

TECHNICAL STATEMENT
K202EG ESTES PARK, CO
CEDAR COVE BROADCASTING, INC.
FCC FORM 349
MARCH 2012

This Technical Statement is in support of a minor change application, FCC form 349, being filed on behalf of Cedar Cove Broadcasting, Inc. ("CCB") in regards to its FM translator, K202EG Estes Park, Colorado, facility ID 68216.

CCB is proposing to relocate to a existing tower site known as Prospect Mountain located at N. 40°-21'-38", W. 105°-31'-12", NAD 27, with a decreased Effective Radiated Power of 13 Watts (0.013 kilowatts) and replace its current antenna with a Nicom BKG-77/L, one bay, circular polarized, directional antenna. The antenna will be mounted at the 10 meter level on a 31 meter overall tower, with a Center of Radiation at 2723 meters Above Mean Sea Level. It also seeks to one step change channels from 202D to 201D.

Figure 1 shows a channel interference study conducted from the proposed site for K202EG. It shows that the proposed operation of K202EG on channel 201D, will not cause any prohibited outgoing interference to any licensed or proposed FM services with the exception of KHIH Estes Park, Colorado on channel 204A, facility ID 173750. It will be shown that no actual interference will be caused to this 3rd adjacent channel station since the proposed worse case 100 dBμ interference contour proposed by K202EG on channel 201D, will not cover any population since the area of predicted interference nearby the proposed tower site is not inhabited. The proposed transmitter building is not inhabited and there is no indoor plumbing. Therefore, a waiver is respectfully requested of C.F.R. 74.1204 based on no population within the area of predicted interference.

Figure 2 is the predicted 100 dB μ interference contour for the proposed K202EG on channel 201D. It shows that there is no population located inside of this contour, thus, no real life interference will occur to KHHH as licensed.

Figure 3 is a map showing the present and proposed 60 dB μ contours for K202EG. It shows that there will be overlap between these two facilities as required.

Figure 4 shows the antenna polar plot of the proposed directional antenna.

Figure 5 is a tabulation of the pertinent distances to contours for the proposed operation of K202EG on channel 201D.

It was concluded that the new proposed operation of K202EG Estes Park, Colorado on channel 201D will not cause any harmful interference to any existing stations, and will be in full compliance with the commission's rules.

