

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: | 15.48 | (dBm) |
| Maximum peak output power at antenna input terminal: | 35.3 | (mW) |
| Antenna gain(typical): | 5 | (dBi) |
| Maximum antenna gain: | 3.162 | (numeric) |
| Prediction distance: | 20 | (cm) |
| Source Based Time Average Duty Cycle: | 100 | (%) |
| Prediction frequency: | 2437 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 1.000 | (mW/cm ²) |
| Power density at prediction frequency: | 0.02222 | (mW/cm ²) |
| Power density at prediction frequency: | 0.2222 | (W/m ²) |
| Margin of Compliance: | 16.53 | (dB) |