

## 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 device output terminal:         | 49.16 dBm                         |
| Cable and Jumper loss:                                       | 0.0 dB                            |
| Maximum peak output power at antenna input terminal:         | 49.16 dBm                         |
|                                                              | 82413.8115 mW                     |
| Single Antenna gain (typical):                               | 0 dBi                             |
| Number of Antennae:                                          | 1                                 |
| Total Antenna gain (typical):                                | 0 dBi                             |
|                                                              | 1 (numeric)                       |
| Prediction distance:                                         | 40 cm                             |
| Prediction frequency:                                        | 34700 MHz                         |
| MPE limit for Occupational exposure at prediction frequency: | 5 mW/cm <sup>2</sup>              |
| <b>Power density at prediction frequency:</b>                | <b>4.098927 mW/cm<sup>2</sup></b> |
| <b>Margin of Compliance:</b>                                 | <b>0.86299851 dB</b>              |

.PPROVAL

