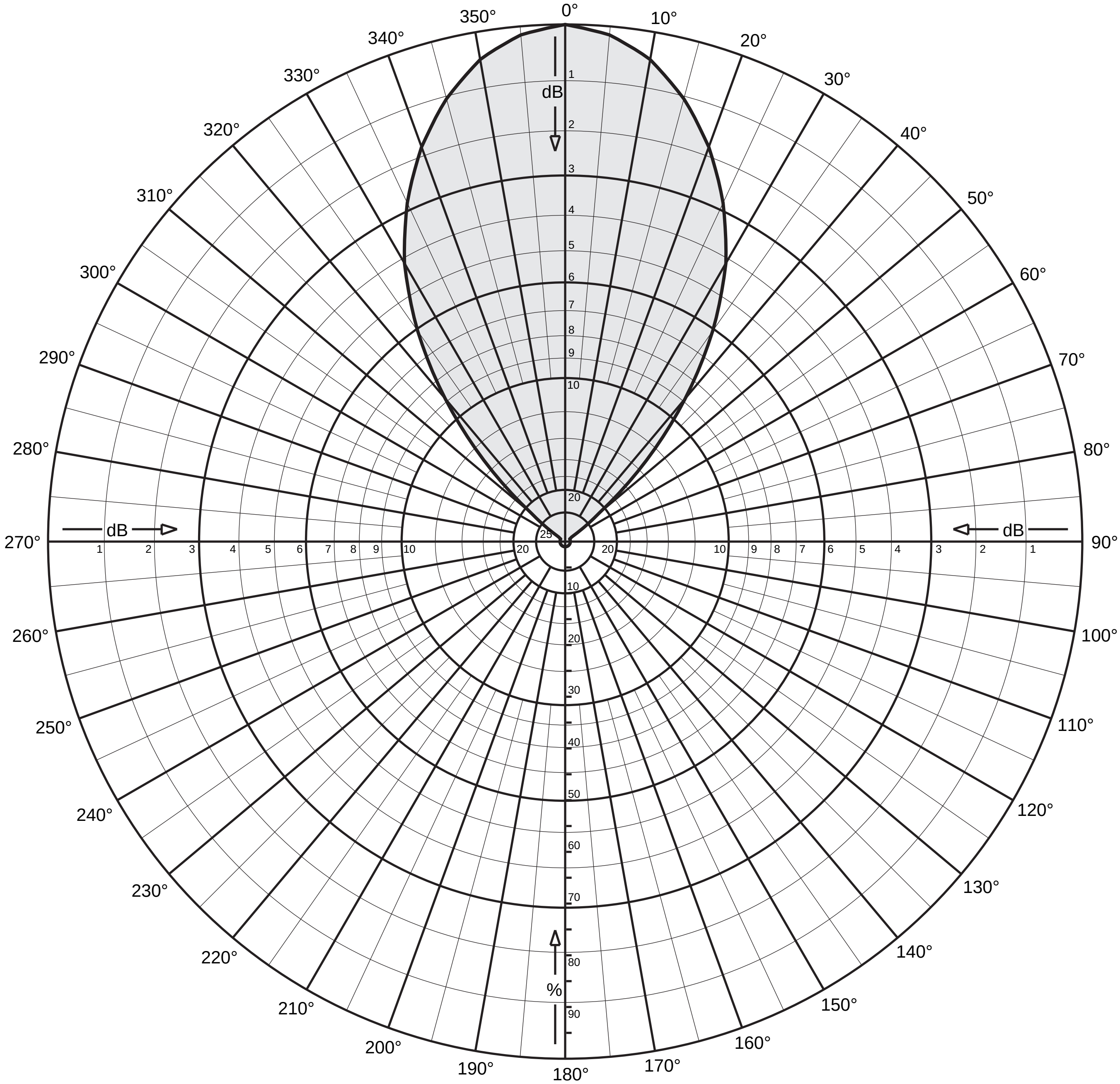

3 x CL-1469B/50 Log-periodic Antennas
Oriented at 0 degrees
Gain: 11.9 dBd (x 15.5)
Horizontal Polarization
Vertical stacked 0.65 wavelength
Horizontal plane Pattern

