

TECHNICAL STATEMENT
K245CM GOLDEN, CO, CH 245D
MAINSTREET MEDIA OF COLORADO, LLC
FCC FORM 349
DECEMBER 2016

This Technical Statement is in support of FCC form 349 filed by Mainstreet Media of Colorado, LLC for a minor change in the facility of K245CM, facility ID 25621. It is proposing to increase its Effective Radiated Power from 1 watt to 73 watts and remain at its current transmitter location with the same antennas heights, but with a new directional antenna system. K245CM will remain a “fill-in” translator for KKCL(AM) Golden, Colorado, facility ID 161314.

Figure 1 shows a channel interference study conducted from the proposed site for K245CM. It shows that the proposed operation of K245CM on channel 245D, will not cause any prohibited outgoing interference to any licensed or proposed FM services, with the exception of KBCO(FM) Boulder, Colorado, facility ID 48966, on channel 247C and KXPK(FM) Evergreen, Colorado, facility ID 20300. The proposed operation of K245CM on 245D is located within the protected 60 dB μ contour of 2nd adjacent stations KBCO and KXPK.

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, Mainstreet Media of Colorado, 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 2 acre mountain area with private access. The transmitter building is uninhabited and does not have indoor plumbing.

Since the current and proposed operation of K245CM will be at the same tower site, it can be assumed that the present 60 dB μ will overlap with the proposed operation of K245CM on channel 245D.

Figure 3 is the directional antenna data for the proposed Scala Antenna 2 CLFM antenna system oriented at 57 degrees.

Figure 4 show the proposed 60 dB μ contour for K245CM with the 2 mv/m daytime contour for KKCL(AM) and a 40 kilometer (25 mile) radius circle from the KKCL(AM) tower site. It shows that the proposed primary contour of K245CM will be completely encompassed inside of both the 2 mv/m contour and 40 kilometer radius of KKCL, the station to be rebroadcast.

It was concluded that the new proposed operation of K245CM Golden, Colorado on channel 245D 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

K245CM GOLDEN, CO, CH 245D

REFERENCE
39 43 59.0 N.
105 14 12.0 W.CH# 245D - 96.9 MHz, Pwr= 0.073 kW DA, HAAT= 0.0 M, COR= 2249 M
Average Protected F(50-50)= 5.2 km
Standard DirectionalDISPLAY DATES
DATA 12-05-16
SEARCH 12-05-16

