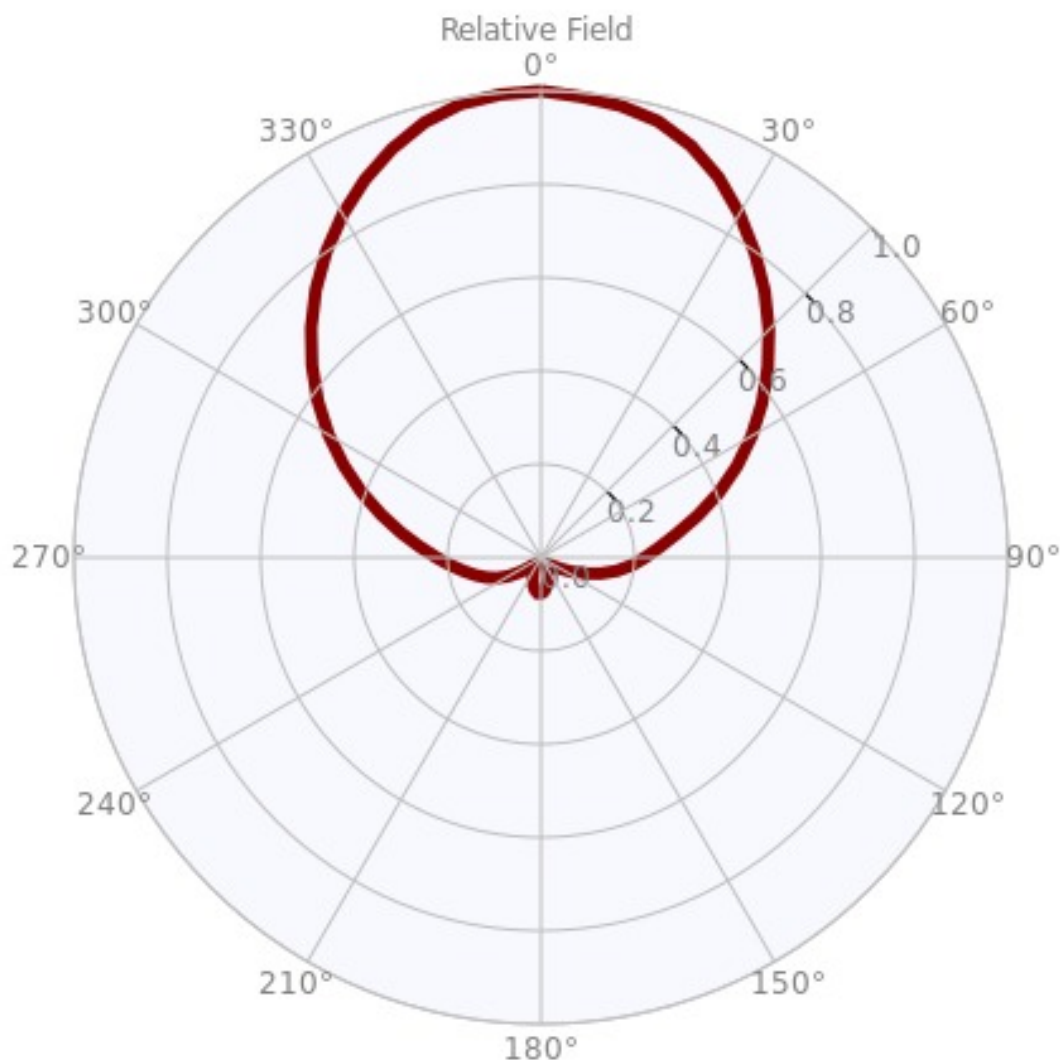


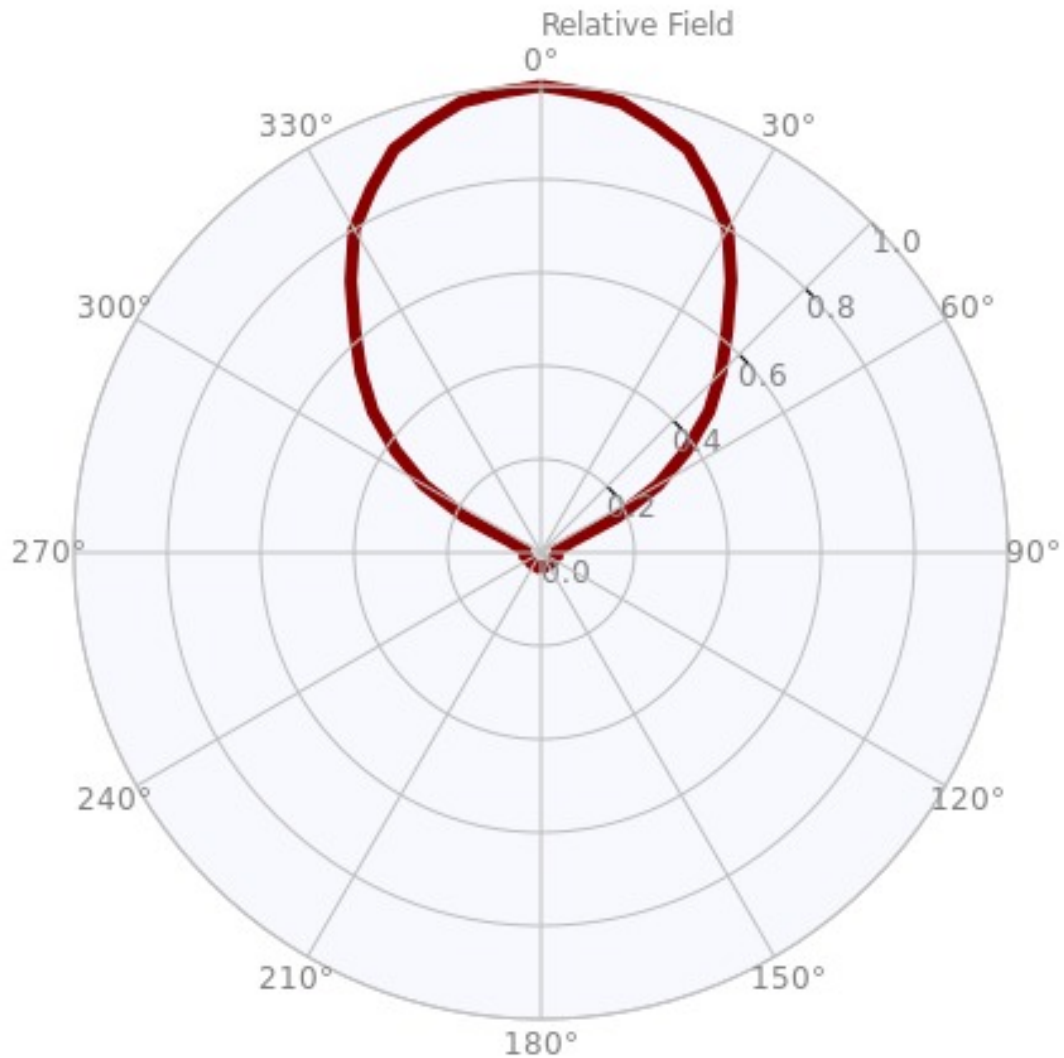
## Summary

Antenna Specifications	
Antenna Type	Coaxial Slot
Antenna Model	ATC-BCC830CF-V6-36
Electrical Specifications	
Channel(s)	36
Frequency Range (MHz)	602 - 608
Polarization	Circular
Horizontal Azimuth Pattern	CF
Directivity	3.10
dB	4.91
Vertical Azimuth Pattern	V6
Directivity	4.92
dB	0.00
Vertical Component	100 %
Azimuth Peak of Beam	0 °
Elevation Pattern	30
Directivity	30.00
dB	14.77
Electrical Beam Tilt	2.00 °
Antenna Peak Power Gain	
Horizontal Gain Power	46.50
Horizontal Gain Ratio	16.67 dBd
Vertical Gain Power	46.50
Vertical Gain Ratio	16.67 dBd
Line Type	6-1/8" 50 Ohm Rigid Line
Line Length	1,000 ft
Total Line Loss	1.19 dB
Effective Radiated Power (ERP)	1000 kW
ERP Vertical Power	1000.00 kW
Transmitter Power Output (TPO)	
TPO Power	28.28 kW
TPO Ratio	14.52 dBk
Input Type	EIA 6-1/8" 50 ohm
Mechanical Specifications	
Mount Type	Side Mount
Length of Antenna	51.61 ft
Center of Radiation	25.80 ft
Radome Diameter	TBD
Color	White
Calculated Weight	Contact Alive Telecom 1 2
Windload (Shear)	Contact Alive Telecom 1 2

