

TECHNICAL STATEMENT
K228EZ FORT COLLINS, COLORADO 228D
MOUNTAIN COMMUNITY TRANSLATORS, LLC
FCC FORM 349
JULY 2011

This Technical Statement is in support of FCC form 349 filed by Mountain Community Translators, LLC for a minor change in the licensed facility of K228EZ Fort Collins, Colorado, facility ID 157751. It is proposing to remain at its current licensed tower site, tower registration 1271533, located at N. $40^{\circ} 32' 47''$, W. $105^{\circ} 11' 53''$, NAD 27, decrease its Effective Radiated Power to 9 watts and continue utilizing a Nicom model BKG-1/P, one bay, directional vertical only dipole type antenna system. The antenna will be mounted at the 25.1 meter level on a 30 meter overall tower, with a Center of Radiation at 2198 Above Mean Sea Level, with the main lobe directed at 0 degrees.

Figure 1 shows a channel interference study conducted for K228EZ. It shows that the proposed operation of K228EZ on channel 228D, will not cause any prohibited outgoing interference to any licensed or proposed FM services, with the exception of 2nd adjacent channel KCWA Loveland, Colorado operating on channel 230A, facility ID 9761.

Figure 2 shows the coverage area for the worse case 100 dB μ interference contour F(50-10) and shows that there is no population in the area of interference. 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 area, with private access. The transmitter building is uninhabited and does not have indoor plumbing.

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

Since the proposed operation of K228EZ will remain at its currently licensed tower site, it can be assumed that the proposed K228EZ will 60 dB μ overlap with the currently licensed operation of K228EZ as required.

Figure 4 is a tabulation of the distance to contours for the pertinent contours used in this study for the proposed K228EZ.

It was concluded that the new proposed operation of K228EZ Fort Collins, Colorado on channel 228D 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
K288EZ FORT COLLINS, CO, CH. 228D
Average Protected F(50-50)= 11.0 km
Standard Directional

REFERENCE
40 32 47.0 N.
105 11 53.0 W.

CH# 228D - 93.5 MHz, Pwr= 0.009 kW DA, HAAT= 379.4 M, COR= 2198 M
Average Protected F(50-50)= 11.0 km
Standard Directional