FIGURE 1, DETAILED CHANNEL STUDY K202EG ESTES PARK, COLORADO, CH. 201D CH# 201D - 88.1 MHz, Pwr= 0.013 kW DA, HAAT= 39.9 M, COR= 2723 M Average Protected F(50-50)= 3.88 km Standard Directional											
REFERENCE		CH#		201D		- 88.1 MHz, Pwr= 0.013 kW DA, HAAT= 39.9 M, COR= 2723 M		DISPLAY DATES			
40 21 38.0 N.								DATA 02-11-12			
105 31 12.0 W.								SEARCH 02-12-12			
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)
201C3	KVOD	CP	DCX	161.8	73.7	39 43 49.0	2.100	70.8	23.2	-13.0	16.2
Lakewood		CO		341.9	BPED20090205ABZ	105 15 00.0	275	2334	Prc Denver-i, Llc		
201C3	KVOD	LIC	CX	161.3	80.7	39 40 18.0	1.200	85.9	29.8	-10.5	22.7
Lakewood		CO		341.5	BLLED20100805AJY	105 13 05.0	321	2348	Prc Denver-i, Llc		
204A	KHIH	CP	VX	45.4	0.3	40 21 44.0	0.100	0.7	5.6	-10.2	-5.6
Estes Park		CO		225.4	BMPED20101213AAE	105 31 04.0	-49	2664	Cedar Cove Broadcasting, I		
202D	K202EG	LIC	DH	199.5	8.0	40 17 34.0	0.110	10.9	6.5	-5.9	-3.2
Estes Park		CO		19.4	BLFT20110207ACB	105 33 05.0	73	2914	Cedar Cove Broadcasting, I		
202A	KGCO	LIC	VX	29.6	32.9	40 37 03.0	0.150	21.9	9.4	2.9	1.0
Fort Collins		CO		209.7	BLLED20060117AFJ	105 19 40.0	364	2552	Educational Media Foundati		
06NT	KXDP-LP	LI	D_N	158.7	53.3	39 54 48.0	3.000	5.6	35.0	40.7R	12.6M
Denver		CO		338.8	BLTVL20100716ABT	105 17 33.0	879	2536	Syncom Media Group, Inc.		
202C3	1227487	APP	DCX	210.7	45.7	40 00 23.0	10.000	23.9	15.5	19.1	24.1
Winter Park		CO		30.5	BNPED20071018BDM	105 47 38.0	-180	2745	Fraser Valley Community Me		
203A	KGNU-FM	LIC	DC	142.7	51.4	39 59 33.0	4.000	2.0	24.0	42.7	27.2
Boulder		CO		322.9	BLLED20100528ADY	105 09 16.0	65	1732	Boulder Community Broadcas		
202A	1212100	APP	CX	211.2	52.5	39 57 23.0	1.000	14.2	10.2	35.2	38.0
Fraser		CO		31.0	BNPED20071017AHY	105 50 22.0	45	2640	Rv Ministries, Inc.		
201D	K201HP	LIC	C	270.8	99.5	40 22 03.0	0.075	57.9	17.9	36.8	67.7
Steamboat Springs		CO		90.1	BLFT20101230ACE	106 41 28.0	371	3102	Cedar Cove Broadcasting, I		
204A	KMKZ	LIC	CX	349.7	57.3	40 52 04.0	0.005	0.2	8.4	48.4	48.1
Red Feather Lakes		CO		169.6	BLLED20110316AAC	105 38 33.0	260	2927	3g Learning Solutions		
201C2	KDNK	LIC	DEX	237.0	189.6	39 25 08.0	1.200	136.1	59.4	49.3	119.0
Glenwood Springs		CO		55.8	BLLED20041022ABU	107 22 10.0	775	3227	Carbondale Community Acces		
201A	KAIX	LIC	CX	37.4	112.4	41 09 37.0	1.900	49.3	12.8	51.7	61.2
Cheyenne		WY		218.0	BLLED20100603ACJ	104 42 13.0	63	1890	Educational Media Foundati		
202A	1205743	APP	DVX	190.9	71.0	39 43 56.0	2.000	12.0	9.0	54.6	53.9
Idaho Springs		CO		10.8	BNPED20071019AIY	105 40 38.0	-195	3018	Clear Creek Radio, Inc		
201C3	KLMI	LIC		330.0	174.0	41 42 37.5	25.000	99.8	22.7	67.6	125.9
Rock River		WY		149.3		106 34 10.6	167	2443	User		
204A	KDNR	CP	DCX	26.7	92.2	41 06 02.0	1.900	1.7	17.2	79.0	68.2
South Greeley		WY		207.1	BPED20090205ACH	105 01 29.0	129	2153	Western Inspirational Bro		
202C1	1277517	APP	DCX	109.8	140.6	39 55 21.9	11.000	63.8	42.3	69.5	88.6
Fort Morgan		CO		290.8	BNPED20071019BCM	103 58 18.4	334	1815	The Helpline		
201D	K202CV	APP	C	209.1	92.7	39 37 51.0	0.065	16.3	5.0	73.1	77.8
Breckenridge		CO		28.8	BPFT20120103AAA	106 02 47.0		2793	Community Radio For Northe		
204A	KDNR	LIC	CX	26.7	92.2	41 06 02.0	0.500	1.6	13.3	79.1	74.2
South Greeley		WY		207.1	BMLED20080929AUD	105 01 29.1	129	2153	Western Inspirational Bro		
201D	K201HM	LIC	C	359.0	105.2	41 18 27.9	0.050	15.0	4.7	80.4	86.1
Laramie		WY		179.0	BLFT20111003ATU	105 32 33.6		2277	Western Inspirational Broa		
204A	KMPB	LIC	CX	204.4	105.4	39 29 44.0	0.300	1.2	22.6	100.6	80.8
Breckenridge		CO		24.1	BLLED20090724ADM	106 01 44.0	-76	3246	Wren Communications, Inc.		
203A	KUWY	LIC	CX	3.0	105.6	41 18 36.0	0.135	0.8	10.9	94.6	87.8
Laramie		WY		183.0	BLLED20080303AJB	105 27 17.0	298	2703	University Of Wyoming		
202D	K202CV	CP	DV	204.4	105.4	39 29 44.0	0.250	11.7	8.1	90.6	91.8
Breckenridge		CO		24.1	BPFT20100205ABF	106 01 44.0	-66	3217	Community Radio For Northe		
202A	1212074	APP	CX	171.1	106.2	39 24 56.0	0.100	8.0	5.6	92.7	97.1
Pine		CO		351.2	BNPED20071022AZK	105 19 40.0	21	2203	The North Fork Angling Soc		
202D	K202CV	LIC	DC	201.5	107.5	39 27 35.0	0.040	10.4	6.4	93.3	96.8
Breckenridge		CO		21.2	BLFT20020828ABF	105 58 46.0	481	3820	Community Radio For Northe		

