



3.5 RF Exposure Compliance

The maximum measured power, P is -2.8dBm

The antenna gain, G is 1.3dBi

The maximum EIRP power = P + G

ERP = -2.8 + 1.3 = -1.5dBm, or 0.708mW or 0.00071W

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

$S = 0.708 / 4\pi 20^2$,

$S = 0.00014\text{mW}/\text{cm}^2$, or below the Maximum Permissible Exposure (MPE)