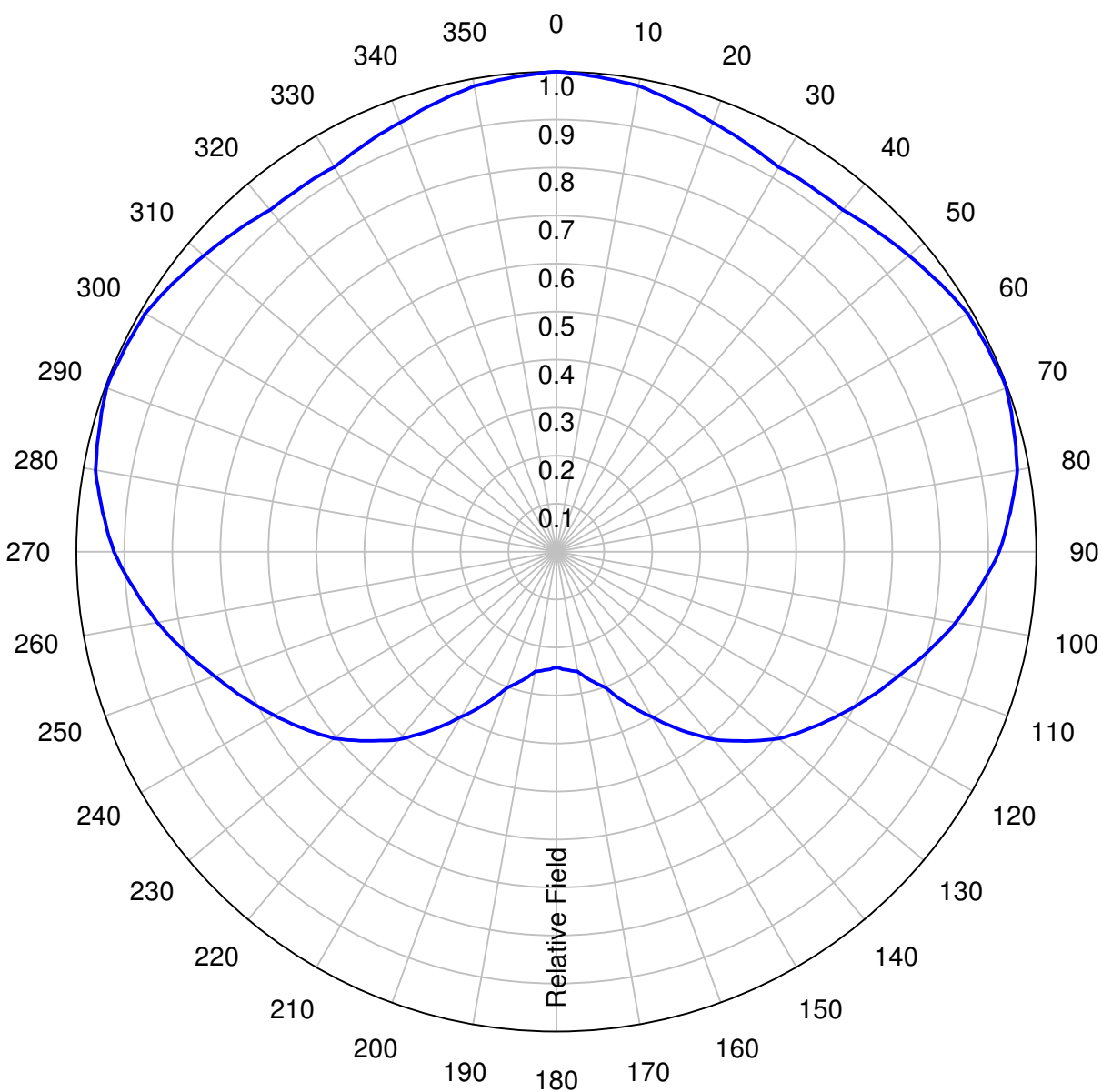


AZIMUTH PATTERN**Type:****ALP-W****Channel:****24****Directivity:****Numeric****dBd****1.56****1.93****Peak(s) at:****Location:****Polarization:****Horizontal**

Note: Pattern shape and directivity may vary with channel and mouting configuration.



Preliminary, subject to final design and review.