										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)

203D Cheyenne	K203DT	LIC_V_ WY		36.9 217.4	111.4 BLFT20010626AAN	41 09 34.0 104 43 19.0	0.170 73	0.9 1910	8.7 Calvary Chapel Of	99.0	102.4 Twin Fal
203A Vail	KVJZ	LIC_CX CO		224.0 43.4	114.6 BLED20091112AJH	39 36 56.0 106 26 57.0	5.000 -241	1.6 2730	15.0 Denver Educational Broadca	109.4	99.4
201C3 Salida	KMPZ	LIC_CX CO		191.3 11.0	216.6 BLED20101029ADJ	38 26 48.0 106 00 36.0	0.200 827	112.5 3567	44.1 Cheyenne Mountain Public B	99.6	163.7
201D Vail	K201DU	LIC_DC CO		224.0 43.4	114.6 BLFT20090515ADA	39 36 58.0 106 26 57.0	0.028 -219	10.2 2734	3.2 Educational Media Foundati	100.8	100.6
203A Steamboat Springs	KRNC	LIC_CX CO		276.2 95.3	113.4 BLED20060418ADQ	40 27 43.0 106 50 57.0	0.240 183	1.1 2528	7.0 Community Radio Of Norther	107.6	103.2
204C1 Manitou Springs	KCME	LIC_CY CO		162.3 342.8	188.1 BLED19990203KA	38 44 40.0 104 51 41.0	12.000 668	6.8 2918	76.9 Cheyenne Mountain Public B	175.6	109.7
202A Brush	NEW	CP_CX CO		92.8 274.0	159.9 BNPED20071018AYM	40 16 30.0 103 38 33.0	1.000 56	21.8 1370	15.0 Make A Difference Foundati	128.8	135.4
06NT Encampment	K06BR	LI_DHN WY		315.6 134.8	145.1 BLTTV3558	41 17 10.0 106 44 00.0	0.095 258	3.6 2390	11.6 Elk Mountain Tv Co.	15.2R	129.9M
202A Craig	KPYR	LIC_C_ CO		278.0 96.6	178.8 BLED20051021ACN	40 33 50.0 107 36 40.0	0.250 271	34.7 2283	23.1 Public Broadcasting Of Col	139.4	150.8
201A Elk Mountain	KGCV	LIC_CX WY		333.8 153.2	165.6 BLED20101223ACX	41 41 39.0 106 24 02.0	0.100 -32	18.6 2239	5.6 Cedar Cove Broadcasting, I	140.0	149.3

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.
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.
** No actual interference will be caused to KHIH Estes Park on channel 204A
since there is no population inside of the proposed 100 dbu contour. See
the technical statement for more information.

