

TECHNICAL STATEMENT  
K267CD LOVELAND, COLORADO  
MOUNTAIN COMMUNITY TRANSLATORS, LLC  
FCC FORM 349  
JUNE 2016

This Technical Statement is made in support of a minor change application for FM translator station, K267CD Loveland, Colorado, facility ID 158249. K267CD seeks to remain at its current authorized site, and remain a fill-in translator for KVAM(AM) Loveland, Colorado, facility ID 35517. The following will show that the new proposed operation of K267CD will meet all of the Commissions technical requirements for an FM translator station.

The proposed operation of K267CD specifies a maximum Effective Radiated Power of 0.12 kilowatts. It will operate with a directional antenna with an “off the shelf” type antenna, or a Scala CA-2/CP with circular polarization. The antenna will be mounted on an existing tower with an over height of 27 meters above the ground. The antenna will be mounted with a Center of Radiation of 13 meters above the ground, and 2083 meters Above Mean Sea Level. The coordinates of this tower are located at N 40° 29’ 37”, W 105° 10’ 53”, NAD 27.

Figure 1 is a detailed interference study conducted on channel 267D with these new proposed facilities. It shows that the new operation of K267CD will not cause any interference to any existing or proposed FM stations on any of the pertinent same channel or adjacent channels to channel 267, with the exception of KOLT-FM Cheyenne, Wyoming on channel 264C1, facility ID 30225, and K269EQ Loveland, Colorado, facility ID 140256. No actual interference will be cause to either of these 2nd and 3<sup>rd</sup> adjacent channel stations since the proposed worst case 100 dBμ interference contour will not cover any population. See the predicted 100 dBμ interference contour map at Figure 2.

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 proposed existing tower site, which is a privately owned 40 acre square wooded area, with private access. The transmitter building is uninhabited and does not have indoor plumbing. Should any unforeseen actual interference be caused, the licensee will immediately cease broadcasting with K267CD until such interference can be eliminated.

Figure 3 is the directional antenna data for the proposed Scala CA-2/CP antenna system proposed to be used.

Since there is no change in the location of the transmitter site, it can be assumed that there will be overlap between the present and proposed facilities as required.

The proposed operation of K267CD Loveland will be considered a "Fill-In" operation for KVAM(AM) Loveland, Colorado. KVAM(AM) operates with 7 kilowatts daytime with a non-direction antenna system on 1570 kHz. Figure 4 shows that the proposed 60 dB $\mu$  contour for the proposed K267CD will not extend beyond the daytime 2.0 mV/m contour of KVAM. It will also not extend beyond a 25 miles radius from the KVAM tower site. Since this is a "Fill-In" translator, the maximum ERP will not exceed the maximum permissible ERP of 250 watts in any azimuth.

It was found that the new proposed operation of K267CD Loveland, Colorado on channel 267D, will satisfy all of the required commission rules and regulations for an FM translator station.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

K267CD LOVELAND, CO, CH. 267D

REFERENCE  
40 29 37.0 N.  
105 10 53.0 W.

CH# 267D - 101.3 MHz, Pwr= 0.12 kW DA, HAAT= 0.0 M, COR= 2083 M  
Average Protected F(50-50)= 5.9 km  
Standard Directional

