

Larry Waggoner  
 Project: K231AY  
 Site Coordinates: 37-41-37 North 97-22-54 West  
 NGDC 30-Second Database is used in Continental US  
 DEM-30 Database is used in AK, HI, and PR.  
 Site Elevation: ( 1,309 feet) AMSL 399 meters  
 Antenna HAAT: 85 meters  
 Antenna center Above Mean Sea Level: 490 meters

----- Distances to Contours in Kilometers -----						
AZM (deg)	HAAT (mtrs)	ERP (kW)	70 dBu (km)	60 dBu (km)	54 dBu (km)	65 dBu (km)
0	86	0.2500	6.7	12.0	17.0	9.0
5	87	0.2500	6.8	12.1	17.1	9.1
10	86	0.2500	6.7	12.0	17.0	9.0
15	85	0.2500	6.7	11.9	16.9	9.0
20	85	0.2500	6.7	11.9	16.9	9.0
25	84	0.2500	6.7	11.9	16.8	8.9
30	83	0.2500	6.6	11.8	16.7	8.9
35	81	0.2500	6.5	11.6	16.4	8.7
40	81	0.2500	6.5	11.6	16.4	8.7
45	79	0.2500	6.5	11.5	16.2	8.6
50	77	0.2500	6.4	11.4	16.0	8.5
55	76	0.2500	6.3	11.3	15.9	8.5
60	77	0.2500	6.4	11.4	16.0	8.5
65	76	0.2500	6.3	11.3	15.9	8.5
70	76	0.2500	6.3	11.3	15.9	8.5
75	77	0.2500	6.4	11.4	16.0	8.5
80	78	0.2500	6.4	11.4	16.1	8.6
85	78	0.2500	6.4	11.4	16.1	8.6
90	80	0.2500	6.5	11.6	16.3	8.7
95	81	0.2500	6.5	11.6	16.4	8.7
100	82	0.2500	6.6	11.7	16.5	8.8
105	83	0.2500	6.6	11.8	16.7	8.9
110	83	0.2500	6.6	11.8	16.7	8.9
115	85	0.2500	6.7	11.9	16.9	9.0
120	87	0.2500	6.8	12.1	17.1	9.1
125	90	0.2500	6.9	12.3	17.4	9.2
130	92	0.2500	7.0	12.4	17.6	9.3
135	95	0.2500	7.1	12.6	18.0	9.5
140	98	0.2500	7.2	12.8	18.3	9.6
145	100	0.2500	7.3	12.9	18.5	9.7
150	102	0.2500	7.4	13.0	18.7	9.8
155	103	0.2500	7.4	13.1	18.8	9.9
160	103	0.2500	7.4	13.1	18.8	9.9
165	103	0.2500	7.4	13.1	18.8	9.9
170	103	0.2500	7.4	13.1	18.8	9.9
175	102	0.2500	7.4	13.0	18.7	9.8

Larry Waggoner  
 Project: K231AY  
 Site Coordinates: 37-41-37 North 97-22-54 West  
 NGDC 30-Second Database is used in Continental US  
 DEM-30 Database is used in AK, HI, and PR.  
 Site Elevation: ( 1,309 feet) AMSL 399 meters  
 Antenna HAAT: 85 meters  
 Antenna center Above Mean Sea Level: 490 meters

----- Distances to Contours in Kilometers -----						
AZM (deg)	HAAT (mtrs)	ERP (kW)	70 dBu (km)	60 dBu (km)	54 dBu (km)	65 dBu (km)
180	100	0.2500	7.3	12.9	18.5	9.7
185	100	0.2500	7.3	12.9	18.5	9.7
190	99	0.2500	7.3	12.9	18.4	9.7
195	98	0.2500	7.2	12.8	18.3	9.6
200	97	0.2500	7.2	12.7	18.2	9.6
205	95	0.2500	7.1	12.6	18.0	9.5
210	93	0.2500	7.0	12.5	17.7	9.4
215	92	0.2500	7.0	12.4	17.6	9.3
220	91	0.2500	6.9	12.3	17.5	9.3
225	88	0.2500	6.8	12.1	17.2	9.1
230	86	0.2500	6.7	12.0	17.0	9.0
235	84	0.2500	6.7	11.9	16.8	8.9
240	82	0.2500	6.6	11.7	16.5	8.8
245	80	0.2500	6.5	11.6	16.3	8.7
250	78	0.2500	6.4	11.4	16.1	8.6
255	76	0.2500	6.3	11.3	15.9	8.5
260	75	0.2500	6.3	11.2	15.8	8.4
265	75	0.2500	6.3	11.2	15.8	8.4
270	75	0.2500	6.3	11.2	15.8	8.4
275	76	0.2500	6.3	11.3	15.9	8.5
280	75	0.2500	6.3	11.2	15.8	8.4
285	76	0.2500	6.3	11.3	15.9	8.5
290	76	0.2500	6.3	11.3	15.9	8.5
295	76	0.2500	6.3	11.3	15.9	8.5
300	76	0.2500	6.3	11.3	15.9	8.5
305	76	0.2500	6.3	11.3	15.9	8.5
310	77	0.2500	6.4	11.4	16.0	8.5
315	79	0.2500	6.5	11.5	16.2	8.6
320	80	0.2500	6.5	11.6	16.3	8.7
325	81	0.2500	6.5	11.6	16.4	8.7
330	81	0.2500	6.5	11.6	16.4	8.7
335	82	0.2500	6.6	11.7	16.5	8.8
340	83	0.2500	6.6	11.8	16.7	8.9
345	84	0.2500	6.7	11.9	16.8	8.9
350	85	0.2500	6.7	11.9	16.9	9.0
355	85	0.2500	6.7	11.9	16.9	9.0