

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: **25.28** (dBm)

Maximum peak output power at antenna input terminal: **337.3** (mW)

Antenna gain(typical): **7.77** (dBi)

Maximum antenna gain: **5.984** (numeric)

Prediction distance: **20** (cm)

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

Prediction frequency: **2437** (MHz)

MPE limit for uncontrolled exposure at prediction frequency: **1.000** (mW/cm^2)

Power density at prediction frequency: **0.40154** (mW/cm^2)

Power density at prediction frequency: **4.0154** (W/m^2)

Margin of Compliance: **3.96** (dB)

Sum power density of 2.4 GHz and 5.8 GHz : $0.40154 + 0.26530 = 0.66684 < 1 \text{ mW/cm}^2$