## 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 ERP: | 1780.00 | (mw) |
| Maximum peak output power EIRP = ERP *1.64: | 2919.2 | (mW) |
| GSM Duty cycle: 1:8.3 | 0.120481928 | |
| Antenna gain(typical): | 0 | (dBi) |
| Maximum antenna gain: | 1 | (numeric) |
| Prediction distance: | 20 | (cm) |
| Prediction frequency: | 824.2 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 0.549466667 | (mW/cm^2) |
| Power density at prediction frequency: | 0.069971 | (mW/cm^2) |
| | 0.699706 | (W/m^2) |
| Maximum allowable antenna gain: | -0.240526439 | (dBi) |
| Margin of Compliance: | 8.950254485 | dB |

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| | | |
|---|---|---|
| Maximum peak output power **EIRP**: | 472 | (mW) |
| Antenna gain(typical): | 0 | (dBi) |
| Maximum antenna gain: | 1 | (numeric) |
| Prediction distance: | 20 | (cm) |
| Prediction frequency: | 1900 | (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 1 | (mW/cm^2) |
| Power density at prediction frequency: | 0.093901 | (mW/cm^2) |
| | 0.939014 | (W/m^2) |
| Maximum allowable antenna gain: | 10.27327857 | (dBi) |
| Margin of Compliance: | 10.27327857 | dB |