

Global United Technology Services Co., Ltd.

Report No.: GTSE15030023801

FCC REPORT

Applicant: CHINA ELECTRONIC TECHNOLOGY CO., LTD

5F,NO.11, PINGDONG 4TH RD,NANPING HI TECH **Address of Applicant:**

INDUSTRIAL ZONE, ZHUHAI, GUANGDONG, CHINA

Equipment Under Test (EUT)

Product Name: Wireless SELF CAMERA MONOPOD

Model No.: NW-BS07

2AED2NW-BS07 FCC ID:

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249:2013

Date of sample receipt: March 11, 2015

Date of Test: March 11-19, 2015

Date of report issued: March 20, 2015

Test Result: PASS *

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

Authorized Signature:



Robinson Lo **Laboratory Manager**

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the GTS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in

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2 Version

Version No.	Date	Description
00	March 20, 2015	Original

Prepared By:	Sam. Gao	Date:	March 20, 2015
	Project Engineer		
Check By:	hank. you	Date:	March 20, 2015
	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:	CHINA ELECTRONIC TECHNOLOGY CO., LTD
Address of Applicant:	5F,NO.11, PINGDONG 4TH RD,NANPING HI TECH INDUSTRIAL ZONE, ZHUHAI, GUANGDONG, CHINA
Manufacturer:	CHINA ELECTRONIC TECHNOLOGY CO., LTD
Address of Manufacturer:	5F,NO.11, PINGDONG 4TH RD,NANPING HI TECH INDUSTRIAL ZONE, ZHUHAI, GUANGDONG, CHINA

5.2 General Description of EUT

Product Name:	Wireless SELF CAMERA MONOPOD
Model No.:	NW-BS07
Operation Frequency:	2402MHz~2480MHz
Channel numbers:	79
Channel separation:	1MHz
Modulation type:	GFSK
Antenna Type:	PCB Antenna
Antenna gain:	0dBi
Power supply:	DC 3.7V



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2402MHz	21	2422MHz	41	2442MHz	61	2462MHz
2	2403MHz	22	2423MHz	42	2443MHz	62	2463MHz
						:	
19	2420MHz	39	2440MHz	59	2460MHz	79	2480MHz
20	2421MHz	40	2441MHz	60	2461MHz		

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	2402MHz
The middle channel	2441MHz
The Highest channel	2480MHz



5.3 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
Transmitting mode	Treep the Lot in continuously transmitting mode

Remark: 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	Х	Y	Z
Field Strength(dBuV/m)	93.60	91.53	92.15

Final Test Mode:

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

X axis (see the test setup photo)

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number
Emerson Network Power	USB Charger	A1299	N/A

5.5 Test Facility

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

CNAS —Registration No.: CNAS L5775

CNAS has accredited Global United Technology Services Co., Ltd. To ISO/IEC 17025 General Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• 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: Room 301-309, 3th Floor, Block A, Huafeng Jinyuan Business Building, No. 300 Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen 518102

Tel: 0755-27798480 Fax: 0755-27798960

5.7 Other Information Requested by the Customer

None.

Global United Technology Services Co., Ltd.

Room 301-309, 3th Floor, Block A, Huafeng Jinyuan Business Building, No. 300 Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

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6 Test Instruments list

Rad	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. 29 2014	Mar. 28 2015
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	Jul. 01 2014	Jun 30 2015
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 01 2014	Jun 30 2015
5	BiConiLog Antenna SCHWARZBECK MESS-ELEKTRONIK		VULB9163	GTS214	Jul. 01 2014	Jun 30 2015
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 27 2014	June 26 2015
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 28 2014	Mar. 27 2015
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
9	Coaxial Cable	GTS	N/A	GTS213	Mar. 29 2014	Mar. 28 2015
10	Coaxial Cable	GTS	N/A	GTS211	Mar. 29 2014	Mar. 28 2015
11	Coaxial cable	GTS	N/A	GTS210	Mar. 29 2014	Mar. 28 2015
12	Coaxial Cable	GTS	N/A	GTS212	Mar. 29 2014	Mar. 28 2015
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 01 2014	Jun. 30, 2015
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 01 2014	Jun. 30, 2015
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 27 2014	June 26 2015
16	Band filter	Amindeon	82346	GTS219	Mar. 29 2014	Mar. 28 2015

Cone	Conducted Emission:											
				Inventory	Cal.Date	Cal.Due date						
Item	Test Equipment	Manufacturer	Model No.	No.	(mm-dd-yy)	(mm-dd-yy)						
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS264	July 01 2014	June 30 2015						
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	July 01 2014	June 30 2015						
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	July 01 2014	June 30 2015						
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	July 01 2014	June 30 2015						
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	July 01 2014	June 30 2015						
6	Coaxial Cable	GTS	N/A	GTS227	July 01 2014	June 30 2015						
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A						

