

# Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

St. Paul, MN

## Channel Study

REFERENCE CH# 225D - 92.9 MHz, Pwr= 0.099 kW, HAAT= 236.4 M, COR= 504 M DISPLAY DATES  
44 58 36.0 N. Average Protected F(50-50)= 15.8 km DATA 09-01-11  
93 16 15.0 W. Omni-directional SEARCH 09-02-11

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
223C Golden Valley	KQRS-FM	LIC	CN MN	51.7 231.8	14.7 BLH19910814KB	45 03 30.0 93 07 27.0	100.000 315	10.4 593	73.9 Radio License Holding	-11.0*	-59.9*
225D St. Paul	W225AP	LIC	C MN	92.2 272.4	17.6 BLFT20070730ABV	44 58 13.0 93 02 51.0	0.170 4	21.5 283	6.4 Educational Media Foundati	-19.8*	-40.8
225C3 St. Joseph	KKJM	LIC	CN MN	310.9 130.1	113.5 BLH19960510KA	45 38 19.0 94 22 23.0	25.000 100	117.3 448	42.2 Gabriel Media	-19.5*	20.0
227D Shoreview	W227BF	APP	V MN	240.6 60.6	0.1 BPFT20110623ADH	44 58 34.0 93 16 20.0	0.099	0.7 504	15.3 Educational Media Foundati	-15.9*	-15.9*
227D Shoreview	W227BF	LIC	C MN	36.6 216.7	12.7 BLFT20061219ACT	45 04 05.0 93 10 29.0	0.010 129	0.2 401	6.6 Educational Media Foundati	-2.8*	5.4
226C1 New Ulm	KATO-FM	LIC	CN MN	217.9 37.3	119.1 BLH19890117KG	44 07 44.0 94 11 15.0	100.000 149	88.4 440	58.7 Minnesota Valley Broadcast	15.0	36.7
225A Rochester	KFSI	LIC	CN MN	151.2 331.7	120.6 BLED19810507AJ	44 01 27.0 92 32 36.0	6.000 97	85.8 443	27.6 Faith Sound, Inc.	18.2	39.1
225A Elk Mound	WECL	LIC	CN WI	93.8 275.0	133.5 BLH19920720KI	44 53 04.0 91 35 04.0	3.300 136	83.5 424	28.4 Maverick Media Of Eau Clai	34.0	53.0
225C1 Duluth	WSCD-FM	LIC	C MN	23.5 204.3	220.4 BMLED19940823KA	46 47 20.0 92 07 04.0	70.000 185	163.6 492	69.2 Minnesota Public Radio	41.4	100.7

Terrain database is 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= West Zone, Co to 3rd  
adjacent.

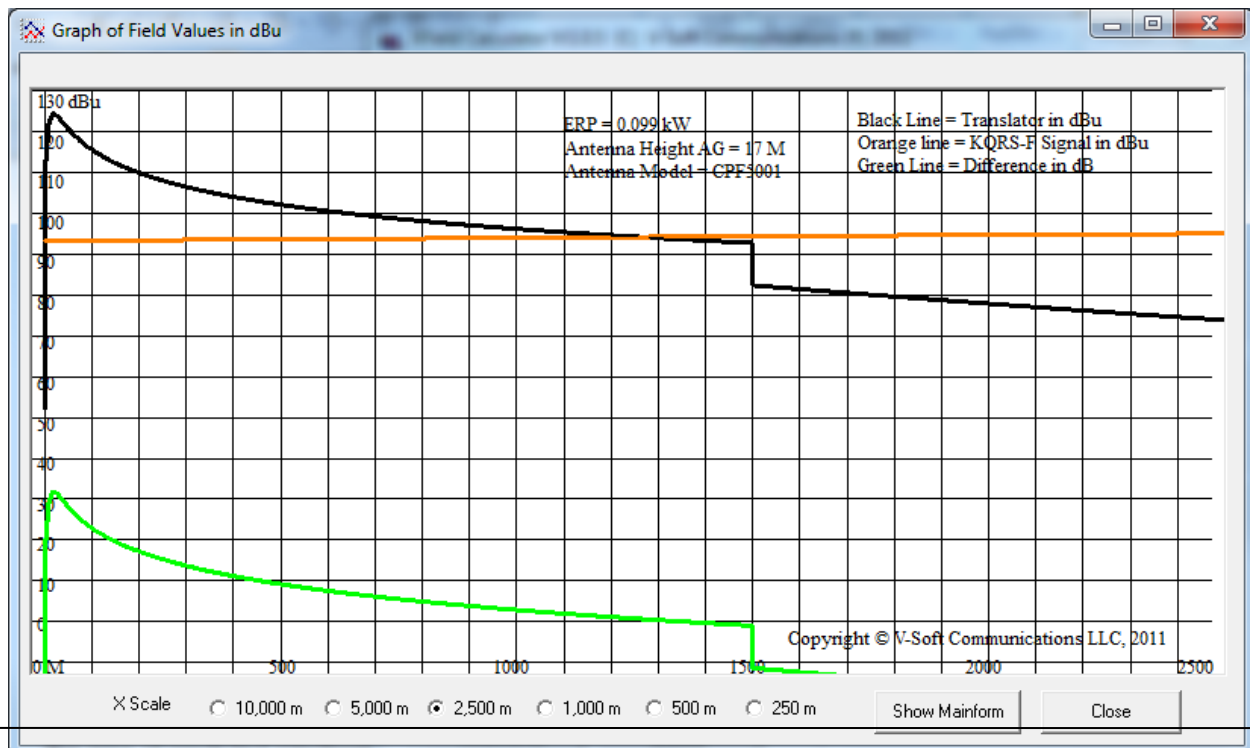
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
\*\*\*affixed to 'IN' or 'OUT' values = site inside protected contour.

**Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KQRS-FM, channel 223C Golden Valley, MN. According to 74.1204(a)(3), in order to protect second adjacent facilities, the difference in dB between the two facilities must not exceed 40dB.

EMF has investigated the proposed W225AP facility using V-Soft Communication's X-Field program. This program calculates the incoming signal of the station to be protected, and then calculates the interfering contour of the proposed facility based on the proposed ERP, antenna height above ground, and the actual characteristics of the antenna being used (e.g. vertical plane, directionality, number of bays). In this case W225AP's proposed facility has an ERP of 99 watts, height AG\* of 17m, and is using an RFS CPF500 1 bay.

As can be seen in the graph below, at no point does the interfering contour of the proposed facility exceed the required 40dB difference (green line on graph). Therefore, the proposed facility does not cause interference at any point.



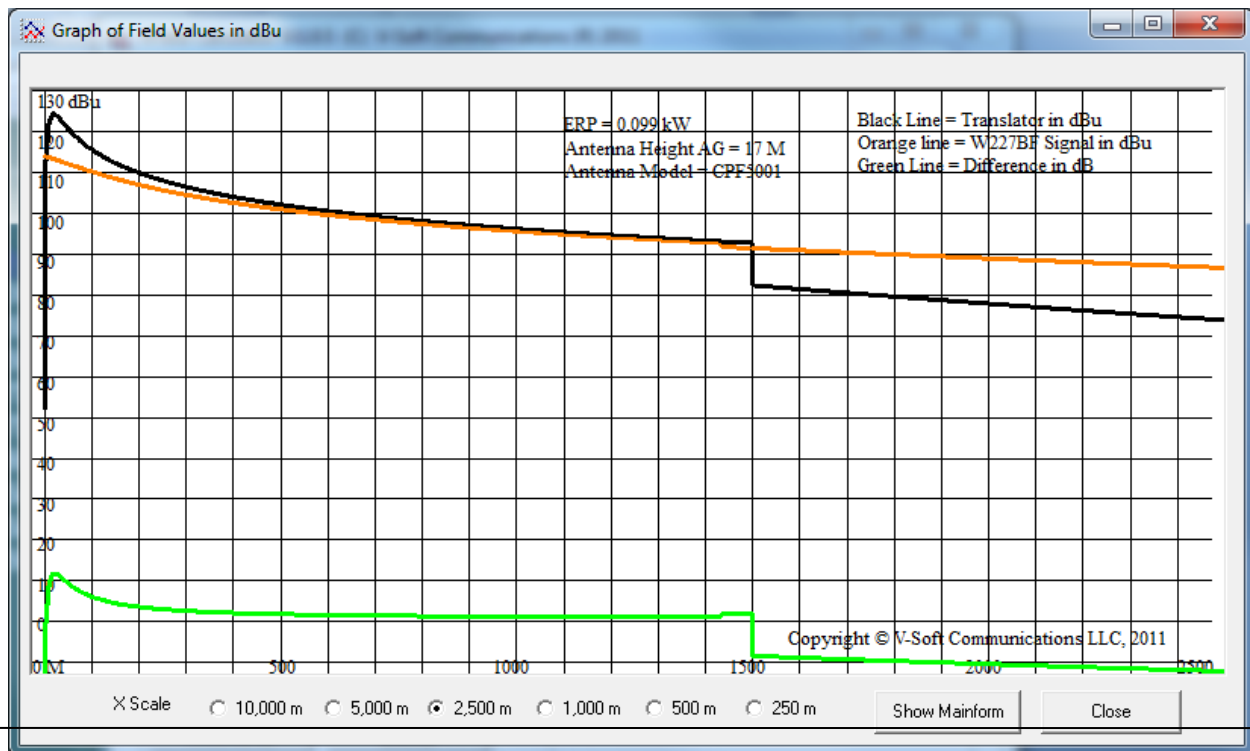
\* NOTE: The architectural specification sheet for this site states that this is a 57 floor building with floors 56 and 57 housing equipment only; each floor is approximately 4.14 meters tall. The roof of the building is topped by a 5 meter parapet. The proposed antenna will be mounted on a 4 meter pole atop the parapet placing the proposed antenna approximately 17 meters above the regularly occupied portion of the building.

**Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station W227BF, channel 227D Shoreview, MN. According to 74.1204(a)(3), in order to protect second adjacent facilities, the difference in dB between the two facilities must not exceed 40dB.

EMF has investigated the proposed W225AP facility using V-Soft Communication's X-Field program. This program calculates the incoming signal of the station to be protected, and then calculates the interfering contour of the proposed facility based on the proposed ERP, antenna height above ground, and the actual characteristics of the antenna being used (e.g. vertical plane, directionality, number of bays). In this case W225AP's proposed facility has an ERP of 99 watts, height AG\* of 17m, and is using an RFS CPF500 1 bay.

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