

EXHIBIT E-1  
TECHNICAL STATEMENT  
K260AL ARVADA, COLORADO  
MOUNTAIN COMMUNITY TRANSLATORS, LLC  
FCC FORM 349  
MARCH 2009

This technical statement is made on behalf of Mountain Community Translators, LLC, licensee of K260AL Arvada, Colorado. This application seeks to modify the existing facilities by changing to a directional antenna and increasing the Effective Radiated Power from 205 Watts to 250 Watts.

The tower site will remain at N.  $40^{\circ}-00'-43''$ , W.  $105^{\circ}-11'-16''$ , NAD 27. K260AL proposes to operate on channel 260 with an Effective Radiated Power of 250 Watts horizontal and vertical polarization utilizing a Nicom, model BKG77-2L, two bay, half-wave spaced directional antenna system. The antenna will be mounted at the 30 meter level on a 51 meter overall tower, with a Center of Radiation at 1655 Above Mean Sea Level.

The antenna will still be located on a tower with other FM transmit antennas: K274BW, K245AD, KCUV-FM2, and KJAC-FM1. The new antenna will be 18 meters below K274BW and 7 meters below any of the other antennas. Thus, there should be no meaningful effect to any of the antenna patterns used or proposed by this installation.

Figure 1 shows a channel spacing study conducted from the proposed site for K260AL. In the first entry, there is an apparent short spacing with the currently licensed facility of K260AL which will be replaced by this application. The only pertinent stations in terms of interference that require more study, are 2<sup>nd</sup> adjacent station KQMT Denver, Colorado on channel 258C, 2<sup>nd</sup> adjacent station KIMN Denver, Colorado on channel

262C and its booster station, KIMN-FM1 Boulder, Colorado on channel 262D. The other stations of interest are KVVU Pueblo, Colorado on channel 260C and KKPL Cheyenne, Wyoming on Channel 260C2.

Note: At the bottom of the study there is a stated protected zone issue with Table Mountain. The concern is that the site is 14.4 km away from the Table Mountain zone. According to FCC Rule 1.924 as of July 9, 2008, coordination is only recommended if the transmitter is in the range of 4.8 km up to 16 km from the Table Mountain zone and is transmitting with 1 kW or more. The proposed facilities are below this threshold with a maximum ERP of 250 Watts.

The proposed operation of K260AL is located within the protected 60 dB $\mu$  contour of 2<sup>nd</sup> adjacent channel station KQMT Denver on channel 258C. The predicted (F50,50) field strength of KCUV at the proposed K260AL transmitter site is 78.5 dB $\mu$ . Therefore, the respective predicted interfering contour generated by the proposed K260AL is 40 dB $\mu$  more than 78.5 dB $\mu$ , or 118.5 dB $\mu$ . The maximum distance from the transmitter to this contour is less than 132 meters. Figure 2 shows the coverage for the 118.5 dB $\mu$  interference contour (F50,10) and shows that there is no population in the area of interference. The applicant, Mountain Community Translators, LLC, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference. There are no homes nearby the tower site and the road to the site is a gated private lane. The transmitter building is uninhabited and does not have indoor plumbing.

The proposed operation of K260AL is located within the protected 60 dB $\mu$  contours of 2<sup>nd</sup> adjacent channel station KIMN Denver on channel 262C2 and a booster

station for KIMN, KIMN-FM1 Boulder on channel 262D. The predicted (F50,50) field strengths of KIMN and KIMN-FM1 at the proposed K260AL transmitter site are 74.4 dB $\mu$  and 69.6 dB $\mu$ , respectively. Therefore, the corresponding predicted interfering contours generated by the proposed K260AL is 40 dB $\mu$  more, or 114.4 dB $\mu$  and 109.6 dB $\mu$ , respectively. The maximum distance from the transmitter to these contours is less than 210.2 meters and 365.9 meters. Figure 3 shows the coverage for the worst case 109.6 dB $\mu$  interference contour (F50,10) and shows that there is no population in the area of interference. The applicant, Mountain Community Translators, LLC, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference. There are no homes nearby the tower site and the road to the site is a gated private lane. The transmitter building is uninhabited and does not have indoor plumbing.

Figure 4 is a predicted coverage map showing the 40 dB $\mu$  interference contour (F50,10) of the proposed operation of K260AL and the 60 dB $\mu$  protected contour (F50,50) of KVUU Pueblo, Colorado. As can be seen, there is no prohibited overlap between these two contours.

Figure 5 is a predicted coverage map showing the 40 dB $\mu$  interference contour (F50,10) of the proposed operation of K260AL and the 60 dB $\mu$  protected contour (F50,50) of KKPL Cheyenne, Wyoming. As can be seen, there is no prohibited overlap between these two contours.

Figure 6 shows the overlap between the 60 dB $\mu$  contours of the proposed facilities, in red, and the current licensed facilities, in blue, for K260AL seeking to be modified by this application.

