



reliable, durable, customizable, affordable

[broadcast antenna systems]

MODEL PSIFM8LOG

8 ELEMENT LOG PERIODIC FM ANTENNA

LOW COST | LOW WEIGHT & WIND AREA | BROADBAND

General Specifications

Element Input: "A" - 'N' Female | "B" - 7/8" EIA | "C" - 7-16 DIN

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

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

Power Rating: Type 'N' - 750W | 7/8" EIA - 5kW | 7/16 DIN - 2.5 kW

Multi-Element Arrays: Dual Stack Configuration available

Gain: 4.48 (6.51 dBd)

F/B Ratio: > 23 dBd

VSWR: < 1.25:1 (88 - 108 MHz)

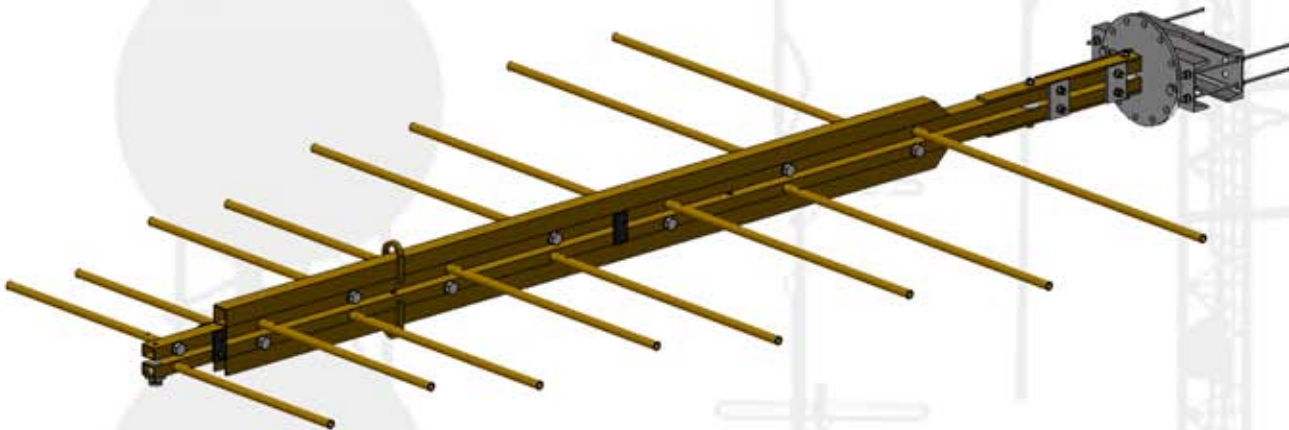
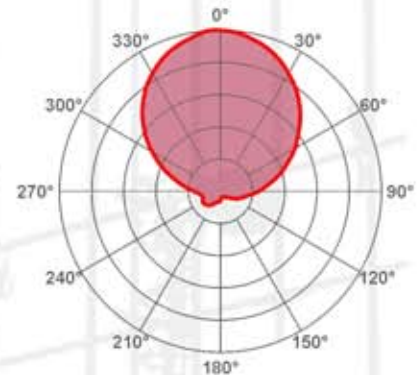
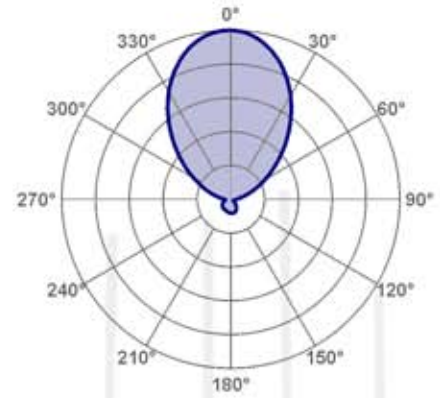
Impedance: 50 ohms

Dimensions: 104" x 69.5" x 9" (2642 x 1765 x 229mm)

Weight: 73 lbs (33.1 kg)

Wind Area: 9.82 ft² (.91 m²)

Wind Survival Rating: 137 mph (220 km/h)



