

EXHIBIT E-1
TECHNICAL STATEMENT
K227BS ESTES PARK, COLORADO 230D
CEDAR COVE BROADCASTING, INC.
FCC FORM 349
DECEMBER 2009

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 K227BS, facility ID 142150. It is proposing to remain at its current licensed tower site located at N. $40^{\circ}-21'-38''$, W. $105^{\circ}-31'-12''$, NAD 27, with an increased Effective Radiated Power of 250 Watts and utilizing a Scala model CL-FMV, one bay, directional log periodic yagi type antenna as currently utilized. The antenna will be mounted at the 21 meter level on a 30 meter overall tower, with a Center of Radiation at 2734 Above Mean Sea Level.

Figure 1 shows a channel interference study conducted from the proposed site for K227BS. It shows that the proposed operation of K227BS on channel 230D, will not cause any prohibited outgoing interference to any licensed or proposed FM services.

Figure 2 shows the proposed 60 db μ of K227BS will be completely contained inside of the current 60 db μ predicted coverage contour of the station being rebroadcast, KUNC Greeley, Colorado on channel 218C1, facility ID 68219. The proposed operation of K227BS will be considered a "fill-in" translator for KUNC, 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 250 watts, thus this proposed operation is in compliance with 74.1235(a).

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

It was assumed since the proposed operation of K227BS will be at the same site as the proposed operation of K227BS on channel 230 that the 60 dBμ contours will overlap as required.

It was concluded that the new proposed operation of K227BS Estes Park, Colorado on channel 230D will not cause any harmful interference to any existing stations, and will be in full compliance with the commission's rules.

