

TECHNICAL STATEMENT
K231BQ ESTES PARK, COLORADO 284D
CEDAR COVE BROADCASTING, INC.
FCC FORM 349
FEBRUARY 2013

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 K231BQ, facility ID 142150. It is proposing to make some minor technical changes at its currently licensed tower site located at N. 39°- 40'- 31", W. 105°- 29 '- 02", NAD 27, no change in its transmitter site location is proposed. An increase in Effective Radiated Power to 100 Watts (0.1 KW) and utilizing a Scala HDCA-10VRM directional type antenna (vertical polarization only) is proposed, with a proposed "one step" I.F. channel change to 284D (53 channels). The antenna will be mounted at the 25 meter level on a 43 meter overall, unregistered, existing tower, with a Center of Radiation at 3244 meters Above Mean Sea Level.

Figure 1 shows a channel interference study conducted from the proposed site for K231BQ. It shows that the proposed operation of K231BQ on channel 284D, will not cause any prohibited outgoing interference to any licensed or proposed FM services, with the exception of KXKL-FM Denver, Colorado operating on channel 286C, facility ID 59959, and KKFN Longmont, Colorado operating on channel 282C1, facility ID 71767. Both of these stations are second adjacent to the proposed operation of K231BQ on channel 284D. Figure 2 shows the coverage area for the worst case 100 dBμ 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 10 acre wooded area, with private access. The transmitter building is uninhabited and does not have indoor plumbing.

Figure 1 also shows that there would be interference to caused to three pending applications, BNPFT-20030312AGZ at Wheat Ridge, CO, Ch. 284D, BNPFT-20030312ADH at Longmont, CO, ch. 284D and BPL-20130128ALI, for KREV-LP Estes Park, CO, ch. 284D. All three as of these applications have been dismissed as noted at the bottom of Figure 1. Thus no interference will be caused to these applications.

Figure 3 shows the antenna polar plot of the proposed directional antenna system.

Figure 4 is a tabulation of distance to contours for the pertinent contours proposed by K231BQ.

