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## 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:	2.83 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	2.83 dBm
	1.918668741 mW
Single Antenna gain (typical):	1.5 dBi
Number of Antennae:	1
Total Antenna gain (typical):	<u>1.5</u> dBi
	<u>1.412537545</u> (numeric)
Prediction distance:	<u>20</u> cm
Prediction frequency:	<u>2480</u> MHz
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u> mW/cm <sup>2</sup>
Power density at prediction frequency:	0.000539 mW/cm <sup>2</sup>

	0.005392 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:	0.005392 W/m <sup>2</sup>
Maximum allowable antenna gain:	34.18269855 dBi

Margin of Compliance: 32.68269855 dB