

## 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 isotropic

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: 14.66 (dBm)

Maximum peak output power at antenna input terminal: 29.24 (mW)

Antenna gain(typical): 3.3 (dBi)

Maximum antenna gain: 2.138 (numeric)

Prediction distance: 20 (cm)

Source Based Time Average Duty Cycle: 100 (%)

Prediction frequency: 2442.2 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1.000 (mW/cm<sup>2</sup>)

Power density at prediction frequency: 0.0124 (mW/cm<sup>2</sup>)

Power density at prediction frequency: 0.124 (W/m<sup>2</sup>)

Margin of Compliance: -19.05 (dB)