

Table II

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

Amended June, 2013

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.001	0.0002	-66.7	0.0450	67.2
85	0.016	0.0550	-42.6	0.0452	91.2
80	0.036	0.2786	-35.5	0.0457	98.2
75	0.061	0.8000	-31.0	0.0466	102.6
70	0.091	1.7804	-27.5	0.0479	105.8
65	0.119	3.0446	-25.2	0.0497	107.8
60	0.135	3.9184	-24.1	0.0520	108.5
55	0.126	3.4133	-24.7	0.0549	107.5
50	0.082	1.4457	-28.4	0.0587	103.1
45	0.001	0.0002	-66.7	0.0636	64.2
40	0.107	2.4615	-26.1	0.0700	103.9
35	0.201	8.6862	-20.6	0.0785	108.4
30	0.234	11.7725	-19.3	0.0900	108.5
25	0.162	5.6425	-22.5	0.1065	103.9
20	0.036	0.2786	-35.5	0.1316	89.0
15	0.332	23.6982	-16.3	0.1739	105.9
10	0.655	92.2404	-10.4	0.2591	108.3
5	0.905	176.0904	-7.5	0.5163	105.1
2	0.984	208.1750	-6.8	1.2894	97.9
1	0.996	213.2834	-6.7	2.5784	92.0

Notes:

Antenna radiation center above ground (meters): 45
Maximum ERP (watts) at 0° Depression angle: 215
Free Space Signal = $106.92 - 20 \cdot \log(\text{distance in km}) + \text{dBk}$
Relative field based Shively 4 bay 0.7062 wavelength interbay spaced antenna