



ONE WORLD ○ OUR APPROVAL

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

	<u>Transmitter</u> <u>Chain 1 and 2</u>	<u>Transmitter</u> <u>Chain 3 and 4</u>	<u>Transmitter 5</u>
Maximum peak output power at device output terminal:	36.6	35.8	20.68 dBm
Cable and Jumper loss:	0	0	0 dB
Maximum peak output power at antenna input terminal:	36.6	35.8	20.68 dBm
	4570.881896	3801.893963	116.9499391 mW
Single Antenna gain (typical):	9.5	9.5	0 dBi
Number of Antennae:	1	1	1
Total Antenna gain (typical):	9.5	9.5	0 dBi
	8.912509381	8.912509381	1 (numeric)
Prediction distance:	80	80	80 cm
Prediction frequency:	2593	2685	2462 MHz
limit for uncontrolled exposure at prediction frequency:	1	1	1 mW/cm ²
Power density at prediction frequency:	0.50653582	0.421318144	0.001454153 mW/cm ²
	5.065358198	4.213181437	0.014541532 W/m ²
Tx On time:	1	1	1 ms
Tx period time:	1	1	1 ms
Average Factor:	100	100	100 %
Average Power density at prediction frequency:	5.065358198	4.213181437	0.014541532 W/m ²

Result

0.929

Limit

<1.0