



WNTE-LD Antenna Specifications

ANTENNA SPECIFICATIONS



ALIVETELE.COM
SPEC GENERATOR

model no.: ATC-BCE88WRS-V4-30

call sign: WNTE-LD

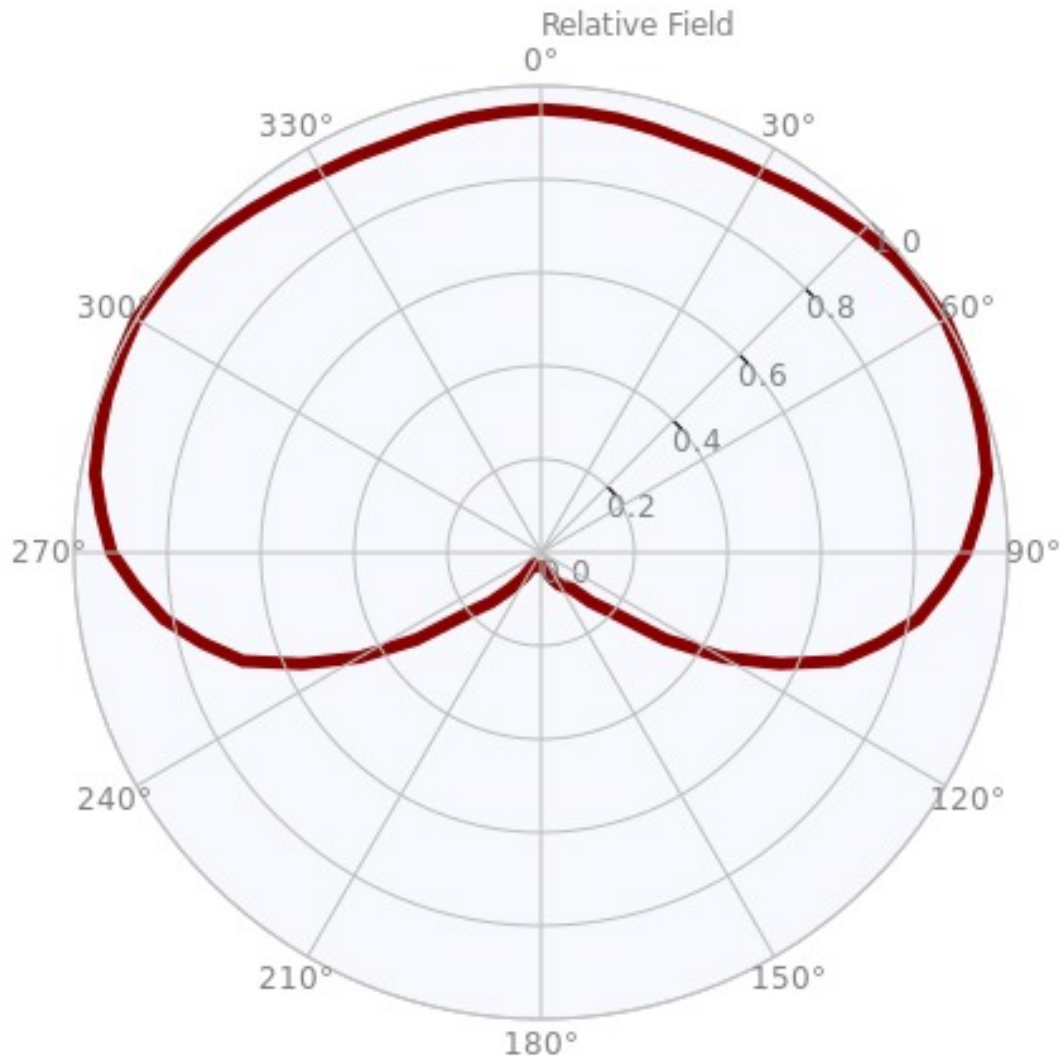
city of license: Mayaguez

state: PR

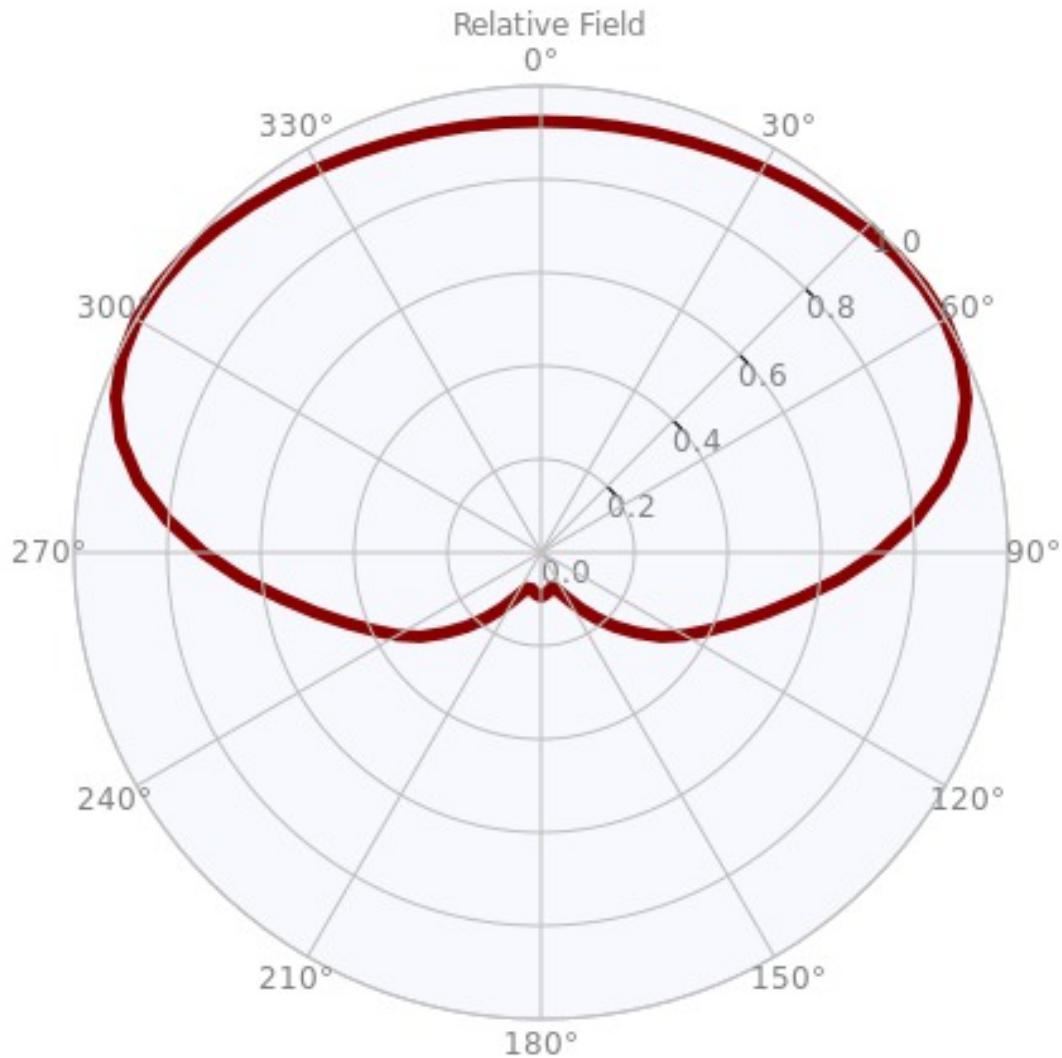
Summary

Antenna Specifications	
Antenna Type	Coaxial Slot
Antenna Model	ATC-BCE88WRS-V4-30
Electrical Specifications	
Channel(s)	30
Frequency Range (MHz)	566 - 572
Polarization	Elliptical
Horizontal Azimuth Pattern	WRS
Directivity	1.80
dB	2.55
Vertical Azimuth Pattern	V4- Wide Cardioid
Directivity	2.00
dB	0.00
Vertical Component	30 %
Azimuth Peak of Beam	0 °
Elevation Pattern	BC8
Directivity	8.68
dB	9.39
Electrical Beam Tilt	2.00 °
Antenna Peak Power Gain	
Horizontal Gain Power	12.02
Horizontal Gain Ratio	10.80 dBd
Vertical Gain Power	3.61
Vertical Gain Ratio	5.57 dBd
Line Type	1-5/8" 50 Ohm Foam Flex Line
Line Length	150 ft
Total Line Loss	0.82 dB
Effective Radiated Power (ERP)	15 kW
ERP Vertical Power	4.50 kW
Transmitter Power Output (TPO)	
TPO Power	1.51 kW
TPO Ratio	1.78 dBk
Input Type	EIA 7/8"
Mechanical Specifications	
Mount Type	Top Mount
Length of Antenna	16.85 ft
Center of Radiation	8.43 ft
Radome Diameter	TBD
Color	Aviation Orange
Calculated Weight	Contact Alive Telecom 1 2
Windload (Shear)	Contact Alive Telecom 1 2