TABULATED DATA FOR AZIMUTH PATTERN

Type: ALP-W

Polarization: Horizontal

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.907	-0.85	184	0.246	-12.18	276	0.954	-0.41
2	0.997	-0.03	94	0.891	-1.00	186	0.248	-12.11	278	0.964	-0.32
4	0.994	-0.05	96	0.876	-1.15	188	0.251	-12.01	280	0.975	-0.22
6	0.991	-0.08	98	0.860	-1.31	190	0.253	-11.94	282	0.979	-0.18
8	0.988	-0.10	100	0.845	-1.46	192	0.263	-11.60	284	0.984	-0.14
10	0.985	-0.13	102	0.828	-1.64	194	0.273	-11.28	286	0.988	-0.10
12	0.978	-0.19	104	0.810	-1.83	196	0.282	-11.00	288	0.993	-0.06
14	0.971	-0.26	106	0.793	-2.01	198	0.292	-10.69	290	0.997	-0.03
16	0.965	-0.31	108	0.775	-2.21	200	0.302	-10.40	292	0.996	-0.03
18	0.958	-0.37	110	0.758	-2.41	202	0.321	-9.87	294	0.994	-0.05
20	0.951	-0.44	112	0.742	-2.59	204	0.340	-9.37	296	0.993	-0.06
22	0.946	-0.48	114	0.727	-2.77	206	0.359	-8.90	298	0.991	-0.08
24	0.941	-0.53	116	0.711	-2.96	208	0.378	-8.45	300	0.990	-0.09
26	0.935	-0.58	118	0.696	-3.15	210	0.397	-8.02	302	0.984	-0.14
28	0.930	-0.63	120	0.680	-3.35	212	0.420	-7.54	304	0.978	-0.19
30	0.925	-0.68	122	0.665	-3.54	214	0.442	-7.09	306	0.971	-0.26
32	0.926	-0.67	124	0.650	-3.74	216	0.465	-6.65	308	0.965	-0.31
34	0.927	-0.66	126	0.635	-3.94	218	0.487	-6.25	310	0.959	-0.36
36	0.927	-0.66	128	0.620	-4.15	220	0.510	-5.85	312	0.953	-0.42
38	0.928	-0.65	130	0.605	-4.36	222	0.529	-5.53	314	0.947	-0.47
40	0.929	-0.64	132	0.586	-4.64	224	0.548	-5.22	316	0.941	-0.53
42	0.935	-0.58	134	0.567	-4.93	226	0.567	-4.93	318	0.935	-0.58
44	0.941	-0.53	136	0.548	-5.22	228	0.586	-4.64	320	0.929	-0.64
46	0.947	-0.47	138	0.529	-5.53	230	0.605	-4.36	322	0.928	-0.65
48	0.953	-0.42	140	0.510	-5.85	232	0.620	-4.15	324	0.927	-0.66
50	0.959	-0.36	142	0.487	-6.25	234	0.635	-3.94	326	0.927	-0.66
52	0.965	-0.31	144	0.465	-6.65	236	0.650	-3.74	328	0.926	-0.67
54	0.971	-0.26	146	0.442	-7.09	238	0.665	-3.54	330	0.925	-0.68
56	0.978	-0.19	148	0.420	-7.54	240	0.680	-3.35	332	0.930	-0.63
58	0.984	-0.14	150	0.397	-8.02	242	0.696	-3.15	334	0.935	-0.58
60	0.990	-0.09	152	0.378	-8.45	244	0.711	-2.96	336	0.941	-0.53
62	0.991	-0.08	154	0.359	-8.90	246	0.727	-2.77	338	0.946	-0.48
64	0.993	-0.06	156	0.340	-9.37	248	0.742	-2.59	340	0.951	-0.44
66	0.994	-0.05	158	0.321	-9.87	250	0.758	-2.41	342	0.958	-0.37
68	0.996	-0.03	160	0.302	-10.40	252	0.775	-2.21	344	0.965	-0.31
70	0.997	-0.03	162	0.292	-10.69	254	0.793	-2.01	346	0.971	-0.26
72	0.993	-0.06	164	0.282	-11.00	256	0.810	-1.83	348	0.978	-0.19
74	0.988	-0.10	166	0.273	-11.28	258	0.828	-1.64	350	0.985	-0.13
76	0.984	-0.14	168	0.263	-11.60	260	0.845	-1.46	352	0.988	-0.10
78	0.979	-0.18	170	0.253	-11.94	262	0.860	-1.31	354	0.991	-0.08
80	0.975	-0.22	172	0.251	-12.01	264	0.876	-1.15	356	0.994	-0.05
82	0.964	-0.32	174	0.248	-12.11	266	0.891	-1.00	358	0.997	-0.03
84	0.954	-0.41	176	0.246	-12.18	268	0.907	-0.85	360	1.000	0.00
86	0.943	-0.51	178	0.243	-12.29	270	0.922	-0.71			
88	0.933	-0.60	180	0.241	-12.36	272	0.933	-0.60			
90	0.922	-0.71	182	0.243	-12.29	274	0.943	-0.51			

Preliminary, subject to final design and review.

