

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: 21.00 (dBm) * (36dBm-15dB loss)

Maximum peak output power at antenna input terminal: 125.8925412 (mW)

Antenna gain(typical): ______17.1 (dBi) *(15dB +2.1=17.1dBi)

Maximum antenna gain: 51.2861384 (numeric)
Prediction distance: 35 (cm)

Prediction frequency: 915.75 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.6105 (mW/cm^2)

Power density at prediction frequency: 0.419425 (mW/cm^2)

Maximum allowable antenna gain: 18.73031621 (dBi)

Margin of Compliance: 1.63031621

Note: