

Radiotechniques

402 Tenth Ave. • PO Box 367 • Haddon Heights, NJ 08035-0367

Exhibit 12 Table 1

Computation of Signal Level on the Ground
Proposed Translator
BNPFT-20030311AAD
August 2003

Horizontal Effective Radiated Power = 30 W
Height of Radiation Center Above Ground = 79 Meters
Antenna Manufacturer / Type = SWR FMEC/43/4WS

Depression Angle - Deg	Horizontal Dist. - m	Slant Dist. - m	Relative Field	ERP Watts	Reflection Loss db	Signal Strength dbμV
1	4525.91	4526.60	0.996	29.760	2.90	75.62
2	2262.26	2263.64	0.983	28.989	2.83	81.60
3	1507.41	1509.48	0.961	27.706	2.76	84.99
4	1129.75	1132.51	0.932	26.059	2.73	87.25
5	902.97	906.42	0.894	23.977	2.70	88.85
6	751.63	755.78	0.850	21.675	2.65	90.05
7	643.40	648.24	0.800	19.200	2.62	90.88
8	562.11	567.64	0.744	16.606	2.55	91.47
9	498.79	505.00	0.683	13.995	2.50	91.80
10	448.03	454.94	0.618	11.458	2.47	91.87
12	371.67	379.97	0.482	6.970	2.47	91.27
14	316.85	326.55	0.342	3.509	2.47	89.61
16	275.51	286.61	0.206	1.273	2.47	86.34
18	243.14	255.65	0.082	0.202	2.47	79.33
20	217.05	230.98	0.027	0.022	2.47	70.56
25	169.42	186.93	0.203	1.236	2.47	89.92
30	136.83	158.00	0.238	1.699	2.47	92.76
35	112.82	137.73	0.165	0.817	2.47	90.77
40	94.15	122.90	0.044	0.058	2.47	80.28

Consulting Engineers

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45	79.00	111.72	0.069	0.143	2.47	85.02
50	66.29	103.13	0.140	0.588	2.47	91.86
55	55.32	96.44	0.163	0.797	2.47	93.76
60	45.61	91.22	0.147	0.648	2.47	93.35
65	36.84	87.17	0.110	0.363	2.47	91.23
70	28.75	84.07	0.069	0.143	2.47	87.49
75	21.17	81.79	0.034	0.035	2.47	81.58
80	13.93	80.22	0.012	0.004	2.47	72.70

Maximum Signal on the Ground = 93.76 db μ V