Figure 7 shows the antenna polar plot of the proposed directional antenna. Figure 8 is an antenna polar plot giving the power output at 10 degree intervals. The terrain of the 12 radials was studied for HAAT and the maximum ERP allowed for each radial and a summary is given in Figure 9. With the directional antenna system, the maximum ERP allowed is 250 Watts on all radials except the 60 degree azimuth, which is only 205 Watts. With the antenna pattern of the proposed facilities, the ERP on the 60 degree radial is less than 64 Watts. The antenna pattern does not exceed the maximum ERP allowed on any of the 12 pertinent radials.

It was concluded that the new proposed operation of K260AL Arvada, Colorado will not cause any harmful interference to any existing stations, and will be in full compliance of the Commission's rules.

## Exhibit E-1, Figure 1, Channel Study

K260AL Arvada, Colorado 260D

REFERENCE 40 00 43.0 N. CH# 260D - 99.9 MHz, Pwr= 0.25 kw, HAAT= -32.2 M, COR= 1655 M DISPLAY DATES  
 105 11 16.0 W. Average Protected F(50-50)= 7.09 km DATA 03-05-09  
 Standard Directional SEARCH 03-05-09

CH CITY	CALL	TYPE STATE	ANT AZI -<--	DIST FILE #	LAT LNG	PWR (kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*OUT* (Overlap in km)
260D K260AL Arvada	LIC _C_	0.0	0.0	0.0	40 00 43.0	0.205	39.1	11.4	-49.5*
	CO	0.0	0.0	BLFT20070718ADY	105 11 16.0		1654	Mountain Community Transla	
260C KVVU Pueblo	LIC _CY	168.6	143.4	143.4	38 44 44.0	79.000	211.0	99.9	22.1
	CO	348.8	348.8	BLH19990311KF	104 51 42.0	670	2922	Capstar Tx Limited Partner	
260C2 KKPL Cheyenne	LIC _C_	5.5	109.1	109.1	40 59 22.0	50.000	159.7	68.1	3.4
	WY	185.6	185.6	BMLH20010426AAK	105 03 47.0	150	2129	Regent Broadcasting Of Ft.	
258C KQMT Denver	LIC DC_	187.3	31.7	31.7	39 43 45.0	100.000	8.7	71.3	-40.7*
	CO	7.3	7.3	BLH20020118AAT	105 14 06.0	495	2262	Entercom Denver License, L	
262C KIMN Denver	LIC DCY	184.2	37.9	37.9	39 40 18.0	100.000	7.5	70.2	-33.3*
	CO	4.1	4.1	BLH19960205KA	105 13 12.0	345	2379	Cbs Radio Stations Inc.	
262D KIMN-FM1 Boulder	LIC DC_	200.4	6.1	6.1	39 57 37.0	0.580	0.5	10.7	-5.7*
	CO	20.3	20.3	BLFTB20030502AAZ	105 12 46.0		1762	Cbs Radio Stations Inc.	
207C1 KUVU Denver	LIC _CN	189.6	31.7	31.7	39 43 49.0	22.500	3.6	57.9	22.0R 9.7M
	CO	9.6	9.6	BLED19851022KD	105 14 59.0	278	2333	Denver Educational Broadca	
207C1 KUVU Denver	CP DCX	183.8	37.6	37.6	39 40 25.0	22.500	3.6	57.9	22.0R 15.7M
	CO	3.8	3.8	BPED20030728AJV	105 13 01.0	342	2363	Denver Educational Broadca	
258D K258BE Estes Park	LIC _C_	324.1	47.9	47.9	40 21 38.0	0.013	0.3	8.8	38.0
	CO	143.8	143.8	BLFT20060630AIH	105 31 12.0		2737	Educational Media Foundati	
206A KGQD Fraser	CP DVX	262.5	54.1	54.1	39 56 49.0	0.150	3.6	57.9	10.0R 44.1M
	CO	82.1	82.1	BNPED20071018ABB	105 48 57.0	-307	2635	Cedar Cove Broadcasting, I	
206A NEW Granby	CP DCX	273.0	64.0	64.0	40 02 24.0	0.400	3.6	57.9	10.0R 54.0M
	CO	92.6	92.6	BNPED20071018AXK	105 56 11.0	-174	2525	Academy Media Inc.	
259C1 RADD Sterling	ADD _	70.2	193.9	193.9	40 34 57.0	100.000	106.6	73.5	107.8
	CO	251.6	251.6		103 01 56.0	299	1608	Jer Licenses, Llc	
261C1 AL5413 Sterling	ADD _	70.2	193.9	193.9	40 34 57.0	100.000	106.6	73.5	107.8
	CO	251.6	251.6		103 01 56.0	299	1608		
207D K207CK Breckenridge	LIC DVN	228.0	91.5	91.5	39 27 35.0	0.249	3.6	57.9	10.0R 81.5M
	CO	47.5	47.5	BLFT19990401TE	105 58 46.0	483	3822	Summit Public Radio And Tv	
258D K258AS Breckenridge	LIC DC_	231.7	92.1	92.1	39 29 44.0	0.099	0.2	2.7	88.3
	CO	51.1	51.1	BLFT20071009ALB	106 01 44.0		3225	Skandia, Llc	
206A KBWA Brush	LIC _VX	79.3	129.2	129.2	40 13 02.1	6.000	3.6	57.9	10.0R 119.2M
	CO	260.3	260.3	BLED20060428AAY	103 41 46.2	44	1369	Way-fm Media Group, Inc.	
207C2 KLBV Steamboat Springs	CP _VX	290.7	141.7	141.7	40 27 04.0	2.600	3.6	57.9	15.0R 126.8M
	CO	109.7	109.7	BPED20060926ALF	106 45 06.0	528	3146	Educational Media Foundati	
207C2 KLBV Steamboat Springs	LIC _VX	290.7	141.7	141.7	40 27 04.0	2.600	3.6	57.9	15.0R 126.8M
	CO	109.7	109.7	BLED20050819AEA	106 45 06.0	518	3136	Educational Media Foundati	
206C3 KTLC Canon City	LIC _CX	181.0	139.5	139.5	38 45 21.0	1.150	3.6	57.9	12.0R 127.5M
	CO	1.0	1.0	BLED20021001ABS	105 13 02.0	450	3175	Educational Communications	
206A KYCO Limon	CP _CX	119.0	145.1	145.1	39 22 13.0	1.800	3.6	57.9	10.0R 135.1M
	CO	300.0	300.0	BNPED20071017AJB	103 42 50.0	100	1799	Saidnewsfoundation	
207A KTDX Laramie	LIC _CX	351.3	146.0	146.0	41 18 39.0	0.450	3.6	57.9	10.0R 136.0M
	WY	171.1	171.1	BLED20081010BIM	105 27 12.0	347	2751	Educational Communications	
207A 1200716 Burns	APP DVX	30.8	153.3	153.3	41 11 34.9	2.500	3.6	57.9	10.0R 143.3M
	WY	211.4	211.4	BNPED20071019AZU	104 15 02.9	117	1748	Catholic Hour, Inc.	
207A 1215192 Pine Bluffs	APP _VX	32.6	155.7	155.7	41 11 13.0	0.600	3.6	57.9	10.0R 145.7M
	WY	213.3	213.3	BNPED20071022AFK	104 11 05.0	70	1683	Better Life Ministries	