It was concluded that the new proposed operation of K231BQ Estes Park, Colorado on channel 284D 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											
K231BQ ESTES PARK, COLORADO, CH. 284D											
REFERENCE 39 40 31.0 N. CH# 284D - 104.7 MHz, Pwr= 0.1 kW DA, HAAT= 0.0 M, COR= 3244 M											
105 29 02.0 W. Average Protected F(50-50)= 5.64 km											
Standard Directional											
DI SPLAY DATES											
DATA 02-20-13											
SEARCH 02-20-13											
CH CITY	CALL	TYPE STATE	ANT	AZI ---	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (km)
284C1 Vail	KKVM	LIC _C_ CO		267.2 86.6	82.72 BMLH20031119AII	39 38 05.0 106 26 47.0	100.000 102	171.2 3015	68.7 Vail Radio Partners, Llc	-91.0*	6.9
284D Wheat Ridge	631521*	APP DE_ CO		44.9 225.0	14.23 BNPFT20030312AGZ	39 45 57.0 105 21 59.0	0.011 97	4.6 2509	1.6 Educational Communications	-14.4*	-67.7*
286C Denver	KXKL-FM****	LIC _CN CO		109.5 289.7	24.97 BLH19901023KB	39 36 00.0 105 12 35.0	100.000 356	6.8 2448	56.7 Wilks License Company-denv	10.0	-31.7* ****
284D Longmont	631535**	APP DE_ CO		30.0 210.3	72.56 BNPFT20030312ADH	40 14 24.0 105 03 23.0	0.100 99	4.5 1637	1.1 Educational Communications	42.3	-11.1**
282C1 Longmont	KKFN****	LIC NC_ CO		85.1 265.3	27.45 BLH19991214ABH	39 41 45.0 105 09 54.0	100.000 206	3.2 2081	31.0 Lincoln Financial Media Co	8.6	-3.5* ****
284L1 Estes Park	KREV-LP***	APP _ CO		358.8 178.8	77.12 BPL20130128ALI	40 22 11.0 105 30 10.0	0.100	18.6 2355	5.6 United Methodist Church Of	33.9	-2.6***
284D Denver	630301	APP _C_ CO		75.4 255.7	44.72 BNPFT20030317AZX	39 46 32.0 104 58 43.0	0.140 -25	20.4 1602	6.1 Horizon Christian Fellowsh	5.9	0.9
284L1 Estes Park	KREV-LP	LIC _ CO		355.0 174.9	80.50 BLL20120713ADJ	40 23 51.0 105 34 02.0	0.100	18.6 2429	5.6 United Methodist Church Of	37.8	3.5
286D Boulder	KXKL-FM1	LIC DC_ CO		36.1 216.2	39.24 BLFTB20030502ABA	39 57 37.0 105 12 46.0	1.500	0.1 1762	2.0 Wilks License Company-denv	13.5	33.4
284L1 Grealey	KELS-LP	LIC _ CO		38.7 219.1	101.37 BLL20100524ACP	40 23 05.0 104 44 11.0	0.061 38	22.2 1489	6.6 Plymouth Gathering Inc.	53.5	15.4
