

### 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 output power at antenna input terminal: 29.77 (dBm)

Maximum peak output power at antenna input terminal: 948.4184633 (mW)

Antenna gain(typical): 1.5 (dBi)

Maximum antenna gain: 1.412537545 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 2400-2483.5M (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1.0 (mW/cm<sup>2</sup>)

Power density at prediction frequency: **0.266520** (mW/cm<sup>2</sup>)

Maximum allowable antenna gain: **7.242698554** (dBi)

Margin of Compliance: **5.742698554** (dB)