

Global EMC

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 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 antenna input terminal:	12.50	(dBm)
Maximum peak output power at antenna input terminal:	17.7827941	(mW)
Antenna gain(typical):	3.3	(dBi)
Maximum antenna gain:	2.13796209	(numeric)
Time Averaging:	100	(%)
Prediction distance:	20	(cm)
Prediction frequency:	2480	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)
Power density at prediction frequency:	0.007564	(mW/cm^2)
Margin of compliance:	-21.2	(dB)
This equates to	0.075636277	W/m^2
For information This equates to	5.339932255	V/m
		PASS

Note: This device does not exceed the $60 / f$ (GHz) in mW \square limit as per FCC KDB 447498 2(a)(i), so it is allowable to be used in portable exposure conditions with no restrictions on host platforms