DISPLAY DATES  
DATA 06-17-16  
SEARCH 06-19-16

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
267D K267CD Loveland		LIC DC_ CO	0.0 0.0	0.00 BLFT20160513AES	40 29 37.0 105 10 53.0	0.040 2083	21.6 2083	5.8 Mountain Community Transla	-36.4*	-55.2*
268C KJHM Strasburg		LIC NCX CO	121.3 302.1	120.93 BMLH20141014ACF	39 55 22.0 103 58 18.0	97.000 625	138.4 2109	93.2 Max Radio Of Denver Lic	-35.5*	1.1
268C KJHM Watkins		APP NHX CO	121.3 302.1	120.93 BPH20160614AAD	39 55 22.0 103 58 18.0	97.000 625	138.4 2109	93.2 Max Radio Of Denver Lic	-35.5*	1.1
266C KOSI Denver		LIC DC_ CO	183.1 3.1	85.03 BLH20150622AFR	39 43 44.0 105 14 08.0	100.000 513	113.7 2280	73.8 Bonneville International C	-32.3*	0.4
268C KJHM Watkins		RSV-A ____ CO	121.7 302.5	132.51	39 51 39.0 103 51 44.0	100.000 600	135.6 2088	91.2 Max Radio Of Denver Lic	-21.2*	17.6
269D K269EQ Loveland		LIC _C_ CO	0.0 0.0	0.00 BLFT20110103AAQ	40 29 37.0 105 10 53.0	0.010 338	0.2 2085	10.6 Mountain Community Transla	-15.1*	-11.1*
264C1 KOLT-FM Cheyenne		LIC NC_ WY	21.5 201.7	66.32 BLH20080625AAB	41 02 55.0 104 53 28.0	100.000 202	9.6 2103	69.8 Citicasters Licenses, Inc.	33.7	-4.1*
267C0 KOZY-FM Bridgeport		LIC _C_ NE	36.7 217.6	187.81 BLH20010827AAD	41 50 23.0 103 49 36.0	100.000 339	163.2 1630	65.0 Legacy Communications, Lic	0.2	47.2
213C3 KCSU-FM Fort Collins		LIC _CN CO	10.3 190.4	12.01 BLED19850124LR	40 36 00.0 105 09 21.0	10.000 -108	6.5 1613	55.5 Board Of Governors Of The	11.5R	0.51M
270D K280EQ Grealey		CP DV_ CO	106.5 286.7	28.45 BPFT20160129AYN	40 25 15.0 104 51 35.0	0.020	0.3 1571	5.3 Cedar Cove Broadcasting, I	9.0	21.7
214A KGUD Longmont		LIC _CN CO	159.2 339.3	30.12 BLED19821018AU	40 14 24.0 105 03 19.0	0.100 82	6.5 1613	55.5 Longmont Community Radio	9.5R	20.6M
214A KGUD Longmont		CP DCX CO	159.2 339.3	30.12 BPED20141216AAD	40 14 24.0 105 03 19.0	1.000 82	6.5 1613	55.5 Longmont Community Radio	9.5R	20.6M
214A KENC Estes Park		LIC DEX CO	242.8 62.6	32.31 BMLED20130109AGF	40 21 38.0 105 31 12.0	0.200 13	6.5 2730	55.5 Community Radio For Northe	9.5R	22.8M
268D KJHM-FM1 Commerce City		LIC DC_ CO	163.8 344.0	94.59 BLFTB20050802ABY	39 40 31.0 104 52 22.0	20.000 84	63.0 1766	39.8 Max Radio Of Denver Lic	23.6	48.4
270C2 KIGN Burns		LIC _CN WY	31.7 212.1	81.63 BMLH19950920KD	41 07 01.0 104 40 07.0	50.000 150	5.1 1963	45.6 Townsquare Media Cheyenne	52.5	34.8
268D K268BX Cheyenne		LIC _C_ WY	24.0 204.2	78.17 BLFT20130514ACH	41 08 09.0 104 48 07.0	0.250 5	10.1 1879	7.1 Brahmin Broadcasting Corpo	44.9	36.8
266D K277BP Cheyenne		CP _C_ WY	24.0 204.2	78.17 BPFT20160129ACJ	41 08 09.0 104 48 07.0	0.250	10.1 1874	7.1 Cedar Cove Broadcasting, I	44.9	36.8
269D K269AE Boulder		LIC ?HN CO	182.7 2.7	59.25 BLFT221	39 57 38.0 105 12 52.0	0.103 -58	0.7 1747	12.8 Kse Radio Ventures, Lic	49.7	46.4
264D K264B0 Denver		CP DC_ CO	183.1 3.1	85.00 BPFT20160517AAB	39 43 45.0 105 14 08.0	0.099	0.7 2262	21.5 KlZ Radio, Inc.	75.5	63.3
264D K264B0 Granby		LIC DC_ CO	183.1 3.1	85.00 BLFT20160211ACO	39 43 45.0 105 14 08.0	0.099	0.7 2262	21.5 KlZ Radio, Inc.	75.5	63.3
268D KJHM-FM6 Commerce City		CP DV_ CO	155.7 336.0	83.13 BNPFTB20130815AAL	39 48 39.0 104 46 52.0	8.000 11	6.7 1635	2.8 Max Radio Of Denver Lic	66.7	64.7
270C3 KXWA Centennial		LIC NC_ CO	174.7 354.8	123.58 BLH20071207AAY	39 23 07.0 105 02 52.0	9.500 163	5.5 2226	58.5 Way Media, Inc.	109.8	65.1
268D K268CK Golden		LIC DC_ CO	183.1 3.1	84.97 BLFT20131101AJL	39 43 46.0 105 14 08.0	0.002	11.0 2251	7.0 Mary Medicus	65.1	68.8
270D K270AL Granby		LIC DC_ CO	232.0 51.5	81.61 BLFT20120118AES	40 02 24.0 105 56 11.0	0.250 -165	0.3 2530	4.1 Alwaymountaintime, Lic	73.0	74.9
268D KJHM-FM3 Denver		CP DV_ CO	164.0 344.2	87.01 BNPFTB20130430ACQ	39 44 24.0 104 54 05.0	0.750 8	3.6 1644	2.6 Max Radio Of Denver Lic	75.4	77.0