FIGURE 1, CHANNEL INTERFERENCE STUDY K227BS Estes Park, CO, Channel 230D CH# 230D - 93.9 MHz, Pwr= 0.25 kW, HAAT= 0.0 M, COR= 2734 M Average Protected F(50-50)= 7.09 km Standard Directional											
REFERENCE										DISPLAY DATES	
40 21 38.0 N.										DATA 12-05-09	
105 31 12.0 W.										SEARCH 12-06-09	
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)
230A	KUSZ	APP	NCX	78.7	32.8	40 25 04.0	6.000	68.3	15.8	-40.5*<	8.4
Loveland		CO		258.9	BPHT20080312ADR	105 08 28.0	6	1652	Laramie	Mountain Broadcast	
230A	KUSZ	RSV	---	83.7	36.7	40 23 44.0	6.000	68.3	15.8	-37.2*<	0.4
Loveland		CO		264.0		105 05 27.0	100	1676	Laramie	Mountain Broadcast	
230A	KYSL	LIC	_CN	209.7	102.8	39 33 22.0	0.560	105.0	39.2	-15.7*<	40.5
Frisco		CO		29.3	BLH19940808KA	106 06 53.0	324	3549	Krystal	Broadcasting, Inco	
227D	K224DU *	CP	DC_	0.0	0.0	40 21 38.0	0.001	0.0	2.1	-2.2*<	-2.1*<
Estes Park		CO		0.0	BPFT20091123AKP	105 31 12.0		2734	Cedar Cove	Broadcasting, I	
230D	644477	APP	_C_	52.8	34.3	40 32 46.8	0.010	19.7	6.0	2.6	14.4
Fort Collins		CO		233.0	BNPFT20030317GEQ	105 11 50.0		2188	Radio Assist	Ministry, Inc	
230D	644473	APP	_C_	111.5	71.1	40 07 28.1	0.115	42.6	12.7	18.3	41.1
Fort Lupton		CO		292.0	BNPFT20030317GEL	104 44 36.1		1630	Radio Assist	Ministry, Inc	
231D	K231AA	LIC	_CN	151.0	50.2	39 57 54.0	0.205	9.7	6.7	25.1	18.4
Boulder		CO		331.2	BLFT19960111TK	105 14 05.0	-133	1719	Citicasters	Licenses, Inc.	
229D	K229AC	LIC	_E_	180.0	43.1	39 58 22.0	0.028	5.8	4.1	23.7	18.9
Ward		CO		0.0	BLFT20061218ACR	105 31 13.0		2655	Boulder	Community Broadcas	
230D	631544	APP	DE_	62.7	32.3	40 29 36.0	0.010	2.5	0.4	26.4	19.6
Windsor		CO		242.9	BNPFT20030312ADM	105 10 52.0		2078	Educational	Communications	
229D	637466	APP	_C_	52.8	34.3	40 32 46.8	0.010	8.4	6.0	20.7	22.1
Fort Collins		CO		233.0	BNPFT20030317CVW	105 11 50.0		2188	Radio Assist	Ministry, Inc	
230D	630344	APP	_C_	116.3	73.0	40 04 05.0	0.170	40.6	11.9	21.1	38.7
Fort Lupton		CO		296.8	BNPFT20030317AZW	104 45 08.0		1611	Horizon	Christian Fellowsh	
230D	650170	APP	_C_	59.9	50.2	40 35 08.0	0.250	23.8	7.1	23.3	32.1
Timmath		CO		240.2	BNPFT20030317IUB	105 00 23.0		1520	Educational	Media Foundati	
232C3	KMAX-FM	LIC	_CX	26.6	70.6	40 55 41.0	8.700	4.6	47.3	62.3	23.3
Wellington		CO		206.9	BLH20021101AAV	105 08 36.0	168	2131	Regent	Broadcasting Of Ft.	
284D	648009	APP	_C_	84.3	36.0	40 23 31.0	0.250	100.3	68.4	10.0R	26.1M
Loveland		CO		264.6	BNPFT20030317HZU	105 05 51.0		1612	Educational	Media Foundati	
227C1	KTCL	LIC	DCX	160.8	73.8	39 43 59.0	71.000	5.0	45.6	48.7	27.2
Wheat Ridge		CO		341.0	BLH20070621AQR	105 14 10.0	346	2256	Jacor	Broadcasting Of Colo	
229D	631534	APP	DE_	108.7	41.6	40 14 24.0	0.100	1.4	0.7	30.0	34.3
Berthoud		CO		289.0	BNPFT20030312ADC	105 03 23.0		1637	Educational	Communications	
284D	631535	APP	DE_	108.7	41.6	40 14 24.0	0.100	100.3	68.4	10.0R	31.6M
Longmont		CO		289.0	BNPFT20030312ADH	105 03 23.0		1637	Educational	Communications	
231C2	KEZZ	LIC	NCX	270.8	99.5	40 22 03.0	1.750	57.5	38.2	36.9	56.6
Phippsburg		CO		90.1	BLH20090522ACV	106 41 28.0	380	3107	Youngers	Colorado Broadcas	
284D	630197	APP	DC_	117.7	48.4	40 09 27.0	0.250	100.3	68.4	10.0R	38.4M
Idaho Creek		CO		298.0	BNPFT20030317BBM	105 01 00.0		1543	Horizon	Christian Fellowsh	
229C1	KAZY	RSV	---	120.9	165.5	39 35 05.0	100.000	102.0	69.8	50.8	84.3
Deer Trail		CO		302.0		103 51 58.0	299	1881	Freisland	Broadcasting Cor	
230D	631577	APP	DE_	87.1	67.0	40 23 19.0	0.050	5.9	1.9	54.5	57.7
Greeley		CO		267.6	BNPFT20030312AWW	104 43 56.0		1528	Educational	Communications	
233D	652147	APP	_C_	87.4	66.6	40 23 05.0	0.060	0.5	4.9	64.9	61.3
Greeley		CO		267.9	BNPFT20030317MSW	104 44 12.0		1508	Kevin J.	Youngers	
284D	644350	APP	_C_	128.2	72.8	39 57 15.1	0.250	100.3	68.4	10.0R	62.8M
Thornton		CO		308.6	BNPFT20030317CYR	104 50 59.1		1603	Edgewater	Broadcasting, In	
229C1	KRAI-FM	LIC	_CN	278.4	178.7	40 34 35.0	100.000	109.9	75.3	66.9	101.8
Craig		CO		97.1	BLH6997	107 36 29.0	299	2315	Wild West	Radio, Inc.	
284D	630301	APP	_C_	144.5	79.7	39 46 32.0	0.140	100.3	68.4	10.0R	69.7M
Denver		CO		324.9	BNPFT20030317AZX	104 58 43.0		1602	Horizon	Christian Fellowsh	

