

## Global EMC

### 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 antenna input terminal:         | 5.00        | (dBm)     |
| Maximum peak output power at antenna input terminal:         | 3.16227766  | (mW)      |
| Antenna gain(typical):                                       | 0           | (dBi)     |
| Maximum antenna gain:  | 1           | (numeric) |
| Time Averaging:  | 100         | (%)       |
| Prediction distance:   | 1           | (cm)      |
| Prediction frequency:  | 2480        | (MHz)     |
| MPE limit for uncontrolled exposure at prediction frequency: | 1           | (mW/cm^2) |
| Power density at prediction frequency:                       | 0.251646    | (mW/cm^2) |
| Margin of compliance:  | -6.0        | (dB)      |
| This equates to  | 2.516460605 | W/m^2     |
| For information This equates to                              | 30.8010657  | V/m       |
|  |             | PASS      |

Note: This device does not exceed the  $60 / f$  (GHz) in mW limit as per FCC KDB 447498 2(a)(i), so it is allowable to be used in portable exposure conditions with no restrictions on host platforms

ator