FIGURE 2, PROPOSED 100 DBU INTERFERENCE CONTOUR
K202EG ESTES PARK, COLORADO, CH. 201D

Coverage Study - NGDC 30 SEC
02-12-2012

K202EG CH201 D , 0.013 kW, 39.9M HAAT, 2723.0M COR AMSL
Interference Contour = 100 dBu. Population = 0

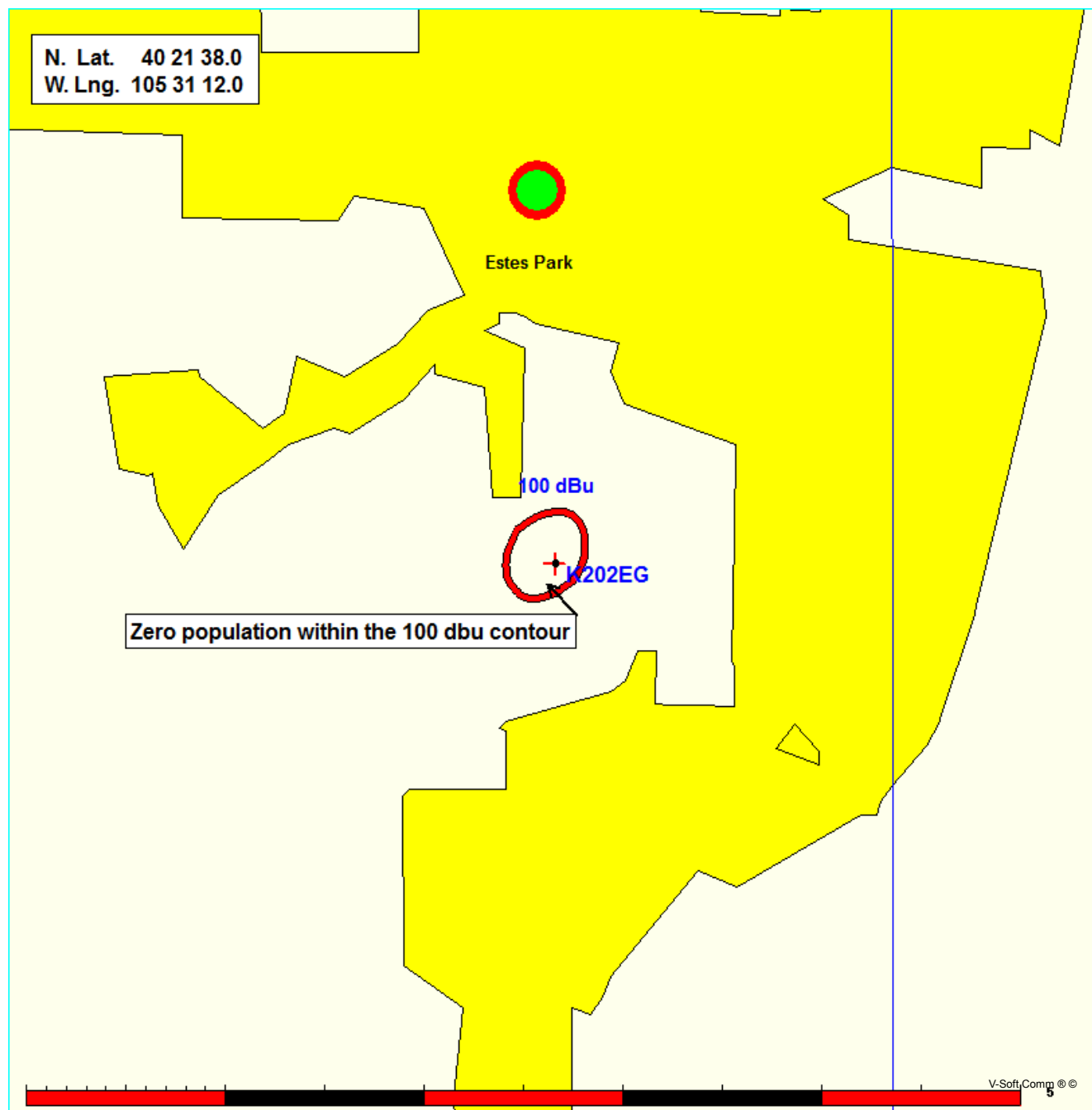


FIGURE 3, PRESENT AND PROPOSED 60 DBU CONTOURS
K202EG ESTES PARK, COLORADO, CH. 201D

Coverage Study - NGDC 30 SEC
02-12-2012

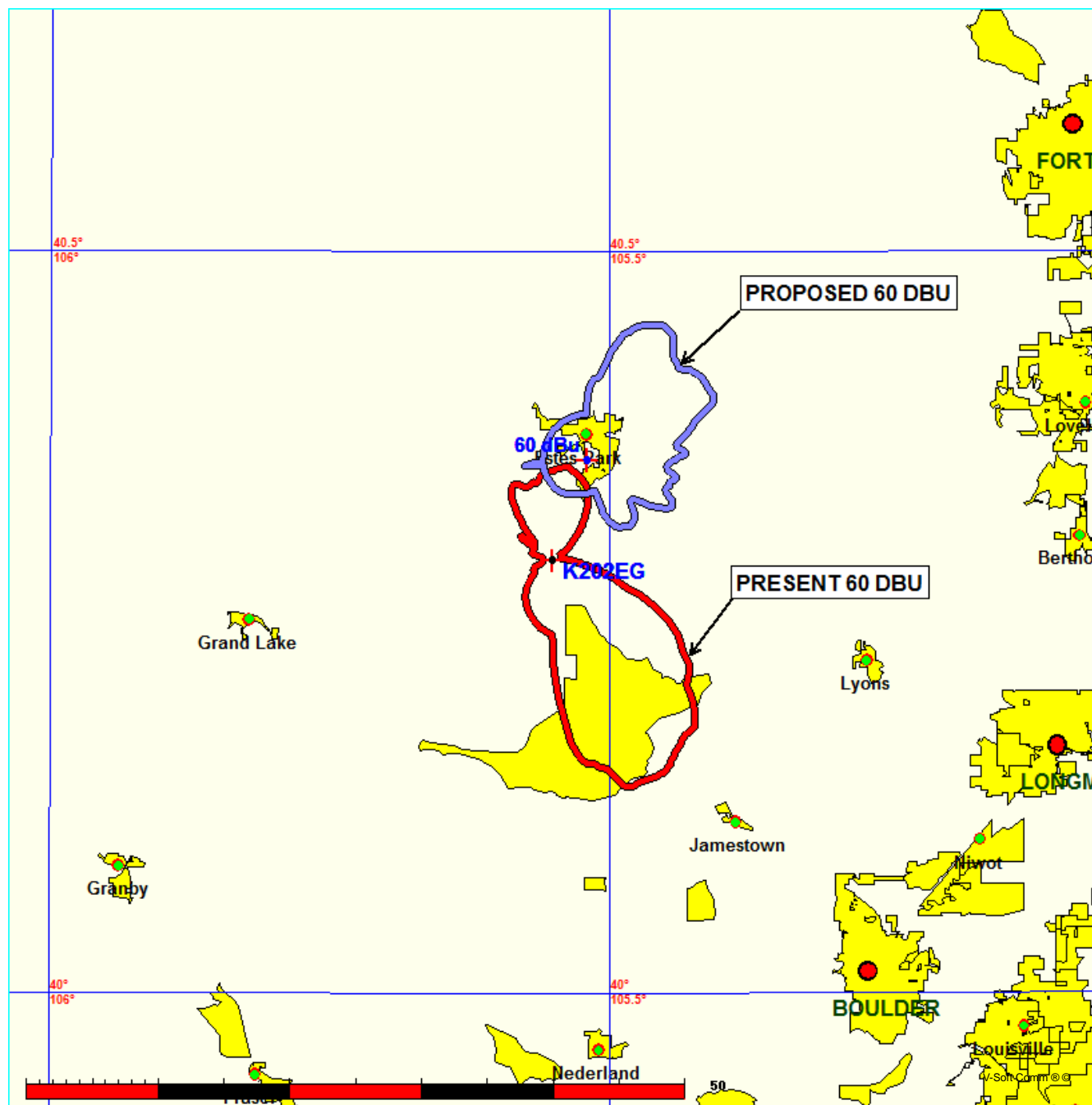


FIGURE 4, DIRECTIONAL ANTENNA DATA

K202EG

02-12-2012

