



reliable, durable, customizable, affordable

[broadcast antenna systems]

MODEL PSIFM5LOG

5 ELEMENT LOG PERIODIC FM ANTENNA

LOW COST | LOW WEIGHT & WIND AREA | BROADBAND

General Specifications

Element Input: "A" - Type 'N' | "C" - 7-16 DIN

Polarization: Linear - H/V Field Adjustable in 15 Degree Increments with Optional Bracket

Physical Characteristics: Treated Aluminum, Plated Brass, Teflon, Galvanized Steel

Power Rating: Type 'N' - 750W | 7-16 DIN - 2.5 kW

Multi-Element Arrays: Dual Stack Configuration available

Gain: 3.55 (5.50 dBd)

F/B Ratio: 20 dBd

VSWR: < 1.15:1 (88 - 108 MHz)

Impedance: 50 ohms

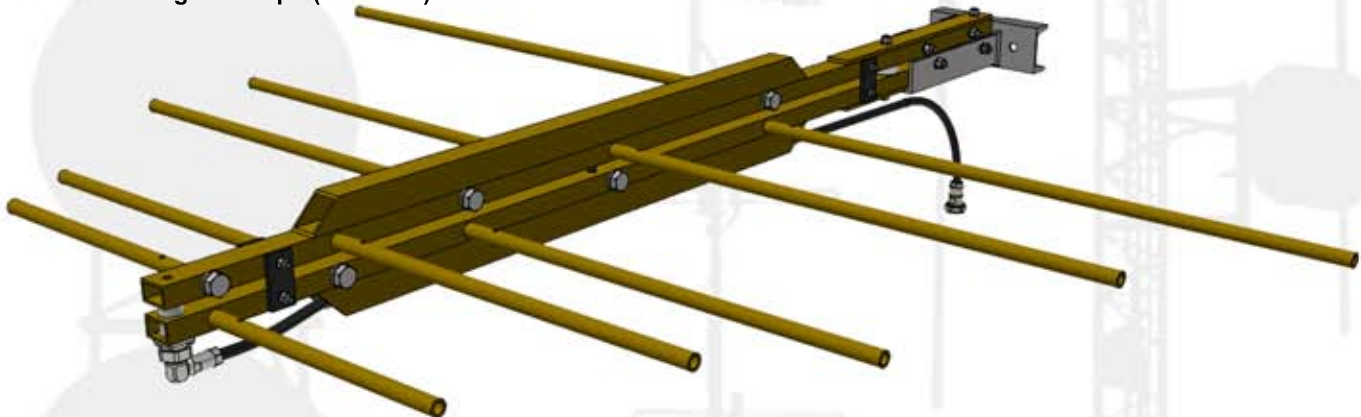
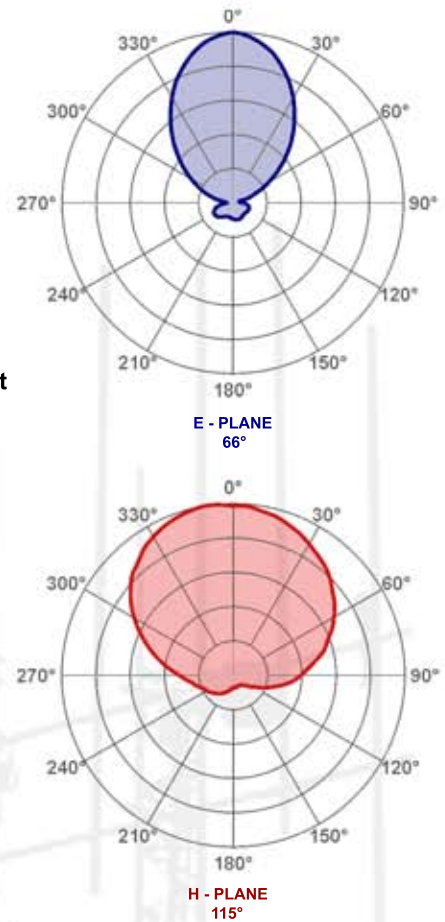
Dimensions: (L x W x H)

64.5" x 68.5" x 6" (1638 mm x 1740 mm x 152 mm)

Weight: 33 lbs (15 kg)

Wind Area: 5.12 ft² (.48 m²)

Wind Survival Rating: 112 mph (180 km/h)



PSIFM5LOG antenna model is a linearly polarized antenna intended for FM broadcast applications up to 2.5 kW of input power. Treated aluminum, plated brass, and teflon construction with hot dip galvanized mounting bracket, make it suitable for any environment. Vertical or horizontal polarization can be achieved with the standard mounting bracket. Slant polarization is achievable with the optional 45° mounting bracket. Element includes 1/2" Hi-Flex feed cable with a 12" extension.

