

EXHIBIT E-1  
TECHNICAL STATEMENT  
K232EF ESTES PARK, COLORADO 229D  
CEDAR COVE BROADCASTING, INC.  
FCC FORM 349  
JUNE 2010

This Technical Statement is in support of FCC form 349 filed by Cedar Cove Broadcasting, Inc. for a minor change in the licensed facility of K232EF, facility ID 142150. It is proposing to relocate its current licensed tower site to an existing tower site known as "Lee Hill" located at N.  $40^{\circ}-04'-20''$ , W.  $105^{\circ}-21'-12''$ , NAD 27, with an Effective Radiated Power of 90Watts (0.090 KW) and utilizing a Scala model H5FMH-2 custom offset mounted, two yagi, directional horizontal only, type antenna. The antenna will be mounted at the 26 meter level on a 50 meter overall, unregistered, existing tower, with a Center of Radiation at 2425 meters Above Mean Sea Level. It also seeks to "one step" change channels from 232D to 229D, or its third adjacent channel.

Figure 1 shows a channel interference study conducted from the proposed site for K232EF. It shows that the proposed operation of K232EF on channel 229D, will not cause any prohibited outgoing interference to any licensed or proposed FM services, with the exception of KTCL Wheat Ridge, Colorado operating on channel 227C1, facility ID 68684. The proposed operation of K232EF on 232D is located within the protected 60 dB $\mu$  contour of 2nd adjacent station KTCL. Figure 2 shows the predicted F(50-50) field strength of KTCL at the proposed K232EF transmitter site is 68.9 dB $\mu$ . Therefore, the respective predicted interfering contour F(50-10) generated by the proposed K232EF on channel 229D is an additional 40 dB $\mu$  or 108.9 dB $\mu$ . Figure 3 shows the coverage area for the 108.9 dB $\mu$  interference contour F(50-10) and shows that there is no population in

the area of interference. The applicant, Cedar Cove Broadcasting, Inc., 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 proposed existing tower site, which is a privately owned 40 acre wooded area, with private access. The transmitter building is uninhabited and does not have indoor plumbing.

Figure 4 shows a more detailed interference study with K288EX Lakewood, Colorado, facility ID 140231 on channel 229D. There will be no overlap of the proposed K232EF 40 dB $\mu$  interference contour and the protected 60 dB $\mu$  of K288EX on channel 229D.

Figure 5 shows the proposed 60 dB $\mu$  of K232EF will be completely contained inside of the current 60 dB $\mu$  predicted coverage contour of the station being rebroadcast, KLDV Morrison, Colorado on channel 216C0, facility ID 12354. The proposed operation of K232EF will be considered a “fill-in” translator for KLDV, thus some of the maximum allowable ERP limits on some of the pertinent radials will be exceeded. However, the maximum ERP on any radial will not exceed 90 watts, thus this proposed operation is in compliance with 74.1235(a).

Figure 6 shows that the proposed operation of K232EF will 60 dB $\mu$  overlap with the currently licensed operation of K232EF as required.

Figure 7 shows the antenna polar plot of the proposed directional composite antenna system.

Figure 8 is a tabulation of distance to contours for the pertinent contours proposed by K232EF on channel 229D.

It was concluded that the new proposed operation of K232EF Estes Park, Colorado on channel 229D will not cause any harmful interference to any existing stations, and will be in full compliance with the commission's rules.

