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Publication Date

1959-04-21

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UCRL-8635

Lawrence Radiation Laboratory
Berkeley, California

Contract No. W-7405-eng-48

RELATIVISTIC SELF-CONSISTENT CALCULATION FOR
THE NORMAL PLATINUM ATOM

Stanley Cohen

April 21, 1959

Printed for the U. S. Atomic Energy Commission

RELATIVISTIC SELF-CONSISTENT CALCULATION FOR
THE NORMAL PLATINUM ATOM

Stanley Cohen

RAND Corporation
Santa Monica, California

and

Lawrence Radiation Laboratory
University of California
Berkeley, California

April 21, 1959

ABSTRACT

The relativistic self-consistent solution for the normal platinum atom is presented. A comparison is made between the energy eigenvalues for each of the subshells with corresponding experimentally determined energy-term values.

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INTRODUCTION

A previous paper¹ described a method for obtaining the relativistic self-consistent solution without exchange for an atom of arbitrary atomic number and electron configuration. This method involved the use of a rather flexible routing programmed for an IBM type-704 computing machine. The routing described therein has been used to obtain the self-consistent solution for the normal platinum atom, and the results of this calculation are presented in this report. For comparison the experimentally determined energy-term values for each of the subshells of the atom has been included. For a complete description of the method by which these results have been obtained the reader is referred to the previous report.

DETAILS OF THE CALCULATIONS

In this calculation 613 grid points were used for the numerical integrations. For reasons mentioned in the previous report the calculation was carried out by using equal grid spaces in the variable ρ defined as $\rho = \ln(1000r/a_0)$, where a_0 is the Bohr radius in hydrogen and r is the distance from the origin. The grid spacing chosen was $\Delta\rho = 1/36$ with an innermost value of $\rho = \rho_0 = -4$. The range of values of r is therefore from $r_{\min} = r_0 = 1.83156 \times 10^{-4} a_0$ to $r_{\max} = 442.413 a_0$. As will be noted, however, values of r larger than 59.8741 are of no importance because the electron cloud has an insignificant density beyond this value. The iterations

*Work done under the auspices of the U. S. Atomic Energy Commission.

of the calculation were repeated until successive values of the individual subshell contributions to the potential at the origin were constant to at least 1 part in 10^6 . Six-figure accuracy for all energy eigenvalues was obtained as indicated by their values in successive iterations.

RESULTS FOR THE PLATINUM ATOM

The energy eigenvalues obtained from this calculation are given in Table I. Also included in this table are experimental energy-term values for each of the subshells of the atom.² The Appendix contains the edited tabulations of the various potentials and the individual electronic wave functions for this solution. The relativistic radial wave functions consist of two parts--F, the large component, and G, the small component. These wave functions have been normalized and satisfy the condition

$$\int_0^{\infty} (F^2 + G^2) dr = 1.$$

Included in the tabulations are parameters which define the behavior of the wave function for values of r less than r_0 . The normalized wave functions for this region are expressed as power series of the form

$$F = \left(\frac{r}{r_0} \right)^{\lambda} (a_0 + a_1 r + a_2 r^2 + a_3 r^3 + \dots)$$

and

$$G = \left(\frac{r}{r_0} \right)^{\lambda} (\beta_0 + \beta_1 r + \beta_2 r^2 + \beta_3 r^3 + \dots) \quad (1)$$

Table I

Comparison of energy eigenvalues with experimentally
determined term values for platinum

Subshell	Experimental energy-term value	Calculated eigenvalue
1S	5773.8(Ry)	5796.7
2S	1021.92	1011.44
2P _{1/2}	977.41	973.04
2P _{3/2}	851.47	845.37
3S	242.60	236.76
3P _{1/2}	222.46	218.05
3P _{3/2}	194.73	190.38
3D _{3/2}	162.01	160.11
3D _{5/2}	156.01	154.11
4S	53.06	50.59
4P _{1/2}	44.51	42.63
4P _{3/2}	37.82	36.01
4D _{3/2}	24.24	23.11
4D _{5/2}	22.84	21.89
4F _{5/2}	} 5.15	5.57
4F _{7/2}		5.32
5S	7.29	7.666
5P _{1/2}	4.51	5.102
5P _{3/2}	3.51	3.980
5D _{3/2}	0.5992
5D _{5/2}	0.486
6S	0.502

REFERENCES

1. Stanley Cohen, "Relativistic Self-Consistent Calculation for the Normal Mercury Atom, "UCRL-8389, July 28, 1958.
2. Landolt and Boernstein, Zahlenwerte und Funktionen, Band 1 6 Auflage (Springer, Berlin, 1950), p.228.

APPENDIX

This appendix contains edited results of the self-consistent calculation for the normal platinum atom. Because these tabulations were printed by the computing machine, a description of the notation is necessary. All numbers are written in decimal form consisting of two parts: The first seven digits preceded by a decimal point are a decimal number between 0.0 and 1.0. The sign and two-digit number that follow are the power of ten by which this number is multiplied. The sign of the number is to the left of the decimal point; thus $-.9072915-07$ is to be read as $-.9072915 \times 10^{-7}$. Zero is represented as $.0000000-39$.

The first two pages of the tabulation contain information about the atom and its configuration. The entries at the top of the page are as follows: the problem identification number, the atomic number, the number of electrons in the atom, the number of shells in the atom, the values of r_0 , ρ_0 , and $\Delta\rho$, and the number of grid points used. Following this is the electric potential at r_0 due to the electrons of the atom. A tabulation of r , ρ , and r times the total atomic potential follows. Note that in this and other tabulations, values of the functions at every ninth grid point are given. All potentials and energies are expressed in Rydbergs.

Each electron subshell has a separate tabulation which is identified by the designation in the upper left-hand corner. Following this are the number of electrons in the subshell, the eigenvalue in Rydbergs, the potential contribution at r_0 for one electron of this subshell, and λ , the parameter used in the power series for the wave function at r_0 (see Eq. (1)). The next two lines contain α 's and β 's for this power-series expression, starting with α_0 and followed by $\alpha_1, \alpha_2, \dots$ etc. In general, only five values are given and are sufficient to express the wave function to eight significant figures for values of r near r_0 . A tabulation of the quantities

$rv_1(r)$, v_1 , $\int_0^r (F^2 + G^2)dr$, F , G , and ρ follows. Here v_1 is the potential

due to one electron in this subshell.

Although eight-figure results are tabulated here, small errors due to rounding may be present. These are sometimes manifested in inconsistencies of the monotonic behavior of some results for large values of r . Because these results are in fact not accurate to eight figures, these variations are not significant.

PROB. NO.	ATOMIC NO.	SUM NP	NO. SHELLS
.1290000 03	.7800000 02	.7800000 02	.6000000 01
R(0)	RHO(0)	DELTA RHO	GRID PTS.
.1831564-04-	.4000000 01	.2777778-01	.6130000 03

ELEC. POT.	AT ORIGIN	RHO	R TIMES V(R)
.1831564-04-	.4000000 01-	.1559784 03	
.2351775-04-	.3750000 01-	.1559722 03	
.3019738-04-	.3500000 01-	.1559643 03	
.3877421-04-	.3250000 01-	.1559542 03	
.4978707-04-	.3000000 01-	.1559412 03	
.6392786-04-	.2750000 01-	.1559245 03	
.8208499-04-	.2500000 01-	.1559031 03	
.1053992-03-	.2250000 01-	.1558755 03	
.1353353-03-	.2000000 01-	.1558402 03	
.1737739-03-	.1750000 01-	.1557948 03	
.2231301-03-	.1500000 01-	.1557365 03	
.2865048-03-	.1250000 01-	.1556618 03	
.3678794-03-	.1000000 01-	.1555658 03	
.4723665-03-	.7500000 00-	.1554427 03	
.6065306-03-	.5000000 00-	.1552849 03	
.7788007-03-	.2500000 00-	.1550826 03	
.9999999-03	.0000000-39-	.1548237 03	
.1284025-02	.2500000 00-	.1544927 03	
.1648721-02	.5000000 00-	.1540704 03	
.2117000-02	.7500000 00-	.1535331 03	
.2718281-02	.1000000 01-	.1528519 03	
.3490342-02	.1250000 01-	.1519928 03	
.4481688-02	.1500000 01-	.1509163 03	
.5754602-02	.1750000 01-	.1495780 03	
.7389055-02	.2000000 01-	.1479293 03	
.9487734-02	.2250000 01-	.1459170 03	
.1218249-01	.2500000 01-	.1434805 03	
.1564263-01	.2750000 01-	.1405452 03	
.2008553-01	.3000000 01-	.1370143 03	
.2579033-01	.3250000 01-	.1327683 03	
.3311544-01	.3500000 01-	.1276891 03	
.4252107-01	.3750000 01-	.1217089 03	
.5459813-01	.4000000 01-	.1148413 03	
.7010539-01	.4250000 01-	.1071214 03	
.9001710-01	.4500000 01-	.9849237 02	
.1155843 00	.4750000 01-	.8887729 02	
.1484131 00	.5000000 01-	.7851105 02	
.1905662 00	.5250000 01-	.6793300 02	
.2446918 00	.5500000 01-	.5730021 02	
.3141905 00	.5750000 01-	.4636572 02	
.4034286 00	.6000000 01-	.3570463 02	
.5180126 00	.6250000 01-	.2663554 02	
.6651413 00	.6500000 01-	.1952514 02	
.8540584 00	.6750000 01-	.1375831 02	
.1096633 01	.7000000 01-	.9047291 01	
.1408104 01	.7250000 01-	.5516721 01	
.1808042 01	.7500000 01-	.3109787 01	
.2321571 01	.7750000 01-	.1579692 01	
.2980957 01	.8000000 01-	.6911038 00	
.3827624 01	.8250000 01-	.2457947 00	
.4914767 01	.8500000 01-	.6589274-01	
.6310686 01	.8750000 01-	.1203211-01	

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-9-

.8103080 01 .9000000 01-.1317546-02
.1040456 02 .9250000 01-.7681486-04
.1335972 02 .9500000 01-.4945505-05
.1715422 02 .9750000 01-.7673509-05
.2202645 02 .1000000 02-.6157951-05
.2828253 02 .1025000 02-.5535775-05
.3631548 02 .1050000 02-.4052123-05
.4663000 02 .1075000 02-.4211656-05
.5987411 02 .1100000 02-.3956404-05
.7687987 02 .1125000 02-.3956404-05
.9871572 02 .1150000 02-.3956404-05
.1267535 03 .1175000 02-.3956404-05
.1627547 03 .1200000 02-.3956404-05
.2089812 03 .1225000 02-.3956404-05
.2683371 03 .1250000 02-.3956404-05
.3445517 03 .1275000 02-.3956404-05
.4424131 03 .1300000 02-.3956404-05

DESIGNATION	NP	RIND.	ENRGY	V(I)	LAMBDA
1 S 1/2	.2000000	01-	.5796672	04 .1881427	03 .8222074 00

ALPHA S	.7866734-01-	.6118378	01 .2397588	03-.6259559	04 .1227766	06
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	
BETA S	-.2457268-01	.1924520	01-.7536039	02 .1970590	04-.3863754	05
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.3445955-02	.1881427	03 .4694782-07	.7855536-01-	.2453746-01-	.4000000 01
.4424656-02	.1881412	03 .9088112-07	.9644287-01-	.3012469-01-	.3750000 01
.5681299-02	.1881388	03 .1758977-06	.1183899	00-.3697988-01-	.3500000 01
.7294793-02	.1881352	03 .3403715-06	.1453098	00-.4538828-01-	.3250000 01
.9366429-02	.1881298	03 .6584563-06	.1783171	00-.5569794-01-	.3000000 01
.1202621-01	.1881216	03 .1273349-05	.2187688	00-.6833264-01-	.2750000 01
.1544095-01	.1881093	03 .2461337-05	.2683132	00-.8380706-01-	.2500000 01
.1982462-01	.1880908	03 .4754909-05	.3289460	00-.1027443	00-.2250000 01
.2545155-01	.1880629	03 .9178869-05	.4030728	00-.1258953	00-.2000000 01
.3267316-01	.1880211	03 .1770192-04	.4935774	00-.1541601	00-.1750000 01
.4193916-01	.1879583	03 .3409712-04	.6038907	00-.1886094	00-.1500000 01
.5382397-01	.1878641	03 .6557382-04	.7380538	00-.2305036	00-.1250000 01
.6905952-01	.1877232	03 .1258535-03	.9007617	00-.2813066	00-.1000000 01
.8857484-01	.1875130	03 .2409211-03	.1097366	01-.3426858	00-.7500000 00
.1135425 00	.1872000	03 .4596659-03	.1333801	01-.4164886	00-.5000000 00
.1454301 00	.1867359	03 .8732989-03	.1616384	01-.5046780	00-.2500000 00
.1860512 00	.1860512	03 .1650139-02	.1951402	01-.6092029	00 .0000000-39
.2376052 00	.1850471	03 .3096406-02	.2344386	01-.7317688	00 .2500000 00
.3026829 00	.1835865	03 .5758901-02	.2798919	01-.8734626	00 .5000000 00
.3841993 00	.1814829	03 .1059031-01	.3314812	01-.1034180	01 .7500000 00
.4851922 00	.1784923	03 .1919695-01	.3885481	01-.1211803	01 .1000000 01
.6083988 00	.1743092	03 .3416986-01	.4494463	01-.1401116	01 .1250000 01
.7555128 00	.1685777	03 .5943895-01	.5111269	01-.1592518	01 .1500000 01
.9260614 00	.1609254	03 .1004571	00 .5687330	01-.1770778	01 .1750000 01
.1115993 01	.1510332	03 .1638039	00 .6153720	01-.1914372	01 .2000000 01
.1316380 01	.1387455	03 .2555917	00 .6423647	01-.1996322	01 .2250000 01
.1513118 01	.1242043	03 .3781777	00 .6403791	01-.1987790	01 .2500000 01
.1688779 01	.1079601	03 .5257048	00 .6018119	01-.1865523	01 .2750000 01
.1827314 01	.9097665	02 .6811606	00 .5243516	01-.1622871	01 .3000000 01
.1920320 01	.7445892	02 .8194706	00 .4146369	01-.1280979	01 .3250000 01
.1971062 01	.5952094	02 .9187124	00 .2895778	01-.8926906	00 .3500000 01
.1992289 01	.4685416	02 .9729294	00 .1725078	01-.5303967	00 .3750000 01
.1998622 01	.3660604	02 .9939158	00 .8385422	00-.2570045	00 .4000000 01
.1999853 01	.2852637	02 .9991782	00 .3142657	00-.9597114-01	.4250000 01
.1999992 01	.2221791	02 .9999425	00 .8445365-01-	.2569083-01	.4500000 01
.2000000 01	.1730339	02 .9999983	00 .1482995-01-	.4493132-02	.4750000 01
.2000000 01	.1347590	02 .1000000	01 .1511106-02-	.4558838-03	.5000000 01
.2000000 01	.1049504	02 .1000000	01 .7678925-04-	.2306220-04	.5250000 01
.2000000 01	.8173546	01 .1000000	01 .1603558-05-	.4794361-06	.5500000 01
.2000000 01	.6365563	01 .1000000	01 .1079477-07-	.3212558-08	.5750000 01
.2000000 01	.4957506	01 .1000000	01 .0000000-39	.0000000-39	.6000000 01
.2000000 01	.3860910	01 .1000000	01 .0000000-39	.0000000-39	.6250000 01
.2000000 01	.3006880	01 .1000000	01 .0000000-39	.0000000-39	.6500000 01
.2000000 01	.2341760	01 .1000000	01 .0000000-39	.0000000-39	.6750000 01
.2000000 01	.1823765	01 .1000000	01 .0000000-39	.0000000-39	.7000000 01
.2000000 01	.1420349	01 .1000000	01 .0000000-39	.0000000-39	.7250000 01
.2000000 01	.1106169	01 .1000000	01 .0000000-39	.0000000-39	.7500000 01
.2000000 01	.8614855	00 .1000000	01 .0000000-39	.0000000-39	.7750000 01
.2000000 01	.6709256	00 .1000000	01 .0000000-39	.0000000-39	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.0000000-39	.0000000-39	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.0000000-39	.0000000-39	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000-39	.0000000-39	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
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.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
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.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION NP BIND. ENERGY V(O) LAMBDA
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ALPHA S .6187921-05-.2387155-03 .4889724-02-.6770755-01 .7124412 00
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BETA S -.8991128-06 .3676452-04-.7631220-03 .1070142-01-.1132826.00
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.6894092-03	.3764047 02	.1479504-15	.6183550-05-	.8984397-06-	.4000000 01
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.3764045-01	.3764046 02	.3478785-07	.1274954-01-	.1848222-02	.0000000-39
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.6205845-01	.3764036 02	.3743730-06	.3243351-01-	.4694615-02	.5000000 00
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.1023153 00	.3763970 02	.3923194-05	.8118891-01-	.1172307-01	.1000000 01
.1313713 00	.3763852 02	.1251241-04	.1272965 00-	.1834900-01	.1250000 01
.1686711 00	.3763562 02	.3936481-04	.1979316 00-	.2846932-01	.1500000 01
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.7413881 00	.3691155 02	.2136340-01	.1947888 01-	.2732530 00	.3000000 01
.9328170 00	.3616925 02	.5109189-01	.2542849 01-	.3543678 00	.3250000 01
.1154019 01	.3484836 02	.1121306 00	.3130191 01-	.4328843 00	.3500000 01
.1390880 01	.3271037 02	.2218544 00	.3576502 01-	.4901651 00	.3750000 01
.1617061 01	.2961751 02	.3886804 00	.3718504 01-	.5043301 00	.4000000 01
.1800484 01	.2568254 02	.5942182 00	.3431145 01-	.4599748 00	.4250000 01
.1919443 01	.2132309 02	.7887877 00	.2722209 01-	.3603948 00	.4500000 01
.1976833 01	.1710296 02	.9212845 00	.1784382 01-	.2330371 00	.4750000 01
.1995726 01	.1344710 02	.9811683 00	.9195896 00-	.1182616 00	.5000000 01
.1999555 01	.1049271 02	.9974658 00	.3503733 00-	.4429527-01	.5250000 01
.1999978 01	.8173455 01	.9998372 00	.9129706-01-	.1134227-01	.5500000 01
.1999999 01	.6365562 01	.9999959 00	.1471495-01-	.1797469-02	.5750000 01
.2000000 01	.4957506 01	.1000000 01	.1291685-02-	.1551335-03	.6000000 01
.2000000 01	.3860909 01	.1000000 01	.5269005-04-	.6219460-05	.6250000 01
.2000000 01	.3006879 01	.1000000 01	.8168317-06-	.9482304-07	.6500000 01
.2000000 01	.2341760 01	.1000000 01	.3714537-08-	.4248279-09	.6750000 01
.2000000 01	.1823765 01	.1000000 01	.3544357-11-	.3999315-12	.7000000 01
.2000000 01	.1420349 01	.1000000 01	.0000000-39	.0000000-39	.7250000 01
.2000000 01	.1106169 01	.1000000 01	.0000000-39	.0000000-39	.7500000 01
.2000000 01	.8614855 00	.1000000 01	.0000000-39	.0000000-39	.7750000 01
.2000000 01	.6709256 00	.1000000 01	.0000000-39	.0000000-39	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.0000000-39	.0000000-39	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.0000000-39	.0000000-39	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000-39	.0000000-39	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01		.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION NP BIND. ENERGY V(O) LAMBDA
2 P 1/2 .2000000 01-.9730427 03 .4587649 02 .8222074 00

