Table II

Computation of Signal Level
2 METERS AGL
from Proposed CH 228 FM Translator
Westport, CT

November, 2017

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.010	0.0100	-50.0	0.1000	76.9
85	0.010	0.0100	-50.0	0.1004	76.9
80	0.010	0.0100	-50.0	0.1015	76.8
75	0.019	0.0361	-44.4	0.1035	82.2
70	0.048	0.2304	-36.4	0.1064	90.0
65	0.083	0.6889	-31.6	0.1103	94.4
60	0.105	1.1025	-29.6	0.1155	96.1
55	0.105	1.1025	-29.6	0.1221	95.6
50	0.066	0.4356	-33.6	0.1305	91.0
45	0.011	0.0121	-49.2	0.1414	74.7
40	0.109	1.1881	-29.3	0.1556	93.8
35	0.195	3.8025	-24.2	0.1743	97.9
30	0.224	5.0176	-23.0	0.2000	97.9
25	0.150	2.2500	-26.5	0.2366	93.0
20	0.045	0.2025	-36.9	0.2924	80.7
15	0.335	11.2225	-19.5	0.3864	95.7
10	0.657	43.1649	-13.6	0.5759	98.1
5	0.901	81.1801	-10.9	1.1474	94.8
4	0.935	87.4225	-10.6	1.4336	93.2
3	0.961	92.3521	-10.3	1.9107	91.0
2	0.981	96.2361	-10.2	2.8654	87.6
1	0.994	98.8036	-10.1	5.7299	81.7

Notes:

Antenna radiation center above ground (meters): 100

Maximum ERP (watts) at 0° Depression angle: 100

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

Relative Field from Kathrein Four CA-2-50N Yagi stacked 0.7 wave