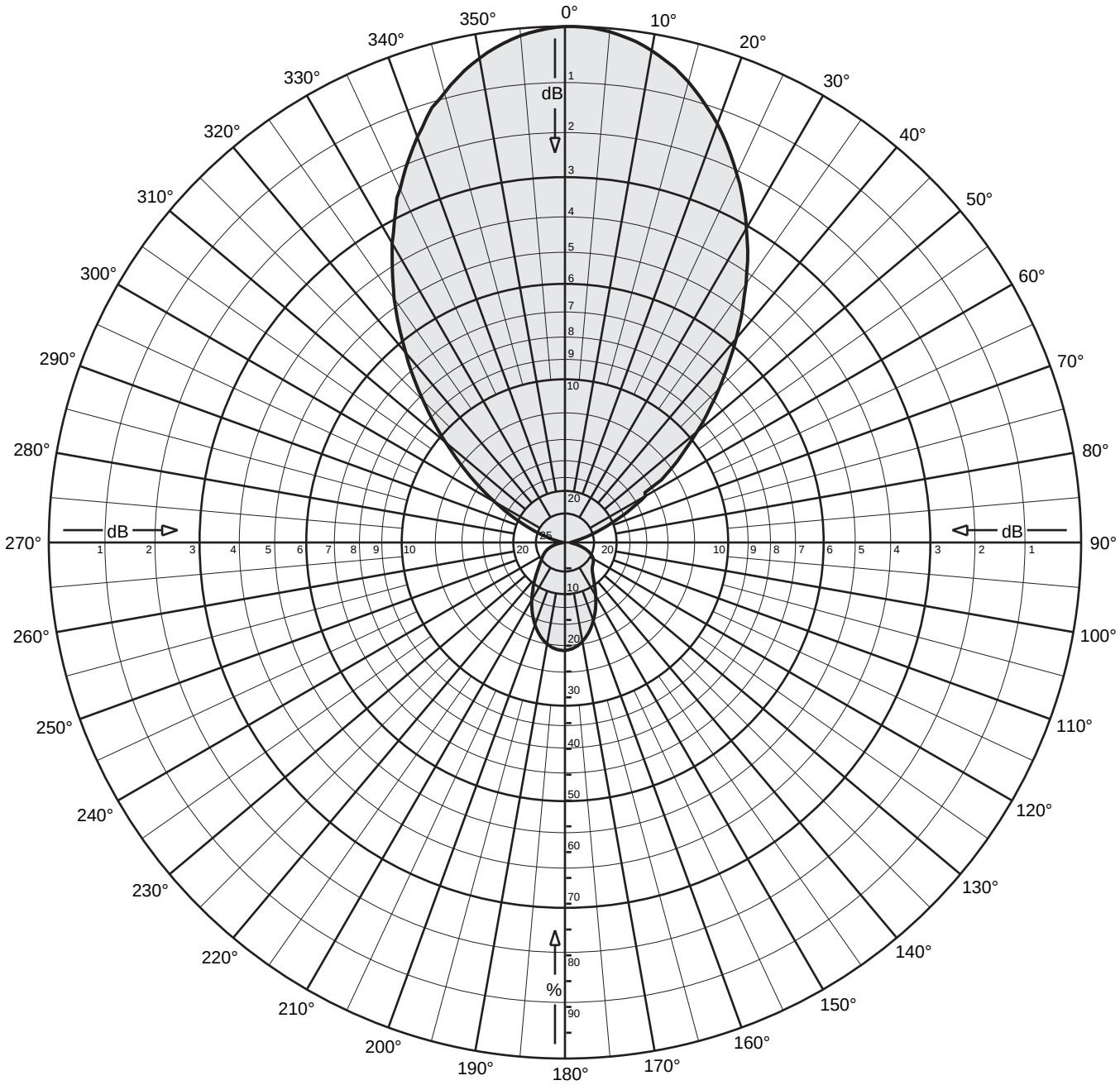


840 10293
Ch-12
Maximum gain: 6.99 dBd
Horizontal polarization
Horizontal radiation pattern
0 degree electrical downtilt

KATHREIN
SCALA DIVISION
Post Office Box 4580
Medford, OR 97501 (USA)
Phone:(541)779-6500
Fax:(541)779-3991
http://www.kathrein-scala.com

