* 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^2)	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^2)	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
Predication 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

(R = 20cm)

Mode	Channel	Peak Output Power		Antenna Gain		Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Result
		(dBm)	(mW)	(dBi)	(numeric)			
802.11b	Low	18.840	**76.560**	5.100	**3.236**	**0.049287**	1	**PASS**
	Middle	18.880	**77.268**	5.100	**3.236**	**0.049743**	1	**PASS**
	High	18.580	**72.111**	5.100	**3.236**	**0.046423**	1	**PASS**
802.11g	Low	17.990	**62.951**	5.100	**3.236**	**0.040526**	1	**PASS**
	Middle	20.690	**117.220**	5.100	**3.236**	**0.075462**	1	**PASS**
	High	17.330	**54.075**	5.100	**3.236**	**0.034812**	1	**PASS**
802.11n20	Low	17.570	**57.148**	5.100	**3.236**	**0.036790**	1	**PASS**
	Middle	20.320	**107.647**	5.100	**3.236**	**0.069300**	1	**PASS**
	High	17.290	**53.580**	5.100	**3.236**	**0.034493**	1	**PASS**