

Global United Technology Services Co., Ltd.

Report No.: GTSE15090182603

FCC REPORT

Applicant: PHILIPS

Address of Applicant: 14F.-5, No.258, Liancheng Rd., Zhonghe Dist., New Taipei

City, Taiwan

Equipment Under Test (EUT)

Product Name: Tablet

Model No.: V710

Trade Mark: Philips

FCC ID: 2AEY6-V710

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249:2014

Date of sample receipt: December 09, 2015

Date of Test: December 10-15, 2015

Date of report issued: December 16, 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 this report.

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2 Version

Version No.	Date	Description	
00	December 16, 2015	Original	

Prepared By:	Sam. Gao	Date:	December 16, 2015
	Project Engineer		
Check By:	hank. yan	Date:	December 16, 2015
	Reviewer		



3 Contents

		Page
1	I COVER PAGE	1
2	2 VERSION	2
3	3 CONTENTS	3
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	
	5.7 DESCRIPTION OF SUPPORT UNITS	
	5.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER	
6	TEST INSTRUMENTS LIST	8
7	7 TEST RESULTS AND MEASUREMENT DATA	9
	7.1 ANTENNA REQUIREMENT	9
	7.2 CONDUCTED EMISSIONS	10
	7.3 RADIATED EMISSION METHOD	
	7.3.1 Field Strength of The Fundamental Signal	15
	7.3.2 Spurious emissions	16
	7.3.3 Bandedge emissions	
	7.4 20DB OCCUPY BANDWIDTH	21
8	TEST SETUP PHOTO	23
9	9 EUT CONSTRUCTIONAL DETAILS	24



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 C63.10 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	(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:	PHILIPS
Address of Applicant:	14F5, No.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan
Manufacturer:	New Flying
Address of Manufacturer:	10/F Block C, Tairan Building, Tairan 8 Road, Chegongmiao, District, Shenzhen City, Guangdong Province, China

5.2 General Description of EUT

Product Name:	Tablet
Model No.:	V710
Operation Frequency:	2402MHz~2480MHz
Channel numbers:	40
Channel separation:	2MHz
Modulation type:	GFSK
Antenna Type:	Integral antenna
Antenna gain:	2.0dBi (declare by Applicant)
Power supply:	DC 3.7V 2800mAh Li-ion Battery



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	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

p the EUT in continuously transmitting mode
е

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)	87.93	91.06	88.62

5.4 Description of Support Units

None.

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.



6 Test Instruments list

Rad	Radiated Emission:							
Item	em Test Equipment Manufacture		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 SCHWARZBECK		9120D-829	GTS208	June 26 2015	June 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	June 26 2015	June 25 2016		
16	Band filter	Amindeon	82346	GTS219	Mar. 28 2015	Mar. 27 2016		

Conducted Emission:												
Itam Toot Equipment		Manufacturer	Model No.	Inventory	Cal.Date	Cal.Due date						
Item	Test Equipment	Manufacturer	woder 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	em 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

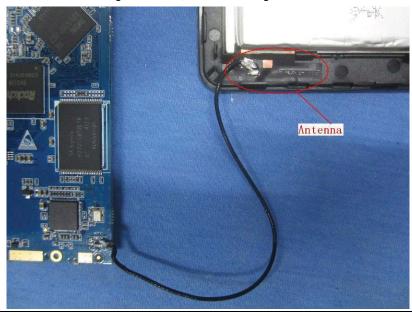
Standard requirement: FCC Part15 C Section 15.203

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 integral antenna, the best case gain of the antenna is 2dBi