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	Page # 2	
										IN (Overlap	*OUT* in km)
229C3 Cheyenne	KAZY	LIC	_CX WY	38.7 219.3	110.8 BLH20060615AAH	41 08 04.0 104 41 32.0	25.000 35	35.6 1859	22.7 Freisland Broadcasting Cor	71.6	82.7
284D Denver	631870	APP	_C_ CO	146.4 326.8	82.2 BNPFT20030313BKR	39 44 37.0 104 59 18.0	0.170	100.3 1694	68.4 Educational Media Foundati	10.0R	72.2M
230A Laramie	KUSZ	LIC	NCX WY	356.8 176.8	108.8 BLH20080305AEH	41 20 20.0 105 35 31.0	0.800 -26	33.0 2236	9.6 Laramie Mountain Broadcast	72.6	93.8
229C1 Limon	KIIQ	RSV	____ CO	124.5 305.7	190.6	39 22 34.0 103 41 43.0	100.000 299	104.7 1996	72.0 Percheron Associates, Llc	73.5	106.8
228D Buford	K228EZ	LIC	_C_ WY	18.6 198.8	84.2 BLFT20090415ADF	41 04 42.0 105 11 59.0	0.034	0.4 2389	9.9 Mitchell A. Beranek	80.3	74.2
231D Laramie	K231BL	LIC	DC_ WY	2.8 182.8	97.5 BLFT20050916AAA	41 14 16.0 105 27 48.0	0.089	15.6 2679	10.9 Laramie Plains Antenna Tv	78.9	79.4
284D Dillon	KBTB-FM3	LIC	DV_ CO	209.1 28.8	92.7 BLFTB20090115AFD	39 37 51.0 106 02 47.0	0.175	100.3 2786	68.4 Nrc Broadcasting, Inc.	10.0R	82.7M
229C1 Limon	KIIQ	APP	NCX CO	124.5 305.7	190.6 BPH20070313ABN	39 22 34.0 103 41 43.0	100.000 205	94.7 1901	63.9 Percheron Associates, Llc	83.7	114.8
229C1 Deer Trail	KAZY	APP	NHX CO	126.7 307.7	169.6 BPH20070119ACJ	39 26 23.0 103 56 14.0	58.000 71	70.4 1760	44.5 Freisland Broadcasting Cor	86.6	112.0
232C Colorado Springs	KILO	LIC	_C_ CO	162.3 342.8	188.0 BLH20070426AAL	38 44 44.0 104 51 42.0	79.000 670	14.4 2922	97.1 Colorado Springs Radio Bro	158.7	89.9
283C2 Laramie	1232298	APP	NCX WY	4.5 184.6	105.8 BNPH20080205AJN	41 18 37.0 105 25 10.0	3.500 408	100.3 2818	68.4 Superior Broadcasting Of D	15.0R	90.8M
284C1 Vail	KBTB	LIC	_C_ CO	224.7 44.1	112.9 BMLH20031119AII	39 38 05.0 106 26 47.0	100.000 102	100.3 3015	68.4 Superior Broadcasting Of D	22.0R	90.9M
283A Laramie	KRQU	RSV	____ WY	3.0 183.1	105.7	41 18 39.0 105 27 12.0	6.000 100	100.3 2505	68.4 Murray Grey Broadcasting C	10.0R	95.7M
283A Laramie	KRQU	APP	_CX WY	3.0 183.1	105.7 BMPH20091016ADM	41 18 39.0 105 27 12.0	0.250 327	100.3 2730	68.4 Murray Grey Broadcasting C	10.0R	95.7M
