

Global United Technology Services Co., Ltd.

Report No.: GTS201606000117E01

FCC REPORT

Applicant: Striiv Inc.

Address of Applicant: 570 El Camino Real #200 Suite 220, Redwood City, California

94063, United States

Equipment Under Test (EUT)

Product Name: Swappable Wristband

Model No.: TOCHGM0006

FCC ID: ZXO-TOCHGM0006

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249:2015

Date of sample receipt: June 06, 2016

Date of Test: June 07-12, 2016

Date of report issued: June 13, 2016

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 this report

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 or testing done by GTS in connection with, distribution or use of the product described in this report must be approved by GTS 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	June 13, 2016	Original

Prepared By:	Edward. Pan	Date:	June 13, 2016
	Project Engineer		
Check By:	Andy w	Date:	June 13, 2016
	Reviewer		

Project No.: GTS201606000117

Page 2 of 30



3 Contents

		Page
1	1 COVER PAGE	1
2	2 VERSION	2
3	3 CONTENTS	3
4	4 TEST SUMMARY	4
	4.1 MEASUREMENT UNCERTAINTY	4
5	5 GENERAL INFORMATION	5
	5.1 CLIENT INFORMATION	5
	5.2 GENERAL DESCRIPTION OF EUT	
	5.3 TEST MODE	
	5.4 DESCRIPTION OF SUPPORT UNITS	
	5.5 TEST FACILITY	
	5.6 TEST LOCATION	
	5.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER	
6	6 TEST INSTRUMENTS LIST	8
7	7 TEST RESULTS AND MEASUREMENT DATA	9
-	7.1 ANTENNA REQUIREMENT	
	7.1 ANTENNA REQUIREMENT	
	7.3 RADIATED EMISSION METHOD	
	7.3.1 Field Strength of The Fundamental Signal	
	7.3.2 Spurious emissions	
	7.3.3 Bandedge emissions	20
	7.4 20DB OCCUPY BANDWIDTH	21
8	8 TEST SETUP PHOTO	23
9	9 FUT CONSTRUCTIONAL DETAILS	25



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 C63.10 2013 and ANSI C63.4: 2014

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				
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:	Striiv Inc.
Address of Applicant:	570 El Camino Real #200 Suite 220, Redwood City, California 94063, United States
Manufacturer:	Striiv Inc.
Address of Manufacturer:	570 El Camino Real #200 Suite 220, Redwood City, California 94063, United States

5.2 General Description of EUT

Product Name:	Swappable Wristband	
Model No.:	TOCHGM0006	
Operation Frequency:	2402MHz~2480MHz	
Channel numbers:	40	
Channel separation:	2MHz	
Modulation type:	GFSK	
Antenna Type:	Integral Antenna	
Antenna gain:	3.0dBi (declare by Applicant)	
Power supply:	DC 5.0V	
	Or	
	DC 3.7V 85mAh Li-ion Battery	



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency Channe		Frequency	Channel	Frequency
1	2402MHz	11	2422MHz	21	2442MHz	31	2462MHz
2	2404MHz	12	2424MHz	22	2444MHz	32	2464MHz
			. !	• !	• :		. !
9	2418MHz	19	2438MHz	29	2458MHz	39	2478MHz
10	2420MHz	20	2440MHz	30	2460MHz	40	2480MHz

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	2440MHz
The Highest channel	2480MHz



5.3 Test mode

Geep the EUT 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)	87.67	88.01	87.54

5.4 Description of Support Units

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

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: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960

5.7 Description of Support Units

None.

5.8 Other Information Requested by the Customer

None.

Global United Technology Services Co., Ltd.