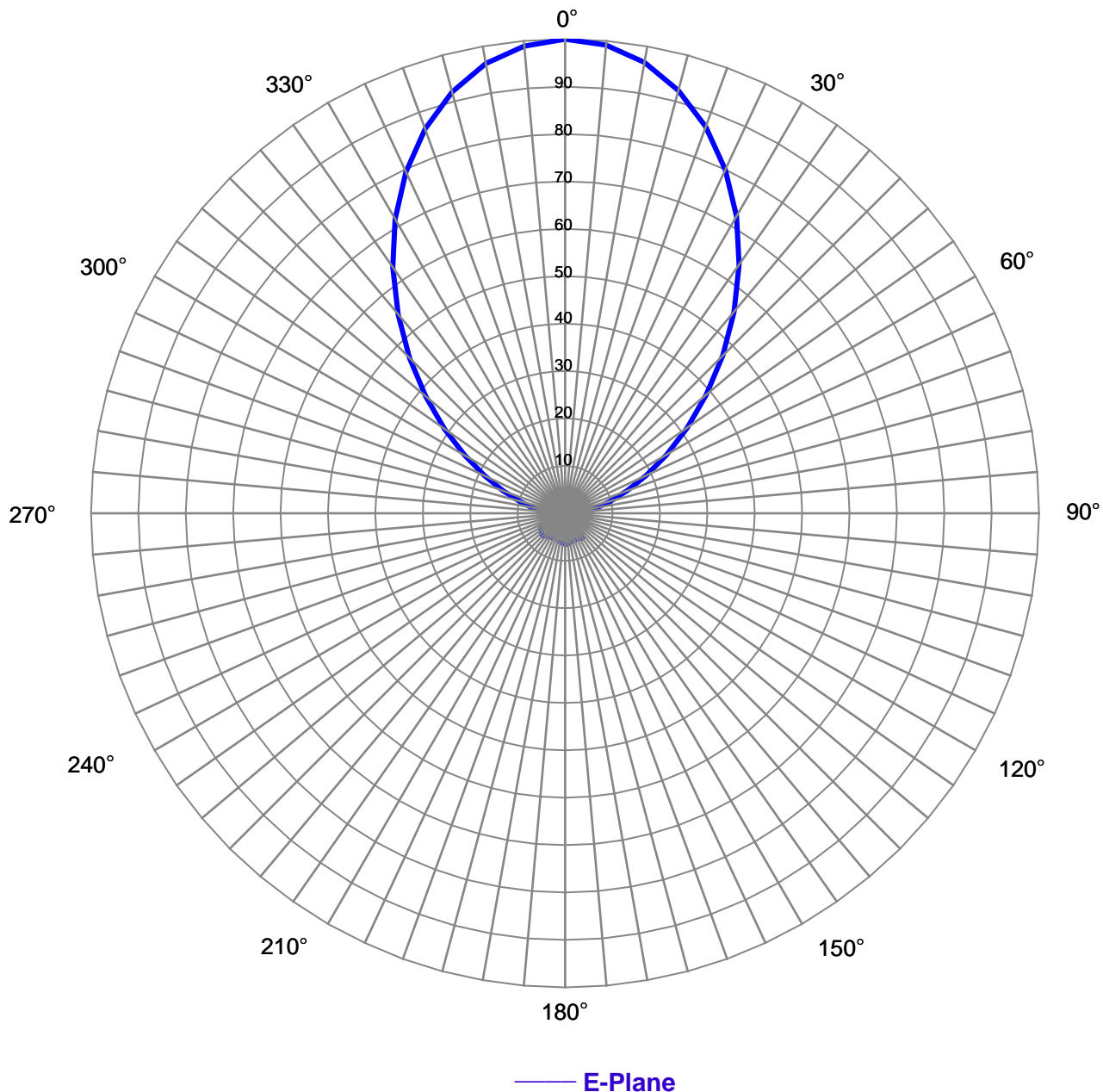
PSIFM8LOG antenna model is a linearly polarized antenna intended for FM broadcast applications up to 5 kW of input power. Treated aluminum, plated brass, and teflon construction with hot dip galvanized mounting bracket makes it suitable for any environment. Vertical, horizontal, or slant polarization can be achieved in 15 degree increments with the indexable mounting bracket. Three input versions are available: "A" - 'N' Female, "B" - 7/8" EIA and "C" - 7-16 DIN.

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

Standard with the PSIFM8LOG is an integral indexable mounting bracket that will accommodate a mast from 1-1/2" to 7" in diameter and a non-conductive guy wire assembly with mounting hardware.



Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Antenna Type:	8-Element FM Log
Antenna Model:	PSIFM8LOG	Mount:	Horizontal Mount
Polarization:	Linear	Configuration:	Single Element
Gain:	4.48 (6.51 dB)	Beamwidth:	62 Degrees
Pattern:	E-Plane	Date:	9/30/025



Relative Field Tabulation

Azimuth Plane Pattern

Antenna Model: PSIFM8LOG

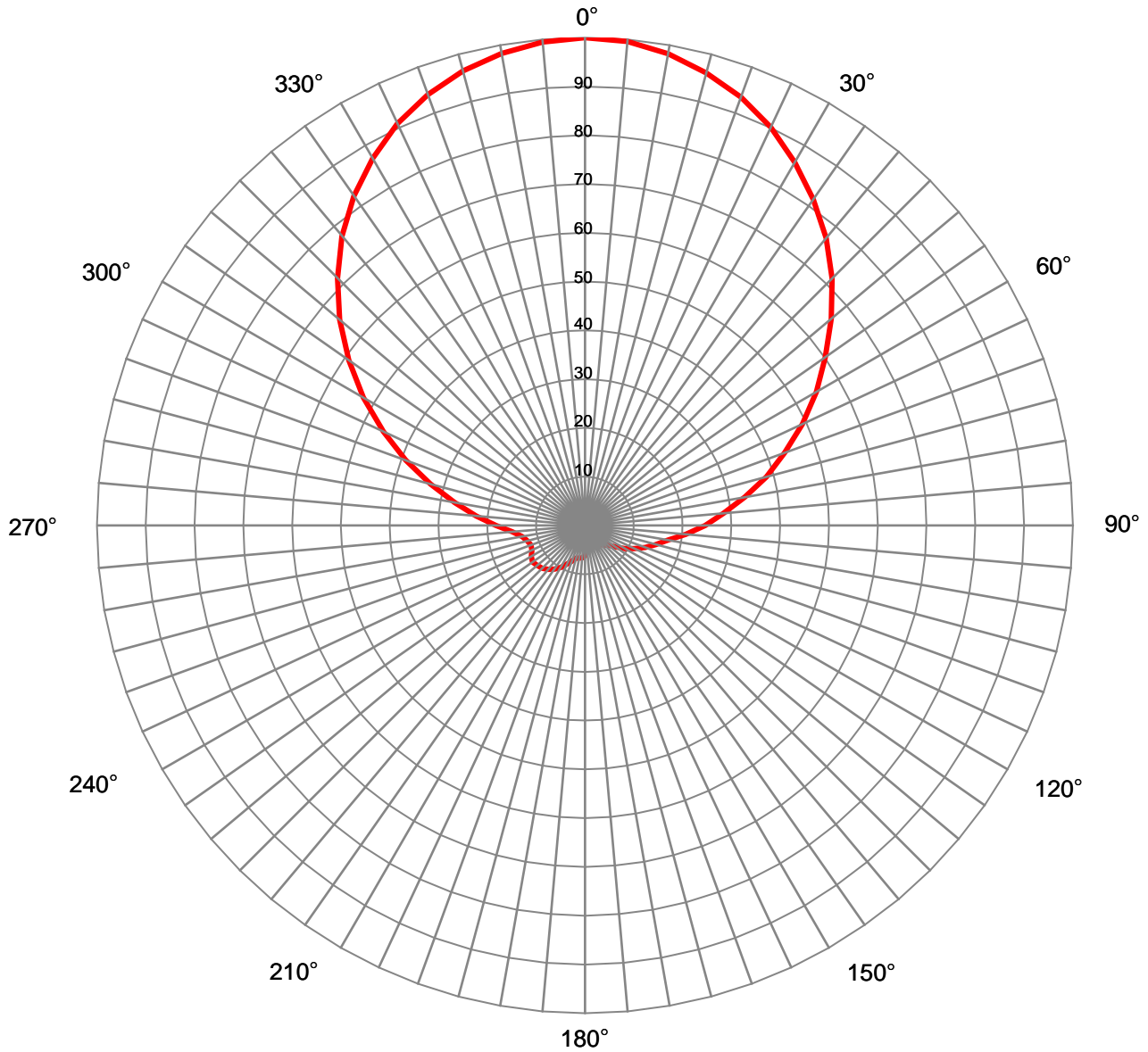
Horizontal Polarization (E-plane)