FIGURE 1, DETAILED INTERFERENCE STUDY K232EF ESTES PARK, COLORADO, CHANNEL 229D CH# 229D - 93.7 MHz, Pwr= 0.09 kW DA, HAAT= 288.3 M, COR= 2425 M Average Protected F(50-50)= 17.16 km Standard Directional											
REFERENCE		CH#		229D		- 93.7 MHz, Pwr= 0.09 kW DA, HAAT= 288.3 M, COR= 2425 M		DISPLAY DATES		DATA 06-23-10	
40 04 20.0 N.						Average Protected F(50-50)= 17.16 km		SEARCH 06-23-10			
105 21 12.0 W.											
CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR (kW)	INT (km)	PRO (km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT (M)	COR (M)	LICENSEE	(Overlap	in km)
232D	K232EF *	LIC	DV_	325.6	29.7	40 17 34.0	0.250	0.9	21.3	20.7	7.8 *
Estes	Park	CO		145.5	BLFT20100510ABX	105 33 05.0		2917	Cedar Cove Broadcasting, I		
229D	K229AC	LIC	_E_	232.2	18.0	39 58 22.0	0.028	49.1	14.5	-30.7*<	1.6
Ward		CO		52.1	BLFT20061218ACR	105 31 13.0		2655	Boulder Community Broadcas		
229C1	KIIQ	RSV	___	118.1	161.8	39 22 34.0	100.000	170.4	72.3	-18.5*<	48.0
Limon		CO		299.2		103 41 43.0	299	1996	Percheron Associates, Llc		
227C1	KTCL **	LIC	DCX	165.1	39.0	39 43 59.0	71.000	6.7	57.0	25.5	-18.0*< **
Wheat	Ridge	CO		345.2	BLH20070621AQR	105 14 10.0	346	2256	Citicasters Licenses, Inc.		
229D	K288EX	APP	DC_	165.2	39.4	39 43 46.0	0.099	48.8	16.7	-14.6*<	0.5
Lakewood		CO		345.3	BPFT20100405AAH	105 14 08.0		2246	Mountain Community Transla		
230A	KRKU	CP	ZCX	17.2	49.0	40 29 37.0	0.580	49.0	31.9	-10.4<	3.8
Loveland		CO		197.3	BPH20100302ACE	105 10 53.0	319	2098	Laramie Mountain Broadcast		
229C1	KIIQ	APP	NCX	118.1	161.8	39 22 34.0	100.000	160.6	64.6	-8.7<	56.0
Limon		CO		299.2	BPH20070313ABN	103 41 43.0	205	1901	Percheron Associates, Llc		
230A	KRKU	LIC	NCX	17.2	49.0	40 29 37.0	0.300	41.8	27.1	-3.2<	8.9
Loveland		CO		197.3	BLH20100302ABS	105 10 53.0	319	2098	Laramie Mountain Broadcast		
229D	637466	APP	_C_	14.0	54.3	40 32 46.8	0.010	41.5	10.7	2.2	10.9
Fort Collins		CO		194.1	BNPFT20030317CVW	105 11 50.0		2188	Radio Assist Ministry, Inc		
229C1	KIIQ	CP	_CX	118.1	161.9	39 22 34.0	100.000	148.3	56.1	3.6	64.7
Limon		CO		299.1	BPH20070313ABN	103 41 41.0	117	1823	Percheron Associates, Llc		
229D	631534	APP	DE_	53.4	31.4	40 14 24.0	0.100	12.0	5.5	13.6	5.5
Berthoud		CO		233.6	BNPFT20030312ADC	105 03 23.0		1637	Educational Communications		
231D	K231AA	LIC	_CN	139.7	15.6	39 57 54.0	0.205	1.0	6.7	7.8	8.8
Boulder		CO		319.8	BLFT19960111TK	105 14 05.0	-133	1719	Citicasters Licenses, Inc.		
229C1	KRAI-FM	LIC	_CN	287.1	199.6	40 34 35.0	100.000	177.8	76.0	14.9	114.7
Craig		CO		105.6	BLH6997	107 36 29.0	299	2315	Wild West Radio, Inc.		
229C3	KAZY	LIC	_CX	25.1	130.6	41 08 04.0	25.000	99.8	22.7	20.5	86.2
Cheyenne		WY		205.5	BLH20060615AAH	104 41 32.0	35	1859	Freisland Broadcasting Cor		
230D	630344	APP	_C_	90.3	51.3	40 04 05.0	0.170	16.1	11.5	25.7	24.8
Fort Lupton		CO		270.7	BNPFT20030317AZW	104 45 08.0		1611	Horizon Christian Fellowsh		
230A	KYSL	LIC	_CN	228.8	86.8	39 33 22.0	0.560	60.5	41.9	25.1	44.1
Frisco		CO		48.3	BLH19940808KA	106 06 53.0	324	3549	Krystal Broadcasting, Inco		
230D	644477	APP	_C_	14.0	54.3	40 32 46.8	0.010	17.8	12.2	25.9	29.1
Fort Collins		CO		194.1	BNPFT20030317GEQ	105 11 50.0		2188	Radio Assist Ministry, Inc		
230D	644473	APP	_C_	83.4	52.3	40 07 28.1	0.115	16.9	11.8	26.3	27.4
Fort Lupton		CO		263.8	BNPFT20030317GEL	104 44 36.1		1630	Radio Assist Ministry, Inc		
230D	631544	APP	DE_	17.3	49.0	40 29 36.0	0.010	0.9	7.7	37.6	34.0
Windsor		CO		197.4	BNPFT20030312ADM	105 10 52.0		2078	Educational Communications		
230D	650170	APP	_C_	27.1	64.2	40 35 08.0	0.250	10.1	7.1	44.1	50.4
Timnath		CO		207.4	BNPFT20030317IUB	105 00 23.0		1520	Educational Media Foundati		
232C3	KMAX-FM	LIC	_CX	10.5	96.7	40 55 41.0	8.700	4.7	49.3	82.0	46.9
Wellington		CO		190.6	BLH20021101AAV	105 08 36.0	168	2131	Regent Trust		
229C2	KSBV	LIC	_CX	197.6	189.2	38 26 47.0	1.000	135.0	59.4	50.6	126.3
Salida		CO		17.2	BLH20020828AAQ	106 00 37.0	830	3572	Arkansas Valley Broadcasti		
232C	KILO	LIC	_C_	163.9	153.3	38 44 44.0	79.000	16.1	98.0	134.9	55.2
Colorado Springs		CO		344.2	BLH20070426AAL	104 51 42.0	670	2922	Colorado Springs Radio Bro		
226C3	1170083	APP	_HX	304.0	121.9	40 40 42.0	25.000	6.3	54.2	111.3	67.1
Walden		CO		123.2	BNPH20070125ACD	106 33 00.0	14	2727	Laramie Mountain Broadcast		
228D	K228EZ	APP	DC_	6.4	112.2	41 04 35.0	0.250	27.9	22.9	73.0	75.8
Buford		WY		186.5	BPFT20100511ACZ	105 12 15.0		2432	Mitchell A. Beranek		