No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

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

Page 7 of 30



6 Test Instruments list

Rad	iated 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. 27 2016	Mar. 26 2017
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	June 26 2015	June 25 2016
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 26 2016	Mar. 25 2017
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
9	Coaxial Cable	GTS	N/A	GTS213	Mar. 27 2016	Mar. 26 2017
10	Coaxial Cable	GTS	N/A	GTS211	Mar. 27 2016	Mar. 26 2017
11	Coaxial cable	GTS	N/A	GTS210	Mar. 27 2016	Mar. 26 2017
12	Coaxial Cable	GTS	N/A	GTS212	Mar. 27 2016	Mar. 26 2017
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	June 26 2015	June 25 2016
16	Band filter	Amindeon	82346	GTS219	Mar. 27 2016	Mar. 26 2017

Cond	Conducted Emission:											
Itam Toot Equipment		Manageratura	MadalNa	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	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						

Gen	General used equipment:										
Item	n 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

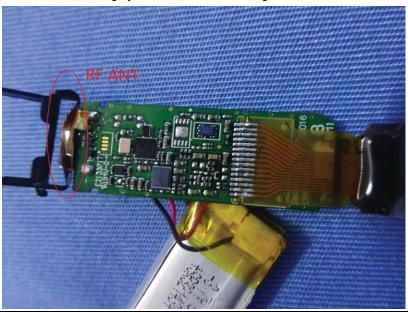
Standard requirement: FCC Part15 C Section 15.203

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.

EUT Antenna:

The antenna is integrity antenna, the best case gain of the antenna is 3.0dBi





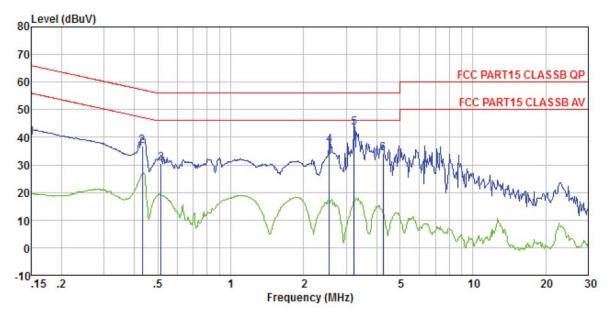
7.2 Conducted Emissions

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, Sv	weep time=auto					
Limit:	Fraguency range (MHz)	Limit (c	dBuV)				
	Frequency range (MHz)	Quasi-peak	Average				
	0.15-0.5	66 to 56*	56 to 46*				
	0.5-5 56 46						
	* Decreases with the logarithm of the frequency.						
T		n of the frequency.					
Test setup:	Reference Plane		•				
Tast procedure:	AUX Filter AC power Equipment E.U.T Test table/Insulation plane Remark: EUT: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m						
Test procedure:	The E.U.T and simulators a line impedance stabilization 50ohm/50uH coupling impe	n network (L.I.S.N.). Th	nis provides a				
50ohm/50uH coupling impedance for the measuring equiporation. (Please refer to the block diagram of the test sphotographs).							
	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:



Line:



Site : Shielded room

Condition : FCC PART15 CLASSB QP LISN-2013 LINE

Job No. : 0117

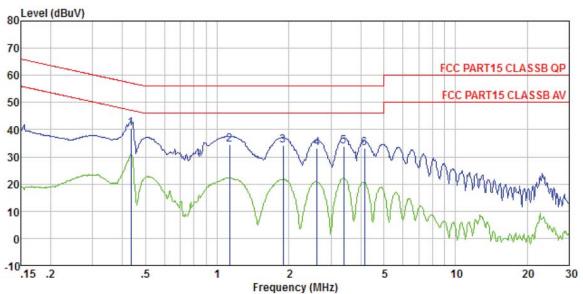
Test mode : Bluetooth mode

Test Engineer: Sky

051	Freq	Read	Level	LISN Factor	Cable Loss		Over Limit	Remark	
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	8	-
1 2 3 4 5	0.150 0.431 0.516 2.554 3.241 4.269	30. 33 36. 87 43. 09	39. 84 36. 89 30. 56 37. 15 43. 41 34. 13	0.12 0.12 0.13 0.17	0.11 0.11 0.15	57. 24 56. 00 56. 00 56. 00	-25. 44 -18. 85 -12. 59	QP QP QP QP	