DISPLAY DATES
DATA 07-16-11
SEARCH 07-16-11

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* (Overlap in km)
228D Fort Collins	K228EZ *	LIC DV_ CO	0.0 0.0	0.0 BLFT20110407ACR	40 32 47.0 105 11 53.0	0.036 379	58.6 2198	17.3 Mountain Community Transla	-70.6	-60.3 *
227C1 Wheat Ridge	KTCL	LIC DCX CO	182.1 2.0	90.4 BLH20070621AQR	39 43 59.0 105 14 10.0	71.000 346	115.0 2256	75.9 Citicasters Licenses, Inc.	-26.1	7.9
230A Loveland	KCWA **	LIC ZCX CO	166.5 346.5	6.0 BLH20101214ACL	40 29 37.0 105 10 53.0	0.580 319	1.6 2098	18.2 Way Media, Inc.	1.3	-12.2 **
225D Windsor	631551	APP DE_ CO	166.3 346.4	6.1 BNPFT20030312AEB	40 29 36.0 105 10 52.0	0.010 332	0.2 2078	5.6 Educational Communications	2.7	0.1
225C2 Warren Afb	KOLT-FM	LIC _CX WY	359.6 179.6	58.9 BLH20070131ABW	41 04 35.0 105 12 10.0	33.000 185	7.5 2404	56.2 Joli A. Lofstedt, Chapter	39.4	2.5
230D Windsor	631544	APP DE_ CO	166.3 346.4	6.1 BNPFT20030312ADM	40 29 36.0 105 10 52.0	0.010 332	0.0 2078	2.2 Educational Communications	2.9	3.8
229D Berthoud	631534	APP DE_ CO	160.6 340.6	36.1 BNPFT20030312ADC	40 14 24.0 105 03 23.0	0.100 99	14.1 1637	9.2 Educational Communications	18.7	20.5
229C3 Cheyenne	KAZY	LIC _CX WY	32.9 213.2	78.0 BLH20060615AAH	41 08 04.0 104 41 32.0	25.000 35	35.6 1859	22.7 Freisland Broadcasting Cor	29.5	35.0
225D Longmont	631529	APP DE_ CO	160.6 340.6	36.1 BNPFT20030312ACQ	40 14 24.0 105 03 23.0	0.100 99	0.2 1637	4.8 Educational Communications	32.9	31.2
225D Kersey	631576	APP DE_ CO	113.8 294.2	43.2 BNPFT20030312AWS	40 23 19.0 104 43 56.0	0.050 83	0.1 1528	2.6 Educational Communications	37.7	40.5
230D Fort Lupton	644473	APP _C_ CO	140.4 320.7	60.7 BNPFT20030317GEL	40 07 28.1 104 44 36.1	0.115 125	0.8 1630	13.2 Radio Assist Ministry, Inc	56.9	47.5
231D Boulder	K231AA	LIC _CN CO	182.8 2.7	64.6 BLFT19960111TK	39 57 54.0 105 14 05.0	0.205 -133	1.0 1719	13.3 Citicasters Licenses, Inc.	60.5	51.3
230D Fort Lupton	630344	APP _C_ CO	144.5 324.7	65.3 BNPFT20030317AZW	40 04 05.0 104 45 08.0	0.170 90	0.9 1611	13.2 Horizon Christian Fellowsh	61.2	52.0
229D Ward	K229AC	LIC _E_ CO	203.3 23.1	69.3 BLFT20061218ACR	39 58 22.0 105 31 13.0	0.028 -188	7.3 2655	4.1 Boulder Community Broadcas	59.4	53.7
226C3 Walden	1170205	RSV-A ____ CO	279.1 98.3	113.4	40 42 01.0 106 31 21.0	25.000 100	6.5 2764	57.1 Laramie Mountain Broadcast	102.9	56.1
228L1 Laramie	KOCA-LP	LIC ____ WY	339.3 159.1	91.1 BLL20021223AAQ	41 18 48.0 105 35 00.0	0.100	18.6 2218	5.6 La Radio Montanesa: Voz De	61.3	58.8
226C3 Walden	1170083	APP _HX CO	277.8 96.9	115.3 BNPH20070125ACD	40 40 42.0 106 33 00.0	25.000 14	6.3 2727	52.9 Laramie Mountain Broadcast	105.7	62.2
229D Lakewood	K229BS	LIC DC_ CO	182.0 2.0	90.8 BLFT20100719AFS	39 43 46.0 105 14 08.0	0.099 218	22.3 2246	14.7 4-k's Lllp	65.3	70.2
229C1 Limon	KIIQ	RSV-A ____ CO	135.0 315.9	182.7	39 22 34.0 103 41 43.0	100.000 299	106.8 1996	73.4 Percheron Associates, Llc	69.8	102.3
231D Laramie	K231BL	LIC DC_ WY	343.9 163.7	80.0 BLFT20050916AAA	41 14 16.0 105 27 48.0	0.089 262	0.6 2679	7.2 Laramie Plains Antenna Tv	70.3	72.5
227C0 Gering	AL9347	RSV-A ____ NE	45.6 226.8	218.7 RM10864*	41 54 26.0 103 18 44.0	100.000 450	130.8 1723	87.6	75.1	111.5
227C0 Gering	KMOR	LIC NCX NE	38.1 219.0	184.0 BLH20070827AED	41 50 23.0 103 49 36.0	100.000 311	92.6 1598	62.2 Legacy Communications, Llc	78.6	100.3
229C1 Limon	KIIQ	APP NCX CO	135.0 315.9	182.7 BPH20070313ABN	39 22 34.0 103 41 43.0	100.000 205	97.1 1901	65.6 Percheron Associates, Llc	79.4	109.9
231D Estes Park	K232EF	APP DV_ CO	194.2 14.0	99.7 BPFT20110711AGS	39 40 31.0 105 29 02.0	0.016	0.3 3244	10.7 Cedar Cove Broadcasting, I	96.4	89.0
229C1 Craig	KRAI-FM	LIC _CN CO	271.7 90.2	204.1 BLH6997	40 34 35.0 107 36 29.0	100.000 299	110.0 2315	75.4 Wild West Radio, Inc.	89.1	125.1

