

TECHNICAL STATEMENT
K258DV CASPER, WYOMING, CH 258D
MOUNTAIN COMMUNITY TRANSLATORS, LLC
MINOR CHANGE APPLICATION
DECEMBER 2022

This Technical Statement is in support of a Minor Change Application filed by Mountain Community Translators, LLC for a minor change in the licensed facility of K258DV Casper, Wyoming, facility ID 148047. It is proposing to increase its Effective Radiated Power (“ERP”) from 10 watts to 250 watts, add a directional antenna pattern, but remain at its currently licensed Casper Mountain communications tower site with the same antenna heights.

Figure 1 shows a channel interference study conducted from the proposed site for K258DV on channel 258D. It shows that the proposed operation of K258DV on channel 258D, will not cause any prohibited outgoing interference to any licensed or proposed FM services.

Figure 2 is the directional antenna data for the proposed antenna.

Figure 3 is a fill-in compliance map showing the proposed 60 dB μ for K258DV and the primary station to be rebroadcast, KLWC Casper, WY, facility ID 90985.

KLWC is the current primary station being rebroadcast on K258DV.

Since the proposed operation of K258DV will be located at the same tower site as it is presently licensed, it can be concluded that the current operation of K258DV will 60 dB μ overlap with the proposed operation of K258DV on channel 258D.

It was concluded that the new proposed operation of K258DV Casper, Wyoming on channel 258D 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 INTERFERENCE STUDY

K258DV CASPER, WY, CH. 258D

REFERENCE 42 44 26.80 N. CH# 258D - 99.5 MHz, Pwr= 0.25 kW DA, HAAT= 540.0 M, COR= 2488 M DISPLAY DATES
 106 18 24.00 W. Average Protected F(50-50)= 30.38 km DATA 12-13-22
 Standard Directional SEARCH 12-13-22

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*
258D Casper	K258DV	LIC _CN WY	0.0 269.7	0.00 0000203048	42 44 26.80 106 18 24.00	0.010	2488	---Reference---		
257A Douglas	KKTS-FM	LIC _CN WY	91.0 271.5	63.62 BMLH20141028AAZ	42 43 41.80 105 31 47.90	2.350 162	43.1 1780	12.5 Douglas Broadcasting, Inc	0.8	2.4
257C1 Saratoga	KTGA	LIC _CN WY	213.3 32.7	140.67 BLH20080130AKR	41 40 45.80 107 14 10.10	18.000 324	92.3 2500	62.8 Toga Radio LLC	19.0	32.9
261C1 Glendo	KKTY-FM	LIC _CN WY	87.5 268.2	88.48 0000203397	42 46 13.30 105 13 35.50	80.000 139	7.3 1681	59.8 Douglas Broadcasting, Inc.	58.7	27.7
258C1 Keystone	KRKI	LIC _HN SD	58.0 239.8	240.68 BLH20121004ABW	43 51 23.90 103 45 51.70	100.000 224	167.4 2119	68.1 Bad Lands Broadcasting Com	45.2	89.5
255C1 Manville	AU6229552	VAC _N WY	87.7 268.8	138.32 RM	42 46 44.88 104 37 03.86	100.000 299	10.1 1907	71.8 From CDBS	105.5	65.6
204C1 Douglas	KRKY-FM	CP _HN WY	81.2 261.9	88.65 0000162803	42 51 28.90 105 14 04.90	60.000 101	32.6 1658	9.5 Cedar Cove Broadcasting, I	21.5R	67.2M
256C Lost Cabin	KWYW	STA _CN WY	300.1 118.9	157.75 0000191099	43 26 17.80 107 59 39.30	51.000 578	11.0 2499	85.6 Edwards Communications Lc	110.6	70.4
256C Lost Cabin	KWYW	LIC _CN WY	300.1 118.9	157.75 BLH20010730AAA	43 26 17.80 107 59 39.30	51.000 578	11.0 2499	85.6 Edwards Communications Lc	110.6	70.4
204C3 Douglas	KRKY-FM	LIC _HN WY	81.2 261.9	88.65 0000101347	42 51 28.90 105 14 04.90	23.000 101	32.6 1658	9.5 Cedar Cove Broadcasting, I	11.5R	77.2M
258C2 Mitchell	KETT	LIC _CN NE	115.3 297.0	227.69 0000197974	41 50 22.80 103 49 37.00	13.000 293	128.5 1584	53.9 Vss Catholic Communication	78.2	105.6
259C Meeteetse	AU9810902	VAC _N WY	308.1 126.4	260.51 RMrf119	44 09 25.84 108 52 17.47	100.000 600	137.6 2449	92.8 From CDBS	85.7	111.9
205C2 Saratoga	KAIW	LIC _CN WY	188.7 8.6	124.77 BLED20170208AAL	41 37 48.90 106 32 02.90	0.580 996	32.6 3339	9.5 University Of Wyoming	14.5R	110.3M
259C Rock Springs	KSIT	LIC _CN WY	238.9 57.0	274.21 BLH20050907ABB	41 25 59.80 109 07 04.40	100.000 493	130.5 2660	87.2 Big Thicket Broadcasting C	115.0	141.7
204A Kaycee	KUWK	LIC _CN WY	346.9 166.6	131.75 BLED20131018AIS	43 53 41.30 106 40 50.40	1.600 99	32.6 1664	9.5 University Of Wyoming	9.5R	122.3M

Terrain database is GLOBE 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 restricted contour.