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*
245C Pueblo	KCCY-FM	LIC _CY CO	163.5 343.7	114.34 BLH19940217KC	38 44 43.0 104 51 41.0	72.000 695	212.5 2946	97.6 Capstar Tx, LIc	-100.0*	1.5
243C Evergreen	KXPK	LIC _CN CO	253.6 73.5	22.27 BLH19940701KC	39 40 35.0 105 29 09.0	100.000 530	16.8 3281	101.4 Entravisi on Hol di ngs, LIc	4.1	-79.2*
247C Boul der	KBCO	LIC DEY CO	346.7 166.7	20.57 BMLH19960506KA	39 54 48.0 105 17 32.0	100.000 469	12.3 2583	87.2 Ci ti cas ters Li censes, Inc.	0.0	-66.7*
245D Gol den	K245CM	APP DC_ CO	0.0 0.0	0.00 BMPFT20161121AAF	39 43 59.0 105 14 12.0	0.075	17.4 2249	4.0 Mainstreet Media Of Col ora	-21.3*	-21.2*
245D Gol den	K245CM	LIC DC_ CO	0.0 0.0	0.00 BLFT20161104ABJ	39 43 59.0 105 14 12.0	0.001	7.5 2249	1.1 Mainstreet Media Of Col ora	-11.4*	-18.4*
245D Boul der	K245AD	LIC DC_ CO	7.6 187.7	31.24 BLFT20161104ABK	40 00 43.0 105 11 16.0	0.250	20.1 1650	6.7 Mainstreet Media Of Col ora	-1.5	0.2
243D Boul der	KXPK-FM1	LIC DCN CO	4.7 184.7	25.34 BLFTB19950119TD	39 57 38.0 105 12 44.0	0.500 -52	0.1 1753	1.7 Entravisi on Hol di ngs, LIc	13.5	23.6
245A Nunn	KYAP	CP NCX CO	14.2 194.4	120.07 BMPH20141029AAP	40 46 51.0 104 53 15.0	4.300 115	88.6 1777	30.4 Appaloosa Broadcasting Com	14.3	50.3
245C2 Steamboat Springs	KBCR-FM	LIC _H_ CO	301.1 120.1	159.55 BMLH20010118ACB	40 27 43.0 106 50 57.0	27.500 203	101.9 2542	23.2 Blizzard Broadcasting LIc	55.1	113.5
248D Silverthorne	K248AP	LIC _H_ CO	259.7 79.2	72.48 BLFT20010713ABO	39 36 50.0 106 04 02.0	0.105 -288	0.7 2861	5.7 Skandi a, LIc	70.2	66.7
248D Fort Collins	K248CH	CP _C_ CO	355.5 175.5	98.48 BNPFT20130826ABZ	40 37 02.0 105 19 40.0	0.060 400	0.5 2562	18.4 Horizon Christian Fellowsh	85.3	77.5
248D Woodland Park	K248AS	LIC _C_ CO	162.3 342.5	98.66 BLFT20120927AGP	38 53 10.0 104 53 24.0	0.250 -105	1.1 2215	7.1 Educational Communi cations	94.3	85.4
247D Vail	K247BY	CP _C_ CO	264.4 83.6	104.35 BNPFT20130830AHQ	39 38 05.0 106 26 47.0	0.010 37	0.2 2963	9.1 Educational Communi cations	102.7	95.2
243D Colorado Springs	K243AM	APP DC_ CO	163.3 343.5	106.92 BPFT20161125AAQ	38 48 37.0 104 52 54.0	0.022	0.0 2179	1.2 Mountain Community Transla	103.7	102.2
243D Colorado Springs	K243AM	LIC DC_ CO	168.8 348.9	108.67 BLFT20111003AUX	38 46 22.0 104 59 32.0	0.010 917	0.0 3775	2.2 Mountain Community Transla	105.8	105.4
244C2 Laramie	KYAP	LIC NCX WY	354.3 174.1	173.50 BLH20070130AIV	41 17 15.0 105 26 38.0	4.800 313	49.0 2730	32.2 Appaloosa Broadcasting Com	111.7	132.7
248C3 Poncha Springs	KWUZ	CP NCX CO	205.6 25.1	157.32 BPH20150212ABF	38 27 11.0 106 01 02.0	0.250 834	1.1 3575	45.5 Three Eagles Communi cation	154.7	111.8

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. Call signs with strikeout need not be protected. 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.

* No actual interference will be caused to either KBCO or KXPK since the worse case 100 DBU contour will cover any population.

FIGURE 2 - PREDICTED 100 DBU INTERFERENCE CONTOUR
K245CM GOLDEN, CO, CH 245D

Coverage Study - NGDC 30 SEC
12-05-2016

K245CM CH245 D , 0.073 kW, 0.0m HAAT, 2249.0m COR AMSL
Interference Contour = 100 dBu. Population = 0