284D Masonville	641070	APP DV_ CO		7.2 187.3	105.46 BNPFT20030314BSM	40 37 03.0 105 19 40.0	0.010 387	13.7 2549	1.8 Mary Medicus	67.3	17.9
284D Castle Rock	643821	APP DC_ CO		129.3 309.6	50.26 BNPFT20030317BCK	39 23 18.0 105 01 54.0	0.030 127	18.9 2156	2.6 Cheyenne Mountain Public B	28.7	36.4
284D Dillon	KKVM-FM3	LIC DV_ CO		264.3 84.0	48.52 BLFTB20090115AFD	39 37 51.0 106 02 47.0	0.175	15.6 2786	4.8 Vail Radio Partners, Llc	28.8	39.9
231D Boulder	K231AA«	LIC _CN CO		33.4 213.5	38.59 BLFT19960111TK	39 57 54.0 105 14 05.0	0.205 -133	12.8 1719	58.8 Citicasters Licenses, Inc.	10.0R	29.1M
284D Denver	628169	APP DE_ CO		130.6 310.9	49.46 BNPFT20030312ALW	39 23 06.0 105 02 51.0	0.013 302	9.9 2352	2.5 Educational Communications	33.9	31.7
284C1 Sterling	KNNG	LIC _CN CO		63.4 245.0	231.98 BLH19810402AB	40 34 57.0 103 01 56.0	100.000 198	162.8 1508	64.2 Arnold Broadcasting, Inc.	46.2	102.2
230A Frisco	KYSL«	LIC _CN CO		256.4 76.0	55.76 BLH19940808KA	39 33 22.0 106 06 53.0	0.560 324	12.8 3549	58.8 Krystal Broadcasting, Inco	10.0R	46.3M
284A Calhan	KKCS	LIC NCX CO		126.4 307.1	125.79 BMLED20121019AAH	38 59 57.0 104 18 47.0	1.550 198	73.3 2192	22.3 Educational Media Foundati	47.3	88.7
283C3 Canon City	KSTY	LIC _CX CO		171.1 351.2	152.84 BLH20071003ABD	38 18 54.0 105 12 40.0	8.600 14	81.6 2138	55.2 Royal Gorge Broadcasting,	62.0	84.8
283C2 Centennial	KYAP	RSV-A _ WY		343.7 163.3	186.34	41 17 02.0 106 06 36.0	50.000 150	98.4 2778	68.3 White Park Broadcasting, I	65.7	93.9
281C3 Buena Vista	KBVC	LIC NCN CO		211.0 30.6	120.24 BLH19961127KB	38 44 45.0 106 11 55.0	0.600 362	1.7 3335	46.6 Three Eagles Communication	109.4	73.2
281D Vail	K281AM	LIC _C_ CO		265.8 85.1	83.11 BLFT20111003ASF	39 36 58.0 106 26 57.0	0.050	0.5 2727	4.7 Nrc Broadcasting Mountain	78.5	78.4
230A Loveland	KCWA«	LIC ZCX CO		15.7 195.9	94.45 BLH20101214ACL	40 29 37.0 105 10 53.0	0.580 319	12.8 2098	58.8 Way Media, Inc.	10.0R	85.0M
283D Colorado Springs	KSTY-FM1	LIC _C_ CO		152.4 332.8	116.42 BLFTB20050815ABU	38 44 43.0 104 51 39.0	0.003	15.4 2957	9.3 Royal Gorge Broadcasting L	93.2	96.4
283C2 Centennial	KYAP	APP NCX WY		1.0 181.1	178.77 BPH20130124ACV	41 17 06.0 105 26 41.0	13.500 284	55.7 2702	36.5 White Park Broadcasting, I	98.0	102.5

