Maximum Permissible Exposure Evaluation

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Power Density at Specific Separation:

$$S = PG/(4R^2\pi)$$

Where S = Maximum power density (mW/cm^2)

      P = Power input to the antenna (mW)

      G = Numeric power gain of the antenna

      R = Distance to the center of the antenna = 20 cm

Measured maximum output power (P) is 16.26dBm = 42.27mW

The Numeric power gain of the antenna (G) is 0dB = 1

$$S = (42.27 * 1) / (4 * 20^2 * \pi)$$
$$S = 0.008 \ (mW/cm^2)$$

The maximum permissible exposure (MPE) for the general population is 1 mW/cm^2. The power density at 20 cm distance to the center of the antenna does not exceed the 1 mW/cm^2. Therefore, the exposure condition is compliant with FCC rules.