

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 isotropic

R = distance to the center of radiation of the antenna

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|--------------------------------------------------------------|---------|-----------|
| Maximum peak output power at antenna input terminal: | 31.45 | (dBm) |
| Maximum peak output power at antenna input terminal: | 1396.4 | (mW) |
| Antenna gain(typical): | 2.15 | (dBi) |
| Maximum antenna gain: | 1.641 | (numeric) |
| Prediction distance: | 20 | (cm) |
| Source Based Time Average Duty Cycle: | 100 | (%) |
| Prediction frequency: | 836.6 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 0.558 | (mW/cm^2) |
| Power density at prediction frequency: | 0.45575 | (mW/cm^2) |
| Power density at prediction frequency: | 4.5575 | (W/m^2) |
| Margin of Compliance: | 0.88 | (dB) |