

Compliance with Special Operating Condition #2

The KKRD Construction Permit (file number BPED-20170501AAT) specifies the following special operating condition:

Condition #2:

Permittee has specified use of the antenna listed below to demonstrate compliance with the FCC radiofrequency electromagnetic field exposure guidelines. If any other type or size of antenna is to be used with the facilities authorized herein, THE AUTOMATIC PROGRAM TEST PROVISIONS OF 47 C.F.R. SECTION 73.1620 WILL NOT APPLY. In this case, a FORMAL REQUEST FOR PROGRAM TEST AUTHORITY must be filed in conjunction with FCC Form 302-FM, application for license, BEFORE program tests will be authorized. The request must include a revised RF field showing to demonstrate continued compliance with the FCC guidelines.

Antenna Type: Opposed U Dipole, two sections

Educational Media Foundation constructed the KKRD facility utilizing a Nicom BKG77/2 with a 0.85 wavelength spaced antenna. The as-built facility was evaluated in terms of potential radiofrequency electromagnetic field exposure per FCC OET Bulletin No. 65. The Commission's FM Model Power Density Prediction program was employed to determine the predicted exposure limits.

The Nicom BKG77/2 antenna was evaluated using the EPA Type 2: Opposed V Dipole antenna with 2 sections and 0.85 wavelength spacing, and the AGL height and ERP on the CP application, as well as the antenna height above the facility building roof top. The highest predicted power density at 2 meters above ground is 0.5% of the uncontrolled standard with a power density of 1.02 microwatts per square centimeter 26.6 meters from the center of the facility. The highest predicted power density at 2 meters above the facility roof top is 58% of the uncontrolled standard with a power density of 116.28 microwatts per square centimeter 2.5 meters from the base of the antenna mast/tower.

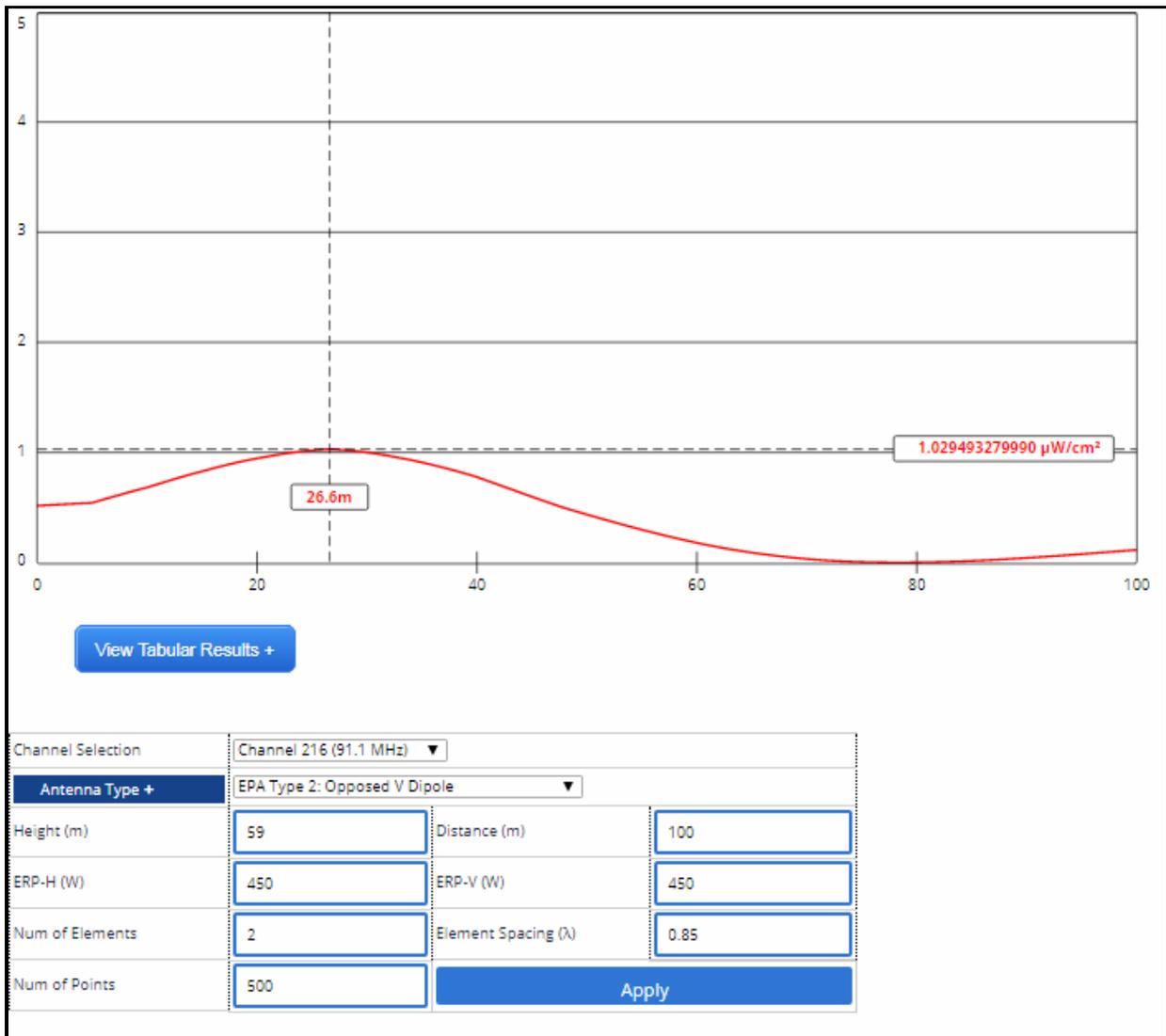
Even though the site will fully comply with the FCC's uncontrolled exposure limits, access to the site will be restricted and appropriately marked with signage. When it becomes necessary for workers to ascend the tower, appropriate measures shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

Lastly, the instant Form 302-FM application constitutes a formal request for Program Test Authority.

