

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: 20.99 (dBm)
Cable and Jumper loss 0.0 (dB)

Maximum peak output power at antenna input terminal: 20.99 (dBm)

Maximum peak output power at antenna input terminal: 125.6029964 (mW)

Single Antenna gain(typical): 15 (dBi)
Number of Antennae 1

Total Antenna gain(typical): 15 (dBi)
Maximum antenna gain: 31.6227766 (numeric)

Prediction distance: 20 (cm)
Prediction frequency: 2437 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at prediction frequency: 0.790187 (mW/cm²)
7.901875 (W/m²)

Tx On time: 100.000000

Tx period time: 100.000000

Average Factor: 100.000000

Average Power density at prediction frequency: 7.901875 (W/m²)

Maximum allowable antenna gain: 16.02269855 (dBi)

Margin of Compliance: 1.022698554 dB