

Theta [deg.]	Phi [deg.]	Abs(Grlz)[dB]	Abs(Theta)[dB]	Phase(Theta)
[deg.]	Abs(Phi ) [dB]	Phase(Phi ) [deg.]	Ax.Ratio [dB]	
0.000	90.000	-1.209e+001	-4.272e+001	
323.937	-1.209e+001	238.295	3.066e+001	
1.000	90.000	-1.209e+001	-3.988e+001	
315.737	-1.209e+001	238.121	2.799e+001	
2.000	90.000	-1.209e+001	-3.778e+001	
310.823	-1.210e+001	237.837	2.607e+001	
3.000	90.000	-1.210e+001	-3.617e+001	
307.309	-1.212e+001	237.447	2.460e+001	
4.000	90.000	-1.212e+001	-3.489e+001	
304.466	-1.214e+001	236.961	2.344e+001	
5.000	90.000	-1.215e+001	-3.385e+001	
301.955	-1.218e+001	236.391	2.250e+001	
6.000	90.000	-1.218e+001	-3.300e+001	
299.599	-1.222e+001	235.750	2.174e+001	
7.000	90.000	-1.223e+001	-3.230e+001	
297.297	-1.227e+001	235.056	2.111e+001	
8.000	90.000	-1.229e+001	-3.172e+001	
294.984	-1.234e+001	234.325	2.059e+001	
9.000	90.000	-1.237e+001	-3.123e+001	
292.623	-1.242e+001	233.577	2.017e+001	
10.000	90.000	-1.246e+001	-3.082e+001	
290.189	-1.252e+001	232.832	1.983e+001	
11.000	90.000	-1.256e+001	-3.047e+001	
287.672	-1.264e+001	232.108	1.955e+001	
12.000	90.000	-1.269e+001	-3.017e+001	
285.070	-1.277e+001	231.426	1.933e+001	
13.000	90.000	-1.285e+001	-2.991e+001	
282.390	-1.294e+001	230.803	1.916e+001	
14.000	90.000	-1.303e+001	-2.968e+001	
279.649	-1.313e+001	230.259	1.902e+001	
15.000	90.000	-1.324e+001	-2.946e+001	
276.872	-1.335e+001	229.811	1.892e+001	
16.000	90.000	-1.349e+001	-2.926e+001	
274.088	-1.361e+001	229.477	1.884e+001	
17.000	90.000	-1.378e+001	-2.907e+001	
271.336	-1.391e+001	229.274	1.878e+001	
18.000	90.000	-1.411e+001	-2.887e+001	
268.653	-1.426e+001	229.220	1.874e+001	
19.000	90.000	-1.449e+001	-2.868e+001	
266.080	-1.466e+001	229.336	1.870e+001	
20.000	90.000	-1.493e+001	-2.849e+001	
263.657	-1.512e+001	229.645	1.869e+001	
21.000	90.000	-1.542e+001	-2.830e+001	
261.420	-1.565e+001	230.174	1.869e+001	
22.000	90.000	-1.598e+001	-2.811e+001	
259.400	-1.626e+001	230.959	1.872e+001	
23.000	90.000	-1.662e+001	-2.791e+001	
257.622	-1.695e+001	232.047	1.881e+001	
24.000	90.000	-1.733e+001	-2.772e+001	
256.105	-1.775e+001	233.505	1.901e+001	
25.000	90.000	-1.813e+001	-2.754e+001	
254.863	-1.866e+001	235.427	1.940e+001	
26.000	90.000	-1.902e+001	-2.736e+001	
253.902	-1.971e+001	237.959	2.017e+001	
27.000	90.000	-2.001e+001	-2.719e+001	
253.225	-2.093e+001	241.329	2.177e+001	
28.000	90.000	-2.107e+001	-2.703e+001	
252.830	-2.234e+001	245.913	2.559e+001	
29.000	90.000	-2.218e+001	-2.688e+001	
252.711	-2.398e+001	252.367	4.000e+001	

30.000	90.000	-2.326e+001	-2.673e+001
252.859	-2.585e+001	261.852	2.213e+001
31.000	90.000	-2.416e+001	-2.660e+001
253.261	-2.783e+001	276.314	1.390e+001
32.000	90.000	-2.468e+001	-2.647e+001
253.903	-2.941e+001	297.773	8.564e+000
33.000	90.000	-2.469e+001	-2.634e+001
254.768	-2.969e+001	324.061	4.693e+000
34.000	90.000	-2.421e+001	-2.622e+001
255.837	-2.851e+001	347.277	2.304e+000
35.000	90.000	-2.341e+001	-2.610e+001
257.087	-2.675e+001	3.649	2.631e+000
36.000	90.000	-2.247e+001	-2.599e+001
258.497	-2.503e+001	14.785	4.249e+000
37.000	90.000	-2.153e+001	-2.587e+001
260.042	-2.353e+001	22.788	5.812e+000
38.000	90.000	-2.065e+001	-2.575e+001
261.696	-2.226e+001	28.981	7.166e+000
39.000	90.000	-1.985e+001	-2.563e+001
263.434	-2.118e+001	34.108	8.327e+000
40.000	90.000	-1.913e+001	-2.551e+001
265.231	-2.026e+001	38.597	9.330e+000
41.000	90.000	-1.849e+001	-2.539e+001
267.063	-1.948e+001	42.704	1.021e+001
42.000	90.000	-1.793e+001	-2.526e+001
268.907	-1.882e+001	46.592	1.099e+001