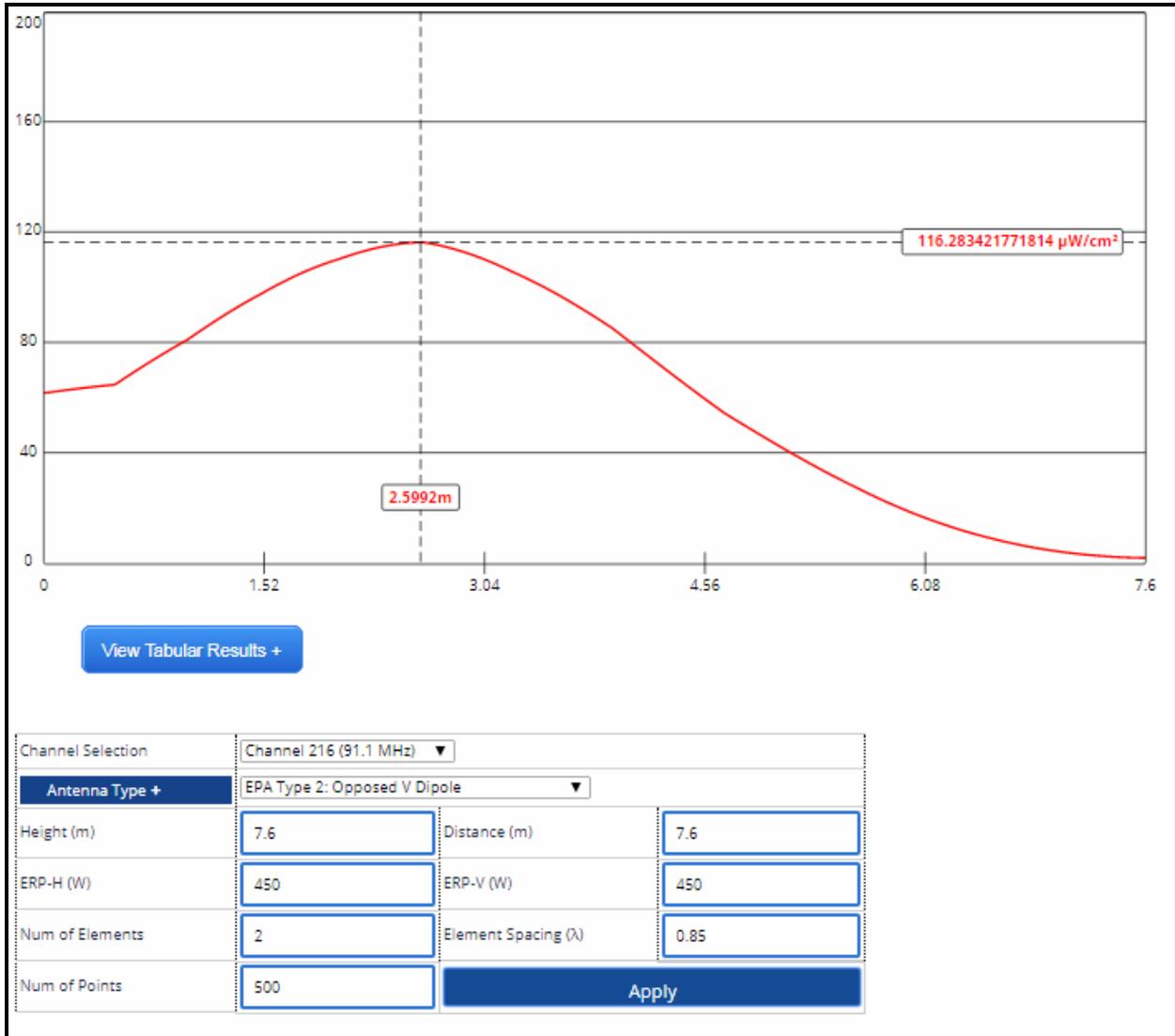
Therefore, KKRD fully complies with Special Operating Condition #2, file number BPED-20170501AAT.

KKRD FM Model RF Exposure Limit Results

Evaluation #1: Predicted Exposure Limit above Ground



Evaluation #2: Predicted Exposure Limit above Facility Roof Top



Channel Selection	Channel 216 (91.1 MHz) ▼		
Antenna Type +	EPA Type 2: Opposed V Dipole ▼		
Height (m)	<input type="text" value="7.6"/>	Distance (m)	<input type="text" value="7.6"/>
ERP-H (W)	<input type="text" value="450"/>	ERP-V (W)	<input type="text" value="450"/>
Num of Elements	<input type="text" value="2"/>	Element Spacing (λ)	<input type="text" value="0.85"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	