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
 In & Out distances between contours are shown at closest points. Reference zone = 2, Co to 3rd adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
 Incoming contour overlap is ignored.

"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.

Reference station has protected zone issue: Table Mtn.

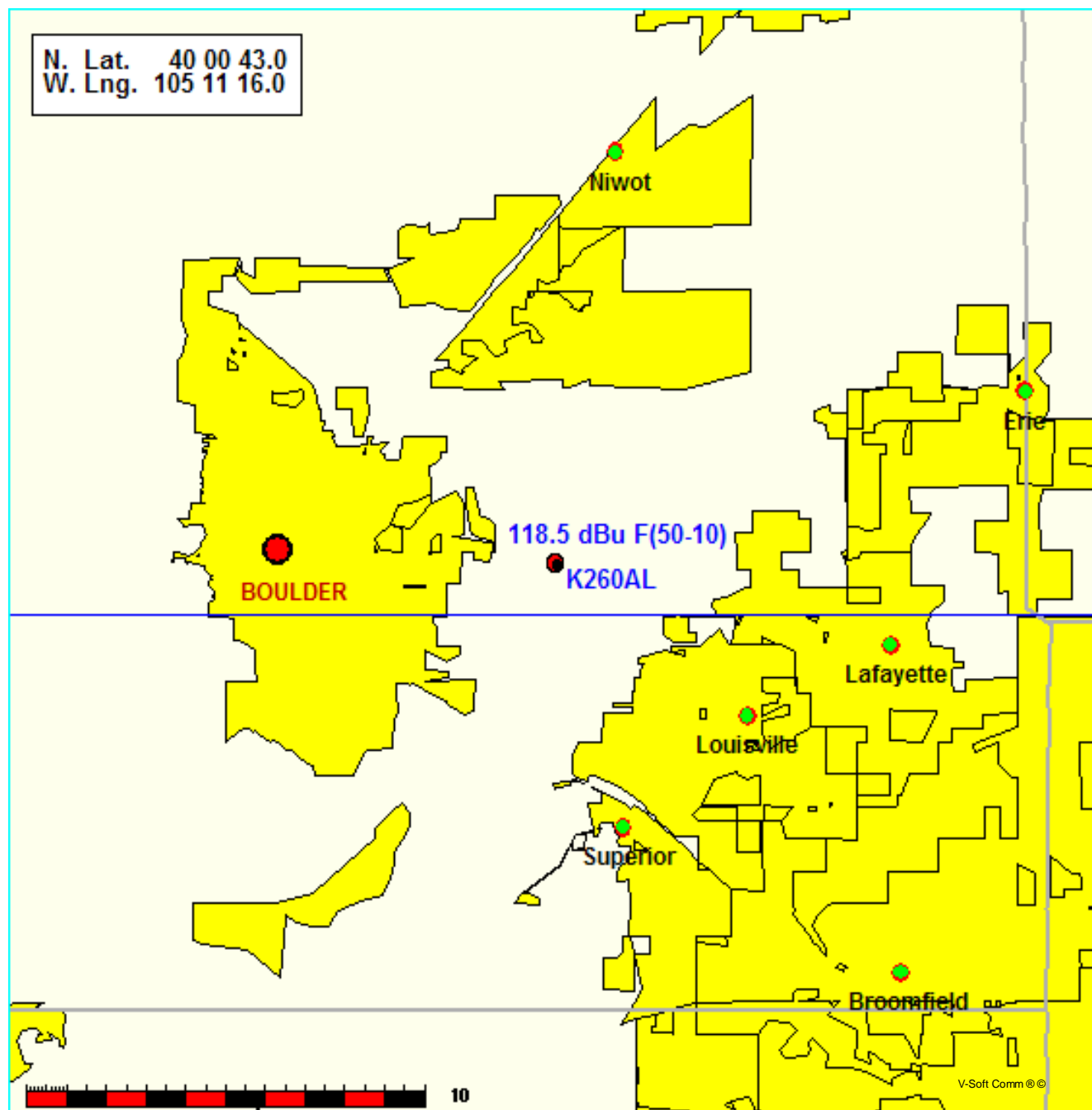


