



KATHREIN
SCALA DIVISION
 Post Office Box 4580 Phone:(541)779-6500
 Medford, OR 97501 (USA) Fax:(541)779-3991
<http://www.kathrein-scala.com>

GP-FM Groundplane
 FM
 Maximum gain: 0.0 dBd
 Vertical polarization

Vertical radiation pattern
 0 degree electrical downtilt



GP-FM Groundplane

FM

Maximum gain: 0.0 dBd

Vertical polarization

Vertical radiation pattern

0 degree electrical downtilt

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	0.00	1.00	45	0.663	-3.57	-3.57	0.44
1	0.999	-0.01	-0.01	1.00	46	0.650	-3.74	-3.74	0.42
2	0.998	-0.02	-0.02	1.00	47	0.637	-3.92	-3.92	0.41
3	0.996	-0.03	-0.03	0.99	48	0.624	-4.10	-4.10	0.39
4	0.994	-0.05	-0.05	0.99	49	0.610	-4.29	-4.29	0.37
5	0.992	-0.07	-0.07	0.98	50	0.597	-4.48	-4.48	0.36
6	0.990	-0.09	-0.09	0.98	51	0.583	-4.68	-4.68	0.34
7	0.986	-0.12	-0.12	0.97	52	0.570	-4.89	-4.89	0.32
8	0.983	-0.15	-0.15	0.97	53	0.555	-5.11	-5.11	0.31
9	0.979	-0.18	-0.18	0.96	54	0.541	-5.33	-5.33	0.29
10	0.976	-0.21	-0.21	0.95	55	0.527	-5.56	-5.56	0.28
11	0.972	-0.25	-0.25	0.94	56	0.513	-5.79	-5.79	0.26
12	0.967	-0.29	-0.29	0.94	57	0.499	-6.04	-6.04	0.25
13	0.962	-0.33	-0.33	0.93	58	0.485	-6.29	-6.29	0.23
14	0.957	-0.38	-0.38	0.92	59	0.470	-6.56	-6.56	0.22
15	0.952	-0.43	-0.43	0.91	60	0.456	-6.83	-6.83	0.21
16	0.946	-0.48	-0.48	0.90	61	0.441	-7.12	-7.12	0.19
17	0.940	-0.54	-0.54	0.88	62	0.426	-7.41	-7.41	0.18
18	0.933	-0.60	-0.60	0.87	63	0.411	-7.71	-7.71	0.17
19	0.927	-0.66	-0.66	0.86	64	0.397	-8.03	-8.03	0.16
20	0.920	-0.72	-0.72	0.85	65	0.382	-8.36	-8.36	0.15
21	0.913	-0.79	-0.79	0.83	66	0.367	-8.71	-8.71	0.13
22	0.906	-0.86	-0.86	0.82	67	0.352	-9.07	-9.07	0.12
23	0.897	-0.94	-0.94	0.81	68	0.337	-9.45	-9.45	0.11
24	0.889	-1.02	-1.02	0.79	69	0.322	-9.85	-9.85	0.10
25	0.881	-1.10	-1.10	0.78	70	0.307	-10.27	-10.27	0.09
26	0.872	-1.19	-1.19	0.76	71	0.291	-10.71	-10.71	0.08
27	0.863	-1.28	-1.28	0.74	72	0.276	-11.17	-11.17	0.08
28	0.854	-1.37	-1.37	0.73	73	0.261	-11.67	-11.67	0.07
29	0.844	-1.47	-1.47	0.71	74	0.246	-12.19	-12.19	0.06
30	0.835	-1.57	-1.57	0.70	75	0.231	-12.75	-12.75	0.05
31	0.825	-1.67	-1.67	0.68	76	0.215	-13.34	-13.34	0.05
32	0.815	-1.78	-1.78	0.66	77	0.200	-13.98	-13.98	0.04
33	0.805	-1.89	-1.89	0.65	78	0.185	-14.67	-14.67	0.03
34	0.794	-2.00	-2.00	0.63	79	0.169	-15.42	-15.42	0.03
35	0.783	-2.12	-2.12	0.61	80	0.154	-16.25	-16.25	0.02
36	0.772	-2.25	-2.25	0.60	81	0.139	-17.16	-17.16	0.02
37	0.760	-2.38	-2.38	0.58	82	0.123	-18.18	-18.18	0.02
38	0.749	-2.51	-2.51	0.56	83	0.108	-19.34	-19.34	0.01
39	0.737	-2.65	-2.65	0.54	84	0.092	-20.68	-20.68	0.01
40	0.725	-2.79	-2.79	0.53	85	0.077	-22.26	-22.26	0.01
41	0.713	-2.93	-2.93	0.51	86	0.062	-24.20	-24.20	0.00
42	0.701	-3.08	-3.08	0.49	87	0.046	-26.70	-26.70	0.00
43	0.689	-3.24	-3.24	0.47	88	0.031	-30.22	-30.22	0.00
44	0.676	-3.40	-3.40	0.46	89	0.015	-36.24	-36.24	0.00
					90	0.010	-40.00	-40.00	0.00

