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Compton Scattering Factors for  
Spherically Symmetric Free Atoms

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**Compton Scattering Factors for**  
**Spherically Symmetric Free Atoms**

by

**Don T. Cromer**  
**Joseph B. Mann**

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COMPTON SCATTERING FACTORS  
FOR SPHERICALLY SYMMETRIC FREE ATOMS

by

Don T. Cromer and Joseph B. Mann

ABSTRACT

Incoherent scattering factors for all spherically symmetric free atoms have been computed from numerical SCF Hartree-Fock wave functions. The complete Waller-Hartree theory with all exchange terms has been used. In addition to the incoherent scattering factors, all the matrix elements used in the Waller-Hartree expression are tabulated.

INTRODUCTION

The importance of Compton, or incoherent, scattering in many X-ray scattering experiments arises not so much from intrinsic interest but from the corrections necessary to study other aspects of diffracted X-rays such as order-disorder and thermal diffuse scattering. The incoherent scattering often contributes a large fraction of the total measured intensity, and the best procedure is to subtract the calculated incoherent scattering. Consequently, it is desirable to calculate this quantity as accurately as possible.

The most extensive calculations of incoherent scattering have been those of Freeman.<sup>1-5</sup> Some additional calculations of Freeman are given in the International Tables for X-ray Crystallography.<sup>6</sup> Most of these are for spherical free atoms, but some in Refs. 2, 4 and 5 are for aspherical atoms.

Numerical SCF Hartree-Fock calculations have recently been made by Mann<sup>7-8</sup> for all the elements and for many ions. In this paper we give the incoherent scattering factors for all the spherically symmetric neutral free atoms as calculated from the wave functions of Mann. There is some duplication of Freeman's calculations, but in many cases we used more accurate wave functions than were available to him. In addition we have carried the calculations to smaller and larger values of  $\sin \theta/\lambda$  than did Freeman.

The calculation of incoherent scattering for

aspherical atoms is a much more complicated problem,<sup>9</sup> and we will present results for such atoms in a later report.

METHOD

The most accurate formula for the incoherent scattering by an assemblage of free atoms is that given by Waller and Hartree:<sup>10</sup>

$$I = Z - \sum_{j=1}^Z \sum_{k=j}^Z |f_{jk}|^2, \quad (1)$$

where

$$f_{jk} = \langle j | \exp(ik \vec{S} \cdot \vec{r}) | k \rangle \quad (2)$$

and

$\kappa = 2\pi/\lambda$ ;  $\lambda$  is the wavelength of the incident radiation;  $\vec{S} = \vec{s} - \vec{s}_0$ , where  $\vec{s}_0$  and  $\vec{s}$  are unit vectors along the incident and reflected directions; and  $|j\rangle$  and  $|k\rangle$  are one-electron wave functions. Equation (1) does not include the Breit-Dirac factor  $(v'/v)^2$ , where  $v$  and  $v'$  are the frequencies before and after scattering. The summation in Eq. (1) is over all electrons in the atom. Equation (2) can be transformed<sup>1</sup> into a form that is convenient for calculation.

If the total atomic charge distribution is spherically symmetric, i.e. filled shells, half-filled shells, or only  $g$  electrons outside filled shells, the scattering is independent of orientation. We may therefore take the vector  $\vec{S}$  to be along the polar axis. Setting  $\vec{k} = \vec{K}|S| = 4\pi \sin \theta/\lambda$ , where  $2\theta$  here is the scattering angle, we use the expansion

$$\exp [ i \vec{k} \cdot \vec{r} ] = \exp [ i k r \cos \theta ] = \sum_n i^n (2n + 1) P_n (\cos \theta) j_n (kr), \quad (3)$$

where the  $j_n$  are spherical Bessel functions. We can then write

$$f_{jk} = \sum_n i^n (2n + 1) \int \psi_j^* (\vec{r}) \psi_k (\vec{r}) P_n (\cos \theta) j_n (kr) dr. \quad (4)$$

If we write  $\psi$  in the separable form

$$\psi = (P(r)/r) \otimes (\ell m) \otimes \phi (m) \quad (5)$$

and substitute in Eq. (4), we have

$$f_{jk} = \sum_n i^n (2n + 1) C^n (\ell_j m_j; \ell_k m_k) \int_0^\infty P_j(r) P_k(r) j_n(kr) dr. \quad (6)$$

Equation (6) can be substituted into Eq. (1) to give the final form used for the calculation of the incoherent scattering. The  $C^n$  coefficients in Eq. (6) are commonly called Condon-Shortley coefficients and are integrals of products of three associated Legendre functions;

$$C^n (\ell_1 m_1; \ell_2 m_2) = \left( \frac{2}{2n + 1} \right)^{1/2} \int_0^\pi \Theta (n_1 m_1 - m_2) \otimes (\ell_1 m_1) \otimes (\ell_2 m_2) \sin \theta d\theta. \quad (7)$$

These coefficients have been tabulated in many places, but for our purpose we used a subroutine written by Joy,<sup>11</sup> of the Oak Ridge National Laboratory, to compute them as needed. Denoting the integrals in Eq. (6) by  $\langle j_n \rangle$ , the  $f_{jk}$  are linear combinations of  $\langle j_n \rangle$  with coefficients depending on the angular dependence of the one-electron wave functions. The P's in Eq. (6) are the normalized radial wave functions obtained from the Hartree-Fock calculations.

A Fortran IV program for the IBM-7030 computer was written to compute the incoherent scattering directly from Eqs. (1) and (6). The results are given in Table I. Table II contains the values of the various terms  $\langle j_n \rangle$ .

Freeman<sup>1</sup> has emphasized the importance of the exchange terms, which have often been neglected. These are the terms in Eq. (1) for which  $j \neq k$ , and, while they are individually small, for a heavy atom they accumulate to a substantial amount. This effect is illustrated in Fig. 1, where the incoherent scattering for a heavy element, Hg, is plotted both with and without these exchange terms.

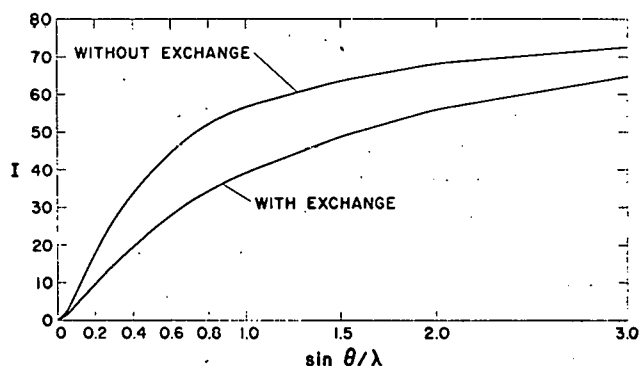


Fig. 1. Incoherent scattering factors for Hg plotted both with and without the exchange terms.

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Table I. Incoherent Scattering Factors for Spherically Symmetric Free Atoms

SIN(THETA)/ LAMBDA	HE	LI	BE	N	NE	NA	MG	P	AR	K	CA	CR	MN
0.005	0.001	0.007	0.006	0.003	0.002	0.009	0.010	0.008	0.006	0.016	0.018	0.012	0.013
0.010	0.003	0.027	0.025	0.013	0.009	0.036	0.040	0.032	0.024	0.062	0.072	0.046	0.052
0.050	0.085	0.509	0.546	0.310	0.218	0.674	0.831	0.719	0.571	1.105	1.375	0.968	1.104
0.100	0.312	1.048	1.463	1.080	0.812	1.503	2.066	2.206	1.956	2.500	3.105	2.609	2.949
0.150	0.618	1.265	2.000	2.003	1.637	2.160	2.829	3.611	3.558	3.905	4.401	4.123	4.435
0.200	0.934	1.441	2.228	2.858	2.547	2.891	3.444	4.732	5.033	5.301	5.690	5.577	5.791
0.300	1.438	1.929	2.494	4.097	4.269	4.431	4.771	6.312	7.377	7.652	7.981	8.206	8.380
0.400	1.727	2.187	2.769	4.792	5.644	5.804	6.064	7.435	8.998	9.405	9.790	10.415	10.604
0.500	1.871	2.456	3.037	5.182	6.640	6.903	7.181	8.419	10.106	10.650	11.157	12.264	12.486
0.600	1.938	2.661	3.272	5.437	7.320	7.724	8.086	9.323	10.967	11.568	12.163	13.770	14.062
0.700	1.969	2.789	3.465	5.635	7.774	8.313	8.784	10.131	11.726	12.329	12.953	14.960	15.346
0.800	1.984	2.869	3.615	5.809	8.085	8.729	9.304	10.827	12.424	13.014	13.635	15.902	16.376
0.900	1.992	2.918	3.724	5.968	8.312	9.028	9.689	11.411	13.061	13.645	14.256	16.670	17.211
1.000	1.995	2.949	3.807	6.113	8.490	9.252	9.975	11.888	13.629	14.220	14.830	17.323	17.910
1.500	2.000	2.994	3.966	6.630	9.113	9.939	10.766	13.209	15.489	16.212	16.921	19.730	20.411
2.000	2.000	2.999	3.993	6.860	9.517	10.376	11.229	13.790	16.324	17.152	17.970	21.168	21.938
3.000	2.000	3.000	3.999	6.979	9.875	10.813	11.738	14.457	17.132	18.020	18.906	22.456	23.337
4.000	2.000	3.000	4.000	6.996	9.967	10.946	11.916	14.778	17.573	18.494	19.411	23.065	23.976
5.000	2.000	3.000	4.000	6.999	9.991	10.983	11.972	14.911	17.800	18.752	19.698	23.449	24.380
8.000	2.000	3.000	4.000	7.000	10.000	10.999	11.998	14.993	17.978	18.970	19.961	23.900	24.879

SIN(THETA)/ LAMBDA	CU	ZN	AS	KR	RB	SR	MO	TC	PD	AG	CD	SB	XE
0.005	0.009	0.010	0.010	0.009	0.020	0.023	0.016	0.018	0.010	0.013	0.015	0.015	0.013
0.010	0.036	0.041	0.040	0.035	0.078	0.091	0.065	0.072	0.039	0.052	0.059	0.058	0.052
0.050	0.796	0.912	0.909	0.812	1.372	1.701	1.344	1.502	0.923	1.139	1.288	1.287	1.194
0.100	2.348	2.654	2.793	2.703	3.225	3.831	3.625	3.987	3.103	3.362	3.700	3.871	3.841
0.150	3.919	4.220	4.675	4.805	5.172	5.653	5.720	6.067	5.536	5.631	5.921	6.453	6.677
0.200	5.455	5.631	6.365	6.760	7.062	7.464	7.690	7.984	7.725	7.785	7.980	8.811	9.340
0.300	8.310	8.388	9.236	10.157	10.431	10.746	11.260	11.512	11.441	11.598	11.812	12.777	13.892
0.400	10.778	10.901	11.658	12.828	13.206	13.576	14.440	14.653	14.824	14.969	15.185	16.088	17.307
0.500	12.942	13.094	13.828	14.969	15.410	15.860	17.196	17.456	17.943	18.082	18.263	19.067	20.175
0.600	14.847	15.020	15.775	16.849	17.282	17.745	19.455	19.816	20.653	20.858	21.064	21.823	22.833
0.700	16.494	16.709	17.511	18.562	18.974	19.420	21.300	21.748	22.904	23.212	23.501	24.349	25.324
0.800	17.885	18.163	19.056	20.123	20.526	20.956	22.877	23.370	24.756	25.162	25.546	26.590	27.619
0.900	19.043	19.395	20.420	21.535	21.940	22.367	24.288	24.797	26.316	26.792	27.252	28.518	29.680
1.000	20.002	20.427	21.612	22.804	23.221	23.654	25.581	26.093	27.677	28.195	28.705	30.157	31.488
1.500	23.107	23.745	25.583	27.313	27.871	28.423	30.620	31.173	32.888	33.465	34.046	35.822	37.628
2.000	24.957	25.683	27.810	29.870	30.543	31.210	33.808	34.447	36.349	36.983	37.618	39.536	41.477
3.000	26.830	27.687	30.209	32.659	33.461	34.255	37.370	38.134	40.389	41.131	41.870	44.069	46.254
4.000	27.622	28.530	31.241	33.919	34.803	35.682	39.150	40.003	42.529	43.359	44.184	46.626	49.030
5.000	28.095	29.021	31.796	34.562	35.482	36.399	40.052	40.958	43.658	44.550	45.437	48.075	50.673
8.000	28.772	29.739	32.629	35.504	36.459	37.413	41.221	42.171	45.019	45.968	46.915	49.756	52.591

SIN(THETA)/ LAMBDA	CS	BA	EU	YB	RE	AU	HG	BI	RN	FR	RA	AM	ND
0.005	0.027	0.031	0.027	0.024	0.020	0.016	0.017	0.017	0.016	0.031	0.036	0.033	0.030
0.010	0.105	0.124	0.108	0.096	0.081	0.062	0.069	0.070	0.064	0.122	0.144	0.129	0.117
0.050	1.793	2.196	2.020	1.859	1.700	1.357	1.519	1.540	1.465	2.078	2.520	2.399	2.229
0.100	4.320	4.902	4.754	4.527	4.615	4.068	4.409	4.622	4.652	5.124	5.696	5.745	5.488
0.150	7.023	7.468	7.359	7.088	7.219	6.875	7.159	7.757	8.065	8.415	8.858	9.065	8.793
0.200	9.615	9.976	9.954	9.720	9.739	9.560	9.766	10.676	11.329	11.609	11.964	12.277	12.113
0.300	14.217	14.544	14.643	14.565	14.635	14.551	14.772	15.734	16.929	17.303	17.672	18.033	18.091
0.400	17.753	18.201	18.662	18.810	19.217	19.321	19.489	20.268	21.382	21.816	22.270	23.027	23.307
0.500	20.612	21.078	21.976	22.443	23.361	23.828	23.960	24.586	25.507	25.878	26.283	27.380	27.904
0.600	23.228	23.654	24.840	25.596	26.914	27.815	28.005	28.642	29.469	29.791	30.139	31.401	32.131
0.700	25.691	26.083	27.456	28.446	29.945	31.197	31.480	32.294	33.153	33.463	33.790	35.190	36.106
0.800	27.981	28.359	29.889	31.077	32.624	34.072	34.429	35.462	36.460	36.795	37.136	38.740	39.834
0.900	30.064	30.453	32.159	33.519	35.075	36.597	36.994	38.190	39.358	39.740	40.121	42.040	43.330
1.000	31.914	32.336	34.275	35.794	37.357	38.896	39.307	40.585	41.885	42.315	42.744	45.067	46.612
1.500	38.232	38.836	42.432	45.131	46.895	48.456	48.866	50.156	51.533	52.013	52.502	56.106	59.469
2.000	42.129	42.784	47.282	51.272	53.741	55.607	56.069	57.462	58.886	59.370	59.860	63.497	67.403
3.000	46.981	47.709	52.872	57.966	61.452	64.149	64.808	66.751	68.646	69.268	69.835	74.088	78.233
4.000	49.824	50.615	56.159	61.672	65.546	68.610	69.370	71.638	73.882	74.624	75.353	80.425	85.284
5.000	51.530	52.383	58.298	64.115	68.201	71.440	72.248	74.662	77.067	77.866	78.664	84.213	89.648
8.000	53.534	54.477	61.056	67.573	72.172	75.613	76.718	79.419	82.102	82.992	83.881	90.062	96.178

Table II. Values of  $\langle j_n \rangle$  for Spherically Symmetric Free Atoms

SIN THETA/ LAMBDA	H	HE	LI	LI	LI	HE	HE	HE	N	N	N	N	N	N
	1S1S J(0)	1S1S J(0)	2S2S J(0)	2S1S J(0)	1S1S J(0)	2S2S J(0)	2S1S J(0)	1S1S J(0)	2P2P J(0)	2P2P J(2)	2P2S J(1)	2P1S J(1)	2S2S J(0)	2S1S J(0)
0.005	0.99945	0.99978	0.99674	0.00006	0.99992	0.99845	0.00003	0.99996	0.99950	0.00020-0.01498	0.00132	0.99961	0.00001	
0.010	0.99779	0.99913	0.98702	0.00022	0.99967	0.99381	0.00012	0.99983	0.99801	0.00080-0.02992	0.00264	0.99843	0.00004	
0.050	0.94694	0.97856	0.72387	0.00541	0.99182	0.85760	0.00298	0.99572	0.95186	0.01896-0.14411	0.01313	0.96166	0.00105	
0.100	0.81083	0.91861	0.27917	0.01964	0.96792	0.54948	0.01140	0.98306	0.82590	0.05558-0.25720	0.02587	0.85655	0.00414	
0.150	0.64131	0.83131	0.04343	0.03811	0.93007	0.26867	0.02388	0.96251	0.66326	0.11817-0.32247	0.03788	0.70944	0.00909	
0.200	0.48060	0.73019-0.02033	0.05614	0.88092	0.09495	0.03854	0.93486	0.50201	0.15932-0.34058	0.04886	0.54902	0.01564		
0.300	0.25128	0.53010-0.00971	0.07950	0.76115-0.01627	0.06705	0.86236	0.25540	0.18873-0.28617	0.06693	0.27082	0.03222			
0.400	0.13045	0.36917	0.00581	0.08342	0.63225-0.01457	0.08653	0.77473	0.11676	0.17005-0.19354	0.07916	0.09831	0.05103		
0.500	0.07060	0.25446	0.00997	0.07548	0.51125	0.00004	0.09437	0.68105	0.04793	0.13582-0.11431	0.08564	0.01582	0.06941	
0.600	0.04033	0.17645	0.00969	0.06338	0.40676	0.00893	0.09291	0.58863	0.01594	0.10256-0.05957	0.08715-0.01326	0.08535		
0.700	0.02429	0.12403	0.00821	0.05131	0.32103	0.01240	0.08582	0.50244	0.00197	0.07547-0.02585	0.08484-0.01674	0.09767		
0.800	0.01534	0.08863	0.00664	0.04087	0.25281	0.01285	0.07618	0.42519-0.00354	0.05497-0.00642	0.07990-0.01043	0.10597			
0.900	0.01009	0.06443	0.00528	0.03237	0.19942	0.01193	0.06598	0.35790-0.00522	0.03997	0.00397	0.07340-0.00197	0.11038		
1.000	0.00688	0.04763	0.00419	0.02566	0.15797	0.01052	0.05632	0.30041-0.00528	0.02916	0.00897	0.06618	0.00551	0.11142	
1.500	0.00149	0.01309	0.00141	0.00874	0.05427	0.00462	0.02415	0.12672-0.00214	0.03679	0.00857	0.03401	0.01776	0.08850	
2.000	0.00049	0.00475	0.00057	0.00352	0.02207	0.00206	0.01094	0.05787-0.00074	0.03198	0.00418	0.01633	0.01324	0.05759	
3.000	0.00010	0.00104	0.	0.00085	0.00538	0.00056	0.00295	0.01582-0.00013	0.03029	0.00132	0.00421	0.00526	0.02250	
4.000	0.00006	0.00034	0.00009	0.00029	0.00185	0.00013	0.00106	0.00571-0.00007	0.03011	0.00032	0.00135	0.00220	0.00960	
5.000	-0.00003	0.00016	0.00011	0.00012	0.00079	0.00013	0.00046	0.00250	0.00002-0.00001	0.00014	0.00052	0.00106	0.00459	
8.000	0.00014	0.00001	0.00005	0.	0.00013-0.00014	0.00009	0.00041-0.00014	0.00014	0.00014	0.00009	0.00006	0.00004	0.00084	

SIN THETA/ LAMBDA	N	NE	NE	NE	NE	NE	NE	NE	NA	NA	NA	NA	NA	NA
	1S1S J(0)	2P2P J(0)	2P2P J(2)	2P2S J(1)	2P1S J(1)	2S2S J(0)	2S1S J(0)	1S1S J(0)	3S3S J(0)	3S2P J(1)	3S2S J(0)	3S1S J(0)	2P2P J(0)	2P2P J(2)
0.005	0.99999	0.99977	0.00009-0.01000	0.00098	0.99982	0.00001	0.99999	0.99619	0.02264	0.00036	0.	0.99985	0.00006	
0.010	0.99995	0.99910	0.00036-0.02000	0.00195	0.99929	0.00002	0.99998	0.98486	0.03527	0.00024	0.	0.99939	0.00024	
0.050	0.99871	0.97776	0.00883-0.09827	0.00973	0.98237	0.00052	0.99938	0.68463	0.02426	0.00579	0.00005	0.98502	0.00597	
0.100	0.99484	0.91543	0.03284-0.18632	0.01933	0.93166	0.00208	0.99754	0.21554	0.03753	0.02079	0.00021	0.94195	0.02279	
0.150	0.98846	0.82428	0.06586-0.25637	0.02866	0.85387	0.00465	0.99447	0.00507	0.03613	0.03956	0.00047	0.87594	0.04762	
0.200	0.97963	0.71804	0.10081-0.30447	0.03761	0.75736	0.00810	0.99021-0.03206	0.02371	0.03568	0.00084	0.00084	0.79405	0.07665	
0.300	0.95506	0.50549	0.15643-0.33711	0.05396	0.54357	0.01742	0.97818-0.00570-0.00986	0.07254	0.00189	0.61161	0.13290			
0.400	0.92224	0.33244	0.18188-0.30899	0.06777	0.34768	0.02916	0.96172	0.00739-0.03171	0.06557	0.00329	0.44052	0.17175		
0.500	0.88257	0.20903	0.18230-0.25294	0.07869	0.19742	0.04235	0.94118	0.00812-0.03830	0.04839	0.00494	0.30225	0.18848		
0.600	0.83757	0.12676	0.16816-0.19188	0.08663	0.09599	0.05600	0.91700	0.00573-0.03577	0.03028	0.00675	0.19985	0.18741		
0.700	0.78883	0.07397	0.14767-0.13727	0.09171	0.03468	0.06927	0.88964	0.00333-0.02954	0.01639	0.00861	0.12794	0.17512		
0.800	0.73785	0.04093	0.12584-0.09308	0.09419	0.00196	0.08148	0.85962	0.00159-0.02263	0.00739	0.01042	0.07912	0.15718		
0.900	0.68599	0.02069	0.10524-0.05941	0.09443-0.01232	0.09214	0.82745	0.00052-0.01637	0.00158	0.01211	0.04676	0.13741			
1.000	0.63440	0.00858	0.08699-0.03483	0.09283-0.01570	0.10094	0.79366-0.00006-0.01122-0.00123	0.01363	0.04574	0.11803					
1.500	0.40528-0.00532	0.03177	0.01017	0.07040	0.00305	0.11664	0.61623-0.00006	0.00055-0.00017	0.01771-0.00527	0.04948				
2.000	0.24970-0.00338	0.01201	0.01134	0.04530	0.01922	0.10142	0.45424	0.00036	0.00204	0.00254	0.01687-0.00497	0.02036		
3.000	0.09567-0.00084	0.00222	0.00453	0.01672	0.01396	0.05701	0.23211	0.00039	0.00134	0.00255	0.01067-0.00149	0.00413		
4.000	0.04170-0.00023	0.00056	0.00170	0.00648	0.00737	0.02958	0.11935	0.00019	0.00041	0.00154	0.00592-0.00045	0.00110		
5.000	0.02014-0.00006	0.00016	0.00071	0.00278	0.00392	0.01586	0.06442-0.00048	0.00016	0.00087	0.00330-0.00016	0.00036			
8.000	0.00375	0.	0.00001	0.00006	0.00037	0.00082	0.00338	0.01404	0.00005	0.00001	0.00019	0.00074-0.00001	0.00002	

SIN THETA/ LAMBDA	NA 2P2S J(1)	NA 2P1S J(1)	NA 2S2S J(0)	NA 2S1S J(0)	NA 1S1S J(0)	MG 3S3S J(0)	MG 3S2P J(1)	MG 3S2S J(0)	MG 3S1S J(0)	MG 2P2P J(0)	MG 2P2P J(2)	MG 2P2S J(1)	MG 2P1S J(1)	MG 2S2S J(0)
0.005	-0.00857	0.00094	0.99986	0.	0.99999	0.99771	0.00233	0.00005	0.	0.99989	0.00004-0.00749	0.00090	0.99989	
0.010	-0.01714	0.00189	0.99946	0.00002	0.99998	0.99089	0.00464	0.00021	0.	0.99956	0.00018-0.01498	0.00181	0.99958	
0.050	-0.08466	0.00941	0.98663	0.00044	0.99949	0.79672	0.02192	0.00511	0.00006	0.95907	0.00436-0.07421	0.00902	0.98954	
0.100	-0.16303	0.01872	0.94773	0.00175	0.99798	0.40581	0.03658	0.01899	0.00023	0.95726	0.01688-0.14428	0.01795	0.95889	
0.150	-0.22986	0.02782	0.88673	0.00390	0.99546	0.12116	0.04023	0.03797	0.00051	0.90729	0.03603-0.20654	0.02673	0.91014	
0.200	-0.28168	0.03662	0.80869	0.00684	0.99195	-0.00287	0.03346	0.05753	0.00091	0.84313	0.05952-0.25828	0.03527	0.84646	
0.300	-0.33633	0.05300	0.62492	0.01485	0.98203	-0.02505	0.00282	0.08466	0.00204	0.69056	0.11055-0.32476	0.05139	0.68999	
0.400	-0.33459	0.06732	0.43980	0.02515	0.96840	0.00127-0.02729	0.08822	0.00356	0.53300	0.15397-0.34335	0.06583	0.52107		
0.500	-0.29711	0.07921	0.28201	0.03700	0.95130	0.01200-0.04411	0.07449	0.00541	0.39258	0.18148-0.32522	0.07826	0.36498		
0.600	-0.24401	0.08853	0.16277	0.04965	0.93104	0.01212-0.04831	0.05422	0.00749	0.27867	0.19252-0.28512	0.08849	0.23606		
0.700	-0.18905	0.09526	0.08104	0.06239	0.90794	0.00886-0.04473	0.03486	0.00968	0.19180	0.19041-0.23586	0.09645	0.13870		
0.800	-0.13956	0.09954	0.02996	0.07461	0.88238	0.00543-0.03763	0.01962	0.01190	0.12829	0.17955-0.18625	0.10218	0.07073		
0.900	-0.09843	0.10161	0.00136	0.08583	0.85474	0.00280-0.02969	0.00902	0.01405	0.08320	0.16382-0.14123	0.10582	0.02691		
1.000	-0.06595	0.10175	-0.01209	0.09569	0.82540	0.00107-0.02227	0.00241	0.01606	0.05190	0.14607-0.10296	0.10756	0.00125		
1.500	0.00544	0.08447	0.00081	0.12063	0.66600	-0.00042-0.00157	-0.00178	0.02262	-0.00276	0.06996-0.00436	0.09634	-0.00693		
2.000	0.01373	0.05875	0.01835	0.11317	0.51140	0.00046	0.00267	0.00264	0.02315	-0.00634	0.03128	0.01449	0.07177	0.01517
3.000	0.00684	0.02418	0.01761	0.07091	0.28809	0.00079	0.00184	0.00400	0.01628	-0.00237	0.00696	0.00950	0.03270	0.02087
4.000	0.00277	0.00998	0.01018	0.03927	0.15224	0.00053	0.00081	0.00258	0.00964	-0.00077	0.00193	0.00417	0.01437	0.01331
5.000	0.00120	0.00445	0.00566	0.02191	0.08521	0.00073	0.00038	0.00150	0.00560	-0.00028	0.00055	0.00188	0.00666	0.00777
8.000	0.00017	0.00063	0.00126	0.00494	0.01962	-0.00004	0.00006	0.00035	0.00134	-0.00003	0.00006	0.00027	0.00100	0.00181

SIN THETA/ LAMBDA	MG 2S1S J(0)	MG 1S1S J(0)	P 3P3P J(0)	P 3P3P J(2)	P 3P3S J(1)	P 3P2P J(0)	P 3P2P J(2)	P 3P2S J(1)	P 3P1S J(1)	P 3S3S J(0)	P 3S2P J(1)	P 3S2S J(0)	P 3S1S J(0)	P 2P2P J(0)
0.005	0.	1.00000	0.99877	0.00049-0.02266	0.00004-0.00001	0.00004-0.00001	0.00105	0.00016	0.99920	0.00157	0.00004	0.00001	0.99995	
0.010	0.00001	0.99998	0.99508	0.00197-0.04521	0.00015-0.00006	0.00210	0.00032	0.99682	0.00314	0.00014	0.00001	0.99978		
0.050	0.00037	0.99958	0.88479	0.04473-0.20972	0.00360-0.00143	0.01021	0.00161	0.92349	0.01526	0.00345	0.00006	0.99464		
0.100	0.00149	0.99831	0.61832	0.13569-0.33419	0.01373-0.00534	0.01880	0.00321	0.72775	0.02798	0.01328	0.00022	0.97877		
0.150	0.00332	0.99620	0.34521	0.20149-0.35045	0.02861-0.01075	0.02450	0.00480	0.48821	0.03622	0.02815	0.00048	0.95305		
0.200	0.00585	0.99327	0.14911	0.21467-0.29226	0.04596-0.01646	0.02658	0.00637	0.27340	0.03895	0.04610	0.00085	0.91847		
0.300	0.01278	0.98495	-0.01041	0.14543-0.12660	0.07936-0.02458	0.01991	0.00943	0.02430	0.02842	0.08286	0.00189	0.82816		
0.400	0.02182	0.97349	-0.02109	0.06546-0.02537	0.10136-0.02470	0.00306	0.01235	-0.03343	0.00369	0.10956	0.00332	0.71981		
0.500	0.03243	0.95906	-0.00230	0.01955	0.00829	0.10838	-0.01724	-0.01672	0.01507	-0.01788	-0.02420	0.11980	0.00510	0.60538
0.600	0.04403	0.94187	0.01158	0.00085	0.00994	0.10318	-0.00559	-0.03352	0.01756	0.00588	-0.04700	0.11458	0.00718	0.49453
0.700	0.05603	0.92216	0.01711	-0.00370	0.00248	0.09069	0.00669	-0.04446	0.01978	0.01936	-0.06115	0.09891	0.00950	0.39377
0.800	0.06791	0.90021	0.01734	-0.00257	-0.00467	0.07529	0.01725	-0.04926	0.02170	0.02275	-0.06674	0.07844	0.01199	0.30651
0.900	0.07922	0.87629	0.01515	0.00008	-0.00907	0.05993	0.02508	-0.04906	0.02331	0.02031	-0.06557	0.05760	0.01458	0.23372
1.000	0.08960	0.85071	0.01224	0.00257	-0.01088	0.04616	0.03008	-0.04548	0.02461	0.01561	-0.06027	0.03907	0.01720	0.17476
1.500	0.12154	0.70784	0.00240	0.00606	-0.00542	0.00824	0.02906	-0.01632	0.02678	-0.00014	-0.02112	-0.00298	0.02875	0.02795
2.000	0.12193	0.56227	-0.00006	0.00405	-0.00056	-0.00065	0.01766	-0.00076	0.02392	-0.00076	-0.00126	-0.00184	0.03481	-0.00423
3.000	0.08451	0.32901	-0.00036	0.00130	0.00107	-0.00142	0.00535	0.00394	0.01444	0.00168	0.00456	0.00644	0.03216	-0.00601
4.000	0.04987	0.18725	-0.00020	0.00046	0.00070	-0.00061	0.00172	0.00239	0.00763	0.00167	0.00283	0.00620	0.02289	-0.00256
5.000	0.02897	0.10854	0.00007	0.00002	0.00030	-0.00025	0.00063	0.00125	0.00399	0.00132	0.00147	0.00431	0.01503	-0.00105
8.000	0.00692	0.02644	-0.00004	0.00005	0.00008	-0.00002	0.00006	0.00021	0.00071	0.00029	0.00024	0.00123	0.00429	-0.00011

SIN THETA/ LAMBDA	P 2P2P J(2)	P 2P2S J(1)	P 2P1S J(1)	P 2S2S J(0)	P 2S1S J(0)	P 1S1S J(0)	AR 3P3P J(0)	AR 3P3P J(2)	AR 3P3S J(1)	AR 3P2P J(0)	AR 3P2P J(2)	AR 3P2S J(1)	AR 3P1S J(1)	AR 3S3S J(0)
0.005	0.00002-0.00544	0.00078	0.99994	0.	1.00000	0.99939	0.00024-0.01655	0.00002-0.00001	0.00110	0.00016	0.99957	0.00016	0.99957	0.99957
0.010	0.00009-0.01087	0.00157	0.99977	0.00001	0.99999	0.99756	0.00097-0.03305	0.00009-0.00004	0.00219	0.00032	0.99827	0.00032	0.99827	0.99827
0.050	0.00214-0.05410	0.00784	0.99420	0.00024	0.99973	0.94107	0.02322-0.15892	0.00221-0.00098	0.01080	0.00160	0.95764	0.00160	0.95764	0.95764
0.100	0.00844-0.10663	0.01563	0.97701	0.00097	0.99893	0.78652	0.08048-0.28181	0.00863-0.00340	0.02063	0.00320	0.84112	0.00320	0.84112	0.84112
0.150	0.01853-0.15611	0.02335	0.94908	0.00218	0.99760	0.58737	0.14466-0.34812	0.01865-0.00723	0.02868	0.00480	0.67742	0.00480	0.67742	0.67742
0.200	0.03185-0.20127	0.03094	0.91141	0.00385	0.99574	0.39334	0.19249-0.35766	0.03139-0.01186	0.03432	0.00638	0.49893	0.00638	0.49893	0.49893
0.300	0.06520-0.27469	0.04560	0.81233	0.00851	0.99046	0.11966	0.21144-0.26762	0.05077-0.02133	0.03725	0.00949	0.19642	0.00949	0.19642	0.19642
0.400	0.10213-0.32210	0.05933	0.69234	0.01476	0.98314	0.00351	0.16253-0.14254	0.08863-0.02779	0.02961	0.01250	0.02841	0.01250	0.02841	0.02841
0.500	0.13577-0.34333	0.07192	0.56460	0.02237	0.97385	0.02224	0.09993-0.05195	0.10918-0.02903	0.01446	0.01540	0.02821	0.01540	0.02821	0.02821
0.600	0.16497-0.34175	0.08316	0.44048	0.03105	0.96268	0.01351	0.05049-0.00520	0.12003-0.02488	0.00398	0.01814	0.02705	0.01814	0.02705	0.02705
0.700	0.18466-0.32275	0.09294	0.32819	0.04050	0.94973	0.00184	0.01945-0.01082	0.12156-0.01653	0.02192	0.02070	0.00744	0.02070	0.00744	0.00744
0.800	0.19553-0.29218	0.10120	0.23248	0.05043	0.93512	0.01373	0.00333	0.01073	0.11576-0.00618	0.03675	0.02305	0.01124	0.02305	0.01124
0.900	0.19851-0.25536	0.10790	0.15507	0.06052	0.91899	0.02026	0.00305	0.00448	0.10513	0.00473	0.04721	0.02518	0.02274	0.02274
1.000	0.19510-0.21650	0.11307	0.09545	0.07052	0.90145	0.02239	0.00397	0.00259	0.09198	0.01479	0.05313	0.02707	0.02708	0.02708
1.500	0.13499-0.06279	0.11923	0.01535	0.11210	0.79797	0.01090	0.00638	0.01303	0.03248	0.03838	0.03976	0.03275	0.00894	0.00894
2.000	0.07641	0.00035	0.10420	0.00329	0.13142	0.68116	0.00249	0.00804	0.00557	0.00658	0.03256	0.01382	0.03282	0.01111
3.000	0.02247	0.01705	0.06153	0.02441	0.11772	0.46099	0.00060	0.00377	0.00120	0.00231	0.01359	0.00441	0.02446	0.00098
4.000	0.00723	0.01014	0.03228	0.02255	0.08295	0.29694	0.00042	0.00144	0.00144	0.00154	0.00515	0.00465	0.01518	0.00255
5.000	0.00265	0.00527	0.01684	0.01558	0.05428	0.18941	0.00025	0.00062	0.00088	0.00075	0.00207	0.00293	0.00890	0.00225
8.000	0.00025	0.00089	0.00300	0.00444	0.01551	0.05445	0.00007	0.00011	0.00019	0.00010	0.00022	0.00061	0.00190	0.00080

SIN THETA/ LAMBDA	AR 3S2P J(1)	AR 3S2S J(0)	AR 3S1S J(0)	AR 2P2P J(0)	AR 2P2P J(2)	AR 2P2S J(1)	AR 2P1S J(1)	AR 2S2S J(0)	AR 2S1S J(0)	AR 1S1S J(0)	K 4S4S J(0)	K 4S3P J(1)	K 4S3S J(0)	K 4S2P J(1)	
0.005	0.00110	0.00002	0.00003	0.99997	0.00001-0.00427	0.00008	0.99996	0.	1.00000	0.99421	0.00512	0.00014	0.00017	0.00017	
0.010	0.00220	0.00009	0.00003	0.99987	0.00005-0.00854	0.00137	0.99985	0.00001	0.99999	0.97702	0.01019	0.00058	0.00033	0.00033	
0.050	0.01084	0.00233	0.00007	0.99679	0.00128-0.04256	0.00683	0.99630	0.00017	0.99982	0.55570	0.04360	0.01345	0.00165	0.00165	
0.100	0.02059	0.00913	0.00020	0.98725	0.00508-0.08436	0.01364	0.98529	0.00068	0.99927	0.06156	0.05261	0.04383	0.00318	0.00318	
0.150	0.02828	0.01979	0.00040	0.97161	0.01127-0.12467	0.02040	0.96722	0.00152	0.99835	0.04226	0.02813	0.07155	0.00451	0.00451	
0.200	0.03321	0.03342	0.00070	0.95022	0.01964-0.16281	0.02709	0.94251	0.00270	0.99707	0.01793	0.00675	0.08353	0.00552	0.00552	
0.300	0.03345	0.06523	0.00152	0.89225	0.04180-0.23027	0.04016	0.87553	0.00601	0.99343	0.01218	0.04622	0.06256	0.00629	0.00629	
0.400	0.02171	0.09590	0.00265	0.81826	0.06884-0.28317	0.05269	0.79004	0.01051	0.98836	0.00789	0.04122	0.02504	0.00517	0.00517	
0.500	0.00195	0.11873	0.00408	0.73390	0.09780-0.31969	0.06451	0.69270	0.01609	0.93191	0.00176	0.02293	0.00174	0.00242	0.00242	
0.600	-0.02068	0.13040	0.00578	0.64476	0.12590-0.33977	0.07550	0.59020	0.02261	0.97411	0.00083	0.00829	0.00579	0.00134	0.00134	
0.700	-0.04166	0.13080	0.00771	0.55573	0.15092-0.34477	0.08555	0.48855	0.02990	0.95501	0.00107	0.00045	0.00474	0.00536	0.00536	
0.800	-0.05812	0.12199	0.00985	0.47065	0.17137-0.33702	0.09458	0.39256	0.03779	0.95468	0.00044	0.00228	0.00098	0.00900	0.00900	
0.900	-0.06886	0.10702	0.01215	0.39220	0.18649-0.31934	0.10253	0.30565	0.04611	0.94317	0.00028	0.00221	0.00248	0.01184	0.01184	
1.000	-0.07397	0.08893	0.01456	0.32195	0.19615-0.29463	0.10938	0.22983	0.05468	0.93056	0.00078	0.00099	0.00465	0.01370	0.01370	
1.500	-0.05050	0.01445	0.02689	0.09721	0.18197-0.14399	0.12753	0.01834	0.09592	0.85373	0.00057	0.00293	0.00295	0.01183	0.01183	
2.000	-0.01717	0.00491	0.03643	0.01677	0.12735-0.04152	0.12414	0.01647	0.12498	0.75152	0.00001	0.00169	0.00002	0.00499	0.00499	
3.000	0.00498	0.00418	0.04148	0.00869	0.04879	0.01777	0.08934	0.01641	0.13602	0.55819	0.00043	0.00018	0.00008	0.00077	0.00077
4.000	0.00529	0.00838	0.03468	0.00548	0.01825	0.01690	0.05461	0.02753	0.11157	0.40176	0.00014	0.00035	0.00052	0.00118	0.00118
5.000	0.00352	0.00733	0.02555	0.00265	0.00734	0.01048	0.03181	0.02349	0.08159	0.27748	0.00003	0.00024	0.00052	0.00080	0.00080
8.000	0.00068	0.00266	0.00879	0.00034	0.00078	0.00215	0.00579	0.00845	0.02799	0.09315	0.00011	0.00009	0.00021	0.00018	0.00018

SIN THETA/ LAMBDA	K 4S2S J(0)	K 4S1S J(0)	K 3P3P J(0)	K 3P3P J(2)	K 3P3S J(1)	K 3P2P J(0)	K 3P2P J(2)	K 3P2S J(1)	K 3P1S J(1)	K 3S3S J(0)	K 3S2P J(1)	K 3S2S J(0)	K 3S1S J(0)	K 2P2P J(0)		
0.005	0.	0.	0.99955	0.00018-0.01472	0.00002-0.00001	0.00113	0.00017	0.99965	0.00132	0.00002	0.00003	0.99997	0.00003	0.99997		
0.010	0.00001	0.	0.99820	0.00072-0.02942	0.00008-0.00003	0.00226	0.00033	0.99861	0.00204	0.00009	0.00003	0.99989	0.00003	0.99989		
0.050	0.00031	0.00001	0.95611	0.01737-0.14279	0.00200-0.00080	0.01115	0.00166	0.95589	0.01008	0.00210	0.00007	0.99723	0.00007	0.99723		
0.100	0.00123	0.00003	0.83638	0.06278-0.26044	0.00784-0.00310	0.02148	0.00332	0.87026	0.01927	0.00825	0.00019	0.98896	0.00019	0.98896		
0.150	0.00275	0.00007	0.67064	0.11998-0.33602	0.01707-0.00665	0.03023	0.00496	0.73091	0.02680	0.01797	0.00039	0.97538	0.00039	0.97538		
0.200	0.00479	0.00012	0.49323	0.17169-0.36479	0.02900-0.01107	0.03685	0.00660	0.57094	0.03203	0.03058	0.00066	0.95675	0.00066	0.95675		
0.300	0.00998	0.00027	0.20024	0.22003-0.31213	0.05747-0.02063	0.04235	0.00983	0.27182	0.03427	0.06086	0.00144	0.90588	0.00144	0.90588		
0.400	0.01564	0.00047	0.04020	0.19607-0.19629	0.08627-0.02825	0.03746	0.01298	0.07473	0.02557	0.09173	0.00252	0.84015	0.00252	0.84015		
0.500	0.02059	0.00073	0.01679	0.13937-0.09242	0.10977-0.03151	0.02434	0.01601	0.01394	0.00857	0.11691	0.00387	0.76400	0.00387	0.76400		
0.600	0.02399	0.00103	0.02132	0.08308-0.02668	0.12488-0.02965	0.00650	0.01891	0.03229	0.01255	0.13263	0.00549	0.68202	0.00549	0.68202		
0.700	0.02548	0.00138	0.00770	0.04113	0.00437	0.13097-0.02330	0.01242	0.02163	0.01912	0.03398	0.13780	0.00734	0.59842	0.00734	0.59842	
0.800	0.02514	0.00178	0.00748	0.01506	0.01294	0.12915-0.01391	0.02955	0.02418	0.00118	0.05237	0.13348	0.00939	0.51671	0.00939	0.51671	
0.900	0.02332	0.00220	0.01838	0.00149	0.01008	0.12139-0.00309	0.04313	0.02651	0.01747	0.06606	0.12194	0.01162	0.43957	0.01162	0.43957	
1.000	0.02050	0.00265	0.02420	0.00380	0.00310	0.10982	0.00775	0.05243	0.02862	0.02673	0.07451	0.10586	0.01398	0.36880	0.01398	0.36880
1.500	0.00514	0.00503	0.01634	0.00529	0.01546	0.04563	0.03990	0.04895	0.03551	0.01460	0.06102	0.02522	0.02641	0.12688	0.02641	0.12688
2.000	-0.00068	0.00705	0.00475	0.00973	0.00859	0.01185	0.03842	0.02100	0.03666	0.00005	0.02528	0.00377	0.03683	0.02913	0.03683	0.02913
3.000	0.00049	0.00855	0.00063	0.00539	0.00091	0.00237	0.01795	0.00379	0.02896	0.00043	0.00409	0.00264	0.04444	0.00859	0.04444	0.00859
4.000	0.00168	0.00752	0.00060	0.00220	0.00182	0.00201	0.00720	0.00557	0.01886	0.00275	0.00614	0.00874	0.03898	0.00655	0.03898	0.00655
5.000	0.00162	0.00575	0.00030	0.00090	0.00123	0.00105	0.00300	0.00379	0.01146	0.00276	0.00416	0.00841	0.02979	0.00338	0.02979	0.00338
8.000	0.00065	0.00211	0.00002	0.00008	0.00025	0.00014	0.00033	0.00084	0.00261	0.00113	0.00092	0.00334	0.01091	0.00047	0.01091	0.00047

SIN THETA/ LAMBDA	K 2P2P J(2)	K 2P2S J(1)	K 2P1S J(1)	K 2S2S J(0)	K 2S1S J(0)	K 1S1S J(0)	CA 4S4S J(0)	CA 4S3P J(1)	CA 4S3S J(0)	CA 4S2P J(1)	CA 4S2S J(0)	CA 4S1S J(0)	CA 3P3P J(0)	CA 3P3P J(2)	
0.005	0.00001-0.00398	0.00065	0.99997	0.	1.00000	0.99624	0.00473	0.00013	0.00019	0.	0.	0.99965	0.00014	0.00014	
0.010	0.00004-0.00796	0.00131	0.99987	0.	0.99999	0.98504	0.00942	0.00051	0.00037	0.00001	0.	0.99859	0.00056	0.00056	
0.050	0.00111-0.03972	0.00654	0.99675	0.00015	0.99984	0.68493	0.04194	0.01221	0.00186	0.00034	0.00001	0.96549	0.01370	0.01370	
0.100	0.00440-0.07883	0.01306	0.98708	0.00061	0.99934	0.20182	0.05759	0.04201	0.00361	0.00134	0.00003	0.86921	0.05069	0.05069	
0.150	0.00978-0.11672	0.01954	0.97117	0.00137	0.99852	0.01528	0.04214	0.07406	0.00515	0.00299	0.00008	0.73013	0.10052	0.10052	
0.200	0.01710-0.15284	0.02596	0.94935	0.00243	0.99738	0.03959	0.00935	0.09481	0.00639	0.00523	0.00014	0.57217	0.15071	0.15071	
0.300	0.03666-0.21781	0.03854	0.88982	0.00541	0.99412	0.00865	0.04681	0.08829	0.00763	0.01106	0.00031	0.28102	0.21549	0.21549	
0.400	0.06101-0.27057	0.05066	0.81297	0.00949	0.98957	0.01616	0.05695	0.04786	0.00690	0.01776	0.00055	0.09027	0.21587	0.21587	
0.500	0.08776-0.30931	0.06217	0.72416	0.01455	0.98378	0.00721	0.04006	0.01298	0.00426	0.02405	0.00084	0.00110	0.17288	0.17288	
0.600	0.11458-0.33356	0.07296	0.62898	0.02050	0.97678	0.00059	0.01983	0.00404	0.00022	0.02834	0.00120	0.02303	0.11720	0.11720	
0.700	0.13948-0.34403	0.08294	0.53262	0.02720	0.96860	0.00167	0.00584	0.00743	0.00447	0.03182	0.00161	0.01676	0.06823	0.06823	
0.800	0.16097-0.34232	0.09202	0.43951	0.03450	0.95929	0.00144	0.00113	0.00431	0.00910	0.03255	0.00207	0.00147	0.03299	0.03299	
0.900	0.17813-0.33057	0.10014	0.35302	0.04226	0.94890	0.00037	0.00320	0.00036	0.01307	0.03136	0.00258	0.01275	0.01124	0.01124	
1.000	0.19054-0.31116	0.10728	0.27543	0.05032	0.93750	0.00066	0.00263	0.00420	0.01606	0.02869	0.00311	0.02249	0.00007	0.00007	
1.500	0.19141-0.17086	0.12822	0.03887	0.09046	0.86748	0.00130	0.00376	0.00520	0.01679	0.00953	0.00604	0.02215	0.00307	0.00307	
2.000	0.14276-0.06027	0.12833	0.01611	0.12113	0.78218	0.00014	0.00289	0.00058	0.00837	0.00009	0.00868	0.00785	0.01071	0.01071	
3.000	0.05949	0.01534	0.09751	0.01178	0.13909	0.59844	0.00039	0.00005	0.00008	0.00053	0.00015	0.01112	0.00048	0.00718	0.00718
4.000	0.02339	0.01875	0.06235	0.02765	0.11931	0.43407	0.00021	0.00049	0.00066	0.00162	0.00207	0.01024	0.00080	0.00315	0.00315
5.000	0.00970	0.01246	0.03760	0.02566	0.09033	0.30675	0.00021	0.00038	0.00074	0.00120	0.00223	0.00811	0.00043	0.00134	0.00134
8.000	0.00108	0.00276	0.00852	0.01008	0.03291	0.10807	0.00005	0.00008	0.00033	0.00029	0.00098	0.00316	0.00004	0.00013	0.00013

SIN THETA/ LAMBDA	CA 3P3S J(1)	CA 3P2P J(0)	CA 3P2P J(2)	CA 3P2S J(1)	CA 3P1S J(1)	CA 3S3S J(0)	CA 3S2P J(1)	CA 3S2S J(0)	CA 3S1S J(0)	CA 2P2P J(0)	CA 2P2P J(2)	CA 2P2S J(1)	CA 2P1S J(1)	CA 2S2S J(0)
0.005	-0.01328	0.00002	-0.00001	0.00114	0.00017	0.99972	0.00095	0.00002	0.00004	0.99998	0.00001	-0.00373	0.00063	0.99997
0.010	-0.02554	0.00007	-0.00003	0.00228	0.00034	0.99886	0.00190	0.00008	0.00004	0.99990	0.00004	-0.00746	0.00125	0.99988
0.050	-0.12958	0.00180	-0.00072	0.01129	0.00169	0.97191	0.00940	0.00190	0.00007	0.99758	0.00097	-0.03724	0.00627	0.99713
0.100	-0.24079	0.00709	-0.00281	0.02187	0.00337	0.89210	0.01808	0.00746	0.00018	0.99035	0.00385	-0.07397	0.01253	0.98856
0.150	-0.32003	0.01551	-0.00607	0.03109	0.00504	0.77278	0.02538	0.01633	0.00037	0.97845	0.00857	-0.10969	0.01875	0.97446
0.200	-0.36129	0.02652	-0.01020	0.03842	0.00671	0.63063	0.03078	0.02795	0.00063	0.95208	0.01501	-0.14395	0.02491	0.95506
0.300	-0.34180	0.05355	-0.01956	0.04609	0.01000	0.34429	0.03453	0.05653	0.00136	0.91714	0.03239	-0.20641	0.03703	0.90186
0.400	-0.24420	0.08230	-0.02784	0.04390	0.01322	0.12935	0.02845	0.08698	0.00238	0.85846	0.05435	-0.25857	0.04874	0.83253
0.500	-0.13701	0.10756	-0.03267	0.03320	0.01633	0.01170	0.01415	0.11361	0.00366	0.78960	0.07899	-0.29868	0.05993	0.75142
0.500	-0.05658	0.12594	-0.03290	0.01681	0.01932	-0.02973	-0.00518	0.13248	0.00519	0.71431	0.10434	-0.32604	0.07050	0.66318
0.700	-0.00993	0.13608	-0.02863	-0.00201	0.02216	-0.02827	-0.02605	0.14185	0.00695	0.63618	0.12857	-0.34092	0.08036	0.57231
0.800	0.01007	0.13831	-0.02083	-0.02040	0.02483	-0.01035	-0.04542	0.14191	0.00892	0.55837	0.15055	-0.34436	0.08943	0.48276
0.900	0.01359	0.13399	-0.01083	-0.03628	0.02731	0.00879	-0.06127	0.13420	0.01106	0.48342	0.16900	-0.33797	0.09765	0.39777
1.000	0.00897	0.12489	0.00002	-0.04847	0.02959	0.02270	-0.07257	0.12088	0.01335	0.41320	0.18344	-0.32362	0.10499	0.31971
1.500	-0.01548	0.05991	0.03905	-0.05662	0.03751	0.02096	-0.07046	0.03794	0.02573	0.15854	0.19789	-0.19628	0.12820	0.06303
2.000	-0.01191	0.01867	0.04310	-0.02889	0.03975	0.00204	-0.03428	-0.00095	0.03679	0.04415	0.15658	-0.08048	0.13151	-0.01271
3.000	0.00024	-0.00205	0.02264	0.00237	0.03313	-0.00027	0.00240	0.00079	0.04679	-0.00771	0.07086	0.01133	0.10499	0.00665
4.000	0.00213	-0.00246	0.00961	0.00631	0.02257	0.00279	0.00682	0.00873	0.04294	-0.00758	0.02927	0.02015	0.07004	0.02693
5.000	0.00163	-0.00139	0.00414	0.00468	0.01420	0.00320	0.00504	0.00936	0.03399	-0.00419	0.01253	0.01445	0.04367	0.02744
8.000	0.00043	-0.00020	0.00048	0.00113	0.00344	0.00144	0.00121	0.00410	0.01324	-0.00062	0.00146	0.00346	0.01050	0.01182

SIN THETA/ LAMBDA	CA 2S1S J(0)	CA 1S1S J(0)	CR 4S4S J(0)	CR 4S3D J(2)	CR 4S3P J(1)	CR 4S3S J(0)	CR 4S2P J(1)	CR 4S2S J(0)	CR 4S1S J(0)	CR 3D3D J(0)	CR 3D3D J(2)	CR 3D3D J(4)	CR 3D3P J(1)	CR 3D3P J(3)
0.005	-0.	1.00000	0.99684	-0.00033	0.00292	0.00007	0.00011	0.	0.	0.99951	0.00020	0.	-0.01108	-0.
0.010	0.	0.99999	0.98740	-0.00129	0.00582	0.00029	0.00022	0.00001	0.	0.99804	0.00078	0.	-0.02214	-0.00001
0.050	0.00014	0.99985	0.72944	-0.02837	0.02691	0.00693	0.00110	0.00018	0.00001	0.95304	0.01844	0.00025	-0.10817	-0.00075
0.100	0.00055	0.99941	0.27955	-0.07763	0.04197	0.02491	0.00218	0.00071	0.00002	0.83274	0.06243	0.00312	-0.20151	-0.00553
0.150	0.00124	0.99867	0.03141	-0.10047	0.04050	0.04730	0.00319	0.00159	0.00005	0.68117	0.11034	0.01124	-0.26972	-0.01648
0.200	0.00220	0.99764	-0.03403	-0.09148	0.02565	0.06708	0.00409	0.00282	0.00008	0.53225	0.14758	0.02387	-0.30901	-0.03320
0.300	0.00490	0.99470	-0.01031	-0.03860	-0.01665	0.08292	0.00538	0.00615	0.00018	0.29726	0.17959	0.05196	-0.31199	-0.07438
0.400	0.00860	0.99061	0.01000	0.00306	-0.04358	0.06809	0.00576	0.01034	0.00032	0.15142	0.17173	0.07231	-0.25426	-0.10894
0.500	0.01322	0.98539	0.01090	0.02241	-0.04756	0.04096	0.00510	0.01486	0.00050	0.05889	0.14684	0.08202	-0.17934	-0.12645
0.500	0.01867	0.97906	0.00620	0.02700	-0.03798	0.01698	0.00348	0.01918	0.00071	0.02496	0.11808	0.08335	-0.11160	-0.12730
0.700	0.02483	0.97166	0.00202	0.02426	-0.02458	0.00194	0.00107	0.02282	0.00096	0.00312	0.09146	0.07930	-0.05968	-0.11659
0.800	0.03159	0.96324	-0.00030	0.01881	-0.01281	-0.00466	-0.00184	0.02548	0.00124	-0.00663	0.06910	0.07229	-0.02390	-0.09978
0.900	0.03882	0.95382	-0.00107	0.01306	-0.00457	-0.00556	-0.00493	0.02698	0.00155	-0.01006	0.05132	0.06400	-0.00135	-0.08104
1.000	0.04539	0.94346	-0.00093	0.00807	0.00019	-0.00352	-0.00792	0.02733	0.00189	-0.01039	0.03755	0.05550	0.01153	-0.06297
1.500	0.08518	0.87945	0.00117	-0.00238	-0.00041	0.00633	-0.01589	0.01749	0.00387	-0.00384	0.00722	0.02331	0.01603	-0.00787
2.000	0.11586	0.80045	0.00069	-0.00217	-0.00346	0.00350	-0.01279	0.00527	0.00598	-0.00092	0.00123	0.00912	0.00615	0.00493
3.000	0.14089	0.62617	0.00005	-0.00036	-0.00112	-0.00038	-0.00245	-0.00105	0.00904	-0.00002	-0.00005	0.00159	0.00036	0.00360
4.000	0.12605	0.46481	0.00004	0.	0.00029	0.00018	0.00109	0.00083	0.00972	0.00002	-0.00004	0.00035	-0.00013	0.00137
5.000	0.09865	0.33556	0.00025	0.00008	0.00050	0.00066	0.00146	0.00193	0.00875	0.00001	-0.00002	0.00010	-0.00011	0.00053
8.000	0.03815	0.12384	0.	0.00001	0.00016	0.00049	0.00052	0.00137	0.00433	0.00003	-0.00003	0.00003	0.	0.00003

SIN THETA/ LAMBDA	CR 3D3S J(2)	CR 3D2P J(1)	CR 3D2P J(3)	CR 3D2S J(2)	CR 3D1S J(2)	CR 3P3P J(0)	CR 3P3P J(2)	CR 3P3S J(1)	CR 3P2P J(0)	CR 3P2P J(2)	CR 3P2S J(1)	CR 3P1S J(1)	CR 3S3S J(0)	CR 3S2P J(1)
0.005	0.00008	0.00141	0.	-0.00001	0.	0.99979	0.00008-0.01034	0.00001-0.	0.00001-0.	0.00102	0.00015	0.99982	0.00071	
0.010	0.00033	0.00282	0.	-0.00002	0.	0.99917	0.00033-0.02067	0.00005-0.00002	0.00005-0.00002	0.00204	0.00030	0.99929	0.00143	
0.050	0.00807	0.01407	0.00002-0.00057	0.00001	0.97957	0.00813-0.10188	0.00117-0.00047	0.01016	0.00152	0.98251	0.00708			
0.100	0.03049	0.02779	0.00013-0.00227	0.00002	0.92089	0.03105-0.19481	0.00463-0.00184	0.01993	0.00303	0.93181	0.01380			
0.150	0.06250	0.04085	0.00043-0.00500	0.00005	0.83118	0.06472-0.27133	0.01023-0.00404	0.02895	0.00454	0.85288	0.01983			
0.200	0.09807	0.05296	0.00098-0.00864	0.00009	0.72057	0.10365-0.32652	0.01775-0.00693	0.03688	0.00605	0.75305	0.02487			
0.300	0.15865	0.07351	0.00302-0.01803	0.00021	0.47960	0.17567-0.36805	0.03729-0.01410	0.04848	0.00904	0.52463	0.03107			
0.400	0.18679	0.08827	0.00638-0.02896	0.00036	0.26788	0.21630-0.33336	0.06039-0.02184	0.05342	0.01198	0.30841	0.03128			
0.500	0.18209	0.09698	0.01086-0.04000	0.00055	0.11785	0.21877-0.25686	0.08407-0.02863	0.05154	0.01487	0.14264	0.02548			
0.600	0.15622	0.10010	0.01605-0.04989	0.00078	0.03010	0.19279-0.17132	0.10571-0.03326	0.04364	0.01768	0.03778	0.01455			
0.700	0.12156	0.09856	0.02144-0.05781	0.00102	0.01020	0.15268-0.09740	0.12339-0.03504	0.03118	0.02041	0.01454	0.00002			
0.800	0.08578	0.09350	0.02656-0.05329	0.00129	0.02055	0.11025-0.04348	0.13602-0.03378	0.01590	0.02303	0.03022	0.01638			
0.900	0.05547	0.08607	0.03102-0.05625	0.00157	0.01520	0.07266-0.00973	0.14326-0.02971	0.00044	0.02554	0.02493	0.03295			
1.000	0.03237	0.07729	0.03457-0.05688	0.00185	0.00369	0.04301	0.00765	0.14536	0.02336	0.01634	0.02792	0.01059	0.04830	
1.500	-0.01353	0.03505	0.03806-0.04874	0.00318	0.03171	-0.00466	0.00464	0.10691	0.01939	0.06235	0.03755	0.03397	0.08465	
2.000	-0.01100	0.01226	0.02837-0.02506	0.00401	0.02197	0.00549	0.01829	0.05321	0.04419	0.05408	0.04291	0.01711	0.06556	
3.000	-0.00187	0.00056	0.01086-0.00369	0.00401	0.00264	0.01190	0.00559	0.00461	0.03826	0.01047	0.04227	0.00197	0.01205	
4.000	0.00002	0.00039	0.00383	0.00027	0.00293	0.00094	0.00711	0.00154	0.00307	0.02059	0.00549	0.03360	0.00102	0.00578
5.000	0.00022	0.00026	0.00143	0.00060	0.00188	0.00096	0.00362	0.00253	0.00273	0.01020	0.00714	0.02401	0.00340	0.00755
8.000	0.00004	0.00003	0.00012	0.00016	0.00041	0.00020	0.00050	0.00094	0.00058	0.00144	0.00256	0.00735	0.00258	0.00268

SIN THETA/ LAMBDA	CR 3S2S J(0)	CR 3S1S J(0)	CR 2P2P J(0)	CR 2P2P J(2)	CR 2P2S J(1)	CR 2P1S J(1)	CR 2S2S J(0)	CR 2S1S J(0)	CR 1S1S J(0)	MN 4S4S J(0)	MN 4S3D J(2)	MN 4S3P J(1)	MN 4S3S J(0)	MN 4S2P J(1)
0.005	0.00001	0.00004	0.99998	0.00001-0.00298	0.00054	0.99998-0.	1.00000	0.99750	0.00019	0.00285	0.00007	0.00012		
0.010	0.00005	0.00004	0.99994	0.00002-0.00597	0.00107	0.99992	0.	1.00000	0.99043	0.00076	0.00569	0.00027	0.00024	
0.050	0.00125	0.00006	0.99847	0.00061-0.02978	0.00537	0.99812	0.00009	0.99990	0.78696	0.01740	0.02663	0.00651	0.00117	
0.100	0.00496	0.00014	0.99390	0.00244-0.05931	0.01073	0.99251	0.00038	0.99959	0.38230	0.05372	0.04320	0.02389	0.00232	
0.150	0.01096	0.00028	0.98634	0.00544-0.08831	0.01606	0.98324	0.00086	0.99909	0.09664	0.08120	0.04483	0.04668	0.00340	
0.200	0.01902	0.00046	0.97588	0.00959-0.11656	0.02137	0.97040	0.00153	0.99838	0.01855	0.08690	0.03292	0.06851	0.00437	
0.300	0.03996	0.00100	0.94672	0.02101-0.16983	0.03186	0.93469	0.00342	0.99635	0.02303	0.05211	0.00942	0.09175	0.00584	
0.400	0.06466	0.00173	0.90765	0.03601-0.21749	0.04212	0.88697	0.00603	0.99352	0.00734	0.00740	0.04327	0.08266	0.00643	
0.500	0.08979	0.00267	0.86024	0.05373-0.25826	0.05207	0.82930	0.00933	0.98991	0.01464	0.02040	0.05423	0.05580	0.00599	
0.600	0.11239	0.00380	0.80629	0.07319-0.29128	0.06165	0.76400	0.01325	0.98552	0.01051	0.03117	0.04794	0.02798	0.00451	
0.700	0.13023	0.00511	0.74767	0.09342-0.31613	0.07080	0.69354	0.01776	0.98037	0.00478	0.03131	0.03435	0.00794	0.00216	
0.800	0.14202	0.00660	0.68623	0.11348-0.33281	0.07946	0.62034	0.02279	0.97448	0.00082	0.02636	0.02047	0.00283	0.00082	
0.900	0.14739	0.00824	0.62369	0.13257-0.34165	0.08759	0.54664	0.02827	0.96787	0.00102	0.01979	0.00956	0.00635	0.00412	
1.000	0.14667	0.01001	0.56158	0.15002-0.34330	0.09516	0.47442	0.03413	0.96056	0.00139	0.01343	0.00240	0.00548	0.00745	
1.500	0.08833	0.02037	0.29293	0.20081-0.27602	0.12367	0.18051	0.06663	0.91453	0.00136	0.00242	0.00061	0.00692	0.01785	
2.000	0.02534	0.03132	0.12603	0.19398-0.16479	0.13663	0.03103	0.09833	0.85555	0.00115	0.00312	0.00383	0.00501	0.01586	
3.000	-0.00536	0.04695	0.00671	0.11830-0.02054	0.12771	0.01200	0.13849	0.71574	0.00005	0.00065	0.00176	0.00034	0.00396	
4.000	0.00446	0.05026	0.00962	0.05922	0.01885	0.09841	0.01643	0.57172	0.00013	0.00004	0.00020	0.00006	0.00095	
5.000	0.01004	0.04517	0.00778	0.02878	0.02113	0.06914	0.02929	0.44305	0.00009	0.00006	0.00059	0.00070	0.00173	
8.000	0.00707	0.02232	0.00161	0.00405	0.00726	0.02087	0.01940	0.19310	0.00021	0.	0.00023	0.00065	0.00070	

SIN THETA/ LAMBDA	MN 4S2S J(0)	MN 4S1S J(0)	MN 3D3D J(0)	MN 3D3D J(2)	MN 3D3D J(4)	MN 3D3P J(1)	MN 3D3P J(3)	MN 3D3S J(2)	MN 3D2P J(1)	MN 3D2P J(3)	MN 3D2S J(2)	MN 3D1S J(2)	MN 3P3P J(0)	MN 3P3P J(2)
0.005	0.	0.	0.99968	0.00013	0.	-0.01037-0.	0.00007	0.00148	0.	-0.00001	0.	0.99982	0.00007	0.00007
0.010	0.00001	0.	0.99872	0.00051	0.	-0.02073-0.	0.00029	0.00296	0.	-0.00002	0.	0.99928	0.00029	0.00029
0.050	0.00018	0.00001	0.96867	0.01240	0.00010	-0.10175-0.00056	0.00708	0.01477	0.00002	-0.00057	0.00001	0.98216	0.00711	0.00711
0.100	0.00073	0.00002	0.88316	0.04486	0.00135	-0.19221-0.00423	0.02702	0.02922	0.00012	-0.00226	0.00002	0.93063	0.02730	0.02730
0.150	0.00164	0.00005	0.76375	0.08644	0.00555	-0.26280-0.01296	0.05634	0.04307	0.00040	-0.00530	0.00006	0.85091	0.05749	0.05749
0.200	0.00289	0.00009	0.63245	0.12633	0.01257	-0.30918-0.02700	0.09033	0.05603	0.00091	-0.00869	0.00010	0.75094	0.09335	0.09335
0.300	0.00634	0.00019	0.39314	0.17818	0.03759	-0.33196-0.06517	0.15382	0.07845	0.00285	-0.01828	0.00022	0.52563	0.16386	0.16386
0.400	0.01075	0.00034	0.22101	0.18942	0.06215	-0.28893-0.10260	0.19141	0.09529	0.00610	-0.02959	0.00038	0.31627	0.21037	0.21037
0.500	0.01563	0.00053	0.11265	0.17472	0.07943	-0.21827-0.12706	0.19716	0.10611	0.01054	-0.04152	0.00059	0.15729	0.22267	0.22267
0.600	0.02044	0.00075	0.04961	0.14881	0.08787	-0.14678-0.13537	0.17852	0.11118	0.01582	-0.05253	0.00082	0.05566	0.20588	0.20588
0.700	0.02470	0.00102	0.01523	0.12072	0.08904	-0.08725-0.13035	0.14667	0.11126	0.02150	-0.06177	0.00109	0.00204	0.17158	0.17158
0.800	0.02803	0.00132	-0.00212	0.09489	0.08524	-0.04310-0.11675	0.11101	0.10736	0.02708	-0.06870	0.00138	-0.01829	0.13106	0.13106
0.900	0.03023	0.00165	-0.00983	0.07299	0.07852	-0.01310-0.09898	0.07752	0.10058	0.03218	-0.07308	0.00168	-0.01897	0.09227	0.09227
1.000	0.03121	0.00201	-0.01234	0.05529	0.07040	0.00567-0.08024	0.04916	0.09195	0.03648	-0.07499	0.00199	-0.01012	0.05953	0.05953
1.500	0.02236	0.00415	-0.00602	0.01214	0.03319	0.02026-0.01456	0.01332	0.04560	0.04346	-0.05928	0.00349	0.03161	-0.00425	0.00425
2.000	0.00814	0.00650	-0.00163	0.00235	0.01392	0.00890	0.00447	-0.01408	0.01744	0.03451	-0.03288	0.00452	0.02591	0.00328
3.000	-0.00125	0.01014	-0.00006	-0.00003	0.00261	0.00073	0.00473	-0.00294	0.00123	0.01436	-0.00579	0.00475	0.00421	0.01280
4.000	0.00058	0.01127	0.00002	-0.00006	0.00060	-0.00014	0.00193	0.00012	-0.00043	0.00532	0.00002	0.00363	-0.00078	0.00838
5.000	0.00210	0.01044	0.00002	-0.00004	0.00018	-0.00014	0.00076	0.00025	-0.00035	0.00204	0.00071	0.00241	-0.00108	0.00444
8.000	0.00173	0.00548	-0.00002	0.00002	-0.00001	-0.00001	0.00005	0.00009	-0.00005	0.00018	0.00022	0.00057	-0.00027	0.00067

SIN THETA/ LAMBDA	MN 3P3S J(1)	MN 3P2P J(0)	MN 3P2P J(2)	MN 3P2S J(1)	MN 3P1S J(1)	MN 3S3S J(0)	MN 3S2P J(1)	MN 3S2S J(0)	MN 3S1S J(0)	MN 2P2P J(0)	MN 2P2P J(2)	MN 2P2S J(1)	MN 2P1S J(1)	MN 2S2S J(0)
0.005	-0.00972	0.00001	-0.	0.00100	0.00015	0.99984	0.00067	0.00001	0.00003	0.99999	0.00001	-0.00284	0.00052	0.99998
0.010	-0.01943	0.00004	-0.00002	0.00200	0.00030	0.99937	0.00135	0.00005	0.00004	0.99995	0.00002	-0.00568	0.00104	0.99993
0.050	-0.09591	0.00107	-0.00043	0.00996	0.00149	0.98447	0.00669	0.00115	0.00006	0.99862	0.00055	-0.02837	0.00518	0.99829
0.100	-0.18442	0.00423	-0.00168	0.01958	0.00298	0.93926	0.01308	0.00455	0.00013	0.99448	0.00221	-0.05651	0.01035	0.99318
0.150	-0.25918	0.00937	-0.00370	0.02853	0.00446	0.86830	0.01887	0.01007	0.00026	0.98763	0.00493	-0.08421	0.01550	0.98472
0.200	-0.31574	0.01630	-0.00638	0.03652	0.00594	0.77747	0.02380	0.01752	0.00043	0.97814	0.00869	-0.11125	0.02063	0.97300
0.300	-0.36779	0.03449	-0.01313	0.04869	0.00888	0.56435	0.03028	0.03704	0.00093	0.95162	0.01910	-0.16253	0.03076	0.94032
0.400	-0.34765	0.05639	-0.02062	0.05481	0.01178	0.35361	0.03141	0.06047	0.00162	0.91594	0.03286	-0.20890	0.04069	0.89648
0.500	-0.28225	0.07937	-0.02751	0.05454	0.01462	0.18257	0.02701	0.08489	0.00250	0.87241	0.04924	-0.24921	0.05036	0.84319
0.600	-0.20093	0.10106	-0.03268	0.04841	0.01741	0.06577	0.01771	0.10757	0.00356	0.82255	0.06741	-0.28263	0.05969	0.78245
0.700	-0.12492	0.11959	-0.03538	0.03759	0.02011	0.00003	0.00468	0.12640	0.00479	0.75795	0.08655	-0.30870	0.06863	0.71638
0.800	-0.06505	0.13375	-0.03530	0.02356	0.02272	-0.02688	-0.01059	0.13997	0.00619	0.71023	0.10581	-0.32730	0.07715	0.64711
0.900	-0.02403	0.14302	-0.03250	0.00790	0.02523	-0.02902	-0.02659	0.14767	0.00773	0.65093	0.12447	-0.33863	0.08519	0.57667
1.000	0.00015	0.14741	-0.02736	-0.00796	0.02762	-0.01830	-0.04199	0.14956	0.00941	0.59142	0.14189	-0.34315	0.09271	0.50686
1.500	-0.00013	0.11753	0.01354	-0.06046	0.03754	0.03405	-0.08498	0.10024	0.01932	0.32552	0.19770	-0.29009	0.12186	0.21178
2.000	-0.01829	0.06358	0.04222	-0.05891	0.04348	0.02180	-0.07213	0.03478	0.03009	0.15008	0.19877	-0.18447	0.13651	0.04824
3.000	-0.00772	0.00783	0.04186	-0.01515	0.04424	-0.00167	-0.01730	-0.00574	0.04658	0.01344	0.12949	-0.03190	0.13162	-0.01467
4.000	0.00097	-0.00282	0.02395	0.00438	0.03633	0.00037	0.00454	0.00286	0.05149	-0.00918	0.06784	0.01635	0.10454	0.01247
5.000	0.00266	-0.00306	0.01231	0.00752	0.02670	0.00324	0.00791	0.00966	0.04760	-0.00859	0.03402	0.02206	0.07541	0.02831
8.000	0.00114	-0.00072	0.00184	0.00304	0.00865	0.00292	0.00316	0.00788	0.02490	-0.00197	0.00503	0.00843	0.02402	0.02130



SIN THETA/ LAMBDA	MN 2S1S J(0)	MN 1S1S J(0)	CU 4S4S J(0)	CU 4S3D J(2)	CU 4S3P J(1)	CU 4S3S J(0)	CU 4S2P J(1)	CU 4S2S J(0)	CU 4S1S J(0)	CU 3D3D J(0)	CU 3D3D J(2)	CU 3D3D J(4)	CU 3D3P J(1)	CU 3D3P J(3)
0.005	-0.	1.00000	0.99759	-0.00016	0.00196	0.00004	0.00007	0.	0.	0.99975	0.00010	0.	-0.00856	-0.
0.010	0.	1.00000	0.99041	-0.00065	0.00391	0.00017	0.00015	0.	0.	0.99902	0.00039	0.	-0.01711	-0.
0.050	0.00009	0.99991	0.78758	-0.01490	0.01856	0.00409	0.00073	0.00010	0.	0.97595	0.00953	0.00007	-0.08440	-0.00034
0.100	0.00035	0.99963	0.39030	-0.04617	0.03157	0.01525	0.00146	0.00041	0.00001	0.90971	0.03430	0.00094	-0.16198	-0.00257
0.150	0.00079	0.99916	0.11290	-0.07089	0.03588	0.03064	0.00216	0.00093	0.00003	0.81546	0.06819	0.00388	-0.22719	-0.00804
0.200	0.00141	0.99851	-0.00368	-0.07873	0.03141	0.04681	0.00283	0.00165	0.00005	0.70861	0.10208	0.00951	-0.27658	-0.01724
0.300	0.00316	0.99664	-0.02579	-0.05732	0.00591	0.07025	0.00394	0.00366	0.00011	0.50032	0.15402	0.02700	-0.32501	-0.04480
0.400	0.00557	0.99404	-0.00255	-0.02312	-0.02222	0.07404	0.00464	0.00632	0.00020	0.33140	0.17819	0.04681	-0.31704	-0.07704
0.500	0.00862	0.99071	0.00823	0.06307	-0.03929	0.06174	0.00480	0.00943	0.00031	0.20835	0.18030	0.06365	-0.27436	-0.10498
0.600	0.01226	0.98667	0.00928	0.01814	-0.04359	0.04251	0.00438	0.01273	0.00045	0.12381	0.16881	0.07549	-0.21719	-0.12348
0.700	0.01545	0.98192	0.00667	0.02446	-0.03905	0.02385	0.00339	0.01597	0.00061	0.05809	0.15044	0.08223	-0.15924	-0.13145
0.800	0.02113	0.97649	0.00359	0.02513	-0.03032	0.00958	0.00191	0.01892	0.00079	0.03267	0.12954	0.08462	-0.10794	-0.13030
0.900	0.02526	0.97038	0.00124	0.02265	-0.02083	0.00061	0.00005	0.02139	0.00099	0.01106	0.10904	0.08366	-0.06624	-0.12243
1.000	0.03176	0.96363	-0.00014	0.01872	-0.01249	-0.00378	-0.00205	0.02324	0.00121	-0.00145	0.09009	0.08030	-0.03441	-0.11030
1.500	0.06270	0.92095	0.00016	0.00165	0.00234	0.00219	-0.01177	0.02277	0.00256	-0.01067	0.02959	0.05097	0.02289	-0.04161
2.000	0.09382	0.86590	0.00098	-0.00285	-0.00127	0.00583	-0.01451	0.01316	0.00416	-0.03465	0.00846	0.02681	0.01751	-0.00532
3.000	0.13524	0.73363	0.00013	-0.00138	-0.00270	0.00077	-0.00713	0.00020	0.00716	-0.03048	0.00044	0.00666	0.00322	0.00684
4.000	0.14488	0.59453	-0.00010	-0.00027	-0.00060	-0.00032	-0.00095	-0.00062	0.00887	-0.00001	-0.00009	0.00179	0.00019	0.00389
5.000	0.13110	0.46750	-0.00009	-0.00001	0.00032	0.00024	0.00115	0.00094	0.00908	0.00001	-0.00006	0.00054	-0.00017	0.00178
8.000	0.06722	0.21138	0.00006	0.00005	0.00032	0.00067	0.00090	0.00181	0.00590	0.00002	-0.00003	0.00005	-0.00003	0.00017

SIN THETA/ LAMBDA	CU 3D3S J(2)	CU 3D2P J(1)	CU 3D2P J(3)	CU 3D2S J(2)	CU 3D1S J(2)	CU 3P3P J(0)	CU 3P3P J(2)	CU 3P3S J(1)	CU 3P2P J(0)	CU 3P2P J(2)	CU 3P2S J(1)	CU 3P1S J(1)	CU 3S3S J(0)	CU 3S2P J(1)
0.005	0.00005	0.00128	0.	-0.	0.	0.99987	0.00005	-0.00814	0.00001	-0.	0.00089	0.00013	0.99989	0.00054
0.010	0.00020	0.00256	0.	-0.00002	0.	0.99950	0.00020	-0.01627	0.00003	-0.00001	0.00177	0.00026	0.99956	0.00109
0.050	0.00501	0.01276	0.00001	-0.00042	0.00001	0.98759	0.00495	-0.08062	0.00076	-0.00030	0.00883	0.00132	0.98894	0.00540
0.100	0.01935	0.02532	0.00007	-0.00167	0.00002	0.95133	0.01925	-0.15681	0.00301	-0.00120	0.01744	0.00264	0.95648	0.01062
0.150	0.04114	0.03752	0.00024	-0.00370	0.00005	0.89400	0.04132	-0.22457	0.00669	-0.00265	0.02564	0.00395	0.90468	0.01549
0.200	0.06771	0.04917	0.00056	-0.00647	0.00008	0.81981	0.06885	-0.28080	0.01171	-0.00461	0.03324	0.00527	0.83669	0.01984
0.300	0.12363	0.07029	0.00177	-0.01389	0.00018	0.64099	0.12954	-0.35170	0.02522	-0.00974	0.04600	0.00788	0.66826	0.02647
0.400	0.16790	0.08779	0.00388	-0.02316	0.00032	0.45440	0.18172	-0.36672	0.04223	-0.01587	0.05468	0.01047	0.48481	0.02967
0.500	0.19118	0.10115	0.00692	-0.03342	0.00049	0.28970	0.21329	-0.33703	0.06121	-0.02218	0.05876	0.01302	0.31517	0.02906
0.500	0.19333	0.11023	0.01078	-0.04382	0.00069	0.16185	0.22132	-0.28005	0.08064	-0.02791	0.05818	0.01553	0.17740	0.02467
0.700	0.17927	0.11522	0.01525	-0.05362	0.00092	0.07339	0.20945	-0.21265	0.09913	-0.03242	0.05332	0.01800	0.07815	0.01693
0.800	0.15529	0.11652	0.02006	-0.06223	0.00117	0.01933	0.18422	-0.14742	0.11557	-0.03525	0.04487	0.02041	0.01549	0.00652
0.900	0.12692	0.11470	0.02494	-0.06925	0.00145	-0.00842	0.15230	-0.09182	0.12915	-0.03616	0.03372	0.02275	-0.01729	-0.00571
1.000	0.09821	0.11039	0.02964	-0.07446	0.00173	-0.01809	0.11902	-0.04892	0.13941	-0.03510	0.02082	0.02502	-0.02853	-0.01888
1.500	0.00348	0.07170	0.04461	-0.07512	0.00325	0.01823	0.01124	0.01281	0.14239	-0.00800	-0.04133	0.03501	0.01923	-0.07395
2.000	-0.01737	0.03616	0.04357	-0.05303	0.00454	0.03371	-0.00388	-0.00959	0.09994	0.02651	-0.06487	0.04223	0.03397	-0.08557
3.000	-0.00768	0.00582	0.02455	-0.01559	0.00561	0.01265	0.01200	-0.01537	0.02608	0.04906	-0.03490	0.04759	0.00389	-0.04019
4.000	-0.00144	0.00010	0.01099	-0.00254	0.00499	0.00129	0.01214	-0.00322	0.00120	0.03608	-0.00432	0.04355	-0.00181	-0.00497
5.000	0.00008	-0.00051	0.00477	0.00047	0.00376	-0.00111	0.00781	0.00194	-0.00344	0.02152	0.00647	0.03536	0.00144	0.00675
8.000	0.00017	-0.00013	0.00050	0.00045	0.00114	-0.00054	0.00149	0.00192	-0.00143	0.00399	0.00504	0.01417	0.00388	0.00521

SIN THETA/ LAMBDA	CU 3S2S J(0)	CU 3S1S J(0)	CU 2P2P J(0)	CU 2P2P J(2)	CU 2P2S J(1)	CU 2P1S J(1)	CU 2S2S J(0)	CU 2S1S J(0)	CU 1S1S J(0)	ZN 4S4S J(0)	ZN 4S3D J(2)	ZN 4S3P J(1)	ZN 4S3S J(0)	ZN 4S2P J(1)
0.005	0.00001	0.00003	0.99999	0.	-0.00239	0.00045	0.99999-0.		1.00000	0.99818-0.00011	0.00200	0.00004	0.00008	
0.010	0.00003	0.00003	0.99996	0.00002-0.00477	0.00091	0.99995-0.		1.00000	0.99276-0.00044	0.00399	0.00017	0.00016		
0.050	0.00082	0.00005	0.99903	0.00039-0.02385	0.00453	0.99878	0.00006	0.99993	0.83476-0.01031	0.01906	0.00404	0.00081		
0.100	0.00327	0.00011	0.99612	0.00155-0.04756	0.00906	0.99511	0.00026	0.99972	0.48966-0.03438	0.03315	0.01523	0.00161		
0.150	0.00727	0.00020	0.99130	0.00347-0.07100	0.01357	0.98904	0.00059	0.99938	0.19677-0.05826	0.03912	0.03113	0.00238		
0.200	0.01272	0.00033	0.98460	0.00614-0.09405	0.01807	0.98060	0.00105	0.99890	0.03591-0.07194	0.03639	0.04856	0.00311		
0.300	0.02738	0.00070	0.96574	0.01358-0.13845	0.02699	0.95689	0.00235	0.99752-0.03400-0.06435	0.01211	0.07647	0.00437			
0.400	0.04578	0.00122	0.94008	0.02359-0.17985	0.03578	0.92469	0.00415	0.99560-0.01072-0.03363-0.01899	0.08507	0.00521				
0.500	0.06520	0.00188	0.90827	0.03578-0.21745	0.04440	0.88494	0.00644	0.99313	0.00751-0.00380-0.04109	0.07528	0.00550			
0.600	0.08688	0.00268	0.87114	0.04972-0.25060	0.05280	0.83872	0.00920	0.99013	0.01239	0.01641-0.04970	0.05553	0.00518		
0.700	0.10523	0.00362	0.82957	0.05491-0.27885	0.06095	0.78727	0.01239	0.98661	0.01037	0.02682-0.04747	0.03422	0.00425		
0.800	0.12293	0.00469	0.78451	0.08086-0.30190	0.06882	0.73187	0.01599	0.98256	0.00645	0.02997-0.03911	0.01650	0.00276		
0.900	0.13606	0.00587	0.73690	0.09708-0.31966	0.07637	0.67381	0.01996	0.97801	0.00294	0.02858-0.02864	0.00427	0.00083		
1.000	0.14510	0.00718	0.68769	0.11311-0.33218	0.08358	0.61436	0.02423	0.97295	0.00057	0.02476-0.01865-0.00264-0.00142				
1.500	0.13279	0.01513	0.44467	0.17828-0.32667	0.11368	0.33246	0.04958	0.94069-0.00011	0.00370	0.00265	0.00115-0.01269			
2.000	0.07355	0.02448	0.25136	0.20415-0.25093	0.13297	0.13204	0.07741	0.89820	0.00133-0.00326-0.00073	0.00691-0.01694				
3.000	0.00041	0.04184	0.05292	0.16743-0.08556	0.14169-0.01182	0.12409	0.79174	0.00033-0.00199-0.00344	0.00141-0.00945					
4.000	-0.00039	0.05151-0.00149	0.10402-0.00319	0.12463-0.00406	0.14597	0.67218-0.00023-0.00046-0.00100-0.00041-0.00180								
5.000	0.00563	0.05259-0.01020	0.05888	0.02090	0.09866	0.01934	0.14486	0.55484-0.00008-0.00004	0.00028	0.00016	0.00113			
8.000	0.01043	0.03403-0.00381	0.01064	0.01370	0.03842	0.02801	0.09079	0.28559	0.00018	0.00002	0.00041	0.00083	0.00116	

SIN THETA/ LAMBDA	ZN 4S2S J(0)	ZN 4S1S J(0)	ZN 3D3D J(0)	ZN 3D3D J(2)	ZN 3D3D J(4)	ZN 3D3P J(1)	ZN 3D3P J(3)	ZN 3D3S J(2)	ZN 3D2P J(1)	ZN 3D2P J(3)	ZN 3D2S J(2)	ZN 3D1S J(2)	ZN 3P3P J(0)	ZN 3P3P J(2)
0.005	0.	0.	0.99981	0.00007	0.	-0.00810-0.	0.00005	0.00129	0.	-0.	0.	0.99989	0.00005	
0.010	0.	0.	0.99926	0.00030	0.	-0.01620-0.	0.00018	0.00259	0.	-0.00002	0.	0.99955	0.00018	
0.050	0.00011	0.	0.98176	0.00075	0.00003-0.08009-0.00027	0.00450	0.01291	0.00001-0.00041	0.00001	0.98881	0.00447			
0.100	0.00044	0.00001	0.93012	0.02726	0.00050-0.15465-0.00209	0.01747	0.02565	0.00007-0.00162	0.00002	0.95602	0.01741			
0.150	0.00099	0.00003	0.85311	0.05561	0.00222-0.21899-0.00662	0.03745	0.03804	0.00022-0.00361	0.00005	0.90389	0.03757			
0.200	0.00175	0.00006	0.76078	0.08707	0.00585-0.26991-0.01444	0.06228	0.04994	0.00051-0.00631	0.00008	0.83585	0.06303			
0.300	0.00390	0.00012	0.56564	0.14291	0.01945-0.32688-0.03904	0.11670	0.07170	0.00154-0.01361	0.00018	0.66904	0.12074			
0.400	0.00577	0.00022	0.39281	0.17675	0.03792-0.32986-0.06996	0.16328	0.09005	0.00353-0.02281	0.00032	0.48997	0.17316			
0.500	0.01015	0.00034	0.25841	0.18807	0.05627-0.29575-0.09915	0.19176	0.10445	0.00652-0.03314	0.00049	0.32636	0.20835			
0.600	0.01380	0.00049	0.16130	0.18306	0.07116-0.24289-0.12087	0.19999	0.11471	0.01025-0.04378	0.00069	0.19414	0.22201			
0.700	0.01746	0.00066	0.09446	0.16830	0.08135-0.18535-0.13289	0.19118	0.12092	0.01463-0.05400	0.00093	0.09815	0.21601			
0.800	0.02088	0.00085	0.05017	0.14888	0.08688-0.13172-0.13562	0.17074	0.12341	0.01943-0.06322	0.00119	0.03568	0.19558			
0.900	0.02384	0.00107	0.02190	0.12814	0.08849-0.08621-0.13088	0.14404	0.12267	0.02440-0.07099	0.00146	0.00027	0.16671			
1.000	0.02519	0.00132	0.00460	0.10808	0.08709-0.05005-0.12093	0.11538	0.11926	0.02928-0.07706	0.00176-0.01546	0.13470				
1.500	0.02734	0.00280-0.01263	0.03872	0.06019	0.02279-0.05185	0.01060	0.08174	0.04629-0.08172	0.00333	0.01355	0.01855			
2.000	0.01715	0.00458-0.00622	0.01194	0.03348	0.02068-0.00971-0.01785	0.04357	0.04670	0.01943-0.06055	0.00474	0.03447-0.00449				
3.000	0.00099	0.00805-0.00075	0.00079	0.00893	0.00444	0.00747-0.00966	0.00799	0.02857-0.01970	0.00605	0.01543	0.01121			
4.000	-0.00093	0.01020-0.00004-0.00008	0.00250	0.00040	0.00472-0.00211	0.00045	0.01339-0.00380	0.00556	0.00224	0.01303				
5.000	0.00081	0.01068	0.00002-0.00007	0.00073-0.00017	0.00225-0.00005-0.00054	0.00600	0.00025	0.00431-0.00098	0.00884					
8.000	0.00220	0.00729-0.00001	0.00001	0.00003-0.00005	0.00024	0.00022-0.00016	0.00056	0.00054	0.00139-0.00064	0.00181				

SIN THETA/ LAMBDA	ZN 3P3S J(1)	ZN 3P2P J(0)	ZN 3P2P J(2)	ZN 3P2S J(1)	ZN 3P1S J(1)	ZN 3S3S J(0)	ZN 3S2P J(1)	ZN 3S2S J(0)	ZN 3S1S J(0)	ZN 2P2P J(0)	ZN 2P2P J(2)	ZN 2P2S J(1)	ZN 2P1S J(1)	ZN 2S2S J(0)
0.005	-0.00776	0.00001-0.		0.00087	0.00013	0.99990	0.00052	0.00001	0.00003	0.99999	0.	-0.00230	0.00044	0.99999
0.010	-0.01551	0.00003-0.00001		0.00173	0.00026	0.99959	0.00104	0.00003	0.00003	0.99996	0.00001-0.00459	0.00088	0.99995	
0.050	-0.07693	0.00070-0.00028		0.00863	0.00129	0.98991	0.00517	0.00077	0.00005	0.99910	0.00036-0.02293	0.00439	0.99886	
0.100	-0.15003	0.00280-0.00111		0.01708	0.00258	0.96024	0.01018	0.00304	0.00010	0.99642	0.00143-0.04575	0.00878	0.99547	
0.150	-0.21582	0.00622-0.00247		0.02515	0.00387	0.91269	0.01487	0.00677	0.00019	0.99196	0.00321-0.06832	0.01316	0.98983	
0.200	-0.27149	0.01091-0.00430		0.03269	0.00516	0.84991	0.01911	0.01187	0.00031	0.98576	0.00557-0.09055	0.01752	0.98199	
0.300	-0.34569	0.02358-0.00913		0.04553	0.00772	0.69236	0.02573	0.02563	0.00066	0.95830	0.01257-0.13348	0.02618	0.95995	
0.400	-0.36834	0.03967-0.01499		0.05466	0.01026	0.51689	0.02925	0.04306	0.00115	0.94448	0.02188-0.17373	0.03472	0.92996	
0.500	-0.34750	0.05784-0.02114		0.05951	0.01277	0.34993	0.02927	0.06263	0.00177	0.91489	0.03326-0.21056	0.04310	0.89281	
0.600	-0.29775	0.07671-0.02689		0.05997	0.01524	0.20949	0.02577	0.08276	0.00253	0.88021	0.04634-0.24338	0.05129	0.84946	
0.700	-0.23444	0.09501-0.03163		0.05631	0.01766	0.10377	0.01904	0.10197	0.00341	0.84124	0.06069-0.27174	0.05925	0.80100	
0.800	-0.16955	0.11166-0.03492		0.04906	0.02004	0.03292	0.00965	0.11901	0.00442	0.79880	0.07587-0.29535	0.06696	0.74856	
0.900	-0.11240	0.12587-0.03646		0.03899	0.02235	0.00794	0.00168	0.13295	0.00555	0.75373	0.09143-0.31407	0.07437	0.69331	
1.000	-0.06586	0.13710-0.03617		0.02696	0.02460	0.02594	0.01417	0.14319	0.00678	0.70688	0.10697-0.32790	0.08147	0.63637	
1.500	0.01389	0.14708-0.01256	-0.03559	0.03462	0.01360	0.07026	0.13902	0.01436	0.47108	0.17253	0.33180	0.11155	0.36047	
2.000	-0.00635	0.10873	0.02203-0.06446	0.04208	0.03555	0.08714	0.08336	0.02340	0.27660	0.20290	0.26415	0.13157	0.15509	
3.000	-0.01708	0.03206	0.04987-0.03999	0.04837	0.00632	0.04625	0.00387	0.04078	0.05554	0.17481	0.10002	0.14304	0.00746	
4.000	-0.00471	0.00305	0.03912-0.00743	0.04528	0.00204	0.00838	0.00451	0.05134	0.00216	0.11294	0.01029	0.12853	0.00759	
5.000	0.00148	0.00326	0.02423	0.00562	0.03756	0.00087	0.00582	0.00429	0.05356	0.00997	0.06581	0.01917	0.10382	0.01617
8.000	0.00215	0.00166	0.00475	0.00560	0.01581	0.00410	0.00577	0.01098	0.03642	0.00436	0.01249	0.01507	0.04235	0.02932

SIN THETA/ LAMBDA	ZN 2S1S J(0)	ZN 1S1S J(0)	AS 4P4P J(0)	AS 4P4P J(2)	AS 4P4S J(1)	AS 4P3D J(1)	AS 4P3D J(3)	AS 4P3P J(0)	AS 4P3P J(2)	AS 4P3S J(1)	AS 4P2P J(0)	AS 4P2P J(2)	AS 4P2S J(1)	AS 4P1S J(1)
0.005	-0.	1.00000	0.99858	0.00057-0.02384	0.00321	0.	0.00004-0.00002	0.00075	0.	-0.	0.00016	0.00003		
0.010	-0.	1.00000	0.99433	0.00226-0.04756	0.00641	0.	0.00016-0.00007	0.00149	0.	-0.	0.00032	0.00005		
0.050	0.00006	0.99994	0.86820	0.05101-0.21895	0.03069	0.00039	0.00399-0.00158	0.00716	0.00009-0.00004	0.00158	0.00158	0.00026		
0.100	0.00024	0.99974	0.57183	0.15014-0.34092	0.05371	0.00284	0.01511-0.00585	0.01264	0.00037-0.00015	0.00315	0.00053			
0.150	0.00055	0.99942	0.28416	0.21322-0.34411	0.06443	0.00813	0.03113-0.01158	0.01515	0.00083-0.00033	0.00467	0.00079			
0.200	0.00098	0.99897	0.09403	0.21474-0.27157	0.06235	0.01549	0.04916-0.01724	0.01405	0.00147-0.00059	0.00614	0.00105			
0.300	0.00219	0.99768	0.03166	0.12493-0.09595	0.03188	0.02973	0.08064-0.02334	0.00175	0.00327-0.00130	0.00883	0.00158			
0.400	0.00388	0.99589	0.02071	0.04299-0.00555	0.00776	0.03489	0.09535-0.01896	0.01822	0.00571-0.00224	0.01107	0.00210			
0.500	0.00603	0.99359	0.00297	0.00492	0.01434	0.03689	0.02942	0.09160	0.00628	0.03731	0.00857	0.00335	0.01272	0.00261
0.600	0.00861	0.99079	0.01390	0.00519	0.00748	0.05083	0.01766	0.07546	0.00920	0.04961	0.01199	0.00453	0.01371	0.00312
0.700	0.01160	0.98749	0.01485	0.00382	0.00283	0.05265	0.00448	0.05456	0.02266	0.05343	0.01549	0.00568	0.01398	0.00363
0.800	0.01499	0.98371	0.01147	0.00030	0.00927	0.04716	0.00701	0.03461	0.03162	0.05010	0.01899	0.00670	0.01354	0.00412
0.900	0.01873	0.97945	0.00726	0.00376	0.01138	0.03834	0.01550	0.01856	0.03566	0.04227	0.02232	0.00751	0.01245	0.00461
1.000	0.02281	0.97473	0.00374	0.00575	0.01063	0.02878	0.02086	0.00728	0.03558	0.03251	0.02533	0.00805	0.01079	0.00508
1.500	0.04687	0.94449	0.00065	0.00341	0.00057	0.00142	0.01912	0.00175	0.01301	0.00065	0.03294	0.00618	0.00165	0.00726
2.000	0.07379	0.90450	0.00120	0.00020	0.00065	0.00625	0.00732	0.00635	0.00020	0.00169	0.02891	0.00055	0.01152	0.00902
3.000	0.12064	0.80349	0.00125	0.00022	0.00115	0.00221	0.00147	0.00555	0.00134	0.00435	0.01189	0.01026	0.01183	0.01096
4.000	0.14496	0.68857	0.00046	0.00057	0.00066	0.00038	0.00161	0.00149	0.00320	0.00225	0.00256	0.01027	0.00423	0.01094
5.000	0.14677	0.57410	0.00006	0.00053	0.00005	0.	0.00090	0.00001	0.00265	0.00021	0.00032	0.00723	0.00022	0.00965
8.000	0.09635	0.30399	0.00001	0.00012	0.00004	0.00001	0.00008	0.00022	0.00068	0.00064	0.00054	0.00169	0.00161	0.00469

SIN THETA/ LAMBDA	AS 4S4S J(0)	AS 4S3D J(2)	AS 4S3P J(1)	AS 4S3S J(0)	AS 4S2P J(1)	AS 4S2S J(0)	AS 4S1S J(0)	AS 3D3D J(0)	AS 3D3D J(2)	AS 3D3D J(4)	AS 3D3P J(1)	AS 3D3P J(3)	AS 3D3S J(2)	AS 3D2P J(1)
0.005	0.99913	-0.00005	0.00190	0.00004	0.00010	0.00001	0.	0.99990	0.00004	0.	-0.00682	-0.	0.00003	0.00129
0.010	0.99652	-0.00020	0.00380	0.00015	0.00020	0.00001	0.	0.99959	0.00016	0.	-0.01354	-0.	0.00013	0.00258
0.050	0.91660	-0.00477	0.01843	0.00376	0.00098	0.00013	0.	0.98982	0.00406	0.00001	-0.06757	-0.00015	0.00327	0.01289
0.100	0.70537	-0.01746	0.03353	0.01445	0.00194	0.00050	0.00002	0.96011	0.01577	0.00014	-0.13226	-0.00117	0.01283	0.02565
0.150	0.45215	-0.03400	0.04276	0.03042	0.00288	0.00111	0.00004	0.91317	0.03383	0.00065	-0.19096	-0.00380	0.02793	0.03815
0.200	0.23231	-0.04963	0.04485	0.04932	0.00377	0.00196	0.00006	0.85243	0.05636	0.00191	-0.24152	-0.00856	0.04744	0.05027
0.300	-0.00320	-0.06498	0.02903	0.08598	0.00536	0.00435	0.00014	0.70553	0.10644	0.00780	-0.31269	-0.02506	0.09400	0.07291
0.400	-0.04026	-0.05468	-0.00274	0.10848	0.00656	0.00757	0.00025	0.54965	0.15126	0.01882	-0.34192	-0.04923	0.14083	0.09282
0.500	-0.01380	-0.02893	-0.03502	0.11094	0.00725	0.01147	0.00040	0.40644	0.18233	0.03376	-0.33484	-0.07673	0.17835	0.10944
0.600	0.01109	-0.00085	-0.05742	0.09665	0.00731	0.01583	0.00057	0.28669	0.19760	0.05013	-0.30202	-0.10265	0.20122	0.12247
0.700	0.02095	0.02151	-0.06679	0.07319	0.00671	0.02041	0.00077	0.19296	0.19914	0.05551	-0.25478	-0.12321	0.20834	0.13182
0.800	0.01996	0.03552	-0.06503	0.04797	0.00544	0.02496	0.00100	0.12310	0.19062	0.07822	-0.20252	-0.13648	0.20166	0.13762
0.900	0.01433	0.04178	-0.05607	0.02598	0.00358	0.02922	0.00126	0.07304	0.17576	0.08745	-0.15184	-0.14215	0.18470	0.14012
1.000	0.00810	0.04219	-0.04381	0.00958	0.00121	0.03298	0.00154	0.03841	0.15760	0.09312	-0.10652	-0.14107	0.16129	0.13972
1.500	-0.00182	0.01495	0.00022	-0.00415	-0.01345	0.04042	0.00332	-0.01577	0.07196	0.08401	0.01409	-0.08441	0.04003	0.10976
2.000	0.00191	-0.00248	0.00213	0.00846	-0.02280	0.03098	0.00553	-0.01188	0.02710	0.05510	0.02889	-0.02826	-0.01377	0.06745
3.000	0.00139	-0.00461	-0.00554	0.00467	-0.01779	0.00570	0.01020	-0.00218	0.00289	0.01811	0.00952	0.00772	-0.01634	0.01691
4.000	-0.00003	-0.00148	-0.00287	-0.00031	-0.00600	-0.00156	0.01370	-0.00024	0.00006	0.00571	0.00152	0.00742	-0.00511	0.00247
5.000	-0.00006	-0.00026	-0.00027	-0.00027	0.00021	-0.00009	0.01522	0.00002	-0.00014	0.00193	-0.00005	0.00409	-0.00086	-0.00039
8.000	0.00041	0.00011	0.00081	0.00126	0.00207	0.00336	0.01198	0.00001	-0.00002	0.00013	-0.00013	0.00055	0.00035	-0.00030

SIN THETA/ LAMBDA	AS 3D2P J(3)	AS 3D2S J(2)	AS 3D1S J(2)	AS 3P3P J(0)	AS 3P3P J(2)	AS 3P3S J(1)	AS 3P2P J(0)	AS 3P2P J(2)	AS 3P2S J(1)	AS 3P1S J(1)	AS 3S3S J(0)	AS 3S2P J(1)	AS 3S2S J(0)	AS 3S1S J(0)
0.005	0.	-0.	0.	0.99992	0.00003	-0.00676	0.00001	-0.	0.00082	0.00012	0.99992	0.00046	0.00001	0.00003
0.010	0.	-0.00001	0.	0.99967	0.00013	-0.01351	0.00002	-0.00001	0.00164	0.00025	0.99959	0.00092	0.00003	0.00003
0.050	0.00001	-0.00036	0.	0.99173	0.00330	-0.06715	0.00057	-0.00023	0.00815	0.00123	0.99225	0.00458	0.00063	0.00004
0.100	0.00005	-0.00145	0.00002	0.96732	0.01298	-0.13180	0.00228	-0.00091	0.01617	0.00245	0.96935	0.00905	0.00249	0.00009
0.150	0.00017	-0.00323	0.00004	0.92799	0.02833	-0.19160	0.00509	-0.00203	0.02391	0.00367	0.93229	0.01329	0.00557	0.00016
0.200	0.00039	-0.00567	0.00008	0.87565	0.04831	-0.24455	0.00896	-0.00354	0.03124	0.00490	0.88255	0.01721	0.00978	0.00027
0.300	0.00128	-0.01235	0.00018	0.74186	0.09666	-0.32413	0.01953	-0.00762	0.04422	0.00733	0.75413	0.02368	0.02131	0.00056
0.400	0.00288	-0.02099	0.00031	0.58781	0.14652	-0.36433	0.03326	-0.01273	0.05433	0.00975	0.60302	0.02784	0.03621	0.00098
0.500	0.00528	-0.03098	0.00048	0.43434	0.18788	-0.36686	0.04920	-0.01835	0.06102	0.01214	0.44880	0.02929	0.05342	0.00151
0.600	0.00848	-0.04168	0.00068	0.29709	0.21455	-0.33929	0.06636	-0.02397	0.06404	0.01451	0.30739	0.02787	0.07179	0.00215
0.700	0.01238	-0.05246	0.00091	0.18495	0.22457	-0.29191	0.08374	-0.02909	0.06342	0.01684	0.18912	0.02367	0.09016	0.00291
0.800	0.01685	-0.06276	0.00117	0.10072	0.21940	-0.23502	0.10045	-0.03329	0.05940	0.01913	0.09852	0.01596	0.10749	0.00377
0.900	0.02168	-0.07211	0.00145	0.04276	0.20246	-0.17709	0.11573	-0.03625	0.05245	0.02138	0.03542	0.00818	0.12289	0.00473
1.000	0.02668	-0.08016	0.00175	0.00699	0.17792	-0.12404	0.12898	-0.03777	0.04313	0.02357	-0.00352	-0.00215	0.13569	0.00580
1.500	0.04799	-0.09662	0.00343	-0.00175	0.04854	0.00894	0.15692	-0.02422	-0.01701	0.03350	-0.00511	-0.05781	0.15268	0.01241
2.000	0.05531	-0.08171	0.00506	0.00329	0.00146	0.00436	0.13264	-0.00806	-0.05878	0.04161	0.03499	-0.08762	0.11081	0.02058
3.000	0.04052	-0.03430	0.00706	0.02476	0.00732	-0.02053	0.05269	0.04937	-0.05415	0.05028	0.01553	-0.06365	0.01851	0.03763
4.000	0.02169	-0.00940	0.00708	0.00648	0.01493	-0.01002	0.01107	0.04730	-0.01867	0.04991	-0.00137	-0.02075	-0.00578	0.05019
5.000	0.01064	-0.00118	0.00594	-0.00002	0.01211	-0.00079	-0.00161	0.03288	0.00131	0.04389	-0.00087	0.00118	-0.00001	0.05549
8.000	0.00135	0.00086	0.00227	-0.00097	0.00304	0.00286	-0.00244	0.00764	0.00732	0.02124	0.00451	0.00747	0.01219	0.04337

SIN THETA/ LAMBDA	AS 2P2P J(0)	AS 2P2P J(2)	AS 2P2S J(1)	AS 2P1S J(1)	AS 2S2S J(0)	AS 2S1S J(0)	AS 1S1S J(0)	KR 4P4P J(0)	KR 4P4P J(2)	KR 4P4S J(1)	KR 4P3D J(1)	KR 4P3D J(3)	KR 4P3P J(0)	KR 4P3P J(2)
0.005	0.99999	0.	-0.00206	0.00040	0.99999-0.		1.00000	0.99918	0.00033-0.	0.01903	0.00234	0.	0.00003-0.	0.00001
0.010	0.99997	0.00001-0.	0.00412	0.00080	0.99996-0.		1.00000	0.99672	0.00131-0.	0.03800	0.00457	0.	0.00013-0.	0.00005
0.050	0.99928	0.00029-0.	0.02057	0.00402	0.99908	0.00005	0.99995	0.92139	0.03086-0.	0.18070	0.02259	0.00019	0.00327-0.	0.00130
0.100	0.99713	0.00115-0.	0.04105	0.00804	0.99632	0.00020	0.99979	0.72200	0.10320-0.	0.30982	0.04156	0.00143	0.01260-0.	0.00494
0.150	0.99355	0.00258-0.	0.06136	0.01205	0.99175	0.00045	0.99952	0.48131	0.17544-0.	0.35221	0.05374	0.00436	0.02672-0.	0.01019
0.200	0.98856	0.00456-0.	0.08142	0.01605	0.98538	0.00081	0.99915	0.26822	0.21723-0.	0.34477	0.05788	0.00902	0.04381-0.	0.01607
0.300	0.97449	0.01014-0.	0.12043	0.02400	0.96742	0.00181	0.99809	0.02291	0.19785-0.	0.20513	0.04398	0.02108	0.07880-0.	0.02558
0.400	0.95518	0.01772-0.	0.15748	0.03187	0.94285	0.00321	0.99661-0.	0.03528	0.11734-0.	0.07081	0.01234	0.03104	0.10400-0.	0.02731
0.500	0.93103	0.02708-0.	0.19200	0.03961	0.91219	0.00499	0.99472-0.	0.02070	0.04810-0.	0.00192-0.	0.02121	0.03407	0.11293-0.	0.01989
0.600	0.90250	0.03798-0.	0.22351	0.04721	0.87611	0.00714	0.99241	0.00328	0.00941	0.01604-0.	0.04653	0.02947	0.10641-0.	0.00598
0.700	0.87011	0.05011-0.	0.25165	0.05464	0.83534	0.00965	0.98968	0.01737-0.	0.00505	0.01027-0.	0.06029	0.01951	0.08941	0.01016
0.800	0.83445	0.06317-0.	0.27611	0.06187	0.79070	0.01248	0.98656	0.02102-0.	0.00617-0.	0.00110-0.	0.06366	0.00725	0.06780	0.02474
0.900	0.79611	0.07683-0.	0.29671	0.06888	0.74301	0.01564	0.98303	0.01845-0.	0.00206-0.	0.01002-0.	0.05963-0.	0.00471	0.04632	0.03548
1.000	0.75570	0.09079-0.	0.31336	0.07564	0.69313	0.01908	0.97912	0.01345	0.00282-0.	0.01451-0.	0.05129-0.	0.01477	0.02791	0.04161
1.500	0.54240	0.15543-0.	0.34029	0.10525	0.43801	0.03986	0.95394-0.	0.00113	0.00801-0.	0.00478-0.	0.00680-0.	0.02904-0.	0.00466	0.02702
2.000	0.34978	0.19531-0.	0.29607	0.12676	0.22546	0.06406	0.92032	0.00068	0.00193	0.00127	0.00784-0.	0.01611	0.00459	0.00478
3.000	0.10847	0.19183-0.	0.14326	0.14503	0.01387	0.11015	0.83362	0.00247-0.	0.00007-0.	0.00140	0.00475	0.00048	0.00920	0.00009
4.000	0.01757	0.13817-0.	0.03588	0.13782-0.	0.01475	0.13989	0.73168	0.00097	0.00101-0.	0.00140	0.00116	0.00254	0.00361	0.00382
5.000	-0.00713	0.08750	0.01019	0.11755	0.00575	0.14949	0.62620	0.00021	0.00105-0.	0.00045	0.00014	0.00172	0.00064	0.00403
8.000	-0.00616	0.01924	0.01904	0.05462	0.03203	0.11174	0.35791-0.	0.00010	0.00034	0.00053-0.	0.00008	0.00030-0.	0.00036	0.00129

SIN THETA/ LAMBDA	KR 4P3S J(1)	KR 4P2P J(0)	KR 4P2P J(2)	KR 4P2S J(1)	KR 4P1S J(1)	KR 4S4S J(0)	KR 4S3D J(2)	KR 4S3P J(1)	KR 4S3S J(0)	KR 4S2P J(1)	KR 4S2S J(0)	KR 4S1S J(0)	KR 3D3D J(0)	KR 3D3D J(2)
0.005	0.00088	0.	-0.	0.00018	0.00003	0.99944-0.	0.00003	0.00164	0.00003	0.00010	0.00003	0.	0.99993	0.00003
0.010	0.00175	0.00001-0.		0.00036	0.00006	0.99776-0.	0.00011	0.00327	0.00013	0.00020	0.00003	0.	0.99973	0.00011
0.050	0.00855	0.00009-0.	0.00004	0.00181	0.00031	0.94548-0.	0.00282	0.01600	0.00317	0.00100	0.00015	0.	0.99319	0.00272
0.100	0.01572	0.00037-0.	0.00015	0.00359	0.00061	0.79855-0.	0.01065	0.02985	0.01230	0.00198	0.00050	0.00002	0.97308	0.01069
0.150	0.02039	0.00082-0.	0.00033	0.00535	0.00092	0.60026-0.	0.02178	0.03976	0.02633	0.00294	0.00108	0.00004	0.94069	0.02334
0.200	0.02182	0.00146-0.	0.00058	0.00705	0.00123	0.39677-0.	0.03395	0.04455	0.04367	0.00387	0.00189	0.00006	0.89756	0.03981
0.300	0.01442	0.00325-0.	0.00129	0.01023	0.00184	0.09448-0.	0.05277	0.03769	0.08098	0.00555	0.00416	0.00014	0.78699	0.07988
0.400	-0.00366	0.00570-0.	0.00225	0.01301	0.00245-0.	0.02819-0.	0.05594	0.01341	0.11079	0.00691	0.00725	0.00025	0.65848	0.12200
0.500	-0.02580	0.00873-0.	0.00340	0.01526	0.00305-0.	0.03846-0.	0.04313-0.	0.01818	0.12490	0.00785	0.01103	0.00039	0.52780	0.15872
0.600	-0.04539	0.01220-0.	0.00468	0.01689	0.00365-0.	0.01167-0.	0.02080-0.	0.04703	0.12195	0.00827	0.01535	0.00056	0.40653	0.18555
0.700	-0.05823	0.01599-0.	0.00601	0.01782	0.00424	0.01314	0.00346-0.	0.06682	0.10566	0.00809	0.02004	0.00076	0.30135	0.20101
0.800	-0.06306	0.01994-0.	0.00729	0.01802	0.00483	0.02510	0.02419-0.	0.07558	0.08198	0.00729	0.02438	0.00099	0.21477	0.20580
0.900	-0.06081	0.02387-0.	0.00844	0.01750	0.00540	0.02604	0.03879-0.	0.07456	0.05660	0.00588	0.02954	0.00125	0.14644	0.20186
1.000	-0.05358	0.02763-0.	0.00939	0.01631	0.00597	0.02088	0.04686-0.	0.06659	0.03368	0.00391	0.03413	0.00153	0.09440	0.19156
1.500	-0.00725	0.04022-0.	0.00962	0.00361	0.00861-0.	0.00244	0.03019-0.	0.00978-0.	0.00860-0.	0.01086	0.04729	0.00333-0.	0.01104	0.10938
2.000	0.00406	0.03979-0.	0.00320-0.	0.01020	0.01084	0.00067	0.00308	0.00465	0.00555-0.	0.02390	0.04221	0.00561-0.	0.01744	0.04889
3.000	-0.00492	0.02089	0.01080-0.	0.01703	0.01370	0.00293-0.	0.00724-0.	0.00593	0.00883-0.	0.02491	0.01318	0.01075-0.	0.00473	0.00728
4.000	-0.00430	0.00646	0.01393-0.	0.00873	0.01434	0.00033-0.	0.00320-0.	0.00514	0.00084-0.	0.01166-0.	0.00071	0.01513-0.	0.00078	0.00066
5.000	-0.00128	0.00069	0.01113-0.	0.00170	0.01330-0.	0.00019-0.	0.00086-0.	0.00153-0.	0.00069-0.	0.00225-0.	0.00130	0.01766-0.	0.00005-0.	0.00015
8.000	0.00093-0.	0.00089	0.00312	0.00238	0.00735	0.00046	0.00015	0.00110	0.00149	0.00283	0.00394	0.01578	0.00002-0.	0.00005