43.000	90.000	-1.744e+001	-2.514e+001
270.743	-1.824e+001	50.364	1.172e+001
44.000	90.000	-1.700e+001	-2.501e+001
272.551	-1.775e+001	54.093	1.240e+001
45.000	90.000	-1.661e+001	-2.489e+001
274.316	-1.731e+001	57.826	1.307e+001
46.000	90.000	-1.627e+001	-2.477e+001
276.025	-1.693e+001	61.596	1.375e+001
47.000	90.000	-1.597e+001	-2.466e+001
277.666	-1.660e+001	65.425	1.447e+001
48.000	90.000	-1.569e+001	-2.454e+001
279.232	-1.630e+001	69.323	1.525e+001
49.000	90.000	-1.544e+001	-2.444e+001
280.717	-1.602e+001	73.297	1.611e+001
50.000	90.000	-1.520e+001	-2.435e+001
282.115	-1.576e+001	77.343	1.710e+001
51.000	90.000	-1.498e+001	-2.426e+001
283.425	-1.552e+001	81.454	1.824e+001
52.000	90.000	-1.476e+001	-2.419e+001
284.646	-1.529e+001	85.618	1.959e+001
53.000	90.000	-1.455e+001	-2.412e+001
285.777	-1.506e+001	89.817	2.123e+001
54.000	90.000	-1.434e+001	-2.407e+001
286.819	-1.483e+001	94.035	2.327e+001
55.000	90.000	-1.414e+001	-2.403e+001
287.773	-1.460e+001	98.249	2.597e+001
56.000	90.000	-1.392e+001	-2.400e+001
288.641	-1.437e+001	102.439	2.984e+001
57.000	90.000	-1.371e+001	-2.398e+001
289.425	-1.414e+001	106.584	3.680e+001
58.000	90.000	-1.349e+001	-2.398e+001
290.126	-1.390e+001	110.666	4.000e+001
59.000	90.000	-1.327e+001	-2.399e+001
290.749	-1.366e+001	114.669	3.440e+001
60.000	90.000	-1.305e+001	-2.401e+001
291.293	-1.341e+001	118.578	2.925e+001
61.000	90.000	-1.282e+001	-2.405e+001
291.762	-1.316e+001	122.383	2.623e+001

62.000	90.000	-1.260e+001	-2.409e+001
292.158	-1.292e+001	126.077	2.416e+001
63.000	90.000	-1.238e+001	-2.415e+001
292.482	-1.267e+001	129.656	2.262e+001
64.000	90.000	-1.215e+001	-2.422e+001
292.736	-1.243e+001	133.116	2.145e+001
65.000	90.000	-1.194e+001	-2.430e+001
292.923	-1.220e+001	136.458	2.052e+001
66.000	90.000	-1.172e+001	-2.439e+001
293.043	-1.196e+001	139.684	1.979e+001
67.000	90.000	-1.151e+001	-2.449e+001
293.097	-1.174e+001	142.797	1.920e+001
68.000	90.000	-1.131e+001	-2.461e+001
293.087	-1.152e+001	145.802	1.873e+001
69.000	90.000	-1.112e+001	-2.472e+001
293.015	-1.131e+001	148.702	1.835e+001
70.000	90.000	-1.093e+001	-2.485e+001
292.880	-1.111e+001	151.504	1.806e+001
71.000	90.000	-1.076e+001	-2.499e+001
292.684	-1.092e+001	154.212	1.783e+001
72.000	90.000	-1.059e+001	-2.513e+001
292.429	-1.074e+001	156.832	1.765e+001
73.000	90.000	-1.042e+001	-2.528e+001
292.114	-1.057e+001	159.369	1.753e+001
74.000	90.000	-1.027e+001	-2.543e+001
291.740	-1.041e+001	161.828	1.744e+001
75.000	90.000	-1.013e+001	-2.559e+001
291.309	-1.026e+001	164.213	1.739e+001
76.000	90.000	-9.996e+000	-2.576e+001
290.821	-1.011e+001	166.528	1.738e+001
77.000	90.000	-9.872e+000	-2.592e+001
290.277	-9.981e+000	168.776	1.739e+001
78.000	90.000	-9.756e+000	-2.609e+001
289.678	-9.858e+000	170.962	1.742e+001
79.000	90.000	-9.649e+000	-2.627e+001
289.025	-9.744e+000	173.086	1.748e+001
80.000	90.000	-9.550e+000	-2.644e+001
288.318	-9.640e+000	175.152	1.756e+001
81.000	90.000	-9.461e+000	-2.662e+001
287.560	-9.545e+000	177.160	1.766e+001
82.000	90.000	-9.380e+000	-2.680e+001
286.751	-9.460e+000	179.112	1.777e+001
83.000	90.000	-9.308e+000	-2.698e+001
285.892	-9.383e+000	181.008	1.790e+001
84.000	90.000	-9.245e+000	-2.716e+001
284.985	-9.316e+000	182.846	1.805e+001
85.000	90.000	-9.192e+000	-2.734e+001
284.030	-9.259e+000	184.627	1.820e+001
86.000	90.000	-9.147e+000	-2.752e+001
283.029	-9.211e+000	186.349	1.837e+001
87.000	90.000	-9.112e+000	-2.770e+001
281.984	-9.173e+000	188.009	1.855e+001
88.000	90.000	-9.088e+000	-2.788e+001
