

3175
П-563

ОБЪЕДИНЕННЫЙ
ИНСТИТУТ
ЯДЕРНЫХ
ИССЛЕДОВАНИЙ

Дубна

Р4 - 3175



ЛАБОРАТОРИЯ ТЕОРЕТИЧЕСКОЙ ФИЗИКИ
ЛАБОРАТОРИЯ ВЫЧИСЛИТЕЛЬНОЙ ТЕХНИКИ
И АВТОМАТИЗАЦИИ

Л.И. Пономарев, Т.П. Пузынина

ЗАДАЧА ДВУХ ЦЕНТРОВ КВАНТОВОЙ МЕХАНИКИ

Ш. Таблицы термов

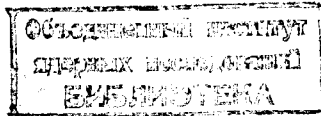
1967.

P4 - 3175

Л.И. Пономарев, Т.П. Пузынина

ЗАДАЧА ДВУХ ЦЕНТРОВ КВАНТОВОЙ МЕХАНИКИ

Ш. Таблицы термов



Таблицы содержат результаты вычислений для некоторых собственных значений задачи двух центров квантовой механики [1], [2], полученные методом, который подробно изложен во второй части данной работы [3]. Система уравнений Штурма-Лиувилля для этой задачи на интервале $-1 \leq \eta \leq 1$, $1 \leq \xi < \infty$ имеет вид:

$$\frac{d}{d\xi}(\xi^2-1) \frac{dX}{d\xi} + [-p^2(\xi^2-1) + b'\xi + \lambda - \frac{m^2}{\xi^2-1}]X = 0$$

$$\frac{d}{d\eta}(1-\eta^2) \frac{dY}{d\eta} + [-p^2(1-\eta^2) + b\eta - \lambda - \frac{m^2}{1-\eta^2}]Y = 0,$$

где:

$$p^2 = -\frac{R^2}{2}E; \quad b' = R(Z_2 + Z_1); \quad b = R(Z_2 - Z_1)$$

$E = E_{Nlm}(R)$ — энергия электрона в поле двух ядер с зарядами Z_1 и Z_2 ($Z_1 < Z_2$), которая зависит от расстояния R между ними и квантовых чисел Nlm (см. [2]).

В таблицах приведены собственные значения p и $\lambda(R)$ для некоторых значений Nlm при $Z_1=1$; $Z_2 = Z = 2, 3, \dots, 8$. (Термы системы Z_1 и Z_2 для $Z_1=1, Z_2=2$ вычислены в работе [4] при значениях $R = 0, 25 (0, 25) 5$). Таблицы содержат также значения полной энергии $W(R)$ систем Z_1 и Z_2 , знание которой важно в приложениях. Все остальные величины, которые встречаются в задаче двух центров (E, A, b см. [1], [2]), просто определить, используя формулы:

$$W = E + \frac{Z_1 Z_2}{R}$$

$$\lambda = A - p^2$$

$$p = \frac{R}{2} \sqrt{-2E} \quad b = \frac{b'}{2p} - (m+1).$$

При $Z_1=1$ каждый терм системы Z_1 и Z_2 характеризуется значением $Z=Z_2$, набором сферических квантовых чисел Nlm (которые удобно использовать при $R \rightarrow 0$) и набором параболических квантовых чисел, более удобных при $R \rightarrow \infty$: n, n_1, n_2, m — для Z_1 -термов и n', n'_1, n'_2, m' — для Z_2 -термов [3].

Асимптотика собственных значений дается следующими выражениями [2]:

при $R \rightarrow 0$:

$$E = -\frac{(Z_1 + Z_2)^2}{2N^2} - 2R^2 \cdot \frac{Z_1 Z_2 (Z_1 + Z_2)^2}{N^3 (2l-1)(2l+1)(2l+3)} \left[1 - \frac{3m^2}{l(l+1)} \right]$$

$$A = -l(l+1) + \frac{1}{2}P^2 \left[1 - \frac{m^2}{l(l+1)} \right] - \frac{1}{8} \frac{R^2 (Z_2 - Z_1)^2}{N^2} \cdot \left[1 - \frac{3m^2}{l(l+1)} \right]$$

при $R \rightarrow \infty$ (для eZ_1 -термов):

$$E = -\frac{Z_1^2}{2n^2} - \frac{Z_2}{R} + \frac{3}{2} n(n_1 - n_2) \cdot \frac{Z_2}{Z_1 R^2}$$

$$A = p^2 + 2p(2n_1 + m + 1) - R(Z_2 + Z_1) + \\ + (2n_1 + 1)(n_1 + m + 1) - n_1 - \frac{R}{2p} (Z_1 + Z_2)(2n_1 + m + 1).$$

Формулы для eZ_2 -термов получаются после замен [2]:

$$n \rightarrow n'; \quad n_1 \rightarrow n'_1; \quad n_2 \rightarrow n'_2; \quad Z_1 \rightleftharpoons Z_2.$$

Используя табличные значения ρ и λ , можно вычислить собственные функции задачи по формулам [3], [4]:

$$X(\xi) = (\xi^2 - 1)^{\frac{m}{2}} (\xi + 1)^6 e^{-\rho(\xi-1)} \sum_{s=0}^z g_s \left(\frac{\xi-1}{\xi+1} \right)^s$$

$$Y(\eta) = (-)^{l-m} (1-\eta^2)^{\frac{m}{2}} e^{-\rho(1-\eta)} \sum_{s=0}^z C_s (1-\eta)^s,$$

где коэффициенты g_s и C_s для eZ_1 -термов находятся из рекуррентных соотношений:

$$\alpha_s g_{s+1} - \beta_s g_s + \gamma_s g_{s-1} = 0$$

$$\rho_s C_{s+1} - \lambda_s C_s + \delta_s C_{s-1} = 0$$

$$g_{-1} = C_{-1} = 0; \quad g_0 = C_0 = 1,$$

а выражения для $\alpha_s, \beta_s, \gamma_s$ и $\rho_s, \lambda_s, \delta_s$ имеют следующий вид:

$$\alpha_s = (s+1)(s+m+1)$$

$$\begin{aligned} \beta_s &= 2s^2 - m(m+1) - \lambda - b' + (2s+m+1)(2\rho - \sigma) = \\ &= 2s(s+2\rho - \sigma) - \lambda - 2\rho\sigma - (m+1)(m+\sigma) \end{aligned}$$

$$\gamma_s = (s-1-\sigma)(s-m-1-\sigma) = (s - \frac{b'}{2\rho})(s+m - \frac{b'}{2\rho})$$

$$\rho_s = 2(s+1)(s+m+1)$$

$$\lambda_s = \lambda + s(s+1) + (2s+m+1)(2\rho+m) + b$$

$$\delta_s = 2\rho(s+m) + b.$$

Для eZ_2 -термов в разложении для функции $Y(\eta)$ (4) необходимо опустить множитель $(-)^{\ell-m}$, заменить $\eta \rightarrow -\eta$, а в выражениях для ρ_s, λ_s и δ_s положить $b \rightarrow -b$.

Графики термов $E = E_{N\ell m}(R)$ и $W = W_{N\ell m}(R)$ при различных значениях квантовых чисел $N\ell m$ для $Z_1=1$ $= 3, 4, \dots, 8$ приведены в первой части данной работы [5].

В данных таблицах для обозначения термов использованы спектроскопические символы, согласно которым главное квантовое число N обозначается числами ($N = 1, 2, 3, \dots$), орбитальный момент ℓ - латинскими буквами (причем ряду $\ell = s, p, d, f$... соответствует ряд $\ell = 0, 1, 2, 3, \dots$), а магнитное квантовое число m обозначается греческими буквами (ряду $m = \sigma, \pi, \delta, \dots$ соответствует ряд $m = 0, 1, 2, \dots$).

Таким образом, например, символ $3d\sigma$ обозначает терм с квантовыми числами $N=3; \ell=2; m=0$. Параболические квантовые числа термов даны в квадратных скобках: $[n, n_1, n_2, m]$ - для eZ_1 -термов, $[n', n'_1, n'_2, m]$ - для eZ_2 -термов (см. [5], [3]).

В заключение выражаем искреннюю благодарность Л.И.Чириковой и Л.Н.Сеченовой за проверку таблиц.

Литература

1. E. Teller, Zs. Phys. 61, 458 (1930).
- E. Hylleraas, Zs. Phys. 71, 639 (1931).
- W. G. Baber, H. H. Hasse, Proc. Camb. Phys. Soc. 31, 564 (1934).
- S. K. Chakravatry, Phyl. Mag. 28, 423 (1939).
- D. R. Bates, K. Ledsham, A. L. Stewart, Phys. Trans. Roy. Soc. A246, 215 (1953).
2. С. С. Герштейн, В. Д. Кривченков, ЖЭТФ 40, 1491 (1961).
- С. С. Герштейн, Л. М. Пономарев, Т. П. Пузынина. ЖЭТФ 48, 632 (1965).
3. Л. М. Пономарев, Т. П. Пузынина, препринт ОИЯИ Р2-3012, Дубна, 1966.
4. D. R. Bates, T. R. Carson, Proc. Roy. Soc. A234, 207 (1954).
5. Л. М. Пономарев, Т. П. Пузынина, препринт ОИЯИ Р2-3009, Дубна, 1966.

Рукопись поступила в издательский отдел
20 февраля 1967 г.

Z=2

1s6 [1'0'0'0]

R	W	P	λ
0,2	5,76731	0,290953	-0,049553
0,4	I,15794	0,554405	-0,175244
0,6	-0,173555	0,794506	-0,347538
0,8	-0,740842	I,01837	-0,547375
I,0	-I,03335	I,23153	-0,762415
I,2	-I,20559	I,43806	-0,984442
I,4	-I,31861	I,64081	-1,20816
I,6	-I,39972	I,84164	-I,43050
I,8	-I,46202	2,04168	-I,65007
2,0	-I,51219	2,24151	-I,86655
2,2	-I,55386	2,44138	-2,08016
2,4	-I,58917	2,64137	-2,29137
2,6	-I,61949	2,84146	-2,50065
2,8	-I,64580	3,04164	-2,70841
3,0	-I,66882	3,24187	-2,91499
3,2	-I,68911	3,44213	-3,12064
3,4	-I,70711	3,64240	-3,32554
3,6	-I,72318	3,84268	-3,52984
3,8	-I,73760	4,04295	-3,73366
4,0	-I,75061	4,24321	-3,93706
4,2	-I,76240	4,44346	-4,14012
4,4	-I,77313	4,64370	-4,34289
4,6	-I,78294	4,84392	-4,54542
4,8	-I,79195	5,04413	-4,74772
5,0	-I,80024	5,24433	-4,94984
5,2	-I,80789	5,44451	-5,15178
5,4	-I,81499	5,64469	-5,35358
5,6	-I,82158	5,84486	-5,55526
5,8	-I,82771	6,04501	-5,75681
6,0	-I,83345	6,24516	-5,95826
6,2	-I,83881	6,44530	-6,15961
6,4	-I,84384	6,64543	-6,36088
6,6	-I,84856	6,84556	-6,56207
6,8	-I,85301	7,04568	-6,76319
7,0	-I,85720	7,24579	-6,96424
7,2	-I,86116	7,44590	-7,16524
7,4	-I,86491	7,64600	-7,36618
7,6	-I,86846	7,84610	-7,56708

R	W	P	λ
7,8	-I,87183	8,04619	-7,76792
8,0	-I,87503	8,24628	-7,96873
8,2	-I,87808	8,44636	-8,16949
8,4	-I,88098	8,64645	-8,37022
8,6	-I,88375	8,84652	-8,57091
8,8	-I,88639	9,04660	-8,77158
9,0	-I,88891	9,24667	-8,97221
9,2	-I,89132	9,44674	-9,17281
9,4	-I,89364	9,64680	-9,37339
9,6	-I,89585	9,84687	-9,57395
9,8	-I,89797	10,0469	-9,77448
10,0	-I,90001	10,2470	-9,97499
10,2	-I,90197	10,4470	-10,1755
10,4	-I,90386	10,6471	-10,3760
10,6	-I,90567	10,8471	-10,5764
10,8	-I,90741	11,0472	-10,7768
11,0	-I,90910	11,2472	-10,9773
11,2	-I,91072	11,4473	-11,1777
11,4	-I,91229	11,6473	-11,3781
11,6	-I,91380	11,8474	-11,5784
11,8	-I,91526	12,0474	-11,7788
12,0	-I,91667	12,2475	-11,9792
12,2	-I,91804	12,4475	-12,1795
12,4	-I,91936	12,6475	-12,3798
12,6	-I,92064	12,8476	-12,5802
12,8	-I,92188	13,0476	-12,7805
13,0	-I,92308	13,2476	-12,9808
13,2	-I,92425	13,4477	-13,1811
13,4	-I,92538	13,6477	-13,3813
13,6	-I,92647	13,8478	-13,5816
13,8	-I,92754	14,0478	-13,7819
14,0	-I,92858	14,2478	-13,9821
14,2	-I,92959	14,4478	-14,1824
14,4	-I,93056	14,6479	-14,3826
14,6	-I,93151	14,8479	-14,5829
14,8	-I,93244	15,0479	-14,7831
15,0	-I,93334	15,2480	-14,9833

$Z=2$ $2\rho\sigma [1000]$

R	W	P	λ
0,2	8,86298	0,150799	-2,01311
0,4	3,82750	0,306268	-2,05382
0,6	2,10696	0,469837	-2,12594
0,8	1,21356	0,641609	-2,23415
1,0	0,661658	0,818029	-2,38156
1,2	0,293829	0,994205	-2,56837
1,4	0,040855	1,16617	-2,79231
1,6	-0,135330	1,33162	-3,04962
1,8	-0,258666	1,48964	-3,33593
2,0	-0,345186	1,64024	-3,64679
2,2	-0,405891	1,78589	-3,97808
2,4	-0,448396	1,92130	-4,32622
2,6	-0,477994	2,05320	-4,68819
2,8	-0,498381	2,18029	-5,06151
3,0	-0,512157	2,30319	-5,44419
3,2	-0,521164	2,42247	-5,83455
3,4	-0,526725	2,53860	-6,23125
3,6	-0,529796	2,65200	-6,63316
3,8	-0,531076	2,76304	-7,03933
4,0	-0,531081	2,87205	-7,44894
4,2	-0,530196	2,97932	-7,86130
4,4	-0,528708	3,08511	-8,27579
4,6	-0,526834	3,18966	-8,69187
4,8	-0,524738	3,29317	-9,10906
5,0	-0,522543	3,39585	-9,52695
5,2	-0,520340	3,49786	-9,94517
5,4	-0,518195	3,59935	-10,3634
5,6	-0,516157	3,70045	-10,7814
5,8	-0,514257	3,80129	-11,1989
6,0	-0,512514	3,90195	-11,6157
6,2	-0,510937	4,00253	-12,0318
6,4	-0,509528	4,10306	-12,4469
6,6	-0,508281	4,20361	-12,8612
6,8	-0,507189	4,30421	-13,2746
7,0	-0,506238	4,40486	-13,6870
7,2	-0,505416	4,50559	-14,0985
7,4	-0,504709	4,60640	-14,5092
7,6	-0,504102	4,70728	-14,9190

R	W	P	λ
7,8	-0,503584	4,80822	-15,3282
8,0	-0,503141	4,90923	-15,7367
8,2	-0,502762	5,01028	-16,1445
8,4	-0,502439	5,11136	-16,5519
8,6	-0,502162	5,21248	-16,9587
8,8	-0,501924	5,31361	-17,3651
9,0	-0,501719	5,41476	-17,7711
9,2	-0,501543	5,51591	-18,1767
9,4	-0,501389	5,61706	-18,5820
9,6	-0,501256	5,71820	-18,9870
9,8	-0,501139	5,81934	-19,3918
10,0	-0,501037	5,92046	-19,7963
10,2	-0,500947	6,02156	-20,2006
10,4	-0,500867	6,12265	-20,6047
10,6	-0,500796	6,22372	-21,0086
10,8	-0,500732	6,32477	-21,4123
11,0	-0,500675	6,42579	-21,8159
11,2	-0,500624	6,52680	-22,2194
11,4	-0,500578	6,62779	-22,6227
11,6	-0,500536	6,72875	-23,0258
11,8	-0,500499	6,82969	-23,4289
12,0	-0,500464	6,93061	-23,8318
12,2	-0,500433	7,03152	-24,2347
12,4	-0,500404	7,13240	-24,6374
12,6	-0,500378	7,23326	-25,0401
12,8	-0,500354	7,33410	-25,4426
13,0	-0,500332	7,43492	-25,8451
13,2	-0,500311	7,53572	-26,2475
13,4	-0,500292	7,63651	-26,6498
13,6	-0,500275	7,73728	-27,0521
13,8	-0,500259	7,83803	-27,4543
14,0	-0,500244	7,93876	-27,8564
14,2	-0,500230	8,03948	-28,2584
14,4	-0,500217	8,14018	-28,6604
14,6	-0,500205	8,24087	-29,0624
14,8	-0,500194	8,34154	-29,4643
15,0	-0,500184	8,44220	-29,8661

 $Z=2$ $2\rho\pi [2;0;0;1]$

R	W	P	λ
0,2	8,88080	0,149613	-2,01590
0,4	3,89642	0,297130	-2,06253
0,6	2,25190	0,441200	-2,13723
0,8	1,44434	0,581215	-2,23674
1,0	0,971687	0,717047	-2,35775
1,2	0,665951	0,848832	-2,49724
1,4	0,454894	0,976834	-2,65249
1,6	0,302330	1,10137	-2,82115
1,8	0,188160	1,22278	-3,00113
2,0	0,100353	1,34138	-3,19061
2,2	0,031294	1,45749	-3,38799
2,4	-0,024056	1,57139	-3,59186
2,6	-0,069155	1,68337	-3,80098
2,8	-0,106441	1,79367	-4,01426
3,0	-0,137674	1,90251	-4,23074
3,2	-0,164154	2,01009	-4,44958
3,4	-0,186856	2,11661	-4,67007
3,6	-0,206518	2,22221	-4,89161
3,8	-0,223710	2,32705	-5,11368
4,0	-0,238874	2,43125	-5,33588
4,2	-0,252359	2,53492	-5,55788
4,4	-0,264438	2,63813	-5,77945
4,6	-0,275329	2,74098	-6,00038
4,8	-0,285210	2,84352	-6,22056
5,0	-0,294222	2,94581	-6,43990
5,2	-0,302482	3,04788	-6,65837
5,4	-0,310085	3,14977	-6,87593
5,6	-0,317111	3,25151	-7,09261
5,8	-0,323626	3,35312	-7,30842
6,0	-0,329687	3,45461	-7,52340
6,2	-0,335340	3,55601	-7,73758
6,4	-0,340628	3,65733	-7,95100
6,6	-0,345584	3,75857	-8,16371
6,8	-0,350241	3,85974	-8,37576
7,0	-0,354624	3,96084	-8,58718
7,2	-0,358757	4,06189	-8,79802
7,4	-0,362662	4,16289	-9,00832
7,6	-0,366356	4,26384	-9,21811

R	W	P	λ
7,8	-0,369857	4,36475	-9,42743
8,0	-0,373179	4,46562	-9,63632
8,2	-0,376335	4,56644	-9,84479
8,4	-0,379338	4,66723	-10,0529
8,6	-0,382199	4,76799	-10,2606
8,8	-0,384927	4,86871	-10,4680
9,0	-0,387532	4,96941	-10,6751
9,2	-0,390021	5,07008	-10,8819
9,4	-0,392402	5,17072	-11,0884
9,6	-0,394682	5,27133	-11,2946
9,8	-0,396867	5,37192	-11,5007
10,0	-0,398963	5,47249	-11,7064
10,2	-0,400976	5,57304	-11,9120
10,4	-0,402910	5,67357	-12,1173
10,6	-0,404770	5,77408	-12,3225
10,8	-0,406559	5,87456	-12,5274
11,0	-0,408283	5,97504	-12,7323
11,2	-0,409944	6,07550	-12,9369
11,4	-0,411545	6,17594	-13,1414
11,6	-0,413091	6,27636	-13,3457
11,8	-0,414583	6,37678	-13,5499
12,0	-0,416025	6,47717	-13,7540
12,2	-0,417419	6,57756	-13,9579
12,4	-0,418767	6,67793	-14,1617
12,6	-0,420072	6,77830	-14,3654
12,8	-0,421335	6,87865	-14,5690
13,0	-0,422559	6,97899	-14,7724
13,2	-0,423746	7,07932	-14,9758
13,4	-0,424896	7,17964	-15,1791
13,6	-0,426012	7,27995	-15,3822
13,8	-0,427096	7,38025	-15,5853
14,0	-0,428148	7,48054	-15,7883
14,2	-0,429170	7,58083	-15,9912
14,4	-0,430163	7,68110	-16,1941
14,6	-0,431129	7,78137	-16,3969
14,8	-0,432069	7,88163	-16,5995
15,0	-0,432983	7,98189	-16,8022

Z = 3

1s6 [1'0'0'0]

R	W	P	λ
0,2	7,6015I	0,384668	-0,07104I
0,4	0,831368	0,730404	-0,236510
0,6	-1,13586	1,05093	-0,44350I
0,8	-2,02044	1,35887	-6,64240
1,0	-2,52097	1,66147	-8,85928
1,2	-2,84747	1,96219	-1,10410
1,4	-3,08006	2,26240	-1,31820
1,6	-3,25520	2,56255	-1,52896
1,8	-3,39209	2,86272	-1,73725
2,0	-3,50204	3,16292	-1,94379
2,2	-3,59226	3,46313	-2,14906
2,4	-3,66760	3,76333	-2,3534I
2,6	-3,73143	4,06352	-2,55706
2,8	-3,78620	4,36370	-2,76017
3,0	-3,83370	4,66386	-2,96285
3,2	-3,87528	4,9640I	-3,16519
3,4	-3,91198	5,26415	-3,36725
3,6	-3,94462	5,56427	-3,56908
3,8	-3,97382	5,86438	-3,77072
4,0	-4,0001I	6,16449	-3,97219
4,2	-4,02390	6,46458	-4,17352
4,4	-4,04553	6,76467	-4,37472
4,6	-4,06528	7,06475	-4,57583
4,8	-4,08339	7,36482	-4,77684
5,0	-4,10004	7,66489	-4,97776
5,2	-4,11542	7,96496	-5,17862
5,4	-4,12966	8,2650I	-5,3794I
5,6	-4,14288	8,56507	-5,58015
5,8	-4,15520	8,86512	-5,78084
6,0	-4,16669	9,16517	-5,98148
6,2	-4,17744	9,46522	-6,18207
6,4	-4,18752	9,76526	-6,38263
6,6	-4,19698	10,0653	-6,58316
6,8	-4,20590	10,3653	-6,78366
7,0	-4,21430	10,6654	-6,98412
7,2	-4,22223	10,9654	-7,18456
7,4	-4,22974	11,2654	-7,38498
7,6	-4,23685	11,5655	-7,58538

Z = 3

2s6 [2'1'0'0]

R	W	P	λ
0,2	13,0776	0,196083	0,001024
0,4	5,68017	0,381558	0,009226
0,6	3,26487	0,558858	0,029143
0,8	2,08212	0,730563	0,061336
1,0	1,38602	0,898325	0,010445
1,2	0,930030	1,06319	0,156585
1,4	0,609480	1,22585	0,215949
1,6	0,372550	1,38677	0,28106I
1,8	0,190723	1,54630	0,350768
2,0	0,047043	1,70467	0,424189
2,2	0,069184	1,86210	0,500654
2,4	-0,165027	2,01873	0,579647
2,6	-0,245340	2,17468	0,660765
2,8	-0,313562	2,33006	0,743693
3,0	-0,372195	2,48493	0,828174
3,2	-0,423100	2,63937	0,914002
3,4	-0,46769I	2,79743	1,00100
3,6	-0,507059	2,94716	1,08904
3,8	-0,54206I	3,10059	1,17799
4,0	-0,573376	3,25377	1,26776
4,2	-0,601550	3,4067I	1,35825
4,4	-0,627030	3,55944	1,44939
4,6	-0,650179	3,71199	1,54112
4,8	-0,671300	3,86437	1,63337
5,0	-0,690646	4,01660	1,7261I
5,2	-0,708430	4,16869	1,81928
5,4	-0,724832	4,32065	1,91286
5,6	-0,740005	4,47250	2,00679
5,8	-0,754082	4,62425	2,10107
6,0	-0,767176	4,77589	2,19564
6,2	-0,779385	4,92745	2,2905I
6,4	-0,790797	5,07893	2,38564
6,6	-0,801486	5,23033	2,48100
6,8	-0,811518	5,38066	2,57660
7,0	-0,82095I	5,53292	2,67240
7,2	-0,829838	5,68414	2,76840
7,4	-0,838224	5,83529	2,86457
7,6	-0,846150	5,98636	2,96092

Z = 3

2pσ [2'0'1'0]

R	W	P	λ	R	W	P	λ
2,0	I2,9684	0,20I575	-2,03225	7,8	-0,887070	6,2I970	-20,3638
4,0	5,3829I	0,4I1542	-2,13I85	8,0	-0,892492	6,36865	-20,8682
6,0	2,78I60	0,63I9II	-2,30502	8,2	-0,897680	6,5I767	-2I,3724
8,0	I,462IO	0,855645	-2,55409	8,4	-0,902649	6,66674	-2I,8764
I,0	0,694263	I,07372	-2,87289	8,6	-0,9074IO	6,8I587	-22,380I
I,2	0,220722	I,28IO5	-3,2498I	8,8	-0,9I977	6,96504	-22,8836
I,4	-0,08I398	I,47640	-3,67252	9,0	-0,9I636I	7,II425	-23,3869
I,6	-0,279I88	I,66053	-4,13040	9,2	-0,92057I	7,2635I	-23,8900
I,8	-0,4II482	I,83483	-4,6I5I6	9,4	-0,9246I8	7,4I280	-24,3929
2,0	-0,50I579	2,00079	-5,12047	9,6	-0,9285IO	7,562I3	-24,8957
2,2	-0,563887	2,15977	-5,64I55	9,8	-0,932257	7,7II48	-25,3984
2,4	-0,607588	2,3I297	-6,17462	IO,0	-0,935866	7,86087	-25,9009
2,6	-0,638700	2,46I46	-6,7I664	IO,2	-0,939343	8,0IO28	-26,4033
2,8	-0,66I286	2,606I9	-7,26505	IO,4	-0,942697	8,15972	-26,9056
3,0	-0,678I60	2,74804	-7,8I756	IO,6	-0,945933	8,309I8	-27,4078
3,2	-0,69I3I8	2,88783	-8,372IO	IO,8	-0,949058	8,45867	-27,9099
3,4	-0,702203	3,02634	-8,92676	II,0	-0,952076	8,608I7	-28,4I19
3,6	-0,7II856	3,I6430	-9,47978	II,2	-0,954994	8,75770	-28,9I38
3,8	-0,72IO06	3,30237	-IO,0297	II,4	-0,9578I6	8,90724	-29,4I56
4,0	-0,730I2I	3,44IO7	-IO,5754	II,6	-0,960547	9,05680	-29,9I74
4,2	-0,739449	3,58077	-II,II6I	II,8	-0,963I9I	9,20637	-30,4I9I
4,4	-0,749064	3,72I68	-II,65I6	I2,0	-0,96575I	9,35597	-30,9207
4,6	-0,7589I8	3,86385	-I2,I822	I2,2	-0,968233	9,50557	-3I,4222
4,8	-0,768895	4,00720	-I2,7082	I2,4	-0,970639	9,655I9	-3I,9237
5,0	-0,778862	4,I5I60	-I3,2304	I2,6	-0,972973	9,80482	-32,4252
5,2	-0,788697	4,29688	-I3,7492	I2,8	-0,975238	9,95447	-32,9266
5,4	-0,798303	4,44289	-I4,2654	I3,0	-0,977436	IO,IO4I	-33,4279
5,6	-0,8076IO	4,58948	-I4,7794	I3,2	-0,979572	IO,2538	-33,9292
5,8	-0,8I6576	4,73654	-I5,29I7	I3,4	-0,98I647	IO,4035	-34,4304
6,0	-0,825I78	4,88397	I5,8025	I3,6	-0,983664	IO,5532	-34,93I6
6,2	-0,833408	5,03I7I	-I6,3I2I	I3,8	-0,985625	IO,7028	-35,4328
6,4	-0,84I268	5,I7969	-I6,8208	I4,0	-0,987532	IO,8526	-35,9339
6,6	-0,848768	5,32787	-I7,3286	I4,2	-0,989389	II,0023	-36,4350
6,8	-0,855922	5,4762I	-I7,8357	I4,4	-0,99II96	II,I520	-36,936I
7,0	-0,862746	5,62470	-I8,3422	I4,6	-0,992956	II,30I7	-37,437I
7,2	-0,869255	5,7733I	-I8,8483	I4,8	-0,99467I	II,45I5	-37,938I
7,4	-0,875468	5,92202	-I9,3538	I5,0	-0,996342	II,60I2	-38,4390
7,6	-0,88I40I	6,07082	-I9,8590				

Z = 3

2pπ [2'0'0'1]

