

Global United Technology Services Co., Ltd.

Report No.: GTSE14060105601

FCC REPORT

Applicant: Furrion Ltd

Address of Applicant: Suite 3-5, 16/F Pacific Plaza, 410 Des Voeux Road West, Sai

Wan, Hong Kong

Equipment Under Test (EUT)

Product Name: Wall Mount Stereo

Model No.: DV3000, DV3100

Trade Mark: **Furrion**

FCC ID: 2AAKS-DV30

FCC CFR Title 47 Part 15 Subpart C Section 15.249:2012 Applicable standards:

Date of sample receipt: June 24, 2014

Date of Test: July 01-07, 2014

Date of report issued: July 07, 2014

PASS * Test Result:

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

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of GTS International Electrical Approvals or testing done by GTS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by GTS International Electrical Approvals in writing.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



2 Version

Version No.	Date	Description
00	July 07, 2014	Original

Prepared By:	Sam. Gao	Date:	July 07, 2014
	Project Engineer	_	
Check By:	hank. yan	Date:	July 07, 2014
	Reviewer		

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



3 Contents

			Page
1	COV	ER PAGE	1
2	VEF	RSION	2
3	COI	NTENTS	3
4	TES	T SUMMARY	4
5	GEN	NERAL INFORMATION	5
	5.1	CLIENT INFORMATION	
	5.2	GENERAL DESCRIPTION OF EUT	5
	5.3	TEST MODE	
	5.4	DESCRIPTION OF SUPPORT UNITS	
	5.5	TEST FACILITY	
	5.6	TEST LOCATION	
	5.7	OTHER INFORMATION REQUESTED BY THE CUSTOMER	7
6	TES	T INSTRUMENTS LIST	8
7	TES	T RESULTS AND MEASUREMENT DATA	9
	7.1	ANTENNA REQUIREMENT:	
	7.2	RADIATED EMISSION METHOD	
	7.2.	· · · · · · · · · · · · · · · · · · ·	
	7.2.		
	7.2.	· · · · · · · · · · · · · · · · · · ·	
	7.3	20DB OCCUPY BANDWIDTH	18
8	TES	T SETUP PHOTO	20
9	EUT	CONSTRUCTIONAL DETAILS	21



4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	N/A
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.

N/A: not applicable.



5 General Information

5.1 Client Information

Applicant:	Furrion Ltd
Address of Applicant:	Suite 3-5, 16/F Pacific Plaza, 410 Des Voeux Road West, Sai Wan, Hong Kong
Manufacturer:	Dongguan Hua Sheng Audio Product Company Limited
Address of Manufacturer:	Jiaoyu Road, Fulong Village, Shipai Town, Dongguan, China

5.2 General Description of EUT

Product Name:	Wall Mount Stereo
Model No.:	DV3000, DV3100
Test Model No.:	DV3100
Remark:	DV3000 and DV3100 are identical in the same interior structure, electrical circuits, components and appearance. The only difference is the model name for the marketing requirement.
Operation Frequency:	2402MHz~2480MHz
Channel numbers:	79
Channel separation:	1MHz
Modulation type:	GFSK, Pi/4QPSK, 8DPSK
Antenna Type:	PCB Antenna
Antenna gain:	0dBi
Power supply:	DC 12V

Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



Operation	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

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



5.3 Test mode

Transmilling mode	Keep the EUT in continuously transmitting mode with GFSK modulation.
-------------------	--

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	Υ	Z
Field Strength(dBuV/m)	93.64	97.58	95.15

Final Test Mode:

The EUT was tested in GFSK, Pi/4QPSK, 8DPSK modulation, and found the GFSK modulation is the worst case.

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
GS	Supreme maintenance Free	S5D26R-MFZ	9442804454

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: 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.

Global United Technology Services Co., Ltd.

