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Atomic Structure Calculations

II. Hartree-Fock Wavefunctions and  
Radial Expectation Values:  
Hydrogen to Lawrencium

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ATOMIC STRUCTURE CALCULATIONS. II. HARTREE-FOCK WAVEFUNCTIONS  
AND RADIAL EXPECTATION VALUES: HYDROGEN TO LAWRENCIUM

by

Joseph B. Mann

ABSTRACT

Hartree-Fock calculations were made of the electronic structure of the elements from hydrogen to lawrencium. Exchange terms were included without approximation. Tabulations of the electron wavefunctions and average  $r^n$ , with seven values of  $n$  from -3 to +6, are presented.

The first report<sup>1</sup> (LA-3690) of this series described the calculation of atomic wavefunctions and energies by the self-consistent field method of Hartree and Fock. Only the energy results were tabulated. This report completes the work done on the free, gaseous elements in their ground-state configurations by tabulating the wavefunctions and other radial values of interest.

The restricted Hartree-Fock equation, including exchange, for the radial wavefunction of one orbital of an atom may be written

$$\left\{ -\frac{d^2}{dr^2} - \epsilon_i - \frac{2Z}{r} + \frac{\ell_i(\ell_i+1)}{r^2} + V_{\text{coul}}(r) - V_{\text{add}_i}(r) \right\} P_i = V_{\text{pex}_i}(r) \quad (1)$$

$$\text{where } V_{\text{coul}} = \frac{2}{r} \sum_j \omega_j Y_0(i, j) \quad (2)$$

$$V_{\text{add}_i} = \frac{2}{r} \left\{ Y_0(i, i) + \frac{\omega_i - 1}{4\ell_i + 1} \sum_{2,4,6} c^k(i, i) Y_k(i, i) \right\} \quad (3)$$

$$V_{\text{pex}_i} = \frac{2}{r} \sum_{j \neq i} \frac{\omega_j P_j}{\sqrt{(4\ell_j+2)(4\ell_i+2)}} \sum_k c^k(i, j) Y_k(i, j) \quad (4)$$

$$+ \sum (j \neq i, \ell_j = \ell_i) \omega_j \epsilon_{ij} P_j$$

and

$$Y_k(i, j) = r^{-k} \int_0^r r^k P_i P_j dr + r^{k+1} \int_r^\infty P_i P_j r^{-(k+1)} dr. \quad (5)$$

The symbols,  $i$  or  $j$ , in the above equations designate an orbital of quantum numbers  $n_i \ell_i$  or  $n_j \ell_j$ , respectively. The  $\epsilon_i$  is a variation parameter (or orbital binding energy) which maintains normalization of the wavefunction  $P_i$ . The  $\epsilon_{ij}$  terms, similarly, maintain orthogonality of the wavefunctions of equal azimuthal quantum number  $\ell$ . Orthogonality of other wavefunctions is already assured by the properties of the spherical harmonics which enter into the angular dependence of the wavefunctions. The orthonormalization requirements are then

$$\int_0^\infty P_i P_j dr = 1 \text{ for } i = j \\ = 0 \text{ for } i \neq j, \ell_i = \ell_j. \quad (6)$$

The  $c^k$  coefficients are tabulated in various texts.<sup>2</sup> The number of electrons in a particular shell of quantum numbers  $n_i, \ell_i$  is given by  $\omega_i$ ; all  $\omega_i$  electrons of one shell are assumed to have the same radial wavefunction. The unit of energy is the Rydberg; radii are expressed in Bohr units.

As described in LA-3690, the simultaneous solution of Eq. (1) for all orbitals is not attempted. Instead, one starts with approximate wavefunctions and  $\epsilon_i$  values and

calculates the various  $Y_k$  terms. The solution for each  $P_i$  then proceeds with the  $Y_k$  and  $P_j$  terms held constant. New  $Y_k$  terms are then calculated and another iteration is begun. The final wavefunctions are those obtained after various criteria of self-consistency are satisfied. In each solution for  $P_i$ ,  $\epsilon_i$  was determined such that the integral of  $P^2$  over all radii was equal to 1.0 to within  $10^{-6}$ . For open shells (those containing fewer than  $4\ell + 2$  electrons) orthogonality to within  $10^{-7}$  was forced with all other shells of equal  $\ell$  by varying  $\epsilon_{ij}$ . Iterations were halted when the largest absolute change in any wavefunction, from one iteration to the next, was less than  $5.0 \times 10^{-6}$ .

The Hartree-Fock code was written in FORTRAN IV for the IBM 7030 (Stretch) computer. Core memory is 98304 words of 64 binary bits length. To date the calculations have been carried out for all the elements to atomic number 103 in their ground-state configuration, as well as various other alternate configurations. Eighty-eight ions of chemical interest have also been run, but are not reported here.

Relativistic effects become important for the heavier elements but are not included in the usual Hartree-Fock formulation. The author is now engaged in the preparation of a computer code for relativistic Hartree-Fock, or Dirac-Fock, calculations. Finite nuclear-size and some magnetic interaction effects will be included.

#### DESCRIPTION OF TABLES

Table I (the same as the first table of the earlier report<sup>1</sup>) shows the electron configurations for each atom and gives a tabulation of the average total atom energies. The configurations of the first 103 elements listed are believed to be ground-state configurations. Alternate configurations for eight elements are listed at the end of the table; ground-state configurations of the heaviest elements have not yet been determined by analysis of optical spectra.

Table II lists seven different radial expectation values for each orbital, as well as the radius at which the orbital wavefunction has its maximum absolute value. The expectation, or average, values are obtained from

the expression

$$\langle r^n \rangle = \int_0^\infty r^n P_i^2 dr \quad (7)$$

The values of  $n$  included in the table are -3, -2, -1, 1, 2, 4, and 6. Note that for  $s$  electrons, no value exists for  $\langle r^{-3} \rangle$ , because the wavefunction behaves as  $r^{+1}$  near the origin.

Inspection of Eqs. (1) to (5) shows that at small values of  $r$ , the wavefunction may be represented as

$$P = Ar^{\ell+1} \left\{ 1 - \frac{Z}{\ell+1} r + \alpha r^2 - \beta r^3 + \dots \right\} \quad (8)$$

The  $\alpha$ ,  $\beta$  coefficients were determined from an expression for the potential close to the origin (see Appendix of Reference 1), and were used in the calculation of the wavefunction for small  $r$ , to start numerical integration of Eq. (1). For practical applications of the wavefunctions close to the origin, the values of  $\alpha$  and  $\beta$  are generally not very important and are not listed here; the  $\alpha$  values are, however, available from the author on request. The starting coefficients  $A$  are listed in Table III.

A common distribution of radial points in Hartree or Hartree-Fock calculations has been one in which a change of variable  $\rho = \ln r$  is made, and equal increments in  $\rho$  made for all points. The system used here, and employed earlier by Herman and Skillman,<sup>3</sup> sets up a radial mesh consisting of blocks of 41 points each, with 40 equal increments in  $r$  within each block. The  $\Delta r$  is doubled in each succeeding block. The last point of a block coincides with the first point of the next block. A total of 441 mesh points was generally sufficient for atoms in their ground-state configuration. For excited atoms and negative ions, a total of 521 points could be used. For the radial variable,  $r$  in Bohr units could have been used directly, but a change of variable to  $X = r/U$  was introduced to remain consistent with Herman and Skillman. The function  $U$  comes from the Thomas-Fermi theory and is equal to  $(9\pi^2/128Z)^{1/3}$ , which is 0.88534138 for hydrogen. The increment in  $x$  for the first block of points, starting with  $x = 0$ , was 0.0025. This represents an increment in Bohr units of 0.002213 for hydrogen; for lawrencium ( $Z = 103$ )

the increment is 0.000472. Wavefunction tables for every radial point would be too lengthy; the wavefunctions of Table IV are thus tabulated only for every fourth point. The wavefunctions are given as a function of the  $x$  variable, to avoid listing a different table of  $r$  for each element. The elements are grouped, nine to a page, with the relationship of  $r$  to  $x$  for each element given at the start of each group of elements. The symbol and atomic number of each element, as well as the orbital symbol and number of electrons in the shell are shown at the head of each column. The binding energies (to seven places) were presented in Reference 1, but are repeated here to 5-figure accuracy, to eliminate the need for frequent cross-referencing; the energy unit is the Rydberg (13.605 ev). The elements are presented in the same order as in Table I, with the alternate configuration elements following the first 103.

The wavefunctions could be listed in a floating point format to avoid loss of significant figures at points where

the functions are small, but presentation in floating-point format takes more space than in fixed-point format; for most practical uses of the wavefunctions, the fixed-point format of six decimal places used here seems preferable. For  $f$  electrons the wavefunctions at  $x = 0.01$  are generally less than  $5.0 \times 10^{-7}$ , so the wavefunctions are shown as zero to six places. This can be troublesome in further computer applications unless a suitable program is written to generate wavefunction values at small radii; here the starting coefficients of Table II, and Eq. (8) can be used.

#### REFERENCES

1. Joseph B. Mann, "Atomic Structure Calculations. I. Hartree-Fock Energy Results for the Elements Hydrogen to Lawrencium," LA-3690, Los Alamos Scientific Laboratory (May 1967).
2. John C. Slater, Quantum Theory of Atomic Structure, Vols. I and II, McGraw-Hill Book Co., Inc., N. Y. (1960).
3. Frank Herman and Sherwood Skillman, Atomic Structure Calculations, Prentice-Hall, Inc., Englewood Cliffs, N. J. (1963).



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Table I. Electron Configurations and Total Energies of the Atoms  
(The elements Ce, Tb, Tm, and Bk through 102 are included in two different configurations.)

<u>Z</u>		<u>Configuration</u>	<u>-E, Rydberg Units</u>	<u>Z</u>		<u>Configuration</u>	<u>-E, Rydberg Units</u>
1	H	1s	1.000000	37	Rb	[Kr] + 5s	5876.716
2	He	1s <sup>2</sup>	5.723360	38	Sr	5s <sup>2</sup>	6263.092
3	Li	1s <sup>2</sup> 2s	14.86545	39	Y	4d5s <sup>2</sup>	6663.369
4	Be	1s <sup>2</sup> 2s <sup>2</sup>	29.14605	40	Zr	4d <sup>2</sup> 5s <sup>2</sup>	7077.938
5	B	1s <sup>2</sup> 2s <sup>2</sup> 2p	49.05812	41	Nb	4d <sup>4</sup> 5s	7506.984
6	C	1s <sup>2</sup> 2s <sup>2</sup> 2p <sup>2</sup>	75.31940	42	Mo	4d <sup>5</sup> 5s	7950.739
7	N	1s <sup>2</sup> 2s <sup>2</sup> 2p <sup>3</sup>	108.5923	43	Tc	4d <sup>5</sup> 5s <sup>2</sup>	8409.215
8	O	1s <sup>2</sup> 2s <sup>2</sup> 2p <sup>4</sup>	149.5384	44	Ru	4d <sup>7</sup> 5s	8882.913
9	F	1s <sup>2</sup> 2s <sup>2</sup> 2p <sup>5</sup>	198.8187	45	Rh	4d <sup>8</sup> 5s	9371.675
10	Ne	1s <sup>2</sup> 2s <sup>2</sup> 2p <sup>6</sup>	257.0942	46	Pd	[Kr] + 4d <sup>10</sup>	9875.844
11	Na	[Ne] + 3s	323.7178	47	Ag	4d <sup>10</sup> 5s	10395.40
12	Mg	3s <sup>2</sup>	399.2293	48	Cd	4d <sup>10</sup> 5s <sup>2</sup>	10930.27
13	Al	3s <sup>2</sup> 3p	483.7535	49	In	4d <sup>10</sup> 5s <sup>2</sup> 5p	11480.34
14	Si	3s <sup>2</sup> 3p <sup>2</sup>	577.6693	50	Sn	4d <sup>10</sup> 5s <sup>2</sup> 5p <sup>2</sup>	12045.83
15	P	3s <sup>2</sup> 3p <sup>3</sup>	681.2978	51	Sb	4d <sup>10</sup> 5s <sup>2</sup> 5p <sup>3</sup>	12626.85
16	S	3s <sup>2</sup> 3p <sup>4</sup>	794.9572	52	Te	4d <sup>10</sup> 5s <sup>2</sup> 5p <sup>4</sup>	13223.53
17	Cl	3s <sup>2</sup> 3p <sup>5</sup>	918.9642	53	I	4d <sup>10</sup> 5s <sup>2</sup> 5p <sup>5</sup>	13835.96
18	Ar	[Ne] + 3s <sup>2</sup> 3p <sup>6</sup>	1053.635	54	Xe	[Kr] + 4d <sup>10</sup> 5s <sup>2</sup> 5p <sup>6</sup>	14464.28
19	K	[Ar] + 4s	1198.330	55	Cs	[Xe] + 6s	15107.87
20	Ca	4s <sup>2</sup>	1353.517	56	Ba	6s <sup>2</sup>	15767.09
21	Sc	3d4s <sup>2</sup>	1519.472	57	La	5d6s <sup>2</sup>	16442.14
22	Ti	3d <sup>2</sup> 4s <sup>2</sup>	1696.740	58	Ce	4f5d6s <sup>2</sup>	17133.70
23	V	3d <sup>3</sup> 4s <sup>2</sup>	1885.607	59	Pr	4f <sup>3</sup> 6s <sup>2</sup>	17842.13
24	Cr	3d <sup>5</sup> 4s	2086.284	60	Nd	4f <sup>4</sup> 6s <sup>2</sup>	18567.40
25	Mn	3d <sup>5</sup> 4s <sup>2</sup>	2299.252	61	Pm	4f <sup>5</sup> 6s <sup>2</sup>	19309.73
26	Fe	3d <sup>6</sup> 4s <sup>2</sup>	2524.582	62	Sm	4f <sup>6</sup> 6s <sup>2</sup>	20069.27
27	Co	3d <sup>7</sup> 4s <sup>2</sup>	2762.617	63	Eu	4f <sup>7</sup> 6s <sup>2</sup>	20846.16
28	Ni	[Ar] + 3d <sup>8</sup> 4s <sup>2</sup>	3013.632	64	Gd	[Xe] + 4f <sup>7</sup> 5d6s <sup>2</sup>	21640.26
29	Cu	3d <sup>10</sup> 4s	3277.928	65	Tb	4f <sup>8</sup> 5d6s <sup>2</sup>	22452.29
30	Zn	3d <sup>10</sup> 4s <sup>2</sup>	3555.697	66	Dy	4f <sup>10</sup> 6s <sup>2</sup>	23282.47
31	Ga	3d <sup>10</sup> 4s <sup>2</sup> 4p	3846.522	67	Ho	4f <sup>11</sup> 6s <sup>2</sup>	24130.28
32	Ge	3d <sup>10</sup> 4s <sup>2</sup> 4p <sup>2</sup>	4150.881	68	Er	4f <sup>12</sup> 6s <sup>2</sup>	24996.19
33	As	3d <sup>10</sup> 4s <sup>2</sup> 4p <sup>3</sup>	4468.345	69	Tm	4f <sup>13</sup> 6s <sup>2</sup>	25880.35
34	Se	3d <sup>10</sup> 4s <sup>2</sup> 4p <sup>4</sup>	4799.687	70	Yb	4f <sup>14</sup> 6s <sup>2</sup>	26782.92
35	Br	3d <sup>10</sup> 4s <sup>2</sup> 4p <sup>5</sup>	5144.883	71	Lu	4f <sup>14</sup> 5d6s <sup>2</sup>	27703.62
36	Kr	[Ar] + 3d <sup>10</sup> 4s <sup>2</sup> 4p <sup>6</sup>	5504.111	72	Hf	[Xe] + 4f <sup>14</sup> 5d <sup>2</sup> 6s <sup>2</sup>	28642.46

Table I (Continued)

Z	Configuration	-E, Rydberg Units	Z	Configuration	-E, Rydberg Units
73	Ta [Xe] + 4f <sup>14</sup> 5d <sup>3</sup> 6s <sup>2</sup>	29599.52	91	Pa [Rn] + 5f <sup>2</sup> 6d7s <sup>2</sup>	50014.12
74	W 4f <sup>14</sup> 5d <sup>4</sup> 6s <sup>2</sup>	30574.91	92	U 5f <sup>3</sup> 6d7s <sup>2</sup>	51328.44
75	Re 4f <sup>14</sup> 5d <sup>5</sup> 6s <sup>2</sup>	31568.73	93	Np 5f <sup>4</sup> 6d7s <sup>2</sup>	52662.55
76	Os 4f <sup>14</sup> 5d <sup>6</sup> 6s <sup>2</sup>	32581.09	94	Pu 5f <sup>6</sup> 7s <sup>2</sup>	54016.96
77	Ir 4f <sup>14</sup> 5d <sup>7</sup> 6s <sup>2</sup>	33612.09	95	Am 5f <sup>7</sup> 7s <sup>2</sup>	55391.06
78	Pt 4f <sup>14</sup> 5d <sup>9</sup> 6s	34662.14	96	Cm 5f <sup>7</sup> 6d7s <sup>2</sup>	56784.72
79	Au 4f <sup>14</sup> 5d <sup>10</sup> 6s	35730.82	97	Bk 5f <sup>8</sup> 6d7s <sup>2</sup>	58199.08
80	Hg 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>2</sup>	36817.99	98	Cf 5f <sup>10</sup> 7s <sup>2</sup>	59634.51
81	Tl 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>2</sup> 6p	37923.66	99	Es 5f <sup>11</sup> 7s <sup>2</sup>	61089.73
82	Pb [Xe] + 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>2</sup> 6p <sup>2</sup>	39047.99	100	Fm [Rn] + 5f <sup>12</sup> 7s <sup>2</sup>	62565.49
83	Bi 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>2</sup> 6p <sup>3</sup>	40191.07	101	Md 5f <sup>13</sup> 7s <sup>2</sup>	64061.89
84	Po 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>2</sup> 6p <sup>4</sup>	41352.97	102	No 5f <sup>14</sup> 7s <sup>2</sup>	65579.05
85	At 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>2</sup> 6p <sup>5</sup>	42533.77	103	Lw [Rn] + 5f <sup>14</sup> 6d7s <sup>2</sup>	67115.93
86	Rn [Xe] + 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>2</sup> 6p <sup>6</sup>	43733.56			
87	Fr [Rn] + 7s	44951.73			
88	Ra 7s <sup>2</sup>	46188.62	58	Ce [Xe] + 4f <sup>2</sup> 6s <sup>2</sup>	17133.76
89	Ac 6d7s <sup>2</sup>	47444.40	65	Tb [Xe] + 4f <sup>9</sup> 6s <sup>2</sup>	22452.61
90	Th 6d <sup>2</sup> 7s <sup>2</sup>	48719.22	97	Bk [Rn] + 5f <sup>9</sup> 7s <sup>2</sup>	58199.74
			98	Cf 5f <sup>9</sup> 6d7s <sup>2</sup>	59633.78
			99	Es 5f <sup>10</sup> 6d7s <sup>2</sup>	61088.92
			100	Fm 5f <sup>11</sup> 6d7s <sup>2</sup>	62564.59
			101	Md 5f <sup>12</sup> 6d7s <sup>2</sup>	64060.92
			102	No [Rn] + 5f <sup>13</sup> 6d7s <sup>2</sup>	65578.00

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
HYDROGEN 1S1								
1S		2.000000	1.000000	1.500000	3.000000	22.50000	315.0000	1.00003
HELIUM 1S2								
1S		5.995513	1.687284	.9272732	1.184829	3.887959	25.27857	.569176
LITHIUM 2S1								
1S		14.88825	2.685033	.5731247	.4468027	.5322735	1.248227	.363707
2S		.4354200	.3453914	3.873661	17.73843	565.8799	28960.60	3.10010
BERYLLIUM 2S2								
1S		27.75338	3.681878	.4149940	.2329547	.1420594	.1666972	.267090
2S		1.055651	.5225229	2.649409	8.426403	135.1856	3652.633	2.05099
BORON 2P1								
1S		44.53807	4.674342	.3258661	.1433613	.0536222	.0388462	.211007
2S		2.024536	.7128830	1.977063	4.709131	42.80064	666.0450	1.52499
2P	.7755868	.5298861	.6050056	2.204757	6.146088	83.66132	2048.148	1.58590
CARBON 2P2								
1S		65.23885	5.664702	.2684215	.0971791	.0246199	.0121710	.174410
2S		3.270507	.8988676	1.585814	3.037950	17.99508	184.6639	1.22014
2P	1.661837	.8776337	.7751281	1.742523	3.889695	35.14322	591.2292	1.21644
NITROGEN 2P3								
1S		89.85498	6.653880	.2282598	.0702357	.0128605	.0046257	.148645
2S		4.797172	1.083180	1.326322	2.129408	8.909756	65.16429	1.01854
2P	3.020514	1.304235	.9420769	1.446623	2.707160	17.65251	220.1654	.988367
OXYGEN 2P4								
1S		118.3868	7.642354	.1985812	.0531403	.0073639	.0020160	.129470
2S		6.605840	1.266688	1.140725	1.577635	4.920147	27.01169	.874962
2P	4.949090	1.809912	1.107367	1.239087	2.001400	9.931481	96.32834	.832845
FLUORINE 2P5								
1S		150.8342	8.630364	.1757470	.0416121	.0045171	.0009734	.114714
2S		8.697123	1.449755	1.001092	1.216561	2.939851	12.57787	.766984
2P	7.545118	2.394766	1.271674	1.084786	1.543523	6.049081	47.17737	.720013
NEON 2P6								
1S		187.1973	9.618057	.1576305	.0334696	.0029233	.0005089	.102974
2S		11.07132	1.632554	.8921135	.9670839	1.865067	6.398500	.683072
2P	10.90618	3.058851	1.435351	.9652737	1.228457	3.908741	25.12998	.634216
SODIUM 3S1								
1S		227.5340	10.60739	.1428583	.0274807	.0019682	.0002794	.093411
2S		14.45317	1.867338	.7790680	.7314949	1.028705	2.492982	.607895
2P	17.00482	4.187700	1.696598	.7984854	.8221347	1.621313	6.198216	.549158
3S		.3983742	.3013984	4.208768	20.70495	748.8011	42835.54	3.39059
MAGNESIUM 3S2								
1S		271.8474	11.59796	.1305942	.0229560	.0013712	.0001616	.085468
2S		18.38239	2.107822	.6903350	.5710840	.6111883	1.099354	.546427
2P	24.92010	5.469807	1.951690	.6849980	.5976957	.8229270	2.153226	.483878
3S		.7884518	.3993874	3.252948	12.41865	274.5368	9855.314	2.58617

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
ALUMINUM 3P1								
1S		320.1298	12.58926	.1202583	.0194588	.0009836	9.772E-05	.078770
2S		22.79750	2.349008	.6200251	.4588962	.3879841	.5440831	.496108
2P	34.93856	6.915852	2.205108	.6005425	.4553567	.4630895	.8766355	.432315
3S		1.359446	.5067859	2.599277	7.890672	108.9330	2437.092	2.09800
3P	1.088344	.3105450	.3792826	3.433894	14.00632	362.3152	15506.88	2.68675
SILICON 3P2								
1S		372.3835	13.58118	.1114304	.0167008	.0007234	6.137E-05	.073043
2S		27.69295	2.590495	.5629204	.3772256	.2590646	.2927658	.454142
2P	47.26605	8.520098	2.456329	.5354385	.3597473	.2830445	.4101430	.390693
3S		2.004763	.6041183	2.204147	5.660917	55.49170	878.9366	1.79642
3P	2.027534	.4946781	.4738062	2.787685	9.253699	159.8660	4647.663	2.17544
PHOSPHORUS 3P3								
1S		428.6095	14.57362	.1038040	.0144881	.0005436	3.982E-05	.068094
2S		33.06228	2.831960	.5156115	.3158542	.1800575	.1680821	.418663
2P	62.13098	10.28194	2.705889	.4835479	.2920649	.1837833	.2118888	.356372
3S		2.730750	.6967254	1.927789	4.324901	32.17008	385.6757	1.58227
3P	3.266666	.7046666	.5630577	2.368813	6.694429	84.30324	1808.252	1.84815
SULFUR 3P4								
1S		488.8085	15.56648	.0971505	.0126864	.0004162	2.659E-05	.063766
2S		38.90149	3.073279	.4757594	.2685138	.1292823	.1016187	.388319
2P	79.76380	12.20123	2.954195	.4411166	.2422088	.1249837	.1179062	.327629
3S		3.540143	.7866496	1.719676	3.439003	20.24372	191.6723	1.41911
3P	4.836400	.9402062	.6491969	2.069271	5.116176	49.52448	824.1605	1.61545
CHLORINE 3P5								
1S		552.9812	16.55972	.0912954	.0112000	.0003240	1.821E-05	.059962
2S		45.20801	3.314405	.4417138	.2311928	.0953604	.0640911	.362043
2P	100.3956	14.27789	3.201540	.4057145	.2043255	.0881738	.0695278	.303223
3S		4.434388	.8748838	1.555631	2.812970	13.49693	103.9933	1.28931
3P	6.768695	1.201128	.7332873	1.842027	4.059228	31.32037	418.5765	1.43911
ARGON 3P6								
1S		621.1278	17.55326	.0861035	.0099597	.0002559	1.274E-05	.056572
2S		51.97998	3.555327	.4122790	.2012254	.0719545	.0418756	.339143
2P	124.3789	16.52562	3.449993	.3753291	.1743419	.0633415	.0405978	.282143
3S		5.414391	.9619844	1.422172	2.350434	9.398361	60.26738	1.18286
3P	8.974768	1.473634	.8140750	1.662958	3.310846	20.91086	230.1969	1.29987
POTASSIUM 4S1								
1S		693.2675	18.54741	.0814663	.0089134	.0002047	9.095E-06	.053561
2S		59.26345	3.797720	.3863881	.1765923	.0551806	.0279393	.318878
2P	151.8073	18.92678	3.697027	.3494268	.1508009	.0470569	.0257522	.263823
3S		6.817744	1.074859	1.277058	1.883467	5.845183	28.17040	1.08208
3P	12.95590	1.946484	.9390135	1.436847	2.440659	10.75123	79.39916	1.16238
4S		.2952615	.2365881	5.243734	31.54479	1631.281	128309.1	4.34528
CALCIUM 4S2								
1S		769.3965	19.54198	.0773004	.0080231	.0001657	6.607E-06	.050850
2S		67.04443	4.040874	.3635025	.1561709	.0429856	.0190916	.300857
2P	183.0055	21.49126	3.944087	.3268694	.1317250	.0356817	.0168603	.247736
3S		8.398830	1.188773	1.159424	1.546003	3.850415	14.50843	.996393
3P	17.74048	2.462375	1.058812	1.274551	1.908067	6.378918	35.03770	1.05301
4S		.5350081	.2997376	4.218476	20.45334	691.6267	36193.60	3.47565

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
SCANDIUM 3D1 4S2								
1S		849.5587	20.53759	.0735344	.0072586	.0001355	4.874E-06	.048398
2S		75.31396	4.284365	.3431780	.1391114	.0340037	.0133790	.284699
2P	218.3067	24.22480	4.191507	.3070667	.1160918	.0275993	.0114261	.233394
3S		9.815222	1.281938	1.079390	1.339905	2.888070	9.414614	.930249
3P	22.41132	2.911818	1.152126	1.174391	1.619879	4.589503	21.36006	.973511
3D	1.429414	.8863341	.7989775	1.675451	3.634426	32.78619	590.9194	1.11908
4S		.6169754	.3203167	3.959736	18.07097	545.8127	25744.71	3.24169
TITANIUM 3D2 4S2								
1S		933.7253	21.53368	.0701161	.0065978	.0001118	3.647E-06	.046169
2S		84.05488	4.527654	.3250345	.1247303	.0272688	.0095780	.270219
2P	257.8346	27.11759	4.438431	.2895820	.1031345	.0217117	.0079532	.220628
3S		11.27353	1.371255	1.012384	1.179021	2.236346	6.420392	.873752
3P	27.59924	3.375126	1.241009	1.092758	1.403008	3.443442	13.89356	.907425
3D	1.975090	1.108913	.8967156	1.487252	2.861649	20.43521	295.5229	.997057
4S		.6864840	.3374077	3.766159	16.38970	453.6263	19765.67	3.06434
VANADIUM 3D3 4S2								
1S		1021.894	22.53013	.0669998	.0060230	9.308E-05	2.766E-06	.044133
2S		93.26477	4.770714	.3087371	.1124909	.0221337	.0069864	.257122
2P	301.8174	30.16909	4.684907	.2740229	.0922653	.0173313	.0056632	.209190
3S		12.78965	1.458310	.9545911	1.048628	1.770283	4.529015	.824580
3P	33.38033	3.858418	1.327427	1.023628	1.231712	2.656399	9.429537	.850856
3D	2.588832	1.334921	.9856421	1.351337	2.364448	14.06904	171.6411	.905523
4S		.7505189	.3527958	3.606757	15.06846	387.1626	15775.43	2.91775
CHROMIUM 3D5 4S1								
1S		1114.089	23.52725	.0641462	.0055197	7.810E-05	2.122E-06	.042266
2S		102.9462	5.013648	.2940137	.1019865	.0181646	.0051873	.245251
2P	350.5884	33.38553	4.931435	.2600675	.0830479	.0140187	.0041268	.198865
3S		14.15208	1.531968	.9111139	.9575303	1.493479	3.593260	.783433
3P	39.01008	4.287473	1.398307	.9748831	1.121206	2.237260	7.478980	.804789
3D	2.838989	1.389552	.9906259	1.400978	2.658779	20.80352	361.7433	.858912
4S		.6118542	.3291663	3.843109	17.20670	514.2267	24457.73	3.07211
MANGANESE 3D5 4S2								
1S		1210.228	24.52388	.0615274	.0050772	6.602E-05	1.647E-06	.040566
2S		113.0880	5.256199	.2806473	.0928958	.0150449	.0038998	.234415
2P	404.0774	36.74758	5.176739	.2475146	.0751693	.0114584	.0030393	.189560
3S		16.01826	1.628204	.8588250	.8494479	1.164107	2.424718	.742397
3P	46.91773	4.893502	1.495877	.9112983	.9772693	1.676855	4.749965	.758120
3D	4.059744	1.812463	1.150451	1.158074	1.742401	7.795373	73.15898	.772301
4S		.8706987	.3806914	3.349370	13.05382	295.7664	10765.81	2.68100
IRON 3D6 4S2								
1S		1310.397	25.52116	.0591119	.0046855	5.618E-05	1.291E-06	.038990
2S		123.7004	5.498666	.2684543	.0849789	.0125732	.0029748	.224479
2P	462.8209	40.27440	5.422189	.2361240	.0683703	.0094649	.0022809	.181072
3S		17.73635	1.711721	.8184306	.7717202	.9619608	1.825290	.707522
3P	54.75750	5.447318	1.578670	.8646710	.8802909	1.362653	3.487868	.719389
3D	4.930602	2.066963	1.229058	1.084832	1.532109	6.091341	51.34887	.721193
4S		.9286964	.3936957	3.241616	12.25363	262.7728	9105.613	2.58186
COBALT 3D7 4S2								
1S		1414.567	26.51864	.0568784	.0043374	4.811E-05	1.022E-06	.037521
2S		134.7796	5.740969	.2572857	.0780392	.0105913	.0022968	.215364
2P	526.9524	43.95962	5.667388	.2257501	.0624629	.0078897	.0017355	.173320
3S		19.52569	1.794554	.7819367	.7046961	.8030941	1.395300	.675984
3P	63.36343	6.026078	1.660801	.8229066	.7977169	1.120742	2.607890	.684603
3D	5.899595	2.332896	1.306041	1.021859	1.362292	4.867160	37.25258	.677099
4S		.9859342	.4062479	3.144128	11.55155	235.3697	7791.961	2.49249

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
NICKEL 3D8 4S2								
1S		1522.736	27.51629	.0548070	.0040265	4.143E-05	8.155E-07	.036175
2S		146.3255	5.983131	.2470169	.0719213	.0089865	.0017929	.206969
2P	596.7060	47.80321	5.912365	.2162607	.0572962	.0066309	.0013372	.166208
3S		21.38724	1.876836	.7487590	.6463955	.6765195	1.081051	.647275
3P	72.77314	6.630113	1.742408	.7852231	.7266866	.9314747	1.980761	.653219
3D	6.972252	2.610648	1.381784	.9668688	1.222248	3.959267	27.75041	.638528
4S		1.042686	.4184272	3.055139	10.92877	212.2715	6733.418	2.41125
COPPER 3D10 4S1								
1S		1634.932	28.51440	.0528799	.0037477	3.587E-05	6.561E-07	.034914
2S		158.3440	6.225294	.2375399	.0664993	.0076768	.0014151	.199198
2P	672.4559	51.81249	6.157567	.2075359	.0527474	.0056165	.0010456	.159632
3S		23.06389	1.947508	.7227621	.6034588	.5955846	.9112254	.622163
3P	81.84310	7.168371	1.810487	.7574795	.6783170	.8237045	1.688862	.626431
3D	7.504224	2.702490	1.391226	.9911570	1.335125	5.473438	53.03584	.613359
4S		.8077270	.3822107	3.331133	13.08433	310.3408	12034.72	2.59609
ZINC 3D10 4S2								
1S		1751.073	29.51207	.0510849	.0034971	3.121E-05	5.321E-07	.033736
2S		170.8171	6.467087	.2287727	.0616716	.0065963	.0011253	.191996
2P	754.0166	55.96550	6.401760	.1995136	.0487287	.0047872	.0008204	.153601
3S		25.32959	2.040110	.6905835	.5502199	.4913197	.6717619	.596815
3P	94.15246	7.914931	1.904429	.7197853	.6111713	.6608374	1.189198	.598736
3D	9.450023	3.202578	1.530536	.8748743	1.005017	2.732376	16.38053	.574064
4S		1.155418	.4418786	2.897730	9.869356	175.5965	5151.074	2.26777
GALLIUM 4P1								
1S		1871.200	30.50973	.0494077	.0032708	2.729E-05	4.345E-07	.032642
2S		183.7554	6.708773	.2206320	.0573519	.0056991	.0009020	.185313
2P	841.9145	60.27861	6.645975	.1920850	.0451497	.0041043	.0006496	.147992
3S		27.76404	2.135144	.6604696	.5026474	.4070684	.5001463	.573073
3P	108.0969	8.731334	2.002602	.6840877	.5506980	.5293129	.8322205	.572811
3D	11.65508	3.730024	1.664869	.7878885	.7961626	1.567987	6.429994	.539100
4S		1.671322	.5155901	2.488891	7.206990	90.38928	1843.262	1.99899
4P	2.890767	.3423226	.3721304	3.424242	13.90075	357.7042	15315.80	2.64643
GERMANIUM 4P2								
1S		1995.310	31.50739	.0478372	.0030658	2.396E-05	3.572E-07	.031608
2S		197.1677	6.950533	.2130475	.0534683	.0049485	.0007284	.179077
2P	936.3951	64.75243	6.890262	.1851849	.0419475	.0035379	.0005185	.142801
3S		30.38200	2.232795	.6322433	.4600566	.3387271	.3754707	.550910
3P	123.7163	9.612715	2.103739	.6509162	.4974892	.4269100	.5916833	.548632
3D	14.10737	4.278130	1.793422	.7211595	.6568964	1.008115	3.101725	.508083
4S		2.198488	.5796188	2.223199	5.717326	55.60992	868.7071	1.81451
4P	4.733064	.5044102	.4415290	2.903880	9.950635	181.2056	5516.550	2.26459
ARSENIC 4P3								
1S		2123.407	32.50507	.0463634	.0028795	2.113E-05	2.955E-07	.030646
2S		211.0564	7.192403	.2059627	.0499635	.0043167	.0005923	.173245
2P	1037.708	69.38751	7.134639	.1787579	.0390712	.0030650	.0004170	.137956
3S		33.17177	2.332311	.6059512	.4221415	.2834984	.2848201	.530041
3P	141.0183	10.55299	2.206743	.6203808	.4510540	.3474359	.4280958	.526160
3D	16.82254	4.848932	1.917999	.6672998	.5563048	.6941601	1.688691	.480429
4S		2.751919	.6390994	2.025291	4.726690	37.39172	470.2129	1.67234
4P	6.853495	.6750616	.5035625	2.561105	7.715683	107.9058	2526.250	2.01466

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
SELENIUM 4P4								
1S		2255.491	33.50275	.0449778	.0027096	1.870E-05	2.458E-07	.029736
2S		225.4233	7.434407	.1993297	.0467899	.0037819	.0004847	.167775
2P	1146.100	74.18430	7.379123	.1727572	.0364780	.0026678	.0003377	.133425
3S		36.12444	2.433164	.5815301	.3884415	.2387863	.2184406	.510707
3P	160.0366	11.54860	2.310987	.5923473	.4105522	.2854043	.3150168	.505214
3D	19.81542	5.443699	2.039677	.6223963	.4799302	.5009391	.9974106	.455678
4S		3.336015	.6958208	1.868272	4.011347	26.59589	277.9005	1.55697
4P	9.269844	.8556916	.5615205	2.308858	6.256237	70.37551	1325.075	1.82990
BROMINE 4P5								
1S		2391.561	34.50046	.0436725	.0025544	1.661E-05	2.057E-07	.028876
2S		240.2696	7.676553	.1872559	.0439069	.0033269	.0003991	.162655
2P	1261.820	79.14315	7.623722	.1671418	.0341323	.0023324	.0002754	.129180
3S		39.23366	2.534996	.5588597	.3584599	.2024189	.1693537	.492568
3P	180.8137	12.59703	2.416064	.5666114	.3751437	.2365751	.2354810	.485740
3D	23.10045	6.063300	2.159167	.5840995	.4198962	.3742109	.6250698	.433365
4S		3.952858	.7506758	1.738859	3.467917	19.68208	174.7552	1.46023
4P	11.99625	1.046738	.6168339	2.111627	5.223867	48.73179	760.2951	1.68481
KRYPTON 4P6								
1S		2531.619	35.49818	.0424407	.0024121	1.481E-05	1.729E-07	.028074
2S		255.5963	7.918846	.1872559	.0412803	.0029378	.0003305	.157829
2P	1385.114	84.26434	7.868441	.1618758	.0320037	.0020477	.0002260	.125199
3S		42.49486	2.637558	.5378022	.3317286	.1726625	.1326613	.475562
3P	203.5603	13.70621	2.522776	.5426274	.3435366	.1965496	.1741517	.467646
3D	26.69151	6.708285	2.276939	.5508802	.3714787	.2871211	.4099132	.413333
4S		4.603718	.8041892	1.629390	3.040357	15.00664	115.1453	1.37699
4P	14.88678	1.238776	.6692191	1.951612	4.455082	35.22939	465.3853	1.56579
RUBIDIUM 5S1								
1S		2675.672	36.49599	.0412764	.0022813	1.324E-05	1.461E-07	.027297
2S		271.4178	8.161506	.1817413	.0388786	.0026033	.0002752	.153272
2P	1516.243	89.54867	8.113305	.1569272	.0300661	.0018047	.0001865	.121455
3S		45.92263	2.741241	.5181049	.3076733	.1479348	.1044930	.459576
3P	228.0730	14.85899	2.629145	.5207565	.3160595	.1653213	.1329102	.450775
3D	30.62518	7.383566	2.394259	.5213348	.3310368	.2234793	.2728174	.394909
4S		5.560374	.8763091	1.499204	2.557213	10.26823	61.92016	1.29225
4P	20.09719	1.577860	.7520576	1.734948	3.477823	20.33178	190.7529	1.43966
5S		.2806100	.2177582	5.631858	36.17900	2103.137	183537.1	4.70616
STRONTIUM 5S2								
1S		2823.720	37.49388	.0401742	.0021609	1.187E-05	1.240E-07	.026577
2S		287.7306	8.404450	.1765360	.0366777	.0023146	.0002302	.148969
2P	1655.457	94.99656	8.358324	.1522679	.0282974	.0015965	.0001548	.117930
3S		49.50974	2.845716	.4996977	.2860287	.1273715	.0829416	.444565
3P	254.5493	16.06284	2.735977	.5005214	.2916933	.1400074	.1025640	.435006
3D	34.90889	8.087600	2.510861	.4950139	.2971627	.1769990	.1873001	.378158
4S		6.606784	.9480836	1.390920	2.191482	7.362986	36.11554	1.21772
4P	25.89513	1.931629	.8290724	1.577619	2.857305	13.31877	97.45833	1.33720
5S		.4840133	.2686804	4.632974	24.49715	967.1763	58054.04	3.86364
YTTRIUM 4D1 5S2								
1S		2975.775	38.49193	.0391291	.0020498	1.068E-05	1.057E-07	.025883
2S		304.5278	8.647554	.1716173	.0346571	.0020646	.0001936	.144899
2P	1803.034	100.6090	8.603508	.1478741	.0266791	.0014172	.0001292	.114602
3S		53.22759	2.950166	.4825641	.2666041	.1102744	.0664243	.430523
3P	283.0016	17.31431	2.842925	.4817924	.2700392	.1193763	.0800760	.420300
3D	39.56075	8.821090	2.626970	.4713617	.2684318	.1423552	.1324964	.362767
4S		7.576305	1.009642	1.311709	1.946785	5.769362	24.80928	1.15626
4P	31.49073	2.250027	.8924504	1.471167	2.480424	9.942077	62.12623	1.25763
4D	1.711730	.5663019	.5455858	2.435221	7.265519	110.6491	3111.445	1.77384
5S		.5847612	.2908965	4.299999	21.13866	724.9667	38068.52	3.57338



TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
ZIRCONIUM 402 5S2								
1S		3131.829	39.49007	.0381369	.0019470	9.632E-06	9.050E-08	.025231
2S		321.8107	8.890819	.1669620	.0327975	.0018472	.0001636	.141050
2P	1959.191	106.3849	8.848807	.1437243	.0251946	.0012623	.0001083	.111454
3S		57.08358	3.054754	.4665643	.2490980	.0959685	.0536487	.417338
3P	313.4787	18.61225	2.949866	.4644373	.2507496	.1024713	.0632319	.406557
3D	44.57873	9.581156	2.742146	.4500995	.2439794	.1161967	.0962398	.348644
4S		8.548821	1.067740	1.245161	1.753326	4.660041	17.90649	1.10280
4P	37.36057	2.566851	.9514160	1.384814	2.195846	7.746294	42.39536	1.19073
4D	2.397358	.7328532	.6211901	2.136222	5.554288	63.48716	1342.976	1.58731
5S		.6640232	.3076701	4.077756	19.04703	593.2504	28494.11	3.37293
NIORIUM 404 5S1								
1S		3291.892	40.48837	.0371935	.0018517	8.709E-06	7.777E-08	.024609
2S		339.5739	9.134160	.1625512	.0310830	.0016576	.0001388	.137398
2P	2124.196	112.3250	9.094227	.1397991	.0238300	.0011279	9.130E-05	.108468
3S		61.05723	3.158975	.4516450	.2333229	.0839674	.0437163	.404963
3P	346.0016	19.95422	3.056600	.4483334	.2335144	.0885304	.0505025	.393709
3D	49.98131	10.36875	2.856661	.4308222	.2229109	.0960364	.0717161	.335602
4S		9.403947	1.116309	1.195321	1.617856	3.991888	14.41588	1.05814
4P	42.80830	2.841671	.9995792	1.322927	2.006956	6.509848	32.99799	1.13606
4D	2.730425	.7998829	.6457102	2.089966	5.421921	65.43774	1545.775	1.49107
5S		.5989271	.2975682	4.206801	20.36726	690.0448	36296.35	3.43698
MOLYBDENUM 405 5S1								
1S		3455.944	41.48867	.0362956	.0017632	7.894E-06	6.708E-08	.024020
2S		357.8283	9.377717	.1583636	.0294979	.0014916	.0001183	.133934
2P	2298.239	118.4278	9.339724	.1360806	.0225725	.0010108	7.730E-05	.105631
3S		65.18599	3.263730	.4376085	.2189651	.0737688	.0358547	.393239
3P	380.6993	21.34346	3.163403	.4333188	.2180182	.0769093	.0406821	.381539
3D	55.76713	11.18155	2.970222	.4133198	.2046782	.0802695	.0542972	.323525
4S		10.40121	1.170358	1.143686	1.480870	3.337126	10.98152	1.01547
4P	49.35370	3.165251	1.053776	1.258406	1.815388	5.310176	24.20395	1.08442
4D	3.479834	.9613873	.7092137	1.900038	4.459425	43.66415	839.0065	1.37719
5S		.6393419	.3073772	4.078709	19.19250	618.5720	31164.32	3.31191
TECHNETIUM 405 5S2								
1S		3623.984	42.48496	.0354401	.0016810	7.173E-06	5.806E-08	.023458
2S		376.5764	9.621506	.1543829	.0280297	.0013456	.0001012	.130641
2P	2481.559	124.6932	9.585295	.1325527	.0214111	.0009084	6.572E-05	.102959
3S		69.47339	3.369054	.4243733	.2058540	.0650510	.0295758	.382063
3P	417.6586	22.78080	3.270343	.4192737	.2040182	.0671392	.0330068	.370104
3D	61.95052	12.01998	3.083004	.3973263	.1887489	.0677302	.0415535	.312345
4S		11.57884	1.231039	1.090333	1.343899	2.720920	7.919110	.974277
4P	57.33577	3.551942	1.115460	1.191260	1.623384	4.193966	16.65264	1.03510
4D	4.738991	1.224192	.8057175	1.649797	3.285509	21.62149	263.8367	1.26270
5S		.8482280	.3453404	3.649827	15.34412	393.9251	15891.38	2.97488
RUTHENIUM 407 5S1								
1S		3796.044	43.48348	.0346238	.0016043	6.531E-06	5.043E-08	.022918
2S		395.7968	9.865238	.1505978	.0266685	.0012171	8.688E-05	.127505
2P	2674.489	131.1235	9.830975	.1292022	.0203368	.0008186	5.611E-05	.100411
3S		73.85025	3.473377	.4120169	.1939865	.0576555	.0246074	.371579
3P	456.7715	24.25771	3.376760	.4061788	.1913983	.0589419	.0270663	.354394
3D	68.56218	12.88674	3.195490	.3825757	.1746692	.0576363	.0325732	.301916
4S		12.47321	1.275230	1.055371	1.260921	2.412395	6.717551	.941267
4P	63.80719	3.838568	1.158611	1.150120	1.515962	3.687062	13.91137	.996604
4D	5.161965	1.292125	.8249108	1.631970	3.269516	23.02313	318.8507	1.20803
5S		.7061639	.3240252	3.877190	17.42070	518.4487	24401.85	3.11256

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
RHODIUM 4D8 5S1								
1S		3972.092	44.48197	.0338442	.0015328	5.960E-06	4.394E-08	.022409
2S		415.5107	10.10918	.1469908	.0254030	.0011034	7.489E-05	.124513
2P	2877.184	137.7165	10.07672	.1260153	.0193408	.0007396	4.810E-05	.097974
3S		78.38401	3.578224	.4003223	.1830855	.0512657	.0205733	.361647
3P	498.2681	25.78221	3.483294	.3938732	.1799147	.0519590	.0223250	.349286
3D	75.59737	13.77923	3.307339	.3689792	.1622050	.0494140	.0257161	.292176
4S		13.55088	1.326445	1.017061	1.171090	2.078908	5.364886	.908702
4P	71.76141	4.189544	1.209723	1.103877	1.396455	3.123855	10.82165	.958464
4D	6.104243	1.463377	.8791767	1.531161	2.872148	17.64461	213.2938	1.14197
5S		.7343125	.3312764	3.795186	16.72633	481.6865	22049.02	3.03146
PALLADIUM 4D10								
1S		4152.147	45.48058	.0330989	.0014659	5.450E-06	3.840E-08	.021914
2S		435.7086	10.35321	.1435514	.0242250	.0010026	6.477E-05	.121652
2P	3089.951	144.4739	10.32256	.1229806	.0184158	.0006699	4.138E-05	.095663
3S		83.03985	3.682839	.3892974	.1731021	.0457543	.0173067	.352262
3P	542.1368	27.35055	3.589669	.3823132	.1694585	.0460023	.0185566	.339724
3D	83.14227	14.70808	3.420148	.3561388	.1508206	.0423516	.0198686	.283027
4S		14.53728	1.371554	.9859605	1.101830	1.850285	4.552039	.879696
4P	79.26906	4.501756	1.253041	1.068569	1.311078	2.779920	9.257208	.925428
4D	6.506528	1.519610	.8926577	1.533058	2.951731	20.85154	317.2861	1.09607
SILVER 4D10 5S1								
1S		4336.185	46.47914	.0323857	.0014033	4.993E-06	3.366E-08	.021449
2S		456.3983	10.59740	.1402671	.0231264	.0009130	5.620E-05	.118911
2P	3312.932	151.3927	10.56841	.1200878	.0175552	.0006081	3.573E-05	.093461
3S		87.85112	3.787889	.3788387	.1638950	.0409550	.0146182	.343328
3P	588.4890	28.96497	3.696056	.3714179	.1598953	.0408761	.0154886	.330653
3D	91.08028	15.65441	3.531195	.3444276	.1408693	.0367595	.0159549	.274494
4S		15.79412	1.427065	.9494031	1.020638	1.577014	3.535920	.850513
4P	89.22504	4.921937	1.310062	1.023205	1.199858	2.500972	6.814334	.891572
4D	8.137216	1.809916	.9816900	1.369804	2.291453	11.11342	106.1404	1.03308
5S		.7827196	.3442549	3.656482	15.58662	424.3067	18522.08	2.89429
CADMIUM 4D10 5S2								
1S		4524.215	47.47770	.0317026	.0013447	4.583E-06	2.959E-08	.020995
2S		477.5807	10.84176	.1371276	.0221000	.0008332	4.892E-05	.116312
2P	3546.418	158.4746	10.81431	.1173270	.0167533	.0005533	3.095E-05	.091338
3S		92.80983	3.893214	.3689095	.1553891	.0367616	.0124003	.334802
3P	637.4282	30.62684	3.802553	.3611184	.1511135	.0364408	.0129931	.322071
3D	99.49517	16.62854	3.642020	.3334892	.1318949	.0320730	.0129178	.266451
4S		17.16048	1.484943	.9141330	.9451371	1.341891	2.729967	.822794
4P	100.2632	5.375444	1.368984	.9803861	1.099662	1.912923	5.075038	.859690
4D	9.904134	2.105672	1.064244	1.252086	1.884738	7.006035	48.43605	.977394
5S		1.070568	.3903979	3.237480	12.17078	256.0681	8671.075	2.58410
INDIUM 5P1								
1S		4716.239	48.47629	.0310477	.0012896	4.215E-06	2.608E-08	.020568
2S		499.2480	11.08619	.1341248	.0211402	.0007618	4.271E-05	.113819
2P	3790.711	165.7213	11.06033	.1146887	.0160045	.0005044	2.690E-05	.089339
3S		97.90352	3.998546	.3594906	.1475319	.0330931	.0105648	.326676
3P	689.0428	32.33683	3.909195	.3513641	.1430277	.0325870	.0109523	.313900
3D	108.4026	17.63075	3.752680	.3232429	.1237674	.0281179	.0105384	.258863
4S		18.59111	1.543157	.8812994	.8775858	1.149220	2.136439	.796909
4P	112.4339	5.862276	1.429675	.9398528	1.008733	1.591215	3.768182	.829838
4D	11.85667	2.416160	1.144701	1.156918	1.590788	4.731161	24.97812	.928083
5S		1.468240	.4447885	2.844489	9.304907	144.3492	3537.503	2.33109
5P	4.458173	.3138030	.3318443	3.777953	16.64723	486.3757	22971.50	2.99300

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
TIN 5P2								
1S		4912.254	49.47488	.0304193	.0012379	3.882E-06	2.305E-08	.020150
2S		521.4048	11.33074	.1512493	.0202411	.0006979	3.740E-05	.111416
2P	4046.035	173.1321	11.30644	.1121651	.0153044	.0004608	2.346E-05	.087401
3S		103.1395	4.104026	.3505327	.1402500	.0298680	.0090363	.318960
3P	743.4129	34.09529	4.015994	.3421111	.1355649	.0292249	.0092727	.306114
3D	117.8180	18.66123	3.863211	.3136211	.1163797	.0247589	.0086568	.251723
4S		20.10215	1.602238	.8504299	.8164666	.9888283	1.686845	.772412
4P	125.6935	6.377920	1.491297	.9021880	.9280560	1.333903	2.843993	.801688
4D	13.95970	2.734173	1.221570	1.080285	1.376715	3.419974	14.60936	.884072
5S		1.856404	.4910229	2.583404	7.631572	94.82231	1832.583	2.15299
5P	6.747496	.4400311	.3834390	3.285864	12.52698	270.8425	9448.283	2.63540
ANTIMONY 5P3								
1S		5112.263	50.47349	.0298159	.0011892	3.582E-06	2.042E-08	.019756
2S		544.0510	11.57539	.1284932	.0193977	.0006405	3.284E-05	.109124
2P	4312.639	180.7073	11.55263	.1097491	.0146490	.0004218	2.051E-05	.085562
3S		108.5178	4.209652	.3420024	.1334880	.0270234	.0077578	.311590
3P	800.6088	35.90216	4.122938	.3333226	.1286633	.0262814	.0078837	.298694
3D	127.7559	19.72007	3.973634	.3045666	.1096427	.0218904	.0071572	.244963
4S		21.68787	1.661883	.8215013	.7612954	.8552545	1.344431	.749227
4P	140.0154	6.919203	1.553388	.8673439	.8566602	1.127407	2.180360	.775239
4D	16.22148	3.060877	1.295877	1.016154	1.211700	2.581726	9.234887	.844488
5S		2.250245	.5332532	2.385891	6.484075	67.27258	1071.878	2.01336
5P	9.230825	.5684256	.4288651	2.951884	10.07326	172.8108	4765.776	2.39286
TELLURIUM 5P4								
1S		5316.266	51.47212	.0292359	.0011433	3.310E-06	1.814E-08	.019372
2S		567.1879	11.82015	.1258493	.0186056	.0005889	2.892E-05	.106927
2P	4590.771	188.4469	11.79891	.1074339	.0140344	.0003868	1.799E-05	.083785
3S		114.0386	4.315411	.3338702	.1271982	.0245070	.0066840	.304543
3P	860.7014	37.75738	4.230013	.3249651	.1222690	.0236964	.0067296	.291627
3D	138.2305	20.80731	4.083962	.2960287	.1034807	.0194280	.0059531	.238555
4S		23.34430	1.721898	.7944166	.7114775	.7436185	1.081437	.727359
4P	155.3956	7.484275	1.615706	.8351173	.7933584	.9603874	1.695544	.750430
4D	18.64924	3.396989	1.368250	.9611179	1.079754	2.009826	6.161841	.809044
5S		2.655012	.5730091	2.227026	5.633390	50.10103	677.0060	1.89783
5P	11.93350	.7007801	.4707496	2.701071	8.411562	119.1871	2703.350	2.20968
IODINE 5P5								
1S		5524.262	52.47075	.0286780	.0011000	3.064E-06	1.614E-08	.019005
2S		590.8148	12.06502	.1233109	.0178607	.0005423	2.552E-05	.104795
2P	4880.677	196.3508	12.04526	.1052134	.0134574	.0003554	1.582E-05	.082091
3S		119.7016	4.421299	.3261092	.1213378	.0222747	.0057784	.297800
3P	923.7641	39.66100	4.337213	.3170083	.1163339	.0214190	.0057667	.284888
3D	149.2564	21.92300	4.194211	.2879640	.0978294	.0173044	.0049796	.232472
4S		25.06838	1.782146	.7690487	.6664176	.6498531	.8775211	.706669
4P	171.8411	8.071915	1.678108	.8052697	.7370381	.8241011	1.335502	.726926
4D	21.24951	3.742971	1.439106	.9130341	.9714771	1.601457	4.280569	.776540
5S		3.073348	.6110700	2.094429	4.971805	38.60588	451.3343	1.79934
5P	14.86653	.8377175	.5102850	2.501748	7.200923	86.54924	1657.980	2.06270
XENON 5P6								
1S		5736.251	53.46940	.0281410	.0010592	2.840E-06	1.440E-08	.018652
2S		614.9333	12.31000	.1208720	.0171594	.0005002	2.259E-05	.102776
2P	5182.610	204.4194	12.29170	.1030820	.0129151	.0003270	1.394E-05	.080453
3S		125.5071	4.527306	.3186950	.1158690	.0202891	.0050119	.291343
3P	989.8667	41.61294	4.444526	.3094248	.1108157	.0194068	.0049598	.278445
3D	160.8475	23.06715	4.304384	.2803331	.0926331	.0154647	.0041875	.226689
4S		26.85795	1.842542	.7452664	.6255691	.5706711	.7179080	.687194
4P	189.5776	8.690122	1.741494	.7770230	.6855270	.7074373	1.041264	.704958
4D	24.02845	4.099132	1.508735	.8704527	.8808680	1.299756	3.068844	.747127
5S		3.506760	.6478905	1.980960	4.440149	30.51860	313.3338	1.71349
5P	17.82653	.9707342	.5471543	2.337981	6.276862	65.22768	1075.872	1.93996

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
CESIUM 6S1								
1S		5952.239	54.46810	.0276237	.0010205	2.636E-06	1.287E-08	.018308
2S		639.5485	12.55514	.1185261	.0164980	.0004621	2.003E-05	.100813
2P	5496.823	212.6529	12.53821	.1010342	.0124046	.0003015	1.232E-05	.078891
3S		131.4615	4.633548	.3115971	.1107522	.0185163	.0043600	.285150
3P	1059.069	43.61278	4.551924	.3021896	.1056769	.0176237	.0042806	.272278
3D	173.0243	24.24042	4.414555	.2730967	.0878404	.0138631	.0035385	.221181
4S		28.72359	1.903418	.7227918	.5881731	.5027795	.5898323	.668628
4P	208.2613	9.323039	1.804092	.7511440	.6401972	.6138249	.8332036	.684374
4D	27.02583	4.470533	1.578371	.8315645	.8019400	1.061659	2.202954	.719680
5S		4.170684	.6994119	1.839382	3.805493	21.72886	179.1435	1.62263
5P	23.25444	1.211411	.6062791	2.111205	5.066610	40.53651	495.2943	1.80646
6S		.2398925	.1921687	6.305904	44.98954	3159.907	326611.8	5.33704
BARIUM 6S2								
1S		6172.225	55.46682	.0271250	.0009840	2.450E-06	1.153E-08	.017983
2S		664.6593	12.80042	.1162683	.0158739	.0004275	1.781E-05	.098930
2P	5823.567	221.0513	12.78481	.0990654	.0119236	.0002783	1.092E-05	.077370
3S		137.5631	4.739976	.3047993	.1059603	.0169304	.0038039	.279205
3P	1131.460	45.66110	4.659434	.2952786	.1008831	.0160392	.0037068	.266383
3D	185.8001	25.44270	4.524713	.2662257	.0834110	.0124637	.0030039	.215957
4S		30.66015	1.964577	.7015851	.5539696	.4446046	.4874851	.651035
4P	228.0953	9.977906	1.866731	.7269615	.5992900	.5353785	.6724337	.664916
4D	30.23211	4.854710	1.647495	.7963345	.7338949	.8780295	1.618192	.694385
5S		4.885185	.7500756	1.721189	3.319047	16.16508	110.5740	1.54192
5P	29.06601	1.456666	.6603728	1.944587	4.276117	28.13558	276.7671	1.69650
6S		.4038179	.2336370	5.256808	31.27069	1527.304	110817.2	4.44826
LANTHANUM 5D1 6S2								
1S		6396.214	56.46561	.0266440	.0009493	2.280E-06	1.035E-08	.017664
2S		690.2611	13.04578	.1140942	.0152843	.0003961	1.586E-05	.097116
2P	6163.104	229.6150	13.03149	.0971712	.0114698	.0002573	9.695E-06	.075930
3S		143.7984	4.846361	.2982934	.1014740	.0155112	.0033289	.273497
3P	1207.045	47.75563	4.766923	.2886774	.0964089	.0146290	.0032208	.260746
3D	199.1891	26.67394	4.634852	.2596938	.0793097	.0112371	.0025615	.210971
4S		32.64661	2.025426	.6816893	.5228259	.3948622	.4057078	.634362
4P	249.0768	10.65338	1.929300	.7043308	.5622612	.4692554	.5473385	.646632
4D	33.66306	5.252868	1.716369	.7641687	.6746495	.7344959	1.217191	.670990
5S		5.512018	.7916710	1.636888	2.999033	13.11443	80.05241	1.47617
5P	34.29653	1.665362	.7031149	1.833134	3.794692	21.97203	188.7636	1.61180
5D	2.321599	.4863454	.4670012	2.757895	8.942136	145.5205	4045.845	2.17318
6S		.4772061	.2501358	4.931210	27.56117	1193.715	77295.70	4.15934
CERIUM 4F1 5D1 6S2								
1S		6624.229	57.46459	.0261797	.0009165	2.125E-06	9.309E-09	.017357
2S		716.4473	13.29218	.1119917	.0147247	.0003674	1.416E-05	.095357
2P	6516.642	238.3710	13.27911	.0953396	.0110393	.0002382	8.623E-06	.074514
3S		150.1935	4.953142	.2920439	.0972597	.0142385	.0029236	.268002
3P	1286.183	49.90491	4.874818	.2823511	.0922219	.0133738	.0028110	.255305
3D	213.2928	27.94098	4.745432	.2534754	.0755149	.0101692	.0022014	.206153
4S		34.35348	2.076585	.6656343	.4985500	.3590598	.3517907	.619787
4P	267.8463	11.22270	1.980446	.6867688	.5346572	.4243491	.4707181	.630841
4D	36.56561	5.567691	1.768124	.7421454	.6364466	.6538129	1.022898	.652175
4F	4.816478	2.178225	1.297461	.9833939	1.217532	3.509887	21.03528	.693436
5S		5.755553	.8087429	1.602593	2.875631	12.07925	70.97749	1.44312
5P	36.45636	1.736334	.7182091	1.794688	3.638997	20.25862	167.8093	1.57516
5D	2.442341	.5021960	.4750160	2.713529	8.675627	138.2015	3785.541	2.12650
6S		.4869713	.2532920	4.868527	26.88203	1138.892	72310.14	4.09889

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	I/R	R	R**2	R**4	R**6	R MAX
PRASEODYMIUM 4F3 6S2								
1S		6856.267	58.46372	.0257311	.0008853	1.982E-06	8.386E-09	.017063
2S		743.2233	13.53959	.1099574	.0141930	.0003412	1.265E-05	.093667
2P	6884.383	247.3167	13.52753	.0935688	.0106309	.0002207	7.683E-06	.073170
3S		156.7428	5.060204	.2860408	.0932986	.0130949	.0025764	.262712
3P	1368.900	52.10714	4.983006	.2762873	.0883003	.0122532	.0024634	.250053
3D	228.1172	29.24268	4.856343	.2475499	.0719956	.0092339	.0019048	.201501
4S		35.81180	2.119602	.6525279	.4793386	.3327226	.3152352	.606782
4P	284.5698	11.69830	2.022066	.6730312	.5138444	.3933658	.4229833	.617094
4D	38.97475	5.809410	1.805816	.7274604	.6125728	.6110476	.9391801	.636616
4F	4.888347	2.170780	1.283681	1.019173	1.347907	4.860520	39.90911	.681227
5S		5.623865	.8033560	1.608877	2.902983	12.43017	75.19428	1.43613
5P	35.38720	1.670848	.7075892	1.816411	3.736844	21.65075	189.0184	1.57690
6S		.4310084	.2431994	5.046615	28.87873	1314.602	89579.46	4.24607
NEODYMIUM 4F4 6S2								
1S		7092.292	59.46279	.0252978	.0008557	1.852E-06	7.568E-09	.016775
2S		770.4223	13.78635	.1080007	.0136910	.0003173	1.134E-05	.092028
2P	7264.992	256.4078	13.77536	.0918675	.0102459	.0002049	6.863E-06	.071864
3S		163.4024	5.166800	.2803003	.0895865	.0120657	.0022761	.257644
3P	1454.709	54.34581	5.090662	.2705007	.0846351	.0112485	.0021640	.245034
3D	243.5005	30.56466	4.966535	.2419194	.0687250	.0084013	.0016509	.197096
4S		37.55500	2.169618	.6380866	.4584095	.3043351	.2757943	.593587
4P	304.6406	12.27997	2.072015	.6573123	.4901959	.3580473	.3673870	.602967
4D	42.10011	6.131888	1.856233	.7079760	.5803003	.5485038	.7993218	.619996
4F	5.505453	2.357246	1.339668	.9741749	1.229439	4.030524	30.13111	.653551
5S		5.849814	.8192477	1.577810	2.792941	11.52755	67.36294	1.40623
5P	37.42306	1.734981	.7213675	1.781755	3.597594	20.12321	170.0938	1.54369
6S		.4390166	.2459969	4.988666	28.23689	1260.207	84373.14	4.19079
PROMETHIUM 4F5 6S2								
1S		7332.310	60.46188	.0248787	.0008276	1.732E-06	6.842E-09	.016499
2S		798.1237	14.03324	.1061115	.0132150	.0002954	1.018E-05	.090453
2P	7659.506	265.6664	14.02330	.0902263	.0098813	.0001904	6.143E-06	.070597
3S		170.1945	5.273318	.2747901	.0860949	.0111368	.0020162	.252756
3P	1543.953	56.62925	5.198218	.2649571	.0811975	.0103462	.0019067	.240198
3D	259.5420	31.91402	5.076549	.2365508	.0656797	.0076628	.0014364	.192910
4S		39.31774	2.219070	.6244061	.4390155	.2791775	.2423685	.581030
4P	325.4112	12.86822	2.121358	.6424745	.4683870	.3269752	.3207259	.589555
4D	45.34688	6.458310	1.905909	.6897744	.5509538	.4946328	.6851362	.604299
4F	6.143833	2.542317	1.392788	.9355168	1.132862	3.421289	23.63826	.628899
5S		6.071198	.8346162	1.548789	2.692091	10.73061	60.68804	1.37839
5P	39.46214	1.797385	.7346022	1.749592	3.470802	18.78238	154.0368	1.51281
6S		.4468118	.2486942	4.934233	27.64077	1210.683	79714.76	4.13889
SAMARIUM 4F6 6S2								
1S		7576.329	61.46100	.0244733	.0008008	1.621E-06	6.196E-09	.016234
2S		826.3265	14.28025	.1042863	.0127631	.0002754	9.152E-06	.088927
2P	8068.170	275.0924	14.27132	.0886419	.0095356	.0001772	5.509E-06	.069392
3S		177.1184	5.379757	.2694967	.0828065	.0102966	.0017906	.248032
3P	1636.694	58.95736	5.305675	.2596415	.0779688	.0095336	.0016848	.235573
3D	276.2576	33.29102	5.186422	.2314243	.0628381	.0070053	.0012543	.188880
4S		41.10208	2.268049	.6114096	.4209805	.2567686	.2138487	.569057
4P	346.9109	13.46377	2.170195	.6284223	.4481918	.2994764	.2812548	.576800
4D	48.72076	6.789185	1.954977	.6726921	.5241118	.4478398	.5908748	.589516
4F	6.806711	2.727342	1.443770	.9015592	1.051853	2.954748	19.07449	.606702
5S		6.289427	.8495705	1.521486	2.598918	10.01983	54.92897	1.35215
5P	41.51406	1.858534	.7474059	1.719490	3.354252	17.59147	140.2174	1.48407
6S		.4544530	.2513118	4.882693	27.08237	1165.160	75502.85	4.08945

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
EUROPIUM 4F7 6S2								
1S		7824.346	62.46014	.0240809	.0007753	1.519E-06	5.620E-09	.015973
2S		855.0317	14.52738	.1025224	.0123339	.0002571	8.246E-06	.087449
2P	8491.229	284.6855	14.51943	.0871116	.0092077	.0001651	4.950E-06	.068208
3S		184.1742	5.486118	.2644072	.0797056	.0095350	.0015942	.243520
3P	1732.995	61.33004	5.413032	.2545395	.0749320	.0088003	.0014927	.231135
3D	293.6589	34.69550	5.296148	.2265239	.0601822	.0064182	.0010990	.185005
4S		42.90940	2.316620	.5990320	.4041558	.2367150	.1893639	.557622
4P	369.1660	14.06721	2.218602	.6150771	.4294251	.2750157	.2476395	.564651
4D	52.22696	7.124909	2.003538	.6565989	.4994417	.4069099	.5123428	.575579
4F	7.496359	2.913176	1.493086	.8712547	.9824949	2.586361	15.73139	.586456
5S		6.505561	.8641898	1.495652	2.512283	9.380753	49.91144	1.32730
5P	43.58610	1.918783	.7598619	1.691134	3.246327	16.52379	128.1887	1.45640
6S		.4619728	.2538638	4.833625	26.55614	1123.029	71666.18	4.04325
GADOLINIUM 4F7 5D1 6S2								
1S		8076.341	63.45920	.0237009	.0007510	1.425E-06	5.105E-09	.015721
2S		884.1652	14.77395	.1008206	.0119268	.0002403	7.444E-06	.086030
2P	8928.139	294.4257	14.76704	.0856368	.0088972	.0001541	4.458E-06	.067070
3S		191.3414	5.592090	.2595213	.0767836	.0088435	.0014223	.239182
3P	1832.641	63.73970	5.519952	.2496502	.0720771	.0081368	.0013253	.226858
3D	311.6680	36.12065	5.405279	.2218445	.0576973	.0058904	.0009643	.181350
4S		44.98872	2.371087	.5858366	.3864808	.2161206	.1646629	.546138
4P	394.9500	14.77116	2.273968	.6005184	.4092180	.2491383	.2124725	.552351
4D	56.49379	7.536527	2.062535	.6376161	.4704836	.3587356	.4188247	.561080
4F	8.771884	3.273425	1.594492	.7997455	.8081113	1.585244	6.673538	.560311
5S		7.121085	.9002114	1.439054	2.323050	7.968466	38.71414	1.28471
5P	49.57234	2.126618	.7975088	1.614716	2.954357	13.56270	94.20912	1.40135
5D	3.018376	.5668310	.5078322	2.551737	7.782437	117.5906	3167.217	1.93027
6S		.5441444	.2706951	4.554009	23.60151	890.8944	51002.06	3.80143
TERBIUM 4F8 5D1 6S2								
1S		8332.359	64.45840	.0233326	.0007278	1.338E-06	4.645E-09	.015481
2S		913.8725	15.02130	.0991696	.0115384	.0002248	6.730E-06	.084633
2P	9380.728	304.3533	15.01531	.0842066	.0086011	.0001439	4.020E-06	.065969
3S		198.6604	5.698307	.2548051	.0740163	.0082139	.0012721	.234951
3P	1936.254	66.20151	5.627136	.2449377	.0693801	.0075356	.0011802	.222707
3D	330.4791	37.58006	5.514745	.2173516	.0553658	.0054187	.0008503	.177778
4S		46.84314	2.418823	.5746320	.3718843	.2001749	.1468628	.535684
4P	418.8038	15.39067	2.321478	.5885222	.3930968	.2300043	.1886157	.541327
4D	60.28388	7.882087	2.109981	.6234638	.4499437	.3283735	.3673338	.548602
4F	9.532279	3.461864	1.639849	.7780602	.7657948	1.432497	5.788759	.543996
5S		7.343050	.9144112	1.416450	2.251319	7.496878	35.42852	1.26284
5P	51.85354	2.189152	.8096484	1.590150	2.866505	12.80026	86.71777	1.37728
5D	3.096314	.5741262	.5115911	2.535849	7.705718	116.3950	3151.466	1.90630
6S		.5537394	.2734583	4.508275	23.14186	858.3803	48370.62	3.75844
DYSPROSIUM 4F10 6S2								
1S		8592.403	65.45775	.0229756	.0007057	1.258E-06	4.232E-09	.015245
2S		944.1504	15.26935	.0975677	.0111677	.0002104	6.092E-06	.083309
2P	9849.253	314.4672	15.26418	.0828193	.0083186	.0001345	3.630E-06	.064897
3S		206.1315	5.804763	.2502499	.0713929	.0076396	.0011406	.230876
3P	2043.917	68.71560	5.734578	.2403926	.0668293	.0069895	.0010539	.218733
3D	350.1103	39.07373	5.624539	.2130331	.0531741	.0049956	.0007532	.174348
4S		48.47979	2.460374	.5651155	.3598089	.1877823	.1339797	.526111
4P	440.6845	15.92866	2.361786	.5786809	.3802810	.2159240	.1725993	.531367
4D	63.58249	8.163766	2.146877	.6132931	.4360183	.3107492	.3432317	.537800
4F	9.742581	3.480800	1.633928	.7959685	.8217503	1.837593	9.685238	.534756
5S		7.147979	.9065459	1.425327	2.283912	7.796276	38.15667	1.25965
5P	49.96778	2.096264	.7956568	1.614460	2.963488	13.88432	99.96885	1.38261
6S		.4840141	.2612081	4.698402	25.13313	1012.831	61918.24	3.91516

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
HOLMIUM 4F11 6S2								
1S		8856.418	66.45698	.0226293	.0006845	1.184E-06	3.861E-09	.015012
2S		974.8571	15.51685	.0960199	.0108153	.0001973	5.526E-06	.081999
2P	10332.36	324.7281	15.51255	.0814803	.0080506	.0001259	3.285E-06	.063864
3S		213.7134	5.910839	.2458674	.0689129	.0071153	.0010245	.226964
3P	2155.111	71.26650	5.841593	.2360265	.0644228	.0064924	.0009428	.214880
3D	370.3878	40.58807	5.733765	.2088976	.0511147	.0046121	.0006678	.171062
4S		50.38846	2.507756	.5547473	.3467652	.1744693	.1200484	.516510
4P	466.1730	16.56705	2.408963	.5676014	.3659121	.1999984	.1539645	.521187
4D	67.65963	8.521222	2.194040	.6002675	.4177844	.2855075	.3026790	.526391
4F	10.55478	3.674492	1.679128	.7747486	.7793342	1.663514	8.431876	.519930
5S		7.361637	.9202799	1.403878	2.216429	7.355738	35.07025	1.23898
5P	52.16070	2.154820	.8071814	1.591201	2.880280	13.15117	92.52875	1.35997
6S		.4912348	.2635722	4.656654	24.70180	980.5030	59139.81	3.87576
ERBIUM 4F12 6S2								
1S		9124.437	67.45625	.0222933	.0006643	1.115E-06	3.528E-09	.014793
2S		1006.064	15.76442	.0945201	.0104793	.0001851	5.019E-06	.080750
2P	10831.11	335.1560	15.76098	.0801835	.0077952	.0001180	2.977E-06	.062869
3S		221.4268	6.016852	.2416384	.0665615	.0066356	.0009220	.223141
3P	2270.193	73.86194	5.948534	.2318193	.0621457	.0060391	.0008453	.211168
3D	391.4177	42.12988	5.842886	.2049245	.0491752	.0042653	.0005936	.167896
4S		52.32402	2.554917	.5447928	.3344676	.1623662	.1078320	.507261
4P	492.5173	17.21473	2.455914	.5569836	.3524006	.1855795	.1377131	.511397
4D	71.88851	8.884460	2.240954	.5878482	.4007611	.2629058	.2678220	.515500
4F	11.40055	3.870796	1.723664	.7550190	.7410091	1.514377	7.406583	.505998
5S		7.575506	.9338594	1.383279	2.152575	6.950488	32.30451	1.21911
5P	54.39003	2.213234	.8185428	1.568914	2.801670	12.47654	85.84209	1.33845
6S		.4984001	.2658997	4.616345	24.28892	950.0299	56555.98	3.83742
THULIUM 4F13 6S2								
1S		9396.455	68.45554	.0219672	.0006450	1.051E-06	3.228E-09	.014579
2S		1037.771	16.01207	.0930660	.0101586	.0001739	4.566E-06	.079533
2P	11345.75	345.7506	16.00946	.0789270	.0075518	.0001107	2.702E-06	.061898
3S		229.2715	6.122804	.2375547	.0643298	.0061960	.0008314	.219498
3P	2389.195	76.50102	6.055364	.2277635	.0599896	.0056252	.0007594	.207602
3D	413.2140	43.69918	5.951909	.2011040	.0473463	.0039510	.0005290	.164858
4S		54.28695	2.601880	.5352237	.3228546	.1513360	.0970841	.498325
4P	519.7358	17.87190	2.502665	.5467944	.3396725	.1724896	.1234889	.502049
4D	76.27275	9.253596	2.287647	.5759867	.3848323	.2426001	.2377263	.505087
4F	12.28087	4.069863	1.767622	.7365923	.7061722	1.385433	6.557365	.492877
5S		7.789940	.9473078	1.363457	2.092009	6.576521	29.81643	1.20018
5P	56.65819	2.271599	.8297618	1.547508	2.727202	11.85354	79.80611	1.31781
6S		.5055243	.2681953	4.577338	23.89269	921.2161	54144.45	3.80079
YTTERBIUM 4F14 6S2								
1S		9672.474	69.45486	.0216504	.0006265	9.911E-07	2.957E-09	.014369
2S		1069.977	16.25978	.0916557	.0098523	.0001635	4.160E-06	.078333
2P	11876.51	356.5120	16.25799	.0777091	.0073195	.0001039	2.457E-06	.060961
3S		237.2474	6.228697	.2336089	.0622098	.0057924	.0007511	.215943
3P	2512.245	79.18549	6.162166	.2238482	.0579445	.0052464	.0006836	.204104
3D	435.7892	45.29594	6.060835	.1974273	.0456196	.0036655	.0004726	.161915
4S		56.27738	2.648658	.5260156	.3118726	.1412616	.0876000	.489671
4P	547.8429	18.53860	2.549230	.5370054	.3276639	.1605776	.1109984	.493075
4D	80.81536	9.628685	2.334139	.5646417	.3698987	.2243022	.2116353	.495111
4F	13.19666	4.271819	1.811076	.7193157	.6743394	1.273036	5.846134	.480544
5S		8.005002	.9606347	1.344355	2.034461	6.230564	27.57107	1.18189
5P	58.96605	2.329956	.8408511	1.526915	2.656519	11.27666	74.33885	1.29805
6S		.5126098	.2704612	4.539537	23.51184	893.9185	51888.70	3.76546

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
LUTECIUM 4F14 5D1 6S2								
1S		9952.470	70.45409	.0213427	.0006088	9.358E-07	2.712E-09	.014162
2S		1102.617	16.50702	.0902899	.0095602	.0001539	3.796E-06	.077203
2P	12422.85	367.4219	16.50610	.0765305	.0070982	9.768E-05	2.237E-06	.060052
3S		245.3322	6.334227	.2298031	.0601981	.0054219	.0006796	.212514
3P	2639.045	81.90627	6.268568	.2200768	.0560072	.0048993	.0006163	.200807
3D	459.0529	46.91315	6.169239	.1938956	.0439900	.0034050	.0004225	.159107
4S		58.53051	2.700500	.5162403	.3003468	.1308561	.0779044	.481109
4P	579.7601	19.30182	2.601734	.5263867	.3147581	.1478972	.0977233	.483982
4D	86.18825	10.07660	2.389450	.5513793	.3524188	.2024956	.1794941	.484827
4F	14.80671	4.651049	1.900136	.6745787	.5804720	.8583888	2.861840	.465285
5S		8.680814	.9963989	1.298350	1.894805	5.362725	21.77643	1.14874
5P	66.39246	2.562174	.8791185	1.462588	2.431750	9.345843	55.32100	1.25415
5D	3.468782	.6021631	.5266309	2.485283	7.526958	117.8271	3408.512	1.79586
6S		.6129113	.2896880	4.258749	20.71033	695.5543	35818.22	3.52829
HAFNIUM 5D2 6S2								
1S		10236.46	71.45334	.0210436	.0005919	8.843E-07	2.491E-09	.013968
2S		1135.745	16.75424	.0889645	.0092810	.0001450	3.469E-06	.076084
2P	12985.64	378.4950	16.75418	.0753874	.0068869	9.191E-05	2.040E-06	.059166
3S		253.5448	6.439671	.2261217	.0582836	.0050806	.0006160	.209209
3P	2769.979	84.67165	6.374928	.2164314	.0541658	.0045804	.0005566	.197555
3D	483.1145	48.55772	6.277582	.1904890	.0424462	.0031671	.0003784	.156389
4S		60.86718	2.753210	.5066832	.2892828	.1212328	.0692847	.472752
4P	613.3807	20.09499	2.655240	.5160023	.3023826	.1362233	.0860364	.475116
4D	91.89591	10.54466	2.446045	.5384387	.3357801	.1828608	.1524936	.474836
4F	16.48371	5.030180	1.984615	.6382703	.5121058	.6279315	1.651379	.450863
5S		9.376487	1.031696	1.256395	1.772569	4.666930	17.53911	1.11737
5P	74.14312	2.797680	.9161441	1.406011	2.243706	7.892480	42.46708	1.21355
5D	4.569206	.7484822	.5847485	2.227740	5.984505	72.18960	1601.515	1.65455
6S		.6927564	.3042701	4.068442	18.92482	583.5855	27728.92	3.36158
TANTALUM 5D3 6S2								
1S		10524.46	72.45260	.0207527	.0005756	8.363E-07	2.290E-09	.013777
2S		1169.359	17.00143	.0876774	.0090138	.0001367	3.174E-06	.074993
2P	13565.14	389.7317	17.00224	.0742780	.0066849	8.655E-05	1.864E-06	.058312
3S		261.8944	6.545153	.2225547	.0564579	.0047655	.0005591	.205976
3P	2905.129	87.48199	6.481260	.2129048	.0524137	.0042869	.0005035	.194458
3D	507.9905	50.22984	6.385883	.1872006	.0409823	.0029496	.0003396	.153764
4S		63.28228	2.806625	.4973678	.2786969	.1123690	.0616590	.464580
4P	648.6708	20.91578	2.709531	.5058896	.2905699	.1255350	.0758118	.466505
4D	97.92552	11.03062	2.503552	.5259060	.3200662	.1653235	.1299199	.465149
4F	18.23458	5.411625	2.065812	.6075368	.4588993	.4817497	1.045329	.437438
5S		10.09221	1.066648	1.217699	1.663862	4.094005	14.31915	1.08748
5P	82.27261	3.038259	.9524069	1.355062	2.081580	6.749330	33.27464	1.17592
5D	5.674401	.8872676	.6345834	2.049213	5.028702	49.82508	902.7961	1.55029
6S		.7622515	.3165873	3.920254	17.59518	507.1463	22633.83	3.22942
TUNGSTEN 5D4 6S2								
1S		10816.45	73.45187	.0204698	.0005600	7.914E-07	2.108E-09	.013589
2S		1203.463	17.24862	.0864271	.0087581	.0001290	2.908E-06	.073955
2P	14161.61	401.1323	17.25029	.0732009	.0064917	8.159E-05	1.704E-06	.057475
3S		270.3783	6.650638	.2190982	.0547164	.0044743	.0005083	.202882
3P	3044.577	90.33772	6.587586	.2094911	.0507449	.0040164	.0004562	.191412
3D	533.6966	51.92970	6.494153	.1840239	.0395927	.0027502	.0003053	.151238
4S		65.77250	2.860636	.4883055	.2685883	.1042225	.0549293	.456670
4P	685.6221	21.76275	2.764466	.4960669	.2793238	.1157769	.0668919	.458236
4D	104.2717	11.53310	2.561739	.5138171	.3052849	.1497125	.1110630	.455784
4F	20.06375	5.796709	2.144471	.5808645	.4158590	.3817959	.7037412	.424799
5S		10.82677	1.101263	1.181821	1.566414	3.615513	11.82064	1.05940
5P	90.79427	3.284177	.9880609	1.308682	1.939735	5.829386	26.49577	1.14092
5D	6.814430	1.023834	.6799147	1.911769	4.354788	36.70998	562.7258	1.46670
6S		.8246407	.3274294	3.798149	16.53877	450.5248	19093.72	3.11788



TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R*-3	R*-2	1/R	R	R**2	R**4	R**6	R MAX
RHENIUM 505 6S2								
1S		11112.43	74.45116	.0201945	.0005450	7.496E-07	1.943E-09	.013404
2S		1238.056	17.49581	.0852120	.0085130	.0001218	2.668E-06	.072926
2P	14775.30	412.6968	17.49833	.0721546	.0063067	7.697E-05	1.561E-06	.056671
3S		278.9973	6.756135	.2157468	.0530539	.0042049	.0004627	.199835
3P	3188.401	93.23906	6.693912	.2061847	.0491543	.0037669	.0004139	.188503
3D	560.2483	53.65743	6.602402	.1809532	.0382723	.0025673	.0002749	.148763
4S		68.33513	2.915152	.4795012	.2589478	.0967444	.0489967	.449042
4P	724.2331	22.63472	2.819932	.4865421	.2686345	.1068812	.0591188	.450171
4D	110.9325	12.05110	2.620446	.5021839	.2914091	.1358283	.0952821	.446791
4F	21.97476	6.186312	2.221089	.5573105	.3801053	.3099086	.4953788	.412910
5S		11.57914	1.135548	1.148424	1.478525	3.211538	9.851057	1.03271
5P	99.71589	3.535478	1.023191	1.266147	1.814358	5.076913	21.38387	1.10821
5D	8.001411	1.160285	.7223331	1.799927	3.845362	28.21671	374.4854	1.39616
6S		.8815674	.3371965	3.694182	15.66692	406.4873	16483.95	3.02264
OSMIUM 506 6S2								
1S		11412.42	75.45044	.0199265	.0005306	7.105E-07	1.792E-09	.013229
2S		1273.140	17.74301	.0840305	.0082781	.0001152	2.450E-06	.071922
2P	15406.46	424.4255	17.74636	.0711378	.0061296	7.267E-05	1.431E-06	.055879
3S		287.7520	6.861651	.2124957	.0514655	.0039553	.0004217	.196927
3P	3336.674	96.18620	6.800247	.2029803	.0476368	.0035362	.0003761	.185636
3D	587.6606	55.41311	6.710639	.1779831	.0370166	.0023993	.0002480	.146397
4S		70.96684	2.970076	.4709590	.2497650	.0898869	.0437703	.441563
4P	764.5089	23.53080	2.875843	.4773167	.2584844	.0987768	.0523450	.442296
4D	117.9075	12.58388	2.679554	.4910044	.2783956	.1234767	.0820426	.438091
4F	23.97066	6.581069	2.296026	.5362371	.3498135	.2562632	.3607833	.401724
5S		12.34875	1.169515	1.117228	1.398844	2.867424	8.278262	1.00738
5P	109.0450	3.792186	1.057861	1.226910	1.702636	4.453346	17.45850	1.07760
5D	9.242505	1.297741	.7626922	1.705694	3.442784	22.35016	261.1083	1.33483
6S		.9339910	.3461257	3.603713	14.92878	371.0802	14480.12	2.93864
IRIDIUM 507 6S2								
1S		11716.41	76.44976	.0196655	.0005168	6.739E-07	1.655E-09	.013058
2S		1308.714	17.99020	.0828814	.0080528	.0001090	2.253E-06	.070968
2P	16055.34	436.3185	17.99439	.0701493	.0059598	6.867E-05	1.314E-06	.055119
3S		296.6430	6.967192	.2093402	.0499469	.0037239	.0003849	.194058
3P	3489.470	99.17929	6.906596	.1998732	.0461881	.0033229	.0003422	.182905
3D	615.9485	57.19684	6.818868	.1751086	.0358215	.0022447	.0002240	.144086
4S		73.66799	3.025396	.4626694	.2410144	.0835932	.0391604	.434331
4P	806.4453	24.44987	2.932105	.4683914	.2488551	.0913963	.0464402	.434739
4D	125.1979	13.13088	2.738972	.4802680	.2661931	.1124753	.0708895	.429669
4F	26.05425	6.981465	2.369554	.5171895	.3237529	.2150786	.2699445	.391195
5S		13.13516	1.203183	1.087997	1.326274	2.572019	7.008287	.983577
5P	118.7897	4.054333	1.092124	1.190541	1.602410	3.930978	14.39822	1.04894
5D	10.54156	1.436776	.8014916	1.624396	3.114726	18.10997	188.6016	1.28092
6S		.9826010	.3543783	3.523711	14.29191	341.8981	12894.06	2.86352
PLATINUM 509 6S1								
1S		12024.43	77.44920	.0194113	.0005035	6.396E-07	1.531E-09	.012890
2S		1344.773	18.23737	.0817633	.0078366	.0001031	2.075E-06	.070022
2P	16722.20	448.3758	18.24241	.0691880	.0057969	6.495E-05	1.207E-06	.054370
3S		305.6586	7.072630	.2062789	.0484953	.0035092	.0003518	.191311
3P	3646.785	102.2165	7.012889	.1968608	.0448048	.0031254	.0003119	.180193
3D	645.1280	59.00875	6.927098	.1723250	.0346829	.0021023	.0002028	.141856
4S		76.42211	3.080791	.4546588	.2327086	.0778388	.0351121	.427369
4P	850.0852	25.39211	2.988709	.4597533	.2397143	.0846715	.0413026	.427415
4D	132.8344	13.69408	2.798903	.4699167	.2547011	.1026355	.0615705	.421489
4F	28.21990	7.385981	2.441443	.5000315	.3014339	.1838413	.2106121	.381272
5S		13.77703	1.230133	1.066098	1.274644	2.387430	6.342743	.962672
5P	127.0411	4.264118	1.118779	1.164475	1.534718	3.624260	12.85852	1.02437
5D	11.11600	1.488099	.8135596	1.613530	3.106610	18.93589	216.6609	1.24565
6S		.8173303	.3318679	3.758787	16.36662	458.1498	20356.03	3.00555

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
GOLD 5D10 6S1								
1S		12336.42	78.44856	.0191635	.0004907	6.075E-07	1.416E-09	.012724
2S		1381.328	18.48459	.0806749	.0076289	9.772E-05	1.912E-06	.069087
2P	17407.27	460.5976	18.49045	.0682526	.0056407	6.147E-05	1.111E-06	.053650
3S		314.8228	7.178229	.2033023	.0471044	.0033095	.0003220	.188612
3P	3808.843	105.3018	7.119277	.1934354	.0434815	.0029421	.0002846	.177631
3D	675.2113	60.84878	7.035325	.1696281	.0335975	.0019709	.0001838	.139703
4S		79.25481	3.136704	.4468672	.2247725	.0725370	.0315182	.420488
4P	895.4110	26.35620	3.045561	.4514015	.2310432	.0785363	.0367928	.420229
4D	140.8466	14.27556	2.859616	.4598351	.2437138	.0935086	.0527879	.413599
4F	30.48596	7.798641	2.512742	.4840772	.2813983	.1577014	.1636904	.371895
5S		14.59016	1.263195	1.039970	1.212709	2.157083	5.430058	.941096
5P	137.5282	4.534830	1.152271	1.132472	1.450979	3.230387	10.76961	.998818
5D	12.42464	1.622796	.8500616	1.543268	2.834055	15.58818	160.1251	1.20041
6S		.8433482	.3373898	3.700615	15.88934	434.4034	18922.96	2.94759
MERCURY 5D10 6S2								
1S		12652.40	79.44787	.0189220	.0004784	5.773E-07	1.312E-09	.012563
2S		1418.381	18.73185	.0796149	.0074294	9.265E-05	1.764E-06	.068211
2P	18110.78	472.9835	18.73847	.0673421	.0054906	5.822E-05	1.024E-06	.052939
3S		324.1371	7.283999	.2004065	.0457706	.0031236	.0002950	.185999
3P	3975.730	108.4354	7.225764	.1910927	.0422146	.0027719	.0002600	.175079
3D	706.2126	62.71694	7.143551	.1670140	.0325620	.0018495	.0001668	.137614
4S		82.16700	3.193126	.4392865	.2171859	.0676468	.0283218	.413914
4P	942.4616	27.34231	3.102667	.4433210	.2228085	.0729273	.0328214	.413352
4D	149.0926	14.86231	2.919556	.4503438	.2336419	.0856642	.0460072	.406070
4F	32.85530	8.219606	2.583518	.4692055	.2633657	.1358616	.1272816	.363010
5S		15.59362	1.302587	1.010192	1.142851	1.900306	4.414297	.918961
5P	150.5983	4.873660	1.192875	1.095401	1.355160	2.788853	8.487274	.972505
5D	14.70664	1.857347	.9103226	1.432684	2.409821	10.59260	82.39297	1.14935
6S		1.109771	.3760654	3.328422	12.79939	278.4013	9656.677	2.67841
THALLIUM 6P1								
1S		12972.37	80.44719	.0186865	.0004666	5.490E-07	1.217E-09	.012410
2S		1455.923	18.97911	.0785824	.0072376	8.790E-05	1.629E-06	.067342
2P	18833.04	485.5346	18.98653	.0664555	.0053465	5.518E-05	9.440E-07	.052257
3S		333.5883	7.389792	.1975913	.0444923	.0029504	.0002705	.183461
3P	4147.481	111.6165	7.332313	.1883305	.0410015	.0026137	.0002378	.172643
3D	736.1503	64.61354	7.251794	.1644784	.0315733	.0017373	.0001516	.135581
4S		85.14044	3.249720	.4319429	.2099623	.0631530	.0254902	.407452
4P	991.3233	28.35176	3.160084	.4354896	.2149723	.0677882	.0293276	.406639
4D	157.6732	15.46259	2.979689	.4412124	.2241600	.0786129	.0402129	.398739
4F	35.32750	8.648293	2.653658	.4553855	.2472307	.1179671	.1004858	.354567
5S		16.62967	1.341971	.9821822	1.079210	1.682822	3.630077	.897887
5P	164.7958	5.235495	1.234769	1.059614	1.265651	2.404607	6.648066	.947443
5D	17.17254	2.101581	.9689226	1.341197	2.090506	7.593356	46.66654	1.10329
6S		1.472371	.4217321	2.966903	10.07299	166.1742	4280.691	2.45141
6P	7.555084	.3128700	.3162347	3.926233	17.87595	550.2513	27093.50	3.13572
LEAD 6P2								
1S		13296.34	81.44653	.0184568	.0004552	5.225E-07	1.129E-09	.012259
2S		1493.958	19.22640	.0775762	.0070531	8.345E-05	1.507E-06	.066480
2P	19574.28	498.2506	19.23459	.0655919	.0052080	5.234E-05	8.715E-07	.051584
3S		343.1806	7.495653	.1948525	.0432660	.0027889	.0002484	.180962
3P	4324.181	114.8453	7.438933	.1856451	.0398391	.0024665	.0002178	.170252
3D	771.0401	66.53866	7.360058	.1620178	.0306285	.0016334	.0001380	.133605
4S		88.18018	3.306564	.4248173	.2030712	.0590128	.0229745	.401191
4P	1042.012	29.38408	3.217774	.4279011	.2075149	.0630765	.0262478	.400069
4D	166.5912	16.07608	3.039973	.4324262	.2152282	.0722633	.0352458	.391612
4F	37.90556	9.084939	2.723258	.4424890	.2327017	.1031311	.0803835	.346519
5S		17.71592	1.381914	.9554660	1.020352	1.494998	3.004863	.877617
5P	179.9962	5.615589	1.277203	1.025942	1.184612	2.086162	5.279970	.923387
5D	19.74693	2.347195	1.024169	1.267091	1.853459	5.777419	29.53963	1.06193
6S		1.816297	.4599216	2.724195	8.443418	113.9290	2359.428	2.29029
6P	10.98939	.4282520	.3603333	3.456900	13.77666	320.3862	11855.31	2.80073

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
<b>BISMUTH 6P3</b>								
1S		13624.31	82.44588	.0182327	.0004442	4.975E-07	1.049E-09	.012111
2S		1532.487	19.47370	.0765954	.0068755	7.928E-05	1.394E-06	.065654
2P	20334.74	511.1315	19.48266	.0647504	.0050747	4.968E-05	8.055E-07	.050934
3S		352.9144	7.601584	.1921870	.0420890	.0026382	.0002284	.178578
3P	4505.902	118.1220	7.545622	.1830334	.0387246	.0023293	.0001997	.167914
3D	804.8970	68.49238	7.468347	.1596289	.0297250	.0015371	.0001258	.131696
4S		91.28585	3.363641	.4179016	.1964941	.0551947	.0207362	.395124
4P	1094.554	30.43904	3.275711	.4205473	.2004154	.0587528	.0235292	.393798
4D	175.8526	16.70273	3.100397	.4239674	.2068065	.0665351	.0309755	.384835
4F	40.59144	9.529561	2.792359	.4304181	.2195586	.0907200	.0650634	.338826
5S		18.84766	1.422205	.9300839	.9660975	1.332979	2.504826	.858153
5P	196.1251	6.011075	1.319833	.9944284	1.111515	1.821726	4.248311	.900408
5D	22.43907	2.595504	1.077017	1.204622	1.667284	4.564447	20.01807	1.02451
6S		2.156874	.4943044	2.539350	7.307071	83.79271	1453.948	2.16244
6P	14.57199	.5429192	.3984986	3.136561	11.29541	212.0194	6291.582	2.57141
<b>POLONIUM 6P4</b>								
1S		13956.27	83.44523	.0180159	.0004336	4.740E-07	9.755E-10	.011964
2S		1571.509	19.72102	.0756391	.0067046	7.536E-05	1.292E-06	.064857
2P	21114.68	524.1775	19.73075	.0639302	.0049465	4.718E-05	7.452E-07	.050297
3S		362.7899	7.707584	.1895919	.0409586	.0024974	.0002102	.176199
3P	4692.719	121.4465	7.652381	.1804924	.0376554	.0022015	.0001833	.165674
3D	839.7356	70.47473	7.576661	.1573085	.0288606	.0014477	.0001149	.129834
4S		94.45707	3.420936	.4111884	.1902141	.0516707	.0187420	.389169
4P	1148.977	31.51647	3.333875	.4134198	.1936538	.0547815	.0211261	.387584
4D	185.4631	17.34247	3.160946	.4158200	.1988587	.0613581	.0272941	.378197
4F	43.38711	9.982176	2.861000	.4190886	.2076179	.0802500	.0532180	.331451
5S		20.02107	1.462692	.9060196	.9161457	1.193012	2.102593	.839483
5P	213.1452	6.420300	1.362487	.9649626	1.045516	1.600728	3.458434	.878522
5D	25.25576	2.847317	1.128050	1.150589	1.515708	3.703089	14.22150	.990303
6S		2.499529	.5262665	2.389853	6.452695	64.42269	961.6439	2.05595
6P	18.33921	.6587448	.4331813	2.894961	9.592868	150.9701	3731.516	2.39723
<b>ASTATINE 6P5</b>								
1S		14292.23	84.44456	.0178003	.0004233	4.518E-07	9.078E-10	.011820
2S		1611.024	19.96837	.0747062	.0065399	7.169E-05	1.198E-06	.064066
2P	21914.35	537.3883	19.97885	.0631304	.0048231	4.484E-05	6.901E-07	.049675
3S		372.8074	7.813654	.1870643	.0398724	.0023658	.0001936	.173936
3P	4884.706	124.8190	7.759208	.1780193	.0366292	.0020822	.0001684	.163443
3D	875.5706	72.48573	7.684999	.1550536	.0280328	.0013646	.0001050	.128021
4S		97.69334	3.478428	.4046704	.1842153	.0484152	.0169632	.383461
4P	1205.305	32.61621	3.392245	.4065101	.1872112	.0511304	.0189987	.381671
4D	195.4282	17.99521	3.221605	.4079682	.1913514	.0566711	.0241114	.371779
4F	46.29467	10.44283	2.929219	.4084270	.1967257	.0713485	.0439383	.324501
5S		21.23350	1.503280	.8832155	.8701288	1.071700	1.776716	.821573
5P	231.0324	6.842058	1.405055	.9373956	.9857884	1.414749	2.845517	.857718
5D	28.20213	3.103147	1.177649	1.102989	1.389118	3.064635	10.46273	.959079
6S		2.847020	.5565252	2.264451	5.779802	51.09595	668.4647	1.96434
6P	22.31033	.7765936	.4655233	2.702211	8.337917	112.8308	2382.756	2.25704
<b>RADON 6P6</b>								
1S		14632.19	85.44393	.0175918	.0004135	4.310E-07	8.455E-10	.011685
2S		1651.033	20.21574	.0737960	.0063812	6.823E-05	1.112E-06	.063281
2P	22734.00	550.7647	20.22697	.0623503	.0047042	4.265E-05	6.397E-07	.049071
3S		382.9672	7.919796	.1846019	.0388283	.0022427	.0001785	.171705
3P	5081.950	128.2398	7.866113	.1756114	.0356436	.0019708	.0001549	.161319
3D	912.4175	74.52549	7.793372	.1528617	.0272399	.0012874	9.605E-05	.126267
4S		100.9943	3.536104	.3983409	.1784828	.0454051	.0153743	.377809
4P	1263.563	33.73796	3.450799	.3998111	.1810705	.0477709	.0171125	.375830
4D	205.7532	18.66087	3.282361	.4003982	.1842543	.0524207	.0213527	.365616
4F	49.31611	10.91153	2.997048	.3983700	.1867532	.0637271	.0365829	.317813

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
RADON 86P								
5S		22.48301	1.543905	.8615973	.8276782	.9661423	1.510735	.804375
5P	250.1032	7.284316	1.448390	.9108837	.9298567	1.249171	2.316264	.837855
5D	31.28258	3.363348	1.226083	1.060484	1.281375	2.576159	7.909170	.930166
6S		3.200930	.5855082	2.156622	5.232653	41.48077	482.2922	1.88420
6P	26.16892	.8882192	.4952738	2.543384	7.370029	87.31501	1604.706	2.13933
FRANCIUM 87S1								
1S		14976.15	86.44329	.0173880	.0004039	4.113E-07	7.882E-10	.011552
2S		1691.539	20.46315	.0729076	.0062282	6.498E-05	1.033E-06	.062540
2P	23573.88	564.3061	20.47511	.0615892	.0045897	4.058E-05	5.935E-07	.048476
3S		393.2724	8.026037	.1822015	.0378237	.0021273	.0001648	.169508
3P	5284.489	131.7081	7.973070	.1732664	.0346967	.0018666	.0001427	.159233
3D	950.2937	76.59417	7.901779	.1507299	.0264797	.0012155	8.800E-05	.124551
4S		104.3643	3.594029	.3921854	.1729952	.0426157	.0139511	.372418
4P	1323.762	34.88129	3.509507	.3933156	.1752151	.0446764	.0154375	.370221
4D	216.4503	19.33986	3.343250	.3930902	.1775333	.0485558	.0189525	.359534
4F	52.45576	11.38869	3.064580	.3888524	.1775812	.0571505	.0306820	.311347
5S		23.77766	1.584811	.8409454	.7881530	.8729871	1.288592	.787826
5P	269.7885	7.731314	1.490871	.8864859	.8801189	1.113310	1.928578	.817015
5D	34.55977	3.633642	1.274644	1.020921	1.184773	2.170624	5.942954	.903175
6S		3.757235	.6271013	2.016926	4.550486	30.43301	288.6021	1.79683
6P	33.36340	1.093745	.5435952	2.318082	6.064724	56.54924	787.6587	2.00807
7S		.2292599	.1815436	6.629752	49.55344	3785.533	421803.9	5.64197
RADIUM 88S2								
1S		15324.10	87.44266	.0171889	.0003947	3.927E-07	7.353E-10	.011421
2S		1732.541	20.71060	.0720402	.0060807	6.193E-05	9.604E-07	.061815
2P	24434.24	578.0130	20.72327	.0608464	.0044793	3.864E-05	5.512E-07	.047903
3S		403.7222	8.132367	.1798609	.0368569	.0020192	.0001523	.167417
3P	5492.418	135.2245	8.080093	.1709817	.0337863	.0017692	.0001315	.157160
3D	989.2133	78.69175	8.010222	.1486558	.0257504	.0011485	8.072E-05	.122886
4S		107.8013	3.652159	.3862008	.1677429	.0400302	.0126758	.367060
4P	1385.944	36.04638	3.568372	.3870140	.1696275	.0418225	.0139473	.364718
4D	227.5238	20.03199	3.404246	.3860337	.1711653	.0450371	.0168600	.353791
4F	55.71543	11.87428	3.131825	.3798290	.1691216	.0514446	.0259053	.305245
5S		25.11317	1.625858	.8212559	.7514116	.7909152	1.104002	.772075
5P	290.3726	8.190260	1.533272	.8634694	.8345207	.9962008	1.616685	.801089
5D	38.00506	3.910889	1.322690	.984475	1.100127	1.848327	4.557633	.877923
6S		4.347968	.6675863	1.900012	4.022812	23.27442	185.7592	1.71870
6P	40.82868	1.299128	.5870710	2.152564	5.204262	40.63523	464.1384	1.90044
7S		.3792182	.2185117	5.573923	35.02111	1888.468	149657.6	4.74750
ACTINIUM 89S2								
1S		15676.05	88.44205	.0169944	.0003858	3.752E-07	6.866E-10	.011291
2S		1774.036	20.95807	.0711932	.0059383	5.904E-05	8.938E-07	.061095
2P	25315.35	591.8853	20.97144	.0601212	.0043728	3.681E-05	5.123E-07	.047338
3S		414.3103	8.238724	.1775789	.0359263	.0019178	.0001408	.165332
3P	5705.761	138.7879	8.187146	.1687556	.0329110	.0016779	.0001214	.155210
3D	1029.191	80.81826	8.118700	.1466371	.0250506	.0010861	7.413E-05	.121265
4S		111.2970	3.710360	.3803908	.1627218	.0376359	.0115336	.361953
4P	1450.111	37.23252	3.627348	.3809027	.1642964	.0391902	.0126212	.359411
4D	238.9858	20.73765	3.465376	.3792139	.1651247	.0418282	.0150314	.348100
4F	59.09560	12.36805	3.198769	.3712653	.1613042	.0464733	.0220093	.299313
5S		26.47176	1.666588	.8026170	.7174564	.7188518	.9507678	.757003
5P	311.8493	8.660612	1.575588	.8416861	.7925182	.8944951	1.363634	.784050
5D	41.64064	4.196691	1.370529	.9513781	1.025208	1.589218	3.570491	.854323
6S		4.853843	.7002163	1.817170	3.675735	19.29950	138.8292	1.65541
6P	47.28980	1.469674	.6208598	2.041830	4.675483	32.50829	327.8375	1.81734
6D	3.267600	.4273338	.4130278	3.066237	10.90865	206.5339	6466.405	2.47083
7S		.4498571	.2337040	5.234095	30.92192	1479.303	104563.2	4.44755

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
THORIUM 602 7S2								
1S		16032.01	89.44145	.0168041	.0003772	3.586E-07	6.415E-10	.011163
2S		1816.026	21.20556	.0703657	.0058008	5.633E-05	8.325E-07	.060380
2P	26217.44	605.9229	21.21963	.0594131	.0042701	3.509E-05	4.766E-07	.046787
3S		425.0405	8.345140	.1753530	.0350301	.0018226	.0001304	.163312
3P	5924.618	142.3990	8.294250	.1665857	.0320688	.0015925	.0001121	.153269
3D	1070.240	82.97364	8.227209	.1446717	.0243786	.0010277	6.815E-05	.119678
4S		114.8554	3.768684	.3747425	.1579155	.0354146	.0105080	.356896
4P	1516.301	38.43984	3.686438	.3749725	.1592056	.0367586	.0114385	.354207
4D	250.8346	21.45624	3.526582	.3726248	.1593943	.0388991	.0134302	.342672
4F	62.59829	12.87001	3.265429	.3631236	.1540607	.0421202	.0188073	.293612
5S		27.86259	1.707243	.7848764	.6858997	.6551956	.8227342	.742454
5P	334.2167	9.141839	1.617751	.8211025	.7538881	.8062672	1.158016	.767776
5D	45.43385	4.487906	1.417678	.9207873	.9591305	1.379536	2.846664	.832117
6S		5.352198	.7308445	1.746037	3.391242	16.34726	107.4036	1.59914
6P	53.79645	1.636507	.6522280	1.949128	4.256101	26.76018	242.3407	1.74549
6D	4.154827	.5192282	.4519791	2.808843	9.116388	141.8602	3624.422	2.29514
7S		.5116436	.2462185	4.983816	28.07340	1225.719	79493.07	4.22307
PROTACTINIUM 5F2 6D1 7S2								
1S		16391.98	90.44094	.0166181	.0003689	3.430E-07	5.999E-10	.011039
2S		1858.584	21.45353	.0695559	.0056678	5.376E-05	7.759E-07	.059698
2P	27141.93	620.1464	21.46824	.0587201	.0041707	3.347E-05	4.437E-07	.046251
3S		435.9105	8.451604	.1731811	.0341666	.0017333	.0001208	.161359
3P	6149.136	146.0587	8.401429	.1644694	.0312581	.0015124	.0001037	.151350
3D	1112.448	85.16112	8.335870	.1427570	.0237331	.0009733	6.273E-05	.118140
4S		118.4245	3.826407	.3693006	.1533491	.0333687	.0095955	.352069
4P	1583.795	39.65176	3.744891	.3692710	.1543868	.0345331	.0103966	.349240
4D	262.9400	22.17789	3.586984	.3663437	.1540326	.0362697	.0120611	.337384
4F	66.20853	13.37737	3.331404	.3554410	.1474105	.0383733	.0162688	.288205
5S		28.99815	1.739977	.7711326	.6622872	.6114112	.7429735	.729594
5P	352.6739	9.516246	1.649887	.8061519	.7269949	.7509402	1.044253	.753839
5D	48.14423	4.680885	1.447788	.9028635	.9230221	1.283118	2.575116	.814941
5F	5.955122	1.642988	.9793342	1.333916	2.137334	9.073788	72.77929	1.03447
6S		5.349713	.7324016	1.740443	3.373308	16.28200	107.8919	1.58419
6P	53.64856	1.618925	.6504407	1.952061	4.275964	27.26052	252.7906	1.73445
6D	3.730865	.4714356	.4336276	2.927217	9.968246	174.4296	5098.704	2.34358
7S		.4658556	.2393024	5.105435	29.45337	1349.951	91890.55	4.32009
URANIUM 5F3 6D1 7S2								
1S		16755.95	91.44041	.0164361	.0003609	3.282E-07	5.614E-10	.010921
2S		1901.609	21.70134	.0687649	.0055394	5.134E-05	7.239E-07	.059030
2P	28087.47	634.5272	21.71669	.0580435	.0040748	3.194E-05	4.134E-07	.045722
3S		446.9217	8.558110	.1710616	.0333343	.0016493	.0001121	.159412
3P	6379.256	149.7651	8.508625	.1624057	.0304775	.0014372	9.597E-05	.149537
3D	1155.722	87.37581	8.444487	.1408924	.0231127	.0009224	5.780E-05	.116629
4S		122.0725	3.884472	.3639934	.1489635	.0314629	.0087714	.347327
4P	1653.572	40.88955	3.803668	.3637197	.1497679	.0324669	.0094598	.344314
4D	275.4713	22.91465	3.647671	.3602459	.1489166	.0338475	.0108433	.332303
4F	69.94387	13.89286	3.397141	.3481068	.1412056	.0350370	.0141051	.282995
5S		30.26825	1.775745	.7566613	.6376951	.5664911	.6617205	.716995
5P	373.7243	9.945076	1.685943	.7899655	.6981225	.6919341	.9221780	.739709
5D	51.49578	4.922227	1.484869	.8813110	.8794363	1.163233	2.218158	.797077
5F	6.696808	1.794643	1.025036	1.273635	1.943837	7.426158	53.22240	.994938
6S		5.577517	.7469017	1.707681	3.248249	15.11394	96.67761	1.55316
6P	56.65137	1.686360	.6635597	1.914406	4.113970	25.27580	226.2985	1.69903
6D	3.928013	.4892064	.4419095	2.874839	9.628932	163.7862	4678.036	2.29276
7S		.4730102	.2418054	5.050272	28.83505	1297.154	86853.19	4.26579

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
NEPTUNIUM 5F4 6D1 7S2								
1S		17123.92	92.43991	.0162581	.0003531	3.141E-07	5.257E-10	.010805
2S		1945.133	21.94920	.0679917	.0054153	4.906E-05	6.758E-07	.058368
2P	29054.83	649.0750	21.96519	.0573823	.0039822	3.049E-05	3.856E-07	.045209
3S		458.0739	8.664659	.1689926	.0325317	.0015703	.0001040	.157538
3P	6615.093	153.5190	8.615859	.1603925	.0297255	.0013666	8.891E-05	.147731
3D	1200.110	89.61929	8.553123	.1390755	.0225162	.0008747	5.331E-05	.115170
4S		125.7765	3.942561	.3588363	.1447637	.0296920	.0080293	.342686
4P	1725.341	42.14606	3.862444	.3583345	.1453555	.0305547	.0086213	.339625
4D	288.3787	23.66247	3.708282	.3543573	.1440606	.0316301	.0097705	.327301
4F	73.80110	14.41565	3.462532	.3411158	.1354272	.0320819	.0122890	.277982
5S		31.54546	1.811013	.7429100	.6147677	.5262292	.5917886	.704721
5P	395.2469	10.37572	1.721421	.7746569	.6713691	.6395262	.8183793	.726383
5D	54.92577	5.164124	1.521172	.8611899	.8397320	1.059433	1.924694	.780217
5F	7.451302	1.943898	1.068235	1.221672	1.785218	6.212850	40.34529	.960003
6S		5.795875	.7606434	1.677604	3.135564	14.10045	87.29904	1.52426
6P	59.57995	1.750411	.6758905	1.880145	3.969409	23.57239	204.4020	1.66650
6D	4.108739	.5049631	.4492720	2.829876	9.344468	155.2614	4354.144	2.24768
7S		.4799285	.2441922	4.999053	28.26698	1249.509	82376.10	4.21583
PLUTONIUM 5F6 7S2								
1S		17495.89	93.43943	.0160839	.0003456	3.008E-07	4.927E-10	.010690
2S		1989.186	22.19728	.0672350	.0052952	4.689E-05	6.314E-07	.057723
2P	30044.76	663.7977	22.21388	.0567353	.0038926	2.913E-05	3.598E-07	.044708
3S		469.3654	8.771239	.1669723	.0317575	.0014959	9.668E-05	.155718
3P	6856.739	157.3205	8.723131	.1584276	.0290007	.0013003	8.245E-05	.145939
3D	1245.662	91.89304	8.661833	.1373040	.0219424	.0008301	4.923E-05	.113733
4S		129.5170	4.000415	.3538374	.1407502	.0280491	.0073625	.338243
4P	1798.842	43.41517	3.920958	.3531250	.1411507	.0287892	.0078733	.334931
4D	301.6200	24.41801	3.768536	.3486924	.1394690	.0296095	.0088321	.322549
4F	77.77966	14.94535	3.527539	.3344524	.1300462	.0294687	.0107823	.273164
5S		32.70711	1.842640	.7309683	.5953379	.4939941	.5393394	.693482
5P	415.1383	10.75866	1.752407	.7617817	.6495080	.5995551	.7454565	.714222
5D	57.88259	5.362478	1.550095	.8461187	.8113625	.9936031	1.764854	.765428
5F	7.732189	1.987377	1.077854	1.220258	1.801156	6.664929	48.36901	.938435
6S		5.733089	.7589763	1.679112	3.145787	14.31090	90.42124	1.51440
6P	58.50942	1.708566	.6701417	1.893583	4.035128	24.64221	222.2310	1.66239
7S		.4231498	.2346525	5.177309	30.31323	1437.770	101629.7	4.36159
AMERICIUM 5F7 7S2								
1S		17871.86	94.43893	.0159134	.0003383	2.883E-07	4.620E-10	.010576
2S		2033.709	22.44522	.0664953	.0051792	4.485E-05	5.904E-07	.057098
2P	31056.51	678.6787	22.46244	.0561032	.0038061	2.784E-05	3.361E-07	.044212
3S		480.7988	8.877864	.1649991	.0310104	.0014259	8.990E-05	.153903
3P	7104.211	161.1690	8.830427	.1565099	.0283019	.0012379	7.653E-05	.144256
3D	1292.323	94.19406	8.770501	.1355773	.0213901	.0007883	4.550E-05	.112344
4S		133.3321	4.058537	.3489627	.1368922	.0265150	.0067578	.333769
4P	1874.655	44.70876	3.979720	.3480508	.1371157	.0271454	.0071975	.330526
4D	315.2917	25.18771	3.828991	.3431897	.1350808	.0277408	.0079919	.317808
4F	81.88647	15.48287	3.592315	.3280698	.1249989	.0271196	.0094749	.268514
5S		33.99793	1.877034	.7184253	.5751283	.4608779	.4856426	.682244
5P	437.5889	11.19307	1.786910	.7479065	.6261140	.5569150	.6667503	.701800
5D	61.46772	5.606045	1.585193	.8281553	.7772958	.9111772	1.547786	.750218
5F	8.515256	2.135611	1.118841	1.174741	1.666050	5.654467	37.43889	.908897
6S		5.926779	.7712665	1.652787	3.048722	13.46071	82.68599	1.48880
6P	61.13143	1.763420	.6808864	1.864020	3.911724	23.20775	203.8066	1.63375
7S		.4286986	.2367176	5.131160	29.78907	1391.387	97018.60	4.31735

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
CURIUM 5F7 6D1 7S2								
1S		18251.81	95.43841	.0157465	.0003312	2.763E-07	4.336E-10	.010464
2S		2078.701	22.69302	.0657721	.0050670	4.292E-05	5.524E-07	.056481
2P	32090.26	693.7173	22.71086	.0554853	.0037225	2.662E-05	3.142E-07	.043734
3S		492.3746	8.984533	.1630715	.0302891	.0013599	8.368E-05	.152150
3P	7357.581	165.0647	8.937746	.1546376	.0276278	.0011792	7.109E-05	.142582
3D	1340.104	96.52232	8.879127	.1338935	.0208584	.0007490	4.210E-05	.110979
4S		137.2226	4.116925	.3442070	.1331810	.0250809	.0062084	.329575
4P	1952.834	46.02713	4.038734	.3431056	.1332405	.0256128	.0065859	.326098
4D	329.4044	25.97184	3.889662	.3378405	.1308826	.0260098	.0072380	.313325
4F	86.12425	16.02835	3.656893	.3219472	.1202551	.0250015	.0083356	.264021
5S		35.43089	1.914367	.7053156	.5542626	.4273568	.4321216	.670938
5P	462.8801	11.68350	1.825089	.7331171	.6014561	.5126874	.5859095	.689625
5D	65.74184	5.897575	1.626502	.8076937	.8182123	.8182123	1.301675	.734710
5F	9.823377	2.386268	1.187656	1.098413	1.438283	3.969719	20.24598	.874087
6S		6.409254	.7984934	1.599343	2.851813	11.70928	66.50679	1.44852
6P	68.08519	1.927754	.7094319	1.792132	3.610284	19.61139	156.5665	1.58154
6D	4.574902	.5431347	.4673338	2.725826	8.712413	137.7430	3731.788	2.13762
7S		.5000383	.2508920	4.862137	26.77676	1128.424	71302.71	4.08374
BERKELIUM 5F8 6D1 7S2								
1S		18635.77	96.43791	.0155830	.0003244	2.650E-07	4.072E-10	.010353
2S		2124.221	22.94104	.0650640	.0049582	4.109E-05	5.173E-07	.055885
2P	33147.36	708.9311	22.95947	.0548804	.0036415	2.547E-05	2.939E-07	.043264
3S		504.0897	9.091229	.1611877	.0295924	.0012976	7.794E-05	.150458
3P	7616.973	169.0079	9.045100	.1528088	.0269773	.0011239	6.610E-05	.140912
3D	1389.091	98.88079	8.987821	.1322503	.0203461	.0007122	3.899E-05	.109656
4S		141.1487	4.175066	.3395931	.1296295	.0237470	.0057129	.325384
4P	2032.809	47.35777	4.097475	.3383168	.1295415	.0241935	.0060378	.321854
4D	343.8637	26.76351	3.949975	.3326866	.1269032	.0244256	.0065744	.308851
4F	90.48901	16.58083	3.721146	.3160877	.1158112	.0231096	.0073783	.259691
5S		36.74663	1.948137	.6938326	.5364131	.4002086	.3914101	.660625
5P	486.5075	12.12588	1.858891	.7205108	.5810088	.4783203	.5276990	.678305
5D	69.53651	6.145636	1.660671	.7917386	.7099070	.7552328	1.153374	.721020
5F	10.65710	2.533713	1.225035	1.064895	1.350887	3.489969	16.62863	.849964
6S		6.603028	.8102392	1.576340	2.771000	11.06986	61.27549	1.42636
6P	70.85910	1.983052	.7197268	1.766546	3.509173	18.56467	144.6652	1.55667
6D	4.709554	.5534540	.4723209	2.698680	8.554286	133.7141	3599.273	2.10707
7S		.5066655	.2530178	4.820679	26.33357	1093.505	68193.66	4.04433
CALIFORNIUM 5F10 7S2								
1S		19023.76	97.43751	.0154229	.0003177	2.542E-07	3.826E-10	.010250
2S		2170.273	23.18928	.0643703	.0048529	3.935E-05	4.847E-07	.055293
2P	34228.09	724.3208	23.20828	.0542881	.0035631	2.438E-05	2.751E-07	.042799
3S		515.9441	9.197956	.1593464	.0289193	.0012389	7.267E-05	.148768
3P	7882.456	172.9987	9.152493	.1510223	.0263493	.0010718	6.151E-05	.139328
3D	1439.300	101.2696	9.096590	.1306465	.0198523	.0006776	3.614E-05	.108351
4S		145.1093	4.232959	.3351155	.1262287	.0225051	.0052653	.321322
4P	2114.578	48.70031	4.155939	.3336782	.1260088	.0228777	.0055457	.317731
4D	358.6697	27.56251	4.009929	.3277188	.1231284	.0229734	.0059888	.304637
4F	94.98271	17.14037	3.785101	.3104729	.1116400	.0214132	.0065697	.255515
5S		37.93420	1.978267	.6838580	.5212564	.3783676	.3606651	.650848
5P	508.2260	12.51649	1.888262	.7099017	.5642614	.4519814	.4865666	.667950
5D	72.79825	6.348050	1.687788	.7797694	.6892436	.7152505	1.073347	.708823
5F	10.99019	2.579187	1.233827	1.064002	1.361459	3.711506	19.54162	.833914
6S		6.476344	.8055951	1.582942	2.798684	11.39415	64.88402	1.42095
6P	68.79591	1.916736	.7105348	1.786485	3.597554	19.76068	161.8311	1.55792
7S		.4447831	.2425331	5.006714	28.39959	1271.990	85445.53	4.19828

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
EINSTEINIUM 5F11 7S2								
1S		19415.72	98.43705	.0152660	.0003113	2.440E-07	3.597E-10	.010147
2S		2216.792	23.43737	.0636917	.0047510	3.771E-05	4.545E-07	.054721
2P	35331.56	739.8678	23.45695	.0537087	.0034872	2.335E-05	2.577E-07	.042350
3S		527.9410	9.304725	.1575461	.0282686	.0011834	6.779E-05	.147107
3P	8154.050	177.0367	9.259905	.1492765	.0257428	.0010227	5.729E-05	.137776
3D	1490.671	103.6855	9.205309	.1290813	.0193763	.0006451	3.353E-05	.107090
4S		149.1450	4.291109	.3307422	.1229518	.0213405	.0048566	.317401
4P	2198.793	50.06756	4.214651	.3291515	.1226090	.0216464	.0050978	.313608
4D	373.9330	28.37591	4.070103	.3228800	.1195063	.0216209	.0054589	.300457
4F	99.61269	17.70787	3.848894	.3050685	.1076997	.0198694	.0058531	.251487
5S		39.26934	2.011457	.6732296	.5052281	.3554239	.3282459	.641248
5P	532.9148	12.96511	1.921441	.6982784	.5459925	.4231339	.4405547	.657501
5D	76.77734	6.599775	1.721251	.7651879	.6637624	.6631047	.9574853	.696273
5F	11.86277	2.727979	1.270186	1.033328	1.282981	3.283040	16.19243	.812597
6S		6.651079	.8163550	1.562108	2.726204	10.82802	60.26233	1.40033
6P	71.30308	1.964796	.7197236	1.763595	3.507423	18.82534	151.0151	1.53541
7S		.4500245	.2443731	4.968935	27.98466	1237.335	82168.61	4.16248
FERMIUM 5F12 7S2								
1S		19811.68	99.43660	.0151123	.0003051	2.343E-07	3.385E-10	.010047
2S		2263.810	23.68548	.0630272	.0046522	3.615E-05	4.265E-07	.054157
2P	36458.59	755.5813	23.70564	.0531415	.0034137	2.237E-05	2.416E-07	.041910
3S		540.0787	9.411526	.1557856	.0276395	.0011310	6.330E-05	.145534
3P	8431.850	181.1220	9.367344	.1475702	.0251568	.0009763	5.340E-05	.136229
3D	1543.256	106.1302	9.314043	.1275528	.0189170	.0006145	3.114E-05	.105843
4S		153.2353	4.349259	.3264827	.1198019	.0202508	.0044848	.313467
4P	2285.168	51.45307	4.273344	.3247480	.1193469	.0204978	.0046920	.309742
4D	389.6064	29.20018	4.130210	.3181879	.1160468	.0203690	.0049840	.296384
4F	104.3785	18.28298	3.912486	.2998691	.1039799	.0184691	.0052295	.247589
5S		40.61665	2.044407	.6629956	.4900322	.3343468	.2994006	.631779
5P	558.1964	13.41776	1.954362	.6871122	.5287267	.3967629	.3998871	.647341
5D	80.86207	6.853925	1.754408	.7512672	.6398892	.6160869	.8569898	.684240
5F	12.76063	2.877583	1.305777	1.005004	1.212731	2.923688	13.56409	.792655
6S		6.822338	.8268330	1.562278	2.658112	10.30953	56.12925	1.38097
6P	73.79360	2.011597	.7286271	1.741903	3.423107	17.97175	141.3639	1.51395
7S		.4552186	.2461723	4.932687	27.58954	1204.763	79123.69	4.12823
MENDELEVIUM 5F13 7S2								
1S		20211.65	100.4362	.0149616	.0002990	2.251E-07	3.186E-10	.009947
2S		2311.326	23.93363	.0623763	.0045564	3.467E-05	4.004E-07	.053603
2P	37609.42	771.4612	23.95435	.0525861	.0033425	2.144E-05	2.266E-07	.041474
3S		552.3574	9.518360	.1540635	.0270310	.0010814	5.914E-05	.143965
3P	8715.928	185.2547	9.474809	.1459020	.0245905	.0009325	4.981E-05	.134708
3D	1597.068	108.6036	9.422789	.1260599	.0184739	.0005856	2.895E-05	.104643
4S		157.3800	4.407407	.3223324	.1167725	.0192304	.0041461	.309740
4P	2373.728	52.85678	4.332018	.3204627	.1162152	.0194254	.0043239	.305867
4D	405.6947	30.03529	4.190251	.3136358	.1127400	.0192085	.0045575	.292484
4F	109.2815	18.86562	3.975878	.2948633	.1004646	.0171964	.0046855	.243811
5S		41.97644	2.077135	.6531300	.4756037	.3149403	.2736551	.622776
5P	584.0819	13.87457	1.987046	.6763709	.5123808	.3725932	.3638165	.637653
5D	85.05483	7.110601	1.787290	.7379538	.6174708	.5735454	.7694135	.672483
5F	13.68534	3.028257	1.340709	.9787107	1.149409	2.619045	11.47055	.773922
6S		6.990462	.8370570	1.523356	2.593951	9.832774	52.41448	1.36208
6P	76.27052	2.057256	.7372737	1.721289	3.343966	17.18926	132.7034	1.49345
7S		.4603736	.2479347	4.897825	27.21228	1174.056	76284.36	4.09501



TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
NOBELIUM 5F14 7S2								
1S		20615.61	101.4357	.0148140	.0002931	2.163E-07	3.002E-10	.009848
2S		2359.341	24.18182	.0617386	.0044636	3.327E-05	3.762E-07	.053065
2P	38784.29	787.5075	24.20308	.0520422	.0032735	2.056E-05	2.127E-07	.041051
3S		564.7770	9.625225	.1523786	.0264422	.0010345	5.530E-05	.142399
3P	9006.353	189.4347	9.582299	.1442707	.0240429	.0008911	4.650E-05	.133254
3D	1652.121	111.1058	9.531546	.1246014	.0180461	.0005585	2.693E-05	.103454
4S		161.5791	4.465549	.3182874	.1138577	.0182740	.0038371	.306070
4P	2464.496	54.27865	4.390672	.3162911	.1132069	.0184231	.0039894	.302094
4D	422.2030	30.88123	4.250228	.3092173	.1095768	.0181313	.0041739	.288579
4F	114.4227	19.46937	4.040799	.2898460	.0969709	.0159378	.0041200	.240105
5S		43.34903	2.109659	.6436092	.4618840	.2970335	.2506093	.613974
5P	610.5828	14.33567	2.019513	.6660252	.4968806	.3503871	.3317175	.628176
5D	89.35793	7.369898	1.819921	.7252001	.5963730	.5349293	.6927619	.661488
5F	14.53865	3.166596	1.373341	.9543863	1.092154	2.358440	9.781085	.756095
6S		7.155764	.8470509	1.505254	2.533316	9.392706	49.05971	1.34444
6P	78.73685	2.101883	.7456879	1.701642	3.269438	16.46885	124.8905	1.47393
7S		.4655004	.2496643	4.864211	26.85109	1145.010	73626.91	4.06333
LAWRENCIUM 5F14 6D1 7S2								
1S		21023.56	102.4353	.0146692	.0002874	2.080E-07	2.829E-10	.009750
2S		2407.820	24.42984	.0611142	.0043736	3.193E-05	3.537E-07	.052532
2P	39982.84	803.7107	24.45168	.0515097	.0032067	1.972E-05	1.998E-07	.040639
3S		577.3402	9.732137	.1507297	.0258723	.0009901	5.175E-05	.140912
3P	9303.185	193.6623	9.689814	.1426752	.0235133	.0008520	4.344E-05	.131807
3D	1708.389	113.6351	9.640259	.1231763	.0176329	.0005329	2.507E-05	.102304
4S		165.8535	4.523936	.3143322	.1110435	.0173739	.0035535	.302377
4P	2557.850	55.72545	4.449568	.3122144	.1103053	.0174813	.0036831	.298471
4D	439.1954	31.74170	4.310427	.3049056	.1065328	.0171231	.0038241	.284845
4F	119.6226	20.06927	4.104065	.2851738	.0938045	.0148740	.0037003	.236553
5S		44.89106	2.145468	.6334823	.4474235	.2783855	.2267560	.605105
5P	640.6076	14.86238	2.055986	.6547789	.4801556	.3265857	.2972570	.619669
5D	94.50177	7.683317	1.858932	.7103137	.5717621	.4893289	.5999699	.649876
5F	16.08685	3.421971	1.432046	.9103837	.9849424	1.834478	6.275251	.735260
6S		7.690662	.8745404	1.460118	2.380576	8.236495	39.87572	1.31204
6P	87.22173	2.287807	.7752713	1.638932	3.026847	13.97722	96.35482	1.43103
6D	5.347955	.5970636	.4946605	2.586833	7.945705	120.3904	3228.758	1.96493
7S		.5465753	.2650797	4.601215	24.04895	921.4966	53470.26	3.83753
CERIUM 4F2 6S2								
1S		6624.252	57.46472	.0261796	.0009165	2.125E-06	9.308E-09	.017357
2S		716.5278	13.29300	.1119852	.0147228	.0003673	1.415E-05	.095354
2P	6517.434	238.3933	13.27982	.0953332	.0110377	.0002381	8.619E-06	.074512
3S		150.2160	4.953531	.2920267	.0972504	.0142379	.0029248	.267975
3P	1286.462	49.91334	4.875248	.2823336	.0922140	.0133747	.0028132	.255273
3D	213.3807	27.94827	4.745978	.2534622	.0755148	.0101755	.0022070	.206109
4S		34.08516	2.068900	.6678279	.5020258	.3649579	.3621627	.620675
4P	265.1613	11.12211	1.971371	.6897540	.5396215	.4338076	.4898698	.632046
4D	35.96319	5.490080	1.754463	.7484455	.6483304	.6844335	1.112858	.654500
4F	4.287545	1.980668	1.223619	1.073289	1.499405	6.062775	55.89449	.713077
5S		5.391036	.7867698	1.642480	3.024448	13.46704	84.53845	1.46825
5P	33.33880	1.604209	.6930877	1.854211	3.891866	23.42033	211.7721	1.61258
6S		.4226771	.2402661	5.109066	29.57887	1375.216	95489.87	4.30620
TERBIUM 4F9 6S2								
1S		8332.382	64.45851	.0233326	.0007278	1.338E-06	4.645E-09	.015480
2S		913.9436	15.02194	.0991657	.0115375	.0002247	6.728E-06	.084631
2P	9381.521	304.3729	15.01586	.0842027	.0086002	.0001439	4.019E-06	.065967
3S		198.6808	5.698617	.2547942	.0740110	.0082136	.0012724	.234937
3P	1936.541	66.20917	5.627479	.2449264	.0693753	.0075357	.0011808	.222689
3D	330.5720	37.58686	5.515200	.2173415	.0553639	.0054205	.0008518	.177754
4S		46.59742	2.412743	.5759279	.3736675	.2024641	.1499226	.536178
4P	416.0328	15.29937	2.314355	.5902578	.3955899	.2335638	.1940507	.541978

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
TERBIUM 4F9 6S2								
4D	59.65385	7.812003	2.099435	.6269803	.4555977	.3390472	.3906531	.549771
4F	8.962896	3.289525	1.587954	.8189134	.8690285	2.043006	11.24015	.550750
5S		6.934339	.8926389	1.447705	2.355397	8.276678	41.61435	1.28118
5P	47.80940	2.037482	.7839474	1.638784	3.051798	14.68392	108.2842	1.40593
6S		.4767360	.2588049	4.741718	25.58463	1047.207	64913.74	3.95571
BERKELIUM 5F9 7S2								
1S		18635.79	96.43797	.0155830	.0003244	2.650E-07	4.072E-10	.010353
2S		2124.254	22.94123	.0650635	.0049582	4.109E-05	5.173E-07	.055885
2P	33147.92	708.9403	22.95964	.0548800	.0036414	2.547E-05	2.939E-07	.043264
3S		504.0881	9.091222	.1611877	.0295924	.0012976	7.795E-05	.150457
3P	7616.998	169.0081	9.045109	.1528087	.0269773	.0011239	6.610E-05	.140911
3D	1389.128	98.88233	8.987880	.1322500	.0203460	.0007122	3.899E-05	.109654
4S		141.1285	4.174812	.3396068	.1296395	.0237510	.0057150	.325396
4P	2032.499	47.35139	4.097212	.3383333	.1295541	.0241991	.0060409	.321866
4D	343.8118	26.76000	3.949687	.3327114	.1269236	.0244363	.0065815	.308866
4F	90.48598	16.58034	3.721077	.3160983	.1158224	.0231210	.0073980	.259697
5S		36.61090	1.944818	.6949107	.5381912	.4034060	.3972251	.661012
5P	484.1184	12.07175	1.854802	.7220185	.5836283	.4836271	.5388244	.678823
5D	68.92224	6.098627	1.653986	.7950740	.7165121	.7733073	1.207619	.722096
5F	10.14267	2.431113	1.196600	1.097421	1.449844	4.228842	23.88437	.857021
6S		6.297721	.7945215	1.604900	2.876119	12.01525	70.08240	1.44222
6P	66.26826	1.867274	.7010278	1.810724	3.694296	20.79106	174.0328	1.58186
7S		.4394923	.2406485	5.046183	28.83650	1308.976	88984.01	4.23610
CALIFORNIUM 5F9 6D1 7S2								
1S		19023.74	97.43746	.0154229	.0003177	2.542E-07	3.826E-10	.010250
2S		2170.241	23.18909	.0643708	.0048530	3.935E-05	4.847E-07	.055294
2P	34227.52	724.3116	23.20812	.0542885	.0035631	2.438E-05	2.751E-07	.042799
3S		515.9460	9.197967	.1593464	.0289192	.0012389	7.266E-05	.148769
3P	7882.434	172.9986	9.152489	.1510223	.0263493	.0010718	6.151E-05	.139329
3D	1439.264	101.2681	9.096534	.1306469	.0198523	.0006776	3.614E-05	.108352
4S		145.1298	4.233215	.3351022	.1262191	.0225012	.0052633	.321311
4P	2114.895	48.70680	4.156204	.3336621	.1259966	.0228724	.0055428	.317719
4D	358.7233	27.56608	4.010219	.3276946	.1231088	.0229633	.0059824	.304623
4F	94.98554	17.14082	3.785165	.3104637	.1116303	.0214034	.0065526	.255508
5S		38.07363	1.981619	.6828069	.5195507	.3753987	.3554392	.650447
5P	510.7015	12.57189	1.892376	.7084379	.5617615	.4470875	.4766519	.667417
5D	73.43141	6.395829	1.694460	.7765685	.6830254	.6988715	1.026007	.707822
5F	11.51482	2.681727	1.261509	1.034139	1.273253	3.091636	13.82488	.827707
6S		6.792548	.8216368	1.554569	2.695592	10.48969	56.65336	1.40489
6P	73.61318	2.036824	.7296696	1.742437	3.415248	17.61896	134.1866	1.53278
6D	4.835412	.5627838	.4768902	2.674445	8.415912	130.3331	3492.553	2.07875
7S		.5132835	.2551023	4.780892	25.91175	1060.741	65312.49	4.00609
EINSTEINIUM 5F10 6D1 7S2								
1S		19415.71	98.43701	.0152660	.0003113	2.440E-07	3.597E-10	.010147
2S		2216.759	23.43718	.0636921	.0047510	3.771E-05	4.545E-07	.054722
2P	35330.98	739.8585	23.45678	.0537091	.0034872	2.335E-05	2.577E-07	.042351
3S		527.9430	9.304736	.1575461	.0282686	.0011834	6.779E-05	.147108
3P	8154.031	177.0367	9.259902	.1492766	.0257428	.0010227	5.729E-05	.137777
3D	1490.634	103.6840	9.205254	.1290816	.0193763	.0006451	3.353E-05	.107092
4S		149.1656	4.291364	.3307293	.1229425	.0213368	.0048548	.317391
4P	2199.118	50.07413	4.214916	.3291357	.1225972	.0216414	.0050951	.313597
4D	373.9879	28.37953	4.070393	.3228564	.1194875	.0216115	.0054530	.300443
4F	99.61591	17.70838	3.848965	.3050588	.1076897	.0198600	.0058369	.251481
5S		39.41231	2.014838	.6722041	.5035906	.3526629	.3235377	.640878
5P	535.4743	13.02172	1.925577	.6968567	.5436045	.4186118	.4316919	.657008
5D	77.42936	6.648306	1.727910	.7621121	.6578972	.6482147	.9159876	.695252
5F	12.39744	2.830510	1.297198	1.005741	1.203727	2.756795	11.61470	.806888
6S		6.978296	.8327245	1.533892	2.624945	9.960502	52.54282	1.38474
6P	76.35192	2.089237	.7392989	1.719629	3.327600	16.75947	124.8928	1.51071
6D	4.952911	.5712032	.4810826	2.652766	8.294652	127.5005	3407.310	2.05256
7S		.5199068	.2571523	4.742564	25.50862	1029.852	62628.46	3.97020

TABLE II. RADIAL EXPECTATION VALUES AND R MAX

	R**3	R**2	1/R	R	R**2	R**4	R**6	R MAX
FERMIUM 5F11 6D1 7S2								
1S		19811.67	99.43656	.0151123	.0003051	2.343E-07	3.385E-10	.010047
2S		2263.777	23.68530	.0630276	.0046523	3.615E-05	4.265E-07	.054158
2P	36457.99	755.5719	23.70547	.0531419	.0034138	2.237E-05	2.416E-07	.041910
3S		540.0809	9.411539	.1557856	.0276395	.0011309	6.330E-05	.145534
3P	8431.833	181.1220	9.367342	.1475703	.0251568	.0009763	5.340E-05	.136230
3D	1543.218	106.1287	9.313989	.1275531	.0189171	.0006145	3.114E-05	.105845
4S		153.2561	4.349512	.3264700	.1197928	.0202473	.0044831	.313457
4P	2285.500	51.45970	4.273608	.3247325	.1193355	.0204931	.0046895	.309731
4D	389.6624	29.20383	4.130499	.3181650	.1160287	.0203602	.0049786	.296372
4F	104.3819	18.28351	3.912559	.2998594	.1039702	.0184602	.0052145	.247583
5S		40.76310	2.047814	.6619952	.4884593	.3317755	.2951489	.631398
5P	560.8407	13.47557	1.958518	.6857306	.5264435	.3925765	.3919421	.646834
5D	81.53304	6.903197	1.761056	.7483081	.6343472	.6025108	.8204640	.683295
5F	13.30610	2.980268	1.332206	.9793805	1.141028	2.472330	9.847032	.787373
6S		7.160674	.8435343	1.514197	2.558528	9.475624	48.86648	1.36521
6P	79.07956	2.140440	.7486502	1.697986	3.245502	15.97436	116.5974	1.48916
6D	5.062643	.5787913	.4849325	2.633361	8.188426	125.1401	3340.322	2.02839
7S		.5265439	.2591725	4.705531	25.12207	1000.623	60117.87	3.93523
MENDELEVIUM 5F12 6D1 7S2								
1S		20211.63	100.4361	.0149616	.0002990	2.251E-07	3.186E-10	.009947
2S		2311.292	23.93345	.0623767	.0045565	3.467E-05	4.004E-07	.053603
2P	37608.81	771.4517	23.95419	.0525865	.0033426	2.144E-05	2.266E-07	.041475
3S		552.3597	9.518373	.1540634	.0270310	.0010814	5.914E-05	.143965
3P	8715.912	185.2547	9.474808	.1459021	.0245905	.0009325	4.981E-05	.134709
3D	1597.029	108.6021	9.422735	.1260602	.0184739	.0005856	2.895E-05	.104644
4S		157.4010	4.407659	.3223201	.1167638	.0192271	.0041445	.309730
4P	2374.067	52.86348	4.332283	.3204477	.1162042	.0194209	.0043216	.305857
4D	405.7518	30.03897	4.190539	.3136136	.1127226	.0192002	.0045527	.292471
4F	109.2853	18.86620	3.975956	.2948534	.1004549	.0171879	.0046713	.243806
5S		42.12627	2.080567	.6521539	.4740919	.3125423	.2698073	.622427
5P	586.8109	13.93355	1.991221	.6750277	.5101960	.3687109	.3566753	.637186
5D	85.74480	7.160603	1.793925	.7351040	.6122259	.5611345	.7371441	.671610
5F	14.24182	3.131170	1.366617	.9548021	1.084151	2.228483	8.415730	.769039
6S		7.339998	.8540916	1.495389	2.495905	9.029619	45.56253	1.34686
6P	81.79852	2.190534	.7577467	1.677387	3.168343	15.25408	109.1531	1.46907
6D	5.164914	.5856002	.4884638	2.616026	8.095737	123.1985	3289.435	2.00561
7S		.5331953	.2611646	4.669711	24.75099	972.9271	57766.17	3.90131
NOBELIUM 5F13 6D1 7S2								
1S		20615.60	101.4357	.0148140	.0002931	2.163E-07	3.002E-10	.009848
2S		2359.307	24.18163	.0617390	.0044637	3.327E-05	3.762E-07	.053066
2P	38783.67	787.4980	24.20292	.0520426	.0032736	2.056E-05	2.127E-07	.041051
3S		564.7795	9.625239	.1523785	.0264422	.0010345	5.530E-05	.142399
3P	9006.339	189.4348	9.582299	.1442708	.0240429	.0008911	4.650E-05	.133255
3D	1652.082	111.1042	9.531492	.1246017	.0180461	.0005585	2.693E-05	.103455
4S		161.6002	4.465801	.3182755	.1138493	.0182709	.0038356	.306060
4P	2464.842	54.28541	4.390936	.3162765	.1131962	.0184188	.0039873	.302085
4D	422.2613	30.88494	4.250515	.3091957	.1095601	.0181236	.0041695	.288567
4F	114.3277	19.45644	4.039163	.2900295	.0971283	.0160290	.0041960	.240140
5S		43.50217	2.113113	.6426565	.4604303	.2947942	.2471198	.613616
5P	613.3966	14.39579	2.023705	.6647190	.4947882	.3467809	.3252831	.627698
5D	90.06697	7.420617	1.826543	.7224526	.5914018	.5235556	.6641548	.660599
5F	15.20565	3.283367	1.400501	.9317949	1.032287	2.017765	7.243861	.751768
6S		7.516590	.8644210	1.477385	2.436692	8.617839	42.57945	1.32878
6P	84.51192	2.239629	.7666137	1.657728	3.095597	14.59054	102.4379	1.44939
6D	5.259651	.5916630	.4917000	2.600565	8.015174	121.6269	3252.689	1.98472
7S		.5398679	.2631329	4.634964	24.39362	946.5884	55554.45	3.86908

TABLE III. STARTING COEFFICIENTS OF RADIAL WAVEFUNCTIONS

	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
1S	2.000000	4.753300	9.260370	14.66972	20.83732	27.67894	35.13402	43.15604	51.70759
2S			1.446804	2.673380	4.207370	5.912093	7.780480	9.802118	11.96741
2P					3.277516	6.035639	9.781397	14.60908	20.60531
	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
1S	60.75782	70.29044	80.28260	90.71268	101.5632	112.8185	124.4645	136.4885	148.8789
2S	14.26800	17.16347	20.28478	23.57811	27.03145	30.63431	34.37893	38.25916	42.26979
2P	27.85069	38.84695	51.96340	67.38519	85.19341	105.4931	128.3874	153.9762	182.4532
3S		2.579882	3.908087	5.443802	6.936832	8.444553	9.987540	11.57455	13.20955
3P				12.10919	18.08679	24.91441	32.68131	41.45099	50.92933
	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
1S	161.6277	174.7245	188.1658	201.9393	216.0366	230.4537	245.1733	260.1998	275.5233
2S	46.42637	50.71761	55.13592	59.67089	64.31881	69.07825	73.94229	78.91297	83.98665
2P	213.7963	248.1690	285.7542	326.5343	370.5870	418.0758	468.8276	523.1713	581.0996
3S	15.29872	17.48976	19.42098	21.34521	23.28432	25.04512	27.23905	29.26199	31.31771
3P	65.10926	80.76610	95.87461	112.0352	129.4046	146.5547	168.0768	189.4863	212.3364
3D			44.47473	60.17824	78.28703	91.40068	123.1269	150.4473	181.4107
4S	2.954053	4.175957	4.607820	4.981543	5.329612	4.859401	5.987858	6.306405	6.620739
	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
1S	291.1381	307.0418	323.2205	339.6737	356.3970	373.3862	390.6373	408.1463	425.9096
2S	89.16135	94.43726	99.80637	105.2707	110.8314	116.4874	122.2378	128.0813	134.0167
2P	642.6870	708.1082	777.1309	850.0339	926.8900	1007.775	1092.762	1181.924	1275.329
3S	33.40711	35.32393	37.68858	40.14963	42.71334	45.36617	48.09793	50.90121	53.77054
3P	236.6652	260.6053	289.9008	321.7727	356.1757	393.0281	432.2985	473.9759	518.2733
3D	216.2990	243.8747	298.9946	361.4394	431.3330	509.2456	595.7414	691.3868	796.7477
4S	6.932075	6.124429	7.548802	9.340693	10.96953	12.53487	14.07221	15.59949	17.12727
4P				52.60038	69.75894	86.86464	104.4049	122.6059	140.8396
	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
1S	443.9243	462.1870	480.6954	499.4455	518.4353	537.6597	557.1159	576.8042	596.7188
2S	140.0466	146.1685	152.3791	158.6776	165.0611	171.5315	178.0881	184.7243	191.4446
2P	1373.054	1475.167	1581.760	1692.876	1808.598	1928.946	2053.977	2183.819	2318.464
3S	56.71342	59.72279	62.77884	65.88555	69.02979	72.23350	75.49735	78.78077	82.12205
3P	564.8619	613.9450	665.4892	719.5057	775.9800	835.0154	896.6667	960.7868	1027.582
3D	912.8219	1040.095	1179.279	1330.690	1495.062	1672.687	1864.198	2070.672	2292.302
4S	19.15893	21.23854	23.09972	24.90258	26.48195	28.23312	30.19291	31.73017	33.48475
4P	168.6483	197.1085	223.5906	250.3089	275.1591	303.2132	335.2016	362.4136	393.6934
4D			254.7030	322.6843	366.6155	440.5145	546.7896	603.6625	694.2806
5S	4.034332	5.477822	6.131971	6.637266	6.351501	6.647039	7.809801	7.153207	7.375639
	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
1S	616.8589	637.2200	657.8004	678.5978	699.6101	720.8351	742.2706	763.9146	785.7652
2S	198.2455	205.1279	212.0911	219.1322	226.2514	233.4479	240.7211	248.0700	255.4942
2P	2458.015	2602.465	2751.901	2906.409	3066.034	3230.834	3400.864	3576.180	3756.839
3S	85.50091	88.93509	92.41921	95.94598	99.51861	103.1366	106.7991	110.5058	114.2560
3P	1097.008	1169.138	1244.047	1321.789	1402.407	1485.932	1572.398	1661.839	1754.286
3D	2531.146	2785.391	3057.060	3346.886	3655.600	3983.933	4332.618	4702.399	5094.020
4S	35.09608	37.01953	39.04063	41.10092	43.21749	45.38159	47.58731	49.83021	52.10721
4P	423.5874	459.8445	498.5379	539.6692	583.0248	628.4583	675.8958	725.2976	777.0832
4D	755.7876	892.0246	1037.060	1194.055	1361.560	1540.428	1731.400	1935.148	2152.305
5S		7.775836	9.279631	11.07695	12.65553	14.13414	15.55748	16.94850	18.32061
5P				107.3809	135.0599	161.4040	187.4091	213.5110	238.5376

TABLE III. STARTING COEFFICIENTS OF RADIAL WAVEFUNCTIONS

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
1S	807.8209	830.0794	852.5397	875.2016	898.0629	921.1196	944.3699	967.8132	991.4474
2S	262.9941	270.5685	278.2159	285.9556	293.7875	301.6750	309.6347	317.6655	325.7671
2P	3942.898	4134.411	4331.443	4534.445	4743.438	4957.813	5177.951	5403.899	5635.707
3S	118.0523	121.8932	125.7719	129.7003	133.6751	137.6757	141.7121	145.7839	149.8908
3P	1849.762	1948.313	2049.918	2154.908	2263.263	2374.454	2488.792	2606.301	2727.007
3D	5508.394	5946.266	6408.452	6898.462	7416.925	7959.452	8529.377	9127.546	9754.731
4S	54.42811	56.78661	59.16180	61.24899	63.09150	65.18227	67.27513	69.37250	71.47604
4P	830.4851	885.8893	943.2511	996.2721	1045.557	1101.126	1158.016	1216.277	1275.950
4D	2385.065	2633.284	2898.013	3145.853	3378.774	3651.415	3937.336	4237.089	4551.206
4F				1559.086	1681.431	1925.251	2188.229	2472.052	2778.260
5S	20.23367	22.16381	23.80326	24.54481	24.44244	25.14624	25.83650	26.51687	27.19007
5P	277.8942	316.7681	350.6751	368.2512	369.3390	386.6001	403.9582	421.4696	439.1761
5D			765.5857	817.7598					
6S	4.581186	6.104492	6.724977	6.850680	6.467472	6.580081	6.690992	6.800670	6.909363
	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
1S	1015.270	1039.282	1063.483	1087.867	1112.435	1137.186	1162.117	1187.227	1212.516
2S	333.9238	342.1646	350.4881	358.8650	367.3092	375.8202	384.3973	393.0274	401.7204
2P	5873.107	6116.781	6366.771	6622.498	6884.327	7152.303	7426.473	7706.579	7992.912
3S	154.0236	158.1997	162.4187	166.6628	170.9405	175.2517	179.5960	183.9642	188.3639
3P	2850.673	2977.858	3108.595	3242.369	3379.478	3519.926	3663.785	3810.769	3961.182
3D	10408.99	11096.60	11818.55	12570.00	13354.61	14173.25	15026.75	15912.80	16835.07
4S	73.79894	75.91425	77.83598	79.97515	82.12497	84.28594	86.45823	88.62765	91.24817
4P	1341.776	1404.348	1463.772	1529.399	1596.576	1665.323	1735.655	1812.159	1891.391
4D	4908.428	5253.117	5584.703	5961.192	6354.454	6764.971	7193.197	7670.492	8174.554
4F	3230.568	3591.080	3846.076	4256.686	4697.140	5168.990	5673.804	6378.130	7132.966
5S	28.71473	29.38922	29.18335	29.84283	30.50100	31.15868	31.81608	33.41168	35.01127
5P	476.2508	495.0629	493.7217	512.4378	531.4405	550.7426	570.3489	614.3217	658.8294
5D	1139.501	1195.350						1542.077	1830.444
6S	7.594139	7.718440	7.231177	7.337386	7.443119	7.548493	7.653522	8.475178	9.103898
	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
1S	1237.981	1263.623	1289.439	1315.429	1341.591	1367.929	1394.433	1421.105	1447.945
2S	410.4759	419.2938	428.1737	437.1153	446.1184	455.1814	464.3060	473.4920	482.7375
2P	8285.524	8584.462	8889.776	9201.511	9519.713	9844.438	10175.71	10513.58	10858.10
3S	192.7984	197.2665	201.7682	206.3034	210.8722	215.4699	220.1053	224.7786	229.4846
3P	4115.061	4272.446	4433.368	4597.860	4765.952	4937.623	5113.002	5292.126	5475.001
3D	17794.49	18792.03	19828.62	20905.19	22022.69	23182.15	24384.36	25630.24	26920.91
4S	93.71459	96.22334	98.77145	101.3556	103.9755	106.6182	109.3022	112.0273	114.7798
4P	1973.253	2057.689	2144.658	2234.132	2326.070	2420.503	2517.376	2616.714	2718.612
4D	8705.161	9262.445	9846.693	10458.28	11097.66	11766.72	12467.11	13192.68	13948.59
4F	7942.075	8808.830	9736.502	10728.35	11787.67	12915.53	14119.61	15403.74	16770.88
5S	36.61614	38.22484	39.83642	41.45081	43.06805	44.41924	46.03902	47.94174	49.86215
5P	704.1629	750.3991	797.5814	845.7463	894.9277	938.0813	989.1597	1048.858	1111.588
5D	2107.771	2385.038	2666.919	2956.111	3254.227	3441.218	3746.326	4197.273	4668.516
6S	9.638258	10.11094	10.53849	10.93059	11.29391	10.30034	10.53133	12.25127	14.30270
6P									237.8517
	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
1S	1474.953	1502.126	1529.464	1556.965	1584.630	1612.456	1640.443	1668.591	1696.898
2S	492.0429	501.4077	510.8315	520.3140	529.8550	539.4545	549.1122	558.8271	568.5992
2P	11209.32	11567.27	11932.01	12303.57	12682.01	13067.35	13459.66	13858.96	14265.31
3S	234.2246	238.9985	243.8062	248.6474	253.5220	258.4308	263.3734	268.3473	273.3535
3P	5661.660	5852.132	6046.444	6244.623	6446.705	6652.694	6862.631	7076.511	7294.378
3D	28257.35	29640.55	31071.50	32551.20	34080.65	35660.98	37293.17	38978.29	40717.29
4S	117.5627	120.3755	123.2173	126.0875	128.9854	131.9136	134.8702	137.8496	140.8540
4P	2823.062	2930.070	3039.646	3151.797	3266.526	3383.826	3503.724	3626.202	3751.282
4D	14735.38	15553.78	16404.49	17288.21	18205.64	19157.86	20145.52	21169.67	22230.69
4F	18225.05	19770.02	21409.61	23147.84	24988.73	26937.27	28997.67	31173.62	33469.63
5S	51.82707	53.82753	55.85668	57.90992	59.98405	62.08972	64.22027	66.35188	68.49724
5P	1176.782	1244.097	1313.350	1384.419	1458.191	1532.941	1609.490	1687.789	1767.810
5D	5150.677	5646.519	6158.023	6686.689	7233.745	7807.015	8403.398	9025.730	9670.684
6S	16.06148	17.67447	19.19839	20.66303	22.08613	24.14114	26.18937	27.88114	29.48951

TABLE III. STARTING COEFFICIENTS OF RADIAL WAVEFUNCTIONS

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
6P	290.6551	339.0405	385.2098	430.2265	471.7316	539.2150	603.7560	657.5607	709.6384
6D								2528.209	2926.587
7S						5.653870	7.432300	8.177958	8.797943
	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
1S	1725.364	1753.988	1782.768	1811.704	1840.794	1870.038	1899.436	1928.987	1958.688
2S	578.4405	588.3333	598.2831	608.2944	618.3568	628.4700	638.6438	648.8779	659.1617
2P	14679.13	15099.93	15527.92	15963.31	16405.80	16855.42	17312.57	17777.29	18249.26
3S	278.3913	283.4607	288.5615	293.6930	298.8557	304.0496	309.2737	314.5276	319.8123
3P	7516.351	7742.305	7972.316	8206.441	8444.629	8686.903	8933.364	9184.035	9438.864
3D	42514.27	44365.89	46274.61	48242.90	50268.97	52353.76	54501.30	56712.78	58986.13
4S	143.8503	146.8820	149.9343	152.9949	156.0875	159.2121	162.3442	165.4834	168.6539
4P	3878.073	4007.754	4139.950	4274.341	4411.594	4551.744	4694.117	4838.706	4986.234
4D	23323.50	24455.71	25625.74	26832.36	28080.05	29369.79	30698.20	32065.82	33477.75
4F	35887.77	38433.13	41110.13	43924.24	46878.70	49978.46	53230.02	56638.66	60207.62
5S	70.29616	72.24716	74.18881	75.97461	77.90163	79.97976	81.90417	83.66858	85.58990
5P	1837.027	1912.753	1989.369	2061.659	2140.144	2225.280	2306.115	2382.300	2465.377
5D	10205.31	10817.82	11447.34	12035.93	12700.82	13447.67	14154.29	14816.33	15563.94
5F	11619.41	12885.70	14200.74	15075.33	16502.87	18503.03	20072.52	21188.21	22899.19
6S	29.63594	30.44139	31.21324	31.19287	31.89414	33.38201	34.06774	33.88831	34.52401
6P	716.8536	745.1028	772.7929	774.3613	800.3026	853.9167	880.5896	876.9261	902.2394
6D	2841.149	2988.003	3131.172			3547.268	3683.139		
7S	8.411186	8.519835	8.626303	8.103841	8.197864	8.939899	9.043789	8.474580	8.565694
	FM 100	MD 101	NO 102	LW 103					
1S	1988.540	2018.543	2048.694	2078.994					
2S	669.5000	679.8924	690.3389	700.8336					
2P	18728.69	19215.64	19710.12	20211.99					
3S	325.1269	330.4714	335.8456	341.2501					
3P	9697.910	9961.198	10228.75	10500.56					
3D	61323.98	63727.41	66197.52	68733.63					
4S	171.8433	175.0514	178.2780	181.5351					
4P	5136.361	5289.098	5444.457	5602.831					
4D	34932.58	36431.05	37973.93	39564.40					
4F	63943.24	67850.69	71975.39	76247.99					
5S	87.51212	89.43593	91.36194	93.45927					
5P	2549.683	2635.245	2722.086	2816.627					
5D	16333.75	17126.31	17942.16	18856.13					
5F	24690.73	26567.08	28430.79	31071.91					
6S	35.14792	35.76128	36.36520	37.92653					
6P	927.5012	952.7383	977.9758	1039.877					
6D				4482.464					
7S	8.656359	8.746659	8.836701	9.668861					
	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102	
1S	875.2033	1039.284	1899.436	1928.986	1958.687	1988.540	2018.542	2048.694	
2S	285.9729	342.1790	638.6491	648.8727	659.1564	669.4947	679.8871	690.3335	
2P	4534.777	6117.094	17312.75	17777.11	18249.07	18728.51	19215.44	19709.93	
3S	129.7107	158.2084	309.2732	314.5282	319.8128	325.1275	330.4721	335.8463	
3P	2155.192	2978.127	8933.402	9184.000	9438.829	9697.877	9961.166	10228.72	
3D	6901.048	11099.41	54502.85	56711.21	58984.51	61322.33	63725.73	66195.80	
4S	60.99939	75.70683	162.3320	165.4956	168.6661	171.8555	175.0636	178.2902	
4P	991.2396	1399.671	4693.765	4839.064	4986.598	5136.128	5289.469	5444.833	
4D	3118.776	5224.530	30696.06	32068.03	33480.02	34934.89	36433.41	37976.33	
4F	1454.776	3463.794	53230.84	56637.68	60206.71	63942.34	67849.84	71934.62	
5S	23.71916	28.52204	81.74741	83.82762	85.75103	87.67527	89.60096	91.52879	
5P	352.0824	475.2822	2300.426	2388.115	2471.311	2555.737	2641.416	2728.373	
5D			14090.36	14881.95	15631.25	16402.79	17197.08	18014.69	
5F			19554.90	21716.66	23438.97	25243.18	27132.98	29112.05	
6S	6.352299	7.124483	33.23935	34.73884	35.39707	36.04384	36.68033	37.30763	
6P			851.5281	907.1715	933.7013	960.2140	986.7319	1013.280	
6D				3818.102	3952.254	4085.746	4218.613	4350.735	
7S			8.383010	9.147620	9.251521	9.355563	9.459751	9.564138	

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TABLE IV. RADIAL WAVEFUNCTIONS

H	IS1	R=0.88534138*x	C	2P2	R=0.48722214*x				
HE	1S2	R=0.70269592*x	N	2P3	R=0.46281925*x				
LI	2S1	R=0.61386143*x	O	2P4	R=0.44267069*x				
BE	2S2	R=0.55773012*x	F	2P5	R=0.42562774*x				
R	2P1	R=0.51775078*x							
	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
	1S 1	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	1.0000	1.8359	4.9555	9.4653	15.391	22.677	31.333	41.362	52.765
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.017551	.032935	.055809	.080014	.105130	.130975	.157426	.184396	.211815
.02	.034792	.064954	.109586	.156503	.204897	.254417	.304833	.355982	.407736
.03	.051728	.096076	.161390	.229593	.299515	.370663	.442716	.515447	.588683
.04	.068363	.126322	.211278	.299401	.389193	.480040	.571549	.663447	.755529
.05	.084700	.155713	.259309	.366044	.474130	.582858	.691784	.800605	.909102
.06	.100745	.184269	.305536	.429633	.554519	.679416	.803853	.927516	1.050184
.07	.116499	.212009	.350014	.490276	.630545	.770001	.908168	1.044742	1.179518
.08	.131969	.238952	.392793	.548079	.702386	.854887	1.005123	1.152820	1.297805
.09	.147156	.265116	.433926	.603142	.770215	.934337	1.095093	1.252258	1.405709
.10	.162066	.290521	.473461	.655565	.834196	1.008604	1.178437	1.343540	1.503860
.12	.191065	.339120	.547929	.752862	.951249	1.142540	1.326593	1.503450	1.673243
.14	.218997	.384887	.616564	.840691	1.054747	1.258507	1.452136	1.635951	1.810331
.16	.245890	.427955	.679713	.919728	1.145802	1.358164	1.557378	1.744107	1.919032
.18	.271771	.468448	.737704	.990601	1.225443	1.443033	1.644417	1.830674	2.002836
.20	.296668	.506489	.790848	1.053899	1.294621	1.514504	1.715160	1.898135	2.064858
.22	.320608	.542192	.839437	1.110170	1.354216	1.573854	1.771333	1.948721	2.107873
.24	.343615	.575667	.883746	1.159928	1.405039	1.622248	1.814504	1.984436	2.134354
.26	.365716	.607020	.924035	1.203650	1.447840	1.660753	1.846093	2.007082	2.146505
.28	.386936	.636351	.960551	1.241783	1.483312	1.690346	1.867387	2.018276	2.146283
.30	.407298	.663756	.993524	1.274741	1.512094	1.711918	1.879552	2.019470	2.135431
.34	.445543	.713151	1.049703	1.326660	1.551903	1.734193	1.880613	1.996925	2.087853
.38	.480634	.755888	1.094173	1.362207	1.571465	1.733294	1.856569	1.948315	2.014163
.42	.512744	.792592	1.128354	1.383815	1.574353	1.713991	1.813378	1.880737	1.922508
.46	.542037	.823830	1.153511	1.393598	1.563605	1.680255	1.755899	1.799848	1.819233
.50	.568671	.850118	1.170766	1.393394	1.541807	1.635388	1.688077	1.710136	1.709241
.54	.592796	.871927	1.181116	1.384797	1.511151	1.582127	1.613106	1.615135	1.596286
.58	.614553	.889685	1.185446	1.369193	1.473499	1.522739	1.533556	1.517607	1.483203
.62	.634079	.903781	1.184543	1.347783	1.430425	1.459091	1.451483	1.419687	1.372096
.66	.651502	.914570	1.179106	1.321611	1.383261	1.392714	1.368518	1.323001	1.264489
.70	.666944	.922376	1.169755	1.291578	1.333128	1.324858	1.285941	1.228766	1.161451
.78	.692351	.930185	1.141460	1.222953	1.227567	1.188560	1.125682	1.050928	.971645
.86	.711165	.929259	1.103366	1.146965	1.119559	1.056099	.976047	.890410	.805382
.94	.724169	.921301	1.058398	1.067363	1.013093	.931104	.839794	.748717	.662666
1.02	.732069	.907725	1.008850	.986894	.910816	.815618	.717988	.625696	.542009
1.10	.735503	.889703	.956522	.907539	.814396	.710597	.610616	.520238	.441191
1.18	.735045	.868213	.902813	.830695	.724794	.616264	.517002	.430739	.357723
1.26	.731211	.844065	.848806	.757309	.642462	.532361	.436105	.355395	.289133
1.34	.724464	.817933	.795330	.687990	.567498	.458330	.366700	.292384	.233106
1.42	.715222	.790376	.743007	.623093	.499751	.393443	.307511	.239973	.187567
1.50	.703856	.761858	.692302	.562776	.438909	.336887	.257287	.196577	.150703
1.66	.676053	.703402	.596962	.455864	.336228	.245436	.179126	.131349	.097030
1.82	.643316	.644891	.510842	.366353	.255628	.177615	.124044	.087466	.062423
1.98	.607433	.587875	.434405	.292508	.193180	.127893	.085613	.058189	.040255
2.14	.569806	.533359	.367463	.232286	.145282	.091759	.058994	.038765	.026105
2.30	.531522	.481960	.309448	.183621	.108839	.065676	.040654	.025924	.017083
2.46	.493411	.434019	.259593	.144588	.081288	.046947	.028064	.017447	.011322
2.62	.456095	.389683	.217047	.113473	.060568	.033551	.019441	.011849	.007630
2.78	.420028	.348962	.180949	.088798	.045052	.023998	.013539	.008145	.005248
2.94	.385533	.311775	.150473	.069316	.033472	.017198	.009500	.005685	.003646