ALPHA S .2466526-02 .6580928 00-.2840702 02 .6197507 03-.9008526 04
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39
BETA S .7896372-02-.4324982 00 .1165166 02-.2024281 03 .2588917 04
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.8402571-03	.4587649 02	.4736727-09	.2478569-02	.7888454-02-	.4000000 01
.1078911-02	.4587647 02	.9172894-09	.3048383-02	.9685860-02-	.3750000 01
.1385349-02	.4587645 02	.1776278-08	.3750647-02	.1189185-01-	.3500000 01
.1778821-02	.4587641 02	.3439411-08	.4616981-02	.1459874-01-	.3250000 01
.2284049-02	.4587636 02	.6659139-08	.5687017-02	.1791940-01-	.3000000 01
.2932772-02	.4587627 02	.1289145-07	.7010690-02	.2199161-01-	.2750000 01
.3765744-02	.4587615 02	.2495291-07	.8651306-02	.2698330-01-	.2500000 01
.4835291-02	.4587596 02	.4829022-07	.1068972-01	.3309866-01-	.2250000 01
.6208598-02	.4587568 02	.9343159-07	.1323010-01	.4058525-01-	.2000000 01
.7971924-02	.4587526 02	.1807164-06	.1640798-01	.4974206-01-	.1750000 01
.1023601-01	.4587462 02	.3494116-06	.2040171-01	.6092837-01-	.1500000 01
.1314302-01	.4587365 02	.6752610-06	.2544881-01	.7457301-01-	.1250000 01
.1687544-01	.4587220 02	.1304223-05	.3186966-01	.9118332-01-	.1000000 01
.2166746-01	.4587001 02	.2517218-05	.4010191-01	.1113522 00-	.7500000 00
.2781957-01	.4586672 02	.4854170-05	.5075082-01	.1357613 00-	.5000000 00
.3571719-01	.4586179 02	.9351211-05	.6466261-01	.1651753 00-	.2500000 00
.4585438-01	.4585439 02	.1799361-04	.8303098-01	.2004235 00	.0000000-39
.5886396-01	.4584331 02	.3458006-04	.1075501 00	.2423562 00	.2500000 00
.7555550-01	.4582673 02	.6637376-04	.1406306 00	.2917662 00	.5000000 00
.9696274-01	.4580197 02	.1272694-03	.1856945 00	.3492541 00	.7500000 00
.1244021 00	.4576500 02	.2439212-03	.2475622 00	.4150174 00	.1000000 01
.1595429 00	.4570980 02	.4677744-03	.3329186 00	.4885360 00	.1250000 01
.2044873 00	.4562729 02	.8991702-03	.4507980 00	.5681360 00	.1500000 01
.2618543 00	.4550346 02	.1736733-02	.6129185 00	.6504337 00	.1750000 01
.3348459 00	.4531647 02	.3380252-02	.8335019 00	.7297155 00	.2000000 01
.4272475 00	.4503157 02	.6644719-02	.1127920 01	.7974115 00	.2250000 01
.5432541 00	.4459302 02	.1319086-01	.1509130 01	.8419898 00	.2500000 01
.6869101 00	.4391271 02	.2631959-01	.1980647 01	.8498074 00	.2750000 01
.8608198 00	.4285771 02	.5219647-01	.2525229 01	.8076117 00	.3000000 01
.1063754 01	.4124623 02	.1010616 00	.3090671 01	.7071937 00	.3250000 01
.1287248 01	.3887153 02	.1866698 00	.3578960 01	.5516987 00	.3500000 01
.1512763 01	.3557679 02	.3206381 00	.3851979 01	.3609713 00	.3750000 01
.1713191 01	.3137819 02	.4998976 00	.3769781 01	.1710096 00	.4000000 01
.1862405 01	.2656579 02	.6948451 00	.3264588 01	.2309486-01	.4250000 01
.1949867 01	.2166108 02	.8571090 00	.2417644 01-	.5556910-01	.4500000 01
.1987306 01	.1719357 02	.9532794 00	.1466921 01-	.6797181-01	.4750000 01
.1998000 01	.1346242 02	.9904863 00	.6914431 00-	.4439318-01	.5000000 01
.1999829 01	.1049414 02	.9989506 00	.2370105 00-	.1840919-01	.5250000 01
.1999993 01	.8173518 01	.9999473 00	.5434352-01-	.4770221-02	.5500000 01
.2000000 01	.6365563 01	.9999991 00	.7485163-02-	.7136376-03	.5750000 01
.2000000 01	.4957506 01	.1000000 01	.5403394-03-	.5449459-04	.6000000 01
.2000000 01	.3860910 01	.1000000 01	.1723630-04-	.1805005-05	.6250000 01
.2000000 01	.3006880 01	.1000000 01	.1957219-06-	.2102337-07	.6500000 01
.2000000 01	.2341760 01	.1000000 01	.5995699-09-	.6557198-10	.6750000 01
.2000000 01	.1823765 01	.1000000 01	.0000000-39	.0000000-39	.7000000 01
.2000000 01	.1420349 01	.1000000 01	.0000000-39	.0000000-39	.7250000 01
.2000000 01	.1106169 01	.1000000 01	.0000000-39	.0000000-39	.7500000 01
.2000000 01	.8614855 00	.1000000 01	.0000000-39	.0000000-39	.7750000 01
.2000000 01	.6709256 00	.1000000 01	.0000000-39	.0000000-39	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.0000000-39	.0000000-39	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.0000000-39	.0000000-39	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000-39	.0000000-39	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01		.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	BIND.	ENERGY	V(O)	LAMBDA
2 S 1/2	.2000000	01-	.1011441	04 .4593602	02 .8222074 00

ALPHA S	.3018729-01-	.2628380	01 .8409936	02-.1623417	04 .2221454	05 .0000000-39
BETA S	-.9429359-02	.6138814	00-.1791021	02 .3282277	03-.4355826	04 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.8413475-03	.4593602	02 .6911788-08	.3013918-01-	.9418121-02-	.4000000 01
.1080306-02	.4593578	02 .1337903-07	.3700025-01-	.1156345-01-	.3750000 01
.1387130-02	.4593543	02 .2589288-07	.4541736-01-	.1419608-01-	.3500000 01
.1781090-02	.4593490	02 .5009953-07	.5574005-01-	.1742592-01-	.3250000 01
.2286924-02	.4593411	02 .9690728-07	.6839439-01-	.2138722-01-	.3000000 01
.2936392-02	.4593291	02 .1873748-06	.8389867-01-	.2624366-01-	.2750000 01
.3770254-02	.4593110	02 .3621182-06	.1028815 00-	.3219443-01-	.2500000 01
.4840815-02	.4592837	02 .6993789-06	.1261025 00-	.3948128-01-	.2250000 01
.6215175-02	.4592428	02 .1349643-05	.1544752 00-	.4839652-01-	.2000000 01
.7979374-02	.4591813	02 .2601768-05	.1890906 00-	.5929201-01-	.1750000 01
.1024366-01	.4590890	02 .5008769-05	.2312411 00-	.7258868-01-	.1500000 01
.1314916-01	.4589507	02 .9625854-05	.2824388 00-	.8878591-01-	.1250000 01
.1687625-01	.4587440	02 .1845773-04	.3444241 00-	.1084697 00-	.1000000 01
.2165497-01	.4584358	02 .3529161-04	.4191538 00-	.1323171 00-	.7500000 00
.2777775-01	.4579777	02 .6722992-04	.5087509 00-	.1610940 00-	.5000000 00
.3561453-01	.4572997	02 .1274656-03	.6153937 00-	.1956395 00-	.2500000 00
.4563016-01	.4563016	02 .2401992-03	.7411035 00-	.2368298 00	.0000000-39
.5840296-01	.4548428	02 .4490916-03	.8873773 00-	.2855070 00	.2500000 00
.7464247-01	.4527295	02 .8311825-03	.1054591 01-	.3423560 00	.5000000 00
.9520224-01	.4497036	02 .1518373-02	.1241072 01-	.4077063 00	.7500000 00
.1210819 00	.4454355	02 .2727232-02	.1441743 01-	.4812286 00	.1000000 01
.1534112 00	.4395306	02 .4792573-02	.1646235 01-	.5615016 00	.1250000 01
.1934134 00	.4315637	02 .8186509-02	.1836478 01-	.6454356 00	.1500000 01
.2423602 00	.4211589	02 .1347781-01	.1983989 01-	.7275816 00	.1750000 01
.3015713 00	.4081325	02 .2114899-01	.2047568 01-	.7994469 00	.2000000 01
.3725791 00	.3926956	02 .3117530-01	.1972879 01-	.8490886 00	.2250000 01
.4576450 00	.3756580	02 .4239027-01	.1696568 01-	.8614875 00	.2500000 01
.5607496 00	.3584753	02 .5212380-01	.1158647 01-	.8204450 00	.2750000 01
.6887052 00	.3428862	02 .5752013-01	.3268084 00-	.7128253 00	.3000000 01
.8508966 00	.3299285	02 .6063115-01-	.7672814 00-	.5354586 00	.3250000 01
.1054903 01	.3185531	02 .7725985-01-	.1989767 01-	.3033274 00	.3500000 01
.1296379 01	.3048793	02 .1414642 00-	.3091070 01-	.5454795-01	.3750000 01
.1548490 01	.2836159	02 .2888021 00-	.3756032 01	.1551046 00	.4000000 01
.1765373 01	.2518170	02 .5146100 00-	.3739209 01	.2729855 00	.4250000 01
.1908562 01	.2120221	02 .7502322 00-	.3036892 01	.2790897 00	.4500000 01
.1975656 01	.1709278	02 .9123717 00-	.1956787 01	.2029605 00	.4750000 01
.1996047 01	.1344927	02 .9813509 00-	.9562085 00	.1062964 00	.5000000 01
.1999659 01	.1049325	02 .9979076 00-	.3332355 00	.3856931-01	.5250000 01
.1999987 01	.8173492	01 .9998961 00-	.7635334-01	.9047642-02	.5500000 01
.2000000 01	.6365563	01 .9999982 00-	.1033647-01	.1241322-02	.5750000 01
.2000000 01	.4957506	01 .1000000 01-	.7208285-03	.8708996-04	.6000000 01
.2000000 01	.3860909	01 .1000000 01-	.2178994-04	.2634060-05	.6250000 01
.2000000 01	.3006879	01 .1000000 01-	.2292728-06	.2764369-07	.6500000 01
.2000000 01	.2341760	01 .1000000 01-	.6337343-09	.7612291-10	.6750000 01
.2000000 01	.1823765	01 .1000000 01-	.3235155-12	.3871460-13	.7000000 01
.2000000 01	.1420349	01 .1000000 01	.0000000-39	.0000000-39	.7250000 01
.2000000 01	.1106169	01 .1000000 01	.0000000-39	.0000000-39	.7500000 01
.2000000 01	.8614855	00 .1000000 01	.0000000-39	.0000000-39	.7750000 01
.2000000 01	.6709256	00 .1000000 01	.0000000-39	.0000000-39	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.0000000-39	.0000000-39	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.0000000-39	.0000000-39	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000-39	.0000000-39	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01		.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	BIND. ENERGY	V(O)	LAMBDA
3 D 5/2	.6000000	01-.1541125	03 .1379568	02 .2945509

