

MPE Calculations

FCC part 1.1310, Table 1 limits the power density for uncontrolled exposure to $1\text{mW}/\text{cm}^2$ for systems operating in FCC Part 21. The distance, $d(\text{cm})$ from the antenna at which the power density, $P_d (\text{mW}/\text{cm}^2)$ is below this limit is calculated from the maximum EIRP, $P_t(\text{mW})$ using the equation:

$$P_d = P_t / (4 \pi d^2)$$

Re-arranging for the distance at which the power density is $1\text{mW}/\text{cm}^2$ gives:

$$d = \sqrt{(P_t / (4 \pi))}$$

Frequency	Maximum Output Power (dBm)	Max. Antenna Gain (dBi)	EIRP (mW)	Pd at 20cm	Calculated distance (in cm) where Pd < $1\text{mW}/\text{cm}^2$
2500 – 2566 MHz	26.5	4	1120	0.223	9.447

The minimum distance from the antenna that the power density is $1\text{mW}/\text{cm}^2$ and the calculated minimum distance is 9.447 cm.

This information is detailed in the user manual..