

# MPE Report

## 1. Specification Limits

### Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/150	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

\*Plane-wave equivalent power density

NOTE: 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 can not exercise control over their exposure.

The limit value 1.0mW/cm<sup>2</sup> is available for this EUT.

## 2. MPE Calculation Method

$$S = PG/(4 \pi R^2)$$

$$R = [PG/(4 \pi S)]^{0.5}$$

where: S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

(the measured power value see Report: F12124 Section 6.6)

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 (appropriate units, e.g., cm)

### 3. Calculated Result

#### Radio Frequency Radiation Exposure Evaluation

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance(R)
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm <sup>2</sup> )	(cm)
2405	2.23	1	1.26	1.0	0.47
2450	2.14	1	1.26	1.0	0.46
2480	2.21	1	1.26	1.0	0.47

Separation distance R= 20cm.

---