Page # 2											
CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap	*OUT* in km)
227D Breckenridge	652035	APP CO	_C_	218.5 38.1	86.2 BNPFT20030317MPR	39 27 48.0 105 58 41.0	0.008	0.2 3752	10.9 Mitchell A. Beranek	85.4	75.2
231C2 Phippsburg	KEZZ	LIC CO	NCX	286.6 105.7	118.5 BLH20090522ACV	40 22 03.0 106 41 28.0	1.750 380	2.7 3107	42.5 Youngers Colorado Broadcas	113.1	75.4
227D Breckenridge	634531	APP CO	DH_	218.4 38.0	86.6 BNPFT20030311AOY	39 27 35.0 105 58 46.0	0.070	0.5 3822	10.8 Krystal Broadcasting	85.5	75.8
230D Westcreek	631674	APP CO	_C_	164.6 344.8	103.2 BNPFT20030310BGE	39 10 33.0 105 02 03.1	0.010	13.7 2823	13.6 Way-fm Media Group, Inc.	82.9	86.4
228D Buford	K228EZ	LIC WY	_C_	6.6 186.7	112.5 BLFT20090415ADF	41 04 42.0 105 11 59.0	0.034	15.8 2389	13.1 Mitchell A. Beranek	85.4	85.0
231D Byers	649226	APP CO	_C_	112.2 293.0	106.3 BNPFT20030312ARO	39 42 19.0 104 12 18.0	0.200	1.0 1705	11.0 Frank G. Mccoy	95.4	95.2
226D Frisco	K226AH	LIC CO	DVN	242.8 62.1	105.4 BLFT19980717TD	39 38 05.0 106 26 47.0	0.150 72	0.8 2978	5.5 Krystal Broadcasting, Inc.	103.9	99.7
228D Leadville	K228AG	LIC CO	DHN	218.6 38.0	114.4 BLFT19790511IC	39 15 54.0 106 10 54.0	0.107 546	8.2 4011	7.5 Lake County Tv-fm, Inc	104.4	106.6
226C3 Walden	AL7155	VAC CO	___	305.6 124.8	121.3 RM11387	40 42 01.0 106 31 21.0	25.000 100	6.7 2758	0.0 Laramie Mountain Broadcast	110.0	120.7
229A Limon	KIIQ	LIC CO	_CX	121.6 302.7	168.6 BLH20041025AEJ	39 16 00.0 103 41 15.0	1.000 -32	35.6 1649	10.2 Percheron Associates, Llc	123.2	117.9
228L1 Laramie	KOCA-LP	LIC WY	___	352.1 171.9	139.2 BLL20021223AAQ	41 18 48.0 105 35 00.0	0.100	8.0 2218	5.6 La Radio Montanesa: Voz De	119.7	119.2
228C3 Aspen	KTND	CP CO	_CX	239.0 58.0	161.3 BNPHT20070501AAQ	39 18 56.0 106 57 32.0	21.000 109	34.2 2682	24.4 Bs&t Wireless, Inc.	125.2	135.7
228A Aspen	AU7052710	VAC CO	___	232.4 51.5	159.4 RM9994	39 11 24.0 106 49 06.0	6.000 100	23.5 3078	35.5 Roaring Forks Broadcasting	134.3	138.9
231C1 Scottsbluff	KNEB-FM	LIC NE	_CN	37.3 218.4	229.4 BLH19810904AB	41 42 04.0 103 40 49.0	100.000 207	7.3 1512	57.3 Nebraska Rural Radio Assoc	221.2	171.7
227C0 Gering	KMOR	LIC NE	NCX	32.6 213.6	234.6 BLH20070827AED	41 50 23.0 103 49 36.0	100.000 311	9.1 1598	61.6 Legacy Communications, Llc	224.6	172.7

-----  
Terrain database is USGS 03 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)  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.

\* Translator being modified by this application  
\*\* Protection will be afforded to KRKS since there is no population located inside of the proposed  
interference contour for K232EF. See the attached Technical Statement for further details.

FIGURE 2, KTCL 68.9 DBU CONTOUR AT THE K232EF SITE  
K232EF ESTES PARK, COLORADO, CHANNEL 229D

Coverage Study - USGS 03 SEC  
06-24-2010

K232EF CH229 D , 0.09 kW, 288.3M HAAT, 2425.0M COR AMSL  
Service Contour = 68.9 dBu.

