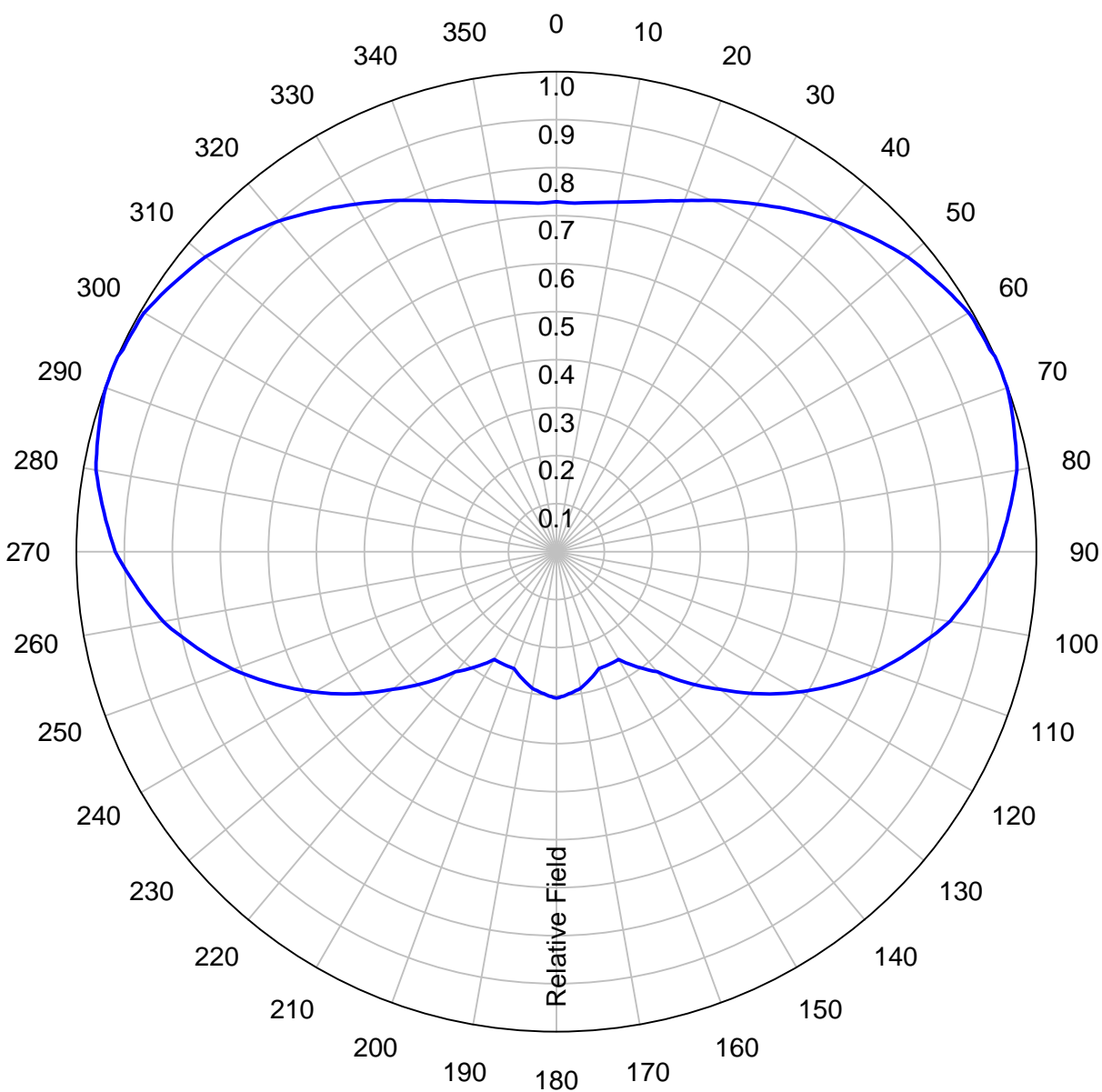


AZIMUTH PATTERN**Type:****ALP-P****Channel:****18****Directivity:****Numeric****dBd****1.88****2.74****Peak(s) at:****Location:****Polarization:****Horizontal**

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



Preliminary, subject to final design and review.