CH CI TY	CALL	TYPE STATE	ANT	AZI <--	DI ST FI LE #	LAT LNG	PWR(KW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	Page # *IN* 2 (Overlap in km)	*OUT*
281C3	KFMU-FM Oak Creek	LIC NCN CO		298.2 117.3	134.19 BLH19940111KC	40 14 10.0 106 52 30.0	1.400 327	2.1 2831	29.7 Nrc Broadcasting	120.9 Mountain	103.4
285C3	KRYE Rye	LIC _CX CO		167.5 347.8	196.70 BLH20080307ADA	37 56 40.0 104 59 56.0	25.000 55	78.1 2597	53.2 United States Cp, Lic	110.2	121.5
285C2	KRRR Cheyenne	LIC NCX WY		22.2 202.7	175.41 BLH20031125AIV	41 08 04.0 104 41 32.0	25.500 35	35.8 1859	22.8 Brahmin Broadcasting Corpo	113.4	112.3
231C2	KEZZ« Phi ppsburg	LIC NCX CO		307.2 126.4	128.56 BLH20090522ACV	40 22 03.0 106 41 28.0	1.750 380	12.8 3107	58.8 Youngers Colorado Broadcas	15.0R	114.1M
282D	647603 Aspen	APP DC_ CO		247.1 66.2	126.42 BNPFT20030317BQR	39 13 33.0 106 50 00.0	0.011 19	0.0 2877	1.6 Educational Communications	120.3	124.7
287C	KZKS Ri fle	LIC _HN CO		264.1 82.4	228.97 BLH19940928KB	39 25 57.0 108 07 46.0	60.000 743	13.4 2690	97.4 Western Slope Communicatio	211.2	130.8
287D	KZKS-FM2 Carbondale	LIC DVN CO		260.9 79.7	165.28 BLFTB19951204TB	39 25 30.0 107 22 46.0	0.060 798	0.5 3248	29.6 Western Slope Communicatio	160.1	135.2
285C1	KRYE Ol ney Springs	CP NCX CO		142.1 323.1	226.75 BPH20100125AIM	38 03 18.0 103 53 35.0	100.000 79	76.3 1417	46.4 United States Cp, Lic	143.2	170.5
287D	KZKS-FM3 Glenwood Springs	LIC _C_ CO		266.0 84.8	157.86 BLFTB20000918AKW	39 33 40.0 107 18 59.0	0.250	1.1 2219	7.1 Western Slope Communicatio	152.6	150.7
283A	KYAP Centenni al	LIC _CX WY		343.1 162.7	188.46 BLH20121126ACD	41 17 49.0 106 08 23.0	0.500 33	12.0 2455	8.5 White Park Broadcasting, I	154.1	154.3
285C1	KRYD Norwood	LIC _C_ CO		238.1 56.4	279.40 BLH20080519AAS	38 18 59.0 108 11 55.0	24.000 512	105.2 3074	71.3 Rocky Iii Investments, Inc	167.3	202.7
282C0	KMXY Grand Junction	LIC _CX CO		257.5 75.4	289.29 BLH20110209ADG	39 03 56.0 108 44 52.0	100.000 446	16.1 2245	99.0 Townsquare Media Grand Jun	268.1	189.7
287A	KRE0 Pine Bluffs	LIC _CX WY		34.4 215.4	218.58 BLH20031125AJQ	41 17 17.0 104 00 21.0	6.000 76	2.5 1650	25.4 Chisholm Trail Broadcastin	190.1	192.4
284C1	KTRS-FM Casper	LIC _CX WY		348.9 168.3	347.67 BLH20060927ANT	42 44 37.0 106 18 24.0	18.000 554	122.5 2524	49.0 Townsquare Media Casper Li	201.7	232.4
231C	KKXX« Montrose	LIC _CY CO		232.1 50.7	238.57 BLH19961009KC	38 20 16.0 107 38 23.0	100.000 574	12.8 3094	58.8 Ccr-montrose Iv, Lic	29.0R	210.1M
287D	KZKS-FM1 Grand Junction	LIC DCN CO		257.5 75.4	289.12 BLFTB19980514TE	39 03 57.0 108 44 45.0	20.000 354	7.8 2150	77.9 Western Slope Communicatio	276.2	210.9
281C1	KNAB-FM Burl ington	LIC _CN CO		97.7 279.7	280.54 BLH19900222KD	39 17 41.0 102 15 37.0	51.000 110	4.6 1367	42.3 Knab, Inc.	261.3	237.9
286A	AU9412036 Wheatl and	VAC ____ WY		9.4 189.8	270.23 RM11407	42 04 28.0 104 56 51.0	6.000 100	1.8 1547	17.4 Appaloosa Broadcasting Com	242.7	246.7
281C2	KANT Guernsey	LIC _CX WY		7.1 187.4	299.02 BLH20080304AAR	42 20 46.6 105 02 03.9	36.000 172	6.1 1675	53.4 Chisholm Trail Broadcastin	267.3	244.7
231C1	KNEB-FM« Scottsbl uff	LIC _CN NE		33.4 214.6	271.75 BLH19810904AB	41 42 04.0 103 40 49.0	100.000 207	12.8 1512	58.8 Nebraska Rural Radio Assoc	22.0R	250.3M
281C2	KANT Guernsey	CP _CX WY		7.1 187.4	299.02 BPH20110211ACB	42 20 46.6 105 02 03.9	18.000 172	5.0 1675	47.2 Chisholm Trail Broadcastin	268.4	250.9
287C	R13666 Des Moines	ADD ____ NM		154.9 336.0	342.25	36 52 21.0 103 51 13.0	100.000 600	13.1 2576	89.8 Caroline Smith	321.0	251.4
281C3	NEW Silverton	CP _CX CO		223.0 41.6	281.48 BNPH20110630AEB	37 48 12.0 107 40 04.0	25.000 -604	2.3 2859	22.7 Mt Communications	270.9	258.6
287C	R13666 Des Moines	DEL ____ NM		155.5 336.5	353.94	36 45 48.0 103 50 12.0	100.000 600	14.2 2626	93.5 Caroline Smith	331.5	260.0
287C	AU6249403 Des Moines	VAC ____ NM		155.5 336.5	353.94 RM9842	36 45 48.0 103 50 12.0	100.000 600	14.2 2626	93.5 Caroline Smithe	331.5	260.0
231A	KWDI « Idalia	LIC _CX CO		88.3 270.4	273.80 BMLH20080806ABJ	39 42 10.0 102 17 32.0	0.100 58	12.8 1216	58.8 Conundrum Communications I	10.0R	264.3M