SIN THETA/ LAMBDA	KR 3D3D J(4)	KR 3D3P J(1)	KR 3D3P J(3)	KR 3D3S J(2)	KR 3D2P J(1)	KR 3D2P J(3)	KR 3D2S J(2)	KR 3D1S J(2)	KR 3P3P J(0)	KR 3P3P J(2)	KR 3P3S J(1)	KR 3P2P J(0)	KR 3P2P J(2)	KR 3P2S J(1)
0.005	0.	-0.00583-0.		0.00002	0.00125	0.	-0.	0.	0.99994	0.00003-0.00596		0.00001-0.		0.00077
0.010	0.	-0.01167-0.		0.00010	0.00250	0.	-0.00001	0.	0.99975	0.00010-0.01191		0.00002-0.00001		0.00155
0.050	0.	-0.05802-0.00009		0.00245	0.01249	0.	-0.00032	0.	0.99369	0.00252-0.05930		0.00048-0.00019		0.00773
0.100	0.00006	-0.11414-0.00072		0.00967	0.02488	0.00004-0.00127	0.00002	0.97500	0.00995-0.11688		0.00190-0.00076		0.01534	
0.150	0.00028	-0.16659-0.00237		0.02125	0.03706	0.00013-0.00283	0.00004	0.94463	0.02188-0.17115		0.00424-0.00169		0.02275	
0.200	0.00085	-0.21382-0.00542		0.03655	0.04896	0.00030-0.00498	0.00007	0.90367	0.03770-0.22063		0.00748-0.00296		0.02985	
0.300	0.00377	-0.28812-0.01656		0.07489	0.07152	0.00099-0.01093	0.00016	0.79606	0.07766-0.30073		0.01641-0.00644		0.04276	
0.400	0.01000	-0.33174-0.03433		0.11718	0.09191	0.00225-0.01874	0.00029	0.66610	0.12231-0.35109		0.02818-0.01088		0.05341	
0.500	0.01981	-0.34513-0.05686		0.15616	0.10966	0.00419-0.02799	0.00045	0.52853	0.15417-0.37058		0.04214-0.01595		0.06131	
0.600	0.03245	-0.33302-0.08112		0.18637	0.12442	0.00683-0.03817	0.00064	0.39625	0.19736-0.36240		0.05756-0.02124		0.06618	
0.700	0.04655	-0.30238-0.10396		0.20484	0.13602	0.01015-0.04877	0.00086	0.27865	0.21844-0.33251		0.07367-0.02637		0.06791	
0.800	0.06058	-0.26054-0.12286		0.21102	0.14443	0.01406-0.05931	0.00111	0.18114	0.22644-0.28851		0.08976-0.03097		0.06657	
0.900	0.07326	-0.21389-0.13630		0.20612	0.14977	0.01845-0.06925	0.00139	0.10556	0.22239-0.23724		0.10517-0.03475		0.06241	
1.000	0.08372	-0.16733-0.14377		0.19243	0.15225	0.02316-0.07854	0.00168	0.05100	0.20858-0.18484		0.11932-0.03747		0.05577	
1.500	0.09793	-0.00846-0.11372		0.07698	0.13311	0.04620-0.10478	0.00337	-0.01405	0.08680-0.01023		0.16040-0.03264		0.00206	
2.000	0.07559	0.03209-0.05275	-0.00029	0.09169	0.05892-0.09858	0.00512	0.02385	0.01076	0.01302	0.15109-0.00544	-0.04748			
3.000	0.03040	0.01680	0.00428-0.02279	0.02925	0.05121-0.05104	0.00765	0.03392	0.00195-0.02026	0.07566	0.04450-0.06478				
4.000	0.01083	0.00402	0.00982-0.00962	0.00631	0.03104-0.01774	0.00825	0.01279	0.01498-0.01577	0.02282	0.05298-0.03168				
5.000	0.00396	0.00046	0.00641-0.00254	0.00037	0.01664-0.00412	0.00742	0.00217	0.01508-0.00446	0.00218	0.04144-0.00572				
8.000	0.00029	-0.00020	0.00103	0.00047	-0.00048	0.00245	0.00118	0.00333	-0.00134	0.00473	0.00347	-0.00328	0.01146	0.00879

SIN THETA/ LAMBDA	KR 3P1S J(1)	KR 3S3S J(0)	KR 3S2P J(1)	KR 3S2S J(0)	KR 3S1S J(0)	KR 2P2P J(0)	KR 2P2P J(2)	KR 2P2S J(1)	KR 2P1S J(1)	KR 2S2S J(0)	KR 2S1S J(0)	KR 1S1S J(0)	RB 5S5S J(0)	RB 5S4P J(1)
0.005	0.00012	0.99994	0.00041	0.00001	0.00002	0.99999	0.	-0.00187	0.00037	0.99999-0.		1.00000	0.99336	0.00658
0.010	0.00023	0.99976	0.00082	0.00002	0.00002	0.99998	0.00001-0.00373	0.00074	0.99997	0.		1.00000	0.97368	0.01308
0.050	0.00117	0.99391	0.00411	0.00052	0.00004	0.99941	0.00024-0.01864	0.00371	0.99924	0.00004	0.99996	0.50642	0.05404	
0.100	0.00234	0.97583	0.00814	0.00208	0.00007	0.99764	0.00094-0.03722	0.00742	0.99696	0.00017	0.99982	0.02083	0.05729	
0.150	0.00350	0.94639	0.01200	0.00465	0.00014	0.99471	0.00211-0.05567	0.01112	0.99318	0.00038	0.99960	0.04226	0.01925	
0.200	0.00467	0.90657	0.01562	0.00820	0.00023	0.99062	0.00374-0.07393	0.01481	0.98791	0.00058	0.99929	0.00690	0.02256	
0.300	0.00699	0.80120	0.02184	0.01796	0.00049	0.97904	0.00834-0.10962	0.02216	0.97300	0.00152	0.99840	0.01330	0.05030	
0.400	0.00930	0.67248	0.02630	0.03079	0.00084	0.96310	0.01462-0.14384	0.02944	0.95253	0.00270	0.99716	0.00404	0.02993	
0.500	0.01159	0.53435	0.02864	0.04591	0.00130	0.94306	0.02243-0.17614	0.03662	0.92685	0.00420	0.99557	0.00117	0.00826	
0.600	0.01386	0.39960	0.02868	0.06248	0.00186	0.91924	0.03161-0.20615	0.04370	0.89643	0.00632	0.99363	0.00160	0.00188	
0.700	0.01610	0.27815	0.02636	0.07962	0.00251	0.89201	0.04194-0.23354	0.05064	0.86179	0.00814	0.99135	0.00042	0.00350	
0.800	0.01831	0.17628	0.02180	0.09648	0.00326	0.86177	0.05320-0.25805	0.05743	0.82351	0.01055	0.98872	0.00066	0.00152	
0.900	0.02049	0.09671	0.01524	0.11227	0.00410	0.82896	0.06516-0.27949	0.06405	0.78221	0.01324	0.98576	0.00116	0.00098	
1.000	0.02263	0.03925	0.00703	0.12637	0.00502	0.79401	0.07759-0.29775	0.07048	0.73852	0.01619	0.98246	0.00118	0.000274	
1.500	0.03256	-0.02113-0.04463	0.15937	0.01085	0.60273	0.13897-0.34115	0.09928	0.50555	0.03422	0.96119-0.00003	-0.00166			
2.000	0.04087	0.02635-0.08285	0.13348	0.01820	0.41741	0.18413-0.31773	0.12151	0.29440	0.03588	0.93258	0.00015	0.00026		
3.000	0.05133	0.02633-0.07829	0.03817	0.03454	0.15679	0.20173-0.18393	0.14474	0.04573	0.10000	0.85760	0.00009	0.00028		
4.000	0.05342	0.00195-0.03530	-0.00299	0.04825	0.03950	0.15998-0.06514	0.14398	-0.01519	0.13288	0.76712	-0.00019	-0.00035		
5.000	0.04935	-0.00212-0.00631	-0.00381	0.05602	-0.00044	0.10946-0.00425	0.12860	-0.00425	0.14856	0.67060	-0.00013	-0.00011		
8.000	0.02707	0.00472	0.00890	0.01248	0.04963	-0.00801	0.02778	0.02234	0.06716	0.03263	0.12482	0.40906	0.00011	0.00010

SIN THETA/ LAMBDA	RB 5S4S J(0)	RB 5S3D J(2)	RB 5S3P J(1)	RB 5S3S J(0)	RB 5S2P J(1)	RB 5S2S J(0)	RB 5S1S J(0)	RB 4P4P J(0)	RB 4P4P J(2)	RB 4P4S J(1)	RB 4P3D J(1)	RB 4P3D J(3)	RB 4P3P J(0)	RB 4P3P J(2)
0.005	0.00019-0.		0.00028	0.00001	0.00002	0.	0.	0.99936	0.00026-0.01740	0.00218	0.		0.00003-0.00001	
0.010	0.00076-0.00001	0.00055	0.00002	0.00004	0.	0.	0.	0.99744	0.00102-0.03475	0.00436	0.		0.00013-0.00005	
0.050	0.01750-0.00025	0.00273	0.00050	0.00021	0.00002	0.	0.	0.93795	0.02448-0.15690	0.02128	0.00016	0.00016	0.00316-0.00126	
0.100	0.05425-0.00103	0.00522	0.00198	0.00042	0.00010	0.	0.	0.77383	0.08558-0.29482	0.03943	0.00118	0.01224-0.00481		
0.150	0.08188-0.00237	0.00720	0.00434	0.00062	0.00021	0.00001	0.56004	0.15517-0.35077	0.05194	0.00366	0.02615-0.01003			
0.200	0.08581-0.00418	0.00847	0.00742	0.00081	0.00038	0.00001	0.35097	0.20707-0.35376	0.05743	0.00774	0.04326-0.01604			
0.300	0.04553-0.00814	0.00834	0.01464	0.00117	0.00084	0.00003	0.06625	0.22045-0.24992	0.04751	0.01907	0.07970-0.02656			
0.400	0.00565-0.01047	0.00471	0.02131	0.00147	0.00147	0.00005	-0.03140	0.15270-0.10779	0.01858	0.02984	0.10830-0.03014			
0.500	-0.00826-0.00980	-0.00115	0.02553	0.00169	0.00225	0.00008	-0.03082	0.07562-0.01856	-0.01540	0.03502	0.12158-0.02455			
0.600	-0.00625-0.00649	-0.00739	0.02647	0.00180	0.00315	0.00012	-0.00497	0.02357	0.01460-0.04388	0.03283	0.11882-0.01155			
0.700	-0.00023-0.00183	-0.01245	0.02438	0.00180	0.00413	0.00016	0.01531-0.00113	0.01515-0.06183	0.02452	0.10394	0.00500			
0.800	0.00420	0.00284-0.01549	0.02019	0.00167	0.00516	0.00021	0.02390-0.00757	0.00397-0.06899	0.01274	0.08249	0.02120			
0.900	0.00592	0.00664-0.01639	0.01504	0.00142	0.00620	0.00026	0.02371-0.00500	-0.00740-0.06759	0.00014	0.05955	0.03427			
1.000	0.00559	0.00919-0.01554	0.00992	0.00104	0.00719	0.00032	0.01905	0.00043-0.01465	-0.06056-0.01130	0.03865	0.04288			
1.500	-0.00033	0.00775-0.00341	-0.00191-0.00202	0.01042	0.00071-0.00084	0.01042-0.00750	-0.01152-0.03275	-0.00501	0.03345					
2.000	-0.00005	0.00140	0.00104	0.00074-0.00503	0.00978	0.00120	0.00029	0.00324	0.00128	0.00799-0.02035	0.00353	0.00767		
3.000	0.00078-0.00172	-0.00119	0.00222-0.00581	0.00351	0.00232	0.00316-0.00024	-0.00142	0.00604-0.00030	0.01080-0.00043					
4.000	0.00016-0.00085	-0.00127	0.00033-0.00298	0.00001	0.00331	0.00145	0.00110-0.00181	0.00153	0.00291	0.00473	0.00399			
5.000	-0.00006-0.00025	-0.00046-0.00016	-0.00074-0.00035	0.00393	0.00037	0.00131-0.00066	0.00025	0.00214	0.00103	0.00463				
8.000	0.00007	0.00003	0.00026	0.00033	0.00066	0.00087	0.00366-0.00032	0.00066	0.00053-0.00008	0.00038-0.00043	0.00161			

SIN THETA/ LAMBDA	RB 4P3S J(1)	RB 4P2P J(0)	RB 4P2P J(2)	RB 4P2S J(1)	RB 4P1S J(1)	RB 4S4S J(0)	RB 4S3D J(2)	RB 4S3P J(1)	RB 4S3S J(0)	RB 4S2P J(1)	RB 4S2S J(0)	RB 4S1S J(0)	RB 3D3D J(0)	RB 3D3D J(2)
0.005	0.00094	0.	-0.	0.00019	0.00003	0.99953-0.00002	0.00159	0.00003	0.00010	0.00003	0.	0.99994	0.00002	
0.010	0.00187	0.	-0.	0.00039	0.00007	0.99812-0.00010	0.00318	0.00012	0.00020	0.00003	0.	0.99976	0.00010	
0.050	0.00914	0.00010-0.00004	0.00193	0.00033	0.95392-0.00244	0.01557	0.00303	0.00102	0.00015	0.00001	0.99392	0.00243		
0.100	0.01699	0.00038-0.00015	0.00385	0.00066	0.82727-0.00927	0.02924	0.01179	0.00202	0.00050	0.00002	0.97596	0.00955		
0.150	0.02244	0.00084-0.00034	0.00574	0.00099	0.64991-0.01921	0.03939	0.02535	0.00300	0.00108	0.00004	0.94690	0.02094		
0.200	0.02474	0.00150-0.00060	0.00757	0.00133	0.45817-0.03043	0.04488	0.04233	0.00395	0.00188	0.00007	0.90796	0.03589		
0.300	0.01895	0.00334-0.00133	0.01101	0.00199	0.14383-0.04943	0.04040	0.07988	0.00568	0.00415	0.00015	0.80686	0.07300		
0.400	0.00159	0.00586-0.00231	0.01405	0.00264-0.01112	-0.05553	0.01845	0.11177	0.00711	0.00723	0.00026	0.68690	0.11335		
0.500	-0.02136	0.00898-0.00351	0.01657	0.00330-0.04318	-0.04650-0.01240	0.12945	0.00814	0.01102	0.00040	0.56191	0.15023			
0.600	-0.04326	0.01260-0.00485	0.01846	0.00394-0.02201	-0.02679-0.04263	0.13039	0.00866	0.01538	0.00057	0.44282	0.17907			
0.700	-0.05929	0.01657-0.00626	0.01964	0.00458	0.00637-0.00310-0.06541	0.11711	0.00861	0.02014	0.00077	0.33666	0.19779			
0.800	-0.06736	0.02074-0.00766	0.02008	0.00522	0.02408	0.01893-0.07777	0.09484	0.00795	0.02510	0.00100	0.24684	0.20638		
0.900	-0.06773	0.02496-0.00894	0.01977	0.00584	0.02931	0.03592-0.08000	0.06915	0.00668	0.03006	0.00126	0.17398	0.20612		
1.000	-0.06211	0.02906-0.01004	0.01874	0.00645	0.02614	0.04671-0.07432	0.04454	0.00483	0.03480	0.00155	0.11695	0.19896		
1.500	-0.01201	0.04369-0.01105	0.00590	0.00933-0.00188	0.03633-0.01518	-0.00923-0.00996	0.04993	0.00338-0.00708	0.12186					
2.000	0.00457	0.04478-0.00479	-0.00949	0.01180-0.00009	0.00618	0.00500	0.00389-0.02421	0.04655	0.00571-0.01888	0.05743				
3.000	-0.00492	0.02526	0.01094-0.01925	0.01507	0.00365-0.00818	-0.00576	0.01048-0.02753	0.01655	0.01105-0.00585	0.00939				
4.000	-0.00522	0.00854	0.01553-0.01090	0.01600	0.00063-0.00402	-0.00604	0.00154-0.01411	-0.00001	0.01576-0.00106	0.00102				
5.000	-0.00186	0.00132	0.01298-0.00275	0.01507-0.00023	-0.00119-0.00215	-0.00077-0.00348	-0.00158	0.01868-0.00011	-0.00012					
8.000	0.00107-0.00106	0.00387	0.00272	0.00866	0.00032	0.00015	0.00122	0.00155	0.00312	0.00413	0.01737	0.00003-0.00006		

SIN THETA/ LAMBDA	RB 3D3D J(4)	RB 3D3P J(1)	RB 3D3P J(3)	RB 3D3S J(2)	RB 3D2P (1)	RB 3D2P J(3)	RB 3D2S J(2)	RB 3D1S J(2)	RB 3P3P J(0)	RB 3P3P J(2)	RB 3P3S J(1)	RB 3P2P J(0)	RB 3P2P J(2)	RB 3P2S J(1)
0.005	0.	-0.00556-0.	0.00002	0.00123	0.	-0.	0.	0.99994	0.00002-0.00573	0.	-0.	0.00076		
0.010	0.	-0.01112-0.	0.00009	0.00247	0.	-0.00001	0.	0.99977	0.00009-0.01146	0.00002-0.00001	0.00152			
0.050	0.	-0.05534-0.00008	0.00224	0.01232	0.	-0.00030	0.	0.99419	0.00232-0.05704	0.00045-0.00018	0.00759			
0.100	0.00005	-0.10905-0.00062	0.00886	0.02455	0.00003	-0.00121	0.00002	0.97698	0.00916-0.11256	0.00179-0.00071	0.01508			
0.150	0.00022	-0.15957-0.00205	0.01951	0.03660	0.00012	-0.00270	0.00004	0.94893	0.02020-0.16513	0.00400-0.00159	0.02238			
0.200	0.00067	-0.20554-0.00472	0.03366	0.04837	0.00028	-0.00477	0.00007	0.91100	0.03490-0.21343	0.00706-0.00280	0.02939			
0.300	0.00303	-0.27967-0.01456	0.06955	0.07079	0.00091	-0.01047	0.00016	0.81063	0.07242-0.29305	0.01552-0.00610	0.04222			
0.400	0.00822	-0.32619-0.03058	0.11002	0.09121	0.00207	-0.01800	0.00028	0.68793	0.11518-0.34556	0.02672-0.01034	0.05298			
0.500	0.01667	-0.34466-0.05141	0.14856	0.10917	0.00387	-0.02697	0.00044	0.55600	0.15645-0.36935	0.04007-0.01522	0.06118			
0.600	0.02799	-0.33851-0.07457	0.17995	0.12433	0.00634	-0.03691	0.00063	0.42671	0.19067-0.36664	0.05491-0.02038	0.06653			
0.700	0.04112	-0.31346-0.09724	0.20102	0.13650	0.00947	-0.04736	0.00085	0.30919	0.21425-0.34239	0.07057-0.02546	0.06890			
0.800	0.05478	-0.27597-0.11698	0.21066	0.14563	0.01319	-0.05786	0.00109	0.20921	0.22574-0.30297	0.08635-0.03011	0.06833			
0.900	0.06772	-0.23204-0.13210	0.20950	0.15178	0.01740	-0.06800	0.00136	0.12933	0.22557-0.25492	0.10165-0.03406	0.06500			
1.000	0.07900	-0.18655-0.14180	0.19928	0.15514	0.02197	-0.07741	0.00165	0.06949	0.21545-0.20404	0.11592-0.03707	0.05921			
1.500	0.10022	-0.01880-0.12181	0.08983	0.13981	0.04517	-0.10632	0.00333	-0.01636	0.10020-0.01958	0.15033-0.03475	0.00819			
2.000	0.08161	0.03150-0.06159	0.00623	0.09955	0.05435	-0.10319	0.00510	0.01982	0.01696	0.01455	0.15586	-0.00960	-0.04282	
3.000	0.03506	0.01951	0.00214	-0.02457	0.03404	0.05435	-0.05684	0.00778	0.03654	0.00016	-0.01922	0.08344	0.04205	-0.06727
4.000	0.01300	0.00514	0.01040	-0.01141	0.00806	0.03428	-0.02110	0.00857	0.01529	0.01449	-0.01757	0.02749	0.05416	-0.03613
5.000	0.00488	0.00076	0.00725	-0.00333	0.00081	0.01391	-0.00550	0.00787	0.00322	0.01588	-0.00595	0.00399	0.04409	-0.00860
8.000	0.00037	-0.00023	0.00124	0.00050	-0.00055	0.00292	0.00126	0.00371	-0.00145	0.00539	0.00362	-0.00354	0.01293	0.00916

SIN THETA/ LAMBDA	RB 3P1S J(1)	RB 3S3S J(0)	RB 3S2P J(1)	RB 3S2S J(0)	RB 3S1S J(0)	RB 2P2P J(0)	RB 2P2P J(2)	RB 2P2S J(1)	RB 2P1S J(1)	RB 2S2S J(0)	RB 2S1S J(0)	SR 1S1S J(0)	SR 5S5S J(0)	SR 5S4P J(1)
0.005	0.00011	0.99994	0.00040	0.	0.00003	0.99999	0.	-0.00181	0.00036	0.99999-0.		1.00000	0.99550	0.00626
0.010	0.00023	0.99977	0.00080	0.00002	0.00003	0.99998	0.00001	-0.00362	0.00072	0.99997-0.		1.00000	0.98210	0.01247
0.050	0.00115	0.99435	0.00397	0.00049	0.00004	0.99945	0.00022	-0.01808	0.00362	0.99928	0.00004	0.99996	0.63345	0.05372
0.100	0.00230	0.97757	0.00787	0.00197	0.00008	0.99779	0.00088	-0.03609	0.00723	0.99714	0.00016	0.99983	0.13017	0.06583
0.150	0.00345	0.95018	0.01162	0.00440	0.00014	0.99503	0.00199	-0.05399	0.01084	0.99357	0.00036	0.99962	0.04045	0.03556
0.200	0.00459	0.91305	0.01514	0.00775	0.00023	0.99118	0.00352	-0.07172	0.01444	0.98861	0.00064	0.99933	0.03016	0.00950
0.300	0.00688	0.81422	0.02127	0.01701	0.00047	0.98029	0.00784	-0.10642	0.02160	0.97455	0.00144	0.99849	0.01761	0.05969
0.400	0.00915	0.69225	0.02578	0.02923	0.00081	0.96529	0.01376	-0.13977	0.02871	0.95522	0.00256	0.99732	0.01132	0.04700
0.500	0.01141	0.55962	0.02834	0.04371	0.00125	0.94640	0.02114	-0.17137	0.03572	0.93095	0.00398	0.99581	0.00049	0.01896
0.600	0.01365	0.42807	0.02875	0.05970	0.00178	0.92390	0.02982	-0.20085	0.04264	0.90214	0.00570	0.99398	0.00268	0.00120
0.700	0.01586	0.30711	0.02694	0.07639	0.00240	0.89813	0.03963	-0.22793	0.04943	0.85926	0.00771	0.99181	0.00158	0.00450
0.800	0.01804	0.20321	0.02295	0.09298	0.00311	0.86945	0.05036	-0.25235	0.05609	0.83284	0.01000	0.98933	0.00032	0.00344
0.900	0.02020	0.11967	0.01709	0.10874	0.00392	0.83825	0.06181	-0.27392	0.06258	0.79343	0.01256	0.98652	0.00156	0.00025
1.000	0.02231	0.05708	0.00953	0.12306	0.00480	0.80493	0.07375	-0.29252	0.06890	0.75160	0.01536	0.98340	0.00197	0.00263
1.500	0.03219	-0.02473	-0.04032	0.16029	0.01039	0.62063	0.13379	-0.34023	0.09738	0.52609	0.03259	0.96324	0.00006	0.00291
2.000	0.04056	0.02199	-0.08039	0.13977	0.01749	0.43851	0.17997	-0.32302	0.11973	0.31658	0.05346	0.93605	0.00004	0.00022
3.000	0.05149	0.02977	-0.08230	0.04546	0.03354	0.17363	0.20364	-0.19654	0.14428	0.05821	0.09677	0.86450	0.00035	0.00031
4.000	0.05432	0.00369	-0.04038	-0.00105	0.04748	0.04815	0.16633	-0.07687	0.14545	-0.01366	0.13030	0.77751	-0.00010	-0.00050
5.000	0.05092	-0.00229	-0.00940	-0.00476	0.05552	0.00273	0.11661	-0.01017	0.13172	-0.00713	0.14777	0.68389	0.00015	-0.00025
8.000	0.02904	0.00465	0.00926	0.01235	0.05151	-0.00859	0.03101	0.02319	0.07132	0.03234	0.12862	0.42537	0.00011	0.00004



SIN THETA/ LAMBDA	SR 5S4S J(0)	SR 5S3D J(2)	SR 5S3P J(1)	SR 5S3S J(0)	SR 5S2P J(1)	SR 5S2S J(0)	SR 5S1S J(0)	SR 4P4P J(0)	SR 4P4P J(2)	SR 4P4S J(1)	SR 4P3D J(1)	SR 4P3D J(3)	SR 4P3P J(0)	SR 4P3P J(2)
0.005	0.00018-0.		0.00032	0.00001	0.00003-0.	0.	0.	0.99947	0.00021-0.01606	0.00203	0.		0.00003-0.00001	
0.010	0.00070-0.00001	0.00064	0.00002	0.00002	0.00005-0.	0.	0.	0.99790	0.00084-0.03209	0.00406	0.		0.00012-0.00005	
0.050	0.01640-0.00026	0.00317	0.00056	0.00026	0.00002	0.	0.	0.94869	0.02030-0.15519	0.01985	0.00013		0.00301-0.00120	
0.100	0.05390-0.00106	0.00607	0.00223	0.00052	0.00011	0.	0.	0.80957	0.07286-0.27983	0.03709	0.00098		0.01173-0.00462	
0.150	0.08827-0.00242	0.00846	0.00492	0.00077	0.00025	0.00001	0.61962	0.13756-0.35378	0.04959	0.00308	0.02520-0.00971			
0.200	0.10207-0.00430	0.01011	0.00846	0.00101	0.00045	0.00002	0.42132	0.19306-0.37233	0.05600	0.00662	0.04201-0.01571			
0.300	0.06961-0.00873	0.01053	0.01700	0.00146	0.00101	0.00004	0.11630	0.23096-0.23637	0.04977	0.01702	0.07898-0.02689			
0.400	0.01859-0.01198	0.00692	0.02539	0.00183	0.00177	0.00007-0.01788	0.18176-0.14612	0.02415	0.02799	0.11010-0.03208				
0.500	-0.00727-0.01219	0.00035	0.03134	0.00212	0.00271	0.00010-0.03760	0.10464-0.04116-0.00914	0.03478	0.12727-0.02845					
0.600	-0.00993-0.00919	-0.00726	0.03361	0.00228	0.00381	0.00015-0.01489	0.04237	0.00833-0.03952	0.03488	0.12851-0.01689				
0.700	-0.00331-0.00410	-0.01400	0.03212	0.00231	0.00502	0.00020	0.01003	0.00685	0.01821-0.06096	0.02858	0.11652-0.00065			
0.800	0.00345	0.00160-0.01863	0.02774	0.00220	0.00629	0.00026	0.02419-0.00680	0.00958-0.07188	0.01792	0.09629	0.01647			
0.900	0.00715	0.00668-0.02072	0.02173	0.00193	0.00759	0.00033	0.02770-0.00752-0.00313-0.07357	0.00538	0.07287	0.03138				
1.000	0.00785	0.01048-0.02052	0.01530	0.00151	0.00886	0.00040	0.02451-0.00264-0.01306-0.06853-0.00688	0.05024	0.04228					
1.500	0.00001	0.01105-0.00592	-0.00221-0.00218	0.01328	0.00087	0.00006	0.01252-0.01072-0.01736-0.03541-0.00456	0.03963						
2.000	-0.00032	0.00273	0.00121	0.00034-0.00613	0.01300	0.00148-0.00028	0.00490	0.00098	0.00751-0.02463	0.00210	0.01119			
3.000	0.00113-0.00231	-0.00134	0.00313-0.00777	0.00525	0.00290	0.00380-0.00041-0.00129	0.00741-0.00141	0.01222-0.00095						
4.000	0.00027-0.00128	-0.00179	0.00064-0.00432	0.00027	0.00419	0.00199	0.00112-0.00220	0.00219	0.00320	0.00595	0.00398			
5.000	-0.00008-0.00042	-0.00074	-0.00020-0.00128	-0.00052	0.00504	0.00055	0.00158-0.00092	0.00039	0.00255	0.00153	0.00516			
8.000	0.00015	0.00005	0.00034	0.00041	0.00087	0.00109	0.00487-0.00044	0.00091	0.00037-0.00008	0.00047-0.00050	0.00196			

SIN THETA/ LAMBDA	SR 4P3S J(1)	SR 4P2P J(0)	SR 4P2P J(2)	SR 4P2S J(1)	SR 4P1S J(1)	SR 4S4S J(0)	SR 4S3D J(2)	SR 4S3P J(1)	SR 4S3S J(0)	SR 4S2P J(1)	SR 4S2S J(0)	SR 4S1S J(0)	SR 3D3D J(0)	SR 3D3D J(2)
0.005	0.00098	0.	-0.	0.00020	0.00004	0.99960-0.00002	0.00154	0.00003	0.00010	0.00004	0.		0.99995	0.00002
0.010	0.00195	0.00001-0.		0.00041	0.00007	0.99839-0.00009	0.00308	0.00012	0.00021	0.00004	0.		0.99978	0.00009
0.050	0.00956	0.00010-0.00004	0.00203	0.00035	0.96036-0.00212	0.01512	0.00288	0.00103	0.00015	0.00001	0.99454	0.00218		
0.100	0.01792	0.00038-0.00015	0.00404	0.00070	0.84990-0.00813	0.02855	0.01125	0.00205	0.00050	0.00002	0.97839	0.00860		
0.150	0.02402	0.00085-0.00034	0.00602	0.00105	0.69092-0.01701	0.03883	0.02430	0.00305	0.00107	0.00004	0.95215	0.01890		
0.200	0.02710	0.00151-0.00060	0.00795	0.00140	0.51217-0.02732	0.04489	0.04080	0.00401	0.00187	0.00007	0.91682	0.03253		
0.300	0.02306	0.00336-0.00134	0.01159	0.00210	0.19526-0.04603	0.04258	0.07820	0.00578	0.00411	0.00015	0.82413	0.06690		
0.400	0.00694	0.00590-0.00233	0.01484	0.00279	0.01338-0.05431	0.02306	0.11166	0.00727	0.00716	0.00026	0.71219	0.10536		
0.500	-0.01603	0.00906-0.00355	0.01758	0.00348-0.04278	-0.04873-0.00654	0.13248	0.00837	0.01094	0.00040	0.59309	0.14190			
0.600	-0.03946	0.01274-0.00493	0.01971	0.00417-0.03169	-0.03193-0.03746	0.13724	0.00899	0.01530	0.00057	0.47697	0.17205			
0.700	-0.05818	0.01681-0.00639	0.02114	0.00485-0.00246	-0.00951-0.06265	0.12732	0.00907	0.02009	0.00078	0.37090	0.19339			
0.800	-0.06940	0.02113-0.00786	0.02182	0.00552	0.02046	0.01303-0.07835	0.10709	0.00854	0.02514	0.00101	0.27888	0.20529		
0.900	-0.07266	0.02554-0.00925	0.02174	0.00618	0.03077	0.03187-0.08394	0.08181	0.00742	0.03023	0.00127	0.20234	0.20850		
1.000	-0.06919	0.02988-0.01047	0.02091	0.00683	0.03071	0.04513-0.08094	0.05615	0.00571	0.03518	0.00156	0.14089	0.20450		
1.500	-0.01767	0.04629-0.01229	0.00832	0.00990-0.00057	0.04237-0.02151	-0.00901-0.00891	0.05212	0.00340-0.00176	0.13399					
2.000	0.00461	0.04905-0.00641	-0.00827	0.01256-0.00103	0.00992	0.00485	0.00186-0.02418	0.05059	0.00577-0.01997	0.06647				
3.000	-0.00462	0.02960	0.01066-0.02106	0.01621	0.00437-0.00899	-0.00532	0.01208-0.03016	0.02019	0.01127-0.00711	0.01188				
4.000	-0.00510	0.01084	0.01681-0.01309	0.01743	0.00102-0.00493	-0.00691	0.00243-0.01668	0.00098	0.01628-0.00141	0.00148				
5.000	-0.00252	0.00213	0.01470-0.00398	0.01665-0.00025	-0.00160-0.00285	-0.00078-0.00490	-0.00199	0.01957-0.00018	-0.00007					
8.000	0.00119-0.00122	0.00466	0.00301	0.00994	0.00032	0.00017	0.00132	0.00158	0.00338	0.00425	0.01890	0.00003-0.00007		

SIN THETA/ LAMBDA	SR 3D3D J(4)	SR 3D3P J(1)	SR 3D3P J(3)	SR 3D3S J(2)	SR 3D2P J(1)	SR 3D2P J(2)	SR 3D2S J(2)	SR 3D1S J(2)	SR 3P3P J(0)	SR 3P3P J(2)	SR 3P3S J(1)	SR 3P2P J(0)	SR 3P2P J(2)	SR 3P2S J(1)
0.005	0.	-0.00531-0.		0.00002	0.00122	0.	-0.	0.	0.99995	0.00002-0.00552	0.	-0.		0.00075
0.010	0.	-0.01062-0.		0.00008	0.00243	0.	-0.00001	0.	0.99979	0.00009-0.01103	0.00002-0.00001	0.00001		0.00149
0.050	0.	-0.05289-0.00007		0.00206	0.01214	0.	-0.00029	0.	0.99464	0.00214-0.05494	0.00004-0.00017	0.00017		0.00745
0.100	0.00004	-0.10435-0.00054		0.00814	0.02420	0.00003-0.00116	0.00002	0.97873	0.00847-0.10852	0.00169-0.00068	0.01482			0.01482
0.150	0.00018	-0.15303-0.00179		0.01797	0.03610	0.00011-0.00258	0.00004	0.95277	0.01870-0.15947	0.00378-0.00151	0.02200			0.02200
0.200	0.00054	-0.19773-0.00413		0.03107	0.04774	0.00025-0.00456	0.00007	0.91755	0.03238-0.20659	0.00668-0.00265	0.02893			0.02893
0.300	0.00247	-0.27134-0.01285		0.06467	0.06999	0.00033-0.01003	0.00016	0.82380	0.05763-0.28552	0.01470-0.00578	0.04168			0.04168
0.400	0.00681	-0.32007-0.02730		0.10330	0.09039	0.00171-0.01729	0.00028	0.70795	0.10851-0.33972	0.02535-0.00984	0.05250			0.05250
0.500	0.01408	-0.34287-0.04651		0.14112	0.10849	0.00359-0.02597	0.00043	0.58162	0.14897-0.36723	0.03812-0.01454	0.06095			0.06095
0.600	0.02415	-0.34211-0.06846		0.17323	0.12338	0.00590-0.03566	0.00061	0.45572	0.18381-0.36948	0.05242-0.01955	0.06672			0.06672
0.700	0.03625	-0.32242-0.09068		0.19635	0.13655	0.00884-0.04593	0.00083	0.33898	0.20938-0.35049	0.06760-0.02456	0.06968			0.06968
0.800	0.04931	-0.28943-0.11085		0.20901	0.14641	0.01237-0.05635	0.00107	0.23735	0.22390-0.31576	0.08305-0.02924	0.06981			0.06981
0.900	0.06219	-0.24864-0.12724		0.21130	0.15351	0.01640-0.06652	0.00133	0.15394	0.22729-0.27122	0.09819-0.03332	0.06727			0.06727
1.000	0.07395	-0.20480-0.13882		0.20447	0.15748	0.02081-0.07609	0.00162	0.08942	0.22075-0.22234	0.11249-0.03656	0.06229			0.06229
1.500	0.10140	-0.03034-0.12886		0.10256	0.14599	0.04299-0.10737	0.00328	0.01746	0.11354-0.03046	0.15976-0.03655	0.01414			0.01414
2.000	0.08705	0.02995-0.07052		0.01366	0.10722	0.05447-0.10731	0.00507	0.01544	0.02416	0.01542	0.15996-0.01353			0.03785
3.000	0.03994	0.02231-0.00053		0.02605	0.03911	0.05726-0.06267	0.00788	0.03882	0.00149-0.01772	0.09116	0.03927-0.06920			0.06920
4.000	0.01541	0.00643	0.01082-0.01333	0.01082	0.01333	0.03753-0.02473	0.00886	0.01793	0.01377-0.01923	0.03250	0.05496-0.04052			0.04052
5.000	0.00594	0.00113	0.00810-0.00425	0.00810	0.00425	0.02130-0.00710	0.00829	0.00445	0.01654-0.00755	0.00610	0.04659-0.01172			0.01172
8.000	0.00347	-0.00026	0.00148	0.00052-0.00061	0.00052	0.00346	0.00133	0.00410-0.00156	0.00609	0.00373-0.00379	0.01450			0.00945

SIN THETA/ LAMBDA	SR 3P1S J(1)	SR 3S3S J(0)	SR 3S2P J(1)	SR 3S2S J(0)	SR 3S1S J(0)	SR 2P2P J(0)	SR 2P2P J(2)	SR 2P2S J(1)	SR 2P1S J(1)	SR 2S2S J(0)	SR 2S1S J(0)	SR 1S1S J(0)	MD 5S5S J(0)	MD 5S4D J(2)
0.005	0.00011	0.99995	0.00039	0.	0.00003	0.99999	0.	-0.00176	0.00035	0.99999-0.		1.00000	0.99647-0.00047	
0.010	0.00023	0.99979	0.00077	0.00002	0.00003	0.99998	0.00001-0.00351	0.00071	0.99997-0.			1.00000	0.98596-0.00187	
0.050	0.00113	0.99474	0.00384	0.00047	0.00004	0.99948	0.00021-0.01754	0.00353	0.99933	0.00003	0.99996	0.70190-0.04024		
0.100	0.00226	0.97913	0.00762	0.00186	0.00008	0.99792	0.00083-0.03503	0.00705	0.99730	0.00015	0.99984	0.22965-0.10502		
0.150	0.00339	0.95361	0.01126	0.00416	0.00013	0.99532	0.00187-0.05241	0.01057	0.99394	0.00034	0.99964	0.00118-0.12557		
0.200	0.00452	0.91892	0.01470	0.00734	0.00022	0.99170	0.00331-0.06964	0.01408	0.98925	0.00051	0.99936	0.04076-0.10118		
0.300	0.00677	0.82611	0.02072	0.01613	0.00045	0.98144	0.00739-0.10340	0.02108	0.97598	0.00137	0.99857	0.00212-0.02152		
0.400	0.00901	0.71053	0.02527	0.02777	0.00078	0.96729	0.01297-0.13591	0.02801	0.95770	0.00242	0.99746	0.01530-0.02204		
0.500	0.01123	0.58332	0.02801	0.04165	0.00119	0.94945	0.01995-0.16682	0.03487	0.93472	0.00377	0.99603	0.00818-0.02998		
0.600	0.01344	0.45526	0.02875	0.05707	0.00170	0.92818	0.02818-0.19579	0.04163	0.90740	0.00541	0.99429	0.00093-0.02253		
0.700	0.01562	0.33538	0.02740	0.07329	0.00230	0.90376	0.03750-0.22254	0.04828	0.87617	0.00732	0.99224	0.00194-0.01241		
0.800	0.01778	0.23018	0.02401	0.08958	0.00298	0.87653	0.04773-0.24682	0.05480	0.84148	0.00950	0.98989	0.00174-0.00469		
0.900	0.01991	0.14340	0.01873	0.10525	0.00374	0.84684	0.05868-0.26846	0.06117	0.80385	0.01193	0.98723	0.00041-0.00032		
1.000	0.02200	0.07626	0.01179	0.11970	0.00459	0.81505	0.07016-0.28732	0.06738	0.76380	0.01450	0.98427	0.00087-0.00139		
1.500	0.03181	-0.02714-0.03611	0.16066	0.00995	0.63753	0.12878-0.33885	0.09553	0.54554	0.03107	0.96512	0.00085	0.00176		
2.000	0.04023	0.01712-0.07760	0.14541	0.01682	0.45885	0.17570-0.32748	0.11795	0.33826	0.05117	0.93927	0.00031	0.00175		
3.000	0.05158	0.03298-0.08584	0.05298	0.05255	0.19068	0.20494-0.20861	0.14367	0.07144	0.09363	0.87093	0.00025-0.00046			
4.000	0.05510	0.00574-0.04548	0.00141	0.04666	0.05741	0.17219-0.08779	0.14666	0.01127	0.12755	0.78727	0.00024-0.00051			
5.000	0.05237	-0.00229-0.01275	-0.00547	0.05571	0.03639	0.12361-0.01659	0.13456	0.00967	0.14655	0.69649	0.00003-0.00029			
8.000	0.03101	0.00452	0.00955	0.01210	0.05327-0.00915	0.03442	0.02390	0.07544	0.03180	0.13214	0.44128	0.00026	0.00030	

SIN THETA/ LAMBDA	MO 5S4P J(1)	MO 5S4S J(0)	MO 5S3D J(2)	MO 5S3P J(1)	MO 5S3S J(0)	MO 5S2P J(1)	MO 5S2S J(0)	MO 5S1S J(0)	MO 4D4D J(0)	MO 4D4D J(2)	MO 4D4D J(4)	MO 4D4P J(1)	MO 4D4P J(3)	MO 4D4S J(2)
0.005	0.00416	0.00011-0.		0.00024	0.	0.00002	0.	0.	0.99918	0.00033	0.	-0.01434-0.		0.00013
0.010	0.00829	0.00045-0.00001	0.00048	0.00002	0.00005	0.	0.	0.	0.99672	0.00131	0.	-0.02864-0.00001	0.00005	0.00052
0.050	0.03744	0.01062-0.00013	0.00238	0.00039	0.00022	0.00002	0.	0.	0.92207	0.03047	0.00051-0.13816-0.00149	0.01253		0.01253
0.100	0.05384	0.03688-0.00057	0.00463	0.00155	0.00045	0.00009	0.	0.	0.73054	0.09865	0.00633-0.24742-0.01070	0.04606		0.04606
0.150	0.04355	0.06617-0.00136	0.00661	0.00344	0.00067	0.00020	0.00001	0.50805	0.16272	0.02192-0.31056-0.03050	0.09043			0.09043
0.200	0.01582	0.08685-0.00248	0.00819	0.00599	0.00088	0.00036	0.00001	0.31421	0.19896	0.04431-0.32589-0.05799	0.13382			0.13382
0.300	-0.03976	0.08587-0.00537	0.00962	0.01256	0.00128	0.00080	0.00003	0.07623	0.19086	0.08506-0.25695-0.11207	0.18481			0.18481
0.400	-0.05564	0.04896-0.00820	0.00833	0.01987	0.00163	0.00141	0.00005	-0.00868	0.13338	0.10098-0.14517-0.13651	0.17613			0.17613
0.500	-0.04105	0.01302-0.00984	0.00446	0.02637	0.00192	0.00217	0.00009	-0.02101	0.07571	0.09454-0.05674-0.12721	0.13084			0.13084
0.600	-0.01962	-0.00572-0.00957-0.00116	0.03083	0.00213	0.00306	0.00012	-0.00970	0.03471	0.07650	-0.00743-0.09862	0.07850			0.07850
0.700	-0.00411	-0.00917-0.00735-0.00736	0.03256	0.00225	0.00407	0.00017	0.00398	0.01093	0.05588	0.01113-0.06576	0.03651			0.03651
0.800	0.00308	-0.00484-0.00370-0.01301	0.03155	0.00225	0.00516	0.00022	0.01326	-0.00022	0.03723	0.01209-0.03759	0.00995			0.00995
0.900	0.00416	0.00117	0.00063-0.01727	0.02827	0.00214	0.00631	0.00027	0.01750	-0.00362	0.02259	0.00573-0.01742-0.00305			0.00305
1.000	0.00216	0.00569	0.00488-0.01976	0.02350	0.00192	0.00747	0.00034	0.01799	-0.00300	0.01219	-0.00189-0.00506-0.00672			0.00672
1.500	-0.00507	0.00315	0.01344-0.01207	0.00098-0.00079	0.01243	0.00074	0.00542	0.00684	-0.00089	-0.01145-0.00130	0.00836			0.00836
2.000	-0.00108	-0.00093	0.00680-0.00077-0.00174-0.00463	0.01394	0.00126	-0.00055	0.00657	0.00251	-0.00163-0.00725	0.00727				0.00727
3.000	0.00011	0.00131-0.00214-0.00023	0.00367-0.00834	0.00811	0.00255	-0.00094	0.00191	0.00341	0.00306	0.00235-0.00204				0.00204
4.000	-0.00073	0.00074-0.00204-0.00209	0.00170-0.00610	0.00177	0.00385	-0.00027	0.00037	0.00179	0.00139	0.00064-0.00223				0.00223
5.000	-0.00050	0.00005-0.00090-0.00139	0.00004-0.00276-0.00045	0.00486-0.00011	0.00010	0.00074	0.00038	0.00099-0.00099						0.00099
8.000	0.00012	0.	0.00004	0.00032	0.00030	0.00087	0.00088	0.00540	0.00048-0.00048	0.00055	0.00005	0.00020-0.00020		0.00020

SIN THETA/ LAMBDA	MO 4D3D J(0)	MO 4D3D J(2)	MO 4D3D J(4)	MO 4D3P J(1)	MO 4D3P J(3)	MO 4D3S J(2)	MO 4D2P J(1)	MO 4D2P J(3)	MO 4D2S J(2)	MO 4D1S J(2)	MO 4P4P J(0)	MO 4P4P J(2)	MO 4P4S J(1)	MO 4P3D J(1)
0.005	0.00002-0.00001-0.			0.00077	0.	-0.00001	0.00024	0.	-0.	0.	0.99967	0.00013-0.01311	0.00149	
0.010	0.00009-0.00004-0.			0.00155	0.	-0.00002	0.00048	0.	-0.	0.	0.99866	0.00053-0.02621	0.00298	
0.050	0.00224-0.00089-0.			0.00761	0.00003-0.00055	0.00237	0.	-0.00004	0.	0.96709	0.01307-0.12821	0.01465		
0.100	0.00870-0.00342-0.00004	0.01451	0.00027-0.00215	0.00474	0.	-0.00017	0.	0.87447	0.04883-0.23955	0.02794				0.02794
0.150	0.01868-0.00720-0.00020	0.02006	0.00087-0.00459	0.00709	0.00001-0.00039	0.00001	0.73848	0.09823-0.32100	0.03864					0.03864
0.200	0.03119-0.01169-0.00056	0.02378	0.00194-0.00759	0.00941	0.00003-0.00069	0.00002	0.58066	0.14983-0.36594	0.04587					0.04587
0.300	0.05931-0.02045-0.00223	0.02480	0.00547-0.01395	0.01395	0.00008-0.00155	0.00004	0.27936	0.22199-0.35244	0.04810					0.04810
0.400	0.08472-0.02570-0.00528	0.01759	0.01018-0.01864	0.01830	0.00020-0.00272	0.00006	0.07489	0.22777-0.25228	0.03486					0.03486
0.500	0.10190-0.02544-0.00921	0.00457	0.01471-0.01986	0.02238	0.00039-0.00417	0.00010	-0.01890	0.18190-0.13590	0.01093					0.01093
0.600	0.10896-0.01985-0.01308-0.01085	0.01770-0.01706	0.02613	0.00067-0.00588	0.00014-0.03705	0.11749-0.04727-0.01708								
0.700	0.10684-0.01055-0.01593-0.02544	0.01827-0.01081	0.02951	0.00106-0.00780	0.00019-0.02027	0.05992	0.00169-0.04319							
0.800	0.09796	0.00044-0.01717-0.03695	0.01625-0.00239	0.03245	0.00156-0.00987	0.00025	0.00385	0.02022	0.01816-0.06344					
0.900	0.08504	0.01129-0.01662-0.04430	0.01202	0.00673	0.03493	0.00218-0.01204	0.00031	0.02221-0.00110	0.01513-0.07607					
1.000	0.07047	0.02077-0.01445-0.04737	0.00631	0.01525	0.03693	0.00290-0.01425	0.00037	0.03137-0.00848	0.00400-0.08114					
1.500	0.01391	0.03766	0.00588-0.02499-0.02014	0.03010	0.03980	0.00775-0.02391	0.00078	0.00968	0.01294-0.02150-0.04286					
2.000	-0.00371	0.02663	0.01773	0.00057-0.02246	0.01409	0.03388	0.01270-0.02810	0.00124-0.00209	0.01214-0.00398-0.00111					
3.000	-0.00354	0.00703	0.01445	0.00848-0.00471-0.00637	0.01621	0.01617-0.02161	0.00206	0.00469-0.00036	0.00037	0.01212				
4.000	-0.00099	0.00134	0.00697	0.00355	0.00241-0.00556	0.00553	0.01276-0.01084	0.00251	0.00400	0.00058-0.00300	0.00509			
5.000	-0.00020	0.00014	0.00305	0.00098	0.00288-0.00244	0.00137	0.00823-0.00417	0.00253	0.00160	0.00203-0.00216	0.00140			
8.000	0.00001-0.00003	0.00028-0.00010	0.00073	0.00012-0.00023	0.00164	0.00035	0.00151-0.		0.00099	0.00056-0.00014				

SIN THETA/ LAMBDA	MO 4P3D J(3)	MO 4P3P J(0)	MO 4P3P J(2)	MO 4P3S J(1)	MO 4P2P J(0)	MO 4P2P J(2)	MO 4P2S J(1)	MO 4P1S J(1)	MO 4S4S J(0)	MO 4S3D J(2)	MO 4S3P J(1)	MO 4S3S J(0)	MO 4S2P J(1)	MO 4S2S J(0)
0.005	0.	0.00002	-0.00001	0.00100	0.00002	-0.	0.00021	0.00004	0.99973	-0.00001	0.00130	0.00002	0.00010	0.00004
0.010	0.	0.00009	-0.00004	0.00199	0.00002	-0.	0.00042	0.00007	0.99891	-0.00005	0.00260	0.00009	0.00020	0.00004
0.050	0.00007	0.00234	-0.00093	0.00981	0.00010	-0.00003	0.00209	0.00037	0.97305	-0.00131	0.01283	0.00227	0.00099	0.00014
0.100	0.00052	0.00919	-0.00363	0.01877	0.00035	-0.00013	0.00416	0.00074	0.89612	-0.00507	0.02459	0.00892	0.00197	0.00044
0.150	0.00167	0.02001	-0.00780	0.02609	0.00077	-0.00030	0.00621	0.00111	0.77997	-0.01085	0.03432	0.01947	0.00293	0.00094
0.200	0.00370	0.03399	-0.01298	0.03115	0.00136	-0.00053	0.00821	0.00148	0.63969	-0.01797	0.04123	0.03320	0.00386	0.00164
0.300	0.01040	0.06729	-0.02412	0.03304	0.00301	-0.00119	0.01206	0.00221	0.34995	-0.03307	0.04477	0.06640	0.00562	0.00360
0.400	0.01926	0.10042	-0.03261	0.02369	0.00528	-0.00209	0.01561	0.00295	0.12518	-0.04419	0.03426	0.10037	0.00715	0.00630
0.500	0.02761	0.12603	-0.03518	0.00551	0.00813	-0.00319	0.01874	0.00368	0.00017	-0.04720	0.01254	0.12776	0.00839	0.00966
0.600	0.03290	0.13983	-0.03063	-0.01728	0.01150	-0.00448	0.02139	0.00440	-0.04112	-0.04101	-0.01482	0.14378	0.00927	0.01360
0.700	0.03361	0.14094	-0.01980	-0.04009	0.01530	-0.00589	0.02347	0.00512	-0.03364	-0.02723	-0.04246	0.14680	0.00971	0.01802
0.800	0.02959	0.13111	-0.00487	-0.05918	0.01944	-0.00738	0.02491	0.00584	-0.00841	-0.00895	-0.06568	0.13799	0.00959	0.02279
0.900	0.02170	0.11361	0.01152	-0.07227	0.02380	-0.00888	0.02568	0.00655	0.01565	0.01047	-0.08170	0.12031	0.00915	0.02777
1.000	0.01136	0.09206	0.02698	-0.07858	0.02827	-0.01032	0.02576	0.00724	0.03072	0.02825	-0.08962	0.09744	0.00809	0.03281
1.500	-0.03406	0.00649	0.05493	-0.04264	0.04818	-0.01461	0.01683	0.01058	0.01151	0.05801	-0.04926	0.00190	0.00387	0.05386
2.000	-0.03734	-0.00410	0.02797	-0.00142	0.05710	-0.01162	-0.00048	0.01357	-0.00397	0.02781	-0.00227	-0.00685	-0.02031	0.05971
3.000	-0.00851	0.01451	-0.00165	-0.00089	0.04351	0.00636	-0.02320	0.01810	0.00567	-0.00934	-0.00123	0.01571	-0.03567	0.03423
4.000	0.00290	0.01081	0.00239	-0.00803	0.02065	0.01805	-0.02021	0.02032	0.00309	-0.00863	-0.00893	0.00712	-0.02586	0.00734
5.000	0.00389	0.00424	0.00596	-0.00533	0.00672	0.01912	-0.00966	0.02038	0.00015	-0.00379	-0.00588	0.00014	-0.01162	-0.00194
8.000	0.00101	-0.00065	0.00337	0.00127	-0.00160	0.00783	0.00342	0.01398	0.00062	0.00018	0.00137	0.00127	0.00372	0.00376

SIN THETA/ LAMBDA	MO 4S1S J(0)	MO 3D3D J(0)	MO 3D3D J(2)	MO 3D3D J(4)	MO 3D3P J(1)	MO 3D3P J(3)	MO 3D3S J(2)	MO 3D2P J(1)	MO 3D2P J(3)	MO 3D2S J(2)	MO 3D1S J(2)	MO 3P3P J(0)	MO 3P3P J(2)	MO 3P3S J(1)
0.005	0.	0.99996	0.00002	0.	-0.00450	-0.	0.00002	0.00114	0.	-0.	0.	0.99996	0.00002	-0.00480
0.010	0.	0.99985	0.00006	0.	-0.00900	-0.	0.00006	0.00228	0.	-0.00001	0.	0.99984	0.00006	-0.00960
0.050	0.00001	0.99624	0.00150	0.	-0.04488	-0.00004	0.00151	0.01140	0.	-0.00024	0.	0.99599	0.00160	-0.04787
0.100	0.00002	0.98505	0.00596	0.00002	-0.08889	-0.00033	0.00599	0.02274	0.00002	-0.00097	0.00002	0.98406	0.00636	-0.09486
0.150	0.00004	0.96671	0.01320	0.00008	-0.13119	-0.00110	0.01328	0.03396	0.00008	-0.00216	0.00004	0.96448	0.01410	-0.14010
0.200	0.00006	0.94170	0.02298	0.00025	-0.17100	-0.00256	0.02314	0.04500	0.00018	-0.00382	0.00006	0.93769	0.02459	-0.18278
0.300	0.00013	0.87420	0.04867	0.00119	-0.24054	-0.00815	0.04919	0.06632	0.00061	-0.00845	0.00014	0.86506	0.05236	-0.25773
0.400	0.00024	0.78871	0.07967	0.00345	-0.29338	-0.01788	0.08087	0.08627	0.00140	-0.01467	0.00025	0.77235	0.08626	-0.31525
0.500	0.00037	0.69222	0.11230	0.00754	-0.32749	-0.03166	0.11444	0.10451	0.00266	-0.02223	0.00039	0.66691	0.12234	-0.35288
0.600	0.00053	0.59158	0.14318	0.01372	-0.34286	-0.04868	0.14632	0.12073	0.00442	-0.03086	0.00055	0.55623	0.15681	-0.37026
0.700	0.00071	0.49265	0.16972	0.02192	-0.34119	-0.06763	0.17355	0.13473	0.00672	-0.04023	0.00075	0.44716	0.18645	-0.36884
0.800	0.00093	0.39991	0.19023	0.03178	-0.32534	-0.08696	0.19406	0.14638	0.00955	-0.05002	0.00097	0.34528	0.20897	-0.35146
0.900	0.00117	0.31633	0.20401	0.04271	-0.29878	-0.10515	0.20676	0.15563	0.01286	-0.05992	0.00121	0.25457	0.22313	-0.32180
1.000	0.00144	0.24348	0.21110	0.05403	-0.26506	-0.12096	0.21149	0.16248	0.01660	-0.05964	0.00148	0.17741	0.22868	-0.28382
1.500	0.00315	0.03318	0.17574	0.09716	-0.08436	-0.14608	0.14818	0.16546	0.03851	-0.10757	0.00305	-0.00817	0.16205	-0.08285
2.000	0.00540	-0.01890	0.10545	0.10185	-0.01362	-0.10407	0.04986	0.13504	0.05742	-0.11887	0.00484	-0.00251	0.06043	-0.00833
3.000	0.01088	-0.01315	0.02574	0.06038	0.03314	-0.01628	-0.02767	0.06157	0.06618	-0.08518	0.00803	0.04348	-0.00508	-0.00806
4.000	0.01640	-0.00360	0.00478	0.02727	0.01322	0.01022	-0.02152	0.02054	0.05008	-0.04138	0.00970	0.02918	0.00880	-0.02354
5.000	0.02068	-0.00073	0.00049	0.01167	0.00358	0.01124	-0.00917	0.00500	0.03171	-0.01561	0.00974	0.01106	0.01752	-0.01447
8.000	0.02294	0.00006	-0.00014	0.00109	-0.00037	0.00277	0.00046	-0.00086	0.00624	0.00134	0.00576	-0.00180	0.00930	0.00360

SIN THETA/ LAMBDA	MO 3P2P J(0)	MO 3P2P J(2)	MO 3P2S J(1)	MO 3P1S J(1)	MO 3S3S J(0)	MO 3S2P J(1)	MO 3S2S J(0)	MO 3S1S J(0)	MO 2P2P J(0)	MO 2P2P J(2)	MO 2P2S J(1)	MO 2P1S J(1)	MO 2S2S J(0)	MO 2S1S J(0)
0.005	0.	-0.	0.00069	0.00011	0.99996	0.00034	0.	0.00002	1.00000	0.	-0.00157	0.00032	0.99999	-0.
0.010	0.00001	-0.00001	0.00139	0.00021	0.99984	0.00068	0.00002	0.00003	0.99998	0.00017	-0.00314	0.00064	0.99998	-0.
0.050	0.00034	-0.00014	0.00694	0.00106	0.99597	0.00340	0.00038	0.00003	0.99958	0.00017	-0.01559	0.00321	0.99946	0.00003
0.100	0.00136	-0.00054	0.01381	0.00212	0.98398	0.00675	0.00151	0.00006	0.99834	0.00066	-0.03134	0.00642	0.99783	0.00012
0.150	0.00306	-0.00122	0.02056	0.00318	0.96429	0.01000	0.00338	0.00011	0.99627	0.00149	-0.04691	0.00962	0.99512	0.00028
0.200	0.00540	-0.00215	0.02711	0.00424	0.93734	0.01311	0.00597	0.00018	0.99337	0.00265	-0.06237	0.01282	0.99134	0.00050
0.300	0.01195	-0.00472	0.03941	0.00635	0.86407	0.01872	0.01318	0.00038	0.98516	0.00591	-0.09279	0.01920	0.98063	0.00112
0.400	0.02075	-0.00811	0.05028	0.00846	0.77022	0.02327	0.02285	0.00065	0.97380	0.01041	-0.12232	0.02553	0.96583	0.00199
0.500	0.03146	-0.01213	0.05934	0.01055	0.66302	0.02648	0.03457	0.00100	0.95942	0.01506	-0.15068	0.03180	0.94714	0.00309
0.600	0.04370	-0.01657	0.06634	0.01263	0.55000	0.02818	0.04786	0.00143	0.94219	0.02277	-0.17762	0.03801	0.92480	0.00444
0.700	0.05701	-0.02118	0.07108	0.01470	0.43816	0.02824	0.06221	0.00193	0.92229	0.03044	-0.20293	0.04413	0.89909	0.00601
0.800	0.07096	-0.02574	0.07349	0.01674	0.33334	0.02663	0.07707	0.00250	0.89995	0.03895	-0.22640	0.05015	0.87032	0.00781
0.900	0.08508	-0.03002	0.07358	0.01876	0.23989	0.02340	0.09192	0.00315	0.87540	0.04816	-0.24787	0.05606	0.83884	0.00982
1.000	0.09897	-0.03382	0.07146	0.02075	0.16050	0.01866	0.10627	0.00387	0.84889	0.05795	-0.26722	0.06185	0.80503	0.01204
1.500	0.15358	-0.04099	0.03542	0.03024	0.02328	-0.02074	0.15750	0.00844	0.69614	0.11059	-0.32988	0.08862	0.61408	0.02589
2.000	0.17003	-0.02663	-0.01632	0.03867	-0.00422	-0.06430	0.16134	0.01441	0.53267	0.15823	-0.33821	0.11096	0.41908	0.04325
3.000	0.12015	0.02585	-0.07123	0.05122	0.04182	-0.09495	0.08352	0.02877	0.25954	0.20505	-0.25084	0.14013	0.12978	0.08202
4.000	0.05506	0.05437	-0.05650	0.05712	0.01631	-0.06497	0.01594	0.04300	0.09963	0.19066	-0.13189	0.14935	0.00654	0.11670
5.000	0.01741	0.05449	-0.02584	0.05695	-0.00022	-0.02816	-0.00543	0.05383	0.02592	0.14943	-0.04637	0.14343	-0.01547	0.14029
8.000	-0.00446	0.02157	0.00961	0.03864	0.00340	0.00967	0.00992	0.05896	-0.01077	0.04973	0.02482	0.09125	0.02735	0.14338

SIN THETA/ LAMBDA	MO 1S1S J(0)	TC 5S5S J(0)	TC 5S4D J(2)	TC 5S4P J(1)	TC 5S4S J(0)	TC 5S3D J(2)	TC 5S3P J(1)	TC 5S3S J(0)	TC 5S2P J(1)	TC 5S2S J(0)	TC 5S1S J(0)	TC 4D4D J(0)	TC 4D4D J(2)	TC 4D4D J(4)
0.005	1.00000	0.99718	-0.00032	0.00405	0.00010	-0.	0.00025	0.	0.00002	-0.	0.	0.99939	0.00024	0.
0.010	1.00000	0.98876	-0.00128	0.00809	0.00041	-0.00001	0.00050	0.00002	0.00005	-0.	0.	0.99758	0.00097	0.
0.050	0.99997	0.75352	-0.02864	0.03703	0.00996	-0.00013	0.00250	0.00040	0.00024	0.00002	0.	0.94160	0.02300	0.00026
0.100	0.99987	0.31300	-0.08319	0.05564	0.03536	-0.00056	0.00487	0.00158	0.00049	0.00009	0.	0.78908	0.07937	0.00354
0.150	0.99971	0.04080	-0.11425	0.04934	0.06551	-0.00132	0.00698	0.00352	0.00072	0.00021	0.00001	0.59342	0.14218	0.01378
0.200	0.99948	-0.03981	-0.10704	0.02434	0.08934	-0.00241	0.00869	0.00615	0.00096	0.00037	0.00001	0.40270	0.18924	0.03137
0.300	0.99883	-0.00751	-0.03761	-0.03520	0.09691	-0.00529	0.01045	0.01299	0.00140	0.00084	0.00003	0.12957	0.21068	0.07371
0.400	0.99792	0.01747	0.01725	-0.06054	0.06278	-0.00830	0.00949	0.02081	0.00178	0.00149	0.00006	0.00778	0.16618	0.10135
0.500	0.99676	0.01293	0.03479	-0.05077	0.02258	-0.01030	0.00581	0.02806	0.00211	0.00230	0.00009	-0.02310	0.10548	0.10570
0.600	0.99534	0.00349	0.03036	-0.02832	-0.00236	-0.01049	0.00011	0.03341	0.00235	0.00325	0.00013	-0.01648	0.05523	0.09326
0.700	0.99366	-0.00164	0.01913	-0.00919	-0.01015	-0.00866	-0.00650	0.03604	0.00249	0.00433	0.00018	-0.00100	0.02229	0.07325
0.800	0.99174	-0.00247	0.00894	0.00147	-0.00741	-0.00518	-0.01283	0.03575	0.00253	0.00551	0.00023	0.01186	0.00443	0.05242
0.900	0.98956	-0.00120	0.00226	0.00474	-0.00103	-0.00075	-0.01794	0.03290	0.00244	0.00675	0.00029	0.01923	-0.00298	0.03438
1.000	0.98713	0.00046	-0.00103	0.00357	0.00472	0.00387	-0.02131	0.02820	0.00223	0.00802	0.00036	0.02174	-0.00424	0.02048
1.500	0.97140	0.00136	0.00168	-0.00597	0.00470	0.01521	-0.01517	0.00257	-0.00056	0.01354	0.00079	0.00844	0.00749	-0.00127
2.000	0.95001	-0.00027	0.00240	-0.00180	-0.00101	0.00880	-0.00183	-0.00234	-0.00476	0.01574	0.00137	-0.00018	0.00854	0.00240
3.000	0.89269	0.00035	-0.00048	0.00027	0.00143	-0.00217	0.00010	0.00409	-0.00939	0.00987	0.00277	-0.00131	0.00277	0.00440
4.000	0.82088	-0.00007	-0.00081	-0.00081	0.00099	-0.00249	-0.00234	0.00224	-0.00730	0.00252	0.00422	-0.00044	0.00061	0.00242
5.000	0.74073	0.00005	-0.00035	-0.00064	0.00011	-0.00118	-0.00174	0.00018	-0.00355	-0.00039	0.00538	-0.00011	0.00010	0.00111
8.000	0.50083	0.00039	0.00026	-0.00002	0.00004	0.00004	0.00034	0.00029	0.00095	0.00090	0.00618	0.00024	-0.00026	0.00039

SIN THETA/ LAMBDA	TC 4D4P J(1)	TC 4D4P J(3)	TC 4D4S J(2)	TC 4D3D J(0)	TC 4D3D J(2)	TC 4D3D J(4)	TC 4D3P J(1)	TC 4D3P J(3)	TC 4D3S J(2)	TC 4D2P J(1)	TC 4D2P J(3)	TC 4D2S J(2)	TC 4D1S J(2)	TC 4P4P J(0)
0.005	-0.01376-0.		0.00012	0.00002-0.00001-0.			C.00086	0.	-0.00001	0.00026	0.	-0.	0.	0.99970
0.010	-0.02749-0.00001		0.00047	0.00009-0.00004-0.			C.00171	0.	-0.00002	0.00051	0.	-0.	0.	0.99880
0.050	-0.13339-0.00120		0.01146	0.00219-0.00087-0.			C.00844	0.00003-0.00059	0.00257	0.	-0.00005	0.		0.97051
0.100	-0.24309-0.00882		0.04268	0.00854-0.00337-0.00004			C.01618	0.00027-0.00228	0.00512	0.	-0.00018	0.		0.88692
0.150	-0.31341-0.02590		0.08552	0.01846-0.00715-0.00017			C.02259	0.00086-0.00490	0.00767	0.00001-0.00041	0.00001	0.00001	0.76241	
0.200	-0.34012-0.05103		0.12984	0.03105-0.01173-0.00049			C.02716	0.00193-0.00817	0.01018	0.00003-0.00072	0.00002	0.00002	0.61490	
0.300	-0.29098-0.10667		0.19055	0.06011-0.02109-0.00203			C.02974	0.00555-0.01533	0.01511	0.00008-0.00161	0.00004	0.00004	0.32122	
0.400	-0.18206-0.14041		0.19435	0.08768-0.02750-0.00496			C.02356	0.01057-0.02111	0.01984	0.00020-0.00284	0.00007	0.00007	0.10631	
0.500	-0.08341-0.14075		0.15542	0.10790-0.02863-0.00895			C.01070	0.01572-0.02350	0.02431	0.00039-0.00437	0.00011	0.00011	0.00490	
0.600	-0.02089-0.11709		0.10172	0.11820-0.02420-0.01315-0.00555			C.01956-0.02167	0.02844	0.00068-0.00617	0.00015-0.03702				
0.700	0.00782-0.08407		0.05370	0.11879-0.01544-0.01663-0.02182			C.02108-0.01595	0.03220	0.00107-0.00820	0.00021-0.02700				
0.800	0.01435-0.05251		0.02000	0.11165-0.00420-0.01865-0.03555			C.01989-0.00747	0.03552	0.00157-0.01041	0.00027-0.00358				
0.900	0.00982-0.02778		0.00101	0.09939	0.00747-0.01888-0.04525		C.01620	0.00229	0.03836	0.00220-0.01274	0.00033	0.00033	0.01739	
1.000	0.00176-0.01111-0.00664		0.08449	0.01820-0.01736-0.05049			C.01063	0.01193	0.04070	0.00295-0.01514	0.00041	0.00041	0.03007	
1.500	-0.01383	0.00010	0.00782	0.02004	0.04181	0.00348-0.03138-0.01964	0.03339	0.04484	0.00809-0.02599	0.00085	0.01353-0.03134	0.00135-0.00206		
2.000	-0.00314-0.00790		0.00911-0.00308	0.03191	0.01847-0.00182-0.02555	0.01816	0.03915	0.01353-0.03134	0.00135-0.00206					
3.000	0.00366-0.00330-0.00198-0.00442		0.00917	0.01712	0.00998-0.00669-0.00660	0.01974	0.01824-0.02537	0.00229	0.00466					
4.000	0.00182	0.00057-0.00273-0.00134	0.00188	0.00869	0.00456	0.00237-0.00673	0.00712	0.01496-0.01336	0.00283	0.00458				
5.000	0.00054	0.00119-0.00132-0.00030	0.00025	0.00391	0.00136	0.00336-0.00316	0.00192	0.00993-0.00542	0.00290	0.00201				
8.000	0.00023	0.00009-0.00006	0.00002-0.00005	0.00039-0.00011	0.00093	0.00011-0.00026	0.00208	0.00036	0.00181-0.00016					

SIN THETA/ LAMBDA	TC 4P4P J(2)	TC 4P4S J(1)	TC 4P3D J(1)	TC 4P3D J(3)	TC 4P3P J(0)	TC 4P3P J(2)	TC 4P3S J(1)	TC 4P2P J(0)	TC 4P2P J(2)	TC 4P2S J(1)	TC 4P1S J(1)	TC 4S4S J(0)	TC 4S3D J(2)	TC 4S3P J(1)
0.005	0.00012-0.01248		0.00140	0.	0.00002-0.00001	0.00100	0.00002-0.		0.00021	0.00004	0.99975-0.00001	0.00126		
0.010	0.00048-0.02493		0.00280	0.	0.00009-0.00004	0.00200	0.00002-0.		0.00042	0.00007	0.99901-0.00005	0.00251		
0.050	0.01172-0.12225		0.01380	0.00006	0.00222-0.00088	0.00985	0.00010-0.00003	0.00210	0.00037	0.97552-0.00118	0.01240			
0.100	0.04413-0.23001		0.02641	0.00045	0.00873-0.00344	0.01890	0.00035-0.00013	0.00418	0.00075	0.90526-0.00459	0.02383			
0.150	0.08989-0.31173		0.03675	0.00146	0.01903-0.00742	0.02645	0.00075-0.00029	0.00624	0.00112	0.79814-0.00986	0.03343			
0.200	0.13941-0.36089		0.04401	0.00326	0.03237-0.01241	0.03188	0.00132-0.00052	0.00827	0.00150	0.66689-0.01644	0.04046			
0.300	0.21551-0.36263		0.04748	0.00933	0.06475-0.02342	0.03495	0.00293-0.00116	0.01216	0.00224	0.38740-0.03072	0.04502			
0.400	0.23282-0.27535		0.03647	0.01764	0.09783-0.03238	0.02714	0.00514-0.00203	0.01576	0.00298	0.15813-0.04198	0.03628			
0.500	0.19736-0.16183		0.01472	0.02594	0.12473-0.03606	0.01031	0.00793-0.00312	0.01899	0.00372	0.01915-0.04622	0.01652			
0.600	0.13705-0.06734-0.01205		0.03185	0.14095-0.03301-0.01178	0.01122-0.00438	0.02174	0.00446-0.03663-0.04198-0.00970							
0.700	0.07746-0.00907-0.03826		0.03375	0.14498-0.02366-0.03485	0.01495-0.00577	0.02396	0.00519-0.03851-0.03021-0.03716							
0.800	0.03242	0.01568-0.05981	0.03117	0.13795-0.00976-0.05515	0.01903-0.00725	0.02557	0.00591-0.01648-0.01344-0.06135							
0.900	0.00522	0.01786-0.07454	0.02462	0.12260	0.00628-0.07016	0.02336-0.00876	0.02652	0.00653	0.00886	0.00531-0.07927				
1.000	-0.00689	0.00875-0.08198	0.01525	0.10225	0.02215-0.07875	0.02783-0.01023	0.02681	0.00734	0.02728	0.02333-0.00958				
1.500	0.01161-0.02348-0.04975-0.03213		0.01152	0.05731-0.04937	0.04834-0.01501	0.01887	0.01073	0.01593	0.06038-0.05660					
2.000	0.01409-0.00619-0.00473-0.03983-0.00516		0.03282-0.00447	0.05867-0.01277	0.00172	0.01380-0.00408	0.03282-0.00569							
3.000	-0.00004	0.00092	0.01321-0.01095	0.01455-0.00128	0.00035	0.04704	0.00500-0.02318	0.01852	0.00568-0.00874	0.00008				
4.000	0.00036-0.00308	0.00605	0.00248	0.01213	0.00181-0.00824	0.02356	0.01798-0.02190	0.02099	0.00375-0.00960-0.00914					
5.000	0.00207-0.00252	0.00180	0.00418	0.00515	0.00598-0.00611	0.00829	0.02007-0.01134	0.02127	0.00039-0.00451-0.00670					
8.000	0.00133	0.00063-0.00015	0.00119-0.00065	0.00379	0.00122-0.00166	0.00878	0.00341	0.01506	0.00047	0.00015	0.00131			

SIN THETA/ LAMBDA	TC 4S3S J(0)	TC 4S2P J(1)	TC 4S2S J(0)	TC 4S1S J(0)	TC 3D3D J(0)	TC 3D3D J(2)	TC 3D3D J(4)	TC 3D3P J(1)	TC 3D3P J(3)	TC 3D3S J(2)	TC 3D2P J(1)	TC 3D2P J(3)	TC 3D2S J(2)	TC 3D1S J(2)
0.005	0.00002	0.00010	0.00006	0.	0.99997	0.00001	0.	-0.00434-0.	0.00001	0.00112	0.	-0.	0.	0.
0.010	0.00009	0.00020	0.00006	0.	0.99986	0.00006	0.	-0.00867-0.	0.00006	0.00224	0.	-0.00001	0.	0.
0.050	0.00215	0.00098	0.00015	0.00001	0.99653	0.00139	0.	-0.04324-0.00004	0.00141	0.01121	0.	-0.00023	0.	0.
0.100	0.00846	0.00195	0.00044	0.00002	0.98620	0.00550	0.00001-0.08571-0.00030	0.00558	0.02237	0.00002-0.00092	0.00002	0.00002	0.00002	0.00002
0.150	0.01852	0.00290	0.00093	0.00003	0.96925	0.01220	0.00007-0.12664-0.00099	0.01239	0.03341	0.00007-0.00207	0.00003	0.00003	0.00003	0.00003
0.200	0.03167	0.00383	0.00160	0.00006	0.94608	0.02128	0.00021-0.16534-0.00229	0.02162	0.04429	0.00017-0.00366	0.00006	0.00006	0.00006	0.00006
0.300	0.06386	0.00558	0.00350	0.00013	0.88326	0.04529	0.00102-0.23362-0.00735	0.04615	0.06533	0.00056-0.00810	0.00014	0.00014	0.00014	0.00014
0.400	0.09760	0.00712	0.00611	0.00023	0.80304	0.07464	0.00297-0.28671-0.01621	0.07627	0.08512	0.00130-0.01408	0.00024	0.00024	0.00024	0.00024
0.500	0.12593	0.00839	0.00938	0.00036	0.71157	0.10605	0.00654-0.32251-0.02891	0.10865	0.10329	0.00247-0.02138	0.00038	0.00038	0.00038	0.00038
0.600	0.14402	0.00931	0.01322	0.00051	0.61499	0.13644	0.01202-0.34073-0.04482	0.14000	0.11959	0.00413-0.02973	0.00054	0.00054	0.00054	0.00054
0.700	0.14980	0.00984	0.01755	0.00070	0.51878	0.16333	0.01943-0.34261-0.06282	0.15752	0.13379	0.00629-0.03886	0.00073	0.00073	0.00073	0.00073
0.800	0.14384	0.00991	0.02224	0.00091	0.42725	0.18499	0.02849-0.33053-0.08156	0.18912	0.14576	0.00895-0.04845	0.00094	0.00094	0.00094	0.00094
0.900	0.12853	0.00949	0.02717	0.00115	0.34347	0.20053	0.03876-0.30749-0.09964	0.20351	0.15544	0.01210-0.05821	0.00118	0.00118	0.00118	0.00118
1.000	0.10718	0.00857	0.03221	0.00141	0.26926	0.20976	0.04963-0.27672-0.11584	0.21059	0.16283	0.01566-0.06787	0.00144	0.00144	0.00144	0.00144
1.500	0.00695-0.00269	0.05397	0.00310	0.04508	0.18390	0.09449-0.09885-0.14780	0.15768	0.16908	0.03706-0.10683	0.00299	0.00299	0.00299	0.00299	0.00299
2.000	-0.00857-0.01915	0.06152	0.00532-0.01689	0.11528	0.10371	0.00708-0.11134	0.05989	0.14113	0.05644-0.12062	0.00477	0.00477	0.00477	0.00477	0.00477
3.000	0.01502-0.03661	0.03793	0.01077-0.01481	0.03017	0.06541	0.03546-0.02135-0.02678	0.06751	0.06772-0.09038	0.00802	0.00802	0.00802	0.00802	0.00802	0.00802
4.000	0.00855-0.02816	0.00953	0.01639-0.00436	0.00603	0.03071	0.01527	0.00937-0.02353	0.02375	0.05298-0.04592	0.00983	0.00983	0.00983	0.00983	0.00983
5.000	0.00065-0.01361	-0.00155	0.02088-0.00096	0.00076	0.01349	0.00447	0.01186-0.01069	0.00629	0.03443-0.01826	0.01003	0.01003	0.01003	0.01003	0.01003
8.000	0.00113	0.00368	0.00351	0.02390	0.00006-0.00017	0.00132-0.00038	0.00317	0.00039-0.00091	0.00711	0.00125	0.00618	0.00618	0.00618	0.00618

SIN THETA/ LAMBDA	TC 3P3P J(0)	TC 3P3P J(2)	TC 3P3S J(1)	TC 3P2P J(0)	TC 3P2P J(2)	TC 3P2S J(1)	TC 3P1S J(1)	TC 3S3S J(0)	TC 3S2P J(1)	TC 3S2S J(0)	TC 3S1S J(0)	TC 2P2P J(0)	TC 2P2P J(2)	TC 2P2S J(1)
0.005	0.99996	0.00002-0.00465	0.	-0.	0.00068	0.00010	0.99996	0.00033	0.	0.00002	1.00000	0.	-0.00153	0.
0.010	0.99985	0.00006-0.00930	0.00001-0.00001	0.00137	0.00021	0.99985	0.00066	0.00001	0.00002	0.99998	0.00001-0.00306	0.00001	0.00306	0.00001
0.050	0.99625	0.00150-0.04638	0.00033-0.00013	0.00682	0.00104	0.99621	0.00330	0.00036	0.00003	0.99961	0.00016-0.01528	0.00016	0.01528	0.00016
0.100	0.98507	0.00595-0.09195	0.00130-0.00052	0.01357	0.00209	0.98494	0.00656	0.00143	0.00006	0.99842	0.00063-0.03053	0.00063	0.03053	0.00063
0.150	0.96672	0.01322-0.13593	0.00291-0.00116	0.02021	0.00313	0.96540	0.00972	0.00321	0.00011	0.99646	0.00142-0.04571	0.00142	0.04571	0.00142
0.200	0.94157	0.02308-0.17759	0.00514-0.00204	0.02667	0.00417	0.94098	0.01276	0.00568	0.00017	0.99371	0.00251-0.06078	0.00251	0.06078	0.00251
0.300	0.87315	0.04933-0.25137	0.01137-0.00449	0.03884	0.00625	0.87169	0.01827	0.01257	0.00036	0.98592	0.00561-0.09046	0.00561	0.09046	0.00561
0.400	0.78528	0.08166-0.30912	0.01978-0.00774	0.04967	0.00833	0.78245	0.02279	0.02181	0.00052	0.97513	0.00989-0.11932	0.00989	0.11932	0.00989
0.500	0.68453	0.11654-0.34838	0.03004-0.01161	0.05882	0.01039	0.67977	0.02608	0.03306	0.00096	0.96146	0.01526-0.14709	0.01526	0.14709	0.01526
0.600	0.57773	0.15048-0.36854	0.04181-0.01590	0.06603	0.01244	0.57054	0.02794	0.04586	0.00137	0.94506	0.02166-0.17355	0.02166	0.17355	0.02166
0.700	0.47125	0.18042-0.37066	0.05468-0.02040	0.07111	0.01447	0.46127	0.02827	0.05976	0.00185	0.92611	0.02898-0.19848	0.02898	0.19848	0.02898
0.800	0.37043	0.20409-0.35710	0.06823-0.02490	0.07396	0.01649	0.35755	0.02701	0.07424	0.00240	0.90479	0.03712-0.22170	0.03712	0.22170	0.03712
0.900	0.27927	0.22012-0.33107	0.08205-0.02917	0.07459	0.01848	0.26368	0.02420	0.08882	0.00302	0.88133	0.04595-0.24306	0.04595	0.24306	0.04595
1.000	0.20033	0.22805-0.29615	0.09574-0.03303	0.07308	0.02045	0.18253	0.01993	0.10303	0.00371	0.85596	0.05536-0.26242	0.05536	0.26242	0.05536
1.500	-0.00235	0.17234-0.09737	0.15133-0.04154	0.04004	0.02985-0.01882-0.01732	0.15588	0.00812	0.70880	0.10650-0.32703	0.00812	0.70880	0.10650	0.32703	0.00812
2.000	-0.00634	0.07073	0.00389	0.17117-0.02924-0.01082	0.03825-0.00922-0.06070	0.15387	0.01389	0.54929	0.15391-0.33944	0.01389	0.54929	0.15391	0.33944	0.01389
3.000	0.04339-0.00489-0.00506	0.12670	0.02217-0.07042	0.05100	0.04277-0.09605	0.09096	0.02789	0.27660	0.20404-0.25986	0.02789	0.27660	0.20404	0.25986	0.02789
4.000	0.03195	0.00720-0.02390	0.06114	0.05335-0.05989	0.05739	0.01935-0.06942	0.02060	0.04205	0.11124	0.19407-0.14272	0.04205	0.11124	0.19407	0.14272
5.000	0.01309	0.01730-0.01619	0.02093	0.05587-0.02960	0.05781	0.00087-0.03236-0.00459	0.05318	0.03198	0.15521-0.05461	0.05318	0.03198	0.15521	0.05461	0.05318
8.000	-0.00178	0.01017	0.00341-0.00450	0.02349	0.00935	0.04045	0.00300	0.00941	0.00912	0.06007-0.01097	0.05390	0.02450	0.02450	0.05390

SIN THETA/ LAMBDA	TC 2P1S J(1)	TC 2S2S J(0)	TC 2S1S J(0)	TC 1S1S J(0)	PD 4D4D J(0)	PD 4D4D J(2)	PD 4D4D J(4)	PD 4D4P J(1)	PD 4D4P J(3)	PD 4D4S J(2)	PD 4D3D J(0)	PD 4D3D J(2)	PD 4D3D J(4)	PD 4D3P J(1)
0.005	0.00031	0.99999-0.		1.00000	0.99946	0.00022	0.	-0.01227-0.		0.00010	0.00002-0.00001-0.			0.00087
0.010	0.00063	0.99998-0.		1.00000	0.99783	0.00087	0.	-0.02452-0.00001		0.00038	0.00007-0.00003-0.			0.00174
0.050	0.00314	0.99948	0.00003	0.99997	0.94766	0.02059	0.00025-0.11957-0.00090			0.00940	0.00156-0.00066-0.			0.00860
0.100	0.00628	0.99794	0.00012	0.99988	0.81179	0.07066	0.00325-0.22133-0.00665			0.03538	0.00650-0.00257-0.00002			0.01664
0.150	0.00941	0.99536	0.00027	0.99972	0.63753	0.12666	0.01215-0.29280-0.01985			0.07215	0.01420-0.00555-0.00010			0.02363
0.200	0.01254	0.99177	0.00047	0.99951	0.46471	0.17085	0.02680-0.32939-0.04001			0.11224	0.02422-0.00929-0.00029			0.02915
0.300	0.01878	0.98159	0.00107	0.99889	0.19793	0.20382	0.06203-0.31232-0.08909			0.17638	0.04857-0.01763-0.00127			0.03474
0.400	0.02497	0.96750	0.00189	0.99802	0.05211	0.18051	0.08881-0.22750-0.12744			0.19737	0.07399-0.02473-0.00329			0.03259
0.500	0.03112	0.94970	0.00295	0.99691-0.00754		0.13382	0.09988-0.13262-0.14113			0.17758	0.09567-0.02843-0.00635			0.02368
0.600	0.03719	0.92840	0.00424	0.99556-0.02025		0.08623	0.09700-0.05847-0.13172			0.13515	0.11057-0.02776-0.01002			0.01019
0.700	0.04319	0.90385	0.00574	0.99396-0.01293		0.04806	0.08504-0.01276-0.10806			0.08814	0.11760-0.02289-0.01369			0.00526
0.800	0.04910	0.87634	0.00746	0.99212-0.00039		0.02182	0.06882-0.00878-0.07939			0.04797	0.11721-0.01483-0.01670			0.02024
0.900	0.05491	0.84619	0.00938	0.99004-0.01050		0.00620	0.05197-0.01413-0.05228			0.01924	0.11083-0.00490-0.01856			0.03294
1.000	0.06060	0.81374	0.01151	0.98773-0.01757		0.00147	0.03671-0.01067-0.03021			0.00198	0.10027-0.00559-0.01903			0.04228
1.500	0.08702	0.62912	0.02480	0.97271-0.01388		0.00399	0.00045-0.01430-0.00325			0.00205	0.03560-0.03985-0.00462			0.04063
2.000	0.10927	0.43774	0.04153	0.95226-0.00210		0.00929	0.00040-0.00742-0.00593			0.01074	0.00197-0.03809-0.01375			0.01038
3.000	0.13905	0.14526	0.07936	0.89730-0.00172		0.00426	0.00477-0.00391-0.00537			0.00047-0.00585	0.01400	0.01990		0.01110
4.000	0.14957	0.01291	0.11397	0.82810-0.00071		0.00112	0.00328-0.00269-0.00018			0.00330-0.00224	0.00351	0.01179		0.00664
5.000	0.14508-0.01566		0.13837	0.75042-0.00018		0.00020	0.00171-0.00099			0.00126-0.00201-0.00061	0.00066	0.00582		0.00242
8.000	0.09499	0.02573	0.14550	0.51468-0.00037		0.00035-0.00018	-0.00009			0.00056	0.00015	0.00002-0.00007		0.00066-0.00011

SIN THETA/ LAMBDA	PD 4D3P J(3)	PD 4D3S J(2)	PD 4D2P J(1)	PD 4D2P J(3)	PD 4D2S J(2)	PD 4D1S J(2)	PD 4P4P J(0)	PD 4P4P J(2)	PD 4P4S J(1)	PD 4P3D J(1)	PD 4P3D J(3)	PD 4P3P J(0)	PD 4P3P J(2)	PD 4P3S J(1)	
0.005	0.	-0.00001	0.00024	0.	-0.	0.	0.99976	0.00010-0.01126		0.00114	0.	0.00002-0.00001		0.00096	
0.010	0.	-0.00002	0.00048	0.	-0.	0.	0.99903	0.00039-0.02250		0.00228	0.	0.00007-0.00003		0.00193	
0.050	0.00003-0.000053		0.00241	0.	-0.00004	0.	0.97613	0.00950-0.11072		0.01126	0.00004	0.00185-0.00074		0.00953	
0.100	0.00021-0.00209		0.00482	0.	-0.00015	0.	0.90776	0.03616-0.21062		0.02173	0.00030	0.00729-0.00289		0.01844	
0.150	0.00068-0.00453		0.00722	0.00001-0.00025		0.00001	0.80385	0.07497-0.29074		0.03066	0.00099	0.01599-0.00627		0.02616	
0.200	0.00154-0.00765		0.00959	0.00002-0.00062		0.00002	0.67698	0.11912-0.34535		0.03745	0.00224	0.02746-0.01061		0.03219	
0.300	0.00454-0.01492		0.01426	0.00006-0.00138		0.00004	0.40749	0.19675-0.37361		0.04303	0.00664	0.05606-0.02067		0.03785	
0.400	0.00901-0.02175		0.01879	0.00015-0.00243		0.00006	0.18420	0.23209-0.31613		0.03731	0.01317	0.08718-0.02997		0.03408	
0.500	0.01412-0.02626		0.02311	0.00030-0.00375		0.00010	0.04292	0.21966-0.21812		0.02188	0.02051	0.11514-0.03575		0.02166	
0.600	0.01878-0.02734		0.02718	0.00051-0.00533		0.00014-0.02208	0.17530-0.12047			0.00023	0.02696	0.13562-0.03628		0.00303	
0.700	0.02201-0.02471		0.03095	0.00082-0.00712		0.00019-0.03519	0.11978-0.04643			0.02357	0.03101	0.14632-0.03115		0.01857	
0.800	0.02314-0.01885		0.03438	0.00121-0.00910		0.00025-0.02186	0.06879-0.00228			0.04585	0.03175	0.14694-0.02111		0.03986	
0.900	0.02197-0.01073		0.03743	0.00171-0.01123		0.00031-0.00061	0.03032-0.01621			0.06401	0.02896	0.13871-0.00768		0.05816	
1.000	0.01868-0.00151		0.04007	0.00232-0.01346		0.00038	0.01813			0.00611	0.01731-0.07662	0.02304	0.12386	0.00730-0.07171	
1.500	-0.01080	0.03090	0.04664	0.00577-0.02445		0.00080	0.02429			0.00457-0.02357	-0.06616-0.02279	0.02963	0.05754	-0.06523	
2.000	-0.02561	0.02484	0.04349	0.01227-0.03153		0.00130	0.00028			0.01715-0.01331	-0.01776-0.04260	-0.00547	0.04504	-0.01618	
3.000	-0.01152-0.00415		0.02522	0.01883-0.02930		0.00228	0.00347			0.00181	0.00225	-0.01487-0.01855	0.01253	0.00162	0.00391
4.000	0.00088-0.00819		0.01053	0.01720-0.01760		0.00294	0.00576			-0.00035-0.00263	0.00895	0.00018	0.01516	-0.00011-0.00755	
5.000	0.00366-0.00469		0.00346	0.01240-0.00821		0.00315	0.00322			0.00174-0.00329	0.00325	0.00452	0.00801	0.00525-0.00793	
8.000	0.00136-0.00002	-0.00028		0.00302	0.00018	0.00221-0.00034				0.00203	0.00029-0.00014	0.00177-0.00054		0.00492	0.00083



SIN THETA/ LAMBDA	PD 4P2P J(0)	PD 4P2P J(2)	PD 4P2S J(1)	PD 4P1S J(1)	PD 4S4S J(0)	PD 4S3D J(2)	PD 4S3P J(1)	PD 4S3S J(0)	PD 4S2P J(1)	PD 4S2S J(0)	PD 4S1S J(0)	PD 3D3D J(0)	PD 3D3D J(2)	PD 3D3D J(4)
0.005	0.00005-0.		0.00020	0.00004	0.99980-0.00001	0.00111	0.00002	0.00009	0.00006	0.		0.99997	0.00001	0.
0.010	0.00005-0.		0.00041	0.00007	0.99919-0.00004	0.00223	0.00007	0.00018	0.00006	0.		0.99989	0.00004	0.
0.050	0.00012-0.00003	0.00203	0.00037	0.97989-0.00087	0.01103	0.00181	0.00092	0.00015	0.			0.99723	0.00111	0.
0.100	0.00033-0.00011	0.00405	0.00073	0.92174-0.00342	0.02134	0.00715	0.00183	0.00040	0.00001	0.98895	0.00441	0.00001	0.00001	0.
0.150	0.00069-0.00026	0.00605	0.00110	0.83172-0.00741	0.03026	0.01572	0.00273	0.00083	0.00003	0.97534	0.00981	0.00004	0.00004	0.
0.200	0.00119-0.00046	0.00802	0.00147	0.71885-0.01250	0.03723	0.02706	0.00361	0.00142	0.00005	0.95662	0.01717	0.00014	0.00014	0.
0.300	0.00261-0.00102	0.01183	0.00220	0.46599-0.02422	0.04373	0.05559	0.00528	0.00310	0.00012	0.90532	0.03698	0.00065	0.00065	0.
0.400	0.00457-0.00180	0.01541	0.00293	0.23734-0.03481	0.03927	0.08714	0.00678	0.00541	0.00021	0.83853	0.06190	0.00194	0.00194	0.
0.500	0.00704-0.00276	0.01868	0.00366	0.07582-0.04103	0.02481	0.11607	0.00806	0.00832	0.00032	0.76047	0.08966	0.00436	0.00436	0.
0.600	0.00998-0.00390	0.02157	0.00438	-0.01136-0.04103	0.00320	0.13788	0.00906	0.01176	0.00047	0.67562	0.11795	0.00822	0.00822	0.
0.700	0.01335-0.00517	0.02401	0.00510	-0.03994-0.03457	0.02175	0.14991	0.00973	0.01566	0.00063	0.58823	0.14467	0.01366	0.01366	0.
0.800	0.01706-0.00655	0.02595	0.00581	-0.03318-0.02276	0.04623	0.15146	0.01003	0.01995	0.00082	0.50203	0.16818	0.02063	0.02063	0.
0.900	0.02106-0.00798	0.02734	0.00652	-0.01162-0.00751	0.06716	0.14350	0.00993	0.02453	0.00104	0.42000	0.18733	0.02892	0.02892	0.
1.000	0.02525-0.00943	0.02814	0.00722	0.01100	0.00905-0.08252	0.12812	0.00940	0.02928	0.00128	0.34430	0.20148	0.03820	0.03820	0.
1.500	0.04596-0.01507	0.02339	0.01061	0.02774	0.06104-0.07425	0.02541	0.00051	0.05164	0.00282	0.08692	0.20274	0.08453	0.08453	0.
2.000	0.05932-0.01497	0.00814	0.01371	-0.00161	0.04571-0.01870	0.01062	-0.01485	0.05321	0.00487	-0.00601	0.14349	0.10543	0.10543	0.
3.000	0.05451	0.00051-0.02077	0.01873	0.00434	-0.00476	0.00387	0.01454	-0.03686	0.04704	0.01003	-0.01967	0.04566	0.07959	0.07959
4.000	0.03151	0.01604-0.02513	0.02173	0.00546	-0.01179	0.00844	0.01256	-0.03336	0.01668	0.01550	-0.00716	0.01104	0.04188	0.04188
5.000	0.01336	0.02123-0.01594	0.02265	0.00142	-0.00678	0.00868	0.00282	-0.01931	0.00066	0.02043	-0.00193	0.00203	0.01989	0.01989
8.000	-0.00158	0.01136	0.00284	0.01749	0.00010	-0.00004	0.00088	0.00056	0.00304	0.00238	0.02551	0.00007	-0.00023	0.00221

SIN THETA/ LAMBDA	PD 3D3P J(1)	PD 3D3P J(3)	PD 3D3S J(2)	PD 3D2P J(1)	PD 3D2P J(3)	PD 3D2S J(2)	PD 3D1S J(2)	PD 3P3P J(0)	PD 3P3P J(2)	PD 3P3S J(1)	PD 3P2P J(0)	PD 3P2P J(2)	PD 3P2S J(1)	PD 3P1S J(1)
0.005	-0.00391-0.		0.00001	0.00107	0.	-0.	0.	0.99997	0.00001	-0.00425	0.	-0.	0.00065	0.00010
0.010	-0.00781-0.		0.00005	0.00213	0.	-0.00001	0.	0.99988	0.00005	-0.00850	0.00001	-0.	0.00130	0.00020
0.050	-0.03897-0.00003	0.00115	0.01066	0.	-0.00020	0.	0.99688	0.00125	-0.04242	0.00028	-0.00011	0.00647	0.00100	0.00100
0.100	-0.07737-0.00022	0.00458	0.02127	0.00002	-0.00081	0.00001	0.98759	0.00495	-0.08422	0.00112	-0.00045	0.01289	0.00199	0.00199
0.150	-0.11464-0.00073	0.01020	0.03180	0.00006	-0.00182	0.00003	0.97228	0.01102	-0.12481	0.00251	-0.00100	0.01921	0.00299	0.00299
0.200	-0.15026-0.00170	0.01786	0.04219	0.00014	-0.00322	0.00006	0.95123	0.01931	-0.15362	0.00444	-0.00177	0.02539	0.00398	0.00398
0.300	-0.21465-0.00549	0.03849	0.06240	0.00045	-0.00716	0.00013	0.89345	0.04164	-0.23382	0.00987	-0.00391	0.03715	0.00597	0.00597
0.400	-0.26742-0.01228	0.06445	0.08159	0.00105	-0.01249	0.00022	0.81814	0.06978	-0.29137	0.01722	-0.00676	0.04781	0.00794	0.00794
0.500	-0.30655-0.02227	0.09331	0.09948	0.00201	-0.01904	0.00035	0.73008	0.10113	-0.33398	0.02627	-0.01020	0.05709	0.00991	0.00991
0.600	-0.33123-0.03522	0.12257	0.11580	0.00337	-0.02662	0.00050	0.63443	0.13298	-0.35061	0.03675	-0.01409	0.06475	0.01187	0.01187
0.700	-0.34179-0.05049	0.14990	0.13038	0.00516	-0.03500	0.00067	0.53628	0.16280	-0.37149	0.04834	-0.01824	0.07062	0.01382	0.01382
0.800	-0.33946-0.06715	0.17338	0.14308	0.00741	-0.04395	0.00087	0.44017	0.18850	-0.35789	0.06073	-0.02249	0.07457	0.01575	0.01575
0.900	-0.32617-0.08418	0.19164	0.15379	0.01009	-0.05321	0.00109	0.34986	0.20854	-0.35188	0.07358	-0.02666	0.07658	0.01766	0.01766
1.000	-0.30420-0.10055	0.20389	0.16250	0.01318	-0.06256	0.00133	0.26816	0.22205	-0.32605	0.08656	-0.03060	0.07664	0.01956	0.01956
1.500	-0.14198-0.14811	0.18076	0.17756	0.03281	-0.10345	0.00280	0.02254	0.19778	-0.14137	0.14359	-0.04219	0.05218	0.02866	0.02866
2.000	-0.01739-0.12940	0.09020	0.15730	0.05286	-0.12368	0.00453	-0.01432	0.10236	-0.01520	0.17193	-0.03554	0.00522	0.03694	0.03694
3.000	0.04062-0.03850	-0.02070	0.08561	0.07083	-0.10461	0.00789	0.04009	-0.00101	0.00407	0.14418	0.01099	-0.06530	0.05011	0.05011
4.000	0.02205	0.00493-0.02888	0.03466	0.06089	-0.06003	0.01009	0.03946	0.00220	-0.02299	0.07974	0.04852	-0.06808	0.05773	0.05773
5.000	0.00782	0.01303-0.01574	0.01116	0.04265	-0.02732	0.01075	0.01987	0.01553	-0.02083	0.03291	0.05837	-0.04086	0.05979	0.05979
8.000	-0.00037	0.00457-0.00002	-0.00096	0.01013	0.00067	0.00744	-0.00148	0.01283	0.00236	-0.00422	0.02952	0.00776	0.04557	0.04557

SIN THETA/ LAMBDA	PD 3S3S J(0)	PD 3S2P J(1)	PD 3S2S J(0)	PD 3S1S J(0)	PD 2P2P J(0)	PD 2P2P J(2)	PD 2P2S J(1)	PD 2P1S J(1)	PD 2S2S J(0)	PD 2S1S J(0)	PD 1S1S J(0)	AG 5S5S J(0)	AG 5S4D J(2)	AG 5S4P J(1)
0.005	0.99997	0.00030	0.	0.00002	1.00000	0.	-0.00142	0.00029	1.00000-0.		1.00000	0.99713-0.00022	0.00286	
0.010	0.99987	0.00061	0.00001	0.00002	0.99999	0.00001-0.00284	0.00059	0.99998-0.		1.00000	0.98858-0.00089	0.00089	0.00570	
0.050	0.99682	0.00304	0.00031	0.00003	0.99966	0.00014-0.01418	0.00294	0.99955	0.00002	0.99997	0.75153-0.02012	0.02653		
0.100	0.98732	0.00604	0.00124	0.00005	0.99864	0.00054-0.02834	0.00589	0.99822	0.00010	0.99989	0.31734-0.06072	0.04223		
0.150	0.97167	0.00897	0.00279	0.00009	0.99695	0.00122-0.04244	0.00883	0.99599	0.00023	0.99976	0.05351-0.08886	0.04215		
0.200	0.95015	0.01179	0.00493	0.00015	0.99459	0.00216-0.05645	0.01177	0.99288	0.00041	0.99957-0.03052-0.09143	0.02837			
0.300	0.89102	0.01700	0.01095	0.00032	0.98787	0.00484-0.08411	0.01762	0.98406	0.00093	0.99933-0.01573-0.04866-0.01509				
0.400	0.81382	0.02142	0.01907	0.00055	0.97856	0.00853-0.11111	0.02344	0.97185	0.00166	0.99827	0.00903-0.00136-0.04498			
0.500	0.72339	0.02483	0.02902	0.00085	0.96674	0.01319-0.13723	0.02922	0.95637	0.00258	0.99731	0.01188	0.02395-0.04944		
0.600	0.62500	0.02708	0.04048	0.00121	0.95252	0.01876-0.16229	0.03495	0.93780	0.00371	0.99612	0.00665	0.02995-0.03762		
0.700	0.52388	0.02804	0.05308	0.00164	0.93604	0.02516-0.18612	0.04061	0.91632	0.00502	0.99473	0.00158	0.02543-0.02140		
0.800	0.42481	0.02766	0.06641	0.00213	0.91743	0.03231-0.20854	0.04620	0.89215	0.00653	0.99312-0.00106	0.01733-0.00801			
0.900	0.33177	0.02593	0.08009	0.00268	0.89687	0.04012-0.22943	0.05170	0.86555	0.00823	0.99131-0.00159	0.00958	0.00014		
1.000	0.24778	0.02287	0.09372	0.00330	0.87453	0.04849-0.24867	0.05711	0.83676	0.01010	0.98929-0.00098	0.00380	0.00347		
1.500	0.00200-0.00819	0.14962	0.00723	0.74276	0.09527-0.31761	0.08247	0.66985	0.02188	0.97614	0.00149-0.00046-0.00410				
2.000	-0.02122-0.04983	0.16834	0.01244	0.59506	0.14137-0.34048	0.10435	0.48988	0.03692	0.95817	0.00018	0.00234-0.00357			
3.000	0.04213-0.09675	0.11184	0.02538	0.32667	0.19922-0.28330	0.13550	0.19264	0.07198	0.90952	0.00010	0.00010	0.00054		
4.000	0.02854-0.08118	0.03635	0.03916	0.14787	0.20165-0.17399	0.14940	0.03595	0.10593	0.84746	0.00065-0.00071-0.00047				
5.000	0.00550-0.04520	0.00005	0.05090	0.05273	0.17070-0.08049	0.14888-0.01291	0.13210	0.77668	0.00008-0.00052-0.00074					
8.000	0.00158	0.00779	0.00626	0.06260-0.01090	0.06709	0.02210	0.10556	0.01994	0.15036	0.55376	0.00014-0.00010	0.00016		

SIN THETA/ LAMBDA	AG 5S4S J(0)	AG 5S3D J(2)	AG 5S3P J(1)	AG 5S3S J(0)	AG 5S2P J(1)	AG 5S2S J(0)	AG 5S1S J(0)	AG 4D4D J(0)	AG 4D4D J(2)	AG 4D4D J(4)	AG 4D4P J(1)	AG 4D4P J(3)	AG 4D4S J(2)	AG 4D3D J(0)
0.005	0.00007-0.		0.00017	0.	0.00002	0.	0.	0.99958	0.00017	0.	-0.01184-0.		0.00009	0.00002
0.010	0.00028-0.		0.00035	0.00001	0.00004	0.	0.	0.99831	0.00067	0.	-0.02356-0.00001		0.00035	0.00007
0.050	0.00572-0.00009	0.00173	0.00026	0.00018	0.00002	0.	0.95889	0.01626	0.00014-0.11574-0.00075	0.00872	0.00161			
0.100	0.02433-0.00037	0.00339	0.00102	0.00037	0.00007	0.	0.84759	0.05829	0.00191-0.21641-0.00565	0.03310	0.00634			
0.150	0.04664-0.00084	0.00493	0.00228	0.00054	0.00015	0.00001	0.69487	0.11063	0.00786-0.29074-0.01719	0.06828	0.01389			
0.200	0.06680-0.00148	0.00626	0.00400	0.00072	0.00026	0.00001	0.53157	0.15816	0.01911-0.33352-0.03547	0.10782	0.02377			
0.300	0.08369-0.00320	0.00798	0.00862	0.00106	0.00058	0.00002	0.25349	0.20855	0.05200-0.33152-0.08312	0.17573	0.04814			
0.400	0.06799-0.00516	0.00808	0.01423	0.00136	0.00103	0.00004	0.08275	0.19956	0.08339-0.25534-0.12510	0.20491	0.07424			
0.500	0.03820-0.00684	0.00638	0.01995	0.00163	0.00159	0.00007	0.00313	0.15797	0.10155-0.15962-0.14529	0.19267	0.09736			
0.600	0.01207-0.00771	0.00309	0.02490	0.00184	0.00226	0.00009-0.02076	0.10860	0.10474-0.07863-0.14184	0.15389	0.11428				
0.700	-0.00308-0.00746-0.00129	0.02840	0.00199	0.00303	0.00013-0.01761	0.06535	0.09650-0.02447-0.12167	0.10630	0.12355					
0.800	-0.00791-0.00605-0.00610	0.03006	0.00208	0.00388	0.00017-0.00514	0.03336	0.08168	0.00429-0.09371	0.06267	0.12525				
0.900	-0.00521-0.00366-0.01069	0.02980	0.00209	0.00479	0.00021	0.00761	0.01271	0.05444	0.01448-0.06519	0.02931	0.12053			
1.000	-0.00182-0.00065-0.01452	0.02785	0.00201	0.00574	0.00026	0.01699	0.00129	0.04767	0.01353-0.04051	0.00755	0.11102			
1.500	0.00693	0.01182-0.01684	0.00783	0.00040	0.01042	0.00057	0.01769	0.00293	0.00215-0.01456	0.00385	0.00014	0.04389		
2.000	0.00028	0.01059-0.00552-0.00203-0.00268	0.01318	0.00099	0.00358	0.01047-0.00222-0.00952-0.00524	0.01153	0.00464						
3.000	0.00070-0.00044	0.00109	0.00272-0.00762	0.01055	0.00206-0.00206	0.00547	0.00541	0.00411-0.00650	0.00025-0.00667					
4.000	0.00128-0.00259-0.00162	0.00294-0.00735	0.00414	0.00322-0.00093	0.00152	0.00406	0.00322-0.00057-0.00366-0.00277							
5.000	0.00040-0.00162-0.00195	0.00081-0.00451	0.00039	0.00426-0.00027	0.00032	0.00217	0.00127	0.00133-0.00243-0.00080						
8.000	0.00007-0.00003	0.00013	0.00007	0.00056	0.00041	0.00548-0.00018	0.00016	0.00006-0.00019	0.00078	0.00005	0.00002			

SIN THETA/ LAMBDA	AG 4D3D J(2)	AG 4D3D J(4)	AG 4D3P J(1)	AG 4D3P J(3)	AG 4D3S J(2)	AG 4D2P J(1)	AG 4D2P J(3)	AG 4D2S J(2)	AG 4D1S J(2)	AG 4P4P J(3)	AG 4P4P J(2)	AG 4P4S J(1)	AG 4P3D J(1)	AG 4P3D J(3)
0.005	-0.00001-0.		0.00092	0.	-0.00001	0.00025	0.	-0.	0.	0.99978	0.00039-0.01082	0.00108	0.	
0.010	-0.00003-0.		0.00184	0.	-0.00002	0.00050	0.	-0.	0.	0.99912	0.00035-0.02163	0.00216	0.	
0.050	-0.00064-0.		0.00910	0.00003-0.00054	0.00252	0.	-0.00004	0.		0.97813	0.00871-0.10658	0.01070	0.00003	
0.100	-0.00251-0.00002		0.01767	0.00020-0.00213	0.00503	0.	-0.00016	0.		0.91521	0.03330-0.20356	0.02068	0.00027	
0.150	-0.00544-0.00009		0.02521	0.00066-0.00464	0.00754	0.00001-0.00035	0.00001	0.81877	0.06957-0.28289	0.02929	0.00089			
0.200	-0.00915-0.00026		0.03133	0.00150-0.00788	0.01002	0.00002-0.00062	0.00002	0.69956	0.11164-0.33910	0.03597	0.00201			
0.300	-0.01763-0.00115		0.03816	0.00447-0.01556	0.01491	0.00006-0.00139	0.00004	0.43985	0.18925-0.37620	0.04206	0.00602			
0.400	-0.02524-0.00305		0.03717	0.00899-0.02304	0.01965	0.00015-0.00246	0.00007	0.21511	0.23045-0.32944	0.03763	0.01209			
0.500	-0.02978-0.00599		0.02908	0.01433-0.02842	0.02420	0.00029-0.00380	0.00010	0.05410	0.22621-0.23801	0.02386	0.01913			
0.600	-0.03012-0.00966		0.01586	0.01944-0.03045	0.02850	0.00050-0.00540	0.00015-0.01271	0.18824-0.14075	0.00367	0.02563				
0.700	-0.02619-0.01349		0.00004	0.02330-0.02869	0.03251	0.00080-0.00724	0.00020-0.03515	0.13532-0.06234-0.01928	0.03014					
0.800	-0.01876-0.01686-0.01591		0.02517-0.02345	0.03619	0.00119-0.00927	0.00026-0.02695	0.08333-0.01176-0.04154	0.03170						
0.900	-0.00905-0.01923-0.03005		0.02474-0.01559	0.03948	0.00168-0.01147	0.00032-0.00702	0.04156	0.01285-0.06046	0.02993					
1.000	0.00167-0.02029-0.04109		0.02207-0.00621	0.04237	0.00228-0.01378	0.00040	0.01293	0.01323	0.01843-0.07443	0.02506				
1.500	0.04074-0.00753-0.04571-0.00798		0.03097	0.05010	0.00677-0.02543	0.00084	0.02811	0.00193-0.02259-0.07136-0.01941						
2.000	0.04221	0.01250-0.01442-0.02648	0.02831	0.04765	0.01256-0.03346	0.00137	0.00185	0.01780-0.01602-0.02287-0.04293						
3.000	0.01584	0.02189	0.01190-0.01404-0.00316	0.02883	0.02011-0.03243	0.00242	0.00293	0.00279	0.00255	0.01514-0.02156				
4.000	0.00448	0.01359	0.00785	0.00019-0.00911	0.01258	0.01903-0.02029	0.00316	0.00618-0.00055-0.00237	0.01007-0.00093					
5.000	0.00092	0.00697	0.00304	0.00390-0.00559	0.00436	0.01409-0.00986	0.00344	0.00373	0.00159-0.00354	0.00388	0.00453			
8.000	-0.00008	0.00033-0.00010	0.00162-0.00009-0.00029	0.00361	0.00008	0.00250-0.00025	0.00217	0.00015-0.00012	0.00200					

SIN THETA/ LAMBDA	AG 4P3P J(0)	AG 4P3P J(2)	AG 4P3S J(1)	AG 4F2P J(0)	AG 4P2P J(2)	AG 4P2S J(1)	AG 4P1S J(1)	AG 4S4S J(0)	AG 4S3D J(2)	AG 4S3P J(1)	AG 4S3S J(0)	AG 4S2P J(1)	AG 4S2S J(0)	AG 4S1S J(0)
0.005	0.00002-0.00001	0.00096	0.00002	0.00005-0.		0.00020	0.00004	0.99981-0.00001	0.00108	0.00002	0.00009	0.00006	0.	
0.010	0.00007-0.00003	0.00192	0.00005-0.			0.00040	0.00007	0.99925-0.00003	0.00216	0.00007	0.00018	0.00006	0.	
0.050	0.00176-0.00070	0.00949	0.00012-0.00003	0.00202	0.00037	0.98136-0.00080	0.01068	0.00172	0.00091	0.00014	0.			
0.100	0.00693-0.00275	0.01840	0.00033-0.00011	0.00404	0.00074	0.92729-0.00314	0.02071	0.00681	0.00181	0.00039	0.00001			
0.150	0.01523-0.00598	0.02620	0.00068-0.00025	0.00603	0.00110	0.84311-0.00683	0.02947	0.01499	0.00269	0.00080	0.00003			
0.200	0.02621-0.01015	0.03242	0.00116-0.00044	0.00800	0.00147	0.73665-0.01157	0.03643	0.02585	0.00356	0.00137	0.00005			
0.300	0.05383-0.01996	0.03883	0.00253-0.00099	0.01182	0.00220	0.49375-0.02262	0.04344	0.05338	0.00521	0.00300	0.00012			
0.400	0.08443-0.02935	0.03621	0.00443-0.00174	0.01541	0.00294	0.26680-0.03296	0.04015	0.08429	0.00671	0.00523	0.00020			
0.500	0.11266-0.03566	0.02508	0.00683-0.00268	0.01872	0.00366	0.09888-0.03958	0.02717	0.11331	0.00799	0.00804	0.00032			
0.600	0.13429-0.03715	0.00753	0.00959-0.00379	0.02166	0.00439	0.00135-0.04061	0.00695	0.13638	0.00902	0.01138	0.00045			
0.700	0.14687-0.03323-0.01349	0.01296-0.00503	0.02418	0.00511-0.03706-0.03555-0.01711	0.14983	0.00973	0.01518	0.00062						
0.800	0.14974-0.02438-0.03489	0.01659-0.00638	0.02622	0.00583-0.03695-0.02519-0.04144	0.15358	0.01010	0.01937	0.00080						
0.900	0.14377-0.01187-0.05398	0.02051-0.00780	0.02774	0.00654-0.01824-0.01111-0.05300	0.14791	0.01008	0.02385	0.00101						
1.000	0.13081	0.00262-0.06889	0.02464-0.00924	0.02869	0.00724	0.00461	0.00476-0.07967	0.13455	0.00966	0.02852	0.00125			
1.500	0.03688	0.05682-0.07022	0.04545-0.01513	0.02489	0.01065	0.03156	0.06038-0.07967	0.03259	0.00145	0.05104	0.00275			
2.000	-0.00458	0.04903-0.02098	0.05973-0.01566	0.01028	0.01379	0.00012	0.04976-0.02396-0.01027-0.01353	0.06378	0.00476					
3.000	0.01153	0.00322	0.00494	0.05718-0.00098-0.01978	0.01892	0.00366-0.00283	0.00494	0.01356-0.03681	0.05013	0.00984				
4.000	0.01613-0.00069-0.00709	0.03450	0.01529-0.02613	0.02210	0.00604-0.01240-0.00794	0.01390-0.03505	0.01942	0.01542						
5.000	0.00912	0.00490-0.00850	0.01540	0.02157-0.01760	0.02323	0.00188-0.00764-0.00928	0.00377-0.02136	0.00174	0.02036					
8.000	-0.00046	0.00535	0.00063-0.00149	0.01236	0.00255	0.01842	0.00005-0.00013	0.00066	0.00035	0.00271	0.00196	0.02611		

SIN THETA/ LAMBDA	AG 3D3D J(0)	AG 3D3D J(2)	AG 3D3D J(4)	AG 3D3P J(1)	AG 3D3P J(3)	AG 3D3S J(2)	AG 3D2P J(1)	AG 3D2P J(3)	AG 3D2S J(2)	AG 3D1S J(2)	AG 3P3P J(0)	AG 3P3P J(2)	AG 3P3S J(1)	AG 3P2P J(0)
0.005	0.99997	0.00001	0.	-0.00378-0.	0.00001	0.00105	0.	-0.	0.	0.99997	0.00001-0.00413	0.	0.	
0.010	0.99990	0.00004	0.	-0.00756-0.	0.00004	0.00210	0.	-0.00001	0.	0.99988	0.00005-0.00827	0.00001	0.	
0.050	0.99741	0.00104	0.	-0.03773-0.00002	0.00108	0.01048	0.	-0.00020	0.	0.99706	0.00118-0.04125	0.00027	0.	
0.100	0.98968	0.00412	0.00001-0.07495-0.00020	0.00431	0.02092	0.00002-0.00078	0.00001	0.98828	0.00468-0.08193	0.00107	0.	0.		
0.150	0.97694	0.00917	0.00004-0.11113-0.00065	0.00960	0.03127	0.00005-0.00175	0.00003	0.97382	0.01041-0.12149	0.00240	0.	0.		
0.200	0.95942	0.01607	0.00012-0.14581-0.00155	0.01682	0.04150	0.00013-0.00309	0.00005	0.95391	0.01826-0.15941	0.00424	0.	0.		
0.300	0.91123	0.03473	0.00057-0.20892-0.00501	0.03635	0.06143	0.00042-0.00687	0.00012	0.89916	0.03946-0.22841	0.00943	0.	0.		
0.400	0.84818	0.05838	0.00170-0.26134-0.01125	0.06108	0.08040	0.00098-0.01200	0.00022	0.82748	0.06636-0.28569	0.01647	0.	0.		
0.500	0.77402	0.08498	0.00385-0.30113-0.02051	0.08883	0.09815	0.00187-0.01833	0.00034	0.74321	0.09658-0.32901	0.02516	0.	0.		
0.600	0.69279	0.11245	0.00730-0.32738-0.03261	0.11730	0.11444	0.00315-0.02566	0.00048	0.65107	0.12764-0.35729	0.03524	0.	0.		
0.700	0.60838	0.13884	0.01222-0.34023-0.04702	0.14433	0.12908	0.00484-0.03380	0.00065	0.55575	0.15718-0.37055	0.04644	0.	0.		
0.800	0.52429	0.16255	0.01860-0.34065-0.06296	0.16807	0.14194	0.00696-0.04252	0.00085	0.46154	0.18318-0.36981	0.05846	0.	0.		
0.900	0.44342	0.18242	0.02628-0.33026-0.07950	0.18714	0.15291	0.00950-0.05160	0.00106	0.37208	0.20412-0.35683	0.07098	0.	0.		
1.000	0.36794	0.19773	0.03501-0.31107-0.09567	0.20069	0.16197	0.01245-0.06081	0.00130	0.29016	0.21904-0.33391	0.08369	0.	0.		
1.500	0.10244	0.20711	0.08088-0.15580-0.14689	0.18667	0.17962	0.03145-0.10201	0.00274	0.03303	0.20445-0.15582	0.14079	0.	0.		
2.000	-0.00072	0.15213	0.10486-0.02688-0.13406	0.10002	0.16195	0.05152-0.12403	0.00445	-0.01553	0.11278-0.02328	0.17144	0.	0.		
3.000	-0.02113	0.05145	0.08383	0.04158-0.04467-0.01754	0.09160	0.07139-0.10880	0.00783	0.03808	0.00145	0.00689	0.14925	0.	0.	
4.000	-0.00826	0.01315	0.04578	0.02442	0.00279-0.03031	0.03866	0.06320-0.06477	0.01013	0.04158	0.00061-0.02204	0.08595	0.	0.	
5.000	-0.00236	0.00263	0.02231	0.00917	0.01312-0.01754	0.01312	0.04535-0.03066	0.01094	0.02228	0.01460-0.02213	0.03732	0.	0.	
8.000	0.00007	-0.00025	0.00258-0.00033	0.00509-0.00023-0.00094	0.01128	0.00035	0.00784-0.00128	0.01371	0.00184-0.00397	0.	0.	0.		