Ground Plane Vertically Polarized FM Antenna

Frequency =

100.5
108.3

 Mhz
Interfering Contour

dBu (50,10)

ERP Watts =

1

Degrees	Rel. Field	Power	Distance to Contour	Degrees	Rel. Field	Power	Distance to Contour
1	1.000	1.0	26.9774	46	0.650	0.4	17.5353
2	0.999	1.0	26.9504	47	0.637	0.4	17.1846
3	0.998	1.0	26.9234	48	0.624	0.4	16.8339
4	0.996	1.0	26.8695	49	0.610	0.4	16.4562
5	0.992	1.0	26.7616	50	0.597	0.4	16.1055
6	0.990	1.0	26.7076	51	0.583	0.3	15.7278
7	0.986	1.0	26.5997	52	0.570	0.3	15.3771
8	0.983	1.0	26.5188	53	0.555	0.3	14.9725
9	0.979	1.0	26.4109	54	0.541	0.3	14.5948
10	0.976	1.0	26.3299	55	0.527	0.3	14.2171
11	0.972	0.9	26.2220	56	0.513	0.3	13.8394
12	0.967	0.9	26.0871	57	0.499	0.2	13.4617
13	0.962	0.9	25.9523	58	0.485	0.2	13.0840
14	0.957	0.9	25.8174	59	0.470	0.2	12.6794
15	0.952	0.9	25.6825	60	0.456	0.2	12.3017
16	0.946	0.9	25.5206	61	0.441	0.2	11.8970
17	0.940	0.9	25.3588	62	0.426	0.2	11.4924
18	0.933	0.9	25.1699	63	0.411	0.2	11.0877
19	0.927	0.9	25.0080	64	0.397	0.2	10.7100
20	0.920	0.8	24.8192	65	0.382	0.1	10.3054
21	0.913	0.8	24.6304	66	0.367	0.1	9.9007
22	0.906	0.8	24.4415	67	0.352	0.1	9.4960
23	0.897	0.8	24.1987	68	0.337	0.1	9.0914
24	0.889	0.8	23.9829	69	0.322	0.1	8.6867
25	0.881	0.8	23.7671	70	0.307	0.1	8.2821
26	0.872	0.8	23.5243	71	0.291	0.1	7.8504
27	0.863	0.7	23.2815	72	0.276	0.1	7.4458
28	0.854	0.7	23.0387	73	0.261	0.1	7.0411
29	0.844	0.7	22.7689	74	0.246	0.1	6.6364
30	0.835	0.7	22.5261	75	0.231	0.1	6.2318
31	0.825	0.7	22.2564	76	0.215	0.0	5.8001
32	0.815	0.7	21.9866	77	0.200	0.0	5.3955
33	0.805	0.6	21.7168	78	0.185	0.0	4.9908
34	0.794	0.6	21.4201	79	0.169	0.0	4.5592
35	0.783	0.6	21.1233	80	0.154	0.0	4.1545
36	0.772	0.6	20.8265	81	0.139	0.0	3.7499
37	0.760	0.6	20.5028	82	0.123	0.0	3.3182
38	0.749	0.6	20.2061	83	0.108	0.0	2.9136
39	0.737	0.5	19.8823	84	0.092	0.0	2.4819
40	0.725	0.5	19.5586	85	0.077	0.0	2.0773
41	0.713	0.5	19.2349	86	0.062	0.0	1.6726
42	0.701	0.5	18.9112	87	0.046	0.0	1.2410
43	0.689	0.5	18.5874	88	0.031	0.0	0.8363
44	0.676	0.5	18.2367	89	0.015	0.0	0.4047
45	0.663	0.4	17.8860	90	0.010	0.0	0.0000