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
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.
« = Station meets FCC minimum distance spacing for its class.

- * This application, BNPFT-20030312AGZ at Wheat Ridge, CO for a new FM translator was dismissed on 2/15/2013.
- ** This application, BNPFT-20030312ADH at Longmont, CO for a new FM translator was dismissed on 2/15/2013.
- *** This application, BPL-20130128ALI for KREV-LP, facility ID 131930, was dismissed on 2/12/2013.
- **** KXKL-FM and KKFN are second adjacent to the proposed K231BQ. No actual interference will be caused to either station as the proposed 100 dbu interference covers zero population. See the technical statement attached.

FIGURE 2, PREDICTED 100 DBU CONTOUR
K231BQ ESTES PARK, COLORADO, CH. 284D

Coverage Study - NGDC 30 SEC
02-20-2013

K231BQ CH284 D , 0.1 kW, 0.0M HAAT, 3244.0M COR AMSL
Service Contour = 100 dBu. Population =

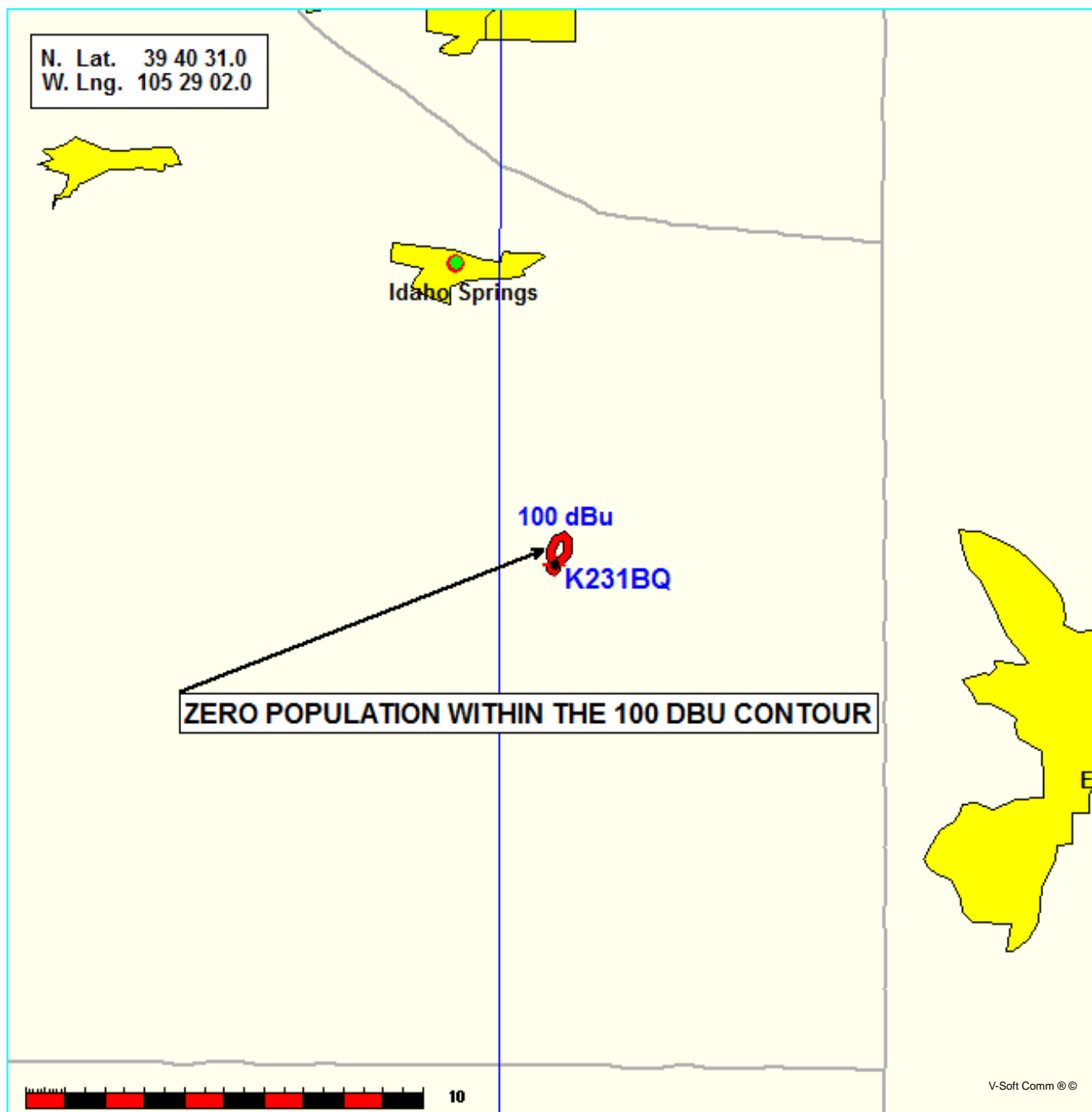


FIGURE 3

K231BQ

02-20-2013

RMS(V) = .382

