

FCC MPE Calculation

RF Power = 24.2 dBm

Duty cycle = -4.7 dB

Power to Antenna = 19.5 dBm, 0.089 W

General Population Limit = 10 W/m²

Antenna Gain = 11.0 dBi

Numeric Antenna Gain = 12.6

Minimum Distance

$$R = \sqrt{\frac{GP}{4\pi P_D}} = \sqrt{\frac{12.6 \times 0.089}{4\pi \times 10}} = 0.0945m$$