

**AL PLUS Series UHF Television Antennas  
Catalog Azimuth and Elevation Patterns**

Last Update 2/8/2019

**Azimuth Patterns**

[ALPL-E-H Horizontally Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-E-H Horizontally Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-E-V Vertically Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-E-V Vertically Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-M-H Horizontally Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-M-H Horizontally Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-M-V Vertically Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-M-V Vertically Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-N-H Horizontally Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-N-H Horizontally Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-N-V Vertically Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-N-V Vertically Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-O-H Horizontally Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-O-H Horizontally Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-O-V Vertically Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-O-V Vertically Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-OC-H Horizontally Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-OC-H Horizontally Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-OC-V Vertically Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-OC-V Vertically Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-W-H Horizontally Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-W-H Horizontally Polarized Tabulated Azimuth Pattern Data](#)  
[ALPL-W-V Vertically Polarized Plotted Azimuth Pattern Data](#)  
[ALPL-W-V Vertically Polarized Tabulated Azimuth Pattern Data](#)

**Elevation Patterns**

[ALPL8 Plotted Elevation Pattern Data](#)  
[ALPL8 Plotted 90 Degree Elevation Pattern Data](#)  
[ALPL8 Tabulated Elevation Pattern Data](#)  
[ALPL12 Plotted Elevation Pattern Data](#)  
[ALPL12 Plotted 90 Degree Elevation Pattern Data](#)  
[ALPL12 Tabulated Elevation Pattern Data](#)

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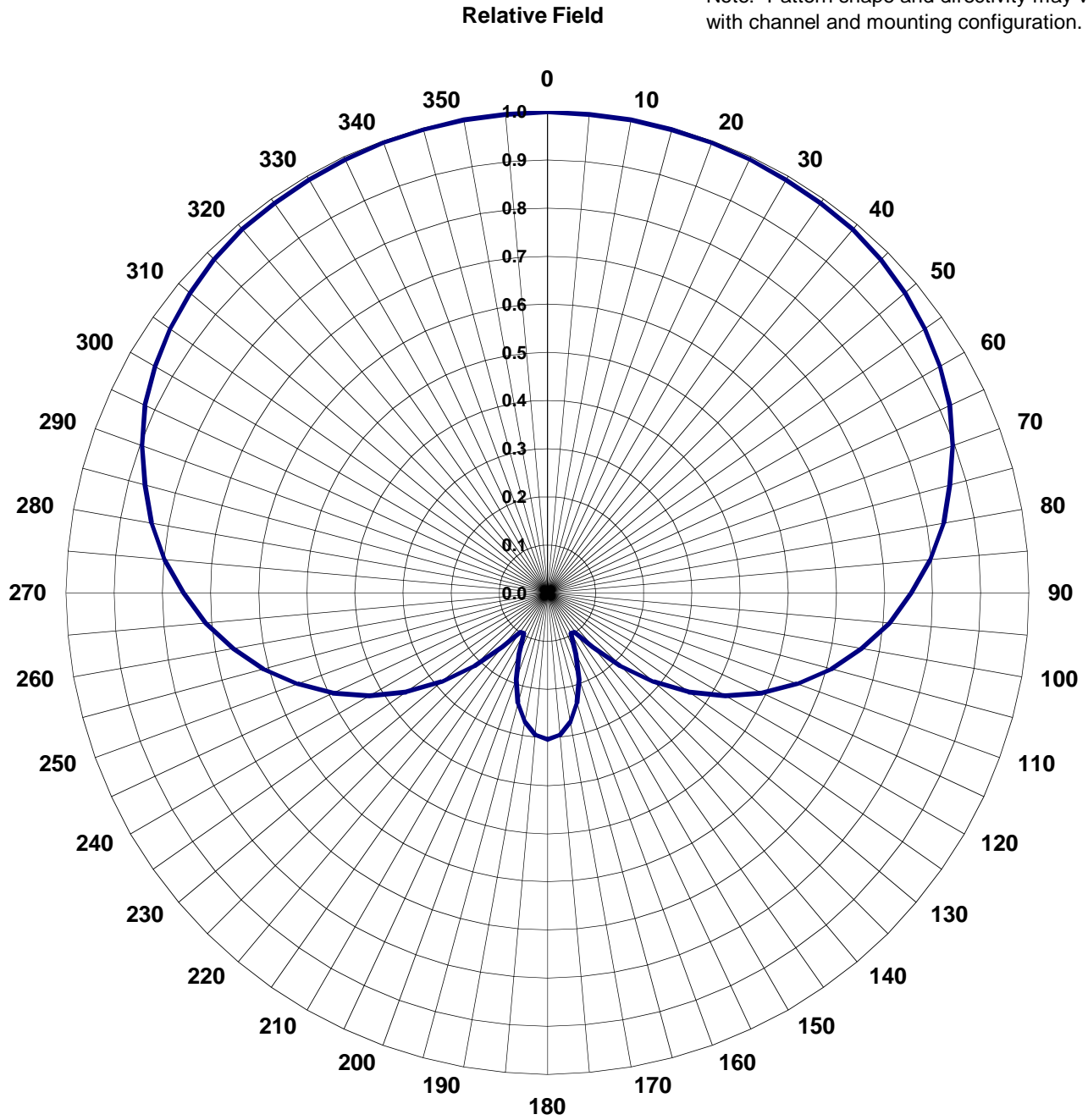


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**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-E-H</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>1.88</b>	<b>(2.74)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Horizontal</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-E-H**

**POLARIZATION: Horizontal**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.999	0.00	92	0.739	-2.56	184	0.298	-10.06	276	0.805	-1.95
2	1.000	-0.01	94	0.721	-2.72	186	0.292	-10.26	278	0.821	-1.81
4	0.999	-0.01	96	0.703	-2.89	188	0.283	-10.52	280	0.836	-1.66
6	0.998	-0.01	98	0.683	-3.07	190	0.272	-10.84	282	0.848	-1.52
8	0.997	-0.01	100	0.662	-3.26	192	0.259	-11.24	284	0.862	-1.39
10	0.999	-0.01	102	0.642	-3.47	194	0.245	-11.67	286	0.874	-1.26
12	0.998	-0.01	104	0.621	-3.69	196	0.228	-12.11	288	0.885	-1.13
14	0.998	-0.01	106	0.599	-3.93	198	0.211	-12.62	290	0.896	-1.01
16	0.996	-0.01	108	0.576	-4.19	200	0.191	-13.07	292	0.907	-0.90
18	0.993	-0.01	110	0.553	-4.48	202	0.170	-13.51	294	0.916	-0.79
20	0.996	-0.01	112	0.530	-4.81	204	0.150	-13.94	296	0.926	-0.69
22	0.995	-0.01	114	0.504	-5.16	206	0.131	-14.24	298	0.934	-0.59
24	0.994	-0.01	116	0.479	-5.55	208	0.112	-14.47	300	0.941	-0.50
26	0.995	-0.01	118	0.454	-5.97	210	0.098	-14.52	302	0.950	-0.43
28	0.993	-0.01	120	0.427	-6.45	212	0.091	-14.47	304	0.954	-0.35
30	0.992	-0.01	122	0.399	-6.96	214	0.094	-14.24	306	0.959	-0.29
32	0.992	-0.01	124	0.371	-7.49	216	0.105	-13.85	308	0.965	-0.23
34	0.990	-0.01	126	0.344	-8.09	218	0.123	-13.39	310	0.970	-0.18
36	0.990	-0.01	128	0.316	-8.73	220	0.147	-12.80	312	0.975	-0.14
38	0.988	-0.02	130	0.286	-9.37	222	0.173	-12.15	314	0.978	-0.10
40	0.987	-0.03	132	0.257	-10.06	224	0.201	-11.47	316	0.981	-0.08
42	0.983	-0.05	134	0.228	-10.78	226	0.228	-10.78	318	0.983	-0.05
44	0.981	-0.08	136	0.201	-11.47	228	0.257	-10.06	320	0.987	-0.03
46	0.978	-0.10	138	0.173	-12.15	230	0.286	-9.37	322	0.988	-0.02
48	0.975	-0.14	140	0.147	-12.80	232	0.316	-8.73	324	0.990	-0.01
50	0.970	-0.18	142	0.123	-13.39	234	0.344	-8.09	326	0.990	-0.01
52	0.965	-0.23	144	0.105	-13.85	236	0.371	-7.49	328	0.992	-0.01
54	0.959	-0.29	146	0.094	-14.24	238	0.399	-6.96	330	0.992	-0.01
56	0.954	-0.35	148	0.091	-14.47	240	0.427	-6.45	332	0.993	-0.01
58	0.950	-0.43	150	0.098	-14.52	242	0.454	-5.97	334	0.995	-0.01
60	0.941	-0.50	152	0.112	-14.47	244	0.479	-5.55	336	0.994	-0.01
62	0.934	-0.59	154	0.131	-14.24	246	0.504	-5.16	338	0.995	-0.01
64	0.926	-0.69	156	0.150	-13.94	248	0.530	-4.81	340	0.996	-0.01
66	0.916	-0.79	158	0.170	-13.51	250	0.553	-4.48	342	0.993	-0.01
68	0.907	-0.90	160	0.191	-13.07	252	0.576	-4.19	344	0.996	-0.01
70	0.896	-1.01	162	0.211	-12.62	254	0.599	-3.93	346	0.998	-0.01
72	0.885	-1.13	164	0.228	-12.11	256	0.621	-3.69	348	0.998	-0.01
74	0.874	-1.26	166	0.245	-11.67	258	0.642	-3.47	350	0.999	-0.01
76	0.862	-1.39	168	0.259	-11.24	260	0.662	-3.26	352	0.997	-0.01
78	0.848	-1.52	170	0.272	-10.84	262	0.683	-3.07	354	0.998	-0.01
80	0.836	-1.66	172	0.283	-10.52	264	0.703	-2.89	356	0.999	-0.01
82	0.821	-1.81	174	0.292	-10.26	266	0.721	-2.72	358	1.000	-0.01
84	0.805	-1.95	176	0.298	-10.06	268	0.739	-2.56	360	0.999	0.00
86	0.791	-2.10	178	0.303	-9.92	270	0.756	-2.41			
88	0.775	-2.25	180	0.305	-9.84	272	0.775	-2.25			
90	0.756	-2.41	182	0.303	-9.92	274	0.791	-2.10			

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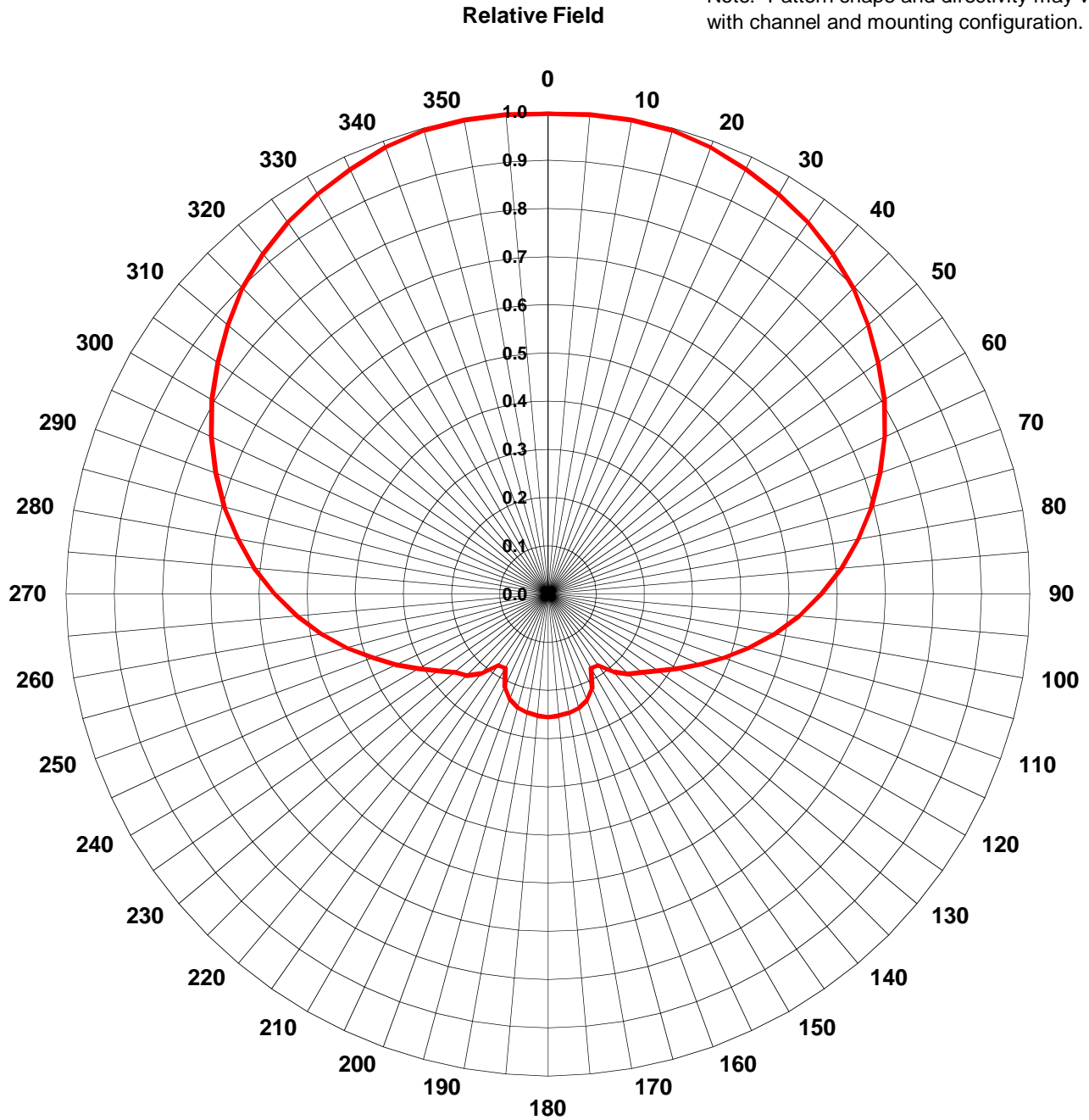


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**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-E-V</b>	
<b>Directivity:</b>	<b>Numeric</b>	<b>dB</b>
<b>Peak(s) at:</b>	<b>2.33</b>	<b>(3.67)</b>
<b>Polarization:</b>	<b>Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-E-V**

**POLARIZATION: Vertical**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.996	0.00	92	0.551	-2.56	184	0.254	-10.06	276	0.621	-1.95
2	0.998	-0.01	94	0.533	-2.72	186	0.253	-10.26	278	0.638	-1.81
4	1.000	-0.01	96	0.514	-2.89	188	0.252	-10.52	280	0.654	-1.66
6	0.998	-0.01	98	0.497	-3.07	190	0.250	-10.84	282	0.671	-1.52
8	1.000	-0.01	100	0.478	-3.26	192	0.248	-11.24	284	0.687	-1.39
10	0.998	-0.01	102	0.460	-3.47	194	0.245	-11.67	286	0.704	-1.26
12	0.997	-0.01	104	0.442	-3.69	196	0.243	-12.11	288	0.718	-1.13
14	0.996	-0.01	106	0.423	-3.93	198	0.239	-12.62	290	0.734	-1.01
16	0.992	-0.01	108	0.406	-4.19	200	0.232	-13.07	292	0.750	-0.90
18	0.990	-0.01	110	0.388	-4.48	202	0.224	-13.51	294	0.764	-0.79
20	0.986	-0.01	112	0.371	-4.81	204	0.216	-13.94	296	0.778	-0.69
22	0.983	-0.01	114	0.355	-5.16	206	0.210	-14.24	298	0.792	-0.59
24	0.977	-0.01	116	0.339	-5.55	208	0.205	-14.47	300	0.806	-0.50
26	0.971	-0.01	118	0.324	-5.97	210	0.178	-14.52	302	0.818	-0.43
28	0.965	-0.01	120	0.310	-6.45	212	0.166	-14.47	304	0.831	-0.35
30	0.957	-0.01	122	0.298	-6.96	214	0.172	-14.24	306	0.843	-0.29
32	0.952	-0.01	124	0.284	-7.49	216	0.192	-13.85	308	0.856	-0.23
34	0.946	-0.01	126	0.273	-8.09	218	0.209	-13.39	310	0.867	-0.18
36	0.936	-0.01	128	0.261	-8.73	220	0.216	-12.80	312	0.879	-0.14
38	0.928	-0.02	130	0.253	-9.37	222	0.225	-12.15	314	0.890	-0.10
40	0.920	-0.03	132	0.245	-10.06	224	0.235	-11.47	316	0.900	-0.08
42	0.911	-0.05	134	0.238	-10.78	226	0.238	-10.78	318	0.911	-0.05
44	0.900	-0.08	136	0.230	-11.47	228	0.245	-10.06	320	0.920	-0.03
46	0.890	-0.10	138	0.220	-12.15	230	0.253	-9.37	322	0.928	-0.02
48	0.879	-0.14	140	0.212	-12.80	232	0.261	-8.73	324	0.936	-0.01
50	0.867	-0.18	142	0.207	-13.39	234	0.273	-8.09	326	0.946	-0.01
52	0.856	-0.23	144	0.192	-13.85	236	0.284	-7.49	328	0.952	-0.01
54	0.843	-0.29	146	0.172	-14.24	238	0.298	-6.96	330	0.957	-0.01
56	0.831	-0.35	148	0.166	-14.47	240	0.310	-6.45	332	0.965	-0.01
58	0.818	-0.43	150	0.178	-14.52	242	0.324	-5.97	334	0.971	-0.01
60	0.806	-0.50	152	0.205	-14.47	244	0.339	-5.55	336	0.977	-0.01
62	0.792	-0.59	154	0.213	-14.24	246	0.355	-5.16	338	0.983	-0.01
64	0.778	-0.69	156	0.220	-13.94	248	0.371	-4.81	340	0.986	-0.01
66	0.764	-0.79	158	0.228	-13.51	250	0.388	-4.48	342	0.990	-0.01
68	0.750	-0.90	160	0.236	-13.07	252	0.406	-4.19	344	0.992	-0.01
70	0.734	-1.01	162	0.241	-12.62	254	0.423	-3.93	346	0.996	-0.01
72	0.718	-1.13	164	0.244	-12.11	256	0.442	-3.69	348	0.997	-0.01
74	0.704	-1.26	166	0.247	-11.67	258	0.460	-3.47	350	0.998	-0.01
76	0.687	-1.39	168	0.249	-11.24	260	0.478	-3.26	352	1.000	-0.01
78	0.671	-1.52	170	0.251	-10.84	262	0.497	-3.07	354	0.998	-0.01
80	0.654	-1.66	172	0.253	-10.52	264	0.514	-2.89	356	1.000	-0.01
82	0.638	-1.81	174	0.254	-10.26	266	0.533	-2.72	358	0.998	-0.01
84	0.621	-1.95	176	0.255	-10.06	268	0.551	-2.56	360	0.996	0.00
86	0.605	-2.10	178	0.255	-9.92	270	0.568	-2.41			
88	0.586	-2.25	180	0.255	-9.84	272	0.586	-2.25			
90	0.568	-2.41	182	0.255	-9.92	274	0.605	-2.10			