7.2 Conducted Emissions

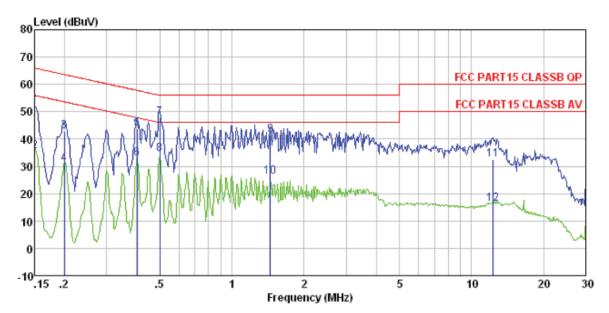
Test Requirement:	FCC Part15 C Section 15.207							
Test Method:	ANSI C63.10:2013							
Test Frequency Range:	150KHz to 30MHz							
Class / Severity:	Class B							
Receiver setup:	RBW=9KHz, VBW=30KHz, Sv	weep time=auto						
Limit:		Limit (c	dBuV)					
	Frequency range (MHz)	Quasi-peak	Average					
	0.15-0.5	66 to 56*	56 to 46*					
	0.5-5	56	46					
	5-30	60	50					
Took ook un.	* Decreases with the logarithm	•						
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 and simulators a line impedance stabilization 50ohm/50uH coupling impe	n network (L.I.S.N.). Th	nis provides a					
	LISN that provides a 50ohn	he peripheral devices are also connected to the main power through a ISN that provides a 50ohm/50uH coupling impedance with 50ohm ermination. (Please refer to the block diagram of the test setup and hotographs).						
	 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 cha 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:

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



Line:



Condition : FCC PART15 CLASSB QP LISN-2013 LINE

: 1826RF

Job No. Test mode : Blueetooth4.0 mode

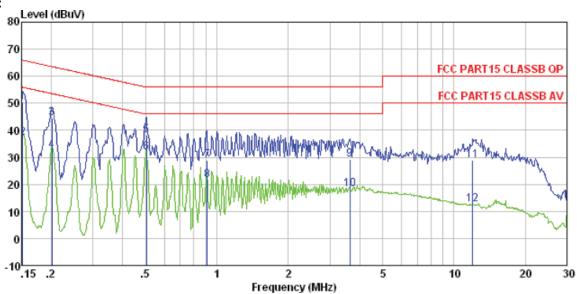
Test Engineer: Song

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBu₹	dBu√	dB	d₿	dBuV	dB	
1	0.150	48.20	48.47	0.15	0.12	66.00	-17.53	QP
2 3	0.150	35.24	35.51	0.15	0.12	56.00	-20.49	Average
3	0.200	42.39	42.66	0.14	0.13	63.62	-20.96	QP
4	0.200	30.70	30.97	0.14	0.13	53.62	-22.65	Average
4 5	0.402	43.65	43.87	0.11	0.11	57.81	-13.94	QP
6 7	0.402	32.72	32.94	0.11	0.11	47.81	-14.87	Average
	0.499	47.63	47.86	0.12	0.11	56.01	-8.15	QP
8 9	0.499	34.15	34.38	0.12	0.11	46.01	-11.63	Average
	1.449	41.14	41.39	0.12	0.13	56.00	-14.61	QP
10	1.449	25.88	26.13	0.12	0.13			Average
11	12. 253	31.98	32.54	0.36	0.20	60.00	-27.46	QP
12	12, 253	15, 72	16, 28	0.36	0. 20	50.00	-33.72	Average

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







Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

Job No. : 1826RF

Test mode : Blueetooth4.0 mode

Test Engineer: Song

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBu₹	dBu₹	dB	dB	dBuV	dB	
1 2 3 4	0. 152 0. 152 0. 202 0. 202	50. 11 36. 89 44. 42 32. 19	50.30 37.08 44.62 32.39		0.12 0.12 0.13 0.13	55. 91 63. 54 53. 54	-18.92 -21.15	Average QP Average
5 6 7 8	0.505 0.505 0.909 0.909	38. 13 31. 55 28. 64 21. 19	38.30 31.72 28.84 21.39	0.06 0.06 0.07 0.07	0.11 0.11 0.13 0.13	46.00 56.00 46.00	-27.16 -24.61	Average QP Average
9 10 11 12	3.642 3.642 11.996 11.996	28. 87 17. 82 28. 18 12. 18	29. 16 18. 11 28. 70 12. 70	0.14 0.14 0.32 0.32	0. 15 0. 15 0. 20 0. 20	46.00 60.00	-31.30	Average