26-Oct-2011

KATHREIN
SCALA DIVISION

840 10293
Ch-12
Maximum gain: 6.99 dBd
Horizontal polarization

Horizontal radiation pattern
0 degree electrical downtilt

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	-0.00	7.49	5.61	45	0.423	-7.47	0.02	1.00
1	1.000	0.00	7.49	5.61	46	0.405	-7.85	-0.36	0.92
2	1.000	-0.00	7.49	5.60	47	0.386	-8.27	-0.78	0.84
3	0.999	-0.01	7.48	5.60	48	0.369	-8.65	-1.16	0.77
4	0.996	-0.03	7.46	5.57	49	0.353	-9.05	-1.56	0.70
5	0.994	-0.06	7.43	5.54	50	0.334	-9.52	-2.03	0.63
6	0.990	-0.09	7.40	5.49	51	0.317	-9.97	-2.48	0.56
7	0.985	-0.13	7.36	5.45	52	0.300	-10.46	-2.97	0.50
8	0.981	-0.17	7.32	5.40	53	0.284	-10.93	-3.44	0.45
9	0.975	-0.22	7.27	5.33	54	0.270	-11.36	-3.87	0.41
10	0.968	-0.28	7.21	5.26	55	0.254	-11.89	-4.40	0.36
11	0.960	-0.35	7.14	5.17	56	0.238	-12.48	-4.99	0.32
12	0.952	-0.43	7.06	5.09	57	0.223	-13.04	-5.55	0.28
13	0.944	-0.50	6.99	5.00	58	0.183	-14.76	-7.27	0.19
14	0.934	-0.59	6.90	4.89	59	0.181	-14.84	-7.35	0.18
15	0.924	-0.69	6.80	4.79	60	0.180	-14.91	-7.42	0.18
16	0.912	-0.80	6.69	4.67	61	0.169	-15.44	-7.95	0.16
17	0.901	-0.91	6.58	4.55	62	0.155	-16.18	-8.69	0.14
18	0.888	-1.03	6.46	4.42	63	0.144	-16.84	-9.35	0.12
19	0.876	-1.15	6.34	4.31	64	0.134	-17.46	-9.97	0.10
20	0.863	-1.28	6.21	4.18	65	0.123	-18.19	-10.70	0.09
21	0.849	-1.42	6.07	4.05	66	0.111	-19.08	-11.59	0.07
22	0.835	-1.57	5.92	3.91	67	0.101	-19.91	-12.42	0.06
23	0.819	-1.73	5.76	3.77	68	0.092	-20.69	-13.20	0.05
24	0.804	-1.90	5.59	3.62	69	0.085	-21.44	-13.95	0.04
25	0.788	-2.07	5.42	3.48	70	0.075	-22.46	-14.97	0.03
26	0.773	-2.24	5.25	3.35	71	0.068	-23.32	-15.83	0.03
27	0.756	-2.43	5.06	3.21	72	0.061	-24.23	-16.74	0.02
28	0.738	-2.63	4.86	3.06	73	0.055	-25.18	-17.69	0.02
29	0.722	-2.83	4.66	2.92	74	0.050	-26.04	-18.55	0.01
30	0.703	-3.06	4.43	2.77	75	0.044	-27.08	-19.59	0.01
31	0.685	-3.28	4.21	2.63	76	0.039	-28.20	-20.71	0.01
32	0.668	-3.50	3.99	2.51	77	0.033	-29.56	-22.07	0.01
33	0.650	-3.74	3.75	2.37	78	0.031	-30.27	-22.78	0.01
34	0.630	-4.02	3.47	2.22	79	0.027	-31.47	-23.98	0.00
35	0.612	-4.27	3.22	2.10	80	0.023	-32.71	-25.22	0.00
36	0.591	-4.57	2.92	1.96	81	0.021	-33.39	-25.90	0.00
37	0.573	-4.83	2.66	1.84	82	0.019	-34.41	-26.92	0.00
38	0.555	-5.11	2.38	1.73	83	0.017	-35.37	-27.88	0.00
39	0.535	-5.44	2.05	1.60	84	0.016	-35.85	-28.36	0.00
40	0.517	-5.74	1.75	1.50	85	0.014	-36.96	-29.47	0.00
41	0.497	-6.07	1.42	1.39	86	0.013	-37.45	-29.96	0.00
42	0.478	-6.42	1.07	1.28	87	0.013	-37.73	-30.24	0.00
43	0.460	-6.75	0.74	1.19	88	0.012	-38.55	-31.06	0.00
44	0.441	-7.11	0.38	1.09	89	0.012	-38.58	-31.09	0.00