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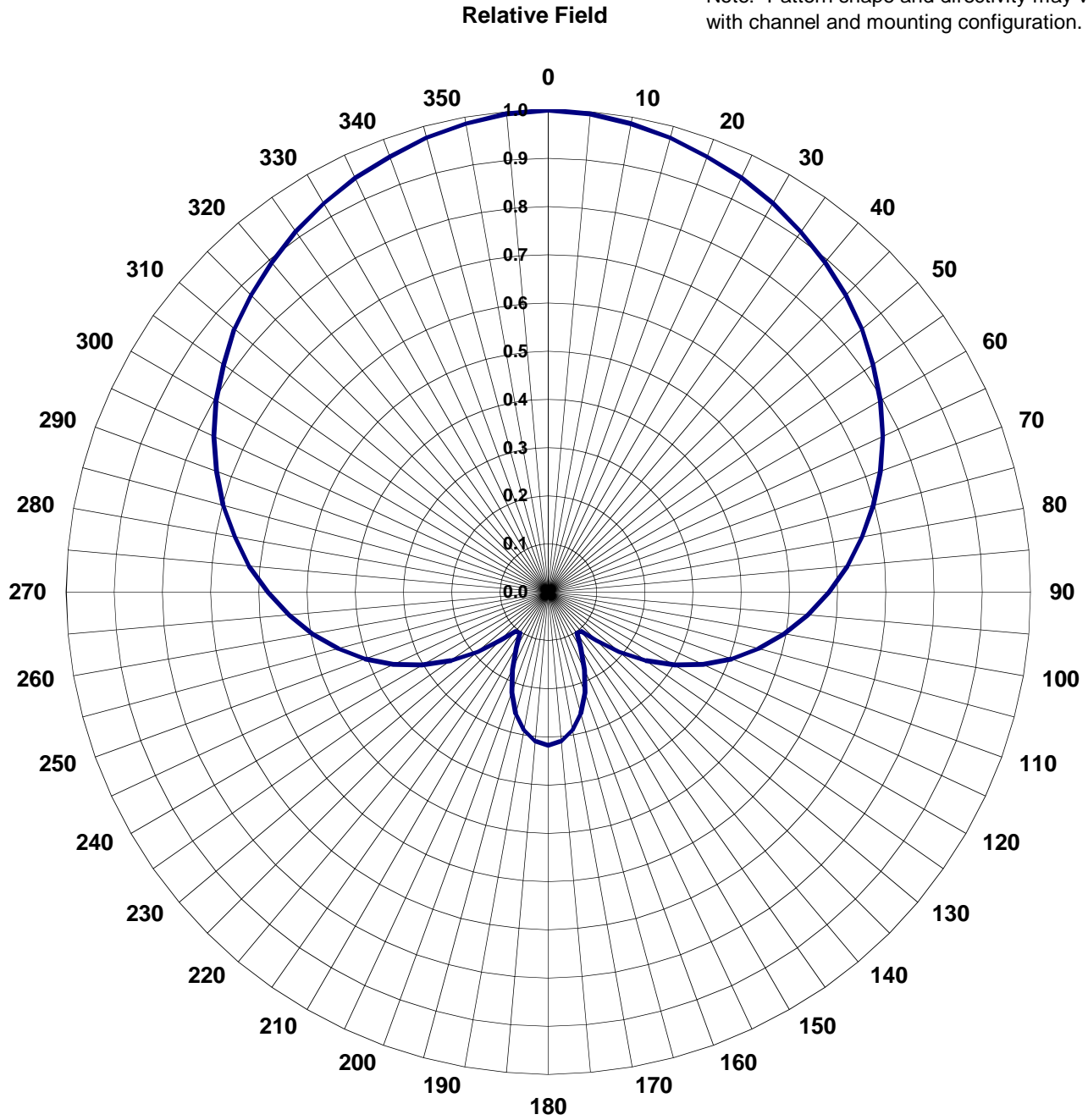


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**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-M-H</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>2.40</b>	<b>(3.80)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Horizontal</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



# TABULATED DATA FOR AZIMUTH PATTERN

**TYPE:** ALPL-M-H

**POLARIZATION:** Horizontal

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.566	-5.35	184	0.313	-10.03	276	0.630	-4.61
2	0.998	-0.02	94	0.549	-5.56	186	0.307	-10.12	278	0.646	-4.44
4	0.996	-0.04	96	0.532	-5.78	188	0.299	-10.23	280	0.660	-4.26
6	0.993	-0.06	98	0.516	-6.00	190	0.290	-10.31	282	0.676	-4.11
8	0.989	-0.09	100	0.496	-6.23	192	0.280	-10.57	284	0.691	-3.96
10	0.987	-0.10	102	0.480	-6.50	194	0.267	-10.84	286	0.705	-3.81
12	0.983	-0.17	104	0.461	-6.78	196	0.254	-11.09	288	0.720	-3.66
14	0.979	-0.23	106	0.443	-7.05	198	0.238	-11.37	290	0.732	-3.52
16	0.975	-0.28	108	0.425	-7.35	200	0.222	-11.67	292	0.746	-3.38
18	0.968	-0.35	110	0.405	-7.66	202	0.204	-11.97	294	0.758	-3.24
20	0.962	-0.41	112	0.385	-8.02	204	0.187	-12.29	296	0.772	-3.09
22	0.958	-0.49	114	0.366	-8.43	206	0.169	-12.65	298	0.784	-2.95
24	0.950	-0.58	116	0.344	-8.83	208	0.150	-13.00	300	0.795	-2.82
26	0.944	-0.67	118	0.324	-9.27	210	0.134	-13.35	302	0.806	-2.67
28	0.940	-0.76	120	0.303	-9.71	212	0.119	-13.43	304	0.817	-2.53
30	0.931	-0.85	122	0.279	-10.14	214	0.107	-13.56	306	0.828	-2.38
32	0.923	-0.96	124	0.257	-10.60	216	0.101	-13.64	308	0.838	-2.25
34	0.915	-1.08	126	0.236	-11.12	218	0.100	-13.76	310	0.849	-2.11
36	0.911	-1.19	128	0.213	-11.63	220	0.106	-13.85	312	0.858	-1.97
38	0.903	-1.31	130	0.192	-12.18	222	0.117	-13.47	314	0.867	-1.83
40	0.893	-1.43	132	0.170	-12.51	224	0.133	-13.15	316	0.875	-1.70
42	0.884	-1.57	134	0.150	-12.80	226	0.150	-12.80	318	0.884	-1.57
44	0.875	-1.70	136	0.133	-13.15	228	0.170	-12.51	320	0.893	-1.43
46	0.867	-1.83	138	0.117	-13.47	230	0.192	-12.18	322	0.903	-1.31
48	0.858	-1.97	140	0.106	-13.85	232	0.213	-11.63	324	0.911	-1.19
50	0.849	-2.11	142	0.100	-13.76	234	0.236	-11.12	326	0.915	-1.08
52	0.838	-2.25	144	0.101	-13.64	236	0.257	-10.60	328	0.923	-0.96
54	0.828	-2.38	146	0.107	-13.56	238	0.279	-10.14	330	0.931	-0.85
56	0.817	-2.53	148	0.119	-13.43	240	0.303	-9.71	332	0.940	-0.76
58	0.806	-2.67	150	0.134	-13.35	242	0.324	-9.27	334	0.944	-0.67
60	0.795	-2.82	152	0.150	-13.00	244	0.344	-8.83	336	0.950	-0.58
62	0.784	-2.95	154	0.169	-12.65	246	0.366	-8.43	338	0.958	-0.49
64	0.772	-3.09	156	0.187	-12.29	248	0.385	-8.02	340	0.962	-0.41
66	0.758	-3.24	158	0.204	-11.97	250	0.405	-7.66	342	0.968	-0.35
68	0.746	-3.38	160	0.222	-11.67	252	0.425	-7.35	344	0.975	-0.28
70	0.732	-3.52	162	0.238	-11.37	254	0.443	-7.05	346	0.979	-0.23
72	0.720	-3.66	164	0.254	-11.09	256	0.461	-6.78	348	0.983	-0.17
74	0.705	-3.81	166	0.267	-10.84	258	0.480	-6.50	350	0.987	-0.10
76	0.691	-3.96	168	0.280	-10.57	260	0.496	-6.23	352	0.989	-0.09
78	0.676	-4.11	170	0.290	-10.31	262	0.516	-6.00	354	0.993	-0.06
80	0.660	-4.26	172	0.299	-10.23	264	0.532	-5.78	356	0.996	-0.04
82	0.646	-4.44	174	0.307	-10.12	266	0.549	-5.56	358	0.998	-0.02
84	0.630	-4.61	176	0.313	-10.03	268	0.566	-5.35	360	1.000	0.00
86	0.614	-4.78	178	0.316	-9.92	270	0.582	-5.15			
88	0.599	-4.96	180	0.317	-9.84	272	0.599	-4.96			
90	0.582	-5.15	182	0.316	-9.92	274	0.614	-4.78			

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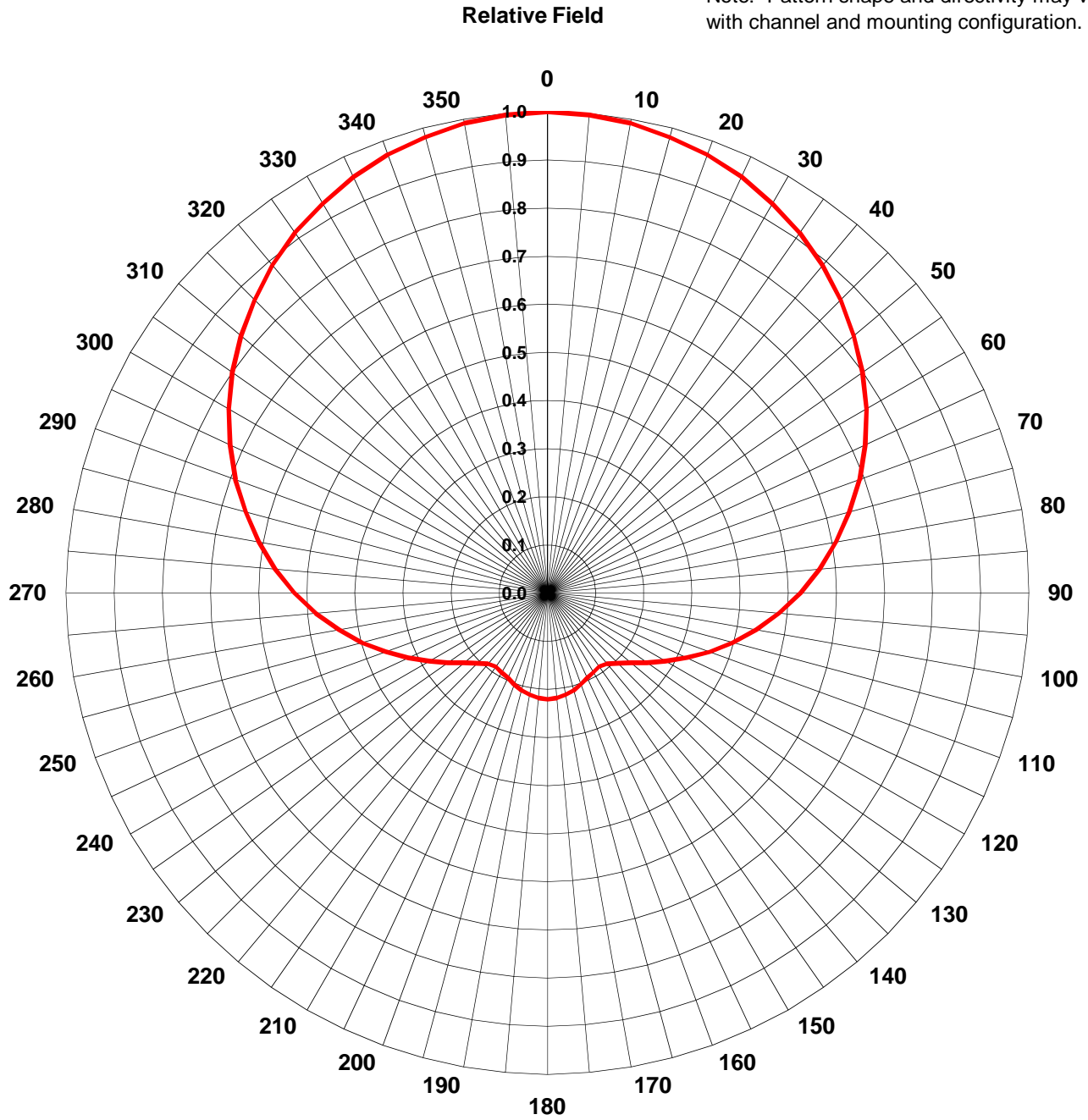


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**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-M-V</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>2.52</b>	<b>(4.01)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		

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





# TABULATED DATA FOR AZIMUTH PATTERN

**TYPE:** ALPL-M-V

**POLARIZATION:** Vertical

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.509	-2.56	184	0.220	-10.06	276	0.576	-1.95
2	0.999	-0.01	94	0.492	-2.72	186	0.218	-10.26	278	0.593	-1.81
4	0.998	-0.01	96	0.475	-2.89	188	0.217	-10.52	280	0.609	-1.66
6	0.997	-0.01	98	0.457	-3.07	190	0.215	-10.84	282	0.625	-1.52
8	0.993	-0.01	100	0.440	-3.26	192	0.213	-11.24	284	0.642	-1.39
10	0.991	-0.01	102	0.423	-3.47	194	0.210	-11.67	286	0.659	-1.26
12	0.988	-0.01	104	0.406	-3.69	196	0.207	-12.11	288	0.674	-1.13
14	0.983	-0.01	106	0.391	-3.93	198	0.205	-12.62	290	0.690	-1.01
16	0.980	-0.01	108	0.374	-4.19	200	0.202	-13.07	292	0.705	-0.90
18	0.975	-0.01	110	0.358	-4.48	202	0.199	-13.51	294	0.721	-0.79
20	0.970	-0.01	112	0.342	-4.81	204	0.197	-13.94	296	0.736	-0.69
22	0.963	-0.01	114	0.326	-5.16	206	0.194	-14.24	298	0.747	-0.59
24	0.957	-0.01	116	0.311	-5.55	208	0.192	-14.47	300	0.765	-0.50
26	0.950	-0.01	118	0.297	-5.97	210	0.190	-14.52	302	0.779	-0.43
28	0.943	-0.01	120	0.283	-6.45	212	0.189	-14.47	304	0.791	-0.35
30	0.934	-0.01	122	0.271	-6.96	214	0.189	-14.24	306	0.805	-0.29
32	0.926	-0.01	124	0.258	-7.49	216	0.183	-13.85	308	0.817	-0.23
34	0.918	-0.01	126	0.246	-8.09	218	0.181	-13.39	310	0.831	-0.18
36	0.909	-0.01	128	0.236	-8.73	220	0.192	-12.80	312	0.843	-0.14
38	0.899	-0.02	130	0.226	-9.37	222	0.198	-12.15	314	0.855	-0.10
40	0.889	-0.03	132	0.217	-10.06	224	0.203	-11.47	316	0.866	-0.08
42	0.878	-0.05	134	0.210	-10.78	226	0.210	-10.78	318	0.878	-0.05
44	0.866	-0.08	136	0.203	-11.47	228	0.217	-10.06	320	0.889	-0.03
46	0.855	-0.10	138	0.198	-12.15	230	0.226	-9.37	322	0.899	-0.02
48	0.843	-0.14	140	0.192	-12.80	232	0.236	-8.73	324	0.909	-0.01
50	0.831	-0.18	142	0.181	-13.39	234	0.246	-8.09	326	0.918	-0.01
52	0.817	-0.23	144	0.183	-13.85	236	0.258	-7.49	328	0.926	-0.01
54	0.805	-0.29	146	0.189	-14.24	238	0.271	-6.96	330	0.934	-0.01
56	0.791	-0.35	148	0.189	-14.47	240	0.283	-6.45	332	0.943	-0.01
58	0.779	-0.43	150	0.190	-14.52	242	0.297	-5.97	334	0.950	-0.01
60	0.765	-0.50	152	0.192	-14.47	244	0.311	-5.55	336	0.957	-0.01
62	0.747	-0.59	154	0.194	-14.24	246	0.326	-5.16	338	0.963	-0.01
64	0.736	-0.69	156	0.197	-13.94	248	0.342	-4.81	340	0.970	-0.01
66	0.721	-0.79	158	0.199	-13.51	250	0.358	-4.48	342	0.975	-0.01
68	0.705	-0.90	160	0.202	-13.07	252	0.374	-4.19	344	0.980	-0.01
70	0.690	-1.01	162	0.205	-12.62	254	0.391	-3.93	346	0.983	-0.01
72	0.674	-1.13	164	0.207	-12.11	256	0.406	-3.69	348	0.988	-0.01
74	0.659	-1.26	166	0.210	-11.67	258	0.423	-3.47	350	0.991	-0.01
76	0.642	-1.39	168	0.213	-11.24	260	0.440	-3.26	352	0.993	-0.01
78	0.625	-1.52	170	0.215	-10.84	262	0.457	-3.07	354	0.997	-0.01
80	0.609	-1.66	172	0.217	-10.52	264	0.475	-2.89	356	0.998	-0.01
82	0.593	-1.81	174	0.218	-10.26	266	0.492	-2.72	358	0.999	-0.01
84	0.576	-1.95	176	0.220	-10.06	268	0.509	-2.56	360	1.000	0.00
86	0.560	-2.10	178	0.220	-9.92	270	0.526	-2.41			
88	0.542	-2.25	180	0.221	-9.84	272	0.542	-2.25			
90	0.526	-2.41	182	0.220	-9.92	274	0.560	-2.10			