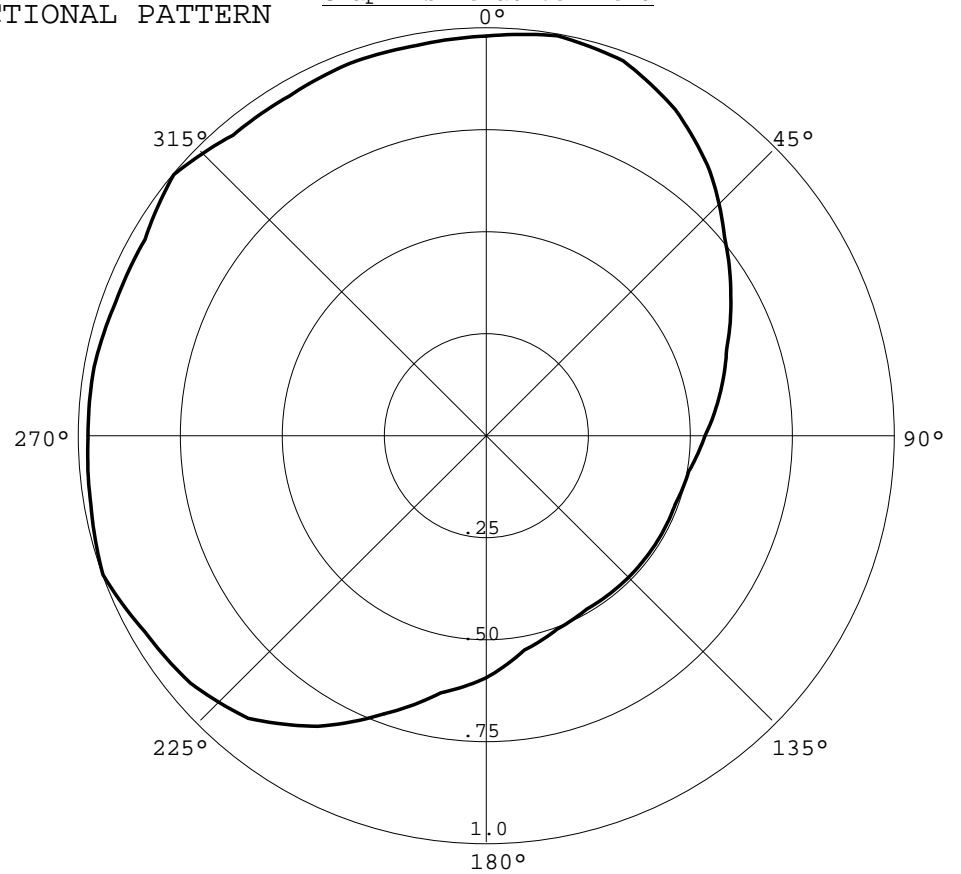
RMS(V)= .812

ESTES PARK, CO, CH. 201D

NICOM BKG-77/L DIRECTIONAL PATTERN

Graph is Relative Field

Azi	Field	dBk	kW
000	0.984	-19.001	0.013
010	1.000	-18.861	0.013
020	0.982	-19.018	0.013
030	0.927	-19.519	0.011
040	0.852	-20.252	0.009
050	0.762	-21.221	0.008
060	0.692	-22.058	0.006
070	0.627	-22.915	0.005
080	0.581	-23.577	0.004
090	0.536	-24.277	0.004
100	0.504	-24.812	0.003
110	0.493	-25.004	0.003
120	0.493	-25.004	0.003
130	0.493	-25.004	0.003
140	0.493	-25.004	0.003
150	0.493	-25.004	0.003
160	0.507	-24.760	0.003
170	0.536	-24.277	0.004
180	0.596	-23.356	0.005
190	0.643	-22.696	0.005
200	0.728	-21.618	0.007
210	0.826	-20.521	0.009
220	0.908	-19.699	0.011
230	0.947	-19.334	0.012
240	0.966	-19.161	0.012
250	1.000	-18.861	0.013
260	0.984	-19.001	0.013
270	0.976	-19.072	0.012
280	0.976	-19.072	0.012
290	0.966	-19.161	0.012
300	0.966	-19.161	0.012
310	1.000	-18.861	0.013
320	0.966	-19.161	0.012
330	0.966	-19.161	0.012
340	0.976	-19.072	0.012
350	0.976	-19.072	0.012



