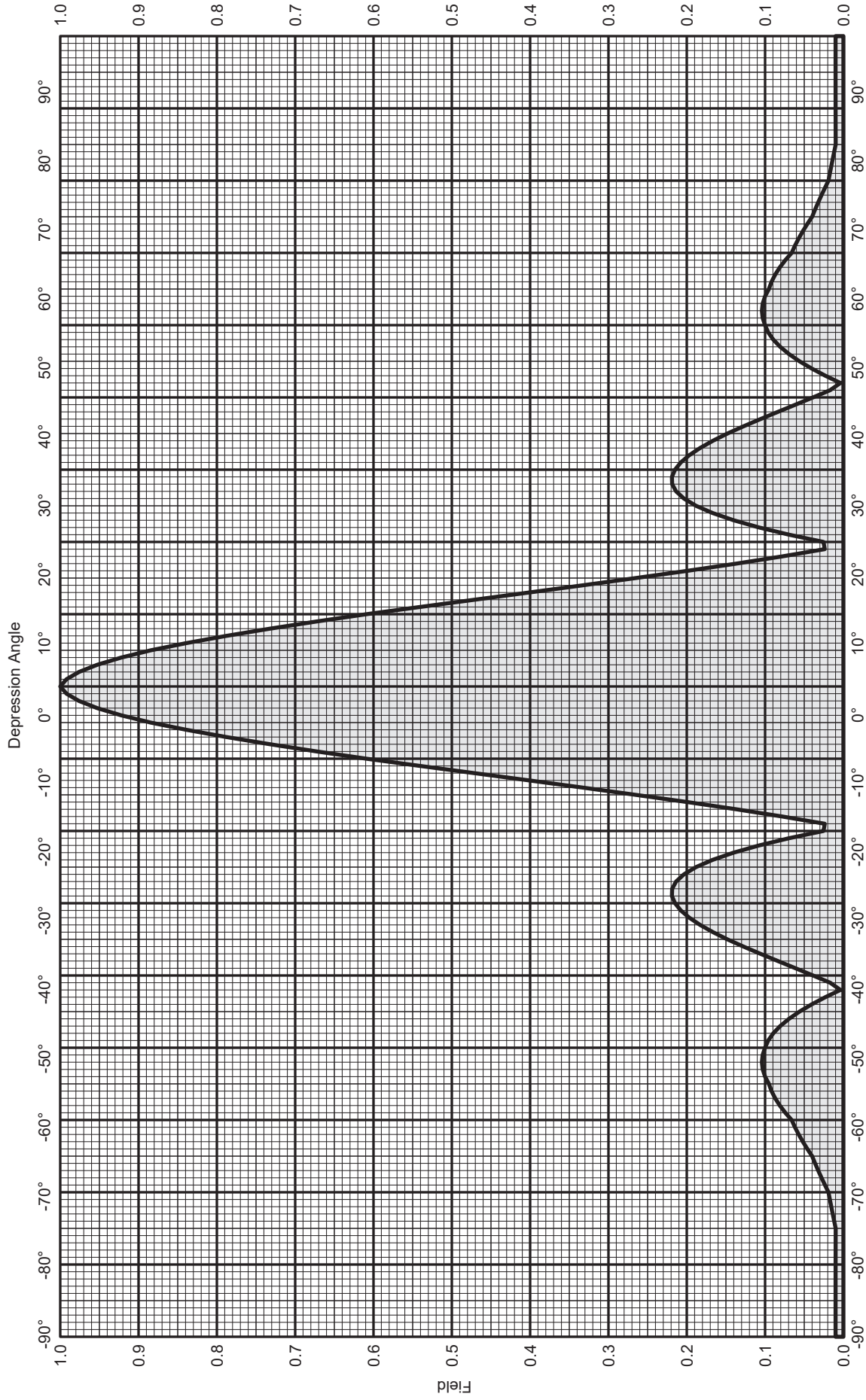


FIGURE EE1 (1 OF 3)



3 x CL-FM/VRM/50N Log-periodic Array

Frequency: 98.3 MHz

Gain: 10.9 dBd (x 12.3)