										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)
229C1 Limon	KIIQ	CP _CX CO		135.0 315.9	182.7 BPH20070313ABN	39 22 34.0 103 41 41.0	100.000 117	87.2 1823	57.2 Percheron Associates, Llc	89.4	117.4
231C2 Phippsburg	KEZZ	LIC NCX CO		261.5 80.6	128.2 BLH20090522ACV	40 22 03.0 106 41 28.0	1.750 380	2.6 3107	37.2 Youngers Colorado Broadcas	123.5	90.8
230A Frisco	KYSL	LIC _CN CO		215.6 35.0	134.9 BLH19940808KA	39 33 22.0 106 06 53.0	0.560 324	1.6 3549	42.0 Krystal Broadcasting, Inco	130.5	92.9
225C Colorado Springs	KKPK	LIC _C_ CO		171.7 351.9	202.0 BLH19990311KE	38 44 44.0 104 51 42.0	79.000 670	16.2 2922	101.1 Radio License Holding Cbc,	182.7	100.9
226C3 Walden	AL7155	VAC ____ CO		279.1 98.3	113.4 RM11387	40 42 01.0 106 31 21.0	25.000 100	6.5 2764	57.1 Laramie Mountain Broadcast	102.9	113.2
228C3 Aspen	KTND	LIC _C_ CO		228.2 47.1	203.3 BLH20100816ABF	39 18 56.0 106 57 32.0	21.000 109	96.1 2682	21.8 Bs&t Wireless, Inc.	104.4	171.1
231C1 Scottsbluff	KNEB-FM	LIC _CN NE		44.2 225.2	180.8 BLH19810904AB	41 42 04.0 103 40 49.0	100.000 207	7.2 1512	57.6 Nebraska Rural Radio Assoc	161.1	123.0
229C2 Salida	KSBV	LIC _CX CO		196.9 16.4	243.4 BLH20020828AAQ	38 26 47.0 106 00 37.0	1.000 830	87.7 3572	58.9 Arkansas Valley Broadcasti	152.6	178.9
228C1 Casper	KWYX	LIC _CX WY		339.7 158.9	260.7 BMLH20100607AFR	42 44 28.0 106 18 31.0	3.800 530	90.7 2497	33.2 Cochise Broadcasting Llc	158.7	188.7
229A Limon	KIIQ	LIC _CX CO		137.4 318.3	192.0 BLH20041025AEJ	39 16 00.0 103 41 15.0	1.000 -32	14.2 1649	10.2 Percheron Associates, Llc	172.0	176.0

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 real life interference will be caused to KCWA Loveland, CO on channel 230A, since the 100 DBU
Interference Contour will not cover any population. See the Technical Statement for more details.

FIGURE 2, PREDICTED 100 DBU CONTOUR
K228EZ FORT COLLINS, CO, CH. 228D

Coverage Study - NGDC 30 SEC
07-16-2011

K228EZ CH228 D , 0.009 kW, 379.4M HAAT, 2198.0M COR AMSL
Interference Contour = 100 dBu. Population = 0

