Shenzhen EBO Technology Co., Ltd.

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FCC REPORT

Applicant:	SHENZHEN AIBIRD TECHNOLOGY CO., LTD.
Address of Applicant:	Building B, Famous Industrial Product Purchasing Center, Xixiang Baoyuan Road, Baoan District, Shenzhen
Equipment Under Test (EUT)	
Product Name:	MULTIFUNCTIONAL SHOOTING STABILIZER REMOTE CONTROL
Model No.:	rc01
FCC ID:	2AGP8RC01A
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.249:2014
Date of sample receipt:	January 26, 2016
Date of Test:	January 26, 2016 To February 26, 2016
Date of report issued:	February 26, 2016
Test Result :	PASS *

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

Authorized Signature:

Kevin Yu
Laboratory Manager

2 Version

Version No.	Date	Description
00	*February 26, 2016*	*Original*

Prepared By:  ***Date:*** *February 26, 2016*

Project Engineer

Check By:  ***Date:*** *February 26, 2016*

Reviewer

3 Contents

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.

Remark: Test according to ANSI C63.4 2014 and ANSI C63.10 2013.

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz ~ 30MHz	± 4.34dB	(1)
Radiated Emission	30MHz ~ 1000MHz	± 4.24dB	(1)
Radiated Emission	1GHz ~ 26.5GHz	± 4.68dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	± 3.45dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 Client Information

Applicant:	SHENZHEN AIBIRD TECHNOLOGY CO., LTD.
Address of Applicant:	Building B, Famous Industrial Product Purchasing Center, Xixiang Baoyuan Road, Baoan District, Shenzhen
Manufacturer:	Wuhan AIbird UAV Co., Ltd.
Address of Manufacturer:	Innovation Park, Changzui Technology Park, High-tech six Road, Optical Valley Avenue, Wuhan

5.2 General Description of EUT

Product Name:	MULTIFUNCTIONAL SHOOTING STABILIZER REMOTE CONTROL
Model No.:	rc01
Operation Frequency:	2408MHz~2470MHz
Channel numbers:	63
Channel separation:	1MHz
Modulation type:	GFSK
Antenna Type:	PCB Antenna
Antenna gain:	2dBi (declare by Applicant)
Power supply:	DC 5.0V (by USB port) or 300mAh lithium battery

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2408MHz	17	2424MHz	33	2440MHz	49	2456MHz
2	2409MHz	18	2425MHz	34	2441MHz	50	2457MHz
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
15	2422MHz	31	2438MHz	47	2454MHz	63	2470MHz
16	2423MHz	32	2439MHz	48	2455MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2408MHz
The middle channel	2439MHz
The Highest channel	2470MHz

5.3 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
Remark: 1.During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.	

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)	95.21	98.90	94.32

Final Test Mode:

According to ANSI C63.10 standards, the test results is the "worst case":

Y axis (see the test setup photo)

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC Approval
Apple	PC	A1278	C1MN99ERDTY3	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 files. Registration 600491, June 28, 2013.

● **Industry Canada (IC) —Registration No.: 9079A-2**

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-2, June 26, 2013.

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

5.7 Other Information Requested by the Customer

None.

6 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. 28 2015	Mar. 27 2016
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	Spectrum Analyzer	Agilent	E4440A	GTS533	Jun. 30 2015	Jun. 29 2016
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jun. 30 2015	Jun. 29 2016
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Jun. 30 2015	Jun. 29 2016
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	Jun. 26 2015	Jun. 25 2016
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 27 2015	Mar. 26 2016
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
9	Coaxial Cable	GTS	N/A	GTS213	Mar. 28 2015	Mar. 27 2016
10	Coaxial Cable	GTS	N/A	GTS211	Mar. 28 2015	Mar. 27 2016
11	Coaxial cable	GTS	N/A	GTS210	Mar. 28 2015	Mar. 27 2016
12	Coaxial Cable	GTS	N/A	GTS212	Mar. 28 2015	Mar. 27 2016
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jun. 30 2015	Jun. 29 2016
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jun. 30 2015	Jun. 29 2016
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Jun. 26 2015	Jun. 25 2016
16	Band filter	Amindeon	82346	GTS219	Mar. 28 2015	Mar. 27 2016
17	Power Meter	Anritsu	ML2495A	GTS540	Jun. 30 2015	Jun. 29 2016
18	Power Sensor	Anritsu	MA2411B	GTS541	Jun. 30 2015	Jun. 29 2016

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)	GTS264	Jun. 30 2015	Jun. 29 2016
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	Jun. 30 2015	Jun. 29 2016
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	Jun. 30 2015	Jun. 29 2016
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	Jun. 30 2015	Jun. 29 2016
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	Jun. 30 2015	Jun. 29 2016
6	Coaxial Cable	GTS	N/A	GTS227	Jun. 30 2015	Jun. 29 2016
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Barometer	ChangChun	DYM3	GTS257	July 07 2015	July 06 2016