Horizontal Mount

Angle	Relative Field	Power Gain	Gain (dB)	Angle	Relative Field	Power Gain	Gain (dB)
0	1.000	4.480	6.51	180	0.065	0.019	-17.23
5	0.991	4.402	6.44	185	0.063	0.018	-17.50
10	0.966	4.177	6.21	190	0.061	0.017	-17.78
15	0.923	3.819	5.82	195	0.058	0.015	-18.22
20	0.868	3.376	5.28	200	0.056	0.014	-18.52
25	0.800	2.868	4.58	205	0.056	0.014	-18.52
30	0.724	2.345	3.70	210	0.059	0.016	-18.07
35	0.640	1.836	2.64	215	0.061	0.017	-17.78
40	0.555	1.378	1.39	220	0.062	0.017	-17.64
45	0.470	0.991	-0.04	225	0.067	0.020	-16.94
50	0.389	0.678	-1.69	230	0.065	0.019	-17.19
55	0.314	0.443	-3.54	235	0.063	0.018	-17.57
60	0.247	0.274	-5.63	240	0.058	0.015	-18.15
65	0.189	0.159	-7.98	245	0.053	0.013	-18.95
70	0.140	0.087	-10.59	250	0.047	0.010	-20.05
75	0.100	0.044	-13.52	255	0.040	0.007	-21.38
80	0.070	0.022	-16.62	260	0.034	0.005	-22.82
85	0.049	0.011	-19.67	265	0.031	0.004	-23.66
90	0.037	0.006	-22.04	270	0.035	0.006	-22.48
95	0.031	0.004	-23.53	275	0.049	0.011	-19.66
100	0.028	0.003	-24.61	280	0.071	0.023	-16.44
105	0.024	0.003	-25.98	285	0.101	0.046	-13.40
110	0.019	0.002	-27.84	290	0.139	0.087	-10.61
115	0.015	0.001	-30.05	295	0.187	0.156	-8.06
120	0.015	0.001	-30.26	300	0.244	0.267	-5.73
125	0.019	0.002	-27.78	305	0.310	0.431	-3.65
130	0.027	0.003	-24.73	310	0.384	0.659	-1.81
135	0.037	0.006	-22.16	315	0.464	0.964	-0.16
140	0.047	0.010	-20.12	320	0.548	1.343	1.28
145	0.064	0.018	-17.36	325	0.634	1.799	2.55
150	0.061	0.017	-17.78	330	0.717	2.303	3.62
155	0.060	0.016	-17.92	335	0.794	2.827	4.51
160	0.060	0.016	-17.92	340	0.863	3.337	5.23
165	0.061	0.017	-17.78	345	0.920	3.795	5.79
170	0.063	0.018	-17.50	350	0.963	4.156	6.19
175	0.065	0.019	-17.23	355	0.989	4.383	6.42



Relative Field Azimuth Plane Pattern



— H-Plane

Pattern Type:	Relative Field	Antenna Type:	8-Element FM Log
Antenna Model:	PSIFM8LOG	Mount:	Vertical Mount
Polarization:	Linear	Configuration:	Single Element
Gain:	4.48 (6.51 dB)	Beamwidth:	92 Degree
Pattern:	H-Plane	Date:	9/30/2025