Vertical polarization

Vertical stacked 1.0 Wavelength

Vertical plane Pattern

**KATHREIN**  
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3 x CL-FM/VRM/50N Log-periodic Array

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Vertical polarization

Vertical stacked 1.0 Wavelength

Vertical plane Pattern

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
-90	0.010	-40.00	-29.10	0.00	-45	0.056	-25.03	-14.13	0.04
-89	0.010	-40.00	-29.10	0.00	-44	0.041	-27.85	-16.95	0.02
-88	0.010	-40.00	-29.10	0.00	-43	0.023	-32.75	-21.85	0.01
-87	0.010	-40.00	-29.10	0.00	-42	0.010	-40.00	-29.10	0.00
-86	0.010	-40.00	-29.10	0.00	-41	0.017	-35.43	-24.53	0.00
-85	0.010	-40.00	-29.10	0.00	-40	0.039	-28.22	-17.32	0.02
-84	0.010	-40.00	-29.10	0.00	-39	0.061	-24.27	-13.37	0.05
-83	0.010	-40.00	-29.10	0.00	-38	0.084	-21.55	-10.65	0.09
-82	0.010	-40.00	-29.10	0.00	-37	0.106	-19.50	-8.60	0.14
-81	0.010	-40.00	-29.10	0.00	-36	0.128	-17.89	-6.99	0.20
-80	0.010	-40.00	-29.10	0.00	-35	0.148	-16.59	-5.69	0.27
-79	0.010	-40.00	-29.10	0.00	-34	0.167	-15.57	-4.67	0.34
-78	0.010	-40.00	-29.10	0.00	-33	0.183	-14.75	-3.85	0.41
-77	0.010	-40.00	-29.10	0.00	-32	0.197	-14.12	-3.22	0.48
-76	0.010	-40.00	-29.10	0.00	-31	0.208	-13.65	-2.75	0.53
-75	0.010	-40.00	-29.10	0.00	-30	0.215	-13.35	-2.45	0.57
-74	0.012	-38.59	-27.69	0.00	-29	0.219	-13.19	-2.29	0.59
-73	0.014	-37.30	-26.40	0.00	-28	0.219	-13.20	-2.30	0.59
-72	0.015	-36.19	-25.29	0.00	-27	0.214	-13.41	-2.51	0.56
-71	0.017	-35.24	-24.34	0.00	-26	0.204	-13.82	-2.92	0.51
-70	0.019	-34.40	-23.50	0.00	-25	0.188	-14.51	-3.61	0.44
-69	0.024	-32.55	-21.65	0.01	-24	0.167	-15.55	-4.65	0.34
-68	0.028	-31.08	-20.18	0.01	-23	0.140	-17.07	-6.17	0.24
-67	0.032	-29.86	-18.96	0.01	-22	0.108	-19.36	-8.46	0.14
-66	0.036	-28.84	-17.94	0.02	-21	0.069	-23.19	-12.29	0.06
-65	0.040	-27.97	-17.07	0.02	-20	0.025	-31.90	-21.00	0.01
-64	0.046	-26.73	-15.83	0.03	-19	0.024	-32.45	-21.55	0.01
-63	0.052	-25.71	-14.81	0.03	-18	0.078	-22.16	-11.26	0.07
-62	0.057	-24.87	-13.97	0.04	-17	0.137	-17.29	-6.39	0.23
-61	0.062	-24.17	-13.27	0.05	-16	0.199	-14.01	-3.11	0.49
-60	0.066	-23.60	-12.70	0.05	-15	0.265	-11.53	-0.63	0.87
-59	0.074	-22.60	-11.70	0.07	-14	0.333	-9.56	1.34	1.36
-58	0.081	-21.81	-10.91	0.08	-13	0.401	-7.93	2.97	1.98
-57	0.087	-21.20	-10.30	0.09	-12	0.471	-6.54	4.36	2.73
-56	0.092	-20.75	-9.85	0.10	-11	0.540	-5.34	5.56	3.59
-55	0.095	-20.43	-9.53	0.11	-10	0.609	-4.31	6.59	4.56
-54	0.100	-20.00	-9.10	0.12	-9	0.672	-3.45	7.45	5.56
-53	0.103	-19.74	-8.84	0.13	-8	0.732	-2.71	8.19	6.59
-52	0.104	-19.65	-8.75	0.13	-7	0.788	-2.07	8.83	7.64
-51	0.103	-19.73	-8.83	0.13	-6	0.839	-1.53	9.37	8.66
-50	0.100	-19.99	-9.09	0.12	-5	0.884	-1.07	9.83	9.62
-49	0.096	-20.35	-9.45	0.11	-4	0.922	-0.71	10.19	10.46
-48	0.090	-20.96	-10.06	0.10	-3	0.953	-0.42	10.48	11.17
-47	0.081	-21.86	-10.96	0.08	-2	0.976	-0.21	10.69	11.72
-46	0.069	-23.16	-12.26	0.06	-1	0.992	-0.07	10.83	12.11
					0	1.000	0.00	10.90	12.30



