

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: | 12.46 dBm |
| Cable and Jumper loss: | 0.0 dB |
| Maximum peak output power at antenna input terminal: | 12.46 dBm |
| | 17.61976046 mW |
| Single Antenna gain (typical): | 3 dBi |
| Number of Antennae: | 1 |
| Total Antenna gain (typical): | 3 dBi |
| | 1.995262315 (numeric) |
| Prediction distance: | 20 cm |
| Prediction frequency: | 5240 MHz |
| MPE limit for uncontrolled exposure at prediction frequency: | 1 mW/cm ² |
| Power density at prediction frequency: | 0.006994 mW/cm² |
| | 0.069941 W/m ² |
| Tx On time: | 1.000000 ms |
| Tx period time: | 1.000000 ms |
| Average Factor: | 100.000000 % |
| Average Power density at prediction frequency: | 0.069941 W/m ² |
| Maximum allowable antenna gain: | 24.55269855 dBi |
| Margin of Compliance: | 21.55269855 dB |