

Analysis of Signal Levels At Ground Level

Translator H AGL	102	
Translator ERP	250	
Translator channel	260	
Translator HAAT		
Interference Contour	106.1	
Highest signal on ground	105.13	Adequate Choice

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.000	0.0000	-345.6	0.1020	-218.82
85	0.003	0.0019	-57.1	0.1024	69.59
80	0.000	0.0000	-84.8	0.1036	41.84
75	0.012	0.0372	-44.3	0.1056	82.16
70	0.037	0.3412	-34.7	0.1085	91.54
65	0.075	1.3885	-28.6	0.1125	97.32
60	0.122	3.7255	-24.3	0.1178	101.21
55	0.173	7.4522	-21.3	0.1245	103.74
50	0.215	11.5642	-19.4	0.1332	105.06
45	0.235	13.7778	-18.6	0.1442	105.13
40	0.216	11.6586	-19.3	0.1587	103.58
35	0.145	5.2797	-22.8	0.1778	99.15
30	0.016	0.0669	-41.7	0.2040	78.98
25	0.167	6.9423	-21.6	0.2414	97.68
20	0.386	37.3444	-14.3	0.2982	103.15
15	0.614	94.3296	-10.3	0.3941	104.75
10	0.814	165.7051	-7.8	0.5874	103.73
5	0.951	226.1968	-6.5	1.1703	99.10
4	0.969	234.5393	-6.3	1.4622	97.32
3	0.982	241.2027	-6.2	1.9489	94.95
2	0.992	246.0578	-6.1	2.9227	91.51
1	0.998	249.0096	-6.0	5.8445	85.55
0.1	1.000	250.0000	-6.0	58.4417	65.56

Notes:

Antenna radiation center above ground (meters):	102
Maximum ERP (watts) at 0° Depression angle:	250

Free Space Signal = 106.92 -20*log(distance in km) + dBk

PSI MODEL PSI-FMD-3A-DA CUSTOM

EXHIBIT 13-3