



3.6 RF Exposure Compliance

The maximum measured power, P is 5.53dBm

The antenna gain, G is 2.0dBi

The maximum EIRP power = P + G

EIRP = 5.53+ 2.0 = 7.53dBm, or 5.66mW or 0.00566W

The limits for Maximum Permissible Exposure (MPE) for transmitter operating at 2.4Hz, MPE is $1\text{mW}/\text{cm}^2$, or $10\text{W}/\text{m}^2$

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

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

$S = 5.66 / 4\pi 20^2$,

$S = 0.001126\text{mW}/\text{cm}^2$, or below the Maximum Permissible Exposure (MPE)