

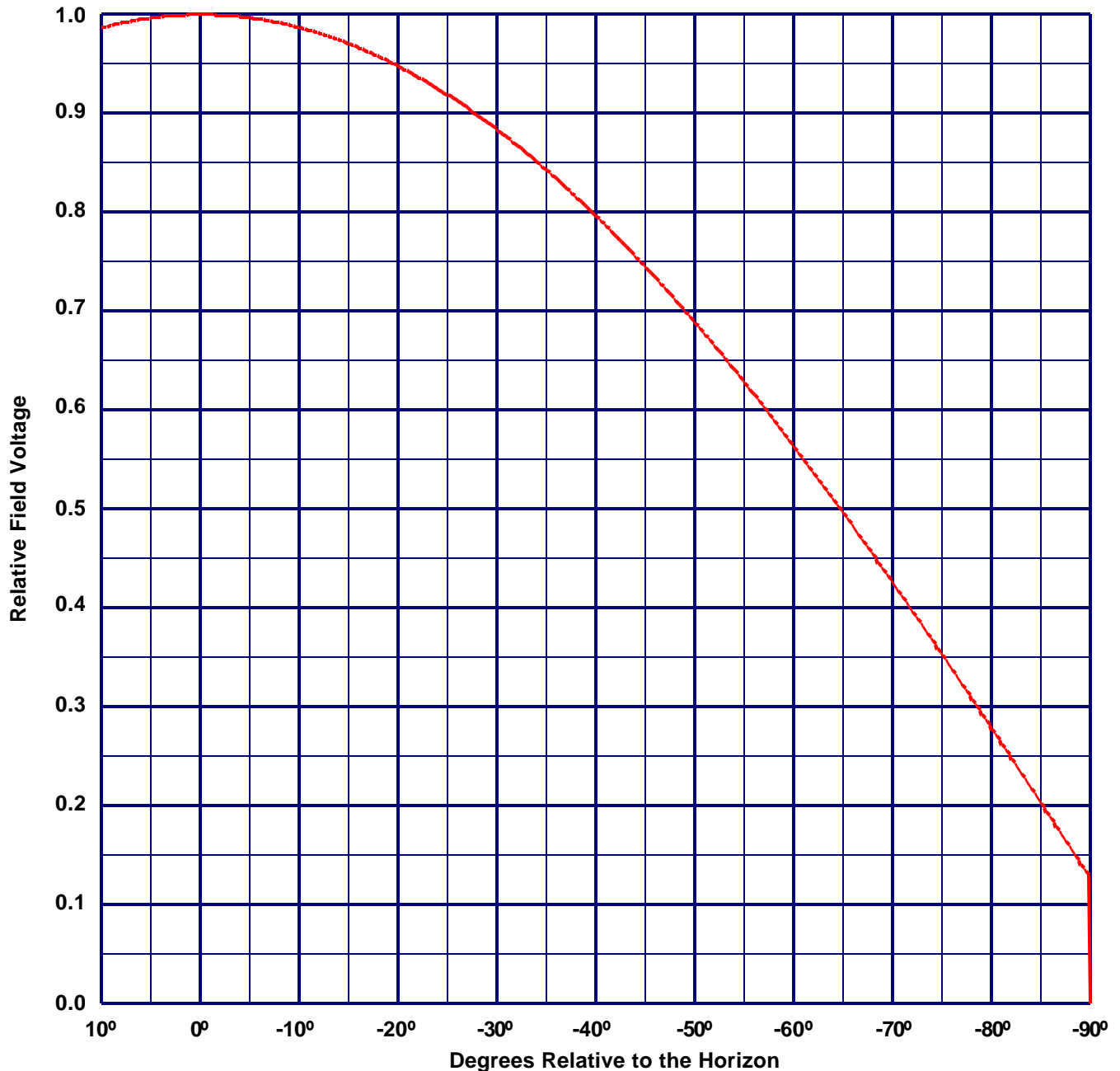


Vertical Plane Relative Field Pattern

ERI TYPE FM100A ELEMENT

A 1 level, 1 wave-length spaced non directional antenna

with a H/V maximum power ratio of 1.000



Vertical Polarization Gain:

Maximum: 0.461 (-3.362 dB)

Horizontal Plane: 0.461 (-3.362 dB)

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ERI FM 100A
1-Bay Circularly Polarized FM Antenna



Frequency =

89.3
112.5

 Mhz
Interfering Contour

dBu (50,10)

