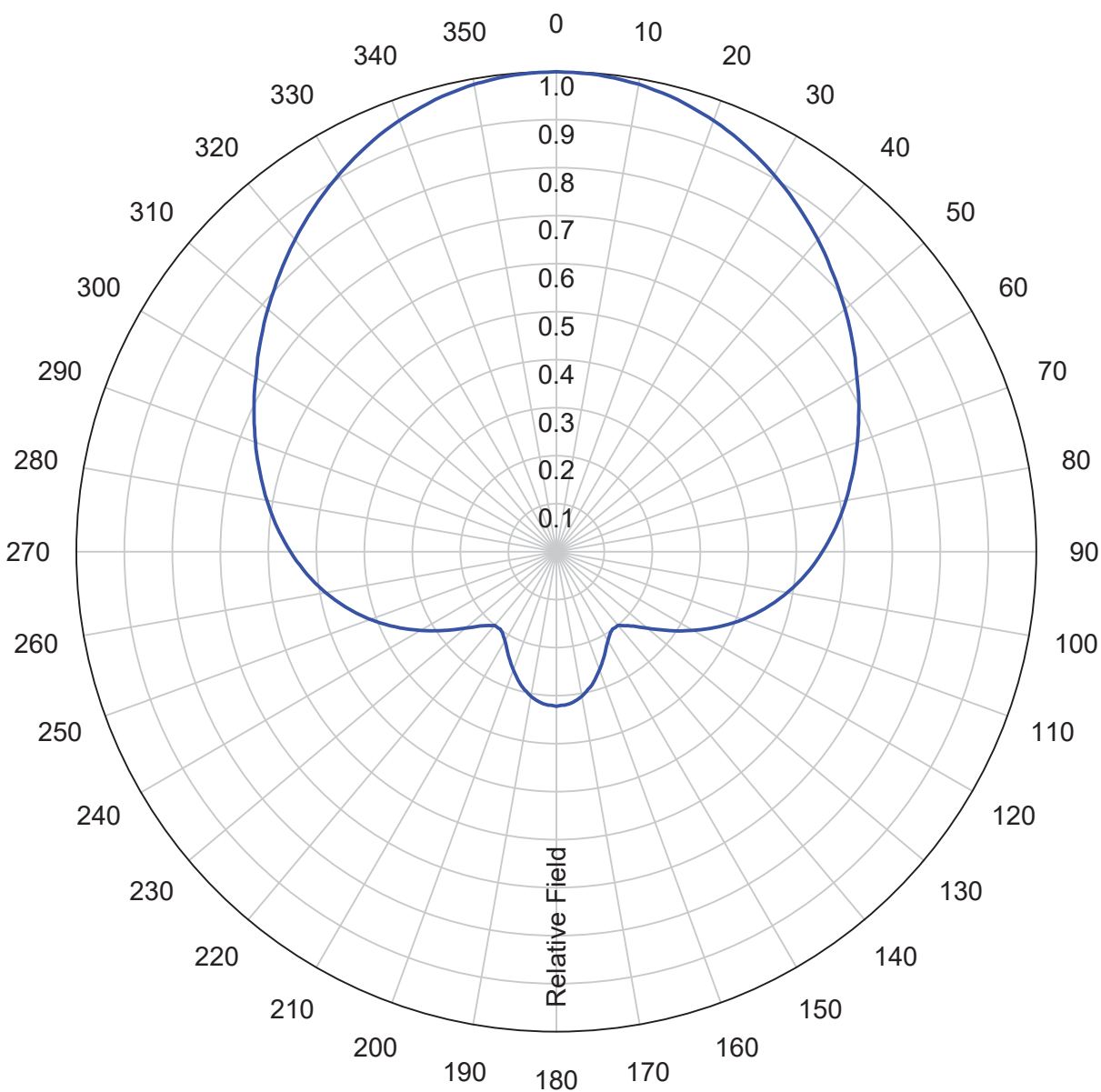


**AZIMUTH PATTERN****Type:**ATW-C4**Channel:**32**Directivity:**NumericdBd2.544.05**Peak(s) at:****Location:****Polarization:**Horizontal