	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
X	IS 1	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2
3.10	.352822	.277978	.124852	.053990	.024854	.012364	.006729	.004039	.002672
3.42	.293211	.219792	.085473	.032576	.013710	.006486	.003508	.002174	.001516
3.74	.241539	.172730	.058163	.019538	.007599	.003506	.001951	.001283	.000951
4.06	.197516	.135054	.039402	.011664	.004256	.001979	.001171	.000827	.000645
4.38	.160513	.105139	.026610	.006937	.002426	.001180	.000759	.000572	.000462
4.70	.129746	.081546	.017940	.004113	.001419	.000750	.000526	.000416	.000343
5.02	.104390	.063042	.012092	.002433	.000860	.000507	.000384	.000313	.000259
5.34	.083648	.048598	.008163	.001436	.000544	.000363	.000291	.000241	.000199
5.66	.066787	.037368	.005531	.000846	.000362	.000271	.000226	.000188	.000155
5.98	.053154	.028669	.003771	.000498	.000253	.000210	.000178	.000148	.000121
6.30	.042183	.021950	.002596	.000293	.000185	.000166	.000142	.000117	.000095
6.94	.026368	.012799	.001287	.000101	.000111	.000109	.000092	.000075	.000059
7.58	.016342	.007418	.000698	.000035	.000073	.000073	.000061	.000048	.000038
8.22	.010056	.004278	.000427	.000012	.000051	.000050	.000041	.000032	.000024
8.86	.006151	.002456	.000295	.000004	.000036	.000035	.000028	.000021	.000016
9.50	.003742	.001405	.000224	.000001	.000026	.000024	.000019	.000014	.000010
10.14	.002267	.000801	.000180	.000000	.000019	.000017	.000013	.000009	.000007
10.78	.001367	.000455	.000150	.000000	.000014	.000012	.000009	.000006	.000004
11.42	.000822	.000258	.000127		.000010	.000009	.000006	.000004	.000003
12.06	.000493	.000146	.000108		.000007	.000006	.000004	.000003	.000002
12.70	.000294	.000082	.000091		.000005	.000004	.000003	.000002	.000001
13.98	.000104	.000026	.000066		.000003	.000002	.000001	.000001	.000001
15.26	.000037	.000008	.000046		.000001	.000001	.000001	.000000	.000000
15.54	.000013	.000003	.000032		.000001	.000001	.000001	.000000	.000000
17.82	.000004	.000001	.000022		.000000	.000000	.000000		
19.10	.000002	.000000	.000015		.000000	.000000			
20.38	.000001	.000000	.000010						
21.66	.000000		.000007						
22.94	.000000		.000005						
24.22			.000003						
25.50			.000002						
28.06			.000001						
30.62			.000000						

	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
-E	2S 0	2S 0	2S 1	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
X			.39265	.61854	.98941	1.4241	1.9273	2.5007	3.1451
.00			.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01			.008719	.014581	.021226	.027974	.034859	.041877	.049017
.02			.017120	.028517	.041363	.054326	.067480	.080817	.094315
.03			.025210	.041826	.060446	.079118	.097955	.116949	.136072
.04			.032998	.054529	.078513	.102409	.126373	.150400	.174459
.05			.040492	.066643	.095598	.124256	.152818	.181289	.209637
.06			.047699	.078187	.111735	.144714	.177375	.209733	.241762
.07			.054626	.089178	.126956	.163836	.200121	.235843	.270983
.08			.061282	.099632	.141294	.181673	.221132	.259725	.297444
.09			.067674	.109566	.154778	.198276	.240483	.281481	.321280
.10			.073808	.118996	.167439	.213690	.258244	.301209	.342621
.12			.085329	.136406	.190403	.241140	.289262	.334956	.378315
.14			.095900	.151980	.210405	.264373	.314698	.361670	.405456
.16			.105569	.165830	.227650	.283712	.335025	.382000	.424899
.18			.114384	.178061	.242329	.299459	.350680	.396541	.437419
.20			.122390	.188773	.254620	.311895	.362064	.405841	.443728
.22			.129629	.198058	.264691	.321280	.369552	.410399	.444473
.24			.136142	.206004	.272698	.327855	.373485	.410679	.440246
.26			.141967	.212694	.278786	.331846	.374181	.407101	.431587
.28			.147140	.218206	.283094	.333460	.371933	.400054	.418989

	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
X	2S 0	2S 0	2S 1	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
.30			.151695	.222612	.285747	.332892	.367013	.389896	.402902
.34			.159082	.228379	.286562	.325916	.350133	.361526	.361868
.38			.164368	.230499	.282095	.312214	.325324	.324303	.311362
.42			.167770	.229416	.273103	.292903	.294106	.280180	.253778
.46			.169481	.225526	.260250	.268955	.257782	.230802	.191111
.50			.169676	.219179	.244117	.241209	.217464	.177559	.125016
.54			.168512	.210687	.225216	.210392	.174105	.121620	.056864
.58			.166130	.200327	.203994	.177139	.128518	.063968	-.012213
.62			.162657	.188346	.180849	.141996	.081398	.005428	-.081286
.66			.158208	.174963	.156127	.105442	.033339	-.053312	-.149599
.70			.152885	.160376	.130138	.067888	-.015156	-.111679	-.216539
.78			.139985	.128274	.075404	-.008833	-.111809	-.225493	-.344453
.86			.124600	.093234	.018453	-.085846	-.205886	-.333191	-.462280
.94			.107261	.056219	-.039309	-.161426	-.295525	-.432973	-.568483
1.02			.088402	.018005	-.096794	-.234317	-.379478	-.523788	-.662386
1.10			.068385	-.020783	-.153166	-.303621	-.456963	-.605136	-.743911
1.18			.047510	-.059638	-.207786	-.368724	-.527548	-.676909	-.813389
1.26			.026027	-.098153	-.260179	-.429231	-.591063	-.739282	-.871418
1.34			.004145	-.136001	-.309999	-.484918	-.647535	-.792620	-.918763
1.42			-.017958	-.172920	-.357002	-.535696	-.697130	-.837418	-.956279
1.50			-.040134	-.208704	-.401032	-.581574	-.740115	-.874246	-.984857
1.66			-.084223	-.276266	-.479865	-.659042	-.807636	-.926459	-1.018745
1.82			-.127333	-.337822	-.546371	-.718618	-.853185	-.954227	-1.027172
1.98			-.168903	-.392947	-.600980	-.762082	-.880047	-.962265	-1.016090
2.14			-.208533	-.441519	-.644464	-.791399	-.891390	-.954785	-.990517
2.30			-.245950	-.483629	-.677778	-.808545	-.890113	-.935406	-.954556
2.46			-.280969	-.519514	-.701958	-.815395	-.878779	-.907157	-.911493
2.62			-.313480	-.549505	-.718052	-.813671	-.859598	-.872527	-.863907
2.78			-.343426	-.573989	-.727080	-.804917	-.834441	-.833528	-.813795
2.94			-.370793	-.593389	-.729999	-.790490	-.804874	-.791765	-.762682
3.10			-.395600	-.608137	-.727698	-.771567	-.772188	-.748503	-.711708
3.42			-.437739	-.625391	-.710571	-.724128	-.701480	-.661194	-.613300
3.74			-.470422	-.629027	-.681182	-.668974	-.628532	-.576982	-.522741
4.06			-.494416	-.621979	-.643812	-.610578	-.557253	-.498808	-.441835
4.38			-.510585	-.606774	-.601720	-.551987	-.489968	-.428066	-.370999
4.70			-.519830	-.585532	-.557330	-.495199	-.427936	-.365189	-.309873
5.02			-.523038	-.560000	-.512406	-.441461	-.371711	-.310038	-.257696
5.34			-.521065	-.531593	-.468201	-.391489	-.321398	-.262152	-.213530
5.66			-.514712	-.501443	-.425578	-.345631	-.276818	-.220902	-.176392
5.98			-.504718	-.470441	-.385105	-.303981	-.237629	-.185596	-.145333
6.30			-.491754	-.439284	-.347129	-.266465	-.203399	-.155535	-.119471
6.94			-.459253	-.378499	-.279286	-.203041	-.147936	-.108532	-.080279
7.58			-.421223	-.321904	-.222293	-.153295	-.106738	-.075204	-.053615
8.22			-.380707	-.270902	-.175393	-.114877	-.076517	-.051919	-.035635
8.86			-.339916	-.225999	-.137391	-.085557	-.054562	-.035544	-.023595
9.50			-.300389	-.187157	-.106969	-.063391	-.038735	-.024289	-.015576
10.14			-.263132	-.154015	-.082849	-.046761	-.027396	-.016548	-.010257
10.78			-.228747	-.126049	-.063878	-.034362	-.019315	-.011245	-.006742
11.42			-.197536	-.102667	-.049056	-.025167	-.013580	-.007625	-.004425
12.06			-.169586	-.083267	-.037542	-.018379	-.009526	-.005162	-.002902
12.70			-.144835	-.067276	-.028641	-.013388	-.006669	-.003489	-.001901
13.98			-.104224	-.043486	-.016536	-.007058	-.003252	-.001589	-.000815
15.26			-.073868	-.027795	-.009461	-.003694	-.001578	-.000722	-.000350
16.54			-.051697	-.017600	-.005373	-.001922	-.000763	-.000328	-.000151
17.82			-.035798	-.011056	-.003032	-.000996	-.000368	-.000149	-.000065
19.10			-.024565	-.006898	-.001702	-.000514	-.000177	-.000068	-.000028
20.38			-.016725	-.004278	-.000951	-.000265	-.000085	-.000031	-.000012
21.66			-.011309	-.002640	-.000530	-.000136	-.000041	-.000014	-.000005
22.94			-.007601	-.001621	-.000294	-.000070	-.000020	-.000006	-.000002
24.22			-.005082	-.000992	-.000163	-.000036	-.000010	-.000003	-.000001

	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
	2S 0	2S 0	2S 1	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
X									
25.50			-.003381	-.000605	-.000090	-.000018	-.000005	-.000001	-.000000
28.06			-.001478	-.000222	-.000027	-.000005	-.000001	-.000000	-.000000
30.62			-.000637	-.000081	-.000008	-.000001	-.000000	-.000000	
33.18			-.000271	-.000029	-.000002	-.000000	-.000000		
35.74			-.000114	-.000010	-.000001	-.000000			
38.30			-.000048	-.000004	-.000000				
40.86			-.000020	-.000001	-.000000				
43.42			-.000008	-.000000					
45.98			-.000003	-.000000					
48.54			-.000001						
51.10			-.000001						
56.22			-.000000						

	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
	2P 0	2P 0	2P 0	2P 0	2P 1	2P 2	2P 3	2P 4	2P 5
-E					.61971	.81380	1.0173	1.2324	1.4600
X									
.00					.000000	.000000	.000000	.000000	.000000
.01					.000087	.000141	.000206	.000281	.000366
.02					.000342	.000557	.000811	.001105	.001437
.03					.000761	.001235	.001797	.002444	.003173
.04					.001335	.002163	.003144	.004270	.005536
.05					.002060	.003332	.004835	.006556	.008488
.06					.002929	.004730	.006852	.009279	.011997
.07					.003938	.006347	.009181	.012415	.016027
.08					.005079	.008174	.011805	.015940	.020549
.09					.006348	.010201	.014710	.019832	.025532
.10					.007741	.012418	.017880	.024072	.030947
.12					.010876	.017391	.024965	.033514	.042967
.14					.014447	.023028	.032957	.044117	.056406
.16					.018419	.029268	.041763	.055745	.071080
.18					.022761	.036054	.051294	.068276	.086824
.20					.027442	.043335	.061472	.081596	.103486
.22					.032436	.051063	.072224	.095602	.120928
.24					.037716	.059194	.083483	.110201	.139028
.26					.043259	.067686	.095186	.125306	.157671
.28					.049042	.076503	.107277	.140840	.176757
.30					.055045	.085608	.119704	.156731	.196192
.34					.067632	.104558	.145378	.189327	.235783
.38					.080882	.124303	.171867	.222637	.275862
.42					.094674	.144643	.198883	.256277	.315952
.46					.108899	.165406	.226180	.289931	.355665
.50					.123466	.186443	.253551	.323331	.394683
.54					.138294	.207624	.280818	.356260	.432753
.58					.153308	.228838	.307833	.388534	.469670
.62					.168447	.249988	.334469	.420006	.505275
.66					.183654	.270990	.360618	.450555	.539444
.70					.198878	.291771	.386192	.480085	.572087
.78					.229206	.332425	.435330	.535804	.632555
.86					.259132	.371544	.481434	.586757	.686405
.94					.288417	.408831	.524219	.632754	.733621
1.02					.316871	.444073	.563524	.673762	.774368
1.10					.344346	.477127	.599285	.709862	.808931
1.18					.370726	.507906	.631510	.741219	.837673
1.26					.395922	.536365	.660262	.768052	.861003
1.34					.419870	.562498	.685647	.790617	.879352
1.42					.442522	.586323	.707798	.809194	.893154

	H 1	HE 2	LI 3	BE 4	B 5	C 6	N 7	O 8	F 9
X	2P 0	2P 0	2P 0	2P 0	2P 1	2P 2	2P 3	2P 4	2P 5
1.50					.463852	.607885	.726871	.824071	.902837
1.66					.502494	.644471	.756465	.843884	.911474
1.82					.535809	.672878	.775845	.852301	.908285
1.98					.563949	.693845	.786425	.851386	.895878
2.14					.587158	.708154	.789548	.842961	.876445
2.30					.605743	.716589	.786441	.828598	.851789
2.46					.620045	.719900	.778199	.809628	.823371
2.62					.630421	.718789	.765781	.787165	.792364
2.78					.637231	.713903	.750020	.762128	.759698
2.94					.640830	.705822	.731629	.735273	.726108
3.10					.641557	.695067	.711213	.707215	.692165
3.42					.635663	.667333	.666276	.649385	.624897
3.74					.621871	.633760	.618391	.591549	.560320
4.06					.602152	.596676	.569761	.535534	.499772
4.38					.578143	.557819	.521878	.482433	.443909
4.70					.551179	.518469	.475722	.432852	.392955
5.02					.522334	.479549	.431910	.387070	.346873
5.34					.492464	.441714	.390801	.345154	.305469
5.66					.462241	.405413	.352574	.307030	.268459
5.98					.432188	.370938	.317278	.272542	.235513
6.30					.402703	.338467	.284878	.241479	.206287
6.94					.346550	.279825	.228351	.188664	.157624
7.58					.295284	.229530	.181865	.146609	.119891
8.22					.249551	.187054	.144072	.113420	.090841
8.86					.209453	.151607	.113620	.087410	.068605
9.50					.174766	.122302	.089257	.067144	.051665
10.14					.145084	.098261	.069883	.051429	.038811
10.78					.119907	.078665	.054551	.039292	.029090
11.42					.098711	.062778	.042471	.029951	.021761
12.06					.080978	.049959	.032988	.022784	.016249
12.70					.066224	.039657	.025568	.017301	.012114
13.98					.043928	.024822	.015273	.009926	.006703
15.26					.028868	.015419	.009064	.005663	.003691
16.54					.018822	.009516	.005350	.003216	.002024
17.82					.012191	.005841	.003143	.001818	.001105
19.10					.007850	.003568	.001839	.001024	.000602
20.38					.005030	.002170	.001072	.000575	.000327
21.66					.003208	.001315	.000623	.000322	.000177
22.94					.002039	.000795	.000361	.000180	.000096
24.22					.001291	.000479	.000209	.000100	.000052
25.50					.000815	.000287	.000120	.000056	.000028
28.06					.000322	.000103	.000040	.000017	.000008
30.62					.000126	.000037	.000013	.000005	.000002
33.18					.000049	.000013	.000004	.000002	.000001
35.74					.000019	.000005	.000001	.000000	.000000
38.30					.000007	.000002	.000000	.000000	.000000
40.86					.000003	.000001	.000000		
43.42					.000001	.000000			
45.98					.000000	.000000			

TABLE IV. RADIAL WAVEFUNCTIONS

NE 2P6	R=0.41093907*X	P 3P3	R=0.35898834*X
NA 3S1	R=0.39808872*X	S 3P4	R=0.35134796*X
MG 3S2	R=0.38670847*X	CL 3P5	R=0.34431911*X
AL 3P1	R=0.37652716*X	A 3P6	R=0.33782096*X
SI 3P2	R=0.36733988*X		

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	65.545	80.957	98.063	117.00	137.64	159.98	184.02	209.77	237.22
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.239631	.267836	.296389	.325250	.354390	.383784	.413410	.443250	.473287
.02	.459997	.512758	.565942	.619475	.673306	.727390	.781691	.836175	.890813
.03	.662293	.736273	.810522	.884941	.959464	1.034035	1.108605	1.183134	1.257587
.04	.847643	.939799	1.031879	1.123769	1.215397	1.306702	1.397632	1.488148	1.578214
.05	1.017112	1.124669	1.231651	1.337937	1.443459	1.548159	1.651992	1.754924	1.856925
.06	1.171703	1.292137	1.411372	1.529292	1.645842	1.760974	1.874658	1.986873	2.097604
.07	1.312361	1.443380	1.572479	1.699558	1.824581	1.947524	2.068377	2.187140	2.303818
.08	1.439979	1.579506	1.716316	1.850340	1.981570	2.110012	2.235684	2.358614	2.478834
.09	1.555398	1.701552	1.844143	1.983137	2.118567	2.250475	2.378917	2.503953	2.625649
.10	1.659410	1.810494	1.957134	2.099344	2.237205	2.370803	2.500235	2.625602	2.747008
.12	1.836154	1.992669	2.142942	2.287104	2.425357	2.557896	2.684920	2.806624	2.923200
.14	1.975678	2.132695	2.281702	2.422984	2.556885	2.683731	2.803841	2.917521	3.025062
.16	2.082823	2.236429	2.380366	2.515096	2.641125	2.758927	2.868952	2.971625	3.067348
.18	2.161878	2.309019	2.444993	2.570458	2.686096	2.792535	2.890366	2.980137	3.062359
.20	2.216638	2.354982	2.480858	2.595133	2.698669	2.792256	2.876623	2.952441	3.020329
.22	2.250458	2.378281	2.492553	2.594354	2.684730	2.764629	2.834917	2.896380	2.949742
.24	2.266302	2.382385	2.484062	2.572626	2.649303	2.715194	2.771292	2.818492	2.857610
.26	2.266786	2.370331	2.458844	2.533827	2.596676	2.648634	2.690812	2.724203	2.749701
.28	2.254216	2.344772	2.419894	2.481282	2.530492	2.568895	2.597707	2.618002	2.630742
.30	2.230624	2.308025	2.369802	2.417841	2.453842	2.479291	2.495491	2.503583	2.504580
.34	2.157308	2.208771	2.244813	2.267641	2.279188	2.281115	2.274847	2.261612	2.242480
.38	2.058674	2.085735	2.098240	2.098636	2.089006	2.071109	2.046424	2.016199	1.981496
.42	1.943798	1.948790	1.940605	1.921838	1.894643	1.860796	1.821760	1.778745	1.732751
.46	1.819579	1.805251	1.779494	1.744960	1.703792	1.657712	1.608106	1.556095	1.502573
.50	1.691208	1.660456	1.620262	1.573246	1.521464	1.466526	1.409691	1.351946	1.294054
.54	1.562528	1.518221	1.466576	1.410110	1.350727	1.289873	1.228645	1.167866	1.108145
.58	1.436332	1.381187	1.320837	1.257623	1.193249	1.128963	1.065669	1.004011	.944433
.62	1.314591	1.251109	1.184500	1.116881	1.049717	.984031	.920521	.859645	.801678
.66	1.198645	1.129065	1.058328	.988284	.920135	.854666	.792364	.733499	.678187
.70	1.089342	1.015630	.942580	.871746	.804054	.740049	.680008	.624023	.572059
.78	.892297	.815135	.741720	.672978	.609281	.550711	.497161	.448411	.404172
.86	.724331	.648489	.578681	.515216	.457963	.406603	.360716	.319844	.283516
.94	.583814	.512383	.448504	.391941	.342137	.298461	.260268	.226934	.197878
1.02	.467903	.402673	.345849	.296736	.254458	.218163	.187058	.160431	.137647
1.10	.373324	.315136	.265663	.223866	.188645	.159012	.134102	.113167	.095570
1.18	.296809	.245843	.203492	.168476	.139562	.115702	.096010	.079752	.066317
1.26	.235328	.191336	.155567	.126597	.103137	.084132	.068723	.056216	.046048
1.34	.186200	.148674	.118792	.095064	.076204	.061196	.049232	.039678	.032031
1.42	.147115	.115416	.090672	.071394	.056344	.044569	.035334	.028073	.022346
1.50	.116132	.089569	.069228	.053666	.041724	.032532	.025433	.019932	.015654
1.66	.072327	.054023	.040500	.030501	.023069	.017517	.013347	.010200	.007811
1.82	.045166	.032779	.023919	.017566	.012974	.009630	.007176	.005362	.004011
1.98	.028396	.020108	.014345	.010320	.007476	.005447	.003983	.002917	.002132
2.14	.018054	.012538	.008790	.006227	.004446	.003192	.002297	.001649	.001174
2.30	.011662	.007989	.005537	.003882	.002744	.001946	.001378	.000967	.000666
2.46	.007690	.005229	.003602	.002511	.001762	.001236	.000860	.000586	.000384
2.62	.005201	.003531	.002428	.001688	.001177	.000815	.000554	.000363	.000222
2.78	.003620	.002465	.001698	.001178	.000814	.000555	.000366	.000227	.000126
2.94	.002599	.001780	.001228	.000849	.000581	.000387	.000245	.000142	.000071

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
X	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2
3.10	.001926	.001327	.000916	.000630	.000424	.000275	.000164	.000088	.000040
3.42	.001153	.000799	.000548	.000368	.000237	.000141	.000074	.000034	.000013
3.74	.000758	.000520	.000350	.000227	.000137	.000072	.000033	.000013	.000004
4.06	.000530	.000356	.000232	.000144	.000080	.000035	.000014	.000005	.000001
4.38	.000385	.000250	.000158	.000092	.000046	.000017	.000006	.000002	.000000
4.70	.000286	.000179	.000109	.000059	.000025	.000008	.000003	.000001	.000000
5.02	.000216	.000129	.000076	.000038	.000013	.000004	.000001	.000000	.000000
5.34	.000165	.000094	.000053	.000025	.000007	.000002	.000001	.000000	.000000
5.66	.000127	.000069	.000037	.000016	.000004	.000001	.000000	.000000	.000000
5.98	.000094	.000051	.000026	.000010	.000002	.000000	.000000	.000000	.000000
6.30	.000077	.000038	.000019	.000006	.000001	.000000	.000000	.000000	.000000
6.94	.000047	.000021	.000010	.000002	.000000	.000000	.000000	.000000	.000000
7.58	.000029	.000011	.000005	.000001	.000000	.000000	.000000	.000000	.000000
8.22	.000018	.000006	.000003	.000000	.000000	.000000	.000000	.000000	.000000
8.86	.000012	.000003	.000001	.000000	.000000	.000000	.000000	.000000	.000000
9.50	.000008	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000
10.14	.000005	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
10.78	.000003	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
11.42	.000002	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
12.06	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
12.70	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
13.98	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	3.8608	5.5940	7.5354	9.8213	12.326	15.057	18.020	21.215	24.644
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.056264	.065388	.074872	.084519	.094297	.104180	.114152	.124202	.134323
.02	.107952	.125109	.142870	.160855	.179004	.197270	.215622	.234040	.252510
.03	.155295	.179469	.204383	.229494	.254718	.279986	.305260	.330513	.355726
.04	.198515	.228757	.259781	.290897	.321999	.353006	.383870	.414562	.445060
.05	.237826	.273249	.309415	.345499	.381380	.416966	.452207	.487071	.521538
.06	.273428	.313210	.353619	.393714	.433364	.472471	.510982	.548870	.586118
.07	.305516	.348889	.392709	.435934	.478427	.520087	.560866	.600740	.639700
.08	.334274	.380525	.426987	.472531	.517019	.560351	.602487	.643412	.683124
.09	.359878	.408344	.456737	.503856	.549563	.593768	.636438	.677572	.717180
.10	.382496	.432563	.482232	.530241	.576460	.620811	.663275	.703865	.742605
.12	.419403	.471011	.521468	.569432	.614807	.657546	.697668	.735225	.770278
.14	.446188	.497391	.546593	.592426	.634838	.673033	.709482	.741983	.771146
.16	.463934	.513080	.559318	.601297	.639028	.672579	.702082	.727695	.749581
.18	.473622	.519320	.561178	.597901	.629578	.656355	.678436	.696044	.709404
.20	.476146	.517235	.553552	.583896	.608449	.627442	.641158	.649897	.653948
.22	.472314	.507838	.537681	.560767	.577382	.587853	.592551	.591852	.586116
.24	.462863	.492045	.514677	.529838	.537926	.539372	.534639	.524183	.508438
.26	.448459	.470683	.485540	.492292	.491456	.483572	.469199	.448876	.423110
.28	.429708	.444497	.451167	.449185	.439193	.421844	.397793	.367664	.332035
.30	.407160	.414160	.412364	.401460	.382219	.355411	.321788	.282055	.236862
.34	.352621	.343401	.324277	.295418	.257863	.212611	.160605	.102707	.039695
.38	.288301	.262580	.226193	.179830	.124793	.062303	-.006524	-.080685	-.159293
.42	.217042	.175079	.122044	.059161	-.012018	-.090067	-.173719	-.261859	-.353511
.46	.141175	.083632	.014955	-.063099	-.148748	-.240392	-.336639	-.436290	-.538315
.50	.062605	-.009567	-.092608	-.184247	-.282503	-.385634	-.492154	-.600814	-.710560
.54	-.017120	-.102765	-.198719	-.302224	-.411136	-.523604	-.638089	-.753321	-.868257
.58	-.096747	-.194580	-.301895	-.415490	-.533095	-.652789	-.773015	-.892519	-1.010297
.62	-.175274	-.283932	-.401016	-.522926	-.647306	-.772205	-.896085	-1.017739	-1.136234
.66	-.251907	-.369996	-.495261	-.623754	-.753076	-.881287	-1.006899	-1.128787	-1.246112

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
X									
.70	-.326025	-.452153	-.584046	-.717467	-.850013	-.979791	-1.105399	-1.225821	-1.340335
.78	-.464942	-.603106	-.743865	-.882574	-1.016943	-1.145278	-1.266436	-1.379690	-1.484615
.86	-.589574	-.734769	-.879120	-1.017802	-1.148779	-1.270679	-1.382714	-1.484520	-1.576027
.94	-.698838	-.846654	-.990115	-1.124428	-1.247933	-1.359671	-1.459284	-1.546818	-1.622591
1.02	-.792579	-.939265	-1.078164	-1.204708	-1.317704	-1.416680	-1.501751	-1.573401	-1.632343
1.10	-.871257	-1.013719	-1.145156	-1.261383	-1.361750	-1.446317	-1.515695	-1.570812	-1.612770
1.18	-.935719	-1.071483	-1.193250	-1.297362	-1.383755	-1.453047	-1.506350	-1.545025	-1.570538
1.26	-.987039	-1.114188	-1.224689	-1.315519	-1.387227	-1.440999	-1.478437	-1.501308	-1.511408
1.34	-1.026404	-1.143514	-1.241672	-1.318573	-1.375395	-1.413883	-1.436103	-1.444192	-1.440233
1.42	-1.055036	-1.161105	-1.246276	-1.309027	-1.351159	-1.374957	-1.382917	-1.377502	-1.361030
1.50	-1.074141	-1.168525	-1.240420	-1.289132	-1.317073	-1.327035	-1.321901	-1.304409	-1.277059
1.66	-1.088313	-1.158522	-1.204087	-1.226030	-1.227909	-1.213406	-1.186022	-1.148878	-1.104666
1.82	-1.077227	-1.123573	-1.144363	-1.142337	-1.122039	-1.087838	-1.043626	-.992673	-.937640
1.98	-1.047817	-1.071720	-1.070227	-1.047700	-1.009478	-.960386	-.904460	-.844904	-.784152
2.14	-1.005658	-1.009180	-.988351	-.949001	-.897040	-.837506	-.774354	-.710518	-.648061
2.30	-.955119	-.940640	-.903565	-.850985	-.789146	-.723060	-.656399	-.591675	-.530476
2.46	-.899551	-.869555	-.819265	-.756788	-.688470	-.619084	-.551851	-.488749	-.430840
2.62	-.841480	-.798416	-.737756	-.668360	-.596451	-.526373	-.460773	-.401036	-.347683
2.78	-.782774	-.728969	-.660530	-.586797	-.513667	-.444905	-.382504	-.327238	-.279110
2.94	-.724790	-.662396	-.588479	-.512591	-.440121	-.374151	-.315980	-.265787	-.223112
3.10	-.668483	-.599455	-.522062	-.445812	-.375445	-.313287	-.259946	-.215050	-.177742
3.42	-.563281	-.486011	-.406510	-.333527	-.270211	-.217316	-.174183	-.139544	-.111983
3.74	-.469949	-.389788	-.312891	-.246559	-.192186	-.149072	-.115566	-.089825	-.070163
4.06	-.389119	-.309957	-.238623	-.180553	-.135449	-.101427	-.076176	-.057581	-.043916
4.38	-.320278	-.244784	-.180628	-.131219	-.094793	-.068614	-.050030	-.036888	-.027579
4.70	-.262359	-.192223	-.135890	-.094784	-.065987	-.046247	-.032825	-.023697	-.017453
5.02	-.214073	-.150239	-.101710	-.068130	-.045758	-.031116	-.021572	-.015320	-.011181
5.34	-.174107	-.116960	-.075801	-.048778	-.031648	-.020939	-.014238	-.010004	-.007284
5.66	-.141214	-.090748	-.056287	-.034814	-.021860	-.014119	-.009466	-.006625	-.004848
5.98	-.114269	-.070211	-.041668	-.024789	-.015097	-.009560	-.006359	-.004466	-.003309
6.30	-.092279	-.054191	-.030766	-.017621	-.010438	-.006514	-.004331	-.003076	-.002323
6.94	-.059883	-.032099	-.016666	-.008883	-.005037	-.003115	-.002120	-.001574	-.001249
7.58	-.038655	-.018912	-.008969	-.004484	-.002489	-.001578	-.001135	-.000895	-.000746
8.22	-.024852	-.011111	-.004805	-.002283	-.001280	-.000863	-.000669	-.000559	-.000483
8.86	-.015929	-.006529	-.002566	-.001182	-.000698	-.000515	-.000430	-.000374	-.000329
9.50	-.010187	-.003850	-.001368	-.000629	-.000409	-.000334	-.000295	-.000262	-.000231
10.14	-.006504	-.002289	-.000729	-.000350	-.000259	-.000231	-.000211	-.000189	-.000166
10.78	-.004148	-.001381	-.000389	-.000205	-.000176	-.000168	-.000156	-.000139	-.000120
11.42	-.002643	-.000852	-.000208	-.000129	-.000127	-.000126	-.000117	-.000103	-.000088
12.06	-.001684	-.000543	-.000112	-.000087	-.000096	-.000096	-.000089	-.000077	-.000065
12.70	-.001073	-.000362	-.000060	-.000062	-.000074	-.000075	-.000068	-.000058	-.000048
13.98	-.000437	-.000188	-.000018	-.000036	-.000046	-.000046	-.000040	-.000033	-.000027
15.26	-.000178	-.000120	-.000006	-.000024	-.000030	-.000028	-.000024	-.000019	-.000015
16.54	-.000073	-.000089	-.000002	-.000016	-.000020	-.000018	-.000014	-.000011	-.000008
17.82	-.000030	-.000070	-.000001	-.000011	-.000013	-.000011	-.000009	-.000007	-.000005
19.10	-.000013	-.000057	-.000000	-.000008	-.000009	-.000007	-.000005	-.000004	-.000003
20.38	-.000005	-.000046	.000000	-.000005	-.000006	-.000005	-.000003	-.000002	-.000002
21.66	-.000002	-.000038		-.000004	-.000004	-.000003	-.000002	-.000001	-.000001
22.94	-.000001	-.000031		-.000003	-.000003	-.000002	-.000001	-.000001	-.000001
24.22	-.000000	-.000025		-.000002	-.000002	-.000001	-.000001	-.000000	.000000
25.50	-.000000	-.000020		-.000001	-.000001	-.000001	-.000000	.000000	.000000
28.06		-.000013		-.000001	-.000001	.000000	.000000		
30.62		-.000008		.000000	.000000	.000000			
33.18		-.000005		.000000	.000000				
35.74		-.000003							
38.30		-.000002							
40.86		-.000001							
43.42		-.000001							
45.98		.000000							





	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X									
4.70	.356839	.265613	.190817	.133570	.092743	.064494	.045214	.032112	.021730
5.02	.311424	.221574	.152624	.102557	.068617	.046197	.031529	.021938	.014233
5.34	.271242	.184321	.121756	.078574	.050716	.033127	.022082	.015125	.009372
5.66	.235835	.152969	.096935	.060116	.037487	.023816	.015568	.010557	.006216
5.98	.204739	.126695	.077059	.045964	.027738	.017194	.011075	.007484	.004160
6.30	.177505	.104757	.061198	.035143	.020569	.012485	.007969	.005406	.002816
5.94	.132960	.071331	.038549	.020599	.011430	.006746	.004312	.003013	.001342
7.58	.099201	.048386	.024309	.012169	.006491	.003810	.002508	.001847	.000680
8.22	.073767	.032750	.015394	.007285	.003802	.002277	.001581	.001240	.000368
8.86	.054698	.022152	.009820	.004444	.002318	.001452	.001076	.000894	.000212
9.50	.040457	.014994	.006331	.002778	.001481	.000988	.000781	.000677	.000129
10.14	.029858	.010173	.004138	.001788	.000995	.000712	.000594	.000530	.000081
10.78	.021992	.006927	.002751	.001190	.000702	.000537	.000467	.000423	.000053
11.42	.016170	.004743	.001864	.000820	.000518	.000420	.000375	.000342	.000035
12.06	.011870	.003272	.001291	.000585	.000396	.000336	.000305	.000279	.000024
12.70	.008701	.002277	.000914	.000431	.000312	.000274	.000251	.000228	.000016
13.98	.004657	.001142	.000490	.000254	.000205	.000188	.000172	.000154	.000008
15.26	.002482	.000606	.000283	.000162	.000142	.000132	.000119	.000104	.000004
15.54	.001317	.000343	.000174	.000109	.000101	.000093	.000083	.000070	.000002
17.82	.000697	.000207	.000111	.000076	.000073	.000067	.000058	.000048	.000001
19.10	.000368	.000132	.000073	.000054	.000053	.000048	.000040	.000032	.000000
20.38	.000193	.000088	.000048	.000040	.000039	.000034	.000028	.000022	.000000
21.66	.000101	.000060	.000032	.000029	.000029	.000025	.000019	.000015	
22.94	.000053	.000042	.000022	.000022	.000021	.000018	.000014	.000010	
24.22	.000028	.000030	.000015	.000016	.000016	.000013	.000009	.000007	
25.50	.000014	.000021	.000010	.000012	.000011	.000009	.000006	.000004	
28.06	.000004	.000011	.000005	.000007	.000006	.000004	.000003	.000002	
30.62	.000001	.000006	.000002	.000004	.000003	.000002	.000001	.000001	
33.18	.000000	.000003	.000001	.000002	.000002	.000001	.000001	.000000	
35.74	.000000	.000002	.000000	.000001	.000001	.000000	.000000	.000000	
38.30		.000001	.000000	.000001	.000000	.000000	.000000		
40.86		.000000		.000000	.000000				

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	3S 0	3S 1	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E		.36420	.50610	.78684	1.0872	1.4127	1.7653	2.1458	2.5547
X									
.00		.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01		.009828	.014425	.019514	.024198	.028717	.033162	.037574	.041975
.02		.018805	.027524	.037136	.045932	.054373	.062633	.070794	.078898
.03		.026974	.039371	.052977	.065352	.077161	.088657	.099958	.111126
.04		.034379	.050037	.067143	.082601	.097265	.111462	.125344	.138992
.05		.041061	.059589	.079731	.097812	.114859	.131265	.147216	.162811
.06		.047059	.068090	.090837	.111113	.130105	.148268	.165821	.182879
.07		.052411	.075600	.100550	.122625	.143159	.162666	.181392	.199474
.08		.057153	.082178	.108955	.132463	.154167	.174638	.194150	.212856
.09		.061317	.087877	.116133	.140734	.163268	.184355	.204300	.223271
.10		.064937	.092749	.122159	.147540	.170591	.191979	.212036	.230947
.12		.070665	.100210	.131044	.157141	.180390	.201545	.220986	.238936
.14		.074563	.104925	.136145	.161979	.184468	.204444	.222332	.238391
.16		.076839	.107223	.137942	.162689	.183630	.201659	.217249	.230692
.18		.077681	.107401	.136864	.159841	.178591	.194063	.206775	.217053
.20		.077256	.105727	.133297	.153944	.169987	.182428	.191824	.198537
.22		.075720	.102440	.127590	.145449	.158384	.167437	.173202	.176080
.24		.073209	.097759	.120051	.134764	.144285	.149693	.151619	.150498
.26		.069851	.091878	.110959	.122248	.128136	.129731	.127699	.122508
.28		.065758	.084974	.100564	.108225	.110334	.108022	.101990	.092736

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	3S 0	3S 1	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X									
.30		.061033	.077205	.089089	.092981	.091228	.084982	.074971	.061726
.34		.050050	.059626	.063678	.059825	.050315	.036323	.018630	-.002178
.38		.037544	.040119	.036085	.024499	.007469	-.013829	-.038574	-.066134
.42		.024038	.019468	.007389	-.011645	-.035706	-.063631	-.094578	-.127879
.46		.009957	-.001694	-.021555	-.047557	-.077981	-.111702	-.147864	-.185781
.50		-.004354	-.022866	-.050079	-.082430	-.118436	-.157023	-.197345	-.238708
.54		-.018618	-.043652	-.077666	-.115655	-.156391	-.198873	-.242276	-.285918
.58		-.032617	-.063743	-.103926	-.146784	-.191366	-.236759	-.282179	-.326971
.62		-.046174	-.082902	-.128566	-.175498	-.223038	-.270378	-.316790	-.361662
.66		-.059157	-.100953	-.151381	-.201586	-.251209	-.299566	-.346001	-.389964
.70		-.071462	-.117769	-.172231	-.224916	-.275780	-.324275	-.369835	-.411983
.78		-.093763	-.147374	-.207738	-.263112	-.314102	-.360477	-.401893	-.438063
.86		-.112721	-.171377	-.234881	-.290156	-.338477	-.379977	-.414589	-.442267
.94		-.128227	-.189788	-.253907	-.306643	-.349946	-.384356	-.410125	-.427488
1.02		-.140334	-.202838	-.265333	-.313458	-.349841	-.375457	-.390915	-.396762
1.10		-.149201	-.210891	-.269823	-.311629	-.339605	-.355191	-.359374	-.353038
1.18		-.155047	-.214380	-.268105	-.302222	-.320686	-.325412	-.317791	-.299054
1.26		-.158124	-.213769	-.260921	-.286289	-.294466	-.287859	-.268269	-.237280
1.34		-.158698	-.209520	-.248990	-.264821	-.262229	-.244114	-.212691	-.169893
1.42		-.157034	-.202081	-.232991	-.238739	-.225143	-.195595	-.152718	-.098785
1.50		-.153385	-.191874	-.213550	-.208876	-.184253	-.143552	-.089796	-.025573
1.66		-.141078	-.164678	-.166564	-.140729	-.094653	-.033122	.040114	.121922
1.82		-.123484	-.130640	-.111927	-.065412	.000471	.080129	.169223	.264233
1.98		-.102009	-.091942	-.052710	.013196	.096547	.191103	.292116	.395878
2.14		-.077782	-.050303	.008708	.092169	.190245	.296253	.405252	.513562
2.30		-.051693	-.007065	.070514	.169346	.279217	.393239	.506517	.615617
2.46		-.024438	.036742	.131344	.243167	.361878	.480647	.594864	.701542
2.62		.003446	.080328	.190190	.312547	.437238	.557759	.670019	.771651
2.78		.031543	.123096	.246320	.376769	.504756	.624374	.732253	.826790
2.94		.059534	.164598	.299223	.435400	.564233	.680660	.782210	.868140
3.10		.087174	.204502	.348556	.488229	.615723	.727047	.820766	.897055
3.42		.140706	.278633	.435788	.576433	.695821	.792643	.867778	.923268
3.74		.191127	.344355	.507479	.642358	.748249	.826969	.881780	.916429
4.06		.237878	.401279	.564129	.688105	.777108	.836208	.870866	.886205
4.38		.280675	.449481	.606833	.716277	.786662	.826157	.842057	.840469
4.70		.319408	.489327	.636998	.729605	.780930	.801870	.801108	.785321
5.02		.354082	.521356	.656151	.730719	.763480	.767560	.752545	.725309
5.34		.384772	.546203	.665824	.722028	.737367	.726619	.699818	.663715
5.66		.411606	.564545	.667479	.705664	.705124	.681709	.645485	.602826
5.98		.434746	.577069	.662467	.683464	.668811	.634868	.591386	.544176
6.30		.454375	.584441	.652005	.656982	.630067	.587622	.538807	.488736
6.94		.483903	.586240	.618913	.596107	.550114	.496050	.441317	.389442
7.58		.501856	.574518	.575243	.530760	.472261	.412430	.356517	.306439
8.22		.509914	.553101	.526140	.465871	.400288	.338996	.285032	.238845
8.86		.509693	.525078	.475223	.404389	.335937	.276165	.226045	.184789
9.50		.502694	.492882	.424939	.347919	.279713	.223387	.178113	.142126
10.14		.490278	.458386	.376866	.297178	.231406	.179652	.139609	.108790
10.78		.473651	.423008	.331957	.252318	.190423	.143789	.108955	.082945
11.42		.453869	.387796	.290718	.213151	.155996	.114622	.084722	.063032
12.06		.431836	.353502	.253349	.179287	.127304	.091058	.065676	.047767
12.70		.408321	.320653	.219842	.150242	.103547	.072125	.050778	.036114
13.98		.359282	.260535	.163762	.104520	.067941	.044920	.030158	.020528
15.26		.310573	.208769	.120556	.071973	.044182	.027759	.017792	.011603
16.54		.264596	.165404	.087909	.049157	.028530	.017052	.010445	.006533
17.82		.222710	.129813	.063602	.033352	.018320	.010427	.006109	.003669
19.10		.185542	.101065	.045715	.022505	.011711	.006353	.003565	.002058
20.38		.153221	.078142	.032676	.015117	.007460	.003861	.002077	.001153
21.66		.125567	.060055	.023245	.010117	.004738	.002343	.001209	.000647
22.94		.102218	.045910	.016469	.006749	.003003	.001419	.000704	.000363
24.22		.082720	.034933	.011626	.004490	.001900	.000859	.000410	.000204

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	3S 0	3S 1	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X									
25.50		.066590	.026469	.008182	.002981	.001201	.000520	.000239	.000115
28.06		.042567	.015030	.004022	.001308	.000479	.000191	.000081	.000037
30.62		.026793	.008430	.001961	.000571	.000191	.000070	.000028	.000012
33.18		.016650	.004679	.000950	.000249	.000076	.000026	.000010	.000004
35.74		.010236	.002574	.000458	.000109	.000031	.000010	.000003	.000001
38.30		.006234	.001406	.000221	.000047	.000012	.000004	.000001	.000000
40.86		.003767	.000763	.000106	.000021	.000005	.000001	.000000	.000000
43.42		.002260	.000411	.000051	.000009	.000002	.000001	.000000	
45.98		.001348	.000221	.000024	.000004	.000001	.000000		
48.54		.000799	.000118	.000012	.000002	.000000	.000000		
51.10		.000472	.000063	.000006	.000001	.000000			
56.22		.000162	.000018	.000001	.000000				
61.34		.000055	.000005	.000000	.000000				
66.46		.000018	.000001	.000000					
71.58		.000006	.000000						
76.70		.000002	.000000						
81.82		.000001							
86.94		.000000							

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	3P 0	3P 0	3P 0	3P 1	3P 2	3P 3	3P 4	3P 5	3P 6
-E				.41990	.55749	.70112	.85262	1.0128	1.1820
X									
.00				.000000	.000000	.000000	.000000	.000000	.000000
.01				.000168	.000238	.000313	.000392	.000477	.000564
.02				.000654	.000927	.001217	.001526	.001854	.002188
.03				.001436	.002034	.002666	.003339	.004053	.004777
.04				.002492	.003526	.004616	.005772	.006999	.008240
.05				.003802	.005371	.007023	.008773	.010624	.012494
.06				.005344	.007542	.009850	.012288	.014864	.017460
.07				.007103	.010010	.013058	.016271	.019659	.023066
.08				.009058	.012751	.016612	.020676	.024952	.029243
.09				.011196	.015740	.020482	.025461	.030691	.035927
.10				.013499	.018954	.024634	.030587	.036826	.043059
.12				.018546	.025975	.033678	.041716	.050106	.058450
.14				.024092	.033659	.043533	.053793	.064460	.075017
.16				.030042	.041867	.054015	.066584	.079597	.092415
.18				.036311	.050477	.064962	.079884	.095266	.110345
.20				.042826	.059382	.076233	.093513	.111249	.128548
.22				.049518	.068487	.087701	.107314	.127356	.146801
.24				.056331	.077709	.099259	.121153	.143424	.164915
.26				.063210	.086974	.110809	.134911	.159311	.182726
.28				.070110	.096218	.122271	.148485	.174898	.200096
.30				.076991	.105384	.133570	.161789	.190080	.216908
.34				.090556	.123292	.155444	.187296	.218899	.248485
.38				.103667	.140377	.176029	.210958	.245230	.276867
.42				.116145	.156403	.195039	.232447	.268712	.301673
.46				.127857	.171198	.212276	.251545	.289121	.322688
.50				.138708	.184646	.227610	.268126	.306344	.339823
.54				.148631	.196674	.240973	.282132	.320348	.353083
.58				.157586	.207241	.252336	.293560	.331164	.362546
.62				.165553	.216338	.261708	.302448	.338873	.368343
.66				.172524	.223972	.269124	.308865	.343587	.370640
.70				.178509	.230172	.274637	.312904	.345446	.369631
.78				.187593	.238431	.280247	.314291	.341231	.358542
.86				.193023	.241526	.279203	.307585	.327570	.336827
.94				.195085	.239948	.272246	.293825	.305841	.306228
1.02				.194098	.234214	.260130	.274034	.277372	.268397

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	3P 0	3P 0	3P 0	3P 1	3P 2	3P 3	3P 4	3P 5	3P 6
X									
1.10				.190387	.224835	.243582	.249184	.243397	.224840
1.18				.184271	.212299	.223283	.220167	.205036	.176908
1.26				.176049	.197061	.199856	.187789	.163288	.125792
1.34				.166002	.179534	.173864	.152770	.119035	.072526
1.42				.154381	.160092	.145810	.115748	.073047	.018004
1.50				.141419	.139071	.116139	.077279	.025990	-.037010
1.66				.112265	.093447	.053472	-.002109	-.069112	-.146032
1.82				.079932	.044656	-.011535	-.082225	-.162617	-.250546
1.98				.045514	-.005749	-.076896	-.160720	-.251930	-.347868
2.14				.009868	-.056566	-.141115	-.235899	-.335286	-.436325
2.30				-.026332	-.106870	-.203084	-.306576	-.411565	-.515013
2.46				-.062559	-.155954	-.261996	-.371968	-.480140	-.583601
2.62				-.098399	-.203284	-.317290	-.431605	-.540762	-.642173
2.78				-.133527	-.248463	-.368596	-.485261	-.593460	-.691102
2.94				-.167686	-.291204	-.415697	-.532897	-.638465	-.730957
3.10				-.200681	-.331312	-.458498	-.574612	-.676151	-.762425
3.42				-.262605	-.403191	-.531263	-.641166	-.731474	-.803211
3.74				-.318506	-.463755	-.587651	-.687280	-.763630	-.819514
4.06				-.368019	-.513281	-.629088	-.715809	-.776939	-.816968
4.38				-.411079	-.552434	-.657322	-.729677	-.775408	-.800430
4.70				-.447829	-.582101	-.674186	-.731639	-.762530	-.773891
5.02				-.478549	-.603269	-.681460	-.724154	-.741238	-.740529
5.34				-.503612	-.616953	-.680795	-.709349	-.713929	-.702811
5.66				-.523441	-.624141	-.673671	-.689019	-.682520	-.662621
5.98				-.538486	-.625762	-.661383	-.664647	-.648521	-.621370
6.30				-.549201	-.622671	-.645050	-.637447	-.613103	-.580095
6.94				-.559404	-.605356	-.603900	-.578278	-.541379	-.500254
7.58				-.557362	-.577377	-.556120	-.517165	-.472150	-.426744
8.22				-.545972	-.542707	-.505753	-.457562	-.407954	-.361082
8.86				-.527668	-.504305	-.455483	-.401459	-.349945	-.303596
9.50				-.504454	-.464324	-.407024	-.349893	-.298455	-.253972
10.14				-.477943	-.424298	-.361411	-.303293	-.253341	-.211578
10.78				-.449420	-.385288	-.319210	-.261707	-.214197	-.175646
11.42				-.419892	-.348002	-.280673	-.224955	-.180494	-.145383
12.06				-.390135	-.312886	-.245837	-.192723	-.151652	-.120025
12.70				-.360739	-.280195	-.214602	-.164632	-.127096	-.098865
13.98				-.304660	-.222442	-.162144	-.119253	-.088689	-.066690
15.26				-.253830	-.174635	-.121358	-.085677	-.061442	-.044695
16.54				-.209155	-.135863	-.090133	-.061142	-.042312	-.029793
17.82				-.170765	-.104903	-.066511	-.043387	-.028992	-.019770
19.10				-.138340	-.080479	-.048811	-.030640	-.019780	-.013068
20.38				-.111324	-.061402	-.035652	-.021548	-.013444	-.008609
21.66				-.089064	-.046622	-.025933	-.015098	-.009108	-.005654
22.94				-.070891	-.035250	-.018794	-.010545	-.006153	-.003704
24.22				-.056172	-.026551	-.013577	-.007344	-.004146	-.002421
25.50				-.044329	-.019932	-.009779	-.005101	-.002787	-.001579
28.06				-.027318	-.011134	-.005034	-.002445	-.001251	-.000668
30.62				-.016633	-.006157	-.002569	-.001162	-.000558	-.000281
33.18				-.010027	-.003376	-.001302	-.000549	-.000247	-.000117
35.74				-.005992	-.001838	-.000655	-.000258	-.000109	-.000049
38.30				-.003555	-.000994	-.000328	-.000121	-.000048	-.000020
40.86				-.002096	-.000535	-.000163	-.000056	-.000021	-.000008
43.42				-.001228	-.000287	-.000081	-.000026	-.000009	-.000003
45.98				-.000716	-.000153	-.000040	-.000012	-.000004	-.000001
48.54				-.000416	-.000081	-.000020	-.000006	-.000002	-.000001

	NE 10	NA 11	MG 12	AL 13	SI 14	P 15	S 16	CL 17	A 18
	3P 0	3P 0	3P 0	3P 1	3P 2	3P 3	3P 4	3P 5	3P 6
X									
51.10				-.000240	-.000043	-.000010	-.000003	-.000001	-.000000
56.22				-.000080	-.000012	-.000002	-.000001	-.000000	-.000000
61.34				-.000026	-.000003	-.000001	-.000000	-.000000	
66.46				-.000008	-.000001	-.000000	-.000000		
71.58				-.000003	-.000000	-.000000			
76.70				-.000001	-.000000				
81.82				-.000000					

TABLE IV. RADIAL WAVEFUNCTIONS

	K 4S1	CA 4S2	SC 3D1	TI 3D2	V 3D3	CR 3D5 4S1	MN 3D5 4S2	FE 3D6	CO 3D7
	R=0.33178715*X	R=0.32616255*X	R=0.32090095*X	R=0.31596322*X	R=0.31131603*X	R=0.30693071*X	R=0.30278249*X	R=0.29884981*X	R=0.29511379*X
	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	267.06	298.73	331.80	366.57	403.04	440.88	481.16	522.80	566.16
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.503514	.533914	.564494	.595228	.626105	.657125	.688249	.719500	.750860
.02	.945595	1.000493	1.055519	1.110630	1.165806	1.221048	1.276288	1.331570	1.386863
.03	1.331954	1.406203	1.480352	1.554348	1.628166	1.701813	1.775198	1.848386	1.921338
.04	1.667826	1.756951	1.845622	1.933777	2.021396	2.108491	2.194959	2.280886	2.366230
.05	1.958004	2.058135	2.157365	2.255634	2.352928	2.449272	2.544556	2.638889	2.732232
.06	2.206878	2.314678	2.421072	2.526009	2.629484	2.731540	2.832068	2.931199	3.028902
.07	2.418460	2.531069	2.641736	2.750422	2.857140	2.961950	3.064753	3.165704	3.264782
.08	2.596421	2.711401	2.823892	2.933874	3.041380	3.146493	3.249128	3.349464	3.447497
.09	2.744113	2.859400	2.971659	3.080891	3.187156	3.290560	3.391039	3.488794	3.583843
.10	2.864590	2.978459	3.088773	3.195567	3.298931	3.398996	3.495722	3.589337	3.679879
.12	3.034878	3.141820	3.244276	3.342342	3.436167	3.525940	3.611682	3.693666	3.771979
.14	3.126789	3.222946	3.313859	3.399696	3.480676	3.557044	3.628892	3.696532	3.760108
.16	3.156539	3.239533	3.316727	3.388370	3.454746	3.516159	3.572771	3.624929	3.672830
.18	3.137548	3.206125	3.268559	3.325172	3.376315	3.422343	3.463488	3.500124	3.532496
.20	3.080894	3.134641	3.182100	3.223667	3.259750	3.290747	3.316957	3.338770	3.356474
.22	2.995690	3.034806	3.067673	3.094751	3.116497	3.133344	3.145650	3.153811	3.158147
.24	2.889403	2.914522	2.933590	2.947123	2.955615	2.959526	2.959261	2.955212	2.947725
.26	2.768123	2.780174	2.786506	2.787679	2.784216	2.776591	2.765245	2.750559	2.732893
.28	2.636788	2.636885	2.631705	2.621840	2.607827	2.590146	2.569265	2.545542	2.519342
.30	2.499374	2.488739	2.473350	2.453820	2.430693	2.404440	2.375549	2.344343	2.311190
.34	2.218358	2.190037	2.158170	2.123373	2.086171	2.046998	2.006345	1.964452	1.921663
.38	1.943188	1.902035	1.858623	1.813535	1.767244	1.720114	1.672603	1.624866	1.577192
.42	1.684571	1.634894	1.584212	1.533042	1.481778	1.430698	1.380200	1.330351	1.281373
.46	1.448221	1.393626	1.339164	1.285267	1.232234	1.180250	1.129638	1.080376	1.032613
.50	1.236554	1.179916	1.124390	1.070310	1.017873	.967169	.918443	.871589	.826685
.54	1.049871	.993383	.938807	.886372	.836178	.788223	.742672	.699348	.658265
.58	.887170	.832431	.780220	.730667	.683779	.639472	.597837	.558638	.521831
.62	.746709	.694819	.645902	.599995	.557023	.516832	.479445	.444582	.412154
.66	.626377	.578035	.532958	.491100	.452315	.416393	.383299	.352721	.324535
.70	.523941	.479534	.438551	.400877	.366306	.334587	.305637	.279125	.254899
.78	.364070	.327809	.294984	.265388	.238724	.214696	.193152	.173758	.156333
.86	.251229	.222585	.197129	.174581	.154625	.136947	.121366	.107568	.095371
.94	.172531	.150448	.131163	.114373	.099764	.087036	.075999	.066381	.058012
1.02	.118123	.101406	.087051	.074760	.064240	.055221	.047523	.040918	.035258
1.10	.080746	.068264	.057719	.048835	.041351	.035036	.029726	.025239	.021451
1.18	.055184	.045959	.038289	.031927	.026650	.022265	.018631	.015605	.013086
1.26	.037753	.030986	.025445	.020920	.017221	.014193	.011716	.009684	.008015
1.34	.025887	.020947	.016963	.013755	.011171	.009086	.007402	.006039	.004935
1.42	.017811	.014215	.011356	.009087	.007283	.005849	.004702	.003787	.003054
1.50	.012311	.009695	.007644	.006037	.004777	.003788	.003004	.002388	.001900
1.66	.005988	.004594	.003531	.002717	.002094	.001617	.001244	.000959	.000737
1.82	.003000	.002241	.001676	.001253	.000936	.000700	.000515	.000378	.000274
1.98	.001553	.001124	.000812	.000584	.000419	.000300	.000206	.000138	.000082
2.14	.000827	.000573	.000394	.000265	.000187	.000127	.000081	.000050	.000006

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2
2.30	.000447	.000291	.000183	.000107	.000083	.000054	.000032	.000018	.000000
2.46	.000240	.000146	.000082	.000029	.000037	.000023	.000012	.000006	.000000
2.62	.000122	.000073	.000037	.000000	.000016	.000009	.000005	.000002	.000000
2.78	.000057	.000036	.000016	.000000	.000007	.000004	.000002	.000001	.000000
2.94	.000026	.000018	.000007		.000003	.000002	.000001	.000000	
3.10	.000012	.000009	.000003		.000001	.000001	.000000	.000000	
3.42	.000002	.000002	.000001		.000000	.000000	.000000		
3.74	.000001	.000001	.000000		.000000	.000000			
4.06	.000000	.000000	.000000						

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	28.980	33.645	38.161	42.870	47.794	52.537	58.320	63.929	69.773
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.144568	.154908	.165324	.175789	.186299	.196853	.207436	.218060	.228716
.02	.271138	.289864	.308654	.327461	.346274	.365096	.383899	.402703	.421497
.03	.381048	.406399	.431731	.456977	.482127	.507184	.532113	.556942	.581657
.04	.475555	.505947	.536176	.566166	.595903	.625395	.654602	.683560	.712253
.05	.555834	.589845	.623506	.656728	.689502	.721841	.753701	.785127	.816105
.06	.622984	.659344	.695128	.730245	.764689	.798476	.831568	.864015	.895809
.07	.678032	.715608	.752357	.788187	.823097	.857112	.890198	.922413	.953755
.08	.721939	.759726	.796415	.831918	.866243	.899422	.931432	.962337	.992142
.09	.755603	.792710	.828439	.862706	.895532	.926957	.956971	.985644	1.012992
.10	.779860	.815506	.849485	.881728	.912265	.941148	.968383	.994045	1.018163
.12	.803233	.833989	.862510	.888757	.912791	.934689	.954494	.972297	.988151
.14	.797711	.821515	.842549	.860818	.876421	.889460	.900028	.908225	.914141
.16	.768213	.783574	.795691	.804623	.810508	.813478	.813682	.811230	.806249
.18	.719016	.724921	.727184	.725927	.721329	.713557	.702816	.689228	.672957
.20	.653834	.649661	.641539	.629654	.614233	.595471	.573638	.548863	.521348
.22	.575888	.561340	.542630	.520014	.493763	.464105	.431370	.395694	.357318
.24	.487965	.463008	.433774	.400588	.363767	.323568	.280382	.234348	.185744
.26	.392474	.357287	.317803	.274419	.227493	.177309	.124316	.068656	.010637
.28	.291490	.246421	.197128	.144077	.087665	.028202	-.033811	-.098235	-.164732
.30	.186796	.132324	.073790	.011724	-.053439	-.121371	-.191523	-.263759	-.337718
.34	-.027842	-.099306	-.174268	-.252085	-.332266	-.414452	-.498023	-.582857	-.668565
.38	-.241777	-.327424	-.415739	-.505990	-.597652	-.690355	-.783440	-.876811	-.970071
.42	-.448146	-.544957	-.643403	-.742694	-.842296	-.941845	-1.040682	-1.138742	-1.235646
.46	-.642238	-.747192	-.852609	-.957674	-1.061868	-1.164856	-1.266006	-1.365298	-1.462393
.50	-.820989	-.931202	-1.040627	-1.148455	-1.254207	-1.357594	-1.458046	-1.555591	-1.649950
.54	-.982582	-1.095394	-1.206140	-1.314048	-1.418701	-1.519873	-1.617081	-1.710408	-1.799651
.58	-1.126138	-1.239166	-1.348865	-1.454531	-1.555829	-1.652607	-1.744496	-1.831632	-1.913906
.62	-1.251470	-1.362630	-1.469250	-1.570721	-1.666805	-1.757438	-1.842378	-1.921821	-1.995758
.66	-1.358899	-1.466408	-1.568252	-1.663931	-1.753323	-1.836455	-1.913230	-1.983902	-2.048564
.70	-1.449099	-1.551474	-1.647158	-1.735787	-1.817356	-1.891995	-1.959756	-2.020950	-2.075777
.78	-1.581645	-1.670396	-1.750770	-1.822710	-1.886468	-1.942383	-1.990807	-2.032161	-2.066850
.86	-1.657948	-1.730201	-1.792927	-1.846396	-1.891123	-1.927646	-1.956599	-1.978500	-1.993930
.94	-1.687584	-1.742043	-1.786359	-1.821132	-1.847116	-1.865035	-1.875753	-1.879866	-1.878095
1.02	-1.679808	-1.716371	-1.742673	-1.759621	-1.768175	-1.769211	-1.763765	-1.752492	-1.736197
1.10	-1.643015	-1.662440	-1.671924	-1.672635	-1.665701	-1.652106	-1.632998	-1.609059	-1.581135
1.18	-1.584519	-1.588145	-1.582511	-1.568995	-1.548840	-1.523099	-1.492962	-1.459116	-1.422399
1.26	-1.510508	-1.500033	-1.481260	-1.455720	-1.424715	-1.389327	-1.350727	-1.309583	-1.266682
1.34	-1.426096	-1.403405	-1.373582	-1.338246	-1.298713	-1.256048	-1.211353	-1.165254	-1.118457
1.42	-1.335425	-1.302459	-1.263659	-1.220670	-1.174776	-1.126985	-1.078294	-1.029263	-.980494
1.50	-1.241783	-1.200450	-1.154643	-1.105982	-1.055676	-1.004647	-.953752	-.903475	-.854296
1.66	-1.055207	-1.002407	-.947840	-.892932	-.838648	-.785670	-.734529	-.685526	-.638884
1.82	-.880087	-.821775	-.764120	-.708233	-.654756	-.604086	-.556417	-.511859	-.470399
1.98	-.723383	-.664082	-.607401	-.554076	-.504406	-.458507	-.416265	-.377627	-.342387
2.14	-.587706	-.530577	-.477509	-.428855	-.384595	-.344599	-.308503	-.276131	-.247137

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
X									
2.30	-.473033	-.420081	-.372127	-.329171	-.290927	-.257070	-.227054	-.200624	-.177348
2.46	-.377870	-.330193	-.288009	-.251028	-.218753	-.190727	-.166282	-.145128	-.126791
2.62	-.300016	-.258045	-.221712	-.190495	-.163760	-.140967	-.121380	-.104710	-.090472
2.78	-.237040	-.200750	-.169978	-.144040	-.122218	-.103941	-.088446	-.075468	-.064539
2.94	-.186560	-.155635	-.129926	-.108648	-.091048	-.076557	-.064421	-.054414	-.046097
3.10	-.146393	-.120352	-.099111	-.081836	-.067777	-.056395	-.046961	-.039302	-.033016
3.42	-.089616	-.071652	-.057525	-.046407	-.037630	-.030753	-.025142	-.020722	-.017175
3.74	-.054681	-.042616	-.033452	-.026456	-.021083	-.017007	-.013703	-.011177	-.009189
4.06	-.033423	-.025460	-.019611	-.015267	-.012012	-.009623	-.007674	-.006230	-.005109
4.38	-.020566	-.015360	-.011661	-.008980	-.007012	-.005617	-.004452	-.003617	-.002974
4.70	-.012801	-.009408	-.007074	-.005418	-.004222	-.003405	-.002692	-.002199	-.001820
5.02	-.008101	-.005881	-.004403	-.003371	-.002635	-.002153	-.001701	-.001400	-.001169
5.34	-.005236	-.003769	-.002824	-.002171	-.001709	-.001420	-.001122	-.000931	-.000784
5.66	-.003472	-.002485	-.001870	-.001449	-.001150	-.000974	-.000768	-.000643	-.000544
5.98	-.002368	-.001689	-.001280	-.001001	-.000801	-.000692	-.000543	-.000457	-.000389
6.30	-.001664	-.001182	-.000904	-.000712	-.000575	-.000505	-.000394	-.000333	-.000284
6.94	-.000894	-.000628	-.000487	-.000388	-.000316	-.000286	-.000219	-.000185	-.000158
7.58	-.000527	-.000363	-.000283	-.000226	-.000185	-.000171	-.000128	-.000108	-.000092
8.22	-.000332	-.000221	-.000172	-.000137	-.000112	-.000105	-.000077	-.000064	-.000055
8.86	-.000217	-.000140	-.000108	-.000086	-.000069	-.000066	-.000047	-.000039	-.000033
9.50	-.000145	-.000090	-.000069	-.000054	-.000044	-.000042	-.000030	-.000025	-.000021
10.14	-.000098	-.000059	-.000045	-.000035	-.000028	-.000027	-.000019	-.000016	-.000013
10.78	-.000067	-.000039	-.000029	-.000023	-.000018	-.000018	-.000012	-.000010	-.000009
11.42	-.000046	-.000026	-.000019	-.000015	-.000012	-.000011	-.000008	-.000007	-.000006
12.06	-.000032	-.000017	-.000013	-.000010	-.000008	-.000007	-.000005	-.000004	-.000004
12.70	-.000022	-.000012	-.000009	-.000007	-.000005	-.000005	-.000004	-.000003	-.000002
13.98	-.000010	-.000005	-.000004	-.000003	-.000002	-.000002	-.000002	-.000001	-.000001
15.26	-.000005	-.000003	-.000002	-.000002	-.000001	-.000000	-.000001	-.000000	-.000000
16.54	-.000002	-.000001	-.000001	-.000001	-.000001	.000000	.000000	.000000	.000000
17.82	-.000001	-.000001	-.000001	-.000000	.000000	.000000	.000000	.000000	.000000

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
-E	23.039	27.258	31.336	35.606	40.089	44.397	49.725	54.885	60.277
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.002281	.002556	.002845	.003149	.003466	.003796	.004139	.004495	.004864
.02	.008841	.009896	.011006	.012167	.013377	.014639	.015943	.017298	.018698
.03	.019281	.021558	.023951	.026449	.029050	.031758	.034552	.037450	.040443
.04	.033228	.037111	.041187	.045445	.049852	.054443	.059173	.064072	.069125
.05	.050335	.056157	.062259	.068609	.075200	.082042	.089080	.096360	.103858
.06	.070282	.078326	.086744	.095491	.104557	.113955	.123608	.133576	.143830
.07	.092768	.103275	.114253	.125644	.137431	.149631	.162144	.175048	.188301
.08	.117516	.130686	.144426	.158659	.173366	.188566	.204132	.220160	.236599
.09	.144269	.160266	.176929	.194165	.211946	.230296	.249058	.268350	.288109
.10	.172788	.191743	.211457	.231815	.252786	.274396	.296658	.319108	.342273
.12	.234254	.259400	.285472	.312311	.339873	.368187	.397004	.426503	.456581
.14	.300331	.331868	.364462	.397909	.432148	.467214	.502790	.539097	.576006
.16	.369662	.407620	.446724	.486723	.527538	.569206	.611346	.654220	.697670
.18	.441088	.485361	.530822	.577170	.624310	.672281	.720638	.769684	.819231
.20	.513621	.563993	.615545	.667928	.721029	.774891	.829005	.883714	.938805
.22	.586423	.642592	.699883	.757901	.816514	.875768	.935100	.994987	1.054892
.24	.658786	.720384	.782997	.846184	.909800	.973891	1.038446	1.102073	1.166317
.26	.730113	.796723	.864193	.932041	1.000108	1.068444	1.136394	1.204396	1.272180
.28	.799910	.871079	.942909	1.014879	1.086822	1.158788	1.230092	1.301193	1.371812
.30	.867767	.943019	1.018690	1.094229	1.169460	1.244437	1.318449	1.391978	1.464738
.34	.996389	1.078329	1.160102	1.241105	1.321157	1.400323	1.477866	1.554306	1.629355
.38	1.114041	1.200700	1.286489	1.370781	1.453404	1.534436	1.613155	1.690102	1.765010
.42	1.219584	1.309067	1.396895	1.482446	1.565570	1.646366	1.724160	1.799504	1.872169
.46	1.312500	1.403030	1.491085	1.576062	1.657850	1.736574	1.811637	1.883596	1.952274



	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X									
.50	1.392687	1.482670	1.569338	1.652137	1.731007	1.806106	1.876941	1.944066	2.007370
.54	1.460391	1.548412	1.632291	1.711545	1.786176	1.856380	1.921792	1.982954	2.039834
.58	1.516082	1.600921	1.680824	1.755400	1.824722	1.889032	1.948107	2.002474	2.052187
.62	1.560391	1.641016	1.715965	1.784953	1.848135	1.905801	1.957881	2.004887	2.046960
.66	1.594052	1.669614	1.738824	1.801522	1.857948	1.908445	1.953101	1.992412	2.026607
.70	1.617857	1.687676	1.750546	1.806439	1.855689	1.898689	1.935692	1.967171	1.993446
.78	1.639183	1.696087	1.745106	1.786500	1.820790	1.848480	1.870132	1.886180	1.897113
.86	1.630862	1.673813	1.708308	1.734904	1.754304	1.767115	1.774178	1.775888	1.772872
.94	1.598984	1.627780	1.647908	1.660214	1.665565	1.664661	1.658563	1.647633	1.632598
1.02	1.548991	1.564051	1.570569	1.569649	1.562295	1.549281	1.531829	1.510265	1.485378
1.10	1.485594	1.487779	1.481843	1.469109	1.450685	1.427395	1.400553	1.370453	1.337900
1.18	1.412771	1.403237	1.386248	1.363302	1.335571	1.303902	1.269639	1.233038	1.194886
1.26	1.333818	1.313895	1.287378	1.255888	1.220622	1.182421	1.142602	1.101379	1.059487
1.34	1.251419	1.222520	1.188033	1.149644	1.108539	1.065526	1.021847	.977668	.933645
1.42	1.167721	1.131272	1.090334	1.046608	1.001232	.954956	.908905	.863197	.818386
1.50	1.084412	1.041800	.995845	.948220	.899977	.851790	.804637	.758581	.714068
1.66	.923820	.872715	.820559	.768834	.718356	.669592	.623177	.579066	.537462
1.82	.776441	.721222	.667045	.615081	.565849	.519579	.476542	.436591	.399706
1.98	.645497	.589564	.536425	.486872	.441108	.399129	.360866	.326096	.294608
2.14	.531884	.477697	.427648	.382134	.341059	.304214	.271237	.241859	.215727
2.30	.435077	.384274	.338543	.297908	.262013	.230483	.202728	.178467	.157245
2.46	.353753	.307304	.266490	.231003	.200283	.173837	.150906	.131225	.114283
2.62	.286205	.244571	.208819	.178372	.152516	.130689	.112019	.096280	.082935
2.78	.230611	.193883	.163037	.137285	.115817	.098039	.083016	.070572	.060176
2.94	.185196	.153215	.126933	.105407	.087781	.073459	.061482	.051737	.043707
3.10	.148323	.120774	.098610	.080794	.066455	.055026	.045548	.037974	.031816
3.42	.094572	.074639	.059265	.047344	.038064	.030951	.025111	.020616	.017052
3.74	.059997	.045932	.035535	.027749	.021876	.017561	.014009	.011386	.009352
4.06	.037982	.028228	.021329	.016333	.012678	.010117	.007965	.006450	.005298
4.38	.024053	.017368	.012854	.009693	.007446	.005959	.004649	.003778	.003127
4.70	.015271	.010721	.007801	.005822	.004454	.003613	.002804	.002304	.001934
5.02	.009741	.006653	.004782	.003553	.002727	.002269	.001757	.001468	.001256
5.34	.006255	.004158	.002968	.002212	.001716	.001482	.001147	.000979	.000854
5.66	.004051	.002621	.001871	.001409	.001113	.001009	.000779	.000680	.000606
5.98	.002651	.001669	.001200	.000921	.000746	.000715	.000550	.000490	.000444
6.30	.001756	.001074	.000784	.000618	.000516	.000526	.000401	.000364	.000335
6.94	.000803	.000460	.000356	.000302	.000269	.000311	.000230	.000215	.000202
7.58	.000390	.000204	.000174	.000161	.000154	.000200	.000141	.000135	.000128
8.22	.000200	.000091	.000089	.000092	.000093	.000136	.000091	.000087	.000084
8.86	.000108	.000041	.000047	.000055	.000059	.000096	.000060	.000058	.000056
9.50	.000059	.000018	.000025	.000033	.000038	.000070	.000040	.000039	.000038
10.14	.000033	.000008	.000013	.000020	.000025	.000051	.000027	.000027	.000026
10.78	.000018	.000003	.000007	.000012	.000016	.000039	.000018	.000018	.000018
11.42	.000009	.000001	.000004	.000007	.000011	.000029	.000013	.000013	.000012
12.06	.000005	.000001	.000002	.000004	.000007	.000022	.000009	.000009	.000008
12.70	.000003	.000000	.000001	.000003	.000004	.000016	.000006	.000006	.000006
13.98	.000001	.000000	.000000	.000001	.000001	.000009	.000003	.000003	.000003
15.26	.000000		.000000	.000000	.000000	.000005	.000001	.000001	.000001
16.54	.000000			.000000	.000000	.000003	.000001	.000001	.000001
17.82						.000001	.000000	.000000	.000000
19.10						.000001	.000000	.000000	.000000
20.38						.000000			

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	3.4976	4.4907	5.1346	5.7641	6.3977	6.6648	7.7020	8.3784	9.0731
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.047637	.053417	.058230	.062879	.067438	.071366	.076410	.080853	.085279
.02	.089331	.099938	.108696	.117110	.125323	.132332	.141378	.149279	.157117
.03	.125514	.140081	.151995	.163377	.174431	.183765	.195882	.206364	.216717
.04	.156591	.174328	.188688	.202321	.215487	.226473	.240832	.253120	.265195
.05	.182944	.203134	.219297	.234540	.249166	.261207	.277071	.290481	.303583
.06	.204928	.226922	.244314	.260590	.276098	.288668	.305384	.319316	.332837
.07	.222879	.246092	.264195	.280993	.296869	.309504	.326500	.340430	.353841
.08	.237111	.261014	.279368	.296233	.312024	.324321	.341094	.354566	.367412
.09	.247918	.272036	.290232	.306762	.322071	.333679	.349790	.362414	.374305
.10	.255575	.279485	.297158	.313001	.327482	.338097	.353171	.364611	.375217
.12	.262455	.284854	.300566	.314152	.326117	.334016	.346090	.354366	.361621
.14	.259625	.279324	.292099	.302508	.311079	.315538	.323690	.328030	.331198
.16	.248723	.264814	.273937	.280514	.285085	.285635	.289254	.289182	.287830
.18	.231186	.242997	.247972	.250284	.250474	.246856	.245589	.240870	.234809
.20	.208268	.215331	.215845	.213642	.209259	.201385	.195086	.185678	.174914
.22	.181066	.183084	.178976	.172161	.163163	.151085	.139777	.125791	.110484
.24	.150535	.147356	.138591	.127193	.113663	.097542	.081383	.063052	.043480
.26	.117508	.109097	.095749	.079895	.062016	.042098	.021353	-.000999	-.024467
.28	.082707	.069133	.051355	.031257	.009289	-.014113	-.039099	-.065078	-.092009
.30	.046758	.028170	.006186	-.017881	-.043618	-.070141	-.098961	-.128125	-.158040
.34	-.026497	-.054410	-.083930	-.114928	-.147071	-.178625	-.213737	-.247826	-.282176
.38	-.098790	-.134788	-.170453	-.206845	-.243725	-.278590	-.318022	-.355038	-.391738
.42	-.167609	-.210223	-.250496	-.290637	-.330513	-.366960	-.408717	-.446699	-.483736
.46	-.231186	-.278842	-.322141	-.364382	-.405543	-.441924	-.484095	-.521216	-.556745
.50	-.288337	-.339434	-.384213	-.426970	-.467804	-.502609	-.543436	-.578060	-.610456
.54	-.338327	-.391303	-.436095	-.477898	-.516936	-.548826	-.586744	-.617456	-.645341
.58	-.380766	-.434140	-.477594	-.517114	-.553052	-.580874	-.614535	-.640154	-.662402
.62	-.415530	-.467926	-.508825	-.544889	-.576602	-.599397	-.627671	-.647247	-.662978
.66	-.442688	-.492857	-.530129	-.561728	-.588268	-.605265	-.627239	-.640043	-.648611
.70	-.462459	-.509284	-.542001	-.568288	-.588885	-.599490	-.614458	-.619967	-.620939
.78	-.481193	-.518522	-.539928	-.553663	-.560715	-.557409	-.556991	-.547078	-.532302
.86	-.475019	-.499987	-.508034	-.507585	-.499850	-.482062	-.465504	-.440074	-.409825
.94	-.447700	-.458409	-.451993	-.436689	-.413905	-.381966	-.349560	-.309467	-.264938
1.02	-.403046	-.398436	-.377236	-.347186	-.309853	-.264769	-.217578	-.164342	-.107341
1.10	-.344669	-.324383	-.288707	-.244623	-.193808	-.137049	-.076678	-.012241	.055064
1.18	-.275859	-.240114	-.190754	-.133789	-.070959	-.004290	.067317	.140787	.216066
1.26	-.199535	-.148997	-.087106	-.018722	.054402	.129064	.209786	.290051	.370966
1.34	-.118231	-.053911	.019110	.097256	.178819	.259514	.347180	.432044	.516360
1.42	-.034112	.042728	.125319	.211473	.299578	.384389	.476873	.564268	.649929
1.50	.051001	.138928	.229448	.321831	.414612	.501729	.597021	.685062	.770235
1.66	.218463	.323899	.425321	.525007	.621928	.708848	.804406	.888962	.968669
1.82	.375248	.491866	.597948	.698747	.793813	.875352	.965397	1.041646	1.111569
1.98	.515901	.637731	.743045	.839873	.928432	1.000933	1.081345	1.146219	1.203838
2.14	.637535	.759314	.859452	.948441	1.027192	1.088396	1.156570	1.208478	1.252725
2.30	.739104	.856440	.948061	1.026510	1.093372	1.142190	1.196777	1.235271	1.266148
2.46	.820832	.930249	1.011013	1.077255	1.131166	1.167412	1.208039	1.233498	1.251738
2.62	.883773	.982673	1.051122	1.104346	1.145047	1.169196	1.196199	1.209548	1.216335
2.78	.929483	1.016064	1.071473	1.111545	1.139374	1.152343	1.166544	1.169034	1.165795
2.94	.959782	1.032925	1.075160	1.102453	1.118168	1.121140	1.123667	1.116710	1.104956
3.10	.976585	1.035742	1.065118	1.080365	1.084996	1.079287	1.071435	1.056487	1.037711
3.42	.977186	1.008479	1.014290	1.008504	.994593	.975536	.950995	.924227	.895521
3.74	.945086	.950632	.936865	.914711	.887243	.859743	.823674	.789912	.755852
4.06	.891651	.874928	.846016	.812111	.775644	.743708	.700541	.663539	.627543
4.38	.825649	.790685	.750885	.709327	.667671	.634307	.587581	.550059	.514498

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
4.70	.753534	.704390	.657463	.611645	.567786	.535094	.487488	.451290	.417686
5.02	.679862	.620339	.569420	.522007	.478163	.447494	.400934	.367209	.336443
5.34	.607725	.541198	.488788	.441769	.399500	.371629	.327420	.296798	.269291
5.66	.539111	.468470	.416475	.371263	.331591	.306874	.265831	.238573	.214427
5.98	.475205	.402844	.352653	.310186	.273716	.252219	.214783	.190900	.170013
6.30	.416623	.344462	.297031	.257873	.224894	.206497	.172834	.152174	.134320
6.94	.316031	.248364	.207989	.176074	.150118	.137160	.110830	.095826	.083144
7.58	.236396	.176428	.143646	.118705	.099039	.090294	.070373	.059802	.051046
8.22	.174921	.123885	.098166	.079265	.064776	.059090	.044372	.037089	.031169
8.86	.128328	.086197	.066540	.052546	.042096	.038533	.027843	.022909	.018969
9.50	.093502	.059538	.044819	.034645	.027230	.025092	.017417	.014118	.011527
10.14	.067754	.040885	.030042	.022751	.017558	.016348	.010878	.008693	.007005
10.78	.048882	.027944	.020062	.014898	.011299	.010680	.006792	.005357	.004264
11.42	.035147	.019027	.013362	.009739	.007265	.007011	.004245	.003307	.002603
12.06	.025208	.012918	.008883	.006361	.004672	.004636	.002659	.002348	.001596
12.70	.018050	.008750	.005899	.004155	.003008	.003097	.001671	.001275	.000985
13.98	.009242	.003997	.002601	.001779	.001256	.001444	.000670	.000503	.000384
15.26	.004756	.001821	.001152	.000769	.000533	.000730	.000277	.000206	.000156
16.54	.002487	.000830	.000515	.000339	.000232	.000410	.000119	.000088	.000067
17.82	.001340	.000381	.000235	.000153	.000104	.000256	.000053	.000040	.000030
19.10	.000758	.000176	.000109	.000072	.000049	.000176	.000025	.000019	.000015
20.38	.000459	.000083	.000053	.000035	.000024	.000130	.000013	.000010	.000007
21.66	.000301	.000040	.000026	.000018	.000012	.000101	.000007	.000005	.000004
22.94	.000213	.000020	.000014	.000010	.000007	.000080	.000004	.000003	.000002
24.22	.000162	.000010	.000008	.000005	.000004	.000065	.000002	.000002	.000001
25.50	.000129	.000005	.000004	.000003	.000002	.000053	.000001	.000001	.000001
28.06	.000089	.000002	.000002	.000001	.000001	.000036	.000000	.000000	.000000
30.62	.000065	.000001	.000001	.000000	.000000	.000024	.000000	.000000	.000000
33.18	.000047	.000000	.000000	.000000	.000000	.000016			
35.74	.000034	.000000	.000000			.000011			
38.30	.000025					.000007			
40.86	.000018					.000005			
43.42	.000012					.000003			
45.98	.000009					.000002			
48.54	.000006					.000001			
51.10	.000004					.000001			
56.22	.000002					.000000			
61.34	.000001					.000000			
66.46	.000000								

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	1.9088	2.6814	3.1491	3.6058	4.0669	4.1923	5.0223	5.5210	6.0353
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000695	.000832	.000955	.001080	.001210	.001331	.001484	.001628	.001777
.02	.002692	.003220	.003692	.004174	.004671	.005131	.005715	.006264	.006831
.03	.005871	.007014	.008034	.009072	.010141	.011129	.012383	.013559	.014772
.04	.010116	.012073	.013813	.015582	.017398	.019074	.021200	.023190	.025240
.05	.015321	.018265	.020874	.023522	.026237	.028733	.031904	.034863	.037906
.06	.021387	.025468	.029075	.032727	.036466	.039893	.044250	.048304	.052468
.07	.028221	.033570	.038281	.043043	.047909	.052357	.058014	.063264	.068647
.08	.035738	.042463	.048370	.054328	.060404	.065942	.072991	.079514	.086191
.09	.043856	.052051	.059226	.066449	.073801	.080482	.088991	.096842	.104867
.10	.052503	.062243	.070744	.079284	.087962	.095821	.105840	.115058	.124462
.12	.071106	.084107	.095380	.106658	.118073	.128346	.141462	.153457	.165652
.14	.091049	.107450	.121576	.135649	.149835	.162515	.178734	.193474	.208405
.16	.111903	.131755	.148736	.165577	.182483	.197487	.216719	.234079	.251599
.18	.133298	.156578	.176348	.195866	.215374	.232557	.254634	.274421	.294310

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
.20	.154916	.181540	.203982	.226030	.247969	.267140	.291833	.313799	.335785
.22	.176486	.206319	.231271	.255663	.279819	.300750	.327787	.351645	.375419
.24	.197775	.230643	.257911	.284427	.310556	.332992	.362066	.387504	.412729
.26	.218590	.254284	.283646	.312041	.339876	.363546	.394329	.421014	.447341
.28	.238763	.277051	.308267	.338279	.367536	.392158	.424308	.451900	.478970
.30	.258159	.298787	.331602	.362957	.393345	.418632	.451798	.479954	.507411
.34	.294182	.338680	.373896	.407097	.438856	.464610	.498762	.527036	.554221
.38	.325989	.373231	.409770	.443691	.475652	.500765	.534550	.561662	.587269
.42	.353170	.402020	.438823	.472381	.503433	.526879	.559040	.583827	.606690
.46	.375519	.424868	.460930	.493111	.522232	.543092	.572499	.593945	.613058
.50	.392980	.441776	.476164	.506046	.532323	.549796	.575463	.592706	.607234
.54	.405614	.452874	.484744	.511506	.534142	.547553	.568645	.580980	.590259
.58	.413563	.458390	.486990	.509919	.528236	.537035	.552865	.559740	.563270
.62	.417032	.458617	.483291	.501781	.515218	.518974	.528999	.530008	.527437
.66	.416264	.453091	.474080	.487628	.495737	.494133	.497945	.492814	.483931
.70	.411533	.444575	.459811	.468015	.470455	.463275	.460591	.449167	.433882
.78	.391334	.413675	.417953	.414627	.405087	.386481	.370398	.346343	.318410
.86	.358775	.368919	.361354	.345918	.324101	.294215	.264811	.228634	.188814
.94	.316133	.313164	.293416	.265836	.231995	.191464	.149405	.102130	.051675
1.02	.265525	.249025	.217195	.177876	.132685	.082500	.028882	-.028120	-.087645
1.10	.208858	.178822	.135369	.085049	.029496	-.029111	-.092903	-.158050	-.224913
1.18	.147816	.104580	.050236	-.010100	-.074812	-.140466	-.212869	-.284482	-.356901
1.26	.083866	.028034	-.036264	-.105459	-.177995	-.249258	-.328626	-.405017	-.481240
1.34	.018264	-.049347	-.122519	-.199313	-.278269	-.353698	-.438379	-.517915	-.596289
1.42	-.047917	-.126337	-.207212	-.290291	-.374252	-.452451	-.540838	-.621991	-.701002
1.50	-.113781	-.201926	-.289284	-.377328	-.464909	-.544562	-.635140	-.716517	-.794816
1.66	-.241704	-.345797	-.442447	-.536590	-.627532	-.706591	-.797490	-.875763	-.949305
1.82	-.361060	-.476313	-.577583	-.673172	-.762953	-.837594	-.924347	-.995869	-1.061389
1.98	-.469077	-.590870	-.692600	-.785713	-.870725	-.938176	-1.017477	-1.079833	-1.135337
2.14	-.564251	-.688372	-.787063	-.874595	-.952156	-1.010617	-1.080233	-1.132059	-1.176594
2.30	-.646009	-.768786	-.861646	-.941296	-1.009582	-1.058080	-1.116691	-1.157457	-1.190856
2.46	-.714444	-.832802	-.917729	-.987925	-1.045847	-1.084070	-1.131086	-1.160885	-1.183538
2.62	-.770108	-.881567	-.957086	-1.016882	-1.063954	-1.092090	-1.127475	-1.146831	-1.159494
2.78	-.813844	-.916491	-.981668	-1.030637	-1.066840	-1.085429	-1.109549	-1.119268	-1.122915
2.94	-.846670	-.939098	-.993458	-1.031576	-1.057240	-1.067056	-1.080556	-1.081605	-1.077312
3.10	-.869685	-.950933	-.994365	-1.021921	-1.037623	-1.039576	-1.043273	-1.036695	-1.025567
3.42	-.890711	-.948170	-.970499	-.978620	-.976720	-.965872	-.952768	-.934061	-.912434
3.74	-.885345	-.918931	-.922322	-.914026	-.898032	-.878164	-.852095	-.825090	-.796699
4.06	-.860895	-.872003	-.859349	-.837968	-.811375	-.785782	-.750324	-.718228	-.686069
4.38	-.823323	-.814219	-.788622	-.757382	-.723348	-.694688	-.652944	-.618282	-.584626
4.70	-.777306	-.750691	-.715155	-.676955	-.638170	-.608461	-.563001	-.527665	-.494151
5.02	-.726404	-.685128	-.642384	-.599705	-.558355	-.529049	-.481927	-.447271	-.415021
5.34	-.673264	-.620134	-.572563	-.527446	-.485247	-.457322	-.410126	-.377069	-.346801
5.66	-.619808	-.557472	-.507078	-.461148	-.419397	-.393463	-.347378	-.316498	-.288623
5.98	-.567397	-.498272	-.446695	-.401203	-.360842	-.337227	-.293100	-.264720	-.239429
6.30	-.516960	-.443200	-.391742	-.347618	-.309295	-.288125	-.246529	-.220782	-.198107
6.94	-.424206	-.346515	-.298046	-.258415	-.225233	-.208815	-.173164	-.152596	-.134865
7.58	-.343886	-.267604	-.224269	-.190224	-.162599	-.150297	-.120829	-.104873	-.091379
8.22	-.276181	-.204774	-.167415	-.139073	-.116704	-.107706	-.083987	-.071866	-.061791
8.86	-.220187	-.155633	-.124274	-.101216	-.083470	-.076996	-.058286	-.049214	-.041796
9.50	-.174528	-.117703	-.091907	-.073469	-.059601	-.054995	-.040463	-.033747	-.028337
10.14	-.137698	-.088717	-.067822	-.053272	-.042558	-.039301	-.028148	-.023214	-.019294
10.78	-.108242	-.066730	-.050009	-.038640	-.030432	-.028135	-.019653	-.016046	-.013217
11.42	-.084842	-.050146	-.036890	-.028073	-.021822	-.020201	-.013795	-.011164	-.009125
12.06	-.066356	-.037688	-.027254	-.020453	-.015713	-.014562	-.009749	-.007831	-.006361
12.70	-.051815	-.028356	-.020187	-.014962	-.011376	-.010551	-.006946	-.005547	-.004485
13.98	-.031513	-.016162	-.011207	-.008138	-.006088	-.005648	-.003634	-.002881	-.002318
15.26	-.019164	-.009348	-.006360	-.004554	-.003373	-.003122	-.001992	-.001577	-.001269
16.54	-.011697	-.005522	-.003713	-.002639	-.001947	-.001791	-.001150	-.000913	-.000737
17.82	-.007192	-.003348	-.002241	-.001590	-.001174	-.001070	-.000698	-.000557	-.000453

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
19.10	-.004472	-.002091	-.001401	-.000996	-.000739	-.000666	-.000444	-.000356	-.000291
20.38	-.002823	-.001348	-.000907	-.000648	-.000483	-.000430	-.000293	-.000236	-.000193
21.66	-.001815	-.000896	-.000606	-.000435	-.000326	-.000287	-.000199	-.000161	-.000132
22.94	-.001193	-.000612	-.000416	-.000300	-.000225	-.000196	-.000138	-.000112	-.000092
24.22	-.000802	-.000429	-.000292	-.000211	-.000159	-.000137	-.000098	-.000079	-.000065
25.50	-.000553	-.000306	-.000209	-.000151	-.000113	-.000097	-.000070	-.000056	-.000046
28.06	-.000281	-.000163	-.000111	-.000080	-.000060	-.000051	-.000037	-.000029	-.000024
30.62	-.000154	-.000090	-.000060	-.000043	-.000032	-.000027	-.000019	-.000016	-.000013
33.18	-.000089	-.000051	-.000034	-.000024	-.000018	-.000015	-.000011	-.000008	-.000007
35.74	-.000054	-.000029	-.000019	-.000013	-.000010	-.000008	-.000006	-.000005	-.000004
38.30	-.000033	-.000017	-.000011	-.000007	-.000005	-.000005	-.000003	-.000003	-.000002
40.86	-.000020	-.000010	-.000006	-.000004	-.000003	-.000003	-.000002	-.000001	-.000001
43.42	-.000013	-.000006	-.000003	-.000002	-.000002	-.000001	-.000001	-.000001	-.000000
45.98	-.000008	-.000003	-.000002	-.000001	-.000001	-.000001	-.000000	.000000	.000000
48.54	-.000005	-.000002	-.000001	-.000001	-.000000	-.000000	.000000	.000000	.000000
51.10	-.000003	-.000001	-.000001	.000000	.000000	.000000			
56.22	-.000001	.000000	.000000	.000000					
61.34	-.000000	.000000	.000000						

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
-E	3D 0	3D 0	3D 1	3D 2	3D 3	3D 5	3D 5	3D 6	3D 7
X			.68742	.81164	.92236	.64499	1.1223	1.2157	1.3061
.00			.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01			.000001	.000002	.000002	.000003	.000003	.000004	.000005
.02			.000011	.000015	.000018	.000020	.000026	.000031	.000035
.03			.000037	.000048	.000059	.000066	.000086	.000100	.000116
.04			.000086	.000111	.000138	.000154	.000198	.000232	.000269
.05			.000164	.000212	.000263	.000293	.000377	.000442	.000511
.06			.000278	.000358	.000443	.000494	.000636	.000745	.000861
.07			.000432	.000556	.000688	.000766	.000986	.001153	.001333
.08			.000632	.000811	.001004	.001117	.001437	.001680	.001940
.09			.000880	.001130	.001398	.001554	.001998	.002334	.002694
.10			.001183	.001517	.001875	.002083	.002677	.003124	.003604
.12			.001960	.002510	.003098	.003439	.004412	.005144	.005927
.14			.002986	.003820	.004709	.005220	.006688	.007787	.008961
.16			.004279	.005467	.006730	.007451	.009535	.011087	.012743
.18			.005852	.007467	.009180	.010150	.012972	.015065	.017294
.20			.007714	.009829	.012069	.013327	.017011	.019731	.022623
.22			.009871	.012561	.015403	.016987	.021655	.025087	.028728
.24			.012325	.015663	.019182	.021128	.026901	.031126	.035599
.26			.015078	.019136	.023405	.025747	.032741	.037836	.043221
.28			.018126	.022975	.028064	.030834	.039161	.045199	.051570
.30			.021467	.027175	.033152	.036378	.046144	.053194	.060619
.34			.029005	.036622	.044564	.048781	.061722	.070980	.080694
.38			.037637	.047400	.057534	.062824	.079295	.090969	.103173
.42			.047295	.059411	.071933	.078357	.098659	.112915	.127763
.46			.057901	.072551	.087626	.095223	.119602	.136562	.154161
.50			.069374	.086709	.104469	.113258	.141910	.161655	.182069
.54			.081631	.101775	.122321	.132303	.165374	.187948	.211200
.58			.094587	.117637	.141045	.152202	.189792	.215205	.241284
.62			.108163	.134192	.160507	.172807	.214974	.243205	.272068
.66			.122279	.151336	.180582	.193980	.240742	.271742	.303318
.70			.136863	.168974	.201151	.215591	.266931	.300628	.334822
.78			.167152	.205378	.243337	.259652	.319974	.358772	.397840
.86			.198518	.242751	.286275	.304141	.373043	.416443	.459809
.94			.230515	.280534	.329297	.348349	.425267	.472685	.519693
1.02			.262759	.318251	.371843	.391696	.475946	.526743	.576700

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	3D 0	3D 0	3D 1	3D 2	3D 3	3D 5	3D 5	3D 6	3D 7
1.10			.294920	.355503	.413452	.433714	.524531	.578047	.630248
1.18			.326719	.391957	.453749	.474036	.570605	.626176	.679934
1.26			.357920	.427339	.492437	.512379	.613860	.670844	.725503
1.34			.388326	.461426	.529281	.548534	.654086	.711870	.766821
1.42			.417772	.494042	.564107	.582358	.691155	.749170	.803857
1.50			.446125	.525052	.596791	.613760	.725003	.782730	.836658
1.66			.499154	.581879	.655448	.669161	.783067	.838873	.890042
1.82			.546840	.631458	.705020	.714809	.828732	.881188	.928341
1.98			.588916	.673713	.745707	.751192	.862914	.911004	.953312
2.14			.625352	.708846	.777998	.779053	.886780	.929846	.966839
2.30			.656291	.737244	.802560	.799267	.901596	.939275	.970764
2.46			.682000	.759408	.820149	.812754	.908624	.940786	.966789
2.62			.702823	.775903	.831552	.820418	.909060	.935748	.956432
2.78			.719151	.787315	.837542	.823111	.903997	.925377	.941010
2.94			.731393	.794221	.838852	.821611	.894407	.910732	.921644
3.10			.739956	.797173	.836155	.816615	.881144	.892720	.899274
3.42			.747608	.793231	.821120	.798503	.846427	.849532	.848500
3.74			.744984	.779072	.796547	.772740	.804504	.800541	.793380
4.06			.734518	.757576	.765586	.742221	.758676	.748973	.736997
4.38			.718190	.730988	.730601	.709005	.711231	.696980	.681324
4.70			.697583	.701028	.693332	.674530	.663726	.645962	.627581
5.02			.673941	.668999	.655046	.639786	.617200	.596801	.576485
5.34			.648241	.635885	.616658	.605443	.572326	.550030	.528424
5.66			.621242	.602417	.578819	.571945	.529520	.505939	.483565
5.98			.593537	.569139	.541984	.539576	.489023	.464657	.441933
6.30			.565582	.536452	.506465	.508509	.450948	.426206	.403463
6.94			.510258	.473915	.440107	.450615	.382123	.357549	.335486
7.58			.457210	.416206	.380532	.398482	.322681	.299109	.278342
8.22			.407517	.363895	.327800	.351902	.271815	.249736	.230591
8.86			.361716	.317063	.281581	.310478	.228560	.208230	.190845
9.50			.319994	.275511	.241356	.273745	.191938	.173456	.157846
10.14			.282320	.238891	.206527	.241234	.161027	.144390	.130497
10.78			.248528	.206778	.176488	.212493	.134996	.120136	.107856
11.42			.218376	.178728	.150655	.187108	.113109	.099920	.089127
12.06			.191583	.154301	.128490	.164699	.094730	.083084	.073642
12.70			.167853	.133079	.109505	.144927	.079308	.069071	.060842
13.98			.128419	.098747	.079392	.112112	.055542	.047714	.041524
15.26			.097893	.073075	.057447	.086616	.038863	.032945	.028337
16.54			.074401	.053958	.041501	.066830	.027172	.022737	.019335
17.82			.056401	.039766	.029930	.051495	.018985	.015687	.013191
19.10			.042658	.029255	.021568	.039624	.013256	.010818	.008999
20.38			.032197	.021489	.015519	.030448	.009250	.007458	.006138
21.66			.024255	.015760	.011154	.023365	.006451	.005140	.004186
22.94			.018239	.011543	.008008	.017905	.004496	.003541	.002854
24.22			.013692	.008443	.005744	.013703	.003132	.002439	.001946
25.50			.010263	.006167	.004115	.010474	.002181	.001679	.001327
28.06			.005740	.003280	.002107	.006096	.001057	.000796	.000617
30.62			.003194	.001737	.001076	.003532	.000511	.000377	.000288
33.18			.001768	.000917	.000548	.002038	.000247	.000179	.000134
35.74			.000975	.000482	.000278	.001171	.000120	.000085	.000063
38.30			.000536	.000253	.000141	.000671	.000058	.000041	.000029
40.86			.000293	.000132	.000072	.000383	.000028	.000019	.000014
43.42			.000160	.000069	.000036	.000218	.000014	.000009	.000007
45.98			.000087	.000036	.000018	.000124	.000007	.000004	.000003
48.54			.000047	.000019	.000009	.000070	.000003	.000002	.000002
51.10			.000026	.000010	.000005	.000040	.000002	.000001	.000001
56.22			.000008	.000003	.000001	.000013	.000000	.000000	.000000
61.34			.000002	.000001	.000000	.000004	.000000	.000000	.000000
66.46			.000001	.000000	.000000	.000001	.000001	.000001	.000001
71.58			.000000	.000000	.000000	.000000	.000000	.000000	.000000

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
	4S 1	4S 2	4S 2	4S 2	4S 2	4S 1	4S 2	4S 2	4S 2
-E	.29495	.39106	.42022	.44382	.46485	.41505	.50270	.52026	.53717
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.009198	.012754	.013816	.014675	.015436	.013847	.016797	.017425	.018028
.02	.017249	.023861	.025788	.027330	.028685	.025675	.031077	.032170	.033214
.03	.024235	.033445	.036060	.038126	.039923	.035652	.043056	.044470	.045810
.04	.030234	.041619	.044763	.047212	.049316	.043935	.052932	.054541	.056053
.05	.035320	.048493	.052021	.054726	.057019	.050669	.060891	.062585	.064159
.06	.039562	.054168	.057950	.060798	.063176	.055990	.067105	.068788	.070331
.07	.043025	.058738	.062659	.065550	.067919	.060023	.071733	.073324	.074756
.08	.045768	.062293	.066248	.069095	.071374	.062885	.074925	.076352	.077605
.09	.047849	.064914	.068814	.071538	.073658	.064686	.076816	.078022	.079038
.10	.049321	.066681	.070442	.072977	.074878	.065527	.077536	.078470	.079204
.12	.050632	.067933	.071216	.073206	.074520	.064694	.075925	.076203	.076266
.14	.050065	.066577	.069165	.070440	.071024	.061061	.070936	.070457	.069759
.16	.047936	.063071	.064807	.065251	.065012	.055204	.063293	.062006	.060508
.18	.044523	.057816	.058592	.058135	.057023	.047621	.053617	.051512	.049212
.20	.040069	.051161	.050912	.049520	.047519	.038738	.042435	.039533	.036462
.22	.034786	.043410	.042105	.039773	.036898	.028917	.030198	.026545	.022757
.24	.028859	.034827	.032465	.029214	.025499	.018470	.017287	.012947	.008515
.26	.022451	.025641	.022242	.018114	.013612	.007658	.004023	-.000924	-.005916
.28	.015701	.016050	.011655	.006706	.001485	-.003295	-.009322	-.014788	-.020246
.30	.008731	.006224	.000890	-.004811	-.010674	-.014204	-.022525	-.028415	-.034239
.34	-.005463	-.013566	-.020565	-.027531	-.034416	-.035295	-.047794	-.054235	-.060485
.38	-.019455	-.032801	-.041128	-.049004	-.056544	-.054678	-.070678	-.077272	-.083549
.42	-.032755	-.050816	-.060104	-.068520	-.076342	-.071745	-.090482	-.096856	-.102787
.46	-.045019	-.067157	-.077030	-.085623	-.093370	-.086138	-.106819	-.112634	-.117890
.50	-.056013	-.081531	-.091621	-.100048	-.107390	-.097685	-.119526	-.124491	-.128792
.54	-.065593	-.093766	-.103728	-.111675	-.118319	-.106346	-.128606	-.132476	-.135596
.58	-.073683	-.103788	-.113303	-.120491	-.126182	-.112183	-.134174	-.136757	-.138522
.62	-.080258	-.111592	-.120374	-.126560	-.131086	-.115324	-.136427	-.137578	-.137864
.66	-.085331	-.117224	-.125024	-.130005	-.133192	-.115944	-.135613	-.135233	-.133962
.70	-.088945	-.120772	-.127375	-.130984	-.132698	-.114246	-.132012	-.130042	-.127179
.78	-.092065	-.122078	-.125785	-.126292	-.124803	-.104785	-.117631	-.112452	-.106440
.86	-.090268	-.116585	-.116940	-.114082	-.109258	-.088749	-.095650	-.087422	-.078499
.94	-.084302	-.105465	-.102249	-.095980	-.087899	-.067879	-.068296	-.057358	-.045928
1.02	-.074932	-.089882	-.083067	-.073518	-.062418	-.043748	-.037546	-.024356	-.010930
1.10	-.062882	-.070921	-.060638	-.048073	-.034313	-.017720	-.005084	.009828	.024687
1.18	-.048819	-.049560	-.036061	-.020845	-.004862	.009059	.027701	.043775	.059490
1.26	-.033336	-.026659	-.010288	.007148	.024868	.035655	.059697	.076376	.092384
1.34	-.016952	-.002957	.015876	.035061	.054011	.061325	.090044	.106794	.122571
1.42	-.000114	.020919	.041764	.062209	.081882	.085498	.118099	.134428	.149503
1.50	.016802	.044451	.066835	.088050	.107952	.107752	.143408	.158876	.172836
1.66	.049662	.088869	.112905	.134253	.153262	.145422	.184724	.197381	.208133
1.82	.079751	.127867	.151746	.171553	.188134	.173126	.213004	.221795	.228444
1.98	.105899	.160064	.182196	.199096	.212083	.190790	.228594	.232900	.234991
2.14	.127475	.184855	.203928	.216891	.225479	.199042	.232614	.232180	.229598
2.30	.144241	.202180	.217182	.225495	.229209	.198892	.226566	.221414	.214299
2.46	.156234	.212347	.222549	.225789	.224421	.191520	.212077	.202427	.191086
2.62	.163677	.215893	.220823	.218804	.212365	.178130	.190742	.176942	.161785
2.78	.166909	.213482	.212890	.205616	.194277	.159867	.164029	.146504	.127993
2.94	.166333	.205837	.199651	.187273	.171318	.137771	.133246	.112456	.091068
3.10	.162380	.193684	.181976	.164751	.144541	.112761	.099518	.075932	.052136
3.42	.146048	.158609	.136482	.110604	.083122	.057026	.026884	-.000952	-.028261
3.74	.121110	.113242	.081963	.049031	.015990	-.002430	-.048065	-.078555	-.107874
4.06	.090276	.061627	.022712	-.015630	-.052607	-.062278	-.121501	-.153328	-.183461
4.38	.055703	.006875	-.038100	-.080306	-.119778	-.120360	-.191033	-.223157	-.253182

	K 19	CA 20	SC 21	TI 22	V 23	CR 24	MN 25	FE 26	CO 27
X	4S 1	4S 2	4S 2	4S 2	4S 2	4S 1	4S 2	4S 2	4S 2
4.70	.019047	-.048697	-.098214	-.142898	-.183641	-.175349	-.255262	-.286884	-.316117
5.02	-.018457	-.103412	-.156068	-.202034	-.243035	-.226479	-.313459	-.343985	-.371933
5.34	-.055903	-.156089	-.210626	-.256862	-.297304	-.273367	-.365339	-.394342	-.420661
5.66	-.092642	-.205922	-.261238	-.306908	-.346146	-.315875	-.410907	-.438091	-.462557
5.98	-.128213	-.252387	-.307532	-.351960	-.389498	-.354023	-.450355	-.475528	-.498006
6.30	-.162300	-.295169	-.349342	-.391991	-.427458	-.387934	-.483984	-.507036	-.527462
6.94	-.225245	-.369161	-.419515	-.457470	-.488092	-.443813	-.535298	-.554012	-.570339
7.58	-.280579	-.427819	-.472623	-.504998	-.530337	-.485294	-.568082	-.582596	-.595038
8.22	-.328095	-.472080	-.510348	-.536815	-.556859	-.514296	-.585569	-.596206	-.605121
8.86	-.367969	-.503379	-.534694	-.555305	-.570308	-.532661	-.590727	-.597900	-.603706
9.50	-.400579	-.523354	-.547705	-.562761	-.573131	-.542079	-.586157	-.590311	-.593438
10.14	-.426419	-.533663	-.551324	-.561274	-.567498	-.544056	-.574079	-.575653	-.576515
10.78	-.446037	-.535889	-.547318	-.552689	-.555282	-.539923	-.556352	-.555762	-.554741
11.42	-.460009	-.531486	-.537249	-.538597	-.538069	-.530840	-.534510	-.532135	-.529579
12.06	-.468911	-.521751	-.522469	-.520348	-.517185	-.517811	-.509805	-.505988	-.502201
12.70	-.473311	-.507823	-.504130	-.499069	-.493723	-.501704	-.483251	-.478290	-.473542
13.98	-.470755	-.471167	-.460488	-.450988	-.442456	-.463112	-.427657	-.421158	-.415148
15.26	-.456338	-.427707	-.412244	-.399928	-.389502	-.419752	-.372339	-.365077	-.358479
16.54	-.433511	-.381752	-.363330	-.349471	-.338125	-.374934	-.320031	-.312553	-.305838
17.82	-.405136	-.336177	-.316235	-.301787	-.290228	-.330911	-.272207	-.264887	-.258372
19.10	-.373519	-.292799	-.272427	-.258077	-.246799	-.289141	-.229523	-.222602	-.216485
20.38	-.340454	-.252681	-.232671	-.218892	-.208220	-.250496	-.192109	-.185729	-.180125
21.66	-.307298	-.216359	-.197258	-.184356	-.174486	-.215425	-.159775	-.154008	-.148969
22.94	-.275033	-.184010	-.166171	-.154324	-.145360	-.184079	-.132149	-.127017	-.122554
24.22	-.244341	-.155576	-.139204	-.128494	-.120471	-.156409	-.108768	-.104259	-.100355
25.50	-.215661	-.130851	-.116038	-.106481	-.099387	-.132235	-.089136	-.085217	-.081837
28.06	-.165206	-.091328	-.079607	-.072230	-.066844	-.093300	-.059192	-.056308	-.053838
30.62	-.124200	-.062787	-.053834	-.048323	-.044358	-.064874	-.038810	-.036746	-.034989
33.18	-.091940	-.042629	-.035974	-.031959	-.029110	-.044567	-.025179	-.023733	-.022510
35.74	-.067184	-.028639	-.023799	-.020933	-.018924	-.030305	-.016189	-.015194	-.014357
38.30	-.048556	-.019068	-.015610	-.013597	-.012204	-.020428	-.010329	-.009655	-.009090
40.86	-.034762	-.012597	-.010162	-.008769	-.007815	-.013667	-.006547	-.006095	-.005719
43.42	-.024683	-.008266	-.006573	-.005620	-.004974	-.009084	-.004125	-.003826	-.003577
45.98	-.017400	-.005392	-.004227	-.003582	-.003149	-.006003	-.002586	-.002389	-.002227
48.54	-.012187	-.003498	-.002705	-.002272	-.001984	-.003946	-.001614	-.001486	-.001380
51.10	-.008488	-.002259	-.001723	-.001434	-.001245	-.002582	-.001003	-.000920	-.000852
56.22	-.004056	-.000930	-.000691	-.000565	-.000484	-.001093	-.000383	-.000349	-.000321
61.34	-.001906	-.000378	-.000273	-.000220	-.000186	-.000456	-.000145	-.000131	-.000120
66.46	-.000883	-.000152	-.000107	-.000085	-.000071	-.000188	-.000054	-.000049	-.000044
71.58	-.000405	-.000060	-.000041	-.000032	-.000027	-.000077	-.000020	-.000018	-.000016
76.70	-.000183	-.000024	-.000016	-.000012	-.000010	-.000031	-.000007	-.000007	-.000006
81.82	-.000082	-.000009	-.000006	-.000005	-.000004	-.000013	-.000003	-.000002	-.000002
86.94	-.000037	-.000004	-.000002	-.000002	-.000001	-.000005	-.000001	-.000001	-.000001
92.06	-.000016	-.000001	-.000001	-.000001	-.000001	-.000002	-.000000	-.000000	-.000000
97.18	-.000007	-.000001	-.000000	-.000000	-.000000	-.000001	-.000000	-.000000	-.000000
102.30	-.000003	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000
112.54	-.000001	-.000000				-.000000			
122.78	-.000000								



TABLE IV. RADIAL WAVEFUNCTIONS

NI 3D8 R=0.29155786\*X AS 4P3 R=0.27601930\*X  
 CU 3010 4S1 R=0.28816734\*X SE 4P4 R=0.27328626\*X  
 ZN 3010 4S2 R=0.28492923\*X BR 4P5 R=0.27065834\*X  
 GA 4P1 R=0.28183193\*X KR 4P6 R=0.26812867\*X  
 GE 4P2 R=0.27886506\*X

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	611.25	657.59	706.61	757.64	810.50	865.20	921.74	980.12	1040.3
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.782323	.813890	.845532	.877255	.909056	.940930	.972873	1.004881	1.036952
.02	1.442155	1.497453	1.552704	1.607923	1.663102	1.718237	1.773322	1.828351	1.883320
.03	1.994043	2.066512	2.138676	2.210561	2.282159	2.353468	2.424481	2.495196	2.565610
.04	2.450985	2.535168	2.618703	2.701626	2.783934	2.865629	2.946709	3.027176	3.107030
.05	2.824584	2.915975	3.006329	3.095691	3.184066	3.271465	3.357893	3.443358	3.527869
.06	3.125188	3.220100	3.313565	3.405644	3.496352	3.585709	3.673732	3.760437	3.845842
.07	3.362016	3.457461	3.551056	3.642876	3.732950	3.821311	3.907986	3.993005	4.076396
.08	3.543271	3.636861	3.728220	3.817438	3.904561	3.989634	4.072700	4.153801	4.232979
.09	3.676250	3.766107	3.853385	3.938194	4.020593	4.100644	4.178406	4.253934	4.327284
.10	3.767433	3.852111	3.933906	4.012944	4.089304	4.163062	4.234294	4.303070	4.369460
.12	3.846754	3.918143	3.986185	4.051043	4.112829	4.171656	4.227628	4.280848	4.331413
.14	3.819795	3.875785	3.928172	3.977145	4.022855	4.065443	4.105045	4.141790	4.175800
.16	3.716693	3.756743	3.793126	3.826056	3.855712	3.882266	3.905876	3.926695	3.944864
.18	3.560861	3.585472	3.606520	3.624240	3.638834	3.650492	3.659395	3.665709	3.669592
.20	3.370354	3.380684	3.387695	3.391634	3.392717	3.391150	3.387124	3.380815	3.372390
.22	3.158966	3.156554	3.151174	3.143073	3.132481	3.119605	3.104642	3.087772	3.069162
.24	2.937119	2.923684	2.907708	2.889430	2.869082	2.846872	2.822993	2.797621	2.770918
.26	2.712572	2.689877	2.665113	2.638507	2.610285	2.580648	2.549778	2.517844	2.484996
.28	2.490988	2.460747	2.428929	2.395747	2.361410	2.326109	2.290012	2.253272	2.216027
.30	2.276395	2.240212	2.202947	2.164788	2.125931	2.086545	2.046782	2.006778	1.966652
.34	1.878242	1.834389	1.790388	1.746371	1.702486	1.658859	1.615597	1.572793	1.530526
.38	1.529787	1.482785	1.436431	1.390792	1.345962	1.302016	1.259013	1.216998	1.176007
.42	1.233401	1.186503	1.140873	1.096512	1.053461	1.011744	.971372	.932346	.894662
.46	.986416	.941788	.898866	.857593	.817961	.779947	.743519	.708642	.675277
.50	.783734	.742680	.703605	.666404	.631026	.597409	.565488	.535197	.506469
.54	.619368	.582550	.547846	.515114	.484266	.455211	.427860	.402124	.377917
.58	.487315	.454946	.424715	.396453	.370047	.345386	.322362	.300873	.280821
.62	.382020	.354010	.328080	.304045	.281775	.261146	.242040	.224348	.207967
.66	.298573	.274647	.252687	.232499	.213945	.196894	.181225	.166826	.153594
.70	.232775	.212556	.194152	.177369	.162067	.148112	.135386	.123779	.113192
.78	.140682	.126608	.114002	.102685	.092523	.083395	.075194	.067821	.061193
.86	.084589	.075045	.066628	.059184	.052598	.046768	.041603	.037026	.032967
.94	.050727	.044377	.038859	.034049	.029854	.026192	.022992	.020194	.017745
1.02	.030405	.026238	.022667	.019598	.016957	.014682	.012720	.011026	.009562
1.10	.018250	.015541	.013250	.011307	.009656	.008252	.007056	.006035	.005163
1.18	.010987	.009237	.007774	.006549	.005520	.004655	.003926	.003311	.002792
1.26	.006644	.005516	.004583	.003811	.003169	.002635	.002189	.001817	.001505
1.34	.004038	.003312	.002716	.002227	.001824	.001493	.001218	.000991	.000803
1.42	.002467	.001998	.001615	.001304	.001050	.000842	.000671	.000530	.000415
1.50	.001513	.001209	.000961	.000761	.000599	.000467	.000359	.000271	.000199
1.66	.000565	.000441	.000338	.000256	.000191	.000140	.000078	.000042	.000013
1.82	.000194	.000159	.000118	.000086	.000061	.000042	.000000	.000000	.000000
1.98	.000045	.000057	.000041	.000028	.000019	.000012	.000000	.000000	.000000
2.14	.000000	.000020	.000014	.000009	.000006	.000004	.000000	.000000	.000000
2.30	.000000	.000007	.000005	.000003	.000002	.000001	.000001	.000000	.000000
2.46		.000003	.000002	.000001	.000001	.000000	.000000	.000000	.000000
2.62		.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000
2.78		.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	75.853	81.638	88.723	96.337	104.31	112.65	121.35	130.40	139.81
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.239405	.250129	.260870	.271636	.282435	.293264	.304123	.315012	.325930
.02	.440279	.459055	.477794	.496511	.515217	.533912	.552596	.571267	.589924
.03	.606256	.630750	.655096	.679318	.703431	.727436	.751335	.775124	.798805
.04	.740682	.768863	.796745	.824360	.851727	.878850	.905732	.932372	.958770
.05	.846638	.876747	.906381	.935574	.964355	.992728	1.020699	1.048271	1.075445
.06	.926956	.957481	.987336	1.016563	1.045193	1.073238	1.100705	1.127601	1.153932
.07	.984236	1.013887	1.042664	1.070616	1.097782	1.124176	1.149812	1.174700	1.198850
.08	1.020868	1.048551	1.075157	1.100740	1.125346	1.148995	1.171707	1.193498	1.214382
.09	1.039044	1.063843	1.087367	1.109676	1.130823	1.150836	1.169740	1.187557	1.204308
.10	1.040774	1.061932	1.081627	1.099926	1.116888	1.132550	1.146945	1.160099	1.172043
.12	1.002119	1.014269	1.024629	1.033277	1.040289	1.045717	1.049611	1.052014	1.052969
.14	.917862	.919475	.919051	.916678	.912451	.906440	.898710	.889323	.878337
.16	.798853	.789147	.777249	.763258	.747286	.729421	.709746	.688339	.665276
.18	.654146	.632916	.609439	.583820	.556187	.526647	.495299	.462237	.427552
.20	.491265	.458752	.424030	.387211	.348438	.307833	.265512	.221583	.176150
.22	.316440	.273210	.227901	.180629	.131548	.080793	.028495	-.025227	-.080256
.24	.134790	.081652	.026644	-.030114	-.088461	-.148247	-.209335	-.271594	-.334900
.26	-.049499	-.111578	-.175242	-.240376	-.306810	-.374391	-.442970	-.512412	-.582589
.28	-.233043	-.302986	-.374173	-.446489	-.519765	-.593841	-.668568	-.743805	-.819424
.30	-.413129	-.489808	-.567336	-.645608	-.724457	-.803721	-.883251	-.962909	-1.042567
.34	-.754864	-.841572	-.928242	-1.014789	-1.101061	-1.186909	-1.272193	-1.356788	-1.440580
.38	-1.062946	-1.155274	-1.246605	-1.336888	-1.426002	-1.513820	-1.600231	-1.685132	-1.768436
.42	-1.331149	-1.425120	-1.517139	-1.607196	-1.695211	-1.781096	-1.864774	-1.946181	-2.025265
.46	-1.557090	-1.649300	-1.738662	-1.825212	-1.908922	-1.989751	-2.067668	-2.142651	-2.214693
.50	-1.740982	-1.828651	-1.912673	-1.993137	-2.070074	-2.143493	-2.213416	-2.279871	-2.342897
.54	-1.884740	-1.965700	-2.042340	-2.114804	-2.183184	-2.247547	-2.307966	-2.364522	-2.417303
.58	-1.991325	-2.063978	-2.131780	-2.194930	-2.253580	-2.307854	-2.357882	-2.403794	-2.445725
.62	-2.064277	-2.127536	-2.185561	-2.238601	-2.286868	-2.330544	-2.369809	-2.404841	-2.435821
.66	-2.107393	-2.160610	-2.208357	-2.250929	-2.288593	-2.321583	-2.350127	-2.374448	-2.394765
.70	-2.124499	-2.167400	-2.204732	-2.236831	-2.264016	-2.286566	-2.304753	-2.318835	-2.329067
.78	-2.095293	-2.117890	-2.135088	-2.147288	-2.154885	-2.158234	-2.157667	-2.153499	-2.146031
.86	-2.003436	-2.007510	-2.006746	-2.001583	-1.992458	-1.979769	-1.963881	-1.945133	-1.923842
.94	-1.871077	-1.859360	-1.843633	-1.824343	-1.801936	-1.776819	-1.749359	-1.719892	-1.688726
1.02	-1.715569	-1.691182	-1.663761	-1.633734	-1.601525	-1.567522	-1.532068	-1.495472	-1.458010
1.10	-1.549923	-1.515991	-1.480049	-1.442484	-1.403677	-1.363965	-1.323653	-1.283003	-1.242245
1.18	-1.383483	-1.342898	-1.301298	-1.259013	-1.216357	-1.173609	-1.131016	-1.088785	-1.047089
1.26	-1.222640	-1.177928	-1.133115	-1.088460	-1.044197	-1.000542	-.957674	-.915739	-.874852
1.34	-1.071495	-1.024764	-.978730	-.933572	-.889445	-.846490	-.804823	-.764526	-.725659
1.42	-.932425	-.885362	-.839659	-.795416	-.752706	-.711600	-.672150	-.634382	-.598304
1.50	-.806549	-.760449	-.716231	-.673921	-.633514	-.595019	-.558430	-.523720	-.490852
1.66	-.594724	-.553086	-.513986	-.477319	-.442954	-.410796	-.380747	-.352704	-.326655
1.82	-.431970	-.396467	-.363725	-.333551	-.305731	-.280103	-.256512	-.234813	-.214869
1.98	-.310333	-.281260	-.254872	-.230929	-.209177	-.189416	-.171472	-.155182	-.140397
2.14	-.221216	-.198107	-.177424	-.158922	-.142334	-.127457	-.114112	-.102141	-.091401
2.30	-.156868	-.138906	-.123027	-.109006	-.096587	-.085576	-.075810	-.067143	-.059450
2.46	-.110897	-.097174	-.085171	-.074697	-.065520	-.057469	-.050400	-.044188	-.038726
2.62	-.078306	-.067961	-.058991	-.051247	-.044528	-.038688	-.033606	-.029179	-.025320
2.78	-.055323	-.047606	-.040958	-.035271	-.030379	-.026162	-.022521	-.019373	-.016649
2.94	-.039173	-.033461	-.028559	-.024401	-.020849	-.017808	-.015199	-.012957	-.011029
3.10	-.027842	-.023641	-.020037	-.017001	-.014421	-.012224	-.010348	-.008745	-.007372
3.42	-.014316	-.012069	-.010120	-.008491	-.007114	-.005948	-.004958	-.004115	-.003397
3.74	-.007613	-.006418	-.005348	-.004451	-.003692	-.003048	-.002499	-.002032	-.001634
4.06	-.004231	-.003593	-.002985	-.002470	-.002030	-.001652	-.001328	-.001051	-.000815
4.38	-.002474	-.002130	-.001768	-.001454	-.001181	-.000945	-.000740	-.000564	-.000413

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
4.70	-.001525	-.001336	-.001107	-.000904	-.000723	-.000565	-.000427	-.000307	-.000206
5.02	-.000988	-.000882	-.000728	-.000588	-.000461	-.000349	-.000251	-.000166	-.000101
5.34	-.000667	-.000606	-.000498	-.000396	-.000302	-.000219	-.000147	-.000085	-.000049
5.66	-.000466	-.000430	-.000351	-.000273	-.000202	-.000139	-.000085	-.000040	-.000024
5.98	-.000334	-.000313	-.000252	-.000192	-.000137	-.000088	-.000049	-.000018	-.000011
6.30	-.000244	-.000232	-.000185	-.000137	-.000093	-.000054	-.000028	-.000008	-.000005
6.94	-.000136	-.000132	-.000103	-.000071	-.000043	-.000020	-.000009	-.000002	-.000001
7.58	-.000079	-.000078	-.000059	-.000038	-.000019	-.000007	-.000003	-.000000	.000000
8.22	-.000047	-.000047	-.000035	-.000020	-.000009	-.000003	-.000001	.000000	.000000
8.86	-.000028	-.000029	-.000021	-.000010	-.000004	-.000001	.000000		
9.50	-.000018	-.000018	-.000013	-.000005	-.000002	.000000	.000000		
10.14	-.000011	-.000012	-.000008	-.000003	-.000001	.000000			
10.78	-.000007	-.000007	-.000005	-.000001	-.000000				
11.42	-.000005	-.000005	-.000004	-.000001	.000000				
12.06	-.000003	-.000003	-.000002	.000000					
12.70	-.000002	-.000002	-.000001	.000000					
13.98	-.000001	-.000001	-.000001						
15.26	.000000	.000000	.000000						

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
-E	65.901	71.236	77.850	84.988	92.484	100.34	108.55	117.11	126.02
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.005245	.005640	.006046	.006464	.006894	.007337	.007791	.008258	.008737
.02	.020146	.021641	.023176	.024755	.026379	.028046	.029758	.031513	.033311
.03	.043530	.046717	.049982	.053338	.056784	.060319	.063941	.067651	.071448
.04	.074330	.079696	.085185	.090820	.096597	.102516	.108575	.114771	.121104
.05	.111570	.119510	.127621	.135935	.144449	.153160	.162065	.171161	.180444
.06	.154361	.165188	.176234	.187540	.199103	.210918	.222979	.235283	.247825
.07	.201895	.215851	.230068	.244601	.259443	.274588	.290029	.305760	.321774
.08	.253436	.270698	.288256	.306181	.324462	.343091	.362058	.381356	.400976
.09	.308317	.329003	.350016	.371438	.393255	.415457	.438032	.460970	.484258
.10	.365929	.390113	.414641	.439612	.465008	.490816	.517023	.543615	.570577
.12	.487208	.518426	.549997	.582045	.614548	.647487	.680841	.714592	.748720
.14	.613476	.651558	.689953	.728816	.768117	.807831	.847932	.888397	.929199
.16	.741646	.786205	.830994	.876193	.921767	.967686	1.013918	1.060433	1.107203
.18	.869222	.919719	.970318	1.021225	1.072400	1.123806	1.175409	1.227173	1.279067
.20	.994211	1.050002	1.105725	1.161612	1.217619	1.273705	1.329832	1.385963	1.442061
.22	1.115042	1.175412	1.235511	1.295594	1.355611	1.415523	1.475287	1.534866	1.594220
.24	1.230498	1.294698	1.358394	1.421860	1.485049	1.547917	1.610424	1.672530	1.734199
.26	1.339662	1.406929	1.473435	1.539474	1.604999	1.669967	1.734341	1.798082	1.861154
.28	1.441864	1.511442	1.579986	1.647805	1.714856	1.781100	1.846502	1.911027	1.974645
.30	1.536646	1.607800	1.677634	1.746474	1.814281	1.881021	1.946665	2.011183	2.074550
.34	1.702943	1.775182	1.845518	1.914303	1.981513	2.047133	2.111148	2.173544	2.234313
.38	1.837830	1.908690	1.977083	2.043376	2.107573	2.169679	2.229702	2.287652	2.343542
.42	1.942138	2.009558	2.073995	2.135826	2.195087	2.251811	2.306034	2.357793	2.407127
.46	2.017696	2.080029	2.138934	2.194794	2.247680	2.297659	2.344796	2.389159	2.430817
.50	2.066927	2.122923	2.175135	2.223945	2.269462	2.311786	2.351019	2.387257	2.420601
.54	2.092557	2.141336	2.186068	2.227130	2.264672	2.298830	2.329737	2.357523	2.382316
.58	2.097425	2.138427	2.175217	2.208165	2.237458	2.263266	2.285756	2.305088	2.321416
.62	2.084336	2.117281	2.145944	2.170684	2.191725	2.209270	2.223514	2.234644	2.242841
.66	2.055979	2.080817	2.101396	2.118058	2.131061	2.140636	2.147006	2.150382	2.150964
.70	2.014864	2.031738	2.044458	2.053346	2.058691	2.060750	2.059765	2.055968	2.049577
.78	1.903370	1.905306	1.903508	1.898256	1.889878	1.878670	1.864902	1.848831	1.830692
.86	1.765643	1.754582	1.740419	1.723382	1.703819	1.682039	1.658324	1.632932	1.606100
.94	1.614019	1.592286	1.568211	1.541966	1.513896	1.484300	1.453452	1.421595	1.388951
1.02	1.457744	1.427745	1.396222	1.363283	1.329250	1.294395	1.258964	1.223175	1.187216

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
1.10	1.303461	1.267490	1.230805	1.193452	1.155709	1.117811	1.079963	1.042344	1.005102
1.18	1.155711	1.115827	1.075989	1.036179	.996621	.957499	.918974	.881176	.844209
1.26	1.017396	.975365	.934059	.893395	.853536	.814615	.776738	.739988	.704425
1.34	.890173	.847450	.806029	.765769	.726768	.689102	.652829	.617983	.584580
1.42	.774783	.732520	.692028	.653110	.615804	.580133	.546104	.513708	.482924
1.50	.671314	.630385	.591586	.554675	.519630	.486426	.455027	.425385	.397444
1.66	.498405	.461832	.427806	.396022	.366360	.338717	.312988	.289069	.266855
1.82	.365766	.334610	.306091	.279880	.255791	.233670	.213374	.194765	.177714
1.98	.266159	.240522	.217387	.196434	.177444	.160238	.144655	.130548	.117782
2.14	.192516	.171965	.153648	.137280	.122632	.109522	.097790	.087294	.077904
2.30	.138695	.122552	.108313	.095744	.084625	.074785	.066076	.058368	.051547
2.46	.099697	.087218	.076301	.066772	.058430	.051123	.044721	.039111	.034196
2.62	.071612	.062090	.053807	.046650	.040442	.035055	.030377	.026316	.022791
2.78	.051475	.044286	.038049	.032707	.028112	.024156	.020750	.017817	.015292
2.94	.037076	.031697	.027025	.023053	.019660	.016760	.014280	.012160	.010349
3.10	.026795	.022802	.019312	.016363	.013858	.011729	.009919	.008382	.007078
3.42	.014213	.012056	.010110	.008478	.007099	.005936	.004955	.004130	.003439
3.74	.007765	.006629	.005529	.004606	.003826	.003167	.002615	.002152	.001770
4.06	.004415	.003834	.003192	.002649	.002186	.001794	.001465	.001191	.000967
4.38	.002633	.002349	.001957	.001619	.001326	.001078	.000869	.000697	.000558
4.70	.001655	.001528	.001272	.001047	.000850	.000682	.000542	.000427	.000337
5.02	.001095	.001051	.000872	.000712	.000571	.000450	.000351	.000270	.000210
5.34	.000759	.000757	.000623	.000503	.000397	.000307	.000233	.000175	.000133
5.66	.000548	.000566	.000461	.000366	.000283	.000214	.000158	.000115	.000086
5.98	.000407	.000436	.000350	.000272	.000206	.000151	.000108	.000076	.000055
6.30	.000310	.000343	.000270	.000206	.000151	.000107	.000074	.000050	.000036
6.94	.000190	.000222	.000168	.000121	.000084	.000055	.000034	.000021	.000014
7.58	.000121	.000150	.000108	.000073	.000047	.000028	.000016	.000009	.000006
8.22	.000079	.000104	.000071	.000045	.000026	.000013	.000007	.000004	.000002
8.86	.000053	.000074	.000047	.000028	.000014	.000006	.000003	.000001	.000001
9.50	.000036	.000053	.000032	.000017	.000008	.000003	.000001	.000001	.000000
10.14	.000025	.000039	.000022	.000011	.000004	.000001	.000001	.000000	.000000
10.78	.000017	.000029	.000015	.000007	.000002	.000001	.000000	.000000	.000000
11.42	.000012	.000021	.000010	.000004	.000001	.000000	.000000	.000000	.000000
12.06	.000008	.000016	.000007	.000002	.000000	.000000	.000000	.000000	.000000
12.70	.000005	.000012	.000005	.000001	.000000	.000000	.000000	.000000	.000000
13.98	.000002	.000006	.000002	.000000	.000000	.000000	.000000	.000000	.000000
15.26	.000001	.000003	.000001	.000000	.000000	.000000	.000000	.000000	.000000
16.54	.000001	.000002	.000000	.000000	.000000	.000000	.000000	.000000	.000000
17.82	.000000	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
-E	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X	9.7871	10.024	11.276	12.789	14.394	16.089	17.873	19.744	21.699
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.089692	.093551	.098499	.103589	.108835	.114198	.119651	.125173	.130752
.02	.164902	.171640	.180347	.189281	.198466	.207829	.217320	.226903	.236553
.03	.226955	.235712	.247132	.258818	.270797	.282971	.295271	.307647	.320063
.04	.277077	.287102	.300321	.313803	.327581	.341535	.355579	.369652	.383714
.05	.316402	.327044	.341264	.355714	.370429	.385272	.400144	.414979	.429728
.06	.345977	.356673	.371205	.385909	.400820	.415788	.430708	.445506	.460132
.07	.366770	.377039	.391289	.405634	.420109	.434556	.448862	.462953	.476775
.08	.379673	.389108	.402570	.416036	.429541	.442921	.456061	.468885	.481342
.09	.385511	.393768	.406015	.418167	.430256	.442116	.453634	.464733	.475366
.10	.385041	.391838	.402514	.412990	.423296	.433267	.442792	.451799	.460242
.12	.367923	.371157	.377875	.384179	.390092	.395463	.400190	.404214	.407500
.14	.333275	.332387	.334410	.335816	.336624	.336702	.335968	.334378	.331914
.16	.285291	.280012	.276954	.273103	.268473	.262959	.256504	.249085	.240701
.18	.227510	.217801	.209553	.200372	.190268	.179170	.167048	.153902	.139750

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
x	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
.20	.162910	.148910	.135580	.121220	.105835	.089392	.071892	.053360	.033834
.22	.093983	.075968	.057832	.038611	.018311	-.003063	-.025477	-.048882	-.073219
.24	.022804	.001153	-.021391	-.045027	-.069750	-.095516	-.122259	-.149903	-.178369
.26	-.048907	-.073743	-.100206	-.127724	-.156293	-.185827	-.216230	-.247401	-.279243
.28	-.119742	-.147264	-.177095	-.207902	-.239681	-.272307	-.305652	-.339596	-.374023
.30	-.188554	-.218235	-.250844	-.284313	-.318636	-.353650	-.389201	-.425145	-.461354
.34	-.316635	-.349009	-.385347	-.422213	-.459597	-.497270	-.535029	-.572699	-.610128
.38	-.427978	-.460926	-.498588	-.536344	-.574181	-.611817	-.649013	-.685574	-.721339
.42	-.519704	-.551273	-.588021	-.624365	-.660289	-.695473	-.729658	-.762642	-.794263
.46	-.590588	-.619063	-.652918	-.685840	-.717812	-.748494	-.777619	-.804991	-.830460
.50	-.640569	-.664511	-.693798	-.721622	-.747968	-.772490	-.794931	-.815108	-.832896
.54	-.670390	-.688646	-.712007	-.733400	-.752815	-.769913	-.784458	-.796296	-.805331
.58	-.681323	-.693017	-.709408	-.723371	-.734900	-.743680	-.749508	-.752264	-.751892
.62	-.674968	-.679486	-.688158	-.693999	-.697012	-.696918	-.693554	-.686845	-.676776
.66	-.653108	-.650074	-.650543	-.647850	-.642006	-.632779	-.620053	-.603803	-.584061
.70	-.617600	-.606847	-.598870	-.587476	-.572686	-.554321	-.532322	-.506713	-.477579
.78	-.513013	-.487026	-.462224	-.433735	-.401601	-.365768	-.326297	-.283321	-.237022
.86	-.375222	-.335171	-.294665	-.250512	-.202778	-.151544	-.096991	-.039358	.021083
.94	-.216532	-.164334	-.110106	-.052548	.008256	.072088	.138656	.207628	.278660
1.02	-.047202	.014806	.080279	.148539	.219489	.292789	.368048	.444863	.522834
1.10	.124571	.193882	.267909	.344014	.422094	.501704	.582375	.663652	.745106
1.18	.292482	.366610	.446496	.527645	.609955	.692894	.775940	.858608	.940462
1.26	.451888	.528495	.611690	.695280	.779170	.862764	.945508	1.026911	1.106547
1.34	.599545	.676526	.760720	.844435	.927585	1.009533	1.089715	1.167653	1.242951
1.42	.733357	.808892	.892067	.973918	1.054373	1.132774	1.208565	1.281297	1.350619
1.50	.852150	.924718	1.005172	1.083516	1.159690	1.233035	1.303018	1.369237	1.431392
1.66	1.043395	1.106653	1.177806	1.245517	1.309749	1.369887	1.425485	1.476254	1.522030
1.82	1.175309	1.226530	1.285109	1.339284	1.389033	1.433827	1.473342	1.507430	1.536072
1.98	1.254613	1.292789	1.337354	1.376915	1.411455	1.440561	1.464052	1.481928	1.494317
2.14	1.289947	1.315305	1.345741	1.370890	1.390729	1.404985	1.413625	1.416798	1.414768
2.30	1.290218	1.303777	1.320847	1.332603	1.339011	1.339948	1.335536	1.326060	1.311908
2.46	1.263685	1.266913	1.271905	1.271747	1.266400	1.255898	1.240509	1.220643	1.196795
2.62	1.217551	1.212108	1.206572	1.196191	1.180925	1.160967	1.136723	1.108712	1.077511
2.78	1.157828	1.145392	1.130965	1.112088	1.088739	1.061263	1.030190	.996129	.959715
2.94	1.089376	1.071535	1.049819	1.024110	.994413	.961218	.925162	.886924	.847167
3.10	1.016021	.994209	.966701	.935693	.901228	.863926	.824513	.783712	.742195
3.42	.865601	.839400	.804226	.766560	.726557	.685042	.642856	.600737	.559307
3.74	.721997	.694907	.656222	.616015	.574556	.532811	.491635	.451700	.413509
4.06	.592828	.567057	.527828	.487947	.447794	.408385	.370513	.334723	.301357
4.38	.480965	.457738	.419942	.382240	.345089	.309480	.276082	.245282	.217251
4.70	.386574	.366428	.331281	.296835	.263588	.232440	.203906	.178204	.155350
5.02	.308404	.291432	.259588	.228913	.199909	.173341	.149560	.128628	.110430
5.34	.244569	.230601	.202319	.175544	.150748	.128542	.109115	.092399	.078184
5.66	.193001	.181726	.156999	.134003	.113153	.094898	.079288	.066154	.055224
5.98	.151696	.142748	.121402	.101912	.084619	.069820	.057450	.047271	.038978
6.30	.118837	.111845	.093608	.077271	.063095	.051239	.041553	.033755	.027532
6.94	.072369	.068286	.055293	.044120	.034862	.027475	.021709	.017264	.013858
7.58	.043746	.041512	.032470	.025041	.019178	.014721	.011399	.008946	.007137
8.22	.026320	.025203	.019007	.014173	.010551	.007933	.006071	.004753	.003817
8.86	.015796	.015324	.011116	.008022	.005832	.004330	.003314	.002624	.002149
9.50	.009473	.009357	.006508	.004555	.003256	.002416	.001875	.001523	.001287
10.14	.005687	.005755	.003822	.002603	.001848	.001391	.001113	.000938	.000822
10.78	.003423	.003578	.002255	.001503	.001075	.000835	.000698	.000614	.000557
11.42	.002068	.002257	.001339	.000881	.000646	.000527	.000463	.000425	.000397
12.06	.001257	.001451	.000802	.000527	.000404	.000350	.000325	.000308	.000293
12.70	.000770	.000956	.000485	.000324	.000265	.000246	.000238	.000232	.000222
13.98	.000297	.000453	.000185	.000136	.000132	.000138	.000141	.000140	.000134
15.26	.000120	.000246	.000075	.000067	.000077	.000086	.000090	.000089	.000084
16.54	.000052	.000153	.000032	.000038	.000050	.000057	.000059	.000057	.000053
17.82	.000024	.000106	.000015	.000025	.000035	.000039	.000040	.000038	.000034

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
19.10	.000011	.000079	.000007	.000017	.000025	.000027	.000027	.000025	.000022
20.38	.000006	.000061	.000004	.000012	.000018	.000019	.000019	.000017	.000014
21.66	.000003	.000049	.000002	.000009	.000013	.000014	.000013	.000011	.000009
22.94	.000002	.000040	.000001	.000007	.000009	.000010	.000009	.000008	.000006
24.22	.000001	.000033	.000001	.000005	.000007	.000007	.000006	.000005	.000004
25.50	.000001	.000027	.000000	.000004	.000005	.000005	.000004	.000003	.000003
28.06	.000000	.000018	.000000	.000002	.000003	.000002	.000002	.000002	.000001
30.62	.000000	.000012		.000001	.000001	.000001	.000001	.000001	.000001
33.18		.000008		.000001	.000001	.000001	.000000	.000000	.000000
35.74		.000006		.000000	.000000	.000000	.000000	.000000	.000000
38.30		.000004		.000000	.000000	.000000			
40.86		.000002							
43.42		.000002							
45.98		.000001							
48.54		.000001							

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
-E	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
X	6.5661	6.6496	7.6787	8.9647	10.335	11.791	13.332	14.956	16.663
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.001931	.002076	.002255	.002447	.002649	.002861	.003082	.003312	.003550
.02	.007417	.007963	.008644	.009369	.010134	.010935	.011769	.012634	.013533
.03	.016023	.017185	.018636	.020180	.021808	.023510	.025279	.027112	.029015
.04	.027350	.029306	.031749	.034346	.037082	.039938	.042904	.045971	.049153
.05	.041034	.043925	.047540	.051380	.055419	.059631	.063999	.068509	.073184
.06	.056740	.060677	.065607	.070837	.076332	.082055	.087981	.094094	.100421
.07	.074162	.079230	.085582	.092313	.099378	.106726	.114326	.122153	.130243
.08	.093021	.099277	.107131	.115443	.124156	.133207	.142555	.152169	.162094
.09	.113062	.120544	.129949	.139893	.150303	.161102	.172240	.183679	.195471
.10	.134051	.142776	.153761	.165361	.177490	.190055	.202995	.216266	.229927
.12	.178044	.189242	.203386	.218286	.233826	.249877	.266360	.283213	.300511
.14	.223522	.237085	.254275	.272339	.291127	.310476	.330283	.350469	.371126
.16	.269269	.284999	.305015	.325995	.347752	.370090	.392879	.416027	.439637
.18	.314290	.331927	.354469	.378033	.402396	.427325	.452669	.478317	.504386
.20	.357780	.377017	.401729	.427487	.454032	.481098	.508510	.536141	.564120
.22	.399095	.419596	.446083	.473606	.501873	.530584	.559543	.588608	.617919
.24	.437729	.459142	.486984	.515823	.545331	.575177	.605146	.635084	.665138
.26	.473296	.495258	.524028	.553722	.583983	.614451	.644894	.675145	.705362
.28	.505507	.527658	.556925	.587017	.617548	.648132	.678524	.708546	.738362
.30	.534159	.556145	.585487	.615529	.645860	.676072	.705907	.735180	.764062
.34	.580320	.600971	.629252	.657923	.686528	.714627	.741946	.768292	.793847
.38	.611393	.629491	.655238	.681001	.706295	.730661	.753821	.775588	.796147
.42	.627670	.642173	.664115	.685661	.706309	.725600	.743262	.759121	.773368
.46	.629907	.639961	.657047	.673309	.688242	.701401	.712533	.721486	.728454
.50	.619149	.624094	.635495	.645647	.654056	.660305	.664170	.665529	.664578
.54	.596621	.595977	.601077	.604522	.605844	.604663	.600796	.594155	.584941
.58	.563628	.557085	.555467	.551820	.545713	.536816	.524992	.510197	.492630
.62	.521503	.508902	.500326	.489391	.475709	.459015	.439219	.416328	.390539
.66	.471553	.452871	.437255	.419000	.397772	.373372	.345768	.315017	.281315
.70	.415039	.390365	.367766	.342301	.313698	.281831	.246730	.208501	.167340
.78	.286982	.250974	.215019	.175920	.133539	.087910	.039186	-.012422	-.066727
.86	.145809	.099792	.051856	.000724	-.053596	-.110905	-.170928	-.233356	-.298020
.94	-.001443	-.055782	-.113884	-.175028	-.239054	-.305606	-.374298	-.444734	-.516771
1.02	-.149140	-.209939	-.276164	-.345100	-.416445	-.489693	-.564365	-.639999	-.716482
1.10	-.292928	-.358290	-.430531	-.505015	-.581304	-.658769	-.736851	-.815041	-.893269
1.18	-.429570	-.497668	-.573873	-.651754	-.730754	-.810137	-.889288	-.967674	-1.045269
1.26	-.556777	-.625923	-.704179	-.783482	-.863171	-.942428	-1.020604	-1.097157	-1.172114
1.34	-.673042	-.741732	-.820318	-.899291	-.977906	-1.055283	-1.130759	-1.203803	-1.274496
1.42	-.777490	-.844432	-.921844	-.998984	-1.075033	-1.149074	-1.220449	-1.288653	-1.353822

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
1.50	-.869749	-.933866	-1.008832	-1.082883	-1.155146	-1.224688	-1.290867	-1.353219	-1.411939
1.66	-1.018051	-1.074122	-1.141272	-1.206337	-1.268375	-1.326471	-1.380064	-1.428801	-1.472980
1.82	-1.121082	-1.167158	-1.223932	-1.277657	-1.327366	-1.372224	-1.411790	-1.445848	-1.474789
1.98	-1.184400	-1.219747	-1.264900	-1.306265	-1.342888	-1.374059	-1.399480	-1.419092	-1.433360
2.14	-1.214455	-1.239215	-1.272479	-1.301424	-1.325147	-1.343093	-1.355127	-1.361350	-1.362283
2.30	-1.217670	-1.232570	-1.254340	-1.271448	-1.283067	-1.288822	-1.288750	-1.283111	-1.272463
2.46	-1.199949	-1.206056	-1.217153	-1.223396	-1.224064	-1.218980	-1.208355	-1.192601	-1.172293
2.62	-1.166445	-1.164992	-1.166472	-1.163032	-1.154083	-1.139655	-1.120128	-1.096055	-1.068005
2.78	-1.121503	-1.113762	-1.106790	-1.094934	-1.077757	-1.055501	-1.028706	-.998049	-.964075
2.94	-1.068690	-1.055891	-1.041652	-1.022644	-.998605	-.969983	-.937466	-.901836	-.863589
3.10	-1.010871	-.994151	-.973792	-.948845	-.919234	-.885610	-.848787	-.809629	-.768562
3.26	-.888741	-.867095	-.837637	-.804092	-.766789	-.726733	-.684929	-.642324	-.599151
3.42	-.767586	-.744032	-.709026	-.670559	-.629365	-.586715	-.543711	-.501282	-.459404
3.58	-.654305	-.630906	-.593123	-.552565	-.510343	-.467884	-.426293	-.386395	-.347875
3.74	-.552235	-.530280	-.491787	-.451218	-.409998	-.369610	-.331074	-.295051	-.260932
3.90	-.462539	-.442736	-.405010	-.365880	-.327008	-.289843	-.255254	-.223706	-.194318
4.06	-.385102	-.367758	-.331801	-.295056	-.259343	-.225999	-.195704	-.168722	-.143939
4.22	-.319121	-.304272	-.270720	-.236918	-.204770	-.175445	-.149425	-.126780	-.106214
4.38	-.263457	-.250978	-.220184	-.189594	-.161125	-.135751	-.113752	-.095037	-.078176
4.54	-.216860	-.206531	-.178646	-.151328	-.126454	-.104788	-.086430	-.071157	-.057455
4.70	-.178090	-.169653	-.144679	-.120549	-.099056	-.080762	-.065608	-.053273	-.042207
4.86	-.119516	-.114072	-.094558	-.076213	-.060591	-.047889	-.037828	-.029982	-.022826
5.02	-.079902	-.076523	-.061677	-.048093	-.037042	-.028460	-.021954	-.017088	-.012447
5.18	-.053361	-.051336	-.040262	-.030390	-.022726	-.017041	-.012915	-.009952	-.006887
5.34	-.035681	-.034509	-.026369	-.019288	-.014049	-.010337	-.007758	-.005978	-.003890
5.50	-.023939	-.023286	-.017366	-.012332	-.008786	-.006389	-.004795	-.003736	-.002255
5.66	-.016148	-.015800	-.011527	-.007967	-.005583	-.004048	-.003070	-.002446	-.001348
5.82	-.010973	-.010797	-.007728	-.005216	-.003620	-.002642	-.002047	-.001681	-.000833
5.98	-.007526	-.007443	-.005245	-.003471	-.002405	-.001785	-.001425	-.001212	-.000533
6.14	-.005219	-.005183	-.003610	-.002353	-.001642	-.001251	-.001035	-.000911	-.000352
6.30	-.003666	-.003650	-.002524	-.001630	-.001155	-.000909	-.000781	-.000709	-.000239
6.46	-.001889	-.001882	-.001299	-.000837	-.000625	-.000531	-.000487	-.000463	-.000119
6.62	-.001036	-.001025	-.000718	-.000471	-.000377	-.000344	-.000331	-.000322	-.000063
6.78	-.000605	-.000591	-.000424	-.000287	-.000247	-.000238	-.000236	-.000231	-.000035
6.94	-.000373	-.000358	-.000264	-.000187	-.000172	-.000172	-.000172	-.000169	-.000020
7.10	-.000241	-.000226	-.000172	-.000128	-.000124	-.000128	-.000128	-.000124	-.000012
7.26	-.000161	-.000148	-.000115	-.000090	-.000092	-.000096	-.000096	-.000092	-.000007
7.42	-.000110	-.000100	-.000079	-.000066	-.000070	-.000073	-.000073	-.000068	-.000004
7.58	-.000077	-.000068	-.000055	-.000049	-.000054	-.000056	-.000055	-.000051	-.000002
7.74	-.000054	-.000048	-.000039	-.000037	-.000042	-.000044	-.000042	-.000038	-.000001
7.90	-.000039	-.000034	-.000028	-.000028	-.000033	-.000034	-.000032	-.000028	-.000001
8.06	-.000020	-.000017	-.000014	-.000017	-.000020	-.000020	-.000018	-.000016	-.000000
8.22	-.000011	-.000009	-.000008	-.000011	-.000013	-.000012	-.000011	-.000009	-.000000
8.38	-.000006	-.000005	-.000004	-.000007	-.000008	-.000007	-.000006	-.000005	-.000000
8.54	-.000003	-.000003	-.000002	-.000005	-.000005	-.000005	-.000004	-.000003	-.000000
8.70	-.000002	-.000001	-.000001	-.000003	-.000003	-.000003	-.000002	-.000001	-.000000
8.86	-.000001	-.000001	-.000001	-.000002	-.000002	-.000002	-.000001	-.000001	-.000000
9.02	-.000000	.000000	.000000	-.000001	-.000001	-.000001	-.000001	-.000000	-.000000
9.18	.000000	.000000	.000000	-.000001	-.000001	-.000001	.000000	.000000	.000000
9.34	.000000	.000000	.000000	-.000001	-.000001	.000000	.000000	.000000	.000000

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
-E	3D 8	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
X	1.3942	.98245	1.5650	2.3867	3.2813	4.2552	5.3084	6.4403	7.6505
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000005	.000006	.000007	.000008	.000009	.000010	.000012	.000013	.000015
.02	.000041	.000044	.000052	.000061	.000071	.000081	.000091	.000103	.000115
.03	.000133	.000145	.000172	.000200	.000231	.000264	.000299	.000337	.000377
.04	.000308	.000335	.000396	.000462	.000532	.000608	.000689	.000774	.000866

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	3D 8	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
.05	.000586	.000636	.000751	.000876	.001010	.001153	.001305	.001467	.001638
.06	.000986	.001070	.001263	.001472	.001696	.001934	.002188	.002458	.002744
.07	.001526	.001654	.001952	.002273	.002617	.002983	.003373	.003787	.004225
.08	.002220	.002404	.002835	.003300	.003797	.004326	.004888	.005485	.006116
.09	.003080	.003334	.003929	.004571	.005255	.005984	.006758	.007578	.008446
.10	.004118	.004454	.005246	.006100	.007009	.007976	.009003	.010090	.011238
.12	.006763	.007307	.008595	.009982	.011456	.013021	.014679	.016433	.018282
.14	.010212	.011020	.012948	.015019	.017216	.019545	.022009	.024610	.027348
.16	.014504	.015633	.018346	.021254	.024335	.027595	.031038	.034665	.038479
.18	.019660	.021165	.024808	.028705	.032828	.037183	.041773	.046602	.051671
.20	.025686	.027619	.032334	.037371	.042688	.048295	.054194	.060390	.066883
.22	.032579	.034989	.040913	.047230	.053887	.060894	.068255	.075972	.084046
.24	.040323	.043254	.050518	.058250	.066384	.074929	.083891	.093271	.103068
.26	.048897	.052390	.061116	.070387	.080123	.090334	.101023	.112193	.123840
.28	.058273	.062362	.072664	.083589	.095042	.107032	.119562	.132633	.146240
.30	.068416	.073133	.085114	.097798	.111070	.124940	.139411	.154479	.170139
.34	.090859	.096898	.112511	.128981	.146151	.164032	.182622	.201914	.221896
.38	.115899	.123321	.142862	.163401	.184737	.206876	.229813	.253534	.278019
.42	.143190	.152017	.175703	.200511	.226186	.252732	.280138	.308383	.337437
.46	.172380	.182600	.210575	.239769	.269872	.300884	.332787	.365551	.399138
.50	.203125	.214697	.247035	.280660	.315203	.350660	.387004	.424198	.462191
.54	.235098	.247953	.284667	.322703	.361631	.401442	.442101	.483560	.525760
.58	.267989	.282039	.323087	.365458	.408657	.452671	.497457	.542959	.589107
.62	.301515	.316653	.361945	.408524	.455832	.503849	.552528	.601801	.651589
.66	.335414	.351521	.400927	.451547	.502759	.554541	.606837	.659572	.712657
.70	.369451	.386395	.439751	.494211	.549092	.604367	.659975	.715835	.771851
.78	.437112	.455312	.515967	.577402	.638813	.700174	.761414	.822445	.883160
.86	.503071	.521951	.588977	.656329	.723095	.789255	.854740	.919458	.983304
.94	.566227	.585218	.657595	.729735	.800630	.870275	.938613	1.005561	1.071023
1.02	.625766	.644329	.721007	.796790	.870597	.942450	1.012311	1.080118	1.145794
1.10	.681112	.698761	.778696	.857013	.932571	1.005432	1.075589	1.143012	1.207654
1.18	.731890	.748203	.830395	.910198	.986433	1.059209	1.128566	1.194512	1.257040
1.26	.777894	.792516	.876031	.956357	1.032297	1.104021	1.171620	1.235155	1.294666
1.34	.819048	.831696	.915680	.995663	1.070452	1.140283	1.205313	1.265659	1.321421
1.42	.855387	.865849	.949533	1.028411	1.101305	1.168533	1.230320	1.286851	1.338286
1.50	.887025	.895155	.977863	1.054975	1.125345	1.189379	1.247380	1.299606	1.346284
1.66	.936958	.940225	1.019303	1.091284	1.155135	1.211455	1.260717	1.303337	1.339692
1.82	.970725	.969193	1.042942	1.108241	1.164216	1.211674	1.251279	1.283618	1.309224
1.98	.990520	.984550	1.051828	1.109468	1.156794	1.194838	1.224463	1.246433	1.261441
2.14	.998572	.988719	1.048824	1.098274	1.136619	1.165131	1.184876	1.196799	1.201752
2.30	.996982	.983910	1.036475	1.077530	1.106883	1.126049	1.136305	1.138775	1.134465
2.46	.987639	.972055	1.016959	1.049647	1.070217	1.080434	1.081784	1.075566	1.062932
2.62	.972181	.954791	.992086	1.016601	1.028747	1.030546	1.023692	1.009649	.989702
2.78	.952003	.933478	.963334	.979979	.984159	.978156	.963866	.942909	.916681
2.94	.928265	.909223	.931893	.941040	.937773	.924632	.903706	.876752	.845259
3.10	.901924	.882920	.898706	.900772	.890610	.871016	.844258	.812206	.776419
3.42	.844394	.826855	.829889	.819128	.796888	.766440	.730351	.690643	.648924
3.74	.783982	.769319	.761020	.739247	.707179	.668493	.625942	.581585	.536955
4.06	.723577	.712725	.694500	.663479	.623706	.579157	.532637	.486112	.440934
4.38	.664943	.658446	.631638	.593028	.547489	.499150	.450731	.403987	.359993
4.70	.609110	.607201	.573068	.528401	.478814	.428438	.379773	.334257	.292629
5.02	.556627	.559309	.519015	.469677	.417534	.366558	.318907	.275632	.237105
5.34	.507739	.514843	.469458	.416686	.363252	.312815	.267097	.226717	.191673
5.66	.462496	.473737	.424232	.369117	.315441	.266417	.223260	.186141	.154705
5.98	.420825	.435842	.383098	.326586	.273518	.226547	.186341	.152633	.124749
6.30	.382584	.400969	.345777	.288679	.236889	.192413	.155363	.125058	.100551
6.94	.315620	.339462	.281402	.225070	.177235	.138467	.107805	.083881	.065349
7.58	.259937	.287574	.228833	.175135	.132317	.099479	.074757	.056308	.042585
8.22	.213851	.243804	.186022	.136120	.098679	.071449	.051893	.037901	.027881
8.86	.175822	.206851	.151207	.105732	.073576	.051357	.036102	.025617	.018372



	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
	3D 8	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
X									
9.50	.144501	.175621	.122917	.082112	.054881	.036973	.025198	.017406	.012200
10.14	.118734	.149194	.099936	.063776	.040972	.026678	.017660	.011903	.008174
10.78	.097552	.126808	.081268	.049551	.030628	.019304	.012436	.008198	.005532
11.42	.080146	.107826	.066103	.038519	.022933	.014014	.008806	.005693	.003786
12.06	.065847	.091715	.053780	.029964	.017204	.010213	.006274	.003988	.002621
12.70	.054101	.078031	.043764	.023327	.012935	.007474	.004500	.002821	.001837
13.98	.036527	.056513	.028999	.014180	.007368	.004060	.002367	.001454	.000937
15.26	.024666	.040942	.019230	.008660	.004248	.002254	.001286	.000782	.000503
16.54	.016659	.029662	.012760	.005318	.002484	.001283	.000723	.000439	.000282
17.82	.011253	.021485	.008471	.003288	.001476	.000749	.000421	.000256	.000165
19.10	.007602	.015556	.005627	.002048	.000893	.000450	.000253	.000154	.000099
20.38	.005136	.011258	.003739	.001288	.000551	.000278	.000157	.000096	.000061
21.66	.003470	.008143	.002486	.000818	.000347	.000176	.000100	.000061	.000039
22.94	.002345	.005886	.001654	.000525	.000223	.000114	.000065	.000039	.000025
24.22	.001585	.004252	.001101	.000342	.000147	.000075	.000043	.000026	.000016
25.50	.001071	.003070	.000733	.000225	.000098	.000051	.000029	.000017	.000010
28.06	.000490	.001597	.000326	.000102	.000046	.000024	.000013	.000008	.000004
30.62	.000225	.000829	.000146	.000049	.000023	.000012	.000006	.000003	.000002
33.18	.000103	.000429	.000065	.000025	.000012	.000006	.000003	.000002	.000001
35.74	.000048	.000222	.000030	.000013	.000006	.000003	.000001	.000001	.000000
38.30	.000022	.000115	.000013	.000007	.000003	.000001	.000001	.000000	.000000
40.86	.000010	.000059	.000006	.000004	.000002	.000001	.000000	.000000	.000000
43.42	.000005	.000030	.000003	.000002	.000001	.000000	.000000	.000000	.000000
45.98	.000002	.000016	.000001	.000001	.000001	.000000	.000000	.000000	.000000
48.54	.000001	.000008	.000001	.000001	.000000	.000000	.000000	.000000	.000000
51.10	.000001	.000004	.000000	.000000	.000000	.000000	.000000	.000000	.000000
56.22	.000000	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
61.34	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
	4S 2	4S 1	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	.55355	.47699	.58501	.84919	1.1141	1.3903	1.6803	1.9854	2.3059
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.018611	.016220	.019728	.024099	.027950	.031553	.035006	.038361	.041647
.02	.034216	.029757	.036120	.044033	.050966	.057420	.063577	.069532	.075341
.03	.047089	.040863	.049493	.060205	.069535	.078173	.086373	.094265	.101927
.04	.057483	.049767	.060139	.072987	.084105	.094339	.103998	.113245	.122175
.05	.065633	.056684	.068328	.082722	.095090	.106399	.117008	.127102	.136792
.06	.071756	.061809	.074309	.089725	.102868	.114798	.125911	.136411	.146423
.07	.076053	.065325	.078312	.094287	.107787	.119942	.131173	.141699	.151656
.08	.078709	.067399	.080546	.096674	.110168	.122203	.133218	.143446	.153029
.09	.079895	.068185	.081207	.097131	.110302	.121921	.132437	.142091	.151030
.10	.079768	.067825	.080473	.095882	.108459	.119408	.129186	.138034	.146105
.12	.076148	.064180	.075460	.089077	.099804	.108808	.116538	.123239	.129063
.14	.068878	.057390	.066665	.077708	.085927	.092397	.097544	.101601	.104719
.16	.058834	.048235	.055060	.062992	.068269	.071837	.074081	.075217	.075391
.18	.046753	.037372	.041461	.045943	.048030	.048503	.047698	.045810	.042972
.20	.033257	.025352	.026549	.027406	.026199	.023527	.019665	.014783	.009001
.22	.018868	.012635	.010888	.008078	.003592	-.002165	-.008985	-.016726	-.025283
.24	.004021	-.000398	-.005055	-.011472	-.019128	-.027824	-.037420	-.047807	-.058897
.26	-.010923	-.013433	-.020899	-.030777	-.041424	-.052848	-.064979	-.077744	-.091071
.28	-.025669	-.026214	-.036335	-.049466	-.062870	-.076762	-.091145	-.105979	-.121212
.30	-.039974	-.038534	-.051117	-.067243	-.083131	-.099199	-.115521	-.132092	-.148880
.34	-.066533	-.061174	-.077988	-.099204	-.119144	-.138609	-.157813	-.176820	-.195639
.38	-.089507	-.080446	-.100468	-.125454	-.148151	-.169702	-.190447	-.210518	-.229968
.42	-.108286	-.095870	-.118034	-.145436	-.169601	-.191963	-.212976	-.232835	-.251634
.46	-.122611	-.107272	-.130539	-.159047	-.183468	-.205469	-.225602	-.244123	-.261164

