Table II

Computation of Signal Level
2 meters above ground
from Proposed K210DF on CH 207
Lake Jackson, Texas

May, 2013

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.001	0.0002	-67.6	0.0450	66.3
85	0.016	0.0448	-43.5	0.0452	90.3
80	0.036	0.2268	-36.4	0.0457	97.3
75	0.061	0.6512	-31.9	0.0466	101.7
70	0.091	1.4492	-28.4	0.0479	104.9
65	0.119	2.4782	-26.1	0.0497	106.9
60	0.135	3.1894	-25.0	0.0520	107.6
55	0.126	2.7783	-25.6	0.0549	106.6
50	0.082	1.1767	-29.3	0.0587	102.2
45	0.001	0.0002	-67.6	0.0636	63.3
40	0.107	2.0036	-27.0	0.0700	103.0
35	0.201	7.0702	-21.5	0.0785	107.5
30	0.234	9.5823	-20.2	0.0900	107.6
25	0.162	4.5927	-23.4	0.1065	103.0
20	0.036	0.2268	-36.4	0.1316	88.1
15	0.332	19.2892	-17.1	0.1739	105.0
10	0.655	75.0794	-11.2	0.2591	107.4
5	0.905	143.3294	-8.4	0.5163	104.2
2	0.984	169.4448	-7.7	1.2894	97.0
1	0.996	173.6028	-7.6	2.5784	91.1

Notes:

Antenna radiation center above ground (meters): 45
Maximum ERP (watts) at 0° Depression angle: 175
Free Space Signal = 106.92 -20*log(distance in km) + dBk
Relative field based on Shively 4 bay 0.7062 wavelength interbay spaced antenna