R	W	P	λ	R	W	P	λ
0,2	I3,0I5I	0,I99242	-2,02373	7,8	-0,867433	6,I7I49	-9,63223
0,4	5,55360	0,394604	-2,09208	8,0	-0,873923	6,32I83	-9,83628
0,6	3,I0426	0,584I52	-2,I9863	8,2	-0,880092	6,472I5	-IO,040I
0,8	I,909I2	0,7675I7	-2,336I4	8,4	-0,885966	6,62245	-IO,2438
I,0	I,2I358	0,945098	-2,49799	8,6	-0,89I563	6,77274	-IO,4474
I,2	0,765264	I,II759	-2,67850	8,8	-0,896904	6,9230I	-IO,6507
I,4	0,455926	I,28576	-2,87298	9,0	-0,902005	7,07327	-IO,8540
I,6	0,23I6IO	I,45036	-3,07757	9,2	-0,906882	7,22352	-II,0570
I,8	0,062557	I,6I204	-3,2892I	9,4	-0,9II55I	7,37376	-II,2600
2,0	-0,06888I	I,77I37	-3,50545	9,6	-0,9I6023	7,52398	-II,4629
2,2	-0,I73756	I,92886	-3,72443	9,8	-0,9203II	7,67420	-II,6656
2,4	-0,259292	2,08489	-3,94478	IO,0	-0,924427	7,8244I	-II,8682
2,6	-0,330370	2,23979	-4,16550	IO,2	-0,928380	7,97460	-I2,0708
2,8	-0,390388	2,3938I	-4,3859I	IO,4	-0,932I80	8,I2479	-I2,2732
3,0	-0,44I77I	2,547I5	-4,60557	IO,6	-0,935835	8,27498	-I2,4755
3,2	-0,486285	2,69996	-4,82424	IO,8	-0,939354	8,425I5	-I2,6778
3,4	-0,525247	2,85235	-5,04I78	II,0	-0,942745	8,57532	-I2,8800
3,6	-0,559652	3,00442	-5,258I7	II,2	-0,9460I4	8,72548	-I3,082I
3,8	-0,590270	3,I5622	-5,47340	II,4	-0,949I67	8,87563	-I3,284I
4,0	-0,6I7704	3,3078I	-5,68754	II,6	-0,9522II	9,02578	-I3,486I
4,2	-0,642433	3,45923	-5,90066	II,8	-0,955I5I	9,I7593	-I3,6880
4,4	-0,664843	3,6I050	-6,II282	I2,0	-0,957993	9,32606	-I3,8898
4,6	-0,685249	3,76I64	-6,324II	I2,2	-0,96074I	9,47620	-I4,09I6
4,8	-0,7039II	3,9I268	-6,53460	I2,4	-0,963400	9,62633	-I4,2933
5,0	-0,72IO45	4,06363	-6,74437	I2,6	-0,965974	9,77645	-I4,4950
5,2	-0,736832	4,2I450	-6,95348	I2,8	-0,968467	9,92657	-I4,6966
5,4	-0,75I426	4,36529	-7,I6I98	I3,0	-0,970884	IO,0767	-I4,8982
5,6	-0,764958	4,5I603	-7,36994	I3,2	-0,973226	IO,2268	-I5,0997
5,8	-0,777539	4,6667I	-7,57740	I3,4	-0,975498	IO,3769	-I5,30I2
6,0	-0,789268	4,8I735	-7,78440	I3,6	-0,977704	IO,5270	-I5,5026
6,2	-0,800228	4,96794	-7,99099	I3,8	-0,979845	IO,677I	-I5,7040
6,4	-0,8IO493	5,II849	-8,I9720	I4,0	-0,98I924	IO,8272	-I5,9054
6,6	-0,820I27	5,26900	-8,40305	I4,2	-0,983945	IO,9773	-I6,IO67
6,8	-0,829I86	5,4I948	-8,60859	I4,4	-0,9859IO	II,I274	-I6,3080
7,0	-0,83772I	5,56993	-8,8I382	I4,6	-0,987820	II,2775	-I6,5092
7,2	-0,845775	5,72036	-9,0I879	I4,8	-0,989679	II,4276	-I6,7IO4
7,4	-0,853390	5,87076	-9,22350	I5,0	-0,99I488	II,5777	-I6,9I16
7,6	-0,860598	6,02II4	-9,42797				

$Z=3$

$3s\sigma [3'2'0'0']$

R	W	P	λ
2,0	I4,I343	0,I3I580	0,0I4974
4,0	6,66587	0,258322	0,059830
6,0	4,I9285	0,38I166	0,I3I933
8,0	2,965I0	0,50I166	0,2266I5
I,0	2,23367	0,6I9004	0,339025
I,2	I,74945	0,735II7	0,465046
I,4	I,40595	0,849802	0,60I507
I,6	I,I5008	0,963275	0,746060
I,8	0,952390	I,07570	0,896992
2,0	0,795273	I,I8720	I,05305
2,2	0,667548	I,29790	I,2I330
2,4	0,56I777	I,40786	I,37704
2,6	0,472827	I,5I7I8	I,54374
2,8	0,397039	I,62592	I,7I298
3,0	0,33I738	I,734I2	I,88442
3,2	0,274924	I,84I84	2,0578I
3,4	0,225070	I,949I3	2,2329I
3,6	0,I80992	2,0560I	2,40954
3,8	0,I4I759	2,I6252	2,58755
4,0	0,I06628	2,26870	2,76680
4,2	0,074998	2,37456	2,947I9
4,4	0,04638I	2,480I3	3,I2860
4,6	0,020374	2,58543	3,3I097
4,8	-0,003359	2,69048	3,49420
5,0	-0,025098	2,79530	3,67824
5,2	-0,045080	2,8999I	3,86303
5,4	-0,063505	3,0043I	4,04850
5,6	-0,080545	3,I0853	4,2346I
5,8	-0,096349	3,2I257	4,42I33
6,0	-0,II1042	3,3I644	4,60860
6,2	-0,I24738	3,420I5	4,79639
6,4	-0,I3753I	3,52372	4,98468
6,6	-0,I49507	3,627I6	5,I7342
6,8	-0,I60740	3,73046	5,36260
7,0	-0,I7I296	3,83364	5,552I8
7,2	-0,I8I234	3,93670	5,742I5
7,4	-0,I90605	4,03965	5,93248
7,6	-0,I99456	4,I4250	6,I23I6

R	W	P	λ
7,8	-0,207828	4,24525	6,3I4I6
8,0	-0,2I5758	4,34790	6,50546
8,2	-0,223280	4,45047	6,69706
8,4	-0,230424	4,55295	6,88894
8,6	-0,2372I8	4,65535	7,08I08
8,8	-0,243685	4,75768	7,27347
9,0	-0,249850	4,85992	7,466I0
9,2	-0,25573I	4,962II	7,65896
9,4	-0,26I349	5,06423	7,85203
9,6	-0,266720	5,I6628	8,0453I
9,8	-0,27I859	5,26827	8,23879
I0,0	-0,276782	5,37020	8,43246
I0,2	-0,28I50I	5,47208	8,6263I
I0,4	-0,286029	5,5739I	8,82033
I0,6	-0,290376	5,67568	9,0I452
I0,8	-0,294554	5,77740	9,20887
II,0	-0,298572	5,87908	9,40337
II,2	-0,302439	5,98072	9,59802
II,4	-0,306I62	6,08230	9,7928I
II,6	-0,30975I	6,I8385	9,98773
II,8	-0,3I32II	6,28536	I0,I828
I2,0	-0,3I6550	6,38683	I0,3780
I2,2	-0,3I9774	6,48826	I0,5732
I2,4	-0,322888	6,58966	I0,7687
I2,6	-0,325898	6,69I02	I0,9642
I2,8	-0,328809	6,79235	II,I598
I3,0	-0,33I626	6,89365	II,3556
I3,2	-0,334354	6,9949I	II,55I4
I3,4	-0,336995	7,096I6	II,7473
I3,6	-0,339555	7,I9736	II,9434
I3,8	-0,342037	7,29854	I2,I395
I4,0	-0,344444	7,39970	I2,3357
I4,2	-0,34678I	7,50083	I2,5320
I4,4	-0,349049	7,60I93	I2,7283
I4,6	-0,35I252	7,7030I	I2,9248
I4,8	-0,353392	7,80407	I3,I2I3
I5,0	-0,355472	7,905I0	I3,3I79

$Z=3$

$3p\sigma [3'1'1'0']$

R	W	P	λ
2,0	I4,I0I9	0,I34024	-2,02304
4,0	6,57847	0,27I5I9	-2,09I33
6,0	4,0547I	0,4I2494	-2,20220
8,0	2,7929I	0,5534I5	-2,35058
I,0	2,04459	0,69II63	-2,52995
I,2	I,55570	0,824559	-2,73399
I,4	I,2I500	0,953573	-2,95743
I,6	0,966I29	I,07859	-3,19597
I,8	0,777646	I,20009	-3,446I7
2,0	0,630728	I,3I854	-3,70520
2,2	0,5I3474	I,43436	-3,97072
2,4	0,4I8020	I,54794	-4,24074
2,6	0,338982	I,65959	-4,5I357
2,8	0,272563	I,76962	-4,78776
3,0	0,2I60I6	I,87828	-5,06209
3,2	0,I673I2	I,98579	-5,33552
3,4	0,I24927	2,09235	-5,60724
3,6	0,087698	2,I98I2	-5,8766I
3,8	0,054726	2,30323	-6,I43I8
4,0	0,025306	2,4078I	-6,40666
4,2	-0,00I1I8	2,5I194	-6,66686
4,4	-0,024993	2,6I570	-6,92376
4,6	-0,046677	2,7I9I6	-7,I7738
4,8	-0,066465	2,82235	-7,42783
5,0	-0,084598	2,92532	-7,67525
5,2	-0,I0I278	3,02808	-7,9I98I
5,4	-0,II6675	3,I3067	-8,I6I69
5,6	-0,I3093I	3,233II	-8,40I08
5,8	-0,I44I69	3,33540	-8,638I6
6,0	-0,I56494	3,43757	-8,873II
6,2	-0,I67997	3,53962	-9,I0609
6,4	-0,I78757	3,64I56	-9,33724
6,6	-0,I88844	3,74340	-9,56673
6,8	-0,I983I8	3,845I4	-9,79466
7,0	-0,207233	3,94680	-I0,02I2
7,2	-0,2I5637	4,04837	-I0,2463
7,4	-0,223573	4,I4987	-I0,4702
7,6	-0,23I078	4,25I30	-I0,6930

R	W	P	λ
7,8	-0,238I86	4,35266	-I0,9I48
8,0	-0,244928	4,45395	-II,I355
8,2	-0,25I330	4,555I0	-II,3553
8,4	-0,257420	4,65637	-II,5743
8,6	-0,2632I7	4,75750	-II,7924
8,8	-0,268743	4,85857	-I2,0098
9,0	-0,2740I7	4,9596I	-I2,2265
9,2	-0,279055	5,06059	-I2,4424
9,4	-0,283873	5,I6I54	-I2,6578
9,6	-0,288484	5,26245	-I2,8726
9,8	-0,292902	5,36332	-I3,0868
I0,0	-0,297I39	5,464I5	-I3,3005
I0,2	-0,30I206	5,56496	-I3,5I36
I0,4	-0,305II2	5,66573	-I3,7263
I0,6	-0,308867	5,76647	-I3,9386
I0,8	-0,3I2480	5,867I8	-I4,I504
II,0	-0,3I5958	5,96787	-I4,36I8
II,2	-0,3I9309	6,06853	-I4,5729
II,4	-0,322540	6,I69I7	-I4,7835
II,6	-0,325656	6,26978	-I4,9938
II,8	-0,328665	6,37037	-I5,2038
I2,0	-0,33I57I	6,47095	-I5,4I35
I2,2	-0,334380	6,57I50	-I5,6229
I2,4	-0,337397	6,67203	-I5,8320
I2,6	-0,339726	6,77255	-I6,0408
I2,8	-0,342270	6,87305	-I6,2393
I3,0	-0,344735	6,97353	-I6,4376
I3,2	-0,347I24	7,07400	-I6,6356
I3,4	-0,349440	7,I7445	-I6,8335
I3,6	-0,351687	7,27488	-I7,03I0
I3,8	-0,353867	7,3753I	-I7,2285
I4,0	-0,355984	7,47572	-I7,4256
I4,2	-0,358040	7,576I2	-I7,6226
I4,4	-0,360039	7,6765I	-I7,8194
I4,6	-0,36198I	7,77689	-I8,0I60
I4,8	-0,363870	7,87725	-I8,2125
I5,0	-0,365708	7,97760	-I8,4088

$Z=3$ $3d6 [1000]$

R	W	P	λ
2,0	I4,I097	0,I33436	-6,0I228
4,0	6,60550	0,267507	-6,04926
6,0	4,09795	0,402950	-6,II132
8,0	2,83640	0,540695	-6,19927
I,0	2,0700I	0,681906	-6,31448
I,2	I,54802	0,827902	-6,45898
I,4	I,I63I4	0,979857	-6,63536
I,6	0,86868I	I,I3832	-6,84623
I,8	0,6I8982	I,30278	-7,09328
2,0	0,4I6995	I,47I74	-7,3766I
2,2	0,2480I9	I,643I0	-7,69468
2,4	0,I06383	I,8I483	-8,04485
2,6	-0,0I2I60	I,98522	-8,42402
2,8	-0,IIIO85	2,I530I	-8,82924
3,0	-0,I93327	2,3I732	-9,25788
3,2	-0,26I37I	2,47754	-9,70784
3,4	-0,3I7307	2,63326	-IO,I774
3,6	-0,362894	2,784I6	-IO,6654
3,8	-0,399634	2,93008	-II,I707
4,0	-0,428838	3,07094	-II,6922
4,2	-0,45I687	3,20685	-I2,2288
4,4	-0,469252	3,33802	-I2,7790
4,6	-0,482506	3,4648I	-I3,34I3
4,8	-0,492308	3,58767	-I3,9I40
5,0	-0,499397	3,70708	-I4,4955
5,2	-0,504385	3,82352	-I5,0843
5,4	-0,507769	3,93742	-I5,6789
5,6	-0,50994I	4,049I8	-I6,2783
5,8	-0,5II2IO	4,I59I5	-I6,88I3
6,0	-0,5II8I5	4,26763	-I7,4873
6,2	-0,5II939	4,37487	-I8,0954
6,4	-0,5II725	4,48I09	-I8,7052
6,6	-0,5II279	4,58646	-I9,3I6I
6,8	-0,5IO684	4,69II6	-I9,9277
7,0	-0,5IO00I	4,7953I	-20,5398
7,2	-0,509276	4,89902	-2I,I52I
7,4	-0,50854I	5,00238	-2I,7644
7,6	-0,50782I	5,I0547	-22,3766

R	W	P	λ
7,8	-0,507I3I	5,20835	-22,9885
8,0	-0,50648I	5,3II06	-23,6000
8,2	-0,505877	5,4I365	-24,2II0
8,4	-0,505322	5,5I6I4	-24,82I7
8,6	-0,5048I6	5,6I855	-25,43I9
8,8	-0,504358	5,72090	-26,04I6
9,0	-0,503944	5,8232I	-26,6508
9,2	-0,503573	5,92547	-27,2595
9,4	-0,50324I	6,02770	-27,8679
9,6	-0,502944	6,I2990	-28,4758
9,8	-0,502678	6,23206	-29,0833
IO,0	-0,50244I	6,33420	-29,6904
IO,2	-0,502229	6,43630	-30,2972
IO,4	-0,502040	6,53837	-30,9037
IO,6	-0,50I87I	6,6404I	-3I,5098
IO,8	-0,50I7I9	6,74242	-32,II57
II,0	-0,50I582	6,84439	-32,72I4
II,2	-0,50I460	6,94633	-33,3268
II,4	-0,50I349	7,04824	-33,93I9
II,6	-0,50I249	7,I50II	-34,5368
II,8	-0,50II58	7,25I94	-35,I4I6
I2,0	-0,50I076	7,35374	-35,7462
I2,2	-0,50I002	7,45550	-36,3506
I2,4	-0,500933	7,55723	-36,9548
I2,6	-0,50087I	7,65893	-37,5589
I2,8	-0,5008I4	7,76059	-38,I628
I3,0	-0,500762	7,8622I	-38,7666
I3,2	-0,5007I4	7,9638I	-39,3703
I3,4	-0,500670	8,06537	-39,9738
I3,6	-0,500630	8,I6690	-40,5773
I3,8	-0,500592	8,26840	-4I,I806
I4,0	-0,500558	8,36986	-4I,7839
I4,2	-0,500525	8,47I30	-42,3870
I4,4	-0,500496	8,5727I	-42,9900
I4,6	-0,500468	8,67409	-43,5930
I4,8	-0,500442	8,77544	-44,I958
I5,0	-0,5004I8	8,87677	-44,7986

 $Z=3$ $3p\pi [3'1'0'1]$

R	W	P	λ
0,2	I4,II56	0,I32998	-2,006I4
0,4	6,6269I	0,264286	-2,02376
0,6	4,I4I86	0,393020	-2,05IO3
0,8	2,9082I	0,5I90I2	-2,08588
I,0	2,I7470	0,642380	-2,I2640
I,2	I,69067	0,763358	-2,I7096
I,4	I,34868	0,882209	-2,2I8I7
I,6	I,09502	0,999I86	-2,26690
I,8	0,899903	I,II452	-2,3I625
2,0	0,745492	I,22842	-2,36550
2,2	0,620477	I,34IO6	-2,4I4IO
2,4	0,5I7343	I,45260	-2,46I65
2,6	0,4309I2	I,563I7	-2,50785
2,8	0,357505	I,67290	-2,55250
3,0	0,294437	I,78I86	-2,59549
3,2	0,239706	I,890I6	-2,63675
3,4	0,I9I79I	I,99786	-2,67626
3,6	0,I495I4	2,I0503	-2,7I404
3,8	0,II953	2,2I172	-2,750II
4,0	0,078374	2,3I798	-2,78454
4,2	0,048I85	2,42384	-2,8I739
4,4	0,020907	2,52935	-2,84872
4,6	-0,003856	2,63454	-2,87862
4,8	-0,026430	2,73943	-2,907I5
5,0	-0,047089	2,84405	-2,93439
5,2	-0,066064	2,94842	-2,9604I
5,4	-0,083548	3,05256	-2,98528
5,6	-0,099708	3,I5649	-3,00906
5,8	-0,II4688	3,26022	-3,03I82
6,0	-0,I28609	3,36377	-3,05362
6,2	-0,I4I579	3,467I5	-3,07450
6,4	-0,I53690	3,57037	-3,09453
6,6	-0,I65025	3,67345	-3,II374
6,8	-0,I75654	3,77639	-3,I32I9
7,0	-0,I85640	3,87920	-3,I4992
7,2	-0,I95040	3,98I89	-3,I6696
7,4	-0,203902	4,08446	-3,I8336
7,6	-0,2I2272	4,I8693	-3,I99I5

R	W	P	λ
7,8	-0,220I88	4,28930	-3,2I435
8,0	-0,227687	4,39I58	-3,2290I
8,2	-0,234799	4,49377	-3,243I5
8,4	-0,24I554	4,59587	-3,25679
8,6	-0,247978	4,69790	-3,26996
8,8	-0,254094	4,79984	-3,28269
9,0	-0,259923	4,90I72	-3,29499
9,2	-0,265486	5,00354	-3,30688
9,4	-0,270800	5,I0528	-3,3I839
9,6	-0,275880	5,20697	-3,32953
9,8	-0,280743	5,30860	-3,34033
IO,0	-0,285400	5,4I0I8	-3,35078
IO,2	-0,289867	5,5II70	-3,36092
IO,4	-0,294I52	5,6I3I8	-3,37075
IO,6	-0,298268	5,7I460	-3,38029
IO,8	-0,302224	5,8I599	-3,38956
II,0	-0,306029	5,9I732	-3,39855
II,2	-0,30969I	6,0I862	-3,40728
II,4	-0,3I32I9	6,II988	-3,4I578
II,6	-0,3I66I9	6,22IIO	-3,42403
II,8	-0,3I9899	6,32229	-3,43206
I2,0	-0,323064	6,42344	-3,43987
I2,2	-0,326I2I	6,52456	-3,44747
I2,4	-0,329074	6,62565	-3,45488
I2,6	-0,33I930	6,7267I	-3,46209
I2,8	-0,334692	6,82774	-3,469I1
I3,0	-0,337365	6,92874	-3,47596
I3,2	-0,339954	7,0297I	-3,48263
I3,4	-0,342462	7,I3066	-3,489I4
I3,6	-0,344894	7,23I58	-3,49549
I3,8	-0,34725I	7,33248	-3,50I68
I4,0	-0,349539	7,43336	-3,50773
I4,2	-0,35I759	7,5342I	-3,5I363
I4,4	-0,3539I5	7,63504	-3,5I940
I4,6	-0,356009	7,73586	-3,52503
I4,8	-0,358045	7,83665	-3,53053
I5,0	-0,360024	7,93742	-3,5359I

$Z=3$ $3d\pi [3'0'1'1]$

R	W	P	λ
0,2	I4, I104	0, I33383	-6, 0I208
0,4	6, 60854	0, 26705I	-6, 04845
0,6	4, I0574	0, 40I207	-6, I0952
0,8	2, 85249	0, 5359I2	-6, I9583
I,0	2, 09940	0, 67I044	-6, 30794
I,2	I, 59702	0, 8063I5	-6, 44623
I,4	I, 23872	0, 94I305	-6, 6I082
I,6	0, 97I260	I, 07554	-6, 80I47
I,8	0, 765060	I, 20855	-7, 0I755
2,0	0, 602289	I, 33993	-7, 258I0
2,2	0, 47I489	I, 46935	-7, 52I89
2,4	0, 364908	I, 59658	-7, 80746
2,6	0, 277078	I, 72I47	-8, I13I9
2,8	0, 2040I5	I, 84398	-8, 4374I
3,0	0, I42732	I, 964I0	-8, 77839
3,2	0, 090949	2, 08I9I	-9, I3445
3,4	0, 046892	2, I9749	-9, 50395
3,6	0, 009I65	2, 3I098	-9, 88532
3,8	-0, 023343	2, 4225I	-I0, 277I
4,0	-0, 05I5270	2, 53224	-I0, 6779
4,2	-0, 076I10	2, 64032	-II, 0864
4,4	-0, 097682	2, 74692	-II, 50I5
4,6	-0, II6725	2, 852I8	-II, 922I
4,8	-0, I33642	2, 95627	-I2, 347I
5,0	-0, I48760	3, 05933	-I2, 7757
5,2	-0, I62354	3, I6I49	-I3, 2070
5,4	-0, I74652	3, 26289	-I3, 6404
5,6	-0, I85847	3, 36364	-I4, 0750
5,8	-0, I96096	3, 46386	-I4, 5I05
6,0	-0, 205534	3, 56365	-I4, 946I
6,2	-0, 2I4272	3, 663I0	-I5, 38I6
6,4	-0, 222402	3, 76229	-I5, 8I65
6,6	-0, 230002	3, 86I28	-I6, 2506
6,8	-0, 237I37	3, 960I3	-I6, 6837
7,0	-0, 243860	4, 05889	-I7, II56
7,2	-0, 2502I7	4, I5760	-I7, 5462
7,4	-0, 256244	4, 25629	-I7, 9755
7,6	-0, 26I974	4, 35497	-I8, 4034

 $Z=3$ $4f\sigma [3'0'2'0]$

R	W	P	λ
0,2	I4, 4998	0, I000I9	-I2, 0067
0,4	6, 99923	0, 200I53	-I2, 0267
0,6	4, 49826	0, 300520	-I2, 060I
0,8	3, 24688	0, 40I245	-I2, I07I
I,0	2, 49506	0, 502462	-I2, I677
I,2	I, 99277	0, 604322	-I2, 2422
I,4	I, 6328I	0, 706998	-I2, 3309
I,6	I, 36I54	0, 8I0694	-I2, 434I
I,8	I, I49I2	0, 9I565I	-I2, 5524
2,0	0, 977594	I, 022I6	-I2, 6863
2,2	0, 835464	I, I3056	-I2, 8366
2,4	0, 7I5027	I, 24I26	-I3, 0044
2,6	0, 6I0909	I, 35467	-I3, I909
2,8	0, 5I9264	I, 47I22	-I3, 3977
3,0	0, 4373I2	I, 59I25	-I3, 626I
3,2	0, 363060	I, 7I497	-I3, 8779
3,4	0, 295I3I	I, 84232	-I4, I542
3,6	0, 2326I8	I, 97298	-I4, 4557
3,8	0, I74965	2, I0636	-I4, 7828
4,0	0, I2I838	2, 24I72	-I5, I348
4,2	0, 073025	2, 37822	-I5, 5I09
4,4	0, 028356	2, 5I506	-I5, 9095
4,6	-0, 0I2338	2, 65I52	-I6, 3293
4,8	-0, 04925I	2, 78700	-I6, 7685
5,0	-0, 082599	2, 92I04	-I7, 2255
5,2	-0, II26I9	3, 05330	-I7, 6988
5,4	-0, I39558	3, I835I	-I8, I870
5,6	-0, I63666	3, 3I154	-I8, 6888
5,8	-0, I85I90	3, 43728	-I9, 2030
6,0	-0, 204365	3, 56070	-I9, 7285
6,2	-0, 22I4I8	3, 68I80	-20, 2644
6,4	-0, 236559	3, 80062	-20, 8097
6,6	-0, 249986	3, 9I723	-2I, 3636
6,8	-0, 26I880	4, 03I7I	-2I, 9254
7,0	-0, 272408	4, I44I5	-22, 4943
7,2	-0, 28I722	4, 25467	-23, 0697
7,4	-0, 289962	4, 36339	-23, 65I0
7,6	-0, 297256	4, 47043	-24, 2374

Z=4

156 [1'0'0']

R	W	P	λ
0,2	8,56817	0,478160	-0,089961
0,4	-0,347862	0,909851	-0,281265
0,6	-3,00614	1,31951	-0,500506
0,8	-4,26523	1,72188	-0,720854
1,0	-5,00925	2,12241	-0,936243
1,2	-5,50492	2,52261	-1,14712
1,4	-5,85980	2,92277	-1,35490
1,6	-6,12652	3,32294	-1,56067
1,8	-6,33426	3,72310	-1,76512
2,0	-6,50059	4,12325	-1,96865
2,2	-6,63676	4,52338	-2,17152
2,4	-6,75028	4,92349	-2,37391
2,6	-6,84635	5,32360	-2,57593
2,8	-6,92872	5,72368	-2,77765
3,0	-7,00011	6,12376	-2,97915
3,2	-7,06258	6,52384	-3,18045
3,4	-7,11771	6,92390	-3,38161
3,6	-7,16672	7,32396	-3,58263
3,8	-7,21057	7,72401	-3,78354
4,0	-7,25003	8,12406	-3,98437
4,2	-7,28574	8,52410	-4,18511
4,4	-7,31820	8,92414	-4,38579
4,6	-7,34784	9,32417	-4,58641
4,8	-7,37501	9,72421	-4,78698
5,0	-7,40001	10,1242	-4,98750
5,2	-7,42309	10,5243	-5,18798
5,4	-7,44445	10,9243	-5,38842
5,6	-7,46429	11,3243	-5,58884
5,8	-7,48277	11,7243	-5,78922
6,0	-7,50001	12,1244	-5,98958
6,2	-7,51614	12,5244	-6,18992
6,4	-7,53126	12,9244	-6,39023
6,6	-7,54546	13,3244	-6,59053
6,8	-7,55883	13,7244	-6,79081
7,0	-7,57143	14,1244	-6,99107
7,2	-7,58334	14,5245	-7,19132
7,4	-7,59460	14,9245	-7,39155
7,6	-7,60526	15,3245	-7,59178
7,8	-7,61539	15,7245	-7,79199
8,0	-7,62500	16,1245	-7,99219

R	W	P	λ
8,2	-7,63415	16,5245	-8,19238
8,4	-7,64286	16,9245	-8,39256
8,6	-7,65116	17,3246	-8,59273
8,8	-7,65909	17,7246	-8,79290
9,0	-7,66667	18,1246	-8,99306
9,2	-7,67391	18,5246	-9,19321
9,4	-7,68085	18,9246	-9,39335
9,6	-7,68750	19,3246	-9,59349
9,8	-7,69388	19,7246	-9,79362
10,0	-7,70000	20,1246	-9,99375
10,2	-7,70588	20,5246	-10,1939
10,4	-7,71154	20,9246	-10,3940
10,6	-7,71698	21,3246	-10,5941
10,8	-7,72222	21,7246	-10,7942
11,0	-7,72727	22,1246	-10,9943
11,2	-7,73214	22,5246	-11,1944
11,4	-7,73684	22,9247	-11,3945
11,6	-7,74138	23,3247	-11,5946
11,8	-7,74576	23,7247	-11,7947
12,0	-7,75000	24,1247	-11,9942
12,2	-7,75410	24,5247	-12,1943
12,4	-7,75806	24,9247	-12,3944
12,6	-7,76190	25,3247	-12,5945
12,8	-7,76562	25,7247	-12,7945
13,0	-7,76923	26,1247	-12,9946
13,2	-7,77273	26,5247	-13,1947
13,4	-7,77612	26,9247	-13,3948
13,6	-7,77941	27,3247	-13,5948
13,8	-7,78261	27,7247	-13,7949
14,0	-7,78571	28,1247	-13,9950
14,2	-7,78873	28,5247	-14,1951
14,4	-7,79167	28,9247	-14,3951
14,6	-7,79452	29,3247	-14,5952
14,8	-7,79730	29,7247	-14,7953
15,0	-7,80000	30,1247	-14,9953
16,0	-7,81250	32,1248	15,9956
17,0	-7,82353	34,1248	-16,9959
18,0	-7,83333	36,1248	-17,9961
19,0	-7,84210	38,1248	-18,9963
20,0	-7,85000	40,1248	-19,9965

Z=4

256 [2'1'0']

R	W	P	λ
0,2	17,0138	0,244386	0,019730
0,4	7,17183	0,475661	0,81975
0,6	3,95660	0,698436	0,181312
0,8	2,37831	0,915938	0,307287
1,0	1,44672	1,12988	0,451185
1,2	0,834686	1,34128	0,607164
1,4	0,403233	1,55075	0,771539
1,6	0,083445	1,75875	0,941976
1,8	-0,162650	1,96558	1,11696
2,0	-0,357651	2,17147	1,29545
2,2	-0,515827	2,37662	1,47674
2,4	-0,646616	2,58113	1,66028
2,6	-0,756504	2,78514	1,84569
2,8	-0,850090	2,98870	2,03266
3,0	-0,930724	3,19190	2,22095
3,2	-1,00090	3,39479	2,41036
3,4	-1,06251	3,59741	2,60074
3,6	-1,11704	3,79979	2,79196
3,8	-1,16561	4,00196	2,98392
4,0	-1,20916	4,20396	3,17652
4,2	-1,24842	4,40580	3,36970
4,4	-1,28399	4,60750	3,56338
4,6	-1,31637	4,80908	3,75752
4,8	-1,34596	5,01054	3,95206
5,0	-1,37311	5,21190	4,14697
5,2	-1,39811	5,41317	4,34220
5,4	-1,42120	5,61436	4,53774
5,6	-1,44259	5,81548	4,73355
5,8	-1,46246	6,01653	4,92960
6,0	-1,48097	6,21751	5,12588
6,2	-1,49825	6,41844	5,32237
6,4	-1,51443	6,61932	5,51905
6,6	-1,52959	6,82016	5,71590
6,8	-1,54384	7,02094	5,91291
7,0	-1,55726	7,22169	6,11008
7,2	-1,56991	7,42240	6,30738
7,4	-1,58186	7,62308	6,50481
7,6	-1,59317	7,82372	6,70237
7,8	-1,60388	8,02434	6,90003
8,0	-1,61404	8,22492	7,09780

