FCC REPORT

Applicant:	Posturite LTD
Address of Applicant:	The Mill, Berwick, East Sussex, BN26 6SZ, UK

Equipment Under Test (EUT)

Product Name:	Wireless Mouse
Model No.:	9820099, 9820102, 9820103
Trade Mark:	Penguin
FCC ID:	Y35-9820099M
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.249:2010
Date of sample receipt:	June 26, 2012
Date of Test:	July 11, 2012
Date of report issued:	July 11, 2012
Test Result :	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Laboratory Manager

2 Version

Version No.	Date	Description
00	*July 11, 2012*	*Original*

Prepared By: Oscear. Li ***Date:*** *July 11, 2012*

Project Engineer

Check By: Hans.Hu ***Date:*** *July 11, 2012*

Reviewer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Pass: The EUT complies with the essential requirements in the standard.

5 General Information

5.1 Client Information

Applicant:	Posturite LTD
Address of Applicant:	The Mill, Berwick, East Sussex, BN26 6SZ, UK
Manufacturer:	SHENZHEN BONDIDEA TECHNOLOGY CO., LIMITED
Address of Manufacturer:	No 10th, honghualing industrial park, longxi , longgang, Shenzhen , China
Factory:	SHENZHEN BONDIDEA TECHNOLOGY CO., LIMITED
Address of factory :	No 10th, honghualing industrial park, longxi , longgang, Shenzhen , China

5.2 General Description of E.U.T.

Product Name:	Wireless Mouse
Model No.:	9820099, 9820102, 9820103
Operation Frequency:	2408MHz -2474MHz
Channel number:	34
Channel separation:	2MHz
Modulation type:	GFSK
Antenna Type:	Integral
Antenna Gain:	0dBi
Power supply:	DC 3.7V Li-ion Battery Charging Voltage: DC 5.0V by PC
Remark:	Only the model No. 9820099 was tested. 9820099, 9820102, 9820103 are identical in the same PCB layout, interior structure and electrical circuits. The only differences are the model name and appearance color for commercial purpose.

5.3 Test mode

Transmitting mode	Keep the EUT in transmitting mode.

Per-test mode.

We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:

Axis	X	Y	Z
Field Strength(dBuV/m)	77.45	79.27	78.32

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”:

Y axis (see the test setup photo)

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
IBM	Notebook	T42	GTS209	DoC
IBM	AC Adapter	92P1024	N/A	DoC

5.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.: 600491**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission.

The acceptance letter from the FCC is maintained in out files. Registration 600491, July 20, 2010.

● **Industry Canada (IC)**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

5.6 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.
Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China
Tel: 0755-27798480
Fax: 0755-27798960

5.7 Other Information Requested by the Customer

None.

5.8 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 30 2011	Mar. 29 2013
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 03 2012	Jul. 02 2013
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 25 2012	Feb. 24 2013
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 29 2012	June 28 2013
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2011	Mar. 29 2013
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	Mar. 31 2012	Mar. 30 2013
9	Coaxial Cable	GTS	N/A	GTS211	Mar. 31 2012	Mar. 30 2013
10	Coaxial cable	GTS	N/A	GTS210	Mar. 31 2012	Mar. 30 2013
11	Coaxial Cable	GTS	N/A	GTS212	Mar. 31 2012	Mar. 30 2013
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 03 2012	Jul. 02 2013
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 03 2012	Jul. 02 2013
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 29 2012	June 28 2013
15	Band filter	Amindeon	82346	GTS219	Mar. 31 2012	Mar. 30 2013

Conducted Emission						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS252	Sep. 08 2011	Sep. 07 2013
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	Jul. 03 2012	Jul. 02 2013
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	Jul. 03 2012	Jul. 02 2013
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	Jul. 03 2012	Jul. 02 2013
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	Jul. 03 2012	Jul. 02 2013
6	Coaxial Cable	GTS	N/A	GTS227	Jul. 03 2012	Jul. 02 2013
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Thermo meter	KTJ	TA328	GTS233	Jul. 05 2012	Jul. 04 2013

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (dd-mm-yy)**	**Cal.Due date (dd-mm-yy)**
1	Barometer	ChangChun	DYM3	GTS257	July 09 2012	July 08 2013

6 Test results and Measurement Data

6.1 Antenna requirement:

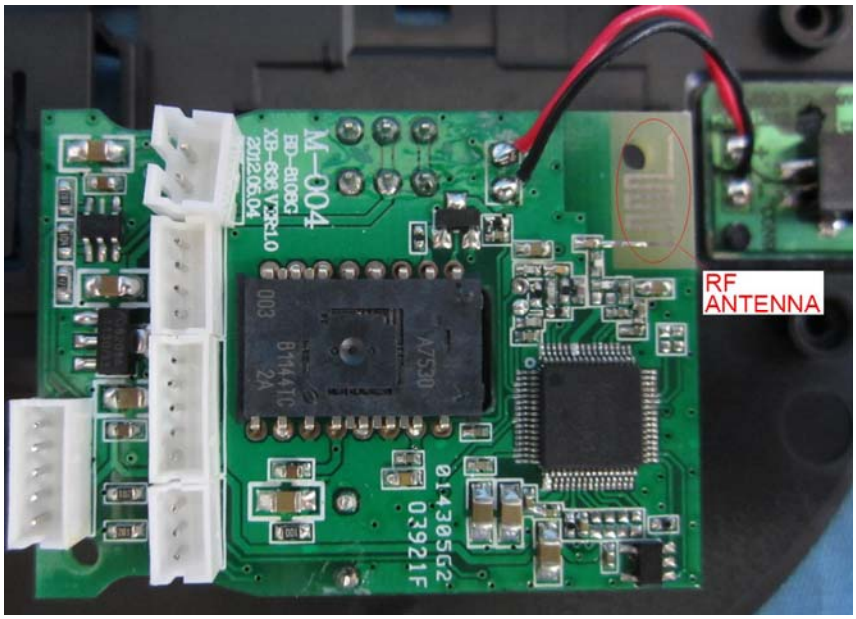
Standard requirement:	FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

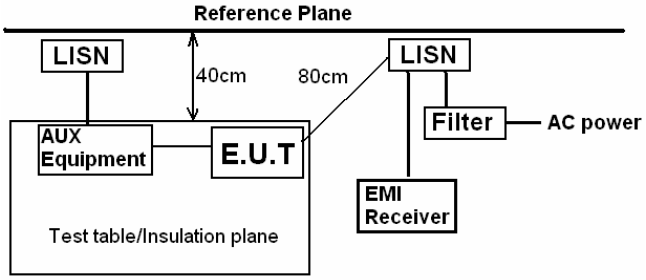
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

E.U.T Antenna:

The RF antenna is a PCB antenna, the best case gain of the antenna is 0dBi

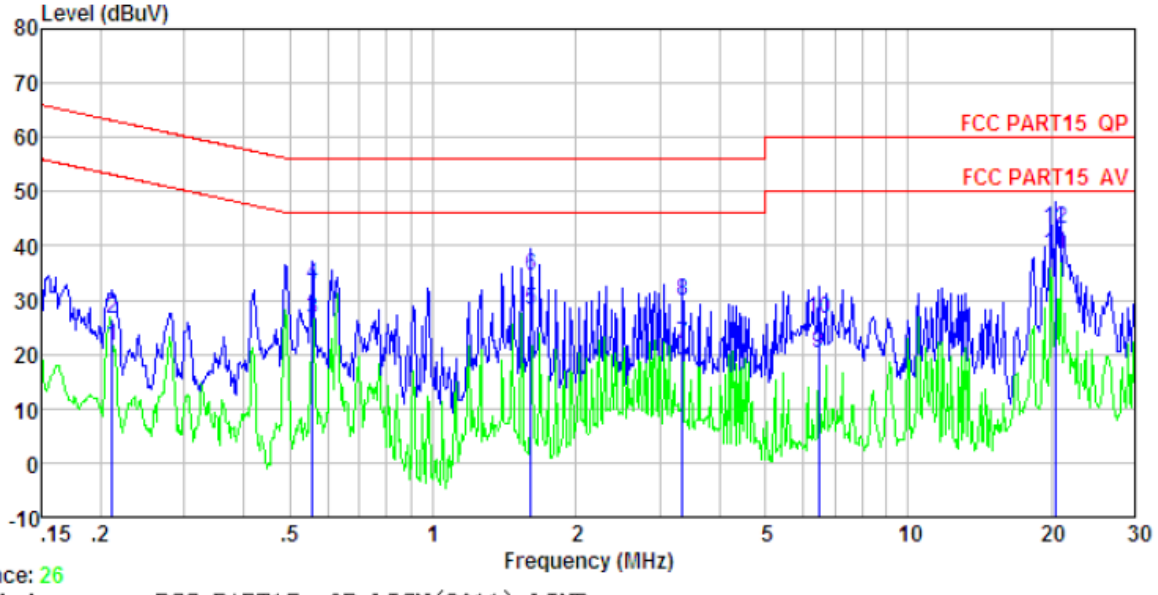


6.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.4:2003
Test Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto
Limit:	Frequency range (MHz) / Limit (dBuV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement data:

Line:

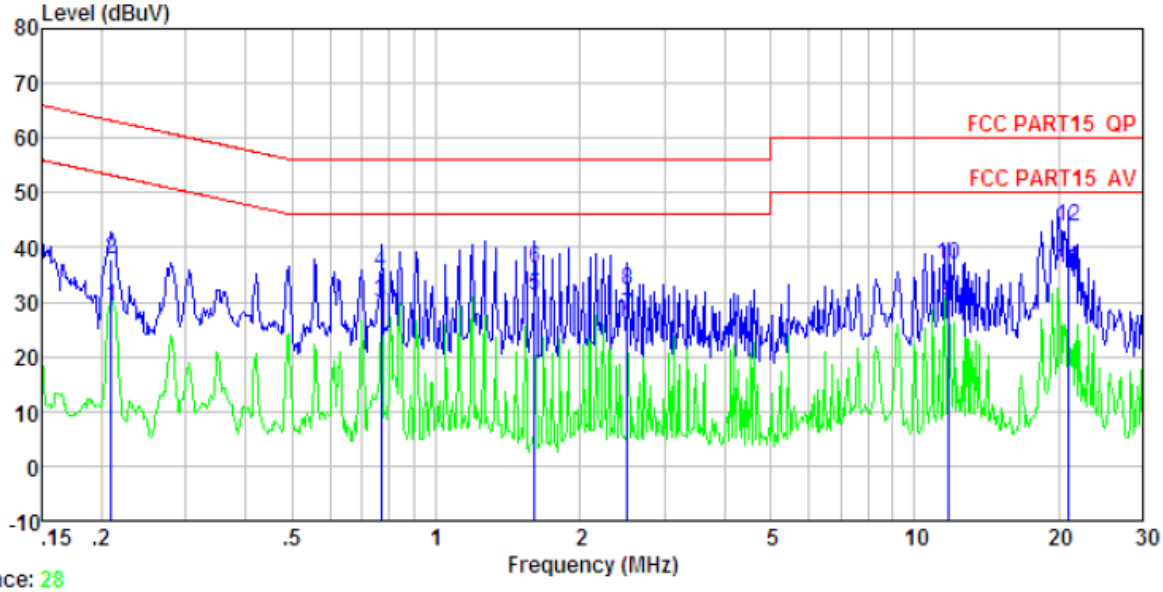


Trace: 26

Condition : FCC PART15 QP LISN(2011) LINE
Job No. : 688RF
Test Mode : Charging via PC
Test Engineer: Blue

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.212	20.95	0.65	0.10	21.70	53.14	-31.44	Average
2	0.212	25.87	0.65	0.10	26.62	63.14	-36.52	QP
3	0.558	25.95	0.54	0.10	26.59	46.00	-19.41	Average
4	0.558	32.06	0.54	0.10	32.70	56.00	-23.30	QP
5	1.610	27.55	0.42	0.10	28.07	46.00	-17.93	Average
6	1.610	34.06	0.42	0.10	34.58	56.00	-21.42	QP
7	3.346	21.36	0.34	0.10	21.80	46.00	-24.20	Average
8	3.346	29.49	0.34	0.10	29.93	56.00	-26.07	QP
9	6.488	19.68	0.27	0.13	20.08	50.00	-29.92	Average
10	6.488	26.14	0.27	0.13	26.54	60.00	-33.46	QP
11	20.486	38.14	0.14	0.21	38.49	50.00	-11.51	Average
12	20.486	42.76	0.14	0.21	43.11	60.00	-16.89	QP

Neutral:



Trace: 28

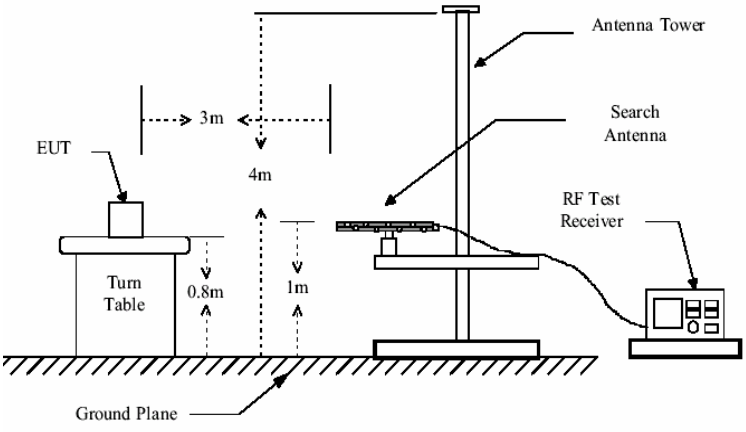
Condition : FCC PART15 QP LISN(2011) NEUTRAL
Job No. : 688RF
Test Mode : Charging via PC
Test Engineer: Blue

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.209	28.52	0.65	0.10	29.27	53.23	-23.96	Average
2	0.209	36.95	0.65	0.10	37.70	63.23	-25.53	QP
3	0.767	29.14	0.51	0.10	29.75	46.00	-16.25	Average
4	0.767	34.89	0.51	0.10	35.50	56.00	-20.50	QP
5	1.610	30.74	0.42	0.10	31.26	46.00	-14.74	Average
6	1.610	35.62	0.42	0.10	36.14	56.00	-19.86	QP
7	2.513	27.08	0.38	0.10	27.56	46.00	-18.44	Average
8	2.513	31.77	0.38	0.10	32.25	56.00	-23.75	QP
9	11.807	29.56	0.20	0.20	29.96	50.00	-20.04	Average
10	11.807	36.40	0.20	0.20	36.80	60.00	-23.20	QP
11	20.924	35.87	0.14	0.21	36.22	50.00	-13.78	Average
12	20.924	43.45	0.14	0.21	43.80	60.00	-16.20	QP

