

Evaluation 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 powerConducted	21.09 dBm
	0.1285 (W)
Antenna gain(typical):	2.15 (dBi)
Maximum antenna gain:	1.64 (numeric)
Evaluation distance:	<u>20.00</u> (cm)
Evaluation frequency:	2412.00 (MHz)
Limit from table below:	<u>1</u> (mW/cm^2)

Power density at Evaluation frequency: 0.042 (mW/cm^2)

EUT complies

FCC/LSGAC Local Official's Guide to RF A LOCAL GOVERNMENT OFFICIAL'S GUIDE TO TRANSMITTING ANTENNA RF EMISSION SAFETY: RULES, PROCEDURES, AND PRACTICAL GUIDANCE

Electric Field	Magnetic Field Strength	Power Density	Averaging Time
Strength (E)	(H)	(S)	$ E ^{2}$, $ H ^{2}$ or S
(V/m)	(A/m)	(mW/cm^2)	(minutes)
614	1.63	(100)*	30
824/f	2.19/f	$(180/f^2)^*$	30
27.5	0.073	0.2	30
		f/1500	30
		1.0	30
	Strength (E) (V/m) 614 824/f 27.5 	Strength (E) (H) (V/m) (A/m) 614 1.63 824/f 2.19/f 27.5 0.073	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

(B) Limits for General Population/Uncontrolled Exposure

f = frequency in MHz

*Plane-wave equivalent power density

NOTE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.