2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District,

Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



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. 28 2014	Mar. 27 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	Dec. 05 2013	Dec. 04 2014	
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jun. 30 2014	Jun. 30 2015	
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 23 2014	Feb. 22 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	Jun. 30 2014	Jun. 30 2015	
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jun. 30 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	

Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



7 Test results and Measurement Data

7.1 Antenna requirement:

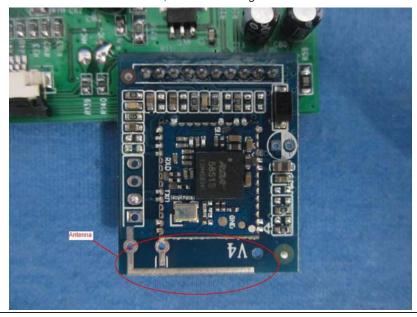
Standard requirement: FCC Part15 C Section 15.203

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



Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



7.2 Radiated Emission Method

 Madiated Ellission Me						
Test Requirement:	FCC Part15 C S	Section 15.20	9			
Test Method:	ANSI C63.4:200	03				
Test Frequency Range:	30MHz to 25GH	łz				
Test site:	Measurement D	istance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark	
	30MHz- 1GHz	Quasi-peal	120KHz	300KHz	Quasi-peak Value	
	Above 1GHz	Peak	1MHz	3MHz	Peak Value	
	Above IGHZ	Peak	1MHz	10Hz	Average Value	
Limit:	Freque	ency	Limit (dBuV	/m @3m)	Remark	
(Field strength of the	2400MHz-24	183.5MHz	94.0		Average Value	
fundamental signal)	114.00 Peak Value					
Limit:	Freque		Limit (dBuV		Remark	
(Spurious Emissions)	30MHz-8		40.0		Quasi-peak Value	
	88MHz-2 ⁻ 216MHz-9		43.5 46.0		Quasi-peak Value Quasi-peak Value	
	960MHz-9		54.0		Quasi-peak Value	
			54.0		Average Value	
	Above 1	GHz	74.0		Peak Value	
Limit: (band edge)	harmonics, sha fundamental or	ll be attenuate to the genera	ed by at least al radiated em	50 dB belov	bands, except for w the level of the in Section 15.209,	
Test setup:	fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation. Below 1GHz Antenna Tower Search Antenna RF Test Receiver Ground Plane Above 1GHz					



	Report No.: GTSE14060105601
	Antenna Tower Horn Antenna Spectrum Analyzer Turn Table A A A A A A A A A A A A A A A A A A A
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.
	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.
	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:

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



7.2.1 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	93.29	27.58	5.39	30.18	96.08	114.00	-17.92	Horizontal
2402.00	90.49	27.58	5.39	30.18	93.28	114.00	-20.72	Vertical
2441.00	91.49	27.55	5.43	30.06	94.41	114.00	-19.59	Horizontal
2441.00	89.46	27.55	5.43	30.06	92.38	114.00	-21.62	Vertical
2480.00	94.52	27.52	5.47	29.93	97.58	114.00	-16.42	Horizontal
2480.00	91.18	27.52	5.47	29.93	94.24	114.00	-19.76	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
2402.00	82.40	27.58	5.39	30.18	85.19	94.00	-8.81	Horizontal
2402.00	79.66	27.58	5.39	30.18	82.45	94.00	-11.55	Vertical
2441.00	80.42	27.55	5.43	30.06	83.34	94.00	-10.66	Horizontal
2441.00	77.44	27.55	5.43	30.06	80.36	94.00	-13.64	Vertical
2480.00	83.80	27.52	5.47	29.93	86.86	94.00	-7.14	Horizontal
2480.00	80.33	27.52	5.47	29.93	83.39	94.00	-10.61	Vertical

Remark: RBW 2MHz VBW 6MHz Peak detector for Pk value, Av detector for AV value.

Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



7.2.2 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	
37.42	39.73	14.92	0.64	32.06	23.23	40.00	-16.77	Vertical	
48.16	38.18	15.36	0.75	31.98	22.31	40.00	-17.69	Vertical	
203.52	39.16	12.67	1.86	32.14	21.55	43.50	-21.95	Vertical	
595.13	37.42	20.40	3.70	31.07	30.45	46.00	-15.55	Vertical	
408.95	37.47	17.26	2.90	31.86	25.77	46.00	-20.23	Vertical	
108.27	37.40	14.39	1.26	31.80	21.25	43.50	-22.25	Vertical	
302.48	42.21	15.08	2.37	32.17	27.49	46.00	-18.51	Horizontal	
576.64	36.16	20.03	3.63	31.15	28.67	46.00	-17.33	Horizontal	
98.14	35.86	15.03	1.18	31.75	20.32	43.50	-23.18	Horizontal	
47.66	37.58	15.39	0.75	31.98	21.74	40.00	-18.26	Horizontal	
925.76	37.46	23.28	4.95	31.20	34.49	46.00	-11.51	Horizontal	
196.51	37.65	12.57	1.82	32.13	19.91	43.50	-23.59	Horizontal	

Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



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	35.56	31.78	8.60	32.09	43.85	74.00	-30.15	Vertical
7206.00	30.67	36.15	11.65	32.00	46.47	74.00	-27.53	Vertical
9608.00	30.44	37.95	14.14	31.62	50.91	74.00	-23.09	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	39.49	31.78	8.60	32.09	47.78	74.00	-26.22	Horizontal
7206.00	32.28	36.15	11.65	32.00	48.08	74.00	-25.92	Horizontal
9608.00	29.70	37.95	14.14	31.62	50.17	74.00	-23.83	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	24.71	31.78	8.60	32.09	33.00	54.00	-21.00	Vertical
7206.00	19.56	36.15	11.65	32.00	35.36	54.00	-18.64	Vertical
9608.00	18.74	37.95	14.14	31.62	39.21	54.00	-14.79	Vertical
12010.00	*					54.00		Vertical
14412.00	*					54.00		Vertical
4804.00	28.74	31.78	8.60	32.09	37.03	54.00	-16.97	Horizontal
7206.00	21.62	36.15	11.65	32.00	37.42	54.00	-16.58	Horizontal
9608.00	18.33	37.95	14.14	31.62	38.80	54.00	-15.20	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	34.94	31.85	8.67	32.12	43.34	74.00	-30.66	Vertical
7323.00	30.26	36.37	11.72	31.89	46.46	74.00	-27.54	Vertical
9764.00	30.07	38.35	14.25	31.62	51.05	74.00	-22.95	Vertical
12205.00	*					74.00		Vertical
14646.00	*					74.00		Vertical
4882.00	38.74	31.85	8.67	32.12	47.14	74.00	-26.86	Horizontal
7323.00	31.81	36.37	11.72	31.89	48.01	74.00	-25.99	Horizontal
9764.00	29.27	38.35	14.25	31.62	50.25	74.00	-23.75	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	24.20	31.85	8.67	32.12	32.60	54.00	-21.40	Vertical
7323.00	19.22	36.37	11.72	31.89	35.42	54.00	-18.58	Vertical
9764.00	18.44	38.35	14.25	31.62	39.42	54.00	-14.58	Vertical
12205.00	*					54.00		Vertical
14646.00	*					54.00		Vertical
4882.00	28.17	31.85	8.67	32.12	36.57	54.00	-17.43	Horizontal
7323.00	21.23	36.37	11.72	31.89	37.43	54.00	-16.57	Horizontal
9764.00	17.97	38.35	14.25	31.62	38.95	54.00	-15.05	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	35.92	31.93	8.73	32.16	44.42	74.00	-29.58	Vertical
7440.00	30.91	36.59	11.79	31.78	47.51	74.00	-26.49	Vertical
9920.00	30.65	38.81	14.38	31.88	51.96	74.00	-22.04	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	39.92	31.93	8.73	32.16	48.42	74.00	-25.58	Horizontal
7440.00	32.54	36.59	11.79	31.78	49.14	74.00	-24.86	Horizontal
9920.00	29.94	38.81	14.38	31.88	51.25	74.00	-22.75	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	25.04	31.93	8.73	32.16	33.54	54.00	-20.46	Vertical
7440.00	19.78	36.59	11.79	31.78	36.38	54.00	-17.62	Vertical
9920.00	18.94	38.81	14.38	31.88	40.25	54.00	-13.75	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	29.12	31.93	8.73	32.16	37.62	54.00	-16.38	Horizontal
7440.00	21.87	36.59	11.79	31.78	38.47	54.00	-15.53	Horizontal
9920.00	18.56	38.81	14.38	31.88	39.87	54.00	-14.13	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.