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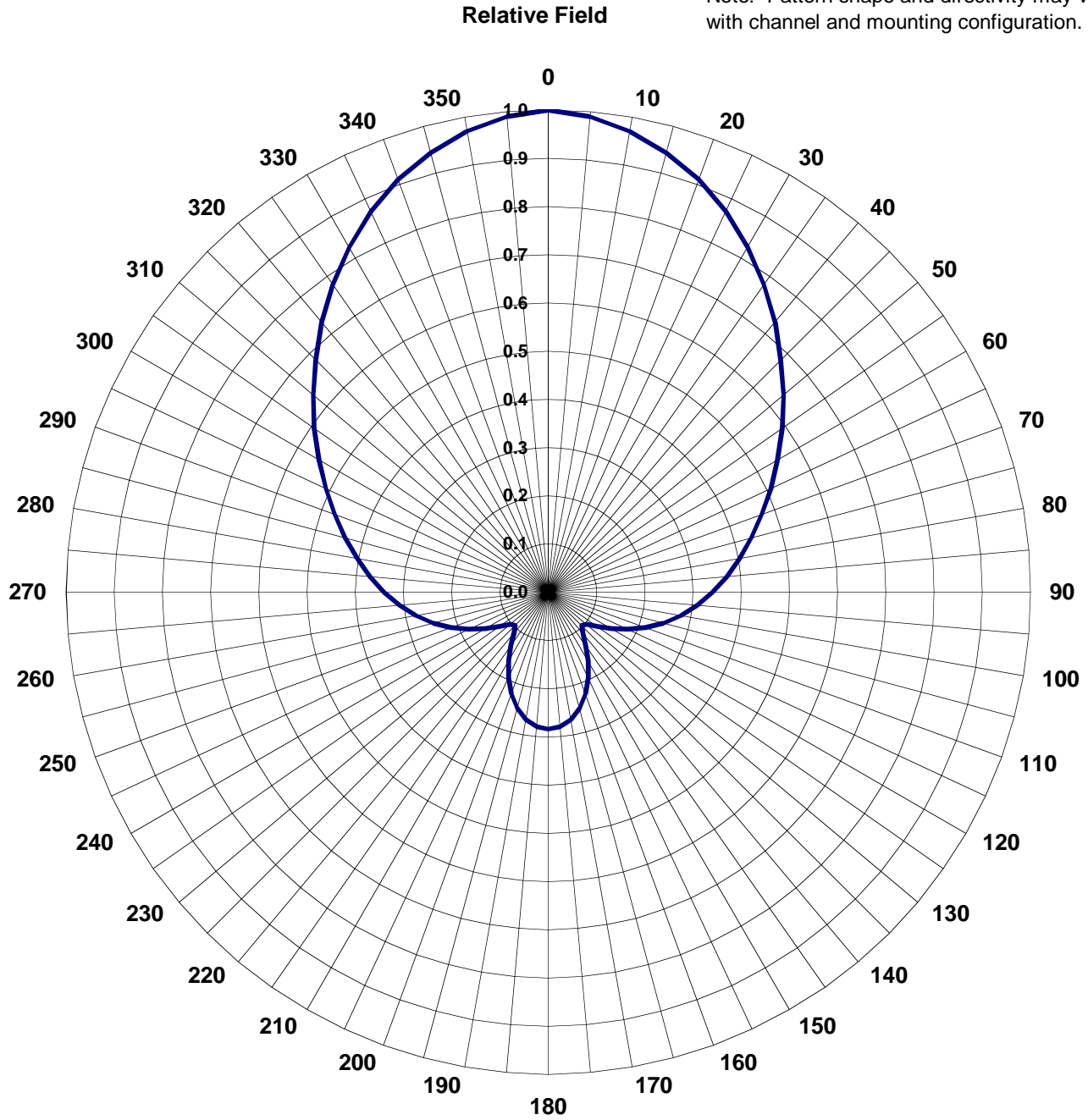


Your Single Source for Broadcast Solutions™

**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-N-H</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>3.54</b>	<b>(5.49)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Horizontal</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-N-H**

**POLARIZATION: Horizontal**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.328	-10.29	184	0.281	-12.92	276	0.378	-9.22
2	0.996	-0.03	94	0.314	-10.54	186	0.278	-13.15	278	0.390	-8.95
4	0.993	-0.06	96	0.303	-10.84	188	0.273	-13.47	280	0.403	-8.68
6	0.987	-0.10	98	0.290	-11.09	190	0.268	-13.89	282	0.417	-8.40
8	0.978	-0.17	100	0.279	-11.40	192	0.262	-14.33	284	0.429	-8.11
10	0.971	-0.25	102	0.267	-11.70	194	0.253	-14.85	286	0.443	-7.83
12	0.962	-0.34	104	0.254	-12.04	196	0.245	-15.44	288	0.458	-7.51
14	0.950	-0.45	106	0.241	-12.36	198	0.235	-15.97	290	0.471	-7.23
16	0.937	-0.57	108	0.229	-12.73	200	0.224	-16.65	292	0.486	-6.94
18	0.925	-0.71	110	0.215	-13.11	202	0.213	-17.27	294	0.501	-6.63
20	0.911	-0.86	112	0.203	-13.51	204	0.203	-17.92	296	0.516	-6.32
22	0.895	-1.02	114	0.189	-13.98	206	0.190	-18.56	298	0.532	-6.04
24	0.878	-1.19	116	0.176	-14.47	208	0.178	-19.17	300	0.549	-5.73
26	0.861	-1.38	118	0.163	-14.94	210	0.165	-19.66	302	0.565	-5.43
28	0.845	-1.58	120	0.151	-15.49	212	0.153	-20.09	304	0.583	-5.15
30	0.827	-1.78	122	0.140	-16.03	214	0.141	-20.45	306	0.600	-4.87
32	0.808	-1.99	124	0.129	-16.59	216	0.130	-20.63	308	0.618	-4.57
34	0.789	-2.21	126	0.119	-17.20	218	0.119	-20.63	310	0.636	-4.28
36	0.771	-2.45	128	0.110	-17.79	220	0.111	-20.54	312	0.654	-4.00
38	0.750	-2.69	130	0.104	-18.42	222	0.104	-20.35	314	0.673	-3.73
40	0.731	-2.94	132	0.099	-18.94	224	0.099	-19.91	316	0.693	-3.47
42	0.711	-3.20	134	0.098	-19.49	226	0.098	-19.49	318	0.711	-3.20
44	0.693	-3.47	136	0.099	-19.91	228	0.099	-18.94	320	0.731	-2.94
46	0.673	-3.73	138	0.104	-20.35	230	0.104	-18.42	322	0.750	-2.69
48	0.654	-4.00	140	0.111	-20.54	232	0.110	-17.79	324	0.771	-2.45
50	0.636	-4.28	142	0.119	-20.63	234	0.119	-17.20	326	0.789	-2.21
52	0.618	-4.57	144	0.130	-20.63	236	0.129	-16.59	328	0.808	-1.99
54	0.600	-4.87	146	0.141	-20.45	238	0.140	-16.03	330	0.827	-1.78
56	0.583	-5.15	148	0.153	-20.09	240	0.151	-15.49	332	0.845	-1.58
58	0.565	-5.43	150	0.165	-19.66	242	0.163	-14.94	334	0.861	-1.38
60	0.549	-5.73	152	0.178	-19.17	244	0.176	-14.47	336	0.878	-1.19
62	0.532	-6.04	154	0.190	-18.56	246	0.189	-13.98	338	0.895	-1.02
64	0.516	-6.32	156	0.203	-17.92	248	0.203	-13.51	340	0.911	-0.86
66	0.501	-6.63	158	0.213	-17.27	250	0.215	-13.11	342	0.925	-0.71
68	0.486	-6.94	160	0.224	-16.65	252	0.229	-12.73	344	0.937	-0.57
70	0.471	-7.23	162	0.235	-15.97	254	0.241	-12.36	346	0.950	-0.45
72	0.458	-7.51	164	0.245	-15.44	256	0.254	-12.04	348	0.962	-0.34
74	0.443	-7.83	166	0.253	-14.85	258	0.267	-11.70	350	0.971	-0.25
76	0.429	-8.11	168	0.262	-14.33	260	0.279	-11.40	352	0.978	-0.17
78	0.417	-8.40	170	0.268	-13.89	262	0.290	-11.09	354	0.987	-0.10
80	0.403	-8.68	172	0.273	-13.47	264	0.303	-10.84	356	0.993	-0.06
82	0.390	-8.95	174	0.278	-13.15	266	0.314	-10.54	358	0.996	-0.03
84	0.378	-9.22	176	0.281	-12.92	268	0.328	-10.29	360	1.000	0.00
86	0.366	-9.50	178	0.283	-12.69	270	0.340	-10.01			
88	0.353	-9.76	180	0.284	-12.54	272	0.353	-9.76			
90	0.340	-10.01	182	0.283	-12.69	274	0.366	-9.50			

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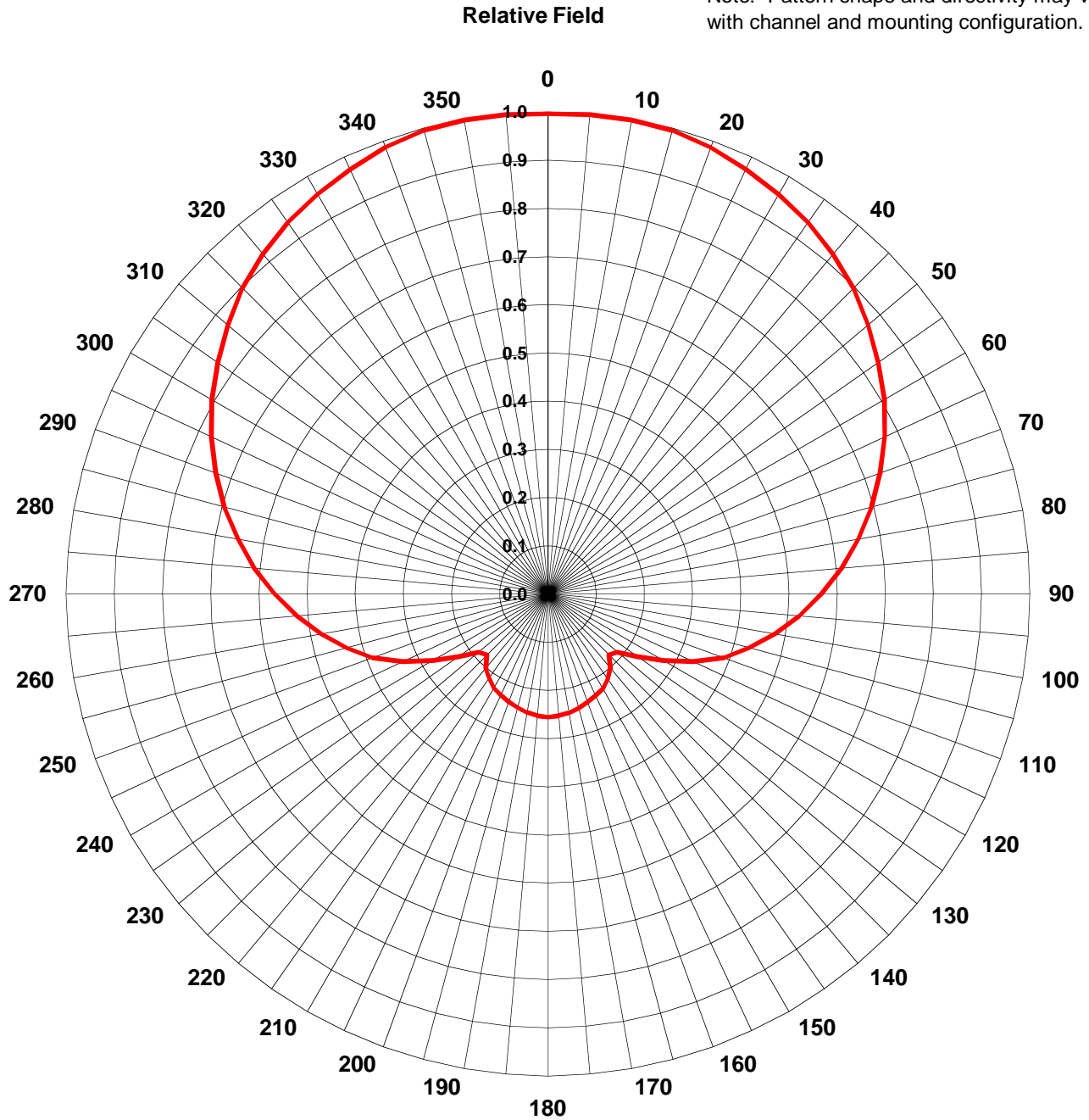


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**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-N-V</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>2.34</b>	<b>(3.69)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-N-V**

**POLARIZATION: Vertical**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.996	0.00	92	0.551	-2.56	184	0.254	-10.06	276	0.621	-1.95
2	0.998	-0.01	94	0.533	-2.72	186	0.253	-10.26	278	0.638	-1.81
4	1.000	-0.01	96	0.514	-2.89	188	0.252	-10.52	280	0.654	-1.66
6	0.998	-0.01	98	0.497	-3.07	190	0.250	-10.84	282	0.671	-1.52
8	1.000	-0.01	100	0.478	-3.26	192	0.248	-11.24	284	0.687	-1.39
10	0.998	-0.01	102	0.460	-3.47	194	0.245	-11.67	286	0.704	-1.26
12	0.997	-0.01	104	0.442	-3.69	196	0.243	-12.11	288	0.718	-1.13
14	0.996	-0.01	106	0.423	-3.93	198	0.240	-12.62	290	0.734	-1.01
16	0.992	-0.01	108	0.406	-4.19	200	0.238	-13.07	292	0.750	-0.90
18	0.990	-0.01	110	0.388	-4.48	202	0.235	-13.51	294	0.764	-0.79
20	0.986	-0.01	112	0.370	-4.81	204	0.233	-13.94	296	0.778	-0.69
22	0.983	-0.01	114	0.346	-5.16	206	0.231	-14.24	298	0.792	-0.59
24	0.977	-0.01	116	0.322	-5.55	208	0.229	-14.47	300	0.806	-0.50
26	0.971	-0.01	118	0.297	-5.97	210	0.225	-14.52	302	0.818	-0.43
28	0.965	-0.01	120	0.276	-6.45	212	0.221	-14.47	304	0.831	-0.35
30	0.957	-0.01	122	0.255	-6.96	214	0.216	-14.24	306	0.843	-0.29
32	0.952	-0.01	124	0.235	-7.49	216	0.210	-13.85	308	0.856	-0.23
34	0.946	-0.01	126	0.217	-8.09	218	0.200	-13.39	310	0.867	-0.18
36	0.936	-0.01	128	0.200	-8.73	220	0.202	-12.80	312	0.879	-0.14
38	0.928	-0.02	130	0.189	-9.37	222	0.189	-12.15	314	0.890	-0.10
40	0.920	-0.03	132	0.181	-10.06	224	0.181	-11.47	316	0.900	-0.08
42	0.911	-0.05	134	0.178	-10.78	226	0.178	-10.78	318	0.911	-0.05
44	0.900	-0.08	136	0.181	-11.47	228	0.181	-10.06	320	0.920	-0.03
46	0.890	-0.10	138	0.189	-12.15	230	0.189	-9.37	322	0.928	-0.02
48	0.879	-0.14	140	0.202	-12.80	232	0.200	-8.73	324	0.936	-0.01
50	0.867	-0.18	142	0.200	-13.39	234	0.217	-8.09	326	0.946	-0.01
52	0.856	-0.23	144	0.213	-13.85	236	0.235	-7.49	328	0.952	-0.01
54	0.843	-0.29	146	0.218	-14.24	238	0.255	-6.96	330	0.957	-0.01
56	0.831	-0.35	148	0.223	-14.47	240	0.276	-6.45	332	0.965	-0.01
58	0.818	-0.43	150	0.227	-14.52	242	0.297	-5.97	334	0.971	-0.01
60	0.806	-0.50	152	0.230	-14.47	244	0.322	-5.55	336	0.977	-0.01
62	0.792	-0.59	154	0.232	-14.24	246	0.346	-5.16	338	0.983	-0.01
64	0.778	-0.69	156	0.234	-13.94	248	0.370	-4.81	340	0.986	-0.01
66	0.764	-0.79	158	0.236	-13.51	250	0.388	-4.48	342	0.990	-0.01
68	0.750	-0.90	160	0.239	-13.07	252	0.406	-4.19	344	0.992	-0.01
70	0.734	-1.01	162	0.242	-12.62	254	0.423	-3.93	346	0.996	-0.01
72	0.718	-1.13	164	0.244	-12.11	256	0.442	-3.69	348	0.997	-0.01
74	0.704	-1.26	166	0.247	-11.67	258	0.460	-3.47	350	0.998	-0.01
76	0.687	-1.39	168	0.249	-11.24	260	0.478	-3.26	352	1.000	-0.01
78	0.671	-1.52	170	0.251	-10.84	262	0.497	-3.07	354	0.998	-0.01
80	0.654	-1.66	172	0.253	-10.52	264	0.514	-2.89	356	1.000	-0.01
82	0.638	-1.81	174	0.254	-10.26	266	0.533	-2.72	358	0.998	-0.01
84	0.621	-1.95	176	0.255	-10.06	268	0.551	-2.56	360	0.996	0.00
86	0.605	-2.10	178	0.255	-9.92	270	0.568	-2.41			
88	0.586	-2.25	180	0.255	-9.84	272	0.586	-2.25			
90	0.568	-2.41	182	0.255	-9.92	274	0.605	-2.10			