KATHREIN
SCALA DIVISION

840 10293
Ch-12
Maximum gain: 6.99 dBd
Horizontal polarization

Horizontal radiation pattern
0 degree electrical downtilt

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
90	0.011	-38.89	-31.40	0.00	135	0.075	-22.52	-15.03	0.03
91	0.011	-39.10	-31.61	0.00	136	0.076	-22.34	-14.85	0.03
92	0.011	-39.21	-31.72	0.00	137	0.078	-22.16	-14.67	0.03
93	0.011	-38.83	-31.34	0.00	138	0.080	-21.92	-14.43	0.04
94	0.012	-38.49	-31.00	0.00	139	0.082	-21.69	-14.20	0.04
95	0.013	-37.57	-30.08	0.00	140	0.084	-21.48	-13.99	0.04
96	0.015	-36.73	-29.24	0.00	141	0.087	-21.19	-13.70	0.04
97	0.016	-35.70	-28.21	0.00	142	0.090	-20.90	-13.41	0.05
98	0.018	-34.67	-27.18	0.00	143	0.093	-20.64	-13.15	0.05
99	0.021	-33.66	-26.17	0.00	144	0.096	-20.32	-12.83	0.05
100	0.023	-32.91	-25.42	0.00	145	0.100	-20.04	-12.55	0.06
101	0.025	-32.02	-24.53	0.00	146	0.103	-19.71	-12.22	0.06
102	0.027	-31.24	-23.75	0.00	147	0.107	-19.39	-11.90	0.06
103	0.030	-30.42	-22.93	0.01	148	0.111	-19.09	-11.60	0.07
104	0.032	-29.79	-22.30	0.01	149	0.115	-18.78	-11.29	0.07
105	0.035	-29.12	-21.63	0.01	150	0.119	-18.49	-11.00	0.08
106	0.038	-28.42	-20.93	0.01	151	0.123	-18.21	-10.72	0.08
107	0.040	-27.99	-20.50	0.01	152	0.127	-17.92	-10.43	0.09
108	0.043	-27.37	-19.88	0.01	153	0.132	-17.60	-10.11	0.10
109	0.044	-27.04	-19.55	0.01	154	0.136	-17.35	-9.86	0.10
110	0.047	-26.61	-19.12	0.01	155	0.140	-17.05	-9.56	0.11
111	0.049	-26.19	-18.70	0.01	156	0.145	-16.80	-9.31	0.12
112	0.051	-25.84	-18.35	0.01	157	0.149	-16.55	-9.06	0.12
113	0.053	-25.53	-18.04	0.02	158	0.152	-16.34	-8.85	0.13
114	0.055	-25.23	-17.74	0.02	159	0.157	-16.10	-8.61	0.14
115	0.056	-24.97	-17.48	0.02	160	0.161	-15.88	-8.39	0.15
116	0.058	-24.71	-17.22	0.02	161	0.165	-15.66	-8.17	0.15
117	0.060	-24.49	-17.00	0.02	162	0.169	-15.46	-7.97	0.16
118	0.061	-24.30	-16.81	0.02	163	0.172	-15.27	-7.78	0.17
119	0.062	-24.12	-16.63	0.02	164	0.176	-15.08	-7.59	0.17
120	0.063	-24.00	-16.51	0.02	165	0.180	-14.92	-7.43	0.18
121	0.064	-23.88	-16.39	0.02	166	0.183	-14.75	-7.26	0.19
122	0.065	-23.76	-16.27	0.02	167	0.186	-14.62	-7.13	0.19
123	0.066	-23.67	-16.18	0.02	168	0.189	-14.46	-6.97	0.20
124	0.066	-23.56	-16.07	0.02	169	0.192	-14.35	-6.86	0.21
125	0.067	-23.50	-16.01	0.03	170	0.194	-14.23	-6.74	0.21
126	0.068	-23.40	-15.91	0.03	171	0.197	-14.11	-6.62	0.22
127	0.068	-23.34	-15.85	0.03	172	0.200	-14.00	-6.51	0.22
128	0.069	-23.25	-15.76	0.03	173	0.202	-13.90	-6.41	0.23
129	0.069	-23.19	-15.70	0.03	174	0.203	-13.84	-6.35	0.23
130	0.070	-23.12	-15.63	0.03	175	0.205	-13.78	-6.29	0.23
131	0.071	-23.03	-15.54	0.03	176	0.206	-13.71	-6.22	0.24
132	0.071	-22.93	-15.44	0.03	177	0.207	-13.68	-6.19	0.24
133	0.072	-22.81	-15.32	0.03	178	0.208	-13.64	-6.15	0.24
134	0.073	-22.68	-15.19	0.03	179	0.209	-13.61	-6.12	0.24