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7 Test results and Measurement Data

7.1 Antenna requirement

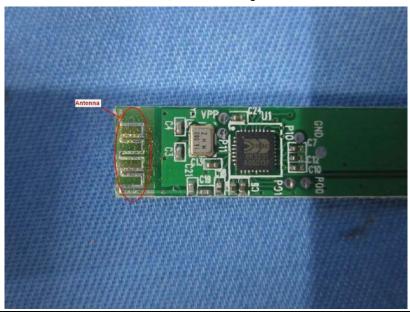
Standard requirement: FCC Part15 C Section 15.203

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 0dBi





7.2 Conducted Emissions

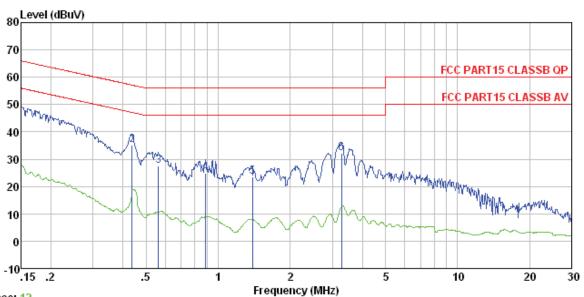
Test Requirement:	FCC Part15 C Section 15.207	'						
Test Method:	ANSI C63.4:2009							
Test Frequency Range:	150KHz to 30MHz							
Class / Severity:	Class B							
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto							
Limit:	1.577 511.12, 7577 5511.12, 51	Limit (c	IRu\/\					
Littiit.	Frequency range (MHz)	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:	Reference Plane		_					
	AUX Equipment E.U.T EMI Receiver Remark E.U.T Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m							
Test procedure:	The E.U.T is connected to the stabilization network (L.I.S. impedance for the measuring the measuring transfer in the	N.). This provides a 50						
	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).							
	conducted on, the relative oles must be changed asurement.							
Test Instruments:	Refer to section 6.0 for details							
Test mode:	Refer to section 5.3 for details	1						
Test results:	Pass							

Measurement data:

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Line:



Trace: 12

Site : Shielded room

Condition : FCC PART15 CLASSB QP LISN-2013 LINE

: 0238RF

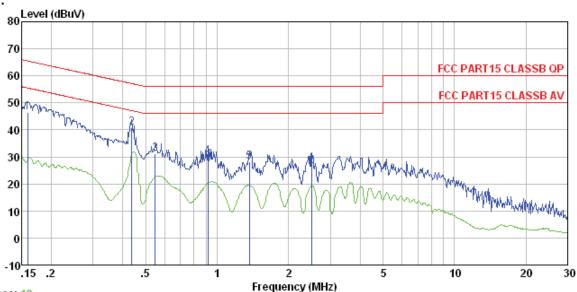
Job No. Test mode : Bluetooth mode

Test Engineer: Mike : Charger Remark

	Freq	Read Level		Level			Remark
	MHz	dBuV	dB	dBuV	dBu₹	dB	
5	0.437 0.564 0.885 1.388	44. 95 34. 82 27. 31 24. 61 23. 15 31. 70	0.11 0.12 0.13 0.13	35. 05 27. 56 24. 88 23. 40	57.11 56.00 56.00 56.00	-22.06 -28.44 -31.12 -32.60	QP QP QP QP



Neutral:



Trace: 10

Site : Shielded room

Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

Job No. : 0238RF

Test mode : Bluetooth mode

Test Engineer: Mike Remark : Charger

	Freq	Read Level	Cable Loss				Remark
	MHz	dBuV	d₿	dBuV	dBuV	dB	
5	0.437 0.549 0.914	27.89	0.11 0.11 0.13 0.13	40.66 31.27 30.05 28.11	57.11 56.00 56.00 56.00	-16.45 -24.73 -25.95 -27.89	QP QP QP 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