SIN THETA/ LAMBDA	AG 3P2P J(2)	AG 3P2S J(1)	AG 3P1S J(1)	AG 3S3S J(0)	AG 3S2P J(1)	AG 3S2S J(0)	AG 3S1S J(0)	AG 2P2P J(0)	AG 2P2P J(2)	AG 2P2S J(1)	AG 2P1S J(1)	AG 2S2S J(0)	AG 2S1S J(0)	AG 1S1S J(0)
0.005	-0.	0.00064	0.00010	0.99997	0.00030	0.	0.00002	1.00000	0.	-0.00139	0.00029	1.00000-0.	1.00000	
0.010	-0.	0.00127	0.00020	0.99988	0.00059	0.00001	0.00002	0.99999	0.00001-0.00277	0.00058	0.99998-0.	1.00000	0.	
0.050	-0.00011	0.00636	0.00098	0.99698	0.00296	0.00030	0.00003	0.99968	0.00013-0.01385	0.00289	0.99957	0.00002	0.99997	
0.100	-0.00043	0.01267	0.00196	0.98799	0.00538	0.00119	0.00005	0.99871	0.00052-0.02767	0.00577	0.99830	0.00010	0.99990	
0.150	-0.00096	0.01889	0.00294	0.97316	0.00874	0.00267	0.00009	0.99709	0.00116-0.04145	0.00865	0.99617	0.00022	0.99977	
0.200	-0.00169	0.02498	0.00392	0.95274	0.01150	0.00472	0.00015	0.99484	0.00206-0.05514	0.01153	0.99321	0.00040	0.99959	
0.300	-0.00373	0.03659	0.00587	0.89652	0.01651	0.01047	0.00031	0.98844	0.00461-0.08218	0.01727	0.98478	0.00089	0.99907	
0.400	-0.00647	0.04718	0.00782	0.82285	0.02098	0.01826	0.00053	0.97955	0.00814-0.10861	0.02297	0.97311	0.00159	0.99835	
0.500	-0.00979	0.05648	0.00976	0.73611	0.02442	0.02783	0.00082	0.96827	0.01259-0.13422	0.02854	0.95831	0.00247	0.99742	
0.600	-0.01354	0.06424	0.01169	0.64115	0.02676	0.03888	0.00117	0.95468	0.01791-0.15884	0.03426	0.94053	0.00355	0.99629	
0.700	-0.01758	0.07031	0.01361	0.54281	0.02790	0.05107	0.00158	0.93892	0.02404-0.18229	0.03982	0.91995	0.00482	0.99495	
0.800	-0.02174	0.07456	0.01551	0.44560	0.02776	0.06403	0.00205	0.92110	0.03090-0.20444	0.04530	0.89677	0.00626	0.99341	
0.900	-0.02586	0.07695	0.01740	0.35336	0.02632	0.07739	0.00258	0.90140	0.03841-0.22515	0.05071	0.87122	0.00789	0.99168	
1.000	-0.02978	0.07747	0.01927	0.26910	0.02362	0.09075	0.00317	0.87995	0.04647-0.24431	0.05603	0.84353	0.00968	0.98974	
1.500	-0.04214	0.05568	0.02827	0.01120-0.00550	0.14722	0.00697	0.75287	0.09186-0.31428	0.08105	0.68210	0.02101	0.97714	0.	
2.000	-0.03718	0.01033	0.03650-0.02390-0.04628	0.16896	0.01200	0.60903	0.13736-0.34009	0.10278	0.50603	0.03555	0.95990	0.	0.	
3.000	0.00732-0.06284	0.04976	0.04079-0.09624	0.11824	0.02461	0.34287	0.19713-0.28997	0.13424	0.20853	0.06970	0.91312	0.	0.	
4.000	0.04642-0.07011	0.05773	0.03148-0.08453	0.04206	0.03822	0.16053	0.20336-0.18390	0.14910	0.04478	0.10333	0.85323	0.	0.	
5.000	0.05867-0.04450	0.06028	0.00746-0.04947	0.00230	0.05008	0.06043	0.17521-0.09936	0.14980-0.01087	0.12990	0.78459	0.	0.		
8.000	0.03157	0.00694	0.04716	0.00107	0.00696	0.00521	0.06321-0.01062	0.07165	0.02079	0.10885	0.01778	0.15152	0.56598	0.

SIN THETA/ LAMBDA	CD 5S5S J(0)	CD 5S4D J(2)	CD 5S4P J(1)	CD 5S4S J(0)	CD 5S3D J(2)	CD 5S3P J(1)	CD 5S3S J(0)	CD 5S2P J(1)	CD 5S2S J(0)	CD 5S1S J(0)	CD 4D4D J(0)	CD 4D4D J(2)	CD 4D4D J(4)	CD 4D4P J(1)
0.005	0.99776	-0.00017	0.00291	0.00007	-0.	0.00019	0.	0.00002	-0.00001	-0.	0.99955	0.00014	0.	-0.01136
0.010	0.99107	-0.00068	0.00580	0.00027	-0.	0.00038	0.00001	0.00004	-0.00001	-0.	0.99851	0.00055	0.	-0.02271
0.050	0.79969	-0.01576	0.02725	0.00662	-0.00010	0.00188	0.00027	0.00020	0.00001	0.	0.96598	0.01349	0.00009	-0.11141
0.100	0.40750	-0.05063	0.04454	0.02433	-0.00038	0.00370	0.00108	0.00041	0.00006	0.	0.87174	0.04955	0.00127	-0.20997
0.150	0.11490	-0.08072	0.04671	0.04760	-0.00086	0.00538	0.00242	0.00061	0.00015	0.00001	0.73714	0.09733	0.00548	-0.28568
0.200	-0.01336	-0.09134	0.03471	0.06989	-0.00153	0.00685	0.00426	0.00080	0.00028	0.00001	0.58584	0.14475	0.01410	-0.33315
0.300	-0.02735	-0.06054	-0.00998	0.09287	-0.00331	0.00884	0.00921	0.00118	0.00063	0.00003	0.30736	0.20649	0.04296	-0.34514
0.400	0.00632	-0.01050	-0.04621	0.08100	-0.00541	0.00917	0.01531	0.00152	0.00112	0.00005	0.11794	0.21190	0.07566	-0.27958
0.500	0.01548	0.02262	-0.05645	0.05017	-0.00729	0.00759	0.02167	0.00182	0.00174	0.00007	0.01873	0.17848	0.09916	-0.18600
0.600	0.01067	0.03434	-0.04671	0.01978	-0.00842	0.00426	0.02737	0.00207	0.00247	0.00010	-0.01817	0.13031	0.10845	-0.10033
0.700	0.00382	0.03207	-0.02932	-0.00007	-0.00843	-0.00037	0.03164	0.00225	0.00331	0.00014	-0.02126	0.08387	0.10494	-0.03860
0.800	-0.00054	0.02370	-0.01321	-0.00826	-0.00719	-0.00563	0.03399	0.00236	0.00424	0.00018	-0.01027	0.04690	0.09278	-0.00248
0.900	-0.00202	0.01444	-0.00228	-0.00814	-0.00485	-0.01083	0.03427	0.00239	0.00525	0.00023	0.00357	0.02125	0.07630	-0.01325
1.000	-0.00166	0.00687	0.00311	-0.00389	-0.00172	-0.01537	0.03262	0.00233	0.00631	0.00029	0.01503	0.00572	0.05888	-0.01561
1.500	0.00203	-0.00112	-0.00401	0.00854	0.01288	-0.02010	0.01082	0.00066	0.01161	0.00063	0.02151	0.00150	0.00471	-0.01410
2.000	0.00034	0.00267	-0.00467	0.00095	0.01283	-0.00766	-0.00196	-0.00271	0.01499	0.00110	0.00547	0.01129	-0.00086	-0.01167
3.000	0.00007	0.00035	0.00064	0.00058	0.00008	0.00143	0.00275	-0.00857	0.01265	0.00228	-0.00238	0.00677	0.00589	-0.00416
4.000	0.00087	-0.00088	-0.00045	0.00157	-0.00305	-0.00167	0.00363	-0.00870	0.00538	0.00360	-0.00119	0.00201	0.00483	-0.00378
5.000	-0.	-0.00071	-0.00089	0.00058	-0.00204	-0.00233	0.00118	-0.00560	0.00075	0.00480	-0.00037	0.00045	0.00269	-0.00160
8.000	0.00006	0.00004	0.00016	-0.00001	-0.00006	0.00009	0.00003	0.00054	0.00035	0.00633	0.00003	-0.00004	0.00034	-0.00019

SIN THETA/ LAMBDA	CD 4D4P J(3)	CD 4D4S J(2)	CD 4D3D J(0)	CD 4D3D J(2)	CD 4D3D J(4)	CD 4D3P J(1)	CD 4D3P J(3)	CD 4D3S J(2)	CD 4D2P J(1)	CD 4D2P J(3)	CD 4D2S J(2)	CD 4D1S J(2)	CD 4P4P J(0)	CD 4P4P J(2)
0.005	-0.	0.00008	0.00002	-0.00001	-0.	0.00096	0.	-0.00001	0.00026	0.	-0.	0.	0.99980	0.00008
0.010	-0.00001	0.00033	0.00006	-0.00003	-0.	0.00192	0.	-0.00002	0.00052	0.	-0.	0.	0.99919	0.00032
0.050	-0.00064	0.00804	0.00156	-0.00062	-0.	0.00950	0.00002	-0.00055	0.00260	0.	-0.00034	0.	0.97993	0.00799
0.100	-0.00482	0.03070	0.00613	-0.00243	-0.00002	0.01849	0.00019	-0.00215	0.00519	0.	-0.00016	0.	0.92199	0.03069
0.150	-0.01489	0.06397	0.01346	-0.00528	-0.00008	0.02650	0.00063	-0.00470	0.00778	0.00001	-0.00035	0.00001	0.83250	0.06454
0.200	-0.03127	0.10233	0.02311	-0.00893	-0.00023	0.03313	0.00144	-0.00801	0.01034	0.00002	-0.00052	0.00002	0.72064	0.10452
0.300	-0.07648	0.17226	0.04721	-0.01742	-0.00104	0.04112	0.00435	-0.01598	0.01539	0.00006	-0.00139	0.00004	0.47128	0.18142
0.400	-0.12042	0.20858	0.07361	-0.02539	-0.00279	0.04132	0.00886	-0.02400	0.02031	0.00014	-0.00246	0.00007	0.24670	0.22754
0.500	-0.14620	0.20434	0.09779	-0.03067	-0.00559	0.03421	0.01433	-0.03016	0.02503	0.00028	-0.00381	0.00011	0.08736	0.23110
0.600	-0.14897	0.17068	0.11641	-0.03198	-0.00919	0.02154	0.01977	-0.03312	0.02952	0.00048	-0.00542	0.00015	0.00086	0.19994
0.700	-0.13330	0.12416	0.12776	-0.02904	-0.01310	0.00569	0.02418	-0.03229	0.03373	0.00077	-0.00727	0.00021	0.03313	0.15051
0.800	-0.10727	0.07832	0.13157	-0.02241	-0.01673	-0.01091	0.02677	-0.02781	0.03760	0.00115	-0.00933	0.00027	0.03101	0.09842
0.900	-0.07836	0.04096	0.12868	-0.01315	-0.01953	-0.02621	0.02709	-0.02042	0.04111	0.00163	-0.01156	0.00033	0.01333	0.05398
1.000	-0.05175	0.01482	0.12052	-0.00247	-0.02113	-0.03876	0.02512	-0.01112	0.04422	0.00221	-0.01392	0.00041	0.00716	0.02177
1.500	0.00389	-0.00254	0.05253	0.04065	-0.01044	-0.05014	-0.00464	0.03010	0.05307	0.00669	-0.02609	0.00087	0.03176	-0.00073
2.000	-0.00422	0.01191	0.00793	0.04579	0.01075	-0.01878	-0.02662	0.03138	0.05140	0.01268	-0.03498	0.00142	0.00386	0.01810
3.000	-0.00763	0.00115	-0.00740	0.01984	0.02356	0.01241	-0.01660	-0.00180	0.03238	0.02114	-0.03530	0.00254	0.00231	-0.00395
4.000	-0.00107	-0.00396	-0.00335	0.00559	0.01560	0.00909	-0.00071	-0.00989	0.01473	0.02069	-0.02296	0.00335	0.00655	-0.00071
5.000	0.00136	-0.00286	-0.00103	0.00124	0.00819	0.00373	0.00404	-0.00651	0.00536	0.01574	-0.01160	0.00369	0.00427	-0.00141
8.000	0.00092	-0.00008	0.00002	-0.00009	0.00102	-0.00009	0.00191	-0.00019	-0.00029	0.00423	-0.00005	0.00278	-0.00013	0.00231

SIN THETA/ LAMBDA	CD 4P4S J(1)	CD 4P3D J(1)	CD 4P3D J(3)	CD 4P3P J(0)	CD 4P3P J(2)	CD 4P3S J(1)	CD 4P2P J(0)	CD 4P2P J(2)	CD 4P2S J(1)	CD 4P1S J(1)	CD 4S4S J(0)	CD 4S3D J(2)	CD 4S3P J(1)	CD 4S3S J(0)
0.005	-0.01040	0.00103	0.	0.00002	-0.00001	0.00095	0.00005	-0.	0.00020	0.00004	0.99983	-0.00001	0.00105	0.00002
0.010	-0.02080	0.00206	0.	0.00007	-0.00003	0.00191	0.00005	-0.	0.00040	0.00007	0.99930	-0.00003	0.00209	0.00007
0.050	-0.10258	0.01019	0.00003	0.00167	-0.00067	0.00944	0.00012	-0.00003	0.00202	0.00037	0.98272	-0.00074	0.01037	0.00164
0.100	-0.19666	0.01973	0.00024	0.00659	-0.00262	0.01835	0.00032	-0.00011	0.00403	0.00074	0.93249	-0.00290	0.02014	0.00649
0.150	-0.27498	0.02805	0.00080	0.01452	-0.00571	0.02622	0.00066	-0.00024	0.00602	0.00111	0.85384	-0.00632	0.02874	0.01431
0.200	-0.33241	0.03462	0.00182	0.02504	-0.00972	0.03262	0.00113	-0.00043	0.00799	0.00147	0.75358	-0.01073	0.03568	0.02472
0.300	-0.37748	0.04112	0.00548	0.05174	-0.01929	0.03972	0.00246	-0.00096	0.01181	0.00221	0.52084	-0.02118	0.04316	0.05132
0.400	-0.34123	0.03784	0.01113	0.08178	-0.02871	0.03818	0.00430	-0.00169	0.01542	0.00294	0.29651	-0.03126	0.04091	0.08159
0.500	-0.25711	0.02559	0.01786	0.11016	-0.03548	0.02829	0.00663	-0.00260	0.01876	0.00367	0.12347	-0.03818	0.02933	0.11062
0.600	-0.16142	0.00682	0.02434	0.13278	-0.03784	0.01183	0.00941	-0.00368	0.02175	0.00440	0.01623	-0.04008	0.01045	0.13420
0.700	-0.07959	-0.01521	0.02921	0.14706	-0.03505	-0.00853	0.01260	-0.00490	0.02435	0.00512	-0.03214	-0.03629	-0.01267	0.14950
0.800	-0.02302	-0.03728	0.03147	0.15206	-0.02736	-0.02987	0.01615	-0.00623	0.02648	0.00584	-0.03936	-0.02729	-0.03671	0.15530
0.900	0.00780	-0.05675	0.03063	0.14828	-0.01582	-0.04957	0.01999	-0.00763	0.02812	0.00656	-0.02438	-0.01439	-0.05872	0.15184
1.000	0.01831	-0.07189	0.02675	0.13726	-0.00192	-0.06566	0.02405	-0.00906	0.02922	0.00726	-0.00207	0.00071	-0.07651	0.14052
1.500	-0.02095	-0.07616	-0.01590	0.04458	0.05556	-0.07480	0.04492	-0.01515	0.02634	0.01069	0.03506	0.05924	-0.08467	0.04040
2.000	-0.01873	-0.02827	-0.04282	-0.00311	0.05275	-0.02613	0.06003	-0.01627	0.01240	0.01386	0.00233	0.05355	-0.02956	-0.00932
3.000	0.00272	0.01516	-0.02456	0.01034	0.00515	0.00581	0.05976	-0.00248	-0.01863	0.01911	0.00285	-0.00057	0.00583	0.01233
4.000	-0.00203	0.01122	-0.00222	0.01701	-0.00122	-0.00648	0.03756	0.01442	-0.02700	0.02247	0.00660	-0.01291	-0.00730	0.01517
5.000	-0.00376	0.00458	0.00445	0.01028	0.00448	-0.00900	0.01758	0.02180	-0.01925	0.02380	0.00240	-0.00853	-0.00981	0.00482
8.000	0.00004	-0.00010	0.00226	-0.00035	0.00578	0.00035	-0.00137	0.01340	0.00219	0.01937	0.	-0.00025	0.00040	0.00013

SIN THETA/ LAMBDA	CD 4S2P J(1)	CD 4S2S J(0)	CD 4S1S J(0)	CD 3D3D J(0)	CD 3D3D J(2)	CD 3D3S J(1)	CD 3D3P J(1)	CD 3D3P J(3)	CD 3D3S J(2)	CD 3D2P J(1)	CD 3D2P J(3)	CD 3D2S J(2)	CD 3D1S J(2)	CD 3P3P J(0)
0.005	0.00009	0.00005	0.	0.99998	0.00001	0.	-0.00366	-0.	0.00001	0.00103	0.	-0.	0.	0.99997
0.010	0.00018	0.00005	0.	0.99990	0.00004	0.	-0.00733	-0.	0.00004	0.00206	0.	-0.00001	0.	0.99989
0.050	0.00090	0.00013	0.	0.99757	0.00097	0.	-0.03657	-0.00002	0.00102	0.01030	0.	-0.00019	0.	0.99722
0.100	0.00178	0.00037	0.00001	0.99033	0.00386	0.00001	-0.07267	-0.00018	0.00406	0.02057	0.00001	-0.00075	0.00001	0.98892
0.150	0.00266	0.00077	0.00003	0.97839	0.00860	0.00003	-0.10782	-0.00060	0.00905	0.03075	0.00005	-0.00168	0.00003	0.97524
0.200	0.00352	0.00132	0.00005	0.96194	0.01508	0.00010	-0.14161	-0.00141	0.01587	0.04082	0.00012	-0.00297	0.00005	0.95639
0.300	0.00516	0.00289	0.00011	0.91660	0.03268	0.00050	-0.20344	-0.00459	0.03437	0.06047	0.00039	-0.00660	0.00012	0.90442
0.400	0.00665	0.00506	0.00020	0.85700	0.05513	0.00150	-0.25544	-0.01034	0.05795	0.07922	0.00092	-0.01154	0.00021	0.83615
0.500	0.00794	0.00779	0.00031	0.78650	0.08063	0.00341	-0.29571	-0.01891	0.08462	0.09682	0.00175	-0.01764	0.00033	0.75547
0.600	0.00898	0.01104	0.00044	0.70872	0.10725	0.00650	-0.32332	-0.03022	0.11229	0.11305	0.00295	-0.02474	0.00047	0.66672
0.700	0.00974	0.01474	0.00060	0.62726	0.13321	0.01095	-0.33821	-0.04383	0.13893	0.12773	0.00455	-0.03264	0.00064	0.57422
0.800	0.01016	0.01882	0.00078	0.54538	0.15693	0.01679	-0.34113	-0.05905	0.16279	0.14072	0.00655	-0.04114	0.00082	0.48202
0.900	0.01022	0.02321	0.00099	0.46586	0.17739	0.02391	-0.33346	-0.07505	0.18251	0.15193	0.00896	-0.05003	0.00103	0.39361
1.000	0.00989	0.02781	0.00122	0.39086	0.19367	0.03203	-0.31696	-0.09096	0.19717	0.16129	0.01176	-0.05909	0.00126	0.31174
1.500	0.00233	0.05044	0.00269	0.11856	0.21063	0.07717	-0.16920	-0.14515	0.19173	0.18136	0.03012	-0.10046	0.00267	0.04446
2.000	-0.01223	0.06426	0.00466	0.00540	0.16030	0.10382	-0.03688	-0.13805	0.10957	0.15625	0.05014	-0.12411	0.00436	-0.01592
3.000	-0.03666	0.05316	0.00967	-0.02246	0.05751	0.08779	0.04209	-0.05099	-0.01382	0.09754	0.07174	-0.11272	0.00775	0.03567
4.000	-0.03666	0.02230	0.01525	-0.00943	0.01550	0.04973	0.02682	0.00032	-0.03152	0.04281	0.06534	-0.06950	0.01015	0.04346
5.000	-0.02345	0.00301	0.02029	-0.00284	0.00334	0.02485	0.01063	0.01305	-0.01937	0.01524	0.04800	-0.03414	0.01110	0.02474
8.000	0.00230	0.00152	0.02669	0.00006	-0.00027	0.00300	-0.00029	0.00564	-0.00048	-0.00089	0.01250	-0.00004	0.00824	-0.00102

SIN THETA/ LAMBDA	CD 3P3P J(2)	CD 3P3S J(1)	CD 3P2P J(0)	CD 3P2P J(2)	CD 3P2S J(1)	CD 3P1S J(1)	CD 3S3S J(0)	CD 3S2P J(1)	CD 3S2S J(0)	CD 3S1S J(0)	CD 2P2P J(0)	CD 2P2P J(2)	CD 2P2S J(1)	CD 2P1S J(1)
0.005	0.00001-0.00402-0.		-0.		0.00063	0.00010	0.99997	0.00029	0.	0.00002	1.00000	0.	-0.00135	0.00028
0.010	0.00004-0.00804	0.00001-0.			0.00125	0.00019	0.99988	0.00058	0.00001	0.00002	0.99999	0.	-0.00271	0.00057
0.050	0.00111-0.04013	0.00025-0.00010			0.00625	0.00097	0.99714	0.00288	0.00029	0.00003	0.99969	0.00012-0.01353	0.00283	
0.100	0.00442-0.07974	0.00102-0.00041			0.01246	0.00193	0.98861	0.00573	0.00114	0.00005	0.99877	0.00049-0.02704	0.00565	
0.150	0.00985-0.11833	0.00229-0.00091			0.01858	0.00289	0.97453	0.00852	0.00255	0.00009	0.99723	0.00111-0.04050	0.00848	
0.200	0.01728-0.15539	0.00405-0.00162			0.02458	0.00386	0.95514	0.01122	0.00452	0.00014	0.99508	0.00197-0.05389	0.01130	
0.300	0.03745-0.22321	0.00902-0.00357			0.03605	0.00578	0.90164	0.01624	0.01003	0.00030	0.98896	0.00440-0.08034	0.01693	
0.400	0.06316-0.28014	0.01576-0.00620			0.04656	0.00770	0.83128	0.02057	0.01750	0.00051	0.98047	0.00777-0.10621	0.02252	
0.500	0.09229-0.32402	0.02411-0.00939			0.05585	0.00961	0.74805	0.02402	0.02671	0.00079	0.96969	0.01203-0.13133	0.02808	
0.600	0.12255-0.35374	0.03382-0.01302			0.06371	0.01152	0.65640	0.02644	0.03736	0.00112	0.95670	0.01713-0.15551	0.03359	
0.700	0.15172-0.36915	0.04464-0.01694			0.06995	0.01341	0.55083	0.02773	0.04916	0.00152	0.94161	0.02300-0.17861	0.03905	
0.800	0.17789-0.37104	0.05629-0.02101			0.07447	0.01528	0.46558	0.02780	0.06175	0.00197	0.92454	0.02959-0.20048	0.04444	
0.900	0.19954-0.36093	0.06848-0.02507			0.07721	0.01714	0.37434	0.02665	0.07480	0.00249	0.90554	0.03680-0.22100	0.04976	
1.000	0.21567-0.34082	0.08092-0.02898			0.07815	0.01899	0.29008	0.02427	0.08795	0.00306	0.88505	0.04457-0.24005	0.05499	
1.500	0.21026-0.17000	0.13794-0.04199			0.05893	0.02789	0.02138-0.00299		0.14473	0.00672	0.76244	0.08860-0.31088	0.07966	
2.000	0.12298-0.03209	0.17065-0.03861			0.01529	0.03606-0.02581-0.04279			0.16925	0.01158	0.62240	0.13346-0.33940	0.10123	
3.000	0.00449	0.00948	0.15393	0.00372-0.06005	0.04939	0.03895-0.09542			0.12433	0.02386	0.35879	0.19486-0.29610	0.13296	
4.000	-0.00087-0.02079	0.09211	0.04411-0.07178	0.05767	0.03427-0.08758				0.04793	0.03729	0.17334	0.20470-0.19351	0.14871	
5.000	0.01353-0.02325	0.04191	0.05871-0.04803	0.06068	0.00960-0.05369				0.00488	0.04923	0.06849	0.17940-0.09830	0.15057	
8.000	0.01458	0.00125-0.00362	0.03364	0.00598	0.04869	0.00055	0.00598		0.00412	0.06372-0.01018	0.07627	0.01922	0.11202	

SIN THETA/ LAMBDA	CD 2S2S J(0)	CD 2S1S J(0)	CD 1S1S J(0)	SB 5P5P J(0)	SB 5P5P J(2)	SB 5P5S J(1)	SB 5P4D J(1)	SB 5P4D J(3)	SB 5P4P J(0)	SB 5P4P J(2)	SB 5P4S J(1)	SB 5P3D J(1)	SB 5P3D J(3)	SB 5P3P J(0)
0.005	1.00000-0.		1.00000	0.99815	0.00074-0.02792	0.00508	0.	0.00007-0.00003	0.00079	0.00017	0.	0.	0.	0.
0.010	0.99998-0.		1.00000	0.99250	0.00295-0.05564	0.01014	0.00001	0.00028-0.00011	0.00157	0.00034	0.	0.	0.	0.00001
0.050	0.99959	0.00002	0.99997	0.83031	0.06497-0.24966	0.04763	0.00090	0.00689-0.00272	0.00730	0.00169	0.	0.	0.	0.00027
0.100	0.99837	0.00009	0.99990	0.47435	0.17841-0.35919	0.07831	0.00622	0.02534-0.00964	0.01130	0.00332	0.00002	0.	0.	0.00106
0.150	0.99634	0.00021	0.99978	0.17102	0.22774-0.31802	0.08397	0.01675	0.04980-0.01773	0.00986	0.00484	0.00008	0.	0.	0.00237
0.200	0.99351	0.00038	0.99960	0.01052	0.19918-0.20652	0.06729	0.02949	0.07378-0.02370	0.00254	0.00618	0.00018	0.	0.	0.00416
0.300	0.98545	0.00086	0.99911-0.03596	0.07459-0.02723	0.00442	0.04549	0.10136-0.02157-0.02392	0.00809	0.00061	0.00900				0.00900
0.400	0.97429	0.00152	0.99842	0.00226	0.00564	0.01814-0.04505	0.03822	0.09351-0.00221-0.04996	0.00863	0.00140	0.	0.	0.	0.01506
0.500	0.96012	0.00237	0.99753	0.01816-0.00775	0.00610-0.06061	0.01627	0.06359	0.02142-0.06193	0.00757	0.00258	0.	0.	0.	0.02159
0.600	0.94309	0.00341	0.99644	0.01499-0.00165-0.00908-0.05213-0.00634	0.03082	0.03758-0.05764	0.00492	0.00402	0.02778					0.02778
0.700	0.92336	0.00462	0.99516	0.00702	0.00538-0.01427-0.03452-0.02172	0.00684	0.04268-0.04311	0.00099	0.00550	0.03288				0.03288
0.800	0.90111	0.00601	0.99369	0.00102	0.00848-0.01213-0.01757-0.02843-0.00549	0.03850-0.02584-0.00373	0.00676	0.03636						0.03636
0.900	0.87656	0.00757	0.99202-0.00173	0.00821-0.00738-0.00536-0.02836-0.00847	0.02937-0.01114-0.00864	0.00756	0.00756	0.03796						0.03796
1.000	0.84991	0.00929	0.99016-0.00208	0.00624-0.00298	0.00158-0.02426-0.00591	0.01912-0.00128-0.01323	0.00775	0.03767						0.03767
1.500	0.69375	0.02020	0.97808	0.00240-0.00060	0.00011-0.00122-0.00118	0.00997-0.00227-0.00164-0.02197	0.00023	0.01891						0.01891
2.000	0.52158	0.03424	0.96152	0.00106	0.00079-0.00204-0.00451	0.00033	0.00369	0.00365-0.00652-0.01219-0.00926	0.00184					0.00184
3.000	0.22440	0.06751	0.91651-0.00002	0.00061	0.00010	0.00072-0.00274-0.00005	0.00230	0.00047	0.00328-0.00874	0.00131				0.00131
4.000	0.05411	0.10078	0.85868	0.00029	0.00011	0.00022	0.00140-0.00085	0.00183-0.00020-0.00011	0.00378-0.00199	0.00478				0.00478
5.000	-0.00828	0.12768	0.79211	0.00039	0.00005-0.00046	0.00074	0.00024	0.00154	0.00016-0.00104	0.00184	0.00087	0.	0.	0.00359
8.000	0.01553	0.15245	0.57781	0.00033-0.00014	0.00030-0.00011	0.00041-0.00005	0.00083-0.00012	0.00001	0.00080	0.00005				0.00005

SIN THETA/ LAMBDA	SB 5P3P J(2)	SB 5P3S J(1)	SB 5P2P J(0)	SB 5P2P J(2)	SB 5P2S J(1)	SB 5P1S J(1)	SB 5S5S J(0)	SB 5S4D J(2)	SB 5S4P J(1)	SB 5S4S J(0)	SB 5S3D J(2)	SB 5S3P J(1)	SB 5S3S J(0)	SB 5S2P J(1)
0.005	-0.	0.00021	0.	-0.	0.00005	0.00001	0.99881-0.00009	0.00278	0.00006-0.	0.00022	0.00001	0.00003	0.00001	0.00003
0.010	-0.	0.00042	0.	-0.	0.00010	0.00002	0.99523-0.00038	0.00556	0.00026-0.	0.00044	0.00002	0.00005	0.00002	0.00005
0.050	-0.00011	0.00207	0.00001-0.00001	0.00050	0.00009	0.88711-0.00910	0.02657	0.00623-0.00010	0.00220	0.00031	0.00026	0.00011	0.00011	0.00026
0.100	-0.00042	0.00407	0.00006-0.00002	0.00100	0.00019	0.61573-0.03212	0.04595	0.02342-0.00039	0.00433	0.00121	0.00051	0.00012	0.00012	0.00051
0.150	-0.00094	0.00593	0.00013-0.00005	0.00149	0.00028	0.32262-0.05884	0.05338	0.04753-0.00088	0.00633	0.00270	0.00076	0.00013	0.00013	0.00076
0.200	-0.00164	0.00758	0.00024-0.00009	0.00198	0.00038	0.10659-0.07891	0.04771	0.07329-0.00155	0.00812	0.00474	0.00101	0.00014	0.00014	0.00101
0.300	-0.00349	0.01002	0.00053-0.00021	0.00293	0.00057	0.04590-0.07991	0.00797	0.11077-0.00339	0.01080	0.01030	0.00148	0.00015	0.00015	0.00148
0.400	-0.00566	0.01098	0.00094-0.00038	0.00385	0.00075	0.01965-0.04031-0.03962	0.11410-0.00556	0.01184	0.01735	0.00192	0.00016	0.00016	0.00192	0.00016
0.500	-0.00772	0.01022	0.00146-0.00058	0.00470	0.00094	0.01601	0.00572-0.06792	0.08815-0.00795	0.01087	0.02510	0.00231	0.00017	0.00017	0.00231
0.600	-0.00924	0.00780	0.00209-0.00083	0.00549	0.00113	0.02433	0.03618-0.07079	0.05087-0.00973	0.00786	0.03260	0.00265	0.00018	0.00018	0.00265
0.700	-0.00988	0.00400	0.00281-0.00111	0.00620	0.00131	0.01666	0.04712-0.05626	0.01813-0.01053	0.00309	0.03897	0.00292	0.00019	0.00019	0.00292
0.800	-0.00945-0.00070	0.00362-0.00142	0.00682	0.00150	0.00633	0.04391-0.03546-0.00257-0.01006-0.00288	0.04349	0.00310	0.00310	0.00310	0.00310	0.00020	0.00020	0.00310
0.900	-0.00794-0.00574	0.00451-0.00175	0.00733	0.00168	0.00062	0.03366-0.01654-0.01096-0.00827-0.00935	0.04576	0.00320	0.00320	0.00320	0.00320	0.00021	0.00021	0.00320
1.000	-0.00550-0.01059	0.00547-0.00210	0.00773	0.00186	0.00335	0.02183-0.00329-0.01046-0.00532-0.01562	0.04567	0.00320	0.00320	0.00320	0.00320	0.00022	0.00022	0.00320
1.500	0.01062-0.02115	0.01068-0.00377	0.00779	0.00275	0.00328-0.00318-0.00160	0.01219	0.01408-0.02909	0.02211	0.00157	0.00157	0.00157	0.00023	0.00023	0.00157
2.000	0.01544-0.01152	0.01510-0.00453	0.00495	0.00358	0.00172	0.00260-0.00810	0.00454	0.01919-0.01582	0.00006-0.00234	0.00006	0.00234	0.00024	0.00024	0.00006
3.000	0.00355	0.00178	0.01699-0.00191-0.00341	0.00500	0.00013	0.00167	0.00054-0.00023	0.00295	0.00213	0.00190	0.01072	0.00025	0.00025	0.00190
4.000	-0.00056-0.00088	0.01205	0.00273-0.00723	0.00599	0.00070	0.00131-0.00013	0.00241-0.00411-0.00127	0.00568	0.01259	0.00568	0.01259	0.00026	0.00026	0.00568
5.000	0.00068-0.00253	0.00642	0.00550-0.00615	0.00649	0.00042-0.00131-0.00127	0.00133-0.00352-0.00334	0.00270	0.00926	0.00270	0.00926	0.00270	0.00027	0.00027	0.00926
8.000	0.00181-0.00016-0.00017	0.00427	0.00015	0.00568	0.00037	0.00010-0.00017-0.00016-0.00024-0.00021-0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00021	0.00021	0.00016

SIN THETA/ LAMBDA	SB 5S2S J(0)	SB 5S1S J(0)	SB 4D4D J(0)	SB 4D4D J(2)	SB 4D4D J(4)	SB 4D4P J(1)	SB 4D4P J(3)	SB 4D4S J(2)	SB 4D3D J(0)	SB 4D3D J(2)	SB 4D3D J(4)	SB 4D3P J(1)	SB 4D3P J(3)	SB 4D3S J(2)
0.005	-0.	0.	0.99978	0.00009	0.	-0.01000-0.	0.00006	0.00001-0.00001-0.	0.00104	0.	-0.00001	0.	-0.00001	0.
0.010	-0.	0.	0.99911	0.00036	0.	-0.01998-0.	0.00026	0.00005-0.00002-0.	0.00207	0.	-0.00002	0.	-0.00002	0.
0.050	0.00002	0.	0.97794	0.00878	0.00003-0.00857-0.00040	0.00634	0.00137-0.00055-0.	0.01030	0.00002-0.00054	0.00002	0.00054	0.00002	0.00054	0.00002
0.100	0.00008	0.	0.91476	0.03342	0.00050-0.18893-0.00309	0.02451	0.00543-0.00216-0.00001	0.02016	0.00016-0.00213	0.00016	0.00213	0.00016	0.00213	0.00016
0.150	0.00018	0.00001	0.81871	0.06930	0.00231-0.26414-0.00983	0.05213	0.01198-0.00472-0.00005	0.02918	0.00054-0.00467	0.00054	0.00467	0.00054	0.00467	0.00054
0.200	0.00033	0.00001	0.70125	0.11026	0.00650-0.31941-0.02143	0.08574	0.02074-0.00807-0.00016	0.03701	0.00124-0.00804	0.00124	0.00804	0.00124	0.00804	0.00124
0.300	0.00075	0.00003	0.44968	0.18363	0.02416-0.36401-0.05755	0.15522	0.04324-0.01625-0.00075	0.04795	0.00385-0.01643	0.00385	0.01643	0.00385	0.01643	0.00385
0.400	0.00132	0.00006	0.23518	0.22115	0.05175-0.33267-0.10084	0.20554	0.06924-0.02470-0.00210	0.05157	0.00809-0.02554	0.00809	0.02554	0.00809	0.02554	0.00809
0.500	0.00205	0.00009	0.08970	0.21766	0.08087-0.25677-0.13685	0.22284	0.09493-0.03152-0.00438	0.04779	0.01359-0.03355	0.01359	0.03355	0.01359	0.03355	0.01359
0.600	0.00292	0.00013	0.01057	0.18537	0.10314-0.16901-0.15592	0.20821	0.11707-0.03526-0.00756	0.03768	0.01957-0.03900	0.01957	0.03900	0.01957	0.03900	0.01957
0.700	0.00393	0.00017-0.02030	0.14043	0.11420-0.09191-0.15597	0.17192	0.13347-0.03522-0.01135	0.02307	0.02515-0.00097	0.02307	0.00097	0.00097	0.00097	0.00097	0.00097
0.800	0.00505	0.00022-0.02260	0.09544	0.11397-0.03572-0.14065	0.12652	0.14310-0.03137-0.01531	0.00609	0.02948-0.03918	0.00609	0.03918	0.00609	0.03918	0.00609	0.03918
0.900	0.00627	0.00028-0.01159	0.05753	0.10494-0.00152-0.11606	0.08222	0.14594-0.02427-0.01894-0.01119	0.03194	0.03392	0.03194	0.03392	0.03194	0.03392	0.03194	0.03392
1.000	0.00758	0.00035	0.00303	0.02937	0.09044	0.01453-0.08815	0.04529	0.14273-0.01481-0.02181-0.02706	0.03219	0.02592	0.03219	0.02592	0.03219	0.02592
1.500	0.01445	0.00077	0.03168-0.00344	0.01804	0.00860-0.00061-0.00922	0.07966	0.03591-0.01832-0.03933	0.00698	0.02299	0.00698	0.02299	0.00698	0.02299	0.00698
2.000	0.01966	0.00135	0.01340	0.01138-0.00170-0.01753	0.00010	0.01030	0.02138	0.05332	0.00350-0.03282-0.02336	0.03780	0.00350	0.03780	0.00350	0.03780
3.000	0.01907	0.00283-0.00292	0.01116	0.00632	0.00316-0.01071	0.00483-0.00892	0.02952	0.02678	0.01206-0.02419	0.00415	0.01206	0.00415	0.01206	0.00415
4.000	0.00991	0.00454-0.00214	0.00401	0.00713	0.00548-0.00318-0.00434-0.00534	0.00981	0.02123	0.01280-0.00454-0.01134	0.00936	0.00936	0.00936	0.00936	0.00936	0.00936
5.000	0.00253	0.00618-0.00078	0.00108	0.00452	0.00281	0.00108-0.00422-0.00192	0.00260	0.01229	0.00622	0.00383-0.00936	0.00622	0.00383	0.00936	0.00622
8.000	0.00002	0.00875	0.00012-0.00016	0.00081	0.00003	0.00119-0.00036	0.00001-0.00012	0.00177	0.00002	0.00285-0.00064	0.00002	0.00285	0.00064	0.00002



SIN THETA/ LAMBDA	SB 4D2P J(1)	SB 4D2P J(3)	SB 4D2S J(2)	SB 4D1S J(2)	SB 4P4P J(0)	SB 4P4P J(2)	SB 4P4S J(1)	SB 4P3D J(1)	SB 4P3D J(3)	SB 4P3P J(0)	SB 4P3P J(2)	SB 4P3S J(1)	SB 4P2P J(0)	SB 4P2P J(2)
0.005	0.00027	0.	-0.	0.	0.99984	0.00006	-0.00930	0.00090	0.	0.00002	-0.00001	0.00094	0.00007	-0.
0.010	0.00055	0.	-0.	0.	0.99937	0.00025	-0.01859	0.00180	0.	0.00006	-0.00002	0.00188	0.00007	-0.
0.050	0.00274	0.	-0.00004	0.	0.98433	0.00625	-0.09198	0.00892	0.00002	0.00145	-0.00058	0.00931	0.00013	-0.00002
0.100	0.00548	0.	-0.00015	0.	0.93867	0.02423	-0.17794	0.01737	0.00018	0.00573	-0.00228	0.01819	0.00031	-0.00010
0.150	0.00821	0.00001	-0.00034	0.00001	0.86684	0.05178	-0.25252	0.02490	0.00059	0.01257	-0.00500	0.02622	0.00062	-0.00022
0.200	0.01092	0.00002	-0.00060	0.00002	0.77463	0.08570	-0.31160	0.03112	0.00136	0.02197	-0.00857	0.03304	0.00105	-0.00039
0.300	0.01529	0.00005	-0.00134	0.00004	0.55708	0.15773	-0.37473	0.03844	0.00419	0.04605	-0.01739	0.04188	0.00226	-0.00088
0.400	0.02153	0.00012	-0.00238	0.00007	0.34080	0.21316	-0.36651	0.03788	0.00875	0.07425	-0.02671	0.04318	0.00395	-0.00154
0.500	0.02660	0.00024	-0.00369	0.00011	0.16553	0.23631	-0.30616	0.02951	0.01457	0.10249	-0.03444	0.03673	0.00608	-0.00238
0.600	0.03147	0.00042	-0.00527	0.00016	0.04808	0.22589	-0.22099	0.01470	0.02072	0.12712	-0.03888	0.02358	0.00865	-0.00338
0.700	0.03609	0.00067	-0.00709	0.00021	-0.01412	0.19082	-0.13543	-0.00433	0.02615	0.14544	-0.03901	0.00561	0.01160	-0.00452
0.800	0.04042	0.00100	-0.00914	0.00028	-0.03441	0.14369	-0.06534	-0.02505	0.02990	0.15594	-0.03450	-0.01482	0.01491	-0.00578
0.900	0.04443	0.00143	-0.01139	0.00035	-0.02889	0.09580	-0.01725	-0.04508	0.03130	0.15828	-0.02608	-0.03534	0.01852	-0.00712
1.000	0.04806	0.00196	-0.01380	0.00043	-0.01144	0.05471	-0.00929	-0.06254	0.03005	0.15315	-0.01444	-0.05392	0.02238	-0.00851
1.500	0.05991	0.00619	-0.02687	0.00091	0.04013	-0.00744	-0.01245	-0.08761	-0.00510	0.05937	-0.04878	-0.08538	0.03346	-0.01503
2.000	0.06092	0.01238	-0.03788	0.00151	0.01246	0.01642	-0.02587	-0.04541	-0.03991	0.00496	0.06154	-0.04280	0.06028	-0.01771
3.000	0.04283	0.02314	-0.04269	0.00278	0.00012	0.00851	0.00209	0.01347	-0.03363	0.00590	0.01289	0.00704	0.06671	-0.00689
4.000	0.02184	0.02495	-0.03093	0.00379	0.00724	-0.00081	-0.00061	0.01469	-0.00722	0.01883	-0.00218	-0.00382	0.04689	0.01123
5.000	0.00903	0.02049	-0.01739	0.00432	0.00600	0.00069	-0.00414	0.00709	0.00359	0.01392	0.00284	-0.00997	0.02486	0.02178
8.000	-0.00019	0.00636	-0.00071	0.00359	0.00016	0.00290	-0.00035	0.00002	0.00312	0.00017	0.00708	-0.00060	0.00068	0.01665

SIN THETA/ LAMBDA	SB 4P2S J(1)	SB 4P1S J(1)	SB 4S4S J(0)	SB 4S3D J(2)	SB 4S3P J(1)	SB 4S3S J(0)	SB 4S2P J(1)	SB 4S2S J(0)	SB 4S1S J(0)	SB 3D3D J(0)	SB 3D3D J(2)	SB 3D3D J(4)	SB 3D3P J(1)	SB 3D3P J(3)
0.005	0.00020	0.00004	0.99986	-0.00001	0.00096	0.00002	0.00009	0.00008	0.	0.99998	0.00001	0.	-0.00335	-0.
0.010	0.00040	0.00007	0.99944	-0.00002	0.00192	0.00006	0.00017	0.00008	0.	0.99992	0.00003	0.	-0.00670	-0.
0.050	0.00200	0.00037	0.98606	-0.00059	0.00951	0.00143	0.00086	0.00015	0.00001	0.99798	0.00081	0.	-0.03346	-0.00002
0.100	0.00400	0.00074	0.94527	-0.00232	0.01856	0.00566	0.00171	0.00036	0.00001	0.99196	0.00321	0.	-0.06656	-0.00014
0.150	0.00598	0.00111	0.88057	-0.00508	0.02669	0.01251	0.00256	0.00072	0.00003	0.98200	0.00717	0.00002	-0.09894	-0.00047
0.200	0.00794	0.00148	0.79648	-0.00869	0.03351	0.02172	0.00339	0.00122	0.00005	0.95824	0.01251	0.00007	-0.13025	-0.00109
0.300	0.01176	0.00222	0.59295	-0.01754	0.04197	0.04568	0.00498	0.00265	0.00011	0.93008	0.02750	0.00035	-0.18841	-0.00357
0.400	0.01540	0.00296	0.38157	-0.02672	0.04233	0.07391	0.00645	0.00462	0.00019	0.87937	0.04681	0.00105	-0.23880	-0.00811
0.500	0.01882	0.00369	0.20051	-0.03405	0.03440	0.10243	0.00775	0.00710	0.00029	0.81851	0.06924	0.00241	-0.27977	-0.01500
0.600	0.02195	0.00443	0.07043	-0.03781	0.01936	0.12756	0.00884	0.01007	0.00041	0.75018	0.09335	0.00467	-0.31030	-0.02426
0.700	0.02473	0.00516	-0.00563	-0.03705	-0.00069	0.14646	0.00969	0.01348	0.00056	0.67716	0.11770	0.00799	-0.33004	-0.03569
0.800	0.02712	0.00588	-0.03674	-0.03164	-0.02315	0.15745	0.01026	0.01728	0.00073	0.60210	0.14099	0.01247	-0.33924	-0.04884
0.900	0.02907	0.00660	-0.03721	-0.02218	-0.04545	0.16001	0.01052	0.02139	0.00092	0.52737	0.16216	0.01810	-0.33868	-0.06314
1.000	0.03055	0.00732	-0.02125	-0.00978	-0.06539	0.15468	0.01044	0.02575	0.00113	0.45500	0.18036	0.02479	-0.32951	-0.07792
1.500	0.03024	0.01080	0.04190	0.05310	-0.09623	0.06483	0.00466	0.04834	0.00251	0.15950	0.21654	0.06622	-0.20633	-0.13764
2.000	0.01852	0.01405	0.01159	0.06249	-0.04750	0.00268	-0.00846	0.06478	0.00436	0.02847	0.18175	0.09852	-0.06905	-0.14622
3.000	-0.01430	0.01960	-0.00014	0.00797	0.00701	0.00729	-0.03533	0.06139	0.00916	-0.02533	0.07696	0.09770	-0.04072	-0.07021
4.000	-0.02863	0.02345	0.00781	-0.01349	-0.00452	0.01827	-0.04066	0.03141	0.01468	-0.01329	0.02397	0.06168	0.03386	-0.00895
5.000	-0.02401	0.02537	0.00422	-0.01126	-0.01082	0.00847	-0.02962	0.00783	0.01994	-0.00466	0.00619	0.03326	0.01565	0.01168
8.000	0.00064	0.02216	-0.00025	-0.00076	-0.00065	-0.00051	0.00059	0.00011	0.02814	0.00002	-0.00031	0.00457	-0.00001	0.00744

SIN THETA/ LAMBDA	SB 3D3S J(2)	SB 3D2P J(1)	SB 3D2P J(3)	SB 3D2S J(2)	SB 3D1S J(2)	SB 3P3P J(0)	SB 3P3P J(2)	SB 3P3S J(1)	SB 3P2P J(0)	SB 3P2P J(2)	SB 3P2S J(1)	SB 3P1S J(1)	SB 3S3S J(0)	SB 3S2P J(1)
0.005	0.00001	0.00098	0.	-0.	0.	0.99998	0.00001-0.00372	-0.	-0.	0.00050	0.00009	0.99998	0.00027	
0.010	0.00003	0.00196	0.	-0.00001	0.	0.99991	0.00004-0.00744	0.	-0.	0.00119	0.00018	0.99990	0.00054	
0.050	0.00086	0.00980	0.	-0.00017	0.	0.99763	0.00095-0.03712	0.00022-0.00009	0.00595	0.00092	0.99754	0.00268		
0.100	0.00343	0.01957	0.00001-0.00066	0.00001	0.99056	0.00377-0.07383	0.00089-0.00036	0.01186	0.00184	0.99021	0.00533			
0.150	0.00765	0.02927	0.00004-0.00149	0.00003	0.97888	0.00841-0.10972	0.00201-0.00080	0.01770	0.00277	0.97809	0.00793			
0.200	0.01345	0.03888	0.00010-0.00264	0.00005	0.96275	0.01479-0.14441	0.00356-0.00142	0.02344	0.00369	0.96135	0.01046			
0.300	0.02930	0.05769	0.00032-0.00588	0.00011	0.91804	0.03222-0.20874	0.00793-0.00315	0.03449	0.00553	0.91493	0.01520			
0.400	0.04980	0.07576	0.00076-0.01030	0.00019	0.85872	0.05477-0.26429	0.01389-0.00548	0.04473	0.00736	0.85335	0.01938			
0.500	0.07348	0.09288	0.00145-0.01579	0.00030	0.78774	0.08084-0.30914	0.02131-0.00834	0.05397	0.00919	0.77963	0.02283			
0.600	0.09872	0.10886	0.00245-0.02222	0.00043	0.70839	0.10863-0.34211	0.03000-0.01162	0.06199	0.01101	0.69722	0.02543			
0.700	0.12389	0.12353	0.00378-0.02944	0.00059	0.62414	0.13637-0.36276	0.03977-0.01521	0.06864	0.01282	0.60973	0.02708			
0.800	0.14751	0.13676	0.00548-0.03729	0.00076	0.53830	0.16240-0.37138	0.05038-0.01899	0.07381	0.01462	0.52069	0.02769			
0.900	0.16831	0.14847	0.00753-0.04558	0.00096	0.45391	0.18533-0.36885	0.06161-0.02284	0.07742	0.01641	0.43329	0.02724			
1.000	0.18533	0.15857	0.00995-0.05415	0.00117	0.37353	0.20409-0.35652	0.07322-0.02664	0.07945	0.01818	0.35030	0.02570			
1.500	0.20231	0.18494	0.02642-0.09539	0.00249	0.08328	0.22290-0.21008	0.12924-0.04105	0.06725	0.02677	0.05669	0.00360			
2.000	0.13590	0.17720	0.04588-0.12300	0.00410	-0.01194	0.15154-0.06188	0.16683-0.04179	0.02912	0.03477	-0.02657	-0.03287			
3.000	0.00030	0.11484	0.07170-0.12278	0.00749	0.02662	0.01695	0.01521	0.16570	-0.00646	-0.05016	0.04819	0.03075	-0.09134	
4.000	-0.03353	0.05606	0.07075-0.08338	0.01013	0.04739	-0.00423	-0.01545	0.11002	0.03623	-0.07463	0.05724	0.04131	-0.09484	
5.000	-0.02486	0.02260	0.05558-0.04526	0.01146	0.03213	0.00963	-0.02545	0.05649	0.05736	-0.05774	0.06151	0.01687	-0.06579	
8.000	-0.00154	-0.00057	0.01654-0.00166	0.00939	0.00017	0.01702	-0.00102	-0.00197	0.03977	0.00224	0.05291	-0.00092	0.00216	

SIN THETA/ LAMBDA	SB 3S2S J(0)	SB 3S1S J(0)	SB 2P2P J(0)	SB 2P2P J(2)	SB 2P2S J(1)	SB 2P1S J(1)	SB 2S2S J(0)	SB 2S1S J(0)	SB 1S1S J(0)	XE 5P5F J(0)	XE 5P5P J(2)	XE 5P5S J(1)	XE 5P4D J(1)	XE 5P4D J(3)
0.005	-0.	0.00002	1.00000	0.	-0.00127	0.00027	1.00000-0.	1.00000	0.99884	0.00046-0.02301	0.00404	0.		
0.010	0.00001	0.00002	0.99999	0.	-0.00253	0.00053	0.99999-0.	1.00000	0.99538	0.00184-0.04593	0.00807	0.		
0.050	0.00025	0.00003	0.99973	0.00011-0.01266	0.00267	0.99964	0.00002	0.99998	0.89072	0.04265-0.21407	0.03864	0.00051		
0.100	0.00100	0.00005	0.99892	0.00043-0.02530	0.00534	0.99857	0.00008	0.99991	0.62773	0.13492-0.34486	0.06726	0.00372		
0.150	0.00224	0.00008	0.99757	0.00097-0.03790	0.00800	0.99679	0.00019	0.99980	0.34176	0.20982-0.36351	0.07950	0.01079		
0.200	0.00397	0.00013	0.99569	0.00172-0.05044	0.01067	0.99430	0.00034	0.99965	0.12655	0.23107-0.29824	0.07427	0.02084		
0.300	0.00885	0.00027	0.99034	0.00385-0.07526	0.01598	0.98722	0.00076	0.99921	-0.03952	0.15118-0.10538	0.02748	0.04041		
0.400	0.01548	0.00046	0.98290	0.00681-0.09961	0.02127	0.97739	0.00135	0.99860	-0.02436	0.04988	0.00216-0.02892	0.04559		
0.500	0.02369	0.00071	0.97343	0.01055-0.12333	0.02653	0.96491	0.00210	0.99781	0.01140	-0.00016	0.01939-0.06360	0.03312		
0.600	0.03327	0.00101	0.96201	0.01505-0.14628	0.03175	0.94986	0.00302	0.99685	0.02410	-0.00913	0.00290-0.07079	0.01108		
0.700	0.04397	0.00136	0.94871	0.02024-0.16833	0.03692	0.93239	0.00410	0.99572	0.01956	-0.00177	-0.01277-0.05923	-0.01075		
0.800	0.05551	0.00177	0.93363	0.02609-0.18936	0.04204	0.91264	0.00533	0.99442	0.00994	0.00679-0.01835	-0.04017-0.02634			
0.900	0.06762	0.00223	0.91688	0.03252-0.20926	0.04709	0.89077	0.00672	0.99294	0.00211	0.01130-0.01608	-0.02164-0.03401			
1.000	0.08000	0.00274	0.89858	0.03948-0.22794	0.05208	0.86695	0.00826	0.99129	-0.00202	0.01171-0.01049	-0.00758-0.03487			
1.500	0.13684	0.00604	0.78826	0.07968-0.30046	0.07575	0.72538	0.01802	0.98057	0.00260	-0.00002	0.00164	0.00223	-0.00697	
2.000	0.16819	0.01045	0.65915	0.12236-0.33582	0.09680	0.56482	0.03071	0.96586	0.00272	0.00029	-0.00267	-0.00594	0.00151	
3.000	0.14052	0.02177	0.40468	0.18718-0.31148	0.12904	0.27138	0.06146	0.92561	-0.00021	0.00142	-0.00027	-0.00015	-0.00371	
4.000	0.06505	0.03459	0.21234	0.20672-0.22037	0.14705	0.08460	0.09345	0.87341	0.00048	0.00017	0.00014	0.00210	-0.00194	
5.000	0.01446	0.04662	0.09454	0.19004-0.12509	0.15205	0.00270	0.12090	0.81260	0.00084	-0.00016	-0.00036	0.00133	0.00001	
8.000	0.00082	0.06466	-0.00791	0.09034	0.01295	0.12078	0.00853	0.15408	0.61108	-0.00044	0.00082	0.00002	-0.00005	0.00062

SIN THETA/ LAMBDA	XE 5P4P J(0)	XE 5P4P J(2)	XE 5P4S J(1)	XE 5P3D J(1)	XE 5P3D J(3)	XE 5P3P J(0)	XE 5P3P J(2)	XE 5P3S J(1)	XE 5P2P J(0)	XE 5P2P J(2)	XE 5P2S J(1)	XE 5P1S J(1)	XE 5S5S J(0)	XE 5S4D J(2)
0.005	0.00006	-0.00002	0.00094	0.00017	0.	0.00001	-0.	0.00024	-0.00001	-0.	0.00006	0.00001	0.99918	-0.00006
0.010	0.00024	-0.00010	0.00189	0.00035	0.	0.00002	-0.	0.00048	-0.00001	-0.	0.00012	0.00002	0.99673	-0.00025
0.050	0.00585	-0.00232	0.00895	0.00173	0.	0.00027	-0.00011	0.00237	0.00001	-0.00001	0.00058	0.00011	0.92122	-0.00611
0.100	0.02204	-0.00851	0.01507	0.00342	0.00002	0.00107	-0.00042	0.00468	0.00006	-0.00003	0.00117	0.00023	0.71759	-0.02235
0.150	0.04498	-0.01659	0.01629	0.00500	0.00006	0.00239	-0.00095	0.00685	0.00014	-0.00006	0.00175	0.00034	0.46490	-0.04344
0.200	0.06994	-0.02404	0.01176	0.00643	0.00015	0.00420	-0.00166	0.00884	0.00025	-0.00010	0.00232	0.00045	0.23698	-0.06302
0.300	0.10850	-0.02889	-0.01177	0.00864	0.00052	0.00915	-0.00357	0.01199	0.00057	-0.00023	0.00345	0.00067	-0.01439	-0.07915
0.400	0.11557	-0.01611	-0.04244	0.00964	0.00122	0.01552	-0.00591	0.01372	0.00101	-0.00041	0.00454	0.00090	-0.04442	-0.05835
0.500	0.09518	0.00769	-0.06503	0.00917	0.00230	0.02268	-0.00833	0.01373	0.00158	-0.00063	0.00557	0.00112	-0.00425	-0.01749
0.600	0.06217	0.03105	-0.07184	0.00711	0.00371	0.02991	-0.01042	0.01196	0.00226	-0.00090	0.00653	0.00135	0.02450	0.02148
0.700	0.02922	0.04589	-0.06400	0.00360	0.00531	0.03644	-0.01180	0.00854	0.00305	-0.00120	0.00741	0.00157	0.02866	0.04606
0.800	0.00563	0.04995	-0.04755	-0.00104	0.00689	0.04165	-0.01217	0.00382	0.00394	-0.00155	0.00820	0.00179	0.01930	0.05432
0.900	-0.00672	0.04526	-0.02904	-0.00633	0.00818	0.04509	-0.01140	-0.00170	0.00492	-0.00192	0.00888	0.00201	0.00772	0.05031
1.000	-0.00987	0.03553	-0.01315	-0.01172	0.00899	0.04654	-0.00952	-0.00749	0.00599	-0.00232	0.00944	0.00223	-0.00043	0.03964
1.500	0.01112	-0.00199	0.00224	-0.02730	0.00355	0.03031	0.00863	-0.02574	0.01201	-0.00435	0.01022	0.00329	0.00236	-0.00278
2.000	0.00810	0.00218	-0.00849	-0.01971	-0.00852	0.00683	0.01915	-0.01882	0.01764	-0.00562	0.00762	0.00430	0.00378	0.00053
3.000	-0.00064	0.00449	-0.00046	0.00226	-0.01283	0.	0.00748	0.00145	0.02183	-0.00354	-0.00231	0.00607	-0.00051	0.00348
4.000	0.00208	0.00007	0.00044	0.00542	-0.00445	0.00570	-0.00046	0.00009	0.01713	0.00199	-0.00855	0.00737	0.00085	-0.00118
5.000	0.00235	-0.00007	-0.00117	0.00314	0.00037	0.00534	0.00020	-0.00295	0.01015	0.00614	-0.00854	0.00813	0.00087	-0.00190
8.000	0.00021	0.00104	-0.00037	0.00009	0.00125	0.00034	0.00251	-0.00062	0.00019	0.00608	-0.00052	0.00758	-0.00055	-0.00034

SIN THETA/ LAMBDA	XE 5S4P J(1)	XE 5S4S J(0)	XE 5S3D J(2)	XE 5S3P J(1)	XE 5S3S J(0)	XE 5S2P J(1)	XE 5S2S J(0)	XE 5S1S J(0)	XE 4D4D J(0)	XE 4D4D J(2)	XE 4D4D J(4)	XE 4D4P J(1)	XE 4D4P J(3)	XE 4D4S J(2)
0.005	0.00246	0.00006	-0.	0.00022	0.00004	0.00003	-0.	-0.	0.99984	0.00006	0.	-0.00888	-0.	0.00005
0.010	0.00491	0.00022	-0.	0.00045	0.00005	0.00006	-0.	-0.	0.99935	0.00026	0.	-0.01775	-0.	0.00021
0.050	0.02370	0.00542	-0.00009	0.00224	0.00033	0.00027	0.00002	0.	0.98390	0.00642	0.00002	-0.08786	-0.00027	0.00510
0.100	0.04238	0.02063	-0.00035	0.00441	0.00120	0.00055	0.00008	0.	0.93715	0.02479	0.00026	-0.17011	-0.00212	0.01986
0.150	0.05227	0.04281	-0.00079	0.00648	0.00264	0.00082	0.00019	0.00001	0.86409	0.05258	0.00123	-0.24180	-0.00684	0.04278
0.200	0.05167	0.06804	-0.00140	0.00836	0.00462	0.00109	0.00034	0.00001	0.77114	0.08654	0.00358	-0.29910	-0.01523	0.07159
0.300	0.02274	0.11174	-0.00308	0.01136	0.01006	0.00160	0.00076	0.00003	0.55549	0.15653	0.01460	-0.36267	-0.04327	0.13588
0.400	-0.02361	0.12874	-0.00521	0.01293	0.01709	0.00209	0.00135	0.00006	0.34580	0.20799	0.03480	-0.35995	-0.08129	0.19135
0.500	-0.06223	0.11521	-0.00751	0.01270	0.02508	0.00253	0.00209	0.00009	0.17846	0.22785	0.06076	-0.30807	-0.11932	0.22317
0.600	-0.07959	0.08215	-0.00955	0.01050	0.03324	0.00291	0.00299	0.00013	0.06603	0.21724	0.08640	-0.23129	-0.14779	0.22660
0.700	-0.07585	0.04469	-0.01091	0.00644	0.04074	0.00323	0.00403	0.00018	0.00381	0.18555	0.10617	-0.15140	-0.16126	0.20557
0.800	-0.05877	0.01409	-0.01123	0.00087	0.04683	0.00348	0.00519	0.00024	-0.02104	0.14404	0.11697	-0.08290	-0.15911	0.16873
0.900	-0.03732	-0.00481	-0.01033	-0.00566	0.05095	0.00364	0.00647	0.00030	-0.02248	0.10196	0.11834	-0.03242	-0.14429	0.12554
1.000	-0.01803	-0.01234	-0.00820	-0.01251	0.05279	0.00370	0.00784	0.00037	-0.01202	0.05517	0.11175	-0.00064	-0.12141	0.08371
1.500	0.00293	0.01150	0.01189	-0.03371	0.03352	0.00241	0.01538	0.00081	0.03666	-0.00568	0.03831	0.00149	-0.01344	-0.01152
2.000	-0.00973	0.00953	0.02263	-0.02410	0.00504	-0.00142	0.02182	0.00142	0.02354	0.00793	0.00107	-0.02058	0.00433	0.00487
3.000	-0.00059	-0.00129	0.00726	0.00151	-0.00013	-0.01117	0.02378	0.00301	-0.00233	0.01555	0.00507	0.00022	-0.01250	0.00927
4.000	0.00051	0.00272	-0.00410	-0.00011	0.00684	-0.01506	0.01450	0.00490	-0.00324	0.00677	0.00898	0.00690	0.00604	-0.00366
5.000	-0.00135	0.00223	-0.00484	-0.00370	0.00449	-0.01245	0.00509	0.00678	-0.00142	0.00215	0.00657	0.00433	0.00018	-0.00545
8.000	-0.00044	-0.00015	-0.00056	-0.00076	-0.00036	-0.00070	-0.00046	0.01023	-0.00004	-0.00003	0.00117	0.00016	0.00167	-0.00068

SIN THETA/ LAMBDA	XE 4D3D J(0)	XE 4D3D J(2)	XE 4D3D J(4)	XE 4D3P J(1)	XE 4D3P J(3)	XE 4D3S J(2)	XE 4D2P J(1)	XE 4D2P J(3)	XE 4D2S J(2)	XE 4D1S J(2)	XE 4P4P J(0)	XE 4P4P J(2)	XE 4P4S J(1)	XE 4P3D J(1)
0.005	0.00001-0.	-0.	0.00107	0.	-0.00001	0.00028	0.	-0.	0.	0.99987	0.00005-0.	0.00840	0.00080	
0.010	0.00005-0.00002-0.		0.00214	0.	-0.00002	0.00056	0.	-0.	0.	0.99949	0.00020-0.	0.01679	0.00159	
0.050	0.00120-0.00048-0.		0.01066	0.00002-0.00051	0.00279	0.	-0.00004	0.	0.98744	0.00501-0.	0.08324	0.00791		
0.100	0.00475-0.00189-0.00001	0.02095	0.00014-0.00202	0.00557	0.	-0.00014	0.	0.95062	0.01956-0.	0.16207	0.01547			
0.150	0.01052-0.00416-0.00004	0.03054	0.00045-0.00447	0.00835	0.00001-0.00032	0.00001	0.89197	0.04226-0.	0.23246	0.02232				
0.200	0.01829-0.00716-0.00012	0.03911	0.00105-0.00773	0.01111	0.00001-0.00056	0.00002	0.81528	0.07101-0.	0.29112	0.02817				
0.300	0.03869-0.01472-0.00055	0.05217	0.00331-0.01608	0.01658	0.00004-0.00126	0.00004	0.62702	0.13622-0.	0.36506	0.03586				
0.400	0.06317-0.02307-0.00156	0.05868	0.00712-0.02562	0.02195	0.00010-0.00223	0.00007	0.42622	0.19440-0.	0.37843	0.03717				
0.500	0.08866-0.03060-0.00337	0.05820	0.01228-0.03476	0.02718	0.00020-0.00346	0.00011	0.24730	0.23014-0.	0.34105	0.03180				
0.600	0.11231-0.03597-0.00601	0.05125	0.01827-0.04205	0.03223	0.00036-0.00495	0.00016	0.11095	0.23739-0.	0.27176	0.02042				
0.700	0.13188-0.03825-0.00938	0.03909	0.02436-0.04644	0.03707	0.00057-0.00668	0.00022	0.02303	0.21885-0.	0.19098	0.00450				
0.800	0.14594-0.03710-0.01319	0.02342	0.02976-0.04737	0.04166	0.00085-0.00864	0.00028	0.02168	0.18257-0.	0.11522-0.	0.01410				
0.900	0.15388-0.03262-0.01706	0.00607	0.03386-0.04475	0.04597	0.00122-0.01081	0.00035-0.03420	0.13816-0.	0.05462-0.	0.03340					
1.000	0.15583-0.02532-0.02059-0.01124	0.03611-0.03895	0.04996	0.00168-0.01315	0.00043-0.02674	0.09398-0.	0.1306-0.	0.05165						
1.500	0.10585	0.02649-0.02400-0.06181	0.01886	0.01110	0.06419	0.00548-0.02640	0.00093	0.04217-0.00914-0.	0.0063-0.	0.0395				
2.000	0.03920	0.05563-0.00506-0.04619-0.01565	0.03919	0.06796	0.01150-0.03879	0.00154	0.02375	0.01098-0.	0.02964-0.	0.06227				
3.000	-0.00876	0.03979	0.02699	0.00859-0.03047	0.01209	0.05253	0.02376-0.04813	0.00290-0.00186	0.01406-0.	0.00074	0.00872			
4.000	-0.00755	0.01534	0.02621	0.01604-0.00986-0.01102	0.02959	0.02801-0.03841	0.00407	0.00703	0.00003	0.00119	0.01771			
5.000	-0.00317	0.00471	0.01680	0.00922	0.00246-0.01200	0.01361	0.02474-0.02371	0.00478	0.00768-0.00016-0.	0.00395	0.01011			
8.000	-0.00004-0.00011	0.00280	0.00026	0.00390-0.00137	0.00009	0.00885-0.00182	0.00435	0.00055	0.00353-0.	0.00103	0.00029			

SIN THETA/ LAMBDA	XE 4P3D J(3)	XE 4P3P J(0)	XE 4P3P J(2)	XE 4P3S J(1)	XE 4P2F J(0)	XE 4P2P J(2)	XE 4P2S J(1)	XE 4P1S J(1)	XE 4S4S J(0)	XE 4S3D J(2)	XE 4S3P J(1)	XE 4S3S J(0)	XE 4S2P J(1)	XE 4S2S J(0)
0.005	0.	0.00001-0.00001	0.00092	0.00007-0.	0.00020	0.00004	0.99988-0.	0.00088	0.00001	0.00008	0.00007			
0.010	0.	0.00005-0.00002	0.00184	0.00007-0.	0.00040	0.00007	0.99954-0.00002	0.00177	0.00005	0.00017	0.00007			
0.050	0.00002	0.00127-0.00051	0.00914	0.00012-0.00002	0.00198	0.00037	0.98853-0.00048	0.00877	0.00125	0.00083	0.00014			
0.100	0.00014	0.00502-0.00200	0.01792	0.00029-0.00009	0.00395	0.00074	0.95482-0.00189	0.01717	0.00497	0.00165	0.00033			
0.150	0.00045	0.01112-0.00439	0.02601	0.00057-0.00020	0.00591	0.00111	0.90084-0.00416	0.02484	0.01101	0.00246	0.00066			
0.200	0.00104	0.01936-0.00758	0.03308	0.00096-0.00036	0.00785	0.00148	0.82972-0.00716	0.03146	0.01919	0.00326	0.00112			
0.300	0.00326	0.04104-0.01565	0.04320	0.00207-0.00080	0.01165	0.00222	0.65221-0.01470	0.04050	0.04076	0.00481	0.00241			
0.400	0.00696	0.06720-0.02462	0.04678	0.00362-0.00141	0.01530	0.00296	0.45740-0.02295	0.04276	0.06688	0.00624	0.00421			
0.500	0.01191	0.09456-0.03278	0.04334	0.00558-0.00219	0.01876	0.00369	0.27737-0.03021	0.03779	0.09434	0.00754	0.00648			
0.600	0.01751	0.11999-0.03860	0.03338	0.00793-0.00311	0.02196	0.00443	0.13384-0.03500	0.02615	0.11997	0.00867	0.00921			
0.700	0.02297	0.14089-0.04097	0.01818	0.01066-0.00417	0.02488	0.00516	0.03580-0.03631	0.00925	0.14114	0.00958	0.01235			
0.800	0.02747	0.15551-0.03936-0.00045	0.01374-0.00534	0.02745	0.00588-0.01869-0.03370-0.01096	0.15597	0.01026	0.01587						
0.900	0.03032	0.16300-0.03379-0.02051	0.01711-0.00662	0.02965	0.00661-0.03838-0.02730-0.03237	0.16348	0.01067	0.01971						
1.000	0.03108	0.16335-0.02479-0.04011	0.02075-0.00796	0.03143	0.00732-0.03470-0.01770-0.05298	0.16360	0.01079	0.02381						
1.500	0.00502	0.09452	0.03851-0.09050	0.04101-0.01465	0.03336	0.01083	0.04167	0.04418-0.10244	0.08943	0.00654	0.04594			
2.000	-0.03366	0.01826	0.06615-0.05952	0.05945-0.01853	0.02406	0.01414	0.02335	0.06732-0.06544	0.00931-0.00500	0.06416				
3.000	-0.04179	0.00094	0.02300	0.00543	0.07206-0.01094-0.00888	0.01992-0.00314	0.01859	0.00522	0.00111-0.	0.03295	0.06812			
4.000	-0.01374	0.01905-0.00170-0.00029	0.05587	0.00729-0.02863	0.02417	0.00802-0.01228-0.00088	0.01977-0.	0.04329	0.04081					
5.000	0.00158	0.01740	0.00089-0.00988	0.03290	0.02060-0.02805	0.02662	0.00625-0.01376-0.01074	0.01253-0.	0.03534	0.01405				
8.000	0.00409	0.00107	0.00822-0.00198	0.00058	0.01988-0.00163	0.02475-0.00049-0.00155-0.00209-0.00102-0.	0.00187-0.	0.00126						

SIN THETA/ LAMBDA	XE 4S1S J(0)	XE 3D3D J(0)	XE 3D3D J(2)	XE 3D3D J(4)	XE 3D3P J(1)	XE 3D3P J(3)	XE 3D3S J(2)	XE 3D2P J(1)	XE 3D2P J(3)	XE 3D2S J(2)	XE 3D1S J(2)	XE 3P3P J(0)	XE 3P3P J(2)	XE 3P3S J(1)
0.005	0.	0.99998	0.00001	0.	-0.00309-0.	0.00001	0.00093	0.	-0.	0.	0.99998	0.00001-0.	0.00346	
0.010	0.	0.99993	0.00003	0.	-0.00618-0.	0.00003	0.00187	0.	-0.00001	0.	0.99992	0.00003-0.	0.00691	
0.050	0.	0.99829	0.00068	0.	-0.03083-0.00001	0.00074	0.00933	0.	-0.00015	0.	0.99796	0.00068-0.	0.03452	
0.100	0.00001	0.99320	0.00272	0.	-0.06138-0.00011	0.00293	0.01864	0.00001-0.	0.0059	0.00001	0.99186	0.00325-0.	0.06871	
0.150	0.00003	0.98477	0.00607	0.00002-0.	0.09136-0.00037	0.00655	0.02789	0.00003-0.	0.0133	0.00003	0.98178	0.00726-0.	0.10224	
0.200	0.00004	0.97309	0.01070	0.00005-0.	0.12050-0.00086	0.01153	0.03706	0.00008-0.	0.0236	0.00004	0.96783	0.01278-0.	0.13480	
0.300	0.00010	0.94055	0.02344	0.00025-0.	0.17522-0.00283	0.02524	0.05507	0.00027-0.	0.0526	0.00010	0.92900	0.02798-0.	0.19583	
0.400	0.00017	0.89694	0.04019	0.00075-0.	0.22374-0.00647	0.04317	0.07246	0.00063-0.	0.0923	0.00018	0.87709	0.04786-0.	0.24968	
0.500	0.00027	0.84403	0.05997	0.00175-0.	0.26459-0.01206	0.06423	0.08906	0.00121-0.	0.0149	0.00028	0.81434	0.07121-0.	0.29469	
0.600	0.00038	0.78383	0.08168	0.00343-0.	0.29680-0.01970	0.08714	0.10470	0.00204-0.	0.0202	0.00040	0.74331	0.09661-0.	0.32969	
0.700	0.00052	0.71848	0.10419	0.00594-0.	0.31987-0.02930	0.11061	0.11923	0.00317-0.	0.0262	0.00054	0.66675	0.12263-0.	0.35412	
0.800	0.00068	0.65010	0.12644	0.00940-0.	0.33375-0.04060	0.13338	0.13254	0.00461-0.	0.03385	0.00070	0.58738	0.14788-0.	0.36792	
0.900	0.00066	0.58071	0.14747	0.01385-0.	0.33884-0.05321	0.15436	0.14453	0.00637-0.	0.04156	0.00088	0.50778	0.17112-0.	0.37156	
1.000	0.00106	0.51207	0.16648	0.01926-0.	0.33584-0.06663	0.17260	0.15512	0.00846-0.	0.04961	0.00108	0.43026	0.19133-0.	0.36592	
1.500	0.00234	0.22224	0.21709	0.05610-0.	0.23810-0.12799	0.20700	0.18650	0.02315-0.	0.08999	0.00232	0.12689	0.22929-0.	0.24555	
2.000	0.00408	0.05774	0.19819	0.09104-0.	0.10268-0.14929	0.15792	0.18551	0.04165-0.	0.12032	0.00385-0.	0.00031	0.17601-0.	0.09486	
3.000	0.00865-0.	0.02582	0.09755	0.10449	0.03468-0.08875	0.01806	0.13098	0.07032-0.	0.13036	0.00719	0.01604	0.03374	0.01689	
4.000	0.01405-0.	0.01744	0.03455	0.07322	0.04008-0.02070-0.	0.03266	0.07012	0.07462-0.	0.09640	0.01000	0.04845-0.	0.00526-0.	0.00841	
5.000	0.01942-0.	0.00703	0.01027	0.04252	0.02142	0.00838-0.	0.02990	0.03132	0.06240-0.	0.05706	0.01166	0.03904	0.00516-0.	0.02563
8.000	0.02917-0.	0.00008-0.	0.00028	0.00664	0.00052	0.00937-0.	0.00309	0.00009	0.02113-0.	0.00404	0.01043	0.00202	0.01909-0.	0.00397

SIN THETA/ LAMBDA	XE 3P2P J(0)	XE 3P2P J(2)	XE 3P2S J(1)	XE 3P1S J(1)	XE 3S3S J(0)	XE 3S2P J(1)	XE 3S2S J(0)	XE 3S1S J(0)	XE 2P2P J(0)	XE 2P2P J(2)	XE 2P2S J(1)	XE 2P1S J(1)	XE 2S2S J(0)	XE 2S1S J(0)
0.005	-0.	-0.	0.00057	0.00009	0.99998	0.00025	0.	0.00002	1.00000	0.	-0.00119	0.00025	1.00000-0.	
0.010	0.	-0.	0.00113	0.00018	0.99991	0.00050	0.00001	0.00002	0.99999	0.	-0.00238	0.00051	0.99999-0.	
0.050	0.00019-0.	0.00008	0.00567	0.00088	0.99787	0.00250	0.00022	0.00002	0.99976	0.00010-0.	0.01189	0.00253	0.99968	0.00002
0.100	0.00079-0.	0.00032	0.01131	0.00176	0.99149	0.00497	0.00089	0.00004	0.99905	0.00038-0.	0.02377	0.00505	0.99874	0.00007
0.150	0.00177-0.	0.00071	0.01689	0.00265	0.98095	0.00741	0.00199	0.00007	0.99786	0.00086-0.	0.03552	0.00758	0.99716	0.00017
0.200	0.00315-0.	0.00126	0.02239	0.00353	0.96637	0.00978	0.00353	0.00012	0.99620	0.00152-0.	0.04741	0.01010	0.99495	0.00030
0.300	0.00702-0.	0.00279	0.03302	0.00529	0.92577	0.01427	0.00786	0.00024	0.99148	0.00340-0.	0.07078	0.01513	0.98868	0.00068
0.400	0.01233-0.	0.00487	0.04298	0.00705	0.87150	0.01829	0.01378	0.00041	0.98491	0.00601-0.	0.09376	0.02015	0.97997	0.00120
0.500	0.01896-0.	0.00744	0.05209	0.00880	0.80591	0.02171	0.02114	0.00064	0.97653	0.00933-0.	0.11621	0.02514	0.96889	0.00188
0.600	0.02677-0.	0.01041	0.06017	0.01054	0.73171	0.02442	0.02978	0.00091	0.96642	0.01332-0.	0.13803	0.03009	0.95551	0.00269
0.700	0.03559-0.	0.01369	0.06708	0.01228	0.65180	0.02631	0.03949	0.00123	0.95461	0.01794-0.	0.15909	0.03500	0.93995	0.00366
0.800	0.04527-0.	0.01720	0.07271	0.01401	0.56908	0.02732	0.05007	0.00159	0.94121	0.02316-0.	0.17929	0.03987	0.92231	0.00476
0.900	0.05559-0.	0.02082	0.07699	0.01573	0.48631	0.02741	0.06127	0.00201	0.92628	0.02892-0.	0.19855	0.04469	0.90272	0.00600
1.000	0.06638-0.	0.02446	0.07986	0.01743	0.40594	0.02654	0.07286	0.00247	0.90992	0.03518-0.	0.21676	0.04945	0.88132	0.00738
1.500	0.12061-0.	0.03959	0.07370	0.02573	0.09724	0.00890	0.12871	0.00545	0.81033	0.07190-0.	0.28997	0.07217	0.75269	0.01617
2.000	0.16139-0.	0.04359	0.04126	0.03352-0.	0.01970-0.	0.02391	0.16494	0.00947	0.69137	0.11223-0.	0.33054	0.09265	0.60329	0.02768
3.000	0.17421-0.	0.01548-0.	0.03867	0.04692	0.01975-0.	0.08542	0.15351	0.01991	0.44756	0.17868-0.	0.32283	0.12507	0.31681	0.05609
4.000	0.12659	0.02742-0.	0.07439	0.05653	0.04568-0.	0.09935	0.08421	0.03207	0.25154	0.20619-0.	0.24408	0.14482	0.11791	0.08665
5.000	0.07187	0.05400-0.	0.06572	0.06183	0.02482-0.	0.07662	0.02639	0.04397	0.12290	0.19789-0.	0.15127	0.15250	0.01810	0.11415
8.000	0.00072	0.04562-0.	0.00272	0.05656-0.	0.00208-0.	0.00296-0.	0.00222	0.06483-0.	0.00404	0.10445	0.00441	0.12841	0.00162	0.15417

SIN THETA/ LAMBDA	XE 1S1S J(0)	CS 6S6S J(0)	CS 6S5P J(1)	CS 6S5S J(0)	CS 6S4D J(2)	CS 6S4P J(1)	CS 6S4S J(0)	CS 6S3D J(2)	CS 6S3P J(1)	CS 5S3S J(0)	CS 6S2P J(1)	CS 6S2S J(0)	CS 6S1S J(0)	CS 5P5P J(0)
0.005	1.00000	0.99174	0.00777	0.00027	-0.00001	0.00044	0.00001	0.	0.00005	0.	0.00001	0.	-0.	0.99907
0.010	1.00000	0.96735	0.01542	0.00109	-0.00002	0.00088	0.00004	0.	0.00010	0.	0.00001	0.	-0.	0.99627
0.050	0.99998	0.42162	0.05966	0.02429	-0.00055	0.00428	0.00092	-0.00002	0.00050	0.00006	0.00006	0.	0.	0.91065
0.100	0.99992	-0.02796	0.04814	0.06887	-0.00230	0.00793	0.00360	-0.00007	0.00099	0.00025	0.00013	0.00002	0.	0.68503
0.150	0.99982	-0.02997	-0.00514	0.08989	-0.00530	0.01037	0.00772	-0.00017	0.00146	0.00057	0.00019	0.00004	0.	0.41723
0.200	0.99969	0.00870	-0.04463	0.07642	-0.00904	0.01112	0.01274	-0.00029	0.00189	0.00100	0.00025	0.00008	0.	0.19056
0.300	0.99930	0.00895	-0.04153	0.01600	-0.01505	0.00712	0.02268	-0.00065	0.00259	0.00220	0.00038	0.00018	0.00001	-0.02853
0.400	0.99875	-0.00131	-0.00917	-0.01012	-0.01442	-0.00199	0.02838	-0.00111	0.00299	0.00376	0.00049	0.00031	0.00001	-0.03593
0.500	0.99805	-0.00188	0.00420	-0.00586	-0.00748	-0.01138	0.02765	-0.00162	0.00302	0.00556	0.00059	0.00048	0.00002	0.00456
0.600	0.99720	0.00023	0.00314	0.00313	0.00145	-0.01719	0.02170	-0.00210	0.00261	0.00744	0.00069	0.00069	0.00003	0.02610
0.700	0.99619	0.00143	-0.00133	0.00692	0.00850	-0.01821	0.01348	-0.00246	0.00179	0.00923	0.00076	0.00093	0.00004	0.02558
0.800	0.99502	0.00142	-0.00409	0.00600	0.01209	-0.01548	0.00582	-0.00261	0.00059	0.01075	0.00082	0.00119	0.00005	0.01555
0.900	0.99371	0.00083	-0.00449	0.00327	0.01244	-0.01089	0.00039	-0.00250	0.00086	0.01186	0.00087	0.00149	0.00007	0.00545
1.000	0.99224	0.00026	-0.00345	0.00079	0.01066	-0.00615	-0.00240	-0.00211	-0.00243	0.01247	0.00089	0.00181	0.00009	-0.00094
1.500	0.98267	0.00003	0.00051	0.00030	-0.00030	0.00110	0.00225	-0.00240	-0.00794	0.00870	0.00062	0.00358	0.00019	0.00244
2.000	0.96950	0.00053	-0.00061	0.00108	-0.00014	-0.00222	0.00266	0.00536	-0.00624	0.00176	-0.00024	0.00515	0.00033	0.00366
3.000	0.93333	-0.00013	-0.00014	-0.00015	0.00096	-0.00030	0.00037	-0.00210	0.00021	-0.00023	-0.00257	0.00583	0.00071	-0.00028
4.000	0.88602	0.00042	0.00015	0.00023	-0.00023	0.00017	0.00062	-0.00089	0.00009	0.00163	-0.00364	0.00374	0.00115	0.00062
5.000	0.83036	0.00014	-0.00012	0.00020	-0.00048	-0.00030	0.00059	-0.00122	-0.00085	0.00119	-0.00312	0.00142	0.00161	0.00097
8.000	0.64118	0.00002	0.00003	-0.00007	-0.00009	-0.00012	-0.00004	-0.00016	-0.00023	-0.00010	-0.00025	-0.00014	0.00247	-0.00034

SIN THETA/ LAMBDA	CS 5P5P J(2)	CS 5P5S J(1)	CS 5P4D J(1)	CS 5P4D J(3)	CS 5P4P J(0)	CS 5P4P J(2)	CS 5P4S J(1)	CS 5P3D J(1)	CS 5P3D J(3)	CS 5P3P J(0)	CS 5P3P J(2)	CS 5P3S J(1)	CS 5P2P J(0)	CS 5P2P J(2)
0.005	0.00037	-0.02125	0.00385	0.	0.00006	-0.00002	0.00101	0.00018	0.	0.00001	0.	0.00026	-0.00001	0.
0.010	0.00149	-0.04243	0.00768	0.	0.00023	-0.00005	0.00202	0.00036	0.	0.00002	0.	0.00051	-0.00001	0.
0.050	0.03507	-0.20026	0.03696	0.00043	0.00571	-0.00226	0.00963	0.00180	0.	0.00028	-0.00011	0.00254	0.00001	-0.00001
0.100	0.11665	-0.33481	0.06534	0.00320	0.02165	-0.00835	0.01654	0.00355	0.00002	0.00110	-0.00044	0.00502	0.00006	-0.00003
0.150	0.19530	-0.37358	0.07928	0.00948	0.04462	-0.01660	0.01866	0.00520	0.00006	0.00246	-0.00098	0.00737	0.00014	-0.00006
0.200	0.23400	-0.32977	0.07702	0.01882	0.07028	-0.02456	0.01501	0.00670	0.00015	0.00432	-0.00171	0.00953	0.00026	-0.00011
0.300	0.18361	-0.14485	0.03513	0.03897	0.11273	-0.03156	-0.00770	0.00906	0.00051	0.00945	-0.00369	0.01302	0.00060	-0.00024
0.400	0.07707	-0.01354	-0.02260	0.04759	0.12629	-0.02099	-0.03988	0.01024	0.00120	0.01608	-0.00615	0.01506	0.00107	-0.00043
0.500	0.00972	0.02173	-0.06345	0.03867	0.10973	0.00249	-0.06615	0.00995	0.00227	0.02363	-0.00874	0.01536	0.00166	-0.00066
0.600	-0.01018	0.00907	-0.07700	0.01780	0.07600	0.02795	-0.07720	0.00804	0.00371	0.01388	-0.01107	0.01379	0.00238	-0.00095
0.700	-0.00550	-0.01006	-0.06903	-0.00552	0.04020	0.0463	-0.07242	0.00460	0.00537	0.03855	-0.01272	0.01046	0.00321	-0.00127
0.800	0.00472	-0.01984	-0.05034	-0.02415	0.01229	0.05383	-0.05696	-0.00009	0.00706	0.04448	-0.01339	0.00569	0.00416	-0.00164
0.900	0.01179	-0.01985	-0.02997	-0.03505	-0.00421	0.05147	-0.03752	-0.00557	0.00854	0.04866	-0.01289	-0.00007	0.00520	-0.00203
1.000	0.01399	-0.01453	-0.01314	-0.03842	-0.01036	0.0426	-0.01948	-0.01131	0.00957	0.05081	-0.01120	-0.00626	0.00633	-0.00246
1.500	0.00071	0.00222	0.00378	-0.01031	0.01108	-0.00106	0.00380	-0.02969	0.00488	0.03563	0.00779	-0.02773	0.01280	-0.00467
2.000	-0.00001	-0.00283	-0.00629	0.00177	0.01016	0.00141	-0.00901	-0.02315	-0.00817	0.00948	0.02070	-0.02215	0.01901	-0.00615
3.000	0.00189	-0.00055	-0.00068	-0.00404	-0.00081	0.00551	-0.00107	0.00161	-0.01468	-0.00051	0.00944	0.00106	0.02421	-0.00427
4.000	0.00019	0.00024	0.00240	-0.00248	0.00214	0.00023	0.00068	0.00616	-0.00570	0.00607	-0.00027	0.00053	0.01960	0.00167
5.000	-0.00013	-0.00035	0.00164	-0.00015	0.00272	-0.00017	-0.00019	0.00378	0.00006	0.03616	0.	-0.00309	0.01200	0.00646
8.000	0.00084	-0.00029	0.00003	0.00067	0.00031	0.00113	-0.00047	0.00014	0.00147	0.00050	0.00284	-0.00086	0.00040	0.00697

SIN THETA/ LAMBDA	CS 5P2S J(1)	CS 5P1S J(1)	CS 5S5S J(0)	CS 5S4D J(2)	CS 5S4P J(1)	CS 5S4S J(0)	CS 5S3D J(2)	CS 5S3P J(1)	CS 5S3S J(0)	CS 5S2P J(1)	CS 5S2S J(0)	CS 5S1S J(0)	CS 4D4D J(0)	CS 4D4D J(2)
0.005	0.00006	0.00001	0.99930	-0.00006	0.00241	0.00005	-0.00002	0.00023	0.00005	0.00003	-0.00000	-0.00000	0.99985	0.00006
0.010	0.00013	0.00002	0.99720	-0.00022	0.00481	0.00021	-0.00046	0.00046	0.00005	0.00006	-0.00000	-0.00000	0.99941	0.00024
0.050	0.00063	0.00012	0.93205	-0.00544	0.02328	0.00524	-0.00009	0.00229	0.00034	0.00029	0.00002	0.00000	0.98533	0.00585
0.100	0.00126	0.00024	0.75209	-0.02013	0.04201	0.02003	-0.00035	0.00451	0.00121	0.00057	0.00008	0.00000	0.94259	0.02268
0.150	0.00189	0.00037	0.51817	-0.03977	0.05267	0.04184	-0.00078	0.00663	0.00265	0.00085	0.00019	0.00001	0.87537	0.04846
0.200	0.00251	0.00049	0.29284	-0.05897	0.05345	0.06709	-0.00138	0.00858	0.00464	0.00113	0.00035	0.00002	0.78904	0.08023
0.300	0.00373	0.00073	0.00970	-0.07855	0.02762	0.11289	-0.00303	0.01172	0.01012	0.00167	0.00078	0.00003	0.58483	0.14806
0.400	0.00491	0.00098	-0.04979	-0.06347	-0.01804	0.13428	-0.00515	0.01348	0.01725	0.00218	0.00138	0.00006	0.37968	0.20170
0.500	0.00504	0.00122	-0.01458	-0.02546	-0.05953	0.12516	-0.00747	0.01347	0.02542	0.00264	0.00214	0.00010	0.20913	0.22727
0.600	0.00709	0.00146	0.02131	0.01502	-0.08173	0.09425	-0.00961	0.01152	0.03388	0.00305	0.00306	0.00014	0.08849	0.22340
0.700	0.00806	0.00171	0.03219	0.04381	-0.08232	0.05591	-0.01114	0.00765	0.04183	0.00339	0.00412	0.00019	0.01667	0.19715
0.800	0.00893	0.00195	0.02517	0.05555	-0.06752	0.02221	-0.01170	0.00218	0.04850	0.00366	0.00532	0.00024	0.01647	0.15862
0.900	0.00970	0.00219	0.01261	0.05573	-0.04605	-0.00059	-0.01107	-0.00440	0.05328	0.00384	0.00653	0.00031	-0.02364	0.11697
1.000	0.01034	0.00242	0.00220	0.04545	-0.02506	-0.01157	-0.00920	-0.01146	0.05581	0.00393	0.00805	0.00038	-0.01622	0.07867
1.500	0.01141	0.00359	0.00162	-0.00172	0.00454	0.01057	0.01107	-0.03545	0.03824	0.00273	0.01591	0.00084	0.03682	-0.00513
2.000	0.00886	0.00469	0.00474	-0.00047	-0.00999	0.01158	0.02386	-0.02748	0.00749	-0.00110	0.02286	0.00147	0.02710	0.00622
3.000	-0.00182	0.00663	-0.00064	0.00422	-0.00126	-0.00162	0.00916	0.00097	-0.00093	-0.01142	0.02580	0.00312	-0.00178	0.01689
4.000	-0.00915	0.00809	0.00094	-0.00103	0.00076	0.00277	-0.00397	0.00038	0.00721	-0.01611	0.01648	0.00510	-0.00361	0.00786
5.000	-0.00967	0.00897	0.00101	-0.00214	-0.00133	0.00260	-0.00537	-0.00378	0.00525	-0.01380	0.00526	0.00710	-0.00168	0.00262
8.000	-0.00088	0.00853	-0.00054	-0.00044	-0.00054	-0.00016	-0.00071	-0.00101	-0.00042	-0.00111	-0.00054	0.01090	-0.00006	-0.00001

SIN THETA/ LAMBDA	CS 4D4D J(4)	CS 4D4P J(1)	CS 4D4P J(3)	CS 4D4S J(2)	CS 4D3D J(0)	CS 4D3D J(2)	CS 4D3D J(4)	CS 4D3P J(1)	CS 4D3P J(3)	CS 4D3S J(2)	CS 4D2P J(1)	CS 4D2P J(3)	CS 4D2S J(2)	CS 4D1S J(2)
0.005	0.	-0.00856	-0.00000	0.00005	0.00001	-0.00000	-0.00000	0.00108	0.	-0.00001	0.00028	0.	-0.00000	0.
0.010	0.	-0.01712	-0.00000	0.00019	0.00005	-0.00002	-0.00000	0.00215	0.	-0.00002	0.00056	0.	-0.00000	0.
0.050	0.00001	-0.08477	-0.00024	0.00476	0.00115	-0.00046	-0.00000	0.01072	0.00002	-0.00050	0.00279	0.	-0.00003	0.
0.100	0.00021	-0.16455	-0.00189	0.01858	0.00454	-0.00181	-0.00001	0.02110	0.00013	-0.00198	0.00558	0.	-0.00014	0.
0.150	0.00101	-0.23486	-0.00612	0.04016	0.01007	-0.00398	-0.00003	0.03081	0.00043	-0.00438	0.00836	0.00001	-0.00031	0.00001
0.200	0.00299	-0.29219	-0.01370	0.06751	0.01753	-0.00687	-0.00010	0.03956	0.00099	-0.00759	0.01113	0.00001	-0.00055	0.00002
0.300	0.01246	-0.36000	-0.03947	0.12972	0.03724	-0.01421	-0.00049	0.05319	0.00314	-0.01588	0.01661	0.00004	-0.00122	0.00004
0.400	0.03052	-0.36509	-0.07550	0.18570	0.06112	-0.02245	-0.00142	0.06053	0.00679	-0.02547	0.02199	0.00010	-0.00217	0.00007
0.500	0.05486	-0.32110	-0.11315	0.22090	0.08633	-0.03010	-0.00308	0.06107	0.01181	-0.03485	0.02725	0.00019	-0.00338	0.00011
0.500	0.08034	-0.24945	-0.14338	0.22946	0.11018	-0.03585	-0.00556	0.05519	0.01773	-0.04262	0.03234	0.00034	-0.00483	0.00016
0.700	0.10164	-0.17084	-0.16027	0.21353	0.13045	-0.03877	-0.00876	0.04396	0.02389	-0.04770	0.03723	0.00054	-0.00653	0.00021
0.800	0.11518	-0.10021	-0.16220	0.18052	0.14566	-0.03841	-0.01246	0.02895	0.02955	-0.04946	0.04188	0.00081	-0.00845	0.00028
0.900	0.11978	-0.04552	-0.15107	0.13921	0.15508	-0.03478	-0.01632	0.01188	0.03404	-0.04772	0.04626	0.00116	-0.01058	0.00035
1.000	0.11618	-0.00882	-0.13079	0.09713	0.15863	-0.02828	-0.01997	0.00558	0.03685	-0.04275	0.05034	0.00159	-0.01289	0.00043
1.500	0.04607	0.00526	-0.01951	-0.01071	0.11406	0.02277	-0.02537	-0.06128	0.02257	0.00651	0.06524	0.00524	-0.02610	0.00092
2.000	0.00311	-0.02068	0.00524	0.00246	0.04588	0.05535	-0.00790	-0.05017	-0.01240	0.03857	0.06989	0.01114	-0.03881	0.00154
3.000	0.00435	-0.00118	-0.01268	0.01074	-0.00823	0.04313	0.02644	0.00675	-0.03212	0.01499	0.05559	0.02375	-0.04959	0.00293
4.000	0.00944	0.00724	-0.00711	-0.00317	-0.00830	0.01747	0.02766	0.01692	-0.01179	-0.01049	0.03229	0.02880	-0.04077	0.00414
5.000	0.00727	0.00489	-0.00028	-0.00580	-0.00366	0.00560	0.01836	0.01030	0.00176	-0.01277	0.01533	0.02604	-0.02591	0.00491
8.000	0.00136	0.00021	0.00186	-0.00084	-0.00007	-0.00010	0.00322	0.00038	0.00426	-0.00169	0.00024	0.00976	-0.00230	0.00459

SIN THETA/ LAMBDA	CS 4P4P J(0)	CS 4P4P J(2)	CS 4P4S J(1)	CS 4P3D J(1)	CS 4P2D J(3)	CS 4P3P J(0)	CS 4P3P J(2)	CS 4P3S J(1)	CS 4P2P J(0)	CS 4P2P J(2)	CS 4P2S J(1)	CS 4P1S J(1)	CS 4S4S J(0)	CS 4S3D J(2)
0.005	0.99988	0.00005-0.00813	0.00077	0.	0.00001-0.	0.00091	0.00006-0.	0.00020	0.00004	0.99989-0.	0.00004	0.99989-0.	0.99989-0.	0.99989-0.
0.010	0.99953	0.00019-0.01627	0.00153	0.	0.00005-0.00002	0.00182	0.00006-0.	0.00039	0.00007	0.99957-0.00002	0.00039	0.00007	0.99957-0.00002	0.99957-0.00002
0.050	0.98827	0.00468-0.08068	0.00762	0.00002	0.00121-0.00048	0.00907	0.00012-0.00002	0.00197	0.00037	0.98921-0.00045	0.00197	0.00037	0.98921-0.00045	0.98921-0.00045
0.100	0.95381	0.01831-0.15735	0.01491	0.00012	0.00480-0.00191	0.01780	0.00028-0.00009	0.00393	0.00074	0.95746-0.00177	0.00393	0.00074	0.95746-0.00177	0.95746-0.00177
0.150	0.89875	0.03967-0.22633	0.02155	0.00041	0.01065-0.00421	0.02588	0.00055-0.00020	0.00588	0.00111	0.90651-0.00391	0.00588	0.00111	0.90651-0.00391	0.90651-0.00391
0.200	0.82641	0.06692-0.28458	0.02728	0.00096	0.01857-0.00728	0.03301	0.00093-0.00035	0.00781	0.00148	0.83910-0.00674	0.00781	0.00148	0.83910-0.00674	0.83910-0.00674
0.300	0.64698	0.12978-0.36093	0.03502	0.00301	0.03950-0.01510	0.04346	0.00201-0.00078	0.01160	0.00222	0.66947-0.01390	0.01160	0.00222	0.66947-0.01390	0.66947-0.01390
0.400	0.45199	0.18792-0.38012	0.03681	0.00647	0.06496-0.02392	0.04768	0.00351-0.00137	0.01524	0.00295	0.48047-0.02184	0.01524	0.00295	0.48047-0.02184	0.48047-0.02184
0.500	0.27383	0.22648-0.34972	0.03226	0.01114	0.09192-0.03214	0.04514	0.00541-0.00212	0.01870	0.00369	0.30214-0.02901	0.01870	0.00369	0.30214-0.02901	0.30214-0.02901
0.600	0.13344	0.23855-0.28617	0.02191	0.01653	0.11739-0.03828	0.03619	0.00771-0.00302	0.02193	0.00442	0.15595-0.03402	0.02193	0.00442	0.15595-0.03402	0.15595-0.03402
0.700	0.03851	0.22527-0.20831	0.00699	0.02192	0.13887-0.04125	0.02195	0.01036-0.00406	0.02487	0.00515	0.05208-0.03585	0.02487	0.00515	0.05208-0.03585	0.05208-0.03585
0.800	-0.01390	0.19324-0.13230	0.01081	0.02655	0.15457-0.04045	0.00405	0.01336-0.00520	0.02750	0.00587	0.00951-0.03401	0.02750	0.00587	0.00951-0.03401	0.00951-0.03401
0.900	-0.03301	0.15119-0.06890	0.02968	0.02975	0.16352-0.03580	0.01565	0.01666-0.00645	0.02976	0.00660	0.03584-0.02850	0.02976	0.00660	0.03584-0.02850	0.03584-0.02850
1.000	-0.03006	0.10730-0.02310	0.04792	0.03103	0.16555-0.02769	0.03530	0.02022-0.00777	0.03163	0.00731	0.03713-0.01981	0.03163	0.00731	0.03713-0.01981	0.03713-0.01981
1.500	0.04117	0.00806	0.00341-0.09493	0.00806	0.10257	0.03459-0.09098	0.04024-0.01447	0.03423	0.01082	0.03992	0.03423	0.01082	0.03992	0.04086
2.000	0.02771	0.00856-0.02986	0.06750-0.03103	0.02367	0.06661-0.06474	0.05895-0.01867	0.02574	0.02574	0.01415	0.02741	0.02574	0.01415	0.02741	0.06801
3.000	-0.00230	0.01595-0.00222	0.00644-0.04411	0.00061	0.02672	0.00415	0.07346-0.01216	0.00691	0.01998	0.00394	0.00691	0.01998	0.00394	0.02242
4.000	0.00673	0.00059	0.00179	0.01851-0.01618	0.01873-0.00112	0.00097	0.05869	0.00587-0.02826	0.02434	0.00781-0.01143	0.02434	0.00781	0.01143	0.01143
5.000	0.00817	0.00043-0.00373	0.01119	0.00053	0.01845	0.00023-0.00958	0.03567	0.01996-0.02916	0.02696	0.00692-0.01448	0.02696	0.00692	0.01448	0.01448
8.000	0.00074	0.00371-0.00130	0.00041	0.00442	0.00146	0.00854-0.00252	0.00114	0.02091-0.00254	0.02555-0.00054	0.00188	0.02555	0.00054	0.00188	0.00188

SIN THETA/ LAMBDA	CS 4S3P J(1)	CS 4S3S J(0)	CS 4S2P J(1)	CS 4S2S J(0)	CS 4S1S J(0)	CS 3D3C J(0)	CS 3D3D J(2)	CS 3D3D J(4)	CS 3D3P J(1)	CS 3D3P J(3)	CS 3D3S J(2)	CS 3D2P J(1)	CS 3D2P J(3)	CS 3D2S J(2)
0.005	0.00086	0.00001	0.00008	0.00007	0.	0.99998	0.00001	0.	-0.00301-0.	0.00001	0.00092	0.	-0.	-0.
0.010	0.00172	0.00005	0.00016	0.00007	0.	0.99994	0.00003	0.	-0.00602-0.	0.00003	0.00184	0.	-0.00001	-0.00001
0.050	0.00855	0.00120	0.00082	0.00013	0.	0.99838	0.00065	0.	-0.03004-0.00001	0.00070	0.00918	0.	-0.00014	-0.00014
0.100	0.01675	0.00475	0.00163	0.00032	0.00001	0.99355	0.00258	0.	-0.05982-0.00010	0.00279	0.01834	0.00001-0.00057	0.00001-0.00057	0.00057
0.150	0.02427	0.01057	0.00243	0.00064	0.00003	0.98555	0.00576	0.00001-0.08907	0.00034	0.00623	0.02745	0.00003-0.00128	0.00003-0.00128	0.00128
0.200	0.03082	0.01843	0.00322	0.00108	0.00004	0.97446	0.01015	0.00004-0.11754	0.00080	0.01098	0.03648	0.00008-0.00227	0.00008-0.00227	0.00227
0.300	0.03998	0.03926	0.00475	0.00234	0.00010	0.94353	0.02229	0.00022-0.17119	0.00263	0.02406	0.05423	0.00025-0.00507	0.00025-0.00507	0.00507
0.400	0.04275	0.06469	0.00618	0.00408	0.00017	0.90197	0.03828	0.00068-0.21905	0.00602	0.04124	0.07141	0.00059-0.00891	0.00059-0.00891	0.00891
0.500	0.03862	0.09170	0.00747	0.00629	0.00026	0.85139	0.05726	0.00158-0.25974	0.01124	0.06150	0.08783	0.00114-0.01370	0.00114-0.01370	0.01370
0.600	0.02801	0.11734	0.00860	0.00894	0.00038	0.79362	0.07822	0.00310-0.29231	0.01842	0.08367	0.10334	0.00193-0.01936	0.00193-0.01936	0.01936
0.700	0.01214	0.13901	0.00953	0.01200	0.00051	0.73064	0.10011	0.00540-0.31622	0.02749	0.10655	0.11781	0.00300-0.02576	0.00300-0.02576	0.02576
0.800	-0.00725	0.15485	0.01024	0.01543	0.00066	0.66441	0.12194	0.00858-0.33137	0.03823	0.12897	0.13111	0.00436-0.03279	0.00436-0.03279	0.03279
0.900	-0.02819	0.16377	0.01069	0.01918	0.00084	0.59682	0.14279	0.01269-0.33805	0.05030	0.14986	0.14315	0.00604-0.04031	0.00604-0.04031	0.04031
1.000	-0.04876	0.16553	0.01086	0.02319	0.00103	0.52955	0.16190	0.01774-0.33686	0.06325	0.16832	0.15387	0.00802-0.04818	0.00802-0.04818	0.04818
1.500	-0.10338	0.09733	0.00708	0.04510	0.00229	0.23985	0.21628	0.05299-0.24744	0.12452	0.20750	0.18666	0.02215-0.08817	0.02215-0.08817	0.08817
2.000	-0.07110	0.01433-0.00393	0.06375	0.00399	0.06865	0.20256	0.08828-0.11387	0.14937	0.16423	0.18775	0.04029-0.11917	0.04029-0.11917	0.11917	0.11917
3.000	0.00387	0.00097-0.03198	0.07001	0.00849-0.02533	0.01049	0.10606	0.03164-0.09458	0.02458	0.13605	0.06963-0.13237	0.13605	0.06963-0.13237	0.13237	0.13237
4.000	0.00040	0.01985-0.04386	0.04391	0.01383-0.01883	0.03853	0.07687	0.04183-0.02507	0.03167	0.07491	0.07558-0.10048	0.07491	0.07558-0.10048	0.10048	0.10048
5.000	-0.01045	0.01388-0.03709	0.01639	0.01922-0.00793	0.01193	0.04573	0.02346	0.00683-0.03138	0.03450	0.06447-0.06107	0.03450	0.06447-0.06107	0.06107	0.06107
8.000	-0.00265	-0.00113-0.00286	0.00167	0.02942-0.00013	0.00026	0.00745	0.00077	0.01003-0.00372	0.00040	0.02276-0.00502	0.00040	0.02276-0.00502	0.00502	0.00502



SIN THETA/ LAMBDA	CS 3D1S J(2)	CS 3P3P J(0)	CS 3P3P J(2)	ES 3P3S J(1)	CS 3P2P J(0)	CS 3P2P J(2)	CS 3P2S J(1)	CS 3P1S J(1)	CS 3S3S J(0)	CS 3S2P J(1)	CS 3S2S J(0)	CS 3S1S J(0)	CS 2P2P J(0)	CS 2P2P J(2)
0.005	0.	0.99998	0.00001	-0.00338	-0.	-0.	0.00056	0.00009	0.99998	0.00024	0.	0.00002	1.00000	0.
0.010	0.	0.99992	0.00003	-0.00676	0.	-0.	0.00112	0.00017	0.99992	0.00049	0.00001	0.00002	0.99999	0.
0.050	0.	0.99805	0.00078	-0.03373	0.00019	-0.00008	0.00558	0.00087	0.99796	0.00244	0.00021	0.00002	0.99977	0.00009
0.100	0.00001	0.99224	0.00310	-0.06715	0.00076	-0.00030	0.01114	0.00174	0.99187	0.00486	0.00085	0.00004	0.99909	0.00037
0.150	0.00002	0.98262	0.00693	-0.09995	0.00170	-0.00068	0.01664	0.00261	0.98179	0.00725	0.00192	0.00007	0.99795	0.00082
0.200	0.00004	0.96930	0.01220	-0.13185	0.00303	-0.00121	0.02206	0.00348	0.96783	0.00957	0.00339	0.00011	0.99635	0.00146
0.300	0.00010	0.93218	0.02674	-0.19183	0.00675	-0.00269	0.03255	0.00521	0.92893	0.01398	0.00757	0.00023	0.99181	0.00327
0.400	0.00017	0.88245	0.04584	-0.24509	0.01186	-0.00469	0.04241	0.00695	0.87684	0.01795	0.01327	0.00040	0.98550	0.00578
0.500	0.00027	0.82216	0.06835	-0.29001	0.01826	-0.00717	0.05147	0.00867	0.81370	0.02135	0.02038	0.00061	0.97745	0.00897
0.600	0.00039	0.75367	0.09299	-0.32549	0.02580	-0.01004	0.05955	0.01040	0.74202	0.02408	0.02873	0.00088	0.96772	0.01281
0.700	0.00053	0.67952	0.11841	-0.35091	0.03434	-0.01323	0.06652	0.01211	0.66450	0.02604	0.03814	0.00119	0.95636	0.01726
0.800	0.00068	0.60227	0.14331	-0.36614	0.04372	-0.01665	0.07228	0.01381	0.58386	0.02716	0.04842	0.00154	0.94345	0.02229
0.900	0.00086	0.52435	0.16651	-0.37156	0.05376	-0.02020	0.07673	0.01551	0.50272	0.02739	0.05933	0.00194	0.92907	0.02785
1.000	0.00105	0.44798	0.18699	-0.36791	0.06428	-0.02378	0.07984	0.01719	0.42342	0.02672	0.07056	0.00239	0.91329	0.03389
1.500	0.00226	0.14208	0.23027	-0.25624	0.11780	-0.03903	0.07548	0.02539	0.11153	0.01042	0.12631	0.00527	0.81697	0.06953
2.000	0.00377	0.00516	0.18312	-0.10619	0.15933	-0.04394	0.04493	0.03311	-0.01578	-0.02116	0.16350	0.00917	0.70121	0.10907
3.000	0.00709	0.01245	0.04010	0.01642	0.17636	-0.01820	-0.03462	0.04649	0.01574	-0.08315	0.15714	0.01933	0.46115	0.17574
4.000	0.00994	0.04813	-0.00497	-0.00585	0.13174	0.02438	-0.07367	0.05625	0.04644	-0.10028	0.09013	0.03127	0.26453	0.20555
5.000	0.01170	0.04113	0.00366	-0.02522	0.07706	0.05250	-0.06793	0.06185	0.02748	-0.07988	0.03078	0.04310	0.13275	0.19993
8.000	0.01075	0.00280	0.01965	-0.00508	0.00185	0.04746	-0.00462	0.05765	-0.00235	-0.00494	-0.00312	0.06475	-0.00237	0.10911