Exhibit E-1, Fig 3, 109.6 dBu Interference, 0 Population  
K260AL Arvada, Colorado 260D

Coverage Study - NGDC 30 SEC  
03-05-2009

K260AL CH260 D 0.25 kW 1655M COR  
Prot. = 60 dBu. Population =

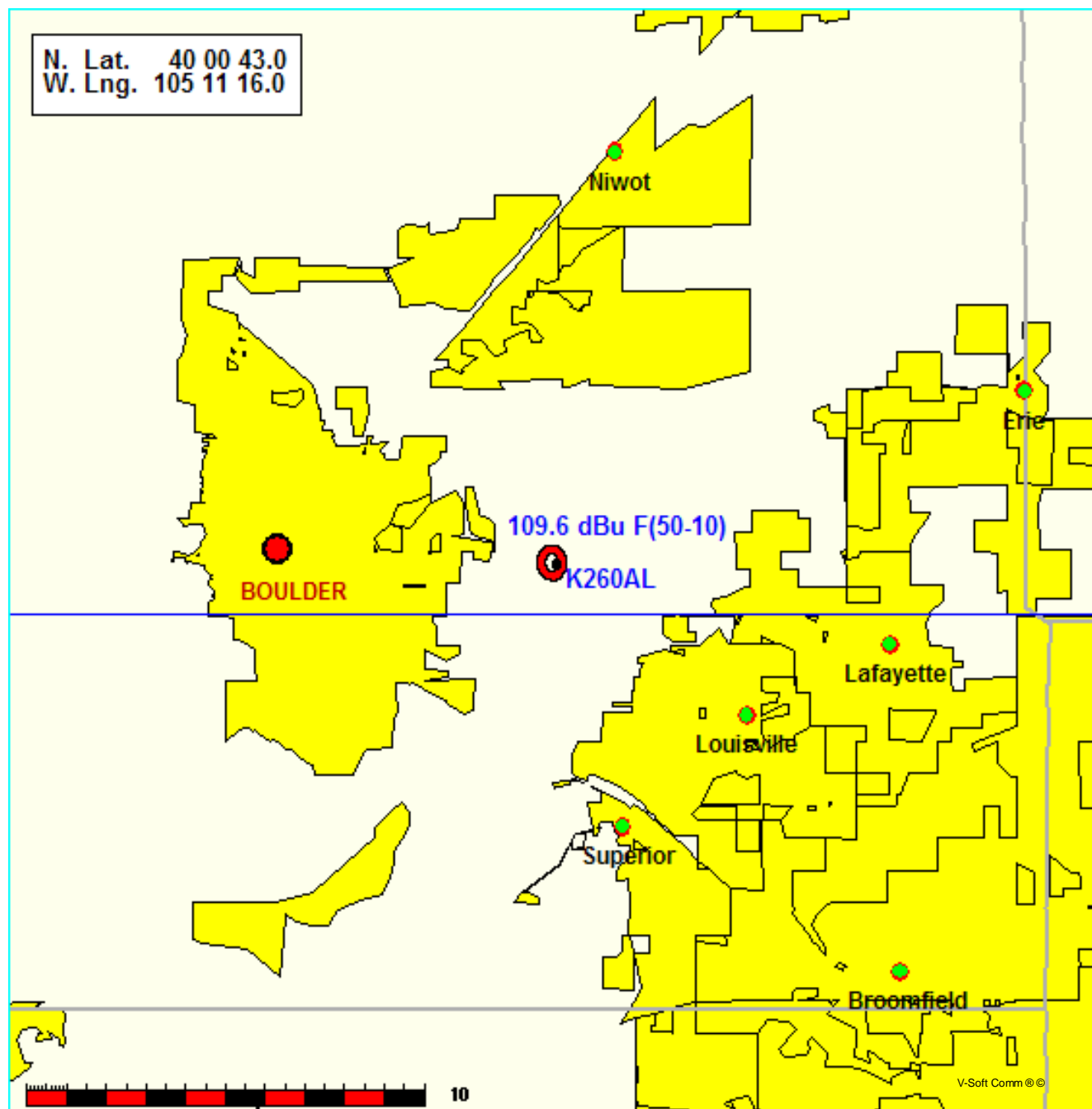


Exhibit E-1, Fig 4, K260AL vs KVUU  
K260AL Arvada, Colorado 260D

FMCommander Single Allocation Study - 03-05-2009 - NGDC 30 SEC  
K260AL's Overlaps (In= -74.04 km, Out= 22.12 km)

