

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:	<u>24.57</u> dBm
Cable and Jumper loss:	<u>0.0</u> dB
Maximum peak output power at antenna input terminal:	<u>24.57</u> dBm
	<u>286.417797</u> mW
Single Antenna gain (typical):	<u>16</u> dBi
Number of Antennae:	<u>1</u>
Total Antenna gain (typical):	<u>16</u> dBi
	<u>39.81071706</u> (numeric)
Prediction distance:	<u>50</u> cm
Prediction frequency:	<u>5740</u> MHz
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u> mW/cm ²
Power density at prediction frequency:	0.362953 mW/cm ²
	3.629528 W/m ²
Tx On time:	1.000000 ms
Tx period time:	1.000000 ms
Average Factor:	100.000000 %
Average Power density at prediction frequency:	3.629528 W/m ²
Maximum allowable antenna gain:	20.40149873 dBi
Margin of Compliance:	4.401498727 dB