TABULATED DATA FOR AZIMUTH PATTERN FCC FILING FORMAT

Type: ALP-W

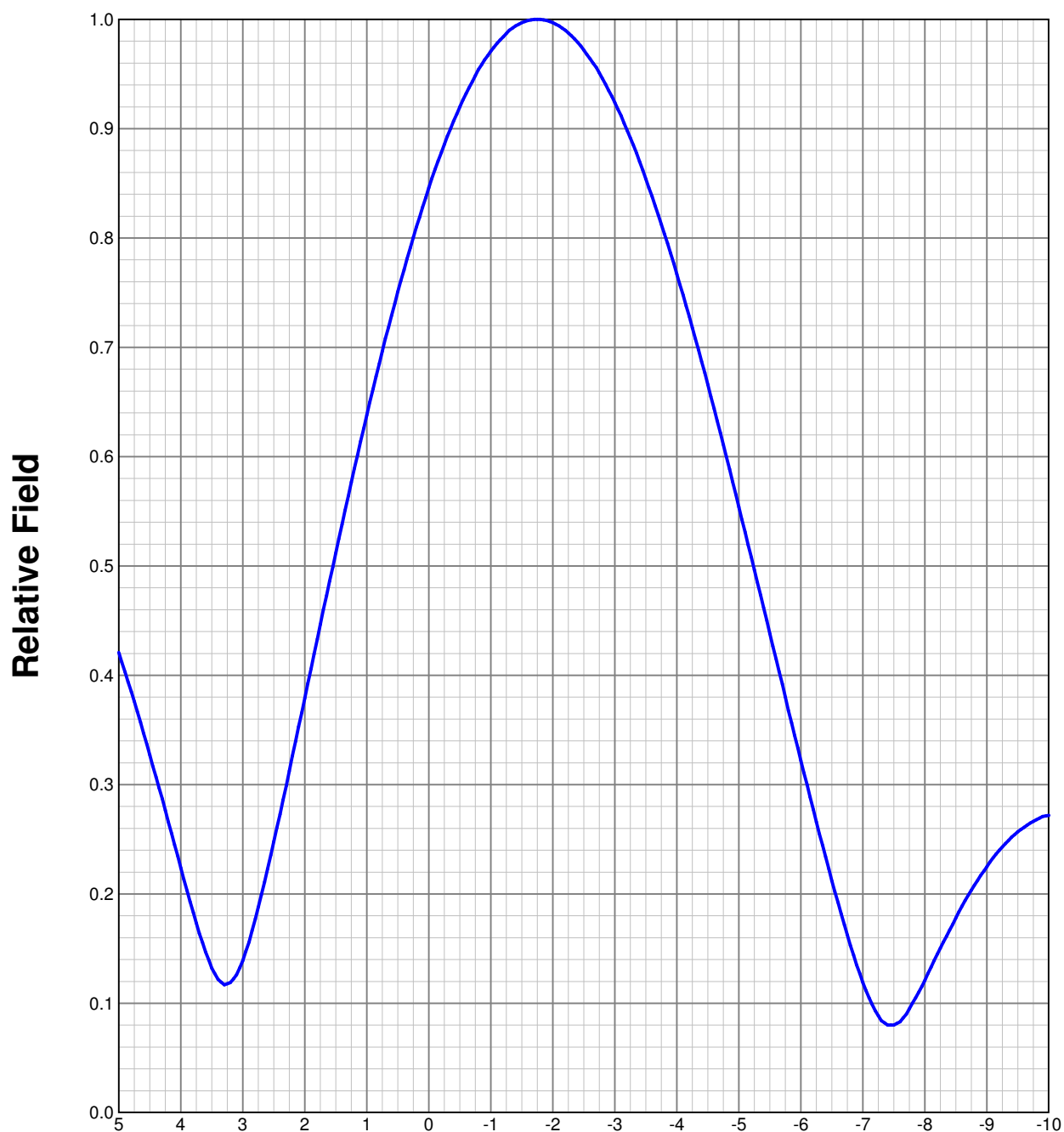
Polarization: Horizontal

ANGLE	FIELD	ERP (kW)	ERP (dBk)
0	1.000	5.500	7.404
10	0.985	5.336	7.272
20	0.951	4.974	6.967
30	0.925	4.706	6.726
40	0.929	4.747	6.764
50	0.959	5.058	7.040
60	0.990	5.391	7.316
70	0.997	5.467	7.378
80	0.975	5.228	7.184
90	0.922	4.675	6.698
100	0.845	3.927	5.941
110	0.758	3.160	4.997
120	0.680	2.543	4.054
130	0.605	2.013	3.039
140	0.510	1.431	1.555
150	0.397	0.867	-0.621
160	0.302	0.502	-2.996
170	0.253	0.352	-4.534
180	0.241	0.319	-4.956
190	0.253	0.352	-4.534
200	0.302	0.502	-2.996
210	0.397	0.867	-0.621
220	0.510	1.431	1.555
230	0.605	2.013	3.039
240	0.680	2.543	4.054
250	0.758	3.160	4.997
260	0.845	3.927	5.941
270	0.922	4.675	6.698
280	0.975	5.228	7.184
290	0.997	5.467	7.378
300	0.990	5.391	7.316
310	0.959	5.058	7.040
320	0.929	4.747	6.764
330	0.925	4.706	6.726
340	0.951	4.974	6.967
350	0.985	5.336	7.272

Preliminary, subject to final design and review.

ELEVATION PATTERN

Type:	ALP8L7		Channel:	24
Directivity:	Numeric	dBd	Location:	
Main Lobe:	9.05	9.57	Beam Tilt:	-1.75
Horizontal:	6.48	8.11	Polarization:	Horizontal



Preliminary, subject to final design and review.