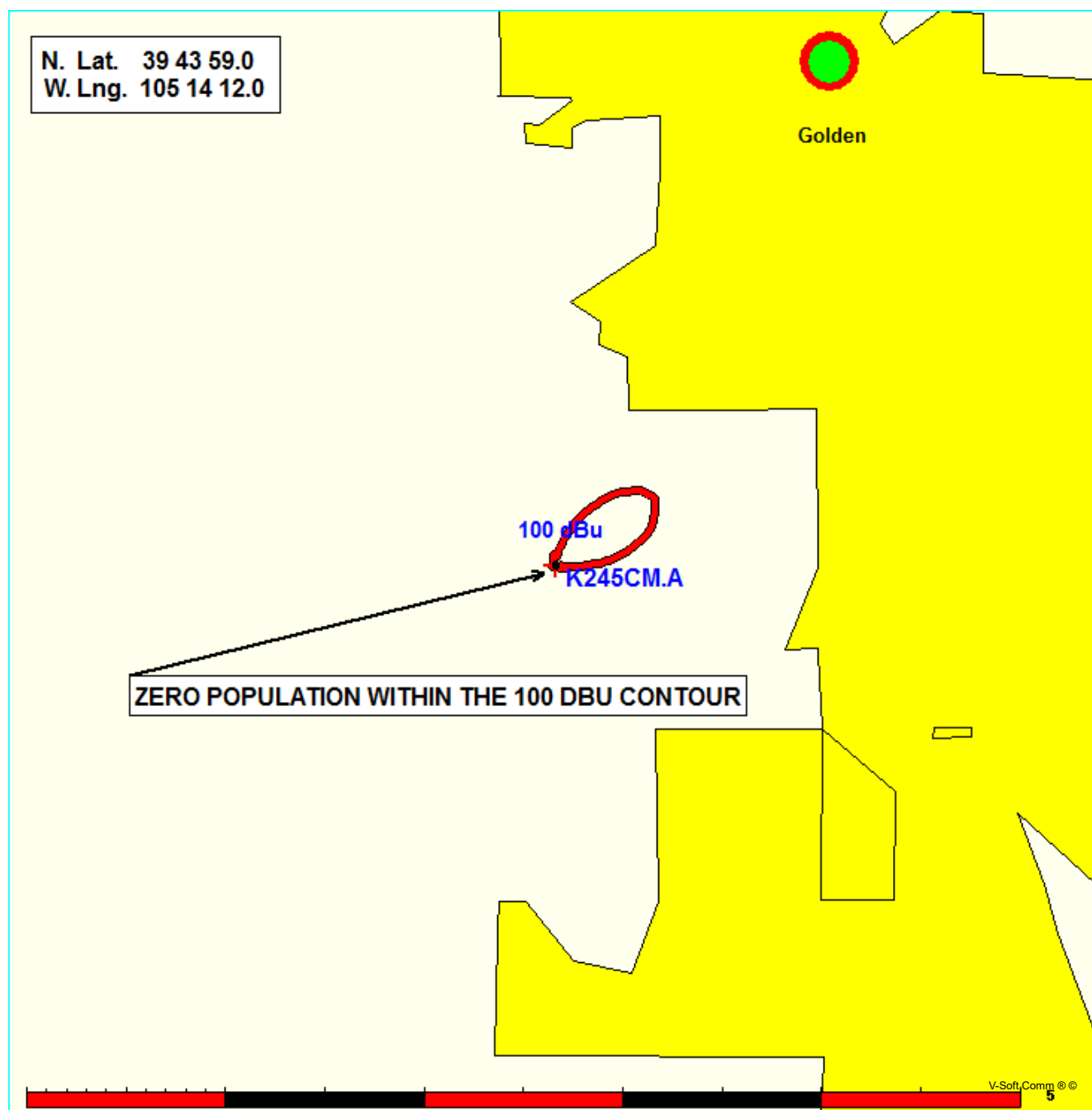


Figure 3 - Directional Antenna Data

K245CM

12-05-2016

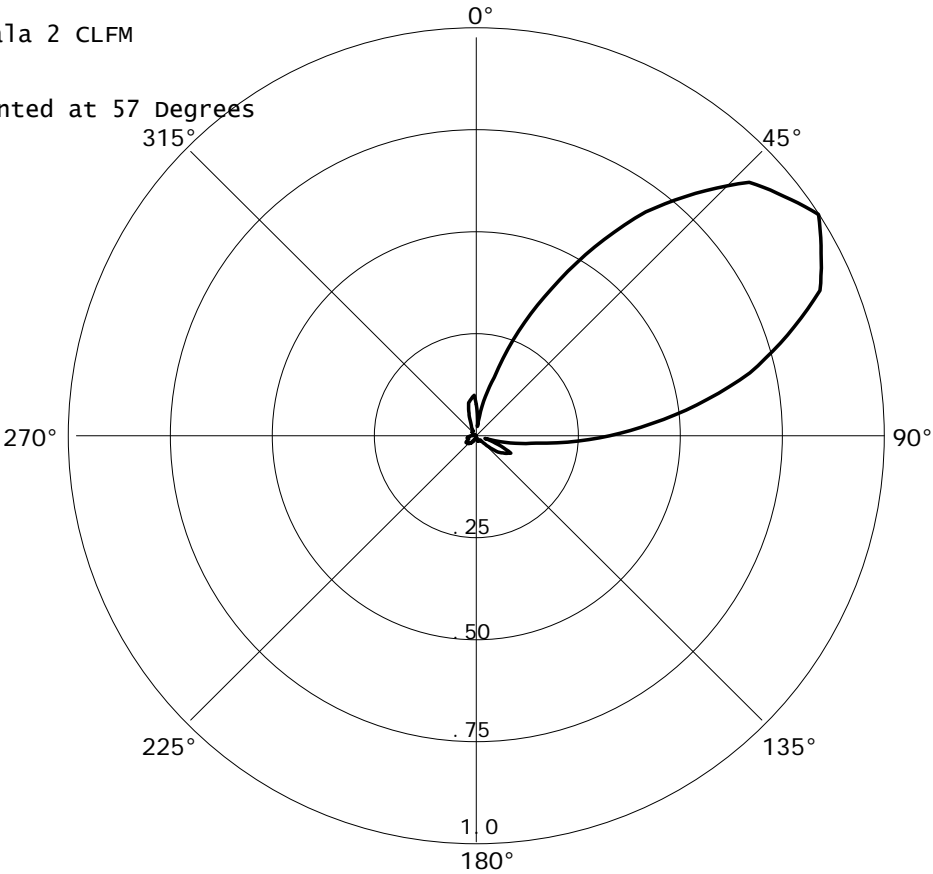
RMS(V) = .332

Graph is Relative Field

Azi	Field	dBk	kW
000	0.077	-33.520	0.000
010	0.061	-35.543	0.000
020	0.227	-24.129	0.004
030	0.491	-17.428	0.018
040	0.757	-13.667	0.043
050	0.941	-11.778	0.066
060	0.975	-11.469	0.071
070	0.847	-12.692	0.054
080	0.603	-15.643	0.027
090	0.327	-20.958	0.008
100	0.110	-30.422	0.001
110	0.044	-38.380	0.000
120	0.087	-32.459	0.001
130	0.051	-37.098	0.000
140	0.014	-48.327	0.000
150	0.015	-47.728	0.000
160	0.013	-48.971	0.000
170	0.010	-51.249	0.000
180	0.005	-57.270	0.000
190	0.002	-65.229	0.000
200	0.009	-52.165	0.000
210	0.017	-46.640	0.000
220	0.025	-43.291	0.000
230	0.029	-42.001	0.000
240	0.027	-42.622	0.000
250	0.021	-44.805	0.000
260	0.021	-44.805	0.000
270	0.012	-49.666	0.000
280	0.005	-57.270	0.000
290	0.003	-61.707	0.000
300	0.009	-52.165	0.000
310	0.013	-48.971	0.000
320	0.014	-48.327	0.000
330	0.021	-44.805	0.000
340	0.049	-37.445	0.000
350	0.088	-32.360	0.001

