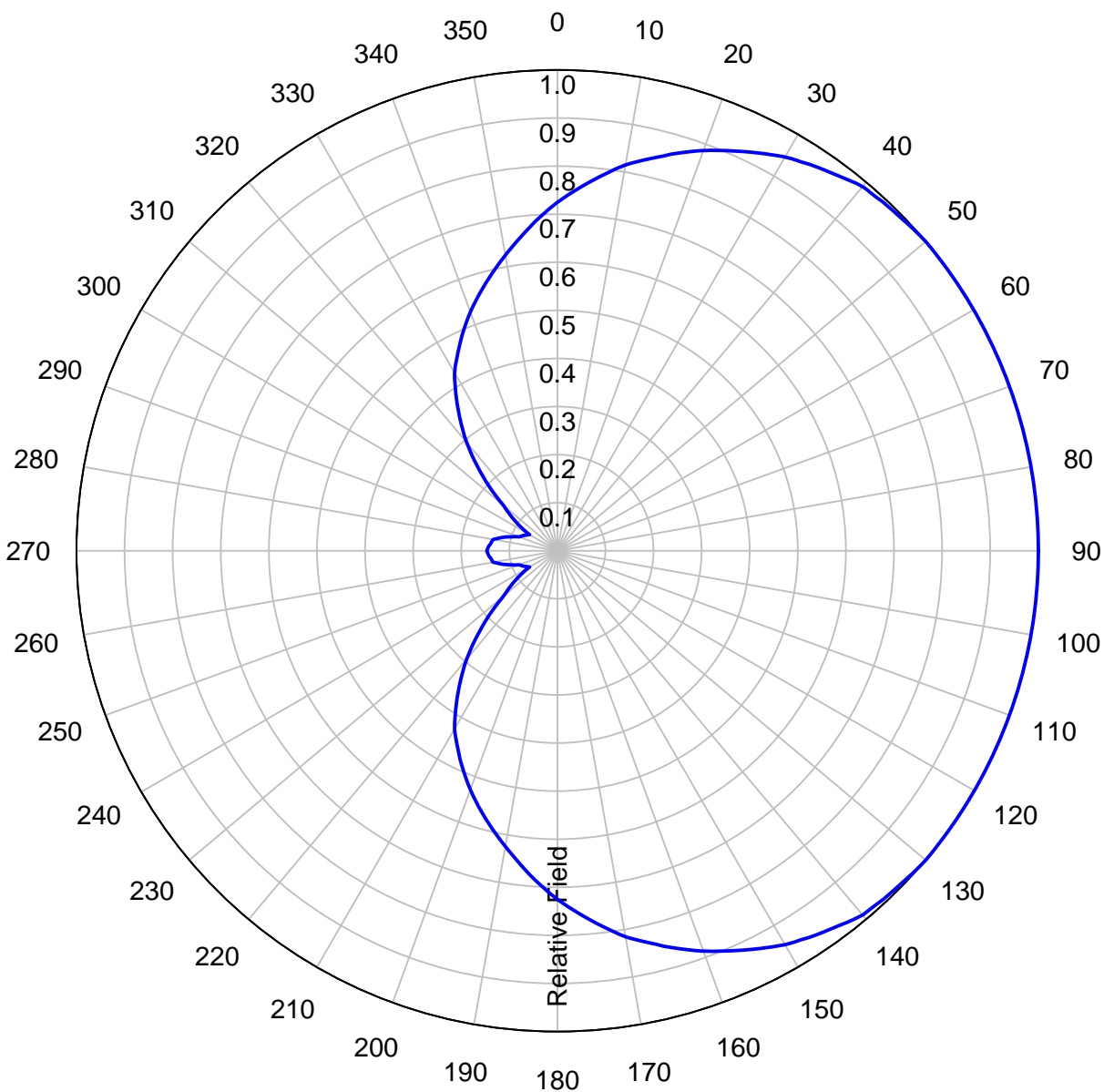


**AZIMUTH PATTERN****Type:**ALP-ER**Channel:**18**Directivity:**NumericdBd1.932.86**Peak(s) at:****Location:****Polarization:**Horizontal

