

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: 18.40 (dBm)

Maximum peak output power at antenna input terminal: 69.18309709 (mW)

Antenna gain(maximum): 5.3 (dBi)

Maximum antenna gain: 3.388441561 (numeric)

Time Averaging: 100 (%)
Prediction distance: 20 (cm)

Prediction frequency: 2450 (MHz)

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

Power density at prediction frequency: 0.046637 (mW/cm^2)

This equates to: 0.466369505 W/m^2