

PURPOSE OF APPLICATION

Family Radio, Inc.  
LaCrosse, WI

WIZM-FM is presently licensed to operate on FM Channel 227C0 with a nondirectional effective radiated power of 100 kilowatts at 311 meters above average terrain. The attached application proposes to modify the WIZM-FM license to reflect the replacement of the station's presently licensed nondirectional antenna with a new ERI SHPX-10AC ten bay circularly polarized nondirectional antenna. This replacement antenna was mounted with its center of radiation located at the same height as the previously licensed antenna (203 meters (667 feet) above ground level). Because the ground elevation was corrected when this tower was originally registered in 1997, however, the antenna height above sea level is actually 576.9 meters (1893 feet) instead of the previously licensed value of 579 meters (1900 feet).

Since this substitution involves the replacement of an omnidirectional antenna with no change in effective radiated power or antenna height above ground and the antenna height above sea level (and above average terrain) remains within +2/-4 meters of the licensed value, it can be accomplished in the context of a license modification application.

When converted to the NAD 83 datum, the presently licensed WIZM-FM coordinates are:

43° 48' 22.9  
91° 22' 4.5"

This differs by 0.1 seconds of latitude and 1.5 seconds of longitude from the registered coordinates for this tower:

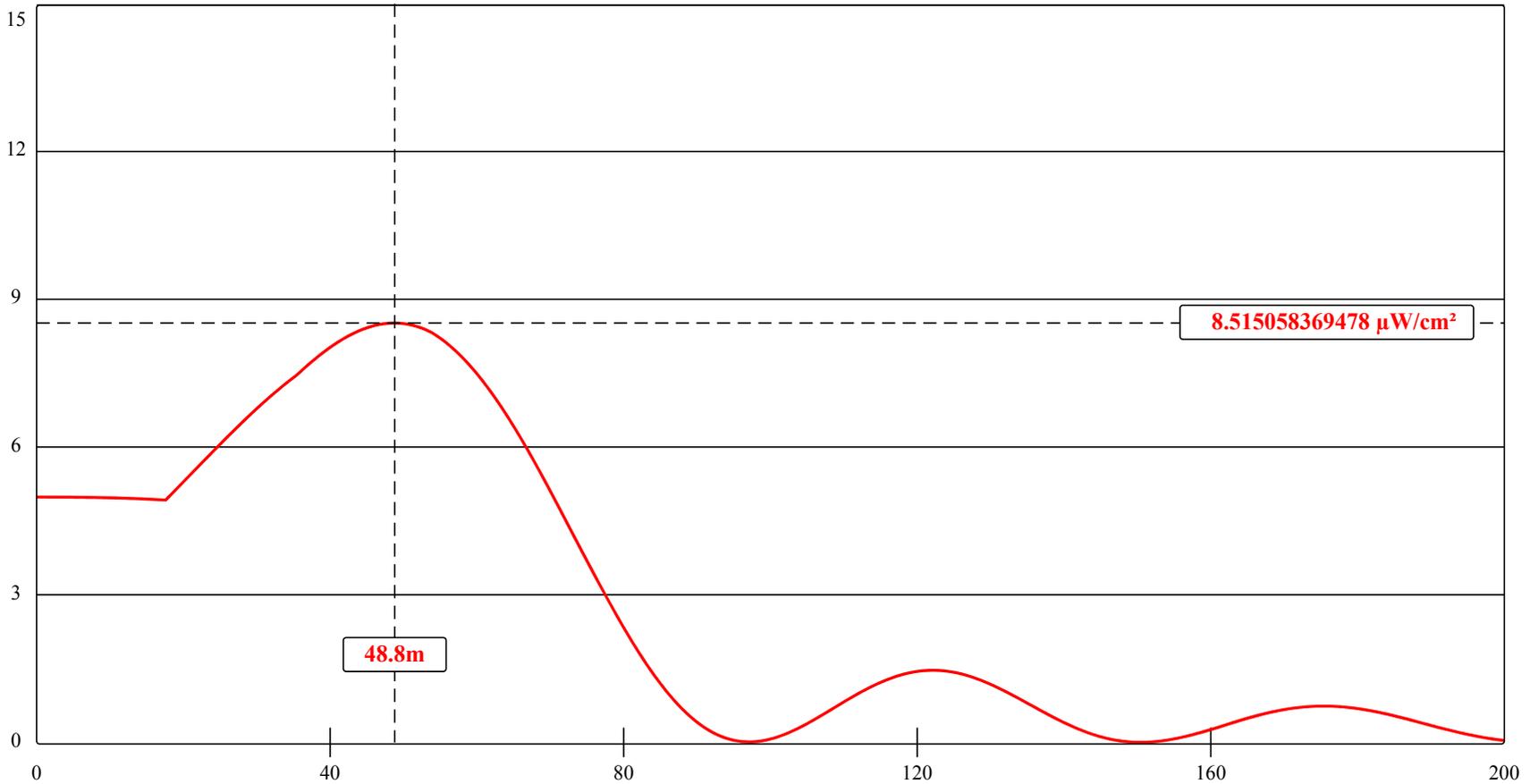
43° 48' 23"  
91° 22' 03"

EXHIBIT 1  
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Because this difference is less than three seconds of both latitude and longitude, this coordinate correction can also be accomplished in the context of a license modification application.

The modified WIZM-FM facilities will continue to fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. The predicted power density levels at two meters above ground level for WIZM-FM were calculated using the FCC's "FM Model" computer program. The results of these calculations are shown in Figure 1.0. As can be seen from an examination of this figure, the maximum predicted power density at two meters above ground level for the modified WIZM-FM facilities is  $8.52 \mu\text{W}/\text{cm}^2$ , which occurs at a horizontal distance of 48.8 meters from the base of the tower. Since the permitted power density for uncontrolled exposure in the FM band is  $200 \mu\text{W}/\text{cm}^2$ , this amounts to only 4.3% of the permitted level. Since this value is less than 5% of the permitted level, the modified WIZM-FM facilities are excluded from environmental processing under this standard and need not be considered in conjunction with other co-located or nearby facilities in evaluating uncontrolled exposure compliance with this standard.

WIZM-FM, in conjunction with any other facilities on this tower, will continue to take appropriate steps to insure that workers that must be on this tower will not be exposed to levels of nonionizing radiation that are in excess of the permitted level for controlled exposure. These steps will include the cessation of operation or a reduction in power by one or more of these stations, as appropriate, when work becomes necessary on this tower in areas where the total power density levels are in excess of the permitted level for controlled exposure.



[View Tabular Results +](#)

Figure 1.0  
WIZM-FM Power Density Calculations

Channel Selection	Channel 227 (93.3 MHz) ▼		
Antenna Type +	EPA Type 3: Opposed U Dipole ▼		
Height (m)	203	Distance (m)	200
ERP-H (W)	100000	ERP-V (W)	100000
Num of Elements	10	Element Spacing ( $\lambda$ )	1
Num of Points	500	Apply	