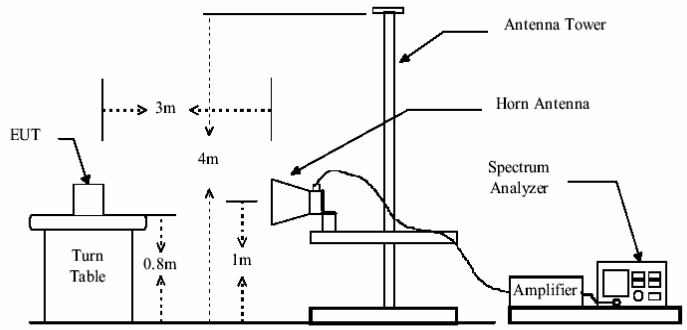
Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss

6.3 Radiated Emission Method

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.4:2003</td></tr>
<tr><td>Test Frequency Range:</td><td>30MHz to 25GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(Field strength of the fundamental signal)</td><td>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td rowspan="2">2400MHz-2483.5MHz</td><td>94.00</td><td>Average Value</td></tr>
<tr><td>114.00</td><td>Peak Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(Spurious Emissions)</td><td>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td>30MHz-88MHz</td><td>40.00</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.50</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.00</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.00</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>54.00</td><td>Average Value</td></tr>
<tr><td>74.00</td><td>Peak Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(band edge)</td><td>Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.</td></tr>
<tr><td>Test setup:</td><td>Below 1GHz
 

Above 1GHz</td></tr>
</table>

	
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement data:

6.3.1 Field Strength of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2408.00	42.51	27.57	5.40	0.00	75.48	114.00	-38.52	Horizontal
2408.00	46.30	27.57	5.40	0.00	79.27	114.00	-34.73	Vertical
2440.00	42.05	27.48	5.43	0.00	74.96	114.00	-39.04	Horizontal
2440.00	45.97	27.48	5.43	0.00	78.88	114.00	-35.12	Vertical
2474.00	41.65	27.50	5.46	0.00	74.61	114.00	-39.39	Horizontal
2474.00	45.82	27.50	5.46	0.00	78.78	114.00	-35.22	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2408.00	31.81	27.57	5.40	0.00	64.78	94.00	-29.22	Horizontal
2408.00	36.44	27.57	5.40	0.00	69.41	94.00	-24.59	Vertical
2440.00	31.24	27.48	5.43	0.00	64.15	94.00	-29.85	Horizontal
2440.00	36.02	27.48	5.43	0.00	68.93	94.00	-25.07	Vertical
2474.00	30.91	27.50	5.46	0.00	63.87	94.00	-30.13	Horizontal
2474.00	35.84	27.50	5.46	0.00	68.80	94.00	-25.20	Vertical

According to the follow transmitter output power (P_t) formula:

$P_t=(E \times d)^2/(30 \times g_t)$

P_t =transmitter output power in watts

g_t =numeric gain of the transmitting antenna (unitless)

E=electric field strength in V/m

d= measurement distance in meters (m).

According to the above test data, Emax=79.27dBuV/m=0.00919V/m, d=3m, g_t=1

$P_t =(E \times d)^2/(30 \times g_t)= (0.00919 \times 3)^2/(30 \times 1)=0.000025W$

6.3.2 Spurious emissions

■ Below 1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
44.12	38.37	16.57	0.71	32.02	23.63	40.00	-16.37	Vertical
66.73	38.53	13.78	0.91	31.90	21.32	40.00	-18.68	Vertical
95.76	37.67	15.99	1.16	31.74	23.08	43.50	-20.42	Vertical
249.43	38.60	15.07	2.12	32.16	23.63	46.00	-22.37	Vertical
410.38	37.56	17.27	2.91	31.86	25.88	46.00	-20.12	Vertical
872.18	38.27	23.82	4.74	31.22	35.61	46.00	-10.39	Vertical
42.45	38.72	16.57	0.69	32.03	23.95	40.00	-16.05	Horizontal
58.20	37.35	15.91	0.84	31.94	22.16	40.00	-17.84	Horizontal
93.77	37.69	15.76	1.14	31.73	22.86	43.50	-20.64	Horizontal
228.49	39.94	14.62	2.01	32.15	24.42	46.00	-21.58	Horizontal
392.10	38.28	16.92	2.82	31.91	26.11	46.00	-19.89	Horizontal
848.06	37.79	23.55	4.65	31.25	34.74	46.00	-11.26	Horizontal

■ Above 1GHz

Test channel:	Lowest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4816.00	24.86	31.79	8.61	24.17	41.09	74.00	-32.91	Vertical
7224.00	27.16	36.19	11.66	26.46	48.55	74.00	-25.45	Vertical
9632.00	21.13	38.01	14.16	25.44	47.86	74.00	-26.14	Vertical
12040.00	*					74.00		Vertical
14448.00	*					74.00		Vertical
4816.00	23.98	31.78	8.60	24.17	40.19	74.00	-33.81	Horizontal
7224.00	27.06	36.19	11.66	26.46	48.45	74.00	-25.55	Horizontal
9632.00	19.09	38.01	14.16	25.44	45.82	74.00	-28.18	Horizontal
12040.00	*					74.00		Horizontal
14448.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4816.00	15.88	31.79	8.61	24.17	32.11	54.00	-21.89	Vertical
7224.00	18.51	36.19	11.66	26.46	39.90	54.00	-14.10	Vertical
9632.00	12.81	38.01	14.16	25.44	39.54	54.00	-14.46	Vertical
12040.00	*					54.00		Vertical
14448.00	*					54.00		Vertical
4816.00	15.00	31.78	8.60	24.17	31.21	54.00	-22.79	Horizontal
7224.00	18.41	36.19	11.66	26.46	39.80	54.00	-14.20	Horizontal
9632.00	10.77	38.01	14.16	25.44	37.50	54.00	-16.50	Horizontal
12040.00	*					54.00		Horizontal
14448.00	*					54.00		Horizontal

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

Test channel:	Middle channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.00	25.65	31.85	8.66	24.10	42.06	74.00	-31.94	Vertical
7320.00	27.56	36.37	11.72	26.71	48.94	74.00	-25.06	Vertical
9760.00	18.82	38.35	14.25	25.36	46.06	74.00	-27.94	Vertical
12200.00	*					74.00		Vertical
14640.00	*					74.00		Vertical
4880.00	24.80	31.85	8.66	24.10	41.21	74.00	-32.79	Horizontal
7320.00	26.39	36.37	11.72	26.78	47.70	74.00	-26.30	Horizontal
9760.00	18.34	38.35	14.25	25.36	45.58	74.00	-28.42	Horizontal
12200.00	*					74.00		Horizontal
14640.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.00	16.78	31.85	8.66	24.10	33.19	54.00	-20.81	Vertical
7320.00	19.02	36.37	11.72	26.71	40.40	54.00	-13.60	Vertical
9760.00	10.61	38.35	14.25	25.36	37.85	54.00	-16.15	Vertical
12200.00	*					54.00		Vertical
14640.00	*					54.00		Vertical
4880.00	15.93	31.85	8.66	24.10	32.34	54.00	-21.66	Horizontal
7320.00	17.85	36.37	11.72	26.78	39.16	54.00	-14.84	Horizontal
9760.00	10.13	38.35	14.25	25.36	37.37	54.00	-16.63	Horizontal
12200.00	*					54.00		Horizontal
14640.00	*					54.00		Horizontal