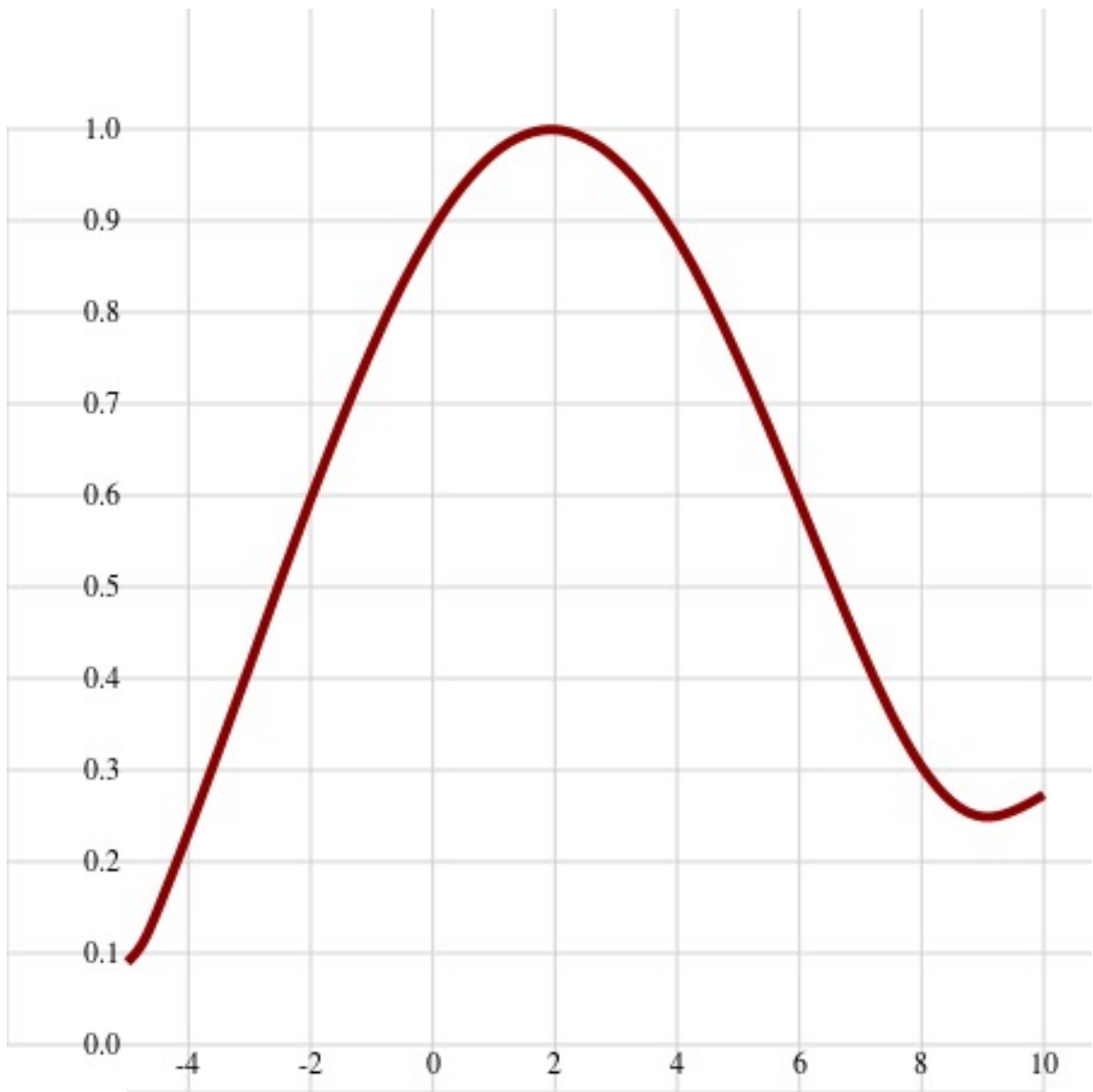
Horizontal Azimuth Pattern



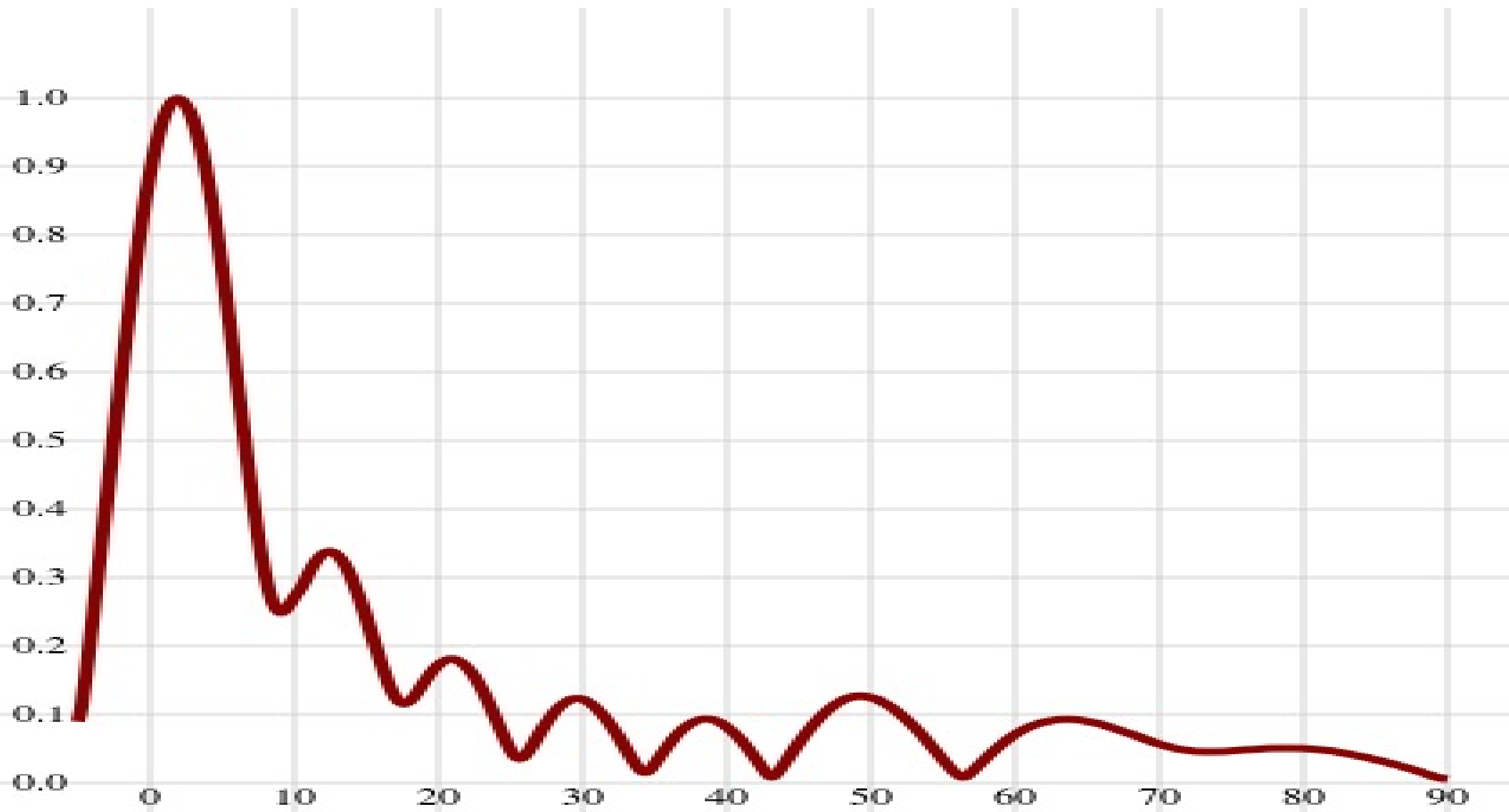
Vertical Azimuth Pattern



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°	0.950	-0.45	90°	0.910	-0.82	180°	0.030	-30.46	270°	0.920	-0.72
2°	0.950	-0.45	92°	0.899	-0.92	182°	0.030	-30.46	272°	0.926	-0.67
4°	0.948	-0.46	94°	0.876	-1.15	184°	0.030	-30.46	274°	0.939	-0.55
6°	0.946	-0.48	96°	0.854	-1.37	186°	0.030	-30.46	276°	0.951	-0.44
8°	0.946	-0.48	98°	0.831	-1.61	188°	0.030	-30.46	278°	0.964	-0.32
10°	0.944	-0.50	100°	0.820	-1.72	190°	0.030	-30.46	280°	0.970	-0.26
12°	0.944	-0.50	102°	0.802	-1.92	192°	0.030	-30.46	282°	0.972	-0.25
14°	0.940	-0.54	104°	0.768	-2.29	194°	0.030	-30.46	284°	0.977	-0.20
16°	0.938	-0.56	106°	0.732	-2.71	196°	0.030	-30.46	286°	0.981	-0.17
18°	0.935	-0.58	108°	0.698	-3.12	198°	0.030	-30.46	288°	0.986	-0.12
20°	0.934	-0.59	110°	0.680	-3.35	200°	0.030	-30.46	290°	0.988	-0.10
22°	0.935	-0.58	112°	0.651	-3.73	202°	0.030	-30.46	292°	0.990	-0.09
24°	0.936	-0.57	114°	0.594	-4.52	204°	0.030	-30.46	294°	0.992	-0.07