ALPHA S	.2132151-09-	.5454503-08	.7971156-07-	.8063697-06	.6325144-03
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	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
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BETA S	-.2041196-10	.5950329-09-	.9020648-08	.9427771-07-	.7529712-06
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	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
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R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO	
.2526767-03	.1379568	02 .1218375-24	.2131152-09-	.2040106-10-	.4000000	01
.3244433-03	.1379568	02 .6821189-24	.4450013-09-	.4259824-10-	.3750000	01
.4165935-03	.1379568	02 .3818730-23	.9291626-09-	.8894299-10-	.3500000	01
.5349166-03	.1379568	02 .2137642-22	.1939997-08-	.1856982-09-	.3250000	01
.6868465-03	.1379568	02 .1196476-21	.4050264-08-	.3876796-09-	.3000000	01
.8819284-03	.1379568	02 .6695951-21	.8455336-08-	.8092795-09-	.2750000	01
.1132418-02	.1379568	02 .3746644-20	.1764956-07-	.1689170-08-	.2500000	01
.1454054-02	.1379568	02 .2095909-19	.3683659-07-	.3525192-08-	.2250000	01
.1867042-02	.1379568	02 .1172125-18	.7686907-07-	.7355436-08-	.2000000	01
.2397330-02	.1379568	02 .6552550-18	.1603723-06-	.1534358-07-	.1750000	01
.3078232-02	.1379568	02 .3661297-17	.3344922-06-	.3199680-07-	.1500000	01
.3952529-02	.1379568	02 .2044503-16	.6974084-06-	.6669745-07-	.1250000	01
.5075147-02	.1379568	02 .1140753-15	.1453412-05-	.1389583-06-	.1000000	01
.6516618-02	.1379568	02 .6358396-15	.3027152-05-	.2893126-06-	.7500000	00
.8367503-02	.1379568	02 .3539396-14	.6300153-05-	.6018327-06-	.5000000	00
.1074409-01	.1379568	02 .1966862-13	.1309925-04-	.1250557-05-	.2500000	00
.1379568-01	.1379568	02 .1090621-12	.2720203-04-	.2594867-05	.0000000-39	
.1771400-01	.1379568	02 .6030630-12	.5639790-04-	.5374490-05	.2500000	00
.2274523-01	.1379568	02 .3322765-11	.1166908-03-	.1110577-04	.5000000	00
.2920545-01	.1379568	02 .1822425-10	.2408088-03-	.2288063-04	.7500000	00
.3750054-01	.1379568	02 .9937040-10	.4952812-03-	.4696102-04	.1000000	01
.4815165-01	.1379568	02 .5377916-09	.1014305-02-	.9591911-04	.1250000	01
.6182794-01	.1379568	02 .2882837-08	.2065877-02-	.1947159-03	.1500000	01
.7938865-01	.1379568	02 .1526625-07	.4178314-02-	.3922041-03	.1750000	01
.1019370	00 .1379568	02 .7959817-07	.8375712-02-	.7822481-03	.2000000	01
.1308896	00 .1379567	02 .4069162-06	.1659993-01-	.1540934-02	.2250000	01
.1680650	00 .1379562	02 .2028792-05	.3242748-01-	.2988373-02	.2500000	01
.2157971	00 .1379545	02 .9799806-05	.6219422-01-	.5682499-02	.2750000	01
.2770761	00 .1379481	02 .4548334-04	.1165440	00-.1054071-01	.3000000	01
.3557148	00 .1379256	02 .2007727-03	.2120687	00-.1894995-01	.3250000	01
.4565003	00 .1378512	02 .8324567-03	.3718941	00-.3275256-01	.3500000	01
.5851805	00 .1376213	02 .3193928-02	.6226896	00-.5389431-01	.3750000	01
.7478339	00 .1369706	02 .1114109-01	.9841608	00-.8346460-01	.4000000	01
.9486246	00 .1353141	02 .3461683-01	.1447675	01-.1199917	00 .4250000	01
.1184636	01 .1316012	02 .9363185-01	.1947601	01-.1573903	00 .4500000	01
.1438341	01 .1244409	02 .2152348	00 .2346022	01-.1842414	00 .4750000	01
.1674347	01 .1128166	02 .4117477	00 .2467723	01-.1874908	00 .5000000	01
.1851843	01 .9717584	01 .6484138	00 .2200362	01-.1611411	00 .5250000	01
.1951544	01 .7975518	01 .8482197	00 .1601983	01-.1129840	00 .5500000	01
.1989738	01 .6332903	01 .9577577	00 .9078086	00-.6163090-01	.5750000	01
.1998752	01 .4954413	01 .9933147	00 .3785026	00-.2464583-01	.6000000	01
.1999924	01 .3860763	01 .9994768	00 .1090167	00-.6777692-02	.6250000	01
.1999998	01 .3006876	01 .9999829	00 .2005825-01-	.1190079-02	.6500000	01
.2000000	01 .2341760	01 .9999999	00 .2119383-02-	.1204236-03	.6750000	01
.2000000	01 .1823765	01 .1000000	01 .1115936-03-	.6099922-05	.7000000	01
.2000000	01 .1420349	01 .1000000	01 .2440593-05-	.1289087-06	.7250000	01
.2000000	01 .1106169	01 .1000000	01 .1756036-07-	.9003832-09	.7500000	01
.2000000	01 .8614854	00 .1000000	01 .3087255-10-	.1543911-11	.7750000	01
.2000000	01 .6709256	00 .1000000	01 .7915294-14-	.3942510-15	.8000000	01

•2000000	01	•5225173	00	•1000000	01	•0000000-39	•0000000-39	•8250000	01
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•2000000	01	•3169228	00	•1000000	01	•0000000-39	•0000000-39	•8750000	01
•2000000	01	•2468197	00	•1000000	01	•0000000-39	•0000000-39	•9000000	01
•2000000	01	•1922234	00	•1000000	01	•0000000-39	•0000000-39	•9250000	01
•2000000	01	•1497037	00	•1000000	01	•0000000-39	•0000000-39	•9500000	01
•2000000	01	•1165894	00	•1000000	01	•0000000-39	•0000000-39	•9750000	01
•2000000	01	•9079991-01	•1000000	01	•0000000-39	•0000000-39	•1000000	02	
•2000000	01	•7071504-01	•1000000	01	•0000000-39	•0000000-39	•1025000	02	
•2000000	01	•5507293-01	•1000000	01	•0000000-39	•0000000-39	•1050000	02	
•2000000	01	•4289084-01	•1000000	01	•0000000-39	•0000000-39	•1075000	02	
•2000000	01	•3340342-01	•1000000	01	•0000000-39	•0000000-39	•1100000	02	
•2000000	01	•2601461-01	•1000000	01	•0000000-39	•0000000-39	•1125000	02	
•2000000	01	•2026020-01	•1000000	01	•0000000-39	•0000000-39	•1150000	02	
•2000000	01	•1577866-01	•1000000	01	•0000000-39	•0000000-39	•1175000	02	
•2000000	01	•1228843-01	•1000000	01	•0000000-39	•0000000-39	•1200000	02	
•2000000	01	•9570240-02	•1000000	01	•0000000-39	•0000000-39	•1225000	02	
•2000000	01	•7453311-02	•1000000	01	•0000000-39	•0000000-39	•1250000	02	
•2000000	01	•5804644-02	•1000000	01	•0000000-39	•0000000-39	•1275000	02	
•2000000	01	•4520661-02	•1000000	01	•0000000-39	•0000000-39	•1300000	02	

DESIGNATION NP RIND. ENERGY V(O) LAMBDA
3 D 3/2 .4000000 01-.1601112 03 .1428418 02 .1917296 01

ALPHA S .3987092-07 .1404001-04-.3727535-03 .5547210-02-.5675851-01
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39
BETA S .2744017-06-.8501439-05 .1461188-03-.1701026-02 .1510420-01
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.2616239-03	.1428418 02	.2910756-18	.4012794-07	.2742461-06-	.4000000 01
.3359317-03	.1428418 02	.9746021-18	.6492375-07	.4428312-06-	.3750000 01
.4313449-03	.1428418 02	.3263084-17	.1050950-06	.7150166-06-	.3500000 01
.5538578-03	.1428418 02	.1092435-16	.1702328-06	.1154432-05-	.3250000 01
.7111675-03	.1428418 02	.3656983-16	.2759723-06	.1863752-05-	.3000000 01
.9131571-03	.1428418 02	.1224050-15	.4478650-06	.3008608-05-	.2750000 01
.1172517-02	.1428418 02	.4096466-15	.7277995-06	.4856118-05-	.2500000 01
.1505542-02	.1428418 02	.1370679-14	.1184716-05	.7836883-05-	.2250000 01
.1933154-02	.1428418 02	.4585166-14	.1932621-05	.1264470-04-	.2000000 01
.2482218-02	.1428418 02	.1533337-13	.3161150-05	.2039668-04-	.1750000 01
.3187231-02	.1428418 02	.5125620-13	.5187960-05	.3288997-04-	.1500000 01
.4092486-02	.1428418 02	.1712516-12	.8549565-05	.5301262-04-	.1250000 01
.5254856-02	.1428418 02	.5718002-12	.1416084-04	.8539911-04-	.1000000 01
.6747369-02	.1428418 02	.1907670-11	.2359884-04	.1374729-03-	.7500000 00
.8663792-02	.1428418 02	.6358049-11	.3961453-04	.2210971-03-	.5000000 00
.1112453-01	.1428418 02	.2116417-10	.6706782-04	.3551715-03-	.2500000 00
.1428418-01	.1428418 02	.7034174-10	.1146564-03	.5696896-03	.0000000-39
.1834125-01	.1428418 02	.2333579-09	.1981454-03	.9120079-03	.2500000 00
.2355063-01	.1428418 02	.7724784-09	.3464494-03	.1456406-02	.5000000 00
.3023961-01	.1428418 02	.2550779-08	.6131432-03	.2318393-02	.7500000 00
.3882842-01	.1428418 02	.8400297-08	.1098278-02	.3675578-02	.1000000 01
.4985667-01	.1428418 02	.2759081-07	.1989605-02	.5797009-02	.1250000 01
.6401720-01	.1428417 02	.9042355-07	.3639855-02	.9082213-02	.1500000 01
.8219962-01	.1428416 02	.2960402-06	.6709476-02	.1410864-01	.1750000 01
.1055461 00	.1428411 02	.9703111-06	.1242425-01	.2168007-01	.2000000 01
.1355228 00	.1428400 02	.3194513-05	.2302419-01	.3285601-01	.2250000 01
.1740113 00	.1428372 02	.1060794-04	.4250564-01	.4892017-01	.2500000 01
.2234236 00	.1428299 02	.3565932-04	.7775085-01	.7121473-01	.2750000 01
.2868428 00	.1428106 02	.1214206-03	.1400211 00	.1007353 00	.3000000 01
.3681808 00	.1427592 02	.4164548-03	.2464102 00	.1373838 00	.3250000 01
.4722999 00	.1426223 02	.1419021-02	.4200240 00	.1788784 00	.3500000 01
.6049213 00	.1422639 02	.4699750-02	.6863159 00	.2196027 00	.3750000 01
.7718359 00	.1413667 02	.1471838-01	.1061786 01	.2501478 00	.4000000 01
.9764163 00	.1392784 02	.4227133-01	.1532232 01	.2587826 00	.4250000 01
.1214293 01	.1348958 02	.1078686 00	.2025201 01	.2360651 00	.4500000 01
.1466200 01	.1268512 02	.2372372 00	.2398396 01	.1820029 00	.4750000 01
.1696059 01	.1142796 02	.4384915 00	.2480231 01	.1106904 00	.5000000 01
.1864892 01	.9786059 01	.6723462 00	.2172572 01	.4524705-01	.5250000 01
.1957085 01	.7998163 01	.8627729 00	.1551598 01	.4242075-02	.5500000 01
.1991238 01	.6337677 01	.9632168 00	.8604482 00-	.9381538-02	.5750000 01
.1998982 01	.4954983 01	.9944435 00	.3498305 00-	.7295095-02	.6000000 01
.1999941 01	.3860797 01	.9995896 00	.9774963-01-	.2722706-02	.6250000 01
.1999998 01	.3006877 01	.9999876 00	.1732581-01-	.5678664-03	.6500000 01
.2000000 01	.2341760 01	.9999999 00	.1747135-02-	.6345331-04	.6750000 01
.2000000 01	.1823765 01	.1000000 01	.8672524-04-	.3371895-05	.7000000 01
.2000000 01	.1420349 01	.1000000 01	.1759744-05-	.7164961-07	.7250000 01
.2000000 01	.1106169 01	.1000000 01	.1150753-07-	.4837496-09	.7500000 01
.2000000 01	.8614854 00	.1000000 01	.1790962-10-	.7706902-12	.7750000 01
.2000000 01	.6709256 00	.1000000 01	.0000000-39	.0000000-39	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.0000000-39	.0000000-39	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.0000000-39	.0000000-39	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000-39	.0000000-39	.8750000	01
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.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01		.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION NP BIND. ENERGY V(O) LAMBDA
3 P 3/2 .4000000 01-.1903875 03 .1447182 02 .1917296 01

ALPHA S .3189502-05-.1249958-03 .2382657-02-.2997884-01 .2809988 00
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39
BETA S -.4634387-06 .1768062-04-.3337964-03 .4172549-02-.3895261-01
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.2650607-03	.1447182 02	.3930657-16	.3187213-05-	.4631150-06-	.4000000 01
.3403446-03	.1447182 02	.1315910-15	.5146244-05-	.7477741-06-	.3750000 01
.4370112-03	.1447182 02	.4405035-15	.8308918-05-	.1207334-05-	.3500000 01
.5611334-03	.1447182 02	.1474404-14	.1341425-04-	.1949186-05-	.3250000 01
.7205096-03	.1447182 02	.4934186-14	.2165442-04-	.3146578-05-	.3000000 01
.9251525-03	.1447182 02	.1650920-13	.3495213-04-	.5078928-05-	.2750000 01
.1187919-02	.1447182 02	.5522344-13	.5640692-04-	.8196698-05-	.2500000 01
.1525319-02	.1447182 02	.1846611-12	.9101299-04-	.1322575-04-	.2250000 01
.1958548-02	.1447182 02	.6172213-12	.1468120-03-	.2133498-04-	.2000000 01
.2514825-02	.1447182 02	.2061895-11	.2367418-03-	.3440512-04-	.1750000 01
.3229100-02	.1447182 02	.6883111-11	.3815949-03-	.5545914-04-	.1500000 01
.4146246-02	.1447182 02	.2295662-10	.6147399-03-	.8934925-04-	.1250000 01
.5323885-02	.1447182 02	.7647577-10	.9896319-03-	.1438502-03-	.1000000 01
.6836004-02	.1447182 02	.2543834-09	.1591704-02-	.2313915-03-	.7500000 00
.8777602-02	.1447182 02	.8445355-09	.2557085-02-	.3717858-03-	.5000000 00
.1127066-01	.1447182 02	.2796882-08	.4101838-02-	.5964959-03-	.2500000 00
.1447182-01	.1447182 02	.9233220-08	.6567158-02-	.9552407-03	.0000000-39
.1858217-01	.1447181 02	.3035741-07	.1048828-01-	.1526089-02	.2500000 00
.2385995-01	.1447179 02	.9929047-07	.1669758-01-	.2430609-02	.5000000 00
.3063667-01	.1447174 02	.3225815-06	.2647474-01-	.3856059-02	.7500000 00
.3933793-01	.1447162 02	.1039049-05	.4175726-01-	.6086761-02	.1000000 01
.5050981-01	.1447131 02	.3310097-05	.6541854-01-	.9546226-02	.1250000 01
.6485244-01	.1447054 02	.1039675-04	.1015999 00-	.1484915-01	.1500000 01
.8326148-01	.1446868 02	.3206770-04	.1560322 00-	.2285630-01	.1750000 01
.1068773 00	.1446427 02	.9663144-04	.2361762 00-	.3471237-01	.2000000 01
.1371366 00	.1445409 02	.2826047-03	.3508226 00-	.5182380-01	.2250000 01
.1758103 00	.1443139 02	.7953392-03	.5084943 00-	.7569669-01	.2500000 01
.2249872 00	.1438295 02	.2130378-02	.7136552 00-	.1075100 00	.2750000 01
.2869279 00	.1428530 02	.5354088-02	.9595760 00-	.1472729 00	.3000000 01
.3637042 00	.1410235 02	.1239191-01	.1217408 01-	.1924838 00	.3250000 01
.4566776 00	.1379047 02	.2577479-01	.1423668 01-	.2365227 00	.3500000 01
.5663790 00	.1331996 02	.4666184-01	.1473999 01-	.2676757 00	.3750000 01
.6941316 00	.1271347 02	.7062960-01	.1238538 01-	.2705044 00	.4000000 01
.8462599 00	.1207125 02	.8609253-01	.6166910 00-	.2313340 00	.4250000 01
.1036734 01	.1151708 02	.8878337-01-	.3677781 00-	.1478233 00	.4500000 01
.1276450 01	.1104346 02	.1148692 00-	.1480206 01-	.3819201-01	.4750000 01
.1545578 01	.1041403 02	.2419712 00-	.2305791 01	.6012216-01	.5000000 01
.1782367 01	.9353008 01	.4967856 00-	.2473939 01	.1104984 00	.5250000 01
.1928536 01	.7881490 01	.7725999 00-	.1953510 01	.1036959 00	.5500000 01
.1985720 01	.6320115 01	.9385469 00-	.1120438 01	.6397866-01	.5750000 01
.1998480 01	.4953739 01	.9913253 00-	.4469498 00	.2621803-01	.6000000 01
.1999926 01	.3860767 01	.9994496 00-	.1166919 00	.6850493-02	.6250000 01
.1999998 01	.3006877 01	.9999870 00-	.1836163-01	.1064983-02	.6500000 01
.2000000 01	.2341760 01	.9999999 00-	.1551219-02	.8848955-04	.6750000 01
.2000000 01	.1823765 01	.1000000 01-	.6022206-04	.3374844-05	.7000000 01
.2000000 01	.1420349 01	.1000000 01-	.8786199-06	.4837985-07	.7250000 01
.2000000 01	.1106169 01	.1000000 01-	.3723054-08	.2016994-09	.7500000 01
.2000000 01	.8614854 00	.1000000 01-	.3306901-11	.1766284-12	.7750000 01
.2000000 01	.6709255 00	.1000000 01-	.4132436-15	.2185225-16	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.0000000-39	.0000000-39	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.0000000-39	.0000000-39	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000-39	.0000000-39	.8750000	01
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.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991	-01	.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071506	-01	.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293	-01	.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084	-01	.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342	-01	.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461	-01	.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020	-01	.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866	-01	.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843	-01	.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240	-02	.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311	-02	.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644	-02	.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661	-02	.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	BIND.	ENERGY	V(I)	LAMBDA
3 P 1/2	.2000000	01-	.2180551	03 .1660321	02 .8222074