R	W	P	λ
8,2	-1,62370	8,42548	7,29566
8,4	-1,63288	8,62602	7,49362
8,6	-1,64163	8,82653	7,69166
8,8	-1,64998	9,02702	7,88978
9,0	-1,65794	9,22749	8,08798
9,2	-1,66555	9,42794	8,28625
9,4	-1,67283	9,62838	8,48458
9,6	-1,67980	9,82880	8,68298
9,8	-1,68648	10,0292	8,88144
10,0	-1,69289	10,2296	9,07995
10,2	-1,69904	10,4300	9,27852
10,4	-1,70495	10,6303	9,47714
10,6	-1,71063	10,8307	9,67580
10,8	-1,71610	11,0310	9,87451
11,0	-1,72136	11,2313	10,0733
11,2	-1,72644	11,4316	10,2720
11,4	-1,73133	11,6319	10,4709
11,6	-1,73605	11,8322	10,6698
11,8	-1,74061	12,0325	10,8687
12,0	-1,74501	12,2328	11,0676
12,2	-1,74927	12,4330	11,2666
12,4	-1,75339	12,6333	11,4656
12,6	-1,75737	12,8336	11,6646
12,8	-1,76123	13,0338	11,8637
13,0	-1,76497	13,2340	12,0628
13,2	-1,76859	13,4343	12,2619
13,4	-1,77210	13,6345	12,4610
13,6	-1,77551	13,8347	12,6601
13,8	-1,77882	14,0349	12,8594
14,0	-1,78203	14,2351	13,0586
14,2	-1,78515	14,4353	13,2578
14,4	-1,78818	14,6355	13,4570
14,6	-1,79113	14,8357	13,6563
14,8	-1,79399	15,0359	13,8556
15,0	-1,79678	15,2361	14,0549
16,0	-1,80966	16,2369	15,0516
17,0	-1,82101	17,2376	16,0488
18,0	-1,83108	18,2383	17,0462
19,0	-1,84008	19,2389	18,0439
20,0	-1,84817	20,2394	19,0418

Z=4

2pσ [2'0'1'0]

R	W	P	λ	R	W	P	λ
0,2	I6,8I08	0,252554	-2,061I2	8,2	-I,646I2	8,47009	-25,54I0
0,4	6,66I58	0,516792	-2,24572	8,4	-I,65424	8,66958	-26, I428
0,6	3,2II24	0,788655	-2,55225	8,6	-I,66200	8,869I0	-26,7444
0,8	I,529I4	I,05388	-2,96547	8,8	-I,66943	9,06864	-27,3460
I,0	0,598056	I,3042I	-3,46037	9,0	-I,67653	9,26820	-27,9475
I,2	0,0449735	I,5387I	-4,0I329	9,2	-I,68334	9,46778	-28,5488
I,4	-0,30I938	I,75952	-4,606I3	9,4	-I,68986	9,66738	-29, I502
I,6	-0,5303I8	I,96947	-5,22578	9,6	-I,696I3	9,86700	-29,75I4
I,8	-0,687924	2,I7I28	-5,8626I	9,8	-I,702I5	I0,0666	-30,3526
2,0	-0,802I9I	2,36736	-6,50926	I0,0	-I,70793	I0,2663	-30,9538
2,2	-0,889532	2,5598I	-7, I5997	I0,2	-I,7I350	I0,4660	-3I,5548
2,4	-0,960000	2,75042	-7,8I034	I0,4	-I,7I885	I0,6656	-32, I559
2,6	-I,0I974	2,94053	-8,45725	I0,6	-I,72402	I0,8653	-32,7569
2,8	-I,07240	3, I3I1I	-9,09886	I0,8	-I,72899	II,0650	-33,3578
3,0	-I, I2003	3,32267	-9,73450	II,0	-I,73379	II,2647	-33,9587
3,2	-I, I637I	3,5I542	-I0,3643	II,2	-I,73842	II,4644	-34,5596
3,4	-I,2040I	3,70934	-I0,9890	II,4	-I,74290	II,6642	-35, I604
3,6	-I,24I26	3,90427	-II,6094	II,6	-I,74722	II,8639	-35,76I2
3,8	-I,27568	4, I0005	-I2,2263	II,8	-I,75I40	I2,0637	-36,3620
4,0	-I,30750	4,2965I	-I2,8404	I2,0	-I,75545	I2,2635	-36,9628
4,2	-I,3369I	4,49350	-I3,4524	I2,2	-I,75937	I2,4632	-37,5635
4,4	-I,364I2	4,6909I	-I4,0627	I2,4	-I,763I6	I2,6630	-38, I642
4,6	-I,38932	4,88866	-I4,67I7	I2,6	-I,76684	I2,8628	-38,7648
4,8	-I,4I269	5,08667	-I5,2795	I2,8	-I,77040	I3,0626	-39,3655
5,0	-I,4344I	5,28490	-I5,8864	I3,0	-I,77386	I3,2624	-39,966I
5,2	-I,45464	5,4833I	-I6,4926	I3,2	-I,7772I	I3,4622	-40,5667
5,4	-I,47350	5,68I87	-I7,098I	I3,4	-I,78047	I3,6620	-4I, I672
5,6	-I,49I14	5,88056	-I7,703I	I3,6	-I,78363	I3,86I8	-4I,7678
5,8	-I,50765	6,07937	-I8,3076	I3,8	-I,78670	I4,06I6	-42,3683
6,0	-I,523I4	6,27826	-I8,9I18	I4,0	-I,78969	I4,26I5	-42,9688
6,2	-I,5377I	6,47724	-I9,5I55	I4,2	-I,79260	I4,46I3	-43,5694
6,4	-I,55I4I	6,67630	-20, I190	I4,4	-I,79542	I4,66II	-44, I698
6,6	-I,56434	6,87542	-20,7222	I4,6	-I,798I7	I4,86I0	-44,7703
6,8	-I,57656	7,07460	-2I,3252	I4,8	-I,80085	I5,0608	-45,3708
7,0	-I,588II	7,27383	-2I,9279	I5,0	-I,80345	I5,2607	-45,97I2
7,2	-I,59905	7,473II	-22,5305	I6,0	-I,8I553	I6,2600	-48,9732
7,4	-I,60943	7,67244	-23, I329	I7,0	-I,8262I	I7,2594	-5I,9750
7,6	-I,6I930	7,87I80	-23,735I	I8,0	-I,83572	I8,2589	-54,9766
7,8	-I,62867	8,07I20	-24,3372	I9,0	-I,84424	I9,2584	-57,9779
8,0	-I,63760	8,27063	-24,9392	20,0	-I,85I92	20,2580	-60,9792

Z=4

3sσ [3'2'0'0]

R	W	P	λ	R	W	P	λ
0,2	I8,6527	0, I64I50	0,04II26	8,2	-0,496530	5,75268	I2,0I20
0,4	8,70I74	0,322274	0, I5759I	8,4	-0,506357	5,88764	I2,3390
0,6	5,40676	0,4762I7	0,33I273	8,6	-0,5I5709	6,02254	I2,6664
0,8	3,7703I	0,627296	0,54394I	8,8	-0,52462I	6, I5738	I2,9939
I,0	2,79495	0,776224	0,782590	9,0	-0,533I22	6,292I7	I3,32I6
I,2	2, I4898	0,923436	I,03896	9,2	-0,54I239	6,4269I	I3,6495
I,4	I,69056	I,06923	I,30787	9,4	-0,548998	6,56I6I	I3,9776
I,6	I,34892	I,2I383	I,58606	9,6	-0,556422	6,69626	I4,3058
I,8	I,08485	I,35740	I,87I32	9,8	-0,563532	6,83087	I4,6342
2,0	0,874865	I,50009	2, I62I8	I0,0	-0,570347	6,96544	I4,9628
2,2	0,704058	I,64200	2,45755	I0,2	-0,576885	7,09997	I5,29I5
2,4	0,5625I9	I,78324	2,75667	I0,4	-0,583I63	7,23446	I5,6204
2,6	0,443403	I,92388	3,05893	I0,6	-0,589I95	7,36892	I5,9494
2,8	0,34I837	2,06398	3,36386	I0,8	-0,594996	7,50334	I6,2785
3,0	0,254254	2,20360	3,67I10	II,0	-0,600579	7,63774	I6,6078
3,2	0, I77988	2,34280	3,98036	II,2	-0,605955	7,772I0	I6,937I
3,4	0, I11I006	2,48I6I	4,29I39	II,4	-0,6I1I36	7,90643	I7,2666
3,6	0,05I732	2,62007	4,60399	II,6	-0,6I6I33	8,04073	I7,5962
3,8	-0,00I076	2,75822	4,9I798	II,8	-0,620954	8, I750I	I7,9259
4,0	-0,048408	2,89608	5,23323	I2,0	-0,625609	8,30926	I8,2557
4,2	-0,09I063	3,03367	5,54960	I2,2	-0,630I06	8,44349	I8,5856
4,4	-0, I29693	3, I7I03	5,86699	I2,4	-0,634454	8,57769	I8,9I56
4,6	-0, I64834	3,308I6	6, I853I	I2,6	-0,638658	8,7I I87	I9,2456
4,8	-0, I96934	3,445I0	6,50447	I2,8	-0,642727	8,84603	I9,5758
5,0	-0,226366	3,58I84	6,8244I	I3,0	-0,646667	8,980I7	I9,9060
5,2	-0,253445	3,7I84I	7, I4505	I3,2	-0,650484	9, I1428	20,2363
5,4	-0,278440	3,85482	7,46635	I3,4	-0,654I82	9,24838	20,5667
5,6	-0,30I578	3,99I08	7,78825	I3,6	-0,657769	9,38246	20,8972
5,8	-0,323059	4, I272I	8, I107I	I3,8	-0,66I248	9,5I652	2I,2277
6,0	-0,343050	4,26320	8,43368	I4,0	-0,664625	9,65056	2I,5583
6,2	-0,36I70I	4,39908	8,757I3	I4,2	-0,667904	9,78458	2I,8890
6,4	-0,379I40	4,53484	9,08I03	I4,4	-0,67I088	9,9I859	22,2I97
6,6	-0,395480	4,67050	9,40535	I4,6	-0,674I83	I0,0526	22,5505
6,8	-0,4I0822	4,80606	9,73005	I4,8	-0,677I92	I0, I866	22,88I3
7,0	-0,425252	4,94I53	I0,055I	I5,0	-0,680I18	I0,3205	23,2I22
7,2	-0,438850	5,0769I	I0,3805	I6,0	-0,6936I8	I0,990I	24,8675
7,4	-0,45I684	5,2I22I	I0,7063	I7,0	-0,705486	II,6594	26,5240
7,6	-0,4638I6	5,34743	II,0323	I8,0	-0,7I6000	I2,3285	28, I8I4
7,8	-0,475302	5,48258	II,3586	I9,0	-0,725377	I2,9973	29,8397
8,0	-0,486I92	5,6I766	II,6852	20,0	-0,733794	I3,6660	3I,4988

Z=4

3dσ [3'0'2'0]

R	W	P	λ
0,2	18,6082	0,166838	-6,02182
0,4	8,59917	0,334762	-6,08754
0,6	5,24916	0,505125	-6,19809
0,8	3,55622	0,679712	-6,35538
1,0	2,51876	0,860594	-6,56255
1,2	1,80390	1,04938	-6,82364
1,4	1,27283	1,24604	-7,14207
1,6	0,861139	1,44836	-7,51879
1,8	0,536274	1,65264	-7,95170
2,0	0,279277	1,85511	-8,43660
2,2	0,076971	2,05273	-8,96860
2,4	-0,080974	2,24348	-9,54290
2,6	-0,203101	2,42621	-10,1550
2,8	-0,296602	2,60052	-10,8004
3,0	-0,367530	2,76657	-11,4748
3,2	-0,420904	2,92490	-12,1740
3,4	-0,460786	3,07625	-12,8939
3,6	-0,490386	3,22144	-13,6311
3,8	-0,512186	3,36125	-14,3824
4,0	-0,528080	3,49637	-15,1455
4,2	-0,539499	3,62745	-15,9181
4,4	-0,547528	3,75501	-16,6987
4,6	-0,552989	3,87951	-17,4858
4,8	-0,556507	4,00137	-18,2783
5,0	-0,558566	4,12093	-19,0751
5,2	-0,559542	4,23851	-19,8755
5,4	-0,559731	4,35441	-20,6786
5,6	-0,559373	4,46889	-21,4837
5,8	-0,558665	4,58222	-22,2902
6,0	-0,557775	4,69467	-23,0973
6,2	-0,556853	4,80653	-23,9044
6,4	-0,556040	4,91810	-24,7106
6,6	-0,555475	5,02973	-25,5151
6,8	-0,555300	5,14184	-26,3167
7,0	-0,555663	5,25488	-27,1143
7,2	-0,556701	5,36933	-27,9066
7,4	-0,558522	5,48565	-28,6926
7,6	-0,561169	5,60416	-29,4714
7,8	-0,564595	5,72494	-30,2429
8,0	-0,568677	5,84788	-31,0078

R	W	P	λ
8,2	-0,573247	5,97265	-31,7670
8,4	-0,578139	6,09891	-32,5216
8,6	-0,583211	6,22633	-33,2728
8,8	-0,588358	6,35462	-34,0211
9,0	-0,593504	6,48359	-34,7675
9,2	-0,598597	6,61307	-35,5122
9,4	-0,603607	6,74295	-36,2556
9,6	-0,608511	6,87315	-36,9980
9,8	0,613298	7,00361	-37,7396
10,0	-0,617961	7,13429	-38,4805
10,2	-0,622498	7,26514	-39,2208
10,4	-0,626908	7,39616	-39,9606
10,6	-0,631193	7,52731	-40,6999
10,8	-0,635356	7,65859	-41,4389
11,0	-0,639399	7,78997	-42,1775
11,2	-0,643326	7,92145	-42,9158
11,4	-0,647141	8,05302	-43,6537
11,6	-0,650847	8,18468	-44,3915
11,8	-0,654448	8,31641	-45,1290
12,0	-0,657948	8,44821	-45,8662
12,2	-0,661350	8,58007	-46,6033
12,4	-0,664658	8,71200	-47,3401
12,6	-0,667876	8,84398	-48,0769
12,8	-0,671007	8,97602	-48,8134
13,0	-0,674053	9,10810	-49,5498
13,2	-0,677019	9,24023	-50,2860
13,4	0,679907	9,37241	-51,0222
13,6	-0,682720	9,50463	-51,7582
13,8	-0,685460	9,63688	-52,4940
14,0	-0,688131	9,76918	-53,2298
14,2	-0,690734	9,90150	-53,9655
14,4	-0,693273	10,0339	-54,7010
14,6	-0,695749	10,1663	-55,4365
14,8	-0,698164	10,2987	-56,1719
15,0	-0,700522	10,4311	-56,9072
16,0	-0,711502	11,0938	-60,5828
17,0	-0,721292	11,7570	-64,2568
18,0	-0,730073	12,4206	-67,9298
19,0	-0,737990	13,0846	-71,6018
20,0	-0,745162	13,7489	-75,2732

Z=4

4fσ [1000]

R	W	P	λ
0,2	19,2184	0,125031	-12,0116
0,4	8,21715	0,250256	-12,0466
0,6	5,88177	0,375873	-12,1050
0,8	4,21217	0,502103	-12,1871
1,0	3,20823	0,629193	-12,2931
1,2	2,53650	0,757443	-12,4235
1,4	2,05392	0,887217	-12,5790
1,6	1,68882	1,01897	-12,7604
1,8	1,40121	1,15327	-12,9689
2,0	1,16695	1,29077	-13,2061
2,2	0,970589	1,43219	-13,4739
2,4	0,801877	1,57816	-13,7747
2,6	0,653941	1,72907	-14,1105
2,8	0,522270	1,88486	-14,4829
3,0	0,404034	2,04496	-14,8927
3,2	0,297513	2,20833	-15,3390
3,4	0,201633	2,37372	-15,8201
3,6	0,115604	2,53986	-16,3335
3,8	0,038716	2,70564	-16,8759
4,0	-0,029748	2,87019	-17,4444
4,2	-0,090530	3,03290	-18,0359
4,4	-0,144378	3,19336	-18,6478
4,6	-0,192020	3,35135	-19,2776
4,8	-0,234148	3,50676	-19,9231
5,0	-0,271400	3,65958	-20,5825
5,2	-0,304352	3,80983	-21,2542
5,4	-0,3333519	3,95761	-21,9368
5,6	-0,359353	4,10301	-22,6290
5,8	-0,382224	4,24610	-23,3300
6,0	-0,402523	4,38696	-24,0390
6,2	-0,420468	4,52564	-24,7555
6,4	-0,436300	4,66213	-25,4790
6,6	-0,450188	4,79636	-26,2095
6,8	-0,462252	4,92821	-26,9472
7,0	-0,472569	5,05746	-27,6924
7,2	-0,481187	5,18386	-28,4458
7,4	-0,488162	5,30715	-29,2078
7,6	-0,493583	5,42722	-29,9787
7,8	-0,497611	5,54413	-30,7581
8,0	-0,500465	5,65817	-31,5450

R	W	P	λ
8,2	-0,502389	5,76978	-32,3380
8,4	-0,503616	5,87942	-33,1359
8,6	-0,504342	5,98753	-33,9374
8,8	-0,504716	6,09447	-34,7413
9,0	-0,504849	6,20052	-35,5470
9,2	-0,504823	6,30588	-36,3539
9,4	-0,504693	6,41072	-37,1615
9,6	-0,504498	6,51516	-37,9696
9,8	-0,504267	6,61928	-38,7778
10,0	-0,504019	6,72316	-39,5861
10,2	-0,503765	6,82685	-40,3944
10,4	-0,503514	6,93037	-41,2025
10,6	-0,503272	7,03376	-42,0104
10,8	-0,503041	7,13704	-42,8181
11,0	-0,502825	7,24023	-43,6256
11,2	-0,502624	7,34333	-44,4328
11,4	-0,502436	7,44636	-45,2398
11,6	-0,502264	7,54932	-46,0465
11,8	-0,502104	7,65222	-46,8530
12,0	-0,501958	7,75506	-47,6502
12,2	-0,501823	7,85784	-48,4452
12,4	-0,501700	7,96057	-49,2410
12,6	-0,501586	8,06324	-50,0366
12,8	-0,501482	8,16587	-50,8320
13,0	-0,501386	8,26844	-51,6272
13,2	-0,501298	8,37097	-52,4222
13,4	-0,501217	8,47344	-53,2170
13,6	-0,501142	8,57587	-54,0117
13,8	-0,501073	8,67826	-54,8063
14,0	-0,501009	8,78060	-55,6007
14,2	-0,500950	8,88289	-56,3949
14,4	-0,500896	8,98515	-57,1890
14,6	-0,500845	9,08736	-57,9830
14,8	-0,500798	9,18952	-58,7769
15,0	-0,500754	9,29165	-59,5707
16,0	-0,500576	9,80172	-63,7480
17,0	-0,500448	10,3109	-67,7632
18,0	-0,500354	10,8193	-71,7766
19,0	-0,500284	11,3270	-75,7886
20,0	-0,500231	11,8341	-79,7993

$Z = 5$ $1s\sigma [1'0'0']$

R	W	P	λ
0,2	8,65208	0,571803	-0,106339
0,4	-2,43838	1,09319	-0,312917
0,6	-5,84518	1,59754	-0,533666
0,8	-7,50855	2,09827	-0,749331
1,0	-8,50407	2,59847	-0,959583
1,2	-9,16863	3,09862	-1,16645
1,4	-9,64389	3,59875	-1,37132
1,6	-10,0006	4,09887	-1,57494
1,8	-10,2781	4,59898	-1,77774
2,0	-10,5002	5,09906	-1,97997
2,2	-10,6820	5,59914	-2,18180
2,4	-10,8334	6,09921	-2,38332
2,6	-10,9616	6,59926	-2,58461
2,8	-11,0715	7,09931	-2,78571
3,0	-11,1667	7,59936	-2,98666
3,2	-11,2500	8,09939	-3,18750
3,4	-11,3236	8,59943	-3,38823
3,6	-11,3889	9,09946	-3,58889
3,8	-11,4474	9,59949	-3,78947
4,0	-11,5000	10,0995	-3,99000
4,2	-11,5476	10,5995	-4,19047
4,4	-11,5909	11,0996	-4,39091
4,6	-11,6304	11,5996	-4,59130
4,8	-11,6667	12,0996	-4,79166
5,0	-11,7000	12,5996	-4,99200
5,2	-11,7308	13,0996	-5,19231
5,4	-11,7593	13,5996	-5,39259
5,6	-11,7857	14,0996	-5,59286
5,8	-11,8103	14,5996	-5,79310
6,0	-11,8333	15,0997	-5,99333
6,2	-11,8548	15,5997	-6,19355
6,4	-11,8750	16,0997	-6,39375
6,6	-11,8939	16,5997	-6,59394
6,8	-11,9118	17,0997	-6,79412
7,0	-11,9286	17,5997	-6,99428
7,2	-11,9444	18,0997	-7,19444
7,4	-11,9595	18,5997	-7,39459
7,6	-11,9737	19,0997	-7,59474
7,8	-11,9872	19,5997	-7,79487
8,0	-12,0000	20,0998	-7,99500

R	W	P	λ
8,2	-12,0122	20,5998	-8,19512
8,4	-12,0238	21,0998	-8,39524
8,6	-12,0349	21,5998	-8,59535
8,8	-12,0454	22,0998	-8,79545
9,0	-12,0556	22,5998	-8,99556
9,2	-12,0652	23,0998	-9,19565
9,4	-12,0745	23,5998	-9,39574
9,6	-12,0833	24,0998	-9,59583
9,8	-12,0918	24,5998	-9,79554
10,0	-12,1000	25,0998	-9,99563
10,2	-12,1078	25,5998	-10,1957
10,4	-12,1154	26,0998	-10,3958
10,6	-12,1226	26,5998	-10,5959
10,8	-12,1296	27,0998	-10,7959
11,0	-12,1364	27,5998	-10,9960
11,2	-12,1428	28,0998	-11,1961
11,4	-12,1491	28,5998	-11,3962
11,6	-12,1552	29,0998	-11,5962
11,8	-12,1610	29,5998	-11,7963
12,0	-12,1667	30,0998	-11,9964
12,2	-12,1721	30,5998	-12,1964
12,4	-12,1774	31,0998	-12,3965
12,6	-12,1825	31,5998	-12,5965
12,8	-12,1875	32,0998	-12,7966
13,0	-12,1923	32,5998	-12,9966
13,2	-12,1970	33,0998	-13,1967
13,4	-12,2015	33,5998	-13,3967
13,6	-12,2059	34,0998	-13,5968
13,8	-12,2101	34,5998	-13,7968
14,0	-12,2143	35,0998	-13,9969
14,2	-12,2183	35,5998	-14,1969
14,4	-12,2222	36,0999	-14,3970
14,6	-12,2260	36,5999	-14,5970
14,8	-12,2297	37,0999	-14,7970
15,0	-12,2333	37,5999	-14,9971
16,0	-12,2500	40,0999	-15,9973
17,0	-12,2647	42,5999	-16,9974
18,0	-12,2778	45,0999	-17,9976
19,0	-12,2895	47,5999	-18,9977
20,0	-12,3000	50,0999	-19,9978

 $Z = 5$ $3s\sigma [3'2'0']$

R	W	P	λ
0,2	23,0650	0,196723	0,077870
0,4	10,6324	0,386538	0,286919
0,6	6,51521	0,572068	0,579790
0,8	4,46999	0,754721	0,921649
1,0	3,25075	0,935213	1,29312
1,2	2,44309	1,11399	1,68375
1,4	1,86977	1,29136	2,08760
1,6	1,44236	1,46758	2,50109
1,8	1,11184	1,64280	2,92190
2,0	0,848893	1,81720	3,34845
2,2	0,634882	1,99088	3,77961
2,4	0,457435	2,16393	4,21458
2,6	0,308004	2,33644	4,65271
2,8	0,180501	2,50847	5,09352
3,0	0,070476	2,68008	5,53664
3,2	-0,025401	2,85132	5,98174
3,4	-0,109670	3,02223	6,42857
3,6	-0,184296	3,19284	6,87692
3,8	-0,250832	3,36318	7,32663
4,0	-0,310512	3,53328	7,77753
4,2	-0,364335	3,70316	8,22951
4,4	-0,413116	3,87285	8,68244
4,6	-0,457525	4,04235	9,13625
4,8	-0,498119	4,21169	9,59084
5,0	-0,535366	4,38088	10,0461
5,2	-0,569661	4,54992	10,5021
5,4	-0,601337	4,71884	10,9586
5,6	-0,630682	4,88765	11,4158
5,8	-0,657942	5,05634	11,8734
6,0	-0,683330	5,22494	12,3314
6,2	-0,707031	5,39343	12,7899
6,4	-0,729207	5,56185	13,2488
6,6	-0,749998	5,73018	13,7081
6,8	-0,769531	5,89844	14,1677
7,0	-0,787915	6,06662	14,6276
7,2	-0,805248	6,23474	15,0878
7,4	-0,821618	6,40280	15,5483
7,6	-0,837101	6,57080	16,0091
7,8	-0,851768	6,73875	16,4701
8,0	-0,865680	6,90665	16,9313

R	W	P	λ
8,2	-0,878896	7,07450	17,3928
8,4	-0,891465	7,24230	17,8544
8,6	-0,903433	7,41006	18,3163
8,8	-0,914842	7,57778	18,7783
9,0	-0,925731	7,74546	19,2405
9,2	-0,936134	7,91310	19,7028
9,4	-0,946082	8,08071	20,1653
9,6	-0,955605	8,24829	20,6280
9,8	-0,964730	8,41584	21,0908
10,0	-0,973480	8,58335	21,5537
10,2	-0,981878	8,75084	22,0167
10,4	-0,989945	8,91831	22,4799
10,6	-0,997700	9,08574	22,9432
10,8	-1,00516	9,25316	23,4065
11,0	-1,01234	9,42055	23,8700
11,2	-1,01926	9,58792	24,3336
11,4	-1,02593	9,75527	24,7973
11,6	-1,03237	9,92259	25,2610
11,8	-1,03858	10,0899	25,7249
12,0	-1,04458	10,2572	26,1888
12,2	-1,05038	10,4245	26,6528
12,4	-1,05599	10,5917	27,1169
12,6	-1,06142	10,7590	27,5810
12,8	-1,06667	10,9262	28,0452
13,0	-1,07176	11,0934	28,5095
13,2	-1,07668	11,2606	28,9738
13,4	-1,08146	11,4278	29,4382
13,6	-1,08610	11,5949	29,9027
13,8	-1,09060	11,7621	30,3672
14,0	-1,09497	11,9292	30,8318
14,2	-1,09921	12,0964	31,2964
14,4	-1,10333	12,2635	31,7611
14,6	-1,10733	12,4306	32,2258
14,8	-1,11123	12,5977	32,6906
15,0	-1,11502	12,7648	33,1554
16,0	-1,13252	13,6001	35,4801
17,0	-1,14792	14,4352	37,8057
18,0	-1,16158	15,2701	40,1321
19,0	-1,17377	16,1048	42,4591
20,0	-1,18473	16,9395	44,7867

$Z=5$

$3d\sigma [3'0'2'0]$

R	W	P	λ	R	W	P	λ
0,2	22,9948	0,200259	-6,03433	8,2	-0,93504I	7,20667	-37,4235
0,4	10,4780	0,402197	-6,13792	8,4	-0,9448I2	7,37109	-38,2955
0,6	6,27940	0,608036	-6,31279	8,6	-0,954I95	7,53566	-39,1670
0,8	4,14547	0,820640	-6,56288	8,8	-0,963208	7,70035	-40,0382
1,0	2,82666	1,04243	-6,89366	9,0	-0,97187I	7,86516	-40,9090
1,2	1,91528	1,27319	-7,30960	9,2	-0,980202	8,03008	-41,7795
1,4	1,24827	1,50887	-7,81073	9,4	-0,988218	8,19509	-42,6498
1,6	0,750208	1,74348	-8,39182	9,6	-0,995936	8,36018	-43,5197
1,8	0,377993	1,9717I	-9,04439	9,8	-I,00337	8,52537	-44,3895
2,0	0,101427	2,19024	-9,75882	10,0	-I,01054	8,69062	-45,2591
2,2	0,102887	2,39770	-10,5254	10,2	-I,01745	8,85594	-46,1285
2,4	-0,253385	2,59418	-11,3349	10,4	-I,02412	9,02133	-46,9977
2,6	-0,364324	2,78054	-12,1788	10,6	-I,03056	9,18677	-47,8668
2,8	-0,446440	2,95805	-13,0502	10,8	-I,03678	9,35227	-48,7357
3,0	-0,50764I	3,12800	-13,9428	11,0	-I,04279	9,51782	-49,6045
3,2	-0,55369I	3,29164	-14,8518	11,2	-I,0486I	9,68342	-50,4732
3,4	-0,58878I	3,45009	-15,7733	11,4	-I,05423	9,84906	-51,3417
3,6	-0,615988	3,60439	-16,7037	11,6	-I,05968	10,0147	-52,2102
3,8	-0,637605	3,75546	-17,6404	11,8	-I,06495	10,1805	-53,0786
4,0	-0,655372	3,90422	-18,5804	12,0	-I,07006	10,3462	-53,9468
4,2	-0,670639	4,05155	-19,5215	12,2	-I,07502	10,5120	-54,8151
4,4	-0,684464	4,19828	-20,461I	12,4	-I,07982	10,6779	-55,6832
4,6	-0,697662	4,34526	-21,3972	12,6	-I,08448	10,8437	-56,5512
4,8	-0,710827	4,49319	-22,3279	12,8	-I,08900	11,0096	-57,4192
5,0	-0,724330	4,64264	-23,2519	13,0	-I,09340	11,1755	-58,2872
5,2	-0,73833I	4,79398	-24,1685	13,2	-I,09767	11,3415	-59,1550
5,4	-0,752813	4,94732	-25,0777	13,4	-I,10181	11,5074	-60,0228
5,6	-0,767636	5,10260	-25,9800	13,6	-I,10585	11,6734	-60,8906
5,8	-0,782608	5,2596I	-26,8763	13,8	-I,10977	11,8394	-61,7583
6,0	-0,797536	5,41809	-27,7677	14,0	-I,11358	12,0055	-62,6260
6,2	-0,812255	5,57777	-28,6550	14,2	-I,11729	12,1715	-63,4936
6,4	-0,826642	5,73843	-29,539I	14,4	-I,1209I	12,3376	-64,3612
6,6	-0,840613	5,89988	-30,4207	14,6	-I,12443	12,5037	-65,2288
6,8	-0,854118	6,06195	-31,300I	14,8	-I,12786	12,6698	-66,0963
7,0	-0,86713I	6,22452	-32,1780	15,0	-I,13120	12,8359	-66,9638
7,2	-0,879643	6,38752	-33,0545	16,0	-I,14672	13,6668	-71,3008
7,4	-0,891659	6,55085	-33,9298	17,0	-I,16048	14,4979	-75,637I
7,6	-0,903189	6,71447	-34,8043	18,0	-I,17277	15,3294	-79,973I
7,8	-0,914250	6,87833	-35,6780	19,0	-I,18382	16,1610	-84,3086
8,0	-0,924860	7,0424I	-36,5510	20,0	-I,19379	16,9929	-88,6438