SIN THETA/ LAMBDA	CS 2P2S J(1)	CS 2P1S J(1)	CS 2S2S J(0)	CS 2S1S J(0)	CS 1S1S J(0)	BA 6S6S J(0)	BA 6S5P J(1)	BA 6S5S J(0)	BA 6S4D J(2)	BA 5S4P J(1)	BA 6S4S J(0)	BA 6S3D J(2)	BA 6S3P J(1)	BA 6S3S J(0)
0.005	-0.00117	0.00025	1.00000	-0.	1.00000	0.99425	0.00757	0.00025	-0.00001	0.00051	0.00001	-0.	0.00006	-0.00001
0.010	-0.00233	0.00050	0.99999	-0.	1.00000	0.97720	0.01505	0.00101	-0.00002	0.00101	0.00004	-0.	0.00012	-0.00001
0.050	-0.01166	0.00248	0.99970	0.00002	0.99998	0.55382	0.06135	0.02314	-0.00057	0.00495	0.00104	-0.00002	0.00062	0.00007
0.100	-0.02330	0.00497	0.99879	0.00007	0.99993	0.04433	0.06061	0.07048	-0.00237	0.00925	0.00407	-0.00009	0.00122	0.00030
0.150	-0.03491	0.00745	0.99727	0.00016	0.99983	-0.05005	0.01061	0.10176	-0.00547	0.01227	0.00879	-0.00019	0.00179	0.00067
0.200	-0.04648	0.00993	0.99515	0.00029	0.99970	-0.00743	-0.03980	0.09813	-0.00952	0.01350	0.01466	-0.00034	0.00232	0.00120
0.300	-0.06940	0.01487	0.98912	0.00065	0.99932	0.01825	-0.05824	0.03353	-0.01699	0.00978	0.02684	-0.00076	0.00321	0.00264
0.400	-0.09195	0.01980	0.98074	0.00116	0.99880	0.00125	-0.02075	-0.00903	-0.01800	-0.00044	0.03484	-0.00131	0.00375	0.00454
0.500	-0.11401	0.02470	0.97007	0.00181	0.99812	-0.00348	0.00281	-0.01039	-0.01124	-0.01213	0.03549	-0.00193	0.00384	0.00675
0.600	-0.13547	0.02957	0.95719	0.00260	0.99730	-0.00078	0.00549	0.00106	-0.00076	-0.02042	0.02943	-0.00253	0.00343	0.00909
0.700	-0.15621	0.03441	0.94219	0.00353	0.99633	0.00179	0.00019	0.00821	0.00867	-0.02316	0.01974	-0.00301	0.00250	0.01136
0.800	-0.17615	0.03920	0.92518	0.00459	0.99520	0.00241	-0.00447	0.00872	0.01439	-0.02093	0.00990	-0.00325	0.00111	0.01334
0.900	-0.19518	0.04394	0.90628	0.00579	0.99394	0.00175	-0.00609	0.00570	0.01605	-0.01576	0.00229	-0.00320	0.00063	0.01487
1.000	-0.21323	0.04862	0.88562	0.00712	0.99252	0.00077	-0.00533	0.00220	0.01464	-0.00979	-0.00219	-0.00281	0.00257	0.01581
1.500	-0.28650	0.07104	0.76096	0.01561	0.98329	-0.00004	0.00072	0.00003	0.00019	0.00173	0.00225	0.00259	-0.00998	0.01188
2.000	-0.32850	0.09133	0.61515	0.02677	0.97059	0.00063	-0.00073	0.00158	-0.00050	-0.00265	0.00379	0.00675	-0.00851	0.00294
3.000	-0.32583	0.12376	0.33150	0.05444	0.93564	-0.00019	-0.00027	-0.00021	0.00137	-0.00060	-0.00052	0.000312	0.00003	-0.00051
4.000	-0.25127	0.14399	0.12945	0.08450	0.88982	0.00030	0.00018	0.00026	-0.00021	0.00028	0.00075	-0.00100	0.00026	0.00204
5.000	-0.15975	0.15246	0.02412	0.11193	0.83575	0.00020	-0.00018	0.00032	-0.00065	-0.00035	0.00082	-0.00162	0.00104	0.00166
8.000	0.00109	0.13071	-0.00056	0.15391	0.65056	-0.00001	0.	-0.00013	-0.00014	-0.00018	-0.00035	-0.00025	-0.00036	-0.00013



SIN THETA/ LAMBDA	BA 5S2S J(0)	BA 5S1S J(0)	BA 4D4D J(0)	BA 4D4D J(2)	BA 4D4D J(4)	BA 4D4P J(1)	BA 4D4P J(3)	BA 4D4S J(2)	BA 4D3D J(0)	BA 4D3D J(2)	BA 4D3D J(4)	BA 4D3P J(1)	BA 4D3P J(3)	BA 4D3S J(2)
0.005	-0.	-0.	0.99986	0.00005	0.	-0.00826-0.	0.00004	0.00001-0.	-0.	0.00108	0.	-0.	-0.	-0.
0.010	-0.	-0.	0.99946	0.00022	0.	-0.01652-0.	0.00018	0.00004-0.00002-0.	0.000216	0.	-0.00002	0.	-0.00002	0.
0.050	0.00002	0.	0.98657	0.00536	0.00001-0.08187-0.00022	0.00445	0.00109-0.00044-0.	0.01076	0.00002-0.00049	0.01076	0.00002-0.00049	0.01076	0.00002-0.00049	0.01076
0.100	0.00009	0.	0.94732	0.02083	0.00018-0.15929-0.00169	0.01741	0.00434-0.00173-0.00001	0.02121	0.00012-0.00194	0.02121	0.00012-0.00194	0.02121	0.00012-0.00194	0.02121
0.150	0.00020	0.00001	0.88525	0.04474	0.00085-0.22820-0.00549	0.03774	0.00964-0.00381-0.00003	0.03102	0.00040-0.00429	0.03102	0.00040-0.00429	0.03102	0.00040-0.00429	0.03102
0.200	0.00035	0.00002	0.80489	0.07456	0.00251-0.28535-0.01236	0.06371	0.01681-0.00660-0.00009	0.03992	0.00094-0.00745	0.03992	0.00094-0.00745	0.03992	0.00094-0.00745	0.03992
0.300	0.00079	0.00004	0.61160	0.14002	0.01069-0.35660-0.03606	0.12379	0.03582-0.01372-0.00044	0.05405	0.00298-0.01564	0.05405	0.00298-0.01564	0.05405	0.00298-0.01564	0.05405
0.400	0.00140	0.00006	0.41181	0.19498	0.02681-0.36869-0.07010	0.17984	0.05908-0.02183-0.00129	0.06216	0.00648-0.02524	0.06216	0.00648-0.02524	0.06216	0.00648-0.02524	0.06216
0.500	0.00217	0.00010	0.23964	0.22529	0.04945-0.33229-0.10705	0.21780	0.08395-0.02954-0.00282	0.06367	0.01134-0.03482	0.06367	0.01134-0.03482	0.06367	0.01134-0.03482	0.06367
0.600	0.00311	0.00014	0.11224	0.22763	0.07437-0.26616-0.13848	0.23100	0.10787-0.03560-0.00513	0.05883	0.01717-0.04300	0.05883	0.01717-0.04300	0.05883	0.01717-0.04300	0.05883
0.700	0.00419	0.00019	0.03158	0.20695	0.09662-0.18965-0.15827	0.22020	0.12871-0.03908-0.00817	0.04856	0.02335-0.04871	0.04856	0.02335-0.04871	0.04856	0.02335-0.04871	0.04856
0.800	0.00541	0.00025	-0.00984	0.17199	0.11241-0.11782-0.16396	0.19128	0.14493-0.03946-0.01175	0.03428	0.02919-0.05126	0.03428	0.02919-0.05126	0.03428	0.02919-0.05126	0.03428
0.900	0.00675	0.00031	-0.02323	0.13156	0.11993-0.05963-0.15652	0.15218	0.15568-0.03666-0.01557	0.01761	0.03403-0.05039	0.01761	0.03403-0.05039	0.01761	0.03403-0.05039	0.01761
1.000	0.00820	0.00039	-0.01955	0.09247	0.11928-0.01838-0.13912	0.11046	0.16075-0.03096-0.01927	0.00015	0.03735-0.04625	0.00015	0.03735-0.04625	0.00015	0.03735-0.04625	0.00015
1.500	0.01634	0.00086	0.03619	-0.00375	0.05405	0.00898	-0.02635-0.00898	0.12190	0.01888	-0.02648	-0.06013	0.02609	0.00173	0.00173
2.000	0.02374	0.00151	0.03059	0.00435	0.00577	-0.02028	0.00574-0.00011	0.05283	0.05458	-0.01057	-0.05382	0.00892	0.03742	0.03742
3.000	0.02770	0.00321	-0.00102	0.01811	0.00353	-0.00277	-0.01262	0.01215	-0.00742	0.04638	0.02559	0.00460	-0.03348	0.01792
4.000	0.01849	0.00527	-0.00397	0.00503	0.00980	0.00749	-0.00819	-0.00253	-0.00903	0.01973	0.02897	0.01768	-0.01386	-0.00973
5.000	0.00755	0.00736	-0.00197	0.00315	0.00798	0.00546	-0.00081	-0.00610	-0.00419	0.00659	0.01993	0.01141	0.00091	-0.01347
8.000	-0.00081	0.01153	-0.00008	0.	0.00159	0.00028	0.00205	-0.00103	-0.00010	-0.00008	0.00357	0.00053	0.00463	-0.00204

SIN THETA/ LAMBDA	BA 4D2P J(1)	BA 4D2P J(3)	BA 4D2S J(2)	BA 4D1S J(2)	BA 4P4P J(0)	BA 4P4P J(2)	BA 4P4S J(1)	BA 4P3D J(1)	BA 4P3D J(3)	BA 4P3P J(0)	BA 4P3P J(2)	BA 4P3S J(1)	BA 4P2P J(0)	BA 4P2P J(2)
0.005	0.00028	0.	-0.	0.	0.99989	0.00004-0.00789	0.00074	0.	0.00001-0.	0.00090	0.00006-0.	0.00090	0.00006-0.	0.00090
0.010	0.00056	0.	-0.	0.	0.99956	0.00018-0.01577	0.00148	0.	0.00005-0.00002	0.00181	0.00006-0.	0.00181	0.00006-0.	0.00181
0.050	0.00279	0.	-0.00003	0.	0.98901	0.00439-0.07826	0.00734	0.00001	0.00116-0.00046	0.00899	0.00011-0.00002	0.00899	0.00011-0.00002	0.00899
0.100	0.00558	0.	-0.00013	0.	0.95670	0.01718-0.15287	0.01438	0.00011	0.00460-0.00183	0.01767	0.00027-0.00008	0.01767	0.00027-0.00008	0.01767
0.150	0.00836	0.	-0.00030	0.00001	0.90492	0.03731-0.22047	0.02083	0.00038	0.01022-0.00404	0.02574	0.00053-0.00019	0.02574	0.00053-0.00019	0.02574
0.200	0.01112	0.00001	-0.00053	0.00002	0.83659	0.06316-0.27821	0.02643	0.00088	0.01783-0.00700	0.03291	0.00090-0.00034	0.03291	0.00090-0.00034	0.03291
0.300	0.01661	0.00004	-0.00119	0.00004	0.66551	0.12368-0.35650	0.03419	0.00278	0.03803-0.01458	0.04365	0.00195-0.00075	0.04365	0.00195-0.00075	0.04365
0.400	0.02200	0.00009	-0.00211	0.00007	0.47646	0.18147-0.38091	0.03640	0.00601	0.05280-0.02323	0.04846	0.00340-0.00133	0.04846	0.00340-0.00133	0.04846
0.500	0.02727	0.00018	-0.00329	0.00011	0.29977	0.22229-0.35711	0.03261	0.01043	0.08930-0.03147	0.04676	0.00526-0.00206	0.04676	0.00526-0.00206	0.04676
0.600	0.03239	0.00032	-0.00471	0.00016	0.15630	0.23866-0.29932	0.02321	0.01561	0.11474-0.03788	0.03879	0.00748-0.00294	0.03879	0.00748-0.00294	0.03879
0.700	0.03731	0.00051	-0.00637	0.00021	0.05519	0.23039-0.22484	0.00927	0.02091	0.13669-0.04139	0.02550	0.01007-0.00394	0.02550	0.01007-0.00394	0.02550
0.800	0.04202	0.00076	-0.00825	0.00028	0.00453	0.20271-0.14927	-0.00772	0.02561	0.15333-0.04134	0.00836	0.01299-0.00507	0.00836	0.01299-0.00507	0.00836
0.900	0.04646	0.00109	-0.01034	0.00035	-0.03029	0.16343-0.08375	-0.02608	0.02908	0.15361-0.03756	-0.01088	0.01621-0.00629	0.01621	-0.00629	0.01621
1.000	0.05062	0.00151	-0.01261	0.00043	-0.03224	0.12039-0.03418	-0.04420	0.03082	0.16722-0.03033	-0.03047	0.01969-0.00758	0.01969	-0.00758	0.01969
1.500	0.06613	0.00501	-0.02574	0.00092	0.03935	-0.00605	0.00724	-0.09541	0.01090	0.11035	0.03053	-0.09090	0.03945	-0.01428
2.000	0.07164	0.01077	-0.03872	0.00154	0.03160	0.00598	-0.02951	-0.07245	-0.02821	0.02948	0.06656	-0.06968	0.05838	-0.01877
3.000	0.05856	0.02365	-0.05087	0.00294	-0.00254	0.01778	-0.00394	0.00382	-0.04618	-0.00204	0.03054	0.00250	0.07466	-0.01332
4.000	0.03502	0.02948	-0.04305	0.00420	0.00632	0.00130	0.00235	0.01918	-0.01871	0.01822	-0.00032	0.00222	0.06140	0.00442
5.000	0.01715	0.02728	-0.02814	0.00502	0.00862	-0.00067	-0.00344	0.01229	-0.00046	0.01941	-0.00039	-0.000915	0.03846	0.01920
8.000	0.00042	0.01070	-0.00284	0.00483	0.00097	0.00386	-0.00160	0.00056	0.00475	0.00190	0.00883	-0.00309	0.00177	0.02191

SIN THETA/ LAMBDA	BA 4P2S J(1)	BA 4P1S J(1)	BA 4S4S J(0)	BA 4S3D J(2)	BA 4S3P J(1)	BA 4S3S J(0)	BA 4S2P J(1)	BA 4S2S J(0)	BA 4S1S J(0)	BA 3D3D J(0)	BA 3D3D J(2)	BA 3D3D J(4)	BA 3D3P J(1)	BA 3D3P J(3)
0.005	0.00020	0.00004	0.99990-0.	0.00084	0.00001	0.00008	0.00006	0.	0.99998	0.00001	0.	-0.00293-0.		
0.010	0.00039	0.00007	0.99959-0.00002	0.0016E	0.00005	0.00016	0.00007	0.	0.99994	0.00002	0.	-0.00587-0.		
0.050	0.00196	0.00037	0.98984-0.00042	0.0083E	0.00115	0.00080	0.00012	0.	0.99846	0.00061	0.	-0.02929-0.00001		
0.100	0.00391	0.00074	0.95989-0.00167	0.01634	0.00457	0.00161	0.00031	0.00001	0.99387	0.00245	0.	-0.05834-0.00009		
0.150	0.00584	0.00111	0.91172-0.00357	0.02372	0.01015	0.00240	0.00062	0.00003	0.98627	0.00547	0.00001-0.	0.08690-0.00032		
0.200	0.00777	0.00147	0.84777-0.00635	0.03019	0.01771	0.00318	0.00105	0.00004	0.97573	0.00965	0.00004-0.	0.11473-0.00074		
0.300	0.01154	0.00221	0.68563-0.01315	0.03945	0.03784	0.00469	0.00227	0.00009	0.94629	0.02121	0.00020-0.	0.16732-0.00244		
0.400	0.01518	0.00295	0.50244-0.02080	0.04268	0.06257	0.00611	0.00396	0.00016	0.90664	0.03651	0.00061-0.	0.21452-0.00561		
0.500	0.01864	0.00368	0.32631-0.02786	0.03933	0.08912	0.00740	0.00610	0.00026	0.85826	0.05472	0.00143-0.	0.25501-0.01050		
0.600	0.02187	0.00441	0.17823-0.03303	0.02970	0.11468	0.00853	0.00868	0.00037	0.80280	0.07495	0.00282-0.	0.28785-0.01725		
0.700	0.02485	0.00514	0.06928-0.03531	0.01482	0.13676	0.00948	0.01166	0.00050	0.74209	0.09623	0.00492-0.	0.31249-0.02581		
0.800	0.02751	0.00586	0.00104-0.03416-0.00373	0.00373	0.15348	0.01021	0.01500	0.00065	0.67796	0.11761	0.00784-0.	0.32878-0.03602		
0.900	0.02984	0.00658-0.	0.03184-0.02949-0.02413	0.16369	0.01070	0.01866	0.00082	0.61217	0.13824	0.01165-0.	0.33692-0.04756			
1.000	0.03178	0.00730-0.	0.03837-0.02167-0.04456	0.16700	0.01093	0.02259	0.00101	0.54633	0.15737	0.01635-0.	0.33741-0.06005			
1.500	0.03501	0.01081	0.03738	0.03744-0.10379	0.10499	0.00757	0.04425	0.00224	0.25739	0.21506	0.05002-0.	0.25616-0.12099		
2.000	0.02733	0.01414	0.03138	0.06826-0.07650	0.01979-0.	0.00290	0.06325	0.00391	0.08004	0.20639	0.08543-0.	0.12494-0.14903		
3.000	-0.00488	0.02002-0.	0.00456	0.02633	0.00213-0.	0.00299-0.	0.03094	0.07173	0.00832-0.	0.02448	0.11140	0.10729	0.02809-0.	0.10018
4.000	-0.02771	0.02449	0.00746-0.	0.01034	0.00163	0.01969-0.	0.04428	0.04696	0.01362-0.	0.02019	0.04271	0.08039	0.04339-0.	0.02962
5.000	-0.03014	0.02726	0.00756-0.	0.01511-0.	0.01003	0.01521-0.	0.03875	0.01883	0.01901-0.	0.00890	0.01375	0.04899	0.02553	0.00505
8.000	-0.00352	0.02631-0.	0.00056-0.	0.00225-0.	0.00325-0.	0.00121-0.	0.00392-0.	0.00204	0.02963-0.	0.00019-0.	0.00021	0.00832	0.00106	0.01068

SIN THETA/ LAMBDA	BA 3D3S J(2)	BA 3D2P J(1)	BA 3D2P J(3)	BA 3D2S J(2)	BA 3D1S J(2)	BA 3P3P J(0)	BA 3P3P J(2)	BA 3P3S J(1)	BA 3P2P J(0)	BA 3P2P J(2)	BA 3P2S J(1)	BA 3P1S J(1)	BA 3S3S J(0)	BA 3S2P J(1)
0.005	0.00001	0.00090	0.	-0.	0.	0.99998	0.00001-0.	0.00330-0.	-0.	-0.	0.00055	0.00009	0.99998	0.00024
0.010	0.00003	0.00181	0.	-0.00001	0.	0.99993	0.00003-0.	0.00660	0.	-0.	0.00110	0.00017	0.99992	0.00048
0.050	0.00067	0.00904	0.	-0.00014	0.	0.99814	0.00074-0.	0.03297	0.00018-0.	0.00007	0.00550	0.00086	0.99805	0.00239
0.100	0.00266	0.01805	0.00001-0.	0.00055	0.00001	0.99259	0.00296-0.	0.06566	0.00073-0.	0.00029	0.01097	0.00172	0.99222	0.00476
0.150	0.00594	0.02702	0.00003-0.	0.00124	0.00002	0.98340	0.00662-0.	0.09777	0.00164-0.	0.00066	0.01639	0.00257	0.98257	0.00709
0.200	0.01047	0.03592	0.00007-0.	0.00219	0.00004	0.97068	0.01166-0.	0.12903	0.00291-0.	0.00116	0.02173	0.00343	0.96920	0.00937
0.300	0.02297	0.05342	0.00024-0.	0.00490	0.00010	0.93516	0.02559-0.	0.18798	0.00650-0.	0.00259	0.03209	0.00514	0.93191	0.01371
0.400	0.03943	0.07037	0.00056-0.	0.00860	0.00017	0.88748	0.04393-0.	0.24062	0.01143-0.	0.00452	0.04186	0.00685	0.88186	0.01762
0.500	0.05892	0.08661	0.00107-0.	0.01324	0.00026	0.82952	0.06564-0.	0.28542	0.01759-0.	0.00691	0.05085	0.00855	0.82105	0.02101
0.600	0.08038	0.10200	0.00182-0.	0.01872	0.00038	0.76346	0.08954-0.	0.32128	0.02488-0.	0.00970	0.05893	0.01025	0.75179	0.02375
0.700	0.10267	0.11639	0.00283-0.	0.02493	0.00051	0.69165	0.11436-0.	0.34758	0.03314-0.	0.01279	0.06595	0.01194	0.67659	0.02576
0.800	0.12470	0.12967	0.00413-0.	0.03177	0.00067	0.61648	0.13888-0.	0.36413	0.04224-0.	0.01612	0.07181	0.01362	0.59801	0.02698
0.900	0.14546	0.14176	0.00572-0.	0.03910	0.00084	0.54027	0.16197-0.	0.37119	0.05201-0.	0.01959	0.07644	0.01530	0.51851	0.02735
1.000	0.16407	0.15258	0.00762-0.	0.04681	0.00103	0.46511	0.18265-0.	0.36941	0.06227-0.	0.02311	0.07976	0.01696	0.44037	0.02686
1.500	0.20755	0.18666	0.02120-0.	0.08636	0.00221	0.15746	0.23074-0.	0.26634	0.11503-0.	0.03845	0.07710	0.02506	0.12608	0.01183
2.000	0.17000	0.18975	0.03895-0.	0.11792	0.00369	0.01136	0.18969-0.	0.11756	0.15717-0.	0.04418	0.04841	0.03271-0.	0.01110-0.	0.01852
3.000	0.03133	0.14095	0.06885-0.	0.13413	0.00699	0.00893	0.04676	0.01539	0.17821-0.	0.02078-0.	0.03051	0.04605	0.01168-0.	0.08078
4.000	-0.03032	0.07973	0.07638-0.	0.10440	0.00987	0.04750-0.	0.00432-0.	0.00327	0.13667	0.02132-0.	0.07257	0.05594	0.04683-0.	0.10093
5.000	-0.03273	0.03781	0.06643-0.	0.06510	0.01172	0.04307	0.00220-0.	0.02459	0.08226	0.05083-0.	0.06990	0.06182	0.03010-0.	0.08295
8.000	-0.00442	0.00077	0.02444-0.	0.00610	0.01166	0.00366	0.02015-0.	0.00624	0.00312	0.04923-0.	0.00664	0.05868-0.	0.00254-0.	0.00704

SIN THETA/ LAMBDA	BA 3S2S J(0)	BA 3S1S J(0)	BA 2P2P J(0)	BA 2P2P J(2)	BA 2P2S J(1)	BA 2P1S J(1)	BA 2S2S J(0)	BA 2S1S J(0)	BA 1S1S J(0)	EU 6S6S J(0)	EU 6S5P J(1)	EU 6S5S J(0)	EU 6S4F J(3)	EU 6S4D J(2)
0.005	0.	0.00002	1.00000	0.	-0.00114	0.00024	1.00000	-0.	1.00000	0.99512	0.00641	0.00019	-0.	-0.
0.010	0.00001	0.00002	0.99999	0.	-0.00229	0.00049	0.99999	0.	1.00000	0.98062	0.01275	0.00075	-0.00001	-0.00001
0.050	0.00021	0.00002	0.99978	0.00009	-0.01143	0.00244	0.99971	0.00002	0.99998	0.60837	0.05423	0.01750	-0.00092	-0.00038
0.100	0.00082	0.00004	0.99912	0.00035	-0.02285	0.00488	0.99883	0.00007	0.99993	0.09928	0.06318	0.05642	-0.00517	-0.00155
0.150	0.00184	0.00007	0.99803	0.00079	-0.03423	0.00732	0.99737	0.00016	0.99984	-0.04827	0.02844	0.08940	-0.00996	-0.00355
0.200	0.00327	0.00011	0.99649	0.00140	-0.04558	0.00976	0.99533	0.00028	0.99971	-0.02521	-0.01804	0.09848	-0.01090	-0.00624
0.300	0.00729	0.00022	0.99213	0.00314	-0.06807	0.01462	0.98953	0.00063	0.99935	0.01822	-0.05987	0.05624	0.00019	-0.01209
0.400	0.01279	0.00039	0.98606	0.00556	-0.09021	0.01946	0.98146	0.00112	0.99884	0.00758	-0.03811	0.00615	0.01440	-0.01529
0.500	0.01965	0.00059	0.97831	0.00863	-0.11189	0.02428	0.97119	0.00174	0.99819	-0.00182	-0.00927	-0.01178	0.02085	-0.01357
0.600	0.02773	0.00085	0.96895	0.01232	-0.13300	0.02908	0.95878	0.00251	0.99740	-0.00269	0.00405	-0.00773	0.01928	-0.00764
0.700	0.03686	0.00115	0.95801	0.01661	-0.15343	0.03383	0.94432	0.00340	0.99646	-0.00048	0.00488	0.00126	0.01323	0.00010
0.800	0.04683	0.00149	0.94557	0.02147	-0.17310	0.03855	0.92791	0.00443	0.99538	0.00137	0.00091	0.00693	0.00598	0.00719
0.900	0.05746	0.00188	0.93170	0.02683	-0.19192	0.04321	0.90966	0.00559	0.99415	0.00199	-0.00297	0.00809	-0.00042	0.01212
1.000	0.06854	0.00231	0.91648	0.03268	-0.20980	0.04783	0.88969	0.00687	0.99279	0.00173	-0.00501	0.00638	-0.00511	0.01446
1.500	0.12333	0.00511	0.82328	0.06727	-0.28305	0.06995	0.76885	0.01508	0.98388	-0.00032	-0.00047	-0.00120	-0.00721	0.00494
2.000	0.16192	0.00888	0.71064	0.10600	-0.32635	0.09004	0.62655	0.02589	0.97162	0.00020	0.00023	0.00122	-0.00074	-0.00125
3.000	0.16043	0.01878	0.47440	0.17278	-0.32847	0.12244	0.34594	0.05285	0.93783	0.00012	-0.00074	0.00013	0.00149	0.00137
4.000	0.09594	0.03049	0.27744	0.20470	-0.25811	0.14311	0.14114	0.08242	0.89344	0.00002	0.00003	-0.	0.00031	0.00054
5.000	0.03533	0.04223	0.14276	0.20170	-0.16807	0.15234	0.03054	0.10974	0.84090	0.00015	0.00009	0.00030	-0.00005	-0.00049
8.000	-0.00392	0.06460	-0.00051	0.11372	-0.00246	0.13289	-0.00265	0.15352	0.65963	0.00004	-0.00006	0.00006	-0.00002	-0.00026

SIN THETA/ LAMBDA	EU 6S4P J(1)	EU 6S4S J(0)	EU 6S3D J(2)	EU 6S3P J(1)	EU 6S3S J(0)	EU 6S2P J(1)	EU 6S2S J(0)	EU 5S1S J(0)	EU 5P5P J(0)	EU 5P5P J(2)	EU 5P5S J(1)	EU 5P4F J(2)	EU 5P4F J(4)	EU 5P4D J(1)
0.005	0.00038	0.00001	-0.	0.00005	-0.00001	0.00001	-0.	0.	0.99940	0.00024	-0.01723	-0.00010	-0.	0.00270
0.010	0.00076	0.00003	-0.	0.00009	-0.	0.00001	-0.	0.	0.99761	0.00095	-0.03443	-0.00041	-0.	0.00540
0.050	0.00375	0.00071	-0.00001	0.00046	0.00005	0.00006	0.	0.	0.94186	0.02297	-0.16581	-0.01003	-0.00008	0.02634
0.100	0.00713	0.00278	-0.00005	0.00092	0.00020	0.00013	0.00001	0.	0.78572	0.08164	-0.29515	-0.03625	-0.00111	0.04857
0.150	0.00977	0.00607	-0.00012	0.00136	0.00045	0.00019	0.00004	0.	0.57663	0.15154	-0.36499	-0.06929	-0.00474	0.06343
0.200	0.01134	0.01031	-0.00021	0.00177	0.00081	0.00025	0.00006	0.	0.36503	0.20762	-0.37188	-0.09901	-0.01203	0.06909
0.300	0.01054	0.02001	-0.00047	0.00250	0.00180	0.00037	0.00015	0.00001	0.06336	0.23099	-0.25694	-0.12459	-0.03501	0.05326
0.400	0.00467	0.02836	-0.00082	0.00304	0.00312	0.00049	0.00027	0.00001	-0.04170	0.15138	-0.10444	-0.10333	-0.05734	0.01350
0.500	-0.00410	0.03261	-0.00124	0.00332	0.00472	0.00060	0.00042	0.00002	-0.03455	0.07488	-0.00904	-0.05870	-0.06790	-0.03022
0.600	-0.01270	0.03178	-0.00169	0.00329	0.00649	0.00070	0.00060	0.00003	-0.00022	0.01668	0.02141	-0.01360	-0.06476	-0.06270
0.700	-0.01868	0.02671	-0.00211	0.00292	0.00833	0.00079	0.00081	0.00004	0.02300	-0.00764	0.01497	0.02021	-0.05182	-0.07794
0.800	-0.02102	0.01927	-0.00245	0.00220	0.01012	0.00087	0.00105	0.00005	0.02906	-0.00973	-0.00199	0.04001	-0.03433	-0.07734
0.900	-0.01997	0.01147	-0.00265	0.00118	0.01173	0.00093	0.00131	0.00006	0.02397	-0.00235	-0.01540	0.04776	-0.01653	-0.06596
1.000	-0.01658	0.00481	-0.00266	-0.00010	0.01306	0.00098	0.00160	0.00008	0.01482	0.00619	-0.02124	0.04695	-0.00106	-0.04945
1.500	0.00087	-0.00156	0.00018	-0.00722	0.01365	0.00094	0.00332	0.00017	-0.00265	0.00888	-0.00129	0.00832	0.02564	0.00566
2.000	-0.00028	0.00406	0.00465	-0.00940	0.00691	0.00035	0.00513	0.00031	0.00449	-0.00973	-0.00087	0.00073	-0.00808	0.01216
3.000	-0.00202	0.00008	0.00506	-0.00223	-0.00105	-0.00194	0.00719	0.00066	0.00073	0.00244	-0.00289	-0.00312	-0.00331	-0.00539
4.000	0.00026	0.00007	0.00054	0.00074	0.00102	-0.00393	0.00614	0.00111	0.00003	0.00126	0.00031	0.00019	-0.00249	0.00153
5.000	0.00005	0.00090	-0.00144	-0.00029	0.00203	-0.00436	0.00358	0.00160	0.00099	-0.00004	0.00009	0.00044	-0.00080	0.00282
8.000	-0.00036	0.00001	-0.00056	-0.00076	-0.00002	-0.00126	-0.00027	0.00279	0.00053	0.00028	-0.00042	0.00013	0.	0.00040

SIN THETA/ LAMBDA	EU 5P4D J(3)	EU 5P4P J(0)	EU 5P4P J(2)	EU 5P4S J(1)	EU 5P3D J(1)	EU 5P3D J(3)	EU 5P3P J(0)	EU 5P3P J(2)	EU 5P3S J(1)	EU 5P2P J(0)	EU 5P2P J(2)	EU 5P2S J(1)	EU 5P1S J(1)	EU 5S5S J(0)	
0.005	0.	0.00004	-0.00002	0.00095	0.00014	0.	0.	-0.	0.00023	-0.00001	-0.	0.00006	0.00001	0.99954	
0.010	0.	0.00016	-0.00006	0.00190	0.00027	0.	0.	0.00001	-0.	0.00047	-0.00001	-0.	0.00012	0.00002	0.99815
0.050	0.00020	0.00387	-0.00154	0.00922	0.00136	0.	0.	0.00020	-0.00008	0.00232	0.	-0.00001	0.00059	0.00012	0.95467
0.100	0.00154	0.01496	-0.00586	0.01680	0.00269	0.00001	0.00078	-0.00031	0.00460	0.00004	-0.00002	0.00117	0.00023	0.82938	
0.150	0.00479	0.03176	-0.01213	0.02137	0.00398	0.00003	0.00175	-0.00070	0.00681	0.00011	-0.00005	0.00176	0.00035	0.65207	
0.200	0.01014	0.05211	-0.01914	0.02201	0.00520	0.00007	0.00310	-0.00123	0.00889	0.00020	-0.00008	0.00234	0.00047	0.45792	
0.300	0.02491	0.09353	-0.03027	0.01080	0.00730	0.00026	0.00685	-0.00270	0.01256	0.00046	-0.00019	0.00348	0.00070	0.13463	
0.400	0.03833	0.12196	-0.03127	0.01320	0.00877	0.00063	0.01187	-0.00462	0.01531	0.00082	-0.00033	0.00460	0.00093	0.02338	
0.500	0.04317	0.12880	-0.02014	0.04118	0.00937	0.00125	0.01787	-0.00683	0.01691	0.00128	-0.00051	0.00568	0.00117	0.04858	
0.600	0.03708	0.11525	-0.00053	0.06419	0.00895	0.00215	0.02448	-0.00910	0.01719	0.00184	-0.00074	0.00672	0.00140	0.01805	
0.700	0.02248	0.08871	0.02131	-0.07667	0.00743	0.00329	0.03126	-0.01119	0.01606	0.00250	-0.00100	0.00770	0.00163	0.01512	
0.800	0.00409	0.05799	0.03970	-0.07743	0.00484	0.00462	0.03775	-0.01285	0.01358	0.00325	-0.00129	0.00862	0.00186	0.03157	
0.900	-0.01356	0.03013	0.05129	-0.06860	0.00131	0.00603	0.04352	-0.01388	0.00989	0.00408	-0.00161	0.00947	0.00209	0.03189	
1.000	-0.02744	0.00913	0.05527	-0.05398	0.00294	0.00738	0.04819	-0.01410	0.00525	0.00500	-0.00196	0.01023	0.00232	0.02326	
1.500	-0.03053	-0.00179	0.01661	0.00440	-0.02501	0.00912	0.05000	-0.00317	-0.02068	0.01051	-0.00398	0.01256	0.00344	0.00459	
2.000	-0.00431	0.01498	-0.00318	-0.00167	-0.03109	0.00029	0.02723	0.01470	-0.02957	0.01665	-0.00586	0.01198	0.00453	0.00501	
3.000	-0.00135	0.00145	0.00767	-0.00697	-0.00829	-0.01640	-0.00153	0.01877	-0.00703	0.02529	-0.00648	0.00372	0.00652	0.00044	
4.000	-0.00456	0.00023	0.00344	0.00096	0.00581	-0.01249	0.00295	0.00432	0.00277	0.02511	-0.00220	-0.00605	0.00816	0.	
5.000	-0.00214	0.00294	-0.00015	0.00019	0.00650	-0.00423	0.00736	-0.00078	-0.00075	0.01902	0.00349	-0.01063	0.00935	0.00130	
8.000	0.00096	0.00105	0.00132	-0.00128	0.00081	0.00220	0.00212	0.00309	-0.00254	0.00282	0.00902	-0.00398	0.01011	0.00022	

SIN THETA/ LAMBDA	EU 5S4F J(3)	EU 5S4D J(2)	EU 5S4P J(1)	EU 5S4S J(0)	EU 5S3D J(2)	EU 5S3P J(1)	EU 5S3S J(0)	EU 5S2P J(1)	EU 5S2S J(0)	EU 5S1S J(0)	EU 4F4F J(0)	EU 4F4F J(2)	EU 4F4F J(4)	EU 4F4F J(6)
0.005	0.	-0.00003	0.00188	0.00004	-0.	0.00019	0.00004	0.00003	-0.00001	0.	0.99982	0.00007	0.	0.
0.010	0.00001	-0.00013	0.00375	0.00015	-0.	0.00038	0.00005	0.00005	-0.00001	0.	0.99927	0.00029	0.	0.
0.050	0.00080	-0.00315	0.01834	0.00364	-0.00005	0.00188	0.00025	0.00025	0.00001	0.	0.98210	0.00711	0.00003	0.
0.100	0.00590	-0.01197	0.03420	0.01413	-0.00022	0.00373	0.00089	0.00050	0.00006	0.	0.93137	0.02679	0.00048	0.00001
0.150	0.01746	-0.02473	0.04547	0.03022	-0.00049	0.00552	0.00194	0.00075	0.00015	0.00001	0.85542	0.05483	0.00212	0.00008
0.200	0.03471	-0.03902	0.05073	0.05009	-0.00087	0.00720	0.00339	0.00100	0.00026	0.00001	0.76385	0.08625	0.00562	0.00036
0.300	0.07356	-0.06231	0.04171	0.09241	-0.00195	0.01014	0.00745	0.00149	0.00060	0.00003	0.56799	0.14330	0.01865	0.00227
0.400	0.09709	-0.06736	0.01184	0.12481	-0.00342	0.01227	0.01288	0.00195	0.00106	0.00005	0.39143	0.17957	0.03691	0.00677
0.500	0.09547	-0.05172	-0.02639	0.13732	-0.00514	0.01331	0.01937	0.00238	0.00166	0.00008	0.25211	0.19315	0.05572	0.01362
0.600	0.07444	-0.02264	-0.06001	0.12863	-0.00695	0.01308	0.02655	0.00278	0.00238	0.00011	0.15076	0.18924	0.07166	0.02182
0.700	0.04479	0.00944	-0.08075	0.10418	-0.00862	0.01145	0.03395	0.00314	0.00321	0.00015	0.08128	0.17427	0.08310	0.03025
0.800	0.01546	0.03610	-0.08632	0.07234	-0.00992	0.00845	0.04106	0.00345	0.00416	0.00020	0.03606	0.15361	0.08976	0.03802
0.900	-0.00838	0.05304	-0.07912	0.04094	-0.01062	0.00421	0.04740	0.00370	0.00522	0.00025	0.00819	0.13109	0.09214	0.04455
1.000	-0.02486	0.05967	-0.06382	0.01536	-0.01057	-0.00100	0.05255	0.00389	0.00637	0.00031	-0.00781	0.10910	0.09106	0.04957
1.500	-0.02786	0.01809	0.00416	-0.00526	0.00119	-0.02918	0.05389	0.00369	0.01318	0.00069	-0.01627	0.03387	0.06168	0.05384
2.000	-0.00240	-0.00500	-0.00159	0.01625	0.01875	-0.03719	0.02683	0.00135	0.02034	0.00121	-0.00584	0.00740	0.03193	0.04042
3.000	0.00584	0.00545	-0.00785	0.00021	0.01985	-0.00860	-0.00415	-0.00772	0.02838	0.03261	-0.00005	-0.00054	0.00656	0.01551
4.000	0.00127	0.00209	0.00103	0.00031	0.00204	0.00292	0.00408	-0.01552	0.02419	0.00437	0.00015	-0.00032	0.00127	0.00516
5.000	-0.00026	-0.00195	0.00020	0.00354	-0.00571	-0.00118	0.00800	-0.01716	0.01406	0.00629	0.00006	-0.00009	0.00024	0.00175
8.000	-0.00011	-0.00100	-0.00142	0.00003	-0.00218	-0.00297	-0.00007	-0.00495	-0.00108	0.01097	0.00006	-0.00006	0.00005	0.00004

SIN THETA/ LAMBDA	EU 4F4D J(1)	EU 4F4D J(3)	EU 4F4D J(5)	EU 4F4P J(2)	EU 4F4P J(4)	EU 4F4S J(3)	EU 4F3D J(1)	EU 4F3D J(3)	EU 4F3D J(5)	EU 4F3P J(2)	EU 4F3P J(4)	EU 4F3S J(3)	EU 4F2P J(2)	EU 4F2P J(4)
0.005	-0.00733	0.	-0.	0.00004	0.	-0.	0.00141	0.	0.	-0.	-0.	0.	0.	0.
0.010	-0.01465	0.	-0.	0.00014	0.	-0.	0.00282	0.	0.	-0.00002	-0.	0.	0.	0.
0.050	-0.07258	0.	0.00020	0.00347	0.00001	-0.00013	0.01406	0.00001	0.	-0.00045	-0.	0.00001	0.00002	0.
0.100	-0.14104	0.	0.00156	0.01260	0.00009	-0.00104	0.02792	0.00007	0.	-0.00178	-0.	0.00008	0.00006	0.
0.150	-0.20173	0.	0.00503	0.02551	0.00043	-0.00340	0.04141	0.00024	0.	-0.00397	-0.00002	0.00027	0.00014	0.
0.200	-0.25190	0.	0.01116	0.04989	0.00130	-0.00770	0.05434	0.00057	0.	-0.00696	-0.00005	0.00064	0.00025	0.
0.300	-0.31504	0.	0.03161	0.09762	0.00568	-0.02291	0.07794	0.00183	0.00003	-0.01504	-0.00025	0.00208	0.00056	0.
0.400	-0.32936	0.	0.05967	0.14377	0.01486	-0.04589	0.09770	0.00407	0.00010	-0.02528	-0.00074	0.00466	0.00099	0.00001
0.500	-0.30537	0.	0.08911	0.17818	0.02887	-0.07291	0.11295	0.00737	0.00029	-0.03680	-0.00167	0.00852	0.00151	0.00002
0.500	-0.25791	0.	0.11408	0.19574	0.04613	-0.09911	0.12343	0.01165	0.00065	-0.04868	-0.00317	0.01357	0.00213	0.00004
0.700	-0.20067	0.	0.13095	0.19615	0.06418	-0.12023	0.12924	0.01669	0.00125	-0.06007	-0.00532	0.01963	0.00281	0.00007
0.800	-0.14370	0.	0.13860	0.18237	0.08049	-0.13360	0.13076	0.02223	0.00214	-0.07025	-0.00811	0.02639	0.00356	0.00011
0.900	-0.09308	0.	0.13774	0.15833	0.09314	-0.13834	0.12856	0.02794	0.00336	-0.07870	-0.01150	0.03347	0.00434	0.00017
1.000	-0.05161	0.	0.13012	0.13039	0.10109	-0.13505	0.12334	0.03352	0.00490	-0.08506	-0.01537	0.04048	0.00514	0.00026
1.500	0.03184	0.	0.05585	0.00734	0.07932	-0.05828	0.07573	0.05185	0.01600	-0.08562	-0.03605	0.06428	0.00893	0.00100
2.000	0.02360	0.	0.00604	0.02603	0.02721	-0.00309	0.03251	0.05013	0.02624	-0.05620	-0.04646	0.06120	0.01127	0.00227
3.000	0.00176	0.	0.00987	0.00815	0.01105	-0.01486	0.00046	0.02477	0.02802	-0.03893	-0.03260	0.02371	0.01069	0.00492
4.000	-0.00094	0.	0.00428	0.00066	0.00707	-0.00291	0.00210	0.00857	0.01773	-0.03258	-0.01279	0.03272	0.00689	0.00588
5.000	-0.00054	0.	0.00135	0.00126	0.00219	-0.00075	0.00107	0.00259	0.00930	-0.00258	-0.00322	0.00214	0.00360	0.00519
8.000	-0.00002	0.	0.00001	0.00010	0.00030	-0.00032	0.00004	0.00001	0.00112	-0.00022	-0.00057	0.00062	0.00024	0.00176

SIN THETA/ LAMBDA	EU 4F2S J(3)	EU 4F1S J(3)	EU 4D4D J(0)	EU 4D4D J(2)	EU 4D4D J(4)	EU 4D4P J(1)	EU 4D4P J(3)	EU 4D4S J(2)	EU 4D3D J(0)	EU 4D3D J(2)	EU 4D3D J(4)	EU 4D3P J(1)	EU 4D3P J(3)	EU 4D3S J(2)
0.005	-0.	0.	0.99991	0.00004	0.	-0.00693	-0.	0.00003	0.00001	-0.	-0.	0.00102	0.	-0.
0.010	-0.	0.	0.99963	0.00015	0.	-0.01386	-0.	0.00013	0.00003	-0.00001	-0.	0.00204	0.	-0.00002
0.050	-0.	0.	0.99084	0.00366	0.00001	-0.06886	-0.00013	0.00318	0.00080	-0.00032	-0.	0.01014	0.00001	-0.00040
0.100	-0.	0.	0.96385	0.01435	0.00008	-0.13507	-0.00100	0.01254	0.00317	-0.00126	-0.	0.02008	0.00008	-0.00157
0.150	-0.00001	0.	0.92046	0.03127	0.00040	-0.19616	-0.00330	0.02747	0.00707	-0.00280	-0.00002	0.02959	0.00027	-0.00349
0.200	-0.00002	0.	0.86286	0.05313	0.00122	-0.25001	-0.00754	0.04707	0.01239	-0.03489	-0.00005	0.03850	0.00062	-0.00609
0.300	-0.00005	0.	0.71669	0.10563	0.00547	-0.32978	-0.02295	0.09538	0.02682	-0.01040	-0.00024	0.05381	0.00202	-0.01306
0.400	-0.00012	0.	0.55062	0.15842	0.01468	-0.36760	-0.04724	0.14671	0.04519	-0.01710	-0.00070	0.06487	0.00449	-0.02168
0.500	-0.00023	0.	0.38843	0.20023	0.02934	-0.36520	-0.07729	0.19083	0.06596	-0.02415	-0.00159	0.07099	0.00812	-0.03102
0.600	-0.00039	0.	0.24750	0.22437	0.04822	-0.33075	-0.10826	0.22037	0.08751	-0.03071	-0.00299	0.07195	0.01276	-0.04009
0.700	-0.00061	0.	0.13708	0.22921	0.06886	-0.27570	-0.13519	0.23196	0.10829	-0.03603	-0.00497	0.06798	0.01813	-0.04800
0.800	-0.00088	0.	0.05921	0.21713	0.08841	-0.21168	-0.15429	0.22599	0.12697	-0.03953	-0.00748	0.05969	0.02383	-0.05401
0.900	-0.00121	0.	0.01082	0.19274	0.10442	-0.14835	-0.16361	0.20564	0.14254	-0.04083	-0.01044	0.04796	0.02942	-0.05760
1.000	-0.00160	0.	-0.01385	0.16125	0.11527	-0.09242	-0.16302	0.17554	0.15432	-0.03980	-0.01368	0.03382	0.03443	-0.05850
1.500	-0.00419	0.	0.00001	0.01546	0.02362	0.09397	0.02118	0.07536	0.02178	0.15449	-0.00665	-0.02699	0.03841	0.04060
2.000	-0.00711	0.	0.00003	0.04188	0.00523	0.03285	-0.00584	-0.00435	0.09698	0.03759	-0.02358	-0.06394	0.01534	0.01800
3.000	-0.01029	0.	0.00008	0.00924	0.01898	-0.00173	-0.01463	-0.00588	0.01544	0.00637	0.05046	0.01309	0.01605	0.03253
4.000	-0.00906	0.	0.00014	0.00448	0.01613	0.00800	0.00510	-0.01331	0.00462	-0.01168	0.03576	0.03139	0.01684	0.02676
5.000	-0.00612	0.	0.00020	0.00391	0.00765	0.01064	0.00823	-0.00583	0.00545	-0.00815	0.01549	0.02832	0.01775	0.00796
8.000	-0.00090	0.	0.00025	0.00027	0.00020	0.00345	0.00115	0.00284	-0.00270	-0.00055	0.00038	0.00752	0.00221	0.00654

SIN THETA/ LAMBDA	EU 4D2P J(1)	EU 4D2P J(3)	EU 4D2S J(2)	EU 4D1S J(2)	EU 4P4P J(0)	EU 4P4P J(2)	EU 4P4S J(1)	EU 4P3D J(1)	EU 4P3D J(3)	EU 4P3P J(0)	EU 4P3P J(2)	EU 4P3S J(1)	EU 4P2P J(0)	EU 4P2P J(2)
0.005	0.00026	0.	-0.	0.	0.99992	0.00003	-0.00671	0.00058	0.	0.00001	-0.	0.00082	0.00004	-0.
0.010	0.00051	0.	-0.	0.	0.9996E	0.00013	-0.01341	0.00116	0.	0.00004	-0.00001	0.00164	0.00004	-0.
0.050	0.00255	0.	-0.00003	0.	0.99212	0.00315	-0.06670	0.00579	0.00001	0.00087	-0.00034	0.00819	0.00008	-0.00002
0.100	0.00510	0.	-0.00010	0.	0.96880	0.01240	-0.13115	0.01139	0.00007	0.00344	-0.00137	0.01617	0.00020	-0.00007
0.150	0.00764	0.	-0.00023	0.00001	0.93102	0.02721	-0.19121	0.01665	0.00023	0.00765	-0.00303	0.02374	0.00041	-0.00015
0.200	0.01018	0.00001	-0.00041	0.00002	0.88033	0.04671	-0.24498	0.02139	0.00053	0.01341	-0.00529	0.03072	0.00070	-0.00026
0.300	0.01522	0.00002	-0.00092	0.00003	0.74860	0.09510	-0.32790	0.02874	0.00170	0.02902	-0.01125	0.04223	0.00152	-0.00059
0.400	0.02021	0.00006	-0.00164	0.00006	0.59293	0.14718	-0.37259	0.03254	0.00378	0.04887	-0.01848	0.04959	0.00266	-0.00104
0.500	0.02511	0.00012	-0.00256	0.00010	0.43346	0.19281	-0.37875	0.03227	0.00677	0.07126	-0.02605	0.05212	0.00411	-0.00162
0.600	0.02992	0.00020	-0.00367	0.00014	0.28728	0.22441	-0.35205	0.02783	0.01054	0.09435	-0.03301	0.04962	0.00587	-0.00232
0.700	0.03460	0.00032	-0.00498	0.00019	0.16595	0.23814	-0.30197	0.01954	0.01478	0.11640	-0.03848	0.04237	0.00793	-0.00312
0.800	0.03914	0.00049	-0.00648	0.00024	0.07501	0.23394	-0.23927	0.00805	0.01912	0.13586	-0.04180	0.03101	0.01026	-0.00403
0.900	0.04352	0.00070	-0.00816	0.00031	0.01460	0.21464	-0.17389	0.00576	0.02314	0.15153	-0.04250	0.01649	0.01285	-0.00503
1.000	0.04770	0.00097	-0.01000	0.00038	-0.01895	0.18477	-0.11358	-0.02089	0.02643	0.16263	-0.04041	-0.00007	0.01569	-0.00611
1.500	0.06501	0.00336	-0.02127	0.00082	0.01245	0.02627	-0.01879	-0.08526	0.02345	0.14822	-0.00284	-0.07600	0.03256	-0.01217
2.000	0.07481	0.00773	-0.03399	0.00139	0.04636	-0.00803	-0.01401	-0.09320	-0.00726	0.07280	-0.05337	-0.09008	0.05086	-0.01760
3.000	0.07147	0.02006	-0.05232	0.00275	0.00249	0.02366	-0.01865	-0.02085	-0.05070	-0.00523	-0.05395	-0.01739	0.07546	-0.01859
4.000	0.05092	0.02960	-0.05266	0.00410	0.00126	0.00921	-0.00312	-0.01787	-0.03555	0.00985	-0.01120	-0.00795	0.07366	-0.00545
5.000	0.02992	0.03174	-0.04084	0.00517	0.00884	-0.00058	-0.00019	-0.01885	-0.01134	0.02187	-0.00237	-0.00293	0.05523	-0.01115
8.000	0.00257	0.01693	-0.00786	0.00587	0.00308	-0.00386	-0.00370	-0.00230	-0.00647	0.00606	-0.00915	-0.00735	0.00803	-0.02645

SIN THETA/ LAMBDA	EU 4P2S J(1)	EU 4P1S J(1)	EU 4S4S J(0)	EU 4S3D J(2)	EU 4S3P J(1)	EU 4S3S J(0)	EU 4S2P J(1)	EU 4S2S J(0)	EU 4S1S J(0)	EU 3D3D J(0)	EU 3D3D J(2)	EU 3D3D J(4)	EU 3D3P J(1)	EU 3D3P J(3)
0.005	0.00018	0.00003	0.99993	-0.	0.00070	0.00001	0.00007	0.00004	0.	0.99999	0.	0.	-0.00250	-0.
0.010	0.00036	0.00007	0.99970	-0.00001	0.00140	0.00004	0.00014	0.00004	0.	0.99996	0.00002	0.	-0.00499	-0.
0.050	0.00178	0.00034	0.99258	-0.00029	0.00666	0.00087	0.00071	0.00009	0.00001	0.99889	0.00044	0.	-0.02493	-0.00001
0.100	0.00357	0.00069	0.97060	-0.00113	0.01372	0.00345	0.00141	0.00023	0.00001	0.99558	0.00177	0.	-0.04970	-0.00006
0.150	0.00534	0.00103	0.93491	-0.00251	0.02009	0.00768	0.00211	0.00047	0.00002	0.99007	0.00396	0.00001	-0.07416	-0.00020
0.200	0.00710	0.00137	0.88684	-0.00437	0.02567	0.01346	0.00280	0.00081	0.00004	0.98243	0.00700	0.00002	-0.09817	-0.00046
0.300	0.01058	0.00206	0.76096	-0.00926	0.03503	0.02914	0.00415	0.00177	0.00008	0.96092	0.01549	0.00010	-0.14425	-0.00154
0.400	0.01396	0.00274	0.61020	-0.01509	0.04016	0.04909	0.00544	0.00310	0.00014	0.93164	0.02691	0.00032	-0.18688	-0.00357
0.500	0.01723	0.00343	0.45311	-0.02106	0.04061	0.07161	0.00664	0.00480	0.00021	0.89537	0.04080	0.00076	-0.22512	-0.00676
0.600	0.02034	0.00411	0.30611	-0.02831	0.03624	0.09484	0.00773	0.00685	0.00030	0.85306	0.05667	0.00152	-0.25825	-0.01125
0.700	0.02328	0.00479	0.18122	-0.03012	0.02735	0.11699	0.00870	0.00923	0.00041	0.80573	0.07394	0.00270	-0.28572	-0.01711
0.800	0.02600	0.00546	0.08499	-0.03190	0.01464	0.13646	0.00951	0.01192	0.00053	0.75450	0.09203	0.00439	-0.30719	-0.02430
0.900	0.02849	0.00614	0.01887	-0.03132	-0.00091	0.15201	0.01017	0.01490	0.00067	0.70049	0.11034	0.00666	-0.32255	-0.03272
1.000	0.03071	0.00681	-0.01971	-0.02826	-0.01816	0.16281	0.01063	0.01814	0.00083	0.64481	0.12834	0.00956	-0.33186	-0.04220
1.500	0.03709	0.01012	0.00746	-0.01436	-0.09277	0.14370	0.00970	0.03696	0.00184	0.37398	0.19885	0.03323	-0.30095	-0.09659
2.000	0.03460	0.01330	0.04634	-0.05857	-0.10054	0.06226	0.00290	0.05619	0.00322	0.16927	0.21968	0.06539	-0.19572	-0.13830
3.000	0.00918	0.01911	-0.00146	-0.05055	-0.01878	-0.01110	-0.02185	0.07622	0.00695	-0.00707	0.15644	0.10745	-0.00906	-0.13097
4.000	-0.01915	0.02389	0.00171	-0.00336	0.00753	0.01229	-0.04194	0.06356	0.01162	-0.02755	0.07668	0.09999	0.04695	-0.06432
5.000	-0.03172	0.02736	0.00950	-0.01555	-0.00379	0.02119	-0.04549	0.03634	0.01668	-0.01682	0.03115	0.07179	0.03966	-0.01350
8.000	-0.01143	0.02947	0.00008	-0.00564	-0.00771	-0.00027	-0.01277	-0.00289	0.02897	-0.00106	0.00065	0.01637	0.00439	-0.01475



SIN THETA/ LAMBDA	EU 3D3S J(2)	EU 3D2P J(1)	EU 3D2P J(3)	EU 3D2S J(2)	EU 3D1S J(2)	EU 3P3P J(0)	EU 3P3P J(2)	EU 3P3S J(1)	EU 3P2P J(0)	EU 3P2P J(2)	EU 3P2S J(1)	EU 3P1S J(1)	EU 3S3S J(0)	EU 3S2P J(1)
0.005	0.	0.00081	0.	-0.	0.	0.99999	0.00001-0.00285	-0.	-0.	0.00050	0.00008	0.99999	0.00021	
0.010	0.00002	0.00163	0.	-0.	0.	0.99994	0.00002-0.00571	0.	-0.	0.00099	0.00016	0.99994	0.00041	
0.050	0.00049	0.00812	0.	-0.00011	0.	0.99862	0.00055-0.02850	0.00014-0.00006	0.00496	0.00078	0.99853	0.00207		
0.100	0.00195	0.01623	0.00001-0.00043	0.00001	0.99449	0.00220-0.05680	0.00057-0.00023	0.00990	0.00156	0.99414	0.00413			
0.150	0.00436	0.02431	0.00002-0.00098	0.00002	0.98765	0.00493-0.08474	0.00127-0.00051	0.01480	0.00234	0.98686	0.00616			
0.200	0.00770	0.03234	0.00005-0.00173	0.00004	0.97814	0.00871-0.11213	0.00226-0.00090	0.01965	0.00312	0.97675	0.00816			
0.300	0.01701	0.04819	0.00016-0.00387	0.00008	0.95144	0.01923-0.16457	0.00505-0.00201	0.02913	0.00467	0.94837	0.01200			
0.400	0.02947	0.06367	0.00038-0.00681	0.00014	0.91521	0.03331-0.21284	0.00891-0.00353	0.03820	0.00623	0.90989	0.01555			
0.500	0.04456	0.07867	0.00073-0.01053	0.00022	0.87052	0.05036-0.25583	0.01376-0.00543	0.04674	0.00778	0.86245	0.01875			
0.600	0.06165	0.09307	0.00125-0.01495	0.00032	0.81865	0.06965-0.29265	0.01955-0.00767	0.05462	0.00932	0.80746	0.02150			
0.700	0.08005	0.10677	0.00196-0.02002	0.00043	0.76103	0.09042-0.32267	0.02618-0.01019	0.06176	0.01087	0.74647	0.02374			
0.800	0.09906	0.11969	0.00287-0.02566	0.00056	0.69919	0.11186-0.34551	0.03356-0.01296	0.06806	0.01240	0.68114	0.02541			
0.900	0.11797	0.13176	0.00400-0.03179	0.00071	0.63464	0.13317-0.36104	0.04159-0.01590	0.07345	0.01393	0.61312	0.02648			
1.000	0.13614	0.14290	0.00537-0.03833	0.00087	0.56889	0.15362-0.36940	0.05015-0.01897	0.07787	0.01545	0.54405	0.02690			
1.500	0.19852	0.18337	0.01564-0.07408	0.00188	0.26587	0.22352-0.32112	0.09697-0.03398	0.08464	0.02292	0.23042	0.01904			
2.000	0.19638	0.19810	0.03046-0.10729	0.00318	0.07151	0.22098-0.19390	0.14048-0.04362	0.06789	0.03007	0.03963	0.00317			
3.000	0.08093	0.17024	0.06153-0.14043	0.00625	-0.00993	0.09782-0.00667	0.18343-0.03474	-0.00142	0.04299	-0.01398	-0.06250			
4.000	-0.01112	0.11314	0.07815-0.12726	0.00925	0.03516	0.01045	0.01263	0.16468	0.00045	-0.05887	0.05340	0.03967	-0.09891	
5.000	-0.03707	0.06371	0.07689-0.09260	0.01156	0.05121	-0.00492	-0.01449	0.11734	0.03558	-0.07657	0.06074	0.04484	-0.09851	
8.000	-0.01096	0.00505	0.03720-0.01635	0.01286	0.01194	0.02131	-0.01523	0.01557	0.05911	-0.02311	0.06424	-0.00127	-0.02459	

SIN THETA/ LAMBDA	EU 3S2S J(0)	EU 3S1S J(0)	EU 2P2P J(0)	EU 2P2P J(2)	EU 2P2S J(1)	EU 2P1S J(1)	EU 2S2S J(0)	EU 2S1S J(0)	EU 1S1S J(0)	YB 6S6S J(0)	YB 6S5P J(1)	YB 6S5S J(0)	YB 6S4F J(3)	YB 6S4D J(2)
0.005	-0.	0.00002	1.00000	0.	-0.00101	0.00022	1.00000-0.	1.00000	0.99568	0.00578	0.00015	-0.	-0.	
0.010	0.	0.00002	0.99999	0.	-0.00201	0.00044	0.99999-0.	1.00000	0.98283	0.01150	0.00060	-0.	-0.00001	
0.050	0.00016	0.00002	0.99983	0.00007-0.01005	0.00218	0.99977	0.00001	0.99999	0.64574	0.05017	0.01424	-0.00055	-0.00028	
0.100	0.00064	0.00004	0.99932	0.00027-0.02010	0.00436	0.99909	0.00005	0.99994	0.14507	0.06416	0.04751	-0.00326	-0.00112	
0.150	0.00144	0.00006	0.99847	0.00061-0.03012	0.00654	0.99796	0.00012	0.99987	0.03833	0.03922	0.07962	-0.00686	-0.00256	
0.200	0.00255	0.00009	0.99729	0.00108-0.04011	0.00872	0.99637	0.00022	0.99977	0.03573	-0.00205	0.09483	-0.00854	-0.00451	
0.300	0.00569	0.00019	0.99391	0.00243-0.05997	0.01306	0.99185	0.00050	0.99949	0.01430	-0.05476	0.06987	-0.00265	-0.00912	
0.400	0.01002	0.00032	0.98921	0.00430-0.07958	0.01740	0.98556	0.00088	0.99909	0.01171	-0.04775	0.02164	0.00854	-0.01267	
0.500	0.01546	0.00048	0.98320	0.00669-0.09888	0.02172	0.97754	0.00138	0.99857	0.00123	-0.02121	-0.00624	0.01640	-0.01321	
0.600	0.02193	0.00069	0.97592	0.00957-0.11779	0.02602	0.96781	0.00198	0.99795	-0.00261	-0.00230	-0.01114	0.01846	-0.01036	
0.700	0.02930	0.00093	0.96739	0.01294-0.13623	0.03029	0.95645	0.00269	0.99721	-0.00194	0.00470	-0.00522	0.01596	-0.00510	
0.800	0.03747	0.00120	0.95765	0.01676-0.15414	0.03453	0.94351	0.00351	0.99635	-0.00014	0.00420	0.00193	0.01101	0.00102	
0.900	0.04631	0.00151	0.94676	0.02101-0.17145	0.03874	0.92905	0.00443	0.99539	0.00120	0.00094	0.00626	0.00540	0.00658	
1.000	0.05568	0.00186	0.93475	0.02566-0.18811	0.04292	0.91316	0.00545	0.99431	0.00171	-0.00221	0.00738	0.00029	0.01070	
1.500	0.10543	0.00412	0.86003	0.05389-0.25984	0.06310	0.81518	0.01203	0.98727	-0.00008	-0.00231	-0.00055	-0.00865	0.00923	
2.000	0.14804	0.00719	0.76674	0.08720-0.30923	0.08184	0.69533	0.02081	0.97754	0.00008	0.00054	0.00012	-0.00344	0.00025	
3.000	0.17480	0.01543	0.55792	0.15196-0.33868	0.11360	0.43964	0.04334	0.95052	0.00019	-0.00082	0.00072	0.00177	0.00044	
4.000	0.13203	0.02560	0.36467	0.19449-0.29664	0.13636	0.22525	0.06940	0.91455	0.00016	-0.00015	-0.00015	0.00086	0.00113	
5.000	0.06995	0.03647	0.21578	0.20744-0.22102	0.14973	0.08474	0.09531	0.87126	-0.00003	0.00006	0.00021	0.00008	-0.00002	
8.000	-0.00639	0.06209	0.01819	0.14403-0.03284	0.14508	-0.01334	0.14803	0.71531	-0.00003	-0.00012	0.00009	-0.00005	-0.00043	

SIN THETA/ LAMBDA	YB 6S4P J(1)	YB 6S4S J(0)	YB 6S3D J(2)	YB 6S3P J(1)	YB 6S3S J(0)	YB 6S2P J(1)	YB 6S2S J(0)	YB 6S1S J(0)	YB 5P5P J(0)	YB 5P5P J(2)	YB 5P5S J(1)	YB 5P4F J(2)	YB 5P4F J(4)	YB 5P4D J(1)
0.005	0.00031	0.00001-0.		0.00004-0.	0.00001-0.	0.	-0.	0.99951	0.00020-0.01551-0.00007-0.					0.00216
0.010	0.00062	0.00002-0.		0.00007-0.	0.00001-0.	0.	-0.	0.99805	0.00078-0.03099-0.00030-0.					0.00433
0.050	0.00304	0.00052-0.00001		0.00036	0.00003	0.00005	0.	0.	0.95225	0.01891-0.15028-0.00719-0.00004				0.02120
0.100	0.00583	0.00205-0.00004		0.00072	0.00014	0.00010	0.00001	0.	0.82161	0.06853-0.27324-0.02653-0.00065				0.03980
0.150	0.00813	0.00451-0.00008		0.00108	0.00033	0.00015	0.00003	0.	0.64016	0.13132-0.35009-0.05236-0.00285				0.05359
0.200	0.00974	0.00774-0.00014		0.00141	0.00053	0.00020	0.00005	0.	0.44610	0.18779-0.37502-0.07806-0.00750				0.06115
0.300	0.01025	0.01553-0.00031		0.00202	0.00130	0.00030	0.00011	0.00001	0.13351	0.23500-0.30201-0.10992-0.02387				0.05618
0.400	0.00691	0.02318-0.00055		0.00251	0.00227	0.00040	0.00020	0.00001	-0.01645	0.19417-0.16365-0.10662-0.04326				0.02972
0.500	0.00067	0.02859-0.00085		0.00284	0.00346	0.00049	0.00030	0.00001	-0.04534	0.11737-0.05112-0.07825-0.05720				0.00633
0.600	-0.00666	0.03052-0.00118		0.00297	0.00481	0.00058	0.00044	0.00002	-0.02330	0.05002	0.00692-0.04083-0.06172			0.04008
0.700	-0.01319	0.02885-0.00152		0.00287	0.00628	0.00066	0.00059	0.00003	0.00489	0.00900	0.02142-0.00602-0.05731			0.06392
0.800	-0.01763	0.02435-0.00183		0.00253	0.00778	0.00073	0.00077	0.00004	0.02219	0.00792	0.01336	0.02049-0.04670		0.07525
0.900	-0.01945	0.01827-0.00209		0.00195	0.00923	0.00079	0.00097	0.00005	0.02710	0.00945-0.00090	0.03731-0.03295			0.07525
1.000	-0.01885	0.01188-0.00224		0.00115	0.01056	0.00084	0.00118	0.00006	0.02373	0.00385-0.01253	0.04544-0.01861			0.06703
1.500	-0.00289	-0.00297-0.00102		0.00460	0.01348	0.00092	0.00251	0.00013	-0.00267	0.01272-0.00884	0.02301	0.02363		0.00517
2.000	0.00138	0.00211	0.00255-0.00851	0.00965	0.00061	0.00403	0.00023	0.00157	0.00195	0.00225-0.00338	0.02021	0.00590		
3.000	-0.00263	0.00156	0.00568-0.00462	-0.00007-0.00104	0.00637	0.00051	0.00255	0.00109	0.00346-0.00639	0.00089-0.00688				
4.000	-0.00042	-0.00039	0.00229	0.00022-0.00016-0.00300	0.00645	0.00086	-0.00024	0.00211-0.00071	-0.00087-0.00375	-0.00120				
5.000	0.00031	0.00054-0.00064	0.00041	0.00168-0.00403	0.00469	0.00126	0.00044	0.00054	0.00043	0.00048-0.00188	0.00262			
8.000	-0.00047	0.00021-0.00091	-0.00102	0.00053-0.00205	0.00003	0.00239	0.00047	0.00043-0.00053	0.00005	0.00016	0.00091			

SIN THETA/ LAMBDA	YB 5P4D J(3)	YB 5P4P J(0)	YB 5P4P J(2)	YB 5P4S J(1)	YB 5P3D J(1)	YB 5P3D J(3)	YB 5P3P J(0)	YB 5P3P J(2)	YB 5P3S J(1)	YB 5P2P J(0)	YB 5P2P J(2)	YB 5P2S J(1)	YB 5P1S J(1)	YB 5S5S J(0)
0.005	0.	0.00003-0.00001	0.00085	0.00011	0.	0.	-0.	0.00020-0.00001-0.				0.00005	0.00001	0.99963
0.010	0.	0.00012-0.00005	0.00169	0.00021	0.	0.00001-0.	0.00040-0.00001-0.	0.00010	0.00002	0.99850				
0.050	0.00013	0.00290-0.00116	0.00828	0.00105	0.	0.00014-0.00006	0.00201	0.	-0.	0.00051	0.00010	0.96318		
0.100	0.00098	0.01129-0.00444	0.01544	0.00209	0.	0.00057-0.00023	0.00400	0.00003-0.00002	0.00102	0.00021	0.85989			
0.150	0.00311	0.02427-0.00937	0.02051	0.00310	0.00002	0.00129-0.00051	0.00593	0.00008-0.00004	0.00152	0.00031	0.70934			
0.200	0.00674	0.04053-0.01518	0.02278	0.00408	0.00004	0.00228-0.00091	0.00779	0.00015-0.00006	0.00203	0.00041	0.53686			
0.300	0.01771	0.07643-0.02610	0.01768	0.00534	0.00014	0.00508-0.00201	0.01117	0.00035-0.00014	0.00302	0.00062	0.21920			
0.400	0.02990	0.10664-0.03113	0.00108	0.00723	0.00037	0.00886-0.00348	0.01395	0.00062-0.00025	0.00400	0.00082	0.02338			
0.500	0.03810	0.12278-0.02719-0.02209	0.00809	0.00075	0.01349-0.00523	0.01595	0.00097-0.00039	0.00496	0.00103-0.04624					
0.600	0.03902	0.12240-0.01488-0.04542	0.00827	0.00133	0.01875-0.00713	0.01702	0.00140-0.00056	0.00589	0.00123-0.04070					
0.700	0.03232	0.10810	0.00250-0.06354	0.00770	0.00210	0.02439-0.00904	0.01706	0.00190-0.00076	0.00678	0.00144-0.01024				
0.800	0.02000	0.08518	0.02080-0.07341	0.00634	0.00305	0.03011-0.01079	0.01605	0.00247-0.00098	0.00763	0.00164	0.01643			
0.900	0.00503	0.05934	0.03646-0.07451	0.00422	0.00413	0.03561-0.01222	0.01402	0.00311-0.00124	0.00843	0.00184	0.02985			
1.000	-0.00976	0.03521	0.04725-0.06824	0.00141	0.00527	0.04061-0.01319	0.01106	0.00382-0.00151	0.00917	0.00205	0.03109			
1.500	-0.03781	-0.00893	0.03328-0.00759-0.01736	0.00903	0.05145-0.00886	-0.01102	0.00821-0.00316	0.01188	0.00305-0.00287					
2.000	-0.01538	0.00969	0.00119	0.00479-0.02940	0.00508	0.03817	0.00619-0.02685	0.01344-0.00493	0.01246	0.00402	0.00084			
3.000	0.00147	0.00667	0.00474-0.00969-0.01703-0.01244	0.00308	0.02138-0.01552	0.02262-0.00674	0.00725	0.00583	0.00293					
4.000	-0.00398	-0.00074	0.00626-0.00142	0.00156-0.01549-0.00039	0.01026	0.00106	0.02557-0.00451-0.00184	0.00741-0.00064						
5.000	-0.00374	0.00161	0.00137	0.00117	0.00697-0.00865	0.00553	0.00096	0.00172	0.02229	0.00031-0.00851	0.00867	0.00074		
8.000	0.00089	0.00195	0.00082-0.00173	0.00181	0.00212	0.00388	0.00225-0.00356	0.00571	0.00899-0.00655	0.01016	0.00017			

SIN THETA/ LAMBDA	YB 5S4F J(3)	YB 5S4D J(2)	YB 5S4P J(1)	YB 5S4S J(0)	YB 5S3D J(2)	YB 5S3P J(1)	YB 5S3S J(0)	YB 5S2P J(1)	YB 5S2S J(0)	YB 5S1S J(0)	YB 4F4F J(0)	YB 4F4F J(2)	YB 4F4F J(4)	YB 4F4F J(6)
0.005	0.	-0.00032	0.00157	0.00003-0.		0.00016	0.00003	0.00002	0.	-0.	0.99988	0.00005	0.	0.
0.010	0.	-0.00039	0.00313	0.00012-0.		0.00031	0.00004	0.00004	0.	-0.	0.99950	0.00020	0.	0.
0.050	0.00051-0.00225	0.01540	0.00278-0.00004		0.00156	0.00019	0.00022	0.00002	0.		0.98765	0.00492	0.00002	0.
0.100	0.00384-0.00857	0.02914	0.01085-0.00015		0.00310	0.00067	0.00043	0.00005	0.		0.95237	0.01884	0.00024	0.
0.150	0.01167-0.01824	0.03979	0.02346-0.00033		0.00461	0.00146	0.00065	0.00012	0.00001	0.89726	0.03954	0.00111	0.00003	
0.200	0.02398-0.02934	0.04626	0.03947-0.00060		0.00604	0.00257	0.00086	0.00021	0.00001	0.82855	0.06418	0.00306	0.00015	
0.300	0.05537-0.05036	0.04470	0.07600-0.00136		0.00864	0.00566	0.00127	0.00047	0.00002	0.67076	0.11479	0.01107	0.00106	
0.400	0.08121-0.06173	0.02538	0.10891-0.00241		0.01070	0.00985	0.00168	0.00083	0.00004	0.51300	0.15568	0.02386	0.00348	
0.500	0.09058-0.05735-0.00486		0.12936-0.00370		0.01206	0.01497	0.00206	0.00129	0.00006	0.37397	0.18134	0.03908	0.00765	
0.600	0.08294-0.03959-0.03701		0.13346-0.00513		0.01254	0.02078	0.00242	0.00184	0.00009	0.26047	0.19217	0.05429	0.01328	
0.700	0.06371-0.01428-0.06337		0.12228-0.00658		0.01204	0.02702	0.00275	0.00249	0.00012	0.17255	0.19107	0.06769	0.01979	
0.800	0.03949	0.01202-0.07945		0.10021-0.00789		0.01050	0.03335	0.00305	0.00324	0.00016	0.10717	0.18155	0.07832	0.02662
0.900	0.01554	0.03422-0.08423		0.07295-0.00891		0.00794	0.03946	0.00331	0.00407	0.00020	0.06026	0.16676	0.08581	0.03323
1.000	-0.00488	0.04952-0.07929		0.04571-0.00951		0.00445	0.04501	0.00353	0.00498	0.00025	0.02779	0.14920	0.09024	0.03925
1.500	-0.03531	0.03728-0.01039		-0.01230-0.00398-0.01987		0.05655	0.00381	0.01053	0.00055-0.02079		0.06632	0.08035	0.05516	
2.000	-0.01365	0.00045	0.00550	0.00948	0.01105-0.03582	0.03992	0.00251	0.01689	0.00097-0.01317		0.02225	0.05225	0.05101	
3.000	0.00740	0.00198-0.01098		0.00629	0.02369-0.01902-0.00046-0.00440		0.02661	0.00211-0.00130	0.00048		0.01539	0.02695		
4.000	0.00352	0.00466-0.00167		-0.00163	0.00940	0.00100-0.00058-0.01255	0.02687	0.00359	0.00020-0.00065		0.00384	0.01120		
5.000	0.00038-0.00010	0.00130		0.00229-0.00274	0.00167	0.00703-0.01680	0.01950	0.00525	0.00015-0.00028		0.00092	0.00441		
8.000	-0.00025-0.00181-0.00195		0.00087-0.00377-0.00425		0.00137-0.00850		0.00011	0.00993-0.00002	0.00002-0.00002		0.00002	0.00034		

SIN THETA/ LAMBDA	YB 4F4D J(1)	YB 4F4D J(3)	YB 4F4D J(5)	YB 4F4P J(2)	YB 4F4P J(4)	YB 4F4S J(3)	YB 4F3D J(1)	YB 4F3D J(3)	YB 4F3D J(5)	YB 4F3P J(2)	YB 4F3P J(4)	YB 4F3S J(3)	YB 4F2P J(2)	YB 4F2P J(4)
0.005	-0.00626-0.		-0.	0.00003	0.	-0.	0.00131	0.	0.	-0.	-0.	0.	0.	0.
0.010	-0.01252-0.		-0.	0.00011	0.	-0.	0.00261	0.	0.	-0.00001-0.		0.	0.	0.
0.050	-0.06216-0.00013-0.			0.00262	0.	-0.00009	0.01305	0.00001	0.	-0.00037-0.		0.00001	0.00001	0.
0.100	-0.12173-0.00098-0.00001			0.01030	0.00005-0.00069	0.02598	0.00005	0.		-0.00147-0.		0.00006	0.00006	0.
0.150	-0.17637-0.00319-0.00004			0.02255	0.00025-0.00228	0.03864	0.00017	0.		-0.00328-0.00001		0.00020	0.00013	0.
0.200	-0.22412-0.00721-0.00015			0.03851	0.00075-0.00522	0.05092	0.00039	0.		-0.00576-0.00003		0.00047	0.00023	0.
0.300	-0.29405-0.02132-0.00094			0.07818	0.00340-0.01600	0.07389	0.00128	0.00001-0.01257-0.00015		0.00152	0.00052	0.		
0.400	-0.32731-0.04249-0.00322			0.12047	0.00927-0.03333	0.09410	0.00289	0.00006-0.02143-0.00047		0.00347	0.00091	0.00001		
0.500	-0.32740-0.06748-0.00770			0.15767	0.01895-0.05547	0.11098	0.00532	0.00016-0.03174-0.00108		0.00644	0.00140	0.00001		
0.600	-0.30228-0.09228-0.01461			0.18436	0.03201-0.07948	0.12420	0.00858	0.00036-0.04286-0.00209		0.01047	0.00198	0.00003		
0.700	-0.26123-0.11347-0.02362			0.19808	0.04724-0.10215	0.13362	0.01260	0.00071-0.05414-0.00358		0.01548	0.00263	0.00005		
0.800	-0.21265-0.12889-0.03397			0.19891	0.06299-0.12077	0.13933	0.01723	0.00125-0.05499-0.00550		0.02131	0.00335	0.00008		
0.900	-0.16302-0.13766-0.04472			0.18873	0.07763-0.13356	0.14157	0.02229	0.00201-0.07489-0.00816		0.02775	0.00412	0.00013		
1.000	-0.11675-0.13997-0.05495			0.17033	0.08983-0.13980	0.14070	0.02757	0.00303-0.08345-0.01123		0.03451	0.00493	0.00019		
1.500	0.01758-0.09147-0.08034			0.04661	0.09921-0.09515	0.10628	0.05037	0.01167-0.10009-0.03087		0.06420	0.00906	0.00078		
2.000	0.03463-0.03017-0.06429			-0.01928	0.05527-0.02202	0.05915	0.05779	0.02270-0.08073-0.04704		0.07292	0.01227	0.00190		
3.000	0.00801	0.01105-0.01452		-0.01824-0.00661	0.02111	0.00762	0.03884	0.03267-0.02421-0.04553		0.04212	0.01367	0.00483		
4.000	-0.00055	0.00817	0.00367	-0.00216-0.01165	0.00880-0.00229	0.01723	0.02595-0.00027-0.02426	0.01127	0.01040	0.00673				
5.000	-0.00102	0.00333	0.00538	0.00153-0.00553	0.00076-0.00204	0.00641	0.01608	0.00364-0.00907-0.00060		0.00637	0.00681			
8.000	-0.00007	0.00009	0.00121	0.00035	0.00030-0.00073-0.00016	0.00017	0.00259	0.00064	0.00086-0.00139		0.00074	0.00309		

SIN THETA/ LAMBDA	YB 4F2S J(3)	YB 4F1S J(3)	YB 4D4D J(0)	YB 4D4D J(2)	YB 4D4D J(4)	YB 4D4P J(1)	YB 4D4P J(3)	YB 4D4S J(2)	YB 4D3D J(0)	YB 4D3D J(2)	YB 4D3D J(4)	YB 4D3P J(1)	YB 4D3P J(3)	YB 4D3S J(2)	
0.005	-0.	0.	0.99993	0.00003	0.	-0.00601	-0.	0.00002	0.00001	-0.	-0.	0.00094	0.	-0.	
0.010	-0.	0.	0.99973	0.00011	0.	-0.01202	-0.	0.00010	0.00002	-0.	0.0001	0.00188	0.	-0.00001	
0.050	-0.	0.	0.99321	0.00271	0.	-0.05984	-0.00008	0.00242	0.00061	-0.	0.0024	0.00940	0.00001	-0.00032	
0.100	-0.	0.	0.97311	0.01069	0.00005	-0.11793	-0.00066	0.00958	0.00242	-0.	0.0096	0.01865	0.00006	-0.00128	
0.150	-0.00001	0.	0.94050	0.02349	0.00022	-0.17264	-0.00219	0.02113	0.00540	-0.	0.0215	0.02762	0.00019	-0.00285	
0.200	-0.00001	0.	0.89662	0.04041	0.00069	-0.22247	-0.00504	0.03651	0.00949	-0.	0.0376	0.03616	0.00043	-0.00500	
0.300	-0.00004	0.	0.78189	0.08281	0.00318	-0.30280	-0.01573	0.07584	0.02074	-0.	0.0811	0.05147	0.00142	-0.01084	
0.400	-0.00010	0.	0.64451	0.12953	0.00888	-0.35260	-0.03347	0.12070	0.03541	-0.	0.1359	0.06373	0.00320	-0.01830	
0.500	-0.00019	0.	0.50073	0.17238	0.01859	-0.37055	-0.05705	0.16384	0.05253	-0.	0.1968	0.07230	0.00590	-0.02675	
0.600	-0.00033	0.	0.36448	0.20510	0.03219	-0.35980	-0.08382	0.19912	0.07107	-0.	0.2581	0.07684	0.00948	-0.03553	
0.700	-0.00051	0.	0.24561	0.22425	0.04866	-0.32659	-0.11046	0.22239	0.08995	-0.	0.3146	0.07730	0.01384	-0.04393	
0.800	-0.00074	0.	0.14950	0.22911	0.06638	-0.27858	-0.13377	0.23188	0.10817	-0.	0.3612	0.07387	0.03328	-0.05134	
0.900	-0.00103	0.	0.07755	0.22115	0.08351	-0.22340	-0.15128	0.22796	0.12486	-0.	0.3943	0.06696	0.02396	-0.05724	
1.000	-0.00136	0.	0.02824	0.20313	0.09843	-0.16758	-0.16158	0.21261	0.13931	-0.	0.4111	0.05719	0.02913	-0.06126	
1.500	-0.00377	0.00001	-0.00789	0.06844	0.11492	0.00696	-0.11779	0.06958	0.16701	-0.	0.2436	-0.02330	-0.01008	0.04491	-0.05013
2.000	-0.00684	0.00003	0.03579	0.00034	0.06510	0.01264	-0.03242	-0.00934	0.13180	0.01583	-0.	0.2822	-0.05657	0.03328	-0.00749
3.000	-0.01159	0.00007	0.02395	0.01195	0.0002E	-0.02151	0.00315	0.00869	0.03087	0.05304	-0.	0.0193	-0.03801	-0.02031	0.03906
4.000	-0.01196	0.00014	-0.00085	0.02075	0.00297	-0.00245	-0.01308	0.01206	-0.00860	0.05078	0.02604	0.00715	-0.03410	0.01602	
5.000	-0.00938	0.00021	-0.00523	0.01337	0.0102E	0.00831	-0.01111	-0.00101	-0.01164	0.02756	0.03251	0.02045	-0.01908	-0.00863	
8.000	-0.00207	0.00032	-0.00083	0.00095	0.0058E	0.00274	0.00277	-0.00481	-0.00156	0.00172	0.01271	0.00524	0.00707	-0.00945	

SIN THETA/ LAMBDA	YB 4D2P J(1)	YB 4D2P J(3)	YB 4D2S J(2)	YB 4D1S J(2)	YB 4P4F J(0)	YB 4P4P J(2)	YB 4P4S J(1)	YB 4P3D J(1)	YB 4P3D J(3)	YB 4P3P J(0)	YB 4P3P J(2)	YB 4P3S J(1)	YB 4P2P J(0)	YB 4P2P J(2)
0.005	0.00023	0.	-0.	0.	0.99994	0.00002	-0.00587	0.00048	0.	0.00001	-0.	0.00075	0.00004	-0.
0.010	0.00046	0.	-0.	0.	0.99976	0.00010	-0.01175	0.00096	0.	0.00003	-0.00001	0.00149	0.00004	-0.
0.050	0.00231	0.	-0.00002	0.	0.99398	0.00240	-0.05849	0.00476	0.00001	0.00067	-0.00027	0.00745	0.00007	-0.00001
0.100	0.00462	0.	-0.00008	0.	0.97612	0.00951	-0.11546	0.00941	0.00004	0.00265	-0.00106	0.01476	0.00017	-0.00005
0.150	0.00693	0.	-0.00018	0.00001	0.94697	0.02098	-0.16945	0.01383	0.00015	0.00593	-0.00236	0.02179	0.00033	-0.00012
0.200	0.00923	0.	-0.00032	0.00001	0.90750	0.03631	-0.21912	0.01791	0.00035	0.01043	-0.00413	0.02840	0.00056	-0.00021
0.300	0.01382	0.00002	-0.00072	0.00003	0.80260	0.07568	-0.30113	0.02466	0.00113	0.02277	-0.00890	0.03989	0.00121	-0.00047
0.400	0.01836	0.00004	-0.00128	0.00005	0.67357	0.12095	-0.35515	0.02901	0.00253	0.03883	-0.01488	0.04838	0.00212	-0.00083
0.500	0.02286	0.00008	-0.00200	0.00008	0.53407	0.16503	-0.37897	0.03048	0.00463	0.05752	-0.02150	0.05328	0.00327	-0.00129
0.600	0.02728	0.00013	-0.00288	0.00012	0.39696	0.20170	-0.37436	0.02889	0.00738	0.07765	-0.02810	0.05426	0.00468	-0.00185
0.700	0.03163	0.00021	-0.00392	0.00016	0.27264	0.22662	-0.34619	0.02424	0.01066	0.09796	-0.03404	0.05129	0.00633	-0.00250
0.800	0.03589	0.00032	-0.00511	0.00021	0.16809	0.23774	-0.30118	0.01680	0.01425	0.11730	-0.03877	0.04462	0.00821	-0.00323
0.900	0.04003	0.00046	-0.00645	0.00026	0.08673	0.23515	-0.24660	0.00700	0.01792	0.13462	-0.04181	0.03470	0.01031	-0.00405
1.000	0.04404	0.00064	-0.00794	0.00033	0.02887	0.22066	-0.18920	0.00459	0.02139	0.14910	-0.04286	0.02219	0.01262	-0.00495
1.500	0.06163	0.00229	-0.01732	0.00071	-0.01567	0.07548	0.00225	-0.06740	0.02760	0.16668	-0.01734	-0.05210	0.02677	-0.01020
2.000	0.07377	0.00547	-0.02878	0.00122	0.04062	-0.00475	0.00676	-0.09697	0.00896	0.11230	0.03157	-0.09178	0.04331	-0.01565
3.000	0.07866	0.01599	-0.04949	0.00248	0.01703	0.01829	-0.02984	-0.04864	-0.04352	0.00596	0.06734	-0.04394	0.07125	-0.02059
4.000	0.06396	0.02692	-0.05688	0.00382	-0.00221	0.01852	-0.00305	0.00689	-0.04753	-0.00007	0.02941	0.03447	0.07911	-0.01297
5.000	0.04324	0.03270	-0.05054	0.00501	0.00550	0.00360	0.00340	0.02163	-0.02524	0.01784	0.00213	0.03456	0.06811	0.00203
8.000	0.00652	0.02309	-0.01499	0.00650	0.00584	0.00266	-0.00527	0.00540	0.00668	0.01168	0.00711	-0.01088	0.01713	0.02779

SIN THETA/ LAMBDA	YB 4P2S J(1)	YB 4P1S J(1)	YB 4S4S J(0)	YB 4S3D J(2)	YB 4S3P J(1)	YB 4S3S J(0)	YB 4S2P J(1)	YB 4S2S J(0)	YB 4S1S J(0)	YB 3D3D J(0)	YB 3D3D J(2)	YB 3D3D J(4)	YB 3D3P J(1)	YB 3D3P J(3)
0.005	0.00016	0.00003	0.99994-0.	0.00060	0.00001	0.00006	0.00007	0.	0.99999	0.	0.	-0.00217-0.		
0.010	0.00032	0.00006	0.99977-0.00031	0.00120	0.00004	0.00013	0.00007	0.	0.99997	0.00001	0.	-0.00434-0.		
0.050	0.00162	0.00032	0.99427-0.00021	0.00596	0.00068	0.00062	0.00011	0.	0.99916	0.00034	0.	-0.02171-0.		
0.100	0.00324	0.00063	0.97725-0.00082	0.01179	0.00269	0.00125	0.00022	0.00001	0.99664	0.00134	0.	-0.04331-0.00004		
0.150	0.00485	0.00095	0.94945-0.00193	0.01735	0.00600	0.00187	0.00042	0.00002	0.99247	0.00301	0.	-0.06471-0.00013		
0.200	0.00646	0.00127	0.91167-0.00320	0.02251	0.01055	0.00248	0.00068	0.00003	0.98665	0.00532	0.00001-0.08581-0.00031			
0.300	0.00963	0.00190	0.81078-0.00687	0.03120	0.02304	0.00368	0.00145	0.00006	0.97022	0.01183	0.00006-0.12669-0.00104			
0.400	0.01275	0.00253	0.68556-0.01142	0.03706	0.03929	0.00484	0.00251	0.00011	0.94771	0.02056	0.00019-0.16523-0.00241			
0.500	0.01578	0.00316	0.54859-0.01635	0.03954	0.05819	0.00594	0.00386	0.00017	0.91956	0.03157	0.00044-0.20076-0.00460			
0.600	0.01870	0.00379	0.41210-0.02111	0.03836	0.07852	0.00697	0.00551	0.00025	0.88635	0.04423	0.00090-0.23271-0.00773			
0.700	0.02151	0.00442	0.28638-0.02518	0.03353	0.09900	0.00790	0.00742	0.00034	0.84871	0.05830	0.00161-0.26064-0.01187			
0.800	0.02416	0.00505	0.17882-0.02809	0.02531	0.11842	0.00873	0.00961	0.00044	0.80733	0.07339	0.00264-0.28420-0.01706			
0.900	0.02665	0.00567	0.09351-0.02950	0.01420	0.13571	0.00945	0.01204	0.00055	0.76295	0.08913	0.00406-0.30317-0.02327			
1.000	0.02895	0.00629	0.03149-0.02917	0.00086	0.15000	0.01003	0.01470	0.00068	0.71630	0.10512	0.00591-0.31747-0.03043			
1.500	0.03700	0.00937	-0.02172-0.00250-0.07273	0.16365	0.01055	0.03071	0.00152	0.47342	0.17712	0.02235-0.32307-0.07587				
2.000	0.03814	0.01235	0.03973 0.04134-0.10637	0.10260	0.00646	0.04860	0.00267	0.25263	0.21613	0.04854-0.24944-0.12066				
3.000	0.02072	0.01793	0.01286 0.06523-0.04713	-0.00464	-0.01339	0.07454	0.00581	0.02950	0.19018	0.09789-0.05957-0.14600				
4.000	-0.00745	0.02275	-0.00396 0.02293 0.00419	0.00024	-0.03558	0.07363	0.00985	-0.02713	0.11388	0.10929 0.03527-0.09725				
5.000	-0.02721	0.02653	0.00690-0.00880 0.00388	0.02004	-0.04645	0.05254	0.01442	-0.02477	0.05557	0.09101 0.04897-0.03969				
8.000	-0.01988	0.03106	0.00222-0.01011-0.01150	0.00352	-0.02282	0.00008	0.02714	-0.00296	0.00312	0.02757 0.01032 0.01646				

SIN THETA/ LAMBDA	YB 3D3S J(2)	YB 3D2P J(1)	YB 3C2P J(3)	YB 3D2S J(2)	YB 3D1S J(2)	YB 3P3P J(0)	YB 3P3P J(2)	YB 3P3S J(1)	YB 3P2P J(0)	YB 3P2P J(2)	YB 3P2S J(1)	YB 3P1S J(1)	YB 3S3S J(0)	YB 3S2P J(1)
0.005	0.	0.00074	0.	-0.	0.	0.99999	0.	-0.00251-0.	-0.	0.00045	0.00007	0.99999	0.00018	
0.010	0.00001	0.00147	0.	-0.	0.	0.99996	0.00002-0.00502	0.	-0.	0.00090	0.00014	0.99995	0.00036	
0.050	0.00037	0.00736	0.	-0.00009	0.	0.99893	0.00043-0.02510	0.00011-0.00005	0.00451	0.00071	0.99885	0.00182		
0.100	0.00149	0.01470	0.	-0.00035	0.00001	0.99574	0.00170-0.05008	0.00045-0.00018	0.00900	0.00143	0.99543	0.00364		
0.150	0.00334	0.02203	0.00001-0.00079	0.00002	0.99044	0.00382-0.07480	0.00101-0.00041	0.01347	0.00214	0.98973	0.00543			
0.200	0.00591	0.02932	0.00003-0.00139	0.00003	0.98306	0.00675-0.09914	0.00180-0.00072	0.01790	0.00285	0.98181	0.00720			
0.300	0.01311	0.04375	0.00011-0.00312	0.00007	0.96225	0.01498-0.14622	0.00403-0.00161	0.02650	0.00427	0.95949	0.01064			
0.400	0.02285	0.05792	0.00027-0.00551	0.00012	0.93382	0.02611-0.19039	0.00712-0.00283	0.03501	0.00570	0.92901	0.01387			
0.500	0.03481	0.07174	0.00052-0.00854	0.00019	0.89841	0.03977-0.23086	0.01103-0.00437	0.04303	0.00712	0.89109	0.01685			
0.600	0.04860	0.08514	0.00089-0.01216	0.00027	0.85683	0.05551-0.26691	0.01571-0.00619	0.05058	0.00853	0.84661	0.01950			
0.700	0.06378	0.09803	0.00140-0.01634	0.00036	0.80998	0.07284-0.29802	0.02112-0.00827	0.05758	0.00995	0.79658	0.02179			
0.800	0.07990	0.11036	0.00206-0.02103	0.00047	0.75885	0.09121-0.32376	0.02718-0.01058	0.06396	0.01135	0.74209	0.02367			
0.900	0.09646	0.12206	0.00289-0.02617	0.00060	0.70449	0.11008-0.34392	0.03384-0.01307	0.06956	0.01276	0.68429	0.02510			
1.000	0.11301	0.13307	0.00390-0.03172	0.00073	0.64793	0.12891-0.35839	0.04101-0.01570	0.07462	0.01416	0.62432	0.02604			
1.500	0.18126	0.17648	0.01172-0.06329	0.00161	0.36592	0.20628-0.35210	0.08183-0.02956	0.08740	0.02105	0.32911	0.02294			
2.000	0.20348	0.19904	0.02377-0.09557	0.00275	0.14856	0.23113-0.25650	0.12356-0.04080	0.08036	0.02771	0.11021	0.00738			
3.000	0.12570	0.19036	0.05298-0.13869	0.00553	-0.01128	0.14626-0.04890	0.17896-0.04245	0.02470	0.04003-0.02514-0.04444					
4.000	0.02108	0.14299	0.07483-0.14126	0.00847	0.01549	0.04039 0.01722	0.18108-0.01699-0.03778	0.05051	0.02026-0.08888					
5.000	-0.03002	0.09175	0.08154-0.11603	0.01102	0.04821	-0.00223 0.00062	0.14669 0.01759-0.07214	0.05863	0.04885-0.10392					
8.000	-0.01976	0.01278	0.05035-0.03091	0.01397	0.02326	0.01808-0.02340	0.03367 0.05348-0.04117	0.06727	0.00533-0.04479					

SIN THETA/ LAMBDA	YB 3S2S J(0)	YB 3S1S J(0)	YB 2P2P J(0)	YB 2P2P J(2)	YB 2P2S J(1)	YB 2P1S J(1)	YB 2S2S J(0)	YB 2S1S J(0)	YB 1S1S J(0)	RE 6S6S J(0)	RE 6S5D J(2)	RE 6S5P J(1)	RE 6S5S J(0)	RE 6S4F J(3)
0.005	-0.00001	0.00001	1.00000	0.	-0.00093	0.00020	1.00000	0.	1.00000	0.99712	-0.00037	0.00438	0.00011	-0.
0.010	-0.	0.00001	0.99999	0.	-0.00173	0.00039	0.99999	0.	1.00000	0.98852	-0.00147	0.00874	0.00044	-0.
0.050	0.00012	0.00002	0.99987	0.00005	-0.00897	0.00197	0.99982	0.00001	0.99999	0.74872	-0.03281	0.03981	0.01061	-0.00008
0.100	0.00050	0.00003	0.99946	0.00022	-0.01793	0.00394	0.99927	0.00005	0.99995	0.30250	-0.09378	0.05897	0.03739	-0.00052
0.150	0.00114	0.00005	0.99879	0.00048	-0.02683	0.00591	0.99837	0.00010	0.99990	0.03178	-0.12567	0.05062	0.06844	-0.00131
0.200	0.00203	0.00007	0.99785	0.00086	-0.03583	0.00788	0.99710	0.00018	0.99982	-0.04348	-0.11380	0.02247	0.09174	-0.00203
0.300	0.00456	0.00015	0.99516	0.00193	-0.05355	0.01181	0.99349	0.00040	0.99959	-0.00515	-0.03426	-0.04002	0.09413	-0.00119
0.400	0.00805	0.00025	0.99141	0.00343	-0.07115	0.01573	0.98845	0.00072	0.99926	0.01812	0.02139	-0.06153	0.05455	0.00360
0.500	0.01245	0.00039	0.98662	0.00533	-0.08851	0.01964	0.98201	0.00112	0.99885	0.01118	0.03445	-0.04629	0.01338	0.01009
0.600	0.01771	0.00056	0.98080	0.00764	-0.10559	0.02353	0.97420	0.00161	0.99834	0.00132	0.02593	-0.02122	0.00848	0.01509
0.700	0.02376	0.00075	0.97397	0.01034	-0.12234	0.02741	0.96505	0.00219	0.99774	-0.00288	0.01317	-0.00291	-0.01197	0.01687
0.800	0.03053	0.00098	0.96616	0.01342	-0.13871	0.03127	0.95460	0.00285	0.99705	-0.00259	0.00368	0.00504	-0.00602	0.01536
0.900	0.03792	0.00124	0.95740	0.01686	-0.15464	0.03510	0.94290	0.00360	0.99627	-0.00062	-0.00111	0.00540	0.00163	0.01148
1.000	0.04584	0.00152	0.94771	0.02064	-0.17010	0.03890	0.92999	0.00443	0.99540	0.00119	-0.00231	0.00218	0.00700	0.00643
1.500	0.08992	0.00338	0.88675	0.04395	-0.23888	0.05742	0.84935	0.00981	0.98969	0.00065	0.00320	-0.00532	0.00182	-0.01073
2.000	0.13241	0.00592	0.80885	0.07247	-0.29077	0.07487	0.74801	0.01706	0.98179	-0.00028	0.00141	0.00016	-0.00097	-0.00749
3.000	0.17727	0.01284	0.62608	0.13260	-0.33841	0.10547	0.51925	0.03606	0.95972	0.00046	-0.00026	-0.00092	0.00154	0.00206
4.000	0.15769	0.02162	0.44341	0.17994	-0.32067	0.12909	0.30750	0.05886	0.93006	-0.00008	0.00041	-0.00061	-0.00013	0.00179
5.000	0.10408	0.03141	0.28943	0.20427	-0.26290	0.14507	0.14914	0.08272	0.89393	-0.00004	0.00016	0.00016	0.00004	0.00045
8.000	-0.00171	0.05796	0.04629	0.16905	-0.06998	0.15252	-0.01442	0.13936	0.75948	0.00019	-0.00009	-0.00024	0.00018	-0.00013

SIN THETA/ LAMBDA	RE 6S4D J(2)	RE 6S4P J(1)	RE 6S4S J(0)	RE 6S3D J(2)	RE 6S3P J(1)	RE 6S3S J(0)	RE 6S2P J(1)	RE 6S2S J(0)	RE 6S1S J(0)	RE 5D5D J(0)	RE 5D5D J(2)	RE 5D5D J(4)	RE 5D5P J(1)	RE 5D5P J(3)
0.005	-0.	0.00030	0.00001	-0.	0.00004	-0.00001	0.00001	-0.	-0.	0.99929	0.00028	0.	-0.01447	-0.
0.010	-0.00001	0.00059	0.00002	-0.	0.00008	-0.00001	0.00001	-0.	-0.	0.99717	0.00113	0.	-0.02892	-0.00001
0.050	-0.00021	0.00294	0.00047	-0.00001	0.00029	0.00003	0.00006	0.	0.	0.93197	0.02675	0.00034	-0.13979	-0.00141
0.100	-0.00087	0.00569	0.00185	-0.00003	0.00078	0.00014	0.00011	0.00001	0.	0.75706	0.09077	0.00453	-0.25196	-0.01026
0.150	-0.00200	0.00809	0.00409	-0.00008	0.00116	0.00032	0.00017	0.00003	0.	0.53930	0.15849	0.01724	-0.31892	-0.02979
0.200	-0.00358	0.00995	0.00709	-0.00014	0.00153	0.00058	0.00023	0.00005	0.	0.33603	0.20412	0.03826	-0.33721	-0.05780
0.300	-0.00762	0.01151	0.01470	-0.00030	0.00220	0.00130	0.00034	0.00011	0.00001	0.07002	0.20874	0.08484	-0.26650	-0.11593
0.400	-0.01157	0.00967	0.02299	-0.00053	0.00277	0.00228	0.00045	0.00020	0.00001	-0.02445	0.14644	0.10928	-0.14529	-0.14440
0.500	-0.01377	0.00466	0.03009	-0.00082	0.00319	0.00349	0.00055	0.00032	0.00002	-0.03127	0.07800	0.10569	-0.04911	-0.13470
0.600	-0.01318	-0.00239	0.03448	-0.00115	0.00344	0.00490	0.00065	0.00045	0.00002	-0.01167	0.02965	0.08515	0.00165	-0.10184
0.700	-0.00978	-0.00992	0.03544	-0.00151	0.00347	0.00645	0.00074	0.00062	0.00003	0.00700	0.00386	0.05963	0.01670	-0.06387
0.800	-0.00438	-0.01642	0.03306	-0.00186	0.00327	0.00809	0.00083	0.00080	0.00004	0.01722	-0.00553	0.03659	0.01254	-0.03220
0.900	0.00177	-0.02087	0.02808	-0.00217	0.00283	0.00974	0.00091	0.00101	0.00005	0.01970	-0.00590	0.01917	0.00199	-0.01092
1.000	0.00753	-0.02283	0.02161	-0.00242	0.00216	0.01133	0.00097	0.00124	0.00006	0.01739	-0.00224	0.00772	-0.00778	0.00047
1.500	0.01465	-0.00871	-0.00256	-0.00188	-0.00374	0.01623	0.00112	0.00266	0.00014	-0.00032	0.00894	0.00043	-0.00980	-0.00535
2.000	0.00329	0.00181	0.00013	0.00161	-0.00934	0.01387	0.00089	0.00437	0.00025	0.00012	0.00302	0.00520	0.00165	-0.00817
3.000	-0.00053	-0.00305	0.00340	0.00701	-0.00767	0.00166	-0.00073	0.00737	0.00055	0.00262	-0.00004	0.00120	-0.00144	0.00050
4.000	0.00161	-0.00145	-0.00042	0.00432	-0.00086	0.00090	-0.00304	0.00820	0.00093	0.00053	0.00139	-0.00011	-0.00118	-0.00056
5.000	0.00053	0.00034	0.00021	0.00025	0.00082	0.00144	-0.00467	0.00671	0.00138	-0.00032	0.00127	0.00048	0.00045	-0.00129
8.000	-0.00070	-0.00060	0.00050	-0.00146	-0.00138	0.00086	-0.00324	0.00054	0.00274	-0.00003	0.00007	0.00065	0.00037	0.00026

SIN THETA/ LAMBDA	RE 5D5S J(2)	RE 5D4F J(1)	RE 5D4F J(3)	RE 5D4F J(5)	RE 5D4D J(0)	RE 5D4D J(2)	RE 5D4D J(4)	RE 5D4P J(1)	RE 5D4P J(3)	RE 5D4S J(2)	RE 5D3D J(0)	RE 5D3D J(2)	RE 5D3D J(4)	RE 5D3P J(1)	
0.005	0.00013	0.00316	0.	0.	0.00003-0.00001-0.			0.00053	0.	-0.	0.	-0.	-0.	0.00021	
0.010	0.00051	0.00631	0.	0.	0.00010-0.00004-0.			0.00106	0.	-0.00002	0.	-0.	-0.	0.00042	
0.050	0.01244	0.03078	0.00023	0.	0.00258-0.00103-0.			0.00519	0.00004-0.00046	0.00009-0.00004-0.				0.00209	
0.100	0.04602	0.05698	0.00172	0.00003	0.01001-0.00394-0.00005			0.00965	0.00028-0.00177	0.00037-0.00015-0.				0.00416	
0.150	0.09119	0.07514	0.00525	0.00018	0.02145-0.00825-0.00024			0.01272	0.00090-0.00373	0.00084-0.00033-0.				0.00619	
0.200	0.13630	0.08359	0.01087	0.00063	0.03566-0.01330-0.00069			0.01391	0.00199-0.00606	0.00148-0.00059-0.				0.00817	
0.300	0.19129	0.07330	0.02567	0.00325	0.06670-0.02259-0.00279			0.00987	0.00552-0.01045	0.00331-0.00132-0.00001				0.01189	
0.400	0.18270	0.03992	0.03871	0.00851	0.09262-0.02680-0.00662-0.00197			0.00997	0.01236	0.00581-0.00229-0.00002				0.01518	
0.500	0.13276	0.00127	0.04443	0.01531	0.10678-0.02362-0.01142-0.01847			0.01369	0.01019	0.00890-0.00348-0.00006				0.01791	
0.600	0.07469-0.03066	0.04170	0.02171	0.10757-0.01384-0.01581-0.03543			0.01510-0.00380	0.01248-0.00481-0.00014						0.01996	
0.700	0.02933-0.05107	0.03249	0.02677	0.09727-0.00014-0.01846-0.04923			0.01338	0.00569	0.01641-0.00620-0.00029					0.02127	
0.800	0.00275-0.06009	0.01985	0.02753	0.07999	0.01434-0.01856-0.05765			0.00859	0.01645	0.02053-0.00756-0.00050				0.02178	
0.900	-0.00776-0.06016	0.00651	0.02640	0.05999	0.02700-0.01601-0.06007			0.00153	0.02660	0.02456-0.00880-0.00081				0.02149	
1.000	-0.00790-0.05431-0.00559	0.02292	0.04064	0.03627-0.01128-0.05712-0.00661			0.03463	0.02864-0.00984-0.00122						0.02043	
1.500	0.01277-0.00815-0.02955-0.00433-0.00478	0.03286	0.01809-0.01238-0.03128	0.03209	0.04180-0.01001-0.00444			0.00694							0.00694
2.000	0.00485	0.00981-0.01786-0.01692	0.00365	0.00735	0.02264	0.00610-0.01874	0.00472	0.03982-0.00220-0.00746-0.00854							0.00854
3.000	-0.00095	0.00487	0.00152-0.00890	0.00966	0.00057	0.00324-0.00486	0.00191-0.00119	0.01518	0.01445-0.00444-0.01357						0.01357
4.000	0.00151	0.00035	0.00321-0.00059	0.00160	0.00561-0.00034-0.00281-0.00203			0.00387-0.00014	0.01580	0.00398-0.00154					0.00154
5.000	0.00056-0.00036	0.00168	0.00156-0.00135	0.00485	0.00201	0.00153-0.00361	0.00115-0.00344	0.01023	0.00824	0.00499					0.00499
8.000	-0.00072-0.00003	0.00006	0.00061-0.00041	0.00055	0.00215	0.00121	0.00052-0.00175-0.00077	0.00098	0.00465	0.00228					0.00228

SIN THETA/ LAMBDA	RE 5D3P J(3)	RE 5D3S J(2)	RE 5D2P J(1)	RE 5D2P J(3)	RE 5D2S J(2)	RE 5D1S J(2)	RE 5P5P J(0)	RE 5P5P J(2)	RE 5P5S J(1)	RE 5P4F J(2)	RE 5P4F J(4)	RE 5P4D J(1)	RE 5P4D J(3)	RE 5P4P J(0)
0.005	0.	-0.	0.00006	0.	-0.	0.	0.99967	0.00013-0.01316-0.00004-0.		0.00184	0.			0.00003
0.010	0.	-0.	0.00011	0.	-0.	0.	0.99866	0.00053-0.02631-0.00014-0.		0.00369	0.			0.00011
0.050	0.	-0.00006	0.00056	0.	-0.	0.	0.96710	0.01307-0.12875-0.00348-0.00001		0.01816	0.00008			0.00250
0.100	0.00001-0.00023	0.00112	0.	-0.00002	0.	0.87426	0.04897-0.24087-0.01328-0.00018	0.03458	0.00065	0.00979				0.00979
0.150	0.00002-0.00052	0.00168	0.	-0.00004	0.	0.73728	0.09892-0.32335-0.02770-0.00086	0.04775	0.00211	0.02127				0.02127
0.200	0.00006-0.00092	0.00224	0.	-0.00007	0.	0.57736	0.15161-0.36924-0.04436-0.00246	0.05650	0.00468	0.03602				0.03602
0.300	0.00019-0.00204	0.00336	0.	-0.00015	0.00001	0.26953	0.22654-0.35566-0.07448-0.00959	0.05859	0.01314	0.07063				0.07063
0.400	0.00044-0.00353	0.00447	0.00001-0.00027	0.00001	0.06025	0.23274-0.25164-0.09863-0.02157	0.04135	0.02419	0.10383					0.10383
0.500	0.00085-0.00532	0.00557	0.00001-0.00042	0.00002-0.03254	0.18346-0.13000-0.08252-0.03520	0.01130	0.03426	0.12748						0.12748
0.500	0.00144-0.00732	0.00665	0.00002-0.00061	0.00003-0.04510	0.11396-0.03832-0.06069-0.04630-0.02265	0.03993	0.13711							0.13711
0.700	0.00221-0.00942	0.00773	0.00004-0.00083	0.00004-0.02205	0.05267	0.00993-0.03122-0.05194-0.05260	0.03928	0.13238						0.13238
0.800	0.00316-0.01151	0.00879	0.00005-0.00108	0.00005	0.00602	0.01219	0.02291-0.01157-0.05121-0.07357	0.03232	0.11608					0.11608
0.900	0.00427-0.01348	0.00983	0.00008-0.00137	0.00007	0.02510-0.00727	0.01562	0.02328-0.04487-0.08379	0.02052	0.09265					0.09265
1.000	0.00550-0.01520	0.01084	0.00011-0.00169	0.00008	0.03245-0.01138	0.00119	0.04100-0.03460-0.08404	0.00614	0.06671					0.06671
1.500	0.01140-0.01769	0.01548	0.00041-0.00377	0.00018	0.00185	0.01620-0.01923	0.04160	0.01972-0.02211-0.04293-0.00934						0.00934
2.000	0.01234-0.00982	0.01904	0.00103-0.00647	0.00030-0.00146	0.00755	0.00110	0.00456	0.02973	0.00794-0.02863					0.00365
3.000	-0.00007	0.00806	0.02188	0.0033E-0.01213	0.00063	0.00506-0.00011-0.00361-0.01083	0.00341-0.00688	0.00217	0.01252					0.01252
4.000	-0.00852	0.00706	0.01943	0.00636-0.01535	0.00099	0.00013	0.00313-0.00227-0.00293-0.00520-0.00412-0.00298-0.00010							0.00010
5.000	-0.00708-0.00011	0.01439	0.00851-0.01500	0.00132	0.00013	0.00147	0.00042	0.00033-0.00364	0.00206-0.00519					0.00055
8.000	0.00165-0.00346	0.00293	0.00742-0.00581	0.00186	0.00113	0.00015-0.00094	0.00025	0.00004	0.00168	0.00067				0.00302

SIN THETA/ LAMBDA	RE 5P4P J(2)	RE 5P4S J(1)	RE 5P3D J(1)	RE 5P3D J(3)	RE 5P3P J(1)	RE 5P3P J(2)	RE 5P3S J(1)	RE 5P2P J(1)	RE 5P2P J(2)	RE 5P2S J(1)	RE 5P1S J(1)	RE 5S5S J(1)	RE 5S4F J(3)	RE 5S4D J(2)
0.005	-0.00001	0.00089	0.00010	0.	0.00001	-0.	0.00021	-0.00001	-0.	0.00005	0.00001	0.99973	0.	-0.00002
0.010	-0.00004	0.00177	0.00021	0.	0.00002	-0.	0.00042	-0.00001	-0.	0.00011	0.00002	0.99891	0.	-0.00007
0.050	-0.00100	0.00871	0.00104	0.	0.00015	-0.00005	0.00212	0.	-0.	0.00054	0.00011	0.97309	0.00021	-0.00167
0.100	-0.00387	0.01652	0.00208	0.	0.00055	-0.00022	0.00422	0.00003	-0.00002	0.00109	0.00022	0.89614	0.00161	-0.00650
0.150	-0.00827	0.02263	0.00309	0.00001	0.00123	-0.00049	0.00627	0.00008	-0.00003	0.00163	0.00033	0.77958	0.00512	-0.01390
0.200	-0.01370	0.02638	0.00406	0.00004	0.00217	-0.00086	0.00826	0.00015	-0.00006	0.00217	0.00045	0.63821	0.01114	-0.02302
0.300	-0.02509	0.02534	0.00585	0.00013	0.00482	-0.00191	0.01195	0.00034	-0.00014	0.00324	0.00057	0.34422	0.02972	-0.04222
0.400	-0.03299	0.01294	0.00732	0.00031	0.00843	-0.00332	0.01511	0.00061	-0.00025	0.00430	0.00089	0.11491	0.05143	-0.05603
0.500	-0.03383	-0.00790	0.00836	0.00062	0.01289	-0.00502	0.01758	0.00095	-0.00038	0.00533	0.00111	-0.01138	0.06822	-0.05903
0.600	-0.02653	-0.03225	0.00885	0.00110	0.01804	-0.00693	0.01924	0.00137	-0.00055	0.00634	0.00133	-0.04981	0.07474	-0.04998
0.700	-0.01249	-0.05495	0.00869	0.00176	0.02369	-0.00892	0.01996	0.00186	-0.00074	0.00731	0.00156	-0.03735	0.06990	-0.03129
0.800	0.00538	-0.07200	0.00782	0.00259	0.02960	-0.01087	0.01969	0.00242	-0.00097	0.00825	0.00178	-0.00775	0.05594	-0.00743
0.900	0.02370	-0.08126	0.00621	0.00358	0.03552	-0.01264	0.01840	0.00306	-0.00122	0.00914	0.00200	0.01841	0.03665	0.01684
1.000	0.03959	-0.08243	0.00391	0.00469	0.04119	-0.01408	0.01614	0.00376	-0.00149	0.00999	0.00222	0.03307	0.01582	0.03771
1.500	0.05026	-0.02494	-0.01438	0.00962	0.05843	-0.01319	-0.00520	0.00815	-0.00317	0.01328	0.00331	0.00468	-0.04293	0.05491
2.000	0.01067	0.00681	-0.03070	0.00822	0.05089	0.00066	-0.02633	0.01359	-0.00508	0.01460	0.00437	-0.00320	-0.02740	0.01097
3.000	0.00172	-0.01078	-0.02581	-0.01007	0.01017	0.02417	-0.02416	0.02418	-0.00771	0.01063	0.00638	0.00576	0.00807	-0.00174
4.000	0.00867	-0.00480	-0.00332	-0.01869	-0.00178	0.01682	-0.00249	0.02944	-0.00651	0.00117	0.00816	-0.00049	0.00672	0.00613
5.000	0.00366	0.00124	0.00715	-0.01350	0.00407	0.00413	0.00306	0.02786	-0.00192	-0.00747	0.00965	0.00019	0.00166	0.00193
8.000	0.00045	-0.00209	0.00323	0.00189	0.00604	0.00162	-0.00449	0.00949	0.00988	-0.00949	0.01185	0.00078	-0.00052	-0.00265