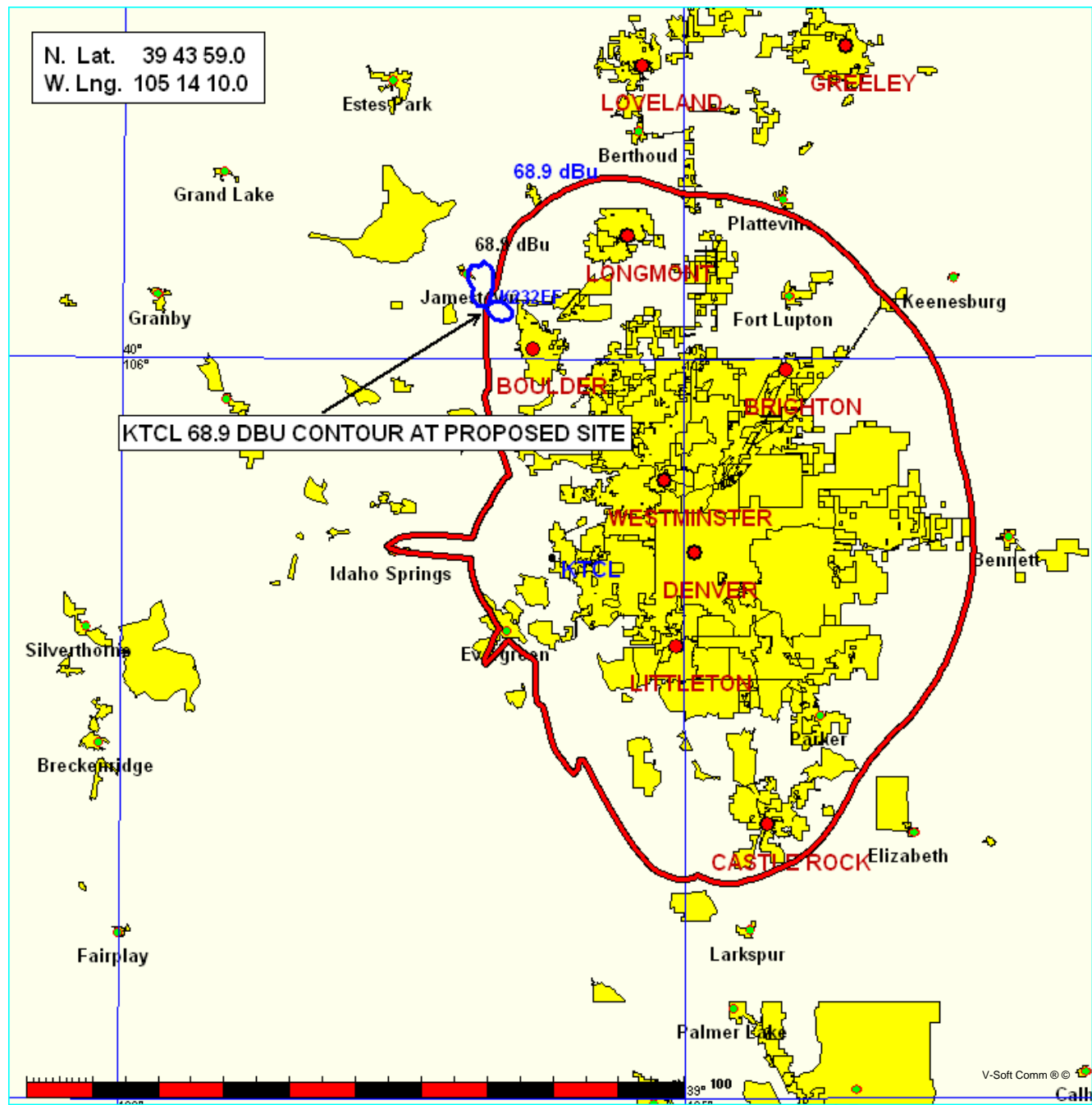


FIGURE 3, PREDICTED 108.9 DBU INTERFERENCE CONTOUR  
K232EF ESTES PARK, COLORADO, CHANNEL 229D

Coverage Study - USGS 03 SEC  
06-24-2010

K232EF CH229 D , 0.09 kW, 288.3M HAAT, 2425.0M COR AMSL  
Interference Contour = 108.9 dBu. Population = 0

