

3.5 RF Exposure Compliance

The maximum measured power, P is 0dBm

The antenna gain, G is 2.0dBi

The maximum EIRP power = P + G

ERP = 0+ 2.0 = 2.0dBm, or 1.58mW or 0.00158W

The limits for Maximum Permissible Exposure (MPE) for transmitter operating at 2.4Hz, MPE is 1mW/cm², or 10W/m²

The Power Density, S is related to EIRP with the equation:

$S = EIRP / 4\pi D^2$, where D is the safe separation distance and = 0.2m, or 20cm

$S = 1.58 / 4\pi 20^2$,

$S = 0.000315\text{mW/cm}^2$, or below the Maximum Permissible Exposure (MPE)