CH CI TY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FI LE #	LAT LNG	PWR(kW) HAAT (M)	INT(km) COR (M)	PRO(km) LICENSEE	Page # 2 *IN* (Overlap in km)		*OUT* in km)
268D Greenwood Vi ll age	KJHM-FM5	CP DV_	CO	154. 5 334. 8	94. 32 BNPFTB20130430ACU	39 43 35. 0 104 42 23. 0	6. 500 64	7. 3 1762	6. 1 Max Radi o Of Denver Li c	76. 9		78. 4
268D Gl endal e	KJHM-FM4	CP DV_	CO	166. 7 346. 8	89. 34 BNPFTB20130430ACS	39 42 38. 0 104 56 25. 0	0. 100 29	2. 5 1675	1. 6 Max Radi o Of Denver Li c	79. 4		79. 8
269D Evergreen	K269CL	LIC DHN	CO	185. 5 5. 4	97. 07 BLFT19950811TB	39 37 24. 0 105 17 24. 0	0. 035 354	0. 0 2646	2. 0 Citi casters Li censes, Inc.	88. 1		87. 0
269C1 Eagle	KSKE-FM	LIC ZC_	CO	239. 1 58. 1	161. 43 BLH20050915ADE	39 44 18. 0 106 47 58. 0	12. 000 667	6. 4 3171	70. 1 Al waysmountai ntime, Li c	147. 2		90. 3
266D Fort Morgan	K266BB	LIC _V_	CO	103. 2 284. 2	129. 85 BLFT20070220AAI	40 13 02. 0 103 41 46. 0	0. 099 36	9. 6 1360	6. 5 First Ventures Capital Par	98. 9		95. 7
264C Puebl o	KGFT	LIC ZCY	CO	171. 9 352. 1	196. 05 BMLH20010216AAB	38 44 43. 0 104 51 39. 0	78. 000 676	8. 6 2930	85. 5 Bison Media, Inc	179. 3		110. 5
264D Di ll on	K264AG	LIC _C_	CO	217. 8 37. 2	120. 92 BLFT20060314AAU	39 37 51. 0 106 02 47. 0	0. 240 -356	1. 1 2790	7. 0 Mountai n Communi ty Transla	111. 0		113. 7
267C1 Wal senburg	KFEZ	LIC _C_	CO	168. 5 349. 0	306. 21 BLH20090105AGJ	37 47 20. 0 104 29 12. 0	95. 500 305	179. 1 2095	76. 8 Edward Magnus	119. 5		213. 1
214A Breckenri dge	KMPB	LIC _CX	CO	213. 3 32. 8	132. 35 BLED20130930BUD	39 29 44. 0 106 01 44. 0	0. 600 -76	6. 5 3246	55. 5 Communi ty Radi o For Northe	9. 5R		122. 9M
213A Brush	KBEI	LIC _CX	CO	100. 1 281. 1	132. 91 BLED20120221ABO	40 16 30. 0 103 38 33. 0	1. 000 56	6. 5 1370	55. 5 Educational Communi cations	9. 5R		123. 4M
269A Wheatl and	KZEW	LIC _CN	WY	6. 4 186. 6	173. 47 BLH19850723KC	42 02 44. 0 104 56 47. 0	3. 000 38	1. 6 1503	13. 2 Smi th Broadcasting, Incorp	150. 7		159. 8
213C0 Col orado Spr i ngs	KTLF	LIC _VX	CO	171. 9 352. 1	196. 05 BLED20040225AAB	38 44 43. 0 104 51 39. 0	20. 000 673	6. 5 2923	55. 5 Educational Communi cations	24. 5R		171. 6M
214A Sterl i ng	KDRE	LIC _VX	CO	85. 0 266. 4	182. 39 BLED20051006AAI	40 36 56. 0 103 02 02. 0	1. 600 154	6. 5 1447	55. 5 Educational Media Foundati	9. 5R		172. 9M