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

Test channel:	Highest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4948.00	25.08	31.91	8.71	24.05	41.65	74.00	-32.35	Vertical
7422.00	26.71	36.56	11.77	27.03	48.01	74.00	-25.99	Vertical
9896.00	17.18	38.81	14.35	25.27	45.07	74.00	-28.93	Vertical
12370.00	*					74.00		Vertical
14844.00	*					74.00		Vertical
4948.00	23.73	31.91	8.71	24.05	40.30	74.00	-33.70	Horizontal
7422.00	25.79	36.56	11.79	27.03	47.11	74.00	-26.89	Horizontal
9896.00	18.38	38.72	14.35	25.29	46.16	74.00	-27.84	Horizontal
12370.00	*					74.00		Horizontal
14844.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4948.00	16.32	31.91	8.71	24.05	32.89	54.00	-21.11	Vertical
7422.00	18.28	36.56	11.77	27.03	39.58	54.00	-14.42	Vertical
9896.00	9.08	38.81	14.35	25.27	36.97	54.00	-17.03	Vertical
12370.00	*					54.00		Vertical
14844.00	*					54.00		Vertical
4948.00	14.97	31.91	8.71	24.05	31.54	54.00	-22.46	Horizontal
7422.00	17.36	36.56	11.79	27.03	38.68	54.00	-15.32	Horizontal
9896.00	10.28	38.72	14.35	25.29	38.06	54.00	-15.94	Horizontal
12370.00	*					54.00		Horizontal
14844.00	*					54.00		Horizontal

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

6.3.3 Bandedge emissions

Test channel:	Lowest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	41.26	27.91	5.30	30.37	44.10	74.00	-29.90	Horizontal
2390.00	42.85	27.59	5.38	30.18	45.64	74.00	-28.36	Horizontal
2310.00	44.87	27.91	5.30	30.37	47.71	74.00	-26.29	Vertical
2390.00	45.92	27.59	5.38	30.18	48.71	74.00	-25.29	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	29.14	27.91	5.30	30.37	31.98	54.00	-22.02	Horizontal
2390.00	31.07	27.59	5.38	30.18	33.86	54.00	-20.14	Horizontal
2310.00	33.48	27.91	5.30	30.37	36.32	54.00	-17.68	Vertical
2390.00	34.94	27.59	5.38	30.18	37.73	54.00	-16.27	Vertical

Test channel:	Highest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	41.85	27.53	5.47	29.93	44.92	74.00	-29.08	Horizontal
2500.00	39.97	27.55	5.49	29.93	43.08	74.00	-30.92	Horizontal
2483.50	45.10	27.53	5.47	29.93	48.17	74.00	-25.83	Vertical
2500.00	43.78	27.55	5.49	29.93	46.89	74.00	-27.11	Vertical

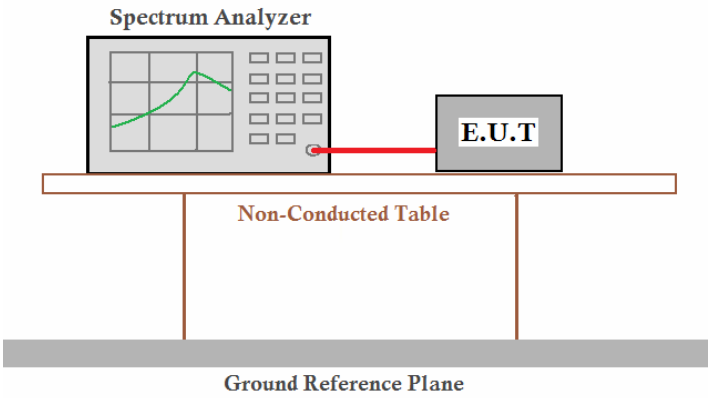
Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	29.65	27.53	5.47	29.93	32.72	54.00	-21.28	Horizontal
2500.00	28.34	27.55	5.49	29.93	31.45	54.00	-22.55	Horizontal
2483.50	33.13	27.53	5.47	29.93	36.20	54.00	-17.80	Vertical
2500.00	31.83	27.55	5.49	29.93	34.94	54.00	-19.06	Vertical

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

6.4 20dB Occupy Bandwidth

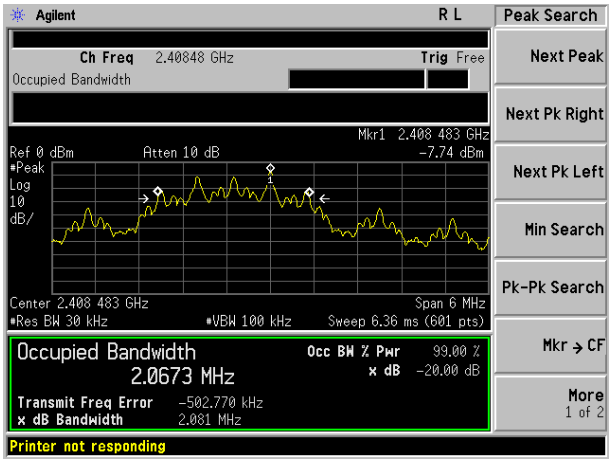
Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2003
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement Data

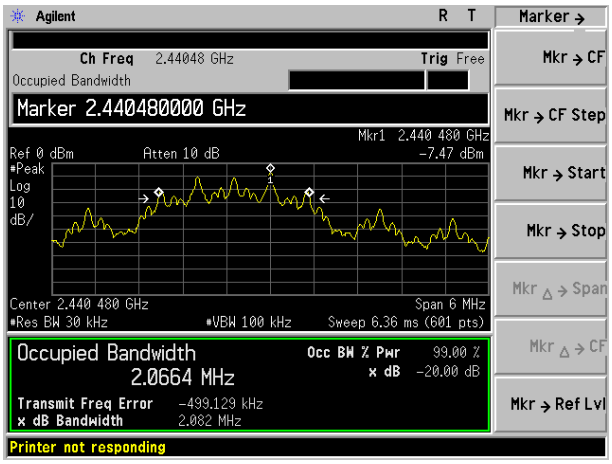
Mouse:

Test channel	20dB bandwidth(MHz)	Result
Lowest	2.081	Pass
Middle	2.082	Pass
Highest	2.078	Pass

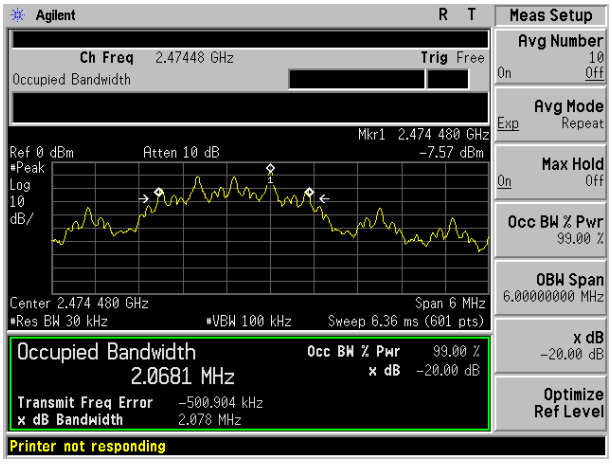
Test plot as follows:



Lowest channel



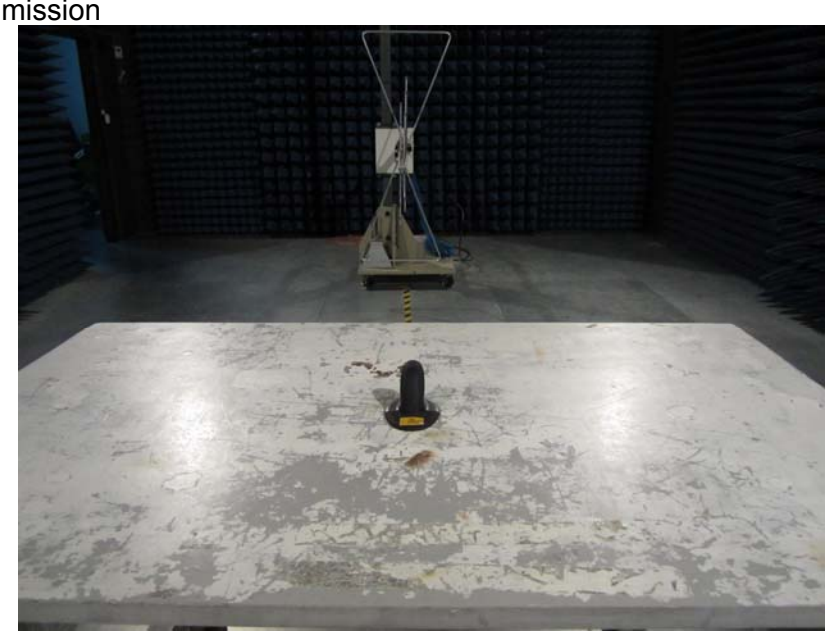
Middle channel

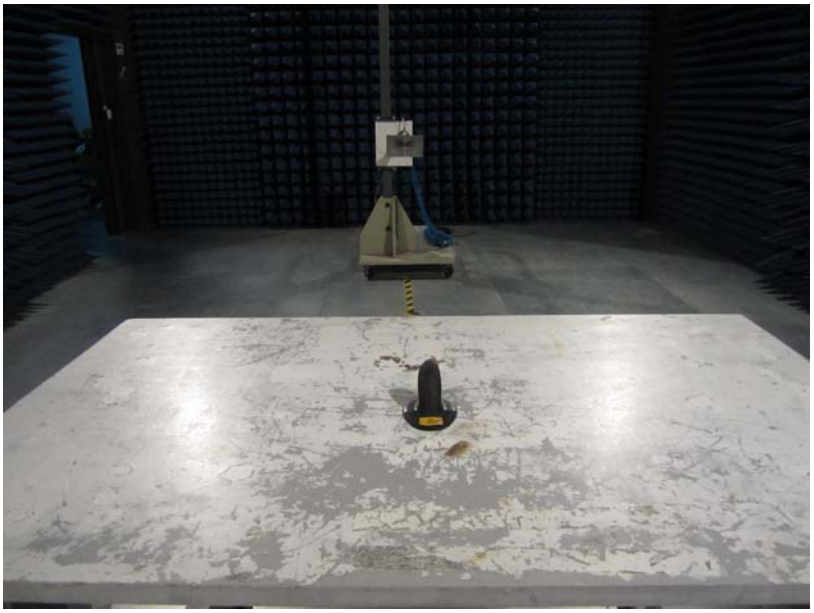


Highest channel

7 Test Setup Photo

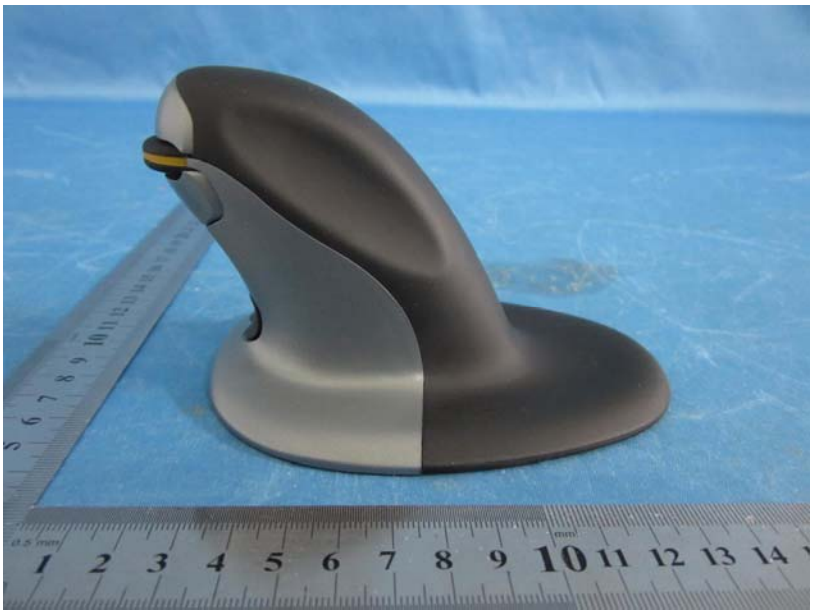
Radiated Emission

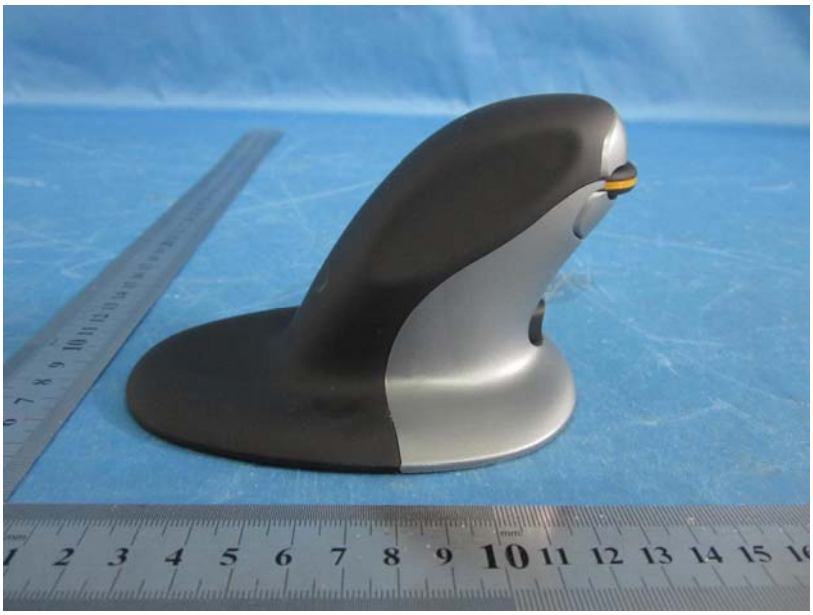


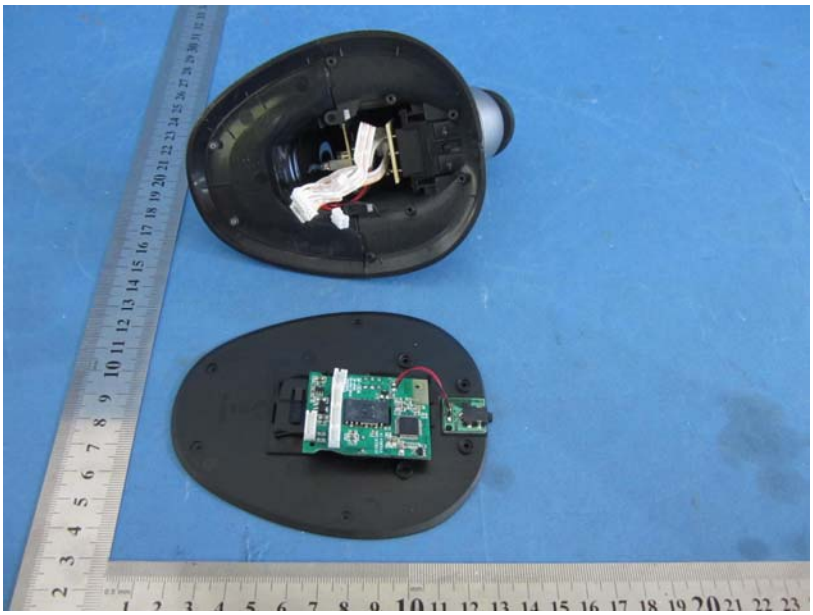