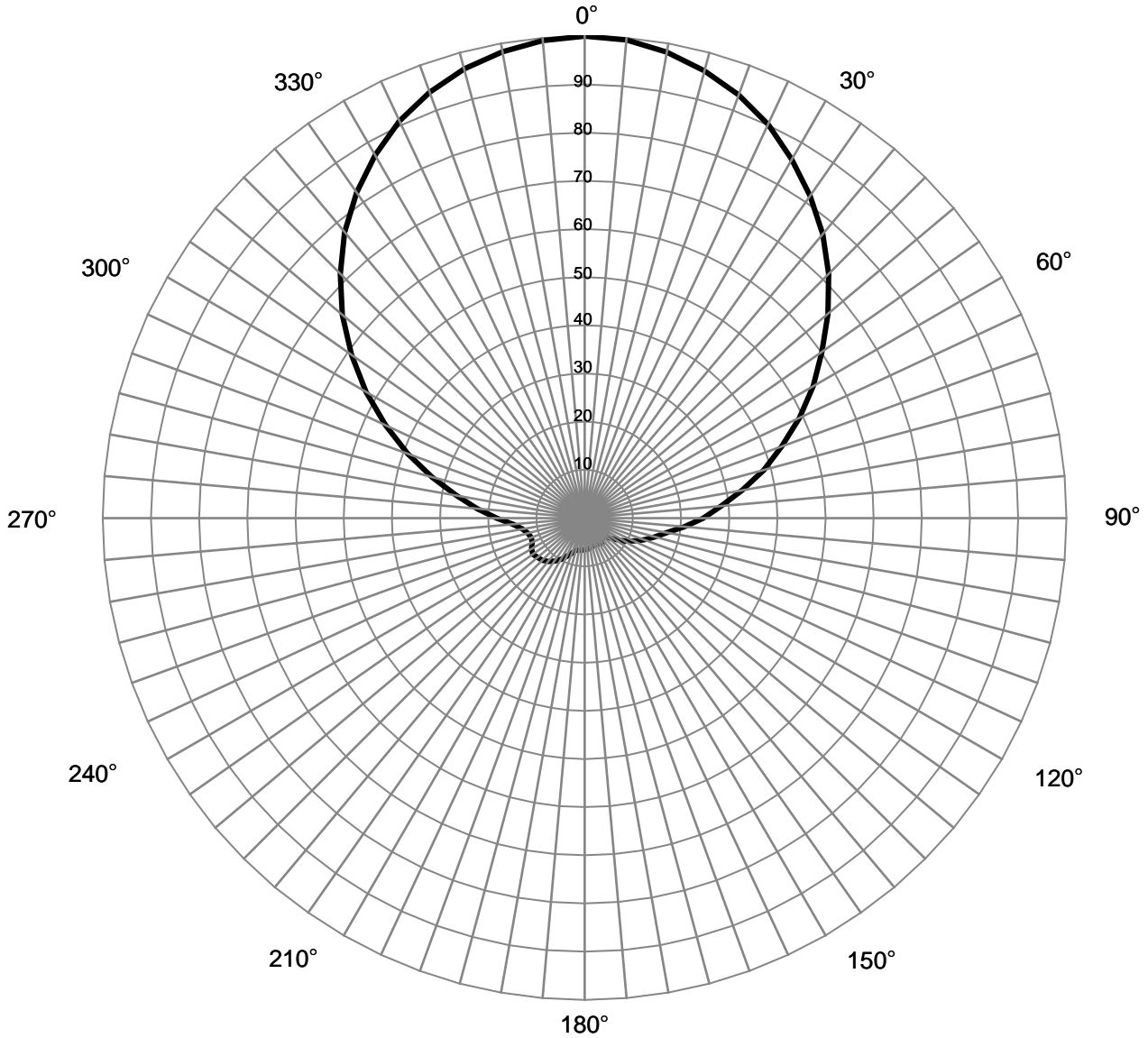


Relative Field Tabulation
Azimuth Plane Pattern
 Antenna Model: PSIFM8LOG
 Vertical Polarization (H-plane)
 Vertical Mount

Angle	Relative Field	Power Gain	Gain (dB)	Angle	Relative Field	Power Gain	Gain (dB)
0	1.000	4.480	6.51	180	0.062	0.017	-17.60
5	0.996	4.442	6.48	185	0.067	0.020	-16.98
10	0.982	4.318	6.35	190	0.068	0.021	-16.88
15	0.961	4.135	6.17	195	0.069	0.021	-16.72
20	0.935	3.913	5.92	200	0.078	0.027	-15.66
25	0.901	3.639	5.61	205	0.087	0.034	-14.66
30	0.860	3.312	5.20	210	0.099	0.044	-13.54
35	0.816	2.984	4.75	215	0.109	0.053	-12.72
40	0.769	2.651	4.23	220	0.118	0.062	-12.08
45	0.716	2.299	3.61	225	0.124	0.069	-11.62
50	0.659	1.948	2.89	230	0.127	0.073	-11.38
55	0.601	1.618	2.09	235	0.131	0.077	-11.14
60	0.548	1.344	1.28	240	0.127	0.072	-11.43
65	0.492	1.084	0.35	245	0.120	0.064	-11.92
70	0.436	0.850	-0.70	250	0.117	0.062	-12.09
75	0.385	0.664	-1.78	255	0.122	0.067	-11.76
80	0.332	0.495	-3.05	260	0.131	0.077	-11.15
85	0.285	0.363	-4.40	265	0.149	0.100	-10.00
90	0.246	0.272	-5.65	270	0.182	0.149	-8.27
95	0.208	0.194	-7.13	275	0.224	0.224	-6.49
100	0.173	0.135	-8.71	280	0.271	0.328	-4.84
105	0.151	0.102	-9.93	285	0.328	0.481	-3.17
110	0.132	0.078	-11.11	290	0.391	0.686	-1.64
115	0.112	0.056	-12.49	295	0.456	0.931	-0.31
120	0.095	0.040	-13.97	300	0.524	1.230	0.90
125	0.076	0.026	-15.83	305	0.590	1.562	1.94
130	0.063	0.018	-17.56	310	0.656	1.929	2.85
135	0.057	0.015	-18.33	315	0.717	2.303	3.62
140	0.051	0.012	-19.28	320	0.774	2.687	4.29
145	0.042	0.008	-21.07	325	0.825	3.048	4.84
150	0.041	0.007	-21.28	330	0.869	3.386	5.30
155	0.041	0.008	-21.24	335	0.909	3.700	5.68
160	0.040	0.007	-21.39	340	0.940	3.960	5.98
165	0.038	0.007	-21.84	345	0.965	4.172	6.20
170	0.044	0.009	-20.52	350	0.982	4.324	6.36
175	0.053	0.013	-19.03	355	0.995	4.434	6.47



