



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: 22.50 (dBm)

Maximum peak output power at antenna input terminal: 177.827941 (mW)

Antenna gain(typical): 2 (dBi)

Maximum antenna gain: 1.584893192 (numeric)

Time Averaging: 100 (%)

Prediction distance: 20 (cm)

Prediction frequency: 2445 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at prediction frequency: **0.056070** (mW/cm²)

Margin of compliance: **-12.5** (dB)

This equates to **0.560699469 W/m²**