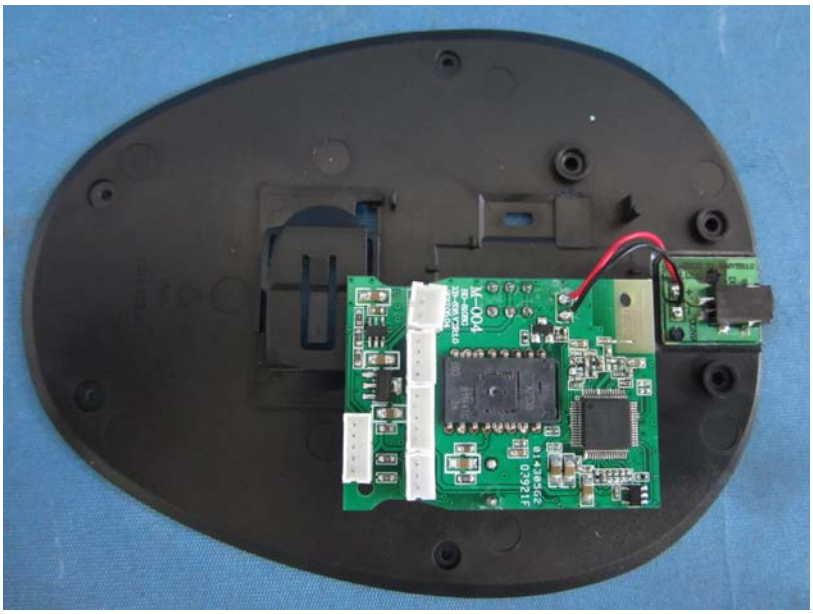
Conducted Emission

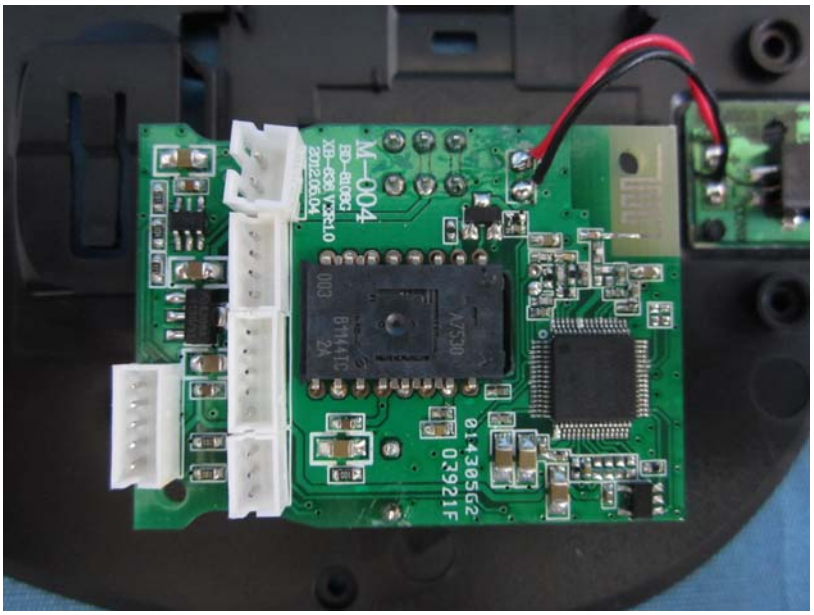
8 EUT Constructional Details







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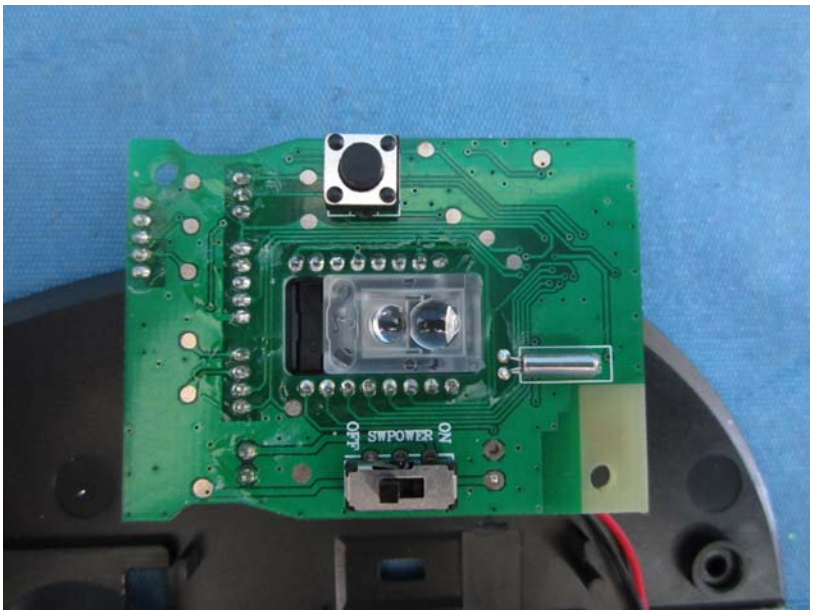
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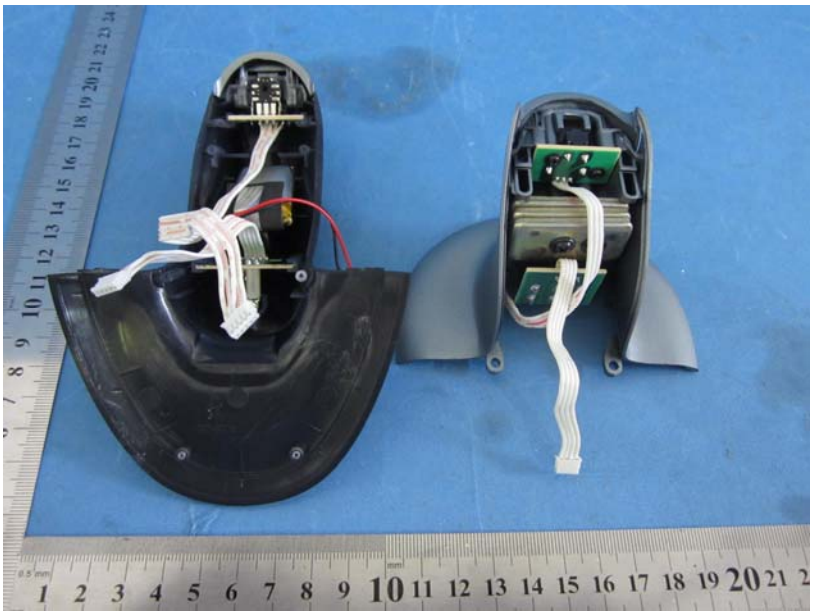