K260AL CH 260 D DA  
Lat= 40 00 43.0, Lng= 105 11 16.0  
0.25 kW -32.2 M HAAT, 1655 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

KVUU CH 260 C BLH19990311KF  
Lat= 38 44 44.0, Lng= 104 51 42.0  
79.0 kW 670 M HAAT, 2922 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

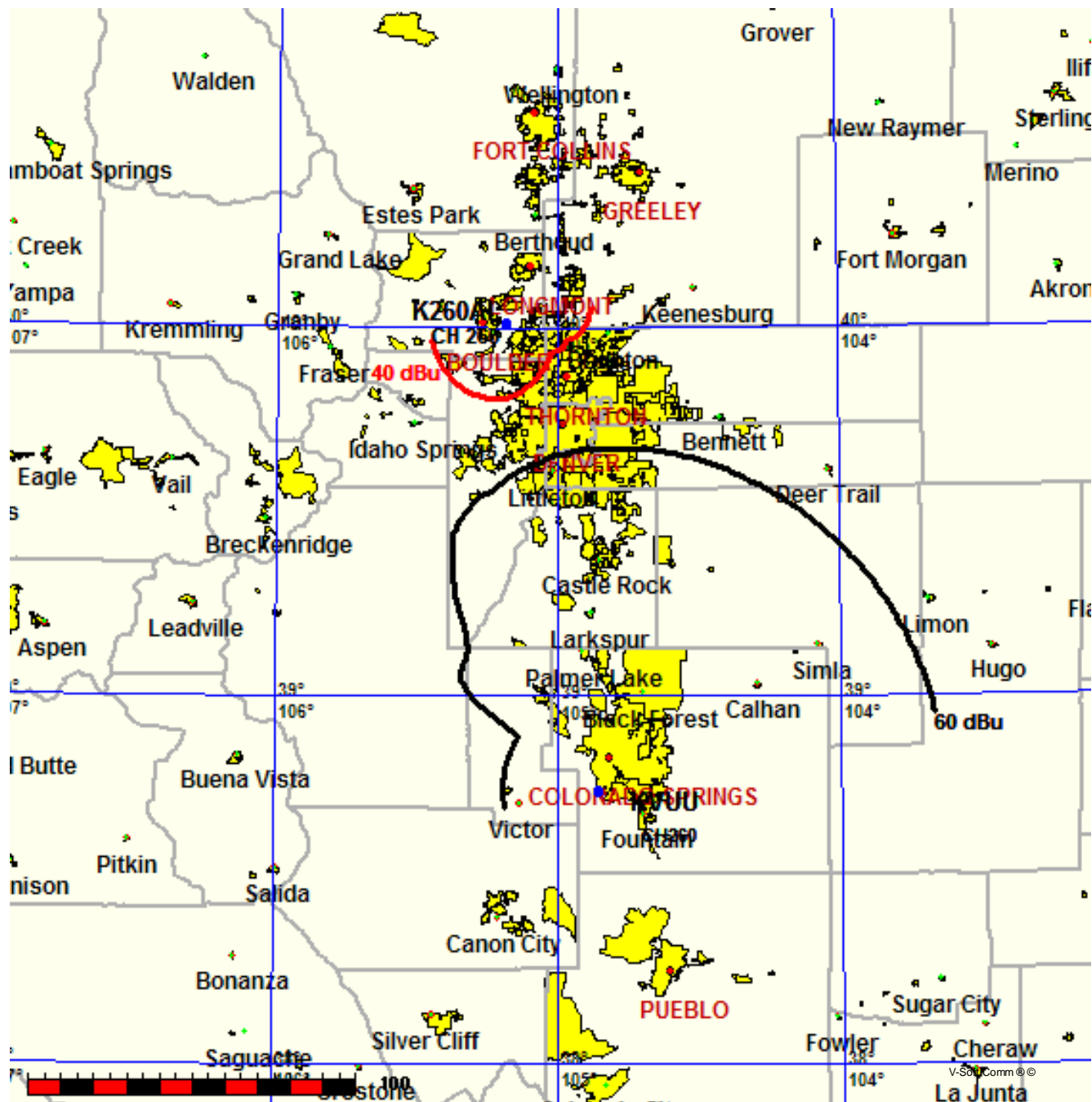




Exhibit E-1, Fig 5, K260AL vs KKPL  
K260AL Arvada, Colorado 260D

FMCommander Single Allocation Study - 03-05-2009 - NGDC 30 SEC  
K260AL's Overlaps (In= -61.68 km, Out= 3.37 km)

K260AL CH 260 D DA  
Lat= 40 00 43.0, Lng= 105 11 16.0  
0.25 kW -32.2 M HAAT, 1655 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

KKPL CH 260 C2 BMLH20010426AAK  
Lat= 40 59 22.0, Lng= 105 03 47.0  
50.0 kW 150 M HAAT, 2129 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

