

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: 27,00 (dBm)

Maximum peak output power at antenna input terminal: 501,1872336 (mW)

Antenna gain(typical): 3 (dBi)

Maximum antenna gain: 1,995262315 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 903 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0,6 (mW/cm²)

Power density at prediction frequency: 0,198944 (mW/cm²)

Maximum allowable antenna gain: 7,794211057 (dBi)

Margin of Compliance: 4,794211057