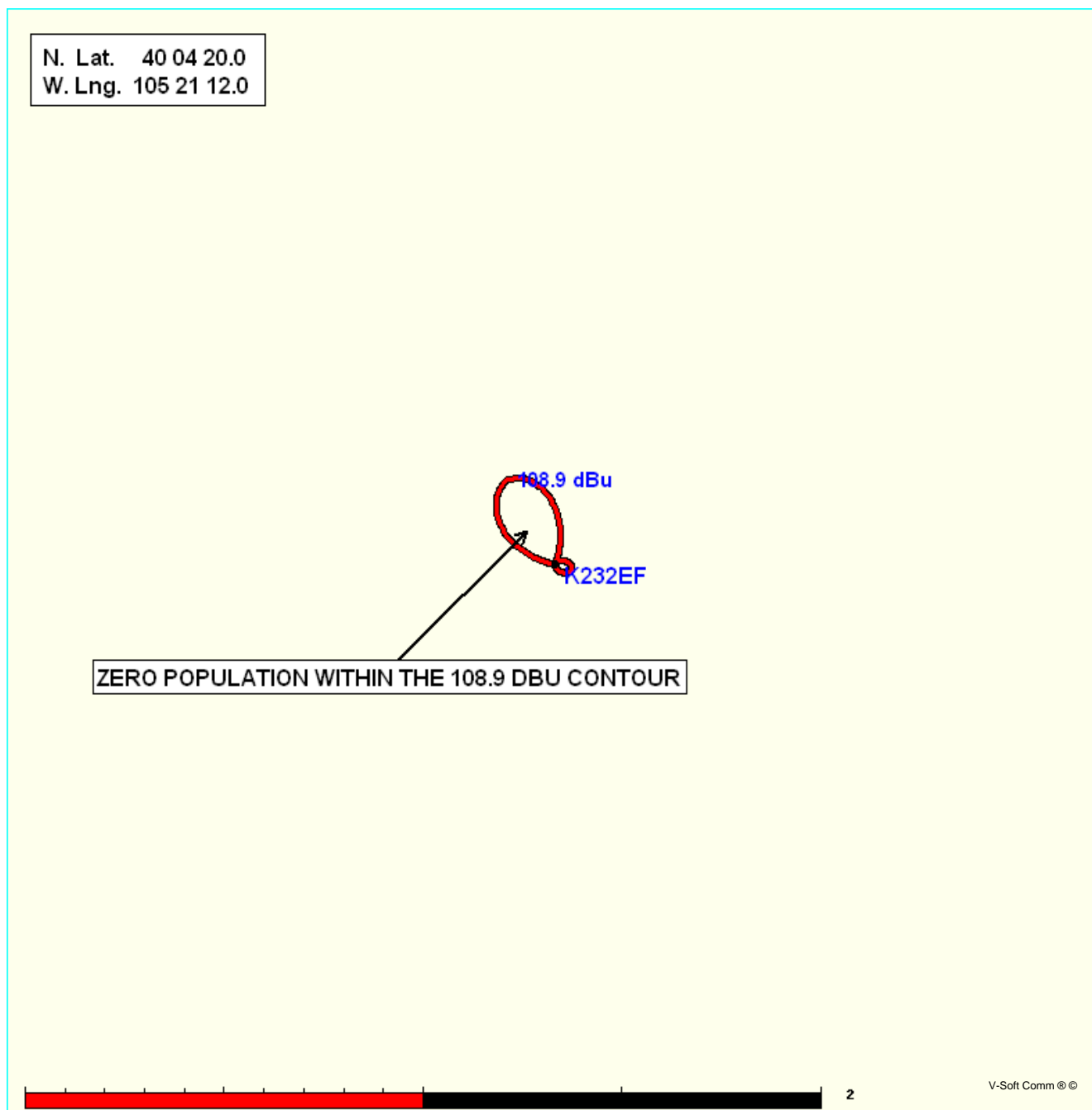


FIGURE 4, DETAILED STUDY WITH K288EX LAKEWOOD, CO  
K232EF ESTES PARK, COLORADO, CHANNEL 229D

FMCommander Single Allocation Study - 06-23-2010 - USGS 03 SEC  
K232EF's Overlaps (In= 2.32 km, Out= 17.73 km)

K232EF CH 229 D DA  
Lat= 40 04 20.0, Lng= 105 21 12.0  
0.09 kW 288.3 M HAAT, 2425 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

K288EX.A CH 229 D DA BPFT20100405AAH  
Lat= 39 43 46.0, Lng= 105 14 08.0  
0.099 kW 0 M HAAT, 2246 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

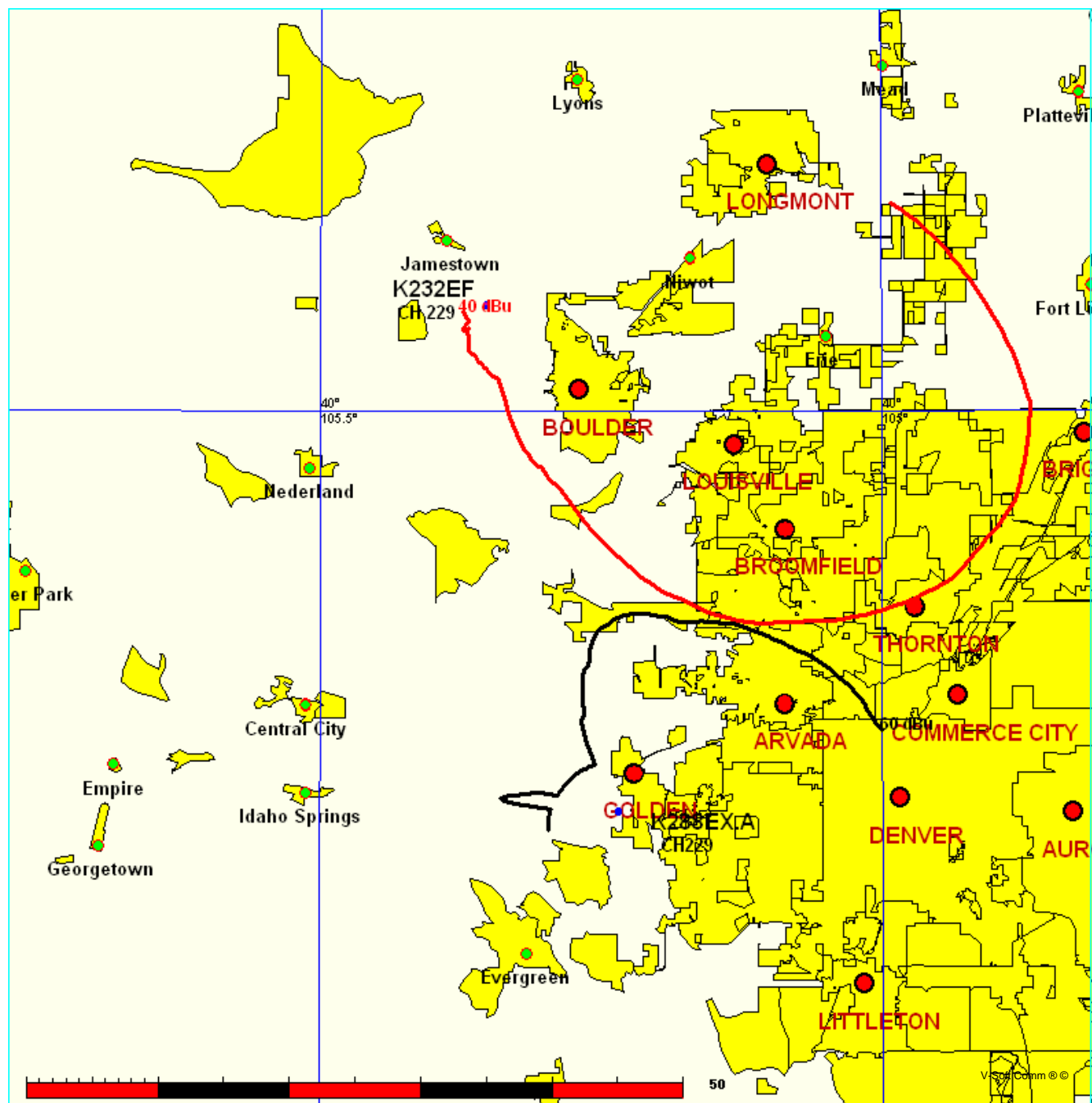




FIGURE 5, FILL IN STUDY WITH KLDV MORRISON, CH. 216C0  
K232EF ESTES PARK, COLORADO, CHANNEL 229D

Coverage Study - USGS 03 SEC  
06-23-2010

K232EF CH229 D , 0.09 kW, 288.3M HAAT, 2425.0M COR AMSL  
Service Contour = 60 dBu.

