

RF HAZARD DISTANCE CALCULATION -- FOR NAVCOM TECHNOLOGY
FCC-ID: QRL-SR7100

The limit for MPE is 1 mW/cm² at a distance of 20 centimeters.

With a maximum RF power of 26.3 dBm and a maximum antenna gain of 5.5 dBi, the distance where the power density will be 1 mW/cm² is **11.0 cm** (or 9.0 cm closer than what is required).

This means beyond 11.0 cm, the power density will be less than be 1 mW/cm².

This is based on the formulas given below:

$$E^2/3770 = S, \text{ mW/cm}^2$$

$$P_{\text{watts}} \cdot G_{\text{gain}} = 10^{(P_{\text{dBm}} - 30 + G_{\text{dBi}})/10}$$

$$E, \text{ V/m} = (P_{\text{watts}} \cdot G_{\text{gain}} \cdot 10^3)^{0.5} / d, \text{ meters}$$

$$d = ((P_{\text{watts}} \cdot G_{\text{gain}} \cdot 10^3) / (3770 \cdot S))^{0.5}$$