



reliable, durable, customizable, affordable

[broadcast antenna systems]

MODEL PSIFM4Y

4 ELEMENT YAGI FM ANTENNA

LOW COST | LOW WEIGHT & WIND AREA | HIGH POWER

Electrical Specifications

Frequency: 88 - 108 MHz

Gain: 6.31 (8.0 dBd)

VSWR: < 1.1:1 (\pm 200 KHz)

Polarization: Linear

HPBW: E-Plane 55°

H-Plane 70°

F/B Ratio: 18 dB

Element Input: 7-16 DIN Female

Power Rating: 1000 W

Mechanical Specifications

Physical Characteristics: Chromated Aluminum, Teflon

Mounting Accomates: 1-1/2" to 4" Diameter Support

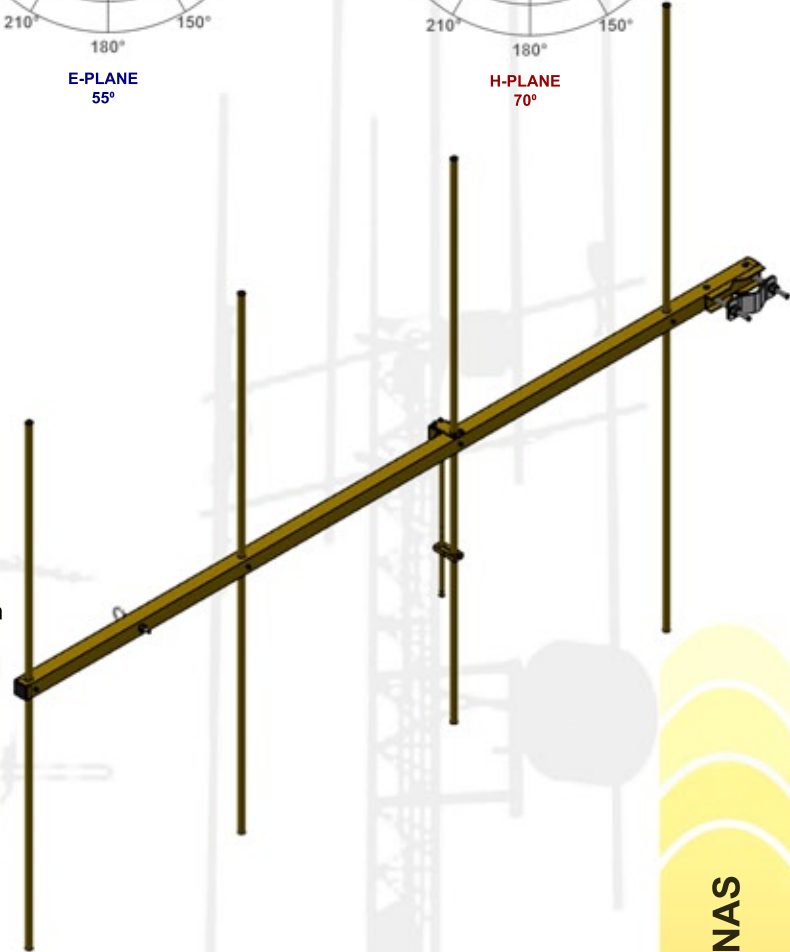
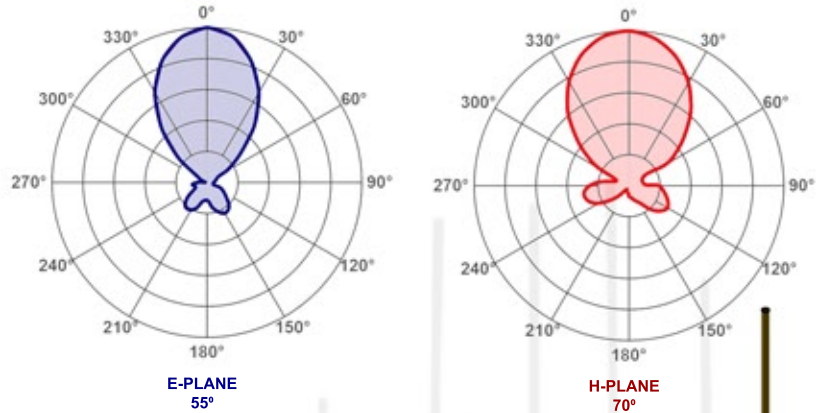
Positionable for H-Pol or V-Pol Operation

Dimensions: 82" x 60.1" x 3" (2083 x 1527 x 76mm)