ALPHA S	.1237185-02	.3326486	00-.1484650	02 .2998368	03-.3924809	04
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
BETA S	.3960743-02-	.2226904	00 .5558509	01-.8701281	02 .9802484	03
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO	
.3040983-03	.1660321	02 .1191690-09	.1243273-02	.3956666-02-	.4000000	01
.3904699-03	.1660320	02 .2307744-09	.1529112-02	.4858167-02-	.3750000	01
.5013731-03	.1660320	02 .4468763-09	.1881404-02	.5964572-02-	.3500000	01
.6437754-03	.1660319	02 .8652754-09	.2316015-02	.7322170-02-	.3250000	01
.8266234-03	.1660318	02 .1675253-08	.2852839-02	.8987540-02-	.3000000	01
.1061404-02	.1660315	02 .3243052-08	.3516944-02	.1102974-01-	.2750000	01
.1362867-02	.1660312	02 .6277118-08	.4340117-02	.1353293-01-	.2500000	01
.1749951-02	.1660308	02 .1214735-07	.5362966-02	.1659940-01-	.2250000	01
.2246972-02	.1660301	02 .2350143-07	.6637821-02	.2035311-01-	.2000000	01
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DESIGNATION NP BIND. ENERGY V(O) LAMBDA
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.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.3072664-03	.1677618 02	.1561437-08	.1432496-01-	.4476668-02-	.4000000 01
.3945366-03	.1677613 02	.3022420-08	.1758584-01-	.5496454-02-	.3750000 01
.5065927-03	.1677605 02	.5849321-08	.2158619-01-	.6747920-02-	.3500000 01
.6504733-03	.1677593 02	.1131755-07	.2649207-01-	.8283335-02-	.3250000 01
.8352152-03	.1677575 02	.2189107-07	.3250587-01-	.1016656-01-	.3000000 01
.1072420-02	.1677548 02	.4232639-07	.3987375-01-	.1247547-01-	.2750000 01
.1376981-02	.1677507 02	.8179689-07	.4889420-01-	.1530488-01-	.2500000 01
.1768014-02	.1677445 02	.1579725-06	.5992781-01-	.1876989-01-	.2250000 01
.2270050-02	.1677353 02	.3048354-06	.7340798-01-	.2300975-01-	.2000000 01
.2914560-02	.1677214 02	.5876052-06	.8985221-01-	.2819221-01-	.1750000 01
.3741904-02	.1677005 02	.1131125-05	.1098728 00-	.3451808-01-	.1500000 01
.4803806-02	.1676693 02	.2173550-05	.1341856 00-	.4222591-01-	.1250000 01
.6166492-02	.1676227 02	.4167206-05	.1636132 00-	.5159605-01-	.1000000 01
.7914645-02	.1675531 02	.7966267-05	.1990781 00-	.6295314-01-	.7500000 00
.1015634-01	.1674497 02	.1517180-04	.2415777 00-	.7666540-01-	.5000000 00
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.1670716-01	.1670716 02	.5416411-04	.3516612 00-	.1127969 00	.0000000-39
.2141019-01	.1667427 02	.1012092-03	.4208396 00-	.1360557 00	.2500000 00
.2741273-01	.1662667 02	.1871706-03	.4997655 00-	.1632587 00	.5000000 00
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.7238747-01	.1615183 02	.1829463-02	.8633768 00-	.3091786 00	.1500000 01
.9161210-01	.1591980 02	.2999048-02	.9279698 00-	.3490490 00	.1750000 01
.1154970 00	.1563082 02	.4676695-02	.9496806 00-	.3840448 00	.2000000 01
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.1817623 00	.1491996 02	.9167024-02	.7519918 00-	.4136088 00	.2500000 01
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.1057239 01	.1174487 02	.9134369-01	.1599535 00	.1995678 00	.4500000 01
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DESIGNATION NP BIND. ENERGY V(O) LAMBDA
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R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
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.1394576-03	.4618201 01	.5549241-33	.1276860-13-	.9129859-15-	.3500000 01
.1790671-03	.4618201 01	.5157381-32	.3435161-13-	.2456127-14-	.3250000 01
.2299267-03	.4618201 01	.4792793-31	.9241253-13-	.6607127-14-	.3000000 01
.2952317-03	.4618201 01	.4453498-30	.2485929-12-	.1777224-13-	.2750000 01
.3790850-03	.4618201 01	.4137652-29	.6686721-12-	.4780027-13-	.2500000 01
.4867547-03	.4618201 01	.3843524-28	.1798436-11-	.1285481-12-	.2250000 01
.6250055-03	.4618201 01	.3569493-27	.4836396-11-	.3456468-12-	.2000000 01
.8025229-03	.4618201 01	.3314030-26	.1300404-10-	.9292062-12-	.1750000 01
.1030460-02	.4618201 01	.3075698-25	.3495781-10-	.2497350-11-	.1500000 01
.1323137-02	.4618201 01	.2853132-24	.9394942-10-	.6709690-11-	.1250000 01
.1698941-02	.4618201 01	.2645037-23	.2524033-09-	.1801941-10-	.1000000 01
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.3596658-02	.4618201 01	.2095465-20	.4878879-08-	.3476513-09-	.2500000 00
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.7614125-02	.4618201 01	.1634281-17	.9349050-07-	.6635304-08	.5000000 00
.9776729-02	.4618201 01	.1495249-16	.2493389-06-	.1765878-07	.7500000 00
.1255357-01	.4618201 01	.1361916-15	.6633305-06-	.4685194-07	.1000000 01
.1611910-01	.4618201 01	.1233378-14	.1759084-05-	.1238227-06	.1250000 01
.2069734-01	.4618201 01	.1108827-13	.4645984-05-	.3256315-06	.1500000 01
.2657591-01	.4618201 01	.9876037-13	.1220731-04-	.8510285-06	.1750000 01
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.1569278 01	.3889852 01	.3432493 00	.1392896 01-	.5090463-01	.6000000 01
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.1894685 01	.2848545 01	.7521123 00	.1028417 01-	.2926963-01	.6500000 01
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.1990762 01	.1815341 01	.9668788 00	.4022199 00-	.8866593-02	.7000000 01
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DESIGNATION NP RIND. ENERGY V(O) LAMBDA
A F 5/2 .6000000 01-.5574070 01 .4687765 01 .2945509 01

ALPHA S .2714321-12 .1050404-09-.2045270-08 .2457491-07-.2068021-06
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39
BETA S .2835270-11-.6199505-10 .8312644-09-.7743983-08 .5670058-07
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.8585940-04	.4687764 01	.2154952-28	.2733553-12	.2834135-11-	.4000000 01
.1102457-03	.4687764 01	.1206553-27	.5720034-12	.5918010-11-	.3750000 01
.1415582-03	.4687764 01	.6755276-27	.1197604-11	.1235711-10-	.3500000 01
.1817643-03	.4687764 01	.3781883-26	.2509218-11	.2580121-10-	.3250000 01
.2333900-03	.4687764 01	.2117093-25	.5262106-11	.5386915-10-	.3000000 01
.2996787-03	.4687764 01	.1185029-24	.1104802-10	.1124632-09-	.2750000 01
.3847951-03	.4687764 01	.6632286-24	.2322997-10	.2347701-09-	.2500000 01
.4940867-03	.4687764 01	.3711312-23	.4893514-10	.4900338-09-	.2250000 01
.6344199-03	.4687764 01	.2076357-22	.1033263-09	.1022696-08-	.2000000 01
.8146112-03	.4687764 01	.1161347-21	.2188143-09	.2133961-08-	.1750000 01
.1045982-02	.4687764 01	.6493459-21	.4650792-09	.4451668-08-	.1500000 01
.1343067-02	.4687764 01	.3629142-20	.9929689-09	.9283811-08-	.1250000 01
.1724532-02	.4687764 01	.2027195-19	.2131746-08	.1935349-07-	.1000000 01
.2214343-02	.4687764 01	.1131586-18	.4607007-08	.4032495-07-	.7500000 00
.2843272-02	.4687764 01	.6311060-18	.1003522-07	.8396682-07-	.5000000 00
.3650834-02	.4687764 01	.3515956-17	.2206105-07	.1746956-06-	.2500000 00
.4687764-02	.4687764 01	.1956119-16	.4900900-07	.3630738-06	.0000000-39
.6019207-02	.4687764 01	.1086477-15	.1101488-06	.7535588-06	.2500000 00
.7728815-02	.4687764 01	.6022304-15	.2506851-06	.1561287-05	.5000000 00
.9923995-02	.4687764 01	.3330061-14	.5780175-06	.3227602-05	.7500000 00
.1274266-01	.4687764 01	.1836206-13	.1350234-05	.6653331-05	.1000000 01
.1636190-01	.4687764 01	.1009336-12	.3193431-05	.1366522-04	.1250000 01
.2100910-01	.4687764 01	.5530281-12	.7637055-05	.2793680-04	.1500000 01
.2697621-01	.4687764 01	.3021206-11	.1843182-04	.5677618-04	.1750000 01
.3463815-01	.4687764 01	.1647252-10	.4477822-04	.1145212-03	.2000000 01
.4447626-01	.4687764 01	.8981801-10	.1091571-03	.2287992-03	.2250000 01
.5710865-01	.4687764 01	.4914087-09	.2660183-03	.4516096-03	.2500000 01
.7332895-01	.4687764 01	.2710014-08	.6453417-03	.8778599-03	.2750000 01
.9415623-01	.4687764 01	.1513502-07	.1550847-02	.1673856-02	.3000000 01
.1208990 00	.4687764 01	.8580789-07	.3671469-02	.3115484-02	.3250000 01
.1552372 00	.4687760 01	.4923165-06	.8508802-02	.5627057-02	.3500000 01
.1993278 00	.4687743 01	.2826662-05	.1916695-01	.9792734-02	.3750000 01
.2559378 00	.4687666 01	.1593022-04	.4162531-01	.1628153-01	.4000000 01
.3286078 00	.4687340 01	.8592790-04	.8633864-01	.2559775-01	.4250000 01
.4218222 00	.4686023 01	.4312840-03	.1692009 00	.3759808-01	.4500000 01
.5410694 00	.4681169 01	.1957332-02	.3095652 00	.5090299-01	.4750000 01
.6923826 00	.4665239 01	.7818098-02	.5221827 00	.6261432-01	.5000000 01
.8803825 00	.4619825 01	.2682067-01	.8013314 00	.6877305-01	.5250000 01
.1103526 01	.4509860 01	.7725666-01	.1101102 01	.6590717-01	.5500000 01
.1347332 01	.4288265 01	.1831967 00	.1331812 01	.5383387-01	.5750000 01
.1582153 01	.3921768 01	.3544603 00	.1402504 01	.3707311-01	.6000000 01
.1773524 01	.3423707 01	.5652684 00	.1283975 01	.2138750-01	.6250000 01
.1900526 01	.2857327 01	.7624470 00	.1018793 01	.9898921-02	.6500000 01
.1966308 01	.2302311 01	.9002657 00	.6898043 00	.3217880-02	.6750000 01
.1991658 01	.1816158 01	.9696107 00	.3893578 00	.4110729-03	.7000000 01
.1998577 01	.1419339 01	.9936602 00	.1789526 00-	.2570914-03	.7250000 01
.1999845 01	.1106083 01	.9991553 00	.6511210-01-	.2051568-03	.7500000 01
.1999990 01	.8614811 00	.9999346 00	.1798352-01-	.7837621-04	.7750000 01
.2000000 01	.6709254 00	.9999974 00	.3543724-02-	.1856119-04	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.4565587-03-	.2695853-05	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.3412017-04-	.2194502-06	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.1260475-05-	.8646924-08	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.1862446-07-	.1351740-09	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01		.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	BIND.	ENERGY	V(O)	LAMBDA
4 D 5/2	.6000000	01-	.2188928	02 .5498060	01 .2945509

ALPHA S	.1077911-09-	.2766257-08	.3955462-07-	.3902321-06	.2968935-05
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
BETA S	-.1031928-10	.2945174-09-	.4355002-08	.4415302-07-	.3413819-06
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.1007005-03	.5498060	01 .3113936-25	.1077404-09-	.1031389-10-	.4000000 01
.1293020-03	.5498060	01 .1743366-24	.2249704-09-	.2153589-10-	.3750000 01
.1660270-03	.5498060	01 .9759935-24	.4697378-09-	.4496603-10-	.3500000 01
.2131829-03	.5498060	01 .5463395-23	.9807641-09-	.9388212-10-	.3250000 01
.2737323-03	.5498060	01 .3057954-22	.2047606-08-	.1959977-09-	.3000000 01
.3514792-03	.5498060	01 .1711348-21	.4274580-08-	.4091479-09-	.2750000 01
.4513082-03	.5498060	01 .9575632-21	.8922689-08-	.8540040-09-	.2500000 01
.5794912-03	.5498060	01 .5356685-20	.1862261-07-	.1782279-08-	.2250000 01
.7440815-03	.5498060	01 .2995683-19	.3886079-07-	.3718855-08-	.2000000 01
.9554195-03	.5498060	01 .1674673-18	.8107520-07-	.7757780-08-	.1750000 01
.1226783-02	.5498060	01 .9357326-18	.1690997-06-	.1617821-07-	.1500000 01
.1575220-02	.5498060	01 .5225173-17	.3525670-06-	.3372485-07-	.1250000 01
.2022623-02	.5498060	01 .2915410-16	.7347509-06-	.7026623-07-	.1000000 01
.2597099-02	.5498060	01 .1624985-15	.1530318-05-	.1463044-06-	.7500000 00
.3334742-02	.5498060	01 .9045287-15	.3184881-05-	.3043695-06-	.5000000 00
.4281893-02	.5498060	01 .5026387-14	.6621884-05-	.6325201-06-	.2500000 00
.5498059-02	.5498060	01 .2787026-13	.1375077-04-	.1312636-05	.0000000-39
.7059647-02	.5498060	01 .1541025-12	.2850862-04-	.2719199-05	.2500000 00
.9064767-02	.5498060	01 .8490233-12	.5898379-04-	.5620153-05	.5000000 00
.1163939-01	.5498060	01 .4656209-11	.1217153-03-	.1158217-04	.7500000 00
.1494527-01	.5498060	01 .2538565-10	.2503179-03-	.2378022-04	.1000000 01
.1919011-01	.5498060	01 .1373638-09	.5125809-03-	.4859407-04	.1250000 01
.2464059-01	.5498060	01 .7361634-09	.1043835-02-	.9870383-04	.1500000 01
.3163914-01	.5498060	01 .3897038-08	.2110723-02-	.1989610-03	.1750000 01
.4062546-01	.5498059	01 .2030864-07	.4229674-02-	.3972001-03	.2000000 01
.5216409-01	.5498056	01 .1037396-06	.8378600-02-	.7833627-03	.2250000 01
.6697989-01	.5498045	01 .5166060-06	.1635455-01-	.1521438-02	.2500000 01
.8600318-01	.5498001	01 .2490774-05	.3132863-01-	.2898321-02	.2750000 01
.1104270 00	.5497839	01 .1152651-04	.5859038-01-	.5387985-02	.3000000 01
.1417765 00	.5497271	01 .5064227-04	.1082721 00-	.9711211-02	.3250000 01
.1819827 00	.5495402	01 .2083822-03	.1853725 00-	.1683208-01	.3500000 01
.2334273 00	.5489686	01 .7895379-03	.3075834 00-	.2777481-01	.3750000 01
.2988583 00	.5473782	01 .2696956-02	.4785190 00-	.4310129-01	.4000000 01
.3809824 00	.5434424	01 .8087782-02	.6841379 00-	.6193525-01	.4250000 01
.4816226 00	.5350345	01 .2058543-01	.8721862 00-	.8069247-01	.4500000 01
.6011480 00	.5200951	01 .4259922-01	.9414414 00-	.9243741-01	.4750000 01
.7405806 00	.4989994	01 .6808197-01	.7645576 00-	.8876278-01	.5000000 01
.9077973 00	.4763685	01 .8110440-01	.2636471 00-	.6501022-01	.5250000 01
.1119080 01	.4573427	01 .8450453-01-	.4859734 00-	.2571898-01	.5500000 01
.1378178 01	.4386439	01 .1416573 00-	.1213909 01	.1445671-01	.5750000 01
.1644552 01	.4076439	01 .3302442 00-	.1589778 01	.3844349-01	.6000000 01
.1848502 01	.3568450	01 .6128468 00-	.1477839 01	.4033599-01	.6250000 01
.1955837 01	.2940484	01 .8495331 00-	.1030725 01	.2833224-01	.6500000 01
.1991999 01	.2332393	01 .9642966 00-	.5360843 00	.1429724-01	.6750000 01
.1999193 01	.1823028	01 .9953546 00-	.2007332 00	.5110371-02	.7000000 01
.1999960 01	.1420321	01 .9997078 00-	.5135605-01	.1238189-02	.7250000 01
.1999999 01	.1106169	01 .9999925 00-	.8350145-02	.1904045-03	.7500000 01
.2000000 01	.8614854	00 .9999999 00-	.7795416-03	.1687006-04	.7750000 01
.2000000 01	.6709255	00 .1000000 01-	.3637582-04	.7515909-06	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.7054589-06	.1401413-07	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.4466937-08	.8591900-10	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.6780675-11	.1270921-12	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01	.1000000	01	.0000000-39	.0000000-39	.1000000	02	
.2000000	01	.7071504-01	.1000000	01	.0000000-39	.0000000-39	.1025000	02	
.2000000	01	.5507293-01	.1000000	01	.0000000-39	.0000000-39	.1050000	02	
.2000000	01	.4289084-01	.1000000	01	.0000000-39	.0000000-39	.1075000	02	
.2000000	01	.3340342-01	.1000000	01	.0000000-39	.0000000-39	.1100000	02	
.2000000	01	.2601461-01	.1000000	01	.0000000-39	.0000000-39	.1125000	02	
.2000000	01	.2026020-01	.1000000	01	.0000000-39	.0000000-39	.1150000	02	
.2000000	01	.1577866-01	.1000000	01	.0000000-39	.0000000-39	.1175000	02	
.2000000	01	.1228843-01	.1000000	01	.0000000-39	.0000000-39	.1200000	02	
.2000000	01	.9570240-02	.1000000	01	.0000000-39	.0000000-39	.1225000	02	
.2000000	01	.7453311-02	.1000000	01	.0000000-39	.0000000-39	.1250000	02	
.2000000	01	.5804644-02	.1000000	01	.0000000-39	.0000000-39	.1275000	02	
.2000000	01	.4520661-02	.1000000	01	.0000000-39	.0000000-39	.1300000	02	

