

## 2.16 Maximum Public Exposure to RF (MPE)

The maximum exposure level to the public from the RF power of the RUT shall not exceed a power density, S, of  $1 \text{ mW/cm}^2$  at a distance, d, of 20 cm from the EUT.

Therefore, for :

Peak Power (Watts) = 0.186 (from paragraph 2.6, herein)  
Gain of Transmit Antenna =  $5\text{dB}_i = 3.16$  numeric (Paragraph 2.5, herein)  
Distance = 20 cm

$$S = (PG / 4\pi d^2) = \text{EIRP}/4A$$

Where: A = The area of the circle of radius d = 20cm.

$$= 0.186 \times 3.16 / 4 \times 3.14 \times (20)^2 = 0.59/5026 = 0.117 \text{ mW/cm}^2$$

which is well below the limit.