280.894	-9.145e+000	189.603	1.873e+001
89.000	90.000	-9.073e+000	-2.805e+001
279.762	-9.129e+000	191.129	1.893e+001
90.000	90.000	-9.070e+000	-2.823e+001
278.587	-9.123e+000	192.581	1.913e+001
91.000	90.000	-9.079e+000	-2.841e+001
277.371	-9.130e+000	193.952	1.934e+001
92.000	90.000	-9.101e+000	-2.858e+001
276.112	-9.150e+000	195.236	1.955e+001
93.000	90.000	-9.136e+000	-2.876e+001
274.812	-9.184e+000	196.424	1.976e+001

94.000	90.000	-9.187e+000	-2.894e+001
273.468	-9.233e+000	197.506	1.997e+001
95.000	90.000	-9.253e+000	-2.911e+001
272.078	-9.298e+000	198.468	2.018e+001
96.000	90.000	-9.337e+000	-2.929e+001
270.642	-9.382e+000	199.297	2.038e+001
97.000	90.000	-9.441e+000	-2.947e+001
269.155	-9.484e+000	199.975	2.058e+001
98.000	90.000	-9.565e+000	-2.965e+001
267.613	-9.608e+000	200.480	2.076e+001
99.000	90.000	-9.711e+000	-2.983e+001
266.010	-9.754e+000	200.786	2.093e+001
100.000	90.000	-9.882e+000	-3.001e+001
264.341	-9.924e+000	200.862	2.107e+001
101.000	90.000	-1.008e+001	-3.020e+001
262.596	-1.012e+001	200.669	2.118e+001
102.000	90.000	-1.030e+001	-3.039e+001
260.767	-1.034e+001	200.160	2.126e+001
103.000	90.000	-1.055e+001	-3.058e+001
258.841	-1.059e+001	199.277	2.130e+001
104.000	90.000	-1.083e+001	-3.078e+001
256.806	-1.087e+001	197.949	2.129e+001
105.000	90.000	-1.113e+001	-3.098e+001
254.647	-1.117e+001	196.090	2.122e+001
106.000	90.000	-1.144e+001	-3.119e+001
252.348	-1.149e+001	193.602	2.109e+001
107.000	90.000	-1.176e+001	-3.140e+001
249.888	-1.180e+001	190.374	2.091e+001
108.000	90.000	-1.206e+001	-3.160e+001
247.250	-1.211e+001	186.296	2.069e+001
109.000	90.000	-1.231e+001	-3.181e+001
244.412	-1.236e+001	181.283	2.046e+001
110.000	90.000	-1.247e+001	-3.201e+001
241.353	-1.252e+001	175.316	2.029e+001
111.000	90.000	-1.250e+001	-3.220e+001
238.053	-1.255e+001	168.493	2.023e+001
112.000	90.000	-1.235e+001	-3.238e+001
234.498	-1.239e+001	161.067	2.036e+001
113.000	90.000	-1.199e+001	-3.254e+001
230.678	-1.203e+001	153.429	2.073e+001
114.000	90.000	-1.144e+001	-3.267e+001
226.590	-1.147e+001	146.016	2.132e+001
115.000	90.000	-1.070e+001	-3.276e+001
222.249	-1.073e+001	139.201	2.210e+001
116.000	90.000	-9.847e+000	-3.281e+001
217.680	-9.869e+000	133.205	2.299e+001
117.000	90.000	-8.913e+000	-3.281e+001
212.930	-8.930e+000	128.104	2.392e+001
118.000	90.000	-7.942e+000	-3.275e+001
208.058	-7.957e+000	123.863	2.484e+001
119.000	90.000	-6.966e+000	-3.263e+001
203.138	-6.977e+000	120.390	2.572e+001
120.000	90.000	-6.003e+000	-3.244e+001
198.253	-6.013e+000	117.575	2.654e+001
121.000	90.000	-5.068e+000	-3.219e+001
193.481	-5.077e+000	115.309	2.731e+001
122.000	90.000	-4.168e+000	-3.189e+001
188.897	-4.175e+000	113.496	2.801e+001
123.000	90.000	-3.307e+000	-3.155e+001
184.557	-3.314e+000	112.055	2.865e+001
124.000	90.000	-2.487e+000	-3.117e+001
180.504	-2.493e+000	110.918	2.924e+001
125.000	90.000	-1.710e+000	-3.076e+001
176.763	-1.715e+000	110.029	2.978e+001

126.000	90.000	-9.752e-001	-3.033e+001
173.343	-9.802e-001	109.345	3.028e+001
127.000	90.000	-2.827e-001	-2.990e+001
170.241	-2.874e-001	108.829	3.075e+001
128.000	90.000	3.677e-001	-2.947e+001
167.447	3.632e-001	108.452	3.118e+001
129.000	90.000	9.763e-001	-2.905e+001
164.943	9.720e-001	108.189	3.158e+001
130.000	90.000	1.543e+000	-2.864e+001
162.710	1.539e+000	108.021	3.195e+001
131.000	90.000	2.069e+000	-2.825e+001
160.725	2.065e+000	107.932	3.230e+001
132.000	90.000	2.552e+000	-2.789e+001
158.967	2.548e+000	107.907	3.262e+001
133.000	90.000	2.994e+000	-2.754e+001