KATHREIN
SCALA DIVISION
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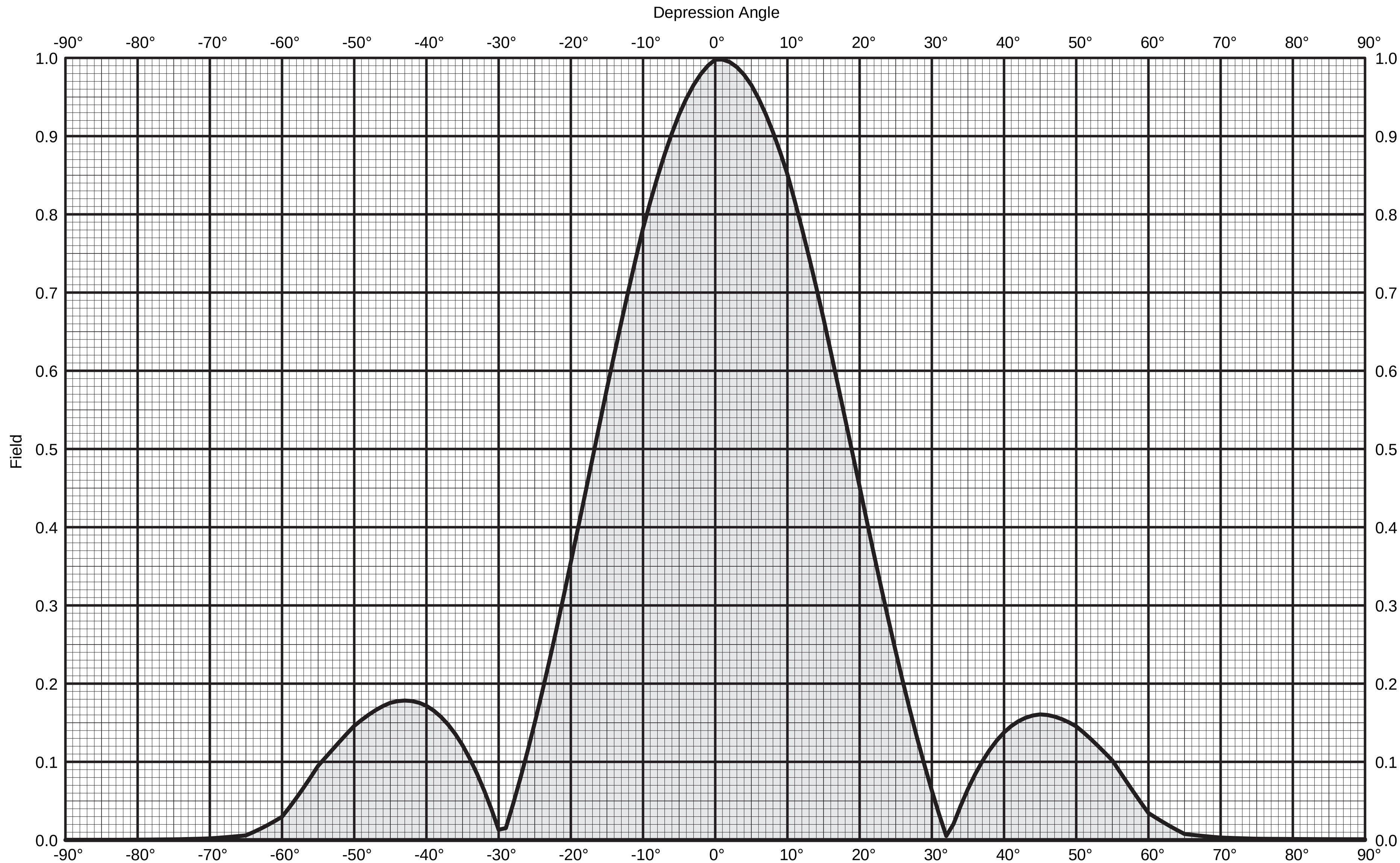
Vertical stacked 0.65 wavelength
Horizontal plane Pattern