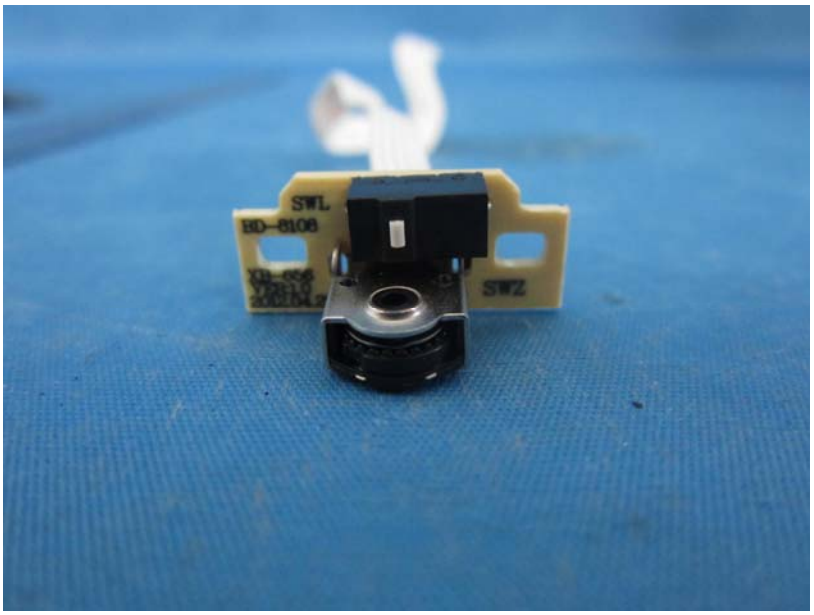
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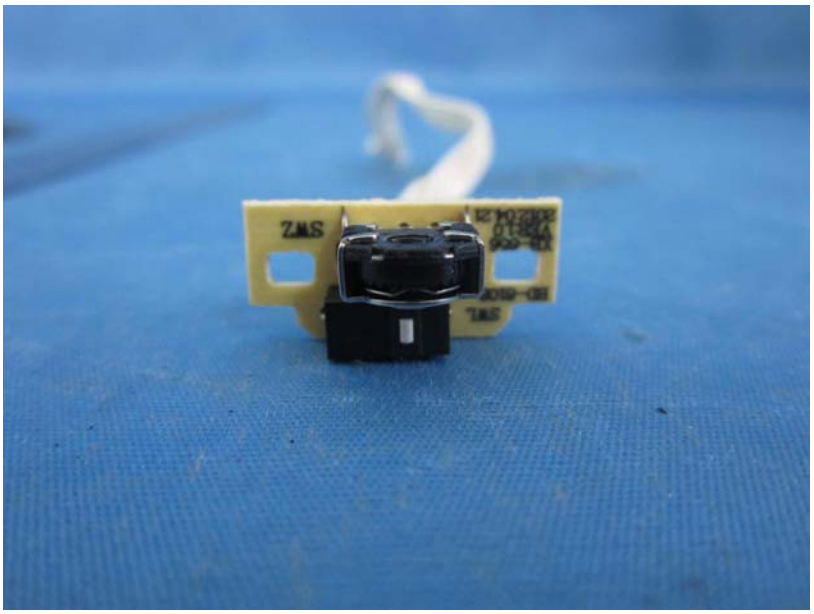
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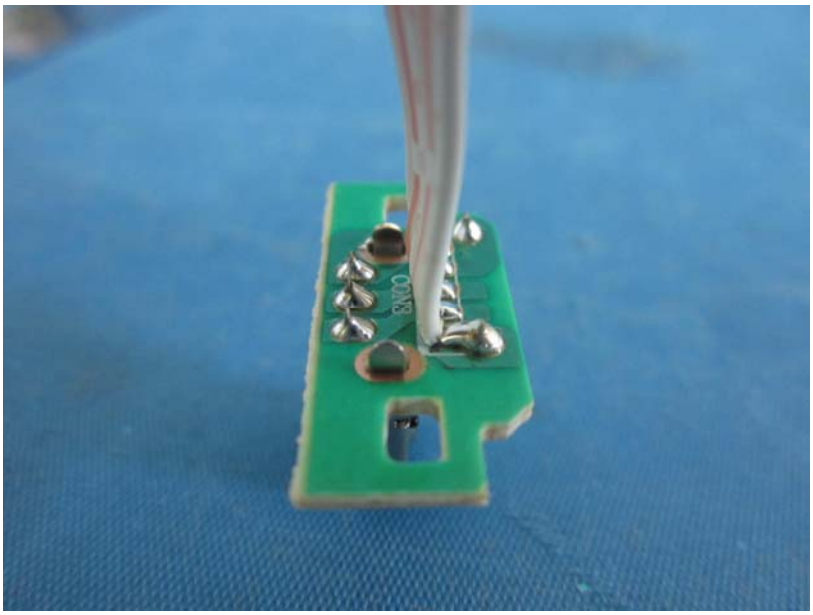