$Z=5$

$4s\sigma [4'3'0'0]$

R	W	P	λ	R	W	P	λ
0,2	23,9026	0,148148	0,088665	8,2	-0,256359	5,39618	20,1436
0,4	11,4318	0,292335	0,325029	8,4	-0,269453	5,52325	20,6837
0,6	7,28705	0,43397I	0,655540	8,6	-0,281918	5,65025	21,224I
0,8	5,22107	0,573809	1,04197	8,8	-0,293800	5,77719	21,7649
1,0	3,98545	0,71223I	1,46308	9,0	-0,305137	5,90407	22,3059
1,2	3,16442	0,84948I	1,90727	9,2	-0,315966	6,03089	22,8472
1,4	2,57993	0,98573I	2,36780	9,4	-0,326320	6,15766	23,3888
1,6	2,14305	1,12112	2,84050	9,6	-0,336229	6,28438	23,9307
1,8	1,80439	1,25574	3,3226I	9,8	-0,345722	6,41105	24,4728
2,0	1,53437	1,38970	3,81230	10,0	-0,354823	6,53767	25,015I
2,2	1,31417	1,52306	4,30800	10,2	-0,363556	6,66425	25,5577
2,4	1,13126	1,65588	4,80886	10,4	-0,371943	6,79078	26,1005
2,6	0,977000	1,78822	5,31403	10,6	-0,380004	6,91727	26,6434
2,8	0,845183	1,92013	5,82290	10,8	-0,387757	7,04372	27,1866
3,0	0,73129I	2,05163	6,33496	11,0	-0,395220	7,17013	27,7300
3,2	0,631933	2,18277	6,84982	11,2	-0,402408	7,29651	28,2735
3,4	0,544520	2,31358	7,36714	11,4	-0,409337	7,42285	28,8173
3,6	0,46704I	2,44409	7,88664	11,6	-0,416019	7,54916	29,3612
3,8	0,39791I	2,57431	8,40809	11,8	-0,422468	7,67543	29,9052
4,0	0,33586I	2,70428	8,93130	12,0	-0,428695	7,80167	30,4494
4,2	0,279869	2,83400	9,45609	12,2	-0,434712	7,92788	30,9938
4,4	0,229099	2,96350	9,98230	12,4	-0,440530	8,05406	31,5382
4,6	0,182859	3,09279	10,5098	12,6	-0,446157	8,18022	32,0829
4,8	0,140575	3,22189	11,0385	12,8	-0,451603	8,30634	32,6276
5,0	0,101767	3,3508I	11,5684	13,0	-0,456877	8,43244	33,1725
5,2	0,0660263	3,47956	12,0992	13,2	-0,461986	8,55852	33,7175
5,4	0,033008	3,60815	12,6309	13,4	-0,466938	8,68457	34,2627
5,6	0,002415	3,73659	13,1635	13,6	-0,471740	8,81059	34,8079
5,8	-0,02601	3,86490	13,6969	13,8	-0,476399	8,93660	35,3532
6,0	-0,05248	3,99307	14,2310	14,0	-0,480921	9,06258	35,8987
6,2	-0,07720	4,12112	14,7659	14,2	-0,485312	9,18854	36,4443
6,4	-0,100317	4,24906	15,3013	14,4	-0,489578	9,31447	36,9899
6,6	-0,121998	4,37688	15,8374	14,6	-0,493723	9,44039	37,5357
6,8	-0,142365	4,50461	16,3740	14,8	-0,497753	9,56629	38,0815
7,0	-0,161533	4,63223	16,9112	15,0	-0,501673	9,69217	38,6274
7,2	-0,179603	4,75976	17,4488	16,0	-0,519761	10,3213	41,3583
7,4	-0,196668	4,88720	17,9870	17,0	-0,535666	10,950I	44,091I
7,6	-0,212807	5,01456	18,5255	18,0	-0,549758	11,5785	46,8254
7,8	-0,228092	5,14184	19,0645	19,0	-0,562329	12,2066	49,5612
8,0	-0,242590	5,26905	19,6039	20,0	-0,573612	12,8344	52,298I

Z=5

4pσ [4'2'1'0]

R	W	P	λ
0,2	23,8617	0,150887	-2,06972
0,4	II,3410	0,304505	-2,24844
0,6	7,17224	0,457162	-2,48092
0,8	5,10272	0,605912	-2,72569
1,0	3,87261	0,750795	-2,95910
1,2	3,05990	0,892676	-3,16946
1,4	2,48393	1,03235	-3,35247
1,6	2,05485	1,17038	-3,50823
1,8	1,72307	1,30714	-3,63914
2,0	1,45906	1,44287	-3,74848
2,2	1,24413	1,57772	-3,83960
2,4	1,06587	1,71181	-3,91546
2,6	0,915730	1,84522	-3,97855
2,8	0,787620	1,97801	-4,03090
3,0	0,677077	2,11025	-4,07414
3,2	0,580766	2,24198	-4,10958
3,4	0,496136	2,37325	-4,13827
3,6	0,421212	2,50411	-4,16106
3,8	0,354434	2,63458	-4,17866
4,0	0,294558	2,76469	-4,19164
4,2	0,240580	2,89449	-4,20051
4,4	0,191679	3,02399	-4,20566
4,6	0,147179	3,15323	-4,20747
4,8	0,106517	3,28221	-4,20624
5,0	0,069223	3,41097	-4,20223
5,2	0,034899	3,53951	-4,19569
5,4	0,003208	3,66786	-4,18682
5,6	-0,026139	3,79603	-4,17581
5,8	-0,053392	3,92404	-4,16281
6,0	-0,078765	4,05188	-4,14799
6,2	-0,102443	4,17959	-4,13146
6,4	-0,124590	4,30716	-4,11336
6,6	-0,145349	4,43460	-4,09378
6,8	-0,164845	4,56193	-4,07284
7,0	-0,183189	4,68915	-4,05061
7,2	-0,200480	4,81627	-4,02719
7,4	-0,216805	4,94329	-4,00264
7,6	-0,232243	5,07022	-3,97703

R	W	P	λ
7,8	-0,246863	5,19707	-3,95044
8,0	-0,260729	5,32385	-3,92291
8,2	-0,273897	5,45054	-3,89450
8,4	-0,286418	5,57717	-3,86527
8,6	-0,298339	5,70373	-3,83525
8,8	-0,309701	5,83023	-3,80449
9,0	-0,320543	5,95667	-3,77303
9,2	-0,330899	6,08306	-3,74091
9,4	-0,340801	6,20940	-3,70816
9,6	-0,350279	6,33568	-3,67482
9,8	-0,359358	6,46192	-3,64090
10,0	-0,368064	6,58811	-3,60645
10,2	-0,376419	6,71426	-3,57149
10,4	-0,384444	6,84037	-3,53603
10,6	-0,392157	6,96645	-3,50012
10,8	-0,399577	7,09248	-3,46376
11,0	-0,406720	7,21849	-3,42698
11,2	-0,413601	7,34446	-3,38979
11,4	-0,420234	7,47039	-3,35221
11,6	-0,426632	7,59630	-3,31428
11,8	-0,432808	7,72218	-3,27598
12,0	-0,438773	7,84804	-3,23735
12,2	-0,444537	7,97386	-3,19840
12,4	-0,450111	8,09966	-3,15913
12,6	-0,455503	8,22544	-3,11957
12,8	-0,460724	8,35120	-3,07972
13,0	-0,465779	8,47693	-3,03960
13,2	-0,470678	8,60264	-2,99921
13,4	-0,475427	8,72833	-2,95857
13,6	-0,480033	8,85401	-2,91769
13,8	-0,484503	8,97966	-2,87658
14,0	-0,488842	9,10530	-2,83524
14,2	-0,493056	9,23092	-2,79368
14,4	-0,497150	9,35652	-2,75191
14,6	-0,501130	9,48211	-2,70995
14,8	-0,505000	9,60768	-2,66779
15,0	-0,508764	9,73324	-2,62544

Z=5

4pσ [4'2'1'0]

R	W	P	λ
15,2	-0,512427	9,85878	-2,58291
15,4	-0,515993	9,98431	-2,54020
15,6	-0,519466	10,1098	-2,49733
15,8	-0,522850	10,2353	-2,45430
16,0	-0,526146	10,3608	-2,41111
16,2	-0,529360	10,4863	-2,36776
16,4	-0,532494	10,6118	-2,32427
16,6	-0,535551	10,7372	-2,28064
16,8	-0,538534	10,8627	-2,23687
17,0	-0,541445	10,9881	-2,19296
17,2	-0,544287	11,1135	-2,14893
17,4	-0,547062	11,2390	-2,10477
17,6	-0,549774	11,3644	-2,06049
17,8	-0,552424	11,4898	-2,01609
18,0	-0,555013	11,6152	-1,97158
18,2	-0,557544	11,7405	-1,92696
18,4	-0,560020	11,8659	-1,88223
18,6	-0,562441	11,9913	-1,83740
18,8	-0,564810	12,1166	-1,79246
19,0	-0,567128	12,2420	-1,74743
19,2	-0,569397	12,3673	-1,70230
19,4	-0,571618	12,4927	-1,65708
19,6	-0,573794	12,6180	-1,61177
19,8	-0,575924	12,7433	-1,56637
20,0	-0,578012	12,8687	-1,52089
20,2	-0,580057	12,9940	-1,47532
20,4	-0,582062	13,1193	-1,42967
20,6	-0,584027	13,2446	-1,38395
20,8	-0,585953	13,3699	-1,33814
21,0	-0,587842	13,4952	-1,29227
21,2	-0,589696	13,6204	-1,24632
21,4	-0,591514	13,7457	-1,20030
21,6	-0,593297	13,8710	-1,15421
21,8	-0,595048	13,9963	-1,10806
22,0	-0,596766	14,1215	-1,06184
22,2	-0,598453	14,2468	-1,01555
22,4	-0,600109	14,3720	-0,969206
22,6	-0,601736	14,4972	-0,922799

R	W	P	λ
22,8	-0,603333	14,6225	-0,876334
23,0	-0,604903	14,7478	-0,829811
23,2	-0,606445	14,8730	-0,783231
23,4	-0,607960	14,9982	-0,736597
23,6	-0,609449	15,1235	-0,689909
23,8	-0,610913	15,2487	-0,643169
24,0	-0,612352	15,3739	-0,596378
24,2	-0,613767	15,4991	-0,549537
24,4	-0,615158	15,6243	-0,502647
24,6	-0,616526	15,7496	-0,455710
24,8	-0,617873	15,8748	-0,408726
25,0	-0,619197	16,0000	-0,361696
25,2	-0,620500	16,1252	-0,314622
25,4	-0,621782	16,2504	-0,267505
25,6	-0,623044	16,3756	-0,220345
25,8	-0,624286	16,5008	-0,173143
26,0	-0,625509	16,6259	-0,125901
26,2	-0,626713	16,7511	-0,078619
26,4	-0,627898	16,8763	-0,031297
26,6	-0,629065	17,0015	-0,016062
26,8	-0,630215	17,1267	0,063459
27,0	-0,631347	17,2518	0,110892
27,2	-0,632463	17,3770	0,158361
27,4	-0,633562	17,5022	0,205865
27,6	-0,634645	17,6274	0,253404
27,8	-0,635712	17,7525	0,300976
28,0	-0,636764	17,8777	0,348581
28,2	-0,637801	18,0028	0,396218
28,4	-0,638822	18,1280	0,443887
28,6	-0,639830	18,2532	0,491587
28,8	-0,640823	18,3783	0,539318
29,0	-0,641803	18,5035	0,587078
29,2	-0,642769	18,6286	0,634868
29,4	-0,643721	18,7538	0,682686
29,6	-0,644661	18,8789	0,730532
29,8	-0,645587	19,0040	0,778406
30,0	-0,646502	19,1292	0,826307

Z = 5

4dσ [4'1'2'0]

R	W	P	λ
0,2	23,8728	0,150146	-6,0260I
0,4	11,3656	0,301247	-6,10468
0,6	7,18535	0,454573	-6,23784
0,8	5,08104	0,611611	-6,42796
1,0	3,80485	0,773029	-6,67680
1,2	2,94645	0,937313	-6,9834I
1,4	2,33397	1,10123	-7,3431I
1,6	1,88085	1,26195	-7,74885
1,8	1,53644	1,41808	-8,19313
2,0	1,26849	1,56940	-8,66884
2,2	1,05563	1,7162I	-9,16959
2,4	0,883337	1,85903	-9,68974
2,6	0,741519	1,99842	-10,2244
2,8	0,623015	2,13490	-10,7693
3,0	0,522637	2,26895	-11,3209
3,2	0,436557	2,4010I	-11,8761
3,4	0,361907	2,53144	-12,4325
3,6	0,296506	2,66057	-12,9879
3,8	0,238675	2,78869	-13,5407
4,0	0,187110	2,9160I	-14,0898
4,2	0,140788	3,04274	-14,634I
4,4	0,098899	3,16902	-15,1733
4,6	0,060796	3,29496	-15,7070
4,8	0,025957	3,42067	-16,2353
5,0	-0,006041	3,54620	-16,758I
5,2	-0,035549	3,67160	-17,2759
5,4	-0,062856	3,79690	-17,7889
5,6	-0,088208	3,92213	-18,2974
5,8	-0,111811	4,04730	-18,8017
6,0	-0,133843	4,17243	-19,3023
6,2	-0,154459	4,29752	-19,7994
6,4	-0,173790	4,42258	-20,2933
6,6	-0,191955	4,54761	-20,7843
6,8	-0,209057	4,67262	-21,2727
7,0	-0,225185	4,79761	-21,7587
7,2	-0,240422	4,92258	-22,2425
7,4	-0,254840	5,04753	-22,7243
7,6	-0,268503	5,17246	-23,2042

R	W	P	λ
7,8	-0,281468	5,29738	-23,6824
8,0	-0,293789	5,42229	-24,1590
8,2	-0,305512	5,54719	-24,6342
8,4	-0,316681	5,67208	-25,108I
8,6	-0,327332	5,79696	-25,5807
8,8	-0,337503	5,92183	-26,0522
9,0	-0,347224	6,04670	-26,5226
9,2	-0,356526	6,17156	-26,9920
9,4	-0,365434	6,29642	-27,4604
9,6	-0,373973	6,42127	-27,9280
9,8	-0,382167	6,54612	-28,3948
10,0	-0,390035	6,67096	-28,8609
10,2	-0,397597	6,79581	-29,3262
10,4	-0,404870	6,92065	-29,7908
10,6	-0,411870	7,04549	-30,2549
10,8	-0,418614	7,17032	-30,7183
11,0	-0,425114	7,29516	-31,1812
11,2	-0,431384	7,42000	-31,6436
11,4	-0,437436	7,54484	-32,1055
11,6	-0,443280	7,66967	-32,5669
11,8	-0,448929	7,79451	-33,0278
12,0	-0,454390	7,91935	-33,4884
12,2	-0,459674	8,04419	-33,9486
12,4	-0,464789	8,16903	-34,4084
12,6	-0,469743	8,29387	-34,8678
12,8	-0,474544	8,41871	-35,3269
13,0	-0,479198	8,54355	-35,7857
13,2	-0,483713	8,66839	-36,2442
13,4	-0,488094	8,79324	-36,7024
13,6	-0,492347	8,91808	-37,1603
13,8	-0,496478	9,04293	-37,6180
14,0	-0,500492	9,16778	-38,0754
14,2	-0,504394	9,29263	-38,5325
14,4	-0,508189	9,41748	-38,9895
14,6	-0,511880	9,54234	-39,4462
14,8	-0,515473	9,66719	-39,9028
15,0	-0,518971	9,79205	-40,359I

Z = 5

4dσ [4'1'2'0]

R	W	P	λ
15,2	-0,522378	9,9169I	-40,8152
15,4	-0,525697	10,0418	-41,2712
15,6	-0,52893I	10,1666	-41,7270
15,8	-0,532085	10,2915	-42,1826
16,0	-0,535161	10,4164	-42,6380
16,2	-0,538161	10,5412	-43,0933
16,4	-0,541089	10,666I	-43,5485
16,6	-0,543946	10,7910	-44,0035
16,8	-0,546737	10,9158	-44,4584
17,0	-0,549462	11,0407	-44,9132
17,2	-0,552125	11,1656	-45,3678
17,4	-0,554727	11,2905	-45,8223
17,6	-0,557270	11,4153	-46,2767
17,8	-0,559757	11,5402	-46,7310
18,0	-0,562189	11,665I	-47,1851
18,2	-0,564568	11,7900	-47,6392
18,4	-0,566896	11,9149	-48,0932
18,6	-0,569174	12,0398	-48,5470
18,8	-0,571404	12,1646	-49,0008
19,0	-0,573588	12,2895	-49,4545
19,2	-0,575726	12,4144	-49,9081
19,4	-0,577821	12,5393	-50,3616
19,6	-0,579874	12,6642	-50,8151
19,8	-0,581885	12,789I	-51,2684
20,0	-0,583857	12,9140	-51,7217
20,2	-0,585790	13,0389	-52,1749
20,4	-0,587685	13,1638	-52,6281
20,6	-0,589544	13,2887	-53,081I
20,8	-0,591367	13,4136	-53,534I
21,0	-0,593156	13,5385	-53,987I
21,2	-0,594912	13,6634	-54,4399
21,4	-0,596634	13,7883	-54,8928
21,6	-0,598326	13,9132	-55,3455
21,8	-0,599986	14,0381	-55,7982
22,0	-0,601617	14,1630	-56,2509
22,2	-0,603219	14,2879	-56,7035
22,4	-0,604792	14,4128	-57,1560
22,6	-0,606337	14,5378	-57,6085

R	W	P	λ
22,8	-0,607856	14,6627	-58,0609
23,0	-0,609349	14,7876	-58,5133
23,2	-0,610816	14,9125	-58,9657
23,4	-0,612258	15,0374	-59,4180
23,6	-0,613676	15,1623	-59,8702
23,8	-0,615070	15,2873	-60,3224
24,0	-0,616444I	15,4122	-60,7746
24,2	-0,617790	15,5371	-61,2268
24,4	-0,619117	15,6620	-61,6789
24,6	-0,620422	15,7869	-62,1309
24,8	-0,621707	15,9119	-62,5829
25,0	-0,622971	16,0368	-63,0349
25,2	-0,624215	16,1617	-63,4869
25,4	-0,625440	16,2866	-63,9388
25,6	-0,626646	16,4116	-64,3907
25,8	-0,627833	16,5365	-64,8425
26,0	-0,629002	16,6614	-65,2943
26,2	-0,630154	16,7863	-65,7461
26,4	-0,631288	16,9113	-66,1979
26,6	-0,632405	17,0362	-66,6496
26,8	-0,633506	17,161I	-67,1013
27,0	-0,634591	17,286I	-67,5530
27,2	-0,635659	17,4110	-68,0046
27,4	-0,636713	17,5359	-68,4562
27,6	-0,637751	17,6609	-68,9078
27,8	-0,638774	17,7858	-69,3594
28,0	-0,639783	17,9107	-69,8109
28,2	-0,640777	18,0357	-70,2624
28,4	-0,641758	18,1606	-70,7139
28,6	-0,642725	18,2856	-71,1654
28,8	-0,643679	18,4105	-71,6169
29,0	-0,644619	18,5354	-72,0683
29,2	-0,645547	18,6604	-72,5197
29,4	-0,646463	18,7853	-72,971I
29,6	-0,647366	18,9103	-73,4224
29,8	-0,648257	19,0352	-73,8738
30,0	-0,649136	19,1601	-74,325I

Z=5

4f6 [4'0'3'0]

R	W	P	λ	R	W	P	λ
0,2	23,8743	0,150048	-12,0181	7,8	-0,520340	5,94380	-38,2807
0,4	11,3721	0,300386	-12,0725	8,0	-0,519337	6,05135	-39,2954
0,6	7,20171	0,451322	-12,1635	8,2	-0,518249	6,15821	-40,3109
0,8	5,11294	0,603209	-12,2913	8,4	-0,517116	6,26449	-41,3269
1,0	3,85550	0,756471	-12,4566	8,6	-0,515971	6,37029	-42,3430
1,2	3,01235	0,911652	-12,6604	8,8	-0,514837	6,47568	-43,3592
1,4	2,40435	1,06946	-12,9038	9,0	-0,513732	6,58074	-44,3753
1,6	1,94157	1,23077	-13,1888	9,2	-0,512671	6,68553	-45,3912
1,8	1,57375	1,39661	-13,5179	9,4	-0,511663	6,79009	-46,4068
2,0	1,27075	1,56796	-13,8940	9,6	-0,510714	6,89447	-47,4219
2,2	1,01386	1,74541	-14,3201	9,8	-0,509828	6,99871	-48,4365
2,4	0,791541	1,92882	-14,7980	10,0	-0,509006	7,10284	-49,4507
2,6	0,596946	2,11715	-15,3278	10,2	-0,508249	7,20688	-50,4642
2,8	0,426027	2,30867	-15,9075	10,4	-0,507555	7,31085	-51,4772
3,0	0,276210	2,50141	-16,5333	10,6	-0,506921	7,41477	-52,4896
3,2	0,145482	2,69353	-17,2008	10,8	-0,506346	7,51865	-53,5015
3,4	0,032006	2,88358	-17,9053	11,0	-0,505826	7,62250	-54,5127
3,6	-0,065985	3,07044	-18,6426	11,2	-0,505357	7,72632	-55,5234
3,8	-0,150168	3,25334	-19,4092	11,4	-0,504938	7,83012	-56,5335
4,0	-0,222081	3,43171	-20,2023	11,6	-0,504566	7,93393	-57,5431
4,2	-0,283093	3,60512	-21,0197	11,8	-0,504239	8,03773	-58,5521
4,4	-0,334400	3,77319	-21,8598	12,0	-0,503956	8,14155	-59,5606
4,6	-0,377053	3,93563	-22,7217	12,2	-0,503726	8,24544	-60,5683
4,8	-0,412002	4,09222	-23,6043	12,4	-0,503558	8,34947	-61,5752
5,0	-0,440153	4,24287	-24,5066	12,6	-0,503512	8,45392	-62,5805
5,2	-0,462406	4,38768	-25,4274	12,8	-0,503760	8,55968	-63,5818
5,4	-0,479663	4,52697	-26,3649	13,0	-0,504947	8,66995	-64,5704
5,6	-0,492777	4,66120	-27,3171	13,2	-0,507554	8,78738	-65,5394
5,8	-0,502547	4,79091	-28,2820	13,4	-0,510730	8,90805	-66,4996
6,0	-0,509663	4,91670	-29,2573	13,6	-0,514023	9,02977	-67,4569
6,2	-0,514714	5,03913	-30,2414	13,8	-0,517295	9,15188	-68,4131
6,4	-0,518160	5,15867	-31,2325	14,0	-0,520522	9,27422	-69,3687
6,6	-0,520374	5,27577	-32,2293	14,2	-0,523694	9,39674	-70,3238
6,8	-0,521648	5,39078	-33,2308	14,4	-0,526802	9,51939	-71,2785
7,0	-0,522212	5,50402	-34,2360	14,6	-0,529849	9,64216	-72,2329
7,2	-0,522233	5,61573	-35,2441	14,8	-0,532832	9,76503	-73,1870
7,4	-0,521866	5,72614	-36,2546	15,0	-0,535744	9,88793	-74,1411
7,6	-0,521205	5,83544	-37,2670				

Z=5

4f6 [4'0'3'0]

R	W	P	λ	R	W	P	λ
15,2	-0,538600	10,0110	-75,0948	22,8	-0,614010	14,7171	-111,262
15,4	-0,541401	10,1341	-76,0483	23,0	-0,615383	14,8415	-112,213
15,6	-0,544138	10,2572	-77,0016	23,2	-0,616732	14,9658	-113,163
15,8	-0,546818	10,3805	-77,9548	23,4	-0,618058	15,0901	-114,114
16,0	-0,549444	10,5038	-78,9078	23,6	-0,619363	15,2145	-115,065
16,2	-0,552009	10,6271	-79,8608	23,8	-0,620646	15,3388	-116,016
16,4	-0,554528	10,7505	-80,8135	24,0	-0,621918	15,4633	-116,966
16,6	-0,556989	10,8739	-81,7662	24,2	-0,623159	15,5876	-117,917
16,8	-0,559407	10,9974	-82,7186	24,4	-0,624386	15,7120	-118,868
17,0	-0,561773	11,1210	-83,6710	24,6	-0,625593	15,8364	-119,818
17,2	-0,564094	11,2446	-84,6233	24,8	-0,626781	15,9608	-120,769
17,4	-0,566363	11,3682	-85,5755	25,0	-0,627954	16,0853	-121,720
17,6	-0,568586	11,4918	-86,5277	25,2	-0,629110	16,2097	-122,670
17,8	-0,570774	11,6156	-87,4796	25,4	-0,630248	16,3342	-123,621
18,0	-0,572914	11,7393	-88,4316	25,6	-0,631369	16,4586	-124,571
18,2	-0,575009	11,8631	-89,3835	25,8	-0,632475	16,5831	-125,522
18,4	-0,577069	11,9869	-90,3353	26,0	-0,633564	16,7076	-126,472
18,6	-0,579088	12,1108	-91,2871	26,2	-0,634638	16,8321	-127,423
18,8	-0,581070	12,2347	-92,2386	26,4	-0,635689	16,9566	-128,373
19,0	-0,583011	12,3585	-93,1902	26,6	-0,636743	17,0812	-129,324
19,2	-0,584923	12,4825	-94,1417	26,8	-0,637759	17,2056	-130,274
19,4	-0,586793	12,6065	-95,0932	27,0	-0,638777	17,3301	-131,225
19,6	-0,588631	12,7304	-96,0446	27,2	-0,639779	17,4547	-132,175
19,8	-0,590431	12,8544	-96,9961	27,4	-0,640767	17,5793	-133,125
20,0	-0,592205	12,9785	-97,9473	27,6	-0,641737	17,7038	-134,076
20,2	-0,593948	13,1026	-98,8986	27,8	-0,642698	17,8284	-135,026
20,4	-0,595654	13,2266	-99,8499	28,0	-0,643641	17,9529	-135,977
20,6	-0,597335	13,3507	-100,8011	28,2	-0,644571	18,0775	-136,927
20,8	-0,598983	13,4749	-101,752	28,4	-0,645494	18,2021	-137,878
21,0	-0,600603	13,5990	-102,703	28,6	-0,646404	18,3267	-138,828
21,2	-0,602197	13,7232	-103,654	28,8	-0,647301	18,4513	-139,778
21,4	-0,603761	13,8474	-104,605	29,0	-0,648192	18,5759	-140,728
21,6	-0,605297	13,9715	-105,556	29,2	-0,649059	18,7004	-141,679
21,8	-0,606815	14,0958	-106,507	29,4	-0,649923	18,8251	-142,629
22,0	-0,608299	14,2200	-107,458	29,6	-0,650771	18,9497	-143,580
22,2	-0,609765	14,3443	-108,409	29,8	-0,651618	19,0744	-144,530
22,4	-0,611205	14,4686	-109,360	30,0	-0,652453	19,1991	-145,480
22,6	-0,612619	14,5928	-110,311				

Z=5

5g₆ [5'0'4'0]

R	W	P	λ
0,2	24,2799	0,1200I4	-20,01I3
0,4	11,7793	0,2401II	-20,045I
0,6	7,61I82	0,360377	-20,10I5
0,8	5,52730	0,480900	-20,1805
1,0	4,27574	0,601772	-20,2824
1,2	3,44046	0,723095	-20,4072
1,4	2,84287	0,844980	-20,5552
1,6	2,39363	0,967550	-20,7267
1,8	2,04310	1,09095	-20,92I9
2,0	1,76147	1,21535	-21,14I3
2,2	1,52970	1,34094	-21,3854
2,4	1,33508	1,46798	-21,6549
2,6	1,16874	1,59677	-21,9507
2,8	1,02430	1,72764	-22,2739
3,0	0,897024	1,86102	-22,6258
3,2	0,783317	1,99735	-23,008I
3,4	0,680426	2,13709	-23,4227
3,6	0,586247	2,28060	-23,8714
3,8	0,499226	2,42808	-24,356I
4,0	0,418276	2,57949	-24,878I
4,2	0,342709	2,73447	-25,4378
4,4	0,272I38	2,89235	-26,0350
4,6	0,206372	3,0523I	-26,668I
4,8	0,1453I2	3,2I34I	-27,3352
5,0	0,08887I5	3,37478	-28,0337
5,2	0,0369379	3,53562	-28,7610
5,4	-0,0106497	3,69530	-29,5143
5,6	-0,0540978	3,85334	-30,2910
5,8	-0,0936486	4,00939	-31,0889
6,0	-0,129567	4,16320	-31,9057
6,2	-0,162I30	4,31464	-32,7395
6,4	-0,191614	4,46366	-33,5885
6,6	-0,2I829I	4,61025	-34,45II
6,8	-0,242420	4,75445	-35,3260
7,0	-0,264248	4,89633	-36,21I9
7,2	-0,284005	5,0360I	-37,1076
7,4	-0,30I902	5,17359	-38,012I
7,6	-0,318134	5,3092I	-38,9244