7.0	7.5 Radiated Emission Method									
	Test Requirement:	FCC Part15 C S	Section 15.20	9						
	Test Method:	ANSI C63.4:200	09							
	Test Frequency Range:	30MHz to 25GH	Ηz							
	Test site:	Measurement D	Distance: 3m							
	Receiver setup:	Frequency	Detector		RBW	VBW	Remark			
		30MHz- 1GHz	Quasi-pea	k	120KHz	300KHz	Quasi-peak Value			
		Above 1GHz	Peak		1MHz	3MHz	Peak Value			
		Above IGHZ	Peak		1MHz	10Hz	Average Value			
	Limit:	Freque	ency	Ĺ	imit (dBuV/	/m @3m)	Remark			
	(Field strength of the	2400MHz-2483.5MHz			94.0		Average Value			
	fundamental signal)	2 10011112 2			114.0	00	Peak Value			
	Limit:	Freque		L	imit (dBuV/	/m @3m)	Remark			
	(Spurious Emissions)	30MHz-88MHz			40.0		Quasi-peak Value			
	,	88MHz-216MHz			43.5		Quasi-peak Value			
		216MHz-960MHz 960MHz-1GHz			46.00 54.00		Quasi-peak Value Quasi-peak Value			
					54.00		Average Value			
		Above 1GHz			74.0		Peak Value			
	Limit: (band edge)	harmonics, sha	II be attenuat to the genera	ed I al ra	by at least a diated emi	50 dB belov	bands, except for w the level of the in Section 15.209,			
	Test setup:	Below 1GHz EUT Turn Table Ground Plane	a lesser atter	ıuat	ion.	Anten Sea Ante RF Test Receiver				
		Above 1GHz								

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	Report No.: GTSE15030023801
	Antenna Tower Horn Antenna Spectrum Analyzer Turn Table A A Amplifier
Test Procedure:	 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. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 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. 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. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 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
2402.00	90.81	27.58	5.39	30.18	93.60	114.00	-20.40	Vertical
2402.00	88.44	27.58	5.39	30.18	91.23	114.00	-22.77	Horizontal
2441.00	89.24	27.55	5.43	30.06	92.16	114.00	-21.84	Vertical
2441.00	87.47	27.55	5.43	30.06	90.39	114.00	-23.62	Horizontal
2480.00	89.65	27.52	5.47	29.93	92.71	114.00	-21.29	Vertical
2480.00	88.87	27.52	5.47	29.93	91.93	114.00	-22.07	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
2402.00	80.95	27.58	5.39	30.18	83.74	94.00	-10.26	Vertical
2402.00	78.45	27.58	5.39	30.18	81.24	94.00	-12.76	Horizontal
2441.00	79.10	27.55	5.43	30.06	82.02	94.00	-11.98	Vertical
2441.00	76.19	27.55	5.43	30.06	79.11	94.00	-14.89	Horizontal
2480.00	79.63	27.52	5.47	29.93	82.69	94.00	-11.31	Vertical
2480.00	78.97	27.52	5.47	29.93	82.03	94.00	-11.97	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