SIN THETA/ LAMBDA	RE 5S4P J(1)	RE 5S4S J(1)	RE 5S3D J(2)	RE 5S3P J(1)	RE 5S3S J(1)	RE 5S2P J(1)	RE 5S2S J(1)	RE 5S1S J(1)	RE 4F4F J(1)	RE 4F4F J(2)	RE 4F4F J(4)	RE 4F4F J(6)	RE 4F4D J(1)	RE 4F4D J(3)
0.005	0.00143	0.00003	-0.	0.00015	0.00004	0.00002	-0.	-0.	0.99993	0.00003	0.	0.	-0.00548	-0.
0.010	0.00286	0.00010	-0.	0.00031	0.00005	0.00004	-0.	-0.	0.99972	0.00011	0.	0.	-0.01097	-0.
0.050	0.01409	0.00240	-0.00003	0.00154	0.00019	0.00022	0.00001	0.	0.99301	0.00279	0.	0.	-0.05458	-0.00008
0.100	0.02696	0.00939	-0.00013	0.00307	0.00063	0.00044	0.00005	0.	0.97242	0.01095	0.00006	0.	-0.10756	-0.00061
0.150	0.03751	0.02047	-0.00030	0.00456	0.00136	0.00066	0.00011	0.00001	0.93931	0.02386	0.00030	0.	-0.15742	-0.00201
0.200	0.04486	0.03483	-0.00054	0.00600	0.00238	0.00087	0.00019	0.00001	0.89531	0.04062	0.00091	0.00002	-0.20283	-0.00461
0.300	0.04789	0.06920	-0.00121	0.00863	0.00525	0.00130	0.00044	0.00002	0.78306	0.08111	0.00399	0.00016	-0.27620	-0.01426
0.400	0.03512	0.10351	-0.00215	0.01083	0.00915	0.00171	0.00078	0.00004	0.65334	0.12332	0.01042	0.00072	-0.32244	-0.03001
0.500	0.01024	0.12970	-0.00330	0.01243	0.01396	0.00211	0.00122	0.00006	0.52196	0.15989	0.02038	0.00208	-0.34093	-0.05060
0.600	-0.02037	0.14275	-0.00462	0.01331	0.01951	0.00249	0.00175	0.00009	0.40021	0.18660	0.03302	0.00458	-0.33484	-0.07366
0.700	-0.04994	0.14129	-0.00601	0.01334	0.02559	0.00284	0.00237	0.00012	0.29449	0.20211	0.04699	0.00833	-0.30963	-0.09645
0.800	-0.07314	0.12721	-0.00736	0.01244	0.03195	0.00316	0.00308	0.00015	0.20717	0.20715	0.06086	0.01326	-0.27158	-0.11654
0.900	-0.08701	0.10441	-0.00855	0.01060	0.03831	0.00345	0.00388	0.00019	0.13799	0.20354	0.07344	0.01909	-0.22664	-0.13220
1.000	-0.09100	0.07749	-0.00946	0.00784	0.04440	0.00370	0.00476	0.00024	0.08511	0.19350	0.08392	0.02545	-0.17977	-0.14248
1.500	-0.02993	-0.01114	-0.00689	-0.01519	0.06241	0.00426	0.01019	0.00054	-0.02063	0.10969	0.09951	0.05321	-0.00596	-0.12247
2.000	0.00714	0.00175	0.00674	-0.03615	0.05241	0.00337	0.01667	0.00094	-0.02228	0.04570	0.07722	0.06124	0.04101	-0.05728
3.000	-0.01179	0.00126	0.02676	-0.02881	0.00588	-0.00285	0.02802	0.00207	-0.00401	0.00350	0.02894	0.04165	0.01665	0.00906
4.000	-0.00533	-0.00166	0.01620	-0.00307	-0.00334	-0.01161	0.03106	0.00354	0.00005	-0.00092	0.00857	0.02029	0.00095	0.01224
5.000	0.00132	0.00086	0.00083	0.00309	0.00553	-0.01772	0.02537	0.00524	0.00028	-0.00060	0.00237	0.00890	-0.00138	0.00617
8.000	-0.00229	0.00190	-0.00552	-0.00524	0.00324	-0.01225	0.00203	0.01036	0.00001	-0.00002	0.00003	0.00077	-0.00020	0.00030



SIN THETA/ LAMBDA	RE 4F4D J(5)	RE 4F4P J(2)	RE 4F4P J(4)	RE 4F4S J(3)	RE 4F3D J(1)	RE 4F3D J(3)	RE 4F3D J(5)	RE 4F3P J(2)	RE 4F3P J(4)	RE 4F3S J(3)	RE 4F2P J(2)	RE 4F2P J(4)	RE 4F2S J(3)	RE 4F1S J(3)
0.005	-0.	0.00002	0.	-0.	0.00134	0.	0.	-0.	-0.	0.	0.	0.	-0.	0.
0.010	-0.	0.00008	0.	-0.	0.00268	0.	0.	-0.00001	-0.	0.	0.	0.	-0.	0.
0.050	-0.	0.00207	0.	-0.00006	0.01338	0.00001	0.	-0.00035	-0.	0.00001	0.00001	0.	-0.	0.
0.100	-0.	0.00819	0.00003	-0.00049	0.02665	0.00004	0.	-0.00138	-0.	0.00005	0.00006	0.	-0.	0.
0.150	-0.00001	0.01806	0.00014	-0.00162	0.03972	0.00014	0.	-0.00308	-0.00001	0.00017	0.00013	0.	-0.00001	0.
0.200	-0.00006	0.03124	0.00044	-0.00375	0.05246	0.00032	0.	-0.00544	-0.00002	0.00040	0.00024	0.	-0.00001	0.
0.300	-0.00042	0.06500	0.00208	-0.01180	0.07663	0.00106	0.00001	-0.01194	-0.00012	0.00132	0.00053	0.	-0.00004	0.
0.400	-0.00154	0.10376	0.00593	-0.02538	0.09846	0.00242	0.00004	-0.02051	-0.00036	0.00303	0.00093	0.	-0.00009	0.
0.500	-0.00399	0.14160	0.01270	-0.04388	0.11742	0.00452	0.00011	-0.03069	-0.00084	0.00568	0.00143	0.00001	-0.00018	0.
0.600	-0.00823	0.17349	0.02260	-0.06559	0.13312	0.00740	0.00025	-0.04193	-0.00165	0.00934	0.00203	0.00002	-0.00031	0.
0.700	-0.01444	0.19604	0.03519	-0.08820	0.14536	0.01103	0.00049	-0.05368	-0.00288	0.01398	0.00271	0.00004	-0.00048	0.
0.800	-0.02244	0.20769	0.04955	-0.10934	0.15407	0.01534	0.00089	-0.06540	-0.00459	0.01953	0.00347	0.00007	-0.00071	0.
0.900	-0.03179	0.20851	0.06446	-0.12697	0.15937	0.02020	0.00146	-0.07658	-0.00680	0.02582	0.00429	0.00011	-0.00098	0.
1.000	-0.04184	0.19977	0.07869	-0.13970	0.16146	0.02545	0.00225	-0.08680	-0.00953	0.03265	0.00515	0.00017	-0.00131	0.
1.500	-0.08103	0.08625	0.11168	-0.12481	0.13632	0.05134	0.00974	-0.11489	-0.02888	0.05663	0.00976	0.00071	-0.00375	0.00001
2.000	-0.08036	-0.00553	0.08040	-0.04914	0.08679	0.06518	0.02112	-0.10386	-0.04870	0.08383	0.01375	0.00179	-0.00708	0.00003
3.000	-0.02918	-0.02828	0.00189	0.02389	0.01785	0.05278	0.03672	-0.04184	-0.05720	0.05050	0.01679	0.00499	-0.01312	0.00008
4.000	0.00020	-0.00684	-0.01515	0.01570	-0.00128	0.02736	0.03381	-0.00554	-0.03649	0.02215	0.01407	0.00763	-0.01488	0.00015
5.000	0.00558	0.00110	-0.00956	0.00353	-0.00294	0.01160	0.02344	0.00389	-0.01653	0.00267	0.00948	0.00841	-0.01278	0.00023
8.000	0.00218	0.00070	0.00014	-0.00121	-0.00035	0.00050	0.00462	0.00127	0.00077	-0.00232	0.00147	0.00464	-0.00360	0.00039

SIN THETA/ LAMBDA	RE 4D4D J(0)	RE 4D4P J(2)	RE 4D4D J(4)	RE 4D4P J(1)	RE 4D4P J(3)	RE 4D4S J(2)	RE 4D3D J(0)	RE 4D3D J(2)	RE 4D3D J(4)	RE 4D3P J(1)	RE 4D3P J(3)	RE 4D3S J(2)	RE 4D2P J(1)	RE 4D2P J(3)
0.005	0.99995	0.00002	0.	-0.00541	-0.	0.00002	0.00001	-0.	-0.	0.00091	0.	-0.	0.00022	0.
0.010	0.99979	0.00009	0.	-0.01081	-0.	0.00008	0.00002	-0.00001	-0.	0.00182	0.	-0.00001	0.00044	0.
0.050	0.99465	0.00214	0.	-0.05387	-0.00006	0.00198	0.00051	-0.00021	-0.	0.00906	0.00001	-0.00028	0.00221	0.
0.100	0.97875	0.00846	0.00003	-0.10648	-0.00048	0.00784	0.00205	-0.00082	-0.	0.01801	0.00004	-0.00113	0.00441	0.
0.150	0.95279	0.01870	0.00014	-0.15662	-0.00159	0.01735	0.00458	-0.00182	-0.00001	0.02673	0.00015	-0.00252	0.00662	0.
0.200	0.91756	0.03240	0.00042	-0.20319	-0.00369	0.03015	0.00807	-0.00320	-0.00002	0.03511	0.00034	-0.00444	0.00882	0.
0.300	0.82356	0.06780	0.00201	-0.28187	-0.01169	0.06359	0.01773	-0.00696	-0.00010	0.05045	0.00113	-0.00968	0.01320	0.00001
0.400	0.70704	0.10906	0.00578	-0.33694	-0.02543	0.10336	0.03048	-0.01178	-0.00030	0.05331	0.00258	-0.01650	0.01756	0.00003
0.500	0.57953	0.15015	0.01253	-0.36608	-0.04454	0.14405	0.04563	-0.01730	-0.00069	0.07312	0.00481	-0.02441	0.02188	0.00006
0.600	0.45198	0.18578	0.02257	-0.37010	-0.06754	0.18062	0.06241	-0.02308	-0.00134	0.07953	0.00783	-0.03287	0.02614	0.00010
0.700	0.33338	0.21212	0.03561	-0.35239	-0.09219	0.20908	0.07997	-0.02870	-0.00232	0.09236	0.01159	-0.04133	0.03034	0.00017
0.800	0.23000	0.22719	0.05078	-0.31801	-0.11599	0.22694	0.09752	-0.03373	-0.00366	0.08165	0.01598	-0.04925	0.03447	0.00025
0.900	0.14530	0.23067	0.06689	-0.27269	-0.13665	0.23328	0.11429	-0.03784	-0.00536	0.07763	0.02079	-0.05615	0.03851	0.00036
1.000	0.08022	0.22367	0.08259	-0.22203	-0.15239	0.22858	0.12963	-0.04074	-0.00742	0.07066	0.02580	-0.06164	0.04245	0.00050
1.500	-0.01803	0.10834	0.12196	-0.01912	-0.14318	0.10945	0.17136	-0.03340	-0.02045	0.01035	0.04547	-0.06181	0.06019	0.00180
2.000	0.02460	0.01586	0.08900	-0.02149	-0.06042	0.00556	0.15254	0.00115	-0.02899	-0.04524	0.04253	-0.02574	0.07352	0.00439
3.000	0.03529	0.00504	0.00818	-0.02145	0.00664	0.00015	0.05318	0.06003	-0.01172	-0.05137	0.00814	0.03641	0.08315	0.01366
4.000	0.00489	0.02216	-0.00045	-0.00962	-0.00988	0.01540	-0.00198	0.06011	0.01936	-0.0386	0.03518	0.02635	0.07286	0.02487
5.000	-0.00524	0.01811	0.00854	0.00630	-0.01402	0.00378	-0.01297	0.03783	0.03302	0.01938	-0.02685	-0.00147	0.05343	0.03261
8.000	-0.00152	0.00200	0.00801	0.00442	0.00204	-0.00650	-0.00278	0.00357	0.01734	0.00836	0.00631	-0.01284	0.01073	0.02765

SIN THETA/ LAMBDA	RE 4D2S J(2)	RE 4D1S J(2)	RE 4P4P J(0)	RE 4P4P J(2)	RE 4P4S J(1)	RE 4P3D J(1)	RE 4P3D J(3)	RE 4P3P J(0)	RE 4P3P J(2)	RE 4P3S J(1)	RE 4P2P J(0)	RE 4P2P J(2)	RE 4P2S J(1)	RE 4P1S J(1)
0.005	-0.	0.	0.99995	0.00002-0.00534	0.00043	0.	0.00001-0.	0.00071	0.00003-0.	0.00015	0.00003	0.00003	0.00003	0.00006
0.010	-0.	0.	0.99980	0.00008-0.01068	0.00085	0.	0.00002-0.00001	0.00142	0.00003-0.	0.00031	0.00006	0.00031	0.00006	0.00030
0.050	-0.00002	0.	0.99506	0.00197-0.05322	0.00424	0.	0.00057-0.00023	0.00707	0.00005-0.00001	0.00154	0.00030	0.00154	0.00030	0.00061
0.100	-0.00007	0.	0.98038	0.00782-0.10529	0.00838	0.00003	0.00226-0.00090	0.01402	0.00014-0.00005	0.00308	0.00061	0.00308	0.00061	0.00091
0.150	-0.00016	0.00001	0.95633	0.01732-0.15512	0.01236	0.00011	0.00506-0.00201	0.02075	0.00028-0.00010	0.00462	0.00091	0.00462	0.00091	0.00121
0.200	-0.00028	0.00001	0.92355	0.03012-0.20167	0.01607	0.00026	0.00892-0.00354	0.02715	0.00048-0.00018	0.00615	0.00121	0.00615	0.00121	0.00182
0.300	-0.00063	0.00003	0.83525	0.06367-0.28147	0.02243	0.00086	0.01957-0.00768	0.03856	0.00105-0.00041	0.00918	0.00182	0.00918	0.00182	0.00243
0.400	-0.00112	0.00005	0.72401	0.10377-0.33921	0.02692	0.00195	0.03360-0.01297	0.04755	0.00184-0.00072	0.01216	0.00243	0.01216	0.00243	0.00303
0.500	-0.00175	0.00008	0.59980	0.14511-0.37218	0.02914	0.00361	0.05021-0.01899	0.05357	0.00285-0.00113	0.01507	0.00303	0.01507	0.00303	0.00364
0.600	-0.00251	0.00011	0.47268	0.18263-0.38049	0.02885	0.00584	0.06848-0.02522	0.05629	0.00409-0.00162	0.01790	0.00364	0.01790	0.00364	0.00424
0.700	-0.00342	0.00015	0.35154	0.21228-0.36672	0.02600	0.00856	0.08745-0.03117	0.05558	0.00553-0.00219	0.02063	0.00424	0.02063	0.00424	0.00484
0.800	-0.00446	0.00019	0.24327	0.23139-0.33523	0.02068	0.01166	0.10616-0.03635	0.05150	0.00718-0.00284	0.02324	0.00484	0.02324	0.00484	0.00544
0.900	-0.00564	0.00024	0.15237	0.23888-0.29132	0.01313	0.01497	0.12373-0.04034	0.04432	0.00903-0.00356	0.02572	0.00544	0.02572	0.00544	0.00604
1.000	-0.00695	0.00030	0.08095	0.23510-0.24052	0.00372	0.01829	0.13938-0.04281	0.03446	0.01107-0.00436	0.02804	0.00604	0.02804	0.00604	0.00901
1.500	-0.01533	0.00066	-0.02792	0.11566-0.02545	-0.05468	0.02808	0.17353-0.02855	-0.03447	0.02374-0.00913	0.03684	0.00901	0.03684	0.00901	0.01190
2.000	-0.02595	0.00114	0.02759	0.01020	0.01671	-0.09400	0.01705	0.13640	0.01589	-0.08599	0.03909	-0.01442	0.03983	0.01190
3.000	-0.04738	0.00234	0.03023	0.01017	-0.03243	-0.06702	-0.03486	0.02168	0.07048	-0.05259	0.06794	-0.02109	0.02744	0.01735
4.000	-0.05873	0.00368	-0.00118	0.02364	-0.01097	-0.00572	-0.05218	-0.00439	0.04359	-0.00413	0.08109	-0.01692	0.00108	0.02219
5.000	-0.05657	0.00493	0.00220	0.00893	0.00362	0.02028	-0.03538	0.01241	0.00962	0.00796	0.07564	-0.00401	-0.02188	0.02620
8.000	-0.02147	0.00690	0.00806	0.00140	-0.00575	0.00851	0.00549	0.01613	0.00472	-0.01228	0.02521	0.02725	-0.02557	0.03205

SIN THETA/ LAMBDA	RE 4S4S J(0)	RE 4S3D J(2)	RE 4S3P J(1)	RE 4S3S J(0)	RE 4S2P J(1)	RE 4S2S J(0)	RE 4S1S J(0)	RE 3D3D J(0)	RE 3D3D J(2)	RE 3D3D J(4)	RE 3D3P J(1)	RE 3D3P J(3)	RE 3D3S J(2)	RE 3D2P J(1)
0.005	0.99995-0.	0.00055	0.	0.00006	0.00003	0.	0.99999	0.	0.	-0.00199-0.	0.	0.00069	0.00069	0.00138
0.010	0.99981-0.00001	0.00109	0.00002	0.0002	0.00003	0.	0.99997	0.00001	0.	-0.00398-0.	0.00001	0.00138	0.00138	0.00689
0.050	0.99524-0.00017	0.00544	0.00058	0.00058	0.00006	0.	0.99930	0.00028	0.	-0.01988-0.	0.00031	0.00689	0.00689	0.01376
0.100	0.98108-0.00067	0.01077	0.00230	0.00117	0.00016	0.00001	0.99718	0.00113	0.	-0.03959-0.00003	0.00126	0.01376	0.01376	0.02063
0.150	0.95786-0.00150	0.01589	0.00514	0.00174	0.00033	0.00002	0.99368	0.00253	0.	-0.05933-0.00010	0.00282	0.02063	0.02063	0.02746
0.200	0.92515-0.00263	0.02071	0.00905	0.00232	0.00056	0.00003	0.98878	0.00447	0.00001	-0.07874-0.00024	0.00499	0.02746	0.02746	0.04101
0.300	0.84045-0.00568	0.02905	0.01986	0.00345	0.00123	0.00006	0.97495	0.00996	0.00004	-0.11655-0.00080	0.01109	0.04101	0.04101	0.05435
0.400	0.73183-0.00955	0.03515	0.03410	0.00454	0.00217	0.00010	0.95592	0.01745	0.00013	-0.15252-0.00188	0.01939	0.05435	0.05435	0.06741
0.500	0.60961-0.01385	0.03852	0.05093	0.00559	0.00336	0.00015	0.93203	0.02676	0.00031	-0.18614-0.00359	0.02966	0.06741	0.06741	0.08012
0.600	0.48336-0.01821	0.03887	0.06943	0.00657	0.00480	0.00022	0.90367	0.03766	0.00064	-0.21693-0.00606	0.04161	0.08012	0.08012	0.09244
0.700	0.36178-0.02219	0.03609	0.08858	0.00748	0.00645	0.00030	0.87131	0.04989	0.00115	-0.24449-0.00936	0.05491	0.09244	0.09244	0.10429
0.800	0.25186-0.02543	0.03028	0.10740	0.00831	0.00841	0.00039	0.83546	0.06318	0.00190	-0.26853-0.01353	0.06922	0.10429	0.10429	0.11563
0.900	0.15841-0.02760	0.02174	0.12496	0.00925	0.01056	0.00049	0.79667	0.07724	0.00294	-0.28881-0.01858	0.08417	0.11563	0.11563	0.12640
1.000	0.08400-0.02845	0.01088	0.14048	0.00968	0.01293	0.00061	0.75550	0.09175	0.00431	-0.30520-0.02448	0.09939	0.12640	0.12640	0.17061
1.500	-0.03386-0.01083	-0.05794	0.17122	0.01086	0.02735	0.00135	0.53333	0.16153	0.01705	-0.32959-0.06386	0.16761	0.17061	0.17061	0.19695
2.000	0.02559	0.02893	-0.10357	0.12746	0.00815	0.04416	0.00238	0.32611	0.20798	0.03908	-0.27719	-0.10746	0.20112	0.19695
3.000	0.02646	0.06983	-0.06743	0.00839	-0.00846	0.07227	0.00521	0.06458	0.20624	0.08852	-0.09785	-0.14877	0.15107	0.19983
4.000	-0.00476	0.03753	-0.00461	-0.00695	-0.03053	0.07825	0.00889	-0.02021	0.13909	0.11031	0.01824	-0.11630	0.04779	0.16093
5.000	0.00316	-0.00007	0.00744	0.01534	-0.04512	0.06274	0.01315	-0.02871	0.07599	0.10095	0.05032	-0.06013	-0.01805	0.11133
8.000	0.00453	-0.01357	-0.01306	0.00770	-0.03011	0.00465	0.02588	-0.00511	0.00634	0.03705	0.01607	0.01533	-0.02650	0.02048

SIN THETA/ LAMBDA	RE 3D2P J(3)	RE 3D2S J(2)	RE 3D1S J(2)	RE 3P3P J(0)	RE 3P3P J(2)	RE 3P3S J(1)	RE 3P2P J(0)	RE 3P2P J(2)	RE 3P2S J(1)	RE 3P1S J(1)	RE 3S3S J(0)	RE 3S2P J(1)	RE 3S2S J(0)	RE 3S1S J(0)
0.005	0.	-0.	0.	0.99999	0.	-0.00232	0.	-0.	0.00042	0.00007	0.99999	0.00017	0.	0.00001
0.010	0.	-0.	0.	0.99996	0.00001	-0.00463	0.	-0.	0.00085	0.00013	0.99996	0.00034	0.	0.00001
0.050	0.	-0.00008	0.	0.99910	0.00036	-0.02314	0.00010	-0.00004	0.00423	0.00067	0.99902	0.00168	0.00011	0.00001
0.100	0.	-0.00030	0.00001	0.99638	0.00145	-0.04619	0.00039	-0.00016	0.00845	0.00134	0.99610	0.00335	0.00044	0.00002
0.150	0.00001	-0.00068	0.00002	0.99188	0.00324	-0.06903	0.00088	-0.00035	0.01264	0.00201	0.99124	0.00501	0.00099	0.00004
0.200	0.00003	-0.00121	0.00003	0.98561	0.00574	-0.09158	0.00155	-0.00062	0.01681	0.00268	0.98447	0.00665	0.00176	0.00006
0.300	0.00009	-0.00271	0.00006	0.96789	0.01276	-0.13541	0.00348	-0.00139	0.02502	0.00402	0.96536	0.00983	0.00395	0.00013
0.400	0.00022	-0.00479	0.00011	0.94358	0.02230	-0.17694	0.00616	-0.00245	0.03299	0.00536	0.93917	0.01286	0.00698	0.00022
0.500	0.00042	-0.00743	0.00017	0.91317	0.03410	-0.21552	0.00955	-0.00378	0.04064	0.00670	0.90642	0.01569	0.01081	0.00034
0.600	0.00072	-0.01060	0.00024	0.87723	0.04783	-0.25057	0.01362	-0.00538	0.04792	0.00804	0.86777	0.01825	0.01540	0.00049
0.700	0.00113	-0.01428	0.00032	0.83644	0.06311	-0.28161	0.01834	-0.00720	0.05475	0.00937	0.82338	0.02052	0.02070	0.00066
0.800	0.00166	-0.01841	0.00042	0.79155	0.07953	-0.30826	0.02365	-0.00924	0.06107	0.01070	0.77587	0.02246	0.02665	0.00086
0.900	0.00233	-0.02297	0.00053	0.74335	0.09668	-0.33026	0.02951	-0.01146	0.06683	0.01202	0.72434	0.02403	0.03319	0.00108
1.000	0.00315	-0.02792	0.00066	0.69265	0.11411	-0.34746	0.03586	-0.01382	0.07199	0.01334	0.67027	0.02520	0.04024	0.00133
1.500	0.00965	-0.05666	0.00144	0.42924	0.19198	-0.36370	0.07278	-0.02670	0.08757	0.01986	0.39250	0.02446	0.08046	0.00296
2.000	0.02000	-0.08751	0.00248	0.20655	0.22985	-0.29098	0.11238	-0.03827	0.08543	0.02620	0.16536	0.01267	0.12156	0.00521
3.000	0.04708	-0.13449	0.00506	-0.00015	0.17459	-0.08545	0.17239	-0.04516	0.04033	0.03806	-0.02127	-0.03295	0.17433	0.01134
4.000	0.07070	-0.14644	0.00790	0.00231	0.06706	0.01105	0.18673	-0.02660	-0.02124	0.04841	0.00440	-0.07928	0.16957	0.01925
5.000	0.08192	-0.12910	0.01051	0.04025	0.00692	0.01022	0.16286	0.00512	-0.06374	0.05682	0.04443	-0.10273	0.12538	0.02828
8.000	0.05911	-0.04323	0.01438	0.03203	0.01362	-0.02714	0.04911	0.06307	-0.05312	0.05825	0.01285	-0.05906	0.00621	0.05458

SIN THETA/ LAMBDA	RE 2P2P J(0)	RE 2P2P J(2)	RE 2P2S J(1)	RE 2P1S J(1)	RE 2S2S J(0)	RE 2S1S J(0)	RE 1S1S J(0)	AU 6S6S J(0)	AU 6S5D J(2)	AU 5S5P J(1)	AU 6S5S J(0)	AU 6S4F J(3)	AU 6S4D J(2)	AU 6S4P J(1)
0.005	1.00000	0.	-0.00083	0.00018	1.00000	0.	1.00000	0.99708	-0.00026	0.00332	0.00008	-0.	-0.	0.00023
0.010	1.00000	0.	-0.00167	0.00037	0.99999	0.	1.00000	0.98836	-0.00105	0.00662	0.00033	-0.	-0.00001	0.00046
0.050	0.99988	0.00005	-0.00833	0.00184	0.99984	0.00001	0.99999	0.74688	-0.02387	0.03062	0.00793	-0.00003	-0.00016	0.00230
0.100	0.99954	0.00019	-0.01665	0.00369	0.99937	0.00004	0.99996	0.30634	-0.07098	0.04757	0.02838	-0.00018	-0.00065	0.00449
0.150	0.99895	0.00042	-0.02496	0.00553	0.99859	0.00009	0.99991	0.04285	-0.10137	0.04515	0.05342	-0.00047	-0.00147	0.00645
0.200	0.99814	0.00074	-0.03325	0.00737	0.99749	0.00016	0.99984	-0.03590	-0.10052	0.02683	0.07457	-0.00073	-0.00259	0.00805
0.300	0.99583	0.00167	-0.04977	0.01105	0.99437	0.00035	0.99964	-0.01249	-0.04566	-0.02372	0.08652	-0.00033	-0.00550	0.00978
0.400	0.99260	0.00296	-0.06614	0.01472	0.99001	0.00063	0.99936	0.01215	0.00680	-0.05174	0.06176	0.00206	-0.00860	0.00905
0.500	0.98846	0.00460	-0.08234	0.01838	0.98444	0.00098	0.99900	0.01178	0.02922	-0.04888	0.02650	0.00593	-0.01084	0.00583
0.600	0.98343	0.00660	-0.09830	0.02203	0.97767	0.00140	0.99856	0.00454	0.02948	-0.03067	0.00097	0.00981	-0.01135	0.00069
0.700	0.97752	0.00894	-0.11401	0.02566	0.96973	0.00191	0.99804	-0.00061	0.02035	-0.01209	-0.00960	0.01233	-0.00979	-0.00539
0.800	0.97076	0.01161	-0.12940	0.02928	0.96065	0.00249	0.99744	-0.00224	0.01027	-0.00006	-0.00910	0.01280	-0.00639	-0.01130
0.900	0.96316	0.01460	-0.14444	0.03288	0.95046	0.00314	0.99676	-0.00162	0.00293	0.03473	-0.00355	0.01130	-0.00184	-0.01611
1.000	0.95475	0.01789	-0.15910	0.03645	0.93920	0.00387	0.99600	-0.00023	-0.00096	0.03444	0.00246	0.00831	0.00307	-0.01922
1.500	0.90148	0.03840	-0.22544	0.05392	0.86839	0.00858	0.99103	0.00112	0.00222	-0.00569	0.00421	-0.00820	0.01445	-0.01170
2.000	0.83256	0.06395	-0.27779	0.07052	0.77810	0.01496	0.98413	-0.00032	0.00229	-0.00095	-0.00129	-0.00875	0.00574	0.00062
3.000	0.66662	0.12023	-0.33427	0.10015	0.56785	0.03187	0.96482	0.00029	-0.00045	-0.00050	0.00170	0.00126	-0.00116	-0.00217
4.000	0.49350	0.16863	-0.33084	0.12390	0.36242	0.05259	0.93873	0.00010	0.00034	-0.00087	0.00011	0.00216	0.00137	-0.00203
5.000	0.33993	0.19852	-0.28591	0.14107	0.19747	0.07488	0.90673	0.00039	0.00044	-0.00002	-0.00011	0.00077	0.00089	0.00008
8.000	0.07125	0.18296	-0.09837	0.15550	-0.00838	0.13223	0.78548	-0.00012	-0.00029	-0.00020	0.00029	-0.00016	-0.00074	-0.00051

SIN THETA/ LAMBDA	AU 6S4S J(0)	AU 6S3D J(2)	AU 6S3P J(1)	AU 6S3S J(0)	AU 6S2P J(1)	AU 6S2S J(0)	AU 6S1S J(0)	AU 5D5D J(0)	AU 5D5D J(2)	AU 5D5D J(4)	AU 5D5P J(1)	AU 5D5P J(3)	AU 5D5S J(2)	AU 5D4F J(1)
0.005	0.	-0.	0.00003	0.	0.	0.	-0.	0.99948	0.00021	0.	-0.01302	-0.	0.00010	0.00234
0.010	0.00001	-0.	0.00007	0.	0.00001	0.	0.	0.99791	0.00083	0.	-0.02603	-0.00001	0.00042	0.00467
0.050	0.00035	-0.00001	0.00033	0.00003	0.00005	0.	0.	0.94935	0.02000	0.00019	-0.12679	-0.00099	0.01028	0.02294
0.100	0.00138	-0.00003	0.00065	0.00012	0.00010	0.00001	0.	0.81411	0.07065	0.00265	-0.23397	-0.00733	0.03867	0.04330
0.150	0.00306	-0.00006	0.00097	0.00026	0.00015	0.00002	0.	0.63357	0.13093	0.01070	-0.30757	-0.02198	0.07864	0.05897
0.200	0.00534	-0.00010	0.00127	0.00046	0.00020	0.00004	0.	0.44824	0.18134	0.02547	-0.34221	-0.04451	0.12175	0.06858
0.300	0.01126	-0.00023	0.00185	0.00103	0.00029	0.00009	0.	0.15909	0.21945	0.05582	-0.31093	-0.09910	0.18761	0.06853
0.400	0.01806	-0.00041	0.00234	0.00181	0.00038	0.00017	0.00001	0.01242	0.18661	0.09892	-0.20809	-0.13940	0.20215	0.04766
0.500	0.02441	-0.00063	0.00273	0.00278	0.00047	0.00026	0.00001	-0.03228	0.12557	0.11137	-0.10258	-0.14871	0.17078	0.01627
0.600	0.02911	-0.00089	0.00299	0.00392	0.00056	0.00037	0.00002	-0.02752	0.06798	0.10448	-0.02912	-0.13056	0.11757	-0.01559
0.700	0.03139	-0.00118	0.00309	0.00518	0.00064	0.00050	0.00003	-0.00799	0.02698	0.08580	0.00787	-0.09777	0.06486	-0.04130
0.800	0.03099	-0.00147	0.00302	0.00654	0.00072	0.00065	0.00003	0.00955	0.00372	0.06297	0.01770	-0.06272	0.02511	-0.05797
0.900	0.02821	-0.00174	0.00276	0.00793	0.00079	0.00082	0.00004	0.01976	-0.00582	0.04137	0.01255	-0.03326	0.00151	-0.06555
1.000	0.02367	-0.00198	0.00231	0.00932	0.00085	0.00101	0.00005	0.02285	-0.00676	0.02384	0.00205	-0.01256	-0.00827	-0.06556
1.500	-0.00008	-0.00196	-0.00224	0.01435	0.00102	0.00219	0.00012	0.00317	0.01035	-0.00188	-0.01596	-0.00112	0.01172	-0.02081
2.000	-0.00154	0.00057	-0.00752	0.01368	0.00089	0.00363	0.00021	-0.00114	0.00642	0.00522	-0.00034	-0.01058	0.00949	0.00862
3.000	0.00394	0.00609	-0.00816	0.00311	-0.00035	0.00638	0.00045	0.00362	-0.00042	0.00277	-0.00065	-0.00027	-0.00191	0.00810
4.000	-0.00001	0.00489	-0.00190	-0.00102	-0.00235	0.00755	0.00078	0.00130	0.00148	-0.00016	-0.00198	-0.00004	0.00149	0.00125
5.000	-0.00014	0.00114	0.00073	0.00073	-0.00398	0.00669	0.00116	-0.00019	0.00177	0.00040	0.00013	-0.00015	0.00116	-0.00038
8.000	0.00066	-0.00156	-0.00125	0.00116	-0.00345	0.00099	0.00237	-0.00017	0.00027	0.00089	0.00059	0.00008	-0.00103	-0.00010

SIN THETA/ LAMBDA	AU 5D4F J(3)	AU 5D4F J(5)	AU 5D4D J(0)	AU 5D4D J(2)	AU 5D4D J(4)	AU 5D4P J(1)	AU 5D4P J(3)	AU 5D4S J(2)	AU 5D3D J(0)	AU 5D3D J(2)	AU 5D3D J(4)	AU 5D3P J(1)	AU 5D3P J(3)	AU 5D3S J(2)
0.005	0.	0.	0.00002	-0.00001	-0.	0.00062	0.	-0.	0.	-0.	-0.	0.00022	0.	-0.
0.010	0.	0.	0.00009	-0.00004	-0.	0.00123	0.	-0.00002	0.	-0.	-0.	0.00044	0.	-0.
0.050	0.00013	0.	0.00219	-0.00087	-0.	0.00606	0.00003	-0.00047	0.00009	-0.00004	-0.	0.00221	0.	-0.00006
0.100	0.00097	0.00001	0.00857	-0.00338	-0.00003	0.01146	0.00025	-0.00184	0.00035	-0.00014	-0.	0.00440	0.00001	-0.00023
0.150	0.00305	0.00007	0.01857	-0.00721	-0.00015	0.01564	0.00079	-0.00393	0.00080	-0.00032	-0.	0.00656	0.00002	-0.00051
0.200	0.00657	0.00027	0.03135	-0.01189	-0.00047	0.01813	0.00178	-0.00651	0.00141	-0.00056	-0.	0.00867	0.00005	-0.00090
0.300	0.01711	0.00154	0.06101	-0.02151	-0.00202	0.01703	0.00512	-0.01193	0.00316	-0.00126	-0.00001	0.01268	0.00017	-0.00200
0.400	0.02896	0.00455	0.08902	-0.02795	-0.00511	0.00788	0.00975	-0.01566	0.00555	-0.00220	-0.00002	0.01630	0.00039	-0.00348
0.500	0.03772	0.00928	0.10873	-0.02843	-0.00949	0.00726	0.01436	-0.01586	0.00854	-0.00335	-0.00005	0.01942	0.00076	-0.00528
0.600	0.04072	0.01489	0.11692	-0.02239	-0.01425	0.02497	0.01748	-0.01178	0.01204	-0.00467	-0.00011	0.02193	0.00129	-0.00733
0.700	0.03754	0.02019	0.11369	-0.01117	-0.01823	0.04170	0.01799	-0.00387	0.01594	-0.00610	-0.00022	0.02375	0.00200	-0.00953
0.800	0.02940	0.02408	0.10145	0.00285	-0.02043	0.05467	0.01542	0.00658	0.02011	-0.00754	-0.00039	0.02481	0.00290	-0.01179
0.900	0.01827	0.02594	0.08366	0.01713	-0.02027	0.06232	0.01002	0.01784	0.02441	-0.00893	-0.00064	0.02508	0.00396	-0.01400
1.000	0.00613	0.02558	0.06374	0.02963	-0.01770	0.06434	0.00258	0.02828	0.02868	-0.01018	-0.00098	0.02458	0.00517	-0.01604
1.500	-0.03184	0.00323	-0.00144	0.04310	0.01229	0.02505	0.03153	0.04108	0.04500	-0.01215	-0.00403	0.01257	0.01182	-0.02101
2.000	-0.02630	-0.01635	-0.00018	0.01566	0.02536	0.00519	0.02692	0.01260	0.04684	-0.00566	-0.00767	-0.00490	0.01469	-0.01495
3.000	-0.00070	-0.01375	0.01259	-0.00089	0.00737	0.00355	0.00118	-0.00362	0.02267	0.01374	-0.00686	-0.01675	0.00354	0.00634
4.000	0.00420	-0.00261	0.00389	0.00569	-0.00066	-0.00475	-0.00079	0.00405	0.00257	0.01878	0.00209	-0.00491	-0.00827	0.00949
5.000	0.00269	0.00150	-0.00107	0.00633	0.00144	0.00066	-0.00412	0.00251	-0.00361	0.01377	0.00836	0.00442	-0.00912	0.00205
8.000	0.00017	0.00095	-0.00070	0.00100	0.00291	0.00182	0.00022	-0.00229	-0.00125	0.00175	0.00631	0.00342	0.00133	-0.00458

SIN THETA/ LAMBDA	AU 5D2P J(1)	AU 5D2P J(3)	AU 5D2S J(2)	AU 5D1S J(2)	AU 5P5P J(0)	AU 5P5P J(2)	AU 5P5S J(1)	AU 5P4F J(2)	AU 5P4F J(4)	AU 5P4D J(1)	AU 5P4D J(3)	AU 5P4P J(0)	AU 5P4P J(2)	AU 5P4S J(1)
0.005	0.00006	0.	-0.	0.	0.99973	0.00011	-0.01188	-0.00002	-0.	0.00160	0.	0.00002	-0.00001	0.00088
0.010	0.00012	0.	-0.	0.	0.99893	0.00043	-0.02376	-0.00009	-0.	0.00319	0.	0.00009	-0.00004	0.00177
0.050	0.00060	0.	-0.	0.	0.97360	0.01050	-0.11674	-0.00231	-0.00001	0.01575	0.00006	0.00218	-0.00087	0.00872
0.100	0.00119	0.	-0.00002	0.	0.89818	0.03987	-0.22117	-0.00893	-0.00009	0.03024	0.00048	0.00857	-0.00339	0.01670
0.150	0.00179	0.	-0.00004	0.	0.78413	0.08230	-0.30319	-0.01897	-0.00044	0.04234	0.00155	0.01873	-0.00732	0.02325
0.200	0.00238	0.	-0.00007	0.	0.64604	0.12988	-0.35649	-0.03114	-0.00131	0.05111	0.00349	0.03198	-0.01227	0.02780
0.300	0.00357	0.	-0.00015	0.00001	0.35883	0.20996	-0.37339	-0.05588	-0.00544	0.05656	0.01015	0.06411	-0.02326	0.02948
0.400	0.00475	0.00001	-0.00026	0.00001	0.13233	0.23906	-0.29916	-0.07258	-0.01327	0.04556	0.01950	0.09715	-0.03225	0.02064
0.500	0.00593	0.00001	-0.00041	0.00002	0.00250	0.21431	-0.18801	-0.07545	-0.02369	0.02171	0.02944	0.12389	-0.03587	0.00300
0.600	0.00709	0.00002	-0.00060	0.00003	-0.04367	0.15749	-0.08627	-0.05446	-0.03426	-0.00873	0.03687	0.13948	-0.03242	-0.01980
0.700	0.00824	0.00003	-0.00081	0.00004	-0.03893	0.09431	-0.01730	-0.04353	-0.04242	-0.03913	0.03973	0.14212	-0.02214	-0.04339
0.800	0.00938	0.00005	-0.00106	0.00005	-0.01392	0.04226	0.01614	-0.01801	-0.04639	-0.05420	0.03708	0.13281	-0.00683	-0.06379
0.900	0.01050	0.00007	-0.00135	0.00007	0.01151	0.00833	0.02266	0.00719	-0.04557	-0.08087	0.02929	0.11447	0.01088	-0.07820
1.000	0.01160	0.00010	-0.00167	0.00008	0.02833	-0.00815	0.01396	0.02861	-0.04034	-0.08826	0.01766	0.09089	0.02828	-0.08533
1.500	0.01669	0.00037	-0.00374	0.00018	0.01034	0.01341	-0.02526	0.05324	0.01081	-0.03932	-0.04023	-0.00329	0.05944	-0.04148
2.000	0.02081	0.00094	-0.00651	0.00032	-0.00379	0.01321	-0.00304	0.01494	0.03329	0.00555	-0.03848	-0.00268	0.02176	0.00431
3.000	0.02488	0.00323	-0.01272	0.00066	0.00664	-0.00115	-0.00243	-0.01360	0.00899	-0.00483	0.00072	0.01665	-0.00118	-0.00924
4.000	0.02328	0.00644	-0.01700	0.00106	0.00107	0.00336	-0.00374	-0.00544	-0.00535	-0.00657	-0.00131	0.00176	0.00941	-0.00800
5.000	0.01826	0.00915	-0.01763	0.00144	-0.00020	0.00245	-0.00001	-0.00025	-0.00516	0.00077	-0.00571	-0.00035	0.00590	0.00042
8.000	0.00452	0.00920	-0.00815	0.00213	0.00157	-0.00008	-0.00089	0.00044	-0.00014	0.00240	0.00021	0.00381	0.00005	-0.00208

SIN THETA/ LAMBDA	AU 5P3D J(1)	AU 5P3D J(3)	AU 5P3P J(0)	AU 5P3P J(2)	AU 5P3S J(1)	AU 5P2P J(0)	AU 5P2P J(2)	AU 5P2S J(1)	AU 5P1S J(1)	AU 5S5S J(0)	AU 5S4F J(3)	AU 5S4D J(2)	AU 5S4P J(1)	AU 5S4S J(0)
0.005	0.00010	0.	0.00004	-0.	0.00021	-0.	-0.	0.00006	0.00001	0.99978	0.	-0.00001	0.00131	0.00002
0.010	0.00020	0.	0.00004	-0.	0.00043	-0.	-0.	0.00011	0.00002	0.99911	0.	-0.00005	0.00262	0.00009
0.050	0.00100	0.	0.00016	-0.00005	0.00213	0.00001	-0.	0.00055	0.00011	0.97788	0.00013	-0.00133	0.01295	0.00210
0.100	0.00199	0.	0.00054	-0.00020	0.00423	0.00003	-0.00001	0.00110	0.00023	0.91407	0.00097	-0.00517	0.02494	0.00826
0.150	0.00296	0.00001	0.00116	-0.00045	0.00630	0.00008	-0.00003	0.00165	0.00034	0.81573	0.00314	-0.01117	0.03509	0.01810
0.200	0.00390	0.00003	0.00203	-0.00080	0.00831	0.00014	-0.00006	0.00220	0.00046	0.69333	0.00697	-0.01872	0.04266	0.03100
0.300	0.00564	0.00011	0.00449	-0.00177	0.01208	0.00032	-0.00013	0.00329	0.00068	0.42386	0.01953	-0.03557	0.04814	0.06276
0.400	0.00712	0.00026	0.00784	-0.00308	0.01540	0.00058	-0.00023	0.00436	0.00091	0.18933	0.03637	-0.04964	0.03985	0.09632
0.500	0.00823	0.00053	0.01202	-0.00469	0.01812	0.00091	-0.00036	0.00542	0.00114	0.03486	0.05228	-0.05608	0.01978	0.12471
0.600	0.00888	0.00093	0.01688	-0.00651	0.02012	0.00130	-0.00052	0.00645	0.00137	-0.03673	0.06258	-0.05264	-0.00755	0.14281
0.700	0.00898	0.00148	0.02228	-0.00847	0.02129	0.00177	-0.00071	0.00745	0.00159	-0.04809	0.06495	-0.03987	-0.03665	0.14822
0.800	0.00846	0.00220	0.02804	-0.01044	0.02156	0.00231	-0.00092	0.00843	0.00182	-0.02810	0.05891	-0.02042	-0.06250	0.14124
0.900	0.00728	0.00308	0.03393	-0.01232	0.02088	0.00291	-0.00116	0.00936	0.00205	0.00014	0.04621	0.00207	-0.08153	0.12422
1.000	0.00544	0.00409	0.03975	-0.01398	0.01927	0.00358	-0.00142	0.01025	0.00227	0.02310	0.02943	0.02402	-0.09199	0.10072
1.500	-0.01124	0.00936	0.06059	-0.01558	0.00011	0.00781	-0.00305	0.01386	0.00339	0.01527	-0.04043	0.06434	-0.04794	-0.00352
2.000	-0.02937	0.00986	0.05848	-0.00400	-0.02324	0.01316	-0.00498	0.01567	0.00448	-0.00555	-0.03769	0.02306	0.00393	-0.00543
3.000	-0.03163	-0.00695	0.01763	0.02385	-0.02992	0.02427	-0.00806	0.01291	0.00657	0.00744	0.00605	-0.00486	-0.00998	0.01707
4.000	-0.00857	-0.01953	-0.00170	0.02160	-0.00694	0.03106	-0.00773	0.00387	0.00845	0.00041	0.00941	0.00611	-0.00874	-0.00018
5.000	0.00588	-0.01694	0.00224	0.00775	0.00320	0.03111	-0.00373	-0.00571	0.01006	-0.00040	0.00332	0.00384	0.00041	-0.00054
8.000	0.00457	0.00114	0.00770	0.00083	-0.00472	0.01282	0.00981	-0.01150	0.01273	0.00130	-0.00069	-0.00325	-0.00226	0.00286

SIN THETA/ LAMBDA	AU 5S3D J(2)	AU 5S3P J(1)	AU 5S3S J(0)	AU 5S2P J(1)	AU 5S2S J(0)	AU 5S1S J(0)	AU 4F4F J(0)	AU 4F4F J(2)	AU 4F4F J(4)	AU 4F4F J(6)	AU 4F4D J(1)	AU 4F4D J(3)	AU 4F4D J(5)	AU 4F4P J(2)
0.005	-0.	0.00015	0.00005	0.00002	-0.	-0.	0.99995	0.00002	0.	0.	-0.00494	-0.	-0.	0.00002
0.010	-0.	0.00030	0.00005	0.00004	-0.	-0.	0.99979	0.00008	0.	0.	-0.00987	-0.	-0.	0.00007
0.050	-0.00003	0.00149	0.00018	0.00022	0.00001	0.	0.99482	0.00207	0.	0.	-0.04917	-0.00006	-0.	0.00172
0.100	-0.00012	0.00297	0.00058	0.00043	0.00004	0.	0.97948	0.00816	0.00003	0.	-0.09719	-0.00044	-0.	0.00682
0.150	-0.00027	0.00442	0.00126	0.00065	0.00013	0.00001	0.95454	0.01797	0.00016	0.	-0.14297	-0.00145	-0.00001	0.01511
0.200	-0.00049	0.00582	0.00219	0.00086	0.00013	0.00001	0.92087	0.03099	0.00048	0.00001	-0.18549	-0.00335	-0.00003	0.02627
0.300	-0.00109	0.00842	0.00483	0.00129	0.00041	0.00002	0.83208	0.06407	0.00222	0.00006	-0.25752	-0.01056	-0.00024	0.05545
0.400	-0.00192	0.01065	0.00844	0.00170	0.00073	0.00004	0.72387	0.10166	0.00615	0.00029	-0.30847	-0.02282	-0.00091	0.09026
0.500	-0.00296	0.01237	0.01291	0.00210	0.00114	0.00006	0.60734	0.13817	0.01280	0.00091	-0.33655	-0.03969	-0.00244	0.12615
0.600	-0.00417	0.01346	0.01812	0.00248	0.00164	0.00008	0.49203	0.16933	0.02214	0.00219	-0.34276	-0.05980	-0.00525	0.15887
0.700	-0.00546	0.01382	0.02389	0.00284	0.00223	0.00011	0.38495	0.19254	0.03359	0.00434	-0.33016	-0.08121	-0.00961	0.18511
0.800	-0.00677	0.01338	0.03003	0.00317	0.00293	0.00015	0.29040	0.20686	0.04624	0.00749	-0.30306	-0.10191	-0.01561	0.20277
0.900	-0.00800	0.01207	0.03631	0.00347	0.00365	0.00019	0.21033	0.21260	0.05909	0.01162	-0.26614	-0.12012	-0.02311	0.21098
1.000	-0.00903	0.00991	0.04249	0.00374	0.00443	0.00023	0.14493	0.21088	0.07123	0.01661	-0.22386	-0.13453	-0.03177	0.21002
1.500	-0.00845	-0.01091	0.06415	0.00447	0.00963	0.00051	-0.01109	0.14297	0.10412	0.04552	-0.03446	-0.13959	-0.07483	0.11738
2.000	0.00315	-0.03399	0.06007	0.00388	0.01604	0.00090	-0.02830	0.06915	0.09291	0.05234	0.03953	-0.08046	-0.08702	0.01276
3.000	0.02707	-0.03559	0.01305	-0.00159	0.02811	0.00199	-0.00754	0.00829	0.04184	0.05200	0.02525	0.00355	-0.04251	-0.03509
4.000	0.02124	-0.00804	-0.00447	-0.01033	0.03314	0.00342	-0.00045	-0.00079	0.01411	0.02868	0.00349	0.01495	-0.00512	-0.01228
5.000	0.00482	0.00322	0.00332	-0.01750	0.02927	0.00509	0.00036	-0.00091	0.00431	0.01372	-0.00138	0.00894	0.00647	-0.00016
8.000	-0.00683	-0.00550	0.00504	-0.01508	0.00429	0.01037	0.00004	-0.00006	0.00009	0.00136	-0.00035	0.00059	0.00319	0.00108

SIN THETA/ LAMBDA	AU 4F4P J(4)	AU 4F4S J(3)	AU 4F3D J(1)	AU 4F3D J(3)	AU 4F3D J(5)	AU 4F3P J(2)	AU 4F3P J(4)	AU 4F3S J(3)	AU 4F2P J(2)	AU 4F2P J(4)	AU 4F2S J(3)	AU 4F1S J(3)	AU 4D4D J(0)	AU 4D4D J(2)
0.005	0.	-0.	0.00133	0.	0.	-0.	-0.	0.	0.	0.	-0.	0.	0.99996	0.00002
0.010	0.	-0.	0.00266	0.	0.	-0.00001	-0.	0.	0.	0.	-0.	0.	0.99982	0.00007
0.050	0.	-0.00005	0.01327	0.	0.	-0.00032	-0.	0.00001	0.00001	0.	-0.	0.	0.99552	0.00179
0.100	0.00002	-0.00038	0.02645	0.00003	0.	-0.00128	-0.	0.00004	0.00006	0.	-0.	0.	0.98219	0.00710
0.150	0.00010	-0.00125	0.03945	0.00012	0.	-0.00287	-0.00001	0.00015	0.00013	0.	-0.	0.	0.96036	0.01573
0.200	0.00030	-0.00290	0.05218	0.00027	0.	-0.00506	-0.00002	0.00035	0.00023	0.	-0.00001	0.	0.93055	0.02738
0.300	0.00144	-0.00923	0.07652	0.00090	0.00001	-0.01116	-0.00009	0.00115	0.00052	0.	-0.00004	0.	0.85009	0.05802
0.400	0.00419	-0.02021	0.09886	0.00207	0.00003	-0.01927	-0.00029	0.00266	0.00091	0.	-0.00009	0.	0.74824	0.09492
0.500	0.00920	-0.03569	0.11870	0.00389	0.00008	-0.02900	-0.00068	0.00501	0.00141	0.00001	-0.00017	0.	0.63370	0.13346
0.600	0.01685	-0.05468	0.13567	0.00642	0.00018	-0.04992	-0.00135	0.00830	0.00201	0.00002	-0.00029	0.	0.51523	0.16923
0.700	0.02706	-0.07557	0.14952	0.00967	0.00036	-0.05155	-0.00237	0.01253	0.00269	0.00004	-0.00045	0.	0.40061	0.19866
0.800	0.03937	-0.09646	0.16013	0.01359	0.00066	-0.06339	-0.00381	0.01766	0.00344	0.00006	-0.00056	0.	0.29596	0.21935
0.900	0.05298	-0.11555	0.16752	0.01809	0.00111	-0.07500	-0.00571	0.02358	0.00427	0.00010	-0.00092	0.	0.20543	0.23020
1.000	0.06693	-0.13132	0.17181	0.02307	0.00174	-0.08596	-0.00810	0.03014	0.00515	0.00015	-0.00124	0.	0.13119	0.23127
1.500	0.11276	-0.14037	0.15592	0.04968	0.00810	-0.12138	-0.02621	0.06538	0.00994	0.00063	-0.00360	0.00001	-0.01836	0.14017
2.000	0.09647	-0.07231	0.10831	0.06759	0.01895	-0.11837	-0.04738	0.08816	0.01438	0.00164	-0.00697	0.00003	0.01279	0.03520
3.000	0.01280	0.02185	0.02879	0.06240	0.03771	-0.05749	-0.06374	0.07398	0.01868	0.00488	-0.01373	0.00008	0.04293	-0.00036
4.000	-0.01511	0.02157	0.00096	0.03622	0.03872	-0.01219	-0.04614	0.03272	0.01675	0.00797	-0.01663	0.00015	0.01148	0.02131
5.000	-0.01307	0.00698	-0.00339	0.01690	0.02924	0.00299	-0.02375	0.00712	0.01207	0.00934	-0.01524	0.00024	-0.00409	0.02158
8.000	-0.00025	-0.00161	-0.00060	0.00098	0.00675	0.00196	0.00033	-0.00314	0.00228	0.00595	-0.00511	0.00044	-0.00228	0.00328

SIN THETA/ LAMBDA	AU 4D4D J(4)	AU 4D4P J(1)	AU 4D4P J(3)	AU 4D4S J(2)	AU 4D3D J(0)	AU 4D3D J(2)	AU 4D3D J(4)	AU 4D3P J(1)	AU 4D3P J(3)	AU 4D3S J(2)	AU 4D2P J(1)	AU 4D2P J(3)	AU 4D2S J(2)	AU 4D1S J(2)	
0.005	0.	-0.00499-0.	0.00002	0.	-0.	-0.	0.00088	0.	-0.	0.00021	0.	-0.	0.		
0.010	0.	-0.00997-0.	0.00007	0.00002-0.	0.00001-0.	0.00177	0.	-0.00001	0.00043	0.	-0.	0.	0.		
0.050	0.	-0.04971-0.00005	0.00169	0.00045-0.	0.00018-0.	0.00881	0.	-0.00026	0.00214	0.	-0.00002	0.	0.		
0.100	0.00002-0.	0.09844-0.00037	0.00672	0.00181-0.	0.00072-0.	0.01753	0.00004-0.	0.00103	0.00427	0.	-0.00006	0.	0.		
0.150	0.00010-0.	0.14524-0.00125	0.01491	0.00405-0.	0.00161-0.	0.02605	0.00012-0.	0.00230	0.00640	0.	-0.00014	0.00001	0.		
0.200	0.00030-0.	0.18921-0.00290	0.02600	0.00715-0.	0.00284-0.	0.00002	0.03429	0.00029-0.	0.00405	0.00853	0.	-0.00025	0.00001	0.	
0.300	0.00142-0.	0.26561-0.00930	0.05538	0.01576-0.	0.00620-0.	0.00007	0.04957	0.00096-0.	0.00888	0.01278	0.00001-0.	0.00057	0.00003	0.	
0.400	0.00414-0.	0.32278-0.02051	0.09122	0.02722-0.	0.01057-0.	0.00023	0.06273	0.00220-0.	0.01522	0.01700	0.00002-0.	0.00101	0.00005	0.	
0.500	0.00918-0.	0.35813-0.03654	0.12928	0.04099-0.	0.01566-0.	0.00053	0.07327	0.00411-0.	0.02268	0.02118	0.00005-0.	0.00157	0.00007	0.	
0.600	0.01695-0.	0.37144-0.05652	0.16538	0.05645-0.	0.02112-0.	0.00105	0.08082	0.00675-0.	0.03082	0.02533	0.00009-0.	0.00227	0.00010	0.	
0.700	0.02747-0.	0.36452-0.07891	0.19592	0.07292-0.	0.02658-0.	0.00183	0.08518	0.01009-0.	0.03917	0.02942	0.00014-0.	0.00308	0.00014	0.	
0.800	0.04032-0.	0.34079-0.10179	0.21828	0.08972-0.	0.03171-0.	0.00292	0.08630	0.01405-0.	0.04725	0.03345	0.00021-0.	0.00403	0.00018	0.	
0.900	0.05474-0.	0.30454-0.12319	0.23098	0.10619-0.	0.03618-0.	0.00434	0.08429	0.01850-0.	0.05463	0.03741	0.00030-0.	0.00510	0.00023	0.	
1.000	0.06974-0.	0.26037-0.14139	0.23369	0.12175-0.	0.03973-0.	0.00608	0.07940	0.02327-0.	0.05094	0.04129	0.00042-0.	0.00629	0.00028	0.	
1.500	0.12121-0.	0.04817-0.15718	0.14031	0.17165-0.	0.03860-0.	0.01813	0.02609	0.04464-0.	0.06877	0.05903	0.00150-0.	0.01395	0.00062	0.	
2.000	0.10502	0.02288-0.08447	0.02442	0.16538-0.	0.00955-0.	0.02841-0.	0.03331	0.04767-0.	0.03936	0.07303	0.00370-0.	0.02391	0.00108	0.	
3.000	0.01873-0.	0.01769	0.00585-0.	0.00730	0.07252	0.05471-0.	0.01841-0.	0.05921	0.00266	0.03054	0.08584	0.01201-0.	0.04538	0.00224	0.
4.000	-0.00207-0.	0.01541-0.00575	0.01584	0.00632	0.06557	0.01271-0.	0.01433-0.	0.03308	0.03305	0.07911	0.02306-0.	0.05922	0.00356	0.	
5.000	0.00622	0.00316-0.01509	0.00803-0.	0.01264	0.04624	0.03154	0.01620-0.	0.03192	0.00567	0.06138	0.03194-0.	0.06034	0.00484	0.	
8.000	0.00986	0.00601	0.00088-0.	0.00772-0.	0.00409	0.00572	0.02133	0.01131	0.00474-0.	0.01538	0.01491	0.03104-0.	0.02720	0.00715	0.

SIN THETA/ LAMBDA	AU 4P4P J(0)	AU 4P4P J(2)	AU 4P4S J(1)	AU 4P3D J(1)	AU 4P3D J(3)	AU 4P3P J(0)	AU 4P3P J(2)	AU 4P3S J(1)	AU 4P2P J(0)	AU 4P2P J(2)	AU 4P2S J(1)	AU 4P1S J(1)	AU 4S4S J(0)	AU 4S3D J(2)	
0.005	0.99996	0.00002-0.	0.00497	0.00039	0.	0.	-0.	0.00068	0.00002-0.	0.00015	0.00003	0.99996-0.	0.	0.	
0.010	0.99983	0.00007-0.	0.00993	0.00078	0.	0.00002-0.	0.00001	0.00136	0.00002-0.	0.00030	0.00006	0.99984-0.	0.00001	0.	
0.050	0.99575	0.00170-0.	0.04951	0.00389	0.	0.00050-0.	0.00020	0.00679	0.00005-0.	0.00001	0.00149	0.00029	0.99587-0.	0.00015	0.
0.100	0.98310	0.00674-0.	0.09811	0.00770	0.00003	0.00201-0.	0.00080	0.01349	0.00013-0.	0.00004	0.00297	0.00059	0.98356-0.	0.00058	0.
0.150	0.96234	0.01496-0.	0.14490	0.01137	0.00009	0.00450-0.	0.00179	0.02000	0.00025-0.	0.00009	0.00445	0.00088	0.96333-0.	0.00129	0.
0.200	0.93391	0.02610-0.	0.18904	0.01484	0.00021	0.00793-0.	0.00315	0.02623	0.00043-0.	0.00016	0.00593	0.00118	0.93561-0.	0.00227	0.
0.300	0.85670	0.05566-0.	0.26647	0.02088	0.00070	0.01747-0.	0.00687	0.03752	0.00095-0.	0.00037	0.00885	0.00177	0.86012-0.	0.00493	0.
0.400	0.75793	0.09185-0.	0.32561	0.02538	0.00161	0.03013-0.	0.01169	0.04675	0.00166-0.	0.00066	0.01174	0.00236	0.76315-0.	0.00834	0.
0.500	0.64538	0.13048-0.	0.36369	0.02798	0.00299	0.04527-0.	0.01725	0.05342	0.00258-0.	0.00102	0.01457	0.00294	0.65204-0.	0.01221	0.
0.600	0.52719	0.16736-0.	0.38009	0.02846	0.00488	0.06217-0.	0.02315	0.05721	0.00370-0.	0.00146	0.01733	0.00353	0.53458-0.	0.01623	0.
0.700	0.41096	0.19883-0.	0.37614	0.02670	0.00723	0.08002-0.	0.02897	0.05794	0.00500-0.	0.00198	0.02000	0.00412	0.41821-0.	0.02006	0.
0.800	0.30307	0.22219-0.	0.35476	0.02273	0.00997	0.09801-0.	0.03429	0.05559	0.00650-0.	0.00257	0.02257	0.00470	0.30929-0.	0.02338	0.
0.900	0.20823	0.23585-0.	0.31991	0.01669	0.01297	0.11538-0.	0.03874	0.05032	0.00819-0.	0.00323	0.02502	0.00528	0.21271-0.	0.02590	0.
1.000	0.12934	0.23939-0.	0.27603	0.00884	0.01608	0.13142-0.	0.04200	0.04240	0.01004-0.	0.00396	0.02735	0.00587	0.13163-0.	0.02738	0.
1.500	-0.02976	0.14648-0.	0.05497-0.	0.04493	0.02747	0.17553-0.	0.03495-0.	0.02071	0.02169-0.	0.00839	0.03656	0.00875-0.	0.03550-0.	0.01577	0.
2.000	0.01381	0.02915	0.01875-0.	0.08904	0.02161	0.15214	0.00400-0.	0.07809	0.03611-0.	0.01348	0.04071	0.01157	0.01101	0.01967	0.
3.000	0.04009	0.00274-0.	0.03027-0.	0.07953-0.	0.02679	0.03763	0.06911-0.	0.07548	0.06502-0.	0.02105	0.03193	0.01693	0.03691	0.07013	0.
4.000	0.00242	0.02555-0.	0.01830-0.	0.01786-0.	0.05318-0.	0.00499	0.05404-0.	0.01408	0.08148-0.	0.01929	0.00770	0.02176-0.	0.00247	0.04825	0.
5.000	-0.00027	0.01400	0.00193	0.01675-0.	0.04265	0.00735	0.01774	0.00849	0.08032-0.	0.00836-0.	0.01657	0.02587-0.	0.00021	0.00873	0.
8.000	0.00970	0.00032-0.	0.00554	0.01143	0.00352	0.01952	0.00252-0.	0.01240	0.03230	0.02585-0.	0.02948	0.03263	0.00660-0.	0.01614	0.

SIN THETA/ LAMBDA	AU 4S3P J(1)	AU 4S3S J(0)	AU 4S2P J(1)	AU 4S2S J(0)	AU 4S1S J(0)	AU 3D3D J(0)	AU 3D3D J(2)	AU 3D3D J(4)	AU 3D3P J(1)	AU 3D3P J(3)	AU 3D3S J(2)	AU 3D2P J(1)	AU 3D2P J(3)	AU 3D2S J(2)
0.005	0.00051	0.	0.00006	0.00002	0.	0.99999	0.	-0.00186	0.	0.00066	0.	-0.	-0.	
0.010	0.00102	0.00002	0.00011	0.00002	0.	0.99998	0.00001	-0.00373	0.	0.00001	0.00131	0.	-0.	
0.050	0.00508	0.00051	0.00055	0.00005	0.	0.99938	0.00025	-0.01863	0.	0.00028	0.00655	0.	-0.00007	
0.100	0.01007	0.00205	0.00111	0.00014	0.00001	0.99753	0.00099	-0.03719	-0.00003	0.00111	0.01309	0.	-0.00027	
0.150	0.01489	0.00458	0.00166	0.00030	0.00001	0.99445	0.00222	-0.05562	-0.00008	0.00248	0.01962	0.00001	-0.00061	
0.200	0.01946	0.00808	0.00221	0.00051	0.00002	0.99015	0.00393	0.00001	-0.07386	-0.00020	0.00440	0.02613	0.00002	-0.00109
0.300	0.02752	0.01778	0.00329	0.00111	0.00005	0.97797	0.00877	0.00003	-0.10950	-0.00067	0.00979	0.03904	0.00008	-0.00244
0.400	0.03369	0.03064	0.00433	0.00196	0.00009	0.96119	0.01538	0.00010	-0.14361	-0.00156	0.01715	0.05177	0.00018	-0.00431
0.500	0.03755	0.04602	0.00534	0.00304	0.00014	0.94006	0.02364	0.00024	-0.17576	-0.00299	0.02630	0.06427	0.00035	-0.00670
0.600	0.03880	0.06315	0.00629	0.00434	0.00020	0.91489	0.03337	0.00049	-0.20554	-0.00506	0.03701	0.07648	0.00061	-0.00956
0.700	0.03730	0.08119	0.00719	0.00588	0.00027	0.88603	0.04436	0.00089	-0.23260	-0.00783	0.04902	0.08834	0.00096	-0.01289
0.800	0.03307	0.09932	0.00801	0.00763	0.00036	0.85391	0.05639	0.00148	-0.25666	-0.01136	0.06205	0.09981	0.00141	-0.01665
0.900	0.02627	0.11672	0.00875	0.00958	0.00045	0.81895	0.06922	0.00231	-0.27751	-0.01567	0.07580	0.11084	0.00199	-0.02080
1.000	0.01721	0.13266	0.00940	0.01174	0.00055	0.78161	0.08261	0.00340	-0.29497	-0.02074	0.08996	0.12139	0.00269	-0.02532
1.500	-0.04644	0.17377	0.01098	0.02504	0.00124	0.57543	0.14966	0.01384	-0.33098	-0.05572	0.15674	0.16574	0.00831	-0.05197
2.000	-0.09818	0.14394	0.00915	0.04097	0.00218	0.37389	0.19965	0.03286	-0.29392	-0.09735	0.19645	0.19428	0.01748	-0.08148
3.000	-0.08188	0.02272	-0.00508	0.06991	0.00480	0.09644	0.21473	0.08059	-0.12777	-0.14751	0.16701	0.20509	0.04269	-0.13011
4.000	-0.01485	-0.01029	-0.02641	0.08043	0.00823	-0.01046	0.15740	0.10856	0.00053	-0.12823	0.06950	0.17319	0.06687	-0.14829
5.000	0.00808	0.00998	-0.04305	0.06963	0.01224	-0.03005	0.09309	0.10645	0.04770	-0.07619	-0.00507	0.12618	0.08091	-0.13732
8.000	-0.01330	0.01157	-0.03559	0.00965	0.02484	-0.00732	0.00998	0.04524	0.02138	0.01273	-0.03161	0.02785	0.06544	-0.05380

SIN THETA/ LAMBDA	AU 3D1S J(2)	AU 3P3P J(0)	AU 3P3P J(2)	AU 3P3S J(1)	AU 3P2P J(0)	AU 3P2P J(2)	AU 3P2S J(1)	AU 3P1S J(1)	AU 3S3S J(0)	AU 3S2P J(1)	AU 3S2S J(0)	AU 3S1S J(0)	AU 2P2P J(0)	AU 2P2P J(2)
0.005	0.	0.99999	0.	-0.00218	0.	-0.	0.00040	0.00006	0.99999	0.00016	0.	0.00001	1.00000	0.
0.010	0.	0.99997	0.00001	-0.00436	0.	-0.	0.00081	0.00013	0.99997	0.00032	0.	0.00001	1.00000	0.
0.050	0.	0.99920	0.00032	-0.02178	0.00009	-0.00003	0.00403	0.00064	0.99913	0.00158	0.00010	0.00001	0.99990	0.00004
0.100	0.00001	0.99680	0.00128	-0.04348	0.00035	-0.00014	0.00805	0.00128	0.99653	0.00315	0.00040	0.00002	0.99958	0.00017
0.150	0.00001	0.99281	0.00287	-0.06501	0.00078	-0.00031	0.01205	0.00192	0.99222	0.00471	0.00089	0.00004	0.99907	0.00037
0.200	0.00002	0.98726	0.00508	-0.08630	0.00139	-0.00056	0.01603	0.00256	0.98620	0.00626	0.00158	0.00006	0.99834	0.00066
0.300	0.00006	0.97155	0.01132	-0.12781	0.00312	-0.00124	0.02387	0.00384	0.96919	0.00927	0.00354	0.00012	0.99627	0.00149
0.400	0.00010	0.94994	0.01982	-0.16739	0.00552	-0.00220	0.03152	0.00512	0.94582	0.01215	0.00626	0.00020	0.99337	0.00265
0.500	0.00015	0.92281	0.03038	-0.20450	0.00856	-0.00340	0.03890	0.00640	0.91650	0.01486	0.00971	0.00031	0.98967	0.00412
0.600	0.00022	0.89064	0.04274	-0.23861	0.01223	-0.00483	0.04595	0.00768	0.88177	0.01735	0.01385	0.00044	0.98516	0.00591
0.700	0.00030	0.85395	0.05659	-0.26931	0.01648	-0.00649	0.05262	0.00895	0.84223	0.01959	0.01865	0.00060	0.97987	0.00801
0.800	0.00039	0.81334	0.07162	-0.29624	0.02129	-0.00834	0.05885	0.01022	0.79855	0.02154	0.02405	0.00078	0.97380	0.01041
0.900	0.00049	0.76947	0.08746	-0.31915	0.02660	-0.01036	0.06461	0.01149	0.75145	0.02317	0.02999	0.00098	0.96698	0.01310
1.000	0.00060	0.72300	0.10376	-0.33786	0.03238	-0.01253	0.06984	0.01275	0.70169	0.02446	0.03644	0.00121	0.95941	0.01607
1.500	0.00133	0.47499	0.18038	-0.36845	0.06646	-0.02463	0.08705	0.01900	0.43894	0.02517	0.07377	0.00268	0.91133	0.03465
2.000	0.00229	0.25257	0.22554	-0.31288	0.10415	-0.03617	0.08828	0.02509	0.20999	0.01590	0.11338	0.00472	0.84861	0.05811
3.000	0.00472	0.01525	0.19281	-0.11597	0.16604	-0.04614	0.05097	0.03658	-0.01136	-0.02481	0.17022	0.01032	0.69494	0.11123
4.000	0.00746	-0.00565	0.08950	0.00064	0.18839	-0.03265	-0.00810	0.04678	-0.00702	-0.07105	0.17573	0.01761	0.52995	0.15956
5.000	0.01007	0.03169	0.01819	0.01546	0.17289	-0.00406	-0.05496	0.05530	0.03738	-0.09956	0.13996	0.02604	0.37843	0.19261
8.000	0.01453	0.03876	0.00935	-0.02838	0.06239	0.06086	-0.06140	0.06850	0.01991	-0.06956	0.01495	0.05182	0.09356	0.19170



SIN THETA/ LAMBDA	AU 2P2S J(1)	AU 2P1S J(1)	AU 2S2S J(0)	AU 2S1S J(0)	AU 1S1S J(0)	HG 6S6S J(0)	HG 6S5D J(2)	HG 6S5P J(1)	HG 6S5S J(0)	HG 6S4F J(3)	HG 6S4D J(2)	HG 6S4P J(1)	HG 6S4S J(0)	HG 6S3D J(2)
0.005	-0.00079	0.00018	1.00000-0.		1.00000	0.99764-0.00021	0.00339	0.00008-0.		-0.	0.00025	0.	-0.	
0.010	-0.00158	0.00035	0.99999 0.		1.00000	0.99061-0.00084	0.00676	0.00033-0.		-0.00031	0.00050	0.00001-0.		
0.050	-0.00788	0.00175	0.99986	0.00001	0.99999	0.79014-0.01949	0.03149	0.00786-0.00002	-0.00017	0.00250	0.00037-0.00001			
0.100	-0.01575	0.00351	0.99944	0.00004	0.99997	0.38539-0.06141	0.05018	0.02851-0.00015	-0.00068	0.00489	0.00147-0.00003			
0.150	-0.02361	0.00526	0.99874	0.00008	0.99992	0.09358-0.09488	0.04996	0.05473-0.00040	-0.00153	0.00703	0.00327-0.00006			
0.200	-0.03146	0.00701	0.99775	0.00014	0.99986	-0.02487-0.10272	0.03309	0.07821-0.00064	-0.00270	0.00881	0.00572-0.00011			
0.300	-0.04710	0.01051	0.99495	0.00032	0.99968	-0.02306-0.05798	-0.01999	0.09595-0.00034	-0.00577	0.01084	0.01212-0.00025			
0.400	-0.06261	0.01400	0.99105	0.00056	0.99942	0.01142-0.00019	-0.05482	0.07353	0.00188	-0.00914	0.01028	0.01957-0.00045		
0.500	-0.07798	0.01748	0.98604	0.00088	0.99910	0.01586	0.03047-0.05658	0.03559	0.00575	-0.01173	0.00703	0.02669-0.00069		
0.600	-0.09315	0.02096	0.97997	0.00126	0.99870	0.00777	0.03513-0.03863	0.00517	0.00994	-0.01259	0.00160	0.03219-0.00097		
0.700	-0.10809	0.02442	0.97283	0.00172	0.99823	0.00046	0.02648-0.01754	-0.00948	0.01296	-0.01125	-0.00501	0.03514-0.00128		
0.800	-0.12278	0.02786	0.96466	0.00224	0.99769	-0.00261	0.01482-0.00245	-0.01099	0.01397	-0.00786	-0.01165	0.03520-0.00161		
0.900	-0.13716	0.03129	0.95549	0.00283	0.99708	-0.00241	0.00542	0.00463	-0.00562	0.01283	-0.00305	-0.01726	0.03258-0.00191	
1.000	-0.15122	0.03470	0.94534	0.00349	0.99639	-0.00081	-0.00016	0.00548	0.00125	0.00995	0.00233	-0.02112	0.02789-0.00219	
1.500	-0.21555	0.05141	0.88120	0.00775	0.99191	0.00165	0.00220	-0.00652	0.00561	-0.00862	0.01649	-0.01436	0.00080-0.00228	
2.000	-0.26777	0.06736	0.79863	0.01354	0.98569	-0.00037	0.00299	-0.00152	-0.00147	-0.01039	0.00737	0.00022	-0.00216	0.00044
3.000	-0.32944	0.09618	0.60234	0.02901	0.96824	0.00043	-0.00056	-0.00044	0.00198	0.00115	-0.00147	-0.00221	0.00465	0.00680
4.000	-0.33572	0.11986	0.40351	0.04821	0.94458	0.00011	0.00036	-0.00108	0.00022	0.00259	0.00149	-0.00251	0.00016	0.00579
5.000	-0.30058	0.13767	0.23616	0.06924	0.91542	0.00035	0.00048	-0.00008	-0.00016	0.00100	0.00113	-0.00001	-0.00024	0.00158
8.000	-0.12122	0.15680	0.00045	0.12532	0.80354	-0.00002	-0.00032	-0.00022	0.00035	-0.00019	-0.00087	-0.00056	0.00080	-0.00183

SIN THETA/ LAMBDA	HG 6S3P J(1)	HG 6S3S J(0)	HG 6S2P J(1)	HG 6S2S J(0)	HG 6S1S J(0)	HG 5D5D J(0)	HG 5D5D J(2)	HG 5D5D J(4)	HG 5D5P J(1)	HG 5D5P J(3)	HG 5D5S J(2)	HG 5D4F J(1)	HG 5D4F J(3)	HG 5D4F J(5)
0.005	0.00004	-0.00001	0.00001-0.		-0.	0.99956	0.00018	0.	-0.01265-0.		0.00010	0.00223	0.	0.
0.010	0.00007	-0.00001	0.00001-0.		-0.	0.99823	0.00071	0.	-0.02528-0.00001		0.00039	0.00446	0.	0.
0.050	0.00036	0.00002	0.00006	0.	0.	0.95667	0.01715	0.00013	-0.12346-0.00086		0.00968	0.02191	0.00011	0.
0.100	0.00072	0.00012	0.00011	0.00001	0.	0.83840	0.06203	0.00188	-0.22964-0.00647		0.03654	0.04154	0.00086	0.00001
0.150	0.00108	0.00027	0.00016	0.00002	0.	0.67422	0.11885	0.00798	-0.30566-0.01969		0.07523	0.05700	0.00271	0.00006
0.200	0.00142	0.00049	0.00022	0.00004	0.	0.49729	0.17096	0.02005	-0.34563-0.04056		0.11792	0.06697	0.00590	0.00022
0.300	0.00206	0.00112	0.00033	0.00010	0.00001	0.19951	0.22312	0.05747	-0.32724-0.09401		0.18744	0.06889	0.01577	0.00127
0.400	0.00261	0.00197	0.00043	0.00018	0.00001	0.03102	0.20311	0.09405	-0.23081-0.13796		0.20942	0.05028	0.02747	0.00391
0.500	0.00306	0.00304	0.00053	0.00028	0.00001	-0.03011	0.14576	0.11321	-0.12283-0.15346		0.18420	0.02011	0.03688	0.00827
0.500	0.00336	0.00429	0.00063	0.00041	0.00002	-0.03245	0.08489	0.11212	-0.04182-0.14039		0.13292	-0.01208	0.04110	0.01373
0.700	0.00349	0.00569	0.00072	0.00055	0.00003	-0.01348	0.03793	0.09650	0.00281-0.10974		0.07816	-0.03933	0.03926	0.01919
0.300	0.00344	0.00719	0.00081	0.00072	0.00004	0.00646	0.00903	0.07407	0.01796-0.07400		0.03423	-0.03815	0.03217	0.02357
0.900	0.00318	0.00875	0.00088	0.00091	0.00005	0.01957	-0.00453	0.05105	0.01534-0.04207		0.00618	-0.06786	0.02158	0.02611
1.000	0.00271	0.01030	0.00095	0.00112	0.00006	0.02487	-0.00771	0.03123	0.00518-0.01830		0.00714	-0.06960	0.00942	0.02648
1.500	-0.00222	0.01614	0.00115	0.00242	0.00013	0.00492	0.01091	-0.00238	-0.01802	0.00017	0.01120	-0.02535	-0.03271	0.00547
2.000	-0.00823	0.01579	0.00103	0.00403	0.00023	-0.00152	0.00794	0.00528	-0.00127	-0.01136	0.01116	0.00805	-0.02931	-0.01621
3.000	-0.00956	0.00403	-0.00031	0.00716	0.00050	0.00409	-0.00051	0.00350	-0.00035	-0.00065	-0.00218	0.00932	-0.00159	-0.01551
4.000	-0.00252	-0.00116	-0.00253	0.00859	0.00087	0.00167	0.00156	-0.00014	-0.00227	0.00012	0.00146	0.00016	0.00455	-0.00341
5.000	0.00078	0.00065	-0.00444	0.00775	0.00130	-0.00019	0.00207	0.00033	-0.00001	-0.00163	0.00138	-0.00038	0.00307	0.00145
8.000	-0.00141	0.00142	-0.00406	0.00128	0.00266	-0.00020	0.00033	0.00106	0.00082	0.00002	-0.00114	-0.00012	0.00022	0.00109

SIN THETA/ LAMBDA	HG 5D4D J(0)	HG 5D4D J(2)	HG 5D4D J(4)	HG 5D4P J(1)	HG 5D4P J(3)	HG 5D4S J(2)	HG 5D3D J(0)	HG 5D3D J(2)	HG 5D3D J(4)	HG 5D3P J(1)	HG 5D3P J(3)	HG 5D3S J(2)	HG 5D2P J(1)	HG 5D2P J(3)
0.005	0.00002	-0.00001	0.	0.00065	0.	-0.	0.	-0.	-0.	0.00023	0.	-0.	0.00006	0.
0.010	0.00009	-0.00003	0.	0.00130	0.	-0.00002	0.	-0.	-0.	0.00046	0.	-0.	0.00012	0.
0.050	0.00217	-0.00086	0.	0.00642	0.00003	-0.00049	0.00009	-0.00004	-0.	0.00231	0.	-0.00006	0.00062	0.
0.100	0.00849	-0.00336	-0.00003	0.01220	0.00024	-0.00190	0.00036	-0.00014	-0.	0.00460	0.00001	-0.00023	0.00125	0.
0.150	0.01846	-0.00718	-0.00015	0.01677	0.00079	-0.00407	0.00081	-0.00032	-0.	0.00686	0.00002	-0.00052	0.00187	0.
0.200	0.03125	-0.01189	-0.00044	0.01965	0.00177	-0.00678	0.00144	-0.00057	-0.	0.00907	0.00005	-0.00093	0.00250	0.
0.300	0.06135	-0.02181	-0.00191	0.01929	0.00514	-0.01257	0.00322	-0.00128	-0.00001	0.01328	0.00017	-0.00206	0.00374	0.
0.400	0.09052	-0.02891	-0.00491	0.01063	0.00991	-0.01685	0.00566	-0.00224	-0.00002	0.01710	0.00040	-0.00358	0.00498	0.00001
0.500	0.11202	-0.03026	-0.00927	-0.00447	0.01484	-0.01765	0.00872	-0.00343	-0.00005	0.02042	0.00076	-0.00544	0.00621	0.00001
0.600	0.12223	-0.02502	-0.01419	-0.02269	0.01844	-0.01410	0.01230	-0.00478	-0.00011	0.02312	0.00130	-0.00756	0.00743	0.00002
0.700	0.12079	-0.01425	-0.01853	-0.04046	0.01951	-0.00648	0.01631	-0.00625	-0.00021	0.02512	0.00202	-0.00985	0.00864	0.00003
0.800	0.10973	-0.00018	-0.02124	-0.05484	0.01747	0.00403	0.02062	-0.00776	-0.00038	0.02635	0.00292	-0.01221	0.00983	0.00005
0.900	0.09235	0.01469	-0.02167	-0.06404	0.01244	0.01573	0.02508	-0.00922	-0.00063	0.02678	0.00401	-0.01454	0.01101	0.00007
1.000	0.07206	0.02818	-0.01964	-0.06747	0.00511	0.02694	0.02955	-0.01056	-0.00096	0.02641	0.00525	-0.01673	0.01217	0.00010
1.500	0.00023	0.04678	0.01082	-0.02957	-0.03193	0.04433	0.04713	-0.01304	-0.00404	0.01450	0.01225	-0.02247	0.01754	0.00037
2.000	-0.00123	0.01877	0.02772	0.00458	-0.02981	0.01546	0.05007	-0.00675	-0.00792	-0.00389	0.01569	-0.01679	0.02193	0.00095
3.000	0.01365	-0.00123	0.00896	-0.00310	0.00074	-0.00434	0.02554	0.01382	-0.00769	-0.01798	0.00470	0.00586	0.02645	0.00329
4.000	0.00475	0.00577	-0.00066	-0.00540	-0.00042	0.00409	0.00358	0.02007	0.00157	-0.00607	-0.00829	0.01035	0.02504	0.00665
5.000	-0.00095	0.00690	0.00129	0.00036	-0.00431	0.00297	-0.00369	0.01518	0.00855	0.00427	-0.00990	0.00277	0.01992	0.00958
8.000	-0.00081	0.00119	0.00321	0.00206	0.00010	-0.00250	-0.00144	0.00207	0.00698	0.00386	0.00123	-0.00502	0.00515	0.00998

SIN THETA/ LAMBDA	HG 5D2S J(2)	HG 5D1S J(2)	HG 5P5P J(0)	HG 5P5P J(2)	HG 5P5S J(1)	HG 5P4F J(2)	HG 5P4F J(4)	HG 5P4D J(1)	HG 5P4D J(3)	HG 5P4P J(0)	HG 5P4P J(2)	HG 5P4S J(1)	HG 5P3D J(1)	HG 5P3D J(3)
0.005	-0.	0.	0.99975	0.00010	-0.01153	-0.00002	-0.	0.00155	0.	0.00002	-0.00001	0.00089	0.00010	0.
0.010	-0.	0.	0.99900	0.00040	-0.02305	-0.00009	-0.	0.00310	0.	0.00009	-0.00003	0.00178	0.00020	0.
0.050	-0.	0.	0.97532	0.00982	-0.11338	-0.00211	-0.00001	0.01533	0.00006	0.00212	-0.00085	0.00876	0.00100	0.
0.100	-0.00002	0.	0.90455	0.03744	-0.21556	-0.00815	-0.00008	0.02949	0.00044	0.00834	-0.00330	0.01681	0.00198	0.
0.150	-0.00004	0.	0.79678	0.07776	-0.29721	-0.01739	-0.00038	0.04140	0.00145	0.01824	-0.00714	0.02349	0.00295	0.00001
0.200	-0.00007	0.	0.66491	0.12376	-0.35222	-0.02870	-0.00112	0.05020	0.00327	0.03120	-0.01200	0.02824	0.00389	0.00003
0.300	-0.00015	0.00001	0.38463	0.20454	-0.37709	-0.05227	-0.00474	0.05634	0.00958	0.06287	-0.02292	0.03055	0.00563	0.00010
0.400	-0.00027	0.00001	0.15491	0.23943	-0.31150	-0.06920	-0.01178	0.04663	0.01869	0.09594	-0.03216	0.02252	0.00712	0.00025
0.500	-0.00042	0.00002	0.01547	0.22171	-0.20445	-0.07367	-0.02148	0.02412	0.02845	0.12341	-0.03639	0.00562	0.00825	0.00051
0.600	-0.00061	0.00003	-0.04059	0.16937	-0.10117	-0.06491	-0.03175	-0.00547	0.03620	0.14037	-0.03380	-0.01679	0.00894	0.00090
0.700	-0.00083	0.00004	-0.04221	0.10679	-0.02711	-0.04600	-0.04020	-0.03584	0.03977	0.14475	-0.02442	-0.04052	0.00909	0.00143
0.800	-0.00109	0.00006	-0.01936	0.05230	0.01212	-0.02175	-0.04501	-0.06173	0.03807	0.13716	-0.00978	-0.06163	0.00864	0.00213
0.900	-0.00138	0.00007	0.00697	0.01457	0.02314	0.00318	-0.04532	-0.07983	0.03123	0.12019	0.00757	-0.07723	0.00755	0.00299
1.000	-0.00171	0.00009	0.02612	-0.00563	0.01688	0.02517	-0.04128	-0.08894	0.02035	0.09737	0.02530	-0.08580	0.00582	0.00398
1.500	-0.00385	0.00019	0.01322	0.01216	-0.02648	0.05589	0.00823	-0.04419	-0.03908	-0.00086	0.06151	-0.04610	-0.01053	0.00932
2.000	-0.00672	0.00033	-0.00420	0.01484	-0.00461	0.01808	0.03382	0.00430	-0.04095	-0.00425	0.02506	0.00304	-0.02908	0.01025
3.000	-0.01326	0.00069	0.00702	-0.00136	-0.00201	-0.01422	0.01072	-0.00410	-0.	0.01764	-0.00185	-0.00862	-0.03319	-0.00614
4.000	-0.01795	0.00111	0.00143	0.00337	-0.00415	-0.00623	-0.00525	-0.00719	-0.00083	0.00244	0.00948	-0.00887	-0.01009	-0.01970
5.000	-0.01886	0.00152	-0.00027	0.00275	-0.00019	-0.00043	-0.00558	0.00034	-0.00577	-0.00053	0.00653	0.00008	0.00543	-0.01787
8.000	-0.00910	0.00227	0.00169	-0.00012	-0.00087	0.00050	-0.00021	0.00262	0.00006	0.00403	-0.00005	-0.00205	0.00497	0.00088

SIN THETA/ LAMBDA	HG 5P3P J(0)	HG 5P3P J(2)	HG 5P3S J(1)	HG 5P2P J(0)	HG 5P2P J(2)	HG 5P2S J(1)	HG 5P1S J(1)	HG 5S5S J(0)	HG 5S4F J(3)	HG 5S4D J(2)	HG 5S4P J(1)	HG 5S4S J(0)	HG 5S3D J(2)	HG 5S3P J(1)
0.005	0.00004-0.		0.00021-0.	-0.		0.00006	0.00001	0.99979	0.	-0.00001	0.00129	0.00002-0.		0.00015
0.010	0.00004-0.		0.00043-0.	-0.		0.00011	0.00002	0.99916	0.	-0.00005	0.00258	0.00008-0.		0.00030
0.050	0.00016-0.00005		0.00214	0.00001-0.		0.00056	0.00012	0.97914	0.00011-0.00126	0.01274	0.00204-0.00003			0.00149
0.100	0.00053-0.00020		0.00426	0.00003-0.00001		0.00111	0.00023	0.91881	0.00086-0.00492	0.02458	0.00804-0.00012			0.00297
0.150	0.00115-0.00044		0.00635	0.00008-0.00003		0.00167	0.00035	0.82538	0.00279-0.01064	0.03457	0.01763-0.00027			0.00441
0.200	0.00201-0.00079		0.00837	0.00014-0.00006		0.00222	0.00046	0.70821	0.00623-0.01789	0.04231	0.03024-0.00048			0.00581
0.300	0.00443-0.00175		0.01219	0.00032-0.00013		0.00332	0.00069	0.44516	0.01776-0.03426	0.04835	0.06148-0.00107			0.00842
0.400	0.00775-0.00305		0.01556	0.00058-0.00023		0.00441	0.00092	0.21144	0.03344-0.04835	0.04104	0.09491-0.00188			0.01066
0.500	0.01188-0.00464		0.01835	0.00090-0.00036		0.00548	0.00115	0.05020	0.04893-0.05546	0.02205	0.12927-0.00290			0.01241
0.600	0.01670-0.00645		0.02044	0.00130-0.00052		0.00652	0.00138-0.03043	0.05987-0.05320-0.00449		0.14306-0.00408				0.01355
0.700	0.02208-0.00840		0.02172	0.00176-0.00070		0.00754	0.00161-0.04914	0.06346-0.04176-0.03340		0.15006-0.00536				0.01399
0.800	0.02782-0.01039		0.02212	0.00229-0.00091		0.00852	0.00184-0.03298	0.05910-0.02341-0.05976		0.14479-0.00667				0.01364
0.900	0.03374-0.01230		0.02159	0.00289-0.00115		0.00947	0.00207-0.00522	0.04799-0.00151-0.07992		0.12380-0.00790				0.01246
1.000	0.03961-0.01401		0.02012	0.00356-0.00141		0.01037	0.00230	0.01941	0.03239	0.02050-0.09190	0.10677-0.00896			0.01043
1.500	0.06135-0.01619		0.00145	0.00778-0.00304		0.01408	0.00343	0.01855-0.03915	0.05632-0.05283-0.00069-0.00881-0.00990					
2.000	0.06059-0.00517-0.02242		0.01314-0.00498	0.01602	0.00454-0.00585-0.04020	0.02658	0.00242-0.00716	0.00231-0.03346						
3.000	0.01985	0.02369-0.03143	0.02442-0.00818	0.01354	0.00566	0.00781	0.00519-0.00555-0.00927	0.01810	0.02709-0.01241					
4.000	-0.00147	0.02287-0.00830	0.03161-0.00806	0.00459	0.00857	0.00076	0.01011	0.03595-0.00955	0.00042	0.02256-0.00954				
5.000	0.00177	0.00885	0.00309	0.03208-0.00421-0.00523	0.01022-0.00054	0.00385	0.00434	0.00004-0.00088	0.00598	0.00309				
8.000	0.00816	0.00062-0.00474	0.01382	0.00979-0.01206	0.01303	0.00144-0.00074-0.00341-0.00222	0.00313-0.00718-0.00553							

SIN THETA/ LAMBDA	HG 5S3S J(0)	HG 5S2P J(1)	HG 5S2S J(0)	HG 5S1S J(0)	HG 4F4F J(0)	HG 4F4F J(2)	HG 4F4F J(4)	HG 4F4F J(6)	HG 4F4D J(1)	HG 4F4D J(3)	HG 4F4D J(5)	HG 4F4P J(2)	HG 4F4P J(4)	HG 4F4S J(3)
0.005	0.00004	0.00002-0.	-0.	0.99995	0.00002	0.	0.	-0.00481-0.	-0.	0.00002	0.	-0.		
0.010	0.00004	0.00004-0.	-0.	0.99981	0.00008	0.	0.	-0.00963-0.	-0.	0.00007	0.	-0.		
0.050	0.00017	0.00022	0.00001	0.	0.99515	0.00194	0.	0.	-0.04796-0.00005-0.	0.00165	0.	-0.00004		
0.100	0.00057	0.00044	0.00004	0.	0.98078	0.00765	0.00003	0.	-0.09486-0.00040-0.	0.00653	0.00002-0.00035			
0.150	0.00123	0.00065	0.00010	0.00001	0.95736	0.01687	0.00014	0.	-0.13968-0.00134-0.00001	0.01447	0.00009-0.00117			
0.200	0.00216	0.00087	0.00018	0.00001	0.92566	0.02916	0.00042	0.	-0.18148-0.00311-0.00003	0.02518	0.00028-0.00272			
0.300	0.00476	0.00129	0.00041	0.00002	0.84158	0.06067	0.00194	0.00005-0.25293-0.00984-0.00021	0.05331	0.00132-0.00869				
0.400	0.00831	0.00171	0.00073	0.00003	0.73809	0.09702	0.00544	0.00024-0.30456-0.02137-0.00080	0.08714	0.00385-0.01910				
0.500	0.01273	0.00211	0.00113	0.00006	0.62534	0.13306	0.01147	0.00075-0.33444-0.03740-0.00217	0.12239	0.00851-0.03389				
0.600	0.01788	0.00249	0.00163	0.00008	0.51231	0.16465	0.02009	0.00184-0.34319-0.05675-0.00471	0.15505	0.01567-0.05219				
0.700	0.02360	0.00285	0.00221	0.00011	0.40592	0.18909	0.03087	0.00370-0.33343-0.07755-0.00870	0.18184	0.02533-0.07255				
0.800	0.02971	0.00319	0.00288	0.00015	0.31065	0.20518	0.04304	0.00650-0.30902-0.09822-0.01426	0.20062	0.03710-0.09320				
0.900	0.03599	0.00349	0.00362	0.00018	0.22881	0.21294	0.05567	0.01025-0.27433-0.11673-0.02131	0.21038	0.05030-0.11240				
1.000	0.04221	0.00377	0.00445	0.00023	0.16099	0.21322	0.06788	0.01488-0.23360-0.13183-0.02957	0.21118	0.06402-0.12865				
1.500	0.06475	0.00454	0.00961	0.00051-0.00724	0.15071	0.10409	0.04332-0.04254-0.14271-0.07277	0.12468	0.11211-0.14315					
2.000	0.06211	0.00402	0.01597	0.00090-0.02942	0.07548	0.09610	0.06186	0.03811-0.08612-0.08784	0.01812	0.09977-0.07798				
3.000	0.01517-0.00130	0.02825	0.00198-0.00861	0.00988	0.04527	0.05428	0.02754	0.00160-0.04589-0.03647	0.01600	0.02069				
4.000	-0.00457-0.01004	0.03377	0.00341-0.00064-0.00067	0.01575	0.03087	0.00434	0.01548-0.00679-0.01385-0.01602	0.02299						
5.000	0.00270-0.01748	0.03035	0.00508	0.00037-0.00099	0.00493	0.01509-0.00131	0.00969	0.00625-0.00064-0.01393	0.00801					
8.000	0.00555-0.01586	0.00498	0.01043	0.00005-0.00007	0.00011	0.00155-0.00040	0.00069	0.00348	0.00119-0.00039-0.00171					

SIN THETA/ LAMBDA	HG 4F3D J(1)	HG 4F3D J(3)	HG 4F3D J(5)	HG 4F3P J(2)	HG 4F3P J(4)	HG 4F3S J(3)	HG 4F2P J(2)	HG 4F2P J(4)	HG 4F2S J(3)	HG 4F1S J(3)	HG 4D4D J(0)	HG 4D4D J(2)	HG 4D4D J(4)	HG 4D4P J(1)
0.005	0.00132	0.	0.	-0.	-0.	0.	0.	0.	-0.	0.	0.99996	0.00002	0.	-0.00489
0.010	0.00265	0.	0.	-0.00001	-0.	0.	0.	0.	-0.	0.	0.99983	0.00007	0.	-0.00978
0.050	0.01322	0.	0.	-0.00032	-0.	0.00001	0.00001	0.	-0.	0.	0.99570	0.00172	0.	-0.04876
0.100	0.02635	0.00003	0.	-0.00126	-0.	0.00004	0.00006	0.	-0.	0.	0.98292	0.00681	0.00002	-0.09660
0.150	0.03931	0.00011	0.	-0.00281	-0.00001	0.00014	0.00013	0.	-0.	0.	0.96196	0.01510	0.00009	-0.14261
0.200	0.05201	0.00026	0.	-0.00497	-0.00002	0.00034	0.00023	0.	-0.00001	0.	0.93332	0.02630	0.00027	-0.18595
0.300	0.07633	0.00086	0.00001	-0.01095	-0.00009	0.00111	0.00052	0.	-0.00004	0.	0.85581	0.05588	0.00130	-0.26170
0.400	0.09873	0.00199	0.00002	-0.01894	-0.00027	0.00257	0.00091	0.	-0.00009	0.	0.75727	0.09176	0.00383	-0.31917
0.500	0.11872	0.00374	0.00007	-0.02854	-0.00064	0.00485	0.00140	0.00001	-0.00017	0.	0.64581	0.12959	0.00852	-0.35574
0.600	0.13593	0.00619	0.00017	-0.03935	-0.00128	0.00804	0.00200	0.00002	-0.00028	0.	0.52971	0.16518	0.01581	-0.37100
0.700	0.15011	0.00934	0.00034	-0.05090	-0.00226	0.01217	0.00267	0.00004	-0.00044	0.	0.41643	0.19507	0.02577	-0.36649
0.800	0.16113	0.01316	0.00062	-0.06273	-0.00363	0.01718	0.00343	0.00006	-0.00065	0.	0.31199	0.21681	0.03806	-0.34526
0.900	0.16899	0.01757	0.00104	-0.07438	-0.00546	0.02300	0.00425	0.00009	-0.00091	0.	0.22059	0.22917	0.05201	-0.31129
1.000	0.17379	0.02245	0.00162	-0.08546	-0.00776	0.02946	0.00513	0.00014	-0.00122	0.	0.14461	0.23203	0.06671	-0.26892
1.500	0.16028	0.04907	0.00771	-0.12245	-0.02550	0.06480	0.00995	0.00062	-0.00355	0.00001	-0.01714	0.14764	0.12026	-0.05624
2.000	0.11352	0.06783	0.01836	-0.12149	-0.04682	0.08877	0.01448	0.00160	-0.00692	0.00003	0.00971	0.04080	0.10833	0.02224
3.000	0.03186	0.06457	0.03772	-0.06152	-0.06502	0.07711	0.01908	0.00484	-0.01382	0.00008	0.04446	-0.00152	0.02188	-0.01626
4.000	0.00176	0.03849	0.03975	-0.01418	-0.04848	0.03555	0.01738	0.00802	-0.01700	0.00015	0.01335	0.02080	-0.00221	-0.01675
5.000	-0.00344	0.01837	0.03064	0.00258	-0.02569	0.00849	0.01272	0.00953	-0.01582	0.00024	-0.00360	0.02233	0.00555	0.00217
8.000	-0.00068	0.00113	0.00735	0.00216	0.00016	-0.00335	0.00251	0.00628	-0.00553	0.00045	-0.00250	0.00366	0.01031	0.00643

SIN THETA/ LAMBDA	HG 4D4P J(3)	HG 4D4S J(2)	HG 4D3D J(0)	HG 4D3D J(2)	HG 4D3D J(4)	HG 4D3P J(1)	HG 4D3P J(3)	HG 4D3S J(2)	HG 4D2P J(1)	HG 4D2P J(3)	HG 4D2S J(2)	HG 4D1S J(2)	HG 4P4P J(0)	HG 4P4P J(2)
0.005	-0.	0.00002	0.	-0.	-0.	0.00088	0.	-0.	0.00021	0.	-0.	0.	0.99996	0.00002
0.010	-0.	0.00007	0.00002	-0.00001	-0.	0.00175	0.	-0.00001	0.00042	0.	-0.	0.	0.99984	0.00007
0.050	-0.00004	0.00163	0.00044	-0.00018	-0.	0.00875	0.	-0.00025	0.00212	0.	-0.00002	0.	0.99590	0.00164
0.100	-0.00035	0.00647	0.00176	-0.00070	-0.	0.01741	0.00004	-0.00101	0.00423	0.	-0.00006	0.	0.98370	0.00650
0.150	-0.00118	0.01437	0.00393	-0.00157	-0.	0.02588	0.00012	-0.00225	0.00635	0.	-0.00014	0.00001	0.96366	0.01444
0.200	-0.00274	0.02508	0.00694	-0.00276	-0.00001	0.03408	0.00028	-0.00396	0.00846	0.	-0.00025	0.00001	0.93619	0.02521
0.300	-0.00880	0.05354	0.01531	-0.00603	-0.00007	0.04932	0.00092	-0.00870	0.01267	0.00001	-0.00055	0.00003	0.86146	0.05387
0.400	-0.01946	0.08844	0.02647	-0.01030	-0.00021	0.06254	0.00211	-0.01492	0.01686	0.00002	-0.00098	0.00005	0.76555	0.08914
0.500	-0.03480	0.12581	0.03992	-0.01528	-0.00050	0.07322	0.00396	-0.02226	0.02101	0.00005	-0.00153	0.00007	0.65577	0.12706
0.600	-0.05407	0.16165	0.05506	-0.02065	-0.00099	0.08101	0.00651	-0.03031	0.02512	0.00008	-0.00221	0.00010	0.53984	0.16365
0.700	-0.07587	0.19247	0.07125	-0.02606	-0.00173	0.08570	0.00975	-0.03861	0.02919	0.00013	-0.00301	0.00014	0.42505	0.19536
0.800	-0.09840	0.21567	0.08784	-0.03119	-0.00277	0.08723	0.01361	-0.04670	0.03319	0.00020	-0.00393	0.00018	0.31762	0.21951
0.900	-0.11980	0.22968	0.10420	-0.03572	-0.00412	0.08569	0.01796	-0.05417	0.03713	0.00029	-0.00497	0.00023	0.22225	0.23445
1.000	-0.13837	0.23402	0.11976	-0.03939	-0.00579	0.08129	0.02266	-0.06063	0.04099	0.00040	-0.00613	0.00028	0.14196	0.23959
1.500	-0.15970	0.14753	0.17129	-0.03963	-0.01755	0.02986	0.04428	-0.07017	0.05872	0.00143	-0.01353	0.00061	-0.02896	0.15368
2.000	-0.09038	0.02993	0.16801	-0.01202	-0.02814	-0.03005	0.04864	-0.04253	0.07284	0.00355	-0.02342	0.00106	0.01019	0.03467
3.000	0.00504	-0.00905	0.07740	0.05303	-0.01988	-0.06068	0.00539	0.02862	0.08637	0.01162	-0.04483	0.00221	0.04226	0.00095
4.000	-0.00458	0.01558	0.00879	0.06659	0.01094	-0.01707	-0.03215	0.03441	0.08051	0.02259	-0.05920	0.00353	0.00371	0.02565
5.000	-0.01513	0.00907	-0.01231	0.04828	0.03090	0.01507	-0.03295	0.00757	0.06328	0.03169	-0.06111	0.00482	-0.00078	0.01530
8.000	0.00050	-0.00797	-0.00446	0.00637	0.02233	0.01209	0.00421	-0.01596	0.01606	0.03183	-0.02858	0.00720	0.01007	0.00006

SIN THETA/ LAMBDA	HG 4P4S J(1)	HG 4P3D J(1)	HG 4P3D J(3)	HG 4P3P J(0)	HG 4P3P J(2)	HG 4P3S J(1)	HG 4P2P J(0)	HG 4P2P J(2)	HG 4P2S J(1)	HG 4P1S J(1)	HG 4S4S J(0)	HG 4S3D J(2)	HG 4S3P J(1)	HG 4S3S J(0)
0.005	-0.00488	0.00038	0.	0.	-0.	0.00067	0.00002-0.	0.00015	0.00003	0.99996-0.	0.00050	0.	0.	0.
0.010	-0.00976	0.00076	0.	0.00002-0.00001	0.00135	0.00002-0.	0.00029	0.00006	0.99984-0.00001	0.00100	0.00002	0.00002	0.00002	0.00002
0.050	-0.04866	0.00381	0.	0.00049-0.00020	0.00673	0.00005-0.00001	0.00147	0.00029	0.99601-0.00014	0.00500	0.00050	0.00050	0.00050	0.00050
0.100	-0.09644	0.00754	0.000003	0.00195-0.00078	0.01336	0.00012-0.00004	0.00294	0.00058	0.98411-0.00056	0.00991	0.00199	0.00199	0.00199	0.00199
0.150	-0.14251	0.01115	0.000009	0.00437-0.00174	0.01982	0.00025-0.00009	0.00441	0.00088	0.96454-0.00125	0.01466	0.00445	0.00445	0.00445	0.00445
0.200	-0.18607	0.01455	0.000020	0.00771-0.00306	0.02600	0.00042-0.00016	0.00587	0.00117	0.93772-0.00219	0.01917	0.00786	0.00786	0.00786	0.00786
0.300	-0.26285	0.02052	0.000067	0.01699-0.00669	0.03726	0.00092-0.00036	0.00878	0.00175	0.86455-0.00476	0.02715	0.01731	0.01731	0.01731	0.01731
0.400	-0.32217	0.02502	0.00153	0.02934-0.01139	0.04653	0.00162-0.00064	0.01164	0.00234	0.77026-0.00807	0.03334	0.02986	0.02986	0.02986	0.02986
0.500	-0.36128	0.02769	0.00286	0.04414-0.01684	0.05334	0.00252-0.00100	0.01445	0.00292	0.66180-0.01184	0.03730	0.04490	0.04490	0.04490	0.04490
0.600	-0.37940	0.02832	0.00467	0.06070-0.02266	0.05735	0.00361-0.00143	0.01719	0.00350	0.54655-0.01578	0.03874	0.06170	0.06170	0.06170	0.06170
0.700	-0.37765	0.02680	0.00694	0.07827-0.02844	0.05840	0.00488-0.00193	0.01984	0.00409	0.43155-0.01956	0.03751	0.07946	0.07946	0.07946	0.07946
0.800	-0.35863	0.02313	0.00959	0.09606-0.03377	0.05644	0.00635-0.00251	0.02240	0.00467	0.32330-0.02288	0.03363	0.09739	0.09739	0.09739	0.09739
0.900	-0.32602	0.01743	0.01251	0.11334-0.03830	0.05160	0.00799-0.00316	0.02485	0.00525	0.22634-0.02546	0.02724	0.11471	0.11471	0.11471	0.11471
1.000	-0.28399	0.00994	0.01557	0.12942-0.04171	0.04415	0.00981-0.00387	0.02718	0.00582	0.14401-0.02707	0.01859	0.13071	0.13071	0.13071	0.13071
1.500	-0.06309-C	0.04259	0.02722	0.17560-0.03628	0.01737	0.02121-0.00822	0.03647	0.00869	0.03457-0.01677	0.04366	0.17400	0.17400	0.17400	0.17400
2.000	0.01827-C	0.08752	0.02250	0.15555	0.00118-0.07577	0.03540-0.01326	0.04087	0.01149	0.00720	0.01749-0.09650	0.14756	0.14756	0.14756	0.14756
3.000	-0.02915-C	0.08227	-0.02470	0.04195	0.06828-0.07831	0.06426-0.02099	0.03294	0.01683	0.03925	0.06979-0.08514	0.02671	0.02671	0.02671	0.02671
4.000	-0.02014-C	0.02108	-0.05305	-0.00468	0.05641-0.01689	0.08143-0.01978	0.00930	0.02166	-0.00147	0.05072-0.01777	-0.01069	-0.01069	-0.01069	-0.01069
5.000	0.00123	0.01551	-0.04427	0.00608	0.01998	0.00826	0.08129	-0.00937	-0.01527	0.02579-0.00101	0.01112	0.00787	0.00851	0.00851
8.000	-0.00540	0.01220	0.00287	0.02031	0.00197-0.01227	0.03413	0.02537	-0.03034	0.03274	0.00713-0.01672	-0.01320	0.01257	0.01257	0.01257

SIN THETA/ LAMBDA	HG 4S2P J(1)	HG 4S2S J(0)	HG 4S1S J(0)	HG 3D3D J(0)	HG 3D3D J(2)	HG 3D3D J(4)	HG 3D3P J(1)	HG 3D3P J(3)	HG 3D3S J(2)	HG 3D2P J(1)	HG 3D2P J(3)	HG 3D2S J(2)	HG 3D1S J(2)	HG 3P3P J(0)
0.005	0.00005	0.00002	0.	0.99999	0.	0.	-0.00183-0.	0.	0.00065	0.	-0.	0.	0.	0.99999
0.010	0.00011	0.00002	0.	0.99998	0.00001	0.	-0.00367-0.	0.00001	0.00129	0.	-0.	0.	0.	0.99997
0.050	0.00055	0.00005	0.	0.99940	0.00024	0.	-0.01834-0.	0.00027	0.00647	0.	-0.00007	0.	0.	0.99922
0.100	0.00110	0.00014	0.000001	0.99760	0.00096	0.	-0.03662-0.00002	0.00107	0.01294	0.	-0.00027	0.00001	0.00001	0.99689
0.150	0.00164	0.00029	0.000001	0.99462	0.00215	0.	-0.05477-0.00008	0.00241	0.01939	0.00001-0.00060	0.00001	0.00001	0.00001	0.99302
0.200	0.00218	0.00050	0.000002	0.99045	0.00381	0.00001-0.07273	-0.00019	0.00427	0.02581	0.00002-0.00106	0.00002	0.00002	0.00002	0.98763
0.300	0.00325	0.00109	0.000005	0.97855	0.00850	0.00003-0.10786	-0.00064	0.00950	0.03858	0.00007-0.00238	0.00005	0.00005	0.00005	0.97236
0.400	0.00428	0.00191	0.000009	0.96237	0.01492	0.00010-0.14153	-0.00149	0.01665	0.05117	0.00018-0.00421	0.00010	0.00010	0.00010	0.95136
0.500	0.00528	0.00296	0.000014	0.94135	0.02295	0.00023-0.17333	-0.00286	0.02555	0.06353	0.00034-0.00653	0.00015	0.00015	0.00015	0.92498
0.600	0.00623	0.00424	0.000020	0.91739	0.03241	0.00046-0.20285	-0.00484	0.03597	0.07561	0.00058-0.00932	0.00021	0.00021	0.00021	0.89366
0.700	0.00712	0.00574	0.000027	0.88933	0.04311	0.00084-0.22976	-0.00750	0.04768	0.08737	0.00092-0.01257	0.00029	0.00029	0.00029	0.85790
0.800	0.00794	0.00745	0.000035	0.85805	0.05485	0.00140-0.25380	-0.01089	0.06041	0.09874	0.00136-0.01624	0.00038	0.00038	0.00038	0.81828
0.900	0.00868	0.00936	0.000044	0.82398	0.06739	0.00217-0.27473	-0.01503	0.07388	0.10969	0.00191-0.02031	0.00048	0.00048	0.00048	0.77542
1.000	0.00934	0.01147	0.000054	0.78753	0.08051	0.00321-0.29241	-0.01992	0.08778	0.12018	0.00259-0.02473	0.00059	0.00059	0.00059	0.72994
1.500	0.01100	0.02451	0.000121	0.58521	0.14680	0.01315-0.33091	-0.05388	0.15407	0.15451	0.00802-0.05088	0.00130	0.00130	0.00130	0.48578
2.000	0.00936	0.04021	0.000214	0.38537	0.19741	0.03147-0.29742	-0.09492	0.19501	0.19351	0.01691-0.08003	0.00224	0.00224	0.00224	0.26391
3.000	-0.00431	0.06927	0.000470	0.10480	0.21631	0.07860-0.13503	-0.14681	0.17041	0.20612	0.04155-0.12892	0.00464	0.00464	0.00464	0.01990
4.000	-0.02538	0.08079	0.00807-0.00745	0.16165	0.10783	-0.00435-0.13074	0.07485	0.17597	0.06587	-0.14849	0.00735	-0.00716	-0.00716	-0.00716
5.000	-0.04243	0.07117	0.01203-0.03007	0.09741	0.10749	0.04652-0.08008	-0.00144	0.12974	0.08051	-0.13908	0.00996	0.02937	0.02937	0.02937
8.000	-0.03688	0.01105	0.02457-0.00794	0.01105	0.04734	0.02278	0.01184	-0.03280	0.02985	0.06691-0.05650	0.01455	0.04037	0.04037	0.04037

SIN THETA/ LAMBDA	HG 3P3P J(2)	HG 3P3S J(1)	HG 3P2P J(0)	HG 3P2P J(2)	HG 3P2S J(1)	HG 3P1S J(1)	HG 3S3S J(0)	HG 3S2P J(1)	HG 3S2S J(0)	HG 3S1S J(0)	HG 2P2P J(0)	HG 2P2P J(2)	HG 2P2S J(1)	HG 2P1S J(1)
0.005	0.	-0.00215	0.	-0.	0.00043	0.00006	0.99999	0.00016	0.	0.00001	1.00000	0.	-0.00078	0.00017
0.010	0.00001	-0.00430	0.	-0.	0.00080	0.00013	0.99997	0.00031	0.	0.00001	1.00000	0.	-0.00155	0.00035
0.050	0.00031	-0.02147	0.00008	-0.00003	0.00393	0.00063	0.99916	0.00156	0.00010	0.00001	0.99990	0.00004	-0.00777	0.00173
0.100	0.00124	-0.04285	0.00034	-0.00014	0.00795	0.00127	0.99663	0.00311	0.00039	0.00002	0.99960	0.00016	-0.01554	0.00346
0.150	0.00279	-0.06408	0.00076	-0.00031	0.01191	0.00190	0.99244	0.00464	0.00087	0.00004	0.99909	0.00036	-0.02330	0.00519
0.200	0.00494	-0.08507	0.00135	-0.00054	0.01584	0.00253	0.98659	0.00617	0.00154	0.00006	0.99838	0.00065	-0.03104	0.00692
0.300	0.01099	-0.12603	0.00304	-0.00121	0.02360	0.00380	0.97005	0.00914	0.00345	0.00011	0.99637	0.00145	-0.04647	0.01038
0.400	0.01926	-0.16515	0.00537	-0.00214	0.03117	0.00507	0.94731	0.01199	0.00610	0.00020	0.99355	0.00258	-0.06179	0.01383
0.500	0.02954	-0.20189	0.00834	-0.00331	0.03848	0.00633	0.91878	0.01467	0.00946	0.00030	0.98994	0.00401	-0.07696	0.01727
0.600	0.04159	-0.23576	0.01191	-0.00471	0.04548	0.00759	0.88494	0.01714	0.01350	0.00043	0.98556	0.00576	-0.09194	0.02070
0.700	0.05511	-0.26635	0.01606	-0.00633	0.05211	0.00885	0.84637	0.01936	0.01818	0.00058	0.98040	0.00780	-0.10671	0.02412
0.800	0.06981	-0.29331	0.02075	-0.00813	0.05832	0.01011	0.80371	0.02131	0.02345	0.00076	0.97449	0.01014	-0.12122	0.02753
0.900	0.08534	-0.31638	0.02594	-0.01011	0.06406	0.01136	0.75765	0.02296	0.02927	0.00096	0.96784	0.01276	-0.13545	0.03092
1.000	0.10136	-0.33539	0.03159	-0.01224	0.06930	0.01261	0.70890	0.02428	0.03557	0.00118	0.96047	0.01565	-0.14937	0.03429
1.500	0.17750	-0.36913	0.06499	-0.02414	0.08685	0.01879	0.44993	0.02529	0.07222	0.00262	0.91357	0.03380	-0.21319	0.05081
2.000	0.22413	-0.31764	0.10220	-0.03564	0.08883	0.02482	0.22109	0.01659	0.11141	0.00461	0.85227	0.05677	-0.26532	0.06661
3.000	0.19675	-0.12361	0.16436	-0.04625	0.05338	0.03622	-0.00801	-0.02293	0.16901	0.01009	0.70152	0.10910	-0.32808	0.09523
4.000	0.09512	-0.00265	0.18848	-0.03396	-0.00489	0.04638	-0.00953	-0.06896	0.17686	0.01723	0.53858	0.15732	-0.33656	0.11887
5.000	0.02149	0.01633	0.17502	-0.00622	-0.05256	0.05492	0.03525	-0.09852	0.14325	0.02552	0.38775	0.19100	-0.30377	0.13681
8.000	0.00824	-0.02842	0.06578	0.06007	-0.06325	0.06851	0.02175	-0.07215	0.01743	0.05113	0.09941	0.19356	-0.12688	0.15699