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



*Preliminary, subject to final design and review.*

## TABULATED DATA FOR AZIMUTH PATTERN

Type: ATW-C4

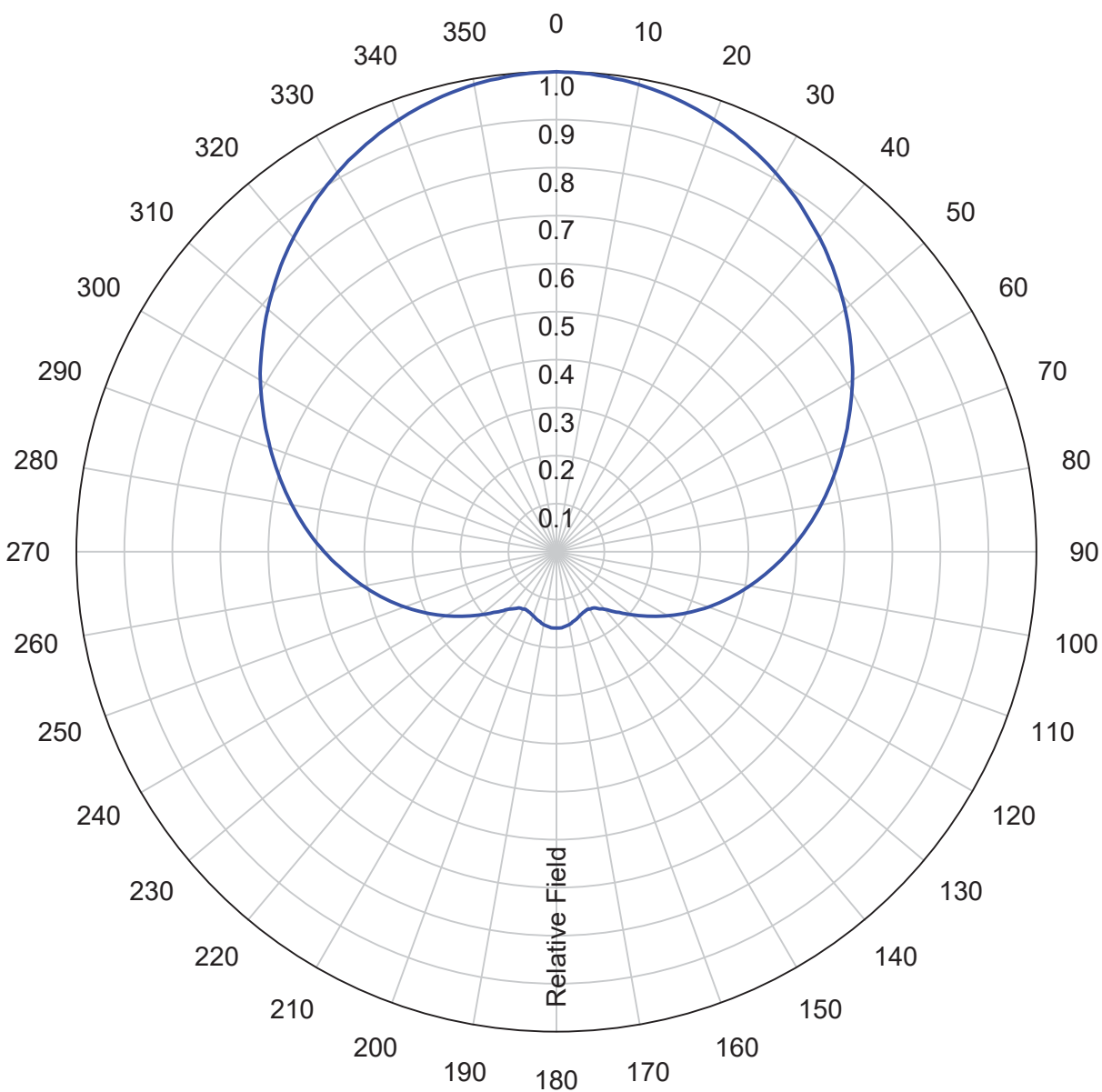
Polarization: Horizontal

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.542	-5.32	184	0.319	-9.92	276	0.590	-4.58
2	0.999	-0.01	94	0.529	-5.53	186	0.316	-10.01	278	0.601	-4.42
4	0.998	-0.02	96	0.516	-5.75	188	0.311	-10.14	280	0.612	-4.26
6	0.995	-0.04	98	0.503	-5.97	190	0.306	-10.29	282	0.623	-4.11
8	0.992	-0.07	100	0.489	-6.21	192	0.298	-10.52	284	0.634	-3.96
10	0.989	-0.10	102	0.474	-6.48	194	0.291	-10.72	286	0.645	-3.81
12	0.983	-0.15	104	0.459	-6.76	196	0.282	-11.00	288	0.656	-3.66
14	0.978	-0.19	106	0.444	-7.05	198	0.272	-11.31	290	0.667	-3.52
16	0.971	-0.26	108	0.429	-7.35	200	0.262	-11.63	292	0.678	-3.38
18	0.964	-0.32	110	0.413	-7.68	202	0.252	-11.97	294	0.689	-3.24
20	0.956	-0.39	112	0.396	-8.05	204	0.242	-12.32	296	0.701	-3.09
22	0.947	-0.47	114	0.379	-8.43	206	0.232	-12.69	298	0.712	-2.95
24	0.938	-0.56	116	0.362	-8.83	208	0.223	-13.03	300	0.723	-2.82
26	0.928	-0.65	118	0.345	-9.24	210	0.214	-13.39	302	0.735	-2.67
28	0.917	-0.75	120	0.328	-9.68	212	0.208	-13.64	304	0.748	-2.52
30	0.907	-0.85	122	0.311	-10.14	214	0.202	-13.89	306	0.760	-2.38
32	0.895	-0.96	124	0.294	-10.63	216	0.199	-14.02	308	0.773	-2.24
34	0.884	-1.07	126	0.278	-11.12	218	0.200	-13.98	310	0.785	-2.10
36	0.872	-1.19	128	0.263	-11.60	220	0.200	-13.98	312	0.797	-1.97
38	0.860	-1.31	130	0.247	-12.15	222	0.207	-13.68	314	0.810	-1.83
40	0.848	-1.43	132	0.235	-12.58	224	0.214	-13.39	316	0.822	-1.70