157.416	2.990e+000	107.936	3.292e+001
134.000	90.000	3.392e+000	-2.723e+001
156.052	3.388e+000	108.009	3.320e+001
135.000	90.000	3.747e+000	-2.695e+001
154.857	3.743e+000	108.118	3.345e+001
136.000	90.000	4.057e+000	-2.671e+001
153.817	4.053e+000	108.255	3.369e+001
137.000	90.000	4.321e+000	-2.650e+001
152.915	4.317e+000	108.416	3.390e+001
138.000	90.000	4.535e+000	-2.633e+001
152.141	4.532e+000	108.593	3.410e+001
139.000	90.000	4.699e+000	-2.620e+001
151.481	4.696e+000	108.784	3.427e+001
140.000	90.000	4.809e+000	-2.611e+001
150.927	4.806e+000	108.983	3.442e+001
141.000	90.000	4.861e+000	-2.607e+001
150.470	4.858e+000	109.186	3.454e+001
142.000	90.000	4.850e+000	-2.607e+001
150.102	4.847e+000	109.389	3.464e+001
143.000	90.000	4.771e+000	-2.613e+001
149.818	4.768e+000	109.588	3.470e+001
144.000	90.000	4.616e+000	-2.625e+001
149.612	4.613e+000	109.779	3.474e+001
145.000	90.000	4.376e+000	-2.642e+001
149.481	4.373e+000	109.956	3.473e+001
146.000	90.000	4.038e+000	-2.667e+001
149.421	4.035e+000	110.113	3.467e+001
147.000	90.000	3.587e+000	-2.698e+001
149.431	3.583e+000	110.242	3.455e+001
148.000	90.000	2.999e+000	-2.737e+001
149.510	2.995e+000	110.331	3.436e+001
149.000	90.000	2.244e+000	-2.786e+001
149.660	2.240e+000	110.362	3.407e+001
150.000	90.000	1.275e+000	-2.844e+001
149.886	1.270e+000	110.305	3.363e+001
151.000	90.000	1.773e-002	-2.915e+001
150.194	1.247e-002	110.106	3.299e+001
152.000	90.000	-1.653e+000	-3.001e+001
150.598	-1.659e+000	109.655	3.202e+001
153.000	90.000	-3.980e+000	-3.104e+001
151.121	-3.989e+000	108.684	3.047e+001
154.000	90.000	-7.534e+000	-3.229e+001
151.802	-7.549e+000	106.317	2.770e+001
155.000	90.000	-1.429e+001	-3.386e+001
152.719	-1.433e+001	97.256	2.124e+001
156.000	90.000	-2.114e+001	-3.586e+001
154.033	-2.129e+001	334.904	4.000e+001
157.000	90.000	-9.477e+000	-3.857e+001
156.152	-9.482e+000	304.214	3.463e+001

158.000	90.000	-4.239e+000	-4.262e+001
160.468	-4.240e+000	300.044	4.000e+001
159.000	90.000	-8.532e-001	-5.022e+001
176.233	-8.532e-001	298.541	4.000e+001
160.000	90.000	1.662e+000	-5.320e+001
293.115	1.662e+000	297.832	4.000e+001
161.000	90.000	3.666e+000	-4.397e+001
319.221	3.666e+000	297.460	4.000e+001
162.000	90.000	5.327e+000	-3.945e+001
324.756	5.326e+000	297.259	4.000e+001
163.000	90.000	6.740e+000	-3.656e+001
327.398	6.739e+000	297.155	4.000e+001
164.000	90.000	7.962e+000	-3.447e+001
329.133	7.962e+000	297.109	4.000e+001
165.000	90.000	9.033e+000	-3.288e+001
330.487	9.032e+000	297.100	4.000e+001
166.000	90.000	9.976e+000	-3.163e+001
331.659	9.976e+000	297.114	4.000e+001
167.000	90.000	1.081e+001	-3.063e+001
332.743	1.081e+001	297.141	4.000e+001
168.000	90.000	1.155e+001	-2.983e+001
333.790	1.155e+001	297.178	4.000e+001
169.000	90.000	1.221e+001	-2.919e+001
334.830	1.221e+001	297.218	4.000e+001
170.000	90.000	1.279e+001	-2.870e+001
335.887	1.279e+001	297.260	4.000e+001
171.000	90.000	1.331e+001	-2.833e+001
336.975	1.331e+001	297.301	4.000e+001
172.000	90.000	1.376e+001	-2.807e+001
338.109	1.376e+001	297.339	4.000e+001
173.000	90.000	1.414e+001	-2.793e+001
339.302	1.414e+001	297.373	4.000e+001
174.000	90.000	1.448e+001	-2.788e+001
340.567	1.448e+001	297.403	4.000e+001
175.000	90.000	1.475e+001	-2.793e+001
341.917	1.475e+001	297.427	4.000e+001
176.000	90.000	1.498e+001	-2.808e+001
343.371	1.497e+001	297.446	4.000e+001
177.000	90.000	1.515e+001	-2.832e+001
344.948	1.515e+001	297.457	4.000e+001
178.000	90.000	1.527e+001	-2.867e+001
346.674	1.527e+001	297.462	4.000e+001
179.000	90.000	1.534e+001	-2.911e+001