283C2 Grand Encampment	1260947	RSV	____ WY	316.8 136.1	115.4	41 06 45.0 106 27 48.0	50.000 150	100.3 2643	68.4 White Park Broadcasting, I	15.0R	100.4M
283C2 Grand Encampment	1260307	APP	_CX WY	316.8 136.1	115.4 BNPH20080804ACL	41 06 45.0 106 27 48.0	50.000 149	100.3 2641	68.4 White Park Broadcasting, I	15.0R	100.4M
283C2 Laramie	1232798	RSV	____ WY	1.2 181.2	121.5	41 27 15.0 105 29 20.0	50.000 150	100.3 2492	68.4 Superior Broadcasting Of D	15.0R	106.5M
229C2 Salida	KSBV	LIC	_CX CO	191.4 11.0	216.7 BLH20020828AAQ	38 26 47.0 106 00 37.0	1.000 830	89.1 3572	59.7 Arkansas Valley Broadcasti	115.7	147.2
231C1 Scottsbluff	KNEB-FM	LIC	_CN NE	45.4 226.6	214.7 BLH19810904AB	41 42 04.0 103 40 49.0	100.000 207	86.6 1512	57.1 Nebraska Rural Radio Assoc	124.6	153.2
228C3 Aspen	KVVQ	CP	_CX CO	227.1 46.1	169.2 BNPH20070501AAQ	39 18 56.0 106 57 32.0	21.000 109	2.2 2682	21.8 Bs&t Wireless, Inc.	162.9	146.6
229A Limon	R11735	DEL	____ CO	127.3 308.4	198.4	39 16 00.0 103 41 15.0	6.000 100	37.6 1780	24.6 White Park Broadcasting	147.1	161.7
283C3 Log Lane Village	NEW	CP	_HX CO	92.8 274.0	159.9 BNPH20070502AEZ	40 16 30.0 103 38 33.0	25.000 62	100.3 1376	68.4 Jer Licenses, Llc	12.0R	147.9M
231C Montrose	KKXK	LIC	_CY CO	219.7 38.4	289.5 BLH19961009KC	38 20 16.0 107 38 23.0	100.000 574	131.4 3094	87.9 Ccr-montrose Iv, Llc	149.0	192.0
227C0 Gering	KMOR	LIC	NCX NE	40.2 221.3	217.3 BLH20070827AED	41 50 23.0 103 49 36.0	100.000 311	8.0 1598	62.7 Legacy Communications, Llc	205.4	154.5
233C3 Merino	KRFD	LIC	_CX CO	83.8 265.4	204.3 BLH20090622ADG	40 31 57.0 103 07 22.0	15.000 124	4.7 1431	45.3 Northeast Colorado Broadca	198.4	158.7
233C1 New Castle	KTUN	CP	NHX CO	251.3 70.0	190.9 BPH20070117ADD	39 47 32.0 107 37 57.0	90.000 211	3.1 2919	30.2 Wildcat Communications Llc	182.2	160.1
228A Aspen	AU7052710	VAC	____ CO	220.9 40.0	171.1 RM9994	39 11 24.0 106 49 06.0	6.000 100	1.6 3078	15.8 Roaring Forks Broadcasting	163.7	170.2
233C3 New Castle	KTUN	LIC	_CX CO	243.4 62.1	193.4 BLH20050603ABU	39 33 56.0 107 32 01.0	25.000 -121	2.3 1935	22.7 Wildcat Communications Llc	187.6	170.0

