

### 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: 40.43 (dBm)

Cable and Jumper loss 0.0 (dB)

Maximum peak output power at antenna input terminal: 40.43 (dBm)

Maximum peak output power at antenna input terminal: 11040.7862 (mW)

Single Antenna gain(typical): -1.28 (dBi)

Number of Antennae 1

Total Antenna gain(typical): -1.28 (dBi)

Maximum antenna gain: 0.744731974 (numeric)

Prediction distance: 100 (cm)

Prediction frequency: 815 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.543333333 (mW/cm^2)

Power density at prediction frequency: 0.065432 (mW/cm^2)

0.654320 (W/m^2)

Maximum allowable antenna gain: 7.912762137 (dBi)

Margin of Compliance: 9.192762137 dB

