

## 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:	41.10 dBm	MIMO operation
Cable and Jumper loss:	0.0 dB	
Maximum peak output power at antenna input terminal:	41.10 dBm	
	12882.49552 mW	
Single Antenna gain (typical):	21.04 dBi	(max for complianc
Number of Un-correlated Antennae:	1	
Total Antenna gain (typical):	21.04 dBi	
	127.04 (numeric)	
Prediction distance:	700 cm	
Prediction frequency:	881.5 MHz	
MPE limit for uncontrolled exposure at prediction frequency:	0.587666667 mW/cm <sup>2</sup>	
<b>Power density at prediction frequency:</b>	<b>0.265792 mW/cm<sup>2</sup></b>	
	2.657920 W/m <sup>2</sup>	
Tx On time:	1.000000 ms	
Tx period time:	1.000000 ms	
Average Factor:	100.000000 %	
Average Power density at prediction frequency:	2.657920 W/m <sup>2</sup>	
Maximum allowable antenna gain:	24.48537002 dBi	
<b>Margin of Compliance:</b>	<b>3.44589208 dB</b>	