Weight: 15 lbs (6.8 kg)

Wind Area: 2.91 ft² (.27 m²)

Wind Survival Rating: 100 mph (160 km/h)



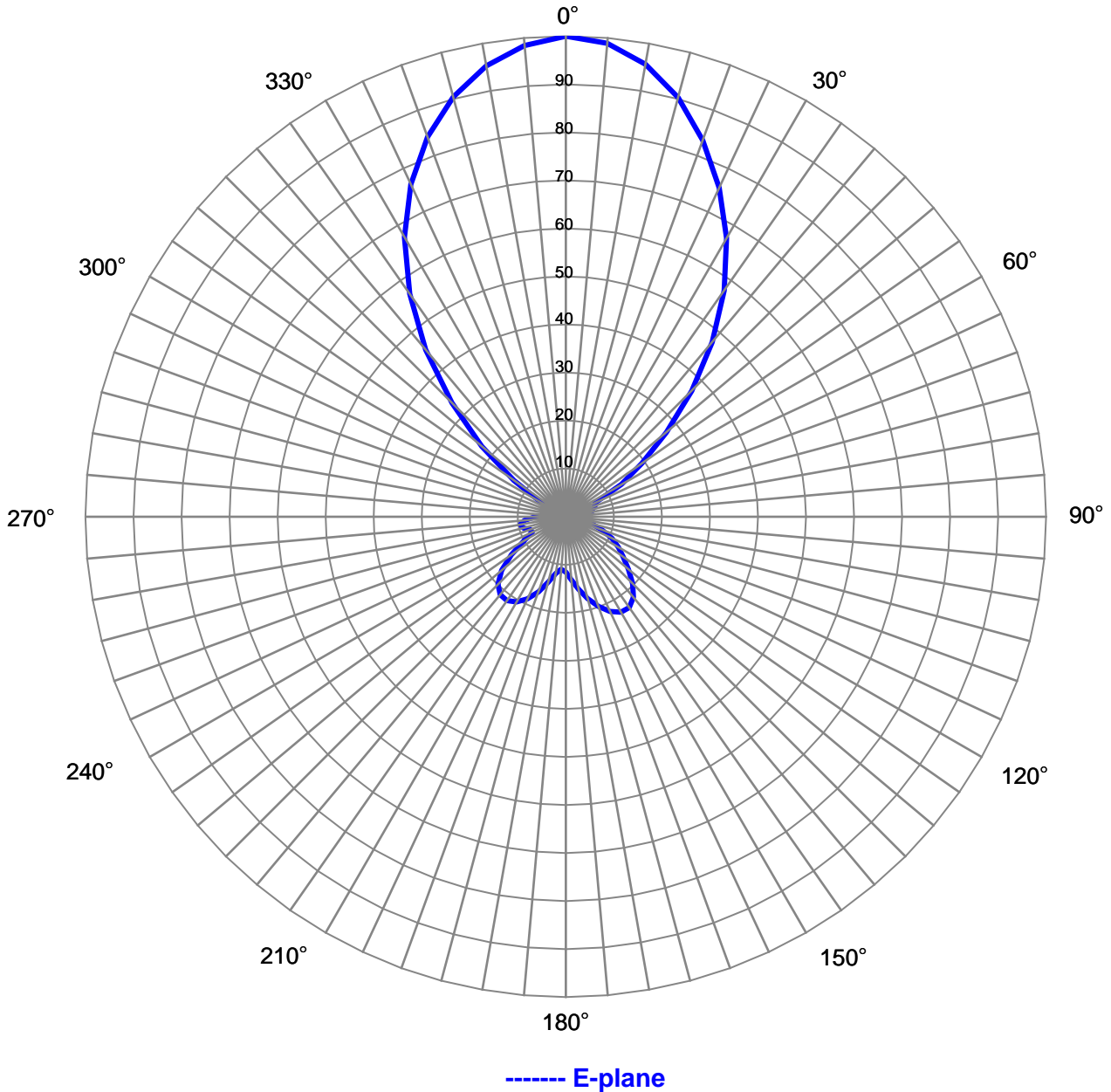
PSIFM4Y antenna model is an optimized frequency tuned, linearly polarized antenna intended for FM broadcast applications up to 1 kW of input power. Treated aluminum, plated brass, and teflon construction with hot dip galvanized mounting bracket make it suitable for any environment.

Standard with the PSIFM4Y is integrated mounting that will accommodate a mast from 1-1/2" to 4" in diameter, and can be mounted vertically or horizontally.

