

4 RF Exposure Information

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 1 mW/cm² at a distance, d, of 20 cm from the EUT.

Therefore, for:

Peak Power (Watts) = 21.0 dBm (0.1259 Watts) (from Table 3, herein)
Gain of Transmit Antenna = 5.0 dBi = 3.16, numeric (from Paragraph 2.5, herein)
d = Distance = 20 cm = 0.2 m

$$\begin{aligned} \mathbf{S} &= (PG / 4\pi d^2) = \text{EIRP} / 4A = 0.1259 (3.16) / 4 * \pi * 0.2 * 0.2 \\ &= 0.3978 / 0.502 = 0.7925 \text{ W/m}^2 \\ &= 0.07925 \text{ mW/cm}^2 \end{aligned}$$

Which is << less than 1 mW/cm²