42	0.835	-1.57	134	0.223	-13.03	226	0.223	-13.03	318	0.835	-1.57
44	0.822	-1.70	136	0.214	-13.39	228	0.235	-12.58	320	0.848	-1.43
46	0.810	-1.83	138	0.207	-13.68	230	0.247	-12.15	322	0.860	-1.31
48	0.797	-1.97	140	0.200	-13.98	232	0.263	-11.60	324	0.872	-1.19
50	0.785	-2.10	142	0.200	-13.98	234	0.278	-11.12	326	0.884	-1.07
52	0.773	-2.24	144	0.199	-14.02	236	0.294	-10.63	328	0.895	-0.96
54	0.760	-2.38	146	0.202	-13.89	238	0.311	-10.14	330	0.907	-0.85
56	0.748	-2.52	148	0.208	-13.64	240	0.328	-9.68	332	0.917	-0.75
58	0.735	-2.67	150	0.214	-13.39	242	0.345	-9.24	334	0.928	-0.65
60	0.723	-2.82	152	0.223	-13.03	244	0.362	-8.83	336	0.938	-0.56
62	0.712	-2.95	154	0.232	-12.69	246	0.379	-8.43	338	0.947	-0.47
64	0.701	-3.09	156	0.242	-12.32	248	0.396	-8.05	340	0.956	-0.39
66	0.689	-3.24	158	0.252	-11.97	250	0.413	-7.68	342	0.964	-0.32
68	0.678	-3.38	160	0.262	-11.63	252	0.429	-7.35	344	0.971	-0.26
70	0.667	-3.52	162	0.272	-11.31	254	0.444	-7.05	346	0.978	-0.19
72	0.656	-3.66	164	0.282	-11.00	256	0.459	-6.76	348	0.983	-0.15
74	0.645	-3.81	166	0.291	-10.72	258	0.474	-6.48	350	0.989	-0.10
76	0.634	-3.96	168	0.298	-10.52	260	0.489	-6.21	352	0.992	-0.07
78	0.623	-4.11	170	0.306	-10.29	262	0.503	-5.97	354	0.995	-0.04
80	0.612	-4.26	172	0.311	-10.14	264	0.516	-5.75	356	0.998	-0.02
82	0.601	-4.42	174	0.316	-10.01	266	0.529	-5.53	358	0.999	-0.01
84	0.590	-4.58	176	0.319	-9.92	268	0.542	-5.32	360	1.000	0.00
86	0.578	-4.76	178	0.320	-9.90	270	0.554	-5.13			
88	0.566	-4.94	180	0.322	-9.84	272	0.566	-4.94			
90	0.554	-5.13	182	0.320	-9.90	274	0.578	-4.76			