Neutral:



Site : Shielded room

: FCC PART15 CLASSB QP LISN-2013 NEUTRAL Condition

Job No. : 0117

Test mode : Bluetooth mode

Test Engineer: Sky

	Freq	Read Level		LISN Factor	Cable Loss		Over Limit	Remark
	MHz	dBu₹	dBuV	dB	dB	dBuV	—dB	
1			40.35	0.06			-16.80	
2		34. 28			0.13			
3	1.888	33.94	34.17	0.09	0.14	56.00	-21.83	QP
4	2.622	32.87	33.12	0.10	0.15	56.00	-22.88	QP
5	3.399	33.72	34.00	0.13	0.15	56.00	-22.00	QP
6	4.158	32.76	33.05	0.14	0.15	56.00	-22.95	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.

Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



7.3 Radiated Emission Method

7.3 Radiated Emission Me	etriou					
Test Requirement:	FCC Part15 C S	Section 15.20	9			
Test Method:	ANSI C63.10:20	013				
Test Frequency Range:	30MHz to 25GH	łz				
Test site:	Measurement D	istance: 3m				
Receiver setup:	Frequency	Detector		RBW	VBW	Remark
	30MHz- 1GHz	Quasi-pea	k	120KHz	300KHz	Quasi-peak Value
	Above 1011	Peak		1MHz	3MHz	Peak Value
	Above 1GHz	Peak		1MHz	10Hz	Average Value
Limit:	Freque	Liı	mit (dBuV/	/m @3m)	Remark	
(Field strength of the fundamental signal)	2400MHz-24		94.0	0	Average Value	
Limit:	Freque	Remark				
(Spurious Emissions)	30MHz-88MHz			40.0		Quasi-peak Value
,		88MHz-216MHz			0	Quasi-peak Value
		216MHz-960MHz		46.00 54.00		Quasi-peak Value
	96010172-	960MHz-1GHz		54.00		Quasi-peak Value Average Value
	Above 1GHz			74.0		Peak Value
Limit: (band edge)	harmonics, sha	II be attenuat to the genera	ed b al rad	y at least diated emi	50 dB belov	bands, except for w the level of the in Section 15.209,
Test setup:	Below 1GHz	4m 4m 10.8m 1m	L	OII.	Anten: Sea: Ante	



Report No.: GTS201606000117E01 Antenna Tower Horn Antenna Spectrum Analyzer Turn 1m Amplifier Test Procedure: 1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) 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 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
2402.00	88.64	27.58	5.39	34.01	87.60	114.00	-26.40	Vertical
2402.00	84.11	27.58	5.39	34.01	83.07	114.00	-30.93	Horizontal
2440.00	89.06	27.48	5.43	33.96	88.01	114.00	-25.99	Vertical
2440.00	83.25	27.48	5.43	33.96	82.20	114.00	-31.80	Horizontal
2480.00	88.47	27.52	5.47	33.92	87.54	114.00	-26.46	Vertical
2480.00	82.79	27.52	5.47	33.92	81.86	114.00	-32.14	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	79.24	27.58	5.39	34.01	78.20	94.00	-15.80	Vertical
2402.00	74.35	27.58	5.39	34.01	73.31	94.00	-20.69	Horizontal
2440.00	78.97	27.48	5.43	33.96	77.92	94.00	-16.08	Vertical
2440.00	72.61	27.48	5.43	33.96	71.56	94.00	-22.44	Horizontal
2480.00	77.94	27.52	5.47	33.92	77.01	94.00	-16.99	Vertical
2480.00	72.71	27.52	5.47	33.92	71.78	94.00	-22.22	Horizontal

