

## 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 relative to an isotropic  
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	<b>14.80</b>	(dBm)
Maximum peak output power at antenna input terminal:	<b>30</b>	(mW)
Antenna gain(typical):	<b>7</b>	(dBi)
Maximum antenna gain:	<b>5.012</b>	(numeric)
Prediction distance:	<b>20</b>	(cm)
Source Based Time Average Duty Cycle:	<b>100</b>	(%)
Prediction frequency:	<b>903</b>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<b>0.602</b>	(mW/cm <sup>2</sup> )
Power density at prediction frequency:	<b>0.0301</b>	(mW/cm <sup>2</sup> )
	<b>0.3011</b>	(W/m <sup>2</sup> )
Margin of Compliance:	13.0	