Preliminary, subject to final design and review.

**AZIMUTH PATTERN****Type:**ATW-V9**Channel:**32**Directivity:**NumericdBd2.764.41**Peak(s) at:****Location:****Polarization:**Vertical

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



*Preliminary, subject to final design and review.*

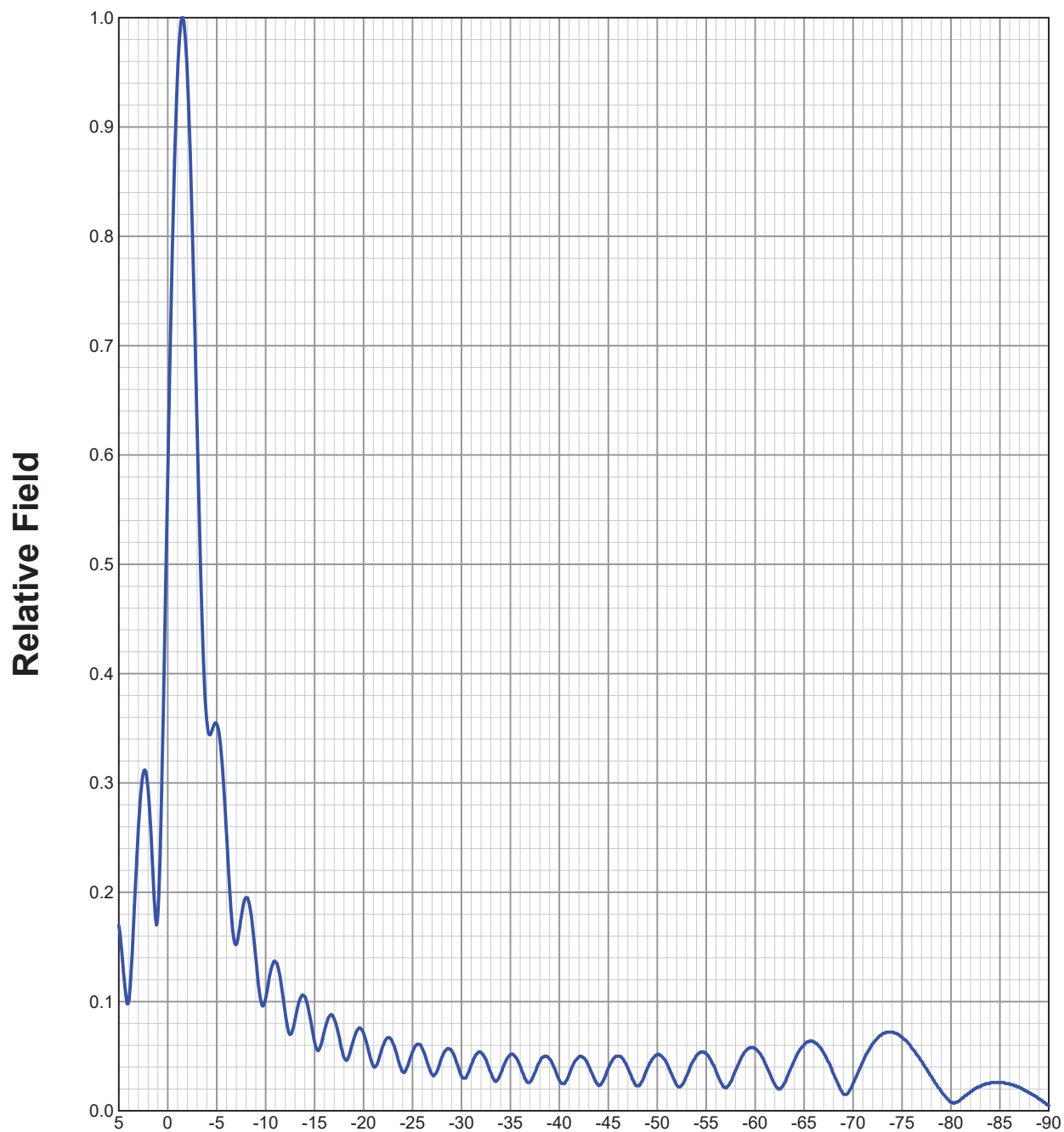
## TABULATED DATA FOR AZIMUTH PATTERN

Type: ATW-V9

Polarization: Vertical

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	1.000	0.00	92	0.469	-6.58	184	0.159	-15.97	276	0.529	-5.53
2	0.999	-0.01	94	0.453	-6.88	186	0.157	-16.08	278	0.544	-5.29
4	0.998	-0.02	96	0.438	-7.17	188	0.156	-16.14	280	0.559	-5.05
6	0.995	-0.04	98	0.424	-7.45	190	0.154	-16.25	282	0.575	-4.81
8	0.992	-0.07	100	0.409	-7.77	192	0.152	-16.36	284	0.589	-4.60
10	0.988	-0.10	102	0.395	-8.07	194	0.149	-16.54	286	0.604	-4.38
12	0.983	-0.15	104	0.380	-8.40	196	0.147	-16.65	288	0.619	-4.17
14	0.978	-0.19	106	0.365	-8.75	198	0.144	-16.83	290	0.635	-3.94
16	0.972	-0.25	108	0.351	-9.09	200	0.142	-16.95	292	0.650	-3.74
18	0.965	-0.31	110	0.337	-9.45	202	0.140	-17.08	294	0.665	-3.54
20	0.958	-0.37	112	0.322	-9.84	204	0.138	-17.20	296	0.681	-3.34
22	0.950	-0.45	114	0.308	-10.23	206	0.137	-17.27	298	0.696	-3.15
24	0.941	-0.53	116	0.294	-10.63	208	0.136	-17.33	300	0.712	-2.95
26	0.932	-0.61	118	0.280	-11.06	210	0.138	-17.20	302	0.727	-2.77
28	0.923	-0.70	120	0.267	-11.47	212	0.139	-17.14	304	0.741	-2.60
30	0.912	-0.80	122	0.253	-11.94	214	0.141	-17.02	306	0.756	-2.43
32	0.901	-0.91	124	0.241	-12.36	216	0.146	-16.71	308	0.771	-2.26
34	0.890	-1.01	126	0.228	-12.84	218	0.151	-16.42	310	0.785	-2.10
36	0.877	-1.14	128	0.216	-13.31	220	0.156	-16.14	312	0.799	-1.95