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



*Preliminary, subject to final design and review.*

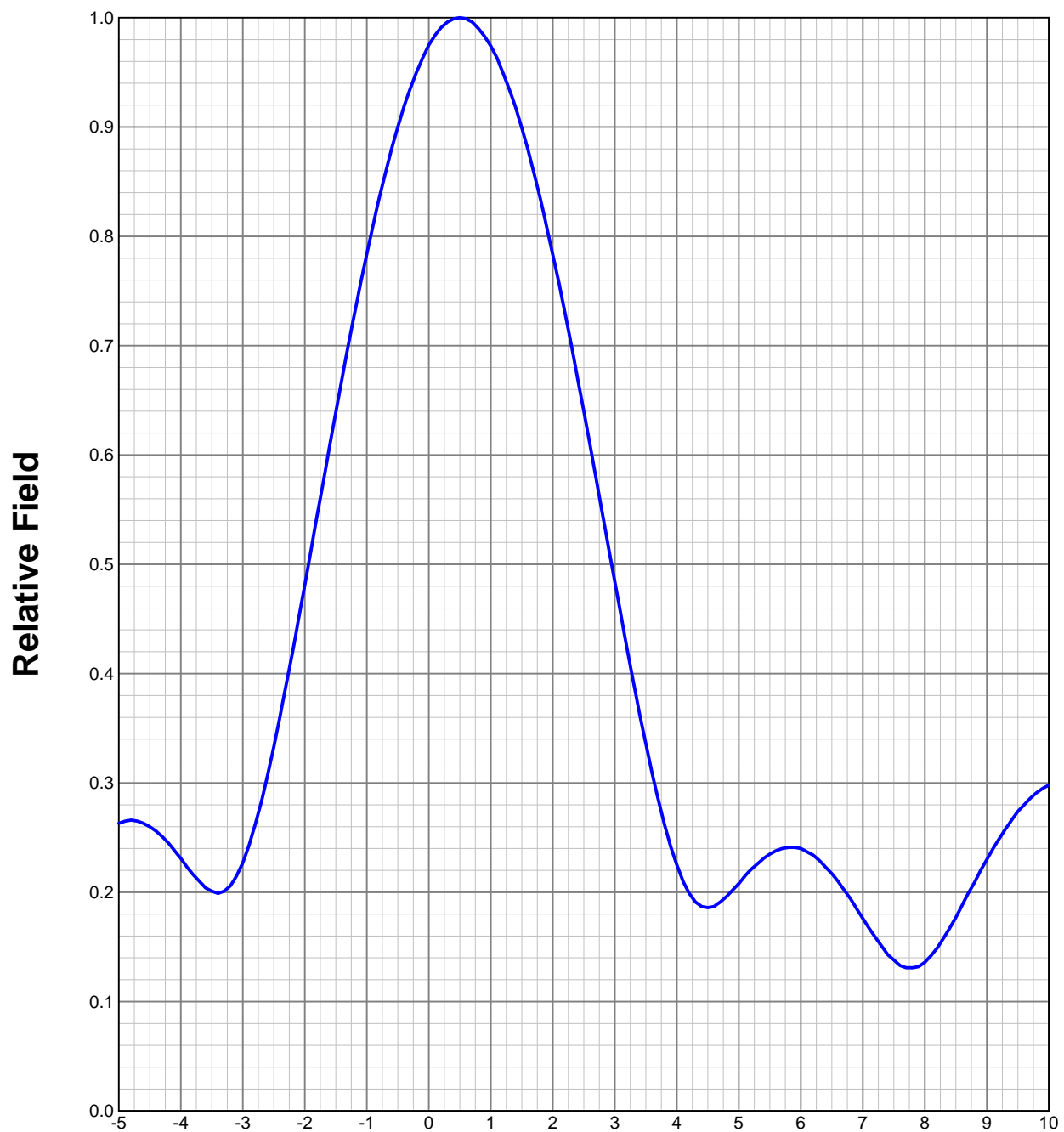
## TABULATED DATA FOR AZIMUTH PATTERN

Type: ALP-ER

PolarizationHorizontal

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.725	-2.79	92	1.000	0.00	184	0.685	-3.29	276	0.140	-17.08
2	0.743	-2.58	94	1.000	0.00	186	0.664	-3.56	278	0.138	-17.20
4	0.761	-2.37	96	1.000	0.00	188	0.644	-3.82	280	0.136	-17.33
6	0.779	-2.17	98	1.000	0.00	190	0.624	-4.10	282	0.126	-17.99
8	0.797	-1.97	100	1.000	0.00	192	0.605	-4.36	284	0.116	-18.71
10	0.815	-1.78	102	1.000	0.00	194	0.586	-4.64	286	0.105	-19.58
12	0.829	-1.63	104	1.000	0.00	196	0.567	-4.93	288	0.095	-20.45
14	0.843	-1.48	106	1.000	0.00	198	0.548	-5.22	290	0.085	-21.41
16	0.858	-1.33	108	1.000	0.00	200	0.529	-5.53	292	0.081	-21.83
18	0.872	-1.19	110	1.000	0.00	202	0.509	-5.87	294	0.078	-22.16
20	0.886	-1.05	112	1.000	0.00	204	0.489	-6.21	296	0.074	-22.62
22	0.898	-0.93	114	1.000	0.00	206	0.468	-6.60	298	0.071	-22.97
24	0.910	-0.82	116	1.000	0.00	208	0.448	-6.97	300	0.067	-23.48
26	0.922	-0.71	118	1.000	0.00	210	0.428	-7.37	302	0.083	-21.62
28	0.934	-0.59	120	1.000	0.00	212	0.401	-7.94	304	0.099	-20.09
30	0.946	-0.48	122	1.000	0.00	214	0.374	-8.54	306	0.114	-18.86
32	0.954	-0.41	124	1.000	0.00	216	0.347	-9.19	308	0.130	-17.72
34	0.963	-0.33	126	1.000	0.00	218	0.320	-9.90	310	0.146	-16.71
36	0.971	-0.26	128	1.000	0.00	220	0.293	-10.66	312	0.175	-15.14
38	0.980	-0.18	130	1.000	0.00	222	0.264	-11.57	314	0.205	-13.76
40	0.988	-0.10	132	0.998	-0.02	224	0.234	-12.62	316	0.234	-12.62
42	0.990	-0.09	134	0.995	-0.04	226	0.205	-13.76	318	0.264	-11.57
44	0.993	-0.06	136	0.993	-0.06	228	0.175	-15.14	320	0.293	-10.66