348.578	1.534e+001	297.459	4.000e+001
180.000	90.000	1.537e+001	-2.967e+001
350.704	1.537e+001	297.449	4.000e+001
-179.000	90.000	1.534e+001	-3.034e+001
353.107	1.534e+001	297.432	4.000e+001
-178.000	90.000	1.527e+001	-3.114e+001
355.866	1.527e+001	297.406	4.000e+001
-177.000	90.000	1.514e+001	-3.208e+001
359.093	1.514e+001	297.373	4.000e+001
-176.000	90.000	1.497e+001	-3.317e+001
2.956	1.497e+001	297.333	4.000e+001
-175.000	90.000	1.475e+001	-3.444e+001
7.712	1.475e+001	297.285	4.000e+001
-174.000	90.000	1.447e+001	-3.591e+001
13.776	1.447e+001	297.229	4.000e+001
-173.000	90.000	1.414e+001	-3.759e+001
21.835	1.414e+001	297.166	4.000e+001
-172.000	90.000	1.375e+001	-3.945e+001
33.005	1.375e+001	297.097	4.000e+001
-171.000	90.000	1.330e+001	-4.130e+001
48.853	1.330e+001	297.020	4.000e+001

-170.000	90.000	1.278e+001	-4.267e+001
70.301	1.278e+001	296.938	4.000e+001
-169.000	90.000	1.220e+001	-4.292e+001
94.594	1.220e+001	296.851	4.000e+001
-168.000	90.000	1.154e+001	-4.209e+001
116.022	1.154e+001	296.760	4.000e+001
-167.000	90.000	1.080e+001	-4.082e+001
132.155	1.080e+001	296.666	4.000e+001
-166.000	90.000	9.958e+000	-3.956e+001
144.050	9.958e+000	296.571	4.000e+001
-165.000	90.000	9.013e+000	-3.847e+001
153.272	9.013e+000	296.479	4.000e+001
-164.000	90.000	7.941e+000	-3.759e+001
160.932	7.941e+000	296.393	4.000e+001
-163.000	90.000	6.717e+000	-3.690e+001
167.720	6.717e+000	296.319	4.000e+001
-162.000	90.000	5.302e+000	-3.636e+001
174.073	5.302e+000	296.270	4.000e+001
-161.000	90.000	3.639e+000	-3.595e+001
180.278	3.639e+000	296.262	4.000e+001
-160.000	90.000	1.633e+000	-3.565e+001
186.536	1.633e+000	296.332	3.782e+001
-159.000	90.000	-8.870e-001	-3.543e+001
192.988	-8.885e-001	296.561	3.479e+001
-158.000	90.000	-4.285e+000	-3.526e+001
199.726	-4.289e+000	297.169	3.105e+001
-157.000	90.000	-9.579e+000	-3.512e+001
206.799	-9.591e+000	299.075	2.554e+001
-156.000	90.000	-2.269e+001	-3.497e+001
214.204	-2.295e+001	316.336	1.224e+001
-155.000	90.000	-1.465e+001	-3.480e+001
221.885	-1.469e+001	105.614	2.107e+001
-154.000	90.000	-7.650e+000	-3.457e+001
229.732	-7.659e+000	110.033	2.814e+001
-153.000	90.000	-4.058e+000	-3.429e+001
237.599	-4.062e+000	111.051	3.213e+001
-152.000	90.000	-1.719e+000	-3.394e+001
245.325	-1.722e+000	111.382	3.507e+001
-151.000	90.000	-4.353e-002	-3.353e+001
252.762	-4.548e-002	111.459	3.757e+001
-150.000	90.000	1.216e+000	-3.308e+001
259.794	1.214e+000	111.410	3.990e+001
-149.000	90.000	2.185e+000	-3.259e+001
266.353	2.184e+000	111.291	4.000e+001
-148.000	90.000	2.940e+000	-3.210e+001
272.411	2.939e+000	111.128	4.000e+001
-147.000	90.000	3.527e+000	-3.160e+001
277.977	3.525e+000	110.936	4.000e+001
-146.000	90.000	3.977e+000	-3.112e+001
283.079	3.976e+000	110.723	4.000e+001
-145.000	90.000	4.313e+000	-3.067e+001
287.760	4.312e+000	110.497	4.000e+001
-144.000	90.000	4.552e+000	-3.024e+001
292.069	4.550e+000	110.262	4.000e+001
-143.000	90.000	4.705e+000	-2.985e+001
296.054	4.703e+000	110.021	4.000e+001
-142.000	90.000	4.781e+000	-2.950e+001
299.759	4.780e+000	109.779	4.000e+001
-141.000	90.000	4.790e+000	-2.919e+001
303.228	4.788e+000	109.538	4.000e+001
-140.000	90.000	4.735e+000	-2.891e+001
306.498	4.733e+000	109.302	4.000e+001
-139.000	90.000	4.623e+000	-2.868e+001
309.602	4.621e+000	109.073	4.000e+001

-138.000	90.000	4.456e+000	-2.848e+001
312.571	4.454e+000	108.857	4.000e+001
-137.000	90.000	4.238e+000	-2.832e+001
315.429	4.235e+000	108.656	3.949e+001
-136.000	90.000	3.971e+000	-2.820e+001
