

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: 29.92 dBm

Cable and Jumper loss: 0.0 dB

Maximum peak output power at antenna input terminal: 29.92 dBm

981.747943 mW

Single Antenna gain (typical): 2.5 dBi

Number of Antennae: 1
Total Antenna gain (typical): 2.5 dBi

1.77827941 (numeric)

Prediction distance: 20 cm
Prediction frequency: 902 MHz

MPE limit for uncontrolled exposure at prediction frequency: 0.601333333 mW/cm²

Power density at prediction frequency: 0.347320 mW/cm²

3.473203 W/m²

Tx On time: 1.000000 ms

Tx period time: 1.000000 ms Average Factor: 100.000000 %

Average Power density at prediction frequency: 3.473203 W/m²

Maximum allowable antenna gain: 4.883851338 dBi

Margin of Compliance: 2.383851338 dB