

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 device output terminal: 22.89 (dBm)

Cable and Jumper loss 0.0 (dB)

Maximum peak output power at antenna input terminal: 22.89 (dBm)

Maximum peak output power at antenna input terminal: 194.5360082 (mW)

Antenna gain(typical): 12 (dBi)

Maximum antenna gain: 15.84893192 (numeric)

Prediction distance: 25 (cm)

Prediction frequency: 5785 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm^2)

Power density at prediction frequency: 0.392564 (mW/cm^2)
3.925637 (W/m^2)

Tx On time: 1.000000

Tx period time: 1.000000

Average Factor: 100.000000

Average Power density at prediction frequency: 3.925637 (W/m^2)

Maximum allowable antenna gain: 16.06089881 (dBi)

Margin of Compliance: 4.060898814 dB

