

KRBK Distributed Transmission System
Channel 22 – Osage Beach, MO
Site #1 of Five Total Sites
Antenna Specifications
June, 2017

DIRECTIONAL ANTENNA

AZIMUTH PATTERN and ELEVATION PATTERN In Relative Field

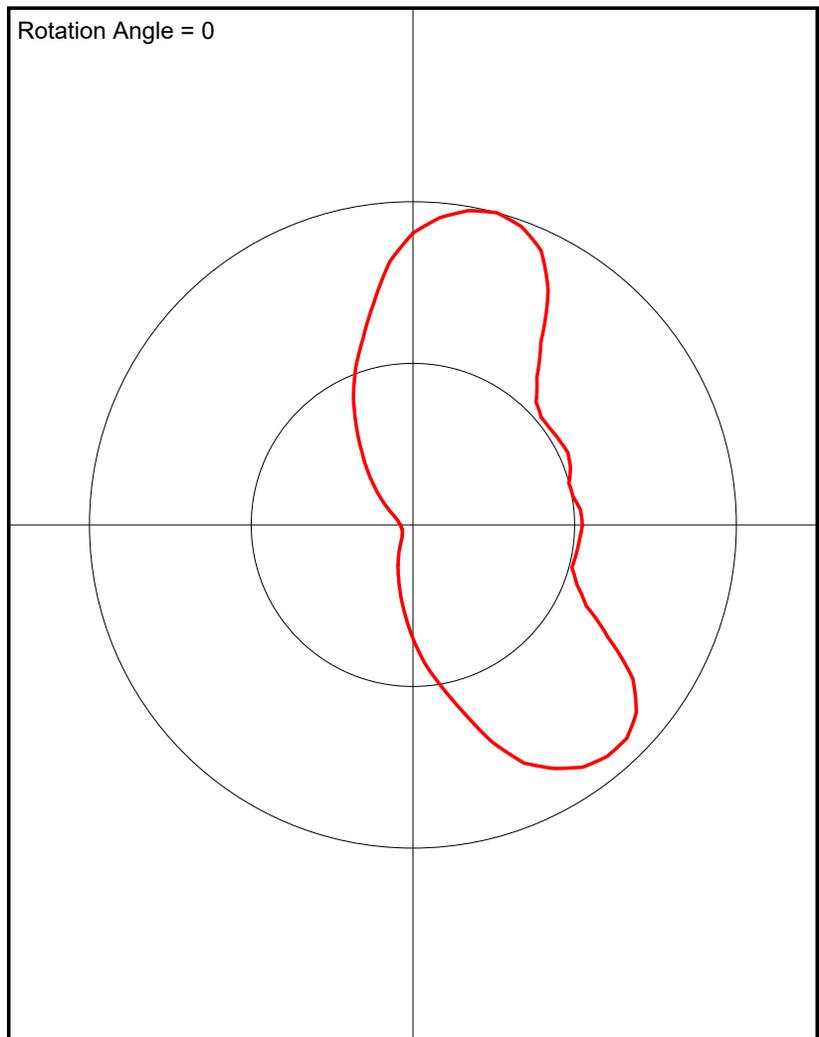
KRBK Site 1 Antenna Pattern

Pre-Rotation Antenna Pattern....

