

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

Tx1: 2AJI5-CMHM10

Maximum peak output power at device output terminal:	5.00 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	5.00 dBm
	3.16227766 mW
Single Antenna gain (typical):	0 dBi
Number of Antennae:	1
Total Antenna gain (typical):	0 dBi
	1 (numeric)
Prediction distance:	20 cm
Prediction frequency:	2440 MHz
MPE limit for uncontrolled exposure at prediction frequency:	1 mW/cm ²
Power density at prediction frequency:	0.000629 mW/cm²
	0.006291 W/m ²
Tx On time:	25.000000 ms
Tx period time:	100.000000 ms
Average Factor:	25.000000 %
Average Power density at prediction frequency:	0.001573 W/m ²
Percentage to limit:	0.015727879 %

Tx2: L2V-STX3

Maximum peak output power at device output terminal:	21.43 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	21.43 dBm
	138.9952631 mW
Single Antenna gain (typical):	5.1 dBi
Number of Antennae:	1
Total Antenna gain (typical):	5.1 dBi
	3.235936569 (numeric)
Prediction distance:	20 cm
Prediction frequency:	1611.88 MHz
MPE limit for uncontrolled exposure at prediction frequency:	1 mW/cm ²
Power density at prediction frequency:	0.089481 mW/cm²
	0.894809 W/m ²
Tx On time:	10.000000 ms
Tx period time:	100.000000 ms
Average Factor:	10.000000 %
Average Power density at prediction frequency:	0.089481 W/m ²
Percentage to limit:	0.89480859 %

Total Percentage to limit:	0.910536469 %
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(PSD1/Limit 1) + (PSD 2/limit 2):	0.009105365 <1
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