

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 power --Conducted20.48 dBm
0.112 (W)Antenna gain(typical):2.00 (dBi)Maximum antenna gain:1.58 (numeric)Evaluation distance:20.00 (cm)Evaluation frequency:2412.00 (MHz)Limit from table below:1 (mW/cm^2)

Power density at Evaluation frequency: 0.035 (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

(B) Limits for General Population/Uncontrolled Exposure

Frequency	Electric Field	Magnetic Field Strength	Power Density	Averaging Time
Range	Strength (E)	(H)	(S)	$ E ^2$, $ H ^2$ or S
(MHz)	(V/m)	(A/m)	(mW/cm ²)	(minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)*$	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

f = frequency in MHz

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.

^{*}Plane-wave equivalent power density