

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: 24.09 dBm

Cable and Jumper loss: 0.3 dB

Maximum peak output power at antenna input terminal: 23.79 dBm

239.3315756 mW

Single Antenna gain (typical): 12.8 dBi

Number of Antennae: 1

Total Antenna gain (typical): 12.8 dBi

19.05460718 (numeric)

Prediction distance: 30 cm

Prediction frequency: 662 MHz

MPE limit for uncontrolled exposure at prediction frequency: 0.441333333 mW/cm²

Power density at prediction frequency: 0.403225 mW/cm²

4.032252 W/m²

Tx On time: 1.000000 ms

Tx period time: 1.000000 ms

Average Factor: 100.000000 %

Average Power density at prediction frequency: 4.032252 W/m²

Maximum allowable antenna gain: 13.19219104 dBi

Margin of Compliance: 0.392191038 dB