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	4S 2	4S 1	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
.50	-.132469	-.114690	-.138089	-.166494	-.190079	-.210686	-.228952	-.245183	-.259554
.54	-.138020	-.118310	-.140967	-.168188	-.189985	-.208325	-.223908	-.237087	-.248073
.58	-.139538	-.118409	-.139559	-.164660	-.183874	-.199234	-.211490	-.221037	-.228120
.62	-.137369	-.115325	-.134318	-.156514	-.172499	-.184326	-.192779	-.198286	-.201126
.66	-.131900	-.109422	-.125723	-.144378	-.156637	-.164528	-.168854	-.170071	-.168486
.70	-.123534	-.101077	-.114261	-.128880	-.137051	-.140739	-.140753	-.137570	-.131523
.78	-.099726	-.078535	-.084616	-.090191	-.089592	-.084553	-.075859	-.064010	-.049378
.86	-.069024	-.050475	-.048885	-.044859	-.035371	-.021820	-.004928	.014808	.036992
.94	-.034156	-.019312	-.010056	.003419	.021288	.042556	.066602	.092951	.121205
1.02	.002588	.012965	.029450	.051701	.077005	.104819	.134648	.166058	.198666
1.10	.039362	.044784	.067760	.097755	.129275	.162248	.196325	.231131	.266315
1.18	.074732	.074954	.103488	.139976	.176347	.213003	.249752	.286300	.322338
1.26	.107637	.102618	.135669	.177284	.217093	.255960	.293857	.330581	.365884
1.34	.137326	.127197	.163681	.209030	.250889	.290561	.328191	.363672	.396830
1.42	.163312	.148338	.187181	.234899	.277496	.316680	.352768	.385761	.415567
1.50	.185319	.165872	.206045	.254837	.296964	.334504	.367939	.397384	.422836
1.66	.217096	.190095	.230127	.277601	.315676	.347042	.372505	.392408	.406945
1.82	.233151	.200710	.237453	.279775	.310529	.332853	.347833	.356048	.357896
1.98	.235130	.199428	.230470	.264767	.285933	.297387	.300467	.295973	.284510
2.14	.225183	.188285	.211891	.236164	.246329	.245954	.236584	.219230	.194701
2.30	.205564	.169316	.184335	.197315	.195763	.183272	.161561	.131840	.095104
2.46	.178408	.144383	.150135	.151150	.137702	.113316	.079857	.038709	-.008957
2.62	.145617	.115103	.111281	.100119	.075003	.039316	-.004963	-.656295	-.113359
2.78	.108818	.082825	.069410	.046213	.009956	-.036178	-.090124	-.150216	-.215008
2.94	.069369	.048652	.025836	-.008988	-.055646	-.111197	-.173522	-.240855	-.311665
3.10	.028374	.013461	-.018404	-.064256	-.120428	-.184258	-.253605	-.326639	-.401781
3.42	-.054901	-.057386	-.105870	-.171478	-.243679	-.320464	-.399752	-.479715	-.558811
3.74	-.135994	-.125942	-.188670	-.270508	-.354526	-.439487	-.523540	-.605040	-.682666
4.06	-.211976	-.190118	-.264504	-.358854	-.450550	-.539256	-.623534	-.702111	-.774062
4.38	-.281282	-.248881	-.332326	-.435542	-.531085	-.619661	-.700427	-.772656	-.835954
4.70	-.343215	-.301840	-.391848	-.500512	-.596509	-.681727	-.756092	-.819550	-.872328
5.02	-.397619	-.348976	-.443225	-.554233	-.647791	-.727097	-.792974	-.846132	-.887453
5.34	-.444663	-.390485	-.486859	-.597474	-.686213	-.757691	-.813715	-.855793	-.885451
5.66	-.484707	-.426672	-.523286	-.631147	-.713188	-.775500	-.820918	-.851733	-.870062
5.98	-.518216	-.457897	-.553097	-.656222	-.730146	-.782462	-.817018	-.836837	-.844544
6.30	-.545701	-.484534	-.576900	-.673665	-.738470	-.780383	-.804211	-.813623	-.811653
6.94	-.584712	-.525531	-.608837	-.689323	-.734279	-.755471	-.759328	-.750469	-.732425
7.58	-.605814	-.552460	-.623496	-.684833	-.709599	-.711680	-.698587	-.675397	-.645721
8.22	-.612675	-.567784	-.624680	-.665799	-.671544	-.657157	-.630628	-.597031	-.559726
8.86	-.608451	-.573623	-.615574	-.636725	-.625513	-.597703	-.561200	-.520695	-.479066
9.50	-.595785	-.571781	-.598791	-.601133	-.575472	-.537288	-.493928	-.449426	-.406044
10.14	-.576853	-.563788	-.576447	-.561718	-.524244	-.478510	-.430940	-.384746	-.341512
10.78	-.553424	-.550940	-.550241	-.520500	-.473778	-.422975	-.373350	-.327211	-.285463
11.42	-.526924	-.534330	-.521520	-.478965	-.425361	-.371587	-.321596	-.276781	-.237406
12.06	-.498486	-.514883	-.491347	-.438177	-.379796	-.324768	-.275690	-.233074	-.196609
12.70	-.469007	-.493373	-.460549	-.398873	-.337534	-.282619	-.235382	-.195528	-.162245
13.98	-.409563	-.446642	-.399472	-.326491	-.263563	-.211760	-.169896	-.136340	-.109535
15.26	-.352438	-.398095	-.341717	-.263757	-.203317	-.156891	-.121355	-.094149	-.073282
16.54	-.299752	-.350377	-.289082	-.210886	-.155361	-.115229	-.085985	-.064531	-.048691
17.82	-.252510	-.305170	-.242330	-.167211	-.117817	-.084043	-.060537	-.043973	-.032181
19.10	-.211015	-.263460	-.201587	-.131672	-.088792	-.060952	-.042403	-.029826	-.021182
20.38	-.175138	-.225737	-.166600	-.103089	-.066573	-.044001	-.029578	-.020157	-.013898
21.66	-.144506	-.192151	-.136907	-.080315	-.049697	-.031642	-.020563	-.013584	-.009098
22.94	-.118617	-.162627	-.111949	-.062308	-.036963	-.022682	-.014257	-.009133	-.005945
24.22	-.096924	-.136944	-.091140	-.048162	-.027406	-.016216	-.009863	-.006131	-.003880
25.50	-.078877	-.114797	-.073909	-.037109	-.020265	-.011568	-.006812	-.004110	-.002531
28.06	-.051689	-.079730	-.048112	-.021853	-.011008	-.005857	-.003237	-.001943	-.001076
30.62	-.033470	-.054646	-.030959	-.012756	-.005940	-.002951	-.001534	-.000826	-.000458
33.18	-.021458	-.037043	-.019731	-.007396	-.003190	-.001483	-.000726	-.000371	-.000196
35.74	-.013641	-.024878	-.012473	-.004265	-.001707	-.000744	-.000344	-.000167	-.000084

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
X	4S 2	4S 1	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
38.30	-.008609	-.016575	-.007829	-.002450	-.000912	-.000374	-.000164	-.000075	-.000036
40.86	-.005399	-.010967	-.004885	-.001403	-.000487	-.000188	-.000078	-.000034	-.000016
43.42	-.003368	-.007213	-.003031	-.000802	-.000260	-.000095	-.000037	-.000016	-.000007
45.98	-.002090	-.004719	-.001872	-.000458	-.000139	-.000048	-.000018	-.000007	-.000003
48.54	-.001292	-.003072	-.001152	-.000261	-.000074	-.000024	-.000009	-.000003	-.000001
51.10	-.000795	-.001992	-.000706	-.000149	-.000040	-.000012	-.000004	-.000002	-.000001
56.22	-.000298	-.000828	-.000262	-.000049	-.000012	-.000003	-.000001	-.000000	-.000000
61.34	-.000111	-.000340	-.000097	-.000016	-.000003	-.000001	-.000000	-.000000	-.000000
66.46	-.000041	-.000138	-.000035	-.000005	-.000001	-.000000	-.000000	-.000000	-.000000
71.58	-.000015	-.000056	-.000013	-.000002	-.000000	-.000000	-.000000	-.000000	-.000000
76.70	-.000005	-.000022	-.000005	-.000001	-.000000	-.000000	-.000000	-.000000	-.000000
81.82	-.000002	-.000009	-.000002	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000
86.94	-.000001	-.000003	-.000001	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000
92.06	-.000000	-.000001	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000
97.18	-.000000	-.000001	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
-E	4P 0	4P 0	4P 0	4P 1	4P 2	4P 3	4P 4	4P 5	4P 6
X				.41700	.53866	.66027	.78501	.91417	1.0484
.00				.000000	.000000	.000000	.000000	.000000	.000000
.01				.000400	.000519	.000632	.000744	.000857	.000965
.02				.001531	.001985	.002417	.002842	.003268	.003677
.03				.003299	.004271	.005196	.006105	.007013	.007884
.04				.005614	.007262	.008826	.010360	.011890	.013355
.05				.008398	.010852	.013177	.015453	.017717	.019882
.06				.011577	.014946	.018130	.021242	.024331	.027279
.07				.015086	.019457	.023579	.027599	.031583	.035374
.08				.018864	.024306	.029426	.034409	.039337	.044018
.09				.022857	.029421	.035582	.041567	.047475	.053071
.10				.027015	.034737	.041970	.048981	.055886	.062412
.12				.035650	.045747	.055160	.064242	.073150	.081528
.14				.044462	.056934	.068504	.079617	.090469	.100620
.16				.053198	.067974	.081611	.094646	.107315	.119100
.18				.061659	.078609	.094170	.108968	.123280	.136515
.20				.069684	.088636	.105938	.122303	.138049	.152517
.22				.077149	.097899	.116731	.134443	.151389	.166853
.24				.083962	.106281	.126413	.145233	.163133	.179346
.26				.090052	.113700	.134889	.154571	.173170	.189882
.28				.095373	.120098	.142098	.162392	.181436	.198396
.30				.099895	.125443	.148006	.168664	.187904	.204870
.34				.106498	.132938	.155901	.176570	.195486	.211779
.38				.109876	.136247	.158700	.178496	.196216	.211018
.42				.110184	.135605	.156731	.174875	.190650	.203271
.46				.107657	.131350	.150445	.166280	.179491	.189381
.50				.102584	.123882	.140357	.153351	.163513	.170255
.54				.095279	.113627	.127012	.136753	.143506	.146815
.58				.086060	.101017	.110950	.117142	.120247	.119952
.62				.075244	.086472	.092698	.095149	.094470	.090505
.66				.063134	.070391	.072747	.071360	.066859	.059249
.70				.050012	.053145	.051555	.046315	.038032	.026880
.78				.021757	.016491	.007062	-.005654	-.021108	-.038796
.86				-.007706	-.021160	-.037975	-.057505	-.079277	-.102471
.94				-.036937	-.057986	-.081401	-.106787	-.133760	-.161219
1.02				-.064841	-.092631	-.121648	-.151757	-.182680	-.213070
1.10				-.090622	-.124138	-.157643	-.191268	-.224846	-.256834
1.18				-.113742	-.151885	-.188722	-.224649	-.259619	-.291934
1.26				-.133867	-.175514	-.214541	-.251603	-.286776	-.318256
1.34				-.150830	-.194878	-.235006	-.272114	-.306408	-.336018
1.42				-.164590	-.209989	-.250205	-.286372	-.318824	-.345669

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
	4P 0	4P 0	4P 0	4P 1	4P 2	4P 3	4P 4	4P 5	4P 6
X									
1.50				-.175202	-.220973	-.260357	-.294704	-.324481	-.347806
1.66				-.187520	-.231441	-.266797	-.295328	-.317754	-.332304
1.82				-.189234	-.228449	-.257286	-.277810	-.290984	-.295242
1.98				-.182083	-.214429	-.234980	-.246065	-.248873	-.242112
2.14				-.167806	-.191733	-.202845	-.203679	-.195640	-.177745
2.30				-.147991	-.162463	-.163481	-.153744	-.134862	-.106182
2.46				-.124015	-.128411	-.119073	-.098826	-.069469	-.030688
2.62				-.097028	-.091059	-.071408	-.041000	-.001806	.046159
2.78				-.067974	-.051607	-.021922	.018087	.066292	.122367
2.94				-.037607	-.011013	.028253	.077149	.133411	.196433
3.10				-.006530	.029969	.078233	.135194	.198481	.267247
3.42				.055974	.110879	.175039	.245426	.319547	.396221
3.74				.116898	.187866	.264814	.344883	.425629	.505754
4.06				.174693	.259083	.345592	.431708	.515222	.594952
4.38				.228498	.323573	.416511	.505343	.588297	.664524
4.70				.277885	.380950	.477408	.566043	.645713	.716080
5.02				.322692	.431188	.528560	.614555	.688825	.751669
5.34				.362931	.474488	.570514	.651901	.719219	.773488
5.66				.398718	.511196	.603970	.679231	.738547	.783689
5.98				.430235	.541739	.629703	.697729	.748417	.784280
6.30				.457703	.566588	.648511	.708550	.750334	.777064
6.94				.501478	.601153	.668455	.711435	.735609	.745330
7.58				.532066	.618708	.669593	.695509	.703475	.698605
8.22				.551445	.622745	.656863	.666851	.660751	.644034
8.86				.561446	.616298	.634284	.630110	.612345	.586457
9.50				.563710	.601922	.605029	.588736	.561679	.529033
10.14				.559675	.581719	.571550	.545227	.511067	.473742
10.78				.550585	.557393	.535706	.501351	.462024	.421751
11.42				.537505	.530308	.498883	.458329	.415494	.373677
12.06				.521341	.501541	.462098	.416974	.372021	.329774
12.70				.502857	.471937	.426082	.377805	.331873	.290059
13.98				.461384	.412670	.358226	.307070	.261735	.222572
15.26				.417022	.356047	.297613	.246938	.204450	.169302
16.54				.372439	.303965	.244957	.196929	.158501	.127897
17.82				.329380	.257289	.200098	.155989	.122128	.096078
19.10				.288925	.216238	.162432	.122867	.093623	.071838
20.38				.251683	.180647	.131159	.096319	.071461	.053501
21.66				.217933	.150138	.105426	.075198	.054342	.039707
22.94				.187725	.124221	.084406	.058500	.041190	.029382
24.22				.160963	.102373	.067341	.045366	.031131	.021684
25.50				.137452	.084072	.053559	.035083	.023468	.015965
28.06				.099173	.056185	.033608	.020828	.013248	.008601
30.62				.070700	.037163	.020897	.012263	.007423	.004601
33.18				.049900	.024371	.012894	.007171	.004132	.002447
35.74				.034921	.015865	.007905	.004168	.002288	.001295
38.30				.024260	.010263	.004819	.002411	.001261	.000682
40.86				.016748	.006603	.002923	.001388	.000692	.000358
43.42				.011497	.004220	.001766	.000796	.000379	.000187
45.98				.007853	.002695	.001063	.000455	.000206	.000098
48.54				.005341	.001712	.000637	.000259	.000112	.000051
51.10				.003617	.001083	.000381	.000147	.000061	.000026
56.22				.001642	.000430	.000135	.000047	.000018	.000007
61.34				.000737	.000169	.000047	.000015	.000005	.000002
66.46				.000327	.000066	.000017	.000005	.000001	.000000
71.58				.000144	.000025	.000006	.000001	.000000	.000000

	NI 28	CU 29	ZN 30	GA 31	GE 32	AS 33	SE 34	BR 35	KR 36
	4P 0	4P 0	4P 0	4P 1	4P 2	4P 3	4P 4	4P 5	4P 6
X									
76.70				.000063	.000010	.000002	.000000	.000000	.000000
81.82				.000027	.000004	.000001	.000000		
86.94				.000012	.000001	.000000			
92.06				.000005	.000001	.000000			
97.18				.000002	.000000				
102.30				.000001	.000000				
112.54				.000000					

TABLE IV. RADIAL WAVEFUNCTIONS

	RB 5S1	R=0.26569101*X		MO 4D5 5S1	R=0.25469925*X				
	SR 5S2	R=0.26333964*X		TC 4D5 5S2	R=0.25270933*X				
	Y 4D1	R=0.26106935*X		RU 4D7 5S1	R=0.25078018*X				
	ZR 4D2	R=0.25887539*X		RH 4D8 5S1	R=0.24890861*X				
	NB 4D4 5S1	R=0.25675336*X							
	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	1102.9	1167.4	1233.5	1301.4	1370.9	1442.5	1516.1	1591.1	1668.1
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	1.069082	1.101270	1.133514	1.165809	1.198155	1.230545	1.262976	1.295451	1.327963
.02	1.938227	1.993068	2.047844	2.102546	2.157175	2.211719	2.266176	2.320553	2.374837
.03	2.635723	2.705532	2.775041	2.844243	2.913139	2.981719	3.049979	3.117936	3.185570
.04	3.186278	3.264920	3.342965	3.420409	3.497260	3.573507	3.649152	3.724216	3.798683
.05	3.611439	3.694074	3.775791	3.856592	3.936491	4.015482	4.093573	4.170793	4.247129
.06	3.929971	4.012838	4.094469	4.174873	4.254073	4.332071	4.408881	4.484541	4.559045
.07	4.158194	4.238425	4.317123	4.394308	4.470012	4.544246	4.617034	4.688421	4.758410
.08	4.310280	4.385741	4.459409	4.531315	4.601499	4.669984	4.736804	4.802012	4.865621
.09	4.398515	4.467678	4.534829	4.600012	4.663279	4.724661	4.784205	4.841971	4.897984
.10	4.433535	4.495361	4.555004	4.612520	4.667972	4.721404	4.772871	4.822443	4.870153
.12	4.379420	4.424959	4.468119	4.508979	4.547623	4.584115	4.618531	4.650953	4.681437
.14	4.207196	4.236088	4.262585	4.286787	4.308792	4.328686	4.346559	4.362501	4.376588
.16	3.960523	3.973799	3.984813	3.993682	4.000515	4.005412	4.008474	4.009796	4.009467
.18	3.671193	3.670651	3.668095	3.663652	3.657436	3.649558	3.640123	3.629225	3.616961
.20	3.362000	3.349792	3.335894	3.320440	3.303542	3.285316	3.265866	3.245281	3.223661
.22	3.048963	3.027320	3.004360	2.980209	2.954979	2.928783	2.901721	2.873871	2.845334
.24	2.743028	2.714089	2.684224	2.653547	2.622163	2.590179	2.557686	2.524751	2.491467
.26	2.451369	2.417088	2.382264	2.347001	2.311391	2.275530	2.239501	2.203352	2.167170
.28	2.178394	2.140486	2.102396	2.064217	2.026024	1.987903	1.949920	1.912111	1.874549
.30	1.926503	1.886427	1.846500	1.806799	1.767382	1.728321	1.689668	1.651441	1.613702
.34	1.488852	1.447831	1.407500	1.367902	1.329061	1.291019	1.253795	1.217379	1.181805
.38	1.136056	1.097165	1.059335	1.022576	.986880	.952258	.918704	.886178	.854692
.42	.858298	.823241	.789459	.756933	.725629	.695533	.666614	.638816	.612129
.46	.643371	.612883	.583757	.555950	.529410	.504101	.479977	.456970	.435054
.50	.479231	.453419	.428960	.405796	.383860	.363106	.343473	.324890	.307319
.54	.355150	.333747	.313624	.294713	.276940	.260250	.244579	.229854	.216030
.58	.262110	.244653	.228366	.213173	.199000	.185787	.173470	.161979	.151267
.62	.192796	.178749	.165739	.153692	.142534	.132207	.122647	.113790	.105591
.66	.141431	.130251	.119972	.110521	.101830	.093842	.086498	.079742	.073528
.70	.103530	.094714	.086665	.079316	.072606	.066481	.060887	.055776	.051107
.78	.055229	.049863	.045032	.040682	.036763	.033233	.030053	.027185	.024598
.86	.029365	.026168	.023328	.020804	.018561	.016567	.014792	.013212	.011806
.94	.015602	.013723	.012076	.010631	.009363	.008250	.007271	.006411	.005654
1.02	.008298	.007202	.006254	.005433	.004721	.004103	.003566	.003100	.002695
1.10	.004420	.003783	.003238	.002772	.002373	.002030	.001736	.001483	.001266
1.18	.002355	.001984	.001670	.001405	.001180	.000989	.000827	.000690	.000573
1.26	.001249	.001032	.000850	.000698	.000571	.000464	.000374	.000299	.000236
1.34	.000657	.000529	.000423	.000336	.000264	.000204	.000155	.000115	.000075
1.42	.000344	.000270	.000209	.000161	.000121	.000089	.000063	.000043	.000006
1.50	.000179	.000137	.000103	.000077	.000055	.000039	.000026	.000016	.000000
1.66	.000048	.000035	.000025	.000017	.000012	.000007	.000004	.000002	.000000
1.82	.000013	.000009	.000006	.000004	.000002	.000001	.000001	.000000	.000000
1.98	.000003	.000002	.000001	.000001	.000000	.000000	.000000	.000000	.000000
2.14	.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	150.10	160.78	171.62	182.77	193.99	205.77	218.20	230.34	243.14
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.336884	.347869	.358880	.369915	.380969	.392049	.403153	.414269	.425407
.02	.608581	.627231	.645861	.664472	.683054	.701618	.720163	.738667	.757148
.03	.822396	.845888	.869267	.892532	.915673	.938704	.961626	.984407	1.007076
.04	.984953	1.010909	1.036624	1.062097	1.087319	1.112307	1.137064	1.161553	1.185810
.05	1.102254	1.128686	1.154728	1.180381	1.205635	1.230514	1.255021	1.279119	1.302848
.06	1.179733	1.204998	1.229711	1.253879	1.277495	1.300585	1.323156	1.345171	1.366676
.07	1.222305	1.245058	1.267099	1.288438	1.309071	1.329030	1.348325	1.366919	1.384865
.08	1.234406	1.253570	1.271866	1.289311	1.305903	1.321679	1.336655	1.350797	1.364162
.09	1.220044	1.234771	1.248487	1.261212	1.272952	1.283748	1.293620	1.302540	1.310569
.10	1.182831	1.192475	1.200980	1.208372	1.214661	1.219896	1.224102	1.227254	1.229420
.12	1.052541	1.050756	1.047633	1.043213	1.037517	1.030606	1.022515	1.013235	1.002838
.14	.865825	.851831	.836389	.819553	.801360	.781879	.761157	.739202	.716092
.16	.640635	.614479	.586856	.557835	.527467	.495830	.462982	.428946	.393806
.18	.391330	.353647	.314569	.274176	.232533	.189724	.145818	.100852	.054912
.20	.129303	.081133	.031719	-.018847	-.070490	-.123120	-.176663	-.231064	-.286240
.22	-.136504	-.193864	-.252246	-.311553	-.371698	-.432588	-.494147	-.556307	-.618988
.24	-.399165	-.464272	-.530125	-.596617	-.663659	-.731158	-.799034	-.867211	-.935615
.26	-.653414	-.724766	-.796541	-.868633	-.940946	-1.013392	-1.085894	-1.158366	-1.230746
.28	-.895344	-.971441	-1.047607	-1.123738	-1.199739	-1.275528	-1.351031	-1.426160	-1.500861
.30	-1.122153	-1.201544	-1.280632	-1.359318	-1.437509	-1.515133	-1.592123	-1.668388	-1.743890
.34	-1.523522	-1.605501	-1.686419	-1.766195	-1.844751	-1.922042	-1.998018	-2.072597	-2.145774
.38	-1.850128	-1.930117	-2.008328	-2.084708	-2.159203	-2.231800	-2.302479	-2.371174	-2.437916
.42	-2.102047	-2.176471	-2.248490	-2.318088	-2.385241	-2.449975	-2.512303	-2.572182	-2.629683
.46	-2.283854	-2.350117	-2.413474	-2.473946	-2.531547	-2.586343	-2.638378	-2.687644	-2.734243
.50	-2.402595	-2.458991	-2.512118	-2.562038	-2.608803	-2.652517	-2.693259	-2.731052	-2.766031
.54	-2.466448	-2.512029	-2.554119	-2.592822	-2.628226	-2.660470	-2.689664	-2.715866	-2.739235
.58	-2.483849	-2.518286	-2.549144	-2.576566	-2.600678	-2.621644	-2.639602	-2.654645	-2.666948
.62	-2.462953	-2.486396	-2.506299	-2.522834	-2.536159	-2.546463	-2.553902	-2.558602	-2.560748
.66	-2.411308	-2.424273	-2.433838	-2.440207	-2.443561	-2.444103	-2.442007	-2.437428	-2.430550
.70	-2.335696	-2.338951	-2.339036	-2.336174	-2.330568	-2.322429	-2.311939	-2.299277	-2.284622
.78	-2.135529	-2.122261	-2.106470	-2.088395	-2.068265	-2.046283	-2.022636	-1.997534	-1.971125
.86	-1.900269	-1.874695	-1.847375	-1.818542	-1.788423	-1.757197	-1.725039	-1.692155	-1.658654
.94	-1.656097	-1.622270	-1.587490	-1.551966	-1.515904	-1.479441	-1.442727	-1.405949	-1.369171
1.02	-1.419880	-1.381307	-1.342515	-1.303671	-1.264947	-1.226433	-1.188241	-1.150534	-1.113325
1.10	-1.201523	-1.161021	-1.120923	-1.081350	-1.042432	-1.004209	-.966754	-.930198	-.894510
1.18	-1.006016	-.965702	-.926285	-.887837	-.850444	-.814104	-.778849	-.744774	-.711815
1.26	-.835045	-.796404	-.759021	-.722923	-.688153	-.654671	-.622475	-.591626	-.562033
1.34	-.688201	-.652192	-.617681	-.584653	-.553116	-.522998	-.494269	-.466960	-.440961
1.42	-.563848	-.531016	-.499816	-.470201	-.442147	-.415561	-.390389	-.366636	-.344184
1.50	-.459724	-.430302	-.402561	-.376431	-.351861	-.328742	-.307007	-.286640	-.267518
1.66	-.302179	-.279465	-.258356	-.238746	-.220559	-.203673	-.188003	-.173509	-.160072
1.82	-.196511	-.179636	-.164155	-.149957	-.136953	-.125025	-.114092	-.104100	-.094946
1.98	-.126954	-.114746	-.103681	-.093651	-.084572	-.076340	-.068879	-.062139	-.056033
2.14	-.081746	-.073076	-.065305	-.058339	-.052101	-.046507	-.041492	-.037010	-.032994
2.30	-.052606	-.046524	-.041129	-.036343	-.032102	-.028338	-.024997	-.022044	-.019424
2.46	-.033914	-.029679	-.025959	-.022691	-.019824	-.017304	-.015089	-.013150	-.011448
2.62	-.021950	-.019010	-.016452	-.014225	-.012290	-.010603	-.009135	-.007863	-.006756
2.78	-.014289	-.012247	-.010486	-.008966	-.007656	-.006525	-.005549	-.004711	-.003988
2.94	-.009371	-.007947	-.006729	-.005686	-.004795	-.004031	-.003379	-.002823	-.002348
3.10	-.006199	-.005199	-.004350	-.003629	-.003017	-.002497	-.002057	-.001686	-.001370
3.42	-.002792	-.002282	-.001855	-.001497	-.001199	-.000949	-.000753	-.000591	-.000457
3.74	-.001303	-.001028	-.000801	-.000614	-.000460	-.000334	-.000271	-.000204	-.000150
4.06	-.000621	-.000465	-.000340	-.000239	-.000151	-.000084	-.000096	-.000069	-.000048
4.38	-.000292	-.000208	-.000143	-.000092	-.000026	.000000	-.000034	-.000023	-.000015

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
4.70	-.000127	-.000092	-.000059	-.000035	.000000	.000000	-.000012	-.000008	-.000005
5.02	-.000052	-.000041	-.000024	-.000013	.000000		-.000004	-.000003	-.000002
5.34	-.000021	-.000018	-.000010	-.000005			-.000001	-.000001	-.000000
5.66	-.000009	-.000008	-.000004	-.000002			-.000000	-.000000	.000000
5.98	-.000003	-.000003	-.000002	-.000001			.000000	.000000	
6.30	-.000001	-.000001	-.000001	.000000					
6.94	.000000	-.000000	.000000	.000000					

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
-E	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X	135.81	145.99	156.33	166.97	177.69	188.96	200.87	212.51	224.79
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.009228	.009731	.010247	.010774	.011312	.011863	.012425	.012998	.013583
.02	.035152	.037035	.038962	.040930	.042940	.044991	.047082	.049215	.051387
.03	.075330	.079296	.083348	.087484	.091702	.096000	.100378	.104837	.109373
.04	.127571	.134171	.140906	.147769	.154763	.161880	.169120	.176485	.183969
.05	.189913	.199565	.209401	.219413	.229601	.239958	.250480	.261172	.272023
.06	.260601	.273608	.286844	.300303	.313981	.327868	.341959	.356260	.370757
.07	.338066	.354631	.371468	.388565	.405919	.423517	.441350	.459428	.477731
.08	.420911	.441153	.461700	.482539	.503665	.525059	.546714	.568637	.590806
.09	.507890	.531855	.556150	.580757	.605672	.630871	.656345	.682102	.708115
.10	.597901	.625572	.653588	.681928	.710584	.739529	.768752	.798263	.828029
.12	.783212	.818050	.853227	.888714	.924504	.960560	.996866	1.033433	1.070220
.14	.970322	1.011742	1.053450	1.095412	1.137614	1.180015	1.222595	1.265365	1.308277
.16	1.154205	1.201413	1.248813	1.296367	1.344058	1.391839	1.439688	1.487614	1.535565
.18	1.331064	1.383136	1.435267	1.487412	1.539555	1.591643	1.643653	1.695595	1.747412
.20	1.498100	1.554048	1.609888	1.665574	1.721086	1.776371	1.831406	1.886199	1.940694
.22	1.653324	1.712145	1.770665	1.828838	1.886643	1.944028	2.000971	2.057480	2.113502
.24	1.795404	1.856115	1.916314	1.975954	2.035017	2.093455	2.151247	2.208402	2.264870
.26	1.923537	1.985199	2.046127	2.106276	2.165631	2.224148	2.281811	2.338629	2.394561
.28	2.037337	2.099078	2.159856	2.219632	2.278394	2.336107	2.392760	2.448361	2.502881
.30	2.136753	2.197774	2.257605	2.316214	2.373593	2.429717	2.484582	2.538197	2.590546
.34	2.293459	2.350979	2.406876	2.461139	2.513772	2.564774	2.614159	2.661939	2.708126
.38	2.397395	2.449233	2.499072	2.546926	2.592816	2.636770	2.678821	2.718989	2.757316
.42	2.454084	2.498709	2.541040	2.581116	2.618978	2.654684	2.688290	2.719823	2.749359
.46	2.469843	2.506309	2.540273	2.571804	2.600964	2.627840	2.652509	2.675011	2.695450
.50	2.451149	2.479001	2.504237	2.526953	2.547233	2.565192	2.580926	2.594487	2.606004
.54	2.404241	2.423424	2.439966	2.453989	2.465598	2.474930	2.482100	2.487172	2.490294
.58	2.334890	2.345658	2.353843	2.359589	2.363019	2.364289	2.363526	2.360810	2.356299
.62	2.248274	2.251113	2.251497	2.249589	2.245528	2.239483	2.231591	2.221944	2.210705
.66	2.148938	2.144492	2.137779	2.128977	2.118235	2.105732	2.091609	2.075969	2.058975
.70	2.040789	2.029805	2.016788	2.001927	1.985380	1.967325	1.947906	1.927236	1.905470
.78	1.810697	1.789056	1.765945	1.741556	1.716052	1.689600	1.662336	1.634383	1.605869
.86	1.578037	1.548941	1.518988	1.488357	1.457199	1.425656	1.393844	1.361885	1.329867
.94	1.355709	1.322042	1.288112	1.254070	1.220049	1.186151	1.152467	1.119106	1.086115
1.02	1.151247	1.115407	1.079833	1.044642	1.009935	.975776	.942224	.909369	.877219
1.10	.968358	.932213	.896773	.862115	.828306	.795372	.763338	.732275	.702151
1.18	.808155	.773071	.739029	.706067	.674220	.643476	.613833	.585336	.557925
1.26	.670086	.636991	.605177	.574646	.545402	.517402	.490618	.465074	.440608
1.34	.552619	.522084	.492980	.465277	.438954	.413941	.390192	.367709	.346397
1.42	.453714	.426033	.399857	.375131	.351811	.329811	.309067	.289567	.271206
1.50	.371140	.346401	.323181	.301405	.281013	.261904	.244007	.227294	.211658
1.66	.246242	.227126	.209431	.193057	.177925	.163925	.150977	.139037	.128001
1.82	.162099	.147803	.134738	.122798	.111896	.101930	.092821	.084519	.076933
1.98	.106234	.095786	.086350	.077826	.070133	.063178	.056892	.051224	.046103
2.14	.069505	.061992	.055281	.049285	.043931	.039142	.034858	.031036	.027619



	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X									
2.30	.045510	.040165	.035441	.031263	.027570	.024298	.021402	.018842	.016575
2.46	.029887	.026111	.022806	.019910	.017373	.015147	.013195	.011483	.009982
2.62	.019729	.017068	.014761	.012756	.011015	.009500	.008183	.007036	.006040
2.78	.013116	.011242	.009630	.008239	.007040	.006004	.005112	.004339	.003673
2.94	.008800	.007476	.006344	.005374	.004542	.003829	.003220	.002693	.002243
3.10	.005969	.005027	.004227	.003546	.002962	.002466	.002046	.001681	.001373
3.42	.002855	.002366	.001952	.001602	.001303	.001052	.000843	.000658	.000509
3.74	.001447	.001179	.000953	.000762	.000597	.000461	.000349	.000248	.000186
4.06	.000778	.000622	.000490	.000378	.000280	.000202	.000140	.000077	.000067
4.38	.000440	.000344	.000262	.000192	.000129	.000087	.000055	.000009	.000024
4.70	.000260	.000197	.000143	.000097	.000055	.000037	.000022	.000000	.000008
5.02	.000157	.000116	.000078	.000049	.000022	.000016	.000008	.000000	.000003
5.34	.000097	.000068	.000042	.000024	.000009	.000007	.000003	.000001	.000001
5.66	.000060	.000040	.000022	.000012	.000003	.000003	.000001	.000001	.000000
5.98	.000037	.000023	.000011	.000006	.000001	.000001	.000000	.000000	.000000
6.30	.000022	.000014	.000006	.000003	.000001	.000000	.000000	.000000	.000000
6.94	.000008	.000005	.000001	.000001	.000000	.000000	.000000	.000000	.000000
7.58	.000003	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
8.22	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
8.86	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	24.266	26.950	29.518	32.123	34.539	37.239	40.317	42.855	45.773
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.136405	.142113	.147831	.153569	.159296	.165065	.170877	.176641	.182445
.02	.246301	.256115	.265911	.275707	.285450	.295233	.305059	.314875	.324508
.03	.332563	.345103	.357569	.369987	.382286	.394591	.406906	.419015	.431125
.04	.397815	.411902	.425840	.439660	.453280	.466849	.480370	.493590	.506756
.05	.444449	.459083	.473481	.487678	.501583	.515364	.529024	.542286	.555421
.06	.474647	.488989	.502999	.516717	.530050	.543174	.556095	.568523	.580745
.07	.490394	.503747	.516669	.529206	.541264	.553024	.564496	.575385	.585986
.08	.493498	.505289	.516555	.527342	.537560	.547394	.556852	.565647	.574073
.09	.485598	.495369	.504525	.513113	.521049	.528517	.535526	.541804	.547636
.10	.468187	.475578	.482271	.488315	.493634	.498406	.502644	.506095	.509031
.12	.410111	.412004	.413062	.413338	.412779	.411544	.409650	.406901	.403529
.14	.328632	.324508	.319461	.313548	.306743	.299179	.290877	.281715	.271868
.16	.231402	.221186	.210013	.197943	.184981	.171228	.156712	.141388	.125371
.18	.124639	.108585	.091598	.073736	.055038	.035571	.015367	-.005534	-.027085
.20	.013353	-.008042	-.030294	-.053345	-.077124	-.101601	-.126736	-.152410	-.178641
.22	-.098455	-.124526	-.151330	-.178809	-.206861	-.235493	-.264660	-.294164	-.324091
.24	-.207633	-.237608	-.268146	-.299193	-.330619	-.362465	-.394685	-.427006	-.459579
.26	-.311739	-.344780	-.378180	-.411885	-.445743	-.479829	-.514092	-.548199	-.582356
.28	-.408922	-.444167	-.479535	-.514977	-.550320	-.585672	-.620981	-.655857	-.690561
.30	-.497825	-.534413	-.570865	-.607139	-.643044	-.678719	-.714111	-.748787	-.783056
.34	-.647327	-.684131	-.720239	-.755624	-.790077	-.823789	-.856713	-.888357	-.919105
.38	-.756331	-.790375	-.823148	-.854645	-.884654	-.913409	-.940874	-.966539	-.990838
.42	-.824560	-.853361	-.880343	-.905526	-.928716	-.950174	-.969883	-.987354	-1.003044
.46	-.854078	-.875692	-.894999	-.912047	-.926675	-.939161	-.949509	-.957289	-.962951
.50	-.848361	-.861377	-.871682	-.879354	-.884277	-.886736	-.886759	-.884000	-.878888
.54	-.811646	-.815149	-.815638	-.813219	-.807831	-.799756	-.789047	-.775469	-.759403
.58	-.748489	-.742007	-.732313	-.719543	-.703698	-.685048	-.663670	-.639456	-.612724
.62	-.663461	-.646899	-.627038	-.604039	-.577973	-.549083	-.517477	-.483179	-.446434
.66	-.560954	-.534533	-.504830	-.472034	-.436282	-.397788	-.356683	-.313131	-.267294
.70	-.445055	-.409249	-.370280	-.328357	-.283684	-.236440	-.186779	-.135001	-.081180
.78	-.187556	-.135132	-.080044	-.022531	.037081	.098699	.162133	.226830	.292901
.86	.084169	.149595	.216915	.285879	.356067	.427478	.499902	.572584	.645811
.94	.351588	.426036	.501436	.577546	.653884	.730543	.807309	.883292	.958927
1.02	.601812	.681372	.760862	.840065	.918474	.996268	1.073247	1.148452	1.222436

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X									
1.10	.826612	.907719	.987732	1.066475	1.143450	1.218909	1.292677	1.363799	1.432904
1.18	1.021409	1.100997	1.178528	1.253876	1.326580	1.396953	1.464855	1.529392	1.591234
1.26	1.184365	1.259929	1.332578	1.402238	1.468514	1.531760	1.591880	1.648091	1.701065
1.34	1.315598	1.385200	1.451156	1.513453	1.571775	1.626503	1.677590	1.724400	1.767580
1.42	1.416565	1.478792	1.536788	1.590596	1.639996	1.685380	1.726752	1.763648	1.796664
1.50	1.489565	1.543475	1.592714	1.637384	1.677366	1.713048	1.744487	1.771407	1.794332
1.66	1.562979	1.598969	1.629833	1.655771	1.676874	1.693496	1.705793	1.713868	1.718073
1.82	1.559509	1.577767	1.590932	1.599284	1.603105	1.602689	1.598279	1.590319	1.578975
1.98	1.501519	1.503716	1.501231	1.494397	1.483657	1.469233	1.451435	1.430975	1.407845
2.14	1.407884	1.396466	1.381036	1.361962	1.339804	1.314710	1.287035	1.257666	1.226454
2.30	1.293462	1.271157	1.245671	1.217384	1.186923	1.154374	1.120104	1.085093	1.049082
2.46	1.169362	1.138870	1.106097	1.071420	1.035492	.998334	.960307	.922405	.884281
2.62	1.043520	1.007322	.969746	.931148	.892169	.852774	.813293	.774673	.736508
2.78	.921332	.881591	.841328	.800864	.760793	.721034	.681865	.644143	.607425
2.94	.806248	.764774	.723548	.682848	.643198	.604473	.568890	.531191	.496907
3.10	.700268	.658517	.617677	.577976	.539853	.503146	.468001	.435035	.403767
3.42	.518736	.479503	.442157	.406816	.373735	.342686	.313675	.287084	.262426
3.74	.377062	.342690	.310733	.281206	.254195	.229426	.206783	.186473	.168018
4.06	.270240	.241554	.215448	.191857	.170739	.151785	.134802	.119885	.106579
4.38	.191656	.168549	.147940	.129702	.113714	.099650	.087276	.076635	.067297
4.70	.134883	.116764	.100908	.087158	.075347	.065150	.056324	.048899	.042476
5.02	.094421	.080504	.068546	.058375	.049814	.042550	.036353	.031258	.026903
5.34	.065877	.055357	.046477	.039064	.032951	.027844	.023538	.020088	.017163
5.66	.045892	.038038	.031522	.026180	.021864	.018308	.015338	.013023	.011070
5.98	.031978	.026168	.021429	.017612	.014592	.012132	.010088	.008546	.007245
6.30	.022325	.018057	.014633	.011920	.009821	.008125	.006718	.005695	.004827
6.94	.011023	.008743	.006973	.005614	.004611	.003804	.003126	.002679	.002284
7.58	.005606	.004385	.003469	.002784	.002305	.001914	.001572	.001375	.001186
8.22	.002980	.002312	.001828	.001473	.001242	.001044	.000858	.000769	.000672
8.86	.001677	.001294	.001028	.000837	.000721	.000614	.000504	.000463	.000408
9.50	.001005	.000772	.000618	.000507	.000447	.000384	.000314	.000294	.000260
10.14	.000641	.000488	.000392	.000325	.000291	.000252	.000204	.000194	.000172
10.78	.000430	.000324	.000261	.000216	.000196	.000170	.000137	.000131	.000116
11.42	.000301	.000223	.000179	.000149	.000136	.000117	.000094	.000090	.000079
12.06	.000217	.000157	.000126	.000104	.000095	.000082	.000065	.000063	.000055
12.70	.000159	.000113	.000090	.000074	.000067	.000058	.000046	.000044	.000038
13.98	.000089	.000060	.000047	.000039	.000034	.000029	.000023	.000022	.000019
15.26	.000051	.000033	.000026	.000021	.000017	.000015	.000012	.000011	.000009
16.54	.000029	.000018	.000014	.000011	.000009	.000007	.000007	.000005	.000004
17.82	.000017	.000010	.000008	.000007	.000004	.000003	.000004	.000002	.000002
19.10	.000009	.000006	.000005	.000004	.000002	.000002	.000002	.000001	.000001
20.38	.000005	.000003	.000003	.000002	.000001	.000001	.000001	.000000	.000000
21.66	.000003	.000002	.000002	.000001	.000000	.000000	.000001	.000000	.000000
22.94	.000001	.000001	.000001	.000001	.000000	.000000	.000000	.000000	.000000
24.22	.000001	.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	18.975	21.400	23.708	26.053	28.208	30.644	33.453	35.725	38.373
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.003796	.004050	.004311	.004579	.004853	.005135	.005423	.005718	.006020
.02	.014457	.015408	.016386	.017390	.018416	.019468	.020545	.021643	.022765
.03	.030967	.032977	.035039	.037151	.039310	.041519	.043778	.046077	.048425
.04	.052412	.055763	.059196	.062709	.066295	.069959	.073701	.077505	.081385
.05	.077965	.082874	.087898	.093030	.098262	.103601	.109047	.114575	.120206
.06	.106883	.113508	.120278	.127186	.134218	.141385	.148685	.156085	.163611
.07	.130495	.146943	.155565	.164348	.173278	.182365	.191609	.200966	.210470
.08	.172201	.182534	.193064	.203777	.214652	.225702	.236927	.248273	.259781
.09	.207462	.219704	.232160	.244813	.257638	.270650	.283850	.297170	.310662

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
X									
.10	.243797	-.257936	.272300	-.286869	.301613	-.316551	.331679	-.346923	.362338
.12	.318015	-.335803	.353817	-.372030	.390400	-.408952	.427682	-.446490	.465450
.14	.391956	-.413054	.434347	-.455799	.477361	-.499062	.520895	-.542739	.564683
.16	.463355	-.487293	.511363	-.535523	.559713	-.583966	.608278	-.632502	.656745
.18	.530469	-.556692	.582954	-.609205	.635379	-.661514	.687602	-.713480	.739268
.20	.591991	-.619893	.647713	-.675396	.702869	-.730175	.757306	-.784080	.810634
.22	.646974	-.675926	.704651	-.733092	.761167	-.788926	.816362	-.843279	.869827
.24	.694769	-.724141	.753121	-.781650	.809642	-.837154	.864178	-.890510	.916310
.26	.734971	-.764148	.792752	-.820724	.847978	-.874574	.900509	-.925570	.949928
.28	.767375	-.795767	.823397	-.850205	.876104	-.901163	.925380	-.948540	.970824
.30	.791935	-.818993	.845090	-.870171	.894150	-.917104	.939034	-.959725	.979369
.34	.817975	-.840883	.862432	-.882578	.901245	-.918523	.934425	-.948752	.961704
.38	.814872	-.831983	.847356	-.860962	.872747	-.882814	.891191	-.897706	.902566
.42	.785410	-.795476	.803467	-.809378	.813178	-.814987	.814850	-.812635	.808550
.46	.732899	-.735060	.734867	-.732345	.727495	-.720449	.711272	-.699883	.686485
.50	.660855	-.654602	.645790	-.634474	.620692	-.604588	.586245	-.565646	.542979
.54	.572779	-.557915	.540366	-.520219	.497552	-.472517	.445218	-.415705	.384146
.58	.472021	-.448615	.422479	-.393732	.362496	-.328925	.293146	-.255277	.215463
.62	.361693	-.330033	.295678	-.258781	.219502	-.178000	.134420	-.088950	.041707
.66	.244620	-.205170	.163137	-.118704	.072072	-.023398	-.027157	-.079333	-.133050
.70	.123323	-.076682	.027640	-.023591	-.076773	-.131754	-.188359	-.246262	-.305420
.78	-.123415	-.182276	-.242992	-.305305	-.368914	-.433685	-.499428	-.565703	-.632543
.86	-.364380	-.432263	-.501269	-.571114	-.641456	-.712188	-.783118	-.853727	-.924126
.94	-.589675	-.663312	-.737232	-.811140	-.884674	-.957767	-1.030234	-1.101520	-1.171803
1.02	-.792919	-.869232	-.944940	-1.019758	-1.093328	-1.165625	-1.236487	-1.305360	-1.372480
1.10	-.970515	-1.046761	-1.121528	-1.194551	-1.265501	-1.334395	-1.401105	-1.465116	-1.526705
1.18	-1.120971	-1.194827	-1.266381	-1.335406	-1.401617	-1.465074	-1.525691	-1.583020	-1.637369
1.26	-1.244326	-1.313909	-1.380452	-1.443775	-1.503654	-1.560186	-1.613335	-1.662744	-1.708737
1.34	-1.341679	-1.405536	-1.465721	-1.522105	-1.574536	-1.623147	-1.667952	-1.708705	-1.745732
1.42	-1.414817	-1.471892	-1.524776	-1.573398	-1.617685	-1.657800	-1.693810	-1.725591	-1.753459
1.50	-1.465931	-1.515517	-1.560512	-1.600904	-1.636702	-1.668097	-1.695208	-1.718036	-1.736881
1.66	-1.511669	-1.545306	-1.573894	-1.597541	-1.616420	-1.630764	-1.640793	-1.646748	-1.648885
1.82	-1.497908	-1.515734	-1.528464	-1.536317	-1.539612	-1.538615	-1.533633	-1.525109	-1.513249
1.98	-1.441845	-1.445146	-1.443634	-1.437624	-1.427558	-1.413725	-1.396498	-1.376467	-1.353791
2.14	-1.357777	-1.348472	-1.334882	-1.317405	-1.296570	-1.272683	-1.246158	-1.217669	-1.187335
2.30	-1.256954	-1.237232	-1.213925	-1.187489	-1.158507	-1.127293	-1.094275	-1.060153	-1.025013
2.46	-1.147866	-1.119952	-1.089249	-1.056255	-1.021570	-.985505	-.948479	-.911163	-.873611
2.62	-1.036687	-1.002688	-.966733	-.929345	-.891105	-.852315	-.813358	-.774839	-.736779
2.78	-.927737	-.889550	-.850234	-.810311	-.770322	-.730547	-.691311	-.653129	-.615989
2.94	-.823890	-.783163	-.742087	-.701169	-.660884	-.621482	-.583218	-.546500	-.511281
3.10	-.726932	-.685047	-.643521	-.602830	-.563370	-.525353	-.488951	-.454467	-.421813
3.42	-.557009	-.515932	-.476355	-.438662	-.403071	-.369693	-.338531	-.309704	-.283039
3.74	-.419806	-.382222	-.346888	-.314070	-.283819	-.256130	-.230859	-.208003	-.187299
4.06	-.312495	-.279705	-.249557	-.222200	-.197553	-.175495	-.155772	-.138331	-.122828
4.38	-.230450	-.202812	-.177929	-.155844	-.136384	-.119331	-.104364	-.091434	-.080132
4.70	-.168764	-.146063	-.126034	-.108632	-.093635	-.080748	-.069625	-.060251	-.052176
5.02	-.122961	-.104681	-.088866	-.075410	-.064071	-.054502	-.046363	-.039688	-.034006
5.34	-.089272	-.074773	-.062473	-.052220	-.043778	-.036769	-.030879	-.026197	-.022244
5.66	-.064668	-.053301	-.043847	-.036124	-.029918	-.024840	-.020611	-.017368	-.014642
5.98	-.046792	-.037960	-.030760	-.024997	-.020483	-.016834	-.013812	-.011593	-.009725
6.30	-.033853	-.027035	-.021592	-.017321	-.014070	-.011465	-.009310	-.007809	-.006534
6.94	-.017776	-.013760	-.010697	-.008388	-.006745	-.005435	-.004334	-.003675	-.003084
7.58	-.009425	-.007071	-.005367	-.004136	-.003335	-.002684	-.002107	-.001840	-.001566
8.22	-.005076	-.003686	-.002743	-.002090	-.001720	-.001397	-.001080	-.000992	-.000863
8.86	-.002792	-.001957	-.001433	-.001088	-.000933	-.000773	-.000586	-.000576	-.000514
9.50	-.001576	-.001059	-.000766	-.000584	-.000536	-.000456	-.000336	-.000359	-.000327
10.14	-.000915	-.000583	-.000419	-.000323	-.000325	-.000285	-.000202	-.000236	-.000219
10.78	-.000547	-.000325	-.000232	-.000182	-.000207	-.000187	-.000126	-.000162	-.000153
11.42	-.000336	-.000182	-.000129	-.000104	-.000138	-.000128	-.000080	-.000115	-.000109
12.06	-.000211	-.000101	-.000071	-.000059	-.000095	-.000091	-.000052	-.000083	-.000080

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
12.70	-.000135	-.000055	-.000039	-.000033	-.000067	-.000065	-.000033	-.000062	-.000059
13.98	-.000055	-.000016	-.000011	-.000010	-.000035	-.000036	-.000014	-.000035	-.000034
15.26	-.000022	-.000005	-.000003	-.000003	-.000020	-.000021	-.000005	-.000020	-.000020
16.54	-.000009	-.000001	-.000001	-.000001	-.000011	-.000012	-.000002	-.000012	-.000012
17.82	-.000003	-.000000	-.000000	-.000000	-.000007	-.000007	-.000001	-.000007	-.000007
19.10	-.000001	.000000	.000000	.000000	-.000004	-.000004	-.000000	-.000004	-.000004
20.38	-.000000				-.000002	-.000003	.000000	-.000003	-.000002
21.66	.000000				-.000001	-.000002		-.000001	-.000001
22.94					-.000001	-.000001		-.000001	-.000001
24.22					-.000000	-.000000		-.000000	-.000000

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
-E	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
9.4646	11.389	13.199	15.045	16.704	18.639	20.942	22.714	24.857	
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000017	.000018	.000020	.000022	.000024	.000027	.000029	.000031	.000034
.02	.000128	.000142	.000157	.000172	.000189	.000206	.000224	.000243	.000263
.03	.000419	.000464	.000512	.000563	.000616	.000671	.000729	.000790	.000854
.04	.000963	.001065	.001174	.001289	.001410	.001536	.001669	.001807	.001952
.05	.001821	.002014	.002219	.002434	.002661	.002898	.003146	.003405	.003676
.06	.003049	.003370	.003711	.004068	.004444	.004838	.005249	.005679	.006126
.07	.004691	.005183	.005703	.006249	.006823	.007423	.008049	.008703	.009385
.08	.006786	.007494	.008241	.009025	.009848	.010708	.011605	.012542	.013517
.09	.009365	.010337	.011361	.012435	.013562	.014737	.015963	.017242	.018572
.10	.012455	.013739	.015091	.016509	.017995	.019544	.021158	.022842	.024590
.12	.020238	.022299	.024467	.026737	.029110	.031582	.034153	.036831	.039608
.14	.030240	.033282	.036478	.039817	.043304	.046930	.050695	.054611	.058666
.16	.042500	.046723	.051152	.055773	.060592	.065594	.070780	.076166	.081735
.18	.057007	.062601	.068460	.074563	.080916	.087501	.094318	.101387	.108685
.20	.073708	.080851	.088320	.096089	.104163	.112519	.121156	.130098	.139314
.22	.092519	.101374	.110617	.120216	.130176	.140468	.151089	.162069	.173369
.24	.113332	.124043	.135205	.146778	.158768	.171138	.183883	.197038	.210555
.26	.136022	.148714	.161919	.175589	.189730	.204294	.219277	.234716	.250557
.28	.160449	.175229	.190582	.206450	.222837	.239688	.256996	.274804	.293047
.30	.186466	.203422	.221007	.239151	.257859	.277066	.296762	.316995	.337689
.34	.242662	.264156	.286377	.309228	.332714	.356746	.381311	.406466	.432110
.38	.303382	.329549	.356511	.384146	.412454	.441325	.470741	.500763	.531272
.42	.367434	.398278	.429954	.462312	.495345	.528924	.563021	.597705	.632835
.46	.433698	.469115	.505363	.542264	.579808	.617840	.656329	.695347	.734733
.50	.501153	.540943	.581528	.622700	.664442	.706579	.749074	.792003	.835187
.54	.568887	.612778	.657387	.702480	.748034	.793855	.839902	.886251	.932708
.58	.636102	.683759	.732024	.780633	.829560	.878592	.927685	.976918	1.026085
.62	.702110	.753156	.804663	.856344	.908167	.959905	1.011511	1.063068	1.114358
.66	.766328	.820354	.874663	.928946	.983167	1.037088	1.090661	1.143972	1.196797
.70	.828271	.884849	.941504	.997906	1.054020	1.109597	1.164592	1.219095	1.272877
.78	.943839	1.004206	1.064167	1.123365	1.181767	1.239116	1.295375	1.350646	1.404703
.86	1.046591	1.109019	1.170495	1.230646	1.289451	1.346658	1.402246	1.456335	1.508710
.94	1.135345	1.198220	1.259561	1.318998	1.376529	1.431918	1.485168	1.536424	1.585494
1.02	1.209722	1.271598	1.331354	1.388635	1.443466	1.495640	1.545189	1.592291	1.636781
1.10	1.269934	1.329566	1.386510	1.440439	1.491414	1.539262	1.584054	1.626002	1.664977
1.18	1.316611	1.372965	1.426098	1.475724	1.521946	1.564634	1.603898	1.639992	1.672823
1.26	1.350657	1.402904	1.451448	1.496051	1.536865	1.573807	1.607032	1.636833	1.663162
1.34	1.373142	1.420645	1.464022	1.503093	1.538058	1.568888	1.595784	1.619078	1.638768
1.42	1.385216	1.427513	1.465323	1.498534	1.527394	1.551933	1.572397	1.589156	1.602257
1.50	1.388047	1.424826	1.456828	1.484006	1.506663	1.524885	1.538967	1.549313	1.556017
1.66	1.370498	1.395816	1.415973	1.431071	1.441511	1.447507	1.449438	1.447760	1.442672
1.82	1.328891	1.342824	1.351468	1.355078	1.354145	1.349008	1.340125	1.327975	1.312860
1.98	1.270357	1.273528	1.271510	1.264710	1.253696	1.238924	1.220916	1.200144	1.177007
2.14	1.200671	1.194046	1.182530	1.166671	1.147093	1.124364	1.099046	1.071574	1.042431

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
2.30	1.124368	1.109108	1.089413	1.065963	1.039413	1.010428	.979587	.947257	.913991
2.46	1.044917	1.022269	.995767	.966202	.934239	.900619	.865914	.830396	.794671
2.62	.964916	.936137	.904173	.869908	.833989	.797210	.760109	.722852	.686070
2.78	.886257	.852564	.816411	.778748	.740183	.701540	.663299	.625508	.588801
2.94	.810286	.772819	.733639	.693742	.653676	.614266	.575915	.538556	.502798
3.10	.737917	.697713	.656546	.615426	.574826	.535549	.497907	.461717	.427549
3.42	.606057	.563045	.520475	.479326	.439887	.402845	.368307	.335902	.306064
3.74	.492663	.449614	.408202	.369298	.332987	.299782	.269575	.241880	.216953
4.06	.397377	.356198	.317581	.282241	.250070	.221367	.195842	.172963	.152797
4.38	.318641	.280513	.245599	.214430	.186732	.162584	.141558	.123136	.107207
4.70	.254387	.219932	.189096	.162214	.138888	.118988	.101998	.087455	.075101
5.02	.202438	.171877	.145131	.122349	.103041	.086905	.073375	.062074	.052626
5.34	.160733	.134015	.111144	.092101	.076340	.063421	.052770	.044098	.036952
5.66	.127427	.104333	.084998	.069256	.056535	.046297	.037985	.031401	.026043
5.98	.100933	.081150	.064953	.052057	.041887	.033839	.027397	.022442	.018453
6.30	.079917	.063091	.049625	.039138	.031070	.024787	.019820	.016121	.013168
6.94	.050125	.038146	.028999	.022183	.017207	.013437	.010516	.008499	.006902
7.58	.031525	.023120	.017013	.012660	.009657	.007432	.005726	.004660	.003808
8.22	.019921	.014074	.010046	.007302	.005526	.004229	.003233	.002693	.002244
8.86	.012668	.008619	.005986	.004274	.003246	.002499	.001912	.001658	.001424
9.50	.008118	.005318	.003607	.002548	.001971	.001546	.001195	.001093	.000974
10.14	.005249	.003310	.002204	.001555	.001246	.001009	.000792	.000771	.000712
10.78	.003428	.002080	.001369	.000976	.000825	.000696	.000556	.000577	.000549
11.42	.002263	.001321	.000866	.000632	.000573	.000507	.000412	.000452	.000440
12.06	.001511	.000849	.000560	.000425	.000417	.000387	.000318	.000366	.000362
12.70	.001021	.000551	.000371	.000296	.000318	.000308	.000253	.000305	.000304
13.98	.000484	.000241	.000176	.000161	.000206	.000212	.000172	.000221	.000221
15.26	.000240	.000110	.000093	.000100	.000147	.000157	.000123	.000166	.000165
16.54	.000124	.000052	.000055	.000068	.000112	.000121	.000091	.000127	.000125
17.82	.000067	.000025	.000036	.000050	.000088	.000095	.000068	.000098	.000095
19.10	.000037	.000012	.000025	.000038	.000071	.000075	.000051	.000076	.000073
20.38	.000021	.000006	.000019	.000029	.000057	.000060	.000039	.000059	.000056
21.66	.000012	.000003	.000015	.000023	.000047	.000048	.000029	.000046	.000043
22.94	.000007	.000001	.000012	.000018	.000038	.000039	.000022	.000036	.000033
24.22	.000004	.000000	.000009	.000014	.000031	.000031	.000017	.000027	.000025
25.50	.000002	.000000	.000008	.000011	.000025	.000024	.000012	.000021	.000019
28.06	.000001	.000000	.000005	.000007	.000016	.000015	.000007	.000012	.000010
30.62	.000000	.000000	.000004	.000004	.000010	.000009	.000004	.000007	.000006
33.18	.000000	.000000	.000002	.000002	.000006	.000005	.000002	.000004	.000003
35.74	.000000	.000000	.000002	.000001	.000003	.000003	.000001	.000002	.000002
38.30	.000000	.000000	.000001	.000001	.000002	.000002	.000000	.000001	.000001
40.86	.000000	.000000	.000001	.000000	.000001	.000001	.000000	.000001	.000000
43.42	.000000	.000000	.000001	.000000	.000001	.000001	.000000	.000000	.000000
45.98	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	3.0471	3.7936	4.3377	4.8495	5.1157	5.5875	6.3453	6.5384	7.0206
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.046079	.050537	.054394	.058042	.061109	.064515	.068335	.071142	.074388
.02	.083197	.091070	.097832	.104195	.109493	.115379	.121981	.126757	.132294
.03	.112321	.122695	.131534	.139803	.146612	.154180	.162674	.168703	.175721
.04	.134333	.146413	.156612	.166089	.173794	.182362	.191987	.198666	.206479
.05	.150040	.163136	.174078	.184166	.192244	.201236	.211345	.218171	.226203
.06	.160177	.173696	.184854	.195045	.203057	.211986	.222038	.228593	.236369
.07	.165417	.178850	.189776	.199644	.207224	.215686	.225231	.231175	.238309
.08	.166368	.179285	.189605	.198794	.205643	.213307	.221976	.227039	.233218
.09	.163588	.175627	.185029	.193248	.199124	.205725	.213222	.217192	.222174

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
.10	.157580	.168443	.176675	.183690	.188403	.193731	.199824	.202542	.206144
.12	.137677	.145506	.150838	.154937	.156931	.159284	.162088	.162006	.162496
.14	.109840	.114034	.115997	.116776	.115771	.114841	.114018	.110978	.108165
.16	.076678	.076930	.075325	.072643	.068589	.064325	.059818	.053887	.047828
.18	.040311	.036551	.031386	.025301	.018319	.010858	.002823	-.005772	-.014835
.20	.002457	-.005209	-.013770	-.023053	-.032713	-.043095	-.054353	-.065271	-.076969
.22	-.035514	-.046844	-.058520	-.070689	-.082690	-.095623	-.109692	-.122522	-.136405
.24	-.072516	-.087171	-.101603	-.116269	-.130220	-.145270	-.161670	-.175958	-.191527
.26	-.107709	-.125281	-.142053	-.158784	-.174257	-.190958	-.209171	-.224446	-.241183
.28	-.140452	-.160490	-.179156	-.197493	-.214049	-.231918	-.251412	-.267205	-.284590
.30	-.170277	-.192303	-.212402	-.231879	-.249079	-.267636	-.287882	-.303738	-.321271
.34	-.219970	-.244520	-.266110	-.286498	-.303727	-.322290	-.342531	-.357260	-.373697
.38	-.255431	-.280633	-.301990	-.321601	-.337351	-.354281	-.372721	-.384890	-.398646
.42	-.276572	-.300736	-.320346	-.337730	-.350752	-.364702	-.379866	-.388374	-.398223
.46	-.284132	-.305810	-.322419	-.336409	-.345739	-.355676	-.366446	-.370522	-.375607
.50	-.279355	-.297369	-.309999	-.319715	-.324677	-.329880	-.335482	-.334672	-.334484
.54	-.263761	-.277211	-.285156	-.289995	-.290174	-.290215	-.290196	-.284325	-.278662
.58	-.238996	-.247242	-.250046	-.249661	-.244880	-.239588	-.233777	-.222909	-.211833
.62	-.206719	-.209362	-.206797	-.201061	-.191348	-.180771	-.169240	-.153637	-.137426
.66	-.168532	-.165387	-.157421	-.146403	-.131953	-.116323	-.099343	-.079420	-.058521
.70	-.125937	-.117005	-.103772	-.087697	-.068844	-.048539	-.026538	-.002825	.022187
.78	-.032876	-.012967	.009876	.034905	.061172	.089279	.119590	.148996	.180190
.86	.063203	.092558	.123180	.155085	.186513	.219946	.255831	.288200	.322617
.94	.155321	.192039	.228194	.264570	.298722	.334831	.373384	.406017	.440736
1.02	.238573	.280311	.319621	.358007	.392504	.428722	.467152	.497599	.529975
1.10	.309801	.354178	.394323	.432389	.465064	.499074	.534878	.561064	.588862
1.18	.367244	.411990	.450838	.486499	.515486	.545312	.576373	.596649	.618100
1.26	.410208	.453264	.488946	.520420	.544196	.568240	.592862	.606012	.619815
1.34	.438787	.478353	.509296	.535133	.552521	.569564	.586475	.591685	.596983
1.42	.453618	.488180	.513117	.532194	.542346	.551532	.559854	.556677	.553006
1.50	.455699	.484030	.501991	.513493	.515862	.516661	.515873	.504178	.491416
1.66	.426573	.439841	.442008	.437004	.423199	.406736	.387374	.359257	.329043
1.82	.361955	.358269	.343691	.321867	.292423	.259492	.222633	.180130	.134742
1.98	.272135	.251132	.220261	.182647	.139251	.091857	.039864	-.014086	-.071420
2.14	.166139	.128590	.082859	.031383	-.023573	-.082708	-.146737	-.208802	-.274452
2.30	.051411	-.001129	-.059650	-.122525	-.186293	-.254118	-.326775	-.393593	-.463939
2.46	-.066180	-.131647	-.200531	-.272086	-.341829	-.415243	-.493124	-.561562	-.633259
2.62	-.182171	-.258216	-.334886	-.412358	-.485335	-.561394	-.641317	-.708624	-.778772
2.78	-.293288	-.377451	-.459340	-.540073	-.613769	-.689818	-.768956	-.832853	-.899078
2.94	-.397235	-.487069	-.571736	-.653287	-.725494	-.799245	-.875205	-.933910	-.994382
3.10	-.492499	-.585665	-.670871	-.751077	-.819934	-.889500	-.960349	-1.012565	-1.065977
3.42	-.653860	-.747414	-.828010	-.900300	-.958315	-1.015458	-1.072065	-1.109136	-1.146332
3.74	-.775235	-.862342	-.932617	-.992153	-1.036030	-1.077737	-1.117325	-1.138649	-1.159187
4.06	-.858920	-.934698	-.991101	-1.035336	-1.063985	-1.089537	-1.111713	-1.118570	-1.123887
4.38	-.909443	-.970820	-1.011638	-1.039844	-1.053771	-1.064019	-1.069964	-1.064649	-1.057162
4.70	-.932189	-.977612	-1.002557	-1.015309	-1.016028	-1.012766	-1.004553	-.989744	-.972204
5.02	-.932577	-.961681	-.971480	-.970198	-.959761	-.945234	-.925331	-.903670	-.878763
5.34	-.915621	-.928907	-.924945	-.911523	-.892171	-.868736	-.839671	-.813529	-.783656
5.66	-.885715	-.884278	-.868316	-.844843	-.818775	-.788688	-.752841	-.724206	-.691389
5.98	-.846571	-.831874	-.805838	-.774410	-.743637	-.708927	-.668419	-.638874	-.604736
6.30	-.801233	-.774943	-.740769	-.703362	-.669637	-.632047	-.588694	-.559436	-.525228
6.94	-.701211	-.656937	-.611875	-.567635	-.532114	-.492812	-.447979	-.421587	-.389734
7.58	-.599335	-.543622	-.493692	-.447895	-.414257	-.376870	-.334333	-.312258	-.284513
8.22	-.503333	-.441724	-.391357	-.347498	-.317698	-.284170	-.245972	-.228435	-.205306
8.86	-.417040	-.353863	-.306017	-.266129	-.240923	-.212046	-.179030	-.165622	-.146925
9.50	-.341881	-.280282	-.236711	-.201755	-.181154	-.156999	-.129248	-.119303	-.104525
10.14	-.277870	-.219966	-.181518	-.151727	-.135337	-.115571	-.092730	-.085543	-.074060
10.78	-.224258	-.171324	-.138217	-.113374	-.100620	-.084717	-.066218	-.061147	-.052339
11.42	-.179932	-.132597	-.104643	-.084283	-.074545	-.061920	-.047121	-.043630	-.036940
12.06	-.143659	-.102081	-.078853	-.062402	-.055093	-.045176	-.033449	-.031110	-.026068

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
12.70	-.114223	-.078237	-.059193	-.046054	-.040659	-.032933	-.023705	-.022192	-.018414
13.98	-.071489	-.045465	-.033067	-.024916	-.022130	-.017528	-.011882	-.011354	-.009256
15.26	-.044295	-.026135	-.018329	-.013412	-.012106	-.009406	-.005966	-.005895	-.004736
16.54	-.027261	-.014909	-.010118	-.007212	-.006705	-.005132	-.003015	-.003137	-.002495
17.82	-.016716	-.008462	-.005581	-.003888	-.003791	-.002873	-.001540	-.001731	-.001370
19.10	-.010242	-.004788	-.003084	-.002109	-.002209	-.001667	-.000799	-.001002	-.000793
20.38	-.006293	-.002707	-.001713	-.001154	-.001339	-.001013	-.000422	-.000614	-.000490
21.66	-.003892	-.001531	-.000959	-.000640	-.000850	-.000649	-.000228	-.000401	-.000324
22.94	-.002436	-.000868	-.000543	-.000361	-.000569	-.000440	-.000127	-.000279	-.000228
24.22	-.001553	-.000494	-.000312	-.000208	-.000401	-.000314	-.000072	-.000205	-.000170
25.50	-.001015	-.000283	-.000182	-.000122	-.000296	-.000235	-.000042	-.000157	-.000132
28.06	-.000480	-.000096	-.000066	-.000045	-.000180	-.000146	-.000016	-.000102	-.000086
30.62	-.000268	-.000034	-.000027	-.000019	-.000120	-.000099	-.000006	-.000070	-.000060
33.18	-.000173	-.000013	-.000012	-.000008	-.000084	-.000069	-.000003	-.000050	-.000043
35.74	-.000124	-.000006	-.000006	-.000004	-.000060	-.000050	-.000001	-.000036	-.000031
38.30	-.000094	-.000003	-.000003	-.000002	-.000045	-.000036	-.000001	-.000026	-.000023
40.86	-.000073	-.000001	-.000001	-.000001	-.000031	-.000026	-.000000	-.000019	-.000016
43.42	-.000057	-.000001	-.000001	-.000001	-.000022	-.000019	-.000000	-.000014	-.000012
45.98	-.000044	-.000000	-.000000	-.000000	-.000016	-.000013		-.000010	-.000009
48.54	-.000034	-.000000	-.000000	-.000000	-.000012	-.000010		-.000007	-.000006
51.10	-.000027				-.000008	-.000007		-.000005	-.000004
56.22	-.000016				-.000004	-.000004		-.000003	-.000002
61.34	-.000009				-.000002	-.000002		-.000001	-.000001
66.46	-.000005				-.000001	-.000001		-.000001	-.000000
71.58	-.000003				-.000001	-.000000		.000000	.000000
76.70	-.000002				-.000000	-.000000		.000000	
81.82	-.000001				.000000				
86.94	-.000001								
92.06	.000000								

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
-E	1.6201	2.1963	2.6024	2.9850	3.1544	3.5073	4.1189	4.2268	4.5955
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.001133	.001300	.001448	.001593	.001721	.001864	.002027	.002157	.002306
.02	.004316	.004947	.005505	.006049	.006530	.007069	.007680	.008163	.008721
.03	.009245	.010586	.011771	.012923	.013937	.015074	.016363	.017378	.018550
.04	.015646	.017899	.019884	.021811	.023502	.025397	.027544	.029226	.031170
.05	.023271	.026598	.029521	.032352	.034829	.037604	.040746	.043197	.046030
.06	.031898	.036425	.040390	.044222	.047565	.051308	.055545	.058834	.062636
.07	.041326	.047146	.052230	.057132	.061394	.066163	.071563	.075730	.080552
.08	.051373	.058553	.064806	.070821	.076033	.081863	.088461	.093527	.099390
.09	.061880	.070460	.077908	.085059	.091231	.098134	.105944	.111906	.118810
.10	.072699	.082698	.091352	.099639	.106766	.114734	.123747	.130586	.138511
.12	.094775	.107594	.118615	.129119	.138081	.148094	.159412	.167894	.177736
.14	.116726	.132240	.145485	.158042	.168667	.180527	.193928	.203830	.215341
.16	.137868	.155858	.171102	.185474	.197520	.210960	.226138	.237181	.250044
.18	.157675	.177852	.194814	.210708	.223895	.238598	.255195	.267063	.280920
.20	.175750	.197781	.216140	.233232	.247253	.262876	.280505	.292864	.307338
.22	.191807	.215327	.234744	.252689	.267227	.283416	.301676	.314192	.328900
.24	.205648	.230279	.250404	.268855	.283591	.299991	.318485	.330829	.345401
.26	.217151	.242509	.262993	.281606	.296230	.312499	.330840	.342701	.356784
.28	.226254	.251961	.272463	.290906	.305124	.320933	.338755	.349845	.363110
.30	.232945	.258633	.278828	.296786	.310321	.325366	.342328	.352384	.364533
.34	.239233	.263853	.282535	.298662	.310099	.322807	.337146	.344464	.353616
.38	.236578	.258902	.275029	.288350	.296877	.306360	.317091	.320981	.326347
.42	.225853	.244861	.257594	.267347	.272363	.277970	.284373	.284384	.285445
.46	.208100	.222984	.231693	.237327	.238436	.239740	.241353	.237254	.233740

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
.50	.184430	.194592	.198842	.200009	.196998	.193780	.190371	.182127	.173989
.54	.155955	.160992	.160532	.157061	.149882	.142104	.133645	.121385	.108758
.58	.123743	.123429	.118167	.110047	.098792	.086570	.073204	.057192	.040364
.62	.088791	.083058	.073042	.060393	.045270	.028849	.010859	-.008536	-.029161
.66	.052009	.040924	.026318	.009374	-.009316	-.029593	-.051811	-.074143	-.098073
.70	.014215	-.002042	-.020978	-.041897	-.063780	-.087493	-.113460	-.138228	-.164909
.78	-.061629	-.087336	-.113861	-.141511	-.168471	-.197587	-.229400	-.257422	-.287816
.86	-.134104	-.167648	-.200022	-.232521	-.262646	-.295045	-.330331	-.359418	-.391108
.94	-.199926	-.239402	-.275703	-.311047	-.342398	-.375948	-.412335	-.440425	-.471131
1.02	-.256958	-.300354	-.338639	-.374862	-.405610	-.438315	-.473601	-.498874	-.526591
1.10	-.303982	-.349314	-.387736	-.423017	-.451528	-.481618	-.513861	-.534904	-.557864
1.18	-.340490	-.385892	-.422773	-.455498	-.480376	-.506354	-.533926	-.549350	-.566445
1.26	-.366502	-.410282	-.444151	-.472944	-.493051	-.513708	-.535306	-.544339	-.554514
1.34	-.382407	-.423082	-.452694	-.476425	-.490875	-.505284	-.519924	-.521987	-.524613
1.42	-.388846	-.425149	-.449486	-.467267	-.475413	-.482911	-.489901	-.484680	-.479419
1.50	-.386614	-.417494	-.435756	-.446924	-.448336	-.448498	-.447415	-.434822	-.421586
1.66	-.359663	-.377361	-.381859	-.378615	-.366011	-.351042	-.333440	-.306579	-.277945
1.82	-.308688	-.311285	-.300990	-.282856	-.256501	-.226868	-.193437	-.153846	-.111544
1.98	-.240354	-.227120	-.202070	-.169600	-.130637	-.087745	-.040195	.009879	.063352
2.14	-.160421	-.131539	-.092560	-.047032	.002820	.056963	.116292	.174251	.236029
2.30	-.073636	-.029968	.021567	.078398	.137087	.200148	.268591	.331747	.398894
2.46	.016210	.073328	.135688	.201793	.267121	.336648	.411452	.477225	.546944
2.62	.106170	.175085	.246340	.319567	.389334	.462913	.541412	.607458	.677234
2.78	.194007	.272879	.351019	.429216	.501324	.576695	.656426	.720717	.788400
2.94	.278068	.364974	.448002	.529107	.601633	.676759	.755542	.816406	.880241
3.10	.357176	.450190	.536191	.618292	.689537	.762652	.838625	.894753	.953386
3.42	.497659	.597381	.684149	.763304	.827879	.892826	.958925	1.003013	1.048639
3.74	.612368	.712275	.794095	.865197	.919294	.972398	1.025000	1.055546	1.086712
4.06	.701275	.796089	.868781	.928468	.970070	1.009572	1.047109	1.064335	1.081344
4.38	.766123	.851875	.912711	.959143	.987662	1.013259	1.035670	1.040880	1.045110
4.70	.809566	.883510	.931002	.963556	.979431	.991824	1.000045	.995110	.988478
5.02	.834615	.895062	.928709	.947659	.951999	.952504	.948061	.935042	.919638
5.34	.844293	.890418	.910463	.916695	.910990	.901243	.885946	.866855	.844707
5.66	.841442	.873095	.880302	.875086	.860986	.842728	.818468	.795125	.768076
5.98	.828614	.846154	.841630	.826440	.805602	.780544	.749154	.723122	.692767
6.30	.808039	.812192	.797243	.773624	.747615	.717350	.680527	.653089	.620759
6.94	.750949	.731414	.699825	.663846	.631570	.594979	.551647	.524209	.490935
7.58	.681887	.643501	.600713	.557659	.523333	.484632	.439291	.414150	.382560
8.22	.608689	.556411	.507147	.461181	.427629	.389661	.345386	.323575	.295054
8.86	.536335	.474750	.422788	.376932	.345843	.310351	.269051	.250814	.225924
9.50	.467812	.400877	.349043	.305326	.277553	.245469	.208185	.193323	.172122
10.14	.404751	.335711	.285980	.245635	.221468	.193164	.160319	.148428	.130689
10.78	.347893	.279281	.232924	.196587	.175960	.151446	.123055	.113663	.099020
11.42	.297403	.231103	.188838	.156720	.139368	.118436	.094260	.086907	.074944
12.06	.253095	.190421	.152556	.124585	.110147	.092471	.072131	.066406	.056711
12.70	.214572	.156369	.122921	.098849	.086932	.072137	.055192	.050747	.042937
13.98	.152830	.104676	.079413	.062058	.054069	.043904	.032407	.029724	.024721
15.26	.107865	.069665	.051181	.038983	.033687	.026824	.019190	.017548	.014373
16.54	.075649	.046274	.033044	.024610	.021104	.016517	.011518	.010485	.008476
17.82	.052839	.030778	.021449	.015672	.013340	.010285	.007037	.006365	.005090
19.10	.036826	.020558	.014041	.010101	.008532	.006497	.004393	.003938	.003122
20.38	.025653	.013826	.009296	.006608	.005537	.004174	.002809	.002489	.001961
21.66	.017890	.009385	.006239	.004397	.003653	.002732	.001842	.001610	.001263
22.94	.012508	.006443	.004253	.002981	.002454	.001825	.001239	.001066	.000834
24.22	.008781	.004482	.002948	.002060	.001680	.001244	.000854	.000723	.000565
25.50	.006199	.003162	.002079	.001450	.001171	.000864	.000602	.000500	.000391
28.06	.003159	.001648	.001087	.000758	.000600	.000441	.000315	.000254	.000199
30.62	.001673	.000911	.000603	.000420	.000327	.000239	.000175	.000137	.000107
33.18	.000927	.000530	.000351	.000243	.000186	.000135	.000100	.000077	.000061
35.74	.000539	.000321	.000211	.000145	.000109	.000079	.000059	.000045	.000035



	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
39.30	.000328	.000200	.000130	.000088	.000066	.000047	.000035	.000027	.000021
40.86	.000207	.000127	.000081	.000054	.000040	.000029	.000021	.000016	.000013
43.42	.000135	.000082	.000051	.000034	.000025	.000018	.000013	.000010	.000008
45.98	.000090	.000053	.000032	.000021	.000015	.000011	.000008	.000006	.000005
48.54	.000061	.000035	.000021	.000013	.000010	.000007	.000005	.000004	.000003
51.10	.000042	.000023	.000013	.000008	.000006	.000004	.000003	.000002	.000002
56.22	.000020	.000010	.000005	.000003	.000002	.000001	.000001	.000001	.000001
61.34	.000010	.000004	.000002	.000001	.000001	.000000	.000000	.000000	.000000
66.46	.000005	.000002	.000001	.000001	.000000	.000000	.000000	.000000	.000000
71.58	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
76.70	.000001	.000000	.000000	.000000					
81.82	.000001	.000000							
86.94	.000000								

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
-E	4D 0	4D 0	4D 1	4D 2	4D 4	4D 5	4D 5	4D 7	4D 8
X			.49970	.62187	.53533	.62444	.96133	.80224	.89205
.00			.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01			.000004	.000005	.000006	.000007	.000009	.000009	.000010
.02			.000034	.000042	.000046	.000054	.000066	.000071	.000080
.03			.000111	.000136	.000151	.000177	.000214	.000230	.000259
.04			.000254	.000313	.000346	.000405	.000489	.000527	.000591
.05			.000479	.000590	.000652	.000763	.000923	.000993	.001113
.06			.000801	.000986	.001090	.001274	.001539	.001655	.001855
.07			.001231	.001515	.001673	.001954	.002360	.002536	.002841
.08			.001779	.002188	.002414	.002819	.003402	.003654	.004091
.09			.002453	.003014	.003324	.003879	.004679	.005023	.005620
.10			.003258	.004001	.004410	.005143	.006200	.006653	.007440
.12			.005280	.006477	.007131	.008308	.010005	.010722	.011978
.14			.007869	.009643	.010604	.012340	.014843	.015891	.017732
.16			.011031	.013502	.014830	.017238	.020712	.022149	.024688
.18			.014757	.018041	.019794	.022982	.027582	.029462	.032803
.20			.019030	.023237	.025465	.029533	.035404	.037775	.042011
.22			.023821	.029054	.031803	.036842	.044115	.047016	.052229
.24			.029098	.035450	.038759	.044848	.053640	.057102	.063362
.26			.034825	.042377	.046279	.053487	.063899	.067946	.075309
.28			.040960	.049783	.054305	.062690	.074807	.079453	.087962
.30			.047461	.057617	.062777	.072385	.086275	.091529	.101214
.34			.061389	.074349	.080817	.092967	.110546	.117006	.129087
.38			.076265	.092143	.099922	.114671	.136028	.143639	.158098
.42			.091757	.110591	.119640	.136969	.162083	.170747	.187483
.46			.107558	.129316	.139557	.159380	.188137	.197714	.216565
.50			.123391	.147981	.159306	.181480	.213685	.224009	.244756
.54			.139012	.166289	.178565	.202903	.238293	.249179	.271561
.58			.154207	.183987	.197064	.223340	.261602	.272848	.296577
.62			.168797	.200860	.214573	.242536	.283315	.294714	.319482
.66			.182632	.216732	.230908	.260287	.303200	.314543	.340031
.70			.195589	.231461	.245923	.276433	.321080	.332160	.358044
.78			.218505	.257081	.271582	.303480	.350360	.360322	.386043
.86			.237030	.277160	.291014	.323147	.370626	.378749	.403110
.94			.250937	.291489	.304065	.335342	.381873	.387543	.409472
1.02			.260218	.300124	.310864	.340292	.384464	.387185	.405765
1.10			.265020	.303301	.311730	.338436	.379003	.378396	.392876
1.18			.265596	.301379	.307107	.330342	.366239	.362037	.371828
1.26			.262268	.294790	.297507	.316652	.346992	.339029	.343695
1.34			.255392	.284001	.283476	.298031	.322097	.310299	.309545
1.42			.245336	.269489	.265558	.275137	.292375	.276746	.270401

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	4D 0	4D 0	4D 1	4D 2	4D 4	4D 5	4D 5	4D 7	4D 8
1.50			.232469	.251722	.244282	.248604	.258605	.239215	.227220
1.66			.199696	.208179	.193630	.186950	.181771	.155290	.132183
1.82			.159644	.156585	.135093	.117267	.096684	.063958	.030474
1.98			.114498	.099641	.071640	.043004	.007478	-.030426	-.073135
2.14			.066057	.039549	.005669	-.033084	-.082588	-.124480	-.175002
2.30			.015773	-.021922	-.060919	-.108844	-.171008	-.215656	-.272444
2.46			-.035189	-.083373	-.126644	-.182629	-.255905	-.302101	-.363579
2.62			-.085908	-.143714	-.190370	-.253210	-.335927	-.382536	-.447173
2.78			-.135662	-.202104	-.251255	-.319709	-.410153	-.456147	-.522516
2.94			-.183890	-.257917	-.308695	-.381532	-.478012	-.522493	-.589307
3.10			-.230171	-.310697	-.362279	-.438317	-.539211	-.581428	-.647558
3.42			-.315747	-.406037	-.457022	-.536219	-.641518	-.677522	-.739576
3.74			-.390942	-.486935	-.534900	-.613579	-.718269	-.746716	-.802141
4.06			-.455343	-.553452	-.596634	-.671951	-.772133	-.792577	-.839914
4.38			-.509207	-.606422	-.643672	-.713571	-.806383	-.819046	-.857675
4.70			-.553197	-.647093	-.677795	-.740897	-.824365	-.829916	-.859808
5.02			-.588194	-.676888	-.700852	-.756333	-.829202	-.828568	-.850086
5.34			-.615165	-.697259	-.714615	-.762079	-.823655	-.817884	-.831624
5.66			-.635080	-.709585	-.720696	-.760064	-.810082	-.800240	-.806922
5.98			-.648864	-.715132	-.720514	-.751935	-.790447	-.777556	-.777947
6.30			-.657368	-.715028	-.715287	-.739071	-.766358	-.751353	-.746218
6.94			-.661519	-.701685	-.693668	-.703473	-.709762	-.692895	-.678857
7.58			-.652657	-.675933	-.662211	-.660044	-.647832	-.631495	-.611055
8.22			-.634691	-.642410	-.625263	-.613170	-.585234	-.570981	-.546161
8.86			-.610554	-.604428	-.585723	-.565621	-.524734	-.513445	-.485830
9.50			-.582423	-.564316	-.545499	-.519095	-.467877	-.459932	-.430738
10.14			-.551914	-.523696	-.505821	-.474595	-.415428	-.410860	-.381006
10.78			-.520214	-.483672	-.467460	-.432671	-.367670	-.366286	-.336457
11.42			-.488194	-.444980	-.430880	-.393584	-.324585	-.326059	-.296756
12.06			-.456485	-.408088	-.396339	-.357414	-.285983	-.289921	-.261506
12.70			-.425535	-.373276	-.363955	-.324124	-.251574	-.257563	-.230286
13.98			-.367067	-.310369	-.305712	-.265721	-.193981	-.202885	-.178321
15.26			-.314197	-.256425	-.255775	-.217163	-.149055	-.159518	-.137891
16.54			-.267355	-.210851	-.213358	-.177064	-.114253	-.125249	-.106522
17.82			-.226435	-.172735	-.177550	-.144101	-.087417	-.098235	-.082224
19.10			-.191047	-.141087	-.147454	-.117088	-.066787	-.076974	-.063424
20.38			-.160675	-.114950	-.122243	-.095006	-.050965	-.060262	-.048890
21.66			-.134760	-.093453	-.101181	-.076989	-.038851	-.047140	-.037663
22.94			-.112753	-.075832	-.083624	-.062313	-.029589	-.036845	-.028996
24.22			-.094135	-.061428	-.069017	-.050376	-.022516	-.028777	-.022310
25.50			-.078438	-.049681	-.056887	-.040682	-.017120	-.022458	-.017155
28.06			-.054172	-.032358	-.038505	-.026447	-.009876	-.013648	-.010125
30.62			-.037181	-.020967	-.025943	-.017125	-.005683	-.008271	-.005963
33.18			-.025378	-.013524	-.017406	-.011048	-.003263	-.004999	-.003504
35.74			-.017237	-.008687	-.011632	-.007103	-.001869	-.003014	-.002055
38.30			-.011656	-.005559	-.007746	-.004553	-.001069	-.001813	-.001203
40.86			-.007850	-.003545	-.005140	-.002909	-.000611	-.001088	-.000704
43.42			-.005268	-.002254	-.003401	-.001854	-.000349	-.000652	-.000411
45.98			-.003523	-.001429	-.002244	-.001179	-.000199	-.000390	-.000240
48.54			-.002349	-.000903	-.001477	-.000748	-.000113	-.000233	-.000140
51.10			-.001562	-.000570	-.000969	-.000473	-.000065	-.000139	-.000081
56.22			-.000685	-.000225	-.000415	-.000188	-.000021	-.000049	-.000028
61.34			-.000298	-.000088	-.000176	-.000075	-.000007	-.000017	-.000009
66.46			-.000129	-.000034	-.000074	-.000029	-.000002	-.000006	-.000003
71.58			-.000055	-.000013	-.000031	-.000011	-.000001	-.000002	-.000001
76.70			-.000024	-.000005	-.000013	-.000004	-.000000	-.000001	-.000000
81.82			-.000010	-.000002	-.000005	-.000002	-.000000	-.000000	-.000000
86.94			-.000004	-.000001	-.000002	-.000001	-.000000	-.000000	-.000000
92.06			-.000002	-.000000	-.000001	-.000000	-.000000	-.000000	-.000000
97.18			-.000001	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
	SS 1	SS 2	SS 2	SS 2	SS 1	SS 1	SS 2	SS 1	SS 1
-E	.27573	.35691	.39229	.41721	.38999	.40087	.46998	.41883	.42648
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.009703	.013034	.014439	.015470	.014656	.015189	.017676	.016038	.016385
.02	.017519	.023488	.025970	.027771	.026261	.027163	.031551	.028575	.029140
.03	.023651	.031644	.034915	.037260	.035162	.036297	.042076	.038030	.038704
.04	.028285	.037760	.041571	.044264	.041680	.042931	.049655	.044783	.045476
.05	.031592	.042072	.046205	.049079	.046102	.047371	.054658	.049176	.049816
.06	.033725	.044793	.049062	.051975	.048692	.049898	.057419	.051520	.052050
.07	.034826	.046119	.050365	.053196	.049687	.050764	.058238	.052097	.052471
.08	.035024	.046228	.050315	.052964	.049302	.050198	.057388	.051157	.051342
.09	.034436	.045280	.049095	.051480	.047732	.048406	.055115	.048929	.048901
.10	.033168	.043422	.046871	.048925	.045154	.045574	.051639	.045617	.045360
.12	.028971	.037495	.039999	.041246	.037590	.037447	.041856	.036459	.035724
.14	.023102	.029366	.030735	.031058	.027702	.026966	.029399	.024934	.023735
.16	.016111	.019784	.019924	.019278	.016370	.015055	.015358	.012045	.010425
.18	.008446	.009358	.008247	.006645	.004299	.002452	.000596	-.001421	-.003394
.20	.000469	-.001422	-.003751	-.006255	-.007952	-.010261	-.014207	-.014846	-.017091
.22	-.007531	-.012167	-.015638	-.018960	-.019946	-.022635	-.028528	-.027757	-.030187
.24	-.015326	-.022572	-.027078	-.031111	-.031347	-.034324	-.041971	-.039801	-.042324
.26	-.022737	-.032401	-.037815	-.042439	-.041905	-.045074	-.054248	-.050721	-.053248
.28	-.029630	-.041477	-.047657	-.052746	-.051437	-.054703	-.065153	-.060340	-.062784
.30	-.035905	-.049673	-.056469	-.061894	-.059820	-.063090	-.074555	-.068545	-.070829
.34	-.046351	-.063107	-.070680	-.076393	-.072867	-.075887	-.088594	-.080519	-.082274
.38	-.053787	-.072365	-.080131	-.085660	-.080842	-.083315	-.096263	-.086617	-.087625
.42	-.058195	-.077474	-.084906	-.089840	-.083938	-.085634	-.097933	-.087237	-.087352
.46	-.059732	-.078688	-.085336	-.089343	-.082594	-.083350	-.094252	-.083021	-.082163
.50	-.058661	-.076401	-.081900	-.084730	-.077382	-.077100	-.086011	-.074729	-.072882
.54	-.055305	-.071080	-.075155	-.076632	-.068937	-.067574	-.074055	-.063162	-.060357
.58	-.050014	-.063223	-.065677	-.065699	-.057899	-.055466	-.059220	-.049104	-.045415
.62	-.043138	-.053323	-.054038	-.052565	-.044890	-.041437	-.042298	-.033288	-.028822
.66	-.035019	-.041854	-.040778	-.037825	-.030487	-.026098	-.024014	-.016382	-.011268
.70	-.025975	-.029257	-.026397	-.022024	-.015212	-.009997	-.005011	.001025	.006644
.78	-.006252	-.002229	.003991	.010883	.016166	.022634	.032988	.035395	.041560
.86	.014060	.025099	.034175	.043002	.046274	.053408	.068194	.066697	.072797
.94	.033476	.050758	.062013	.072092	.073052	.080260	.098290	.092920	.098398
1.02	.050951	.073396	.086078	.096704	.095213	.101946	.121939	.112959	.117348
1.10	.065813	.092180	.105527	.116030	.112079	.117865	.138560	.126398	.129335
1.18	.077687	.106682	.119973	.129746	.123439	.127891	.148124	.133309	.134541
1.26	.086431	.116781	.129364	.137889	.129410	.132237	.150980	.134103	.133476
1.34	.092066	.122578	.133889	.140742	.130335	.131334	.147722	.129393	.126847
1.42	.094735	.124325	.133893	.138746	.126695	.125746	.139085	.119906	.115459
1.50	.094656	.122372	.129822	.132437	.119049	.116107	.125868	.106416	.100149
1.66	.087348	.109004	.111453	.109206	.094101	.087277	.088909	.070470	.061011
1.82	.072460	.085870	.082824	.075660	.060079	.049826	.042905	.027214	.015378
1.98	.052262	.056203	.047684	.035970	.021041	.008061	-.007007	-.018658	-.031922
2.14	.028757	.022800	.009216	-.006387	-.019697	-.034562	-.056791	-.063537	-.077254
2.30	.003609	-.012055	-.030025	-.048671	-.059575	-.075436	-.103470	-.104826	-.118085
2.46	-.021861	-.046574	-.068080	-.088827	-.096720	-.112703	-.144991	-.140804	-.152800
2.62	-.046641	-.079416	-.103511	-.125392	-.129843	-.145138	-.180068	-.170455	-.180527
2.78	-.069979	-.109614	-.135319	-.157390	-.158131	-.172023	-.208020	-.193319	-.200954
2.94	-.091344	-.136508	-.162860	-.184241	-.181152	-.193038	-.228634	-.209345	-.214182
3.10	-.110383	-.159691	-.185775	-.205672	-.198763	-.208160	-.242038	-.218776	-.220595
3.42	-.140738	-.194226	-.217341	-.232309	-.218212	-.221648	-.248842	-.219753	-.215342
3.74	-.160525	-.213131	-.230666	-.238826	-.218657	-.215515	-.232894	-.200919	-.190612
4.06	-.170288	-.217726	-.227864	-.228160	-.203411	-.193736	-.199473	-.167375	-.151950
4.38	-.171133	-.210009	-.211666	-.203732	-.176036	-.160322	-.153646	-.123791	-.104232

	RB 37	SR 38	Y 39	ZR 40	NB 41	MO 42	TC 43	RU 44	RH 45
X	SS 1	SS 2	SS 2	SS 2	SS 1	SS 1	SS 2	SS 1	SS 1
4.70	-.164399	-.192197	-.184903	-.168899	-.139862	-.118871	-.099801	-.074056	-.051383
5.02	-.151461	-.166459	-.150228	-.126681	-.097767	-.072387	-.041494	-.021218	.003612
5.34	-.133610	-.134767	-.109970	-.079645	-.052113	-.023257	.018521	.032448	.058590
5.66	-.112004	-.098838	-.066097	-.029894	-.004763	.026690	.078193	.085307	.112052
5.98	-.087639	-.060122	-.020218	.020906	.042855	.076102	.136053	.136233	.163005
6.30	-.061352	-.019808	.026381	.071465	.089681	.124010	.191084	.184487	.210832
6.94	-.005641	.061962	.117950	.168235	.178124	.212875	.290281	.271388	.295924
7.58	.051059	.140973	.203152	.255452	.256931	.290376	.373274	.344557	.366539
8.22	.106194	.213975	.279090	.330847	.324725	.355743	.439944	.404285	.423398
8.86	.158234	.279224	.344510	.393785	.381395	.409321	.491371	.451641	.467843
9.50	.206319	.335958	.399174	.444584	.427495	.451995	.529168	.487984	.501386
10.14	.250017	.384041	.443455	.484082	.463900	.484868	.555112	.514708	.525505
10.78	.289164	.423730	.478069	.513375	.491607	.509090	.570953	.533138	.541563
11.42	.323769	.455518	.503908	.533648	.511626	.525774	.578319	.544476	.550777
12.06	.353944	.480029	.521934	.546089	.524932	.535951	.578675	.549799	.554217
12.70	.379867	.497952	.533112	.551825	.532429	.540562	.573312	.550053	.552819
13.98	.419855	.516853	.538568	.547253	.533218	.536358	.549753	.538570	.538656
15.26	.445699	.517632	.526887	.527057	.519644	.518812	.514807	.515473	.513591
16.54	.459463	.505067	.503476	.496780	.496179	.492302	.473613	.484880	.481603
17.82	.463156	.483139	.472557	.460583	.466293	.460173	.429765	.449875	.445658
19.10	.458654	.455036	.437329	.421500	.432636	.424946	.385713	.412747	.407946
20.38	.447660	.423240	.400150	.381684	.397200	.388492	.343071	.375161	.370049
21.66	.431679	.389638	.362713	.342624	.361452	.352166	.302848	.338304	.333090
22.94	.412023	.355625	.326196	.305303	.326442	.316926	.265628	.302992	.297829
24.22	.389807	.322209	.291387	.270333	.292900	.283420	.231690	.269754	.264754
25.50	.365966	.290091	.258778	.238059	.261303	.252059	.201107	.238906	.234146
28.06	.316340	.231420	.201114	.182058	.204947	.196560	.149644	.184881	.180730
30.62	.267626	.181417	.153783	.137104	.158153	.150883	.109816	.140932	.137448
33.18	.222492	.140219	.116049	.101961	.120431	.114332	.079673	.106105	.103262
35.74	.182309	.107109	.086616	.075035	.090693	.085702	.057253	.079056	.076786
38.30	.147569	.081008	.064048	.054729	.067657	.063653	.040806	.058383	.056601
40.86	.118207	.060747	.046982	.039613	.050065	.046904	.028880	.042786	.041408
43.42	.093835	.045216	.034224	.028481	.036787	.034325	.020313	.031148	.030095
45.98	.073901	.033438	.024778	.020358	.026864	.024967	.014211	.022543	.021746
48.54	.057799	.024585	.017842	.014476	.019511	.018064	.009893	.016230	.015632
51.10	.044926	.017984	.012786	.010245	.014101	.013007	.006858	.011631	.011186
56.22	.026711	.009495	.006483	.005070	.007273	.006660	.003259	.005902	.005660
61.34	.015596	.004938	.003241	.002475	.003697	.003362	.001529	.002954	.002825
66.46	.008971	.002536	.001601	.001194	.001857	.001678	.000710	.001461	.001394
71.58	.005096	.001288	.000783	.000571	.000924	.000829	.000326	.000716	.000682
76.70	.002863	.000649	.000380	.000271	.000455	.000406	.000149	.000348	.000330
81.82	.001594	.000324	.000183	.000127	.000223	.000197	.000068	.000168	.000159
86.94	.000880	.000161	.000087	.000060	.000108	.000095	.000030	.000080	.000076
92.06	.000482	.000079	.000041	.000028	.000052	.000046	.000014	.000038	.000036
97.18	.000263	.000039	.000020	.000013	.000025	.000022	.000006	.000018	.000017
102.30	.000142	.000019	.000009	.000006	.000012	.000010	.000003	.000009	.000008
112.54	.000041	.000004	.000002	.000001	.000003	.000002	.000001	.000002	.000002
122.78	.000012	.000001	.000000	.000000	.000001	.000001	.000000	.000000	.000000
133.02	.000003	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
143.26	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

TABLE IV. RADIAL WAVEFUNCTIONS

PD 4010	R=0.24709170*X	SB 5P3	R=0.23873753*X
AG 4010 5S1	R=0.24532670*X	TE 5P4	R=0.23719725*X
CD 4010 5S2	R=0.24361107*X	I 5P5	R=0.23569596*X
IN 5P1	R=0.24194245*X	XE 5P6	R=0.23423197*X
SN 5P2	R=0.24031862*X		

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2	IS 2
-E	1746.6	1827.7	1910.6	1995.6	2082.4	2171.2	2261.8	2354.4	2448.8
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	1.360513	1.393094	1.425705	1.458346	1.491014	1.523708	1.556425	1.589166	1.621927
.02	2.429031	2.483124	2.537118	2.591011	2.644800	2.698484	2.752062	2.805531	2.858890
.03	3.252890	3.319885	3.386559	3.452910	3.518940	3.584647	3.650032	3.715096	3.779838
.04	3.872566	3.945856	4.018560	4.090682	4.162225	4.233194	4.303590	4.373419	4.442683
.05	4.322601	4.397204	4.470952	4.543853	4.615916	4.687150	4.757562	4.827162	4.895958
.06	4.632419	4.704667	4.775806	4.845855	4.914826	4.982735	5.049597	5.115425	5.180234
.07	4.827037	4.894309	4.960256	5.024901	5.088266	5.150371	5.211239	5.270889	5.329344
.08	4.927674	4.988189	5.047204	5.104748	5.160851	5.215542	5.268850	5.320801	5.371424
.09	4.952293	5.004928	5.055932	5.105345	5.153202	5.199541	5.244397	5.287804	5.329795
.10	4.916061	4.960203	5.002633	5.043397	5.082539	5.120101	5.156126	5.190655	5.223727
.12	4.710054	4.736860	4.761922	4.785298	4.807045	4.827217	4.845869	4.863051	4.878814
.14	4.388901	4.399506	4.408485	4.415903	4.421825	4.426315	4.429433	4.431239	4.431787
.16	4.007571	4.004186	3.999398	3.993277	3.985893	3.977314	3.967602	3.956819	3.945023
.18	3.603416	3.588671	3.572815	3.555916	3.538045	3.519268	3.499649	3.479246	3.458116
.20	3.201086	3.177646	3.153409	3.128449	3.102831	3.076619	3.049869	3.022637	2.994975
.22	2.816179	2.786495	2.756340	2.725781	2.694878	2.663684	2.632252	2.600628	2.568857
.24	2.457894	2.424112	2.390169	2.356124	2.322025	2.287919	2.253846	2.219846	2.185953
.26	2.131001	2.094917	2.058952	2.023153	1.987560	1.952207	1.917125	1.882342	1.847884
.28	1.837266	1.800324	1.763744	1.727561	1.691801	1.656490	1.621647	1.587289	1.553432
.30	1.576469	1.539790	1.503674	1.468144	1.433215	1.398900	1.365209	1.332148	1.299722
.34	1.147064	1.113180	1.080137	1.047935	1.016569	.986030	.956308	.927394	.899275
.38	.824215	.794746	.766252	.738714	.712110	.686415	.661605	.637656	.614544
.42	.586504	.561925	.538346	.515732	.494051	.473268	.453348	.434260	.415971
.46	.414170	.394290	.375359	.357337	.340183	.323856	.308318	.293532	.279463
.50	.290700	.274993	.260143	.246105	.232837	.220295	.208441	.197237	.186648
.54	.203048	.190865	.179427	.168689	.158608	.149143	.140257	.131913	.124078
.58	.141277	.131966	.123284	.115187	.107637	.100594	.094026	.087897	.082180
.62	.097996	.090965	.084453	.078420	.072830	.067650	.062849	.058399	.054273
.66	.067812	.062555	.057718	.053265	.049166	.045392	.041915	.038713	.035762
.70	.046840	.042941	.039376	.036115	.033133	.030403	.027905	.025617	.023522
.78	.022266	.020160	.018259	.016542	.014990	.013587	.012318	.011170	.010131
.86	.010553	.009435	.008439	.007549	.006754	.006044	.005409	.004840	.004332
.94	.004988	.004401	.003883	.003425	.003022	.002665	.002349	.002070	.001823
1.02	.002342	.002035	.001766	.001532	.001329	.001150	.000993	.000856	.000736
1.10	.001080	.000918	.000779	.000659	.000559	.000469	.000391	.000324	.000266
1.18	.000474	.000389	.000317	.000255	.000229	.000185	.000147	.000116	.000069
1.26	.000183	.000139	.000101	.000069	.000093	.000072	.000055	.000041	.000001
1.34	.000047	.000024	.000005	.000000	.000038	.000028	.000021	.000015	.000000
1.42	.000000	.000000	.000000	.000000	.000015	.000011	.000008	.000005	.000000
1.50	.000000	.000000	.000000		.000006	.000004	.000003	.000002	
1.66					.000001	.000001	.000000	.000000	
1.82					.000000	.000000	.000000	.000000	

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	255.93	269.75	284.01	298.79	313.96	329.54	345.52	361.90	378.68
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.436560	.447733	.458923	.470127	.481344	.492576	.503820	.515076	.526345
.02	.775596	.794016	.812408	.830763	.849083	.867367	.885616	.903827	.922001
.03	1.029618	1.052041	1.074345	1.096520	1.118569	1.140492	1.162289	1.183959	1.205502
.04	1.209818	1.233589	1.257123	1.280410	1.303455	1.326258	1.348822	1.371145	1.393230
.05	1.326192	1.349166	1.371772	1.394000	1.415859	1.437349	1.458476	1.479239	1.499643
.06	1.387655	1.408128	1.428100	1.447560	1.466522	1.484989	1.502967	1.520460	1.537473
.07	1.402150	1.418797	1.434813	1.450193	1.464950	1.479094	1.492632	1.505570	1.517917
.08	1.376740	1.388560	1.399631	1.409953	1.419543	1.428412	1.436572	1.444032	1.450805
.09	1.317701	1.323970	1.329389	1.333961	1.337709	1.340647	1.342790	1.344151	1.344747
.10	1.230597	1.230826	1.230123	1.228497	1.225973	1.222569	1.218306	1.213199	1.207269
.12	.991337	.978780	.965191	.950591	.935013	.918484	.901031	.882678	.863453
.14	.691851	.666537	.640181	.612818	.584485	.555219	.525054	.494022	.462156
.16	.357596	.320383	.282205	.243107	.203134	.162328	.120729	.078377	.035309
.18	.008044	-.039680	-.088216	-.137509	-.187512	-.238176	-.289458	-.341312	-.393698
.20	-.342137	-.398678	-.455817	-.513490	-.571648	-.630240	-.689220	-.748540	-.808157
.22	-.682130	-.745654	-.809514	-.873640	-.937984	-1.002495	-1.067124	-1.131826	-1.196558
.24	-1.004181	-1.072834	-1.141526	-1.210188	-1.278774	-1.347232	-1.415519	-1.483589	-1.551402
.26	-1.302965	-1.374955	-1.446670	-1.518042	-1.589029	-1.659584	-1.729668	-1.799238	-1.868261
.28	-1.575070	-1.648724	-1.721783	-1.794183	-1.865888	-1.936858	-2.007059	-2.076456	-2.145020
.30	-1.818568	-1.892369	-1.965261	-2.037183	-2.108111	-2.178011	-2.246858	-2.314623	-2.381288
.34	-2.217501	-2.287752	-2.356513	-2.423742	-2.489436	-2.553582	-2.616174	-2.677204	-2.736671
.38	-2.502678	-2.565467	-2.626291	-2.685134	-2.742017	-2.796951	-2.849953	-2.901038	-2.950229
.42	-2.684804	-2.737584	-2.788059	-2.836240	-2.882173	-2.925895	-2.967447	-3.006867	-3.044199
.46	-2.778204	-2.819599	-2.858487	-2.894911	-2.928940	-2.960635	-2.990059	-3.017273	-3.042341
.50	-2.798253	-2.827820	-2.854814	-2.879305	-2.901384	-2.921133	-2.938635	-2.953970	-2.967218
.54	-2.759857	-2.777855	-2.793334	-2.806388	-2.817124	-2.825643	-2.832042	-2.836414	-2.838857
.58	-2.676622	-2.683809	-2.688627	-2.691194	-2.691627	-2.690038	-2.686538	-2.681229	-2.674216
.62	-2.560470	-2.557923	-2.553235	-2.546539	-2.537961	-2.527619	-2.515629	-2.502101	-2.487142
.66	-2.421520	-2.410496	-2.397615	-2.383019	-2.366836	-2.349186	-2.330188	-2.309951	-2.288582
.70	-2.268131	-2.249962	-2.230253	-2.209152	-2.186781	-2.163262	-2.138710	-2.113230	-2.086925
.78	-1.943575	-1.915023	-1.885601	-1.855450	-1.824676	-1.793387	-1.761682	-1.729650	-1.697377
.86	-1.624693	-1.590382	-1.555829	-1.521155	-1.486444	-1.451775	-1.417225	-1.382859	-1.348739
.94	-1.332525	-1.296086	-1.259931	-1.224156	-1.188811	-1.153950	-1.119620	-1.085860	-1.052705
1.02	-1.076718	-1.040749	-1.005465	-.970930	-.937165	-.904194	-.872037	-.840709	-.810220
1.10	-.859762	-.825955	-.793106	-.761249	-.730378	-.700492	-.671588	-.643659	-.616693
1.18	-.680011	-.649335	-.619777	-.591345	-.564012	-.537756	-.512554	-.488382	-.465214
1.26	-.533707	-.506599	-.480679	-.455932	-.432315	-.409790	-.388323	-.367874	-.348409
1.34	-.416260	-.392743	-.370513	-.349391	-.329371	-.310406	-.292450	-.275460	-.259390
1.42	-.323002	-.303016	-.284169	-.266419	-.249704	-.233973	-.219174	-.205258	-.192179
1.50	-.249596	-.232797	-.217058	-.202329	-.188546	-.175654	-.163601	-.152336	-.141813
1.66	-.147637	-.136124	-.125469	-.115617	-.106509	-.098091	-.090313	-.083130	-.076497
1.82	-.086574	-.078913	-.071906	-.065501	-.059646	-.054298	-.049411	-.044949	-.040875
1.98	-.050512	-.045516	-.040996	-.036911	-.033217	-.029881	-.026865	-.024141	-.021682
2.14	-.029402	-.026186	-.023308	-.020733	-.018430	-.016373	-.014533	-.012888	-.011419
2.30	-.017106	-.015051	-.013231	-.011619	-.010193	-.008933	-.007816	-.006828	-.005955
2.46	-.009957	-.008647	-.007499	-.006492	-.005609	-.004841	-.004164	-.003571	-.003053
2.62	-.005797	-.004961	-.004236	-.003605	-.003057	-.002593	-.002182	-.001825	-.001517
2.78	-.003369	-.002832	-.002372	-.001975	-.001634	-.001365	-.001116	-.000903	-.000722
2.94	-.001945	-.001598	-.001304	-.001052	-.000838	-.000713	-.000567	-.000443	-.000340
3.10	-.001106	-.000880	-.000690	-.000529	-.000393	-.000371	-.000286	-.000216	-.000159
3.42	-.000348	-.000257	-.000138	-.000071	-.000016	-.000098	-.000072	-.000051	-.000034
3.74	-.000108	-.000074	.000000	.000000	.000000	-.000026	-.000018	-.000012	-.000007
4.06	-.000033	-.000021	.000000	.000000	.000000	-.000007	-.000004	-.000003	-.000002
4.38	-.000010	-.000006	.000000	.000000	.000000	-.000002	-.000001	-.000001	-.000000
4.70	-.000003	-.000002	.000000	.000000	.000000	-.000000	-.000000	.000000	.000000
5.02	-.000001	-.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
5.34	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
-E	237.06	250.36	264.09	278.34	292.99	308.03	323.48	339.32	355.56
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.014179	.014787	.015405	.016035	.016676	.017328	.017991	.018665	.019350
.02	.053599	.055849	.058138	.060467	.062833	.065238	.067681	.070162	.072680
.03	.113987	.118677	.123441	.128281	.133196	.138184	.143245	.148379	.153584
.04	.191574	.199292	.207126	.215074	.223136	.231309	.239593	.247986	.256486
.05	.283036	.294200	.305517	.316988	.328608	.340376	.352288	.364344	.376541
.06	.385452	.400332	.415397	.430649	.446081	.461691	.477475	.493430	.509553
.07	.496261	.515001	.533953	.553116	.572483	.592050	.611812	.631765	.651904
.08	.613223	.635867	.658738	.681835	.705151	.728680	.752414	.776350	.800480
.09	.734386	.760890	.787626	.814595	.841785	.869190	.896801	.924613	.952617
.10	.858053	.888303	.918782	.949487	.980406	1.011530	1.042850	1.074358	1.106047
.12	1.107230	1.144424	1.181802	1.219361	1.257085	1.294964	1.332985	1.371138	1.409413
.14	1.351333	1.394487	1.437738	1.481084	1.524506	1.567991	1.611524	1.655093	1.698688
.16	1.583543	1.631496	1.679425	1.727326	1.775178	1.822966	1.870676	1.918295	1.965809
.18	1.799107	1.850626	1.901968	1.953132	2.004095	2.054843	2.105360	2.155634	2.205653
.20	1.994894	2.048744	2.102245	2.155398	2.208180	2.260577	2.312576	2.364164	2.415331
.22	2.169039	2.224040	2.278507	2.332444	2.385829	2.438651	2.490899	2.542522	2.593634
.24	2.320657	2.375716	2.430052	2.483670	2.536554	2.588696	2.640086	2.690720	2.740592
.26	2.449613	2.503746	2.556968	2.609290	2.660698	2.711189	2.760759	2.809407	2.857132
.28	2.556328	2.608673	2.659927	2.710106	2.759202	2.807217	2.854153	2.900014	2.944804
.30	2.641639	2.691458	2.740019	2.787343	2.833431	2.878288	2.921924	2.964348	3.005571
.34	2.752741	2.795790	2.837297	2.877300	2.915813	2.952856	2.988452	3.022623	3.055394
.38	2.793835	2.828578	2.861584	2.892901	2.922561	2.950600	2.977056	3.001963	3.025361
.42	2.776941	2.802630	2.826474	2.848539	2.868871	2.887521	2.904540	2.919977	2.933883
.46	2.713880	2.730388	2.745036	2.757899	2.769039	2.778521	2.786407	2.792760	2.797638
.50	2.615545	2.623214	2.629087	2.633247	2.635770	2.636730	2.636202	2.634253	2.630955
.54	2.491544	2.491045	2.488878	2.485135	2.479902	2.473260	2.465290	2.456068	2.445668
.58	2.350082	2.342291	2.333016	2.322349	2.310383	2.297207	2.282903	2.267551	2.251227
.62	2.197971	2.183879	2.168523	2.151995	2.134392	2.115802	2.096310	2.075996	2.054934
.66	2.040728	2.021366	2.000983	1.979669	1.957519	1.934622	1.911060	1.886909	1.862241
.70	1.882712	1.859094	1.834712	1.809645	1.783990	1.757829	1.731239	1.704292	1.677055
.78	1.576895	1.547573	1.517994	1.488210	1.458309	1.428357	1.398418	1.368548	1.338796
.86	1.297882	1.266011	1.234325	1.202859	1.171677	1.140828	1.110353	1.080290	1.050669
.94	1.053567	1.021510	.989990	.959025	.928654	.898902	.869791	.841337	.813552
1.02	.845822	.815197	.785363	.756321	.728085	.700660	.674047	.648246	.623249
1.10	.672995	.644796	.617550	.591243	.565866	.541407	.517850	.495179	.473373
1.18	.531607	.506350	.482129	.458917	.436687	.415413	.395067	.375620	.357043
1.26	.417448	.395304	.374218	.354150	.335063	.316918	.299680	.283311	.267775
1.34	.326228	.307139	.289085	.272015	.255884	.240649	.226267	.212695	.199894
1.42	.253944	.237713	.222459	.208129	.194671	.182040	.170188	.159073	.148653
1.50	.197051	.183403	.170656	.158753	.147643	.137278	.127611	.118599	.110201
1.66	.117815	.108412	.099732	.091722	.084334	.077521	.071241	.065454	.060123
1.82	.070011	.063693	.057927	.052666	.047868	.043495	.039508	.035876	.032568
1.98	.041480	.037307	.033539	.030139	.027072	.024308	.021815	.019570	.017548
2.14	.024565	.021836	.019399	.017223	.015282	.013551	.012007	.010631	.009407
2.30	.014569	.012795	.011226	.009839	.008615	.007537	.006584	.005744	.005006
2.46	.008665	.007512	.006502	.005618	.004845	.004176	.003587	.003074	.002629
2.62	.005172	.004419	.003766	.003200	.002710	.002295	.001930	.001616	.001347
2.78	.003096	.002600	.002174	.001809	.001495	.001246	.001020	.000828	.000667
2.94	.001855	.001525	.001244	.001005	.000802	.000671	.000535	.000421	.000327
3.10	.001108	.000885	.000697	.000538	.000405	.000360	.000279	.000213	.000160
3.42	.000389	.000291	.000211	.000111	.000052	.000102	.000075	.000053	.000037
3.74	.000134	.000094	.000063	.000000	.000000	.000028	.000020	.000013	.000009
4.06	.000046	.000030	.000019	.000000	.000000	.000008	.000005	.000003	.000002
4.38	.000015	.000009	.000005			.000002	.000001	.000001	.000000
4.70	.000005	.000003	.000002			.000001	.000000	.000000	.000000
5.02	.000002	.000001	.000000			.000000	.000000	.000000	.000000
5.34	.000001	.000000	.000000			.000000	.000000	.000000	.000000
5.66	.000000	.000000	.000000			.000000	.000000	.000000	.000000

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	48.418	51.835	55.417	59.249	63.207	67.296	71.517	75.868	80.351
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.188243	.194076	.199931	.205794	.211672	.217563	.223468	.229385	.235314
.02	.334208	.343935	.353670	.363385	.373093	.382794	.392485	.402166	.411834
.03	.443132	.455131	.467094	.478985	.490822	.502605	.514331	.525998	.537607
.04	.519743	.532665	.545488	.558173	.570740	.583190	.595519	.607728	.619815
.05	.568297	.581036	.593603	.605956	.618119	.630092	.641873	.653463	.664861
.06	.592622	.604285	.615699	.626819	.637673	.648261	.658585	.668644	.678439
.07	.596159	.606039	.615591	.624773	.633614	.642116	.650281	.658112	.665611
.08	.501995	.589546	.596695	.603403	.609700	.615590	.621078	.626167	.630863
.09	.552896	.557713	.562061	.565906	.569277	.572182	.574628	.576620	.578166
.10	.511337	.513138	.514411	.515128	.515321	.514999	.514170	.512845	.511032
.12	.399450	.394772	.389483	.383571	.377068	.369990	.362350	.354163	.345443
.14	.261292	.250072	.238210	.225713	.212612	.198927	.184679	.169888	.154574
.16	.108660	.091312	.073345	.054785	.035660	.015999	-.004175	-.024834	-.045955
.18	-.049244	-.071980	-.095261	-.119043	-.143298	-.167996	-.193104	-.218593	-.244434
.20	-.205346	-.232522	-.260123	-.288087	-.316391	-.344997	-.373871	-.402981	-.432293
.22	-.354316	-.384866	-.415681	-.446685	-.477857	-.509158	-.540551	-.572001	-.603472
.24	-.492244	-.525052	-.557935	-.590804	-.623642	-.656408	-.689064	-.721575	-.753905
.26	-.616373	-.650328	-.684144	-.717721	-.751049	-.784088	-.816799	-.849146	-.881097
.28	-.724879	-.758910	-.792572	-.825760	-.858469	-.890660	-.922298	-.953348	-.983781
.30	-.816681	-.849786	-.882284	-.914069	-.945140	-.975463	-1.005005	-1.033738	-1.061635
.34	-.948701	-.977303	-1.004827	-1.031170	-1.056347	-1.080335	-1.103113	-1.124664	-1.144974
.38	-1.013517	-1.034762	-1.054499	-1.072641	-1.089221	-1.104232	-1.117669	-1.129533	-1.139823
.42	-1.016723	-1.028594	-1.038602	-1.046688	-1.052900	-1.057254	-1.059763	-1.060448	-1.059331
.46	-.966313	-.967582	-.966729	-.963730	-.958652	-.951530	-.942403	-.931312	-.918299
.50	-.871294	-.861426	-.849284	-.834886	-.818312	-.799624	-.778881	-.756146	-.731484
.54	-.740791	-.719828	-.696552	-.671018	-.643324	-.613553	-.581787	-.548109	-.512604
.58	-.583495	-.551941	-.518137	-.482181	-.444183	-.404246	-.362471	-.318963	-.273820
.62	-.407340	-.366047	-.322662	-.277325	-.230154	-.181269	-.130791	-.078836	-.025520
.66	-.219349	-.169412	-.117628	-.064170	-.009161	.047261	.104965	.163822	.223707
.70	-.025565	.031758	.090618	.150808	.212203	.274657	.338029	.402182	.466985
.78	.359967	.428015	.496831	.566161	.635888	.705858	.775925	.845952	.915807
.86	.719111	.792544	.865874	.938827	1.011309	1.083174	1.154288	1.224529	1.293780
.94	1.033695	1.107720	1.180770	1.252576	1.323074	1.392144	1.459678	1.525579	1.589763
1.02	1.294674	1.365343	1.434235	1.501110	1.565941	1.628644	1.689147	1.747392	1.803330
1.10	1.499500	1.563803	1.625648	1.684839	1.741392	1.795266	1.846433	1.894874	1.940585
1.18	1.649952	1.705789	1.758632	1.808346	1.854987	1.898563	1.939089	1.976594	2.011116
1.26	1.750463	1.796541	1.839249	1.878515	1.914439	1.947074	1.976482	2.002734	2.025910
1.34	1.806895	1.842600	1.874714	1.903235	1.928296	1.949998	1.968445	1.983750	1.996028
1.42	1.825680	1.850943	1.872537	1.890530	1.905086	1.916347	1.924456	1.929558	1.931804
1.50	1.813261	1.828424	1.839970	1.848031	1.852798	1.854447	1.853152	1.849089	1.842431
1.66	1.718629	1.715725	1.709614	1.700539	1.688722	1.674390	1.657757	1.639036	1.618428
1.82	1.564650	1.547484	1.527801	1.505918	1.482059	1.456473	1.429386	1.401014	1.371559
1.98	1.382574	1.355255	1.326241	1.295883	1.264387	1.231988	1.198899	1.165315	1.131413
2.14	1.193990	1.160324	1.125797	1.090759	1.055383	1.019860	.984371	.949074	.914105
2.30	1.012661	.975047	.938935	.902246	.865900	.830041	.794801	.760289	.726594
2.46	.846494	.809021	.772093	.735980	.700742	.666472	.633248	.601126	.570148
2.62	.699288	.662958	.627670	.593633	.560851	.529360	.499189	.470347	.442831
2.78	.572114	.538125	.505528	.474468	.444898	.416806	.390174	.364972	.341164
2.94	.464352	.433409	.404073	.376432	.350391	.325900	.302906	.281349	.261164
3.10	.374422	.346854	.320994	.296878	.274379	.253415	.233907	.215774	.198934
3.42	.239778	.218949	.199782	.182238	.166154	.151416	.137917	.125561	.114254
3.74	.151404	.136407	.122837	.110620	.099588	.089624	.080622	.072490	.065142
4.06	.094826	.084385	.075078	.066819	.059457	.052889	.047023	.041783	.037098
4.38	.059202	.052104	.045857	.040381	.035552	.031287	.027513	.024171	.021210



	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
4.70	.037010	.032261	.028125	.024536	.021397	.018644	.016226	.014098	.012225
5.02	.023265	.020119	.017401	.015059	.013022	.011243	.009687	.008323	.007127
5.34	.014767	.012692	.010909	.009378	.008048	.006888	.005875	.004988	.004212
5.66	.009504	.008133	.006959	.005949	.005070	.004302	.003629	.003040	.002524
5.98	.006225	.005315	.004533	.003857	.003265	.002745	.002287	.001885	.001532
6.30	.004165	.003552	.003024	.002562	.002153	.001791	.001470	.001187	.000938
6.94	.002004	.001710	.001453	.001219	.001005	.000812	.000639	.000485	.000348
7.58	.001066	.000909	.000770	.000636	.000510	.000394	.000289	.000196	.000126
8.22	.000620	.000526	.000442	.000356	.000274	.000198	.000130	.000069	.000045
8.86	.000386	.000323	.000269	.000210	.000152	.000099	.000058	.000014	.000016
9.50	.000252	.000207	.000170	.000127	.000085	.000047	.000025	.000000	.000005
10.14	.000170	.000137	.000111	.000078	.000047	.000021	.000011	.000000	.000002
10.78	.000118	.000092	.000073	.000049	.000025	.000010	.000005		.000001
11.42	.000083	.000062	.000049	.000030	.000012	.000004	.000002		.000000
12.06	.000059	.000043	.000034	.000019	.000006	.000002	.000001		.000000
12.70	.000043	.000030	.000023	.000011	.000003	.000001	.000000		.000000
13.98	.000023	.000014	.000011	.000004	.000001	.000000	.000000		.000000
15.26	.000013	.000007	.000006	.000001	.000000	.000000			.000000
16.54	.000008	.000003	.000003	.000000	.000000				.000000
17.82	.000005	.000001	.000002	.000000					.000000
19.10	.000003	.000000	.000001						.000000
20.38	.000002	.000000	.000000						.000000
21.66	.000001		.000000						.000000
22.94	.000001								.000000
24.22	.000000								.000000

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	40.748	43.891	47.194	50.748	54.427	58.236	62.175	66.244	70.443
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.006327	.006642	.006963	.007292	.007627	.007969	.008317	.008672	.009034
.02	.023910	.025077	.026269	.027485	.028724	.029987	.031274	.032584	.033917
.03	.050817	.053254	.055738	.058269	.060847	.063471	.066141	.068855	.071614
.04	.085332	.089349	.093437	.097599	.101832	.106135	.110508	.114950	.119458
.05	.125927	.131742	.137654	.143662	.149767	.155965	.162256	.168638	.175108
.06	.171249	.179002	.186873	.194863	.202970	.211191	.219525	.227967	.236516
.07	.220101	.229863	.239761	.249796	.259964	.270261	.280685	.291231	.301897
.08	.271425	.283212	.295147	.307228	.319454	.331818	.344317	.356946	.369700
.09	.324293	.338071	.352001	.366083	.380312	.394683	.409188	.423823	.438583
.10	.377889	.393584	.409429	.425422	.441558	.457830	.474231	.490753	.507391
.12	.484514	.503693	.522992	.542411	.561941	.581573	.601296	.621103	.640983
.14	.586669	.608709	.630810	.652969	.675178	.697424	.719694	.741977	.764264
.16	.680938	.705096	.729227	.753327	.777386	.801388	.825320	.849169	.872924
.18	.764889	.790361	.815692	.840878	.865907	.890764	.915433	.939902	.964156
.20	.836882	.862846	.888536	.913947	.939067	.963880	.988370	1.012525	1.036330
.22	.895913	.921566	.946795	.971597	.995960	1.019869	1.043309	1.066267	1.088730
.24	.941482	.966061	.990057	1.013468	1.036285	1.058493	1.080079	1.101032	1.121341
.26	.973488	.996288	1.018342	1.039650	1.060204	1.079993	1.099006	1.117235	1.134672
.28	.992137	1.012524	1.032001	1.050571	1.068231	1.084972	1.100787	1.115672	1.129623
.30	.997872	1.015288	1.031633	1.046917	1.061139	1.074296	1.086386	1.097408	1.107364
.34	.973202	.983315	.992067	.999477	1.005557	1.010314	1.013758	1.015901	1.016755
.38	.905713	.907231	.907155	.905516	.902340	.897650	.891468	.883822	.874736
.42	.802564	.794777	.785234	.773982	.761063	.746515	.730378	.712693	.693502
.46	.671081	.653781	.634647	.613739	.591116	.566833	.540947	.513516	.484597
.50	.518285	.491685	.463254	.433067	.401201	.367727	.332719	.296250	.258390
.54	.350623	.315265	.278158	.239395	.199065	.157258	.114060	.069559	.023840
.58	.173827	.130499	.085579	.039174	-.008614	-.057682	-.107929	-.159257	-.211571
.62	-.007147	-.057481	-.109187	-.162144	-.216241	-.271362	-.327397	-.384239	-.441783
.66	-.188107	-.244377	-.301742	-.360075	-.419255	-.479158	-.539668	-.600670	-.662057

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
.70	-.365597	-.426676	-.488532	-.551030	-.614047	-.677453	-.741128	-.804955	-.868825
.78	-.699663	-.766966	-.834327	-.901608	-.968687	-1.035434	-1.101732	-1.167469	-1.232543
.86	-.993999	-1.063285	-1.131866	-1.199616	-1.266429	-1.332186	-1.396786	-1.460134	-1.522147
.94	-1.240768	-1.308388	-1.374568	-1.439207	-1.502222	-1.563519	-1.623022	-1.680665	-1.736390
1.02	-1.437556	-1.500595	-1.561538	-1.620317	-1.676879	-1.731166	-1.783134	-1.832753	-1.879997
1.10	-1.585627	-1.641923	-1.695578	-1.746562	-1.794860	-1.840453	-1.883336	-1.923515	-1.961004
1.18	-1.688553	-1.736646	-1.781679	-1.823665	-1.862631	-1.898600	-1.931605	-1.961693	-1.988916
1.26	-1.751200	-1.790238	-1.825930	-1.858335	-1.887519	-1.913548	-1.936495	-1.956446	-1.973490
1.34	-1.779000	-1.808637	-1.834772	-1.857508	-1.876951	-1.893205	-1.906385	-1.916608	-1.923997
1.42	-1.777465	-1.797757	-1.814512	-1.827875	-1.837985	-1.844986	-1.849024	-1.850250	-1.848815
1.50	-1.751875	-1.763186	-1.771031	-1.775593	-1.777043	-1.775557	-1.771310	-1.764478	-1.755235
1.66	-1.647480	-1.642735	-1.634928	-1.624299	-1.611067	-1.595455	-1.577678	-1.557942	-1.536449
1.82	-1.498439	-1.480904	-1.460953	-1.438856	-1.414853	-1.389191	-1.362096	-1.333781	-1.304447
1.98	-1.328923	-1.302098	-1.273626	-1.243776	-1.212791	-1.180907	-1.148340	-1.115287	-1.081927
2.14	-1.155630	-1.122790	-1.089091	-1.054781	-1.020082	-.985197	-.950313	-.915591	-.881176
2.30	-.989302	-.953251	-.917078	-.880986	-.845160	-.809759	-.774926	-.740777	-.707412
2.46	-.836220	-.799198	-.762690	-.726842	-.691789	-.657640	-.624489	-.592402	-.561433
2.62	-.699503	-.663188	-.627894	-.593709	-.560711	-.528959	-.498495	-.469341	-.441506
2.78	-.580131	-.545690	-.512646	-.481025	-.450854	-.422142	-.394887	-.369068	-.344660
2.94	-.477716	-.445891	-.415711	-.387148	-.360182	-.334779	-.310898	-.288489	-.267495
3.10	-.391066	-.362258	-.335233	-.309916	-.286246	-.264158	-.243581	-.224439	-.206658
3.42	-.258485	-.235969	-.215255	-.196207	-.178711	-.162658	-.147947	-.134478	-.122158
3.74	-.168631	-.151830	-.136637	-.122896	-.110468	-.099236	-.089091	-.079932	-.071670
4.06	-.109131	-.096998	-.086191	-.076560	-.067969	-.060306	-.053472	-.047382	-.041955
4.38	-.070347	-.061787	-.054262	-.047643	-.041809	-.036665	-.032130	-.028134	-.024613
4.70	-.045327	-.039387	-.034222	-.029731	-.025812	-.022390	-.019404	-.016798	-.014526
5.02	-.029289	-.025212	-.021697	-.018671	-.016051	-.013783	-.011819	-.010121	-.008655
5.34	-.019039	-.016259	-.013875	-.011839	-.010088	-.008581	-.007285	-.006174	-.005221
5.66	-.012489	-.010598	-.008979	-.007606	-.006428	-.005419	-.004556	-.003822	-.003197
5.98	-.008294	-.007005	-.005899	-.004965	-.004165	-.003481	-.002899	-.002407	-.001991
6.30	-.005593	-.004709	-.003945	-.003302	-.002750	-.002279	-.001879	-.001543	-.001261
6.94	-.002693	-.002262	-.001878	-.001554	-.001275	-.001037	-.000835	-.000669	-.000532
7.58	-.001418	-.001190	-.000977	-.000797	-.000641	-.000508	-.000397	-.000308	-.000236
8.22	-.000820	-.000684	-.000552	-.000441	-.000345	-.000264	-.000197	-.000146	-.000106
8.86	-.000515	-.000425	-.000334	-.000259	-.000195	-.000142	-.000099	-.000069	-.000047
9.50	-.000346	-.000280	-.000212	-.000158	-.000113	-.000077	-.000048	-.000030	-.000020
10.14	-.000244	-.000192	-.000139	-.000099	-.000066	-.000041	-.000023	-.000013	-.000009
10.78	-.000178	-.000136	-.000093	-.000062	-.000038	-.000022	-.000011	-.000005	-.000004
11.42	-.000134	-.000098	-.000063	-.000039	-.000021	-.000011	-.000005	-.000002	-.000002
12.06	-.000102	-.000072	-.000043	-.000024	-.000011	-.000006	-.000002	-.000001	.000001
12.70	-.000080	-.000053	-.000029	-.000015	-.000006	-.000003	-.000001	-.000000	.000000
13.98	-.000050	-.000030	-.000013	-.000006	-.000002	-.000001	.000000	.000000	.000000
15.26	-.000032	-.000017	-.000006	-.000002	-.000001	.000000	.000000	.000000	.000000
16.54	-.000021	-.000010	-.000003	-.000001	.000000	.000000	.000000	.000000	.000000
17.82	-.000015	-.000006	-.000001	.000000	.000000	.000000	.000000	.000000	.000000
19.10	-.000010	-.000003	-.000000	.000000	.000000	.000000	.000000	.000000	.000000
20.38	-.000007	-.000002	.000000	.000000	.000000	.000000	.000000	.000000	.000000
21.66	-.000005	-.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
22.94	-.000003	-.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
24.22	-.000002	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
25.50	-.000002	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
28.06	-.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
30.62	-.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
-E	26.727	29.356	32.144	35.179	38.336	41.620	45.032	48.571	52.237
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000037	.000040	.000043	.000046	.000049	.000052	.000055	.000059	.000063
.02	.000283	.000305	.000327	.000351	.000375	.000400	.000426	.000453	.000482
.03	.000921	.000990	.001063	.001138	.001216	.001297	.001381	.001469	.001559
.04	.002104	.002261	.002425	.002595	.002771	.002955	.003145	.003342	.003546
.05	.003960	.004253	.004559	.004876	.005206	.005547	.005901	.006268	.006647
.06	.006596	.007081	.007586	.008109	.008653	.009216	.009799	.010402	.011025
.07	.010099	.010836	.011601	.012396	.013219	.014072	.014955	.015867	.016810
.08	.014537	.015590	.016682	.017815	.018989	.020204	.021460	.022757	.024097
.09	.019964	.021398	.022886	.024427	.026023	.027673	.029379	.031139	.032955
.10	.026419	.028301	.030253	.032274	.034364	.036525	.038756	.041058	.043430
.12	.042508	.045489	.048575	.051765	.055062	.058464	.061971	.065585	.069305
.14	.062895	.067235	.071721	.076353	.081131	.086056	.091126	.096343	.101704
.16	.087534	.093476	.099609	.105933	.112446	.119150	.126043	.133124	.140391
.18	.116274	.124038	.132039	.140276	.148750	.157457	.166398	.175569	.184970
.20	.148886	.158663	.168723	.179065	.189688	.200589	.211765	.223214	.234932
.22	.185086	.197036	.209314	.221918	.234844	.248090	.261650	.275521	.289698
.24	.224552	.238804	.253424	.268411	.283758	.299462	.315515	.331912	.348646
.26	.266937	.283587	.300642	.318098	.335948	.354186	.372801	.391788	.411136
.28	.311881	.330996	.350546	.370525	.390925	.411736	.432947	.454549	.476530
.30	.359023	.380639	.402713	.425238	.448201	.471593	.495398	.519606	.544202
.34	.458471	.485090	.512189	.539756	.567774	.596226	.625094	.654360	.684006
.38	.562538	.594002	.625933	.658311	.691117	.724327	.757917	.791864	.826143
.42	.668727	.704719	.741127	.777927	.815092	.852593	.890402	.928488	.966824
.46	.774847	.814928	.855337	.896045	.937021	.978230	1.019638	1.061212	1.102918
.50	.879027	.922669	.966517	1.010537	1.054695	1.098951	1.143268	1.187607	1.231932
.54	.979716	1.026331	1.073001	1.119687	1.166352	1.212953	1.259449	1.305800	1.351966
.58	1.075663	1.124633	1.173478	1.222160	1.270638	1.318869	1.366809	1.414417	1.461653
.62	1.165894	1.216587	1.266957	1.316964	1.366567	1.415723	1.464387	1.512519	1.560080
.66	1.249681	1.301473	1.352728	1.403407	1.453470	1.502874	1.551577	1.599542	1.646731
.70	1.326511	1.378800	1.430327	1.481056	1.530950	1.579969	1.628075	1.675233	1.721411
.78	1.458166	1.509774	1.560160	1.609299	1.657164	1.703726	1.748959	1.792840	1.835350
.86	1.560032	1.609015	1.656331	1.701970	1.745924	1.788180	1.828729	1.867567	1.904692
.94	1.633064	1.677866	1.720597	1.761271	1.799899	1.836491	1.871061	1.903627	1.934208
1.02	1.679363	1.718822	1.755866	1.790538	1.822872	1.852905	1.880676	1.906228	1.929604
1.10	1.701688	1.735006	1.765640	1.793660	1.819131	1.842114	1.862678	1.880890	1.896821
1.18	1.703100	1.729803	1.753630	1.774683	1.793054	1.808836	1.822121	1.833005	1.841584
1.26	1.686711	1.706597	1.723495	1.737539	1.748848	1.757543	1.763746	1.767575	1.769149
1.34	1.655525	1.668614	1.678683	1.685891	1.690387	1.692319	1.691832	1.689069	1.684170
1.42	1.612337	1.618827	1.622333	1.623045	1.621137	1.616778	1.610138	1.601379	1.590659
1.50	1.559678	1.559900	1.557243	1.551918	1.544123	1.534050	1.521885	1.507808	1.491990
1.66	1.434664	1.423709	1.410244	1.394521	1.376771	1.357215	1.336066	1.313521	1.289767
1.82	1.295134	1.275140	1.253168	1.229491	1.204356	1.177997	1.150630	1.122454	1.093651
1.98	1.151698	1.124913	1.096777	1.067560	1.037508	1.006849	.975782	.944492	.913141
2.14	1.011631	.980193	.948061	.915483	.882687	.849875	.817217	.784868	.752958
2.30	.879608	.845414	.811161	.777061	.743306	.710060	.677454	.645601	.614593
2.46	.758353	.722994	.688152	.653990	.620654	.588261	.556896	.526629	.497506
2.62	.649177	.613920	.579673	.546542	.514620	.483974	.454643	.426650	.400002
2.78	.552400	.518205	.485414	.454077	.424232	.395896	.369064	.343718	.319828
2.94	.467685	.435233	.404482	.375424	.348046	.322321	.298202	.275638	.254568
3.10	.394287	.364023	.335663	.309147	.284417	.261405	.240031	.220217	.201877
3.42	.277430	.252157	.228954	.207681	.188209	.170414	.154172	.139367	.125890
3.74	.193282	.173011	.154742	.138291	.123487	.110179	.098226	.087502	.077889
4.06	.133774	.117975	.103977	.091579	.080598	.070876	.062274	.054671	.047954
4.38	.092214	.080155	.069636	.060464	.052458	.045471	.039378	.034066	.029441

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
X									
4.70	.063435	.054369	.046576	.039878	.034111	.029148	.024877	.021205	.018052
5.02	.043618	.036877	.031160	.026314	.022195	.018695	.015723	.013202	.011066
5.34	.030019	.025046	.020880	.017394	.014468	.012012	.009953	.008229	.006787
5.66	.020702	.017052	.014030	.011532	.009458	.007739	.006315	.005138	.004166
5.98	.014321	.011651	.009463	.007675	.006208	.005004	.004019	.003215	.002559
6.30	.009948	.007997	.006414	.005134	.004093	.003250	.002567	.002015	.001571
6.94	.004877	.003834	.003001	.002339	.001811	.001391	.001057	.000794	.000587
7.58	.002458	.001892	.001447	.001098	.000823	.000607	.000439	.000310	.000209
8.22	.001281	.000968	.000723	.000533	.000384	.000269	.000181	.000116	.000064
8.86	.000695	.000516	.000376	.000268	.000184	.000119	.000070	.000043	.000011
9.50	.000393	.000287	.000204	.000139	.000089	.000051	.000022	.000015	.000000
10.14	.000233	.000166	.000115	.000075	.000043	.000021	.000003	.000000	.000000
10.78	.000144	.000100	.000067	.000041	.000020	.000009	.000000	.000000	.000000
11.42	.000092	.000063	.000041	.000022	.000008	.000004	.000000	.000000	.000000
12.06	.000061	.000040	.000025	.000012	.000003	.000001	.000000	.000000	.000000
12.70	.000042	.000027	.000016	.000006	.000001	.000001	.000000	.000000	.000000
13.98	.000021	.000012	.000006	.000002	.000000	.000000	.000000	.000000	.000000
15.26	.000011	.000006	.000002	.000001	.000000	.000000	.000000	.000000	.000000
16.54	.000006	.000003	.000001	.000000	.000000	.000000	.000000	.000000	.000000
17.82	.000004	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
19.10	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
20.38	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
21.66	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
22.94	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	7.1746	8.0030	8.9010	9.9534	11.034	12.150	13.301	14.489	15.712
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.077266	.080781	.084453	.088153	.091917	.095726	.099567	.103430	.107310
.02	.137161	.143138	.149373	.155634	.161988	.168398	.174843	.181305	.187773
.03	.181822	.189369	.197226	.205089	.213042	.221040	.229051	.237054	.245035
.04	.213181	.221547	.230238	.238898	.247624	.256364	.265082	.273752	.282359
.05	.232982	.241541	.250409	.259200	.268018	.276806	.285524	.294147	.302657
.06	.242795	.251031	.259539	.267916	.276270	.284542	.292692	.300693	.308529
.07	.244034	.251530	.259242	.266767	.274213	.281521	.288651	.295579	.302287
.08	.237969	.244392	.250965	.257294	.263485	.269480	.275243	.280750	.285987
.09	.225740	.230834	.236002	.240873	.245546	.249967	.254105	.257937	.261454
.10	.208371	.211944	.215512	.218733	.221699	.224361	.226692	.228675	.230302
.12	.161772	.161953	.161966	.161552	.160781	.159621	.158054	.156073	.153678
.14	.104377	.100994	.097292	.093112	.088501	.083442	.077934	.071981	.065590
.16	.041095	.034249	.026956	.019169	.010908	.002176	-.007014	-.016646	-.026702
.18	-.024230	-.034244	-.044800	-.055833	-.067350	-.079327	-.091735	-.104547	-.117736
.20	-.088635	-.101387	-.114744	-.128528	-.142772	-.157431	-.172463	-.187830	-.203495
.22	-.149878	-.164856	-.180466	-.196423	-.212787	-.229491	-.246481	-.263709	-.281132
.24	-.206312	-.222957	-.240227	-.257741	-.275579	-.293659	-.311913	-.330286	-.348728
.26	-.256771	-.274509	-.292834	-.311278	-.329941	-.348726	-.367556	-.386367	-.405107
.28	-.300482	-.318745	-.337529	-.356292	-.375150	-.393994	-.412740	-.431318	-.449675
.30	-.336989	-.355232	-.373906	-.392408	-.410868	-.429166	-.447214	-.464941	-.482289
.34	-.387776	-.404495	-.421406	-.437831	-.453914	-.469529	-.484582	-.499003	-.512739
.38	-.409647	-.423174	-.436610	-.449250	-.461249	-.472479	-.482854	-.492311	-.500808
.42	-.405078	-.414164	-.422857	-.430480	-.437184	-.442856	-.447421	-.450834	-.453067
.46	-.377621	-.381427	-.384552	-.386385	-.387067	-.386506	-.384651	-.381473	-.376967
.50	-.331296	-.329371	-.326506	-.322191	-.316554	-.309531	-.301096	-.291246	-.279998
.54	-.270209	-.262435	-.253509	-.243047	-.231159	-.217816	-.203020	-.186796	-.169185
.58	-.198299	-.184839	-.170070	-.153755	-.135981	-.116757	-.096116	-.074113	-.050810
.62	-.119191	-.100434	-.080271	-.058624	-.035558	-.011117	.014630	.041604	.069717
.66	-.036113	-.012620	.012312	.038599	.066200	.095032	.124995	.155985	.187891

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
X									
.70	.048131	.075675	.104629	.134748	.166015	.198311	.231507	.265473	.300081
.78	.211049	.244346	.278828	.313946	.349733	.386001	.422574	.459285	.495980
.86	.355395	.391154	.427687	.464193	.500746	.537111	.573079	.608463	.643099
.94	.472580	.507650	.542951	.577500	.611406	.644403	.676271	.706822	.735897
1.02	.558390	.589997	.621220	.650968	.679373	.706165	.731128	.754092	.774918
1.10	.611815	.637688	.662542	.685246	.705954	.724408	.740417	.753840	.764578
1.18	.634052	.652463	.669240	.683285	.694761	.703443	.709180	.711876	.711477
1.26	.627709	.637461	.645019	.649375	.650701	.648819	.643630	.635090	.623201
1.34	.596201	.596583	.594289	.588458	.579259	.566576	.550371	.530662	.507509
1.42	.543317	.534042	.521708	.505638	.485999	.462741	.435895	.405543	.371808
1.50	.472910	.454053	.431861	.405873	.376246	.343008	.306258	.266144	.222848
1.66	.294172	.257489	.212751	.173484	.126320	.075940	.022580	-.033490	-.091982
1.82	.086332	.034869	-.019943	-.077582	-.137952	-.200730	-.265563	-.332089	-.399943
1.98	-.129801	-.192166	-.257324	-.324296	-.393030	-.463092	-.534049	-.605479	-.676985
2.14	-.339036	-.408203	-.479353	-.551126	-.623525	-.696043	-.768206	-.839577	-.909763
2.30	-.531133	-.603198	-.676286	-.748754	-.820667	-.891485	-.960735	-1.028003	-1.092936
2.46	-.699885	-.771402	-.842930	-.912647	-.980681	-1.046499	-1.109664	-1.169815	-1.226671
2.62	-.842194	-.910317	-.977463	-1.041737	-1.103323	-1.161731	-1.216586	-1.267606	-1.314596
2.78	-.957252	-1.019776	-1.080422	-1.137309	-1.190674	-1.240092	-1.285269	-1.326019	-1.362241
2.94	-1.045844	-1.101189	-1.153876	-1.202119	-1.246195	-1.285760	-1.320616	-1.350673	-1.375936
3.10	-1.109792	-1.156943	-1.200798	-1.239728	-1.274036	-1.303470	-1.327931	-1.347432	-1.362072
3.42	-1.173793	-1.203357	-1.228783	-1.248883	-1.263970	-1.273988	-1.279032	-1.279302	-1.275070
3.74	-1.171001	-1.183588	-1.191702	-1.194690	-1.192826	-1.186237	-1.175194	-1.160050	-1.141209
4.06	-1.122287	-1.120086	-1.113458	-1.102299	-1.086815	-1.067301	-1.044164	-1.017876	-.988923
4.38	-1.045011	-1.030873	-1.012603	-.990616	-.965045	-.936324	-.904965	-.871511	-.836489
4.70	-.952413	-.929267	-.902430	-.872778	-.840378	-.805776	-.769557	-.732287	-.694496
5.02	-.853958	-.824492	-.791844	-.757287	-.720830	-.683106	-.644732	-.606268	-.568205
5.34	-.756036	-.722547	-.686407	-.649204	-.610918	-.572231	-.533759	-.496023	-.459448
5.66	-.662685	-.627040	-.589267	-.551193	-.512781	-.474733	-.437635	-.401942	-.367989
5.98	-.576241	-.539898	-.501925	-.464310	-.427014	-.390729	-.355984	-.323148	-.292458
6.30	-.497854	-.461910	-.424795	-.388593	-.353268	-.319477	-.287669	-.258119	-.230963
6.94	-.366156	-.333137	-.299729	-.268042	-.238046	-.210264	-.184961	-.162214	-.141977
7.58	-.265461	-.236798	-.208333	-.182048	-.157898	-.136229	-.117118	-.100478	-.086128
8.22	-.190575	-.166618	-.143259	-.122265	-.103554	-.087291	-.073400	-.061676	-.051868
8.86	-.135899	-.116408	-.097750	-.081447	-.067366	-.055515	-.045710	-.037686	-.031168
9.50	-.096478	-.080935	-.066328	-.053940	-.043582	-.035145	-.028383	-.023016	-.018779
10.14	-.068304	-.056097	-.044832	-.035579	-.028098	-.022205	-.017630	-.014106	-.011401
10.78	-.048291	-.038819	-.030226	-.023410	-.018088	-.014036	-.010990	-.008712	-.007010
11.42	-.034133	-.026853	-.020350	-.015385	-.011648	-.008899	-.006899	-.005447	-.004389
12.06	-.024145	-.018592	-.013695	-.010112	-.007516	-.005675	-.004378	-.003463	-.002813
12.70	-.017107	-.012899	-.009221	-.006655	-.004871	-.003651	-.002820	-.002251	-.001855
13.98	-.008660	-.006280	-.004199	-.002910	-.002089	-.001572	-.001244	-.001031	-.000887
15.26	-.004456	-.003133	-.001934	-.001300	-.000938	-.000731	-.000610	-.000534	-.000481
16.54	-.002344	-.001623	-.000905	-.000602	-.000452	-.000376	-.000335	-.000309	-.000289
17.82	-.001266	-.000886	-.000433	-.000293	-.000237	-.000215	-.000204	-.000195	-.000186
19.10	-.000706	-.000516	-.000213	-.000153	-.000138	-.000135	-.000134	-.000130	-.000124
20.38	-.000406	-.000324	-.000108	-.000086	-.000087	-.000091	-.000092	-.000090	-.000085
21.66	-.000241	-.000219	-.000056	-.000053	-.000059	-.000064	-.000065	-.000063	-.000059
22.94	-.000148	-.000159	-.000031	-.000034	-.000042	-.000046	-.000047	-.000045	-.000042
24.22	-.000093	-.000121	-.000017	-.000024	-.000031	-.000034	-.000034	-.000032	-.000029
25.50	-.000060	-.000096	-.000010	-.000017	-.000023	-.000025	-.000025	-.000023	-.000021
28.06	-.000026	-.000065	-.000003	-.000010	-.000014	-.000014	-.000014	-.000012	-.000011
30.62	-.000012	-.000046	-.000001	-.000006	-.000008	-.000008	-.000008	-.000007	-.000005
33.18	-.000006	-.000033	.000000	-.000004	-.000005	-.000005	-.000004	-.000003	-.000003
35.74	-.000003	-.000024	.000000	-.000002	-.000003	-.000003	-.000002	-.000002	-.000001

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
X									
38.30	-.000001	-.000018	.000000	-.000002	-.000002	-.000002	-.000001	-.000001	-.000001
40.86	-.000001	-.000013		-.000001	-.000001	-.000001	-.000001	-.000000	.000000
43.42	.000000	-.000009		-.000001	-.000001	-.000000	.000000	.000000	.000000
45.98	.000000	-.000007		.000000	.000000	.000000	.000000		
48.54		-.000005		.000000	.000000				
51.10		-.000003							
56.22		-.000002							
61.34		-.000001							
66.46		-.000000							

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
-E	4.6602	5.3536	6.1070	7.0144	7.9471	8.9124	9.9120	10.947	12.017
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.002443	.002612	.002790	.002977	.003171	.003370	.003575	.003785	.004002
.02	.009231	.009863	.010526	.011221	.011940	.012681	.013442	.014219	.015022
.03	.019618	.020942	.022332	.023785	.025290	.026838	.028423	.030043	.031713
.04	.032938	.035130	.037430	.039832	.042316	.044868	.047479	.050144	.052888
.05	.048597	.051787	.055129	.058617	.062220	.065917	.069694	.073543	.077503
.06	.066071	.070345	.074820	.079485	.084297	.089228	.094259	.099380	.104642
.07	.084893	.090304	.095963	.101855	.107927	.114139	.120470	.126904	.133507
.08	.104651	.111220	.118083	.125221	.132566	.140071	.147708	.155459	.163402
.09	.124983	.132705	.140764	.149135	.157738	.166516	.175436	.184474	.193725
.10	.145570	.154418	.163641	.173211	.183032	.193038	.203189	.213459	.223956
.12	.186430	.197378	.208763	.220544	.232600	.244843	.257223	.269706	.282427
.14	.225418	.238172	.251400	.265051	.278975	.293066	.307263	.321525	.336012
.16	.261190	.275383	.290061	.305162	.320510	.335983	.351509	.367041	.382759
.18	.292789	.308010	.323702	.339791	.356079	.372428	.388758	.405015	.421399
.20	.319571	.335391	.351643	.368242	.384971	.401679	.418279	.434714	.451196
.22	.341140	.357130	.373490	.390126	.406805	.423367	.439719	.455800	.471835
.24	.357303	.373046	.389079	.405299	.421460	.437396	.453011	.468243	.483323
.26	.368024	.383130	.398427	.413807	.429017	.443886	.458316	.472248	.485912
.28	.373394	.387500	.401688	.415843	.429709	.443113	.455960	.468192	.480038
.30	.373596	.386378	.399121	.411709	.423884	.435476	.446394	.456581	.466265
.34	.359577	.368891	.377910	.386516	.394463	.401594	.407831	.413127	.417695
.38	.328554	.333574	.338041	.341842	.344757	.346652	.347468	.347176	.345961
.42	.283509	.283720	.283137	.281659	.279102	.275368	.270419	.264249	.257011
.46	.227510	.222678	.216843	.209924	.201782	.192359	.181645	.169660	.156517
.50	.163517	.153653	.142622	.130364	.116797	.101903	.085708	.068254	.049618
.54	.094268	.079587	.063623	.046346	.027732	.007809	-.013363	-.035717	-.059215
.58	.022212	.003089	-.017375	-.039183	-.062297	-.086640	-.112121	-.138645	-.166215
.62	-.050517	-.073581	-.097991	-.123719	-.150663	-.178700	-.207707	-.237564	-.268315
.66	-.122103	-.148519	-.176234	-.205183	-.235208	-.266138	-.297821	-.330116	-.363103
.70	-.191039	-.220160	-.250482	-.281908	-.314218	-.347203	-.380682	-.414496	-.448759
.78	-.316349	-.348838	-.382199	-.416272	-.450735	-.485306	-.519765	-.553926	-.587963
.86	-.419690	-.452844	-.486603	-.520155	-.553695	-.586695	-.618909	-.650142	-.680614
.94	-.497624	-.528958	-.560142	-.590923	-.620842	-.649545	-.676781	-.702363	-.726546
1.02	-.549173	-.576555	-.603188	-.628795	-.652888	-.675113	-.695233	-.713083	-.728943
1.10	-.575083	-.596793	-.617151	-.635872	-.652470	-.666608	-.678083	-.686767	-.692954
1.18	-.577224	-.591961	-.604776	-.615391	-.623341	-.628334	-.630212	-.628895	-.624682
1.26	-.558126	-.564996	-.569428	-.571168	-.569798	-.565082	-.556921	-.545296	-.530499
1.34	-.520651	-.519123	-.514718	-.507218	-.496269	-.481709	-.463507	-.441707	-.416593
1.42	-.467751	-.457614	-.444250	-.427490	-.407058	-.382877	-.354989	-.323505	-.288694
1.50	-.402315	-.383629	-.361465	-.335709	-.306177	-.272883	-.235946	-.195545	-.151930
1.66	-.244499	-.209752	-.171323	-.129232	-.083501	-.034331	.018006	.073200	.131059
1.82	-.066148	-.017720	.034210	.089479	.147850	.208943	.272351	.337661	.404753
1.98	.117890	.176919	.238940	.303654	.370628	.439326	.509240	.579887	.651236
2.14	.296697	.362990	.431518	.501866	.573429	.645561	.717689	.789305	.860472

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
X									
2.30	.462758	.533048	.604655	.677076	.749578	.821442	.892077	.960984	1.028332
2.46	.611332	.682637	.754266	.825661	.895998	.964533	1.030695	1.094030	1.154808
2.62	.739851	.809605	.878683	.946509	1.012208	1.075050	1.134515	1.190224	1.242542
2.78	.847381	.913486	.977970	1.040267	1.099486	1.154944	1.206201	1.252967	1.295693
2.94	.934159	.994999	1.053365	1.108728	1.160207	1.207198	1.249352	1.286488	1.319124
3.10	1.001229	1.055640	1.106840	1.154356	1.197346	1.235297	1.267970	1.295293	1.317836
3.42	1.082741	1.122355	1.157669	1.188364	1.213719	1.233445	1.247531	1.256126	1.259851
3.74	1.106814	1.131039	1.150365	1.164649	1.173333	1.176372	1.173977	1.166498	1.154541
4.06	1.088674	1.098511	1.103252	1.102928	1.097173	1.086180	1.070361	1.050233	1.026330
4.38	1.041671	1.038971	1.031276	1.018777	1.001317	.979310	.953341	.924051	.891857
4.70	.976540	.963488	.945747	.923648	.897253	.867176	.834134	.798851	.761588
5.02	.901420	.880215	.854759	.825498	.792722	.757214	.719780	.681179	.641490
5.34	.822200	.794873	.763816	.729560	.692621	.653917	.614299	.574521	.534452
5.66	.742963	.711297	.676465	.639054	.599801	.559712	.519649	.480317	.441364
5.98	.666407	.631907	.594826	.555770	.515687	.475629	.436427	.398706	.361890
6.30	.594204	.558110	.520015	.480521	.440759	.401791	.364379	.329048	.295003
6.94	.466107	.429583	.392166	.354358	.317578	.282797	.250572	.221181	.193447
7.58	.360967	.326416	.291942	.257861	.225756	.196400	.170100	.146892	.125308
8.22	.277153	.245852	.215419	.185928	.159014	.135199	.114547	.096890	.080590
8.86	.211585	.184067	.158010	.133238	.111335	.092573	.076815	.063748	.051665
9.50	.160930	.137263	.115462	.095110	.077684	.063231	.051465	.041996	.033126
10.14	.122129	.102111	.084194	.067758	.054134	.043192	.034553	.027800	.021303
10.78	.092581	.075868	.061351	.048252	.037746	.029574	.023314	.018557	.013777
11.42	.070168	.056357	.044729	.034397	.026382	.020343	.015854	.012534	.008982
12.06	.053211	.041890	.032662	.024578	.018515	.014091	.010896	.008596	.005917
12.70	.040400	.031181	.023913	.017627	.013070	.009849	.007590	.006005	.003946
13.98	.023423	.017399	.012969	.009211	.006672	.004989	.003874	.003129	.001833
15.26	.013729	.009843	.007186	.004956	.003556	.002687	.002143	.001793	.000909
16.54	.008162	.005672	.004095	.002770	.002001	.001555	.001290	.001125	.000481
17.82	.004934	.003343	.002413	.001619	.001196	.000968	.000839	.000759	.000270
19.10	.003040	.002022	.001474	.000993	.000760	.000644	.000581	.000540	.000159
20.38	.001910	.001258	.000935	.000638	.000510	.000452	.000421	.000398	.000097
21.66	.001225	.000806	.000614	.000429	.000359	.000331	.000314	.000300	.000061
22.94	.000801	.000531	.000417	.000300	.000262	.000249	.000240	.000229	.000039
24.22	.000534	.000359	.000291	.000216	.000197	.000191	.000186	.000177	.000025
25.50	.000362	.000249	.000208	.000160	.000151	.000149	.000145	.000137	.000016
28.06	.000174	.000127	.000111	.000093	.000093	.000094	.000090	.000084	.000007
30.62	.000087	.000069	.000063	.000057	.000060	.000060	.000057	.000051	.000003
33.18	.000045	.000039	.000036	.000036	.000039	.000039	.000036	.000032	.000001
35.74	.000024	.000023	.000021	.000024	.000026	.000026	.000023	.000020	.000000
38.30	.000013	.000014	.000013	.000016	.000018	.000017	.000015	.000012	.000000
40.86	.000007	.000008	.000008	.000011	.000012	.000011	.000009	.000007	
43.42	.000004	.000005	.000005	.000008	.000008	.000007	.000006	.000005	
45.98	.000002	.000003	.000003	.000005	.000006	.000005	.000004	.000003	
48.54	.000001	.000002	.000002	.000004	.000004	.000003	.000002	.000002	
51.10	.000001	.000001	.000001	.000002	.000003	.000002	.000001	.000001	
56.22	.000000	.000000	.000000	.000001	.000001	.000001	.000001	.000000	
61.34	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
-E	.67199	1.0748	1.5273	2.1263	2.7471	3.3987	4.0835	4.8024	5.5557
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000011	.000013	.000014	.000016	.000018	.000020	.000022	.000024	.000027
.02	.000085	.000098	.000111	.000125	.000140	.000155	.000170	.000187	.000203
.03	.000275	.000317	.000360	.000406	.000453	.000501	.000552	.000604	.000659
.04	.000628	.000724	.000822	.000925	.001032	.001142	.001257	.001375	.001498