This model is also available in array configurations for custom patterns. For multi-element custom arrays, the PSIFM4Y includes a multi-power divider network, corresponding cables, and site specific mounting. Total weight, wind area, gain, and power rating are dependent on pattern requirements and configuration.



Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Antenna Type:	4-Element FM Yagi
Antenna Model:	PSIFM4Y	Mount:	Horizontal Mount
Polarization:	Linear	Configuration:	Single Element
Gain:	6.31 (8.0 dB)	Beamwidth:	55 Degrees
Pattern:	E-Plane	Date:	1/1/2026



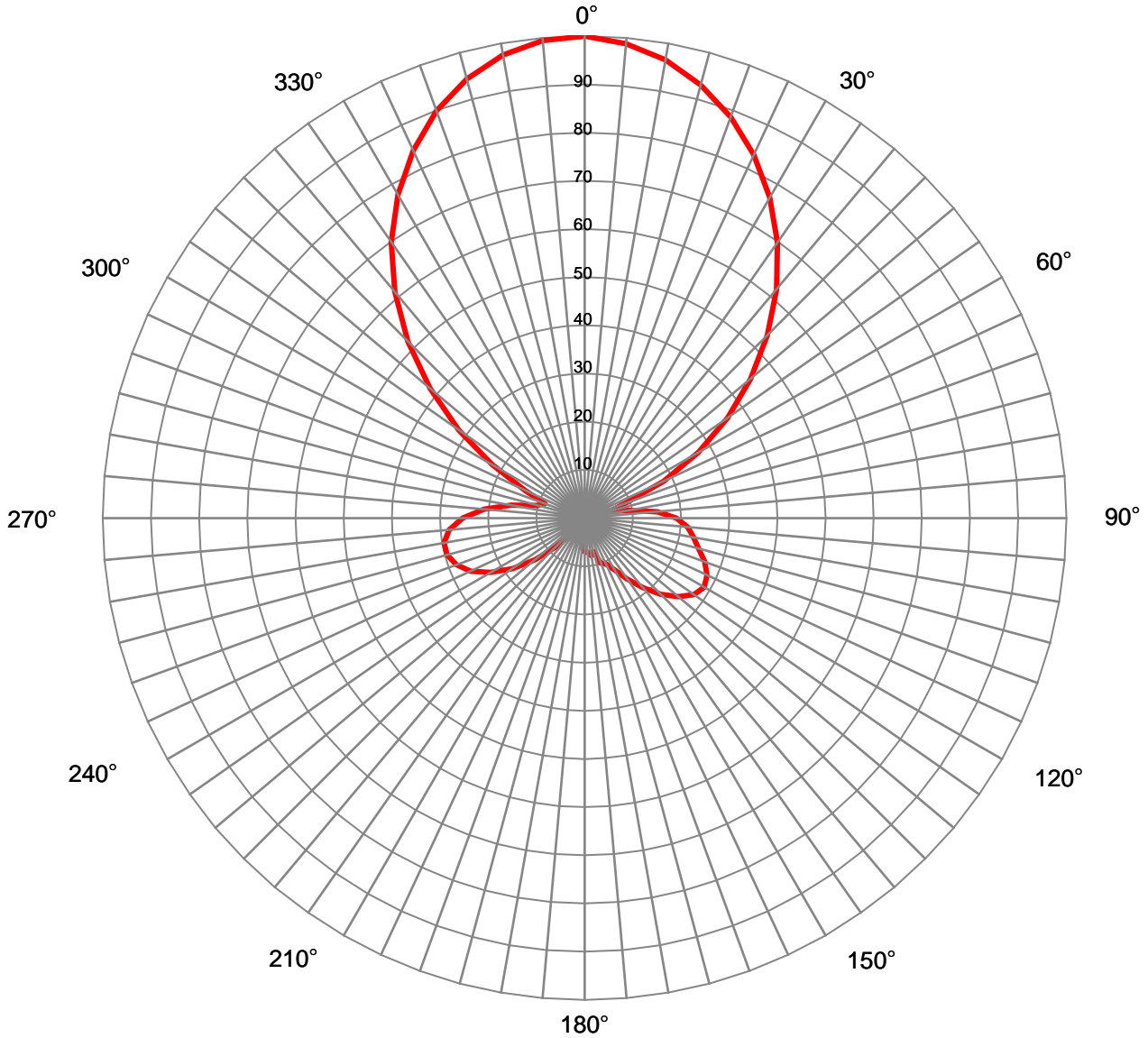
**Relative Field Tabulation
Azimuth Plane Pattern**