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Vertical polarization

Vertical stacked 1.0 Wavelength

Vertical plane Pattern

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	10.90	12.30	45	0.056	-25.03	-14.13	0.04
1	0.992	-0.07	10.83	12.11	46	0.069	-23.16	-12.26	0.06
2	0.976	-0.21	10.69	11.72	47	0.081	-21.86	-10.96	0.08
3	0.953	-0.42	10.48	11.17	48	0.090	-20.96	-10.06	0.10
4	0.922	-0.71	10.19	10.46	49	0.096	-20.35	-9.45	0.11
5	0.884	-1.07	9.83	9.62	50	0.100	-19.99	-9.09	0.12
6	0.839	-1.53	9.37	8.66	51	0.103	-19.73	-8.83	0.13
7	0.788	-2.07	8.83	7.64	52	0.104	-19.65	-8.75	0.13
8	0.732	-2.71	8.19	6.59	53	0.103	-19.74	-8.84	0.13
9	0.672	-3.45	7.45	5.56	54	0.100	-20.00	-9.10	0.12
10	0.609	-4.31	6.59	4.56	55	0.095	-20.43	-9.53	0.11
11	0.541	-5.34	5.56	3.59	56	0.092	-20.75	-9.85	0.10
12	0.471	-6.54	4.36	2.73	57	0.087	-21.20	-10.30	0.09
13	0.402	-7.93	2.97	1.98	58	0.081	-21.81	-10.91	0.08
14	0.333	-9.56	1.34	1.36	59	0.074	-22.60	-11.70	0.07
15	0.265	-11.52	-0.62	0.87	60	0.066	-23.60	-12.70	0.05
16	0.199	-14.01	-3.11	0.49	61	0.062	-24.17	-13.27	0.05
17	0.137	-17.29	-6.39	0.23	62	0.057	-24.87	-13.97	0.04
18	0.078	-22.16	-11.26	0.07	63	0.052	-25.71	-14.81	0.03
19	0.024	-32.44	-21.54	0.01	64	0.046	-26.73	-15.83	0.03
20	0.025	-31.91	-21.01	0.01	65	0.040	-27.97	-17.07	0.02
21	0.069	-23.19	-12.29	0.06	66	0.036	-28.84	-17.94	0.02
22	0.108	-19.37	-8.47	0.14	67	0.032	-29.86	-18.96	0.01
23	0.140	-17.07	-6.17	0.24	68	0.028	-31.08	-20.18	0.01
24	0.167	-15.55	-4.65	0.34	69	0.024	-32.55	-21.65	0.01
25	0.188	-14.51	-3.61	0.44	70	0.019	-34.40	-23.50	0.00
26	0.204	-13.82	-2.92	0.51	71	0.017	-35.24	-24.34	0.00
27	0.214	-13.41	-2.51	0.56	72	0.015	-36.19	-25.29	0.00
28	0.219	-13.20	-2.30	0.59	73	0.014	-37.30	-26.40	0.00
29	0.219	-13.19	-2.29	0.59	74	0.012	-38.59	-27.69	0.00
30	0.215	-13.35	-2.45	0.57	75	0.010	-40.00	-29.10	0.00
31	0.208	-13.65	-2.75	0.53	76	0.010	-40.00	-29.10	0.00
32	0.197	-14.12	-3.22	0.48	77	0.010	-40.00	-29.10	0.00
33	0.183	-14.75	-3.85	0.41	78	0.010	-40.00	-29.10	0.00
34	0.167	-15.57	-4.67	0.34	79	0.010	-40.00	-29.10	0.00
35	0.148	-16.59	-5.69	0.27	80	0.010	-40.00	-29.10	0.00
36	0.128	-17.88	-6.98	0.20	81	0.010	-40.00	-29.10	0.00
37	0.106	-19.50	-8.60	0.14	82	0.010	-40.00	-29.10	0.00
38	0.084	-21.55	-10.65	0.09	83	0.010	-40.00	-29.10	0.00
39	0.061	-24.27	-13.37	0.05	84	0.010	-40.00	-29.10	0.00
40	0.039	-28.22	-17.32	0.02	85	0.010	-40.00	-29.10	0.00
41	0.017	-35.43	-24.53	0.00	86	0.010	-40.00	-29.10	0.00
42	0.010	-40.00	-29.10	0.00	87	0.010	-40.00	-29.10	0.00
43	0.023	-32.76	-21.86	0.01	88	0.010	-40.00	-29.10	0.00
44	0.041	-27.85	-16.95	0.02	89	0.010	-40.00	-29.10	0.00
					90	0.010	-40.00	-29.10	0.00