



Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Job No.: 160309129GZU

Page: 1 of 2

FCC ID: 2AHP4-ONOBCE668

RF Exposure Compliance Requirement

1. Standard requirement

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
1500-100000	--	--	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)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	F/1500	30
1500-100000	--	--	1.0	30

Note: f=frequency in MHz; *Plane-wave equivalent power density



Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Job No.: 160309129GZU

Page: 2 of 2

FCC ID: 2AHP4-ONOBCE668

2. MPE Calculation Method

$$E(V/m) = (30 \cdot P \cdot G)^{0.5} / d \quad \text{Power Density: } Pd(W/m^2) = E^2 / 377$$

E=Electric Field (V/m)

P=Peak RF output Power (W)

G=EUT Antenna numeric gain (numeric)

d= Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = (30 \cdot P \cdot G) / (377 \cdot d^2)$$

From the peak EUT RF output power, the minimum mobile separation distance, $d=0.2m$, as well as the gain of the used antenna, the RF power density can be obtained.

3. Calculated Result and Limit

(1) 802.11b 11Mbps data rate:

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2412	1.585	18.72	74.47	0.0235	1	Complies
2437	1.585	20.43	110.41	0.0348	1	Complies
2462	1.585	20.94	124.17	0.0392	1	Complies

(2) 802.11g 9Mbps data rate:

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2412	1.585	25.82	381.94	0.1204	1	Complies
2437	1.585	23.04	201.37	0.0635	1	Complies
2462	1.585	23.69	233.88	0.0737	1	Complies

(3) 802.11n HT20 6.5Mbps data rate:

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2412	1.585	22.31	170.22	0.0537	1	Complies
2437	1.585	23.14	206.06	0.0650	1	Complies
2462	1.585	24.65	291.74	0.0920	1	Complies

(4) 802.11n HT40 130Mbps data rate:

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2422	1.585	22.09	161.81	0.0510	1	Complies
2437	1.585	22.39	173.38	0.0547	1	Complies
2452	1.585	22.65	184.08	0.0580	1	Complies