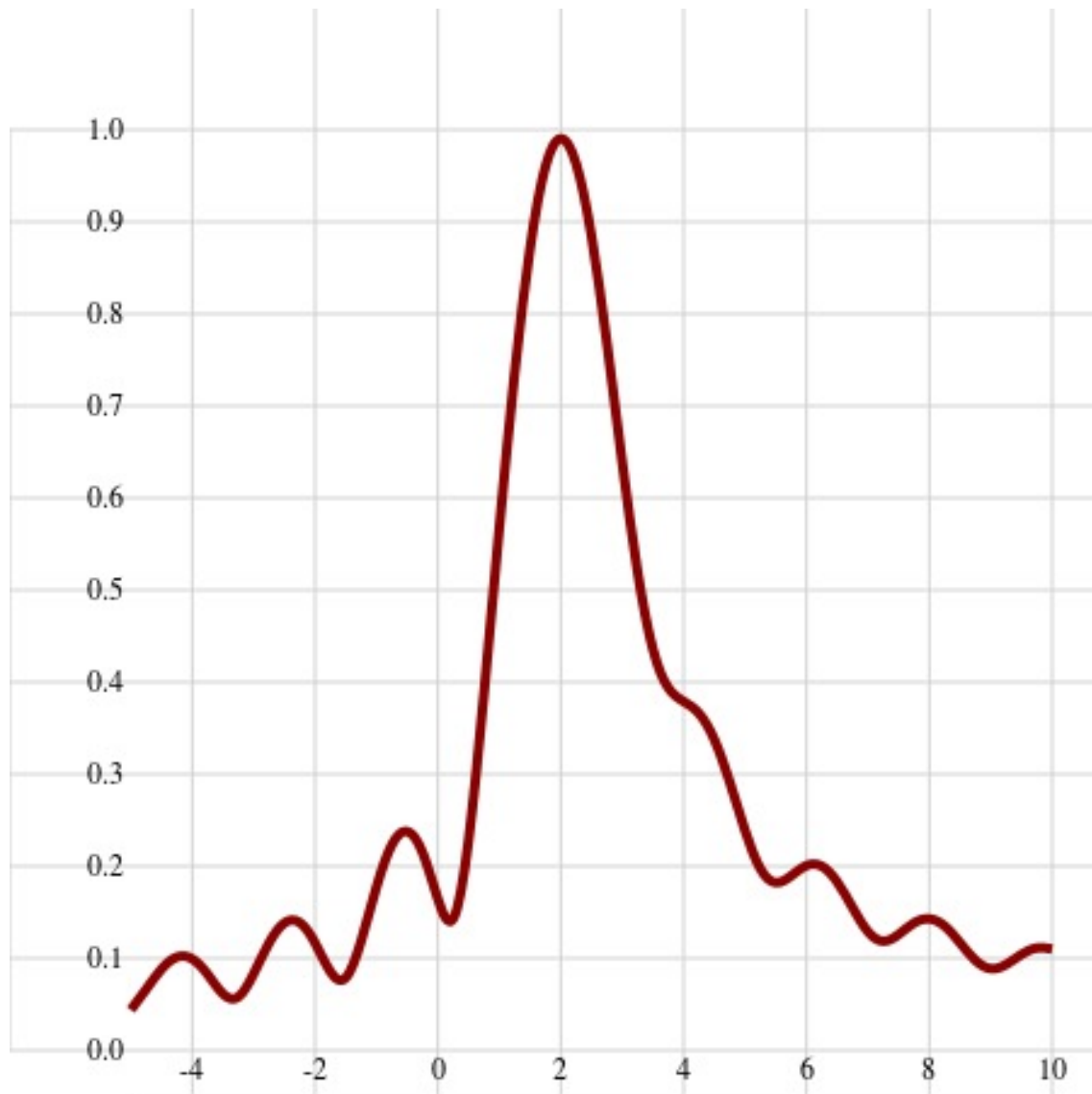
## Horizontal Azimuth Pattern



## Vertical Azimuth Pattern



## Elevation pattern -5 to 10



## Elevation pattern -5 to 90



## Azimuth Horizontal Pattern Tabulation

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	1.000	0.00	90°	0.223	-13.03	180°	0.077	-22.27	270°	0.224	-13.00
2°	0.996	-0.03	92°	0.211	-13.51	182°	0.078	-22.16	272°	0.237	-12.51
4°	0.993	-0.06	94°	0.200	-13.98	184°	0.077	-22.27	274°	0.252	-11.97
6°	0.990	-0.09	96°	0.189	-14.47	186°	0.076	-22.38	276°	0.268	-11.44
8°	0.987	-0.11	98°	0.178	-14.99	188°	0.074	-22.62	278°	0.286	-10.87
10°	0.983	-0.15	100°	0.165	-15.65	190°	0.071	-22.97	280°	0.304	-10.34
12°	0.978	-0.19	102°	0.153	-16.31	192°	0.068	-23.35	282°	0.324	-9.79
14°	0.972	-0.25	104°	0.140	-17.08	194°	0.064	-23.88	284°	0.344	-9.27
16°	0.963	-0.33	106°	0.127	-17.92	196°	0.060	-24.44	286°	0.365	-8.75
18°	0.952	-0.43	108°	0.114	-18.86	198°	0.055	-25.19	288°	0.387	-8.25
20°	0.939	-0.55	110°	0.101	-19.91	200°	0.051	-25.85	290°	0.409	-7.77
22°	0.924	-0.69	112°	0.089	-21.01	202°	0.046	-26.74	292°	0.432	-7.29
24°	0.907	-0.85	114°	0.078	-22.16	204°	0.041	-27.74	294°	0.455	-6.84
26°	0.889	-1.02	116°	0.067	-23.48	206°	0.036	-28.87	296°	0.478	-6.41
28°	0.870	-1.21	118°	0.057	-24.88	208°	0.032	-29.90	298°	0.501	-6.00
30°	0.850	-1.41	120°	0.049	-26.20	210°	0.028	-31.06	300°	0.525	-5.60
32°	0.830	-1.62	122°	0.041	-27.74	212°	0.024	-32.40	302°	0.548	-5.22
34°	0.809	-1.84	124°	0.035	-29.12	214°	0.021	-33.56	304°	0.571	-4.87
36°	0.788	-2.07	126°	0.030	-30.46	216°	0.019	-34.42	306°	0.594	-4.52
38°	0.766	-2.32	128°	0.026	-31.70	218°	0.018	-34.89	308°	0.617	-4.19
40°	0.745	-2.56	130°	0.023	-32.77	220°	0.017	-35.39	310°	0.640	-3.88
42°	0.723	-2.82	132°	0.021	-33.56	222°	0.018	-34.89	312°	0.663	-3.57
44°	0.701	-3.09	134°	0.020	-33.98	224°	0.020	-33.98	314°	0.685	-3.29
46°	0.678	-3.38	136°	0.019	-34.42	226°	0.023	-32.77	316°	0.707	-3.01
48°	0.656	-3.66	138°	0.019	-34.42	228°	0.028	-31.06	318°	0.729	-2.75
50°	0.634	-3.96	140°	0.019	-34.42	230°	0.035	-29.12	320°	0.750	-2.50
52°	0.611	-4.28	142°	0.020	-33.98	232°	0.042	-27.54	322°	0.771	-2.26
54°	0.589	-4.60	144°	0.022	-33.15	234°	0.051	-25.85	324°	0.791	-2.04
56°	0.566	-4.94	146°	0.024	-32.40	236°	0.060	-24.44	326°	0.811	-1.82
58°	0.544	-5.29	148°	0.026	-31.70	238°	0.070	-23.10	328°	0.830	-1.62
60°	0.521	-5.66	150°	0.028	-31.06	240°	0.080	-21.94	330°	0.849	-1.42
62°	0.498	-6.06	152°	0.031	-30.17	242°	0.090	-20.92	332°	0.867	-1.24
64°	0.475	-6.47	154°	0.034	-29.37	244°	0.099	-20.09	334°	0.885	-1.06
66°	0.452	-6.90	156°	0.038	-28.40	246°	0.108	-19.33	336°	0.901	-0.91
68°	0.428	-7.37	158°	0.041	-27.74	248°	0.117	-18.64	338°	0.917	-0.75
70°	0.405	-7.85	160°	0.045	-26.94	250°	0.125	-18.06	340°	0.932	-0.61
72°	0.382	-8.36	162°	0.048	-26.38	252°	0.134	-17.46	342°	0.947	-0.47
74°	0.359	-8.90	164°	0.052	-25.68	254°	0.142	-16.95	344°	0.959	-0.36
76°	0.337	-9.45	166°	0.056	-25.04	256°	0.151	-16.42	346°	0.971	-0.26
78°	0.316	-10.01	168°	0.060	-24.44	258°	0.159	-15.97	348°	0.980	-0.18
80°	0.296	-10.57	170°	0.064	-23.88	260°	0.168	-15.49	350°	0.987	-0.11
82°	0.278	-11.12	172°	0.068	-23.35	262°	0.178	-14.99	352°	0.992	-0.07
84°	0.262	-11.63	174°	0.071	-22.97	264°	0.188	-14.52	354°	0.995	-0.04
86°	0.248	-12.11	176°	0.074	-22.62	266°	0.199	-14.02	356°	0.997	-0.03
88°	0.235	-12.58	178°	0.076	-22.38	268°	0.211	-13.51	358°	0.998	-0.02



