TABLE II

Computation of Signal Level
on the Ground
PROPOSED CH 296D
BROOKLYN, NEW YORK

August 1, 2003

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	0.0019	-57.2	0.0940	70.2	2.47	67.8
85	0.122	0.2828	-35.5	0.0944	91.9	2.47	89.5
80	0.164	0.5110	-32.9	0.0955	94.4	2.47	91.9
75	0.221	0.9280	-30.3	0.0973	96.8	2.47	94.4
70	0.288	1.5759	-28.0	0.1000	98.9	2.47	96.4
65	0.362	2.4898	-26.0	0.1037	100.6	2.47	98.1
60	0.440	3.6784	-24.3	0.1085	101.9	2.47	99.4
55	0.514	5.0197	-23.0	0.1148	102.7	2.47	100.3
50	0.584	6.4801	-21.9	0.1227	103.3	2.47	100.8
45	0.657	8.2013	-20.9	0.1329	103.6	2.47	101.1
40	0.727	10.0421	-20.0	0.1462	103.6	2.47	101.2
35	0.785	11.7083	-19.3	0.1639	103.3	2.47	100.8
30	0.836	13.2790	-18.8	0.1880	102.7	2.47	100.2
25	0.882	14.7806	-18.3	0.2224	101.7	2.47	99.2
20	0.922	16.1516	-17.9	0.2748	100.2	2.47	97.8
15	0.958	17.4375	-17.6	0.3632	98.1	2.47	95.7
10	0.984	18.3969	-17.4	0.5413	94.9	2.47	92.4
5	0.997	18.8862	-17.2	1.0785	89.0	2.47	86.6

Notes:

Antenna radiation center above ground (meters): 94

Maximum ERP (watts) at 0° Depression angle: 19

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

Relative field based on one bay antenna.