318.201	3.968e+000	108.475	3.826e+001
-135.000	90.000	3.657e+000	-2.811e+001
320.908	3.654e+000	108.320	3.714e+001
-134.000	90.000	3.298e+000	-2.805e+001
323.567	3.295e+000	108.196	3.610e+001
-133.000	90.000	2.896e+000	-2.802e+001
326.197	2.892e+000	108.110	3.512e+001
-132.000	90.000	2.450e+000	-2.802e+001
328.811	2.446e+000	108.071	3.418e+001
-131.000	90.000	1.961e+000	-2.805e+001
331.425	1.957e+000	108.088	3.328e+001
-130.000	90.000	1.430e+000	-2.811e+001
334.052	1.425e+000	108.173	3.242e+001
-129.000	90.000	8.572e-001	-2.819e+001
336.704	8.518e-001	108.340	3.157e+001
-128.000	90.000	2.421e-001	-2.828e+001
339.392	2.360e-001	108.606	3.074e+001
-127.000	90.000	-4.154e-001	-2.840e+001
342.126	-4.223e-001	108.992	2.992e+001
-126.000	90.000	-1.116e+000	-2.854e+001
344.916	-1.124e+000	109.522	2.911e+001
-125.000	90.000	-1.859e+000	-2.869e+001
347.771	-1.868e+000	110.228	2.830e+001
-124.000	90.000	-2.646e+000	-2.885e+001
350.697	-2.656e+000	111.148	2.748e+001
-123.000	90.000	-3.475e+000	-2.902e+001
353.703	-3.487e+000	112.328	2.667e+001
-122.000	90.000	-4.347e+000	-2.919e+001
356.791	-4.361e+000	113.828	2.584e+001
-121.000	90.000	-5.258e+000	-2.937e+001
359.965	-5.275e+000	115.718	2.501e+001
-120.000	90.000	-6.204e+000	-2.955e+001
3.226	-6.224e+000	118.087	2.418e+001
-119.000	90.000	-7.176e+000	-2.972e+001
6.573	-7.201e+000	121.036	2.335e+001
-118.000	90.000	-8.161e+000	-2.989e+001
10.002	-8.190e+000	124.680	2.255e+001
-117.000	90.000	-9.135e+000	-3.006e+001
13.505	-9.170e+000	129.134	2.180e+001
-116.000	90.000	-1.007e+001	-3.020e+001
17.074	-1.011e+001	134.487	2.115e+001
-115.000	90.000	-1.091e+001	-3.034e+001
20.695	-1.096e+001	140.761	2.066e+001
-114.000	90.000	-1.161e+001	-3.045e+001
24.355	-1.167e+001	147.852	2.040e+001
-113.000	90.000	-1.213e+001	-3.055e+001
28.035	-1.219e+001	155.493	2.041e+001
-112.000	90.000	-1.244e+001	-3.063e+001
31.716	-1.251e+001	163.270	2.070e+001
-111.000	90.000	-1.254e+001	-3.068e+001
35.380	-1.261e+001	170.724	2.120e+001
-110.000	90.000	-1.247e+001	-3.071e+001
39.007	-1.253e+001	177.476	2.182e+001
-109.000	90.000	-1.227e+001	-3.072e+001
42.576	-1.233e+001	183.305	2.244e+001
-108.000	90.000	-1.199e+001	-3.071e+001
46.069	-1.205e+001	188.147	2.296e+001
-107.000	90.000	-1.167e+001	-3.068e+001
49.472	-1.173e+001	192.046	2.335e+001



-106.000	90.000	-1.135e+001	-3.063e+001
52.769	-1.140e+001	195.105	2.358e+001
-105.000	90.000	-1.103e+001	-3.056e+001
55.949	-1.108e+001	197.439	2.366e+001
-104.000	90.000	-1.073e+001	-3.048e+001
59.004	-1.077e+001	199.162	2.363e+001
-103.000	90.000	-1.045e+001	-3.038e+001
61.927	-1.050e+001	200.373	2.350e+001
-102.000	90.000	-1.021e+001	-3.027e+001
64.714	-1.025e+001	201.155	2.330e+001
-101.000	90.000	-9.987e+000	-3.015e+001
67.363	-1.003e+001	201.577	2.306e+001
-100.000	90.000	-9.794e+000	-3.003e+001
69.875	-9.836e+000	201.695	2.278e+001
-99.000	90.000	-9.628e+000	-2.989e+001
72.249	-9.669e+000	201.554	2.248e+001
-98.000	90.000	-9.486e+000	-2.975e+001
74.490	-9.527e+000	201.192	2.217e+001
-97.000	90.000	-9.367e+000	-2.961e+001
76.598	-9.408e+000	200.638	2.186e+001
-96.000	90.000	-9.269e+000	-2.946e+001
78.579	-9.310e+000	199.917	2.154e+001
-95.000	90.000	-9.190e+000	-2.931e+001
80.437	-9.232e+000	199.050	2.123e+001
-94.000	90.000	-9.128e+000	-2.916e+001
82.174	-9.171e+000	198.054	2.093e+001
-93.000	90.000	-9.083e+000	-2.901e+001
83.797	-9.127e+000	196.942	2.063e+001
-92.000	90.000	-9.053e+000	-2.886e+001
85.308	-9.098e+000	195.726	2.034e+001
-91.000	90.000	-9.036e+000	-2.872e+001
