

Prediction of MPE limit at a given distance

[IS 9181](#)

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:	<u>14.83</u>	(dBm)
Cable and Jumper loss	<u>0.0</u>	(dB)
Maximum peak output power at antenna input terminal:	<u>14.83</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>30.40885026</u>	(mW)
Single Antenna gain(typical):	<u>6</u>	(dBi)
Number of Antennae	<u>1</u>	
Total Antenna gain(typical):	<u>6</u>	(dBi)
Maximum antenna gain:	<u>3.981071706</u>	(numeric)
Prediction distance:	<u>20</u>	(cm)
Prediction frequency:	<u>2462</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u>	(mW/cm^2)
Power density at prediction frequency:	<u>0.024084</u>	(mW/cm^2)
	<u>0.240841</u>	(W/m^2)
Maximum allowable antenna gain:	<u>22.18269855</u>	(dBi)
Margin of Compliance:	<u>16.18269855</u>	dB