

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: **22.32** (dBm)

Maximum peak output power at antenna input terminal: **171** (mW)

Antenna gain(typical): **2.5** (dBi)

Maximum antenna gain: **1.78** (numeric)

Prediction distance: **20** (cm)

Source Based Time Average Duty Cycle: **100** (%)

Prediction frequency: **2400** (MHz)

MPE limit for uncontrolled exposure at prediction frequency: **1.0** (mW/cm²)

Power density at prediction frequency: **0.0604** (mW/cm²)

Power density at prediction frequency: **0.604** (W/m²)

Margin of Compliance: **12.2** (dB)