46	0.995	-0.04	138	0.990	-0.09	230	0.146	-16.71	322	0.320	-9.90
48	0.998	-0.02	140	0.988	-0.10	232	0.130	-17.72	324	0.347	-9.19
50	1.000	0.00	142	0.980	-0.18	234	0.114	-18.86	326	0.374	-8.54
52	1.000	0.00	144	0.971	-0.26	236	0.099	-20.09	328	0.401	-7.94
54	1.000	0.00	146	0.963	-0.33	238	0.083	-21.62	330	0.428	-7.37
56	1.000	0.00	148	0.954	-0.41	240	0.067	-23.48	332	0.448	-6.97
58	1.000	0.00	150	0.946	-0.48	242	0.071	-22.97	334	0.468	-6.60
60	1.000	0.00	152	0.934	-0.59	244	0.074	-22.62	336	0.489	-6.21
62	1.000	0.00	154	0.922	-0.71	246	0.078	-22.16	338	0.509	-5.87
64	1.000	0.00	156	0.910	-0.82	248	0.081	-21.83	340	0.529	-5.53
66	1.000	0.00	158	0.898	-0.93	250	0.085	-21.41	342	0.548	-5.22
68	1.000	0.00	160	0.886	-1.05	252	0.095	-20.45	344	0.567	-4.93
70	1.000	0.00	162	0.872	-1.19	254	0.105	-19.58	346	0.586	-4.64
72	1.000	0.00	164	0.858	-1.33	256	0.116	-18.71	348	0.605	-4.36
74	1.000	0.00	166	0.843	-1.48	258	0.126	-17.99	350	0.624	-4.10
76	1.000	0.00	168	0.829	-1.63	260	0.136	-17.33	352	0.644	-3.82
78	1.000	0.00	170	0.815	-1.78	262	0.138	-17.20	354	0.664	-3.56
80	1.000	0.00	172	0.797	-1.97	264	0.140	-17.08	356	0.685	-3.29
82	1.000	0.00	174	0.779	-2.17	266	0.143	-16.89	358	0.705	-3.04
84	1.000	0.00	176	0.761	-2.37	268	0.145	-16.77	360	0.725	-2.79
86	1.000	0.00	178	0.743	-2.58	270	0.147	-16.65			
88	1.000	0.00	180	0.725	-2.79	272	0.145	-16.77			
90	1.000	0.00	182	0.705	-3.04	274	0.143	-16.89			

Preliminary, subject to final design and review.

**ELEVATION PATTERN****Type:****ALP12L2****Channel:****18****Directivity:****Numeric****dBd****Location:****Main Lobe:****12.64****11.02****Beam Tilt:****-0.50****Horizontal:****12.02****10.80****Polarization:****Horizontal***Preliminary, subject to final design and review.*