38	0.865	-1.26	130	0.204	-13.81	222	0.165	-15.65	314	0.813	-1.80
40	0.853	-1.38	132	0.193	-14.29	224	0.174	-15.19	316	0.827	-1.65
42	0.840	-1.51	134	0.182	-14.80	226	0.182	-14.80	318	0.840	-1.51
44	0.827	-1.65	136	0.174	-15.19	228	0.193	-14.29	320	0.853	-1.38
46	0.813	-1.80	138	0.165	-15.65	230	0.204	-13.81	322	0.865	-1.26
48	0.799	-1.95	140	0.156	-16.14	232	0.216	-13.31	324	0.877	-1.14
50	0.785	-2.10	142	0.151	-16.42	234	0.228	-12.84	326	0.890	-1.01
52	0.771	-2.26	144	0.146	-16.71	236	0.241	-12.36	328	0.901	-0.91
54	0.756	-2.43	146	0.141	-17.02	238	0.253	-11.94	330	0.912	-0.80
56	0.741	-2.60	148	0.139	-17.14	240	0.267	-11.47	332	0.923	-0.70
58	0.727	-2.77	150	0.138	-17.20	242	0.280	-11.06	334	0.932	-0.61
60	0.712	-2.95	152	0.136	-17.33	244	0.294	-10.63	336	0.941	-0.53
62	0.696	-3.15	154	0.137	-17.27	246	0.308	-10.23	338	0.950	-0.45
64	0.681	-3.34	156	0.138	-17.20	248	0.322	-9.84	340	0.958	-0.37
66	0.665	-3.54	158	0.140	-17.08	250	0.337	-9.45	342	0.965	-0.31
68	0.650	-3.74	160	0.142	-16.95	252	0.351	-9.09	344	0.972	-0.25
70	0.635	-3.94	162	0.144	-16.83	254	0.365	-8.75	346	0.978	-0.19
72	0.619	-4.17	164	0.147	-16.65	256	0.380	-8.40	348	0.983	-0.15
74	0.604	-4.38	166	0.149	-16.54	258	0.395	-8.07	350	0.988	-0.10
76	0.589	-4.60	168	0.152	-16.36	260	0.409	-7.77	352	0.992	-0.07
78	0.575	-4.81	170	0.154	-16.25	262	0.424	-7.45	354	0.995	-0.04
80	0.559	-5.05	172	0.156	-16.14	264	0.438	-7.17	356	0.998	-0.02
82	0.544	-5.29	174	0.157	-16.08	266	0.453	-6.88	358	0.999	-0.01
84	0.529	-5.53	176	0.159	-15.97	268	0.469	-6.58	360	1.000	0.00
86	0.514	-5.78	178	0.159	-15.97	270	0.484	-6.30			
88	0.499	-6.04	180	0.159	-15.97	272	0.499	-6.04			
90	0.484	-6.30	182	0.159	-15.97	274	0.514	-5.78			