26°	0.938	-0.56	116°	0.536	-5.42	206°	0.030	-30.46	296°	0.996	-0.03
28°	0.939	-0.55	118°	0.479	-6.39	208°	0.030	-30.46	298°	0.998	-0.02
30°	0.940	-0.54	120°	0.450	-6.94	210°	0.030	-30.46	300°	1.000	0.00
32°	0.943	-0.51	122°	0.419	-7.56	212°	0.039	-28.18	302°	0.998	-0.02
34°	0.948	-0.46	124°	0.356	-8.97	214°	0.056	-25.04	304°	0.995	-0.04
36°	0.953	-0.42	126°	0.294	-10.63	216°	0.074	-22.62	306°	0.991	-0.08
38°	0.958	-0.37	128°	0.231	-12.73	218°	0.091	-20.82	308°	0.988	-0.10
40°	0.961	-0.35	130°	0.200	-13.98	220°	0.100	-20.00	310°	0.986	-0.12
42°	0.964	-0.32	132°	0.196	-14.15	222°	0.112	-19.02	312°	0.983	-0.15
44°	0.970	-0.26	134°	0.177	-15.04	224°	0.138	-17.20	314°	0.977	-0.20
46°	0.977	-0.20	136°	0.152	-16.36	226°	0.162	-15.81	316°	0.970	-0.26
48°	0.983	-0.15	138°	0.126	-17.99	228°	0.188	-14.52	318°	0.964	-0.32
50°	0.986	-0.12	140°	0.100	-20.00	230°	0.200	-13.98	320°	0.961	-0.35
52°	0.988	-0.10	142°	0.098	-20.18	232°	0.231	-12.73	322°	0.958	-0.37
54°	0.991	-0.08	144°	0.092	-20.72	234°	0.294	-10.63	324°	0.953	-0.42
56°	0.995	-0.04	146°	0.088	-21.11	236°	0.356	-8.97	326°	0.948	-0.46
