

TABLE II

**Computation of Signal Level
on the Ground
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Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal	dB Loss for Reflection	Signal Strength dBu
90	0.010	0.0010	-60.0	0.0274	78.2	2.47	75.7
85	0.122	0.1488	-38.3	0.0275	99.9	2.47	97.4
80	0.164	0.2690	-35.7	0.0278	102.3	2.47	99.9
75	0.221	0.4884	-33.1	0.0284	104.8	2.47	102.3
70	0.288	0.8294	-30.8	0.0292	106.8	2.47	104.3
65	0.362	1.3104	-28.8	0.0302	108.5	2.47	106.0
60	0.440	1.9360	-27.1	0.0316	109.8	2.47	107.3
55	0.514	2.6420	-25.8	0.0334	110.7	2.47	108.2
50	0.584	3.4106	-24.7	0.0358	111.2	2.47	108.7
45	0.657	4.3165	-23.6	0.0387	111.5	2.47	109.0
40	0.727	5.2853	-22.8	0.0426	111.6	2.47	109.1
35	0.785	6.1623	-22.1	0.0478	111.2	2.47	108.8
30	0.836	6.9890	-21.6	0.0548	110.6	2.47	108.1
25	0.882	7.7792	-21.1	0.0648	109.6	2.47	107.1
20	0.922	8.5008	-20.7	0.0801	108.1	2.47	105.7
15	0.958	9.1776	-20.4	0.1059	106.1	2.47	103.6
10	0.984	9.6826	-20.1	0.1578	102.8	2.47	100.3
5	0.997	9.9401	-20.0	0.3144	96.9	2.47	94.5

Notes:

Antenna radiation center above ground (meters): 27.4
Maximum ERP (watts) at 0° Depression angle: 10
Free Space Signal = $106.92 - 20 \cdot \log(\text{distance in km}) + \text{dBk}$
Relative field based on one bay antenna.