

FIGURE 3

Computation of Signal Level TWO METERS ABOVE GROUND K206CA ENID, OKLAHOMA

May 5, 2009

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	the Ground in Kilometers	Free Space Signal
90	0.036	0.3240	-34.9	0.0740	94.6
85	0.073	1.3323	-28.8	0.0743	100.7
80	0.133	4.4223	-23.5	0.0751	105.9
75	0.021	0.1103	-39.6	0.0766	89.7
70	0.252	15.8760	-18.0	0.0787	111.0
65	0.314	24.6490	-16.1	0.0816	112.6
60	0.375	35.1563	-14.5	0.0854	113.7
55	0.428	45.7960	-13.4	0.0903	114.4
50	0.454	51.5290	-12.9	0.0966	114.3
45	0.428	45.7960	-13.4	0.1047	113.1
40	0.335	28.0563	-15.5	0.1151	110.2
35	0.174	7.5690	-21.2	0.1290	103.5
30	0.029	0.2103	-36.8	0.1480	86.7
25	0.240	14.4000	-18.4	0.1751	103.6
20	0.440	48.4000	-13.2	0.2164	107.1
15	0.628	98.5960	-10.1	0.2859	107.7
10	0.803	161.2023	-7.9	0.4261	106.4
5	0.940	220.9000	-6.6	0.8491	101.8

Notes:

Antenna radiation center above ground (meter) 74
Maximum ERP (watts) at 0° Depression angle 250
Free Space Signal = $106.92 - 20 \log(\text{distance in km}) + \text{dBk}$
Relative field based on TFC2K Full wave spaced antenna