58°	0.998	-0.02	148°	0.082	-21.72	238°	0.419	-7.56	328°	0.943	-0.51
60°	1.000	0.00	150°	0.080	-21.94	240°	0.450	-6.94	330°	0.940	-0.54
62°	0.998	-0.02	152°	0.076	-22.38	242°	0.479	-6.39	332°	0.939	-0.55
64°	0.996	-0.03	154°	0.069	-23.22	244°	0.536	-5.42	334°	0.938	-0.56
66°	0.992	-0.07	156°	0.061	-24.29	246°	0.594	-4.52	336°	0.936	-0.57
68°	0.990	-0.09	158°	0.054	-25.35	248°	0.651	-3.73	338°	0.935	-0.58
70°	0.988	-0.10	160°	0.050	-26.02	250°	0.680	-3.35	340°	0.934	-0.59
72°	0.986	-0.12	162°	0.048	-26.38	252°	0.698	-3.12	342°	0.935	-0.58
74°	0.981	-0.17	164°	0.042	-27.54	254°	0.732	-2.71	344°	0.938	-0.56
76°	0.977	-0.20	166°	0.038	-28.40	256°	0.768	-2.29	346°	0.940	-0.54
78°	0.972	-0.25	168°	0.032	-29.90	258°	0.802	-1.92	348°	0.943	-0.51
80°	0.970	-0.26	170°	0.030	-30.46	260°	0.820	-1.72	350°	0.944	-0.50
82°	0.962	-0.34	172°	0.030	-30.46	262°	0.832	-1.60	352°	0.945	-0.49
84°	0.948	-0.46	174°	0.030	-30.46	264°	0.858	-1.33	354°	0.946	-0.48
86°	0.932	-0.61	176°	0.030	-30.46	266°	0.882	-1.09	356°	0.948	-0.46
88°	0.918	-0.74	178°	0.030	-30.46	268°	0.908	-0.84	358°	0.949	-0.45

