

## 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 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 antenna input terminal:	-0.60	(dBm)
Maximum peak output power at antenna input terminal:	0.87096359	(mW)
Antenna gain(typical):	2.4	(dBi)
Maximum antenna gain:	1.737800829	(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:	0.000301	(mW/cm^2)
Margin of compliance:	-35.2	(dB)
This equates to	0.003011134	W/m^2
For information This equates to	1.065456559	V/m
		PASS

Note: This device does not exceed the  $60 / f$  (GHz) in mW 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