KATHREIN
SCALA DIVISION

840 10293
Ch-12
Maximum gain: 6.99 dBd
Horizontal polarization

Horizontal radiation pattern
0 degree electrical downtilt

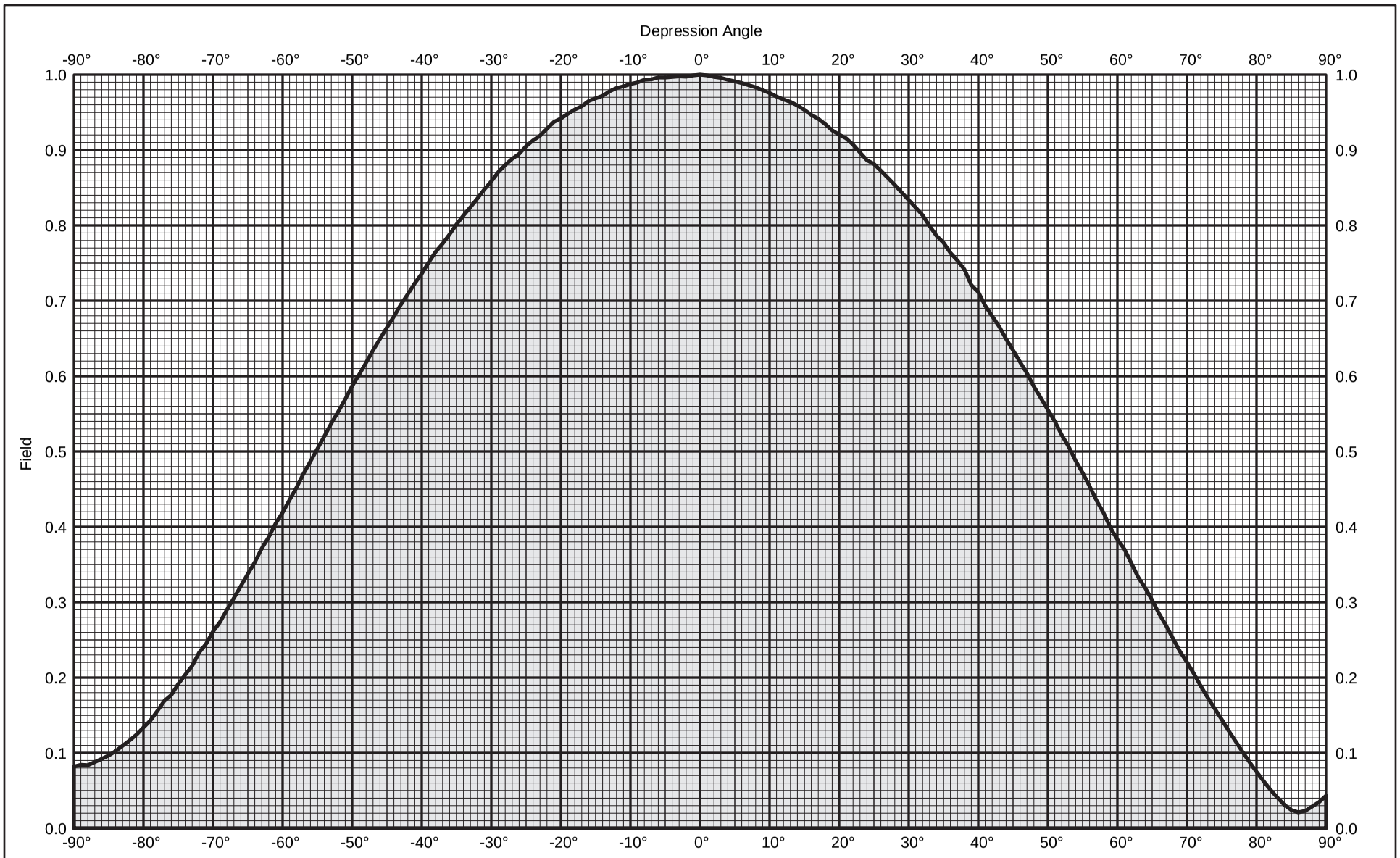
Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
180	0.209	-13.59	-6.10	0.25	225	0.074	-22.61	-15.12	0.03
181	0.209	-13.58	-6.09	0.25	226	0.072	-22.88	-15.39	0.03
182	0.209	-13.60	-6.11	0.25	227	0.069	-23.18	-15.69	0.03
183	0.209	-13.62	-6.13	0.24	228	0.067	-23.45	-15.96	0.03
184	0.208	-13.63	-6.14	0.24	229	0.065	-23.74	-16.25	0.02
185	0.207	-13.68	-6.19	0.24	230	0.063	-24.02	-16.53	0.02
186	0.206	-13.72	-6.23	0.24	231	0.061	-24.28	-16.79	0.02
187	0.205	-13.77	-6.28	0.24	232	0.059	-24.53	-17.04	0.02
188	0.203	-13.84	-6.35	0.23	233	0.058	-24.80	-17.31	0.02
189	0.201	-13.92	-6.43	0.23	234	0.056	-25.00	-17.51	0.02
190	0.200	-14.00	-6.51	0.22	235	0.055	-25.21	-17.72	0.02
191	0.197	-14.10	-6.61	0.22	236	0.053	-25.47	-17.98	0.02
192	0.195	-14.20	-6.71	0.21	237	0.052	-25.67	-18.18	0.02
193	0.192	-14.32	-6.83	0.21	238	0.051	-25.87	-18.38	0.01
194	0.190	-14.44	-6.95	0.20	239	0.050	-26.11	-18.62	0.01
195	0.187	-14.57	-7.08	0.20	240	0.049	-26.28	-18.79	0.01
196	0.184	-14.72	-7.23	0.19	241	0.047	-26.59	-19.10	0.01
197	0.180	-14.88	-7.39	0.18	242	0.046	-26.81	-19.32	0.01
198	0.177	-15.04	-7.55	0.18	243	0.044	-27.05	-19.56	0.01
199	0.173	-15.22	-7.73	0.17	244	0.043	-27.29	-19.80	0.01
200	0.170	-15.40	-7.91	0.16	245	0.042	-27.59	-20.10	0.01
