



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

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|--|--------------------|------------------------|
| Maximum peak output power at antenna input terminal: | <u>31.11</u> | (dBm) |
| Maximum peak output power at antenna input terminal: | <u>1291</u> | (mW) |
| Antenna gain(maximum): | <u>7.89</u> | (dBi) |
| EIRP | <u>7.94</u> | W |
| ERP | <u>4.85</u> | W |
| Maximum antenna gain: | <u>6.15</u> | (numeric) |
| Time Averaging: | <u>100</u> | (%) |
| Prediction distance: | <u>50</u> | (cm) |
| Prediction frequency: | <u>769</u> | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | <u>0.513</u> | (mW/cm ²) |
| Power density at prediction frequency: | 0.253 | (mW/cm ²) |
| Margin of compliance: | -3.1 | (dB) |
| This equates to: | 2.53 | W/m² |