7 Test results and Measurement Data

7.1 Antenna requirement:

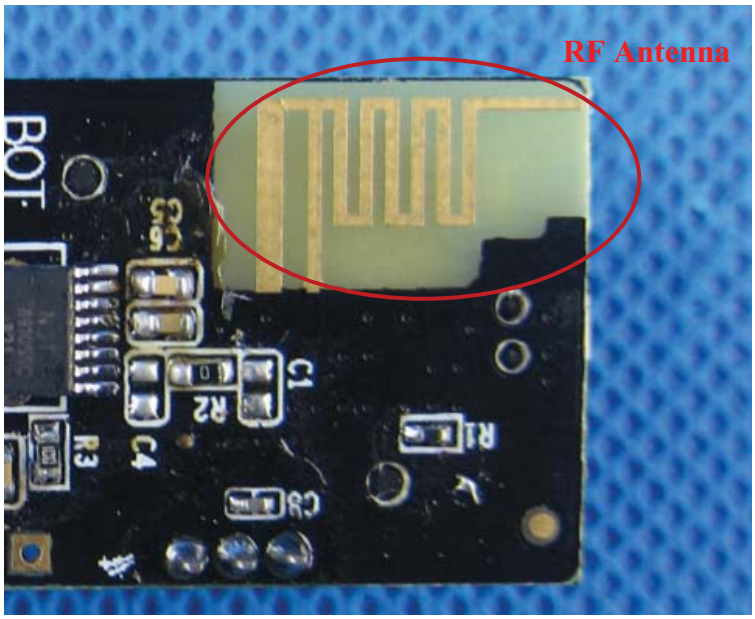
Standard requirement:	FCC Part15 C Section 15.203

15.203 requirement:

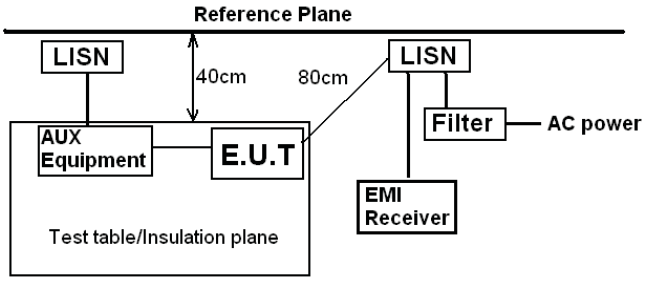
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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 antenna is PCB antenna, the best case gain of the antenna is 2dBi

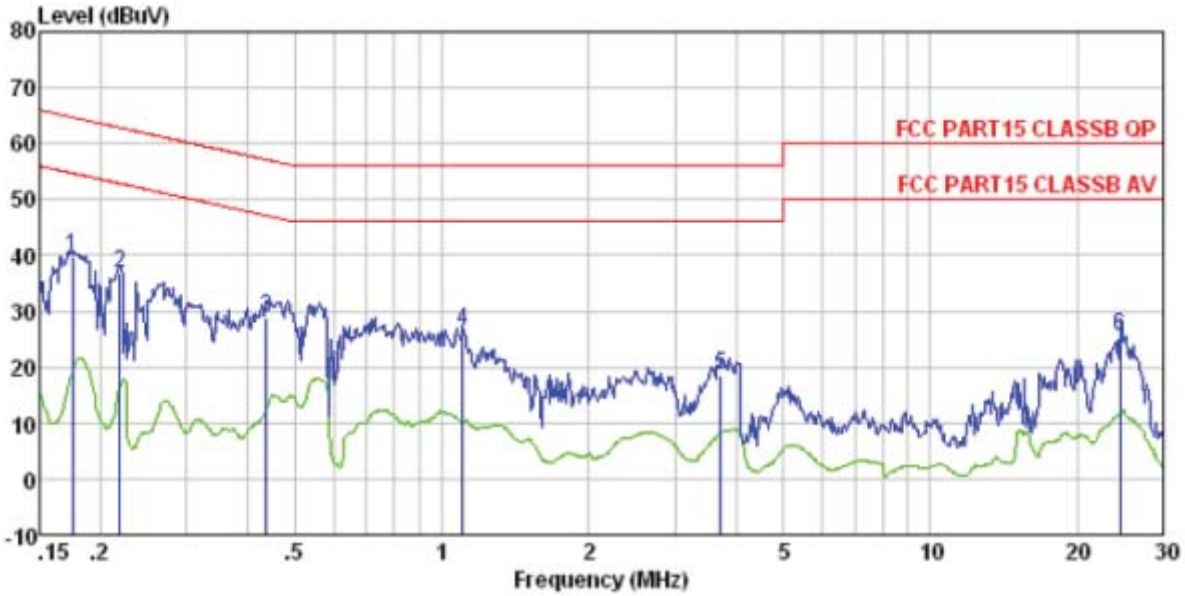


7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
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 C63.10:2013 on conducted measurement.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement data:

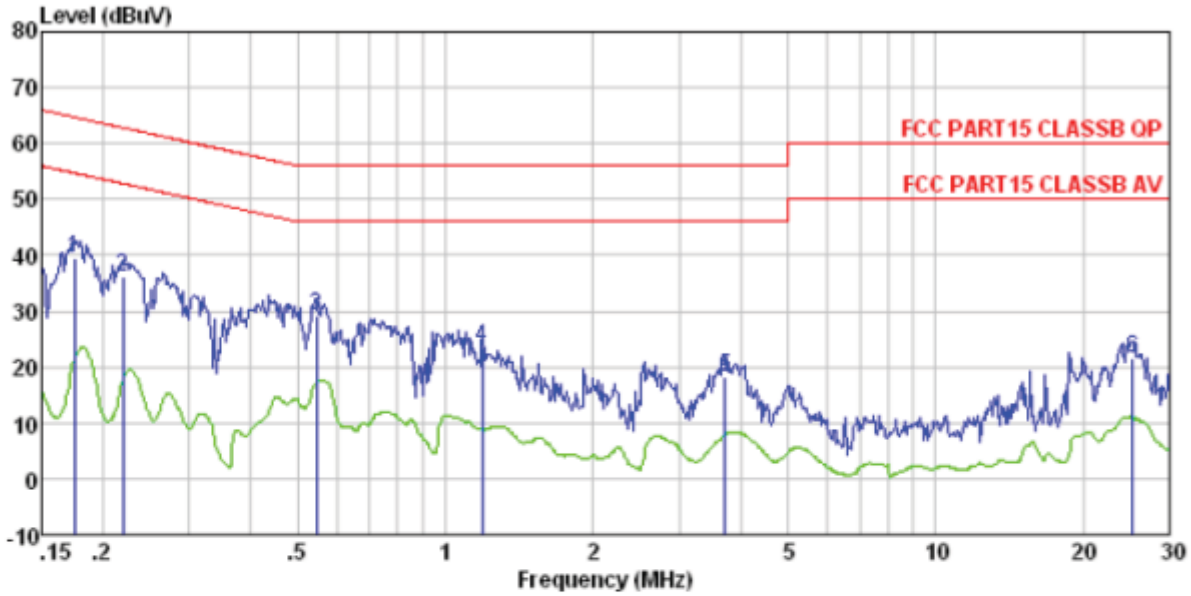
Test mode:	Bluetooth mode		LINE



Condition : FCC PART15 CLASSB QP LISN-2013 LINE

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.175	39.54	0.14	0.13	39.81	64.72	-24.91	QP
2	0.219	36.62	0.13	0.13	36.88	62.88	-26.00	QP
3	0.437	28.76	0.12	0.11	28.99	57.11	-28.12	QP
4	1.106	26.26	0.13	0.13	26.52	56.00	-29.48	QP
5	3.720	18.18	0.19	0.15	18.52	56.00	-37.48	QP
6	24.529	24.09	1.11	0.23	25.43	60.00	-34.57	QP

Test mode:	Bluetooth mode		NEUTRAL



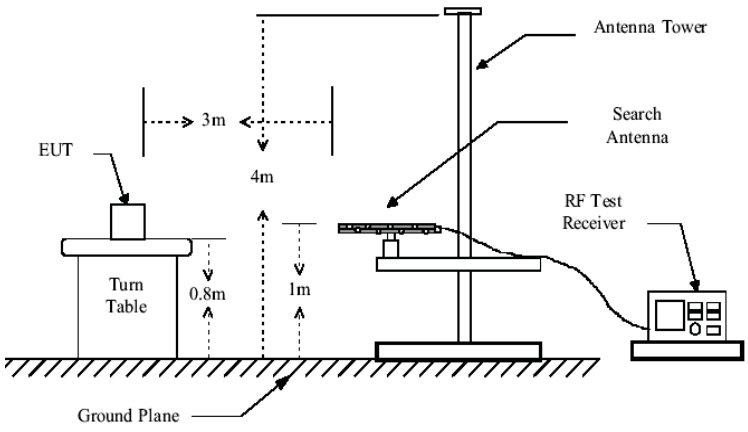
Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.175	39.40	0.07	0.13	39.60	64.72	-25.12	QP
2	0.220	36.04	0.06	0.12	36.22	62.83	-26.61	QP
3	0.546	29.16	0.07	0.11	29.34	56.00	-26.66	QP
4	1.191	23.40	0.08	0.13	23.61	56.00	-32.39	QP
5	3.720	17.80	0.14	0.15	18.09	56.00	-37.91	QP
6	25.188	20.35	1.05	0.23	21.63	60.00	-38.37	QP

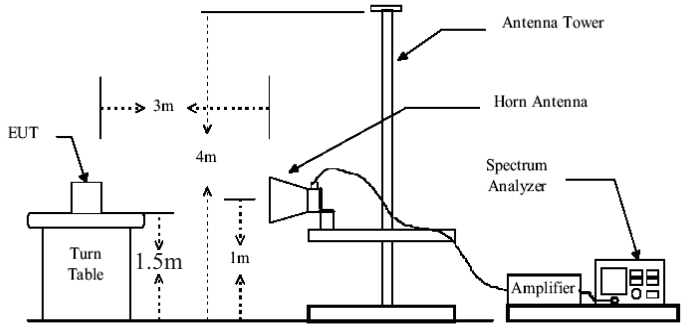
Notes:

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
4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.