R	W	P	λ
7,8	-0,33288I	5,44300	-39,8437
8,0	-0,346304	5,57510	-40,7693
8,2	-0,358552	5,70566	-41,7002
8,4	-0,369758	5,8348I	-42,6360
8,6	-0,380038	5,96270	-43,5760
8,8	-0,389504	6,08947	-44,5197
9,0	-0,398252	6,21524	-45,4664
9,2	-0,406367	6,34015	-46,4158
9,4	-0,413928	6,4643I	-47,3674
9,6	-0,42100I	6,58785	-48,3209
9,8	-0,427647	6,71086	-49,2758
10,0	-0,433918	6,83344	-50,2319
10,2	-0,439859	6,95568	-51,1889
10,4	-0,445510	7,07765	-52,1465
10,6	-0,450904	7,19943	-53,1046
10,8	-0,45607I	7,32107	-54,0630
11,0	-0,461034	7,44262	-55,0216
11,2	-0,465814	7,56412	-55,980I
11,4	-0,470427	7,68559	-56,9387
11,6	-0,474887	7,80707	-57,8972
11,8	-0,479203	7,92856	-58,8555
12,0	-0,483385	8,05007	-59,8137
12,2	-0,487425	8,17154	-60,7720
12,4	-0,491319	8,29292	-61,7304
12,6	-0,495013	8,41393	-62,6898
12,8	-0,498346	8,53373	-63,6524
13,0	-0,500670	8,64908	-64,6270
13,2	-0,50149I	8,75728	-65,6028
13,4	-0,501669	8,86227	-66,6230
13,6	-0,50167I	8,96630	-67,6273
13,8	-0,50162I	9,06997	-68,6323
14,0	-0,501556	9,17346	-69,6374
14,2	-0,50148I	9,27682	-70,6425
14,4	-0,501403	9,38006	-71,6477
14,6	-0,501326	9,4832I	-72,6527
14,8	-0,501258	9,58633	-73,6575
15,0	-0,50119I	9,68938	-74,6623

Z=5

5g₆ [5'0'4'0]

R	W	P	λ
15,2	-0,50113I	9,79238	-75,6669
15,4	-0,501065	9,89527	-76,6714
15,6	-0,501009	9,99814	-77,6758
15,8	-0,500959	10,1010	-78,680I
16,0	-0,500910	10,2037	-79,6842
16,2	-0,500866	10,3065	-80,6882
16,4	-0,500823	10,4092	-81,692I
16,6	-0,500782	10,5118	-82,6960
16,8	-0,500741	10,6144	-83,6998
17,0	-0,500708	10,7169	-84,7034
17,2	-0,500674	10,8194	-85,7069
17,4	-0,500640	10,9219	-86,7104
17,6	-0,500611	11,0243	-87,7139
17,8	-0,500582	11,1266	-88,717I
18,0	-0,500563	11,2290	-89,7202
18,2	-0,500536	11,3313	-90,7234
18,4	-0,500512	11,4336	-91,7265
18,6	-0,500486	11,5358	-92,7295
18,8	-0,500467	11,6380	-93,7324
19,0	-0,500447	11,740I	-94,7353
19,2	-0,500430	11,8423	-95,738I
19,4	-0,500414	11,9444	-96,7408
19,6	-0,50039I	12,0464	-97,7436
19,8	-0,500373	12,1484	-98,7463
20,0	-0,500367	12,2504	-99,7487
20,2	-0,500348	12,3524	-100,75I
20,4	-0,500339	12,4543	-101,754
20,6	-0,500320	12,5562	-102,756
20,8	-0,5003I3	12,658I	-103,759
21,0	-0,500290	12,7599	-104,76I
21,2	-0,500289	12,8618	-105,763
21,4	-0,500279	12,9636	-106,765
21,6	-0,500272	13,0653	-107,768
21,8	-0,500260	13,167I	-108,770
22,0	-0,500253	13,2688	-109,772
22,2	-0,500238	13,3704	-110,774
22,4	-0,500228	13,472I	-111,776
22,6	-0,500224	13,5738	-112,778

R	W	P	λ
22,8	-0,500213	13,6754	-113,780
23,0	-0,500210	13,7770	-114,782
23,2	-0,500209	13,8786	-115,784
23,4	-0,500192	13,980I	-116,786
23,6	-0,500179	14,0815	-117,788
23,8	-0,500179	14,183I	-118,789
24,0	-0,50018I	14,2847	-119,79I
24,2	-0,500172	14,386I	-120,793
24,4	-0,500166	14,4876	-121,794
24,6	-0,500172	14,589I	-122,796
24,8	-0,500159	14,6904	-123,798
25,0	-0,500156	14,7918	-124,799
25,2	-0,500158	14,8933	-125,80I
25,4	-0,500135	14,9944	-126,803
25,6	-0,500121	15,0957	-127,805
25,8	-0,500135	15,1972	-128,806
26,0	-0,500128	15,2985	-129,807
26,2	-0,500132	15,3998	-130,808
26,4	-0,500121	15,5010	-131,810
26,6	-0,500123	15,6024	-132,81I
26,8	-0,500117	15,7036	-133,813
27,0	-0,500112	15,8048	-134,814
27,2	-0,500109	15,9060	-135,816
27,4	-0,500098	16,007I	-136,817
27,6	-0,500100	16,1083	-137,818
27,8	-0,500108	16,2096	-138,819
28,0	-0,500117	16,3109	-139,820
28,2	-0,500124	16,4122	-140,82I
28,4	-0,500094	16,5130	-141,823
28,6	-0,500088	16,6140	-142,825
28,8	-0,50010I	16,7153	-143,826
29,0	-0,500092	16,8163	-144,827
29,2	-0,500079	16,9173	-145,829
29,4	-0,500086	17,0184	-146,829
29,6	-0,500088	17,1195	-147,830
29,8	-0,500078	17,2205	-148,832
30,0	-0,500084	17,3216	-149,833

Z=6

1 sσ [1'0'0'0]

R	W	P	λ
0,2	7,83449	0,665815	-0,120332
0,4	9,45493	0,666037	0,305134
0,6	7,51725	0,668502	0,861407
0,8	6,09399	0,670764	1,49000
1,0	5,09509	0,672646	2,16388
1,2	4,36867	0,674211	2,86928
1,4	3,82006	0,675529	3,59828
1,6	3,39229	0,676658	4,34582
1,8	3,04988	0,677637	5,10846
2,0	2,76982	0,678498	5,88374
2,2	2,53661	0,679262	6,66978
2,4	2,33947	0,679946	7,46515
2,6	2,17066	0,680564	8,26872
2,8	2,02451	0,681126	9,07956
3,0	1,89675	0,681639	9,89690
3,2	1,78413	0,682111	10,7201
3,4	1,68411	0,682547	11,5487
3,6	1,59469	0,682951	12,3821
3,8	1,51427	0,683327	13,2200
4,0	1,44157	0,683678	14,0620
4,2	1,37553	0,684007	14,9079
4,4	1,30587	0,68437	15,7573
4,6	1,26005	0,684608	16,6101
4,8	1,20928	0,684883	17,4660
5,0	1,16245	0,685143	18,3247
5,2	1,11910	0,685389	19,1863
5,4	1,07887	0,685624	20,0504
5,6	1,04143	0,685847	20,9170
5,8	1,00650	0,686059	21,7859
6,0	0,973836	0,686262	22,6570
6,2	0,943225	0,686456	23,5302
6,4	0,914479	0,686642	24,4055
6,6	0,887432	0,686820	25,2826
6,8	0,861940	0,686991	26,1615
7,0	0,837870	0,687155	27,0422
7,2	0,815108	0,687313	27,9246
7,4	0,793550	0,687465	28,8085
7,6	0,773102	0,687612	29,6940
7,8	0,753682	0,687753	30,5810
8,0	0,735213	0,687889	31,4694

R	W	P	λ
8,2	0,717627	0,688021	32,3591
8,4	0,700863	0,688148	33,2502
8,6	0,684864	0,688271	34,1426
8,8	0,669580	0,688388	35,0362
9,0	0,654962	0,688500	35,9309
9,2	0,640969	0,688602	36,8269
9,4	0,627563	0,688679	37,7239
9,6	0,614708	0,688659	38,6220
9,8	0,602773	0,674397	39,5247
10,0	0,590536	0,687889	40,4216
10,2	0,578778	0,701373	41,3194
10,4	0,567474	0,714853	42,2182
10,6	0,556596	0,728326	43,1179
10,8	0,546120	0,741793	44,0185
11,0	0,536026	0,755255	44,9200
11,2	0,526293	0,768710	45,8223
11,4	0,516901	0,782161	46,7255
11,6	0,507833	0,795605	47,6294
11,8	0,499073	0,809045	48,5341
12,0	0,490605	0,822479	49,4396
12,2	0,482414	0,835908	50,3458
12,4	0,474488	0,849332	51,2528
12,6	0,466814	0,862750	52,1604
12,8	0,459379	0,876164	53,0687
13,0	0,452173	0,889574	53,9777
13,2	0,445186	0,902978	54,8874
13,4	0,438408	0,916378	55,7977
13,6	0,431829	0,929773	56,7086
13,8	0,425440	0,943163	57,6201
14,0	0,419235	0,956549	58,5323
14,2	0,413204	0,969931	59,4450
14,4	0,407341	0,983309	60,3583
14,6	0,401638	0,996682	61,2721
14,8	0,396090	1,01005	62,1865
15,0	0,390690	1,02342	63,1014
16,0	0,365715	1,09018	67,6837
17,0	0,343680	1,15685	72,2779
18,0	0,324094	1,22343	76,8830
19,0	0,306571	1,28993	81,4980
20,0	0,290802	1,35634	86,1221

Z=6

3 sσ [3'2'0'0]

R	W	P	λ
0,2	27,3706	0,229322	0,124309
0,4	12,4566	0,451080	0,440651
0,6	7,51725	0,668502	0,861407
0,8	6,06335	0,883021	1,33662
1,0	5,09509	1,09537	1,84301
1,2	4,36867	1,30602	2,36912
1,4	3,82006	1,51531	2,90870
1,6	3,39229	1,72349	3,45805
1,8	3,04988	1,93074	4,01476
2,0	2,76982	2,13721	4,57723
2,2	2,53661	2,34302	5,14430
2,4	2,33947	2,54827	5,71511
2,6	2,17066	2,75303	6,28904
2,8	2,02451	2,95738	6,86559
3,0	1,89675	3,16135	7,44436
3,2	1,78413	3,36500	8,02503
3,4	1,68411	3,56837	8,60737
3,6	1,59469	3,77148	9,19115
3,8	1,51427	3,97437	9,77620
4,0	1,44157	4,17705	10,3623
4,2	1,37553	4,37955	10,9495
4,4	1,30587	4,58188	11,5376
4,6	1,26005	4,78407	12,1265
4,8	1,20928	4,98612	12,7160
5,0	1,16245	5,18805	13,3063
5,2	1,11910	5,38987	13,8971
5,4	1,07887	5,59158	14,4885
5,6	1,04143	5,79320	15,0803
5,8	1,00650	5,99474	15,6726
6,0	0,973836	6,19619	16,2654
6,2	0,943225	6,39757	16,8585
6,4	0,914479	6,59888	17,4519
6,6	0,887432	6,80012	18,0457
6,8	0,861940	7,00131	18,6398
7,0	0,837870	7,20244	19,2341
7,2	0,815108	7,40353	19,8288
7,4	0,793550	7,60454	20,4236
7,6	0,773102	7,80555	21,0187
7,8	0,753682	8,00650	21,6140
8,0	0,735213	8,20740	22,2095

R	W	P	λ
8,2	-1,37118	8,40827	22,8052
8,4	-1,38653	8,60911	23,4011
8,6	-1,40115	8,80991	23,9971
8,8	-1,41509	9,01069	24,5933
9,0	-1,42841	9,21143	25,1896
9,2	-1,44113	9,41214	25,7861
9,4	-1,45330	9,61283	26,3827
9,6	-1,46495	9,81350	26,9794
9,8	-1,47611	10,0141	27,5762
10,0	-1,48683	10,2148	28,1732
10,2	-1,49711	10,4154	28,7702
10,4	-1,50699	10,6159	29,3674
10,6	-1,51649	10,8165	29,9646
10,8	-1,52564	11,0170	30,5619
11,0	-1,53444	11,2176	31,1593
11,2	-1,54293	11,4181	31,7568
11,4	-1,55111	11,6189	32,3544
11,6	-1,55900	11,8190	32,9521
11,8	-1,56663	12,0198	33,5498
12,0	-1,57399	12,2200	34,1476
12,2	-1,58111	12,4204	34,7454
12,4	-1,58799	12,6206	35,3433
12,6	-1,59466	12,8212	35,9413
12,8	-1,60111	13,0218	36,5393
13,0	-1,60736	13,2220	37,1374
13,2	-1,61342	13,4224	37,7356
13,4	-1,61929	13,6228	38,3337
13,6	-1,62499	13,8231	38,9320
13,8	-1,63052	14,0235	39,5303
14,0	-1,63589	14,2238	40,1286
14,2	-1,64110	14,4242	40,7270
14,4	-1,64617	14,6245	41,3254
14,6	-1,65110	14,8248	41,9238
14,8	-1,65590	15,0251	42,5223
15,0	-1,66059	15,2254	43,1208
16,0	-1,68210	16,2268	46,1139
17,0	-1,70108	17,2281	49,1078
18,0	-1,71792	18,2292	52,1023
19,0	-1,73297	19,2302	55,0973
20,0	-1,74649	20,2311	58,0928

Z = 6

3 σ [3'1'1'0]

R	W	P	λ
0,2	27,2286	0,235430	-2,II495
0,4	I2,I709	0,475740	-2,402I8
0,6	7,I8927	0,7I1289	-2,77008
0,8	4,75I46	0,937833	-3,I5955
I,0	3,32252	I,I5704	-3,54I04
I,2	2,38849	I,37I24	-3,90205
I,4	I,73I52	I,582I2	-4,23943
I,6	I,24465	I,79077	-4,55472
I,8	0,869580	I,99782	-4,85I26
2,0	0,57I9I4	2,20367	-5,I3256
2,2	0,330036	2,40859	-5,40I68
2,4	0,I29679	2,6I276	-5,66I06
2,6	-0,038957	2,8I632	-5,9I260
2,8	-0,I82825	3,0I938	-6,I5773
3,0	-0,306992	3,22203	-6,39758
3,2	-0,4I5239	3,42433	-6,63300
3,4	-0,5I0439	3,62634	-6,86468
3,6	-0,5948I6	3,828II	-7,093I7
3,8	-0,670I16	4,02967	-7,3I892
4,0	-0,737730	4,23I06	-7,54230
4,2	-0,798779	4,43229	-7,7636I
4,4	-0,854I75	4,63340	-7,983II
4,6	-0,90467I	4,83440	-8,20I00
4,8	-0,950889	5,03530	-8,4I748
5,0	-0,993353	5,236I2	-8,6327I
5,2	-I,03250	5,43686	-8,8468I
5,4	-I,0687I	5,63754	-9,05990
5,6	-I,I0230	5,838I6	-9,27208
5,8	-I,I3354	6,03872	-9,48346
6,0	-I,I6268	6,23925	-9,69409
6,2	-I,I899I	6,43973	-9,90405
6,4	-I,2I543	6,640I8	-I0,I134
6,6	-I,23938	6,84059	-I0,3222
6,8	-I,26I90	7,04098	-I0,5305
7,0	-I,283I4	7,24I33	-I0,7383
7,2	-I,303I8	7,44I67	-I0,9457
7,4	-I,322I3	7,64I98	-II,I527
7,6	-I,34007	7,84227	-II,3593
7,8	-I,35709	8,04255	-II,5656
8,0	-I,37324	8,24280	-II,77I5

R	W	P	λ
8,2	-I,3886I	8,44305	-II,9772
8,4	-I,40324	8,64327	-I2,I826
8,6	-I,4I7I8	8,84349	-I2,3878
8,8	-I,43048	9,04369	-I2,5927
9,0	-I,443I9	9,24388	-I2,7974
9,2	-I,45535	9,44406	-I3,00I9
9,4	-I,46698	9,64424	-I3,2062
9,6	-I,478I2	9,84440	-I3,4I03
9,8	-I,48882	10,0446	-I3,6I43
10,0	-I,49908	10,2447	-I3,8I80
10,2	-I,50893	10,4448	-I4,02I7
10,4	-I,5I84I	10,6450	-I4,2252
10,6	-I,52752	10,845I	-I4,4286
10,8	-I,53630	II,0452	-I4,63I8
II,0	-I,54476	II,2453	-I4,8350
II,2	-I,5529I	II,4455	-I5,0380
II,4	-I,56077	II,6456	-I5,2409
II,6	-I,56837	II,8457	-I5,4437
II,8	-I,57570	I2,0458	-I5,6464
I2,0	-I,58279	I2,2459	-I5,8490
I2,2	-I,58965	I2,4459	-I6,05I6
I2,4	-I,59628	I2,6460	-I6,2540
I2,6	-I,6027I	I2,846I	-I6,4564
I2,8	-I,60892	I3,0462	-I6,6587
I3,0	-I,6I496	I3,2463	-I6,8609
I3,2	-I,62080	I3,4463	-I7,0630
I3,4	-I,62647	I3,6464	-I7,265I
I3,6	-I,63I98	I3,8465	-I7,4672
I3,8	-I,63732	I4,0466	-I7,669I
I4,0	-I,6425I	I4,2466	-I7,87I0
I4,2	-I,64756	I4,4467	-I8,0729
I4,4	-I,65246	I4,6467	-I8,2747
I4,6	-I,65723	I4,8468	-I8,4765
I4,8	-I,66I87	I5,0469	-I8,6782
I5,0	-I,66639	I5,2469	-I8,8798
I6,0	-I,68727	I6,2472	-I9,8875
I7,0	-I,70569	I7,2474	-20,8942
I8,0	-I,72206	I8,2476	-2I,9002
I9,0	-I,73670	I9,2477	-22,9056
20,0	-I,74988	20,2479	-23,9I04

Z = 6

3 σ [3'0'2'0]

R	W	P	λ
0,2	27,2692	0,233699	-6,04983
0,4	I2,2408	0,469826	-6,20057
0,6	7,I8579	0,7I1729	-6,456I4
0,8	4,60097	0,963I67	-6,82307
I,0	2,99807	I,225I4	-7,30742
I,2	I,90473	I,49285	-7,90890
I,4	I,I3227	I,75795	-8,6I8I6
I,6	0,582854	2,0I344	-9,4I99I
I,8	0,I920I9	2,25587	-I0,297I
2,0	-0,086972	2,48474	-II,2333
2,2	-0,2880I3	2,70I29	-I2,2I44
2,4	-0,435II2	2,90743	-I3,2286
2,6	-0,544992	3,I05I7	-I4,2663
2,8	-0,629256	3,29647	-I5,3202
3,0	-0,6960I3	3,483II	-I6,3839
3,2	-0,750997	3,66676	-I7,4523
3,4	-0,798284	3,8489I	-I8,5209
3,6	-0,840725	4,03087	-I9,586I
3,8	-0,8802I4	4,2I369	-20,6454
4,0	-0,9I7873	4,39807	-2I,697I
4,2	-0,954237	4,58436	-22,7409
4,4	-0,989457	4,77262	-23,777I
4,6	-I,02348	4,96270	-24,8067
4,8	-I,056I8	5,I5433	-25,8309
5,0	-I,08745	5,34725	-26,8506
5,2	-I,II723	5,54I2I	-27,8669
5,4	-I,I455I	5,73599	-28,8804
5,6	-I,I723I	5,93I43	-29,89I8
5,8	-I,I9769	6,I2740	-30,90I5
6,0	-I,22I70	6,3238I	-3I,9099
6,2	-I,24443	6,52058	-32,9I72
6,4	-I,26596	6,7I765	-33,9236
6,6	-I,28635	6,9I497	-34,9292
6,8	-I,30570	7,I125I	-35,9342
7,0	-I,32407	7,3I024	-36,9387
7,2	-I,34I52	7,508I4	-37,9427
7,4	-I,358I2	7,706I9	-38,9464
7,6	-I,37393	7,90437	-39,9497
7,8	-I,38900	8,I0267	-40,9526
8,0	-I,40337	8,30I08	-4I,9554

R	W	P	λ
8,2	-I,4I7I0	8,49958	-42,9579
8,4	-I,43022	8,698I7	-43,9602
8,6	-I,44277	8,89684	-44,9623
8,8	-I,45479	9,09558	-45,9642
9,0	-I,4663I	9,29439	-46,9660
9,2	-I,47736	9,49326	-47,9677
9,4	-I,48797	9,692I9	-48,9692
9,6	-I,498I6	9,89I17	-49,9707
9,8	-I,50796	10,0902	-50,9720
10,0	-I,5I738	10,2893	-5I,9732
10,2	-I,52646	10,4884	-52,9744
10,4	-I,53520	10,6875	-53,9755
10,6	-I,54363	10,8867	-54,9765
10,8	-I,55I76	II,0860	-55,9775
II,0	-I,5596I	II,2852	-56,9784
II,2	-I,567I9	II,4845	-57,9792
II,4	-I,5745I	II,6838	-58,9800
II,6	-I,58I59	II,8832	-59,9808
II,8	-I,58845	I2,0825	-60,98I5
I2,0	-I,59508	I2,28I9	-6I,9822
I2,2	-I,60I50	I2,48I3	-62,9828
I2,4	-I,60773	I2,6808	-63,9834
I2,6	-I,6I376	I2,8802	-64,9840
I2,8	-I,6I962	I3,0797	-65,9845
I3,0	-I,62529	I3,2792	-66,9850
I3,2	-I,6308I	I3,4787	-67,9855
I3,4	-I,636I6	I3,6782	-68,9860
I3,6	-I,64I36	I3,8778	-69,9864
I3,8	-I,6464I	I4,0773	-70,9869
I4,0	-I,65I33	I4,2769	-7I,9873
I4,2	-I,656II	I4,4765	-72,9876
I4,4	-I,66076	I4,676I	-73,9880
I4,6	-I,66529	I4,8757	-74,9884
I4,8	-I,66970	I5,0753	-75,9887
I5,0	-I,67399	I5,2750	-76,9890
I6,0	-I,67930	I6,2733	-8I,9905
I7,0	-I,7II52	I7,27I8	-86,99I6
I8,0	-I,72723	I8,2705	-9I,9926
I9,0	-I,74I3I	I9,2693	-96,9934
20,0	-I,75402	20,2683	-I0I,994

Z=6

4dδ [4'1'2'0]

R	W	P	λ	R	W	P	λ
0,2	28,4651	0,175207	-6,03853	7,8	-0,495429	6,20250	-25,9598
0,4	I3,4530	0,351796	-6,15561	8,0	-0,511013	6,35235	-26,4768
0,6	8,42973	0,531647	-6,35489	8,2	-0,525838	6,50220	-26,9929
0,8	5,89609	0,716415	-6,63950	8,4	-0,539959	6,65205	-27,5081
1,0	4,36137	0,905159	-7,00781	8,6	-0,553426	6,80189	-28,0224
1,2	3,33844	1,09377	-7,45076	8,8	-0,566283	6,95172	-28,5361
1,4	2,61849	1,27823	-7,95435	9,0	-0,578570	7,10156	-29,0490
1,6	2,09188	1,45684	-8,50373	9,2	-0,590326	7,25139	-29,5613
1,8	1,69401	1,62963	-9,08580	9,4	-0,601584	7,40122	-30,0730
2,0	1,38477	1,79735	-9,68968	9,6	-0,612375	7,55104	-30,5842
2,2	1,13838	1,96090	-10,3067	9,8	-0,622728	7,70087	-31,0948
2,4	0,937757	2,12115	-10,9299	10,0	-0,632669	7,85070	-31,6049
2,6	0,771282	2,27883	-11,5542	10,2	-0,642222	8,00052	-32,1145
2,8	0,630835	2,43457	-12,1756	10,4	-0,651410	8,15035	-32,6238
3,0	0,510626	2,58886	-12,7917	10,6	-0,660253	8,30018	-33,1326
3,2	0,406443	2,74208	-13,4007	10,8	-0,668770	8,45001	-33,6411
3,4	0,315173	2,89453	-14,0019	11,0	-0,676980	8,59984	-34,1491
3,6	0,234471	3,04641	-14,5947	11,2	-0,684898	8,74967	-34,6570
3,8	0,162540	3,19788	-15,1799	11,4	-0,692540	8,89951	-35,1644
4,0	0,097984	3,34905	-15,7575	11,6	-0,699920	9,04934	-35,6716
4,2	0,039698	3,49998	-16,3281	11,8	-0,707052	9,19918	-36,1784
4,4	-0,013205	3,65073	-16,8925	12,0	-0,713947	9,34902	-36,6850
4,6	-0,061450	3,80133	-17,4512	12,2	-0,720618	9,49886	-37,1914
4,8	-0,105631	3,95182	-18,0048	12,4	-0,727075	9,64871	-37,6975
5,0	-0,146246	4,10220	-18,5540	12,6	-0,733328	9,79855	-38,2034
5,2	-0,183713	4,25251	-19,0991	12,8	-0,739387	9,94840	-38,7090
5,4	-0,218386	4,40273	-19,6406	13,0	-0,745262	10,0982	-39,2146
5,6	-0,250569	4,55290	-20,1789	13,2	-0,750959	10,2481	-39,7199
5,8	-0,280522	4,70302	-20,7144	13,4	-0,756488	10,3980	-40,2250
6,0	-0,308471	4,85309	-21,2472	13,6	-0,761855	10,5478	-40,7299
6,2	-0,334610	5,00312	-21,7777	13,8	-0,767067	10,6977	-41,2347
6,4	-0,359113	5,15312	-22,3061	14,0	-0,772132	10,8475	-41,7393
6,6	-0,382127	5,30309	-22,8326	14,2	-0,777055	10,9974	-42,2437
6,8	-0,403787	5,45303	-23,3573	14,4	-0,781842	11,1473	-42,7480
7,0	-0,424208	5,60296	-23,8805	14,6	-0,786498	11,2971	-43,2522
7,2	-0,443496	5,75286	-24,4022	14,8	-0,791030	11,4470	-43,7563
7,4	-0,461741	5,90275	-24,9225	15,0	-0,795442	11,5969	-44,2602
7,6	-0,479028	6,05263	-25,4417				

Z=6

4dδ [4'1'3'0]

R	W	P	λ	R	W	P	λ
15,2	-0,799739	II,7467	-44,7640	22,8	-0,907441	I7,4431	-63,8539
15,4	-0,803924	II,8966	-45,2677	23,0	-0,909319	I7,5930	-64,3554
15,6	-0,808003	I2,0465	-45,7713	23,2	-0,911166	I7,7430	-64,8568
15,8	-0,811980	I2,1964	-46,2748	23,4	-0,912981	I7,8929	-65,3582
16,0	-0,815858	I2,3462	-46,7781	23,6	-0,914765	I8,0428	-65,8596
16,2	-0,819641	I2,4961	-47,2814	23,8	-0,916520	I8,1928	-66,3610
16,4	-0,823332	I2,6460	-47,7846	24,0	-0,918245	I8,3427	-66,8623
16,6	-0,826935	I2,7959	-48,2877	24,2	-0,919942	I8,4926	-67,3636
16,8	-0,830452	I2,9458	-48,7907	24,4	-0,921612	I8,6426	-67,8649
17,0	-0,833888	I3,0957	-49,2937	24,6	-0,923254	I8,7925	-68,3662
17,2	-0,837244	I3,2456	-49,7965	24,8	-0,924871	I8,9424	-68,8674
17,4	-0,840523	I3,3955	-50,2993	25,0	-0,926461	I9,0924	-69,3686
17,6	-0,843729	I3,5454	-50,8020	25,2	-0,928026	I9,2423	-69,8698
17,8	-0,846862	I3,6953	-51,3047	25,4	-0,929567	I9,3923	-70,3710
18,0	-0,849927	I3,8452	-51,8073	25,6	-0,931084	I9,5422	-70,8722
18,2	-0,852925	I3,9950	-52,3098	25,8	-0,932578	I9,6921	-71,3733
18,4	-0,855858	I4,1450	-52,8122	26,0	-0,934048	I9,8421	-71,8744
18,6	-0,858728	I4,2949	-53,3146	26,2	-0,935497	I9,9920	-72,3755
18,8	-0,861538	I4,4448	-53,8169	26,4	-0,936923	20,1420	-72,8766
19,0	-0,864289	I4,5947	-54,3192	26,6	-0,938328	20,2919	-73,3776
19,2	-0,866983	I4,7446	-54,8214	26,8	-0,939713	20,4419	-73,8787
19,4	-0,869622	I4,8945	-55,3236	27,0	-0,941077	20,5918	-74,3797
19,6	-0,872207	I5,0444	-55,8257	27,2	-0,942421	20,7418	-74,8807
19,8	-0,874741	I5,1943	-56,3278	27,4	-0,943745	20,8917	-75,3817
20,0	-0,877224	I5,3442	-56,8298	27,6	-0,945051	21,0416	-75,8827
20,2	-0,879658	I5,4941	-57,3318	27,8	-0,946337	21,1916	-76,3836
20,4	-0,882045	I5,6440	-57,8337	28,0	-0,94,606	21,3415	-76,8846
20,6	-0,884386	I5,7940	-58,3356	28,2	-0,948856	21,4915	-77,3855
20,8	-0,886682	I5,9439	-58,8374	28,4	-0,950089	21,6414	-77,8864
21,0	-0,888935	I6,0938	-59,3392	28,6	-0,951305	21,7914	-78,3873
21,2	-0,891145	I6,2437	-59,8410	28,8	-0,952504	21,9413	-78,8882
21,4	-0,893315	I6,3936	-60,3427	29,0	-0,953687	22,0913	-79,3891
21,6	-0,895444	I6,5436	-60,8444	29,2	-0,954854	22,2412	-79,8899
21,8	-0,897535	I6,6935	-61,3461	29,4	-0,956004	22,3912	-80,3908
22,0	-0,899588	I6,8434	-61,8477	29,6	-0,957140	22,5412	-80,8916
22,2	-0,901604	I6,9933	-62,3493	29,8	-0,958260	22,6911	-81,3925
22,4	-0,903584	I7,1433	-62,8509	30,0	-0,959365	22,8411	-81,8933
22,6	-0,905529	I7,2932	-63,3524	30,2	-0,960456	22,9910	-82,3941

Z=6 4f5 [4'03'0]

R	W	P	λ
0,2	28,4676	0,175067	-12,0261
0,4	13,4640	0,350542	-12,1045
0,6	8,45781	0,526872	-12,2356
0,8	5,94860	0,704590	-12,4200
1,0	4,43572	0,884386	-12,6589
1,2	3,41820	1,06719	-12,9539
1,4	2,68056	1,25421	-13,3076
1,6	2,11456	1,44684	-13,7234
1,8	1,66034	1,64628	-14,2053
2,0	1,28339	1,85290	-14,7565
2,2	0,964031	2,06568	-15,3780
2,4	0,691280	2,28235	-16,0675
2,6	0,458622	2,49997	-16,8201
2,8	0,261407	2,71575	-17,6296
3,0	0,0956487	2,92738	-18,4898
3,2	0,0423419	3,13318	-19,3955
3,4	-0,155999	3,33192	-20,3421
3,6	-0,248505	3,52283	-21,3261
3,8	-0,322830	3,70551	-22,3442
4,0	-0,381765	3,87996	-23,3929
4,2	-0,427925	4,04652	-24,4689
4,4	-0,463698	4,20578	-25,5684
4,6	-0,491184	4,35852	-26,6878
4,8	-0,512154	4,50555	-27,8237
5,0	-0,528054	4,64765	-28,9731
5,2	-0,540032	4,78552	-30,1335
5,4	-0,548993	4,91979	-31,3029
5,6	-0,555643	5,05099	-32,4793
5,8	-0,560540	5,17960	-33,6614
6,0	-0,564128	5,30606	-34,8479
6,2	-0,566769	5,43077	-36,0374
6,4	-0,568767	5,55413	-37,2289
6,6	-0,570389	5,67654	-38,4212
6,8	-0,571882	5,79844	-39,6130
7,0	-0,573485	5,92034	-40,8030
7,2	-0,575438	6,04279	-41,9895
7,4	-0,577978	6,16644	-43,1708
7,6	-0,581325	6,29195	-44,3450

