

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:

Cable and Jumper loss: 0.0 dB

19.15 dBm Maximum peak output power at antenna input terminal:

82.22426499 mW

Single Antenna gain (typical): 1.5 dBi

Number of Antennae:

1.5 dBi Total Antenna gain (typical):

1.412537545 (numeric) Prediction distance: 20 cm

Prediction frequency: 2405 MHz

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

> Power density at prediction frequency: 0.023106 mW/cm²

> > 0.231063 W/m²

Tx On time: 1.000000 ms Tx period time: 1.000000 ms

Average Factor: 100.000000 %

0.231063 W/m² Average Power density at prediction frequency:

17.86269855 dBi Maximum allowable antenna gain:

Margin of Compliance: 16.36269855 dB