7.3 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 C63.10:2013</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><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></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><th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></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><th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></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 m for below 1GHz and 1.5m for above 1GHz above the ground at a 3 meter camber. The table was rotated 360 degrees to determine 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 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement data:

7.3.1 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	94.53	27.58	5.39	30.18	97.32	114.00	-16.68	Vertical
2408.00	91.51	27.58	5.39	30.18	94.30	114.00	-19.70	Horizontal
2439.00	92.61	27.55	5.43	30.06	95.53	114.00	-18.47	Vertical
2439.00	90.45	27.55	5.43	30.06	93.37	114.00	-20.63	Horizontal
2470.00	95.84	27.52	5.47	29.93	98.90	114.00	-15.10	Vertical
2470.00	92.33	27.52	5.47	29.93	95.39	114.00	-18.61	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
2408.00	83.08	27.58	5.39	30.18	85.87	94.00	-8.14	Vertical
2408.00	80.23	27.58	5.39	30.18	83.02	94.00	-10.98	Horizontal
2439.00	81.04	27.55	5.43	30.06	83.96	94.00	-10.04	Vertical
2439.00	78.02	27.55	5.43	30.06	80.94	94.00	-13.06	Horizontal
2470.00	84.57	27.52	5.47	29.93	87.63	94.00	-6.37	Vertical
2470.00	80.97	27.52	5.47	29.93	84.03	94.00	-9.97	Horizontal

Remark: RBW 3MHz, VBW 10MHz , peak detector for PK value, RBW 3MHz, VBW 10MHz AV detector for AV value

7.3.2 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
35.75	38.20	14.49	0.62	30.07	23.24	40.00	-16.76	Vertical
88.03	38.96	13.32	1.09	29.76	23.61	43.50	-19.89	Vertical
100.23	39.41	15.11	1.19	29.70	26.01	43.50	-17.49	Vertical
432.55	36.28	17.53	3.01	29.43	27.39	46.00	-18.61	Vertical
842.13	29.62	22.51	4.63	29.16	27.60	46.00	-18.40	Vertical
938.83	31.87	23.34	4.99	29.10	31.10	46.00	-14.90	Vertical
94.76	39.81	14.84	1.15	29.72	26.08	43.50	-17.42	Horizontal
103.81	40.07	14.78	1.22	29.68	26.39	43.50	-17.11	Horizontal
109.80	38.40	14.25	1.28	29.63	24.30	43.50	-19.20	Horizontal
180.65	41.89	11.76	1.74	29.27	26.12	43.50	-17.38	Horizontal
432.55	32.97	17.53	3.01	29.43	24.08	46.00	-21.92	Horizontal
938.83	31.21	23.34	4.99	29.10	30.44	46.00	-15.56	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	37.59	31.78	8.60	32.09	45.88	74.00	-28.12	Vertical
7224.00	32.02	36.15	11.65	32.00	47.82	74.00	-26.18	Vertical
9632.00	31.63	37.95	14.14	31.62	52.10	74.00	-21.90	Vertical
12040.00	*					74.00		Vertical
14448.00	*					74.00		Vertical
4816.00	41.93	31.78	8.60	32.09	50.22	74.00	-23.78	Horizontal
7224.00	33.80	36.15	11.65	32.00	49.60	74.00	-24.40	Horizontal
9632.00	31.08	37.95	14.14	31.62	51.55	74.00	-22.45	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	26.35	31.78	8.60	32.09	34.64	54.00	-19.36	Vertical
7224.00	20.67	36.15	11.65	32.00	36.47	54.00	-17.53	Vertical
9632.00	19.73	37.95	14.14	31.62	40.20	54.00	-13.80	Vertical
12040.00	*					54.00		Vertical
14448.00	*					54.00		Vertical
4816.00	30.61	31.78	8.60	32.09	38.90	54.00	-15.10	Horizontal
7224.00	22.86	36.15	11.65	32.00	38.66	54.00	-15.34	Horizontal
9632.00	19.48	37.95	14.14	31.62	39.95	54.00	-14.05	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
4878.00	35.90	31.85	8.67	32.12	44.30	74.00	-29.70	Vertical
7317.00	30.90	36.37	11.72	31.89	47.10	74.00	-26.90	Vertical
9756.00	30.64	38.35	14.25	31.62	51.62	74.00	-22.38	Vertical
12195.00	*					74.00		Vertical
14634.00	*					74.00		Vertical
4878.00	39.90	31.85	8.67	32.12	48.30	74.00	-25.70	Horizontal
7317.00	32.53	36.37	11.72	31.89	48.73	74.00	-25.27	Horizontal
9756.00	29.93	38.35	14.25	31.62	50.91	74.00	-23.09	Horizontal
12195.00	*					74.00		Horizontal
14634.00	*					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
4878.00	24.99	31.85	8.67	32.12	33.39	54.00	-20.61	Vertical
7317.00	19.75	36.37	11.72	31.89	35.95	54.00	-18.05	Vertical
9756.00	18.91	38.35	14.25	31.62	39.89	54.00	-14.11	Vertical
12195.00	*					54.00		Vertical
14634.00	*					54.00		Vertical
4878.00	29.06	31.85	8.67	32.12	37.46	54.00	-16.54	Horizontal
7317.00	21.83	36.37	11.72	31.89	38.03	54.00	-15.97	Horizontal
9756.00	18.53	38.35	14.25	31.62	39.51	54.00	-14.49	Horizontal
12195.00	*					54.00		Horizontal
14634.00	*					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
4940.00	39.93	31.93	8.73	32.16	48.43	74.00	-25.57	Vertical
7410.00	33.57	36.59	11.79	31.78	50.17	74.00	-23.83	Vertical
9880.00	33.02	38.81	14.38	31.88	54.33	74.00	-19.67	Vertical
12350.00	*					74.00		Vertical
14820.00	*					74.00		Vertical
4940.00	44.75	31.93	8.73	32.16	53.25	74.00	-20.75	Horizontal
7410.00	35.56	36.59	11.79	31.78	52.16	74.00	-21.84	Horizontal
9880.00	32.69	38.81	14.38	31.88	54.00	74.00	-20.00	Horizontal
12350.00	*					74.00		Horizontal
14820.00	*					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
4940.00	28.41	31.93	8.73	32.16	36.91	54.00	-17.09	Vertical
7410.00	22.07	36.59	11.79	31.78	38.67	54.00	-15.33	Vertical
9880.00	20.98	38.81	14.38	31.88	42.29	54.00	-11.71	Vertical
12350.00	*					54.00		Vertical
14820.00	*					54.00		Vertical
4940.00	32.96	31.93	8.73	32.16	41.46	54.00	-12.54	Horizontal
7410.00	24.43	36.59	11.79	31.78	41.03	54.00	-12.97	Horizontal
9880.00	20.94	38.81	14.38	31.88	42.25	54.00	-11.75	Horizontal
12350.00	*					54.00		Horizontal
14820.00	*					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.*