TABULATED DATA FOR ELEVATION PATTERN

Type: ALP8L7

Polarization: Horizontal

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
5.00	0.421	-7.51	-6.75	0.162	-15.78	-27.00	0.087	-21.21	-50.50	0.057	-24.88	-74.00	0.218	-13.23
4.75	0.376	-8.50	-7.00	0.119	-18.49	-27.50	0.064	-23.88	-51.00	0.073	-22.73	-74.50	0.212	-13.47
4.50	0.327	-9.71	-7.25	0.088	-21.06	-28.00	0.043	-27.33	-51.50	0.087	-21.21	-75.00	0.207	-13.68
4.25	0.276	-11.17	-7.50	0.080	-21.94	-28.50	0.025	-32.04	-52.00	0.101	-19.91	-75.50	0.200	-13.98
4.00	0.224	-13.00	-7.75	0.095	-20.45	-29.00	0.012	-38.42	-52.50	0.113	-18.94	-76.00	0.194	-14.24
3.75	0.173	-15.21	-8.00	0.121	-18.34	-29.50	0.004	-47.96	-53.00	0.123	-18.20	-76.50	0.187	-14.56
3.50	0.132	-17.59	-8.25	0.150	-16.45	-30.00	0.000	-40.00	-53.50	0.132	-17.59	-77.00	0.180	-14.89
3.25	0.118	-18.56	-8.50	0.178	-14.99	-30.50	0.003	-50.46	-54.00	0.138	-17.20	-77.50	0.172	-15.29
3.00	0.139	-17.14	-8.75	0.204	-13.83	-31.00	0.010	-40.00	-54.50	0.142	-16.95	-78.00	0.165	-15.65
2.75	0.188	-14.52	-9.00	0.225	-12.96	-31.50	0.021	-33.56	-55.00	0.143	-16.89	-78.50	0.157	-16.08
2.50	0.248	-12.11	-9.25	0.243	-12.29	-32.00	0.036	-28.87	-55.50	0.142	-16.95	-79.00	0.150	-16.48
2.25	0.313	-10.10	-9.50	0.257	-11.80	-32.50	0.053	-25.51	-56.00	0.139	-17.14	-79.50	0.142	-16.95
2.00	0.379	-8.43	-9.75	0.267	-11.49	-33.00	0.072	-22.85	-56.50	0.133	-17.52	-80.00	0.134	-17.46
1.75	0.447	-7.00	-10.00	0.272	-11.31	-33.50	0.093	-20.63	-57.00	0.125	-18.06	-80.50	0.127	-17.92
1.50	0.512	-5.81	-10.50	0.273	-11.28	-34.00	0.113	-18.94	-57.50	0.115	-18.79	-81.00	0.119	-18.49
1.25	0.577	-4.78	-11.00	0.259	-11.73	-34.50	0.132	-17.59	-58.00	0.103	-19.74	-81.50	0.112	-19.02
1.00	0.638	-3.90	-11.50	0.235	-12.58	-35.00	0.150	-16.48	-58.50	0.090	-20.92	-82.00	0.104	-19.66
0.75	0.697	-3.14	-12.00	0.201	-13.94	-35.50	0.165	-15.65	-59.00	0.076	-22.38	-82.50	0.097	-20.26
0.50	0.751	-2.49	-12.50	0.161	-15.86	-36.00	0.177	-15.04	-59.50	0.062	-24.15	-83.00	0.090	-20.92
0.25	0.800	-1.93	-13.00	0.118	-18.56	-36.50	0.185	-14.66	-60.00	0.048	-26.38	-83.50	0.083	-21.62
0.00	0.846	-1.45	-13.50	0.075	-22.50	-37.00	0.189	-14.47	-60.50	0.037	-28.64	-84.00	0.076	-22.38
-0.25	0.885	-1.06	-14.00	0.034	-29.37	-37.50	0.189	-14.47	-61.00	0.034	-29.37	-84.50	0.069	-23.22