- Below TOTIZ									
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	
40.56	27.19	15.58	0.67	30.04	13.40	40.00	-26.60	Vertical	
66.27	28.79	12.16	0.91	29.88	11.98	40.00	-28.02	Vertical	
127.67	27.90	11.32	1.42	29.52	11.12	43.50	-32.38	Vertical	
189.07	25.73	12.48	1.78	29.24	10.75	43.50	-32.75	Vertical	
337.22	26.14	16.05	2.56	29.79	14.96	46.00	-31.04	Vertical	
675.21	28.00	20.72	4.00	29.22	23.50	46.00	-22.50	Vertical	
39.72	26.08	15.49	0.66	30.04	12.19	40.00	-27.81	Horizontal	
96.10	27.97	14.90	1.16	29.72	14.31	43.50	-29.19	Horizontal	
185.14	29.96	12.16	1.77	29.25	14.64	43.50	-28.86	Horizontal	
487.32	24.65	18.26	3.25	29.33	16.83	46.00	-29.17	Horizontal	
798.98	33.75	22.06	4.45	29.20	31.06	46.00	-14.94	Horizontal	
318.82	29.54	15.33	2.46	29.89	17.44	46.00	-28.56	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
4804.00	35.15	31.78	8.60	32.09	43.44	74.00	-30.56	Vertical
7206.00	30.40	36.15	11.65	32.00	46.20	74.00	-27.80	Vertical
9608.00	30.19	37.95	14.14	31.62	50.66	74.00	-23.34	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	38.99	31.78	8.60	32.09	47.28	74.00	-26.72	Horizontal
7206.00	31.96	36.15	11.65	32.00	47.76	74.00	-26.24	Horizontal
9608.00	29.41	37.95	14.14	31.62	49.88	74.00	-24.12	Horizontal
12010.00	*					74.00		Horizontal
14412.00	*					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
4804.00	24.37	31.78	8.60	32.09	32.66	54.00	-21.34	Vertical
7206.00	19.33	36.15	11.65	32.00	35.13	54.00	-18.87	Vertical
9608.00	18.54	37.95	14.14	31.62	39.01	54.00	-14.99	Vertical
12010.00	*					54.00		Vertical
14412.00	*					54.00		Vertical
4804.00	28.36	31.78	8.60	32.09	36.65	54.00	-17.35	Horizontal
7206.00	21.36	36.15	11.65	32.00	37.16	54.00	-16.84	Horizontal
9608.00	18.09	37.95	14.14	31.62	38.56	54.00	-15.44	Horizontal
12010.00	*					54.00		Horizontal
14412.00	*					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
4882.00	35.11	31.85	8.67	32.12	43.51	74.00	-30.49	Vertical
7323.00	30.37	36.37	11.72	31.89	46.57	74.00	-27.43	Vertical
9764.00	30.17	38.35	14.25	31.62	51.15	74.00	-22.85	Vertical
12205.00	*					74.00		Vertical
14646.00	*					74.00		Vertical
4882.00	38.95	31.85	8.67	32.12	47.35	74.00	-26.65	Horizontal
7323.00	31.93	36.37	11.72	31.89	48.13	74.00	-25.87	Horizontal
9764.00	29.39	38.35	14.25	31.62	50.37	74.00	-23.63	Horizontal
12205.00	*					74.00		Horizontal
14646.00	*					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
4882.00	24.34	31.85	8.67	32.12	32.74	54.00	-21.26	Vertical
7323.00	19.31	36.37	11.72	31.89	35.51	54.00	-18.49	Vertical
9764.00	18.52	38.35	14.25	31.62	39.50	54.00	-14.50	Vertical
12205.00	*					54.00		Vertical
14646.00	*					54.00		Vertical
4882.00	28.33	31.85	8.67	32.12	36.73	54.00	-17.27	Horizontal
7323.00	21.34	36.37	11.72	31.89	37.54	54.00	-16.46	Horizontal
9764.00	18.07	38.35	14.25	31.62	39.05	54.00	-14.95	Horizontal
12205.00	*					54.00		Horizontal
14646.00	*					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
4960.00	34.95	31.93	8.73	32.16	43.45	74.00	-30.55	Vertical
7440.00	30.27	36.59	11.79	31.78	46.87	74.00	-27.13	Vertical
9920.00	30.08	38.81	14.38	31.88	51.39	74.00	-22.61	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	38.75	31.93	8.73	32.16	47.25	74.00	-26.75	Horizontal
7440.00	31.81	36.59	11.79	31.78	48.41	74.00	-25.59	Horizontal
9920.00	29.28	38.81	14.38	31.88	50.59	74.00	-23.41	Horizontal
12400.00	*					74.00		Horizontal
14880.00	*					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
4960.00	24.22	31.93	8.73	32.16	32.72	54.00	-21.28	Vertical
7440.00	19.23	36.59	11.79	31.78	35.83	54.00	-18.17	Vertical
9920.00	18.45	38.81	14.38	31.88	39.76	54.00	-14.24	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	28.19	31.93	8.73	32.16	36.69	54.00	-17.31	Horizontal
7440.00	21.25	36.59	11.79	31.78	37.85	54.00	-16.15	Horizontal
9920.00	17.99	38.81	14.38	31.88	39.30	54.00	-14.70	Horizontal
12400.00	*					54.00		Horizontal
14880.00	*					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.

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	44.33	27.59	5.38	30.18	47.12	74.00	-26.88	Horizontal
2400.00	61.32	27.58	5.39	30.18	64.11	74.00	-9.89	Horizontal
2390.00	45.01	27.59	5.38	30.18	47.80	74.00	-26.20	Vertical
2400.00	63.51	27.58	5.39	30.18	66.30	74.00	-7.70	Vertical

Lowest channel

Average value:

Test channel:

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	34.55	27.59	5.38	30.18	37.34	54.00	-16.66	Horizontal
2400.00	45.87	27.58	5.39	30.18	48.66	54.00	-5.34	Horizontal
2390.00	34.60	27.59	5.38	30.18	37.39	54.00	-16.61	Vertical
2400.00	47.66	27.58	5.39	30.18	50.45	54.00	-3.55	Vertical

Т	est channel:	Highest channel
•	out originion.	riigiloot orialiiloi

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	46.60	27.53	5.47	29.93	49.67	74.00	-24.33	Horizontal
2500.00	45.50	27.55	5.49	29.93	48.61	74.00	-25.39	Horizontal
2483.50	47.69	27.53	5.47	29.93	50.76	74.00	-23.24	Vertical
2500.00	46.64	27.55	5.49	29.93	49.75	74.00	-24.25	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	37.39	27.53	5.47	29.93	40.46	54.00	-13.54	Horizontal
2500.00	35.19	27.55	5.49	29.93	38.30	54.00	-15.70	Horizontal
2483.50	38.73	27.53	5.47	29.93	41.80	54.00	-12.20	Vertical
2500.00	35.23	27.55	5.49	29.93	38.34	54.00	-15.66	Vertical

