

Global EMC

Prediction of MPE limit at a given distance

Exposure limit according to FCC CFR 47part 1, §1.1307, §1.1310

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:	<u>23.30</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>213.796209</u>	(mW)
Antenna gain(typical):	<u>-12.2</u>	(dBi)
Maximum antenna gain:	<u>0.060255959</u>	(numeric)
Time Averaging:	<u>100</u>	(%)
Prediction distance:	<u>10</u>	(cm)
Prediction frequency:	<u>900</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>0.6</u>	(mW/cm^2)
Power density at prediction frequency:	<u>0.010252</u>	(mW/cm^2)
Margin of compliance:	<u>-17.7</u>	(dB)
This equates to	0.102515642	W/m^2 PASS
For information This equates to	6.216783497	V/m