ERP=

27

 watts
Height =

50

 m AGL

Depression Angle	Relative Field (o)	Effective Power (w)	Distance to Contour (m)	Distance from Antenna to Ground (m)	Clearance (m)
1	1.000	27.0	86.43	2,864.93	2779
2	0.996	26.8	86.09	1,432.69	1347
3	0.992	26.6	85.74	955.37	870
4	0.989	26.4	85.48	716.78	631
5	0.983	26.1	84.96	573.69	489
6	0.981	26.0	84.79	478.34	394
7	0.979	25.9	84.62	410.28	326
8	0.975	25.7	84.27	359.26	275
9	0.973	25.6	84.10	319.62	236
10	0.971	25.5	83.93	287.94	204
11	0.970	25.4	83.84	262.04	178
12	0.969	25.4	83.75	240.49	157
13	0.968	25.3	83.67	222.27	139
14	0.966	25.2	83.49	206.68	123
15	0.965	25.1	83.41	193.19	110
16	0.961	24.9	83.06	181.40	98
17	0.957	24.7	82.72	171.02	88
18	0.953	24.5	82.37	161.80	79
19	0.949	24.3	82.03	153.58	72
20	0.945	24.1	81.68	146.19	65
21	0.941	23.9	81.33	139.52	58
22	0.938	23.8	81.07	133.47	52
23	0.934	23.6	80.73	127.97	47
24	0.930	23.4	80.38	122.93	43
25	0.926	23.2	80.04	118.31	38
26	0.915	22.6	79.09	114.06	35
27	0.904	22.1	78.14	110.13	32
28	0.894	21.6	77.27	106.50	29
29	0.883	21.1	76.32	103.13	27
30	0.872	20.5	75.37	100.00	25
31	0.868	20.3	75.02	97.08	22
32	0.863	20.1	74.59	94.35	20
33	0.858	19.9	74.16	91.80	18
34	0.850	19.5	73.47	89.41	16
35	0.843	19.2	72.86	87.17	14
36	0.834	18.8	72.09	85.07	13
37	0.824	18.3	71.22	83.08	12
38	0.816	18.0	70.53	81.21	11
39	0.807	17.6	69.75	79.45	10
40	0.798	17.2	68.97	77.79	9
41	0.788	16.8	68.11	76.21	8
42	0.778	16.3	67.25	74.72	7
43	0.767	15.9	66.29	73.31	7
44	0.755	15.4	65.26	71.98	7
45	0.744	14.9	64.31	70.71	6

Depression Angle	Relative Field	Effective Power (w)	Distance to Contour (m)	Distance from Antenna to Ground (m)	Clearance (m)
46	0.729	14.3	63.01	69.51	6
47	0.716	13.8	61.89	68.37	6
48	0.704	13.4	60.85	67.28	6
49	0.693	13.0	59.90	66.25	6
50	0.682	12.6	58.95	65.27	6
51	0.670	12.1	57.91	64.34	6
52	0.659	11.7	56.96	63.45	6
53	0.648	11.3	56.01	62.61	7
54	0.637	11.0	55.06	61.80	7
55	0.626	10.6	54.11	61.04	7
56	0.611	10.1	52.81	60.31	8
57	0.602	9.8	52.03	59.62	8
58	0.588	9.3	50.82	58.96	8
59	0.579	9.1	50.04	58.33	8
60	0.563	8.6	48.66	57.74	9
61	0.551	8.2	47.62	57.17	10
62	0.538	7.8	46.50	56.63	10
63	0.523	7.4	45.20	56.12	11
64	0.511	7.1	44.17	55.63	11
65	0.499	6.7	43.13	55.17	12
66	0.484	6.3	41.83	54.73	13
67	0.469	5.9	40.54	54.32	14
68	0.454	5.6	39.24	53.93	15
69	0.439	5.2	37.94	53.56	16
70	0.424	4.9	36.65	53.21	17
71	0.409	4.5	35.35	52.88	18
72	0.398	4.3	34.40	52.57	18
73	0.381	3.9	32.93	52.28	19
74	0.366	3.6	31.63	52.01	20
75	0.351	3.3	30.34	51.76	21
76	0.338	3.1	29.21	51.53	22
77	0.319	2.7	27.57	51.32	24
78	0.302	2.5	26.10	51.12	25
79	0.290	2.3	25.07	50.94	26
80	0.277	2.1	23.94	50.77	27
81	0.261	1.8	22.56	50.62	28
82	0.248	1.7	21.44	50.49	29
83	0.231	1.4	19.97	50.38	30
84	0.215	1.2	18.58	50.28	32
85	0.200	1.1	17.29	50.19	33
86	0.189	1.0	16.34	50.12	34
87	0.174	0.8	15.04	50.07	35
88	0.161	0.7	13.92	50.03	36
89	0.147	0.6	12.71	50.01	37
90	0.134	0.5	0.00	50.00	50

NOTES:

- HEIGHT HAS BEEN REDUCED BY 2 METERS TO ALLOW FOR HUMAN EXPOSURE
- DISTANCE FROM ANTENNA TO GROUND IS ACTUALLY TO A POINT 2 METERS ABOVE GROUND