

Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Louisville, KY

Channel Study

REFERENCE		CH# 250D - 97.9 MHz, Pwr= 0.25 kW DA, HAAT= 89.1 M, COR= 239 M								DISPLAY DATES	
38 14 38.0 N.		Average Protected F(50-50)= 12.2 km								DATA	05-04-16
85 45 33.0 W.		Standard Directional								SEARCH	05-04-16
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
248C1 Louisville	WAMZ	LIC	CX KY	173.0 353.0	20.13 BMLH20080402AAP	38 03 50.0 85 43 52.0	100.000 205	9.0 372	67.2 Cc Licenses, Llc	0.3	-47.8*
250D Louisville	W250BD!	LIC	C KY	121.7 301.8	16.66 BLFT20130809ADH	38 09 54.0 85 35 50.0	0.250 78	45.9 255	13.4 Educational Media Foundati	-40.9	-36.9
250A Salem	WSLM-FM	LIC	CN IN	320.2 140.0	56.72 BLH19920528KA	38 38 07.0 86 10 37.0	3.000 100	74.6 330	23.4 Rebecca L. White	-19.7*	27.4
251D Louisville	W250BD!	CP	C KY	121.7 301.8	16.66 BPFT20151209AAW	38 09 54.0 85 35 50.0	0.250	20.1 255	13.4 Educational Media Foundati	-15.2	-13.8
251C1 Lexington	WBUL-FM	LIC	CX KY	101.1 281.9	117.03 BMLH20031218ACF	38 02 07.0 84 27 02.0	100.000 171	93.1 467	62.7 Citicasters Licenses, Inc.	13.7	40.1
252C3 Elizabethtown	WQXE	LIC	NC KY	202.8 22.6	62.86 BLH20010802ABD	37 43 18.0 86 02 10.0	8.500 162	3.8 389	39.3 Skytower Communications-e'	54.4	23.4
250D Whitesville	W250BW	LIC	DC KY	242.8 62.1	107.89 BLFT20141114ADB	37 47 44.0 86 50 58.0	0.250 161	51.4 308	15.8 Hancock Communications, In	54.4	84.8
250B Anderson	WG NR-FM	LIC	C IN	1.2 181.2	201.87 BMLH20030908ADX	40 03 43.0 85 42 34.0	50.000 149	135.5 405	62.8 The Moody Bible Institute	64.2	128.9
253A Ferdinand	WQKZ	LIC	CN IN	265.1 84.5	94.20 BLH19971105KB	38 10 02.0 86 49 49.0	3.600 129	2.5 285	26.8 Jasper On The Air, Inc.	89.8	67.4
249D North Vernon	W297AU	CP	C IN	6.6 186.7	84.24 BPFT20160129AVM	38 59 51.7 85 38 48.2	0.250	14.5 269	10.4 Indiana Community Radio Co	67.7	70.7

Terrain database is FCC NGDC 30 Sec, R= 73.215 qualifying spacings or
FCC minimum spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station.
Reference Zone= East 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 restricted contour.

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station WAMZ, channel 248C1, Louisville, KY. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for W250BD.P*: 104 (250) watts

The proposed COR for W250BD.P**: 13 (100) meters

WAMZ F(50/50) contour at proposed site: 86.1 dBu

The F(50/10) contour of proposed W250BD.P 126.1 dBu

The proposed W250BP facility is to be located on a 30' pole atop the 800 Tower City Apartment building. The top floor of the building is a maintenance/communication room and is not regularly occupied.

By taking into account the antenna vertical elevation and the directional pattern* for the Scala CLFMV 1 bay, it has been determined that based on the height of the antenna, the signal is predicted to not reach the ground or any nearby occupied structure (see Exhibit 13-A1).

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

* WAMZ is at 173 degrees azimuth from the proposed facility. Taking into consideration the directional pattern for W250BD.P, the ERP toward WAMZ is 104 watts (see Exhibit 13-B). Therefore 104 watts ERP was used for the ERP value in the calculations shown in Exhibit 13-A.

** The proposed COR is 13 meters above the top of the closest occupied floor

EXHIBIT 13 - A1
74.1204(d) Showing
W250BD.P
Louisville, KY

ERP (kw): 0.104
Height of Antenna above Ground (m): 13
Translator's IX Contour: 126.1
Antenna Type: Scala CL-V

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.1040	35.4419	13.000
5	0.980	0.0999	34.7330	9.973
10	0.950	0.0939	33.6698	7.153
15	0.895	0.0833	31.7205	4.790
20	0.820	0.0699	29.0623	3.060
25	0.735	0.0562	26.0498	1.991
30	0.645	0.0433	22.8600	1.570
35	0.563	0.0329	19.9361	1.565
40	0.470	0.0230	16.6577	2.293
45	0.360	0.0135	12.7591	3.978
50	0.250	0.0065	8.8605	6.212
55	0.155	0.0025	5.4935	8.500
60	0.085	0.0008	3.0126	10.391
65	0.045	0.0002	1.5949	11.555
70	0.020	0.0000	0.7088	12.334
75	0.010	0.0000	0.3544	12.658
80	0.010	0.0000	0.3544	12.651
85	0.010	0.0000	0.3544	12.647
90	0.010	0.0000	0.3544	12.646