Azimuth Pattern Tabulation, FCC

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	0.950	-0.45	90°	0.910	-0.82	180°	0.030	-30.46	270°	0.920	-0.72
10°	0.944	-0.50	100°	0.820	-1.72	190°	0.030	-30.46	280°	0.970	-0.26
20°	0.934	-0.59	110°	0.680	-3.35	200°	0.030	-30.46	290°	0.988	-0.10
30°	0.940	-0.54	120°	0.450	-6.94	210°	0.030	-30.46	300°	1.000	0.00
40°	0.961	-0.35	130°	0.200	-13.98	220°	0.100	-20.00	310°	0.986	-0.12
50°	0.986	-0.12	140°	0.100	-20.00	230°	0.200	-13.98	320°	0.961	-0.35
60°	1.000	0.00	150°	0.080	-21.94	240°	0.450	-6.94	330°	0.940	-0.54
70°	0.988	-0.10	160°	0.050	-26.02	250°	0.680	-3.35	340°	0.934	-0.59
80°	0.970	-0.26	170°	0.030	-30.46	260°	0.820	-1.72	350°	0.944	-0.50

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	0.090	-20.92	8.75	0.253	-11.94	35.00	0.028	-31.06	62.50	0.091	-20.82
-4.75	0.107	-19.41	9.00	0.248	-12.11	35.50	0.043	-27.33	63.00	0.093	-20.63
-4.50	0.147	-16.65	9.25	0.249	-12.08	36.00	0.057	-24.88	63.50	0.093	-20.63
-4.25	0.189	-14.47	9.50	0.255	-11.87	36.50	0.070	-23.10	64.00	0.093	-20.63
-4.00	0.232	-12.69	9.75	0.263	-11.60	37.00	0.080	-21.94	64.50	0.092	-20.72
-3.75	0.277	-11.15	10.00	0.273	-11.28	37.50	0.087	-21.21	65.00	0.090	-20.92
-3.50	0.322	-9.84	10.50	0.284	-10.93	38.00	0.092	-20.72	65.50	0.088	-21.11
-3.25	0.368	-8.68	11.00	0.307	-10.26	38.50	0.094	-20.54	66.00	0.086	-21.31
-3.00	0.413	-7.68	11.50	0.325	-9.76	39.00	0.093	-20.63	66.50	0.082	-21.72
-2.75	0.460	-6.74	12.00	0.336	-9.47	39.50	0.089	-21.01	67.00	0.079	-22.05
-2.50	0.506	-5.92	12.50	0.340	-9.37	40.00	0.082	-21.72	67.50	0.075	-22.50
-2.25	0.551	-5.18	13.00	0.334	-9.53	40.50	0.073	-22.73	68.00	0.072	-22.85
-2.00	0.596	-4.50	13.50	0.321	-9.87	41.00	0.063	-24.01	68.50	0.068	-23.35
-1.75	0.639	-3.89	14.00	0.300	-10.46	41.50	0.050	-26.02	69.00	0.064	-23.88
-1.50	0.681	-3.34	14.50	0.273	-11.28	42.00	0.036	-28.87	69.50	0.060	-24.44
-1.25	0.722	-2.83	15.00	0.242	-12.32	42.50	0.021	-33.56	70.00	0.057	-24.88
-1.00	0.760	-2.38	15.50	0.208	-13.64	43.00	0.006	-44.44	70.50	0.054	-25.35
-0.75	0.797	-1.97	16.00	0.175	-15.14	43.50	0.012	-38.42	71.00	0.051	-25.85
-0.50	0.831	-1.61	16.50	0.145	-16.77	44.00	0.028	-31.06	71.50	0.049	-26.20
-0.25	0.862	-1.29	17.00	0.123	-18.20	44.50	0.044	-27.13	72.00	0.048	-26.38
0.00	0.891	-1.00	17.50	0.114	-18.86	45.00	0.059	-24.58	72.50	0.046	-26.74
0.25	0.917	-0.75	18.00	0.118	-18.56	45.50	0.073	-22.73	73.00	0.046	-26.74
0.50	0.939	-0.55	18.50	0.130	-17.72	46.00	0.086	-21.31	73.50	0.046	-26.74
0.75	0.958	-0.37	19.00	0.147	-16.65	46.50	0.097	-20.26	74.00	0.046	-26.74
1.00	0.974	-0.23	19.50	0.162	-15.81	47.00	0.107	-19.41	74.50	0.046	-26.74
1.25	0.986	-0.12	20.00	0.173	-15.24	47.50	0.115	-18.79	75.00	0.047	-26.56
1.50	0.994	-0.05	20.50	0.180	-14.89	48.00	0.121	-18.34	75.50	0.048	-26.38
1.75	0.999	-0.01	21.00	0.182	-14.80	48.50	0.125	-18.06	76.00	0.049	-26.20
2.00	1.000	0.00	21.50	0.178	-14.99	49.00	0.127	-17.92	76.50	0.049	-26.20
2.25	0.997	-0.03	22.00	0.169	-15.44	49.50	0.127	-17.92	77.00	0.050	-26.02
2.50	0.990	-0.09	22.50	0.156	-16.14	50.00	0.125	-18.06	77.50	0.051	-25.85
2.75	0.981	-0.17	23.00	0.138	-17.20	50.50	0.122	-18.27	78.00	0.051	-25.85
3.00	0.967	-0.29	23.50	0.117	-18.64	51.00	0.116	-18.71	78.50	0.051	-25.85
3.25	0.951	-0.44	24.00	0.093	-20.63	51.50	0.110	-19.17	79.00	0.051	-25.85
3.50	0.931	-0.62	24.50	0.069	-23.22	52.00	0.101	-19.91	79.50	0.051	-25.85
3.75	0.907	-0.85	25.00	0.047	-26.56	52.50	0.092	-20.72	80.00	0.051	-25.85
4.00	0.881	-1.10	25.50	0.033	-29.63	53.00	0.082	-21.72	80.50	0.050	-26.02
4.25	0.852	-1.39	26.00	0.037	-28.64	53.50	0.071	-22.97	81.00	0.049	-26.20
4.50	0.820	-1.72	26.50	0.054	-25.35	54.00	0.059	-24.58	81.50	0.048	-26.38
4.75	0.786	-2.09	27.00	0.072	-22.85	54.50	0.047	-26.56	82.00	0.047	-26.56
5.00	0.750	-2.50	27.50	0.089	-21.01	55.00	0.034	-29.37	82.50	0.045	-26.94
5.25	0.713	-2.94	28.00	0.104	-19.66	55.50	0.022	-33.15	83.00	0.043	-27.33
5.50	0.674	-3.43	28.50	0.114	-18.86	56.00	0.011	-39.17	83.50	0.041	-27.74
5.75	0.634	-3.96	29.00	0.121	-18.34	56.50	0.007	-43.10	84.00	0.039	-28.18
6.00	0.593	-4.54	29.50	0.124	-18.13	57.00	0.016	-35.92	84.50	0.037	-28.64
6.25	0.552	-5.16	30.00	0.123	-18.20	57.50	0.027	-31.37	85.00	0.034	-29.37
6.50	0.512	-5.81	30.50	0.118	-18.56	58.00	0.037	-28.64	85.50	0.032	-29.90
6.75	0.472	-6.52	31.00	0.109	-19.25	58.50	0.047	-26.56	86.00	0.029	-30.75
7.00	0.433	-7.27	31.50	0.098	-20.18	59.00	0.056	-25.04	86.50	0.026	-31.70
7.25	0.396	-8.05	32.00	0.084	-21.51	59.50	0.064	-23.88	87.00	0.023	-32.77
7.50	0.361	-8.85	32.50	0.068	-23.35	60.00	0.071	-22.97	87.50	0.020	-33.98
7.75	0.330	-9.63	33.00	0.050	-26.02	60.50	0.077	-22.27	88.00	0.017	-35.39
8.00	0.303	-10.37	33.50	0.032	-29.90	61.00	0.082	-21.72	88.50	0.013	-37.72
8.25	0.281	-11.03	34.00	0.016	-35.92	61.50	0.086	-21.31	89.00	0.010	-40.00
8.50	0.264	-11.57	34.50	0.013	-37.72	62.00	0.089	-21.01	89.50	0.007	-43.10
8.75	0.253	-11.94	35.00	0.028	-31.06	62.50	0.091	-20.82	90.00	0.006	-44.44