-0.50	0.920	-0.72	-14.50	0.001	-60.00	-38.00	0.185	-14.66	-61.50	0.040	-27.96	-85.00	0.062	-24.15
-0.75	0.948	-0.46	-15.00	0.031	-30.17	-38.50	0.177	-15.04	-62.00	0.054	-25.35	-85.50	0.056	-25.04
-1.00	0.971	-0.26	-15.50	0.052	-25.68	-39.00	0.166	-15.60	-62.50	0.070	-23.10	-86.00	0.049	-26.20
-1.25	0.987	-0.11	-16.00	0.064	-23.88	-39.50	0.151	-16.42	-63.00	0.086	-21.31	-86.50	0.043	-27.33
-1.50	0.997	-0.03	-16.50	0.067	-23.48	-40.00	0.134	-17.46	-63.50	0.103	-19.74	-87.00	0.037	-28.64
-1.75	1.000	0.00	-17.00	0.061	-24.29	-40.50	0.116	-18.71	-64.00	0.120	-18.42	-87.50	0.030	-30.46
-2.00	0.997	-0.03	-17.50	0.048	-26.38	-41.00	0.096	-20.35	-64.50	0.135	-17.39	-88.00	0.024	-32.40
-2.25	0.988	-0.11	-18.00	0.032	-29.90	-41.50	0.076	-22.38	-65.00	0.150	-16.48	-88.50	0.018	-34.89
-2.50	0.972	-0.25	-18.50	0.027	-31.37	-42.00	0.056	-25.04	-65.50	0.164	-15.70	-89.00	0.012	-38.42
-2.75	0.951	-0.44	-19.00	0.047	-26.56	-42.50	0.038	-28.40	-66.00	0.177	-15.04	-89.50	0.006	-44.44
-3.00	0.924	-0.69	-19.50	0.077	-22.27	-43.00	0.024	-32.40	-66.50	0.188	-14.52	-90.00	0.000	-40.00
-3.25	0.891	-1.00	-20.00	0.109	-19.25	-43.50	0.017	-35.39	-67.00	0.198	-14.07			
-3.50	0.854	-1.37	-20.50	0.141	-17.02	-44.00	0.022	-33.15	-67.50	0.207	-13.68			
-3.75	0.813	-1.80	-21.00	0.169	-15.44	-44.50	0.029	-30.75	-68.00	0.215	-13.35			
-4.00	0.767	-2.30	-21.50	0.193	-14.29	-45.00	0.035	-29.12	-68.50	0.221	-13.11			
-4.25	0.718	-2.88	-22.00	0.211	-13.51	-45.50	0.039	-28.18	-69.00	0.226	-12.92			
-4.50	0.666	-3.53	-22.50	0.222	-13.07	-46.00	0.040	-27.96	-69.50	0.230	-12.77			
-4.75	0.611	-4.28	-23.00	0.227	-12.88	-46.50	0.038	-28.40	-70.00	0.233	-12.65			
-5.00	0.554	-5.13	-23.50	0.226	-12.92	-47.00	0.032	-29.90	-70.50	0.234	-12.62			
-5.25	0.496	-6.08	-24.00	0.217	-13.27	-47.50	0.025	-32.04	-71.00	0.234	-12.62			
-5.50	0.438	-7.17	-24.50	0.204	-13.81	-48.00	0.015	-36.48	-71.50	0.234	-12.62			
-5.75	0.380	-8.40	-25.00	0.185	-14.66	-48.50	0.002	-53.98	-72.00	0.232	-12.69			
-6.00	0.322	-9.84	-25.50	0.163	-15.76	-49.00	0.011	-39.17	-72.50	0.230	-12.77			
-6.25	0.266	-11.50	-26.00	0.138	-17.20	-49.50	0.026	-31.70	-73.00	0.226	-12.92			
-6.50	0.212	-13.47	-26.50	0.113	-18.94	-50.00	0.042	-27.54	-73.50	0.222	-13.07			

Preliminary, subject to final design and review.