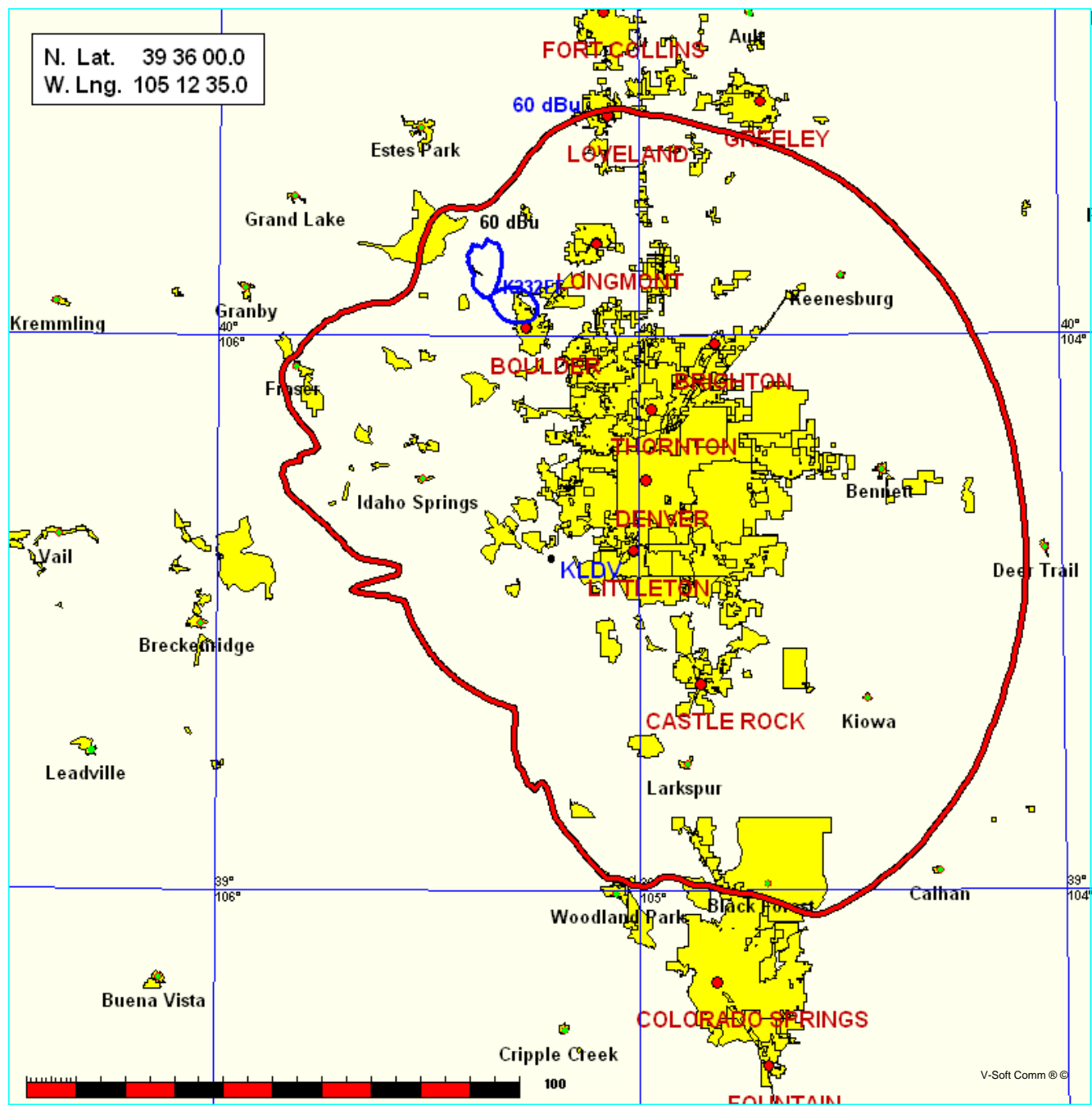


FIGURE 6, 60 DBU OVERLAP WITH CURRENT K232EF  
K232EF ESTES PARK, COLORADO, CHANNEL 229D

Coverage Study - USGS 03 SEC  
06-23-2010

K232EF CH229 D , 0.09 kW, 288.3M HAAT, 2425.0M COR AMSL  
Service Contour = 60 dBu.