DESIGNATION NP RIND. ENERGY V(O) LAMBDA
4 D 3/2 .4000000 01-.2311436 02 .5673729 01 .1917296 01

ALPHA S .2021885-07 .7131049-05-.1902852-03 .2768854-02-.2761042-01
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39
BETA S .1391512-06-.4328453-05 .7275789-04-.8255190-03 .7103410-02
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.1039180-03	.5673728 01	.7485223-19	.2034940-07	.1390720-06-	.4000000 01
.1334333-03	.5673728 01	.2506259-18	.3292376-07	.2245625-06-	.3750000 01
.1713318-03	.5673728 01	.8391242-18	.5329535-07	.3625891-06-	.3500000 01
.2199943-03	.5673728 01	.2809266-17	.8632820-07	.5854187-06-	.3250000 01
.2824783-03	.5673728 01	.9404148-17	.1399515-06	.9451171-06-	.3000000 01
.3627093-03	.5673728 01	.3147707-16	.2271236-06	.1525676-05-	.2750000 01
.4657280-03	.5673728 01	.1053424-15	.3690890-06	.2462549-05-	.2500000 01
.5980065-03	.5673728 01	.3524746-15	.6008122-06	.3974091-05-	.2250000 01
.7678556-03	.5673728 01	.1179084-14	.9801163-06	.6412115-05-	.2000000 01
.9859461-03	.5673728 01	.3942976-14	.1603187-05	.1034308-04-	.1750000 01
.1265980-02	.5673728 01	.1318041-13	.2631150-05	.1667828-04-	.1500000 01
.1625550-02	.5673728 01	.4403642-13	.4336159-05	.2688212-04-	.1250000 01
.2087248-02	.5673728 01	.1470330-12	.7182322-05	.4330449-04-	.1000000 01
.2680079-02	.5673728 01	.4905295-12	.1196971-04	.6970928-04-	.7500000 00
.3441290-02	.5673728 01	.1634837-11	.2009405-04	.1121110-03-	.5000000 00
.4418704-02	.5673728 01	.5441730-11	.3402119-04	.1800913-03-	.2500000 00
.5673728-02	.5673728 01	.1808545-10	.5816444-04	.2888541-03	.0000000-39
.7285210-02	.5673728 01	.5999472-10	.1005235-03	.4624020-03	.2500000 00
.9354395-02	.5673728 01	.1985833-09	.1757706-03	.7383758-03	.5000000 00
.1201128-01	.5673728 01	.6556672-09	.3110901-03	.1175293-02	.7500000 00
.1542279-01	.5673728 01	.2158954-08	.5572430-03	.1863095-02	.1000000 01
.1980325-01	.5673728 01	.7089703-08	.1009467-02	.2937938-02	.1250000 01
.2542787-01	.5673726 01	.2322882-07	.1846619-02	.4601809-02	.1500000 01
.3265001-01	.5673722 01	.7602020-07	.3403396-02	.7146164-02	.1750000 01
.4192336-01	.5673711 01	.2490279-06	.6300395-02	.1097554-01	.2000000 01
.5383040-01	.5673684 01	.8191914-06	.1166996-01	.1662036-01	.2250000 01
.6911872-01	.5673612 01	.2716892-05	.2152698-01	.2471645-01	.2500000 01
.8874727-01	.5673425 01	.9115448-05	.3932581-01	.3591127-01	.2750000 01
.1139439 00	.5672932 01	.3094355-04	.7067262-01	.5063893-01	.3000000 01
.1462731 00	.5671626 01	.1056096-03	.1239420 00	.6870405-01	.3250000 01
.1877039 00	.5668167 01	.3569605-03	.2100593 00	.8866553-01	.3500000 01
.2406360 00	.5659217 01	.1166578-02	.3399093 00	.1071635 00	.3750000 01
.3077811 00	.5637208 01	.3572905-02	.5170249 00	.1186061 00	.4000000 01
.3917137 00	.5587498 01	.9882059-02	.7236422 00	.1159633 00	.4250000 01
.4940452 00	.5488348 01	.2364384-01	.9026418 00	.9351118-01	.4500000 01
.6150741 00	.5321435 01	.4653897-01	.9491149 00	.5144272-01	.4750000 01
.7563339 00	.5096139 01	.7125244-01	.7375045 00-	.4367288-03	.5000000 01
.9267972 00	.4863388 01	.8220095-01	.2008935 00-	.4458932-01	.5250000 01
.1142799 01	.4670361 01	.8701832-01-	.5672397 00-	.6450412-01	.5500000 01
.1404873 01	.4471405 01	.1542156 00-	.1282267 01-	.5613919-01	.5750000 01
.1668009 01	.4134583 01	.3555734 00-	.1618124 01-	.3221089-01	.6000000 01
.1863036 01	.3596506 01	.6398903 00-	.1462787 01-	.1046405-01	.6250000 01
.1961698 01	.2949295 01	.8659418 00-	.9928888 00	.6739025-03	.6500000 01
.1993413 01	.2334048 01	.9698400 00-	.5012778 00	.2933613-02	.6750000 01
.1999377 01	.1823197 01	.9963267 00-	.1812924 00	.1690914-02	.7000000 01
.1999972 01	.1420329 01	.9997874 00-	.4446124-01	.5174823-03	.7250000 01
.1999999 01	.1106169 01	.9999951 00-	.6856906-02	.9043336-04	.7500000 01
.2000000 01	.8614854 00	.1000000 01-	.5986455-03	.8533961-05	.7750000 01
.2000000 01	.6709255 00	.1000000 01-	.2564307-04	.3849876-06	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.4456619-06	.6939025-08	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.2452247-08	.3921940-10	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.3111944-11	.5082461-13	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	BIND.	ENERGY	V(0)	LAMBDA
4 P 3/2	.4000000	01-	.3600701	02	.6093837 01
					.1917296 01

ALPHA S	.1576623-05-	.6201047-04	.1161879-02-	.1423797-01	.1292411 00
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
BETA S	-.2290853-06	.8594831-05-	.1580749-03	.1913880-02-	.1723892-01
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.1116125-03	.6093836	01 .9604470-17	.1575488-05-	.2289279-06-	.4000000 01
.1433133-03	.6093837	01 .3215393-16	.2543864-05-	.3696424-06-	.3750000 01
.1840179-03	.6093836	01 .1076357-15	.4107216-05-	.5968164-06-	.3500000 01
.2362837-03	.6093837	01 .3602657-15	.6630844-05-	.9635379-06-	.3250000 01
.3033942-03	.6093836	01 .1205649-14	.1070406-04-	.1555454-05-	.3000000 01
.3895659-03	.6093837	01 .4033947-14	.1727725-04-	.2510698-05-	.2750000 01
.5002125-03	.6093836	01 .1349354-13	.2788254-04-	.4051972-05-	.2500000 01
.6422856-03	.6093837	01 .4512069-13	.4498852-04-	.6538141-05-	.2250000 01
.8247110-03	.6093836	01 .1508128-12	.7257015-04-	.1054713-04-	.2000000 01
.1058950-02	.6093837	01 .5038027-12	.1170224-03-	.1700888-04-	.1750000 01
.1359719-02	.6093836	01 .1681799-11	.1886225-03-	.2741822-04-	.1500000 01
.1745913-02	.6093837	01 .5609072-11	.3038632-03-	.4417478-04-	.1250000 01
.2241797-02	.6093836	01 .1868526-10	.4891647-03-	.7112400-04-	.1000000 01
.2878524-02	.6093837	01 .6215182-10	.7867498-03-	.1144146-03-	.7500000 00
.3696098-02	.6093836	01 .2063334-09	.1263893-02-	.1838499-03-	.5000000 00
.4745884-02	.6093836	01 .6832946-09	.2027363-02-	.2950019-03-	.2500000 00
.6093835-02	.6093836	01 .2255607-08	.3245743-02-	.4724869-03	.0000000-39
.7824637-02	.6093834	01 .7415546-08	.5183452-02-	.7549758-03	.2500000 00
.1004702-01	.6093829	01 .2425175-07	.8251606-02-	.1202723-02	.5000000 00
.1290061-01	.6093818	01 .7878003-07	.1308204-01-	.1908613-02	.7500000 00
.1656463-01	.6093787	01 .2537062-06	.2063091-01-	.3013822-02	.1000000 01
.2126914-01	.6093711	01 .8080171-06	.3231512-01-	.4728915-02	.1250000 01
.2730927-01	.6093524	01 .2536954-05	.5017422-01-	.7360051-02	.1500000 01
.3506319-01	.6093071	01 .7820647-05	.7702434-01-	.1133694-01	.1750000 01
.4501409-01	.6091996	01 .2354711-04	.1165170 00-	.1723286-01	.2000000 01
.5777572-01	.6089518	01 .6877988-04	.1729176 00-	.2575524-01	.2250000 01
.7411826-01	.6083998	01 .1932009-03	.2502680 00-	.3766671-01	.2500000 01
.9498596-01	.6072250	01 .5159682-03	.3504166 00-	.5357201-01	.2750000 01
.1214905 00	.6048657	01 .1290621-02	.4693185 00-	.7348970-01	.3000000 01
.1548639 00	.6004726	01 .2964373-02	.5913677 00-	.9615577-01	.3250000 01
.1963939 00	.5930583	01 .6089139-02	.6829322 00-	.1181563 00	.3500000 01
.2474954 00	.5820535	01 .1079925-01	.6893809 00-	.1333282 00	.3750000 01
.3102453 00	.5682343	01 .1582015-01	.5443224 00-	.1333208 00	.4000000 01
.3884872 00	.5541474	01 .1848360-01	.2020609 00-	.1103782 00	.4250000 01
.4881985 00	.5423397	01 .1912500-01-	.3040319 00-	.6268626-01	.4500000 01
.6143154 00	.5314871	01 .2818338-01-	.8042053 00-	.3566063-03	.4750000 01
.7656617 00	.5158990	01 .5783063-01-	.1006964 01	.5378107-01	.5000000 01
.9404979 00	.4935282	01 .9076501-01-	.6551617 00	.7491085-01	.5250000 01
.1153281 01	.4713196	01 .9741588-01	.2239992 00	.5444471-01	.5500000 01
.1418514 01	.4514821	01 .1422260 00	.1200678 01	.1023628-01	.5750000 01
.1692714 01	.4195819	01 .3505055 00	.1706028 01-	.2536478-01	.6000000 01
.1888342 01	.3645359	01 .6681619 00	.1526945 01-	.3430375-01	.6250000 01
.1975010 01	.2969309	01 .8986551 00	.9496567 00-	.2403342-01	.6500000 01
.1996943 01	.2338180	01 .9835088 00	.4095055 00-	.1075463-01	.6750000 01
.1999822 01	.1823602	01 .9987477 00	.1172106 00-	.3084913-02	.7000000 01
.1999996 01	.1420346	01 .9999623 00	.2077631-01-	.5384438-03	.7250000 01
.2000000 01	.1106169	01 .9999997 00	.2069190-02-	.5240561-04	.7500000 01
.2000000 01	.8614854	00 .1000000 01	.1012222-03-	.2501474-05	.7750000 01
.2000000 01	.6709255	00 .1000000 01	.2029645-05-	.4901925-07	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.1315266-07-	.3113710-09	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.2029976-10-	.4726700-12	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.5113788-14-	.1175080-15	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01		.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	RIND.	ENERGY	V(O)	LAMBDA
4 P 1/2	.2000000	01-	.4262884	02 .6851803	01 .8222074