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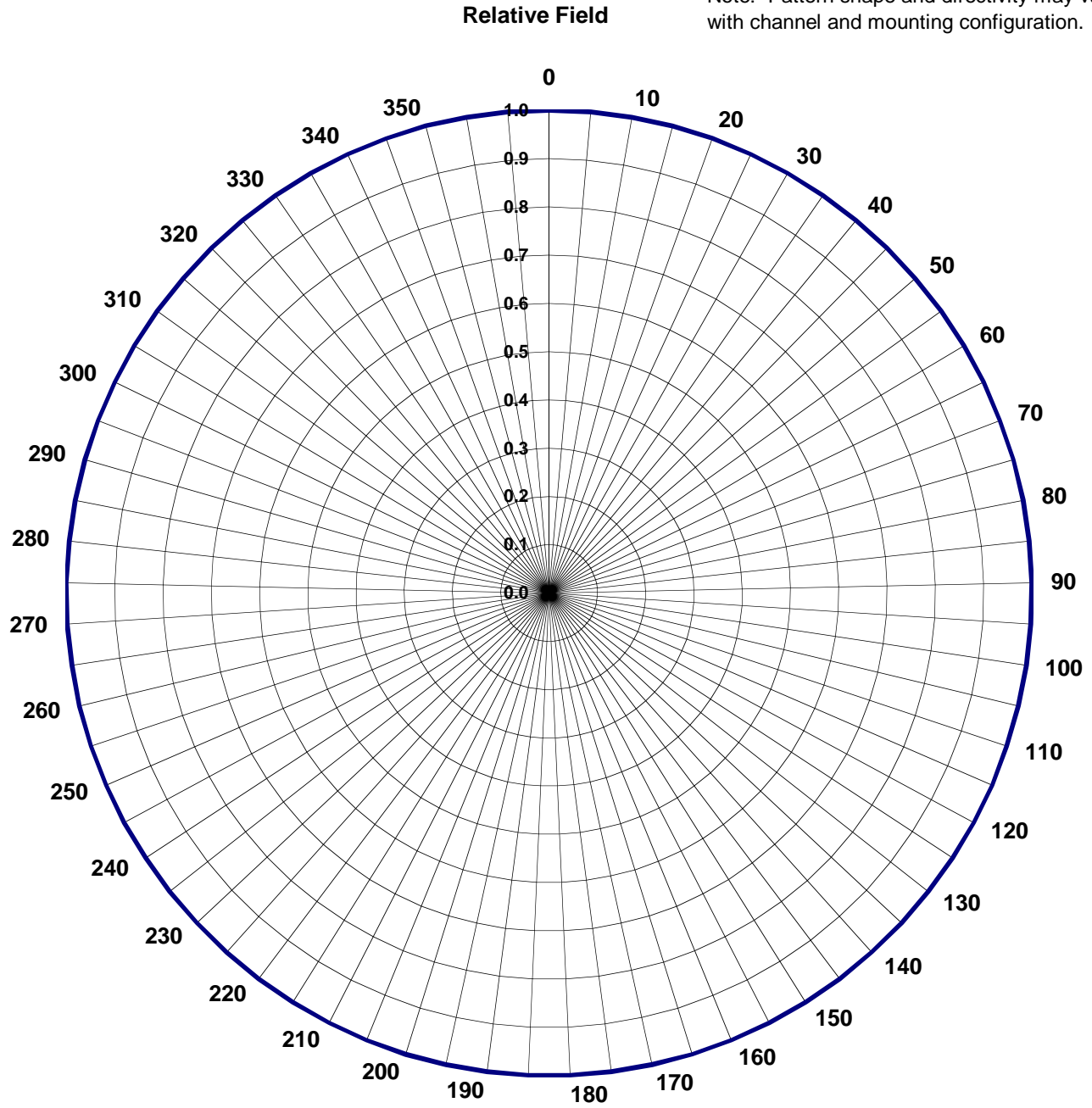
Your Single Source for Broadcast Solutions™

**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-O-H</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>1.00</b>	<b>(0.00)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Horizontal</b>	
<b>Channel:</b>		
<b>Location:</b>		

Circularity  $\pm 2$  dB

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE:** ALPL-O-H

**POLARIZATION:** Horizontal

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	1.000	0.00	184	1.000	0.00	276	1.000	0.00
2	1.000	0.00	94	1.000	0.00	186	1.000	0.00	278	1.000	0.00
4	1.000	0.00	96	1.000	0.00	188	1.000	0.00	280	1.000	0.00
6	1.000	0.00	98	1.000	0.00	190	1.000	0.00	282	1.000	0.00
8	1.000	0.00	100	1.000	0.00	192	1.000	0.00	284	1.000	0.00
10	1.000	0.00	102	1.000	0.00	194	1.000	0.00	286	1.000	0.00
12	1.000	0.00	104	1.000	0.00	196	1.000	0.00	288	1.000	0.00
14	1.000	0.00	106	1.000	0.00	198	1.000	0.00	290	1.000	0.00
16	1.000	0.00	108	1.000	0.00	200	1.000	0.00	292	1.000	0.00
18	1.000	0.00	110	1.000	0.00	202	1.000	0.00	294	1.000	0.00
20	1.000	0.00	112	1.000	0.00	204	1.000	0.00	296	1.000	0.00
22	1.000	0.00	114	1.000	0.00	206	1.000	0.00	298	1.000	0.00
24	1.000	0.00	116	1.000	0.00	208	1.000	0.00	300	1.000	0.00
26	1.000	0.00	118	1.000	0.00	210	1.000	0.00	302	1.000	0.00
28	1.000	0.00	120	1.000	0.00	212	1.000	0.00	304	1.000	0.00
30	1.000	0.00	122	1.000	0.00	214	1.000	0.00	306	1.000	0.00
32	1.000	0.00	124	1.000	0.00	216	1.000	0.00	308	1.000	0.00
34	1.000	0.00	126	1.000	0.00	218	1.000	0.00	310	1.000	0.00
36	1.000	0.00	128	1.000	0.00	220	1.000	0.00	312	1.000	0.00
38	1.000	0.00	130	1.000	0.00	222	1.000	0.00	314	1.000	0.00
40	1.000	0.00	132	1.000	0.00	224	1.000	0.00	316	1.000	0.00
42	1.000	0.00	134	1.000	0.00	226	1.000	0.00	318	1.000	0.00
44	1.000	0.00	136	1.000	0.00	228	1.000	0.00	320	1.000	0.00
46	1.000	0.00	138	1.000	0.00	230	1.000	0.00	322	1.000	0.00
48	1.000	0.00	140	1.000	0.00	232	1.000	0.00	324	1.000	0.00
50	1.000	0.00	142	1.000	0.00	234	1.000	0.00	326	1.000	0.00
52	1.000	0.00	144	1.000	0.00	236	1.000	0.00	328	1.000	0.00
54	1.000	0.00	146	1.000	0.00	238	1.000	0.00	330	1.000	0.00
56	1.000	0.00	148	1.000	0.00	240	1.000	0.00	332	1.000	0.00
58	1.000	0.00	150	1.000	0.00	242	1.000	0.00	334	1.000	0.00
60	1.000	0.00	152	1.000	0.00	244	1.000	0.00	336	1.000	0.00
62	1.000	0.00	154	1.000	0.00	246	1.000	0.00	338	1.000	0.00
64	1.000	0.00	156	1.000	0.00	248	1.000	0.00	340	1.000	0.00
66	1.000	0.00	158	1.000	0.00	250	1.000	0.00	342	1.000	0.00
68	1.000	0.00	160	1.000	0.00	252	1.000	0.00	344	1.000	0.00
70	1.000	0.00	162	1.000	0.00	254	1.000	0.00	346	1.000	0.00
72	1.000	0.00	164	1.000	0.00	256	1.000	0.00	348	1.000	0.00
74	1.000	0.00	166	1.000	0.00	258	1.000	0.00	350	1.000	0.00
76	1.000	0.00	168	1.000	0.00	260	1.000	0.00	352	1.000	0.00
78	1.000	0.00	170	1.000	0.00	262	1.000	0.00	354	1.000	0.00
80	1.000	0.00	172	1.000	0.00	264	1.000	0.00	356	1.000	0.00
82	1.000	0.00	174	1.000	0.00	266	1.000	0.00	358	1.000	0.00
84	1.000	0.00	176	1.000	0.00	268	1.000	0.00	360	1.000	0.00
86	1.000	0.00	178	1.000	0.00	270	1.000	0.00			
88	1.000	0.00	180	1.000	0.00	272	1.000	0.00			
90	1.000	0.00	182	1.000	0.00	274	1.000	0.00			

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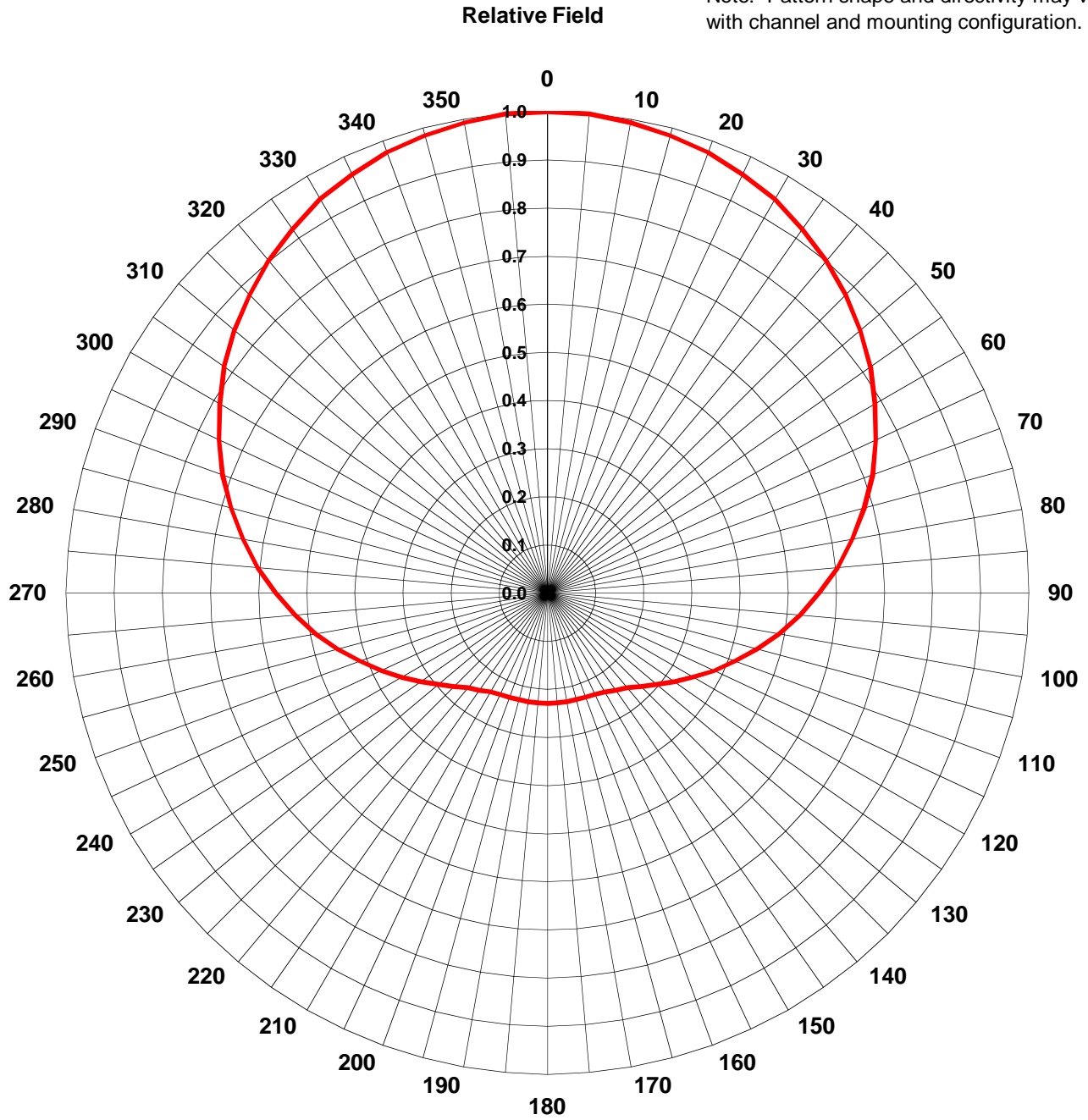


Your Single Source for Broadcast Solutions™

### AZIMUTH PATTERN

<b>TYPE:</b>	<b>ALPL-O-V</b>	
<b>Directivity:</b>	<b>2.36</b>	<b>(3.73)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		

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





**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-O-V**

**POLARIZATION: Vertical**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.550	-2.56	184	0.229	-10.06	276	0.612	-1.95
2	1.000	-0.01	94	0.535	-2.72	186	0.229	-10.26	278	0.628	-1.81
4	0.999	-0.01	96	0.518	-2.89	188	0.229	-10.52	280	0.643	-1.66
6	0.999	-0.01	98	0.504	-3.07	190	0.229	-10.84	282	0.658	-1.52
8	0.996	-0.01	100	0.488	-3.26	192	0.229	-11.24	284	0.674	-1.39
10	0.993	-0.01	102	0.473	-3.47	194	0.229	-11.67	286	0.690	-1.26
12	0.991	-0.01	104	0.458	-3.69	196	0.229	-12.11	288	0.704	-1.13
14	0.988	-0.01	106	0.442	-3.93	198	0.229	-12.62	290	0.719	-1.01
16	0.983	-0.01	108	0.428	-4.19	200	0.230	-13.07	292	0.734	-0.90
18	0.979	-0.01	110	0.414	-4.48	202	0.230	-13.51	294	0.746	-0.79
20	0.975	-0.01	112	0.400	-4.81	204	0.232	-13.94	296	0.760	-0.69
22	0.968	-0.01	114	0.387	-5.16	206	0.233	-14.24	298	0.774	-0.59
24	0.963	-0.01	116	0.374	-5.55	208	0.235	-14.47	300	0.786	-0.50
26	0.957	-0.01	118	0.361	-5.97	210	0.237	-14.52	302	0.800	-0.43
28	0.951	-0.01	120	0.349	-6.45	212	0.240	-14.47	304	0.813	-0.35
30	0.945	-0.01	122	0.337	-6.96	214	0.243	-14.24	306	0.825	-0.29
32	0.935	-0.01	124	0.326	-7.49	216	0.248	-13.85	308	0.838	-0.23
34	0.926	-0.01	126	0.315	-8.09	218	0.252	-13.39	310	0.849	-0.18
36	0.919	-0.01	128	0.304	-8.73	220	0.257	-12.80	312	0.860	-0.14
38	0.911	-0.02	130	0.295	-9.37	222	0.264	-12.15	314	0.872	-0.10
40	0.901	-0.03	132	0.286	-10.06	224	0.271	-11.47	316	0.881	-0.08
42	0.891	-0.05	134	0.278	-10.78	226	0.278	-10.78	318	0.891	-0.05
44	0.881	-0.08	136	0.271	-11.47	228	0.286	-10.06	320	0.901	-0.03
46	0.872	-0.10	138	0.264	-12.15	230	0.295	-9.37	322	0.911	-0.02
48	0.860	-0.14	140	0.257	-12.80	232	0.304	-8.73	324	0.919	-0.01
50	0.849	-0.18	142	0.252	-13.39	234	0.315	-8.09	326	0.926	-0.01
52	0.838	-0.23	144	0.248	-13.85	236	0.326	-7.49	328	0.935	-0.01
54	0.825	-0.29	146	0.243	-14.24	238	0.337	-6.96	330	0.945	-0.01
56	0.813	-0.35	148	0.240	-14.47	240	0.349	-6.45	332	0.951	-0.01
58	0.800	-0.43	150	0.237	-14.52	242	0.361	-5.97	334	0.957	-0.01
60	0.786	-0.50	152	0.235	-14.47	244	0.374	-5.55	336	0.963	-0.01
62	0.774	-0.59	154	0.233	-14.24	246	0.387	-5.16	338	0.968	-0.01
64	0.760	-0.69	156	0.232	-13.94	248	0.400	-4.81	340	0.975	-0.01
66	0.746	-0.79	158	0.230	-13.51	250	0.414	-4.48	342	0.979	-0.01
68	0.734	-0.90	160	0.230	-13.07	252	0.428	-4.19	344	0.983	-0.01
70	0.719	-1.01	162	0.229	-12.62	254	0.442	-3.93	346	0.988	-0.01
72	0.704	-1.13	164	0.229	-12.11	256	0.458	-3.69	348	0.991	-0.01
74	0.690	-1.26	166	0.229	-11.67	258	0.473	-3.47	350	0.993	-0.01
76	0.674	-1.39	168	0.229	-11.24	260	0.488	-3.26	352	0.996	-0.01
78	0.658	-1.52	170	0.229	-10.84	262	0.504	-3.07	354	0.999	-0.01
80	0.643	-1.66	172	0.229	-10.52	264	0.518	-2.89	356	0.999	-0.01
82	0.628	-1.81	174	0.229	-10.26	266	0.535	-2.72	358	1.000	-0.01
84	0.612	-1.95	176	0.229	-10.06	268	0.550	-2.56	360	1.000	0.00
86	0.596	-2.10	178	0.229	-9.92	270	0.565	-2.41			
88	0.581	-2.25	180	0.229	-9.84	272	0.581	-2.25			
90	0.565	-2.41	182	0.229	-9.92	274	0.596	-2.10			