7.2.3 Bandedge emissions

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

Test channel:	Lowest channel
Book at a constant	

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	44.66	27.59	5.38	30.18	47.45	74.00	-26.55	Horizontal
2400.00	61.71	27.58	5.39	30.18	64.50	74.00	-9.50	Horizontal
2390.00	45.38	27.59	5.38	30.18	48.17	74.00	-25.83	Vertical
2400.00	63.93	27.58	5.39	30.18	66.72	74.00	-7.28	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	34.81	27.59	5.38	30.18	37.60	54.00	-16.40	Horizontal
2400.00	46.15	27.58	5.39	30.18	48.94	54.00	-5.06	Horizontal
2390.00	34.88	27.59	5.38	30.18	37.67	54.00	-16.33	Vertical
2400.00	47.97	27.58	5.39	30.18	50.76	54.00	-3.24	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	46.98	27.53	5.47	29.93	50.05	74.00	-23.95	Horizontal
2500.00	45.81	27.55	5.49	29.93	48.92	74.00	-25.08	Horizontal
2483.50	48.12	27.53	5.47	29.93	51.19	74.00	-22.81	Vertical
2500.00	46.98	27.55	5.49	29.93	50.09	74.00	-23.91	Vertical

Average value:

- morage made:								
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	37.66	27.53	5.47	29.93	40.73	54.00	-13.27	Horizontal
2500.00	35.40	27.55	5.49	29.93	38.51	54.00	-15.49	Horizontal
2483.50	39.02	27.53	5.47	29.93	42.09	54.00	-11.91	Vertical
2500.00	35.47	27.55	5.49	29.93	38.58	54.00	-15.42	Vertical

Remark:

Global United Technology Services Co., Ltd.

2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District,

Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

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



7.3 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:	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

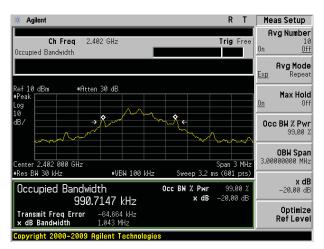
Worst case GFSK modulation

Test channel	20dB bandwidth(MHz)	Result
Lowest	1.043	Pass
Middle	1.044	Pass
Highest	1.045	Pass

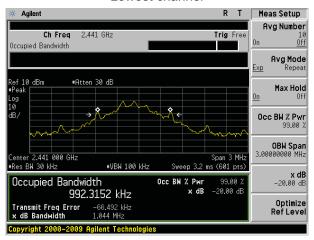
Test plot as follows:

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

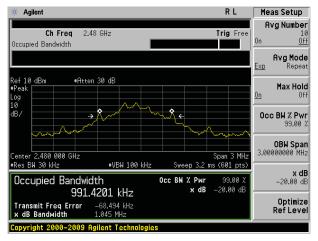




Lowest channel



Middle channel

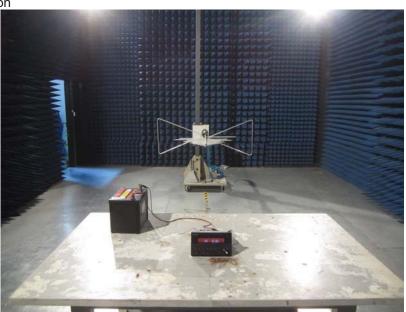


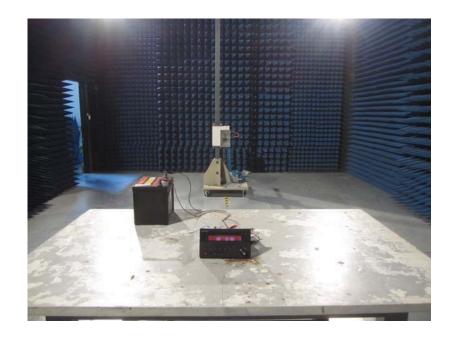
Highest channel



8 Test Setup Photo

Radiated Emission







9 EUT Constructional Details





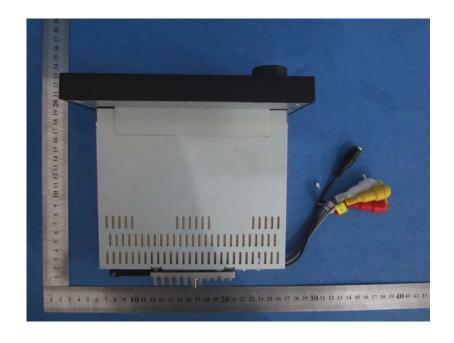












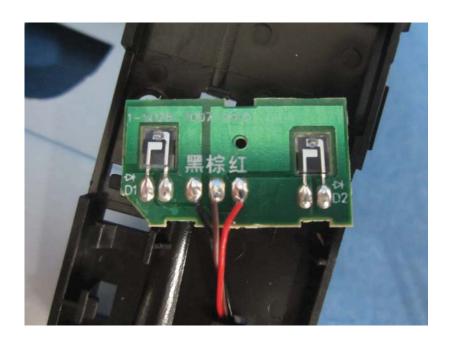






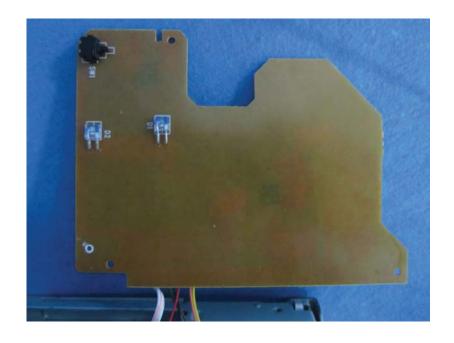










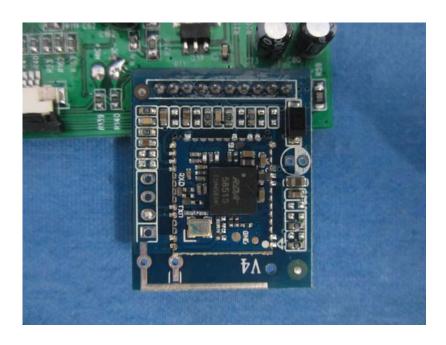






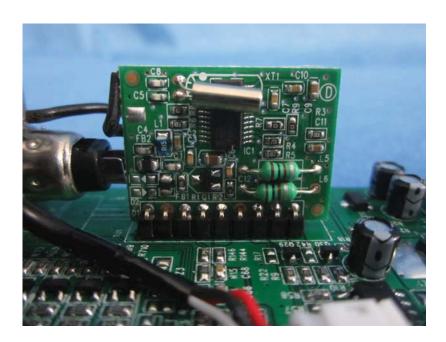


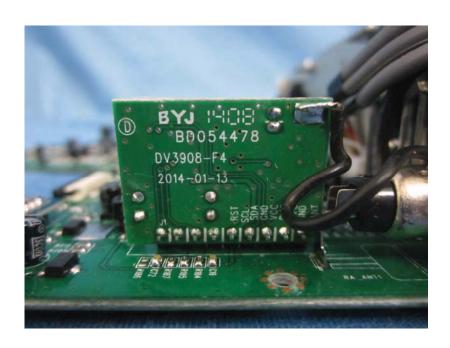




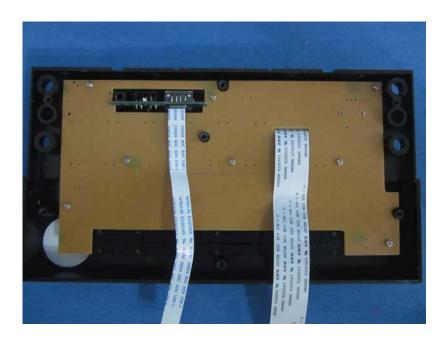






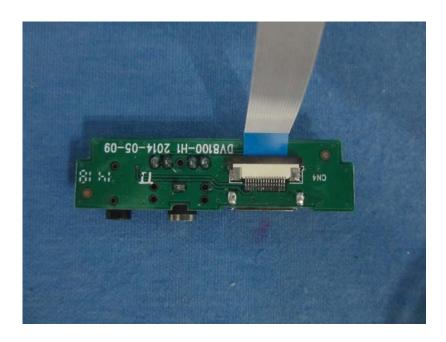














----end-----