



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 --Conducted	13.08 dBm
	<u>0.020</u> (W)
Antenna gain(typical):	<u>3.00</u> (dBi)
Maximum antenna gain:	<u>2.00</u> (numeric)
Evaluation distance:	<u>20.00</u> (cm)
Evaluation frequency:	<u>2412.000</u> (MHz)
Limit from table below:	<u>1</u> (mW/cm ²)
Power density at Evaluation frequency:	0.0081 (mW/cm ²)

EUT complies

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μ T)	Equivalent plane wave power density Seq (W/m ²)
0-1Hz	-	3.2×10^4	4×10^4	-
1-8Hz	1000	$3.2 \times 10^4 / f^2$	$4 \times 10^4 / f^2$	-
8-25Hz	1000	$4000 / f$	$5000 / f$	-
0.025Hz-0.8kHz	$250 / f$	$4 / f$	$5 / f$	-
0.8-3kHz	$250 / f$	5	6.25	-
3-150kHz	87	5	6.25	-
0.15-1MHz	87	$0.73 / f$	$0.92 / f$	-
1-10MHz	$87 / f^{1/2}$	$0.73 / f$	$0.92 / f$	-
10-400MHz	28	0.073	0.092	2
400-2000MHz	$1.375 f^{1/2}$	$0.0037 f^{1/2}$	$0.0046 f^{1/2}$	$f / 200$
2-300GHz	61	0.16	0.2	10