

RF Exposure Evaluation

A calculation based on the **FCC's Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (Edition 97-01)** appears below.

The highest antenna gain is used for this calculation.

$$\text{Maximum EIRP} = 9.55\text{dBm} + 5\text{dBi} = 14.55\text{dBm} = 28.5\text{mW}$$

The limit for General Population/Uncontrolled Exposure is

$$S [\text{mW}/\text{cm}^2] = 1.0$$

The distance from the antenna at which this radiation level will be reached is

$$R = \text{SQRT}(\text{EIRP}/4\pi S)$$

$$R = \text{SQRT}(28.5 / (4\pi \times 1.0)) = 1.5\text{cm}$$

RESULTS

The minimum distance from the antenna at which the power density is below the limit for General Population/Uncontrolled Exposure is 1.5cm.