Remark:

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



7.4 20dB Occupy Bandwidth

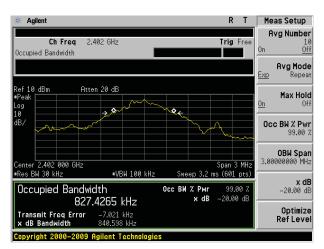
Test Requirement:	FCC Part15 C Section 15.249/15.215	
Test Method:	ANSI C63.4:2009	
Limit:	Operation Frequency range 2400MHz~2483.5MHz	
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Test Instruments:	Refer to section 6.0 for details	
Test mode:	Refer to section 5.3 for details	
Test results:	Pass	

Measurement Data

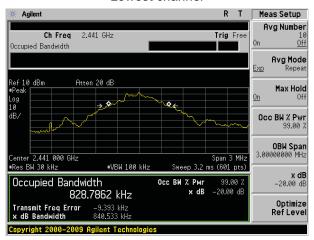
Test channel	20dB bandwidth(MHz)	Result
Lowest	0.841	Pass
Middle	0.841	Pass
Highest	0.840	Pass

Test plot as follows:

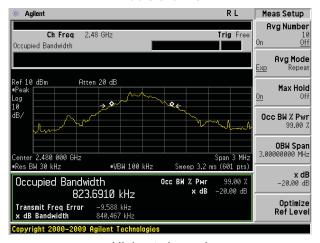




Lowest channel



Middle channel



Highest channel



8 Test Setup Photo

Radiated Emission







Conducted Emissions





9 EUT Constructional Details





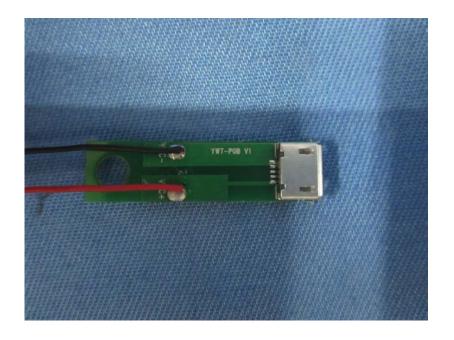




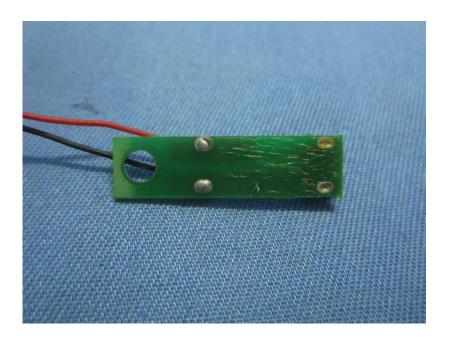


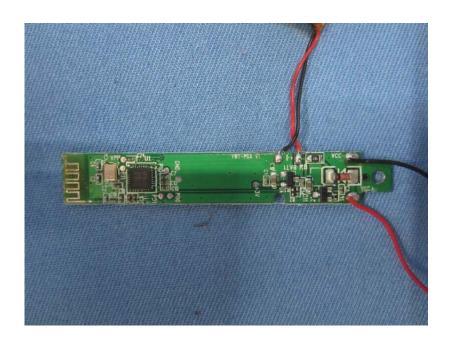






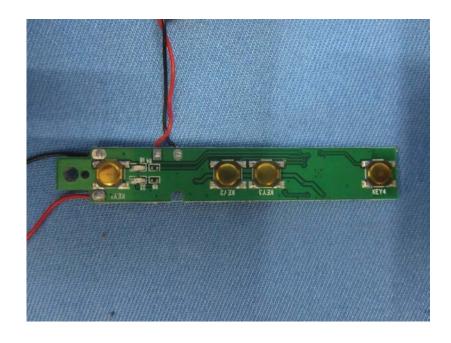




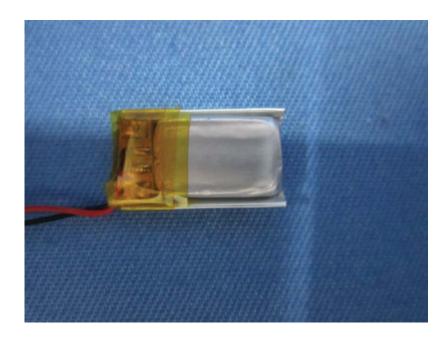












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