NOTE: RBW 3MHz VBW 10MHz Peak detector is for PK value, RMS detector is 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
36.00	27.13	14.58	0.62	30.06	12.27	40.00	-27.73	Vertical
96.44	26.36	14.94	1.16	29.72	12.74	43.50	-30.76	Vertical
214.51	25.81	13.03	1.93	29.35	11.42	43.50	-32.08	Vertical
406.09	25.57	17.18	2.88	29.49	16.14	46.00	-29.86	Vertical
586.84	25.14	20.24	3.67	29.30	19.75	46.00	-26.25	Vertical
787.85	25.52	21.92	4.41	29.20	22.65	46.00	-23.35	Vertical
40.42	26.57	15.58	0.66	30.04	12.77	40.00	-27.23	Horizontal
104.54	26.63	14.73	1.23	29.67	12.92	43.50	-30.58	Horizontal
301.42	25.19	15.08	2.37	29.99	12.65	46.00	-33.35	Horizontal
480.53	24.29	18.07	3.22	29.34	16.24	46.00	-29.76	Horizontal
670.49	25.46	20.71	3.98	29.23	20.92	46.00	-25.08	Horizontal
900.15	25.85	23.09	4.85	29.10	24.69	46.00	-21.31	Horizontal



Above 1GHz

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	37.04	31.78	8.60	32.09	45.33	74.00	-28.67	Vertical
7206.00	31.65	36.15	11.65	32.00	47.45	74.00	-26.55	Vertical
9608.00	31.31	37.95	14.14	31.62	51.78	74.00	-22.22	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	41.27	31.78	8.60	32.09	49.56	74.00	-24.44	Horizontal
7206.00	33.39	36.15	11.65	32.00	49.19	74.00	-24.81	Horizontal
9608.00	30.71	37.95	14.14	31.62	51.18	74.00	-22.82	Horizontal
12010.00	*					74.00		Horizontal
14412.00	*					74.00		Horizontal

Average value:

Average var	uc.							
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	25.90	31.78	8.60	32.09	34.19	54.00	-19.81	Vertical
7206.00	20.37	36.15	11.65	32.00	36.17	54.00	-17.83	Vertical
9608.00	19.46	37.95	14.14	31.62	39.93	54.00	-14.07	Vertical
12010.00	*					54.00		Vertical
14412.00	*					54.00		Vertical
4804.00	30.10	31.78	8.60	32.09	38.39	54.00	-15.61	Horizontal
7206.00	22.53	36.15	11.65	32.00	38.33	54.00	-15.67	Horizontal
9608.00	19.17	37.95	14.14	31.62	39.64	54.00	-14.36	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. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test channe	est channel: Middle							
Peak value:				<u>'</u>				
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	36.71	31.85	8.67	32.12	45.11	74.00	-28.89	Vertical
7320.00	31.44	36.37	11.72	31.89	47.64	74.00	-26.36	Vertical
9760.00	31.12	38.35	14.25	31.62	52.10	74.00	-21.90	Vertical
12200.00	*					74.00		Vertical
14640.00	*					74.00		Vertical
4880.00	40.88	31.85	8.67	32.12	49.28	74.00	-24.72	Horizontal
7320.00	33.14	36.37	11.72	31.89	49.34	74.00	-24.66	Horizontal
9760.00	30.49	38.35	14.25	31.62	51.47	74.00	-22.53	Horizontal
12200.00	*					74.00		Horizontal
14640.00	*					74.00		Horizontal
Average val	ue:							
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	8.67	32.12	34.05	54.00	-19.95	Vertical
7320.00	20.20	36.37	11.72	31.89	36.40	54.00	-17.60	Vertical
9760.00	19.31	38.35	14.25	31.62	40.29	54.00	-13.71	Vertical
12200.00	*					54.00		Vertical
14640.00	*					54.00		Vertical
4880.00	29.81	31.85	8.67	32.12	38.21	54.00	-15.79	Horizontal
7320.00	22.33	36.37	11.72	31.89	38.53	54.00	-15.47	Horizontal
9760.00	18.99	38.35	14.25	31.62	39.97	54.00	-14.03	Horizontal

Remark:

12200.00

14640.00

*

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.

