

Maximum Permissible Exposure(MPE) Report

1. Applicable Standard

FCC Part §1.1310

2. Requirements

Limits For Maximum Permissible Exposure (MPE)				
Frequency range (MHz)	Electric field strength(V/m)	Magnetic field Strength(A/m)	Power density (mw/cm ²)	Averaging time (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	0.0173	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

3. MPE Calculation

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = Power density (In appropriate units, e.g., mW/cm²)

P = Power input to the antenna (In appropriate units, e.g., mW)

G = Power gain og the antenna in the direction of interest relative to an isotropic radiator, the power gain factor,

Is normally numeric gain

R =Distance tp the center of radiation of the antenna(In appropriate units, e.g., cm

4. Test Result

Operation Frequency(MHz)	Power (mW)	Antenna gain(G)	Measure Distance(cm)	Power density (mW/cm ²)	MPE limit (mW/cm ²)
1850 ~ 1910	191.9	0	20	0.0382	1.0
1710 ~ 1755	211.8	0	20	0.0421	1.0
699 ~716	239.3	0	20	0.0476	0.46

Results: PASS