## Azimuth Pattern Tabulation, FCC

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	1.000	0.00	90°	0.223	-13.03	180°	0.077	-22.27	270°	0.224	-13.00
10°	0.983	-0.15	100°	0.165	-15.65	190°	0.071	-22.97	280°	0.304	-10.34
20°	0.939	-0.55	110°	0.101	-19.91	200°	0.051	-25.85	290°	0.409	-7.77
30°	0.850	-1.41	120°	0.049	-26.20	210°	0.028	-31.06	300°	0.525	-5.60
40°	0.745	-2.56	130°	0.023	-32.77	220°	0.017	-35.39	310°	0.640	-3.88
50°	0.634	-3.96	140°	0.019	-34.42	230°	0.035	-29.12	320°	0.750	-2.50
60°	0.521	-5.66	150°	0.028	-31.06	240°	0.080	-21.94	330°	0.849	-1.42
70°	0.405	-7.85	160°	0.045	-26.94	250°	0.125	-18.06	340°	0.932	-0.61
80°	0.296	-10.57	170°	0.064	-23.88	260°	0.168	-15.49	350°	0.987	-0.11

# Elevation Pattern Tabulation

-5 to 10 in 0.25 increments, 10 to 90 in 0.50 increments

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-5.00	0.044	-27.13	8.75	0.096	-20.35	35.00	0.027	-31.37	62.50	0.016	-35.92
-4.75	0.066	-23.61	9.00	0.086	-21.31	35.50	0.031	-30.17	63.00	0.008	-41.94
-4.50	0.090	-20.92	9.25	0.092	-20.72	36.00	0.024	-32.40	63.50	0.012	-38.42
-4.25	0.104	-19.66	9.50	0.105	-19.58	36.50	0.016	-35.92	64.00	0.021	-33.56
-4.00	0.102	-19.83	9.75	0.113	-18.94	37.00	0.023	-32.77	64.50	0.027	-31.37
-3.75	0.084	-21.51	10.00	0.110	-19.17	37.50	0.030	-30.46	65.00	0.030	-30.46
-3.50	0.058	-24.73	10.50	0.097	-20.26	38.00	0.026	-31.70	65.50	0.027	-31.37
-3.25	0.052	-25.68	11.00	0.080	-21.94	38.50	0.017	-35.39	66.00	0.021	-33.56
-3.00	0.082	-21.72	11.50	0.069	-23.22	39.00	0.018	-34.89	66.50	0.012	-38.42
-2.75	0.119	-18.49	12.00	0.084	-21.51	39.50	0.027	-31.37	67.00	0.005	-46.02
-2.50	0.142	-16.95	12.50	0.092	-20.72	40.00	0.028	-31.06	67.50	0.012	-38.42
-2.25	0.143	-16.89	13.00	0.069	-23.22	40.50	0.020	-33.98	68.00	0.021	-33.56
-2.00	0.119	-18.49	13.50	0.058	-24.73	41.00	0.015	-36.48	68.50	0.027	-31.37
-1.75	0.081	-21.83	14.00	0.076	-22.38	41.50	0.023	-32.77	69.00	0.030	-30.46
-1.50	0.069	-23.22	14.50	0.073	-22.73	42.00	0.029	-30.75	69.50	0.030	-30.46
-1.25	0.116	-18.71	15.00	0.050	-26.02	42.50	0.025	-32.04	70.00	0.026	-31.70
-1.00	0.180	-14.89	15.50	0.055	-25.19	43.00	0.016	-35.92	70.50	0.019	-34.42
-0.75	0.229	-12.80	16.00	0.067	-23.48	43.50	0.017	-35.39	71.00	0.011	-39.17
-0.50	0.244	-12.25	16.50	0.055	-25.19	44.00	0.026	-31.70	71.50	0.002	-53.98
-0.25	0.221	-13.11	17.00	0.039	-28.18	44.50	0.029	-30.75	72.00	0.009	-40.92
0.00	0.161	-15.86	17.50	0.052	-25.68	45.00	0.023	-32.77	72.50	0.018	-34.89
0.25	0.120	-18.42	18.00	0.057	-24.88	45.50	0.014	-37.08	73.00	0.025	-32.04