7.3.3 Bandedge emissions

All of the restriction bands were tested, and only the data of worst case was exhibited.

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
2390.00	39.36	27.59	5.38	30.18	42.15	74.00	-31.85	Horizontal
2400.00	45.47	27.58	5.39	30.18	48.26	74.00	-25.74	Horizontal
2390.00	39.58	27.59	5.38	30.18	42.37	74.00	-31.63	Vertical
2400.00	45.46	27.58	5.39	30.18	48.25	74.00	-25.75	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
2390.00	30.71	27.59	5.38	30.18	33.50	54.00	-20.50	Horizontal
2400.00	31.30	27.58	5.39	30.18	34.09	54.00	-19.92	Horizontal
2390.00	30.40	27.59	5.38	30.18	33.19	54.00	-20.81	Vertical
2400.00	31.20	27.58	5.39	30.18	33.99	54.00	-20.01	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	41.05	27.53	5.47	29.93	44.12	74.00	-29.88	Horizontal
2500.00	40.89	27.55	5.49	29.93	44.00	74.00	-30.00	Horizontal
2483.50	41.30	27.53	5.47	29.93	44.37	74.00	-29.63	Vertical
2500.00	41.55	27.55	5.49	29.93	44.66	74.00	-29.34	Vertical

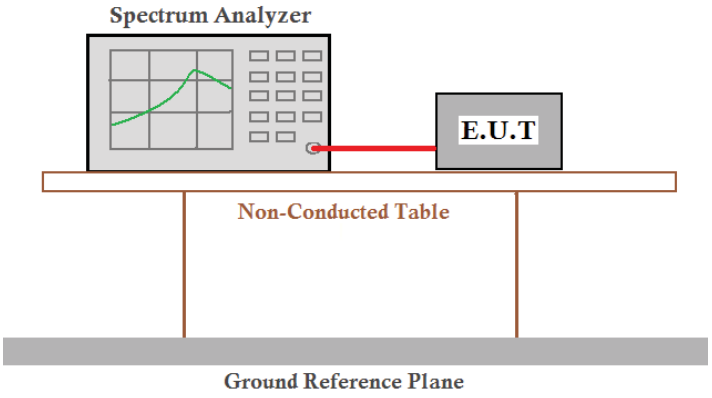
Average value:

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	33.49	27.53	5.47	29.93	36.56	54.00	-17.44	Horizontal
2500.00	32.00	27.55	5.49	29.93	35.11	54.00	-18.89	Horizontal
2483.50	34.41	27.53	5.47	29.93	37.48	54.00	-16.52	Vertical
2500.00	31.63	27.55	5.49	29.93	34.74	54.00	-19.26	Vertical

Remark:

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

7.4 20dB Occupy Bandwidth

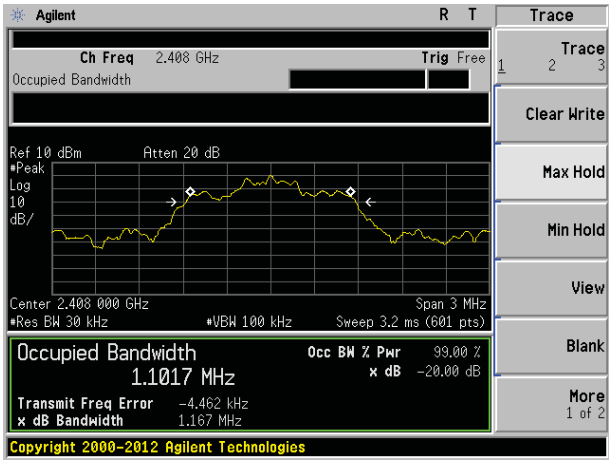
Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.10:2013
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement Data