265C3 Yuma	KNEC	LIC _CX	CO	103. 9 285. 5	212. 94 BLH20040811AAU	40 00 33. 0 102 45 35. 0	23. 000 106	3. 6 1393	34. 7 Media Logi c Li c	188. 0		177. 3
269A Rock Creek Park	KXCL	LIC _CX	CO	168. 5 348. 8	200. 87 BMLE20130813AAE	38 43 11. 0 104 43 16. 0	2. 100 -9	1. 6 1803	12. 1 Cal vary Chapel Aurora	191. 4		188. 7
269D Gl enwood Spr i ngs	KSKE-FM1	LIC DV_	CO	241. 0 59. 6	209. 62 BLFTB20080529AEJ	39 33 40. 0 107 19 00. 0	0. 600	1. 3 2216	7. 6 Al waysmountai ntime, Li c	200. 6		201. 7
213C2 Carbondal e	KVOV	LIC DCX	CO	238. 1 56. 7	221. 80 BLED20040913AAA	39 25 08. 0 107 22 10. 0	0. 450 775	6. 5 3227	55. 5 Public Broadcasting Of Col	14. 5R		207. 3M
214C3 Li ngl e	KUWV	LIC _CX	WY	22. 2 202. 8	221. 34 BLED20110316AAQ	42 20 02. 8 104 09 56. 2	14. 000 96	6. 5 1510	55. 5 Uni versi ty Of Wyomi ng	11. 5R		209. 8M
268C2 Frui ta	KGJX	LIC _C_	CO	243. 6 61. 4	344. 01 BLH20120917AFH	39 04 00. 0 108 44 45. 0	3. 150 418	91. 7 2215	61. 9 Redrock Radi o Group L. l. c.	244. 8		274. 4
266A Parachute	KDBN	LIC _CX	CO	245. 1 63. 3	269. 23 BMLH20130724AFB	39 26 31. 0 108 01 15. 0	0. 425 -426	11. 5 1705	8. 1 Ksun Communi ty Radi o Corpo	250. 3		250. 8
264C1 Grand Junction	KKVT	LIC _CX	CO	243. 6 61. 3	343. 94 BLH20061025ADV	39 03 59. 4 108 44 40. 9	30. 000 475	9. 9 2252	87. 2 Mbc Grand Broadcasting, In	326. 5		256. 4
269C1 Ogal l ala	R12441	ADD ____	NE	77. 7 260. 2	330. 59	41 03 50. 0 101 20 16. 0	100. 000 299	9. 6 1266	69. 6 Jer Li censes, Li c	296. 8		260. 1
270C2 Ol athe	AL9051	VAC ____	N	229. 7 47. 9	319. 22 RM9438	38 36 18. 0 107 58 54. 0	50. 000 150	4. 8 1854	43. 8 Mountai n West Broadcasting	306. 0		264. 5
264C1 Sutherl and	KRNP	LIC _CX	NE	77. 7 260. 2	330. 59 BLH20071031ABD	41 03 50. 0 101 20 16. 0	100. 000 230	8. 2 1199	63. 7 Legacy Communi cations, Li c	298. 1		266. 0
213A Chadron	KJZC	LIC _C_	NE	34. 3 215. 8	316. 08 BLED20110824ABL	42 49 14. 0 102 59 48. 0	0. 865 13	6. 5 1084	55. 5 Board Trustees, Ne State C	9. 5R		306. 6M
213C0 Rock Spr i ngs	KUWZ	LIC _CX	WY	288. 7 106. 1	347. 53 BLED20060213ADF	41 25 39. 0 109 07 17. 0	35. 000 512	6. 5 2680	55. 5 Uni versi ty Of Wyomi ng	24. 5R		323. 0M
270A North Rock Spr i ngs	KXJW	LIC _CX	WY	292. 5 109. 9	358. 36 BLH20130328AQN	41 39 24. 0 109 09 32. 0	0. 500 155	1. 6 2166	22. 3 Cochi se Broadcasting Li c	351. 4		335. 6
214A Lamar	KCSE	LIC NCX	CO	140. 0 321. 7	352. 26 BLED20140929AI N	38 02 10. 0 102 35 58. 0	4. 000 113	6. 5 1259	55. 5 Kanza Soci ety, Inc.	9. 5R		342. 8M