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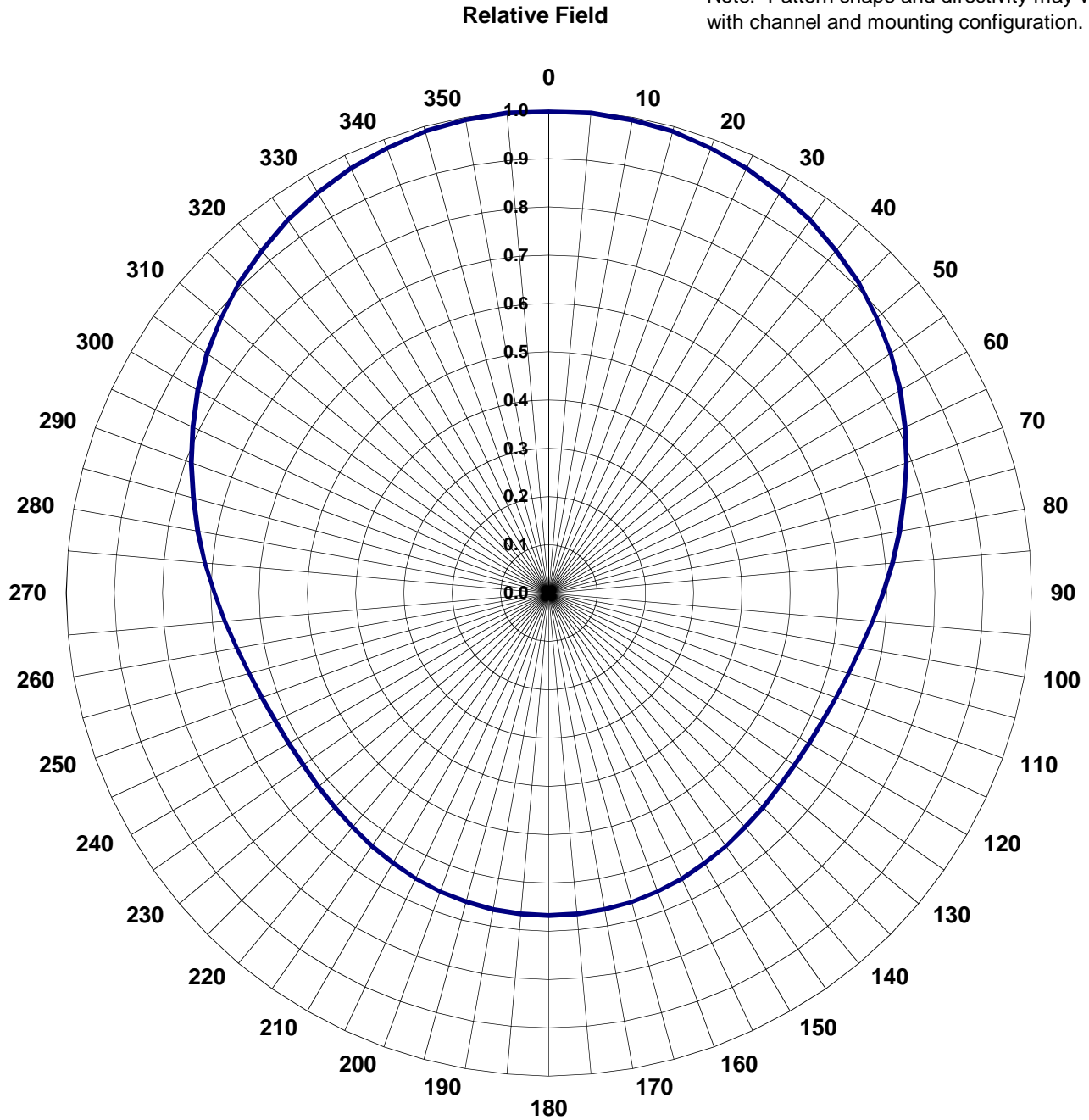


Your Single Source for Broadcast Solutions™

**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-OC-H</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>1.65</b>	<b>(2.17)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Horizontal</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-OC-H**

**POLARIZATION: Horizontal**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.997	0.00	92	0.685	-3.61	184	0.668	-3.41	276	0.720	-3.16
2	0.999	0.00	94	0.677	-3.72	186	0.667	-3.43	278	0.729	-3.04
4	0.999	-0.01	96	0.670	-3.82	188	0.667	-3.44	280	0.738	-2.91
6	0.998	-0.02	98	0.663	-3.90	190	0.666	-3.45	282	0.748	-2.79
8	0.996	-0.03	100	0.656	-4.00	192	0.664	-3.48	284	0.759	-2.67
10	0.995	-0.05	102	0.651	-4.07	194	0.663	-3.50	286	0.771	-2.55
12	0.993	-0.07	104	0.646	-4.14	196	0.662	-3.54	288	0.780	-2.43
14	0.991	-0.10	106	0.641	-4.21	198	0.659	-3.58	290	0.789	-2.30
16	0.989	-0.12	108	0.637	-4.26	200	0.658	-3.62	292	0.799	-2.18
18	0.984	-0.16	110	0.633	-4.31	202	0.655	-3.66	294	0.809	-2.07
20	0.980	-0.19	112	0.630	-4.35	204	0.653	-3.70	296	0.820	-1.95
22	0.978	-0.23	114	0.627	-4.38	206	0.651	-3.76	298	0.830	-1.83
24	0.972	-0.27	116	0.625	-4.39	208	0.648	-3.80	300	0.840	-1.72
26	0.969	-0.33	118	0.623	-4.41	210	0.646	-3.85	302	0.851	-1.61
28	0.963	-0.38	120	0.622	-4.41	212	0.642	-3.90	304	0.858	-1.50
30	0.957	-0.44	122	0.621	-4.41	214	0.640	-3.96	306	0.868	-1.40
32	0.950	-0.49	124	0.622	-4.39	216	0.638	-4.01	308	0.878	-1.30
34	0.945	-0.56	126	0.622	-4.38	218	0.635	-4.05	310	0.887	-1.20
36	0.940	-0.62	128	0.622	-4.35	220	0.633	-4.11	312	0.897	-1.11
38	0.934	-0.70	130	0.623	-4.32	222	0.631	-4.17	314	0.903	-1.02
40	0.925	-0.77	132	0.625	-4.29	224	0.628	-4.21	316	0.912	-0.93
42	0.918	-0.85	134	0.626	-4.25	226	0.626	-4.25	318	0.918	-0.85
44	0.912	-0.93	136	0.628	-4.21	228	0.625	-4.29	320	0.925	-0.77
46	0.903	-1.02	138	0.631	-4.17	230	0.623	-4.32	322	0.934	-0.70
48	0.897	-1.11	140	0.633	-4.11	232	0.622	-4.35	324	0.940	-0.62
50	0.887	-1.20	142	0.635	-4.05	234	0.622	-4.38	326	0.945	-0.56
52	0.878	-1.30	144	0.638	-4.01	236	0.622	-4.39	328	0.950	-0.49
54	0.868	-1.40	146	0.640	-3.96	238	0.621	-4.41	330	0.957	-0.44
56	0.858	-1.50	148	0.642	-3.90	240	0.622	-4.41	332	0.963	-0.38
58	0.851	-1.61	150	0.646	-3.85	242	0.623	-4.41	334	0.969	-0.33
60	0.840	-1.72	152	0.648	-3.80	244	0.625	-4.39	336	0.972	-0.27
62	0.830	-1.83	154	0.651	-3.76	246	0.627	-4.38	338	0.978	-0.23
64	0.820	-1.95	156	0.653	-3.70	248	0.630	-4.35	340	0.980	-0.19
66	0.809	-2.07	158	0.655	-3.66	250	0.633	-4.31	342	0.984	-0.16
68	0.799	-2.18	160	0.658	-3.62	252	0.637	-4.26	344	0.989	-0.12
70	0.789	-2.30	162	0.659	-3.58	254	0.641	-4.21	346	0.991	-0.10
72	0.780	-2.43	164	0.662	-3.54	256	0.646	-4.14	348	0.993	-0.07
74	0.771	-2.55	166	0.663	-3.50	258	0.651	-4.07	350	0.995	-0.05
76	0.759	-2.67	168	0.664	-3.48	260	0.656	-4.00	352	0.996	-0.03
78	0.748	-2.79	170	0.666	-3.45	262	0.663	-3.90	354	0.998	-0.02
80	0.738	-2.91	172	0.667	-3.44	264	0.670	-3.82	356	0.999	-0.01
82	0.729	-3.04	174	0.667	-3.43	266	0.677	-3.72	358	0.999	0.00
84	0.720	-3.16	176	0.668	-3.41	268	0.685	-3.61	360	0.997	0.00
86	0.710	-3.27	178	0.668	-3.40	270	0.693	-3.50			
88	0.702	-3.39	180	0.668	-3.40	272	0.702	-3.39			
90	0.693	-3.50	182	0.668	-3.40	274	0.710	-3.27			

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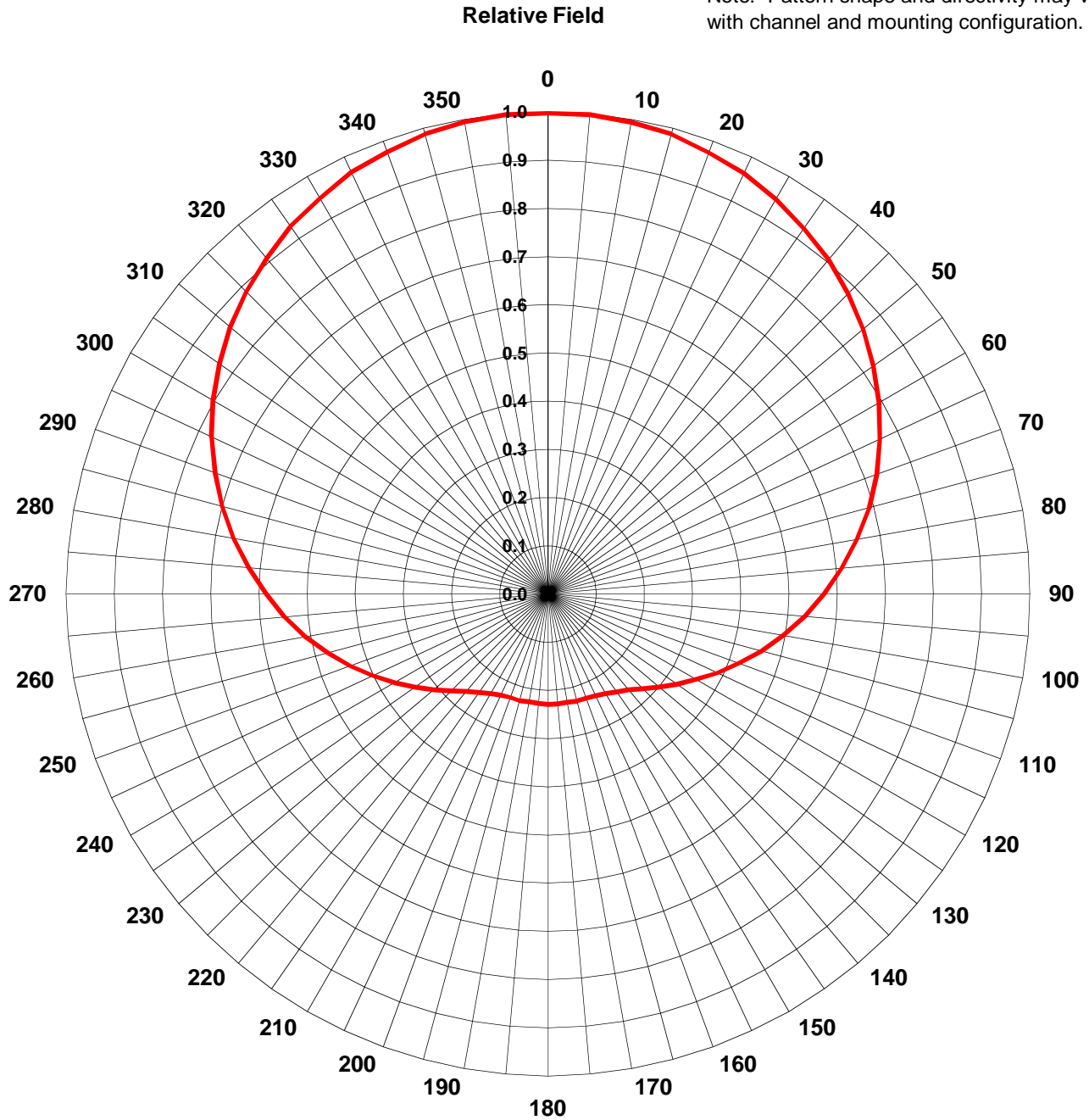


Your Single Source for Broadcast Solutions™

**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-OC-V</b>	
<b>Directivity:</b>	<b>Numeric</b>	<b>dB</b>
<b>Peak(s) at:</b>	<b>2.31</b>	<b>(3.64)</b>
<b>Polarization:</b>	<b>Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-OC-V**

**POLARIZATION: Vertical**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.997	0.00	92	0.558	-2.56	184	0.228	-10.06	276	0.633	-1.95
2	0.999	-0.01	94	0.543	-2.72	186	0.227	-10.26	278	0.647	-1.81
4	0.999	-0.01	96	0.527	-2.89	188	0.226	-10.52	280	0.663	-1.66
6	0.998	-0.01	98	0.513	-3.07	190	0.227	-10.84	282	0.677	-1.52
8	0.996	-0.01	100	0.495	-3.26	192	0.227	-11.24	284	0.693	-1.39
10	0.994	-0.01	102	0.481	-3.47	194	0.228	-11.67	286	0.708	-1.26
12	0.993	-0.01	104	0.466	-3.69	196	0.227	-12.11	288	0.722	-1.13
14	0.988	-0.01	106	0.450	-3.93	198	0.227	-12.62	290	0.736	-1.01
16	0.984	-0.01	108	0.435	-4.19	200	0.228	-13.07	292	0.751	-0.90
18	0.982	-0.01	110	0.421	-4.48	202	0.229	-13.51	294	0.764	-0.79
20	0.975	-0.01	112	0.407	-4.81	204	0.230	-13.94	296	0.777	-0.69
22	0.971	-0.01	114	0.392	-5.16	206	0.233	-14.24	298	0.791	-0.59
24	0.966	-0.01	116	0.381	-5.55	208	0.236	-14.47	300	0.803	-0.50
26	0.960	-0.01	118	0.367	-5.97	210	0.238	-14.52	302	0.815	-0.43
28	0.953	-0.01	120	0.355	-6.45	212	0.243	-14.47	304	0.826	-0.35
30	0.946	-0.01	122	0.343	-6.96	214	0.247	-14.24	306	0.839	-0.29
32	0.938	-0.01	124	0.331	-7.49	216	0.252	-13.85	308	0.849	-0.23
34	0.931	-0.01	126	0.321	-8.09	218	0.258	-13.39	310	0.861	-0.18
36	0.923	-0.01	128	0.309	-8.73	220	0.264	-12.80	312	0.871	-0.14
38	0.915	-0.02	130	0.300	-9.37	222	0.272	-12.15	314	0.881	-0.10
40	0.906	-0.03	132	0.291	-10.06	224	0.280	-11.47	316	0.892	-0.08
42	0.896	-0.05	134	0.282	-10.78	226	0.288	-10.78	318	0.900	-0.05
44	0.886	-0.08	136	0.274	-11.47	228	0.298	-10.06	320	0.909	-0.03
46	0.876	-0.10	138	0.267	-12.15	230	0.309	-9.37	322	0.919	-0.02
48	0.865	-0.14	140	0.260	-12.80	232	0.320	-8.73	324	0.926	-0.01
50	0.854	-0.18	142	0.255	-13.39	234	0.332	-8.09	326	0.933	-0.01
52	0.843	-0.23	144	0.250	-13.85	236	0.343	-7.49	328	0.941	-0.01
54	0.831	-0.29	146	0.246	-14.24	238	0.355	-6.96	330	0.947	-0.01
56	0.820	-0.35	148	0.242	-14.47	240	0.367	-6.45	332	0.954	-0.01
58	0.806	-0.43	150	0.238	-14.52	242	0.381	-5.97	334	0.960	-0.01
60	0.794	-0.50	152	0.236	-14.47	244	0.395	-5.55	336	0.966	-0.01
62	0.782	-0.59	154	0.234	-14.24	246	0.408	-5.16	338	0.972	-0.01
64	0.767	-0.69	156	0.233	-13.94	248	0.422	-4.81	340	0.976	-0.01
66	0.753	-0.79	158	0.231	-13.51	250	0.436	-4.48	342	0.979	-0.01
68	0.741	-0.90	160	0.230	-13.07	252	0.450	-4.19	344	0.985	-0.01
70	0.726	-1.01	162	0.230	-12.62	254	0.464	-3.93	346	0.987	-0.01
72	0.712	-1.13	164	0.229	-12.11	256	0.481	-3.69	348	0.992	-0.01
74	0.696	-1.26	166	0.229	-11.67	258	0.496	-3.47	350	0.994	-0.01
76	0.681	-1.39	168	0.229	-11.24	260	0.512	-3.26	352	0.996	-0.01
78	0.667	-1.52	170	0.228	-10.84	262	0.527	-3.07	354	0.998	-0.01
80	0.651	-1.66	172	0.229	-10.52	264	0.542	-2.89	356	0.998	-0.01
82	0.636	-1.81	174	0.229	-10.26	266	0.557	-2.72	358	0.999	-0.01
84	0.620	-1.95	176	0.228	-10.06	268	0.571	-2.56	360	0.997	0.00
86	0.605	-2.10	178	0.229	-9.92	270	0.586	-2.41			
88	0.589	-2.25	180	0.229	-9.84	272	0.603	-2.25			
90	0.574	-2.41	182	0.228	-9.92	274	0.618	-2.10			