201	0.166	-15.60	-8.11	0.15	246	0.040	-27.93	-20.44	0.01
202	0.162	-15.81	-8.32	0.15	247	0.039	-28.27	-20.78	0.01
203	0.158	-16.04	-8.55	0.14	248	0.037	-28.58	-21.09	0.01
204	0.154	-16.24	-8.75	0.13	249	0.035	-29.00	-21.51	0.01
205	0.150	-16.49	-9.00	0.13	250	0.034	-29.47	-21.98	0.01
206	0.146	-16.73	-9.24	0.12	251	0.032	-29.97	-22.48	0.01
207	0.141	-17.00	-9.51	0.11	252	0.030	-30.47	-22.98	0.01
208	0.137	-17.24	-9.75	0.11	253	0.028	-31.09	-23.60	0.00
209	0.133	-17.53	-10.04	0.10	254	0.026	-31.69	-24.20	0.00
210	0.129	-17.80	-10.31	0.09	255	0.024	-32.39	-24.90	0.00
211	0.125	-18.08	-10.59	0.09	256	0.022	-33.15	-25.66	0.00
212	0.120	-18.40	-10.91	0.08	257	0.020	-34.08	-26.59	0.00
213	0.116	-18.70	-11.21	0.08	258	0.018	-34.99	-27.50	0.00
214	0.111	-19.10	-11.61	0.07	259	0.016	-36.04	-28.55	0.00
215	0.108	-19.32	-11.83	0.07	260	0.014	-37.33	-29.84	0.00
216	0.104	-19.64	-12.15	0.06	261	0.012	-38.61	-31.12	0.00
217	0.100	-19.97	-12.48	0.06	262	0.010	-40.41	-32.92	0.00
218	0.097	-20.30	-12.81	0.05	263	0.008	-42.27	-34.78	0.00
219	0.093	-20.62	-13.13	0.05	264	0.006	-44.81	-37.32	0.00
220	0.089	-20.99	-13.50	0.04	265	0.004	-47.53	-40.04	0.00
221	0.086	-21.30	-13.81	0.04	266	0.003	-52.02	-44.53	0.00
222	0.083	-21.59	-14.10	0.04	267	0.001	-59.29	-51.80	0.00
223	0.080	-21.94	-14.45	0.04	268	0.001	-61.69	-54.20	0.00
224	0.077	-22.28	-14.79	0.03	269	0.002	-54.64	-47.15	0.00

