



### 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 eirp:	<u>17.10</u>	(dBm)
Maximum peak eirp:	<u>51.2861384</u>	(mW)
Antenna gain(maximum):	<u>2</u>	(dBi)
Maximum antenna gain:	<u>1.584893192</u>	(numeric)
Time Averaging:	<u>7.33</u>	(%)
Prediction distance:	<u>5</u>	(cm)
Prediction frequency:	<u>2450</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1.000</u>	(mW/cm <sup>2</sup> )
Power density at prediction frequency:	<b>0.018965</b>	(mW/cm <sup>2</sup> )
Margin of compliance:	<b>-17.2</b>	(dB)
This equates to:	<b>0.189650548</b>	<b>W/m<sup>2</sup></b>