## TABULATED DATA FOR ELEVATION PATTERN

Type: ALP12L2

PolarizationHorizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
-5.00	0.263	-11.60	6.75	0.198	-14.07	27.00	0.030	-30.46	50.50
-4.75	0.266	-11.52	7.00	0.176	-15.09	27.50	0.021	-33.56	51.00
-4.50	0.260	-11.70	7.25	0.155	-16.19	28.00	0.019	-34.42	51.50
-4.25	0.248	-12.11	7.50	0.138	-17.20	28.50	0.017	-35.39	52.00
-4.00	0.231	-12.73	7.75	0.131	-17.65	29.00	0.012	-38.42	52.50
-3.75	0.213	-13.43	8.00	0.136	-17.33	29.50	0.006	-44.44	53.00
-3.50	0.201	-13.94	8.25	0.153	-16.28	30.00	0.000	-40.00	53.50
-3.25	0.204	-13.83	8.50	0.177	-15.04	30.50	0.005	-46.02	54.00
-3.00	0.227	-12.88	8.75	0.204	-13.81	31.00	0.008	-41.94	54.50
-2.75	0.272	-11.29	9.00	0.230	-12.77	31.50	0.013	-37.72	55.00
-2.50	0.333	-9.55	9.25	0.254	-11.92	32.00	0.022	-33.15	55.50
-2.25	0.404	-7.86	9.50	0.274	-11.24	32.50	0.037	-28.64	56.00
-2.00	0.481	-6.36	9.75	0.288	-10.80	33.00	0.057	-24.88	56.50
-1.75	0.560	-5.03	10.00	0.298	-10.52	33.50	0.080	-21.94	57.00
-1.50	0.639	-3.89	10.50	0.300	-10.46	34.00	0.104	-19.66	57.50
-1.25	0.714	-2.92	11.00	0.282	-11.00	34.50	0.128	-17.86	58.00
-1.00	0.784	-2.11	11.50	0.246	-12.18	35.00	0.148	-16.59	58.50
-0.75	0.847	-1.45	12.00	0.199	-14.02	35.50	0.164	-15.70	59.00
-0.50	0.900	-0.92	12.50	0.147	-16.65	36.00	0.173	-15.24	59.50
-0.25	0.943	-0.51	13.00	0.096	-20.35	36.50	0.176	-15.09	60.00
0.00	0.975	-0.22	13.50	0.053	-25.51	37.00	0.171	-15.34	60.50
0.25	0.994	-0.06	14.00	0.020	-33.98	37.50	0.160	-15.92	61.00
0.50	1.000	0.00	14.50	0.001	-60.00	38.00	0.144	-16.83	61.50
0.75	0.993	-0.06	15.00	0.011	-39.17	38.50	0.123	-18.20	62.00
1.00	0.974	-0.23	15.50	0.015	-36.48	39.00	0.100	-20.00	62.50
1.25	0.942	-0.52	16.00	0.023	-32.77	39.50	0.076	-22.38	63.00
1.50	0.899	-0.92	16.50	0.035	-29.12	40.00	0.056	-25.04	63.50
1.75	0.845	-1.46	17.00	0.047	-26.56	40.50	0.043	-27.33	64.00
2.00	0.783	-2.12	17.50	0.055	-25.19	41.00	0.039	-28.18	64.50
2.25	0.714	-2.92	18.00	0.056	-25.04	41.50	0.042	-27.54	65.00
2.50	0.640	-3.88	18.50	0.051	-25.85	42.00	0.047	-26.56	65.50
2.75	0.562	-5.01	19.00	0.048	-26.38	42.50	0.049	-26.20	66.00
3.00	0.484	-6.30	19.50	0.059	-24.58	43.00	0.047	-26.56	66.50
3.25	0.407	-7.81	20.00	0.087	-21.21	43.50	0.043	-27.33	67.00
3.50	0.336	-9.47	20.50	0.123	-18.20	44.00	0.036	-28.87	67.50
3.75	0.273	-11.26	21.00	0.159	-15.97	44.50	0.029	-30.75	68.00
4.00	0.225	-12.96	21.50	0.192	-14.33	45.00	0.023	-32.77	68.50
4.25	0.195	-14.20	22.00	0.216	-13.31	45.50	0.020	-33.98	69.00
4.50	0.186	-14.61	22.50	0.229	-12.80	46.00	0.020	-33.98	69.50
4.75	0.194	-14.27	23.00	0.231	-12.73	46.50	0.021	-33.56	70.00
5.00	0.208	-13.64	23.50	0.221	-13.11	47.00	0.021	-33.56	70.50
5.25	0.224	-13.01	24.00	0.201	-13.94	47.50	0.018	-34.89	71.00
5.50	0.235	-12.58	24.50	0.173	-15.24	48.00	0.011	-39.17	71.50
5.75	0.240	-12.38	25.00	0.141	-17.02	48.50	0.002	-53.98	72.00
6.00	0.240	-12.40	25.50	0.107	-19.41	49.00	0.010	-40.00	72.50
6.25	0.232	-12.71	26.00	0.076	-22.38	49.50	0.024	-32.40	73.00
6.50	0.217	-13.27	26.50	0.049	-26.20	50.00	0.040	-27.96	73.50

Preliminary, subject to final design and review.