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	11.90	15.49	180	0.010	-40.00	-28.10	0.00
5	0.984	-0.14	11.76	14.98	185	0.010	-40.00	-28.10	0.00
10	0.947	-0.48	11.42	13.88	190	0.010	-40.00	-28.10	0.00
15	0.887	-1.05	10.85	12.17	195	0.010	-40.00	-28.10	0.00
20	0.812	-1.81	10.09	10.21	200	0.010	-40.00	-28.10	0.00
25	0.723	-2.82	9.08	8.08	205	0.010	-40.00	-28.10	0.00
30	0.622	-4.13	7.77	5.98	210	0.010	-40.00	-28.10	0.00
35	0.498	-6.06	5.84	3.83	215	0.010	-40.00	-28.10	0.00
40	0.361	-8.85	3.05	2.02	220	0.010	-40.00	-28.10	0.00
45	0.223	-13.05	-1.15	0.77	225	0.010	-40.00	-28.10	0.00
50	0.086	-21.31	-9.41	0.11	230	0.010	-40.00	-28.10	0.00
55	0.015	-36.48	-24.58	0.00	235	0.010	-40.00	-28.10	0.00
60	0.010	-40.00	-28.10	0.00	240	0.010	-40.00	-28.10	0.00
65	0.010	-40.00	-28.10	0.00	245	0.010	-40.00	-28.10	0.00
70	0.010	-40.00	-28.10	0.00	250	0.010	-40.00	-28.10	0.00
75	0.010	-40.00	-28.10	0.00	255	0.010	-40.00	-28.10	0.00
80	0.010	-40.00	-28.10	0.00	260	0.010	-40.00	-28.10	0.00
85	0.010	-40.00	-28.10	0.00	265	0.010	-40.00	-28.10	0.00
90	0.010	-40.00	-28.10	0.00	270	0.010	-40.00	-28.10	0.00
95	0.010	-40.00	-28.10	0.00	275	0.010	-40.00	-28.10	0.00
100	0.010	-40.00	-28.10	0.00	280	0.010	-40.00	-28.10	0.00
105	0.010	-40.00	-28.10	0.00	285	0.010	-40.00	-28.10	0.00
110	0.010	-40.00	-28.10	0.00	290	0.010	-40.00	-28.10	0.00
115	0.010	-40.00	-28.10	0.00	295	0.010	-40.00	-28.10	0.00
120	0.010	-40.00	-28.10	0.00	300	0.010	-40.00	-28.10	0.00
125	0.010	-40.00	-28.10	0.00	305	0.015	-36.48	-24.58	0.00
130	0.010	-40.00	-28.10	0.00	310	0.086	-21.31	-9.41	0.11
135	0.010	-40.00	-28.10	0.00	315	0.223	-13.05	-1.15	0.77
140	0.010	-40.00	-28.10	0.00	320	0.361	-8.85	3.05	2.02
145	0.010	-40.00	-28.10	0.00	325	0.498	-6.06	5.84	3.83
150	0.010	-40.00	-28.10	0.00	330	0.622	-4.13	7.77	5.98
155	0.010	-40.00	-28.10	0.00	335	0.723	-2.82	9.08	8.08
160	0.010	-40.00	-28.10	0.00	340	0.812	-1.81	10.09	10.21
165	0.010	-40.00	-28.10	0.00	345	0.887	-1.05	10.85	12.17
170	0.010	-40.00	-28.10	0.00	350	0.947	-0.48	11.42	13.88
175	0.010	-40.00	-28.10	0.00	355	0.984	-0.14	11.76	14.98



3 x CL-1469B/50 Log-periodic Antennas

Oriented at 0 degrees

0.5 deg Electrical down tilt

Gain: 11.9 dBd (x 15.5)

