

MPE Calculation

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$$S = (P * G) / (4 * \pi * R^2)$$

Where:

$$P = 15 \text{ mW}$$

$$G = 9.0 \text{ dBi} = 7.94$$

$$R = 20 \text{ cm}$$

$$S = (15 * 7.94) / (4 * 3.14159 * 20^2)$$

$$S = 0.023 \text{ mW/cm}^2 @ 20 \text{ cm}$$

Solving for R with S = 5.00 and 1.00 yields the following separation distances:

	Occupational Control	Uncontrolled
Maximum Permissible Exposure (MPE)	5.00 mW/cm ²	1.00 mW/cm ²
Compliance from Center of Antenna	3.1 cm	1.4 cm
In Compliance	Yes	Yes