Azimuth Vertical Pattern Tabulation

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	0.924	-0.69	90°	0.724	-2.81	180°	0.094	-20.54	270°	0.724	-2.81
2°	0.924	-0.69	92°	0.693	-3.19	182°	0.093	-20.63	272°	0.758	-2.41
4°	0.925	-0.68	94°	0.658	-3.64	184°	0.092	-20.72	274°	0.787	-2.08
6°	0.925	-0.68	96°	0.629	-4.03	186°	0.091	-20.82	276°	0.820	-1.72
8°	0.926	-0.67	98°	0.596	-4.50	188°	0.088	-21.11	278°	0.849	-1.42
10°	0.927	-0.66	100°	0.564	-4.97	190°	0.086	-21.31	280°	0.875	-1.16
12°	0.928	-0.65	102°	0.536	-5.42	192°	0.084	-21.51	282°	0.900	-0.92
14°	0.930	-0.63	104°	0.511	-5.83	194°	0.082	-21.72	284°	0.921	-0.71
16°	0.931	-0.62	106°	0.486	-6.27	196°	0.080	-21.94	286°	0.940	-0.54
18°	0.934	-0.59	108°	0.462	-6.71	198°	0.080	-21.94	288°	0.957	-0.38
20°	0.936	-0.57	110°	0.443	-7.07	200°	0.082	-21.72	290°	0.969	-0.27
22°	0.939	-0.55	112°	0.422	-7.49	202°	0.083	-21.62	292°	0.979	-0.18
24°	0.941	-0.53	114°	0.404	-7.87	204°	0.089	-21.01	294°	0.987	-0.11
26°	0.944	-0.50	116°	0.387	-8.25	206°	0.096	-20.35	296°	0.993	-0.06
28°	0.947	-0.47	118°	0.370	-8.64	208°	0.104	-19.66	298°	0.998	-0.02
30°	0.951	-0.44	120°	0.355	-9.00	210°	0.115	-18.79	300°	0.999	-0.01
32°	0.954	-0.41	122°	0.339	-9.40	212°	0.127	-17.92	302°	1.000	0.00
34°	0.958	-0.37	124°	0.324	-9.79	214°	0.140	-17.08	304°	0.998	-0.02
36°	0.962	-0.34	126°	0.306	-10.29	216°	0.154	-16.25	306°	0.997	-0.03
38°	0.966	-0.30	128°	0.287	-10.84	218°	0.168	-15.49	308°	0.995	-0.04
40°	0.970	-0.26	130°	0.268	-11.44	220°	0.184	-14.70	310°	0.992	-0.07
42°	0.975	-0.22	132°	0.251	-12.01	222°	0.200	-13.98	312°	0.988	-0.10
44°	0.979	-0.18	134°	0.234	-12.62	224°	0.217	-13.27	314°	0.984	-0.14
46°	0.984	-0.14	136°	0.217	-13.27	226°	0.234	-12.62	316°	0.979	-0.18
48°	0.988	-0.10	138°	0.200	-13.98	228°	0.251	-12.01	318°	0.975	-0.22
50°	0.992	-0.07	140°	0.184	-14.70	230°	0.268	-11.44	320°	0.970	-0.26
52°	0.995	-0.04	142°	0.168	-15.49	232°	0.287	-10.84	322°	0.966	-0.30
54°	0.997	-0.03	144°	0.154	-16.25	234°	0.306	-10.29	324°	0.962	-0.34
56°	0.998	-0.02	146°	0.140	-17.08	236°	0.324	-9.79	326°	0.958	-0.37
58°	1.000	0.00	148°	0.127	-17.92	238°	0.339	-9.40	328°	0.954	-0.41
60°	0.999	-0.01	150°	0.115	-18.79	240°	0.355	-9.00	330°	0.951	-0.44
62°	0.998	-0.02	152°	0.104	-19.66	242°	0.370	-8.64	332°	0.947	-0.47
64°	0.993	-0.06	154°	0.096	-20.35	244°	0.387	-8.25	334°	0.944	-0.50
66°	0.987	-0.11	156°	0.089	-21.01	246°	0.404	-7.87	336°	0.941	-0.53
68°	0.979	-0.18	158°	0.083	-21.62	248°	0.422	-7.49	338°	0.939	-0.55
70°	0.969	-0.27	160°	0.082	-21.72	250°	0.443	-7.07	340°	0.936	-0.57
72°	0.957	-0.38	162°	0.080	-21.94	252°	0.462	-6.71	342°	0.934	-0.59
74°	0.940	-0.54	164°	0.080	-21.94	254°	0.486	-6.27	344°	0.931	-0.62
76°	0.921	-0.71	166°	0.082	-21.72	256°	0.511	-5.83	346°	0.930	-0.63
78°	0.900	-0.92	168°	0.084	-21.51	258°	0.536	-5.42	348°	0.928	-0.65
80°	0.875	-1.16	170°	0.086	-21.31	260°	0.564	-4.97	350°	0.927	-0.66
82°	0.849	-1.42	172°	0.088	-21.11	262°	0.596	-4.50	352°	0.926	-0.67
84°	0.820	-1.72	174°	0.091	-20.82	264°	0.629	-4.03	354°	0.925	-0.68
86°	0.787	-2.08	176°	0.092	-20.72	266°	0.658	-3.64	356°	0.925	-0.68
88°	0.758	-2.41	178°	0.093	-20.63	268°	0.693	-3.19	358°	0.924	-0.69