

3.8 RF Exposure Compliance

MPE Requirement:

$$S = f / 1500 \text{ mW/cm}^2$$

f = operating frequency

$$S = 824 / 1500 = 0.55 \text{ mW/cm}^2$$

Calculation:

Antenna Gain = 0.7di

The maximum ERP power = 1.45W

D = distance of 20cm

$$S_{\text{(mW)}} = \text{ERP}_{\text{(mW)}} / 4\pi D^2, \text{ or } S_{\text{(mW)}} = 1450 / 4\pi 400 = 0.288 \text{ mW/cm}^2, < 0.55 \text{ mW/cm}^2$$