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	Page # 3 *IN* (Overlap in km)	*OUT*
214A Placerville	KLMO	LIC_HX CO		221.7 40.0	367.71 BMLED20151105AHD	37 59 30.0 107 58 21.0	0.250 449	6.5 3359	55.5 Educational Media Foundati	9.5R	358.2M
213A Newcastle	KUWN	LIC_CN WY		11.7 192.4	379.30 BLED19971201KA	43 49 57.0 104 13 08.0	0.400 62	6.5 1406	55.5 University Of Wyoming	9.5R	369.8M

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= West Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.  
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 restricted contour.

\* No actual interference will be caused to either K269EQ or KOLT-FM since the predicted 100 DBU interference contour will not cover any population. See the technical statement for more details.

FIGURE 2 - PREDICTED 100 DBU INTERFERENCE CONTOUR  
K267CD LOVELAND, CO, CH. 267D

Coverage Study - NGDC 30 SEC  
06-19-2016

K267CD CH267 D , 0.12 kW, 0.0m HAAT, 2083.0m COR AMSL  
Interference Contour = 100 dBu. Population = 0

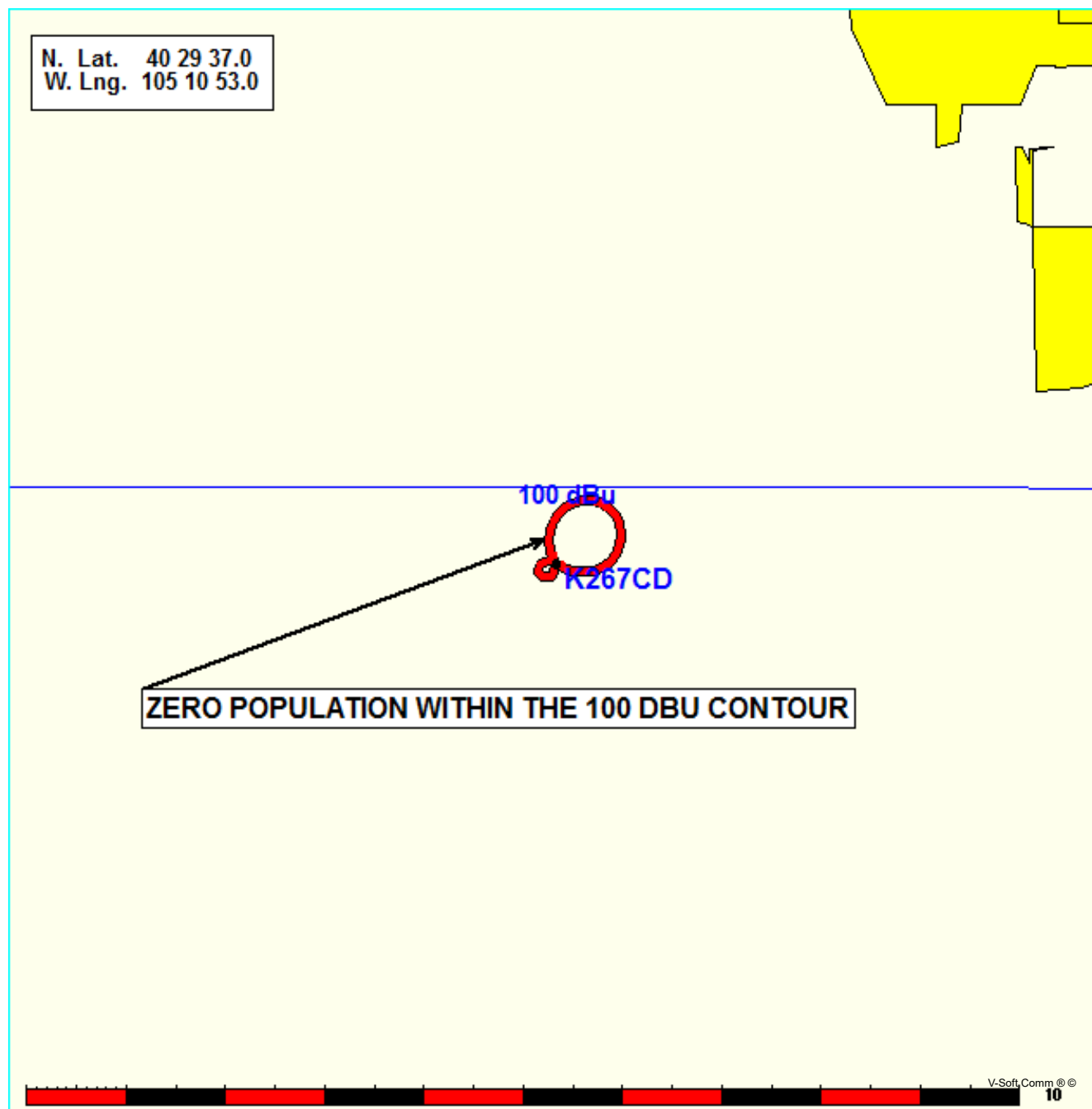
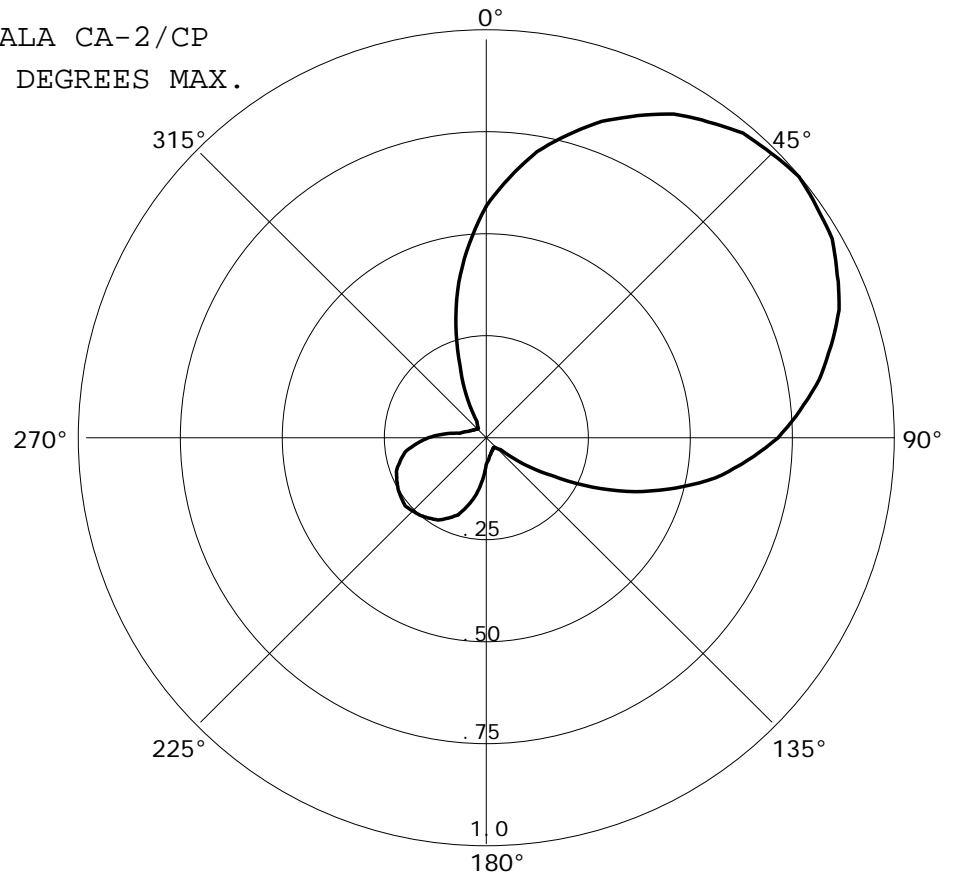