R	W	P	λ
7,8	-0,585639	6,41990	-45,5107
8,0	-0,590981	6,55068	-46,6668
8,2	-0,597286	6,68437	-47,8134
8,4	-0,604383	6,82075	-48,9513
8,6	-0,612057	6,95944	-50,0820
8,8	-0,620093	7,10000	-51,2068
9,0	-0,628314	7,24201	-52,3271
9,2	-0,636586	7,38514	-53,4440
9,4	-0,644815	7,52914	-54,5582
9,6	-0,652937	7,67381	-55,6704
9,8	-0,660912	7,81901	-56,7809
10,0	-0,668712	7,96465	-57,8903
10,2	-0,676326	8,11064	-58,9985
10,4	-0,683743	8,25693	-60,1060
10,6	-0,690962	8,40347	-61,2127
10,8	-0,697984	8,55023	-62,3187
11,0	-0,704811	8,69719	-63,4243
11,2	-0,711447	8,84432	-64,5294
11,4	-0,717897	8,99160	-65,6340
11,6	-0,724166	9,13903	-66,7384
11,8	-0,730260	9,28659	-67,8423
12,0	-0,736184	9,43426	-68,9460
12,2	-0,741945	9,58204	-70,0495
12,4	-0,747547	9,72992	-71,1527
12,6	-0,752997	9,87790	-72,2556
12,8	-0,758299	10,0260	-73,3584
13,0	-0,763460	10,1741	-74,4610
13,2	-0,768484	10,3223	-75,5634
13,4	-0,773376	10,4706	-76,6657
13,6	-0,778140	10,6190	-77,7678
13,8	-0,782782	10,7674	-78,8698
14,0	-0,787307	10,9159	-79,9717
14,2	-0,791716	11,0644	-81,0735
14,4	-0,796015	11,2130	-82,1752
14,6	-0,800208	11,3616	-83,2767
14,8	-0,804299	11,5103	-84,3782
15,0	-0,808290	11,6590	-85,4796

Z=6 4f5 [4'03'0]

R	W	P	λ
15,2	-0,812187	11,8078	-86,5809
15,4	-0,815991	11,9566	-87,6822
15,6	-0,819705	12,1054	-88,7834
15,8	-0,823334	12,2543	-89,8845
16,0	-0,826878	12,4032	-90,9856
16,2	-0,830343	12,5522	-92,0865
16,4	-0,833729	12,7012	-93,1875
16,6	-0,837039	12,8502	-94,2884
16,8	-0,840276	12,9992	-95,3893
17,0	-0,843443	13,1483	-96,4901
17,2	-0,846542	13,2974	-97,5909
17,4	-0,849574	13,4465	-98,6916
17,6	-0,852542	13,5956	-99,7923
17,8	-0,855447	13,7448	-100,893
18,0	-0,858292	13,8940	-101,994
18,2	-0,861079	14,0432	-103,094
18,4	-0,863808	14,1924	-104,195
18,6	-0,866484	14,3417	-105,295
18,8	-0,869104	14,4910	-106,396
19,0	-0,871673	14,6403	-107,496
19,2	-0,874192	14,7896	-108,597
19,4	-0,876661	14,9389	-109,697
19,6	-0,879083	15,0882	-110,798
19,8	-0,881460	15,2376	-111,898
20,0	-0,883790	15,3869	-112,999
20,2	-0,886078	15,5363	-114,099
20,4	-0,888321	15,6857	-115,199
20,6	-0,890524	15,8351	-116,300
20,8	-0,892687	15,9846	-117,400
21,0	-0,894813	16,1340	-118,500
21,2	-0,896896	16,2834	-119,601
21,4	-0,898944	16,4329	-120,701
21,6	-0,900958	16,5824	-121,801
21,8	-0,902935	16,7319	-122,901
22,0	-0,904878	16,8814	-124,002
22,2	-0,906785	17,0309	-125,102
22,4	-0,908663	17,1804	-126,202
22,6	-0,910508	17,3299	-127,302

R	W	P	λ
22,8	-0,912321	17,4794	-128,403
23,0	-0,914107	17,6290	-129,503
23,2	-0,915862	17,7785	-130,603
23,4	-0,917586	17,9281	-131,703
23,6	-0,919283	18,0777	-132,804
23,8	-0,920953	18,2272	-133,904
24,0	-0,922596	18,3768	-135,004
24,2	-0,924214	18,5264	-136,104
24,4	-0,925805	18,6760	-137,204
24,6	-0,927370	18,8256	-138,304
24,8	-0,928914	18,9752	-139,404
25,0	-0,930435	19,1249	-140,505
25,2	-0,931930	19,2745	-141,605
25,4	-0,933402	19,4241	-142,705
25,6	-0,934850	19,5738	-143,805
25,8	-0,936283	19,7234	-144,905
26,0	-0,937690	19,8731	-146,005
26,2	-0,939077	20,0227	-147,105
26,4	-0,940444	20,1724	-148,205
26,6	-0,941793	20,3221	-149,306
26,8	-0,943118	20,4718	-150,406
27,0	-0,944425	20,6214	-151,506
27,2	-0,945715	20,7711	-152,606
27,4	-0,946989	20,9208	-153,706
27,6	-0,948246	21,0705	-154,806
27,8	-0,949485	21,2203	-155,906
28,0	-0,950701	21,3700	-157,006
28,2	-0,951903	21,5197	-158,106
28,4	-0,953091	21,6694	-159,206
28,6	-0,954259	21,8191	-160,306
28,8	-0,955411	21,9688	-161,406
29,0	-0,956557	22,1186	-162,506
29,2	-0,957672	22,2682	-163,607
29,4	-0,958780	22,4180	-164,707
29,6	-0,959876	22,5677	-165,807
29,8	-0,960957	22,7175	-166,907
30,0	-0,962024	22,8672	-168,007

Z = 6 5sσ [5'4'0'0]

R	W	P	λ
0,2	29,0403	0,138543	0,145478
0,4	14,0597	0,274265	0,513975
0,6	9,07409	0,408246	0,100556
0,8	6,58551	0,540959	1,56436
1,0	5,09509	0,672646	2,16388
1,2	4,10339	0,803467	2,79057
1,4	3,39643	0,933538	3,43674
1,6	2,86729	1,06295	4,09760
1,8	2,45658	1,19178	4,76997
2,0	2,12868	1,32009	5,45159
2,2	1,86096	1,44792	6,14084
2,4	1,63831	1,57533	6,83647
2,6	1,45030	1,70235	7,53752
2,8	1,28948	1,82901	8,24324
3,0	1,15037	1,95534	8,95302
3,2	1,02889	2,08137	9,66635
3,4	0,921911	2,20711	10,3828
3,6	0,827001	2,33260	11,1021
3,8	0,742242	2,45785	11,8239
4,0	0,666100	2,58287	12,5479
4,2	0,597335	2,70767	13,2740
4,4	0,534933	2,83229	14,0019
4,6	0,478058	2,95671	14,7316
4,8	0,426012	3,08097	15,4627
5,0	0,378210	3,20505	16,1953
5,2	0,334159	3,32899	16,9292
5,4	0,293437	3,45278	17,6643
5,6	0,255684	3,57643	18,4006
5,8	0,220590	3,69996	19,1378
6,0	0,187885	3,82336	19,8761
6,2	0,157337	3,94664	20,6152
6,4	0,128740	4,06982	21,3552
6,6	0,101915	4,19289	22,0960
6,8	0,0767037	4,31586	22,8375
7,0	0,0529661	4,43873	23,5798
7,2	0,0305778	4,56152	24,3226
7,4	0,00942799	4,68421	25,0661
7,6	-0,0105824	4,80683	25,8102

R	W	P	λ
7,8	-0,0295423	4,92937	26,5549
8,0	-0,0475315	5,05183	27,3000
8,2	-0,0646221	5,17422	28,0457
8,4	-0,0808790	5,29655	28,7918
8,6	-0,0963615	5,41880	29,5384
8,8	-0,111123	5,54100	30,2854
9,0	-0,125212	5,66313	31,0328
9,2	-0,138674	5,78521	31,7806
9,4	-0,151548	5,90723	32,5287
9,6	-0,163873	6,02920	33,2772
9,8	-0,175682	6,15112	34,0260
10,0	-0,187007	6,27299	34,7752
10,2	-0,197877	6,39481	35,5246
10,4	-0,208318	6,51658	36,2744
10,6	-0,218356	6,63831	37,0244
10,8	-0,228012	6,76000	37,7747
11,0	-0,237308	6,88165	38,5252
11,2	-0,246264	7,00326	39,2760
11,4	-0,254897	7,12483	40,0271
11,6	-0,263226	7,24637	40,7783
11,8	-0,271265	7,36787	41,5298
12,0	-0,279029	7,48933	42,2815
12,2	-0,286532	7,61076	43,0334
12,4	-0,293787	7,73217	43,7855
12,6	-0,300806	7,85354	44,5377
12,8	-0,307601	7,97488	45,2902
13,0	-0,314180	8,09619	46,0428
13,2	-0,320556	8,21747	46,7956
13,4	-0,326736	8,33873	47,5486
13,6	-0,332730	8,45996	48,3017
13,8	-0,338546	8,58116	49,0549
14,0	-0,344192	8,70234	49,8084
14,2	-0,349674	8,82350	50,5619
14,4	-0,355001	8,94463	51,3156
14,6	-0,360178	9,06574	52,0694
14,8	-0,365211	9,18683	52,8234
15,0	-0,370107	9,30790	53,5775

Z = 6 5sσ [5'4'0'0]

R	W	P	λ
15,2	-0,374871	9,42895	54,3317
15,4	-0,379508	9,54998	55,0860
15,6	-0,384023	9,67099	55,8404
15,8	-0,388421	9,79197	56,5950
16,0	-0,392707	9,91295	57,3496
16,2	-0,396884	10,0339	58,1044
16,4	-0,400957	10,1548	58,8592
16,6	-0,404929	10,2758	59,6142
16,8	-0,408804	10,3967	60,3692
17,0	-0,412586	10,5175	61,1244
17,2	-0,416278	10,6384	61,8796
17,4	-0,419883	10,7593	62,6349
17,6	-0,423404	10,8801	63,3903
17,8	-0,426844	11,0009	64,1458
18,0	-0,430206	11,1218	64,9013
18,2	-0,433492	11,2426	65,6570
18,4	-0,436705	11,3633	66,4127
18,6	-0,439847	11,4841	67,1685
18,8	-0,442921	11,6049	67,9243
19,0	-0,445929	11,7256	68,6803
19,2	-0,448872	11,8464	69,4363
19,4	-0,451753	11,9671	70,1923
19,6	-0,454575	12,0878	70,9485
19,8	-0,457337	12,2085	71,7047
20,0	-0,460044	12,3292	72,4609
20,2	-0,462695	12,4499	73,2172
20,4	-0,465293	12,5705	73,9736
20,6	-0,467840	12,6912	74,7300
20,8	-0,470337	12,8118	75,4865
21,0	-0,472785	12,9325	76,2431
21,2	-0,475185	13,0531	76,9997
21,4	-0,477540	13,1737	77,7563
21,6	-0,479850	13,2943	78,5130
21,8	-0,482117	13,4149	79,2698
22,0	-0,484342	13,5355	80,0266
22,2	-0,486526	13,6561	80,7834
22,4	-0,488670	13,7767	81,5403
22,6	-0,490775	13,8973	82,2973

R	W	P	λ
22,8	-0,492842	14,0178	83,0542
23,0	-0,494873	14,1384	83,8113
23,2	-0,496867	14,2589	84,5683
23,4	-0,498827	14,3795	85,3254
23,6	-0,500753	14,5000	86,0826
23,8	-0,502646	14,6205	86,8398
24,0	-0,504507	14,7410	87,5970
24,2	-0,506336	14,8615	88,3543
24,4	-0,508135	14,9820	89,1116
24,6	-0,509904	15,1025	89,8689
24,8	-0,511643	15,2230	90,6263
25,0	-0,513354	15,3435	91,3837
25,2	-0,515038	15,4640	92,1412
25,4	-0,516694	15,5845	92,8987
25,6	-0,518324	15,7049	93,6562
25,8	-0,519928	15,8254	94,4137
26,0	-0,521507	15,9458	95,1713
26,2	-0,523062	16,0663	95,9289
26,4	-0,524592	16,1867	96,6866
26,6	-0,526099	16,3072	97,4443
26,8	-0,527583	16,4276	98,2020
27,0	-0,529044	16,5480	98,9597
27,2	-0,530484	16,6684	99,7174
27,4	-0,531901	16,7888	100,475
27,6	-0,533299	16,9093	101,233
27,8	-0,534675	17,0297	101,991
28,0	-0,536032	17,1501	102,748
28,2	-0,537369	17,2705	103,507
28,4	-0,538686	17,3908	104,265
28,6	-0,539985	17,5112	105,023
28,8	-0,541266	17,6316	105,780
29,0	-0,542528	17,7520	106,538
29,2	-0,543773	17,8724	107,297
29,4	-0,545000	17,9927	108,055
29,6	-0,546211	18,1131	108,813
29,8	-0,547405	18,2335	109,571
30,0	-0,548583	18,3538	110,329

Z = 6

5d6 [5'2'2'0]

R	W	P	λ	R	W	P	λ
0,2	29,0181	0,140132	-6,03330	7,8	-0,0670064	5,04364	-18,0327
0,4	14,0119	0,281155	-6,13493	8,0	-0,0837752	5,16535	-18,2735
0,6	9,00001	0,424263	-6,30864	8,2	-0,0997028	5,28697	-18,5126
0,8	6,48336	0,570372	-6,55643	8,4	-0,114851	5,40851	-18,7501
1,0	4,96747	0,718516	-6,87410	8,6	-0,129275	5,52997	-18,9860
1,2	3,95862	0,865907	-7,24988	8,8	-0,143026	5,65137	-19,2205
1,4	3,24416	1,01031	-7,66775	9,0	-0,156150	5,77270	-19,4537
1,6	2,71489	1,15106	-8,11166	9,2	-0,168688	5,89397	-19,6856
1,8	2,30856	1,28846	-8,56785	9,4	-0,180680	6,01518	-19,9164
2,0	1,98739	1,42310	-9,02554	9,6	-0,192159	6,13634	-20,1459
2,2	1,72735	1,55558	-9,47683	9,8	-0,203158	6,25745	-20,3744
2,4	1,51253	1,68639	-9,91639	10,0	-0,213707	6,37851	-20,6019
2,6	1,33205	1,81595	-10,3411	10,2	-0,223833	6,49952	-20,8284
2,8	1,17826	1,94454	-10,7495	10,4	-0,233560	6,62049	-21,0539
3,0	1,04562	2,07237	-11,1414	10,6	-0,242912	6,74142	-21,2786
3,2	0,930047	2,19958	-11,5175	10,8	-0,251909	6,86231	-21,5024
3,4	0,828444	2,32628	-11,8790	11,0	-0,260573	6,98317	-21,7255
3,6	0,738436	2,45254	-12,2272	11,2	-0,268921	7,10399	-21,9478
3,8	0,658161	2,57839	-12,5635	11,4	-0,276969	7,22478	-22,1694
4,0	0,586135	2,70387	-12,8893	11,6	-0,284735	7,34554	-22,3902
4,2	0,521163	2,82902	-13,2058	11,8	-0,292232	7,46627	-22,6104
4,4	0,462270	2,95385	-13,5139	12,0	-0,299474	7,58697	-22,8300
4,6	0,408653	3,07839	-13,8147	12,2	-0,306474	7,70765	-23,0490
4,8	0,359639	3,20264	-14,1088	12,4	-0,313244	7,82830	-23,2674
5,0	0,314671	3,32665	-14,3971	12,6	-0,319796	7,94892	-23,4853
5,2	0,273271	3,45042	-14,6800	12,8	-0,326138	8,06953	-23,7026
5,4	0,235036	3,57396	-14,9580	13,0	-0,332283	8,19011	-23,9194
5,6	0,199620	3,69729	-15,2317	13,2	-0,338238	8,31067	-24,1358
5,8	0,166726	3,82043	-15,5013	13,4	-0,344012	8,43121	-24,3517
6,0	0,136095	3,94339	-15,7672	13,6	-0,349613	8,55174	-24,5671
6,2	0,107504	4,06617	-16,0296	13,8	-0,355050	8,67224	-24,7821
6,4	0,0807574	4,18881	-16,2890	14,0	-0,360328	8,79273	-24,9967
6,6	0,0556829	4,31129	-16,5454	14,2	-0,365456	8,91321	-25,2109
6,8	0,0321296	4,43364	-16,7990	14,4	-0,370439	9,03366	-25,4247
7,0	0,00996404	4,55586	-17,0502	14,6	-0,375283	9,15411	-25,6382
7,2	-0,0109323	4,67797	-17,2990	14,8	-0,379995	9,27454	-25,8513
7,4	-0,0306651	4,79996	-17,5456	15,0	-0,384579	9,39495	-26,0640
7,6	-0,0493283	4,92185	-17,7901				

Z = 6

5d6 [5'2'2'0]

R	W	P	λ	R	W	P	λ
15,2	-0,389040	9,51535	-26,2765	22,8	-0,500065	14,0846	-34,1894
15,4	-0,393384	9,63574	-26,4886	23,0	-0,501988	14,2048	-34,3949
15,6	-0,397616	9,75612	-26,7004	23,2	-0,503877	14,3249	-34,6003
15,8	-0,401738	9,87649	-26,9119	23,4	-0,505734	14,4451	-34,8055
16,0	-0,405757	9,99684	-27,1232	23,6	-0,507559	14,5652	-35,0107
16,2	-0,409674	10,1172	-27,3342	23,8	-0,509353	14,6853	-35,2158
16,4	-0,413495	10,2375	-27,5449	24,0	-0,511117	14,8055	-35,4208
16,6	-0,417223	10,3578	-27,7553	24,2	-0,512852	14,9256	-35,6257
16,8	-0,420861	10,4782	-27,9656	24,4	-0,514558	15,0457	-35,8306
17,0	-0,424412	10,5985	-28,1755	24,6	-0,516236	15,1658	-36,0353
17,2	-0,427880	10,7188	-28,3853	24,8	-0,517887	15,2860	-36,2400
17,4	-0,431267	10,8391	-28,5948	25,0	-0,519512	15,4061	-36,4446
17,6	-0,434576	10,9593	-28,8042	25,2	-0,521110	15,5262	-36,6491
17,8	-0,437810	11,0796	-29,0133	25,4	-0,522683	15,6463	-36,8536
18,0	-0,440971	11,1999	-29,2222	25,6	-0,524232	15,7664	-37,0580
18,2	-0,444062	11,3201	-29,4309	25,8	-0,525756	15,8865	-37,2623
18,4	-0,447085	11,4404	-29,6394	26,0	-0,527256	16,0066	-37,4666
18,6	-0,450043	11,5606	-29,8478	26,2	-0,528734	16,1268	-37,6708
18,8	-0,452937	11,6809	-30,0560	26,4	-0,530189	16,2469	-37,8749
19,0	-0,455769	11,8011	-30,2640	26,6	-0,531622	16,3670	-38,0790
19,2	-0,458542	11,9213	-30,4718	26,8	-0,533034	16,4871	-38,2830
19,4	-0,461257	12,0416	-30,6795	27,0	-0,534424	16,6072	-38,4869
19,6	-0,463916	12,1618	-30,8870	27,2	-0,535794	16,7273	-38,6908
19,8	-0,466521	12,2820	-31,0943	27,4	-0,537144	16,8473	-38,8946
20,0	-0,469075	12,4022	-31,3016	27,6	-0,538474	16,9674	-39,0984
20,2	-0,471574	12,5224	-31,5087	27,8	-0,539785	17,0875	-39,3021
20,4	-0,474026	12,6426	-31,7156	28,0	-0,541077	17,2076	-39,5057
20,6	-0,476429	12,7628	-31,9224	28,2	-0,542351	17,3277	-39,7094
20,8	-0,478787	12,8830	-32,1291	28,4	-0,543606	17,4478	-39,9129
21,0	-0,481098	13,0032	-32,3357	28,6	-0,544844	17,5679	-40,1164
21,2	-0,483366	13,1233	-32,5421	28,8	-0,546065	17,6880	-40,3199
21,4	-0,485591	13,2435	-32,7484	29,0	-0,547269	17,8080	-40,5233
21,6	-0,487775	13,3637	-32,9546	29,2	-0,548456	17,9281	-40,7266
21,8	-0,489918	13,4839	-33,1607	29,4	-0,549627	18,0482	-40,9300
22,0	-0,492022	13,6040	-33,3666	29,6	-0,550782	18,1683	-41,1332
22,2	-0,494087	13,7242	-33,5725	29,8	-0,551921	18,2884	-41,3365
22,4	-0,496116	13,8443	-33,7782	30,0	-0,553046	18,4084	-41,5396
22,6	-0,498108	13,9645	-33,9839				

Z = 6

5f6 [5'1'3'0]

R	W	P	λ
0,2	29,0194	0,140043	-12,0207
0,4	14,0176	0,280348	-12,0829
0,6	9,01437	0,421204	-12,1869
0,8	6,50959	0,562967	-12,3334
1,0	5,00282	0,706109	-12,5231
1,2	3,99353	0,851268	-12,7576
1,4	3,26688	0,999226	-13,0385
1,6	2,71553	1,15071	-13,3682
1,8	2,28064	1,30590	-13,7480
2,0	1,92844	1,46394	-14,1782
2,2	1,63883	1,62297	-14,6566
2,4	1,39880	1,78086	-15,1796
2,6	1,19882	1,93598	-15,7430
2,8	1,03130	2,08741	-16,3431
3,0	0,890093	2,23486	-16,9762
3,2	0,770213	2,37834	-17,6389
3,4	0,667691	2,51808	-18,3281
3,6	0,579361	2,65438	-19,0403
3,8	0,502698	2,78757	-19,7724
4,0	0,435678	2,91797	-20,5213
4,2	0,376675	3,04594	-21,2838
4,4	0,324369	3,17177	-22,0573
4,6	0,277687	3,29577	-22,8390
4,8	0,235751	3,41821	-23,6265
5,0	0,197836	3,53936	-24,4177
5,2	0,163346	3,65945	-25,2105
5,4	0,131787	3,77870	-26,0033
5,6	0,102747	3,89730	-26,7945
5,8	0,075885	4,01542	-27,5830
6,0	0,050920	4,13321	-28,3677
6,2	0,027617	4,25079	-29,1480
6,4	0,005780	4,36825	-29,9232
6,6	-0,014751	4,48568	-30,6932
6,8	-0,034112	4,60312	-31,4579
7,0	-0,052416	4,72061	-32,2172
7,2	-0,069757	4,83819	-32,9713
7,4	-0,086216	4,95587	-33,7205
7,6	-0,101865	5,07364	-34,4650

R	W	P	λ
7,8	-0,116763	5,19153	-35,2052
8,0	-0,130966	5,30951	-35,9413
8,2	-0,144521	5,42759	-36,6736
8,4	-0,157471	5,54577	-37,4026
8,6	-0,169855	5,66403	-38,1283
8,8	-0,181711	5,78237	-38,8512
9,0	-0,193069	5,90079	-39,5714
9,2	-0,203960	6,01927	-40,2892
9,4	-0,214413	6,13781	-41,0047
9,6	-0,224452	6,25641	-41,7182
9,8	-0,234101	6,37507	-42,4297
10,0	-0,243382	6,49377	-43,1396
10,2	-0,252316	6,61252	-43,8477
10,4	-0,260921	6,73132	-44,5544
10,6	-0,269216	6,85015	-45,2597
10,8	-0,277216	6,96902	-45,9637
11,0	-0,284937	7,08793	-46,6665
11,2	-0,292393	7,20687	-47,3681
11,4	-0,299598	7,32584	-48,0687
11,6	-0,306564	7,44484	-48,7684
11,8	-0,313302	7,56387	-49,4671
12,0	-0,319824	7,68292	-50,1649
12,2	-0,326139	7,80201	-50,8620
12,4	-0,332259	7,92111	-51,5583
12,6	-0,338190	8,04024	-52,2538
12,8	-0,343943	8,15940	-52,9488
13,0	-0,349524	8,27857	-53,6430
13,2	-0,354942	8,39777	-54,3367
13,4	-0,360203	8,51699	-55,0299
13,6	-0,365315	8,63622	-55,7225
13,8	-0,370283	8,75547	-56,4146
14,0	-0,375114	8,87475	-57,1062
14,2	-0,379813	8,99404	-57,7974
14,4	-0,384385	9,11335	-58,4881
14,6	-0,388836	9,23267	-59,1785
14,8	-0,393170	9,35201	-59,8684
15,0	-0,397392	9,47136	-60,5580

Z = 6

5f6 [5'1'3'0]

R	W	P	λ
15,2	-0,401506	9,59073	-61,2473
15,4	-0,405517	9,71011	-61,9362
15,6	-0,409427	9,82950	-62,6248
15,8	-0,413242	9,94891	-63,3132
16,0	-0,416963	10,0683	-64,0012
16,2	-0,420595	10,1878	-64,6890
16,4	-0,424142	10,3072	-65,3765
16,6	-0,427604	10,4267	-66,0637
16,8	-0,430987	10,5461	-66,7508
17,0	-0,434293	10,6656	-67,4376
17,2	-0,437523	10,7851	-68,1242
17,4	-0,440681	10,9046	-68,8105
17,6	-0,443769	11,0241	-69,4967
17,8	-0,446790	11,1436	-70,1827
18,0	-0,449745	11,2632	-70,8685
18,2	-0,452637	11,3827	-71,5542
18,4	-0,455468	11,5022	-72,2397
18,6	-0,458239	11,6218	-72,9250
18,8	-0,460952	11,7413	-73,6101
19,0	-0,463610	11,8609	-74,2952
19,2	-0,466214	11,9805	-74,9800
19,4	-0,468766	12,1001	-75,6648
19,6	-0,471266	12,2197	-76,3494
19,8	-0,473718	12,3393	-77,0339
20,0	-0,476121	12,4589	-77,7182
20,2	-0,478478	12,5785	-78,4025
20,4	-0,480790	12,6981	-79,0866
20,6	-0,483058	12,8178	-79,7707
20,8	-0,485283	12,9374	-80,4546
21,0	-0,487467	13,0570	-81,1384
21,2	-0,489611	13,1767	-81,8221
21,4	-0,491715	13,2964	-82,5058
21,6	-0,493781	13,4160	-83,1893
21,8	-0,495811	13,5357	-83,8728
22,0	-0,497804	13,6553	-84,5561
22,2	-0,499762	13,7750	-85,2394
22,4	-0,501685	13,8947	-85,9226
22,6	-0,503576	14,0144	-86,6058

R	W	P	λ
22,8	-0,505434	14,1341	-87,2888
23,0	-0,507260	14,2538	-87,9718
23,2	-0,509055	14,3735	-88,6548
23,4	-0,510821	14,4932	-89,3376
23,6	-0,512557	14,6129	-90,0204
23,8	-0,514264	14,7326	-90,7031
24,0	-0,515944	14,8523	-91,3858
24,2	-0,517596	14,9721	-92,0684
24,4	-0,519222	15,0918	-92,7510
24,6	-0,520822	15,2115	-93,4335
24,8	-0,522396	15,3313	-94,1159
25,0	-0,523946	15,4510	-94,7983
25,2	-0,525472	15,5707	-95,4806
25,4	-0,526974	15,6905	-96,1629
25,6	-0,528453	15,8102	-96,8452
25,8	-0,529910	15,9300	-97,5274
26,0	-0,531344	16,0497	-98,2095
26,2	-0,532757	16,1695	-98,8917
26,4	-0,534150	16,2893	-99,5737
26,6	-0,535521	16,4090	-100,2556
26,8	-0,536873	16,5288	-100,938
27,0	-0,538204	16,6486	-101,620
27,2	-0,539517	16,7684	-102,302
27,4	-0,540811	16,8881	-102,983
27,6	-0,542086	17,0079	-103,665
27,8	-0,543343	17,1277	-104,347
28,0	-0,544583	17,2475	-105,029
28,2	-0,545805	17,3673	-105,711
28,4	-0,547011	17,4871	-106,392
28,6	-0,548199	17,6069	-107,074
28,8	-0,549372	17,7267	-107,756
29,0	-0,550529	17,8465	-108,437
29,2	-0,551670	17,9663	-109,119
29,4	-0,552796	18,0861	-109,800
29,6	-0,553907	18,2059	-110,482
29,8	-0,555003	18,3257	-111,163
30,0	-0,556085	18,4455	-111,845
30,2	-0,557153	18,5654	-112,526

$Z=7$ 1s6 [1'0'0'0] $Z=8$ 1s6 [1'0'0'0] $Z=7$

4s6 [4'3'0'0]

R	W	P	λ
0,2	6,09654	0,760309	-0,132174
0,4	-9,49843	1,46963	-0,350437
0,6	-14,5066	2,17053	-0,565744
0,8	-17,0025	2,87068	-0,774356
1,0	-18,5010	3,57078	-0,979535
1,2	-19,5005	4,27087	-1,18297
1,4	-20,2145	4,97094	-1,38541
1,6	-20,7501	5,67100	-1,58724
1,8	-21,1668	6,37104	-1,78866
2,0	-21,5000	7,07108	-1,98979
2,5	-22,1000	8,82114	-2,49184
3,0	-22,5000	10,5712	-2,99320
3,5	-22,7857	12,3212	-3,49417
4,0	-23,0000	14,0712	-3,99490
4,5	-23,1667	15,8213	-4,49546
5,0	-23,3000	17,5713	-4,99592
5,5	-23,4091	19,3213	-5,49629
6,0	-23,5000	21,0713	-5,99660
6,5	-23,5769	22,8213	-6,49686
7,0	-23,6428	24,5713	-6,99689
7,5	-23,7000	26,3213	-7,49710
8,0	-23,7500	28,0713	-7,99728
8,5	-23,7941	29,8213	-8,49744
9,0	-23,8333	31,5713	-8,99758
9,5	-23,8684	33,3214	-9,49770
10,0	-23,9000	35,0714	-9,99782
10,5	-23,9286	36,8214	-10,4979
11,0	-23,9545	38,5714	-10,9980
11,5	-23,9783	40,3214	-11,4981
12,0	-24,0000	42,0714	-11,9982
12,5	-24,0200	43,8214	-12,4982
13,0	-24,0385	45,5714	-12,9983
13,5	-24,0556	47,3214	-13,4984
14,0	-24,0714	49,0714	-13,9984
14,5	-24,0862	50,8214	-14,4985
15,0	-24,1000	52,5714	-14,9985
15,5	-24,1129	54,3214	-15,4986
16,0	-24,1250	56,0714	-15,9986
16,5	-24,1364	57,8214	-16,4987
17,0	-24,1470	59,5714	-16,9987