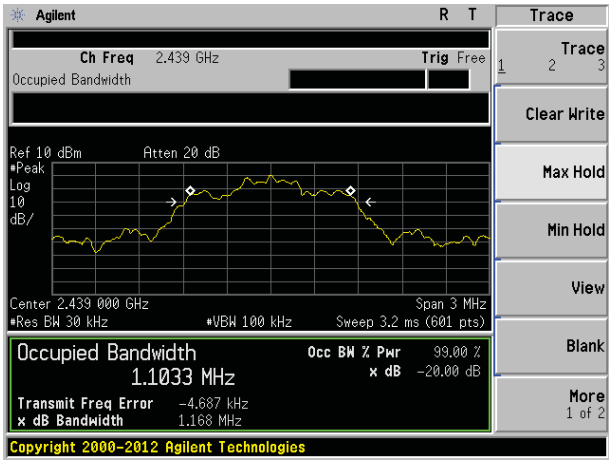
Measurement Data

Test channel	20dB bandwidth(MHz)	Result
Lowest	1.167	Pass
Middle	1.168	Pass
Highest	1.169	Pass

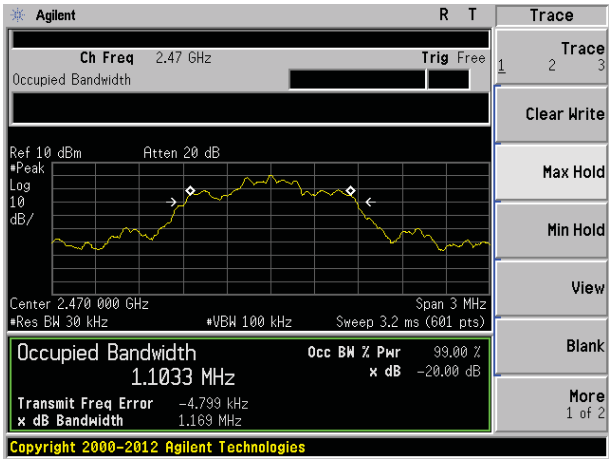
Test plot as follows:



Lowest channel



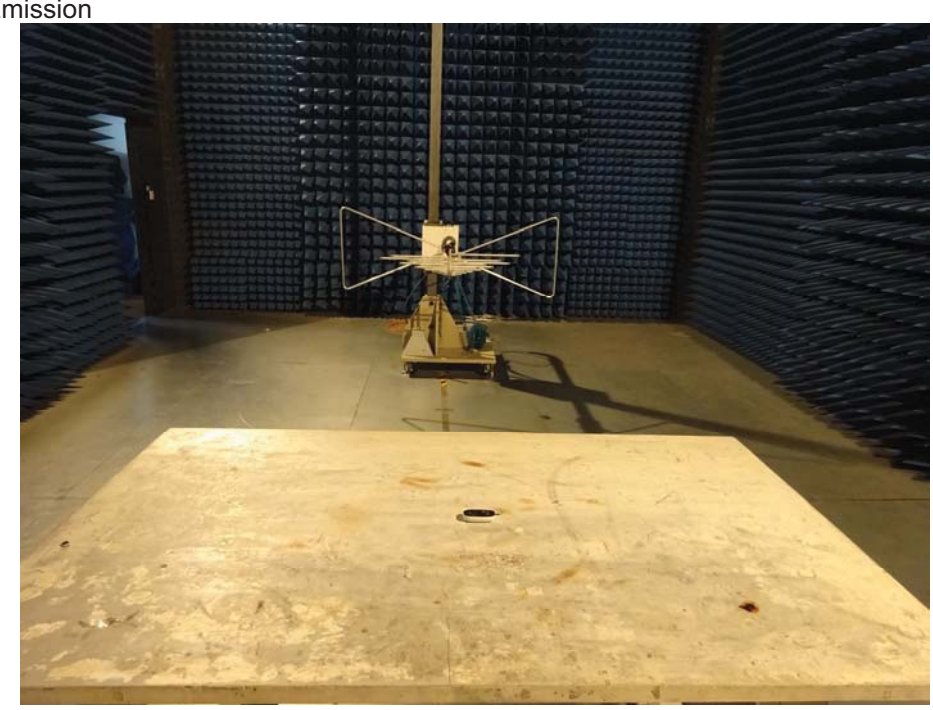
Middle channel

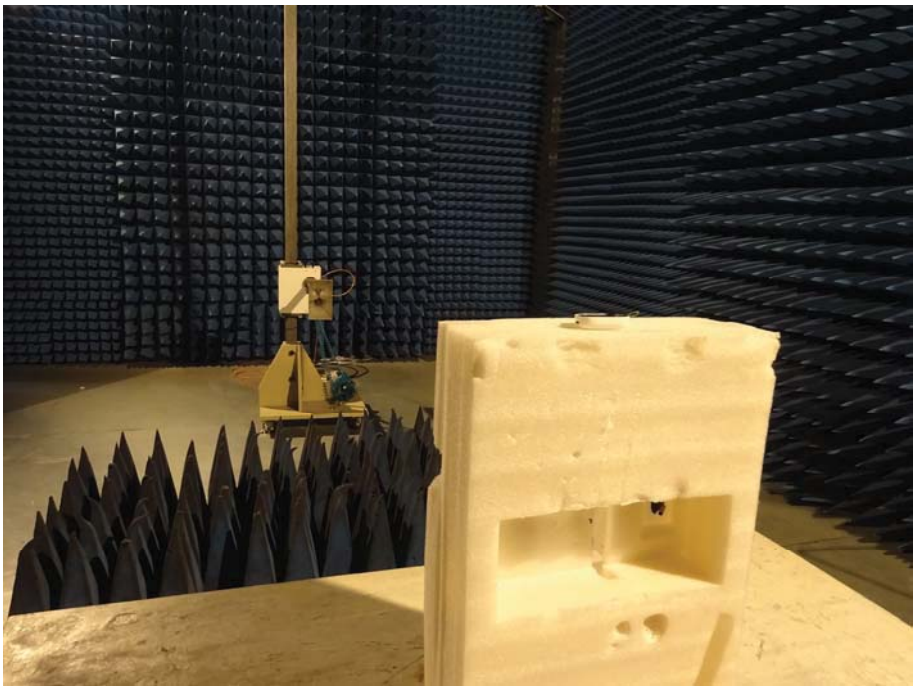


Highest channel

8 Test Setup Photo

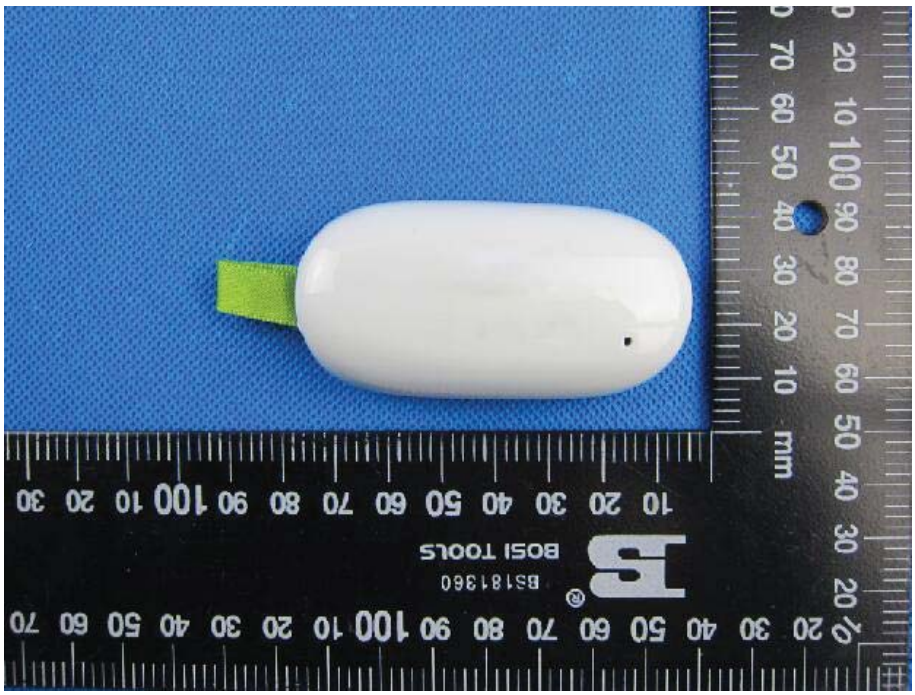
Radiated Emission

