

## 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: 12.96 dBm

19.7696964 mW

Single Antenna gain (typical): 34 dBi

Number of Antennae: 1

Total Antenna gain (typical): 34 dBi

2511.886432 (numeric)

Prediction distance: 65 cm

Prediction frequency: 58775 MHz

MPE limit for uncontrolled exposure at prediction frequency: \_\_\_\_\_\_\_1 mW/cm<sup>2</sup>

Power density at prediction frequency: 0.935327 mW/cm<sup>2</sup>

9.353269 W/m<sup>2</sup>

Tx On time: 1.000000 ms

Tx period time: 1.000000 ms Average Factor: 100.00000 %

Average Power density at prediction frequency: 9.353269 W/m<sup>2</sup>

Maximum allowable antenna gain: 34.29036577 dBi

Margin of Compliance: 0.290365773 dB