

### **Maximum Public Exposure to RF (MPE) CFR 15.247 (i)**

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 1 mW/cm<sup>2</sup> at a distance, d, of 23 cm from the EUT.

Therefore, for:

#### **Highest Gain Dipole Antenna= 5 dBi**

Peak Power (Watts) = 0.912 (from Table 9 of Test Report)

Gain of Transmit Antenna = 5 dBi = 3.162, numeric (from Table 3 of Test Report)

d = Distance = 23 cm = 0.23 m

$$\begin{aligned} S &= (PG / 4\pi d^2) = EIRP / 4A = 0.912 (3.162) / 4 * \pi * 0.23 * 0.23 \\ &= 2.884 / 0.665 = 4.337 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.4337 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 0.61 mW/cm<sup>2</sup>

#### **Highest Gain Yagi Antenna= 6 dBi**

Peak Power (Watts) = 0.912 (from Table 9 of Test Report)

Gain of Transmit Antenna = 6 dBi = 3.981, numeric (from Table 3 of Test Report)

d = Distance = 23 cm = 0.23 m

$$\begin{aligned} S &= (PG / 4\pi d^2) = EIRP / 4A = 0.912 (3.981) / 4 * \pi * 0.23 * 0.23 \\ &= 3.6307 / 0.665 = 5.4597 \text{ w/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.5460 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 0.61 mW/cm<sup>2</sup>