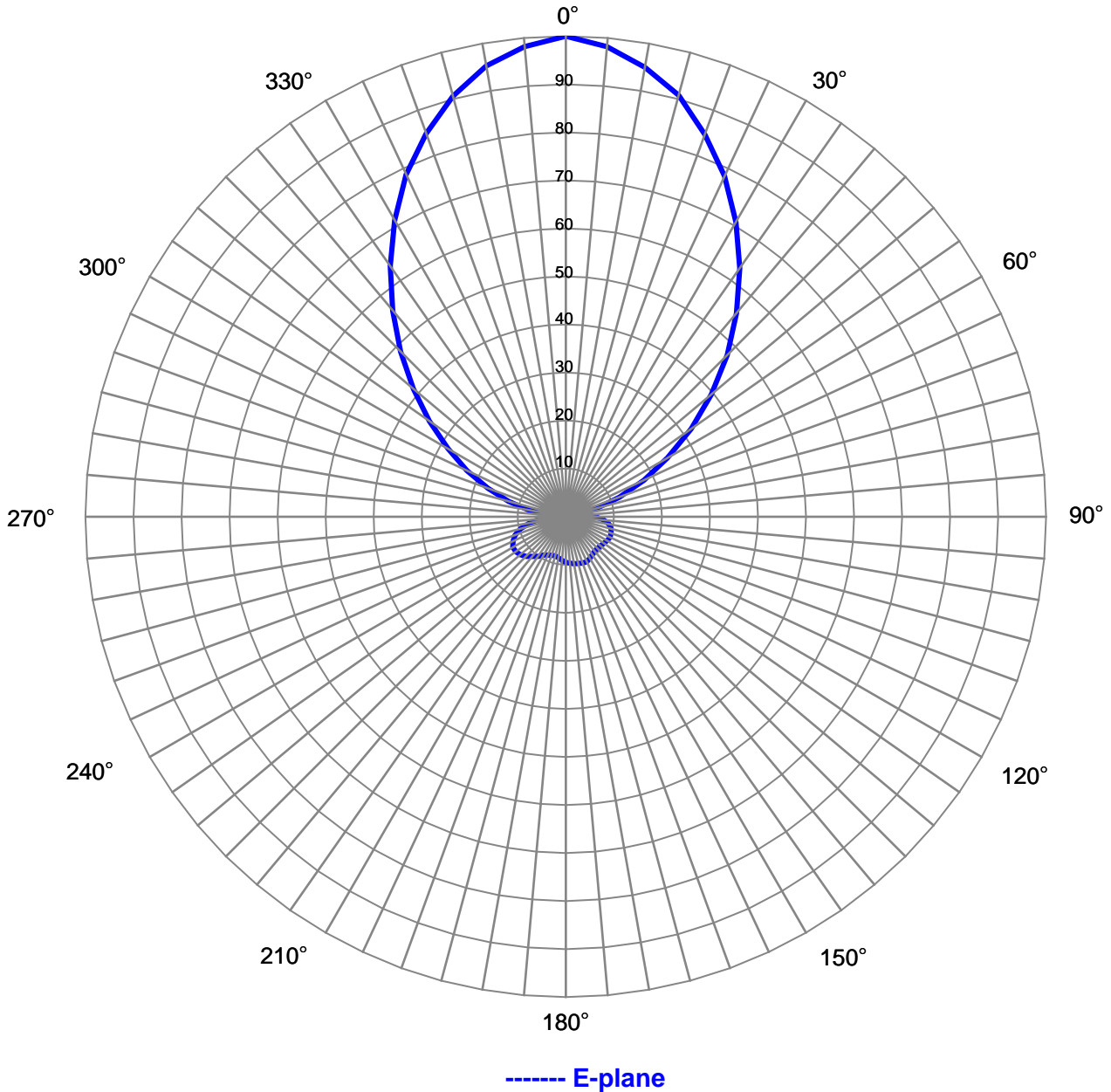
Two input versions are available: "A" - 'N' Male or Female, and "C" - 7-16 DIN Male or Female.

The antenna is available in a dual stack configuration. For multi-element arrays, each version includes a power divider and cables to accommodate the increased power. Versions "A" and "C" include either a 7/8" EIA or 1-5/8" EIA power divider and 1/2" corrugated foam cable.

Optional indexable mounting bracket adjustable in 15 degree increments accommodating a mast from 1-1/2" to 7" is available.



Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Antenna Type:	5-Element FM Log
Antenna Model:	PSIFM5LOG	Mount:	Horizontal Mount
Polarization:	Linear	Configuration:	Single Element
Gain:	3.55 (5.50 dB)	Beamwidth:	66 Degrees
Pattern:	E-Plane	Date:	9/29/2025

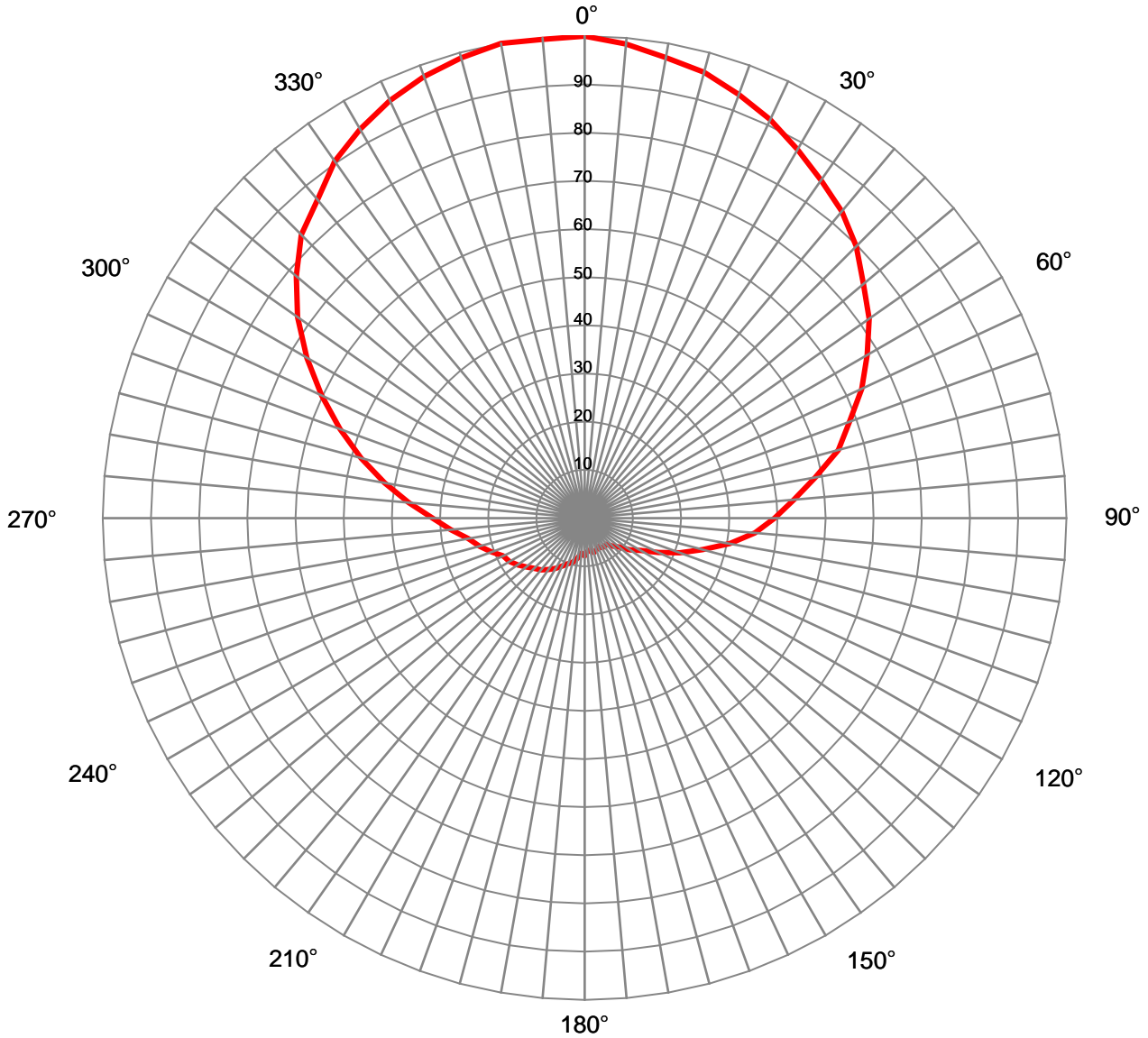


Relative Field Tabulation
Azimuth Plane Pattern
 Antenna Model: PSIFM5LOG
 Horizontal Polarization (E-plane)
 Horizontal Mount