FIGURE 3 - DIRECTIONAL ANTENNA DATA

Graph is Relative Field

Azi	Field	dBk	kW
000	0.570	-14.091	0.039
010	0.715	-12.122	0.061
020	0.829	-10.837	0.082
030	0.920	-09.932	0.102
040	0.979	-09.393	0.115
050	1.000	-09.208	0.120
060	0.979	-09.393	0.115
070	0.920	-09.932	0.102
080	0.829	-10.837	0.082
090	0.715	-12.122	0.061
100	0.570	-14.091	0.039
110	0.388	-17.432	0.018
120	0.187	-23.771	0.004
130	0.045	-36.144	0.000
140	0.030	-39.666	0.000
150	0.032	-39.105	0.000
160	0.037	-37.844	0.000
170	0.046	-35.953	0.000
180	0.065	-32.950	0.001
190	0.142	-26.162	0.002
200	0.202	-23.101	0.005
210	0.234	-21.824	0.007
220	0.250	-21.249	0.007
230	0.260	-20.909	0.008
240	0.250	-21.249	0.007
250	0.234	-21.824	0.007
260	0.202	-23.101	0.005
270	0.142	-26.162	0.002
280	0.065	-32.950	0.001
290	0.046	-35.953	0.000
300	0.037	-37.844	0.000
310	0.032	-39.105	0.000
320	0.030	-39.666	0.000
330	0.045	-36.144	0.000
340	0.187	-23.771	0.004
350	0.388	-17.432	0.018

SCALA CA-2/CP  
50 DEGREES MAX.



**K267CD**

BLFT20160513AES

Latitude: 40-29-37 N

Longitude: 105-10-53 W

ERP: 0.12 kW

Channel: 267

Frequency: 101.3 MHz

AMSL Height: 2083.0 m

Elevation: 2070.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model:

**FIGURE 4 - FILL-IN MAP WITH  
KVAM(AM) LOVELAND, CO**