Horizontal Polarization

Vertical stacked 0.65 wavelength

Vertical plane Pattern

4.68 deg vertical phase

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4.68 deg vertical phase

Angle	Field	Rel.dB	dBd	PwrMult
-90	0.010	-40.00	-28.10	0.00
-89	0.010	-40.00	-28.10	0.00
-88	0.010	-40.00	-28.10	0.00
-87	0.010	-40.00	-28.10	0.00
-86	0.010	-40.00	-28.10	0.00
-85	0.010	-40.00	-28.10	0.00
-84	0.010	-40.00	-28.10	0.00
-83	0.010	-40.00	-28.10	0.00
-82	0.010	-40.00	-28.10	0.00
-81	0.010	-40.00	-28.10	0.00
-80	0.010	-40.00	-28.10	0.00
-79	0.010	-40.00	-28.10	0.00
-78	0.010	-40.00	-28.10	0.00
-77	0.010	-40.00	-28.10	0.00
-76	0.010	-40.00	-28.10	0.00
-75	0.010	-40.00	-28.10	0.00
-74	0.010	-40.00	-28.10	0.00
-73	0.010	-40.00	-28.10	0.00
-72	0.010	-40.00	-28.10	0.00
-71	0.010	-40.00	-28.10	0.00
-70	0.010	-40.00	-28.10	0.00
-69	0.010	-40.00	-28.10	0.00
-68	0.010	-40.00	-28.10	0.00
-67	0.010	-40.00	-28.10	0.00
-66	0.010	-40.00	-28.10	0.00
-65	0.010	-40.00	-28.10	0.00
-64	0.010	-40.00	-28.10	0.00
-63	0.014	-36.84	-24.94	0.00
-62	0.019	-34.36	-22.46	0.01
-61	0.024	-32.29	-20.39	0.01
-60	0.030	-30.52	-18.62	0.01
-59	0.042	-27.63	-15.73	0.03
-58	0.054	-25.35	-13.45	0.05
-57	0.067	-23.46	-11.56	0.07
-56	0.081	-21.85	-9.95	0.10
-55	0.095	-20.45	-8.55	0.14
-54	0.105	-19.55	-7.65	0.17
-53	0.116	-18.73	-6.83	0.21
-52	0.126	-17.99	-6.09	0.25
-51	0.136	-17.32	-5.42	0.29
-50	0.146	-16.71	-4.81	0.33
-49	0.153	-16.28	-4.38	0.36
-48	0.160	-15.90	-4.00	0.40
-47	0.166	-15.58	-3.68	0.43
-46	0.171	-15.32	-3.42	0.46

Angle	Field	Rel.dB	dBd	PwrMult
-45	0.175	-15.11	-3.21	0.48
-44	0.178	-15.01	-3.11	0.49
-43	0.178	-14.97	-3.07	0.49
-42	0.178	-15.00	-3.10	0.49
-41	0.176	-15.11	-3.21	0.48
-40	0.172	-15.31	-3.41	0.46
-39	0.166	-15.62	-3.72	0.42
-38	0.158	-16.05	-4.15	0.39
-37	0.148	-16.61	-4.71	0.34
-36	0.136	-17.36	-5.46	0.28
-35	0.121	-18.33	-6.43	0.23
-34	0.104	-19.64	-7.74	0.17
-33	0.085	-21.42	-9.52	0.11
-32	0.063	-23.96	-12.06	0.06
-31	0.039	-28.07	-16.17	0.02
-30	0.013	-37.56	-25.66	0.00
-29	0.015	-36.31	-24.41	0.00
-28	0.046	-26.76	-14.86	0.03
-27	0.079	-22.09	-10.19	0.10
-26	0.113	-18.91	-7.01	0.20
-25	0.150	-16.48	-4.58	0.35
-24	0.188	-14.51	-2.61	0.55
-23	0.228	-12.85	-0.95	0.80
-22	0.269	-11.40	0.50	1.12
-21	0.312	-10.13	1.77	1.50
-20	0.355	-8.99	2.91	1.96
-19	0.399	-7.98	3.92	2.47
-18	0.443	-7.07	4.83	3.04
-17	0.488	-6.23	5.67	3.69
-16	0.533	-5.47	6.43	4.39
-15	0.577	-4.77	7.13	5.16
-14	0.620	-4.15	7.75	5.96
-13	0.662	-3.58	8.32	6.80
-12	0.704	-3.05	8.85	7.67
-11	0.744	-2.57	9.33	8.56
-10	0.782	-2.13	9.77	9.47
-9	0.816	-1.77	10.13	10.31
-8	0.848	-1.44	10.46	11.13
-7	0.877	-1.14	10.76	11.91
-6	0.904	-0.88	11.02	12.65
-5	0.928	-0.65	11.25	13.33
-4	0.948	-0.46	11.44	13.92
-3	0.965	-0.31	11.59	14.43
-2	0.979	-0.18	11.72	14.86
-1	0.990	-0.09	11.81	15.19
0	0.998	-0.02	11.88	15.42