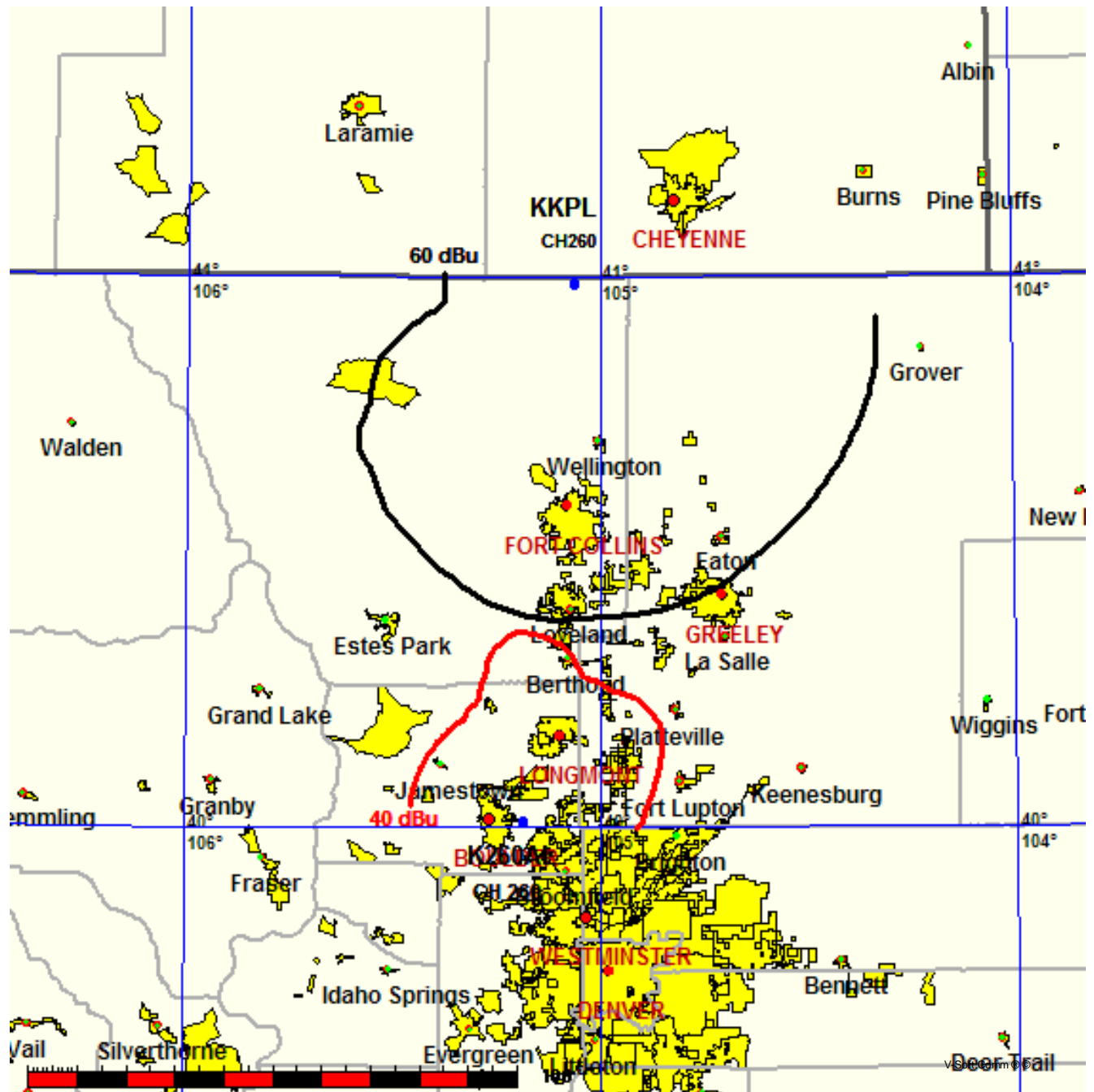
