

# 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-20030311ASI  
August 2003

Horizontal Effective Radiated Power = 47 W  
Height of Radiation Center Above Ground = 145 Meters  
Antenna Manufacturer / Type = SWR FMEC/23/4WS

Depression Angle - Deg	Horizontal Dist. - m	Slant Dist. - m	Relative Field	ERP Watts	Reflection Loss db	Signal Strength dbμV
1	8307.04	8308.31	0.999	46.906	2.90	72.33
2	4152.26	4154.79	0.996	46.625	2.83	78.39
3	2766.76	2770.56	0.991	46.158	2.76	81.93
4	2073.60	2078.66	0.984	45.508	2.73	84.40
5	1657.36	1663.69	0.976	44.771	2.70	86.29
6	1379.58	1387.18	0.965	43.768	2.65	87.82
7	1180.93	1189.80	0.953	42.686	2.62	89.08
8	1031.73	1041.87	0.938	41.353	2.55	90.16
9	915.49	926.91	0.923	40.041	2.50	91.09
10	822.34	835.02	0.905	38.494	2.47	91.85
12	682.17	697.41	0.865	35.167	2.47	93.03
14	581.56	599.37	0.819	31.526	2.47	93.87
16	505.68	526.05	0.769	27.794	2.47	94.45
18	446.26	469.23	0.714	23.960	2.47	94.80
20	398.38	423.95	0.655	20.164	2.47	94.93
25	310.95	343.10	0.498	11.656	2.47	94.39
30	251.15	290.00	0.337	5.338	2.47	92.46
35	207.08	252.80	0.182	1.557	2.47	88.30
40	172.80	225.58	0.044	0.091	2.47	76.96

Consulting Engineers

# Radiotechniques

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

45	145.00	205.06	0.070	0.230	2.47	81.82
50	121.67	189.28	0.157	1.159	2.47	89.53
55	101.53	177.01	0.217	2.213	2.47	92.92
60	83.72	167.43	0.249	2.914	2.47	94.60
65	67.61	159.99	0.257	3.104	2.47	95.27
70	52.78	154.31	0.245	2.821	2.47	95.17
75	38.85	150.12	0.216	2.193	2.47	94.32
80	25.57	147.24	0.175	1.439	2.47	92.65

Maximum Signal on the Ground = 95.27 db $\mu$ V