Relative Field Azimuth Plane Pattern



————— Slant 45

Pattern Type:	Relative Field	Type:	8-Element FM Log
Antenna Model:	PSIFM8LOG	Mount:	45 Degree Slant Mount
Polarization:	Slant 45	Configuration:	Single Element
Gain:	2.24 (3.51 dB)	Beamwidth:	92 Degrees
Pattern:	Combined E/H	Date:	9/30/2025



**Relative Field Tabulation
Azimuth Plane Pattern**

Antenna Model: PSIFM8LOG

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	2.244	3.51	180	0.065	0.009	-20.23
5	0.996	2.225	3.47	185	0.067	0.010	-19.98
10	0.982	2.163	3.35	190	0.068	0.010	-19.88
15	0.961	2.071	3.16	195	0.069	0.011	-19.72
20	0.935	1.960	2.92	200	0.078	0.014	-18.66
25	0.901	1.823	2.61	205	0.087	0.017	-17.66
30	0.860	1.659	2.20	210	0.099	0.022	-16.54
35	0.816	1.495	1.75	215	0.109	0.027	-15.72
40	0.769	1.328	1.23	220	0.118	0.031	-15.08
45	0.716	1.151	0.61	225	0.124	0.034	-14.63
50	0.659	0.975	-0.11	230	0.127	0.036	-14.39
55	0.601	0.810	-0.91	235	0.131	0.038	-14.15
60	0.548	0.673	-1.72	240	0.127	0.036	-14.43
65	0.492	0.543	-2.65	245	0.120	0.032	-14.92
70	0.436	0.426	-3.71	250	0.117	0.031	-15.09
75	0.385	0.333	-4.78	255	0.122	0.033	-14.76
80	0.332	0.248	-6.06	260	0.131	0.038	-14.16
85	0.285	0.182	-7.40	265	0.149	0.050	-13.00
90	0.246	0.136	-8.65	270	0.182	0.075	-11.28
95	0.208	0.097	-10.13	275	0.224	0.112	-9.49
100	0.173	0.067	-11.71	280	0.271	0.164	-7.85
105	0.151	0.051	-12.93	285	0.328	0.241	-6.18
110	0.132	0.039	-14.11	290	0.391	0.343	-4.64
115	0.112	0.028	-15.49	295	0.456	0.466	-3.31
120	0.095	0.020	-16.98	300	0.524	0.616	-2.10
125	0.076	0.013	-18.83	305	0.590	0.782	-1.07
130	0.063	0.009	-20.56	310	0.656	0.966	-0.15
135	0.057	0.007	-21.33	315	0.717	1.153	0.62
140	0.051	0.006	-22.28	320	0.774	1.346	1.29
145	0.064	0.009	-20.37	325	0.825	1.527	1.84
150	0.061	0.008	-20.78	330	0.869	1.696	2.29
155	0.060	0.008	-20.93	335	0.909	1.853	2.68
160	0.060	0.008	-20.93	340	0.940	1.984	2.97
165	0.061	0.008	-20.78	345	0.965	2.090	3.20
170	0.063	0.009	-20.50	350	0.982	2.166	3.36
175	0.065	0.009	-20.23	355	0.995	2.221	3.47