Preliminary, subject to final design and review.

**ELEVATION PATTERN****Type:****ATW20H6H****Channel:****32****Directivity:****Numeric****dBd****Location:****Main Lobe:****20.00****13.01****Beam Tilt:****-1.50****Horizontal:****6.76****8.30****Polarization:****Horizontal***Preliminary, subject to final design and review.*

## TABULATED DATA FOR ELEVATION PATTERN

Type: ATW20H6H  
PolarizationHorizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.169	-15.42	-6.75	0.157	-16.08	-27.00	0.034	-29.50	-50.50
4.75	0.151	-16.42	-7.00	0.152	-16.33	-27.50	0.036	-28.87	-51.00
4.50	0.126	-18.03	-7.25	0.162	-15.81	-28.00	0.049	-26.20	-51.50
4.25	0.103	-19.74	-7.50	0.177	-15.04	-28.50	0.057	-24.96	-52.00
4.00	0.100	-20.00	-7.75	0.190	-14.42	-29.00	0.055	-25.19	-52.50
3.75	0.125	-18.06	-8.00	0.195	-14.20	-29.50	0.044	-27.03	-53.00
3.50	0.168	-15.47	-8.25	0.192	-14.33	-30.00	0.032	-29.90	-53.50
3.25	0.215	-13.35	-8.50	0.180	-14.87	-30.50	0.031	-30.17	-54.00
3.00	0.258	-11.77	-8.75	0.162	-15.81	-31.00	0.042	-27.54	-54.50
2.75	0.291	-10.72	-9.00	0.140	-17.11	-31.50	0.051	-25.76	-55.00
2.50	0.309	-10.20	-9.25	0.117	-18.64	-32.00	0.053	-25.43	-55.50
2.25	0.311	-10.14	-9.50	0.101	-19.91	-32.50	0.047	-26.56	-56.00
2.00	0.293	-10.66	-9.75	0.096	-20.35	-33.00	0.035	-29.12	-56.50
1.75	0.260	-11.70	-10.00	0.103	-19.74	-33.50	0.027	-31.37	-57.00
1.50	0.214	-13.37	-10.50	0.128	-17.89	-34.00	0.034	-29.37	-57.50
1.25	0.176	-15.09	-11.00	0.137	-17.30	-34.50	0.045	-26.94	-58.00
1.00	0.181	-14.85	-11.50	0.121	-18.34	-35.00	0.051	-25.76	-58.50
0.75	0.244	-12.25	-12.00	0.089	-20.96	-35.50	0.050	-26.11	-59.00
0.50	0.346	-9.23	-12.50	0.070	-23.10	-36.00	0.041	-27.74	-59.50
0.25	0.462	-6.71	-13.00	0.083	-21.57	-36.50	0.029	-30.60	-60.00
0.00	0.582	-4.71	-13.50	0.102	-19.83	-37.00	0.026	-31.54	-60.50