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
.05	.001182	.001362	.001546	.001739	.001938	.002144	.002357	.002578	.002807
.06	.001969	.002267	.002572	.002892	.003221	.003561	.003914	.004278	.004655
.07	.003014	.003468	.003933	.004419	.004920	.005437	.005972	.006524	.007096
.08	.004338	.004989	.005655	.006350	.007066	.007804	.008567	.009355	.010169
.09	.005956	.006846	.007756	.008705	.009681	.010687	.011725	.012797	.013903
.10	.007880	.009053	.010250	.011498	.012781	.014101	.015462	.016867	.018316
.12	.012672	.014543	.016447	.018431	.020464	.022554	.024705	.026921	.029203
.14	.018738	.021481	.024268	.027165	.030129	.033170	.036295	.039507	.042811
.16	.026060	.029841	.033676	.037655	.041719	.045880	.050147	.054528	.059025
.18	.034588	.039562	.044597	.049812	.055127	.060559	.066120	.071819	.077658
.20	.044248	.050554	.056925	.063511	.070210	.077044	.084028	.091170	.098476
.22	.054948	.062709	.070533	.078606	.086801	.095145	.103655	.112343	.121213
.24	.066586	.075905	.085279	.094934	.104714	.114653	.124770	.135077	.145583
.26	.079050	.090012	.101014	.112324	.123757	.135351	.147129	.159107	.171291
.28	.092227	.104897	.117583	.130601	.143731	.157018	.170491	.184163	.198043
.30	.106000	.120423	.134833	.149589	.164440	.179438	.194613	.209981	.225552
.34	.134877	.152874	.170771	.189020	.207306	.225691	.244213	.262892	.281736
.38	.164801	.186350	.207673	.229324	.250916	.272524	.294194	.315948	.337796
.42	.194965	.219927	.244502	.269341	.293988	.318534	.343029	.367501	.391961
.46	.224657	.252797	.280352	.308069	.335426	.362527	.389432	.416171	.442756
.50	.253267	.284271	.314458	.344668	.374316	.403522	.432353	.460842	.489005
.54	.280286	.313781	.346197	.378460	.409930	.440741	.470968	.500651	.529809
.58	.305300	.340872	.375072	.408913	.441703	.473592	.504664	.534966	.564520
.62	.327987	.365190	.400709	.435632	.469225	.501654	.533013	.563357	.592712
.66	.348103	.386479	.422840	.458342	.492219	.524652	.555749	.585571	.614153
.70	.365480	.404563	.441288	.476872	.510524	.542442	.572746	.601507	.628769
.78	.391635	.430765	.466831	.501149	.532903	.562330	.589578	.614742	.637887
.86	.406194	.443653	.477345	.508651	.536774	.561988	.584473	.604355	.621726
.94	.409517	.443773	.473593	.500396	.523434	.543023	.559381	.572668	.583008
1.02	.402375	.432121	.456820	.477904	.494706	.507586	.516802	.522553	.525003
1.10	.385785	.409950	.428537	.442967	.452680	.458082	.459476	.457102	.451165
1.18	.360888	.378635	.390368	.397472	.399522	.396970	.390164	.379388	.364893
1.26	.328863	.339576	.343941	.343291	.337356	.326632	.311514	.292333	.269383
1.34	.290868	.294130	.290820	.282206	.268183	.249295	.225981	.198619	.167547
1.42	.248000	.243576	.232468	.215865	.193843	.166987	.135782	.100649	.061970
1.50	.201280	.189092	.170219	.145763	.115987	.081516	.042877	.000532	-.045097
1.66	.099911	.072479	.038693	-.000548	-.044601	-.092772	-.144466	-.199147	-.256332
1.82	-.006914	-.048532	-.095769	-.147951	-.204069	-.263385	-.325256	-.389105	-.454410
1.98	-.114277	-.168453	-.227166	-.289985	-.355568	-.423165	-.492119	-.561840	-.631804
2.14	-.218494	-.283265	-.351214	-.422165	-.494496	-.567483	-.640487	-.712945	-.784362
2.30	-.316929	-.390180	-.465047	-.541626	-.618073	-.693725	-.768002	-.840401	-.910489
2.46	-.407804	-.487413	-.566949	-.646789	-.724934	-.800820	-.873960	-.943940	-1.010421
2.62	-.490037	-.573975	-.656094	-.737059	-.814781	-.888829	-.958835	-1.024504	-1.085612
2.78	-.563090	-.649495	-.732333	-.812566	-.888077	-.958592	-1.023888	-1.083809	-1.138264
2.94	-.626847	-.714059	-.796008	-.873950	-.945795	-1.011449	-1.070853	-1.124003	-1.170952
3.10	-.681501	-.768085	-.847795	-.922177	-.989220	-1.049024	-1.101706	-1.147423	-1.186376
3.42	-.765298	-.847209	-.919376	-.983899	-1.039042	-1.085323	-1.123226	-1.153238	-1.175861
3.74	-.819198	-.893225	-.955177	-1.007661	-1.049330	-1.081131	-1.103916	-1.118493	-1.125644
4.06	-.848682	-.912941	-.963339	-1.002932	-1.030844	-1.048440	-1.056919	-1.057386	-1.050866
4.38	-.859045	-.912628	-.951071	-.977816	-.992513	-.996923	-.992564	-.980796	-.962842
4.70	-.854944	-.897617	-.924320	-.938819	-.941330	-.933982	-.918569	-.896657	-.869614
5.02	-.840246	-.872218	-.887774	-.890955	-.882569	-.865070	-.840484	-.810526	-.776651
5.34	-.818046	-.839795	-.845015	-.837975	-.820087	-.794086	-.762170	-.726142	-.687480
5.66	-.790753	-.802912	-.798717	-.782620	-.756636	-.723728	-.686204	-.645889	-.604221
5.98	-.760207	-.763484	-.750835	-.726846	-.694127	-.655802	-.614223	-.571175	-.527997
6.30	-.727784	-.722918	-.702771	-.672019	-.633839	-.591453	-.547184	-.502716	-.459244
6.94	-.661102	-.642131	-.609714	-.568567	-.522871	-.475819	-.429488	-.385205	-.343768
7.58	-.595891	-.565537	-.524137	-.476238	-.426793	-.378676	-.333502	-.292100	-.254801
8.22	-.534680	-.495364	-.447791	-.396121	-.345791	-.299109	-.257084	-.219994	-.187707
8.86	-.478519	-.432351	-.380936	-.327844	-.278688	-.235034	-.197221	-.164990	-.137810



	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
9.50	-.427666	-.376460	-.323095	-.270362	-.223768	-.184034	-.150838	-.123451	-.101033
10.14	-.381969	-.327274	-.273455	-.222379	-.179202	-.143772	-.115169	-.092289	-.074076
10.78	-.341083	-.284206	-.231088	-.182569	-.143257	-.112169	-.087878	-.069007	-.054378
11.42	-.304589	-.246622	-.195071	-.149685	-.114394	-.087460	-.067063	-.051654	-.040003
12.06	-.272050	-.213897	-.164537	-.122610	-.091289	-.068193	-.051220	-.038733	-.029512
12.70	-.243048	-.185447	-.138703	-.100371	-.072835	-.053194	-.039171	-.029112	-.021848
13.98	-.194149	-.139295	-.098459	-.067204	-.046392	-.032459	-.023039	-.016592	-.012124
15.26	-.155237	-.104565	-.069835	-.044998	-.029620	-.019921	-.013684	-.009593	-.006858
16.54	-.124210	-.078463	-.049518	-.030161	-.018985	-.012320	-.008226	-.005641	-.003964
17.82	-.099426	-.058859	-.035110	-.020252	-.012231	-.007690	-.005015	-.003379	-.002345
19.10	-.079598	-.044140	-.024897	-.013633	-.007929	-.004852	-.003105	-.002066	-.001421
20.38	-.063721	-.033093	-.017660	-.009205	-.005177	-.003099	-.001955	-.001289	-.000882
21.66	-.050998	-.024803	-.012530	-.006238	-.003409	-.002005	-.001252	-.000821	-.000559
22.94	-.040802	-.018584	-.008893	-.004245	-.002265	-.001315	-.000816	-.000533	-.000362
24.22	-.032628	-.013921	-.006315	-.002903	-.001520	-.000875	-.000541	-.000353	-.000239
25.50	-.026079	-.010424	-.004486	-.001996	-.001031	-.000591	-.000365	-.000237	-.000160
28.06	-.016631	-.005840	-.002268	-.000962	-.000491	-.000281	-.000173	-.000112	-.000075
30.62	-.010579	-.003269	-.001150	-.000477	-.000245	-.000141	-.000087	-.000055	-.000036
33.18	-.006712	-.001828	-.000585	-.000245	-.000128	-.000074	-.000045	-.000028	-.000018
35.74	-.004248	-.001022	-.000299	-.000130	-.000069	-.000040	-.000024	-.000015	-.000009
38.30	-.002682	-.000571	-.000154	-.000072	-.000039	-.000022	-.000013	-.000008	-.000005
40.86	-.001690	-.000319	-.000080	-.000041	-.000022	-.000013	-.000007	-.000004	-.000002
43.42	-.001062	-.000178	-.000041	-.000024	-.000013	-.000007	-.000004	-.000002	-.000001
45.98	-.000666	-.000100	-.000022	-.000014	-.000008	-.000004	-.000002	-.000001	-.000001
48.54	-.000417	-.000056	-.000011	-.000009	-.000005	-.000002	-.000001	-.000001	.000000
51.10	-.000261	-.000031	-.000006	-.000006	-.000003	-.000001	-.000001	-.000000	.000000
56.22	-.000101	-.000010	-.000002	-.000002	-.000001	-.000000	.000000	.000000	
61.34	-.000039	-.000003	-.000001	-.000001	.000000	.000000	.000000		
66.46	-.000015	-.000001	-.000000	.000000	.000000				
71.58	-.000006	-.000000	-.000000	.000000					
76.70	-.000002	-.000000							
81.82	-.000001								
86.94	-.000000								

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
X	5S 0	5S 1	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
-E		.43996	.52971	.74532	.95864	1.1779	1.4054	1.6422	1.8888
.00		.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01		.016968	.020074	.023758	.026916	.029814	.032551	.035179	.037729
.02		.030065	.035503	.041943	.047434	.052446	.057158	.061663	.066017
.03		.039774	.046876	.055268	.062380	.068836	.074875	.080619	.086143
.04		.046530	.054718	.064375	.072501	.079831	.086645	.093090	.099254
.05		.050725	.059507	.069838	.078463	.086186	.093315	.100012	.106373
.06		.052712	.061669	.072177	.080867	.088580	.095641	.102218	.108414
.07		.052809	.061588	.071855	.080249	.087621	.094298	.100454	.106192
.08		.051301	.059609	.069287	.077089	.083849	.089890	.095382	.100429
.09		.048443	.056040	.064845	.071816	.077748	.082952	.087591	.091767
.10		.044465	.051155	.058860	.064811	.069747	.073960	.077605	.080777
.12		.033941	.038398	.043411	.046926	.049530	.051458	.052841	.053758
.14		.021113	.022995	.024928	.025715	.025752	.025206	.024173	.022713
.16		.007072	.006250	.004967	.002954	.000397	-.002615	-.006026	-.009795
.18		-.007331	-.010826	-.015271	-.019990	-.025018	-.030345	-.035957	-.041837
.20		-.021444	-.027463	-.034875	-.042089	-.049355	-.056748	-.064292	-.071994
.22		-.034777	-.043084	-.053171	-.062585	-.071787	-.080929	-.090076	-.099257
.24		-.046972	-.057275	-.069676	-.080944	-.091735	-.102272	-.112659	-.122949
.26		-.057780	-.069751	-.084065	-.096811	-.108819	-.120381	-.131635	-.142653
.28		-.067040	-.080330	-.096137	-.109973	-.122822	-.135036	-.146785	-.158160

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
X	SS 0	SS 1	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
.30		-.074660	-.088917	-.105790	-.120330	-.133651	-.146156	-.158043	-.169419
.34		-.084882	-.100040	-.117810	-.132659	-.145886	-.157973	-.169161	-.179586
.38		-.088635	-.103429	-.120594	-.134443	-.146369	-.156896	-.166292	-.174715
.42		-.086534	-.099888	-.115184	-.126967	-.136632	-.144718	-.151504	-.157160
.46		-.079424	-.090479	-.102912	-.111820	-.118528	-.123559	-.127190	-.129595
.50		-.068241	-.076364	-.085209	-.090689	-.093993	-.095604	-.095787	-.094712
.54		-.053933	-.058698	-.063486	-.065218	-.064896	-.062943	-.059603	-.055037
.58		-.037401	-.038573	-.039063	-.036930	-.032953	-.027481	-.020725	-.012833
.62		-.019465	-.016976	-.013123	-.007183	.000319	.009116	.019036	.029948
.66		-.000855	.005225	.013303	.022855	.033622	.045433	.058156	.071680
.70		.017806	.027293	.039344	.052201	.065881	.080307	.095394	.111056
.78		.053271	.068691	.087552	.105801	.123993	.142249	.160576	.178942
.86		.083845	.103669	.127439	.149181	.169940	.190021	.209528	.228482
.94		.107727	.130239	.156824	.180077	.201452	.221415	.240161	.257767
1.02		.124111	.147598	.174945	.197840	.218050	.236176	.252492	.267129
1.10		.132916	.155798	.182035	.202935	.220472	.235351	.247914	.258345
1.18		.134548	.155451	.178977	.196534	.210209	.220777	.228633	.234010
1.26		.129724	.147517	.167036	.180217	.189166	.194699	.197252	.197098
1.34		.119327	.133133	.147663	.155743	.159415	.159507	.156483	.150651
1.42		.104314	.113502	.122361	.124900	.123027	.117553	.108961	.097585
1.50		.085641	.089809	.092593	.089407	.081965	.071041	.057122	.040564
1.66		.040912	.034623	.024986	.010640	-.007224	-.027958	-.051102	-.076283
1.82		-.008453	-.024704	-.045898	-.069972	-.096369	-.124627	-.154348	-.185177
1.98		-.057467	-.082293	-.113163	-.144733	-.177124	-.210098	-.243355	-.276584
2.14		-.102556	-.134049	-.172150	-.208614	-.244236	-.279023	-.312797	-.345328
2.30		-.141392	-.177408	-.220082	-.258788	-.294956	-.328843	-.360420	-.389556
2.46		-.172656	-.211034	-.255661	-.294124	-.328423	-.359064	-.386175	-.409748
2.62		-.195803	-.234512	-.278677	-.314710	-.345099	-.370591	-.391476	-.407880
2.78		-.210859	-.248084	-.289671	-.321448	-.346303	-.365203	-.378602	-.386765
2.94		-.218232	-.252426	-.289662	-.315735	-.333841	-.345144	-.350257	-.349582
3.10		-.218582	-.248472	-.279937	-.299223	-.309744	-.312834	-.309256	-.299545
3.42		-.201440	-.219971	-.236941	-.240685	-.234803	-.220893	-.199974	-.172830
3.74		-.166122	-.171162	-.171539	-.158826	-.136533	-.106413	-.069686	-.027337
4.06		-.118811	-.109658	-.093025	-.064415	-.027035	-.017299	.067231	.121631
4.38		-.064563	-.041505	-.008584	.034440	.084812	.140734	.200782	.263741
4.70		-.007209	.028829	.076606	.132038	.192930	.257575	.324548	.392626
5.02		.050512	.098227	.159020	.224611	.293436	.363951	.434807	.504842
5.34		.106732	.164624	.236398	.309837	.384065	.457773	.529758	.599003
5.66		.160250	.226739	.307403	.386440	.463705	.538193	.608928	.675105
5.98		.210345	.283852	.371352	.453060	.532030	.605205	.672714	.734029
6.30		.256634	.335631	.428007	.512066	.589244	.659351	.722063	.777181
6.94		.337346	.423078	.519885	.602044	.672711	.732735	.782641	.822976
7.58		.402718	.490237	.585449	.660501	.720349	.767013	.801946	.826451
8.22		.454150	.539419	.628341	.692712	.739284	.771260	.790975	.800392
8.86		.493360	.573231	.652423	.703959	.736271	.753646	.759156	.755258
9.50		.522053	.594187	.661324	.699024	.717183	.720975	.714009	.699038
10.14		.541791	.604562	.658259	.682007	.686863	.678634	.661240	.637538
10.78		.553956	.606342	.645980	.656305	.649169	.630737	.605018	.574801
11.42		.559751	.601231	.626792	.624658	.607086	.580326	.548275	.513516
12.06		.560216	.590672	.602591	.589235	.562873	.529586	.492996	.455381
12.70		.556250	.575877	.574920	.551722	.518193	.480032	.440457	.401375
13.98		.538008	.537455	.513862	.475246	.431851	.388133	.346277	.307349
15.26		.510029	.492162	.450706	.402010	.353735	.308729	.268035	.231898
16.54		.476037	.444195	.389701	.335444	.286018	.242571	.205069	.173041
17.82		.438793	.396330	.333203	.276938	.228949	.188783	.155482	.128017
19.10		.400317	.350341	.282342	.226698	.181800	.145810	.117040	.094063
20.38		.362065	.307293	.237481	.184285	.143417	.111924	.087588	.068732
21.66		.325051	.261168	.198512	.148939	.112522	.085473	.065231	.049995
22.94		.289953	.232008	.165064	.119781	.087877	.064992	.048385	.036229
24.22		.257195	.200033	.136628	.095926	.068361	.049238	.035767	.026171

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	5S 0	5S 1	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
X									
25.50		.227006	.171714	.112642	.076541	.052999	.037186	.026364	.018856
28.06		.174588	.125122	.075796	.048285	.031588	.021047	.014225	.009728
30.62		.132353	.090029	.050439	.030156	.018658	.011817	.007621	.004989
33.18		.099147	.064106	.033265	.018686	.010944	.006596	.004063	.002549
35.74		.073532	.045246	.021777	.011505	.006385	.003665	.002159	.001299
38.30		.054070	.031695	.014170	.007048	.003710	.002031	.001145	.000662
40.86		.039466	.022058	.009173	.004300	.002150	.001123	.000607	.000337
43.42		.028621	.015264	.005913	.002615	.001243	.000620	.000322	.000172
45.98		.020639	.010509	.003798	.001587	.000717	.000343	.000170	.000088
48.54		.014808	.007203	.002432	.000961	.000414	.000189	.000091	.000045
51.10		.010577	.004918	.001554	.000581	.000239	.000105	.000048	.000023
56.22		.005333	.002268	.000630	.000212	.000079	.000032	.000014	.000006
61.34		.002654	.001034	.000255	.000077	.000027	.000010	.000004	.000002
66.46		.001306	.000466	.000103	.000028	.000009	.000003	.000001	.000000
71.58		.000636	.000209	.000041	.000010	.000003	.000001	.000000	.000000
76.70		.000308	.000093	.000017	.000004	.000001	.000000	.000000	.000000
81.82		.000148	.000041	.000007	.000001	.000000	.000000	.000000	.000000
86.94		.000070	.000018	.000003	.000001	.000000	.000000	.000000	.000000
92.06		.000033	.000008	.000001	.000000	.000000	.000000	.000000	.000000
97.18		.000016	.000003	.000000	.000000	.000000	.000000	.000000	.000000
102.30		.000007	.000001	.000000	.000000	.000000	.000000	.000000	.000000
112.54		.000002	.000000	.000000	.000000	.000000	.000000	.000000	.000000
122.78		.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	SP 0	SP 0	SP 0	SP 1	SP 2	SP 3	SP 4	SP 5	SP 6
-E				.39456	.49717	.59848	.70117	.80635	.91457
X									
.00				.000000	.000000	.000000	.000000	.000000	.000000
.01				.000592	.000734	.000866	.000991	.001114	.001228
.02				.002233	.002766	.003257	.003727	.004186	.004611
.03				.004733	.005858	.006892	.007881	.008844	.009734
.04				.007925	.009802	.011523	.013164	.014760	.016233
.05				.011662	.014412	.016927	.019322	.021646	.023787
.06				.015814	.019525	.022912	.026131	.029250	.032115
.07				.020263	.024997	.029307	.033395	.037348	.040970
.08				.024910	.030701	.035963	.040942	.045747	.050139
.09				.029665	.036528	.042749	.048624	.054280	.059437
.10				.034452	.042382	.049553	.056310	.062801	.068703
.12				.043858	.053849	.062837	.071266	.079327	.086614
.14				.052697	.064568	.075192	.085102	.094535	.103006
.16				.060655	.074158	.086172	.097319	.107871	.117281
.18				.067516	.082357	.095479	.107581	.118969	.129046
.20				.073140	.088999	.102926	.115685	.127613	.138076
.22				.077450	.093996	.108418	.121533	.133703	.144272
.24				.080419	.097322	.111931	.125107	.137232	.147640
.26				.082054	.098993	.113496	.126453	.138261	.148257
.28				.082395	.099067	.113186	.125662	.136902	.146260
.30				.081503	.097623	.111104	.122861	.133307	.141825
.34				.076339	.090602	.102141	.111850	.120136	.126472
.38				.067287	.078869	.087754	.094778	.100327	.103995
.42				.055147	.063441	.069172	.073086	.075533	.076252
.46				.040716	.045324	.047599	.048171	.047343	.045015
.50				.024746	.025457	.024150	.021318	.017210	.011891
.54				.007916	.004683	-.000181	-.006334	-.013590	-.021717
.58				-.009181	-.016264	-.024536	-.033813	-.043975	-.054631
.62				-.026038	-.036765	-.048197	-.060311	-.073055	-.085889
.66				-.042235	-.056313	-.070582	-.085178	-.100122	-.114736

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	SP 0	SP 0	SP 0	SP 1	SP 2	SP 3	SP 4	SP 5	SP 6
X									
.70				-.057435	-.074504	-.091232	-.107912	-.124634	-.140602
.78				-.083864	-.105665	-.126051	-.145609	-.164559	-.181930
.86				-.103987	-.128724	-.151021	-.171716	-.191149	-.208252
.94				-.117283	-.143168	-.165692	-.185897	-.204224	-.219588
1.02				-.123818	-.149196	-.170439	-.188735	-.204611	-.217034
1.10				-.124042	-.147470	-.166155	-.181383	-.193745	-.202324
1.18				-.118643	-.138921	-.154030	-.165305	-.173379	-.177503
1.26				-.108429	-.124616	-.135390	-.142093	-.145382	-.144713
1.34				-.094250	-.105652	-.111581	-.113339	-.111594	-.106035
1.42				-.076946	-.083104	-.083896	-.080557	-.073749	-.063409
1.50				-.057311	-.057972	-.053535	-.045136	-.033417	-.018572
1.66				-.013881	-.003496	.011036	.028846	.049364	.071891
1.82				.031153	.051746	.075097	.100663	.127986	.155910
1.98				.074162	.103381	.133665	.164834	.196575	.227351
2.14				.112660	.148503	.183548	.217993	.251692	.282823
2.30				.145116	.185418	.223006	.258451	.291793	.321024
2.46				.170750	.213367	.251394	.285764	.316713	.342140
2.62				.189342	.232273	.268855	.300358	.327219	.347328
2.78				.201072	.242532	.276052	.303212	.324650	.338316
2.94				.206383	.244837	.273965	.295626	.310651	.317107
3.10				.205875	.240048	.263735	.279038	.286973	.285768
3.42				.190144	.212916	.223584	.224631	.217407	.200552
3.74				.159361	.168374	.164570	.150685	.128348	.096664
4.06				.118440	.112691	.094230	.065933	.029652	-.015048
4.38				.071353	.050816	.018380	-.023036	-.071414	-.126777
4.70				.021119	-.013563	-.058735	-.111514	-.169788	-.233238
5.02				-.030065	-.077811	-.134145	-.196297	-.262135	-.331093
5.34				-.080655	-.140115	-.205859	-.275315	-.346411	-.418441
5.66				-.129603	-.199272	-.272615	-.347336	-.421512	-.494414
5.98				-.176219	-.254529	-.333674	-.411728	-.487006	-.558866
6.30				-.220079	-.305452	-.388678	-.468286	-.542922	-.612133
6.94				-.298694	-.393642	-.480324	-.558457	-.627592	-.687905
7.58				-.364856	-.463853	-.548678	-.620561	-.680210	-.728643
8.22				-.419038	-.517388	-.596273	-.658671	-.706570	-.741901
8.86				-.462190	-.556100	-.626137	-.677139	-.712375	-.734635
9.50				-.495444	-.581998	-.641313	-.680065	-.702699	-.712722
10.14				-.519963	-.597049	-.644620	-.671059	-.681798	-.680879
10.78				-.536869	-.603072	-.638550	-.653167	-.653111	-.642751
11.42				-.547208	-.601699	-.625241	-.628891	-.619337	-.601086
12.06				-.551930	-.594359	-.606488	-.600239	-.582554	-.557903
12.70				-.551891	-.582288	-.583772	-.568796	-.544329	-.514654
13.98				-.540481	-.547996	-.531045	-.502191	-.467876	-.431692
15.26				-.518043	-.505396	-.474125	-.435822	-.395852	-.356872
16.54				-.488454	-.459044	-.417416	-.373406	-.331003	-.291847
17.82				-.454632	-.412004	-.363522	-.316778	-.274280	-.236685
19.10				-.418738	-.366268	-.313856	-.266626	-.225642	-.190675
20.38				-.382344	-.323066	-.269062	-.222974	-.184535	-.152773
21.66				-.346568	-.283096	-.229303	-.185469	-.150175	-.121847
22.94				-.312178	-.246690	-.194439	-.153570	-.121700	-.096804
24.22				-.279677	-.213933	-.164165	-.126657	-.098267	-.076649
25.50				-.249371	-.184747	-.138082	-.104101	-.079096	-.060512
28.06				-.195856	-.136309	-.096754	-.069711	-.050830	-.037432
30.62				-.151755	-.099382	-.067075	-.046229	-.032373	-.022962
33.18				-.116284	-.071756	-.046095	-.030413	-.020466	-.013989
35.74				-.088279	-.051389	-.031446	-.019874	-.012859	-.008474
38.30				-.066489	-.036549	-.021319	-.012913	-.008037	-.005107
40.86				-.049736	-.025839	-.014376	-.008349	-.005000	-.003065
43.42				-.036983	-.018172	-.009648	-.005375	-.003098	-.001833
45.98				-.027356	-.012721	-.006449	-.003447	-.001913	-.001092
48.54				-.020140	-.008869	-.004294	-.002204	-.001178	-.000649

	PD 46	AG 47	CD 48	IN 49	SN 50	SB 51	TE 52	I 53	XE 54
	SP 0	SP 0	SP 0	SP 1	SP 2	SP 3	SP 4	SP 5	SP 6
X									
51.10				-.014766	-.006161	-.002850	-.001404	-.000723	-.000385
56.22				-.007851	-.002944	-.001245	-.000566	-.000270	-.000134
61.34				-.004122	-.001392	-.000538	-.000226	-.000100	-.000046
66.46				-.002142	-.000652	-.000231	-.000089	-.000037	-.000016
71.58				-.001103	-.000303	-.000098	-.000035	-.000014	-.000005
76.70				-.000564	-.000140	-.000042	-.000014	-.000005	-.000002
81.82				-.000286	-.000064	-.000018	-.000005	-.000002	-.000001
86.94				-.000144	-.000029	-.000007	-.000002	-.000001	-.000000
92.06				-.000072	-.000013	-.000003	-.000001	-.000000	-.000000
97.18				-.000036	-.000006	-.000001	-.000000	-.000000	-.000000
102.30				-.000018	-.000003	-.000001	-.000000		
112.54				-.000004	-.000001	-.000000			
122.78				-.000001	-.000000	-.000000			
133.02				-.000000	-.000000				

TABLE IV. RADIAL WAVEFUNCTIONS

		CS 6S1	R=0.23280369*X			ND 4F4	R=0.22614848*X			
		BA 6S2	R=0.23140963*X			PM 4F5	R=0.22490588*X			
		LA 5D1	R=0.23004836*X			SM 4F6	R=0.22369015*X			
		CE 4F1 5D1	R=0.22871857*X			EU 4F7	R=0.22250029*X			
		PR 4F3	R=0.22741901*X							
		CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
		1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E		2545.5	2644.2	2744.5	2846.2	2949.1	3054.5	3161.6	3270.6	3381.5
X										
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	1.654708	1.687508	1.720327	1.753166	1.786023	1.818892	1.851773	1.884665	1.917567	1.950481
.02	2.912139	2.965276	3.018302	3.071222	3.124032	3.176723	3.229294	3.281747	3.334081	3.386333
.03	3.844260	3.908362	3.972147	4.035622	4.098788	4.161631	4.224155	4.286362	4.348253	4.410000
.04	4.511388	4.579538	4.647137	4.714199	4.780725	4.846705	4.912144	4.977050	5.041424	5.105800
.05	4.963960	5.031175	5.097614	5.163295	5.228223	5.292390	5.355808	5.418487	5.480433	5.541800
.06	5.244040	5.306856	5.368697	5.429585	5.489533	5.548536	5.606612	5.663775	5.720036	5.775400
.07	5.386625	5.442751	5.497743	5.551628	5.604424	5.656132	5.706775	5.756374	5.804943	5.852500
.08	5.420746	5.468793	5.515591	5.561173	5.605562	5.648764	5.690811	5.731725	5.771527	5.810300
.09	5.370406	5.409667	5.447610	5.484273	5.519683	5.553854	5.586823	5.618616	5.649258	5.678800
.10	5.255382	5.285657	5.314589	5.342219	5.368579	5.393689	5.417592	5.440317	5.461892	5.482300
.12	4.893205	4.906271	4.918056	4.928607	4.937963	4.946151	4.953230	4.959228	4.964180	4.968000
.14	4.431131	4.429322	4.426410	4.422442	4.417462	4.411501	4.404627	4.396868	4.388263	4.378800
.16	3.932268	3.918608	3.904091	3.888762	3.872667	3.855849	3.838360	3.820235	3.801509	3.782200
.18	3.436311	3.413882	3.390875	3.367330	3.343289	3.318811	3.293917	3.268649	3.243041	3.217000
.20	2.966929	2.938545	2.909862	2.880913	2.851736	2.822388	2.792883	2.763256	2.733537	2.703700
.22	2.536977	2.505026	2.473038	2.441036	2.409049	2.377134	2.345292	2.313554	2.281942	2.250300
.24	2.152196	2.118606	2.085206	2.052009	2.019040	1.986346	1.953921	1.921789	1.889963	1.858300
.26	1.813769	1.780020	1.746649	1.713661	1.681071	1.648921	1.617196	1.585911	1.555072	1.524500
.28	1.520085	1.487259	1.454961	1.423185	1.391937	1.361253	1.331110	1.301515	1.272469	1.243800
.30	1.267933	1.236783	1.206268	1.176376	1.147106	1.118484	1.090483	1.063102	1.036336	1.010200
.34	.871936	.845364	.819543	.794446	.770060	.746398	.723423	.701125	.679487	.658500
.38	.592242	.570727	.549973	.529946	.510625	.492011	.474065	.456767	.440096	.424000
.42	.398448	.381662	.365583	.350172	.335405	.321275	.307742	.294785	.282379	.270500
.46	.266075	.253337	.241216	.229676	.218691	.208248	.198311	.188857	.179863	.171300
.50	.176638	.167176	.158231	.149769	.141766	.134206	.127058	.120300	.113911	.107800
.54	.116719	.109809	.103318	.097216	.091480	.086096	.081037	.076284	.071817	.067600
.58	.076844	.071865	.067217	.062875	.058819	.055035	.051501	.048200	.045117	.042200
.62	.050447	.046898	.043605	.040549	.037711	.035079	.032636	.030368	.028262	.026300
.66	.033042	.030535	.028223	.026090	.024122	.022307	.020632	.019087	.017660	.016300
.70	.021603	.019844	.018233	.016754	.015398	.014155	.013015	.011969	.011008	.010100
.78	.009190	.008338	.007567	.006868	.006234	.005660	.005139	.004667	.004238	.003850
.86	.003877	.003469	.003104	.002778	.002486	.002224	.001989	.001781	.001592	.001420
.94	.001604	.001410	.001239	.001088	.000954	.000836	.000731	.000654	.000571	.000500
1.02	.000631	.000539	.000459	.000389	.000329	.000276	.000230	.000190	.000150	.000110
1.10	.000216	.000172	.000135	.000104	.000077	.000054	.000035	.000026	.000018	.000010
1.18	.000045	.000025	.000009	.000000	.000000	.000000	.000000	.000000	.000000	.000000
1.26	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
1.34	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
1.42	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
		CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
		2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E		396.29	414.31	432.55	450.51	468.20	486.83	505.79	525.10	544.75
X										
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.537627	.548920	.560224	.571575	.582976	.594352	.605739	.617134	.628537	.640000
.02	.940140	.958243	.976304	.994393	1.012509	1.030527	1.048506	1.066444	1.084340	1.102300
.03	1.226923	1.248220	1.269387	1.290514	1.311601	1.332486	1.353246	1.373880	1.394387	1.414800
.04	1.415084	1.436703	1.458084	1.479329	1.500438	1.521230	1.541791	1.562122	1.582224	1.602100

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
.05	1.519696	1.539397	1.558744	1.577845	1.596702	1.615126	1.633208	1.650952	1.668358
.06	1.554017	1.570095	1.585703	1.600955	1.615853	1.630208	1.644117	1.657583	1.670609
.07	1.529687	1.540884	1.551509	1.561672	1.571375	1.580445	1.588973	1.596966	1.604430
.08	1.456906	1.462344	1.467121	1.471341	1.475012	1.477975	1.480319	1.482053	1.483185
.09	1.344595	1.343707	1.342089	1.339838	1.336961	1.333326	1.329015	1.324037	1.318407
.10	1.200536	1.193016	1.184719	1.175729	1.166058	1.155601	1.144431	1.132563	1.120010
.12	.843381	.822485	.800784	.778334	.755153	.731202	.706532	.681162	.655113
.14	.429486	.396043	.361851	.326938	.291325	.255045	.218123	.180583	.142450
.16	-.008442	-.052840	-.097852	-.143485	-.189714	-.236433	-.283648	-.331328	-.379447
.18	-.446582	-.499923	-.553684	-.607905	-.662557	-.717469	-.772674	-.828141	-.883841
.20	-.868039	-.928142	-.988427	-1.048965	-1.109727	-1.170480	-1.231289	-1.292119	-1.352943
.22	-1.261288	-1.325974	-1.390576	-1.455194	-1.519798	-1.584110	-1.648217	-1.712088	-1.775697
.24	-1.618932	-1.686137	-1.752979	-1.819585	-1.885925	-1.951686	-2.016977	-2.081770	-2.146044
.26	-1.936714	-2.004561	-2.071768	-2.138482	-2.204678	-2.270017	-2.334628	-2.398489	-2.461582
.28	-2.212737	-2.279576	-2.345510	-2.410702	-2.475131	-2.538448	-2.600795	-2.662158	-2.722526
.30	-2.446845	-2.511272	-2.574546	-2.636848	-2.698160	-2.758131	-2.816917	-2.874509	-2.930905
.34	-2.794588	-2.850951	-2.905755	-2.959194	-3.011267	-3.061645	-3.110499	-3.157838	-3.203674
.38	-2.997555	-3.043035	-3.086685	-3.128697	-3.169085	-3.207578	-3.244346	-3.279414	-3.312815
.42	-3.079494	-3.112790	-3.144124	-3.173673	-3.201468	-3.227314	-3.251369	-3.273676	-3.294281
.46	-3.065329	-3.086297	-3.105299	-3.122488	-3.137908	-3.151453	-3.163260	-3.173386	-3.181889
.50	-2.978459	-2.987769	-2.995218	-3.000925	-3.004946	-3.007268	-3.008000	-3.007207	-3.004957
.54	-2.839456	-2.838299	-2.835470	-2.831049	-2.825099	-2.817698	-2.808922	-2.798842	-2.787532
.58	-2.665590	-2.655446	-2.643877	-2.630920	-2.616644	-2.601210	-2.584658	-2.567062	-2.548495
.62	-2.470843	-2.453304	-2.434619	-2.414787	-2.393874	-2.372119	-2.349521	-2.326156	-2.302093
.66	-2.266170	-2.242812	-2.218604	-2.193503	-2.167573	-2.141115	-2.114095	-2.086581	-2.058639
.70	-2.059878	-2.032181	-2.003926	-1.975037	-1.945566	-1.915867	-1.885873	-1.855645	-1.825242
.78	-1.664925	-1.632371	-1.599790	-1.567053	-1.534183	-1.501602	-1.469186	-1.436980	-1.405026
.86	-1.314901	-1.281401	-1.248291	-1.215395	-1.182731	-1.150733	-1.119238	-1.088271	-1.057853
.94	-1.020168	-.988280	-.957070	-.926332	-.896086	-.866738	-.838105	-.810194	-.783008
1.02	-.780561	-.751741	-.723769	-.696427	-.669733	-.644048	-.619183	-.595130	-.571878
1.10	-.590665	-.565565	-.541386	-.517915	-.495165	-.473441	-.452560	-.432504	-.413251
1.18	-.443011	-.421751	-.401411	-.381797	-.362917	-.345013	-.327922	-.311615	-.296065
1.26	-.329879	-.312253	-.295501	-.279451	-.264104	-.249647	-.235936	-.222938	-.210623
1.34	-.244192	-.229826	-.216259	-.203342	-.191074	-.179589	-.168766	-.158570	-.148970
1.42	-.179885	-.168337	-.157496	-.147243	-.137568	-.128566	-.120134	-.112241	-.104854
1.50	-.131981	-.122801	-.114235	-.106186	-.098643	-.091663	-.085167	-.079121	-.073499
1.66	-.070373	-.064721	-.059510	-.054680	-.050216	-.046129	-.042370	-.038915	-.035739
1.82	-.037157	-.033766	-.030674	-.027851	-.025282	-.022951	-.020833	-.018909	-.017161
1.98	-.019463	-.017462	-.015659	-.014040	-.012592	-.011287	-.010116	-.009065	-.008122
2.14	-.010108	-.008940	-.007899	-.006984	-.006181	-.005461	-.004823	-.004257	-.003756
2.30	-.005185	-.004507	-.003910	-.003398	-.002960	-.002567	-.002224	-.001923	-.001661
2.46	-.002602	-.002209	-.001869	-.001585	-.001350	-.001139	-.000957	-.000800	-.000665
2.62	-.001253	-.001026	-.000832	-.000678	-.000555	-.000443	-.000349	-.000269	-.000202
2.78	-.000569	-.000440	-.000332	-.000237	-.000175	-.000117	-.000070	-.000032	-.000000
2.94	-.000255	-.000186	-.000131	-.000044	-.000014	.000000	.000000	.000000	.000000
3.10	-.000114	-.000078	-.000051	.000000	.000000	.000000	.000000	.000000	.000000
3.42	-.000022	-.000014	-.000008	.000000	.000000	.000000	.000000	.000000	.000000
3.74	-.000004	-.000002	-.000001	.000000	.000000	.000000	.000000	.000000	.000000
4.06	-.000001	-.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4.38	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
-E	372.63	390.11	407.81	425.24	442.41	460.51	478.94	497.72	516.84
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.020046	.020753	.021470	.022201	.022943	.023695	.024458	.025231	.026015
.02	.075235	.077827	.080456	.083129	.085844	.088590	.091373	.094191	.097045
.03	.158860	.164207	.169624	.175126	.180710	.186351	.192060	.197837	.203681
.04	.265092	.273805	.282621	.291567	.300637	.309789	.319042	.328394	.337845

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
.05	.388876	.401349	.413957	.426736	.439680	.452725	.465900	.479202	.492629
.06	.525842	.542292	.558903	.575722	.592739	.609868	.627149	.644578	.662152
.07	.672226	.692728	.713405	.734318	.755455	.776706	.798122	.819696	.841426
.08	.824801	.849308	.873997	.898939	.924120	.949409	.974862	1.000476	1.026244
.09	.980810	1.009183	1.037733	1.066545	1.095600	1.124742	1.154041	1.183489	1.213082
.10	1.137910	1.169938	1.202126	1.234573	1.267255	1.299996	1.332873	1.365878	1.399006
.12	1.447802	1.486294	1.524882	1.563688	1.602684	1.641647	1.680677	1.719764	1.758898
.14	1.742297	1.785910	1.829518	1.873263	1.917112	1.960807	2.004462	2.048067	2.091612
.16	2.013209	2.060483	2.107621	2.154784	2.201935	2.248785	2.295463	2.341959	2.388264
.18	2.255406	2.304882	2.354071	2.403149	2.452076	2.500542	2.548688	2.596505	2.643983
.20	2.466068	2.516366	2.566215	2.615802	2.665086	2.713744	2.761928	2.809629	2.856839
.22	2.644107	2.693973	2.743227	2.792062	2.840436	2.888026	2.934986	2.981312	3.026998
.24	2.789700	2.838039	2.885606	2.932597	2.978974	3.024417	3.069084	3.112975	3.156086
.26	2.903936	2.949818	2.994780	3.039018	3.082495	3.124905	3.166408	3.207005	3.246700
.28	2.988529	3.031196	3.072809	3.113561	3.153421	3.192101	3.229759	3.266401	3.302035
.30	3.045605	3.084460	3.122148	3.158853	3.194551	3.228980	3.262292	3.294499	3.325614
.34	3.086788	3.116830	3.145539	3.173082	3.199446	3.224435	3.248185	3.270720	3.292062
.38	3.047284	3.067770	3.086851	3.104663	3.121208	3.136368	3.150258	3.162908	3.174354
.42	2.946306	2.957293	2.966886	2.975189	2.982218	2.987936	2.992432	2.995745	2.997917
.46	2.801101	2.803205	2.804002	2.803556	2.801897	2.799072	2.795137	2.790140	2.784127
.50	2.626371	2.620566	2.613597	2.605489	2.596285	2.586108	2.574982	2.562959	2.550088
.54	2.434160	2.421611	2.408085	2.393563	2.378100	2.361889	2.344922	2.327250	2.308925
.58	2.234002	2.215944	2.197120	2.177472	2.157061	2.136142	2.114672	2.092704	2.070288
.62	2.033194	2.010844	1.987948	1.964413	1.940304	1.915928	1.891209	1.866197	1.840941
.66	1.837122	1.811616	1.785784	1.759500	1.732832	1.706124	1.679275	1.652329	1.625329
.70	1.649587	1.621946	1.594190	1.566161	1.537932	1.509870	1.481852	1.453918	1.426101
.78	1.309207	1.279824	1.250688	1.221601	1.192630	1.164168	1.136057	1.108320	1.080979
.86	1.021516	.992855	.964712	.936865	.909371	.882617	.856423	.830799	.805752
.94	.786444	.760019	.734286	.709015	.684256	.660363	.637150	.614614	.592749
1.02	.599049	.575637	.553007	.530937	.509464	.488899	.469061	.449936	.431509
1.10	.452413	.432276	.412945	.394215	.376114	.358899	.342404	.326608	.311489
1.18	.339304	.322375	.306229	.290684	.275757	.261656	.248232	.235458	.223310
1.26	.253035	.239056	.225807	.213131	.201037	.189685	.178945	.168789	.159190
1.34	.187825	.176448	.165730	.155540	.145881	.136869	.128395	.120432	.112951
1.42	.138887	.129736	.121166	.113070	.105447	.098375	.091766	.085593	.079828
1.50	.102375	.095086	.088299	.081930	.075972	.070476	.065371	.060630	.056231
1.66	.055213	.050692	.046529	.042677	.039125	.035880	.032903	.030171	.027665
1.82	.029555	.026812	.024315	.022039	.019972	.018101	.016404	.014865	.013471
1.98	.015727	.014086	.012609	.011286	.010106	.009044	.008093	.007241	.006478
2.14	.008315	.007342	.006476	.005716	.005052	.004456	.003930	.003464	.003052
2.30	.004353	.003779	.003273	.002840	.002471	.002141	.001852	.001601	.001381
2.46	.002239	.001900	.001604	.001360	.001158	.000977	.000820	.000686	.000571
2.62	.001114	.000913	.000740	.000603	.000496	.000397	.000314	.000244	.000185
2.78	.000528	.000411	.000312	.000237	.000171	.000119	.000076	.000040	.000011
2.94	.000248	.000183	.000129	.000091	.000028	.000001	.000000	.000000	.000000
3.10	.000116	.000081	.000053	.000035	.000000	.000000	.000000	.000000	.000000
3.42	.000025	.000016	.000009	.000005	.000000	.000000	.000000	.000000	.000000
3.74	.000005	.000003	.000001	.000001	.000000	.000000	.000000	.000000	.000000
4.06	.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4.38	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
-E	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X	85.385	90.561	95.688	100.16	104.00	108.59	113.24	117.96	122.75
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.241260	.247220	.253181	.259167	.265172	.271155	.277137	.283118	.289096
.02	.421501	.431160	.440790	.450431	.460074	.469647	.479188	.488695	.498166
.03	.549169	.560679	.572107	.583508	.594866	.606094	.617237	.628295	.639269
.04	.631796	.643665	.655387	.667026	.678564	.689903	.701095	.712141	.723042



	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
.05	.676085	.687129	.697958	.708637	.719150	.729395	.739428	.749250	.758863
.06	.687991	.697294	.706312	.715113	.723680	.731915	.739874	.747561	.754978
.07	.672799	.679670	.686195	.692436	.698378	.703933	.709156	.714049	.718620
.08	.635185	.639133	.642679	.645880	.648725	.651140	.653173	.654831	.656122
.09	.579287	.579984	.580233	.580086	.579536	.578524	.577094	.575255	.573015
.10	.508752	.506009	.502787	.499128	.495030	.490452	.485433	.479983	.474113
.12	.336212	.326480	.316244	.305527	.294337	.282677	.270569	.258029	.245070
.14	.138757	.122454	.105678	.088431	.070729	.052624	.034120	.015235	-.004013
.16	-.067518	-.089499	-.111871	-.134653	-.157818	-.181271	-.205026	-.229060	-.253352
.18	-.270609	-.297090	-.323834	-.350880	-.378192	-.405636	-.433242	-.460986	-.488845
.20	-.461793	-.491446	-.521199	-.551106	-.581126	-.611091	-.641047	-.670969	-.700833
.22	-.634954	-.666409	-.697772	-.729112	-.760382	-.791392	-.822200	-.852782	-.883114
.24	-.786047	-.817960	-.849574	-.880967	-.912087	-.942734	-.972974	-1.002784	-1.032145
.26	-.912648	-.943758	-.974353	-1.004517	-1.034195	-1.063188	-1.091566	-1.119310	-1.146404
.28	-1.013596	-1.042758	-1.071188	-1.098972	-1.126056	-1.152251	-1.177629	-1.202177	-1.225882
.30	-1.088700	-1.114902	-1.140165	-1.164568	-1.188064	-1.210483	-1.231896	-1.252295	-1.271672
.34	-1.164059	-1.181898	-1.198429	-1.213712	-1.227709	-1.240323	-1.251611	-1.261580	-1.270238
.38	-1.148572	-1.155776	-1.161391	-1.165444	-1.167919	-1.168818	-1.168175	-1.166013	-1.162355
.42	-1.056454	-1.051835	-1.045458	-1.037306	-1.027390	-1.015829	-1.002627	-.987824	-.971461
.46	-.903421	-.886716	-.868202	-.847809	-.825579	-.801761	-.776321	-.749314	-.720800
.50	-.704962	-.676640	-.646571	-.614631	-.580891	-.545733	-.509079	-.471002	-.431573
.54	-.475348	-.436423	-.395913	-.353643	-.309714	-.264629	-.218269	-.170719	-.122062
.58	-.227127	-.178984	-.129506	-.078468	-.025999	.027290	.081560	.136715	.192665
.62	.029069	.084818	.141586	.199638	.258823	.318443	.378694	.439477	.500696
.66	.284531	.346169	.408459	.471704	.535731	.599778	.664073	.728515	.793011
.70	.532352	.598152	.664208	.730848	.797886	.864520	.931004	.997238	1.063136
.78	.985418	1.054655	1.123330	1.191794	1.259852	1.326696	1.392608	1.457508	1.521328
.86	1.361995	1.429058	1.494795	1.559545	1.623125	1.684809	1.744882	1.803296	1.860009
.94	1.652212	1.712840	1.771502	1.828502	1.883686	1.936474	1.987136	2.035657	2.082032
1.02	1.856979	1.908289	1.957161	2.003841	2.048221	2.089909	2.129139	2.165937	2.200334
1.10	1.983619	2.023966	2.061582	2.096645	2.129103	2.158767	2.185827	2.210346	2.232389
1.18	2.042739	2.071498	2.097403	2.120568	2.140997	2.158700	2.173818	2.186448	2.196686
1.26	2.046125	2.063453	2.077956	2.089691	2.098719	2.105225	2.109305	2.111080	2.110670
1.34	2.005418	2.012031	2.015978	2.017266	2.016007	2.012533	2.006896	1.999237	1.989691
1.42	1.931348	1.928331	1.922907	1.915045	1.904899	1.892911	1.879097	1.863608	1.846587
1.50	1.833346	1.821998	1.808570	1.793009	1.775499	1.756557	1.736170	1.714488	1.691657
1.66	1.596100	1.572243	1.547073	1.520519	1.492794	1.464468	1.435481	1.405971	1.376063
1.82	1.341165	1.310019	1.278350	1.246069	1.213392	1.180842	1.148334	1.115973	1.083848
1.98	1.097299	1.063135	1.029131	.995202	.961533	.928547	.896144	.864387	.833327
2.14	.879521	.845447	.812052	.779272	.747242	.716259	.686219	.657146	.629052
2.30	.693723	.661758	.630822	.600872	.571994	.544352	.517851	.492478	.468213
2.46	.540278	.511555	.484056	.457764	.432715	.408955	.386402	.365017	.344758
2.62	.416570	.391568	.367864	.345462	.324358	.304499	.285820	.268265	.251777
2.78	.318651	.297410	.277450	.258796	.241415	.225171	.210022	.195902	.182746
2.94	.242239	.224531	.208027	.192774	.178713	.165650	.153565	.142388	.132052
3.10	.183270	.168726	.155275	.142979	.131770	.121405	.111889	.103153	.095132
3.42	.103884	.094389	.085732	.077999	.071108	.064478	.059048	.053859	.049157
3.74	.058486	.052467	.047048	.042330	.038233	.034472	.031112	.028106	.025416
4.06	.032901	.029147	.025806	.022982	.020604	.018406	.016466	.014750	.013230
4.38	.018582	.016256	.014207	.012535	.011179	.009906	.008793	.007819	.006965
4.70	.010578	.009132	.007872	.006886	.006125	.005388	.004750	.004197	.003716
5.02	.006085	.005178	.004394	.003812	.003392	.002964	.002597	.002281	.002008
5.34	.003541	.002962	.002466	.002122	.001895	.001645	.001432	.001250	.001093
5.66	.002083	.001705	.001385	.001180	.001061	.000915	.000790	.000684	.000594
5.98	.001234	.000981	.000770	.000646	.000589	.000504	.000432	.000371	.000320

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
6.30	.000731	.000558	.000415	.000341	.000317	.000275	.000234	.000200	.000171
6.94	.000251	.000175	.000089	.000063	.000066	.000080	.000067	.000057	.000048
7.58	.000084	.000054	.000000	.000000	.000000	.000023	.000019	.000016	.000013
8.22	.000028	.000016	.000000	.000000	.000000	.000006	.000005	.000004	.000003
8.86	.000009	.000005				.000002	.000001	.000001	.000001
9.50	.000003	.000001				.000000	.000000	.000000	.000000
10.14	.000001	.000000				.000000	.000000	.000000	.000000
10.78	.000000	.000000							

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
-E	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
X	75.191	80.079	84.918	89.103	92.671	96.973	101.34	105.77	110.27
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.009403	.009778	.010159	.010549	.010945	.011346	.011753	.012166	.012585
.02	.035273	.036651	.038051	.039477	.040929	.042397	.043885	.045392	.046920
.03	.074417	.077263	.080151	.083091	.086080	.089096	.092151	.095244	.098374
.04	.124033	.128674	.133375	.138157	.143013	.147909	.152860	.157866	.162927
.05	.181665	.188308	.195031	.201859	.208786	.215760	.222805	.229919	.237102
.06	.245168	.253923	.262772	.271749	.280844	.289989	.299214	.308519	.317902
.07	.312677	.323571	.334566	.345707	.356981	.368299	.379703	.391189	.402756
.08	.382573	.395563	.408657	.421907	.435297	.448720	.462225	.475809	.489469
.09	.453458	.468449	.483536	.498782	.514168	.529567	.545039	.560578	.576181
.10	.524135	.540983	.557914	.574998	.592212	.609414	.626670	.643974	.661322
.12	.660925	.680926	.700959	.721109	.741347	.761498	.781644	.801777	.821892
.14	.786538	.808796	.831007	.853265	.875537	.897625	.919620	.941514	.963302
.16	.896566	.920093	.943468	.966792	.990029	1.012964	1.035697	1.058221	1.080528
.18	.988177	1.011963	1.035473	1.058812	1.081939	1.104637	1.127006	1.149042	1.170738
.20	1.059767	1.082834	1.105489	1.127835	1.149829	1.171259	1.192227	1.212728	1.232757
.22	1.110681	1.132120	1.153004	1.173429	1.193352	1.212579	1.231207	1.249232	1.266652
.24	1.140990	1.159982	1.178276	1.195955	1.212981	1.229184	1.244652	1.259387	1.273388
.26	1.151305	1.167137	1.182132	1.196358	1.209781	1.222265	1.233889	1.244656	1.254571
.28	1.142630	1.154703	1.165807	1.175995	1.185236	1.193439	1.200667	1.206929	1.212233
.30	1.116248	1.124074	1.130815	1.136500	1.141108	1.144596	1.147011	1.148366	1.148676
.34	1.016328	1.014643	1.011689	1.007444	1.001906	.995151	.987184	.978031	.967716
.38	.864234	.852350	.839093	.824385	.808248	.790887	.772261	.752409	.731367
.42	.672843	.650763	.627292	.602294	.575818	.548204	.519360	.489339	.458188
.46	.454243	.422512	.389459	.354891	.318882	.281904	.243816	.204680	.164556
.50	.219210	.178777	.137168	.094138	.049789	.004707	-.041292	-.088137	-.135760
.54	-.023016	-.070930	-.119807	-.169938	-.221194	-.272891	-.325253	-.378204	-.431670
.58	-.264777	-.318790	-.373499	-.429231	-.485837	-.542553	-.599640	-.657017	-.714607
.62	-.499930	-.558590	-.617639	-.677430	-.737798	-.797926	-.858101	-.918243	-.978275
.66	-.723723	-.785578	-.847489	-.909827	-.972414	-1.034404	-1.096104	-1.157436	-1.218329
.70	-.932632	-.996287	-1.059652	-1.123106	-1.186464	-1.248876	-1.310660	-1.371745	-1.432067
.78	-1.296854	-1.360328	-1.422829	-1.484425	-1.545830	-1.605355	-1.663621	-1.720575	-1.776176
.86	-1.582745	-1.644874	-1.699420	-1.755707	-1.810568	-1.863350	-1.914349	-1.963543	-2.010916
.94	-1.790149	-1.841915	-1.891607	-1.939482	-1.985413	-2.028929	-2.070286	-2.109493	-2.146568
1.02	-1.924853	-1.967327	-2.007379	-2.045190	-2.080681	-2.113593	-2.144125	-2.172324	-2.198238
1.10	-1.995826	-2.028021	-2.057595	-2.084651	-2.109166	-2.131092	-2.150574	-2.167688	-2.182511
1.18	-2.013334	-2.035021	-2.054028	-2.070388	-2.084135	-2.095417	-2.104324	-2.110959	-2.115425
1.26	-1.987721	-1.999243	-2.008150	-2.014417	-2.018134	-2.019617	-2.018903	-2.016119	-2.011386
1.34	-1.928680	-1.930785	-1.930444	-1.927589	-1.922357	-1.915197	-1.906105	-1.895222	-1.882680
1.42	-1.844871	-1.838567	-1.830069	-1.819278	-1.806370	-1.791890	-1.775800	-1.758247	-1.739370
1.50	-1.743753	-1.730196	-1.714753	-1.697310	-1.678074	-1.657645	-1.635960	-1.613168	-1.589405
1.66	-1.513392	-1.488942	-1.463318	-1.436402	-1.408429	-1.380019	-1.351077	-1.321735	-1.292113
1.82	-1.274284	-1.243457	-1.212167	-1.180328	-1.148166	-1.116224	-1.084395	-1.052782	-1.021468
1.98	-1.048425	-1.014922	-.981581	-.948360	-.915445	-.883249	-.851671	-.820771	-.790595
2.14	-.847193	-.813740	-.780946	-.748804	-.717449	-.687143	-.657795	-.629428	-.602049

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
2.30	-.674912	-.643329	-.612751	-.583204	-.554768	-.527557	-.501496	-.476574	-.452767
2.46	-.531616	-.502964	-.475524	-.449351	-.424474	-.400871	-.378491	-.357294	-.337234
2.62	-.414984	-.389753	-.365827	-.343283	-.322106	-.302164	-.283429	-.265841	-.249340
2.78	-.321623	-.299907	-.279500	-.260500	-.242857	-.226349	-.210973	-.196658	-.183337
2.94	-.247854	-.229496	-.212390	-.196650	-.182202	-.168757	-.156335	-.144861	-.134265
3.10	-.190158	-.174859	-.160717	-.147858	-.136190	-.125381	-.115472	-.106388	-.098059
3.42	-.110895	-.100603	-.091231	-.082918	-.075556	-.068775	-.062648	-.057109	-.052100
3.74	-.064217	-.057495	-.051459	-.046248	-.041756	-.037621	-.033934	-.030644	-.027706
4.06	-.037118	-.032809	-.028988	-.025789	-.023117	-.020641	-.018461	-.016539	-.014842
4.38	-.021508	-.018773	-.016376	-.014439	-.012882	-.011416	-.010141	-.009028	-.008055
4.70	-.012541	-.010810	-.009310	-.008147	-.007256	-.006393	-.005650	-.005008	-.004452
5.02	-.007383	-.006284	-.005341	-.004646	-.004146	-.003639	-.003206	-.002835	-.002516
5.34	-.004401	-.003697	-.003098	-.002683	-.002410	-.002111	-.001857	-.001641	-.001457
5.66	-.002661	-.002205	-.001819	-.001571	-.001427	-.001249	-.001100	-.000973	-.000866
5.98	-.001635	-.001334	-.001081	-.000932	-.000861	-.000755	-.000666	-.000591	-.000527
6.30	-.001020	-.000818	-.000648	-.000558	-.000528	-.000464	-.000411	-.000366	-.000328
6.94	-.000414	-.000317	-.000231	-.000198	-.000206	-.000183	-.000163	-.000146	-.000132
7.58	-.000173	-.000124	-.000080	-.000069	-.000082	-.000073	-.000066	-.000060	-.000055
8.22	-.000072	-.000046	-.000027	-.000023	-.000031	-.000028	-.000026	-.000024	-.000022
8.86	-.000029	-.000017	-.000009	-.000008	-.000011	-.000011	-.000010	-.000009	-.000009
9.50	-.000012	-.000006	-.000003	-.000003	-.000004	-.000004	-.000004	-.000004	-.000003
10.14	-.000005	-.000002	-.000001	-.000001	-.000002	-.000001	-.000001	-.000001	-.000001
10.78	-.000002	-.000001	-.000000	.000000	-.000001	-.000001	-.000001	-.000001	-.000001
11.42	-.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
12.06	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
-E	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
56.452	60.804	65.107	68.771	71.831	75.608	79.449	83.355	87.329	
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000067	.000071	.000075	.000079	.000083	.000088	.000093	.000098	.000103
.02	.000511	.000541	.000572	.000605	.000638	.000673	.000709	.000745	.000783
.03	.001653	.001750	.001850	.001954	.002062	.002173	.002287	.002404	.002525
.04	.003757	.003975	.004200	.004435	.004678	.004926	.005182	.005445	.005716
.05	.007039	.007443	.007861	.008296	.008746	.009206	.009680	.010166	.010666
.06	.011669	.012334	.013020	.013732	.014471	.015225	.016000	.016796	.017613
.07	.017783	.018787	.019821	.020895	.022008	.023143	.024309	.025506	.026734
.08	.025479	.026903	.028371	.029893	.031469	.033076	.034726	.036418	.038153
.09	.034828	.036757	.038742	.040801	.042930	.045100	.047327	.049609	.051947
.10	.045875	.048391	.050980	.053662	.056435	.059258	.062153	.065119	.068155
.12	.073132	.077067	.081109	.085292	.089610	.094002	.098498	.103098	.107801
.14	.107214	.112870	.118672	.124669	.130853	.137132	.143551	.150110	.156807
.16	.147849	.155495	.163328	.171413	.179738	.188180	.196798	.205591	.214558
.18	.194602	.204464	.214553	.224953	.235648	.246477	.257516	.268764	.280217
.20	.246922	.259180	.271704	.284595	.297835	.311220	.324846	.338711	.352808
.22	.304183	.318971	.334058	.349567	.365475	.381532	.397854	.414438	.431278
.24	.365720	.383125	.400857	.419061	.437705	.456497	.475571	.494924	.514546
.26	.430849	.450916	.471329	.492256	.513660	.535199	.557031	.579148	.601542
.28	.498892	.521623	.544712	.568348	.592488	.616743	.641291	.666124	.691229
.30	.569187	.594546	.620267	.646560	.673373	.700271	.727453	.754910	.782625
.34	.714030	.744411	.775131	.806441	.838273	.870106	.902173	.934465	.966960
.38	.860751	.895663	.930854	.966607	1.002842	1.038957	1.075222	1.111622	1.148134
.42	1.005404	1.044195	1.083170	1.122637	1.162501	1.202098	1.241726	1.281368	1.320996
.46	1.144748	1.186667	1.228641	1.270997	1.313625	1.355820	1.397896	1.439838	1.481617
.50	1.276233	1.320473	1.364613	1.408988	1.453478	1.497354	1.540943	1.584228	1.627181
.54	1.397940	1.443679	1.489144	1.534668	1.580123	1.624777	1.668960	1.712659	1.755844
.58	1.508508	1.554942	1.600915	1.646747	1.692308	1.736882	1.780796	1.824037	1.866582
.62	1.607064	1.653431	1.699140	1.744496	1.789366	1.833070	1.875923	1.917919	1.959038
.66	1.693141	1.738735	1.783476	1.827641	1.871100	1.913228	1.954321	1.994380	2.033389

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
X									
.70	1.766610	1.810795	1.853937	1.896279	1.937697	1.977634	2.016365	2.053895	2.090219
.78	1.876501	1.916274	1.954650	1.991796	2.027610	2.061708	2.094304	2.125423	2.155076
.86	1.940132	1.973886	2.005955	2.036416	2.065203	2.092134	2.117352	2.140902	2.162815
.94	1.962850	1.989574	2.014404	2.037329	2.058326	2.077422	2.094690	2.110193	2.123984
1.02	1.950870	1.970071	1.987253	2.002328	2.015320	2.026459	2.035746	2.043265	2.049087
1.10	1.910554	1.922160	1.931707	1.939045	1.944248	1.947720	1.949404	1.949400	1.947796
1.18	1.847960	1.852225	1.854471	1.854504	1.852444	1.848834	1.843583	1.836788	1.828558
1.26	1.768589	1.766007	1.761517	1.754897	1.746311	1.736410	1.725057	1.712369	1.698458
1.34	1.677269	1.668498	1.657984	1.645503	1.631252	1.615949	1.599433	1.581825	1.563243
1.42	1.578122	1.563916	1.548181	1.530701	1.511704	1.491932	1.471215	1.449672	1.427422
1.50	1.474584	1.455745	1.435624	1.414030	1.391206	1.367888	1.343909	1.319378	1.294411
1.66	1.264959	1.239259	1.212823	1.185535	1.157648	1.129800	1.101849	1.073875	1.045980
1.82	1.064363	1.034745	1.004938	.974920	.944921	.915407	.886276	.857581	.829390
1.98	.881844	.850732	.819920	.789482	.759598	.730531	.702224	.674700	.647992
2.14	.721565	.690787	.660705	.631479	.603226	.576003	.549799	.524607	.500426
2.30	.584466	.555282	.527086	.500106	.474395	.449818	.426410	.404135	.382964
2.46	.469526	.442712	.417077	.392900	.370173	.348597	.328246	.309064	.290999
2.62	.374660	.350615	.327849	.306679	.287045	.268512	.251192	.235011	.219904
2.78	.297324	.276169	.256323	.238126	.221474	.205830	.191338	.177913	.165483
2.94	.234897	.216567	.199520	.184112	.170203	.157184	.145224	.134236	.124141
3.10	.184900	.169214	.154748	.141861	.130392	.119683	.109926	.101031	.092922
3.42	.113614	.102449	.092319	.083569	.076013	.068969	.062649	.056974	.051874
3.74	.069264	.061539	.054637	.048877	.044070	.039568	.035589	.032067	.028946
4.06	.042016	.036774	.032163	.028461	.025494	.022682	.020232	.018092	.016221
4.38	.025410	.021903	.018866	.016534	.014756	.013032	.011550	.010274	.009172
4.70	.015342	.013019	.011038	.009596	.008566	.007527	.006646	.005897	.005258
5.02	.009257	.007728	.006446	.005570	.004999	.004383	.003868	.003436	.003072
5.34	.005584	.004582	.003755	.003235	.002939	.002581	.002286	.002042	.001838
5.66	.003367	.002712	.002181	.001879	.001744	.001542	.001378	.001243	.001133
5.98	.002028	.001600	.001259	.001091	.001048	.000937	.000849	.000779	.000721
6.30	.001218	.000939	.000719	.000631	.000638	.000581	.000538	.000503	.000475
6.94	.000429	.000316	.000229	.000207	.000247	.000240	.000235	.000232	.000230
7.58	.000137	.000104	.000071	.000066	.000102	.000109	.000116	.000121	.000126
8.22	.000030	.000033	.000022	.000021	.000045	.000055	.000063	.000070	.000076
8.86	.000000	.000011	.000006	.000006	.000021	.000030	.000038	.000044	.000049
9.50	.000000	.000003	.000002	.000002	.000010	.000018	.000024	.000029	.000033
10.14		.000001	.000001	.000001	.000005	.000011	.000016	.000020	.000023
10.78		.000000	.000000	.000000	.000003	.000008	.000011	.000014	.000017
11.42		.000000	.000000	.000000	.000002	.000005	.000008	.000010	.000012
12.06					.000001	.000004	.000006	.000008	.000009
12.70					.000001	.000003	.000005	.000006	.000007
13.98					.000000	.000002	.000003	.000004	.000004
15.26					.000000	.000001	.000002	.000002	.000003
16.54						.000001	.000001	.000001	.000002
17.82						.000001	.000001	.000001	.000001
19.10						.000000	.000001	.000001	.000001
20.38						.000000	.000000	.000000	.000000

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	17.391	19.113	20.691	21.620	21.928	22.842	23.755	24.669	25.587
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.111226	.115165	.119086	.122379	.125146	.128368	.131556	.134713	.137846
.02	.194283	.200811	.207285	.212648	.217079	.222285	.227412	.232472	.237472
.03	.253040	.261038	.268935	.275363	.280563	.286742	.292797	.298743	.304589
.04	.290954	.299505	.307902	.314583	.319834	.326176	.332349	.338370	.344251

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
.05	.311111	.319473	.327626	.333915	.338656	.344521	.350175	.355638	.360923
.06	.316257	.323841	.331164	.336560	.340359	.345257	.349907	.354331	.358542
.07	.308834	.315185	.321227	.325351	.327894	.331459	.334748	.337781	.340574
.08	.291010	.295787	.300213	.302793	.303861	.305838	.307516	.308918	.310060
.09	.264706	.267666	.270242	.271097	.270553	.270777	.270688	.270311	.269661
.10	.231619	.232605	.233181	.232205	.229983	.228366	.226433	.224206	.221702
.12	.150905	.147743	.144151	.139448	.133887	.128574	.122963	.117076	.110928
.14	.058785	.051569	.043938	.035733	.027133	.018416	.009452	.000259	-.009145
.16	-.037175	-.048044	-.059274	-.070494	-.081607	-.093184	-.104928	-.116824	-.128856
.18	-.131308	-.145229	-.159424	-.173011	-.185979	-.199721	-.213527	-.227384	-.241282
.20	-.219479	-.235733	-.252146	-.267367	-.281475	-.296615	-.311698	-.326717	-.341664
.22	-.298779	-.316594	-.334432	-.350528	-.365049	-.380805	-.396374	-.411753	-.426938
.24	-.367280	-.385874	-.404342	-.420569	-.434808	-.450425	-.465721	-.480697	-.495354
.26	-.423825	-.442446	-.460782	-.476442	-.489756	-.504536	-.518860	-.532737	-.546172
.28	-.467867	-.485813	-.503312	-.517770	-.529587	-.542906	-.555641	-.567807	-.579414
.30	-.499324	-.515961	-.531991	-.544691	-.554521	-.565839	-.576456	-.586393	-.595665
.34	-.525862	-.538292	-.549821	-.557670	-.562398	-.568465	-.573639	-.577954	-.581436
.38	-.508420	-.515079	-.520602	-.522395	-.521078	-.520828	-.519568	-.517341	-.514186
.42	-.454195	-.454169	-.452848	-.448021	-.440330	-.433361	-.425344	-.416335	-.406383
.46	-.371205	-.364162	-.355750	-.344291	-.330413	-.316876	-.302338	-.286863	-.270509
.50	-.267419	-.253513	-.238254	-.220595	-.201120	-.181602	-.161208	-.140007	-.118064
.54	-.150247	-.130017	-.108536	-.085443	-.061251	-.036658	-.011379	.014511	.040944
.58	-.026261	-.000533	.026268	.053797	.081635	.110191	.139186	.168545	.198198
.62	.098925	.129131	.160164	.193990	.221296	.252588	.284030	.315550	.347082
.66	.220678	.254223	.288297	.321213	.352781	.385540	.418135	.450500	.482572
.70	.335307	.371001	.406886	.440679	.472326	.505308	.537797	.569738	.601076
.78	.532654	.569122	.605038	.637159	.665707	.695703	.724561	.752251	.778742
.86	.677002	.709972	.741634	.768147	.789996	.813202	.834703	.854504	.872607
.94	.763530	.789529	.813532	.831467	.844062	.857760	.869324	.878797	.886217
1.02	.793660	.810152	.824082	.831499	.833329	.835900	.836074	.833935	.829559
1.10	.772698	.778079	.780491	.776408	.766902	.757713	.746042	.732011	.715732
1.18	.708067	.701581	.691894	.676153	.655522	.634760	.611603	.586205	.558708
1.26	.608063	.589674	.568030	.541140	.510197	.478685	.445018	.409373	.371917
1.34	.481025	.451277	.418392	.381360	.341351	.300367	.257594	.213227	.167447
1.42	.334810	.294691	.251702	.205887	.158336	.109452	.059243	.007911	-.044359
1.50	.176499	.127306	.075644	.022619	-.030805	-.085861	-.141712	-.198159	-.255022
1.66	-.152764	-.215507	-.279633	-.342035	-.402131	-.464267	-.526054	-.587332	-.647957
1.82	-.469006	-.538868	-.608817	-.674141	-.734740	-.797539	-.858907	-.918747	-.976979
1.98	-.748475	-.819505	-.889312	-.952113	-1.008329	-1.066693	-1.122739	-1.176456	-1.227837
2.14	-.978717	-1.046005	-1.110891	-1.167102	-1.215563	-1.265941	-1.313390	-1.357979	-1.399779
2.30	-1.155541	-1.215433	-1.271970	-1.318940	-1.357702	-1.398019	-1.435078	-1.469925	-1.500000
2.46	-1.280294	-1.330379	-1.376425	-1.412760	-1.441077	-1.470483	-1.496566	-1.519531	-1.539570
2.62	-1.357676	-1.396637	-1.431154	-1.456469	-1.474495	-1.493075	-1.508479	-1.520957	-1.530735
2.78	-1.394110	-1.421522	-1.444340	-1.458998	-1.467508	-1.475984	-1.481598	-1.484618	-1.485288
2.94	-1.396620	-1.412732	-1.424323	-1.429190	-1.429331	-1.428826	-1.425880	-1.420762	-1.413720
3.10	-1.372105	-1.377643	-1.378913	-1.375158	-1.368261	-1.360099	-1.349979	-1.338156	-1.324867
3.42	-1.266640	-1.254301	-1.238581	-1.221557	-1.204644	-1.185291	-1.164983	-1.143914	-1.122274
3.74	-1.118990	-1.093814	-1.066398	-1.041242	-1.019096	-.993519	-.967881	-.942307	-.916896
4.06	-.957615	-.924444	-.890205	-.861181	-.837398	-.809458	-.782148	-.755516	-.729578
4.38	-.800171	-.763071	-.725958	-.696205	-.673165	-.645536	-.619004	-.593544	-.569113
4.70	-.656392	-.618459	-.581381	-.552981	-.532056	-.506390	-.482086	-.459063	-.437235
5.02	-.530668	-.494077	-.458985	-.433158	-.414982	-.392149	-.370781	-.350762	-.331975
5.34	-.424059	-.390189	-.358248	-.335571	-.320290	-.300612	-.282387	-.265478	-.249753
5.66	-.335695	-.305302	-.277076	-.257690	-.245158	-.228604	-.213417	-.194948	-.186565
5.98	-.263727	-.237105	-.212733	-.196502	-.186422	-.172759	-.160331	-.148992	-.138613
6.30	-.205913	-.183040	-.162384	-.149020	-.141036	-.129928	-.119905	-.110827	-.102576
6.94	-.123801	-.107651	-.093437	-.084713	-.079877	-.072784	-.066474	-.060836	-.055777
7.58	-.073532	-.062610	-.053232	-.047741	-.044907	-.040523	-.036673	-.033273	-.030256
8.22	-.043417	-.036246	-.030236	-.026863	-.025239	-.022587	-.020283	-.018271	-.016502
8.86	-.025624	-.021008	-.017230	-.015191	-.014273	-.012690	-.011328	-.010148	-.009120

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
X									
9.50	-.015196	-.012258	-.009913	-.008690	-.008176	-.007236	-.006434	-.005744	-.005148
10.14	-.009103	-.007242	-.005793	-.005061	-.004776	-.004217	-.003743	-.003339	-.002990
10.78	-.005539	-.004356	-.003460	-.003020	-.002862	-.002528	-.002246	-.002005	-.001799
11.42	-.003442	-.002682	-.002124	-.001857	-.001770	-.001567	-.001396	-.001250	-.001126
12.06	-.002195	-.001698	-.001345	-.001180	-.001133	-.001007	-.000901	-.000811	-.000733
12.70	-.001442	-.001109	-.000880	-.000777	-.000751	-.000671	-.000604	-.000546	-.000496
13.98	-.000684	-.000520	-.000416	-.000371	-.000364	-.000329	-.000298	-.000272	-.000250
15.26	-.000364	-.000272	-.000218	-.000196	-.000195	-.000177	-.000162	-.000149	-.000137
16.54	-.000211	-.000154	-.000123	-.000111	-.000112	-.000102	-.000093	-.000086	-.000079
17.82	-.000129	-.000091	-.000073	-.000066	-.000067	-.000061	-.000055	-.000051	-.000047
19.10	-.000081	-.000056	-.000044	-.000040	-.000041	-.000037	-.000034	-.000031	-.000028
20.38	-.000052	-.000035	-.000027	-.000025	-.000025	-.000023	-.000021	-.000019	-.000017
21.66	-.000033	-.000022	-.000017	-.000015	-.000016	-.000014	-.000013	-.000012	-.000011
22.94	-.000021	-.000014	-.000011	-.000010	-.000010	-.000009	-.000008	-.000007	-.000007
24.22	-.000013	-.000009	-.000007	-.000006	-.000006	-.000006	-.000005	-.000005	-.000004
25.50	-.000008	-.000006	-.000005	-.000004	-.000004	-.000003	-.000003	-.000003	-.000003
28.06	-.000003	-.000003	-.000002	-.000002	-.000002	-.000001	-.000001	-.000001	-.000001
30.62	-.000000	-.000001	-.000001	-.000001	-.000001	-.000000	-.000000	.000000	.000000
33.18	.000000	-.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
-E	13.537	15.099	16.518	17.307	17.492	18.266	19.038	19.811	20.587
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.004221	.004446	.004675	.004877	.005056	.005261	.005469	.005677	.005888
.02	.015834	.016663	.017506	.018249	.018905	.019658	.020416	.021180	.021950
.03	.033401	.035120	.036869	.038402	.039752	.041302	.042861	.044430	.046010
.04	.055657	.058474	.061335	.063835	.066026	.068546	.071076	.073619	.076177
.05	.081492	.085546	.089658	.093234	.096356	.099952	.103557	.107176	.110810
.06	.109935	.115306	.120747	.125458	.129550	.134273	.139001	.143740	.148492
.07	.140138	.146859	.153656	.159515	.164577	.170433	.176285	.182140	.188004
.08	.171367	.179428	.187567	.194549	.200548	.207503	.214442	.221374	.228303
.09	.202985	.212342	.221775	.229825	.236700	.244690	.252649	.260585	.268504
.10	.234444	.245025	.255676	.264713	.272383	.281321	.290206	.299050	.307859
.12	.295089	.307818	.320586	.331285	.340234	.350731	.361123	.371422	.381639
.14	.350368	.364745	.379108	.390970	.400722	.412252	.423610	.434813	.445873
.16	.398259	.413714	.429084	.441559	.451598	.463592	.475336	.486852	.498154
.18	.437464	.453400	.469164	.481691	.491504	.503386	.514937	.526180	.537132
.20	.467249	.483076	.498633	.510671	.519766	.530990	.541797	.552214	.562262
.22	.487324	.502483	.517264	.528309	.536242	.546305	.555868	.564961	.573607
.24	.497739	.511714	.525202	.534804	.541183	.549644	.557525	.564859	.571675
.26	.498798	.511131	.522868	.530637	.535133	.541616	.547447	.552664	.557296
.28	.490995	.501290	.510884	.516497	.518845	.523044	.526531	.529344	.531518
.30	.474958	.482885	.490012	.493212	.493211	.494892	.495811	.496010	.495527
.34	.421105	.423567	.425065	.422924	.417869	.414081	.409474	.404096	.397990
.38	.343481	.339922	.335288	.327521	.317310	.307885	.297646	.286645	.274928
.42	.248467	.238775	.227959	.214695	.199602	.184791	.169232	.152981	.136088
.46	.142100	.126530	.109859	.091555	.072148	.052526	.032280	.011469	-.009854
.50	.029806	.008906	-.013008	-.035646	-.058591	-.082215	-.106286	-.130745	-.155540
.54	-.083723	-.109194	-.135529	-.161627	-.187198	-.213862	-.240754	-.267819	-.295004
.58	-.194573	-.223710	-.253506	-.282089	-.309306	-.337967	-.366605	-.395170	-.423614
.62	-.299583	-.331397	-.363620	-.393668	-.421533	-.451125	-.480423	-.509383	-.537963
.66	-.396296	-.429764	-.463355	-.493850	-.521394	-.550874	-.579778	-.608072	-.635723
.70	-.482892	-.516996	-.550912	-.580877	-.607185	-.635568	-.663095	-.689741	-.715484
.78	-.621147	-.653648	-.685298	-.711549	-.732984	-.756574	-.778778	-.799601	-.819045
.86	-.709513	-.737061	-.763107	-.782726	-.796762	-.812803	-.827021	-.839453	-.850132
.94	-.748495	-.768474	-.786365	-.797264	-.802235	-.808880	-.813395	-.815850	-.816311
1.02	-.742012	-.752584	-.760591	-.761506	-.756554	-.752822	-.746798	-.738588	-.728289

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
X									
1.10	-.695925	-.695996	-.693159	-.683562	-.668535	-.654196	-.637554	-.618748	-.597902
1.18	-.616980	-.606114	-.592146	-.572132	-.547449	-.522884	-.496151	-.467412	-.436815
1.26	-.512096	-.490413	-.465584	-.435744	-.402255	-.368316	-.332467	-.294891	-.255752
1.34	-.387908	-.355971	-.320990	-.282284	-.241145	-.199013	-.155336	-.110304	-.064094
1.42	-.250493	-.209205	-.165108	-.118753	-.071311	-.022377	.027659	.078603	.130280
1.50	-.105234	-.055737	-.003784	.048846	.101153	.155390	.210232	.265492	.321001
1.66	.191062	.252997	.316418	.377262	.434985	.495311	.555183	.614452	.672988
1.82	.472768	.541583	.610701	.674219	.732139	.793053	.852505	.910413	.966707
1.98	.722165	.792660	.862223	.923694	.977657	1.034733	1.089515	1.141996	1.192181
2.14	.929895	.997682	1.063380	1.119199	1.166282	1.216366	1.263557	1.307931	1.349566
2.30	1.092738	1.154432	1.213051	1.260773	1.299231	1.340383	1.378296	1.413123	1.445007
2.46	1.211642	1.264881	1.314275	1.352505	1.381590	1.412904	1.440871	1.465705	1.487602
2.62	1.290145	1.333489	1.372458	1.400663	1.420396	1.441769	1.459891	1.475016	1.487376
2.78	1.333177	1.365964	1.394074	1.412384	1.423328	1.435236	1.444142	1.450327	1.454044
2.94	1.346223	1.368399	1.385810	1.394818	1.397884	1.401177	1.401830	1.400133	1.396342
3.10	1.334760	1.346730	1.354025	1.354627	1.350913	1.346656	1.340192	1.331805	1.321740
3.42	1.258324	1.252241	1.242083	1.229134	1.215335	1.199461	1.182325	1.164162	1.145170
3.74	1.138206	1.118147	1.094957	1.072922	1.053297	1.030218	1.006768	.983108	.959368
4.06	.999218	.969438	.937615	.910436	.888352	.861703	.835418	.809576	.784236
4.38	.857739	.822074	.785444	.756217	.734042	.706518	.679901	.654191	.629383
4.70	.723668	.685270	.646875	.617815	.597037	.570461	.545145	.521026	.498045
5.02	.602303	.563576	.525656	.498219	.479644	.455124	.432055	.410328	.389844
5.34	.495881	.458533	.422611	.397642	.381595	.359701	.339325	.320324	.302576
5.66	.404710	.369856	.336864	.314759	.301250	.282180	.264600	.248353	.233303
5.98	.327974	.296253	.266669	.247511	.236369	.220073	.205183	.191531	.178981
6.30	.264270	.235965	.209935	.193609	.184569	.170855	.158423	.147110	.136783
6.94	.169377	.147819	.128520	.117108	.111379	.101993	.093607	.086078	.079291
7.58	.107292	.091555	.077830	.070140	.066649	.060432	.054948	.050083	.045746
8.22	.067516	.056348	.046866	.041812	.039748	.035720	.032207	.029123	.026402
8.86	.042374	.034594	.028172	.024906	.023718	.021146	.018925	.016994	.015306
9.50	.026611	.021250	.016958	.014873	.014207	.012579	.011186	.009986	.008945
10.14	.016770	.013093	.010249	.008927	.008565	.007540	.006670	.005926	.005285
10.78	.010630	.008108	.006232	.005397	.005208	.004564	.004021	.003559	.003164
11.42	.006793	.005054	.003818	.003291	.003200	.002794	.002454	.002167	.001922
12.06	.004384	.003174	.002359	.002026	.001988	.001731	.001517	.001337	.001185
12.70	.002863	.002009	.001470	.001259	.001248	.001085	.000950	.000836	.000740
13.98	.001268	.000822	.000582	.000496	.000505	.000438	.000382	.000336	.000297
15.26	.000592	.000339	.000230	.000195	.000206	.000177	.000154	.000135	.000118
16.54	.000289	.000136	.000086	.000072	.000080	.000068	.000058	.000050	.000043
17.82	.000145	.000053	.000032	.000026	.000030	.000025	.000021	.000018	.000015
19.10	.000073	.000020	.000011	.000009	.000011	.000009	.000008	.000006	.000005
20.38	.000036	.000008	.000004	.000003	.000004	.000003	.000003	.000002	.000002
21.66	.000018	.000003	.000001	.000001	.000001	.000001	.000001	.000001	.000001
22.94	.000008	.000001	.000000	.000000	.000001	.000000	.000000	.000000	.000000
24.22	.000004	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
25.50	.000002	.000000			.000000				
28.06	.000000								

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
-E	6.7590	8.0029	9.1071	9.6356	9.6043	10.117	10.627	11.136	11.647
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000029	.000031	.000034	.000036	.000038	.000040	.000043	.000045	.000048
.02	.000221	.000240	.000259	.000276	.000291	.000309	.000327	.000346	.000365
.03	.000715	.000775	.000836	.000891	.000939	.000996	.001055	.001116	.001178
.04	.001626	.001760	.001899	.002022	.002130	.002259	.002391	.002527	.002666

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
.05	.003046	.003295	.003553	.003781	.003982	.004221	.004466	.004716	.004973
.06	.005049	.005458	.005884	.006257	.006587	.006978	.007379	.007790	.008210
.07	.007693	.008311	.008954	.009518	.010014	.010604	.011208	.011825	.012457
.08	.011018	.011899	.012812	.013613	.014314	.015150	.016004	.016877	.017770
.09	.015056	.016251	.017490	.018572	.019520	.020649	.021802	.022980	.024183
.10	.019824	.021386	.023004	.024416	.025648	.027118	.028618	.030148	.031711
.12	.031575	.034026	.036563	.038767	.040681	.042969	.045299	.047673	.050093
.14	.046240	.049777	.053432	.056593	.059327	.062598	.065924	.069308	.072752
.16	.063683	.068483	.073434	.077696	.081364	.085761	.090224	.094757	.099363
.18	.083697	.089909	.096306	.101788	.106481	.112117	.117829	.123620	.129495
.20	.106020	.113766	.121730	.128522	.134304	.141263	.148303	.155428	.162644
.22	.130357	.139728	.149348	.157511	.164422	.172756	.181172	.189675	.198270
.24	.156393	.167453	.178786	.188352	.196403	.206136	.215945	.225837	.235818
.26	.183806	.196587	.209660	.220636	.229815	.240940	.252130	.263394	.274737
.28	.212275	.226782	.241594	.253960	.264232	.276717	.289249	.301839	.314491
.30	.241487	.257699	.274220	.287931	.299243	.313031	.326842	.340688	.354574
.34	.300947	.320412	.340169	.356359	.369513	.385657	.401754	.417818	.433859
.38	.359977	.382354	.404969	.423242	.437833	.455884	.473794	.491578	.509248
.42	.416681	.441502	.466470	.486330	.501872	.521287	.540442	.559355	.578042
.46	.469495	.496203	.522933	.543815	.559777	.579954	.599731	.619135	.638179
.50	.517180	.545162	.573007	.594316	.610147	.630458	.650217	.669454	.688189
.54	.558805	.587419	.615709	.636838	.651995	.671814	.690921	.709349	.727124
.58	.593713	.622311	.650377	.670734	.684697	.703423	.721271	.738282	.754487
.62	.621487	.649437	.676629	.695652	.707940	.725011	.741040	.756077	.770158
.66	.641917	.668615	.694319	.711490	.721669	.736575	.750283	.762850	.774318
.70	.654967	.679851	.703499	.718350	.726041	.738333	.749280	.758949	.767390
.78	.659464	.679233	.697285	.706322	.708138	.714110	.718493	.721370	.722810
.86	.637040	.650086	.660970	.663029	.658161	.656795	.653675	.648903	.642566
.94	.590850	.596025	.598660	.593044	.581125	.571899	.560846	.548087	.533277
1.02	.524583	.521181	.514947	.501384	.482430	.465256	.446279	.425638	.403452
1.10	.442075	.429788	.414476	.393055	.367396	.342548	.316015	.287950	.258486
1.18	.347060	.325920	.301672	.272777	.240988	.209023	.175578	.140816	.104877
1.26	.243016	.213340	.180582	.144829	.107660	.069346	.029833	-.010715	-.052151
1.34	.133082	.095416	.054799	.012971	-.028708	-.072461	-.117071	-.162376	-.208232
1.42	.020026	-.024912	-.072568	-.119576	-.164833	-.213027	-.261693	-.310674	-.359834
1.50	-.093769	-.145133	-.198895	-.250120	-.298001	-.349605	-.401264	-.452836	-.504197
1.66	-.315866	-.377256	-.440181	-.496891	-.547251	-.602634	-.657209	-.710878	-.763559
1.82	-.521113	-.588612	-.656583	-.715039	-.764581	-.820054	-.873904	-.926094	-.976599
1.98	-.702059	-.771932	-.841126	-.898096	-.944188	-.996734	-1.046965	-1.094917	-1.140630
2.14	-.854902	-.923865	-.991004	-1.043927	-1.084684	-1.132059	-1.176596	-1.218407	-1.257594
2.30	-.978553	-1.043905	-1.106371	-1.153392	-1.187642	-1.228352	-1.265887	-1.300427	-1.332136
2.46	-1.073812	-1.133473	-1.189321	-1.229240	-1.256426	-1.289635	-1.319512	-1.346295	-1.370197
2.62	-1.142691	-1.195175	-1.243082	-1.275267	-1.295318	-1.320724	-1.342801	-1.361831	-1.378066
2.78	-1.187898	-1.232245	-1.271430	-1.295700	-1.308908	-1.326616	-1.341129	-1.352763	-1.361790
2.94	-1.212451	-1.248148	-1.278272	-1.294795	-1.301698	-1.312101	-1.319548	-1.324372	-1.326856
3.10	-1.219413	-1.246307	-1.267385	-1.276576	-1.277865	-1.281548	-1.282590	-1.281326	-1.278041
3.42	-1.192098	-1.201979	-1.206011	-1.202385	-1.194759	-1.187149	-1.177659	-1.166596	-1.154213
3.74	-1.126472	-1.121265	-1.110651	-1.097101	-1.083586	-1.067704	-1.050745	-1.032961	-1.014548
4.06	-1.038510	-1.020831	-.998525	-.977943	-.961135	-.939768	-.918075	-.896229	-.874360
4.38	-.939842	-.912496	-.881510	-.856460	-.838369	-.813852	-.789650	-.765849	-.742512
4.70	-.838511	-.804183	-.767297	-.739889	-.721942	-.696103	-.671081	-.646885	-.623517
5.02	-.739793	-.700880	-.660495	-.632359	-.615486	-.589669	-.565037	-.541532	-.519103
5.34	-.646929	-.605458	-.563543	-.535873	-.520609	-.495748	-.472316	-.450202	-.429312
5.66	-.561708	-.519321	-.477416	-.451030	-.437624	-.414318	-.392581	-.372263	-.353238
5.98	-.484922	-.442890	-.402142	-.377558	-.366058	-.344651	-.324870	-.306537	-.289504
6.30	-.416693	-.375959	-.337176	-.314678	-.305007	-.285653	-.267920	-.251610	-.236565
6.94	-.304463	-.268075	-.234574	-.216474	-.209968	-.194700	-.180915	-.168409	-.157016
7.58	-.220297	-.189279	-.161631	-.147615	-.143489	-.131843	-.121463	-.112155	-.103771
8.22	-.158437	-.132821	-.110716	-.100144	-.097682	-.089000	-.081350	-.074563	-.068509
8.86	-.113561	-.092865	-.075595	-.067768	-.066404	-.060036	-.054482	-.049602	-.045288



	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
9.50	-.081275	-.064813	-.051548	-.045832	-.045160	-.040542	-.036553	-.033078	-.030031
10.14	-.058164	-.045215	-.035158	-.031025	-.030767	-.027446	-.024602	-.022144	-.020006
10.78	-.041666	-.031562	-.024014	-.021047	-.021022	-.018648	-.016630	-.014900	-.013405
11.42	-.029903	-.022062	-.016443	-.014325	-.014419	-.012729	-.011302	-.010087	-.009044
12.06	-.021516	-.015454	-.011297	-.009791	-.009936	-.008736	-.007729	-.006877	-.006149
12.70	-.015529	-.010854	-.007795	-.006726	-.006884	-.006032	-.005323	-.004725	-.004216
13.98	-.008181	-.005408	-.003772	-.003236	-.003366	-.002937	-.002583	-.002288	-.002038
15.26	-.004386	-.002738	-.001876	-.001606	-.001692	-.001475	-.001297	-.001149	-.001024
16.54	-.002398	-.001411	-.000965	-.000828	-.000876	-.000765	-.000674	-.000598	-.000535
17.82	-.001340	-.000742	-.000517	-.000446	-.000467	-.000410	-.000362	-.000322	-.000289
19.10	-.000765	-.000398	-.000290	-.000252	-.000256	-.000226	-.000200	-.000179	-.000161
20.38	-.000446	-.000217	-.000171	-.000150	-.000144	-.000128	-.000114	-.000102	-.000092
21.66	-.000266	-.000120	-.000106	-.000094	-.000083	-.000074	-.000066	-.000059	-.000053
22.94	-.000161	-.000068	-.000069	-.000062	-.000048	-.000043	-.000039	-.000035	-.000031
24.22	-.000099	-.000038	-.000047	-.000043	-.000028	-.000025	-.000023	-.000021	-.000019
25.50	-.000062	-.000022	-.000034	-.000031	-.000017	-.000015	-.000014	-.000012	-.000011
28.06	-.000025	-.000007	-.000019	-.000017	-.000006	-.000005	-.000005	-.000004	-.000004
30.62	-.000010	-.000002	-.000012	-.000011	-.000002	-.000002	-.000002	-.000001	-.000001
33.18	-.000004	-.000001	-.000008	-.000007	-.000001	-.000001	-.000001	-.000000	-.000000
35.74	-.000002	.000000	-.000005	-.000005	.000000	.000000	.000000	.000000	.000000
38.30	-.000001	.000000	-.000004	-.000003	.000000	.000000	.000000		
40.86	.000000		-.000003	-.000002					
43.42	.000000		-.000002	-.000002					
45.98			-.000001	-.000001					
48.54			-.000001	-.000001					
51.10			-.000001	-.000001					
56.22			.000000	.000000					

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
-E	4F 0	4F 0	4F 0	4F 1	4F 3	4F 4	4F 5	4F 6	4F 7
X				1.3975	.95104	1.0277	1.0952	1.1553	1.2092
.00				.000000	.000000	.000000	.000000	.000000	.000000
.01				.000000	.000000	.000000	.000000	.000000	.000000
.02				.000001	.000001	.000001	.000001	.000001	.000001
.03				.000003	.000003	.000004	.000004	.000005	.000005
.04				.000010	.000010	.000011	.000013	.000014	.000015
.05				.000023	.000024	.000027	.000030	.000033	.000036
.06				.000046	.000048	.000053	.000059	.000065	.000072
.07				.000082	.000086	.000096	.000106	.000117	.000129
.08				.000135	.000142	.000158	.000176	.000194	.000212
.09				.000210	.000220	.000246	.000272	.000300	.000329
.10				.000310	.000325	.000363	.000402	.000443	.000486
.12				.000604	.000634	.000707	.000783	.000861	.000943
.14				.001054	.001105	.001231	.001362	.001498	.001639
.16				.001693	.001774	.001975	.002183	.002399	.002624
.18				.002556	.002676	.002977	.003288	.003612	.003948
.20				.003674	.003845	.004273	.004717	.005177	.005655
.22				.005076	.005308	.005896	.006503	.007133	.007786
.24				.006788	.007094	.007874	.008679	.009513	.010376
.26				.008834	.009226	.010233	.011272	.012346	.013457
.28				.011234	.011723	.012995	.014304	.015656	.017054
.30				.014004	.014604	.016177	.017794	.019463	.021187
.34				.020709	.021567	.023857	.026207	.028626	.031119
.38				.029026	.030189	.033348	.036583	.039906	.043324
.42				.038990	.040497	.044675	.048943	.053318	.057808
.46				.050597	.052483	.057820	.063259	.068822	.074520

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	4F 0	4F 0	4F 0	4F 1	4F 3	4F 4	4F 5	4F 6	4F 7
X									
.50				.063813	.066105	.072729	.079466	.086340	.093365
.54				.078578	.081295	.089321	.097466	.105758	.114214
.58				.094812	.097962	.107491	.117139	.126938	.136910
.62				.112416	.116001	.127118	.138346	.149725	.161279
.66				.131285	.135298	.148070	.160938	.173951	.187133
.70				.151302	.155730	.170207	.184760	.199442	.214283
.78				.194305	.199491	.217472	.235460	.253524	.271702
.86				.240467	.246278	.267788	.289201	.310605	.332046
.94				.288864	.295131	.320092	.344819	.369417	.393944
1.02				.338641	.345170	.373418	.401262	.428827	.456183
1.10				.389031	.395611	.426914	.457611	.487852	.517720
1.18				.439357	.445768	.479840	.513079	.545659	.577681
1.26				.489032	.495056	.531573	.567007	.601559	.635351
1.34				.537555	.542981	.581591	.618852	.654996	.690163
1.42				.584506	.589134	.629473	.668184	.705533	.741682
1.50				.629539	.633185	.674883	.714669	.752844	.789595
1.66				.712798	.714015	.757348	.798205	.836958	.873854
1.82				.785822	.784149	.827777	.868398	.906465	.942282
1.98				.847918	.843096	.885859	.925151	.961503	.995278
2.14				.899023	.890988	.931942	.969044	1.002900	1.033932
2.30				.939539	.928393	.966812	1.001089	1.031901	1.059723
2.46				.970173	.956154	.991512	1.022533	1.049955	1.074300
2.62				.991810	.975258	1.007204	1.034708	1.058560	1.079317
2.78				1.005418	.986739	1.015067	1.038932	1.059161	1.076341
2.94				1.011974	.991614	1.016235	1.036443	1.053094	1.066795
3.10				1.012419	.990839	1.011753	1.028369	1.041557	1.051935
3.42				.998416	.975747	.989504	.999340	1.006123	1.010465
3.74				.969480	.947370	.954573	.958370	.959590	.958811
4.06				.930411	.910229	.911642	.910241	.906788	.901806
4.38				.884882	.867686	.864120	.858364	.851093	.842757
4.70				.835652	.822196	.814443	.805124	.794810	.783873
5.02				.784761	.775523	.764322	.752155	.739481	.726591
5.34				.733694	.728919	.714937	.700549	.686102	.671800
5.66				.683507	.683253	.667078	.651011	.635282	.620017
5.98				.634934	.639109	.621252	.603962	.587360	.571495
6.30				.588459	.596863	.577760	.559629	.542488	.526315
6.94				.502860	.518841	.498290	.479365	.461901	.445751
7.58				.427662	.449809	.428836	.409957	.392857	.377291
8.22				.362607	.389454	.368745	.350443	.334118	.319453
8.86				.306868	.337040	.317037	.299633	.284311	.270701
9.50				.259400	.291687	.272661	.256332	.242121	.229625
10.14				.219131	.252511	.234617	.219446	.206380	.194993
10.78				.185049	.218693	.202005	.188013	.176077	.165761
11.42				.156248	.189500	.174037	.161206	.150357	.141052
12.06				.131932	.164291	.150037	.138324	.128501	.120138
12.70				.111413	.142509	.129425	.118772	.109907	.102412
13.98				.079502	.107388	.096473	.087736	.080571	.074590
15.26				.056797	.081076	.072063	.064960	.059213	.054472
16.54				.040634	.061320	.053932	.048196	.043613	.039874
17.82				.029118	.046456	.040436	.035827	.032189	.029251
19.10				.020902	.035251	.030369	.026680	.023802	.021501
20.38				.015032	.026790	.022845	.019903	.017631	.015833
21.66				.010831	.020389	.017212	.014871	.013082	.011680
22.94				.007819	.015539	.012986	.011128	.009723	.008630
24.22				.005656	.011858	.009812	.008339	.007237	.006387
25.50				.004099	.009061	.007423	.006258	.005394	.004734
28.06				.002166	.005307	.004263	.003537	.003009	.002611
30.62				.001154	.003121	.002459	.002009	.001687	.001440
33.18				.000620	.001841	.001424	.001145	.000950	.000807
35.74				.000336	.001090	.000827	.000655	.000537	.000451

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	4F 0	4F 0	4F 0	4F 1	4F 3	4F 4	4F 5	4F 6	4F 7
X									
38.30				.000183	.000647	.000482	.000376	.000305	.000254
40.86				.000101	.000384	.000282	.000217	.000174	.000143
43.42				.000056	.000229	.000165	.000125	.000099	.000081
45.98				.000032	.000137	.000097	.000073	.000057	.000046
48.54				.000018	.000082	.000057	.000042	.000033	.000027
51.10				.000010	.000049	.000034	.000025	.000019	.000015
56.22				.000004	.000018	.000012	.000009	.000007	.000005
61.34				.000001	.000007	.000004	.000003	.000002	.000002
66.46				.000000	.000002	.000002	.000001	.000001	.000001
71.58				.000000	.000001	.000001	.000000	.000000	.000000

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
-E	2.4632	3.0254	3.4088	3.5081	3.3236	3.4109	3.4952	3.5773	3.6578
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.041348	.044948	.047912	.049041	.048482	.049522	.050522	.051492	.052437
.02	.072221	.078372	.083394	.085211	.084094	.085748	.087330	.088854	.090330
.03	.094056	.101869	.108188	.110332	.108677	.110602	.112428	.114172	.115848
.04	.108136	.116866	.123847	.126029	.123871	.125795	.127596	.129296	.130911
.05	.115609	.124636	.131756	.133748	.131135	.132842	.134411	.135864	.137220
.06	.117495	.126310	.133145	.134771	.131758	.133088	.134268	.135323	.136271
.07	.114703	.122894	.129105	.130235	.126885	.127719	.128398	.128946	.129384
.08	.108040	.115280	.120602	.121144	.117524	.117782	.117885	.117857	.117717
.09	.098220	.104257	.108490	.108387	.104565	.104199	.103683	.103039	.102286
.10	.085876	.090523	.093523	.092743	.088790	.087778	.086625	.085352	.083976
.12	.055781	.057299	.057589	.055455	.051447	.049162	.046767	.044278	.041710
.14	.021452	.019669	.017167	.013788	.009988	.006562	.003070	-.000478	-.004072
.16	-.014286	-.019282	-.024435	-.028857	-.032210	-.036561	-.040925	-.045298	-.049675
.18	-.049317	-.057250	-.064767	-.069973	-.072673	-.077685	-.082650	-.087571	-.092450
.20	-.082094	-.092568	-.102059	-.107764	-.109642	-.115029	-.120308	-.125487	-.130573
.22	-.111530	-.124070	-.135093	-.141006	-.141928	-.147405	-.152712	-.157863	-.162871
.24	-.136902	-.150995	-.163084	-.168922	-.168794	-.174089	-.179153	-.184009	-.188673
.26	-.157778	-.172901	-.185588	-.191088	-.189852	-.194714	-.199292	-.203613	-.207698
.28	-.173953	-.189592	-.202427	-.207356	-.204983	-.209195	-.213074	-.216653	-.219956
.30	-.185399	-.201066	-.213629	-.217782	-.214275	-.217652	-.220653	-.223319	-.225676
.34	-.194627	-.209035	-.219952	-.222078	-.216417	-.217704	-.218560	-.219032	-.219153
.38	-.187351	-.199057	-.207160	-.206850	-.199324	-.198190	-.196610	-.194633	-.192296
.42	-.166300	-.174261	-.178757	-.175853	-.166866	-.163229	-.159168	-.154732	-.149962
.46	-.134521	-.138079	-.138527	-.133085	-.123114	-.117095	-.110710	-.104006	-.097023
.50	-.095044	-.093892	-.090164	-.082408	-.071962	-.063840	-.055439	-.046805	-.037973
.54	-.050692	-.044821	-.037045	-.027325	-.016913	-.007078	.002922	.013048	.023269
.58	-.003970	.006385	.017877	.029125	.039022	.050107	.061227	.072349	.083447
.62	.042977	.057393	.072120	.084411	.093353	.105192	.116922	.128521	.139970
.66	.088381	.106299	.123674	.136503	.144109	.156196	.168027	.179590	.190877
.70	.130832	.151600	.170975	.183842	.189791	.201639	.213084	.224127	.234768
.78	.202867	.227197	.248540	.260093	.262035	.272083	.281462	.290196	.298306
.86	.253806	.278836	.299539	.308218	.305659	.312487	.318437	.323560	.327894
.94	.281924	.305052	.322857	.327534	.320441	.323093	.324737	.325447	.325281
1.02	.287939	.307011	.320149	.320147	.308861	.306838	.303768	.299741	.294831
1.10	.274105	.287495	.294728	.289791	.274925	.268143	.260360	.251680	.242188
1.18	.243519	.250142	.250751	.240980	.223331	.212043	.199881	.186956	.173360
1.26	.199635	.198910	.192646	.178429	.158893	.143615	.127657	.111131	.094131
1.34	.145929	.137722	.124734	.106678	.086183	.067612	.048609	.029281	.009719
1.42	.085685	.070239	.051001	.029859	.009312	-.011739	-.032936	-.054184	-.075404
1.50	.021874	-.000266	-.025031	-.048419	-.068174	-.090837	-.113340	-.135605	-.157567
1.66	-.106493	-.139535	-.172539	-.197797	-.213820	-.237122	-.259649	-.281371	-.302264
1.82	-.223256	-.263082	-.300080	-.323912	-.334119	-.354971	-.374515	-.392774	-.409775
1.98	-.318457	-.360682	-.397457	-.417138	-.420411	-.436420	-.450731	-.463425	-.474579
2.14	-.387048	-.427570	-.460404	-.473957	-.470041	-.479613	-.487269	-.493147	-.497364

	CS 55	RA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
2.30	-.427648	-.462974	-.488888	-.495098	-.484421	-.486714	-.487053	-.485612	-.482544
2.46	-.441382	-.468773	-.485603	-.483938	-.467404	-.462214	-.455185	-.446519	-.436385
2.62	-.430922	-.448419	-.454787	-.445271	-.424066	-.411671	-.397683	-.382309	-.365726
2.78	-.399757	-.406124	-.401351	-.384426	-.359854	-.340878	-.320645	-.299359	-.277185
2.94	-.351666	-.346307	-.330295	-.306693	-.280058	-.255337	-.229759	-.203506	-.176725
3.10	-.290384	-.273230	-.246348	-.216980	-.189493	-.159981	-.130043	-.099830	-.069459
3.42	-.141764	-.102417	-.056215	-.018354	.007797	.043934	.079631	.114822	.149465
3.74	.023001	.080918	.141911	.184268	.206218	.245314	.283205	.319925	.355512
4.06	.187320	.259072	.329700	.373071	.389328	.428364	.465604	.501179	.535199
4.38	.340357	.420912	.496121	.537764	.547954	.584672	.619202	.651750	.682491
4.70	.475758	.560313	.635587	.673528	.678075	.710941	.741413	.769757	.796194
5.02	.590420	.674716	.746303	.779267	.779088	.807183	.832843	.856372	.878015
5.34	.683478	.763955	.828949	.856248	.852502	.875399	.895952	.914482	.931241
5.66	.755537	.829388	.885711	.907115	.901015	.918656	.934142	.947791	.959851
5.98	.808098	.873246	.919578	.935194	.927884	.940470	.951158	.960247	.967966
6.30	.843158	.898195	.933862	.944034	.936509	.944414	.950715	.955683	.959522
6.94	.869658	.902469	.916785	.917622	.911922	.911931	.910962	.909206	.906802
7.58	.852411	.863089	.858262	.852142	.850041	.844257	.838075	.831599	.824902
8.22	.806481	.797255	.776912	.766103	.768168	.758521	.748956	.739497	.730153
8.86	.743660	.717838	.686013	.672420	.678405	.666482	.655005	.643931	.633219
9.50	.672578	.633832	.594356	.579453	.588658	.575676	.563396	.551718	.540565
10.14	.599227	.551143	.507332	.492188	.503733	.490572	.478270	.466693	.455738
10.78	.527554	.473372	.427908	.413252	.426255	.413514	.401715	.390699	.380350
11.42	.459994	.402492	.357417	.343709	.357385	.345447	.334473	.324297	.314793
12.06	.397907	.339361	.296140	.283639	.297347	.286429	.276458	.267263	.258720
12.70	.341916	.284111	.243717	.232538	.245794	.235995	.227096	.218932	.211381
13.98	.248424	.195721	.162407	.153848	.165310	.157746	.150943	.144755	.139076
15.26	.177483	.132412	.106433	.100153	.109350	.103747	.098751	.094240	.090129
16.54	.125186	.088358	.068901	.064429	.071430	.067402	.063837	.060640	.057744
17.82	.087430	.058343	.044204	.041090	.046213	.043382	.040893	.038674	.036675
19.10	.060598	.038211	.028177	.026044	.029680	.027723	.026014	.024499	.023142
20.38	.041758	.024871	.017880	.016438	.018956	.017622	.016463	.015442	.014531
21.66	.028655	.016112	.011315	.010349	.012058	.011157	.010380	.009698	.009093
22.94	.019612	.010402	.007151	.006509	.007648	.007045	.006528	.006076	.005677
24.22	.013407	.006700	.004519	.004095	.004842	.004441	.004099	.003802	.003540
25.50	.009170	.004309	.002860	.002580	.003063	.002798	.002573	.002378	.002207
28.06	.004328	.001782	.001155	.001035	.001228	.001113	.001016	.000933	.000861
30.62	.002101	.000741	.000476	.000424	.000497	.000447	.000406	.000370	.000340
33.18	.001073	.000312	.000202	.000180	.000204	.000183	.000165	.000150	.000137
35.74	.000593	.000134	.000090	.000080	.000086	.000077	.000069	.000063	.000057
38.30	.000360	.000060	.000042	.000037	.000038	.000034	.000030	.000027	.000025
40.86	.000241	.000028	.000020	.000018	.000018	.000016	.000014	.000013	.000012
43.42	.000175	.000013	.000010	.000009	.000009	.000008	.000007	.000006	.000006
45.98	.000134	.000007	.000006	.000005	.000004	.000004	.000004	.000003	.000003
48.54	.000106	.000004	.000003	.000003	.000002	.000002	.000002	.000002	.000002
51.10	.000085	.000002	.000002	.000002	.000001	.000001	.000001	.000001	.000001
56.22	.000056	.000001	.000001	.000001	.000001	.000000	.000000	.000000	.000000
61.34	.000037	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
66.46	.000024	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
71.58	.000016								
76.70	.000010								
81.82	.000006								
86.94	.000004								
92.06	.000002								
97.18	.000002								
102.30	.000001								
112.54	.000000								

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
-E	1.3669	1.8077	2.0989	2.1558	1.9759	2.0226	2.0668	2.1091	2.1500
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.001413	.001590	.001738	.001803	.001786	.001847	.001908	.001967	.002027
.02	.005298	.005958	.006508	.006745	.006678	.006902	.007122	.007339	.007555
.03	.011176	.012557	.013706	.014194	.014041	.014500	.014950	.015395	.015835
.04	.018622	.020906	.022800	.023592	.023320	.024063	.024791	.025507	.026216
.05	.027264	.030583	.033326	.034455	.034030	.035085	.036117	.037131	.038132
.06	.036777	.041220	.044878	.046360	.045750	.047128	.048474	.049793	.051093
.07	.046877	.052494	.057103	.058938	.058113	.059813	.061468	.063088	.064680
.08	.057318	.064128	.069697	.071873	.070805	.072813	.074762	.076666	.078533
.09	.067885	.075881	.082396	.084892	.083556	.085848	.088068	.090230	.092345
.10	.078395	.087548	.094976	.097762	.096135	.098682	.101140	.103528	.105858
.12	.098639	.109943	.119040	.122297	.120031	.122975	.125797	.128521	.131162
.14	.117068	.130214	.140699	.144254	.141298	.144464	.147478	.150364	.153141
.16	.133000	.147612	.159148	.162813	.159128	.162342	.165367	.168233	.170965
.18	.145999	.161659	.173882	.177470	.173049	.176128	.178986	.181656	.184165
.20	.155821	.172096	.184635	.187967	.182820	.185596	.188120	.190430	.192556
.22	.162367	.178830	.191325	.194235	.188393	.190712	.192755	.194561	.196161
.24	.165657	.181896	.194006	.196350	.189858	.191590	.193024	.194204	.195161
.26	.165794	.181428	.192839	.194494	.187412	.188447	.189170	.189626	.189847
.28	.162945	.177627	.188059	.188927	.181325	.181579	.181512	.181169	.180585
.30	.157326	.170745	.179956	.179960	.171919	.171330	.170417	.169226	.167793
.34	.138768	.148900	.155088	.153227	.144577	.142204	.139522	.136577	.133403
.38	.112245	.118348	.120988	.117216	.108338	.104186	.099765	.095117	.090276
.42	.079930	.081578	.080417	.074831	.066115	.060319	.054318	.048149	.041841
.46	.043884	.040929	.035951	.028758	.020579	.013378	.006054	-.001362	-.008846
.50	.005959	-.001511	-.010126	-.018637	-.025933	-.034232	-.042555	-.050880	-.059189
.54	-.032240	-.043949	-.055867	-.065354	-.071464	-.080508	-.089468	-.098331	-.107086
.58	-.069375	-.084898	-.099673	-.109766	-.114432	-.123849	-.133069	-.142089	-.150905
.62	-.104364	-.123172	-.140282	-.150600	-.153617	-.163036	-.172143	-.180946	-.189450
.66	-.136369	-.157861	-.176738	-.186908	-.188122	-.197186	-.205827	-.214063	-.221907
.70	-.164770	-.188304	-.208361	-.218029	-.217340	-.225717	-.233568	-.240919	-.247795
.78	-.209207	-.234868	-.255546	-.263272	-.258666	-.264820	-.270271	-.275068	-.279250
.86	-.236085	-.261377	-.280545	-.285335	-.276943	-.280014	-.282262	-.283756	-.284552
.94	-.245672	-.268410	-.284290	-.285478	-.273703	-.273171	-.271763	-.269565	-.266645
1.02	-.239439	-.257854	-.269086	-.266330	-.251765	-.247430	-.242234	-.236276	-.229633
1.10	-.219547	-.232320	-.237977	-.231223	-.214583	-.206516	-.197671	-.188151	-.178040
1.18	-.188474	-.194731	-.194295	-.183729	-.165787	-.154280	-.142136	-.129458	-.116331
1.26	-.148768	-.148045	-.141360	-.127357	-.108895	-.094407	-.079469	-.064181	-.048624
1.34	-.102878	-.095070	-.082290	-.065365	-.047137	-.030239	-.013115	.004145	.021466
1.42	-.053059	-.038365	-.019895	-.000655	.016645	.035314	.053962	.072511	.090899
1.50	-.001312	.019823	.043383	.064276	.080033	.099805	.119297	.138448	.157212
1.66	.101329	.133297	.164717	.186887	.198088	.218105	.237331	.255751	.273358
1.82	.194475	.233836	.269597	.290505	.295855	.313784	.330481	.345986	.360335
1.98	.271505	.314506	.351046	.368578	.367547	.381564	.394029	.405032	.414656
2.14	.328996	.372019	.406100	.418689	.411392	.420253	.427380	.432913	.436970
2.30	.365926	.405761	.434677	.441313	.428356	.431363	.432596	.432232	.430418
2.46	.382931	.416918	.438574	.438753	.421067	.417989	.413224	.406973	.399401
2.62	.381695	.407775	.420684	.414322	.393021	.383988	.373463	.361654	.348730
2.78	.364488	.381179	.384416	.371752	.348012	.333419	.317608	.300781	.283105
2.94	.333817	.340168	.333296	.314805	.289770	.270186	.249714	.228540	.206812
3.10	.292208	.287728	.270716	.247026	.221752	.197850	.173421	.148626	.123590
3.42	.185533	.159399	.123253	.091367	.068245	.037869	.007717	-.022127	-.051602
3.74	.060872	.014888	-.037478	-.074521	-.093003	-.127060	-.160199	-.192425	-.223753
4.06	-.069369	-.132034	-.196783	-.236188	-.248719	-.284036	-.317860	-.350290	-.381410
4.38	-.196495	-.271993	-.344991	-.384418	-.390661	-.425307	-.458035	-.489026	-.518428

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
4.70	-.314815	-.399108	-.476346	-.513974	-.514314	-.546857	-.577211	-.605621	-.632288
5.02	-.420928	-.510116	-.587973	-.622488	-.617779	-.647239	-.674379	-.699493	-.722815
5.34	-.513098	-.603632	-.679020	-.709558	-.700913	-.726690	-.750138	-.771579	-.791267
5.66	-.590764	-.679563	-.749988	-.776064	-.764687	-.786488	-.806045	-.823693	-.839693
5.98	-.654169	-.738667	-.802232	-.823657	-.810729	-.828489	-.844165	-.858088	-.870513
6.30	-.704072	-.782226	-.837587	-.854401	-.840997	-.854821	-.866771	-.877163	-.886237
6.94	-.767837	-.829096	-.865921	-.874216	-.862474	-.869159	-.874470	-.878665	-.881939
7.58	-.792026	-.833479	-.851361	-.852599	-.844873	-.845729	-.845730	-.845059	-.843853
8.22	-.786624	-.807808	-.808289	-.804113	-.801528	-.797942	-.793976	-.789734	-.785293
8.86	-.760346	-.762421	-.748090	-.740045	-.742789	-.736031	-.729291	-.722601	-.715984
9.50	-.720254	-.705344	-.679202	-.668609	-.676249	-.667389	-.658861	-.650636	-.642691
10.14	-.671795	-.642512	-.607557	-.595479	-.607232	-.597127	-.587587	-.578537	-.569914
10.78	-.619024	-.578139	-.537124	-.524377	-.539312	-.528620	-.518657	-.509309	-.500488
11.42	-.564865	-.515088	-.470400	-.457585	-.474759	-.463970	-.454013	-.444748	-.436068
12.06	-.511361	-.455205	-.408819	-.396360	-.414905	-.404367	-.394717	-.385797	-.377489
12.70	-.459886	-.399590	-.353073	-.341253	-.360420	-.350371	-.341228	-.332822	-.325032
13.98	-.366145	-.303044	-.259519	-.249416	-.268128	-.259443	-.251622	-.244498	-.237948
15.26	-.286831	-.226176	-.188050	-.179816	-.196657	-.189494	-.183099	-.177315	-.172033
16.54	-.221998	-.166905	-.134966	-.128467	-.142820	-.137098	-.132025	-.127467	-.123325
17.82	-.170248	-.122205	-.096286	-.091268	-.103041	-.098571	-.094633	-.091113	-.087931
19.10	-.129648	-.089022	-.068472	-.064658	-.074047	-.070612	-.067601	-.064924	-.062514
20.38	-.098207	-.064664	-.048649	-.045783	-.053117	-.050507	-.048232	-.046217	-.044410
21.66	-.074098	-.046928	-.034603	-.032465	-.038108	-.036142	-.034435	-.032930	-.031584
22.94	-.055754	-.034081	-.024683	-.023097	-.027390	-.025917	-.024643	-.023524	-.022527
24.22	-.041879	-.024807	-.017686	-.016512	-.019754	-.018654	-.017706	-.016876	-.016139
25.50	-.031432	-.018122	-.012747	-.011878	-.014315	-.013495	-.012791	-.012176	-.011631
28.06	-.017724	-.009825	-.006772	-.006295	-.007667	-.007210	-.006820	-.006481	-.006183
30.62	-.010063	-.005478	-.003730	-.003465	-.004245	-.003988	-.003769	-.003580	-.003413
33.18	-.005788	-.003159	-.002139	-.001988	-.002444	-.002296	-.002170	-.002062	-.001967
35.74	-.003392	-.001890	-.001277	-.001188	-.001465	-.001378	-.001304	-.001240	-.001184
38.30	-.002037	-.001172	-.000791	-.000737	-.000913	-.000859	-.000814	-.000775	-.000741
40.86	-.001257	-.000751	-.000505	-.000471	-.000588	-.000554	-.000526	-.000502	-.000480
43.42	-.000800	-.000494	-.000330	-.000309	-.000389	-.000367	-.000349	-.000333	-.000319
45.98	-.000524	-.000332	-.000220	-.000206	-.000262	-.000248	-.000236	-.000225	-.000216
48.54	-.000353	-.000227	-.000149	-.000139	-.000180	-.000170	-.000162	-.000155	-.000149
51.10	-.000243	-.000157	-.000102	-.000095	-.000125	-.000118	-.000112	-.000107	-.000103
56.22	-.000122	-.000077	-.000048	-.000045	-.000061	-.000058	-.000055	-.000053	-.000050
61.34	-.000064	-.000038	-.000023	-.000022	-.000030	-.000029	-.000027	-.000026	-.000025
66.46	-.000035	-.000019	-.000011	-.000010	-.000015	-.000014	-.000014	-.000013	-.000013
71.58	-.000019	-.000010	-.000006	-.000005	-.000008	-.000007	-.000007	-.000007	-.000006
76.70	-.000011	-.000005	-.000003	-.000002	-.000004	-.000004	-.000003	-.000003	-.000003
81.82	-.000006	-.000002	-.000001	-.000001	-.000002	-.000002	-.000002	-.000002	-.000002
86.94	-.000003	-.000001	-.000001	-.000000	-.000001	-.000001	-.000001	-.000001	-.000001
92.06	-.000002	-.000001	.000000	.000000	-.000000	-.000000	.000000	.000000	.000000
97.18	-.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
-E	SD 0	SD 0	SD 1	SD 1	SD 0	SD 0	SD 0	SD 0	SD 0
X			.53770	.54084					
.00			.000000	.000000					
.01			.000009	.000009					
.02			.000068	.000072					
.03			.000221	.000232					
.04			.000502	.000525					
.05			.000939	.000983					
.06			.001554	.001626					
.07			.002365	.002474					
.08			.003384	.003538					
.09			.004619	.004827					

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	5D 0	5D 0	5D 1	5D 1	5D 0	5D 0	5D 0	5D 0	5D 0
X									
.10			.006075	.006345					
.12			.009655	.010073					
.14			.014107	.014702					
.16			.019384	.020180					
.18			.025415	.026431					
.20			.032116	.033363					
.22			.039391	.040875					
.24			.047139	.048861					
.26			.055259	.057214					
.28			.063649	.065826					
.30			.072211	.074595					
.34			.089484	.092221					
.38			.106399	.109386					
.42			.122380	.125498					
.46			.136962	.140081					
.50			.149785	.152772					
.54			.160587	.163312					
.58			.169192	.171533					
.62			.175503	.177344					
.66			.179484	.180724					
.70			.181152	.181705					
.78			.177833	.176808					
.86			.166396	.163623					
.94			.148001	.143424					
1.02			.123947	.117605					
1.10			.095546	.087563					
1.18			.064055	.054618					
1.26			.030628	.019972					
1.34			-.003708	-.015316					
1.42			-.038060	-.050333					
1.50			-.071671	-.084314					
1.66			-.134281	-.146803					
1.82			-.187916	-.199269					
1.98			-.230555	-.239877					
2.14			-.261406	-.268051					
2.30			-.280563	-.284103					
2.46			-.288710	-.288915					
2.62			-.286888	-.283688					
2.78			-.276313	-.269771					
2.94			-.258256	-.248532					
3.10			-.233961	-.221284					
3.42			-.171226	-.153491					
3.74			-.096173	-.074620					
4.06			-.015088	.009058					
4.38			.067358	.092981					
4.70			.147826	.173972					
5.02			.224036	.249922					
5.34			.294521	.319535					
5.66			.358434	.382117					
5.98			.415382	.437414					
6.30			.465303	.485480					
6.94			.544902	.561106					
7.58			.600103	.612393					
8.22			.634719	.643439					
8.86			.652613	.658236					
9.50			.657295	.660324					
10.14			.651776	.652691					
10.78			.638550	.637785					
11.42			.619648	.617579					
12.06			.596698	.593643					

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	5D 0	5D 0	5D 1	5D 1	5D 0	5D 0	5D 0	5D 0	5D 0
12.70			.570991	.567218					
13.98			.515166	.510568					
15.26			.457898	.453050					
16.54			.402553	.397806					
17.82			.350976	.346531					
19.10			.304051	.300011					
20.38			.262068	.258472					
21.66			.224962	.221810					
22.94			.192463	.189732					
24.22			.164197	.161853					
25.50			.139747	.137749					
28.06			.100624	.099197					
30.62			.071980	.070977					
33.18			.051211	.050516					
35.74			.036266	.035788					
38.30			.025577	.025253					
40.86			.017973	.017754					
43.42			.012588	.012441					
45.98			.008790	.008693					
48.54			.006121	.006057					
51.10			.004252	.004210					
56.22			.002038	.002020					
61.34			.000969	.000962					
66.46			.000458	.000455					
71.58			.000215	.000214					
76.70			.000100	.000100					
81.82			.000047	.000047					
86.94			.000022	.000022					
92.06			.000010	.000010					
97.18			.000005	.000005					
102.30			.000002	.000002					
112.54			.000000	.000000					

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	6S 1	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
-E	.24734	.31505	.34081	.34525	.32825	.33206	.33573	.33927	.34272
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.009362	.012380	.013536	.013688	.012828	.012958	.013084	.013206	.013325
.02	.016352	.021586	.023561	.023783	.022251	.022438	.022616	.022788	.022954
.03	.021295	.028057	.030565	.030794	.028755	.028941	.029115	.029280	.029438
.04	.024483	.032187	.034988	.035174	.032775	.032916	.033043	.033158	.033265
.05	.026174	.034326	.037222	.037327	.034696	.034759	.034806	.034842	.034867
.06	.026601	.034786	.037612	.037611	.034860	.034822	.034768	.034702	.034624
.07	.025968	.033843	.036469	.036343	.033568	.033415	.033246	.033065	.032872
.08	.024458	.031744	.034065	.033804	.031090	.030813	.030522	.030219	.029906
.09	.022233	.028707	.030640	.030241	.027659	.027257	.026841	.026416	.025982
.10	.019437	.024922	.026409	.025872	.023483	.022957	.022422	.021878	.021327
.12	.012621	.015767	.016252	.015460	.013597	.012848	.012095	.011340	.010583
.14	.004846	.005399	.004828	.003825	.002623	.001697	.000775	-.000142	-.001055
.16	-.003247	-.005332	-.006930	-.008081	-.008545	-.009589	-.010621	-.011640	-.012645
.18	-.011180	-.015791	-.018326	-.019558	-.019252	-.020351	-.021427	-.022482	-.023515
.20	-.018601	-.025518	-.028861	-.030105	-.029033	-.030122	-.031178	-.032204	-.033201
.22	-.025264	-.034192	-.038191	-.039379	-.037573	-.038590	-.039566	-.040503	-.041403
.24	-.031006	-.041604	-.046093	-.047164	-.044676	-.045566	-.046407	-.047201	-.047952
.26	-.035729	-.047630	-.052442	-.053341	-.050239	-.050954	-.051613	-.052219	-.052776
.28	-.039385	-.052218	-.057187	-.057869	-.054232	-.054732	-.055170	-.055551	-.055878



	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
X	6S 1	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
.30	-.041970	-.055366	-.060337	-.060764	-.056677	-.056930	-.057118	-.057245	-.057316
.34	-.044042	-.057531	-.062086	-.061924	-.057210	-.056909	-.056540	-.056110	-.055622
.38	-.042373	-.054746	-.058426	-.057627	-.052647	-.051762	-.050814	-.049810	-.048755
.42	-.037583	-.047876	-.050352	-.048925	-.044015	-.042570	-.041074	-.039533	-.037953
.46	-.030363	-.037868	-.038935	-.036937	-.032396	-.030456	-.028482	-.026481	-.024459
.50	-.021401	-.025658	-.025224	-.022746	-.018822	-.016482	-.014132	-.011776	-.009419
.54	-.011338	-.012108	-.010177	-.007334	-.004225	-.001600	.001010	.003601	.006167
.58	-.000743	.002021	.005368	.008448	.010595	.013382	.016125	.018822	.021470
.62	.009896	.016085	.020708	.023891	.024979	.027800	.030550	.033226	.035828
.66	.020178	.029557	.035271	.038424	.038400	.041134	.043769	.046305	.048741
.70	.029784	.042021	.048615	.051612	.050462	.052996	.055404	.057689	.059853
.78	.046053	.062770	.070430	.072784	.069476	.071318	.072992	.074504	.075860
.86	.057508	.076855	.084661	.086026	.080849	.081711	.082378	.082863	.083173
.94	.063759	.083880	.091001	.091158	.084532	.084249	.083765	.083095	.082250
1.02	.064977	.084176	.089932	.088783	.081196	.079718	.078052	.076215	.074222
1.10	.061679	.078525	.082411	.079965	.071922	.069295	.066511	.063589	.060545
1.18	.054578	.067946	.069635	.065989	.057972	.054319	.050555	.046701	.042772
1.26	.044465	.053548	.052878	.048194	.040643	.036141	.031587	.027000	.022395
1.34	.032138	.036430	.033384	.027872	.021165	.016026	.010902	.005809	.000761
1.42	.018353	.017619	.012302	.006198	.000642	-.004902	-.010361	-.015722	-.020975
1.50	.003791	-.001969	-.009356	-.015803	-.019969	-.025686	-.031246	-.036642	-.041866
1.66	-.025377	-.040447	-.051102	-.057499	-.058458	-.063857	-.068969	-.073798	-.078349
1.82	-.051714	-.074246	-.086764	-.092242	-.089839	-.094174	-.098126	-.101711	-.104945
1.98	-.072941	-.100516	-.113432	-.117324	-.111812	-.114552	-.116858	-.118758	-.120276
2.14	-.087915	-.117953	-.129924	-.131796	-.123707	-.124547	-.124949	-.124951	-.124582
2.30	-.096341	-.126385	-.136288	-.135932	-.125964	-.124800	-.123238	-.121320	-.119081
2.46	-.098509	-.126394	-.133378	-.130771	-.119690	-.116580	-.113146	-.109432	-.105473
2.62	-.095067	-.119010	-.122494	-.117766	-.106326	-.101443	-.096338	-.091051	-.085613
2.78	-.086854	-.105481	-.105140	-.098522	-.087417	-.081013	-.074503	-.067922	-.061295
2.94	-.074779	-.087115	-.082844	-.074637	-.064463	-.056831	-.049218	-.041647	-.034138
3.10	-.059739	-.065174	-.057052	-.047591	-.038833	-.030284	-.021878	-.013626	-.005537
3.42	-.024021	-.015062	-.000028	.010902	.015848	.025322	.034430	.043186	.051603
3.74	.014717	.037279	.057564	.068680	.069227	.078560	.087356	.095657	.103497
4.06	.052436	.086528	.110036	.120283	.116557	.124918	.132638	.139782	.146398
4.38	.086479	.129317	.153952	.162549	.155173	.161980	.168110	.173640	.178630
4.70	.115277	.163788	.187590	.194019	.183917	.188815	.193056	.196724	.199884
5.02	.138063	.189184	.210441	.214417	.202652	.205469	.207697	.209418	.210696
5.34	.154633	.205499	.222813	.224240	.211890	.212596	.212817	.212626	.212078
5.66	.165158	.213220	.225524	.224447	.212516	.211188	.209501	.207512	.205268
5.98	.170049	.213127	.219670	.216237	.205608	.202391	.198952	.195332	.191562
6.30	.169849	.206152	.206472	.200897	.192299	.187382	.182382	.177323	.172220
6.94	.156621	.175483	.162931	.153840	.150860	.143174	.135675	.128343	.121161
7.58	.130322	.128720	.103912	.092361	.096091	.086474	.077271	.068422	.059880
8.22	.095250	.072234	.036697	.023640	.034220	.023407	.013183	.003452	-.005856
8.86	.054866	.010982	-.033298	-.047081	-.030171	-.041585	-.052288	-.062401	-.072017
9.50	.011795	-.051397	-.102282	-.116192	-.093878	-.105435	-.116205	-.126329	-.135910
10.14	-.032056	-.112343	-.167746	-.181339	-.154755	-.166117	-.176654	-.186518	-.195820
10.78	-.075343	-.170140	-.228130	-.241096	-.211440	-.222363	-.232454	-.241870	-.250723
11.42	-.117148	-.223692	-.282561	-.294693	-.263128	-.273446	-.282947	-.291788	-.300081
12.06	-.156865	-.272361	-.330645	-.341813	-.309411	-.319015	-.327834	-.336021	-.343685
12.70	-.194112	-.315836	-.372317	-.382451	-.350160	-.358983	-.367067	-.374557	-.381555
13.98	-.260419	-.387043	-.437194	-.445212	-.415415	-.422607	-.429169	-.435229	-.440874
15.26	-.315434	-.438309	-.479829	-.485834	-.460650	-.466247	-.471337	-.476023	-.480377
16.54	-.359455	-.471869	-.503729	-.507928	-.488528	-.492657	-.496401	-.499839	-.503026
17.82	-.393226	-.490404	-.512479	-.515121	-.501946	-.504779	-.507340	-.509686	-.511855
19.10	-.417695	-.496617	-.509384	-.510721	-.503702	-.505423	-.506973	-.508389	-.509695
20.38	-.433888	-.493021	-.497321	-.497593	-.496324	-.497114	-.497822	-.498465	-.499055
21.66	-.442843	-.481843	-.478708	-.478130	-.482011	-.482038	-.482059	-.482075	-.482085
22.94	-.445565	-.464996	-.455529	-.454290	-.462622	-.462039	-.461512	-.461028	-.460579
24.22	-.443008	-.444080	-.429377	-.427638	-.439694	-.438635	-.437681	-.436811	-.436007

	CS 55	BA 56	LA 57	CE 58	PR 59	ND 60	PM 61	SM 62	EU 63
	6S 1	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
X									
25.50	-.436055	-.420412	-.401510	-.399408	-.414478	-.413056	-.411781	-.410620	-.409550
28.06	-.412117	-.368858	-.344307	-.341798	-.360960	-.359092	-.357422	-.355908	-.354519
30.62	-.379252	-.316430	-.289208	-.286596	-.307702	-.305660	-.303840	-.302195	-.300690
33.18	-.341717	-.266733	-.239015	-.236490	-.257938	-.255900	-.254090	-.252458	-.250969
35.74	-.302647	-.221683	-.194951	-.192623	-.213306	-.211382	-.209679	-.208146	-.206753
38.30	-.264238	-.182100	-.157281	-.155206	-.174420	-.172671	-.171127	-.169742	-.168485
40.86	-.227930	-.148114	-.125721	-.123917	-.141269	-.139723	-.138362	-.137144	-.136041
43.42	-.194581	-.119455	-.099696	-.098157	-.113485	-.112147	-.110972	-.109923	-.108976
45.98	-.164623	-.095635	-.078511	-.077219	-.090516	-.089378	-.088381	-.087493	-.086693
48.54	-.138183	-.076070	-.061451	-.060381	-.071744	-.070789	-.069955	-.069214	-.068548
51.10	-.115184	-.060162	-.047837	-.046961	-.056549	-.055757	-.055068	-.054456	-.053908
56.22	-.078606	-.037074	-.028584	-.028012	-.034628	-.034099	-.033641	-.033236	-.032875
61.34	-.052575	-.022467	-.016811	-.016448	-.020861	-.020519	-.020223	-.019964	-.019733
66.46	-.034585	-.013427	-.009757	-.009532	-.012399	-.012182	-.011996	-.011834	-.011690
71.58	-.022436	-.007931	-.005600	-.005464	-.007286	-.007151	-.007037	-.006936	-.006848
76.70	-.014384	-.004638	-.003184	-.003102	-.004239	-.004157	-.004088	-.004027	-.003974
81.82	-.009127	-.002689	-.001795	-.001747	-.002446	-.002397	-.002355	-.002319	-.002287
86.94	-.005741	-.001547	-.001005	-.000977	-.001401	-.001372	-.001347	-.001326	-.001307
92.06	-.003583	-.000884	-.000559	-.000543	-.000797	-.000780	-.000765	-.000753	-.000742
97.18	-.002220	-.000502	-.000309	-.000300	-.000451	-.000441	-.000432	-.000425	-.000419
102.30	-.001368	-.000284	-.000170	-.000165	-.000254	-.000248	-.000243	-.000239	-.000235
112.54	-.000511	-.000089	-.000051	-.000049	-.000079	-.000077	-.000076	-.000074	-.000073
122.78	-.000187	-.000028	-.000015	-.000014	-.000024	-.000024	-.000023	-.000023	-.000022
133.02	-.000068	-.000008	-.000004	-.000004	-.000007	-.000007	-.000007	-.000007	-.000007
143.26	-.000024	-.000003	-.000001	-.000001	-.000002	-.000002	-.000002	-.000002	-.000002
153.50	-.000008	-.000001	-.000000	-.000000	-.000001	-.000001	-.000001	-.000001	-.000001
163.74	-.000003	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000
173.98	-.000001	-.000000			-.000000	-.000000	-.000000	-.000000	-.000000
184.22	-.000000								

TABLE IV. RADIAL WAVEFUNCTIONS

GD 4F7 5D1	R=0.22133534*X	TM 4F13	R=0.21585448*X
TB 4F8 5D1	R=0.22019442*X	YB 4F14	R=0.21482167*X
DY 4F10	R=0.21907666*X	LU 5D1	R=0.21380834*X
HO 4F11	R=0.21798126*X	HF 5D2	R=0.21281387*X
ER 4F12	R=0.21690744*X		

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	3494.7	3609.3	3725.1	3843.3	3963.4	4085.4	4209.2	4335.4	4463.6
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	1.950475	1.983395	2.016325	2.049258	2.082196	2.115139	2.148086	2.181033	2.213981
.02	3.386289	3.438382	3.490359	3.542207	3.593933	3.645535	3.697013	3.748361	3.799584
.03	4.409822	4.471084	4.532040	4.592675	4.652999	4.713013	4.772717	4.832106	4.891187
.04	5.105264	5.168589	5.231403	5.293692	5.355469	5.416738	5.477502	5.537758	5.597515
.05	5.541648	5.602154	5.661959	5.721053	5.779453	5.837166	5.894197	5.950549	6.006233
.06	5.775401	5.829897	5.883536	5.936311	5.988245	6.039348	6.089630	6.139096	6.187763
.07	5.852493	5.899056	5.944648	5.989267	6.032940	6.075680	6.117503	6.158418	6.198445
.08	5.810234	5.847878	5.884481	5.920049	5.954608	5.988179	6.020780	6.052425	6.083136
.09	5.678771	5.707191	5.734543	5.760837	5.786106	5.810371	5.833655	5.855976	5.877358
.10	5.482346	5.501715	5.520027	5.537299	5.553565	5.568849	5.583178	5.596572	5.609058
.12	4.968124	4.971093	4.973122	4.974238	4.974475	4.973863	4.972431	4.970205	4.967215
.14	4.378850	4.368662	4.357735	4.346102	4.333797	4.320849	4.307288	4.293144	4.278444
.16	3.782225	3.762408	3.742092	3.721315	3.700106	3.678492	3.656501	3.634164	3.611503
.18	3.217133	3.190943	3.164500	3.137844	3.110996	3.083980	3.056820	3.029545	3.002168
.20	2.703761	2.673937	2.644089	2.614255	2.584448	2.554687	2.524991	2.495383	2.465873
.22	2.250485	2.219184	2.188057	2.157136	2.126428	2.095945	2.065699	2.035710	2.005980
.24	1.858467	1.827292	1.796449	1.765966	1.735842	1.706083	1.676694	1.647691	1.619068
.26	1.524697	1.494769	1.465293	1.436289	1.407751	1.379679	1.352072	1.324940	1.298272
.28	1.243980	1.216026	1.188606	1.161735	1.135399	1.109595	1.084316	1.059566	1.035331
.30	1.010187	.984627	.959650	.935266	.911457	.888213	.865525	.843392	.821795
.34	.658502	.638137	.618375	.599219	.580644	.562634	.545174	.528256	.511858
.38	.424038	.408559	.393638	.379270	.365428	.352095	.339252	.326887	.314978
.42	.270508	.259137	.248246	.237825	.227850	.218301	.209160	.200413	.192040
.46	.171312	.163171	.155423	.148055	.141045	.134375	.128029	.121993	.116249
.50	.107873	.102161	.096756	.091649	.086818	.082249	.077928	.073842	.069976
.54	.067621	.063676	.059965	.056479	.053201	.050120	.047222	.044497	.041935
.58	.042238	.039547	.037031	.034681	.032485	.030431	.028511	.026716	.025038
.62	.026307	.024489	.022801	.021232	.019775	.018420	.017160	.015989	.014900
.66	.016342	.015125	.014001	.012963	.012003	.011116	.010296	.009537	.008836
.70	.010127	.009317	.008573	.007890	.007262	.006685	.006154	.005666	.005217
.78	.003848	.003495	.003174	.002882	.002617	.002376	.002157	.001957	.001775
.86	.001422	.001269	.001133	.001010	.000899	.000800	.000711	.000631	.000559
.94	.000498	.000434	.000377	.000326	.000282	.000230	.000195	.000163	.000135
1.02	.000173	.000146	.000124	.000104	.000087	.000073	.000062	.000051	.000040
1.10	.000059	.000049	.000040	.000033	.000027	.000020	.000015	.000010	.000007
1.18	.000020	.000016	.000013	.000010	.000008	.000006	.000004	.000003	.000002
1.26	.000007	.000005	.000004	.000003	.000002	.000001	.000001	.000000	.000000
1.34	.000002	.000002	.000001	.000001	.000001	.000000	.000000	.000000	.000000
1.42	.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	565.37	585.72	605.77	626.81	648.20	669.93	692.02	715.14	738.67
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.639919	.651337	.662787	.674215	.685647	.697084	.708524	.719944	.731362
.02	1.102145	1.119955	1.137765	1.155483	1.173155	1.190779	1.208356	1.225845	1.243279
.03	1.414703	1.434955	1.455135	1.475125	1.494986	1.514716	1.534315	1.553735	1.573016
.04	1.602025	1.621668	1.641146	1.660328	1.679281	1.698006	1.716504	1.734721	1.752703

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
.05	1.685355	1.702093	1.718564	1.734634	1.750376	1.765791	1.780880	1.795592	1.809974
.06	1.683128	1.695287	1.707082	1.718383	1.729263	1.739725	1.749773	1.759357	1.768528
.07	1.611304	1.617729	1.623701	1.629104	1.634007	1.638416	1.642337	1.645727	1.648635
.08	1.483666	1.483622	1.483053	1.481861	1.480108	1.477804	1.474956	1.471532	1.467576
.09	1.312084	1.305181	1.297699	1.289562	1.280825	1.271501	1.261598	1.251096	1.240035
.10	1.106749	1.092871	1.078381	1.063228	1.047458	1.031085	1.014122	.996560	.978433
.12	.628392	.601043	.573080	.544503	.515340	.485609	.455327	.424513	.393183
.14	.103765	.064520	.024733	-.015535	-.056282	-.097486	-.139126	-.181159	-.223582
.16	-.427934	-.476846	-.526160	-.575764	-.625677	-.675876	-.726339	-.776998	-.827868
.18	-.939676	-.995753	-1.052044	-1.108391	-1.164836	-1.221354	-1.277923	-1.334457	-1.390988
.20	-1.413643	-1.474367	-1.535087	-1.595605	-1.655985	-1.716204	-1.776240	-1.835994	-1.895513
.22	-1.838910	-1.901915	-1.964680	-2.026982	-2.088901	-2.150418	-2.211514	-2.272082	-2.332181
.24	-2.209655	-2.272821	-2.335512	-2.397485	-2.458838	-2.519555	-2.579622	-2.638928	-2.697544
.26	-2.523763	-2.585269	-2.646076	-2.705932	-2.764946	-2.823109	-2.880410	-2.936744	-2.992189
.28	-2.781755	-2.840100	-2.897539	-2.953821	-3.009066	-3.063270	-3.116430	-3.168445	-3.219401
.30	-2.985969	-3.039962	-3.092869	-3.144447	-3.194823	-3.244000	-3.291981	-3.338676	-3.384176
.34	-3.247900	-3.290772	-3.332288	-3.372244	-3.410770	-3.447884	-3.483603	-3.517866	-3.550765
.38	-3.344476	-3.374629	-3.403284	-3.430297	-3.455791	-3.479797	-3.502345	-3.523410	-3.543079
.42	-3.313156	-3.330489	-3.346304	-3.360528	-3.373265	-3.384558	-3.394450	-3.402952	-3.410137
.46	-3.188786	-3.194209	-3.198196	-3.200744	-3.201938	-3.201827	-3.200461	-3.197886	-3.194161
.50	-3.001308	-2.996334	-2.990080	-2.982615	-2.973994	-2.964274	-2.953506	-2.941770	-2.929103
.54	-2.775085	-2.761513	-2.746868	-2.731283	-2.714783	-2.697425	-2.679264	-2.660402	-2.640855
.58	-2.529084	-2.508777	-2.487631	-2.465833	-2.443380	-2.420324	-2.396720	-2.372687	-2.348221
.62	-2.277484	-2.252220	-2.226357	-2.200129	-2.173501	-2.146524	-2.119246	-2.091799	-2.064157
.66	-2.030438	-2.001817	-1.972832	-1.943749	-1.914508	-1.885151	-1.855722	-1.826359	-1.797016
.70	-1.794843	-1.764244	-1.733499	-1.702895	-1.672347	-1.641894	-1.611569	-1.581511	-1.551659
.78	-1.373502	-1.342147	-1.311004	-1.280374	-1.250141	-1.220323	-1.190939	-1.162118	-1.133775
.86	-1.028148	-.998869	-.970048	-.941968	-.914494	-.887631	-.861382	-.835855	-.810953
.94	-.756686	-.730942	-.705794	-.681491	-.657896	-.634998	-.612790	-.591353	-.570591
1.02	-.549536	-.527837	-.506791	-.486600	-.467134	-.448374	-.430304	-.412980	-.396313
1.10	-.394880	-.377158	-.360083	-.343813	-.328231	-.313313	-.299036	-.285436	-.272434
1.18	-.281325	-.267196	-.253673	-.240870	-.228686	-.217094	-.206070	-.195632	-.185712
1.26	-.199021	-.187973	-.177466	-.167579	-.158227	-.149385	-.141028	-.133159	-.125725
1.34	-.139980	-.131473	-.123436	-.115917	-.108848	-.102204	-.095962	-.090116	-.084625
1.42	-.097795	-.091508	-.085439	-.079792	-.074515	-.069584	-.064980	-.060688	-.056680
1.50	-.068290	-.063426	-.058893	-.054696	-.050797	-.047175	-.043814	-.040694	-.037798
1.66	-.032826	-.030144	-.027679	-.025419	-.023344	-.021438	-.019691	-.018080	-.016602
1.82	-.015571	-.014130	-.012827	-.011642	-.010565	-.009587	-.008707	-.007890	-.007153
1.98	-.007268	-.006510	-.005836	-.005227	-.004680	-.004188	-.003774	-.003347	-.002986
2.14	.003304	-.002911	-.002570	-.002266	-.001993	-.001751	-.001613	-.001341	-.001168
2.30	-.001425	-.001225	-.001057	-.000915	-.000781	-.000665	-.000682	-.000471	-.000389
2.46	-.000544	-.000445	-.000365	-.000352	-.000290	-.000237	-.000286	-.000111	-.000074
2.62	-.000141	-.000095	-.000060	-.000135	-.000107	-.000084	-.000119	.000000	.000000
2.78	.000000	.000000	.000000	-.000051	-.000039	-.000029	-.000049	.000000	.000000
2.94	.000000	.000000	.000000	-.000019	-.000014	-.000010	-.000020	.000000	.000000
3.10				-.000007	-.000005	-.000004	-.000008		
3.42				-.000001	-.000001	-.000000	-.000001		
3.74				.000000	.000000	.000000	.000000		

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
-E	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X	536.92	556.74	576.27	596.78	617.64	638.84	660.39	682.98	705.96
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.026807	.027612	.028429	.029254	.030090	.030937	.031793	.032658	.033534
.02	.099929	.102854	.105819	.108813	.111841	.114904	.118000	.121125	.124283
.03	.209580	.215556	.221608	.227713	.233881	.240113	.246408	.252754	.259161
.04	.347374	.357018	.366774	.376606	.386530	.396545	.406650	.416828	.427091

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X									
.05	.506153	.519826	.533644	.547553	.561578	.575717	.589968	.604306	.618748
.06	.679832	.697688	.715715	.733840	.752097	.770482	.788993	.807596	.826315
.07	.863262	.885291	.907508	.929820	.952269	.974852	.997564	1.020364	1.043281
.08	1.052108	1.078173	1.104430	1.130770	1.157242	1.183842	1.210564	1.237359	1.264262
.09	1.242747	1.272611	1.302662	1.332771	1.362997	1.393333	1.423775	1.454263	1.484839
.10	1.432175	1.465527	1.499050	1.532597	1.566235	1.599956	1.633755	1.667565	1.701432
.12	1.797981	1.837187	1.876503	1.915746	1.954998	1.994253	2.033502	2.072666	2.111800
.14	2.134984	2.178385	2.221797	2.265012	2.308126	2.351131	2.394018	2.436698	2.479234
.16	2.434252	2.480148	2.525933	2.571381	2.616595	2.661570	2.706297	2.750679	2.794788
.18	2.690993	2.737774	2.784305	2.830351	2.876022	2.921313	2.966219	3.010638	3.054649
.20	2.903428	2.949643	2.995466	3.040655	3.085330	3.129484	3.173115	3.216124	3.258592
.22	3.071917	3.116319	3.160189	3.203288	3.245736	3.287533	3.328679	3.369078	3.408814
.24	3.198298	3.239859	3.280755	3.320759	3.359991	3.398454	3.436151	3.472996	3.509071
.26	3.285381	3.323289	3.360415	3.396546	3.431803	3.466191	3.499716	3.532306	3.564039
.28	3.336564	3.370215	3.402983	3.434679	3.465416	3.495206	3.524060	3.551916	3.578852
.30	3.355555	3.384534	3.412549	3.439437	3.465306	3.490172	3.514049	3.536891	3.558771
.34	3.312165	3.331198	3.349169	3.365978	3.381714	3.396401	3.410061	3.422683	3.434325
.38	3.184587	3.193725	3.201786	3.208736	3.214642	3.219536	3.223447	3.226396	3.228426
.42	2.998981	2.998997	2.997991	2.995996	2.993056	2.989206	2.984483	2.978935	2.972589
.46	2.777167	2.769262	2.760448	2.750818	2.740390	2.729203	2.717296	2.704744	2.691556
.50	2.536471	2.522053	2.506875	2.491086	2.474676	2.457688	2.440158	2.422184	2.403756
.54	2.290073	2.270589	2.250515	2.230048	2.209155	2.187871	2.166236	2.144361	2.122220
.58	2.047570	2.024396	2.000811	1.977050	1.953054	1.928857	1.904494	1.880087	1.855594
.62	1.815598	1.789975	1.764118	1.738285	1.712401	1.686492	1.660589	1.634821	1.609129
.66	1.598441	1.571440	1.544368	1.517504	1.490750	1.464130	1.437669	1.411496	1.385541
.70	1.398573	1.371082	1.343667	1.316614	1.289815	1.263285	1.237043	1.211216	1.185725
.78	1.054196	1.027691	1.001496	.975892	.950750	.926076	.901877	.878264	.855146
.86	.781426	.757536	.734104	.711387	.689250	.667688	.646697	.626368	.606608
.94	.571675	.551122	.531103	.511836	.493192	.475157	.457719	.440947	.424751
1.02	.413873	.396785	.380250	.364445	.349251	.334649	.320621	.307215	.294350
1.10	.297112	.283271	.269964	.257326	.245253	.233723	.222715	.212259	.202285
1.18	.211830	.200847	.190355	.180451	.171048	.162122	.153652	.145654	.138068
1.26	.150174	.141602	.133465	.125830	.118623	.111824	.105410	.099387	.093707
1.34	.105964	.099364	.093139	.087330	.081880	.076769	.071975	.067497	.063298
1.42	.074473	.069448	.064740	.060370	.056294	.052493	.048949	.045655	.042583
1.50	.052164	.048374	.044847	.041590	.038569	.035769	.033173	.030771	.028543
1.66	.025371	.023263	.021330	.019560	.017938	.016451	.015089	.013839	.012691
1.82	.012204	.011058	.010025	.009086	.008235	.007464	.006765	.006128	.005549
1.98	.005789	.005177	.004636	.004148	.003709	.003317	.002965	.002645	.002357
2.14	.002681	.002359	.002082	.001834	.001612	.001415	.001241	.001083	.000942
2.30	.001183	.001016	.000877	.000760	.000649	.000553	.000469	.000392	.000324
2.46	.000466	.000382	.000315	.000301	.000249	.000204	.000165	.000100	.000068
2.62	.000131	.000090	.000060	.000119	.000094	.000074	.000058	.000000	.000000
2.78	.000000	.000000	.000000	.000046	.000036	.000027	.000020	.000000	.000000
2.94	.000000	.000000	.000000	.000018	.000013	.000010	.000007		
3.10				.000007	.000005	.000003	.000002		
3.42				.000001	.000001	.000000	.000000		
3.74				.000000	.000000	.000000	.000000		

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	128.31	133.26	137.56	142.65	147.81	153.06	158.38	164.54	170.84
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.295057	.301032	.307021	.312992	.318961	.324927	.330892	.336837	.342778
.02	.507579	.516986	.526387	.535727	.545033	.554305	.563545	.572724	.581866
.03	.650123	.660930	.671690	.682331	.692890	.703367	.713763	.724044	.734241
.04	.733759	.744374	.754887	.765219	.775412	.785467	.795385	.805129	.814734

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
.05	.768229	.777433	.786475	.795275	.803878	.812285	.820498	.828482	.836271
.06	.762089	.768979	.775647	.782020	.788141	.794012	.799637	.804983	.810085
.07	.722836	.726774	.730438	.733763	.736788	.739517	.741957	.744078	.745916
.08	.657021	.657597	.657852	.657735	.657283	.656500	.655393	.653943	.652179
.09	.570360	.567345	.563975	.560215	.556095	.551622	.546804	.541630	.536126
.10	.467818	.461139	.454082	.446632	.438810	.430627	.422090	.413200	.403975
.12	.231709	.217956	.203822	.189326	.174478	.159291	.143776	.127953	.111828
.14	-.023585	-.043506	-.063761	-.084290	-.105101	-.126178	-.147506	-.169048	-.190808
.16	-.277847	-.302598	-.327587	-.352722	-.378022	-.403472	-.429054	-.454714	-.480469
.18	-.516747	-.544773	-.572904	-.601017	-.629147	-.657275	-.685384	-.713407	-.741373
.20	-.730556	-.760241	-.789867	-.819292	-.848559	-.877653	-.906555	-.935191	-.963599
.22	-.913107	-.942880	-.972410	-1.001546	-1.030339	-1.058774	-1.086835	-1.114444	-1.141647
.24	-1.060965	-1.089372	-1.117344	-1.144729	-1.171582	-1.197891	-1.223643	-1.248765	-1.273303
.26	-1.172763	-1.198513	-1.223636	-1.247987	-1.271625	-1.294540	-1.316724	-1.338111	-1.358750
.28	-1.248669	-1.270660	-1.291838	-1.312207	-1.331435	-1.349905	-1.367485	-1.384123	-1.399866
.30	-1.289971	-1.307297	-1.323639	-1.338899	-1.353126	-1.366324	-1.378494	-1.389600	-1.399688
.34	-1.277569	-1.283634	-1.288436	-1.291949	-1.294208	-1.295226	-1.295020	-1.293598	-1.290992
.38	-1.157245	-1.150676	-1.142667	-1.133288	-1.122547	-1.110473	-1.097095	-1.082475	-1.066624
.42	-.953643	-.934288	-.913430	-.891246	-.867712	-.842870	-.816763	-.789506	-.761089
.46	-.690945	-.659586	-.626776	-.592795	-.557586	-.521203	-.483699	-.445243	-.405797
.50	-.391020	-.349099	-.305877	-.261734	-.216577	-.170471	-.123476	-.075806	-.027398
.54	-.072577	-.021944	.029754	.082055	.135083	.188768	.243045	.297664	.352714
.58	.249093	.306379	.364432	.422723	.481407	.540411	.599667	.658903	.718229
.62	.562007	.623842	.686102	.748215	.810358	.872461	.934457	.996064	1.057411
.66	.857200	.921551	.985963	1.049840	1.113378	1.176513	1.239183	1.301106	1.362425
.70	1.128334	1.193323	1.258003	1.321777	1.384853	1.447177	1.508693	1.569131	1.628647
.78	1.583738	1.645227	1.705709	1.764643	1.822245	1.878483	1.933326	1.986554	2.038332
.86	1.914764	1.967998	2.019653	2.069302	2.117149	2.163191	2.207426	2.249710	2.290199
.94	2.126098	2.168209	2.208338	2.246211	2.282003	2.315742	2.347457	2.377089	2.404774
1.02	2.232268	2.261994	2.289522	2.314738	2.337782	2.358710	2.377579	2.394413	2.409322
1.10	2.251995	2.269314	2.284391	2.297266	2.308041	2.316795	2.323607	2.328574	2.331776
1.18	2.204656	2.210413	2.214031	2.215685	2.215437	2.213385	2.209620	2.204300	2.197474
1.26	2.108272	2.103853	2.097514	2.089534	2.079941	2.068840	2.056334	2.042619	2.027714
1.34	1.978506	1.965579	1.951031	1.935213	1.918123	1.899869	1.880554	1.860398	1.839396
1.42	1.828312	1.808632	1.787673	1.765832	1.743080	1.719523	1.695260	1.670517	1.645268
1.50	1.667967	1.643231	1.617578	1.591420	1.564710	1.537543	1.510009	1.482331	1.454465
1.66	1.346033	1.315660	1.285055	1.254606	1.224237	1.194015	1.164004	1.134389	1.105110
1.82	1.052182	1.020756	.989650	.959175	.929242	.899886	.871137	.843129	.815777
1.98	.803114	.773556	.744697	.716750	.689625	.663327	.637857	.613291	.589531
2.14	.602012	.575878	.550657	.526464	.503219	.480902	.459492	.439013	.419370
2.30	.445069	.422941	.401812	.381708	.362563	.344341	.327008	.310544	.294866
2.46	.325581	.307435	.290280	.274069	.258757	.244299	.230651	.217763	.205571
2.62	.236273	.221746	.208149	.195373	.183396	.172170	.161650	.151760	.142460
2.78	.170443	.159030	.148453	.138561	.129352	.120780	.112801	.105325	.098333
2.94	.122429	.113593	.105488	.097933	.090947	.084486	.078510	.072922	.067720
3.10	.087689	.080927	.074790	.069082	.063837	.059015	.054582	.050439	.046599
3.42	.044806	.040944	.037523	.034339	.031447	.028818	.026427	.024182	.022116
3.74	.022916	.020758	.018904	.017161	.015595	.014185	.012915	.011705	.010597
4.06	.011801	.010609	.009624	.008678	.007836	.007084	.006412	.005754	.005152
4.38	.006142	.005486	.004972	.004459	.004005	.003602	.003246	.002879	.002545
4.70	.003235	.002872	.002610	.002330	.002083	.001866	.001674	.001463	.001270
5.02	.001719	.001518	.001389	.001233	.001097	.000978	.000874	.000748	.000632
5.34	.000916	.000802	.000742	.000655	.000580	.000514	.000456	.000377	.000305
5.66	.000483	.000419	.000394	.000345	.000303	.000266	.000234	.000184	.000139
5.98	.000252	.000217	.000207	.000180	.000156	.000136	.000118	.000088	.000062
6.30	.000131	.000111	.000108	.000093	.000080	.000069	.000059	.000042	.000028
6.94	.000034	.000029	.000029	.000024	.000021	.000017	.000015	.000009	.000005
7.58	.000009	.000007	.000007	.000006	.000005	.000004	.000004	.000002	.000001
8.22	.000002	.000002	.000002	.000002	.000001	.000001	.000001	.000000	.000000
8.86	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	115.54	120.20	124.22	129.01	133.89	138.84	143.86	149.72	155.72
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.013009	.013440	.013877	.014320	.014768	.015222	.015681	.016145	.016615
.02	.048463	.050030	.051621	.053227	.054851	.056495	.058158	.059835	.061531
.03	.101531	.104734	.107983	.111258	.114568	.117913	.121294	.124699	.128138
.04	.168026	.173193	.178428	.183699	.189021	.194391	.199813	.205269	.210772
.05	.244329	.251646	.259049	.266495	.274003	.281571	.289201	.296870	.304597
.06	.327330	.336863	.346498	.356174	.365920	.375731	.385612	.395528	.405507
.07	.414363	.426084	.437916	.449781	.461717	.473716	.485784	.497880	.510037
.08	.503157	.516961	.530877	.544812	.558809	.572862	.586977	.601102	.615280
.09	.591791	.607512	.623337	.639160	.655031	.670941	.686897	.702841	.718821
.10	.678650	.696075	.713589	.731073	.748581	.766105	.783652	.801156	.818673
.12	.841913	.861978	.882078	.902071	.922022	.941920	.961775	.981509	1.001185
.14	.984898	1.006458	1.027970	1.049276	1.070449	1.091478	1.112373	1.133049	1.153577
.16	1.102531	1.124391	1.146098	1.167487	1.188634	1.209527	1.230179	1.250502	1.270572
.18	1.192006	1.213009	1.233737	1.254026	1.273954	1.293508	1.312704	1.331457	1.349843
.20	1.252233	1.271311	1.289982	1.308094	1.325721	1.342852	1.359505	1.375603	1.391219
.22	1.283397	1.299607	1.315276	1.330270	1.344659	1.358433	1.371612	1.384134	1.396064
.24	1.286601	1.299146	1.311016	1.322109	1.332483	1.342134	1.351082	1.359283	1.366794
.26	1.263599	1.271831	1.279274	1.285834	1.291584	1.296515	1.300650	1.303965	1.306508
.28	1.216569	1.219994	1.222510	1.224093	1.224773	1.224555	1.223466	1.221504	1.218705
.30	1.147956	1.146225	1.143491	1.139776	1.135094	1.129455	1.122890	1.115421	1.107071
.34	.956313	.943758	.930068	.915372	.899645	.882908	.865198	.846593	.827085
.38	.709273	.685967	.661484	.636059	.609629	.582226	.553891	.524759	.494786
.42	.426105	.392841	.358444	.323253	.287168	.250229	.212481	.174112	.135044
.46	.123696	.081767	.038830	-.004681	-.048906	-.093793	-.139296	-.185185	-.231567
.50	-.183864	-.232853	-.282658	-.332765	-.383345	-.434342	-.485711	-.537187	-.588906
.54	-.485317	-.539611	-.594473	-.649330	-.704382	-.759567	-.814845	-.869929	-.924976
.58	-.772056	-.829871	-.887968	-.945737	-1.003400	-1.060893	-1.118181	-1.174969	-1.231432
.62	-1.037832	-1.097451	-1.157043	-1.215985	-1.274510	-1.332560	-1.390106	-1.446856	-1.502995
.66	-1.278420	-1.338256	-1.397749	-1.456283	-1.514099	-1.571141	-1.627393	-1.682574	-1.736878
.70	-1.491277	-1.549917	-1.607904	-1.664647	-1.720387	-1.775079	-1.828716	-1.881039	-1.932243
.78	-1.830132	-1.882938	-1.934524	-1.984403	-2.032801	-2.079692	-2.125095	-2.168818	-2.211046
.86	-2.056268	-2.099998	-2.142066	-2.182132	-2.220387	-2.256832	-2.291511	-2.324318	-2.355411
.94	-2.181411	-2.214309	-2.245254	-2.274073	-2.300915	-2.325807	-2.348816	-2.369924	-2.389258
1.02	-2.221871	-2.243391	-2.262823	-2.280161	-2.295508	-2.308916	-2.320470	-2.330235	-2.338298
1.10	-2.195145	-2.205643	-2.214062	-2.220547	-2.225156	-2.227961	-2.229061	-2.228588	-2.226593
1.18	-2.117904	-2.118349	-2.116846	-2.113664	-2.108818	-2.102400	-2.094510	-2.085334	-2.074888
1.26	-2.004947	-1.996677	-1.986684	-1.975326	-1.962585	-1.948563	-1.933360	-1.917195	-1.900052
1.34	-1.868765	-1.853291	-1.836382	-1.818454	-1.799463	-1.779516	-1.758702	-1.737260	-1.715148
1.42	-1.719476	-1.698340	-1.676093	-1.653178	-1.629533	-1.605264	-1.580445	-1.555320	-1.529825
1.50	-1.564983	-1.539655	-1.513552	-1.487120	-1.460281	-1.433139	-1.405747	-1.378345	-1.350847
1.66	-1.262488	-1.232612	-1.202595	-1.172832	-1.143231	-1.113883	-1.084786	-1.056149	-1.027862
1.82	-.990668	-.960161	-.930026	-.900561	-.871673	-.843419	-.815775	-.788884	-.762629
1.98	-.761277	-.732647	-.704745	-.677756	-.651597	-.626291	-.601798	-.578195	-.555369
2.14	-.575714	-.550309	-.525841	-.502383	-.479871	-.458296	-.437612	-.417833	-.398862
2.30	-.430061	-.408401	-.387765	-.368129	-.349452	-.331704	-.314832	-.298803	-.283540
2.46	-.318241	-.300314	-.283412	-.267432	-.252354	-.238139	-.224729	-.212058	-.200071
2.62	-.233812	-.219308	-.205775	-.193047	-.181127	-.169971	-.159524	-.149692	-.140467
2.78	-.170865	-.159338	-.148694	-.138724	-.129454	-.120837	-.112822	-.105301	-.098247
2.94	-.124386	-.115352	-.107100	-.099394	-.092276	-.085702	-.079627	-.073935	-.068638
3.10	-.090317	-.083317	-.076994	-.071099	-.065689	-.060723	-.056161	-.051888	-.047928
3.42	-.047454	-.043354	-.039745	-.036374	-.033317	-.030543	-.028022	-.025649	-.023465
3.74	-.024970	-.022624	-.020622	-.018733	-.017038	-.015516	-.014146	-.012837	-.011638
4.06	-.013243	-.011919	-.010833	-.009786	-.008855	-.008026	-.007287	-.006660	-.005895
4.38	-.007118	-.006376	-.005799	-.005220	-.004710	-.004258	-.003858	-.003447	-.003069