Angle	Relative Field	Power Gain	Gain (dB)	Angle	Relative Field	Power Gain	Gain (dB)
0	1.000	3.550	5.50	180	0.095	0.032	-14.97
5	0.982	3.425	5.35	185	0.092	0.030	-15.27
10	0.950	3.201	5.05	190	0.087	0.027	-15.68
15	0.908	2.926	4.66	195	0.085	0.025	-15.95
20	0.846	2.544	4.05	200	0.086	0.026	-15.83
25	0.782	2.174	3.37	205	0.088	0.028	-15.56
30	0.708	1.781	2.51	210	0.092	0.030	-15.19
35	0.632	1.416	1.51	215	0.101	0.036	-14.41
40	0.553	1.086	0.36	220	0.108	0.042	-13.81
45	0.476	0.803	-0.95	225	0.117	0.048	-13.16
50	0.396	0.557	-2.54	230	0.123	0.054	-12.69
55	0.319	0.361	-4.43	235	0.127	0.057	-12.43
60	0.245	0.212	-6.73	240	0.127	0.057	-12.42
65	0.180	0.115	-9.41	245	0.121	0.052	-12.83
70	0.119	0.050	-13.00	250	0.112	0.045	-13.50
75	0.066	0.016	-18.05	255	0.097	0.034	-14.73
80	0.037	0.005	-23.09	260	0.077	0.021	-16.75
85	0.041	0.006	-22.15	265	0.054	0.010	-19.92
90	0.061	0.013	-18.79	270	0.033	0.004	-24.10
95	0.079	0.022	-16.52	275	0.042	0.006	-22.00
100	0.091	0.030	-15.27	280	0.078	0.022	-16.61
105	0.098	0.034	-14.67	285	0.123	0.054	-12.68
110	0.101	0.036	-14.45	290	0.173	0.106	-9.75
115	0.102	0.037	-14.35	295	0.227	0.182	-7.39
120	0.099	0.035	-14.54	300	0.283	0.284	-5.47
125	0.096	0.033	-14.81	305	0.347	0.428	-3.69
130	0.094	0.032	-15.00	310	0.414	0.608	-2.16
135	0.093	0.031	-15.09	315	0.487	0.841	-0.75
140	0.093	0.031	-15.09	320	0.560	1.114	0.47
145	0.096	0.033	-14.82	325	0.637	1.440	1.58
150	0.101	0.036	-14.45	330	0.712	1.801	2.55
155	0.104	0.038	-14.19	335	0.786	2.192	3.41
160	0.103	0.038	-14.23	340	0.849	2.556	4.08
165	0.101	0.036	-14.41	345	0.906	2.916	4.65
170	0.100	0.035	-14.53	350	0.953	3.222	5.08
175	0.097	0.034	-14.73	355	0.982	3.423	5.34



Relative Field Azimuth Plane Pattern



— H-plane

Pattern Type:	Relative Field	Type:	5-Element FM Log
Antenna Model:	PSIFM5LOG	Mount:	Vertical Mount
Polarization:	Linear	Configuration:	Single Element
Gain:	3.55 (5.50 dB)	Beamwidth:	115 Degrees
Pattern:	H-Plane	Date:	9/29/2025