SIN THETA/ LAMBDA	HG 2S2S J(0)	HG 2S1S J(0)	HG 1S1S J(0)	BI 6P6P J(0)	BI 6P6P J(2)	BI 6P6S J(1)	BI 6P5D J(1)	BI 6P5D J(3)	BI 6P5P J(0)	BI 6P5P J(2)	BI 6P5S J(1)	BI 6P4F J(2)	BI 6P4F J(4)	BI 6P4D J(1)
0.005	1.00000	0.	1.00000	0.99792	0.000E3	-0.02963	0.00640	0.	0.00009	-0.00004	0.00074	-0.	0.	0.00028
0.010	0.99999	0.	1.00000	0.99171	0.003E1	-0.05904	0.01277	0.00001	0.00035	-0.00014	0.00147	-0.	0.	0.00057
0.050	0.99986	0.00001	0.99999	0.81192	0.071E5	-0.26162	0.05933	0.00132	0.00854	-0.00337	0.00660	-0.00009	0.	0.00281
0.100	0.99945	0.00003	0.99997	0.42361	0.190E5	-0.36218	0.09415	0.00894	0.03090	-0.01163	0.00901	-0.00040	0.00001	0.00551
0.150	0.99877	0.00008	0.99992	0.12443	0.23019	-0.29996	0.09458	0.02323	0.05911	-0.02049	0.00474	-0.00102	0.00005	0.00795
0.200	0.99781	0.00014	0.99986	-0.01659	0.186E1	-0.17460	0.06731	0.03895	0.08438	-0.02558	0.00616	-0.00206	0.00012	0.01002
0.300	0.99508	0.00031	0.99968	-0.02387	0.05211	-0.00505	-0.01167	0.05238	0.10407	-0.01663	-0.03791	-0.00549	0.00028	0.01256
0.400	0.99128	0.00055	0.99944	0.01187	-0.004E5	0.01819	-0.05734	0.03444	0.08118	0.01018	-0.06179	-0.00996	0.00006	0.01237
0.500	0.98641	0.00086	0.99912	0.01890	-0.006E2	-0.00212	-0.05854	0.00425	0.04106	0.03492	-0.06432	-0.01378	-0.00102	0.00922
0.600	0.98048	0.00123	0.99873	0.00981	0.003E8	-0.01449	-0.03814	-0.01923	0.00802	0.04535	-0.04926	-0.01541	-0.00303	0.00359
0.700	0.97353	0.00168	0.99828	0.00108	0.00916	-0.01409	-0.01626	-0.02964	0.00874	0.04156	-0.02785	-0.01419	-0.00561	0.00349
0.800	0.96557	0.00218	0.99775	-0.00278	0.00920	-0.00817	-0.00167	-0.02924	-0.01151	0.02983	-0.00941	-0.01043	-0.00813	-0.01076
0.900	0.95663	0.00276	0.99715	-0.00281	0.006E1	-0.00241	0.00469	-0.02291	-0.00658	0.01667	0.00189	-0.00505	-0.01000	-0.01706
1.000	0.94673	0.00340	0.99648	-0.00111	0.00320	0.00099	0.00522	-0.01488	0.00045	0.03611	0.00610	0.00087	-0.01084	-0.02162
1.500	0.88412	0.00756	0.99212	0.00212	-0.000E3	-0.00180	-0.00596	0.00149	0.00707	0.00068	-0.00686	0.01641	-0.00167	-0.01687
2.000	0.80334	0.01322	0.98605	-0.00026	0.00145	-0.00127	-0.00179	-0.00308	-0.00109	0.00532	-0.00329	0.00825	0.00849	-0.00087
3.000	0.61040	0.02835	0.96901	0.00054	-0.000E9	0.00001	0.00030	-0.00075	0.00207	-0.00042	-0.00031	-0.00413	0.00470	-0.00022
4.000	0.41336	0.04715	0.94591	0.00018	0.000E6	-0.00044	-0.00083	0.00021	0.00080	0.00082	-0.00146	-0.00246	-0.00111	-0.00242
5.000	0.24575	0.06792	0.91740	-0.00018	0.000E2	0.00035	-0.00025	-0.00038	-0.00010	0.00101	-0.00029	-0.00040	-0.00184	-0.00036
8.000	0.00318	0.12483	0.80772	0.00021	-0.000E8	-0.00017	0.00035	-0.00008	0.00053	-0.00004	-0.00021	0.00018	-0.00013	0.00091

SIN THETA/ LAMBDA	BI 6P4D J(3)	BI 6P4P J(0)	BI 6P4P J(2)	EI 6F4S J(1)	BI 6P3D J(1)	BI 6P3D J(3)	BI 6P3P J(0)	BI 6P3P J(2)	BI 6P3S J(1)	BI 5P2P J(0)	BI 6P2P J(2)	BI 6P2S J(1)	BI 6P1S J(1)	BI 6S6S J(0)
0.005	0.	0.	-0.	0.00021	0.00003	0.	0.	-0.	0.00006	0.	-0.	0.00002	0.	0.99865
0.010	0.	0.00002	-0.00001	0.00042	0.00005	0.	0.	-0.	0.00011	0.	-0.	0.00003	0.00001	0.99463
0.050	0.00001	0.00039	-0.00016	0.00210	0.00025	0.	0.00003	-0.00001	0.00057	0.	-0.	0.00015	0.00003	0.87354
0.100	0.00005	0.00154	-0.00061	0.00409	0.00051	0.	0.00012	-0.00005	0.00114	0.00001	-0.	0.00031	0.00007	0.57651
0.150	0.00016	0.00342	-0.00135	0.00585	0.00076	0.	0.00027	-0.00011	0.00170	0.00002	-0.00001	0.00046	0.00010	0.27073
0.200	0.00038	0.00595	-0.00233	0.00730	0.00100	0.00001	0.00049	-0.00019	0.00225	0.00004	-0.00002	0.00062	0.00013	0.06285
0.300	0.00127	0.01259	-0.00479	0.00885	0.00145	0.00002	0.00108	-0.00043	0.00330	0.00009	-0.00003	0.00092	0.00020	-0.04991
0.400	0.00286	0.02036	-0.00736	0.00824	0.00184	0.00006	0.00191	-0.00076	0.00424	0.00015	-0.00006	0.00122	0.00026	-0.00610
0.500	0.00503	0.02793	-0.00932	0.00539	0.00216	0.00011	0.00294	-0.00116	0.00505	0.00024	-0.00009	0.00152	0.00032	0.02361
0.500	0.00737	0.03399	-0.01003	0.00066	0.00238	0.00020	0.00416	-0.00162	0.00569	0.00034	-0.00014	0.00181	0.00039	0.02163
0.700	0.00932	0.03760	-0.00913	-0.00518	0.00248	0.00032	0.00553	-0.00213	0.00615	0.00046	-0.00019	0.00210	0.00045	0.00890
0.800	0.01035	0.03831	-0.00663	-0.01123	0.00243	0.00048	0.00702	-0.00266	0.00639	0.00060	-0.00024	0.00238	0.00052	-0.00089
0.900	0.01013	0.03625	-0.00285	-0.01662	0.00224	0.00068	0.00859	-0.00320	0.00639	0.00076	-0.00030	0.00265	0.00058	-0.00451
1.000	0.00863	0.03195	0.00166	-0.02066	0.00188	0.00092	0.01018	-0.00370	0.00617	0.00094	-0.00037	0.00290	0.00065	-0.00367
1.500	-0.00751	0.00352	0.01707	-0.01695	-0.00205	0.00239	0.01677	-0.00485	0.00181	0.00206	-0.00081	0.00399	0.00097	0.00374
2.000	-0.01275	0.00252	0.01019	-0.00122	-0.00731	0.00306	0.01795	-0.00254	-0.00493	0.00351	-0.00134	0.00463	0.00128	-0.00031
3.000	-0.00105	0.00542	-0.00098	-0.00147	-0.01020	-0.00080	0.00753	0.00595	-0.00964	0.00669	-0.00230	0.00421	0.00188	0.00083
4.000	0.00022	0.00143	0.00244	-0.00313	-0.00418	-0.00529	0.00720	-0.00358	0.00897	-0.00245	0.00190	0.00243	0.00023	0.00023
5.000	-0.00153	-0.00025	0.00232	-0.00039	0.00092	-0.00558	0.00007	0.00345	0.00060	0.00947	-0.00155	-0.00094	0.00291	-0.00026
8.000	-0.00016	0.00126	-0.00009	-0.00050	0.00172	-0.00005	0.00259	-0.00001	-0.00125	0.00464	0.00259	-0.00371	0.00378	0.00028

SIN THETA/ LAMBDA	BI 6S5D J(2)	BI 6S5P J(1)	BI 6S5S J(0)	BI 6S4F J(3)	BI 6S4D J(2)	BI 6S4P J(1)	BI 6S4S J(0)	BI 6S3D J(2)	BI 6S3P J(1)	BI 6S3S J(0)	BI 6S2P J(1)	BI 6S2S J(0)	BI 6S1S J(0)	BI 5D5D J(0)
0.005	-0.00013	0.00330	0.00008	-0.	-0.	0.00030	0.00001	-0.	0.00005	-0.00001	0.00001	-0.	0.	0.99969
0.010	-0.00052	0.00659	0.00031	-0.	-0.00001	0.00060	0.00003	-0.	0.00009	-0.00001	0.00001	-0.	0.	0.99877
0.050	-0.01233	0.03123	0.00758	-0.00001	-0.00018	0.00296	0.00043	-0.00001	0.00046	0.00003	0.00007	0.	0.	0.96975
0.100	-0.04261	0.05260	0.02815	-0.00009	-0.00073	0.00580	0.00169	-0.00003	0.00091	0.00014	0.00014	0.00001	0.	0.88426
0.150	-0.07542	0.05806	0.05603	-0.00023	-0.00163	0.00840	0.00375	-0.00008	0.00136	0.00033	0.00021	0.00003	0.	0.75766
0.200	-0.09639	0.04708	0.08403	-0.00040	-0.00287	0.01062	0.00655	-0.00013	0.00179	0.00060	0.00028	0.00005	0.	0.60880
0.300	-0.08368	-0.00513	0.11707	-0.00024	-0.00621	0.01346	0.01399	-0.00030	0.00261	0.00135	0.00042	0.00013	0.00001	0.31590
0.400	-0.02737	-0.05542	0.10634	0.00143	-0.01011	0.01357	0.02295	-0.00053	0.00333	0.00239	0.00056	0.00022	0.00001	0.10399
0.500	0.02291	-0.07424	0.06695	0.00492	-0.01356	0.01059	0.03201	-0.00082	0.00392	0.00369	0.00069	0.00035	0.00002	-0.00568
0.600	0.04583	-0.06332	0.02486	0.00940	-0.01546	0.00484	0.03970	-0.00116	0.00435	0.00522	0.00081	0.00051	0.00003	-0.03849
0.700	0.04510	-0.03881	-0.00334	0.01352	-0.01507	-0.00281	0.04481	-0.00154	0.00459	0.00695	0.00093	0.00069	0.00004	-0.03006
0.800	0.03247	-0.01519	-0.01423	0.01605	-0.01219	-0.01115	0.04666	-0.00194	0.00461	0.00882	0.00105	0.00090	0.00005	-0.00780
0.900	0.01773	0.00036	-0.01245	0.01634	-0.00724	-0.01891	0.04514	-0.00233	0.00439	0.01079	0.00115	0.00113	0.00006	0.01291
1.000	0.00613	0.00692	-0.00469	0.01440	-0.00100	-0.02507	0.04070	-0.00270	0.00392	0.01279	0.00125	0.00139	0.00007	0.02606
1.500	0.00093	-0.00799	0.01058	-0.00835	0.02165	-0.02311	0.00523	-0.00319	-0.00182	0.02097	0.00154	0.00303	0.00016	0.01240
2.000	0.00535	-0.00413	-0.00142	-0.01517	0.01324	-0.00223	-0.00413	-0.00030	-0.00977	0.02198	0.00144	0.00508	0.00029	-0.00228
3.000	-0.00083	0.00001	0.00265	0.00015	-0.00234	-0.00182	0.00668	0.00850	-0.01382	0.00751	-0.00011	0.00926	0.00064	0.00516
4.000	0.00031	-0.00177	0.00077	0.00395	0.00155	-0.00406	0.00103	0.00864	-0.00491	-0.00136	-0.00293	0.01156	0.00110	0.00301
5.000	0.00065	-0.00036	-0.00030	0.00190	0.00191	-0.00053	-0.00060	0.00328	0.00068	0.00018	-0.00551	0.01095	0.00165	0.00004
8.000	-0.00041	-0.00026	0.00058	-0.00029	-0.00125	-0.00064	0.00130	-0.00267	-0.00176	0.00235	-0.00597	0.00242	0.00345	-0.00037

SIN THETA/ LAMBDA	BI 5D5D J(2)	BI 5D5D J(4)	BI 5D5P J(1)	BI 5D5P J(3)	BI 5D5S J(2)	BI 5D4F J(1)	BI 5D4F J(3)	BI 5D4F J(5)	BI 5D4D J(0)	BI 5D4D J(2)	BI 5D4D J(4)	BI 5D4P J(1)	BI 5D4P J(3)	BI 5D4S J(2)
0.005	0.00012	0.	-0.01149	-0.	0.00008	0.00193	0.	0.	0.00002	-0.00001	-0.	0.00074	0.	-0.00001
0.010	0.00049	0.	-0.02297	-0.	0.00033	0.00386	0.	0.	0.00008	-0.00003	-0.	0.00148	0.	-0.00002
0.050	0.01202	0.00006	-0.11282	-0.00000	0.00810	0.01901	0.00008	0.	0.00205	-0.00082	-0.	0.00730	0.00003	-0.00051
0.100	0.04511	0.00087	-0.21354	-0.00455	0.03105	0.03643	0.00061	0.	0.00805	-0.00319	-0.00002	0.01400	0.00023	-0.00200
0.150	0.09141	0.00394	-0.29234	-0.01425	0.06510	0.05083	0.00195	0.00003	0.01759	-0.00688	-0.00012	0.01955	0.00074	-0.00433
0.200	0.14092	0.01082	-0.34320	-0.03048	0.10492	0.06113	0.00434	0.00012	0.03003	-0.01153	-0.00035	0.02351	0.00167	-0.00728
0.300	0.21524	0.03764	-0.35878	-0.07748	0.17929	0.06732	0.01226	0.00075	0.06026	-0.02188	-0.00158	0.02540	0.00499	-0.01396
0.400	0.23065	0.07428	-0.28823	-0.12624	0.21905	0.05507	0.02282	0.00249	0.09149	-0.03045	-0.00422	0.01870	0.00994	-0.01966
0.500	0.19522	0.10562	-0.18359	-0.15655	0.21357	0.02975	0.03300	0.00573	0.11713	-0.03418	-0.00831	0.00464	0.01551	-0.02229
0.600	0.13641	0.12103	-0.08784	-0.15996	0.17377	-0.00113	0.03984	0.01034	0.13285	-0.03159	-0.01334	-0.01401	0.02031	-0.02059
0.700	0.07834	0.11873	-0.02199	-0.14028	0.11914	-0.03073	0.04162	0.01566	0.13704	-0.02292	-0.01838	-0.03382	0.02300	-0.01439
0.800	0.03395	0.10313	0.01157	-0.10754	0.06680	-0.05442	0.03805	0.02078	0.13059	-0.00974	-0.02237	-0.05162	0.02272	-0.00448
0.900	0.00549	0.08067	0.02043	-0.07195	0.02672	-0.06999	0.03001	0.02481	0.11593	0.00571	-0.02447	-0.06505	0.01923	0.00770
1.000	-0.00639	0.05703	0.01478	-0.04073	0.00189	-0.07727	0.01902	0.02713	0.09624	0.02117	-0.02418	-0.07288	0.01287	0.02045
1.500	0.01026	-0.00231	-0.02285	0.00418	0.00733	-0.04015	-0.03233	0.01239	0.00804	0.05547	0.00449	-0.04371	-0.03031	0.05172
2.000	0.01287	0.00416	-0.00546	-0.01241	0.01598	0.00420	-0.03743	-0.01385	-0.00433	0.02904	0.02959	0.00085	-0.03740	0.02497
3.000	-0.00054	0.00608	0.00091	-0.00246	-0.00266	0.01312	-0.00526	-0.02061	0.01610	-0.00189	0.01438	-0.00095	-0.00159	-0.00623
4.000	0.00154	0.00017	-0.00305	0.00070	0.00108	0.00313	0.00527	-0.00634	0.00769	0.00549	-0.00025	-0.00717	0.00091	0.00362
5.000	0.00288	0.00007	-0.00062	-0.00170	0.00203	-0.00023	0.00430	0.00096	-0.00024	0.00838	-0.00088	-0.00451	0.00431	0.00431
8.000	0.00061	0.00151	0.00124	-0.00026	-0.00140	-0.00021	0.00040	0.00156	-0.00118	0.00184	0.00409	0.00280	-0.00037	-0.00304

SIN THETA/ LAMBDA	BI 5D3D J(0)	BI 5D3D J(2)	BI 5D3D J(4)	BI 5D3P J(1)	BI 5D3P J(3)	BI 5D3S J(2)	BI 5D2P J(1)	BI 5D2P J(3)	BI 5D2S J(2)	BI 5D1S J(2)	BI 5P5P J(0)	BI 5P5P J(2)	BI 5P5S J(1)	BI 5P4F J(2)
0.005	0.	-0.	-0.	0.00025	0.	-0.	0.00007	0.	-0.	0.	0.99980	0.00008	-0.01057	-0.00002
0.010	0.	-0.	-0.	0.00051	0.	-0.	0.00014	0.	-0.	0.	0.99918	0.00033	-0.02113	-0.00007
0.050	0.00009	-0.00004	-0.	0.00254	0.	-0.00006	0.00069	0.	-0.	0.	0.97971	0.00808	-0.10426	-0.00163
0.100	0.00037	-0.00015	-0.	0.00506	0.00001	-0.00024	0.00138	0.	-0.00002	0.	0.92100	0.03111	-0.19997	-0.00634
0.150	0.00083	-0.00033	-0.	0.00754	0.00002	-0.00054	0.00207	0.	-0.00004	0.	0.82995	0.06565	-0.27972	-0.01366
0.200	0.00147	-0.00059	-0.	0.00999	0.00005	-0.00096	0.00276	0.	-0.00007	0.	0.71557	0.10676	-0.33819	-0.02284
0.300	0.00329	-0.00131	-0.	0.01466	0.00016	-0.00214	0.00414	0.	-0.00016	0.00001	0.45853	0.18685	-0.38302	-0.04313
0.400	0.00580	-0.00230	-0.00002	0.01896	0.0003E	-0.00373	0.00550	0.00001	-0.00028	0.00002	0.22584	0.23528	-0.34237	-0.05993
0.500	0.00894	-0.00352	-0.00004	0.02276	0.00074	-0.00569	0.00687	0.00001	-0.00044	0.00002	0.06277	0.23756	-0.25078	-0.06779
0.600	0.01265	-0.00494	-0.00009	0.02596	0.00127	-0.00795	0.00822	0.00002	-0.00064	0.00003	-0.02241	0.20109	-0.14778	-0.06460
0.700	0.01685	-0.00650	-0.00019	0.02847	0.0019E	-0.01042	0.00956	0.00003	-0.00087	0.00005	-0.04634	0.14441	-0.06207	-0.05142
0.800	0.02140	-0.00813	-0.00033	0.03020	0.0028E	-0.01302	0.01089	0.00005	-0.00114	0.00006	-0.03432	0.08614	-0.00643	-0.03136
0.900	0.02618	-0.00976	-0.00055	0.03112	0.0039E	-0.01564	0.01220	0.00007	-0.00145	0.00008	-0.00871	0.03874	0.01943	-0.00830
1.000	0.03105	-0.01130	-0.00086	0.03120	0.0052E	-0.01816	0.01349	0.00010	-0.00179	0.00010	0.01579	0.00731	0.02296	0.01423
1.500	0.05178	-0.01525	-0.00390	0.02033	0.01301	-0.02612	0.01955	0.00036	-0.00405	0.00021	0.02307	0.00672	-0.02804	0.06209
2.000	0.05820	-0.01001	-0.00829	0.00095	0.01809	-0.02207	0.02464	0.00093	-0.00712	0.00036	-0.00445	0.01948	-0.01051	0.02838
3.000	0.03427	0.01306	-0.00997	-0.02083	0.00850	0.00348	0.03045	0.00333	-0.01440	0.00076	0.00780	-0.00161	-0.00041	-0.01546
4.000	0.00734	0.02319	-0.00044	-0.00986	-0.00756	0.01244	0.02980	0.00701	-0.02018	0.00123	0.00282	0.00316	-0.00535	-0.00890
5.000	-0.00347	0.01928	0.00851	0.00321	-0.01182	0.00521	0.02461	0.01051	-0.02206	0.00170	-0.00038	0.00370	-0.00096	-0.00142
8.000	-0.00208	0.00317	0.00898	0.00527	0.00067	-0.00623	0.00721	0.01212	-0.01197	0.00264	0.00201	-0.00022	-0.00075	0.00068



SIN THETA/ LAMBDA	BI 5P4F J(4)	BI 5P4D J(1)	BI 5P4D J(3)	BI 5P4P J(0)	BI 5P4P J(2)	BI 5P4S J(1)	BI 5P3D J(1)	BI 5P3D J(3)	BI 5P3P J(0)	BI 5P3P J(2)	BI 5P3S J(1)	BI 5P2P J(0)	BI 5P2P J(2)	BI 5P2S J(1)
0.005	-0.	0.00143	0.	0.00002-0.00001	0.00090	0.00010	0.	0.00003-0.	0.00022-0.	-0.	0.00006			
0.010	-0.	0.00287	0.	0.00008-0.00003	0.00179	0.00020	0.	0.00004-0.	0.00044	0.	0.00011			
0.050	-0.	0.01419	0.00005	0.00195-0.00078	0.00887	0.00099	0.	0.00015-0.00005	0.00218	0.00001-0.	0.00057			
0.100	-0.00005	0.02742	0.00036	0.00768-0.00305	0.01711	0.00196	0.	0.00051-0.00019	0.00434	0.00004-0.00001	0.00114			
0.150	-0.00024	0.03881	0.00119	0.01686-0.00662	0.02414	0.00292	0.00001	0.00110-0.00043	0.00647	0.00008-0.00003	0.00172			
0.200	-0.00073	0.04762	0.00270	0.02898-0.01120	0.02945	0.00385	0.00003	0.00193-0.00076	0.00854	0.00014-0.00006	0.00229			
0.300	-0.00320	0.05545	0.00809	0.05922-0.02186	0.03351	0.00559	0.00010	0.00427-0.00168	0.01248	0.00032-0.00013	0.00342			
0.400	-0.00835	0.04919	0.01622	0.09207-0.03164	0.02783	0.00710	0.00023	0.00747-0.00294	0.01631	0.00057-0.00023	0.00454			
0.500	-0.01606	0.03055	0.02556	0.12123-0.03746	0.01322	0.00829	0.00046	0.01147-0.00449	0.01930	0.00089-0.00035	0.00564			
0.600	-0.02513	0.00377	0.03391	0.14179-0.03727	-0.00773	0.00908	0.00081	0.01617-0.00627	0.02135	0.00127-0.00051	0.00672			
0.700	-0.03377	-0.02585	0.03919	0.15103-0.03055	-0.03141	0.00939	0.00129	0.02144-0.00821	0.02295	0.00173-0.00069	0.00778			
0.800	-0.04023	-0.05335	0.04003	0.14860-0.01815	-0.05411	0.00915	0.00193	0.02714-0.01022	0.02372	0.00225-0.00090	0.00880			
0.900	-0.04328	-0.07504	0.03599	0.13606-0.00192	-0.07276	0.00831	0.00272	0.03307-0.01220	0.02359	0.00284-0.00113	0.00979			
1.000	-0.04244	-0.08888	0.02758	0.11619	0.01580-0.08535	0.00685	0.00365	0.03907-0.01405	0.02256	0.00350-0.00139	0.01074			
1.500	-0.00008	-0.05915	-0.03399	0.00880	0.06599-0.06009	-0.00838	0.00911	0.06322-0.01782	0.00554	0.00768-0.00301	0.01473			
2.000	0.03385	0.00128	-0.04747	-0.00847	0.03566-0.00258	-0.02789	0.01122	0.06652-0.00863	-0.01948	0.01305-0.00498	0.01705			
3.000	0.01650	-0.00134	-0.00319	0.02005	-0.00345-0.00609	-0.03756	-0.00355	0.02709	0.02262-0.03557	0.02479-0.00850	0.01543			
4.000	-0.00441	-0.00887	0.00067	0.00502	0.00920-0.01142	-0.01506	-0.01978	-0.00018	0.02650-0.01286	0.03312-0.00900	0.00684			
5.000	-0.00680	-0.00121	-0.00569	-0.00090	0.00846-0.00132	0.00356	-0.02051	0.00036	0.01250	0.00229	0.03487-0.00563	-0.00360		
8.000	-0.00047	0.00332	-0.00054	0.00464	-0.00032-0.00185	0.00628	-0.00013	0.00951	-0.00001-0.00453	0.01700	0.00957-0.01365			

SIN THETA/ LAMBDA	BI 5P1S J(1)	BI 5S5S J(0)	BI 5S4F J(3)	BI 5S4D J(2)	BI 5S4P J(1)	BI 5S4S J(0)	BI 5S3D J(2)	BI 5S3P J(1)	BI 5S3S J(0)	BI 5S2P J(1)	BI 5S2S J(0)	BI 5S1S J(0)	BI 4F4F J(0)	BI 4F4F J(2)
0.005	0.00001	0.99982	0.	-0.00001	0.00123	0.00002-0.	0.00015	0.00007	0.00002	0.	0.	0.99996	0.00002	
0.010	0.00002	0.99929	0.	-0.00004	0.00245	0.00008-0.	0.00030	0.00007	0.00004	0.	0.	0.99984	0.00006	
0.050	0.00012	0.98234	0.00008	-0.00109	0.01213	0.00188-0.00003	0.00147	0.00019	0.00022	0.00001	0.	0.99596	0.00161	
0.100	0.00024	0.93094	0.00062	-0.00426	0.02349	0.00740-0.00011	0.00294	0.00057	0.00044	0.00004	0.	0.98395	0.00640	
0.150	0.00036	0.85035	0.00202	-0.00925	0.03337	0.01627-0.00025	0.00437	0.00120	0.00066	0.00010	0.00001	0.96429	0.01416	
0.200	0.00048	0.74741	0.00455	-0.01567	0.04114	0.02803-0.00045	0.00576	0.00207	0.00087	0.00018	0.00001	0.93750	0.02461	
0.300	0.00072	0.50781	0.01336	-0.03062	0.04857	0.05767-0.00100	0.00837	0.00455	0.00130	0.00040	0.00002	0.86543	0.05197	
0.400	0.00096	0.27698	0.02615	-0.04449	0.04393	0.09046-0.00177	0.01065	0.00794	0.00172	0.00071	0.00004	0.77462	0.08472	
0.500	0.00119	0.10072	0.04007	-0.05312	0.02808	0.12040-0.00272	0.01248	0.01217	0.00213	0.00110	0.00006	0.67279	0.11882	
0.600	0.00143	-0.00431	0.05164	-0.05386	0.00410	0.14256-0.00384	0.01377	0.01714	0.00251	0.00158	0.00008	0.56735	0.15065	
0.700	0.00167	-0.04587	0.05806	-0.04615	-0.02371	0.15390-0.00507	0.01441	0.02270	0.00288	0.00215	0.00011	0.46455	0.17750	
0.800	0.00191	-0.04427	0.05790	-0.03121	-0.05089	0.15359-0.00634	0.01434	0.02870	0.00323	0.00279	0.00014	0.36905	0.19770	
0.900	0.00215	-0.02141	0.05127	-0.01154	-0.07370	0.14270-0.00758	0.01348	0.03494	0.00355	0.00352	0.00018	0.28384	0.21060	
1.000	0.00238	0.00573	0.03943	0.00988	-0.08967	0.12369-0.00869	0.01182	0.04121	0.00384	0.00432	0.00022	0.21043	0.21637	
1.500	0.00356	0.02870	-0.03352	0.07022	-0.06724	0.00992-0.00970	-0.00690	0.06600	0.00472	0.00938	0.00050	0.00784	0.17192	
2.000	0.00471	-0.00541	-0.04659	0.03766	-0.00395	-0.01160-0.00012	-0.03142	0.06765	0.00440	0.01570	0.00088	-0.03144	0.09516	
3.000	0.00692	0.00836	0.00158	-0.00711	-0.00647	0.02050	0.02663	-0.04218	0.02205	-0.00043	0.02850	0.00195	-0.01226	0.01569
4.000	0.00894	0.00216	0.01205	0.00499	-0.01224	0.00280	0.02624	-0.01451	-0.00427	-0.00910	0.03540	0.00336	-0.00146	-0.00005
5.000	0.01070	-0.00090	0.00567	0.00576	-0.00146	-0.00176	0.00972	0.00221	0.00074	-0.01723	0.03342	0.00504	0.00036	-0.00121
8.000	0.01391	0.00184	-0.00088	-0.00380	-0.00199	0.00394	-0.00814	-0.00541	0.00712	-0.01816	0.00730	0.01053	0.00008	-0.00011



SIN THETA/ LAMBDA	BI 4D3P J(3)	BI 4D3S J(2)	BI 4D2P J(1)	BI 4D2P J(3)	BI 4D2S J(2)	BI 4D1S J(2)	BI 4P4P J(0)	BI 4P4P J(2)	BI 4P4S J(1)	BI 4P3D J(1)	BI 4P3D J(3)	BI 4P3P J(0)	BI 4P3P J(2)	BI 4P3S J(1)
0.005	0.	-0.	0.00021	0.	-0.	0.	0.99996	0.00001-0.00464	0.00036	0.	0.	-0.	0.00066	0.00066
0.010	0.	-0.00001	0.00041	0.	-0.	0.	0.99985	0.00006-0.00927	0.00072	0.	0.	0.00002-0.00001	0.00013	0.00131
0.050	0.	-0.00024	0.00206	0.	-0.00001	0.	0.99631	0.00147-0.04624	0.00359	0.	0.	0.00045-0.00018	0.00654	0.00654
0.100	0.00003-0.00094	0.00413	0.	-0.00006	0.	0.	0.98533	0.00585-0.09173	0.00711	0.00002	0.00002	0.00180-0.00072	0.01299	0.01299
0.150	0.00010-0.00210	0.00619	0.	-0.00013	0.00001	0.	0.96725	0.01302-0.13575	0.01052	0.00008	0.00008	0.00402-0.00160	0.01929	0.01929
0.200	0.00025-0.00371	0.00825	0.	-0.00023	0.00001	0.	0.94243	0.02277-0.17761	0.01376	0.00018	0.00018	0.00710-0.00282	0.02535	0.02535
0.300	0.00081-0.00816	0.01235	0.00001-0.00051	0.00002	0.87455	0.04893-0.25239	0.01950	0.00058	0.01568-0.00618	0.03648	0.03648	0.01568-0.00618	0.03648	0.03648
0.400	0.00187-0.01404	0.01644	0.00002-0.00091	0.00004	0.78664	0.08156-0.31193	0.02396	0.00133	0.02714-0.01057	0.04584	0.04584	0.02714-0.01057	0.04584	0.04584
0.500	0.00353-0.02105	0.02050	0.00004-0.00142	0.00007	0.68480	0.11735-0.35356	0.02682	0.00250	0.04097-0.01570	0.05299	0.05299	0.04097-0.01570	0.05299	0.05299
0.600	0.00583-0.02882	0.02452	0.00007-0.00205	0.00010	0.57560	0.15285-0.37623	0.02786	0.00411	0.05658-0.02126	0.05762	0.05762	0.05658-0.02126	0.05762	0.05762
0.700	0.00879-0.03694	0.02850	0.00011-0.00279	0.00013	0.46547	0.18490-0.38045	0.02696	0.00614	0.07330-0.02688	0.05952	0.05952	0.07330-0.02688	0.05952	0.05952
0.800	0.01235-0.04501	0.03243	0.00017-0.00364	0.00017	0.36008	0.21089-0.36808	0.02410	0.00955	0.09046-0.03221	0.05863	0.05863	0.09046-0.03221	0.05863	0.05863
0.900	0.01642-0.05264	0.03630	0.00025-0.00461	0.00022	0.26400	0.22905-0.34198	0.01934	0.01124	0.10739-0.03692	0.05502	0.05502	0.10739-0.03692	0.05502	0.05502
1.000	0.02088-0.05949	0.04011	0.00035-0.00569	0.00027	0.18049	0.23847-0.30560	0.01286	0.01412	0.12347-0.04071	0.04886	0.04886	0.12347-0.04071	0.04886	0.04886
1.500	0.04296-0.07365	0.05774	0.00125-0.01271	0.00059	0.02352	0.17373-0.08855	-0.03584	0.02630	0.17497-0.03966	0.00769	0.00769	0.17497-0.03966	0.00769	0.00769
2.000	0.05089-0.05142	0.07219	0.00313-0.02201	0.00102	0.00052	0.05265	0.01435-0.08248	0.02468	0.16452-0.00679	0.06816	0.06816	0.16452-0.00679	0.06816	0.06816
3.000	0.01350	0.02195	0.08763	0.01051-0.04313	0.00213	0.04772-0.00385	-0.02459	-0.08952	-0.01840	0.05542	0.05542	0.06478-0.08571	0.08571	0.08571
4.000	-0.02851	0.03758	0.08435	0.02115-0.05885	0.00343	0.00844	0.02501-0.02537	-0.03100	-0.05186	-0.00259	0.06280	-0.02590	0.02590	0.02590
5.000	-0.03537	0.01338	0.06877	0.03078-0.06304	0.00473	0.00190	0.01910-0.00155	0.01101	-0.04860	0.00246	0.02709	0.00665	0.00665	0.00665
8.000	0.00227-0.01746	0.01973	0.03401-0.03315	0.00732	0.01102	-0.00062	-0.00475	0.01457	0.00057	0.02245	0.00039	-0.01152	0.01152	0.01152

SIN THETA/ LAMBDA	BI 4P2P J(0)	BI 4P2P J(2)	BI 4P2S J(1)	BI 4P1S J(1)	BI 4S4S J(0)	BI 4S3D J(2)	BI 4S3P J(1)	BI 4S3S J(0)	BI 4S2P J(1)	BI 4S2S J(0)	BI 4S1S J(0)	BI 3D3D J(0)	BI 3D3D J(2)	BI 3D3D J(4)
0.005	0.00003-0.	0.00014	0.00003	0.99996-0.	0.00048	0.	0.00005	0.00003	0.	0.99999	0.	0.	0.	0.
0.010	0.00003-0.	0.00029	0.00006	0.99986-0.00001	0.00096	0.00002	0.00011	0.00004	0.	0.99998	0.00001	0.	0.	0.
0.050	0.00005-0.00001	0.00143	0.00029	0.99639-0.00013	0.00476	0.00046	0.00053	0.00006	0.00001	0.99945	0.00022	0.	0.	0.
0.100	0.00012-0.00004	0.00287	0.00057	0.98561-0.00050	0.00946	0.00183	0.00106	0.00014	0.00001	0.99781	0.00087	0.	0.	0.
0.150	0.00024-0.00008	0.00430	0.00086	0.96787-0.00112	0.01401	0.00410	0.00158	0.00028	0.00002	0.99508	0.00196	0.	0.	0.
0.200	0.00040-0.00015	0.00572	0.00114	0.94350-0.00198	0.01834	0.00725	0.00211	0.00047	0.00002	0.99128	0.00348	0.00001	0.00001	0.00001
0.300	0.00087-0.00034	0.00855	0.00172	0.87672-0.00431	0.02611	0.01599	0.00314	0.00102	0.00005	0.98049	0.00777	0.00003	0.00003	0.00003
0.400	0.00152-0.00059	0.01135	0.00229	0.78996-0.00733	0.03229	0.02767	0.00414	0.00179	0.00009	0.96558	0.01366	0.00008	0.00008	0.00008
0.500	0.00235-0.00093	0.01409	0.00286	0.68906-0.01082	0.03649	0.04174	0.00511	0.00277	0.00013	0.94677	0.02103	0.00019	0.00019	0.00019
0.600	0.00336-0.00133	0.01678	0.00343	0.58035-0.01452	0.03843	0.05759	0.00604	0.00396	0.00019	0.92429	0.02975	0.00039	0.00039	0.00039
0.700	0.00456-0.00180	0.01939	0.00400	0.47013-0.01815	0.03796	0.07453	0.00691	0.00536	0.00025	0.89843	0.03966	0.00070	0.00070	0.00070
0.800	0.00592-0.00234	0.02191	0.00457	0.36403-0.02145	0.03503	0.09185	0.00772	0.00695	0.00033	0.86952	0.05058	0.00117	0.00117	0.00117
0.900	0.00746-0.00295	0.02434	0.00514	0.26672-0.02416	0.02974	0.10885	0.00847	0.00874	0.00042	0.83791	0.06230	0.00183	0.00183	0.00183
1.000	0.00915-0.00361	0.02666	0.00570	0.18158-0.02606	0.02227	0.12488	0.00913	0.01072	0.00051	0.80398	0.07464	0.00271	0.00271	0.00271
1.500	0.01987-0.00772	0.03616	0.00851	-0.02922-0.01931	-0.03560	0.17380	0.01101	0.02300	0.00114	0.61290	0.13851	0.01130	0.01130	0.01130
2.000	0.03339-0.01260	0.04123	0.01126	-0.00403	0.01132	-0.09084	0.15719	0.00990	0.03804	0.00201	0.41861	0.19046	0.02767	0.02767
3.000	0.06195-0.02073	0.03567	0.01653	0.04524	0.06791	-0.09393	0.03941	-0.00217	0.05724	0.00443	0.13057	0.21985	0.07274	0.07274
4.000	0.08095-0.02101	0.01394	0.02134	0.00255	0.05743	-0.02715	-0.01077	-0.02235	0.08145	0.00764	0.00292	0.17357	0.10509	0.10509
5.000	0.08376-0.01218	-0.01093	0.02551	-0.00312	0.01854	0.00633	0.00402	-0.04032	0.07529	0.01143	-0.02933	0.11030	0.10983	0.10983
8.000	0.03969	0.02365	-0.03257	0.03303	0.00863	-0.01824	-0.01253	0.01552	-0.04051	0.01562	0.02378	-0.00994	0.01466	0.05371

SIN THETA/ LAMBDA	BI 3D3P J(1)	BI 3D3P J(3)	BI 3D3S J(2)	BI 3D2P J(1)	BI 3D2P J(3)	BI 3D2S J(2)	BI 3D1S J(2)	BI 3P3P J(0)	BI 3P3P J(2)	BI 3P3S J(1)	BI 3P2P J(0)	BI 3P2P J(2)	BI 3P2S J(1)	BI 3P1S J(1)
0.005	-0.00175	-0.	0.	0.00062	0.	-0.	0.	0.99999	0.	-0.00206	-0.	-0.	0.00038	0.00006
0.010	-0.00351	-0.	0.00001	0.00125	0.	-0.	0.	0.99997	0.00001	-0.00412	0.	-0.	0.00077	0.00012
0.050	-0.01752	-0.	0.00025	0.00625	0.	-0.00006	0.	0.99929	0.00029	-0.02057	0.00008	-0.00003	0.00385	0.00061
0.100	-0.03499	-0.00002	0.00098	0.01248	0.	-0.00025	0.00001	0.99715	0.00114	-0.04107	0.00031	-0.00013	0.00769	0.00123
0.150	-0.05234	-0.00007	0.00220	0.01871	0.00001	-0.00055	0.00001	0.99360	0.00256	-0.06142	0.00070	-0.00028	0.01151	0.00184
0.200	-0.06953	-0.00017	0.00391	0.02492	0.00002	-0.00098	0.00002	0.98865	0.00453	-0.08157	0.00125	-0.00050	0.01532	0.00245
0.300	-0.10322	-0.00056	0.00870	0.03725	0.00007	-0.00221	0.00005	0.97462	0.01010	-0.12098	0.00281	-0.00112	0.02283	0.00368
0.400	-0.13562	-0.00130	0.01527	0.04942	0.00015	-0.00390	0.00009	0.95530	0.01772	-0.15876	0.00497	-0.00198	0.03017	0.00490
0.500	-0.16638	-0.00251	0.02347	0.06140	0.00030	-0.00606	0.00014	0.93098	0.02722	-0.19442	0.00772	-0.00307	0.03728	0.00613
0.600	-0.19513	-0.00425	0.03310	0.07312	0.00052	-0.00866	0.00020	0.90203	0.03839	-0.22755	0.01103	-0.00437	0.04411	0.00735
0.700	-0.22157	-0.00661	0.04398	0.08455	0.00082	-0.01169	0.00027	0.86889	0.05099	-0.25774	0.01489	-0.00587	0.05062	0.00857
0.800	-0.24545	-0.00962	0.05586	0.09565	0.00121	-0.01512	0.00036	0.83205	0.06474	-0.28469	0.01925	-0.00756	0.05674	0.00978
0.900	-0.26656	-0.01331	0.06850	0.10636	0.00170	-0.01891	0.00045	0.79203	0.07937	-0.30814	0.02409	-0.00941	0.06245	0.01100
1.000	-0.28473	-0.01770	0.08165	0.11666	0.00231	-0.02306	0.00055	0.74938	0.09458	-0.32791	0.02937	-0.01141	0.06771	0.01221
1.500	-0.32989	-0.04873	0.14624	0.16084	0.00720	-0.04777	0.00122	0.51662	0.16902	-0.37013	0.06085	-0.02274	0.08611	0.01820
2.000	-0.30650	-0.08790	0.19018	0.19102	0.01534	-0.07585	0.00212	0.29734	0.21927	-0.33030	0.09658	-0.03408	0.09015	0.02406
3.000	-0.15610	-0.14399	0.17926	0.20863	0.03865	-0.12520	0.00440	0.03550	0.20712	-0.14627	0.15917	-0.04634	0.06006	0.03519
4.000	-0.01986	-0.13718	0.09048	0.18363	0.06284	-0.14851	0.00703	-0.01039	0.11172	-0.01397	0.18806	-0.03740	0.00452	0.04521
5.000	0.04176	-0.09126	0.01017	0.14004	0.07903	-0.14365	0.00962	0.02223	0.03233	0.01776	0.18052	-0.01232	0.04499	0.05377
8.000	0.02708	0.00857	-0.03606	0.03618	0.07104	-0.06468	0.01456	0.04481	0.00494	-0.02792	0.07607	0.05721	-0.06822	0.06840

SIN THETA/ LAMBDA	BI 3S3S J(0)	BI 3S2P J(1)	BI 3S2S J(0)	BI 3S1S J(0)	BI 2P2P J(0)	BI 2P2P J(2)	BI 2P2S J(1)	BI 2P1S J(1)	BI 2S2S J(0)	BI 2S1S J(0)	BI 1S1S J(0)	RN 6P6P J(0)	RN 6P6P J(2)	RN 6P6S J(1)
0.005	0.99999	0.00015	-0.	0.00002	1.00000	0.	-0.00075	0.00017	1.00000	-0.	1.00000	0.99864	0.00054	-0.02500
0.010	0.99997	0.00030	0.	0.00002	1.00000	0.	-0.00149	0.00033	1.00000	-0.	1.00000	0.99458	0.00216	-0.04987
0.050	0.99923	0.00149	0.00009	0.00002	0.99991	0.00004	-0.00747	0.00167	0.99987	0.00001	0.99999	0.87270	0.04950	-0.22976
0.100	0.99690	0.00297	0.00036	0.00003	0.99963	0.00015	-0.01494	0.00334	0.99949	0.00003	0.99997	0.57563	0.15141	-0.35703
0.150	0.99304	0.00445	0.00080	0.00004	0.99916	0.00034	-0.02240	0.00501	0.99886	0.00007	0.99993	0.27233	0.22358	-0.35391
0.200	0.98766	0.00591	0.00142	0.00006	0.99851	0.00060	-0.02985	0.00668	0.99798	0.00013	0.99987	0.06676	0.22919	-0.26449
0.300	0.97243	0.00877	0.00320	0.00011	0.99664	0.00134	-0.04469	0.01002	0.99545	0.00029	0.99971	-0.04820	0.11974	-0.06047
0.400	0.95146	0.01152	0.00565	0.00019	0.99404	0.00238	-0.05944	0.01335	0.99193	0.00051	0.99948	-0.00767	0.02120	0.01943
0.500	0.92508	0.01411	0.00877	0.00029	0.99070	0.00371	-0.07405	0.01667	0.98741	0.00079	0.99918	0.02262	-0.01006	0.01254
0.600	0.89373	0.01652	0.01252	0.00041	0.98664	0.00533	-0.08850	0.01998	0.98193	0.00114	0.99882	0.02224	-0.00476	-0.00974
0.700	0.85789	0.01872	0.01688	0.00055	0.98187	0.00722	-0.10275	0.02329	0.97548	0.00156	0.99840	0.01018	0.00680	-0.01945
0.800	0.81812	0.02066	0.02179	0.00071	0.97639	0.00939	-0.11678	0.02658	0.96810	0.00203	0.99791	0.00015	0.01271	-0.01681
0.900	0.77500	0.02234	0.02723	0.00090	0.97023	0.01182	-0.13056	0.02985	0.95979	0.00256	0.99736	-0.00405	0.01234	-0.00928
1.000	0.72916	0.02372	0.03313	0.00110	0.96340	0.01451	-0.14405	0.03311	0.95060	0.00316	0.99674	-0.00374	0.00865	-0.00242
1.500	0.48144	0.02556	0.06780	0.00245	0.91980	0.03142	-0.20636	0.04911	0.89227	0.00703	0.99258	0.00388	-0.00105	-0.00118
2.000	0.25400	0.01841	0.10572	0.00430	0.86252	0.05299	-0.25814	0.06445	0.81655	0.01231	0.98704	0.00010	0.00213	-0.00261
3.000	0.00390	-0.01761	0.16508	0.00943	0.72012	0.10301	-0.32371	0.09246	0.63334	0.02650	0.97118	0.00072	-0.00004	0.00028
4.000	-0.01603	-0.06274	0.17939	0.01615	0.56335	0.15069	-0.33829	0.11595	0.44192	0.04432	0.94963	0.00046	0.00027	-0.00074
5.000	0.02821	-0.09494	0.15222	0.02403	0.41456	0.18596	-0.31227	0.13420	0.27420	0.05414	0.92297	-0.00048	0.00094	-0.00027
8.000	0.02730	-0.07919	0.02543	0.04908	0.11750	0.19842	-0.14363	0.15730	0.01254	0.12040	0.81955	0.00036	-0.00016	0.00003

SIN THETA/ LAMBDA	RN 6P5D J(1)	RN 6P5D J(3)	RN 6P5P J(0)	RN 6P5P J(2)	RN 6P5S J(1)	RN 6P4F J(2)	RN 6P4F J(4)	RN 6P4D J(1)	RN 6P4D J(3)	RN 5P4P J(0)	RN 6P4P J(2)	RN 6P4S J(1)	RN 6P3D J(1)	RN 6P3D J(3)
0.005	0.00534	0.	0.00008	-0.00003	0.00090	0.	0.	0.00030	0.	0.00001	-0.	0.00025	0.00003	0.
0.010	0.01066	0.00001	0.00031	-0.00012	0.00179	0.	0.	0.00060	0.	0.00003	-0.00001	0.00049	0.00006	0.
0.050	0.05051	0.00082	0.00752	-0.00297	0.00831	-0.00010	0.	0.00299	0.00001	0.00042	-0.00016	0.00245	0.00029	0.
0.100	0.08516	0.00587	0.02791	-0.01068	0.01284	-0.00041	0.000001	0.00587	0.00004	0.00162	-0.00064	0.00479	0.00059	0.
0.150	0.09498	0.01646	0.05555	-0.02002	0.01105	-0.00101	0.000003	0.00851	0.00015	0.00359	-0.00142	0.00691	0.00087	0.
0.200	0.08050	0.03037	0.08340	-0.02732	0.00234	-0.00196	0.000008	0.01082	0.00035	0.00627	-0.00246	0.00870	0.00115	0.00001
0.300	0.01157	0.05182	0.11697	-0.02595	-0.02943	-0.00502	0.000021	0.01395	0.00117	0.01338	-0.00513	0.01095	0.00168	0.00002
0.400	-0.05055	0.04786	0.10804	-0.00293	-0.06140	-0.00927	0.000014	0.01447	0.00269	0.02200	-0.000810	0.01095	0.00215	0.00006
0.500	-0.07253	0.02259	0.07051	0.02584	-0.07551	-0.01350	-0.000056	0.01200	0.00489	0.03086	-0.01067	0.00850	0.00254	0.00012
0.600	-0.06138	-0.00696	0.02901	0.04753	-0.06837	-0.01623	-0.00216	0.00670	0.00748	0.03861	-0.01213	0.00381	0.00282	0.00021
0.700	-0.03692	-0.02789	-0.00007	0.05284	-0.04788	-0.01643	-0.00454	-0.00065	0.00995	0.04411	-0.01199	-0.00251	0.00298	0.00034
0.800	-0.01422	-0.03633	-0.01262	0.04536	-0.02471	-0.01388	-0.00728	-0.00889	0.01174	0.04664	-0.01004	-0.00957	0.00299	0.00051
0.900	0.00030	-0.03457	-0.01246	0.03149	-0.00639	-0.00907	-0.00980	-0.01678	0.01239	0.04602	-0.00645	-0.01641	0.00283	0.00072
1.000	0.00634	-0.02706	-0.00575	0.01710	0.00416	-0.00293	-0.01157	-0.02328	0.01165	0.04256	-0.00156	-0.02218	0.00250	0.00098
1.500	-0.00671	0.00194	0.01158	-0.00181	-0.00632	0.01965	-0.00497	-0.02452	-0.00582	0.00900	0.01986	-0.02415	-0.00170	0.00269
2.000	-0.00423	-0.00289	-0.00032	0.00705	-0.00635	0.01337	0.00874	-0.00414	-0.01613	-0.00371	0.01559	-0.00450	0.00802	0.00380
3.000	0.00090	-0.00185	0.00235	-0.00022	0.00062	-0.00478	0.00765	0.00089	-0.00293	0.00671	-0.00128	-0.00056	-0.01322	-0.00002
4.000	-0.00112	0.00040	0.00155	0.00074	-0.00201	-0.00390	-0.00067	-0.00323	0.00071	0.00280	0.00249	-0.00439	-0.00671	-0.00600
5.000	-0.00050	-0.00045	-0.00006	0.00147	-0.00069	-0.00094	-0.00250	-0.00105	-0.00161	-0.00027	0.00332	-0.00111	0.00021	-0.00731
8.000	0.00048	-0.00015	0.00073	-0.00008	-0.00021	0.00029	-0.00029	0.00131	-0.00045	0.00165	-0.00017	-0.00046	0.00248	-0.00051

SIN THETA/ LAMBDA	RN 6P3P J(0)	RN 6P3P J(2)	RN 6P3S J(1)	RN 6P2P J(0)	RN 6P2P J(2)	RN 6P2S J(1)	RN 6P1S J(1)	RN 6S6S J(0)	RN 6S5D J(2)	RN 6S5P J(1)	RN 6S5S J(0)	RN 6S4F J(3)	RN 6S4D J(2)	RN 6S4P J(1)
0.005	-0.00001	-0.	0.00007	-0.	-0.	0.00002	0.	0.99904	-0.00009	0.00298	0.00007	-0.	-0.	0.00031
0.010	-0.00001	-0.	0.00014	-0.	-0.	0.00004	0.00001	0.99615	-0.00037	0.00596	0.00028	-0.	-0.00001	0.00062
0.050	0.00002	-0.00001	0.00069	0.	-0.	0.00019	0.00004	0.90770	-0.00887	0.02856	0.00680	-0.00001	-0.00017	0.00308
0.100	0.00013	-0.00005	0.00137	0.00001	-0.	0.00037	0.00008	0.67448	-0.03185	0.04977	0.02551	-0.00005	-0.00069	0.00604
0.150	0.00030	-0.00012	0.00204	0.00002	-0.00001	0.00056	0.00012	0.39827	-0.05993	0.05849	0.05214	-0.00013	-0.00154	0.00879
0.200	0.00053	-0.00022	0.00270	0.00004	-0.00002	0.00075	0.00016	0.16711	-0.08304	0.05307	0.08066	-0.00022	-0.00273	0.01119
0.300	0.00121	-0.00048	0.00395	0.00010	-0.00004	0.00112	0.00024	-0.04268	-0.09053	0.00973	0.12242	-0.00010	-0.00593	0.01453
0.400	0.00213	-0.00085	0.00511	0.00017	-0.00007	0.00148	0.00032	-0.03228	-0.04986	-0.04461	0.12530	0.00110	-0.00983	0.01531
0.500	0.00330	-0.00130	0.00612	0.00027	-0.00011	0.00185	0.00040	0.01440	0.00404	-0.07735	0.09380	0.00383	-0.01360	0.01307
0.600	0.00468	-0.00184	0.00695	0.00039	-0.00016	0.00220	0.00048	0.03031	0.04165	-0.07927	0.04922	0.00781	-0.01623	0.00789
0.700	0.00625	-0.00243	0.00758	0.00053	-0.00021	0.00255	0.00055	0.02155	0.05447	-0.05966	0.01135	0.01207	-0.01687	0.00039
0.800	0.00797	-0.00305	0.00797	0.00070	-0.00028	0.00289	0.00063	0.00705	0.04841	-0.03312	-0.01037	0.01546	-0.01507	-0.00839
0.900	0.00980	-0.00369	0.00811	0.00088	-0.00035	0.00322	0.00071	-0.00267	0.03350	-0.01057	-0.01623	0.01709	-0.01093	-0.01723
1.000	0.01168	-0.00431	0.00798	0.00108	-0.00043	0.00353	0.00079	-0.00571	0.01780	0.00323	-0.01158	0.01659	-0.00499	-0.02499
1.500	0.02005	-0.00612	0.00350	0.00239	-0.00094	0.00490	0.00118	0.00524	-0.00175	-0.00671	0.01468	-0.00567	0.02344	-0.03039
2.000	0.02276	-0.00408	-0.00454	0.00409	-0.00158	0.00577	0.00156	0.00047	0.00696	-0.00742	0.00005	-0.01805	0.01892	-0.00633
3.000	0.01149	0.00631	-0.01241	0.00797	-0.00280	0.00556	0.00230	0.00089	-0.00071	0.00073	0.00268	-0.00191	-0.00264	-0.00063
4.000	0.00079	0.00949	-0.00592	0.01099	-0.00317	0.00300	0.00298	0.00058	0.00001	-0.00229	0.00158	0.00493	0.00106	-0.00531
5.000	-0.00033	0.00540	0.00017	0.01201	-0.00229	-0.00048	0.00359	-0.00044	0.00091	-0.00080	-0.00038	0.00291	0.00257	-0.00138
8.000	0.00346	-0.00020	-0.00134	0.00660	0.00289	-0.00484	0.00474	0.00040	-0.00056	-0.00025	0.00081	-0.00036	-0.00149	-0.00057

SIN THETA/ LAMBDA	RN 6S4S J(0)	RN 6S3D J(2)	RN 6S3P J(1)	RN 6S3S J(0)	RN 6S2P J(1)	RN 6S2S J(0)	RN 6S1S J(0)	RN 5D5D J(0)	RN 5D5D J(2)	RN 5D5D J(4)	RN 5D5P J(1)	RN 5D5P J(3)	RN 5D5S J(2)	RN 5D4F J(1)
0.005	0.00004-0.		0.00005-0.00001	0.00001-0.	0.00001-0.	0.	0.	0.99976	0.00009	0.	-0.01049-0.		0.00007	0.00167
0.010	0.00005-0.		0.00010-0.00001	0.00002-0.	0.	0.	0.	0.99906	0.00038	0.	-0.02097-0.		0.00028	0.00335
0.050	0.00046-0.00001		0.00050	0.00003	0.00008	0.	0.	0.97666	0.00929	0.00003-0.10336-0.00044		0.00685	0.01655	
0.100	0.00172-0.00003		0.00100	0.00015	0.00016	0.00001	0.	0.90965	0.03546	0.00050-0.19781-0.00336		0.02649	0.03192	
0.150	0.00379-0.00008		0.00149	0.00035	0.00024	0.00003	0.	0.80736	0.07380	0.00235-0.27573-0.01071		0.05628	0.04505	
0.200	0.00661-0.00014		0.00197	0.00064	0.00032	0.00006	0.	0.68170	0.11784	0.00672-0.33181-0.02343		0.09238	0.05506	
0.300	0.01419-0.00031		0.00287	0.00143	0.00047	0.00014	0.00001	0.41178	0.19686	0.02575-0.37138-0.06318		0.16595	0.06362	
0.400	0.02353-0.00055		0.00368	0.00253	0.00063	0.00024	0.00001	0.18482	0.23474	0.05669-0.32756-0.11065		0.21634	0.05640	
0.500	0.03338-0.00085		0.00436	0.00391	0.00077	0.00038	0.00002	0.03968	0.22381	0.09014-0.23688-0.14877		0.22809	0.03632	
0.600	0.04234-0.00121		0.00488	0.00554	0.00092	0.00055	0.00003-0.02697	0.17889	0.11522-0.13821-0.16581		0.20359	0.00875		
0.700	0.04912-0.00161		0.00521	0.00740	0.00105	0.00075	0.00004-0.03931	0.12136	0.12561-0.05791-0.15958		0.15642-0.02048			
0.800	0.05281-0.00204		0.00532	0.00943	0.00118	0.00097	0.00005-0.02396	0.06815	0.12095-0.00651-0.13548		0.10265-0.04656			
0.900	0.05301-0.00247		0.00518	0.01158	0.00130	0.00123	0.00007-0.00072	0.02820	0.10499	0.01737-0.10218		0.05473-0.06642		
1.000	0.04990-0.00288		0.00479	0.01380	0.00141	0.00151	0.00008	0.01922	0.00356	0.08299	0.02109-0.06786		0.01937-0.07877	
1.500	0.01157-0.00376-0.00094		0.00094	0.02351	0.00178	0.00329	0.00018	0.02210	0.00615	0.00177-0.02422	0.00660	0.00099-0.05509		
2.000	-0.00533-0.00115-0.00988		0.02618	0.00174	0.00556	0.00032-0.00162		0.01727	0.00151-0.01137-0.01112		0.01954-0.00269			
3.000	0.00772	0.00901-0.01690	0.01124	0.00018	0.01038	0.00070	0.00549	0.00008	0.00886	0.00253-0.00521-0.00232		0.01680		
4.000	0.00239	0.01082-0.00757-0.00098-0.00291	0.01341	0.00121	0.00461	0.00114	0.00095-0.00354	0.00123	0.00024	0.00516		0.00014		
5.000	-0.00085	0.00518	0.00010-0.00054-0.00609	0.01329	0.00183	0.00062	0.00345-0.00019-0.00145-0.00149	0.00256	0.00014					
8.000	0.00173-0.00328-0.00181	0.00321-0.00749	0.00370	0.00389-0.00063	0.00106	0.00187	0.00165-0.00062-0.00156-0.00031							

SIN THETA/ LAMBDA	RN 5D4F J(3)	RN 5D4F J(5)	RN 5D4D J(0)	RN 5D4D J(2)	RN 5D4D J(4)	RN 5D4P J(1)	RN 5D4P J(3)	RN 5D4S J(2)	RN 5D3D J(0)	RN 5D3D J(2)	RN 5D3D J(4)	RN 5D3P J(1)	RN 5D3P J(3)	RN 5D3S J(2)
0.005	0.	0.	0.00002-0.00001-0.		0.00080	0.	-0.00001	0.	-0.	-0.		0.00027	0.	-0.
0.010	0.	0.	0.00007-0.00003-0.		0.00159	0.	-0.00002	0.	-0.	-0.		0.00053	0.	-0.
0.050	0.00006	0.	0.00189-0.00075-0.		0.00788	0.00003-0.00051	0.00009-0.00004-0.	0.00267	0.	-0.00006				
0.100	0.00045	0.	0.00745-0.00295-0.00002		0.01522	0.00020-0.00202	0.00036-0.00015-0.	0.00533	0.00001-0.00024					
0.150	0.00145	0.00002	0.01635-0.00641-0.00009		0.02152	0.00067-0.00439	0.00082-0.00033-0.	0.00795	0.00002-0.00054					
0.200	0.00327	0.00007	0.02808-0.01085-0.00028		0.02635	0.00154-0.00745	0.00145-0.00058-0.	0.01054	0.00004-0.00096					
0.300	0.00958	0.00046	0.05729-0.02112-0.00128		0.03033	0.00466-0.01465	0.00324-0.00129-0.	0.01551	0.00015-0.00214					
0.400	0.01866	0.00163	0.08894-0.03051-0.00352		0.02590	0.00952-0.02141	0.00571-0.00227-0.00001	0.02013	0.00036-0.00374					
0.500	0.02846	0.00397	0.11703-0.03609-0.00718		0.01371	0.01535-0.02565	0.00883-0.00349-0.00004	0.02429	0.00069-0.00573					
0.600	0.03651	0.00760	0.13698-0.03605-0.01197-0.00409		0.02092-0.02589	0.01253-0.00491-0.00008	0.02788	0.00119-0.00803						
0.700	0.04084	0.01224	0.14643-0.02997-0.01720-0.02447		0.02493-0.02158	0.01673-0.00649-0.00016	0.03081	0.00186-0.01058						
0.800	0.04049	0.01726	0.14517-0.01875-0.02197-0.04432		0.02637-0.01309	0.02134-0.00817-0.00028	0.03299	0.00273-0.01330						
0.900	0.03555	0.02192	0.13470-0.00413-0.02536-0.06103		0.02469-0.00151	0.02624-0.00989-0.00048	0.03437	0.00380-0.01608						
1.000	0.02690	0.02551	0.11757	0.01184-0.02674-0.07286	0.01992	0.01164	0.03129-0.01156-0.00075	0.03492	0.00505-0.01883					
1.500	-0.02810	0.01847	0.01970	0.06010-0.00309-0.05732-0.02523	0.05517	0.05423-0.01677-0.00358	0.02584	0.01313-0.02868						
2.000	-0.04337-0.00921-0.00643	0.03976	0.02851-0.00572-0.04258	0.03485	0.06406-0.01299-0.00819	0.00493	0.01960-0.02674							
3.000	-0.01030-0.02492	0.01718-0.00161	0.02037	0.00205-0.00547-0.00721	0.04280	0.01108-0.01192-0.02227	0.01241-0.00008							
4.000	0.00535-0.00996	0.01099	0.00450	0.00096-0.00842	0.00230	0.00231	0.01205	0.02510-0.00285-0.01382-0.00575	0.01362					
5.000	0.00552-0.00012	0.00101	0.00940-0.00006-0.00253-0.00412	0.00545-0.00253	0.02296	0.00753	0.00131-0.01299	0.00783						
8.000	0.00064	0.00207-0.00161	0.00265	0.00486	0.00355-0.00106-0.00342-0.00281	0.00452	0.01086	0.00670-0.00025-0.00719						

SIN THETA/ LAMBDA	RN 5D2P J(1)	RN 5D2P J(3)	RN 5D2S J(2)	RN 5D1S J(2)	RN 5P5P J(0)	RN 5P5P J(2)	RN 5P5S J(1)	RN 5P4F J(2)	RN 5P4F J(4)	RN 5P4D J(1)	RN 5P4D J(3)	RN 5P4P J(0)	RN 5P4P J(2)	RN 5P4S J(1)
0.005	0.00007	0.	-0.	0.	0.99983	0.00007-0.00976	-0.00001-0.	0.00133	0.	0.00002-0.00001	0.00003	0.00007-0.00003	0.00003	0.00090
0.010	0.00015	0.	-0.	0.	0.99932	0.00027-0.01951	-0.00005-0.	0.00266	0.	0.00007-0.00005	0.00003	0.00007-0.00003	0.00003	0.00180
0.050	0.00073	0.	-0.	0.	0.98300	0.00678-0.09645	-0.00130-0.	0.01317	0.00004	0.00004	0.00004	0.00179-0.00071	0.00089	0.00891
0.100	0.00146	0.	-0.00002	0.	0.93348	0.02627-0.18622	-0.00507-0.00003	0.02555	0.00030	0.00030	0.00030	0.00707-0.00281	0.01728	0.01728
0.150	0.00220	0.	-0.00004	0.	0.85570	0.05607-0.26336	-0.01099-0.00016	0.03640	0.00099	0.00099	0.00099	0.01556-0.00612	0.02457	0.02457
0.200	0.00293	0.	-0.00007	0.	0.75610	0.09261-0.32330	-0.01856-0.00050	0.04509	0.00225	0.00225	0.00225	0.02686-0.01043	0.03033	0.03033
0.300	0.00439	0.	-0.00016	0.00001	0.52285	0.16916-0.38240	-0.03600-0.00224	0.05413	0.00685	0.00685	0.00685	0.05552-0.02070	0.03591	0.03591
0.400	0.00584	0.00001	-0.00028	0.00002	0.29530	0.22533-0.36357	-0.05189-0.00606	0.05072	0.01406	0.01406	0.01406	0.08770-0.03076	0.03243	0.03243
0.500	0.00729	0.00001	-0.00044	0.00003	0.11789	0.24369-0.28984	-0.06154-0.01212	0.03565	0.02278	0.02278	0.02278	0.11778-0.03776	0.02018	0.02018
0.600	0.00873	0.00002	-0.00064	0.00004	0.00809	0.22391-0.19337	-0.06233-0.01983	0.01196	0.03128	0.03128	0.03128	0.14106-0.03962	0.01018	0.01018
0.700	0.01015	0.00003	-0.00087	0.00005	-0.03974	0.17786-0.10228	-0.05404-0.02795	-0.01606	0.03770	0.03770	0.03770	0.15447-0.03542	-0.02185	-0.02185
0.800	0.01157	0.00004	-0.00114	0.00006	-0.04377	0.12158-0.03366	-0.03840-0.03504	-0.04395	0.04054	0.04054	0.04054	0.15692-0.02546	-0.04525	-0.04525
0.900	0.01297	0.00006	-0.00145	0.00008	-0.02457	0.06881	0.00707-0.01825	-0.03982	-0.05799	0.03904	0.03904	0.14908-0.01102	-0.06607	-0.06607
1.000	0.01435	0.00009	-0.00180	0.00010	0.00129	0.02793	0.02297	0.00333	-0.04146	-0.08566	0.03318	0.13297	0.00598	-0.08200
1.500	0.02088	0.00033	-0.00408	0.00022	0.03325	-0.00036	-0.02578	0.06502	-0.00842	-0.07351	-0.02681	0.02166	0.06744	-0.07328
2.000	0.02649	0.00088	-0.00723	0.00038	-0.00252	0.02274	-0.01765	0.03916	0.03145	-0.00962	-0.05192	-0.01126	0.04648	-0.01079
3.000	0.03345	0.00323	-0.01494	0.00080	0.00772	-0.00100	0.00148	-0.01544	0.02278	0.00204	-0.00794	0.02124	-0.00407	-0.00273
4.000	0.03373	0.00705	-0.02162	0.00130	0.00462	0.00250	-0.00628	-0.01188	-0.00263	-0.01005	0.00207	0.00829	0.00813	-0.01358
5.000	0.02883	0.01098	-0.02450	0.00182	-0.00026	0.00459	-0.00204	-0.00279	-0.00782	-0.00310	-0.00513	-0.00087	0.01025	-0.00327
8.000	0.00947	0.01395	-0.01484	0.00291	0.00226	-0.00026	-0.00057	0.00089	-0.00087	0.00404	-0.00134	0.00513	-0.00052	-0.00147

SIN THETA/ LAMBDA	RN 5P3D J(1)	RN 5P3D J(3)	RN 5P3P J(0)	RN 5P3P J(2)	RN 5P3S J(1)	RN 5P2P J(0)	RN 5P2P J(2)	RN 5P2S J(1)	RN 5P1S J(1)	RN 5S5S J(0)	RN 5S4F J(3)	RN 5S4D J(2)	RN 5S4P J(1)	RN 5S4S J(0)
0.005	0.00010	0.	0.00005-0.	0.00022	0.00001-0.	0.00006	0.00001	0.99985	0.	-0.00001	0.00117	0.00002	0.00002	0.00002
0.010	0.00019	0.	0.00005-0.	0.00044	0.00001-0.	0.00012	0.00002	0.99939	0.	-0.00004	0.00233	0.00007	0.00007	0.00007
0.050	0.00097	0.	0.00016-0.00005	0.00221	0.00001-0.	0.00058	0.00012	0.98485	0.00006	-0.00094	0.01155	0.00172	0.00172	0.00172
0.100	0.00193	0.	0.00050-0.00018	0.00439	0.00004-0.00001	0.00117	0.00025	0.94056	0.00046	-0.00371	0.02244	0.00681	0.00681	0.00681
0.150	0.00287	0.00001	0.00107-0.00041	0.00655	0.00008-0.00003	0.00175	0.00037	0.87046	0.00150	-0.00810	0.03206	0.01502	0.01502	0.01502
0.200	0.00379	0.00003	0.00186-0.00072	0.00867	0.00014-0.00006	0.00233	0.00049	0.77965	0.00342	-0.01379	0.03986	0.02597	0.02597	0.02597
0.300	0.00552	0.00009	0.00410-0.00161	0.01269	0.00032-0.00012	0.00349	0.00074	0.56168	0.01027	-0.02741	0.04836	0.05396	0.05396	0.05396
0.400	0.00704	0.00021	0.00717-0.00282	0.01634	0.00056-0.00022	0.00464	0.00098	0.33944	0.02070	-0.04080	0.04601	0.08581	0.08581	0.08581
0.500	0.00828	0.00041	0.01102-0.00431	0.01951	0.00087-0.00035	0.00577	0.00123	0.15534	0.03288	-0.05034	0.03308	0.11621	0.11621	0.11621
0.600	0.00915	0.00073	0.01556-0.00605	0.02209	0.00125-0.00050	0.00688	0.00147	0.03104	0.04417	-0.05340	0.01180	0.14051	0.14051	0.14051
0.700	0.00959	0.00117	0.02070-0.00796	0.02396	0.00169-0.00067	0.00796	0.00172	-0.03259	0.05207	-0.04889	0.01436	0.15549	0.15549	0.15549
0.800	0.00953	0.00174	0.02629-0.00997	0.02506	0.00220-0.00088	0.00902	0.00196	-0.04859	0.05488	-0.03730	0.01446	0.15971	0.15971	0.15971
0.900	0.00892	0.00247	0.03219-0.01199	0.02532	0.00278-0.00111	0.01005	0.00221	-0.03536	0.05198	-0.02031	0.06591	0.15348	0.15348	0.15348
1.000	0.00772	0.00333	0.03822-0.01393	0.02471	0.00342-0.00136	0.01104	0.00245	-0.03999	0.04385	-0.00033	0.08500	0.13846	0.13846	0.13846
1.500	-0.00623	0.00877	0.06423-0.01908	0.00959	0.00753-0.00296	0.01527	0.00366	0.03802	-0.02591	0.07103	-0.08054	0.02332	0.02332	0.02332
2.000	-0.02616	0.01187	0.07145-0.01187	-0.01586	0.00220-0.00088	0.00902	0.00196	-0.04859	0.05488	-0.03730	0.01446	0.15971	0.15971	0.15971
3.000	-0.04120	-0.00082	0.03488	0.02063	-0.03883	0.02493	-0.00872	0.01717	0.00714	0.00792	-0.00352	-0.00754	-0.00291	0.02157
4.000	-0.02038	-0.01912	0.00211	0.02953	-0.01793	0.03425	-0.00980	0.00912	0.00925	0.00402	0.01354	0.00330	-0.01440	0.00598
5.000	0.00092	-0.02272	-0.00091	0.01650	0.00071	0.03730	-0.00699	-0.00169	0.01111	-0.00105	0.00778	0.00694	-0.00350	-0.00229
8.000	0.00766	-0.00150	0.01071	-0.00060	-0.00421	0.02037	0.00905	-0.01502	0.01469	0.00221	-0.00098	-0.00406	-0.00158	0.00469

SIN THETA/ LAMBDA	RN 5S3D J(2)	RN 5S3P J(1)	RN 5S3S J(0)	RN 5S2P J(1)	RN 5S2S J(0)	RN 5S1S J(0)	RN 4F4F J(0)	RN 4F4F J(2)	RN 4F4F J(4)	RN 4F4F J(6)	RN 4F4D J(1)	RN 4F4D J(3)	RN 4F4D J(5)	RN 4F4P J(2)
0.005	-0.	0.00015	0.00006	0.00002	0.	0.	0.99997	0.00001	0.	0.	-0.00418-0.	-0.	0.00001	
0.010	-0.	0.00029	0.00007	0.00004	0.	0.	0.99986	0.00006	0.	0.	-0.00836-0.	-0.	0.00005	
0.050	-0.00003	0.00145	0.00018	0.00022	0.00001	0.	0.99656	0.00137	0.	0.	-0.04170-0.00003-0.	0.	0.00128	
0.100	-0.00010	0.00289	0.00054	0.00044	0.00004	0.	0.98632	0.00545	0.00001	0.	-0.08270-0.00026-0.	0.	0.00508	
0.150	-0.00024	0.00431	0.00114	0.00066	0.00010	0.00001	0.96952	0.01210	0.00007	0.	-0.12233-0.00088-0.	0.	0.01129	
0.200	-0.00042	0.00569	0.00197	0.00087	0.00017	0.00001	0.94651	0.02112	0.00020	0.	-0.15996-0.00206-0.00001	0.	0.01975	
0.300	-0.00094	0.00828	0.00433	0.00130	0.00039	0.00002	0.88399	0.04507	0.00097	0.00002	-0.22697-0.00663-0.00010	0.	0.04242	
0.400	-0.00166	0.01058	0.00757	0.00173	0.00068	0.00004	0.80384	0.07452	0.00283	0.00008	-0.28010-0.01473-0.00040	0.	0.07070	
0.500	-0.00255	0.01249	0.01162	0.00213	0.00107	0.00006	0.71198	0.10629	0.00627	0.00027	-0.31715-0.02652-0.00113	0.	0.10172	
0.600	-0.00361	0.01390	0.01639	0.00253	0.00153	0.00008	0.61445	0.13735	0.01160	0.00070	-0.33748-0.04158-0.00253	0.	0.13256	
0.700	-0.00478	0.01472	0.02177	0.00290	0.00208	0.00011	0.51667	0.16518	0.01886	0.00152	-0.34183-0.05900-0.00488	0.	0.16056	
0.800	-0.00501	0.01488	0.02761	0.00326	0.00270	0.00014	0.42309	0.18794	0.02786	0.00288	-0.33206-0.07757-0.00836	0.	0.18359	
0.900	-0.00724	0.01432	0.03376	0.00359	0.00341	0.00018	0.33693	0.20462	0.03817	0.00490	-0.31077-0.09601-0.01308	0.	0.20016	
1.000	-0.00838	0.01300	0.04003	0.00389	0.00419	0.00022	0.26022	0.21489	0.04924	0.00763	-0.28088-0.11309-0.01900	0.	0.20955	
1.500	-0.01033	-0.00398	0.06654	0.00488	0.00913	0.00049	0.02796	0.18964	0.09694	0.03036	-0.09521-0.15248-0.05868	0.	0.16223	
2.000	-0.00235	-0.02885	0.07226	0.00474	0.01538	0.00087	-0.03097	0.11520	0.10841	0.05464	0.02079-0.11670-0.08681	0.	0.05433	
3.000	0.02548	-0.04620	0.02954	0.00039	0.02854	0.00191	-0.01646	0.02308	0.06636	0.05466	0.04121-0.01462-0.06512	0.	0.04073	
4.000	0.02942	-0.02001	-0.00298	-0.00809	0.03663	0.00331	-0.00267	0.00111	0.02767	0.04413	0.01133	0.01666-0.01939	0.	0.02442
5.000	0.01376	0.00052	-0.00125	-0.01672	0.03618	0.00498	0.00026	-0.00138	0.00999	0.02449	-0.00009	0.01429	0.00299	0.00500
8.000	-0.00892	-0.00498	0.00868	-0.02034	0.00996	0.01058	0.00011	-0.00017	0.00035	0.00313	-0.00076	0.00154	0.00540	0.00195

SIN THETA/ LAMBDA	RN 4F4P J(4)	RN 4F4S J(3)	RN 4F3D J(1)	RN 4F3D J(3)	RN 4F3D J(5)	RN 4F3P J(2)	RN 4F3P J(4)	RN 4F3S J(3)	RN 4F2P J(2)	RN 4F2P J(4)	RN 4F2S J(3)	RN 4F1S J(3)	RN 4D4D J(0)	RN 4D4D J(2)
0.005	0.	-0.	0.00128	0.	0.	-0.	-0.	0.	0.	0.	-0.	0.	0.99997	0.00001
0.010	0.	-0.	0.00256	0.	0.	-0.00001	-0.	0.	0.	0.	-0.	0.	0.99986	0.00005
0.050	0.	-0.00003	0.01279	0.	0.	-0.00028	-0.	0.	0.00001	0.	-0.	0.	0.99661	0.00135
0.100	0.00001	-0.00024	0.02551	0.00003	0.	-0.00111	-0.	0.00003	0.00006	0.	-0.	0.	0.98651	0.00538
0.150	0.00005	-0.00081	0.03809	0.00009	0.	-0.00249	-0.	0.00012	0.00012	0.	-0.	0.	0.96988	0.01198
0.200	0.00017	-0.00190	0.05047	0.00020	0.	-0.00440	-0.00001	0.00027	0.00022	0.	-0.00001	0.	0.94704	0.02096
0.300	0.00080	-0.00616	0.07439	0.00068	0.	-0.00974	-0.00006	0.00090	0.00049	0.	-0.00003	0.	0.88446	0.04510
0.400	0.00239	-0.01377	0.09679	0.00157	0.00001	-0.01693	-0.00020	0.00209	0.00087	0.	-0.00008	0.	0.80321	0.07534
0.500	0.00540	-0.02496	0.11725	0.00298	0.00004	-0.02570	-0.00047	0.00398	0.00134	0.00001	-0.00015	0.	0.70869	0.10875
0.600	0.01024	-0.03944	0.13544	0.00497	0.00011	-0.03571	-0.00094	0.00664	0.00191	0.00002	-0.00025	0.	0.60675	0.14226
0.700	0.01708	-0.05642	0.15111	0.00757	0.00022	-0.04663	-0.00168	0.01014	0.00256	0.00003	-0.00039	0.	0.50309	0.17304
0.800	0.02590	-0.07481	0.16409	0.01079	0.00040	-0.05807	-0.00273	0.01446	0.00330	0.00005	-0.00058	0.	0.40277	0.19879
0.900	0.03641	-0.09334	0.17430	0.01458	0.00069	-0.06967	-0.00415	0.01957	0.00410	0.00008	-0.00081	0.	0.30992	0.21788
1.000	0.04813	-0.11076	0.18174	0.01889	0.00109	-0.08107	-0.00598	0.02538	0.00497	0.00011	-0.00109	0.	0.22750	0.22944
1.500	0.10298	-0.15148	0.18216	0.04456	0.00567	-0.12528	-0.02119	0.05998	0.00986	0.00051	-0.00324	0.00001	0.00128	0.18653
2.000	0.11295	-0.10865	0.14284	0.06701	0.01482	-0.13607	-0.04235	0.08937	0.01477	0.00138	-0.00650	0.00002	-0.00703	0.07863
3.000	0.03780	0.00843	0.05265	0.07537	0.03627	-0.08570	-0.06985	0.09345	0.02098	0.00446	-0.01398	0.00007	0.04946	-0.00532
4.000	-0.01225	0.03016	0.00864	0.05216	0.04424	-0.02865	-0.06128	0.05347	0.02080	0.00802	-0.01868	0.00015	0.02581	0.01554
5.000	-0.01844	0.01531	-0.00295	0.02833	0.03839	-0.00175	-0.03804	0.01879	0.01659	0.01034	-0.01889	0.00024	0.00122	0.02534
8.000	-0.00171	-0.00215	-0.00126	0.00247	0.01160	0.00350	-0.00159	-0.00443	0.00422	0.00830	-0.00831	0.00049	-0.00399	0.00655



SIN THETA/ LAMBDA	RN 4D4D J(4)	RN 4D4P J(1)	RN 4D4P J(3)	RN 4D4S J(2)	RN 4D3D J(0)	RN 4D3D J(2)	RN 4D3D J(4)	RN 4D3P J(1)	RN 4D3P J(3)	RN 4D3S J(2)	RN 4D2P J(1)	RN 4D2P J(3)	RN 4D2S J(2)	RN 4D1S J(2)
0.005	0.	-0.00438-0.	0.00001	0.	-0.	-0.	0.00084	0.	-0.	0.00020	0.	-0.	0.	0.
0.010	0.	-0.00876-0.	0.00005	0.00002	-0.00001	-0.	0.00168	0.	-0.00001	0.00040	0.	-0.	0.	0.
0.050	0.	-0.04368-0.00003	0.00132	0.00037	-0.00015	-0.	0.00837	0.	-0.00022	0.00201	0.	-0.00001	0.	0.
0.100	0.00001	-0.08670-0.00025	0.00524	0.00148	-0.00059	-0.	0.01667	0.00003	-0.00088	0.00402	0.	-0.00005	0.	0.
0.150	0.00005	-0.12840-0.00085	0.01166	0.00332	-0.00132	-0.	0.02482	0.00009	-0.00197	0.00603	0.	-0.00012	0.00001	0.
0.200	0.00017	-0.16817-0.00198	0.02042	0.00586	-0.00233	-0.00001	0.03276	0.00022	-0.00348	0.00804	0.	-0.00021	0.00001	0.
0.300	0.00082	-0.23971-0.00642	0.04405	0.01298	-0.00513	-0.00005	0.04773	0.00072	-0.00766	0.01205	0.00001	-0.00047	0.00002	0.
0.400	0.00244	-0.29759-0.01440	0.07383	0.02256	-0.00882	-0.00015	0.06108	0.00167	-0.01323	0.01604	0.00002	-0.00084	0.00004	0.
0.500	0.00554	-0.33932-0.02622	0.10696	0.03423	-0.01321	-0.00035	0.07239	0.00316	-0.01990	0.02000	0.00004	-0.00132	0.00006	0.
0.600	0.01055	-0.36384-0.04163	0.14049	0.04759	-0.01806	-0.00070	0.08133	0.00524	-0.02737	0.02394	0.00006	-0.00190	0.00009	0.
0.700	0.01768	-0.37144-0.05987	0.17162	0.06214	-0.02312	-0.00124	0.08767	0.00794	-0.03528	0.02783	0.00010	-0.00259	0.00013	0.
0.800	0.02693	-0.36359-0.07982	0.19798	0.07739	-0.02813	-0.00201	0.09129	0.01122	-0.04326	0.03169	0.00015	-0.00339	0.00016	0.
0.900	0.03803	-0.34268-0.10015	0.21780	0.09284	-0.03282	-0.00303	0.09219	0.01501	-0.05097	0.03549	0.00022	-0.00429	0.00021	0.
1.000	0.05050	-0.31163-0.11950	0.23003	0.10803	-0.03697	-0.00432	0.09044	0.01921	-0.05807	0.03923	0.00030	-0.00530	0.00025	0.
1.500	0.11012	-0.10846-0.16738	0.18493	0.16657	-0.04396	-0.01433	0.05067	0.04134	-0.07614	0.05672	0.00110	-0.01187	0.00056	0.
2.000	0.12191	0.00972-0.12274	0.06712	0.17936	-0.02497	-0.02576	-0.00915	0.05223	-0.05930	0.07139	0.00276	-0.02067	0.00098	0.
3.000	0.04384	-0.00466-0.00535	-0.01681	0.10613	0.04083	-0.02693	-0.06528	0.02126	0.01417	0.08849	0.00950	-0.04137	0.00206	0.
4.000	-0.00010	-0.02285	0.00248	0.01109	0.02658	0.06961	-0.00001	-0.03349	-0.02373	0.03933	0.08766	0.01972	-0.05813	0.00333
5.000	0.00134	-0.00503	-0.01336	0.01440	-0.00798	0.05951	0.02516	0.00582	-0.03671	0.01911	0.07388	0.02969	-0.06440	0.00463
8.000	0.01272	0.00897	-0.00244	-0.00891	-0.00698	0.01115	0.02817	0.01689	-0.00015	-0.01857	0.02370	0.03591	-0.03765	0.00740

SIN THETA/ LAMBDA	RN 4P4P J(0)	RN 4P4P J(2)	RN 4P4S J(1)	RN 4P3D J(1)	RN 4P3D J(3)	RN 4P3P J(0)	RN 4P3P J(2)	RN 4P3S J(1)	RN 4P2P J(0)	RN 4P2P J(2)	RN 4P2S J(1)	RN 4P1S J(1)	RN 4S4S J(0)	RN 4S3D J(2)	
0.005	0.99997	0.00001	-0.00441	0.00034	0.	0.	-0.	0.00064	0.00005	-0.	0.00014	0.00003	0.99997	-0.	
0.010	0.99987	0.00005	-0.00883	0.00068	0.	0.	0.00001	-0.00001	0.00127	0.00005	-0.	0.00028	0.00006	0.99987	-0.
0.050	0.99667	0.00133	-0.04403	0.00339	0.	0.	0.00041	-0.00017	0.00636	0.00007	-0.00001	0.00140	0.00028	0.99672	-0.00011
0.100	0.98674	0.00529	-0.08741	0.00672	0.00002	0.00166	-0.00066	0.01264	0.00013	-0.00003	0.00279	0.00056	0.98692	-0.00046	
0.150	0.97037	0.01179	-0.12952	0.00996	0.00007	0.00371	-0.00148	0.01879	0.00024	-0.00008	0.00419	0.00084	0.97078	-0.00102	
0.200	0.94786	0.02065	-0.16977	0.01304	0.00015	0.00656	-0.00261	0.02473	0.00039	-0.00014	0.00558	0.00112	0.94856	-0.00179	
0.300	0.88601	0.04457	-0.24249	0.01857	0.00051	0.01450	-0.00572	0.03571	0.00083	-0.00031	0.00834	0.00168	0.88743	-0.00392	
0.400	0.80529	0.07477	-0.30186	0.02297	0.00117	0.02516	-0.00982	0.04511	0.00143	-0.00055	0.01107	0.00224	0.80747	-0.00669	
0.500	0.71080	0.10846	-0.34534	0.02596	0.00220	0.03810	-0.01466	0.05253	0.00221	-0.00086	0.01376	0.00280	0.71357	-0.00991	
0.600	0.60816	0.14267	-0.37171	0.02733	0.00363	0.05280	-0.01996	0.05766	0.00315	-0.00124	0.01639	0.00336	0.61120	-0.01338	
0.700	0.50297	0.17455	-0.38105	0.02695	0.00545	0.06871	-0.02540	0.06029	0.00426	-0.00168	0.01896	0.00392	0.50586	-0.01686	
0.800	0.40039	0.20170	-0.37463	0.02478	0.00763	0.08520	-0.03068	0.06034	0.00554	-0.00219	0.02145	0.00447	0.40267	-0.02009	
0.900	0.30474	0.22229	-0.35464	0.02084	0.01012	0.10170	-0.03549	0.05782	0.00697	-0.00275	0.02385	0.00503	0.30601	-0.02287	
1.000	0.21934	0.23522	-0.32389	0.01526	0.01280	0.11763	-0.03954	0.05287	0.00856	-0.00338	0.02615	0.00558	0.21929	-0.02499	
1.500	-0.01367	0.19114	-0.11495	-0.02956	0.02519	0.17323	-0.04223	0.00142	0.01865	-0.000726	0.03580	0.00834	-0.01955	-0.02124	
2.000	-0.01027	0.07209	0.00676	-0.07692	0.02617	0.17166	-0.01400	-0.05985	0.03151	-0.01196	0.04143	0.01104	-0.01428	0.00577	
3.000	0.05130	-0.00735	-0.01856	-0.09525	-0.01224	0.06934	0.05998	-0.09142	0.05960	-0.02035	0.03804	0.01624	0.04935	0.06492	
4.000	0.01428	0.02301	-0.02987	-0.04104	-0.04955	0.00122	0.06793	-0.03545	0.08005	-0.02194	0.01830	0.02101	0.00789	0.06303	
5.000	-0.00223	0.02252	-0.00521	0.00539	-0.05199	0.00067	0.03450	0.00366	0.08558	-0.01468	-0.00644	0.02522	-0.00458	0.02618	
8.000	0.01168	-0.00109	-0.00379	0.01695	-0.00227	0.02417	-0.00098	-0.01023	0.04530	0.02157	-0.03427	0.03322	0.00996	-0.01935	

SIN THETA/ LAMBDA	RN 4S3P J(1)	RN 4S3S J(0)	RN 4S2P J(1)	RN 4S2S J(0)	RN 4S1S J(0)	RN 3D3D J(0)	RN 3D3D J(2)	RN 3D3D J(4)	RN 3D3P J(1)	RN 3D3P J(3)	RN 3D3S J(2)	RN 3D2P J(1)	RN 3D2P J(3)	RN 3D2S J(2)
0.005	0.00046	0.	0.00005	0.00003	0.	0.99999	0.	0.	-0.00168-0.	0.	0.00060	0.	-0.	
0.010	0.00091	0.00001	0.00010	0.00003	0.	0.99998	0.00001	0.	-0.00336-0.	0.00001	0.00121	0.	-0.	
0.050	0.00455	0.00042	0.00051	0.00005	0.00001	0.99950	0.00020	0.	-0.01677-0.	0.00023	0.00603	0.	-0.00006	
0.100	0.00904	0.00169	0.00102	0.00013	0.00001	0.99799	0.00080	0.	-0.03349-0.00002	0.00090	0.01206	0.	-0.00023	
0.150	0.01340	0.00379	0.00153	0.00026	0.00001	0.99549	0.00180	0.	-0.05011-0.00006	0.00202	0.01808	0.00001	-0.00051	
0.200	0.01758	0.00670	0.00203	0.00044	0.00002	0.99200	0.00319	0.	-0.06660-0.00015	0.00359	0.02408	0.00002	-0.00091	
0.300	0.02513	0.01482	0.00303	0.00095	0.00005	0.98210	0.00713	0.00002	-0.09894-0.00049	0.00800	0.03600	0.00006	-0.00205	
0.400	0.03128	0.02569	0.00400	0.00167	0.00008	0.96841	0.01255	0.00007	-0.13016-0.00115	0.01405	0.04779	0.00014	-0.00363	
0.500	0.03566	0.03888	0.00495	0.00258	0.00012	0.95110	0.01934	0.00016	-0.15992-0.00221	0.02162	0.05940	0.00027	-0.00564	
0.600	0.03801	0.05383	0.00585	0.00370	0.00018	0.93038	0.02740	0.00033	-0.18790-0.00376	0.03055	0.07078	0.00046	-0.00807	
0.700	0.03816	0.06996	0.00671	0.00500	0.00024	0.90649	0.03659	0.00059	-0.21384-0.00585	0.04066	0.08190	0.00073	-0.01089	
0.800	0.03606	0.08663	0.00751	0.00650	0.00031	0.87970	0.04676	0.00099	-0.23748-0.00853	0.05177	0.09272	0.00108	-0.01410	
0.900	0.03174	0.10323	0.00826	0.00818	0.00039	0.85033	0.05773	0.00155	-0.25864-0.01184	0.06365	0.10320	0.00153	-0.01766	
1.000	0.02535	0.11915	0.00893	0.01003	0.00048	0.81869	0.06933	0.00230	-0.27715-0.01577	0.07608	0.11330	0.00207	-0.02154	
1.500	-0.02805	0.17248	0.01099	0.02163	0.00108	0.63826	0.13069	0.00975	-0.32784-0.04415	0.13871	0.15721	0.00650	-0.04492	
2.000	-0.08446	0.16504	0.01033	0.03600	0.00190	0.45005	0.18329	0.02436	-0.31360-0.08131	0.18479	0.18831	0.01394	-0.07191	
3.000	-0.10114	0.05282	-0.00027	0.06509	0.00419	0.15709	0.22178	0.06708	-0.17595-0.14028	0.18621	0.21036	0.03587	-0.12132	
4.000	-0.03718	-0.00908	-0.01943	0.08156	0.00723	0.01516	0.18416	0.10167	-0.03638-0.14202	0.10530	0.19035	0.05977	-0.14781	
5.000	0.00338	-0.00035	-0.03796	0.07871	0.01086	-0.02728	0.12297	0.11108	0.03522-0.10161	0.02264	0.14970	0.07719	-0.14724	
8.000	-0.01132	0.01831	-0.04374	0.02060	0.02299	-0.01213	0.01888	0.06009	0.03145	0.00444	-0.03875	0.04295	0.07470	-0.07288

SIN THETA/ LAMBDA	RN 3D1S J(2)	RN 3P3P J(0)	RN 3P3P J(2)	RN 3P3S J(1)	RN 3P2P J(0)	RN 3P2P J(2)	RN 3P2S J(1)	RN 3P1S J(1)	RN 3S3S J(0)	RN 3S2P J(1)	RN 3S2S J(0)	RN 3S1S J(0)	RN 2P2P J(0)	RN 2P2P J(2)
0.005	0.	0.99999	0.	-0.00198-0.	-0.	0.00037	0.00006	0.99999	0.00014-0.	0.00002	1.00000	0.		
0.010	0.	0.99997	0.00001	-0.00395-0.	-0.	0.00074	0.00012	0.99997	0.00029	0.	0.00002	1.00000	0.	
0.050	0.	0.99934	0.00026	-0.01974	0.00007	-0.00003	0.00372	0.00059	0.99929	0.00143	0.00008	0.00002	0.99991	0.00003
0.100	0.00001	0.99738	0.00105	-0.03942	0.00029	-0.00012	0.00744	0.00119	0.99714	0.00286	0.00033	0.00003	0.99965	0.00014
0.150	0.00001	0.99411	0.00235	-0.05898	0.00065	-0.00026	0.01114	0.00178	0.99358	0.00427	0.00074	0.00004	0.99922	0.00031
0.200	0.00002	0.98954	0.00417	-0.07835	0.00116	-0.00046	0.01482	0.00238	0.98861	0.00568	0.00132	0.00006	0.99861	0.00055
0.300	0.00005	0.97662	0.00931	-0.11630	0.00260	-0.00104	0.02210	0.00356	0.97454	0.00843	0.00297	0.00011	0.99689	0.00124
0.400	0.00008	0.95878	0.01635	-0.15280	0.00461	-0.00184	0.02923	0.00475	0.95514	0.01108	0.00525	0.00018	0.99447	0.00221
0.500	0.00013	0.93630	0.02515	-0.18744	0.00716	-0.00285	0.03615	0.00593	0.93070	0.01360	0.00815	0.00027	0.99138	0.00344
0.600	0.00019	0.90948	0.03553	-0.21980	0.01025	-0.00406	0.04282	0.00712	0.90159	0.01595	0.01165	0.00038	0.98761	0.00494
0.700	0.00026	0.87870	0.04728	-0.24954	0.01384	-0.00547	0.04919	0.00830	0.86821	0.01811	0.01571	0.00051	0.98318	0.00670
0.800	0.00034	0.84437	0.06017	-0.27637	0.01791	-0.00704	0.05523	0.00948	0.83107	0.02004	0.02030	0.00067	0.97809	0.00871
0.900	0.00042	0.80696	0.07396	-0.30005	0.02242	-0.00875	0.06089	0.01066	0.79065	0.02173	0.02539	0.00084	0.97237	0.01098
1.000	0.00052	0.76695	0.08837	-0.32038	0.02737	-0.01066	0.06614	0.01183	0.74753	0.02316	0.03093	0.00103	0.96602	0.01348
1.500	0.00115	0.54529	0.16079	-0.36980	0.05706	-0.02144	0.08523	0.01765	0.51087	0.02569	0.06374	0.00229	0.92539	0.02927
2.000	0.00200	0.32972	0.21369	-0.34074	0.09135	-0.03255	0.09104	0.02334	0.28615	0.01991	0.10033	0.00402	0.87178	0.04956
3.000	0.00418	0.05329	0.21543	-0.16828	0.15385	-0.04611	0.06595	0.03421	0.01833	-0.01279	0.16079	0.00883	0.73717	0.09733
4.000	0.00673	-0.01154	0.12771	-0.02719	0.18678	-0.04021	0.01349	0.04408	-0.02072	-0.05663	0.18075	0.01517	0.58651	0.14425
5.000	0.00929	0.01514	0.04436	0.01731	0.18478	-0.01786	-0.03703	0.05263	0.02055	-0.09080	0.15989	0.02266	0.44101	0.18068
8.000	0.01451	0.04864	0.00184	-0.02648	0.08657	0.05370	-0.07225	0.06814	0.03272	-0.08549	0.03417	0.04708	0.13629	0.20222

SIN THETA/ LAMBDA	RN 2P2S J(1)	RN 2P1S J(1)	RN 2S2S J(0)	RN 2S1S J(0)	RN 1S1S J(0)	FR 7S7S J(0)	FR 7S6P J(1)	FR 7S6S J(0)	FR 7S5D J(2)	FR 7S5P J(1)	FR 7S5S J(0)	FR 7S4F J(3)	FR 7S4D J(2)	FR 7S4P J(1)
0.005	-0.00072	0.00016	1.00000	0.	1.00000	0.99091	0.00858	0.00032	-0.00001	0.00054	0.00001	-0.	-0.	0.00007
0.010	-0.00144	0.00032	1.00000	0.	1.00000	0.96409	0.01702	0.00128	-0.00003	0.00109	0.00005	-0.	-0.	0.00014
0.050	-0.00720	0.00161	0.99988	0.00001	0.99999	0.38173	0.06350	0.02801	-0.00075	0.00529	0.00121	-0.	-0.00004	0.00072
0.100	-0.01439	0.00323	0.99953	0.00003	0.99997	0.04280	0.04318	0.07551	-0.00326	0.00963	0.00467	-0.00001	-0.00015	0.00141
0.150	-0.02157	0.00484	0.99894	0.00007	0.99993	0.02129	0.01668	0.09056	-0.00758	0.01215	0.00985	-0.00002	-0.00034	0.00205
0.200	-0.02875	0.00645	0.99812	0.00012	0.99988	0.01372	0.05159	0.06742	-0.01276	0.01222	0.01590	-0.00004	-0.00060	0.00262
0.300	-0.04305	0.00968	0.99578	0.00027	0.99973	0.00554	0.03246	0.00326	-0.01914	0.00510	0.02638	-0.00003	-0.00131	0.00345
0.400	-0.05726	0.01289	0.99250	0.00047	0.99951	0.00264	0.00064	-0.01146	-0.01466	0.00693	0.02952	0.00018	-0.00220	0.00371
0.500	-0.07135	0.01611	0.98831	0.00074	0.99924	0.00096	0.00520	-0.00091	-0.00331	-0.01636	0.02456	0.00071	-0.00310	0.00330
0.600	-0.08530	0.01931	0.98321	0.00107	0.99891	0.00126	0.00004	0.00668	0.00712	-0.01920	0.01485	0.00156	-0.00379	0.00219
0.700	-0.09907	0.02250	0.97722	0.00145	0.99851	0.00160	0.00426	0.00667	0.01241	-0.01612	0.00525	0.00255	-0.00407	0.00050
0.800	-0.11265	0.02568	0.97035	0.00189	0.99805	0.00089	0.00488	0.00326	0.01258	-0.01017	0.00120	0.00343	-0.00379	0.00156
0.900	-0.12599	0.02885	0.96263	0.00239	0.99754	0.00014	-0.00332	0.00016	0.00968	-0.00431	-0.00379	0.00397	-0.00295	0.00371
1.000	-0.13908	0.03201	0.95407	0.00295	0.99696	0.00026	-0.00136	-0.00131	0.00584	-0.00019	-0.00340	0.00403	-0.00164	0.00567
1.500	-0.19991	0.04751	0.89961	0.00656	0.99318	0.00028	-0.00012	0.00132	-0.00071	-0.00126	0.00375	-0.00095	0.00554	-0.00783
2.000	-0.25120	0.06242	0.82853	0.01150	0.98792	0.00012	-0.00078	0.00025	0.00173	-0.00208	0.00026	-0.00445	0.00501	-0.00199
3.000	-0.31900	0.08982	0.65453	0.02482	0.97314	0.00025	0.00010	0.00019	-0.00013	0.00024	0.00060	-0.00069	-0.00061	-0.00002
4.000	-0.33897	0.11311	0.46898	0.04168	0.95299	0.00003	-0.00017	0.00020	-0.00003	-0.00058	0.00046	0.00124	0.00019	-0.00136
5.000	-0.31931	0.13159	0.30202	0.06062	0.92800	0.00009	-0.00005	0.00006	0.00025	-0.00024	-0.00009	0.00079	0.00066	-0.00042
8.000	-0.15991	0.15725	0.02354	0.11601	0.83037	0.00018	-0.00002	0.00006	-0.00015	-0.00005	0.00021	-0.00009	-0.00037	-0.00012

SIN THETA/ LAMBDA	FR 7S4S J(0)	FR 7S3D J(2)	FR 7S3P J(1)	FR 7S3S J(0)	FR 7S2P J(1)	FR 7S2S J(0)	FR 7S1S J(0)	FR 6P6P J(0)	FR 6P6P J(2)	FR 6P6S J(1)	FR 6P5D J(1)	FR 6P5D J(3)	FR 6P5P J(0)	FR 6P5P J(2)
0.005	0.	-0.	0.00001	0.	0.	-0.	0.	0.99888	0.00045	-0.02326	0.00514	0.	0.00008	-0.00003
0.010	0.	-0.	0.00002	0.	0.	-0.	0.	0.99554	0.00178	-0.04642	0.01026	0.00001	0.00030	-0.00012
0.050	0.00010	-0.	0.00012	0.00001	0.00002	0.	0.	0.89382	0.04154	-0.21679	0.04886	0.00071	0.00741	-0.00294
0.100	0.00038	-0.00001	0.00024	0.00004	0.00004	0.	0.	0.63323	0.13402	-0.35049	0.08381	0.00516	0.02770	-0.01065
0.150	0.00086	-0.00002	0.00036	0.00009	0.00006	0.00001	0.	0.34145	0.21354	-0.35925	0.09628	0.01483	0.05574	-0.02029
0.200	0.00150	-0.00003	0.00048	0.00015	0.00008	0.00001	0.	0.11697	0.23893	-0.29890	0.08544	0.02821	0.08488	-0.02837
0.300	0.00325	-0.00007	0.00070	0.00034	0.00012	0.00003	0.	-0.04948	0.15194	-0.09158	0.01994	0.05172	0.12347	-0.02942
0.400	0.00543	-0.00013	0.00090	0.00061	0.00015	0.00006	0.	-0.01883	0.03971	0.01412	-0.04723	0.05231	0.11960	-0.00774
0.500	0.00778	-0.00020	0.00107	0.00094	0.00019	0.00009	0.	0.02153	-0.00816	0.01851	-0.07712	0.02951	0.08339	0.02359
0.600	0.00999	-0.00029	0.00120	0.00133	0.00023	0.00013	0.00001	0.02778	-0.00854	-0.00593	-0.07070	-0.00140	0.03901	0.04800
0.700	0.01175	-0.00038	0.00128	0.00178	0.00026	0.00018	0.00001	0.01571	0.00457	-0.02067	-0.04639	-0.02606	0.00506	0.05708
0.800	0.01282	-0.00049	0.00132	0.00227	0.00029	0.00024	0.00001	0.00286	0.01358	-0.02070	-0.02092	-0.03832	-0.01192	0.05183
0.900	0.01309	-0.00059	0.00130	0.00279	0.00032	0.00030	0.00002	0.00392	0.01510	-0.01312	-0.00292	-0.03905	-0.01438	0.03819
1.000	0.01255	-0.00069	0.00121	0.00333	0.00035	0.00037	0.00002	0.00487	0.01172	-0.00482	0.00590	-0.03239	-0.00838	0.02256
1.500	0.00348	-0.00094	-0.00013	0.00577	0.00044	0.00080	0.00004	0.00477	-0.00147	-0.00073	-0.00673	0.00174	0.01349	-0.00283
2.000	-0.00131	-0.00036	-0.00232	0.00656	0.00044	0.00136	0.00008	0.00040	0.00245	-0.00332	-0.00543	-0.00266	0.00026	0.00769
3.000	0.00188	0.00216	-0.00427	0.00303	0.00007	0.00256	0.00017	0.00078	0.00005	0.00041	0.00117	-0.00243	0.00243	-0.00004
4.000	0.00071	0.00275	-0.00206	-0.00017	-0.00068	0.00334	0.00030	0.00066	0.00025	-0.00087	-0.00123	0.00047	0.00193	0.00068
5.000	-0.00021	0.00141	-0.00005	-0.00019	-0.00148	0.00336	0.00045	-0.00036	0.00095	-0.00048	-0.00054	-0.00045	-0.00003	0.00169
8.000	0.00045	-0.00083	-0.00043	0.00084	-0.00191	0.00100	0.00096	0.00034	-0.00009	0.00007	0.00057	-0.00022	0.00083	-0.00010

SIN THETA/ LAMBDA	FR 6P5S J(1)	FR 6P4F J(2)	FR 6P4F J(4)	FR 6P4D J(1)	FR 6P4D J(3)	FR 6P4P J(0)	FR 6P4P J(2)	FR 6P4S J(1)	FR 6P3D J(1)	FR 6P3D J(3)	FR 6P3P J(0)	FR 6P3P J(2)	FR 6P3S J(1)	FR 6P2P J(0)
0.005	0.00096-0.	0.	0.00031	0.	0.00002-0.	0.00027	0.00003	0.	-0.00001-0.	0.00007-0.	0.00015-0.	0.00074	0.	0.
0.010	0.00193-0.	0.	0.00063	0.	0.00003-0.00001	0.00053	0.00006	0.	-0.00001-0.	0.00015-0.	0.00074	0.	0.	0.
0.050	0.00900-0.00010	0.	0.00313	0.00001	0.00043-0.00017	0.00265	0.00032	0.	0.00003-0.00001	0.00074	0.	0.	0.	0.
0.100	0.01431-0.00043	0.00001	0.00615	0.00004	0.00164-0.00067	0.00518	0.00063	0.	0.00013-0.00006	0.00148	0.00001	0.	0.	0.
0.150	0.01333-0.00104	0.00003	0.00894	0.00013	0.00374-0.00148	0.00748	0.00094	0.	0.00031-0.00013	0.00222	0.00002	0.	0.	0.
0.200	0.00525-0.00198	0.00007	0.01138	0.00035	0.00654-0.00257	0.00945	0.00124	0.00001	0.00057-0.00023	0.00293	0.00004	0.	0.	0.
0.300	-0.02680-0.00503	0.00020	0.01480	0.00117	0.01400-0.00538	0.01200	0.00181	0.00003	0.00128-0.00052	0.00430	0.00010	0.	0.	0.
0.400	-0.06175-0.00931	0.00015	0.01558	0.00270	0.02313-0.00856	0.01224	0.00232	0.00006	0.00227-0.00091	0.00557	0.00019	0.	0.	0.
0.500	-0.08023-0.01373	0.00047	0.01329	0.00495	0.03265-0.01140	0.00990	0.00275	0.00012	0.00352-0.00139	0.00668	0.00029	0.	0.	0.
0.600	-0.07642-0.01683	0.00196	0.00801	0.00763	0.04119-0.01317	0.00514	0.00306	0.00022	0.00499-0.00196	0.00761	0.00042	0.	0.	0.
0.700	-0.05676-0.01750	0.00431	0.00044	0.01037	0.04752-0.01330	0.00145	0.00324	0.00035	0.00667-0.00260	0.00832	0.00057	0.	0.	0.
0.800	-0.03206-0.01534	0.00713	0.00828	0.01245	0.05081-0.01155	0.00900	0.00327	0.00053	0.00852-0.00327	0.00878	0.00075	0.	0.	0.
0.900	-0.01097-0.01071	0.00987	0.01687	0.01343	0.05077-0.00800	0.01650	0.00313	0.00075	0.01049-0.00397	0.00898	0.00095	0.	0.	0.
1.000	0.00239-0.00446	0.01197	0.02421	0.01297	0.04762-0.00306	0.02303	0.00280	0.00103	0.01253-0.00465	0.00889	0.00117	0.	0.	0.
1.500	-0.00582	0.02108-0.00638	0.02809	0.00508	0.01175	0.02113-0.02751	0.00159	0.00287	0.02178-0.00675	0.00428	0.00258	0.	0.	0.
2.000	-0.00778	0.01577	0.00880	0.00584	0.01764	0.00409	0.01813	0.00619	0.00844	0.00417	0.02517-0.00479	0.00442	0.	0.
3.000	0.00090	0.00502	0.00907	0.00141	0.00392	0.00726	0.00131	0.00015	-0.01470	0.00031	0.01344	0.00652-0.01375	0.00865	0.
4.000	-0.00224	0.00460	0.00041	0.00358	0.00090	0.00348	0.00250	0.00496	-0.00794	0.00637	0.00123	0.01059-0.00706	0.01204	0.
5.000	-0.00091	0.00122	0.00280	0.00139	0.00163	0.00024	0.00379	0.00149	-0.00015	0.00816	0.00048	0.00635-0.00008	0.01330	0.
8.000	-0.00020	0.00034	0.00037	0.00151	0.00060	0.00184	0.00020	0.00044	0.00287	0.00075	0.00388	0.00028-0.00138	0.00757	0.

SIN THETA/ LAMBDA	FR 6P2P J(2)	FR 6P2S J(1)	FR 6P1S J(1)	FR 6S6S J(0)	FR 6S5D J(2)	FR 6S5P J(1)	FR 6S5S J(0)	FR 6S4F J(3)	FR 6S4D J(2)	FR 6S4P J(1)	FR 6S4S J(0)	FR 6S3D J(2)	FR 6S3P J(1)	FR 6S3S J(0)
0.005	-0.	0.00002	0.	0.99916-0.00008	0.00294	0.00007-0.	-0.	0.00032	0.00003-0.	0.00005-0.00001	0.00011-0.00001	0.00001	0.	0.
0.010	-0.	0.00004	0.00001	0.99665-0.00023	0.00588	0.00027-0.	-0.00001	0.00064	0.00005-0.	0.00011-0.00001	0.00001	0.	0.	0.
0.050	-0.	0.00020	0.00004	0.91919-0.00805	0.02826	0.00665-0.00001	-0.00017	0.00317	0.00046-0.00001	0.00052	0.00003	0.	0.	0.
0.100	-0.	0.00041	0.00009	0.70968-0.02925	0.04973	0.02514-0.00004	-0.00069	0.00622	0.00175-0.00004	0.00105	0.00016	0.	0.	0.
0.150	-0.00001	0.00061	0.00013	0.44902-0.05603	0.05949	0.05153-0.00011	-0.00154	0.00906	0.00385-0.00008	0.00156	0.00037	0.	0.	0.
0.200	-0.00002	0.00082	0.00017	0.21498-0.07951	0.05566	0.08048-0.00019	-0.00272	0.01156	0.00673-0.00014	0.00206	0.00066	0.	0.	0.
0.300	-0.00004	0.00122	0.00026	0.03118-0.09250	0.01487	0.12534-0.00007	-0.00594	0.01512	0.01446-0.00032	0.00301	0.00148	0.	0.	0.
0.400	-0.00008	0.00162	0.00035	0.04200-0.05734	0.04067	0.13284	0.00103	0.00989	0.01614	0.02406-0.00057	0.00387	0.00262	0.	0.
0.500	-0.00012	0.00202	0.00043	0.00786-0.00346	0.07802	0.10437	0.00359	0.01380	0.01412	0.03432-0.00088	0.00459	0.00405	0.	0.
0.600	-0.00017	0.00241	0.00052	0.03221	0.03865-0.08481	0.05938	0.00744	-0.01669	0.00909	0.04382-0.00125	0.00515	0.00574	0.	0.
0.700	-0.00023	0.00279	0.00061	0.02711	0.05673-0.06772	0.01828	0.01174	-0.01767	0.00157	0.05127-0.00166	0.00552	0.00767	0.	0.
0.800	-0.00030	0.00316	0.00069	0.01161	0.05404-0.04080	0.00759	0.01539	-0.01622	-0.00744	0.05566-0.00210	0.00566	0.00978	0.	0.
0.900	-0.00038	0.00352	0.00078	0.00078	0.03998-0.01595	0.01682	0.01744	-0.01234	-0.01672	0.05651-0.00255	0.00555	0.01203	0.	0.
1.000	-0.00047	0.00387	0.00087	0.00600	0.02326	0.00069-0.01394	0.01741	-0.00650	-0.02510	0.05388-0.00299	0.00518	0.01436	0.	0.
1.500	-0.00101	0.00538	0.00129	0.00577	0.00279-0.00587	0.01609	0.00460	0.02414	-0.03343	0.01442-0.00402	0.00062	0.02477	0.	0.
2.000	-0.00170	0.00636	0.00171	0.00097	0.00745-0.00879	0.00092	-0.01916	0.02131	-0.00824	0.00553-0.00148	-0.01002	0.02808	0.	0.
3.000	-0.00306	0.00624	0.00252	0.00088	0.00056	0.00101	0.00261	-0.00285	-0.00014	0.00808	0.00927-0.01825	0.01289	0.	0.
4.000	-0.00353	0.00353	0.00327	0.00077	0.00014	0.00248	0.00195	0.00531	0.00083	0.00581	0.00301	0.01177-0.00875	0.00075	0.
5.000	-0.00264	0.00027	0.00394	0.00036	0.00102	0.00101	0.00038	0.00337	0.00282	0.00177	0.00091	0.00602-0.00020	0.00082	0.
8.000	0.00306	0.00540	0.00524	0.00037	0.00063	0.00023	0.00091	0.00039	0.00159	0.00053	0.00191	0.00354-0.00183	0.00358	0.