Project No.: GTS201606000117

54.00

54.00

Horizontal

Horizontal



Limit

(dBuV/m)

polarization

Test channel	nnel: Highest							
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	35.75	31.93	8.73	32.16	44.25	74.00	-29.75	Vertical
7440.00	30.80	36.59	11.79	31.78	47.40	74.00	-26.60	Vertical
9920.00	30.55	38.81	14.38	31.88	51.86	74.00	-22.14	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	39.72	31.93	8.73	32.16	48.22	74.00	-25.78	Horizontal
7440.00	32.42	36.59	11.79	31.78	49.02	74.00	-24.98	Horizontal
9920.00	29.83	38.81	14.38	31.88	51.14	74.00	-22.86	Horizontal
12400.00	*					74.00		Horizontal
14880.00	*					74.00		Horizontal
Average val	ue:							
Frequency	Read	Antenna Factor	Cable	Preamp	Level	Limit Line	Over	nolarization

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	
4960.00	24.90	31.93	8.73	32.16	33.40	
7440.00	19.69	36.59	11.79	31.78	36.29	
9920.00	18.86	38.81	14.38	31.88	40.17	
12400.00	*					
14000 00	*					

	(ubuv)	(ub/III)	(ub)	(ub)			(ub)	
4960.00	24.90	31.93	8.73	32.16	33.40	54.00	-20.60	Vertical
7440.00	19.69	36.59	11.79	31.78	36.29	54.00	-17.71	Vertical
9920.00	18.86	38.81	14.38	31.88	40.17	54.00	-13.83	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	28.96	31.93	8.73	32.16	37.46	54.00	-16.54	Horizontal
7440.00	21.76	36.59	11.79	31.78	38.36	54.00	-15.64	Horizontal
9920.00	18.47	38.81	14.38	31.88	39.78	54.00	-14.22	Horizontal
12400.00	*					54.00		Horizontal
14880.00	*					54.00		Horizontal

Remark:

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



7.3.3 Bandedge emissions

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

Test channe	el:			Lo	Lowest channel				
Peak value:									
Frequency	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Polarization	

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	41.81	27.59	5.38	30.18	44.60	74.00	-29.40	Horizontal
2400.00	58.45	27.58	5.39	30.18	61.24	74.00	-12.76	Horizontal
2390.00	42.26	27.59	5.38	30.18	45.05	74.00	-28.95	Vertical
2400.00	60.37	27.58	5.39	30.18	63.16	74.00	-10.84	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	32.61	27.59	5.38	30.18	35.40	54.00	-18.60	Horizontal
2400.00	43.78	27.58	5.39	30.18	46.57	54.00	-7.43	Horizontal
2390.00	32.47	27.59	5.38	30.18	35.26	54.00	-18.74	Vertical
2400.00	45.33	27.58	5.39	30.18	48.12	54.00	-5.88	Vertical

Test channel:	Highest channel
1 oot onarmon	Thightest charmer

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	43.79	27.53	5.47	29.93	46.86	74.00	-27.14	Horizontal
2500.00	43.17	27.55	5.49	29.93	46.28	74.00	-27.72	Horizontal
2483.50	44.46	27.53	5.47	29.93	47.53	74.00	-26.47	Vertical
2500.00	44.06	27.55	5.49	29.93	47.17	74.00	-26.83	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	35.42	27.53	5.47	29.93	38.49	54.00	-15.51	Horizontal
2500.00	33.57	27.55	5.49	29.93	36.68	54.00	-17.32	Horizontal
2483.50	36.54	27.53	5.47	29.93	39.61	54.00	-14.39	Vertical
2500.00	33.41	27.55	5.49	29.93	36.52	54.00	-17.48	Vertical

Remark:

