3.8   RF Exposure Compliance

The maximum measured antenna conducted power, P is 27.5dBm

The antenna gain, G is -8.8dBi

The maximum EIRP power is 27.5 – 8.8 = 18.7dBm, or 0.074W

The limits for Maximum Permissible Exposure (MPE) for transmitter operating at 902-928MHz, MPE is 928/300 = 3.093mW/cm^2, or 31W/m^2

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 = 0.074 / $4\pi 0.2^2$

S = 0.147mW/cm^{2,}, or below the Maximum Permissible Exposure (MPE)