SIN THETA/ LAMBDA	FR 6S2P J(1)	FR 6S2S J(0)	FR 6S1S J(0)	FR 5D5D J(0)	FR 5D5D J(2)	FR 5D5D J(4)	FR 5D5P J(1)	FR 5D5P J(3)	FR 5D5S J(2)	FR 5D4F J(1)	FR 5D4F J(3)	FR 5D4F J(5)	FR 5D4D J(0)	FR 5D4D J(2)
0.005	0.00001-0.	0.	0.	0.99978	0.00009	0.	-0.01019-0.	0.00007	0.00160	0.	0.	0.	0.00002-0.00001	0.00001
0.010	0.00002-0.	0.	0.	0.99913	0.00035	0.	-0.02038-0.	0.00026	0.00320	0.	0.	0.	0.00007-0.00003	0.00003
0.050	0.00008	0.	0.	0.97839	0.00860	0.00003-0.10057-0.00040	0.00650	0.01584	0.00005	0.	0.	0.	0.00184-0.00073	0.00073
0.100	0.00017	0.00001	0.	0.91614	0.03297	0.00043-0.19301-0.00307	0.02517	0.03051	0.00041	0.	0.	0.	0.00724-0.00287	0.00287
0.150	0.00025	0.00003	0.	0.82038	0.06907	0.00201-0.27032-0.00981	0.05368	0.04333	0.00133	0.00001	0.00001	0.00001	0.01592-0.00625	0.00625
0.200	0.00033	0.00006	0.	0.70145	0.11127	0.00580-0.32742-0.02158	0.08855	0.05318	0.00300	0.00006	0.00006	0.00006	0.02739-0.01060	0.01060
0.300	0.00050	0.00014	0.00001	0.44020	0.19023	0.02280-0.37320-0.05908	0.16123	0.05227	0.00885	0.00040	0.00040	0.00040	0.05616-0.02079	0.02079
0.400	0.00066	0.00025	0.00001	0.21187	0.23335	0.05168-0.33758-0.10551	0.21399	0.05641	0.01746	0.00142	0.00142	0.00142	0.08775-0.03036	0.03036
0.500	0.00082	0.00040	0.00002	0.05787	0.22983	0.08472-0.25257-0.14505	0.23062	0.03795	0.02702	0.00352	0.00352	0.00352	0.11638-0.03644	0.03644
0.600	0.00097	0.00057	0.00003-0.01942	0.19061	0.11167-0.15488-0.16568	0.21128	0.01164	0.03524	0.00685	0.13748-0.03716	0.03716	0.03716	0.13748-0.03716	0.03716
0.700	0.00111	0.00078	0.00004-0.03989	0.13516	0.12550-0.07145-0.16373	0.16755-0.01708	0.04018	0.01123	0.14851-0.03195	0.03195	0.03195	0.03195	0.14851-0.03195	0.03195
0.800	0.00125	0.00101	0.00005-0.02863	0.08067	0.12454-0.01484-0.14312	0.11459-0.04352	0.04075	0.01612	0.14896-0.02150	0.02150	0.02150	0.02150	0.14896-0.02150	0.02150
0.900	0.00138	0.00128	0.00007-0.00598	0.03742	0.11147	0.01424-0.11161	0.06514-0.05444	0.03681	0.02084	0.14004-0.00735	0.00735	0.00735	0.14004-0.00735	0.00735
1.000	0.00150	0.00157	0.00008	0.01550	0.00893	0.09100	0.02185-0.07727	0.02685-0.07827	0.02904	0.02469	0.12404	0.00853	0.12404	0.00853
1.500	0.00189	0.00344	0.00019	0.02556	0.00424	0.00424-0.02377	0.00668-0.00135-0.05990-0.02609	0.02020	0.02433	0.06082	0.06082	0.06082	0.06082	0.06082
2.000	0.00187	0.00582	0.00033-0.00094	0.01846	0.00046-0.01359-0.01019	0.02030-0.00560-0.04482-0.00734-0.00675	0.04330	0.04330	0.04330	0.04330	0.04330	0.04330	0.04330	0.04330
3.000	0.00029	0.01094	0.00074	0.00541	0.00049	0.00977	0.00308-0.00631-0.00197	0.01795-0.01225-0.02613	0.01724-0.00124	0.00124	0.00124	0.00124	0.01724-0.00124	0.00124
4.000	-0.00293	0.01428	0.00127	0.00518	0.00095	0.00134-0.00361	0.00136-0.00013	0.00596	0.00521-0.01130	0.01130	0.01130	0.01130	0.01130	0.00405
5.000	-0.00634	0.01435	0.00192	0.00088	0.00358-0.00027-0.00177-0.00135	0.00269	0.00032	0.00592-0.00061	0.00155	0.00964	0.00964	0.00964	0.00964	0.00964
8.000	-0.00817	0.00428	0.00411-0.00073	0.00123	0.00199	0.00178-0.00076-0.00160-0.00035	0.00073	0.00225-0.00176	0.00295	0.00295	0.00295	0.00295	0.00295	0.00295

SIN THETA/ LAMBDA	FR 5D4D J(4)	FR 5D4P J(1)	FR 5D4P J(3)	FR 5D4S J(2)	FR 5D3D J(0)	FR 5D3D J(2)	FR 5D3D J(4)	FR 5D3P J(1)	FR 5D3P J(3)	FR 5D3S J(2)	FR 5D2P J(1)	FR 5D2P J(3)	FR 5D2S J(2)	FR 5D1S J(2)
0.005	-0.	0.00081	0.	-0.00001	0.	-0.	-0.	0.00027	0.	-0.	0.00007	0.	-0.	0.
0.010	-0.	0.00162	0.	-0.00002	0.	-0.	-0.	0.00054	0.	-0.	0.00015	0.	-0.	0.
0.050	-0.	0.00804	0.00003-0.00051	0.00009-0.00004-0.	0.00270	0.	-0.00006	0.00074	0.	-0.	0.	0.	-0.	0.
0.100	-0.00002	0.01555	0.00020-0.00201	0.00036-0.00014-0.	0.00540	0.00001-0.00024	0.00149	0.	-0.00002	0.	0.	0.	-0.00002	0.
0.150	-0.00009	0.02206	0.00065-0.00439	0.00081-0.00032-0.	0.00806	0.00002-0.00054	0.00223	0.	-0.00004	0.	0.	0.	-0.00004	0.
0.200	-0.00026	0.02714	0.00149-0.00747	0.00143-0.00057-0.	0.01068	0.00004-0.00096	0.00297	0.	-0.00007	0.	0.	0.	-0.00007	0.
0.300	-0.00120	0.03177	0.00454-0.01478	0.00321-0.00128-0.	0.01573	0.00015-0.00213	0.00445	0.	-0.00016	0.00001	0.00001	0.00001	-0.00016	0.00001
0.400	-0.00331	0.02810	0.00934-0.02182	0.00566-0.00225-0.00001	0.02044	0.00035-0.00373	0.00593	0.	-0.00028	0.00002	0.00002	0.00002	-0.00028	0.00002
0.500	-0.00681	0.01661	0.01519-0.02654	0.00876-0.00346-0.00003	0.02469	0.00068-0.00571	0.00740	0.00001-0.00044	0.00003	0.00003	0.00003	0.00003	-0.00044	0.00003
0.600	-0.01148-0.00074	0.02094-0.02740	0.01243-0.00488-0.00007	0.02840	0.00116-0.00802	0.00886	0.00002-0.00064	0.00004	0.00004	0.00004	0.00004	0.00004	-0.00064	0.00004
0.700	-0.01671-0.02108	0.02532-0.02376	0.01662-0.00646-0.00015	0.03145	0.00182-0.01058	0.01031	0.00003-0.00087	0.00005	0.00005	0.00005	0.00005	0.00005	-0.00087	0.00005
0.800	-0.02163-0.04135	0.02728-0.01584	0.02123-0.00815-0.00027	0.03377	0.00267-0.01332	0.01175	0.00004-0.00114	0.00006	0.00006	0.00006	0.00006	0.00006	-0.00114	0.00006
0.900	-0.02537-0.05893	0.02621-0.00462	0.02614-0.00988-0.00045	0.03530	0.00372-0.01614	0.01317	0.00006-0.00145	0.00008	0.00008	0.00008	0.00008	0.00008	-0.00145	0.00008
1.000	-0.02723-0.07196	0.02202	0.00847	0.03123-0.01158-0.00071	0.03601	0.00496-0.01895	0.01458	0.00009-0.00179	0.00010	0.00010	0.00010	0.00010	-0.00179	0.00010
1.500	-0.00567-0.00315-0.00387	0.02301	0.05554	0.05474-0.01716-0.00346	0.02760	0.01309-0.02936	0.02124	0.00033-0.00408	0.00022	0.00022	0.00022	0.00022	-0.00408	0.00022
2.000	0.02753-0.00847-0.04375	0.03809	0.06567-0.01392-0.00810	0.00669	0.01995-0.02817	0.02700	0.00086-0.00723	0.00039	0.00039	0.00039	0.00039	0.00039	-0.00723	0.00039
3.000	0.02243	0.00316-0.00709-0.00727	0.04560	0.01024-0.01234-0.02248	0.01371-0.00146	0.03432	0.00318-0.01505	0.00081	0.00081	0.00081	0.00081	0.00081	-0.01505	0.00081
4.000	0.00156-0.00869	0.00272	0.00170	0.01382	0.02551-0.00370-0.01514-0.00495	0.01381	0.03492	0.00702-0.02199	0.00132	0.00132	0.00132	0.00132	-0.02199	0.00132
5.000	-0.00030-0.00315-0.00387	0.00179	0.00051-0.00205	0.02411	0.00719	0.00051-0.01323	0.00871	0.03018	0.01107-0.02520	0.00185	0.00185	0.00185	-0.02520	0.00185
8.000	0.00509	0.00380-0.00133-0.00350-0.00307	0.00503	0.01147	0.00719-0.00064-0.00745	0.01028	0.01451-0.01581	0.00299	0.00299	0.00299	0.00299	0.00299	-0.01581	0.00299

SIN THETA/ LAMBDA	FR 5P5P J(0)	FR 5P5P J(2)	FR 5P5S J(1)	FR 5P4F J(2)	FR 5P4F J(4)	FR 5P4D J(1)	FR 5P4D J(3)	FR 5P4P J(0)	FR 5P4P J(2)	FR 5P4S J(1)	FR 5P3D J(1)	FR 5P3D J(3)	FR 5P3P J(0)	FR 5P3P J(2)
0.005	0.99984	0.00006	-0.00952	-0.00001	0.	0.00130	0.	0.00002	-0.00001	0.00090	0.00010	0.	0.00005	-0.
0.010	0.99935	0.00026	-0.01902	-0.00005	0.	0.00259	0.	0.00007	-0.00003	0.00180	0.00019	0.	0.00005	-0.
0.050	0.98390	0.00642	-0.09411	-0.00121	0.	0.01285	0.00004	0.00174	-0.00069	0.00891	0.00096	0.	0.00016	-0.00004
0.100	0.93693	0.02493	-0.18202	-0.00473	-0.00003	0.02496	-0.00028	0.00687	-0.00273	0.01730	0.00192	0.	0.00050	-0.00018
0.150	0.86290	0.05336	-0.25821	-0.01027	-0.00015	0.03563	0.00093	0.01515	-0.00596	0.02465	0.00285	0.00001	0.00105	-0.00040
0.200	0.76760	0.08851	-0.31833	-0.01738	-0.00044	0.04426	0.00212	0.02617	-0.01017	0.03054	0.00377	0.00002	0.00183	-0.00071
0.300	0.54194	0.16356	-0.38114	-0.03397	-0.00201	0.05360	0.00649	0.05428	-0.02030	0.03657	0.00549	0.00008	0.00403	-0.00158
0.400	0.31726	0.22129	-0.36871	-0.04948	-0.00547	0.05101	0.01340	0.08615	-0.03039	0.03378	0.00701	0.00020	0.00706	-0.00278
0.500	0.13694	0.24399	-0.30100	-0.05946	-0.01106	0.03704	0.02189	0.11638	-0.03771	0.02230	0.00826	0.00040	0.01086	-0.00425
0.600	0.02035	0.22944	-0.20767	-0.06126	-0.01832	0.01441	0.03037	0.14037	-0.04017	0.00389	0.00916	0.00070	0.01535	-0.00597
0.700	-0.03512	0.18747	-0.11610	-0.05438	-0.02619	0.01293	0.03704	0.15500	-0.03675	-0.01866	0.00963	0.00112	0.02042	-0.00787
0.800	-0.04516	0.13293	-0.04420	-0.04016	-0.03332	0.04072	0.04043	0.15896	-0.02761	-0.04211	0.00963	0.00168	0.02597	-0.00987
0.900	-0.02921	0.07946	0.00109	-0.02111	-0.03847	-0.06528	0.03968	0.15269	-0.01385	-0.06344	0.00908	0.00238	0.03184	-0.01190
1.000	-0.00395	0.03615	0.02134	-0.00010	-0.04076	-0.08398	0.03466	0.13794	0.00275	-0.08031	0.00798	0.00322	0.03787	-0.01386
1.500	0.03635	-0.00278	-0.02414	0.06523	-0.01104	-0.07793	0.02408	0.02653	0.06723	-0.07730	-0.00553	0.00863	0.06437	-0.01941
2.000	-0.00129	0.02333	-0.02012	0.04267	0.03015	-0.01294	-0.05285	-0.01174	0.04995	-0.01403	-0.02548	0.01201	0.07283	-0.01287
3.000	0.00746	-0.00054	0.00211	-0.01509	0.02450	0.00324	-0.00985	0.02130	-0.00397	-0.00150	-0.04221	0.00009	0.03752	0.01977
4.000	0.00529	0.00218	-0.00648	-0.01291	-0.00182	-0.01028	0.00246	0.00949	0.00760	-0.01416	-0.02219	-0.01874	0.00311	0.03036
5.000	-0.00015	0.00484	-0.00247	-0.00334	-0.00808	-0.00379	-0.00483	-0.00074	0.01078	-0.00402	-0.00012	-0.02333	-0.00127	0.01786
8.000	0.00233	-0.00026	-0.00049	0.00096	-0.00103	0.00428	-0.00164	0.00525	-0.00056	-0.00131	0.00813	-0.00203	0.01105	-0.00076

SIN THETA/ LAMBDA	FR 5P3S J(1)	FR 5P2P J(0)	FR 5P2P J(2)	FR 5P2S J(1)	FR 5P1S J(1)	FR 5S5S J(0)	FR 5S4F J(3)	FR 5S4D J(2)	FR 5S4P J(1)	FR 5S4S J(0)	FR 5S3D J(2)	FR 5S3P J(1)	FR 5S3S J(0)	FR 5S2P J(1)
0.005	0.00022	-0.	-0.	0.00006	0.00001	0.99986	0.	-0.00001	0.00115	0.00002	0.	0.00014	0.00006	0.00002
0.010	0.00044	-0.	-0.	0.00012	0.00002	0.99942	0.	-0.00004	0.00229	0.00007	0.	0.00029	0.00006	0.00004
0.050	0.00221	0.00001	-0.	0.00059	0.00012	0.98557	0.00005	-0.00090	0.01136	0.00168	-0.00003	0.00144	0.00018	0.00022
0.100	0.00441	0.00003	-0.00001	0.00118	0.00025	0.94332	0.00042	-0.00355	0.02210	0.00663	-0.00010	0.00288	0.00053	0.00044
0.150	0.00657	0.00008	-0.00003	0.00176	0.00037	0.87628	0.00137	-0.00775	0.03163	0.01463	-0.00023	0.00429	0.00112	0.00066
0.200	0.00869	0.00014	-0.00005	0.00235	0.00050	0.78910	0.00313	-0.01323	0.03943	0.02532	-0.00041	0.00566	0.00194	0.00088
0.300	0.01274	0.00031	-0.00012	0.00351	0.00074	0.57798	0.00945	-0.02642	0.04823	0.05275	-0.00092	0.00825	0.00426	0.00131
0.400	0.01643	0.00055	-0.00022	0.00466	0.00099	0.35926	0.01921	-0.03962	0.04656	0.08424	-0.00162	0.01056	0.00744	0.00173
0.500	0.01964	0.00086	-0.00034	0.00580	0.00124	0.17387	0.03081	-0.04935	0.03454	0.11469	-0.00250	0.01248	0.01143	0.00214
0.600	0.02228	0.00123	-0.00049	0.00692	0.00149	0.04437	0.04189	-0.05304	0.01416	0.13955	-0.00353	0.01392	0.01614	0.00253
0.700	0.02424	0.00167	-0.00067	0.00801	0.00173	0.02607	0.05007	-0.04949	-0.01136	0.15557	-0.00458	0.01480	0.02145	0.00291
0.800	0.02544	0.00218	-0.00087	0.00908	0.00198	-0.04822	0.05361	-0.03896	-0.03827	0.16119	-0.00590	0.01503	0.02724	0.00327
0.900	0.02582	0.00276	-0.00110	0.01012	0.00222	-0.03902	0.05178	-0.02291	-0.06307	0.15647	-0.00712	0.01456	0.03335	0.00360
1.000	0.02535	0.00339	-0.00135	0.01112	0.00247	-0.01520	0.04479	-0.00356	-0.08299	0.14285	-0.00827	0.01335	0.03960	0.00391
1.500	0.01090	0.00747	-0.00294	0.01542	0.00359	0.04063	-0.02309	0.07063	-0.08459	0.02829	-0.01050	-0.00304	0.06657	0.00492
2.000	-0.01453	0.01279	-0.00492	0.01818	0.00489	-0.00090	-0.05174	0.05237	-0.01640	-0.01481	-0.00304	-0.02790	0.07358	0.00484
3.000	-0.03967	0.02491	-0.00876	0.01772	0.00720	-0.00753	-0.05552	-0.00735	-0.00163	0.02159	-0.02495	-0.04735	0.03212	0.00066
4.000	-0.01968	0.03454	-0.01004	0.00987	0.00953	0.00472	0.01389	0.00260	-0.01497	0.00719	0.03035	-0.02193	-0.00231	-0.00773
5.000	0.	0.03801	-0.00743	-0.00101	0.01123	-0.00103	0.00854	0.00725	-0.00428	-0.00236	0.01514	-0.00023	-0.00189	-0.01651
8.000	-0.00400	0.02150	0.00881	-0.01540	0.01492	0.00233	-0.00100	-0.00410	-0.00140	0.00491	-0.00913	-0.00477	0.00918	-0.02103

SIN THETA/ LAMBDA	FR 5S2S J(0)	FR 5S1S J(0)	FR 4F4F J(0)	FR 4F4F J(2)	FR 4F4F J(4)	FR 4F4F J(6)	FR 4F4D J(1)	FR 4F4D J(3)	FR 4F4D J(5)	FR 4F4P J(2)	FR 4F4P J(4)	FR 4F4S J(3)	FR 4F3D J(1)	FR 4F3D J(3)
0.005	0.	0.	0.99997	0.00001	0.	0.	-0.00409-0.	-0.	0.00001	0.	-0.	0.00127	0.	
0.010	0.	0.	0.99987	0.00005	0.	0.	-0.00818-0.	-0.	0.00005	0.	-0.	0.00254	0.	
0.050	0.00001	0.	0.99673	0.00131	0.	0.	-0.04079-0.00003-0.	0.	0.00123	0.	-0.00003	0.01270	0.	
0.100	0.00004	0.	0.98699	0.00519	0.00001	0.	-0.08094-0.00025-0.	0.	0.00488	0.00001-0.00023	0.02534	0.00002	0.	
0.150	0.00010	0.00001	0.97099	0.01152	0.00006	0.	-0.11980-0.00083-0.	0.	0.01086	0.00005-0.00077	0.03785	0.00008	0.	
0.200	0.00017	0.00001	0.94906	0.02013	0.00018	0.	-0.15677-0.00193-0.00001	0.	0.01901	0.00015-0.00180	0.05016	0.00020	0.	
0.300	0.00038	0.00002	0.88929	0.04339	0.00087	0.00001-0.22298-0.00623-0.00009	0.04090	0.00074-0.00583	0.07398	0.00065	0.	0.	0.	
0.400	0.00068	0.00004	0.81229	0.07131	0.00256	0.00007-0.27605-0.01389-0.00036	0.05833	0.00221-0.01306	0.09633	0.00151	0.	0.	0.	
0.500	0.00105	0.00006	0.72352	0.10248	0.00572	0.00023-0.31383-0.02511-0.00102	0.09863	0.00503-0.02375	0.11681	0.00287	0.	0.	0.	
0.600	0.00151	0.00008	0.62859	0.13315	0.01064	0.00061-0.33556-0.03953-0.00230	0.12903	0.00956-0.03766	0.13510	0.00479	0.	0.	0.	
0.700	0.00205	0.00011	0.53267	0.16107	0.01743	0.00133-0.34179-0.05635-0.00445	0.15697	0.01602-0.05408	0.15094	0.00731	0.	0.	0.	
0.800	0.00267	0.00014	0.44005	0.18441	0.02594	0.00254-0.33414-0.07448-0.00767	0.19036	0.02440-0.07202	0.16418	0.01044	0.	0.	0.	
0.900	0.00337	0.00018	0.35399	0.20208	0.03580	0.00435-0.31495-0.09270-0.01207	0.19770	0.03447-0.09029	0.17471	0.01413	0.	0.	0.	
1.000	0.00414	0.00022	0.27662	0.21362	0.04653	0.00684-0.28696-0.10983-0.01765	0.20819	0.04530-0.10768	0.18253	0.01833	0.	0.	0.	
1.500	0.00904	0.00049	0.03567	0.19472	0.09493	0.02841-0.10427-0.15280-0.05627	0.15731	0.10087-0.15166	0.18515	0.04372	0.	0.	0.	
2.000	0.01526	0.00086	-0.03017	0.12182	0.10935	0.05297	0.01652-0.12101-0.08582	0.06072	0.11408-0.11300	0.14734	0.06657	0.	0.	0.
3.000	0.02851	0.00190	-0.01795	0.02591	0.06982	0.06577	0.04333-0.01800-0.06798-0.04066	0.04159	0.00556	0.05642	0.07679	0.	0.	0.
4.000	0.03703	0.00329	-0.00317	0.00163	0.02997	0.04627	0.01281	0.01645-0.02184-0.02629-0.01105	0.03101	0.01015	0.05438	0.	0.	0.
5.000	0.03703	0.00495	0.00020	-0.00141	0.01107	0.02622	0.00028	0.01503	0.00210-0.00599-0.01901	0.01667-0.00271	0.03014	0.	0.	0.
8.000	0.01091	0.01058	0.00013	-0.00020	0.00041	0.00348-0.00084	0.00174	0.00574	0.00209-0.00202-0.00219-0.00138	0.00277	0.	0.	0.	

SIN THETA/ LAMBDA	FR 4F3D J(5)	FR 4F3P J(2)	FR 4F3P J(4)	FR 4F3S J(3)	FR 4F2P J(2)	FR 4F2P J(4)	FR 4F1S J(3)	FR 4D4D J(0)	FR 4D4D J(2)	FR 4D4D J(4)	FR 4D4P J(1)	FR 4D4P J(3)	FR 4D4S J(2)	FR 4D3D J(0)
0.005	0.	-0.	-0.	0.	0.	0.	0.	0.99997	0.00001	0.	-0.00430-0.	0.00001	0.	0.
0.010	0.	-0.00001-0.	0.	0.	0.	0.	0.	0.99987	0.00005	0.	-0.00851-0.	0.00005	0.00002	0.
0.050	0.	-0.00027-0.	0.	0.00001	0.	0.	0.	0.99673	0.00131	0.	-0.04293-0.00003	0.00127	0.00036	0.
0.100	0.	-0.00109-0.	0.00003	0.00005	0.	0.	0.	0.98700	0.00519	0.00001-0.08522-0.00024	0.00506	0.00144	0.	0.
0.150	0.	-0.00244-0.	0.00011	0.00012	0.	0.	0.	0.97096	0.01155	0.00005-0.12627-0.00080	0.01128	0.00323	0.	0.
0.200	0.	-0.00431-0.00001	0.00026	0.00022	0.	0.	0.	0.94892	0.02022	0.00016-0.16548-0.00188	0.01977	0.00571	0.	0.
0.300	0.	-0.00955-0.00006	0.00087	0.00049	0.	0.	0.	0.88844	0.04359	0.00076-0.23630-0.00610	0.04269	0.01264	0.	0.
0.400	0.00001	-0.01661-0.00019	0.00202	0.00086	0.	0.	0.	0.80967	0.07299	0.00227-0.29407-0.01372	0.07169	0.02198	0.	0.
0.500	0.00004	-0.02523-0.00045	0.00385	0.00133	0.00001	0.	0.	0.71770	0.10567	0.00518-0.33637-0.02505	0.10414	0.03339	0.	0.
0.600	0.00010	-0.03510-0.00089	0.00643	0.00189	0.00002	0.	0.	0.61805	0.13872	0.00988-0.36207-0.03989	0.13720	0.04647	0.	0.
0.700	0.00020	-0.04589-0.00159	0.00983	0.00254	0.00003	0.	0.	0.51613	0.16943	0.01663-0.37132-0.05756	0.16821	0.06075	0.	0.
0.800	0.00038	-0.05723-0.00260	0.01404	0.00327	0.00005	0.	0.	0.41686	0.19553	0.02544-0.36542-0.07704	0.19484	0.07578	0.	0.
0.900	0.00064	-0.06878-0.00397	0.01903	0.00406	0.00007	0.	0.	0.32426	0.21539	0.03609-0.34652-0.09708	0.21533	0.09106	0.	0.
1.000	0.00103	-0.08017-0.00572	0.02472	0.00492	0.00011	0.	0.	0.24134	0.22807	0.04816-0.31734-0.11637	0.22858	0.10613	0.	0.
1.500	0.00538	-0.12526-0.02049	0.05903	0.00981	0.00050	0.00001	0.00001	0.00611	0.19189	0.10792-0.11744-0.16757	0.19008	0.16543	0.	0.
2.000	0.01426	-0.13786-0.04148	0.08905	0.01477	0.00133	0.00002	-0.00922	0.08533	0.12313	0.00623-0.12742	0.07373	0.18057	0.	0.
3.000	0.03582	-0.08964-0.07023	0.09572	0.02123	0.00438	0.00007	0.04954-0.00527	0.04783	-0.00239-0.00797-0.01747	0.11071	0.	0.	0.	
4.000	0.04472	-0.03143-0.06316	0.05653	0.02131	0.00799	0.00015	0.02799	0.01437	0.00080-0.02345	0.00352	0.00989	0.02997	0.	0.
5.000	0.03954	-0.00280-0.04017	0.02083	0.01722	0.01042	0.00024	0.00235	0.02555	0.00069-0.00638-0.01274	0.01505-0.00684	0.	0.	0.	
8.000	0.01240	0.00375-0.00201-0.00457	0.00455	0.00863	0.00050-0.00426	0.00712	0.01305	0.00937-0.00303-0.00894-0.00744	0.	0.	0.	0.	0.	

SIN THETA/ LAMBDA	FR 4D3D J(2)	FR 4D3D J(4)	FR 4D3P J(1)	FR 4D3P J(3)	FR 4D3S J(2)	FR 4D2P J(1)	FR 4D2P J(3)	FR 4D2S J(2)	FR 4D1S J(2)	FR 4P4P J(0)	FR 4P4P J(2)	FR 4P4S J(1)	FR 4P3D J(1)	FR 4P3D J(3)
0.005	-0.	-0.	0.00083	0.	-0.	0.00020	0.	-0.	0.	0.99997	0.00001	-0.00434	0.00033	0.
0.010	-0.00001	-0.	0.00166	0.	-0.00001	0.00040	0.	-0.	0.	0.99987	0.00005	-0.00869	0.00067	0.
0.050	-0.00014	-0.	0.00831	0.	-0.00022	0.00200	0.	-0.00001	0.	0.99678	0.00129	-0.04333	0.00332	0.
0.100	-0.00058	-0.	0.01655	0.00003	-0.00086	0.00399	0.	-0.00005	0.	0.98716	0.00512	-0.08605	0.00660	0.00002
0.150	-0.00129	-0.	0.02465	0.00009	-0.00193	0.00599	0.	-0.00012	0.00001	0.97132	0.01141	-0.12756	0.00978	0.00006
0.200	-0.00227	-0.00001	0.03254	0.00021	-0.00340	0.00798	0.	-0.00021	0.00001	0.94950	0.02000	-0.16728	0.01281	0.00015
0.300	-0.00499	-0.00005	0.04745	0.00070	-0.00750	0.01196	0.00001	-0.00046	0.00002	0.88950	0.04324	-0.23931	0.01827	0.00049
0.400	-0.00860	-0.00014	0.06080	0.00161	-0.01297	0.01591	0.00002	-0.00083	0.00004	0.81101	0.07258	-0.29856	0.02265	0.00112
0.500	-0.01290	-0.00033	0.07218	0.00305	-0.01953	0.01985	0.00003	-0.00129	0.00006	0.71884	0.10568	-0.34253	0.02568	0.00211
0.600	-0.01767	-0.00066	0.08127	0.00506	-0.02690	0.02376	0.00006	-0.00186	0.00009	0.61832	0.13942	-0.36997	0.02714	0.00348
0.700	-0.02266	-0.00117	0.08783	0.00768	-0.03473	0.02763	0.00010	-0.00253	0.00012	0.51482	0.17117	-0.38084	0.02691	0.00524
0.800	-0.02763	-0.00190	0.09175	0.01086	-0.04267	0.03145	0.00015	-0.00331	0.00016	0.41329	0.19858	-0.37625	0.02495	0.00736
0.900	-0.03232	-0.00288	0.09300	0.01457	-0.05039	0.03523	0.00021	-0.00419	0.00020	0.31800	0.21982	-0.35818	0.02126	0.00977
1.000	-0.03652	-0.00411	0.09165	0.01869	-0.05755	0.03895	0.00029	-0.00518	0.00025	0.23223	0.23375	-0.32928	0.01596	0.01233
1.500	-0.04440	-0.01383	0.05381	0.04075	-0.07678	0.05638	0.00106	-0.01161	0.00056	-0.00947	0.19632	-0.12382	-0.02758	0.02480
2.000	-0.02680	-0.02528	-0.00556	0.05250	-0.06170	0.07110	0.00265	-0.02025	0.00096	-0.01317	0.07875	0.00345	-0.07498	0.02653
3.000	0.03854	-0.02780	-0.06534	0.02374	0.01139	0.08869	0.00918	-0.04077	0.00203	0.05202	-0.00814	-0.01632	-0.09683	-0.01025
4.000	0.06961	-0.00181	-0.03611	-0.02193	0.02358	0.08865	0.01925	-0.05782	0.00330	0.01642	0.02207	-0.03114	-0.04437	-0.04856
5.000	0.06114	0.02394	0.00392	-0.03690	0.02095	0.07550	0.02929	-0.06474	0.00460	-0.00213	0.02353	-0.00660	0.00330	-0.05291
8.000	0.01210	0.02908	0.01767	-0.00106	-0.01883	0.02509	0.03648	-0.03914	0.00742	0.01182	-0.00119	-0.00341	0.01773	-0.00333

SIN THETA/ LAMBDA	FR 4P3P J(0)	FR 4P3P J(2)	FR 4P3S J(1)	FR 4P2P J(0)	FR 4P2P J(2)	FR 4P2S J(1)	FR 4P1S J(1)	FR 4S4S J(0)	FR 4S3D J(2)	FR 4S3P J(1)	FR 4S3S J(0)	FR 4S2P J(1)	FR 4S2S J(0)	FR 4S1S J(0)
0.005	0.	-0.	0.00063	0.00002	-0.	0.00014	0.00003	0.99997	-0.	0.00045	0.	0.00005	0.00002	0.
0.010	0.00001	-0.00001	0.00126	0.00002	-0.	0.00028	0.00006	0.99987	-0.	0.00090	0.00001	0.00010	0.00002	0.
0.050	0.00040	-0.00016	0.00630	0.00004	-0.00001	0.00139	0.00028	0.99682	-0.00011	0.00449	0.00041	0.00051	0.00004	0.00001
0.100	0.00161	-0.00064	0.01253	0.00010	-0.00003	0.00277	0.00056	0.98732	-0.00044	0.00891	0.00165	0.00101	0.00012	0.00001
0.150	0.00361	-0.00144	0.01863	0.00021	-0.00008	0.00415	0.00083	0.97167	-0.00099	0.01321	0.00370	0.00152	0.00024	0.00001
0.200	0.00539	-0.00254	0.02452	0.00036	-0.00014	0.00553	0.00111	0.95010	-0.00173	0.01734	0.00653	0.00202	0.00042	0.00002
0.300	0.01414	-0.00558	0.03545	0.00078	-0.00031	0.00827	0.00167	0.89072	-0.00380	0.02482	0.01445	0.00301	0.00092	0.00005
0.400	0.02455	-0.00959	0.04486	0.00138	-0.00054	0.01098	0.00223	0.81287	-0.00649	0.03095	0.02508	0.00397	0.00162	0.00008
0.500	0.03720	-0.01433	0.05236	0.00214	-0.00085	0.01365	0.00278	0.72119	-0.00964	0.03538	0.03798	0.00491	0.00252	0.00012
0.600	0.05162	-0.01954	0.05763	0.00307	-0.00122	0.01627	0.00334	0.62087	-0.01303	0.03784	0.05255	0.00581	0.00361	0.00017
0.700	0.06725	-0.02492	0.06048	0.00416	-0.00165	0.01882	0.00389	0.51718	-0.01645	0.03819	0.06851	0.00666	0.00489	0.00023
0.800	0.08353	-0.03018	0.06082	0.00541	-0.00214	0.02130	0.00444	0.41507	-0.01966	0.03634	0.08497	0.00746	0.00636	0.00031
0.900	0.09986	-0.03500	0.05864	0.00681	-0.00270	0.02369	0.00500	0.31881	-0.02245	0.03232	0.10141	0.00820	0.00800	0.00038
1.000	0.11572	-0.03913	0.05406	0.00837	-0.00331	0.02599	0.00555	0.23179	-0.02462	0.02626	0.11727	0.00887	0.00981	0.00047
1.500	0.17244	-0.04292	0.00431	0.01826	-0.00713	0.03567	0.00828	-0.01544	-0.02176	-0.02565	0.17183	0.01098	0.02119	0.00106
2.000	0.17366	-0.01623	-0.05697	0.00541	-0.01176	0.04147	0.01097	-0.01735	0.00405	-0.08223	0.16728	0.01045	0.03536	0.00186
3.000	0.07401	0.05814	-0.09293	0.05981	-0.02021	0.03874	0.01614	0.05024	0.06372	-0.10318	0.05738	0.00031	0.06436	0.00411
4.000	0.00287	0.06934	-0.03869	0.07968	-0.02219	0.01968	0.02091	0.00992	0.06464	-0.04060	-0.00812	-0.01848	0.08149	0.00711
5.000	-0.00156	0.03698	0.00237	0.08605	-0.01544	-0.00493	0.02512	-0.00487	0.02873	0.00209	-0.00173	-0.03714	0.07969	0.01068
8.000	0.02464	-0.00136	-0.00969	0.04716	0.02081	-0.03471	0.03326	0.01035	-0.01962	-0.01081	0.01917	-0.04471	0.02233	0.02273



SIN THETA/ LAMBDA	FR 3D3D J(0)	FR 3D3D J(2)	FR 3D3D J(4)	FR 3D3P J(1)	FR 3D3P J(3)	FR 3D3S J(2)	FR 3D2P J(1)	FR 3D2P J(3)	FR 3D2S J(2)	FR 3D1S J(2)	FR 3P3P J(0)	FR 3P3P J(2)	FR 3P3S J(1)	FR 3P2P J(0)
0.005	1.00000	0.	0.	-0.00165	-0.	0.	0.00060	0.	-0.	0.	0.99999	0.	-0.00195	0.
0.010	0.99998	0.00001	0.	-0.00331	-0.	0.00001	0.00119	0.	-0.	0.	0.99997	0.00001	-0.00390	0.
0.050	0.99951	0.00020	0.	-0.01653	-0.	0.00022	0.00597	0.	-0.00006	0.	0.99936	0.00026	-0.01948	0.00007
0.100	0.99805	0.00078	0.	-0.03302	-0.00002	0.00088	0.01193	0.	-0.00022	0.00001	0.99745	0.00102	-0.03890	0.00028
0.150	0.99562	0.00175	0.	-0.04941	-0.00006	0.00197	0.01788	0.00001	-0.00050	0.00001	0.99426	0.00229	-0.05820	0.00064
0.200	0.99223	0.00310	0.	-0.06567	-0.00014	0.00349	0.02381	0.00002	-0.00089	0.00002	0.98982	0.00406	-0.07733	0.00113
0.300	0.98260	0.00693	0.00002	-0.09759	-0.00047	0.00778	0.03561	0.00006	-0.00200	0.00005	0.97723	0.00907	-0.11481	0.00254
0.400	0.96928	0.01220	0.00006	-0.12843	-0.00110	0.01368	0.04727	0.00013	-0.00355	0.00008	0.95986	0.01593	-0.15091	0.00450
0.500	0.95243	0.01882	0.00015	-0.15787	-0.00212	0.02105	0.05876	0.00026	-0.00551	0.00013	0.93794	0.02451	-0.18521	0.00700
0.600	0.93225	0.02668	0.00031	-0.18560	-0.00361	0.02976	0.07003	0.00045	-0.00788	0.00019	0.91178	0.03464	-0.21732	0.01001
0.700	0.90896	0.03564	0.00056	-0.21135	-0.00562	0.03964	0.08105	0.00070	-0.01065	0.00025	0.88173	0.04613	-0.24690	0.01352
0.800	0.88284	0.04557	0.00094	-0.23491	-0.00821	0.05050	0.09178	0.00104	-0.01378	0.00033	0.84820	0.05875	-0.27367	0.01750
0.900	0.85417	0.05631	0.00147	-0.25606	-0.01139	0.06213	0.10218	0.00147	-0.01726	0.00042	0.81161	0.07226	-0.29739	0.02192
1.000	0.82325	0.06768	0.00218	-0.27465	-0.01519	0.07433	0.11222	0.00200	-0.02107	0.00051	0.77242	0.08642	-0.31788	0.02675
1.500	0.64624	0.12818	0.00929	-0.32696	-0.04273	0.13628	0.15601	0.00628	-0.04401	0.00113	0.55438	0.15812	-0.36944	0.05587
2.000	0.46013	0.18088	0.02336	-0.31557	-0.07922	0.18290	0.18737	0.01351	-0.07065	0.00196	0.34025	0.21171	-0.34376	0.08965
3.000	0.16604	0.22211	0.06526	-0.18227	-0.13889	0.18813	0.21078	0.03498	-0.12001	0.00411	0.05964	0.21776	-0.17542	0.15206
4.000	0.01962	0.18739	0.10041	-0.04205	-0.14331	0.11002	0.19238	0.05875	-0.14743	0.00663	-0.01145	0.13286	-0.03196	0.18616
5.000	-0.02629	0.12711	0.11128	0.03267	-0.10484	0.02693	0.15277	0.07651	-0.14823	0.00918	0.01285	0.04858	0.01673	0.18595
8.000	-0.01289	0.02042	0.06220	0.03291	0.00288	-0.03950	0.04530	0.07582	-0.07560	0.01448	0.04976	0.00088	-0.02580	0.08979

SIN THETA/ LAMBDA	FR 3P2P J(2)	FR 3P2S J(1)	FR 3P1S J(1)	FR 3S3S J(0)	FR 3S2P J(1)	FR 3S2S J(0)	FR 3S1S J(0)	FR 2P2P J(0)	FR 2P2P J(2)	FR 2P2S J(1)	FR 2P1S J(1)	FR 2S2S J(0)	FR 2S1S J(0)	FR 1S1S J(0)
0.005	-0.	0.00037	0.00006	0.99999	0.00014	0.	0.00001	1.00000	0.	-0.00071	0.00016	1.00000	0.	1.00000
0.010	-0.	0.00074	0.00012	0.99997	0.00028	0.	0.00002	1.00000	0.	-0.00142	0.00032	1.00000	0.	1.00000
0.050	-0.00003	0.00368	0.00059	0.99930	0.00141	0.00008	0.00002	0.99992	0.00003	-0.00711	0.00150	0.99989	0.00001	0.99999
0.100	-0.00011	0.00736	0.00118	0.99722	0.00282	0.00032	0.00002	0.99966	0.00014	-0.01421	0.00319	0.99954	0.00003	0.99997
0.150	-0.00026	0.01102	0.00176	0.99375	0.00422	0.00073	0.00004	0.99924	0.00030	-0.02131	0.00479	0.99897	0.00007	0.99993
0.200	-0.00045	0.01466	0.00235	0.98891	0.00560	0.00129	0.00005	0.99865	0.00054	-0.02840	0.00638	0.99817	0.00012	0.99988
0.300	-0.00101	0.02187	0.00353	0.97519	0.00832	0.00290	0.00010	0.99696	0.00121	-0.04253	0.00957	0.99588	0.00026	0.99973
0.400	-0.00179	0.02892	0.00470	0.95628	0.01094	0.00513	0.00017	0.99461	0.00216	-0.05657	0.01275	0.99268	0.00046	0.99953
0.500	-0.00278	0.03578	0.00587	0.93244	0.01343	0.00796	0.00026	0.99159	0.00336	-0.07050	0.01593	0.98859	0.00072	0.99926
0.600	-0.00397	0.04240	0.00705	0.90402	0.01576	0.01138	0.00037	0.98791	0.00482	-0.08428	0.01909	0.98361	0.00104	0.99893
0.700	-0.00534	0.04873	0.00821	0.87142	0.01791	0.01535	0.00050	0.98358	0.00654	-0.09790	0.02225	0.97776	0.00142	0.99854
0.800	-0.00688	0.05474	0.00938	0.83509	0.01984	0.01984	0.00065	0.97862	0.00851	-0.11133	0.02540	0.97105	0.00185	0.99810
0.900	-0.00858	0.06038	0.01055	0.79553	0.02153	0.02482	0.00082	0.97303	0.01071	-0.12453	0.02854	0.96351	0.00234	0.99759
1.000	-0.01042	0.06562	0.01171	0.75327	0.02297	0.03024	0.00101	0.96683	0.01316	-0.13750	0.03156	0.95514	0.00288	0.99703
1.500	-0.02103	0.08490	0.01747	0.52024	0.02571	0.06245	0.00224	0.92713	0.02860	-0.19783	0.04700	0.90189	0.00641	0.99334
2.000	-0.03206	0.09125	0.02311	0.29666	0.02035	0.09861	0.00393	0.87467	0.04848	-0.24895	0.06177	0.83227	0.01124	0.98820
3.000	-0.04598	0.06774	0.03389	0.02364	-0.01129	0.15930	0.00864	0.74253	0.09552	-0.31737	0.08897	0.66122	0.02429	0.97374
4.000	-0.04102	0.01637	0.04371	-0.02185	-0.05463	0.18098	0.01486	0.59389	0.14215	-0.33900	0.11219	0.47766	0.04085	0.95403
5.000	-0.01958	-0.03433	0.05226	0.01793	-0.08932	0.16217	0.02223	0.44942	0.17888	-0.32136	0.13072	0.31113	0.05951	0.92957
8.000	0.05241	-0.07338	0.06802	0.03445	-0.08742	0.03722	0.04643	0.14267	0.20327	-0.15521	0.15716	0.02754	0.11457	0.83377

SIN THETA/ LAMBDA	RA 7S7S J(0)	RA 7S6P J(1)	RA 7S6S J(0)	RA 7S5D J(2)	RA 7S5P J(1)	RA 7S5S J(0)	RA 7S4F J(3)	RA 7S4D J(2)	RA 7S4P J(1)	RA 7S4S J(0)	RA 7S3D J(2)	RA 7S3P J(1)	RA 7S3S J(0)	RA 7S2P J(1)
0.005	0.99357	0.00847	0.00030-0.00001	0.00063	0.00001-0.	-0.	0.00009-0.00001-0.	0.00002-0.00001	0.	0.00002-0.00001	0.	0.00002-0.00001	0.	0.
0.010	0.97450	0.01681	0.00120-0.00003	0.00126	0.00006-0.	-0.	0.00018-0.00001-0.	0.00003-0.	0.	0.00003-0.	0.	0.00003-0.	0.	0.
0.050	0.51296	0.06636	0.02701-0.00078	0.00613	0.00137-0.	-0.00004	0.00088	0.00011-0.	0.00015	0.00001	0.00001	0.00001	0.00001	0.00002
0.100	0.01075	0.05721	0.07860-0.00336	0.01126	0.00532-0.00001-0.00018	0.00174	0.00045-0.00003	0.00031	0.00031	0.00004	0.00005	0.00005	0.00005	0.00005
0.150	-0.04592	-0.00275	0.10507-0.00789	0.01445	0.01131-0.00002-0.00040	0.00253	0.00103-0.00002	0.00046	0.00010	0.00007	0.00007	0.00007	0.00007	0.00007
0.200	0.00378	-0.05181	0.09006-0.01363	0.01499	0.01845-0.00004-0.00071	0.00324	0.00181-0.00004	0.00060	0.00019	0.00010	0.00010	0.00010	0.00010	0.00010
0.300	0.01432	-0.04942	0.01512-0.02226	0.00767	0.03160-0.00003-0.00156	0.00430	0.00394-0.00009	0.00088	0.00042	0.00015	0.00015	0.00015	0.00015	0.00015
0.400	-0.00256	-0.00722	-0.01446-0.01928	0.00645	0.03698	0.00019-0.00263	0.00469	0.00662-0.00016	0.00113	0.00075	0.00020	0.00020	0.00020	0.00020
0.500	-0.00272	0.00694	-0.00467-0.00675-0.01889	0.03231	0.00078-0.00375	0.00427	0.00954-0.00025	0.00135	0.00116	0.00024	0.00024	0.00024	0.00024	0.00024
0.600	0.00119	0.00206	0.00712	0.00662-0.02401	0.02110	0.00174-0.00465	0.00300	0.01234-0.00036	0.00152	0.00165	0.00029	0.00029	0.00029	0.00029
0.700	0.00261	-0.00449	0.00936	0.01471-0.02155	0.00892	0.00292-0.00508	0.00099	0.01465-0.00048	0.00163	0.00221	0.00033	0.00033	0.00033	0.00033
0.800	0.00184	-0.00664	0.00567	0.01637-0.01472-0.00006	0.00066	0.00404-0.00487-0.00152	0.01616-0.00050	0.00169	0.00282	0.00037	0.00037	0.00037	0.00037	0.00037
0.900	0.00057	-0.00524	0.00125	0.01355-0.00719-0.00436	0.00481-0.00396-0.00421	0.01669-0.00074	0.00167	0.00348	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041
1.000	-0.00028	-0.00264	-0.00135	0.00889-0.00139-0.00467	0.00503-0.00244-0.00675	0.01622-0.00086	0.00157	0.00416	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045
1.500	0.00043	0.00007	0.00165-0.00115-0.00114	0.00483-0.00075	0.00678-0.01030	0.00513-0.00120-0.00005	0.00729	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057
2.000	0.00021	-0.00115	0.00050	0.00216-0.00292	0.00065-0.00563	0.00675-0.00303-0.00161-0.00053-0.00282	0.00845	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057
3.000	0.00027	0.00015	0.00022-0.00008	0.00037	0.00068-0.00116-0.00071	0.00014	0.00234	0.00256-0.00553	0.00416	0.00012	0.00012	0.00012	0.00012	0.00012
4.000	0.00005	-0.00024	0.00029-0.00009-0.00075	0.00067	0.00160	0.00014-0.00178	0.00106	0.00359-0.00284-0.00011-0.00083	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018
5.000	-0.00018	0.	0.00006	0.00032-0.00036-0.00010	0.00110	0.00087-0.00063-0.00027	0.00196-0.00017-0.00032-0.00185	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
8.000	0.00020	-0.00007	0.00010-0.00020-0.00006	0.00029-0.00012-0.00047-0.00013	0.00059-0.00107-0.00051	0.00112-0.00251	0.00012	0.00251	0.00012	0.00251	0.00012	0.00251	0.00012	0.00251

SIN THETA/ LAMBDA	RA 7S2S J(0)	RA 7S1S J(0)	RA 6P6P J(0)	RA 6P6P J(2)	RA 6P6S J(1)	RA 6P5D J(1)	RA 6P5D J(3)	RA 6P5P J(0)	RA 6P5P J(2)	RA 5P5S J(1)	RA 6P4F J(2)	RA 6P4F J(4)	RA 6P4D J(1)	RA 6P4D J(3)
0.005	-0.	0.	0.99904	0.00038-0.02184	C.00491	0.	0.00007-0.00003	0.00102-0.	0.	0.00032	0.	0.00032	0.	0.
0.010	-0.	0.	0.99617	0.00153-0.04359	C.00980	0.00001	0.00029-0.00012	0.00203-0.	0.	0.00065	0.	0.00065	0.	0.
0.050	0.	0.	0.90814	0.03607-0.20548	C.04689	0.00062	0.00721-0.00286	0.00954-0.00010	0.	0.00321	0.00001	0.00321	0.00001	0.00001
0.100	0.	0.	0.67548	0.12034-0.34176	0.08156	0.00455	0.02712-0.01046	0.01551-0.00044	0.00001	0.00632	0.00004	0.00632	0.00004	0.00004
0.150	0.00001	0.	0.39882	0.20170-0.37673	0.09597	0.01332	0.05508-0.02022	0.01533-0.00104	0.00002	0.00920	0.00014	0.00920	0.00014	0.00014
0.200	0.00002	0.	0.16647	0.24031-0.32440	0.08845	0.02593	0.08490-0.02885	0.00804-0.00197	0.00006	0.01175	0.00034	0.01175	0.00034	0.00034
0.300	0.00004	0.	-0.04334	0.17836-0.12343	0.02770	0.05047	0.12756-0.03219-0.02353-0.00496	0.00018	0.01539	0.00115	0.00115	0.01539	0.00115	0.00115
0.400	0.00007	0.	-0.03004	0.06096	0.00416-0.04225	0.05519	0.12892-0.01244-0.06056-0.00920	0.00016	0.01644	0.00267	0.00267	0.01644	0.00267	0.00267
0.500	0.00012	0.00001	0.01733-0.00286	0.02319-0.07929	0.03571	0.09528	0.01945-0.08303-0.01370-0.00038	0.01437	0.00493	0.00493	0.01437	0.00493	0.00493	0.00493
0.600	0.00017	0.00001	0.03178-0.01166-0.00069-0.07847	0.00473	0.04942	0.04689-0.08294-0.01710-0.00175	0.00923	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773
0.700	0.00023	0.00001	0.02164	0.00124-0.02028-0.05565-0.02281	0.01134	0.05974-0.06500-0.01821-0.00400	0.00161	0.01059	0.01059	0.01059	0.01059	0.01059	0.01059	0.01059
0.800	0.00030	0.00002	0.00667	0.01315-0.02395-0.02836-0.03879-0.01006	0.05726-0.03964-0.01650-0.00684-0.00740	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293
0.900	0.00037	0.00002	-0.00291	0.01716-0.01721-0.00716-0.04246-0.01564	0.04459-0.01628-0.01218-0.00972-0.01652	0.01421	0.01421	0.01421	0.01421	0.01421	0.01421	0.01421	0.01421	0.01421
1.000	0.00046	0.00002	-0.00567	0.01475-0.00787	0.00462-0.03726-0.01094	0.02831-0.00020-0.00600-0.01209-0.02457	0.01407	0.01407	0.01407	0.01407	0.01407	0.01407	0.01407	0.01407
1.500	0.00101	0.00006	0.00549-0.00181-0.00007-0.00634	0.00116	0.01515-0.00379-0.00493	0.02203-0.00775-0.03135-0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408
2.000	0.00171	0.00010	0.00084	0.00263-0.00403-0.00668-0.00225	0.00106	0.00809-0.00919	0.01808	0.00856-0.00774-0.01879	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856
3.000	0.00324	0.00022	0.00079	0.00018	0.00053	0.00145-0.00306	0.00240	0.00024	0.00117-0.00508	0.01045	0.00197-0.00502	0.00197	0.00502	0.00502
4.000	0.00428	0.00038	0.00087	0.00020-0.00098-0.00131	0.00053	0.00232	0.00058-0.00243-0.00530-0.00005-0.00385	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108
5.000	0.00436	0.00057	-0.00020	0.00092-0.00064-0.00081-0.00041	0.00003	0.00188-0.00114-0.00153-0.00305-0.00175-0.00160	0.00160	0.00160	0.00160	0.00160	0.00160	0.00160	0.00160	0.00160
8.000	0.00139	0.00122	0.00029	0.	0.00007	0.00066-0.00029	0.00091-0.00011-0.00017	0.00039-0.00046	0.00169-0.00076	0.00076	0.00076	0.00076	0.00076	0.00076

SIN THETA/ LAMBDA	RA 6P4P J(0)	RA 6P4P J(2)	RA 6P4S J(1)	RA 6P3D J(1)	RA 6P3D J(3)	RA 6P3P J(0)	RA 6P3P J(2)	RA 6P3S J(1)	RA 6P2P J(0)	RA 6P2P J(2)	RA 6P2S J(1)	RA 6P1S J(1)	RA 6S6S J(0)	RA 6S5D J(2)
0.005	0.00001-0.		0.00028	0.00003	0.	-0.00001-0.		0.00008-0.	-0.		0.00002	0.	0.99926-0.00008	
0.010	0.00003-0.00001		0.00056	0.00007	0.	-0.00001-0.		0.00016-0.	-0.		0.00004	0.00001	0.99704-0.00030	
0.050	0.00044-0.00017		0.00279	0.00033	0.	0.00003-0.00002		0.00079	0.	-0.	0.00022	0.00005	0.92821-0.00734	
0.100	0.00172-0.00068		0.00547	0.00057	0.	0.00014-0.00006		0.00158	0.00001-0.		0.00044	0.00009	0.73849-0.02692	
0.150	0.00382-0.00151		0.00792	0.00099	0.	0.00033-0.00014		0.00236	0.00003-0.00001		0.00056	0.00014	0.49348-0.05234	
0.200	0.00669-0.00263		0.01004	0.00131	0.00001	0.00059-0.00024		0.00313	0.00005-0.00002		0.00087	0.00019	0.26105-0.07579	
0.300	0.01437-0.00554		0.01288	0.00192	0.00003	0.00134-0.00054		0.00459	0.00011-0.00004		0.00131	0.00028-0.01423-0.09328		
0.400	0.02384-0.00887		0.01337	0.00246	0.00006	0.00237-0.00095		0.00594	0.00020-0.00008		0.00174	0.00037-0.04960-0.06387		
0.500	0.03386-0.01193		0.01120	0.00291	0.00013	0.00367-0.00146		0.00714	0.00031-0.00012		0.00216	0.00047-0.00052-0.01123		
0.600	0.04304-0.01398		0.00649	0.00325	0.00022	0.00522-0.00205		0.00815	0.00044-0.00018		0.00258	0.00056	0.03216	0.03441
0.700	0.05011-0.01441-0.00024		0.00346	0.00366	0.00036	0.00699-0.00272		0.00894	0.00061-0.00024		0.00299	0.00065	0.03228	0.05766
0.800	0.05414-0.01290-0.00811		0.00351	0.00351	0.00054	0.00893-0.00344		0.00947	0.00079-0.00032		0.00338	0.00074	0.01690	0.05889
0.900	0.05475-0.00949-0.01613		0.00338	0.00338	0.00077	0.01101-0.00418		0.00973	0.00100-0.00040		0.00377	0.00084	0.00208	0.04638
1.000	0.05206-0.00454-0.02333		0.00306	0.00306	0.00105	0.01318-0.00490		0.00968	0.00123-0.00049		0.00415	0.00093-0.00566	0.02917	
1.500	0.01471	0.02191-0.03054-0.00142		0.00299	0.02317-0.00728		0.00506	0.00272-0.00107	0.00578	0.00139	0.00607-0.00380			
2.000	-0.00429	0.02051-0.00806-0.00869		0.00447	0.02724-0.00547-0.00415		0.00415	0.00467-0.00181	0.00686	0.00184	0.00162	0.00777		
3.000	0.00763-0.00124	0.00034-0.01599		0.00069	0.01534	0.00655-0.01489		0.00920-0.00327	0.00685	0.00271	0.00083-0.00033			
4.000	0.00419	0.00241-0.00545-0.00915-0.00659		0.00175	0.01154-0.00820		0.01292-0.00384	0.00435	0.00352	0.00099-0.00032				
5.000	-0.00017	0.00421-0.00189-0.00060-0.00889-0.00062		0.00729-0.00040	0.01442-0.00297-0.00032		0.00424-0.00027	0.00036	0.00069	0.00027	0.00111			
8.000	0.00200-0.00022-0.00040		0.00323-0.00102	0.00425-0.00035-0.00137		0.00851	0.00315-0.00588	0.00567	0.00036-0.00069					

SIN THETA/ LAMBDA	RA 6S5P J(1)	RA 6S5S J(0)	RA 6S4F J(3)	RA 6S4D J(2)	RA 6S4P J(1)	RA 6S4S J(0)	RA 6S3D J(2)	RA 6S3P J(1)	RA 6S3S J(0)	RA 6S2P J(1)	RA 6S2S J(0)	RA 6S1S J(0)	RA 5D5D J(0)	RA 5D5D J(2)
0.005	0.00290	0.00007-0.	-0.	0.00033	0.00005-0.		0.00005-0.00001	0.00001-0.		0.		0.99980	0.00008	
0.010	0.00579	0.00026-0.	-0.00001	0.00065	0.00006-0.		0.00011-0.00001	0.00002-0.		0.		0.99919	0.00032	
0.050	0.02787	0.00647-0.	-0.00017	0.00324	0.00048-0.00001		0.00055	0.00003	0.00009	0.		0.97992	0.00800	
0.100	0.04948	0.02456-0.00003-0.00068		0.00637	0.00177-0.00004		0.00109	0.00016	0.00018	0.00001		0.92187	0.03076	
0.150	0.06013	0.05067-0.00009-0.00153		0.00928	0.00389-0.00008		0.00162	0.00038	0.00026	0.00003		0.83200	0.06481	
0.200	0.05779	0.07982-0.00015-0.00270		0.01187	0.00680-0.00015		0.00214	0.00067	0.00035	0.00006		0.71933	0.10521	
0.300	0.01981	0.12724-0.00004-0.00590		0.01563	0.01463-0.00033		0.00314	0.00152	0.00052	0.00015	0.00001	0.46688	0.18357	
0.400	-0.03613	0.13925	0.00096-0.00983	0.01687	0.02443-0.00058		0.00403	0.00269	0.00069	0.00026	0.00001	0.23854	0.23099	
0.500	-0.07750	0.11430	0.00335-0.01391	0.01510	0.03502-0.00090		0.00480	0.00416	0.00086	0.00041	0.00002	0.07710	0.23431	
0.600	-0.08924	0.06973	0.00705-0.01702	0.01026	0.04501-0.00127		0.00540	0.00590	0.00102	0.00059	0.00003-0.01021	0.20099		
0.700	-0.07530	0.02604	0.01134-0.01833	0.00280	0.05307-0.00170		0.00580	0.00789	0.00117	0.00081	0.00004-0.03906	0.14836		
0.800	-0.04873-0.00382		0.01517-0.01725-0.00634	0.00597	0.05815-0.00215		0.00597	0.01008	0.00131	0.00105	0.00006-0.03261	0.09339		
0.900	-0.02205-0.01666		0.01760-0.01368-0.01598	0.00590	0.05968-0.00262		0.00590	0.01241	0.00145	0.00132	0.00007-0.01129	0.04741		
1.000	-0.00267-0.01600		0.01803-0.00800-0.02491	0.00555	0.05761-0.00308		0.00555	0.01484	0.00157	0.00163	0.00009	0.01123	0.01528	
1.500	-0.00472	0.01723-0.00336	0.02453-0.03632	0.01750-0.00426-0.00026		0.02588	0.00200	0.00357	0.00020	0.00020	0.00020	0.02901	0.00215	
2.000	-0.01018	0.00201-0.02005	0.02367-0.01036-0.00576-0.00182-0.01006		0.02987	0.00200	0.00605	0.00035	0.		0.01944			
3.000	0.00129	0.00246-0.00396-0.00254	0.00041	0.00831	0.00945-0.01951		0.01460	0.00041	0.01144	0.00077	0.00524	0.00101		
4.000	-0.00264	0.00235	0.00565	0.00053-0.00627	0.00370	0.01267-0.00998-0.00043-0.00292		0.01510	0.00133	0.00576	0.00073			
5.000	-0.00125-0.00037		0.00386	0.00305-0.00220-0.00094	0.00689-0.00057-0.00110-0.00654		0.01537	0.00200	0.00118	0.00369				
8.000	-0.00020	0.00101-0.00041-0.00167-0.00047		0.00209-0.00378-0.00181	0.00395-0.00884		0.00489	0.00430-0.00082	0.00141					

SIN THETA/ LAMBDA	RA 5D5D J(4)	RA 5D5P J(1)	RA 5D5P J(3)	RA 5D5S J(2)	RA 5D4F J(1)	RA 5D4F J(3)	RA 5D4F J(5)	RA 5D4D J(0)	RA 5D4D J(2)	RA 5D4D J(4)	RA 5D4P J(1)	RA 5D4P J(3)	RA 5D4S J(2)	RA 5D3D J(0)
0.005	0.	-0.00992-0.		0.00006	0.00153	0.	0.	0.00001-0.00001-0.			0.00083	0.	-0.00001	0.
0.010	0.	-0.01983-0.		0.00025	0.00307	0.	0.	0.00007-0.00003-0.			0.00165	0.	-0.00002	0.
0.050	0.00002-0.09792-0.00036			0.00617	0.01513	0.00005	0.	0.00178-0.00071-0.			0.00818	0.00002-0.00051	0.00009	
0.100	0.00036-0.18841-0.00281			0.02395	0.02933	0.00037	0.	0.00704-0.00280-0.00002			0.01585	0.00019-0.00201	0.00036	
0.150	0.00173-0.26499-0.00901			0.05124	0.04170	0.00121	0.00001	0.01550-0.00609-0.00008			0.02255	0.00063-0.00438	0.00080	
0.200	0.00504-0.32285-0.01991			0.08490	0.05139	0.00275	0.00005	0.02671-0.01035-0.00024			0.02786	0.00144-0.00747	0.00142	
0.300	0.02025-0.37410-0.05529			0.15650	0.06089	0.00819	0.00035	0.05499-0.02044-0.00112			0.03311	0.00441-0.01487	0.00318	
0.400	0.04709-0.34624-0.10048			0.21115	0.05627	0.01634	0.00125	0.08645-0.03013-0.00311			0.03019	0.00914-0.02217	0.00561	
0.500	0.07937-0.26716-0.14099			0.23218	0.03935	0.02562	0.00313	0.11549-0.03666-0.00645			0.01942	0.01500-0.02732	0.00867	
0.600	0.10763-0.17121-0.16472			0.21790	0.01433	0.03394	0.00619	0.13762-0.03810-0.01099			0.00259	0.02090-0.02879	0.01232	
0.700	0.12443-0.08545-0.16686			0.17790-0.01377		0.03940	0.01030	0.15014-0.03375-0.01618-0.01761			0.02561-0.02581		0.01649	
0.800	0.12704-0.02415-0.14986			0.12629-0.04038		0.04079	0.01502	0.15226-0.02409-0.02122-0.03820			0.02806-0.01850		0.02108	
0.900	0.11701 0.01005-0.12052			0.07586-0.06217		0.03781	0.01975	0.14492-0.01050-0.02525-0.05654			0.02758-0.00771		0.02599	
1.000	0.09844 0.02179-0.08662			0.03499-0.07733		0.03094	0.02380	0.13014 0.00519-0.02756-0.07067			0.02399 0.00524		0.03110	
1.500	0.00728-0.02286 0.00630-0.00368-0.06455-0.02384			0.02174		0.02930	0.06114-0.00823-0.06567-0.02058			0.05553		0.05512		
2.000	-0.00059-0.01588-0.00904			0.02078-0.00878-0.04599-0.00535-0.00683		0.04676	0.02628-0.01148-0.04463			0.04125		0.06711		
3.000	0.01064 0.00362-0.00749-0.00148			0.01904-0.01432-0.02720		0.01715-0.00072	0.02448	0.00430-0.00886-0.00716			0.04837			
4.000	0.00179-0.00362 0.00145-0.00053			0.00682		0.00499-0.01270	0.01329	0.00355	0.00228-0.00887		0.00309	0.00103	0.01568	
5.000	-0.00034-0.00210-0.00118			0.00279	0.00055	0.00630-0.00117	0.00215	0.00982-0.00052-0.00379-0.00357			0.00600-0.00150			
8.000	0.00210 0.00190-0.00090-0.00163-0.00039			0.00084	0.00244-0.00191	0.00328	0.00531	0.00404-0.00161-0.00356-0.00334						

SIN THETA/ LAMBDA	RA 5D3D J(2)	RA 5D3D J(4)	RA 5D3P J(1)	RA 5D3P J(3)	RA 5D3S J(2)	RA 5D2P J(1)	RA 5D2P J(3)	RA 5D2S J(2)	RA 5D1S J(2)	RA 5P5P J(0)	RA 5P5P J(2)	RA 5P5S J(1)	RA 5P4F J(2)	RA 5P4F J(4)
0.005	-0.	-0.	0.00027	0.	-0.	0.00008	0.	-0.	0.	0.99985	0.00006-0.00928-0.00001-0.			
0.010	-0.	-0.	0.00055	0.	-0.	0.00015	0.	-0.	0.	0.99939	0.00025-0.01856-0.00005-0.			
0.050	-0.00004-0.		0.00273	0.	-0.00006	0.00075	0.	-0.	0.	0.98473	0.00609-0.09187-0.00113-0.			
0.100	-0.00014-0.		0.00546	0.00001-0.00024		0.00151	0.	-0.00002	0.	0.94010	0.02369-0.17800-0.00442-0.00003			
0.150	-0.00032-0.		0.00815	0.00002-0.00054		0.00226	0.	-0.00004	0.	0.86955	0.05085-0.25322-0.00961-0.00013			
0.200	-0.00057-0.		0.01080	0.00004-0.00095		0.00301	0.	-0.00007	0.	0.77831	0.08467-0.31340-0.01631-0.00039			
0.300	-0.00127-0.		0.01592	0.00014-0.00212		0.00451	0.	-0.00016	0.00001	0.55001	0.15813-0.37948-0.03210-0.00180			
0.400	-0.00223-0.00001		0.02071	0.00034-0.00371		0.00601	0.	-0.00028	0.00002	0.33858	0.21704-0.37305-0.04719-0.00495			
0.500	-0.00343-0.00003		0.02505	0.00066-0.00589		0.00750	0.00001-0.00044	0.00003	0.15612	0.24360-0.31126-0.05741-0.01011				
0.600	-0.00484-0.00007		0.02886	0.00113-0.00799		0.00898	0.00002-0.00064	0.00004	0.03343	0.23405-0.22142-0.06010-0.01694				
0.700	-0.00542-0.00014		0.03203	0.00177-0.01056		0.01045	0.00003-0.00087	0.00005-0.02938		0.19629-0.12995-0.05451-0.02453				
0.800	-0.00811-0.00025		0.03448	0.00261-0.01352		0.01191	0.00004-0.00114	0.00007-0.04560		0.14388-0.05528-0.04167-0.03164				
0.900	-0.00985-0.00042		0.03616	0.00364-0.01617		0.01335	0.00006-0.00144	0.00008-0.03335		0.09021-0.00572-0.02374-0.03708				
1.000	-0.01158-0.00067		0.03702	0.00486-0.01902		0.01478	0.00008-0.00179	0.00010-0.00918		0.04488	0.01886-0.01339-0.03994			
1.500	-0.01751-0.00334		0.02933	0.01301-0.02996		0.02156	0.00032-0.00406	0.00022	0.03918-0.00510-0.02210		0.06509-0.01354			
2.000	-0.01480-0.00798		0.00850	0.02025-0.02953		0.02747	0.00084-0.00722	0.00039	0.00024	0.02364-0.02257		0.04610	0.02863	
3.000	0.00932-0.01282-0.02255		0.01499-0.00292		0.03512	0.00313-0.01512	0.00082	0.00708	0.00005	0.00270-0.01455		0.02699		
4.000	0.02581-0.00456-0.01644-0.00406		0.01389	0.03606		0.00698-0.02230	0.00134	0.00597	0.00183-0.00663-0.01394-0.00089					
5.000	0.02520 0.00669-0.00035-0.01338		0.00958	0.03149		0.01113-0.02584	0.00188	0.00001	0.00507-0.00291-0.00394-0.00830					
8.000	0.00557 0.01206 0.00767-0.00106-0.00769		0.01111	0.01504-0.01678		0.00307	0.00239-0.00025-0.00041	0.00104-0.00121						

SIN THETA/ LAMBDA	RA 5P4D J(1)	RA 5P4D J(3)	RA 5P4P J(0)	RA 5P4P J(2)	RA 5P4S J(1)	RA 5P3D J(1)	RA 5P3D J(3)	RA 5P3P J(0)	RA 5P3P J(2)	RA 5P3S J(1)	RA 5P2P J(0)	RA 5P2P J(2)	RA 5P2S J(1)	RA 5P1S J(1)
0.005	0.00127	0.	0.00002	-0.00001	0.00090	0.00010	0.	0.00005	-0.	0.00022	-0.	-0.	0.00006	0.00001
0.010	0.00253	0.	0.00007	-0.00003	0.00180	0.00019	0.	0.00005	-0.	0.00044	0.	-0.	0.00012	0.00002
0.050	0.01254	0.00003	0.00169	-0.00067	0.00891	0.00096	0.	0.00016	-0.00004	0.00221	0.00001	-0.	0.00059	0.00012
0.100	0.02438	0.00026	0.00668	-0.00265	0.01730	0.00190	0.	0.00049	-0.00018	0.00441	0.00003	-0.00001	0.00118	0.00025
0.150	0.03487	0.00087	0.01474	-0.00581	0.02472	0.00283	0.00001	0.00104	-0.00039	0.00658	0.00008	-0.00003	0.00177	0.00037
0.200	0.04343	0.00200	0.02550	-0.00992	0.03072	0.00374	0.00002	0.00180	-0.00070	0.00871	0.00014	-0.00005	0.00236	0.00050
0.300	0.05304	0.00615	0.05306	-0.01990	0.03717	0.00546	0.00008	0.00397	-0.00156	0.01277	0.00031	-0.00012	0.00353	0.00075
0.400	0.05121	0.01277	0.08457	-0.03000	0.03503	0.00698	0.00019	0.00695	-0.00273	0.01649	0.00054	-0.00022	0.00469	0.00100
0.500	0.03830	0.02103	0.11489	-0.03759	0.02433	0.00823	0.00039	0.01069	-0.00419	0.01975	0.00085	-0.00034	0.00583	0.00125
0.600	0.01672	0.02945	0.13951	-0.04060	0.00661	0.00915	0.00068	0.01512	-0.00589	0.02245	0.00122	-0.00049	0.00695	0.00150
0.700	-0.00989	0.03633	0.15526	-0.03795	-0.01550	0.00967	0.00109	0.02014	-0.00777	0.02449	0.00166	-0.00066	0.00806	0.00174
0.800	-0.03748	0.04021	0.16068	-0.02962	-0.03891	0.00971	0.00163	0.02564	-0.00977	0.02579	0.00216	-0.00086	0.00913	0.00199
0.900	-0.06243	0.04016	0.15596	-0.01657	-0.06067	0.00924	0.00230	0.03147	-0.01180	0.02629	0.00273	-0.00109	0.01018	0.00224
1.000	-0.08206	0.03595	0.14259	-0.00042	-0.07837	0.00821	0.00312	0.03749	-0.01377	0.02595	0.00336	-0.00134	0.01119	0.00249
1.500	-0.08213	-0.02124	0.03162	0.06669	-0.08109	-0.00484	0.00848	0.06442	-0.01969	0.01219	0.00741	-0.00291	0.01556	0.00371
2.000	-0.01650	-0.05348	-0.01195	0.05330	-0.01749	-0.02476	0.01212	0.07409	-0.01384	-0.01316	0.01270	-0.00489	0.01842	0.00492
3.000	0.00443	-0.01190	0.02120	-0.00370	-0.00024	-0.04311	0.00100	0.04018	0.01884	-0.04039	0.02488	-0.00880	0.01824	0.00725
4.000	-0.01043	0.00280	0.01074	0.00699	-0.01465	-0.02399	-0.01829	0.00422	0.03109	-0.02145	0.03478	-0.01025	0.01061	0.00941
5.000	-0.00449	-0.00449	-0.00054	0.01126	-0.00482	-0.00124	-0.02388	-0.00158	0.01924	-0.00079	0.03856	-0.00784	-0.00030	0.01133
8.000	0.00451	-0.00196	0.00536	-0.00058	-0.00112	0.00859	-0.00261	0.01137	-0.00091	-0.00375	0.02255	0.00854	-0.01576	0.01514

SIN THETA/ LAMBDA	RA 5S5S J(0)	RA 5S4F J(3)	RA 5S4D J(2)	RA 5S4P J(1)	RA 5S4S J(0)	RA 5S3D J(2)	RA 5S3P J(1)	RA 5S3S J(0)	RA 5S2P J(1)	RA 5S2S J(0)	RA 5S1S J(0)	RA 4F4F J(0)	RA 4F4F J(2)	RA 4F4F J(4)
0.005	0.99986	0.	-0.00001	0.00113	0.00002	-0.	0.00014	0.00006	0.00002	0.	0.	0.99997	0.00001	0.
0.010	0.99945	0.	-0.00003	0.00226	0.00007	-0.	0.00029	0.00006	0.00004	0.	0.	0.99988	0.00005	0.
0.050	0.98624	0.00005	-0.00086	0.01118	0.00163	-0.00003	0.00144	0.00017	0.00022	0.00001	0.	0.99689	0.00124	0.
0.100	0.94590	0.00038	-0.00340	0.02177	0.00645	-0.00010	0.00286	0.00052	0.00044	0.00004	0.	0.98761	0.00494	0.00001
0.150	0.88173	0.00126	-0.00743	0.03121	0.01424	-0.00023	0.00426	0.00110	0.00066	0.00009	0.00001	0.97235	0.01099	0.00005
0.200	0.79798	0.00287	-0.01270	0.03899	0.02468	-0.00040	0.00563	0.00190	0.00088	0.00017	0.00001	0.95141	0.01921	0.00016
0.300	0.59352	0.00872	-0.02549	0.04806	0.05157	-0.00090	0.00822	0.00418	0.00131	0.00038	0.00002	0.89421	0.04123	0.00079
0.400	0.37852	0.01784	-0.03847	0.04703	0.08267	-0.00158	0.01053	0.00732	0.00173	0.00067	0.00004	0.82020	0.06868	0.00233
0.500	0.19240	0.02889	-0.04836	0.03590	0.11311	-0.00245	0.01246	0.01124	0.00214	0.00104	0.00005	0.73440	0.09885	0.00522
0.600	0.05831	0.03972	-0.05261	0.01642	0.13846	-0.00346	0.01394	0.01588	0.00254	0.00150	0.00008	0.64204	0.12908	0.00978
0.700	-0.01861	0.04809	-0.04995	-0.00843	0.15546	-0.00459	0.01487	0.02113	0.00291	0.00203	0.00011	0.54801	0.15700	0.01613
0.800	-0.04691	0.05227	-0.04045	-0.03509	0.16241	-0.00579	0.01517	0.02686	0.00327	0.00264	0.00014	0.45648	0.18080	0.02416
0.900	-0.04205	0.05139	-0.02535	-0.06013	0.15917	-0.00700	0.01479	0.03293	0.00361	0.00333	0.00018	0.37069	0.19933	0.03358
1.000	-0.02021	0.04550	-0.00666	-0.08080	0.14695	-0.00816	0.01368	0.03915	0.00392	0.00410	0.00022	0.29286	0.21204	0.04396
1.500	0.04289	-0.02019	0.06993	-0.08840	0.03346	-0.01063	-0.00212	0.06654	0.00497	0.00895	0.00048	0.04385	0.19938	0.09279
2.000	0.00098	-0.05235	0.05583	-0.02010	-0.01498	-0.00370	-0.02691	0.07479	0.00494	0.01513	0.00085	-0.02903	0.12837	0.11000
3.000	0.00701	-0.00765	-0.00699	-0.00033	0.02142	0.02437	-0.04838	0.03472	0.00091	0.02846	0.00189	-0.01947	0.02890	0.07323
4.000	0.00544	0.01415	0.00184	-0.01545	0.00845	0.03120	-0.02387	-0.00152	-0.00738	0.03734	0.00327	-0.00372	0.00224	0.03235
5.000	-0.00096	0.00930	0.00750	-0.00511	-0.00236	0.01653	-0.00107	-0.00249	-0.01627	0.03783	0.00493	0.00012	-0.00142	0.01222
8.000	0.00244	-0.00102	-0.00412	-0.00121	0.00512	-0.00930	-0.00453	0.00966	-0.02169	0.01190	0.01058	0.00014	-0.00022	0.00048

SIN THETA/ LAMBDA	RA 4F4F J(6)	RA 4F4D J(1)	RA 4F4D J(3)	RA 4F4D J(5)	RA 4F4P J(2)	RA 4F4P J(4)	RA 4F4S J(3)	RA 4F3D J(1)	RA 4F3D J(3)	RA 4F3D J(5)	RA 4F3P J(2)	RA 4F3P J(4)	RA 4F3S J(3)	RA 4F2P J(2)
0.005	0.	-0.00400	-0.	-0.	0.00001	0.	-0.	0.00126	0.	0.	-0.	-0.	0.	0.
0.010	0.	-0.00801	-0.	-0.	0.00005	0.	-0.	0.00253	0.	0.	-0.00001	-0.	0.	0.
0.050	0.	-0.03993	-0.00003	-0.	0.00118	0.	-0.00003	0.01262	0.	0.	-0.00027	-0.	0.	0.00001
0.100	0.	-0.07924	-0.00023	-0.	0.00469	0.00001	-0.00022	0.02517	0.00002	0.	-0.00107	-0.	0.00003	0.00005
0.150	0.	-0.11736	-0.00078	-0.	0.01045	0.00005	-0.00073	0.03760	0.00008	0.	-0.00239	-0.	0.00011	0.00012
0.200	0.	-0.15370	-0.00181	-0.00001	0.01830	0.00014	-0.00170	0.04984	0.00019	0.	-0.00422	-0.00001	0.00025	0.00021
0.300	0.00001	-0.21908	-0.00587	-0.00008	0.03944	0.00069	-0.00552	0.07355	0.00063	0.	-0.00936	-0.00006	0.00084	0.00048
0.400	0.00006	-0.27205	-0.01311	-0.00032	0.06606	0.00205	-0.01240	0.09584	0.00145	0.00001	-0.01629	-0.00018	0.00195	0.00085
0.500	0.00020	-0.31045	-0.02378	-0.00092	0.09564	0.00468	-0.02261	0.11633	0.00276	0.00004	-0.02476	-0.00042	0.00372	0.00131
0.600	0.00052	-0.33346	-0.03759	-0.00209	0.12558	0.00893	-0.03596	0.13471	0.00462	0.00009	-0.03449	-0.00085	0.00623	0.00187
0.700	0.00116	-0.34145	-0.05383	-0.00406	0.15341	0.01503	-0.05184	0.15071	0.00706	0.00019	-0.04515	-0.00152	0.00953	0.00251
0.800	0.00223	-0.33582	-0.07151	-0.00704	0.17708	0.02299	-0.06933	0.16418	0.01009	0.00035	-0.05639	-0.00248	0.01363	0.00324
0.900	0.00386	-0.31867	-0.08946	-0.01114	0.19511	0.03263	-0.08730	0.17501	0.01368	0.00060	-0.06787	-0.00379	0.01850	0.00403
1.000	0.00614	-0.29256	-0.10658	-0.01639	0.20660	0.04358	-0.10462	0.18319	0.01779	0.00096	-0.07925	-0.00548	0.02407	0.00489
1.500	0.02655	-0.11330	-0.15280	-0.05390	0.17203	0.09865	-0.15156	0.18796	0.04288	0.00511	-0.12512	-0.01982	0.05805	0.00976
2.000	0.05122	0.01190	-0.12507	-0.08466	0.06713	0.11493	-0.11710	0.15171	0.06607	0.01371	-0.13949	-0.04060	0.08863	0.01477
3.000	0.06671	0.04536	-0.02154	-0.07071	-0.04034	0.04559	0.00249	0.06027	0.07810	0.03534	-0.09352	-0.07050	0.09786	0.02144
4.000	0.04836	0.01437	0.01611	-0.02437	-0.02817	-0.00969	0.03174	0.01176	0.05657	0.04512	-0.03430	-0.06497	0.05957	0.02179
5.000	0.02798	0.00071	0.01575	0.00111	-0.00705	-0.01950	0.01805	-0.00241	0.03198	0.04064	-0.00395	-0.04229	0.02294	0.01784
8.000	0.00385	-0.00092	0.00195	0.00609	0.00222	-0.00235	-0.00221	-0.00151	0.00309	0.01323	0.00400	-0.00247	-0.00469	0.00489

SIN THETA/ LAMBDA	RA 4F2P J(4)	RA 4F2S J(3)	RA 4F1S J(3)	RA 4D4D J(0)	RA 4D4D J(2)	RA 4D4D J(4)	RA 4D4P J(1)	RA 4D4P J(3)	RA 4D4S J(2)	RA 4D3D J(0)	RA 4D3D J(2)	RA 4D3D J(4)	RA 4D3P J(1)	RA 4D3P J(3)
0.005	0.	-0.	0.	0.99997	0.00001	0.	-0.00423	-0.	0.00001	0.	-0.	-0.	0.00083	0.
0.010	0.	-0.	0.	0.99987	0.00005	0.	-0.00846	-0.	0.00005	0.00001	-0.00001	-0.	0.00165	0.
0.050	0.	-0.	0.	0.99685	0.00126	0.	-0.04219	-0.00003	0.00123	0.00035	-0.00014	-0.	0.00825	0.
0.100	0.	-0.	0.	0.98746	0.00500	0.00001	-0.08379	-0.00023	0.00490	0.00140	-0.00056	-0.	0.01643	0.00003
0.150	0.	-0.	0.	0.97199	0.01114	0.00005	-0.12420	-0.00076	0.01091	0.00314	-0.00125	-0.	0.02447	0.00009
0.200	0.	-0.00001	0.	0.95070	0.01952	0.00014	-0.16287	-0.00179	0.01914	0.00556	-0.00221	-0.00001	0.03232	0.00020
0.300	0.	-0.00003	0.	0.89222	0.04215	0.00071	-0.23295	-0.00581	0.04139	0.01231	-0.00487	-0.00004	0.04717	0.00067
0.400	0.	-0.00007	0.	0.81585	0.07074	0.00212	-0.29059	-0.01308	0.06964	0.02143	-0.00839	-0.00013	0.06051	0.00155
0.500	0.00001	-0.00014	0.	0.72635	0.10269	0.00484	-0.33338	-0.02394	0.10140	0.03258	-0.01250	-0.00031	0.07196	0.00294
0.600	0.00001	-0.00024	0.	0.62894	0.13526	0.00927	-0.36017	-0.03823	0.13399	0.04538	-0.01729	-0.00063	0.08118	0.00489
0.700	0.00003	-0.00037	0.	0.52879	0.16585	0.01565	-0.37099	-0.05535	0.16484	0.05941	-0.02221	-0.00111	0.08795	0.00742
0.800	0.00004	-0.00055	0.	0.43063	0.19224	0.02403	-0.36694	-0.07435	0.19168	0.07420	-0.02714	-0.00181	0.09215	0.01052
0.900	0.00007	-0.00077	0.	0.33840	0.21279	0.03425	-0.34999	-0.09408	0.21277	0.08930	-0.03183	-0.00274	0.09374	0.01414
1.000	0.00011	-0.00104	0.	0.25512	0.22649	0.04592	-0.32268	-0.11327	0.22696	0.10427	-0.03606	-0.00392	0.09277	0.01817
1.500	0.00048	-0.00313	0.00001	0.01140	0.19690	0.10562	-0.12641	-0.16749	0.19492	0.16422	-0.04478	-0.01335	0.05686	0.04015
2.000	0.00130	-0.00633	0.00002	-0.01118	0.09206	0.12408	0.00237	-0.13185	0.08037	0.18161	-0.02854	-0.02479	-0.00197	0.05269
3.000	0.00431	-0.01391	0.00007	0.04939	-0.00500	0.05187	-0.00008	-0.01083	-0.01791	0.11521	0.03620	-0.00260	-0.06522	0.02615
4.000	0.00795	-0.01905	0.00015	0.03015	0.01315	0.00187	-0.02390	0.00449	0.00859	0.03346	0.06946	-0.00360	-0.03866	-0.02003
5.000	0.01049	-0.01976	0.00024	0.00356	0.02568	0.00008	-0.00774	-0.01205	0.01562	-0.00558	0.06270	0.02264	0.00193	-0.03697
8.000	0.00896	-0.00932	0.00050	-0.00454	0.00773	0.01336	0.00976	-0.00365	-0.00894	0.00791	0.01309	0.02997	0.01845	-0.00202

SIA THETA/ LAMBDA	RA 4D3S J(2)	RA 4D2P J(1)	RA 4D2P J(3)	RA 4D2S J(2)	RA 4D1S J(2)	RA 4P4P J(0)	RA 4P4P J(2)	RA 4P4S J(1)	RA 4P3D J(1)	RA 4P3D J(3)	RA 4P3P J(0)	RA 4P3P J(2)	RA 4P3S J(1)	RA 4P2P J(0)
0.005	-0.	0.00020	0.	-0.	0.	0.99997	0.00001-0.00428	0.00033	0.	0.	-0.	0.00063	0.00002	
0.010	-0.00001	0.00040	0.	-0.	0.	0.99988	0.00005-0.00855	0.00065	0.	0.00001-0.00001	0.00125	0.00002	0.00002	
0.050	-0.00021	0.00198	0.	-0.00001	0.	0.99688	0.00125-0.04266	0.00326	0.	0.00039-0.00016	0.00624	0.00004	0.00004	
0.100	-0.00084	0.00396	0.	-0.00005	0.	0.98757	0.00496-0.08473	0.00648	0.00002	0.00157-0.00063	0.01242	0.00010	0.00010	
0.150	-0.00189	0.00594	0.	-0.00011	0.00001	0.97222	0.01105-0.12565	0.00961	0.00006	0.00352-0.00141	0.01847	0.00020	0.00020	
0.200	-0.00333	0.00791	0.	-0.00020	0.00001	0.95108	0.01939-0.16486	0.01260	0.00014	0.00623-0.00248	0.02432	0.00035	0.00035	
0.300	-0.00735	0.01186	0.00001-0.00045	0.00002	0.89285	0.04196-0.23620	0.01799	0.00047	0.01379-0.00545	0.03520	0.00077	0.00077	0.00077	
0.400	-0.01271	0.01579	0.00002-0.00081	0.00004	0.81651	0.07065-0.29529	0.02234	0.00107	0.02395-0.00936	0.04461	0.00135	0.00135	0.00135	
0.500	-0.01917	0.01969	0.00003-0.00126	0.00006	0.72659	0.10298-0.33969	0.02539	0.00202	0.03634-0.01401	0.05217	0.00209	0.00209	0.00209	
0.500	-0.02544	0.02357	0.00006-0.00182	0.00009	0.62816	0.13624-0.36812	0.02694	0.00334	0.05047-0.01914	0.05758	0.00300	0.00300	0.00300	
0.700	-0.03419	0.02741	0.00009-0.00247	0.00012	0.52634	0.16783-0.38045	0.02686	0.00504	0.06584-0.02446	0.06064	0.00407	0.00407	0.00407	
0.800	-0.04209	0.03121	0.00014-0.00323	0.00016	0.42593	0.19544-0.37760	0.02509	0.00709	0.08188-0.02968	0.06125	0.00529	0.00529	0.00529	
0.900	-0.04980	0.03496	0.00020-0.00410	0.00020	0.33108	0.21727-0.36142	0.02165	0.00944	0.09806-0.03451	0.05939	0.00667	0.00667	0.00667	
1.000	-0.05701	0.03866	0.00028-0.00506	0.00025	0.24505	0.23212-0.33433	0.01662	0.01200	0.11383-0.03870	0.05517	0.00819	0.00819	0.00819	
1.500	-0.07733	0.05603	0.00101-0.01135	0.00055	0.00485	0.20119-0.13267	-0.02565	0.02439	0.17156-0.04354	0.00713	0.01789	0.01789	0.01789	
2.000	-0.06399	0.07080	0.00255-0.01983	0.00095	0.01585	0.08544-0.00022	-0.07302	0.02683	0.17547-0.01836	0.05406	0.03034	0.03034	0.03034	
3.000	0.00854	0.08886	0.00887-0.04017	0.00201	0.05249	0.00871-0.01399	-0.09823	-0.00830	0.07857	0.05620-0.09424	0.05803	0.05803	0.05803	
4.000	0.03967	0.08958	0.01878-0.05748	0.00327	0.01863	0.02100-0.03228	-0.04766	-0.04748	0.00459	0.07059-0.04193	0.07926	0.07926	0.07926	
5.000	0.02276	0.07707	0.02888-0.06503	0.00456	0.00192	0.02446-0.00807	0.00110	-0.05370	-0.00236	0.03946	0.00093	0.08645	0.08645	
8.000	-0.01904	0.02650	0.03701-0.04062	0.00744	0.01193	0.00125-0.00301	0.01851	-0.00444	0.02505	-0.00171	-0.00910	0.04901	0.04901	

SIN THETA/ LAMBDA	RA 4P2P J(2)	RA 4P2S J(1)	RA 4P1S J(1)	RA 4S4S J(0)	RA 4S3D J(2)	RA 4S3P J(1)	RA 4S3S J(0)	RA 4S2P J(1)	RA 4S2S J(0)	RA 4S1S J(0)	RA 3D3D J(0)	RA 3D3D J(2)	RA 3D3D J(4)	RA 3D3P J(1)	
0.005	-0.	0.00014	0.00003	0.99997-0.	0.00044	0.	0.00005	0.00002	0.	1.00000	0.	0.	-0.00163	-0.00163	
0.010	-0.	0.00028	0.00006	0.99988-0.	0.00089	0.00001	0.00010	0.00002	0.	0.99998	0.00001	0.	-0.00326	-0.00326	
0.050	-0.00001	0.00138	0.00028	0.99691-0.00011	0.00442	0.00040	0.00050	0.00004	0.00001	0.99953	0.00019	0.	-0.01630	-0.01630	
0.100	-0.00003	0.00275	0.00055	0.98770-0.00043	0.00878	0.00161	0.00100	0.00012	0.00001	0.99810	0.00076	0.	-0.03256	-0.03256	
0.150	-0.00008	0.00412	0.00083	0.97252-0.00095	0.01303	0.00360	0.00150	0.00024	0.00001	0.99574	0.00170	0.	-0.04873	-0.04873	
0.200	-0.00013	0.00549	0.00111	0.95159-0.00168	0.01710	0.00637	0.00199	0.00041	0.00002	0.99244	0.00302	0.	-0.06477	-0.06477	
0.300	-0.00030	0.00821	0.00166	0.89388-0.00368	0.02451	0.01410	0.00297	0.00090	0.00005	0.98307	0.00675	0.00002	-0.09627	-0.09627	
0.400	-0.00053	0.01090	0.00221	0.81806-0.00630	0.03062	0.02449	0.00393	0.00159	0.00008	0.97011	0.01187	0.00006	-0.12674	-0.12674	
0.500	-0.00083	0.01354	0.00276	0.72854-0.00937	0.03509	0.03712	0.00486	0.00247	0.00012	0.95371	0.01832	0.00014	-0.15586	-0.15586	
0.600	-0.00119	0.01614	0.00331	0.63025-0.01269	0.03767	0.05150	0.00575	0.00353	0.00017	0.93405	0.02598	0.00029	-0.18334	-0.18334	
0.700	-0.00161	0.01868	0.00386	0.52821-0.01605	0.03819	0.06710	0.00660	0.00478	0.00023	0.91135	0.03473	0.00053	-0.20892	-0.20892	
0.800	-0.00210	0.02114	0.00441	0.42721-0.01924	0.03658	0.08334	0.00740	0.00622	0.00030	0.88587	0.04443	0.00089	-0.23237	-0.23237	
0.900	-0.00264	0.02353	0.00496	0.33143-0.02204	0.03285	0.09963	0.00814	0.00783	0.00038	0.85787	0.05493	0.00139	-0.25351	-0.25351	
1.000	-0.00324	0.02582	0.00551	0.24423-0.02425	0.02711	0.11541	0.00881	0.00961	0.00046	0.82755	0.06608	0.00207	-0.27218	-0.27218	
1.500	-0.00699	0.03553	0.00823	-0.01092-0.02222	0.02331	0.17109	0.01096	0.02077	0.00104	0.65399	0.12573	0.00886	-0.32600	-0.32600	
2.000	-0.01156	0.04149	0.01090	-0.02020	0.00241	-0.07995	0.16933	0.01056	0.03472	0.00183	0.47001	0.17847	0.02240	-0.31736	-0.31736
3.000	-0.02005	0.03941	0.01604	0.05089	0.06243	-0.10504	0.06197	0.00087	0.06363	0.00404	0.17503	0.22229	0.06346	-0.18843	-0.18843
4.000	-0.02241	0.02103	0.02080	0.01205	0.06611	-0.04405	-0.00697	-0.01755	0.08137	0.00698	0.02427	0.19047	0.09910	-0.04778	-0.04778
5.000	-0.01617	-0.00342	0.02502	-0.00506	0.03127	0.00065	-0.00304	-0.03629	0.08061	0.01051	-0.02515	0.13119	0.11136	0.02995	0.02995
8.000	0.02001	-0.03508	0.03329	0.01070	-0.01983	-0.01024	0.01999	-0.04564	0.02410	0.02247	-0.01367	0.02203	0.06430	0.03435	0.03435

SIN THETA/ LAMBDA	RA 3D3P J(3)	RA 3D3S J(2)	RA 3D2P J(1)	RA 3D2P J(3)	RA 3D2S J(2)	RA 3D1S J(2)	RA 3P3P J(0)	RA 3P3P J(2)	RA 3P3S J(1)	RA 3P2P J(0)	RA 3P2P J(2)	RA 3P2S J(1)	RA 3P1S J(1)	RA 3S3S J(0)
0.005	-0.	0.	0.00059	0.	-0.	0.	0.99999	0.	-0.00192	0.	-0.	0.00036	0.00006	0.99999
0.010	-0.	0.00001	0.00118	0.	-0.	0.	0.99998	0.00001	-0.00385	0.	-0.	0.00073	0.00012	0.99997
0.050	-0.	0.00021	0.00590	0.	-0.00005	0.	0.99938	0.00025	-0.01922	0.00007	-0.00003	0.00364	0.00058	0.99932
0.100	-0.00002	0.00085	0.01180	0.	-0.00022	0.00001	0.99751	0.00099	-0.03839	0.00028	-0.00011	0.00728	0.00116	0.99729
0.150	-0.00006	0.00192	0.01768	0.00001	-0.00049	0.00001	0.99441	0.00223	-0.05745	0.00062	-0.00025	0.01090	0.00175	0.99391
0.200	-0.00013	0.00339	0.02355	0.00002	-0.00087	0.00002	0.99009	0.00396	-0.07633	0.00111	-0.00044	0.01451	0.00233	0.98919
0.300	-0.00045	0.00758	0.03522	0.00005	-0.00196	0.00005	0.97782	0.00883	-0.11336	0.00248	-0.00099	0.02164	0.00349	0.97582
0.400	-0.00106	0.01332	0.04676	0.00013	-0.00346	0.00008	0.96069	0.01552	-0.14906	0.00440	-0.00175	0.02863	0.00465	0.95737
0.500	-0.00204	0.02050	0.05813	0.00025	-0.00538	0.00013	0.93952	0.02389	-0.18302	0.00683	-0.00272	0.03543	0.00581	0.93411
0.600	-0.00347	0.02900	0.06930	0.00043	-0.00770	0.00018	0.91400	0.03379	-0.21488	0.00977	-0.00387	0.04199	0.00697	0.90636
0.700	-0.00541	0.03865	0.08022	0.00068	-0.01041	0.00025	0.88466	0.04502	-0.24430	0.01320	-0.00522	0.04828	0.00813	0.87451
0.800	-0.00789	0.04927	0.09086	0.00101	-0.01347	0.00032	0.85189	0.05737	-0.27100	0.01709	-0.00673	0.05426	0.00929	0.83898
0.900	-0.01097	0.06066	0.10118	0.00142	-0.01688	0.00041	0.81609	0.07062	-0.29476	0.02142	-0.00839	0.05988	0.01044	0.80026
1.000	-0.01464	0.07264	0.11115	0.00193	-0.02061	0.00050	0.77772	0.08453	-0.31538	0.02615	-0.01019	0.06511	0.01159	0.75883
1.500	-0.04137	0.13389	0.15482	0.00607	-0.04314	0.00111	0.56325	0.15549	-0.36897	0.05472	-0.02063	0.08456	0.01730	0.52940
2.000	-0.07717	0.18098	0.18641	0.01309	-0.06941	0.00192	0.35064	0.20968	-0.34658	0.08801	-0.03157	0.09142	0.02289	0.30706
3.000	-0.13743	0.18987	0.21112	0.03412	-0.11668	0.00404	0.06617	0.21990	-0.18245	0.15027	-0.04582	0.06946	0.03358	0.02917
4.000	-0.14443	0.11462	0.19432	0.05774	-0.14700	0.00653	-0.01111	0.13790	-0.03689	0.18549	-0.04176	0.01919	0.04335	-0.02275
5.000	-0.10797	0.03127	0.15577	0.07580	-0.14913	0.00907	0.01061	0.05289	0.01594	0.18699	-0.02123	-0.03161	0.05188	0.01531
8.000	0.00123	-0.04017	0.04769	0.07688	-0.07830	0.01445	0.05079	-0.00003	-0.02504	0.09319	0.05105	-0.07440	0.06789	0.03614

SIN THETA/ LAMBDA	RA 3S2P J(1)	RA 3S2S J(0)	RA 3S1S J(0)	RA 2P2P J(0)	RA 2P2P J(2)	RA 2P2S J(1)	RA 2P1S J(1)	RA 2S2S J(0)	RA 2S1S J(0)	RA 1S1S J(0)	AM 7S7S J(0)	AM 7S6P J(1)	AM 7S6S J(0)	AM 7S5F J(3)
0.005	0.00014	0.	0.00001	1.00000	0.	-0.00070	0.00016	1.00000	0.	1.00000	0.99453	0.00690	0.00022	0.
0.010	0.00028	0.	0.00001	1.00000	0.	-0.00140	0.00032	1.00000	0.	1.00000	0.97828	0.01372	0.00087	-0.00001
0.050	0.00139	0.00008	0.00002	0.99992	0.00003	-0.00702	0.00158	0.99989	0.00001	0.99999	0.57044	0.05695	0.02007	-0.00130
0.100	0.00278	0.00032	0.00002	0.99967	0.00013	-0.01404	0.00316	0.99955	0.00003	0.99997	0.05858	0.06037	0.06253	-0.00708
0.150	0.00416	0.00071	0.00004	0.99926	0.00030	-0.02105	0.00473	0.99899	0.00006	0.99994	-0.05289	0.01741	0.09352	-0.01287
0.200	0.00553	0.00126	0.00005	0.99868	0.00053	-0.02806	0.00631	0.99821	0.00011	0.99989	-0.01491	-0.03098	0.09461	-0.01246
0.300	0.00821	0.00283	0.00010	0.99703	0.00119	-0.04202	0.00946	0.99598	0.00026	0.99974	0.01791	-0.05778	0.03843	0.00540
0.400	0.01080	0.00501	0.00017	0.99473	0.00210	-0.05589	0.01261	0.99286	0.00045	0.99954	0.00276	-0.02472	-0.00639	0.02258
0.500	0.01327	0.00778	0.00026	0.99179	0.00328	-0.06966	0.01575	0.98886	0.00071	0.99928	-0.00334	0.00097	-0.01185	0.02580
0.600	0.01558	0.01112	0.00037	0.98820	0.00471	-0.08329	0.01888	0.98400	0.00102	0.99896	-0.00141	0.00610	-0.00123	0.01863
0.700	0.01771	0.01500	0.00049	0.98398	0.00638	-0.09676	0.02201	0.97828	0.00139	0.99858	0.00124	0.00141	0.00701	0.00819
0.800	0.01964	0.01939	0.00064	0.97913	0.00830	-0.11004	0.02512	0.97173	0.00181	0.99814	0.00215	-0.00372	0.00857	-0.00077
0.900	0.02134	0.02426	0.00080	0.97367	0.01046	-0.12311	0.02822	0.96436	0.00228	0.99765	0.00159	-0.00589	0.00590	-0.00641
1.000	0.02279	0.02958	0.00099	0.96761	0.01285	-0.13595	0.03131	0.95618	0.00282	0.99710	0.00076	-0.00535	0.00226	-0.00879
1.500	0.02571	0.06121	0.00219	0.92881	0.02796	-0.19579	0.04650	0.90410	0.00627	0.99349	0.00002	0.00086	0.00020	-0.00170
2.000	0.02076	0.09691	0.00385	0.87746	0.04744	-0.24672	0.06114	0.83590	0.01100	0.98847	0.00037	-0.00107	0.00142	0.00045
3.000	-0.00985	0.15778	0.00846	0.74775	0.09376	-0.31572	0.08814	0.66775	0.02378	0.97433	-0.00023	0.00010	-0.00012	-0.00090
4.000	-0.05266	0.18109	0.01456	0.60111	0.14007	-0.33893	0.11127	0.48619	0.04004	0.95505	0.00017	-0.00018	0.00043	0.00027
5.000	-0.08780	0.16431	0.02180	0.45771	0.17707	-0.32326	0.12986	0.32016	0.05842	0.93109	0.00056	-0.00034	-0.00005	0.00046
8.000	-0.08926	0.04032	0.04578	0.14911	0.20421	-0.17044	0.15704	0.03169	0.11314	0.83708	0.00017	0.00001	0.00010	-0.00003



SIN THETA/ LAMBDA	AM 7S5D J(2)	AM 7S5P J(1)	AM 7S5S J(0)	AM 7S4F J(3)	AM 7S4D J(2)	AM 7S4P J(1)	AM 7S4S J(0)	AM 7S3D J(2)	AM 7S3P J(1)	AM 7S3S J(0)	AM 7S2P J(1)	AM 7S2S J(0)	AM 7S1S J(0)	AM 6P6P J(0)
0.005	-0.00001	0.00048	0.00001	0.	-0.	0.00007	-0.00001	-0.	0.00001	-0.00001	0.	-0.	-0.	0.99928
0.010	-0.00002	0.00095	0.00004	0.	-0.	0.00014	-0.00001	-0.	0.00003	-0.00001	0.	-0.	-0.	0.99712
0.050	-0.00054	0.00466	0.00095	0.	-0.00003	0.00070	0.00007	-0.	0.00013	0.	0.00002	0.	0.	0.93027
0.100	-0.00225	0.00873	0.00372	0.00001	-0.00012	0.00138	0.00033	-0.00001	0.00026	0.00003	0.00004	0.	0.	0.74639
0.150	-0.00519	0.01165	0.00802	0.00001	-0.00027	0.00202	0.00074	-0.00002	0.00039	0.00008	0.00007	0.00001	0.	0.50926
0.200	-0.00906	0.01294	0.01339	0.00001	-0.00048	0.00261	0.00132	-0.00003	0.00051	0.00014	0.00009	0.00001	0.	0.28315
0.300	-0.01652	0.00978	0.02467	0.00002	-0.00106	0.00357	0.00290	-0.00007	0.00075	0.00033	0.00013	0.00003	0.	0.00426
0.400	-0.01825	0.00036	0.03225	0.00012	-0.00183	0.00410	0.00495	-0.00012	0.00097	0.00058	0.00017	0.00006	0.	-0.05046
0.500	-0.01237	-0.01083	0.03302	0.00041	-0.00269	0.00409	0.00729	-0.00019	0.00117	0.00091	0.00021	0.00009	0.00001	-0.01362
0.600	-0.00222	-0.01904	0.02730	0.00033	-0.00350	0.00347	0.00971	-0.00027	0.00133	0.00129	0.00025	0.00014	0.00001	0.02167
0.700	0.00743	-0.02189	0.01793	0.00155	-0.00410	0.00226	0.01196	-0.00036	0.00146	0.00174	0.00029	0.00018	0.00001	0.03123
0.800	0.01351	-0.01970	0.00831	0.00246	-0.00435	0.00053	0.01379	-0.00046	0.00154	0.00223	0.00033	0.00024	0.00001	0.02315
0.900	0.01531	-0.01443	0.00092	0.00321	-0.00414	-0.00155	0.01502	-0.00057	0.00157	0.00277	0.00037	0.00030	0.00002	0.01021
1.000	0.01374	-0.00833	-0.00320	0.00376	-0.00344	-0.00376	0.01551	-0.00068	0.00155	0.00334	0.00040	0.00037	0.00002	0.00016
1.500	-0.00082	0.00146	0.00306	0.00137	0.00417	-0.01033	0.00864	-0.00109	0.00052	0.00623	0.00052	0.00083	0.00005	0.00302
2.000	0.00088	-0.00333	0.00282	-0.00414	0.00749	-0.00586	-0.00019	-0.00082	-0.00171	0.00797	0.00056	0.00142	0.00008	0.00384
3.000	0.00075	0.00036	-0.00013	-0.00288	0.00040	0.00086	0.00130	0.00177	-0.00525	0.00554	0.00027	0.00279	0.00018	-0.00011
4.000	-0.00038	-0.00049	0.00107	0.00121	-0.00053	-0.00154	0.00191	0.00352	-0.00391	0.00085	-0.00047	0.00391	0.00032	0.00144
5.000	0.00021	-0.00065	0.00012	0.00152	0.00074	-0.00123	0.00003	0.00270	-0.00103	-0.00055	-0.00142	0.00432	0.00048	0.00053
8.000	-0.00015	0.00005	0.00029	-0.00007	-0.00035	0.00005	0.00060	-0.00096	-0.00020	0.00126	-0.00262	0.00201	0.00107	0.00035

SIN THETA/ LAMBDA	AM 6P6P J(2)	AM 6P6S J(1)	AM 6P5F J(2)	AM 6P5F J(4)	AM 6P5D J(1)	AM 6P5D J(3)	AM 6P5P J(0)	AM 6P5P J(2)	AM 6P5S J(1)	AM 6P4F J(2)	AM 6P4F J(4)	AM 6P4D J(1)	AM 6P4D J(3)	AM 6P4P J(0)
0.005	0.00029	-0.01900	-0.00016	-0.	0.00369	0.	0.00005	-0.00002	0.00097	-0.	0.	0.00027	0.	0.00001
0.010	0.00115	-0.03794	-0.00062	-0.	0.00738	0.	0.00022	-0.00009	0.00194	-0.	0.	0.00053	0.	0.00002
0.050	0.02750	-0.18143	-0.01497	-0.00013	0.03572	0.00035	0.00532	-0.00211	0.00929	-0.00007	0.	0.00264	0.	0.00034
0.100	0.09581	-0.31563	-0.05321	-0.00191	0.06442	0.00263	0.02033	-0.00792	0.01615	-0.00030	0.	0.00522	0.00003	0.00135
0.150	0.17215	-0.37534	-0.09884	-0.00803	0.08085	0.00800	0.04238	-0.01593	0.01864	-0.00071	0.00002	0.00765	0.00009	0.00300
0.200	0.22537	-0.36107	-0.13566	-0.019E9	0.08272	0.01643	0.06776	-0.02413	0.01572	-0.00134	0.00004	0.00987	0.00021	0.00528
0.300	0.21915	-0.20514	-0.15132	-0.05405	0.04834	0.03705	0.11290	-0.03331	-0.00562	-0.00336	0.00012	0.01338	0.00074	0.01150
0.400	0.12215	-0.04936	-0.10209	-0.08067	-0.00999	0.05023	0.13217	-0.02568	-0.03848	-0.00629	0.00014	0.01516	0.00175	0.01947
0.500	0.03416	0.01874	-0.03497	-0.08450	-0.05892	0.04666	0.12013	-0.00311	-0.06801	-0.00969	-0.00007	0.01473	0.00335	0.02842
0.600	-0.00682	0.01976	0.01666	-0.06808	-0.08144	0.02790	0.08672	0.02462	-0.08319	-0.01284	-0.00072	0.01190	0.00549	0.03739
0.700	-0.01124	-0.00182	0.04313	-0.04189	-0.07821	0.00244	0.04731	0.04720	-0.08109	-0.01497	-0.00193	0.00678	0.00796	0.04541
0.800	-0.00055	-0.01889	0.04863	-0.01559	-0.05920	-0.02085	0.01429	0.05866	-0.06565	-0.01547	-0.00370	-0.00012	0.01043	0.05159
0.900	0.01054	-0.02401	0.04156	0.00514	-0.03541	-0.03646	-0.00635	0.05832	-0.04392	-0.01403	-0.00586	-0.00806	0.01249	0.05531
1.000	0.01622	-0.01997	0.02941	0.01836	-0.01461	-0.04286	-0.01440	0.04917	-0.02253	-0.01074	-0.00812	-0.01616	0.01376	0.05624
1.500	0.00051	0.00325	-0.00384	0.01360	0.00176	-0.00891	0.01393	-0.00336	-0.00399	0.01626	-0.01114	-0.03634	0.00380	0.02903
2.000	0.00052	-0.00429	0.00266	-0.00071	-0.01034	0.00181	0.00825	0.00406	-0.01203	0.02364	0.00214	-0.01862	-0.01548	-0.00044
3.000	0.00149	0.00042	0.00060	0.00296	0.00170	-0.00585	0.00018	0.00339	0.00136	-0.00118	0.01434	0.00421	-0.01131	0.00504
4.000	-0.00023	-0.00065	-0.00234	0.00135	-0.00056	-0.00003	0.00379	-0.00049	-0.00180	-0.00744	0.00355	-0.00293	0.00082	0.00733
5.000	0.00052	-0.00096	-0.00120	-0.00083	-0.00154	0.00024	0.00091	0.00189	-0.00230	-0.00352	-0.00276	-0.00345	-0.00026	0.00117
8.000	-0.00001	-0.00005	0.00018	-0.00037	0.00095	-0.00079	0.00089	0.00003	0.00016	0.00056	-0.00109	0.00211	-0.00169	0.00193

SIN THETA/ LAMBDA	AM 6P4P J(2)	AM 6P4S J(1)	AM 6P3D J(1)	AM 6P3D J(3)	AM 6P3P J(0)	AM 6P3P J(2)	AM 6P3S J(1)	AM 6P2P J(0)	AM 6P2P J(2)	AM 5P2S J(1)	AM 6P1S J(1)	AM 6S6S J(0)	AM 6S5F J(3)	AM 6S5D J(2)
0.005	-0.	0.00026	0.00003	0.	-0.00002-0.	0.00008-0.	-0.	0.00002	0.	0.99944	0.	-0.00005	0.00001	0.00020
0.010	-0.00001	0.00053	0.00006	0.	-0.00002-0.	0.00015-0.	-0.	0.00004	0.00001	0.99776	0.00001	0.00001	0.00001	0.00020
0.050	-0.00013	0.00262	0.00030	0.	0.00001-0.00001	0.00076	0.	-0.	0.00022	0.00005	0.94520	0.00132	0.00485	0.00000
0.100	-0.00054	0.00517	0.00061	0.	0.00011-0.00005	0.00152	0.00001-0.	0.	0.00043	0.00009	0.79596	0.00960	0.01821	0.00000
0.150	-0.00119	0.00755	0.00090	0.	0.00027-0.00012	0.00228	0.00002-0.00001	0.	0.00065	0.00014	0.59116	0.02783	0.03678	0.00000
0.200	-0.00209	0.00970	0.00120	0.00001	0.00050-0.00021	0.00302	0.00004-0.00002	0.	0.00086	0.00019	0.37745	0.05375	0.05619	0.00000
0.300	-0.00448	0.01299	0.00176	0.00002	0.00113-0.00046	0.00445	0.00010-0.00004	0.	0.00129	0.00028	0.26009	0.10521	0.08135	0.00000
0.400	-0.00741	0.01453	0.00227	0.00005	0.00202-0.00081	0.00580	0.00018-0.00007	0.	0.00171	0.00037	0.05096	0.12415	0.07458	0.00000
0.500	-0.01041	0.01398	0.00272	0.00010	0.00314-0.00125	0.00704	0.00027-0.00011	0.	0.00213	0.00047	0.03475	0.10425	0.04052	0.00000
0.600	-0.01298	0.01123	0.00308	0.00017	0.00448-0.00177	0.00812	0.00040-0.00016	0.	0.00255	0.00056	0.00903	0.06322	0.0287	0.00000
0.700	-0.01459	0.00646	0.00334	0.00027	0.00603-0.00237	0.00903	0.00054-0.00022	0.	0.00295	0.00065	0.03302	0.02080	0.03866	0.00000
0.800	-0.01483	0.00010	0.00349	0.00041	0.00775-0.00302	0.00975	0.00071-0.00028	0.	0.00335	0.00075	0.03284	0.01134	0.05826	0.00000
0.900	-0.01349	-0.00719	0.00349	0.00058	0.00963-0.00371	0.01024	0.00089-0.00036	0.	0.00375	0.00084	0.02015	0.02975	0.06141	0.00000
1.000	-0.01057	-0.01469	0.00335	0.00080	0.01162-0.00441	0.01048	0.00110-0.00044	0.	0.00413	0.00093	0.00624	0.03613	0.05275	0.00000
1.500	0.01538	-0.03455	0.00015	0.00245	0.02175-0.00734	0.00778	0.00245-0.00097	0.	0.00584	0.00139	0.00140	0.00584	0.00371	0.00000
2.000	0.02538	-0.01838	-0.00631	0.00425	0.02816-0.00719	-0.00022	0.00424-0.00166	0.	0.00710	0.00185	0.00541	0.00165	0.00379	0.00000
3.000	0.00192	0.00299	-0.01662	0.00274	0.02140	0.00326	-0.01477	0.	0.00863	0.00317	0.00776	0.00273	-0.00044	0.00282
4.000	0.00024	-0.00523	-0.01324	-0.00454	0.00572	0.01188	-0.01229	0.	0.01276	-0.00410	0.00571	0.00356	0.00173	0.00110
5.000	0.00456	-0.00412	-0.00415	-0.00917	-0.00069	0.01037	-0.00331	0.	0.01518	-0.00380	0.00191	0.00431	0.00030	0.00193
8.000	0.00001	0.00020	0.00422	-0.00282	0.00454	-0.00043	-0.00041	0.	0.01116	0.00210	-0.00620	0.00595	0.00046	-0.00016