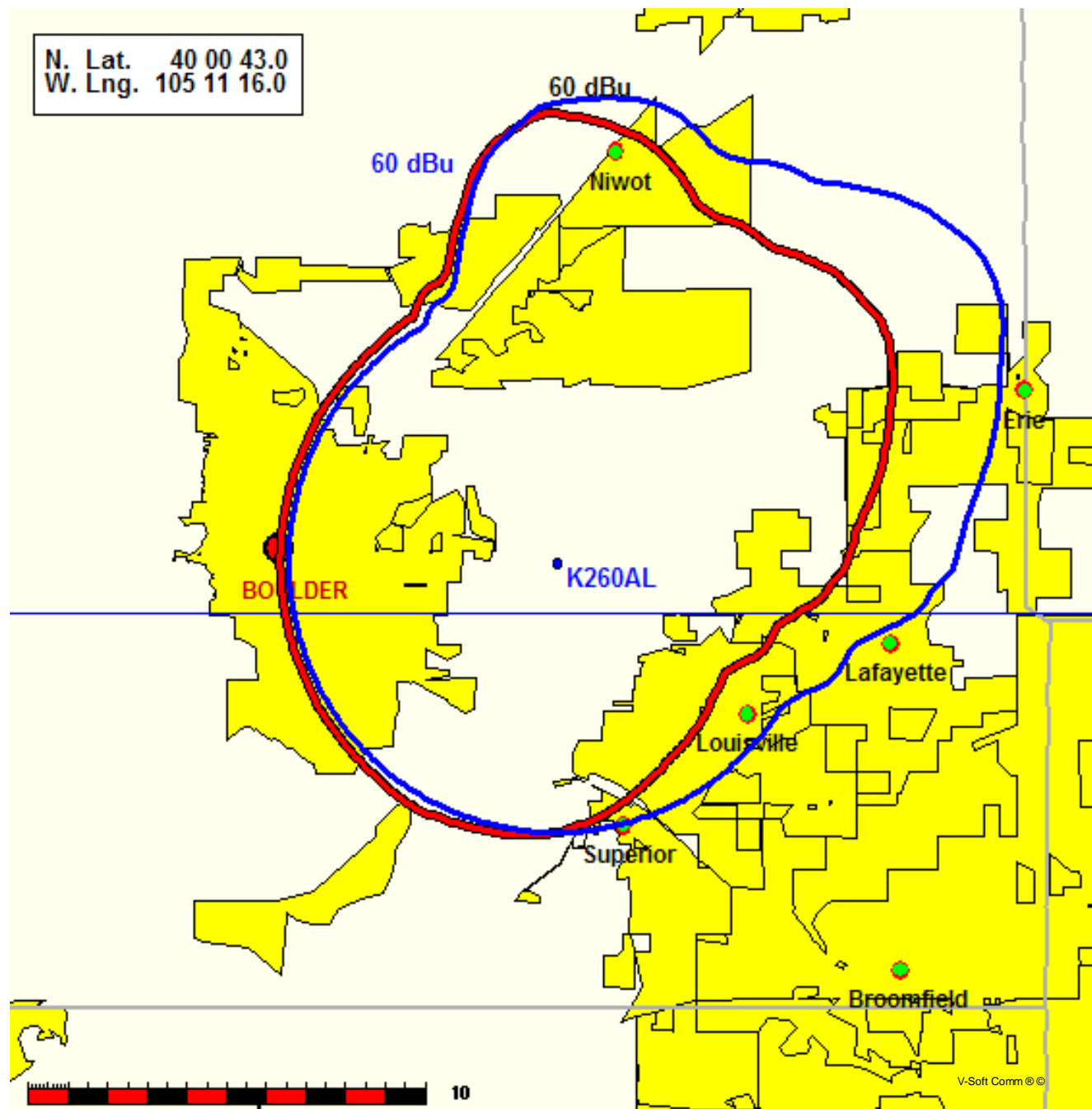