R	W	P	λ
0,2	3,42110	0,855323	-0,142128
0,4	-14,5049	1,66144	-0,361348
0,6	-20,3377	2,46187	-0,573808
0,8	-23,2515	3,26197	-0,780407
1,0	-25,0006	4,06206	-0,984350
1,2	-26,1669	4,86212	-1,18697
1,4	-27,0001	5,66217	-1,38883
1,6	-27,6251	6,46221	-1,59023
1,8	-28,1112	7,26224	-1,79132
2,0	-28,5000	8,06226	-1,99219
2,5	-29,2000	10,0623	-2,49375
3,0	-29,6667	12,0623	-2,99479
3,5	-30,0000	14,0624	-3,49554
4,0	-30,2500	16,0624	-3,99609
4,5	-30,4444	18,0624	-4,49653
5,0	-30,6000	20,0624	-4,99687
5,5	-30,7273	22,0624	-5,49716
6,0	-30,8333	24,0624	-5,99724
6,5	-30,9231	26,0624	-6,49746
7,0	-31,0000	28,0624	-6,99764
7,5	-31,0667	30,0624	-7,49779
8,0	-31,1250	32,0624	-7,99793
8,5	-31,1765	34,0624	-8,49805
9,0	-31,2222	36,0624	-8,99816
9,5	-31,2632	38,0624	-9,49826
10,0	-31,3000	40,0624	-9,99834
10,5	-31,3333	42,0624	-10,4984
11,0	-31,3636	44,0624	-10,9985
11,5	-31,3913	46,0624	-11,4986
12,0	-31,4167	48,0624	-11,9986
12,5	-31,4400	50,0625	-12,4987
13,0	-31,4615	52,0625	-12,9987
13,5	-31,4815	54,0625	-13,4988
14,0	-31,5000	56,0625	-13,9988
14,5	-31,5172	58,0625	-14,4988
15,0	-31,5333	60,0625	-14,9989
15,5	-31,5484	62,0625	-15,4989
16,0	-31,5625	64,0625	-15,9990
16,5	-31,5758	66,0625	-16,4990
17,0	-31,5882	68,0625	-16,9990

R	W	P	λ
0,2	33,0530	0,197334	0,197930
0,4	15,5987	0,390006	0,675416
0,6	9,79784	0,579990	1,28672
0,8	6,90652	0,768059	1,96513
1,0	5,17738	0,954624	2,68250
1,2	4,02845	1,13996	3,42524
1,4	3,21050	1,32428	4,18578
1,6	2,59904	1,50772	4,95952
1,8	2,12498	1,69042	5,74341
2,0	1,74692	1,87248	6,53536
2,2	1,43853	2,05396	7,33382
2,4	1,18229	2,23495	8,13768
2,6	0,966091	2,41549	8,94605
2,8	0,781282	2,59564	9,75825
3,0	0,621538	2,77544	10,5737
3,2	0,482116	2,95492	11,3921
3,4	0,359398	3,13411	12,2129
3,6	0,250572	3,31305	13,0359
3,8	0,153423	3,49174	13,8609
4,0	0,066179	3,67023	14,6876
4,2	-0,012589	3,84851	15,5158
4,4	-0,084052	4,02661	16,3455
4,6	-0,149173	4,20455	17,1763
4,8	-0,208755	4,38233	18,0084
5,0	-0,263471	4,55998	18,8414
5,2	-0,313890	4,73749	19,6754
5,4	-0,360495	4,91487	20,5103
5,6	-0,403700	5,09215	21,3460
5,8	-0,443863	5,26932	22,1824
6,0	-0,481292	5,44640	23,0194
6,2	-0,516254	5,62338	23,8572
6,4	-0,548984	5,80028	24,6954
6,6	-0,579689	5,97709	25,5343
6,8	-0,608549	6,15383	26,3736
7,0	-0,635724	6,33050	27,2134
7,2	-0,661359	6,50710	28,0536
7,4	-0,685578	6,68364	28,8943
7,6	-0,708495	6,86013	29,7353
7,8	-0,730213	7,03655	30,5767
8,0	-0,750823	7,21293	31,4184

R	W	P	λ
8,2	-0,770406	7,38925	32,2605
8,4	-0,789037	7,56553	33,1028
8,6	-0,806783	7,74176	33,9454
8,8	-0,823707	7,91795	34,7883
9,0	-0,839863	8,09410	35,6315
9,2	-0,855302	8,27021	36,4749
9,4	-0,870071	8,44628	37,3185
9,6	-0,884212	8,62233	38,1623
9,8	-0,897765	8,79833	39,0064
10,0	-0,910765	8,97431	39,8506
10,2	-0,923244	9,15025	40,6950
10,4	-0,935235	9,32617	41,5396
10,6	-0,946764	9,50206	42,3844
10,8	-0,957858	9,67793	43,2293
11,0	-0,968541	9,85377	44,0744
11,2	-0,978834	10,0296	44,9196
11,4	-0,988760	10,2054	45,7650
11,6	-0,998337	10,3811	46,6105
11,8	-1,00758	10,5569	47,4561
12,0	-1,01652	10,7326	48,3018
12,2	-1,02515	10,9083	49,1477
12,4	-1,03350	11,0840	49,9937
12,6	-1,04158	11,2597	50,8398
12,8	-1,04940	11,4353	51,6859
13,0	-1,05698	11,6110	52,5322
13,2	-1,06433	11,7866	53,3786
13,4	-1,07145	11,9622	54,2251
13,6	-1,07836	12,1378	55,0716
13,8	-1,08506	12,3134	55,9183
14,0	-1,09157	12,4889	56,7650
14,2	-1,09789	12,6645	57,6118
14,4	-1,10404	12,8400	58,4587
14,6	-1,11001	13,0156	59,3057
14,8	-1,11582	13,1911	60,1527
15,0	-1,12147	13,3666	60,9998
16,0	-1,14758	14,2439	65,2363
17,0	-1,17056	15,1210	69,4741
18,0	-1,19096	15,9980	73,7131
19,0	-1,20917	16,8747	77,9532
20,0	-1,22554	17,7513	82,1942

$Z=7$ $5d\sigma [5'2'2'0]$

R	W	P	λ
0,2	33,7171	0,160178	-6,04681
0,4	16,2073	0,321585	-6,19059
0,6	10,3556	0,485794	-6,43710
0,8	7,41673	0,653181	-6,78433
1,0	5,65198	0,820982	-7,21562
1,2	4,48375	0,985749	-7,70385
I,4	3,65936	I,14622	-8,22133
I,6	3,04902	I,30279	-8,74554
I,8	2,57970	I,45632	-9,26044
2,0	2,20771	I,60766	-9,75595
2,2	I,90555	I,75743	-10,2269
2,4	I,65515	I,90609	-10,6716
2,6	I,44422	2,05391	-11,0912
2,8	I,26410	2,20107	-11,4876
3,0	I,10852	2,34769	-11,8635
3,2	0,972827	2,49382	-12,2218
3,4	0,853459	2,63951	-12,5649
3,6	0,747672	2,78480	-12,8949
3,8	0,653297	2,92971	-13,2136
4,0	0,568603	3,07428	-13,5226
4,2	0,492191	3,21852	-13,8230
4,4	0,422914	3,36247	-14,1158
4,6	0,359828	3,50614	-14,4021
4,8	0,302145	3,64956	-14,6824
5,0	0,249207	3,79274	-14,9574
5,2	0,200455	3,93571	-15,2276
5,4	0,155415	4,07849	-15,4934
5,6	0,113681	4,22108	-15,7553
5,8	0,074904	4,36350	-16,0135
6,0	0,038782	4,50577	-16,2685
6,2	0,005052	4,64789	-16,5204
6,4	-0,026514	4,78989	-16,7695
6,6	-0,056118	4,93176	-17,0160
6,8	-0,083936	5,07352	-17,2602
7,0	-0,110126	5,21518	-17,5021
7,2	-0,134825	5,35674	-17,7419
7,4	-0,158157	5,49821	-17,9798
7,6	-0,180233	5,63960	-18,2159

R	W	P	λ
7,8	-0,201151	5,78092	-18,4504
8,0	-0,221000	5,92216	-18,6833
8,2	-0,239860	6,06334	-18,9147
8,4	-0,257802	6,20446	-19,1448
8,6	-0,274893	6,34551	-19,3736
8,8	-0,291191	6,48652	-19,6011
9,0	-0,306751	6,62747	-19,8275
9,2	-0,321621	6,76838	-20,0529
9,4	-0,335846	6,90925	-20,2772
9,6	-0,349468	7,05007	-20,5006
9,8	-0,362524	7,19085	-20,7231
10,0	-0,375048	7,33160	-20,9447
10,2	-0,387073	7,47232	-21,1655
10,4	-0,398627	7,61300	-21,3856
10,6	-0,409739	7,75365	-21,6049
10,8	-0,420432	7,89428	-21,8236
11,0	-0,430731	8,03487	-22,0416
11,2	-0,440656	8,17545	-22,2590
11,4	-0,450228	8,31600	-22,4757
11,6	-0,459464	8,45652	-22,6920
11,8	-0,468384	8,59703	-22,9076
12,0	-0,477002	8,73751	-23,1228
12,2	-0,485333	8,87798	-23,3375
12,4	-0,493392	9,01843	-23,5518
12,6	-0,501192	9,15886	-23,7656
12,8	-0,508746	9,29927	-23,9789
13,0	-0,516064	9,43967	-24,1919
13,2	-0,523157	9,58005	-24,4044
13,4	-0,530036	9,72042	-24,6166
13,6	-0,536711	9,86078	-24,8285
13,8	-0,543190	10,0011	-25,0400
14,0	-0,549482	10,1415	-25,2512
14,2	-0,555594	10,2818	-25,4621
14,4	-0,561536	10,4221	-25,6726
14,6	-0,567312	10,5624	-25,8829
14,8	-0,572931	10,7027	-26,0929
15,0	-0,578398	10,8430	-26,3026
15,2	-0,583721	10,9832	-26,5121

 $Z=7$ $5d\sigma [5'2'2'0]$

R	W	P	λ
15,4	-0,588904	11,1235	-26,7214
15,6	-0,593952	11,2638	-26,9304
15,8	-0,598872	11,4040	-27,1391
16,0	-0,603667	11,5442	-27,3477
16,2	-0,608343	11,6845	-27,5560
16,4	-0,612904	11,8247	-27,7642
16,6	-0,617354	11,9649	-27,9721
16,8	-0,621698	12,1051	-28,1798
17,0	-0,625938	12,2453	-28,3874
17,2	-0,630079	12,3855	-28,5948
17,4	-0,634124	12,5257	-28,8020
17,6	-0,638076	12,6659	-29,0091
17,8	-0,641939	12,8061	-29,2160
18,0	-0,645715	12,9463	-29,4227
18,2	-0,649408	13,0864	-29,6293
18,4	-0,653020	13,2266	-29,8357
18,6	-0,656554	13,3668	-30,0420
18,8	-0,660011	13,5069	-30,2482
19,0	-0,663396	13,6471	-30,4542
19,2	-0,6666710	13,7872	-30,6601
19,4	-0,669955	13,9274	-30,8659
19,6	-0,673133	14,0675	-31,0716
19,8	-0,676247	14,2077	-31,2771
20,0	-0,679298	14,3478	-31,4825
20,2	-0,682288	14,4879	-31,6879
20,4	-0,685219	14,6281	-31,8931
20,6	-0,688093	14,7682	-32,0982
20,8	-0,690912	14,9083	-32,3032
21,0	-0,693676	15,0484	-32,5081
21,2	-0,696388	15,1886	-32,7129
21,4	-0,699049	15,3287	-32,9177
21,6	-0,701660	15,4688	-33,1223
21,8	-0,704223	15,6089	-33,3269
22,0	-0,706740	15,7490	-33,5313
22,2	-0,709211	15,8891	-33,7357
22,4	-0,711637	16,0292	-33,9400
22,6	-0,714020	16,1693	-34,1443
22,8	-0,716362	16,3094	-34,3484

R	W	P	λ
23,0	-0,718662	16,4495	-34,5525
23,2	-0,720923	16,5896	-34,7565
23,4	-0,723144	16,7297	-34,9604
23,6	-0,725328	16,8698	-35,1643
23,8	-0,727475	17,0099	-35,3681
24,0	-0,729586	17,1500	-35,5719
24,2	-0,731662	17,2900	-35,7755
24,4	-0,733704	17,4301	-35,9792
24,6	-0,735713	17,5702	-36,1827
24,8	-0,737689	17,7103	-36,3862
25,0	-0,739633	17,8503	-36,5896
25,2	-0,741546	17,9904	-36,7930
25,4	-0,743429	18,1305	-36,9964
25,6	-0,745282	18,2706	-37,1996
25,8	-0,747107	18,4106	-37,4029
26,0	-0,748903	18,5507	-37,6060
26,2	-0,750672	18,6908	-37,8092
26,4	-0,752414	18,8308	-38,0122
26,6	-0,754130	18,9709	-38,2153
26,8	-0,755820	19,1110	-38,4182
27,0	-0,757484	19,2510	-38,6212
27,2	-0,759125	19,3911	-38,8241
27,4	-0,760741	19,5312	-39,0269
27,6	-0,762334	19,6712	-39,2297
27,8	-0,763903	19,8113	-39,4325
28,0	-0,765451	19,9514	-39,6352
28,2	-0,766976	20,0914	-39,8379
28,4	-0,768480	20,2315	-40,0405
28,6	-0,769962	20,3715	-40,2432
28,8	-0,771424	20,5116	-40,4457
29,0	-0,772866	20,6516	-40,6483
29,2	-0,774287	20,7917	-40,8508
29,4	-0,775690	20,9317	-41,0532
29,6	-0,777073	21,0718	-41,2556
29,8	-0,778438	21,2118	-41,4580
30,0	-0,779785	21,3519	-41,6604
30,2	-0,781113	21,4919	-41,8627

$Z = 7$

5gσ [5'0'4'0]

R	W	P	λ
0,2	33,7196	0,160026	-20,0220
0,4	16,2183	0,320208	-20,0880
0,6	10,3829	0,480709	-20,1981
0,8	7,46319	0,641700	-20,3526
1,0	5,70918	0,803374	-20,5518
1,2	4,53742	0,965951	-20,7961
1,4	3,69775	1,12969	-21,0861
1,6	3,06496	1,29493	-21,4226
1,8	2,56932	1,46209	-21,8067
2,0	2,16879	1,63169	-22,2398
2,2	1,83638	1,80443	-22,7240
2,4	1,55393	1,98108	-23,2618
2,6	1,30880	2,16247	-23,8562
2,8	1,09210	2,34925	-24,5102
3,0	0,897782	2,54165	-25,2262
3,2	0,722005	2,73922	-26,0051
3,4	0,562525	2,94085	-26,8454
3,6	0,418098	3,14495	-27,7438
3,8	0,287914	3,34982	-28,6954
4,0	0,171243	3,55388	-29,6945
4,2	0,067278	3,75588	-30,7358
4,4	-0,024890	3,95486	-31,8142
4,6	-0,106216	4,15015	-32,9255
4,8	-0,177650	4,34126	-34,0660
5,0	-0,240076	4,52780	-35,2332
5,2	-0,294289	4,70944	-36,4250
5,4	-0,340974	4,88584	-37,6400
5,6	-0,380725	5,05666	-38,8776
5,8	-0,414071	5,22156	-40,1372
6,0	-0,441538	5,38031	-41,4184
6,2	-0,463694	5,53283	-42,7203
6,4	-0,481176	5,67930	-44,0416
6,6	-0,494678	5,82015	-45,3803
6,8	-0,504895	5,95594	-46,7340
7,0	-0,512471	6,08733	-48,1003
7,2	-0,517965	6,21495	-49,4769
7,4	-0,521838	6,33940	-50,8620
7,6	-0,524459	6,46114	-52,2538

R	W	P	λ
7,8	-0,526115	6,58061	-53,6510
8,0	-0,527034	6,69814	-55,0527
8,2	-0,527389	6,81402	-56,4578
8,4	-0,527319	6,92848	-57,8657
8,6	-0,526930	7,04172	-59,2758
8,8	-0,526310	7,15393	-60,6876
9,0	-0,525525	7,26524	-62,1007
9,2	-0,524632	7,37580	-63,5148
9,4	-0,523677	7,48572	-64,9294
9,6	-0,522697	7,59512	-66,3443
9,8	-0,521726	7,70411	-67,7592
10,0	-0,520797	7,81280	-69,1738
10,2	-0,519941	7,92132	-70,5878
10,4	-0,519194	8,02982	-72,0008
10,6	-0,518605	8,13850	-73,4122
10,8	-0,518243	8,24766	-74,8212
11,0	-0,518220	8,35777	-76,2265
11,2	-0,518717	8,46959	-77,6259
11,4	-0,520025	8,58436	-79,0157
11,6	-0,522438	8,70343	-80,3923
11,8	-0,526052	8,82744	-81,7540
12,0	-0,530614	8,95568	-83,1030
12,2	-0,535743	9,08681	-84,4435
12,4	-0,541148	9,21973	-85,7787
12,6	-0,546659	9,35381	-87,1105
12,8	-0,552173	9,48862	-88,4402
13,0	-0,557638	9,62395	-89,7685
13,2	-0,563037	9,75970	-91,0956
13,4	-0,568340	9,89573	-92,4219
13,6	-0,573551	10,0321	-93,7475
13,8	-0,578652	10,1685	-95,0726
14,0	-0,583652	10,3052	-96,3972
14,2	-0,588548	10,4421	-97,7214
14,4	-0,593342	10,5791	-99,0453
14,6	-0,598029	10,7162	-100,369
14,8	-0,602617	10,8535	-101,692
15,0	-0,607101	10,9909	-103,015

 $Z = 7$

5gσ [5'0'4'0]

R	W	P	λ
15,2	-0,611501	11,1284	-104,338
15,4	-0,615801	11,2660	-105,660
15,6	-0,620009	11,4036	-106,983
15,8	-0,624124	11,5414	-108,305
16,0	-0,628153	11,6792	-109,627
16,2	-0,632104	11,8171	-110,949
16,4	-0,635968	11,9551	-112,271
16,6	-0,639747	12,0932	-113,592
16,8	-0,643458	12,2313	-114,914
17,0	-0,647085	12,3695	-116,235
17,2	-0,650645	12,5077	-117,557
17,4	-0,654129	12,6460	-118,878
17,6	-0,657542	12,7844	-120,199
17,8	-0,660891	12,9228	-121,520
18,0	-0,664173	13,0612	-122,841
18,2	-0,667389	13,1997	-124,162
18,4	-0,670549	13,3383	-125,483
18,6	-0,673635	13,4768	-126,804
18,8	-0,676673	13,6155	-128,124
19,0	-0,679668	13,7541	-129,445
19,2	-0,682569	13,8928	-130,766
19,4	-0,685432	14,0316	-132,086
19,6	-0,688254	14,1704	-133,407
19,8	-0,691007	14,3091	-134,727
20,0	-0,693712	14,4479	-136,048
20,2	-0,696378	14,5868	-137,368
20,4	-0,698996	14,7257	-138,688
20,6	-0,701553	14,8646	-140,009
20,8	-0,704079	15,0035	-141,329
21,0	-0,706557	15,1425	-142,649
21,2	-0,708989	15,2815	-143,970
21,4	-0,711373	15,4204	-145,290
21,6	-0,713729	15,5595	-146,610
21,8	-0,716054	15,6987	-147,930
22,0	-0,718315	15,8377	-149,251
22,2	-0,720556	15,9768	-150,571
22,4	-0,722750	16,1159	-151,891
22,6	-0,724919	16,2552	-153,211

R	W	P	λ
22,8	-0,727039	16,3943	-154,531
23,0	-0,729143	16,5336	-155,851
23,2	-0,731185	16,6726	-157,171
23,4	-0,733214	16,8119	-158,491
23,6	-0,735202	16,9511	-159,811
23,8	-0,737170	17,0904	-161,131
24,0	-0,739107	17,2297	-162,451
24,2	-0,740985	17,3688	-163,771
24,4	-0,742864	17,5082	-165,091
24,6	-0,744705	17,6475	-166,411
24,8	-0,746555	17,7869	-167,731
25,0	-0,748301	17,9261	-169,051
25,2	-0,750066	18,0655	-170,371
25,4	-0,751804	18,2049	-171,691
25,6	-0,753511	18,3442	-173,011
25,8	-0,755211	18,4838	-174,331
26,0	-0,756851	18,6230	-175,651
26,2	-0,758506	18,7626	-176,970
26,4	-0,760103	18,9019	-178,291
26,6	-0,761677	19,0412	-179,611
26,8	-0,763258	19,1808	-180,930
27,0	-0,764789	19,3201	-182,251
27,2	-0,766312	19,4596	-183,571
27,4	-0,767827	19,5992	-184,890
27,6	-0,769284	19,7384	-186,211
27,8	-0,770772	19,8782	-187,530
28,0	-0,772187	20,0174	-188,850
28,2	-0,773609	20,1569	-190,170
28,4	-0,775007	20,2964	-191,490
28,6	-0,776417	20,4362	-192,809
28,8	-0,777731	20,5752	-194,130
29,0	-0,779116	20,7152	-195,449
29,2	-0,780478	20,8551	-196,768
29,4	-0,781774	20,9945	-198,089
29,6	-0,783055	21,1339	-199,409
29,8	-0,784327	21,2734	-200,729
30,0	-0,785641	21,4135	-202,047

Z = 7

6g5 [6'1'4'0]

R	W	P	λ
0,2	34,1109	0,13335I	-20,018I
0,4	16,610I	0,2668II	-20,0725
0,6	10,7756	0,400493	-20,1633
0,8	7,85716	0,534517	-20,2907
1,0	6,10482	0,66902I	-20,4549
1,2	4,93517	0,804165	-20,6563
1,4	4,09809	0,940146	-20,8954
1,6	3,46844	1,07722	-21,1728
1,8	2,97657	1,21571	-21,4895
2,0	2,58057	1,35605	-21,8467
2,2	2,25364	1,49873	-22,2458
2,4	1,97790	1,64428	-22,6885
2,6	1,74115	1,79302	-23,1766
2,8	1,53508	1,94486	-23,7109
3,0	1,35421	2,09906	-24,2910
3,2	1,19493	2,25432	-24,9148
3,4	1,05469	2,40912	-25,5792
3,6	0,931363	2,56218	-26,2809
3,8	0,822966	2,71260	-27,0169
4,0	0,727626	2,85989	-27,7848
4,2	0,643622	3,00387	-28,5826
4,4	0,569421	3,14452	-29,4086
4,6	0,503689	3,28192	-30,2614
4,8	0,445275	3,41620	-31,1392
5,0	0,393193	3,54758	-32,0402
5,2	0,346596	3,67614	-32,9626
5,4	0,304757	3,80219	-33,9043
5,6	0,267047	3,92590	-34,8631
5,8	0,232925	4,04749	-35,8370
6,0	0,201922	4,16718	-36,8236
6,2	0,173632	4,28518	-37,8209
6,4	0,147704	4,40171	-38,8268
6,6	0,123834	4,51696	-39,8392
6,8	0,101758	4,63113	-40,8564
7,0	0,0812462	4,74441	-41,8764
7,2	0,0621009	4,85699	-42,8976
7,4	0,0441508	4,96902	-43,9186
7,6	0,0272482	5,08066	-44,938I

R	W	P	λ
7,8	0,0112668	5,19204	-45,9548
8,0	-0,00390093	5,30328	-46,9678
8,2	-0,0183456	5,41450	-47,9764
8,4	-0,0321433	5,52576	-48,9799
8,6	-0,0453572	5,63714	-49,9782
8,8	-0,0580396	5,74868	-50,9708
9,0	-0,0702336	5,8604I	-51,9579
9,2	-0,0819750	5,97237	-52,9394
9,4	-0,0932937	6,08455	-53,9156
9,6	-0,10104215	6,19695	-54,8867
9,8	-0,114761	6,30958	-55,8529
10,0	-0,124950	6,42242	-56,8147
10,2	-0,134800	6,53546	-57,7723
10,4	-0,144325	6,64869	-58,726I
10,6	-0,153542	6,76210	-59,6763
10,8	-0,162462	6,87566	-60,6232
11,0	-0,171098	6,98938	-61,5671
11,2	-0,179463	7,10323	-62,5082
11,4	-0,187568	7,21721	-63,4468
11,6	-0,195423	7,33131	-64,3831
11,8	-0,203040	7,44551	-65,3172
12,0	-0,210428	7,55982	-66,2494
12,2	-0,217597	7,67421	-67,1797
12,4	-0,224555	7,78870	-68,1083
12,6	-0,231311	7,90326	-69,0354
12,8	-0,237874	8,01790	-69,9610
13,0	-0,244252	8,13261	-70,8853
13,2	-0,250451	8,24738	-71,8083
13,4	-0,256479	8,36222	-72,7301
13,6	-0,262342	8,47711	-73,6508
13,8	-0,268048	8,59206	-74,5706
14,0	-0,273602	8,70706	-75,4893
14,2	-0,279010	8,82212	-76,4072
14,4	-0,284277	8,93722	-77,3242
14,6	-0,289409	9,05236	-78,2405
14,8	-0,294412	9,16755	-79,1560
15,0	-0,299289	9,28278	-80,0708

Z = 7

6g5 [6'1'4'0]

R	W	P	λ
15,2	-0,304045	9,39805	-80,9849
15,4	-0,308685	9,51335	-81,8984
15,6	-0,313213	9,62869	-82,8114
15,8	-0,317633	9,74407	-83,7237
16,0	-0,321948	9,85948	-84,6356
16,2	-0,326162	9,97492	-85,5470
16,4	-0,330279	10,0904	-86,4577
16,6	-0,334303	10,2059	-87,3683
16,8	-0,338235	10,3214	-88,2784
17,0	-0,342079	10,4370	-89,1880
17,2	-0,345839	10,5526	-90,0972
17,4	-0,349516	10,6682	-91,0061
17,6	-0,353114	10,7838	-91,9147
17,8	-0,356634	10,8994	-92,8229
18,0	-0,360080	11,0151	-93,7309
18,2	-0,363454	11,1308	-94,6385
18,4	-0,366758	11,2465	-95,5458
18,6	-0,369994	11,3623	-96,4529
18,8	-0,373164	11,4780	-97,3597
19,0	-0,376271	11,5938	-98,2663
19,2	-0,379315	11,7096	-99,1727
19,4	-0,382299	11,8254	-100,079
19,6	-0,385225	11,9413	-100,985
19,8	-0,388095	12,0571	-101,890
20,0	-0,390909	12,1730	-102,796
20,2	-0,393670	12,2889	-103,701
20,4	-0,396379	12,4048	-104,606
20,6	-0,399037	12,5207	-105,511
20,8	-0,401646	12,6366	-106,416
21,0	-0,404208	12,7526	-107,321
21,2	-0,406723	12,8685	-108,225
21,4	-0,409192	12,9845	-109,130
21,6	-0,411618	13,1005	-110,034
21,8	-0,414001	13,2165	-110,938
22,0	-0,416342	13,3325	-111,842
22,2	-0,418642	13,4485	-112,746
22,4	-0,420903	13,5645	-113,650
22,6	-0,423125	13,6806	-114,553

R	W	P	λ
22,8	-0,425310	13,7966	-115,457
23,0	-0,427438	13,9127	-116,360
23,2	-0,429570	14,0288	-117,264
23,4	-0,431647	14,1448	-118,167
23,6	-0,433691	14,2609	-119,070
23,8	-0,435701	14,3770	-119,973
24,0	-0,437678	14,4931	-120,876
24,2	-0,439624	14,6093	-121,779
24,4	-0,441540	14,7254	-122,681
24,6	-0,443425	14,8415	-123,584
24,8	-0,445280	14,9577	-124,487
25,0	-0,447107	15,0738	-125,389
25,2	-0,448906	15,1900	-126,292
25,4	-0,450677	15,3062	-127,194
25,6	-0,452422	15,4224	-128,097
25,8	-0,454140	15,5386	-128,999
26,0	-0,455832	15,6548	-129,901
26,2	-0,457500	15,7710	-130,803
26,4	-0,459143	15,8872	-131,705
26,6	-0,460762	16,0034	-132,607
26,8	-0,462357	16,1196	-133,509
27,0	-0,463930	16,2358	-134,411
27,2	-0,465480	16,3521	-135,313
27,4	-0,467008	16,4683	-136,215
27,6	-0,468515	16,5846	-137,117
27,8	-0,470001	16,7008	-138,019
28,0	-0,471465	16,8171	-138,920
28,2	-0,472910	16,9334	-139,822
28,4	-0,474335	17,0496	-140,724
28,6	-0,475740	17,1659	-141,625
28,8	-0,477127	17,2822	-142,527
29,0	-0,478495	17,3985	-143,428
29,2	-0,479845	17,5148	-144,330
29,4	-0,481176	17,6311	-145,231
29,6	-0,482491	17,7474	-146,133
29,8	-0,483788	17,8637	-147,034
30,0	-0,485068	17,9800	-147,936

Z=8 4fσ [4'0'3'0]

Z=8 4dσ [4'1'2'0]

Z=8

5pσ [5'3'1'0]