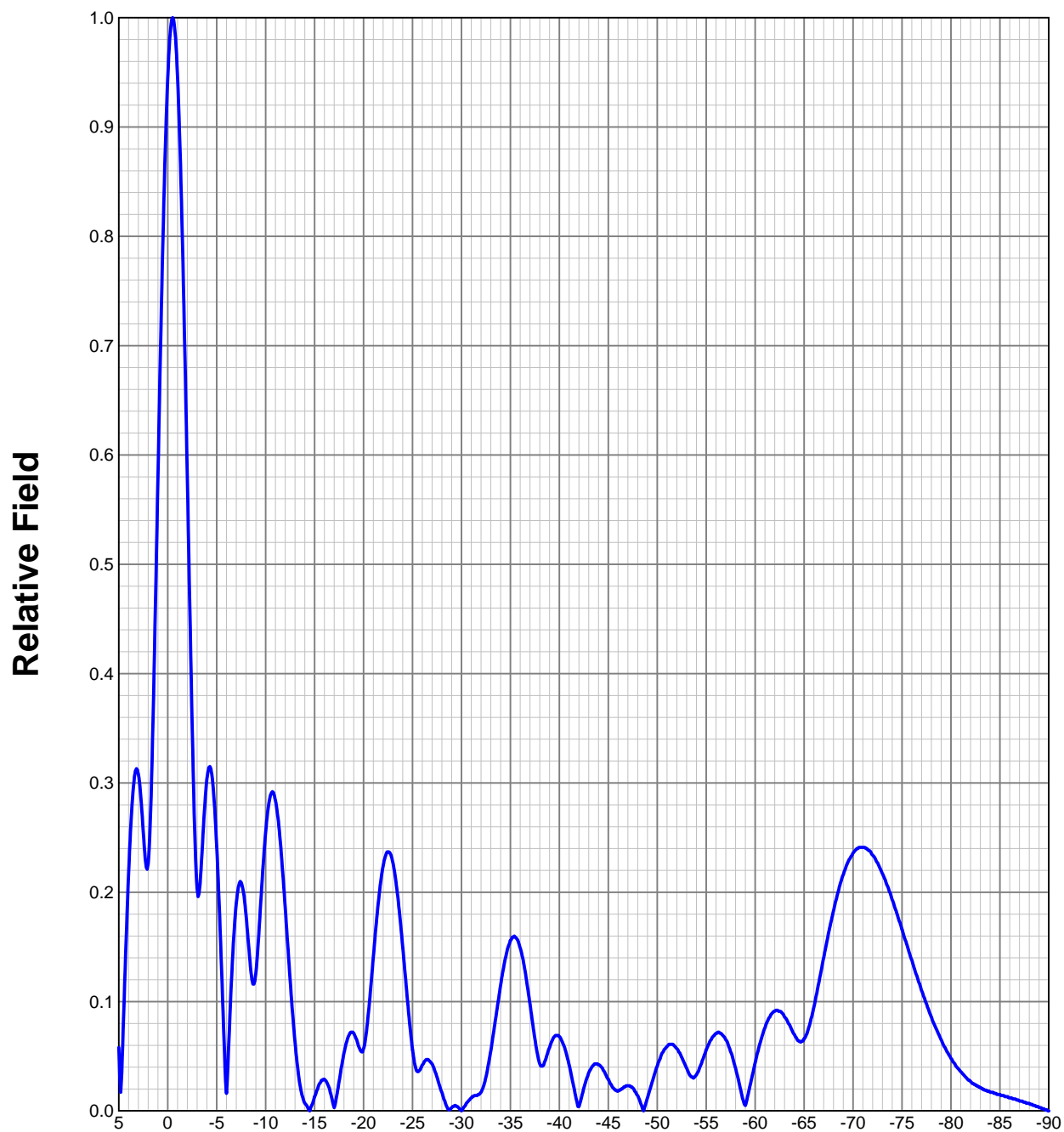
TABULATED DATA FOR AZIMUTH PATTERN

Type: ALP-P

PolarizationHorizontal

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.729	-2.75	92	0.902	-0.90	184	0.299	-10.49	276	0.952	-0.43
2	0.727	-2.77	94	0.884	-1.07	186	0.296	-10.57	278	0.963	-0.33
4	0.728	-2.76	96	0.867	-1.24	188	0.292	-10.69	280	0.974	-0.23
6	0.732	-2.71	98	0.850	-1.41	190	0.289	-10.78	282	0.979	-0.18
8	0.735	-2.67	100	0.833	-1.59	192	0.283	-10.96	284	0.984	-0.14
10	0.739	-2.63	102	0.810	-1.83	194	0.277	-11.15	286	0.990	-0.09
12	0.745	-2.56	104	0.786	-2.09	196	0.271	-11.34	288	0.995	-0.04
14	0.752	-2.48	106	0.763	-2.35	198	0.265	-11.54	290	0.999	-0.01
16	0.760	-2.38	108	0.740	-2.62	200	0.259	-11.73	292	1.000	0.00
18	0.769	-2.28	110	0.717	-2.89	202	0.259	-11.73	294	1.000	0.00
20	0.778	-2.18	112	0.690	-3.22	204	0.259	-11.73	296	0.996	-0.03
22	0.789	-2.06	114	0.664	-3.56	206	0.259	-11.73	298	0.994	-0.05
24	0.801	-1.93	116	0.637	-3.92	208	0.259	-11.73	300	0.993	-0.06
26	0.813	-1.80	118	0.611	-4.28	210	0.259	-11.73	302	0.985	-0.13
28	0.824	-1.68	120	0.585	-4.66	212	0.273	-11.28	304	0.978	-0.19
30	0.836	-1.56	122	0.557	-5.08	214	0.286	-10.87	306	0.970	-0.26
32	0.848	-1.43	124	0.529	-5.53	216	0.299	-10.49	308	0.963	-0.33
34	0.861	-1.30	126	0.502	-5.99	218	0.313	-10.09	310	0.955	-0.40
36	0.874	-1.17	128	0.474	-6.48	220	0.326	-9.74	312	0.944	-0.50
38	0.886	-1.05	130	0.446	-7.01	222	0.350	-9.12	314	0.933	-0.60
40	0.899	-0.92	132	0.422	-7.49	224	0.374	-8.54	316	0.921	-0.71
42	0.910	-0.82	134	0.398	-8.00	226	0.398	-8.00	318	0.910	-0.82
44	0.921	-0.71	136	0.374	-8.54	228	0.422	-7.49	320	0.899	-0.92
46	0.933	-0.60	138	0.350	-9.12	230	0.446	-7.01	322	0.886	-1.05
