

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

Fundamental transmit (prediction) frequency:	<u>2409.6</u> MHz
Maximum measured conducted peak output power:	<u>29.10</u> dBm
Cable and/or jumper loss:	<u>0.0</u> dB
Maximum peak power at antenna input terminal:	<u>29.10</u> dBm
Tx On time:	<u>5.000</u> ms
Tx period time:	<u>50.000</u> ms
Average factor:	<u>10</u> %
Maximum calculated average power at antenna input terminal:	<u>81.283</u> mW
Single Antenna gain (typical):	<u>6</u> dBi
Number of antennae:	<u>1</u>
Total system gain (typical):	<u>6.000</u> dBi
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u> mW/cm ²
	<u>10</u> W/m ²
Minimum calculated prediction distance for compliance:	<u>5</u> cm
Typical (declared) distance:	<u>20</u> cm
Average power density at prediction frequency:	<u>0.064377</u> mW/cm²
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Margin of Compliance:	<u>11.91270</u> dB
Maximum allowable antenna gain:	<u>17.91270</u> dBi