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
4.70	-.003896	-.003480	-.003181	-.002860	-.002578	-.002331	-.002112	-.001872	-.001650
5.02	-.002179	-.001945	-.001795	-.001615	-.001458	-.001320	-.001199	-.001053	-.000917
5.34	-.001248	-.001115	-.001045	-.000942	-.000853	-.000775	-.000707	-.000613	-.000525
5.66	-.000731	-.000654	-.000626	-.000567	-.000515	-.000470	-.000431	-.000368	-.000308
5.98	-.000437	-.000393	-.000386	-.000351	-.000320	-.000294	-.000270	-.000226	-.000184
6.30	-.000265	-.000239	-.000243	-.000222	-.000204	-.000188	-.000174	-.000142	-.000111
6.94	-.000097	-.000088	-.000101	-.000094	-.000087	-.000081	-.000075	-.000057	-.000040
7.58	-.000035	-.000032	-.000044	-.000041	-.000038	-.000036	-.000034	-.000022	-.000014
8.22	-.000012	-.000011	-.000019	-.000018	-.000017	-.000016	-.000016	-.000008	-.000005
8.86	-.000004	-.000004	-.000008	-.000007	-.000007	-.000007	-.000007	-.000002	-.000002
9.50	-.000001	-.000001	-.000003	-.000003	-.000003	-.000003	-.000003	-.000000	-.000001
10.14	-.000000	-.000000	-.000001	-.000001	-.000001	-.000001	-.000001	.000000	.000000
10.78	.000000	.000000	-.000001	-.000000	-.000000	-.000000	-.000001	.000000	.000000
11.42			.000000	.000000	.000000	.000000	.000000		

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
-E	92.059	96.182	99.678	103.94	108.27	112.68	117.17	122.47	127.91
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000108	.000113	.000118	.000124	.000130	.000136	.000142	.000148	.000154
.02	.000822	.000862	.000903	.000945	.000989	.001033	.001079	.001125	.001173
.03	.002648	.002775	.002907	.003041	.003179	.003320	.003465	.003612	.003763
.04	.005492	.006277	.006572	.006872	.007180	.007495	.007818	.008147	.008484
.05	.011176	.011703	.012245	.012799	.013366	.013946	.014540	.015145	.015763
.06	.018447	.019306	.020192	.021095	.022018	.022964	.023931	.024914	.025919
.07	.027986	.029276	.030605	.031957	.033341	.034756	.036202	.037673	.039174
.08	.039920	.041740	.043614	.045519	.047468	.049459	.051493	.053560	.055668
.09	.054327	.056777	.059297	.061859	.064476	.067149	.069878	.072649	.075473
.10	.071243	.074420	.077686	.081004	.084392	.087850	.091377	.094956	.098602
.12	.112578	.117486	.122525	.127637	.132850	.138164	.143578	.149062	.154644
.14	.163598	.170569	.177716	.184956	.192329	.199835	.207473	.215199	.223052
.16	.223638	.232945	.242477	.252117	.261923	.271891	.282021	.292254	.302641
.18	.291800	.303656	.315782	.328030	.340470	.353099	.365916	.378845	.391952
.20	.367044	.381597	.396462	.411454	.426661	.442078	.457702	.473441	.489374
.22	.448258	.465593	.483275	.501083	.519120	.537381	.555862	.574453	.593246
.24	.534302	.554444	.574962	.595594	.616463	.637561	.658883	.680300	.701920
.26	.624054	.646974	.670288	.693698	.717342	.741212	.765300	.789459	.813814
.28	.716428	.742048	.768072	.794162	.820475	.847000	.873729	.900496	.927442
.30	.810403	.838602	.867204	.895835	.924667	.953689	.982889	1.012088	1.041437
.34	.999425	1.032285	1.065512	1.098668	1.131954	1.165356	1.198859	1.232256	1.265722
.38	1.184495	1.221179	1.258154	1.294930	1.331730	1.368538	1.405339	1.441902	1.478424
.42	1.360327	1.399874	1.439597	1.478972	1.518236	1.557376	1.596372	1.634983	1.673420
.46	1.522935	1.564328	1.605755	1.646668	1.687319	1.727691	1.767767	1.807302	1.846515
.50	1.669502	1.711733	1.753829	1.795246	1.836234	1.876779	1.916866	1.956257	1.995172
.54	1.798226	1.840337	1.882130	1.923079	1.963430	2.003172	2.042293	2.080569	2.118216
.58	1.908157	1.949270	1.989876	2.029484	2.068328	2.106402	2.143696	2.180012	2.215555
.62	1.999032	2.038373	2.077019	2.114526	2.151115	2.186781	2.221523	2.255171	2.287917
.66	2.071135	2.108042	2.144072	2.178844	2.212556	2.245212	2.276814	2.307228	2.336628
.70	2.125161	2.159088	2.191969	2.223496	2.253841	2.283014	2.311025	2.337779	2.363427
.78	2.183178	2.209964	2.235423	2.259407	2.282031	2.303321	2.323301	2.341959	2.359398
.86	2.183104	2.201865	2.219107	2.234853	2.249156	2.262058	2.273599	2.283846	2.292854
.94	2.136169	2.146710	2.155644	2.163147	2.169219	2.173914	2.177286	2.179474	2.180482
1.02	2.053402	2.056055	2.057107	2.056870	2.055294	2.052445	2.048388	2.043316	2.037193
1.10	1.944848	1.940308	1.934261	1.927121	1.918798	1.909368	1.898905	1.887637	1.875496
1.18	1.819193	1.808383	1.796228	1.783211	1.769218	1.754327	1.738614	1.722332	1.705383
1.26	1.683655	1.667609	1.650435	1.632648	1.614120	1.594928	1.575149	1.555040	1.534484
1.34	1.544026	1.523808	1.502710	1.481254	1.459303	1.436933	1.414216	1.391400	1.368356
1.42	1.404795	1.381433	1.357457	1.333368	1.309029	1.284510	1.259878	1.235358	1.210818



	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
1.50	1.269317	1.243761	1.217860	1.192070	1.166265	1.140504	1.114844	1.089486	1.064291
1.66	1.018401	.990878	.963507	.936621	.910118	.884037	.858409	.833368	.808783
1.82	.801848	.774797	.748295	.722530	.697433	.673017	.649292	.626315	.603977
1.98	.622147	.597110	.572904	.549565	.527065	.505393	.484537	.464487	.445157
2.14	.477212	.455009	.433804	.413501	.394108	.375596	.357936	.341060	.324912
2.30	.362778	.343704	.325702	.308565	.292335	.276969	.262429	.248602	.235460
2.46	.273871	.257881	.242967	.228834	.215555	.203080	.191365	.180264	.169777
2.62	.205647	.192498	.180379	.168934	.158262	.148309	.139028	.130254	.122012
2.78	.153792	.143144	.133453	.124319	.115863	.108031	.100778	.093927	.087523
2.94	.114669	.106155	.098507	.091304	.084680	.078587	.072980	.067679	.062747
3.10	.085321	.078583	.072616	.066990	.061851	.057154	.052858	.048786	.045013
3.42	.047086	.042970	.039441	.036089	.033064	.030332	.027863	.025493	.023311
3.74	.025988	.023538	.021524	.019573	.017832	.016278	.014888	.013520	.012265
4.06	.014415	.012987	.011875	.010760	.009776	.008905	.008134	.007341	.006615
4.38	.008074	.007255	.006668	.006039	.005490	.005008	.004585	.004118	.003690
4.70	.004589	.004127	.003836	.003486	.003183	.002919	.002689	.002406	.002145
5.02	.002660	.002404	.002276	.002084	.001919	.001775	.001651	.001472	.001306
5.34	.001581	.001442	.001401	.001297	.001208	.001131	.001064	.000945	.000834
5.66	.000967	.000894	.000899	.000843	.000796	.000755	.000720	.000636	.000557
5.98	.000611	.000575	.000601	.000572	.000548	.000527	.000508	.000446	.000387
6.30	.000399	.000383	.000418	.000405	.000393	.000382	.000372	.000324	.000278
6.94	.000188	.000188	.000225	.000223	.000222	.000220	.000218	.000185	.000154
7.58	.000099	.000103	.000134	.000136	.000137	.000137	.000138	.000113	.000091
8.22	.000057	.000061	.000086	.000088	.000090	.000091	.000091	.000073	.000056
8.86	.000035	.000038	.000058	.000060	.000061	.000062	.000063	.000048	.000035
9.50	.000022	.000025	.000040	.000042	.000043	.000044	.000044	.000032	.000023
10.14	.000014	.000016	.000029	.000030	.000031	.000031	.000032	.000022	.000015
10.78	.000009	.000011	.000021	.000022	.000022	.000023	.000023	.000015	.000009
11.42	.000006	.000007	.000015	.000016	.000016	.000017	.000017	.000011	.000006
12.06	.000004	.000005	.000012	.000012	.000012	.000013	.000013	.000008	.000004
12.70	.000003	.000003	.000009	.000009	.000009	.000009	.000010	.000005	.000002
13.98	.000001	.000002	.000005	.000005	.000005	.000006	.000006	.000003	.000001
15.26	.000000	.000001	.000003	.000003	.000003	.000003	.000003	.000001	.000000
16.54	.000000	.000000	.000002	.000002	.000002	.000002	.000002	.000001	.000000
17.82		.000000	.000001	.000001	.000001	.000001	.000001	.000000	
19.10			.000001	.000001	.000001	.000001	.000001	.000000	
20.38			.000000	.000000	.000000	.000000	.000000		

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	27.152	28.088	28.371	29.313	30.263	31.222	32.190	33.875	35.607
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.141362	.144442	.147121	.150179	.153224	.156256	.159277	.162626	.166033
.02	.243116	.247992	.252166	.256976	.261746	.266480	.271179	.276422	.281745
.03	.311237	.316880	.321605	.327122	.332568	.337947	.343262	.349244	.355305
.04	.351009	.356606	.361146	.366552	.371854	.377057	.382164	.387988	.393872
.05	.367095	.372019	.375815	.380485	.385020	.389423	.393700	.398687	.403704
.06	.363600	.367384	.370025	.373499	.376808	.379958	.382954	.386609	.390258
.07	.344131	.346444	.347646	.349600	.351366	.352950	.354359	.356342	.358282
.08	.311852	.312475	.312060	.312288	.312310	.312135	.311768	.311869	.311890
.09	.269529	.268336	.266216	.264607	.262783	.260753	.258523	.256638	.254639
.10	.219570	.216518	.212675	.209200	.205507	.201607	.197506	.193619	.189589
.12	.104840	.098184	.091070	.084019	.076770	.069333	.061717	.054044	.046190
.14	-.018797	-.028608	-.038492	-.048611	-.058881	-.069291	-.079833	-.090683	-.101726
.16	-.141413	-.153695	-.165647	-.178103	-.190639	-.203243	-.215908	-.229097	-.242463
.18	-.255939	-.269887	-.283106	-.297058	-.310998	-.324917	-.338808	-.353395	-.368116

	GD 64	TB 65	DY 66	MO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
X									
.20	-.357553	-.372322	-.385989	-.400563	-.415023	-.429363	-.443573	-.458601	-.473700
.22	-.443193	-.457954	-.471278	-.485633	-.499765	-.513670	-.527340	-.541899	-.556453
.24	-.511156	-.525138	-.537396	-.550756	-.563785	-.576480	-.588836	-.602107	-.615284
.26	-.560776	-.573291	-.583849	-.595534	-.606783	-.617596	-.627972	-.639245	-.650335
.28	-.592169	-.602628	-.610953	-.620388	-.629291	-.637667	-.645516	-.654210	-.662630
.30	-.606025	-.613942	-.619611	-.626335	-.632444	-.637945	-.642844	-.648507	-.653811
.34	-.585795	-.587605	-.587112	-.587477	-.587108	-.586022	-.584232	-.582978	-.581226
.38	-.511614	-.506620	-.499486	-.492937	-.485609	-.477527	-.468714	-.460164	-.451031
.42	-.396681	-.384886	-.371298	-.357988	-.343931	-.329160	-.313706	-.298235	-.282160
.46	-.254071	-.236031	-.216689	-.197318	-.177304	-.156686	-.135505	-.114048	-.092031
.50	-.095728	-.072400	-.048365	-.024016	.000808	.026063	.051705	.077840	.104434
.54	.068035	.095431	.122878	.150881	.179143	.207616	.236255	.265553	.295157
.58	.228721	.258824	.288295	.318517	.348744	.378931	.409032	.439902	.470889
.62	.379634	.411038	.441137	.472125	.502846	.533258	.563315	.594198	.624984
.66	.515755	.547088	.576477	.606841	.636659	.665894	.694507	.723950	.753068
.70	.633555	.663535	.690991	.719454	.747100	.773898	.799816	.826523	.852680
.78	.806280	.830251	.850773	.872234	.892393	.911240	.928766	.946891	.964047
.86	.891503	.906139	.916779	.928151	.937867	.945943	.952394	.959158	.964632
.94	.894071	.897389	.896560	.896168	.893927	.889880	.884072	.878249	.870941
1.02	.825207	.816439	.803751	.791162	.776699	.760433	.742434	.724091	.704207
1.10	.699059	.678448	.654463	.630233	.604261	.576641	.547466	.517648	.486362
1.18	.530425	.498971	.464945	.430348	.394275	.356837	.318141	.278550	.237675
1.26	.333334	.292561	.250197	.206973	.162641	.117320	.071126	.023843	-.024455
1.34	.120259	.072003	.023242	-.026622	-.077159	-.128247	-.179769	-.232516	-.285951
1.42	-.098247	-.152014	-.205166	-.259610	-.314257	-.368990	-.423699	-.479711	-.536053
1.50	-.313641	-.370951	-.426548	-.483577	-.540331	-.596708	-.652610	-.709841	-.767036
1.66	-.710418	-.769392	-.824724	-.881614	-.937355	-.991883	-1.045141	-1.099651	-1.153446
1.82	-1.036907	-1.091682	-1.141428	-1.192691	-1.242133	-1.289745	-1.335520	-1.382335	-1.427899
1.98	-1.280615	-1.327224	-1.368064	-1.410239	-1.450184	-1.487939	-1.523548	-1.559895	-1.594634
2.14	-1.442566	-1.478835	-1.509219	-1.540646	-1.569685	-1.596423	-1.620944	-1.645833	-1.668934
2.30	-1.531481	-1.556686	-1.576422	-1.596823	-1.614892	-1.630749	-1.644506	-1.658220	-1.670108
2.46	-1.559596	-1.574062	-1.583883	-1.593922	-1.601844	-1.607787	-1.611881	-1.615493	-1.617350
2.62	-1.539962	-1.544688	-1.545867	-1.546773	-1.545879	-1.543330	-1.539260	-1.534262	-1.527655
2.78	-1.484873	-1.481229	-1.475287	-1.468560	-1.460403	-1.450959	-1.440357	-1.428391	-1.415005
2.94	-1.405077	-1.394579	-1.383083	-1.370285	-1.356445	-1.341694	-1.326148	-1.308831	-1.290304
3.10	-1.309495	-1.293652	-1.278078	-1.260704	-1.242665	-1.224073	-1.205028	-1.183845	-1.161669
3.42	-1.097740	-1.075262	-1.055269	-1.032608	-1.009931	-.987307	-.964800	-.939585	-.913792
3.74	-.888031	-.863175	-.842410	-.818350	-.794741	-.771611	-.748982	-.723330	-.697446
4.06	-.699897	-.675496	-.656138	-.633137	-.610873	-.589337	-.568520	-.544604	-.520719
4.38	-.540896	-.518594	-.501715	-.481104	-.461366	-.442467	-.424374	-.403296	-.382434
4.70	-.411772	-.392344	-.378283	-.360611	-.343840	-.327918	-.312801	-.294946	-.277419
5.02	-.309841	-.293491	-.282158	-.267483	-.253665	-.240645	-.228373	-.213683	-.199378
5.34	-.231045	-.217637	-.208728	-.196830	-.185706	-.175296	-.165548	-.153728	-.142311
5.66	-.171094	-.160315	-.153445	-.143975	-.135179	-.127000	-.119386	-.110039	-.101085
5.98	-.126037	-.117507	-.112287	-.104860	-.098002	-.091661	-.085792	-.078501	-.071575
6.30	-.092495	-.085827	-.081910	-.076150	-.070862	-.065999	-.061522	-.055896	-.050597
6.94	-.049498	-.045536	-.043387	-.040012	-.036944	-.034150	-.031602	-.028330	-.025303
7.58	-.026458	-.024162	-.023014	-.021080	-.019338	-.017765	-.016343	-.014476	-.012783
8.22	-.014245	-.012933	-.012331	-.011236	-.010257	-.009380	-.008593	-.007536	-.006596
8.86	-.007789	-.007044	-.006732	-.006114	-.005565	-.005077	-.004640	-.004039	-.003517
9.50	-.004362	-.003938	-.003778	-.003427	-.003118	-.002843	-.002599	-.002252	-.001957
10.14	-.002522	-.002277	-.002197	-.001995	-.001818	-.001661	-.001522	-.001315	-.001144
10.78	-.001515	-.001371	-.001331	-.001213	-.001109	-.001017	-.000935	-.000808	-.000705
11.42	-.000948	-.000862	-.000843	-.000772	-.000708	-.000652	-.000603	-.000521	-.000456
12.06	-.000619	-.000565	-.000557	-.000512	-.000472	-.000437	-.000406	-.000350	-.000308
12.70	-.000419	-.000384	-.000382	-.000353	-.000327	-.000304	-.000283	-.000244	-.000215
13.98	-.000211	-.000195	-.000196	-.000183	-.000170	-.000159	-.000149	-.000128	-.000112
15.26	-.000115	-.000107	-.000109	-.000102	-.000095	-.000089	-.000083	-.000071	-.000062
16.54	-.000066	-.000061	-.000063	-.000059	-.000055	-.000051	-.000048	-.000041	-.000036
17.82	-.000039	-.000036	-.000037	-.000035	-.000033	-.000030	-.000029	-.000024	-.000021



	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
X									
2.30	1.478238	1.504371	1.524343	1.545775	1.564905	1.581851	1.596724	1.612128	1.625765
2.46	1.510265	1.526521	1.537430	1.549290	1.559023	1.566767	1.572651	1.578540	1.582673
2.62	1.499870	1.507008	1.509907	1.513171	1.514583	1.514288	1.512423	1.510007	1.505920
2.78	1.457236	1.456364	1.452540	1.448448	1.442836	1.435847	1.427615	1.418272	1.407392
2.94	1.391367	1.383756	1.374556	1.364437	1.353152	1.340837	1.327616	1.312743	1.296495
3.10	1.309853	1.296801	1.283519	1.268675	1.253018	1.236669	1.219737	1.200652	1.180370
3.42	1.123211	1.102883	1.084804	1.063984	1.042986	1.021891	1.000772	.976665	.951729
3.74	.931792	.908142	.888671	.865532	.842700	.820215	.798113	.772469	.746336
4.06	.754492	.730324	.711627	.688641	.666289	.644573	.623495	.598605	.573516
4.38	.599898	.576993	.560245	.538901	.518374	.498640	.479675	.456874	.434102
4.70	.470373	.449714	.435405	.416460	.398406	.381201	.364802	.344732	.324858
5.02	.364853	.346863	.335050	.318767	.303374	.288814	.275038	.257878	.241026
5.34	.280640	.265377	.255874	.242213	.229388	.217340	.206014	.191660	.177681
5.66	.214464	.201771	.194282	.183028	.172531	.162731	.153572	.141767	.130368
5.98	.163077	.152683	.146879	.137740	.129267	.121401	.114090	.104508	.095337
6.30	.123537	.115131	.110694	.103358	.096592	.090345	.084569	.076871	.069571
6.94	.070380	.065031	.062527	.057916	.053707	.049858	.046331	.041475	.036957
7.58	.039921	.036604	.035246	.032415	.029853	.027531	.025421	.022415	.019678
8.22	.022661	.020637	.019931	.018217	.016678	.015294	.014046	.012202	.010564
8.86	.012928	.011705	.011355	.010325	.009407	.008588	.007853	.006723	.005746
9.50	.007439	.006703	.006543	.005925	.005379	.004893	.004461	.003765	.003181
10.14	.004330	.003888	.003824	.003453	.003127	.002838	.002582	.002149	.001798
10.78	.002556	.002288	.002273	.002049	.001852	.001679	.001527	.001253	.001040
11.42	.001531	.001368	.001374	.001238	.001119	.001014	.000922	.000745	.000614
12.06	.000931	.000831	.000845	.000761	.000688	.000624	.000567	.000452	.000370
12.70	.000573	.000511	.000528	.000475	.000430	.000390	.000355	.000277	.000226
13.98	.000214	.000191	.000203	.000183	.000166	.000150	.000137	.000103	.000083
15.26	.000078	.000069	.000076	.000068	.000062	.000056	.000051	.000037	.000030
16.54	.000027	.000024	.000027	.000025	.000022	.000020	.000019	.000013	.000010
17.82	.000009	.000008	.000010	.000009	.000008	.000007	.000007	.000004	.000003
19.10	.000003	.000003	.000003	.000003	.000003	.000002	.000002	.000001	.000001
20.38	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000000	.000000
21.66	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
-E	12.750	13.276	13.196	13.720	14.249	14.783	15.323	16.530	17.774
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.0000051	.0000053	.0000056	.0000059	.000062	.000065	.000068	.000071	.000075
.02	.000388	.000408	.000427	.000448	.000470	.000493	.000516	.000542	.000569
.03	.001248	.001313	.001373	.001442	.001512	.001584	.001658	.001741	.001827
.04	.002824	.002970	.003104	.003257	.003415	.003576	.003741	.003925	.004117
.05	.005267	.005536	.005782	.006065	.006355	.006651	.006954	.007294	.007647
.06	.008690	.009130	.009531	.009993	.010465	.010948	.011441	.011944	.012569
.07	.013179	.013839	.014441	.015132	.015839	.016562	.017301	.018128	.018988
.08	.018790	.019723	.020569	.021544	.022540	.023557	.024595	.025759	.026967
.09	.025559	.026814	.027951	.029261	.030598	.031963	.033356	.034917	.036537
.10	.033499	.035126	.036597	.038293	.040023	.041788	.043588	.045606	.047699
.12	.052864	.055376	.057637	.060248	.062909	.065618	.068376	.071472	.074679
.14	.076698	.080261	.083454	.087148	.090905	.094726	.098610	.102971	.107486
.16	.104646	.109395	.113632	.118541	.123527	.128589	.133727	.139503	.145474
.18	.136238	.142275	.147633	.153854	.160161	.166555	.173034	.180326	.187855
.20	.170934	.178322	.184847	.192436	.200118	.207893	.215760	.224622	.233762
.22	.208156	.216925	.224626	.233603	.242675	.251842	.261100	.271543	.282300
.24	.247312	.257455	.266313	.276663	.287104	.297634	.308252	.320244	.332582
.26	.287816	.299298	.309262	.320936	.332691	.344525	.356435	.369907	.383749
.28	.329102	.341857	.352853	.365774	.378759	.391806	.404912	.419761	.434998

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
x									
.30	.370634	.384571	.396502	.410568	.424673	.438818	.452996	.469092	.485584
.34	.452477	.468425	.481864	.497825	.513762	.529670	.545546	.563650	.582142
.38	.529847	.547230	.561606	.578841	.595962	.612965	.629846	.649207	.668915
.42	.599945	.618105	.632786	.650599	.668188	.685553	.702687	.722483	.742554
.46	.660653	.678899	.693235	.710902	.728223	.745198	.761822	.781218	.800790
.50	.710488	.728126	.741482	.758292	.774626	.790484	.805864	.824053	.842298
.54	.748520	.764890	.776669	.791952	.806624	.820691	.834151	.850389	.866548
.58	.774296	.788785	.798453	.811600	.824006	.835679	.846624	.860248	.873652
.62	.787754	.799820	.806909	.817389	.827005	.835770	.843693	.854141	.864222
.66	.789149	.798323	.802449	.809814	.816204	.821638	.826130	.832943	.839245
.70	.778982	.784877	.785734	.789624	.792445	.794220	.794971	.797795	.799973
.78	.726832	.725332	.719054	.715264	.710270	.704112	.696825	.691019	.684330
.86	.638099	.628603	.614884	.602974	.589814	.575456	.559951	.545254	.529502
.94	.520434	.502888	.481925	.462009	.440887	.418623	.395281	.372039	.347650
1.02	.381491	.356282	.328663	.301295	.272847	.243394	.213011	.182031	.149886
1.10	.228404	.196257	.162849	.128898	.094067	.058437	.022093	-.015510	-.054219
1.18	.067513	.029386	-.008765	-.048221	-.088301	-.128916	-.169982	-.212906	-.256816
1.26	-.095760	-.138767	-.180522	-.224293	-.268389	-.312721	-.357205	-.404073	-.451755
1.34	-.256933	-.303650	-.347854	-.394715	-.441575	-.488353	-.534968	-.584409	-.634456
1.42	-.412422	-.461677	-.507210	-.555961	-.604378	-.652389	-.699921	-.750637	-.801724
1.50	-.559474	-.610137	-.655958	-.705473	-.754326	-.802457	-.849808	-.900612	-.951542
1.66	-.820842	-.871280	-.914997	-.963099	-1.009943	-1.055506	-1.099761	-1.147764	-1.195406
1.82	-1.032019	-1.078936	-1.117836	-1.161470	-1.203386	-1.243598	-1.282120	-1.324388	-1.365858
1.98	-1.191241	-1.232331	-1.264731	-1.301901	-1.337053	-1.370241	-1.401516	-1.436282	-1.469897
2.14	-1.301382	-1.335267	-1.360381	-1.390026	-1.417512	-1.442928	-1.466358	-1.492819	-1.517865
2.30	-1.367918	-1.393992	-1.411729	-1.433527	-1.453165	-1.470758	-1.486416	-1.504487	-1.520960
2.46	-1.397464	-1.415708	-1.426470	-1.440632	-1.452744	-1.462941	-1.471348	-1.481428	-1.489803
2.62	-1.396822	-1.407629	-1.412125	-1.419215	-1.424446	-1.427963	-1.429901	-1.432693	-1.433733
2.78	-1.372403	-1.376427	-1.375533	-1.376319	-1.375493	-1.373200	-1.369575	-1.365944	-1.360562
2.94	-1.329933	-1.327977	-1.322623	-1.317973	-1.311986	-1.304802	-1.296551	-1.287423	-1.276586
3.10	-1.274333	-1.267258	-1.258363	-1.249163	-1.238913	-1.227742	-1.215771	-1.202070	-1.186732
3.42	-1.139429	-1.124662	-1.111156	-1.095363	-1.079075	-1.062388	-1.045396	-1.025113	-1.003406
3.74	-.991969	-.972530	-.957063	-.937542	-.917993	-.898483	-.879071	-.855104	-.829982
4.06	-.846887	-.825171	-.809587	-.788509	-.767767	-.747394	-.727420	-.701979	-.675673
4.38	-.712513	-.690271	-.675718	-.654609	-.634095	-.614181	-.594866	-.569522	-.543603
4.70	-.592804	-.571227	-.558319	-.538177	-.518794	-.500151	-.482227	-.458023	-.433513
5.02	-.488986	-.468818	-.457800	-.439212	-.421473	-.404542	-.388383	-.365950	-.343448
5.34	-.400677	-.382326	-.373205	-.356465	-.340603	-.325567	-.311308	-.290971	-.270765
5.66	-.326634	-.310270	-.302913	-.288112	-.274176	-.261045	-.248665	-.230539	-.212702
5.98	-.265225	-.250859	-.245063	-.232160	-.220081	-.208763	-.198148	-.182203	-.166667
6.30	-.214718	-.202259	-.197795	-.186672	-.176314	-.166658	-.157645	-.143762	-.130376
6.94	-.139879	-.130762	-.128304	-.120240	-.112802	-.105932	-.099575	-.089291	-.079590
7.58	-.090729	-.084229	-.083045	-.077334	-.072111	-.067325	-.062932	-.055472	-.048602
8.22	-.058787	-.054231	-.053803	-.049820	-.046205	-.042917	-.039920	-.034578	-.029787
8.86	-.038142	-.034988	-.034974	-.032223	-.029745	-.027505	-.025477	-.021682	-.018373
9.50	-.024830	-.022662	-.022852	-.020965	-.019275	-.017758	-.016392	-.013704	-.011432
10.14	-.016243	-.014761	-.015033	-.013742	-.012594	-.011568	-.010650	-.008747	-.007192
10.78	-.010694	-.009682	-.009969	-.009088	-.008307	-.007614	-.006997	-.005648	-.004585
11.42	-.007095	-.006405	-.006671	-.006069	-.005539	-.005070	-.004653	-.003693	-.002967
12.06	-.004748	-.004277	-.004510	-.004098	-.003736	-.003417	-.003135	-.002449	-.001952
12.70	-.003210	-.002887	-.003081	-.002798	-.002551	-.002333	-.002141	-.001648	-.001308
13.98	-.001517	-.001363	-.001488	-.001352	-.001234	-.001131	-.001040	-.000782	-.000644
15.26	-.000753	-.000678	-.000752	-.000685	-.000627	-.000576	-.000532	-.000395	-.000323
16.54	-.000395	-.000357	-.000396	-.000362	-.000332	-.000307	-.000284	-.000212	-.000182
17.82	-.000219	-.000198	-.000216	-.000198	-.000183	-.000169	-.000157	-.000121	-.000112
19.10	-.000128	-.000117	-.000122	-.000112	-.000103	-.000096	-.000089	-.000072	-.000073
20.38	-.000079	-.000072	-.000070	-.000064	-.000060	-.000055	-.000052	-.000046	-.000051
21.66	-.000051	-.000047	-.000041	-.000038	-.000035	-.000033	-.000030	-.000031	-.000038
22.94	-.000035	-.000032	-.000024	-.000022	-.000021	-.000019	-.000018	-.000021	-.000029
24.22	-.000025	-.000023	-.000014	-.000013	-.000012	-.000011	-.000011	-.000016	-.000023

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
25.50	-.000019	-.000017	-.000008	-.000008	-.000007	-.000007	-.000006	-.000012	-.000018
28.06	-.000011	-.000010	-.000003	-.000003	-.000002	-.000002	-.000002	-.000008	-.000012
30.62	-.000007	-.000007	-.000001	-.000001	-.000001	-.000001	-.000001	-.000005	-.000008
33.18	-.000005	-.000005	.000000	.000000	.000000	.000000	.000000	-.000004	-.000006
35.74	-.000003	-.000003	.000000	.000000	.000000	.000000	.000000	-.000003	-.000004
38.30	-.000002	-.000002						-.000002	-.000003
40.86	-.000002	-.000002						-.000001	-.000002
43.42	-.000001	-.000001						-.000001	-.000001
45.98	-.000001	-.000001						-.000001	-.000001
48.54	-.000001	-.000001						-.000001	-.000001

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	4F 7	4F 8	4F 10	4F 11	4F 12	4F 13	4F 14	4F 14	4F 14
-E	1.8455	1.9000	1.3411	1.3769	1.4093	1.4385	1.4648	2.1537	2.8723
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.02	.000001	.000001	.000001	.000001	.000002	.000002	.000002	.000002	.000002
.03	.000006	.000006	.000006	.000007	.000008	.000008	.000009	.000010	.000011
.04	.000017	.000019	.000020	.000021	.000023	.000025	.000027	.000029	.000032
.05	.000041	.000044	.000046	.000050	.000054	.000058	.000063	.000069	.000076
.06	.000082	.000089	.000093	.000101	.000109	.000117	.000126	.000138	.000151
.07	.000146	.000159	.000166	.000180	.000194	.000209	.000224	.000247	.000270
.08	.000241	.000262	.000274	.000296	.000320	.000344	.000369	.000406	.000445
.09	.000374	.000405	.000424	.000459	.000495	.000532	.000571	.000628	.000687
.10	.000551	.000598	.000625	.000676	.000728	.000783	.000840	.000924	.001011
.12	.001070	.001160	.001212	.001309	.001410	.001516	.001625	.001785	.001951
.14	.001857	.002012	.002101	.002268	.002442	.002622	.002810	.003084	.003369
.16	.002971	.003217	.003357	.003621	.003895	.004181	.004477	.004911	.005361
.18	.004466	.004832	.005039	.005432	.005840	.006263	.006702	.007347	.008015
.20	.006393	.006912	.007203	.007759	.008336	.008934	.009554	.010467	.011411
.22	.008796	.009504	.009897	.010654	.011438	.012251	.013093	.014334	.015616
.24	.011715	.012649	.013163	.014160	.015193	.016262	.017367	.019000	.020687
.26	.015183	.016382	.017037	.018315	.019638	.021005	.022418	.024510	.026668
.28	.019228	.020732	.021546	.023148	.024803	.026513	.028277	.030896	.033595
.30	.023871	.025722	.026714	.028681	.030711	.032807	.034967	.038181	.041488
.34	.035015	.037679	.039081	.041903	.044810	.047805	.050888	.055493	.060222
.38	.048682	.052317	.054194	.058030	.061977	.066033	.070201	.076455	.082863
.42	.064870	.069623	.072027	.077026	.082158	.087423	.092822	.100961	.109284
.46	.083513	.089514	.092487	.098778	.105224	.111825	.118580	.128813	.139255
.50	.104495	.111858	.115426	.123120	.130987	.139027	.147240	.159743	.172474
.54	.127660	.136480	.140656	.149840	.159213	.168773	.178519	.193434	.208589
.58	.152827	.163177	.167959	.178700	.189639	.200775	.212105	.229538	.247212
.62	.179793	.191724	.197099	.209440	.221984	.234727	.247668	.267690	.287943
.66	.208343	.221889	.227830	.241794	.255957	.270318	.284872	.307520	.330378
.70	.238260	.253432	.259902	.275490	.291269	.307236	.323386	.348665	.374122
.78	.301322	.319715	.327095	.345865	.364787	.383857	.403068	.433514	.464036
.86	.367297	.388763	.396810	.418570	.440415	.462340	.484338	.519465	.554914
.94	.434650	.458942	.467374	.491834	.516285	.540724	.565142	.604913	.644404
1.02	.502034	.528828	.537346	.564144	.590818	.617365	.643779	.687449	.730596
1.10	.568300	.597221	.605524	.634254	.662727	.690941	.718892	.765850	.812008
1.18	.632497	.663138	.670934	.701168	.730996	.760422	.789447	.839049	.887544
1.26	.693858	.725797	.732817	.764120	.794862	.825052	.854697	.906292	.956453
1.34	.751783	.784601	.790606	.822554	.853783	.884309	.914145	.967099	1.018279
1.42	.805826	.839116	.843902	.876094	.907409	.937874	.967511	1.021221	1.072811
1.50	.855674	.889055	.892454	.924519	.955556	.985603	1.014691	1.068599	1.120043
1.66	.942113	.974654	.974939	1.005786	1.035336	1.063651	1.090783	1.143623	1.193335
1.82	1.010671	1.041255	1.038227	1.066843	1.093952	1.119640	1.143982	1.194177	1.240637
1.98	1.062057	1.089874	1.083598	1.109290	1.133332	1.155833	1.176890	1.223293	1.265427
2.14	1.097695	1.122219	1.112967	1.135324	1.155953	1.174986	1.192536	1.234374	1.271490

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	4F 7	4F 8	4F 10	4F 11	4F 12	4F 13	4F 14	4F 14	4F 14
2.30	1.119388	1.140331	1.128520	1.147356	1.164449	1.179945	1.193974	1.230773	1.262477
2.46	1.129070	1.146334	1.132463	1.147766	1.161359	1.173402	1.184035	1.215554	1.241681
2.62	1.128636	1.142268	1.126874	1.138751	1.148994	1.157768	1.165221	1.191387	1.211935
2.78	1.119854	1.129996	1.113619	1.122258	1.129368	1.135119	1.139659	1.160521	1.175606
2.94	1.104305	1.111166	1.094322	1.099958	1.104194	1.107197	1.109115	1.124808	1.134625
3.10	1.083371	1.087199	1.070365	1.073260	1.074896	1.075438	1.075028	1.085747	1.090545
3.42	1.029908	1.028486	1.012897	1.011116	1.008381	1.004840	1.000621	1.002105	.997743
3.74	.966886	.961294	.948224	.942793	.936711	.930105	.923082	.916400	.904143
4.06	.899445	.890676	.880978	.872802	.864258	.855448	.846454	.832710	.813829
4.38	.831049	.819963	.814132	.803973	.793697	.783379	.773080	.753343	.729053
4.70	.763969	.751282	.749521	.737999	.726577	.715303	.704215	.679486	.650905
5.02	.699631	.685925	.688221	.675830	.663720	.651916	.640433	.611625	.579757
5.34	.638881	.624615	.630796	.617923	.605479	.593466	.581881	.549815	.515542
5.66	.582159	.567692	.577480	.564423	.551911	.539929	.528456	.493856	.457939
5.98	.529634	.515235	.528290	.515271	.502890	.491112	.479903	.443404	.406492
6.30	.481292	.467162	.483107	.470293	.458185	.446734	.435894	.398047	.360683
6.94	.396558	.383357	.403925	.391844	.380551	.369975	.360054	.320865	.283869
7.58	.326232	.314233	.337965	.326848	.316548	.306980	.298072	.258926	.223496
8.22	.268243	.257529	.283159	.273086	.263823	.255279	.247376	.209253	.176128
8.86	.220582	.211131	.237619	.228585	.220333	.212768	.205811	.169382	.138965
9.50	.181465	.173199	.199730	.191684	.184378	.177719	.171626	.137325	.109786
10.14	.149372	.142187	.168146	.161014	.154575	.148736	.143419	.111502	.088849
10.78	.123035	.116818	.141759	.135462	.129805	.124700	.120072	.090662	.068794
11.42	.101410	.096051	.119670	.114124	.109166	.104712	.100692	.073812	.054564
12.06	.083644	.079037	.101142	.096268	.091931	.088051	.084563	.060165	.043332
12.70	.069038	.065086	.085572	.081296	.077507	.074132	.071109	.049097	.034456
13.98	.047127	.044235	.061425	.058146	.055264	.052717	.050452	.032799	.021870
15.26	.032257	.030151	.044232	.041728	.039543	.037625	.035932	.021998	.013954
16.54	.022139	.020611	.031940	.030032	.028379	.026938	.025674	.014811	.008952
17.82	.015237	.014131	.023120	.021669	.020421	.019339	.018396	.010009	.005776
19.10	.010516	.009717	.016773	.015671	.014729	.013918	.013215	.006791	.003750
20.38	.007279	.006702	.012194	.011358	.010648	.010039	.009515	.004625	.002451
21.66	.005053	.004637	.008882	.008248	.007713	.007257	.006866	.003163	.001613
22.94	.003519	.003219	.006481	.006001	.005598	.005256	.004964	.002172	.001070
24.22	.002458	.002242	.004738	.004374	.004070	.003814	.003596	.001498	.000716
25.50	.001723	.001567	.003469	.003193	.002964	.002772	.002610	.001038	.000483
28.06	.000855	.000774	.001868	.001710	.001580	.001472	.001381	.000506	.000226
30.62	.000431	.000389	.001012	.000921	.000848	.000787	.000736	.000252	.000111
33.18	.000221	.000198	.000551	.000499	.000457	.000423	.000394	.000129	.000056
35.74	.000115	.000103	.000302	.000272	.000248	.000229	.000213	.000068	.000030
38.30	.000061	.000055	.000166	.000149	.000135	.000124	.000115	.000036	.000016
40.86	.000033	.000030	.000092	.000082	.000074	.000068	.000063	.000020	.000009
43.42	.000018	.000017	.000051	.000046	.000041	.000038	.000035	.000012	.000005
45.98	.000010	.000009	.000029	.000025	.000023	.000021	.000019	.000007	.000003
48.54	.000006	.000005	.000016	.000014	.000013	.000012	.000011	.000004	.000002
51.10	.000003	.000003	.000009	.000008	.000007	.000007	.000006	.000002	.000001
56.22	.000001	.000001	.000003	.000003	.000002	.000002	.000002	.000001	.000000
61.34	.000000	.000000	.000001	.000001	.000001	.000001	.000001	.000000	.000000
66.46	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
-E	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
X	4.0451	4.1302	3.8927	3.9695	4.0459	4.1219	4.1976	4.6340	5.0496
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.055002	.055918	.055160	.056039	.056906	.057763	.058612	.061169	.063704
.02	.094588	.095999	.094538	.095883	.097203	.098503	.099783	.103964	.108093
.03	.121078	.122652	.120557	.122042	.123490	.124905	.126291	.131335	.136296
.04	.136527	.138005	.135356	.136727	.138052	.139334	.140576	.145875	.151058

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
.05	.142749	.143934	.140818	.141887	.142900	.143863	.144777	.149852	.154780
.06	.141342	.142090	.138598	.139230	.139798	.140310	.140767	.145250	.149558
.07	.133710	.133925	.130150	.130252	.130288	.130263	.130180	.133796	.137214
.08	.121087	.120709	.116743	.116263	.115714	.115104	.114435	.116991	.119331
.09	.104551	.103551	.099485	.098400	.097248	.096035	.094765	.096135	.097278
.10	.085042	.083418	.079341	.077652	.075902	.074095	.072234	.072350	.072233
.12	.040266	.037468	.033613	.030805	.027952	.025057	.022124	.019702	.017057
.14	-.007951	-.011727	-.015069	-.018790	-.022532	-.026292	-.030067	-.034839	-.039803
.16	-.055725	-.060214	-.062799	-.067162	-.071514	-.075854	-.080179	-.086937	-.093833
.18	-.100287	-.105190	-.106826	-.111530	-.116187	-.120798	-.125361	-.133635	-.141977
.20	-.139748	-.144760	-.145306	-.150048	-.154705	-.159281	-.163773	-.173047	-.182308
.22	-.172908	-.177735	-.177101	-.181594	-.185965	-.190219	-.194355	-.204107	-.213759
.24	-.199100	-.203474	-.201615	-.205601	-.209430	-.213108	-.216636	-.226370	-.235911
.26	-.218064	-.221753	-.218664	-.221922	-.224991	-.227878	-.230586	-.239846	-.248824
.28	-.229850	-.232658	-.228372	-.230720	-.232851	-.234776	-.236499	-.244885	-.252902
.30	-.234732	-.236505	-.231086	-.232383	-.233443	-.234277	-.234891	-.242065	-.248791
.34	-.225649	-.225049	-.217651	-.216587	-.215266	-.213699	-.211896	-.215886	-.219303
.38	-.195406	-.192276	-.183400	-.179876	-.176100	-.172089	-.167853	-.168062	-.167622
.42	-.149267	-.143702	-.133933	-.128093	-.122037	-.115781	-.109338	-.105610	-.101212
.46	-.092457	-.084748	-.074693	-.066869	-.058887	-.050765	-.042518	-.035051	-.026951
.50	-.029754	-.020327	-.010581	-.001227	.008205	.017698	.027237	.037977	.049262
.54	.034712	.045342	.054238	.064592	.074932	.085241	.095504	.108871	.122651
.58	.097533	.108816	.116386	.127186	.137869	.148422	.158832	.174075	.189564
.62	.156028	.167409	.173261	.183959	.194434	.204680	.214684	.231008	.247386
.66	.208191	.219140	.222972	.233052	.242810	.252240	.261335	.277950	.294416
.70	.252621	.262654	.264250	.273254	.281840	.290009	.297758	.313919	.329720
.78	.315208	.322200	.319020	.324755	.329920	.334526	.338579	.351886	.364429
.86	.341542	.344348	.336472	.337940	.338748	.338920	.338472	.346947	.354318
.94	.333980	.332019	.319990	.316759	.312850	.308298	.303131	.305581	.306690
1.02	.297533	.290726	.275403	.267531	.259034	.249956	.240333	.236300	.230804
1.10	.238449	.227122	.209545	.197473	.184893	.171852	.158394	.148031	.136205
1.18	.163249	.148034	.129307	.113749	.097848	.081655	.065215	.049145	.031725
1.26	.078129	.059855	.041062	.022899	.004594	-.013804	-.032250	-.053078	-.075045
1.34	-.011392	-.031784	-.049646	-.069455	-.089185	-.108793	-.128237	-.152678	-.177965
1.42	-.100635	-.122171	-.138236	-.158725	-.178910	-.198756	-.218228	-.245046	-.272360
1.50	-.185817	-.207544	-.221102	-.241356	-.261088	-.280274	-.298889	-.326847	-.354912
1.66	-.333130	-.352690	-.359773	-.377181	-.393695	-.409318	-.424049	-.450863	-.476961
1.82	-.439005	-.453729	-.453449	-.465645	-.476700	-.486645	-.495506	-.517425	-.537842
1.98	-.498703	-.506901	-.499433	-.505045	-.509409	-.512584	-.514616	-.529042	-.541297
2.14	-.513880	-.514771	-.501040	-.499565	-.496870	-.493030	-.488109	-.493547	-.496302
2.30	-.489906	-.483442	-.464814	-.456418	-.446936	-.436451	-.425041	-.420920	-.413775
2.46	-.433878	-.420541	-.398562	-.383867	-.368295	-.351933	-.334860	-.321312	-.304571
2.62	-.353303	-.333916	-.310121	-.290020	-.269299	-.248039	-.226316	-.203973	-.178425
2.78	-.255302	-.230872	-.206662	-.182176	-.157348	-.132250	-.106948	-.076765	-.043513
2.94	-.146191	-.117799	-.094363	-.066540	-.038655	-.010765	.017076	.053949	.093630
3.10	-.031517	-.000028	.021681	.051836	.081785	.111491	.140912	.183235	.227999
3.42	.199229	.233397	.249768	.281924	.313417	.344246	.374405	.423888	.474832
3.74	.411977	.445850	.455770	.487118	.517477	.546881	.575351	.627400	.679730
4.06	.593842	.625168	.628799	.657424	.684864	.711183	.736426	.787219	.837055
4.38	.739523	.766887	.765193	.789942	.813429	.835735	.856924	.903534	.948011
4.70	.848676	.871336	.865680	.885999	.905069	.922983	.939814	.980186	1.017402
5.02	.923848	.941570	.933425	.949190	.963786	.977310	.989839	1.022690	1.051575
5.34	.969082	.981982	.972739	.984116	.994450	1.003834	1.012344	1.037033	1.057191
5.66	.989000	.997419	.988274	.995614	1.002060	1.007699	1.012602	1.028993	1.040543
5.98	.988236	.992648	.984555	.988305	.991322	.993683	.995451	1.003787	1.007215
6.30	.971118	.972057	.965718	.966368	.966446	.966016	.965133	.965927	.961963
6.94	.902720	.898324	.896691	.892591	.888214	.883597	.878779	.866663	.850609
7.58	.808297	.800498	.803977	.798840	.794665	.782464	.775260	.753556	.729177
8.22	.704500	.694835	.702890	.694069	.685385	.676833	.668419	.640384	.611106
8.86	.601767	.591361	.602985	.593472	.584214	.575196	.566406	.534875	.503490



	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
9.50	.506074	.495697	.509747	.500225	.491031	.482139	.473530	.440774	.409370
10.14	.420384	.410530	.425924	.416836	.408113	.399722	.391639	.359355	.329375
10.78	.345748	.336702	.352524	.344134	.336118	.328441	.321077	.290440	.262786
11.42	.282053	.273954	.289494	.281934	.274741	.267878	.261317	.233070	.208225
12.06	.228540	.221427	.236175	.229491	.223154	.217127	.211383	.185926	.164064
12.70	.184132	.177980	.191605	.185784	.180281	.175064	.170106	.147583	.128670
13.98	.117909	.113464	.124404	.120138	.116128	.112345	.108768	.091894	.078289
15.26	.074464	.071361	.079628	.076608	.073782	.071129	.068631	.056542	.047140
16.54	.046559	.044447	.050423	.048338	.046396	.044580	.042877	.034504	.028196
17.82	.028908	.027497	.031671	.030259	.028949	.027728	.026587	.020940	.016803
19.10	.017864	.016934	.019772	.018830	.017958	.017149	.016396	.012668	.010002
20.38	.011009	.010403	.012289	.011667	.011094	.010563	.010071	.007655	.005960
21.66	.006777	.006385	.007615	.007207	.006834	.006489	.006170	.004629	.003563
22.94	.004174	.003923	.004709	.004445	.004203	.003980	.003775	.002807	.002142
24.22	.002576	.002415	.002910	.002739	.002583	.002440	.002309	.001709	.001297
25.50	.001596	.001493	.001799	.001689	.001588	.001497	.001413	.001047	.000794
28.06	.000623	.000581	.000691	.000645	.000604	.000567	.000533	.000404	.000308
30.62	.000251	.000235	.000269	.000250	.000234	.000218	.000205	.000164	.000128
33.18	.000106	.000099	.000107	.000100	.000093	.000087	.000081	.000071	.000057
35.74	.000048	.000045	.000045	.000041	.000038	.000036	.000033	.000033	.000027
38.30	.000023	.000021	.000019	.000018	.000017	.000016	.000015	.000017	.000014
40.86	.000012	.000011	.000009	.000008	.000008	.000007	.000007	.000009	.000007
43.42	.000006	.000006	.000005	.000004	.000004	.000004	.000003	.000005	.000004
45.98	.000003	.000003	.000002	.000002	.000002	.000002	.000002	.000003	.000002
48.54	.000002	.000002	.000001	.000001	.000001	.000001	.000001	.000002	.000001
51.10	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001
56.22	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6
-E	2.4489	2.4936	2.2663	2.3035	2.3401	2.3761	2.4117	2.7517	3.0743
X	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.002173	.002234	.002204	.002263	.002322	.002381	.002441	.002603	.002763
.02	.008095	.008315	.008197	.008410	.008624	.008837	.009051	.009643	.010231
.03	.016954	.017403	.017141	.017574	.018006	.018439	.018871	.020090	.021299
.04	.028046	.028766	.028312	.029004	.029694	.030384	.031072	.033054	.035016
.05	.040760	.041774	.041081	.042052	.043019	.043982	.044944	.047773	.050569
.06	.054571	.055881	.054910	.056162	.057406	.058645	.059878	.063597	.067265
.07	.069024	.070622	.069336	.070858	.072369	.073869	.075360	.079973	.084516
.08	.083734	.085599	.083969	.085739	.087491	.089229	.090952	.096438	.101829
.09	.098373	.100475	.098475	.100462	.102425	.104368	.106291	.112603	.118793
.10	.112666	.114968	.112578	.114745	.116881	.118990	.121072	.128146	.135069
.12	.139329	.141905	.138691	.141092	.143445	.145755	.148025	.156374	.164506
.14	.162343	.165007	.160942	.163393	.165779	.168104	.170371	.179609	.188559
.16	.180835	.183398	.178488	.180805	.183038	.185192	.187271	.196980	.206327
.18	.194328	.196609	.190887	.192896	.194803	.196613	.198332	.208095	.217423
.20	.202643	.204478	.198003	.199550	.200977	.202293	.203501	.212922	.221839
.22	.205826	.207076	.199925	.200879	.201699	.202393	.202967	.211688	.219842
.24	.204091	.204640	.196909	.197165	.197276	.197252	.197097	.204803	.211890
.26	.197767	.197529	.189323	.188805	.188134	.187321	.186372	.192800	.198566
.28	.187264	.186178	.177612	.176269	.174771	.173127	.171345	.176285	.180532
.30	.173041	.171073	.162269	.160076	.157729	.155238	.152612	.155905	.158486
.34	.135393	.131650	.122740	.118864	.114850	.110710	.106453	.106170	.105178
.38	.088742	.083345	.074815	.069407	.063896	.058292	.052606	.048664	.044068
.42	.036791	.029989	.022291	.015620	.008895	.002127	-.004675	-.012072	-.020017
.46	-.017181	-.025053	-.031522	-.039107	-.046686	-.054248	-.061784	-.072213	-.083045

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
.50	-.070413	-.078969	-.083877	-.091987	-.100020	-.107969	-.115824	-.128716	-.141831
.54	-.120686	-.129515	-.132606	-.140836	-.148915	-.156838	-.164598	-.179294	-.194010
.58	-.166296	-.174993	-.176085	-.184040	-.191770	-.199273	-.206543	-.222348	-.237953
.62	-.206014	-.214193	-.213176	-.220491	-.227509	-.234231	-.240656	-.256873	-.272668
.66	-.239024	-.246335	-.243169	-.249516	-.255501	-.261129	-.266402	-.282370	-.297694
.70	-.264864	-.271002	-.265707	-.270809	-.275491	-.279763	-.283632	-.298742	-.312997
.78	-.294591	-.297669	-.288389	-.290374	-.291857	-.292860	-.293395	-.305249	-.315880
.86	-.296369	-.295781	-.283151	-.281533	-.279385	-.276735	-.273606	-.280683	-.286271
.94	-.273662	-.269196	-.254066	-.248743	-.242915	-.236617	-.229878	-.231304	-.231090
1.02	-.231093	-.222867	-.206196	-.197382	-.188138	-.178503	-.168511	-.163987	-.157799
1.10	-.173654	-.162048	-.144817	-.132961	-.120793	-.108353	-.095679	-.085387	-.073524
1.18	-.106208	-.091787	-.074931	-.060645	-.046195	-.031622	-.016963	-.001449	.015436
1.26	-.033189	-.016636	-.000998	.015017	.031026	.046992	.062878	.082812	.103829
1.34	.041554	.059501	.073201	.090209	.107031	.123636	.139993	.163388	.187510
1.42	.114821	.133412	.144595	.161872	.178784	.195308	.211419	.237242	.263385
1.50	.184057	.202573	.210804	.227673	.244007	.259792	.275015	.302222	.329313
1.66	.303197	.319655	.321243	.335557	.349052	.361738	.373622	.400658	.426685
1.82	.389559	.401970	.396759	.406794	.415827	.423890	.431014	.454557	.476251
1.98	.440214	.447307	.435918	.440669	.444345	.446999	.448680	.466276	.481310
2.14	.456534	.457703	.441263	.440350	.438390	.435452	.431599	.441659	.448606
2.30	.442397	.437572	.417473	.410995	.403580	.395308	.386248	.387934	.386129
2.46	.402868	.392369	.370074	.358461	.346082	.333019	.319343	.312414	.301789
2.62	.343314	.327722	.304625	.288510	.271839	.254688	.237126	.221790	.202718
2.78	.268873	.248915	.226258	.206376	.186167	.165696	.145027	.121816	.094976
2.94	.184163	.160634	.139453	.116572	.093594	.070574	.047562	.017223	-.016507
3.10	.093162	.066861	.047977	.022842	-.002165	-.027006	-.051642	-.088229	-.127854
3.42	-.095083	-.124690	-.137378	-.164993	-.192087	-.218654	-.244684	-.290882	-.339137
3.74	-.276504	-.306885	-.312474	-.340352	-.367411	-.393677	-.419168	-.471129	-.523912
4.06	-.439618	-.468869	-.467590	-.494120	-.519636	-.544190	-.567822	-.622028	-.675300
4.38	-.578608	-.605418	-.598238	-.622352	-.644351	-.667304	-.688272	-.741738	-.793707
4.70	-.691460	-.715026	-.703308	-.724381	-.744314	-.763190	-.781079	-.831422	-.878598
5.02	-.778584	-.798497	-.783746	-.801490	-.818128	-.833750	-.848431	-.893864	-.935021
5.34	-.841813	-.857962	-.841648	-.856016	-.869356	-.881758	-.893299	-.932574	-.966680
5.66	-.883737	-.896216	-.879660	-.890774	-.900962	-.910316	-.918907	-.951248	-.977767
5.98	-.907243	-.916281	-.900603	-.908685	-.915964	-.922522	-.928428	-.953447	-.972240
6.30	-.915236	-.921143	-.907233	-.912569	-.917229	-.921288	-.924808	-.942430	-.953664
6.94	-.895437	-.896146	-.887552	-.888338	-.888699	-.888688	-.888351	-.891861	-.889303
7.58	-.843160	-.840080	-.837914	-.835372	-.832624	-.829704	-.826639	-.817889	-.804063
8.22	-.772641	-.767003	-.771249	-.766437	-.761596	-.756742	-.751887	-.733283	-.711013
8.86	-.693942	-.686738	-.696680	-.690447	-.684321	-.678300	-.672385	-.646435	-.618415
9.50	-.613801	-.605786	-.620347	-.613344	-.606544	-.599932	-.593500	-.562552	-.531127
10.14	-.536485	-.528207	-.546196	-.538900	-.531870	-.525084	-.518526	-.484620	-.451697
10.78	-.464492	-.456335	-.476597	-.469347	-.462400	-.455728	-.449312	-.414131	-.381181
11.42	-.399111	-.391327	-.412838	-.405861	-.399206	-.392840	-.386741	-.351608	-.319697
12.06	-.340819	-.333564	-.355467	-.348909	-.342676	-.336734	-.331059	-.296960	-.266818
12.70	-.289576	-.282932	-.304551	-.298495	-.292758	-.287304	-.282109	-.249740	-.221816
13.98	-.206627	-.201271	-.220953	-.215988	-.211308	-.206880	-.202681	-.174935	-.152000
15.26	-.145826	-.141663	-.158473	-.154550	-.150867	-.147396	-.144116	-.121463	-.103407
16.54	-.102212	-.099057	-.112792	-.109769	-.106942	-.104286	-.101784	-.083918	-.070117
17.82	-.071382	-.069032	-.079902	-.077614	-.075481	-.073483	-.071606	-.057869	-.047537
19.10	-.049802	-.048072	-.056475	-.054766	-.053176	-.051691	-.050299	-.039932	-.032311
20.38	-.034789	-.033527	-.039911	-.038645	-.037471	-.036376	-.035352	-.027636	-.022069
21.66	-.024382	-.023466	-.028254	-.027322	-.026459	-.025657	-.024907	-.019222	-.015179
22.94	-.017175	-.016512	-.020072	-.019388	-.018756	-.018169	-.017622	-.013461	-.010534
24.22	-.012180	-.011700	-.014332	-.013831	-.013369	-.012940	-.012541	-.009508	-.007388
25.50	-.008709	-.008362	-.010302	-.009934	-.009596	-.009282	-.008991	-.006783	-.005243
28.06	-.004586	-.004402	-.005458	-.005259	-.005076	-.004907	-.004751	-.003573	-.002746
30.62	-.002525	-.002425	-.003011	-.002902	-.002801	-.002708	-.002622	-.001979	-.001518
33.18	-.001457	-.001401	-.001738	-.001676	-.001619	-.001566	-.001517	-.001152	-.000882
35.74	-.000878	-.000845	-.001049	-.001013	-.000979	-.000948	-.000919	-.000701	-.000535

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
38.30	-.000549	-.000529	-.000660	-.000637	-.000617	-.000598	-.000580	-.000442	-.000336
40.86	-.000354	-.000341	-.000428	-.000414	-.000401	-.000390	-.000378	-.000287	-.000216
43.42	-.000233	-.000225	-.000286	-.000276	-.000268	-.000260	-.000253	-.000190	-.000141
45.98	-.000156	-.000151	-.000194	-.000188	-.000182	-.000177	-.000172	-.000127	-.000094
48.54	-.000106	-.000102	-.000133	-.000129	-.000125	-.000122	-.000119	-.000086	-.000063
51.10	-.000072	-.000070	-.000093	-.000090	-.000087	-.000085	-.000082	-.000059	-.000042
56.22	-.000034	-.000033	-.000045	-.000044	-.000043	-.000042	-.000040	-.000028	-.000019
61.34	-.000016	-.000016	-.000023	-.000022	-.000021	-.000021	-.000020	-.000013	-.000009
66.46	-.000008	-.000008	-.000011	-.000011	-.000011	-.000010	-.000010	-.000006	-.000004
71.58	-.000004	-.000004	-.000006	-.000005	-.000005	-.000005	-.000005	-.000003	-.000002
76.70	-.000002	-.000002	-.000003	-.000003	-.000003	-.000003	-.000003	-.000001	-.000001
81.82	-.000001	-.000001	-.000001	-.000001	-.000001	-.000001	-.000001	-.000001	-.000000
86.94	.000000	-.000000	-.000001	-.000001	-.000001	-.000001	-.000001	.000000	.000000
92.06	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
-E	SD 1	SD 1	SD 0	SD 0	SD 0	SD 0	SD 0	SD 1	SD 2
.53066	.53066	.52594						.48672	.59834
.00	.000000	.000000						.000000	.000000
.01	.000012	.000012						.000014	.000017
.02	.000090	.000093						.000109	.000127
.03	.000290	.000299						.000350	.000409
.04	.000656	.000676						.000789	.000922
.05	.001223	.001260						.001466	.001712
.06	.002017	.002077						.002411	.002814
.07	.003059	.003149						.003644	.004251
.08	.004361	.004487						.005177	.006036
.09	.005932	.006099						.007017	.008178
.10	.007774	.007989						.009164	.010675
.12	.012265	.012593						.014358	.016709
.14	.017791	.018248						.020680	.024042
.16	.024267	.024864						.028007	.032526
.18	.031583	.032327						.036188	.041984
.20	.039612	.040502						.045057	.052219
.22	.048218	.049249						.054441	.063026
.24	.057261	.058423						.064167	.074205
.26	.066605	.067881						.074069	.085561
.28	.076116	.077488						.083990	.096911
.30	.085667	.087112						.093784	.108086
.34	.104431	.105945						.112476	.129316
.38	.122075	.123544						.129255	.148229
.42	.137940	.139245						.143453	.164066
.46	.151531	.152553						.154616	.176317
.50	.162500	.163130						.162470	.184688
.54	.170633	.170772						.166901	.189070
.58	.175828	.175393						.167926	.189500
.62	.178079	.177002						.165658	.186133
.66	.177453	.175684						.160291	.179211
.70	.174079	.171584						.152073	.169036
.78	.159805	.155822						.128241	.140325
.86	.136951	.131531						.096632	.102947
.94	.107425	.100713						.059742	.059837
1.02	.073137	.065350						.019877	.013686
1.10	.035873	.027276						-.020949	-.033184
1.18	-.002775	-.011890						-.061064	-.078860
1.26	-.041441	-.050773						-.099138	-.121842
1.34	-.078990	-.088245						-.134166	-.161012
1.42	-.114515	-.123414						-.165433	-.195595

	GD 64	TB 65	DY 66	MO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	SD 1	SD 1	SD 0	SD 0	SD 0	SD 0	SD 0	SD 1	SD 2
X									
1.50	-.147318	-.155609						-.192474	-.225105
1.66	-.202876	-.209321						-.233037	-.268132
1.82	-.243410	-.247401						-.255656	-.290224
1.98	-.268552	-.269754						-.261791	-.293346
2.14	-.279162	-.277469						-.253731	-.280343
2.30	-.276796	-.272284						-.234039	-.254299
2.46	-.263333	-.256204						-.205218	-.218173
2.62	-.240716	-.231249						-.169532	-.174612
2.78	-.210797	-.199317						-.128941	-.125882
2.94	-.175260	-.162106						-.085081	-.073865
3.10	-.135586	-.121093						-.039293	-.020090
3.42	-.048697	-.032458						.053996	.088125
3.74	.042006	.058925						.144815	.191909
4.06	.131219	.147988						.229586	.287340
4.38	.215558	.231569						.306415	.372442
4.70	.293016	.307857						.374504	.446496
5.02	.362553	.375970						.433748	.509574
5.34	.423794	.435659						.484461	.562217
5.66	.476806	.487081						.527199	.605230
5.98	.521935	.530652						.562636	.639532
6.30	.559696	.566933						.591490	.666079
6.94	.615557	.620173						.632269	.699558
7.58	.649409	.651920						.654743	.712334
8.22	.665946	.666862						.663267	.709867
8.86	.669181	.668953						.661311	.696440
9.50	.662391	.661394						.651586	.675335
10.14	.648188	.646721						.636182	.649034
10.78	.628627	.626922						.616710	.619401
11.42	.605311	.603544						.594409	.587829
12.06	.579488	.577784						.570235	.555348
12.70	.552120	.550571						.544922	.522720
13.98	.495551	.494464						.493018	.459072
15.26	.439668	.439124						.441814	.399637
16.54	.386754	.386737						.393089	.345657
17.82	.337986	.338431						.347791	.297512
19.10	.293853	.294678						.306350	.255103
20.38	.254434	.255551						.268873	.218076
21.66	.219563	.220888						.235272	.185960
22.94	.188938	.190400						.205343	.158241
24.22	.162196	.163732						.178825	.134412
25.50	.138950	.140511						.155428	.113989
28.06	.101435	.102938						.116822	.081642
30.62	.073607	.074965						.087294	.058195
33.18	.053143	.054318						.064904	.041308
35.74	.038199	.039184						.048043	.029212
38.30	.027349	.028155						.035420	.020588
40.86	.019511	.020158						.026020	.014465
43.42	.013874	.014385						.019052	.010134
45.98	.009836	.010235						.013907	.007081
48.54	.006954	.007262						.010124	.004935
51.10	.004904	.005140						.007351	.003432
56.22	.002423	.002557						.003848	.001650
61.34	.001187	.001262						.001998	.000787
66.46	.000578	.000618						.001030	.000373
71.58	.000279	.000301						.000528	.000176

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	SD 1	SD 1	SD 0	SD 0	SD 0	SD 0	SD 0	SD 1	SD 2
76.70	.000134	.000146						.000269	.000083
81.82	.000064	.000070						.000136	.000039
86.94	.000031	.000034						.000069	.000018
92.06	.000015	.000016						.000035	.000008
97.18	.000007	.000008						.000017	.000004
102.30	.000003	.000004						.000009	.000002
112.54	.000001	.000001						.000002	.000000
122.78	.000000	.000000						.000001	.000000
133.02	.000000	.000000						.000000	

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
-E	.36994	.37392	.35258	.35574	.35885	.36191	.36492	.39772	.42979
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.014546	.014686	.013668	.013778	.013887	.013994	.014099	.015516	.016565
.02	.025015	.025212	.023425	.023574	.023720	.023863	.024003	.026371	.028107
.03	.032020	.032211	.029871	.030005	.030134	.030259	.030379	.033313	.035440
.04	.036105	.036242	.033538	.033615	.033687	.033753	.033815	.037001	.039277
.05	.037749	.037798	.034890	.034883	.034869	.034849	.034824	.038008	.040243
.06	.037376	.037312	.034338	.034228	.034110	.033987	.033858	.036839	.038883
.07	.035355	.035165	.032243	.032019	.031788	.031551	.031309	.033931	.035670
.08	.032014	.031692	.028919	.028577	.028229	.027877	.027519	.029665	.031018
.09	.027639	.027183	.024641	.024183	.023721	.023255	.022785	.024373	.025280
.10	.022476	.021893	.019647	.019080	.018510	.017937	.017363	.018337	.018765
.12	.010629	.009821	.008312	.007557	.006804	.006053	.005305	.004977	.004412
.14	-.002127	-.003104	-.003754	-.004640	-.005519	-.006390	-.007253	-.008861	-.010377
.16	-.014764	-.015840	-.015582	-.016535	-.017473	-.018398	-.019309	-.022077	-.024427
.18	-.026549	-.027652	-.026491	-.027442	-.028374	-.029285	-.030176	-.033921	-.036944
.20	-.036982	-.038041	-.036023	-.036910	-.037770	-.038604	-.039412	-.043913	-.047425
.22	-.045746	-.046694	-.043896	-.044660	-.045392	-.046092	-.046762	-.051783	-.055592
.24	-.052663	-.053444	-.049961	-.050553	-.051108	-.051627	-.052111	-.057417	-.061338
.26	-.057666	-.058232	-.054174	-.054554	-.054893	-.055193	-.055454	-.060820	-.064676
.28	-.060767	-.061079	-.056565	-.056703	-.056796	-.056849	-.056861	-.062079	-.065714
.30	-.062040	-.062070	-.057221	-.057095	-.056924	-.056710	-.056456	-.061341	-.064620
.34	-.059593	-.059016	-.053853	-.053171	-.052448	-.051684	-.050884	-.054652	-.058695
.38	-.051543	-.050358	-.045323	-.044102	-.042846	-.041560	-.040245	-.044268	-.048397
.42	-.039289	-.037549	-.033022	-.031327	-.029611	-.027877	-.026127	-.029577	-.032673
.46	-.024217	-.022018	-.018304	-.016236	-.014163	-.012090	-.010018	-.008639	-.006718
.50	-.007594	-.005062	-.002388	-.000068	.002236	.004521	.006785	.009912	.013127
.54	.009481	.012208	.013691	.016131	.018533	.020895	.023216	.027902	.032215
.58	.026105	.028885	.029093	.031520	.033888	.036196	.038441	.044428	.049594
.62	.041564	.044258	.043170	.045461	.047670	.049800	.051848	.058831	.064581
.66	.055328	.057808	.055454	.057493	.059434	.061277	.063022	.070676	.076734
.70	.067024	.069177	.065629	.067320	.068897	.070362	.071715	.079713	.085810
.78	.083402	.084631	.079036	.079812	.080452	.080961	.081342	.089105	.094552
.86	.090113	.090185	.083133	.082819	.082366	.081779	.081065	.087545	.091565
.94	.087799	.086627	.078775	.077333	.075764	.074076	.072277	.076707	.078783
1.02	.077812	.075432	.067430	.064933	.062335	.059647	.056877	.058784	.058655
1.10	.061834	.058378	.050820	.047420	.043960	.040449	.036895	.036078	.033706
1.18	.041618	.037288	.030677	.026583	.022476	.018365	.014259	.010744	.006269
1.26	.018832	.013870	.008604	.004053	-.000460	-.004925	-.009335	-.015343	-.021649
1.34	-.005039	-.010373	-.014004	-.018768	-.023439	-.028012	-.032481	-.040648	-.048428
1.42	-.028739	-.034183	-.035995	-.040734	-.045330	-.049779	-.054078	-.063987	-.072835
1.50	-.051249	-.056556	-.056465	-.060961	-.065269	-.069388	-.073316	-.084506	-.093998
1.66	-.089791	-.094188	-.090363	-.093837	-.097054	-.100020	-.102741	-.115075	-.124637
1.82	-.116850	-.119708	-.112665	-.114621	-.116287	-.117678	-.118804	-.130545	-.138778
1.98	-.131211	-.132177	-.122752	-.122950	-.122865	-.122514	-.121912	-.131660	-.137528
2.14	-.133403	-.132369	-.121533	-.119950	-.118121	-.116064	-.113799	-.120552	-.123398

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
X	65 2	65 2	65 2	65 2	65 2	65 2	65 2	65 2	65 2
2.30	-.124969	-.122015	-.110742	-.107511	-.104092	-.100506	-.096773	-.099916	-.099422
2.46	-.107922	-.103261	-.092436	-.087789	-.083028	-.078173	-.073239	-.072490	-.068615
2.62	-.084391	-.078313	-.068679	-.062903	-.057092	-.051264	-.045431	-.040776	-.033688
2.78	-.056396	-.049229	-.041363	-.034762	-.028206	-.021707	-.015276	-.006908	.003072
2.94	-.025734	-.017812	-.012124	-.004996	.002011	.008891	.015640	.027380	.039829
3.10	.006068	.014424	.017684	.025061	.032250	.039252	.046065	.060735	.075170
3.42	.068361	.076739	.074932	.082100	.088978	.095577	.101905	.120885	.137741
3.74	.123457	.130970	.124513	.130760	.136660	.142231	.147489	.168607	.185864
4.06	.167560	.173612	.163475	.168350	.172860	.177030	.180881	.202076	.217948
4.38	.199148	.203398	.190828	.194095	.197012	.199607	.201903	.221387	.234424
4.70	.218180	.220489	.206805	.208390	.209664	.210656	.211388	.227707	.236823
5.02	.225506	.225882	.212340	.212283	.211970	.211427	.210676	.222724	.227183
5.34	.222456	.221006	.208716	.207129	.205352	.203404	.201305	.208502	.207679
5.66	.210563	.207456	.197336	.194378	.191295	.188104	.184820	.186275	.180403
5.98	.191386	.186823	.179589	.175435	.171224	.166964	.162667	.158336	.147257
6.30	.166405	.160598	.156769	.151602	.146439	.141284	.136144	.125984	.109899
6.94	.104254	.096578	.100407	.093728	.087160	.080697	.074336	.052996	.027943
7.58	.032921	.024103	.035784	.028188	.020783	.013555	.006493	-.024711	-.056938
8.22	-.041265	-.050647	-.031719	-.039766	-.047567	-.055142	-.062507	-.101800	-.139237
8.86	-.114032	-.123545	-.098453	-.106604	-.114473	-.122087	-.129467	-.174902	-.215643
9.50	-.182655	-.191986	-.162048	-.170052	-.177758	-.185194	-.192382	-.242026	-.284352
10.14	-.245514	-.254446	-.221045	-.228730	-.236111	-.243219	-.250077	-.302120	-.344557
10.78	-.301756	-.310144	-.274619	-.281868	-.288818	-.295499	-.301935	-.354761	-.396096
11.42	-.351047	-.358800	-.322377	-.329117	-.335569	-.341762	-.347721	-.399933	-.439207
12.06	-.393400	-.400468	-.364222	-.370411	-.376327	-.382000	-.387452	-.437884	-.474371
12.70	-.429046	-.435408	-.400253	-.405873	-.411239	-.416378	-.421312	-.469022	-.502202
13.98	-.481804	-.486770	-.455879	-.460368	-.464645	-.468734	-.472652	-.512905	-.538580
15.26	-.513058	-.516730	-.491899	-.495332	-.498597	-.501713	-.504693	-.535949	-.553776
16.54	-.526828	-.529356	-.511424	-.513916	-.516282	-.518536	-.520689	-.542466	-.552778
17.82	-.526884	-.528435	-.517545	-.519228	-.520821	-.522336	-.523781	-.536325	-.539843
19.10	-.516535	-.517272	-.513102	-.514104	-.515051	-.515949	-.516803	-.520819	-.518452
20.38	-.498565	-.498642	-.500581	-.501025	-.501443	-.501837	-.502209	-.498661	-.491376
21.66	-.475256	-.474808	-.482094	-.482091	-.482084	-.482075	-.482064	-.472031	-.460771
22.94	-.448434	-.447582	-.459392	-.459038	-.458700	-.458376	-.458066	-.442647	-.428287
24.22	-.419542	-.418387	-.433901	-.433279	-.432688	-.432125	-.431587	-.411840	-.395166
25.50	-.389695	-.388322	-.406761	-.405940	-.405163	-.404424	-.403720	-.380623	-.362320
28.06	-.330307	-.328699	-.350918	-.349864	-.348870	-.347928	-.347032	-.319769	-.299873
30.62	-.274704	-.273049	-.296810	-.295680	-.294616	-.293610	-.292655	-.263901	-.244039
33.18	-.225052	-.223468	-.247148	-.246040	-.244999	-.244017	-.243085	-.214729	-.195945
35.74	-.182128	-.180680	-.203190	-.202161	-.201198	-.200288	-.199428	-.172703	-.155598
38.30	-.145891	-.144609	-.165286	-.164366	-.163506	-.162695	-.161930	-.137559	-.122418
40.86	-.115850	-.114743	-.133246	-.132445	-.131698	-.130995	-.130332	-.108664	-.095552
43.42	-.091307	-.090370	-.106585	-.105902	-.105266	-.104669	-.104107	-.085226	-.074072
45.98	-.071493	-.070712	-.084682	-.084110	-.083578	-.083079	-.082610	-.066426	-.057077
48.54	-.055656	-.055013	-.066879	-.066406	-.065967	-.065556	-.065171	-.051488	-.043748
51.10	-.043105	-.042582	-.052539	-.052153	-.051795	-.051460	-.051146	-.039714	-.033374
56.22	-.025513	-.025175	-.031980	-.031729	-.031498	-.031282	-.031080	-.023328	-.019185
61.34	-.014875	-.014663	-.019165	-.019007	-.018862	-.018727	-.018601	-.013506	-.010877
66.46	-.008564	-.008434	-.011338	-.011241	-.011151	-.011069	-.010992	-.007726	-.006095
71.58	-.004879	-.004801	-.006634	-.006576	-.006522	-.006473	-.006427	-.004375	-.003382
76.70	-.002754	-.002708	-.003846	-.003811	-.003779	-.003750	-.003723	-.002456	-.001861
81.82	-.001543	-.001516	-.002212	-.002191	-.002173	-.002156	-.002140	-.001369	-.001017
86.94	-.000858	-.000843	-.001263	-.001251	-.001240	-.001230	-.001221	-.000757	-.000552
92.06	-.000475	-.000466	-.000717	-.000710	-.000704	-.000698	-.000693	-.000417	-.000298
97.18	-.000261	-.000256	-.000404	-.000400	-.000397	-.000394	-.000391	-.000228	-.000160

	GD 64	TB 65	DY 66	HO 67	ER 68	TM 69	YB 70	LU 71	HF 72
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
X									
102.30	-.000143	-.000140	-.000227	-.000225	-.000223	-.000221	-.000220	-.000124	-.000086
112.54	-.000042	-.000041	-.000071	-.000070	-.000069	-.000069	-.000068	-.000036	-.000024
122.78	-.000012	-.000012	-.000022	-.000021	-.000021	-.000021	-.000021	-.000011	-.000007
133.02	-.000004	-.000003	-.000007	-.000007	-.000006	-.000006	-.000006	-.000003	-.000002
143.26	-.000001	-.000001	-.000002	-.000002	-.000002	-.000002	-.000002	-.000001	-.000001
153.50	-.000000	-.000000	-.000001	-.000001	-.000001	-.000001	-.000001	-.000000	-.000000
163.74	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000

TABLE IV. RADIAL WAVEFUNCTIONS

TA 503		R=0.21183765*X			PT 509 651		R=0.20721088*X			
W 504		R=0.21087909*X			AU 5010 651		R=0.20633286*X			
RE 505		R=0.20993765*X			HG 5010 652		R=0.20546953*X			
OS 506		R=0.20901281*X			TL 6P1		R=0.20462048*X			
IR 507		R=0.20810404*X								
	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81	
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	
-E	4593.7	4725.6	4859.5	4995.3	5133.0	5272.1	5413.6	5557.3	5703.0	
X										
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	
.01	2.246930	2.279880	2.312829	2.345777	2.378724	2.411674	2.444616	2.477552	2.510484	
.02	3.850680	3.901651	3.952494	4.003210	4.053800	4.104271	4.154606	4.204810	4.254885	
.03	4.949961	5.008430	5.066593	5.124453	5.182011	5.239279	5.296237	5.352893	5.409251	
.04	5.656779	5.715551	5.773836	5.831638	5.888960	5.945817	6.002191	6.058092	6.113527	
.05	6.061257	6.115629	6.169353	6.222438	6.274890	6.326726	6.377932	6.428522	6.478504	
.06	6.235642	6.282742	6.329074	6.374648	6.419475	6.463571	6.506932	6.549572	6.591502	
.07	6.237597	6.275890	6.313337	6.349951	6.385746	6.420737	6.454933	6.488346	6.520930	
.08	6.112931	6.141828	6.169844	6.196994	6.223298	6.248765	6.273420	6.297272	6.320338	
.09	5.897823	5.917391	5.936082	5.953915	5.970910	5.987073	6.002446	6.017033	6.030853	
.10	5.620660	5.631401	5.641303	5.650387	5.658674	5.666166	5.672921	5.678938	5.684237	
.12	4.963485	4.959042	4.953910	4.948113	4.941674	4.934577	4.926921	4.918687	4.909897	
.14	4.263213	4.247478	4.231261	4.214588	4.197480	4.179950	4.162038	4.143754	4.125119	
.16	3.588540	3.565300	3.541803	3.518071	3.494125	3.469996	3.445676	3.421196	3.396574	
.18	2.974712	2.947194	2.919631	2.892042	2.864441	2.836860	2.809281	2.781734	2.754232	
.20	2.436475	2.407202	2.378068	2.349084	2.320261	2.291624	2.263153	2.234872	2.206788	
.22	1.976517	1.947330	1.918426	1.889811	1.861491	1.833486	1.805771	1.778365	1.751272	
.24	1.590828	1.562975	1.535511	1.508435	1.481751	1.455470	1.429566	1.404053	1.378930	
.26	1.272066	1.246320	1.221032	1.196198	1.171814	1.147888	1.124392	1.101335	1.078712	
.28	1.011604	.988379	.965648	.943405	.921642	.900363	.879538	.859173	.839257	
.30	.800726	.780173	.760127	.740577	.721514	.702936	.684815	.667151	.649934	
.34	.495966	.480565	.465641	.451180	.437169	.423600	.410448	.397708	.385367	
.38	.303509	.292463	.281825	.271581	.261716	.252219	.243070	.234260	.225777	
.42	.184025	.176353	.169009	.161978	.155246	.148805	.142636	.136730	.131074	
.46	.110784	.105583	.100633	.095922	.091438	.087172	.083109	.079241	.075559	
.50	.066319	.062860	.059586	.056487	.053555	.050781	.048154	.045667	.043313	
.54	.039524	.037257	.035123	.033115	.031226	.029448	.027774	.026197	.024713	
.58	.023468	.021999	.020625	.019339	.018135	.017009	.015954	.014966	.014041	
.62	.013887	.012944	.012067	.011251	.010491	.009784	.009125	.008511	.007941	
.66	.008187	.007587	.007031	.006517	.006040	.005600	.005191	.004813	.004464	
.70	.004003	.004423	.004073	.003751	.003454	.003181	.002930	.002698	.002486	
.78	.001610	.001460	.001323	.001198	.001085	.000982	.000888	.000802	.000759	
.86	.000494	.000435	.000383	.000336	.000293	.000255	.000221	.000191	.000229	
.94	.000110	.000088	.000069	.000052	.000037	.000024	.000013	.000003	.000069	
1.02	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000020	
1.10	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000006	
1.18									.000002	
1.26									.000001	
1.34									.000000	
	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81	
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	
-E	762.60	786.95	811.69	836.84	862.40	888.03	914.36	941.47	969.12	
X										
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	
.01	.742780	.754197	.765612	.777027	.788440	.799850	.811260	.822670	.834077	
.02	1.260658	1.277983	1.295254	1.312471	1.329635	1.346741	1.363796	1.380801	1.397750	
.03	1.592159	1.611166	1.630038	1.648774	1.667377	1.685843	1.704179	1.722386	1.740459	
.04	1.770454	1.787975	1.805269	1.822336	1.839179	1.855794	1.872193	1.888375	1.904336	



	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
X									
.05	1.824032	1.837768	1.851186	1.864288	1.877078	1.889554	1.901727	1.913601	1.925171
.06	1.777291	1.785650	1.793611	1.801179	1.808357	1.815147	1.821560	1.827601	1.833268
.07	1.651067	1.653031	1.654533	1.655579	1.656177	1.656327	1.656045	1.655336	1.654200
.08	1.463097	1.458104	1.452605	1.446610	1.440126	1.433157	1.425719	1.417819	1.409460
.09	1.228424	1.216275	1.203599	1.190406	1.176706	1.162505	1.147820	1.132660	1.117030
.10	.959751	.940530	.920782	.900517	.879750	.858487	.836747	.814539	.791873
.12	.361354	.329044	.296267	.263039	.229374	.195286	.160793	.125907	.090642
.14	-.266378	-.309527	-.353011	-.396814	-.440917	-.485306	-.529964	-.574874	-.620022
.16	-.878930	-.930164	-.981552	-1.033076	-1.084717	-1.136459	-1.188286	-1.240184	-1.292133
.18	-1.447495	-1.503961	-1.560368	-1.616699	-1.672936	-1.729062	-1.785066	-1.840933	-1.896645
.20	-1.954778	-2.013774	-2.072485	-2.130897	-2.188995	-2.246761	-2.304191	-2.361271	-2.417984
.22	-2.391797	-2.450918	-2.509532	-2.567627	-2.625193	-2.682216	-2.738694	-2.794619	-2.849976
.24	-2.755461	-2.812672	-2.869168	-2.924944	-2.979993	-3.034305	-3.087884	-3.140727	-3.192822
.26	-3.046741	-3.100399	-3.153161	-3.205025	-3.255991	-3.306053	-3.355222	-3.403499	-3.450878
.28	-3.269301	-3.318149	-3.365949	-3.412706	-3.458425	-3.503106	-3.546766	-3.589411	-3.631039
.30	-3.428489	-3.471626	-3.513599	-3.554416	-3.594090	-3.632627	-3.670048	-3.706366	-3.741585
.34	-3.582323	-3.612564	-3.641509	-3.669181	-3.695603	-3.720793	-3.744783	-3.767593	-3.789241
.38	-3.561384	-3.578361	-3.594042	-3.608461	-3.621649	-3.633635	-3.644456	-3.654142	-3.662720
.42	-3.416048	-3.420728	-3.424218	-3.426557	-3.427783	-3.427935	-3.427051	-3.425167	-3.422317
.46	-3.189330	-3.183445	-3.176548	-3.168683	-3.159892	-3.150219	-3.139700	-3.128374	-3.116280
.50	-2.915551	-2.901166	-2.885993	-2.870077	-2.853459	-2.836184	-2.818287	-2.799804	-2.780777
.54	-2.620668	-2.599891	-2.578568	-2.556739	-2.534447	-2.511733	-2.488627	-2.465162	-2.441378
.58	-2.323363	-2.298157	-2.272642	-2.246856	-2.220836	-2.194621	-2.168232	-2.141700	-2.115059
.62	-2.036359	-2.008437	-1.980428	-1.952363	-1.924272	-1.896191	-1.868133	-1.840121	-1.812187
.66	-1.767725	-1.738512	-1.709406	-1.680431	-1.651611	-1.622974	-1.594527	-1.566288	-1.538280
.70	-1.522037	-1.492663	-1.463557	-1.434739	-1.406224	-1.378033	-1.350166	-1.322634	-1.295457
.78	-1.105917	-1.078549	-1.051676	-1.025303	-.999432	-.974071	-.949209	-.924845	-.900985
.86	-.786670	-.763000	-.739934	-.717466	-.695588	-.674296	-.653571	-.633405	-.613793
.94	-.550488	-.531027	-.512193	-.493972	-.476346	-.459305	-.442826	-.426895	-.411499
1.02	-.380280	-.364860	-.350031	-.335775	-.322071	-.308903	-.296248	-.284088	-.272407
1.10	-.260004	-.248122	-.236765	-.225913	-.215543	-.205638	-.196175	-.187135	-.178502
1.18	-.176286	-.167329	-.158818	-.150732	-.143051	-.135756	-.128826	-.122244	-.115994
1.26	-.118702	-.112067	-.105799	-.099877	-.094284	-.089002	-.084012	-.079299	-.074848
1.34	-.079467	-.074622	-.070070	-.065794	-.061777	-.058004	-.054460	-.051131	-.048004
1.42	-.052937	-.049439	-.046172	-.043119	-.040267	-.037603	-.035114	-.032789	-.030616
1.50	-.035107	-.032607	-.030284	-.028125	-.026119	-.024256	-.022524	-.020914	-.019419
1.66	-.015243	-.013994	-.012847	-.011791	-.010821	-.009929	-.009109	-.008355	-.007663
1.82	-.006483	-.005874	-.005319	-.004815	-.004357	-.003940	-.003561	-.003216	-.002907
1.98	-.002662	-.002370	-.002107	-.001871	-.001659	-.001469	-.001298	-.001144	-.001038
2.14	-.001014	-.000877	-.000755	-.000647	-.000552	-.000468	-.000393	-.000327	-.000364
2.30	-.000318	-.000256	-.000202	-.000154	-.000113	-.000078	-.000048	-.000022	-.000126
2.46	-.000043	-.000016	.000000	.000000	.000000	.000000	.000000	.000000	-.000043
2.62	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	-.000015
2.78	.000000	.000000							-.000005
2.94									-.000002
3.10									-.000001
3.42									.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
-E	729.35	753.15	777.35	801.95	826.95	852.03	877.81	904.36	931.45
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.034419	.035314	.036218	.037133	.038057	.038991	.039935	.040889	.041852
.02	.127474	.130696	.133951	.137238	.140557	.143908	.147289	.150703	.154147
.03	.265626	.272151	.278734	.285375	.292074	.298831	.305644	.312513	.319438
.04	.437439	.447870	.458384	.468981	.479658	.490417	.501254	.512170	.523164

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X									
.05	.633295	.647944	.662694	.677544	.692492	.707538	.722680	.737915	.753244
.06	.845149	.864095	.883152	.902318	.921591	.940969	.960451	.980032	.999714
.07	1.066314	1.089459	1.112714	1.136076	1.159544	1.183116	1.206787	1.230555	1.254419
.08	1.291269	1.318379	1.345587	1.372892	1.400290	1.427778	1.455352	1.483009	1.510748
.09	1.515500	1.546242	1.577060	1.607953	1.638916	1.669947	1.701041	1.732192	1.763402
.10	1.735353	1.769325	1.803342	1.837401	1.871499	1.905631	1.939793	1.973980	2.008191
.12	2.150901	2.189965	2.228987	2.267962	2.306886	2.345756	2.384566	2.423310	2.461989
.14	2.521624	2.563864	2.605948	2.647873	2.689634	2.731228	2.772650	2.813896	2.854963
.16	2.838622	2.882177	2.925450	2.968437	3.011136	3.053542	3.095654	3.137467	3.178981
.18	3.098251	3.141441	3.184218	3.226581	3.268527	3.310055	3.351164	3.391852	3.432122
.20	3.300520	3.341909	3.382760	3.423072	3.462847	3.502084	3.540786	3.578955	3.616592
.22	3.447891	3.486313	3.524082	3.561203	3.597678	3.633511	3.668707	3.703269	3.737204
.24	3.544385	3.578943	3.612753	3.645822	3.678155	3.709758	3.740642	3.770812	3.800278
.26	3.594928	3.624982	3.654212	3.682629	3.710241	3.737058	3.763093	3.788356	3.812858
.28	3.604882	3.630020	3.654281	3.677678	3.700225	3.721932	3.742819	3.762897	3.782180
.30	3.579707	3.599717	3.618819	3.637030	3.654366	3.670842	3.686479	3.701293	3.715301
.34	3.445012	3.454769	3.463621	3.471590	3.478699	3.484969	3.490425	3.495089	3.498983
.38	3.229567	3.229850	3.229303	3.227954	3.225829	3.222955	3.219359	3.215068	3.210105
.42	2.965480	2.957639	2.949098	2.939887	2.930036	2.919574	2.908527	2.896924	2.884790
.46	2.677766	2.663407	2.648512	2.633111	2.617235	2.600912	2.584168	2.567030	2.549524
.50	2.384908	2.365671	2.346076	2.326152	2.305928	2.285432	2.264690	2.243718	2.222546
.54	2.099843	2.077258	2.054494	2.031575	2.008528	1.985380	1.962148	1.938849	1.915508
.58	1.831040	1.806449	1.781845	1.757249	1.732683	1.708170	1.683723	1.659353	1.635081
.62	1.583534	1.558056	1.532711	1.507518	1.482492	1.457652	1.433005	1.408559	1.384329
.66	1.359819	1.334343	1.309126	1.284179	1.259513	1.235141	1.211066	1.187291	1.163826
.70	1.160576	1.135779	1.111341	1.087267	1.063563	1.040238	1.017289	.994713	.972519
.78	.832521	.810385	.788736	.767570	.746883	.726674	.706932	.687649	.668824
.86	.587404	.568745	.550621	.533021	.515933	.499349	.483253	.467633	.452480
.94	.409113	.394017	.379446	.365385	.351818	.338732	.326109	.313932	.302191
1.02	.282005	.270161	.258798	.247897	.237443	.227417	.217803	.208583	.199744
1.10	.192771	.183696	.175041	.166786	.158914	.151408	.144251	.137427	.130921
1.18	.130874	.124052	.117582	.111446	.105628	.100110	.094878	.089918	.085215
1.26	.088350	.083299	.078535	.074043	.069806	.065809	.062041	.058488	.055138
1.34	.059360	.055666	.052202	.048953	.045905	.043045	.040364	.037849	.035490
1.42	.039718	.037045	.034551	.032225	.030054	.028028	.026139	.024376	.022733
1.50	.026476	.024559	.022779	.021127	.019594	.018171	.016850	.015625	.014488
1.66	.011637	.010669	.009781	.008964	.008214	.007524	.006891	.006311	.005779
1.82	.005022	.004543	.004108	.003712	.003352	.003024	.002727	.002457	.002217
1.98	.002098	.001864	.001654	.001466	.001296	.001142	.001005	.000882	.000799
2.14	.000816	.000704	.000605	.000516	.000437	.000367	.000306	.000252	.000283
2.30	.000264	.000212	.000166	.000126	.000091	.000060	.000034	.000012	.000099
2.46	.000041	.000017	.000000	.000000	.000000	.000000	.000000	.000000	.000034
2.62	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000012
2.78	.000000	.000000							.000004
2.94									.000001

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	177.28	183.86	190.59	197.46	204.46	211.27	218.52	226.27	234.30
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.348721	.354664	.360608	.366552	.372497	.378435	.384381	.390337	.396293
.02	.590983	.600071	.609132	.618166	.627172	.636139	.645093	.654034	.662947
.03	.744367	.754420	.764401	.774310	.784148	.793900	.803598	.813244	.822820
.04	.824217	.833573	.842805	.851913	.860901	.869750	.878497	.887145	.895673
.05	.843884	.851318	.858576	.865659	.872570	.879293	.885865	.892288	.898544
.06	.814962	.819612	.824038	.828244	.832232	.835988	.839548	.842917	.846076
.07	.747487	.748791	.749833	.750616	.751140	.751410	.751443	.751247	.750810
.08	.650118	.647762	.645116	.642186	.638976	.635479	.631725	.627719	.623450
.09	.530306	.524176	.517741	.511007	.503982	.496661	.489070	.481214	.473087

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X									
.10	.394431	.384573	.374408	.363945	.353191	.342146	.330831	.319250	.307405
.12	.095415	.078721	.061757	.044534	.027059	.009342	-.008608	-.026783	-.045175
.14	-.212779	-.234947	-.257300	-.279829	-.302521	-.325360	-.348349	-.371479	-.394732
.16	-.506316	-.532238	-.558224	-.584260	-.610337	-.636429	-.662551	-.688695	-.714835
.18	-.769282	-.797116	-.824864	-.852513	-.880052	-.907451	-.934737	-.961902	-.988913
.20	-.991783	-1.019726	-1.047416	-1.074844	-1.101998	-1.128846	-1.155424	-1.181724	-1.207712
.22	-1.168453	-1.194844	-1.220813	-1.246351	-1.271449	-1.296074	-1.320270	-1.344031	-1.367322
.24	-1.297274	-1.320663	-1.343463	-1.365669	-1.387277	-1.408252	-1.428647	-1.448458	-1.467650
.26	-1.378662	-1.397835	-1.416267	-1.433957	-1.450902	-1.467074	-1.482529	-1.497265	-1.511253
.28	-1.414740	-1.428737	-1.441860	-1.454112	-1.465495	-1.475986	-1.485643	-1.494469	-1.502439
.30	-1.408788	-1.416897	-1.424023	-1.430173	-1.435356	-1.439554	-1.442826	-1.445180	-1.446597
.34	-1.287242	-1.282355	-1.276351	-1.269248	-1.261064	-1.251798	-1.241507	-1.230206	-1.217895
.38	-1.049588	-1.031390	-1.012057	-.991619	-.970104	-.947531	-.923946	-.899374	-.873834
.42	-.731560	-.700954	-.669308	-.636661	-.603048	-.568510	-.533078	-.496785	-.459667
.46	-.365412	-.324131	-.281999	-.239062	-.195361	-.150954	-.105856	-.060103	-.013752
.50	.021701	.071439	.121767	.172637	.224003	.275793	.328011	.380618	.433543
.54	.408152	.463923	.519977	.576265	.632739	.689321	.746031	.802829	.859637
.58	.777613	.836996	.896331	.955572	1.014672	1.073552	1.132245	1.190716	1.248883
.62	1.118474	1.179199	1.239543	1.299463	1.358921	1.417837	1.476258	1.534156	1.591449
.66	1.423131	1.483172	1.542515	1.601123	1.658966	1.715969	1.772193	1.827614	1.882157
.70	1.687242	1.744874	1.801517	1.857147	1.911740	1.965231	2.017691	2.069105	2.119406
.78	2.088687	2.137599	2.185064	2.231079	2.275644	2.318720	2.360388	2.400653	2.439474
.86	2.328947	2.365959	2.401252	2.434849	2.466771	2.497012	2.525655	2.552722	2.578206
.94	2.430589	2.454560	2.476728	2.497136	2.515825	2.532822	2.548204	2.562008	2.574259
1.02	2.422397	2.433683	2.443242	2.451130	2.457407	2.462125	2.465350	2.467131	2.467520
1.10	2.333309	2.333238	2.331632	2.328561	2.324094	2.318304	2.311241	2.302962	2.293539
1.18	2.189235	2.179659	2.168821	2.156796	2.143657	2.129492	2.114331	2.098234	2.081285
1.26	2.011705	1.994672	1.976692	1.957839	1.938183	1.917819	1.896759	1.875059	1.852812
1.34	1.817616	1.795140	1.772039	1.748383	1.724236	1.699694	1.674749	1.649452	1.623894
1.42	1.619560	1.593472	1.567068	1.540408	1.513547	1.486577	1.459471	1.432273	1.405068
1.50	1.426431	1.398305	1.370140	1.341984	1.313882	1.285915	1.258044	1.230302	1.202766
1.66	1.076123	1.047495	1.019254	.991424	.964025	.937115	.910633	.884593	.859049
1.82	.789020	.762895	.737406	.712554	.688339	.664794	.641848	.619496	.597773
1.98	.566515	.544251	.522725	.501920	.481821	.462442	.443708	.425606	.408149
2.14	.400500	.382391	.365019	.348356	.332378	.317085	.302407	.288322	.274834
2.30	.279916	.265671	.252099	.239169	.226854	.215143	.203976	.193328	.183195
2.46	.194021	.183085	.172731	.162928	.153647	.144875	.136606	.128677	.121219
2.62	.133702	.125458	.117697	.110390	.103511	.097046	.090950	.085204	.079797
2.78	.091784	.085652	.079909	.074531	.069494	.064784	.060367	.056225	.052346
2.94	.062873	.058356	.054146	.050222	.046566	.043163	.039987	.037024	.034263
3.10	.043036	.039731	.036665	.033820	.031180	.028735	.026464	.024355	.022397
3.42	.020214	.018463	.016851	.015367	.014001	.012746	.011591	.010528	.009549
3.74	.009582	.008654	.007805	.007029	.006319	.005672	.005081	.004542	.004049
4.06	.004604	.004104	.003650	.003237	.002861	.002521	.002213	.001935	.001681
4.38	.002240	.001964	.001715	.001489	.001284	.001100	.000934	.000787	.000654
4.70	.001095	.000937	.000797	.000670	.000555	.000451	.000360	.000280	.000208
5.02	.000528	.000433	.000364	.000294	.000232	.000177	.000130	.000093	.000063
5.34	.000240	.000182	.000165	.000127	.000096	.000068	.000046	.000030	.000020
5.66	.000099	.000058	.000073	.000055	.000039	.000026	.000016	.000010	.000007
5.98	.000040	.000002	.000033	.000023	.000016	.000010	.000006	.000004	.000003
6.30	.000016	.000000	.000014	.000010	.000006	.000004	.000002	.000001	.000001
6.94	.000002	.000000	.000003	.000002	.000001	.000001	.000000	.000000	.000000
7.58	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	161.86	168.14	174.56	181.11	187.81	194.31	201.24	208.68	216.39
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.017090	.017571	.018057	.018550	.019048	.019551	.020060	.020576	.021097
.02	.063245	.064978	.066730	.068500	.070289	.072096	.073922	.075767	.077631
.03	.131612	.135119	.138661	.142236	.145846	.149487	.153163	.156874	.160619
.04	.216324	.221924	.227572	.233268	.239011	.244799	.250636	.256522	.262455
.05	.312383	.320227	.328129	.336089	.344106	.352175	.360304	.368492	.376736
.06	.415550	.425656	.435824	.446054	.456345	.466690	.477099	.487571	.498103
.07	.522255	.534534	.546872	.559270	.571725	.584230	.596796	.609422	.622104
.08	.629509	.643789	.658120	.672499	.686925	.701389	.715904	.730469	.745078
.09	.734835	.750883	.766964	.783076	.799216	.815375	.831568	.847793	.864043
.10	.836199	.853735	.871280	.888830	.906384	.923930	.941485	.959047	.976609
.12	1.020804	1.040364	1.059863	1.079299	1.098669	1.117958	1.137188	1.156357	1.175457
.14	1.173957	1.194188	1.214269	1.234196	1.253967	1.273567	1.293019	1.312322	1.331467
.16	1.290388	1.309951	1.329259	1.348311	1.367105	1.385623	1.403893	1.421915	1.439679
.18	1.367863	1.385518	1.402809	1.419734	1.436292	1.452468	1.468291	1.483762	1.498871
.20	1.406357	1.421018	1.435206	1.448920	1.462162	1.474916	1.487215	1.499061	1.510445
.22	1.407409	1.418173	1.428361	1.437975	1.447019	1.455479	1.463390	1.470757	1.477572
.24	1.373624	1.379781	1.385270	1.390099	1.394272	1.397780	1.400659	1.402915	1.404544
.26	1.308289	1.309320	1.309610	1.309167	1.308001	1.306106	1.303519	1.300248	1.296293
.28	1.215083	1.210653	1.205426	1.199415	1.192632	1.185077	1.176786	1.167770	1.158032
.30	1.097857	1.087797	1.076907	1.065201	1.052697	1.039398	1.025341	1.010539	.995000
.34	.806696	.785451	.763373	.740484	.716807	.692359	.667172	.641264	.614652
.38	.464003	.432440	.400126	.367089	.333357	.298961	.263924	.228271	.192028
.42	.095312	.054950	.013993	-.027526	-.069575	-.112114	-.155126	-.198584	-.242456
.46	-.278406	-.325663	-.373303	-.421289	-.469587	-.518148	-.566966	-.616011	-.665247
.50	-.640829	-.692919	-.745140	-.797454	-.849827	-.902205	-.954592	-1.006960	-1.059267
.54	-.979951	-1.034819	-1.089544	-1.144092	-1.198429	-1.252500	-1.306321	-1.359864	-1.413088
.58	-1.287537	-1.343254	-1.398551	-1.453398	-1.507765	-1.561600	-1.614927	-1.667724	-1.719953
.62	-1.558499	-1.613341	-1.667498	-1.720943	-1.773655	-1.825585	-1.876766	-1.927182	-1.976800
.66	-1.790285	-1.842780	-1.894344	-1.944960	-1.994613	-2.043261	-2.090947	-2.137660	-2.183375
.70	-1.982320	-2.031261	-2.079056	-2.125698	-2.171181	-2.215471	-2.258618	-2.300619	-2.341457
.78	-2.251789	-2.291060	-2.328868	-2.365224	-2.400141	-2.433610	-2.465688	-2.496389	-2.525716
.86	-2.384822	-2.412582	-2.438720	-2.463269	-2.486257	-2.507701	-2.527662	-2.546170	-2.563247
.94	-2.406864	-2.422795	-2.437095	-2.449812	-2.460993	-2.470676	-2.478921	-2.485771	-2.491265
1.02	-2.344722	-2.349572	-2.352906	-2.354784	-2.355265	-2.354406	-2.352260	-2.348880	-2.344319
1.10	-2.223147	-2.218324	-2.212190	-2.204814	-2.196260	-2.186598	-2.175875	-2.164146	-2.151471
1.18	-2.063247	-2.050487	-2.036680	-2.021895	-2.006200	-1.989671	-1.972343	-1.954272	-1.935523
1.26	-1.882007	-1.863134	-1.843502	-1.823180	-1.802232	-1.780736	-1.758716	-1.736222	-1.713318
1.34	-1.692435	-1.669191	-1.645479	-1.621361	-1.596896	-1.572160	-1.547161	-1.521945	-1.496570
1.42	-1.504019	-1.477964	-1.451716	-1.425327	-1.398846	-1.372344	-1.345815	-1.319298	-1.292842
1.50	-1.323304	-1.295766	-1.268279	-1.240884	-1.213621	-1.186549	-1.159654	-1.132961	-1.106513
1.66	-.999952	-.972444	-.945359	-.918717	-.892534	-.866850	-.841629	-.816879	-.792623
1.82	-.737013	-.712037	-.687701	-.664005	-.640945	-.618540	-.596742	-.575543	-.554949
1.98	-.533302	-.511979	-.491384	-.471499	-.452308	-.433813	-.415961	-.398732	-.382122
2.14	-.380669	-.363224	-.346503	-.330478	-.315125	-.300436	-.286354	-.272858	-.259933
2.30	-.269007	-.255168	-.241993	-.229451	-.217513	-.206166	-.195356	-.185059	-.175260
2.46	-.188729	-.177998	-.167844	-.158237	-.149147	-.140558	-.132423	-.124719	-.117430
2.62	-.131750	-.123568	-.115871	-.108627	-.101812	-.095409	-.089377	-.083694	-.078347
2.78	-.091686	-.085526	-.079761	-.074364	-.069313	-.064591	-.060165	-.056016	-.052133
2.94	-.063705	-.059111	-.054832	-.050845	-.047130	-.043675	-.040451	-.037444	-.034643
3.10	-.044257	-.040852	-.037695	-.034766	-.032049	-.029533	-.027196	-.025026	-.023015
3.42	-.021455	-.019604	-.017900	-.016332	-.014888	-.013560	-.012338	-.011212	-.010179
3.74	-.010540	-.009534	-.008613	-.007770	-.006998	-.006292	-.005647	-.005058	-.004523
4.06	-.005287	-.004732	-.004226	-.003764	-.003343	-.002958	-.002610	-.002294	-.002010
4.38	-.002724	-.002409	-.002122	-.001860	-.001623	-.001405	-.001210	-.001035	-.000879

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
4.70	-.001446	-.001260	-.001090	-.000936	-.000795	-.000665	-.000552	-.000452	-.000363
5.02	-.000791	-.000675	-.000570	-.000474	-.000387	-.000305	-.000247	-.000191	-.000143
5.34	-.000443	-.000368	-.000300	-.000237	-.000180	-.000126	-.000109	-.000080	-.000056
5.66	-.000253	-.000202	-.000156	-.000115	-.000078	-.000038	-.000048	-.000033	-.000021
5.98	-.000145	-.000109	-.000080	-.000055	-.000033	.000000	-.000021	-.000014	-.000008
6.30	-.000082	-.000059	-.000041	-.000026	-.000014	.000000	-.000009	-.000005	-.000003
6.94	-.000025	-.000017	-.000010	-.000006	-.000002		-.000002	-.000001	-.000000
7.58	-.000008	-.000005	-.000003	-.000001	-.000000		.000000	.000000	.000000
8.22	-.000002	-.000001	-.000001	.000000	.000000		.000000	.000000	
8.86	-.000001	.000000	.000000	.000000					

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
-E	133.49	139.20	145.05	151.04	157.15	163.08	169.44	176.29	183.42
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000161	.000167	.000174	.000181	.000188	.000195	.000203	.000211	.000218
.02	.001221	.001271	.001322	.001374	.001428	.001482	.001538	.001595	.001653
.03	.003918	.004076	.004237	.004402	.004571	.004743	.004920	.005099	.005283
.04	.008828	.009179	.009539	.009906	.010281	.010664	.011055	.011454	.011861
.05	.016395	.017040	.017699	.018372	.019059	.019760	.020475	.021204	.021947
.06	.026945	.027993	.029062	.030154	.031267	.032402	.033559	.034738	.035940
.07	.040706	.042269	.043864	.045490	.047148	.048838	.050559	.052312	.054097
.08	.057819	.060012	.062247	.064526	.066847	.069211	.071618	.074068	.076561
.09	.078353	.081287	.084277	.087322	.090422	.093578	.096789	.100056	.103377
.10	.102317	.106100	.109952	.113873	.117863	.121922	.126049	.130244	.134509
.12	.160323	.166099	.171973	.177944	.184012	.190178	.196440	.202797	.209251
.14	.231031	.239137	.247369	.255727	.264210	.272819	.281550	.290404	.299381
.16	.313182	.323876	.334722	.345720	.356868	.368166	.379612	.391204	.402941
.18	.405234	.418692	.432323	.446127	.460102	.474247	.488557	.503031	.517669
.20	.505499	.521816	.538321	.555013	.571888	.588947	.606183	.623593	.641178
.22	.612240	.631434	.650823	.670405	.690177	.710135	.730275	.750591	.771084
.24	.723742	.745762	.767976	.790380	.812970	.835743	.858690	.881808	.905095
.26	.838361	.863096	.888014	.913110	.938380	.963818	.989416	1.015169	1.041074
.28	.954560	.981848	1.009298	1.036905	1.064663	1.092566	1.120606	1.148774	1.177070
.30	1.070931	1.100566	1.130334	1.160228	1.190242	1.220370	1.250600	1.280925	1.311343
.34	1.299253	1.332840	1.366477	1.400154	1.433864	1.467598	1.501345	1.535096	1.568847
.38	1.514900	1.551320	1.587676	1.623960	1.660161	1.696271	1.732280	1.768176	1.803956
.42	1.711676	1.749744	1.787615	1.825280	1.862730	1.899956	1.936948	1.973695	2.010196
.46	1.885400	1.923951	1.962160	2.000020	2.037521	2.074658	2.111420	2.147800	2.183795
.50	2.033606	2.071557	2.109018	2.145983	2.182447	2.218403	2.253847	2.288771	2.323177
.54	2.155235	2.191623	2.227377	2.262496	2.296976	2.330815	2.364009	2.396557	2.428460
.58	2.250329	2.284337	2.317579	2.350056	2.381770	2.412721	2.442911	2.472342	2.501018
.62	2.319768	2.350731	2.380813	2.410017	2.438351	2.465819	2.492428	2.518182	2.543092
.66	2.365028	2.392437	2.418867	2.444329	2.468833	2.492389	2.515008	2.536700	2.557479
.70	2.387989	2.411481	2.433919	2.455318	2.475695	2.495064	2.513441	2.530842	2.547283
.78	2.375648	2.390737	2.404690	2.417534	2.429294	2.439998	2.449667	2.458329	2.466008
.86	2.300660	2.307303	2.312818	2.317241	2.320607	2.322950	2.324303	2.324699	2.324171
.94	2.180359	2.179149	2.176895	2.173642	2.169430	2.164301	2.158292	2.151445	2.143794
1.02	2.030072	2.022002	2.013032	2.003211	1.992585	1.981197	1.969091	1.956308	1.942888
1.10	1.862535	1.848807	1.834363	1.819253	1.803523	1.787221	1.770388	1.753069	1.735299
1.18	1.687820	1.669696	1.651061	1.631964	1.612450	1.592563	1.572346	1.551839	1.531075
1.26	1.513531	1.492230	1.470629	1.448772	1.426700	1.404454	1.382073	1.359591	1.337039
1.34	1.345128	1.321760	1.298293	1.274767	1.251217	1.227677	1.204182	1.180759	1.157432
1.42	1.186292	1.161818	1.137430	1.113160	1.089037	1.065087	1.041337	1.017810	.994520
1.50	1.039289	1.014508	.989974	.965710	.941738	.918076	.894743	.871757	.849123
1.66	.784666	.761026	.737873	.715213	.693051	.671390	.650236	.629590	.609447
1.82	.582269	.561187	.540724	.520872	.501622	.482963	.464891	.447396	.430460
1.98	.426527	.408579	.391294	.374654	.358640	.343234	.328420	.314181	.300496
2.14	.309462	.294684	.280553	.267043	.254130	.241791	.230004	.218750	.208002

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
X									
2.30	.222969	.211099	.199822	.189108	.178933	.169269	.160096	.151389	.143125
2.46	.159870	.150512	.141674	.133327	.125445	.118004	.110980	.104352	.098096
2.62	.114268	.106994	.100162	.093744	.087717	.082059	.076748	.071762	.067082
2.78	.081537	.075943	.070715	.065830	.061266	.057004	.053024	.049306	.045836
2.94	.058159	.053891	.049921	.046229	.042797	.039609	.036646	.033892	.031334
3.10	.041517	.038279	.035281	.032505	.029937	.027563	.025368	.023336	.021458
3.42	.021304	.019459	.017763	.016206	.014777	.013471	.012273	.011172	.010164
3.74	.011117	.010066	.009108	.008233	.007437	.006716	.006061	.005462	.004918
4.06	.005952	.005348	.004798	.004300	.003849	.003446	.003082	.002750	.002451
4.38	.003298	.002942	.002619	.002327	.002065	.001833	.001627	.001437	.001268
4.70	.001905	.001688	.001490	.001313	.001154	.001016	.000895	.000783	.000683
5.02	.001153	.001013	.000887	.000773	.000672	.000588	.000514	.000444	.000383
5.34	.000730	.000636	.000551	.000475	.000408	.000354	.000308	.000262	.000223
5.66	.000483	.000416	.000356	.000302	.000256	.000220	.000191	.000160	.000133
5.98	.000332	.000282	.000238	.000198	.000165	.000141	.000121	.000100	.000082
6.30	.000235	.000197	.000163	.000133	.000108	.000091	.000079	.000064	.000051
6.94	.000126	.000101	.000080	.000061	.000046	.000038	.000034	.000026	.000019
7.58	.000072	.000054	.000040	.000028	.000019	.000016	.000015	.000011	.000007
8.22	.000042	.000030	.000020	.000012	.000008	.000006	.000006	.000004	.000003
8.86	.000025	.000016	.000010	.000005	.000003	.000002	.000003	.000001	.000001
9.50	.000015	.000008	.000005	.000002	.000001	.000001	.000001	.000000	.000000
10.14	.000008	.000004	.000002	.000001	.000000	.000000	.000000	.000000	.000000
10.78	.000005	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000
11.42	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
12.06	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	37.390	39.222	41.101	43.026	44.994	46.676	48.707	51.147	53.767
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.169487	.172980	.176508	.180064	.183647	.187233	.190856	.194515	.198185
.02	.287131	.292568	.298045	.303552	.309086	.314610	.320177	.325787	.331398
.03	.361422	.367580	.373764	.379963	.386172	.392345	.398548	.404781	.410991
.04	.399790	.405725	.411662	.417586	.423493	.429332	.435177	.441024	.446819
.05	.408724	.413730	.418705	.423634	.428515	.433294	.438047	.442769	.447407
.06	.393876	.397443	.400946	.404369	.407709	.410917	.414063	.417145	.420111
.07	.360154	.361941	.363629	.365205	.366666	.367969	.369177	.370287	.371254
.08	.311808	.311609	.311281	.310813	.310202	.309413	.308499	.307458	.306253
.09	.252507	.250230	.247799	.245206	.242448	.239499	.236400	.233151	.229724
.10	.185401	.181047	.176519	.171813	.166928	.161847	.156599	.151183	.145583
.12	.038149	.029919	.021500	.012892	.004100	-.004875	-.014030	-.023364	-.032870
.14	-.112956	-.124368	-.135956	-.147710	-.159628	-.171682	-.183899	-.196276	-.208783
.16	-.255989	-.269661	-.283468	-.297394	-.311432	-.325538	-.339762	-.354099	-.368499
.18	-.382946	-.397863	-.412851	-.427888	-.442967	-.458023	-.473132	-.488284	-.503414
.20	-.488837	-.503986	-.519124	-.534225	-.549280	-.564214	-.579116	-.593979	-.608721
.22	-.570960	-.585391	-.599718	-.613914	-.627967	-.641794	-.655498	-.669069	-.682418
.24	-.628324	-.641192	-.653860	-.666298	-.678496	-.690364	-.702013	-.713434	-.724533
.26	-.661193	-.671784	-.682080	-.692049	-.701682	-.710890	-.719785	-.728360	-.736521
.28	-.670728	-.678469	-.685824	-.692763	-.699278	-.705283	-.710891	-.716093	-.720801
.30	-.658709	-.663168	-.667159	-.670657	-.673655	-.676074	-.678020	-.679488	-.680398
.34	-.578934	-.576076	-.572631	-.568581	-.563924	-.558604	-.552707	-.546233	-.539125
.38	-.441284	-.430909	-.419893	-.408230	-.395925	-.382953	-.369371	-.355182	-.340366
.42	-.265466	-.248149	-.230211	-.211657	-.192501	-.172752	-.152431	-.131550	-.110124
.46	-.069455	-.046330	-.022672	.001501	.026169	.051287	.076870	.102901	.129328
.50	.131466	.158912	.186746	.214936	.243455	.272227	.301303	.330659	.360210
.54	.325030	.355137	.385439	.415894	.446470	.477065	.507759	.538525	.569249
.58	.501941	.533011	.564053	.595015	.625864	.656475	.686935	.717274	.747290
.62	.655608	.686016	.716154	.745966	.775417	.804369	.832949	.861125	.888751
.66	.781790	.810054	.837804	.864981	.891551	.917369	.942576	.967141	.990913

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
X									
.70	.878206	.903039	.927122	.950396	.972829	.994279	1.014893	1.034641	1.053377
.78	.980154	.995151	1.008988	1.021614	1.033009	1.043055	1.051888	1.059491	1.065744
.86	.968744	.971447	.972705	.972484	.970782	.967522	.962815	.956655	.948973
.94	.862096	.851686	.839697	.826117	.810963	.794216	.775940	.756147	.734831
1.02	.682754	.659728	.635139	.609000	.581346	.552222	.521640	.489624	.456238
1.10	.453607	.419407	.383792	.346802	.308490	.268960	.228168	.186155	.143046
1.18	.195544	.152202	.107704	.062111	.015489	-.032002	-.080462	-.129839	-.179951
1.26	-.073713	-.123867	-.174842	-.226559	-.278943	-.331790	-.385250	-.439262	-.493600
1.34	-.339998	-.394572	-.449589	-.504954	-.560589	-.616257	-.672150	-.728202	-.784158
1.42	-.592630	-.649348	-.706110	-.762815	-.819386	-.875566	-.931579	-.987359	-1.042634
1.50	-.824088	-.880894	-.937355	-.993367	-1.048855	-1.103558	-1.157721	-1.211279	-1.263958
1.66	-1.206404	-1.258422	-1.309407	-1.359259	-1.407925	-1.455163	-1.501227	-1.546065	-1.589434
1.82	-1.472094	-1.514829	-1.556026	-1.595607	-1.633543	-1.669646	-1.704141	-1.736995	-1.768031
1.98	-1.627664	-1.658914	-1.688329	-1.715857	-1.741496	-1.765132	-1.786933	-1.806886	-1.824900
2.14	-1.690166	-1.709483	-1.726854	-1.742258	-1.755717	-1.767197	-1.776795	-1.784520	-1.790370
2.30	-1.680116	-1.688222	-1.694424	-1.698727	-1.701175	-1.701810	-1.700658	-1.697750	-1.693164
2.46	-1.617427	-1.615725	-1.612268	-1.607088	-1.600246	-1.591852	-1.581865	-1.570337	-1.557416
2.62	-1.519439	-1.509643	-1.498311	-1.485502	-1.471288	-1.455832	-1.439045	-1.420994	-1.401877
2.78	-1.400227	-1.384110	-1.366719	-1.348133	-1.328432	-1.307820	-1.286171	-1.263565	-1.240235
2.94	-1.270625	-1.249867	-1.228113	-1.205460	-1.181991	-1.157936	-1.133149	-1.107716	-1.081888
3.10	-1.138586	-1.114686	-1.090065	-1.064841	-1.039090	-1.013054	-.986582	-.959762	-.932847
3.42	-.887548	-.860972	-.834181	-.807314	-.780421	-.753748	-.727152	-.700711	-.674651
3.74	-.671487	-.645589	-.619871	-.594465	-.569419	-.544936	-.520897	-.497358	-.474492
4.06	-.497038	-.473698	-.450810	-.428485	-.406767	-.385805	-.365503	-.345883	-.327066
4.38	-.361960	-.342000	-.322652	-.303999	-.286073	-.268978	-.252626	-.237012	-.222209
4.70	-.260383	-.243948	-.228190	-.213168	-.198898	-.185450	-.172734	-.160721	-.149454
5.02	-.185606	-.172453	-.159976	-.148211	-.137159	-.126869	-.117240	-.108230	-.099863
5.34	-.131421	-.121125	-.111461	-.102444	-.094066	-.086361	-.079219	-.072591	-.066490
5.66	-.092623	-.084703	-.077345	-.070553	-.064308	-.058638	-.053426	-.048620	-.044231
5.98	-.065091	-.059082	-.053557	-.048510	-.043916	-.039803	-.036047	-.032599	-.029471
6.30	-.045683	-.041176	-.037073	-.033362	-.030018	-.027069	-.024388	-.021932	-.019716
6.94	-.022550	-.020074	-.017865	-.015906	-.014173	-.012697	-.011357	-.010123	-.009015
7.58	-.011272	-.009940	-.008774	-.007758	-.006875	-.006156	-.005494	-.004870	-.004305
8.22	-.005775	-.005064	-.004452	-.003928	-.003479	-.003135	-.002805	-.002480	-.002179
8.86	-.003068	-.002687	-.002365	-.002091	-.001860	-.001697	-.001529	-.001350	-.001177
9.50	-.001708	-.001501	-.001327	-.001181	-.001058	-.000982	-.000892	-.000787	-.000678
10.14	-.001003	-.000886	-.000789	-.000708	-.000639	-.000604	-.000554	-.000487	-.000413
10.78	-.000621	-.000553	-.000496	-.000448	-.000408	-.000392	-.000362	-.000316	-.000262
11.42	-.000404	-.000362	-.000327	-.000297	-.000272	-.000265	-.000245	-.000213	-.000172
12.06	-.000274	-.000247	-.000224	-.000204	-.000187	-.000184	-.000171	-.000147	-.000115
12.70	-.000192	-.000173	-.000157	-.000144	-.000132	-.000131	-.000121	-.000104	-.000078
13.98	-.000100	-.000091	-.000083	-.000075	-.000069	-.000069	-.000064	-.000054	-.000036
15.26	-.000056	-.000050	-.000046	-.000041	-.000038	-.000037	-.000034	-.000029	-.000017
16.54	-.000032	-.000029	-.000026	-.000024	-.000021	-.000020	-.000019	-.000016	-.000007
17.82	-.000019	-.000017	-.000015	-.000014	-.000012	-.000011	-.000010	-.000009	-.000003
19.10	-.000011	-.000010	-.000009	-.000008	-.000007	-.000006	-.000005	-.000005	-.000001
20.38	-.000007	-.000006	-.000006	-.000005	-.000004	-.000003	-.000003	-.000003	-.000001
21.66	-.000004	-.000004	-.000003	-.000003	-.000003	-.000002	-.000001	-.000002	.000000
22.94	-.000003	-.000002	-.000002	-.000002	-.000002	-.000001	-.000001	-.000001	.000000
24.22	-.000002	-.000002	-.000001	-.000001	-.000001	-.000000	.000000	-.000001	.000000
25.50	-.000001	-.000001	-.000001	-.000001	-.000001	.000000	.000000	.000000	.000000
28.06	-.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
-E	30.870	32.532	34.239	35.989	37.781	39.288	41.141	43.398	45.835
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.008194	.008462	.008735	.009013	.009296	.009584	.009876	.010173	.010475
.02	.030320	.031287	.032273	.033276	.034296	.035333	.036385	.037453	.038536
.03	.063076	.065040	.067040	.069073	.071139	.073236	.075362	.077517	.079702
.04	.103630	.106775	.109975	.113226	.116525	.119871	.123259	.126690	.130165
.05	.149560	.153980	.158473	.163032	.167653	.172335	.177071	.181862	.186710
.06	.198808	.204522	.210322	.216203	.222156	.228181	.234269	.240419	.246636
.07	.249636	.256601	.263664	.270816	.278049	.285359	.292737	.300180	.307696
.08	.300584	.308711	.316944	.325270	.333678	.342166	.350721	.359341	.368033
.09	.350440	.359604	.368876	.378240	.387684	.397205	.406786	.416427	.426135
.10	.398207	.408257	.418409	.428649	.438961	.449341	.459771	.470250	.480786
.12	.484412	.495703	.507074	.518507	.529981	.541493	.553020	.564559	.576121
.14	.554594	.566366	.578178	.590007	.601831	.613644	.625421	.637159	.648868
.16	.606171	.617660	.629134	.640567	.651935	.663231	.674429	.685524	.696528
.18	.638073	.648563	.658973	.669275	.679443	.689471	.699330	.709017	.718544
.20	.650344	.659201	.667905	.676431	.684750	.692859	.700727	.708351	.715744
.22	.643824	.650513	.656978	.663192	.669129	.674784	.680130	.685163	.689898
.24	.619905	.624003	.627807	.631292	.634433	.637229	.639651	.641700	.643389
.26	.580337	.581532	.582370	.582827	.582883	.582537	.581765	.580567	.578957
.28	.527083	.525173	.522850	.520096	.516893	.513244	.509126	.504544	.499510
.30	.462206	.457089	.451516	.445474	.438947	.431942	.424441	.416450	.407982
.34	.305850	.294378	.282404	.269922	.256931	.243442	.229446	.214953	.199979
.38	.127090	.109836	.092091	.073860	.055154	.035989	.016369	-.003693	-.024179
.42	-.060109	-.082129	-.104573	-.127425	-.150662	-.174259	-.198206	-.222482	-.247072
.46	-.244175	-.269667	-.295467	-.321545	-.347871	-.374412	-.401148	-.428057	-.455120
.50	-.416047	-.443581	-.471264	-.499058	-.526922	-.554822	-.582728	-.610614	-.638465
.54	-.569051	-.597169	-.625250	-.653247	-.681111	-.708808	-.736299	-.763558	-.790573
.58	-.698641	-.725948	-.753013	-.779784	-.806208	-.832249	-.857865	-.883029	-.907733
.62	-.802089	-.827313	-.852082	-.876344	-.900042	-.923143	-.945603	-.967395	-.988516
.66	-.878167	-.900196	-.921562	-.942213	-.962092	-.981173	-.999407	-1.016772	-1.033271
.70	-.926839	-.944744	-.961793	-.977932	-.993110	-1.007307	-1.020473	-1.032592	-1.043672
.78	-.946145	-.953792	-.960256	-.965495	-.969470	-.972180	-.973579	-.973663	-.972455
.86	-.873932	-.869860	-.864394	-.857509	-.849186	-.839447	-.828252	-.815616	-.801575
.94	-.729217	-.713242	-.695790	-.676859	-.656454	-.634621	-.611332	-.586615	-.560524
1.02	-.532187	-.505107	-.476595	-.446673	-.415371	-.382758	-.348817	-.313591	-.277148
1.10	-.301847	-.265144	-.227167	-.187960	-.147577	-.106107	-.063543	-.019943	.024616
1.18	-.054778	-.010346	.035112	.081533	.128842	.176935	.225808	.275395	.325613
1.26	.195376	.245457	.296254	.347685	.399662	.452068	.504893	.558065	.611501
1.34	.437969	.491612	.545621	.599904	.654360	.708869	.763414	.817923	.872316
1.42	.665153	.720390	.775628	.830769	.885706	.940322	.994593	1.048451	1.101825
1.50	.871545	.926608	.981315	1.035564	1.089246	1.142253	1.194557	1.246095	1.296809
1.66	1.210354	1.260798	1.310244	1.358596	1.405756	1.451643	1.496224	1.539456	1.581312
1.82	1.445750	1.487661	1.528090	1.566958	1.604187	1.639735	1.673567	1.705663	1.736032
1.98	1.585008	1.616401	1.646003	1.673762	1.699625	1.723595	1.745633	1.765748	1.783981
2.14	1.643135	1.663505	1.681944	1.698425	1.712926	1.725488	1.736077	1.744726	1.751506
2.30	1.637538	1.647398	1.655323	1.661313	1.665377	1.667589	1.667923	1.666436	1.663219
2.46	1.584988	1.585462	1.584102	1.580934	1.575997	1.569387	1.561097	1.551202	1.539804
2.62	1.500132	1.492653	1.483513	1.472766	1.460476	1.446754	1.431616	1.415153	1.397468
2.78	1.394980	1.381073	1.365729	1.349024	1.331043	1.311905	1.291654	1.270392	1.248214
2.94	1.278914	1.260064	1.240029	1.218900	1.196787	1.173800	1.150019	1.125550	1.100473
3.10	1.158969	1.136539	1.113184	1.089012	1.064150	1.038692	1.012754	.986442	.959816
3.42	.926106	.899929	.873329	.846436	.819399	.792267	.765219	.738342	.711647
3.74	.719906	.693339	.666780	.640364	.614231	.588402	.563083	.538328	.514096
4.06	.548449	.523574	.499038	.474963	.451468	.428554	.406417	.385073	.364443
4.38	.411591	.389509	.367988	.347132	.327031	.307672	.289214	.271636	.254841



	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
X									
4.70	.305407	.286533	.268349	.250932	.234344	.218566	.203702	.189702	.176467
5.02	.224693	.209012	.194071	.179923	.166603	.154094	.142437	.131562	.121382
5.34	.164263	.151516	.139503	.128254	.117782	.108079	.099122	.090832	.083144
5.66	.119533	.109347	.099851	.091058	.082961	.075566	.068794	.062564	.056836
5.98	.086706	.078677	.071273	.064491	.058315	.052760	.047706	.043072	.038846
6.30	.062770	.056510	.050800	.045626	.040965	.036844	.033110	.029689	.026592
6.94	.032837	.029125	.025812	.022874	.020281	.018085	.016091	.014247	.012601
7.58	.017237	.015086	.013207	.011576	.010166	.009040	.007996	.007000	.006121
8.22	.009136	.007906	.006856	.005962	.005206	.004653	.004112	.003561	.003081
8.86	.004916	.004218	.003635	.003149	.002746	.002493	.002212	.001894	.001621
9.50	.002699	.002303	.001980	.001717	.001502	.001401	.001255	.001060	.000895
10.14	.001517	.001292	.001113	.000970	.000855	.000830	.000753	.000624	.000518
10.78	.000874	.000746	.000647	.000569	.000507	.000518	.000476	.000385	.000312
11.42	.000517	.000443	.000388	.000345	.000312	.000339	.000316	.000247	.000194
12.06	.000312	.000270	.000239	.000216	.000198	.000231	.000218	.000163	.000123
12.70	.000192	.000168	.000151	.000138	.000129	.000162	.000155	.000110	.000079
13.98	.000071	.000064	.000059	.000056	.000057	.000086	.000083	.000052	.000032
15.26	.000026	.000024	.000023	.000022	.000025	.000049	.000047	.000024	.000012
16.54	.000009	.000008	.000008	.000008	.000009	.000028	.000028	.000011	.000005
17.82	.000003	.000003	.000003	.000003	.000002	.000017	.000016	.000004	.000002
19.10	.000001	.000001	.000001	.000001	.000000	.000010	.000010	.000002	.000001
20.38	.000000	.000000	.000000	.000000	.000000	.000006	.000006	.000001	.000000
21.66	.000000	.000000	.000000	.000000	.000000	.000003	.000003	.000000	.000000
22.94						.000002	.000002	.000000	
24.22						.000001	.000001		
25.50						.000001	.000000		
28.06						.000000	.000000		

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
-E	19.062	20.393	21.766	23.180	24.632	25.801	27.311	29.219	31.306
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000079	.000082	.000086	.000091	.000095	.000099	.000104	.000108	.000113
.02	.000597	.000626	.000656	.000687	.000719	.000752	.000786	.000821	.000856
.03	.001916	.002008	.002103	.002202	.002303	.002407	.002514	.002624	.002736
.04	.004316	.004522	.004734	.004953	.005178	.005409	.005648	.005891	.006141
.05	.008013	.008391	.008878	.009482	.010219	.011001	.011837	.012729	.013678
.06	.013164	.013778	.014412	.015063	.015732	.016421	.017131	.017852	.018590
.07	.019877	.020795	.021740	.022712	.023710	.024736	.025793	.026866	.027965
.08	.028217	.029505	.030832	.032195	.033594	.035031	.036511	.038012	.039548
.09	.038212	.039938	.041714	.043537	.045407	.047328	.049304	.051307	.053355
.10	.049861	.052088	.054378	.056728	.059136	.061609	.064150	.066725	.069356
.12	.077988	.081392	.084888	.088471	.092138	.095899	.099760	.103665	.107650
.14	.112138	.116919	.121821	.126839	.131969	.137222	.142609	.148049	.153593
.16	.151620	.157927	.164386	.170989	.177729	.184623	.191683	.198801	.206045
.18	.195594	.203527	.211638	.219919	.228361	.236983	.245801	.254677	.263698
.20	.243145	.252749	.262556	.272554	.282730	.293110	.303711	.314363	.325171
.22	.293329	.304601	.316096	.327796	.339686	.351797	.364148	.376536	.389085
.24	.345213	.358105	.371231	.384570	.398105	.411870	.425888	.439919	.454110
.26	.397901	.412322	.426982	.441855	.456923	.472220	.487776	.503313	.519001
.28	.450552	.466377	.482436	.498702	.515151	.531824	.548749	.565618	.582618
.30	.502392	.519465	.536761	.554247	.571897	.589754	.607852	.625846	.643945
.34	.600926	.619934	.639117	.658434	.677851	.697420	.717176	.736715	.756281
.38	.688855	.708950	.729139	.749376	.769620	.789928	.810339	.830398	.850379
.42	.762770	.783041	.803301	.823496	.843582	.863618	.883648	.903175	.922498
.46	.820395	.839934	.859336	.878542	.897504	.916285	.934929	.952916	.970559

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
.50	.860446	.878393	.896063	.913393	.930335	.946952	.963292	.978821	.993862
.54	.882468	.898043	.913193	.927856	.941984	.955639	.968872	.981150	.992799
.58	.886670	.899195	.911148	.922469	.933110	.943135	.952594	.960971	.968586
.62	.873772	.882686	.890886	.898317	.904933	.910798	.915962	.919937	.923031
.66	.844878	.849738	.853755	.856877	.859065	.860380	.860871	.860093	.858334
.70	.801352	.801836	.801363	.799885	.797372	.793881	.789463	.783721	.776920
.78	.676630	.667844	.657926	.646848	.634595	.621220	.606771	.590977	.574041
.86	.512603	.494508	.475194	.454655	.432899	.409968	.385909	.360597	.334162
.94	.322059	.295249	.267226	.238006	.207619	.176099	.143490	.109820	.075142
1.02	.116569	.082095	.046497	.009818	-.027894	-.066611	-.106295	-.146766	-.188051
1.10	-.093998	-.134797	-.176556	-.219209	-.262688	-.306976	-.352040	-.397557	-.443632
1.18	-.301630	-.347266	-.393640	-.440665	-.488255	-.536404	-.585090	-.633857	-.682887
1.26	-.500127	-.549078	-.598501	-.648295	-.698360	-.748698	-.799301	-.849601	-.899846
1.34	-.684944	-.735740	-.786718	-.837764	-.888768	-.939744	-.990698	-1.040968	-1.090866
1.42	-.852986	-.904269	-.955434	-1.006358	-1.056927	-1.107164	-1.157091	-1.205975	-1.254180
1.50	-1.002375	-1.052940	-1.103090	-1.152696	-1.201644	-1.249969	-1.297706	-1.344075	-1.389481
1.66	-1.242426	-1.288637	-1.333886	-1.378047	-1.421013	-1.462838	-1.503589	-1.542449	-1.579878
1.82	-1.406257	-1.445394	-1.483128	-1.519344	-1.553956	-1.587031	-1.618666	-1.648077	-1.675739
1.98	-1.502090	-1.532684	-1.561555	-1.588613	-1.613795	-1.637180	-1.658886	-1.678221	-1.695644
2.14	-1.541242	-1.562799	-1.582435	-1.600089	-1.615727	-1.629434	-1.641344	-1.650898	-1.658510
2.30	-1.535616	-1.548332	-1.559039	-1.567706	-1.574332	-1.579001	-1.581860	-1.582509	-1.581298
2.46	-1.496294	-1.500813	-1.503327	-1.503837	-1.502372	-1.499015	-1.493916	-1.486857	-1.478104
2.62	-1.432890	-1.430116	-1.425413	-1.418815	-1.410383	-1.400191	-1.388392	-1.374955	-1.360053
2.78	-1.353352	-1.344309	-1.333470	-1.320904	-1.306697	-1.290912	-1.273704	-1.255228	-1.235553
2.94	-1.264019	-1.249759	-1.233880	-1.216480	-1.197674	-1.177506	-1.156129	-1.133877	-1.110714
3.10	-1.169795	-1.151337	-1.131468	-1.110312	-1.088006	-1.064578	-1.040170	-1.015287	-.989784
3.42	-.980426	-.956329	-.931282	-.905455	-.879014	-.851949	-.824363	-.797054	-.769673
3.74	-.803954	-.777240	-.750048	-.722571	-.694986	-.667248	-.639374	-.612413	-.585824
4.06	-.648831	-.621713	-.594549	-.567538	-.540847	-.514402	-.488100	-.463182	-.438952
4.38	-.517488	-.491460	-.465749	-.440539	-.415980	-.391975	-.368276	-.344625	-.321513
4.70	-.409101	-.385073	-.361641	-.338968	-.317169	-.296141	-.275479	-.255659	-.238800
5.02	-.321283	-.299726	-.278964	-.259126	-.240292	-.222362	-.204774	-.189070	-.174329
5.34	-.251079	-.232157	-.214152	-.197159	-.181222	-.166252	-.151543	-.138677	-.126724
5.66	-.195514	-.179186	-.163833	-.149518	-.136252	-.123961	-.111817	-.101423	-.091862
5.98	-.151864	-.137963	-.125048	-.113148	-.102250	-.092295	-.082359	-.074052	-.066482
6.30	-.117764	-.106059	-.095313	-.085527	-.076668	-.068695	-.060614	-.054030	-.048082
6.94	-.070661	-.062570	-.055314	-.048859	-.043147	-.038169	-.032862	-.028794	-.025179
7.58	-.042431	-.036973	-.032194	-.028039	-.024443	-.021421	-.017918	-.015435	-.013263
8.22	-.025591	-.021972	-.018877	-.016248	-.014022	-.012230	-.009871	-.008361	-.007057
8.86	-.015551	-.013180	-.011200	-.009557	-.008196	-.007156	-.005517	-.004594	-.003807
9.50	-.009549	-.008008	-.006754	-.005737	-.004912	-.004324	-.003139	-.002570	-.002088
10.14	-.005942	-.004947	-.004158	-.003533	-.003037	-.002717	-.001824	-.001468	-.001167
10.78	-.003757	-.003118	-.002625	-.002244	-.001949	-.001786	-.001085	-.000857	-.000666
11.42	-.002420	-.002012	-.001707	-.001477	-.001303	-.001231	-.000662	-.000513	-.000388
12.06	-.001592	-.001334	-.001147	-.001010	-.000909	-.000889	-.000415	-.000315	-.000230
12.70	-.001073	-.000911	-.000798	-.000719	-.000661	-.000670	-.000267	-.000198	-.000138
13.98	-.000526	-.000466	-.000429	-.000406	-.000389	-.000422	-.000118	-.000083	-.000050
15.26	-.000286	-.000269	-.000261	-.000258	-.000256	-.000292	-.000057	-.000037	-.000017
16.54	-.000173	-.000172	-.000175	-.000178	-.000180	-.000214	-.000029	-.000017	-.000006
17.82	-.000113	-.000119	-.000125	-.000130	-.000132	-.000162	-.000015	-.000008	-.000002
19.10	-.000080	-.000087	-.000093	-.000097	-.000099	-.000125	-.000009	-.000004	-.000001
20.38	-.000059	-.000066	-.000071	-.000074	-.000076	-.000098	-.000005	-.000002	.000000
21.66	-.000045	-.000051	-.000055	-.000058	-.000058	-.000077	-.000003	-.000001	.000000
22.94	-.000035	-.000041	-.000044	-.000045	-.000045	-.000060	-.000002	.000000	.000000
24.22	-.000028	-.000032	-.000035	-.000035	-.000034	-.000048	-.000001	.000000	.000000
25.50	-.000023	-.000026	-.000027	-.000028	-.000026	-.000038	-.000001	.000000	.000000
28.06	-.000015	-.000017	-.000017	-.000017	-.000014	-.000024	-.000000	.000000	.000000
30.62	-.000010	-.000011	-.000011	-.000011	-.000008	-.000015	.000000	.000000	.000000
33.18	-.000007	-.000007	-.000007	-.000007	-.000004	-.000009	.000000	.000000	.000000
35.74	-.000005	-.000005	-.000005	-.000004	-.000002	-.000006	.000000	.000000	.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
38.30	-.000003	-.000003	-.000003	-.000003	-.000001	-.000004	.000000	.000000	.000000
40.86	-.000002	-.000002	-.000002	-.000002	-.000000	-.000002			
43.42	-.000001	-.000001	-.000001	-.000001	.000000	-.000001			
45.98	-.000001	-.000001	-.000001	-.000001	-.000001	-.000001			
48.54	-.000001	-.000001	.000000	.000000		.000000			

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
-E	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
3.6303	3.6303	4.4286	5.2666	6.1434	7.0583	7.6869	8.6566	10.025	11.570
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.02	.000002	.000003	.000003	.000003	.000003	.000004	.000004	.000004	.000004
.03	.000012	.000013	.000014	.000015	.000016	.000017	.000018	.000020	.000021
.04	.000035	.000038	.000041	.000045	.000048	.000052	.000056	.000060	.000064
.05	.000083	.000090	.000097	.000105	.000113	.000122	.000131	.000140	.000150
.06	.000165	.000180	.000195	.000210	.000226	.000243	.000261	.000279	.000299
.07	.000295	.000320	.000347	.000375	.000404	.000434	.000465	.000498	.000532
.08	.000485	.000527	.000570	.000616	.000663	.000712	.000763	.000817	.000872
.09	.000749	.000813	.000880	.000950	.001023	.001098	.001177	.001258	.001343
.10	.001101	.001195	.001293	.001395	.001501	.001611	.001726	.001845	.001969
.12	.002124	.002304	.002492	.002686	.002889	.003099	.003317	.003544	.003780
.14	.003665	.003973	.004293	.004626	.004971	.005329	.005701	.006087	.006488
.16	.005828	.006314	.006818	.007341	.007883	.008445	.009028	.009634	.010262
.18	.008708	.009427	.010173	.010946	.011748	.012576	.013436	.014329	.015253
.20	.012389	.013403	.014454	.015542	.016670	.017834	.019041	.020293	.021588
.22	.016943	.018318	.019741	.021214	.022738	.024310	.025939	.027627	.029371
.24	.022430	.024234	.026100	.028029	.030024	.032079	.034207	.036409	.038684
.26	.028897	.031201	.033581	.036040	.038580	.041195	.043899	.046695	.049582
.28	.036379	.039253	.042220	.045283	.048443	.051694	.055053	.058522	.062101
.30	.044898	.048414	.052040	.055780	.059635	.063596	.067665	.071906	.076255
.34	.065086	.070094	.075248	.080553	.086011	.091608	.097377	.103319	.109432
.38	.089442	.096201	.103144	.110277	.117601	.125097	.132809	.140738	.148880
.42	.117811	.126553	.135516	.144705	.154123	.163743	.173622	.183761	.194153
.46	.149931	.160853	.172030	.183466	.195164	.207089	.219313	.231836	.244646
.50	.185464	.198726	.212269	.226099	.240218	.254584	.269280	.284309	.299653
.54	.224017	.239738	.255759	.272086	.288722	.305614	.322863	.340468	.358409
.58	.265168	.283424	.301993	.320878	.340080	.359540	.379372	.399576	.420126
.62	.308475	.329308	.350453	.371914	.393693	.415718	.438121	.460898	.484022
.66	.353502	.376914	.400627	.424646	.448969	.473518	.498438	.523725	.549347
.70	.399819	.425780	.452019	.478541	.505345	.532339	.559688	.587384	.615390
.78	.494707	.525560	.556609	.587859	.619308	.650844	.682664	.714758	.747078
.86	.590174	.625485	.660862	.696312	.731831	.767292	.802920	.838702	.874583
.94	.683723	.722915	.762002	.800990	.839878	.878521	.917176	.955826	.994410
1.02	.773347	.815756	.857848	.899635	.941118	.982137	1.022980	1.063630	1.104016
1.10	.857510	.902422	.946778	.990592	1.033871	1.076446	1.118632	1.160412	1.201714
1.18	.935098	.981790	1.027663	1.072740	1.117031	1.160363	1.203078	1.245161	1.286538
1.26	1.005370	1.053136	1.099806	1.145413	1.189974	1.233316	1.275806	1.317431	1.358120
1.34	1.067900	1.116073	1.162868	1.208326	1.252479	1.295153	1.336739	1.377231	1.416561
1.42	1.122525	1.170494	1.216800	1.261501	1.304638	1.346048	1.386140	1.424917	1.462315
1.50	1.169296	1.216509	1.261784	1.305192	1.346789	1.386422	1.424521	1.461096	1.496092
1.66	1.240254	1.284578	1.326448	1.365972	1.403237	1.438120	1.471085	1.502162	1.531316
1.82	1.283762	1.323803	1.360944	1.395333	1.427096	1.456144	1.482972	1.507634	1.530113
1.98	1.303763	1.338603	1.370181	1.398686	1.424281	1.446927	1.467136	1.484987	1.500491
2.14	1.304424	1.333535	1.359106	1.381369	1.400529	1.416593	1.430091	1.441127	1.449737
2.30	1.289697	1.312850	1.332265	1.348221	1.360964	1.370551	1.377522	1.382009	1.384074
2.46	1.263098	1.280278	1.293603	1.303396	1.309941	1.313349	1.314168	1.312554	1.308595
2.62	1.227619	1.238969	1.246418	1.250333	1.251039	1.248697	1.243858	1.236705	1.227345
2.78	1.185738	1.191507	1.193395	1.191814	1.187127	1.179542	1.169615	1.157547	1.143465
2.94	1.139463	1.139971	1.136680	1.130044	1.120462	1.108190	1.093778	1.077447	1.059338

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
3.10	1.090397	1.086009	1.077960	1.066744	1.052793	1.036406	1.018125	.998182	.976730
3.42	.988658	.975666	.959437	.940532	.919436	.896524	.872292	.846985	.820762
3.74	.887568	.867596	.844964	.820284	.794069	.766753	.738744	.710269	.681490
4.06	.791192	.765799	.738433	.709725	.680191	.650309	.620347	.590490	.560899
4.38	.701688	.672298	.641681	.610460	.579121	.548177	.517701	.487819	.458696
4.70	.620015	.587880	.555282	.522803	.490874	.460032	.430111	.401172	.373388
5.02	.546394	.512582	.479049	.446312	.414725	.384841	.356222	.328865	.302960
5.34	.480608	.446001	.412371	.380142	.349579	.321240	.294405	.269011	.245275
5.66	.422188	.387499	.354419	.323262	.294194	.267774	.242997	.219753	.198294
5.98	.370544	.336334	.304285	.274597	.247325	.223026	.200426	.179383	.160183
6.30	.325036	.291735	.261064	.233100	.207793	.185691	.165278	.146391	.129353
6.94	.249914	.219287	.191980	.167826	.146581	.128764	.112477	.097552	.084382
7.58	.192152	.164808	.141169	.120853	.103461	.089465	.076746	.065164	.055158
8.22	.147844	.123951	.103899	.087135	.073150	.062362	.052574	.043692	.036177
8.86	.113876	.093334	.076581	.062943	.051845	.043645	.036190	.029432	.023830
9.50	.087826	.070384	.056549	.045573	.036853	.030688	.025049	.019933	.015776
10.14	.067830	.053166	.041845	.033084	.026283	.021688	.017443	.013581	.010505
10.78	.052464	.040233	.031035	.024088	.018813	.015412	.012227	.009314	.007041
11.42	.040641	.030504	.023075	.017593	.013520	.011017	.008631	.006434	.004753
12.06	.031532	.023175	.017202	.012893	.009758	.007926	.006139	.004479	.003233
12.70	.024504	.017645	.012860	.009483	.007075	.005740	.004402	.003145	.002218
13.98	.014874	.010299	.007253	.005192	.003777	.003077	.002323	.001592	.001074
15.26	.009094	.006072	.004147	.002894	.002062	.001703	.001272	.000839	.000541
16.54	.005604	.003620	.002407	.001646	.001155	.000975	.000725	.000460	.000284
17.82	.003484	.002186	.001422	.000957	.000665	.000578	.000429	.000263	.000156
19.10	.002187	.001338	.000856	.000570	.000394	.000355	.000264	.000156	.000088
20.38	.001387	.000831	.000525	.000348	.000240	.000225	.000167	.000095	.000052
21.66	.000890	.000525	.000329	.000218	.000150	.000147	.000109	.000060	.000031
22.94	.000578	.000337	.000211	.000140	.000097	.000098	.000073	.000039	.000019
24.22	.000380	.000221	.000138	.000092	.000064	.000067	.000050	.000025	.000012
25.50	.000254	.000147	.000092	.000061	.000043	.000046	.000034	.000017	.000008
28.06	.000118	.000068	.000043	.000029	.000020	.000023	.000017	.000007	.000003
30.62	.000058	.000034	.000021	.000014	.000010	.000012	.000009	.000003	.000001
33.18	.000030	.000018	.000011	.000007	.000005	.000006	.000005	.000001	.000000
35.74	.000016	.000009	.000006	.000004	.000002	.000003	.000002	.000001	.000000
38.30	.000009	.000005	.000003	.000002	.000001	.000002	.000001	.000000	.000000
40.86	.000005	.000003	.000002	.000001	.000001	.000001	.000001	.000000	.000000
43.42	.000003	.000002	.000001	.000001	.000000	.000000	.000000	.000000	.000000
45.98	.000002	.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000
48.54	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
51.10	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
56.22	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
-E	5.4593	5.8677	6.2769	6.6880	7.1017	7.2134	7.6176	8.3639	9.2375
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.066220	.068715	.071187	.073638	.076067	.078003	.080388	.083240	.086092
.02	.112177	.116211	.120194	.124128	.128013	.131057	.134845	.139401	.143945
.03	.141181	.145985	.150707	.155349	.159913	.163411	.167821	.173170	.178483
.04	.156133	.161097	.165948	.170688	.175321	.178768	.183193	.188621	.193983
.05	.159570	.164219	.168726	.173096	.177332	.180345	.184324	.189284	.194150
.06	.153700	.157676	.161486	.165135	.168626	.170930	.174125	.178215	.182183
.07	.140445	.143488	.146345	.149022	.151524	.152931	.155106	.158043	.160833
.08	.121468	.123401	.125134	.126674	.128026	.128420	.129427	.131028	.132460
.09	.098206	.098921	.099428	.099735	.099848	.099174	.098934	.099098	.099077

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
X									
.10	.071896	.071342	.070579	.069614	.068456	.066708	.065202	.063895	.062394
.12	.014199	.011137	.007880	.004438	.000820	-.002946	-.006869	-.011010	-.015344
.14	-.044949	-.050263	-.055735	-.061354	-.067109	-.072551	-.078528	-.085114	-.091868
.16	-.100859	-.108000	-.115241	-.122572	-.129983	-.136635	-.144153	-.152616	-.161200
.18	-.150382	-.158832	-.167312	-.175810	-.184318	-.191664	-.200140	-.209827	-.219570
.20	-.191553	-.200762	-.209921	-.219018	-.228046	-.235568	-.244413	-.254653	-.264873
.22	-.223308	-.232735	-.242026	-.251171	-.260163	-.267378	-.276032	-.286186	-.296235
.24	-.245261	-.254401	-.263318	-.272004	-.280456	-.286932	-.294893	-.304382	-.313680
.26	-.257521	-.265923	-.274019	-.281803	-.289273	-.294647	-.301485	-.309811	-.317861
.28	-.260557	-.267835	-.274730	-.281239	-.287363	-.291344	-.296710	-.303461	-.309860
.30	-.255078	-.260918	-.266306	-.271243	-.275733	-.278104	-.281732	-.286591	-.291029
.34	-.222161	-.224460	-.226205	-.227405	-.228071	-.226853	-.226519	-.226998	-.226953
.38	-.166554	-.164870	-.162583	-.159711	-.156273	-.151387	-.146921	-.142758	-.138025
.42	-.096175	-.090519	-.084269	-.077450	-.070090	-.061858	-.053548	-.045009	-.035915
.46	-.018254	-.008993	.000801	.011093	.021851	.032822	.044355	.056620	.069370
.50	.061051	.073303	.085977	.099033	.112435	.125364	.139286	.154379	.169837
.54	.136801	.151271	.166014	.180988	.196152	.210173	.225544	.242436	.259536
.58	.205256	.221095	.237031	.253019	.269019	.283257	.299112	.316740	.334390
.62	.263778	.280125	.296374	.312483	.328411	.342037	.357453	.374787	.391944
.66	.310692	.326720	.342450	.357841	.372856	.385125	.399264	.415364	.431085
.70	.345125	.360080	.374537	.388461	.401820	.412097	.424235	.438284	.451759
.78	.376187	.387119	.397191	.406382	.414679	.419560	.426058	.434131	.441288
.86	.360587	.365734	.369745	.372623	.374372	.372806	.372387	.372979	.372421
.94	.306483	.304966	.302154	.298070	.292745	.284579	.276958	.269664	.261115
1.02	.223898	.215616	.206002	.195104	.182977	.168770	.154460	.139764	.123844
1.10	.122993	.108461	.092678	.075719	.057656	.038471	.018555	-.002414	-.024454
1.18	.013054	-.006773	-.027664	-.049523	-.072259	-.095055	-.119140	-.144849	-.171372
1.26	-.098032	-.121923	-.146603	-.171963	-.197896	-.222803	-.249452	-.278168	-.307367
1.34	-.203969	-.230554	-.257591	-.284959	-.312547	-.338062	-.365653	-.395610	-.425667
1.42	-.300034	-.327918	-.355876	-.383784	-.411527	-.436243	-.463243	-.492763	-.521975
1.50	-.382946	-.410795	-.438319	-.465397	-.491918	-.514588	-.539625	-.567197	-.594051
1.66	-.502220	-.526496	-.549662	-.571618	-.592274	-.607908	-.625740	-.645773	-.664333
1.82	-.556673	-.573802	-.589140	-.602622	-.614198	-.620255	-.627986	-.637216	-.644384
1.98	-.551347	-.559128	-.564600	-.567747	-.568569	-.564007	-.560360	-.557288	-.551780
2.14	-.496403	-.493846	-.488652	-.480862	-.470531	-.455474	-.440456	-.424998	-.406956
2.30	-.403705	-.390776	-.375072	-.356695	-.335755	-.311147	-.285678	-.258771	-.229347
2.46	-.284807	-.262158	-.236775	-.208818	-.178452	-.145746	-.111332	-.074577	-.035561
2.62	-.149917	-.118657	-.084862	-.048744	-.010519	.028562	.070092	.114719	.161200
2.78	-.007503	.030987	.071684	.114325	.158653	.202295	.248991	.299364	.351068
2.94	.135747	.179958	.225942	.273393	.322024	.368451	.418384	.472387	.527124
3.10	.274775	.323173	.372828	.423407	.474600	.522158	.573522	.629166	.684910
3.42	.526738	.579142	.631639	.683872	.735531	.781137	.830723	.884529	.937181
3.74	.731827	.783218	.833508	.882375	.929554	.969034	1.012214	1.059056	1.103671
4.06	.885468	.932037	.976432	1.018413	1.057804	1.088699	1.122702	1.159489	1.193269
4.38	.989997	1.029174	1.065328	1.098332	1.128129	1.149440	1.173077	1.198449	1.220360
4.70	1.051260	1.081588	1.108314	1.131448	1.151059	1.162884	1.176156	1.190050	1.200329
5.02	1.076482	1.097408	1.114436	1.127714	1.137434	1.140608	1.144312	1.147527	1.147226
5.34	1.073012	1.084667	1.092391	1.096459	1.097167	1.092943	1.088332	1.082174	1.072782
5.66	1.047645	1.050638	1.049891	1.045783	1.038689	1.028500	1.017030	1.003033	.986213
5.98	1.006309	1.001551	.993420	.982370	.968827	.954109	.937261	.917004	.894408
6.30	.953966	.942532	.928217	.911518	.892886	.874975	.854143	.829127	.802290
6.94	.831521	.810114	.787004	.762689	.737590	.716619	.691360	.660721	.629283
7.58	.703035	.675832	.648115	.620304	.592719	.571863	.545696	.513422	.481242
8.22	.581356	.551715	.522587	.494262	.466930	.448016	.423139	.391856	.361374
8.86	.472776	.443126	.414777	.387868	.362458	.346320	.323915	.295162	.267718
9.50	.379549	.351492	.325264	.300865	.278242	.265067	.245625	.220152	.196321
10.14	.301629	.276096	.252690	.231295	.211772	.201379	.184954	.162989	.142848
10.78	.237771	.215200	.194867	.176571	.160115	.152146	.138546	.119989	.103320
11.42	.186212	.166701	.149401	.134056	.120434	.114478	.103389	.087958	.074391
12.06	.145061	.128492	.114014	.101340	.090226	.085880	.076947	.064273	.053381

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
12.70	.112518	.098648	.086691	.076352	.067388	.064296	.057168	.046859	.038212
13.98	.067035	.057634	.049726	.043039	.037359	.035935	.031491	.024809	.019502
15.26	.039579	.033414	.028339	.024132	.020624	.020099	.017381	.013118	.009946
16.54	.023248	.019298	.016109	.013512	.011383	.011309	.009664	.006955	.005096
17.82	.013627	.011138	.009163	.007580	.006301	.006436	.005443	.003711	.002637
19.10	.007992	.006442	.005231	.004273	.003510	.003726	.003126	.001999	.001386
20.38	.004701	.003744	.003005	.002427	.001972	.002209	.001843	.001090	.000744
21.66	.002781	.002191	.001741	.001393	.001121	.001350	.001123	.000603	.000412
22.94	.001657	.001295	.001020	.000810	.000646	.000856	.000713	.000340	.000236
24.22	.000998	.000775	.000606	.000478	.000379	.000566	.000473	.000195	.000141
25.50	.000608	.000470	.000366	.000286	.000226	.000392	.000329	.000114	.000088
28.06	.000236	.000181	.000140	.000109	.000085	.000214	.000182	.000042	.000040
30.62	.000098	.000075	.000058	.000045	.000035	.000134	.000116	.000016	.000021
33.18	.000044	.000034	.000026	.000020	.000015	.000092	.000081	.000007	.000012
35.74	.000021	.000016	.000012	.000009	.000007	.000067	.000059	.000003	.000008
38.30	.000011	.000008	.000006	.000004	.000003	.000050	.000044	.000001	.000005
40.86	.000006	.000004	.000003	.000002	.000002	.000038	.000033	.000000	.000003
43.42	.000003	.000002	.000002	.000001	.000001	.000028	.000025	.000000	.000002
45.98	.000002	.000001	.000001	.000001	.000000	.000022	.000019	.000000	.000002
48.54	.000001	.000001	.000000	.000000	.000000	.000016	.000015	.000000	.000001
51.10	.000001	.000000	.000000	.000000		.000013	.000011		.000001
56.22	.000000	.000000				.000007	.000006		.000000
61.34	.000000					.000004	.000004		.000000
66.46						.000002	.000002		
71.58						.000001	.000001		
76.70						.000001	.000001		
81.82						.000000	.000000		

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6
-E	3.3932	3.7126	4.0343	4.3592	4.6880	4.7466	5.0686	5.7017	6.4627
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.002924	.003086	.003248	.003412	.003576	.003714	.003881	.004078	.004283
.02	.010819	.011409	.012001	.012596	.013194	.013693	.014296	.015011	.015756
.03	.022507	.023716	.024929	.026145	.027366	.028379	.029608	.031067	.032584
.04	.036973	.038931	.040890	.042853	.044821	.046445	.048420	.050768	.053208
.05	.053354	.056135	.058915	.061695	.064479	.066764	.069549	.072865	.076309
.06	.070913	.074549	.078178	.081802	.085425	.088383	.091998	.096308	.100781
.07	.089026	.093514	.097986	.102445	.106895	.110506	.114932	.120219	.125700
.08	.107172	.112480	.117759	.123014	.128249	.132470	.137660	.143872	.150305
.09	.124917	.130989	.137016	.143006	.148962	.153730	.159614	.166672	.173973
.10	.141903	.148666	.155366	.162010	.168606	.173846	.180337	.188140	.196205
.12	.172499	.180374	.188143	.195813	.203394	.209314	.216712	.225656	.234875
.14	.197311	.205890	.214311	.222583	.230716	.236934	.244794	.254359	.264192
.16	.215413	.224267	.232904	.241337	.249578	.255711	.263578	.273235	.283129
.18	.228425	.235133	.243564	.251734	.259656	.265343	.272789	.282035	.291468
.20	.230367	.238539	.246376	.253895	.261111	.266034	.272674	.281056	.289559
.22	.227547	.234839	.241740	.248270	.254444	.258336	.263844	.270972	.278147
.24	.218473	.224592	.230270	.235530	.240388	.243036	.247148	.252707	.258230
.26	.203784	.208493	.212720	.216487	.219816	.221064	.223583	.227332	.230959
.28	.184194	.187314	.189919	.192033	.193679	.193427	.194219	.195989	.197554
.30	.160458	.161863	.162732	.163088	.162958	.161156	.160146	.159838	.159246
.34	.103564	.101369	.098625	.095362	.091605	.086740	.082116	.077604	.072673
.38	.038884	.033152	.026906	.020178	.012994	.005360	-.002596	-.011030	-.019980
.42	-.028471	-.037395	-.046755	-.056519	-.066658	-.076547	-.087285	-.099051	-.111377
.46	-.094264	-.105838	-.117731	-.129912	-.142351	-.153842	-.166645	-.180947	-.195803

