

The potential for human exposure to non-ionizing radiofrequency radiation at the proposed transmitter site has been evaluated. There are no other known broadcast facilities within 315 meters of the proposed antenna site for the proposed station serving Mankato, MN.

The new facility will operate on 88.7 MHz with a maximum effective radiated power (ERP) of 54 kW in both Horizontal and Vertical. The facility will operate with a six (6) element directional antenna mounted 69.6 meters above ground level (AGL). For purposes of this study, a worst case 6 bay, EPA Type 1 element half-wavelength spaced antenna as defined from FCC program FM Model Version has been assumed

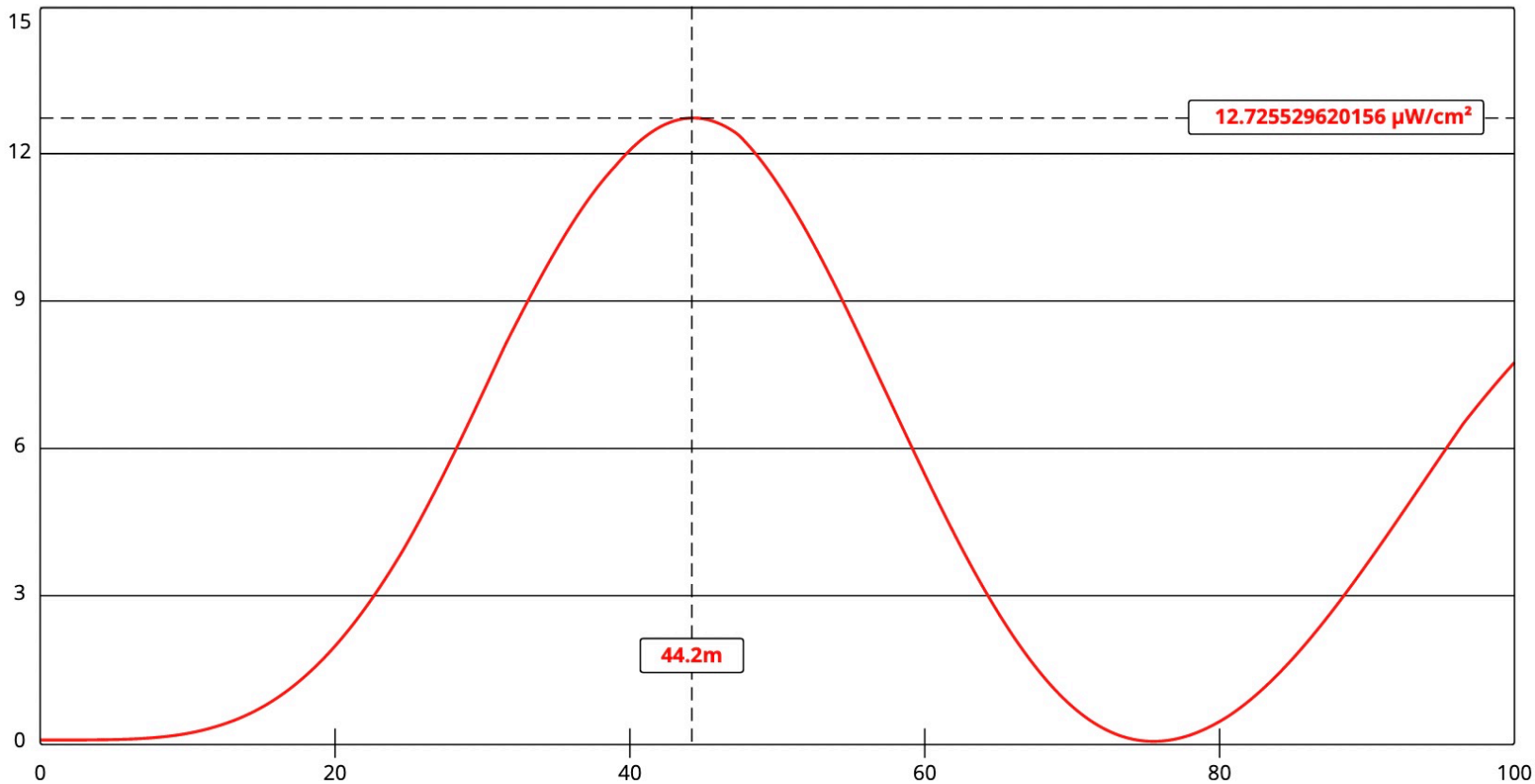
The result of the evaluation with FMModel¹ for this proposed station is included on the last page of this exhibit. It shows that the maximum potential exposure from this proposed station will be $12.72 \frac{\mu W}{cm^2}$ at a distance of approximately 44.2 meters from the tower site. This is less than the $200 \frac{\mu W}{cm^2}$ that is acceptable for exposure to the general public.

In addition to the protection afforded by the proposed antenna heights above ground, the facility is properly marked with signs, and entry to the facility is restricted by means of fencing with locked doors and/or gates. Any other means that may be required to protect employees and the general public will be employed.

In the event work is required in proximity to the antenna(s) such that the person or persons working in the area will be potentially exposed to fields in excess of the current guidelines, applicant will cause their proposed transmitter to reduce power, or cease operation during the critical period.

¹<https://www.fcc.gov/general/fm-model>

View Tabular Results



View Tabular Results +

Channel Selection	Channel 204 (88.7 MHz) ▾		
Antenna Type +	EPA Type 1: Ring-and-Stub or "Other" ▾		
Height (m)	<input type="text" value="69.6"/>	Distance (m)	<input type="text" value="100"/>
ERP-H (W)	<input type="text" value="54000"/>	ERP-V (W)	<input type="text" value="54000"/>
Num of Elements	<input type="text" value="6"/>	Element Spacing (λ)	<input type="text" value=".5"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	