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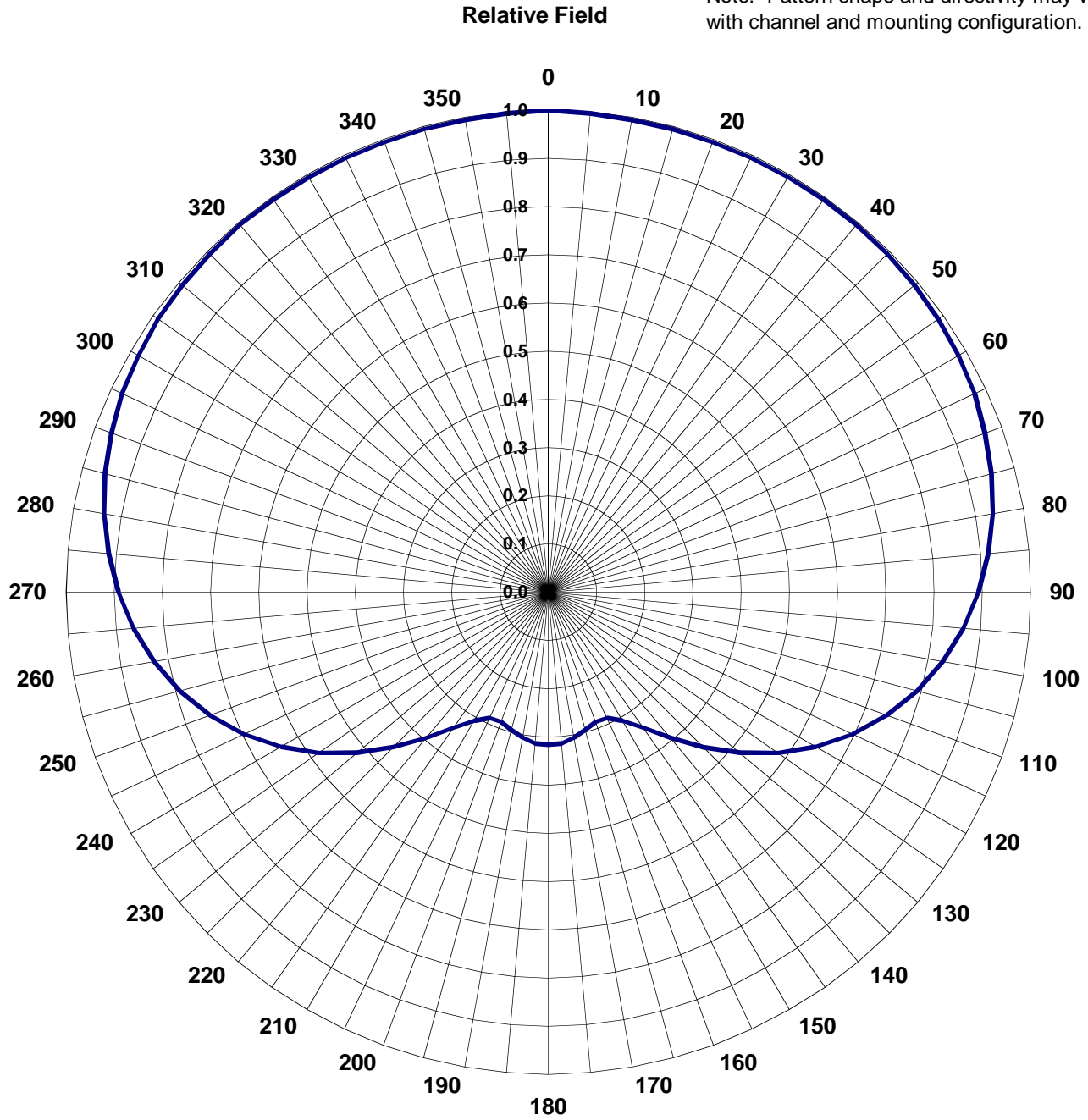


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**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-W-H</b>	
	<b>Numeric</b>	<b>dB</b>
<b>Directivity:</b>	<b>1.58</b>	<b>(1.99)</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Horizontal</b>	
<b>Channel:</b>		
<b>Location:</b>		

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



**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-W-H**

**POLARIZATION: Horizontal**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.880	-0.85	184	0.316	-12.18	276	0.921	-0.41
2	0.998	-0.03	94	0.869	-1.00	186	0.314	-12.11	278	0.928	-0.32
4	0.997	-0.05	96	0.857	-1.15	188	0.311	-12.01	280	0.936	-0.22
6	0.997	-0.08	98	0.844	-1.31	190	0.306	-11.94	282	0.942	-0.18
8	0.996	-0.10	100	0.830	-1.46	192	0.302	-11.60	284	0.949	-0.14
10	0.995	-0.13	102	0.816	-1.64	194	0.296	-11.28	286	0.955	-0.10
12	0.996	-0.19	104	0.800	-1.83	196	0.292	-11.00	288	0.960	-0.06
14	0.995	-0.26	106	0.784	-2.01	198	0.288	-10.69	290	0.964	-0.03
16	0.995	-0.31	108	0.766	-2.21	200	0.286	-10.40	292	0.969	-0.03
18	0.994	-0.37	110	0.747	-2.41	202	0.285	-9.87	294	0.973	-0.05
20	0.994	-0.44	112	0.728	-2.59	204	0.286	-9.37	296	0.976	-0.06
22	0.994	-0.48	114	0.708	-2.77	206	0.291	-8.90	298	0.979	-0.08
24	0.994	-0.53	116	0.685	-2.96	208	0.297	-8.45	300	0.982	-0.09
26	0.994	-0.58	118	0.663	-3.15	210	0.308	-8.02	302	0.985	-0.14
28	0.994	-0.63	120	0.640	-3.35	212	0.321	-7.54	304	0.986	-0.19
30	0.994	-0.68	122	0.618	-3.54	214	0.337	-7.09	306	0.988	-0.26
32	0.994	-0.67	124	0.594	-3.74	216	0.354	-6.65	308	0.990	-0.31
34	0.994	-0.66	126	0.569	-3.94	218	0.373	-6.25	310	0.991	-0.36
36	0.995	-0.66	128	0.544	-4.15	220	0.395	-5.85	312	0.992	-0.42
38	0.994	-0.65	130	0.519	-4.36	222	0.419	-5.53	314	0.993	-0.47
40	0.995	-0.64	132	0.493	-4.64	224	0.443	-5.22	316	0.993	-0.53
42	0.994	-0.58	134	0.468	-4.93	226	0.468	-4.93	318	0.994	-0.58
44	0.993	-0.53	136	0.443	-5.22	228	0.493	-4.64	320	0.995	-0.64
46	0.993	-0.47	138	0.419	-5.53	230	0.519	-4.36	322	0.994	-0.65
48	0.992	-0.42	140	0.395	-5.85	232	0.544	-4.15	324	0.995	-0.66
50	0.991	-0.36	142	0.373	-6.25	234	0.569	-3.94	326	0.994	-0.66
52	0.990	-0.31	144	0.354	-6.65	236	0.594	-3.74	328	0.994	-0.67
54	0.988	-0.26	146	0.337	-7.09	238	0.618	-3.54	330	0.994	-0.68
56	0.986	-0.19	148	0.321	-7.54	240	0.640	-3.35	332	0.994	-0.63
58	0.985	-0.14	150	0.308	-8.02	242	0.663	-3.15	334	0.994	-0.58
60	0.982	-0.09	152	0.297	-8.45	244	0.685	-2.96	336	0.994	-0.53
62	0.979	-0.08	154	0.291	-8.90	246	0.708	-2.77	338	0.994	-0.48
64	0.976	-0.06	156	0.286	-9.37	248	0.728	-2.59	340	0.994	-0.44
66	0.973	-0.05	158	0.285	-9.87	250	0.747	-2.41	342	0.994	-0.37
68	0.969	-0.03	160	0.286	-10.40	252	0.766	-2.21	344	0.995	-0.31
70	0.964	-0.03	162	0.288	-10.69	254	0.784	-2.01	346	0.995	-0.26
72	0.960	-0.06	164	0.292	-11.00	256	0.800	-1.83	348	0.996	-0.19
74	0.955	-0.10	166	0.296	-11.28	258	0.816	-1.64	350	0.995	-0.13
76	0.949	-0.14	168	0.302	-11.60	260	0.830	-1.46	352	0.996	-0.10
78	0.942	-0.18	170	0.306	-11.94	262	0.844	-1.31	354	0.997	-0.08
80	0.936	-0.22	172	0.311	-12.01	264	0.857	-1.15	356	0.997	-0.05
82	0.928	-0.32	174	0.314	-12.11	266	0.869	-1.00	358	0.998	-0.03
84	0.921	-0.41	176	0.316	-12.18	268	0.880	-0.85	360	1.000	0.00
86	0.911	-0.51	178	0.316	-12.29	270	0.891	-0.71			
88	0.902	-0.60	180	0.316	-12.36	272	0.902	-0.60			
90	0.891	-0.71	182	0.316	-12.29	274	0.911	-0.51			

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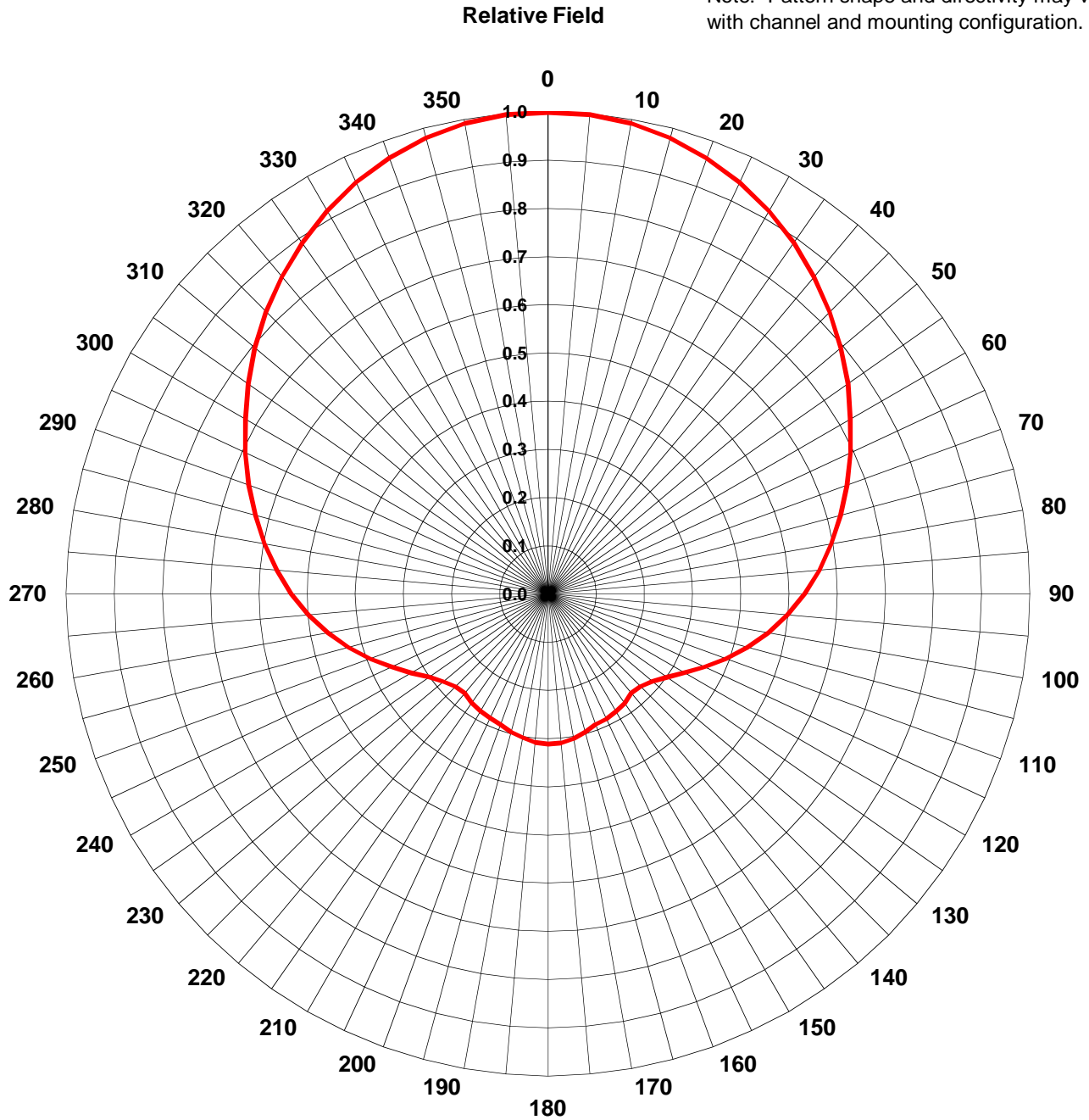


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**AZIMUTH PATTERN**

<b>TYPE:</b>	<b>ALPL-W-V</b>	
<b>Directivity:</b>	<b>2.51</b>	<b>(4.00) dB</b>
<b>Peak(s) at:</b>		
<b>Polarization:</b>	<b>Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		

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





**TABULATED DATA FOR AZIMUTH PATTERN**

**TYPE: ALPL-W-V**

**POLARIZATION: Vertical**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.999	0.00	92	0.519	-2.56	184	0.310	-10.06	276	0.572	-1.95
2	1.000	-0.01	94	0.505	-2.72	186	0.308	-10.26	278	0.584	-1.81
4	0.999	-0.01	96	0.492	-2.89	188	0.306	-10.52	280	0.597	-1.66
6	0.996	-0.01	98	0.478	-3.07	190	0.303	-10.84	282	0.610	-1.52
8	0.995	-0.01	100	0.464	-3.26	192	0.300	-11.24	284	0.622	-1.39
10	0.991	-0.01	102	0.450	-3.47	194	0.298	-11.67	286	0.635	-1.26
12	0.987	-0.01	104	0.436	-3.69	196	0.294	-12.11	288	0.647	-1.13
14	0.982	-0.01	106	0.421	-3.93	198	0.290	-12.62	290	0.661	-1.01
16	0.976	-0.01	108	0.407	-4.19	200	0.288	-13.07	292	0.672	-0.90
18	0.970	-0.01	110	0.393	-4.48	202	0.287	-13.51	294	0.687	-0.79
20	0.962	-0.01	112	0.379	-4.81	204	0.286	-13.94	296	0.699	-0.69
22	0.955	-0.01	114	0.365	-5.16	206	0.284	-14.24	298	0.712	-0.59
24	0.946	-0.01	116	0.352	-5.55	208	0.282	-14.47	300	0.725	-0.50
26	0.937	-0.01	118	0.339	-5.97	210	0.280	-14.52	302	0.740	-0.43
28	0.928	-0.01	120	0.327	-6.45	212	0.278	-14.47	304	0.753	-0.35
30	0.917	-0.01	122	0.316	-6.96	214	0.277	-14.24	306	0.766	-0.29
32	0.907	-0.01	124	0.306	-7.49	216	0.275	-13.85	308	0.780	-0.23
34	0.895	-0.01	126	0.297	-8.09	218	0.274	-13.39	310	0.794	-0.18
36	0.883	-0.01	128	0.289	-8.73	220	0.269	-12.80	312	0.808	-0.14
38	0.871	-0.02	130	0.283	-9.37	222	0.269	-12.15	314	0.819	-0.10
40	0.859	-0.03	132	0.276	-10.06	224	0.270	-11.47	316	0.833	-0.08
42	0.846	-0.05	134	0.272	-10.78	226	0.272	-10.78	318	0.846	-0.05
44	0.833	-0.08	136	0.270	-11.47	228	0.276	-10.06	320	0.859	-0.03
46	0.819	-0.10	138	0.269	-12.15	230	0.283	-9.37	322	0.871	-0.02
48	0.808	-0.14	140	0.269	-12.80	232	0.289	-8.73	324	0.883	-0.01
50	0.794	-0.18	142	0.270	-13.39	234	0.297	-8.09	326	0.895	-0.01
52	0.780	-0.23	144	0.276	-13.85	236	0.306	-7.49	328	0.907	-0.01
54	0.766	-0.29	146	0.278	-14.24	238	0.316	-6.96	330	0.917	-0.01
56	0.753	-0.35	148	0.280	-14.47	240	0.327	-6.45	332	0.928	-0.01
58	0.740	-0.43	150	0.281	-14.52	242	0.339	-5.97	334	0.937	-0.01
60	0.725	-0.50	152	0.283	-14.47	244	0.352	-5.55	336	0.946	-0.01
62	0.712	-0.59	154	0.285	-14.24	246	0.365	-5.16	338	0.955	-0.01
64	0.699	-0.69	156	0.287	-13.94	248	0.379	-4.81	340	0.962	-0.01
66	0.687	-0.79	158	0.287	-13.51	250	0.393	-4.48	342	0.970	-0.01
68	0.672	-0.90	160	0.288	-13.07	252	0.407	-4.19	344	0.976	-0.01
70	0.661	-1.01	162	0.290	-12.62	254	0.421	-3.93	346	0.982	-0.01
72	0.647	-1.13	164	0.294	-12.11	256	0.436	-3.69	348	0.987	-0.01
74	0.635	-1.26	166	0.298	-11.67	258	0.450	-3.47	350	0.991	-0.01
76	0.622	-1.39	168	0.302	-11.24	260	0.464	-3.26	352	0.995	-0.01
78	0.610	-1.52	170	0.305	-10.84	262	0.478	-3.07	354	0.996	-0.01
80	0.597	-1.66	172	0.307	-10.52	264	0.492	-2.89	356	0.999	-0.01
82	0.584	-1.81	174	0.309	-10.26	266	0.505	-2.72	358	1.000	-0.01
84	0.572	-1.95	176	0.311	-10.06	268	0.519	-2.56	360	0.999	0.00
86	0.559	-2.10	178	0.311	-9.92	270	0.533	-2.41			
88	0.545	-2.25	180	0.311	-9.84	272	0.545	-2.25			
90	0.533	-2.41	182	0.311	-9.92	274	0.559	-2.10			