Exhibit E-1, Fig 6, Proposed vs Licensed  
K260AL Arvada, Colorado 260D

Coverage Study - NGDC 30 SEC  
03-05-2009

K260AL CH260 D 0.205 kW 1654M COR  
Prot. = 60 dBu. Population = 103,742



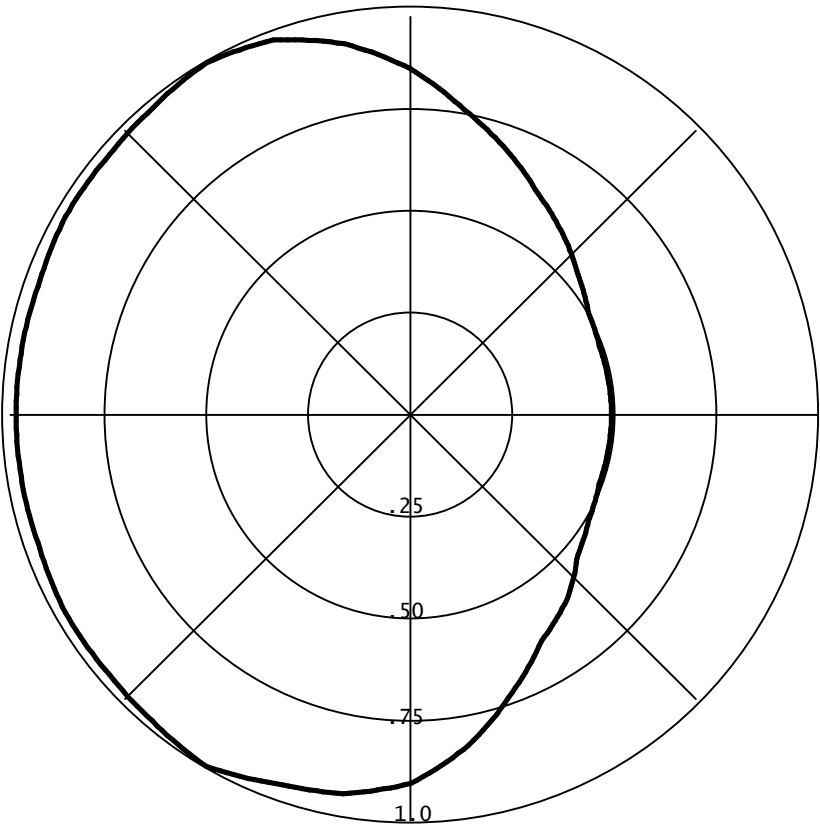
03-05-2009

RMS(V)= .811

Bearing    Field % Voltage

Graph is Percent Relative Field Voltage

000	=	0.852
010	=	0.762
020	=	0.692
030	=	0.627
040	=	0.581
050	=	0.536
060	=	0.504
070	=	0.493
080	=	0.493
090	=	0.493
100	=	0.493
110	=	0.493
120	=	0.507
130	=	0.536
140	=	0.596
150	=	0.643
160	=	0.728
170	=	0.826
180	=	0.908
190	=	0.947
200	=	0.966
210	=	1.000
220	=	0.984
230	=	0.976
240	=	0.976
250	=	0.966
260	=	0.966
270	=	0.966
280	=	0.966
290	=	0.966
300	=	0.976
310	=	0.976
320	=	0.984
330	=	1.000
340	=	0.982
350	=	0.927



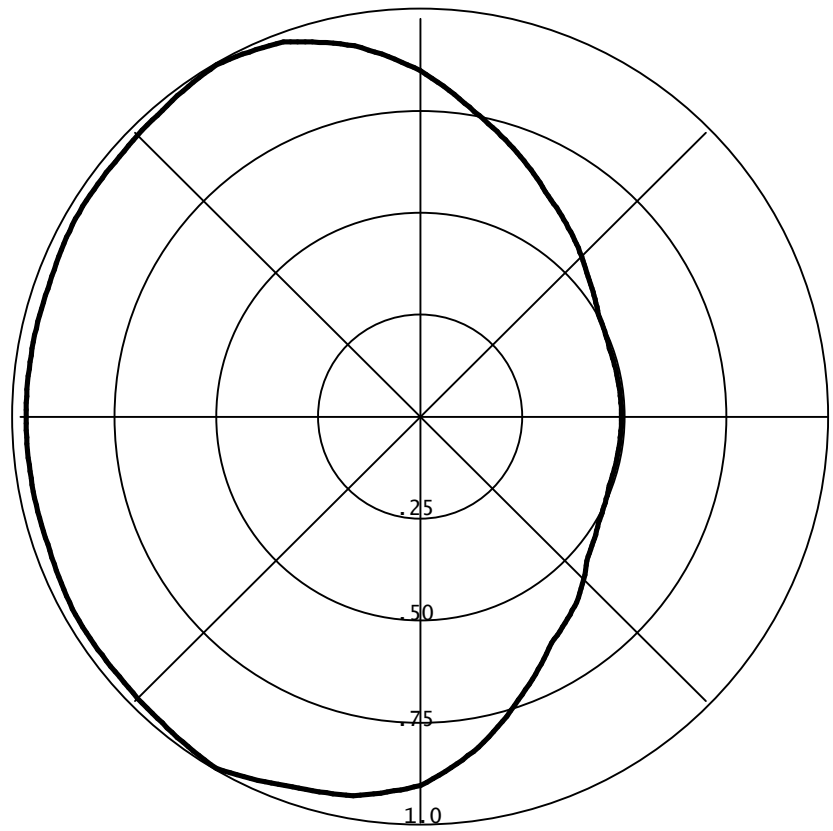
03-05-2009

RMS(V)= .811

Bearing      Field in kw

Graph is Percent Relative Field Voltage

000	=	0.181
010	=	0.145
020	=	0.120
030	=	0.098
040	=	0.084
050	=	0.072
060	=	0.064
070	=	0.061
080	=	0.061
090	=	0.061
100	=	0.061
110	=	0.061
120	=	0.064
130	=	0.072
140	=	0.089
150	=	0.103
160	=	0.132
170	=	0.171
180	=	0.206
190	=	0.224
200	=	0.233
210	=	0.250
220	=	0.242
230	=	0.238
240	=	0.238
250	=	0.233
260	=	0.233
270	=	0.233
280	=	0.233
290	=	0.233
300	=	0.238
310	=	0.238
320	=	0.242
330	=	0.250
340	=	0.241
350	=	0.215



Call Sign:	K260AL	Coordinates:	40-00-43
ASR:	1024061	(NAD 27)	11/16/05

ERP (Watts): 250 Watts  
 RCAMSL (m): 1655 meters  
 RCAGL (m): 30 meters

Nicom BKG77-2L

12 Radial (degrees)	Radial Height (meters)	Allowed MERP (Watts)	Antenna Pattern	Radial Power (Watts)
0	90.2	250	0.852	181.5
30	89.1	250	0.627	98.3
60	115	205	0.504	63.5
90	66.8	250	0.493	60.8
120	32.6	250	0.507	64.3
150	-12.4	250	0.643	103.4
180	-86.3	250	0.908	206.1
210	-149.7	250	1.000	250.0
240	-287.5	250	0.976	238.1
270	-137	250	0.966	233.3
300	-161.9	250	0.976	238.1
330	30.1	250	1.000	250.0

#### Maximum Effective Radiated Power (MERP)

Radial Intervals (meters)	MERP (Watts)
-10000	107
108	118
119	130
131	144
145	157
158	173
174	192
193	212
213	235
236	260
261	285
286	310
311	345
346	380
381	425
426	480
481	540
541	