0.50	0.217	-13.27	18.50	0.042	-27.54	46.00	0.018	-34.89	73.50	0.030	-30.46
0.75	0.385	-8.29	19.00	0.036	-28.87	46.50	0.026	-31.70	74.00	0.032	-29.90
1.00	0.570	-4.88	19.50	0.049	-26.20	47.00	0.028	-31.06	74.50	0.032	-29.90
1.25	0.742	-2.59	20.00	0.048	-26.38	47.50	0.022	-33.15	75.00	0.030	-30.46
1.50	0.879	-1.12	20.50	0.032	-29.90	48.00	0.013	-37.72	75.50	0.026	-31.70
1.75	0.970	-0.26	21.00	0.035	-29.12	48.50	0.018	-34.89	76.00	0.021	-33.56
2.00	1.000	0.00	21.50	0.046	-26.74	49.00	0.026	-31.70	76.50	0.014	-37.08
2.25	0.972	-0.25	22.00	0.040	-27.96	49.50	0.029	-30.75	77.00	0.007	-43.10
2.50	0.891	-1.00	22.50	0.027	-31.37	50.00	0.024	-32.40	77.50	0.002	-53.98
2.75	0.772	-2.25	23.00	0.035	-29.12	50.50	0.015	-36.48	78.00	0.008	-41.94
3.00	0.637	-3.92	23.50	0.042	-27.54	51.00	0.015	-36.48	78.50	0.015	-36.48
3.25	0.514	-5.78	24.00	0.033	-29.63	51.50	0.024	-32.40	79.00	0.020	-33.98
3.50	0.428	-7.37	24.50	0.025	-32.04	52.00	0.029	-30.75	79.50	0.025	-32.04
3.75	0.389	-8.20	25.00	0.035	-29.12	52.50	0.027	-31.37	80.00	0.029	-30.75
4.00	0.379	-8.43	25.50	0.039	-28.18	53.00	0.019	-34.42	80.50	0.031	-30.17
4.25	0.369	-8.66	26.00	0.029	-30.75	53.50	0.012	-38.42	81.00	0.032	-29.90
4.50	0.341	-9.34	26.50	0.023	-32.77	54.00	0.018	-34.89	81.50	0.032	-29.90
4.75	0.293	-10.66	27.00	0.034	-29.37	54.50	0.026	-31.70	82.00	0.032	-29.90
5.00	0.237	-12.51	27.50	0.037	-28.64	55.00	0.029	-30.75	82.50	0.030	-30.46
5.25	0.192	-14.33	28.00	0.026	-31.70	55.50	0.025	-32.04	83.00	0.028	-31.06
5.50	0.178	-14.99	28.50	0.022	-33.15	56.00	0.016	-35.92	83.50	0.026	-31.70
5.75	0.189	-14.47	29.00	0.033	-29.63	56.50	0.011	-39.17	84.00	0.023	-32.77
6.00	0.203	-13.85	29.50	0.034	-29.37	57.00	0.018	-34.89	84.50	0.021	-33.56
6.25	0.203	-13.85	30.00	0.024	-32.40	57.50	0.026	-31.70	85.00	0.018	-34.89
6.50	0.185	-14.66	30.50	0.021	-33.56	58.00	0.029	-30.75	85.50	0.015	-36.48
6.75	0.155	-16.19	31.00	0.031	-30.17	58.50	0.026	-31.70	86.00	0.012	-38.42
7.00	0.126	-17.99	31.50	0.033	-29.63	59.00	0.018	-34.89	86.50	0.010	-40.00
7.25	0.115	-18.79	32.00	0.023	-32.77	59.50	0.010	-40.00	87.00	0.008	-41.94
7.50	0.125	-18.06	32.50	0.020	-33.98	60.00	0.013	-37.72	87.50	0.006	-44.44
7.75	0.140	-17.08	33.00	0.030	-30.46	60.50	0.022	-33.15	88.00	0.005	-46.02
8.00	0.145	-16.77	33.50	0.032	-29.90	61.00	0.028	-31.06	88.50	0.003	-50.46
8.25	0.137	-17.27	34.00	0.023	-32.77	61.50	0.029	-30.75	89.00	0.002	-53.98
8.50	0.117	-18.64	34.50	0.018	-34.89	62.00	0.024	-32.40	89.50	0.002	-53.98
8.75	0.096	-20.35	35.00	0.027	-31.37	62.50	0.016	-35.92	90.00	0.001	-60.00