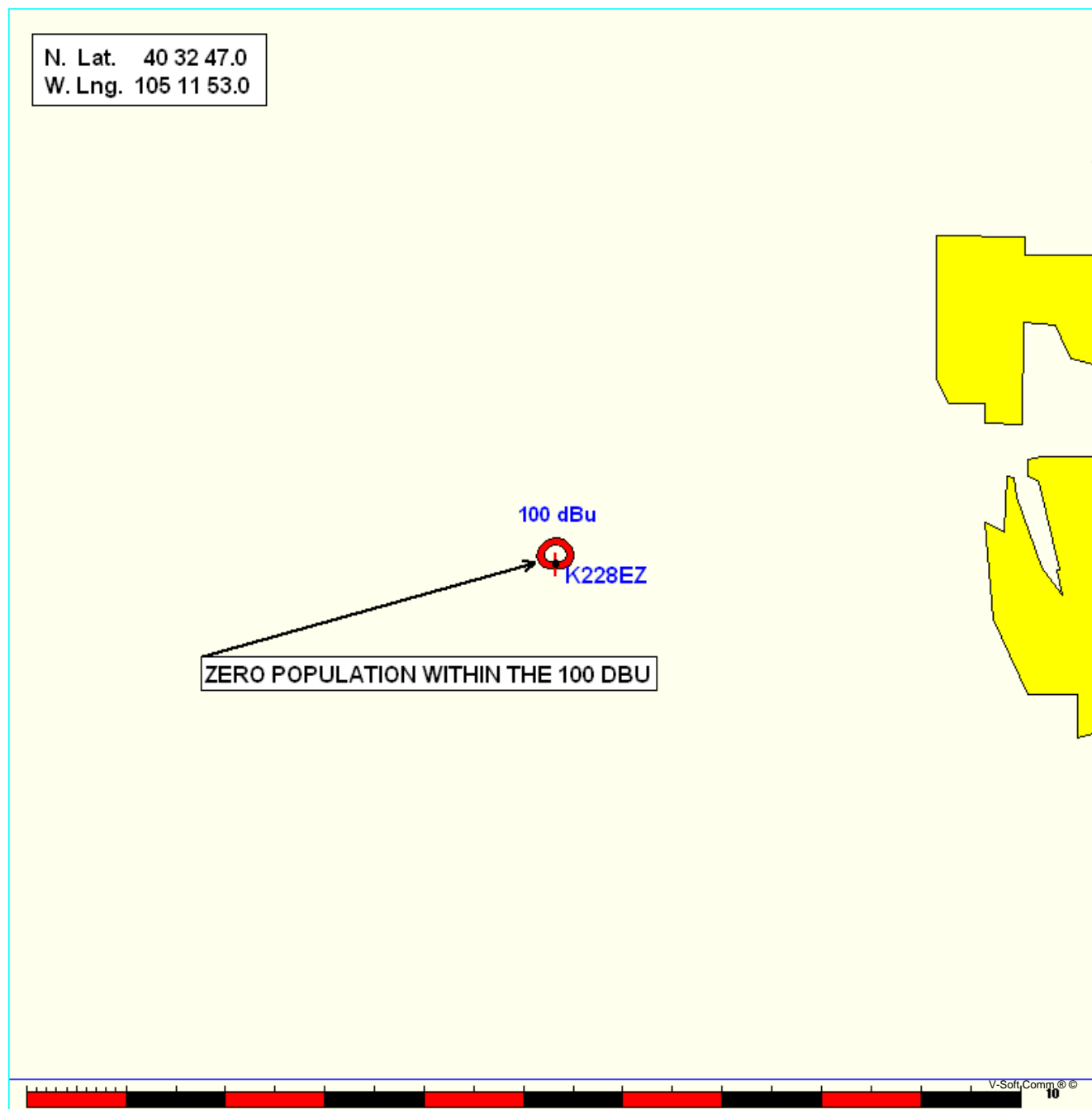


FIGURE 3, DIRECTIONAL ANTENNA DATA

K228EZ FORT COLLINS, CO

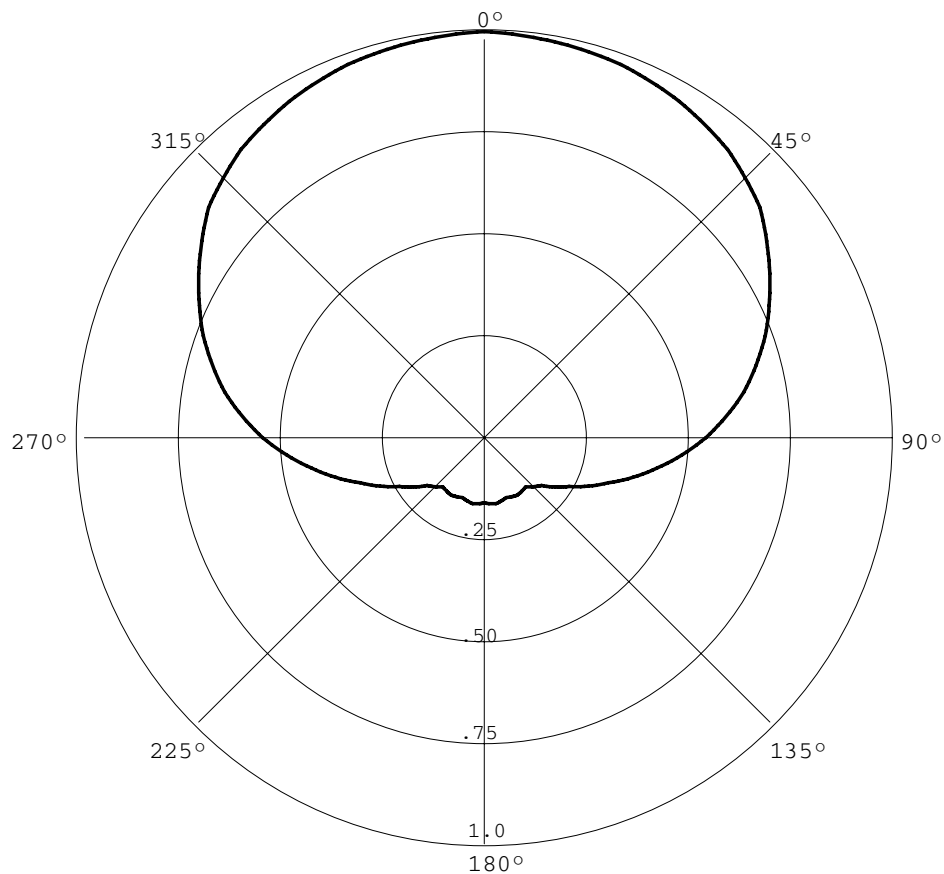
07-16-2011

RMS(V)= .64

NICOM BKG-1P, One bay dipole directional

Graph is Relative Field

Azi	Field	dBk	kW
000	1.000	-20.458	0.009
010	0.990	-20.545	0.009
020	0.978	-20.651	0.009
030	0.956	-20.848	0.008
040	0.927	-21.116	0.008
050	0.882	-21.548	0.007
060	0.808	-22.309	0.006
070	0.733	-23.155	0.005
080	0.646	-24.253	0.004
090	0.543	-25.762	0.003
100	0.430	-27.788	0.002
110	0.324	-30.247	0.001
120	0.240	-32.853	0.001
130	0.183	-35.209	0.000
140	0.158	-36.484	0.000
150	0.163	-36.214	0.000
160	0.157	-36.540	0.000
170	0.165	-36.108	0.000
180	0.161	-36.321	0.000
190	0.165	-36.108	0.000
200	0.157	-36.540	0.000
210	0.163	-36.214	0.000
220	0.158	-36.484	0.000
230	0.183	-35.209	0.000
240	0.240	-32.853	0.001
250	0.324	-30.247	0.001
260	0.430	-27.788	0.002
270	0.543	-25.762	0.003
280	0.646	-24.253	0.004
290	0.733	-23.155	0.005
