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

Operation Bands	Frequency(MHz)	Max. Output power(dBm)	Cable loss (dB)	Power to Antenna(mW)	Antenna gain	
					Isotropic	Numeric
UL1850-1915	1870.80	18.93	6.25	18.54	10	10.00
UL1710-1755	1741.19	17.27	5.89	13.74	10	10.00
UL824-869	834.75	18.85	5.49	21.68	8	6.31
UL698-716	702.90	18.63	5.21	21.98	8	6.31
UL776-787	783.37	17.47	5.21	16.83	8	6.31
DL1930-1995	1957.69	2.89	2.55	1.08	8	6.31
DL2110-2155	2148.52	2.47	2.42	1.01	8	6.31
DL869-894	875.76	2.98	2.29	1.17	6	3.98
DL728-746	737.54	4.53	2.19	1.71	6	3.98
DL746-757	748.50	3.64	2.19	1.40	6	3.98

Operation Bands	Power (mW)	Antenna gain(G)	Measure Distance(cm)	Power density ($mW/cm^{2)}$	MPE limit ($mW/cm^{2)}$
UL1850-1915	18.54	10.00	20	0.0369	1.00
UL1710-1755	13.74	10.00	20	0.0273	1.00
UL824-869	21.68	6.31	20	0.0272	0.56
UL698-716	21.98	6.31	20	0.0276	0.47
UL776-787	16.83	6.31	20	0.0211	0.52
DL1930-1995	1.08	6.31	20	0.0014	1.00
DL2110-2155	1.01	6.31	20	0.0013	1.00
DL869-894	1.17	3.98	20	0.0009	0.58
DL728-746	1.71	3.98	20	0.0014	0.49
DL746-757	1.40	3.98	20	0.0011	0.50

Results: PASS