

Table II

**Computation of Signal Level
on the Ground
from Proposed CH 280 FM translator
Norwalk, CT**

April, 2018

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.034	0.1156	-39.4	0.0960	87.9
85	0.039	0.1521	-38.2	0.0964	89.1
80	0.044	0.1936	-37.1	0.0975	90.0
75	0.048	0.2304	-36.4	0.0994	90.6
70	0.051	0.2601	-35.8	0.1022	90.9
65	0.039	0.1521	-38.2	0.1059	88.2
60	0.017	0.0289	-45.4	0.1109	80.6
55	0.019	0.0361	-44.4	0.1172	81.1
50	0.055	0.3025	-35.2	0.1253	89.8
45	0.085	0.7225	-31.4	0.1358	92.9
40	0.062	0.3844	-34.2	0.1493	89.3
35	0.012	0.0144	-48.4	0.1674	74.0
30	0.086	0.7396	-31.3	0.1920	89.9
25	0.061	0.3721	-34.3	0.2272	85.5
20	0.060	0.3600	-34.4	0.2807	83.5
15	0.064	0.4096	-33.9	0.3709	81.7
10	0.252	6.3504	-22.0	0.5528	90.1
5	0.748	55.9504	-12.5	1.1015	93.6

Notes:

Antenna radiation center above ground (meters): 96
Maximum ERP (watts) at 0° Depression angle: 100
Free Space Signal = $106.92 - 20 \cdot \log(\text{distance in km}) + \text{dBk}$
Relative field based on PSIFMY-6A Custom