-0.25	0.697	-3.14	-14.00	0.104	-19.62	-37.50	0.035	-29.12	-61.00
-0.50	0.799	-1.95	-14.50	0.087	-21.16	-38.00	0.045	-26.94	-61.50
-0.75	0.885	-1.06	-15.00	0.063	-24.01	-38.50	0.050	-26.02	-62.00
-1.00	0.948	-0.46	-15.50	0.057	-24.88	-39.00	0.048	-26.47	-62.50
-1.25	0.988	-0.10	-16.00	0.073	-22.73	-39.50	0.039	-28.18	-63.00
-1.50	1.000	0.00	-16.50	0.086	-21.26	-40.00	0.028	-31.06	-63.50
-1.75	0.987	-0.11	-17.00	0.084	-21.51	-40.50	0.025	-32.04	-64.00
-2.00	0.948	-0.46	-17.50	0.068	-23.35	-41.00	0.034	-29.50	-64.50
-2.25	0.889	-1.02	-18.00	0.049	-26.20	-41.50	0.044	-27.13	-65.00
-2.50	0.810	-1.83	-18.50	0.050	-26.02	-42.00	0.050	-26.11	-65.50
-2.75	0.720	-2.85	-19.00	0.066	-23.68	-42.50	0.049	-26.29	-66.00
-3.00	0.625	-4.09	-19.50	0.075	-22.44	-43.00	0.041	-27.74	-66.50
-3.25	0.532	-5.48	-20.00	0.071	-22.97	-43.50	0.031	-30.17	-67.00
-3.50	0.451	-6.93	-20.50	0.056	-25.11	-44.00	0.024	-32.58	-67.50
-3.75	0.389	-8.20	-21.00	0.041	-27.74	-44.50	0.028	-31.06	-68.00
-4.00	0.355	-8.98	-21.50	0.045	-26.84	-45.00	0.039	-28.18	-68.50
-4.25	0.344	-9.27	-22.00	0.060	-24.44	-45.50	0.048	-26.47	-69.00
-4.50	0.347	-9.18	-22.50	0.067	-23.48	-46.00	0.050	-26.02	-69.50
-4.75	0.354	-9.02	-23.00	0.062	-24.15	-46.50	0.048	-26.47	-70.00
-5.00	0.354	-9.02	-23.50	0.048	-26.38	-47.00	0.039	-28.18	-70.50
-5.25	0.345	-9.24	-24.00	0.036	-28.87	-47.50	0.029	-30.90	-71.00
-5.50	0.324	-9.80	-24.50	0.041	-27.74	-48.00	0.023	-32.77	-71.50
-5.75	0.292	-10.69	-25.00	0.054	-25.35	-48.50	0.028	-31.06	-72.00
-6.00	0.254	-11.90	-25.50	0.061	-24.29	-49.00	0.039	-28.18	-72.50
-6.25	0.214	-13.39	-26.00	0.057	-24.88	-49.50	0.048	-26.47	-73.00
-6.50	0.179	-14.94	-26.50	0.044	-27.03	-50.00	0.051	-25.76	-73.50

Preliminary, subject to final design and review.