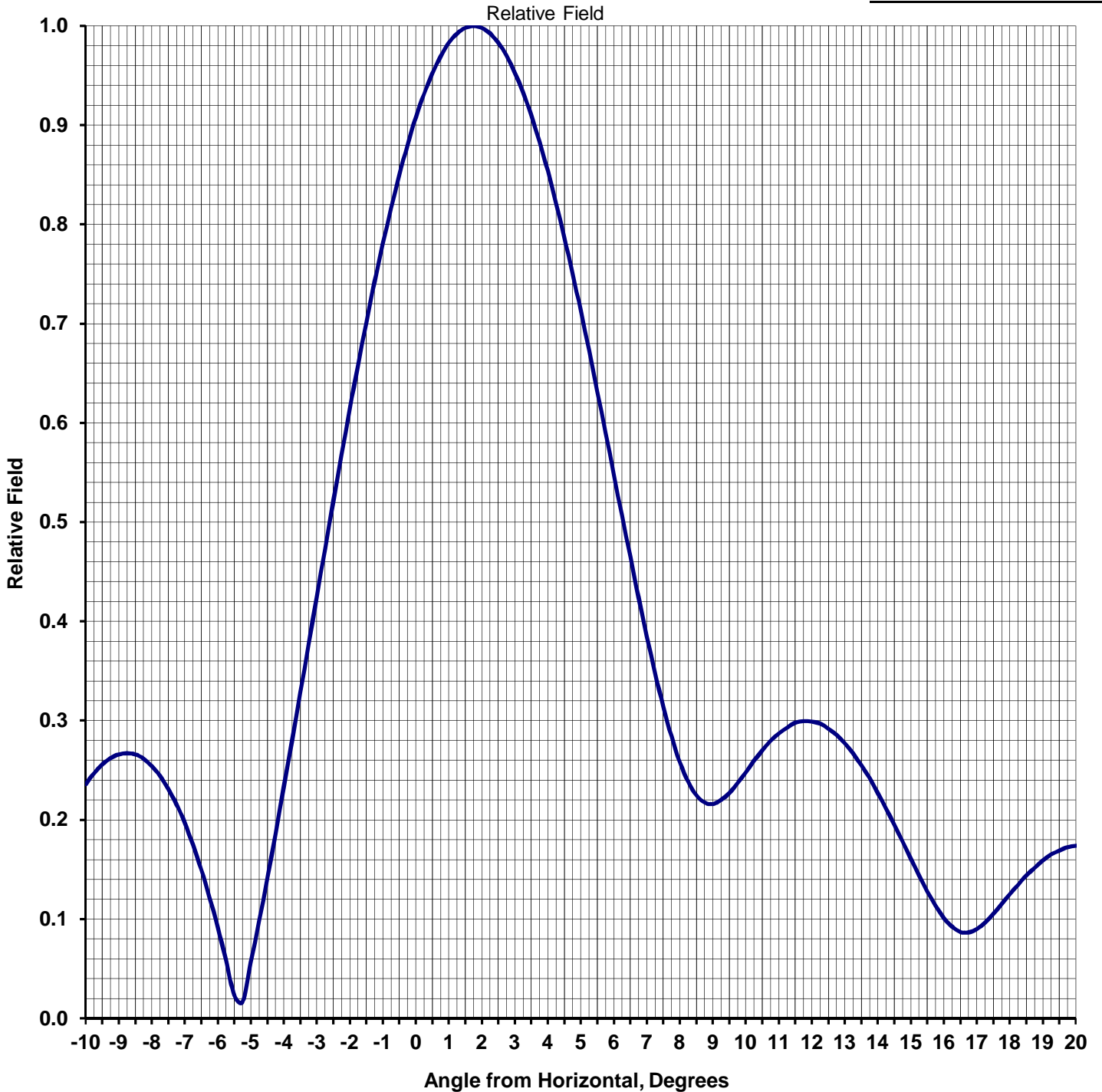
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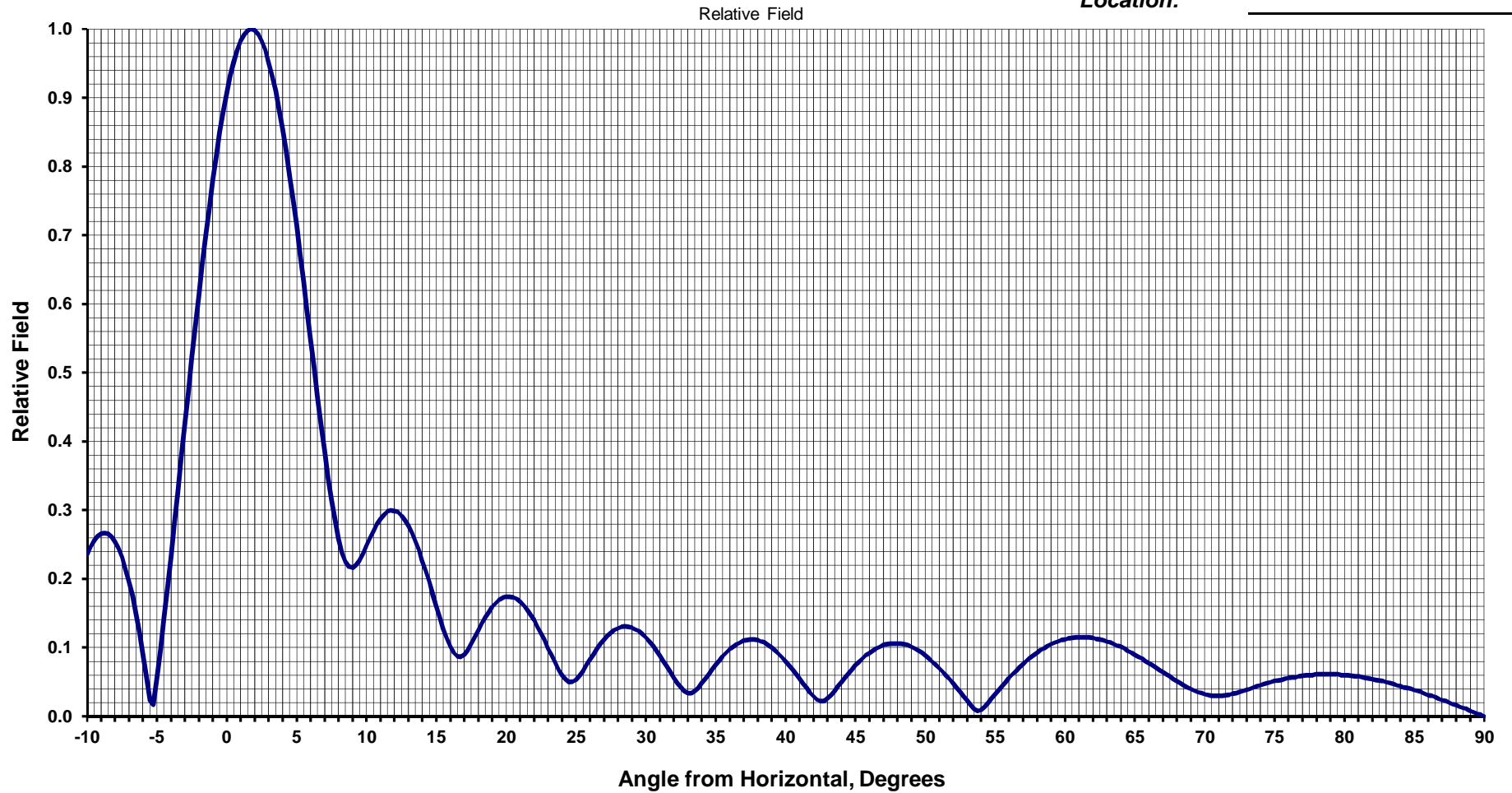
**ELEVATION PATTERN**

<b>TYPE:</b>	<b>ALPL8L7</b>	
<b>Directivity:</b>	<b>Numeric</b>	<b>dBd</b>
<b>Main Lobe:</b>	<b>8.50</b>	<b>(9.29)</b>
<b>Horizontal:</b>	<b>7.01</b>	<b>(8.46)</b>
<b>Beam Tilt:</b>	<b>1.75</b>	
<b>Polarization:</b>	<b>Horizontal/Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		



**ELEVATION PATTERN**

<b>TYPE:</b>	<b>ALPL8L7</b>	
<b>Directivity:</b>	<b>Numeric</b>	<b>dBd</b>
<b>Main Lobe:</b>	<b>8.50</b>	<b>9.29</b>
<b>Horizontal:</b>	<b>7.01</b>	<b>(8.46)</b>
<b>Beam Tilt:</b>	<b>1.75</b>	
<b>Polarization:</b>	<b>Horizontal/Vertical</b>	
<b>Frequency:</b>		
<b>Location:</b>		