SIN THETA/ LAMBDA	AM 6S5P J(1)	AM 6S5S J(0)	AM 6S4F J(3)	AM 6S4D J(2)	AM 6S4P J(1)	AM 6S4S J(0)	AM 6S3D J(2)	AM 6S3P J(1)	AM 6S3S J(0)	AM 5S2P J(1)	AM 6S2S J(0)	AM 6S1S J(0)	AM 5F5F J(0)	AM 5F5F J(2)
0.005	0.00237	0.00005	-0.	-0.	0.00028	0.00004	-0.	0.00005	-0.00001	0.00001	-0.	0.	0.99969	0.00012
0.010	0.00473	0.00020	-0.	-0.00001	0.00057	0.00005	-0.	0.00010	-0.00001	0.00002	-0.	0.	0.99877	0.00049
0.050	0.02301	0.00490	-0.	-0.00013	0.00282	0.00038	-0.00001	0.00051	0.00002	0.00009	0.	0.	0.96981	0.01198
0.100	0.04203	0.01885	-0.00002	-0.00050	0.00557	0.00142	-0.00003	0.00102	0.00013	0.00017	0.00001	0.	0.88565	0.04431
0.150	0.05366	0.03971	-0.00004	-0.00113	0.00817	0.00312	-0.00007	0.00152	0.00032	0.00026	0.00003	0.	0.76377	0.08809
0.200	0.05661	0.06442	-0.00007	-0.00200	0.01055	0.00547	-0.00012	0.00201	0.00057	0.00034	0.00006	0.	0.62397	0.13312
0.300	0.03518	0.11169	0.00001	-0.00443	0.01434	0.01190	-0.00027	0.00295	0.00130	0.00051	0.00013	0.00001	0.35550	0.19820
0.400	-0.00928	0.13783	0.00057	-0.00758	0.01635	0.02021	-0.00049	0.00382	0.00231	0.00067	0.00024	0.00001	0.15803	0.21451
0.500	-0.05446	0.13378	0.00193	-0.01105	0.01614	0.02964	-0.00075	0.00459	0.00358	0.00083	0.00037	0.00002	0.04249	0.19206
0.600	-0.08299	0.10506	0.00419	-0.01424	0.01345	0.03927	-0.00107	0.00523	0.00511	0.00099	0.00053	0.00003	0.01015	0.15026
0.700	-0.08889	0.06507	0.00715	-0.01650	0.00837	0.04807	-0.00143	0.00572	0.00686	0.00114	0.00072	0.00004	0.02399	0.10491
0.800	-0.07611	0.02716	0.01036	-0.01727	0.00132	0.05512	-0.00183	0.00604	0.00881	0.00129	0.00094	0.00005	0.01827	0.06522
0.900	-0.05332	-0.00016	0.01323	-0.01616	-0.00702	0.05967	-0.00225	0.00615	0.01093	0.00143	0.00119	0.00007	0.00554	0.03498
1.000	-0.02913	-0.01421	0.01518	-0.01313	-0.01579	0.06129	-0.00268	0.00605	0.01316	0.00156	0.00146	0.00008	0.00728	0.01452
1.500	0.00004	0.01289	0.00475	0.01712	-0.04063	0.03309	-0.00425	0.00197	0.02444	0.00204	0.00323	0.00018	0.02294	0.00078
2.000	-0.01314	0.01063	-0.01660	0.02928	-0.02246	0.00109	-0.00317	0.00678	0.03115	0.00218	0.00553	0.00032	0.00570	0.01137
3.000	0.00144	-0.00039	-0.01105	0.00141	0.00331	0.00520	0.00698	-0.02052	0.02150	0.00105	0.01087	0.00071	0.00362	0.00729
4.000	-0.00196	0.00415	0.00476	-0.00201	-0.00602	0.00740	0.01374	-0.01517	0.00325	-0.00185	0.01525	0.00123	0.00134	0.00151
5.000	-0.00254	0.00043	0.00590	0.00289	-0.00476	0.00008	0.01051	-0.00398	-0.00215	-0.00553	0.01683	0.00187	-0.00018	-0.00003
8.000	0.00018	0.00114	-0.00029	-0.00137	0.00020	0.00234	-0.00374	-0.00077	0.00490	-0.01022	0.00780	0.00415	0.	-0.00003

SIN THETA/ LAMBDA	AM 5F5F J(4)	AM 5F5F J(6)	AM 5F5D J(1)	AM 5F5D J(3)	AM 5F5D J(5)	AM 5F5P J(2)	AM 5F5P J(4)	AM 5F5S J(3)	AM 5F4F J(0)	AM 5F4F J(2)	AM 5F4F J(4)	AM 5F4F J(6)	AM 5F4D J(1)	AM 5F4D J(3)
0.005	0.	0.	-0.00936-0.	-0.	0.00005	0.	-0.	0.00001-0.00001-0.	-0.	0.00006-0.00002-0.	-0.	0.00076	0.	
0.010	0.	0.	-0.01871-0.	-0.	0.00021	0.	-0.	0.00006-0.00002-0.	-0.	0.00006-0.00002-0.	-0.	0.00151	0.	
0.050	0.00007	0.	-0.09222-0.00039-0.	0.00514	0.00001-0.00023	0.00139-0.00056-0.	-0.	0.00750	0.00002					
0.100	0.00103	0.00002-0.17650-0.00300-0.00003	0.01993	0.00019-0.00178	0.00549-0.00218-0.00001-0.	0.01465	0.00013							
0.150	0.00450	0.00019-0.24617-0.00948-0.00020	0.04257	0.00090-0.00574	0.01207-0.00474-0.00006-0.	0.02113	0.00043							
0.200	0.01171	0.00084-0.29678-0.02057-0.00078	0.07041	0.00266-0.01280	0.02079-0.00805-0.00019-0.	0.02665	0.00099							
0.300	0.03676	0.00519-0.33588-0.05457-0.00453	0.12948	0.01112-0.03634	0.04283-0.01593-0.00085-0.00003	0.03395	0.00307							
0.400	0.06734	0.01486-0.30480-0.09458-0.01366	0.17506	0.02735-0.06824	0.06760-0.02368-0.00232-0.00013	0.03542	0.00645							
0.500	0.09233	0.02837-0.23354-0.12724-0.02833	0.19451	0.04931-0.10000	0.09115-0.02938-0.00472-0.00039	0.03103	0.01080							
0.600	0.10595	0.04257-0.15226-0.14406-0.04609	0.18670	0.07221-0.12336	0.11034-0.03171-0.00795-0.00092	0.02172	0.01548							
0.700	0.10773	0.05465-0.08133-0.14343-0.06327	0.15859	0.09095-0.13354	0.12323-0.03015-0.01156-0.00180	0.00904	0.01972							
0.800	0.10018	0.06292-0.02994-0.12880-0.07662	0.12018	0.10200-0.13000	0.12915-0.02490-0.01534-0.00308-0.00518	0.02282								
0.900	0.08677	0.06684	0.00101-0.10573-0.08422	0.08057	0.10417-0.11543	0.12844-0.01673-0.01850-0.00473-0.01919	0.02424							
1.000	0.07071	0.06671	0.01510-0.07968-0.08566	0.04604	0.09830-0.09408	0.12213-0.00666-0.02071-0.00664-0.03155	0.02374							
1.500	0.00957	0.03503-0.00848	0.00059-0.03980-0.00925	0.02580-0.00300	0.05452	0.03997-0.01340-0.01473-0.04918-0.00076								
2.000	-0.00144	0.00744-0.01401-0.00120-0.00302	0.00971-0.00316	0.00161	0.00453	0.04910	0.00882-0.01155-0.01834-0.02557							
3.000	0.00636	0.00045	0.00624-0.00926-0.00413	0.00071	0.00846-0.00799-0.01059	0.02003	0.02574	0.00929	0.01696-0.01710					
4.000	0.00535	0.00392	0.00484-0.00045-0.00635-0.00633	0.00322	0.00313-0.00349	0.00371	0.01658	0.01594	0.00979	0.00200				
5.000	0.00269	0.00379	0.00123	0.00252-0.00236-0.00328-0.00224	0.00471-0.00047-0.00018	0.00772	0.01254	0.00219	0.00639					
8.000	0.00013	0.00090-0.00027	0.00067	0.00119	0.00054-0.00104-0.00022	0.00011-0.00018	0.00046	0.00249-0.00055	0.00139					

SIN THETA/ LAMBDA	AM 5F4D J(5)	AM 5F4P J(2)	AM 5F4P J(4)	AM 5F4S J(3)	AM 5F3D J(1)	AM 5F3D J(3)	AM 5F3D J(5)	AM 5F3P J(2)	AM 5F3P J(4)	AM 5F3S J(3)	AM 5F2P J(2)	AM 5F2P J(4)	AM 5F2S J(3)	AM 5F1S J(3)
0.005	0.	-0.	-0.	0.	0.00030	0.	-0.	-0.	-0.	0.	0.	0.	-0.	0.
0.010	0.	-0.00002-0.	0.	0.00060	0.	-0.	-0.	-0.	0.	0.	0.	0.	-0.	0.
0.050	0.	-0.00038-0.	0.00001	0.00302	0.	-0.	-0.00005-0.	0.	0.	0.	0.	0.	-0.	0.
0.100	0.	-0.00148-0.00001	0.00010	0.00603	0.	-0.	-0.00019-0.	0.	0.00002	0.	-0.	0.		
0.150	0.	-0.00325-0.00003	0.00033	0.00903	0.00001-0.	-0.00043-0.	0.00001	0.00004	0.	-0.	0.			
0.200	0.00001-0.00559-0.00010	0.00075	0.01201	0.00002-0.	-0.00077-0.	0.00003	0.00006	0.	-0.	0.				
0.300	0.00009-0.01140-0.00046	0.00236	0.01787	0.00007-0.	-0.00171-0.	0.00011	0.00014	0.	-0.00001	0.				
0.400	0.00034-0.01767-0.00131	0.00502	0.02356	0.00017-0.	-0.00302-0.00001	0.00026	0.00025	0.	-0.00002	0.				
0.500	0.00090-0.02307-0.00281	0.00855	0.02902	0.00034-0.	-0.00467-0.00003	0.00050	0.00039	0.	-0.00004	0.				
0.600	0.00190-0.02650-0.00499	0.01249	0.03419	0.00059-0.	-0.00664-0.00006	0.00085	0.00056	0.	-0.00006	0.				
0.700	0.00340-0.02727-0.00773	0.01627	0.03903	0.00093-0.	-0.00889-0.00012	0.00135	0.00075	0.00001-0.00010	0.					
0.800	0.00539-0.02517-0.01076	0.01928	0.04346	0.00139	0.	-0.01140-0.00021	0.00199	0.00097	0.00001-0.00015	0.				
0.900	0.00772-0.02044-0.01372	0.02103	0.04745	0.00197	0.00001-0.01410-0.00034	0.00280	0.00122	0.00002-0.00021	0.					
1.000	0.01021-0.01363-0.01625	0.02122	0.05094	0.00269	0.00002-0.01696-0.00052	0.00378	0.00148	0.00003-0.00028	0.					
1.500	0.01688	0.02470-0.01450	0.00157	0.06024	0.00817	0.00033-0.03152-0.00263	0.01118	0.00304	0.00012-0.00087	0.				
2.000	0.00667	0.03033	0.00539-0.02139	0.05657	0.01555	0.00158-0.04160-0.00718	0.02087	0.00475	0.00033-0.00181	0.00001				
3.000	-0.01719-0.00614	0.01916-0.00985	0.03075	0.02544	0.00751-0.03823-0.01895	0.03242	0.00749	0.00119-0.00434	0.00002					
4.000	-0.01314-0.01322	0.00268	0.00921	0.00967	0.02318	0.01331-0.01960-0.02316	0.02619	0.00836	0.00242-0.00655	0.00005				
5.000	-0.00328-0.00592-0.00615	0.00924	0.00079	0.01557	0.01479-0.00552-0.01868	0.01370	0.00753	0.00353-0.00748	0.00008					
8.000	0.00288	0.00106-0.00193-0.00056-0.00089	0.00217	0.00676	0.00200-0.00246-0.00163	0.00269	0.00383-0.00455	0.00018						

SIN THETA/ LAMBDA	AM 5D5D J(0)	AM 5D5D J(2)	AM 5D5D J(4)	AM 5D5P J(1)	AM 5D5P J(3)	AM 5D5S J(2)	AM 5D4F J(1)	AM 5D4F J(3)	AM 5D4F J(5)	AM 5D4D J(0)	AM 5D4D J(2)	AM 5D4D J(4)	AM 5D4P J(1)	AM 5D4P J(3)
0.005	0.99986	0.00006	0.	-0.00855-0.		0.00005	0.00116	0.	0.	0.00002-0.00001-0.		0.00085	0.	
0.010	0.99943	0.00023	0.	-0.01709-0.		0.00019	0.00232	0.	0.	0.00006-0.00002-0.		0.00171	0.	
0.050	0.98577	0.00567	0.00001-0.08468-0.00023	0.00466	0.01148	0.00003	0.	0.00003	0.	0.00143-0.00057-0.		0.00847	0.00002	
0.100	0.94418	0.02208	0.00018-0.16465-0.00178	0.01821	0.02240	0.00022	0.	0.	0.00567-0.00225-0.00001	0.01655	0.00014			
0.150	0.87836	0.04745	0.00088-0.23564-0.00580	0.03948	0.03220	0.00072	0.00001	0.01254-0.00495-0.00005	0.02389	0.00048				
0.200	0.79305	0.07913	0.00264-0.29418-0.01307	0.06664	0.04042	0.00164	0.00002	0.02178-0.00851-0.00015	0.03016	0.00111				
0.300	0.58775	0.14870	0.01134-0.36549-0.03828	0.12939	0.05067	0.00506	0.00015	0.04581-0.01735-0.00071	0.03843	0.00348				
0.400	0.37635	0.20646	0.02880-0.37356-0.07466	0.18744	0.05139	0.01058	0.00058	0.07418-0.02682-0.00202	0.03986	0.00744				
0.500	0.19690	0.23630	0.05371-0.32980-0.11414	0.22550	0.04268	0.01761	0.00153	0.10287-0.03484-0.00437	0.03414	0.01274				
0.600	0.06908	0.23407	0.08142-0.25489-0.14726	0.23617	0.02617	0.02505	0.00321	0.12818-0.03964-0.00781	0.02201	0.01872				
0.700	-0.00501	0.20552	0.10602-0.17074-0.16688	0.22040	0.00456	0.03162	0.00572	0.14724-0.04039-0.01216	0.00509	0.02450				
0.800	-0.03490	0.16140	0.12272-0.09452-0.17036	0.18508	0.01910	0.03617	0.00900	0.15834-0.03581-0.01701	0.01450	0.02914				
0.900	-0.03492	0.11281	0.12907-0.03624-0.15803	0.13967	0.04195	0.03787	0.01281	0.16096-0.02716-0.02177	0.03450	0.03182				
1.000	-0.01903	0.06836	0.12516	0.00095-0.13483	0.09321-0.06169	0.03637	0.01679	0.15564-0.01506-0.02582	0.05285	0.03202				
1.500	0.04284-0.00948	0.03700-0.00678-0.00917	0.01286-0.08603-0.00555	0.02625	0.06607	0.05232-0.02205-0.08326	0.00138							
2.000	0.01265	0.01766-0.00372-0.02781	0.00155	0.01548-0.03426-0.04452	0.00834	0.00034	0.06354	0.01234-0.03532-0.04126						
3.000	0.00167	0.00727	0.01304	0.00499-0.01519	0.00522	0.02267-0.02933-0.02906	0.01205	0.00739	0.03536	0.01065-0.02300				
4.000	0.00859-0.00080	0.00611-0.00189	0.00032-0.00343	0.01354	0.00056-0.02198	0.01979-0.00034	0.00970-0.00713	0.00340						
5.000	0.00390	0.00319-0.00010-0.00408	0.00051	0.00228	0.00310	0.00790-0.00667	0.00754	0.00896-0.00093-0.00792	0.00028					
8.000	-0.00133	0.00266	0.00246	0.00247-0.00200-0.00136-0.00071	0.00182	0.00355-0.00290	0.00576	0.00604	0.00520-0.00383					

SIN THETA/ LAMBDA	AM 5D4S J(2)	AM 5D3D J(0)	AM 5D3D J(2)	AM 5D3D J(4)	AM 5D3P J(1)	AM 5D3P J(3)	AM 5D3S J(2)	AM 5D2P J(1)	AM 5D2P J(3)	AM 5D2S J(2)	AM 5D1S J(2)	AM 5P5P J(0)	AM 5P5P J(2)	AM 5P5S J(1)
0.005	-0.	0.00002-0.	-0.		0.00027	0.	-0.	0.00008	0.	-0.	0.	0.99988	0.00005-0.00809	
0.010	-0.00002	0.00002-0.	-0.		0.00055	0.	-0.	0.00015	0.	-0.	0.	0.99954	0.00018-0.01618	
0.050	-0.00046	0.00010-0.00003-0.			0.00273	0.	-0.00005	0.00076	0.	-0.	0.	0.98852	0.00458-0.08030	
0.100	-0.00183	0.00033-0.00012-0.			0.00545	0.	-0.00021	0.00152	0.	-0.00002	0.	0.95476	0.01794-0.15678	
0.150	-0.00403	0.00072-0.00028-0.			0.00815	0.00001-0.00048	0.00228	0.	-0.00004	0.	0.90066	0.03898-0.22592		
0.200	-0.00694	0.00126-0.00050-0.			0.01082	0.00003-0.00085	0.00304	0.	-0.00006	0.	0.82927	0.06599-0.28473		
0.300	-0.01425	0.00280-0.00111-0.			0.01601	0.00011-0.00189	0.00456	0.	-0.00014	0.00001	0.65061	0.12916-0.36329		
0.400	-0.02224	0.00493-0.00195-0.00001			0.02094	0.00026-0.00333	0.00608	0.	-0.00025	0.00002	0.45374	0.18908-0.38508		
0.500	-0.02925	0.00764-0.00302-0.00002			0.02552	0.00052-0.00513	0.00759	0.00001-0.00040	0.00002	0.27121	0.23038-0.35608			
0.600	-0.03381	0.01088-0.00428-0.00005			0.02968	0.00089-0.00726	0.00909	0.00001-0.00057	0.00004	0.12565	0.24481-0.29162			
0.700	-0.03485	0.01461-0.00572-0.00009			0.03332	0.00140-0.00966	0.01059	0.00002-0.00078	0.00005	0.02694	0.23219-0.21064			
0.800	-0.03193	0.01878-0.00729-0.00017			0.03639	0.00208-0.01230	0.01207	0.00003-0.00102	0.00006-0.02642	0.19856-0.13038				
0.900	-0.02515	0.02331-0.00896-0.00028			0.03881	0.00292-0.01509	0.01355	0.00005-0.00130	0.00008-0.04339	0.15304-0.06315				
1.000	-0.01516	0.02812-0.01067-0.00044			0.04054	0.00394-0.01797	0.01501	0.00006-0.00161	0.00010-0.03610	0.10490-0.01517				
1.500	0.04537	0.05294-0.01799-0.00240			0.03810	0.01140-0.03099	0.02205	0.00024-0.00368	0.00022	0.04612-0.01290-0.00179				
2.000	0.05522	0.07025-0.01882-0.00651			0.02045	0.01992-0.03543	0.02840	0.00065-0.00660	0.00038	0.01673	0.01720-0.03377			
3.000	-0.00145	0.06326	0.00158-0.01418-0.01873	0.02183-0.01377	0.03767	0.00256-0.01435	0.00081	0.00175	0.00755	0.00412				
4.000	-0.00459	0.02925	0.02405-0.00992-0.02351	0.00360	0.01106	0.04080	0.00610-0.02239	0.00134	0.01007-0.00103-0.00537					
5.000	0.00582	0.00454	0.02987	0.00178-0.00759-0.01158	0.01410	0.03802	0.01047-0.02777	0.00191	0.00222	0.00527-0.00606				
8.000	-0.00309-0.00514	0.00973	0.01498	0.01032-0.00462-0.00792	0.01673	0.01732-0.02243	0.00333	0.00236	0.00011	0.00036				

SIN THETA/ LAMBDA	AM 5P4F J(2)	AM 5P4F J(4)	AM 5P4D J(1)	AM 5P4D J(3)	AM 5P4P J(0)	AM 5P4P J(2)	AM 5P4S J(1)	AM 5P3D J(1)	AM 5P3D J(3)	AM 5P3P J(0)	AM 5P3P J(2)	AM 5P3S J(1)	AM 5P2P J(0)	AM 5P2P J(2)
0.005	-0.00001-0.		0.00107 0.		0.00002-0.00001	0.00086	0.00009 0.		0.00004-0.		0.00022 0.		-0.	
0.010	-0.00003-0.		0.00213 0.		0.00006-0.00002	0.00173	0.00018 0.		0.00004-0.		0.00043 0.		-0.	
0.050	-0.00074-0.		0.01058 0.00002		0.00138-0.00055	0.00858	0.00088 0.		0.00013-0.00004		0.00215 0.		0.00001-0.	
0.100	-0.00293-0.00001		0.02068 0.00018		0.00546-0.00217	0.01679	0.00176 0.		0.00042-0.00015		0.00430 0.00003-0.00001			
0.150	-0.00642-0.00007		0.02987 0.00059		0.01210-0.00478	0.02426	0.00262 0.00001		0.00089-0.00034		0.00642 0.00007-0.00003			
0.200	-0.01101-0.00020		0.03772 0.00137		0.02106-0.00824	0.03065	0.00347 0.00002		0.00156-0.00051		0.00850 0.00012-0.00005			
0.300	-0.02238-0.00094		0.04813 0.00431		0.04457-0.01696	0.03914	0.00508 0.00006		0.00344-0.00135		0.01253 0.00028-0.00011			
0.400	-0.03444-0.00269		0.05009 0.00922		0.07274-0.02655	0.04070	0.00654 0.00015		0.00604-0.00238		0.01628 0.00049-0.00020			
0.500	-0.04452-0.00575		0.04317 0.01578		0.10183-0.03502	0.03484	0.00780 0.00030		0.00932-0.00367		0.01968 0.00076-0.00030			
0.600	-0.05043-0.01017		0.02832 0.02319		0.12824-0.04063	0.02217	0.00880 0.00052		0.01323-0.00518		0.02263 0.00110-0.00044			
0.700	-0.05086-0.01565		0.00754 0.03035		0.14899-0.04208	0.00419	0.00948 0.00084		0.01770-0.00688		0.02505 0.00149-0.00060			
0.800	-0.04551-0.02162		0.01654 0.03608		0.16207-0.03878	0.01698	0.00980 0.00126		0.02266-0.00873		0.02687 0.00195-0.00078			
0.900	-0.03498-0.02733		0.04111 0.03940		0.16657-0.03083	0.03900	0.00971 0.00179		0.02801-0.01066		0.02804 0.00246-0.00098			
1.000	-0.02055-0.03202		0.06365 0.03965		0.16267-0.01894	0.05966	0.00918 0.00244		0.03364-0.01252		0.02849 0.00303-0.00121			
1.500	0.05533-0.02569		0.10130-0.00117		0.06871 0.05484-0.09780	0.00050	0.00715		0.06151-0.02025		0.01973 0.00671-0.00265			
2.000	0.06362 0.01418-0.04419		0.04937-0.00537		0.06982-0.04403	0.01869	0.01181		0.07779-0.01882		0.03296 0.01161-0.00452			
3.000	-0.00555 0.03845 0.01096-0.02819		0.01555 0.00325 0.00726-0.04558		0.00656 0.05670 0.01056-0.04105		0.02350-0.00858							
4.000	-0.01991 0.00816-0.00851 0.00267		0.01920 0.00142-0.01471-0.03513-0.01322		0.01442 0.03254-0.03259		0.03456-0.01103							
5.000	-0.00913-0.00788-0.00908-0.00103		0.00279 0.01251-0.01076-0.01054-0.02504		0.00197 0.02754-0.00836		0.04092-0.01010							
8.000	0.00149-0.00286 0.00567-0.00443		0.00524-0.00003 0.00046 0.01128-0.00737		0.01224-0.00117-0.00124		0.02982 0.00581							

SIN THETA/ LAMBDA	AM 5P2S J(1)	AM 5P1S J(1)	AM 5S5S J(0)	AM 5S4F J(3)	AM 5S4D J(2)	AM 5S4P J(1)	AM 5S4S J(0)	AM 5S3D J(2)	AM 5S3P J(1)	AM 5S3S J(0)	AM 5S2P J(1)	AM 5S2S J(0)	AM 5S1S J(0)	AM 4F4F J(0)
0.005	0.00006 0.00001 0.99989 0.		-0.00001 0.00100 0.00001-0.		0.00013 0.00004 0.00002 0.		0.		0.99998					
0.010	0.00012 0.00003 0.99958 0.		-0.00003 0.00200 0.00005-0.		0.00027 0.00004 0.00004 0.		0.		0.99991					
0.050	0.00058 0.00013 0.98945 0.00003-0.00065		0.00991 0.00134-0.00002		0.00135 0.00014 0.00021 0.		0.99770							
0.100	0.00117 0.00025 0.95836 0.00022-0.00256		0.01940 0.00531-0.00009		0.00269 0.00044 0.00043 0.00004 0.		0.99082							
0.150	0.00175 0.00038 0.90835 0.00074-0.00562		0.02806 0.01178-0.00019		0.00401 0.00094 0.00064 0.00009 0.		0.97947							
0.200	0.00234 0.00050 0.84198 0.00170-0.00969		0.03553 0.02052-0.00034		0.00530 0.00164 0.00085 0.00015 0.00001		0.96380							
0.300	0.00350 0.00075 0.67376 0.00529-0.01992		0.04564 0.04353-0.00076		0.00778 0.00352 0.00127 0.00034 0.00002		0.92046							
0.400	0.00465 0.00100 0.48416 0.01122-0.03115		0.04799 0.07129-0.00134		0.01003 0.00635 0.00168 0.00060 0.00003		0.86314							
0.500	0.00579 0.00125 0.30298 0.01902-0.04108		0.04203 0.10024-0.00208		0.01200 0.00979 0.00208 0.00093 0.00005		0.79477							
0.600	0.00691 0.00150 0.15267 0.02762-0.04766		0.02841 0.12686-0.00294		0.01360 0.01388 0.00247 0.00134 0.00007		0.71861							
0.700	0.00802 0.00175 0.04506 0.03568-0.04945		0.00880 0.14818-0.00392		0.01477 0.01856 0.00285 0.00182 0.00010		0.63797							
0.800	0.00910 0.00200-0.01843 0.04186-0.04580		0.01445 0.16210-0.00498		0.01545 0.02372 0.00321 0.00237 0.00013		0.55597							
0.900	0.01016 0.00225-0.04419 0.04510-0.03689		0.03877 0.16757-0.00609		0.01558 0.02928 0.00355 0.00299 0.00016		0.47536							
1.000	0.01119 0.00250-0.04278 0.04478-0.02360		0.06167 0.16459-0.00719		0.01512 0.03511 0.00387 0.00368 0.00020		0.39840							
1.500	0.01580 0.00373 0.04528-0.00063 0.05749-0.10533		0.07049-0.01082 0.00357		0.06349 0.00506 0.00809 0.00044 0.11064									
2.000	0.01916 0.00495 0.01926-0.04851 0.07308-0.04825		0.00798-0.00726-0.01909		0.07873 0.00536 0.01383 0.00078-0.01104									
3.000	0.02077 0.00732 0.00072-0.02428 0.00089 0.00730		0.01529 0.01866-0.05148		0.05158 0.00249 0.02703 0.00174-0.03014									
4.000	0.01511 0.00955 0.00996 0.01268-0.00427		0.01548 0.01742 0.03415-0.03649		0.00693-0.00475 0.03770 0.00303-0.00900									
5.000	0.00481 0.01157 0.00083 0.01432 0.00736		0.01127-0.00018 0.02536-0.00908		0.00523-0.01379 0.04136 0.00459-0.00106									
8.000	-0.01672 0.01595 0.00276-0.00074-0.00344		0.00042 0.00577-0.00925-0.00201		0.01200-0.02501 0.01892 0.01017 0.00029									

SIN THETA/ LAMBDA	AM 4F4F J(2)	AM 4F4F J(4)	AM 4F4F J(6)	AM 4F4D J(1)	AM 4F4D J(3)	AM 4F4D J(5)	AM 4F4P J(2)	AM 4F4P J(4)	AM 4F4S J(3)	AM 4F3D J(1)	AM 4F3D J(3)	AM 4F3D J(5)	AM 4F3P J(2)	AM 4F3P J(4)
0.005	0.00001	0.	0.	-0.00348-0.	-0.	0.00001	0.	-0.	0.00120	0.	0.	-0.	-0.	-0.
0.010	0.00004	0.	0.	-0.00697-0.	-0.	0.00004	0.	-0.	0.00240	0.	0.	-0.00001-0.	-0.	-0.
0.050	0.00092	0.	0.	-0.03477-0.00002-0.	0.00002	0.00092	0.	-0.00002	0.01197	0.	0.	-0.00023-0.	-0.	-0.
0.100	0.00366	0.00001	0.	-0.06913-0.00016-0.	0.00364	0.00001-0.00015	0.02389	0.00002	0.	0.	-0.00092-0.	-0.	-0.	-0.
0.150	0.00817	0.00003	0.	-0.10269-0.00052-0.	0.00813	0.00003-0.00050	0.03571	0.00006	0.	0.	-0.00206-0.	-0.	-0.	-0.
0.200	0.01436	0.00009	0.	-0.13506-0.00122-0.00001	0.01428	0.00008-0.00118	0.04740	0.00014	0.	0.	-0.00365-0.00001	-0.	-0.	-0.
0.300	0.03123	0.00043	0.	-0.19481-0.00398-0.00004	0.03109	0.00042-0.00387	0.07017	0.00048	0.	0.	-0.00812-0.00004	-0.	-0.	-0.
0.400	0.05297	0.00129	0.00002	-0.24592-0.00903-0.00017	0.05276	0.00127-0.00880	0.09184	0.00112	0.00001-0.01418-0.00013	0.00002-0.02168-0.00030	0.000214	0.00002-0.02168-0.00030	0.00006-0.03038-0.00061	0.00012-0.04007-0.00109
0.500	0.07796	0.00296	0.00008	-0.28657-0.01668-0.00048	0.07769	0.00293-0.01630	0.11212	0.00214	0.00054-0.05046-0.00179	0.00038-0.06130-0.00276	0.01437	0.00062-0.07232-0.00404	0.00353-0.12155-0.01554	0.03111-0.11843-0.06967
0.600	0.10448	0.00571	0.00022	-0.31567-0.02695-0.00112	0.10409	0.00571-0.02640	0.13073	0.00360	0.00062-0.05619-0.07496	0.00062-0.05619-0.07496	0.00368	0.00353-0.12155-0.01554	0.03111-0.11843-0.06967	0.03111-0.11843-0.06967
0.700	0.13083	0.00973	0.00050	-0.33288-0.03954-0.00224	0.13016	0.00982-0.03886	0.14744	0.00554	0.00012-0.04007-0.00109	0.00012-0.04007-0.00109	0.00799	0.00022-0.05046-0.00179	0.00038-0.06130-0.00276	0.00353-0.12155-0.01554
0.800	0.15551	0.01509	0.00100	-0.33859-0.05396-0.00400	0.15426	0.01539-0.05319	0.15208	0.00799	0.00022-0.05046-0.00179	0.00022-0.05046-0.00179	0.01094	0.00038-0.06130-0.00276	0.00353-0.12155-0.01554	0.03111-0.11843-0.06967
0.900	0.17729	0.02177	0.00180	-0.33374-0.06952-0.00653	0.17501	0.02243-0.06872	0.17453	0.01094	0.00038-0.06130-0.00276	0.00038-0.06130-0.00276	0.01437	0.00062-0.07232-0.00404	0.00353-0.12155-0.01554	0.03111-0.11843-0.06967
1.000	0.19531	0.02960	0.00299	-0.31973-0.08545-0.00992	0.19134	0.03082-0.08467	0.18473	0.01437	0.00062-0.07232-0.00404	0.00062-0.07232-0.00404	0.01437	0.00062-0.07232-0.00404	0.00353-0.12155-0.01554	0.03111-0.11843-0.06967
1.500	0.22055	0.07596	0.01626	-0.17285-0.14599-0.03895	0.19538	0.08193-0.14468	0.20293	0.03688	0.00353-0.12155-0.01554	0.00353-0.12155-0.01554	0.03688	0.00353-0.12155-0.01554	0.03111-0.11843-0.06967	0.03111-0.11843-0.06967
2.000	0.16970	0.10761	0.03855	-0.02810-0.14550-0.07321	0.10994	0.11414-0.13818	0.17842	0.06113	0.031026-0.14644-0.03426	0.031026-0.14644-0.03426	0.06113	0.031026-0.14644-0.03426	0.03111-0.11843-0.06967	0.03111-0.11843-0.06967
3.000	0.05415	0.09425	0.06848	0.05557-0.04945-0.08522	0.03111	0.07175-0.02332	0.08823	0.08429	0.03111-0.11843-0.06967	0.03111-0.11843-0.06967	0.08429	0.03111-0.11843-0.06967	0.03111-0.11843-0.06967	0.03111-0.11843-0.06967
4.000	0.00898	0.05053	0.06094	0.02705 0.00972-0.04321-0.04029	0.04029	0.00401 0.03266 0.02583	0.07057	0.07057	0.04593-0.05619-0.07496	0.04593-0.05619-0.07496	0.07057	0.04593-0.05619-0.07496	0.04593-0.05619-0.07496	0.04593-0.05619-0.07496
5.000	-0.00084	0.02218	0.04070	0.00543 0.01959-0.00855	-0.01630	-0.02042 0.02764 0.00141	0.04541	0.04541	0.04678-0.01462-0.05662	0.04678-0.01462-0.05662	0.04541	0.04678-0.01462-0.05662	0.04678-0.01462-0.05662	0.04678-0.01462-0.05662
8.000	-0.00049	0.00126	0.00722	-0.00155 0.00391 0.00846	0.00308	-0.00543-0.00176-0.00252	0.00608	0.00608	0.01962 0.00572-0.00687	0.01962 0.00572-0.00687	0.00608	0.01962 0.00572-0.00687	0.01962 0.00572-0.00687	0.01962 0.00572-0.00687

SIN THETA/ LAMBDA	AM 4F3S J(3)	AM 4F2P J(2)	AM 4F2P J(4)	AM 4F2S J(3)	AM 4F1S J(3)	AM 4D4D J(0)	AM 4D4D J(2)	AM 4D4D J(4)	AM 4D4P J(1)	AM 4D4P J(3)	AM 4D4S J(2)	AM 4D3D J(0)	AM 4D3D J(2)	AM 4D3D J(4)
0.005	0.	0.	0.	-0.	0.	0.99997	0.00001	0.	-0.00378-0.	0.00001	0.	-0.	-0.	-0.
0.010	0.	0.	0.	-0.	0.	0.99990	0.00004	0.	-0.00755-0.	0.00004	0.00001-0.	0.00001-0.	-0.	-0.
0.050	0.	0.00001	0.	-0.	0.	0.99751	0.00099	0.	-0.03770-0.00002	0.00099	0.00029-0.00012-0.	0.00029-0.00012-0.	0.00012-0.	0.00012-0.
0.100	0.00002	0.00005	0.	-0.	0.	0.99009	0.00396	0.00001-0.07497-0.00016	0.00016	0.00394	0.00117-0.00047-0.	0.00117-0.00047-0.	0.00047-0.	0.00047-0.
0.150	0.00008	0.00011	0.	-0.	0.	0.97783	0.00883	0.00003-0.11140-0.00055	0.00055	0.00879	0.00262-0.00105-0.	0.00262-0.00105-0.	0.00105-0.	0.00105-0.
0.200	0.00020	0.00020	0.	-0.00001	0.	0.96090	0.01552	0.00009-0.14657-0.00128	0.00128	0.01546	0.00465-0.00185-0.00001	0.00465-0.00185-0.00001	0.00001	0.00001
0.300	0.00066	0.00044	0.	-0.00003	0.	0.91398	0.03381	0.00044-0.21167-0.00420	0.00420	0.03371	0.01032-0.00409-0.00003	0.01032-0.00409-0.00003	0.00003	0.00003
0.400	0.00154	0.00078	0.	-0.00006	0.	0.85176	0.05745	0.00134-0.26760-0.00955	0.00955	0.05735	0.01804-0.00709-0.00009	0.01804-0.00709-0.00009	0.00009	0.00009
0.500	0.00295	0.00122	0.00001	-0.00012	0.	0.77738	0.08474	0.00311-0.31236-0.01772	0.01772	0.08458	0.02756-0.01073-0.00022	0.02756-0.01073-0.00022	0.00022	0.00022
0.600	0.00497	0.00173	0.00001	-0.00020	0.	0.69435	0.11376	0.00606-0.34466-0.02876	0.02876	0.11382	0.03864-0.01486-0.00043	0.03864-0.01486-0.00043	0.00043	0.00043
0.700	0.00767	0.00234	0.00002	-0.00032	0.	0.60637	0.14259	0.01044-0.36402-0.04243	0.04243	0.14283	0.05094-0.01930-0.00078	0.05094-0.01930-0.00078	0.00078	0.00078
0.800	0.01105	0.00301	0.00003	-0.00047	0.	0.51704	0.16945	0.01640-0.37070-0.05823	0.05823	0.16989	0.06415-0.02388-0.00128	0.06415-0.02388-0.00128	0.00128	0.00128
0.900	0.01514	0.00376	0.00006	-0.00066	0.	0.42962	0.19282	0.02396-0.36562-0.07542	0.07542	0.19345	0.07792-0.02842-0.00195	0.07792-0.02842-0.00195	0.00195	0.00195
1.000	0.01989	0.00458	0.00008	-0.00090	0.	0.34690	0.21155	0.03299-0.35023-0.09316	0.09316	0.21227	0.09189-0.03274-0.00283	0.09189-0.03274-0.00283	0.00283	0.00283
1.500	0.05090	0.00932	0.00038	-0.00274	0.00001	0.05883	0.22239	0.08851-0.21864-0.16106	0.16106	0.21982	0.15406-0.04587-0.01037	0.15406-0.04587-0.01037	0.01037	0.01037
2.000	0.08357	0.01446	0.00106	-0.00569	0.00002	0.01666	0.13746	0.12395-0.03309-0.15543	0.15543	0.12547	0.18441-0.03822-0.02116	0.18441-0.03822-0.02116	0.02116	0.02116
3.000	0.10897	0.02243	0.00375	-0.01334	0.00006	0.04249	0.00360	0.07950 0.01537-0.03604-0.01411	0.01411	0.14355	0.01924-0.03208	0.01924-0.03208	0.03208	0.03208
4.000	0.07998	0.02463	0.00745	-0.01970	0.00014	0.04397	0.00398	0.01389-0.02281 0.00809-0.00242	0.00242	0.05986	0.06480-0.01500	0.06480-0.01500	0.01500	0.01500
5.000	0.03949	0.02187	0.01062	-0.02211	0.00023	0.01423	0.02385	-0.00239-0.01702-0.00541	0.00541	0.01656	0.00656 0.07088 0.01230	0.00656 0.07088 0.01230	0.01230	0.01230
8.000	-0.00486	0.00763	0.01109	-0.01306	0.00052	-0.00642	0.01259	0.01453 0.01184-0.00838-0.00761	-0.00761	0.01128	0.02118 0.03516	0.01128 0.02118 0.03516	0.03516	0.03516

SIN THETA/ LAMBDA	AM 4D3P J(1)	AM 4D3P J(3)	AM 4D3S J(2)	AM 4D2P J(1)	AM 4D2P J(3)	AM 4D2S J(2)	AM 4D1S J(2)	AM 4P4P J(0)	AM 4P4P J(2)	AM 4P4S J(1)	AM 4P3D J(1)	AM 4P3D J(3)	AM 4P3P J(0)	AM 4P3P J(2)
0.005	0.00078	0.	-0.	0.00019	0.	-0.	0.	0.99997	0.00001	-0.00385	0.00029	0.	0.	-0.
0.010	0.00157	0.	-0.00001	0.00037	0.	-0.	0.	0.99990	0.00004	-0.00771	0.00058	0.	0.00001	-0.00001
0.050	0.00782	0.	-0.00018	0.00187	0.	-0.00001	0.	0.99748	0.00101	-0.03846	0.00289	0.	0.00033	-0.00013
0.100	0.01558	0.00002	-0.00073	0.00374	0.	-0.00004	0.	0.98994	0.00402	-0.07650	0.00575	0.00001	0.00132	-0.00053
0.150	0.02324	0.00007	-0.00163	0.00560	0.	-0.00010	0.00001	0.97749	0.00897	-0.11369	0.00854	0.00004	0.00297	-0.00118
0.200	0.03075	0.00016	-0.00288	0.00747	0.	-0.00017	0.00001	0.96028	0.01577	-0.14963	0.01123	0.00010	0.00525	-0.00209
0.300	0.04512	0.00052	-0.00638	0.01119	0.00001	-0.00039	0.00002	0.91256	0.03439	-0.21624	0.01616	0.00035	0.01165	-0.00461
0.400	0.05830	0.00121	-0.01109	0.01490	0.00001	-0.00069	0.00004	0.84917	0.05852	-0.27366	0.02032	0.00081	0.02032	-0.00797
0.500	0.06999	0.00230	-0.01684	0.01859	0.00002	-0.00107	0.00006	0.77321	0.08646	-0.31980	0.02348	0.00153	0.03098	-0.01203
0.600	0.07990	0.00386	-0.02341	0.02227	0.00004	-0.00154	0.00008	0.68822	0.11628	-0.35334	0.02548	0.00255	0.04330	-0.01658
0.700	0.08782	0.00591	-0.03055	0.02591	0.00007	-0.00210	0.00011	0.59796	0.14603	-0.37370	0.02619	0.00388	0.05690	-0.02143
0.800	0.09360	0.00846	-0.03802	0.02953	0.00010	-0.00275	0.00014	0.50611	0.17384	-0.38108	0.02553	0.00552	0.07138	-0.02635
0.900	0.09716	0.01148	-0.04555	0.03311	0.00015	-0.00349	0.00018	0.41609	0.19811	-0.37633	0.02348	0.00744	0.08630	-0.03113
1.000	0.09849	0.01493	-0.05288	0.03665	0.00021	-0.00431	0.00022	0.33084	0.21757	-0.36087	0.02007	0.00959	0.10124	-0.03554
1.500	0.07535	0.03564	-0.07893	0.05351	0.00076	-0.00972	0.00049	0.03738	0.22648	-0.19197	-0.01376	0.02140	0.16334	-0.04610
2.000	0.02256	0.05214	-0.07671	0.06838	0.00193	-0.01716	0.00086	0.02706	0.13102	-0.03429	-0.05901	0.02751	0.18333	-0.03076
3.000	-0.05941	0.04077	-0.01254	0.08900	0.00698	-0.03600	0.00184	0.04902	-0.00594	0.00262	-0.10367	0.00395	0.10997	0.04062
4.000	-0.05399	-0.00494	0.03584	0.09454	0.01566	-0.05434	0.00303	0.03476	0.01098	-0.03578	-0.06912	-0.03779	0.02185	0.07489
5.000	-0.01369	-0.03394	0.03332	0.08661	0.02572	-0.06556	0.00430	0.00285	0.02810	-0.01936	-0.01654	-0.05606	-0.00478	0.05568
8.000	0.02320	-0.00974	-0.01870	0.03692	0.03976	-0.05046	0.00745	0.01146	-0.00046	0.00025	0.02326	-0.01349	0.02613	-0.00260

SIN THETA/ LAMBDA	AM 4P3S J(1)	AM 4P2P J(0)	AM 4P2P J(2)	AM 4P2S J(1)	AM 4P1S J(1)	AM 4S4S J(0)	AM 4S3D J(2)	AM 4S3P J(1)	AM 4S3S J(0)	AM 4S2P J(1)	AM 4S2S J(0)	AM 4S1S J(0)	AM 3D3D J(0)	AM 3D3D J(2)
0.005	0.00059	0.00001	-0.	0.00013	0.00003	0.99998	-0.	0.00040	0.	0.00005	0.00001	0.	1.00000	0.
0.010	0.00117	0.00001	-0.	0.00026	0.00005	0.99990	-0.	0.00080	0.00001	0.00009	0.00001	0.	0.99998	0.00001
0.050	0.00586	0.00003	-0.00001	0.00130	0.00026	0.99748	-0.00009	0.00401	0.00034	0.00047	0.00003	0.	0.99961	0.00016
0.100	0.01168	0.00008	-0.00003	0.00259	0.00053	0.98996	-0.00035	0.00797	0.00136	0.00093	0.00010	0.00001	0.99842	0.00063
0.150	0.01739	0.00017	-0.00006	0.00389	0.00079	0.97752	-0.00077	0.01185	0.00305	0.00139	0.00020	0.00001	0.99646	0.00141
0.200	0.02295	0.00030	-0.00011	0.00518	0.00105	0.96033	-0.00136	0.01559	0.00539	0.00185	0.00035	0.00002	0.99372	0.00251
0.300	0.03343	0.00066	-0.00026	0.00775	0.00158	0.91263	-0.00300	0.02252	0.01195	0.00277	0.00077	0.00004	0.98592	0.00562
0.400	0.04276	0.00116	-0.00046	0.01030	0.00211	0.84919	-0.00516	0.02845	0.02084	0.00366	0.00136	0.00007	0.97510	0.00990
0.500	0.05062	0.00180	-0.00071	0.01281	0.00263	0.77308	-0.00774	0.03310	0.03175	0.00453	0.00212	0.00010	0.96138	0.01531
0.600	0.05677	0.00258	-0.00102	0.01529	0.00316	0.68779	-0.01060	0.03626	0.04434	0.00538	0.00304	0.00015	0.94488	0.02177
0.700	0.06099	0.00350	-0.00139	0.01772	0.00368	0.59704	-0.01359	0.03777	0.05820	0.00619	0.00412	0.00020	0.92575	0.02919
0.800	0.06317	0.00455	-0.00181	0.02009	0.00420	0.50451	-0.01653	0.03752	0.07290	0.00696	0.00537	0.00026	0.90418	0.03748
0.900	0.06325	0.00574	-0.00228	0.02240	0.00473	0.41365	-0.01928	0.03548	0.08799	0.00768	0.00676	0.00033	0.88035	0.04652
1.000	0.06124	0.00707	-0.00280	0.02463	0.00525	0.32746	-0.02167	0.03169	0.10303	0.00835	0.00831	0.00041	0.85447	0.05621
1.500	0.02468	0.01553	-0.00609	0.03444	0.00785	0.03008	-0.02419	-0.00874	0.16377	0.01075	0.01809	0.00091	0.70239	0.10996
2.000	-0.03336	0.02659	-0.01024	0.04124	0.01041	-0.03276	-0.00716	-0.06349	0.17890	0.01109	0.03061	0.00161	0.53373	0.16181
3.000	-0.09816	0.05258	-0.01878	0.04309	0.01536	0.04840	0.05163	-0.11305	0.09344	0.00420	0.05835	0.00356	0.23817	0.22001
4.000	-0.06371	0.07550	-0.02321	0.02941	0.02001	0.02836	0.07255	-0.06760	0.00607	-0.01151	0.07928	0.00618	0.06133	0.20779
5.000	-0.01259	0.08756	-0.02025	0.00697	0.02424	-0.00293	0.04793	-0.01303	-0.00974	-0.03007	0.08496	0.00937	-0.01275	0.15787
8.000	-0.00389	0.06139	0.01376	-0.03589	0.03328	0.01193	-0.01944	-0.00514	0.02421	-0.05060	0.03687	0.02064	-0.01938	0.03513

SIN THETA/ LAMBDA	AM 3D3D J(4)	AM 3D3P J(1)	AM 3D3P J(3)	AM 3D3S J(2)	AM 3D2P J(1)	AM 3D2P J(3)	AM 3D2S J(2)	AM 3D1S J(2)	AM 3P3P J(0)	AM 3P3P J(2)	AM 3P3S J(1)	AM 3P2P J(0)	AM 3P2P J(2)	AM 3P2S J(1)
0.005	0.	-0.00149	-0.	0.	0.00055	0.	-0.	0.	0.99999	0.	-0.00176	0.	-0.	0.00034
0.010	0.	-0.00297	-0.	0.00001	0.00110	0.	-0.	0.	0.99998	0.00001	-0.00352	0.	-0.	0.00068
0.050	0.	-0.01485	-0.	0.00018	0.00548	0.	-0.00005	0.	0.99948	0.00021	-0.01751	0.00006	-0.00002	0.00339
0.100	0.	-0.02967	-0.00001	0.00071	0.01095	0.	-0.00019	0.	0.99792	0.00083	-0.03517	0.00024	-0.00009	0.00677
0.150	0.	-0.04442	-0.00004	0.00160	0.01641	0.00001	-0.00042	0.00001	0.99532	0.00187	-0.05255	0.00053	-0.00021	0.01015
0.200	0.	-0.05907	-0.00010	0.00283	0.02186	0.00001	-0.00075	0.00002	0.99169	0.00332	-0.07000	0.00094	-0.00038	0.01351
0.300	0.00001	-0.08793	-0.00034	0.00633	0.03271	0.00004	-0.00167	0.00004	0.98139	0.00742	-0.10412	0.00211	-0.00084	0.02016
0.400	0.00004	-0.11601	-0.00081	0.01114	0.04346	0.00010	-0.00296	0.00007	0.96714	0.01306	-0.13722	0.00374	-0.00149	0.02671
0.500	0.00010	-0.14305	-0.00156	0.01719	0.05408	0.00020	-0.00461	0.00011	0.94910	0.02015	-0.16897	0.00582	-0.00232	0.03310
0.600	0.00020	-0.16883	-0.00266	0.02439	0.06453	0.00034	-0.00660	0.00016	0.92747	0.02858	-0.19908	0.00834	-0.00331	0.03931
0.700	0.00037	-0.19313	-0.00416	0.03262	0.07479	0.00053	-0.00893	0.00022	0.90249	0.03821	-0.22728	0.01128	-0.00446	0.04530
0.800	0.00062	-0.21577	-0.00609	0.04175	0.08483	0.00079	-0.01158	0.00028	0.87444	0.04889	-0.25333	0.01462	-0.00577	0.05104
0.900	0.00098	-0.23659	-0.00850	0.05164	0.09462	0.00112	-0.01453	0.00036	0.84362	0.05046	-0.27704	0.01835	-0.00721	0.05650
1.000	0.00145	-0.25545	-0.01140	0.06213	0.10413	0.00152	-0.01777	0.00044	0.81035	0.07273	-0.29822	0.02244	-0.00878	0.06165
1.500	0.00641	-0.31746	-0.03317	0.11827	0.14671	0.00484	-0.03761	0.00097	0.61947	0.13818	-0.36311	0.04747	-0.01807	0.08195
2.000	0.01680	-0.32541	-0.06427	0.16696	0.17942	0.01059	-0.06144	0.00170	0.41924	0.19454	-0.36099	0.07753	-0.02832	0.09175
3.000	0.05192	-0.22704	-0.12593	0.19742	0.21181	0.02868	-0.10939	0.00360	0.11592	0.22962	-0.22794	0.13784	-0.04414	0.07946
4.000	0.08898	-0.08865	-0.14830	0.14319	0.20535	0.05087	-0.14248	0.00590	-0.00218	0.15955	-0.07452	0.17902	-0.04547	0.03728
5.000	0.10937	0.00655	-0.12644	0.06220	0.17458	0.07029	-0.15295	0.00832	-0.00262	0.08443	0.00464	0.19121	-0.03110	-0.01246
8.000	0.07834	0.04378	-0.01258	-0.04229	0.06529	0.08284	-0.09658	0.01409	0.05534	-0.00455	-0.01747	0.11612	0.04037	-0.07853

SIN THETA/ LAMBDA	AM 3P1S J(1)	AM 3S3S J(0)	AM 3S2P J(1)	AM 3S2S J(0)	AM 3S1S J(0)	AM 2P2P J(0)	AM 2P2P J(2)	AM 2P2S J(1)	AM 2P1S J(1)	AM 2S2S J(0)	AM 2S1S J(0)	AM 1S1S J(0)	ND 7S7S J(0)	ND 7S6P J(1)
0.005	0.00005	1.00000	0.00013	0.	0.00001	1.00000	0.	-0.00065	0.00015	1.00000	0.	1.00000	0.99507	0.00624
0.010	0.00011	0.99998	0.00026	0.	0.00001	1.00000	0.	-0.00130	0.00029	1.00000	0.	1.00000	0.98041	0.01241
0.050	0.00054	0.99943	0.00127	0.00007	0.00001	0.99993	0.00003	-0.00647	0.00146	0.99990	0.00001	1.00000	0.60481	0.05283
0.100	0.00109	0.99772	0.00255	0.00027	0.00002	0.99972	0.00011	-0.01295	0.00293	0.99962	0.00003	0.99998	0.09449	0.06182
0.150	0.00163	0.99487	0.00381	0.00061	0.00003	0.99937	0.00025	-0.01941	0.00439	0.99914	0.00006	0.99995	-0.05055	0.02819
0.200	0.00217	0.99090	0.00507	0.00108	0.00004	0.99888	0.00045	-0.02587	0.00586	0.99847	0.00010	0.99990	-0.02610	-0.01711
0.300	0.00326	0.97962	0.00754	0.00241	0.00008	0.99748	0.00101	-0.03876	0.00878	0.99657	0.00022	0.99978	0.01723	-0.05779
0.400	0.00434	0.96402	0.00994	0.00427	0.00014	0.99552	0.00179	-0.05157	0.01171	0.99391	0.00039	0.99960	0.00677	-0.03582
0.500	0.00543	0.94430	0.01224	0.00664	0.00022	0.99302	0.00279	-0.06430	0.01462	0.99050	0.00051	0.99938	-0.00208	-0.00744
0.600	0.00651	0.92067	0.01442	0.00951	0.00031	0.98996	0.00401	-0.07693	0.01754	0.98635	0.00088	0.99911	-0.00258	0.00491
0.700	0.00759	0.89342	0.01645	0.01284	0.00042	0.98636	0.00544	-0.08943	0.02044	0.98147	0.00119	0.99878	-0.00030	0.00475
0.800	0.00867	0.86287	0.01833	0.01663	0.00055	0.98223	0.00708	-0.10178	0.02334	0.97587	0.00155	0.99841	0.00143	0.00024
0.900	0.00975	0.82935	0.02002	0.02085	0.00069	0.97757	0.00892	-0.11396	0.02622	0.96956	0.00196	0.99799	0.00187	-0.00363
1.000	0.01083	0.79324	0.02152	0.02546	0.00085	0.97240	0.01096	-0.12596	0.02910	0.96255	0.00242	0.99751	0.00144	-0.00526
1.500	0.01617	0.58773	0.02551	0.05336	0.00189	0.93912	0.02397	-0.18251	0.04327	0.91771	0.00540	0.99442	-0.00027	0.00035
2.000	0.02142	0.37631	0.02293	0.08597	0.00333	0.89471	0.04097	-0.23190	0.05701	0.85840	0.00948	0.99011	0.00037	-0.00036
3.000	0.03153	0.07304	-0.00104	0.14679	0.00734	0.78048	0.08250	-0.30370	0.08266	0.70900	0.02062	0.97794	0.00004	-0.00022
4.000	0.04092	-0.02258	-0.03961	0.17938	0.01269	0.64733	0.12630	-0.33625	0.10516	0.54151	0.03497	0.96129	0.00007	0.00002
5.000	0.04932	-0.00225	-0.07638	0.17573	0.01913	0.51211	0.16424	-0.33304	0.12390	0.38057	0.05152	0.94049	-0.00036	-0.00029
8.000	0.06665	0.04605	-0.09958	0.06300	0.04145	0.19527	0.20814	-0.20486	0.15543	0.05460	0.10348	0.85780	0.00029	-0.00004



SIN THETA/ LAMBDA	NO 7S6S J(0)	NO 7S5F J(3)	NO 7S5D J(2)	NO 7S5P J(1)	NO 7S5S J(0)	NO 7S4F J(3)	NO 7S4D J(2)	NO 7S4P J(1)	NO 7S4S J(0)	NO 7S3D J(2)	NO 7S3P J(1)	NO 7S3S J(0)	NO 7S2P J(1)	NO 7S2S J(0)
0.005	0.00018-0.	-0.	0.00039	0.00001	0.	-0.	0.00006-0.00001-0.	0.00001-0.	0.	0.00001-0.	0.	0.	-0.	-0.
0.010	0.00072-0.	-0.00002	0.00078	0.00003	0.	-0.	0.00011-0.00001-0.	0.00002-0.	0.	0.00002-0.	0.	0.	-0.	-0.
0.050	0.01673-0.00053-0.00042	0.00334	0.00072	0.	-0.00002	0.00057	0.00006-0.	0.00011	0.	0.00002	0.	0.00002	0.	0.
0.100	0.05398-0.00310-0.00172	0.00727	0.00284	0.	-0.00009	0.00113	0.00025-0.00001	0.00022	0.00002	0.00004	0.	0.	0.	0.
0.150	0.08554-0.00632-0.00391	0.00990	0.00619	0.	-0.00019	0.00166	0.00056-0.00001	0.00033	0.00006	0.00006	0.00001	0.	0.00001	0.00001
0.200	0.09407-0.00710-0.00682	0.01140	0.01046	0.	-0.00035	0.00216	0.00100-0.00002	0.00043	0.00011	0.00008	0.00001	0.	0.00001	0.00001
0.300	0.05261	0.00206-0.01302	0.01022	0.02004	0.00003-0.00077	0.00301	0.00222-0.00005	0.00054	0.00026	0.00011	0.00003	0.	0.00003	0.00003
0.400	0.00405	0.01561-0.01615	0.00382	0.02788	0.00011-0.00134	0.00357	0.00382-0.00009	0.00083	0.00046	0.00015	0.00005	0.	0.00005	0.00005
0.500	-0.01239	0.02237-0.01384-0.00531	0.03118	0.00029-0.00200	0.00376	0.00571-0.00015	0.00101	0.00071	0.00019	0.00008	0.00001	0.	0.00001	0.00001
0.600	-0.00731	0.02063-0.00706-0.01378	0.02916	0.00060-0.00268	0.00350	0.00774-0.00021	0.00116	0.00102	0.00022	0.00011	0.00001	0.	0.00001	0.00001
0.700	0.00195	0.01374	0.00133-0.01906	0.02299	0.00104-0.00328	0.00279	0.00976-0.00028	0.00129	0.00138	0.00026	0.00015	0.	0.00015	0.00015
0.800	0.00722	0.00552	0.00854-0.02025	0.01489	0.00158-0.00368	0.00164	0.01158-0.00036	0.00138	0.00178	0.00029	0.00020	0.	0.00020	0.00020
0.900	0.00769-0.00151	0.01298-0.01793	0.00706	0.00216-0.00380	0.00012	0.01304-0.00045	0.00144	0.00222	0.00032	0.00025	0.	0.00025	0.00025	0.00025
1.000	0.00539-0.00626	0.01435-0.01349	0.00103	0.00269-0.00357-0.00164	0.01403-0.00054	0.00146	0.00269	0.00035	0.00031	0.00031	0.	0.00031	0.00031	0.00031
1.500	-0.00105-0.00482	0.00179	0.00210	0.00018	0.00228	0.00188-0.00909	0.01086-0.00094	0.00085	0.00523	0.00048	0.00068	0.	0.00068	0.00068
2.000	0.00160	0.00056-0.00060-0.00214	0.00411-0.00229	0.00682-0.00774	0.00210-0.00091-0.00086	0.00719	0.00053	0.00117	0.00236	0.00036	0.00236	0.	0.00236	0.00236
3.000	-0.00027-0.00094	0.00162-0.00038-0.00065-0.00409	0.00205	0.00071	0.00002	0.00099-0.00457	0.00637	0.00036	0.00236	0.00036	0.00236	0.	0.00236	0.00236
4.000	0.00040-0.00009-0.00040-0.00002	0.00107	0.00031-0.00088-0.00083	0.00232	0.00309-0.00452	0.00201-0.00021	0.00348	0.00049	0.00409	0.00049	0.00409	0.	0.00409	0.00409
5.000	0.00029	0.00055-0.00004-0.00077	0.00050	0.00167	0.00032-0.00159	0.00062	0.00310-0.00198-0.00038-0.00102	0.00409	0.00409	0.00409	0.00409	0.	0.00409	0.00409
8.000	0.00011-0.	-0.00003	0.00011	0.00021	0.00005-0.00012	0.00019	0.00047-0.00066	0.00012	0.00118-0.00256	0.00256	0.00256	0.	0.00256	0.00256

SIN THETA/ LAMBDA	NO 7S1S J(0)	NO 6P6P J(0)	NO 6P6P J(2)	NO 6P6S J(1)	NO 6P5F J(2)	NO 6P5F J(4)	NO 6P5D J(1)	NO 6P5D J(3)	NO 6P5P J(0)	NO 6P5P J(2)	NO 6P5S J(1)	NO 6P4F J(2)	NO 6P4F J(4)	NO 6P4D J(1)
0.005	0.	0.99940	0.00024-0.01732-0.00010-0.	0.00297	0.	0.00004-0.00002	0.00089-0.	0.	0.00022	0.	0.00022	0.	0.00022	0.00022
0.010	0.	0.99760	0.00096-0.03460-0.00041-0.	0.00594	0.	0.00017-0.00007	0.00179-0.	0.	0.00043	0.	0.00043	0.	0.00043	0.00043
0.050	0.	0.94146	0.02314-0.16667-0.01000-0.00007	0.02892	0.00023	0.00412-0.00164	0.00855-0.00007	0.	0.00216	0.	0.00216	0.	0.00216	0.00216
0.100	0.	0.78408	0.08230-0.29666-0.03655-0.00100	0.05321	0.00174	0.01588-0.00622	0.01554-0.00027	0.	0.00428	0.	0.00428	0.	0.00428	0.00428
0.150	0.	0.57299	0.15298-0.36668-0.07093-0.00438	0.06923	0.00539	0.03361-0.01279	0.01923-0.00062	0.	0.00631	0.	0.00631	0.	0.00631	0.00631
0.200	0.	0.35909	0.20979-0.37296-0.10314-0.01145	0.07492	0.01138	0.05488-0.02004	0.01877-0.00112	0.00001	0.00820	0.	0.00820	0.	0.00820	0.00820
0.300	0.	0.05499	0.23282-0.25467-0.13404-0.03534	0.05607	0.02781	0.09705-0.03087	0.00496-0.00259	0.00002	0.01137	0.	0.01137	0.	0.01137	0.01137
0.400	0.	-0.04739	0.16010-0.09881-0.11308-0.06078	0.01137	0.04227	0.12359-0.03009-0.02150-0.00464	0.00002	0.01336	0.	0.01336	0.	0.01336	0.01336	0.01336
0.500	0.	-0.03527	0.07056-0.00331-0.06324-0.07432-0.03590	0.04640	0.12582-0.01604-0.05052-0.00709-0.00009	0.01380	0.01380	0.01380	0.01380	0.01380	0.01380	0.01380	0.01380	0.01380
0.600	0.00001	0.00217	0.01188	0.02412-0.01176-0.07173-0.06847	0.03774	0.10636	0.00644-0.07209-0.00959-0.00042	0.01245	0.01245	0.01245	0.01245	0.01245	0.01245	0.01245
0.700	0.00001	0.02524-0.01045	0.01401	0.02581-0.05662-0.08026	0.01966	0.07462	0.02983-0.08082-0.01168-0.00107	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926
0.800	0.00001	0.02900-0.00968-0.00509	0.04554-0.03545-0.07419-0.00181	0.04107	0.04107	0.04107	0.04107-0.07640-0.01291-0.00211	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440	0.00440
0.900	0.00001	0.02128-0.00010-0.01846	0.05020-0.01400-0.05731-0.02105	0.01345	0.05662-0.06231-0.01295-0.00351-0.00173	0.00173	0.00173	0.00173	0.00173	0.00173	0.00173	0.00173	0.00173	0.00173
1.000	0.00002	0.01046	0.00922-0.02264	0.04491	0.00396-0.03688-0.03456-0.00454	0.05651-0.04358-0.01163-0.00517-0.00859	0.00859	0.00859	0.00859	0.00859	0.00859	0.00859	0.00859	0.00859
1.500	0.00004-0.00134	0.00580	0.00187-0.00033	0.02332	0.00726-0.02211	0.00538	0.00558	0.00791	0.00896-0.01088-0.03452	0.03452	0.03452	0.03452	0.03452	0.03452
2.000	0.00007	0.00536-0.00133-0.00174-0.00142	0.00348	0.00848	0.00209	0.01425-0.00153-0.00875	0.02348-0.00331-0.02705	0.02705	0.02705	0.02705	0.02705	0.02705	0.02705	0.02705
3.000	0.00015-0.00067	0.00268-0.00088	0.00284	0.00155-0.00041-0.00648-0.00172	0.00699-0.00116	0.00493	0.01471	0.00352	0.00352	0.00352	0.00352	0.00352	0.00352	0.00352
4.000	0.00027	0.00137-0.00024	0.00007-0.00232	0.00264	0.00085-0.00177	0.00397-0.00074-0.00015-0.00779	0.00770-0.00051	0.00051	0.00051	0.00051	0.00051	0.00051	0.00051	0.00051
5.000	0.00040	0.00079	0.00040-0.00108-0.00218-0.00006-0.00165	0.00067	0.00227	0.00107-0.00285-0.00564-0.00105-0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419
8.000	0.00092	0.00021	0.00017	0.00019	0.00023-0.00075	0.00091-0.00114	0.00057	0.00046	0.00040	0.00058-0.00188	0.00206	0.00206	0.00206	0.00206

SIN THETA/ LAMBDA	NO 6P4D J(3)	NO 6P4P J(0)	NO 6P4P J(2)	NO 6P4S J(1)	NO 6P3D J(1)	NO 6P3D J(3)	NO 6P3P J(0)	NO 6P3P J(2)	NO 6P3S J(1)	NO 6P2P J(0)	NO 6P2P J(2)	NO 6P2S J(1)	NO 6P1S J(1)	NO 6S6S J(0)
0.005	0.	0.	-0.	0.00024	0.00003	0.	-0.00002-0.	0.00007-0.	-0.	0.00002	0.	0.00002	0.	0.99953
0.010	0.	0.00001-0.	0.00001-0.	0.00048	0.00005	0.	-0.00001-0.	0.00014-0.	-0.	0.00004	0.00001	0.00004	0.00001	0.99814
0.050	0.	0.00026-0.00011	0.00237	0.00027	0.	0.00001-0.00001	0.00070	0.	-0.	0.00020	0.00004	0.00004	0.95430	
0.100	0.00002	0.00105-0.00042	0.00469	0.00053	0.	0.00009-0.00004	0.00139	0.00001-0.	0.00040	0.00009	0.82792			
0.150	0.00006	0.00235-0.00094	0.00689	0.00079	0.	0.00022-0.00009	0.00208	0.00002-0.00001	0.00060	0.00013	0.64893			
0.200	0.00014	0.00414-0.00164	0.00892	0.00105	0.	0.00041-0.00017	0.00276	0.00004-0.00002	0.00080	0.00018	0.45280			
0.300	0.00048	0.00910-0.00357	0.01225	0.00155	0.00001	0.00093-0.00038	0.00409	0.00008-0.00003	0.00120	0.00026	0.12667			
0.400	0.00117	0.01560-0.00601	0.01431	0.00201	0.00004	0.00166-0.00067	0.00535	0.00015-0.00006	0.00159	0.00035-0.03017				
0.500	0.00229	0.02316-0.00869	0.01478	0.00242	0.00007	0.00259-0.00103	0.00653	0.00023-0.00009	0.00199	0.00044-0.05097				
0.600	0.00387	0.03115-0.01123	0.01349	0.00277	0.00012	0.00370-0.00147	0.00760	0.00034-0.00014	0.00237	0.00053-0.01629				
0.700	0.00581	0.03886-0.01327	0.01045	0.00305	0.00020	0.00499-0.00197	0.00854	0.00046-0.00018	0.00276	0.00061	0.01828			
0.800	0.00795	0.04561-0.01444	0.00584	0.00324	0.00030	0.00645-0.00253	0.00932	0.00060-0.00024	0.00313	0.00070	0.03329			
0.900	0.01002	0.05078-0.01447	0.00003	0.00333	0.00043	0.00804-0.00313	0.00994	0.00076-0.00030	0.00350	0.00079	0.03083			
1.000	0.01175	0.05396-0.01323-0.00650	0.00330	0.00059	0.00976-0.00376	0.01037	0.00094-0.00037	0.00387	0.00088	0.01970				
1.500	0.00869	0.03946	0.00735-0.03216	0.00120	0.00190	0.01908-0.00673	0.00928	0.00209-0.00083	0.00553	0.00131-0.00385				
2.000	-0.00901	0.00761	0.02442-0.02617-0.00396	0.00363	0.02648-0.00771	0.00314	0.00365-0.00143	0.00684	0.00174	0.00668				
3.000	-0.01630	0.00085	0.00753	0.00287-0.01517	0.00391	0.02504-0.00010-0.01236	0.00761-0.00285	0.00797	0.00258-0.00110					
4.000	-0.00149	0.00888-0.00140-0.00299-0.01556-0.00203	0.01030	0.01013-0.01459	0.01169-0.00396	0.00673	0.00338	0.00412	0.00085					
5.000	0.00097	0.00348	0.00343-0.00562-0.00777-0.00792	0.00064	0.01192-0.00671	0.01462-0.00413	0.00358	0.00412	0.00085					
8.000	-0.00248	0.00137	0.00071	0.00070	0.00457-0.00473	0.00396	0.00019	0.00068	0.01292	0.00080-0.00560	0.00582	0.00036		

SIN THETA/ LAMBDA	NO 6S5F J(3)	NO 6S5D J(2)	NO 6S5P J(1)	NO 6S5S J(0)	NO 6S4F J(3)	NO 6S4D J(2)	NO 6S4P J(1)	NO 6S4S J(0)	NO 6S3D J(2)	NO 6S3P J(1)	NO 6S3S J(0)	NO 6S2P J(1)	NO 6S2S J(0)	NO 6S1S J(0)
0.005	0.	-0.00004	0.00201	0.00004	0.	-0.	0.00024	0.00003-0.	0.00005-0.00001	0.00001-0.	0.			
0.010	0.00001-0.00014	0.00401	0.00016	0.	-0.	0.00049	0.00003-0.	0.00009-0.00001	0.00002-0.	0.				
0.050	0.00080-0.00355	0.01960	0.00387	0.	-0.00009	0.00243	0.00030-0.00001	0.00046	0.00002	0.00008	0.			
0.100	0.00592-0.01349	0.03642	0.01500	0.	-0.00038	0.00481	0.00113-0.00003	0.00091	0.00011	0.00016	0.00001	0.		
0.150	0.01776-0.02784	0.04814	0.03200	0.00001-0.00085	0.00709	0.00249-0.00006	0.00136	0.00026	0.00024	0.00003	0.			
0.200	0.03588-0.04384	0.05320	0.05283	0.00002-0.00151	0.00921	0.00438-0.00010	0.00181	0.00048	0.00031	0.00005	0.			
0.300	0.07871-0.06941	0.04190	0.09631	0.00015-0.00336	0.01278	0.00961-0.00022	0.00267	0.00108	0.00047	0.00011	0.00001			
0.400	0.10687-0.07372	0.00839	0.12763	0.00054-0.00584	0.01508	0.01649-0.00040	0.00347	0.00192	0.00062	0.00020	0.00001			
0.500	0.10668-0.05435-0.03273	0.13640	0.00138-0.00869	0.01575	0.02453-0.00062	0.00420	0.00299	0.00077	0.00032	0.00002				
0.600	0.08277-0.02043-0.06680	0.12225	0.00278-0.01156	0.01452	0.03313-0.00088	0.00483	0.00428	0.00092	0.00046	0.00003				
0.700	0.04778	0.01534-0.08499	0.09237	0.00474-0.01400	0.01131	0.04155-0.00118	0.00535	0.00576	0.00106	0.00062	0.00003			
0.800	0.01332	0.04306-0.08580	0.05684	0.00707-0.01556	0.00628	0.04907-0.00152	0.00574	0.00743	0.00120	0.00081	0.00005			
0.900	-0.01358	0.05816-0.07309	0.02452	0.00948-0.01587-0.00022	0.05502-0.00188	0.00597	0.00926	0.00133	0.00102	0.00006				
1.000	-0.03046	0.06083-0.05308	0.00090	0.01160-0.01472-0.00767	0.05888-0.00225	0.00603	0.01122	0.00146	0.00126	0.00007				
1.500	-0.01885	0.00605	0.00877	0.00200	0.00909	0.00857-0.03813	0.04446-0.00388	0.00344	0.02174	0.00196	0.00279	0.00016		
2.000	0.00245-0.00215-0.00932	0.01681-0.00999	0.02850-0.03170	0.00815-0.00376-0.00354	0.02976	0.00218	0.00483	0.00028						
3.000	-0.00393	0.00657-0.00143-0.00263-0.01673	0.00820	0.00300	0.00026	0.00418-0.01894	0.02620	0.00148	0.00976	0.00063				
4.000	-0.00031-0.00168-0.00014	0.00445	0.00140-0.00363-0.00351	0.00955	0.01279-0.01860	0.00819-0.00086	0.01435	0.00109						
5.000	0.00231-0.00014-0.00317	0.00203	0.00690	0.00133-0.00654	0.00252	0.01274-0.00812-0.00159-0.00422	0.01686	0.00167						
8.000	0.00008-0.00012	0.00045	0.00086	0.00018-0.00051	0.00078	0.00193-0.00272	0.00048	0.00486-0.01055	0.01036	0.00379				

SIN THETA/ LAMBDA	NO 5F5F J(0)	NO 5F5F J(2)	NO 5F5F J(4)	NO 5F5F J(6)	NO 5F5D J(1)	NO 5F5D J(3)	NO 5F5D J(5)	NO 5F5P J(2)	NO 5F5P J(4)	NO 5F5S J(3)	NO 5F4F J(2)	NO 5F4F J(4)	NO 5F4F J(6)
0.005	0.99980	0.00008	0.	0.	-0.00828-0.	-0.	0.00004	0.	-0.	-0.00039-0.	-0.	-0.	-0.
0.010	0.99919	0.00032	0.	0.	-0.01656-0.	-0.	0.00017	0.	-0.	-0.00035-0.00002-0.	-0.	-0.	-0.
0.050	0.98006	0.00794	0.00003	0.	-0.08196-0.00025-0.	0.00413	0.00001-0.00016	0.00059-0.00043-0.	-0.	-0.	-0.	-0.	-0.
0.100	0.92300	0.03018	0.00045	0.00001-0.15873-0.00196-0.00001	0.01612	0.00011-0.00128	0.00389-0.00171-0.00001-0.	0.00001-0.	0.00011-0.00128	0.00389-0.00171-0.00001-0.	0.00001-0.	0.00001-0.	0.00001-0.
0.150	0.83625	0.06260	0.00208	0.00006-0.22577-0.00630-0.00010	0.03489	0.00055-0.00419	0.00910-0.00375-0.00003-0.	0.00001-0.	0.00055-0.00419	0.00910-0.00375-0.00003-0.	0.00001-0.	0.00001-0.	0.00001-0.
0.200	0.72991	0.09978	0.00577	0.00027-0.27959-0.01401-0.00038	0.05874	0.00166-0.00946	0.01613-0.00647-0.00011-0.	0.00001-0.	0.00166-0.00946	0.01613-0.00647-0.00011-0.	0.00001-0.	0.00001-0.	0.00001-0.
0.300	0.49907	0.16845	0.02093	0.00202-0.34070-0.03958-0.00239	0.11344	0.00727-0.02799	0.03454-0.01329-0.00050-0.00001	0.00001-0.	0.00727-0.02799	0.03454-0.01329-0.00050-0.00001	0.00001-0.	0.00001-0.	0.00001-0.
0.400	0.29364	0.20928	0.04435	0.00687-0.34156-0.07415-0.00783	0.16367	0.01895-0.05545	0.05650-0.02080-0.00142-0.00005	0.00001-0.	0.01895-0.05545	0.05650-0.02080-0.00142-0.00005	0.00001-0.	0.00001-0.	0.00001-0.
0.500	0.14211	0.21661	0.06986	0.01534-0.29737-0.10899-0.01774	0.19689	0.03657-0.08653	0.07953-0.02755-0.00306-0.00017	0.00001-0.	0.03657-0.08653	0.07953-0.02755-0.00306-0.00017	0.00001-0.	0.00001-0.	0.00001-0.
0.600	0.04662	0.19769	0.09138	0.02648-0.22921-0.13588-0.03162	0.20755	0.05774-0.11502	0.10073-0.03230-0.00547-0.00044	0.00001-0.	0.05774-0.11502	0.10073-0.03230-0.00547-0.00044	0.00001-0.	0.00001-0.	0.00001-0.
0.700	-0.00344	0.16363	0.10531	0.03858-0.15609-0.15006-0.04763	0.19678	0.07883-0.13518	0.11816-0.03424-0.00853-0.00093	0.00001-0.	0.07883-0.13518	0.11816-0.03424-0.00853-0.00093	0.00001-0.	0.00001-0.	0.00001-0.
0.800	-0.02208	0.12437	0.11065	0.04991-0.09111-0.15062-0.06331	0.17005	0.09628-0.14413	0.13050-0.03300-0.01201-0.00171	0.00001-0.	0.09628-0.14413	0.13050-0.03300-0.01201-0.00171	0.00001-0.	0.00001-0.	0.00001-0.
0.900	-0.02192	0.08688	0.10822	0.05913-0.04095-0.13964-0.07642	0.13450	0.10759-0.14159	0.13720-0.02870-0.01555-0.00281	0.00001-0.	0.10759-0.14159	0.13720-0.02870-0.01555-0.00281	0.00001-0.	0.00001-0.	0.00001-0.
1.000	-0.01249	0.05511	0.09984	0.06546-0.00720-0.12068-0.08539	0.09681	0.11165-0.12939	0.13833-0.02177-0.01879-0.00424	0.00001-0.	0.11165-0.12939	0.13833-0.02177-0.01879-0.00424	0.00001-0.	0.00001-0.	0.00001-0.
1.500	0.02889	-0.00489	0.03304	0.05644	0.00639-0.01798-0.06691-0.00976	0.05687-0.02652	0.08847	0.02718-0.02182-0.01339	0.00001-0.	0.05687-0.02652	0.08847	0.02718-0.02182-0.01339	0.00001-0.
2.000	0.01703	0.00725	0.00078	0.02334-0.01721	0.00481-0.01801	0.00050	0.00311	0.00749	0.02495	0.05370-0.00339-0.01639	0.00001-0.	0.00001-0.	0.00001-0.
3.000	-0.00441	0.01274	0.00503-0.00075	0.00075	0.00328-0.01191-0.00027	0.00686	0.00575-0.01045-0.01373	0.03361	0.02724	0.00201	0.00001-0.	0.00001-0.	0.00001-0.
4.000	-0.00298	0.00412	0.00791	0.00318	0.00780-0.00404-0.00770-0.00685	0.00701	0.00002-0.00707	0.00929	0.02398	0.01628	0.00001-0.	0.00001-0.	0.00001-0.
5.000	-0.00079	0.00056	0.00499	0.00508	0.00319	0.00222-0.00505-0.00591-0.00061	0.00593-0.00170	0.00099	0.01334	0.01668	0.00001-0.	0.00001-0.	0.00001-0.
8.000	0.00010	-0.00016	0.00047	0.00173-0.00043	0.00132	0.00152	0.00060-0.00201	0.00023	0.00019-0.00036	0.00111	0.00458	0.00001-0.	0.00001-0.

SIN THETA/ LAMBDA	NO 5F4D J(1)	NO 5F4D J(3)	NO 5F4D J(5)	NO 5F4P J(2)	NO 5F4P J(4)	NO 5F4S J(3)	NO 5F3D J(1)	NO 5F3D J(3)	NO 5F3D J(5)	NO 5F3P J(2)	NO 5F3P J(4)	NO 5F3S J(3)	NO 5F2P J(2)	NO 5F2P J(4)
0.005	0.00085	0.	0.	-0.	-0.	0.	0.00030	0.	-0.	-0.	-0.	0.	0.	0.
0.010	0.00170	0.	0.	-0.00002-0.	0.	0.00061	0.	-0.	-0.	-0.	0.	0.	0.	0.
0.050	0.00845	0.00001	0.	-0.00038-0.	0.00001	0.00304	0.	-0.	-0.00004-0.	0.	0.	0.	0.	0.
0.100	0.01663	0.00011	0.	-0.00149-0.	0.00009	0.00607	0.	-0.	-0.00017-0.	0.	0.	0.00002	0.	0.
0.150	0.02426	0.00035	0.	-0.00329-0.00002	0.00029	0.00908	0.00001-0.	-0.00038-0.	0.00001	0.00004	0.	0.	0.	0.
0.200	0.03109	0.00081	0.00001-0.00571-0.00007	0.00068	0.01209	0.00002-0.	-0.00067-0.	0.00002	0.00002	0.00006	0.	0.	0.	0.
0.300	0.04160	0.00257	0.00006-0.01195-0.00035	0.00216	0.01803	0.00005-0.	-0.00151-0.	0.00008	0.00014	0.	0.	0.	0.	0.
0.400	0.04697	0.00556	0.00022-0.01920-0.00103	0.00472	0.02383	0.00013-0.	-0.00267-0.00001	0.00019	0.00025	0.	0.	0.	0.	0.
0.500	0.04678	0.00966	0.00060-0.02630-0.00229	0.00831	0.02947	0.00026-0.	-0.00415-0.00002	0.00037	0.00040	0.	0.	0.	0.	0.
0.600	0.04136	0.01448	0.00131-0.03218-0.00421	0.01264	0.03488	0.00045-0.	-0.00593-0.00003	0.00065	0.00057	0.	0.	0.	0.	0.
0.700	0.03162	0.01948	0.00245-0.03598-0.00678	0.01729	0.04003	0.00072-0.	-0.00799-0.00007	0.00103	0.00076	0.00001	0.	0.	0.	0.
0.800	0.01886	0.02402	0.00406-0.03719-0.00988	0.02171	0.04486	0.00107-0.	-0.01031-0.00012	0.00153	0.00099	0.00001	0.	0.	0.	0.
0.900	0.00455	0.02756	0.00611-0.03564-0.01327	0.02540	0.04934	0.00153-0.00001-0.01286-0.00020	0.00218	0.00124	0.00001	0.	0.	0.	0.	0.
1.000	-0.00990	0.02963	0.00851-0.03151-0.01666	0.02792	0.05342	0.00211-0.	-0.01560-0.00032	0.00297	0.00151	0.00002	0.	0.	0.	0.
1.500	-0.05238	0.01549	0.01970	0.00876-0.02388	0.01805	0.06674	0.00682	0.00013-0.03065-0.00180	0.00940	0.00314	0.00010	0.	0.	0.
2.000	-0.03557	-0.01550	0.01685	0.03240-0.00841-0.01046	0.06747	0.01404	0.00091-0.04352-0.00551	0.01901	0.00501	0.00029	0.	0.	0.	0.
3.000	0.01580	-0.02634-0.01236	0.00274	0.02108-0.01854	0.04417	0.02718	0.00602-0.04770-0.01788	0.03527	0.00835	0.00110	0.	0.	0.	0.
4.000	0.01598-0.00363-0.01812-0.01616	0.00956	0.00596	0.01807	0.02884	0.01305-0.03017-0.02607	0.03415	0.00995	0.00240	0.	0.	0.	0.	0.
5.000	0.00575	0.00672-0.00836-0.01093-0.00443	0.01239	0.00398	0.02207	0.01679-0.01204-0.02450	0.02180	0.00962	0.00375	0.	0.	0.	0.	0.
8.000	-0.00086	0.00269	0.00379	0.00129-0.00379	0.00016-0.00144	0.00419	0.01013	0.00269-0.00528-0.00114	0.00425	0.00491	0.	0.	0.	0.

SIN THETA/ LAMBDA	NO 5F2S J(3)	NO 5F1S J(3)	NO 5D5D J(0)	NO 5D5D J(2)	NO 5D5D J(4)	NO 5D5P J(1)	NO 5D5P J(3)	NO 5D5S J(2)	NO 5D4F J(1)	NO 5D4F J(3)	NO 5D4F J(5)	NO 5D4D J(0)	NO 5D4D J(2)	NO 5D4D J(4)
0.005	-0.	0.	0.99989	0.00004	0.	-0.00758-0.	0.00004	0.00090	0.	0.	0.	0.00001-0.	-0.	-0.
0.010	-0.	0.	0.99956	0.00018	0.	-0.01516-0.	0.00015	0.00181	0.	0.	0.	0.00005-0.	0.00002-0.	0.
0.050	-0.	0.	0.98907	0.00436	0.00001-0.	0.07527-0.	0.00016	0.00370	0.00898	0.00002	0.	0.00117-0.	0.00047-0.	0.
0.100	-0.	0.	0.95692	0.01709	0.00011-0.	0.14726-0.	0.00124	0.01455	0.01760	0.00014	0.	0.00464-0.	0.00185-0.	0.00001
0.150	-0.	0.	0.90542	0.03711	0.00053-0.	0.21293-0.	0.00408	0.03178	0.02552	0.00045	0.	0.01029-0.	0.00407-0.	0.00003
0.200	-0.	0.	0.83746	0.06282	0.00160-0.	0.26967-0.	0.00930	0.05424	0.03242	0.00105	0.00001	0.01795-0.	0.00705-0.	0.00010
0.300	-0.00001	0.	0.66728	0.12303	0.00713-0.	0.34911-0.	0.02809	0.10866	0.04214	0.00331	0.00008	0.03829-0.	0.01467-0.	0.00047
0.400	-0.00002	0.	0.47903	0.18067	0.01901-0.	0.37833-0.	0.05711	0.16433	0.04529	0.00713	0.00029	0.06320-0.	0.02337-0.	0.00137
0.500	-0.00003	0.	0.30261	0.22171	0.03760-0.	0.36115-0.	0.09191	0.20883	0.04140	0.01233	0.00080	0.08981-0.	0.03161-0.	0.00303
0.600	-0.00006	0.	0.15863	0.23874	0.06087-0.	0.30946-0.	0.12597	0.23386	0.03100	0.01835	0.00176	0.11524-0.	0.03796-0.	0.00559
0.700	-0.00009	0.	0.05634	0.23141	0.08518-0.	0.23871-0.	0.15297	0.23651	0.01542	0.02443	0.00328	0.13700-0.	0.04128-0.	0.00901
0.800	-0.00014	0.	-0.00485	0.20461	0.10653-0.	0.16378-0.	0.16852	0.21884-0.	0.00350	0.02972	0.00543	0.15321-0.	0.04090-0.	0.01313
0.900	-0.00019	0.	-0.03190	0.16584	0.12170-0.	0.09612-0.	0.17098	0.18625-0.	0.02377	0.03347	0.00814	0.16277-0.	0.03663-0.	0.01759
1.000	-0.00026	0.	-0.03461	0.12280	0.12891-0.	0.04265-0.	0.16124	0.14555-0.	0.04346	0.03510	0.01129	0.16535-0.	0.02877-0.	0.02200
1.500	-0.00082	0.	0.03918-0.	0.00688	0.07093	0.01195-0.	0.03996-0.	0.00478-0.	0.09320	0.00998	0.02477	0.10129	0.03533-0.	0.02916
2.000	-0.00176	0.00001	0.02988	0.00693	0.00484-0.	0.02895	0.00726	0.00234-0.	0.05936-0.	0.03375	0.01785	0.01925	0.06888-0.	0.00328
3.000	-0.00444	0.00002-0.	0.00224	0.01595	0.00981	0.00065-0.	0.01899	0.01469	0.01907-0.	0.04273-0.	0.02391	0.00353	0.02169	0.03953
4.000	-0.00714	0.00005	0.00899-0.	0.00059	0.01118	0.00182-0.	0.00405-0.	0.00452	0.02064-0.	0.00812-0.	0.02927	0.02277-0.	0.00236	0.01997
5.000	-0.00875	0.00008	0.00714	0.00148	0.00191-0.	0.00475	0.00187	0.00002	0.00747	0.00725-0.	0.01410	0.01410	0.00576	0.00155
8.000	-0.00654	0.00021-0.	0.00163	0.00402	0.00226	0.00252-0.	0.00308-0.	0.00041-0.	0.00104	0.00328	0.00422-0.	0.00357	0.00856	0.00563

SIN THETA/ LAMBDA	NO 5D4P J(1)	NO 5D4P J(3)	NO 5D4S J(2)	NO 5D3D J(0)	NO 5D3D J(2)	NO 5D3D J(4)	NO 5D3P J(1)	NO 5D3P J(3)	NO 5D3S J(2)	NO 5D2P J(1)	NO 5D2P J(3)	NO 5D2S J(2)	NO 5D1S J(2)	NO 5P5P J(0)
0.005	0.00084	0.	-0.	0.00006-0.	-0.	0.00026	0.	-0.	0.00007	0.	-0.	0.	0.99991	0.
0.010	0.00169	0.	-0.00002	0.00006-0.	-0.	0.00053	0.	-0.	0.00015	0.	-0.	0.	0.99963	0.
0.050	0.00839	0.00001-0.	0.00041	0.00013-0.	0.00003-0.	0.00264	0.	-0.00005	0.00074	0.	-0.	0.	0.99088	0.
0.100	0.01650	0.00011-0.	0.00163	0.00033-0.	0.00011-0.	0.00527	0.	-0.00018	0.00149	0.	-0.00001	0.	0.96395	0.
0.150	0.02402	0.00037-0.	0.00360	0.00066-0.	0.00024-0.	0.00788	0.00001-0.	0.00042	0.00223	0.	-0.00003	0.	0.92045	0.
0.200	0.03072	0.00086-0.	0.00624	0.00113-0.	0.00043-0.	0.01047	0.00003-0.	0.00074	0.00297	0.	-0.00006	0.	0.86233	0.
0.300	0.04072	0.00273-0.	0.01308	0.00245-0.	0.00096-0.	0.01554	0.00009-0.	0.00165	0.00446	0.	-0.00012	0.00001	0.71285	0.
0.400	0.04515	0.00598-0.	0.02101	0.00430-0.	0.00169-0.	0.00001	0.02041	0.00020-0.	0.00291	0.00594	0.	-0.00022	0.00001	0.53965
0.500	0.04342	0.01052-0.	0.02874	0.00664-0.	0.00251-0.	0.00001	0.02501	0.00040-0.	0.00450	0.00741	0.00001-0.	0.00035	0.00002	0.36736
0.600	0.03569	0.01599-0.	0.03499	0.00946-0.	0.00372-0.	0.00003	0.02928	0.00069-0.	0.00640	0.00889	0.00001-0.	0.00050	0.00003	0.21604
0.700	0.02286	0.02181-0.	0.03873	0.01273-0.	0.00499-0.	0.00006	0.03315	0.00109-0.	0.00857	0.01035	0.00002-0.	0.00068	0.00005	0.09822
0.800	0.00631	0.02725-0.	0.03927	0.01641-0.	0.00640-0.	0.00011	0.03655	0.00162-0.	0.01098	0.01181	0.00002-0.	0.00090	0.00006	0.01831
0.900	-0.01230	0.03164-0.	0.03632	0.02046-0.	0.00792-0.	0.00019	0.03944	0.00230-0.	0.01358	0.01326	0.00003-0.	0.00114	0.00008-0.	0.02601
1.000	-0.03122	0.03433-0.	0.03002	0.02480-0.	0.00952-0.	0.00030	0.04176	0.00313-0.	0.01632	0.01471	0.00005-0.	0.00141	0.00009-0.	0.04148
1.500	-0.08702	0.01552	0.02762	0.04864-0.	0.01723-0.	0.00169	0.04377	0.00954-0.	0.02998	0.02171	0.00018-0.	0.00323	0.00021	0.03464
2.000	-0.05864-0.	0.02865	0.06014	0.06874-0.	0.02060-0.	0.00500	0.03063	0.01812-0.	0.03792	0.02819	0.00049-0.	0.00584	0.00036	0.03550
3.000	0.01125-0.	0.03676	0.01114	0.07351-0.	0.00601-0.	0.01373-0.	0.01081	0.02585-0.	0.02406	0.03840	0.00202-0.	0.01305	0.00078-0.	0.00398
4.000	-0.00152-0.	0.00115-0.	0.00913	0.04330	0.01883-0.	0.01373-0.	0.02651	0.01182	0.00437	0.04335	0.00508-0.	0.02128	0.00129	0.01148
5.000	-0.01026	0.00317	0.00263	0.01357	0.03109-0.	0.00381-0.	0.01529-0.	0.00659	0.01565	0.04255	0.00927-0.	0.02788	0.00186	0.00599
8.000	0.00539-0.	0.00597-0.	0.00139-0.	0.00669	0.01470	0.01637	0.01180-0.	0.00870-0.	0.00624	0.02251	0.01835-0.	0.02712	0.00341	0.00169

SIN THETA/ LAMBDA	NO 5P5P J(2)	NO 5P5S J(1)	NO 5P4F J(2)	NO 5P4F J(4)	NO 5P4D J(1)	NO 5P4D J(3)	NO 5P4P J(0)	NO 5P4P J(2)	NO 5P4S J(1)	NO 5P3D J(1)	NO 5P3D J(3)	NO 5P3P J(0)	NO 5P3P J(2)	NO 5P3S J(1)
0.005	0.00004-0.00723-0.00001-0.				0.00092 0.		0.00001-0.		0.00082 0.00008 0.			0.00007-0.		0.00021
0.010	0.00015-0.01447-0.00002-0.				0.00183 0.		0.00005-0.00002		0.00164 0.00016 0.			0.00007-0.		0.00041
0.050	0.00364-0.07189-0.00052-0.				0.00910 0.00002		0.00114-0.00046		0.00816 0.00081 0.			0.00015-0.00003		0.00206
0.100	0.01432-0.14104-0.00206-0.00001				0.01787 0.00013		0.00453-0.00180		0.01603 0.00161 0.			0.00040-0.00013		0.00410
0.150	0.03134-0.20489-0.00454-0.00004				0.02598 0.00042		0.01006-0.00399		0.02333 0.00241 0.00001			0.00080-0.00029		0.00613
0.200	0.05359-0.26118-0.00784-0.00011				0.03314 0.00099		0.01758-0.00691		0.02981 0.00319 0.00001			0.00137-0.00052		0.00813
0.300	0.10795-0.34436-0.01627-0.00054				0.04356 0.00314		0.03763-0.01447		0.03940 0.00468 0.00005			0.00299-0.00116		0.01202
0.400	0.16446-0.38261-0.02580-0.00158				0.04761 0.00685		0.06242-0.02321		0.04342 0.00606 0.00012			0.00523-0.00205		0.01570
0.500	0.21085-0.37689-0.03470-0.00347				0.04462 0.01203		0.08921-0.03168		0.04120 0.00728 0.00024			0.00807-0.00317		0.01910
0.600	0.23853-0.33552-0.04135-0.00637				0.03483 0.01825		0.11523-0.03846		0.03285 0.00830 0.00041			0.01148-0.00450		0.02215
0.700	0.24396-0.27115-0.04455-0.01021				0.01930 0.02483		0.13792-0.04236		0.01915 0.00907 0.00055			0.01540-0.00601		0.02478
0.800	0.22853-0.19743-0.04359-0.01476-0.00036				0.03092 0.03092		0.15530-0.04259		0.00146 0.00956 0.00098			0.01979-0.00767		0.02694
0.900	0.19716-0.12621-0.03839-0.01962-0.02217				0.03571 0.03571		0.16605-0.03883-0.01854		0.00973 0.00140 0.00140			0.02458-0.00945		0.02856
1.000	0.15647-0.06594-0.02936-0.02430-0.04414				0.03849 0.03849		0.16965-0.03124-0.03905		0.00954 0.00191 0.00191			0.02970-0.01129		0.02959
1.500	-0.00256 0.01622 0.03921-0.03014-0.10657				0.01500 0.01500		0.10329 0.03675-0.10123		0.00269 0.00587 0.00587			0.05675-0.01959		0.02515
2.000	0.00332-0.03220 0.06989-0.00071-0.07094-0.03642				0.01325 0.01325		0.07474-0.06930-0.01279		0.01070 0.01070 0.01070			0.07696-0.02146		0.00647
3.000	0.01787-0.00107 0.01012 0.04312 0.01109-0.04402				0.00509 0.00509		0.01766 0.00884-0.04390		0.01035 0.01035 0.01035			0.06971 0.00168-0.03675		
4.000	-0.00221-0.00129-0.02231 0.01980-0.00255-0.00278				0.02487 0.02487		0.00342-0.00974-0.04337-0.00691		0.02753 0.02967-0.04076					
5.000	0.00338-0.00805-0.01536-0.00389-0.01175 0.00249				0.00907 0.00907		0.01024-0.01559-0.02101-0.02292		0.00133 0.03341-0.01805					
8.000	0.00120 0.00105 0.00164-0.00516 0.00580-0.00683				0.00395 0.00395		0.00186 0.00191 0.01278-0.01293		0.01119 0.00040 0.00174					

SIN THETA/ LAMBDA	NO 5P2P J(0)	NO 5P2P J(2)	NO 5P2S J(1)	NO 5P1S J(1)	NO 5S5S J(0)	NO 5S4F J(3)	NO 5S4D J(2)	NO 5S4P J(1)	NO 5S4S J(0)	NO 5S3D J(2)	NO 5S3P J(1)	NO 5S3S J(0)	NO 5S2P J(1)	NO 5S2S J(0)
0.005	0.	-0.	0.00006	0.00001	0.99991 0.	-0.00001	0.00089	0.00001-0.		0.00013 0.00007 0.00002 0.				
0.010	0.	-0.	0.00011	0.00002	0.99966 0.	-0.00002	0.00178	0.00005-0.		0.00025 0.00007 0.00004 0.				
0.050	0.00001-0.		0.00057	0.00012	0.99152	0.00002-0.00050	0.00886	0.00112-0.00002		0.00125 0.00015 0.00020 0.00001				
0.100	0.00003-0.00001		0.00113	0.00025	0.96645	0.00014-0.00199	0.01740	0.00443-0.00007		0.00249 0.00041 0.00041 0.00004				
0.150	0.00006-0.00002		0.00170	0.00037	0.92582	0.00047-0.00440	0.02533	0.00985-0.00016		0.00372 0.00084 0.00061 0.00008				
0.200	0.00011-0.00004		0.00226	0.00049	0.87134	0.00108-0.00763	0.03237	0.01723-0.00029		0.00493 0.00144 0.00081 0.00013				
0.300	0.00024-0.00010		0.00339	0.00074	0.72994	0.00343-0.01596	0.04279	0.03694-0.00065		0.00726 0.00315 0.00121 0.00030				
0.400	0.00043-0.00017		0.00451	0.00098	0.56347	0.00744-0.02555	0.04718	0.06141-0.00114		0.00942 0.00550 0.00160 0.00053				
0.500	0.00068-0.00027		0.00562	0.00123	0.39437	0.01300-0.03480	0.04481	0.08801-0.00176		0.01135 0.00849 0.00199 0.00083				
0.600	0.00097-0.00039		0.00671	0.00147	0.24184	0.01958-0.04213	0.03579	0.11404-0.00251		0.01300 0.01206 0.00237 0.00119				
0.700	0.00132-0.00053		0.00779	0.00172	0.11897	0.02641-0.04624	0.02099	0.13697-0.00335		0.01431 0.01617 0.00273 0.00161				
0.800	0.00173-0.00069		0.00886	0.00196	0.03174	0.03258-0.04631	0.00188	0.15479-0.00428		0.01523 0.02075 0.00308 0.00210				
0.900	0.00218-0.00087		0.00990	0.00221-0.02036	0.03724-0.04203-0.01972	0.16612-0.00526	0.01571	0.02574 0.00342 0.00266						
1.000	0.00269-0.00107		0.01093	0.00245-0.04250	0.03970-0.03360-0.04187	0.17031-0.00627	0.01571	0.03105 0.00374 0.00327						
1.500	0.00599-0.00237		0.01559	0.00367 0.03004	0.01385 0.03954-0.10900	0.10447-0.01034	0.00777	0.05873 0.00501 0.00722						
2.000	0.01042-0.00408		0.01926	0.00487 0.03810-0.03642	0.07855-0.07488	0.01092-0.00928-0.01157	0.07829	0.00554 0.01245						
3.000	0.02161-0.00806		0.02227	0.00721-0.00564-0.03999	0.01635 0.00870	0.00405 0.01223-0.04974	0.06545	0.00366 0.02503						
4.000	0.03303-0.01113		0.01860	0.00943 0.01166	0.00557-0.00894-0.01037	0.02395 0.03324-0.04656	0.01913-0.00236	0.03657						
5.000	0.04113-0.01148		0.00967	0.01149 0.00464	0.01757 0.00399-0.01630	0.00556 0.03195-0.01953-0.00435-0.01090	0.04273							
8.000	0.03597 0.00245-0.01582		0.01624 0.00226	0.00037-0.00145	0.00191	0.00498-0.00706	0.00104	0.01233-0.02663						



SIN THETA/ LAMBDA	NO 4D3D J(2)	NO 4D3D J(4)	NO 4D3P J(1)	NO 4D3P J(3)	NO 4D3S J(2)	NO 4D2P J(1)	NO 4D2P J(3)	NO 4D2S J(2)	NO 4D1S J(2)	NO 4P4P J(0)	NO 4P4P J(2)	NO 4P4S J(1)	NO 4P3D J(1)	NO 4P3D J(3)
0.005	-0.	-0.	0.00074	0.	-0.	0.00018	0.	-0.	0.	0.99998	0.00001	-0.00351	0.00026	0.
0.010	-0.	-0.	0.00148	0.	-0.00001	0.00035	0.	-0.	0.	0.99992	0.00003	-0.00701	0.00052	0.
0.050	-0.00010	-0.	0.00741	0.	-0.00016	0.00176	0.	-0.00001	0.	0.99792	0.00083	-0.03502	0.00259	0.
0.100	-0.00040	-0.	0.01477	0.00002	-0.00063	0.00352	0.	-0.00004	0.	0.99169	0.00332	-0.06972	0.00516	0.00001
0.150	-0.00089	-0.	0.02206	0.00005	-0.00142	0.00529	0.	-0.00008	0.	0.98138	0.00742	-0.10378	0.00767	0.00003
0.200	-0.00157	-0.	0.02922	0.00012	-0.00251	0.00705	0.	-0.00015	0.00001	0.95711	0.01308	-0.13689	0.01010	0.00008
0.300	-0.00348	-0.00002	0.04303	0.00041	-0.00557	0.01056	0.	-0.00033	0.00002	0.92730	0.02868	-0.19911	0.01463	0.00027
0.400	-0.00605	-0.00006	0.05591	0.00096	-0.00973	0.01407	0.00001	-0.00059	0.00003	0.87393	0.04918	-0.25426	0.01856	0.00062
0.500	-0.00921	-0.00015	0.06759	0.00183	-0.01484	0.01756	0.00002	-0.00092	0.00005	0.80918	0.07338	-0.30061	0.02172	0.00118
0.600	-0.01284	-0.00031	0.07783	0.00309	-0.02074	0.02103	0.00003	-0.00132	0.00007	0.73557	0.09989	-0.33692	0.02396	0.00198
0.700	-0.01682	-0.00056	0.08645	0.00475	-0.02727	0.02449	0.00005	-0.00180	0.00010	0.65588	0.12723	-0.36246	0.02518	0.00304
0.800	-0.02100	-0.00092	0.09329	0.00685	-0.03421	0.02792	0.00008	-0.00236	0.00013	0.57293	0.15394	-0.37704	0.02529	0.00436
0.900	-0.02527	-0.00142	0.09827	0.00938	-0.04137	0.03133	0.00011	-0.00299	0.00016	0.48944	0.17868	-0.38098	0.02424	0.00592
1.000	-0.02946	-0.00208	0.10132	0.01231	-0.04852	0.03470	0.00016	-0.00370	0.00020	0.40792	0.20027	-0.37502	0.02204	0.00772
1.500	-0.04500	-0.00804	0.08922	0.03112	-0.07771	0.05094	0.00058	-0.00837	0.00045	0.09170	0.23856	-0.24344	0.00447	0.01847
2.000	-0.04409	-0.01764	0.04465	0.04936	-0.08440	0.06565	0.00148	-0.01488	0.00078	-0.02323	0.17029	-0.07813	-0.04561	0.02652
3.000	0.00287	-0.03263	-0.04682	0.05108	-0.03335	0.08783	0.00550	-0.03204	0.00168	0.03577	0.00887	0.01505	-0.10269	0.01330
4.000	0.05510	-0.02382	-0.06347	0.01126	0.02542	0.09719	0.01292	-0.05042	0.00280	0.04854	-0.00004	-0.03117	-0.08629	-0.02613
5.000	0.07391	0.00108	-0.03020	-0.02565	0.03894	0.09368	0.02241	-0.06409	0.00403	0.01295	0.02609	-0.02990	-0.03621	-0.05334
8.000	0.03082	0.03804	0.02595	-0.01837	-0.01506	0.04779	0.04085	-0.05891	0.00733	0.00901	0.00272	0.00328	0.02609	-0.02391

SIN THETA/ LAMBDA	NO 4P3P J(0)	NO 4P3P J(2)	NO 4P3S J(1)	NO 4P2P J(0)	NO 4P2P J(2)	NO 4P2S J(1)	NO 4P1S J(1)	NO 4S4S J(0)	NO 4S3D J(2)	NO 4S3P J(1)	NO 4S3S J(0)	NO 4S2P J(1)	NO 4S2S J(0)	NO 4S1S J(0)
0.005	-0.	-0.	0.00055	0.00001	-0.	0.00012	0.00003	0.99998	-0.	0.00037	-0.	0.00004	0.00001	0.
0.010	0.00001	-0.	0.00111	0.00001	-0.	0.00025	0.00005	0.99992	-0.	0.00073	0.00001	0.00009	0.00001	0.
0.050	0.00028	-0.00011	0.00552	0.00002	-0.00001	0.00123	0.00025	0.99790	-0.00007	0.00366	0.00029	0.00043	0.00003	0.
0.100	0.00112	-0.00045	0.01100	0.00007	-0.00002	0.00245	0.00050	0.99164	-0.00028	0.00729	0.00116	0.00087	0.00008	0.00001
0.150	0.00252	-0.00101	0.01640	0.00015	-0.00006	0.00367	0.00075	0.98127	-0.00064	0.01085	0.00250	0.00130	0.00017	0.00001
0.200	0.00447	-0.00178	0.02168	0.00026	-0.00010	0.00490	0.00100	0.96691	-0.00112	0.01431	0.00461	0.00173	0.00030	0.00002
0.300	0.00995	-0.00395	0.03173	0.00057	-0.00022	0.00733	0.00150	0.92685	-0.00248	0.02079	0.01025	0.00258	0.00067	0.00003
0.400	0.01741	-0.00686	0.04087	0.00100	-0.00040	0.00974	0.00201	0.87311	-0.00430	0.02648	0.01792	0.00342	0.00118	0.00006
0.500	0.02666	-0.01040	0.04883	0.00156	-0.00062	0.01213	0.00251	0.80786	-0.00649	0.03116	0.02741	0.00424	0.00184	0.00009
0.600	0.03744	-0.01444	0.05540	0.00224	-0.00089	0.01449	0.00301	0.73364	-0.00895	0.03466	0.03846	0.00504	0.00264	0.00013
0.700	0.04948	-0.01883	0.06040	0.00304	-0.00121	0.01681	0.00351	0.65320	-0.01158	0.03681	0.05077	0.00581	0.00359	0.00018
0.800	0.06247	-0.02338	0.06369	0.00395	-0.00157	0.01908	0.00401	0.56940	-0.01425	0.03752	0.06401	0.00655	0.00467	0.00023
0.900	0.07608	-0.02794	0.06519	0.00499	-0.00198	0.02131	0.00451	0.48499	-0.01685	0.03673	0.07784	0.00725	0.00589	0.00029
1.000	0.08999	-0.03233	0.06489	0.00614	-0.00244	0.02347	0.00500	0.40252	-0.01924	0.03443	0.09190	0.00792	0.00724	0.00036
1.500	0.15300	-0.04636	0.03855	0.01356	-0.00534	0.03321	0.00748	0.08278	-0.02455	0.00283	0.15418	0.01045	0.01586	0.00080
2.000	0.18449	-0.03913	-0.01355	0.02340	-0.00908	0.04053	0.00993	-0.03062	-0.01375	-0.04741	0.18169	0.01131	0.02707	0.00142
3.000	0.13704	0.02368	-0.09416	0.04744	-0.01736	0.04535	0.01470	0.03559	0.03947	-0.11347	0.12168	0.00662	0.05318	0.00315
4.000	0.04465	0.07210	-0.08161	0.07083	-0.02308	0.03597	0.01922	0.04338	0.07294	-0.08798	0.02601	-0.00643	0.07574	0.00550
5.000	-0.00086	0.06815	-0.03026	0.08629	-0.02280	0.01650	0.02340	0.00527	0.06125	-0.03126	-0.01056	-0.02384	0.08637	0.00837
8.000	0.02401	-0.00021	0.00206	0.07225	0.00693	-0.03375	0.03292	0.01070	-0.01557	0.00080	0.02505	-0.05295	0.04955	0.01890

SIN THETA/ LAMBDA	NO 3D3D J(0)	NO 3D3D J(2)	NO 3D3D J(4)	NO 3D3P J(1)	NO 3D3P J(3)	NO 3D3S J(2)	NO 3D2P J(1)	NO 3D2P J(3)	NO 3D2S J(2)	NO 3D1S J(2)	NO 3P3P J(0)	NO 3P3P J(2)	NO 3P3S J(1)	NO 3P2P J(0)
0.005	1.00000	0.	0.	-0.00136-0.	0.	0.00051	0.	-0.	0.	1.00000	0.	-0.00162	0.	
0.010	0.99999	0.00001	0.	-0.00273-0.	0.00001	0.00102	0.	-0.	0.	0.99998	0.00001	-0.00325	0.	
0.050	0.99967	0.00013	0.	-0.01363-0.	0.00015	0.00511	0.	-0.00004	0.	0.99956	0.00018	-0.01624	0.00005	
0.100	0.99867	0.00053	0.	-0.02724-0.00001	0.00060	0.01021	0.	-0.00016	0.	0.99823	0.00071	-0.03245	0.00020	
0.150	0.99701	0.00119	0.	-0.04080-0.00003	0.00135	0.01531	0.	-0.00036	0.00001	0.99602	0.00159	-0.04858	0.00046	
0.200	0.99470	0.00212	0.	-0.05427-0.00008	0.00240	0.02040	0.00001	-0.00064	0.00002	0.99294	0.00282	-0.06462	0.00081	
0.300	0.98810	0.00475	0.00001	-0.08089-0.00027	0.00536	0.03053	0.00003	-0.00145	0.00004	0.98417	0.00631	-0.09624	0.00182	
0.400	0.97895	0.00838	0.00003	-0.10689-0.00053	0.00945	0.04058	0.00008	-0.00256	0.00006	0.97202	0.01113	-0.12705	0.00323	
0.500	0.96731	0.01298	0.00007	-0.13208-0.00122	0.01461	0.05053	0.00016	-0.00399	0.00010	0.95660	0.01721	-0.15680	0.00502	
0.600	0.95328	0.01849	0.00014	-0.15628-0.00208	0.02078	0.06034	0.00027	-0.00572	0.00014	0.93806	0.02446	-0.18525	0.00719	
0.700	0.93697	0.02485	0.00026	-0.17931-0.00326	0.02786	0.07001	0.00043	-0.00774	0.00019	0.91657	0.03280	-0.21217	0.00974	
0.800	0.91850	0.03199	0.00044	-0.20103-0.00479	0.03577	0.07949	0.00063	-0.01005	0.00025	0.89235	0.04210	-0.23738	0.01264	
0.900	0.89801	0.03983	0.00070	-0.22130-0.00671	0.04439	0.08877	0.00089	-0.01263	0.00031	0.86560	0.05224	-0.26069	0.01588	
1.000	0.87567	0.04829	0.00105	-0.23998-0.00903	0.05362	0.09783	0.00122	-0.01546	0.00039	0.83657	0.06308	-0.28195	0.01945	
1.500	0.74205	0.09654	0.00473	-0.30689-0.02687	0.10466	0.13909	0.00391	-0.03302	0.00086	0.66658	0.12292	-0.35414	0.04151	
2.000	0.58848	0.14612	0.01275	-0.32739-0.05364	0.15288	0.17221	0.00866	-0.05459	0.00151	0.48030	0.17917	-0.36792	0.06861	
3.000	0.29969	0.21322	0.04226	-0.25769-0.11349	0.19851	0.21015	0.02419	-0.10038	0.00322	0.16983	0.23195	-0.26615	0.12599	
4.000	0.10434	0.21829	0.07827	-0.12864-0.14659	0.16496	0.21252	0.04457	-0.13620	0.00533	0.01732	0.19448	-0.11517	0.17053	
5.000	0.00700	0.18025	0.10394	-0.02255-0.13888	0.09202	0.18964	0.06426	-0.15321	0.00762	-0.00972	0.11601	-0.01555	0.19103	
8.000	-0.02491	0.05105	0.09053	0.05098-0.02941	-0.03948	0.08377	0.08631	-0.11305	0.01358	0.05500	-0.00480	-0.00749	0.13674	

SIN THETA/ LAMBDA	NO 3P2P J(2)	NO 3P2S J(1)	NO 3P1S J(1)	NO 3S3S J(0)	NO 3S2P J(1)	NO 3S2S J(0)	NO 3S1S J(0)	NO 2P2P J(0)	NO 2P2P J(2)	NO 2P2S J(1)	NO 2P1S J(1)	NO 2S2S J(0)	NO 2S1S J(0)	NO 1S1S J(0)
0.005	-0.	0.00032	0.00005	1.00000	0.00012	0.	0.00001	1.00000	0.	-0.00060	0.00014	1.00000	0.	1.00000
0.010	-0.	0.00063	0.00010	0.99998	0.00024	0.	0.00001	1.00000	0.	-0.00120	0.00027	1.00000	0.	1.00000
0.050	-0.00002	0.00317	0.00051	0.99951	0.00118	0.00006	0.00001	0.99994	0.00002	-0.00601	0.00137	0.99992	0.00001	1.00000
0.100	-0.00008	0.00633	0.00102	0.99805	0.00235	0.00023	0.00002	0.99976	0.00010	-0.01201	0.00273	0.99967	0.00003	0.99998
0.150	-0.00018	0.00949	0.00153	0.99562	0.00352	0.00052	0.00002	0.99946	0.00022	-0.01801	0.00410	0.99926	0.00005	0.99995
0.200	-0.00032	0.01263	0.00204	0.99223	0.00468	0.00092	0.00004	0.99904	0.00039	-0.02400	0.00547	0.99869	0.00009	0.99992
0.300	-0.00073	0.01887	0.00305	0.98260	0.00696	0.00208	0.00007	0.99783	0.00087	-0.03596	0.00820	0.99704	0.00019	0.99981
0.400	-0.00129	0.02502	0.00407	0.96925	0.00919	0.00369	0.00013	0.99615	0.00154	-0.04787	0.01092	0.99475	0.00034	0.99966
0.500	-0.00200	0.03105	0.00509	0.95232	0.01135	0.00574	0.00019	0.99399	0.00240	-0.05971	0.01365	0.99181	0.00053	0.99946
0.600	-0.00286	0.03693	0.00610	0.93199	0.01340	0.00822	0.00027	0.99136	0.00345	-0.07146	0.01637	0.98823	0.00076	0.99923
0.700	-0.00386	0.04263	0.00712	0.90845	0.01534	0.01112	0.00037	0.98826	0.00468	-0.08311	0.01908	0.98401	0.00104	0.99895
0.800	-0.00500	0.04814	0.00813	0.88195	0.01716	0.01441	0.00048	0.98470	0.00610	-0.09464	0.02179	0.97917	0.00135	0.99862
0.900	-0.00626	0.05341	0.00914	0.85273	0.01882	0.01809	0.00060	0.98068	0.00769	-0.10604	0.02448	0.97371	0.00171	0.99826
1.000	-0.00764	0.05843	0.01015	0.82108	0.02033	0.02213	0.00074	0.97621	0.00946	-0.11729	0.02717	0.96764	0.00210	0.99785
1.500	-0.01592	0.07907	0.01517	0.63706	0.02500	0.04684	0.00164	0.94738	0.02077	-0.17076	0.04046	0.92866	0.00469	0.99516
2.000	-0.02541	0.09093	0.02012	0.43878	0.02418	0.07651	0.00290	0.90864	0.03569	-0.21842	0.05339	0.87670	0.00825	0.99142
3.000	-0.04184	0.08647	0.02970	0.12293	0.00575	0.13570	0.00642	0.80757	0.07296	-0.29138	0.07776	0.74354	0.01803	0.98084
4.000	-0.04710	0.05234	0.03870	-0.01137-0.02816	0.17439	0.01115	0.68681	0.11392	-0.33073	0.09954	0.58969	0.03078	0.96632	
5.000	-0.03819	0.00588	0.04691	-0.01569-0.06451	0.18170	0.01689	0.56035	0.15163	-0.33770	0.11818	0.43606	0.04568	0.94812	
8.000	0.02847	-0.07772	0.06502	0.05144-0.10553	0.08597	0.03752	0.24212	0.20813	-0.23491	0.15280	0.10260	0.09455	0.87495	