

REQUEST FOR SPECIAL TEMPORARY AUTHORITY TO RELOCATE TRANSLATOR STATION K244DT

RF EXPOSURE PROTECTION

The proposed STA operation of K244DT specifies an effective radiated power of 221 watts maximum in the main beam of the antenna system. The antenna radiation center is 20 meters above ground level, and for the purposes of this analysis it is assumed that the full 221 watts is radiated in all directions.

Calculation Results

Average Power at the Antenna	221 watts
Antenna Gain in dBi	0 dBi
Distance to the Area of Interest	65 feet 19.812 meters
Frequency of Operation	96.7 MHz
Are Ground Reflections Calculated?	No
Estimated RF Power Density	0.0045 mW/cm ²

	Controlled Environment	Uncontrolled Environment
Maximum Permissible Exposure (MPE)	1.005 mW/cm ²	0.205 mW/cm ²
Distance to Compliance From Centre of Antenna	4.4009 feet 1.3414 metres	9.7788 feet 2.9806 metres
Does the Area of Interest Appear to be in Compliance?	yes	yes

The MPE limit for public exposure is 0.2 mW per square centimeter, while the proposed K244DT operation will generate no more than .0045 mW per square centimeter in any direction from the antenna at 20 meters. Therefore, the proposed STA operation of K244DT meets the RF exposure requirements outlined in FCC OET Bulletin No. 65.