Antenna Model: PSIFM4Y
Horizontal Polarization (E-plane)
Horizontal Mount

Angle	Relative Field	Power Gain	Gain (dB)	Angle	Relative Field	Power Gain	Gain (dB)
0	1.000	6.310	8.00	180	0.115	0.084	-10.77
5	0.989	6.175	7.91	185	0.110	0.076	-11.19
10	0.956	5.768	7.61	190	0.120	0.091	-10.42
15	0.903	5.147	7.12	195	0.141	0.126	-8.99
20	0.834	4.384	6.42	200	0.166	0.175	-7.58
25	0.755	3.601	5.56	205	0.189	0.226	-6.46
30	0.670	2.829	4.52	210	0.205	0.265	-5.76
35	0.575	2.085	3.19	215	0.213	0.286	-5.43
40	0.474	1.420	1.52	220	0.212	0.284	-5.47
45	0.371	0.868	-0.62	225	0.199	0.251	-6.01
50	0.273	0.471	-3.27	230	0.174	0.192	-7.17
55	0.193	0.235	-6.29	235	0.138	0.120	-9.20
60	0.134	0.113	-9.46	240	0.100	0.063	-12.03
65	0.068	0.029	-15.37	245	0.076	0.037	-14.33
70	0.065	0.027	-15.69	250	0.079	0.039	-14.10
75	0.057	0.020	-16.91	255	0.092	0.053	-12.74
80	0.055	0.019	-17.26	260	0.096	0.058	-12.33
85	0.050	0.016	-18.08	265	0.086	0.047	-13.29
90	0.043	0.012	-19.28	270	0.063	0.025	-16.02
95	0.046	0.014	-18.67	275	0.030	0.006	-22.33
100	0.040	0.010	-19.98	280	0.011	0.001	-31.23
105	0.054	0.019	-17.32	285	0.024	0.004	-24.54
110	0.080	0.041	-13.91	290	0.030	0.006	-22.55
115	0.106	0.071	-11.50	295	0.028	0.005	-22.97
120	0.127	0.101	-9.94	300	0.062	0.024	-16.18
125	0.146	0.134	-8.73	305	0.132	0.110	-9.60
130	0.171	0.183	-7.36	310	0.228	0.328	-4.84
135	0.196	0.243	-6.14	315	0.336	0.710	-1.49
140	0.219	0.303	-5.19	320	0.454	1.298	1.13
145	0.231	0.337	-4.73	325	0.566	2.025	3.06
150	0.230	0.333	-4.78	330	0.672	2.846	4.54
155	0.218	0.299	-5.25	335	0.763	3.675	5.65
160	0.199	0.249	-6.03	340	0.841	4.468	6.50
165	0.177	0.197	-7.06	345	0.905	5.164	7.13
170	0.154	0.149	-8.27	350	0.952	5.724	7.58
175	0.131	0.109	-9.63	355	0.984	6.112	7.86



Relative Field Azimuth Plane Pattern



— H-plane

Pattern Type:	Relative Field	Type:	4-Element FM Yagi
Antenna Model:	PSIFM4Y	Mount:	Vertical Mount
Polarization:	Linear	Configuration:	Single Element
Gain:	6.31 (8.0 dB)	Beamwidth:	70 Degrees
Pattern:	H-Plane	Date:	1/1/2026