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
X									
.50	-.155180	-.168734	-.182461	-.196330	-.210314	-.222689	-.236753	-.252687	-.269123
.54	-.208781	-.223584	-.238392	-.253177	-.267912	-.280445	-.294947	-.311581	-.328621
.58	-.253418	-.268730	-.283864	-.298796	-.313505	-.325505	-.339654	-.356082	-.372789
.62	-.288121	-.303226	-.317967	-.332324	-.346280	-.357126	-.370197	-.385590	-.401107
.66	-.312475	-.326717	-.340409	-.353540	-.366098	-.375251	-.386615	-.400242	-.413824
.70	-.326517	-.339313	-.351384	-.362725	-.373334	-.380356	-.389490	-.400739	-.411765
.78	-.325435	-.333946	-.341430	-.347902	-.353376	-.355225	-.358779	-.363942	-.368537
.86	-.290530	-.293515	-.295264	-.295811	-.295189	-.291297	-.288508	-.286628	-.283887
.94	-.229405	-.226323	-.221903	-.216201	-.209269	-.199737	-.190603	-.181590	-.171507
1.02	-.150112	-.141018	-.130597	-.118922	-.106065	-.091510	-.076622	-.061066	-.044332
1.10	-.060245	-.045658	-.029858	-.012936	.005020	.023632	.043267	.064296	.086504
1.18	.033555	.052789	.073030	.094172	.116120	.137612	.160738	.185876	.212094
1.26	.125815	.148645	.172200	.196370	.221047	.244166	.269416	.297160	.325799
1.34	.212270	.237543	.263207	.289146	.315253	.338756	.364762	.393595	.423070
1.42	.289791	.316339	.342906	.369381	.395656	.418385	.443857	.472340	.501159
1.50	.356264	.382962	.409293	.435148	.460430	.481354	.505134	.531965	.558794
1.66	.451745	.475758	.498634	.520293	.540662	.555512	.573095	.593432	.613055
1.82	.496209	.514395	.530761	.545265	.557874	.564447	.573254	.584124	.593605
1.98	.493961	.504245	.512166	.517730	.520955	.518225	.516971	.516834	.514742
2.14	.452677	.453949	.452481	.448335	.441580	.429460	.417906	.406399	.392522
2.30	.381123	.373055	.362043	.348207	.331668	.310750	.289433	.267073	.242098
2.46	.287804	.270659	.250533	.227599	.202034	.173360	.143346	.111259	.076484
2.62	.180283	.154742	.126333	.095285	.061821	.026702	-.010623	-.050929	-.093834
2.78	.064909	.031931	-.003668	-.041611	-.081631	-.121756	-.164838	-.211655	-.260839
2.94	-.053201	-.092494	-.134046	-.177540	-.222672	-.266342	-.313582	-.365137	-.418709
3.10	-.170072	-.214475	-.260685	-.308350	-.357142	-.402943	-.452785	-.507346	-.563481
3.42	-.388995	-.439989	-.491693	-.543723	-.595730	-.642001	-.692833	-.748696	-.805086
3.74	-.577094	-.630200	-.682802	-.734532	-.785071	-.827751	-.875025	-.927091	-.978585
4.06	-.728491	-.779969	-.829759	-.877555	-.923115	-.959443	-1.000032	-1.044773	-1.087940
4.38	-.842758	-.889752	-.934012	-.975338	-1.013599	-1.042027	-1.074127	-1.109479	-1.142440
4.70	-.922549	-.963076	-1.000036	-1.033365	-1.063059	-1.083036	-1.105932	-1.131030	-1.153137
5.02	-.972045	-1.004902	-1.033611	-1.058251	-1.078958	-1.090678	-1.104462	-1.119326	-1.130815
5.34	-.995974	-1.020609	-1.040768	-1.056679	-1.068603	-1.072755	-1.078063	-1.083313	-1.084998
5.66	-.999039	-1.015405	-1.027208	-1.034809	-1.038578	-1.036145	-1.033935	-1.030553	-1.023577
5.98	-.985590	-.994014	-.997996	-.998009	-.994510	-.986607	-.977991	-.967144	-.952798
6.30	-.959477	-.960540	-.957455	-.950780	-.941030	-.928783	-.914911	-.897821	-.877423
6.94	-.881908	-.870563	-.856013	-.838898	-.819768	-.801935	-.780773	-.754707	-.725894
7.58	-.786483	-.766113	-.743714	-.719906	-.695188	-.675099	-.650236	-.619220	-.586127
8.22	-.686321	-.660112	-.633065	-.605698	-.578407	-.558345	-.532396	-.499505	-.465210
8.86	-.589350	-.559980	-.530838	-.502295	-.474610	-.455955	-.430660	-.398061	-.364671
9.50	-.499928	-.469479	-.440126	-.412078	-.385457	-.368907	-.345318	-.314425	-.283261
10.14	-.420088	-.390071	-.361798	-.335327	-.310653	-.296448	-.275117	-.246763	-.218553
10.78	-.350405	-.321841	-.295465	-.271196	-.248925	-.237024	-.218163	-.192759	-.167806
11.42	-.290593	-.264114	-.240084	-.218311	-.198609	-.188814	-.172417	-.150078	-.128400
12.06	-.239899	-.215839	-.194341	-.175133	-.157969	-.150013	-.135942	-.116590	-.098026
12.70	-.197348	-.175828	-.156870	-.140145	-.125373	-.118972	-.107020	-.090459	-.074744
13.98	-.132561	-.115941	-.101662	-.089348	-.078697	-.074625	-.066194	-.054407	-.043440
15.26	-.088532	-.076121	-.065687	-.056866	-.049375	-.046802	-.040976	-.032825	-.025360
16.54	-.059023	-.049960	-.042486	-.036278	-.031091	-.029451	-.025476	-.019952	-.014953
17.82	-.039406	-.032887	-.027600	-.023277	-.019719	-.018648	-.015954	-.012267	-.008949
19.10	-.026420	-.021774	-.018061	-.015068	-.012635	-.011913	-.010092	-.007655	-.005462
20.38	-.017832	-.014536	-.011937	-.009866	-.008203	-.007695	-.006462	-.004864	-.003414
21.66	-.012142	-.009806	-.007985	-.006550	-.005408	-.005037	-.004198	-.003155	-.002192
22.94	-.008356	-.006698	-.005417	-.004417	-.003628	-.003346	-.002771	-.002092	-.001449
24.22	-.005822	-.004639	-.003732	-.003029	-.002479	-.002259	-.001862	-.001420	-.000987
25.50	-.004111	-.003261	-.002614	-.002115	-.001726	-.001551	-.001273	-.000986	-.000692
28.06	-.002140	-.001688	-.001347	-.001087	-.000885	-.000769	-.000629	-.000507	-.000368
30.62	-.001179	-.000928	-.000739	-.000595	-.000485	-.000407	-.000332	-.000279	-.000213
33.18	-.000684	-.000537	-.000427	-.000344	-.000280	-.000228	-.000186	-.000163	-.000132
35.74	-.000413	-.000323	-.000257	-.000207	-.000169	-.000133	-.000109	-.000098	-.000085

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
X									
38.30	-.000258	-.000201	-.000159	-.000128	-.000104	-.000081	-.000066	-.000061	-.000057
40.86	-.000165	-.000128	-.000101	-.000081	-.000066	-.000050	-.000041	-.000039	-.000039
43.42	-.000107	-.000082	-.000065	-.000052	-.000042	-.000032	-.000026	-.000025	-.000027
45.98	-.000070	-.000054	-.000042	-.000034	-.000027	-.000021	-.000017	-.000016	-.000020
48.54	-.000046	-.000035	-.000028	-.000022	-.000018	-.000013	-.000011	-.000010	-.000014
51.10	-.000031	-.000023	-.000018	-.000014	-.000012	-.000009	-.000007	-.000007	-.000010
56.22	-.000014	-.000010	-.000008	-.000006	-.000005	-.000004	-.000003	-.000003	-.000006
61.34	-.000006	-.000004	-.000003	-.000002	-.000002	-.000002	-.000001	-.000001	-.000003
66.46	-.000003	-.000002	-.000001	-.000001	-.000001	-.000001	-.000001	-.000000	-.000002
71.58	-.000001	-.000001	-.000000	.000000	.000000	.000000	.000000	.000000	-.000001
76.70	-.000001	.000000	.000000	.000000	.000000	.000000	.000000		-.000001
81.82	.000000	.000000							.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	SD 3	SD 4	SD 5	SD 6	SD 7	SD 9	SD 10	SD 10	SD 10
-E	.70329	.80577	.90757	1.0096	1.1124	.95290	1.0420	1.4284	1.9365
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000019	.000021	.000023	.000026	.000028	.000029	.000031	.000034	.000038
.02	.000145	.000161	.000178	.000194	.000211	.000220	.000236	.000261	.000287
.03	.000464	.000517	.000570	.000622	.000675	.000704	.000755	.000835	.000916
.04	.001045	.001164	.001282	.001400	.001518	.001582	.001697	.001874	.002055
.05	.001940	.002160	.002378	.002595	.002813	.002930	.003142	.003468	.003801
.06	.003187	.003547	.003902	.004257	.004612	.004801	.005146	.005678	.006220
.07	.004811	.005353	.005886	.006418	.006950	.007232	.007748	.008544	.009356
.08	.006830	.007595	.008347	.009096	.009846	.010240	.010966	.012087	.013229
.09	.009248	.010279	.011292	.012299	.013307	.013833	.014806	.016312	.017845
.10	.012066	.013404	.014718	.016023	.017328	.018004	.019261	.021210	.023192
.12	.018867	.020939	.022969	.024981	.026989	.028014	.029942	.032940	.035982
.14	.027120	.030068	.032951	.035801	.038640	.040068	.042783	.047020	.051312
.16	.036654	.040597	.044444	.048240	.052013	.053881	.057473	.063102	.068793
.18	.047263	.052294	.057190	.062011	.066792	.069120	.073653	.080783	.087979
.20	.058722	.064905	.070907	.076804	.082639	.085431	.090938	.099637	.108400
.22	.070800	.078170	.085308	.092304	.099211	.102454	.108942	.119236	.129584
.24	.083267	.091835	.100111	.108204	.116174	.119840	.127290	.139167	.151079
.26	.095902	.105654	.115047	.124209	.133209	.137261	.145631	.159040	.172461
.28	.108501	.119397	.129864	.140046	.150022	.154410	.163638	.178501	.193340
.30	.120872	.132855	.144334	.155468	.166348	.171014	.181020	.197228	.213370
.34	.144264	.158183	.171432	.184207	.196617	.201638	.212910	.231398	.249714
.38	.164940	.180388	.194993	.208980	.222478	.227566	.239651	.259769	.279581
.42	.182064	.198569	.214052	.228768	.242860	.247718	.260127	.281150	.301713
.46	.195084	.212139	.227995	.242933	.257112	.261453	.273691	.294874	.315426
.50	.203693	.220785	.236511	.251172	.264940	.268503	.280096	.300711	.320519
.54	.207794	.224426	.239539	.253450	.266341	.268903	.279415	.298784	.317170
.58	.207451	.223161	.237218	.249949	.261543	.262919	.271972	.289486	.305847
.62	.202863	.217232	.229837	.241010	.250945	.250997	.258269	.273402	.287226
.66	.194319	.206984	.217798	.227093	.235068	.233700	.238935	.251253	.262124
.70	.182180	.192833	.201574	.208733	.214509	.211668	.214678	.223838	.231435
.78	.148742	.154679	.158670	.161024	.161936	.156147	.154381	.156561	.157026
.86	.105947	.106621	.105425	.102639	.098442	.089921	.083321	.078185	.071297
.94	.057146	.052407	.045984	.038110	.028947	.018114	.006986	-.005243	-.019140
1.02	.005376	-.004595	-.015964	-.028567	-.042253	-.054845	-.069922	-.088591	-.108733
1.10	-.046764	-.061529	-.077340	-.094075	-.111626	-.125350	-.143615	-.167771	-.193103
1.18	-.097157	-.116099	-.135666	-.155800	-.176424	-.190630	-.211219	-.239720	-.269019
1.26	-.144164	-.166546	-.189090	-.211801	-.234638	-.248691	-.270704	-.302316	-.334286
1.34	-.186584	-.211607	-.236302	-.260739	-.284911	-.298224	-.320773	-.354247	-.387596
1.42	-.223604	-.250450	-.276468	-.301790	-.326447	-.338495	-.360742	-.394872	-.428368



	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
X	SD 3	SD 4	SD 5	SD 6	SD 7	SD 9	SD 10	SD 10	SD 10
1.50	-.254738	-.282606	-.309148	-.334556	-.358901	-.369235	-.390416	-.424076	-.456587
1.66	-.298703	-.326383	-.351799	-.375250	-.396883	-.402755	-.419880	-.449671	-.477314
1.82	-.319022	-.343974	-.365845	-.385032	-.401747	-.402281	-.413423	-.436276	-.456097
1.98	-.318209	-.338472	-.355003	-.368273	-.378558	-.373394	-.377352	-.391189	-.401279
2.14	-.299660	-.313842	-.323821	-.330122	-.333076	-.322253	-.318442	-.322064	-.321423
2.30	-.266964	-.274174	-.276888	-.275672	-.270900	-.254748	-.243072	-.236002	-.224365
2.46	-.223508	-.223269	-.218413	-.209532	-.197037	-.176080	-.156816	-.139145	-.116813
2.62	-.172288	-.164454	-.152042	-.135657	-.115741	-.090632	-.064325	-.036570	-.004258
2.78	-.115846	-.100528	-.080818	-.057322	-.030504	-.001966	.030655	.067671	.108956
2.94	-.056278	-.033782	-.007210	.022840	.055887	.087100	.125187	.170438	.219507
3.10	.004727	.033951	.066820	.102752	.141261	.174398	.217041	.269376	.324941
3.42	.125994	.166952	.210412	.255851	.302794	.337645	.386630	.449508	.514126
3.74	.240527	.290608	.341774	.393599	.445662	.479733	.531590	.600325	.669061
4.06	.344201	.400711	.456736	.511988	.566142	.597481	.649249	.719717	.788373
4.38	.435074	.495463	.553753	.609833	.663516	.690749	.740106	.808947	.874227
4.70	.512606	.574598	.632924	.687685	.738867	.761163	.806426	.871082	.930578
5.02	.577126	.638779	.695317	.747082	.794256	.811248	.851312	.909955	.962046
5.34	.629468	.689191	.742517	.790048	.832179	.843871	.878106	.929532	.973242
5.66	.670730	.727265	.776324	.818773	.855223	.861889	.890038	.933545	.968405
5.98	.702113	.754510	.798567	.835412	.865863	.867963	.890046	.925318	.951238
6.30	.724824	.772400	.810991	.841973	.866357	.864460	.880692	.907700	.924865
6.94	.748761	.785513	.812611	.831862	.844592	.836586	.842216	.853389	.854301
7.58	.750646	.776083	.791916	.800262	.802652	.790973	.787805	.784809	.771771
8.22	.736951	.751456	.756965	.755770	.749489	.736213	.726091	.710992	.686574
8.86	.712626	.717095	.713569	.704382	.691144	.677868	.662467	.637405	.604126
9.50	.681368	.676956	.665799	.650161	.631558	.619407	.600159	.567175	.527342
10.14	.645896	.633853	.616447	.595781	.573215	.562908	.540991	.501941	.457585
10.78	.608181	.589753	.567385	.542948	.517607	.509538	.485898	.442425	.395272
11.42	.569641	.546005	.519825	.492697	.465564	.459883	.435270	.388790	.340273
12.06	.531279	.503511	.474523	.445609	.417481	.414164	.389161	.340876	.292152
12.70	.493792	.462850	.431915	.401960	.373471	.372380	.347435	.298344	.250321
13.98	.423155	.388272	.355484	.325141	.297300	.299991	.276094	.227682	.182962
15.26	.359748	.323401	.290733	.261532	.235496	.240935	.218832	.173178	.133217
16.54	.304102	.268024	.236738	.209569	.185927	.193131	.173171	.131452	.096789
17.82	.255979	.221321	.192170	.167483	.146459	.154613	.136895	.099652	.070250
19.10	.214776	.182256	.155632	.133589	.115183	.123662	.108142	.075485	.050975
20.38	.179747	.149767	.125817	.106398	.090479	.098838	.085381	.057151	.037001
21.66	.150121	.122858	.101570	.084643	.071008	.078951	.067382	.043257	.026879
22.94	.125161	.100640	.081900	.067274	.055686	.063034	.053157	.032735	.019549
24.22	.104196	.082339	.065973	.053426	.043643	.050302	.041921	.024771	.014239
25.50	.086629	.067293	.053096	.042399	.034187	.040125	.033049	.018744	.010389
28.06	.059675	.044820	.034313	.026654	.020949	.025499	.020521	.010734	.005568
30.62	.040943	.029752	.022114	.016720	.012818	.016179	.012728	.006149	.003016
33.18	.027992	.019691	.014217	.010469	.007832	.010250	.007885	.003526	.001656
35.74	.019077	.012997	.009121	.006544	.004781	.006484	.004880	.002024	.000923
38.30	.012963	.008558	.005839	.004085	.002915	.004097	.003018	.001163	.000524
40.86	.008785	.005622	.003732	.002546	.001777	.002585	.001865	.000670	.000304
43.42	.005939	.003686	.002381	.001586	.001082	.001630	.001151	.000387	.000180
45.98	.004006	.002412	.001517	.000986	.000659	.001026	.000711	.000224	.000109
48.54	.002696	.001576	.000965	.000613	.000401	.000646	.000439	.000130	.000067
51.10	.001811	.001028	.000614	.000381	.000244	.000406	.000271	.000076	.000042
56.22	.000813	.000435	.000247	.000147	.000091	.000160	.000103	.000026	.000018
61.34	.000363	.000183	.000099	.000057	.000034	.000063	.000039	.000009	.000008
66.46	.000161	.000077	.000040	.000022	.000013	.000025	.000015	.000003	.000004
71.58	.000071	.000032	.000016	.000008	.000005	.000010	.000006	.000001	.000002
76.70	.000031	.000013	.000006	.000003	.000002	.000004	.000002	.000000	.000001
81.82	.000014	.000006	.000003	.000001	.000001	.000002	.000001	.000000	.000000
86.94	.000006	.000002	.000001	.000001	.000000	.000001	.000000	.000000	.000000
92.06	.000003	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
97.18	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 1	6S 1	6S 2	6S 2
-E	.43946	.45538	.46934	.48184	.49317	.43594	.44155	.52209	.72223
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.017431	.018176	.018832	.019418	.019947	.018088	.018388	.021271	.024695
.02	.029527	.030739	.031796	.032732	.033569	.030390	.030845	.035623	.041289
.03	.037161	.038613	.039867	.040964	.041933	.037892	.038387	.044250	.051194
.04	.041095	.042609	.043897	.045007	.045971	.041451	.041901	.048196	.055637
.05	.041998	.043433	.044630	.045639	.046495	.041814	.042157	.048362	.055680
.06	.040450	.041699	.042711	.043536	.044209	.039627	.039821	.045529	.052242
.07	.036958	.037943	.038702	.039284	.039720	.035450	.035466	.040369	.046111
.08	.031960	.032626	.033087	.033386	.033553	.029762	.029588	.033460	.037966
.09	.025833	.026147	.026283	.026278	.026159	.022976	.022609	.025295	.028383
.10	.018904	.018848	.018647	.018331	.017923	.015444	.014888	.016293	.017854
.12	.003711	.002917	.002053	.001136	.000178	-.000715	-.001605	-.002857	-.004455
.14	-.011862	-.013329	-.014780	-.016218	-.017639	-.016859	-.018000	-.021799	-.026411
.16	-.026580	-.028601	-.030523	-.032361	-.034127	-.031719	-.033011	-.039047	-.046296
.18	-.039612	-.042043	-.044293	-.046395	-.048369	-.044473	-.045811	-.053658	-.063027
.20	-.050442	-.053125	-.055555	-.057777	-.059823	-.054642	-.055925	-.065095	-.075999
.22	-.058788	-.061569	-.064032	-.066238	-.068226	-.062000	-.063138	-.073127	-.084962
.24	-.064550	-.067280	-.069643	-.071708	-.073521	-.066511	-.067426	-.077743	-.089923
.26	-.067755	-.070303	-.072447	-.074262	-.075800	-.068270	-.068902	-.079089	-.091070
.28	-.068529	-.070780	-.072603	-.074078	-.075261	-.067470	-.067774	-.077420	-.088716
.30	-.067058	-.068919	-.070339	-.071403	-.072169	-.064362	-.064307	-.073057	-.083249
.34	-.058329	-.059203	-.059652	-.059758	-.059579	-.052397	-.051592	-.057719	-.064733
.38	-.043625	-.043368	-.042742	-.041822	-.040660	-.034818	-.033302	-.036087	-.039096
.42	-.025038	-.023635	-.021954	-.020055	-.017982	-.013991	-.011875	-.011022	-.009704
.46	-.004480	-.002019	.000603	.003347	.006182	.008008	.010563	.015000	.020556
.50	.016423	.019776	.023162	.026561	.029957	.029480	.032287	.039990	.049377
.54	.036364	.040397	.044328	.048159	.051891	.049122	.051987	.062449	.075044
.58	.054356	.058831	.063071	.067100	.070935	.066004	.068742	.081338	.096382
.62	.069701	.074374	.078687	.082684	.086399	.079528	.081969	.096015	.112687
.66	.081959	.086593	.090753	.094506	.097898	.089373	.091372	.106175	.123644
.70	.090901	.095276	.099082	.102402	.105295	.095444	.096884	.111774	.129243
.78	.098750	.102059	.104661	.106671	.108166	.096716	.096808	.110082	.125443
.86	.094237	.095947	.096899	.097221	.097005	.085342	.083967	.093740	.104797
.94	.079549	.079381	.078484	.076987	.074987	.064341	.061573	.066632	.072002
1.02	.057375	.055274	.052541	.049300	.045643	.037002	.033056	.032829	.031898
1.10	.030435	.026528	.022143	.017387	.012342	.006423	.001609	-.003930	-.011128
1.18	.001216	-.004237	-.009975	-.015912	-.021985	-.024735	-.030059	-.040508	-.053436
1.26	-.028170	-.034823	-.041543	-.048272	-.054966	-.054343	-.059811	-.074461	-.092232
1.34	-.056039	-.063502	-.070800	-.077911	-.084812	-.080822	-.086083	-.104034	-.125545
1.42	-.081132	-.088998	-.096474	-.103567	-.110281	-.103097	-.107837	-.128093	-.152136
1.50	-.102575	-.110454	-.117726	-.124435	-.130606	-.120530	-.124485	-.146027	-.171379
1.66	-.132658	-.139520	-.145409	-.150431	-.154661	-.140038	-.141846	-.163080	-.187639
1.82	-.145025	-.149790	-.153331	-.155808	-.157335	-.140066	-.139313	-.157018	-.177016
1.98	-.141170	-.143158	-.143800	-.143294	-.141786	-.123775	-.120410	-.132292	-.145106
2.14	-.123975	-.122874	-.120430	-.116860	-.112333	-.095272	-.089515	-.094217	-.098358
2.30	-.096789	-.092588	-.087152	-.080710	-.073436	-.058703	-.050954	-.047942	-.042904
2.46	-.062875	-.055785	-.047660	-.038723	-.029149	-.017776	-.008541	.002058	.016004
2.62	-.025123	-.015513	-.005136	.005797	.017123	.024434	.034602	.052169	.074177
2.78	.014058	.025721	.037830	.050199	.062682	.065520	.076068	.099644	.128479
2.94	.052758	.065952	.079236	.092458	.105497	.103704	.114104	.142520	.176720
3.10	.089523	.103705	.117605	.131109	.144128	.137747	.147522	.179504	.217503
3.42	.153373	.167949	.181497	.194000	.205441	.190628	.197981	.233242	.274185
3.74	.200826	.213913	.225302	.235084	.243332	.221746	.225580	.259441	.297781
4.06	.230613	.240721	.248600	.254455	.258452	.232169	.231930	.260627	.292010
4.38	.243552	.249628	.253118	.254339	.253548	.224747	.220325	.241145	.262526

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 1	6S 1	6S 2	6S 2
X									
4.70	.241570	.242972	.241622	.237936	.232250	.202996	.194615	.205822	.215357
5.02	.227059	.223505	.217217	.208690	.198322	.170445	.158540	.159230	.156060
5.34	.202494	.193989	.182933	.169877	.155260	.130283	.115405	.105323	.089358
5.66	.170208	.156974	.141508	.124397	.106093	.085213	.067956	.047328	.019033
5.98	.132282	.114691	.095300	.074697	.053329	.037422	.018369	-.012238	-.052311
6.30	.090503	.069027	.046260	.022768	-.001033	-.011383	-.031691	-.071484	-.121637
6.94	.001086	-.026565	-.054362	-.081856	-.108741	-.107236	-.128673	-.183970	-.251074
7.58	-.089213	-.120883	-.151538	-.180913	-.208864	-.195804	-.216972	-.283673	-.362447
8.22	-.174923	-.208658	-.240326	-.269886	-.297373	-.274106	-.294088	-.368211	-.453650
8.86	-.252946	-.287111	-.318341	-.346827	-.372779	-.341235	-.359486	-.437439	-.525119
9.50	-.321766	-.355074	-.384794	-.411333	-.435057	-.397402	-.413647	-.492332	-.578531
10.14	-.380880	-.412371	-.439835	-.463869	-.484963	-.443367	-.457513	-.534351	-.616063
10.78	-.430409	-.459408	-.484140	-.505352	-.523630	-.480119	-.492188	-.565102	-.640000
11.42	-.470846	-.496913	-.518645	-.536901	-.552328	-.508697	-.518783	-.586159	-.652534
12.06	-.502887	-.525770	-.544393	-.559686	-.572332	-.530109	-.538344	-.598980	-.655660
12.70	-.527323	-.546914	-.562435	-.574850	-.584851	-.545285	-.551821	-.604876	-.651152
13.98	-.556628	-.569728	-.579370	-.586499	-.591763	-.560203	-.563813	-.600369	-.625166
15.26	-.564982	-.572136	-.576612	-.579251	-.580603	-.559119	-.560399	-.580178	-.584362
16.54	-.557804	-.559812	-.559969	-.558958	-.557208	-.546449	-.545919	-.549887	-.535670
17.82	-.539547	-.537286	-.533967	-.530096	-.525970	-.525606	-.523702	-.513570	-.483836
19.10	-.513745	-.508067	-.502049	-.496016	-.490140	-.499225	-.496304	-.474151	-.432006
20.38	-.483136	-.474820	-.466786	-.459187	-.452079	-.469332	-.465686	-.433707	-.382182
21.66	-.449805	-.439534	-.430064	-.421395	-.413481	-.437480	-.433345	-.393680	-.335556
22.94	-.415306	-.403666	-.393245	-.383910	-.375531	-.404852	-.400414	-.355047	-.292765
24.22	-.380782	-.368261	-.357285	-.347609	-.339033	-.372330	-.367738	-.318442	-.254069
25.50	-.347050	-.334048	-.322835	-.313074	-.304510	-.340566	-.335937	-.284245	-.219477
28.06	-.284031	-.270972	-.259980	-.250595	-.242488	-.281023	-.276565	-.223741	-.161910
30.62	-.228740	-.216424	-.206246	-.197680	-.190372	-.228364	-.224278	-.173770	-.117760
33.18	-.181848	-.170714	-.161648	-.154110	-.147742	-.183263	-.179645	-.133490	-.085084
35.74	-.143040	-.133279	-.125430	-.118972	-.113563	-.145540	-.142417	-.101613	-.060869
38.30	-.111510	-.103152	-.096507	-.091088	-.086584	-.114561	-.111918	-.076749	-.043249
40.86	-.086267	-.079243	-.073715	-.069244	-.065554	-.089490	-.087290	-.057582	-.030553
43.42	-.066297	-.060484	-.055951	-.052314	-.049331	-.069444	-.067635	-.042950	-.021478
45.98	-.050654	-.045905	-.042233	-.039308	-.036925	-.053575	-.052105	-.031971	-.015035
48.54	-.038504	-.034665	-.031723	-.029394	-.027508	-.041120	-.039936	-.023542	-.010487
51.10	-.029134	-.026061	-.023724	-.021886	-.020406	-.031416	-.030470	-.017319	-.007291
56.22	-.016482	-.014559	-.013117	-.011998	-.011105	-.018119	-.017528	-.009274	-.003498
61.34	-.009199	-.008027	-.007160	-.006494	-.005969	-.010309	-.009948	-.004906	-.001664
66.46	-.005077	-.004377	-.003866	-.003478	-.003175	-.005799	-.005583	-.002569	-.000787
71.58	-.002775	-.002364	-.002068	-.001846	-.001673	-.003231	-.003104	-.001334	-.000371
76.70	-.001505	-.001267	-.001098	-.000972	-.000875	-.001786	-.001711	-.000688	-.000174
81.82	-.000810	-.000674	-.000579	-.000509	-.000455	-.000980	-.000937	-.000352	-.000082
86.94	-.000433	-.000357	-.000303	-.000265	-.000235	-.000534	-.000510	-.000179	-.000038
92.06	-.000231	-.000188	-.000158	-.000137	-.000121	-.000290	-.000276	-.000091	-.000018
97.18	-.000122	-.000098	-.000082	-.000070	-.000062	-.000156	-.000149	-.000046	-.000009
102.30	-.000064	-.000051	-.000042	-.000036	-.000032	-.000084	-.000080	-.000023	-.000004
112.54	-.000018	-.000014	-.000011	-.000009	-.000008	-.000024	-.000023	-.000006	-.000001
122.78	-.000005	-.000004	-.000003	-.000002	-.000002	-.000007	-.000006	-.000001	-.000000
133.02	-.000001	-.000001	-.000001	-.000001	-.000001	-.000002	-.000002	-.000000	-.000000
143.26	-.000000	-.000000	-.000000	-.000000	-.000000	-.000001	-.000000	-.000000	-.000000

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 1
-E									.38480
X									
.00									.000000
.01									.000916
.02									.003371
.03									.006972
.04									.011385

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 1
X									
.05									.016327
.06									.021563
.07									.026893
.08									.032156
.09									.037218
.10									.041972
.12									.050237
.14									.056498
.16									.060534
.18									.062299
.20									.061868
.22									.059402
.24									.055114
.26									.049252
.28									.042078
.30									.033856
.34									.015289
.38									-.004564
.42									-.024125
.46									-.042168
.50									-.057805
.54									-.070453
.58									-.079792
.62									-.085711
.66									-.088268
.70									-.087643
.78									-.077989
.86									-.059464
.94									-.035048
1.02									-.007558
1.10									.020587
1.18									.047450
1.26									.071590
1.34									.092025
1.42									.108169
1.50									.119757
1.66									.129415
1.82									.122846
1.98									.103343
2.14									.074593
2.30									.040076
2.46									.002791
2.62									-.034833
2.78									-.070933
2.94									-.104152
3.10									-.133566
3.42									-.178984
3.74									-.205650
4.06									-.214710
4.38									-.208646
4.70									-.190408
5.02									-.162897
5.34									-.128717
5.66									-.090063
5.98									-.048717
6.30									-.006079
6.94									.079057
7.58									.159697
8.22									.232977
8.86									.297699

	TA 73	W 74	RE 75	OS 76	IR 77	PT 78	AU 79	HG 80	TL 81
	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 0	6P 1
X									
9.50									.353613
10.14									.400989
10.78									.440366
11.42									.472406
12.06									.497810
12.70									.517274
13.98									.541004
15.26									.548372
16.54									.543372
17.82									.529253
19.10									.508621
20.38									.483537
21.66									.455621
22.94									.426129
24.22									.396025
25.50									.366037
28.06									.308427
30.62									.256000
33.18									.209919
35.74									.170412
38.30									.137175
40.86									.109625
43.42									.087059
45.98									.068760
48.54									.054044
51.10									.042294
56.22									.025612
61.34									.015312
66.46									.009057
71.58									.005309
76.70									.003087
81.82									.001783
86.94									.001024
92.06									.000585
97.18									.000332
102.30									.000188
112.54									.000060
122.78									.000019
133.02									.000006
143.26									.000002
153.50									.000001
163.74									.000000

TABLE IV. RADIAL WAVEFUNCTIONS

	PB 6P2	R=0.20378528*X	FR 7S1	R=0.19980408*X					
	BI 6P3	R=0.20296356*X	RA 7S2	R=0.19904436*X					
	PO 6P4	R=0.20215493*X	AC 6D1	R=0.19829606*X					
	AT 6P5	R=0.20135903*X	TH 6D2	R=0.19755890*X					
	RN 6P6	R=0.20057553*X							
	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	5850.7	6000.2	6151.7	6305.2	6460.5	6618.2	6777.8	6939.2	7102.4
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	2.543411	2.576333	2.609249	2.642157	2.675058	2.707952	2.740838	2.773716	2.806584
.02	4.304832	4.354649	4.404338	4.453895	4.503325	4.552625	4.601795	4.650836	4.699748
.03	5.465313	5.521079	5.576550	5.631727	5.686614	5.741210	5.795517	5.849537	5.903270
.04	6.168499	6.223012	6.277068	6.330671	6.383826	6.436534	6.488801	6.540629	6.592021
.05	6.527884	6.576670	6.624866	6.672477	6.719513	6.765977	6.811875	6.857215	6.902001
.06	6.632731	6.673270	6.713125	6.752306	6.790823	6.828684	6.865897	6.902471	6.938414
.07	6.552878	6.584022	6.614432	6.644121	6.673100	6.701381	6.728974	6.755890	6.782140
.08	6.342633	6.364171	6.384967	6.405032	6.424384	6.443034	6.460996	6.478282	6.494905
.09	6.043923	6.056261	6.067880	6.078798	6.089030	6.098592	6.107497	6.115761	6.123397
.10	5.688838	5.692758	5.696014	5.698623	5.700604	5.701971	5.702741	5.702928	5.702549
.12	4.900572	4.890730	4.880390	4.869569	4.858286	4.846557	4.834398	4.821826	4.808856
.14	4.106152	4.086871	4.067293	4.047433	4.027310	4.006938	3.986331	3.965505	3.944472
.16	3.371825	3.346965	3.322007	3.296964	3.271853	3.246682	3.221465	3.196213	3.170937
.18	2.726787	2.699409	2.672109	2.644897	2.617783	2.590774	2.563878	2.537103	2.510456
.20	2.178910	2.151244	2.123796	2.096570	2.069574	2.042809	2.016282	1.989994	1.963949
.22	1.724494	1.698034	1.671892	1.646070	1.620570	1.595391	1.570534	1.545998	1.521783
.24	1.354194	1.329845	1.305880	1.282296	1.259091	1.236261	1.213803	1.191714	1.169991
.26	1.056517	1.034746	1.013392	.992450	.971914	.951779	.932038	.912686	.893716
.28	.819785	.800747	.782135	.763942	.746160	.728780	.711795	.695196	.678977
.30	.633153	.616799	.600862	.585332	.570200	.555456	.541090	.527095	.513460
.34	.373412	.361832	.350615	.339750	.329227	.319034	.309161	.299599	.290337
.38	.217607	.209739	.202163	.194867	.187841	.181074	.174557	.168280	.162235
.42	.125660	.120475	.115511	.110756	.106203	.101843	.097667	.093667	.089836
.46	.072052	.068714	.065535	.062507	.059623	.056877	.054261	.051769	.049394
.50	.041083	.038971	.036972	.035077	.033283	.031583	.029973	.028446	.027000
.54	.023315	.021998	.020758	.019589	.018488	.017450	.016472	.015550	.014681
.58	.013174	.012362	.011600	.010887	.010218	.009592	.009004	.008453	.007937
.62	.007408	.006911	.006448	.006016	.005614	.005239	.004889	.004562	.004258
.66	.004138	.003837	.003557	.003298	.003057	.002834	.002627	.002435	.002257
.70	.002289	.002107	.001939	.001784	.001641	.001509	.001387	.001275	.001171
.78	.000689	.000624	.000565	.000512	.000463	.000418	.000378	.000341	.000307
.86	.000205	.000183	.000163	.000145	.000129	.000115	.000102	.000090	.000080
.94	.000060	.000053	.000047	.000041	.000036	.000031	.000027	.000024	.000020
1.02	.000018	.000015	.000013	.000011	.000010	.000008	.000007	.000006	.000005
1.10	.000005	.000004	.000004	.000003	.000003	.000002	.000002	.000002	.000001
1.18	.000001	.000001	.000001	.000001	.000001	.000001	.000000	.000000	.000000
1.26	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	997.19	1025.7	1054.6	1084.0	1113.8	1144.4	1175.5	1206.8	1238.6
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.845483	.856887	.868289	.879688	.891084	.902479	.913871	.925260	.936646
.02	1.414646	1.431488	1.448277	1.465012	1.481693	1.498321	1.514897	1.531418	1.547885
.03	1.758402	1.776215	1.793896	1.811448	1.828871	1.846167	1.863335	1.880374	1.897286
.04	1.920082	1.935611	1.950927	1.966029	1.980920	1.995601	2.010075	2.024341	2.038399

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
.05	1.936443	1.947419	1.958101	1.968492	1.978595	1.988413	1.997948	2.007201	2.016174
.06	1.838568	1.843504	1.848080	1.852300	1.856169	1.859690	1.862867	1.865703	1.868200
.07	1.652645	1.650677	1.648301	1.645522	1.642346	1.638778	1.634824	1.630487	1.625773
.08	1.400652	1.391401	1.381714	1.371598	1.361060	1.350108	1.338748	1.326985	1.314825
.09	1.100941	1.084402	1.067421	1.050006	1.032167	1.013910	.995245	.976178	.956718
.10	.768759	.745208	.721229	.696834	.672031	.646829	.621240	.595269	.568928
.12	.055010	.019024	-.017302	-.053958	-.090931	-.128210	-.165785	-.203643	-.241774
.14	-.665393	-.710974	-.756749	-.802707	-.848834	-.895119	-.941550	-.988114	-1.034800
.16	-1.344122	-1.396135	-1.448159	-1.500181	-1.552187	-1.604169	-1.656113	-1.708008	-1.759840
.18	-1.952190	-2.007556	-2.062730	-2.117700	-2.172455	-2.226987	-2.281286	-2.335339	-2.389137
.20	-2.474322	-2.530275	-2.585833	-2.640985	-2.695726	-2.750048	-2.803944	-2.857403	-2.910421
.22	-2.904761	-2.958968	-3.012589	-3.065619	-3.118054	-3.169892	-3.221128	-3.271755	-3.321772
.24	-3.244171	-3.294770	-3.344618	-3.393713	-3.442055	-3.489646	-3.536486	-3.582572	-3.627906
.26	-3.497365	-3.542961	-3.587670	-3.631494	-3.674440	-3.716512	-3.757716	-3.798052	-3.837527
.28	-3.671663	-3.711290	-3.749926	-3.787582	-3.824265	-3.859987	-3.894757	-3.928581	-3.961470
.30	-3.775722	-3.808788	-3.840798	-3.871763	-3.901699	-3.930619	-3.958538	-3.985467	-4.011419
.34	-3.809752	-3.829147	-3.847449	-3.864680	-3.880861	-3.896016	-3.910164	-3.923326	-3.935524
.38	-3.670223	-3.676676	-3.682113	-3.686559	-3.690044	-3.692594	-3.694236	-3.694996	-3.694900
.42	-3.418537	-3.413858	-3.408317	-3.401943	-3.394770	-3.386824	-3.378137	-3.368738	-3.358655
.46	-3.103454	-3.089928	-3.075742	-3.060924	-3.045510	-3.029525	-3.013000	-2.995967	-2.978452
.50	-2.761239	-2.741221	-2.720762	-2.699890	-2.678636	-2.657025	-2.635085	-2.612846	-2.590332
.54	-2.417306	-2.392977	-2.368418	-2.343657	-2.318722	-2.293634	-2.268417	-2.243098	-2.217697
.58	-2.088337	-2.061560	-2.034748	-2.007925	-1.981115	-1.954332	-1.927598	-1.900934	-1.874355
.62	-1.784351	-1.756634	-1.729050	-1.701618	-1.674355	-1.647273	-1.620385	-1.593707	-1.567251
.66	-1.510519	-1.483018	-1.455787	-1.428839	-1.402185	-1.375829	-1.349782	-1.324055	-1.298651
.70	-1.268640	-1.242194	-1.216122	-1.190430	-1.165124	-1.140205	-1.115676	-1.091544	-1.067810
.78	-.877626	-.854766	-.832398	-.810521	-.789131	-.768218	-.747780	-.727813	-.708311
.86	-.594723	-.576186	-.558170	-.540665	-.523660	-.507143	-.491104	-.475533	-.460419
.94	-.396624	-.382255	-.368375	-.354971	-.342030	-.329535	-.317474	-.305835	-.294604
1.02	-.261189	-.250416	-.240071	-.230139	-.220605	-.211453	-.202669	-.194241	-.186154
1.10	-.170257	-.162385	-.154869	-.147694	-.140844	-.134306	-.128066	-.122111	-.116429
1.18	-.110058	-.104421	-.099070	-.093988	-.089164	-.084585	-.080238	-.076112	-.072196
1.26	-.070643	-.066673	-.062924	-.059383	-.056039	-.052882	-.049902	-.047088	-.044431
1.34	-.045066	-.042306	-.039713	-.037278	-.034991	-.032842	-.030825	-.028930	-.027151
1.42	-.028585	-.026688	-.024914	-.023257	-.021709	-.020263	-.018912	-.017650	-.016471
1.50	-.018028	-.016735	-.015533	-.014416	-.013377	-.012412	-.011516	-.010683	-.009909
1.66	-.007025	-.006438	-.005898	-.005401	-.004944	-.004525	-.004139	-.003785	-.003460
1.82	-.002621	-.002361	-.002125	-.001910	-.001715	-.001538	-.001377	-.001232	-.001100
1.98	-.000914	-.000803	-.000703	-.000614	-.000534	-.000460	-.000396	-.000339	-.000289
2.14	-.000313	-.000268	-.000228	-.000193	-.000163	-.000136	-.000111	-.000086	-.000061
2.30	-.000106	-.000088	-.000073	-.000060	-.000049	-.000040	-.000032	-.000025	-.000019
2.46	-.000036	-.000029	-.000023	-.000018	-.000015	-.000012	-.000009	-.000007	-.000005
2.62	-.000012	-.000009	-.000007	-.000006	-.000004	-.000003	-.000002	-.000001	-.000001
2.78	-.000004	-.000003	-.000002	-.000002	-.000001	-.000001	-.000000	-.000000	-.000000
2.94	-.000001	-.000001	-.000001	-.000001	-.000000	-.000000	-.000000	-.000000	-.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
-E	958.97	986.92	1015.3	1044.1	1073.4	1103.4	1133.9	1164.6	1195.8
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.042824	.043806	.044798	.045799	.046810	.047830	.048860	.049899	.050947
.02	.157622	.161128	.164665	.168232	.171830	.175458	.179116	.182804	.186522
.03	.326418	.333454	.340545	.347690	.354888	.362141	.369446	.376804	.384215
.04	.534236	.545383	.556607	.567905	.579278	.590724	.602243	.613834	.625496
.05	.768665	.784177	.799779	.815469	.831247	.847111	.863060	.879092	.895208
.06	1.019493	1.039369	1.059339	1.079402	1.099556	1.119800	1.140131	1.160550	1.181052
.07	1.278377	1.302426	1.326564	1.350788	1.375098	1.399490	1.423962	1.448514	1.473141
.08	1.538566	1.566460	1.594427	1.622464	1.650569	1.678739	1.706972	1.735266	1.763618
.09	1.794665	1.825978	1.857339	1.888744	1.920191	1.951676	1.983196	2.014750	2.046334

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X									
.10	2.042421	2.076668	2.110927	2.145195	2.179470	2.213748	2.248025	2.282300	2.316568
.12	2.500596	2.539129	2.577584	2.615956	2.654243	2.692441	2.730548	2.768560	2.806474
.14	2.895849	2.936550	2.977062	3.017381	3.057507	3.097435	3.137163	3.176688	3.216007
.16	3.220193	3.261101	3.301703	3.341995	3.381977	3.421647	3.461003	3.500044	3.538767
.18	3.471970	3.511396	3.550401	3.588982	3.627142	3.664878	3.702192	3.739083	3.775551
.20	3.653699	3.690277	3.726327	3.761852	3.796853	3.831334	3.865295	3.898738	3.931667
.22	3.770515	3.803205	3.835279	3.866740	3.897596	3.927848	3.957502	3.986562	4.015033
.24	3.829044	3.857118	3.884507	3.911217	3.937259	3.962636	3.987357	4.011428	4.034858
.26	3.836608	3.859616	3.881892	3.903446	3.924288	3.944428	3.963876	3.982641	4.000732
.28	3.800681	3.818412	3.835386	3.851615	3.867115	3.881894	3.895968	3.909346	3.922041
.30	3.728518	3.740958	3.752638	3.763572	3.773778	3.783268	3.792057	3.800160	3.807591
.34	3.502125	3.504537	3.506237	3.507245	3.507582	3.507264	3.506311	3.504740	3.502568
.38	3.204492	3.198253	3.191412	3.183988	3.176006	3.167484	3.158443	3.148902	3.138882
.42	2.872150	2.859027	2.845445	2.831427	2.816995	2.802169	2.786970	2.771418	2.755533
.46	2.531674	2.513503	2.495033	2.476286	2.457284	2.438045	2.418588	2.398934	2.379100
.50	2.201194	2.179684	2.158035	2.136267	2.114399	2.092447	2.070429	2.048360	2.026256
.54	1.892142	1.868769	1.845406	1.822068	1.798772	1.775530	1.752355	1.729262	1.706262
.58	1.610921	1.586887	1.562992	1.539247	1.515664	1.492251	1.469019	1.445978	1.423135
.62	1.360325	1.336557	1.313032	1.289759	1.266744	1.243993	1.221511	1.199305	1.177378
.66	1.140677	1.117848	1.095345	1.073169	1.051324	1.029812	1.008635	.987794	.967290
.70	.950706	.929275	.908227	.887561	.867275	.847369	.827840	.808688	.789909
.78	.650448	.632517	.615023	.597960	.581321	.565099	.549285	.533875	.518859
.86	.437782	.423529	.409709	.396311	.383326	.370741	.358547	.346734	.335290
.94	.290870	.279956	.269436	.259296	.249526	.240110	.231039	.222301	.213883
1.02	.191270	.183147	.175362	.167901	.160751	.153899	.147335	.141045	.135020
1.10	.124719	.118807	.113172	.107801	.102683	.097803	.093154	.088724	.084502
1.18	.080756	.076529	.072521	.068722	.065123	.061708	.058472	.055404	.052497
1.26	.051978	.048999	.046190	.043541	.041046	.038688	.036468	.034373	.032399
1.34	.033278	.031203	.029257	.027431	.025722	.024113	.022607	.021194	.019868
1.42	.021198	.019767	.018432	.017186	.016029	.014939	.013927	.012982	.012101
1.50	.013433	.012454	.011545	.010702	.009926	.009193	.008518	.007892	.007311
1.66	.005290	.004840	.004427	.004048	.003743	.003382	.003089	.002819	.002572
1.82	.001994	.001792	.001609	.001443	.001385	.001157	.001033	.000921	.000820
1.98	.000701	.000614	.000535	.000465	.000505	.000329	.000279	.000235	.000195
2.14	.000242	.000206	.000174	.000147	.000181	.000046	.000028	.000012	.000000
2.30	.000083	.000068	.000056	.000046	.000065	.000000	.000000	.000000	.000000
2.46	.000028	.000022	.000018	.000014	.000023	.000000	.000000	.000000	.000000
2.62	.000009	.000007	.000006	.000004	.000008	.000000	.000000	.000000	.000000
2.78	.000003	.000002	.000002	.000001	.000003	.000000	.000000	.000000	.000000
2.94	.000001	.000001	.000001	.000000	.000001	.000000	.000000	.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	242.48	250.83	259.34	268.01	276.84	286.21	295.74	305.28	314.96
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.402251	.408212	.414176	.420142	.426110	.432082	.438057	.444031	.450007
.02	.671838	.680705	.689550	.698371	.707168	.715945	.724701	.733428	.742130
.03	.832331	.841778	.851160	.860478	.869732	.878925	.888057	.897119	.906116
.04	.904089	.912392	.920584	.928665	.936635	.944499	.952256	.959897	.967429
.05	.904641	.910578	.916358	.921981	.927448	.932765	.937931	.942939	.947794
.06	.849033	.851791	.854352	.856716	.858887	.860869	.862663	.864262	.865674
.07	.750139	.749238	.748108	.746753	.745176	.743381	.741371	.739142	.736699
.08	.618927	.614153	.609132	.603869	.598366	.592629	.586662	.580462	.574036
.09	.464698	.456052	.447153	.438006	.428616	.418989	.409127	.399034	.388714
.10	.295303	.282949	.270350	.257512	.244439	.231138	.217614	.203870	.189913
.12	-.063775	-.082577	-.101572	-.120754	-.140114	-.159648	-.179347	-.199204	-.219211
.14	-.418101	-.441578	-.465154	-.488819	-.512567	-.536390	-.560281	-.584227	-.608222
.16	-.740965	-.767077	-.793160	-.819205	-.845205	-.871154	-.897043	-.922855	-.948588
.18	-1.015767	-1.042456	-1.068969	-1.095299	-1.121437	-1.147380	-1.173119	-1.198637	-1.223930



	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X									
.20	-1.233386	-1.258739	-1.283763	-1.308451	-1.332795	-1.356795	-1.380443	-1.403720	-1.426627
.22	-1.390143	-1.412490	-1.434358	-1.455740	-1.476632	-1.497035	-1.516944	-1.536341	-1.555231
.24	-1.486229	-1.504191	-1.521535	-1.538257	-1.554357	-1.569837	-1.584695	-1.598917	-1.612510
.26	-1.524500	-1.537008	-1.548777	-1.559808	-1.570104	-1.579671	-1.588509	-1.596609	-1.603980
.28	-1.509565	-1.515851	-1.521304	-1.525927	-1.529727	-1.532713	-1.534890	-1.536253	-1.536815
.30	-1.447093	-1.446677	-1.445360	-1.443148	-1.440054	-1.436089	-1.431263	-1.425576	-1.419045
.34	-1.204597	-1.190329	-1.175109	-1.158956	-1.141888	-1.123924	-1.105081	-1.085372	-1.064820
.38	-.847355	-.819961	-.791681	-.762539	-.732562	-.701772	-.670196	-.637859	-.604786
.42	-.421758	-.383091	-.343697	-.303609	-.262858	-.221471	-.179480	-.136920	-.093818
.46	.033164	.080609	.128546	.176939	.225754	.274962	.324530	.374413	.424585
.50	.486756	.540217	.593890	.647737	.701722	.755820	.809996	.864201	.918413
.54	.916429	.973166	1.029811	1.086330	1.142689	1.198867	1.254829	1.310527	1.365943
.58	1.306725	1.364207	1.421296	1.477962	1.534177	1.589922	1.645169	1.699873	1.754021
.62	1.648121	1.704147	1.759498	1.814150	1.868082	1.921282	1.973727	2.025379	2.076231
.66	1.935815	1.988569	2.040400	2.091291	2.141227	2.190206	2.238211	2.285212	2.331212
.70	2.168598	2.216668	2.263608	2.309408	2.354063	2.397579	2.439948	2.481149	2.521193
.78	2.476873	2.512856	2.547435	2.580619	2.612420	2.642860	2.671949	2.699690	2.726104
.86	2.602143	2.624559	2.645483	2.664941	2.682964	2.699584	2.714830	2.728723	2.741299
.94	2.585004	2.594286	2.602146	2.608626	2.613769	2.617614	2.620204	2.621579	2.621778
1.02	2.466572	2.464337	2.460869	2.456216	2.450430	2.443554	2.435639	2.426736	2.416886
1.10	2.283027	2.271484	2.258965	2.245523	2.231213	2.216077	2.200169	2.183544	2.166245
1.18	2.063537	2.045047	2.025871	2.006060	1.985666	1.964727	1.943296	1.921429	1.899161
1.26	1.830061	1.806861	1.783261	1.759309	1.735051	1.710521	1.685761	1.660826	1.635744
1.34	1.598111	1.572150	1.546052	1.519858	1.493606	1.467323	1.441040	1.414808	1.388646
1.42	1.377884	1.350755	1.323715	1.296796	1.270027	1.243425	1.217014	1.190834	1.164899
1.50	1.175452	1.148385	1.121589	1.095087	1.068898	1.043029	1.017497	.992334	.967544
1.66	.833997	.809445	.785398	.761860	.738834	.716312	.694297	.672803	.651822
1.82	.576660	.556148	.536230	.516898	.498142	.479944	.462297	.445203	.428645
1.98	.391312	.375078	.359430	.344352	.329829	.315838	.302366	.289406	.276939
2.14	.261913	.249537	.237688	.226345	.215491	.205102	.195163	.185664	.176584
2.30	.173548	.164365	.155626	.147312	.139404	.131881	.124728	.117933	.111478
2.46	.114159	.107478	.101157	.095177	.089521	.084174	.079119	.074345	.069837
2.62	.074706	.069914	.065405	.061163	.057173	.053422	.049897	.046587	.043480
2.78	.048713	.045312	.042127	.039147	.036360	.033754	.031320	.029047	.026926
2.94	.031689	.029291	.027058	.024978	.023043	.021245	.019575	.018025	.016586
3.10	.020581	.018899	.017339	.015894	.014556	.013320	.012179	.011126	.010155
3.42	.008649	.007824	.007065	.006369	.005732	.005150	.004620	.004137	.003698
3.74	.003599	.003194	.002822	.002484	.002179	.001904	.001658	.001437	.001239
4.06	.001452	.001265	.001083	.000920	.000775	.000647	.000535	.000441	.000323
4.38	.000534	.000491	.000407	.000333	.000269	.000214	.000168	.000105	.000014
4.70	.000144	.000188	.000151	.000119	.000092	.000070	.000052	.000000	.000000
5.02	.000000	.000071	.000055	.000042	.000031	.000022	.000016	.000000	.000000
5.34	.000000	.000026	.000020	.000014	.000010	.000007	.000005	.000000	.000000
5.66	.000000	.000010	.000007	.000005	.000003	.000002	.000001	.000000	.000000
5.98	.000000	.000004	.000002	.000002	.000001	.000001	.000000	.000000	.000000
6.30	.000000	.000001	.000001	.000001	.000000	.000000	.000000	.000000	.000000
6.94	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	224.26	232.29	240.48	248.83	257.34	266.39	275.60	284.81	294.17
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.021623	.022156	.022694	.023238	.023787	.024343	.024903	.025470	.026042
.02	.079513	.081415	.083334	.085273	.087230	.089205	.091198	.093209	.095237
.03	.164397	.168209	.172055	.175933	.179845	.183789	.187765	.191772	.195811
.04	.268435	.274462	.280536	.286654	.292819	.299028	.305280	.311576	.317914

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
.05	.385036	.393392	.401802	.410266	.418784	.427353	.435973	.444643	.453361
.06	.508694	.519342	.530048	.540809	.551625	.562494	.573415	.584385	.595404
.07	.634842	.647632	.660475	.673368	.686310	.699299	.712334	.725410	.738528
.08	.759731	.774425	.789159	.803931	.818740	.833581	.848455	.863355	.878283
.09	.880318	.896616	.912933	.929269	.945621	.961985	.978360	.994740	1.011125
.10	.994170	1.011727	1.029278	1.046819	1.064351	1.081866	1.099365	1.116841	1.134293
.12	1.194485	1.213439	1.232315	1.251112	1.269827	1.288453	1.306991	1.325432	1.343777
.14	1.350452	1.369274	1.387930	1.406417	1.424735	1.442875	1.460839	1.478617	1.496211
.16	1.457183	1.474425	1.491403	1.508115	1.524560	1.540732	1.556631	1.572248	1.587587
.18	1.513618	1.528003	1.542023	1.555678	1.568969	1.581889	1.594441	1.606618	1.618422
.20	1.521370	1.531836	1.541842	1.551390	1.560483	1.569115	1.577291	1.585004	1.592261
.22	1.483840	1.489562	1.494742	1.499382	1.503487	1.507054	1.510089	1.512589	1.514562
.24	1.405552	1.405945	1.405727	1.404904	1.403483	1.401463	1.398853	1.395653	1.391872
.26	1.291662	1.286364	1.280406	1.273796	1.266544	1.258652	1.250133	1.240988	1.231229
.28	1.147585	1.136439	1.124605	1.112094	1.098917	1.085082	1.070602	1.055482	1.039738
.30	.978739	.961769	.944104	.925758	.906746	.887077	.866768	.845828	.824274
.34	.587356	.559397	.530793	.501564	.471729	.441305	.410312	.378768	.346691
.38	.155217	.117865	.079995	.041631	.002795	-.036488	-.076198	-.116308	-.156799
.42	-.286713	-.331330	-.376277	-.421529	-.467061	-.512845	-.558859	-.605072	-.651464
.46	-.714644	-.764174	-.813809	-.863520	-.913283	-.963069	-1.012856	-1.062610	-1.112312
.50	-1.111489	-1.163594	-1.215557	-1.267351	-1.318953	-1.370334	-1.421473	-1.472340	-1.522916
.54	-1.465972	-1.518488	-1.570612	-1.622321	-1.673594	-1.724407	-1.774743	-1.824572	-1.873882
.58	-1.771594	-1.822627	-1.873032	-1.922790	-1.971887	-2.020301	-2.068021	-2.115022	-2.161298
.62	-2.025607	-2.073588	-2.120729	-2.167017	-2.212445	-2.256997	-2.300668	-2.343439	-2.385310
.66	-2.228086	-2.271784	-2.314464	-2.356120	-2.396750	-2.436346	-2.474909	-2.512430	-2.548914
.70	-2.381134	-2.419650	-2.457006	-2.493204	-2.528250	-2.562144	-2.594893	-2.626496	-2.656965
.74	-2.553687	-2.580318	-2.605625	-2.629626	-2.652341	-2.673787	-2.693984	-2.712947	-2.730701
.78	-2.578925	-2.593234	-2.606207	-2.617875	-2.628270	-2.637421	-2.645362	-2.652122	-2.657734
.82	-2.495447	-2.498359	-2.500043	-2.500541	-2.499894	-2.498142	-2.495326	-2.491486	-2.486661
1.02	-2.338626	-2.331851	-2.324043	-2.315250	-2.305519	-2.294894	-2.283420	-2.271144	-2.258107
1.10	-2.137905	-2.123497	-2.108303	-2.092368	-2.075742	-2.058471	-2.040599	-2.022175	-2.003237
1.18	-1.916145	-1.896190	-1.875710	-1.854750	-1.833354	-1.811568	-1.789432	-1.766993	-1.744285
1.26	-1.690050	-1.666466	-1.642608	-1.618520	-1.594239	-1.569808	-1.545258	-1.520634	-1.495961
1.34	-1.471074	-1.445501	-1.419883	-1.394256	-1.368652	-1.343105	-1.317641	-1.292297	-1.267089
1.42	-1.266477	-1.240238	-1.214149	-1.188238	-1.162528	-1.137047	-1.111811	-1.086848	-1.062170
1.50	-1.080330	-1.054437	-1.028851	-1.003590	-.978669	-.954108	-.929914	-.906111	-.882699
1.66	-.768863	-.745606	-.722855	-.700612	-.678876	-.657653	-.636938	-.616737	-.597043
1.82	-.534949	-.515538	-.496705	-.478442	-.460737	-.443584	-.426971	-.410893	-.395335
1.98	-.366111	-.350685	-.335826	-.321519	-.307747	-.294498	-.281753	-.269503	-.257729
2.14	-.247559	-.235715	-.224381	-.213538	-.203169	-.193257	-.183783	-.174735	-.166093
2.30	-.165936	-.157066	-.148630	-.140609	-.132985	-.125740	-.118857	-.112323	-.106121
2.46	-.110534	-.104012	-.097844	-.092014	-.086506	-.081301	-.076385	-.071745	-.067366
2.62	-.073316	-.068584	-.064134	-.059951	-.056022	-.052330	-.048863	-.045609	-.042555
2.78	-.048499	-.045098	-.041918	-.038945	-.036169	-.033574	-.031150	-.028888	-.026778
2.94	-.032036	-.029609	-.027350	-.025250	-.023303	-.021490	-.019806	-.018243	-.016793
3.10	-.021151	-.019426	-.017828	-.016351	-.014990	-.013728	-.012563	-.011487	-.010495
3.42	-.009230	-.008361	-.007564	-.006834	-.006173	-.005564	-.005008	-.004500	-.004036
3.74	-.004035	-.003593	-.003192	-.002828	-.002508	-.002212	-.001945	-.001703	-.001486
4.06	-.001754	-.001524	-.001318	-.001133	-.000989	-.000845	-.000718	-.000604	-.000503
4.38	-.000740	-.000617	-.000508	-.000411	-.000382	-.000316	-.000259	-.000209	-.000166
4.70	-.000285	-.000217	-.000158	-.000107	-.000145	-.000116	-.000092	-.000071	-.000054
5.02	-.000102	-.000046	-.000014	.000000	-.000054	-.000042	-.000032	-.000024	-.000017
5.34	-.000036	.000000	.000000	.000000	-.000020	-.000015	-.000011	-.000008	-.000005
5.66	-.000013	.000000	.000000	.000000	-.000007	-.000005	-.000004	-.000003	-.000002
5.98	-.000004	.000000	.000000	.000000	-.000003	-.000002	-.000001	-.000001	-.000001
6.30	-.000002	.000000	.000000	.000000	-.000001	-.000001	-.000000	.000000	.000000
6.94	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PR 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	3D 10 -E 190.70	3D 10 198.13	3D 10 205.73	3D 10 213.49	3D 10 221.40	3D 10 229.85	3D 10 238.46	3D 10 247.07	3D 10 255.82
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000226	.000234	.000243	.000251	.000260	.000268	.000277	.000287	.000296
.02	.001712	.001773	.001835	.001898	.001962	.002028	.002095	.002163	.002232
.03	.005470	.005661	.005856	.006054	.006257	.006463	.006673	.006887	.007105
.04	.012275	.012698	.013129	.013569	.014016	.014472	.014936	.015408	.015889
.05	.022705	.023476	.024263	.025063	.025878	.026708	.027552	.028412	.029285
.06	.037163	.038410	.039678	.040970	.042283	.043620	.044980	.046362	.047767
.07	.055914	.057764	.059645	.061559	.063505	.065484	.067496	.069540	.071617
.08	.079098	.081678	.084301	.086968	.089679	.092433	.095231	.098073	.100958
.09	.106755	.110188	.113677	.117222	.120823	.124479	.128192	.131960	.135784
.10	.138842	.143244	.147715	.152254	.156862	.161539	.166285	.171099	.175982
.12	.215802	.222448	.229190	.236027	.242959	.249986	.257108	.264324	.271634
.14	.308481	.317703	.327046	.336509	.346092	.355794	.365616	.375555	.385611
.16	.414824	.426852	.439022	.451333	.463785	.476376	.489107	.501974	.514977
.18	.532470	.547430	.562550	.577825	.593255	.608840	.624575	.640461	.656493
.20	.658934	.676860	.694953	.713209	.731626	.750203	.768936	.787824	.806862
.22	.791749	.812584	.833585	.854748	.876070	.897549	.919181	.940962	.962888
.24	.928547	.952160	.975929	.999849	1.023916	1.048128	1.072481	1.096968	1.121585
.26	1.067127	1.093322	1.119654	1.146117	1.172707	1.199421	1.226252	1.253195	1.280244
.28	1.205487	1.234018	1.262659	1.291402	1.320241	1.349174	1.378193	1.407292	1.436464
.30	1.341847	1.372431	1.403086	1.433806	1.464585	1.495419	1.526299	1.557220	1.588174
.34	1.602592	1.636322	1.670028	1.703703	1.737340	1.770934	1.804476	1.837959	1.871373
.38	1.839614	1.875139	1.910524	1.945760	1.980840	2.015760	2.050510	2.085083	2.119469
.42	2.046443	2.082428	2.118142	2.153579	2.188731	2.223595	2.258162	2.292426	2.326379
.46	2.219401	2.254610	2.289416	2.323813	2.357796	2.391362	2.424506	2.457221	2.489501
.50	2.357060	2.390416	2.423242	2.455533	2.487288	2.518505	2.549181	2.579313	2.608897
.54	2.459719	2.490333	2.520301	2.549621	2.578296	2.606326	2.633712	2.660453	2.686550
.58	2.528944	2.556123	2.582557	2.608248	2.633203	2.657425	2.680919	2.703688	2.725736
.62	2.567165	2.590409	2.612830	2.634435	2.655232	2.675232	2.694440	2.712865	2.730515
.66	2.577357	2.596345	2.614455	2.631698	2.648087	2.663634	2.678351	2.692249	2.705340
.70	2.562783	2.577356	2.591018	2.603785	2.615674	2.626700	2.636879	2.646227	2.654761
.78	2.472730	2.478518	2.483397	2.487390	2.490521	2.492814	2.494289	2.494971	2.494882
.86	2.322750	2.320467	2.317352	2.313435	2.308748	2.303315	2.297165	2.290327	2.282828
.94	2.135377	2.126229	2.116385	2.105877	2.094740	2.083002	2.070695	2.057850	2.044497
1.02	1.928868	1.914286	1.899177	1.883577	1.867521	1.851036	1.834154	1.816909	1.799328
1.10	1.717118	1.698561	1.679664	1.660459	1.640981	1.621255	1.601314	1.581184	1.560893
1.18	1.510090	1.488917	1.467588	1.446133	1.424581	1.402956	1.381286	1.359592	1.337900
1.26	1.314445	1.291838	1.269247	1.246695	1.224207	1.201801	1.179501	1.157323	1.135288
1.34	1.134224	1.111159	1.088257	1.065537	1.043018	1.020713	.998638	.976806	.955231
1.42	.971486	.948723	.926245	.904066	.882198	.860647	.839424	.818537	.797994
1.50	.826852	.804953	.783435	.762304	.741567	.721224	.701280	.681737	.662600
1.66	.589803	.570656	.552003	.533838	.516158	.498954	.482221	.465954	.450147
1.82	.414072	.398219	.382889	.368072	.353754	.339922	.326563	.313668	.301224
1.98	.287344	.274709	.262574	.250923	.239739	.229006	.218708	.208831	.199362
2.14	.197740	.187943	.178593	.169672	.161162	.153045	.145306	.137929	.130900
2.30	.135281	.127838	.120776	.114078	.107727	.101705	.095998	.090590	.085469
2.46	.092193	.086623	.081368	.076413	.071741	.067337	.063187	.059279	.055599
2.62	.062690	.058568	.054702	.051076	.047677	.044490	.041505	.038710	.036093
2.78	.042595	.039571	.036749	.034117	.031663	.029376	.027245	.025262	.023416
2.94	.028958	.026751	.024704	.022804	.021043	.019410	.017897	.016497	.015201
3.10	.019722	.018118	.016638	.015272	.014011	.012850	.011779	.010794	.009888
3.42	.009242	.008398	.007626	.006921	.006278	.005691	.005156	.004669	.004226
3.74	.004424	.003977	.003571	.003205	.002873	.002574	.002304	.002062	.001843
4.06	.002182	.001940	.001722	.001528	.001353	.001197	.001058	.000935	.000824
4.38	.001116	.000981	.000860	.000753	.000659	.000575	.000501	.000436	.000379

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
X									
4.70	.000594	.000515	.000446	.000385	.000331	.000285	.000244	.000209	.000179
5.02	.000328	.000281	.000239	.000203	.000172	.000145	.000122	.000102	.000086
5.34	.000188	.000158	.000132	.000110	.000091	.000075	.000062	.000051	.000042
5.66	.000110	.000091	.000074	.000060	.000049	.000039	.000032	.000025	.000020
5.98	.000066	.000053	.000042	.000033	.000026	.000021	.000016	.000012	.000010
6.30	.000040	.000031	.000024	.000018	.000014	.000011	.000008	.000006	.000005
6.94	.000014	.000011	.000008	.000005	.000004	.000003	.000002	.000001	.000001
7.58	.000005	.000003	.000002	.000002	.000001	.000001	.000000	.000000	.000000
8.22	.000002	.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000
8.86	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	56.448	59.196	62.011	64.893	67.841	71.230	74.683	78.047	81.459
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.201872	.205575	.209291	.213021	.216702	.220519	.224289	.228063	.231844
.02	.337019	.342649	.348284	.353924	.359565	.365215	.370869	.376510	.382146
.03	.471911	.477547	.483187	.488829	.494473	.499118	.504764	.510411	.516058
.04	.452573	.458215	.463859	.469504	.475150	.480797	.486445	.492093	.497741
.05	.451972	.457616	.463261	.468907	.474554	.480201	.485849	.491497	.497145
.06	.422973	.428616	.434260	.439905	.445551	.451197	.456844	.462491	.468138
.07	.372089	.377732	.383376	.389020	.394665	.400310	.405956	.411602	.417248
.08	.304893	.310536	.316180	.321824	.327468	.333112	.338756	.344400	.350044
.09	.226126	.231769	.237412	.243055	.248698	.254341	.259984	.265627	.271270
.10	.139805	.145448	.151091	.156734	.162377	.168020	.173663	.179306	.184949
.12	-.042545	-.048188	-.053831	-.059474	-.065117	-.070760	-.076403	-.082046	-.087689
.14	-.221421	-.227064	-.232707	-.238350	-.243993	-.249636	-.255279	-.260922	-.266565
.16	-.382966	-.388609	-.394252	-.399895	-.405538	-.411181	-.416824	-.422467	-.428110
.18	-.518527	-.524170	-.529813	-.535456	-.541099	-.546742	-.552385	-.558028	-.563671
.20	-.623353	-.629000	-.634647	-.640294	-.645941	-.651588	-.657235	-.662882	-.668529
.22	-.695557	-.701204	-.706851	-.712498	-.718145	-.723792	-.729439	-.735086	-.740733
.24	-.735325	-.740972	-.746619	-.752266	-.757913	-.763560	-.769207	-.774854	-.780501
.26	-.774284	-.780000	-.785716	-.791432	-.797148	-.802864	-.808580	-.814296	-.820012
.28	-.825033	-.830750	-.836467	-.842183	-.847899	-.853616	-.859332	-.865049	-.870765
.30	-.680767	-.686484	-.692201	-.697918	-.703635	-.709352	-.715069	-.720786	-.726503
.34	-.531405	-.537122	-.542839	-.548556	-.554273	-.560000	-.565717	-.571434	-.577151
.38	-.324943	-.330660	-.336377	-.342094	-.347811	-.353528	-.359245	-.364962	-.370679
.42	-.088171	-.093888	-.099605	-.105322	-.111039	-.116756	-.122473	-.128190	-.133907
.46	.156134	.161851	.167568	.173285	.179002	.184719	.190436	.196153	.201870
.50	.389941	.395658	.401375	.407092	.412809	.418526	.424243	.429960	.435677
.54	.599922	.605639	.611356	.617073	.622790	.628507	.634224	.639941	.645658
.58	.777022	.782739	.788456	.794173	.800000	.805717	.811434	.817151	.822868
.62	.915827	.921544	.927261	.932978	.938695	.944412	.950129	.955846	.961563
.66	1.013896	1.019613	1.025330	1.031047	1.036764	1.042481	1.048198	1.053915	1.059632
.70	1.071110	1.076827	1.082544	1.088261	1.093978	1.099695	1.105412	1.111129	1.116846
.78	1.070668	1.076385	1.082102	1.087819	1.093536	1.099253	1.104970	1.110687	1.116404
.86	.939798	.945515	.951232	.956949	.962666	.968383	.974100	.979817	.985534
.94	.712029	.717746	.723463	.729180	.734897	.740614	.746331	.752048	.757765
1.02	.421523	.427240	.432957	.438674	.444391	.450108	.455825	.461542	.467259
1.10	.098884	.104601	.110318	.116035	.121752	.127469	.133186	.138903	.144620
1.18	-.230757	-.236474	-.242191	-.247908	-.253625	-.259342	-.265059	-.270776	-.276493
1.26	-.548230	-.553947	-.559664	-.565381	-.571098	-.576815	-.582532	-.588249	-.593966
1.34	-.839992	-.845709	-.851426	-.857143	-.862860	-.868577	-.874294	-.880011	-.885728
1.42	-1.097388	-1.103105	-1.108822	-1.114539	-1.120256	-1.125973	-1.131690	-1.137407	-1.143124
1.50	-1.315755	-1.321472	-1.327189	-1.332906	-1.338623	-1.344340	-1.350057	-1.355774	-1.361491
1.66	-1.631352	-1.637069	-1.642786	-1.648503	-1.654220	-1.659937	-1.665654	-1.671371	-1.677088
1.82	-1.797284	-1.803001	-1.808718	-1.814435	-1.820152	-1.825869	-1.831586	-1.837303	-1.843020
1.98	-1.841022	-1.846739	-1.852456	-1.858173	-1.863890	-1.869607	-1.875324	-1.881041	-1.886758
2.14	-1.794399	-1.799116	-1.803833	-1.808550	-1.813267	-1.817984	-1.822701	-1.827418	-1.832135

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
2.30	-1.686959	-1.679202	-1.669959	-1.659301	-1.647300	-1.634016	-1.619523	-1.603926	-1.587282
2.46	-1.543159	-1.527648	-1.510963	-1.493185	-1.474395	-1.454651	-1.434039	-1.412678	-1.390627
2.62	-1.381751	-1.360706	-1.338826	-1.316198	-1.292908	-1.269004	-1.244576	-1.219754	-1.194583
2.78	-1.216232	-1.191646	-1.166564	-1.141071	-1.115250	-1.089138	-1.062823	-1.036434	-1.010002
2.94	-1.055711	-1.029267	-1.002641	-.975910	-.949150	-.922385	-.895695	-.869198	-.842916
3.10	-.905874	-.878916	-.852048	-.825339	-.798854	-.772599	-.746645	-.721096	-.695961
3.42	-.648984	-.623758	-.599025	-.574824	-.551191	-.528106	-.505611	-.483778	-.462595
3.74	-.452284	-.430756	-.409929	-.389816	-.370424	-.351712	-.333697	-.316419	-.299853
4.06	-.309013	-.291723	-.275191	-.259407	-.244359	-.229991	-.216304	-.203317	-.190994
4.38	-.208165	-.194858	-.182267	-.170367	-.159135	-.148512	-.138487	-.129068	-.120214
4.70	-.138871	-.128941	-.119633	-.110916	-.102761	-.095112	-.087957	-.081294	-.075084
5.02	-.092075	-.084830	-.078095	-.071839	-.066031	-.060626	-.055608	-.050975	-.046690
5.34	-.060857	-.055656	-.050857	-.046429	-.042346	-.038573	-.035095	-.031908	-.028983
5.66	-.040207	-.036515	-.033128	-.030022	-.027173	-.024557	-.022162	-.019983	-.017996
5.98	-.026619	-.024016	-.021639	-.019468	-.017486	-.015676	-.014030	-.012542	-.011194
6.30	-.017703	-.015872	-.014205	-.012688	-.011306	-.010052	-.008917	-.007899	-.006981
6.94	-.008010	-.007097	-.006266	-.005511	-.004824	-.004207	-.003657	-.003169	-.002733
7.58	-.003789	-.003316	-.002883	-.002487	-.002125	-.001806	-.001526	-.001280	-.001063
8.22	-.001897	-.001636	-.001393	-.001169	-.000962	-.000784	-.000634	-.000507	-.000396
8.86	-.001011	-.000853	-.000705	-.000566	-.000439	-.000332	-.000258	-.000196	-.000144
9.50	-.000571	-.000467	-.000368	-.000277	-.000192	-.000124	-.000102	-.000074	-.000051
10.14	-.000338	-.000265	-.000195	-.000133	-.000080	-.000030	-.000040	-.000027	-.000018
10.78	-.000207	-.000152	-.000100	-.000063	-.000033	-.000000	-.000015	-.000010	-.000006
11.42	-.000129	-.000087	-.000049	-.000029	-.000013	.000000	-.000006	-.000004	-.000002
12.06	-.000081	-.000049	-.000023	-.000014	-.000005		-.000002	-.000001	-.000001
12.70	-.000050	-.000028	-.000011	-.000006	-.000002		-.000001	-.000000	.000000
13.98	-.000019	-.000008	-.000002	-.000001	-.000000		.000000	.000000	.000000
15.26	-.000007	-.000002	-.000001	.000000	.000000		.000000		
16.54	-.000002	-.000001	.000000	.000000					
17.82	-.000001	.000000	.000000						

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
-E	48.333	50.896	53.526	56.222	58.982	62.181	65.444	68.618	71.837
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.010781	.011092	.011408	.011728	.012052	.012381	.012713	.013050	.013391
.02	.039636	.040751	.041881	.043025	.044185	.045358	.046545	.047746	.048960
.03	.081917	.084161	.086433	.088733	.091059	.093411	.095789	.098191	.100618
.04	.133685	.137246	.140848	.144490	.148170	.151887	.155641	.159430	.163253
.05	.191613	.196569	.201577	.206634	.211739	.216890	.222085	.227322	.232601
.06	.252917	.259258	.265657	.272112	.278620	.285178	.291786	.298438	.305136
.07	.315279	.322925	.330632	.338397	.346215	.354084	.362001	.369963	.377967
.08	.376792	.385612	.394490	.403422	.412404	.421431	.430501	.439609	.448753
.09	.435904	.445726	.455599	.465518	.475477	.485471	.495498	.505550	.515628
.10	.491370	.501997	.512662	.523359	.534082	.544824	.555585	.566354	.577132
.12	.587694	.599272	.610848	.622416	.633969	.645497	.657000	.668467	.679896
.14	.660537	.672156	.683720	.695220	.706648	.717995	.729260	.740430	.751504
.16	.707428	.718215	.728881	.739419	.749820	.760074	.770180	.780127	.789911
.18	.727898	.737070	.746051	.754834	.763412	.771775	.779921	.787840	.795530
.20	.722894	.729791	.736429	.742801	.748900	.754717	.760252	.765494	.770444
.22	.694322	.698428	.702211	.705664	.708781	.711558	.713992	.716078	.717815
.24	.644708	.645650	.646213	.646392	.646184	.645584	.644593	.643208	.641430
.26	.576928	.574476	.571600	.568297	.564568	.560409	.555824	.550812	.545377
.28	.494020	.488075	.481673	.474817	.467508	.459748	.451541	.442890	.433801
.30	.399036	.389616	.379723	.369363	.358540	.347259	.335527	.323350	.310737
.34	.184531	.168616	.152245	.135429	.118177	.100503	.082418	.063936	.045070
.38	-.045076	-.066368	-.088039	-.110072	-.132450	-.155154	-.178168	-.201470	-.225045
.42	-.271952	-.297102	-.322499	-.348121	-.373946	-.399949	-.426111	-.452403	-.478808
.46	-.482311	-.509602	-.536967	-.564379	-.591814	-.619239	-.646637	-.673972	-.701226

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
X									
.50	-.666247	-.693932	-.721489	-.748891	-.776107	-.803107	-.829870	-.856359	-.882557
.54	-.817307	-.843729	-.869808	-.895516	-.920824	-.945698	-.970120	-.994055	-1.017485
.58	-.931939	-.955616	-.978736	-1.001270	-1.023192	-1.044469	-1.065088	-1.085014	-1.104234
.62	-1.008929	-1.028608	-1.047524	-1.065654	-1.082975	-1.099457	-1.115092	-1.129850	-1.143723
.66	-1.048871	-1.063547	-1.077278	-1.090045	-1.101829	-1.112608	-1.122376	-1.131114	-1.138818
.70	-1.053686	-1.062616	-1.070445	-1.077162	-1.082752	-1.087204	-1.090516	-1.092679	-1.093693
.78	-.969944	-.966125	-.960999	-.954568	-.946836	-.937808	-.927498	-.915916	-.903078
.86	-.786137	-.769315	-.751129	-.731598	-.710744	-.688591	-.665168	-.640510	-.614643
.94	-.533085	-.504330	-.474297	-.443021	-.410543	-.376906	-.342151	-.306335	-.269496
1.02	-.239532	-.200792	-.160979	-.120147	-.078351	-.035648	.007910	.052249	.097322
1.10	.070076	.116375	.163448	.211232	.259659	.308662	.358181	.408131	.458460
1.18	.376395	.427667	.479358	.531396	.583709	.636222	.688876	.741577	.794275
1.26	.665127	.718864	.772639	.826377	.880005	.933447	.986645	1.039507	1.091985
1.34	.926517	.980449	1.034038	1.087212	1.139901	1.192033	1.243555	1.294382	1.344472
1.42	1.154640	1.206824	1.258307	1.309024	1.358912	1.407906	1.455962	1.503006	1.549005
1.50	1.346629	1.395490	1.443331	1.490098	1.535735	1.580190	1.623429	1.665391	1.706056
1.66	1.621740	1.660698	1.698150	1.734064	1.768412	1.801167	1.832323	1.861851	1.889757
1.82	1.764648	1.791495	1.816566	1.839856	1.861365	1.881100	1.899079	1.915309	1.929819
1.98	1.800335	1.814820	1.827456	1.838268	1.847284	1.854538	1.860072	1.863928	1.866151
2.14	1.756443	1.759576	1.760950	1.760613	1.758616	1.755021	1.749887	1.743281	1.735265
2.30	1.658322	1.651805	1.643734	1.634177	1.623205	1.610897	1.597325	1.582575	1.566718
2.46	1.526974	1.512788	1.497328	1.480675	1.462915	1.444137	1.424419	1.403857	1.382527
2.62	1.378647	1.358779	1.337955	1.316264	1.293797	1.270651	1.246902	1.222648	1.197962
2.78	1.225217	1.201496	1.177145	1.152256	1.126919	1.101230	1.075260	1.049103	1.022823
2.94	1.074892	1.048902	1.022593	.996055	.969374	.942636	.915904	.889263	.862766
3.10	.932978	.906021	.879029	.852080	.825255	.798626	.772244	.746182	.720480
3.42	.685225	.659147	.633475	.608262	.583564	.559421	.535857	.512916	.490614
3.74	.490457	.467453	.445117	.423475	.402553	.382362	.362900	.344186	.326214
4.06	.344569	.325465	.307137	.289588	.272818	.256815	.241557	.227050	.213269
4.38	.238842	.223632	.209199	.195523	.182592	.170374	.158842	.147990	.137783
4.70	.163988	.152244	.141208	.130853	.121154	.112075	.103582	.095668	.088294
5.02	.111873	.103007	.094750	.087071	.079942	.073323	.067184	.061518	.056284
5.34	.076024	.069440	.063359	.057750	.052584	.047826	.043447	.039442	.035773
5.66	.051572	.046741	.042313	.038259	.034554	.031164	.028068	.025262	.022711
5.98	.034989	.031474	.028274	.025365	.022723	.020323	.018146	.016189	.014424
6.30	.023783	.021238	.018935	.016856	.014979	.013284	.011756	.010395	.009175
6.94	.011120	.009791	.008602	.007541	.006592	.005744	.004989	.004326	.003740
7.58	.005334	.004633	.004010	.003461	.002973	.002539	.002158	.001828	.001539
8.22	.002652	.002270	.001934	.001641	.001380	.001151	.000951	.000781	.000632
8.86	.001376	.001158	.000968	.000806	.000659	.000532	.000423	.000331	.000250
9.50	.000746	.000615	.000502	.000408	.000321	.000247	.000186	.000133	.000087
10.14	.000422	.000338	.000267	.000210	.000156	.000113	.000080	.000051	.000019
10.78	.000246	.000190	.000144	.000108	.000073	.000051	.000033	.000019	.000000
11.42	.000147	.000107	.000076	.000054	.000031	.000023	.000014	.000007	.000000
12.06	.000088	.000060	.000040	.000027	.000013	.000010	.000006	.000003	.000000
12.70	.000052	.000033	.000021	.000013	.000005	.000004	.000002	.000001	.000000
13.98	.000018	.000010	.000005	.000003	.000001	.000001	.000000	.000000	.000000
15.26	.000006	.000003	.000001	.000001	.000000	.000000	.000000	.000000	.000000
16.54	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
17.82	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
-E	33.450	35.658	37.929	40.264	42.662	45.498	48.395	51.204	54.058
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000118	.000123	.000128	.000133	.000139	.000144	.000150	.000156	.000162
.02	.000893	.000930	.000969	.001008	.001048	.001089	.001131	.001174	.001218
.03	.002851	.002969	.003090	.003214	.003341	.003470	.003603	.003739	.003877
.04	.006396	.006658	.006926	.007201	.007481	.007768	.008061	.008361	.008667

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
.05	.011826	.012304	.012794	.013294	.013806	.014329	.014863	.015409	.015966
.06	.019346	.020120	.020911	.021719	.022544	.023388	.024249	.025128	.026025
.07	.029089	.030238	.031412	.032611	.033835	.035085	.036360	.037662	.038988
.08	.041118	.042723	.044361	.046034	.047740	.049481	.051256	.053067	.054911
.09	.055448	.057584	.059765	.061990	.064258	.066570	.068927	.071329	.073775
.10	.072042	.074783	.077579	.080430	.083334	.086293	.089307	.092377	.095500
.12	.111714	.115855	.120074	.124369	.128739	.133187	.137710	.142312	.146987
.14	.159238	.164984	.170828	.176771	.182809	.188946	.195179	.201511	.207937
.16	.213411	.220897	.228502	.236222	.244057	.252008	.260073	.268254	.276544
.18	.272856	.282150	.291578	.301135	.310819	.320633	.330572	.340639	.350826
.20	.336129	.347231	.358476	.369858	.381373	.393025	.404808	.416723	.428762
.22	.401788	.414639	.427632	.440764	.454027	.467426	.480954	.494612	.508387
.24	.468451	.482934	.497553	.512302	.527174	.542172	.557288	.572524	.587864
.26	.534825	.550778	.566853	.583041	.599334	.615735	.632234	.648834	.665516
.28	.599734	.616958	.634278	.651687	.669175	.686745	.704384	.722096	.739860
.30	.662130	.680392	.698720	.717102	.735529	.754003	.772510	.791054	.809610
.34	.775852	.795415	.814958	.834465	.853926	.873341	.892696	.911993	.931203
.38	.870256	.890014	.909639	.929115	.948429	.967582	.986556	1.005354	1.023947
.42	.941589	.960432	.979011	.997311	1.015315	1.033027	1.050429	1.067522	1.084276
.46	.987831	1.004714	1.021193	1.037253	1.052879	1.068073	1.082818	1.097118	1.110943
.50	1.008388	1.022383	1.035832	1.048721	1.061039	1.072787	1.083951	1.094535	1.104514
.54	1.003792	1.014116	1.023759	1.032710	1.040958	1.048509	1.055350	1.061489	1.066903
.58	.975415	.981449	.986679	.991097	.994698	.997488	.999460	1.000623	1.000961
.62	.925226	.926516	.926898	.926367	.924923	.922575	.919321	.915174	.910124
.66	.855582	.851836	.847098	.841369	.834655	.826968	.818312	.808703	.798140
.70	.769055	.760131	.750157	.739139	.727088	.714021	.699948	.684890	.668852
.78	.555975	.536798	.516529	.495190	.472805	.449398	.424992	.399617	.373296
.86	.306633	.278041	.248422	.217810	.186241	.153747	.120365	.086131	.051086
.94	.039499	.002937	-.034497	-.072757	-.111793	-.151570	-.192038	-.233155	-.274866
1.02	-.230092	-.272832	-.316216	-.360185	-.404684	-.449670	-.495086	-.540887	-.587006
1.10	-.490196	-.537186	-.584536	-.632184	-.680067	-.728144	-.776349	-.824637	-.872934
1.18	-.732102	-.781434	-.830816	-.880181	-.929463	-.978623	-1.027596	-1.076335	-1.124767
1.26	-.949957	-.999864	-1.049500	-1.098797	-1.147692	-1.196150	-1.244108	-1.291523	-1.338324
1.34	-1.140310	-1.189233	-1.237571	-1.285262	-1.332246	-1.378494	-1.423948	-1.468573	-1.512304
1.42	-1.301628	-1.348258	-1.394010	-1.438829	-1.482664	-1.525493	-1.567267	-1.607959	-1.647511
1.50	-1.433853	-1.477138	-1.519284	-1.560246	-1.599982	-1.638479	-1.675698	-1.711623	-1.746208
1.66	-1.615823	-1.650253	-1.683140	-1.714461	-1.744196	-1.772356	-1.798924	-1.823907	-1.847284
1.82	-1.701629	-1.725738	-1.748065	-1.768613	-1.787389	-1.804423	-1.819726	-1.833327	-1.845234
1.98	-1.711157	-1.724781	-1.736539	-1.746460	-1.754580	-1.760946	-1.765595	-1.768574	-1.769923
2.14	-1.664212	-1.668048	-1.670068	-1.670324	-1.668875	-1.665786	-1.661115	-1.654925	-1.647281
2.30	-1.578284	-1.573536	-1.567123	-1.559120	-1.549606	-1.538656	-1.526348	-1.512753	-1.497959
2.46	-1.467740	-1.455850	-1.442523	-1.427851	-1.411924	-1.394828	-1.376652	-1.357471	-1.337388
2.62	-1.343787	-1.326258	-1.307566	-1.287816	-1.267108	-1.245526	-1.223169	-1.200112	-1.176464
2.78	-1.214797	-1.193071	-1.170482	-1.147138	-1.123145	-1.098584	-1.073553	-1.048125	-1.022409
2.94	-1.086769	-1.062155	-1.036983	-1.011360	-.985388	-.959142	-.932716	-.906174	-.879622
3.10	-.963796	-.937433	-.910806	-.884013	-.857153	-.830286	-.803501	-.776848	-.750427
3.42	-.742346	-.715170	-.688234	-.661616	-.635391	-.609588	-.584272	-.559470	-.535254
3.74	-.559712	-.534143	-.509177	-.484865	-.461249	-.438326	-.416134	-.394677	-.373999
4.06	-.415481	-.392803	-.370947	-.349931	-.329769	-.310433	-.291932	-.274257	-.257423
4.38	-.304908	-.285602	-.267213	-.249734	-.233153	-.217422	-.202536	-.188472	-.175223
4.70	-.221902	-.205947	-.190913	-.176774	-.163502	-.151038	-.139364	-.128454	-.118283
5.02	-.160526	-.147627	-.135594	-.124390	-.113977	-.104294	-.095312	-.087007	-.079343
5.34	-.115641	-.105383	-.095904	-.087162	-.079114	-.071700	-.064891	-.058659	-.052967
5.66	-.083077	-.075020	-.067642	-.060900	-.054749	-.049137	-.044030	-.039407	-.035225
5.98	-.059587	-.053317	-.047626	-.042471	-.037811	-.033598	-.029801	-.026401	-.023355
6.30	-.042709	-.037864	-.033504	-.029588	-.026079	-.022936	-.020132	-.017648	-.015445
6.94	-.021964	-.019109	-.016582	-.014349	-.012383	-.010657	-.009148	-.007840	-.006704
7.58	-.011356	-.009688	-.008234	-.006970	-.005876	-.004936	-.004131	-.003450	-.002872
8.22	-.005927	-.004951	-.004113	-.003395	-.002784	-.002272	-.001845	-.001492	-.001199
8.86	-.003131	-.002555	-.002067	-.001656	-.001311	-.001030	-.000803	-.000621	-.000473

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
X									
9.50	-.001679	-.001333	-.001044	-.000804	-.000605	-.000450	-.000330	-.000236	-.000162
10.14	-.000914	-.000702	-.000527	-.000383	-.000266	-.000179	-.000130	-.000084	-.000035
10.78	-.000505	-.000371	-.000262	-.000174	-.000103	-.000054	-.000050	-.000029	.000000
11.42	-.000282	-.000196	-.000127	-.000073	-.000027	.000000	.000000	-.000019	.000000
12.06	-.000159	-.000102	-.000061	-.000030	.000000	.000000	-.000007	-.000003	
12.70	-.000089	-.000053	-.000029	-.000012	.000000		-.000003	-.000001	
13.98	-.000027	-.000014	-.000006	-.000002			-.000000	.000000	
15.26	-.000008	-.000003	-.000001	.000000			.000000	.000000	
16.54	-.000002	-.000001	.000000	.000000					
17.82	-.000001	.000000	.000000						

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
-E	13.173	14.839	16.568	18.360	20.215	22.507	24.861	27.125	29.434
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.02	.000005	.000005	.000005	.000006	.000006	.000006	.000007	.000007	.000007
.03	.000022	.000024	.000026	.000027	.000029	.000031	.000032	.000034	.000036
.04	.000068	.000073	.000077	.000082	.000087	.000093	.000098	.000104	.000110
.05	.000160	.000170	.000181	.000193	.000205	.000217	.000229	.000243	.000256
.06	.000319	.000339	.000361	.000384	.000407	.000431	.000456	.000482	.000509
.07	.000567	.000604	.000642	.000682	.000723	.000766	.000810	.000856	.000903
.08	.000930	.000990	.001052	.001117	.001184	.001254	.001326	.001400	.001477
.09	.001432	.001524	.001619	.001718	.001821	.001927	.002037	.002151	.002269
.10	.002098	.002232	.002371	.002516	.002665	.002819	.002979	.003145	.003316
.12	.004025	.004279	.004543	.004816	.005098	.005391	.005693	.006006	.006328
.14	.006904	.007336	.007782	.008244	.008722	.009217	.009728	.010255	.010799
.16	.010914	.011588	.012285	.013007	.013752	.014523	.015318	.016138	.016983
.18	.016210	.017201	.018225	.019283	.020375	.021503	.022666	.023864	.025098
.20	.022928	.024314	.025745	.027222	.028746	.030318	.031938	.033605	.035321
.22	.031175	.033038	.034960	.036943	.038987	.041093	.043262	.045492	.047786
.24	.041033	.043458	.045958	.048534	.051187	.053918	.056729	.059617	.062584
.26	.052560	.055631	.058794	.062052	.065403	.068850	.072395	.076034	.079769
.28	.065790	.069590	.073502	.077526	.081662	.085914	.090281	.094761	.099356
.30	.080734	.085345	.090086	.094959	.099964	.105104	.110379	.115787	.121327
.34	.115717	.122173	.128802	.135603	.142575	.149723	.157046	.164540	.172204
.38	.157236	.165806	.174588	.183581	.192786	.202205	.211839	.221679	.231726
.42	.204798	.215696	.226843	.238239	.249881	.261774	.273915	.286296	.298913
.46	.257745	.271130	.284797	.298743	.312964	.327466	.342244	.357285	.372587
.50	.315315	.331288	.347568	.364150	.381027	.398207	.415681	.433435	.451464
.54	.376687	.395293	.414221	.433464	.453014	.472876	.493042	.513493	.534222
.58	.441021	.462252	.483809	.505682	.527862	.550356	.573149	.596222	.619563
.62	.507489	.531287	.555404	.579828	.604547	.629567	.654872	.680438	.706252
.66	.575297	.601563	.628128	.654978	.682100	.709497	.737154	.765040	.793142
.70	.643700	.672296	.701160	.730277	.759628	.789219	.819030	.849029	.879198
.78	.779614	.812344	.845246	.878298	.911478	.944792	.978215	1.011707	1.045248
.86	.910550	.946576	.982634	1.018700	1.054748	1.090783	1.126777	1.162685	1.198486
.94	1.032912	1.071303	1.109553	1.147634	1.185520	1.223217	1.260692	1.297902	1.334820
1.02	1.144126	1.183928	1.223390	1.262485	1.301185	1.339499	1.377394	1.414825	1.451769
1.10	1.242524	1.282811	1.322545	1.361701	1.400252	1.438208	1.475541	1.512207	1.548186
1.18	1.327198	1.367114	1.406259	1.444609	1.482142	1.518874	1.554777	1.589815	1.623970
1.26	1.397867	1.436648	1.474440	1.511228	1.546993	1.581757	1.615499	1.648187	1.679811
1.34	1.454728	1.491716	1.527510	1.562098	1.595472	1.627659	1.658645	1.688408	1.716945
1.42	1.498343	1.532992	1.566254	1.598129	1.628615	1.657748	1.685522	1.711924	1.736961
1.50	1.529525	1.561397	1.591710	1.620473	1.647696	1.673420	1.697651	1.720386	1.741644
1.66	1.558584	1.583991	1.607562	1.629329	1.649322	1.667602	1.684195	1.699124	1.712428
1.82	1.550477	1.568772	1.585050	1.599367	1.611779	1.622364	1.631170	1.638248	1.643657
1.98	1.513739	1.524807	1.533772	1.540715	1.545718	1.548874	1.550257	1.549942	1.548008
2.14	1.456041	1.460140	1.462139	1.462144	1.460260	1.456596	1.451248	1.444313	1.435890



	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
X									
2.30	1.383862	1.381500	1.377120	1.370851	1.362819	1.353146	1.341946	1.329339	1.315437
2.46	1.302458	1.294297	1.284267	1.272517	1.259191	1.244422	1.228339	1.211075	1.192757
2.62	1.215969	1.202755	1.187874	1.171493	1.153771	1.134845	1.114857	1.093948	1.072253
2.78	1.127580	1.110086	1.091171	1.071014	1.049783	1.027616	1.004660	.981063	.956958
2.94	1.039677	1.018672	.996521	.973409	.949509	.924955	.899893	.874472	.848822
3.10	.954006	.930224	.905587	.880283	.854482	.828309	.801908	.775421	.748971
3.42	.793864	.766507	.738885	.711172	.683523	.656032	.628823	.602018	.575710
3.74	.652626	.623872	.595398	.567346	.539839	.512933	.486717	.461287	.436696
4.06	.531753	.503210	.475401	.448429	.422375	.397252	.373115	.350024	.327995
4.38	.430456	.403213	.377052	.352032	.328191	.305503	.283985	.263668	.244529
4.70	.346824	.321545	.297593	.274982	.253710	.233718	.214989	.197526	.181274
5.02	.278514	.255546	.234055	.214018	.195396	.178103	.162097	.147353	.133794
5.34	.223148	.202611	.183624	.166132	.150068	.135327	.121842	.109569	.098414
5.66	.178521	.160384	.143811	.128720	.115023	.102601	.091370	.081270	.072195
5.98	.142692	.126828	.112500	.099603	.088034	.077664	.068399	.060163	.052850
6.30	.114003	.100236	.087944	.077007	.067309	.058720	.051137	.044474	.038626
6.94	.072770	.062586	.053698	.045973	.039284	.033500	.028515	.024234	.020564
7.58	.046523	.039120	.032807	.027449	.022920	.019099	.015884	.013184	.010922
8.22	.029830	.024513	.020085	.016418	.013392	.010902	.008858	.007176	.005799
8.86	.019203	.015416	.012338	.009851	.007850	.006242	.004954	.003915	.003082
9.50	.012421	.009740	.007614	.005938	.004622	.003591	.002784	.002143	.001641
10.14	.008080	.006188	.004725	.003600	.002738	.002078	.001574	.001179	.000875
10.78	.005290	.003958	.002953	.002198	.001634	.001212	.000897	.000652	.000467
11.42	.003488	.002550	.001860	.001354	.000984	.000713	.000515	.000362	.000248
12.06	.002319	.001657	.001182	.000841	.000599	.000424	.000299	.000202	.000131
12.70	.001555	.001087	.000758	.000529	.000368	.000255	.000175	.000113	.000067
13.98	.000720	.000482	.000323	.000216	.000144	.000095	.000062	.000034	.000015
15.26	.000348	.000224	.000144	.000093	.000059	.000037	.000023	.000010	.000001
16.54	.000176	.000109	.000068	.000042	.000026	.000015	.000009	.000003	.000000
17.82	.000093	.000055	.000033	.000020	.000012	.000006	.000003	.000001	.000000
19.10	.000051	.000029	.000017	.000010	.000005	.000002	.000001	.000000	.000000
20.38	.000029	.000016	.000009	.000005	.000002	.000001	.000000	.000000	.000000
21.66	.000017	.000009	.000005	.000002	.000001	.000000	.000000	.000000	.000000
22.94	.000010	.000005	.000003	.000001	.000000	.000000	.000000	.000000	.000000
24.22	.000006	.000003	.000001	.000001	.000000	.000000	.000000	.000000	.000000
25.50	.000003	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000
28.06	.000001	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
30.62	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
-E	10.119	11.016	11.930	12.862	13.812	15.151	16.506	17.725	18.943
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.088992	.091922	.094872	.097833	.100800	.103791	.106794	.109770	.112741
.02	.148553	.153198	.157860	.162526	.167187	.171873	.176564	.181196	.185804
.03	.183855	.189253	.194651	.200034	.205391	.210757	.216110	.221370	.226581
.04	.199385	.204790	.210171	.215509	.220794	.226064	.231294	.236401	.241430
.05	.199026	.203875	.208670	.213393	.218034	.222630	.227158	.231535	.235807
.06	.186126	.190009	.193807	.197504	.201091	.204603	.208017	.211259	.214373
.07	.163561	.166196	.168718	.171112	.173370	.175523	.177554	.179398	.181094
.08	.133795	.135007	.136080	.137002	.137768	.138404	.138894	.139192	.139328
.09	.098927	.098628	.098168	.097540	.096741	.095791	.094679	.093375	.091903
.10	.060735	.058907	.056902	.054718	.052355	.049825	.047123	.044238	.041183
.12	-.019875	-.024600	-.029513	-.034609	-.039881	-.045332	-.050955	-.056725	-.062645
.14	-.098834	-.105992	-.113325	-.120818	-.128459	-.136267	-.144221	-.152261	-.160410
.16	-.169984	-.178935	-.188024	-.197229	-.206532	-.215965	-.225497	-.235039	-.244626
.18	-.229479	-.239508	-.249619	-.259784	-.269981	-.280252	-.290558	-.300786	-.310985

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
.20	-.275205	-.285594	-.295996	-.306377	-.316712	-.327051	-.337352	-.347481	-.357499
.22	-.306330	-.316408	-.326418	-.336326	-.346106	-.355811	-.365396	-.374720	-.383850
.24	-.322947	-.332116	-.341135	-.349968	-.358589	-.367054	-.375317	-.383235	-.390879
.26	-.325799	-.333556	-.341081	-.348339	-.355305	-.362035	-.368485	-.374517	-.380202
.28	-.316064	-.322007	-.327641	-.332933	-.337861	-.342479	-.346746	-.350536	-.353917
.30	-.295194	-.299024	-.302476	-.305521	-.308139	-.310383	-.312216	-.313527	-.314383
.34	-.226502	-.225598	-.224211	-.222324	-.219928	-.217062	-.213706	-.209794	-.205377
.38	-.132799	-.127052	-.120773	-.113959	-.106614	-.098763	-.090403	-.081521	-.072152
.42	-.026291	-.016138	-.005463	.005720	.017395	.029554	.042177	.055223	.068678
.46	.082628	.096370	.110567	.125189	.140207	.155630	.171419	.187479	.203818
.50	.185733	.202016	.218637	.235554	.252725	.270175	.287848	.305602	.323467
.54	.276958	.294630	.312487	.330473	.348539	.366722	.384953	.403055	.421073
.58	.352213	.370120	.388031	.405882	.423619	.441289	.458814	.475990	.492881
.62	.409103	.426160	.443028	.459636	.475929	.491960	.507647	.522773	.537414
.66	.446624	.461870	.476729	.491130	.505017	.518451	.531347	.543489	.554960
.70	.464865	.477489	.489536	.500939	.511644	.521714	.531069	.539503	.547106
.78	.447734	.453361	.458088	.461859	.464638	.466484	.467340	.467048	.465696
.86	.370888	.368297	.364591	.359740	.353731	.346615	.338364	.328900	.318299
.94	.251439	.240589	.228544	.215303	.200882	.185318	.168624	.150809	.131936
1.02	.106767	.088529	.069151	.048665	.027114	.004522	-.019060	-.043527	-.068842
1.10	-.047562	-.071694	-.096793	-.122791	-.149619	-.177269	-.205651	-.234576	-.264031
1.18	-.198771	-.226958	-.255836	-.285310	-.315288	-.345776	-.376653	-.407660	-.438807
1.26	-.337166	-.367437	-.398054	-.428897	-.459857	-.490953	-.522041	-.552810	-.583294
1.34	-.455992	-.486423	-.516807	-.547012	-.576914	-.606547	-.635751	-.664185	-.691904
1.42	-.551086	-.579910	-.608280	-.636051	-.663098	-.689462	-.714980	-.739301	-.762500
1.50	-.620423	-.646111	-.670938	-.694761	-.717457	-.739072	-.759447	-.778246	-.795557
1.66	-.681678	-.697603	-.711938	-.724558	-.735365	-.744410	-.751568	-.756582	-.759558
1.82	-.649729	-.653075	-.654288	-.653284	-.650008	-.644510	-.636723	-.626525	-.614022
1.98	-.544027	-.533905	-.521339	-.506301	-.488792	-.468856	-.446503	-.421768	-.394751
2.14	-.386456	-.363443	-.337914	-.309905	-.279480	-.246675	-.211581	-.174400	-.135215
2.30	-.197456	-.163125	-.126425	-.087463	-.046363	-.003152	.041999	.088735	.136995
2.46	.005745	.049230	.094746	.142123	.191182	.241902	.294045	.347128	.401118
2.62	.209636	.259835	.311580	.364649	.418814	.474062	.530104	.586364	.642839
2.78	.404270	.458706	.514103	.570194	.626720	.683677	.740742	.797287	.853339
2.94	.582817	.639145	.695788	.752454	.808867	.865032	.920611	.974967	1.028153
3.10	.741020	.797130	.852896	.908010	.962197	1.015474	1.067507	1.117685	1.166089
3.42	.989003	1.039592	1.088595	1.135727	1.180751	1.223710	1.264334	1.302153	1.337293
3.74	1.146401	1.186867	1.224763	1.259874	1.292043	1.321346	1.347619	1.370610	1.390473
4.06	1.224367	1.252473	1.277369	1.298937	1.317124	1.332037	1.343638	1.351923	1.357053
4.38	1.239087	1.254417	1.266245	1.274559	1.279416	1.280951	1.279250	1.274544	1.266981
4.70	1.207203	1.210571	1.210443	1.206917	1.200150	1.190299	1.177561	1.162358	1.144814
5.02	1.143532	1.136464	1.126143	1.112766	1.096573	1.077740	1.056547	1.033553	1.008852
5.34	1.060195	1.044544	1.026050	1.004995	.981685	.956301	.929181	.900962	.871707
5.66	.966526	.944205	.919560	.892937	.864687	.834986	.804203	.772993	.741392
5.98	.869359	.842180	.813251	.782962	.751691	.719593	.687042	.654667	.622479
6.30	.773464	.743042	.711461	.679133	.646441	.613508	.580693	.548561	.517103
6.94	.596819	.563816	.530759	.498056	.466043	.434752	.404459	.375550	.347985
7.58	.448915	.416971	.385870	.355951	.327456	.300295	.274641	.250684	.228373
8.22	.331466	.302649	.275302	.249659	.225847	.203650	.183144	.164366	.147261
8.86	.241389	.216623	.193690	.172707	.153690	.136312	.120581	.106439	.093826
9.50	.173961	.153424	.134860	.118277	.103598	.090418	.078710	.068369	.059333
10.14	.124372	.107804	.093182	.080426	.069392	.059633	.051112	.043715	.037379
10.78	.088381	.075303	.064035	.054433	.046312	.039216	.033117	.027912	.023540
11.42	.062521	.052380	.043850	.036748	.030872	.025782	.021468	.017850	.014867
12.06	.044084	.036335	.029972	.024795	.020604	.016988	.013960	.011465	.009447
12.70	.031016	.025169	.020481	.016753	.013799	.011246	.009130	.007419	.006058
13.98	.015315	.012084	.009617	.007742	.006315	.005050	.004016	.003213	.002594
15.26	.007584	.005856	.004601	.003688	.003020	.002382	.001865	.001481	.001194
16.54	.003795	.002897	.002276	.001844	.001538	.001202	.000929	.000738	.000597
17.82	.001936	.001481	.001183	.000983	.000845	.000654	.000500	.000398	.000325

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
X									
19.10	.001016	.000793	.000654	.000565	.000503	.000383	.000289	.000230	.000189
20.38	.000555	.000450	.000388	.000349	.000321	.000239	.000177	.000141	.000116
21.66	.000319	.000272	.000247	.000230	.000216	.000155	.000113	.000090	.000074
22.94	.000193	.000175	.000166	.000159	.000151	.000104	.000074	.000059	.000048
24.22	.000124	.000120	.000117	.000114	.000109	.000071	.000050	.000039	.000032
25.50	.000084	.000085	.000085	.000083	.000079	.000049	.000034	.000026	.000021
28.06	.000044	.000048	.000048	.000047	.000044	.000024	.000016	.000012	.000010
30.62	.000026	.000028	.000028	.000027	.000025	.000011	.000008	.000006	.000005
33.18	.000016	.000017	.000017	.000016	.000014	.000005	.000004	.000003	.000002
35.74	.000010	.000011	.000010	.000009	.000008	.000002	.000002	.000001	.000001
38.30	.000007	.000007	.000006	.000006	.000005	.000000	.000001	.000001	.000001
40.86	.000004	.000004	.000004	.000003	.000003	.000000	.000000	.000000	.000000
43.42	.000003	.000003	.000002	.000002	.000002		.000000	.000000	.000000
45.98	.000002	.000002	.000002	.000001	.000001				
48.54	.000001	.000001	.000001	.000001	.000001				
51.10	.000001	.000001	.000001	.000000	.000000				
56.22	.000000	.000000	.000000	.000000	.000000				

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
-E	7.2295	8.0100	8.8064	9.6197	10.450	11.668	12.900	13.996	15.092
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.004494	.004710	.004929	.005151	.005380	.005609	.005840	.006074	.006311
.02	.016521	.017301	.018094	.018897	.019723	.020546	.021380	.022221	.023071
.03	.034142	.035729	.037339	.038969	.040642	.042309	.043994	.045693	.047407
.04	.055710	.058257	.060838	.063447	.066122	.068785	.071471	.074179	.076905
.05	.079837	.083424	.087054	.090718	.094472	.098203	.101962	.105745	.109549
.06	.105358	.110005	.114702	.119437	.124283	.129090	.133927	.138789	.143671
.07	.131302	.136983	.142717	.148488	.154388	.160231	.166102	.171994	.177902
.08	.156872	.163521	.170224	.176960	.183838	.190636	.197457	.204291	.211133
.09	.181416	.188942	.196516	.204115	.211865	.219509	.227165	.234824	.242479
.10	.204415	.212702	.221028	.229367	.237861	.246220	.254578	.262923	.271248
.12	.244232	.253643	.263063	.272461	.282003	.291348	.300652	.309904	.319094
.14	.274134	.284092	.294015	.303867	.313834	.323536	.333148	.342656	.352050
.16	.293089	.303014	.312847	.322553	.332328	.341769	.351062	.360194	.369155
.18	.300910	.310256	.319449	.328452	.337465	.346080	.354486	.362671	.370625
.20	.298006	.306290	.314358	.322172	.329929	.337230	.344262	.351013	.357477
.22	.285194	.292012	.298549	.304772	.310866	.316457	.321723	.326654	.331246
.24	.263554	.268584	.273274	.277594	.281713	.285295	.288502	.291328	.293771
.26	.234318	.237324	.239936	.242131	.244058	.245427	.246380	.246918	.247038
.28	.198785	.199612	.200003	.199939	.199545	.198586	.197185	.195342	.193063
.30	.158263	.156835	.154936	.152559	.149798	.146482	.142707	.138480	.133808
.34	.067266	.061364	.054964	.048073	.040726	.032888	.024598	.015874	.006729
.38	-.029441	-.039397	-.049827	-.060710	-.072069	-.083801	-.095925	-.108413	-.121245
.42	-.124200	-.137469	-.151138	-.165170	-.179650	-.194340	-.209313	-.224537	-.239982
.46	-.211096	-.226737	-.242663	-.258822	-.275351	-.291894	-.308577	-.325358	-.342206
.50	-.285892	-.302875	-.319994	-.337184	-.354627	-.371869	-.389080	-.406214	-.423239
.54	-.345857	-.363147	-.380398	-.397537	-.414783	-.431607	-.448214	-.464559	-.480606
.58	-.389531	-.406147	-.422538	-.438624	-.454650	-.470040	-.485024	-.499559	-.513610
.62	-.416483	-.431547	-.446195	-.460348	-.474263	-.487344	-.499837	-.511703	-.522912
.66	-.427082	-.439844	-.452005	-.463489	-.474558	-.484621	-.493929	-.502450	-.510160
.70	-.422290	-.432142	-.441223	-.449463	-.457119	-.463627	-.469235	-.473923	-.477672
.78	-.372308	-.375109	-.376863	-.377524	-.377313	-.375781	-.373149	-.369420	-.364593
.86	-.280082	-.275112	-.268934	-.261532	-.253072	-.243274	-.232309	-.220209	-.206993
.94	-.160229	-.147709	-.133949	-.118968	-.102858	-.085548	-.067138	-.047692	-.027250
1.02	-.026387	-.007248	.013040	.034420	.056877	.080270	.104569	.129687	.155564

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
1.10	.109830	.134190	.159496	.185657	.212733	.240380	.268641	.297408	.326605
1.18	.239238	.267164	.295742	.324854	.354629	.384542	.414704	.444995	.475329
1.26	.355094	.384845	.414892	.445091	.475635	.505847	.535902	.565673	.595069
1.34	.452871	.482756	.512539	.542059	.571562	.600258	.628374	.655787	.682404
1.42	.529939	.558403	.586350	.613611	.640473	.666068	.690669	.714162	.736462
1.50	.585200	.610885	.635639	.659296	.682168	.703354	.723159	.741485	.758256
1.66	.631498	.648454	.663728	.677172	.689122	.698715	.706286	.711791	.715186
1.82	.601245	.606771	.610029	.610919	.609757	.605842	.599499	.590756	.579605
1.98	.510306	.503321	.493698	.481400	.466698	.449134	.428996	.406387	.381347
2.14	.375986	.356680	.334595	.309767	.282401	.252336	.219801	.184972	.147936
2.30	.214346	.183815	.150582	.114763	.076485	.035902	-.006829	-.051469	-.097885
2.46	.039002	-.001073	-.043576	-.088318	-.135251	-.183912	-.234226	-.285903	-.338774
2.62	-.139208	-.186822	-.236429	-.287773	-.340887	-.395024	-.450195	-.506079	-.562482
2.78	-.312111	-.365137	-.419599	-.475184	-.532006	-.589072	-.646480	-.703901	-.761122
2.94	-.473879	-.530220	-.587357	-.644934	-.703145	-.760797	-.818074	-.874659	-.930336
3.10	-.620646	-.678340	-.736144	-.793681	-.851214	-.907405	-.962522	-1.016276	-1.068461
3.42	-.861261	-.916630	-.970742	-1.023223	-1.074459	-1.122980	-1.169199	-1.212934	-1.254024
3.74	-1.028648	-1.076676	-1.122252	-1.165064	-1.205590	-1.242415	-1.276062	-1.306495	-1.333621
4.06	-1.128633	-1.166302	-1.200619	-1.231371	-1.259094	-1.282576	-1.302407	-1.318703	-1.331449
4.38	-1.172132	-1.198112	-1.220169	-1.238218	-1.252814	-1.263050	-1.269536	-1.272527	-1.272083
4.70	-1.171448	-1.185661	-1.195702	-1.201619	-1.203949	-1.202155	-1.196822	-1.188308	-1.176744
5.02	-1.138238	-1.141447	-1.140511	-1.135610	-1.127231	-1.115232	-1.100132	-1.082355	-1.062091
5.34	-1.082565	-1.076031	-1.065603	-1.051581	-1.034370	-1.014229	-.991576	-.966855	-.940307
5.66	-1.012612	-.997837	-.979587	-.958264	-.934170	-.907942	-.879872	-.850380	-.819750
5.98	-.934734	-.913285	-.888895	-.862050	-.832927	-.802507	-.770937	-.738579	-.705749
6.30	-.853683	-.827072	-.798128	-.767396	-.734909	-.701954	-.668515	-.634874	-.601369
6.94	-.694681	-.661766	-.627799	-.593381	-.558220	-.524070	-.490576	-.457825	-.426170
7.58	-.551678	-.516702	-.481875	-.447753	-.413725	-.381816	-.351351	-.322234	-.294802
8.22	-.430563	-.396437	-.363449	-.332044	-.301306	-.273382	-.247337	-.222941	-.200488
8.86	-.331813	-.300316	-.270682	-.243206	-.216702	-.193343	-.172005	-.152394	-.134740
9.50	-.253345	-.225399	-.199773	-.176605	-.154488	-.135571	-.118612	-.103312	-.089831
10.14	-.192123	-.168047	-.146514	-.127515	-.109488	-.094525	-.081340	-.069663	-.059590
10.78	-.144988	-.124714	-.107019	-.091773	-.077319	-.065688	-.055596	-.046830	-.039423
11.42	-.109056	-.092289	-.078003	-.065976	-.054513	-.045585	-.037944	-.031443	-.026062
12.06	-.081865	-.068198	-.056827	-.047469	-.038436	-.031641	-.025898	-.021118	-.017243
12.70	-.061402	-.050392	-.041444	-.034242	-.027143	-.022000	-.017699	-.014206	-.011432
13.98	-.034592	-.027639	-.022242	-.018082	-.013671	-.010740	-.008330	-.006484	-.005076
15.26	-.019645	-.015369	-.012194	-.009848	-.007032	-.005349	-.003979	-.003004	-.002292
16.54	-.011326	-.008741	-.006904	-.005599	-.003724	-.002735	-.001932	-.001413	-.001050
17.82	-.006672	-.005127	-.004075	-.003355	-.002043	-.001441	-.000950	-.000670	-.000483
19.10	-.004041	-.003124	-.002525	-.002129	-.001166	-.000782	-.000468	-.000315	-.000217
20.38	-.002530	-.001988	-.001647	-.001428	-.000691	-.000436	-.000225	-.000144	-.000095
21.66	-.001642	-.001322	-.001128	-.001006	-.000426	-.000247	-.000100	-.000065	-.000040
22.94	-.001107	-.000918	-.000807	-.000737	-.000270	-.000141	-.000036	-.000029	-.000017
24.22	-.000774	-.000663	-.000598	-.000557	-.000177	-.000079	-.000006	-.000012	-.000007
25.50	-.000559	-.000494	-.000456	-.000431	-.000118	-.000044	.000000	-.000005	-.000003
28.06	-.000318	-.000296	-.000281	-.000269	-.000055	-.000013	.000000	-.000001	-.000000
30.62	-.000196	-.000189	-.000182	-.000173	-.000027	-.000004	.000000	.000000	.000000
33.18	-.000128	-.000126	-.000121	-.000114	-.000013	-.000001	.000000	.000000	.000000
35.74	-.000086	-.000086	-.000082	-.000076	-.000007	.000000	.000000	.000000	.000000
38.30	-.000060	-.000059	-.000056	-.000050	-.000004	.000000	.000000	.000000	.000000
40.86	-.000042	-.000041	-.000038	-.000034	-.000002	.000000	.000000	.000000	.000000
43.42	-.000030	-.000029	-.000026	-.000023	-.000001	.000000	.000000	.000000	.000000
45.98	-.000021	-.000020	-.000018	-.000015	-.000000	.000000	.000000	.000000	.000000
48.54	-.000015	-.000014	-.000012	-.000010	.000000	.000000	.000000	.000000	.000000
51.10	-.000011	-.000010	-.000008	-.000007	.000000	.000000	.000000	.000000	.000000
56.22	-.000006	-.000005	-.000004	-.000003	.000000	.000000	.000000	.000000	.000000
61.34	-.000003	-.000003	-.000002	-.000001	.000000	.000000	.000000	.000000	.000000
66.46	-.000002	-.000001	-.000001	-.000000	.000000	.000000	.000000	.000000	.000000
71.58	-.000001	-.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10
-E	2.4490	2.9748	3.5167	4.0758	4.6526	5.6164	6.5937	7.4379	8.2834
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000041	.000045	.000048	.000052	.000055	.000059	.000063	.000066	.000070
.02	.000312	.000338	.000364	.000390	.000416	.000444	.000472	.000501	.000530
.03	.000997	.001078	.001160	.001243	.001327	.001414	.001503	.001594	.001687
.04	.002236	.002417	.002600	.002785	.002972	.003165	.003362	.003564	.003770
.05	.004133	.004466	.004801	.005141	.005484	.005837	.006198	.006568	.006943
.06	.006760	.007302	.007847	.008397	.008954	.009527	.010111	.010709	.011316
.07	.010163	.010972	.011786	.012607	.013437	.014289	.015158	.016047	.016950
.08	.014364	.015500	.016642	.017793	.018955	.020149	.021364	.022607	.023867
.09	.019367	.020888	.022416	.023955	.025509	.027102	.028723	.030380	.032059
.10	.025158	.027122	.029092	.031074	.033074	.035124	.037207	.039334	.041488
.12	.038995	.041998	.045005	.048026	.051067	.054180	.057339	.060560	.063815
.14	.055554	.059773	.063991	.068219	.072468	.076810	.081210	.085688	.090207
.16	.074405	.079976	.085534	.091095	.096672	.102363	.108119	.113968	.119859
.18	.095059	.102072	.109054	.116026	.123004	.130114	.137290	.144570	.151890
.20	.117000	.125502	.133946	.142361	.150767	.159315	.167928	.176649	.185400
.22	.139716	.149708	.159611	.169458	.179272	.189235	.199252	.209376	.219514
.24	.162714	.174160	.185478	.196705	.207869	.219180	.230530	.241978	.253415
.26	.185533	.198362	.211015	.223536	.235957	.248516	.261090	.273744	.286359
.28	.207755	.221864	.235743	.249442	.262996	.276672	.290331	.304046	.317684
.30	.229007	.244268	.259237	.273973	.288514	.303150	.317731	.332338	.346822
.34	.267345	.284445	.301117	.317428	.333427	.349449	.365318	.381129	.396711
.38	.298514	.316748	.334399	.351547	.368246	.384869	.401222	.417407	.433239
.42	.321199	.339810	.357675	.374884	.391498	.407915	.423929	.439650	.454884
.46	.334710	.352943	.370266	.386777	.402546	.417980	.432874	.447337	.461178
.50	.338879	.356019	.372093	.387203	.401428	.415175	.428243	.440743	.452487
.54	.333945	.349349	.363541	.376632	.388703	.400156	.410796	.420735	.429800
.58	.320461	.333572	.345345	.355896	.365310	.373971	.381700	.388606	.394535
.62	.299196	.309557	.318476	.326073	.332439	.337929	.342386	.345916	.348386
.66	.271064	.278319	.284055	.288396	.291435	.293492	.294440	.294373	.293193
.70	.237061	.240955	.243284	.244171	.243714	.242190	.239503	.235742	.230838
.78	.155545	.152336	.147560	.141340	.133776	.125050	.115136	.104106	.091963
.86	.062628	.052366	.040658	.027621	.013358	-.020206	-.018578	-.036146	-.054685
.94	-.034529	-.051255	-.069194	-.088236	-.108282	-.129368	-.151365	-.174244	-.197851
1.02	-.129968	-.152186	-.175285	-.199167	-.223742	-.249150	-.275191	-.301856	-.328928
1.10	-.219048	-.245540	-.272505	-.299862	-.327531	-.355749	-.384253	-.413056	-.441885
1.18	-.298390	-.327818	-.357257	-.386647	-.415921	-.445401	-.474775	-.504073	-.532986
1.26	-.365753	-.396752	-.427271	-.457271	-.486703	-.515959	-.544690	-.572948	-.600395
1.34	-.419856	-.451111	-.481383	-.510659	-.538910	-.566583	-.593310	-.619155	-.643775
1.42	-.460197	-.490491	-.519308	-.546661	-.572544	-.597445	-.620988	-.643254	-.663903
1.50	-.486877	-.515124	-.541422	-.565814	-.588318	-.609446	-.628832	-.646569	-.662336
1.66	-.501752	-.523249	-.541966	-.558008	-.571447	-.582808	-.591774	-.598462	-.602622
1.82	-.471945	-.484160	-.492968	-.498534	-.500988	-.500824	-.497813	-.492094	-.483523
1.98	-.406881	-.408394	-.406107	-.400242	-.390986	-.378772	-.363484	-.345281	-.324146
2.14	-.316037	-.306354	-.292714	-.275397	-.254644	-.230801	-.203886	-.174072	-.141483
2.30	-.207975	-.187317	-.162778	-.134685	-.103330	-.068959	-.031731	.008171	.050486
2.46	-.089950	-.059069	-.024591	.013115	.053711	.097063	.142873	.190953	.240911
2.62	.032154	.072142	.115259	.161102	.209303	.259838	.312279	.366443	.421824
2.78	.153736	.201484	.251740	.304081	.358118	.413938	.471002	.529136	.587743
2.94	.271319	.325361	.381169	.438316	.496404	.555632	.615368	.675456	.735234
3.10	.382384	.441217	.500992	.561287	.621713	.682577	.743177	.803383	.862492
3.42	.578675	.642766	.706018	.768070	.828595	.888103	.945819	1.001691	1.055010
3.74	.735681	.799947	.861605	.920412	.976149	1.029510	1.079736	1.126870	1.170287
4.06	.852944	.913393	.969638	1.021593	1.069195	1.113290	1.153205	1.189085	1.220456
4.38	.933654	.987426	1.035669	1.078487	1.115994	1.149155	1.177432	1.201074	1.219795

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10
X									
4.70	.982726	1.027984	1.066705	1.099198	1.125764	1.147456	1.163900	1.175434	1.181986
5.02	1.005598	1.041344	1.069869	1.091693	1.107304	1.117805	1.123005	1.123306	1.118859
5.34	1.007533	1.033413	1.051701	1.063121	1.068338	1.068469	1.063507	1.053895	1.040001
5.66	.993263	1.009398	1.017854	1.019546	1.015299	1.006205	.992437	.974453	.952820
5.98	.966848	.973690	.973016	.965913	.953341	.936334	.915229	.890470	.862805
6.30	.931663	.929881	.920962	.906137	.886474	.862914	.835936	.805950	.773857
6.94	.845375	.828824	.806386	.779496	.749340	.716566	.681874	.645562	.608741
7.58	.750102	.722327	.690353	.655671	.619455	.581943	.543972	.505706	.468329
8.22	.655213	.619600	.581664	.542814	.504093	.465241	.427176	.389948	.354688
8.86	.565893	.525403	.484457	.444267	.405641	.367797	.331696	.297316	.265642
9.50	.484693	.441761	.400093	.360607	.323823	.288450	.255481	.224870	.197390
10.14	.412560	.369092	.328368	.290956	.257066	.224954	.195647	.169110	.145874
10.78	.349508	.306921	.268273	.233765	.203297	.174758	.149219	.126676	.107411
11.42	.295030	.254323	.218457	.187268	.160384	.135420	.113493	.094642	.078912
12.06	.248364	.210191	.177480	.149736	.126356	.104779	.086166	.070597	.057909
12.70	.208648	.173390	.143968	.119597	.099495	.081012	.065351	.052621	.042487
13.98	.146631	.117583	.094517	.076237	.061745	.048438	.037559	.029244	.022926
15.26	.102714	.079582	.062040	.048691	.038483	.029053	.021623	.016315	.012465
16.54	.071862	.053880	.040816	.031240	.024154	.017524	.012501	.009169	.006862
17.82	.050286	.036549	.026962	.020173	.015296	.010650	.007272	.005208	.003844
19.10	.035230	.024871	.017907	.013129	.009788	.006530	.004263	.002998	.002201
20.38	.024731	.016995	.011971	.008622	.006336	.004045	.002521	.001754	.001295
21.66	.017407	.011670	.008062	.005719	.004152	.002532	.001506	.001046	.000787
22.94	.012292	.008059	.005475	.003834	.002756	.001604	.000908	.000638	.000495
24.22	.008713	.005601	.003750	.002599	.001853	.001028	.000554	.000399	.000324
25.50	.006202	.003919	.002593	.001782	.001263	.000666	.000341	.000256	.000220
28.06	.003189	.001963	.001277	.000867	.000608	.000289	.000133	.000115	.000113
30.62	.001676	.001015	.000654	.000440	.000306	.000131	.000053	.000058	.000066
33.18	.000904	.000543	.000348	.000233	.000160	.000061	.000021	.000033	.000042
35.74	.000500	.000300	.000191	.000127	.000086	.000029	.000008	.000020	.000028
38.30	.000285	.000171	.000108	.000071	.000048	.000014	.000003	.000014	.000019
40.86	.000167	.000100	.000063	.000041	.000027	.000007	.000001	.000009	.000014
43.42	.000100	.000060	.000037	.000024	.000015	.000003	.000000	.000007	.000010
45.98	.000061	.000036	.000022	.000014	.000009	.000002	.000000	.000005	.000007
48.54	.000038	.000023	.000014	.000008	.000005	.000001		.000004	.000005
51.10	.000024	.000014	.000008	.000004	.000003	.000000		.000003	.000004
56.22	.000010	.000005	.000003	.000001	.000001	.000000		.000001	.000002
61.34	.000004	.000002	.000001	.000000	.000000			.000001	.000001
66.46	.000001	.000001	.000000	.000000	.000000			.000000	.000000
71.58	.000000	.000000	.000000					.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
-E	.91771	1.1163	1.3204	1.5307	1.7420	2.2546	2.7414	3.0712	3.3863
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.027579	.030183	.032608	.034908	.037114	.040355	.043551	.046125	.048537
.02	.046036	.050302	.054256	.057990	.061556	.066824	.072001	.076136	.079989
.03	.056974	.062138	.066898	.071369	.075619	.081937	.088122	.093011	.097538
.04	.061783	.067235	.072227	.076885	.081283	.087881	.094306	.099317	.103919
.05	.061666	.066928	.071704	.076122	.080258	.086535	.092607	.097258	.101484
.06	.057667	.062367	.066587	.070442	.074008	.079513	.084786	.088722	.092238
.07	.050661	.054539	.057953	.061014	.063788	.068192	.072346	.075315	.077890
.08	.041428	.044289	.046724	.048831	.050666	.053744	.056563	.058401	.059887
.09	.030614	.032334	.033683	.034738	.035547	.037160	.038515	.039130	.039448
.10	.018771	.019282	.019489	.019447	.019191	.019274	.019105	.018465	.017594
.12	-.006224	-.008152	-.010228	-.012444	-.014789	-.017746	-.020915	-.023986	-.027134
.14	.030699	-.034083	-.039041	-.043211	-.047410	-.051108	-.058956	-.064135	-.069228
.16	-.052745	-.058829	-.064709	-.070466	-.076145	-.084081	-.092083	-.098898	-.105460
.18	-.071168	-.078700	-.085857	-.092760	-.099476	-.109039	-.118571	-.126473	-.133970

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
.20	-.085310	-.093799	-.101758	-.109338	-.116629	-.127173	-.137580	-.146011	-.153902
.22	-.094916	-.103868	-.112157	-.119960	-.127378	-.138268	-.148917	-.157343	-.165119
.24	-.100013	-.108964	-.117144	-.124745	-.131881	-.142531	-.152837	-.160780	-.167987
.26	-.100834	-.109363	-.117040	-.124066	-.130562	-.140452	-.149905	-.156953	-.163209
.28	-.097745	-.105487	-.112324	-.118460	-.124017	-.132708	-.140878	-.146696	-.151695
.30	-.091200	-.097850	-.103572	-.108562	-.112943	-.120079	-.126627	-.130957	-.134467
.34	-.069750	-.073553	-.076459	-.078639	-.080200	-.083495	-.086115	-.086995	-.087131
.38	-.040560	-.041023	-.040713	-.039760	-.038245	-.037238	-.035542	-.032781	-.029439
.42	-.007435	-.004473	-.000937	.003097	.007578	.012830	.018714	.024876	.031393
.46	.026383	.032536	.039010	.045789	.052857	.061904	.071466	.080483	.089591
.50	.058330	.067208	.076124	.085121	.094218	.106346	.118820	.129957	.140901
.54	.086516	.097508	.108241	.118817	.129288	.143626	.158104	.170533	.182486
.58	.109668	.122085	.133952	.145422	.156579	.172193	.187720	.200596	.212732
.62	.127045	.140178	.152489	.164176	.175346	.191310	.206949	.219471	.231019
.66	.138339	.151505	.163604	.174871	.185437	.200884	.215771	.227221	.237503
.70	.143589	.156155	.167450	.177733	.187154	.201310	.214686	.224455	.232908
.78	.137319	.147105	.155342	.162315	.168193	.177931	.186524	.191591	.195198
.86	.112444	.117947	.121814	.124320	.125635	.129369	.131730	.131134	.129133
.94	.074411	.074859	.073765	.071368	.067822	.064949	.060633	.054292	.046776
1.02	.028745	.024009	.017984	.010850	.002731	-.006532	-.017151	-.028637	-.040927
1.10	-.019608	-.029147	-.039599	-.050857	-.062832	-.077660	-.093616	-.109178	-.125082
1.18	-.066596	-.080193	-.094243	-.108716	-.123565	-.142733	-.162688	-.180995	-.199130
1.26	-.109150	-.125836	-.142465	-.159085	-.175698	-.197767	-.220200	-.239824	-.258751
1.34	-.145146	-.163842	-.181953	-.199607	-.216851	-.240321	-.263680	-.283227	-.301574
1.42	-.173294	-.192901	-.211410	-.229020	-.245821	-.269242	-.292057	-.310253	-.326796
1.50	-.192990	-.212462	-.230357	-.246939	-.262338	-.284390	-.305345	-.321095	-.334809
1.66	-.207187	-.223661	-.237778	-.249894	-.260211	-.276300	-.290418	-.298839	-.304714
1.82	-.191383	-.202126	-.210025	-.215489	-.218765	-.225989	-.230603	-.229876	-.226425
1.98	-.152293	-.155708	-.156110	-.153920	-.149412	-.146478	-.140600	-.130428	-.117785
2.14	-.097418	-.092928	-.085557	-.075709	-.063662	-.050626	-.034634	-.015896	.004793
2.30	-.033764	-.021608	-.006973	.009789	.028407	.050480	.075214	.100838	.127658
2.46	.032750	.051729	.072572	.094992	.118746	.148116	.179583	.209949	.240601
2.62	.097470	.122032	.147678	.174206	.201408	.235950	.271813	.304598	.336676
2.78	.156970	.185645	.214518	.243477	.272362	.309807	.347644	.380554	.411754
2.94	.208909	.240140	.270623	.300343	.329202	.367314	.404796	.435722	.463981
3.10	.251855	.284100	.314635	.343552	.370817	.407523	.442541	.469652	.493236
3.42	.308509	.338566	.365100	.388412	.408621	.437313	.462287	.477617	.488112
3.74	.327150	.350471	.368778	.382572	.392135	.407863	.418198	.418464	.413244
4.06	.312826	.326322	.333757	.335811	.332929	.333061	.326653	.310934	.289745
4.38	.272515	.274467	.269794	.259329	.243664	.227501	.204249	.173397	.137680
4.70	.213390	.203205	.186301	.163631	.135910	.104195	.065431	.021468	-.026278
5.02	.141913	.119848	.091392	.057584	.019239	-.026315	-.078341	-.132724	-.189468
5.34	.063466	.030370	-.008424	-.051830	-.098964	-.156063	-.218596	-.280429	-.342989
5.66	-.017711	-.060603	-.108205	-.159419	-.213325	-.279389	-.349485	-.415797	-.481113
5.98	-.098424	-.149658	-.204382	-.261523	-.320160	-.392547	-.467296	-.535304	-.600608
6.30	-.176370	-.234389	-.294511	-.355720	-.417135	-.493295	-.569973	-.637198	-.700114
6.94	-.318173	-.385099	-.451067	-.515292	-.577083	-.653969	-.727519	-.787241	-.840007
7.58	-.436375	-.506486	-.572522	-.634071	-.690768	-.761135	-.824547	-.871435	-.909711
8.22	-.529498	-.598021	-.659604	-.714329	-.762262	-.821193	-.870176	-.901677	-.923963
8.86	-.598824	-.662074	-.715990	-.761226	-.798336	-.843014	-.875578	-.891275	-.898104
9.50	-.646921	-.702276	-.746499	-.780846	-.806364	-.835655	-.851548	-.852485	-.845646
10.14	-.676815	-.722597	-.756095	-.779147	-.793249	-.807253	-.807421	-.795509	-.777419
10.78	-.691547	-.726872	-.749391	-.761462	-.764952	-.764609	-.750740	-.728301	-.701563
11.42	-.693953	-.718564	-.730424	-.732311	-.726367	-.713132	-.687304	-.656749	-.623864
12.06	-.686558	-.700676	-.702588	-.695381	-.681362	-.656959	-.621392	-.585015	-.548214
12.70	-.671549	-.675736	-.668662	-.653592	-.632898	-.599153	-.556034	-.515889	-.477058
13.98	-.625805	-.612647	-.590921	-.563904	-.533822	-.486706	-.434414	-.391689	-.353018
15.26	-.568090	-.541526	-.509615	-.475256	-.440261	-.386005	-.330940	-.290211	-.255194
16.54	-.505957	-.469929	-.431794	-.393817	-.357257	-.300736	-.247368	-.211149	-.181339
17.82	-.444184	-.402189	-.361033	-.322213	-.286396	-.231116	-.182197	-.151514	-.127214

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
19.10	-.385616	-.340538	-.298784	-.261049	-.227438	-.175705	-.132645	-.107566	-.088382
20.38	-.331799	-.285887	-.245257	-.209850	-.179269	-.132428	-.095675	-.075734	-.060956
21.66	-.283426	-.238345	-.199988	-.167624	-.140443	-.099112	-.068494	-.052979	-.041812
22.94	-.240648	-.197569	-.162180	-.133192	-.109474	-.073758	-.048739	-.036879	-.028568
24.22	-.203289	-.162977	-.130914	-.105367	-.084973	-.054639	-.034513	-.025576	-.019467
25.50	-.170983	-.133887	-.105259	-.083042	-.065720	-.040330	-.024343	-.017690	-.013244
28.06	-.119653	-.089432	-.067387	-.051105	-.038969	-.021812	-.012008	-.008426	-.006125
30.62	-.082757	-.059083	-.042695	-.031145	-.022897	-.011748	-.005882	-.004010	-.002845
33.18	-.056709	-.038697	-.026834	-.018840	-.013362	-.006347	-.002874	-.001918	-.001336
35.74	-.038569	-.025170	-.016759	-.011331	-.007758	-.003470	-.001407	-.000927	-.000638
38.30	-.026070	-.016281	-.010415	-.006786	-.004487	-.001942	-.000692	-.000455	-.000312
40.86	-.017532	-.010483	-.006447	-.004050	-.002589	-.001127	-.000344	-.000228	-.000157
43.42	-.011740	-.006726	-.003979	-.002412	-.001491	-.000688	-.000174	-.000118	-.000081
45.98	-.007833	-.004303	-.002450	-.001434	-.000858	-.000447	-.000089	-.000063	-.000043
48.54	-.005211	-.002746	-.001506	-.000852	-.000494	-.000309	-.000047	-.000034	-.000024
51.10	-.003459	-.001749	-.000925	-.000506	-.000284	-.000227	-.000026	-.000020	-.000014
56.22	-.001515	-.000708	-.000348	-.000178	-.000094	-.000140	-.000008	-.000007	-.000005
61.34	-.000660	-.000285	-.000131	-.000063	-.000031	-.000095	-.000003	-.000003	-.000002
66.46	-.000287	-.000115	-.000049	-.000022	-.000011	-.000067	-.000001	-.000001	-.000001
71.58	-.000124	-.000047	-.000019	-.000008	-.000004	-.000047	-.000001	-.000000	-.000000
76.70	-.000054	-.000019	-.000007	-.000003	-.000001	-.000033	-.000000	-.000000	-.000000
81.82	-.000024	-.000008	-.000003	-.000001	-.000000	-.000023	-.000000		
86.94	-.000010	-.000003	-.000001	-.000000	-.000000	-.000016			
92.06	-.000005	-.000001	-.000000	.000000		-.000011			
97.18	-.000002	-.000001	-.000000			-.000008			
102.30	-.000001	-.000000				-.000005			
112.54	-.000000	-.000000				-.000002			
122.78	-.000000					-.000001			
133.02						-.000000			

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	6P 2	6P 3	6P 4	6P 5	6P 6	6P 6	6P 6	6P 6	6P 6
-E	.47969	.57237	.66536	.75973	.85600	1.2570	1.6396	1.8920	2.1352
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.001110	.001283	.001446	.001601	.001740	.001973	.002191	.002366	.002533
.02	.004080	.004715	.005307	.005873	.006380	.007227	.008020	.008657	.009261
.03	.008433	.009737	.010951	.012110	.013147	.014882	.016502	.017801	.019029
.04	.013759	.015875	.017843	.019716	.021390	.024194	.026809	.028898	.030869
.05	.019718	.022733	.025531	.028189	.030559	.034539	.038244	.041193	.043970
.06	.026020	.029975	.033638	.037112	.040200	.045401	.050231	.054062	.057662
.07	.032426	.037325	.041852	.046136	.049936	.056350	.062294	.066992	.071395
.08	.038739	.044554	.049916	.054979	.059457	.067038	.074048	.079565	.084724
.09	.044798	.051477	.057622	.063412	.068516	.077184	.085181	.091448	.097292
.10	.050474	.057946	.064805	.071251	.076916	.086568	.095449	.102378	.108821
.12	.060296	.069088	.077115	.084620	.091169	.102409	.112694	.120638	.127977
.14	.067665	.077365	.086167	.094349	.101430	.113686	.124831	.133337	.141138
.16	.072325	.082494	.091658	.100117	.107366	.120043	.131484	.140093	.147917
.18	.074231	.084436	.093555	.101903	.108973	.121492	.132689	.140967	.148405
.20	.073484	.083318	.092016	.099898	.106472	.118303	.128763	.136323	.143012
.22	.070287	.079386	.087330	.094433	.100237	.110914	.120211	.126722	.132359
.24	.064908	.072958	.079865	.085926	.090734	.099866	.107648	.112845	.117188
.26	.057652	.064395	.070034	.074844	.078481	.085756	.091747	.095430	.098303
.28	.048841	.054075	.058271	.061672	.064011	.069197	.073197	.075228	.076517
.30	.038799	.042377	.045004	.046892	.047853	.050794	.052673	.052977	.052624
.34	.016269	.016293	.015604	.014333	.012466	.010719	.008235	.005065	.001457
.38	-.007650	-.011205	-.015174	-.019518	-.024073	-.030379	-.037030	-.043408	-.049962
.42	-.031058	-.037931	-.044883	-.051968	-.058855	-.069228	-.079515	-.088583	-.097538
.46	-.052487	-.062211	-.071665	-.080991	-.089714	-.103412	-.116585	-.127660	-.138331



	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	6P 2	6P 3	6P 4	6P 5	6P 6	6P 6	6P 6	6P 6	6P 6
.50	-.070888	-.082864	-.094223	-.105189	-.115174	-.131307	-.146493	-.158818	-.170459
.54	-.085585	-.099141	-.111754	-.123718	-.134362	-.151981	-.168264	-.181068	-.192933
.58	-.096218	-.110661	-.123868	-.136189	-.146907	-.165064	-.181548	-.194096	-.205488
.62	-.102685	-.117341	-.130508	-.142581	-.152827	-.170631	-.186484	-.198113	-.208411
.66	-.105082	-.119321	-.131869	-.143148	-.152441	-.169086	-.183572	-.193711	-.202394
.70	-.103652	-.116912	-.128329	-.138341	-.146275	-.161067	-.173561	-.181747	-.188399
.78	-.090771	-.100699	-.108644	-.115037	-.119357	-.128848	-.135976	-.139298	-.141083
.86	-.067453	-.072785	-.076200	-.078079	-.078121	-.081007	-.081731	-.079603	-.076117
.94	-.037377	-.037494	-.035945	-.033025	-.028687	-.024564	-.018699	-.011242	-.002757
1.02	-.003974	.001184	.007611	.015119	.023494	.034304	.046266	.058399	.071118
1.10	.029835	.039894	.050716	.062234	.073988	.090627	.107716	.123515	.139394
1.18	.061745	.076016	.090479	.105188	.119469	.140727	.161676	.179943	.197750
1.26	.090065	.107663	.124850	.141798	.157663	.182143	.205547	.225015	.243492
1.34	.113668	.133605	.152529	.170723	.187216	.213465	.237896	.257338	.275291
1.42	.131908	.153171	.172846	.191316	.207530	.234132	.258239	.276530	.292892
1.50	.144528	.166136	.185630	.203476	.218594	.244242	.266804	.282970	.296836
1.66	.153310	.172979	.189686	.204015	.214952	.235410	.251916	.261600	.268898
1.82	.142621	.157574	.169034	.177643	.182591	.194711	.202473	.203883	.202375
1.98	.116706	.125109	.129825	.131492	.129608	.131689	.129468	.122084	.111993
2.14	.080177	.081082	.078419	.072782	.064028	.055629	.043394	.027715	.009828
2.30	.037325	.030523	.020552	.007925	-.007122	-.025453	-.046812	-.069563	-.093789
2.46	-.008203	-.022341	-.039018	-.057829	-.078160	-.105166	-.134125	-.162264	-.190981
2.62	-.053490	-.074175	-.096589	-.120449	-.144792	-.178758	-.213412	-.245021	-.276214
2.78	-.096329	-.122494	-.149445	-.177037	-.203993	-.242953	-.281227	-.314332	-.345994
2.94	-.135142	-.165560	-.195736	-.225668	-.253819	-.295730	-.335536	-.368245	-.398503
3.10	-.168889	-.202263	-.234328	-.265226	-.293211	-.336075	-.375433	-.406025	-.433222
3.42	-.219088	-.254565	-.286616	-.315674	-.339736	-.379114	-.412428	-.434563	-.451748
3.74	-.245700	-.278747	-.306466	-.329564	-.345980	-.376119	-.398178	-.407961	-.411808
4.06	-.250671	-.277715	-.297888	-.312150	-.318535	-.335567	-.343194	-.338694	-.327892
4.38	-.237448	-.255948	-.266471	-.270198	-.265370	-.267174	-.258979	-.239872	-.214691
4.70	-.209911	-.218278	-.218017	-.210497	-.194235	-.180131	-.156134	-.123289	-.085114
5.02	-.171780	-.169218	-.157819	-.139106	-.111906	-.082306	-.043557	.001359	.050441
5.34	-.126326	-.112659	-.090359	-.061064	-.023916	.019986	.071748	.126586	.184117
5.66	-.076266	-.051787	-.019247	.019638	.065427	.121923	.184542	.246928	.310329
5.98	-.023770	.010889	.052718	.099960	.152908	.219987	.291108	.358627	.425380
6.30	.029476	.073453	.123438	.177673	.236227	.311740	.388968	.459301	.527076
6.94	.133469	.192967	.255525	.319511	.384722	.470676	.553328	.623134	.687058
7.58	.229179	.299705	.369817	.438195	.504610	.593210	.673518	.736340	.790654
8.22	.313505	.390653	.463721	.531890	.595141	.680038	.752161	.803746	.845124
8.86	.385377	.465161	.537291	.601617	.658523	.734996	.795021	.833093	.860227
9.50	.444882	.523894	.591992	.649828	.698320	.763179	.808872	.832727	.845793
10.14	.492727	.568193	.629959	.679557	.718503	.769861	.800336	.810405	.810556
10.78	.529928	.599700	.653552	.693921	.722925	.759936	.775313	.772772	.761722
11.42	.557624	.620127	.665101	.695856	.715066	.737667	.738769	.725230	.704938
12.06	.576969	.631136	.666772	.687983	.697917	.706615	.694729	.671999	.644455
12.70	.589073	.634267	.660500	.672564	.673981	.669670	.646348	.616264	.583347
13.98	.595600	.622278	.630618	.626378	.613485	.586729	.545595	.505915	.467088
15.26	.584344	.593321	.586090	.568796	.545347	.501483	.449079	.405447	.365593
16.54	.560951	.554187	.534291	.507270	.476682	.420947	.362891	.319353	.281587
17.82	.529739	.509722	.480120	.446387	.411507	.348555	.289238	.248380	.214410
19.10	.493930	.463282	.426705	.388808	.351876	.285575	.228153	.191403	.161942
20.38	.455884	.417123	.375939	.335931	.298635	.232030	.178566	.146519	.121639
21.66	.417294	.372700	.328885	.288356	.251916	.187273	.138947	.111645	.091049
22.94	.379348	.330907	.286048	.246188	.211442	.150344	.107667	.084823	.068028
24.22	.342850	.292239	.247575	.209235	.176722	.120182	.083196	.064346	.050809
25.50	.308320	.256916	.213381	.177141	.147170	.095747	.064183	.048798	.037980
28.06	.246255	.196322	.156864	.125744	.101147	.060333	.038167	.028157	.021368
30.62	.194040	.148187	.114021	.088328	.068837	.037807	.022805	.016416	.012207
33.18	.151247	.110757	.082132	.061526	.046480	.023661	.013772	.009730	.007123
35.74	.116843	.082114	.058723	.042560	.031181	.014844	.008450	.005890	.004265

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	6P 2	6P 3	6P 4	6P 5	6P 6	6P 6	6P 6	6P 6	6P 6
38.30	.089590	.060466	.041723	.029270	.020804	.009369	.005288	.003654	.002626
40.86	.068256	.044267	.029487	.020030	.013816	.005969	.003385	.002327	.001664
43.42	.051714	.032245	.020742	.013648	.009138	.003852	.002219	.001520	.001083
45.98	.038991	.023385	.014532	.009264	.006022	.002524	.001489	.001017	.000722
48.54	.029272	.016893	.010145	.006267	.003957	.001683	.001022	.000695	.000492
51.10	.021892	.012161	.007059	.004228	.002592	.001144	.000715	.000484	.000340
56.22	.012123	.006246	.003390	.001909	.001105	.000561	.000367	.000244	.000169
61.34	.006638	.003175	.001613	.000854	.000467	.000295	.000196	.000128	.000087
66.46	.003600	.001600	.000761	.000379	.000196	.000164	.000108	.000068	.000046
71.58	.001937	.000801	.000357	.000167	.000082	.000095	.000060	.000037	.000024
76.70	.001035	.000398	.000166	.000074	.000034	.000056	.000034	.000020	.000013
81.82	.000550	.000197	.000077	.000032	.000014	.000034	.000019	.000011	.000007
86.94	.000290	.000097	.000036	.000014	.000006	.000021	.000011	.000006	.000004
92.06	.000153	.000047	.000016	.000006	.000002	.000012	.000006	.000003	.000002
97.18	.000080	.000023	.000007	.000003	.000001	.000007	.000003	.000002	.000001
102.30	.000042	.000011	.000003	.000001	.000000	.000004	.000002	.000001	.000001
112.54	.000011	.000003	.000001	.000000	.000000	.000001	.000001	.000000	.000000
122.78	.000003	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
133.02	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
143.26	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
X	6D 0	6D 0	6D 0	6D 0	6D 0	6D 0	6D 0	6D 1	6D 2
								.50298	.59167
.00								.000000	.000000
.01								.000019	.000021
.02								.000040	.000160
.03								.000046	.000510
.04								.000098	.001141
.05								.001840	.002101
.06								.002999	.003424
.07								.004495	.005129
.08								.006332	.007222
.09								.008508	.009700
.10								.011016	.012553
.12								.016959	.019306
.14								.023993	.027287
.16								.031907	.036252
.18								.040469	.045932
.20								.049440	.056054
.22								.058588	.066353
.24								.067694	.076581
.26								.076561	.086511
.28								.085012	.095944
.30								.092892	.104705
.34								.106447	.119663
.38								.116467	.130540
.42								.122527	.136878
.46								.124485	.138540
.50								.122421	.135643
.54								.116586	.128492
.58								.107348	.117528
.62								.095152	.103273
.66								.080486	.086293
.70								.063851	.067169
.78								.026638	.024744
.86								-.012830	-.019828
.94								-.051485	-.063081
1.02								-.086962	-.102371

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	6D 0	6D 0	6D 0	6D 0	6D 0	6D 0	6D 0	6D 1	6D 2
X									
1.10								-.117580	-.135851
1.18								-.142278	-.162387
1.26								-.160515	-.181438
1.34								-.172165	-.192929
1.42								-.177413	-.197135
1.50								-.176667	-.194574
1.66								-.159491	-.171946
1.82								-.125837	-.131228
1.98								-.081067	-.078675
2.14								-.030031	-.019873
2.30								.023210	.040558
2.46								.075450	.099013
2.62								.124283	.152832
2.78								.168013	.200183
2.94								.205539	.239926
3.10								.236245	.271476
3.42								.276548	.309717
3.74								.290066	.317037
4.06								.280377	.298171
4.38								.251976	.258716
4.70								.209394	.204150
5.02								.156749	.139356
5.34								.097570	.068450
5.66								.034760	-.005236
5.98								-.029364	-.079088
6.30								-.093001	-.151123
6.94								-.213739	-.284359
7.58								-.320585	-.398072
8.22								-.410604	-.489960
8.86								-.483299	-.560450
9.50								-.539579	-.611422
10.14								-.581061	-.645398
10.78								-.609643	-.665052
11.42								-.627247	-.672937
12.06								-.635681	-.671358
12.70								-.636577	-.662319
13.98								-.621277	-.628399
15.26								-.590506	-.581633
16.54								-.550801	-.529019
17.82								-.506687	-.475062
19.10								-.461224	-.422543
20.38								-.416419	-.373080
21.66								-.373538	-.327521
22.94								-.333327	-.286216
24.22								-.296178	-.249199
25.50								-.262239	-.216315
28.06								-.203845	-.161827
30.62								-.157064	-.120176
33.18								-.120203	-.088744
35.74								-.091494	-.065239
38.30								-.069326	-.047779
40.86								-.052325	-.034878
43.42								-.039358	-.025387
45.98								-.029514	-.018432
48.54								-.022070	-.013351
51.10								-.016462	-.009650
56.22								-.009097	-.005013
61.34								-.004986	-.002587
66.46								-.002714	-.001327
71.58								-.001469	-.000678

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	6D 0	6D 0	6D 0	6D 0	6D 0	6D 0	6D 0	6D 1	6D 2
X									
76.70								-.000791	-.000345
81.82								-.000424	-.000175
86.94								-.000226	-.000088
92.06								-.000120	-.000045
97.18								-.000064	-.000022
102.30								-.000034	-.000011
112.54								-.000009	-.000003
122.78								-.000003	-.000001
133.02								-.000001	-.000000
143.26								-.000000	-.000000

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	7S 0	7S 0	7S 0	7S 0	7S 0	7S 1	7S 2	7S 2	7S 2
-E						.23582	.29754	.32202	.34155
X									
.00						.000000	.000000	.000000	.000000
.01						.009451	.012359	.013529	.014481
.02						.015650	.020433	.022332	.023864
.03						.019190	.025008	.027281	.029099
.04						.020581	.026762	.029130	.031002
.05						.020266	.026280	.028526	.030275
.06						.018621	.024060	.026021	.027515
.07						.015969	.020529	.022088	.023234
.08						.012505	.016049	.017126	.017862
.09						.008700	.010926	.011472	.011763
.10						.004511	.005417	.005410	.005242
.12						-.004160	-.005942	-.007043	-.008104
.14						-.012442	-.016737	-.018819	-.020662
.16						-.019695	-.026138	-.029015	-.031471
.18						-.025539	-.033653	-.037101	-.039973
.20						-.029785	-.039044	-.042827	-.045915
.22						-.032381	-.042257	-.046146	-.049255
.24						-.033376	-.043364	-.047147	-.050102
.26						-.032886	-.042526	-.046016	-.048667
.28						-.031068	-.039957	-.042999	-.045222
.30						-.028106	-.035905	-.038373	-.040071
.34						-.019529	-.024393	-.025461	-.025928
.38						-.008689	-.010028	-.009544	-.008699
.42						.003042	.005377	.007377	.009460
.46						.014536	.020349	.023689	.026824
.50						.024941	.033782	.038192	.042121
.54						.033664	.044917	.050076	.054505
.58						.040341	.053299	.058865	.063493
.62						.044801	.058726	.064364	.068903
.66						.047022	.061193	.066591	.070783
.70						.047097	.060843	.065727	.069349
.78						.041566	.052756	.055971	.057962
.86						.030137	.037112	.038124	.038120
.94						.015003	.016855	.015491	.013443
1.02						-.001769	-.005270	-.008890	-.012782
1.10						-.018435	-.026983	-.032521	-.037888
1.18						-.033656	-.046551	-.053536	-.059911
1.26						-.046497	-.062790	-.070681	-.077558
1.34						-.056386	-.074999	-.083243	-.090124
1.42						-.063056	-.082877	-.090947	-.097377
1.50						-.066476	-.086435	-.093860	-.099446
1.66						-.064276	-.081693	-.086707	-.089728
1.82						-.052160	-.064174	-.065819	-.065618
1.98						-.033226	-.038133	-.036061	-.032533
2.14						-.010534	-.007683	-.002045	.004485

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	7S 0	7S 0	7S 0	7S 0	7S 0	7S 1	7S 2	7S 2	7S 2
X									
2.30						.013281	.023682	.032375	.041287
2.46						.036147	.053261	.064263	.074768
2.62						.056563	.079136	.091585	.102829
2.78						.073543	.100089	.113094	.124237
2.94						.086534	.115482	.128190	.138463
3.10						.095323	.125127	.136774	.145517
3.42						.100669	.128022	.135714	.139930
3.74						.091806	.112325	.114483	.113083
4.06						.072215	.083078	.079082	.071896
4.38						.045544	.045378	.035386	.022936
4.70						.015050	.003672	-.011600	-.028331
5.02						-.016618	-.038502	-.057978	-.077741
5.34						-.047451	-.078516	-.100925	-.122369
5.66						-.076014	-.114552	-.138559	-.160341
5.98						-.101356	-.145456	-.169754	-.190625
6.30						-.122908	-.170601	-.193974	-.212830
6.94						-.153758	-.202965	-.221408	-.233630
7.58						-.168609	-.212734	-.223230	-.226571
8.22						-.169306	-.203264	-.204081	-.197617
8.86						-.158397	-.178663	-.169164	-.152991
9.50						-.138518	-.142962	-.123343	-.098265
10.14						-.112076	-.099724	-.070762	-.038006
10.78						-.081125	-.051910	-.014744	.024252
11.42						-.047340	-.001871	.042162	.085908
12.06						-.012038	.048583	.098074	.145127
12.70						.023766	.098101	.151654	.200681
13.98						.094035	.190712	.248507	.298074
15.26						.159527	.271284	.328934	.375556
16.54						.218295	.338047	.392224	.433595
17.82						.269546	.390902	.439293	.474078
19.10						.313139	.430670	.471833	.499440
20.38						.349297	.458635	.491832	.512197
21.66						.378435	.476271	.501301	.514721
22.94						.401075	.485084	.502134	.509132
24.22						.417785	.486516	.496038	.497265
25.50						.429151	.481895	.484512	.480677
28.06						.438158	.459107	.450114	.438289
30.62						.432488	.424530	.406952	.389745
33.18						.416049	.383876	.360487	.340071
35.74						.392169	.341126	.314268	.292343
38.30						.363581	.298932	.270470	.248298
40.86						.332456	.258963	.230310	.208785
43.42						.300462	.222180	.194358	.174075
45.98						.268832	.189053	.162757	.144077
48.54						.238440	.159717	.135383	.118490
51.10						.209869	.134086	.111949	.096900
56.22						.159425	.092991	.075394	.063872
61.34						.118490	.063339	.049919	.041421
66.46						.086504	.042507	.032591	.026503
71.58						.062217	.028173	.021029	.016767
76.70						.044187	.018476	.013432	.010505
81.82						.031043	.012006	.008506	.006527
86.94						.021604	.007739	.005346	.004026
92.06						.014911	.004954	.003337	.002468
97.18						.010217	.003152	.002071	.001504
102.30						.006955	.001994	.001278	.000912
112.54						.003169	.000787	.000481	.000331
122.78						.001417	.000305	.000178	.000118
133.02						.000624	.000117	.000065	.000042
143.26						.000271	.000044	.000023	.000015

	PB 82	BI 83	PO 84	AT 85	RN 86	FR 87	RA 88	AC 89	TH 90
	7S 0	7S 0	7S 0	7S 0	7S 0	7S 1	7S 2	7S 2	7S 2
X									
153.50						.000116	.000017	.000008	.000005
163.74						.000049	.000006	.000003	.000002
173.98						.000021	.000002	.000001	.000001
184.22						.000009	.000001	.000000	.000000
194.46						.000004	.000000	.000000	.000000
204.70						.000001	.000000		
225.18						.000000			

TABLE IV. RADIAL WAVEFUNCTIONS

PA 5F2 6C1	R=0.19683257*X	CM 5F7 6D1	R=0.19335423*X
U 5F3 6C1	R=0.19611681*X	BK 5F8 6D1	R=0.19268749*X
NP 5F4 6C1	R=0.19541135*X	CF 5F10	R=0.19202985*X
PU 5F6	R=0.19471593*X	ES 5F11	R=0.19138109*X
AM 5F7	R=0.19403030*X		

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	7266.8	7433.5	7602.0	7772.0	7944.3	8119.0	8295.1	8472.6	8652.5
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	2.839446	2.872297	2.905138	2.937969	2.970788	3.003594	3.036389	3.069174	3.101945
.02	4.748534	4.797189	4.845715	4.894112	4.942378	4.990513	5.038520	5.086401	5.134149
.03	5.956723	6.009889	6.062774	6.115379	6.167702	6.219744	6.271509	6.323003	6.374217
.04	6.642986	6.693519	6.743628	6.793315	6.842580	6.891426	6.939861	6.987889	7.035506
.05	6.946243	6.989941	7.033102	7.075733	7.117835	7.159415	7.200480	7.241038	7.281088
.06	6.973738	7.008445	7.042545	7.076047	7.108956	7.141278	7.173025	7.204205	7.234820
.07	6.807738	6.832688	6.857003	6.880693	6.903765	6.926230	6.948098	6.969381	6.990083
.08	6.510880	6.526215	6.540924	6.555018	6.568507	6.581403	6.593718	6.605464	6.616648
.09	6.130421	6.136845	6.142682	6.147944	6.152645	6.156797	6.160411	6.163503	6.166080
.10	5.701618	5.700150	5.698158	5.695656	5.692658	5.689176	5.685223	5.680813	5.675956
.12	4.795501	4.781778	4.767701	4.753282	4.738536	4.723477	4.708115	4.692463	4.676533
.14	3.923244	3.901837	3.880264	3.858533	3.836660	3.814657	3.792529	3.770289	3.747948
.16	3.145643	3.120347	3.095057	3.069780	3.044528	3.019310	2.994129	2.968993	2.943913
.18	2.483939	2.457567	2.431342	2.405267	2.379352	2.353604	2.328020	2.302606	2.277369
.20	1.938145	1.912594	1.887294	1.862244	1.837453	1.812921	1.788644	1.764624	1.740865
.22	1.497883	1.474305	1.451047	1.428104	1.405480	1.383173	1.361177	1.339489	1.318112
.24	1.148624	1.127618	1.106967	1.086664	1.066710	1.047102	1.027829	1.008888	.990280
.26	.875118	.856893	.839033	.821529	.804381	.787582	.771122	.754995	.739199
.28	.663123	.647637	.632506	.617723	.603283	.589180	.575403	.561943	.548800
.30	.500173	.487231	.474625	.462344	.450384	.438737	.427391	.416339	.405577
.34	.281364	.272674	.264257	.256104	.248209	.240564	.233158	.225984	.219037
.38	.156410	.150801	.145399	.140194	.135182	.130354	.125704	.121222	.116906
.42	.086165	.082649	.079280	.076053	.072961	.069999	.067161	.064441	.061834
.46	.047131	.044976	.042921	.040963	.039098	.037320	.035625	.034009	.032469
.50	.025629	.024330	.023099	.021931	.020824	.019775	.018779	.017836	.016940
.54	.013862	.013089	.012361	.011673	.011025	.010414	.009837	.009293	.008780
.58	.007452	.006998	.006571	.006171	.005796	.005443	.005113	.004802	.004511
.62	.003974	.003708	.003461	.003230	.003015	.002813	.002626	.002450	.002286
.66	.002091	.001938	.001795	.001663	.001541	.001426	.001321	.001222	.001131
.70	.001076	.000988	.000907	.000832	.000762	.000698	.000639	.000585	.000535
.78	.000276	.000249	.000223	.000166	.000145	.000126	.000108	.000093	.000078
.86	.000070	.000062	.000054	.000005	.000000	.000000	.000000	.000000	.000000
.94	.000018	.000015	.000013	.000000	.000000	.000000	.000000	.000000	.000000
1.02	.000004	.000004	.000003	.000000					
1.10	.000001	.000001	.000001						
1.18	.000000	.000000	.000000						
	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	1269.9	1301.9	1334.4	1366.8	1400.1	1434.2	1468.2	1502.1	1537.0
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.948049	.959439	.970827	.982220	.993602	1.004972	1.016346	1.027725	1.039091
.02	1.564332	1.580711	1.597037	1.613323	1.629543	1.645697	1.661810	1.677883	1.693889
.03	1.914111	1.930792	1.947348	1.963796	1.980103	1.996270	2.012330	2.028281	2.044093
.04	2.052294	2.065966	2.079438	2.092725	2.105795	2.118651	2.131325	2.143818	2.156099