## Azimuth Vertical Pattern Tabulation

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	1.000	0.00	90°	0.035	-29.12	180°	0.030	-30.46	270°	0.035	-29.12
2°	1.000	0.00	92°	0.035	-29.12	182°	0.030	-30.46	272°	0.035	-29.12
4°	0.992	-0.07	94°	0.035	-29.12	184°	0.031	-30.17	274°	0.035	-29.12
6°	0.988	-0.10	96°	0.035	-29.12	186°	0.031	-30.17	276°	0.035	-29.12
8°	0.985	-0.13	98°	0.035	-29.12	188°	0.032	-29.90	278°	0.035	-29.12
10°	0.980	-0.18	100°	0.035	-29.12	190°	0.032	-29.90	280°	0.035	-29.12
12°	0.980	-0.18	102°	0.034	-29.37	192°	0.032	-29.90	282°	0.039	-28.18
14°	0.958	-0.37	104°	0.033	-29.63	194°	0.031	-30.17	284°	0.048	-26.38
16°	0.942	-0.52	106°	0.032	-29.90	196°	0.031	-30.17	286°	0.057	-24.88
18°	0.928	-0.65	108°	0.031	-30.17	198°	0.030	-30.46	288°	0.066	-23.61
20°	0.920	-0.72	110°	0.030	-30.46	200°	0.030	-30.46	290°	0.070	-23.10
22°	0.905	-0.87	112°	0.030	-30.46	202°	0.030	-30.46	292°	0.098	-20.18
24°	0.875	-1.16	114°	0.030	-30.46	204°	0.030	-30.46	294°	0.152	-16.36
26°	0.845	-1.46	116°	0.030	-30.46	206°	0.030	-30.46	296°	0.208	-13.64
28°	0.815	-1.78	118°	0.030	-30.46	208°	0.030	-30.46	298°	0.262	-11.63
30°	0.800	-1.94	120°	0.030	-30.46	210°	0.030	-30.46	300°	0.290	-10.75
32°	0.778	-2.18	122°	0.030	-30.46	212°	0.030	-30.46	302°	0.312	-10.12
34°	0.732	-2.71	124°	0.030	-30.46	214°	0.030	-30.46	304°	0.358	-8.92
36°	0.688	-3.25	126°	0.030	-30.46	216°	0.030	-30.46	306°	0.402	-7.92
38°	0.642	-3.85	128°	0.030	-30.46	218°	0.030	-30.46	308°	0.448	-6.97
40°	0.620	-4.15	130°	0.030	-30.46	220°	0.030	-30.46	310°	0.470	-6.56
42°	0.601	-4.42	132°	0.030	-30.46	222°	0.030	-30.46	312°	0.489	-6.21
44°	0.564	-4.97	134°	0.030	-30.46	224°	0.030	-30.46	314°	0.526	-5.58
46°	0.526	-5.58	136°	0.030	-30.46	226°	0.030	-30.46	316°	0.564	-4.97
48°	0.489	-6.21	138°	0.030	-30.46	228°	0.030	-30.46	318°	0.601	-4.42
50°	0.470	-6.56	140°	0.030	-30.46	230°	0.030	-30.46	320°	0.620	-4.15
52°	0.448	-6.97	142°	0.030	-30.46	232°	0.030	-30.46	322°	0.642	-3.85
54°	0.402	-7.92	144°	0.030	-30.46	234°	0.030	-30.46	324°	0.688	-3.25
56°	0.358	-8.92	146°	0.030	-30.46	236°	0.030	-30.46	326°	0.732	-2.71
58°	0.312	-10.12	148°	0.030	-30.46	238°	0.030	-30.46	328°	0.778	-2.18
60°	0.290	-10.75	150°	0.030	-30.46	240°	0.030	-30.46	330°	0.800	-1.94
62°	0.262	-11.63	152°	0.030	-30.46	242°	0.030	-30.46	332°	0.815	-1.78
64°	0.208	-13.64	154°	0.030	-30.46	244°	0.030	-30.46	334°	0.845	-1.46
66°	0.152	-16.36	156°	0.030	-30.46	246°	0.030	-30.46	336°	0.875	-1.16
68°	0.098	-20.18	158°	0.030	-30.46	248°	0.030	-30.46	338°	0.905	-0.87
70°	0.070	-23.10	160°	0.030	-30.46	250°	0.030	-30.46	340°	0.920	-0.72
72°	0.066	-23.61	162°	0.030	-30.46	252°	0.031	-30.17	342°	0.928	-0.65
74°	0.057	-24.88	164°	0.031	-30.17	254°	0.032	-29.90	344°	0.942	-0.52
76°	0.048	-26.38	166°	0.031	-30.17	256°	0.033	-29.63	346°	0.958	-0.37
78°	0.039	-28.18	168°	0.032	-29.90	258°	0.034	-29.37	348°	0.972	-0.25
80°	0.035	-29.12	170°	0.032	-29.90	260°	0.035	-29.12	350°	0.980	-0.18
82°	0.035	-29.12	172°	0.032	-29.90	262°	0.035	-29.12	352°	0.982	-0.16
84°	0.035	-29.12	174°	0.031	-30.17	264°	0.035	-29.12	354°	0.988	-0.10
86°	0.035	-29.12	176°	0.031	-30.17	266°	0.035	-29.12	356°	0.992	-0.07
88°	0.035	-29.12	178°	0.030	-30.46	268°	0.035	-29.12	358°	0.998	-0.02