Scala 2 CLFM

Oriented at 57 Degrees



K245CM

BPFT20160729ALH

Latitude: 39-43-59 N

Longitude: 105-14-12 W

ERP: 0.073 kW

Channel: 245

Frequency: 96.9 MHz

AMSL Height: 2249.0 m

Elevation: 2222.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model: None

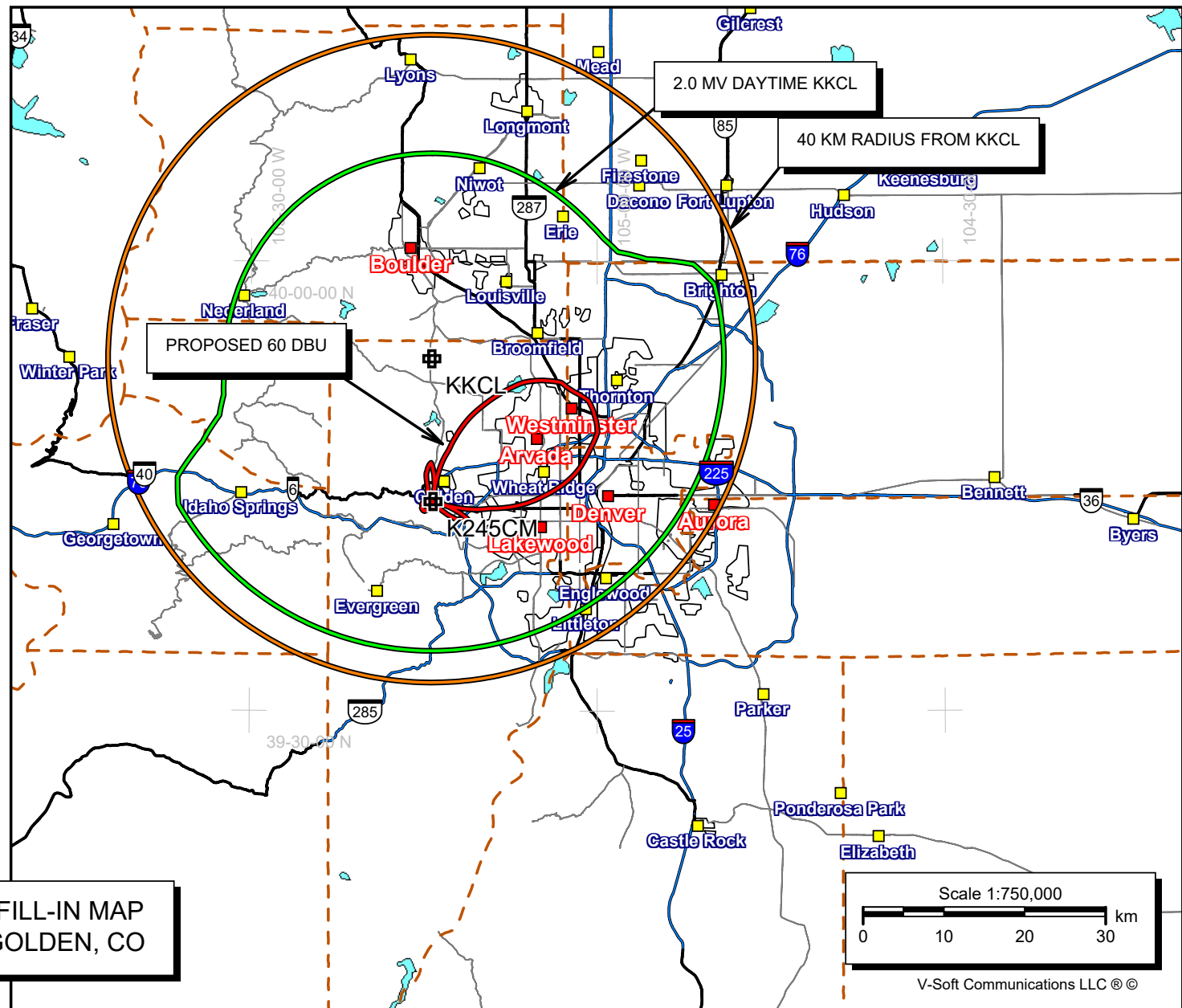


FIGURE 4 - FILL-IN MAP
KKCL(AM) GOLDEN, CO