

### Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak eirp: 4.70 (dBm)

Maximum peak eirp: 2.951209227 (mW)

Time Averaging: 100 (%)

Prediction distance: 20 (cm)

Prediction frequency: 2450 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm<sup>2</sup>)

Power density at prediction frequency: 0.000587 (mW/cm<sup>2</sup>)

Margin of compliance: -32.3 (dB)

This equates to 0.005871244 W/m<sup>2</sup>