

Maximum Public Exposure to RF (MPE)

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 0.98 mW/cm² at a distance, d, of 20 cm from the EUT.

EUT Antenna= 1 dBi

Peak Power (Watts) = 0.000002m (from Table 5 of Test Report)

Gain of Transmit Antenna = 0 dBi = 1.0, numeric (from Table 3 of Test Report)

d = Distance = 20 cm = 0.20 m

$$\begin{aligned} S &= (PG/ 4\pi d^2) = \text{EIRP}/4A = 0.000002m (1.0)/4*\pi*0.20*0.20 \\ &= 0.000002m/0.502 = 3.98\text{nW}/\text{m}^2 \\ &= (\text{W}/\text{m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW}/\text{cm}^2) \\ &= 0.0398\text{nW}/\text{cm}^2 \end{aligned}$$

which is << less than 0.98 mW/cm²