

TABLE I

**Computation of Signal Level
on the Ground
W234AY CP MOD
HIGHLAND, NY**

JULY, 2007

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.001	0.0000	-80.0	0.0259	58.7
85	0.096	0.0922	-40.4	0.0260	98.3
80	0.186	0.3460	-34.6	0.0263	103.9
75	0.273	0.7453	-31.3	0.0268	107.1
70	0.357	1.2745	-28.9	0.0276	109.2
65	0.437	1.9097	-27.2	0.0286	110.6
60	0.514	2.6420	-25.8	0.0299	111.6
55	0.586	3.4340	-24.6	0.0316	112.3
50	0.654	4.2772	-23.7	0.0338	112.7
45	0.717	5.1409	-22.9	0.0366	112.8
40	0.774	5.9908	-22.2	0.0403	112.6
35	0.826	6.8228	-21.7	0.0452	112.2
30	0.871	7.5864	-21.2	0.0518	111.4
25	0.910	8.2810	-20.8	0.0613	110.4
20	0.942	8.8736	-20.5	0.0757	108.8
15	0.967	9.3509	-20.3	0.1001	106.6
10	0.985	9.7023	-20.1	0.1492	103.3
5	0.996	9.9202	-20.0	0.2972	97.4

Notes:

Antenna radiation center above ground (meters): 25.9

Maximum ERP (watts) at 0° Depression angle: 10

Free Space Signal = $106.92 - 20 \log(\text{distance in km}) + \text{dBk}$

Relative field based on one bay antenna.