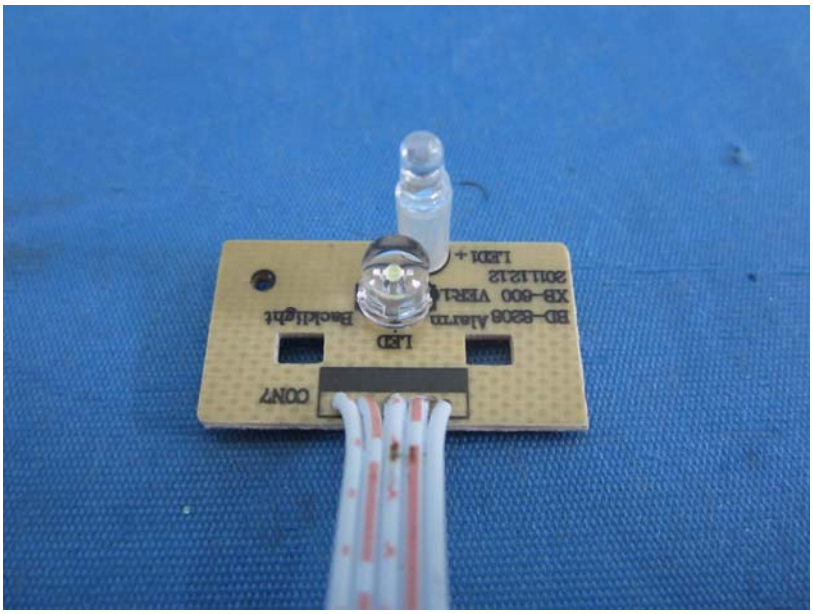
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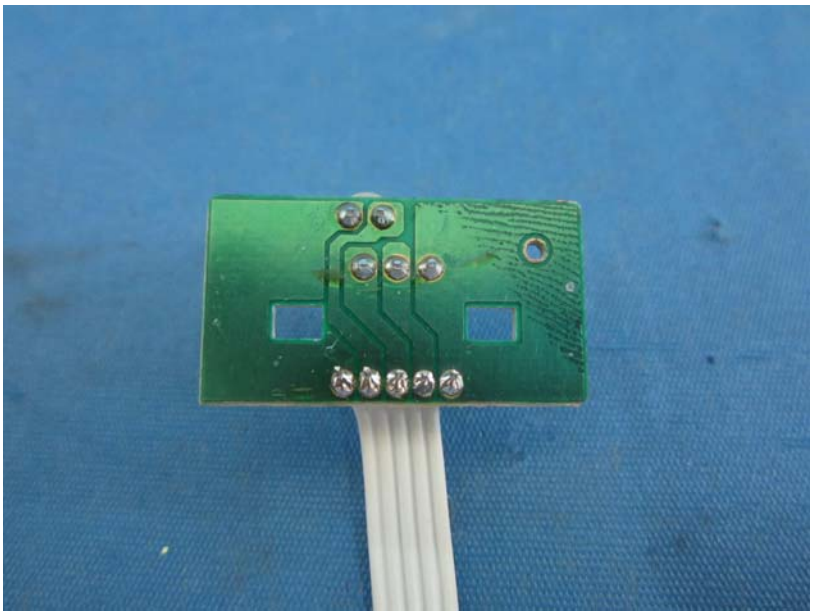
LED
CON7

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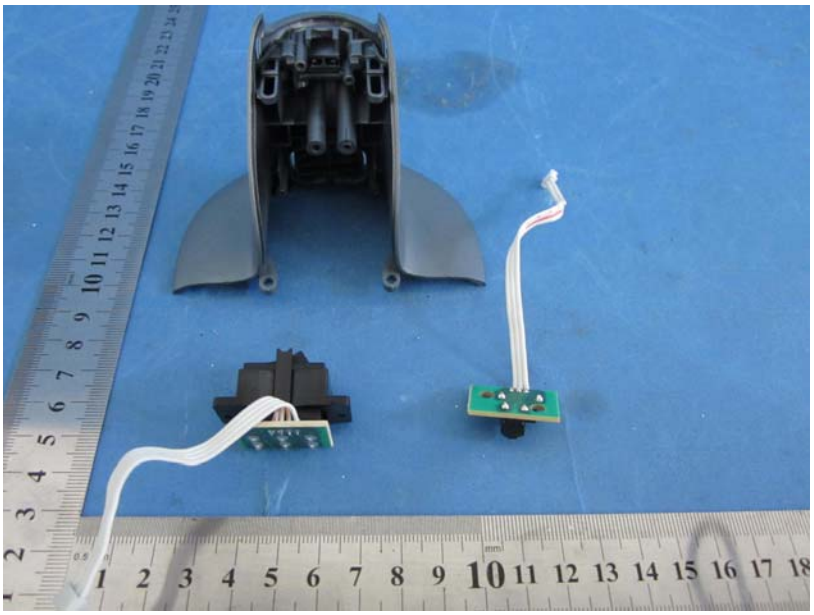

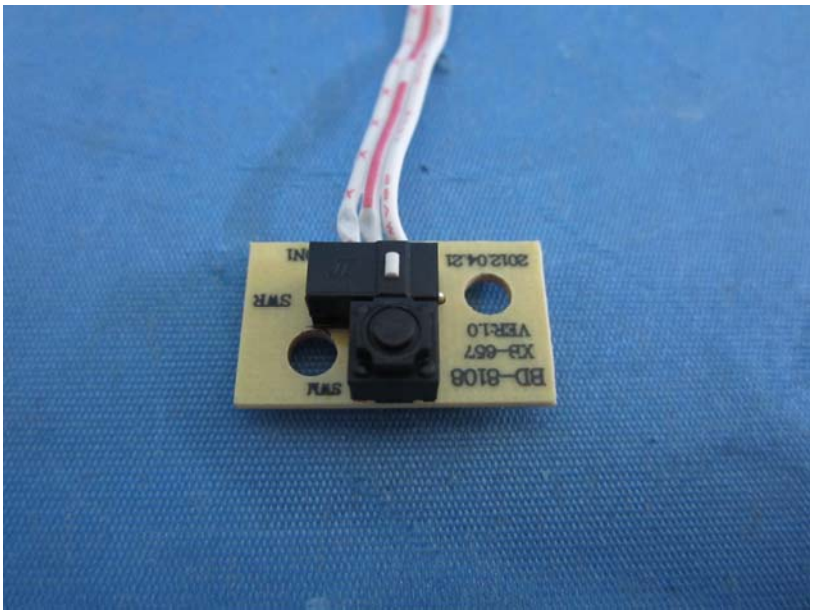
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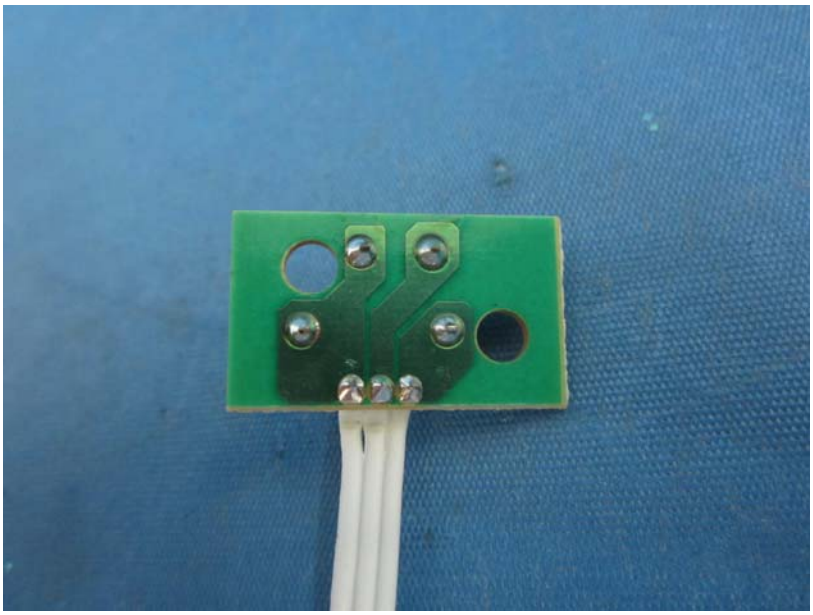

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