

**\* Standalone SAR test exclusion considerations****1. Applicable Standard**

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

**a) Limits for Occupational / Controlled 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 Times  E  2,  H  2 or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-10000			5	6

**b) 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 Times  E  2,  H  2 or S (minutes)
0.3-3.0	614	1.63	(100)*	30
3.0-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-10000			1.0	30

**Note : f=frequency in MHz**

**\*=Plane-wave equivalent power density**

**2. MPE Calculation Method**

S = power density

P = power input to 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

Prediction of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

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

**3. Calculated Result and Limit**

Frequency (MHz)	Peak Output Power		Antenna Gain		Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Result
	(dBm)	(mW)	(dBi)	(numeric)			
Low	9.570	<b>9.057</b>	3.300	<b>2.138</b>	<b>0.003852</b>	1	<b>PASS</b>
Middle	8.640	<b>7.311</b>	3.300	<b>2.138</b>	<b>0.003110</b>	1	<b>PASS</b>
High	6.930	<b>4.932</b>	3.300	<b>2.138</b>	<b>0.002098</b>	1	<b>PASS</b>