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

7.5	7.5 Radiated Ellission Method									
	Test Requirement:	FCC Part15 C S	Section 15.20)9						
	Test Method:	ANSI C63.10:20	013							
	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:	Frequency			mit (dBuV/	/m @3m)	Remark			
	(Field strength of the fundamental signal)	2400MHz-2483.5MHz			94.0	0	Average Value			
	Limit:	Freque		Li	mit (dBuV/		Remark			
	(Spurious Emissions)	30MHz-8			40.0		Quasi-peak Value			
	,	88MHz-2			43.5		Quasi-peak Value			
		216MHz-960MHz			46.0		Quasi-peak Value			
		960MHz-1GHz			54.0 54.0		Quasi-peak Value Average Value			
		Above 1	Above 1GHz		74.0		Peak Value			
	Limit: (band edge)	harmonics, sha	ll be attenuat to the genera	ted 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								
		Antenna Tower Search Antenna RF Test Receiver Turn Table Ground Plane								
		Above 1GHz								



Report No.: GTSE15090182603 Antenna Tower EUT Horn Antenna Spectrum Analyzer Table 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	87.19	27.58	5.39	30.18	89.98	114.00	-24.02	Vertical
2402.00	85.44	27.58	5.39	30.18	88.23	114.00	-25.77	Horizontal
2442.00	85.95	27.55	5.43	30.06	88.87	114.00	-25.13	Vertical
2442.00	84.55	27.55	5.43	30.06	87.47	114.00	-26.53	Horizontal
2480.00	88.00	27.52	5.47	29.93	91.06	114.00	-22.94	Vertical
2480.00	85.50	27.52	5.47	29.93	88.56	114.00	-25.44	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	76.92	27.58	5.39	30.18	79.71	94.00	-14.29	Vertical
2402.00	75.10	27.58	5.39	30.18	77.89	94.00	-16.11	Horizontal
2442.00	75.44	27.55	5.43	30.06	78.36	94.00	-15.64	Vertical
2442.00	72.74	27.55	5.43	30.06	75.66	94.00	-18.34	Horizontal
2480.00	77.63	27.52	5.47	29.93	80.69	94.00	-13.31	Vertical
2480.00	75.21	27.52	5.47	29.93	78.27	94.00	-15.73	Horizontal

REMARK: RBW 3MHz VBW 3MHz PEAK DETECTOR IS FOR PK VALUE ,RMS DETECTOR IS 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			
37.68	39.34	15.01	0.64	30.06	24.93	40.00	-15.07	Vertical			
63.98	33.06	13.11	0.89	29.89	17.17	40.00	-22.83	Vertical			
102.72	26.81	14.92	1.22	29.68	13.27	43.50	-30.23	Vertical			
210.79	33.83	12.90	1.90	29.30	19.33	43.50	-24.17	Vertical			
316.59	27.27	15.28	2.45	29.90	15.10	46.00	-30.90	Vertical			
574.63	27.12	20.03	3.63	29.30	21.48	46.00	-24.52	Vertical			
52.39	26.77	15.14	0.79	29.98	12.72	40.00	-27.28	Horizontal			
93.77	29.70	14.58	1.14	29.73	15.69	43.50	-27.81	Horizontal			
163.76	32.31	10.77	1.65	29.34	15.39	43.50	-28.11	Horizontal			
272.28	40.87	14.46	2.24	29.81	27.76	46.00	-18.24	Horizontal			
417.64	29.98	17.43	2.93	29.46	20.88	46.00	-25.12	Horizontal			
701.76	29.29	20.81	4.09	29.20	24.99	46.00	-21.01	Horizontal			



Above 1GHz

Peak value:

reak 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	35.83	31.78	8.60	32.09	44.12	74.00	-29.88	Vertical
7206.00	30.85	36.15	11.65	32.00	46.65	74.00	-27.35	Vertical
9608.00	30.60	37.95	14.14	31.62	51.07	74.00	-22.93	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	39.81	31.78	8.60	32.09	48.10	74.00	-25.90	Horizontal
7206.00	32.47	36.15	11.65	32.00	48.27	74.00	-25.73	Horizontal
9608.00	29.88	37.95	14.14	31.62	50.35	74.00	-23.65	Horizontal
12010.00	*					74.00		Horizontal
14412.00	*					74.00		Horizontal

