

**MAXIMUM PERMISSIBLE EXPOSURE FOR SUBPART C 2.4 GHz BAND**

**Calculations**

Power density at the specific separation:

$$\begin{aligned} S &= \text{EIRP} / (4R^2\pi) \\ S &= (1.2618) / (4 * 1^2 * \pi) \\ S &= 0.100411 \text{ mW/cm}^2 \text{ (at 1 cm)} \\ \text{Limit} &= 1 \text{ mW/cm}^2 \end{aligned}$$

where

$S$  = Maximum power density (mW/cm<sup>2</sup>)  
EIRP = Effective Isotropic Radiated Power (mW) – 1.01 dBm  
R = distance to the center of the radiation of the antenna (1 cm = limit for MPE)

The maximum permissible exposure (MPE) for the general population is 1 mW/cm<sup>2</sup>.

The power density at 1 cm does not exceed the 1.0 mW/cm<sup>2</sup> limit. Therefore, the exposure condition is compliant with FCC rules.

The EIRP was based on a worst case PEAK value of 96.24 dBuV/m at 3 meters for the EUT.

96.24 dBuV/m @ 3 meters = 1.01 dBm EIRP.