48	0.944	-0.50	140	0.326	-9.74	232	0.474	-6.48	324	0.874	-1.17
50	0.955	-0.40	142	0.313	-10.09	234	0.502	-5.99	326	0.861	-1.30
52	0.963	-0.33	144	0.299	-10.49	236	0.529	-5.53	328	0.848	-1.43
54	0.970	-0.26	146	0.286	-10.87	238	0.557	-5.08	330	0.836	-1.56
56	0.978	-0.19	148	0.273	-11.28	240	0.585	-4.66	332	0.824	-1.68
58	0.985	-0.13	150	0.259	-11.73	242	0.611	-4.28	334	0.813	-1.80
60	0.993	-0.06	152	0.259	-11.73	244	0.637	-3.92	336	0.801	-1.93
62	0.994	-0.05	154	0.259	-11.73	246	0.664	-3.56	338	0.789	-2.06
64	0.996	-0.03	156	0.259	-11.73	248	0.690	-3.22	340	0.778	-2.18
66	1.000	0.00	158	0.259	-11.73	250	0.717	-2.89	342	0.769	-2.28
68	1.000	0.00	160	0.259	-11.73	252	0.740	-2.62	344	0.760	-2.38
70	0.999	-0.01	162	0.265	-11.54	254	0.763	-2.35	346	0.752	-2.48
72	0.995	-0.04	164	0.271	-11.34	256	0.786	-2.09	348	0.745	-2.56
74	0.990	-0.09	166	0.277	-11.15	258	0.810	-1.83	350	0.739	-2.63
76	0.984	-0.14	168	0.283	-10.96	260	0.833	-1.59	352	0.735	-2.67
78	0.979	-0.18	170	0.289	-10.78	262	0.850	-1.41	354	0.732	-2.71
80	0.974	-0.23	172	0.292	-10.69	264	0.867	-1.24	356	0.728	-2.76
82	0.963	-0.33	174	0.296	-10.57	266	0.884	-1.07	358	0.727	-2.77
84	0.952	-0.43	176	0.299	-10.49	268	0.902	-0.90	360	0.729	-2.75
86	0.941	-0.53	178	0.302	-10.40	270	0.919	-0.73			
88	0.930	-0.63	180	0.305	-10.31	272	0.930	-0.63			
90	0.919	-0.73	182	0.302	-10.40	274	0.941	-0.53			

Preliminary, subject to final design and review.

ELEVATION PATTERN**Type:****ALP16L2****Channel:****18****Directivity:****Numeric****dBd****Location:****Main Lobe:****16.59****12.20****Beam Tilt:****-0.50****Horizontal:****14.82****11.71****Polarization:****Horizontal**

Preliminary, subject to final design and review.