ALPHA S	.6158785-03	.1658850	00-	.7459227	01 .1479773	03-	.1881495	04
BETA S	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
	.1971683-02-	.1115105	00	.2734246	01-	.4158155	02	.4521105
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO			
.1254952-03	.6851803	01 .2953119-10	.6189143-03	.1969641-02-	.4000000	01		
.1611390-03	.6851803	01 .5718794-10	.7612100-03	.2418407-02-	.3750000	01		
.2069065-03	.6851801	01 .1107396-09	.9365876-03	.2969171-02-	.3500000	01		
.2656731-03	.6851799	01 .2144217-09	.1152947-02	.3644975-02-	.3250000	01		
.3411308-03	.6851795	01 .4151384-09	.1420193-02	.4473979-02-	.3000000	01		
.4380203-03	.6851791	01 .8036446-09	.1750808-02	.5490558-02-	.2750000	01		
.5624285-03	.6851783	01 .1555491-08	.2160618-02	.6736593-02-	.2500000	01		
.7221714-03	.6851771	01 .3010127-08	.2669844-02	.8262991-02-	.2250000	01		
.9272840-03	.6851754	01 .5823616-08	.3304546-02	.1013144-01-	.2000000	01		
.1190652-02	.6851727	01 .1126322-07	.4098642-02	.1241641-01-	.1750000	01		
.1528818-02	.6851687	01 .2177499-07	.5096780-02	.1520730-01-	.1500000	01		
.1963024-02	.6851628	01 .4207611-07	.6358440-02	.1861069-01-	.1250000	01		
.2520539-02	.6851537	01 .8125358-07	.7963872-02	.2275248-01-	.1000000	01		
.3236372-02	.6851401	01 .1567895-06	.1002273-01	.2777947-01-	.7500000	00		
.4155460-02	.6851196	01 .3022657-06	.1268664-01	.3385984-01-	.5000000	00		
.5335477-02	.6850889	01 .5820809-06	.1616757-01	.4118138-01-	.2500000	00		
.6850428-02	.6850429	01 .1119510-05	.2076431-01	.4994591-01	.0000000-39			
.8795238-02	.6849739	01 .2150140-05	.2690046-01	.6035743-01	.2500000	00		
.1129161-01	.6848709	01 .4123683-05	.3517754-01	.7260021-01	.5000000	00		
.1449546-01	.6847172	01 .7898564-05	.4644692-01	.8680200-01	.7500000	00		
.1860631-01	.6844879	01 .1511662-04	.6190192-01	.1029756	.00	.1000000	01	
.2387904-01	.6841462	01 .2893387-04	.8318464-01	.1209313	.00	.1250000	01	
.3063845-01	.6836364	01 .5547093-04	.1124858	.00	.1401531	.00	.1500000	01
.3929668-01	.6828740	01 .1067447-03	.1525825	.00	.1596365	.00	.1750000	01
.5037324-01	.6817278	01 .2066497-03	.2066990	.00	.1776988	.00	.2000000	01
.6451593-01	.6799930	01 .4029875-03	.2779749	.00	.1918005	.00	.2250000	01
.8251805-01	.6773496	01 .7902301-03	.3681966	.00	.1984649	.00	.2500000	01
.1053239	.6733131	01 .1546526-02	.4753368	.00	.1934579	.00	.2750000	01
.1340123	.6672084	01 .2973391-02	.5895296	.00	.1724709	.00	.3000000	01
.1697656	.6582526	01 .5474712-02	.6877618	.00	.1325651	.00	.3250000	01
.2138898	.6458914	01 .9315373-02	.7293420	.00	.7444815-01	.3500000	.3500000	01
.2680821	.6304688	01 .1399842-01	.6574353	.00	.5053397-02	.3750000	.3750000	01
.3351628	.6138722	01 .1769154-01	.4154705	.00-	.6109078-01	.4000000	.4000000	01
.4199175	.5989804	01 .1870942-01-	.1337888-01-	.1040564	.00	.4250000	.4250000	01
.5282184	.5867978	01 .2110470-01-	.5486196	.00-	.1062446	.00	.4500000	01
.6627227	.5733677	01 .3772873-01-	.9745905	.00-	.6446228-01	.4750000	.4750000	01
.8204890	.5528413	01 .7265407-01-	.9954399	.00	.1616012-02	.5000000	.5000000	01
.1004117	.5269124	01 .9749169-01-	.4267672	.00	.5642960-01	.5250000	.5250000	01
.1232933	.5038716	01 .1026641	.00	.5736314	.00	.7161680-01	.5500000	01
.1508609	.4801574	01 .1890767	.00	.1484086	.01	.4800961-01	.5750000	01
.1766281	.4378176	01 .4486150	.00	.1784603	.01	.1354148-01	.6000000	01
.1926169	.3718382	01 .7573319	.00	.1420772	.01-	.6352815-02	.6250000	01
.1986145	.2986049	01 .9383824	.00	.7898598	.00-	.8993191-02	.6500000	01
.1998638	.2340165	01 .9919897	.00	.3013045	.00-	.4727246-02	.6750000	01
.1999939	.1823710	01 .9995383	.00	.7471863-01-	.1377013-02	.7000000	.7000000	01
.1999999	.1420349	01 .9999902	.00	.1112106-01-	.2241475-03	.7250000	.7250000	01
.2000000	.1106169	01 .1000000	.01	.8905617-03-	.1891999-04	.7500000	.7500000	01
.2000000	.8614854	.00	.1000000	.01	.3306189-04-	.7257168-06	.7750000	.01
.2000000	.6709255	.00	.1000000	.01	.4665595-06-	.1046137-07	.8000000	.01

.2000000	01	.5225173	00	.1000000	01	.1931690-08-	.4394923-10	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.1688723-11-	.3880225-13	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000-39	.0000000-39	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000-39	.0000000-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000-39	.0000000-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000-39	.0000000-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000-39	.0000000-39	.9750000	01
.2000000	01	.9079991-01		.1000000	01	.0000000-39	.0000000-39	.1000000	02
.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02		.1000000	01	.0000000-39	.0000000-39	.1300000	02

DESIGNATION NP BIND. ENERGY V(O) LAMBDA
4 S 1/2 .2000000 01-.5059645 02 .7078918 01 .8222074 00

ALPHA S .7216687-02-.6416688 00 .1968801 02-.3399795 03 .4020218 04
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39
BETA S -.2254218-02 .1408408 00-.3682117 01 .5837545 02-.6539852 03
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.1296549-03	.7078917 01	.3950036-09	.7204941-02-	.2251639-02-	.4000000 01
.1664799-03	.7078905 01	.7645935-09	.8845033-02-	.2764571-02-	.3750000 01
.2137638-03	.7078884 01	.1479722-08	.1085704-01-	.3394036-02-	.3500000 01
.2744770-03	.7078854 01	.2863028-08	.1332447-01-	.4166330-02-	.3250000 01
.3524331-03	.7078808 01	.5537812-08	.1634911-01-	.5113576-02-	.3000000 01
.4525287-03	.7078740 01	.1070730-07	.2005475-01-	.6274958-02-	.2750000 01
.5810498-03	.7078636 01	.2069199-07	.2459148-01-	.7698175-02-	.2500000 01
.7460664-03	.7078481 01	.3996159-07	.3014061-01-	.9441143-02-	.2250000 01
.9579365-03	.7078247 01	.7711188-07	.3692004-01-	.1157394-01-	.2000000 01
.1229954-02	.7077896 01	.1486397-06	.4518991-01-	.1418100-01-	.1750000 01
.1579174-02	.7077369 01	.2861215-06	.5525799-01-	.1736340-01-	.1500000 01
.2027474-02	.7076579 01	.5497917-06	.6748394-01-	.2124129-01-	.1250000 01
.2602893-02	.7075398 01	.1054043-05	.8228096-01-	.2595587-01-	.1000000 01
.3341350-02	.7073639 01	.2014877-05	.1001122 00-	.3167076-01-	.7500000 00
.4288792-02	.7071024 01	.3837115-05	.1214778 00-	.3857167-01-	.5000000 00
.5503905-02	.7067155 01	.7272061-05	.1468868 00-	.4686318-01-	.2500000 00
.7061462-02	.7061463 01	.1369621-04	.1768039 00-	.5676053-01	.0000000-39
.9056420-02	.7053148 01	.2558870-04	.2115571 00-	.6847341-01	.2500000 00
.1160883-01	.7041112 01	.4731341-04	.2511885 00-	.8217720-01	.5000000 00
.1486959-01	.7023900 01	.8631485-04	.2952228 00-	.9796593-01	.7500000 00
.1902704-01	.6999659 01	.1547488-03	.3423254 00-	.1157793 00	.1000000 01
.2431441-01	.6966197 01	.2712379-03	.3898281 00-	.1352962 00	.1250000 01
.3101861-01	.6921190 01	.4616186-03	.4331185 00-	.1557879 00	.1500000 01
.3949194-01	.6852672 01	.7559643-03	.4649516 00-	.1759352 00	.1750000 01
.5017079-01	.6789880 01	.1177100-02	.4748651 00-	.1936279 00	.2000000 01
.6360983-01	.6704428 01	.1715610-02	.4491066 00-	.2058061 00	.2250000 01
.8054319-01	.6611389 01	.2295207-02	.3718301 00-	.2084587 00	.2500000 01
.1019790 00	.6519299 01	.2763114-02	.2287271 00-	.1969773 00	.2750000 01
.1292998 00	.6437459 01	.2996536-02	.1444956-01-	.1671377 00	.3000000 01
.1642735 00	.6369576 01	.3235033-02-	.2555430 00-	.1169605 00	.3250000 01
.2088314 00	.6306164 01	.4517302-02-	.5309468 00-	.4939279-01	.3500000 01
.2646691 00	.6224421 01	.8414950-02-	.7187083 00	.2506695-01	.3750000 01
.3333600 00	.6105703 01	.1490124-01-	.6975824 00	.8791272-01	.4000000 01
.4179918 00	.5962334 01	.2000659-01-	.3739438 00	.1171347 00	.4250000 01
.5249960 00	.5832181 01	.2097931-01	.2207375 00	.9801915-01	.4500000 01
.6606716 00	.5715931 01	.2993138-01	.8435491 00	.3667514-01	.4750000 01
.8231587 00	.5546402 01	.6411606-01	.1082287 01-	.3496708-01	.5000000 01
.1009714 01	.5298492 01	.9934072-01	.6141118 00-	.7516304-01	.5250000 01
.1237986 01	.5059366 01	.1052790 00-	.4460999 00-	.6333925-01	.5500000 01
.1518083 01	.4825361 01	.1837402 00-	.1477692 01-	.1837338-01	.5750000 01
.1777346 01	.4405602 01	.4523104 00-	.1828805 01	.1921796-01	.6000000 01
.1934493 01	.3734452 01	.7724429 00-	.1427602 01	.2797892-01	.6250000 01
.1989085 01	.2990469 01	.9482738 00-	.7529101 00	.1796615-01	.6500000 01
.1999100 01	.2340707 01	.9943338 00-	.2638545 00	.6855124-02	.6750000 01
.1999969 01	.1823736 01	.9997438 00-	.5797989-01	.1563667-02	.7000000 01
.2000000 01	.1420349 01	.9999962 00-	.7320567-02	.1999232-03	.7250000 01
.2000000 01	.1106169 01	.1000000 01-	.4709561-03	.1286203-04	.7500000 01
.2000000 01	.8614854 00	.1000000 01-	.1311402-04	.3561949-06	.7750000 01
.2000000 01	.6709255 00	.1000000 01-	.1272639-06	.3431553-08	.8000000 01

.2000000	01	.5225173	00	.1000000	01	.3249870	-09	.8699635	-11	.8250000	01
.2000000	01	.4069369	00	.1000000	01	.1534181	-12	.4080042	-14	.8500000	01
.2000000	01	.3169228	00	.1000000	01	.0000000	-39	.0000000	-39	.8750000	01
.2000000	01	.2468197	00	.1000000	01	.0000000	-39	.0000000	-39	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.0000000	-39	.0000000	-39	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.0000000	-39	.0000000	-39	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.0000000	-39	.0000000	-39	.9750000	01
.2000000	01	.9079991	-01	.1000000	01	.0000000	-39	.0000000	-39	.1000000	02
.2000000	01	.7071504	-01	.1000000	01	.0000000	-39	.0000000	-39	.1025000	02
.2000000	01	.5507293	-01	.1000000	01	.0000000	-39	.0000000	-39	.1050000	02
.2000000	01	.4289084	-01	.1000000	01	.0000000	-39	.0000000	-39	.1075000	02
.2000000	01	.3340342	-01	.1000000	01	.0000000	-39	.0000000	-39	.1100000	02
.2000000	01	.2601461	-01	.1000000	01	.0000000	-39	.0000000	-39	.1125000	02
.2000000	01	.2026020	-01	.1000000	01	.0000000	-39	.0000000	-39	.1150000	02
.2000000	01	.1577866	-01	.1000000	01	.0000000	-39	.0000000	-39	.1175000	02
.2000000	01	.1228843	-01	.1000000	01	.0000000	-39	.0000000	-39	.1200000	02
.2000000	01	.9570240	-02	.1000000	01	.0000000	-39	.0000000	-39	.1225000	02
.2000000	01	.7453311	-02	.1000000	01	.0000000	-39	.0000000	-39	.1250000	02
.2000000	01	.5804644	-02	.1000000	01	.0000000	-39	.0000000	-39	.1275000	02
.2000000	01	.4520661	-02	.1000000	01	.0000000	-39	.0000000	-39	.1300000	02

DESIGNATION	NP	BIND. ENERGY	V(0)	LAMBDA		
5 D 5/2	.5000000	01-.4859041	00 .1369370	01 .2945509		
ALPHA S	.2717205-10-	.6976266-09	.9944770-08-	.9775387-07 .7404372-06		
	.0000000-39	.0000000-39	.0000000-39	.0000000-39 .0000000-39		
BETA S	-.2601292-11	.7402069-10-	.1090571-08	.1100806-07-.8470921-07		
	.0000000-39	.0000000-39	.0000000-39	.0000000-39 .0000000-39		
R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO	
.2508088-04	.1369370	01 .1978739-26	.2715927-10-	.2599936-11-	.4000000	01
.3220449-04	.1369370	01 .1107815-25	.5671066-10-	.5428790-11-	.3750000	01
.4135138-04	.1369370	01 .6201912-25	.1184118-09-	.1133510-10-	.3500000	01
.5309623-04	.1369370	01 .3471692-24	.2472315-09-	.2366594-10-	.3250000	01
.6817690-04	.1369370	01 .1943164-23	.5161615-09-	.4940743-10-	.3000000	01
.8754088-04	.1369370	01 .1087469-22	.1077538-08-	.1031388-09-	.2750000	01
.1124047-03	.1369370	01 .6084792-22	.2249235-08-	.2152794-09-	.2500000	01
.1443305-03	.1369370	01 .3403880-21	.4694394-08-	.4492819-09-	.2250000	01
.1853240-03	.1369370	01 .1903591-20	.9796037-08-	.9374620-09-	.2000000	01
.2379608-03	.1369370	01 .1064162-19	.2043745-07-	.1955615-08-	.1750000	01
.3055477-03	.1369370	01 .5946054-19	.4262665-07-	.4078291-08-	.1500000	01
.3923310-03	.1369370	01 .3320300-18	.8887501-07-	.8501587-08-	.1250000	01
.5037629-03	.1369370	01 .1852574-17	.1852157-06-	.1771331-07-	.1000000	01
.6468444-03	.1369370	01 .1032581-16	.3857613-06-	.3688198-07-	.7500000	00
.8305646-03	.1369370	01 .5747727-16	.8028409-06-	.7672961-07-	.5000000	00
.1066466-02	.1369370	01 .3193951-15	.1669233-05-	.1594566-06-	.2500000	00
.1369370-02	.1369370	01 .1770970-14	.3466259-05-	.3309181-06	.0000000-39	
.1758305-02	.1369370	01 .9792129-14	.7186352-05-	.6855319-06	.2500000	00
.2257709-02	.1369370	01 .5394898-13	.1486834-04-	.1416929-05	.5000000	00
.2898955-02	.1369370	01 .2958631-12	.3068115-04-	.2920161-05	.7500000	00
.3722332-02	.1369370	01 .1613019-11	.6309777-04-	.5995903-05	.1000000	01
.4779569-02	.1369370	01 .8727975-11	.1292046-03-	.1225321-04	.1250000	01
.6137088-02	.1369370	01 .4677360-10	.2631105-03-	.2489063-04	.1500000	01
.7880177-02	.1369370	01 .2475940-09	.5320150-03-	.5017816-04	.1750000	01
.1011835-01	.1369370	01 .1290194-08	.1066054-02-	.1001873-03	.2000000	01
.1299222-01	.1369370	01 .6589788-08	.2111608-02-	.1976229-03	.2250000	01
.1668232-01	.1369369	01 .3281059-07	.4121289-02-	.3838988-03	.2500000	01
.2142049-01	.1369366	01 .1581527-06	.7893347-02-	.7315038-03	.2750000	01
.2750424-01	.1369356	01 .7315810-06	.1475797-01-	.1360270-02	.3000000	01
.3531522-01	.1369320	01 .3212131-05	.2675621-01-	.2452564-02	.3250000	01
.4534171-01	.1369201	01 .1320317-04	.4663652-01-	.4252497-02	.3500000	01
.5820452-01	.1368840	01 .4993769-04	.7728427-01-	.7019477-02	.3750000	01
.7468125-01	.1367835	01 .1700808-03	.1199664	.1089492-01	.4000000	01
.9571908-01	.1365360	01 .5075181-03	.1708219	.1565156-01	.4250000	01
.1224329	.1360107	01 .1280785-02	.2160789	.2036370-01	.4500000	01
.1561403	.1350879	01 .2611755-02	.2293651	.2323264-01	.4750000	01
.1985909	.1338095	01 .4073651-02	.1780266	.2205893-01	.5000000	01
.2524543	.1324759	01 .4710043-02	.4401834-01-	.1559570-01	.5250000	01
.3214466	.1313679	01 .5035281-02-	.1463664	.5036327-02	.5500000	01
.4090696	.1301980	01 .9123545-02-	.3085697	.5597514-02	.5750000	01
.5174959	.1282745	01 .1932029-01-	.3362427	.1145469-01	.6000000	01
.6508221	.1256383	01 .2785062-01-	.1770105	.1066194-01	.6250000	01
.8193995	.1231918	01 .2911154-01	.1256292	.5361572-02	.6500000	01
.1032430	.1208851	01 .4789136-01	.4545814	.7489729-03	.6750000	01
.1279475	.1166731	01 .1325328	.6856501	.4780784-02	.7000000	01
.1525012	.1083025	01 .3020435	.7595494	.5936153-02	.7250000	01
.1728388	.9559447	00 .5185753	.6956787	.5133308-02	.7500000	01
.1867866	.8045699	00 .7201305	.5525737	.3623776-02	.7750000	01
.1946703	.6530465	00 .8653323	.3884016	.2208796-02	.8000000	01