# TABULATED DATA FOR ELEVATION PATTERN

TYPE: **ALPL8L7**

-10 to 10 degrees in 0.25 increments

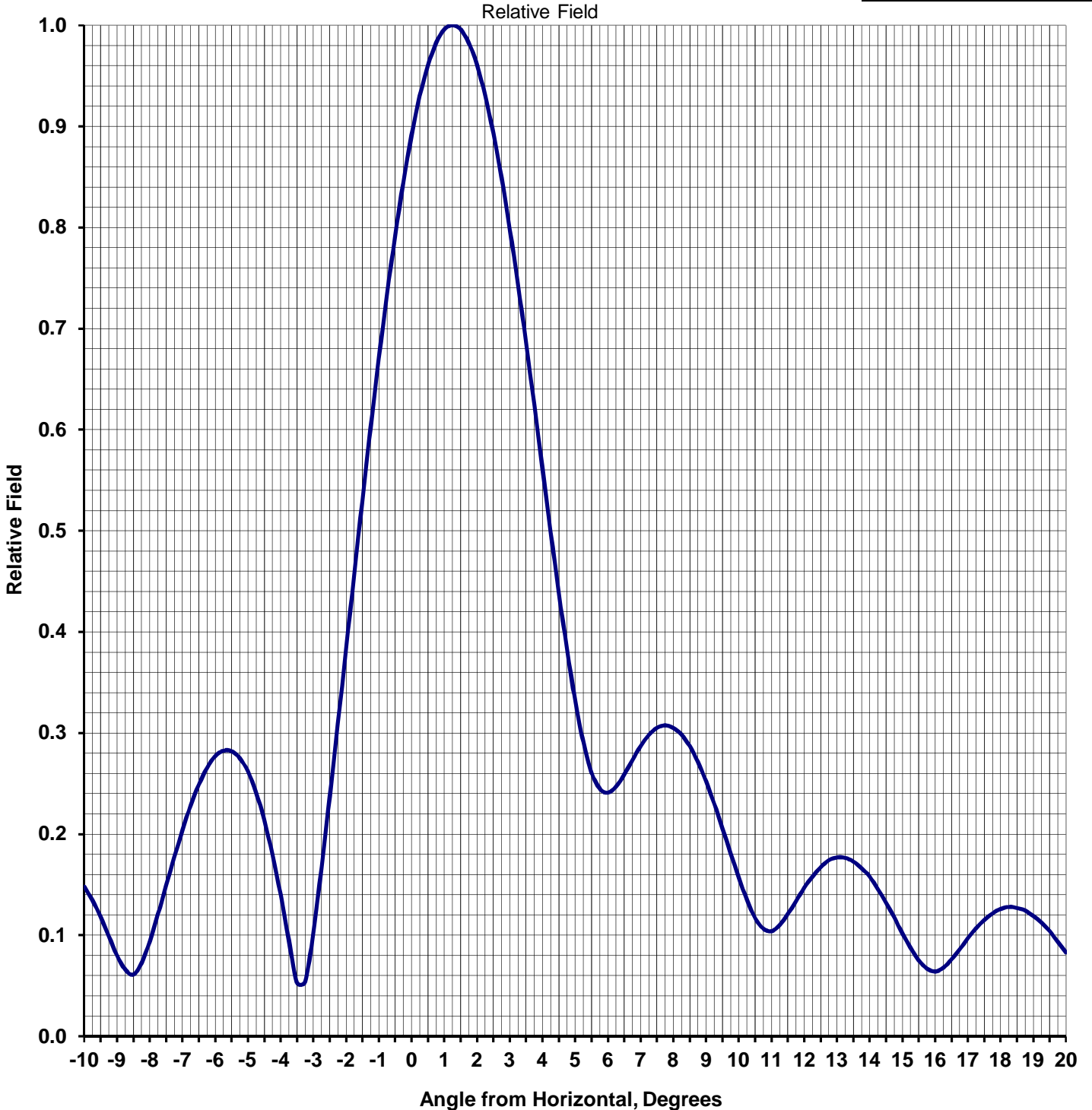
10 to 90 degrees in 0.50 increments

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
-10.00	0.236	-12.54	2.25	0.993	-0.07	18.50	0.144	-16.83	43.00	0.026	-31.70	67.50	0.058	-24.73
-9.75	0.247	-12.15	2.50	0.983	-0.15	19.00	0.159	-15.97	43.50	0.037	-28.64	68.00	0.051	-25.85
-9.50	0.256	-11.84	2.75	0.970	-0.26	19.50	0.169	-15.44	44.00	0.050	-26.02	68.50	0.045	-26.94
-9.25	0.262	-11.63	3.00	0.953	-0.42	20.00	0.174	-15.19	44.50	0.062	-24.15	69.00	0.040	-27.96
-9.00	0.266	-11.50	3.25	0.933	-0.60	20.50	0.173	-15.24	45.00	0.074	-22.62	69.50	0.035	-29.12
-8.75	0.267	-11.47	3.50	0.910	-0.82	21.00	0.167	-15.55	45.50	0.084	-21.51	70.00	0.032	-29.90
-8.50	0.266	-11.50	3.75	0.883	-1.08	21.50	0.155	-16.19	46.00	0.092	-20.72	70.50	0.030	-30.46
-8.25	0.262	-11.65	4.00	0.854	-1.37	22.00	0.140	-17.08	46.50	0.099	-20.09	71.00	0.030	-30.46
-8.00	0.254	-11.90	4.25	0.822	-1.71	22.50	0.120	-18.42	47.00	0.104	-19.66	71.50	0.031	-30.17
-7.75	0.245	-12.23	4.50	0.787	-2.08	23.00	0.099	-20.09	47.50	0.106	-19.49	72.00	0.033	-29.63
-7.50	0.231	-12.73	4.75	0.751	-2.49	23.50	0.078	-22.16	48.00	0.106	-19.49	72.50	0.035	-29.12
-7.25	0.216	-13.33	5.00	0.713	-2.94	24.00	0.060	-24.44	48.50	0.105	-19.58	73.00	0.038	-28.40
-7.00	0.197	-14.11	5.25	0.673	-3.44	24.50	0.050	-26.02	49.00	0.101	-19.91	73.50	0.042	-27.54
-6.75	0.175	-15.16	5.50	0.632	-3.99	25.00	0.053	-25.51	49.50	0.096	-20.35	74.00	0.045	-26.94
-6.50	0.150	-16.48	5.75	0.591	-4.58	25.50	0.066	-23.61	50.00	0.089	-21.01	74.50	0.048	-26.38
-6.25	0.122	-18.27	6.00	0.548	-5.22	26.00	0.083	-21.62	50.50	0.080	-21.94	75.00	0.051	-25.85
-6.00	0.092	-20.72	6.25	0.507	-5.91	26.50	0.098	-20.18	51.00	0.070	-23.10	75.50	0.053	-25.51
-5.75	0.059	-24.66	6.50	0.465	-6.65	27.00	0.112	-19.02	51.50	0.059	-24.58	76.00	0.056	-25.04
-5.50	0.023	-32.77	6.75	0.424	-7.45	27.50	0.122	-18.27	52.00	0.048	-26.38	76.50	0.057	-24.88
-5.25	0.017	-35.65	7.00	0.385	-8.29	28.00	0.128	-17.86	52.50	0.035	-29.12	77.00	0.059	-24.58
-5.00	0.056	-25.04	7.25	0.348	-9.17	28.50	0.131	-17.65	53.00	0.023	-32.77	77.50	0.060	-24.44
-4.75	0.098	-20.22	7.50	0.314	-10.06	29.00	0.129	-17.79	53.50	0.011	-39.17	78.00	0.061	-24.29
-4.50	0.141	-17.02	7.75	0.284	-10.93	29.50	0.124	-18.13	54.00	0.009	-40.92	78.50	0.061	-24.29
-4.25	0.186	-14.61	8.00	0.258	-11.77	30.00	0.115	-18.79	54.50	0.020	-33.98	79.00	0.061	-24.29
-4.00	0.233	-12.65	8.25	0.239	-12.45	30.50	0.103	-19.74	55.00	0.032	-29.90	79.50	0.061	-24.29
-3.75	0.280	-11.06	8.50	0.225	-12.96	31.00	0.088	-21.11	55.50	0.044	-27.13	80.00	0.060	-24.44
-3.50	0.328	-9.68	8.75	0.218	-13.25	31.50	0.073	-22.73	56.00	0.056	-25.04	80.50	0.059	-24.58
-3.25	0.377	-8.48	9.00	0.216	-13.31	32.00	0.056	-25.04	56.50	0.066	-23.61	81.00	0.058	-24.73
-3.00	0.425	-7.43	9.25	0.220	-13.15	32.50	0.042	-27.54	57.00	0.076	-22.38	81.50	0.056	-25.04
-2.75	0.473	-6.50	9.50	0.227	-12.88	33.00	0.034	-29.37	57.50	0.085	-21.41	82.00	0.054	-25.35
-2.50	0.521	-5.66	9.75	0.237	-12.51	33.50	0.037	-28.64	58.00	0.093	-20.63	82.50	0.052	-25.68
-2.25	0.568	-4.92	10.00	0.248	-12.11	34.00	0.048	-26.38	58.50	0.099	-20.09	83.00	0.050	-26.02
-2.00	0.614	-4.24	10.25	0.260	-11.72	34.50	0.061	-24.29	59.00	0.105	-19.58	83.50	0.047	-26.56
-1.75	0.658	-3.64	10.50	0.270	-11.37	35.00	0.075	-22.50	59.50	0.109	-19.25	84.00	0.044	-27.13
-1.50	0.701	-3.09	11.00	0.287	-10.84	35.50	0.087	-21.21	60.00	0.112	-19.02	84.50	0.04	-27.74
-1.25	0.742	-2.59	11.50	0.298	-10.52	36.00	0.098	-20.18	60.50	0.114	-18.86	85.00	0.04	-28.40
-1.00	0.780	-2.16	12.00	0.299	-10.49	36.50	0.105	-19.58	61.00	0.115	-18.79	85.50	0.04	-29.12
-0.75	0.816	-1.77	12.50	0.292	-10.69	37.00	0.110	-19.17	61.50	0.115	-18.79	86.00	0.03	-30.17
-0.50	0.850	-1.41	13.00	0.277	-11.15	37.50	0.112	-19.02	62.00	0.114	-18.86	86.50	0.03	-31.06
-0.25	0.880	-1.11	13.50	0.255	-11.87	38.00	0.111	-19.09	62.50	0.112	-19.02	87.00	0.02	-32.40
0.00	0.908	-0.84	14.00	0.227	-12.88	38.50	0.107	-19.41	63.00	0.109	-19.25	87.50	0.02	-33.98
0.25	0.932	-0.62	14.50	0.195	-14.20	39.00	0.100	-20.00	63.50	0.105	-19.58	88.00	0.02	-35.92
0.50	0.952	-0.43	15.00	0.161	-15.86	39.50	0.091	-20.82	64.00	0.101	-19.91	88.50	0.01	-38.42
0.75	0.969	-0.27	15.50	0.128	-17.86	40.00	0.080	-21.94	64.50	0.095	-20.45	89.00	0.01	-41.94
1.00	0.983	-0.15	16.00	0.101	-19.91	40.50	0.068	-23.35	65.00	0.090	-20.92	89.50	0.00	-47.96
1.25	0.993	-0.07	16.50	0.087	-21.21	41.00	0.055	-25.19	65.50	0.084	-21.51	90.00	0.00	---
1.50	0.998	-0.02	17.00	0.090	-20.92	41.50	0.041	-27.74	66.00	0.077	-22.27			
1.75	1.000	0.00	17.50	0.105	-19.58	42.00	0.029	-30.75	66.50	0.071	-22.97			
2.00	0.998	-0.02	18.00	0.125	-18.06	42.50	0.022	-33.15	67.00	0.064	-23.88			



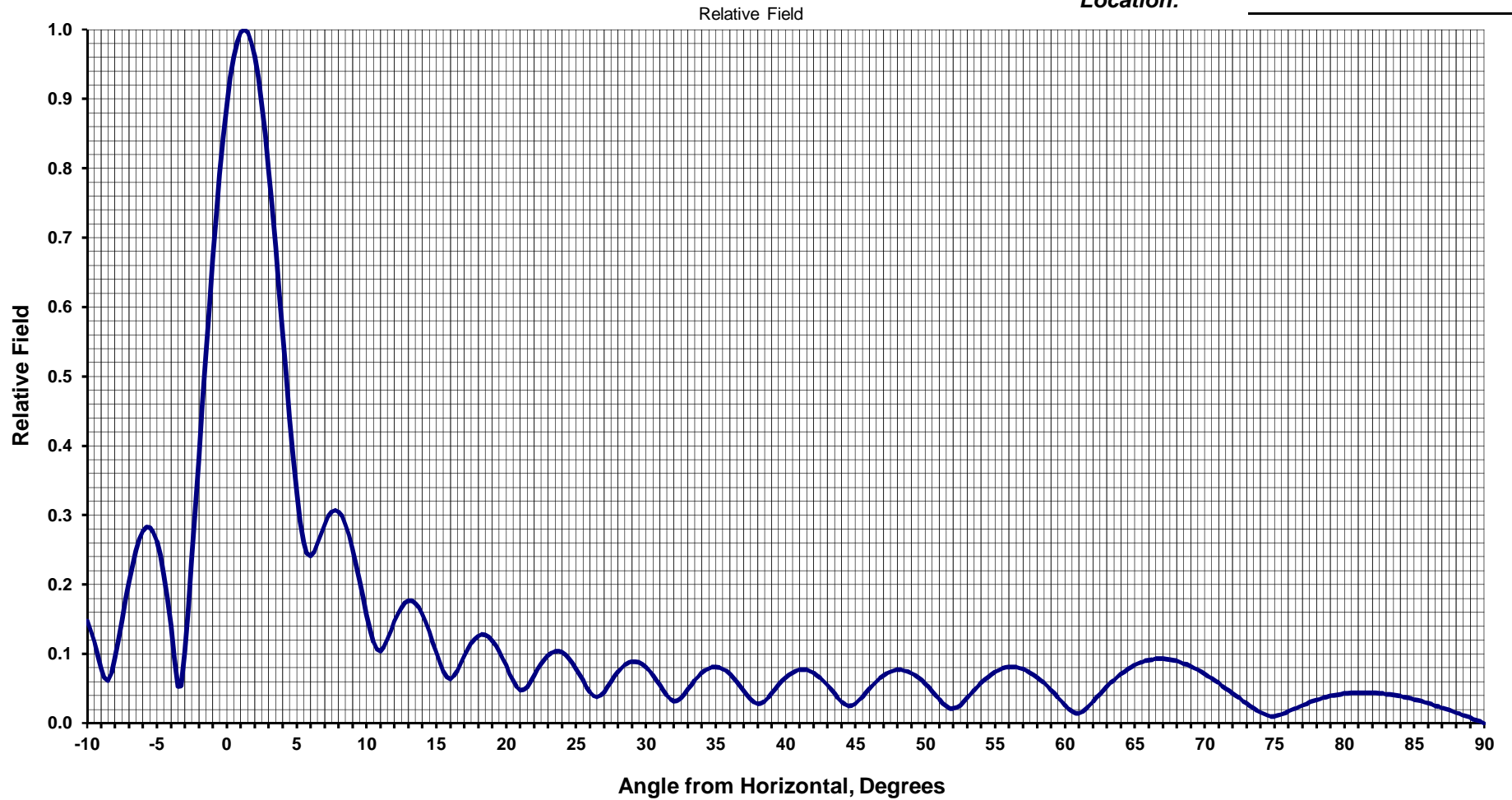
**ELEVATION PATTERN**

<b>TYPE:</b>	<b>ALPL12L5</b>	
<b>Directivity:</b>	<b>Numeric</b>	<b>dBd</b>
<b>Main Lobe:</b>	<b>12.72</b>	<b>(11.04)</b>
<b>Horizontal:</b>	<b>10.10</b>	<b>(10.04)</b>
<b>Beam Tilt:</b>	<b>1.25</b>	
<b>Polarization:</b>	<b>Horizontal/Vertical</b>	
<b>Channel:</b>		
<b>Location:</b>		



**ELEVATION PATTERN**

<b>TYPE:</b>	<b>ALPL12L5</b>	
<b>Directivity:</b>	<b>Numeric</b>	<b>dBd</b>
<b>Main Lobe:</b>	<b>12.72</b>	<b>11.04</b>
<b>Horizontal:</b>	<b>10.10</b>	<b>10.04</b>
<b>Beam Tilt:</b>	<b>1.25</b>	
<b>Polarization:</b>	<b>Horizontal/Vertical</b>	
<b>Frequency:</b>		
<b>Location:</b>		



# TABULATED DATA FOR ELEVATION PATTERN

TYPE: **ALPL12L5**

-10 to 10 degrees in 0.25 increments

10 to 90 degrees in 0.50 increments

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
-10.00	0.148	-16.59	2.25	0.931	-0.63	18.50	0.127	-17.92	43.00	0.055	-25.19	67.50	0.092	-20.72
-9.75	0.135	-17.43	2.50	0.893	-0.98	19.00	0.119	-18.49	43.50	0.043	-27.33	68.00	0.090	-20.92
-9.50	0.118	-18.56	2.75	0.850	-1.42	19.50	0.104	-19.66	44.00	0.031	-30.17	68.50	0.086	-21.31
-9.25	0.099	-20.09	3.00	0.799	-1.95	20.00	0.083	-21.62	44.50	0.025	-32.04	69.00	0.082	-21.72
-9.00	0.080	-21.94	3.25	0.745	-2.56	20.50	0.061	-24.29	45.00	0.028	-31.06	69.50	0.077	-22.27
-8.75	0.066	-23.61	3.50	0.686	-3.27	21.00	0.048	-26.38	45.50	0.038	-28.40	70.00	0.071	-22.97
-8.50	0.061	-24.29	3.75	0.625	-4.09	21.50	0.052	-25.68	46.00	0.050	-26.02	70.50	0.065	-23.74
-8.25	0.073	-22.79	4.00	0.562	-5.01	22.00	0.069	-23.22	46.50	0.060	-24.44	71.00	0.058	-24.73
-8.00	0.094	-20.54	4.25	0.500	-6.03	22.50	0.086	-21.31	47.00	0.069	-23.22	71.50	0.050	-26.02
-7.75	0.121	-18.38	4.50	0.439	-7.15	23.00	0.098	-20.18	47.50	0.074	-22.62	72.00	0.043	-27.33
-7.50	0.149	-16.54	4.75	0.383	-8.34	23.50	0.104	-19.66	48.00	0.077	-22.27	72.50	0.036	-28.87
-7.25	0.178	-15.02	5.00	0.332	-9.58	24.00	0.102	-19.83	48.50	0.076	-22.38	73.00	0.029	-30.75
-7.00	0.204	-13.81	5.25	0.291	-10.72	24.50	0.093	-20.63	49.00	0.072	-22.85	73.50	0.022	-33.15
-6.75	0.229	-12.82	5.50	0.261	-11.67	25.00	0.079	-22.05	49.50	0.066	-23.61	74.00	0.016	-35.92
-6.50	0.249	-12.08	5.75	0.245	-12.22	25.50	0.062	-24.15	50.00	0.057	-24.88	74.50	0.011	-39.17
-6.25	0.266	-11.52	6.00	0.241	-12.36	26.00	0.045	-26.94	50.50	0.046	-26.74	75.00	0.010	-40.00
-6.00	0.277	-11.15	6.25	0.247	-12.15	26.50	0.038	-28.40	51.00	0.035	-29.12	75.50	0.013	-37.72
-5.75	0.283	-10.98	6.50	0.259	-11.73	27.00	0.045	-26.94	51.50	0.025	-32.04	76.00	0.017	-35.39
-5.50	0.282	-11.00	6.75	0.273	-11.28	27.50	0.060	-24.44	52.00	0.021	-33.56	76.50	0.021	-33.56
-5.25	0.275	-11.21	7.00	0.287	-10.84	28.00	0.074	-22.62	52.50	0.026	-31.70	77.00	0.026	-31.70
-5.00	0.262	-11.63	7.25	0.298	-10.52	28.50	0.084	-21.51	53.00	0.037	-28.64	77.50	0.030	-30.46
-4.75	0.241	-12.36	7.50	0.305	-10.31	29.00	0.089	-21.01	53.50	0.048	-26.38	78.00	0.033	-29.63
-4.50	0.214	-13.39	7.75	0.308	-10.24	29.50	0.088	-21.11	54.00	0.058	-24.73	78.50	0.037	-28.64
-4.25	0.180	-14.92	8.00	0.305	-10.31	30.00	0.081	-21.83	54.50	0.067	-23.48	79.00	0.039	-28.18
-4.00	0.140	-17.08	8.25	0.299	-10.50	30.50	0.069	-23.22	55.00	0.074	-22.62	79.50	0.041	-27.74
-3.75	0.095	-20.45	8.50	0.287	-10.84	31.00	0.055	-25.19	55.50	0.079	-22.05	80.00	0.043	-27.33
-3.50	0.053	-25.51	8.75	0.272	-11.32	31.50	0.040	-27.96	56.00	0.081	-21.83	80.50	0.044	-27.13
-3.25	0.054	-25.35	9.00	0.252	-11.97	32.00	0.032	-29.90	56.50	0.081	-21.83	81.00	0.044	-27.13
-3.00	0.103	-19.74	9.25	0.230	-12.77	32.50	0.036	-28.87	57.00	0.078	-22.16	81.50	0.044	-27.13
-2.75	0.168	-15.52	9.50	0.206	-13.72	33.00	0.049	-26.20	57.50	0.073	-22.73	82.00	0.044	-27.13
-2.50	0.237	-12.51	9.75	0.181	-14.85	33.50	0.062	-24.15	58.00	0.066	-23.61	82.50	0.043	-27.33
-2.25	0.310	-10.19	10.00	0.157	-16.08	34.00	0.073	-22.73	58.50	0.058	-24.73	83.00	0.042	-27.54
-2.00	0.383	-8.34	10.25	0.135	-17.39	34.50	0.079	-22.05	59.00	0.048	-26.38	83.50	0.041	-27.74
-1.75	0.458	-6.79	10.50	0.117	-18.64	35.00	0.081	-21.83	59.50	0.037	-28.64	84.00	0.039	-28.18
-1.50	0.531	-5.50	11.00	0.104	-19.66	35.50	0.078	-22.16	60.00	0.026	-31.70	84.50	0.04	-28.64
-1.25	0.602	-4.41	11.50	0.121	-18.34	36.00	0.071	-22.97	60.50	0.017	-35.39	85.00	0.03	-29.37
-1.00	0.670	-3.48	12.00	0.147	-16.65	36.50	0.060	-24.44	61.00	0.014	-37.08	85.50	0.03	-29.90
-0.75	0.734	-2.69	12.50	0.167	-15.55	37.00	0.047	-26.56	61.50	0.021	-33.56	86.00	0.03	-30.75
-0.50	0.792	-2.03	13.00	0.177	-15.04	37.50	0.035	-29.12	62.00	0.031	-30.17	86.50	0.03	-32.04
-0.25	0.845	-1.46	13.50	0.173	-15.24	38.00	0.028	-31.06	62.50	0.042	-27.54	87.00	0.02	-33.15
0.00	0.891	-1.00	14.00	0.158	-16.03	38.50	0.032	-29.90	63.00	0.053	-25.51	87.50	0.02	-34.42
0.25	0.930	-0.63	14.50	0.132	-17.59	39.00	0.043	-27.33	63.50	0.062	-24.15	88.00	0.02	-36.48
0.50	0.960	-0.35	15.00	0.102	-19.83	39.50	0.055	-25.19	64.00	0.071	-22.97	88.50	0.01	-39.17
0.75	0.983	-0.15	15.50	0.075	-22.50	40.00	0.066	-23.61	64.50	0.078	-22.16	89.00	0.01	-41.94
1.00	0.996	-0.03	16.00	0.064	-23.88	40.50	0.073	-22.73	65.00	0.084	-21.51	89.50	0.00	-47.96
1.25	1.000	0.00	16.50	0.076	-22.38	41.00	0.077	-22.27	65.50	0.088	-21.11	90.00	0.00	---
1.50	0.996	-0.03	17.00	0.097	-20.26	41.50	0.077	-22.27	66.00	0.091	-20.82			
1.75	0.983	-0.15	17.50	0.115	-18.79	42.00	0.073	-22.73	66.50	0.093	-20.63			
2.00	0.961	-0.35	18.00	0.126	-17.99	42.50	0.065	-23.74	67.00	0.093	-20.63			