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
.05	2.024911	2.033355	2.041528	2.049448	2.057084	2.064439	2.071547	2.078408	2.084994
.06	1.870399	1.872251	1.873778	1.874995	1.875878	1.876431	1.876684	1.876639	1.876274
.07	1.620715	1.615277	1.609476	1.603329	1.596817	1.589946	1.582741	1.575206	1.567325
.08	1.302296	1.289374	1.276075	1.262411	1.248374	1.233971	1.219220	1.204127	1.188683
.09	.936882	.916662	.896070	.875118	.853804	.832138	.810131	.787789	.765115
.10	.542224	.515167	.487763	.460021	.431950	.403559	.374854	.345840	.316531
.12	-.280188	-.318846	-.357748	-.396892	-.436251	-.475815	-.515593	-.555577	-.595738
.14	-1.081634	-1.128553	-1.175562	-1.222668	-1.269828	-1.317031	-1.364301	-1.411630	-1.458973
.16	-1.811655	-1.863366	-1.914988	-1.966532	-2.017944	-2.069216	-2.120382	-2.171436	-2.222322
.18	-2.442737	-2.496037	-2.549060	-2.601824	-2.654267	-2.706381	-2.758214	-2.809759	-2.860954
.20	-2.963062	-3.015219	-3.066919	-3.118185	-3.168954	-3.219221	-3.269040	-3.318408	-3.367260
.22	-3.371250	-3.420080	-3.468295	-3.515922	-3.562899	-3.609225	-3.654959	-3.700100	-3.744587
.24	-3.672564	-3.716440	-3.759571	-3.801987	-3.843632	-3.884509	-3.924678	-3.964141	-4.002846
.26	-3.876217	-3.914026	-3.950994	-3.987152	-4.022452	-4.056902	-4.090561	-4.123434	-4.155478
.28	-3.993495	-4.024577	-4.054754	-4.084060	-4.112457	-4.139957	-4.166615	-4.192441	-4.217401
.30	-4.036462	-4.060533	-4.083671	-4.105906	-4.127216	-4.147614	-4.167153	-4.185843	-4.203664
.34	-3.946806	-3.957150	-3.966591	-3.975156	-3.982848	-3.989685	-3.995707	-4.000929	-4.005357
.38	-3.693976	-3.692243	-3.689727	-3.686449	-3.682436	-3.677710	-3.672294	-3.666206	-3.659475
.42	-3.347893	-3.336507	-3.324514	-3.311927	-3.298794	-3.285136	-3.270961	-3.256284	-3.241156
.46	-2.960438	-2.942011	-2.923177	-2.903939	-2.884362	-2.864466	-2.844238	-2.823696	-2.802904
.50	-2.567506	-2.544477	-2.521240	-2.497789	-2.474199	-2.450496	-2.426634	-2.402636	-2.378576
.54	-2.192161	-2.166612	-2.141036	-2.115420	-2.089842	-2.064324	-2.038809	-2.013316	-1.987922
.58	-1.847796	-1.821386	-1.795103	-1.768926	-1.742933	-1.717141	-1.691487	-1.665986	-1.640711
.62	-1.540944	-1.514914	-1.489131	-1.463572	-1.438309	-1.413354	-1.388641	-1.364179	-1.340038
.66	-1.273498	-1.248714	-1.224267	-1.200130	-1.176370	-1.152991	-1.129928	-1.107186	-1.084827
.70	-1.044397	-1.021416	-.998833	-.976617	-.954828	-.933466	-.912466	-.891831	-.871613
.78	-.689204	-.670578	-.652397	-.634631	-.617320	-.600458	-.583989	-.567910	-.552256
.86	-.445707	-.431452	-.417623	-.404193	-.391185	-.378589	-.366361	-.354494	-.343008
.94	-.283738	-.273270	-.263174	-.253427	-.244039	-.234999	-.226274	-.217856	-.209752
1.02	-.178377	-.170926	-.163780	-.156921	-.150350	-.144056	-.138015	-.132221	-.126671
1.10	-.110998	-.105822	-.100884	-.096172	-.091681	-.087401	-.083317	-.079421	-.075709
1.18	-.068477	-.064950	-.061603	-.058428	-.055417	-.052560	-.049851	-.047281	-.044843
1.26	-.041924	-.039558	-.037325	-.035219	-.033231	-.031354	-.029583	-.027914	-.026338
1.34	-.025483	-.023917	-.022446	-.021067	-.019771	-.018553	-.017411	-.016341	-.015335
1.42	-.015374	-.014348	-.013390	-.012497	-.011661	-.010880	-.010151	-.009473	-.008838
1.50	-.009194	-.008529	-.007910	-.007338	-.006805	-.006308	-.005848	-.005423	-.005026
1.66	-.003164	-.002891	-.002641	-.002413	-.002202	-.002007	-.001830	-.001668	-.001519
1.82	-.000983	-.000876	-.000779	-.000693	-.000614	-.000542	-.000477	-.000420	-.000367
1.98	-.000226	-.000187	-.000153	-.000123	-.000097	-.000073	-.000053	-.000035	-.000019
2.14	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
-E	1226.6	1258.1	1290.0	1321.9	1354.5	1388.1	1421.5	1454.9	1489.2
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.052006	.053074	.054151	.055238	.056333	.057437	.058551	.059675	.060807
.02	.190274	.194054	.197863	.201703	.205571	.209466	.213391	.217348	.221331
.03	.391688	.399208	.406780	.414408	.422082	.429802	.437576	.445405	.453278
.04	.637245	.649057	.660940	.672898	.684917	.696997	.709151	.721379	.733664
.05	.911429	.927720	.944092	.960553	.977083	.993679	1.010361	1.027128	1.043958
.06	1.201669	1.222355	1.243122	1.263982	1.284907	1.305896	1.326972	1.348135	1.369357
.07	1.497881	1.522678	1.547548	1.572502	1.597510	1.622567	1.647703	1.672919	1.698178
.08	1.792071	1.820558	1.849098	1.877706	1.906344	1.935009	1.963735	1.992521	2.021327
.09	2.077996	2.109662	2.141352	2.173084	2.204814	2.236538	2.268296	2.300087	2.331864
.10	2.350884	2.385164	2.419432	2.453707	2.487941	2.522129	2.556316	2.590501	2.624632
.12	2.844353	2.882100	2.919743	2.957306	2.994731	3.032015	3.069211	3.106315	3.143271
.14	3.255190	3.294132	3.332865	3.371413	3.409718	3.447776	3.485644	3.523320	3.560743
.16	3.577246	3.615374	3.653185	3.690704	3.727874	3.764692	3.801217	3.837447	3.873324
.18	3.811669	3.847334	3.882582	3.917438	3.951847	3.985810	4.019384	4.052571	4.085313



	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
X									
.20	3.964151	3.996095	4.027534	4.058496	4.088931	4.118841	4.148282	4.177256	4.205713
.22	4.042981	4.070322	4.097091	4.123314	4.148950	4.174004	4.198526	4.222521	4.245950
.24	4.057704	4.079899	4.101476	4.122459	4.142817	4.162558	4.181726	4.200329	4.218335
.26	4.018201	4.034996	4.051150	4.066683	4.081576	4.095839	4.109510	4.122596	4.135081
.28	3.934096	3.945476	3.956212	3.966320	3.975795	3.984648	3.992909	4.000587	4.007677
.30	3.814381	3.820516	3.826023	3.830916	3.835200	3.838889	3.842003	3.844555	3.846550
.34	3.499806	3.496476	3.492598	3.488178	3.483244	3.477812	3.471886	3.465479	3.458620
.38	3.128370	3.117422	3.106050	3.094251	3.082074	3.069534	3.056619	3.043341	3.029749
.42	2.739283	2.722753	2.705942	2.688842	2.671514	2.653975	2.636195	2.618189	2.600016
.46	2.359036	2.338855	2.318535	2.298067	2.277520	2.256911	2.236196	2.215388	2.194555
.50	2.004056	1.981882	1.959707	1.937514	1.915379	1.893313	1.871265	1.849244	1.827323
.54	1.683283	1.660456	1.637745	1.615130	1.592686	1.570421	1.548278	1.526264	1.504449
.58	1.400414	1.377942	1.355683	1.333611	1.311799	1.290250	1.268905	1.247767	1.226904
.62	1.155653	1.134251	1.113132	1.092270	1.071730	1.051513	1.031559	1.011870	.992505
.66	.947046	.927175	.907636	.888400	.869528	.851015	.832804	.814893	.797337
.70	.771429	.753350	.735632	.718246	.701243	.684618	.668315	.652331	.636712
.78	.504176	.489899	.475993	.462432	.449249	.436435	.423945	.411773	.399947
.86	.324167	.313415	.303002	.292906	.283148	.273715	.264573	.255716	.247157
.94	.205751	.197931	.190401	.183143	.176164	.169454	.162987	.156757	.150769
1.02	.129233	.123699	.118398	.113317	.108457	.103808	.099353	.095085	.091003
1.10	.080472	.076638	.072985	.069503	.066189	.063035	.060029	.057166	.054441
1.18	.049739	.047128	.044653	.042308	.040086	.037982	.035988	.034099	.032310
1.26	.030538	.028784	.027131	.025574	.024105	.022720	.021416	.020188	.019029
1.34	.018627	.017463	.016372	.015349	.014390	.013489	.012646	.011856	.011115
1.42	.011282	.010517	.009803	.009139	.008519	.007939	.007399	.006897	.006427
1.50	.006775	.006277	.005814	.005387	.004989	.004619	.004277	.003961	.003666
1.66	.002349	.002143	.001954	.001781	.001623	.001476	.001343	.001221	.001109
1.82	.000730	.000649	.000575	.000509	.000448	.000394	.000345	.000301	.000262
1.98	.000162	.000132	.000105	.000082	.000062	.000044	.000028	.000015	.000003
2.14	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	323.88	333.33	342.90	352.12	361.90	372.30	382.33	391.97	402.23
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.455982	.461958	.467934	.473909	.479884	.485859	.491833	.497805	.503777
.02	.750806	.759455	.768078	.776673	.785242	.793786	.802301	.810788	.819248
.03	.915045	.923909	.932706	.941435	.950099	.958698	.967230	.975693	.984093
.04	.974848	.982157	.989355	.996442	1.003422	1.010294	1.017056	1.023707	1.030253
.05	.952493	.957041	.961439	.965684	.969781	.973733	.977536	.981190	.984702
.06	.866894	.867930	.868782	.869448	.869936	.870247	.870379	.870332	.870113
.07	.734040	.731173	.728100	.724820	.721340	.717665	.713790	.709717	.705456
.08	.567380	.560506	.553416	.546109	.538595	.530878	.522954	.514827	.506506
.09	.378165	.367400	.356422	.345230	.333837	.322246	.310454	.298465	.286291
.10	.175739	.161365	.146794	.132026	.117073	.101942	.086628	.071137	.055481
.12	-.239374	-.259670	-.280097	-.300652	-.321322	-.342100	-.362989	-.383982	-.405065
.14	-.632269	-.656344	-.680446	-.704571	-.728703	-.752837	-.776974	-.801106	-.825220
.16	-.974242	-.999794	-1.025242	-1.050582	-1.075801	-1.100892	-1.125854	-1.150681	-1.175362
.18	-1.248998	-1.273823	-1.298401	-1.322728	-1.346795	-1.370596	-1.394128	-1.417385	-1.440361
.20	-1.449158	-1.471305	-1.493064	-1.514428	-1.535395	-1.555963	-1.576123	-1.595872	-1.615210
.22	-1.573601	-1.591457	-1.608792	-1.625600	-1.641887	-1.657654	-1.672888	-1.687586	-1.701761
.24	-1.625456	-1.637775	-1.649460	-1.660504	-1.670923	-1.680720	-1.689880	-1.698402	-1.706307
.26	-1.610600	-1.616504	-1.621685	-1.626134	-1.629881	-1.632930	-1.635262	-1.636879	-1.637815
.28	-1.536546	-1.535501	-1.533671	-1.531048	-1.527671	-1.523551	-1.518661	-1.513009	-1.506639
.30	-1.411632	-1.403412	-1.394375	-1.384512	-1.373874	-1.362477	-1.350287	-1.337317	-1.323623
.34	-1.043373	-1.021145	-.998122	-.974295	-.949739	-.924475	-.898461	-.871716	-.844317
.38	-.570916	-.536394	-.501205	-.465338	-.428887	-.391878	-.354262	-.316063	-.277374
.42	-.050105	-.005950	.038666	.083752	.129203	.174991	.221169	.267710	.314511
.46	.475120	.525838	.576756	.627886	.679118	.730424	.781860	.833396	.884929

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
X									
.50	.972704	1.026893	1.081002	1.135040	1.188902	1.242562	1.296074	1.349411	1.402476
.54	1.421146	1.475966	1.530424	1.584531	1.638191	1.691384	1.744160	1.796495	1.848305
.58	1.807674	1.860685	1.913074	1.964853	2.015941	2.066325	2.116048	2.165094	2.213394
.62	2.126337	2.175575	2.223968	2.271525	2.318188	2.363949	2.408846	2.452867	2.495967
.66	2.376253	2.420246	2.463212	2.505164	2.546062	2.585908	2.624733	2.662533	2.699283
.70	2.560112	2.597850	2.634430	2.669864	2.704135	2.737253	2.769241	2.800105	2.829840
.78	2.751210	2.775015	2.797541	2.818805	2.838829	2.857637	2.875242	2.891666	2.906937
.86	2.752564	2.762576	2.771358	2.778930	2.785345	2.790635	2.794808	2.797900	2.799960
.94	2.620806	2.618752	2.615639	2.611492	2.606379	2.600337	2.593373	2.585531	2.576869
1.02	2.406098	2.394469	2.382025	2.368794	2.354847	2.340221	2.324925	2.309005	2.292519
1.10	2.148281	2.129747	2.110671	2.091080	2.071038	2.050580	2.029718	2.008497	1.986963
1.18	1.876509	1.853555	1.830321	1.806836	1.783153	1.759300	1.735297	1.711172	1.686964
1.26	1.610536	1.585262	1.559946	1.534611	1.509296	1.484023	1.458813	1.433684	1.408664
1.34	1.362576	1.336640	1.310855	1.285241	1.259823	1.234616	1.209639	1.184903	1.160422
1.42	1.139229	1.113846	1.088765	1.063998	1.039558	1.015454	.991700	.968303	.945264
1.50	.943147	.919147	.895554	.872377	.849616	.827273	.805361	.783880	.762822
1.66	.631370	.611424	.591987	.573060	.554625	.536674	.519217	.502244	.485733
1.82	.412637	.397140	.382150	.367665	.353657	.340112	.327037	.314419	.302228
1.98	.264978	.253474	.242423	.231819	.221629	.211839	.202455	.193463	.184828
2.14	.167937	.159670	.151779	.144259	.137076	.130217	.123686	.117471	.111539
2.30	.105376	.099575	.094072	.088865	.083918	.079220	.074778	.070581	.066597
2.46	.065609	.061610	.057840	.054297	.050949	.047788	.044819	.042035	.039405
2.62	.040590	.037871	.035322	.032945	.030710	.028610	.026653	.024831	.023119
2.78	.024971	.023140	.021435	.019856	.018379	.017000	.015722	.014544	.013441
2.94	.015275	.014051	.012918	.011879	.010911	.010013	.009186	.008430	.007726
3.10	.009280	.008466	.007718	.007039	.006408	.005829	.005298	.004818	.004371
3.42	.003314	.002958	.002637	.002351	.002087	.001922	.001712	.001526	.001355
3.74	.001073	.000920	.000784	.000667	.000559	.000467	.000399	.000347	.000309
4.06	.000253	.000189	.000134	.000088	.000047	.0000194	.0000166	.0000142	.0000121
4.38	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4.70	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
5.02						.000005	.000004	.000004	.000003
5.34						.000002	.000001	.000001	.000001
5.66						.000000	.000000	.000000	.000000
	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	302.76	311.89	321.13	330.03	339.48	349.55	359.26	368.56	378.49
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.026620	.027203	.027792	.028386	.028985	.029590	.030201	.030817	.031438
.02	.097285	.099350	.101432	.103532	.105648	.107781	.109932	.112100	.114284
.03	.199884	.203986	.208118	.212282	.216475	.220696	.224948	.229230	.233540
.04	.324298	.330722	.337186	.343693	.350238	.356821	.363444	.370107	.376807
.05	.462133	.470949	.479812	.488722	.497675	.506670	.515710	.524794	.533919
.06	.606477	.617593	.628754	.639962	.651210	.662498	.673828	.685201	.696611
.07	.751694	.764894	.778131	.791406	.804712	.818047	.831416	.844818	.858246
.08	.893244	.908223	.923223	.938246	.953282	.968332	.983398	.998479	1.013569
.09	1.027523	1.043915	1.060306	1.076696	1.093076	1.109446	1.125809	1.142163	1.158500
.10	1.151729	1.169131	1.186503	1.203843	1.221144	1.238405	1.255629	1.272814	1.289952
.12	1.362030	1.380176	1.398218	1.416153	1.433976	1.451685	1.469281	1.486763	1.504125
.14	1.513622	1.530839	1.547863	1.564693	1.581324	1.597756	1.613988	1.630016	1.645842
.16	1.602643	1.617415	1.631900	1.646096	1.660005	1.673627	1.686956	1.699991	1.712738
.18	1.629844	1.640893	1.651567	1.661859	1.671780	1.681332	1.690504	1.699293	1.707716
.20	1.599042	1.605374	1.611250	1.616661	1.621630	1.626158	1.630228	1.633841	1.637021
.22	1.515980	1.516885	1.517270	1.517122	1.516475	1.515334	1.513673	1.511496	1.508838
.24	1.387474	1.382520	1.376999	1.370897	1.364259	1.357091	1.349363	1.341078	1.332284
.26	1.220011	1.209815	1.198227	1.186029	1.173280	1.159988	1.146114	1.131666	1.116703
.28	1.023314	1.006312	.988712	.970499	.951740	.932447	.912573	.892130	.871186



	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
X									
.20	.826097	.845453	.864950	.884607	.904377	.924257	.944287	.964466	.984744
.22	.985013	1.007246	1.029613	1.052134	1.074755	1.097472	1.120331	1.143329	1.166411
.24	1.146392	1.171288	1.196299	1.221449	1.246677	1.271978	1.297404	1.322949	1.348554
.26	1.307462	1.334741	1.362110	1.389591	1.417120	1.444691	1.472359	1.500119	1.527905
.28	1.465777	1.495114	1.524504	1.553974	1.583452	1.612935	1.642478	1.672077	1.701662
.30	1.619229	1.650265	1.681312	1.712396	1.743444	1.774451	1.805476	1.836511	1.867487
.34	1.904791	1.938084	1.971286	2.004421	2.037416	2.070265	2.103027	2.135694	2.168197
.38	2.153736	2.187763	2.221579	2.255208	2.288582	2.321695	2.354602	2.387295	2.419711
.42	2.360078	2.393417	2.426422	2.459115	2.491484	2.523380	2.554996	2.586277	2.617172
.46	2.521394	2.552811	2.583776	2.614307	2.644356	2.673926	2.703050	2.731725	2.759913
.50	2.637966	2.666460	2.694395	2.721784	2.748600	2.774846	2.800544	2.825693	2.850274
.54	2.712019	2.736830	2.760995	2.784522	2.807402	2.829641	2.851250	2.872231	2.892583
.58	2.747063	2.767672	2.787568	2.806756	2.825245	2.843046	2.860156	2.876583	2.892343
.62	2.747376	2.763480	2.778829	2.793422	2.807289	2.820442	2.832870	2.844583	2.855614
.66	2.717600	2.729087	2.739799	2.749735	2.758938	2.767424	2.775174	2.782202	2.788554
.70	2.662445	2.669362	2.675508	2.680878	2.685531	2.689484	2.692713	2.695234	2.697106
.78	2.493981	2.492379	2.490071	2.487053	2.483399	2.479131	2.474221	2.468690	2.462607
.86	2.274629	2.265853	2.256495	2.246556	2.236114	2.225192	2.213764	2.201857	2.189537
.94	2.030607	2.016296	2.001565	1.986419	1.970928	1.955114	1.938961	1.922498	1.905781
1.02	1.781399	1.763218	1.744790	1.726125	1.707280	1.688274	1.669103	1.649793	1.630388
1.10	1.540446	1.519911	1.499297	1.478618	1.457914	1.437201	1.416485	1.395787	1.375134
1.18	1.316230	1.294618	1.273079	1.251628	1.230287	1.209067	1.187983	1.167053	1.146283
1.26	1.113427	1.091748	1.070267	1.049002	1.027956	1.007137	.986564	.966250	.946188
1.34	.933954	.912955	.892252	.871862	.851775	.831992	.812538	.793419	.774616
1.42	.777840	.758035	.738597	.719541	.700844	.682505	.664550	.646978	.629763
1.50	.643913	.625623	.607745	.590291	.573232	.556562	.540305	.524459	.508990
1.66	.434841	.419967	.405536	.391554	.377981	.364810	.352059	.339719	.327752
1.82	.289265	.277718	.266590	.255881	.245552	.235593	.226016	.216807	.207933
1.98	.190323	.181649	.173342	.165398	.157783	.150486	.143512	.136846	.130462
2.14	.124232	.117871	.111815	.106058	.100572	.095348	.090383	.085665	.081174
2.30	.080636	.076053	.071716	.067615	.063731	.060055	.056580	.053295	.050188
2.46	.052143	.048885	.045819	.042934	.040219	.037666	.035264	.033004	.030880
2.62	.033644	.031351	.029204	.027193	.025312	.023556	.021910	.020367	.018927
2.78	.021691	.020087	.018594	.017199	.015904	.014704	.013582	.012533	.011563
2.94	.013991	.012874	.011838	.010873	.009984	.009167	.008405	.007692	.007039
3.10	.009038	.008261	.007544	.006875	.006265	.005710	.005191	.004706	.004266
3.42	.003804	.003424	.003077	.002752	.002461	.002203	.001960	.001730	.001526
3.74	.001625	.001435	.001262	.001098	.000954	.000832	.000714	.000598	.000500
4.06	.000705	.000606	.000515	.000429	.000357	.000299	.000240	.000170	.000121
4.38	.000309	.000253	.000202	.000165	.000131	.000105	.000079	.000050	.000030
4.70	.000134	.000101	.000070	.000047	.000036	.000036	.000025	.000000	.000000
5.02	.000057	.000038	.000016	.000023	.000017	.000012	.000008	.000000	.000000
5.34	.000024	.000014	.000000	.000009	.000006	.000004	.000003	.000000	.000000
5.66	.000010	.000005	.000000	.000003	.000002	.000001	.000001	.000000	.000000
5.98	.000004	.000002	.000000	.000001	.000001	.000000	.000000	.000000	.000000
6.30	.000002	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
6.94	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	84.027	87.038	90.069	92.666	95.730	99.309	102.44	105.09	108.27
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.235577	.239335	.243094	.246833	.250592	.254369	.258126	.261863	.265581
.02	.387687	.393251	.398799	.404298	.409811	.415338	.420815	.426242	.431682
.03	.472022	.477918	.483771	.489542	.495308	.501068	.506745	.512340	.517928
.04	.502058	.507207	.512284	.517246	.522177	.527075	.531860	.536531	.541169

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
.05	.489327	.492977	.496526	.499934	.503281	.506567	.509712	.512720	.515667
.06	.443661	.445326	.446865	.448243	.449533	.450734	.451778	.452665	.453467
.07	.373406	.372814	.372078	.371170	.370151	.369021	.367723	.366261	.364692
.08	.285612	.282664	.279561	.276283	.272878	.269347	.265648	.261784	.257800
.09	.186199	.180930	.175504	.169909	.164179	.158314	.152290	.146111	.139806
.10	.080107	.072655	.065053	.057298	.049407	.041380	.033212	.024909	.016480
.12	-.136529	-.147639	-.158863	-.170184	-.181621	-.193170	-.204801	-.216508	-.228315
.14	-.339944	-.353487	-.367081	-.380692	-.394368	-.408107	-.421845	-.435575	-.449352
.16	-.514751	-.529368	-.543952	-.558455	-.572954	-.587446	-.601838	-.616124	-.630385
.18	-.652192	-.666549	-.680780	-.694824	-.708783	-.722651	-.736316	-.749771	-.763120
.20	-.748332	-.761229	-.773902	-.786284	-.798493	-.810525	-.822252	-.833670	-.844898
.22	-.802672	-.813097	-.823205	-.832927	-.842390	-.851593	-.860399	-.868806	-.876944
.24	-.817084	-.824244	-.831006	-.837298	-.843257	-.848879	-.854029	-.858707	-.863047
.26	-.795000	-.798330	-.801193	-.803524	-.805457	-.806991	-.807998	-.808481	-.808570
.28	-.740809	-.739959	-.738593	-.736652	-.734267	-.731439	-.728049	-.724105	-.719730
.30	-.659399	-.654220	-.648498	-.642181	-.635392	-.628134	-.620304	-.611914	-.603075
.34	-.435090	-.421496	-.407367	-.392675	-.377514	-.361892	-.345748	-.329100	-.312029
.38	-.160808	-.140007	-.118761	-.097069	-.074989	-.052534	-.029689	-.006480	.017052
.42	.129833	.155925	.182304	.208940	.235821	.262928	.290225	.317685	.345309
.46	.410148	.439264	.468457	.497674	.526943	.556245	.585496	.614669	.643807
.50	.660602	.690406	.720048	.749456	.778697	.807751	.836497	.864907	.893065
.54	.868202	.896493	.924377	.951764	.978757	1.005339	1.031357	1.056790	1.081752
.58	1.025513	1.050363	1.074568	1.098030	1.120882	1.143106	1.164536	1.185153	1.205098
.62	1.129565	1.149393	1.168362	1.186375	1.203581	1.219970	1.235368	1.249765	1.263317
.66	1.180796	1.194403	1.206973	1.218413	1.228885	1.238383	1.246738	1.253953	1.260186
.70	1.182115	1.188684	1.194078	1.198219	1.201270	1.203229	1.203947	1.203436	1.201849
.78	1.054388	1.045822	1.035952	1.024737	1.012317	.998702	.983808	.967666	.950394
.86	.792493	.769303	.744864	.719186	.692360	.664407	.635330	.605176	.574004
.94	.445549	.409887	.373189	.335521	.296903	.257369	.217014	.175899	.134006
1.02	.057711	.012656	-.033107	-.079465	-.126470	-.174079	-.222113	-.270507	-.319351
1.10	-.335367	-.386397	-.437743	-.489253	-.541047	-.593079	-.645102	-.697054	-.749087
1.18	-.707373	-.761051	-.814631	-.867939	-.921148	-.974211	-1.026842	-1.078986	-1.130841
1.26	-1.040689	-1.094051	-1.146917	-1.199107	-1.250828	-1.302037	-1.352433	-1.401977	-1.450888
1.34	-1.325032	-1.375630	-1.425375	-1.474096	-1.522017	-1.569099	-1.615054	-1.659860	-1.703739
1.42	-1.555890	-1.601840	-1.646641	-1.690141	-1.732562	-1.773874	-1.813824	-1.852405	-1.889826
1.50	-1.733004	-1.772977	-1.811571	-1.848666	-1.884466	-1.918951	-1.951917	-1.983374	-2.013505
1.66	-1.938543	-1.964509	-1.988846	-2.011510	-2.032640	-2.052236	-2.070222	-2.086637	-2.101585
1.82	-1.980519	-1.992204	-2.002258	-2.010716	-2.017629	-2.023022	-2.026949	-2.029470	-2.030598
1.98	-1.905841	-1.904879	-1.902467	-1.898706	-1.893567	-1.887095	-1.879449	-1.870700	-1.860789
2.14	-1.757501	-1.746447	-1.734239	-1.721023	-1.706710	-1.691359	-1.675197	-1.658298	-1.640551
2.30	-1.569924	-1.551574	-1.532421	-1.512631	-1.492081	-1.470836	-1.449153	-1.427101	-1.404545
2.46	-1.368255	-1.345231	-1.321760	-1.298011	-1.273845	-1.249328	-1.224722	-1.200071	-1.175241
2.62	-1.169435	-1.143970	-1.118385	-1.092836	-1.067188	-1.041501	-1.016010	-.990746	-.965583
2.78	-.983873	-.957726	-.931739	-.906043	-.880518	-.855212	-.830321	-.805863	-.781726
2.94	-.817148	-.791613	-.766459	-.741789	-.717501	-.693627	-.670320	-.647591	-.625338
3.10	-.671488	-.647443	-.623940	-.601054	-.578699	-.556893	-.535749	-.515268	-.495358
3.42	-.442213	-.422483	-.403459	-.385171	-.367553	-.350591	-.334347	-.318811	-.303892
3.74	-.284092	-.269028	-.254677	-.241049	-.228074	-.215715	-.204020	-.192975	-.182471
4.06	-.179410	-.168459	-.158142	-.148466	-.139342	-.130725	-.122672	-.115166	-.108081
4.38	-.112006	-.104316	-.097148	-.090514	-.084304	-.078475	-.073100	-.068165	-.063527
4.70	-.069425	-.064158	-.059298	-.054866	-.050738	-.046873	-.043365	-.040199	-.037225
5.02	-.042869	-.039326	-.036088	-.033186	-.030486	-.027957	-.025702	-.023709	-.021829
5.34	-.026444	-.024090	-.021959	-.020088	-.018342	-.016697	-.015262	-.014027	-.012849
5.66	-.016331	-.014780	-.013388	-.012197	-.011075	-.010006	-.009099	-.008344	-.007609
5.98	-.010114	-.009096	-.008191	-.007441	-.006723	-.006025	-.005453	-.004997	-.004539
6.30	-.006287	-.005621	-.005033	-.004565	-.004105	-.003646	-.003285	-.003014	-.002728
6.94	-.002455	-.002168	-.001918	-.001744	-.001554	-.001346	-.001201	-.001112	-.000999
7.58	-.000957	-.000832	-.000724	-.000665	-.000585	-.000484	-.000425	-.000402	-.000356
8.22	-.000360	-.000304	-.000258	-.000242	-.000208	-.000150	-.000126	-.000126	-.000107
8.86	-.000132	-.000108	-.000089	-.000085	-.000072	-.000024	-.000014	-.000020	-.000013

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
X									
9.50	-.000047	-.000038	-.000030	-.000030	-.000024	.000000	.000000	.000000	.000000
10.14	-.000017	-.000013	-.000010	-.000010	-.000008	.000000	.000000	.000000	.000000
10.78	-.000006	-.000004	-.000003	-.000003	-.000003				
11.42	-.000002	-.000001	-.000001	-.000001	-.000001				
12.06	-.000001	-.000000	.000000	.000000	.000000				

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
-E	74.214	77.032	79.870	82.273	85.143	88.525	91.464	93.913	96.893
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.013733	.014080	.014431	.014783	.015141	.015503	.015868	.016234	.016606
.02	.050176	.051409	.052653	.053904	.055170	.056452	.057741	.059037	.060347
.03	.103045	.105502	.107981	.110470	.112988	.115534	.118090	.120657	.123251
.04	.167070	.170933	.174823	.178726	.182670	.186654	.190650	.194657	.198703
.05	.237864	.243185	.248536	.253900	.259313	.264775	.270247	.275726	.281253
.06	.311803	.318535	.325298	.332067	.338890	.345768	.352648	.359528	.366460
.07	.385921	.393944	.401992	.410035	.418132	.426286	.434428	.442558	.450740
.08	.457823	.466959	.476111	.485241	.494421	.503653	.512857	.522031	.531251
.09	.525603	.535636	.545671	.555663	.565696	.575771	.585796	.595770	.605780
.10	.587776	.598465	.609137	.619741	.630373	.641031	.651614	.662121	.672648
.12	.691118	.702349	.713512	.724549	.735572	.746580	.757454	.768192	.778909
.14	.762294	.773041	.783660	.794086	.804444	.814733	.824822	.834710	.844523
.16	.799335	.808655	.817783	.826648	.835386	.843995	.852336	.860411	.868352
.18	.802789	.809881	.816715	.823224	.829543	.835672	.841472	.846945	.852227
.20	.774905	.779136	.783053	.786586	.789873	.792914	.795574	.797856	.799895
.22	.719019	.719939	.720495	.720624	.720458	.719998	.719119	.717826	.716245
.24	.639092	.636425	.633359	.629839	.625985	.621800	.617174	.612115	.606738
.26	.539373	.533011	.526227	.518978	.511373	.503414	.495009	.486170	.476995
.28	.424155	.414133	.403686	.392781	.381510	.369880	.357818	.345336	.332519
.30	.297598	.284081	.270153	.255790	.241070	.226000	.210529	.194673	.178496
.34	.025795	.006188	-.013758	-.034037	-.054612	-.075473	-.096621	-.118037	-.139698
.38	-.248848	-.272883	-.297124	-.321541	-.346137	-.370899	-.395782	-.420763	-.445861
.42	-.505215	-.531708	-.558232	-.584732	-.611253	-.637781	-.664226	-.690563	-.716853
.46	-.728232	-.755147	-.781890	-.808387	-.834722	-.860879	-.886731	-.912254	-.937548
.50	-.908250	-.933659	-.958684	-.983235	-1.007430	-1.031255	-1.054552	-1.077304	-1.099639
.54	-1.040165	-1.062367	-1.083976	-1.104897	-1.125272	-1.145089	-1.164175	-1.182515	-1.200262
.58	-1.122484	-1.140073	-1.156879	-1.172807	-1.188015	-1.202497	-1.216071	-1.228731	-1.240642
.62	-1.156444	-1.168341	-1.179294	-1.189212	-1.198264	-1.206446	-1.213583	-1.219676	-1.224897
.66	-1.145231	-1.150687	-1.155073	-1.158308	-1.160564	-1.161839	-1.161976	-1.160985	-1.159030
.70	-1.093330	-1.091907	-1.089330	-1.085531	-1.080675	-1.074765	-1.067670	-1.059408	-1.050132
.78	-.888837	-.873446	-.856854	-.839035	-.820116	-.800113	-.778966	-.756713	-.733456
.86	-.587537	-.559335	-.530040	-.499679	-.468319	-.435988	-.402713	-.368548	-.333524
.94	-.231729	-.193043	-.153502	-.113184	-.072085	-.030240	.012230	.052644	.098906
1.02	.142911	.189150	.235919	.283093	.330749	.378847	.427185	.475700	.524507
1.10	.508849	.559560	.610427	.661292	.712296	.763397	.814331	.865040	.915699
1.18	.846573	.898841	.950881	1.002515	1.053935	1.105098	1.155706	1.205710	1.255325
1.26	1.143640	1.194916	1.245599	1.295506	1.344861	1.393627	1.441493	1.488425	1.534660
1.34	1.393376	1.441577	1.488859	1.535052	1.580392	1.624846	1.668120	1.710195	1.751309
1.42	1.593529	1.637065	1.679414	1.720425	1.760330	1.799106	1.836492	1.872486	1.907310
1.50	1.745037	1.782796	1.819160	1.854009	1.887556	1.919786	1.950489	1.979678	2.007549
1.66	1.915795	1.940307	1.963196	1.984416	2.004114	2.022296	2.038877	2.053900	2.067478
1.82	1.942538	1.953637	1.963108	1.970984	1.977328	1.982165	1.985541	1.987519	1.988123
1.98	1.866841	1.865993	1.863683	1.860009	1.854955	1.848565	1.840993	1.832312	1.822471
2.14	1.726076	1.715557	1.703853	1.691110	1.677247	1.662324	1.646566	1.630052	1.612674
2.30	1.550085	1.532412	1.513886	1.494681	1.474675	1.453935	1.432724	1.411115	1.388971
2.46	1.360808	1.338375	1.315437	1.292171	1.268438	1.244305	1.220046	1.195714	1.171163
2.62	1.173236	1.148124	1.122834	1.097532	1.072079	1.046535	1.021155	.995982	.970869
2.78	.996797	.970686	.944684	.918937	.893313	.867860	.842802	.818171	.793824
2.94	.836756	.810921	.785429	.760402	.735718	.711411	.687670	.664514	.641806

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
3.10	.695438	.670779	.646643	.623125	.600114	.577627	.555818	.534698	.514133
3.42	.469164	.448359	.428277	.408974	.390348	.372381	.355184	.338750	.322941
3.74	.309142	.292794	.277210	.262423	.248319	.234862	.222142	.210147	.198720
4.06	.200351	.188116	.176587	.165790	.155592	.145944	.136943	.128574	.120657
4.38	.128361	.119517	.111275	.103664	.096529	.089820	.083650	.078000	.072680
4.70	.081610	.075379	.069633	.064409	.059536	.054969	.050836	.047118	.043620
5.02	.051644	.047337	.043406	.039894	.036625	.033562	.030840	.028442	.026178
5.34	.032608	.029673	.027020	.024699	.022535	.020499	.018729	.017207	.015758
5.66	.020583	.018604	.016833	.015321	.013901	.012555	.011413	.010463	.009542
5.98	.013011	.011688	.010514	.009541	.008616	.007726	.006994	.006409	.005827
6.30	.008248	.007368	.006594	.005976	.005376	.004785	.004318	.003963	.003595
6.94	.003356	.002970	.002636	.002398	.002146	.001879	.001689	.001568	.001421
7.58	.001391	.001222	.001079	.000995	.000889	.000762	.000684	.000651	.000592
8.22	.000583	.000509	.000448	.000426	.000381	.000315	.000284	.000282	.000257
8.86	.000242	.000210	.000183	.000184	.000166	.000129	.000116	.000125	.000114
9.50	.000094	.000080	.000070	.000078	.000070	.000049	.000044	.000054	.000050
10.14	.000034	.000029	.000025	.000032	.000029	.000014	.000013	.000023	.000022
10.78	.000012	.000010	.000009	.000013	.000012	.000001	.000001	.000010	.000009
11.42	.000004	.000004	.000003	.000005	.000005	.000000	.000000	.000004	.000004
12.06	.000002	.000001	.000001	.000002	.000002	.000000	.000000	.000002	.000002
12.70	.000001	.000000	.000000	.000001	.000001			.000001	.000001
13.98	.000000	.000000	.000000	.000000	.000000			.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
-E	56.068	58.518	60.987	63.021	65.519	68.528	71.093	73.167	75.772
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000168	.000174	.000180	.000186	.000193	.000200	.000206	.000213	.000220
.02	.001263	.001309	.001356	.001403	.001452	.001501	.001552	.001603	.001655
.03	.004018	.004162	.004308	.004457	.004610	.004765	.004923	.005083	.005246
.04	.008977	.009295	.009618	.009946	.010281	.010623	.010970	.011322	.011681
.05	.016530	.017107	.017694	.018290	.018897	.019517	.020146	.020784	.021434
.06	.026933	.027860	.028802	.029760	.030735	.031729	.032737	.033759	.034799
.07	.040330	.041699	.043091	.044503	.045942	.047406	.048891	.050395	.051925
.08	.056775	.058676	.060608	.062566	.064559	.066588	.068642	.070722	.072838
.09	.076245	.078761	.081318	.083907	.086541	.089221	.091932	.094676	.097465
.10	.098652	.101862	.105121	.108419	.111772	.115180	.118628	.122113	.125654
.12	.151698	.156490	.161347	.166257	.171242	.176304	.181416	.186576	.191812
.14	.214400	.220966	.227612	.234320	.241122	.248019	.254974	.261986	.269090
.16	.284868	.293313	.301849	.310450	.319161	.327981	.336862	.345800	.354844
.18	.361036	.371380	.381819	.392321	.402941	.413679	.424472	.435318	.446276
.20	.440804	.452988	.465262	.477589	.490035	.502601	.515210	.527857	.540616
.22	.522140	.536032	.550003	.564007	.578125	.592356	.606608	.620875	.635246
.24	.603144	.618553	.634022	.649496	.665069	.680740	.696402	.712049	.727781
.26	.682093	.698781	.715500	.732188	.748951	.765790	.782580	.799316	.816113
.28	.757466	.775155	.792839	.810448	.828102	.845799	.863402	.880904	.898433
.30	.827950	.846337	.864676	.882888	.901107	.919329	.937405	.955327	.973235
.34	.950061	.968877	.987537	1.005951	1.024275	1.042507	1.060472	1.078161	1.095740
.38	1.042037	1.059973	1.077630	1.094907	1.111981	1.128847	1.145314	1.161375	1.177212
.42	1.100377	1.116199	1.131610	1.146504	1.161072	1.175309	1.189014	1.202183	1.215009
.46	1.123970	1.136591	1.148669	1.160101	1.171082	1.181612	1.191486	1.200703	1.209462
.50	1.113566	1.122090	1.129952	1.137050	1.143583	1.149553	1.154761	1.159209	1.163097
.54	1.071289	1.075034	1.078014	1.080135	1.081593	1.082391	1.082343	1.081460	1.079931
.58	1.000197	.998699	.996355	.993084	.989071	.984323	.978675	.972143	.964904
.62	.903933	.896935	.889036	.880172	.870511	.860063	.848693	.836423	.823407
.66	.786430	.773866	.760373	.745909	.730618	.714514	.697498	.679597	.660939

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
X									
.70	.651699	.633667	.614710	.594805	.574071	.552524	.530105	.506848	.482848
.78	.346019	.317894	.288930	.259154	.228620	.197347	.165369	.132729	.099447
.86	.015356	-.021100	-.058211	-.095900	-.134189	-.173053	-.212368	-.252081	-.292255
.94	-.316913	-.359488	-.402463	-.445715	-.489343	-.533316	-.577427	-.621622	-.666039
1.02	-.633071	-.679415	-.725858	-.772242	-.818735	-.865304	-.911674	-.957794	-1.003868
1.10	-.920781	-.968627	-1.016254	-1.063482	-1.110532	-1.157373	-1.203684	-1.249422	-1.294839
1.18	-1.172372	-1.219687	-1.266473	-1.312537	-1.358141	-1.403254	-1.447936	-1.490953	-1.533787
1.26	-1.383966	-1.429038	-1.473293	-1.516541	-1.559066	-1.600841	-1.641526	-1.681102	-1.719862
1.34	-1.554599	-1.596066	-1.636467	-1.675624	-1.713826	-1.751052	-1.786983	-1.821617	-1.855238
1.42	-1.685416	-1.722268	-1.757849	-1.792004	-1.825011	-1.856856	-1.887260	-1.916235	-1.944043
1.50	-1.778998	-1.810549	-1.840672	-1.869243	-1.896515	-1.922485	-1.946924	-1.969859	-1.991518
1.66	-1.868758	-1.888746	-1.907138	-1.923883	-1.939162	-1.952990	-1.965264	-1.976035	-1.985446
1.82	-1.855336	-1.863866	-1.870807	-1.876185	-1.880092	-1.882562	-1.883621	-1.883339	-1.881766
1.98	-1.769709	-1.767982	-1.764808	-1.760284	-1.754416	-1.747255	-1.738942	-1.729554	-1.719059
2.14	-1.638408	-1.628188	-1.616763	-1.604279	-1.590675	-1.576011	-1.560516	-1.544269	-1.527172
2.30	-1.482309	-1.465557	-1.447897	-1.429509	-1.410280	-1.390278	-1.369785	-1.348877	-1.327409
2.46	-1.316829	-1.295453	-1.273490	-1.251136	-1.228244	-1.204884	-1.181358	-1.157738	-1.133848
2.62	-1.152696	-1.128414	-1.103859	-1.079230	-1.054360	-1.029314	-1.004395	-.979667	-.954933
2.78	-.996890	-.971150	-.945427	-.919911	-.894425	-.869021	-.843993	-.819393	-.795008
2.94	-.853539	-.827499	-.801730	-.776404	-.751337	-.726567	-.702371	-.678786	-.655591
3.10	-.724697	-.699238	-.674255	-.649905	-.625997	-.602551	-.579825	-.557845	-.536377
3.42	-.512036	-.489407	-.467530	-.446527	-.426187	-.406496	-.387685	-.369759	-.352454
3.74	-.354471	-.335680	-.317753	-.300791	-.284552	-.268995	-.254344	-.240587	-.227429
4.06	-.241783	-.226894	-.212865	-.199786	-.187383	-.175600	-.164665	-.154557	-.144954
4.38	-.163139	-.151737	-.141120	-.131378	-.122206	-.113545	-.105635	-.098448	-.091647
4.70	-.109201	-.100689	-.092855	-.085790	-.079172	-.072944	-.067357	-.062376	-.057667
5.02	-.072667	-.066440	-.060772	-.055758	-.051072	-.046667	-.042792	-.039414	-.036210
5.34	-.048149	-.043664	-.039628	-.036133	-.032866	-.029788	-.027140	-.024891	-.022742
5.66	-.031803	-.028616	-.025779	-.023382	-.021132	-.019000	-.017213	-.015741	-.014316
5.98	-.020959	-.018719	-.016746	-.015127	-.013594	-.012126	-.010933	-.009987	-.009051
6.30	-.013790	-.012230	-.010872	-.009795	-.008760	-.007754	-.006964	-.006368	-.005758
6.94	-.005948	-.005211	-.004584	-.004132	-.003672	-.003200	-.002864	-.002646	-.002394
7.58	-.002551	-.002215	-.001935	-.001765	-.001569	-.001345	-.001207	-.001145	-.001044
8.22	-.001080	-.000933	-.000815	-.000766	-.000686	-.000577	-.000524	-.000521	-.000483
8.86	-.000442	-.000383	-.000337	-.000337	-.000308	-.000252	-.000235	-.000252	-.000239
9.50	-.000167	-.000146	-.000132	-.000149	-.000141	-.000111	-.000107	-.000129	-.000126
10.14	-.000059	-.000053	-.000050	-.000064	-.000065	-.000047	-.000049	-.000070	-.000071
10.78	-.000021	-.000019	-.000018	-.000026	-.000030	-.000019	-.000022	-.000039	-.000042
11.42	-.000007	-.000007	-.000007	-.000009	-.000013	-.000006	-.000009	-.000023	-.000026
12.06	-.000002	-.000002	-.000002	-.000001	-.000006	-.000001	-.000004	-.000014	-.000016
12.70	-.000001	-.000001	-.000001	.000000	-.000002	-.000000	-.000001	-.000009	-.000010
13.98	.000000	.000000	.000000	.000000	-.000000	.000000	.000000	-.000003	-.000004
15.26	.000000	.000000	.000000	.000000	.000000	.000000	.000000	-.000001	-.000002
16.54								-.000000	-.000001
17.82								.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
-F	30.907	32.816	34.743	36.238	38.194	40.656	42.676	44.200	46.266
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001
.02	.000008	.000008	.000009	.000009	.000010	.000010	.000011	.000011	.000012
.03	.000038	.000040	.000042	.000045	.000047	.000049	.000052	.000054	.000057
.04	.000116	.000122	.000128	.000135	.000142	.000149	.000156	.000164	.000172
.05	.000270	.000285	.000300	.000315	.000331	.000348	.000364	.000382	.000400
.06	.000537	.000565	.000595	.000625	.000657	.000689	.000722	.000757	.000792
.07	.000952	.001003	.001055	.001109	.001164	.001221	.001280	.001340	.001403
.08	.001557	.001639	.001723	.001811	.001900	.001993	.002088	.002186	.002287
.09	.002390	.002515	.002644	.002777	.002914	.003055	.003200	.003349	.003502



	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
.10	.003492	.003674	.003861	.004054	.004253	.004457	.004667	.004883	.005105
.12	.006660	.007002	.007355	.007717	.008090	.008474	.008867	.009272	.009687
.14	.011358	.011934	.012527	.013137	.013763	.014406	.015066	.015744	.016439
.16	.017852	.018746	.019664	.020608	.021577	.022572	.023592	.024638	.025710
.18	.026366	.027669	.029007	.030381	.031790	.033234	.034715	.036233	.037787
.20	.037083	.038891	.040747	.042651	.044601	.046599	.048646	.050742	.052886
.22	.050138	.052551	.055025	.057560	.060156	.062813	.065532	.068315	.071158
.24	.065624	.068741	.071932	.075201	.078545	.081965	.085462	.089037	.092687
.26	.083593	.087509	.091517	.095617	.099808	.104091	.108467	.112937	.117497
.28	.104055	.108864	.113780	.118806	.123940	.129181	.134531	.139991	.145557
.30	.126988	.132776	.138689	.144728	.150891	.157177	.163590	.170127	.176787
.34	.180021	.187999	.196136	.204430	.212881	.221487	.230249	.239166	.248236
.38	.241952	.252372	.262980	.273774	.284752	.295914	.307257	.318780	.330480
.42	.311729	.324767	.338015	.351471	.365133	.378999	.393064	.407326	.421783
.46	.388099	.403851	.419828	.436024	.452440	.469072	.485912	.502954	.520200
.50	.469701	.488188	.506904	.525840	.544999	.564377	.583957	.603736	.623715
.54	.555145	.576318	.597712	.619315	.641132	.663160	.685374	.707768	.730349
.58	.643072	.666818	.690767	.714899	.739227	.763744	.788419	.813244	.838230
.62	.732193	.758347	.784672	.811145	.837781	.864575	.891485	.918502	.945645
.66	.821318	.849671	.878152	.906732	.935432	.964248	.993127	1.022059	1.051069
.70	.909376	.939685	.970067	1.000488	1.030977	1.061528	1.092080	1.122619	1.153181
.78	1.078637	1.112034	1.145366	1.178589	1.211748	1.244835	1.277771	1.310542	1.343199
.86	1.233942	1.269251	1.304327	1.339118	1.373686	1.408023	1.442033	1.475705	1.509103
.94	1.371184	1.407225	1.442848	1.477996	1.512743	1.547085	1.580916	1.614228	1.647098
1.02	1.487946	1.523611	1.558666	1.593054	1.626861	1.660084	1.692614	1.724450	1.755675
1.10	1.583191	1.617497	1.651005	1.683663	1.715563	1.746706	1.776990	1.806418	1.835077
1.18	1.656966	1.689081	1.720223	1.750349	1.779554	1.807843	1.835127	1.861416	1.886797
1.26	1.710115	1.739369	1.767496	1.794464	1.820367	1.845216	1.868939	1.891555	1.913147
1.34	1.744028	1.769914	1.794542	1.817895	1.840062	1.861061	1.880844	1.899436	1.916913
1.42	1.760442	1.782602	1.803400	1.822835	1.840989	1.857890	1.873511	1.887889	1.901089
1.50	1.761273	1.779484	1.796255	1.811605	1.825607	1.838297	1.849675	1.859784	1.868682
1.66	1.724050	1.734136	1.742712	1.749832	1.755554	1.759927	1.763004	1.764842	1.765480
1.82	1.647433	1.649661	1.650411	1.649768	1.647778	1.644506	1.640045	1.634463	1.627789
1.98	1.544573	1.539671	1.533412	1.525903	1.517184	1.507334	1.496474	1.484677	1.471971
2.14	1.426159	1.415123	1.402919	1.389667	1.375411	1.360238	1.344280	1.327615	1.310274
2.30	1.300464	1.284409	1.267424	1.249632	1.231089	1.211884	1.192147	1.171954	1.151347
2.46	1.173629	1.153685	1.133079	1.111931	1.090307	1.068296	1.046013	1.023531	1.000899
2.62	1.050023	1.027265	1.004125	.980712	.957104	.933384	.909644	.885949	.862356
2.78	.932594	.907992	.883287	.858571	.833931	.809435	.785151	.761137	.737447
2.94	.823174	.797580	.772140	.746933	.722047	.697533	.673437	.649807	.626688
3.10	.722778	.696890	.671398	.646359	.621852	.597909	.574559	.551839	.529775
3.42	.550106	.525224	.501119	.477820	.455359	.433723	.412936	.393010	.373910
3.74	.413165	.390623	.369103	.348620	.329127	.310572	.293006	.276415	.260682
4.06	.307291	.287698	.269248	.251959	.235684	.220347	.206042	.192739	.180234
4.38	.226891	.210373	.195022	.180866	.167662	.155320	.143990	.133622	.123941
4.70	.166619	.153014	.140529	.129211	.118731	.108997	.100211	.092308	.084964
5.02	.121861	.110858	.100886	.092006	.083830	.076272	.069572	.063657	.058173
5.34	.088855	.080087	.072238	.065380	.059090	.053292	.048251	.043890	.039849
5.66	.064645	.057744	.051639	.046414	.041629	.037224	.033474	.030302	.027354
5.98	.046959	.041582	.036883	.032948	.029343	.026022	.023259	.020979	.018849
6.30	.034079	.029927	.026341	.023409	.020716	.018228	.016208	.014590	.013063
6.94	.017934	.015513	.013471	.011894	.010423	.009042	.007987	.007203	.006435
7.58	.009460	.008084	.006951	.006141	.005357	.004596	.004059	.003707	.003331
8.22	.005022	.004259	.003646	.003255	.002848	.002427	.002162	.002025	.001848
8.86	.002695	.002283	.001961	.001794	.001589	.001351	.001226	.001194	.001115
9.50	.001471	.001256	.001093	.001042	.000944	.000804	.000749	.000765	.000733
10.14	.000821	.000715	.000639	.000645	.000602	.000515	.000494	.000531	.000521
10.78	.000473	.000426	.000395	.000428	.000414	.000354	.000349	.000394	.000394
11.42	.000284	.000268	.000260	.000304	.000303	.000259	.000261	.000306	.000310
12.06	.000178	.000178	.000182	.000229	.000234	.000199	.000204	.000247	.000251

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
12.70	.000118	.000126	.000135	.000181	.000188	.000158	.000163	.000203	.000208
13.98	.000060	.000073	.000083	.000123	.000130	.000106	.000110	.000143	.000146
15.26	.000037	.000048	.000057	.000089	.000094	.000074	.000077	.000103	.000105
16.54	.000025	.000034	.000041	.000067	.000070	.000053	.000055	.000075	.000076
17.82	.000018	.000025	.000030	.000050	.000053	.000038	.000039	.000055	.000055
19.10	.000014	.000019	.000022	.000039	.000040	.000027	.000028	.000041	.000040
20.38	.000010	.000014	.000017	.000030	.000030	.000020	.000020	.000030	.000030
21.66	.000008	.000011	.000012	.000023	.000023	.000015	.000015	.000022	.000022
22.94	.000006	.000008	.000009	.000017	.000018	.000011	.000010	.000016	.000016
24.22	.000005	.000006	.000007	.000013	.000013	.000008	.000007	.000012	.000012
25.50	.000003	.000004	.000005	.000010	.000010	.000005	.000005	.000009	.000008
28.06	.000002	.000002	.000003	.000005	.000005	.000003	.000003	.000004	.000004
30.62	.000001	.000001	.000001	.000003	.000003	.000001	.000001	.000002	.000002
33.18	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001
35.74	.000000	.000000	.000000	.000001	.000001	.000000	.000000	.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
-E	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
19.338	19.338	20.119	20.890	21.220	21.963	23.162	23.912	24.174	24.907
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.115116	.117717	.120280	.122567	.125062	.127775	.130221	.132391	.134791
.02	.189418	.193393	.197291	.200727	.204490	.208600	.212259	.215461	.219024
.03	.230562	.234966	.239260	.242979	.247078	.251580	.255522	.258899	.262696
.04	.245128	.249255	.253246	.256609	.260355	.264505	.268048	.270979	.274334
.05	.238754	.242096	.245282	.247839	.250744	.254015	.256679	.258738	.261183
.06	.216253	.218465	.220508	.221961	.223702	.225742	.227216	.228133	.229367
.07	.181714	.182583	.183280	.183456	.183844	.184445	.184553	.184182	.184041
.08	.138595	.138017	.137270	.136098	.135049	.134119	.132792	.131089	.129518
.09	.089805	.087760	.085558	.083046	.080563	.078100	.075354	.072350	.069377
.10	.037770	.034308	.030706	.026922	.023074	.019146	.015062	.010851	.006569
.12	-.068360	-.074316	-.080357	-.086309	-.092496	-.098945	-.105281	-.111469	-.117917
.14	-.167800	-.175590	-.183394	-.190837	-.198653	-.206878	-.214723	-.222150	-.229991
.16	-.252958	-.261805	-.270585	-.278753	-.287392	-.296540	-.305066	-.312934	-.321322
.18	-.319513	-.328625	-.337585	-.345721	-.354380	-.363602	-.371999	-.379540	-.387659
.20	-.365530	-.374169	-.382572	-.389985	-.397934	-.406455	-.413994	-.420530	-.427658
.22	-.390780	-.398302	-.405513	-.411618	-.418234	-.425392	-.431465	-.436442	-.441985
.24	-.396217	-.402096	-.407599	-.411934	-.416726	-.421996	-.426129	-.429131	-.432637
.26	-.383577	-.387414	-.390823	-.393055	-.395664	-.398664	-.400527	-.401273	-.402437
.28	-.355077	-.356598	-.357657	-.357577	-.357778	-.358263	-.357660	-.356003	-.354661
.30	-.313187	-.312239	-.310812	-.308327	-.306017	-.303874	-.300734	-.296646	-.292757
.34	-.199451	-.193526	-.187140	-.179969	-.172752	-.165457	-.157456	-.148819	-.140139
.38	-.062003	-.051617	-.040854	-.029684	-.018263	-.006542	.005498	.017768	.030304
.42	.082090	.095938	.110027	.124086	.138561	.153513	.168344	.182959	.198019
.46	.219277	.235317	.251423	.267049	.283201	.299946	.316126	.331645	.347731
.50	.339667	.356530	.373264	.389089	.405492	.422541	.438609	.453610	.469238
.54	.436741	.453096	.469119	.483854	.499164	.515111	.529720	.542920	.556748
.58	.506870	.521511	.535627	.548147	.561192	.574810	.586807	.597139	.608047
.62	.548755	.560668	.571881	.581275	.591101	.601397	.609876	.616524	.623656
.66	.562896	.571284	.578829	.584420	.590324	.596559	.600875	.603291	.606066
.70	.551098	.555398	.558746	.560096	.561620	.563318	.563087	.560978	.559085
.78	.461034	.456350	.450617	.443055	.435370	.427527	.417987	.406866	.395653
.86	.305179	.291716	.277269	.261447	.245235	.228563	.210701	.191815	.172559
.94	.111672	.090802	.069157	.046792	.023837	.000199	-.023941	-.048386	-.073408
1.02	-.094236	-.120414	-.147045	-.173636	-.200927	-.229022	-.256845	-.284189	-.312228
1.10	-.292220	-.321268	-.350379	-.378667	-.407670	-.437491	-.466268	-.493806	-.522059
1.18	-.467424	-.496878	-.525975	-.553511	-.581691	-.610610	-.637778	-.663033	-.688939
1.26	-.610152	-.637738	-.664551	-.689165	-.714283	-.739977	-.763332	-.784236	-.805652
1.34	-.715124	-.738896	-.761512	-.781426	-.801648	-.822226	-.840023	-.854989	-.870278
1.42	-.780584	-.798991	-.815915	-.829786	-.843735	-.857781	-.868769	-.876714	-.884758

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
1.50	-.807404	-.819313	-.829480	-.836403	-.843158	-.849731	-.853133	-.853447	-.853622
1.66	-.757135	-.754221	-.749279	-.741170	-.732411	-.722924	-.710494	-.695341	-.679580
1.82	-.597047	-.579079	-.559110	-.536566	-.512975	-.488208	-.461226	-.432352	-.402491
1.98	-.364808	-.333488	-.300468	-.265833	-.229893	-.192484	-.153915	-.114577	-.074006
2.14	-.095011	-.053204	-.010202	.033245	.078101	.124546	.170936	.216859	.264114
2.30	.184235	.233145	.282614	.331294	.381345	.432942	.483260	.531910	.581859
2.46	.452107	.504689	.557138	.607621	.659321	.712396	.763073	.811030	.860153
2.62	.694537	.747636	.799921	.849212	.899484	.950868	.998929	1.043438	1.088913
2.78	.903138	.954070	1.003568	1.049254	1.095642	1.142824	1.185997	1.225053	1.264834
2.94	1.073977	1.120617	1.165308	1.205610	1.246318	1.287478	1.324210	1.356531	1.389322
3.10	1.206410	1.247213	1.285673	1.319424	1.353290	1.387267	1.416655	1.441601	1.466761
3.42	1.364056	1.390659	1.414528	1.433760	1.452589	1.470902	1.484994	1.495250	1.505230
3.74	1.402998	1.414810	1.423978	1.429350	1.433904	1.437423	1.437775	1.435513	1.432527
4.06	1.356845	1.355482	1.351907	1.345869	1.338681	1.330044	1.319668	1.308190	1.295575
4.38	1.256645	1.244797	1.231367	1.217015	1.201241	1.183693	1.165936	1.148607	1.129763
4.70	1.127256	1.107898	1.087649	1.068006	1.046710	1.023393	1.001297	.980990	.958838
5.02	.986792	.962696	.938372	.916009	.891805	.865403	.841426	.820321	.797109
5.34	.847430	.820933	.794779	.771680	.746590	.719200	.695152	.674748	.652052
5.66	.716664	.689585	.663300	.640867	.616341	.589483	.566588	.547804	.526625
5.98	.598562	.572216	.546991	.526124	.503114	.477805	.456802	.440112	.421008
6.30	.494821	.470088	.446685	.427886	.406946	.383791	.365055	.350621	.333823
6.94	.330123	.309917	.291175	.276937	.260696	.242522	.228490	.218315	.206630
7.58	.215071	.199682	.185646	.175539	.163689	.150257	.140328	.133545	.125020
8.22	.137840	.126666	.116623	.109759	.101463	.091936	.085175	.080824	.075111
8.86	.087389	.079545	.072587	.068071	.062429	.055863	.051380	.048664	.044926
9.50	.055048	.049675	.044965	.042062	.038301	.033866	.030949	.029287	.026881
10.14	.034582	.030967	.027830	.025996	.023525	.020571	.018695	.017693	.016160
10.78	.021741	.019338	.017273	.016130	.014521	.012569	.011372	.010776	.009804
11.42	.013722	.012139	.010789	.010084	.009042	.007757	.006995	.006643	.006029
12.06	.008724	.007685	.006807	.006375	.005701	.004854	.004369	.004164	.003773
12.70	.005604	.004924	.004352	.004090	.003652	.003092	.002782	.002663	.002413
13.98	.002416	.002122	.001876	.001781	.001593	.001340	.001209	.001171	.001065
15.26	.001124	.000992	.000881	.000848	.000763	.000641	.000582	.000571	.000522
16.54	.000569	.000506	.000454	.000443	.000401	.000337	.000308	.000306	.000282
17.82	.000313	.000280	.000253	.000250	.000228	.000191	.000176	.000176	.000163
19.10	.000184	.000166	.000150	.000150	.000137	.000115	.000106	.000107	.000099
20.38	.000113	.000102	.000093	.000093	.000085	.000071	.000066	.000067	.000062
21.66	.000072	.000065	.000059	.000060	.000055	.000045	.000042	.000043	.000040
22.94	.000047	.000042	.000039	.000039	.000036	.000030	.000027	.000028	.000026
24.22	.000031	.000028	.000025	.000026	.000023	.000019	.000018	.000018	.000017
25.50	.000021	.000019	.000017	.000017	.000016	.000013	.000012	.000012	.000011
28.06	.000010	.000009	.000007	.000008	.000007	.000006	.000005	.000005	.000005
30.62	.000005	.000004	.000003	.000003	.000003	.000003	.000002	.000002	.000002
33.18	.000002	.000002	.000001	.000001	.000001	.000001	.000001	.000001	.000001
35.74	.000001	.000001	.000001	.000001	.000000	.000001	.000000	.000000	.000000
38.30	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
40.86	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
-E	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
X	15.392	16.065	16.730	16.966	17.605	18.688	19.335	19.504	20.135
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.006505	.006720	.006934	.007130	.007345	.007579	.007795	.007993	.008210
.02	.023766	.024533	.025299	.025997	.026761	.027596	.028364	.029063	.029834
.03	.048802	.050342	.051876	.053271	.054800	.056469	.058001	.059389	.060924
.04	.079110	.081548	.083974	.086170	.088579	.091212	.093620	.095793	.098199

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6	5P 6
X									
.05	.112607	.115990	.119352	.122383	.125711	.129354	.132670	.135651	.138956
.06	.147567	.151884	.156167	.160010	.164236	.168866	.173063	.176817	.180988
.07	.182581	.187772	.192912	.197503	.202558	.208103	.213107	.217557	.222513
.08	.216505	.222477	.228378	.233619	.239400	.245750	.251452	.256491	.262117
.09	.248433	.255064	.261603	.267375	.273755	.280774	.287040	.292539	.298698
.10	.277657	.284810	.291847	.298017	.304851	.312383	.319066	.324883	.331422
.12	.325998	.333744	.341322	.347855	.355135	.363195	.370235	.376243	.383059
.14	.358883	.366607	.374109	.380430	.387535	.395452	.402220	.407836	.414293
.16	.375386	.382507	.389353	.394933	.401285	.408436	.414359	.419057	.424584
.18	.375788	.381798	.387485	.391868	.396975	.402824	.407414	.410761	.414880
.20	.361194	.365675	.369794	.372622	.376091	.380209	.383089	.384756	.387102
.22	.333233	.335869	.338116	.339130	.340676	.342752	.343654	.343423	.343749
.24	.293838	.294417	.294590	.293632	.293079	.292915	.291684	.289440	.287613
.26	.245086	.243492	.241490	.238496	.235765	.233271	.229855	.225581	.221570
.28	.189075	.185282	.181092	.176081	.171186	.166371	.160808	.154572	.148440
.30	.127841	.121903	.115592	.108657	.101690	.094645	.087053	.078995	.070882
.34	-.002786	-.012595	-.022691	-.032964	-.043547	-.054504	-.065559	-.076620	-.088035
.38	-.133474	-.146277	-.159240	-.171898	-.185102	-.198922	-.212365	-.225536	-.238909
.42	-.253881	-.268571	-.283263	-.297176	-.311808	-.327232	-.341815	-.355470	-.369908
.46	-.356654	-.372039	-.387249	-.401247	-.416069	-.431782	-.446237	-.459360	-.473373
.50	-.437144	-.452057	-.466615	-.479592	-.493428	-.508182	-.521329	-.532819	-.545231
.54	-.492979	-.506360	-.519214	-.530197	-.542015	-.554708	-.565532	-.574462	-.584282
.58	-.523612	-.534558	-.544824	-.553020	-.561971	-.571700	-.579389	-.585047	-.591504
.62	-.529879	-.537676	-.544663	-.549476	-.554922	-.561003	-.564969	-.566866	-.569427
.66	-.513616	-.517743	-.520963	-.521999	-.523515	-.525488	-.525368	-.523233	-.521596
.70	-.477320	-.477454	-.476617	-.473674	-.471037	-.468861	-.464299	-.458064	-.452140
.78	-.356406	-.348287	-.339179	-.328358	-.317469	-.306431	-.293849	-.279896	-.265859
.86	-.191596	-.175851	-.159241	-.141549	-.123441	-.104805	-.085296	-.065124	-.044505
.94	-.006070	.015817	.038326	.061139	.084646	.108977	.133383	.157636	.182625
1.02	.180632	.206675	.233011	.258812	.285493	.313187	.340120	.366070	.392943
1.10	.353486	.381502	.409429	.436001	.463537	.492160	.519225	.544538	.570855
1.18	.501982	.529821	.557172	.582425	.608631	.635888	.660886	.683481	.707059
1.26	.619642	.645349	.670180	.692294	.715262	.739152	.760222	.778386	.797426
1.34	.703322	.725238	.745921	.763419	.781603	.800504	.816182	.828624	.841764
1.42	.752475	.769278	.784546	.796321	.808563	.821262	.830505	.836357	.842676
1.50	.768448	.779171	.788118	.793429	.798954	.804640	.806806	.805592	.804584
1.66	.712233	.709204	.704134	.695603	.686740	.677412	.664892	.649465	.633686
1.82	.563255	.546208	.527138	.505296	.482609	.458882	.432783	.404708	.375768
1.98	.352907	.323224	.291789	.258636	.224228	.188330	.151207	.113322	.074169
2.14	.109685	.069776	.028584	-.013063	-.056236	-.101184	-.146051	-.190352	-.236185
2.30	-.145183	-.190400	-.238296	-.285316	-.333988	-.384555	-.433714	-.481013	-.529966
2.46	-.388243	-.439737	-.491240	-.540585	-.591576	-.644429	-.694651	-.741959	-.790718
2.62	-.613396	-.666305	-.718545	-.767485	-.817960	-.870142	-.918653	-.963216	-1.009330
2.78	-.811079	-.862887	-.913393	-.959661	-1.007274	-1.056352	-1.100956	-1.140942	-1.182306
2.94	-.977347	-1.025985	-1.072768	-1.114619	-1.157574	-1.201692	-1.240801	-1.274897	-1.310150
3.10	-1.110992	-1.154868	-1.196446	-1.232653	-1.269697	-1.307568	-1.340161	-1.367622	-1.395986
3.42	-1.284731	-1.316140	-1.344727	-1.367816	-1.391183	-1.414679	-1.433094	-1.446853	-1.460955
3.74	-1.351141	-1.368701	-1.383380	-1.393284	-1.402926	-1.412026	-1.417017	-1.418534	-1.419808
4.06	-1.336531	-1.341029	-1.342957	-1.341417	-1.339117	-1.335663	-1.329550	-1.321538	-1.312692
4.38	-1.266687	-1.260129	-1.251553	-1.241134	-1.229490	-1.216154	-1.201814	-1.187258	-1.171295
4.70	-1.163322	-1.148216	-1.131756	-1.115156	-1.096906	-1.076508	-1.056741	-1.038342	-1.018011
5.02	-1.043110	-1.021981	-1.000179	-.979840	-.957470	-.932584	-.909795	-.889730	-.867277
5.34	-.917974	-.893094	-.868170	-.846092	-.821658	-.794436	-.770517	-.750376	-.727488
5.66	-.795881	-.769138	-.742888	-.720585	-.695669	-.667789	-.644122	-.624971	-.602823
5.98	-.681738	-.654608	-.628391	-.606926	-.582665	-.555356	-.532875	-.515354	-.494691
6.30	-.578214	-.551779	-.526565	-.506617	-.483769	-.457869	-.437147	-.421572	-.402812
6.94	-.406436	-.383333	-.361764	-.345773	-.326877	-.305121	-.288602	-.277047	-.262457
7.58	-.279261	-.260522	-.243333	-.231365	-.216704	-.199536	-.187119	-.179041	-.168284
8.22	-.188883	-.174419	-.161351	-.152806	-.141902	-.128907	-.119932	-.114515	-.106861
8.86	-.126396	-.115611	-.105997	-.100101	-.092224	-.082667	-.076352	-.072832	-.067515

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
9.50	-.083999	-.076155	-.069246	-.065281	-.059708	-.052818	-.048457	-.046227	-.042594
10.14	-.055601	-.049998	-.045116	-.042507	-.038620	-.033720	-.030748	-.029366	-.026911
10.78	-.036742	-.032793	-.029385	-.027699	-.025015	-.021561	-.019554	-.018717	-.017069
11.42	-.024286	-.021529	-.019171	-.018100	-.016258	-.013837	-.012488	-.011993	-.010891
12.06	-.016082	-.014170	-.012547	-.011880	-.010621	-.008926	-.008022	-.007739	-.007003
12.70	-.010683	-.009362	-.008250	-.007843	-.006984	-.005797	-.005191	-.005037	-.004544
13.98	-.004777	-.004151	-.003630	-.003493	-.003091	-.002503	-.002230	-.002196	-.001973
15.26	-.002182	-.001885	-.001640	-.001606	-.001415	-.001116	-.000991	-.000995	-.000892
16.54	-.001017	-.000875	-.000758	-.000760	-.000667	-.000510	-.000451	-.000465	-.000415
17.82	-.000478	-.000410	-.000353	-.000365	-.000319	-.000234	-.000206	-.000219	-.000195
19.10	-.000222	-.000189	-.000161	-.000174	-.000151	-.000103	-.000090	-.000100	-.000088
20.38	-.000100	-.000084	-.000071	-.000081	-.000069	-.000044	-.000037	-.000044	-.000038
21.66	-.000044	-.000037	-.000031	-.000037	-.000031	-.000018	-.000015	-.000019	-.000016
22.94	-.000019	-.000016	-.000013	-.000016	-.000014	-.000007	-.000006	-.000008	-.000007
24.22	-.000008	-.000007	-.000006	-.000007	-.000006	-.000003	-.000002	-.000003	-.000003
25.50	-.000004	-.000003	-.000002	-.000003	-.000003	-.000001	-.000001	-.000001	-.000001
28.06	-.000001	-.000000	-.000000	-.000001	-.000000	.000000	.000000	.000000	.000000
30.62	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	SD 10	SD 10	SD 10	SD 10	SD 10	SD 10	SD 10	SD 10	SD 10
-E	8.4139	8.8843	9.3481	9.4211	9.8644	10.718	11.172	11.186	11.626
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000073	.000077	.000080	.000084	.000087	.000091	.000095	.000099	.000102
.02	.000553	.000579	.000606	.000629	.000657	.000687	.000715	.000741	.000769
.03	.001758	.001841	.001924	.001999	.002085	.002181	.002269	.002348	.002439
.04	.003927	.004111	.004295	.004460	.004649	.004863	.005057	.005230	.005429
.05	.007231	.007564	.007901	.008201	.008544	.008933	.009285	.009599	.009960
.06	.011779	.012317	.012860	.013342	.013894	.014520	.015085	.015589	.016168
.07	.017635	.018433	.019236	.019948	.020764	.021689	.022524	.023266	.024120
.08	.024821	.025932	.027049	.028037	.029171	.030457	.031616	.032642	.033825
.09	.033324	.034799	.036282	.037591	.039093	.040798	.042331	.043685	.045247
.10	.043106	.044993	.046889	.048557	.050475	.052651	.054604	.056325	.058312
.12	.066240	.069076	.071918	.074407	.077273	.080530	.083438	.085988	.088939
.14	.093545	.097455	.101367	.104775	.108706	.113179	.117155	.120620	.124640
.16	.124172	.129234	.134290	.138669	.143731	.149498	.154598	.159617	.164156
.18	.157196	.163440	.169663	.175019	.181225	.188308	.194537	.199896	.206150
.20	.191678	.199085	.206451	.212750	.220066	.228430	.235744	.241989	.249303
.22	.226707	.235217	.243661	.250828	.259178	.268743	.277052	.284090	.292365
.24	.261433	.270949	.280368	.288299	.297569	.308211	.317392	.325098	.334201
.26	.295085	.305480	.315741	.324305	.334353	.345916	.355814	.364039	.373805
.28	.326982	.338104	.349050	.358097	.368757	.381059	.391499	.400075	.410321
.30	.356540	.368219	.379676	.389040	.400130	.412968	.423759	.432508	.443034
.34	.406777	.419010	.430922	.440400	.451765	.465027	.475916	.484456	.494921
.38	.442975	.454993	.466583	.475472	.486323	.499128	.509309	.516916	.526506
.42	.463638	.474694	.485215	.492855	.502447	.513957	.522685	.528706	.536674
.46	.468367	.477783	.486565	.492384	.500061	.509538	.516168	.520058	.525777
.50	.457620	.464823	.471306	.474840	.480066	.486901	.490922	.492270	.495253
.54	.432495	.437031	.440780	.441688	.444063	.447792	.448838	.447369	.447282
.58	.394526	.396070	.396779	.394847	.394106	.394422	.392268	.387846	.384507
.62	.345520	.343871	.341366	.336498	.332512	.329250	.323814	.316429	.309797
.66	.287420	.282500	.276726	.268936	.261697	.254832	.246154	.235910	.226069
.70	.222207	.214043	.205054	.194456	.184066	.173692	.161921	.149019	.136164
.78	.078079	.063881	.048988	.033425	.017395	.000687	-.016467	-.033788	-.051751
.86	-.072796	-.091957	-.111596	-.130873	-.151231	-.172874	-.193940	-.214156	-.235619
.94	-.218856	-.241541	-.264421	-.285904	-.308969	-.333799	-.357038	-.378449	-.401582
1.02	-.351356	-.375960	-.400431	-.422535	-.446588	-.472733	-.496356	-.517273	-.540240

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10
1.10	-.464274	-.489176	-.513600	-.534806	-.558183	-.583823	-.606140	-.625026	-.646135
1.18	-.553975	-.577658	-.600520	-.619467	-.640668	-.664152	-.683681	-.699233	-.717035
1.26	-.618792	-.639916	-.659896	-.675442	-.693195	-.713116	-.728635	-.739825	-.753161
1.34	-.658594	-.676037	-.692046	-.703291	-.716582	-.731811	-.742382	-.748468	-.756484
1.42	-.674375	-.687248	-.698446	-.704733	-.712813	-.722505	-.727474	-.727988	-.730126
1.50	-.667903	-.675554	-.681339	-.682245	-.684614	-.688202	-.687176	-.681899	-.677871
1.66	-.597492	-.593599	-.587630	-.577317	-.567667	-.558318	-.545038	-.528351	-.512041
1.82	-.467595	-.451907	-.434161	-.413116	-.391849	-.369921	-.345226	-.318403	-.291040
1.98	-.298308	-.271686	-.243233	-.212877	-.181443	-.148450	-.114167	-.079292	-.043021
2.14	-.107269	-.071318	-.033938	.003752	.043274	.085113	.126612	.167069	.209652
2.30	.091176	.134420	.178564	.221360	.266599	.314732	.360880	.404392	.450598
2.46	.286032	.334360	.382975	.428631	.477181	.529013	.577309	.621522	.668825
2.62	.469361	.520575	.571430	.617851	.667458	.720550	.768739	.811619	.857822
2.78	.635825	.687881	.738939	.784290	.832971	.885178	.931352	.971263	1.014582
2.94	.782218	.833313	.882811	.925577	.971688	1.021225	1.063874	1.099599	1.138687
3.10	.907007	.955625	1.002119	1.041124	1.083382	1.128849	1.166861	1.197584	1.231517
3.42	1.091605	1.131946	1.169384	1.198644	1.230720	1.265316	1.292156	1.311804	1.334099
3.74	1.196750	1.226269	1.252510	1.270894	1.291419	1.313552	1.328597	1.337454	1.348141
4.06	1.236288	1.254272	1.268975	1.276952	1.286242	1.296115	1.300282	1.299889	1.300349
4.38	1.225676	1.232675	1.236687	1.235665	1.235039	1.233932	1.228954	1.221382	1.213603
4.70	1.179286	1.176606	1.171436	1.163244	1.154491	1.144217	1.132114	1.119486	1.105576
5.02	1.109258	1.098568	1.086000	1.072533	1.057554	1.040083	1.022839	1.007057	.988964
5.34	1.025225	1.008287	.990123	.973128	.953715	.930946	.910330	.892956	.872338
5.66	.934474	.912968	.890876	.871841	.849564	.823199	.800686	.782914	.761097
5.98	.842285	.817714	.793140	.773263	.749423	.720910	.697667	.680353	.658347
6.30	.752314	.725954	.700100	.680289	.655918	.626437	.603344	.587057	.565590
6.94	.587630	.560594	.534819	.516882	.493581	.464712	.443607	.430226	.411144
7.58	.449583	.424364	.400823	.385863	.365216	.339004	.320973	.310718	.294744
8.22	.339053	.316874	.296523	.284709	.267274	.244596	.229844	.222366	.209501
8.86	.253154	.234406	.217453	.208484	.194231	.175246	.163526	.158284	.148187
9.50	.187724	.172313	.158556	.151952	.140563	.125035	.115914	.112363	.104582
10.14	.138569	.126157	.115203	.110463	.101509	.089023	.082029	.079704	.073782
10.78	.101992	.092146	.083547	.080220	.073264	.063350	.058043	.056577	.052111
11.42	.074952	.067232	.060553	.058267	.052910	.045112	.041117	.040235	.036888
12.06	.055052	.049051	.043904	.042370	.038271	.032180	.029189	.028693	.026195
12.70	.040446	.035814	.031873	.030868	.027746	.023014	.020783	.020535	.018676
13.98	.021910	.019190	.016908	.016518	.014722	.011895	.010661	.010657	.009629
15.26	.011971	.010392	.009083	.008965	.007936	.006261	.005580	.005646	.005077
16.54	.006622	.005711	.004962	.004950	.004360	.003370	.002991	.003062	.002743
17.82	.003722	.003196	.002766	.002787	.002446	.001862	.001648	.001702	.001521
19.10	.002132	.001827	.001578	.001602	.001402	.001058	.000936	.000970	.000865
20.38	.001249	.001070	.000925	.000940	.000821	.000620	.000548	.000565	.000503
21.66	.000750	.000644	.000557	.000563	.000491	.000375	.000332	.000336	.000299
22.94	.000462	.000398	.000346	.000343	.000299	.000234	.000207	.000204	.000181
24.22	.000293	.000254	.000221	.000213	.000185	.000151	.000134	.000125	.000111
25.50	.000192	.000167	.000146	.000134	.000116	.000100	.000089	.000078	.000069
28.06	.000089	.000078	.000069	.000055	.000047	.000049	.000044	.000031	.000027
30.62	.000047	.000041	.000037	.000023	.000019	.000026	.000024	.000012	.000010
33.18	.000027	.000024	.000021	.000010	.000008	.000016	.000014	.000005	.000004
35.74	.000017	.000015	.000014	.000004	.000003	.000010	.000009	.000002	.000001
38.30	.000011	.000010	.000009	.000002	.000001	.000007	.000006	.000001	.000000
40.86	.000008	.000007	.000006	.000001	.000000	.000005	.000004	.000000	.000000
43.42	.000005	.000005	.000004	.000000	.000000	.000003	.000003	.000000	.000000
45.98	.000004	.000004	.000003	.000000	.000000	.000003	.000002	.000000	.000000
48.54	.000003	.000003	.000002	.000000	.000000	.000002	.000002	.000000	.000000
51.10	.000002	.000002	.000002	.000000	.000000	.000001	.000001	.000000	.000000
56.22	.000001	.000001	.000001	.000000	.000000	.000000	.000001	.000000	.000000
61.34	.000000	.000001	.000000	.000000	.000000	.000000	.000000	.000000	.000000
66.46	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	5F 2	5F 3	5F 4	5F 6	5F 7	5F 7	5F 8	5F 10	5F 11
-E	1.1419	1.2689	1.3912	1.1609	1.2626	1.7399	1.8519	1.5555	1.6501
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.02	.000003	.000003	.000003	.000003	.000003	.000004	.000004	.000004	.000004
.03	.000012	.000014	.000015	.000015	.000017	.000018	.000020	.000020	.000022
.04	.000037	.000041	.000044	.000046	.000050	.000055	.000059	.000061	.000065
.05	.000087	.000095	.000103	.000108	.000117	.000129	.000137	.000143	.000152
.06	.000174	.000189	.000205	.000215	.000231	.000255	.000272	.000283	.000301
.07	.000308	.000336	.000364	.000380	.000410	.000452	.000482	.000501	.000533
.08	.000504	.000549	.000595	.000621	.000669	.000737	.000787	.000817	.000869
.09	.000773	.000843	.000913	.000953	.001025	.001130	.001206	.001252	.001331
.10	.001130	.001231	.001333	.001390	.001496	.001649	.001758	.001825	.001940
.12	.002154	.002345	.002538	.002646	.002845	.003133	.003340	.003464	.003680
.14	.003673	.003996	.004321	.004502	.004837	.005325	.005672	.005879	.006241
.16	.005770	.006274	.006780	.007059	.007580	.008339	.008876	.009196	.009755
.18	.008518	.009256	.009996	.010401	.011162	.012270	.013053	.013514	.014327
.20	.011974	.013002	.014033	.014593	.015650	.017193	.018278	.018912	.020037
.22	.016180	.017558	.018938	.019680	.021092	.023157	.024603	.025440	.026936
.24	.021163	.022951	.024739	.025691	.027517	.030191	.032057	.033125	.035051
.26	.026938	.029194	.031448	.032638	.034935	.038305	.040645	.041974	.044386
.28	.033505	.036287	.039063	.040515	.043338	.047488	.050357	.051969	.054920
.30	.040853	.044216	.047567	.049304	.052705	.057714	.061161	.063079	.066617
.34	.057797	.062474	.067120	.069479	.074175	.081117	.085849	.088427	.093266
.38	.077499	.083658	.089760	.092792	.098933	.108048	.114200	.117475	.123740
.42	.099581	.107350	.115024	.118752	.126440	.137903	.145561	.149537	.157302
.46	.123598	.133058	.142376	.146793	.156084	.170001	.179197	.183845	.193131
.50	.149070	.160257	.171243	.176314	.187215	.203623	.214343	.219604	.230379
.54	.175507	.188413	.201046	.206713	.219186	.238057	.250239	.256028	.268214
.58	.202428	.217003	.231223	.237407	.251373	.272619	.286161	.292370	.305850
.62	.229380	.245537	.261246	.267851	.283195	.306676	.321441	.327946	.342566
.66	.255941	.273563	.290633	.297547	.314125	.339655	.355478	.362143	.377723
.70	.281734	.300675	.318952	.326054	.343697	.371053	.387746	.394425	.410765
.78	.329717	.350779	.370931	.378025	.397220	.427444	.445255	.451516	.468717
.86	.371194	.393595	.414821	.421383	.441294	.473226	.491274	.496534	.513685
.94	.404719	.427627	.449087	.454613	.474382	.506805	.524214	.527939	.544149
1.02	.429455	.452040	.472908	.476945	.495744	.527467	.543412	.545149	.559599
1.10	.445076	.466551	.486053	.488215	.505287	.535195	.548946	.548331	.560307
1.18	.451656	.471304	.488746	.488722	.503404	.530501	.541433	.538206	.547117
1.26	.449565	.466759	.481541	.479100	.490831	.514260	.521872	.515863	.521248
1.34	.439386	.453592	.465216	.460201	.468533	.487581	.491491	.482621	.484146
1.42	.421833	.432617	.440684	.433008	.437600	.451703	.451642	.439911	.437359
1.50	.397692	.404713	.408924	.398563	.399173	.407908	.403714	.389189	.382453
1.66	.332895	.331721	.327672	.312080	.304363	.301604	.289024	.269334	.254281
1.82	.251299	.241546	.229013	.208655	.192635	.178105	.157482	.133459	.110648
1.98	.158561	.140346	.119601	.095178	.071358	.045487	.017619	-.009700	-.039281
2.14	.059476	.033299	.004979	-.022653	-.053431	-.089696	-.123712	-.153195	-.188294
2.30	-.042041	-.075401	-.110400	-.140312	-.176985	-.222347	-.261241	-.291753	-.330994
2.46	-.142881	-.182461	-.223082	-.254330	-.295717	-.348672	-.391113	-.421589	-.463580
2.62	-.240651	-.285380	-.330484	-.362164	-.407047	-.466002	-.510683	-.540175	-.583599
2.78	-.333572	-.382338	-.430774	-.462053	-.509247	-.572614	-.618315	-.646026	-.689693
2.94	-.420388	-.472094	-.522745	-.552892	-.601289	-.667552	-.713181	-.738483	-.781364
3.10	-.500283	-.553878	-.605702	-.634103	-.682706	-.750468	-.795085	-.817514	-.858760
3.42	-.637737	-.692297	-.743746	-.767299	-.813837	-.881003	-.921412	-.937327	-.973442
3.74	-.745259	-.797707	-.845917	-.863580	-.905625	-.968457	-1.002738	-1.011957	-1.041477
4.06	-.824847	-.872944	-.915950	-.927446	-.963519	-1.019460	-1.046682	-1.049743	-1.072149
4.38	-.879809	-.922073	-.958680	-.964295	-.993665	-1.041140	-1.061091	-1.058954	-1.074364

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	5F 2	5F 3	5F 4	5F 6	5F 7	5F 7	5F 8	5F 10	5F 11
X									
4.70	-.913877	-.949450	-.979076	-.979455	-1.001942	-1.040133	-1.053084	-1.046886	-1.055804
5.02	-.930710	-.959216	-.981733	-.977721	-.993519	-1.022167	-1.028680	-1.019578	-1.022712
5.34	-.933640	-.955066	-.970666	-.963184	-.972723	-.991967	-.992755	-.981824	-.979960
5.66	-.925581	-.940165	-.949252	-.939215	-.943062	-.953312	-.949148	-.937327	-.931252
5.98	-.909010	-.917162	-.920272	-.908532	-.907317	-.909157	-.900812	-.888880	-.879341
6.30	-.885996	-.888231	-.885971	-.873288	-.867655	-.861775	-.849978	-.838556	-.826227
6.94	-.827144	-.819288	-.808177	-.795451	-.782825	-.763748	-.746979	-.737853	-.721660
7.58	-.759158	-.743559	-.725986	-.714954	-.697497	-.668197	-.648545	-.642629	-.624348
8.22	-.688528	-.667324	-.645346	-.636999	-.616447	-.579633	-.558636	-.556163	-.537044
8.86	-.619224	-.594224	-.569508	-.564270	-.541950	-.499954	-.478687	-.479475	-.460360
9.50	-.553533	-.526196	-.500029	-.497939	-.474835	-.429587	-.408773	-.412412	-.393848
10.14	-.492643	-.464106	-.437455	-.438304	-.415127	-.368181	-.348283	-.354265	-.336590
10.78	-.437046	-.408171	-.381739	-.385183	-.362431	-.315014	-.296308	-.304109	-.287516
11.42	-.386809	-.358234	-.332518	-.338147	-.316161	-.269218	-.251851	-.260977	-.245563
12.06	-.341748	-.313932	-.289269	-.296662	-.275665	-.229909	-.213937	-.223949	-.209743
12.70	-.301545	-.274806	-.251414	-.260165	-.240294	-.196246	-.181667	-.192190	-.179180
13.98	-.234149	-.210117	-.189584	-.199984	-.182544	-.142884	-.130940	-.141619	-.130861
15.26	-.181424	-.160385	-.142779	-.153708	-.138699	-.104010	-.094385	-.104447	-.095676
16.54	-.140417	-.122332	-.107483	-.118174	-.105435	-.075737	-.068073	-.077105	-.070026
17.82	-.108633	-.093294	-.080920	-.090898	-.080198	-.055189	-.049139	-.056974	-.051306
19.10	-.084045	-.071165	-.060948	-.069960	-.061043	-.040253	-.035511	-.042139	-.037629
20.38	-.065044	-.054313	-.045937	-.053881	-.046499	-.029394	-.025696	-.031197	-.027626
21.66	-.050367	-.041482	-.034653	-.041529	-.035449	-.021492	-.018621	-.023119	-.020303
22.94	-.039030	-.031709	-.026167	-.032034	-.027048	-.015738	-.013516	-.017150	-.014937
24.22	-.030269	-.024262	-.019782	-.024730	-.020656	-.011543	-.009827	-.012735	-.011002
25.50	-.023495	-.018583	-.014972	-.019108	-.015790	-.008480	-.007159	-.009467	-.008112
28.06	-.014196	-.010938	-.008610	-.011438	-.009252	-.004602	-.003823	-.005250	-.004426
30.62	-.008611	-.006468	-.004977	-.006870	-.005441	-.002517	-.002059	-.002925	-.002427
33.18	-.005243	-.003842	-.002893	-.004141	-.003213	-.001389	-.001121	-.001637	-.001338
35.74	-.003205	-.002293	-.001691	-.002504	-.001904	-.000774	-.000616	-.000922	-.000742
38.30	-.001966	-.001375	-.000995	-.001520	-.001133	-.000436	-.000343	-.000522	-.000414
40.86	-.001211	-.000829	-.000589	-.000925	-.000676	-.000248	-.000194	-.000297	-.000233
43.42	-.000748	-.000502	-.000350	-.000565	-.000406	-.000143	-.000111	-.000170	-.000132
45.98	-.000464	-.000305	-.000210	-.000346	-.000244	-.000083	-.000064	-.000098	-.000075
48.54	-.000289	-.000187	-.000127	-.000213	-.000148	-.000049	-.000038	-.000057	-.000043
51.10	-.000180	-.000115	-.000077	-.000131	-.000090	-.000030	-.000023	-.000034	-.000025
56.22	-.000071	-.000044	-.000029	-.000051	-.000034	-.000011	-.000008	-.000012	-.000009
61.34	-.000029	-.000017	-.000011	-.000020	-.000013	-.000004	-.000003	-.000004	-.000003
66.46	-.000012	-.000007	-.000005	-.000008	-.000005	-.000002	-.000001	-.000002	-.000001
71.58	-.000005	-.000003	-.000002	-.000003	-.000002	-.000001	.000000	-.000001	-.000001
76.70	-.000002	-.000001	-.000001	-.000001	-.000001	-.000000	.000000	-.000000	-.000000
81.82	-.000001	-.000001	-.000000	-.000001	-.000000	.000000	.000000	-.000000	-.000000
86.94	-.000000	-.000000	-.000000	-.000000	-.000000	.000000	.000000	-.000000	-.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
-E	3.2753	3.3647	3.4485	3.2898	3.3583	3.6762	3.7463	3.5473	3.6060
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.048531	.049600	.050604	.050322	.051202	.053330	.054164	.053622	.054369
.02	.079853	.081482	.083002	.082408	.083717	.087061	.088284	.087263	.088342
.03	.097191	.098992	.100652	.099748	.101145	.104991	.106269	.104848	.105948
.04	.103321	.105001	.106523	.105331	.106568	.110372	.111464	.109726	.110627
.05	.100618	.101968	.103156	.101713	.102615	.105974	.106716	.104748	.105301
.06	.091114	.091991	.092712	.091068	.091522	.094150	.094437	.092327	.092443
.07	.076532	.076851	.077026	.075236	.075179	.076888	.076664	.074500	.074133
.08	.058332	.058050	.057645	.055769	.055178	.055856	.055108	.052968	.052112
.09	.037741	.036852	.035866	.033964	.032847	.032450	.031191	.029152	.027828



	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
.10	.015785	.014311	.012768	.010901	.009289	.007822	.006090	.004222	.002471
.12	-.028985	-.031485	-.033987	-.035614	-.038053	-.041494	-.043993	-.045347	-.047767
.14	-.070910	-.074159	-.077338	-.078529	-.081513	-.086538	-.089508	-.090168	-.092963
.16	-.106785	-.110455	-.113987	-.114589	-.117804	-.123917	-.127037	-.126888	-.129749
.18	-.134782	-.138543	-.142104	-.142008	-.145150	-.151818	-.154783	-.153768	-.156404
.20	-.154084	-.157628	-.160919	-.160067	-.162860	-.169570	-.172110	-.170227	-.172388
.22	-.164598	-.167656	-.170422	-.168797	-.171011	-.177300	-.179193	-.176488	-.177974
.24	-.166729	-.169084	-.171119	-.168743	-.170200	-.175673	-.176756	-.173307	-.173976
.26	-.161214	-.162701	-.163855	-.160784	-.161360	-.165700	-.165862	-.161779	-.161542
.28	-.148997	-.149505	-.149679	-.145994	-.145616	-.148587	-.147773	-.143187	-.142005
.30	-.131127	-.130594	-.129741	-.125544	-.124187	-.125632	-.123834	-.118887	-.116770
.34	-.082770	-.080152	-.077272	-.072411	-.069183	-.067390	-.063759	-.058543	-.054734
.38	-.024492	-.020022	-.015385	-.010378	-.005601	-.000719	.004362	.009255	.014337
.42	.036445	.042334	.048269	.052914	.058752	.066223	.072219	.076264	.082071
.46	.094279	.101038	.107712	.111542	.117876	.127216	.133533	.136307	.142248
.50	.144807	.151849	.158674	.161321	.167578	.177964	.184016	.185216	.190727
.54	.185265	.192020	.198437	.199633	.205284	.215878	.221136	.220588	.225170
.58	.214127	.220084	.225595	.225178	.229767	.239788	.243813	.241459	.244713
.62	.230865	.235595	.239793	.237697	.240867	.249631	.252089	.247975	.249612
.66	.235723	.238893	.241471	.237721	.239216	.246164	.246833	.241097	.240939
.70	.229506	.230885	.231638	.226336	.226004	.230714	.229479	.222327	.220304
.78	.188840	.186329	.183206	.175342	.171277	.170794	.165796	.156621	.151028
.86	.120532	.114283	.107532	.098084	.090698	.084885	.076692	.066730	.058253
.94	.036887	.027559	.017918	.007995	-.001865	-.012364	-.022774	-.032284	-.042597
1.02	-.051073	-.062503	-.074009	-.083326	-.094580	-.108606	-.120058	-.128022	-.138980
1.10	-.134499	-.146914	-.159145	-.166909	-.178412	-.194537	-.205839	-.211396	-.221831
1.18	-.206961	-.219240	-.231077	-.236541	-.247215	-.263942	-.274005	-.276565	-.285446
1.26	-.264319	-.275437	-.285876	-.288517	-.297430	-.313344	-.321260	-.320505	-.327006
1.34	-.304395	-.313485	-.321696	-.321217	-.327632	-.341494	-.346580	-.342438	-.345969
1.42	-.326585	-.332970	-.338324	-.334633	-.338025	-.348833	-.350636	-.343245	-.343451
1.50	-.331459	-.334664	-.336739	-.329922	-.329976	-.336985	-.335273	-.324940	-.321684
1.66	-.295371	-.291549	-.286563	-.274302	-.267488	-.265679	-.257015	-.242169	-.232319
1.82	-.212245	-.201583	-.189927	-.173889	-.160946	-.150178	-.135643	-.118502	-.103395
1.98	-.100341	-.083983	-.066966	-.049146	-.031621	-.013113	.005465	.022620	.041012
2.14	.023613	.043948	.064495	.082105	.102254	.126426	.146899	.162040	.181539
2.30	.146044	.168381	.190429	.206057	.226788	.254138	.274368	.285898	.304431
2.46	.256947	.279308	.300876	.313100	.332508	.360496	.378582	.385409	.401210
2.62	.349673	.370253	.389578	.397378	.413850	.440130	.454536	.456073	.467794
2.78	.420440	.437715	.453349	.456119	.468405	.490981	.500593	.496711	.503446
2.94	.467744	.480529	.491387	.488899	.496137	.513438	.517567	.508513	.509778
3.10	.491788	.499252	.504614	.496963	.498659	.509563	.507901	.494208	.489886
3.42	.476477	.472114	.465641	.448914	.439296	.435680	.422752	.402070	.387332
3.74	.393048	.377051	.359327	.336147	.316423	.298204	.275812	.251598	.228594
4.06	.263484	.237495	.210442	.183812	.156236	.125160	.095940	.071400	.042843
4.38	.108070	.074487	.040643	.013346	-.019469	-.060671	-.093935	-.116306	-.147757
4.70	-.056731	-.095289	-.133272	-.158999	-.194531	-.242761	-.277546	-.296104	-.328168
5.02	-.218707	-.259734	-.299413	-.321993	-.358053	-.410256	-.444492	-.458391	-.489290
5.34	-.369498	-.410803	-.450106	-.468601	-.503438	-.556844	-.588963	-.598015	-.626473
5.66	-.503912	-.543706	-.580995	-.595018	-.627329	-.679574	-.708492	-.712987	-.738180
5.98	-.619191	-.656108	-.690178	-.699773	-.728667	-.777843	-.802890	-.803436	-.824907
6.30	-.714367	-.747438	-.777479	-.782996	-.807935	-.852584	-.873428	-.870806	-.888383
6.94	-.846339	-.870166	-.891004	-.890118	-.906611	-.939452	-.951864	-.945423	-.955473
7.58	-.910090	-.924286	-.935924	-.931336	-.939850	-.959395	-.964324	-.957077	-.960668
8.22	-.920677	-.926130	-.929668	-.923819	-.925580	-.932203	-.931128	-.925263	-.923797
8.86	-.893181	-.891387	-.888388	-.883103	-.879580	-.874764	-.869245	-.866050	-.860909
9.50	-.840605	-.833233	-.825335	-.821756	-.814380	-.800147	-.791593	-.791596	-.783986
10.14	-.773245	-.761882	-.750583	-.749269	-.739293	-.717817	-.707396	-.710579	-.701477
10.78	-.698780	-.684805	-.671375	-.672441	-.660893	-.634263	-.622888	-.628891	-.619048
11.42	-.622651	-.607194	-.592647	-.595919	-.583602	-.553681	-.542034	-.550311	-.540283
12.06	-.548517	-.532460	-.517572	-.522705	-.510223	-.478586	-.467151	-.477101	-.467279

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
X									
12.70	-.478686	-.462687	-.448026	-.454600	-.442386	-.410310	-.399414	-.410447	-.401095
13.98	-.356501	-.341878	-.328711	-.336912	-.326020	-.295758	-.286462	-.298174	-.290182
15.26	-.259503	-.247070	-.236024	-.244477	-.235361	-.208959	-.201466	-.212461	-.205992
16.54	-.185711	-.175628	-.166770	-.174590	-.167278	-.145445	-.139634	-.149177	-.144131
17.82	-.131194	-.123287	-.116407	-.123145	-.117456	-.100096	-.095713	-.103553	-.099722
19.10	-.091762	-.085713	-.080494	-.086014	-.081689	-.068293	-.065055	-.071238	-.068389
20.38	-.063690	-.059149	-.055262	-.059614	-.056384	-.046288	-.043935	-.048659	-.046574
21.66	-.043945	-.040585	-.037731	-.041062	-.038683	-.031219	-.029530	-.033050	-.031543
22.94	-.030186	-.027729	-.025657	-.028145	-.026412	-.020980	-.019780	-.022348	-.021270
24.22	-.020667	-.018887	-.017395	-.019216	-.017966	-.014065	-.013219	-.015059	-.014295
25.50	-.014118	-.012838	-.011772	-.013081	-.012186	-.009416	-.008823	-.010121	-.009583
28.06	-.006567	-.005916	-.005380	-.006026	-.005574	-.004218	-.003930	-.004550	-.004287
30.62	-.003058	-.002731	-.002465	-.002766	-.002542	-.001899	-.001761	-.002042	-.001915
33.18	-.001434	-.001271	-.001140	-.001271	-.001161	-.000865	-.000799	-.000919	-.000858
35.74	-.000681	-.000600	-.000535	-.000588	-.000534	-.000402	-.000370	-.000417	-.000388
38.30	-.000330	-.000289	-.000257	-.000275	-.000249	-.000192	-.000176	-.000192	-.000178
40.86	-.000164	-.000143	-.000127	-.000131	-.000118	-.000094	-.000087	-.000090	-.000084
43.42	-.000084	-.000073	-.000065	-.000064	-.000057	-.000048	-.000045	-.000044	-.000040
45.98	-.000044	-.000039	-.000034	-.000032	-.000029	-.000024	-.000024	-.000022	-.000020
48.54	-.000024	-.000021	-.000019	-.000017	-.000015	-.000014	-.000013	-.000012	-.000010
51.10	-.000014	-.000012	-.000011	-.000009	-.000008	-.000008	-.000008	-.000006	-.000005
56.22	-.000005	-.000004	-.000004	-.000003	-.000003	-.000003	-.000003	-.000002	-.000001
61.34	-.000002	-.000002	-.000002	-.000001	-.000001	-.000001	-.000001	-.000001	.000000
66.46	-.000001	-.000001	-.000001	-.000001	-.000000	-.000001	-.000000	-.000000	.000000
71.58	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6
-E	2.0180	2.0715	2.1208	1.9647	2.0018	2.2509	2.2899	2.1006	2.1303
X									
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.002538	.002618	.002694	.002678	.002747	.002908	.002977	.002942	.003005
.02	.009274	.009557	.009827	.009764	.010007	.010589	.010830	.010698	.010918
.03	.019043	.019609	.020151	.020008	.020491	.021668	.022146	.021860	.022295
.04	.030868	.031764	.032618	.032363	.033121	.034998	.035745	.035258	.035934
.05	.043936	.045177	.046357	.045960	.047002	.049630	.050652	.049925	.050844
.06	.057573	.059154	.060652	.060087	.061402	.064784	.066068	.065070	.066218
.07	.071228	.073125	.074917	.074160	.075723	.079830	.081347	.080055	.081403
.08	.084455	.086632	.088601	.087712	.089486	.094261	.095973	.094371	.095880
.09	.096899	.099310	.101571	.100374	.102315	.107681	.109542	.107619	.109245
.10	.108284	.110877	.113297	.111861	.113920	.119785	.121744	.119499	.121193
.12	.127096	.129884	.132458	.130521	.132661	.139215	.141211	.138333	.140016
.14	.139858	.142611	.145116	.142678	.144694	.151502	.153329	.149867	.151348
.16	.146210	.148711	.150939	.148026	.149733	.156371	.157846	.153880	.154992
.18	.146263	.148325	.150098	.146759	.148000	.154084	.155056	.150690	.151300
.20	.140452	.141922	.143097	.139402	.140056	.145260	.145615	.140968	.140979
.22	.129417	.130100	.130653	.126686	.126671	.130732	.130397	.125596	.124952
.24	.113916	.113899	.113606	.109458	.108729	.111452	.110392	.105568	.104247
.26	.094766	.093930	.092842	.088615	.087158	.088415	.086630	.081913	.079927
.28	.072791	.071133	.069254	.065049	.062883	.062608	.060127	.055642	.053029
.30	.048792	.046336	.043699	.039617	.036787	.034970	.031849	.027713	.024536
.34	-.002331	-.006206	-.010166	-.013715	-.017661	-.022402	-.026560	-.029691	-.033737
.38	-.053367	-.058310	-.063229	-.065906	-.070590	-.077802	-.082585	-.084388	-.088891
.42	-.100251	-.105828	-.111266	-.112806	-.117797	-.126832	-.131785	-.132048	-.136564
.46	-.140098	-.145847	-.151344	-.151565	-.156425	-.166541	-.171215	-.169837	-.173944
.50	-.171088	-.176561	-.181680	-.180483	-.184807	-.195245	-.199236	-.196217	-.199543
.54	-.192303	-.197096	-.201448	-.198815	-.202257	-.212299	-.215270	-.210700	-.212945
.58	-.203545	-.207318	-.210584	-.206566	-.208853	-.217862	-.219556	-.213595	-.214544
.62	-.205164	-.207652	-.209590	-.204300	-.205236	-.212678	-.212925	-.205789	-.205311
.66	-.197907	-.198924	-.199370	-.192968	-.192435	-.197897	-.196608	-.188552	-.186594

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6
.70	-.182784	-.182220	-.181087	-.173770	-.171725	-.174912	-.172075	-.163376	-.159960
.78	-.133682	-.129908	-.125633	-.117163	-.112222	-.110431	-.104722	-.095603	-.089575
.86	-.067705	-.061039	-.054014	-.045346	-.038012	-.031332	-.023373	-.014938	-.006991
.94	.005830	.014736	.023807	.031760	.040721	.051596	.060941	.067749	.076724
1.02	.079074	.089379	.099625	.106080	.115780	.129768	.139546	.144006	.153068
1.10	.146014	.156810	.167313	.171659	.181204	.197029	.206312	.207953	.216218
1.18	.202471	.212874	.222761	.224580	.233152	.249502	.257467	.256056	.262771
1.26	.245907	.255125	.263629	.262694	.269602	.285238	.291218	.286739	.291313
1.34	.275151	.282523	.289017	.285273	.289979	.303816	.307315	.299932	.301958
1.42	.290094	.295107	.299121	.292662	.294791	.305935	.306637	.296654	.295898
1.50	.291408	.293704	.294926	.285961	.285297	.293067	.290821	.278642	.275035
1.66	.258301	.254662	.249940	.236939	.230588	.230408	.222385	.207261	.198275
1.82	.188534	.179107	.168761	.153335	.141901	.133409	.120493	.104474	.091194
1.98	.095943	.081603	.066646	.050518	.035209	.019214	.002850	-.012142	-.028169
2.14	-.006915	-.024836	-.042978	-.058193	-.075855	-.097759	-.115877	-.128242	-.145309
2.30	-.109789	-.129741	-.149468	-.162393	-.180799	-.206593	-.224760	-.233314	-.249780
2.46	-.204983	-.225384	-.245102	-.254671	-.272299	-.299826	-.316494	-.320492	-.334935
2.62	-.287206	-.306573	-.324828	-.333010	-.345833	-.373014	-.386899	-.386011	-.397308
2.78	-.353236	-.370275	-.385832	-.386824	-.399175	-.424154	-.434281	-.428541	-.435899
2.94	-.401522	-.415181	-.427068	-.423461	-.431860	-.453082	-.458796	-.448532	-.451477
3.10	-.431799	-.441288	-.448804	-.440741	-.444684	-.460935	-.461879	-.447637	-.445978
3.42	-.441635	-.441414	-.439110	-.423308	-.417809	-.421807	-.413128	-.393079	-.382533
3.74	-.394302	-.383976	-.371809	-.350568	-.336165	-.326746	-.309509	-.286787	-.268759
4.06	-.305013	-.285441	-.264542	-.240457	-.218632	-.196364	-.172433	-.149913	-.126377
4.38	-.188685	-.161473	-.133618	-.109106	-.081765	-.048308	-.019806	.000255	.027243
4.70	-.058104	-.025196	.007603	.030561	.061455	.103857	.134887	.150972	.179551
5.02	.076652	.113265	.149026	.168992	.201632	.250525	.282305	.293598	.322232
5.34	.208142	.246605	.283540	.299616	.332465	.385423	.416519	.422795	.450300
5.66	.331215	.369908	.406505	.418271	.450098	.504882	.534206	.535693	.561221
5.98	.442576	.480163	.515211	.522638	.552514	.607153	.633940	.631179	.654172
6.30	.540370	.575804	.608391	.611743	.639014	.691845	.715607	.709328	.729467
6.94	.692940	.721998	.747965	.744692	.765689	.811164	.828264	.817437	.831597
7.58	.790683	.812060	.830510	.823156	.837549	.872568	.883155	.870954	.879506
8.22	.841350	.854993	.866140	.857195	.865463	.888759	.893629	.882588	.886350
8.86	.854623	.861218	.865892	.857383	.860397	.872014	.872212	.864046	.863969
9.50	.839965	.840564	.839860	.833211	.831968	.832795	.829391	.825047	.822050
10.14	.805645	.801414	.796475	.792532	.788006	.779416	.773382	.773191	.768082
10.78	.758427	.750497	.742391	.741521	.734583	.718173	.710337	.714182	.707635
11.42	.703593	.692980	.682645	.684854	.676246	.653652	.644688	.652162	.644720
12.06	.645119	.632692	.620910	.625962	.616293	.589075	.579514	.590047	.582133
12.70	.585894	.572369	.559776	.567283	.557040	.526613	.516860	.529815	.521750
13.98	.472623	.458493	.445646	.456677	.446323	.412985	.403660	.419586	.411863
15.26	.372894	.359511	.347537	.360297	.350674	.317835	.309533	.326330	.319424
16.54	.289570	.277618	.267054	.280113	.271620	.241348	.234281	.250479	.244566
17.82	.222287	.212021	.203036	.215424	.208186	.181520	.175687	.190408	.185494
19.10	.169224	.160643	.153198	.164356	.158340	.135610	.130900	.143730	.139734
20.38	.128075	.121045	.114992	.124674	.119764	.100863	.097120	.107961	.104763
21.66	.096557	.090882	.086029	.094199	.090247	.074825	.071886	.080834	.078304
22.94	.072631	.068101	.064251	.071000	.067853	.055452	.053165	.060418	.058436
24.22	.054586	.051001	.047971	.053454	.050968	.041110	.039341	.045140	.043596
25.50	.041040	.038219	.035849	.040248	.038295	.030526	.029164	.033750	.032555
28.06	.023322	.021597	.020162	.022919	.021729	.016987	.016186	.018993	.018281
30.62	.013432	.012385	.011520	.013213	.012493	.009633	.009163	.010854	.010432
33.18	.007890	.007253	.006731	.007765	.007328	.005604	.005325	.006344	.006092
35.74	.004749	.004359	.004041	.004678	.004411	.003359	.003192	.003813	.003661
38.30	.002939	.002696	.002499	.002900	.002734	.002080	.001978	.002365	.002272
40.86	.001871	.001718	.001594	.001853	.001748	.001330	.001266	.001516	.001457
43.42	.001225	.001126	.001046	.001220	.001152	.000876	.000835	.001002	.000964
45.98	.000822	.000757	.000704	.000825	.000781	.000592	.000565	.000681	.000656
48.54	.000564	.000520	.000484	.000572	.000541	.000408	.000390	.000474	.000457

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6
X									
51.10	.000394	.000363	.000339	.000404	.000383	.000287	.000274	.000336	.000324
56.22	.000200	.000185	.000172	.000210	.000199	.000146	.000140	.000175	.000169
61.34	.000105	.000097	.000090	.000113	.000107	.000077	.000073	.000095	.000091
66.46	.000056	.000052	.000048	.000062	.000059	.000041	.000039	.000052	.000050
71.58	.000030	.000028	.000026	.000034	.000033	.000022	.000021	.000029	.000028
76.70	.000016	.000015	.000014	.000019	.000018	.000012	.000011	.000016	.000015
81.82	.000009	.000008	.000008	.000011	.000010	.000006	.000006	.000009	.000009
86.94	.000005	.000005	.000004	.000006	.000006	.000004	.000003	.000005	.000005
92.06	.000003	.000002	.000002	.000003	.000003	.000002	.000002	.000003	.000003
97.18	.000001	.000001	.000001	.000002	.000002	.000001	.000001	.000002	.000001
102.30	.000001	.000001	.000001	.000001	.000001	.000001	.000000	.000001	.000001
112.54	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	6D 1	6D 1	6D 1	6D 0	6D 0	6D 1	6D 1	6D 0	6D 0
-E	.52594	.53308	.53827			.54564	.54608		
X									
.00	.000000	.000000	.000000			.000000	.000000		
.01	.000020	.000021	.000022			.000024	.000025		
.02	.000154	.000160	.000166			.000181	.000186		
.03	.000489	.000508	.000526			.000575	.000591		
.04	.001093	.001135	.001175			.001283	.001316		
.05	.002013	.002089	.002161			.002356	.002416		
.06	.003279	.003402	.003517			.003830	.003925		
.07	.004909	.005091	.005261			.005721	.005860		
.08	.006909	.007162	.007398			.008033	.008225		
.09	.009276	.009610	.009922			.010760	.011013		
.10	.011998	.012425	.012822			.013885	.014205		
.12	.018436	.019073	.019665			.021234	.021703		
.14	.026031	.026906	.027713			.029838	.030468		
.16	.034549	.035674	.036708			.039406	.040198		
.18	.043730	.045108	.046369			.049625	.050571		
.20	.053312	.054934	.056411			.060183	.061266		
.22	.063040	.064889	.066561			.070783	.071980		
.24	.072678	.074725	.076566			.081152	.082432		
.26	.082009	.084222	.086197			.091045	.092374		
.28	.090843	.093184	.095255			.100251	.101593		
.30	.099018	.101444	.103569			.108593	.109908		
.34	.112870	.115328	.117432			.122142	.123287		
.38	.122778	.125085	.126992			.130908	.131736		
.42	.128329	.130310	.131857			.134550	.134935		
.46	.129414	.130916	.131965			.133080	.132923		
.50	.126169	.127066	.127505			.126782	.126015		
.54	.118906	.119105	.118856			.116127	.114714		
.58	.108061	.107502	.106517			.101711	.099647		
.62	.094147	.092800	.091064			.084198	.081506		
.66	.077716	.075581	.073107			.064275	.061002		
.70	.059327	.056433	.053258			.042621	.038835		
.78	.010846	.014599	.010215			-.003337	-.007890		
.86	-.023313	-.028580	-.033819			-.049136	-.054049		
.94	-.063874	-.069751	-.075428			-.091232	-.096078		
1.02	-.100367	-.106416	-.112098			-.127125	-.131497		
1.10	-.131097	-.136892	-.142166			-.155264	-.158807		
1.18	-.155052	-.160205	-.164706			-.174898	-.177324		
1.26	-.171784	-.175965	-.179388			-.185907	-.187005		
1.34	-.181286	-.184228	-.186340			-.188637	-.188271		
1.42	-.183874	-.185381	-.186015			-.183756	-.181862		

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	6D 1	6D 1	6D 1	6D 0	6D 0	6D 1	6D 1	6D 0	6D 0
1.50	-.180088	-.180029	-.179086			-.172131	-.168709		
1.66	-.156196	-.152854	-.148696			-.132599	-.126328		
1.82	-.115696	-.109205	-.102065			-.078024	-.069439		
1.98	-.064638	-.055430	-.045821			-.015731	-.005557		
2.14	-.008352	.002945	.014344			.048216	.059173		
2.30	.048805	.061459	.073887			.109169	.120109		
2.46	.103477	.116724	.129412			.163827	.174018		
2.62	.153234	.166333	.178555			.210060	.218877		
2.78	.196444	.208716	.219826			.246699	.253645		
2.94	.232134	.242991	.252445			.273326	.278040		
3.10	.259861	.268817	.276182			.290079	.292327		
3.42	.291550	.295672	.298005			.296319	.293385		
3.74	.294195	.292765	.289577			.272017	.264133		
4.06	.272724	.265665	.257079			.224938	.212774		
4.38	.232675	.220361	.206901			.162390	.146824		
4.70	.179302	.162388	.144808			.090539	.072497		
5.02	.117181	.096466	.075618			.014256	-.005385		
5.34	.050082	.026416	.003161			-.062793	-.083257		
5.66	-.019003	-.044788	-.069638			-.137965	-.158603		
5.98	-.087776	-.114909	-.140625			-.209441	-.229729		
6.30	-.154531	-.182324	-.208277			-.276042	-.295576		
6.94	-.277503	-.304934	-.329881			-.392204	-.409437		
7.58	-.382379	-.407835	-.430439			-.484652	-.499055		
8.22	-.467559	-.490082	-.509627			-.554660	-.566140		
8.86	-.533687	-.552816	-.569032			-.604854	-.613573		
9.50	-.582543	-.598167	-.611078			-.638263	-.644515		
10.14	-.616369	-.628601	-.638407			-.657840	-.661966		
10.78	-.637480	-.646562	-.653556			-.666240	-.668583		
11.42	-.648056	-.654297	-.658810			-.665753	-.666634		
12.06	-.650051	-.653785	-.656153			-.658303	-.658008		
12.70	-.645162	-.646723	-.647266			-.645481	-.644259		
13.98	-.620290	-.618428	-.616180			-.608697	-.606224		
15.26	-.582416	-.578184	-.574086			-.563163	-.560036		
16.54	-.537697	-.531924	-.526688			-.513936	-.510553		
17.82	-.490254	-.483566	-.477716			-.464244	-.460864		
19.10	-.442774	-.435633	-.429541			-.416090	-.412869		
20.38	-.396950	-.389687	-.383611			-.370655	-.367683		
21.66	-.353791	-.346638	-.340749			-.328574	-.325893		
22.94	-.313838	-.306950	-.301359			-.290119	-.287741		
24.22	-.277323	-.270800	-.265571			-.255331	-.253250		
25.50	-.244270	-.238170	-.233337			-.224102	-.222301		
28.06	-.188056	-.182870	-.178843			-.171498	-.170183		
30.62	-.143619	-.139325	-.136049			-.130328	-.129394		
33.18	-.109003	-.105512	-.102891			-.098498	-.097850		
35.74	-.082315	-.079516	-.077444			-.074107	-.073667		
38.30	-.061900	-.059678	-.058057			-.055541	-.055249		
40.86	-.046378	-.044631	-.043371			-.041486	-.041297		
43.42	-.034637	-.033272	-.032299			-.030894	-.030776		
45.98	-.025793	-.024734	-.023986			-.022944	-.022873		
48.54	-.019157	-.018339	-.017768			-.016997	-.016957		
51.10	-.014194	-.013565	-.013131			-.012562	-.012542		
56.22	-.007741	-.007375	-.007126			-.006820	-.006819		
61.34	-.004190	-.003979	-.003838			-.003675	-.003680		
66.46	-.002253	-.002133	-.002054			-.001968	-.001974		
71.58	-.001205	-.001137	-.001093			-.001048	-.001052		
76.70	-.000641	-.000603	-.000579			-.000555	-.000559		
81.82	-.000339	-.000319	-.000305			-.000293	-.000295		
86.94	-.000179	-.000168	-.000160			-.000154	-.000155		
92.06	-.000094	-.000088	-.000084			-.000081	-.000081		
97.18	-.000049	-.000046	-.000044			-.000042	-.000043		

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	6D 1	6D 1	6D 1	6D 0	6D 0	6D 1	6D 1	6D 0	6D 0
X									
102.30	-.000026	-.000024	-.000023			-.000022	-.000022		
112.54	-.000007	-.000006	-.000006			-.000006	-.000006		
122.78	-.000002	-.000002	-.000002			-.000002	-.000002		
133.02	-.000001	-.000000	-.000000			-.000000	-.000000		
143.26	-.000000	-.000000	-.000000			-.000000	-.000000		

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2
	-E								
X	.32990	.33344	.33682	.32045	.32331	.34633	.34936	.33130	.33381
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.013774	.013882	.013985	.013073	.013161	.014282	.014379	.013409	.013489
.02	.022663	.022805	.022939	.021409	.021518	.023315	.023436	.021822	.021918
.03	.027584	.027705	.027816	.025914	.025997	.028117	.028210	.026219	.026286
.04	.029323	.029386	.029438	.027364	.027391	.029557	.029589	.027439	.027446
.05	.028556	.028537	.028507	.026423	.026374	.028379	.028327	.026193	.026124
.06	.025857	.025744	.025620	.023657	.023522	.025211	.025067	.023086	.022933
.07	.021717	.021505	.021284	.019543	.019320	.020587	.020348	.018627	.018389
.08	.016551	.016242	.015926	.014484	.014178	.014954	.014624	.013242	.012925
.09	.010706	.010309	.009906	.008819	.008438	.008684	.008274	.007285	.006899
.10	.004474	.003999	.003522	.002826	.002382	.002088	.001610	.001050	.000607
.12	-.008234	-.008820	-.009401	-.009259	-.009788	-.011120	-.011686	-.011347	-.011858
.14	-.020133	-.020763	-.021381	-.020408	-.020958	-.023183	-.023769	-.022555	-.023071
.16	-.030314	-.030920	-.031509	-.029775	-.030285	-.033192	-.033730	-.031736	-.032196
.18	-.038257	-.038778	-.039276	-.036896	-.037311	-.040660	-.041091	-.038455	-.038806
.20	-.043731	-.044115	-.044471	-.041583	-.041858	-.045409	-.045686	-.042566	-.042767
.22	-.046709	-.046916	-.047091	-.043846	-.043947	-.047472	-.047559	-.044125	-.044147
.24	-.047306	-.047307	-.047275	-.043825	-.043732	-.047028	-.046903	-.043322	-.043147
.26	-.045733	-.045512	-.045259	-.041749	-.041452	-.044347	-.044002	-.040431	-.040054
.28	-.042256	-.041809	-.041332	-.037898	-.037396	-.039754	-.039189	-.035773	-.035198
.30	-.037174	-.036507	-.035811	-.032577	-.031880	-.033597	-.032824	-.029687	-.028928
.34	-.023431	-.022371	-.021292	-.018757	-.017726	-.017980	-.016857	-.014581	-.013520
.38	-.006876	-.005527	-.004174	-.002628	-.001371	-.000111	.001240	.002385	.003628
.42	.010428	.011933	.013426	.013821	.015175	.017821	.019258	.019145	.020435
.46	.026842	.028362	.029852	.029049	.030368	.034150	.035528	.034154	.035359
.50	.041172	.042571	.043923	.041969	.043130	.047724	.048911	.046368	.047369
.54	.052633	.053791	.054887	.051900	.052798	.057848	.058735	.055186	.055886
.58	.060792	.061611	.062356	.058505	.059057	.064211	.064712	.060368	.060696
.62	.065500	.065908	.066234	.061716	.061868	.066796	.066857	.061952	.061865
.66	.066829	.066779	.066644	.061675	.061395	.065809	.065402	.060180	.059661
.70	.065007	.064479	.063867	.058665	.057946	.061608	.060731	.055431	.054485
.78	.053343	.051884	.050355	.045308	.043770	.045432	.043696	.038889	.037187
.86	.033840	.031603	.029325	.025137	.022960	.022313	.019932	.016318	.014080
.94	.010009	.007243	.004474	.001662	-.000898	-.003804	-.006541	-.008497	-.010992
1.02	-.015003	-.018005	-.020968	-.022088	-.024749	-.029595	-.032376	-.032441	-.034902
1.10	-.038673	-.041614	-.044472	-.043775	-.046261	-.052557	-.055089	-.053232	-.055392
1.18	-.059164	-.061776	-.064260	-.061779	-.063850	-.071022	-.073052	-.069408	-.071046
1.26	-.075313	-.077357	-.079247	-.075137	-.076603	-.084061	-.085395	-.080216	-.081169
1.34	-.086491	-.087797	-.088926	-.083434	-.084159	-.091347	-.091854	-.085470	-.085635
1.42	-.092538	-.092988	-.093247	-.086677	-.086579	-.093009	-.092619	-.085401	-.084734
1.50	-.093628	-.093157	-.092495	-.085176	-.084228	-.089499	-.088198	-.080526	-.079034
1.66	-.082719	-.080409	-.077935	-.070126	-.067561	-.069691	-.066709	-.059219	-.056256
1.82	-.058451	-.054554	-.050555	-.043468	-.039613	-.038114	-.033858	-.027769	-.023760
1.98	-.026121	-.021088	-.016042	-.010623	-.005959	-.000956	.004020	.007854	.012370
2.14	.009422	.015044	.020578	.023689	.028628	.036570	.041676	.042775	.047250
2.30	.044252	.049898	.055354	.055824	.060519	.070570	.075253	.073480	.077421
2.46	.075479	.080627	.085492	.083249	.087251	.098463	.102261	.097756	.100769
2.62	.101195	.105401	.109251	.104440	.107393	.118816	.121383	.114489	.116300
2.78	.120332	.123251	.125765	.118692	.120347	.131111	.132223	.123425	.123872
2.94	.132489	.133884	.134853	.125934	.126147	.135509	.135058	.124914	.123945

	PA 91	U 92	NP 93	PU 94	AM 95	CM 96	BK 97	CF 98	ES 99
X	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2
3.10	.137768	.137506	.136824	.126540	.125263	.132631	.130613	.119708	.117359
3.42	.129740	.126122	.122180	.110681	.106587	.108820	.103964	.093202	.088455
3.74	.102043	.095475	.088758	.077922	.071576	.068078	.061099	.052320	.045898
4.06	.061476	.052701	.043998	.035309	.027480	.018529	.010304	.004743	-.002552
4.38	.014309	.004209	-.005593	-.011148	-.019658	-.033213	-.041832	-.043556	-.050986
4.70	-.034358	-.044908	-.054956	-.065879	-.065347	-.082339	-.090620	-.088416	-.095383
5.02	-.080730	-.090949	-.100503	-.098718	-.106552	-.125688	-.133062	-.127245	-.133505
5.34	-.122209	-.131451	-.139921	-.134685	-.141437	-.161432	-.167494	-.158655	-.163515
5.66	-.157188	-.164961	-.171911	-.163715	-.169081	-.188738	-.193239	-.182132	-.185626
5.98	-.184835	-.190795	-.195936	-.185420	-.189217	-.207485	-.210297	-.197750	-.199812
6.30	-.204892	-.208829	-.212002	-.199882	-.202029	-.218020	-.219118	-.205957	-.206598
6.94	-.223125	-.222820	-.221976	-.208819	-.207727	-.217183	-.215050	-.202923	-.200951
7.58	-.215814	-.211520	-.207008	-.195394	-.191448	-.192778	-.187934	-.179243	-.175131
8.22	-.188562	-.180893	-.173351	-.165229	-.158989	-.151633	-.144712	-.141027	-.135301
8.86	-.147041	-.136747	-.126905	-.123521	-.115572	-.099725	-.091345	-.093465	-.086611
9.50	-.096247	-.084076	-.072636	-.074598	-.065476	-.041838	-.032533	-.040636	-.033069
10.14	-.040246	-.026871	-.014448	-.021850	-.012010	.018417	.028207	.014400	.022349
10.78	.017823	.031834	.044733	.032174	.042365	.078419	.088352	.069428	.077501
11.42	.075636	.089824	.102797	.085623	.095877	.136346	.146163	.122888	.130892
12.06	.131534	.145544	.158284	.137189	.147288	.190978	.200488	.173721	.181514
12.70	.184384	.197949	.210229	.185985	.195766	.241548	.250616	.221238	.228715
13.98	.278314	.290466	.301391	.273193	.282024	.328997	.336936	.304840	.311495
15.26	.354718	.365096	.374378	.345076	.352733	.397674	.404341	.374400	.378108
16.54	.413585	.422090	.429665	.401549	.407963	.448568	.453955	.424353	.429091
17.82	.456254	.462939	.468869	.443608	.448799	.483586	.487762	.462002	.465803
19.10	.484660	.489662	.494077	.472763	.476804	.504965	.508039	.487029	.489960
20.38	.500915	.504408	.507472	.490716	.493707	.514957	.517053	.501230	.503375
21.66	.507083	.509256	.511141	.499182	.501236	.515667	.516914	.506358	.507807
22.94	.505066	.506107	.506983	.499781	.501015	.508983	.509507	.504042	.504888
24.22	.496555	.496641	.496669	.493993	.494519	.496548	.496466	.495750	.496080
25.50	.483015	.482311	.481636	.483129	.483056	.479764	.479183	.482769	.482664
28.06	.445643	.443779	.442078	.450585	.449599	.437660	.436354	.447020	.446262
30.62	.400647	.398078	.395756	.409403	.407826	.389812	.388075	.403776	.402604
33.18	.353201	.350264	.347622	.364667	.362745	.340905	.338955	.357853	.356447
35.74	.306614	.303551	.300804	.319770	.317688	.293851	.291839	.312417	.310911
38.30	.262874	.259850	.257145	.276860	.274749	.250321	.248353	.269430	.267917
40.86	.223054	.220178	.217610	.237192	.235142	.211152	.209294	.229998	.228540
43.42	.187616	.184953	.182581	.201398	.199468	.176629	.174921	.194643	.193280
45.98	.156624	.154210	.152062	.169697	.167921	.146689	.145150	.163497	.162252
48.54	.129896	.127743	.125831	.142031	.140427	.121058	.119694	.136443	.135325
51.10	.107107	.105214	.103534	.118175	.116747	.099352	.098159	.113213	.112223
56.22	.071746	.070328	.069073	.080577	.079485	.065963	.065079	.076796	.076048
61.34	.047264	.046237	.045331	.054013	.053207	.043094	.042461	.051235	.050689
66.46	.030709	.029985	.029348	.035701	.035123	.027781	.027339	.033714	.033326
71.58	.019723	.019223	.018784	.023319	.022914	.017709	.017407	.021930	.021660
76.70	.012542	.012203	.011906	.015079	.014799	.011181	.010978	.014125	.013940
81.82	.007908	.007681	.007483	.009666	.009476	.007001	.006867	.009020	.008896
86.94	.004949	.004799	.004668	.006149	.006022	.004352	.004264	.005717	.005635
92.06	.003077	.002979	.002894	.003886	.003801	.002688	.002631	.003600	.003546
97.18	.001902	.001838	.001783	.002441	.002385	.001651	.001615	.002254	.002219
102.30	.001169	.001129	.001093	.001525	.001489	.001009	.000986	.001404	.001381
112.54	.000436	.000420	.000406	.000587	.000572	.000372	.000363	.000537	.000528
122.78	.000160	.000154	.000148	.000223	.000217	.000135	.000131	.000202	.000199
133.02	.000058	.000056	.000053	.000083	.000081	.000048	.000047	.000075	.000074
143.26	.000021	.000020	.000019	.000031	.000030	.000017	.000017	.000028	.000027
153.50	.000007	.000007	.000007	.000011	.000011	.000006	.000006	.000010	.000010
163.74	.000003	.000002	.000002	.000004	.000004	.000002	.000002	.000004	.000004
173.98	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001	.000001
184.22	.000000	.000000	.000000	.000001	.000001	.000000	.000000	.000000	.000000
194.46	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

TABLE IV. RADIAL WAVEFUNCTIONS

FM 5F12 MD 5F13		R=0.19074102*X R=0.19010942*X		NP 5F14 LW 5F14 6D1		R=0.18948611*X R=0.18887089*X	
	FM 100	MD 101	NO 102	LW 103			
	1S 2	1S 2	1S 2	1S 2			
-E	8834.3	9017.9	9203.5	9391.5			
X							
.00	.000000	.000000	.000000	.000000			
.01	3.134703	3.167448	3.200179	3.232895			
.02	5.181768	5.229258	5.276619	5.323849			
.03	6.425159	6.475827	6.526225	6.576350			
.04	7.082719	7.129531	7.175945	7.221961			
.05	7.320637	7.359691	7.398253	7.436329			
.06	7.264880	7.294392	7.323361	7.351795			
.07	7.010215	7.029785	7.048803	7.067275			
.08	6.627283	6.637378	6.646943	6.655988			
.09	6.168154	6.169738	6.170842	6.171477			
.10	5.670665	5.664951	5.658826	5.652301			
.12	4.660337	4.643886	4.627190	4.610761			
.14	3.725515	3.702998	3.680408	3.657754			
.16	2.918894	2.893942	2.869063	2.844266			
.18	2.252311	2.227436	2.202746	2.178247			
.20	1.717366	1.694128	1.671150	1.648435			
.22	1.297043	1.276278	1.255815	1.235654			
.24	.971997	.954036	.936391	.919062			
.26	.723727	.708573	.693730	.679196			
.28	.535963	.523426	.511182	.499228			
.30	.395096	.384889	.374949	.365270			
.34	.212308	.205791	.199479	.193366			
.38	.112748	.108743	.104883	.101166			
.42	.059337	.056943	.054649	.052450			
.46	.031000	.029600	.028265	.026992			
.50	.016091	.015286	.014522	.013797			
.54	.008295	.007838	.007406	.006999			
.58	.004237	.003981	.003739	.003512			
.62	.002133	.001990	.001857	.001732			
.66	.001046	.000968	.000894	.000826			
.70	.000488	.000445	.000406	.000369			
.78	.000065	.000053	.000043	.000033			
.86	.000000	.000000	.000000	.000000			
	FM 100	MD 101	NO 102	LW 103			
	2S 2	2S 2	2S 2	2S 2			
-E	1572.2	1607.8	1643.8	1680.7			
X							
.00	.000000	.000000	.000000	.000000			
.01	1.050453	1.061810	1.073162	1.084501			
.02	1.709841	1.725739	1.741584	1.757360			
.03	2.059782	2.075347	2.090791	2.106096			
.04	2.168185	2.180077	2.191776	2.203267			
.05	2.091322	2.097394	2.103213	2.108765			
.06	1.875603	1.874632	1.873362	1.871784			
.07	1.559112	1.550571	1.541708	1.532516			
.08	1.172902	1.156789	1.140348	1.123580			
.09	.742117	.718802	.695176	.671245			
.10	.286931	.257047	.226887	.196463			
.12	-.636077	-.676585	-.717255	-.758066			
.14	-1.506339	-1.553718	-1.601104	-1.648467			
.16	-2.273055	-2.323628	-2.374033	-2.424239			
.18	-2.911822	-2.962355	-3.012550	-3.062371			



	FM 100	MD 101	NO 102	LW 103
	2S 2	2S 2	2S 2	2S 2
X				
.20	-3.415624	-3.463496	-3.510874	-3.557725
.22	-3.788450	-3.831690	-3.874307	-3.916272
.24	-4.040823	-4.078076	-4.114609	-4.150400
.26	-4.186724	-4.217180	-4.246855	-4.275730
.28	-4.241527	-4.264831	-4.287324	-4.308996
.30	-4.220646	-4.236805	-4.252153	-4.266690
.34	-4.009015	-4.011923	-4.014099	-4.015558
.38	-3.652118	-3.644157	-3.635612	-3.626510
.42	-3.225585	-3.209592	-3.193197	-3.176435
.46	-2.781859	-2.760581	-2.739088	-2.717422
.50	-2.354442	-2.330251	-2.306017	-2.281784
.54	-1.962608	-1.937386	-1.912268	-1.887295
.58	-1.615638	-1.590776	-1.566132	-1.541743
.62	-1.316190	-1.292638	-1.269387	-1.246467
.66	-1.062821	-1.041168	-1.019869	-.998948
.70	-.851783	-.832337	-.813272	-.794607
.78	-.536997	-.522127	-.507638	-.493540
.86	-.331877	-.321092	-.310643	-.300533
.94	-.201942	-.194417	-.187167	-.180188
1.02	-.121352	-.116254	-.111368	-.106689
1.10	-.072169	-.068794	-.065577	-.062511
1.18	-.042531	-.040338	-.038259	-.036285
1.26	-.024851	-.023447	-.022123	-.020872
1.34	-.014390	-.013504	-.012671	-.011889
1.42	-.008245	-.007691	-.007174	-.006690
1.50	-.004658	-.004316	-.003998	-.003702
1.66	-.001382	-.001256	-.001141	-.001034
1.82	-.000320	-.000278	-.000240	-.000205
1.98	-.000006	.000000	.000000	.000000
2.14	.000000	.000000	.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	2P 6	2P 6	2P 6	2P 6
-E	1523.8	1558.8	1594.3	1630.7
X				
.00	.000000	.000000	.000000	.000000
.01	.061949	.063099	.064258	.065426
.02	.225342	.229381	.233449	.237541
.03	.461201	.469171	.477190	.485252
.04	.746015	.758429	.770906	.783438
.05	1.060860	1.077834	1.094878	1.111981
.06	1.390650	1.412011	1.433440	1.454921
.07	1.723495	1.748869	1.774297	1.799761
.08	2.050168	2.079044	2.107952	2.136870
.09	2.363647	2.395433	2.427220	2.458984
.10	2.658730	2.692793	2.726819	2.760782
.12	3.180103	3.216808	3.253385	3.289805
.14	3.597941	3.634911	3.671654	3.708137
.16	3.908875	3.944100	3.978999	4.013544
.18	4.117640	4.149554	4.181056	4.212121
.20	4.233684	4.261170	4.288175	4.314679
.22	4.268838	4.291193	4.313018	4.334299
.24	4.235772	4.252646	4.268965	4.284720
.26	4.146986	4.158321	4.169096	4.179308
.28	4.014199	4.020163	4.025580	4.030456
.30	3.848005	3.848931	3.849342	3.849249
.34	3.451316	3.443582	3.435432	3.426888
.38	3.015842	3.001634	2.987139	2.972389
.42	2.581668	2.563159	2.544500	2.525730
.46	2.173683	2.152781	2.131860	2.110961

	FM 100	MD 101	NO 102	LW 103
	2P 6	2P 6	2P 6	2P 6
X				
.50	1.805480	1.783724	1.762062	1.740532
.54	1.482809	1.461348	1.440072	1.419016
.58	1.206288	1.185919	1.165802	1.145967
.62	.973436	.954662	.936182	.918022
.66	.780104	.763192	.746598	.730343
.70	.621428	.606474	.591847	.577561
.78	.388443	.377252	.366368	.355798
.86	.238877	.230867	.223120	.215636
.94	.145006	.139462	.134127	.129000
1.02	.087096	.083356	.079777	.076353
1.10	.051845	.049374	.047021	.044781
1.18	.030615	.029009	.027488	.026046
1.26	.017937	.016908	.015938	.015022
1.34	.010420	.009768	.009156	.008582
1.42	.005989	.005581	.005199	.004843
1.50	.003393	.003140	.002904	.002685
1.66	.001007	.000913	.000827	.000748
1.82	.000226	.000194	.000164	.000139
1.98	.000000	.000000	.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	3S 2	3S 2	3S 2	3S 2
-E	412.61	423.12	433.75	445.10
X				
.00	.000000	.000000	.000000	.000000
.01	.509748	.515717	.521686	.527654
.02	.827681	.836087	.844464	.852816
.03	.992426	1.000693	1.008895	1.017033
.04	1.036692	1.043025	1.049251	1.055375
.05	.988069	.991294	.994376	.997321
.06	.869722	.869161	.868430	.867536
.07	.701005	.696368	.691546	.686545
.08	.497991	.489285	.480392	.471319
.09	.273931	.261391	.248673	.235785
.10	.039661	.023682	.007547	-.008734
.12	-.426237	-.447493	-.468826	-.490227
.14	-.849313	-.873380	-.897415	-.921409
.16	-1.199893	-1.224269	-1.248483	-1.272531
.18	-1.463052	-1.485453	-1.507559	-1.529369
.20	-1.634133	-1.652638	-1.670722	-1.688388
.22	-1.715405	-1.728518	-1.741100	-1.753159
.24	-1.713590	-1.720251	-1.726294	-1.731733
.26	-1.638061	-1.637622	-1.636506	-1.634734
.28	-1.499542	-1.491728	-1.483204	-1.474001
.30	-1.309194	-1.294043	-1.278183	-1.261648
.34	-.816253	-.787542	-.758201	-.728279
.38	-.238184	-.198512	-.158303	-.117851
.42	.361587	.408913	.456466	.504186
.46	.936475	.988008	1.039507	1.090914
.50	1.455284	1.507814	1.560046	1.611929
.54	1.899605	1.950380	2.000613	2.050263
.58	2.260965	2.307796	2.353877	2.399180
.62	2.538161	2.579445	2.619816	2.659259
.66	2.734998	2.769683	2.803341	2.835970
.70	2.858461	2.885980	2.912407	2.937753
.78	2.921075	2.934100	2.946036	2.956913
.86	2.801008	2.801077	2.800196	2.798405
.94	2.567409	2.557187	2.546235	2.534599
1.02	2.275489	2.257949	2.239933	2.221481

	FM 100	MD 101	NO 102	LW 103
	3S 2	3S 2	3S 2	3S 2
X				
1.10	1.965139	1.943057	1.920744	1.898235
1.18	1.662695	1.638389	1.614069	1.589760
1.26	1.383770	1.359020	1.334432	1.310019
1.34	1.136210	1.112278	1.088637	1.065291
1.42	.922594	.900296	.878375	.856830
1.50	.742192	.721991	.702217	.682863
1.66	.469686	.454093	.438947	.424230
1.82	.290462	.279109	.268157	.257587
1.98	.176550	.168615	.161011	.153716
2.14	.105887	.100504	.095379	.090490
2.30	.062825	.059256	.055878	.052674
2.46	.036932	.034605	.032418	.030353
2.62	.021519	.020023	.018626	.017313
2.78	.012416	.011466	.010583	.009757
2.94	.007076	.006477	.005925	.005410
3.10	.003962	.003588	.003245	.002926
3.42	.001201	.001062	.000937	.000822
3.74	.000355	.000306	.000264	.000225
4.06	.000102	.000086	.000073	.000060
4.38	.000029	.000024	.000020	.000016
4.70	.000008	.000007	.000005	.000004
5.02	.000002	.000002	.000001	.000001
5.34	.000001	.000000	.000000	.000000
5.66	.000000	.000000	.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	3P 6	3P 6	3P 6	3P 6
-E	388.54	398.72	409.01	420.03
X				
.00	.000000	.000000	.000000	.000000
.01	.032064	.032696	.033333	.033975
.02	.116485	.118703	.120937	.123188
.03	.237879	.242246	.246641	.251064
.04	.383545	.390320	.397131	.403978
.05	.543084	.552290	.561536	.570819
.06	.708058	.719542	.731062	.742615
.07	.871700	.885181	.898687	.912214
.08	1.028668	1.043775	1.058889	1.074006
.09	1.174823	1.191129	1.207416	1.223682
.10	1.307045	1.324091	1.341087	1.358031
.12	1.521366	1.538486	1.555482	1.572353
.14	1.661461	1.676874	1.692079	1.707077
.16	1.725192	1.737353	1.749220	1.760800
.18	1.715765	1.723442	1.730748	1.737693
.20	1.639760	1.642060	1.643925	1.645369
.22	1.505688	1.502050	1.497929	1.493349
.24	1.322968	1.313136	1.302794	1.291974
.26	1.101209	1.085192	1.068662	1.051654
.28	.849724	.827755	.805290	.782370
.30	.577212	.549701	.521732	.493351
.34	-.000213	-.037071	-.074260	-.111723
.38	-.578884	-.622301	-.665867	-.709522
.42	-1.121182	-1.168206	-1.215167	-1.262009
.46	-1.602565	-1.650411	-1.697976	-1.745212
.50	-2.009239	-2.055493	-2.101263	-2.146507
.54	-2.335687	-2.378409	-2.420467	-2.461832
.58	-2.582399	-2.620144	-2.657083	-2.693200
.62	-2.753943	-2.785747	-2.816641	-2.846622
.66	-2.857432	-2.882754	-2.907105	-2.930494

	FM 100	MD 101	NO 102	LW 103
	3P 6	3P 6	3P 6	3P 6
X				
.70	-2.901346	-2.920007	-2.937674	-2.954368
.78	-2.846304	-2.852192	-2.857144	-2.861197
.86	-2.657332	-2.652351	-2.646591	-2.640096
.94	-2.392091	-2.378808	-2.364959	-2.350587
1.02	-2.094138	-2.075192	-2.055908	-2.036323
1.10	-1.793602	-1.771353	-1.748981	-1.726514
1.18	-1.509498	-1.485867	-1.462297	-1.438807
1.26	-1.252402	-1.228832	-1.205469	-1.182322
1.34	-1.026962	-1.004456	-.982262	-.960382
1.42	-.833917	-.813105	-.792676	-.772623
1.50	-.671630	-.652857	-.634503	-.616558
1.66	-.427126	-.412666	-.398634	-.385012
1.82	-.266139	-.255577	-.245396	-.235577
1.98	-.163308	-.155876	-.148758	-.141935
2.14	-.099033	-.093945	-.089103	-.084489
2.30	-.059493	-.056082	-.052856	-.049799
2.46	-.035458	-.033207	-.031092	-.029098
2.62	-.020980	-.019512	-.018141	-.016856
2.78	-.012318	-.011370	-.010490	-.009669
2.94	-.007164	-.006555	-.005994	-.005474
3.10	-.004111	-.003723	-.003367	-.003039
3.42	-.001315	-.001164	-.001028	-.000904
3.74	-.000409	-.000354	-.000306	-.000262
4.06	-.000125	-.000106	-.000089	-.000074
4.38	-.000037	-.000031	-.000025	-.000021
4.70	-.000011	-.000009	-.000007	-.000006
5.02	-.000003	-.000003	-.000002	-.000002
5.34	-.000001	-.000001	-.000001	-.000000
5.66	.000000	.000000	.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	3D 10	3D 10	3D 10	3D 10
-E	344.13	353.69	363.36	373.76
X				
.00	.000000	.000000	.000000	.000000
.01	.000399	.000411	.000422	.000434
.02	.003000	.003084	.003169	.003256
.03	.009508	.009770	.010037	.010307
.04	.021171	.021747	.022331	.022923
.05	.038855	.039895	.040949	.042017
.06	.063108	.064769	.066453	.068158
.07	.094217	.096656	.099128	.101630
.08	.132256	.135624	.139034	.142485
.09	.177128	.181563	.186052	.190591
.10	.228599	.234225	.239917	.245669
.12	.349891	.358206	.366609	.375089
.14	.492551	.503842	.515237	.526723
.16	.652310	.666714	.681234	.695853
.18	.824654	.842174	.859813	.877550
.20	1.005143	1.025658	1.046287	1.067005
.22	1.189600	1.212891	1.236282	1.259742
.24	1.374243	1.400010	1.425853	1.451740
.26	1.555744	1.583630	1.611559	1.639496
.28	1.731261	1.760867	1.790476	1.820052
.30	1.898431	1.929336	1.960198	1.990981
.34	2.200563	2.232785	2.264858	2.296749
.38	2.451875	2.483782	2.515427	2.546781
.42	2.647700	2.677860	2.707647	2.737041
.46	2.787634	2.814883	2.841662	2.867957

	FM 100	MD 101	NO 102	LW 103
	3D 10	3D 10	3D 10	3D 10
X				
.50	2.874301	2.897773	2.920693	2.943059
.54	2.912315	2.931430	2.949935	2.967836
.58	2.907441	2.921884	2.935680	2.948846
.62	2.865964	2.875644	2.884665	2.893053
.66	2.794229	2.799242	2.803605	2.807352
.70	2.698326	2.698910	2.698874	2.698256
.78	2.455972	2.448802	2.441119	2.432963
.86	2.176807	2.163688	2.150199	2.136381
.94	1.888813	1.871617	1.854211	1.836628
1.02	1.610889	1.591318	1.571692	1.552034
1.10	1.354531	1.333997	1.313544	1.293183
1.18	1.125684	1.105267	1.085042	1.065010
1.26	.926388	.906856	.887599	.868611
1.34	.756139	.737991	.720172	.702672
1.42	.612914	.596430	.580307	.564530
1.50	.493906	.479201	.464872	.450899
1.66	.316163	.304942	.294080	.283558
1.82	.199394	.191178	.183275	.175668
1.98	.124356	.118517	.112935	.107596
2.14	.076904	.072845	.068987	.065321
2.30	.047250	.044474	.041852	.039376
2.46	.028884	.027007	.025246	.023594
2.62	.017582	.016324	.015150	.014058
2.78	.010660	.009821	.009043	.008325
2.94	.006435	.005875	.005361	.004890
3.10	.003860	.003487	.003148	.002839
3.42	.001341	.001171	.001057	.000930
3.74	.000411	.000331	.000346	.000297
4.06	.000076	.000035	.000111	.000093
4.38	.000000	.000000	.000035	.000028
4.70	.000000	.000000	.000011	.000009
5.02			.000003	.000003
5.34			.000001	.000001
5.66			.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	4S 2	4S 2	4S 2	4S 2
-E	111.48	114.72	117.99	121.89
X				
.00	.000000	.000000	.000000	.000000
.01	.269371	.273123	.276873	.280639
.02	.437102	.442503	.447885	.453277
.03	.523471	.528969	.534422	.539866
.04	.545735	.550227	.554647	.559032
.05	.518515	.521265	.523917	.526507
.06	.454149	.454712	.455158	.455518
.07	.362990	.361156	.359192	.357123
.08	.253677	.249417	.245022	.240512
.09	.133364	.126789	.120082	.113256
.10	.007925	-.000751	-.009547	-.018457
.12	-.240202	-.252165	-.264201	-.276321
.14	-.463140	-.476935	-.490733	-.504559
.16	-.644574	-.658684	-.672711	-.686695
.18	-.776304	-.789318	-.802159	-.814876
.20	-.855870	-.866583	-.877035	-.887281
.22	-.884745	-.892206	-.899326	-.906167
.24	-.866981	-.870509	-.873633	-.876415
.26	-.808203	-.807383	-.806113	-.804454
.28	-.714870	-.709530	-.703715	-.697483

	FM 100	MD 101	NO 102	LW 103
	4S 2	4S 2	4S 2	4S 2
X				
.30	-.593743	-.583925	-.573631	-.562912
.34	-.294514	-.276568	-.258203	-.239460
.38	.040903	.065054	.089488	.114186
.42	.373066	.400935	.428898	.456952
.46	.672856	.701795	.730603	.759300
.50	.920898	.948386	.975509	1.002307
.54	1.106159	1.129995	1.153243	1.175957
.58	1.224281	1.242691	1.260315	1.277221
.62	1.275935	1.287614	1.298350	1.308213
.66	1.265357	1.269469	1.272523	1.274595
.70	1.199120	1.195260	1.190278	1.184247
.78	.931967	.912411	.891751	.870041
.86	.541839	.508719	.474682	.439755
.94	.091413	.048167	.004312	-.040158
1.02	-.368524	-.417977	-.467661	-.517615
1.10	-.801051	-.852897	-.904580	-.956164
1.18	-1.182241	-1.233144	-1.283512	-1.333425
1.26	-1.499002	-1.546288	-1.592716	-1.638375
1.34	-1.746543	-1.788250	-1.828843	-1.868413
1.42	-1.925964	-1.960811	-1.994362	-2.026702
1.50	-2.042219	-2.069520	-2.095418	-2.119984
1.66	-2.115050	-2.127062	-2.137651	-2.146859
1.82	-2.030394	-2.028903	-2.026172	-2.022213
1.98	-1.849829	-1.837878	-1.824990	-1.811155
2.14	-1.622103	-1.603013	-1.583339	-1.563053
2.30	-1.301638	-1.358438	-1.334996	-1.311278
2.46	-1.150378	-1.125530	-1.100739	-1.075967
2.62	-.940647	-.915973	-.891592	-.867463
2.78	-.758010	-.734736	-.711924	-.689528
2.94	-.603634	-.582489	-.561910	-.541849
3.10	-.476070	-.457403	-.439352	-.421863
3.42	-.289612	-.275953	-.262899	-.250380
3.74	-.172526	-.163115	-.154213	-.145738
4.06	-.101439	-.095214	-.089381	-.083851
4.38	-.059217	-.055215	-.051498	-.047974
4.70	-.034485	-.031962	-.029637	-.027423
5.02	-.020111	-.018540	-.017103	-.015720
5.34	-.011780	-.010810	-.009928	-.009063
5.66	-.006947	-.006349	-.005809	-.005264
5.98	-.004129	-.003760	-.003430	-.003082
6.30	-.002473	-.002245	-.002042	-.001816
6.94	-.000899	-.000810	-.000712	-.000619
7.58	-.000316	-.000281	-.000240	-.000204
8.22	-.000091	-.000077	-.000079	-.000065
8.86	-.000007	-.000002	-.000025	-.000020
9.50	.000000	.000000	-.000008	-.000006
10.14	.000000	.000000	-.000002	-.000002
10.78			-.000001	-.000001
11.42			.000000	-.000000

	FM 100	MD 101	NO 102	LW 103
	4P 6	4P 6	4P 6	4P 6
-E	99.904	102.94	106.02	109.71
X				
.00	.000000	.000000	.000000	.000000
.01	.016981	.017359	.017740	.018126
.02	.061668	.063000	.064343	.065700
.03	.125864	.128496	.131145	.133821
.04	.202773	.206868	.210986	.215142

	FM 100	MD 101	NO 102	LW 103
	4P 6	4P 6	4P 6	4P 6
X				
.05	.286807	.292388	.297994	.303646
.06	.373417	.380398	.387402	.394456
.07	.458940	.467158	.475391	.483672
.08	.540478	.549710	.558946	.568224
.09	.615780	.625768	.635744	.645750
.10	.683145	.693611	.704042	.714488
.12	.789545	.800097	.810565	.821005
.14	.854196	.863727	.873114	.882421
.16	.876092	.883629	.890963	.898158
.18	.857249	.862011	.866514	.870823
.20	.801624	.803045	.804161	.805033
.22	.714318	.712047	.709436	.706544
.24	.600991	.594880	.588409	.581633
.26	.467445	.457526	.447245	.436649
.28	.319337	.305799	.291914	.277720
.30	.161983	.145143	.127986	.110543
.34	-.161595	-.183713	-.206040	-.228565
.38	-.471043	-.496292	-.521593	-.546956
.42	-.743042	-.769111	-.795046	-.820875
.46	-.962538	-.987210	-1.011547	-1.035598
.50	-1.121472	-1.142789	-1.163578	-1.183902
.54	-1.217325	-1.233693	-1.249359	-1.264395
.58	-1.251715	-1.261944	-1.271327	-1.279944
.62	-1.229159	-1.232467	-1.234822	-1.236307
.66	-1.156041	-1.152026	-1.146995	-1.141025
.70	-1.039786	-1.028386	-1.015950	-1.002547
.78	-.709184	-.683926	-.657712	-.630588
.86	-.297684	-.261065	-.223707	-.185624
.94	.143067	.187700	.232763	.278275
1.02	.573478	.622566	.671725	.721009
1.10	.966153	1.016357	1.066269	1.115968
1.18	1.304385	1.352852	1.400691	1.447997
1.26	1.580032	1.624515	1.668081	1.710835
1.34	1.791313	1.830189	1.867924	1.904620
1.42	1.940841	1.973074	2.004007	2.033734
1.50	2.034010	2.059068	2.082735	2.105091
1.66	2.079594	2.090280	2.099566	2.107504
1.82	1.987409	1.985425	1.982218	1.977807
1.98	1.811582	1.799702	1.786890	1.773135
2.14	1.594579	1.575829	1.556482	1.536510
2.30	1.366451	1.343613	1.320513	1.297109
2.46	1.146550	1.121924	1.097332	1.072725
2.62	.945956	.921282	.896882	.872699
2.78	.769879	.746363	.723297	.700619
2.94	.619642	.598035	.576994	.556450
3.10	.494198	.474894	.456218	.438094
3.42	.307804	.293322	.279477	.266174
3.74	.187899	.177658	.167971	.158730
4.06	.113237	.106285	.099773	.093586
4.38	.067740	.063155	.058899	.054857
4.70	.040401	.037439	.034712	.032113
5.02	.024112	.022226	.020504	.018847
5.34	.014446	.013258	.012180	.011126
5.66	.008715	.007970	.007299	.006627
5.98	.005307	.004842	.004425	.003992
6.30	.003269	.002978	.002720	.002437
6.94	.001291	.001177	.001076	.000949
7.58	.000539	.000494	.000453	.000390
8.22	.000236	.000217	.000201	.000166
8.86	.000106	.000098	.000091	.000070

	FM 100	MD 101	NO 102	LW 103
	4P 6	4P 6	4P 6	4P 6
X				
9.50	.000047	.000044	.000041	.000028
10.14	.000020	.000019	.000018	.000010
10.78	.000009	.000008	.000008	.000004
11.42	.000004	.000003	.000003	.000001
12.06	.000002	.000001	.000001	.000000
12.70	.000001	.000001	.000001	.000000
13.98	.000000	.000000	.000000	

	FM 100	MD 101	NO 102	LW 103
	4D 10	4D 10	4D 10	4D 10
-E	78.405	81.067	83.759	87.074
X				
.00	.000000	.000000	.000000	.000000
.01	.000228	.000235	.000242	.000250
.02	.001708	.001762	.001818	.001874
.03	.005413	.005582	.005754	.005929
.04	.012046	.012418	.012795	.013179
.05	.022094	.022765	.023447	.024140
.06	.035856	.036929	.038018	.039125
.07	.053478	.055054	.056653	.058279
.08	.074984	.077160	.079366	.081607
.09	.100292	.103156	.106059	.109007
.10	.129241	.132873	.136552	.140284
.12	.197109	.202467	.207885	.213376
.14	.276267	.283516	.290836	.298246
.16	.363967	.373169	.382447	.391826
.18	.457313	.468428	.479618	.490913
.20	.553446	.566344	.579308	.592375
.22	.649671	.664148	.678672	.693288
.24	.743543	.759331	.775140	.791020
.26	.832906	.849690	.866462	.883277
.28	.915917	.933352	.950733	.968122
.30	.991052	1.008772	1.026390	1.043973
.34	1.113117	1.130288	1.147247	1.164072
.38	1.192726	1.207913	1.222768	1.237379
.42	1.227389	1.239322	1.250804	1.261928
.46	1.217663	1.225303	1.232384	1.239000
.50	1.166328	1.168905	1.170831	1.172200
.54	1.077671	1.074684	1.070979	1.066645
.58	.956883	.948092	.938543	.928316
.62	.809589	.794986	.779613	.763541
.66	.641488	.621264	.600289	.578619
.70	.458092	.432606	.406413	.379556
.78	.065560	.031099	-.003903	-.039441
.86	-.332804	-.373691	-.414881	-.456406
.94	-.710552	-.755122	-.799713	-.844390
1.02	-1.049739	-1.095369	-1.140725	-1.185900
1.10	-1.339759	-1.384151	-1.427985	-1.471376
1.18	-1.575858	-1.617141	-1.657615	-1.697405
1.26	-1.757631	-1.794395	-1.830143	-1.865001
1.34	-1.887689	-1.918968	-1.949072	-1.978125
1.42	-1.970555	-1.995779	-2.019723	-2.042498
1.50	-2.011807	-2.030742	-2.048343	-2.064706
1.66	-1.993475	-2.000158	-2.005534	-2.009663
1.82	-1.878952	-1.874946	-1.869803	-1.863545
1.98	-1.707565	-1.695132	-1.681822	-1.667625
2.14	-1.509373	-1.490937	-1.471926	-1.452307



	FM 100	MD 101	NO 102	LW 103
	4D 10	4D 10	4D 10	4D 10
X				
2.30	-1.305552	-1.283368	-1.260916	-1.238140
2.46	-1.109865	-1.085845	-1.061836	-1.037769
2.62	-.930366	-.906008	-.881901	-.857957
2.78	-.771001	-.747402	-.724238	-.701408
2.94	-.632932	-.610825	-.589286	-.568197
3.10	-.515553	-.495376	-.475849	-.456841
3.42	-.335881	-.320023	-.304862	-.290242
3.74	-.214972	-.203188	-.192047	-.181372
4.06	-.135961	-.127542	-.119665	-.112143
4.38	-.085342	-.079498	-.074083	-.068913
4.70	-.053344	-.049375	-.045731	-.042238
5.02	-.033296	-.030645	-.028232	-.025900
5.34	-.020804	-.019057	-.017479	-.015933
5.66	-.013042	-.011902	-.010881	-.009859
5.98	-.008221	-.007484	-.006829	-.006152
6.30	-.005222	-.004749	-.004332	-.003882
6.94	-.002175	-.001985	-.001819	-.001614
7.58	-.000958	-.000884	-.000820	-.000720
8.22	-.000452	-.000425	-.000401	-.000347
8.86	-.000229	-.000220	-.000213	-.000180
9.50	-.000125	-.000123	-.000122	-.000100
10.14	-.000072	-.000073	-.000073	-.000058
10.78	-.000044	-.000045	-.000046	-.000035
11.42	-.000028	-.000029	-.000030	-.000021
12.06	-.000018	-.000019	-.000020	-.000013
12.70	-.000012	-.000013	-.000014	-.000008
13.98	-.000006	-.000006	-.000007	-.000003
15.26	-.000003	-.000003	-.000003	-.000001
16.54	-.000001	-.000002	-.000002	-.000000
17.82	-.000001	-.000001	-.000001	.000000
19.10	-.000000	-.000000	-.000001	
20.38	-.000000	.000000	-.000000	

	FM 100	MD 101	NO 102	LW 103
	4F 14	4F 14	4F 14	4F 14
-E	48.352	50.465	52.607	55.368
X				
.00	.000000	.000000	.000000	.000000
.01	.000001	.000001	.000001	.000001
.02	.000012	.000013	.000013	.000014
.03	.000060	.000062	.000065	.000068
.04	.000180	.000188	.000196	.000205
.05	.000418	.000437	.000457	.000477
.06	.000829	.000866	.000905	.000945
.07	.001466	.001532	.001601	.001670
.08	.002391	.002497	.002608	.002720
.09	.003660	.003822	.003990	.004160
.10	.005333	.005567	.005810	.006057
.12	.010114	.010551	.011005	.011465
.14	.017152	.017883	.018641	.019409
.16	.026809	.027934	.029102	.030282
.18	.039378	.041005	.042693	.044398
.20	.055079	.057322	.059646	.061991
.22	.074065	.077034	.080110	.083209
.24	.096416	.100221	.104161	.108127
.26	.122151	.126896	.131807	.136746
.28	.151232	.157015	.162995	.169003

	FM 100	MD 101	NO 102	LW 103
	4F 14	4F 14	4F 14	4F 14
X				
.30	.183571	.190478	.197616	.204781
.34	.257458	.266831	.276506	.286197
.38	.342357	.354407	.366829	.379246
.42	.436432	.451269	.466543	.481780
.46	.537643	.555278	.573411	.591459
.50	.643887	.664243	.685146	.705905
.54	.753105	.776026	.799532	.822823
.58	.863362	.888627	.914502	.940081
.62	.972892	1.000229	1.028188	1.055760
.66	1.080132	1.109231	1.138951	1.168186
.70	1.183733	1.214260	1.245393	1.275936
.78	1.375700	1.408030	1.440902	1.472967
.86	1.542181	1.574923	1.608105	1.640267
.94	1.679475	1.711348	1.743530	1.774495
1.02	1.786242	1.816141	1.846205	1.874882
1.10	1.862927	1.889963	1.917011	1.942539
1.18	1.911238	1.934741	1.958106	1.979859
1.26	1.933694	1.953207	1.972439	1.990011
1.34	1.933270	1.948524	1.963368	1.976546
1.42	1.913122	1.924013	1.934379	1.943115
1.50	1.876394	1.882952	1.888887	1.893269
1.66	1.764974	1.763371	1.760998	1.757324
1.82	1.620101	1.611457	1.601963	1.591522
1.98	1.458446	1.444169	1.429013	1.413333
2.14	1.292351	1.273916	1.254614	1.235236
2.30	1.130411	1.109216	1.087190	1.065533
2.46	.978189	.955467	.931961	.909237
2.62	.838919	.815694	.791730	.768913
2.78	.714118	.691195	.667568	.645393
2.94	.604099	.582072	.559362	.538347
3.10	.508373	.487652	.466254	.444731
3.42	.355628	.338159	.319985	.303883
3.74	.245807	.231765	.216956	.204248
4.06	.168545	.157637	.145886	.136161
4.38	.114991	.106729	.097554	.090276
4.70	.078245	.072108	.065004	.059645
5.02	.053207	.048718	.043228	.039330
5.34	.036224	.032980	.028724	.025914
5.66	.024736	.022416	.019091	.017078
5.98	.016975	.015331	.012703	.011268
6.30	.011731	.010575	.008469	.007449
6.94	.005777	.005218	.003799	.003285
7.58	.003015	.002753	.001734	.001473
8.22	.001701	.001583	.000811	.000675
8.86	.001050	.001001	.000391	.000318
9.50	.000708	.000690	.000195	.000154
10.14	.000513	.000509	.000101	.000077
10.78	.000393	.000395	.000055	.000040
11.42	.000313	.000316	.000031	.000021
12.06	.000255	.000258	.000018	.000011
12.70	.000211	.000214	.000011	.000006
13.98	.000148	.000150	.000004	.000001
15.26	.000106	.000106	.000001	.000000
16.54	.000076	.000076	.000001	.000000
17.82	.000055	.000055	.000000	
19.10	.000040	.000039	.000000	
20.38	.000029	.000028		
21.66	.000021	.000021		
22.94	.000015	.000015		
24.22	.000011	.000011		

	FM 100	MD 101	NO 102	LW 103
	4F 14	4F 14	4F 14	4F 14
X				
25.50	.000008	.000007	.000000	.000000
28.06	.000004	.000004		
30.62	.000002	.000002		
33.18	.000001	.000001		
35.74	.000000	.000000		