Average value:

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	24.92	31.78	8.60	32.09	33.21	54.00	-20.79	Vertical		
7206.00	19.70	36.15	11.65	32.00	35.50	54.00	-18.50	Vertical		
9608.00	18.87	37.95	14.14	31.62	39.34	54.00	-14.66	Vertical		
12010.00	*					54.00		Vertical		
14412.00	*					54.00		Vertical		
4804.00	28.99	31.78	8.60	32.09	37.28	54.00	-16.72	Horizontal		
7206.00	21.78	36.15	11.65	32.00	37.58	54.00	-16.42	Horizontal		
9608.00	18.48	37.95	14.14	31.62	38.95	54.00	-15.05	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 channel	I: Middle							
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
4884.00	35.52	31.85	8.67	32.12	43.92	74.00	-30.08	Vertical
7326.00	30.64	36.37	11.72	31.89	46.84	74.00	-27.16	Vertical
9768.00	30.41	38.35	14.25	31.62	51.39	74.00	-22.61	Vertical
12210.00	*					74.00		Vertical
14652.00	*					74.00		Vertical
4884.00	39.44	31.85	8.67	32.12	47.84	74.00	-26.16	Horizontal
7326.00	32.24	36.37	11.72	31.89	48.44	74.00	-25.56	Horizontal
9768.00	29.67	38.35	14.25	31.62	50.65	74.00	-23.35	Horizontal
12210.00	*					74.00		Horizontal
14652.00	*					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
4884.00	24.67	31.85	8.67	32.12	33.07	54.00	-20.93	Vertical
7326.00	19.54	36.37	11.72	31.89	35.74	54.00	-18.26	Vertical
9768.00	18.72	38.35	14.25	31.62	39.70	54.00	-14.30	Vertical
12210.00	*					54.00		Vertical
14652.00	*					54.00		Vertical
4884.00	28.70	31.85	8.67	32.12	37.10	54.00	-16.90	Horizontal
7326.00	21.59	36.37	11.72	31.89	37.79	54.00	-16.21	Horizontal
9768.00	18.31	38.35	14.25	31.62	39.29	54.00	-14.71	Horizontal

Remark:

12210.00

14652.00

*

- 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.

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Horizontal

Horizontal

54.00

54.00



Test channe	: 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	35.15	31.93	8.73	32.16	43.65	74.00	-30.35	Vertical
7440.00	30.40	36.59	11.79	31.78	47.00	74.00	-27.00	Vertical
9920.00	30.20	38.81	14.38	31.88	51.51	74.00	-22.49	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	39.00	31.93	8.73	32.16	47.50	74.00	-26.50	Horizontal
7440.00	31.97	36.59	11.79	31.78	48.57	74.00	-25.43	Horizontal
9920.00	29.42	38.81	14.38	31.88	50.73	74.00	-23.27	Horizontal
12400.00	*					74.00		Horizontal
14880.00	*					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
4960.00	24.39	31.93	8.73	32.16	32.89	54.00	-21.11	Vertical
7440.00	19.34	36.59	11.79	31.78	35.94	54.00	-18.06	Vertical
9920.00	18.55	38.81	14.38	31.88	39.86	54.00	-14.14	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	28.38	31.93	8.73	32.16	36.88	54.00	-17.12	Horizontal
7440.00	21.38	36.59	11.79	31.78	37.98	54.00	-16.02	Horizontal

31.88

39.42

54.00

54.00

54.00

-14.58

Horizontal

Horizontal

Horizontal

Remark:

9920.00

12400.00

14880.00

18.11

*

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

14.38

2. "*", means this data is the too weak instrument of signal is unable to test.