300	0.808	-22.309	0.006
310	0.882	-21.548	0.007
320	0.927	-21.116	0.008
330	0.956	-20.848	0.008
340	0.978	-20.651	0.009
350	0.990	-20.545	0.009



Contour.out

N. Lat. = 403247.0 W. Lng. = 1051153.0
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - NGDC 30 SEC

FIGURE 4, TABULATION OF DISTANCE TO CONTOURS. K228EZ

Azi.	AV EL	HAAT	ERP kW	dBk	60-F5	54-F1	100-F1
000	1715.0	483.0	0.0090	-20.46	12.08	18.38	0.21
030	1596.1	601.9	0.0082	-20.85	12.90	20.33	0.20
060	1558.4	639.6	0.0059	-22.31	11.85	19.12	0.17
090	1548.2	649.8	0.0027	-25.76	8.91	14.53	0.11
120	1571.6	626.4	0.0005	-32.85	4.53	7.99	0.05
150	1674.6	523.4	0.0002	-36.21	3.15	5.70	0.03
180	1655.3	542.7	0.0002	-36.32	3.12	5.70	0.03
210	1874.1	323.9	0.0002	-36.21	2.92	5.00	0.03
240	2138.1	59.9	0.0005	-32.85	2.19	3.03	0.05
270	2182.8	15.2	0.0027	-25.76	2.32	3.20	0.11
300	2203.8	-5.8	0.0059	-22.31	2.78	3.89	0.17
330	2103.7	94.3	0.0082	-20.85	5.40	7.54	0.20

Ave El = 1818.49 M HAAT= 379.51 M AMSL= 2198