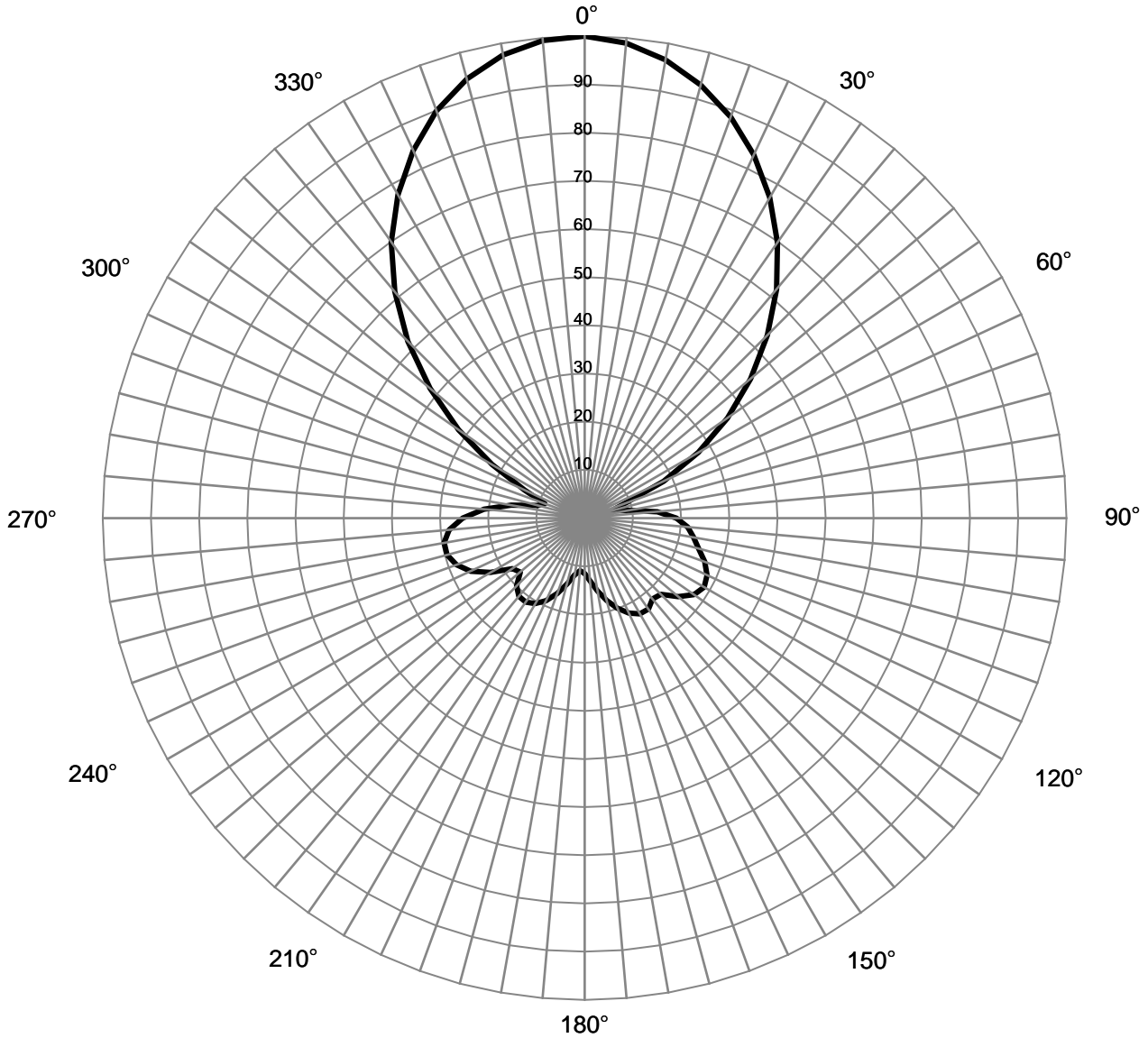


Relative Field Tabulation
Azimuth Plane Pattern
 Antenna Model: PSIFM4Y
 Vertical Polarization (H-plane)
 Vertical Mount

Angle	Relative Field	Power Gain	Gain (dB)	Angle	Relative Field	Power Gain	Gain (dB)
0	1.000	6.310	8.00	180	0.070	0.031	-15.13
5	0.988	6.164	7.90	185	0.061	0.024	-16.28
10	0.965	5.882	7.69	190	0.045	0.013	-19.02
15	0.930	5.462	7.37	195	0.046	0.013	-18.81
20	0.886	4.952	6.95	200	0.042	0.011	-19.52
25	0.831	4.362	6.40	205	0.036	0.008	-20.93
30	0.768	3.726	5.71	210	0.026	0.004	-23.77
35	0.698	3.073	4.88	215	0.022	0.003	-24.96
40	0.620	2.424	3.85	220	0.045	0.013	-18.88
45	0.537	1.818	2.60	225	0.086	0.047	-13.32
50	0.450	1.276	1.06	230	0.134	0.114	-9.44
55	0.362	0.827	-0.83	235	0.183	0.211	-6.77
60	0.273	0.470	-3.28	240	0.226	0.323	-4.91
65	0.181	0.208	-6.82	245	0.261	0.429	-3.68
70	0.091	0.053	-12.78	250	0.283	0.507	-2.95
75	0.053	0.018	-17.49	255	0.295	0.550	-2.59
80	0.093	0.054	-12.66	260	0.296	0.553	-2.57
85	0.152	0.145	-8.38	265	0.282	0.502	-2.99
90	0.191	0.230	-6.39	270	0.253	0.403	-3.94
95	0.215	0.291	-5.36	275	0.209	0.277	-5.58
100	0.230	0.333	-4.78	280	0.155	0.152	-8.19
105	0.245	0.379	-4.21	285	0.101	0.064	-11.94
110	0.265	0.444	-3.53	290	0.087	0.048	-13.16
115	0.281	0.497	-3.04	295	0.137	0.119	-9.25
120	0.287	0.519	-2.85	300	0.222	0.311	-5.07
125	0.277	0.485	-3.14	305	0.319	0.643	-1.92
130	0.254	0.407	-3.91	310	0.419	1.108	0.44
135	0.224	0.316	-5.00	315	0.518	1.696	2.30
140	0.189	0.225	-6.47	320	0.613	2.371	3.75
145	0.154	0.150	-8.23	325	0.699	3.087	4.90
150	0.124	0.097	-10.14	330	0.775	3.787	5.78
155	0.105	0.070	-11.56	335	0.841	4.468	6.50
160	0.099	0.062	-12.05	340	0.899	5.101	7.08
165	0.072	0.033	-14.86	345	0.943	5.616	7.49
170	0.079	0.040	-14.00	350	0.976	6.006	7.79
175	0.071	0.032	-14.98	355	0.995	6.244	7.95



Relative Field Azimuth Plane Pattern



————— Slant 45

Pattern Type:	Relative Field	Type:	4-Element FM Yagi
Antenna Model:	PSIFM4Y	Mount:	45 Degree Slant Mount
Polarization:	Slant 45	Configuration:	Single Element
Gain:	3.16 (5.0 dB)	Beamwidth:	70 Degrees
Pattern:	Combined E/H	Date:	1/1/2026



**Relative Field Tabulation
Azimuth Plane Pattern**

Antenna Model: PSIFM4Y

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	3.160	5.00	180	0.115	0.042	-13.78
5	0.989	3.092	4.90	185	0.110	0.038	-14.19
10	0.965	2.945	4.69	190	0.120	0.046	-13.42
15	0.930	2.735	4.37	195	0.141	0.063	-12.00
20	0.886	2.480	3.94	200	0.166	0.088	-10.58
25	0.831	2.185	3.39	205	0.189	0.113	-9.47
30	0.768	1.866	2.71	210	0.205	0.133	-8.76
35	0.698	1.539	1.87	215	0.213	0.143	-8.43
40	0.620	1.214	0.84	220	0.212	0.142	-8.47
45	0.537	0.910	-0.41	225	0.199	0.126	-9.01
50	0.450	0.639	-1.94	230	0.174	0.096	-10.18
55	0.362	0.414	-3.83	235	0.183	0.105	-9.77
60	0.273	0.235	-6.28	240	0.226	0.162	-7.92
65	0.181	0.104	-9.83	245	0.261	0.215	-6.68
70	0.091	0.026	-15.78	250	0.283	0.254	-5.95
75	0.057	0.010	-19.92	255	0.295	0.276	-5.60
80	0.093	0.027	-15.66	260	0.296	0.277	-5.57
85	0.152	0.073	-11.38	265	0.282	0.251	-6.00
90	0.191	0.115	-9.39	270	0.253	0.202	-6.95
95	0.215	0.146	-8.36	275	0.209	0.139	-8.58
100	0.230	0.167	-7.78	280	0.155	0.076	-11.20
105	0.245	0.190	-7.22	285	0.101	0.032	-14.94
110	0.265	0.222	-6.53	290	0.087	0.024	-16.16
115	0.281	0.249	-6.04	295	0.137	0.059	-12.26
120	0.287	0.260	-5.85	300	0.222	0.156	-8.08
125	0.277	0.243	-6.14	305	0.319	0.322	-4.92
130	0.254	0.204	-6.91	310	0.419	0.555	-2.56
135	0.224	0.158	-8.00	315	0.518	0.849	-0.71
140	0.219	0.152	-8.19	320	0.613	1.187	0.75
145	0.231	0.169	-7.73	325	0.699	1.546	1.89
150	0.230	0.167	-7.78	330	0.775	1.897	2.78
155	0.218	0.150	-8.25	335	0.841	2.237	3.50
160	0.199	0.125	-9.04	340	0.899	2.555	4.07
165	0.177	0.099	-10.06	345	0.943	2.813	4.49
170	0.154	0.075	-11.27	350	0.976	3.008	4.78
175	0.131	0.055	-12.63	355	0.995	3.127	4.95