Contour.out

N. Lat. = 402138.0 W. Lng. = 1053112.0
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - USGS 03 SEC

FIGURE 5, DISTANCE TO CONTOURS, K202EG, CH. 201D
 Azi. AV EL HAAT dBk 60-F5 54-F1 100-F1

000	2677.1	45.9	-19.00	4.16	5.85	0.25
010	2599.0	124.0	-18.86	6.91	9.73	0.25
020	2442.0	281.0	-19.02	10.39	14.51	0.25
030	2351.6	371.4	-19.52	11.54	16.64	0.23
040	2420.6	302.4	-20.25	10.01	14.06	0.22
050	2378.8	344.2	-21.22	10.04	14.20	0.19
060	2264.8	458.2	-22.06	10.71	15.92	0.18
070	2385.3	337.7	-22.92	8.91	12.79	0.16
080	2487.7	235.3	-23.58	7.14	10.33	0.15
090	2473.5	249.5	-24.28	7.01	10.21	0.14
100	2484.3	238.7	-24.81	6.63	9.69	0.13
110	2492.9	230.1	-25.00	6.44	9.40	0.12
120	2395.2	327.8	-25.00	7.56	11.20	0.12
130	2593.2	129.8	-25.00	4.91	6.99	0.12
140	2554.2	168.8	-25.00	5.60	8.00	0.12
150	2533.1	189.9	-25.00	5.89	8.51	0.12
160	2591.5	131.5	-24.76	5.02	7.13	0.13
170	2757.8	-34.8	-24.28	2.50	3.47	0.14
180	2769.2	-46.2	-23.36	2.63	3.66	0.15
190	2711.5	11.5	-22.70	2.73	3.80	0.16
200	2973.8	-250.8	-21.62	2.88	4.04	0.18
210	3222.7	-499.7	-20.52	3.06	4.31	0.21
220	3207.3	-484.3	-19.70	3.21	4.51	0.23
230	2999.1	-276.1	-19.33	3.28	4.61	0.24
240	2860.9	-137.9	-19.16	3.31	4.66	0.24
250	2894.8	-171.8	-18.86	3.36	4.75	0.25
260	2745.8	-22.8	-19.00	3.34	4.71	0.25
270	2789.2	-66.2	-19.07	3.32	4.69	0.25
280	2920.8	-197.8	-19.07	3.32	4.69	0.25
290	2905.1	-182.1	-19.16	3.31	4.66	0.24
300	2781.5	-58.5	-19.16	3.31	4.66	0.24
310	2868.8	-145.8	-18.86	3.36	4.75	0.25
320	2961.8	-238.8	-19.16	3.31	4.66	0.24
330	3097.3	-374.3	-19.16	3.31	4.66	0.24
340	2936.1	-213.1	-19.07	3.32	4.69	0.25
350	2781.9	-58.9	-19.07	3.32	4.69	0.25

Ave EI = 2703.06 M HAAT= 19.94 M AMSL= 2723

FIGURE 6, Interference Study with KXDP-LP LPTV Denver
K202EG ESTES PARK, COLORADO, CH. 201D

FMCommander Single Allocation Study - 02-12-2012 - NGDC 30 SEC
K202EG's Overlaps (In= 0.0 km, Out= 0.0 km)

K202EG CH 201 D DA
Lat= 40 21 38.0, Lng= 105 31 12.0
0.013 kW 39.9 M HAAT, 2723 M COR
Intef. = 58.6 dBu Prot. = 62 dBu

KXDP-LP CH 06N T DA BLTVL20100716ABT
Lat= 39 54 48.0, Lng= 105 17 33.0
3.0 kW 879 M HAAT, 2536 M COR