TABULATED DATA FOR ELEVATION PATTERN

Type: ALP16L2

PolarizationHorizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.058	-24.73	-6.75	0.160	-15.92	-27.00	0.043	-27.33	-50.50
4.75	0.026	-31.70	-7.00	0.190	-14.42	-27.50	0.031	-30.17	-51.00
4.50	0.089	-21.01	-7.25	0.206	-13.72	-28.00	0.017	-35.39	-51.50
4.25	0.156	-16.14	-7.50	0.209	-13.60	-28.50	0.004	-47.96	-52.00
4.00	0.217	-13.27	-7.75	0.199	-14.02	-29.00	0.003	-50.46	-52.50
3.75	0.265	-11.55	-8.00	0.179	-14.94	-29.50	0.004	-47.96	-53.00
3.50	0.297	-10.54	-8.25	0.153	-16.33	-30.00	0.000	-40.00	-53.50
3.25	0.312	-10.12	-8.50	0.127	-17.92	-30.50	0.007	-43.10	-54.00
3.00	0.308	-10.23	-8.75	0.116	-18.71	-31.00	0.012	-38.42	-54.50
2.75	0.287	-10.84	-9.00	0.126	-17.99	-31.50	0.014	-37.08	-55.00
2.50	0.255	-11.87	-9.25	0.155	-16.19	-32.00	0.017	-35.39	-55.50
2.25	0.227	-12.88	-9.50	0.191	-14.38	-32.50	0.031	-30.17	-56.00
2.00	0.226	-12.92	-9.75	0.226	-12.94	-33.00	0.055	-25.19	-56.50
1.75	0.274	-11.24	-10.00	0.255	-11.87	-33.50	0.085	-21.41	-57.00
1.50	0.359	-8.90	-10.50	0.289	-10.78	-34.00	0.115	-18.79	-57.50
1.25	0.467	-6.62	-11.00	0.284	-10.93	-34.50	0.140	-17.08	-58.00
1.00	0.580	-4.73	-11.50	0.246	-12.18	-35.00	0.156	-16.14	-58.50
0.75	0.693	-3.19	-12.00	0.186	-14.61	-35.50	0.159	-15.97	-59.00
0.50	0.794	-2.00	-12.50	0.120	-18.42	-36.00	0.149	-16.54	-59.50
0.25	0.880	-1.11	-13.00	0.063	-24.01	-36.50	0.128	-17.86	-60.00
0.00	0.945	-0.49	-13.50	0.024	-32.40	-37.00	0.098	-20.18	-60.50
-0.25	0.986	-0.13	-14.00	0.007	-43.10	-37.50	0.066	-23.61	-61.00
-0.50	1.000	0.00	-14.50	0.000	-40.00	-38.00	0.043	-27.33	-61.50
-0.75	0.986	-0.12	-15.00	0.013	-37.72	-38.50	0.045	-26.94	-62.00
-1.00	0.946	-0.48	-15.50	0.025	-32.04	-39.00	0.058	-24.73	-62.50
-1.25	0.881	-1.10	-16.00	0.029	-30.75	-39.50	0.068	-23.35	-63.00
-1.50	0.796	-1.98	-16.50	0.021	-33.56	-40.00	0.068	-23.35	-63.50
-1.75	0.693	-3.19	-17.00	0.003	-50.46	-40.50	0.059	-24.58	-64.00
-2.00	0.579	-4.75	-17.50	0.027	-31.37	-41.00	0.042	-27.54	-64.50
-2.25	0.462	-6.71	-18.00	0.053	-25.51	-41.50	0.021	-33.56	-65.00
-2.50	0.350	-9.12	-18.50	0.069	-23.22	-42.00	0.004	-47.96	-65.50
-2.75	0.258	-11.78	-19.00	0.071	-22.97	-42.50	0.021	-33.56	-66.00
-3.00	0.203	-13.85	-19.50	0.059	-24.58	-43.00	0.035	-29.12	-66.50
-3.25	0.204	-13.83	-20.00	0.057	-24.88	-43.50	0.042	-27.54	-67.00
-3.50	0.236	-12.54	-20.50	0.090	-20.92	-44.00	0.042	-27.54	-67.50
-3.75	0.275	-11.21	-21.00	0.141	-17.02	-44.50	0.037	-28.64	-68.00
-4.00	0.304	-10.34	-21.50	0.190	-14.42	-45.00	0.029	-30.75	-68.50
-4.25	0.315	-10.05	-22.00	0.224	-13.00	-45.50	0.021	-33.56	-69.00
-4.50	0.308	-10.23	-22.50	0.237	-12.51	-46.00	0.018	-34.89	-69.50
-4.75	0.282	-10.98	-23.00	0.227	-12.88	-46.50	0.021	-33.56	-70.00
-5.00	0.242	-12.32	-23.50	0.196	-14.15	-47.00	0.023	-32.77	-70.50
-5.25	0.190	-14.45	-24.00	0.150	-16.48	-47.50	0.021	-33.56	-71.00
-5.50	0.129	-17.79	-24.50	0.100	-20.00	-48.00	0.014	-37.08	-71.50
-5.75	0.065	-23.74	-25.00	0.056	-25.04	-48.50	0.002	-53.98	-72.00
-6.00	0.016	-35.92	-25.50	0.036	-28.87	-49.00	0.012	-38.42	-72.50
-6.25	0.065	-23.74	-26.00	0.042	-27.54	-49.50	0.027	-31.37	-73.00
-6.50	0.118	-18.56	-26.50	0.047	-26.56	-50.00	0.041	-27.74	-73.50

Preliminary, subject to final design and review.