.1982875	01	.5180433	00	.9480260	00	.2420198	00-	.1188016	-02	.8250000	01
.1995880	01	.4060985	00	.9847830	00	.1313353	00-	.5623078	-03	.8500000	01
.1999321	01	.3168152	00	.9969042	00	.5963897	-01-	.2272345	-03	.8750000	01
.1999932	01	.2468114	00	.9996136	00	.2129160	-01-	.7387730	-04	.9000000	01
.1999996	01	.1922230	00	.9999749	00	.5494689	-02-	.1772978	-04	.9250000	01
.2000000	01	.1497037	00	.9999994	00	.9211093	-03-	.2811374	-05	.9500000	01
.2000000	01	.1165894	00	.1000000	01	.8766486	-04-	.2564570	-06	.9750000	01
.2000000	01	.9079990	-01	.1000000	01	.3995072	-05-	.1131543	-07	.1000000	02
.2000000	01	.7071503	-01	.1000000	01	.7023409	-07-	.1940753	-09	.1025000	02
.2000000	01	.5507293	-01	.1000000	01	.3242381	-09-	.8749387	-12	.1050000	02
.2000000	01	.4289084	-01	.1000000	01	.0000000	-39	.0000000	-39	.1075000	02
.2000000	01	.3340342	-01	.1000000	01	.0000000	-39	.0000000	-39	.1100000	02
.2000000	01	.2601461	-01	.1000000	01	.0000000	-39	.0000000	-39	.1125000	02
.2000000	01	.2026020	-01	.1000000	01	.0000000	-39	.0000000	-39	.1150000	02
.2000000	01	.1577866	-01	.1000000	01	.0000000	-39	.0000000	-39	.1175000	02
.2000000	01	.1228843	-01	.1000000	01	.0000000	-39	.0000000	-39	.1200000	02
.2000000	01	.9570240	-02	.1000000	01	.0000000	-39	.0000000	-39	.1225000	02
.2000000	01	.7453311	-02	.1000000	01	.0000000	-39	.0000000	-39	.1250000	02
.2000000	01	.5804644	-02	.1000000	01	.0000000	-39	.0000000	-39	.1275000	02
.2000000	01	.4520661	-02	.1000000	01	.0000000	-39	.0000000	-39	.1300000	02

DESIGNATION	NP	BIND. ENERGY	V(0)	LAMBDA	
5 D 3/2	.4000000	01-.5992299	00 .1472791	01 .1917296	
ALPHA S	.5375210-08 .0000000-39	.1896226-05- .0000000-39	.5063541-04 .0000000-39	.7344213-03- .0000000-39	
BETA S	.3699355-07- .0000000-39	.1151382-05 .0000000-39	.1929187-04- .0000000-39	.2180490-03 .0000000-39	
R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.2697511-04	.1472791	01 .5290327-20	.5409924-08	.3697247-07-	.4000000
.3463672-04	.1472791	01 .1771347-19	.8752845-08	.5970022-07-	.3750000
.4447443-04	.1472791	01 .5930672-19	.1416868-07	.9639476-07-	.3500000
.5710630-04	.1472791	01 .1985502-18	.2295054-07	.1556343-06-	.3250000
.7332594-04	.1472791	01 .6646559-18	.3720645-07	.2512605-06-	.3000000
.9415236-04	.1472791	01 .2224701-17	.6038144-07	.4056028-06-	.2750000
.1208940-03	.1472791	01 .7445268-17	.9812345-07	.6546713-06-	.2500000
.1552310-03	.1472791	01 .2491177-16	.1597280-06	.1056516-05-	.2250000
.1993206-03	.1472791	01 .8333378-16	.2605679-06	.1704666-05-	.2000000
.2559327-03	.1472791	01 .2786764-15	.4262150-06	.2749715-05-	.1750000
.3286240-03	.1472791	01 .9315461-15	.6995062-06	.4433928-05-	.1500000
.4219616-03	.1472791	01 .3112338-14	.1152797-05	.7146613-05-	.1250000
.5418095-03	.1472791	01 .1039175-13	.1909478-05	.1151248-04-	.1000000
.6956971-03	.1472791	01 .3466870-13	.3182261-05	.1853215-04-	.7500000
.8932927-03	.1472791	01 .1155434-12	.5342229-05	.2980453-04-	.5000000
.1147011-02	.1472791	01 .3845968-12	.9044982-05	.4787681-04-	.2500000
.1472791-02	.1472791	01 .1278190-11	.1546391-04	.7679077-04	.0000000-39
.1891101-02	.1472791	01 .4240092-11	.2672593-04	.1229270-03	.2500000
.2428221-02	.1472791	01 .1403460-10	.4673202-04	.1962915-03	.5000000
.3117898-02	.1472791	01 .4633769-10	.8270981-04	.3124390-03	.7500000
.4003460-02	.1472791	01 .1525757-09	.1481551-03	.4952753-03	.1000000
.5140544-02	.1472791	01 .5010234-09	.2683879-03	.7809878-03	.1250000
.6600589-02	.1472791	01 .1641497-08	.4909573-03	.1223251-02	.1500000
.8475322-02	.1472791	01 .5371780-08	.9048341-03	.1899498-02	.1750000
.1088253-01	.1472790	01 .1759555-07	.1674967-02	.2917157-02	.2000000
.1397342-01	.1472788	01 .5787476-07	.3102253-02	.4416985-02	.2250000
.1794217-01	.1472783	01 .1919107-06	.5721914-02	.6567441-02	.2500000
.2303799-01	.1472770	01 .6437026-06	.1045094-01	.9539400-02	.2750000
.2958066-01	.1472735	01 .2184176-05	.1877578-01	.1344560-01	.3000000
.3797995-01	.1472643	01 .7449282-05	.3291172-01	.1822865-01	.3250000
.4875915-01	.1472399	01 .2514955-04	.5573355-01	.2349486-01	.3500000
.6258119-01	.1471769	01 .8203416-04	.9005955-01	.2833230-01	.3750000
.8027149-01	.1470224	01 .2504467-03	.1366512	.3122556-01	.4000000
.1028270	.1466749	01 .6889594-03	.1904085	.3027136-01	.4250000
.1314132	.1459869	01 .1633223-02	.2354613	.2393081-01	.4500000
.1674156	.1448429	01 .3164146-02	.2429855	.1230783-01	.4750000
.2127204	.1433299	01 .4720769-02	.1791226	.1790551-02	.5000000
.2702441	.1418112	01 .5291104-02	.2821400-01-	.1330246-01	.5250000
.3439358	.1405588	01 .5816760-02-	.1761597	.1734633-01	.5500000
.4372399	.1391640	01 .1104839-01-	.3396396	.1264956-01	.5750000
.5521428	.1368626	01 .2272297-01-	.3504676	.3078967-02	.6000000
.6932816	.1338349	01 .3129024-01-	.1610920	.5578853-02	.6250000
.8720652	.1311098	01 .3268523-01	.1718011	.9865747-02	.6500000
.1096582	.1283967	01 .5863682-01	.5169361	.9591915-02	.6750000
.1351199	.1232134	01 .1616798	.7430002	.6803476-02	.7000000
.1594389	.1132294	01 .3532296	.7942981	.3792165-02	.7250000
.1784454	.9869538	00 .5814438	.7006452	.1667583-02	.7500000
.1904878	.8205126	00 .7774088	.5314379	.5169923-03	.7750000
.1966182	.6595808	00 .9049194	.3519506	.3554013-04	.8000000

.1990747	01	.5200999	00	.9685809	00	.2029272	00-	.9718572-04	.8250000	01
.1998182	01	.4065671	00	.9924621	00	.9960013-01-	.9028830-04	.8500000	01	
.1999768	01	.3168860	00	.9988095	00	.3977953-01-	.4984317-04	.8750000	01	
.1999983	01	.2468177	00	.9998921	00	.1207177-01-	.1866536-04	.9000000	01	
.1999999	01	.1922233	00	.9999955	00	.2539083-02-	.4555756-05	.9250000	01	
.2000000	01	.1497037	00	.9999999	00	.3291664-03-	.6585769-06	.9500000	01	
.2000000	01	.1165894	00	.1000000	01	.2267439-04-	.4920095-07	.9750000	01	
.2000000	01	.9079990-01	.1000000	01	.6875852-06-	.1586092-08	.1000000	02		
.2000000	01	.7071504-01	.1000000	01	.7395062-08-	.1724252-10	.1025000	02		
.2000000	01	.5507293-01	.1000000	01	.0000000-39	.0000000-39	.1050000	02		
.2000000	01	.4289084-01	.1000000	01	.0000000-39	.0000000-39	.1075000	02		
.2000000	01	.3340342-01	.1000000	01	.0000000-39	.0000000-39	.1100000	02		
.2000000	01	.2601461-01	.1000000	01	.0000000-39	.0000000-39	.1125000	02		
.2000000	01	.2026020-01	.1000000	01	.0000000-39	.0000000-39	.1150000	02		
.2000000	01	.1577866-01	.1000000	01	.0000000-39	.0000000-39	.1175000	02		
.2000000	01	.1228843-01	.1000000	01	.0000000-39	.0000000-39	.1200000	02		
.2000000	01	.9570240-02	.1000000	01	.0000000-39	.0000000-39	.1225000	02		
.2000000	01	.7453311-02	.1000000	01	.0000000-39	.0000000-39	.1250000	02		
.2000000	01	.5804644-02	.1000000	01	.0000000-39	.0000000-39	.1275000	02		
.2000000	01	.4520661-02	.1000000	01	.0000000-39	.0000000-39	.1300000	02		

DESIGNATION	NP	BIND.	ENERGY	V(0)	LAMBDA
5 P 3/2	.4000000	01-	.3979715	01	.2273259 01

ALPHA S	.6295145-06-	.2477676-04	.4626854-03-	.5639788-02	.5086155-01
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
BETA S	-.9146926-07	.3420563-05-	.6257980-04	.7527896-03-	.6731310-02
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.4163618-04	.2273259 01	.1531189-17	.6290608-06-	.9140663-07-	.4000000 01
.5346192-04	.2273259 01	.5126128-17	.1015714-05-	.1475914-06-	.3750000 01
.6864646-04	.2273259 01	.1715978-16	.1639929-05-	.2382979-06-	.3500000 01
.8814380-04	.2273259 01	.5743520-16	.2647563-05-	.3847236-06-	.3250000 01
.1131789-03	.2273259 01	.1922099-15	.4273914-05-	.6210659-06-	.3000000 01
.1453246-03	.2273259 01	.6431094-15	.6898455-05-	.1002480-05-	.2750000 01
.1866004-03	.2273259 01	.2151197-14	.1113292-04-	.1617889-05-	.2500000 01
.2395997-03	.2273259 01	.7193325-14	.1796298-04-	.2610585-05-	.2250000 01
.3076521-03	.2273259 01	.2404317-13	.2897573-04-	.4211331-05-	.2000000 01
.3950331-03	.2273259 01	.8031807-13	.4672452-04-	.6791455-05-	.1750000 01
.5072325-03	.2273259 01	.2681179-12	.7531277-04-	.1094785-04-	.1500000 01
.6512994-03	.2273259 01	.8942146-12	.1213256-03-	.1763874-04-	.1250000 01
.8362850-03	.2273259 01	.2978848-11	.1953118-03-	.2839969-04-	.1000000 01
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.2918921-02	.2273258 01	.1182153-08	.2069568-02-	.3014937-03	.2500000 00
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.3550598-01	.2269822 01	.8211740-04	.1397331 00-	.2142300-01	.2750000 01
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.5037599 00	.2058752 01	.1435504-01	.1543394 00	.2003538-01	.5500000 01
.6370325 00	.2027536 01	.2376278-01	.5071392 00-	.7709720-03	.5750000 01
.7972944 00	.1976296 01	.5195869-01	.5434254 00-	.1651291-01	.6000000 01
.9881474 00	.1907574 01	.6932588-01	.1519826 00-	.1796854-01	.6250000 01
.1228461 01	.1846917 01	.7835757-01-	.4710998 00-	.8395626-02	.6500000 01
.1510456 01	.1768563 01	.1892369 00-	.9632155 00	.2752081-02	.6750000 01
.1764090 01	.1608642 01	.4596988 00-	.1073347 01	.8367204-02	.7000000 01
.1920293 01	.1363743 01	.7549485 00-	.8377324 00	.7833698-02	.7250000 01
.1982474 01	.1096476 01	.9296897 00-	.4831703 00	.4675390-02	.7500000 01
.1997694 01	.8604921 00	.9881565 00-	.2058891 00	.1957881-02	.7750000 01
.1999837 01	.6708708 00	.9989390 00-	.6280109-01	.5756153-03	.8000000 01

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.2000000	01	.2468197	00	.1000000	01-	.3483045-05	.2780916-07	.9000000	01
.2000000	01	.1922234	00	.9999999	00-	.3950405-07	.3090490-09	.9250000	01
.2000000	01	.1497037	00	.1000000	01-	.1227005-09	.9447732-12	.9500000	01
.2000000	01	.1165894	00	.9999999	00-	.7625796-13	.5800105-15	.9750000	01
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.2000000	01	.4289084-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1100000	02
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.2000000	01	.1228843-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	BIND.	ENERGY	V(O)	LAMBDA
5 P 1/2	.2000000	01-	.5101781	01	.2548157 01
					.8222074 00

ALPHA S	.2510992-03	.6765654-01-	.3046809	01	.6022620 02-	.7611019 03
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
BETA S	.8038727-03-	.4551730-01	.1112088	01-	.1680986 02	.1814033 03
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.4667112-04	.2548157 01	.4908863-11	.2523373-03	.8030394-03-	.4000000 01
.5992690-04	.2548157 01	.9506139-11	.3103528-03	.9860045-03-	.3750000 01
.7694766-04	.2548157 01	.1840783-10	.3818562-03	.1210555-02-	.3500000 01
.9880274-04	.2548156 01	.3564248-10	.4700686-03	.1486085-02-	.3250000 01
.1268652-03	.2548156 01	.6900679-10	.5790282-03	.1824075-02-	.3000000 01
.1628981-03	.2548155 01	.1335865-09	.7138241-03	.2238540-02-	.2750000 01
.2091652-03	.2548154 01	.2585623-09	.8809097-03	.2746554-02-	.2500000 01
.2685732-03	.2548152 01	.5003590-09	.1088530-02	.3368871-02-	.2250000 01
.3448543-03	.2548149 01	.9680298-09	.1347309-02	.4130642-02-	.2000000 01
.4428011-03	.2548145 01	.1872221-08	.1671078-02	.5062222-02-	.1750000 01
.5685664-03	.2548138 01	.3619521-08	.2078042-02	.6200056-02-	.1500000 01
.7300509-03	.2548128 01	.6994015-08	.2592454-02	.7587594-02-	.1250000 01
.9373983-03	.2548113 01	.1350613-07	.3247036-02	.9276152-02-	.1000000 01
.1203633-02	.2548091 01	.2606164-07	.4086499-02	.1132557-01-	.7500000 00
.1545474-02	.2548057 01	.5024225-07	.5172676-02	.1380437-01-	.5000000 00
.1984389-02	.2548006 01	.9675147-07	.6591990-02	.1678907-01-	.2500000 00
.2547929-02	.2547929 01	.1860777-06	.8466278-02	.2036189-01	.0000000-39
.3271458-02	.2547815 01	.3573743-06	.1096825-01	.2460587-01	.2500000 00
.4200353-02	.2547643 01	.6853757-06	.1434315-01	.2959592-01	.5000000 00
.5392819-02	.2547388 01	.1312726-05	.1893803-01	.3538380-01	.7500000 00
.6923481-02	.2547007 01	.2512220-05	.2523926-01	.4197417-01	.1000000 01
.8887944-02	.2546439 01	.4808151-05	.3391594-01	.4928877-01	.1250000 01
.1140855-01	.2545592 01	.9217097-05	.4586020-01	.5711573-01	.1500000 01
.1464158-01	.2544326 01	.1773432-04	.6220208-01	.6504312-01	.1750000 01
.1878609-01	.2542421 01	.3432541-04	.8425107-01	.7238110-01	.2000000 01
.2409448-01	.2539540 01	.6691788-04	.1132766 00	.7808832-01	.2250000 01
.3088447-01	.2535152 01	.1311606-03	.1499852 00	.8073871-01	.2500000 01
.3955168-01	.2528455 01	.2565021-03	.1935071 00	.7859477-01	.2750000 01
.5058210-01	.2518335 01	.4925820-03	.2397391 00	.6988776-01	.3000000 01
.6456643-01	.2503513 01	.9052447-03	.2791606 00	.5341382-01	.3250000 01
.8222908-01	.2483104 01	.1535570-02	.2949794 00	.2947798-01	.3500000 01
.1045057 00	.2457740 01	.2296246-02	.2638194 00	.9743340-03	.3750000 01
.1327066 00	.2430607 01	.2881777-02	.1626648 00-	.2602104-01	.4000000 01
.1687032 00	.2406423 01	.3033191-02-	.1440770-01-	.4313761-01	.4250000 01
.2148320 00	.2386568 01	.3474754-02-	.2317077 00-	.4295878-01	.4500000 01
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.4363123 00	.2289558 01	.1494567-01-	.1159038 00	.2643567-01	.5250000 01
.5515862 00	.2254208 01	.1633771-01	.3034137 00	.2907384-01	.5500000 01
.6955430 00	.2213762 01	.3299070-01	.5982151 00	.1270361-01	.5750000 01
.8659486 00	.2146473 01	.6323614-01	.4885941 00-	.8143163-02	.6000000 01
.1072181 01	.2069798 01	.7255271-01-	.4286820-01-	.1894362-01	.6250000 01
.1331657 01	.2002066 01	.1006951 00-	.7018327 00-	.1670887-01	.6500000 01
.1614679 01	.1890596 01	.2721490 00-	.1104585 01-	.7917402-02	.6750000 01
.1838139 01	.1676167 01	.5779767 00-	.1072844 01-	.5829089-03	.7000000 01
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.1992032 01	.1101762 01	.9639101 00-	.3750804 00	.1783270-02	.7500000 01
.1999216 01	.8611479 00	.9954640 00-	.1370950 00	.8026091-03	.7750000 01
.1999962 01	.6709127 00	.9997189 00-	.3465508-01	.2258980-03	.8000000 01

