



### 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 radiator  
R = distance to the center of radiation of the antenna

|                                                 |                                                                  |                         |
|-------------------------------------------------|------------------------------------------------------------------|-------------------------|
| PWR in dBm                                      | Maximum peak E.I.R.P. :                                          | -13.1 dBm               |
|                                                 | Maximum peak output power at antenna input terminal:             | 0.0 mW                  |
| Ant. gain in dBi                                | Antenna gain(maximum):                                           | 3.3 dBi                 |
|                                                 | Maximum antenna gain:                                            | 2.1 numeric             |
| Use the duty cycle from test report or 100%     | Time Averaging:                                                  | 100 %                   |
| Separation distance from antenna to user in cm. | Prediction distance:                                             | 20 cm                   |
| Freq. in MHz                                    | Prediction frequency:                                            | 6494 MHz                |
|                                                 | FCC MPE limit for uncontrolled exposure at prediction frequency: | 1.00 mW/cm <sup>2</sup> |
|                                                 | IC MPE limit for uncontrolled exposure at prediction frequency:  | 10.00 W/m <sup>2</sup>  |
|                                                 | Power density at prediction frequency:                           | 0.00 mW/cm <sup>2</sup> |
|                                                 | This equates to:                                                 | 0.00 W/m <sup>2</sup>   |