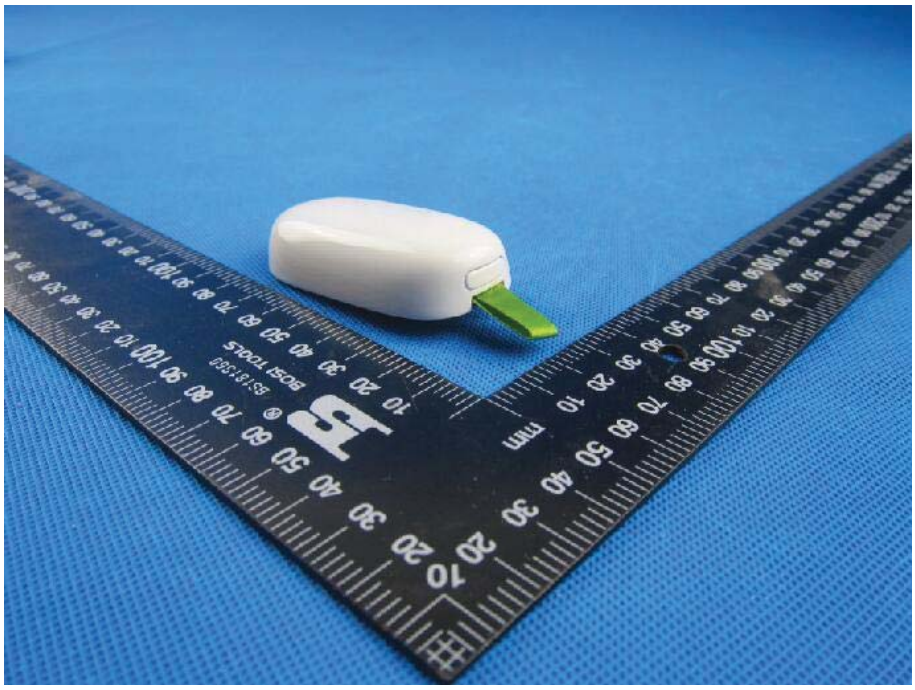


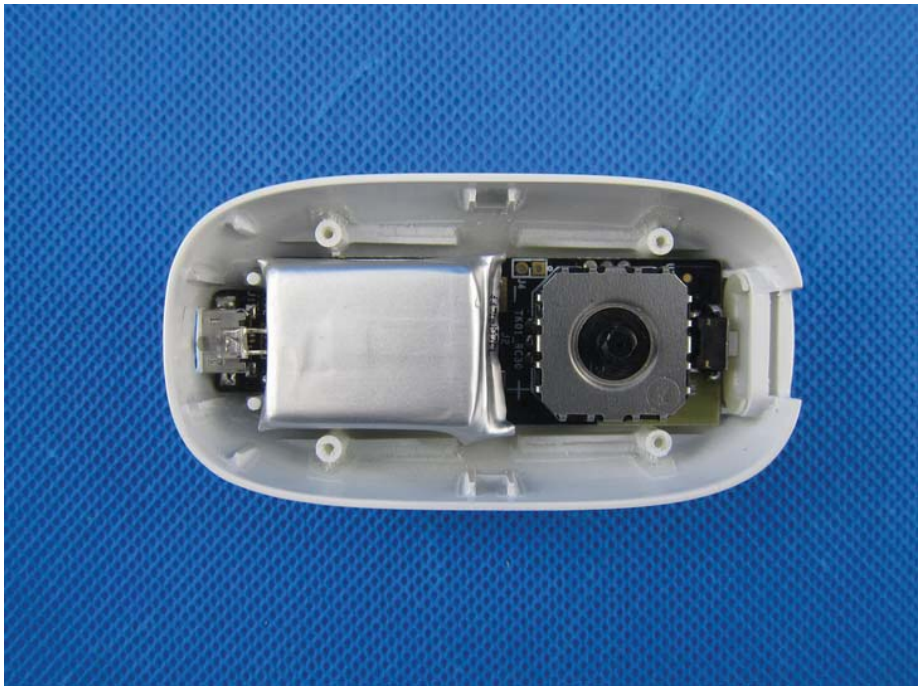


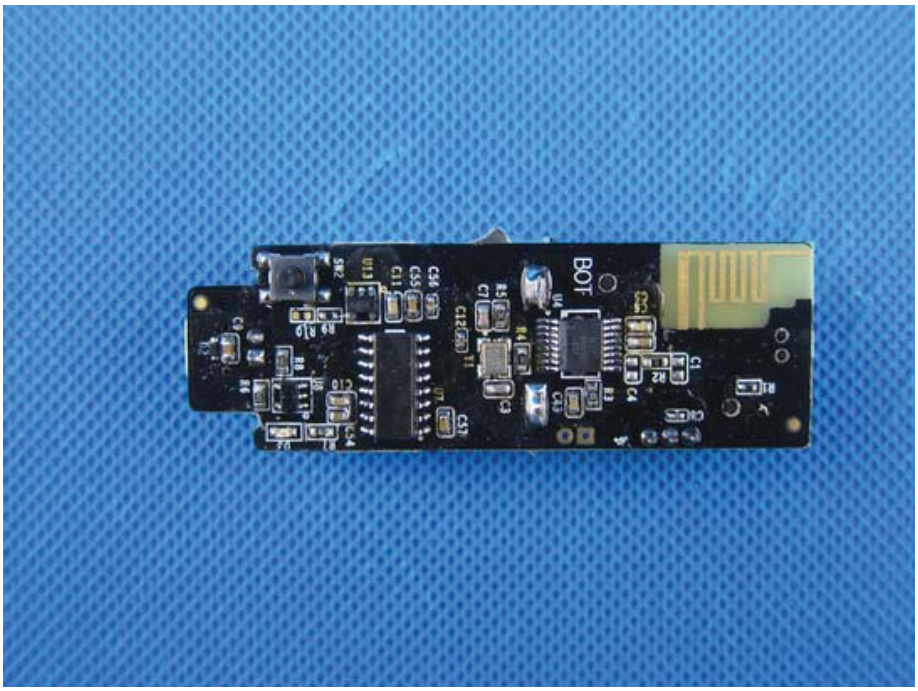
Conducted Emission

9 EUT Constructional Details









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