



### 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

Power Conducted	0.774 mW	
Maximum peak output power at antenna input terminal:	<u>28.89</u> (dBm)	
Maximum peak output power at antenna input terminal:	<u>0.774</u> (W)	
Antenna gain(typical):	<u>5.80</u> (dBi)	
Maximum antenna gain:	<u>3.80</u> (numeric)	
Prediction distance:	<u>20.00</u> (cm)	
Prediction frequency:	<u>906.00</u> (MHz)	
MPE limit for uncontrolled exposure at prediction frequency:	<u>0.60</u> (mW/cm <sup>2</sup> )	f/1500
Power density at prediction frequency:	0.585 (mW/cm <sup>2</sup> )	
Maximum allowable antenna gain:	35.94 (dBi)	
Margin of Compliance:	0.14 dB	

Therefore the power density at 20 cm is = 0.585mW/cm<sup>2</sup>