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



7.4 20dB Occupy Bandwidth

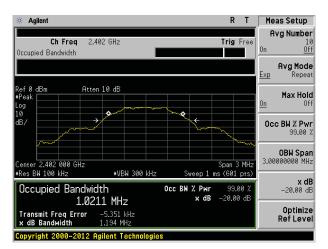
Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.10:2013
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Measurement Data

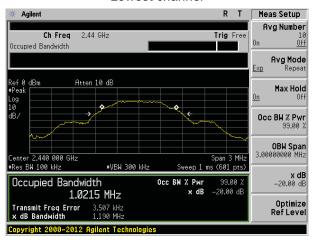
Test channel	20dB bandwidth(MHz)	Result
Lowest	1.194	Pass
Middle	1.190	Pass
Highest	1.197	Pass

Test plot as follows:

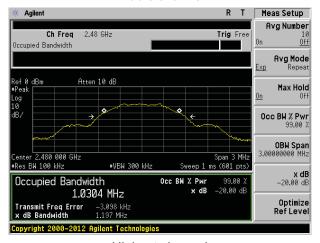




Lowest channel



Middle channel

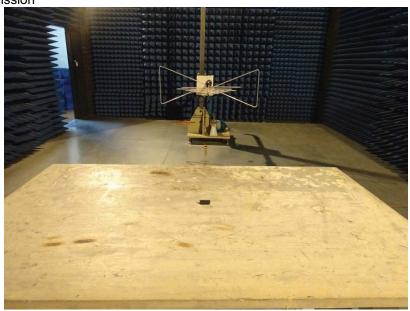


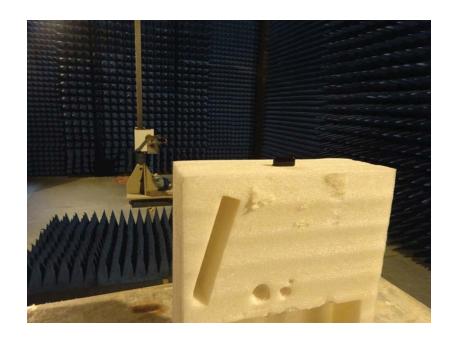
Highest channel



8 Test Setup Photo

Radiated Emission







Conducted Emission





9 EUT Constructional Details





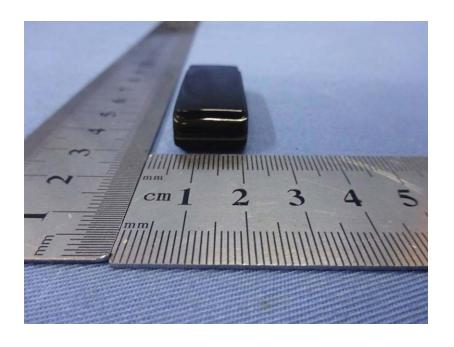










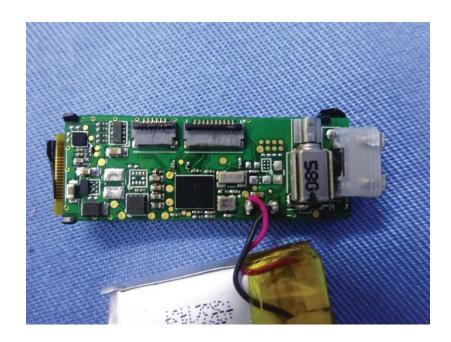


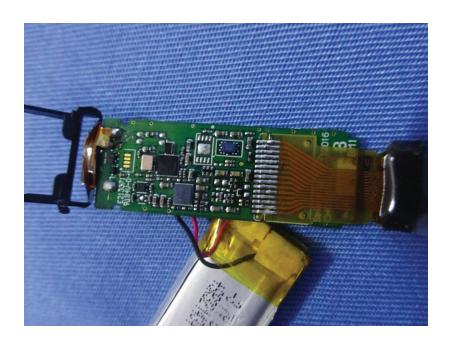
















-----End-----