

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: ______dBm

Cable and Jumper loss: 0.0 dB

Maximum peak output power at antenna input terminal: -12.25 dBm

0.059566214 mW

Single Antenna gain (typical): 0 dBi

Number of Antennae: 1
Total Antenna gain (typical): 0 dBi

Prediction distance: 20 cm
Prediction frequency: 433.91 MHz

MPE limit for uncontrolled exposure at prediction frequency: 0.289273333 mW/cm²

Power density at prediction frequency: 0.000012 mW/cm²

0.000119 W/m²

Tx On time: 11.750000 ms
Tx period time: 100.000000 ms

Average Factor: 11.750000 %

Average Power density at prediction frequency: 0.000014 W/m²

Maximum allowable antenna gain: 43.87578255 dBi

Margin of Compliance: 43.87578255 dB