86.713	-9.083e+000	194.417	2.006e+001
-90.000	90.000	-9.033e+000	-2.857e+001
88.014	-9.081e+000	193.023	1.979e+001
-89.000	90.000	-9.041e+000	-2.842e+001
89.215	-9.091e+000	191.549	1.954e+001
-88.000	90.000	-9.061e+000	-2.828e+001
90.321	-9.113e+000	190.003	1.929e+001
-87.000	90.000	-9.091e+000	-2.814e+001
91.333	-9.145e+000	188.388	1.906e+001
-86.000	90.000	-9.132e+000	-2.800e+001
92.255	-9.188e+000	186.709	1.884e+001
-85.000	90.000	-9.182e+000	-2.786e+001
93.089	-9.241e+000	184.968	1.863e+001
-84.000	90.000	-9.242e+000	-2.773e+001
93.839	-9.304e+000	183.167	1.843e+001
-83.000	90.000	-9.311e+000	-2.760e+001
94.505	-9.376e+000	181.308	1.824e+001
-82.000	90.000	-9.389e+000	-2.748e+001
95.090	-9.457e+000	179.392	1.807e+001
-81.000	90.000	-9.477e+000	-2.736e+001
95.596	-9.548e+000	177.419	1.790e+001
-80.000	90.000	-9.573e+000	-2.724e+001
96.024	-9.648e+000	175.388	1.775e+001
-79.000	90.000	-9.678e+000	-2.713e+001
96.375	-9.757e+000	173.299	1.761e+001
-78.000	90.000	-9.793e+000	-2.703e+001
96.651	-9.876e+000	171.149	1.748e+001
-77.000	90.000	-9.917e+000	-2.692e+001
96.853	-1.000e+001	168.936	1.737e+001
-76.000	90.000	-1.005e+001	-2.683e+001
96.982	-1.014e+001	166.658	1.727e+001
-75.000	90.000	-1.019e+001	-2.673e+001
97.039	-1.029e+001	164.312	1.718e+001

-74.000	90.000	-1.034e+001	-2.665e+001
97.025	-1.045e+001	161.893	1.710e+001
-73.000	90.000	-1.050e+001	-2.656e+001
96.941	-1.061e+001	159.397	1.705e+001
-72.000	90.000	-1.067e+001	-2.649e+001
96.788	-1.079e+001	156.819	1.701e+001
-71.000	90.000	-1.085e+001	-2.642e+001
96.566	-1.097e+001	154.155	1.699e+001
-70.000	90.000	-1.104e+001	-2.635e+001
96.278	-1.117e+001	151.399	1.699e+001
-69.000	90.000	-1.124e+001	-2.629e+001
95.925	-1.137e+001	148.545	1.702e+001
-68.000	90.000	-1.144e+001	-2.623e+001
95.507	-1.159e+001	145.588	1.708e+001
-67.000	90.000	-1.165e+001	-2.618e+001
95.028	-1.181e+001	142.523	1.717e+001
-66.000	90.000	-1.187e+001	-2.614e+001
94.489	-1.203e+001	139.343	1.731e+001
-65.000	90.000	-1.209e+001	-2.609e+001
93.893	-1.227e+001	136.046	1.749e+001
-64.000	90.000	-1.232e+001	-2.606e+001
93.242	-1.250e+001	132.629	1.773e+001
-63.000	90.000	-1.255e+001	-2.603e+001
92.541	-1.275e+001	129.088	1.805e+001
-62.000	90.000	-1.278e+001	-2.600e+001
91.794	-1.299e+001	125.425	1.844e+001
-61.000	90.000	-1.301e+001	-2.597e+001
91.004	-1.323e+001	121.642	1.893e+001
-60.000	90.000	-1.324e+001	-2.595e+001
90.178	-1.348e+001	117.745	1.955e+001
-59.000	90.000	-1.346e+001	-2.593e+001
89.322	-1.372e+001	113.741	2.032e+001
-58.000	90.000	-1.368e+001	-2.592e+001
88.443	-1.395e+001	109.643	2.127e+001
-57.000	90.000	-1.390e+001	-2.591e+001
87.547	-1.418e+001	105.465	2.248e+001
-56.000	90.000	-1.411e+001	-2.590e+001
86.645	-1.441e+001	101.224	2.403e+001
-55.000	90.000	-1.431e+001	-2.589e+001
85.744	-1.463e+001	96.941	2.610e+001
-54.000	90.000	-1.451e+001	-2.588e+001
84.855	-1.484e+001	92.636	2.906e+001
-53.000	90.000	-1.471e+001	-2.588e+001
83.989	-1.505e+001	88.332	3.393e+001
-52.000	90.000	-1.490e+001	-2.588e+001
83.156	-1.526e+001	84.047	4.000e+001
-51.000	90.000	-1.510e+001	-2.588e+001
82.368	-1.548e+001	79.802	3.814e+001
-50.000	90.000	-1.530e+001	-2.589e+001
81.637	-1.570e+001	75.611	3.055e+001
-49.000	90.000	-1.552e+001	-2.590e+001
80.975	-1.593e+001	71.486	2.643e+001
-48.000	90.000	-1.575e+001	-2.591e+001
80.395	-1.619e+001	67.432	2.355e+001
-47.000	90.000	-1.600e+001	-2.592e+001
79.907	-1.646e+001	63.450	2.128e+001
-46.000	90.000	-1.627e+001	-2.594e+001
79.525	-1.677e+001	59.532	1.938e+001
-45.000	90.000	-1.659e+001	-2.596e+001
79.260	-1.712e+001	55.665	1.771e+001
-44.000	90.000	-1.694e+001	-2.598e+001
79.122	-1.752e+001	51.823	1.618e+001
-43.000	90.000	-1.734e+001	-2.601e+001
79.121	-1.797e+001	47.972	1.474e+001

-42.000	90.000	-1.779e+001	-2.604e+001
79.266	-1.849e+001	44.061	1.334e+001
-41.000	90.000	-1.830e+001	-2.607e+001
79.564	-1.910e+001	40.017	1.194e+001
-40.000	90.000	-1.889e+001	-2.611e+001
80.021	-1.980e+001	35.736	1.051e+001
-39.000	90.000	-1.954e+001	-2.614e+001
80.640	-2.061e+001	31.068	9.016e+000
-38.000	90.000	-2.027e+001	-2.618e+001
81.423	-2.156e+001	25.783	7.415e+000
-37.000	90.000	-2.107e+001	-2.622e+001
82.369	-2.265e+001	19.525	5.664e+000
-36.000	90.000	-2.191e+001	-2.626e+001
83.474	-2.390e+001	11.733	3.704e+000
-35.000	90.000	-2.274e+001	-2.630e+001
84.729	-2.527e+001	1.538	1.464e+000
-34.000	90.000	-2.347e+001	-2.634e+001
86.126	-2.663e+001	347.766	1.305e+000
-33.000	90.000	-2.395e+001	-2.637e+001
87.648	-2.764e+001	329.601	4.625e+000
-32.000	90.000	-2.403e+001	-2.640e+001
89.280	-2.780e+001	308.501	9.109e+000
-31.000	90.000	-2.368e+001	-2.642e+001
91.001	-2.697e+001	288.688	1.618e+001
-30.000	90.000	-2.296e+001	-2.645e+001
92.790	-2.554e+001	273.225	4.000e+001
-29.000	90.000	-2.203e+001	-2.647e+001
94.623	-2.397e+001	262.129	1.958e+001
-28.000	90.000	-2.103e+001	-2.649e+001
96.475	-2.248e+001	254.242	1.509e+001
-27.000	90.000	-2.004e+001	-2.651e+001
98.323	-2.114e+001	248.528	1.326e+001
-26.000	90.000	-1.910e+001	-2.654e+001
100.143	-1.996e+001	244.289	1.247e+001
-25.000	90.000	-1.824e+001	-2.657e+001
101.916	-1.893e+001	241.083	1.221e+001
-24.000	90.000	-1.745e+001	-2.662e+001
103.620	-1.802e+001	238.630	1.223e+001
-23.000	90.000	-1.675e+001	-2.668e+001
105.241	-1.722e+001	236.748	1.243e+001
-22.000	90.000	-1.613e+001	-2.677e+001
106.765	-1.652e+001	235.312	1.272e+001
-21.000	90.000	-1.557e+001	-2.688e+001
108.179	-1.590e+001	234.238	1.307e+001
-20.000	90.000	-1.508e+001	-2.702e+001
109.475	-1.536e+001	233.462	1.348e+001
-19.000	90.000	-1.464e+001	-2.720e+001
110.646	-1.489e+001	232.939	1.392e+001
-18.000	90.000	-1.426e+001	-2.742e+001
111.685	-1.448e+001	232.631	1.439e+001
-17.000	90.000	-1.393e+001	-2.768e+001
112.587	-1.412e+001	232.510	1.491e+001
-16.000	90.000	-1.364e+001	-2.801e+001
113.346	-1.380e+001	232.549	1.547e+001
-15.000	90.000	-1.339e+001	-2.840e+001
113.956	-1.353e+001	232.725	1.608e+001
-14.000	90.000	-1.317e+001	-2.885e+001
114.408	-1.329e+001	233.018	1.675e+001
-13.000	90.000	-1.298e+001	-2.939e+001
114.691	-1.309e+001	233.407	1.750e+001
-12.000	90.000	-1.283e+001	-3.003e+001
114.789	-1.291e+001	233.871	1.833e+001
-11.000	90.000	-1.269e+001	-3.077e+001
114.675	-1.276e+001	234.389	1.928e+001

-10.000	90.000	-1.257e+001	-3.165e+001
114.312	-1.263e+001	234.943	2.036e+001
-9.000	90.000	-1.248e+001	-3.269e+001
113.637	-1.252e+001	235.510	2.161e+001
-8.000	90.000	-1.239e+001	-3.392e+001
112.547	-1.242e+001	236.072	2.310e+001
-7.000	90.000	-1.232e+001	-3.542e+001
110.858	-1.234e+001	236.607	2.490e+001
-6.000	90.000	-1.226e+001	-3.726e+001
108.207	-1.228e+001	237.098	2.717e+001
-5.000	90.000	-1.222e+001	-3.962e+001
103.791	-1.222e+001	237.528	3.023e+001
-4.000	90.000	-1.218e+001	-4.277e+001
95.467	-1.218e+001	237.880	3.488e+001
-3.000	90.000	-1.214e+001	-4.702e+001
76.016	-1.215e+001	238.141	4.000e+001
-2.000	90.000	-1.212e+001	-5.010e+001
26.926	-1.212e+001	238.302	4.000e+001
-1.000	90.000	-1.210e+001	-4.666e+001
341.605	-1.210e+001	238.355	3.479e+001