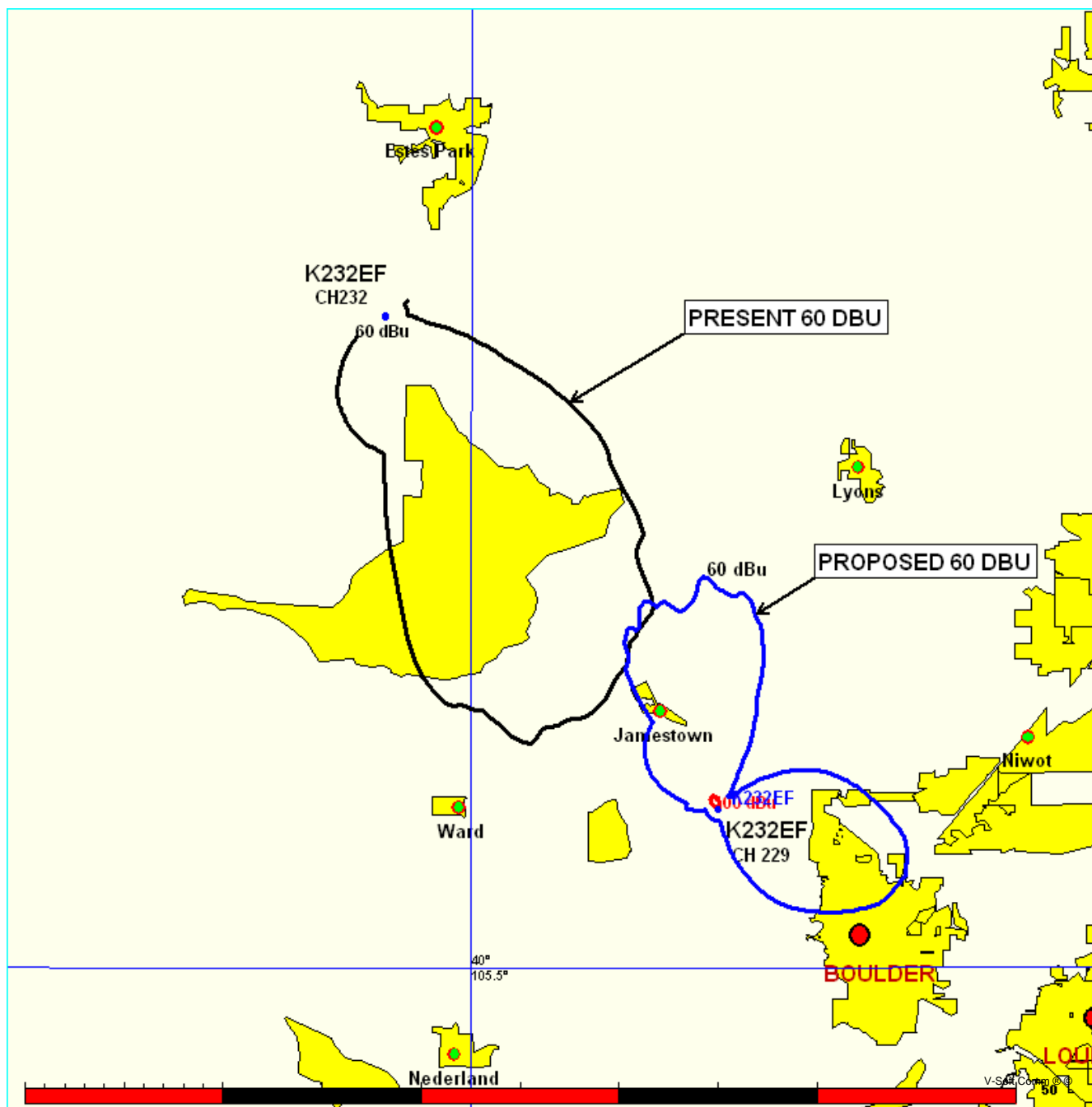


FIGURE 7 - DIRECTIONAL ANTENNA DATA

K232EF ESTES PARK, COLORADO

06-23-2010

RMS(V) = .376

SCALA CUSTOM H5FMH-2 DUAL HORIZONTAL YAGI

Graph is Relative Field

## DIRECTIONAL ANTENNA SYSTEM - COMPOSITE PATTERN

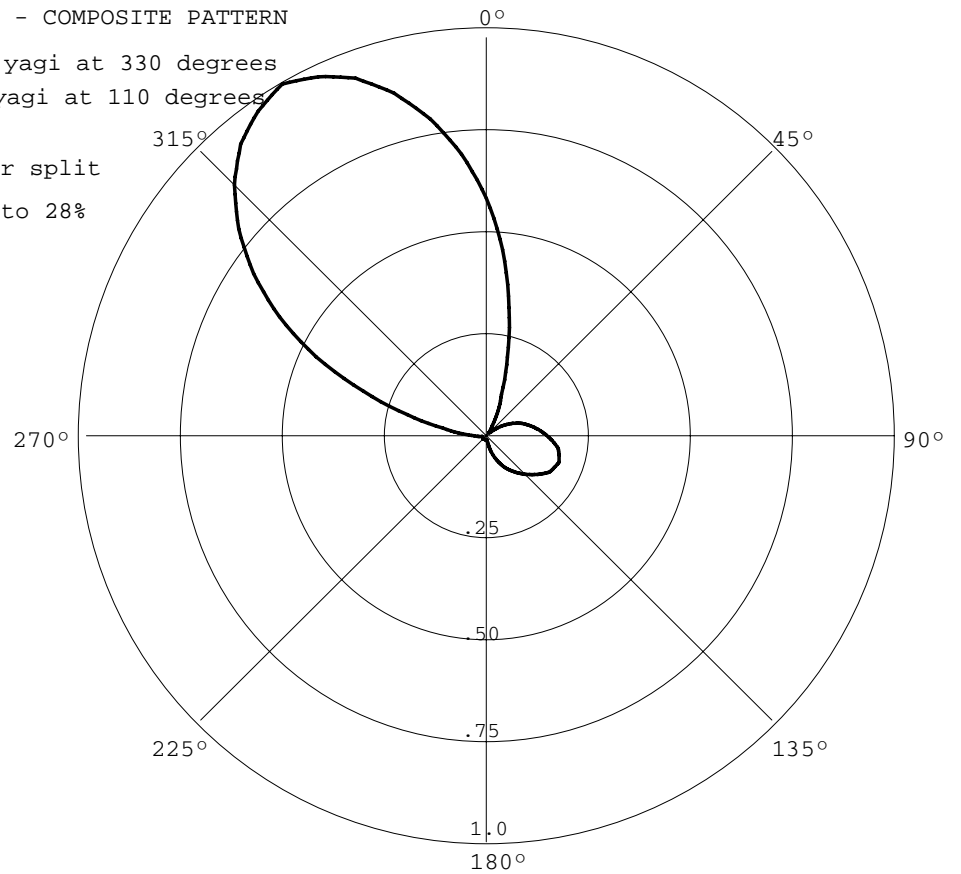
Azi	Field	dBk	kW
000	0.585	-15.114	0.031
010	0.320	-20.355	0.009
020	0.108	-29.789	0.001
030	0.030	-40.915	0.000
040	0.010	-50.458	0.000
050	0.012	-48.874	0.000
060	0.054	-35.810	0.000
070	0.090	-31.373	0.001
080	0.119	-28.947	0.001
090	0.149	-26.994	0.002
100	0.179	-25.401	0.003
110	0.190	-24.883	0.003
120	0.179	-25.401	0.003
130	0.149	-26.994	0.002
140	0.119	-28.947	0.001
150	0.090	-31.373	0.001
160	0.054	-35.810	0.000
170	0.012	-48.874	0.000
180	0.010	-50.458	0.000
190	0.010	-50.458	0.000
200	0.010	-50.458	0.000
210	0.010	-50.458	0.000
220	0.010	-50.458	0.000
230	0.010	-50.458	0.000
240	0.010	-50.458	0.000
250	0.010	-50.458	0.000
260	0.010	-50.458	0.000
270	0.030	-40.915	0.000
280	0.108	-29.789	0.001
290	0.320	-20.355	0.009
300	0.585	-15.114	0.031
310	0.792	-12.483	0.056
320	0.937	-11.023	0.079
330	1.000	-10.458	0.090
340	0.937	-11.023	0.079
350	0.792	-12.483	0.056