KATHREIN
SCALA DIVISION

840 10293
Ch-12
Maximum gain: 6.99 dBd
Horizontal polarization

Horizontal radiation pattern
0 degree electrical downtilt

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
270	0.003	-50.89	-43.40	0.00	315	0.388	-8.22	-0.73	0.84
271	0.004	-49.00	-41.51	0.00	316	0.407	-7.81	-0.32	0.93
272	0.004	-47.15	-39.66	0.00	317	0.425	-7.43	0.06	1.01
273	0.005	-46.07	-38.58	0.00	318	0.444	-7.05	0.44	1.11
274	0.005	-45.40	-37.91	0.00	319	0.463	-6.69	0.80	1.20
275	0.006	-44.75	-37.26	0.00	320	0.480	-6.38	1.11	1.29
276	0.006	-44.35	-36.86	0.00	321	0.499	-6.04	1.45	1.40
277	0.007	-43.09	-35.60	0.00	322	0.518	-5.71	1.78	1.51
278	0.008	-42.17	-34.68	0.00	323	0.538	-5.38	2.11	1.63
279	0.009	-40.86	-33.37	0.00	324	0.557	-5.08	2.41	1.74
280	0.011	-39.09	-31.60	0.00	325	0.577	-4.77	2.72	1.87
281	0.014	-37.33	-29.84	0.00	326	0.594	-4.52	2.97	1.98
282	0.016	-35.94	-28.45	0.00	327	0.613	-4.25	3.24	2.11
283	0.020	-34.19	-26.70	0.00	328	0.631	-3.99	3.50	2.24
284	0.024	-32.47	-24.98	0.00	329	0.650	-3.74	3.75	2.37
285	0.028	-31.06	-23.57	0.00	330	0.670	-3.48	4.01	2.52
286	0.033	-29.62	-22.13	0.01	331	0.686	-3.28	4.21	2.64
287	0.039	-28.27	-20.78	0.01	332	0.704	-3.05	4.44	2.78
288	0.044	-27.05	-19.56	0.01	333	0.722	-2.83	4.66	2.93
289	0.050	-25.97	-18.48	0.01	334	0.743	-2.58	4.91	3.09
290	0.058	-24.67	-17.18	0.02	335	0.756	-2.43	5.06	3.20
291	0.066	-23.66	-16.17	0.02	336	0.772	-2.24	5.25	3.35
292	0.074	-22.67	-15.18	0.03	337	0.789	-2.06	5.43	3.49
293	0.082	-21.69	-14.20	0.04	338	0.805	-1.89	5.60	3.63
294	0.091	-20.83	-13.34	0.05	339	0.820	-1.72	5.77	3.78
295	0.101	-19.94	-12.45	0.06	340	0.836	-1.55	5.94	3.92
296	0.111	-19.07	-11.58	0.07	341	0.850	-1.41	6.08	4.05
297	0.122	-18.28	-10.79	0.08	342	0.866	-1.25	6.24	4.21
298	0.133	-17.50	-10.01	0.10	343	0.881	-1.10	6.39	4.36
299	0.144	-16.85	-9.36	0.12	344	0.891	-1.01	6.48	4.45
300	0.157	-16.10	-8.61	0.14	345	0.902	-0.90	6.59	4.56
301	0.170	-15.41	-7.92	0.16	346	0.914	-0.78	6.71	4.69
302	0.183	-14.77	-7.28	0.19	347	0.924	-0.68	6.81	4.79
303	0.196	-14.14	-6.65	0.22	348	0.935	-0.58	6.91	4.91
304	0.210	-13.54	-6.05	0.25	349	0.944	-0.50	6.99	5.00
305	0.225	-12.95	-5.46	0.28	350	0.953	-0.42	7.07	5.09
306	0.239	-12.43	-4.94	0.32	351	0.961	-0.34	7.15	5.18
307	0.254	-11.90	-4.41	0.36	352	0.968	-0.28	7.21	5.26
308	0.270	-11.39	-3.90	0.41	353	0.975	-0.22	7.27	5.33
309	0.285	-10.90	-3.41	0.46	354	0.981	-0.17	7.32	5.40
310	0.301	-10.42	-2.93	0.51	355	0.986	-0.12	7.37	5.45
311	0.319	-9.92	-2.43	0.57	356	0.990	-0.09	7.40	5.50
312	0.336	-9.47	-1.98	0.63	357	0.993	-0.06	7.43	5.54
313	0.354	-9.02	-1.53	0.70	358	0.996	-0.03	7.46	5.57
314	0.371	-8.62	-1.13	0.77	359	0.999	-0.01	7.48	5.59



840 10293

Ch-12

Maximum gain: 6.99 dBd

Horizontal polarization

Vertical radiation pattern

0 degree electrical downtilt

KATHREIN
SCALA DIVISION
Post Office Box 4580
Medford, OR 97501 (USA)
Phone:(541)779-6500
Fax:(541)779-3991
http://www.kathrein-scala.com