R	W	P	λ
0,5	I3,45I9	0,56437I	-I2,29I8
I,0	5,38897	I,14259	-I3,18I9
I,5	2,5793I	I,760I9	-I4,7284
2,0	I,07059	2,42050	-I6,984I
2,5	0,205799	3,05890	-I9,8427
3,0	-0,258I60	3,6279I	-23,12I7
3,5	-0,4999I2	4,1306I	-26,6573
4,0	-0,633963	4,59039	-30,3225
4,5	-0,72I837	5,03076	-34,0290
5,0	-0,795286	5,47I84	-37,7I36
5,5	-0,867583	5,92640	-4I,3426
6,0	-0,939222	6,39578	-44,9I94
6,5	-I,00684	6,87528	-48,4633
7,0	-I,06855	7,36067	-5I,9896
7,5	-I,I24I0	7,84954	-55,5062
8,0	-I,I7395	8,34065	-59,0I72
8,5	-I,2I875	8,8333I	-62,5248
9,0	-I,259I4	9,327I2	-66,0300
9,5	-I,29569	9,82I82	-69,5337
IO,0	-I,32890	IO,3I72	-73,0363
IO,5	-I,359I8	IO,8I32	-76,5380
II,0	-I,38689	II,3096	-80,0392
II,5	-I,4I234	II,8064	-83,5399
I2,0	-I,43579	I2,3035	-87,0403
I2,5	-I,45747	I2,80I0	-90,5404
I3,0	-I,47755	I3,2986	-94,0404
I3,5	-I,49622	I3,7965	-97,5402
I4,0	-I,5I36I	I4,2945	-I0I,040
I4,5	-I,52984	I4,7927	-I04,540
I5,0	-I,54504	I5,29II	-I08,039
I5,5	-I,55929	I5,7895	-I1I,539
I6,0	-I,57268	I6,288I	-I15,038
I6,5	-I,58528	I6,7868	-I18,538
I7,0	-I,597I7	I7,2856	-I22,037
I7,5	-I,60839	I7,7844	-I25,536
I8,0	-I,6I90I	I8,2833	-I29,036
I8,5	-I,62907	I8,7823	-I32,535
I9,0	-I,63862	I9,28I4	-I36,035
I9,5	-I,64769	I9,7804	-I39,534
20,0	-I,6563I	20,2796	-I43,034

R	W	P	λ
0,5	I3,4084	0,569I66	-6,45764
I,0	5,29989	I,16I92	-7,82220
I,5	2,69959	I,72I32	-9,676I9
2,0	I,47855	2,24564	-II,5899
2,5	0,769685	2,75585	-I3,4I26
3,0	0,303583	3,26096	-I5,I384
3,5	-0,027057	3,76374	-I6,7970
4,0	-0,273974	4,265I8	-I8,4I23
4,5	-0,465486	4,76582	-I9,9990
5,0	-0,6I8436	5,26597	-2I,5660
5,5	-0,743459	5,76583	-23,II90
6,0	-0,847600	6,26552	-24,66I7
6,5	-0,9357I3	6,765I3	-26,I967
7,0	-I,0II24	7,26468	-27,7257
7,5	-I,07673	7,7642I	-29,2502
8,0	-I,I3404	8,26374	-30,77I0
8,5	-I,I8464	8,76328	-32,2888
9,0	-I,22963	9,26283	-33,8043
9,5	-I,26990	9,76240	-35,3I78
IO,0	-I,306I7	IO,2620	-36,8297
IO,5	-I,33899	IO,76I6	-38,3403
II,0	-I,36884	II,26I2	-39,8497
II,5	-I,396II	II,7609	-4I,358I
I2,0	-I,42II2	I2,2605	-42,8656
I2,5	-I,444I4	I2,7602	-44,3725
I3,0	-I,46539	I3,2599	-45,8787
I3,5	-I,48507	I3,7596	-47,3844
I4,0	-I,50336	I4,2594	-48,8896
I4,5	-I,52039	I4,759I	-50,3944
I5,0	-I,53629	I5,2589	-5I,8987
I5,5	-I,55II7	I5,7586	-53,4028
I6,0	-I,565I2	I6,2584	-54,9066
I6,5	-I,57823	I6,7582	-56,4I00
I7,0	-I,59057	I7,2580	-57,9I33
I7,5	-I,60222	I7,7578	-59,4I63
I8,0	-I,6I32I	I8,2576	-60,9I9I
I8,5	-I,6236I	I8,7574	-62,42I8
I9,0	-I,63348	I9,2573	-63,9243
I9,5	-I,64283	I9,757I	-65,4266
20,0	-I,65I72	20,2569	-66,9288

R	W	P	λ
0,5	I4,3646	0,452I33	-2,67446
I,0	6,42286	0,8880I4	-3,0I6I7
I,5	3,79637	I,3I494	-2,77274
2,0	2,49I88	I,73673	-2,23757
2,5	I,7I443	2,I5463	-I,54750
3,0	I,I9947	2,5695I	0,762809
3,5	0,833875	2,98203	0,0853248
4,0	0,56I207	3,39269	0,978647
4,5	0,3502I7	3,80I85	I,90557
5,0	0,I822I4	4,20979	2,85828
5,5	0,0453436	4,6I673	3,83I29
6,0	-0,06827I7	5,02284	4,8206I
6,5	-0,I64066	5,42825	5,82324
7,0	-0,245909	5,83308	6,83690
7,5	-0,3I6629	6,23740	7,85979
8,0	-0,378339	6,64I30	8,89052
8,5	-0,432653	7,04483	9,92793
9,0	-0,480820	7,44803	IO,97II
9,5	-0,523825	7,85096	I2,0I93
IO,0	-0,562452	8,25364	I3,07I8
IO,5	-0,597336	8,656I0	I4,I282
II,0	-0,628995	9,05838	I5,I880
II,5	-0,657854	9,46048	I6,2508
I2,0	-0,684269	9,86242	I7,3I62
I2,5	-0,708537	IO,2642	I8,384I
I3,0	-0,7309IO	IO,6659	I9,4542
I3,5	-0,75I599	II,0675	20,5262
I4,0	-0,770788	II,4690	2I,5999
I4,5	-0,788635	II,8704	22,6753
I5,0	-0,805275	I2,27I7	23,752I
I5,5	-0,820826	I2,6729	24,8303
I6,0	-0,835392	I3,0740	25,9097
I6,5	-0,849064	I3,475I	26,9902
I7,0	-0,86I920	I3,876I	28,07I8
I7,5	-0,874032	I4,277I	29,I543
I8,0	-0,885463	I4,6780	30,2377
I8,5	-0,896269	I5,0789	3I,32I9
I9,0	-0,906499	I5,4798	32,4069
I9,5	-0,9I6I98	I5,8806	33,4926
20,0	-0,925406	I6,28I3	34,5789

R	W	P	λ
20,5	-0,934I60	I6,6820	35,6659
2I,0	-0,942493	I7,0827	36,7534
2I,5	-0,950434	I7,4834	37,84I5
22,0	-0,9580I0	I7,8840	38,930I
22,5	-0,965245	I8,2846	40,0I9I
23,0	-0,972I63	I8,6852	4I,I086
23,5	-0,978783	I9,0858	42,I985
24,0	-0,985I25	I9,4863	43,2888
24,5	-0,99I205	I9,8868	44,3794
25,0	-0,997040	20,2873	45,4704
25,5	-I,00264	20,6878	46,56I8
26,0	-I,00803	2I,0882	47,6534
26,5	-I,0I32I	2I,4887	48,7453
27,0	-I,0I820	2I,889I	49,8376
27,5	-I,02300	22,2895	50,930I
28,0	-I,02763	22,6899	52,0228
28,5	-I,032I0	23,0903	53,II58
29,0	-I,0364I	23,4907	54,2090
29,5	-I,04058	23,89I0	55,3025
30,0	-I,04460	24,29I4	56,396I
30,5	-I,04849	24,69I7	57,4899
3I,0	-I,05226	25,0920	58,5840
3I,5	-I,05590	25,4924	59,6782
32,0	-I,05943	25,8927	60,7725
32,5	-I,06285	26,2930	6I,867I
33,0	-I,066I7	26,6933	62,96I8
33,5	-I,06939	27,0935	64,0566
34,0	-I,0725I	27,4938	65,15I6
34,5	-I,07554	27,894I	66,2468
35,0	-I,07848	28,2943	67,3420
35,5	-I,08I34	28,6946	68,4374
36,0	-I,084I2	29,0948	69,5329
36,5	-I,08682	29,495I	70,6286
37,0	-I,08945	29,8955	7I,7243
37,5	-I,0920I	30,2955	72,8202
38,0	-I,09450	30,6957	73,9I6I
38,5	-I,09692	3I,0960	75,0I22
39,0	-I,09929	3I,4962	76,1083
39,5	-I,IOI59	3I,8964	77,2046
40,0	-I,IO383	32,2966	78,3009

Z=8

5gσ [5'0'4'0]

R	W	P	λ
0,5	I4,3762	0,450526	-20,1798
I,0	6,36415	0,904392	-20,7212
I,5	3,67450	I,36609	-2I,6335
2,0	2,30063	I,84356	-22,937I
2,5	I,43230	2,35034	-24,6745
3,0	0,805159	2,89427	-26,8910
3,5	0,3357II	3,45598	-29,5594
4,0	-0,00362I	4,00362	-32,5816
4,5	-0,23670I	4,51626	-35,8698
5,0	-0,386404	4,98298	-39,3740
5,5	-0,474326	5,40I3I	-43,0572
6,0	-0,522020	5,77896	-46,8712
6,5	-0,546807	6,1279I	-50,7673
7,0	-0,559580	6,45830	-54,7095
7,5	-0,566780	6,77796	-58,6725
8,0	-0,572874	7,09450	-62,633I
8,5	-0,582029	7,41794	-66,5614
9,0	-0,597723	7,75937	-70,426I
9,5	-0,619555	8,12142	-74,2230
IO,0	-0,644037	8,49717	-77,9767
IO,5	-0,668599	8,88012	-81,7086
II,0	-0,692173	9,26696	-85,4294
II,5	-0,714425	9,65616	-89,1438
I2,0	-0,73530I	IO,0470	-92,8543
I2,5	-0,75485I	IO,4390	-96,562I
I3,0	-0,773157	IO,8320	-100,268
I3,5	-0,790310	II,2257	-103,972
I4,0	-0,806403	II,620I	-107,675
I4,5	-0,821515	I2,0150	-111,377
I5,0	-0,835732	I2,4105	-115,079
I5,5	-0,84912I	I2,8063	-118,78I
I6,0	-0,861752	I3,2024	-122,48I
I6,5	-0,873685	I3,5989	-128,182
I7,0	-0,884965	I3,9956	-129,882
I7,5	-0,895657	I4,3926	-133,582
I8,0	-0,905796	I4,7898	-137,28I
I8,5	-0,915420	I5,1872	-140,98I
I9,0	-0,924564	I5,5847	-144,68I
I9,5	-0,933275	I5,9825	-148,380
20,0	-0,941575	I6,3803	-152,079

R	W	P	λ
20,5	-0,949492	I6,7783	-155,778
2I,0	-0,957053	I7,1764	-159,478
2I,5	-0,964265	I7,5746	-163,177
22,0	-0,971178	I7,9729	-166,876
22,5	-0,977802	I8,3713	-170,575
23,0	-0,984149	I8,7699	-174,274
23,5	-0,990243	I9,1685	-177,973
24,0	-0,99807I	I9,5670	-181,672
24,5	-I,00168	I9,9657	-185,372
25,0	-I,00709	20,3646	-189,070
25,5	-I,01227	20,7633	-192,770
26,0	-I,01726	2I,162I	-196,469
26,5	-I,02209	2I,561I	-200,168
27,0	-I,02673	2I,9600	-203,867
27,5	-I,03122	22,359I	-207,566
28,0	-I,03554	22,758I	-211,266
28,5	-I,03973	23,1573	-214,964
29,0	-I,04378	23,5565	-218,663
29,5	-I,04766	23,9554	-222,363
30,0	-I,05147	24,3549	-226,062
30,5	-I,05514	24,7542	-229,76I
3I,0	-I,05866	25,1533	-233,46I
3I,5	-I,06214	25,5529	-237,159
32,0	-I,06539	25,9514	-240,860
32,5	-I,06864	26,3510	-244,559
33,0	-I,07176	26,7502	-248,258
33,5	-I,07480	27,1495	-251,958
34,0	-I,07775	27,5489	-255,657
34,5	-I,08025	27,9443	-259,357
35,0	-I,08306	28,3439	-262,869
35,5	-I,08579	28,7434	-266,57I
36,0	-I,08845	29,1430	-270,273
36,5	-I,09103	29,5426	-273,975
37,0	-I,09355	29,9422	-277,676
37,5	-I,09600	30,3418	-281,378
38,0	-I,09839	30,7414	-285,080
38,5	-I,1007I	3I,141I	-288,78I
39,0	-I,10298	3I,5406	-292,483
39,5	-I,10519	3I,9403	-296,184
40,0	-I,10734	32,3400	-299,886

Z=8

6sσ [6'5'0'0]

R	W	P	λ
0,2	38,8953	0,148639	0,281863
0,4	I8,91I9	0,295036	0,9317I8
0,6	I2,2573	0,440103	I,74178
0,8	8,93358	0,584168	2,63178
I,0	6,94174	0,7274I3	3,56969
I,2	5,6155I	0,869959	4,53983
I,4	4,66945	I,01I90	5,53332
I,6	3,96084	I,1533I	6,54458
I,8	3,41046	I,29424	7,56984
2,0	2,97075	I,43474	8,60642
2,5	2,18110	I,78439	II,2356
3,0	I,65648	2,13210	I3,9042
3,5	I,2830I	2,4782I	I6,6006
4,0	I,00382	2,8230I	I9,3177
4,5	0,78736I	3,16670	22,0507
5,0	0,614714	3,50942	24,7963
5,5	0,473868	3,85133	27,552I
6,0	0,356822	4,19252	30,3163
6,5	0,258047	4,53307	33,0875
7,0	0,173596	4,87308	35,8646
7,5	0,100584	5,21259	38,6469
8,0	0,036846	5,55166	4I,4335
8,5	-0,019268	5,89034	44,2240
9,0	-0,069042	6,22866	47,0178
9,5	-0,113487	6,56666	49,8146
IO,0	-0,153409	6,90438	52,6140
IO,5	-0,189463	7,24183	55,4157
II,0	-0,222180	7,57904	58,2196
II,5	-0,252002	7,91603	61,0253
I2,0	-0,279294	8,25283	63,8328
I2,5	-0,304363	8,58943	66,6418
I3,0	-0,327468	8,92586	69,4522
I3,5	-0,348832	9,26214	72,2639
I4,0	-0,36864I	9,59827	75,0768
I4,5	-0,387060	9,93427	77,8908
I5,0	-0,404229	IO,270I	80,7058
I5,5	-0,420270	IO,6059	83,5217
I6,0	-0,435290	IO,9415	86,3384
I6,5	-0,449384	II,277I	89,1560
I7,0	-0,462635	II,6125	9I,9742

R	W	P	λ
I7,5	-0,4751I4	II,9479	94,7932
I8,0	-0,486888	I2,283I	97,6128
I8,5	-0,4980I5	I2,6184	IO0,433
I9,0	-0,508545	I2,9535	IO3,254
I9,5	-0,518526	I3,2885	IO6,075
20,0	-0,528000	I3,6235	IO8,897
20,5	-0,537003	I3,9584	III,719
2I,0	-0,54557I	I4,2933	II4,542
2I,5	-0,553733	I4,628I	II7,365
22,0	-0,561518	I4,9629	I20,188
22,5	-0,56895I	I5,2976	I23,012
23,0	-0,576056	I5,6322	I25,836
23,5	-0,582853	I5,9668	I28,66I
24,0	-0,589363	I6,3014	I31,486
24,5	-0,595602	I6,6360	I34,31I
25,0	-0,601588	I6,9704	I37,136
25,5	-0,607336	I7,3049	I39,962
26,0	-0,612859	I7,6393	I42,788
26,5	-0,618170	I7,9737	I45,614
27,0	-0,62328I	I8,308I	I48,440
27,5	-0,628204	I8,6424	I51,266
28,0	-0,632948	I8,9767	I54,093
28,5	-0,637523	I9,3110	I56,920
29,0	-0,641938	I9,6452	I59,747
29,5	-0,64620I	I9,9794	I62,575
30,0	-0,650320	20,3136	I65,402
30,5	-0,654302	20,6478	I68,230
3I,0	-0,658153	20,9820	I71,058
3I,5	-0,661880	2I,316I	I73,886
32,0	-0,665490	2I,6502	I76,714
32,5	-0,668986	2I,9843	I79,542
33,0	-0,672375	22,3183	I82,370
33,5	-0,675662	22,6524	I85,199
34,0	-0,678850	22,9864	I88,028
34,5	-0,681945	23,3204	I90,856
35,0	-0,684950	23,6544	I93,685
35,5	-0,690707	24,3224	I99,343
37,0	-0,696148	24,9903	205,002
38,0	-0,701299	25,658I	210,66I
39,0	-0,706182	26,3259	216,320
40,0	-0,710818	26,9936	221,980

Z=8

695 [6'1'4'0]

R	W	P	λ
0,5	I4,8728	0,375366	-20,1491
1,0	6,86577	0,753070	-20,5988
1,5	4,18542	I,13640	-21,3571
2,0	2,82728	I,53148	-22,4427
2,5	I,98741	I,94663	-23,8863
3,0	I,41256	2,37560	-25,6940
3,5	I,01183	2,79330	-27,8102
4,0	0,730894	3,18635	-30,1702
4,5	0,529222	3,55551	-32,7199
5,0	0,379654	3,90568	-35,4046
5,5	0,264660	4,24229	-38,1701
6,0	0,172931	4,57025	-40,9692
6,5	0,097160	4,89362	-43,7656
7,0	0,032666	5,21533	-46,5356
7,5	-0,023488	5,53720	-49,2680
8,0	-0,0731342	5,86006	-51,9616
8,5	-0,117463	6,18412	-54,6205
9,0	-0,157311	6,50931	-57,2507
9,5	-0,193316	6,83545	-59,8579
10,0	-0,225994	7,16238	-62,4470
10,5	-0,255773	7,48996	-65,0215
11,0	-0,283015	7,81808	-67,5844
11,5	-0,308024	8,14666	-70,1379
12,0	-0,331062	8,47564	-72,6838
12,5	-0,352351	8,80496	-75,2232
13,0	-0,372080	9,13459	-77,7574
13,5	-0,390414	9,46449	-80,2871
14,0	-0,407496	9,79462	-82,8131
14,5	-0,423449	10,1250	-85,3359
15,0	-0,438381	10,4555	-87,8560
15,5	-0,452387	10,7862	-90,3747
16,0	-0,465550	11,1171	-92,8894
16,5	-0,477944	11,4481	-95,4034
17,0	-0,489634	11,7793	-97,9159
17,5	-0,500679	12,1106	-100,427
18,0	-0,511131	12,4420	-102,937
18,5	-0,521035	12,7735	-105,446
19,0	-0,530434	13,1051	-107,954
19,5	-0,539365	13,4368	-110,461
20,0	-0,547863	13,7685	-112,968

R	W	P	λ
20,5	-0,555958	I4,1004	-115,474
21,0	-0,563678	I4,4323	-117,979
21,5	-0,571049	I4,7642	-120,484
22,0	-0,578093	I5,0963	-122,989
22,5	-0,584832	I5,4284	-125,493
23,0	-0,591286	I5,7606	-127,997
23,5	-0,597472	I6,0928	-130,500
24,0	-0,603406	I6,4250	-133,003
24,5	-0,609104	I6,7573	-135,506
25,0	-0,614579	I7,0896	-138,009
25,5	-0,619843	I7,4220	-140,511
26,0	-0,624910	I7,7544	-143,013
26,5	-0,629790	I8,0869	-145,515
27,0	-0,634493	I8,4194	-148,017
27,5	-0,639028	I8,7519	-150,519
28,0	-0,643404	I9,0844	-153,020
28,5	-0,647630	I9,4170	-155,521
29,0	-0,651713	I9,7496	-158,023
29,5	-0,655661	20,0822	-160,524
30,0	-0,659479	20,4148	-163,025
30,5	-0,663174	20,7475	-165,526
31,0	-0,666752	21,0802	-168,027
31,5	-0,670219	21,4129	-170,528
32,0	-0,673579	21,7456	-173,029
32,5	-0,676837	22,0784	-175,529
33,0	-0,679999	22,4111	-178,030
33,5	-0,683068	22,7439	-180,531
34,0	-0,686047	23,0767	-183,031
34,5	-0,688942	23,4095	-185,532
35,0	-0,691756	23,7424	-188,032
35,5	-0,694491	24,0752	-190,533
36,0	-0,697151	24,4081	-193,033
36,5	-0,699740	24,7409	-195,533
37,0	-0,702260	25,0738	-198,034
37,5	-0,704714	25,4067	-200,534
38,0	-0,707104	25,7396	-203,034
38,5	-0,709432	26,0726	-205,534
39,0	-0,711702	26,4055	-208,035
39,5	-0,713837	26,7373	-210,020
40,0	-0,715998	27,0703	-212,527

Z=8

795 [7'5'1'0]

R	W	P	λ
0,5	I5,1682	0,322452	-2,61353
1,0	7,18922	0,636700	-2,74454
1,5	4,53728	0,946341	-2,18934
2,0	3,21489	I,25309	-1,27802
2,5	2,42377	I,55747	-0,164971
3,0	I,89797	I,85987	I,07837
3,5	I,52355	2,16061	2,41312
4,0	I,24360	2,45992	3,81552
4,5	I,02651	2,75800	5,26995
5,0	0,853351	3,05501	6,76555
5,5	0,712080	3,35109	8,29446
6,0	0,594681	3,64633	9,85084
6,5	0,495608	3,94085	11,4302
7,0	0,410908	4,23471	13,0290
7,5	0,337684	4,52798	14,6446
8,0	0,273766	4,82074	16,2745
8,5	0,217497	5,11301	17,9170
9,0	0,167591	5,40486	19,5706
9,5	0,123032	5,69633	21,2340
10,0	0,083011	5,98744	22,9060
10,5	0,046873	6,27823	24,5858
11,0	0,014081	6,56872	26,2726
11,5	-0,015805	6,85894	27,9656
12,0	-0,043153	7,14892	29,6643
12,5	-0,068272	7,43866	31,3682
13,0	-0,091421	7,72820	33,0768
13,5	-0,112822	8,01754	34,7897
14,0	-0,132665	8,30669	36,5066
14,5	-0,151113	8,59568	38,2270
15,0	-0,168308	8,88452	39,9509
15,5	-0,184372	9,17321	41,6778
16,0	-0,199413	9,46176	43,4076
16,5	-0,213525	9,75018	45,1400
17,0	-0,226791	10,0385	46,8749
17,5	-0,239285	10,3267	48,6121
18,0	-0,251071	10,6148	50,3515
18,5	-0,262209	10,9028	52,0928
19,0	-0,272749	11,1907	53,8360
19,5	-0,282739	11,4784	55,5810
20,0	-0,292220	11,7662	57,3277

R	W	P	λ
20,5	-0,301230	I2,0539	59,0758
21,0	-0,309803	I2,3415	60,8255
21,5	-0,317971	I2,6290	62,5765
22,0	-0,325760	I2,9164	64,3288
22,5	-0,333198	I3,2038	66,0824
23,0	-0,340306	I3,4911	67,8371
23,5	-0,347106	I3,7784	69,5929
24,0	-0,353618	I4,0656	71,3497
24,5	-0,359860	I4,3528	73,1076
25,0	-0,365848	I4,6399	74,8663
25,5	-0,371597	I4,9270	76,6260
26,0	-0,377121	I5,2140	78,3865
26,5	-0,382433	I5,5010	80,1478
27,0	-0,387546	I5,7880	81,9099
27,5	-0,392469	I6,0749	83,6727
28,0	-0,397214	I6,3618	85,4362
28,5	-0,401789	I6,6486	87,2004
29,0	-0,406204	I6,9354	88,9652
29,5	-0,410467	I7,2224	90,7306
30,0	-0,414586	I7,5090	92,4966
30,5	-0,418568	I7,7957	94,2632
31,0	-0,422419	I8,0824	96,0303
31,5	-0,426146	I8,3690	97,7979
32,0	-0,429755	I8,6557	99,5660
32,5	-0,433251	I8,9423	101,334
33,0	-0,436640	I9,2289	103,104
33,5	-0,439926	I9,5155	104,873
34,0	-0,443114	I9,8020	106,643
34,5	-0,446208	20,0885	108,413
35,0	-0,449213	20,3750	110,184
35,5	-0,452131	20,6615	111,955
36,0	-0,454968	20,9480	113,726
36,5	-0,457725	21,2345	115,498
37,0	-0,460408	21,5209	117,270
37,5	-0,463017	21,8073	119,042
38,0	-0,465557	22,0937	120,815
38,5	-0,468030	22,3801	122,588
39,0	-0,470439	22,6665	124,362
39,5	-0,472786	22,9528	126,135
40,0	-0,475073	23,2392	127,909

Z=8

7g5 [7'2'4'0]

R	W	P	λ
0,5	15,1721	0,321608	-20,1307
1,0	7,16763	0,645122	-20,5252
1,5	4,49221	0,972762	-21,1920
2,0	3,14281	1,30934	-22,1497
2,5	2,31826	1,65996	-23,4256
3,0	1,76406	2,01537	-25,0174
3,5	1,37852	2,35724	-26,8695
4,0	1,10150	2,68104	-28,9062
4,5	0,894362	2,99075	-31,0477
5,0	0,733436	3,29121	-33,2222
5,5	0,604234	3,58622	-35,3778
6,0	0,497710	3,87830	-37,4851
6,5	0,408072	4,16887	-39,5344
7,0	0,331469	4,45859	-41,5277
7,5	0,265217	4,74771	-43,4725
8,0	0,207355	5,03633	-45,3769
8,5	0,156397	5,32448	-47,2483
9,0	0,111186	5,61221	-49,0923
9,5	0,070807	5,89956	-50,9135
10,0	0,034526	6,18657	-52,7154
10,5	0,001750	6,47329	-54,5008
11,0	-0,028007	6,75976	-56,2718
11,5	-0,055146	7,04603	-58,0305
12,0	-0,079999	7,33211	-59,7782
12,5	-0,102845	7,61805	-61,5164
13,0	-0,123919	7,90387	-63,2461
13,5	-0,143422	8,18959	-64,9684
14,0	-0,161524	8,47522	-66,6840
14,5	-0,178371	8,76078	-68,3936
15,0	-0,194091	9,04628	-70,0979
15,5	-0,208794	9,33174	-71,7974
16,0	-0,222576	9,61716	-73,4927
16,5	-0,235522	9,90255	-75,1841
17,0	-0,247707	10,1879	-76,8720
17,5	-0,259195	10,4733	-78,5567
18,0	-0,270045	10,7586	-80,2385
18,5	-0,280309	11,0439	-81,9178
19,0	-0,290035	11,3292	-83,5946
19,5	-0,299262	11,6145	-85,2693
20,0	-0,308030	11,8998	-86,9419

R	W	P	λ
20,5	-0,316371	12,1851	-88,6128
21,0	-0,324316	12,4704	-90,2819
21,5	-0,331893	12,7557	-91,9496
22,0	-0,339127	13,0410	-93,6158
22,5	-0,346041	13,3263	-95,2806
23,0	-0,352655	13,6117	-96,9443
23,5	-0,358989	13,8970	-98,6068
24,0	-0,365061	14,1823	-100,268
24,5	-0,370886	14,4676	-101,929
25,0	-0,376479	14,7529	-103,588
25,5	-0,381854	15,0383	-105,247
26,0	-0,387024	15,3236	-106,905
26,5	-0,391999	15,6090	-108,563
27,0	-0,396791	15,8943	-110,219
27,5	-0,401410	16,1797	-111,875
28,0	-0,405865	16,4651	-113,530
28,5	-0,410164	16,7505	-115,185
29,0	-0,414316	17,0358	-116,840
29,5	-0,418328	17,3212	-118,493
30,0	-0,422207	17,6066	-120,147
30,5	-0,425960	17,8920	-121,799
31,0	-0,429592	18,1774	-123,452
31,5	-0,433110	18,4628	-125,104
32,0	-0,436519	18,7483	-126,756
32,5	-0,439823	19,0337	-128,407
33,0	-0,443028	19,3191	-130,058
33,5	-0,446137	19,6046	-131,709
34,0	-0,449156	19,8900	-133,359
34,5	-0,452088	20,1754	-135,009
35,0	-0,454936	20,4609	-136,659
35,5	-0,457705	20,7463	-138,309
36,0	-0,460397	21,0318	-139,958
36,5	-0,463016	21,3173	-141,608
37,0	-0,465565	21,6027	-143,256
37,5	-0,468046	21,8882	-144,905
38,0	-0,470462	22,1737	-146,554
38,5	-0,472816	22,4592	-148,202
39,0	-0,475110	22,7447	-149,850
39,5	-0,477346	23,0302	-151,498
40,0	-0,479526	23,3157	-153,146

Z=8 7g5 [7'2'4'0]

R	W	P	λ
40,5	-0,481653	23,6012	-154,794
41,0	-0,483891	23,8895	-155,720
41,5	-0,485911	24,1750	-157,375
42,0	-0,487883	24,4604	-159,029
42,5	-0,489809	24,7459	-160,684
43,0	-0,491690	25,0313	-162,338
43,5	-0,493529	25,3168	-163,992
44,0	-0,495326	25,6023	-165,646
44,5	-0,497083	25,8877	-167,299
45,0	-0,498802	26,1732	-168,952
45,5	-0,500483	26,4587	-170,605
46,0	-0,502128	26,7442	-172,258
46,5	-0,503738	27,0297	-173,911
47,0	-0,505313	27,3152	-175,563
47,5	-0,506856	27,6007	-177,215
48,0	-0,508367	27,8862	-178,867
48,5	-0,509847	28,1717	-180,519
49,0	-0,511297	28,4572	-182,170
50,0	-0,512718	28,7427	-183,822
50,5	-0,514111	29,0282	-185,473
51,0	-0,516681	29,5993	-188,775
51,5	-0,518129	29,8848	-190,426
52,0	-0,519417	30,1704	-192,076
52,5	-0,520680	30,4559	-193,726
53,0	-0,521920	30,7414	-195,377
53,5	-0,523137	31,0270	-197,027
54,0	-0,524332	31,3125	-198,677
54,5	-0,525505	31,5981	-200,327
55,0	-0,526656	31,8836	-201,976
55,5	-0,527787	32,1692	-203,626
56,0	-0,528898	32,4548	-205,275
56,5	-0,529990	32,7403	-206,925
57,0	-0,531062	33,0259	-208,574
57,5	-0,532116	33,3115	-210,223
58,0	-0,533152	33,5970	-211,872
58,5	-0,534170	33,8826	-213,521
59,0	-0,535171	34,1682	-215,170
59,5	-0,536156	34,4538	-216,819
60,0	-0,537124	34,7394	-218,467