

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: 10.80 (dBm)

Maximum peak output power at antenna input terminal: 12 (mW)

Isotropic antenna gain(typical): 5.5 (dBi)

Isotropic antenna gain(numeric): 3.548 (numeric)

Prediction distance: 20 (cm)

Source Based Time Average Duty Cycle: 100 (%)

Prediction frequency: 902 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.601 (mW/cm²)

Power density at prediction frequency: 0.0085 (mW/cm²)

Power density at prediction frequency: 0.0849 W/m²

Margin of Compliance: 18.5 dB