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

Figure 2
K258DV Casper, WY
Directional Antenna Data

12-13-2022

RMS(V)= .811

Graph is Relative Field

Azi	Field	dBk	kw
000	0.927	-06.679	0.215
010	0.852	-07.412	0.181
020	0.762	-08.382	0.145
030	0.692	-09.218	0.120
040	0.627	-10.075	0.098
050	0.581	-10.737	0.084
060	0.536	-11.437	0.072
070	0.504	-11.972	0.064
080	0.493	-12.164	0.061
090	0.493	-12.164	0.061
100	0.493	-12.164	0.061
110	0.493	-12.164	0.061
120	0.493	-12.164	0.061
130	0.507	-11.920	0.064
140	0.536	-11.437	0.072
150	0.596	-10.516	0.089
160	0.643	-09.856	0.103
170	0.728	-08.778	0.132
180	0.826	-07.681	0.171
190	0.908	-06.859	0.206
200	0.947	-06.494	0.224
210	0.966	-06.321	0.233
220	1.000	-06.021	0.250
230	0.984	-06.161	0.242
240	0.976	-06.232	0.238
250	0.976	-06.232	0.238
260	0.966	-06.321	0.233
270	0.966	-06.321	0.233
280	0.966	-06.321	0.233
290	0.966	-06.321	0.233
300	0.966	-06.321	0.233
310	0.976	-06.232	0.238
320	0.976	-06.232	0.238
330	0.984	-06.161	0.242
340	1.000	-06.021	0.250
350	0.982	-06.178	0.241

Nicom BKG77

Oriented at 280
degrees

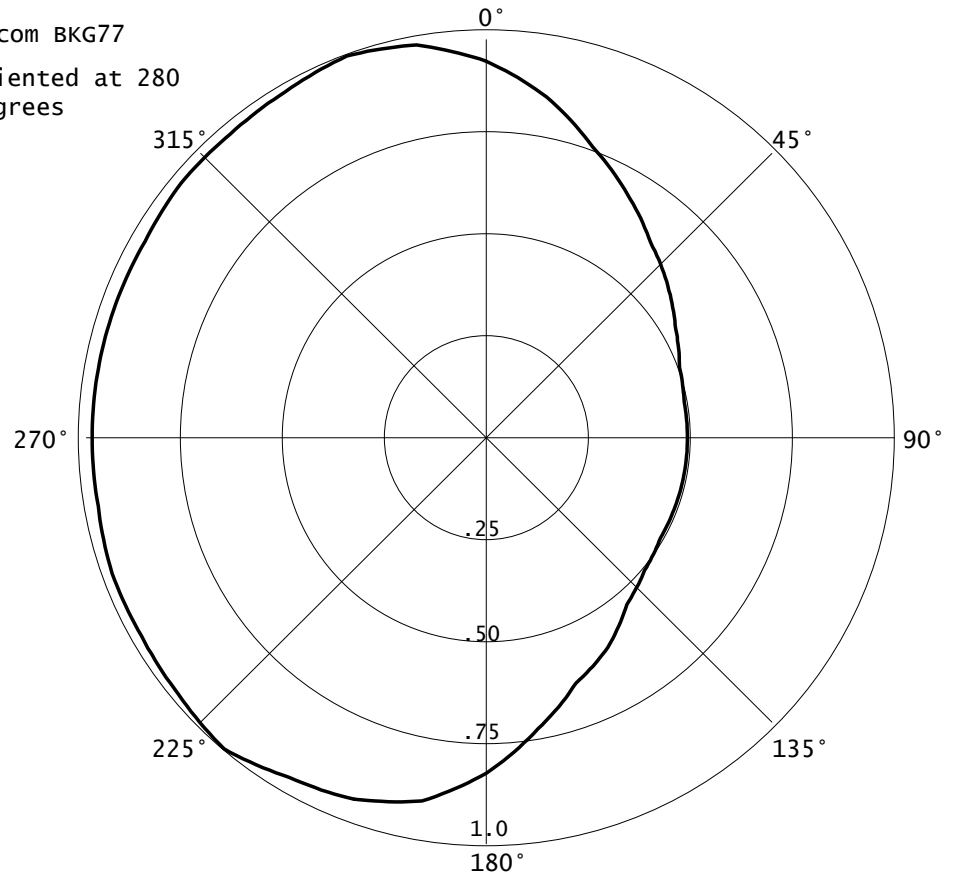


FIGURE 3 - FILL-IN MAP WITH KLWC(FM)
K258DV CASPER, WY, CH. 258D

Coverage Study - GLOBE 30 Sec
12-13-2022