38.81

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

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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:									
_	Read	Antenna	Cable	Preamp	l		Over		

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	36.65	27.59	5.38	30.18	39.44	74.00	-34.56	Horizontal
2400.00	52.55	27.58	5.39	30.18	55.34	74.00	-18.66	Horizontal
2390.00	36.60	27.59	5.38	30.18	39.39	74.00	-34.61	Vertical
2400.00	53.92	27.58	5.39	30.18	56.71	74.00	-17.29	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	28.61	27.59	5.38	30.18	31.40	54.00	-22.60	Horizontal
2400.00	39.47	27.58	5.39	30.18	42.26	54.00	-11.74	Horizontal
2390.00	28.11	27.59	5.38	30.18	30.90	54.00	-23.10	Vertical
2400.00	40.53	27.58	5.39	30.18	43.32	54.00	-10.68	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	38.01	27.53	5.47	29.93	41.08	74.00	-32.92	Horizontal
2500.00	38.37	27.55	5.49	29.93	41.48	74.00	-32.52	Horizontal
2483.50	37.82	27.53	5.47	29.93	40.89	74.00	-33.11	Vertical
2500.00	38.78	27.55	5.49	29.93	41.89	74.00	-32.11	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	31.36	27.53	5.47	29.93	34.43	54.00	-19.57	Horizontal
2500.00	30.25	27.55	5.49	29.93	33.36	54.00	-20.64	Horizontal
2483.50	32.05	27.53	5.47	29.93	35.12	54.00	-18.88	Vertical
2500.00	29.66	27.55	5.49	29.93	32.77	54.00	-21.23	Vertical

Remark:

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



7.4 20dB Occupy Bandwidth

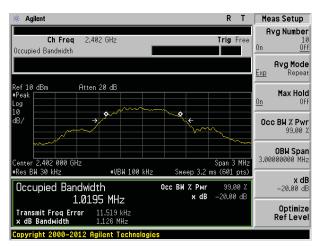
Test Requirement:	FCC Part15 C Section 15.249/15.215					
Test Method:	ANSI C63.10:2013					
Limit:	Operation Frequency range 2400MHz~2483.5MHz					
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer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

Measurement Data

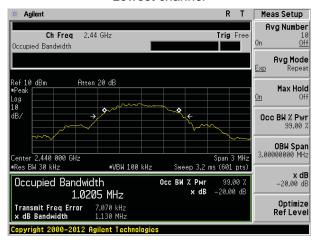
Test channel	20dB bandwidth(MHz)	Result
Lowest	1.126	Pass
Middle	1.130	Pass
Highest	1.113	Pass

Test plot as follows:

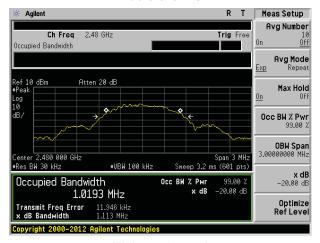




Lowest channel



Middle channel

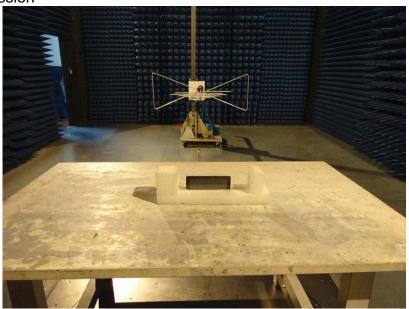


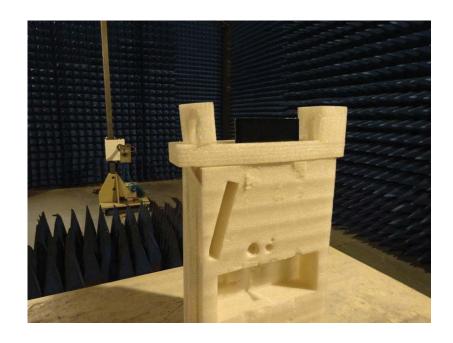
Highest channel



8 Test Setup Photo

Radiated Emission







Conducted Emission



9 EUT Constructional Details

Reference to the test report No. GTSE15090182601

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