26-Oct-2011

KATHREIN
SCALA DIVISION

840 10293
Ch-12
Maximum gain: 6.99 dBd
Horizontal polarization

Vertical radiation pattern
0 degree electrical downtilt

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
-90	0.082	-21.74	-14.25	0.04	-45	0.665	-3.55	3.94	2.48
-89	0.084	-21.49	-14.00	0.04	-44	0.679	-3.36	4.13	2.59
-88	0.084	-21.55	-14.06	0.04	-43	0.695	-3.16	4.33	2.71
-87	0.088	-21.12	-13.63	0.04	-42	0.709	-2.99	4.50	2.82
-86	0.092	-20.71	-13.22	0.05	-41	0.723	-2.82	4.67	2.93
-85	0.097	-20.30	-12.81	0.05	-40	0.736	-2.66	4.83	3.04
-84	0.102	-19.79	-12.30	0.06	-39	0.751	-2.49	5.00	3.16
-83	0.110	-19.21	-11.72	0.07	-38	0.765	-2.33	5.16	3.28
-82	0.117	-18.67	-11.18	0.08	-37	0.776	-2.21	5.28	3.38
-81	0.124	-18.11	-10.62	0.09	-36	0.788	-2.07	5.42	3.48
-80	0.134	-17.47	-9.98	0.10	-35	0.801	-1.92	5.57	3.60
-79	0.143	-16.89	-9.40	0.11	-34	0.813	-1.80	5.69	3.71
-78	0.156	-16.15	-8.66	0.14	-33	0.824	-1.68	5.81	3.81
-77	0.169	-15.44	-7.95	0.16	-32	0.836	-1.56	5.93	3.92
-76	0.177	-15.05	-7.56	0.18	-31	0.848	-1.43	6.06	4.03
-75	0.192	-14.36	-6.87	0.21	-30	0.858	-1.33	6.16	4.13
-74	0.204	-13.82	-6.33	0.23	-29	0.871	-1.20	6.29	4.25
-73	0.216	-13.33	-5.84	0.26	-28	0.880	-1.11	6.38	4.35
-72	0.233	-12.65	-5.16	0.30	-27	0.888	-1.03	6.46	4.43
-71	0.245	-12.23	-4.74	0.34	-26	0.895	-0.96	6.53	4.49
-70	0.261	-11.66	-4.17	0.38	-25	0.905	-0.87	6.62	4.60
-69	0.274	-11.26	-3.77	0.42	-24	0.913	-0.79	6.70	4.67
-68	0.290	-10.75	-3.26	0.47	-23	0.919	-0.73	6.76	4.74
-67	0.306	-10.30	-2.81	0.52	-22	0.928	-0.65	6.84	4.83
-66	0.321	-9.86	-2.37	0.58	-21	0.937	-0.56	6.93	4.93
-65	0.338	-9.43	-1.94	0.64	-20	0.942	-0.52	6.97	4.98
-64	0.353	-9.04	-1.55	0.70	-19	0.948	-0.46	7.03	5.04
-63	0.371	-8.61	-1.12	0.77	-18	0.954	-0.41	7.08	5.10
-62	0.386	-8.26	-0.77	0.84	-17	0.958	-0.37	7.12	5.15
-61	0.405	-7.86	-0.37	0.92	-16	0.965	-0.31	7.18	5.23
-60	0.419	-7.56	-0.07	0.98	-15	0.969	-0.28	7.21	5.26
-59	0.436	-7.22	0.27	1.07	-14	0.972	-0.25	7.24	5.30
-58	0.452	-6.89	0.60	1.15	-13	0.978	-0.19	7.30	5.37
-57	0.470	-6.55	0.94	1.24	-12	0.982	-0.16	7.33	5.41
-56	0.487	-6.25	1.24	1.33	-11	0.984	-0.14	7.35	5.44
-55	0.503	-5.96	1.53	1.42	-10	0.987	-0.11	7.38	5.47
-54	0.520	-5.68	1.81	1.52	-9	0.990	-0.09	7.40	5.49
-53	0.537	-5.40	2.09	1.62	-8	0.993	-0.06	7.43	5.53
-52	0.553	-5.15	2.34	1.71	-7	0.994	-0.05	7.44	5.54
-51	0.569	-4.89	2.60	1.82	-6	0.996	-0.03	7.46	5.57
-50	0.587	-4.63	2.86	1.93	-5	0.996	-0.03	7.46	5.57
-49	0.602	-4.41	3.08	2.03	-4	0.997	-0.03	7.46	5.58
-48	0.618	-4.18	3.31	2.14	-3	0.998	-0.02	7.47	5.59
-47	0.634	-3.95	3.54	2.26	-2	0.997	-0.02	7.47	5.58
-46	0.649	-3.75	3.74	2.37	-1	0.999	-0.01	7.48	5.60
					0	1.000	0.00	7.49	5.61