Azimuth (deg) Relative Field

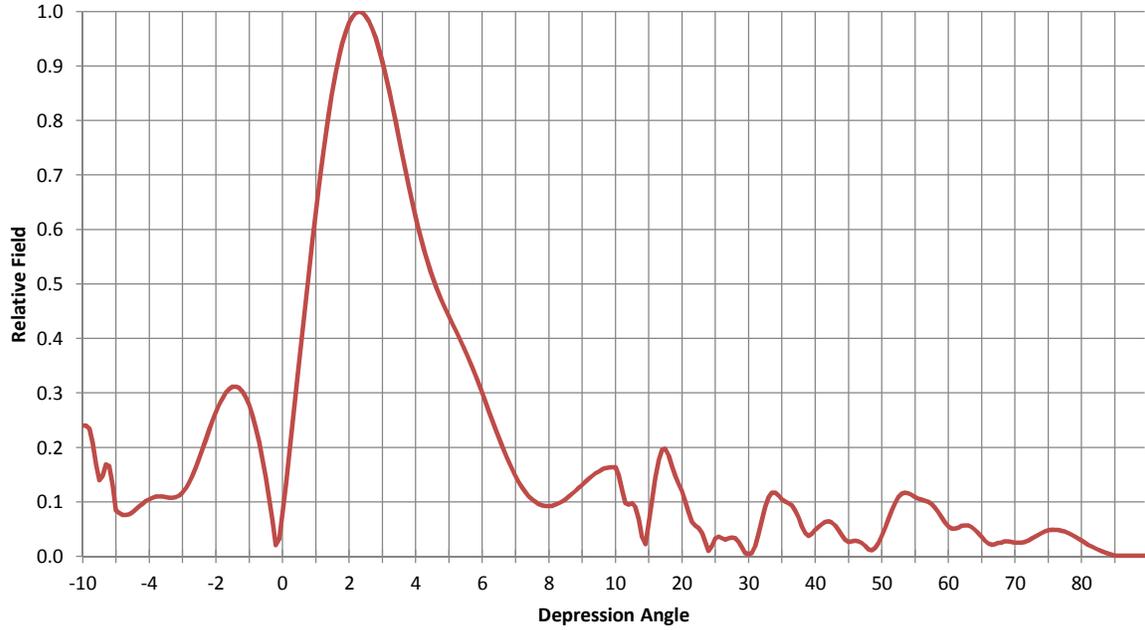
0.0	0.9026
5.0	0.9543
10.0	0.9871
15.0	1.0
20.0	0.9815
25.0	0.9371
30.0	0.8366
35.0	0.689
40.0	0.5957
45.0	0.5384
50.0	0.5175
55.0	0.5183
60.0	0.5233
65.0	0.5284
70.0	0.5184
75.0	0.4992
80.0	0.5028
85.0	0.5202
90.0	0.524
95.0	0.5171
100.0	0.5128
105.0	0.5086
110.0	0.5391
115.0	0.5905
120.0	0.6964
125.0	0.8298
130.0	0.9016
135.0	0.934
140.0	0.9343
145.0	0.9147
150.0	0.8699
155.0	0.8129
160.0	0.7141
165.0	0.5982
170.0	0.5071
175.0	0.4309
180.0	0.3513
185.0	0.2778
190.0	0.2188
195.0	0.1701
200.0	0.1339
205.0	0.1042
210.0	0.0809
215.0	0.0636
220.0	0.0526
225.0	0.047
230.0	0.0417
235.0	0.0392
240.0	0.0381
245.0	0.0356
250.0	0.0359
255.0	0.0363
260.0	0.0367
265.0	0.0371
270.0	0.0375
275.0	0.0409
280.0	0.0443
285.0	0.0477
290.0	0.0539
295.0	0.0627
300.0	0.0786
305.0	0.1006
310.0	0.1301
315.0	0.1681

Rotation Angle = 0



320.0	0.2172
325.0	0.2743
330.0	0.3488
335.0	0.4345
340.0	0.5171
345.0	0.5965
350.0	0.6971
355.0	0.8183

KRBK Ch 22 DTS Site 1 Elevation Relative Field Values



Depression Angle	Relative Field	ERP Site 1 (kW)
-10.0	0.240	0.42
-5.0	0.084	0.05
0.0	0.078	0.05
0.5	0.355	0.93
1.0	0.632	2.94
1.5	0.854	5.36
2.0	0.979	7.05
2.5	0.992	7.24
3.0	0.908	6.07
3.5	0.767	4.33
4.0	0.623	2.85
4.5	0.514	1.94
5.0	0.441	1.43
5.5	0.375	1.04
6.0	0.300	0.66
6.5	0.218	0.35
7.0	0.148	0.16
7.5	0.105	0.08
8.0	0.093	0.06
8.5	0.105	0.08
9.0	0.131	0.13
9.5	0.156	0.18
10.0	0.164	0.20

Depression Angle	Relative Field	ERP Site 1 (kW)
10.5	0.149	0.16
11.0	0.121	0.11
11.5	0.098	0.07
12.0	0.095	0.07
12.5	0.098	0.07
13.0	0.091	0.06
13.5	0.068	0.03
14.0	0.036	0.01
14.5	0.022	0.00
15.0	0.060	0.03
15.5	0.104	0.08
16.0	0.145	0.15
16.5	0.177	0.23
17.0	0.195	0.28
17.5	0.197	0.29
18.0	0.185	0.25
18.5	0.166	0.20
19.0	0.148	0.16
19.5	0.133	0.13
20.0	0.119	0.10
20.5	0.101	0.07
21.0	0.080	0.05
21.5	0.063	0.03