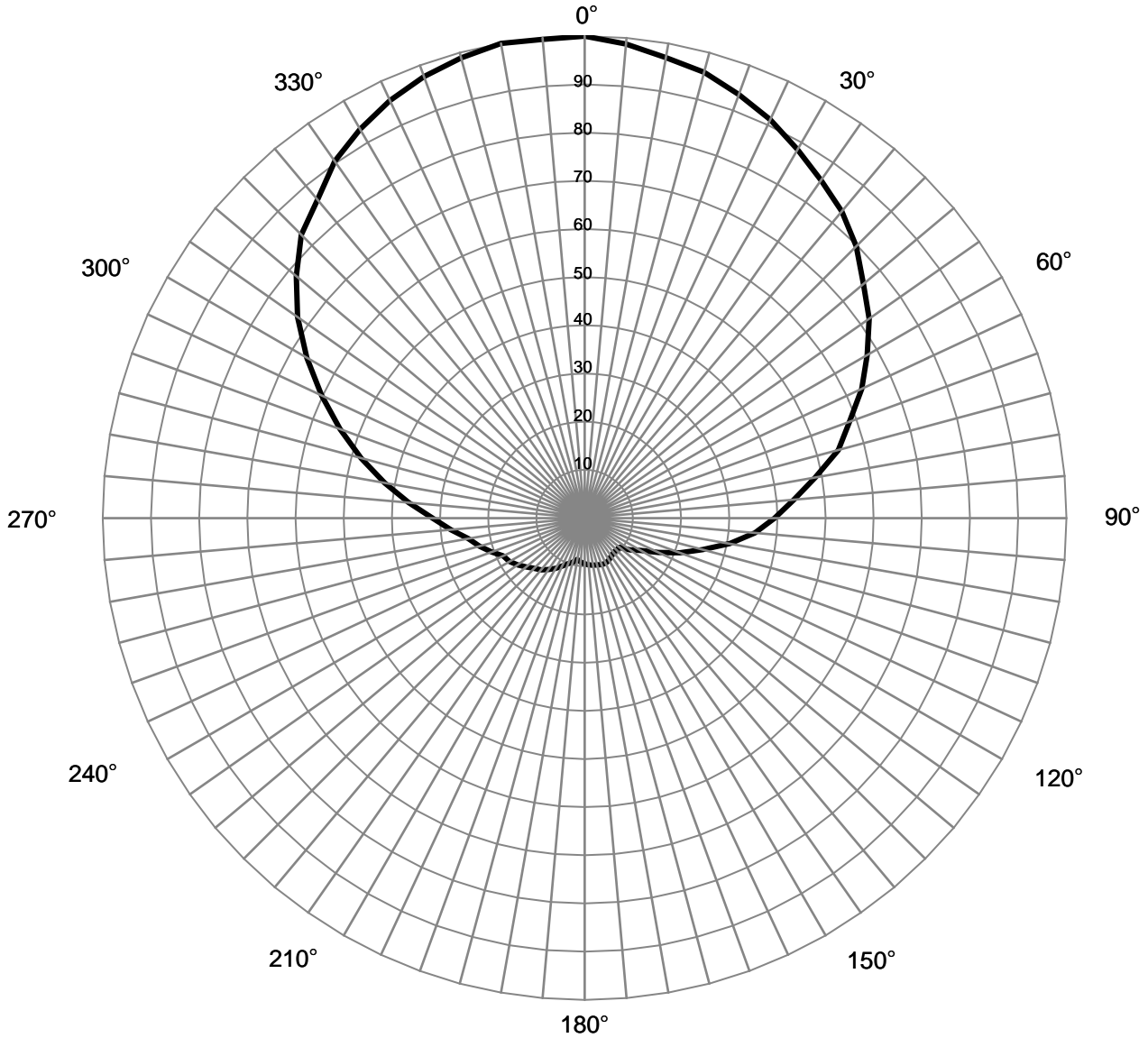


Relative Field Tabulation
Azimuth Plane Pattern
 Antenna Model: PSIFM5LOG
 Vertical Polarization (H-plane)
 Vertical Mount

Angle	Relative Field	Power Gain	Gain (dB)	Angle	Relative Field	Power Gain	Gain (dB)
0	1.000	3.550	5.50	180	0.079	0.022	-16.57
5	0.987	3.461	5.39	185	0.073	0.019	-17.23
10	0.970	3.341	5.24	190	0.085	0.026	-15.92
15	0.958	3.258	5.13	195	0.095	0.032	-14.91
20	0.935	3.104	4.92	200	0.101	0.036	-14.39
25	0.912	2.955	4.71	205	0.110	0.043	-13.67
30	0.883	2.770	4.42	210	0.121	0.052	-12.87
35	0.856	2.599	4.15	215	0.130	0.060	-12.19
40	0.831	2.449	3.89	220	0.140	0.070	-11.55
45	0.797	2.258	3.54	225	0.148	0.078	-11.10
50	0.756	2.027	3.07	230	0.158	0.089	-10.52
55	0.721	1.846	2.66	235	0.169	0.102	-9.92
60	0.677	1.629	2.12	240	0.180	0.116	-9.37
65	0.635	1.429	1.55	245	0.186	0.123	-9.10
70	0.585	1.215	0.85	250	0.205	0.150	-8.25
75	0.546	1.056	0.24	255	0.226	0.181	-7.42
80	0.486	0.840	-0.76	260	0.245	0.213	-6.72
85	0.436	0.676	-1.70	265	0.279	0.276	-5.60
90	0.394	0.552	-2.58	270	0.316	0.354	-4.51
95	0.355	0.447	-3.50	275	0.366	0.476	-3.22
100	0.306	0.333	-4.78	280	0.421	0.629	-2.01
105	0.254	0.228	-6.41	285	0.480	0.818	-0.87
110	0.210	0.157	-8.04	290	0.540	1.036	0.15
115	0.169	0.102	-9.91	295	0.603	1.289	1.10
120	0.135	0.064	-11.91	300	0.665	1.572	1.96
125	0.115	0.047	-13.30	305	0.727	1.876	2.73
130	0.094	0.031	-15.05	310	0.781	2.165	3.36
135	0.082	0.024	-16.19	315	0.831	2.453	3.90
140	0.071	0.018	-17.53	320	0.862	2.640	4.22
145	0.073	0.019	-17.24	325	0.904	2.903	4.63
150	0.071	0.018	-17.49	330	0.932	3.082	4.89
155	0.065	0.015	-18.23	335	0.956	3.246	5.11
160	0.070	0.017	-17.58	340	0.975	3.375	5.28
165	0.074	0.020	-17.09	345	0.989	3.471	5.40
170	0.067	0.016	-17.98	350	1.000	3.550	5.50
175	0.069	0.017	-17.69	355	0.997	3.530	5.48