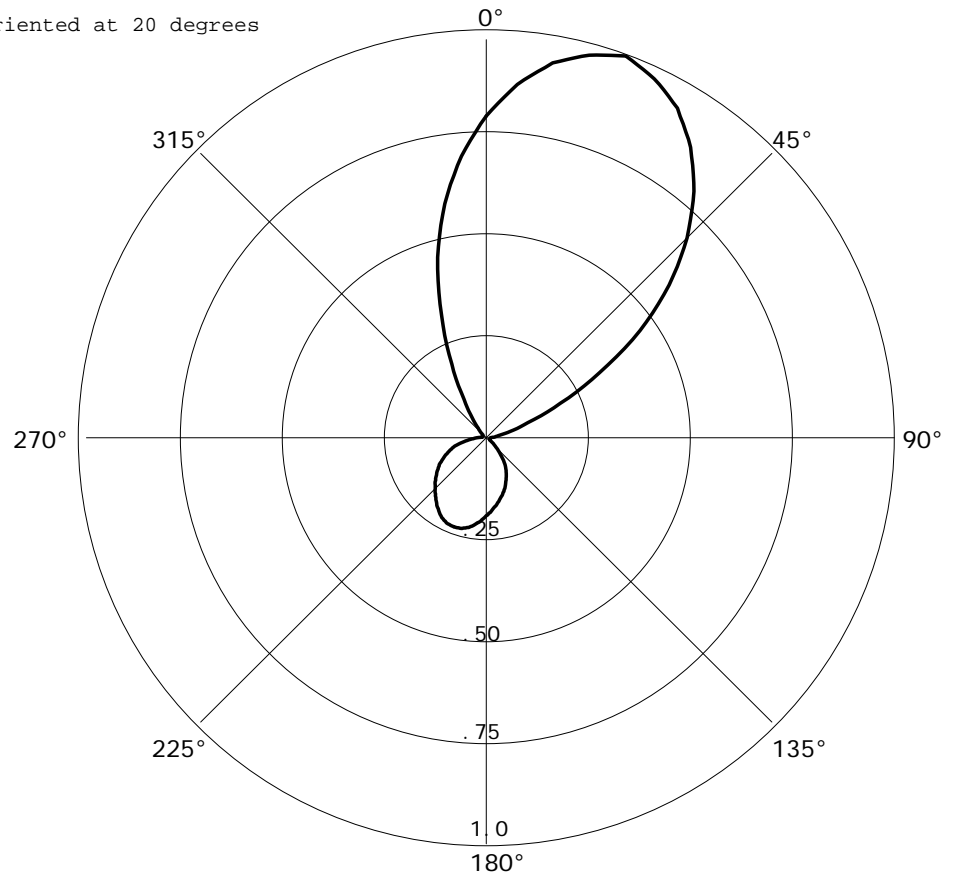
Ch. 284D, Directional antenna data

Scala HDCA-10/HRM YAGI

Graph is Relative Field

Azi	Field	dBk	kW
000	0.792	-12.025	0.063
010	0.937	-10.565	0.088
020	1.000	-10.000	0.100
030	0.937	-10.565	0.088
040	0.792	-12.025	0.063
050	0.585	-14.657	0.034
060	0.320	-19.897	0.010
070	0.108	-29.332	0.001
080	0.030	-40.458	0.000
090	0.010	-50.000	0.000
100	0.010	-50.000	0.000
110	0.010	-50.000	0.000
120	0.010	-50.000	0.000
130	0.023	-42.765	0.000
140	0.055	-35.193	0.000
150	0.097	-30.265	0.001
160	0.133	-27.523	0.002
170	0.162	-25.810	0.003
180	0.192	-24.334	0.004
190	0.222	-23.073	0.005
200	0.233	-22.653	0.005
210	0.222	-23.073	0.005
220	0.192	-24.334	0.004
230	0.162	-25.810	0.003
240	0.133	-27.523	0.002
250	0.097	-30.265	0.001
260	0.055	-35.193	0.000
270	0.023	-42.765	0.000
280	0.010	-50.000	0.000
290	0.010	-50.000	0.000
300	0.010	-50.000	0.000
310	0.010	-50.000	0.000
320	0.030	-40.458	0.000
330	0.108	-29.332	0.001
340	0.320	-19.897	0.010
350	0.585	-14.657	0.034