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*
229A Limon	KIIQ	LIC _CX CO		127.3 308.4	198.4 BLH20041025AEJ	39 16 00.0 103 41 15.0	1.000 -32	14.2 1649	10.2 Percheron Associates, Llc	170.7	176.8
284A Calhan	KKHN	LIC NHX CO		145.3 326.1	183.2 BLH20090518ADM	38 59 57.0 104 18 47.0	0.400 145	100.3 2139	68.4 Superior Broadcasting Of D	10.0R	173.2M
233D Glenwood Springs	KTUN-FM1	LIC DV_ CO		240.4 59.3	177.4 BLFTB20051229AAQ	39 33 40.0 107 19 01.0	0.340	0.2 2216	3.3 Wildcat Communications, L.	175.0	173.4

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.

FIGURE 2, PROPOSED K227BSB WITH KUNC 60 DBU
K227BS Estes Park, CO, Channel 230D

Coverage Study - USGS 03 SEC
12-06-2009

KUNC CH218 C1 36.0 kW 2565M COR
Prot. = 60 dBu. Population = 727,771

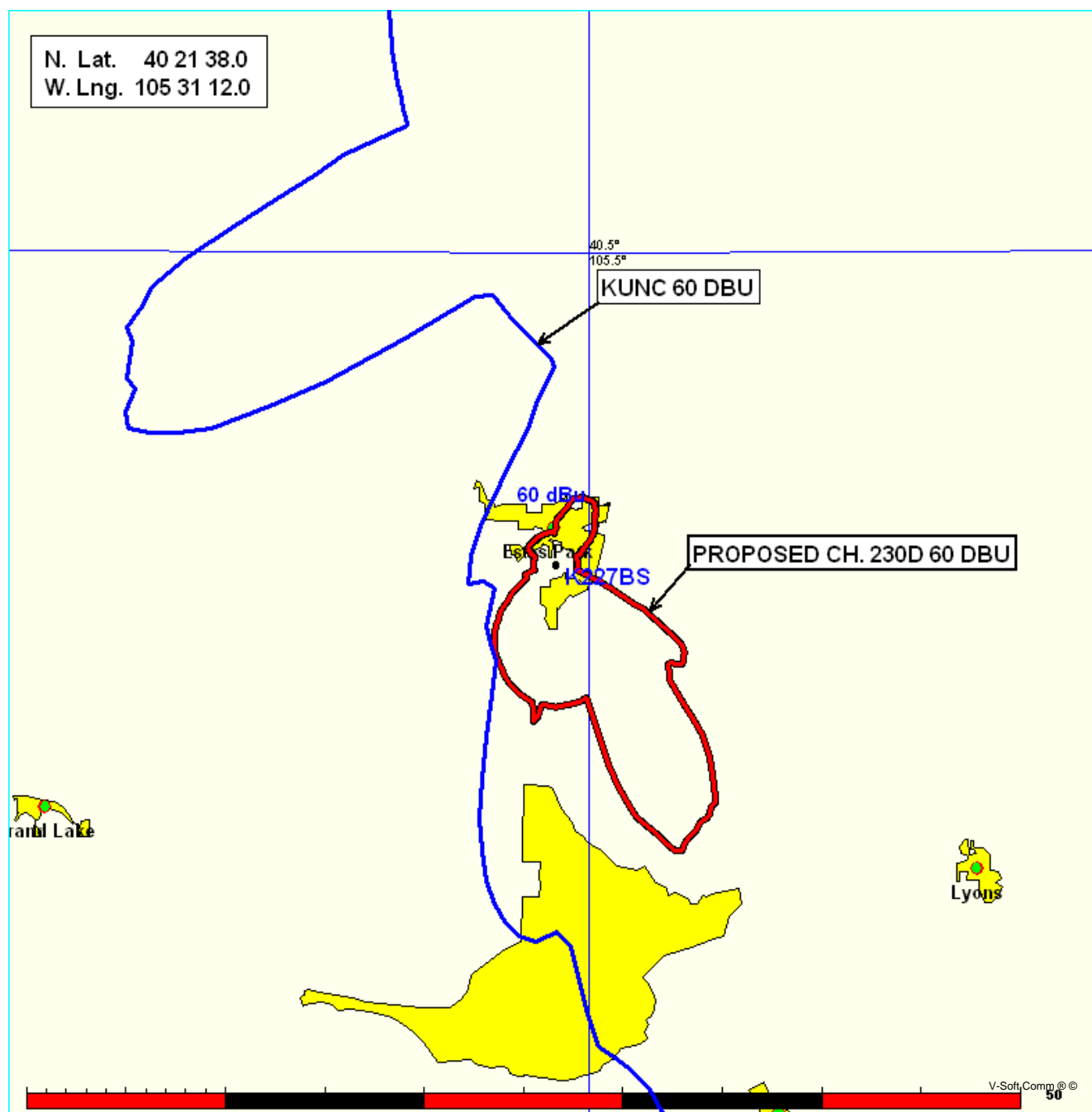


FIGURE 3, DIRECTIONAL ANTENNA DATA

K227BS ESTES PARK, CO, CH. 230D

12-06-2009

RMS(V)= .393

Bearing Field % Voltage

Graph is Percent Relative Field Voltage

000	=	0.040	SCALA CL-FMV LOG PERIODIC YAGI
010	=	0.040	
020	=	0.040	
030	=	0.038	
040	=	0.034	
050	=	0.025	
060	=	0.015	
070	=	0.010	
080	=	0.010	
090	=	0.010	
100	=	0.010	
110	=	0.020	
120	=	0.085	
130	=	0.250	
140	=	0.470	
150	=	0.645	
160	=	0.820	
170	=	0.950	
180	=	1.000	
190	=	0.950	
200	=	0.820	
210	=	0.645	
220	=	0.470	
230	=	0.250	
240	=	0.085	
250	=	0.020	
260	=	0.010	
270	=	0.010	
280	=	0.010	
290	=	0.010	
300	=	0.015	
310	=	0.025	
320	=	0.034	
330	=	0.038	
340	=	0.040	
350	=	0.040	