.1999999	01	.5225171	00	.9999928	00-	.5631647-02	.3909378-04	.8250000	01
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.2000000	01	.2468197	00	.1000000	01-	.4745485-06	.3615318-08	.9000000	01
.2000000	01	.1922234	00	.1000000	01-	.2900789-08	.2248613-10	.9250000	01
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.2000000	01	.7071504-01		.1000000	01	.0000000-39	.0000000-39	.1025000	02
.2000000	01	.5507293-01		.1000000	01	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01		.1000000	01	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01		.1000000	01	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01		.1000000	01	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01		.1000000	01	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01		.1000000	01	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01		.1000000	01	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02		.1000000	01	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02		.1000000	01	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02		.1000000	01	.0000000-39	.0000000-39	.1275000	02
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DESIGNATION NP BIND. ENERGY V(I) LAMBDA
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ALPHA S .3162884-02-.2814713 00 .8620937 01-.1480824 03 .1737903 04
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BETA S -.9879643-03 .6161806-01-.1602511 01 .2521620 02-.2799775 03
.0000000-39 .0000000-39 .0000000-39 .0000000-39 .0000000-39

R TIMES V(R)	V(R)	INTEGRAL	F	G	RHO
.5153354-04	.2813636 01	.7587368-10	.3157731-02-	.9868363-03-	.4000000 01
.6617031-04	.2813633 01	.1468657-09	.3876538-02-	.1211642-02-	.3750000 01
.8496426-04	.2813630 01	.2842298-09	.4758342-02-	.1487522-02-	.3500000 01
.1090960-03	.2813624 01	.5499394-09	.5839745-02-	.1826000-02-	.3250000 01
.1400817-03	.2813615 01	.1063719-08	.7165356-02-	.2241158-02-	.3000000 01
.1798676-03	.2813602 01	.2056687-08	.8789423-02-	.2750168-02-	.2750000 01
.2309529-03	.2813582 01	.3974567-08	.1077773-01-	.3373938-02-	.2500000 01
.2965462-03	.2813552 01	.7675903-08	.1320973-01-	.4137852-02-	.2250000 01
.3807668-03	.2813508 01	.1481177-07	.1618091-01-	.5072629-02-	.2000000 01
.4889025-03	.2813440 01	.2855083-07	.1980528-01-	.6215274-02-	.1750000 01
.6277407-03	.2813339 01	.5495821-07	.2421769-01-	.7610107-02-	.1500000 01
.8059915-03	.2813187 01	.1056034-06	.2957576-01-	.9309786-02-	.1250000 01
.1034830-02	.2812961 01	.2024578-06	.3606050-01-	.1137623-01-	.1000000 01
.1328589-02	.2812623 01	.3870085-06	.4387482-01-	.1388117-01-	.7500000 00
.1705637-02	.2812121 01	.7370061-06	.5323782-01-	.1690605-01-	.5000000 00
.2189503-02	.2811377 01	.1396742-05	.6437238-01-	.2054060-01-	.2500000 00
.2810284-02	.2810284 01	.2630566-05	.7748175-01-	.2487927-01	.0000000-39
.3606425-02	.2808687 01	.4914551-05	.9270920-01-	.3001411-01	.2500000 00
.4626931-02	.2806376 01	.9086611-05	.1100723 00-	.3602218-01	.5000000 00
.5934098-02	.2803070 01	.1657597-04	.1293613 00-	.4294499-01	.7500000 00
.7606880-02	.2798415 01	.2971576-04	.1499891 00-	.5075643-01	.1000000 01
.9745000-02	.2791990 01	.5207900-04	.1707829 00-	.5931603-01	.1250000 01
.1247410-01	.2783349 01	.8861933-04	.1897157 00-	.6830463-01	.1500000 01
.1595242-01	.2772116 01	.1450940-03	.2036045 00-	.7714358-01	.1750000 01
.2038010-01	.2758148 01	.2258501-03	.2078527 00-	.8490640-01	.2000000 01
.2601305-01	.2741755 01	.3290180-03	.1964199 00-	.9024786-01	.2250000 01
.3318411-01	.2723919 01	.4398753-03	.1623503 00-	.9140166-01	.2500000 01
.4233328-01	.2706277 01	.5290961-03	.9937768-01-	.8633365-01	.2750000 01
.5404235-01	.2690611 01	.5734504-03	.5211727-02-	.7317190-01	.3000000 01
.6905659-01	.2677615 01	.6199084-03-	.1132094 00-	.5102758-01	.3250000 01
.8826730-01	.2665442 01	.8686973-03-	.2334810 00-	.2118869-01	.3500000 01
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.1434272 00	.2626962 01	.2846213-02-	.3016562 00	.3935392-01	.4000000 01
.1822543 00	.2599719 01	.3781035-02-	.1549559 00	.5187608-01	.4250000 01
.2318116 00	.2575194 01	.3958138-02	.1091412 00	.4254062-01	.4500000 01
.2950817 00	.2552958 01	.5806086-02	.3764399 00	.1411750-01	.4750000 01
.3740292 00	.2520189 01	.1223117-01	.4558617 00-	.1847120-01	.5000000 01
.4715218 00	.2474320 01	.1779140-01	.2065197 00-	.3519292-01	.5250000 01
.5951003 00	.2432040 01	.1904820-01-	.2830653 00-	.2577252-01	.5500000 01
.7496805 00	.2386070 01	.3751798-01-	.6514026 00	.4105726-04	.5750000 01
.9312393 00	.2308312 01	.7354251-01-	.5224954 00	.1998731-01	.6000000 01
.1149920 01	.2219869 01	.8318519-01	.1138882 00	.2103154-01	.6250000 01
.1422562 01	.2138736 01	.1284580 00	.8497968 00	.8708538-02	.6500000 01
.1702301 01	.1993191 01	.3516328 00	.1210241 01-	.3686285-02	.6750000 01
.1895761 01	.1728711 01	.5819459 00	.1054627 01-	.8160687-02	.7000000 01
.1977492 01	.1404365 01	.9074478 00	.6329998 00-	.6150974-02	.7250000 01
.1997282 01	.1104666 01	.9853703 00	.2657864 00-	.2795274-02	.7500000 01
.1999837 01	.8614152 00	.9988718 00	.7593068-01-	.8178072-03	.7750000 01
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.2000000	01	.2468197	00	.1000000	01	.1405548-07-	.1460777-09	.9000000	01
.2000000	01	.1922234	00	.1000000	01	.2655896-10-	.2743163-12	.9250000	01
.2000000	01	.1497037	00	.1000000	01	.8500983-14-	.8739265-16	.9500000	01
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.2000000	01	.9079991-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1000000	02
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.2000000	01	.5507293-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1050000	02
.2000000	01	.4289084-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1075000	02
.2000000	01	.3340342-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1100000	02
.2000000	01	.2601461-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1125000	02
.2000000	01	.2026020-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1150000	02
.2000000	01	.1577866-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1175000	02
.2000000	01	.1228843-01	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1200000	02
.2000000	01	.9570240-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1225000	02
.2000000	01	.7453311-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1250000	02
.2000000	01	.5804644-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1275000	02
.2000000	01	.4520661-02	.1000000	01	.0000000-39	.0000000-39	.0000000-39	.1300000	02

DESIGNATION	NP	BIND.	ENERGY	V(O)	LAMBDA
6 S 1/2	.1000000	01-	.5019291	00 .7531360	00 .8222074

ALPHA S	.7720455-03-	.6871375-01	.2104080	01-.3611648	02 .4234386	03
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39
BETA S	-.2411576-03	.1503718-01-	.3908023	00 .6143296	01-.6812778	02
	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39	.0000000-39

R	TIMES	V(R)	V(R)	INTEGRAL	F	G	RHO	
.1379417	-04	.7531360	00	.4520748-11	.7707876-03-	.2408823-03-	.4000000	01
.1771206	-04	.7531359	00	.8750636-11	.9462449-03-	.2957563-03-	.3750000	01
.2274273	-04	.7531357	00	.1693514-10	.1161489-02-	.3630974-03-	.3500000	01
.2920223	-04	.7531354	00	.3276679-10	.1425455-02-	.4457186-03-	.3250000	01
.3749638	-04	.7531348	00	.6337910-10	.1749030-02-	.5470568-03-	.3000000	01
.4814625	-04	.7531341	00	.1225426-09	.2145457-02-	.6713040-03-	.2750000	01
.6182091	-04	.7531329	00	.2368147-09	.2630792-02-	.8235637-03-	.2500000	01
.7937943	-04	.7531311	00	.4573495-09	.3224430-02-	.1010032-02-	.2250000	01
.1019249	-03	.7531285	00	.8825217-09	.3949680-02-	.1238208-02-	.2000000	01
.1308734	-03	.7531245	00	.1701129-08	.4834369-02-	.1517124-02-	.1750000	01
.1680434	-03	.7531184	00	.3274543-08	.5911414-02-	.1857598-02-	.1500000	01
.2157693	-03	.7531094	00	.6292098-08	.7219285-02-	.2272485-02-	.1250000	01
.2770483	-03	.7530959	00	.1206291-07	.8802169-02-	.2776899-02-	.1000000	01
.3557278	-03	.7530758	00	.2305883-07	.1070959-01-	.3388352-02-	.7500000	00
.4567454	-03	.7530459	00	.4391239-07	.1299502-01-	.4126724-02-	.5000000	00
.5864382	-03	.7530017	00	.8322069-07	.1571287-01-	.5013921-02-	.2500000	00
.7529364	-03	.7529365	00	.1567339-06	.1891272-01-	.6073000-02	.0000000-39	
.9666674	-03	.7528414	00	.2928167-06	.2262955-01-	.7326435-02	.2500000	00
.1240998	-02	.7527037	00	.5413917-06	.2686759-01-	.8793046-02	.5000000	00
.1593057	-02	.7525068	00	.9876095-06	.3157562-01-	.1048297-01	.7500000	00
.2044771	-02	.7522294	00	.1770471-05	.3661027-01-	.1238985-01	.1000000	01
.2624202	-02	.7518466	00	.3102833-05	.4168511-01-	.1447939-01	.1250000	01
.3367235	-02	.7513318	00	.5279773-05	.4630523-01-	.1667372-01	.1500000	01
.4319764	-02	.7506626	00	.8644176-05	.4969338-01-	.1883155-01	.1750000	01
.5540538	-02	.7498304	00	.1345475-04	.5072724-01-	.2072670-01	.2000000	01
.7104927	-02	.7488540	00	.1959963-04	.4793191-01-	.2203066-01	.2250000	01
.9109963	-02	.7477915	00	.2620106-04	.3960915-01-	.2231201-01	.2500000	01
.1168099	-01	.7467407	00	.3151191-04	.2422962-01-	.2107377-01	.2750000	01
.1497995	-01	.7458078	00	.3415089-04	.1235938-02-	.1785832-01	.3000000	01
.1921467	-01	.7450338	00	.3692414-04-	.2767299-01-	.1244802-01	.3250000	01
.2464811	-01	.7443086	00	.5176720-04-	.5701660-01-	.5157132-02	.3500000	01
.3160895	-01	.7433714	00	.9639337-04-	.7667430-01	.2877203-02	.3750000	01
.4051269	-01	.7420161	00	.1694562-03-	.7349981-01	.9632763-02	.4000000	01
.5190569	-01	.7403952	00	.2247974-03-	.3753425-01	.1267972-01	.4250000	01
.6651703	-01	.7389376	00	.2352937-03	.2703780-01	.1036915-01	.4500000	01
.8525648	-01	.7376133	00	.3464008-03	.9208639-01	.3380869-02	.4750000	01
.1091815	00	.7356595	00	.7279250-03	.1106394	00-.4610222-02	.5000000	01
.1396737	00	.7329407	00	.1050181-02	.4838864-01-	.8654273-02	.5250000	01
.1787344	00	.7304468	00	.1128669-02-	.7165509-01-	.6204072-02	.5300000	01
.2286357	00	.7276975	00	.2248097-02-	.1582713	00 .2888014-03	.5750000	01
.2917219	00	.7231067	00	.4264204-02-	.1178402	00 .5184979-02	.6000000	01
.3719702	00	.7180718	00	.4708421-02	.4647114-01	.5110385-02	.6250000	01
.4744106	00	.7132478	00	.8000486-02	.2162621	00 .1451931-02	.6500000	01
.6017026	00	.7045216	00	.1969406-01	.2480311	00-.2184762-02	.6750000	01
.7585777	00	.6917336	00	.2811340-01	.9109049-01-	.3411397-02	.7000000	01
.9577353	00	.6801594	00	.3065700-01-	.1777677	00-.2453355-02	.7250000	01
.1204365	01	.6661155	00	.7262886-01-	.4305486	00-.8160935-03	.7500000	01
.1472752	01	.6343770	00	.2108797	00-.5756922	00 .4176187-03	.7750000	01
.1711404	01	.5741124	00	.4421589	00-.5868424	00 .9665297-03	.8000000	01

.1876873	01	.4903494	00	.6923310	00-	.4884886	00	.9878549-03	.8250000	01
.1961982	01	.3992014	00	.8770482	00-	.3330381	00	.7329809-03	.8500000	01
.1992292	01	.3157013	00	.9676954	00-	.1801992	00	.4153194-03	.8750000	01
.1999095	01	.2467081	00	.9950853	00-	.7317618-01		.1738009-03	.9000000	01
.1999948	01	.1922184	00	.9996323	00-	.2063866-01		.5007011-04	.9250000	01
.1999999	01	.1497036	00	.9999891	00-	.3653063-02		.9000487-05	.9500000	01
.2000000	01	.1165894	00	.1000000	01-	.3560174-03		.8872572-06	.9750000	01
.2000000	01	.9079990-01		.1000000	01-	.1614472-04		.4058175-07	.1000000	02
.2000000	01	.7071503-01		.1000000	01-	.2745140-06		.6945078-09	.1025000	02
.2000000	01	.5507292-01		.1000000	01-	.1328965-08		.3378822-11	.1050000	02
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.2000000	01	.7453311-02		.1000000	01	.0000000-39		.0000000-39	.1250000	02
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.2000000	01	.4520661-02		.1000000	01	.0000000-39		.0000000-39	.1300000	02

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