	FM 100	MD 101	NO 102	LW 103
	5S 2	5S 2	5S 2	5S 2
-E	25.640	26.374	27.108	28.400
X				
.00	.000000	.000000	.000000	.000000
.01	.137171	.139534	.141881	.144473
.02	.222545	.226026	.229471	.233301
.03	.266428	.270098	.273710	.277766
.04	.277604	.280791	.283900	.287453
.05	.263525	.265769	.267920	.270468
.06	.230488	.231500	.232408	.233636
.07	.183783	.183411	.182929	.182672
.08	.127830	.126030	.124122	.122330
.09	.066295	.063107	.059818	.056533
.10	.002189	-.002283	-.006843	-.011509
.12	-.124422	-.130978	-.137584	-.144497
.14	-.237832	-.245671	-.253505	-.261804
.16	-.329645	-.337903	-.346093	-.354855
.18	-.395646	-.403502	-.411225	-.419573
.20	-.434589	-.441324	-.447866	-.455036
.22	-.447271	-.452307	-.457093	-.462468
.24	-.435839	-.438745	-.441358	-.444484
.26	-.403264	-.403761	-.403935	-.404521
.28	-.352961	-.350912	-.348525	-.346429
.30	-.288505	-.283903	-.278960	-.274178
.34	-.131134	-.121817	-.112203	-.102484
.38	.043075	.056064	.069256	.082792
.42	.213181	.228427	.243743	.259588
.46	.363759	.379713	.395580	.412093
.50	.484638	.499798	.514704	.530305
.54	.570183	.583214	.595835	.609132
.58	.618412	.628229	.637497	.647366
.62	.630120	.635920	.641058	.646681
.66	.608083	.609351	.609880	.610745
.70	.556380	.552878	.548596	.544484
.78	.383635	.370840	.357296	.343580
.86	.152646	.132117	.111009	.089428
.94	-.098824	-.124590	-.150661	-.177417
1.02	-.340327	-.368438	-.396518	-.425389
1.10	-.550005	-.577602	-.604809	-.632803
1.18	-.714177	-.738713	-.762514	-.787004
1.26	-.826074	-.845479	-.863847	-.882731
1.34	-.884302	-.897054	-.908527	-.920289
1.42	-.891337	-.896459	-.900134	-.903840
1.50	-.852207	-.849228	-.844712	-.839957
1.66	-.662213	-.643297	-.622891	-.601737
1.82	-.371280	-.338802	-.305139	-.270335
1.98	-.032542	.009715	.052671	.097004
2.14	.311688	.359478	.407391	.456754
2.30	.631519	.680800	.729617	.779820
2.46	.908416	.955749	1.002092	1.049652
2.62	1.133044	1.175792	1.217123	1.259433
2.78	1.302907	1.339263	1.373905	1.409246
2.94	1.420169	1.449100	1.476146	1.503595

	FM 100	MD 101	NO 102	LW 103
	SS 2	SS 2	SS 2	SS 2
X				
3.10	1.489870	1.510987	1.530173	1.549458
3.42	1.513270	1.519477	1.523953	1.527932
3.74	1.428008	1.422082	1.414870	1.406603
4.06	1.281965	1.267484	1.252243	1.235448
4.38	1.110470	1.090829	1.070929	1.049061
4.70	.936712	.914683	.892810	.868662
5.02	.774292	.751910	.729989	.705594
5.34	.630010	.608629	.587912	.564632
5.66	.506259	.486687	.467888	.446539
5.98	.402790	.385422	.368866	.349855
6.30	.317923	.302872	.288620	.272070
6.94	.194554	.183821	.173776	.161845
7.58	.117141	.109849	.103092	.094888
8.22	.069881	.065085	.060680	.055216
8.86	.041534	.038448	.035636	.032074
9.50	.024713	.022756	.020985	.018696
10.14	.014789	.013558	.012451	.010991
10.78	.008940	.008169	.007480	.006549
11.42	.005484	.005001	.004571	.003976
12.06	.003429	.003124	.002854	.002471
12.70	.002194	.002000	.001828	.001578
13.98	.000972	.000890	.000817	.000703
15.26	.000480	.000442	.000409	.000352
16.54	.000260	.000241	.000224	.000193
17.82	.000151	.000141	.000131	.000113
19.10	.000092	.000086	.000080	.000069
20.38	.000058	.000054	.000050	.000043
21.66	.000037	.000034	.000032	.000027
22.94	.000024	.000022	.000021	.000018
24.22	.000016	.000015	.000014	.000012
25.50	.000010	.000010	.000009	.000008
28.06	.000005	.000004	.000004	.000003
30.62	.000002	.000002	.000002	.000001
33.18	.000001	.000001	.000001	.000001
35.74	.000001	.000000	.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	5P 6	5P 6	5P 6	5P 6
-E	20.766	21.396	22.028	23.205
X				
.00	.000000	.000000	.000000	.000000
.01	.008429	.008649	.008869	.009112
.02	.030609	.031386	.032166	.033024
.03	.062462	.064004	.065551	.067255
.04	.100607	.103019	.105433	.108098
.05	.142260	.145563	.148867	.152519
.06	.185150	.189306	.193456	.198053
.07	.227451	.232373	.237281	.242727
.08	.267713	.273281	.278823	.284989
.09	.304812	.310883	.316914	.323642
.10	.337898	.344315	.350675	.357794
.12	.389772	.396388	.402909	.410271
.14	.420607	.426781	.432820	.439726
.16	.429924	.435085	.440070	.445897
.18	.418775	.422452	.425919	.430155
.20	.389193	.391037	.392642	.394906
.22	.343799	.343580	.343102	.343147
.24	.285497	.283104	.280441	.278144
.26	.217272	.212696	.207853	.203208
.28	.142033	.135361	.128435	.121535

	FM 100	MD 101	NO 102	LW 103
X	SP 6	SP 6	SP 6	SP 6
.30	.062516	.053911	.045077	.036099
.34	-.099624	-.111373	-.123270	-.135622
.38	-.252542	-.266223	-.279939	-.294357
.42	-.384269	-.398544	-.412721	-.427769
.46	-.487164	-.500725	-.514047	-.528326
.50	-.557277	-.568953	-.580254	-.592516
.54	-.593604	-.602429	-.610757	-.619981
.58	-.597354	-.602602	-.607252	-.612676
.62	-.571298	-.572490	-.573012	-.574141
.66	-.519217	-.516112	-.512299	-.508894
.70	-.445456	-.438033	-.429893	-.421949
.78	-.251124	-.235722	-.219685	-.203412
.86	-.023366	-.001747	.020315	.042991
.94	.207866	.233316	.258935	.285448
1.02	.419748	.446441	.472984	.500580
1.10	.596762	.622224	.647205	.673277
1.18	.729899	.751972	.773253	.795551
1.26	.815433	.832391	.848286	.865034
1.34	.853629	.864217	.873529	.883457
1.42	.847542	.850968	.852970	.855305
1.50	.802013	.797908	.792300	.786718
1.66	.616331	.597462	.577137	.556214
1.82	.345488	.313953	.281245	.247400
1.98	.034099	-.006787	-.048394	-.091532
2.14	-.282395	-.328881	-.375543	-.423962
2.30	-.578715	-.627166	-.675234	-.725124
2.46	-.838815	-.886073	-.932427	-.980539
2.62	-1.054191	-1.097753	-1.139975	-1.183787
2.78	-1.222029	-1.260097	-1.296503	-1.334252
2.94	-1.343492	-1.374941	-1.404523	-1.435154
3.10	-1.422285	-1.446573	-1.468904	-1.491956
3.42	-1.473007	-1.483111	-1.491371	-1.499641
3.74	-1.419354	-1.417304	-1.413783	-1.409544
4.06	-1.302604	-1.291412	-1.279238	-1.265651
4.38	-1.154623	-1.137360	-1.119613	-1.099832
4.70	-.997464	-.976791	-.956072	-.932807
5.02	-.845019	-.823013	-.801308	-.776680
5.34	-.705108	-.683260	-.661964	-.637504
5.66	-.581396	-.560691	-.540698	-.517431
5.98	-.474881	-.455899	-.437716	-.416265
6.30	-.384966	-.367991	-.351844	-.332529
6.94	-.248759	-.235892	-.223798	-.208917
7.58	-.158297	-.149013	-.140374	-.129442
8.22	-.099821	-.093338	-.087358	-.079575
8.86	-.062667	-.058238	-.054184	-.048759
9.50	-.039307	-.036326	-.033616	-.029886
10.14	-.024705	-.022717	-.020922	-.018378
10.78	-.015597	-.014280	-.013096	-.011367
11.42	-.009913	-.009041	-.008262	-.007087
12.06	-.006353	-.005776	-.005263	-.004461
12.70	-.004111	-.003728	-.003389	-.002839
13.98	-.001778	-.001607	-.001456	-.001191
15.26	-.000801	-.000723	-.000653	-.000520
16.54	-.000372	-.000335	-.000302	-.000231
17.82	-.000173	-.000155	-.000139	-.000100

	FM 100	MD 101	NO 102	LW 103
	5P 6	5P 6	5P 6	5P 6
X				
19.10	-.000077	-.000068	-.000060	-.000042
20.38	-.000033	-.000028	-.000024	-.000017
21.66	-.000014	-.000012	-.000010	-.000007
22.94	-.000006	-.000005	-.000004	-.000003
24.22	-.000002	-.000002	-.000001	-.000001
25.50	-.000001	-.000001	-.000001	-.000000
28.06	.000000	.000000	.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	5D 10	5D 10	5D 10	5D 10
-E	12.067	12.509	12.952	13.904
X				
.00	.000000	.000000	.000000	.000000
.01	.000106	.000110	.000114	.000119
.02	.000799	.000828	.000859	.000893
.03	.002530	.002624	.002718	.002825
.04	.005631	.005836	.006044	.006279
.05	.010326	.010697	.011073	.011500
.06	.016755	.017349	.017951	.018634
.07	.024983	.025858	.026743	.027749
.08	.035020	.036230	.037454	.038845
.09	.046825	.048420	.050033	.051868
.10	.060319	.062345	.064393	.066724
.12	.091913	.094914	.097940	.101393
.14	.128687	.132762	.136865	.141556
.16	.169321	.174512	.179732	.185711
.18	.212424	.218719	.225036	.232290
.20	.256625	.263958	.271302	.279760
.22	.300633	.308895	.317152	.326691
.24	.343273	.352319	.361339	.371796
.26	.383515	.393171	.402775	.413955
.28	.420478	.430550	.440541	.452225
.30	.453437	.463720	.473886	.485843
.34	.505185	.515250	.525123	.536904
.38	.545808	.544828	.553574	.564246
.42	.544270	.551503	.558380	.567106
.46	.531047	.535878	.540282	.546370
.50	.497722	.499692	.501175	.504106
.54	.446635	.445445	.443726	.443162
.58	.380581	.376088	.371045	.366823
.62	.302572	.294778	.286436	.278557
.66	.215654	.204690	.193202	.181807
.70	.122774	.108879	.094504	.079856
.78	-.070106	-.088822	-.107869	-.127871
.86	-.257266	-.279062	-.300978	-.324413
.94	-.424645	-.447606	-.470434	-.495187
1.02	-.562860	-.585107	-.606955	-.630961
1.10	-.666623	-.686467	-.705651	-.727059
1.18	-.733958	-.749990	-.765123	-.782394
1.26	-.765393	-.776523	-.786551	-.798500
1.34	-.763217	-.768678	-.772883	-.778685
1.42	-.730850	-.730186	-.728161	-.727330
1.50	-.672351	-.665380	-.656998	-.649354
1.66	-.494245	-.475029	-.454459	-.433644
1.82	-.262392	-.232546	-.201587	-.169426
1.98	-.005821	.032206	.070964	.111753
2.14	.252701	.296111	.339781	.386129

	FM 100	MD 101	NO 102	LW 103
X	5D 10	5D 10	5D 10	5D 10
2.30	.496754	.542761	.588528	.637416
2.46	.715560	.761642	.806997	.855721
2.62	.902975	.947018	.989901	1.036220
2.78	1.056437	1.096798	1.135644	1.177840
2.94	1.175985	1.211496	1.245228	1.282094
3.10	1.263429	1.293353	1.321333	1.352124
3.42	1.354186	1.372159	1.388115	1.406003
3.74	1.356744	1.363399	1.368237	1.373925
4.06	1.299056	1.296167	1.291825	1.287162
4.38	1.204512	1.194264	1.183000	1.170247
4.70	1.090824	1.075371	1.059340	1.040734
5.02	.970478	.951712	.932764	.910293
5.34	.851718	.831182	.810796	.786111
5.66	.739603	.718482	.697773	.672178
5.98	.636912	.616071	.595836	.570311
6.30	.544876	.524910	.505681	.480932
6.94	.393005	.375764	.359376	.337436
7.58	.279740	.265638	.252375	.233927
8.22	.197536	.186398	.176016	.161034
8.86	.138880	.130287	.122340	.110460
9.50	.097464	.090941	.084951	.075687
10.14	.068404	.063508	.059041	.051901
10.78	.048081	.044435	.041127	.035671
11.42	.033886	.031184	.028747	.024602
12.06	.023967	.021972	.020181	.017044
12.70	.017025	.015554	.014240	.011872
13.98	.008725	.007926	.007217	.005872
15.26	.004579	.004142	.003757	.002992
16.54	.002466	.002224	.002012	.001576
17.82	.001364	.001228	.001109	.000860
19.10	.000775	.000696	.000627	.000487
20.38	.000450	.000404	.000364	.000286
21.66	.000267	.000239	.000215	.000174
22.94	.000161	.000144	.000129	.000110
24.22	.000099	.000088	.000079	.000072
25.50	.000061	.000054	.000048	.000049
28.06	.000023	.000021	.000018	.000025
30.62	.000009	.000008	.000006	.000014
33.18	.000003	.000003	.000002	.000009
35.74	.000001	.000001	.000001	.000006
38.30	.000000	.000000	.000000	.000004
40.86	.000000	.000000	.000000	.000003
43.42				.000002
45.98				.000002
48.54				.000001
51.10				.000001
56.22				.000000

	FM 100	MD 101	NO 102	LW 103
-E	5F 12	5F 13	5F 14	5F 14
X	1.7434	1.8357	1.9270	2.4967
.00	.000000	.000000	.000000	.000000
.01	.000000	.000000	.000000	.000000
.02	.000005	.000005	.000005	.000006
.03	.000023	.000024	.000026	.000028
.04	.000069	.000073	.000078	.000084

	FM 100	MD 101	NO 102	LW 103
X	5F 12	5F 13	5F 14	5F 14
.05	.000162	.000171	.000181	.000195
.06	.000320	.000339	.000357	.000385
.07	.000566	.000600	.000632	.000680
.08	.000923	.000977	.001029	.001108
.09	.001412	.001495	.001575	.001694
.10	.002057	.002178	.002293	.002466
.12	.003900	.004125	.004341	.004665
.14	.006610	.006988	.007348	.007893
.16	.010326	.010909	.011464	.012305
.18	.015156	.016002	.016806	.018027
.20	.021182	.022351	.023458	.025148
.22	.028458	.030008	.031475	.033721
.24	.037008	.039000	.040880	.043769
.26	.046834	.049323	.051668	.055284
.28	.057913	.060951	.063808	.068230
.30	.070202	.073837	.077249	.082549
.34	.098157	.103106	.107729	.114971
.38	.130059	.136438	.142366	.151736
.42	.165114	.172982	.180256	.191862
.46	.202448	.211809	.220414	.234286
.50	.241162	.251966	.261838	.277930
.54	.280375	.292527	.303556	.321754
.58	.319261	.332624	.344662	.364795
.62	.357066	.371468	.384339	.406183
.66	.393123	.408368	.421869	.445163
.70	.426856	.442726	.456641	.481093
.78	.485514	.501944	.515999	.541817
.86	.530262	.546307	.559584	.585457
.94	.559608	.574366	.586001	.610655
1.02	.573124	.585782	.595014	.617283
1.10	.571197	.581065	.587263	.606139
1.18	.554798	.561326	.563999	.578652
1.26	.525285	.528058	.526858	.536648
1.34	.484232	.482974	.477683	.482152
1.42	.433310	.427867	.418390	.417251
1.50	.374195	.364523	.350872	.343991
1.66	.237749	.219863	.198252	.180015
1.82	.086525	.061228	.032619	.003885
1.98	-.069899	-.101409	-.135700	-.173491
2.14	-.224069	-.260376	-.298858	-.343933
2.30	-.370490	-.410108	-.451261	-.501712
2.46	-.505377	-.546862	-.589243	-.643188
2.62	-.626373	-.668403	-.710723	-.766412
2.78	-.732272	-.773700	-.814862	-.870747
2.94	-.822757	-.862631	-.901754	-.956517
3.10	-.898165	-.935735	-.972142	-1.024709
3.42	-1.007184	-1.038636	-1.068332	-1.114175
3.74	-1.068329	-1.092666	-1.114942	-1.152202
4.06	-1.091804	-1.108918	-1.123893	-1.151842
4.38	-1.087107	-1.097437	-1.105719	-1.124370
4.70	-1.062263	-1.066539	-1.068970	-1.078795
5.02	-1.023672	-1.022745	-1.020240	-1.021968
5.34	-.976254	-.970986	-.964439	-.958924
5.66	-.923686	-.914893	-.905124	-.893260
5.98	-.868657	-.857072	-.844806	-.827476
6.30	-.813088	-.799353	-.785213	-.763256
6.94	-.705251	-.688777	-.672369	-.643421
7.58	-.606326	-.588653	-.571400	-.538013
8.22	-.518543	-.500692	-.483513	-.447691
8.86	-.442120	-.424741	-.408201	-.371470



	FM 100	MD 101	NO 102	LW 103
	5F 12	5F 13	5F 14	5F 14
X				
9.50	-.376334	-.359816	-.344238	-.307729
10.14	-.320074	-.304632	-.290185	-.254711
10.78	-.272142	-.257877	-.244625	-.210750
11.42	-.231387	-.218327	-.206271	-.174363
12.06	-.196770	-.184893	-.173993	-.144274
12.70	-.167375	-.156632	-.146627	-.119403
13.98	-.121215	-.112532	-.104690	-.081857
15.26	-.087895	-.080964	-.074763	-.056198
16.54	-.063811	-.058328	-.053467	-.038644
17.82	-.046379	-.042072	-.038287	-.026622
19.10	-.033745	-.030381	-.027449	-.018376
20.38	-.024580	-.021964	-.019703	-.012713
21.66	-.017923	-.015897	-.014159	-.008816
22.94	-.013084	-.011519	-.010188	-.006130
24.22	-.009562	-.008357	-.007340	-.004275
25.50	-.006997	-.006070	-.005294	-.002991
28.06	-.003760	-.003215	-.002766	-.001480
30.62	-.002031	-.001713	-.001454	-.000745
33.18	-.001104	-.000918	-.000770	-.000383
35.74	-.000604	-.000496	-.000410	-.000201
38.30	-.000332	-.000270	-.000221	-.000109
40.86	-.000185	-.000148	-.000120	-.000060
43.42	-.000103	-.000082	-.000066	-.000034
45.98	-.000059	-.000046	-.000037	-.000020
48.54	-.000033	-.000026	-.000021	-.000012
51.10	-.000019	-.000015	-.000012	-.000008
56.22	-.000007	-.000005	-.000004	-.000003
61.34	-.000003	-.000002	-.000002	-.000001
66.46	-.000001	-.000001	-.000001	-.000000
71.58	-.000000	-.000000	-.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	6S 2	6S 2	6S 2	6S 2
-E	3.6629	3.7184	3.7725	4.1295
X				
.00	.000000	.000000	.000000	.000000
.01	.055092	.055793	.056473	.058627
.02	.089377	.090372	.091332	.094669
.03	.106992	.107984	.108930	.112702
.04	.111464	.112243	.112969	.116615
.05	.105788	.106214	.106585	.109698
.06	.092493	.092485	.092423	.094722
.07	.073707	.073228	.072699	.074009
.08	.051206	.050255	.049262	.049490
.09	.026465	.025068	.023640	.022761
.10	.000696	-.001101	-.002916	-.004875
.12	-.050180	-.052584	-.054979	-.058866
.14	-.095717	-.098429	-.101102	-.106449
.16	-.132534	-.135246	-.137888	-.144136
.18	-.158933	-.161362	-.163693	-.170268
.20	-.174417	-.176321	-.178106	-.184474
.22	-.179310	-.180503	-.181562	-.187257
.24	-.174482	-.174835	-.175045	-.179687
.26	-.161138	-.160578	-.159873	-.163175
.28	-.140661	-.139167	-.137532	-.139296
.30	-.114503	-.112096	-.109561	-.109679
.34	-.050817	-.046801	-.042697	-.039495
.38	.019466	.024633	.029828	.035991
.42	.087850	.093596	.099301	.107733
.46	.148084	.153810	.159423	.169257

	FM 100	MD 101	NO 102	LW 103
	6S 2	6S 2	6S 2	6S 2
X				
.50	.196055	.201201	.206167	.216481
.54	.229503	.233592	.237441	.247354
.58	.247664	.250322	.252695	.261429
.62	.250909	.251880	.252536	.259454
.66	.240423	.239564	.238380	.243004
.70	.217923	.215202	.212161	.214176
.78	.145128	.138947	.132506	.128964
.86	.049583	.040744	.031759	.023054
.94	-.052952	-.063324	-.073694	-.086440
1.02	-.149808	-.160488	-.171001	-.186261
1.10	-.231965	-.241785	-.251283	-.267394
1.18	-.293871	-.301837	-.309344	-.324716
1.26	-.332927	-.338273	-.343053	-.356298
1.34	-.348830	-.351040	-.352615	-.362626
1.42	-.342940	-.341740	-.339877	-.345859
1.50	-.317707	-.313045	-.307734	-.309202
1.66	-.221857	-.210834	-.199297	-.191398
1.82	-.087915	-.072119	-.056059	-.039820
1.98	.059456	.077896	.096283	.118659
2.14	.200735	.219584	.238046	.263793
2.30	.322320	.339538	.356063	.382349
2.46	.416078	.430007	.442997	.467251
2.62	.478365	.487808	.496145	.516259
2.78	.508904	.513132	.516174	.530578
2.94	.509730	.508437	.505967	.513628
3.10	.484299	.477535	.469674	.470052
3.42	.371629	.355069	.337749	.323497
3.74	.205095	.181204	.157013	.129843
4.06	.014314	-.014105	-.042347	-.079551
4.38	-.178688	-.209054	-.238821	-.282796
4.70	-.359306	-.389511	-.418788	-.466381
5.02	-.518962	-.547442	-.574768	-.623189
5.34	-.653517	-.679214	-.703633	-.750565
5.66	-.761871	-.784155	-.805122	-.848749
5.98	-.844873	-.863449	-.880740	-.919719
6.30	-.904520	-.919343	-.932964	-.966377
6.94	-.964343	-.972160	-.979035	-.999962
7.58	-.963419	-.965441	-.966826	-.975175
8.22	-.921834	-.919458	-.916737	-.913743
8.86	-.855576	-.850105	-.844537	-.832112
9.50	-.776432	-.768960	-.761587	-.741872
10.14	-.692620	-.684010	-.675643	-.650732
10.78	-.609585	-.600485	-.591727	-.563503
11.42	-.530723	-.521600	-.512880	-.482943
12.06	-.457977	-.449151	-.440762	-.410399
12.70	-.392285	-.383966	-.376094	-.346296
13.98	-.282715	-.275720	-.269146	-.242414
15.26	-.199987	-.194396	-.189172	-.166753
16.54	-.139474	-.135159	-.131148	-.113222
17.82	-.096204	.092960	-.089956	-.076125
19.10	-.065784	-.063392	-.061187	-.050806
20.38	-.044676	-.042939	-.041343	-.033722
21.66	-.030176	-.028930	-.027790	-.022295
22.94	-.020296	-.019411	-.018604	-.014702
24.22	-.013606	-.012983	-.012415	-.009681
25.50	-.009099	-.008663	-.008267	-.006372
28.06	-.004052	-.003041	-.003651	-.002769
30.62	-.001802	-.001702	-.001611	-.001216
33.18	-.000805	-.000757	-.000715	-.000544
35.74	-.000363	-.000340	-.000320	-.000250

	FM 100	MD 101	NO 102	LW 103
X	6S 2	6S 2	6S 2	6S 2
38.30	-.000166	-.000155	-.000146	-.000119
40.86	-.000078	-.000073	-.000068	-.000059
43.42	-.000038	-.000035	-.000033	-.000031
45.98	-.000019	-.000018	-.000016	-.000017
48.54	-.000009	-.000009	-.000008	-.000010
51.10	-.000004	-.000005	-.000004	-.000006
56.22	-.000001	-.000002	-.000001	-.000002
61.34	.000000	-.000001	.000000	-.000001
66.46	.000000	-.000000	.000000	-.000000

	FM 100	MD 101	NO 102	LW 103
X	6P 6	6P 6	6P 6	6P 6
-E	2.1586	2.1858	2.2120	2.4948
.00	.000000	.000000	.000000	.000000
.01	.003066	.003127	.003187	.003364
.02	.011134	.011347	.011556	.012192
.03	.022721	.023138	.023549	.024828
.04	.036594	.037241	.037875	.039904
.05	.051741	.052617	.053474	.056298
.06	.067335	.068423	.069485	.073099
.07	.082710	.083980	.085216	.089577
.08	.097339	.098752	.100122	.105159
.09	.110811	.112322	.113782	.119402
.10	.122818	.124379	.125881	.131977
.12	.141611	.143125	.144564	.151260
.14	.152725	.154006	.155200	.162014
.16	.155988	.156878	.157669	.164146
.18	.151786	.152160	.152429	.158166
.20	.140866	.140638	.140305	.144969
.22	.124186	.123310	.122332	.125672
.24	.102813	.101277	.099648	.101490
.26	.077841	.075666	.073411	.073656
.28	.050336	.047570	.044741	.043358
.30	.021301	.018015	.014686	.011706
.34	-.037789	-.041841	-.045888	-.051778
.38	-.093339	-.097731	-.102064	-.110245
.42	-.140966	-.145252	-.149425	-.159109
.46	-.177878	-.181643	-.185244	-.195582
.50	-.202646	-.205535	-.208216	-.218383
.54	-.214930	-.216666	-.218162	-.227413
.58	-.215208	-.215600	-.215734	-.223444
.62	-.204535	-.203481	-.202163	-.207844
.66	-.184343	-.181819	-.179040	-.182347
.70	-.156270	-.152326	-.148149	-.148876
.78	-.083347	-.076942	-.070381	-.065833
.86	.001041	.009137	.017278	.026576
.94	.085646	.094500	.103267	.116226
1.02	.161934	.170591	.179029	.194252
1.10	.224150	.231744	.238996	.254997
1.18	.269032	.274846	.280215	.295579
1.26	.295343	.298841	.301821	.315309
1.34	.303378	.304216	.304493	.315101
1.42	.294512	.292525	.289968	.296951
1.50	.270805	.265991	.260627	.263502
1.66	.188777	.178814	.168433	.162589
1.82	.077613	.063783	.049754	.035802
1.98	-.044220	-.060245	-.076200	-.096567
2.14	-.162096	-.178564	-.194678	-.219193

	FM 100	MD 101	NO 102	LW 103
	6P 6	6P 6	6P 6	6P 6
X				
2.30	-.265673	-.280969	-.295649	-.321870
2.46	-.348550	-.361334	-.373284	-.398894
2.62	-.407582	-.416851	-.425136	-.448120
2.78	-.442109	-.447212	-.451250	-.469997
2.94	-.453223	-.453832	-.453366	-.466688
3.10	-.443141	-.439204	-.434246	-.441362
3.42	-.371027	-.358663	-.345534	-.339278
3.74	-.250149	-.231061	-.211587	-.192401
4.06	-.102705	-.078986	-.065292	-.024932
4.38	.053925	.080242	.106149	.145292
4.70	.207436	.234603	.261039	.306383
5.02	.349861	.376498	.402165	.451215
5.34	.476578	.501676	.525646	.576146
5.66	.585386	.608262	.629926	.679935
5.98	.675742	.695984	.714994	.762909
6.30	.748184	.765592	.781799	.826351
6.94	.844477	.856206	.866898	.902123
7.58	.887028	.893643	.899456	.923558
8.22	.889368	.891748	.893576	.906257
8.86	.863428	.862502	.861259	.863210
9.50	.818836	.815461	.811968	.804463
10.14	.762964	.757869	.752818	.737414
10.78	.701245	.695023	.688971	.667306
11.42	.637561	.630679	.624059	.597714
12.06	.574593	.567407	.560549	.530965
12.70	.514121	.506896	.500042	.468481
13.98	.404632	.397848	.391468	.358943
15.26	.313007	.307027	.301439	.270687
16.54	.239104	.234043	.229338	.201859
17.82	.180979	.176814	.172958	.149362
19.10	.136077	.132718	.129620	.109946
20.38	.101847	.099178	.096725	.080681
21.66	.076007	.073910	.071989	.059127
22.94	.056640	.055007	.053515	.043340
24.22	.042203	.040938	.039786	.031819
25.50	.031478	.030503	.029617	.023426
28.06	.017643	.017069	.016548	.012866
30.62	.010055	.009717	.009411	.007238
33.18	.005868	.005667	.005487	.004199
35.74	.003526	.003405	.003297	.002522
38.30	.002189	.002115	.002048	.001569
40.86	.001405	.001358	.001317	.001010
43.42	.000930	.000900	.000873	.000670
45.98	.000634	.000614	.000596	.000456
48.54	.000441	.000428	.000416	.000316
51.10	.000313	.000304	.000295	.000222
56.22	.000164	.000159	.000155	.000114
61.34	.000088	.000086	.000083	.000060
66.46	.000048	.000047	.000046	.000032
71.58	.000027	.000026	.000025	.000017
76.70	.000015	.000014	.000014	.000009
81.82	.000008	.000008	.000008	.000005
86.94	.000005	.000004	.000004	.000003
92.06	.000003	.000002	.000002	.000001
97.18	.000001	.000001	.000001	.000001
102.30	.000001	.000001	.000001	.000000
112.54	.000000	.000000	.000000	.000000

	FM 100	MD 101	NO 102	LW 103
	6D 0	6D 0	6D 0	6D 1
-E				.53479
X				
.00				.000000
.01				.000028
.02				.000212
.03				.000672
.04				.001493
.05				.002733
.06				.004429
.07				.006595
.08				.009232
.09				.012327
.10				.015856
.12				.024091
.14				.033627
.16				.044106
.18				.055152
.20				.066401
.22				.077511
.24				.088174
.26				.098123
.28				.107134
.30				.115025
.34				.126918
.38				.133118
.42				.133452
.46				.128143
.50				.117699
.54				.102813
.58				.084285
.62				.062960
.66				.039673
.70				.015222
.78				-.034311
.86				-.080738
.94				-.120537
1.02				-.151499
1.10				-.172536
1.18				-.183447
1.26				-.184677
1.34				-.177113
1.42				-.161906
1.50				-.140342
1.66				-.083384
1.82				-.016117
1.98				.053223
2.14				.118431
2.30				.175275
2.46				.221229
2.62				.255133
2.78				.276847
2.94				.286940
3.10				.286431
3.42				.258766
3.74				.204570
4.06				.133657
4.38				.053897

	FM 100	MD 101	NO 102	LW 103
	6D 0	6D 0	6D 0	6D 1
X				
4.70				-.028870
5.02				-.110562
5.34				-.188482
5.66				-.260964
5.98				-.327089
6.30				-.386459
6.94				-.484993
7.58				-.558525
8.22				-.610502
8.86				-.644640
9.50				-.664380
10.14				-.672696
10.78				-.672067
11.42				-.664520
12.06				-.651693
12.70				-.634901
13.98				-.593431
15.26				-.546248
16.54				-.497248
17.82				-.448865
19.10				-.402571
20.38				-.359206
21.66				-.319193
22.94				-.282679
24.22				-.249637
25.50				-.219933
28.06				-.169709
30.62				-.130128
33.18				-.099271
35.74				-.075408
38.30				-.057068
40.86				-.043047
43.42				-.032374
45.98				-.024281
48.54				-.018166
51.10				-.013559
56.22				-.007507
61.34				-.004125
66.46				-.002252
71.58				-.001223
76.70				-.000660
81.82				-.000355
86.94				-.000190
92.06				-.000101
97.18				-.000054
102.30				-.000029
112.54				-.000008
122.78				-.000002
133.02				-.000001
143.26				-.000000

	FM 100	MD 101	NO 102	LW 103
	7S 2	7S 2	7S 2	7S 2
-E	.33625	.33863	.34096	.36659
X				
.00	.000000	.000000	.000000	.000000
.01	.013568	.013646	.013723	.014946
.02	.022012	.022103	.022193	.024134
.03	.026350	.026411	.026469	.028731
.04	.027451	.027452	.027450	.029728

	FM 100	MD 101	NO 102	LW 103
X	7S 2	7S 2	7S 2	7S 2
.05	.026052	.025977	.025898	.027964
.06	.022777	.022618	.022456	.024145
.07	.018149	.017907	.017662	.018863
.08	.012607	.012287	.011966	.012612
.09	.006513	.006126	.005739	.005796
.10	.000165	-.000275	-.000715	-.001250
.12	-.012365	-.012868	-.013367	-.015015
.14	-.023580	-.024081	-.024574	-.027145
.16	-.032645	-.033083	-.033511	-.036750
.18	-.039144	-.039467	-.039778	-.043408
.20	-.042952	-.043121	-.043275	-.047023
.22	-.044150	-.044137	-.044107	-.047724
.24	-.042954	-.042743	-.042516	-.045785
.26	-.039659	-.039247	-.038821	-.041565
.28	-.034607	-.034001	-.033383	-.035467
.30	-.028156	-.027372	-.026577	-.027906
.34	-.012455	-.011386	-.010314	-.009996
.38	.004865	.006095	.007319	.009259
.42	.021709	.022964	.024201	.027548
.46	.036535	.037682	.038801	.043220
.50	.048330	.049253	.050138	.055233
.54	.056538	.057145	.057706	.063064
.58	.060971	.061196	.061371	.066602
.62	.061723	.061529	.061283	.066039
.66	.059087	.058463	.057789	.061781
.70	.053490	.052448	.051361	.054365
.78	.035453	.033688	.031897	.032515
.86	.011834	.009585	.007335	.005423
.94	-.013464	-.015909	-.018326	-.022527
1.02	-.037307	-.039657	-.041948	-.047940
1.10	-.057468	-.059460	-.061368	-.068510
1.18	-.072577	-.074003	-.075324	-.082933
1.26	-.082000	-.082711	-.083305	-.090727
1.34	-.085671	-.085582	-.085371	-.092030
1.42	-.083939	-.083021	-.081986	-.087409
1.50	-.077423	-.075699	-.073870	-.077702
1.66	-.053215	-.050104	-.046932	-.046984
1.82	-.019737	-.015705	-.011675	-.007837
1.98	.016828	.021223	.025549	.032762
2.14	.051595	.055807	.059882	.069570
2.30	.081170	.084727	.088093	.099178
2.46	.103545	.106088	.108402	.119795
2.62	.117846	.119138	.120185	.130893
2.78	.124051	.123976	.123660	.132854
2.94	.122725	.121271	.119599	.126639
3.10	.114793	.112031	.109089	.113529
3.42	.083602	.078659	.073646	.072237
3.74	.039502	.033145	.026839	.019638
4.06	-.009692	-.016672	-.023488	-.035676
4.38	-.058156	-.065068	-.071730	-.087690
4.70	-.102014	-.108323	-.114326	-.132685
5.02	-.138989	-.144320	-.149320	-.168705
5.34	-.167991	-.172112	-.175904	-.195048
5.66	-.188754	-.191549	-.194041	-.211833
5.98	-.201548	-.202992	-.204175	-.219684
6.30	-.206969	-.207101	-.207023	-.219507
6.94	-.198843	-.196623	-.194310	-.199206
7.58	-.171021	-.166926	-.162855	-.159110
8.22	-.129701	-.124227	-.118877	-.106359
8.86	-.079986	-.073576	-.067368	-.046584

	FM 100	MD 101	NO 102	LW 103
X	7S 2	7S 2	7S 2	7S 2
9.50	-.025806	-.018825	-.012103	.016036
10.14	.029940	.037206	.044173	.078528
10.78	.085184	.092513	.099521	.138854
11.42	.138489	.145718	.152616	.195678
12.06	.188894	.195903	.202580	.248172
12.70	.235785	.242489	.248867	.295877
13.98	.317771	.323709	.329345	.376305
15.26	.383480	.388554	.393362	.437243
16.54	.433542	.437738	.441710	.480430
17.82	.469368	.472723	.475895	.508190
19.10	.492704	.495283	.497717	.522975
20.38	.505379	.507258	.509029	.527130
21.66	.509157	.510421	.511608	.522781
22.94	.505671	.506401	.507084	.511790
24.22	.496379	.496654	.496908	.495751
25.50	.482557	.482451	.482346	.476003
28.06	.445548	.444872	.444232	.429616
30.62	.401504	.400471	.399496	.379242
33.18	.355133	.353901	.352742	.329102
35.74	.309506	.308192	.306957	.281727
38.30	.266508	.265191	.263957	.238496
40.86	.227185	.225921	.224737	.200020
43.42	.192015	.190837	.189736	.166420
45.98	.161098	.160024	.159022	.137513
48.54	.134290	.133329	.132433	.112943
51.10	.111309	.110461	.109671	.092269
56.22	.075358	.074721	.074127	.060738
61.34	.050186	.049723	.049293	.039366
66.46	.032971	.032643	.032339	.025189
71.58	.021414	.021187	.020977	.015944
76.70	.013772	.013618	.013476	.009999
81.82	.008783	.008680	.008584	.006221
86.94	.005560	.005492	.005429	.003843
92.06	.003497	.003452	.003411	.002360
97.18	.002187	.002158	.002131	.001441
102.30	.001360	.001342	.001324	.000876
112.54	.000519	.000512	.000505	.000319
122.78	.000195	.000192	.000190	.000115
133.02	.000073	.000071	.000070	.000041
143.26	.000027	.000026	.000026	.000014
153.50	.000010	.000010	.000009	.000005
163.74	.000004	.000003	.000003	.000002
173.98	.000001	.000001	.000001	.000001
184.22	.000000	.000000	.000000	.000000



TABLE IV. RADIAL WAVEFUNCTIONS

	CE 4F2 TB 4F9 BK 5F9 CF 5F9 6D1	R=0.22871857*X R=0.22019442*X R=0.19268749*X R=0.19202985*X		ES 5F10 6D1 FM 5F11 6D1 MD 5F12 6D1 NO 5F13 6D1	R=0.19138109*X R=0.19074102*X R=0.19010942*X R=0.18948611*X			
	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2	1S 2
-E	2845.7	3608.7	8294.6	8473.1	8653.0	8834.8	9018.4	9204.0
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	1.753169	1.983398	3.036391	3.069173	3.101944	3.134702	3.167447	3.200178
.02	3.071228	3.438387	5.038522	5.086399	5.134147	5.181766	5.229256	5.276617
.03	4.035630	4.471091	6.271512	6.323000	6.374215	6.425156	6.475825	6.526223
.04	4.714208	5.168597	6.939864	6.987886	7.035504	7.082717	7.129529	7.175943
.05	5.163305	5.602162	7.200483	7.241036	7.281086	7.320635	7.359688	7.398252
.06	5.429595	5.829904	7.173027	7.204203	7.234819	7.264878	7.294390	7.323360
.07	5.551637	5.899063	6.948100	6.969380	6.990082	7.010213	7.029784	7.048802
.08	5.561182	5.847884	6.593719	6.605463	6.616648	6.627282	6.637377	6.646942
.09	5.484281	5.707196	6.160412	6.163502	6.166079	6.168154	6.169738	6.170842
.10	5.342225	5.501719	5.685223	5.680813	5.675956	5.670665	5.664951	5.658826
.12	4.928610	4.971094	4.708115	4.692464	4.676535	4.660339	4.643887	4.627191
.14	4.422442	4.368660	3.792528	3.770290	3.747950	3.725517	3.703001	3.680410
.16	3.888759	3.762404	2.994127	2.968996	2.943916	2.918897	2.893945	2.869066
.18	3.367324	3.190936	2.328018	2.302608	2.277372	2.252314	2.227439	2.202749
.20	2.880905	2.673929	1.788641	1.764626	1.740868	1.717369	1.694131	1.671153
.22	2.441026	2.219175	1.361174	1.339491	1.318115	1.297046	1.276281	1.255818
.24	2.051998	1.827282	1.027827	1.008891	.990283	.972000	.954039	.936394
.26	1.713649	1.494759	.771120	.754997	.739202	.723730	.708575	.693732
.28	1.423172	1.216016	.575401	.561946	.548802	.535965	.523428	.511184
.30	1.176364	.984617	.427389	.416341	.405579	.395098	.384891	.374950
.34	.794434	.638128	.233157	.225985	.219038	.212309	.205792	.199480
.38	.529936	.408552	.125703	.121223	.116907	.112749	.108743	.104884
.42	.350163	.259131	.067160	.064441	.061835	.059337	.056943	.054649
.46	.229669	.163167	.035625	.034009	.032469	.031000	.029600	.028265
.50	.149764	.102158	.018779	.017836	.016941	.016091	.015286	.014522
.54	.097212	.063674	.009837	.009293	.008780	.008295	.007838	.007406
.58	.062872	.039546	.005113	.004802	.004511	.004237	.003980	.003739
.62	.040547	.024489	.002626	.002450	.002286	.002133	.001990	.001857
.66	.026089	.015125	.001321	.001222	.001131	.001046	.000967	.000894
.70	.016754	.009317	.000639	.000585	.000535	.000488	.000445	.000406
.78	.006868	.003495	.000108	.000093	.000078	.000065	.000053	.000043
.86	.002779	.001270	.000000	.000000	.000000	.000000	.000000	.000000
.94	.001088	.000434	.000000	.000000	.000000	.000000	.000000	.000000
1.02	.000390	.000147						
1.10	.000104	.000049						
1.18	.000000	.000016						
1.26	.000000	.000005						
1.34		.000002						
1.42		.000001						
	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
-E	449.91	585.08	1467.7	1502.6	1537.5	1572.7	1608.3	1644.3
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.571610	.651364	1.016355	1.027717	1.039083	1.050445	1.061802	1.073154
.02	.994453	1.120002	1.661824	1.677870	1.693876	1.709828	1.725726	1.741570
.03	1.290592	1.435015	2.012346	2.028265	2.044077	2.059766	2.075332	2.090775
.04	1.479417	1.621735	2.131342	2.143802	2.156083	2.168169	2.180061	2.191760

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2	2S 2
.05	1.577939	1.702162	2.071563	2.078392	2.084978	2.091307	2.097379	2.103198
.06	1.601048	1.695355	1.876698	1.876626	1.876261	1.875591	1.874619	1.873349
.07	1.561760	1.617791	1.582751	1.575196	1.567315	1.559102	1.550562	1.541699
.08	1.471423	1.483677	1.219227	1.204121	1.188678	1.172897	1.156784	1.140343
.09	1.339909	1.305226	.810134	.787788	.765114	.742116	.718801	.695175
.10	1.175787	1.092905	.374852	.345843	.316534	.286934	.257050	.226891
.12	.778363	.601052	-.515603	-.555566	-.595727	-.636065	-.676574	-.717243
.14	.326935	.064502	-1.364319	-1.411612	-1.458955	-1.506320	-1.553699	-1.601085
.16	-.143521	-.476889	-2.120406	-2.171412	-2.222297	-2.273031	-2.323603	-2.374009
.18	-.607972	-.995819	-2.758242	-2.809731	-2.860926	-2.911794	-2.962327	-3.012521
.20	-1.049061	-1.474454	-3.269071	-3.318378	-3.367230	-3.415594	-3.463467	-3.510845
.22	-1.455313	-1.902017	-3.654990	-3.700070	-3.744557	-3.788421	-3.831661	-3.874277
.24	-1.819724	-2.272935	-3.924708	-3.964113	-4.002818	-4.040795	-4.078048	-4.114582
.26	-2.138635	-2.585391	-4.090588	-4.123409	-4.155453	-4.186700	-4.217157	-4.246831
.28	-2.410864	-2.840224	-4.166638	-4.192419	-4.217380	-4.241507	-4.264812	-4.287305
.30	-2.637015	-3.040086	-4.167171	-4.185826	-4.203647	-4.220631	-4.236790	-4.252138
.34	-2.959359	-3.290884	-3.995715	-4.000923	-4.005351	-4.009011	-4.011919	-4.014096
.38	-3.128843	-3.374719	-3.672291	-3.666211	-3.659480	-3.652124	-3.644164	-3.635619
.42	-3.173791	-3.330550	-3.270948	-3.256299	-3.241172	-3.225601	-3.209608	-3.193213
.46	-3.122569	-3.194238	-2.844217	-2.823719	-2.802926	-2.781882	-2.760604	-2.739111
.50	-3.000967	-2.996331	-2.426607	-2.402664	-2.378604	-2.354470	-2.330279	-2.306045
.54	-2.831050	-2.761479	-2.038778	-2.013347	-1.987953	-1.962639	-1.937417	-1.912299
.58	-2.630882	-2.508714	-1.691455	-1.666018	-1.640742	-1.615670	-1.590807	-1.566163
.62	-2.414713	-2.252132	-1.388609	-1.364211	-1.340069	-1.316220	-1.292668	-1.269416
.66	-2.193397	-2.001709	-1.129898	-1.107216	-1.084856	-1.062850	-1.041196	-1.019896
.70	-1.974903	-1.764122	-.912438	-.891858	-.871640	-.851809	-.832362	-.813296
.78	-1.566880	-1.342007	-.583968	-.567930	-.552275	-.537016	-.522146	-.507656
.86	-1.215204	-.998729	-.366346	-.354508	-.343021	-.331889	-.321103	-.310654
.94	-.926139	-.730811	-.226265	-.217864	-.209759	-.201949	-.194423	-.187173
1.02	-.696245	-.527723	-.138011	-.132225	-.126675	-.121355	-.116257	-.111371
1.10	-.517753	-.377064	-.083315	-.079423	-.075710	-.072170	-.068795	-.065578
1.18	-.381659	-.267122	-.049851	-.047280	-.044843	-.042530	-.040338	-.038258
1.26	-.279337	-.187917	-.029584	-.027913	-.026337	-.024849	-.023446	-.022122
1.34	-.203253	-.131433	-.017413	-.016339	-.015333	-.014389	-.013502	-.012670
1.42	-.147175	-.091481	-.010153	-.009471	-.008836	-.008243	-.007690	-.007173
1.50	-.106137	-.063410	-.005850	-.005421	-.005025	-.004656	-.004314	-.003997
1.66	-.054659	-.030141	-.001831	-.001667	-.001518	-.001381	-.001255	-.001140
1.82	-.027849	-.014135	-.000478	-.000419	-.000367	-.000320	-.000277	-.000239
1.98	-.014048	-.006516	-.000053	-.000035	-.000019	-.000006	.000000	.000000
2.14	-.007000	-.002918	.000000	.000000	.000000	.000000	.000000	.000000
2.30	-.003422	-.001232	.000000	.000000	.000000	.000000		
2.46	-.001648	-.000450						
2.62	-.000787	-.000099						
2.78	-.000373	.000000						
2.94	-.000176	.000000						
3.10	-.000082							
3.42	-.000018							
3.74	-.000004							
4.06	-.000001							
4.38	.000000							

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
-E	424.66	556.12	1421.1	1455.4	1489.7	1524.3	1559.4	1594.8
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.022202	.027614	.058552	.059674	.060807	.061948	.063098	.064258
.02	.083135	.102859	.213394	.217346	.221328	.225340	.229379	.233446
.03	.175139	.215567	.437581	.445400	.453274	.461196	.469167	.477185
.04	.291588	.357036	.709159	.721372	.733657	.746007	.758421	.770899

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6	2P 6
.05	.426767	.519852	1.010371	1.027117	1.043947	1.060850	1.077823	1.094868
.06	.575764	.697723	1.326985	1.348122	1.369344	1.390636	1.411997	1.433426
.07	.734371	.885335	1.647720	1.672902	1.698161	1.723478	1.748852	1.774280
.08	.899003	1.078226	1.963754	1.992502	2.021307	2.050149	2.079025	2.107933
.09	1.066620	1.272673	2.268318	2.300065	2.331843	2.363625	2.395411	2.427198
.10	1.234660	1.465598	2.556341	2.590477	2.624607	2.658706	2.692769	2.726795
.12	1.563796	1.837275	3.069238	3.106288	3.143243	3.180075	3.216781	3.253358
.14	1.873389	2.178485	3.485674	3.523291	3.560714	3.597912	3.634883	3.671625
.16	2.154926	2.480259	3.801246	3.837418	3.873294	3.908846	3.944071	3.978971
.18	2.403302	2.737891	4.019413	4.052543	4.085285	4.117613	4.149527	4.181029
.20	2.615962	2.949763	4.148308	4.177230	4.205688	4.233659	4.261146	4.288151
.22	2.792225	3.116439	4.198549	4.222500	4.245928	4.268817	4.291172	4.312998
.24	2.932760	3.239976	4.181745	4.200311	4.218319	4.235756	4.252630	4.268949
.26	3.039176	3.323399	4.109523	4.122583	4.135069	4.146975	4.158311	4.169085
.28	3.113712	3.370316	3.992917	4.000579	4.007670	4.014193	4.020157	4.025575
.30	3.158994	3.384624	3.842006	3.844552	3.846548	3.848004	3.848931	3.849342
.34	3.173196	3.331262	3.471879	3.465487	3.458629	3.451326	3.443592	3.435442
.38	3.104743	3.193760	3.056603	3.043358	3.029767	3.015860	3.001652	2.987157
.42	2.975232	2.999000	2.636172	2.618213	2.600040	2.581693	2.563183	2.544525
.46	2.803561	2.769236	2.236168	2.215416	2.194584	2.173711	2.152809	2.131889
.50	2.605457	2.522000	1.871234	1.849276	1.827355	1.805512	1.783755	1.762093
.54	2.393496	2.270511	1.548246	1.526296	1.504481	1.482841	1.461380	1.440103
.58	2.177374	2.024298	1.268873	1.247799	1.226936	1.206319	1.185950	1.165832
.62	1.964288	1.789861	1.031529	1.011900	.992535	.973465	.954690	.936209
.66	1.759353	1.571315	.832776	.814921	.797363	.780130	.763217	.746623
.70	1.565997	1.370948	.668290	.652355	.636736	.621451	.606497	.591968
.78	1.221416	1.027553	.423927	.411791	.399964	.388459	.377268	.366383
.86	.936674	.757404	.264561	.255727	.247168	.238888	.230877	.223129
.94	.708833	.551003	.162980	.156764	.150775	.145012	.139467	.134132
1.02	.530770	.396684	.099350	.095089	.091006	.087099	.083358	.079779
1.10	.394070	.283189	.060028	.057167	.054441	.051846	.049375	.047022
1.18	.290561	.200783	.035988	.034099	.032309	.030614	.029008	.027487
1.26	.213031	.141554	.021417	.020186	.019028	.017936	.016907	.015936
1.34	.155462	.099330	.012647	.011855	.011113	.010418	.009766	.009155
1.42	.113011	.069425	.007400	.006895	.006426	.005988	.005579	.005198
1.50	.081887	.048360	.004278	.003959	.003665	.003392	.003138	.002903
1.66	.042659	.023261	.001344	.001221	.001109	.001006	.000912	.000826
1.82	.022035	.011062	.000345	.000301	.000261	.000226	.000194	.000165
1.98	.011291	.005184	.000028	.000014	.000003	.000000	.000000	.000000
2.14	.005724	.002366	.000000	.000000	.000000	.000000	.000000	.000000
2.30	.002850	.001023	.000000	.000000	.000000			
2.46	.001370	.000388						
2.62	.000612	.000095						
2.78	.000244	.000000						
2.94	.000096	.000000						
3.10	.000037							
3.42	.000006							
3.74	.000001							
4.06	.000000							

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
-E	99.477	132.55	381.83	392.49	402.77	413.17	423.69	434.33
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.259188	.301048	.491832	.497806	.503778	.509749	.515718	.521687
.02	.450468	.517014	.802300	.810789	.819250	.827683	.836088	.844466
.03	.583554	.660966	.967228	.975695	.984095	.992428	1.000696	1.008897
.04	.667078	.744414	1.017053	1.023710	1.030256	1.036695	1.043028	1.049254

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2	3S 2
.05	.708692	.777473	.977534	.981193	.984705	.988072	.991297	.994380
.06	.715166	.769017	.870376	.870335	.870116	.869726	.869164	.868434
.07	.692485	.726809	.713787	.709721	.705460	.701009	.696372	.691549
.08	.645924	.657626	.522951	.514830	.506509	.497995	.489289	.480396
.09	.580122	.567367	.310450	.298469	.286295	.273936	.261395	.248677
.10	.499156	.461152	.086624	.071141	.055485	.039665	.023686	.007551
.12	.305534	.217953	-.362993	-.383978	-.405061	-.426234	-.447489	-.468822
.14	.088416	-.043527	-.776977	-.801102	-.825216	-.849310	-.873377	-.897412
.16	-.134690	-.302635	-1.125857	-1.150679	-1.175360	-1.199891	-1.224267	-1.248482
.18	-.350936	-.544825	-1.394129	-1.417385	-1.440362	-1.463053	-1.485454	-1.507561
.20	-.551178	-.760303	-1.576121	-1.595875	-1.615214	-1.634137	-1.652642	-1.670727
.22	-.729196	-.942948	-1.672882	-1.687593	-1.701768	-1.715412	-1.728526	-1.741108
.24	-.881058	-1.089442	-1.689870	-1.698412	-1.706318	-1.713601	-1.720262	-1.726306
.26	-1.004610	-1.198580	-1.635248	-1.636893	-1.637829	-1.638076	-1.637638	-1.636522
.28	-1.099063	-1.270720	-1.518643	-1.513027	-1.506658	-1.499562	-1.491748	-1.483224
.30	-1.164652	-1.307348	-1.350265	-1.337340	-1.323646	-1.309218	-1.294067	-1.278207
.34	-1.213768	-1.283654	-.898431	-.871746	-.844348	-.816284	-.787573	-.758232
.38	-1.165458	-1.150656	-.354226	-.316099	-.277410	-.238219	-.198548	-.158418
.42	-1.037270	-.934222	.221208	.267671	.314473	.361549	.408875	.456429
.46	-.847716	-.659474	.781900	.833357	.884891	.936437	.987971	1.039471
.50	-.614479	-.348942	1.296112	1.349374	1.402440	1.455249	1.507780	1.560013
.54	-.353436	-.021749	1.744193	1.796463	1.848274	1.899576	1.950351	2.000585
.58	-.078211	.306606	2.116076	2.165068	2.213369	2.260942	2.307774	2.353856
.62	.199938	.624092	2.408866	2.452848	2.495949	2.538145	2.579430	2.619802
.66	.472036	.921815	2.624746	2.662520	2.699272	2.734989	2.769675	2.803334
.70	.731203	1.193592	2.769248	2.800099	2.829835	2.858458	2.885978	2.912406
.78	1.192164	1.645482	2.875238	2.891671	2.906943	2.921081	2.934107	2.946043
.86	1.559890	1.968211	2.794798	2.797911	2.799971	2.801020	2.801089	2.800207
.94	1.828792	2.168362	2.593360	2.585544	2.576881	2.567421	2.557199	2.546247
1.02	2.004057	2.262082	2.324913	2.309017	2.292530	2.275499	2.257959	2.239942
1.10	2.096779	2.269337	2.029709	2.008505	1.986971	1.965146	1.943063	1.920750
1.18	2.120619	2.210378	1.735292	1.711177	1.686968	1.662698	1.638391	1.614071
1.26	2.089667	2.103771	1.458811	1.433685	1.408665	1.383770	1.359020	1.334431
1.34	2.017177	1.965463	1.209640	1.184901	1.160420	1.136208	1.112275	1.088634
1.42	1.914906	1.808492	.991703	.968299	.945260	.922589	.900291	.878370
1.50	1.792833	1.643079	.805366	.783874	.762816	.742186	.721985	.702211
1.66	1.520309	1.315506	.519225	.502236	.485726	.469678	.454085	.438938
1.82	1.245864	1.020622	.327046	.314410	.302219	.290452	.279099	.268148
1.98	.995026	.773454	.202465	.193453	.184818	.176540	.168605	.161001
2.14	.779136	.575811	.123696	.117460	.111528	.105877	.100494	.095369
2.30	.600782	.422910	.074789	.070571	.066587	.062815	.059246	.055868
2.46	.457718	.307435	.044829	.042025	.039395	.036922	.034596	.032409
2.62	.345455	.221773	.026662	.024822	.023110	.021510	.020014	.018617
2.78	.258824	.159079	.015731	.014535	.013432	.012408	.011458	.010575
2.94	.192829	.113658	.009194	.008423	.007719	.007069	.006470	.005918
3.10	.143057	.081003	.005305	.004811	.004365	.003956	.003582	.003239
3.42	.078104	.041030	.001716	.001523	.001352	.001198	.001059	.000934
3.74	.042445	.020844	.000541	.000469	.000408	.000353	.000305	.000262
4.06	.023096	.010687	.000167	.000142	.000120	.000102	.000086	.000072
4.38	.012640	.005554	.000050	.000042	.000035	.000029	.000024	.000019
4.70	.006980	.002931	.000015	.000012	.000010	.000008	.000006	.000005
5.02	.003893	.001567	.000004	.000004	.000003	.000002	.000002	.000001
5.34	.002191	.000843	.000001	.000001	.000001	.000001	.000000	.000000
5.66	.001238	.000451	.000000	.000000	.000000	.000000	.000000	.000000
5.98	.000695	.000239	.000000	.000000	.000000	.000000	.000000	.000000
6.30	.000381	.000126						
6.94	.000089	.000034						
7.58	.000000	.000009						
8.22	.000000	.000002						
8.86		.000001						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
-E	88.429	119.49	358.75	369.08	379.03	389.10	399.29	409.59
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.010550	.013441	.030201	.030817	.031438	.032064	.032696	.033333
.02	.039482	.050034	.109932	.112099	.114284	.116485	.118703	.120937
.03	.083101	.104744	.224949	.229229	.233539	.237878	.242245	.246641
.04	.138175	.173208	.363445	.370106	.376806	.383544	.390319	.397130
.05	.201885	.251668	.515712	.524792	.533917	.543082	.552288	.561534
.06	.271784	.336893	.673831	.685199	.696609	.708056	.719540	.731060
.07	.345751	.426121	.831419	.844816	.858243	.871698	.885179	.898685
.08	.421961	.517006	.983401	.998477	1.013567	1.028666	1.043773	1.058887
.09	.498845	.607563	1.125812	1.142160	1.158498	1.174821	1.191127	1.207414
.10	.575069	.696133	1.255632	1.272812	1.289950	1.307043	1.324089	1.341086
.12	.721196	.862047	1.469283	1.486762	1.504124	1.521366	1.538486	1.555482
.14	.853364	1.006535	1.613987	1.630017	1.645843	1.661463	1.676876	1.692081
.16	.966899	1.124472	1.686953	1.699995	1.712742	1.725196	1.737358	1.749226
.18	1.058922	1.213089	1.690497	1.699301	1.707724	1.715774	1.723451	1.730758
.20	1.127943	1.271387	1.630217	1.633853	1.637033	1.639773	1.642073	1.643938
.22	1.173530	1.299674	1.513658	1.511512	1.508855	1.505705	1.502068	1.497948
.24	1.196045	1.299200	1.349342	1.341099	1.332305	1.322990	1.313158	1.302817
.26	1.196432	1.271868	1.146089	1.131692	1.116729	1.101236	1.085219	1.068689
.28	1.176050	1.220013	.912544	.892159	.871216	.849755	.827786	.805321
.30	1.136532	1.146223	.656864	.630840	.604285	.577246	.549736	.521766
.34	1.007423	.943708	.108225	.072492	.036340	-.000173	-.037032	-.074220
.38	.824304	.685868	-.449696	-.492520	-.535589	-.578841	-.622259	-.665825
.42	.602152	.392693	-.979909	-1.026973	-1.074070	-1.121140	-1.168165	-1.215126
.46	.354688	.081575	-1.457504	-1.506055	-1.554415	-1.602526	-1.650373	-1.697940
.50	.093880	-.233083	-1.867687	-1.915287	-1.962477	-2.009206	-2.055461	-2.101232
.54	-.170244	-.539869	-2.203616	-2.248254	-2.292282	-2.335661	-2.378384	-2.420443
.58	-.429576	-.830149	-2.464342	-2.504473	-2.543828	-2.582380	-2.620127	-2.657068
.62	-.677802	-1.097738	-2.653035	-2.687576	-2.721213	-2.753932	-2.785737	-2.816633
.66	-.910216	-1.338544	-2.775540	-2.803828	-2.831124	-2.857429	-2.882752	-2.907104
.70	-1.123502	-1.550196	-2.839251	-2.860984	-2.881678	-2.901350	-2.920011	-2.937679
.78	-1.485103	-1.883178	-2.822781	-2.831633	-2.839467	-2.846316	-2.852205	-2.857157
.86	-1.756032	-2.100178	-2.667310	-2.664858	-2.661521	-2.657348	-2.652366	-2.646606
.94	-1.939732	-2.214418	-2.428232	-2.416851	-2.404793	-2.392106	-2.378822	-2.364973
1.02	-2.045352	-2.243429	-2.148652	-2.130912	-2.112730	-2.094150	-2.075203	-2.055918
1.10	-2.084722	-2.205615	-1.859355	-1.837639	-1.815711	-1.793610	-1.771360	-1.748987
1.18	-2.070374	-2.118267	-1.580559	-1.556870	-1.533175	-1.509501	-1.485869	-1.462298
1.26	-2.014329	-1.996553	-1.324216	-1.300110	-1.276166	-1.252402	-1.228831	-1.205467
1.34	-1.927441	-1.853139	-1.096281	-1.072881	-1.049771	-1.026959	-1.004452	-.982257
1.42	-1.819085	-1.698172	-.898619	-.876672	-.855102	-.833911	-.813099	-.792670
1.50	-1.697089	-1.539481	-.730494	-.710441	-.690820	-.671623	-.652849	-.634495
1.66	-1.436163	-1.232450	-.473158	-.457355	-.442014	-.427117	-.412657	-.398625
1.82	-1.180110	-.960031	-.300232	-.288446	-.277086	-.266131	-.255568	-.245387
1.98	-.948185	-.732558	-.187614	-.179156	-.171058	-.163300	-.155867	-.148750
2.14	-.748684	-.550263	-.115885	-.109982	-.104370	-.099025	-.093937	-.089096
2.30	-.583139	-.408394	-.070935	-.066901	-.063091	-.059486	-.056075	-.052849
2.46	-.449338	-.300341	-.043104	-.040390	-.037846	-.035452	-.033201	-.031086
2.62	-.343315	-.219364	-.026026	-.024223	-.022544	-.020974	-.019507	-.018136
2.78	-.260570	-.159415	-.015618	-.014430	-.013334	-.012313	-.011365	-.010485
2.94	-.196750	-.115444	-.009306	-.008528	-.007818	-.007159	-.006551	-.005991
3.10	-.147980	-.083419	-.005493	-.004985	-.004531	-.004108	-.003720	-.003364
3.42	-.083065	-.043463	-.001817	-.001604	-.001480	-.001313	-.001162	-.001026
3.74	-.046400	-.022728	-.000504	-.000415	-.000471	-.000409	-.000354	-.000305
4.06	-.025933	-.012012	-.000054	-.000019	-.000146	-.000124	-.000105	-.000089
4.38	-.014569	-.006456	.000000	.000000	-.000045	-.000037	-.000031	-.000025

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6	3P 6
4.70	-.008260	-.003548	.000000	.000000	-.000013	-.000011	-.000009	-.000007
5.02	-.004742	-.002002			-.000004	-.000003	-.000003	-.000002
5.34	-.002765	-.001162			-.000001	-.000001	-.000001	-.000001
5.66	-.001639	-.000694			.000000	.000000	.000000	.000000
5.98	-.000989	-.000426			.000000	.000000	.000000	.000000
6.30	-.000606	-.000267						
6.94	-.000235	-.000110						
7.58	-.000092	-.000047						
8.22	-.000035	-.000020						
8.86	-.000013	-.000008						
9.50	-.000005	-.000003						
10.14	-.000002	-.000001						
10.78	-.000001	-.000001						
11.42	.000000	.000000						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
-E	68.111	95.489	316.17	325.89	335.23	344.68	354.25	363.94
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000079	.000113	.000366	.000377	.000388	.000399	.000411	.000422
.02	.000605	.000862	.002756	.002836	.002917	.003000	.003084	.003169
.03	.001955	.002776	.008745	.008995	.009249	.009508	.009770	.010037
.04	.004436	.006279	.019497	.020046	.020604	.021171	.021746	.022330
.05	.008299	.011706	.035828	.036821	.037830	.038854	.039894	.040948
.06	.013738	.019311	.058264	.059854	.061469	.063106	.064767	.066451
.07	.020903	.029283	.087095	.089434	.091808	.094214	.096654	.099125
.08	.029904	.041751	.122412	.125647	.128928	.132253	.135620	.139031
.09	.040816	.056791	.164150	.168417	.172743	.177124	.181558	.186047
.10	.053682	.074439	.212115	.217538	.223032	.228593	.234220	.239912
.12	.085323	.117515	.325472	.333515	.341654	.349882	.358197	.366600
.14	.124715	.170611	.459319	.470277	.481355	.492539	.503830	.515225
.16	.171475	.233002	.609810	.623841	.638008	.652294	.666698	.681218
.18	.225034	.303729	.772836	.789964	.807238	.824635	.842155	.859794
.20	.284696	.381688	.944310	.964444	.984722	1.005121	1.025636	1.046265
.22	.349690	.465702	1.120356	1.143304	1.166386	1.189575	1.212866	1.236257
.24	.419206	.554572	1.297431	1.322921	1.348526	1.374215	1.399983	1.425826
.26	.492425	.647120	1.472389	1.500089	1.527876	1.555715	1.583601	1.611530
.28	.568540	.742213	1.642510	1.672046	1.701631	1.731230	1.760837	1.790446
.30	.646774	.838784	1.805508	1.836479	1.867456	1.898400	1.929306	1.960168
.34	.806699	1.032499	2.103059	2.135663	2.168167	2.200533	2.232755	2.264829
.38	.966903	1.221419	2.354631	2.387267	2.419684	2.451849	2.483756	2.515402
.42	1.122964	1.400131	2.555020	2.586255	2.617150	2.647679	2.677840	2.707628
.46	1.271345	1.564596	2.703067	2.731709	2.759898	2.787619	2.814870	2.841649
.50	1.409349	1.712001	2.800554	2.825685	2.850267	2.874294	2.897767	2.920688
.54	1.535032	1.840598	2.851252	2.872230	2.892583	2.912316	2.931432	2.949937
.58	1.647105	1.949516	2.860151	2.876590	2.892350	2.907449	2.921892	2.935689
.62	1.744839	2.038597	2.832859	2.844596	2.855627	2.865978	2.875659	2.884680
.66	1.827960	2.108238	2.775157	2.782220	2.788572	2.794248	2.799260	2.803624
.70	1.896567	2.159252	2.692692	2.695256	2.697128	2.698348	2.698931	2.698895
.78	1.992007	2.210055	2.474196	2.468715	2.462632	2.455996	2.448826	2.441142
.86	2.036536	2.201879	2.213741	2.201879	2.189559	2.176828	2.163708	2.150219
.94	2.037352	2.146653	1.938943	1.922515	1.905797	1.888829	1.871631	1.854224
1.02	2.002260	2.055937	1.669092	1.649803	1.630397	1.610897	1.591325	1.571698
1.10	1.938896	1.940142	1.416481	1.395790	1.375136	1.354533	1.333997	1.313543
1.18	1.854289	1.808184	1.187986	1.167050	1.146280	1.125679	1.105262	1.085036
1.26	1.754633	1.667393	.986572	.966242	.946180	.926379	.906847	.887590
1.34	1.645208	1.523587	.812549	.793408	.774605	.756127	.737979	.720160
1.42	1.530392	1.381219	.664563	.646965	.629750	.612901	.596417	.580294

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10	3D 10
1.50	1.413722	1.243564	.540320	.524445	.508976	.493892	.479188	.464859
1.66	1.185266	.990732	.352073	.339706	.327740	.316151	.304931	.294070
1.82	.974721	.774712	.226027	.216797	.207924	.199385	.191170	.183268
1.98	.789367	.597087	.143519	.136839	.130456	.124351	.118513	.112931
2.14	.631451	.455044	.090387	.085661	.081171	.076902	.072843	.068986
2.30	.500159	.343787	.056581	.053295	.050188	.047251	.044476	.041854
2.46	.393023	.258004	.035263	.033006	.030883	.028887	.027011	.025250
2.62	.306861	.192650	.021906	.020371	.018932	.017587	.016330	.015156
2.78	.238353	.143318	.013577	.012539	.011569	.010666	.009827	.009050
2.94	.184373	.106341	.008398	.007699	.007046	.006442	.005883	.005368
3.10	.142145	.078776	.005184	.004713	.004273	.003868	.003494	.003155
3.42	.083871	.043160	.001952	.001737	.001534	.001348	.001179	.001062
3.74	.049169	.023714	.000706	.000606	.000508	.000419	.000338	.000348
4.06	.028729	.013142	.000234	.000177	.000128	.000082	.000042	.000012
4.38	.016769	.007389	.000075	.000025	.000000	.000000	.000000	.000035
4.70	.009798	.004241	.000024	.000000	.000000	.000000	.000000	.000011
5.02	.005740	.002501	.000008	.000000				.000003
5.34	.003376	.001524	.000002					.000001
5.66	.001996	.000964	.000001					.000000
5.98	.001187	.000634	.000000					.000000
6.30	.000711	.000434	.000000					
6.94	.000259	.000226						
7.58	.000095	.000132						
8.22	.000034	.000084						
8.86	.000012	.000056						
9.50	.000004	.000038						
10.14	.000001	.000027						
10.78	.000000	.000020						
11.42	.000000	.000015						
12.06		.000011						
12.70		.000008						
13.98		.000005						
15.26		.000003						
16.54		.000002						
17.82		.000001						
19.10		.000001						
20.38		.000000						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
-E	21.007	27.437	101.94	105.61	108.80	112.02	115.28	118.57
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.121881	.144047	.258107	.261882	.265637	.269391	.273142	.276892
.02	.211781	.247315	.420783	.426273	.431713	.437133	.442534	.447915
.03	.274241	.316014	.506707	.512378	.517966	.523509	.529006	.534459
.04	.313301	.355631	.531819	.536571	.541209	.545774	.550266	.554685
.05	.332554	.371002	.509674	.512758	.515705	.518552	.521302	.523953
.06	.335187	.366380	.451743	.452700	.453501	.454182	.454744	.455189
.07	.324024	.345496	.367695	.366289	.364720	.363017	.361182	.359217
.08	.301558	.311619	.265627	.261805	.257820	.253696	.249436	.245040
.09	.269990	.267601	.152277	.146124	.139818	.133375	.126799	.120092
.10	.231257	.215925	.033208	.024912	.016483	.007927	-.000750	-.009546
.12	.138876	.097912	-.204788	-.216523	-.228329	-.240217	-.252181	-.264217
.14	.035584	-.028533	-.421816	-.435606	-.449383	-.463171	-.476967	-.490764
.16	-.070212	-.153279	-.601795	-.616168	-.630429	-.644618	-.658728	-.672756
.18	-.172311	-.269153	-.736262	-.749825	-.763174	-.776358	-.789373	-.802214

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
.20	-.266283	-.371308	-.822191	-.833731	-.844959	-.855931	-.866644	-.877095
.22	-.349104	-.456707	-.860333	-.868872	-.877009	-.884809	-.892270	-.899390
.24	-.418860	-.523706	-.853962	-.858773	-.863112	-.867045	-.870573	-.873696
.26	-.474504	-.571727	-.807933	-.808544	-.808632	-.808264	-.807443	-.806172
.28	-.515662	-.600981	-.727989	-.724164	-.719788	-.714927	-.709585	-.703769
.30	-.542471	-.612264	-.620251	-.611966	-.603126	-.593792	-.583973	-.573677
.34	-.555394	-.585995	-.345713	-.329134	-.312061	-.294544	-.276596	-.258230
.38	-.520259	-.505228	-.029677	-.006491	.017043	.040895	.065048	.089484
.42	-.446184	-.383824	.290214	.317697	.345322	.373081	.400952	.428916
.46	-.342873	-.235374	.585464	.614703	.643842	.672893	.701833	.730642
.50	-.219679	-.072189	.836446	.864960	.893119	.920953	.948441	.975565
.54	-.085075	.095185	1.031291	1.056857	1.081820	1.106227	1.130063	1.153311
.58	.053599	.258132	1.164459	1.185230	1.205175	1.224357	1.242766	1.260391
.62	.190234	.409932	1.235287	1.249846	1.263397	1.276014	1.287692	1.298426
.66	.319928	.545613	1.246658	1.254032	1.260263	1.265433	1.269542	1.272595
.70	.438911	.661747	1.203873	1.203508	1.201918	1.199187	1.195325	1.190341
.78	.634601	.828025	.983759	.967711	.950436	.932006	.912447	.891783
.86	.765077	.903737	.635318	.605184	.574008	.541839	.508715	.474675
.94	.828178	.895059	.217044	.175865	.133968	.091372	.048122	.004264
1.02	.828266	.814394	-.222045	-.270580	-.319426	-.368602	-.418057	-.467744
1.10	.773475	.676855	-.645002	-.697156	-.749191	-.801156	-.853003	-.904687
1.18	.673719	.497951	-1.026722	-1.079107	-1.130962	-1.182361	-1.233264	-1.283632
1.26	.539357	.292186	-1.352305	-1.402104	-1.451014	-1.499126	-1.546410	-1.592836
1.34	.380333	.072302	-1.614929	-1.659983	-1.703859	-1.746659	-1.788363	-1.828953
1.42	.205676	-.151050	-1.813711	-1.852514	-1.889930	-1.926064	-1.960907	-1.994454
1.50	.023243	-.369361	-1.951824	-1.983462	-2.013588	-2.042296	-2.069593	-2.095486
1.66	-.339824	-.766758	-2.070181	-2.086673	-2.101615	-2.115075	-2.127082	-2.137666
1.82	-.670616	-1.088366	-2.026962	-2.029452	-2.030577	-2.030368	-2.028873	-2.026139
1.98	-.947669	-1.323623	-1.879505	-1.870641	-1.860728	-1.849766	-1.837812	-1.824924
2.14	-1.162180	-1.475320	-1.675281	-1.658213	-1.640466	-1.622018	-1.602928	-1.583254
2.30	-1.313968	-1.553568	-1.449250	-1.427006	-1.404451	-1.381546	-1.358348	-1.334908
2.46	-1.408116	-1.571580	-1.224818	-1.199978	-1.175150	-1.150290	-1.125445	-1.100656
2.62	-1.452463	-1.543004	-1.016097	-.990662	-.965502	-.940569	-.915897	-.891519
2.78	-1.455863	-1.480432	-.830395	-.805792	-.781658	-.757943	-.734672	-.711862
2.94	-1.427081	-1.394696	-.670381	-.647532	-.625280	-.603578	-.582434	-.561956
3.10	-1.374161	-1.294660	-.535799	-.515219	-.495310	-.476022	-.457354	-.439303
3.42	-1.222800	-1.077833	-.334385	-.318770	-.303849	-.289567	-.275907	-.262851
3.74	-1.044463	-.866886	-.204060	-.192931	-.182424	-.172476	-.163062	-.154157
4.06	-.865916	-.679880	-.122720	-.115114	-.108025	-.101380	-.095152	-.089317
4.38	-.701925	-.523231	-.073157	-.068105	-.063463	-.059151	-.055147	-.051428
4.70	-.559187	-.396907	-.043428	-.040134	-.037157	-.034416	-.031891	-.029566
5.02	-.439433	-.297753	-.025767	-.023642	-.021761	-.020042	-.018471	-.017034
5.34	-.341603	-.221465	-.015327	-.013962	-.012784	-.011715	-.010745	-.009864
5.66	-.263270	-.163650	-.009160	-.008283	-.007549	-.006887	-.006290	-.005751
5.98	-.201511	-.120343	-.005509	-.004942	-.004484	-.004075	-.003708	-.003378
6.30	-.153409	-.088192	-.003336	-.002964	-.002679	-.002426	-.002199	-.001997
6.94	-.087901	-.047109	-.001241	-.001073	-.000961	-.000844	-.000760	-.000685
7.58	-.049934	-.025167	-.000455	-.000373	-.000329	-.000284	-.000254	-.000227
8.22	-.028317	-.013559	-.000154	-.000105	-.000088	-.000093	-.000082	-.000073
8.86	-.016131	-.007430	-.000050	-.000006	.000000	-.000030	-.000026	-.000023
9.50	-.009289	-.004176	-.000016	.000000	.000000	-.000009	-.000008	-.000007
10.14	-.005442	-.002426	-.000005	.000000		-.000003	-.000002	-.000002
10.78	-.003263	-.001466	-.000002			-.000001	-.000001	-.000001
11.42	-.002013	-.000925	-.000000			.000000	.000000	.000000
12.06	-.001283	-.000608	.000000			.000000	.000000	.000000
12.70	-.000847	-.000415						
13.98	-.000406	-.000212						
15.26	-.000216	-.000117						
16.54	-.000123	-.000068						
17.82	-.000073	-.000040						



	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2	4S 2
X								
19.10	-.000045	-.000024	.000000	.000000	.000000	.000000	.000000	.000000
20.38	-.000028	-.000015						
21.66	-.000017	-.000009						
22.94	-.000011	-.000006						
24.22	-.000007	-.000004						
25.50	-.000005	-.000002						
28.06	-.000002	-.000001						
30.62	-.000001	-.000000						
33.18	.000000	.000000						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
-E	16.711	22.150	90.961	94.430	97.426	100.45	103.51	106.60
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.004852	.006317	.015866	.016236	.016607	.016982	.017360	.017742
.02	.018157	.023511	.057737	.059041	.060351	.061673	.063005	.064347
.03	.038208	.049207	.118082	.120666	.123260	.125873	.128505	.131154
.04	.063512	.081342	.190636	.194671	.198717	.202788	.206882	.211000
.05	.092763	.118134	.270227	.275747	.281274	.286828	.292408	.298014
.06	.124824	.158047	.352621	.359554	.366487	.373444	.380425	.387429
.07	.158709	.199767	.434396	.442591	.450774	.458974	.467191	.475424
.08	.193566	.242172	.512818	.522070	.531291	.540518	.549750	.558985
.09	.228663	.284315	.585751	.595814	.605824	.615824	.625813	.635789
.10	.263375	.325397	.651564	.662171	.672698	.683195	.693661	.704092
.12	.329610	.401857	.757396	.768251	.778968	.789603	.800155	.810623
.14	.388993	.467600	.824758	.834775	.844588	.854260	.863791	.873178
.16	.439326	.520162	.852268	.860479	.868420	.876159	.883695	.891029
.18	.479255	.558218	.841404	.847013	.852294	.857316	.862077	.866580
.20	.508087	.581311	.795507	.797922	.799960	.801688	.803109	.804223
.22	.525635	.589628	.719056	.717887	.716306	.714378	.712106	.709494
.24	.532096	.583827	.617118	.612170	.606791	.601043	.594931	.588459
.26	.527949	.564897	.494962	.486216	.477041	.467489	.457569	.447287
.28	.513880	.534047	.357779	.345373	.332555	.319372	.305832	.291946
.30	.490711	.492624	.210501	.194699	.178522	.162007	.145165	.128007
.34	.420776	.383728	-.096627	-.118033	-.139696	-.161594	-.183714	-.206042
.38	.325854	.249510	-.395765	-.420782	-.445882	-.471065	-.496315	-.521617
.42	.213598	.100555	-.664187	-.690603	-.716895	-.743085	-.769155	-.795091
.46	.091080	-.053849	-.886673	-.912313	-.937607	-.962599	-.987271	-1.011609
.50	-.035478	-.205946	-1.054481	-1.077377	-1.099713	-1.121546	-1.142863	-1.163652
.54	-.160822	-.349548	-1.164094	-1.182597	-1.200344	-1.217406	-1.233774	-1.249440
.58	-.280675	-.479961	-1.215985	-1.228816	-1.240728	-1.251799	-1.262028	-1.271410
.62	-.391691	-.593830	-1.213497	-1.219761	-1.224980	-1.229241	-1.232547	-1.234901
.66	-.491370	-.688968	-1.161896	-1.161063	-1.159106	-1.156115	-1.152098	-1.147064
.70	-.577962	-.764169	-1.067600	-1.059475	-1.050197	-1.039848	-1.028446	-1.016006
.78	-.707995	-.853800	-.778927	-.756748	-.733488	-.709212	-.683951	-.657733
.86	-.778850	-.866349	-.402714	-.368542	-.333515	-.297671	-.261048	-.223687
.94	-.793372	-.811487	.012187	.055311	.098957	.143121	.187758	.232824
1.02	-.757872	-.701778	.427105	.475784	.524594	.573568	.622658	.671820
1.10	-.680418	-.550553	.814221	.865152	.915813	.966268	1.016473	1.066386
1.18	-.569662	-.370595	1.155578	1.205839	1.255455	1.304514	1.352981	1.400819
1.26	-.434083	-.173390	1.441358	1.488560	1.534793	1.580163	1.624644	1.668208
1.34	-.281520	.031231	1.667989	1.710324	1.751435	1.791436	1.830308	1.868040
1.42	-.118929	.235203	1.836375	1.872601	1.907421	1.940947	1.973176	2.004104
1.50	.047726	.432175	1.950391	1.979772	2.007638	2.034094	2.059147	2.082809
1.66	.374368	.787419	2.038831	2.053941	2.067514	2.079625	2.090305	2.099587
1.82	.669859	1.074240	1.985549	1.987507	1.988106	1.987388	1.985400	1.982190
1.98	.918292	1.285716	1.841046	1.832257	1.822413	1.811521	1.799639	1.786825
2.14	1.113221	1.424935	1.646649	1.629967	1.612588	1.594493	1.575742	1.556395

	CE 58	TR 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6	4P 6
2.30	1.254673	1.500487	1.432823	1.411017	1.388873	1.366354	1.343517	1.320417
2.46	1.346691	1.523298	1.220148	1.195613	1.171064	1.146452	1.121828	1.097238
2.62	1.395478	1.504633	1.021253	.995886	.970775	.945864	.921192	.896793
2.78	1.408094	1.454953	.842891	.818083	.793738	.769795	.746280	.723216
2.94	1.391615	1.383359	.687749	.664435	.641728	.619565	.597959	.576918
3.10	1.352631	1.297414	.555889	.534627	.514062	.494127	.474822	.456146
3.42	1.229665	1.105349	.355245	.338685	.322874	.307735	.293251	.279403
3.74	1.075813	.912067	.222206	.210079	.198648	.187824	.177580	.167890
4.06	.915271	.735234	.137015	.128498	.120578	.113155	.106200	.099686
4.38	.762471	.582428	.083729	.077918	.072595	.067653	.063066	.058808
4.70	.624951	.455287	.050919	.047033	.043533	.040313	.037350	.034623
5.02	.505755	.352280	.030923	.028358	.026093	.024027	.022141	.020419
5.34	.405185	.270439	.018808	.017128	.015679	.014368	.013180	.012103
5.66	.322014	.206361	.011487	.010389	.009470	.008643	.007900	.007230
5.98	.254281	.156747	.007061	.006343	.005762	.005243	.004780	.004364
6.30	.199776	.118663	.004378	.003904	.003538	.003213	.002924	.002667
6.94	.121950	.067588	.001735	.001523	.001377	.001249	.001137	.001037
7.58	.073748	.038383	.000719	.000617	.000559	.000508	.000464	.000424
8.22	.044405	.021845	.000310	.000257	.000233	.000213	.000195	.000179
8.86	.026726	.012514	.000136	.000106	.000096	.000088	.000082	.000075
9.50	.016129	.007242	.000059	.000040	.000037	.000034	.000032	.000029
10.14	.009787	.004247	.000025	.000012	.000011	.000010	.000010	.000011
10.78	.005983	.002529	.000010	.000001	.000001	.000001	.000001	.000004
11.42	.003691	.001531	.000004	.000000	.000000	.000000	.000000	.000001
12.06	.002299	.000942	.000002	.000000	.000000	.000000	.000000	.000000
12.70	.001447	.000588	.000001					.000000
13.98	.000587	.000235	.000000					
15.26	.000240	.000092	.000000					
16.54	.000095	.000031						
17.82	.000036	.000005						
19.10	.000014	.000000						
20.38	.000005	.000000						
21.66	.000002							
22.94	.000001							
24.22	.000000							

	CE 58	TR 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
-E	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
X	9.0860	12.676	70.591	73.684	76.304	78.952	81.630	84.337
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000036	.000053	.000206	.000213	.000220	.000228	.000235	.000242
.02	.000273	.000406	.001552	.001603	.001655	.001708	.001763	.001818
.03	.000883	.001306	.004922	.005083	.005247	.005413	.005582	.005754
.04	.002004	.002954	.010969	.011323	.011682	.012047	.012418	.012796
.05	.003748	.005506	.020145	.020785	.021435	.022096	.022767	.023448
.06	.006204	.009080	.032735	.033761	.034801	.035858	.036931	.038020
.07	.009436	.013764	.048887	.050398	.051929	.053482	.055058	.056657
.08	.013495	.019615	.068637	.070727	.072843	.074989	.077165	.079371
.09	.018412	.026668	.091926	.094683	.097471	.100298	.103163	.106066
.10	.024206	.034934	.118619	.122122	.125662	.129249	.132882	.136560
.12	.038433	.055074	.181403	.186590	.191825	.197122	.202480	.207898
.14	.056106	.079824	.254956	.262004	.269108	.276286	.283535	.290855
.16	.077027	.108800	.336837	.345825	.354869	.363992	.373194	.382472
.18	.100912	.141500	.424441	.435349	.446307	.457345	.468460	.479650
.20	.127416	.177352	.515172	.527895	.540654	.553484	.566383	.579347
.22	.156156	.215745	.606563	.620921	.635292	.649718	.664194	.678719
.24	.186732	.256055	.696350	.712102	.727835	.743597	.759384	.775193
.26	.218739	.297670	.782521	.799377	.816173	.832966	.849751	.866523
.28	.251776	.339998	.863335	.880971	.898500	.915985	.933419	.950800

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
.30	.285456	.382481	.937332	.955400	.973309	.991126	1.008846	1.026463
.34	.353297	.465881	1.060387	1.078247	1.095825	1.113202	1.130373	1.147331
.38	.419609	.544261	1.145220	1.161469	1.177305	1.192819	1.208006	1.222860
.42	.482159	.614756	1.188915	1.202282	1.215107	1.227487	1.239419	1.250900
.46	.539157	.675227	1.191385	1.200804	1.209562	1.217762	1.225401	1.232481
.50	.589234	.724197	1.154662	1.159307	1.163194	1.166424	1.168999	1.170923
.54	.631404	.760775	1.082250	1.081552	1.080022	1.077759	1.074771	1.071064
.58	.665026	.784559	.978591	.972225	.964984	.956961	.948168	.938616
.62	.689752	.795555	.848622	.836491	.823473	.809653	.795047	.779671
.66	.705479	.794093	.697443	.679649	.660988	.641534	.621308	.600329
.70	.712311	.780750	.530068	.506881	.482878	.458119	.432630	.406434
.78	.700464	.721605	.165374	.132721	.099435	.065545	.031081	-.003925
.86	.657641	.625493	-.212320	-.252133	-.292310	-.332862	-.373752	-.414945
.94	.588374	.500566	-.577339	-.621713	-.666133	-.710648	-.755220	-.799812
1.02	.497635	.354870	-.911554	-.957916	-1.003992	-1.049864	-1.095495	-1.140851
1.10	.390382	.195829	-1.203541	-1.249566	-1.294983	-1.339903	-1.384294	-1.428128
1.18	.271289	.029973	-1.447381	-1.491107	-1.533941	-1.576010	-1.617291	-1.657762
1.26	.144589	-.137171	-1.641370	-1.681257	-1.720014	-1.757780	-1.794541	-1.830285
1.34	.014004	-.301085	-1.786836	-1.821762	-1.855379	-1.887826	-1.919101	-1.949201
1.42	-.117281	-.458209	-1.887128	-1.916363	-1.944166	-1.970673	-1.995892	-2.019830
1.50	-.246605	-.605852	-1.946814	-1.969965	-1.991619	-2.011902	-2.030831	-2.048426
1.66	-.491162	-.865676	-1.965206	-1.976087	-1.985492	-1.993515	-2.000193	-2.005563
1.82	-.707514	-1.072479	-1.883619	-1.883337	-1.881759	-1.878939	-1.874929	-1.869781
1.98	-.889275	-1.225494	-1.738987	-1.729505	-1.719006	-1.707508	-1.695072	-1.681758
2.14	-1.034337	-1.328488	-1.560598	-1.544185	-1.527085	-1.509284	-1.490847	-1.471834
2.30	-1.143543	-1.387650	-1.369890	-1.348770	-1.327301	-1.305443	-1.283259	-1.260806
2.46	-1.219601	-1.410115	-1.181477	-1.157619	-1.133729	-1.109746	-1.085725	-1.061717
2.62	-1.266242	-1.403019	-1.004519	-.979543	-.954809	-.930242	-.905885	-.881778
2.78	-1.287629	-1.372970	-.844118	-.819268	-.794883	-.770877	-.747278	-.724114
2.94	-1.287942	-1.325774	-.702494	-.678662	-.655467	-.632807	-.610700	-.589160
3.10	-1.271139	-1.266357	-.579947	-.557721	-.536252	-.515427	-.495249	-.475721
3.42	-1.200115	-1.126321	-.387809	-.369632	-.352324	-.335749	-.319889	-.304726
3.74	-1.098092	-.976473	-.254475	-.240452	-.227290	-.214831	-.203044	-.191901
4.06	-.981967	-.830962	-.164806	-.154413	-.144807	-.135811	-.127391	-.119512
4.38	-.863085	-.697418	-.105782	-.098298	-.091495	-.085189	-.079345	-.073930
4.70	-.748579	-.579248	-.067505	-.062227	-.057518	-.053195	-.049226	-.045583
5.02	-.642552	-.477284	-.042937	-.039270	-.036068	-.033155	-.030506	-.028095
5.34	-.547035	-.390885	-.027276	-.024757	-.022610	-.020675	-.018929	-.017355
5.66	-.462689	-.318652	-.017337	-.015620	-.014197	-.012925	-.011789	-.010771
5.98	-.389321	-.258866	-.011045	-.009879	-.008945	-.008118	-.007384	-.006732
6.30	-.326235	-.209761	-.007063	-.006273	-.005666	-.005132	-.004663	-.004248
6.94	-.226991	-.137066	-.002939	-.002574	-.002324	-.002108	-.001920	-.001756
7.58	-.156659	-.089307	-.001263	-.001091	-.000992	-.000908	-.000836	-.000773
8.22	-.107624	-.058206	-.000566	-.000481	-.000445	-.000414	-.000388	-.000366
8.86	-.073780	-.038036	-.000266	-.000221	-.000210	-.000200	-.000193	-.000186
9.50	-.050564	-.024967	-.000132	-.000105	-.000104	-.000103	-.000102	-.000101
10.14	-.034690	-.016488	-.000068	-.000051	-.000053	-.000055	-.000056	-.000057
10.78	-.023852	-.010967	-.000037	-.000025	-.000028	-.000030	-.000032	-.000034
11.42	-.016450	-.007357	-.000020	-.000012	-.000015	-.000017	-.000019	-.000020
12.06	-.011389	-.004981	-.000011	-.000006	-.000008	-.000009	-.000011	-.000012
12.70	-.007921	-.003406	-.000007	-.000003	-.000004	-.000005	-.000006	-.000007
13.98	-.003892	-.001644	-.000002	-.000001	-.000001	-.000001	-.000002	-.000002
15.26	-.001960	-.000829	-.000001	.000000	.000000	-.000000	-.000001	-.000000
16.54	-.001013	-.000435	.000000	.000000	.000000	.000000	.000000	.000000
17.82	-.000539	-.000237	.000000	.000000	.000000	.000000	.000000	.000000
19.10	-.000294	-.000133						
20.38	-.000164	-.000076						
21.66	-.000094	-.000044						
22.94	-.000054	-.000026						
24.22	-.000032	-.000016						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10	4D 10
X								
25.50	-.000019	-.000009	.000000	.000000	.000000	.000000	.000000	.000000
28.06	-.000006	-.000003						
30.62	-.000002	-.000001						
33.18	-.000001	.000000						
35.74	.000000	.000000						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	4F 2	4F 9	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
-E	.86252	1.3015	42.178	44.722	46.795	48.896	51.025	53.182
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.000000	.000000	.000001	.000001	.000001	.000001	.000001	.000001
.02	.000001	.000001	.000011	.000011	.000012	.000012	.000013	.000013
.03	.000003	.000006	.000052	.000054	.000057	.000060	.000062	.000065
.04	.000009	.000018	.000156	.000164	.000172	.000180	.000188	.000196
.05	.000021	.000043	.000364	.000382	.000400	.000418	.000437	.000457
.06	.000042	.000086	.000722	.000757	.000792	.000829	.000866	.000904
.07	.000076	.000153	.001280	.001340	.001403	.001466	.001532	.001600
.08	.000126	.000253	.002088	.002186	.002287	.002391	.002497	.002606
.09	.000196	.000391	.003200	.003349	.003502	.003660	.003822	.003988
.10	.000289	.000576	.004667	.004883	.005105	.005333	.005567	.005807
.12	.000564	.001119	.008868	.009272	.009687	.010114	.010551	.010999
.14	.000983	.001941	.015066	.015744	.016439	.017152	.017882	.018631
.16	.001580	.003103	.023592	.024638	.025710	.026809	.027934	.029085
.18	.002385	.004661	.034716	.036233	.037786	.039377	.041005	.042670
.20	.003428	.006667	.048647	.050742	.052886	.055079	.057321	.059613
.22	.004736	.009167	.065533	.068314	.071158	.074064	.077033	.080065
.24	.006334	.012200	.085462	.089036	.092687	.096415	.100220	.104103
.26	.008243	.015802	.108468	.112936	.117497	.122150	.126896	.131734
.28	.010483	.019998	.134532	.139989	.145556	.151232	.157014	.162905
.30	.013068	.024811	.163590	.170126	.176786	.183571	.190478	.197507
.34	.019325	.036344	.230249	.239165	.248235	.257458	.266832	.276355
.38	.027086	.050465	.307257	.318780	.330480	.342357	.354408	.366630
.42	.036385	.067159	.393063	.407327	.421785	.436434	.451272	.466294
.46	.047218	.086348	.485908	.502957	.520203	.537647	.555284	.573107
.50	.059553	.107903	.583952	.603741	.623722	.643894	.664251	.684787
.54	.073335	.131658	.685365	.707776	.730359	.753116	.776038	.799118
.58	.088488	.157415	.788407	.813255	.838243	.863376	.888643	.914035
.62	.104923	.184959	.891469	.918517	.945663	.972910	1.000249	1.027670
.66	.122539	.214066	.993107	1.022078	1.051091	1.080155	1.109256	1.138385
.70	.141230	.244506	1.092054	1.122643	1.153207	1.183761	1.214290	1.244782
.78	.181391	.308478	1.277737	1.310574	1.343234	1.375736	1.408068	1.440216
.86	.224515	.375137	1.441992	1.475744	1.509145	1.542224	1.574968	1.607365
.94	.269746	.442909	1.580870	1.614272	1.647144	1.679523	1.711397	1.742757
1.02	.316289	.510425	1.692565	1.724496	1.755723	1.786291	1.816191	1.845419
1.10	.363433	.576532	1.776941	1.806462	1.835124	1.862974	1.890011	1.916234
1.18	.410550	.640286	1.835082	1.861456	1.886839	1.911280	1.934784	1.957357
1.26	.457099	.700938	1.868900	1.891590	1.913183	1.933730	1.953243	1.971734
1.34	.502616	.757914	1.880812	1.899463	1.916942	1.933298	1.948552	1.962724
1.42	.546712	.810799	1.873488	1.887908	1.901109	1.913141	1.924032	1.933809
1.50	.589068	.859318	1.849661	1.859795	1.868693	1.876404	1.882963	1.888403
1.66	.667590	.942727	1.763007	1.764837	1.765475	1.764969	1.763366	1.760713
1.82	.736789	1.008008	1.640060	1.634447	1.627773	1.620085	1.611442	1.601899
1.98	.796024	1.056133	1.496496	1.484656	1.471949	1.458425	1.444148	1.429181
2.14	.845235	1.088737	1.344303	1.327594	1.310253	1.292330	1.273894	1.255010
2.30	.884789	1.107773	1.192167	1.171937	1.151330	1.130394	1.109197	1.087803
2.46	.915331	1.115268	1.046027	1.023520	1.000887	.978116	.955452	.932771
2.62	.937671	1.113169	.909651	.885945	.862349	.838911	.815683	.792713
2.78	.952692	1.103252	.785153	.761138	.737443	.714112	.691184	.668695
2.94	.961284	1.087083	.673437	.649810	.626684	.604091	.582058	.560607

	CE 58	T8 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	4F 2	4F 9	4F 14	4F 14	4F 14	4F 14	4F 14	4F 14
3.10	.964304	1.066012	.574561	.551839	.529766	.508359	.487630	.467589
3.42	.956740	1.013539	.412954	.392992	.373881	.355591	.338112	.321429
3.74	.935475	.952843	.293053	.276367	.260622	.245739	.231687	.218433
4.06	.904804	.888654	.206124	.192658	.180141	.168445	.157527	.147345
4.38	.867986	.824075	.144103	.133510	.123820	.114864	.106595	.098966
4.70	.827450	.761076	.100349	.092175	.084823	.078101	.071959	.066351
5.02	.784983	.700855	.069726	.063510	.058021	.053054	.048562	.044502
5.34	.741886	.644087	.048412	.043739	.039694	.036070	.032825	.029922
5.66	.699091	.591098	.033635	.030152	.027203	.024587	.022267	.020213
5.98	.657252	.541980	.023414	.020836	.018706	.016834	.015191	.013749
6.30	.616814	.496679	.016354	.014455	.012929	.011600	.010445	.009442
6.94	.541179	.416874	.008111	.007089	.006322	.005667	.005108	.004634
7.58	.473278	.349997	.004162	.003612	.003237	.002923	.002660	.002443
8.22	.413168	.294152	.002248	.001946	.001769	.001623	.001504	.001409
8.86	.360392	.247552	.001298	.001126	.001046	.000982	.000931	.000893
9.50	.314272	.208635	.000811	.000707	.000673	.000647	.000628	.000615
10.14	.274074	.176085	.000549	.000479	.000468	.000459	.000454	.000452
10.78	.239078	.148809	.000398	.000347	.000345	.000344	.000345	.000347
11.42	.208626	.125911	.000305	.000264	.000266	.000269	.000271	.000274
12.06	.182128	.106653	.000243	.000208	.000212	.000215	.000217	.000220
12.70	.159063	.090430	.000199	.000168	.000172	.000174	.000177	.000179
13.98	.121483	.065182	.000140	.000114	.000116	.000118	.000119	.000121
15.26	.092938	.047126	.000101	.000079	.000081	.000081	.000082	.000082
16.54	.071216	.034161	.000075	.000056	.000056	.000057	.000057	.000056
17.82	.054655	.024821	.000055	.000040	.000040	.000040	.000039	.000039
19.10	.042009	.018074	.000041	.000028	.000028	.000028	.000027	.000027
20.38	.032335	.013187	.000031	.000020	.000020	.000020	.000019	.000019
21.66	.024923	.009640	.000023	.000014	.000014	.000014	.000013	.000013
22.94	.019236	.007059	.000017	.000010	.000010	.000010	.000009	.000009
24.22	.014864	.005178	.000013	.000007	.000007	.000007	.000006	.000006
25.50	.011499	.003804	.000009	.000005	.000005	.000005	.000004	.000004
28.06	.006904	.002063	.000005	.000002	.000002	.000002	.000002	.000002
30.62	.004159	.001125	.000002	.000001	.000001	.000001	.000001	.000001
33.18	.002514	.000616	.000001	.000000	.000000	.000000	.000000	.000000
35.74	.001523	.000340	.000001	.000000	.000000	.000000	.000000	.000000
38.30	.000924	.000188	.000000					
40.86	.000562	.000105	.000000					
43.42	.000342	.000059						
45.98	.000209	.000033						
48.54	.000128	.000019						
51.10	.000078	.000011						
56.22	.000029	.000004						
61.34	.000011	.000001						
66.46	.000004	.000000						
71.58	.000002	.000000						
76.70	.000001							
81.82	.000000							

	CE 58	T8 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
-E	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2	5S 2
	3.2322	3.8152	23.439	24.660	25.408	26.155	26.902	27.650
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.047392	.054268	.129971	.132643	.135045	.137427	.139792	.142140
.02	.082344	.093167	.211853	.215870	.219436	.222960	.226443	.229890
.03	.106620	.119034	.255033	.259391	.263190	.266924	.270597	.274210
.04	.121790	.133934	.267535	.271494	.274851	.278121	.281309	.284419

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
.05	.129250	.139688	.256188	.259230	.261674	.264016	.266260	.268409
.06	.130239	.137899	.226782	.228567	.229799	.230917	.231927	.232832
.07	.125856	.129976	.184200	.184532	.184388	.184125	.183749	.183263
.08	.117073	.117150	.132538	.131338	.129761	.128068	.126262	.124348
.09	.104745	.100500	.075209	.072488	.069508	.066418	.063223	.059927
.10	.089629	.080962	.015033	.010872	.006581	.002193	-.002287	-.006856
.12	.053596	.036370	-.105080	-.111681	-.118139	-.124654	-.131220	-.137836
.14	.013333	-.011373	-.214312	-.222573	-.230424	-.238276	-.246124	-.253968
.16	-.027877	-.058429	-.304482	-.313529	-.321927	-.330260	-.338526	-.346725
.18	-.067609	-.102078	-.371287	-.380261	-.388389	-.396384	-.404246	-.411976
.20	-.104129	-.140481	-.413202	-.421329	-.428463	-.435399	-.442138	-.448683
.22	-.136254	-.172485	-.430640	-.437271	-.442816	-.448104	-.453140	-.457927
.24	-.163234	-.197469	-.425315	-.429945	-.433449	-.436650	-.439552	-.442162
.26	-.184659	-.215213	-.399762	-.402034	-.403193	-.404014	-.404504	-.404670
.28	-.200385	-.225803	-.356978	-.356677	-.355326	-.353616	-.351557	-.349158
.30	-.210466	-.229544	-.300162	-.297207	-.293304	-.289039	-.284422	-.279465
.34	-.214634	-.218443	-.157159	-.149098	-.140398	-.131373	-.122036	-.112402
.38	-.199939	-.186657	.005483	.017807	.030367	.043162	.056174	.069389
.42	-.170006	-.139538	.168017	.183312	.198398	.213584	.228855	.244195
.46	-.128699	-.082341	.315517	.332280	.348390	.364442	.380419	.396308
.50	-.079747	-.019837	.437767	.454474	.470124	.485544	.500722	.515646
.54	-.026534	.043886	.528707	.543950	.557794	.571243	.584287	.596919
.58	.028006	.105485	.585691	.598266	.609183	.619555	.629377	.638649
.62	.081427	.162356	.608723	.617680	.624813	.631276	.637073	.642207
.66	.131771	.212577	.599749	.604413	.607180	.609188	.610445	.610960
.70	.177530	.254833	.562043	.562009	.560099	.557376	.553855	.549552
.78	.251273	.312707	.417243	.407580	.396336	.384285	.371456	.357879
.86	.297877	.334324	.210374	.192099	.172800	.152845	.132273	.111121
.94	.316681	.322512	-.023805	-.048571	-.073642	-.099107	-.124920	-.151037
1.02	.309712	.282609	-.256258	-.284825	-.312913	-.341059	-.369216	-.397340
1.10	.280568	.221058	-.465291	-.494828	-.523125	-.551112	-.578747	-.605991
1.18	.233601	.144468	-.636497	-.664351	-.690290	-.715558	-.740120	-.763946
1.26	.173351	.059028	-.761850	-.785741	-.807178	-.827616	-.847034	-.865411
1.34	.104191	-.029810	-.838446	-.856575	-.871868	-.885892	-.898640	-.910107
1.42	.030102	-.117487	-.867198	-.878276	-.886308	-.892870	-.897972	-.901624
1.50	-.045444	-.200361	-.851660	-.854895	-.855040	-.853592	-.850577	-.846023
1.66	-.189777	-.341479	-.709438	-.696340	-.680520	-.663091	-.644112	-.623641
1.82	-.311918	-.440089	-.460778	-.432720	-.402778	-.371485	-.338926	-.305182
1.98	-.402589	-.492523	-.154153	-.114246	-.073584	-.032031	.010314	.053356
2.14	-.458377	-.501220	.170030	.217860	.265205	.312866	.360740	.408733
2.30	-.479946	-.472033	.481770	.533486	.583515	.633251	.682601	.731483
2.46	-.470501	-.412284	.761125	.813047	.862231	.910550	.957932	1.004317
2.62	-.434601	-.329509	.996669	1.045743	1.091255	1.135416	1.178186	1.219533
2.78	-.377320	-.230723	1.183578	1.227490	1.267280	1.305354	1.341704	1.376333
2.94	-.303694	-.122056	1.321776	1.358953	1.391723	1.422542	1.451438	1.478443
3.10	-.218394	-.008627	1.414336	1.443877	1.468987	1.492039	1.513093	1.532212
3.42	-.028706	.216962	1.483223	1.496924	1.506802	1.514737	1.520834	1.525199
3.74	.165864	.423405	1.436834	1.436318	1.433194	1.428537	1.422474	1.415126
4.06	.348317	.598932	1.319679	1.308022	1.295253	1.281494	1.266867	1.251485
4.38	.508758	.739099	1.166888	1.147497	1.128503	1.109066	1.089290	1.069262
4.70	.642447	.844016	1.003085	.979061	.956779	.934532	.912392	.890416
5.02	.748138	.916391	.843882	.817753	.794440	.771535	.749074	.727085
5.34	.826818	.960216	.698086	.671739	.648978	.626883	.605460	.584710
5.66	.880780	.979945	.569810	.544545	.523339	.502956	.483376	.464577
5.98	.912982	.979986	.460141	.436771	.417674	.399472	.382126	.365599
6.30	.926625	.964422	.368371	.347335	.330573	.314715	.299710	.285510
6.94	.910667	.900467	.231469	.215407	.203199	.191797	.181141	.171173
7.58	.855284	.811052	.142781	.131183	.122747	.114955	.107748	.101074
8.22	.777872	.711846	.087076	.079014	.073388	.068241	.063524	.059195
8.86	.690845	.612769	.052791	.047334	.043672	.040350	.037331	.034582

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2	SS 2
9.50	.602486	.519623	.031965	.028337	.025993	.023882	.021978	.020256
10.14	.517953	.435409	.019412	.017028	.015543	.014215	.013024	.011954
10.78	.440168	.361325	.011871	.010316	.009380	.008548	.007806	.007143
11.42	.370537	.297457	.007341	.006327	.005738	.005217	.004755	.004343
12.06	.309466	.243241	.004608	.003945	.003574	.003246	.002956	.002699
12.70	.256742	.197780	.002948	.002511	.002275	.002067	.001884	.001722
13.98	.173858	.128955	.001292	.001095	.000996	.000908	.000832	.000764
15.26	.115742	.082866	.000626	.000530	.000485	.000446	.000411	.000379
16.54	.076064	.052669	.000334	.000283	.000260	.000240	.000223	.000207
17.82	.049496	.033199	.000191	.000162	.000150	.000139	.000129	.000121
19.10	.031965	.020796	.000116	.000098	.000091	.000084	.000078	.000073
20.38	.020525	.012967	.000072	.000061	.000057	.000053	.000049	.000046
21.66	.013123	.008060	.000046	.000039	.000036	.000034	.000031	.000029
22.94	.008365	.005000	.000030	.000025	.000023	.000022	.000020	.000019
24.22	.005322	.003098	.000020	.000017	.000015	.000014	.000013	.000012
25.50	.003383	.001920	.000013	.000011	.000010	.000009	.000009	.000008
28.06	.001368	.000741	.000006	.000005	.000005	.000004	.000004	.000004
30.62	.000557	.000290	.000002	.000002	.000002	.000002	.000002	.000001
33.18	.000231	.000116	.000001	.000001	.000001	.000001	.000001	.000001
35.74	.000098	.000048	.000000	.000000	.000001	.000001	.000000	.000000
38.30	.000043	.000021	.000000	.000000	.000000	.000000	.000000	.000000
40.86	.000020	.000010			.000000	.000000		
43.42	.000010	.000005						
45.98	.000005	.000003						
48.54	.000002	.000001						
51.10	.000001	.000001						
56.22	.000000	.000000						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
-E	1.9260	2.2284	18.873	19.979	20.624	21.268	21.913	22.558
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.001723	.002145	.007776	.008012	.008230	.008449	.008669	.008890
.02	.006449	.007983	.028294	.029134	.029906	.030681	.031459	.032240
.03	.013570	.016708	.057858	.059534	.061071	.062610	.064154	.065702
.04	.022556	.027617	.093389	.096027	.098436	.100846	.103260	.105677
.05	.032943	.040105	.132343	.135982	.139291	.142598	.145904	.149211
.06	.044324	.053649	.172636	.177249	.181423	.185590	.189749	.193903
.07	.056351	.067801	.212582	.218088	.223048	.227991	.232917	.237829
.08	.068718	.082180	.250832	.257117	.262748	.268348	.273921	.279467
.09	.081166	.096462	.286332	.293253	.299417	.305535	.311611	.317645
.10	.093472	.110377	.318279	.325676	.332219	.338700	.345121	.351485
.12	.116931	.136240	.369322	.377161	.383980	.390697	.397315	.403839
.14	.137926	.158421	.401229	.408831	.415290	.421604	.427779	.433818
.16	.155674	.176081	.413338	.420079	.425604	.430944	.436102	.441085
.18	.169691	.188768	.406411	.411762	.415877	.419767	.423439	.426900
.20	.179732	.196328	.382146	.385693	.388031	.390115	.391950	.393545
.22	.185731	.198828	.342810	.344258	.344573	.344611	.344381	.343890
.24	.187760	.196497	.290968	.290142	.288301	.286171	.283762	.281084
.26	.185993	.189678	.229293	.226127	.222099	.217782	.213189	.208328
.28	.180679	.178789	.160417	.154944	.148792	.142364	.135671	.128725
.30	.172114	.164296	.086844	.079182	.071046	.062658	.054030	.045174
.34	.146573	.126465	-.065391	-.076814	-.088255	-.099868	-.111641	-.123563
.38	.112162	.080106	-.211835	-.225893	-.239491	-.253149	-.266853	-.280593
.42	.071655	.028894	-.340967	-.356343	-.370803	-.385187	-.399482	-.413680
.46	.027618	-.023941	-.445134	-.460484	-.474515	-.488323	-.501899	-.515236

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
.50	-.017686	-.075700	-.520045	-.534117	-.546540	-.558596	-.570280	-.581589
.54	-.062349	-.124233	-.564146	-.575854	-.585677	-.595001	-.603827	-.612153
.58	-.104815	-.167907	-.577977	-.586456	-.592907	-.598750	-.603989	-.608630
.62	-.143868	-.205564	-.563603	-.568220	-.570766	-.572621	-.573795	-.574298
.66	-.178602	-.236454	-.524111	-.524469	-.522807	-.520403	-.517272	-.513431
.70	-.208386	-.260177	-.463205	-.459128	-.453171	-.446454	-.438996	-.430821
.78	-.251731	-.285887	-.293200	-.280500	-.266416	-.251634	-.236186	-.220101
.86	-.272948	-.284214	-.085183	-.065183	-.044508	-.023315	-.001642	.020473
.94	-.273239	-.258850	.132945	.158132	.183178	.208475	.233979	.259650
1.02	-.255110	-.214540	.339172	.367072	.393999	.420854	.447595	.474184
1.10	-.221735	-.156315	.517851	.545957	.572318	.598266	.623764	.648779
1.18	-.176519	-.089008	.659195	.685205	.708813	.731678	.753773	.775072
1.26	-.122804	-.016975	.758331	.780292	.799344	.817359	.834321	.850217
1.34	-.063694	.056046	.814213	.830590	.843722	.855576	.866150	.875443
1.42	-.001950	.126984	.828572	.838268	.844560	.849396	.852788	.854753
1.50	.060050	.193421	.805008	.807348	.806294	.803674	.799517	.793855
1.66	.177289	.306106	.663608	.650673	.634815	.617380	.598428	.578020
1.82	.276638	.385690	.432221	.405167	.376125	.345743	.314107	.281299
1.98	.351852	.430036	.151456	.112958	.073692	.033512	-.007483	-.049195
2.14	.400614	.441057	-.145005	-.191513	-.237458	-.283775	-.330362	-.377122
2.30	.423346	.422932	-.431958	-.482874	-.531925	-.580766	-.629303	-.677450
2.46	.422203	.380835	-.692319	-.744275	-.793211	-.841376	-.888695	-.935103
2.62	.400293	.320100	-.915904	-.966021	-1.012182	-1.057083	-1.100674	-1.142920
2.78	.361124	.245734	-1.097960	-1.143963	-1.185341	-1.225070	-1.263135	-1.299529
2.94	.308224	.162173	-1.237720	-1.277967	-1.313200	-1.346512	-1.377923	-1.407461
3.10	.244922	.073188	-1.337147	-1.370589	-1.398897	-1.425134	-1.449351	-1.471606
3.42	.098737	-.109259	-1.430595	-1.449240	-1.463223	-1.475152	-1.485129	-1.493259
3.74	-.058015	-.283760	-1.415395	-1.419992	-1.421100	-1.420481	-1.418266	-1.414581
4.06	-.211776	-.439998	-1.329000	-1.321894	-1.312857	-1.302585	-1.291211	-1.278862
4.38	-.353853	-.572935	-1.202380	-1.186490	-1.170335	-1.153478	-1.136040	-1.118125
4.70	-.479245	-.681004	-1.058353	-1.036541	-1.016034	-.995322	-.974496	-.953635
5.02	-.585593	-.764797	-.912304	-.887061	-.864463	-.842073	-.819949	-.798137
5.34	-.672354	-.826148	-.773731	-.747041	-.724049	-.701577	-.679651	-.658289
5.66	-.740172	-.867524	-.647835	-.621181	-.598971	-.577497	-.556755	-.536736
5.98	-.790414	-.891624	-.536890	-.511307	-.490625	-.470808	-.451828	-.433656
6.30	-.824847	-.901136	-.441288	-.417440	-.398699	-.380881	-.363942	-.347839
6.94	-.854040	-.886278	-.292597	-.273125	-.258612	-.244996	-.232212	-.220204
7.58	-.842893	-.840210	-.190640	-.175629	-.164980	-.155100	-.145922	-.137387
8.22	-.804575	-.776014	-.122853	-.111715	-.104177	-.097250	-.090875	-.084999
8.86	-.749513	-.703016	-.078676	-.070626	-.065419	-.060676	-.056346	-.052386
9.50	-.685481	-.627563	-.050252	-.044537	-.041001	-.037805	-.034909	-.032279
10.14	-.618018	-.553778	-.032106	-.028096	-.025723	-.023592	-.021674	-.019943
10.78	-.550904	-.484180	-.020567	-.017775	-.016193	-.014781	-.013519	-.012386
11.42	-.486592	-.420169	-.013238	-.011300	-.010250	-.009318	-.008489	-.007749
12.06	-.426568	-.362385	-.008575	-.007231	-.006535	-.005920	-.005376	-.004892
12.70	-.371627	-.310960	-.005598	-.004664	-.004202	-.003796	-.003438	-.003121
13.98	-.277934	-.226237	-.002452	-.001993	-.001788	-.001608	-.001451	-.001313
15.26	-.204023	-.162667	-.001115	-.000883	-.000789	-.000708	-.000637	-.000575
16.54	-.149399	-.116035	-.000522	-.000401	-.000357	-.000319	-.000286	-.000257
17.82	-.108217	-.082365	-.000248	-.000182	-.000161	-.000143	-.000127	-.000113
19.10	-.078052	-.058321	-.000114	-.000078	-.000068	-.000059	-.000052	-.000045
20.38	-.056178	-.041282	-.000051	-.000032	-.000027	-.000023	-.000016	-.000013
21.66	-.040427	-.029266	-.000022	-.000013	-.000011	-.000009	-.000001	-.000000
22.94	-.029136	-.020816	-.000010	-.000005	-.000004	-.000003	.000000	.000000
24.22	-.021063	-.014878	-.000004	-.000002	-.000002	-.000001	.000000	.000000
25.50	-.015295	-.010703	-.000002	-.000001	-.000001	-.000000	.000000	.000000
28.06	-.008217	-.005676	.000000	.000000	.000000	.000000	.000000	.000000
30.62	-.004556	.003132	.000000	.000000	.000000	.000000	.000000	.000000
33.18	-.002623	-.001807	.000000	.000000	.000000	.000000	.000000	.000000
35.74	-.001571	-.001090	.000000	.000000	.000000	.000000	.000000	.000000



	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6	SP 6
X								
38.30	-.000977	-.000684	.000000	.000000	.000000	.000000	.000000	.000000
40.86	-.000628	-.000444						
43.42	-.000415	-.000296						
45.98	-.000280	-.000201						
48.54	-.000192	-.000138						
51.10	-.000133	-.000096						
56.22	-.000065	-.000047						
61.34	-.000032	-.000023						
66.46	-.000016	-.000012						
71.58	-.000008	-.000006						
76.70	-.000004	-.000003						
81.82	-.000002	-.000001						
86.94	-.000001	-.000001						
92.06	-.000000	.000000						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	SD 0	SD 0	SD 10	SD 10	SD 10	SD 10	SD 10	SD 10
-E			10.746	11.625	12.079	12.533	12.989	13.445
X								
.00			.000000	.000000	.000000	.000000	.000000	.000000
.01			.000095	.000099	.000103	.000107	.000111	.000115
.02			.000712	.000744	.000773	.000802	.000832	.000862
.03			.002259	.002359	.002449	.002541	.002634	.002729
.04			.005034	.005253	.005453	.005655	.005860	.006068
.05			.009243	.009642	.010003	.010370	.010741	.011118
.06			.015017	.015658	.016238	.016826	.017421	.018023
.07			.022423	.023369	.024224	.025089	.025965	.026851
.08			.031473	.032787	.033971	.035168	.036379	.037605
.09			.042139	.043878	.045442	.047023	.048620	.050235
.10			.054358	.056575	.058564	.060573	.062603	.064653
.12			.083062	.086369	.089323	.092302	.095306	.098336
.14			.116626	.121154	.125179	.129231	.133310	.137418
.16			.153901	.159720	.164865	.170036	.175233	.180458
.18			.193659	.200780	.207041	.213321	.219621	.225944
.20			.234680	.243059	.250379	.257708	.265047	.272397
.22			.275803	.285345	.293627	.301900	.310168	.318431
.24			.315962	.326534	.335642	.344720	.353770	.362795
.26			.354212	.365646	.375416	.385130	.394789	.404397
.28			.389737	.401840	.412088	.422247	.432321	.442314
.30			.421854	.434414	.444940	.455343	.465625	.475791
.34			.473781	.486586	.497046	.507303	.517363	.527228
.38			.507030	.519183	.528760	.538048	.547055	.555785
.42			.520354	.531015	.538962	.546536	.553747	.560601
.46			.513877	.522319	.528007	.533246	.538046	.542417
.50			.488757	.494395	.497338	.499767	.501696	.503139
.54			.446876	.449282	.449146	.448450	.447210	.445443
.58			.390576	.389481	.386085	.382102	.377552	.372453
.62			.322445	.317734	.311037	.303749	.295892	.287487
.66			.245149	.236844	.226933	.216449	.205418	.193862
.70			.161310	.149555	.136626	.123164	.109198	.094753
.78			-.016252	-.034082	-.052121	-.070551	-.089339	-.108456
.86			-.192913	-.215258	-.236792	-.258507	-.280370	-.302349
.94			-.355279	-.380272	-.403464	-.426584	-.449597	-.472475
1.02			-.493988	-.519686	-.542695	-.565353	-.587634	-.609512
1.10			-.603316	-.627874	-.649003	-.669506	-.689361	-.708552
1.18			-.680563	-.702350	-.720146	-.737059	-.753077	-.768192
1.26			-.725385	-.743046	-.756349	-.768545	-.779634	-.789619
1.34			-.739155	-.751639	-.759595	-.766264	-.771660	-.775795
1.42			-.724409	-.730970	-.733022	-.733657	-.732902	-.730785

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	5D 0	5D 0	5D 10	5D 10	5D 10	5D 10	5D 10	5D 10
x								
1.50			-.684395	-.684573	-.680435	-.674804	-.667720	-.659224
1.66			-.543106	-.530133	-.513674	-.495730	-.476367	-.455651
1.82			-.344390	-.319063	-.291526	-.262708	-.232697	-.201575
1.98			-.114529	-.078743	-.042290	-.004915	.033281	.072201
2.14			.125064	.168799	.211555	.254769	.298334	.342153
2.30			.358245	.407190	.453546	.499843	.545980	.591866
2.46			.573744	.625218	.672638	.719478	.765653	.811090
2.62			.764437	.816010	.862288	.907503	.951595	.994516
2.78			.926522	.976135	1.019479	1.061348	1.101711	1.140546
2.94			1.058726	1.104736	1.143799	1.181060	1.216522	1.250195
3.10			1.161598	1.202782	1.236639	1.268462	1.298289	1.326161
3.42			1.287206	1.316588	1.338709	1.358614	1.376401	1.392166
3.74			1.324538	1.341261	1.351695	1.360044	1.366445	1.371030
4.06			1.297508	1.302351	1.302504	1.300911	1.297727	1.293099
4.38			1.227678	1.222313	1.214202	1.204791	1.194236	1.182679
4.70			1.132399	1.118852	1.104612	1.089548	1.073801	1.057493
5.02			1.024627	1.004942	.986544	.967775	.948748	.929559
5.34			.913474	.889524	.868645	.847789	.827039	.806461
5.66			.804987	.778380	.756358	.734683	.713405	.692560
5.98			.702898	.674951	.652802	.631248	.610309	.589995
6.30			.609274	.581022	.559476	.538703	.518698	.499446
6.94			.450295	.423557	.404511	.386423	.369246	.352931
7.58			.327733	.304075	.288227	.273355	.259389	.246266
8.22			.236217	.216176	.203494	.191711	.180752	.170547
8.86			.169254	.152774	.142890	.133787	.125391	.117635
9.50			.120888	.107619	.100057	.093147	.086821	.081018
10.14			.086240	.075718	.070007	.064826	.060115	.055822
10.78			.061540	.053289	.049017	.045166	.041686	.038534
11.42			.043978	.037562	.034387	.031542	.028985	.026682
12.06			.031502	.026543	.024194	.022100	.020229	.018552
12.70			.022637	.018820	.017087	.015550	.014184	.012964
13.98			.011829	.009587	.008646	.007820	.007091	.006445
15.26			.006301	.004990	.004479	.004032	.003640	.003296
16.54			.003431	.002666	.002384	.002140	.001927	.001740
17.82			.001912	.001466	.001309	.001173	.001054	.000951
19.10			.001091	.000832	.000742	.000664	.000597	.000539
20.38			.000637	.000487	.000435	.000390	.000350	.000316
21.66			.000380	.000295	.000264	.000236	.000213	.000192
22.94			.000231	.000185	.000165	.000149	.000134	.000121
24.22			.000142	.000120	.000107	.000096	.000087	.000079
25.50			.000089	.000080	.000072	.000065	.000059	.000053
28.06			.000035	.000039	.000035	.000032	.000029	.000027
30.62			.000014	.000022	.000020	.000018	.000017	.000015
33.18			.000005	.000013	.000012	.000011	.000010	.000010
35.74			.000002	.000009	.000008	.000007	.000007	.000007
38.30			.000001	.000006	.000006	.000005	.000005	.000005
40.86			.000000	.000004	.000004	.000004	.000004	.000003
43.42			.000000	.000003	.000003	.000003	.000003	.000002
45.98				.000002	.000002	.000002	.000002	.000002
48.54				.000002	.000002	.000001	.000001	.000001
51.10				.000001	.000001	.000001	.000001	.000001
56.22				.000001	.000001	.000001	.000000	.000000
61.34				.000000	.000000	.000000	.000000	.000000

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	SF 0	SF 0	SF 9	SF 9	SF 10	SF 11	SF 12	SF 13
-E			1.4596	1.9622	2.0712	2.1791	2.2859	2.3918
X								
.00			.000000	.000000	.000000	.000000	.000000	.000000
.01			.000000	.000000	.000000	.000000	.000000	.000000
.02			.000004	.000004	.000005	.000005	.000005	.000005
.03			.000019	.000021	.000022	.000023	.000025	.000026
.04			.000057	.000063	.000067	.000071	.000075	.000079
.05			.000134	.000146	.000156	.000165	.000175	.000185
.06			.000265	.000290	.000308	.000327	.000346	.000366
.07			.000470	.000514	.000546	.000579	.000612	.000647
.08			.000767	.000838	.000890	.000943	.000998	.001054
.09			.001175	.001283	.001362	.001444	.001527	.001612
.10			.001713	.001871	.001986	.002103	.002224	.002348
.12			.003254	.003551	.003766	.003987	.004213	.004445
.14			.005525	.006026	.006388	.006758	.007137	.007524
.16			.008647	.009425	.009985	.010557	.011141	.011739
.18			.012717	.013851	.014665	.015495	.016343	.017208
.20			.017807	.019383	.020509	.021656	.022826	.024020
.22			.023969	.026074	.027570	.029094	.030647	.032230
.24			.031230	.033951	.035877	.037836	.039830	.041860
.26			.039598	.043020	.045431	.047881	.050372	.052907
.28			.049059	.053264	.056214	.059207	.062248	.065338
.30			.059585	.064650	.068186	.071771	.075408	.079101
.34			.083638	.090629	.095461	.100349	.105299	.110312
.38			.111260	.120399	.126651	.132963	.139337	.145780
.42			.141815	.153257	.161001	.168799	.176657	.184579
.46			.174589	.188417	.197669	.206963	.216305	.225701
.50			.208834	.225061	.235788	.246535	.257310	.268119
.54			.243813	.262384	.274506	.286616	.298725	.310839
.58			.278819	.299622	.313017	.326361	.339663	.352933
.62			.313202	.336072	.350585	.364997	.379320	.393564
.66			.346377	.371105	.386554	.401843	.416987	.431997
.70			.377832	.404173	.420354	.436309	.452056	.467606
.78			.433904	.462639	.479621	.496228	.512480	.528394
.86			.478796	.508716	.525584	.541910	.557719	.573033
.94			.510959	.540828	.556687	.571831	.586291	.600095
1.02			.529748	.558377	.572409	.585555	.597854	.609340
1.10			.535235	.561538	.573031	.583479	.592930	.601424
1.18			.528023	.551050	.559418	.566601	.572654	.577629
1.26			.509079	.528034	.532821	.536308	.538559	.539631
1.34			.479598	.493843	.494723	.494215	.492392	.489321
1.42			.440895	.449947	.446713	.442033	.435991	.428661
1.50			.394320	.397841	.390395	.381478	.371182	.359590
1.66			.282808	.274776	.258985	.241768	.223234	.203482
1.82			.154844	.135333	.111794	.086998	.061066	.034109
1.98			.018721	-.011519	-.041779	-.073022	-.105119	-.137950
2.14			-.118898	-.158642	-.194338	-.230657	-.267470	-.304658
2.30			-.252892	-.300622	-.340346	-.380279	-.420295	-.460282
2.46			-.379513	-.433568	-.475907	-.518009	-.559762	-.601069
2.62			-.496191	-.554886	-.598503	-.641433	-.683587	-.724889
2.78			-.601335	-.663050	-.706741	-.749316	-.790714	-.830885
2.94			-.694142	-.757383	-.800113	-.841336	-.881022	-.919152
3.10			-.774418	-.837853	-.878770	-.917837	-.955061	-.990456
3.42			-.898747	-.959294	-.994734	-1.027815	-1.058618	-1.087225
3.74			-.979597	-1.034060	-1.062592	-1.088496	-1.111920	-1.133007
4.06			-1.024348	-1.070747	-1.091903	-1.110372	-1.126360	-1.140056
4.38			-1.040590	-1.077893	-1.091848	-1.103229	-1.112276	-1.119210

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	5F 0	5F 0	5F 9	5F 9	5F 10	5F 11	5F 12	5F 13
X								
4.70			-1.035190	-1.063050	-1.070371	-1.075348	-1.078244	-1.079292
5.02			-1.013939	-1.032483	-1.033939	-1.033356	-1.031006	-1.027120
5.34			-.981516	-.991184	-.987617	-.982359	-.975674	-.967784
5.66			-.941590	-.943015	-.935264	-.926185	-.916021	-.904980
5.98			-.896980	-.890903	-.879755	-.867636	-.854764	-.841322
6.30			-.849807	-.837017	-.823186	-.808720	-.793809	-.778610
6.94			-.753630	-.729784	-.712377	-.694924	-.677552	-.660362
7.58			-.661042	-.629080	-.609934	-.591199	-.572941	-.555206
8.22			-.575842	-.538300	-.518682	-.499807	-.481687	-.464321
8.86			-.499466	-.458430	-.439172	-.420883	-.403530	-.387075
9.50			-.432075	-.389210	-.370829	-.353558	-.337330	-.322076
10.14			-.373187	-.329788	-.312583	-.296565	-.281638	-.267714
10.78			-.322037	-.279088	-.263210	-.248545	-.234979	-.222412
11.42			-.277770	-.236001	-.221500	-.208204	-.195987	-.184739
12.06			-.239542	-.199475	-.186340	-.174375	-.163450	-.153449
12.70			-.206571	-.168562	-.156740	-.146038	-.136322	-.127476
13.98			-.153665	-.120347	-.110908	-.102461	-.094875	-.088038
15.26			-.114386	-.085953	-.078524	-.071947	-.066098	-.060876
16.54			-.085215	-.061435	-.055649	-.050577	-.046110	-.042156
17.82			-.063537	-.043956	-.039485	-.035603	-.032215	-.029242
19.10			-.047415	-.031490	-.028056	-.025101	-.022545	-.020321
20.38			-.035416	-.022592	-.019967	-.017728	-.015808	-.014150
21.66			-.026478	-.016235	-.014235	-.012545	-.011107	-.009876
22.94			-.019814	-.011687	-.010168	-.008896	-.007822	-.006910
24.22			-.014843	-.008430	-.007279	-.006323	-.005523	-.004848
25.50			-.011130	-.006093	-.005222	-.004505	-.003910	-.003411
28.06			-.006278	-.003205	-.002709	-.002307	-.001977	-.001706
30.62			-.003557	-.001702	-.001421	-.001196	-.001014	-.000866
33.18			-.002024	-.000915	-.000755	-.000629	-.000529	-.000448
35.74			-.001158	-.000498	-.000407	-.000336	-.000281	-.000237
38.30			-.000665	-.000275	-.000223	-.000183	-.000152	-.000128
40.86			-.000384	-.000154	-.000124	-.000102	-.000084	-.000071
43.42			-.000223	-.000088	-.000071	-.000058	-.000048	-.000040
45.98			-.000131	-.000051	-.000041	-.000034	-.000028	-.000024
48.54			-.000077	-.000030	-.000024	-.000020	-.000017	-.000014
51.10			-.000046	-.000018	-.000015	-.000012	-.000010	-.000009
56.22			-.000016	-.000006	-.000005	-.000004	-.000004	-.000003
61.34			-.000006	-.000002	-.000002	-.000002	-.000001	-.000001
66.46			-.000002	-.000001	-.000001	-.000001	-.000000	-.000000
71.58			-.000001	.000000	.000000	.000000	.000000	.000000

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
-E	.32423	.34935	3.4867	3.8142	3.8802	3.9446	4.0075	4.0691
X								
.00	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
.01	.012692	.013555	.052847	.054968	.055744	.056496	.057226	.057936
.02	.022053	.023272	.086137	.089453	.090576	.091655	.092695	.093699
.03	.028554	.029733	.103686	.107479	.108627	.109719	.110759	.111752
.04	.032616	.033454	.108754	.112479	.113424	.114305	.115127	.115896
.05	.034612	.034890	.104121	.107376	.107963	.108484	.108943	.109346
.06	.034876	.034441	.092141	.094644	.094779	.094850	.094861	.094817
.07	.033701	.032461	.074801	.076368	.076006	.075584	.075108	.074582
.08	.031346	.029255	.053769	.054296	.053429	.052510	.051545	.050537
.09	.028043	.025094	.030434	.029882	.028530	.027138	.025710	.024250
.10	.023993	.020211	.005944	.004326	.002531	.000711	-.001131	-.002994
.12	.014338	.009068	-.042921	-.046488	-.048978	-.051461	-.053938	-.056406
.14	.003551	-.002861	-.087329	-.092433	-.095317	-.098159	-.100961	-.103724
.16	-.007488	-.014617	-.123947	-.130074	-.133031	-.135913	-.138723	-.141463
.18	-.018130	-.025520	-.151019	-.157628	-.160360	-.162985	-.165508	-.167935

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
.20	-.027910	-.035110	-.167926	-.174498	-.176746	-.178861	-.180850	-.182719
.22	-.036510	-.043099	-.174840	-.180913	-.182471	-.183876	-.185137	-.186262
.24	-.043730	-.049331	-.172464	-.177650	-.178368	-.178922	-.179321	-.179573
.26	-.049460	-.053752	-.161838	-.165830	-.165616	-.165234	-.164694	-.164004
.28	-.053661	-.056383	-.144193	-.146767	-.145582	-.144232	-.142728	-.141080
.30	-.056348	-.057302	-.120839	-.121854	-.119706	-.117404	-.114959	-.112381
.34	-.057431	-.054490	-.062231	-.059990	-.056095	-.052088	-.047979	-.043778
.38	-.053457	-.046507	.004230	.009515	.014728	.019991	.025295	.030631
.42	-.045397	-.034694	.070436	.078206	.084175	.090119	.096030	.101904
.46	-.034292	-.020367	.130262	.139753	.145871	.151884	.157788	.163580
.50	-.021143	-.004722	.179523	.189883	.195568	.201069	.206388	.211526
.54	-.006859	.011215	.215752	.226131	.230870	.235357	.239597	.243595
.58	.007770	.026607	.237891	.247509	.250890	.253963	.256739	.259225
.62	.022086	.040801	.245984	.254170	.255893	.257270	.258315	.259039
.66	.035564	.053315	.240877	.247097	.246977	.246492	.245658	.244491
.70	.047798	.063821	.223968	.227832	.225796	.223393	.220644	.217566
.78	.067455	.078122	.161880	.160427	.154717	.148693	.142378	.135795
.86	.079776	.083301	.074984	.068239	.059556	.050671	.041611	.032398
.94	.084593	.080080	-.022038	-.033284	-.043868	-.054498	-.065151	-.075805
1.02	.082463	.069818	-.116954	-.131426	-.142687	-.153819	-.164803	-.175622
1.10	.074367	.054148	-.200672	-.216866	-.227601	-.238033	-.248150	-.257940
1.18	.061491	.034747	-.267230	-.283613	-.292763	-.301451	-.309674	-.317430
1.26	.045072	.013185	-.313413	-.328571	-.335285	-.341407	-.346945	-.351907
1.34	.026299	-.009155	-.338218	-.350947	-.354613	-.357597	-.359916	-.361588
1.42	.006259	-.031118	-.342294	-.351647	-.351899	-.351420	-.350236	-.348374
1.50	-.014104	-.051782	-.327436	-.332744	-.329440	-.325397	-.320654	-.315245
1.66	-.052767	-.086627	-.251353	-.247611	-.237525	-.226812	-.215522	-.203702
1.82	-.085101	-.110409	-.133175	-.120594	-.105098	-.089218	-.073009	-.056527
1.98	-.108602	-.122252	.004339	.024226	.043105	.062042	.080979	.099868
2.14	-.122381	-.122848	.142289	.167173	.187194	.206909	.226274	.245248
2.30	-.126676	-.113764	.266755	.294016	.313043	.331416	.349106	.366090
2.46	-.122422	-.096948	.368682	.395739	.411954	.427216	.441520	.454865
2.62	-.110936	-.074403	.443185	.467736	.479746	.490583	.500265	.508816
2.78	-.093674	-.047996	.488656	.508813	.515684	.521251	.525558	.528652
2.94	-.072084	-.019363	.505866	.520212	.521445	.521336	.519953	.517362
3.10	-.047510	.010124	.497176	.504760	.500235	.494417	.487392	.479244
3.42	.005985	.067466	.415729	.408597	.393340	.377099	.359979	.342081
3.74	.059303	.117900	.273993	.252672	.228914	.204653	.179994	.155029
4.06	.107472	.158210	.099893	.066555	.037112	.007704	-.021587	-.050692
4.38	.147584	.187184	-.084392	-.126704	-.159148	-.190973	-.222210	-.252828
4.70	.178250	.204882	-.263126	-.311406	-.344320	-.376276	-.407268	-.437301
5.02	.199136	.212116	-.426236	-.477401	-.509013	-.539361	-.568480	-.596410
5.34	.210596	.210088	-.568071	-.619479	-.648467	-.676000	-.702148	-.726982
5.66	.213400	.200151	-.686189	-.735649	-.761161	-.785132	-.807659	-.828837
5.98	.208543	.183671	-.780334	-.826126	-.847696	-.867729	-.886340	-.903638
6.30	.197105	.161932	-.851648	-.892501	-.909965	-.925964	-.940623	-.954061
6.94	.158765	.107201	-.934048	-.962771	-.972343	-.980728	-.988053	-.994432
7.58	.106215	.043585	-.952518	-.968142	-.971004	-.973037	-.974349	-.975035
8.22	.045768	-.023405	-.926135	-.929367	-.927037	-.924236	-.921043	-.917527
8.86	-.017859	-.089995	-.870935	-.863428	-.857391	-.851196	-.844893	-.838520
9.50	-.081318	-.153716	-.799231	-.783065	-.774603	-.766234	-.757980	-.749856
10.14	-.142336	-.213026	-.719925	-.697253	-.687393	-.677815	-.668516	-.659490
10.78	-.199443	-.267040	-.639134	-.611975	-.601497	-.591433	-.581761	-.572457
11.42	-.251750	-.315318	-.560846	-.530969	-.520441	-.510409	-.500837	-.491691
12.06	-.298786	-.357730	-.487492	-.456371	-.446183	-.436534	-.427382	-.418681
12.70	-.340368	-.394351	-.420398	-.389204	-.379610	-.370570	-.362034	-.353956
13.98	-.407394	-.451153	-.306756	-.277836	-.269802	-.262293	-.255257	-.248644
15.26	-.454382	-.488278	-.219458	-.194566	-.188185	-.182261	-.176743	-.171585
16.54	-.483885	-.508790	-.154668	-.134318	-.129431	-.124919	-.120738	-.116849
17.82	-.498750	-.515764	-.107744	-.091726	-.088081	-.084732	-.081643	-.078782

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2	6S 2
X								
19.10	-.501753	-.512038	-.074370	-.062126	-.059460	-.057022	-.054783	-.052717
20.38	-.495424	-.500107	-.050962	-.041816	-.039896	-.038148	-.036548	-.035078
21.66	-.481974	-.482095	-.034720	-.028016	-.026650	-.025410	-.024281	-.023246
22.94	-.463279	-.459766	-.023547	-.018708	-.017745	-.016875	-.016085	-.015363
24.22	-.440897	-.434561	-.015913	-.012466	-.011793	-.011186	-.010637	-.010137
25.50	-.416096	-.407632	-.010726	-.008298	-.007829	-.007409	-.007030	-.006686
28.06	-.363096	-.352039	-.004848	-.003678	-.003454	-.003255	-.003076	-.002915
30.62	-.310048	-.298015	-.002186	-.001641	-.001535	-.001442	-.001358	-.001283
33.18	-.260288	-.248332	-.000988	-.000742	-.000692	-.000649	-.000610	-.000575
35.74	-.215533	-.204292	-.000450	-.000343	-.000320	-.000299	-.000281	-.000264
38.30	-.176451	-.166274	-.000208	-.000163	-.000152	-.000142	-.000134	-.000126
40.86	-.143070	-.134107	-.000098	-.000081	-.000075	-.000070	-.000066	-.000062
43.42	-.115048	-.107320	-.000048	-.000041	-.000039	-.000036	-.000034	-.000032
45.98	-.091850	-.085299	-.000024	-.000022	-.000021	-.000020	-.000019	-.000018
48.54	-.072867	-.067390	-.000013	-.000012	-.000012	-.000011	-.000011	-.000010
51.10	-.057482	-.052958	-.000007	-.000007	-.000007	-.000006	-.000006	-.000006
56.22	-.035254	-.032253	-.000002	-.000003	-.000003	-.000002	-.000002	-.000002
61.34	-.021269	-.019338	-.000001	-.000001	-.000001	-.000001	-.000001	-.000001
66.46	-.012658	-.011444	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000
71.58	-.007447	-.006699	-.000000	-.000000	-.000000	-.000000	-.000000	-.000000
76.70	-.004338	-.003884						
81.82	-.002506	-.002234						
86.94	-.001437	-.001276						
92.06	-.000818	-.000724						
97.18	-.000463	-.000409						
102.30	-.000261	-.000229						
112.54	-.000082	-.000071						
122.78	-.000025	-.000022						
133.02	-.000008	-.000007						
143.26	-.000002	-.000002						
153.50	-.000001	-.000001						
163.74	-.000000	-.000000						

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	6P 0	6P 0	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6
-E			2.0695	2.3271	2.3630	2.3975	2.4309	2.4633
X								
.00			.000000	.000000	.000000	.000000	.000000	.000000
.01			.002878	.003044	.003109	.003174	.003238	.003302
.02			.010473	.011067	.011299	.011527	.011752	.011973
.03			.021415	.022614	.023072	.023522	.023964	.024399
.04			.034565	.036474	.037187	.037885	.038569	.039242
.05			.048980	.051647	.052617	.053566	.054494	.055404
.06			.063888	.067315	.068527	.069709	.070864	.071993
.07			.078663	.082816	.084241	.085627	.086976	.088292
.08			.092807	.097625	.099223	.100771	.102274	.103736
.09			.105920	.111330	.113054	.114718	.116328	.117889
.10			.117727	.123619	.125418	.127148	.128815	.130423
.12			.136554	.143102	.144896	.146603	.148228	.149779
.14			.148273	.155032	.156621	.158107	.159496	.160797
.16			.152642	.159181	.160390	.161483	.162468	.163353
.18			.149947	.155879	.156566	.157130	.157579	.157922
.20			.140820	.145818	.145883	.145821	.145643	.145356
.22			.126107	.129913	.129294	.128551	.127694	.126732
.24			.106765	.109192	.107864	.106421	.104872	.103226
.26			.083790	.084718	.082693	.080565	.078344	.076039
.28			.058164	.057539	.054855	.052087	.049243	.046331

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	6P 0	6P 0	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6
X								
.30			.030821	.028644	.025367	.022027	.018632	.015189
.34			-.025658	-.030742	-.034940	-.039149	-.043362	-.047573
.38			-.079835	-.087325	-.092016	-.096657	-.101244	-.105774
.42			-.127415	-.136623	-.141347	-.145958	-.150455	-.154839
.46			-.165552	-.175707	-.180021	-.184162	-.188134	-.191940
.50			-.192660	-.202984	-.206499	-.209790	-.212863	-.215726
.54			-.208180	-.217950	-.220351	-.222489	-.224372	-.226011
.58			-.212343	-.220925	-.221986	-.222755	-.223246	-.223472
.62			-.205952	-.212828	-.212407	-.211682	-.210670	-.209386
.66			-.190195	-.194972	-.193013	-.190753	-.188210	-.185403
.70			-.166495	-.168904	-.165426	-.161665	-.157640	-.153371
.78			-.101407	-.098749	-.092542	-.086125	-.079521	-.072751
.86			-.022775	-.015269	-.007047	.001270	.009659	.018100
.94			.058742	.070283	.079598	.088868	.098073	.107198
1.02			.134760	.149158	.158590	.167827	.176857	.185669
1.10			.199358	.215271	.223898	.232190	.240139	.247743
1.18			.248885	.264966	.272001	.278577	.284696	.290362
1.26			.281606	.296614	.301441	.305712	.309439	.312634
1.34			.297278	.310147	.312336	.313906	.314876	.315268
1.42			.296745	.306624	.305929	.304586	.302623	.300069
1.50			.281585	.287849	.284193	.279894	.274989	.269514
1.66			.215681	.213718	.204465	.194679	.184407	.173696
1.82			.117396	.107136	.093403	.079352	.065035	.050503
1.98			.003806	-.013668	-.030276	-.046919	-.063546	-.080110
2.14			-.110942	-.133816	-.151526	-.168957	-.186069	-.202826
2.30			-.216304	-.242412	-.259513	-.276034	-.291947	-.307232
2.46			-.305229	-.332340	-.347350	-.361514	-.374827	-.387286
2.62			-.373674	-.399708	-.411452	-.422148	-.431811	-.440461
2.78			-.419994	-.443149	-.450797	-.457266	-.462594	-.466824
2.94			-.444325	-.463148	-.466201	-.468022	-.468669	-.468204
3.10			-.448035	-.461436	-.459694	-.456738	-.452646	-.447496
3.42			-.402556	-.403225	-.392220	-.380225	-.367340	-.353662
3.74			-.304120	-.291425	-.272623	-.253221	-.233323	-.213021
4.06			-.173215	-.148145	-.123616	-.098948	-.074230	-.049535
4.38			-.026969	.008534	.036628	.064404	.091803	.118779
4.70			.121730	.165273	.194971	.223950	.252186	.279667
5.02			.263953	.313035	.342715	.371357	.398972	.425585
5.34			.394017	.446250	.474664	.501811	.527740	.552502
5.66			.508720	.561951	.588206	.613055	.636575	.658846
5.98			.606651	.659028	.682538	.704584	.725265	.744678
6.30			.687638	.737632	.758067	.777044	.794680	.811083
6.94			.801850	.843743	.857772	.870503	.882062	.892569
7.58			.861228	.892396	.900462	.907497	.913623	.918946
8.22			.877958	.897498	.900516	.902807	.904470	.905596
8.86			.863561	.871764	.870784	.869369	.867593	.865522
9.50			.827761	.825663	.821690	.817539	.813258	.808888
10.14			.778254	.767299	.761212	.755158	.749162	.743242
10.78			.720872	.702674	.695199	.687922	.680848	.673975
11.42			.659895	.636069	.627782	.619817	.612160	.604796
12.06			.598361	.570423	.561768	.553521	.545655	.538143
12.70			.538356	.507662	.498969	.490740	.482938	.475528
13.98			.427859	.394968	.386841	.379221	.372059	.365312
15.26			.333788	.301860	.294741	.288113	.281924	.276128
16.54			.256905	.227794	.221813	.216275	.211132	.206338
17.82			.195777	.170363	.165479	.160980	.156819	.152957
19.10			.148117	.126623	.122716	.119132	.115831	.112778
20.38			.111488	.093736	.090659	.087845	.085263	.082883
21.66			.083634	.069240	.066842	.064658	.062659	.060822
22.94			.062620	.051113	.049260	.047577	.046042	.044635
24.22			.046860	.037760	.036337	.035048	.033875	.032803

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	6P 0	6P 0	6P 6	6P 6	6P 6	6P 6	6P 6	6P 6
X								
25.50			.035087	.027951	.026862	.025879	.024986	.024172
28.06			.019792	.015477	.014843	.014274	.013759	.013292
30.62			.011330	.008748	.008379	.008049	.007752	.007483
33.18			.006629	.005081	.004864	.004671	.004497	.004341
35.74			.003985	.003046	.002916	.002801	.002698	.002606
38.30			.002471	.001888	.001809	.001739	.001677	.001620
40.86			.001583	.001210	.001160	.001116	.001077	.001042
43.42			.001045	.000799	.000767	.000738	.000713	.000691
45.98			.000710	.000541	.000520	.000501	.000484	.000469
48.54			.000493	.000374	.000360	.000347	.000335	.000325
51.10			.000349	.000263	.000253	.000244	.000236	.000229
56.22			.000182	.000134	.000129	.000125	.000121	.000117
61.34			.000098	.000070	.000068	.000065	.000063	.000061
66.46			.000054	.000038	.000036	.000035	.000034	.000033
71.58			.000030	.000020	.000019	.000019	.000018	.000017
76.70			.000017	.000011	.000010	.000010	.000010	.000009
81.82			.000009	.000006	.000006	.000005	.000005	.000005
86.94			.000005	.000003	.000003	.000003	.000003	.000003
92.06			.000003	.000002	.000002	.000002	.000002	.000001
97.18			.000002	.000001	.000001	.000001	.000001	.000001
102.30			.000001	.000000	.000000	.000000	.000000	.000000
112.54			.000000	.000000	.000000	.000000	.000000	.000000

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	6D 0	6D 0	6D 0	6D 1	6D 1	6D 1	6D 1	6D 1
-E				.54569	.54461	.54294	.54070	.53797
X								
.00				.000000	.000000	.000000	.000000	.000000
.01				.000025	.000026	.000027	.000027	.000028
.02				.000191	.000195	.000200	.000204	.000208
.03				.000605	.000619	.000633	.000646	.000659
.04				.001348	.001379	.001409	.001437	.001465
.05				.002474	.002529	.002583	.002635	.002685
.06				.004017	.004105	.004191	.004273	.004352
.07				.005995	.006124	.006248	.006368	.006484
.08				.008410	.008588	.008758	.008922	.009080
.09				.011255	.011487	.011710	.011924	.012129
.10				.014511	.014803	.015083	.015352	.015609
.12				.022149	.022575	.022981	.023368	.023738
.14				.031065	.031631	.032169	.032681	.033165
.16				.040945	.041651	.042318	.042948	.043543
.18				.051459	.052293	.053077	.053813	.054503
.20				.062277	.063221	.064102	.064924	.065688
.22				.073089	.074116	.075068	.075950	.076760
.24				.083609	.084690	.085682	.086591	.087418
.26				.093585	.094685	.095684	.096587	.097395
.28				.102800	.103883	.104852	.105713	.106469
.30				.111075	.112103	.113006	.113789	.114457
.34				.124258	.125067	.125728	.126252	.126642
.38				.132370	.132824	.133116	.133256	.133249
.42				.135112	.135099	.134915	.134571	.134075
.46				.132553	.131990	.131254	.130360	.129314
.50				.125039	.123874	.122544	.121062	.119438
.54				.113105	.111320	.109384	.107311	.105111
.58				.097408	.095015	.092490	.089851	.087106
.62				.078667	.075702	.072633	.069477	.066243
.66				.057617	.054140	.050591	.046989	.043340



	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	6D 0	6D 0	6D 0	6D 1	6D 1	6D 1	6D 1	6D 1
.70				.034976	.031064	.027118	.023155	.019180
.78				-.012424	-.016923	-.021373	-.025760	-.030080
.86				-.058844	-.063511	-.068041	-.072425	-.076663
.94				-.100708	-.105118	-.109308	-.113274	-.117021
1.02				-.135563	-.139330	-.142802	-.145983	-.148883
1.10				-.161968	-.164764	-.167208	-.169309	-.171084
1.18				-.179313	-.180889	-.182072	-.182880	-.183335
1.26				-.187631	-.187816	-.187589	-.186974	-.185998
1.34				-.187420	-.186123	-.184414	-.182323	-.179882
1.42				-.179491	-.176689	-.173495	-.169944	-.166072
1.50				-.164839	-.160570	-.155949	-.151012	-.145800
1.66				-.119721	-.112833	-.105713	-.098405	-.090951
1.82				-.060684	-.051817	-.042886	-.033933	-.024999
1.98				.004582	.014637	.024564	.034325	.043888
2.14				.069876	.080288	.090375	.100108	.109467
2.30				.130581	.140562	.150034	.158983	.167398
2.46				.183547	.192409	.200605	.208135	.215007
2.62				.226870	.234057	.240456	.246086	.250970
2.78				.259648	.264746	.268977	.272378	.274989
2.94				.281736	.284473	.286309	.287296	.287490
3.10				.293530	.293765	.293105	.291619	.289374
3.42				.289477	.284701	.279157	.272932	.266110
3.74				.255484	.246190	.236361	.226092	.215469
4.06				.200142	.187162	.173940	.160564	.147113
4.38				.131130	.115413	.099764	.084255	.068949
4.70				.054673	.037146	.019983	.003235	-.013060
5.02				-.024484	-.042993	-.060876	-.078107	-.094673
5.34				-.102896	-.121693	-.139646	-.156754	-.173029
5.66				-.178177	-.196709	-.214225	-.230750	-.246320
5.98				-.248768	-.266612	-.283315	-.298927	-.313503
6.30				-.313728	-.330579	-.346208	-.360685	-.374082
6.94				-.425152	-.439479	-.452531	-.464407	-.475201
7.58				-.511948	-.523487	-.533808	-.543021	-.551231
8.22				-.576215	-.585052	-.592791	-.599546	-.605421
8.86				-.621051	-.627451	-.632907	-.637529	-.641414
9.50				-.649716	-.654017	-.657543	-.660390	-.662646
10.14				-.665238	-.667792	-.669737	-.671156	-.672123
10.78				-.670266	-.671404	-.672090	-.672391	-.672368
11.42				-.667035	-.667053	-.666761	-.666212	-.665454
12.06				-.657399	-.656551	-.655520	-.654345	-.653062
12.70				-.642871	-.641372	-.639801	-.638186	-.636547
13.98				-.603828	-.601528	-.599335	-.597254	-.595286
15.26				-.557163	-.554536	-.552144	-.549974	-.548013
16.54				-.507550	-.504896	-.502562	-.500525	-.498761
17.82				-.457944	-.455440	-.453312	-.451526	-.450052
19.10				-.410159	-.407901	-.406049	-.404567	-.403417
20.38				-.365244	-.363276	-.361726	-.360555	-.359725
21.66				-.323750	-.322079	-.320827	-.319953	-.319418
22.94				-.285893	-.284509	-.283533	-.282927	-.282652
24.22				-.251682	-.250559	-.249830	-.249457	-.249402
25.50				-.220988	-.220099	-.219584	-.219407	-.219532
28.06				-.169297	-.168784	-.168598	-.168710	-.169087
30.62				-.128826	-.128577	-.128607	-.128891	-.129404
33.18				-.097509	-.097433	-.097591	-.097963	-.098528
35.74				-.073479	-.073509	-.073734	-.074135	-.074697
38.30				-.055161	-.055252	-.055500	-.055894	-.056419
40.86				-.041272	-.041391	-.041637	-.042002	-.042473
43.42				-.030788	-.030915	-.031145	-.031469	-.031880
45.98				-.022905	-.023028	-.023233	-.023513	-.023864
48.54				-.016998	-.017111	-.017288	-.017525	-.017819

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	6D 0	6D 0	6D 0	6D 1	6D 1	6D 1	6D 1	6D 1
X								
51.10				-.012585	-.012685	-.012835	-.013032	-.013274
56.22				-.006856	-.006928	-.007030	-.007161	-.007321
61.34				-.003708	-.003756	-.003822	-.003906	-.004007
66.46				-.001992	-.002023	-.002065	-.002117	-.002179
71.58				-.001065	-.001084	-.001109	-.001141	-.001179
76.70				-.000566	-.000578	-.000593	-.000612	-.000634
81.82				-.000300	-.000307	-.000315	-.000326	-.000340
86.94				-.000158	-.000162	-.000167	-.000174	-.000181
92.06				-.000083	-.000085	-.000088	-.000092	-.000096
97.18				-.000044	-.000045	-.000047	-.000049	-.000051
102.30				-.000023	-.000023	-.000024	-.000026	-.000027
112.54				-.000006	-.000006	-.000007	-.000007	-.000007
122.78				-.000002	-.000002	-.000002	-.000002	-.000002
133.02				-.000000	-.000000	-.000000	-.000001	-.000001
143.26				-.000000	-.000000	-.000000	-.000000	-.000000

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	7S 0	7S 0	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2
-E			.32873	.35232	.35524	.35813	.36098	.36379
X								
.00			.000000	.000000	.000000	.000000	.000000	.000000
.01			.013328	.014474	.014570	.014664	.014758	.014852
.02			.021724	.023555	.023673	.023790	.023905	.024020
.03			.026149	.028301	.028391	.028478	.028564	.028648
.04			.027427	.029617	.029644	.029668	.029690	.029710
.05			.026258	.028273	.028216	.028156	.028094	.028030
.06			.023236	.024919	.024769	.024616	.024461	.024304
.07			.018862	.020106	.019861	.019615	.019366	.019115
.08			.013556	.014292	.013959	.013624	.013288	.012950
.09			.007670	.007863	.007450	.007038	.006624	.006210
.10			.001493	.001132	.000655	.000178	-.000299	-.000775
.12			-.010831	-.012249	-.012809	-.013365	-.013918	-.014468
.14			-.022031	-.024348	-.024920	-.025486	-.026045	-.026598
.16			-.031264	-.034257	-.034775	-.035283	-.035781	-.036270
.18			-.038089	-.041509	-.041914	-.042306	-.042685	-.043052
.20			-.042348	-.045946	-.046191	-.046420	-.046635	-.046836
.22			-.044086	-.047628	-.047679	-.047714	-.047733	-.047736
.24			-.043479	-.046759	-.046598	-.046419	-.046224	-.046012
.26			-.040791	-.043637	-.043255	-.042857	-.042441	-.042010
.28			-.036332	-.038607	-.038009	-.037395	-.036766	-.036123
.30			-.030433	-.032037	-.031235	-.030421	-.029594	-.028755
.34			-.015636	-.015727	-.014591	-.013449	-.012302	-.011150
.38			.001137	.002588	.003932	.005272	.006607	.007936
.42			.017838	.020680	.022086	.023477	.024851	.026208
.46			.032920	.036879	.038203	.039499	.040767	.042007
.50			.045328	.050060	.051170	.052243	.053277	.054273
.54			.054439	.059573	.060363	.061107	.061805	.062457
.58			.059987	.065158	.065551	.065890	.066178	.066415
.62			.061983	.066859	.066804	.066693	.066527	.066309
.66			.060644	.064936	.064412	.063833	.063200	.062515
.70			.056325	.059798	.058810	.057771	.056682	.055546
.78			.040556	.041919	.040104	.038253	.036370	.034456
.86			.018547	.017536	.015127	.012708	.010283	.007854
.94			-.005981	-.009262	-.011963	-.014643	-.017298	-.019927
1.02			-.029927	-.035107	-.037786	-.040410	-.042978	-.045488
1.10			-.050990	-.057537	-.059902	-.062182	-.064377	-.066486
1.18			-.067664	-.074971	-.076781	-.078481	-.080073	-.081556
1.26			-.079140	-.086598	-.087673	-.088621	-.089444	-.090146
1.34			-.085171	-.092218	-.092443	-.092534	-.092493	-.092323
1.42			-.085934	-.092084	-.091409	-.090599	-.089659	-.088594

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
	7S 0	7S 0	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2
x								
1.50			-.081895	-.086758	-.085186	-.083489	-.081671	-.079740
1.66			-.062097	-.063627	-.060452	-.057193	-.053857	-.050451
1.82			-.031753	-.029565	-.025244	-.020903	-.016550	-.012192
1.98			.003288	.008955	.013842	.018672	.023440	.028138
2.14			.038177	.046658	.051513	.056236	.060821	.065267
2.30			.069349	.079738	.084025	.088112	.092000	.095688
2.46			.094501	.105802	.109090	.112129	.114923	.117476
2.62			.112408	.123653	.125638	.127346	.128785	.129964
2.78			.122698	.133024	.133529	.133751	.133704	.133401
2.94			.125617	.134306	.133271	.131971	.130421	.128638
3.10			.121823	.128324	.125787	.123021	.120044	.116874
3.42			.097821	.098949	.093800	.088536	.083176	.077738
3.74			.058753	.054114	.047141	.040193	.033286	.026431
4.06			.012185	.002229	-.005688	-.013441	-.021025	-.028438
4.38			-.035859	-.050163	-.058211	-.065981	-.073480	-.080714
4.70			-.081099	-.098509	-.106025	-.113185	-.120004	-.126499
5.02			-.120784	-.139980	-.146474	-.152569	-.158291	-.163662
5.34			-.153380	-.173079	-.178224	-.182965	-.187330	-.191349
5.66			-.178239	-.197273	-.200887	-.204117	-.206998	-.209561
5.98			-.195327	-.212686	-.214697	-.216370	-.217739	-.218834
6.30			-.205012	-.219857	-.220281	-.220428	-.220329	-.220013
6.94			-.204733	-.212725	-.210241	-.207627	-.204903	-.202090
7.58			-.183346	-.183080	-.178233	-.173404	-.168602	-.163835
8.22			-.146885	-.137950	-.131342	-.124884	-.118571	-.112397
8.86			-.100565	-.083261	-.075451	-.067895	-.060576	-.053476
9.50			-.048537	-.023630	-.015090	-.006878	.001029	.008662
10.14			.006055	.037523	.046417	.054932	.063101	.070959
10.78			.060918	.097768	.106726	.115276	.123457	.131308
11.42			.114426	.155441	.164246	.172633	.180642	.188314
12.06			.165465	.209456	.217952	.226031	.233734	.241105
12.70			.213300	.259152	.267227	.274898	.282203	.289187
13.98			.297755	.344391	.351429	.358103	.364449	.370507
15.26			.366310	.410589	.416480	.422059	.427357	.432411
16.54			.419290	.458996	.463742	.468232	.472492	.476552
17.82			.457932	.491664	.495331	.498797	.502081	.505207
19.10			.483885	.510903	.513591	.516127	.518524	.520803
20.38			.498923	.518999	.520820	.522532	.524146	.525676
21.66			.504794	.518064	.519133	.520132	.521067	.521948
22.94			.503125	.509978	.510407	.510798	.511156	.511486
24.22			.495386	.496369	.496261	.496145	.496020	.495888
25.50			.482872	.478618	.478070	.477535	.477014	.476503
28.06			.447825	.435113	.433927	.432789	.431695	.430638
30.62			.405029	.386433	.384870	.383377	.381946	.380569
33.18			.359360	.337114	.335367	.333700	.332106	.330575
35.74			.314036	.289944	.288148	.286436	.284803	.283235
38.30			.271060	.246501	.244748	.243079	.241488	.239962
40.86			.231571	.207549	.205897	.204326	.202830	.201397
43.42			.196116	.173318	.171803	.170362	.168992	.167680
45.98			.164846	.143707	.142345	.141051	.139820	.138642
48.54			.137655	.118417	.117211	.116067	.114979	.113940
51.10			.114286	.097042	.095990	.094991	.094043	.093137
56.22			.077611	.064254	.063476	.062740	.062042	.061376
61.34			.051830	.041871	.041316	.040791	.040294	.039820
66.46			.034139	.026928	.026542	.026177	.025832	.025503
71.58			.022226	.017127	.016863	.016615	.016380	.016157
76.70			.014327	.010790	.010613	.010447	.010290	.010141
81.82			.009156	.006742	.006626	.006516	.006412	.006314
86.94			.005808	.004183	.004107	.004035	.003968	.003904
92.06			.003660	.002579	.002530	.002483	.002440	.002399
97.18			.002293	.001581	.001549	.001520	.001492	.001466

	CE 58	TB 65	BK 97	CF 98	ES 99	FM 100	MD 101	NO 102
X	7S 0	7S 0	7S 2	7S 2	7S 2	7S 2	7S 2	7S 2
102.30			.001429	.000964	.000944	.000926	.000908	.000891
112.54			.000548	.000354	.000346	.000339	.000332	.000325
122.78			.000207	.000128	.000125	.000122	.000120	.000117
133.02			.000077	.000046	.000045	.000044	.000043	.000042
143.26			.000028	.000016	.000016	.000015	.000015	.000015
153.50			.000010	.000006	.000006	.000005	.000005	.000005
163.74			.000004	.000002	.000002	.000002	.000002	.000002
173.98			.000001	.000001	.000001	.000001	.000001	.000001
184.22			.000000	.000000	.000000	.000000	.000000	.000000