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/cm^2)

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

Channel Frequency (MHz)	Electric field strength (dBuV/m)@3m	Electric field strength (V/m)	Limit of Electric field strength (V/m)	Result
13.56	**85.24**	**4.11**	**60.76**	**PASS**

Electric field=85.24 dBuV/m 0.3m
=85.24 dBuV/m+20log(3/0.2)^2 0.2m
=132.28 dBuV/m 0.2m
=4111497.2uV/m 0.2m
=4.11V/m 0.2m