

Table II

Computation of Signal Level
on the Ground
from Prop. W275BO
Reston, Virginia

July, 2016

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.022	0.0242	-46.2	0.0610	85.1
85	0.022	0.0242	-46.2	0.0612	85.0
80	0.028	0.0392	-44.1	0.0619	87.0
75	0.040	0.0804	-40.9	0.0632	90.0
70	0.060	0.1800	-37.4	0.0649	93.2
65	0.080	0.3208	-34.9	0.0673	95.4
60	0.094	0.4418	-33.5	0.0704	96.4
55	0.089	0.3961	-34.0	0.0745	95.5
50	0.056	0.1568	-38.0	0.0796	90.9
45	0.010	0.0050	-53.0	0.0863	75.2
40	0.096	0.4608	-33.4	0.0949	94.0
35	0.175	1.5313	-28.1	0.1064	98.2
30	0.205	2.1013	-26.8	0.1220	98.4
25	0.141	0.9941	-30.0	0.1443	93.7
20	0.043	0.0925	-40.3	0.1784	81.6
15	0.331	5.4781	-22.6	0.2357	96.9
10	0.651	21.1901	-16.7	0.3513	99.3
5	0.904	40.8608	-13.9	0.6999	96.1

Notes:

Antenna radiation center above ground (meters): 61
Maximum ERP (watts) at 0° Depression angle: 50
Free Space Signal = $106.92 - 20 \cdot \log(\text{distance in km}) + \text{dBk}$
Relative field based on PSIFMY2-4A-70WS