Relative Field Azimuth Plane Pattern



————— Slant 45

Pattern Type:	Relative Field	Type:	5-Element FM Log
Antenna Model:	PSIFM5LOG	Mount:	45 Degree Slant Mount
Polarization:	Slant 45	Configuration:	Single Element
Gain:	1.78 (2.50 dB)	Beamwidth:	115 Degrees
Pattern:	Combined E/H	Date:	9/29/2025



Relative Field Tabulation
Azimuth Plane Pattern
 Antenna Model: PSIFM5LOG
 Slant Polarization (45 degree)
 Combined H-pol and V-pol component

Angle	Relative Field	Power Gain	Gain (dB)	Angle	Relative Field	Power Gain	Gain (dB)
0	1.000	1.780	2.50	180	0.095	0.016	-17.96
5	0.987	1.735	2.39	185	0.092	0.015	-18.27
10	0.970	1.675	2.24	190	0.087	0.014	-18.68
15	0.958	1.634	2.13	195	0.095	0.016	-17.91
20	0.935	1.556	1.92	200	0.101	0.018	-17.39
25	0.912	1.482	1.71	205	0.110	0.022	-16.66
30	0.883	1.389	1.43	210	0.121	0.026	-15.87
35	0.856	1.303	1.15	215	0.130	0.030	-15.18
40	0.831	1.228	0.89	220	0.140	0.035	-14.54
45	0.797	1.132	0.54	225	0.148	0.039	-14.09
50	0.756	1.017	0.07	230	0.158	0.044	-13.52
55	0.721	0.925	-0.34	235	0.169	0.051	-12.92
60	0.677	0.817	-0.88	240	0.180	0.058	-12.37
65	0.635	0.717	-1.45	245	0.186	0.062	-12.10
70	0.585	0.609	-2.15	250	0.205	0.075	-11.25
75	0.546	0.530	-2.76	255	0.226	0.091	-10.42
80	0.486	0.421	-3.76	260	0.245	0.107	-9.71
85	0.436	0.339	-4.70	265	0.279	0.138	-8.60
90	0.394	0.277	-5.58	270	0.316	0.177	-7.51
95	0.355	0.224	-6.50	275	0.366	0.239	-6.22
100	0.306	0.167	-7.77	280	0.421	0.316	-5.01
105	0.254	0.114	-9.41	285	0.480	0.410	-3.87
110	0.210	0.079	-11.04	290	0.540	0.520	-2.84
115	0.169	0.051	-12.91	295	0.603	0.646	-1.90
120	0.135	0.032	-14.90	300	0.665	0.788	-1.03
125	0.115	0.023	-16.29	305	0.727	0.941	-0.26
130	0.094	0.016	-18.00	310	0.781	1.086	0.36
135	0.093	0.016	-18.09	315	0.831	1.230	0.90
140	0.093	0.016	-18.09	320	0.862	1.324	1.22
145	0.096	0.017	-17.82	325	0.904	1.456	1.63
150	0.101	0.018	-17.45	330	0.932	1.545	1.89
155	0.104	0.019	-17.19	335	0.956	1.627	2.12
160	0.103	0.019	-17.23	340	0.975	1.692	2.28
165	0.101	0.018	-17.41	345	0.989	1.740	2.41
170	0.100	0.018	-17.53	350	1.000	1.780	2.50
175	0.097	0.017	-17.73	355	0.997	1.770	2.48