Oriented at 20 degrees



Contour.out

N. Lat. = 394031.0 W. Lng. = 1052902.0
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - NGDC 30 SEC

Figure 4, Tabulation of distance to contours, K231BQ, Ch. 284D

Azi.	AV EL	HAAT	dBk	60-F5	100-F1	40-F1
000	2629.8	614.2	-12.03	23.33	0.56	74.36
010	2624.8	619.2	-10.57	25.39	0.66	79.18
020	2645.6	598.4	-10.00	25.75	0.70	79.87
030	2596.3	647.7	-10.57	25.96	0.66	80.63
040	2523.1	720.9	-12.03	25.24	0.56	79.44
050	2461.6	782.4	-14.66	22.53	0.41	73.43
060	2356.4	887.6	-19.90	16.35	0.22	60.51
070	2406.6	837.4	-29.33	6.73	0.08	34.68
080	2487.4	756.6	-40.46	2.06	0.02	15.26
090	2518.1	725.9	-50.00	0.70	0.01	6.16
100	2500.5	743.5	-50.00	0.70	0.01	6.18
110	2394.3	849.7	-50.00	0.70	0.01	6.32
120	2446.8	797.2	-50.00	0.70	0.01	6.26
130	2517.8	726.2	-42.77	1.55	0.02	11.95
140	2539.8	704.3	-35.19	3.58	0.04	21.82
150	2596.8	647.2	-30.26	5.89	0.07	28.32
160	2727.9	516.1	-27.52	7.18	0.09	29.02
170	2765.1	478.9	-25.81	8.15	0.11	30.95
180	2822.6	421.4	-24.33	8.82	0.13	31.57
190	2811.2	432.8	-23.07	9.79	0.16	34.76
200	2968.6	275.4	-22.65	8.22	0.16	27.62
210	3028.1	215.9	-23.07	7.06	0.16	24.10
220	3085.2	158.8	-24.33	5.67	0.13	18.97
230	3266.4	-22.4	-25.81	2.31	0.11	7.18
240	3377.0	-133.0	-27.52	2.10	0.09	6.50
250	3309.5	-65.5	-30.26	1.79	0.07	5.55
260	3221.1	22.9	-35.19	1.61	0.04	4.14
270	3182.6	61.4	-42.77	1.61	0.02	3.89
280	3045.5	198.5	-50.00	0.70	0.01	4.27
290	2953.9	290.1	-50.00	0.70	0.01	4.92
300	2916.4	327.6	-50.00	0.70	0.01	5.11
310	2706.4	537.6	-50.00	0.70	0.01	5.85
320	2599.5	644.5	-40.46	2.05	0.02	13.73
330	2610.9	633.1	-29.33	6.40	0.08	29.58
340	2693.7	550.3	-19.90	13.17	0.22	48.38
350	2646.5	597.5	-14.66	19.72	0.41	65.56

Ave EI = 2749.55 M HAAT= 494.45 M AMSL= 3244

FEDERAL COMMUNICATIONS COMMISSION

**445 12th STREET, SW
WASHINGTON, DC 20554**

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: WWW.FCC.GOV/MMB/ASD

FEB 12 2013

PROCESSING ENGINEER: Edna Prado
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FACSIMILE: (202) 418-1410
MAIL STOP: 1800B3
INTERNET ADDRESS: Edna.Prado@fcc.gov

United Methodist Church of Estes Park
1509 Fish Hatchery Road
Estes Park, CO 80517

Re: KREV-LP; Estes Park, CO
United Methodist Church of Estes Park
Facility ID # 131930
BPL-20130128ALI

Dear Applicant:

An engineering study of the above-captioned minor change application reveals that the proposed transmitter site fails to meet the minimum spacing requirements of 47 C.F.R. § 73.807. Specifically, the site proposed is 31 kilometers from previously filed co-channel translator application BNPFT-20030314BSM. The required spacing pursuant to § 73.807 is 32 kilometers.

In light of the above, application BPL-20130128ALI is unacceptable for filing and IS HEREBY DISMISSED. This action is taken pursuant to 47 C.F.R. § 0.283.

Sincerely,

Edna V. Prado

Edna V. Prado
Supervisory Engineer
Audio Division
Media Bureau

cc: Matthew Wesolowski