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4.68 deg vertical phase

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	0.998	-0.02	11.88	15.42	45	0.161	-15.88	-3.98	0.40
1	0.998	-0.02	11.88	15.43	46	0.160	-15.92	-4.02	0.40
2	0.995	-0.05	11.85	15.33	47	0.158	-16.03	-4.13	0.39
3	0.988	-0.10	11.80	15.13	48	0.155	-16.21	-4.31	0.37
4	0.978	-0.19	11.71	14.83	49	0.150	-16.45	-4.55	0.35
5	0.965	-0.31	11.59	14.43	50	0.145	-16.75	-4.85	0.33
6	0.948	-0.46	11.44	13.92	51	0.138	-17.22	-5.32	0.29
7	0.928	-0.65	11.25	13.34	52	0.129	-17.77	-5.87	0.26
8	0.905	-0.87	11.03	12.69	53	0.120	-18.38	-6.48	0.22
9	0.879	-1.12	10.78	11.98	54	0.111	-19.07	-7.17	0.19
10	0.851	-1.40	10.50	11.22	55	0.102	-19.85	-7.95	0.16
11	0.818	-1.75	10.15	10.36	56	0.088	-21.11	-9.21	0.12
12	0.782	-2.13	9.77	9.48	57	0.074	-22.59	-10.69	0.09
13	0.745	-2.56	9.34	8.60	58	0.061	-24.34	-12.44	0.06
14	0.706	-3.02	8.88	7.73	59	0.047	-26.48	-14.58	0.03
15	0.667	-3.52	8.38	6.88	60	0.035	-29.22	-17.32	0.02
16	0.624	-4.09	7.81	6.04	61	0.029	-30.83	-18.93	0.01
17	0.582	-4.71	7.19	5.24	62	0.023	-32.73	-20.83	0.01
18	0.538	-5.38	6.52	4.49	63	0.018	-35.04	-23.14	0.00
19	0.495	-6.11	5.79	3.80	64	0.013	-38.00	-26.10	0.00
20	0.452	-6.90	5.00	3.16	65	0.010	-40.00	-28.10	0.00
21	0.408	-7.79	4.11	2.58	66	0.010	-40.00	-28.10	0.00
22	0.365	-8.76	3.14	2.06	67	0.010	-40.00	-28.10	0.00
23	0.322	-9.83	2.07	1.61	68	0.010	-40.00	-28.10	0.00
24	0.281	-11.02	0.88	1.22	69	0.010	-40.00	-28.10	0.00
25	0.241	-12.36	-0.46	0.90	70	0.010	-40.00	-28.10	0.00
26	0.202	-13.89	-1.99	0.63	71	0.010	-40.00	-28.10	0.00
27	0.165	-15.66	-3.76	0.42	72	0.010	-40.00	-28.10	0.00
28	0.129	-17.78	-5.88	0.26	73	0.010	-40.00	-28.10	0.00
29	0.095	-20.42	-8.52	0.14	74	0.010	-40.00	-28.10	0.00
30	0.063	-23.97	-12.07	0.06	75	0.010	-40.00	-28.10	0.00
31	0.033	-29.58	-17.68	0.02	76	0.010	-40.00	-28.10	0.00
32	0.010	-40.00	-28.10	0.00	77	0.010	-40.00	-28.10	0.00
33	0.020	-33.78	-21.88	0.01	78	0.010	-40.00	-28.10	0.00
34	0.044	-27.13	-15.23	0.03	79	0.010	-40.00	-28.10	0.00
35	0.065	-23.70	-11.80	0.07	80	0.010	-40.00	-28.10	0.00
36	0.084	-21.50	-9.60	0.11	81	0.010	-40.00	-28.10	0.00
37	0.101	-19.94	-8.04	0.16	82	0.010	-40.00	-28.10	0.00
38	0.115	-18.78	-6.88	0.21	83	0.010	-40.00	-28.10	0.00
39	0.127	-17.90	-6.00	0.25	84	0.010	-40.00	-28.10	0.00
40	0.138	-17.23	-5.33	0.29	85	0.010	-40.00	-28.10	0.00
41	0.146	-16.73	-4.83	0.33	86	0.010	-40.00	-28.10	0.00
42	0.152	-16.37	-4.47	0.36	87	0.010	-40.00	-28.10	0.00
43	0.156	-16.11	-4.21	0.38	88	0.010	-40.00	-28.10	0.00
44	0.159	-15.96	-4.06	0.39	89	0.010	-40.00	-28.10	0.00
					90	0.010	-40.00	-28.10	0.00