KATHREIN
SCALA DIVISION

840 10293
Ch-12
Maximum gain: 6.99 dBd
Horizontal polarization

Vertical radiation pattern
0 degree electrical downtilt

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	7.49	5.61	45	0.634	-3.95	3.54	2.26
1	0.999	-0.01	7.48	5.60	46	0.619	-4.17	3.32	2.15
2	0.997	-0.03	7.46	5.58	47	0.604	-4.38	3.11	2.05
3	0.996	-0.04	7.45	5.56	48	0.586	-4.64	2.85	1.93
4	0.993	-0.06	7.43	5.53	49	0.571	-4.87	2.62	1.83
5	0.991	-0.08	7.41	5.51	50	0.555	-5.11	2.38	1.73
6	0.989	-0.10	7.39	5.49	51	0.540	-5.35	2.14	1.64
7	0.986	-0.12	7.37	5.45	52	0.522	-5.65	1.84	1.53
8	0.983	-0.15	7.34	5.42	53	0.506	-5.91	1.58	1.44
9	0.979	-0.18	7.31	5.38	54	0.488	-6.24	1.25	1.33
10	0.976	-0.21	7.28	5.34	55	0.472	-6.53	0.96	1.25
11	0.971	-0.26	7.23	5.29	56	0.454	-6.86	0.63	1.16
12	0.967	-0.29	7.20	5.25	57	0.435	-7.23	0.26	1.06
13	0.964	-0.32	7.17	5.21	58	0.419	-7.56	-0.07	0.98
14	0.959	-0.36	7.13	5.16	59	0.399	-7.99	-0.50	0.89
15	0.953	-0.42	7.07	5.10	60	0.383	-8.33	-0.84	0.82
16	0.947	-0.48	7.01	5.03	61	0.371	-8.62	-1.13	0.77
17	0.941	-0.52	6.97	4.97	62	0.352	-9.07	-1.58	0.69
18	0.934	-0.59	6.90	4.90	63	0.333	-9.55	-2.06	0.62
19	0.926	-0.67	6.82	4.81	64	0.319	-9.93	-2.44	0.57
20	0.920	-0.72	6.77	4.75	65	0.303	-10.38	-2.89	0.51
21	0.916	-0.77	6.72	4.70	66	0.285	-10.91	-3.42	0.45
22	0.907	-0.85	6.64	4.62	67	0.269	-11.40	-3.91	0.41
23	0.897	-0.95	6.54	4.51	68	0.252	-11.98	-4.49	0.36
24	0.886	-1.05	6.44	4.41	69	0.235	-12.59	-5.10	0.31
25	0.882	-1.10	6.39	4.36	70	0.221	-13.13	-5.64	0.27
26	0.873	-1.18	6.31	4.27	71	0.205	-13.76	-6.27	0.24
27	0.863	-1.28	6.21	4.18	72	0.189	-14.49	-7.00	0.20
28	0.854	-1.37	6.12	4.09	73	0.173	-15.23	-7.74	0.17
29	0.844	-1.48	6.01	3.99	74	0.159	-15.99	-8.50	0.14
30	0.834	-1.58	5.91	3.90	75	0.144	-16.81	-9.32	0.12
31	0.824	-1.68	5.81	3.81	76	0.129	-17.77	-10.28	0.09
32	0.814	-1.79	5.70	3.71	77	0.115	-18.76	-11.27	0.07
33	0.799	-1.95	5.54	3.58	78	0.101	-19.89	-12.40	0.06
34	0.786	-2.09	5.40	3.47	79	0.088	-21.14	-13.65	0.04
35	0.777	-2.19	5.30	3.39	80	0.075	-22.51	-15.02	0.03
36	0.764	-2.34	5.15	3.27	81	0.063	-24.04	-16.55	0.02
37	0.753	-2.46	5.03	3.19	82	0.051	-25.83	-18.34	0.01
38	0.742	-2.59	4.90	3.09	83	0.041	-27.80	-20.31	0.01
39	0.721	-2.84	4.65	2.92	84	0.031	-30.15	-22.66	0.01
40	0.712	-2.95	4.54	2.84	85	0.024	-32.30	-24.81	0.00
41	0.693	-3.18	4.31	2.70	86	0.021	-33.49	-26.00	0.00
42	0.680	-3.35	4.14	2.59	87	0.023	-32.75	-25.26	0.00
43	0.666	-3.53	3.96	2.49	88	0.029	-30.78	-23.29	0.00
44	0.649	-3.75	3.74	2.37	89	0.035	-29.17	-21.68	0.01
					90	0.043	-27.28	-19.79	0.01