#1 yagi at 330 degrees

#2 yagi at 110 degrees

Power split

72% to 28%



# Contour.out

N. Lat. = 400420.0 W. Lng. = 1052112.0  
 HAAT and Distance to Contour,  
 FCC, FM 2-10 Mi, 51 pts Method - USGS 03 SEC

FIGURE 8, TABULATION OF DISTANCE TO CONTOURS, K232EF

Azi.	AV EL	HAAT	dBk	60-F5	54-F1	40-F1	108.9-F1
000	2224.0	201.0	-15.11	10.97	15.75	36.46	0.14
010	2113.1	311.9	-20.35	10.09	14.19	33.71	0.08
020	1963.1	461.9	-29.79	5.72	9.49	24.08	0.03
030	1886.2	538.8	-40.92	1.92	3.61	12.15	0.01
040	1763.3	661.7	-50.46	0.67	1.33	5.81	0.00
050	1738.9	686.1	-48.87	0.80	1.52	6.77	0.00
060	1711.7	713.3	-35.81	3.36	6.25	21.08	0.01
070	1679.7	745.3	-31.37	5.41	9.56	28.65	0.02
080	1662.0	763.0	-28.95	6.87	11.95	33.90	0.03
090	1662.0	763.0	-26.99	8.25	14.13	38.20	0.04
100	1652.2	772.8	-25.40	9.62	16.86	42.16	0.04
110	1667.5	757.5	-24.88	10.04	17.40	42.99	0.05
120	1687.7	737.3	-25.40	9.51	16.45	41.18	0.04
130	1722.6	702.4	-26.99	8.09	13.68	36.60	0.04
140	1761.7	663.3	-28.95	6.69	11.41	31.24	0.03
150	1881.3	543.7	-31.37	5.16	8.74	23.74	0.02
160	2084.2	340.8	-35.81	3.07	5.26	13.67	0.01
170	2072.4	352.6	-48.87	0.80	1.59	5.74	0.00
180	2135.0	290.0	-50.46	0.67	1.33	4.73	0.00
190	2239.1	185.9	-50.46	0.67	1.33	4.03	0.00
200	2278.9	146.1	-50.46	0.67	1.33	3.62	0.00
210	2359.7	65.3	-50.46	0.67	1.33	2.57	0.00
220	2362.8	62.2	-50.46	0.67	1.33	2.52	0.00
230	2419.9	5.1	-50.46	0.67	1.33	1.77	0.00
240	2517.3	-92.3	-50.46	0.67	1.33	1.77	0.00
250	2568.8	-143.8	-50.46	0.67	1.33	1.77	0.00
260	2674.8	-249.8	-50.46	0.67	1.33	1.77	0.00
270	2638.1	-213.1	-40.92	1.61	1.61	2.99	0.01
280	2656.8	-231.8	-29.79	1.84	2.57	5.71	0.03
290	2652.3	-227.3	-20.35	3.09	4.35	9.96	0.08
300	2607.0	-182.0	-15.11	4.16	5.93	13.31	0.14
310	2517.6	-92.6	-12.48	4.86	6.90	15.62	0.19
320	2422.6	2.4	-11.02	5.31	7.51	17.34	0.22
330	2335.2	89.8	-10.46	9.54	13.32	31.88	0.24
340	2294.3	130.7	-11.02	11.05	15.93	37.43	0.22
350	2294.5	130.5	-12.48	10.19	14.27	34.35	0.19

Ave EI = 2136.33 M HAAT= 288.67 M AMSL= 2425