

## Global United Technology Services Co., Ltd.

Report No.: GTSE15020014703

# **FCC REPORT**

Applicant: Yuko Technology Co., Ltd.

Address of Applicant: 6th Floor, A9 building, TianRui Industrial Park, FuYuan 1st

Road, FuYong ,Bao'an Shenzhen, China

**Equipment Under Test (EUT)** 

Product Name: 7 inch tablet PC

Model No.: I710, U703

**FCC ID**: 2ADQN-I710

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

Date of sample receipt: March 18, 2015

**Date of Test:** March 18-19, 2015

Date of report issued: March 20, 2015

Test Result: PASS \*

## 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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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



## 2 Version

Version No.	Date	Description
00	March 20, 2015	Original

Prepared By:	Edward. Pan	Date:	March 20, 2015
	Project Engineer	<del></del> -	
Check By:	hank yan	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:	Yuko Technology Co., Ltd.	
Address of Applicant:	6th Floor, A9 building, TianRui Industrial Park, FuYuan 1st Road, FuYong ,Bao'an Shenzhen, China	
Manufacturer:	Yuko Technology Co., Ltd.	
Address of Manufacturer:	6th Floor, A9 building, TianRui Industrial Park, FuYuan 1st Road, FuYong ,Bao'an Shenzhen, China	

## 5.2 General Description of EUT

Due dont Names	7 in all tablet DO
Product Name:	7 inch tablet PC
Model No.:	I710, U703
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:	Model No.: K-E30502000U1
	Input: AC 100-240V, 50-60Hz, 0.35A Max.
	Output: DC 5.0V, 2A
	Or
	DC 3.7V Li-ion battery

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Operation Frequency each of channel								
Channel Frequency Channel Frequency Channel Frequency Channel								
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

Transmitting mode Keep 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	X	Υ	Z
Field Strength(dBuV/m)	92.73	95.33	93.67

## 5.4 Description of Support Units

None

## 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

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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. 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	July 01 2014	June 30 2015		
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	July 01 2014	June 30 2015		
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	July 01 2014	June 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	July 01 2014	June 30 2015		
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	July 01 2014	June 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		
17	Power Meter	Anritsu	ML2495A	GTS540	July 01 2014	June 30 2015		
18	Power Sensor	Anritsu	MA2411B	GTS541	July 01 2014	June 30 2015		

Cond	Conducted Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS264	July 01 2014	June 30 2015		
2	<b>EMI Test Receiver</b>	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	<b>EMI Test Software</b>	AUDIX	E3	N/A	N/A	N/A		

Gen	General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Barometer	ChangChun	DYM3	GTS257	July 08 2014	July 07 2015	

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## 7 Test results and Measurement Data

## 7.1 Antenna requirement

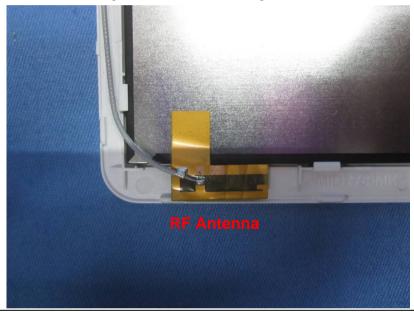
**Standard requirement:** FCC Part15 C Section 15.203

#### 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 Integral antenna, the best case gain of the antenna is 2.0dBi





## 7.2 Conducted Emissions

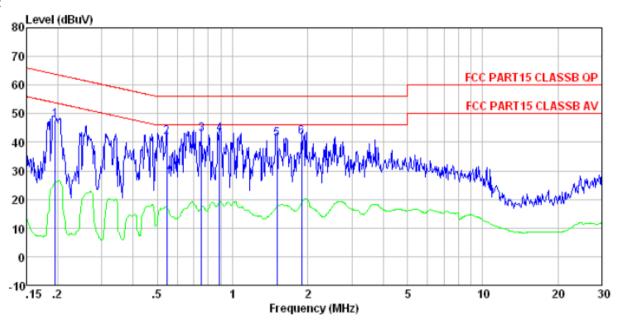
Tard Day Survey	500 Devide 0 0 and a 45 007									
Test Requirement:	FCC Part15 C Section 15.207									
Test Method:	ANSI C63.4:2009									
Test Frequency Range:	150KHz to 30MHz									
Class / Severity:	Class B									
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto									
Limit:	Frequency range (MHz)	Limit (c	dBuV)							
	. , , ,	Quasi-peak Average								
	0.15-0.5 66 to 56* 56 to 46*									
	0.5-5	56	46							
	5-30	60	50							
	* Decreases with the logarithn									
Test setup:	Reference Plane		_							
	AUX Equipment E.U.T  Remark: EU T. Equipment Under Test LISN: Line impedence Stabilization Network Test table height=0.8m									
Test procedure:	<ol> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 500hm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 500hm/50uH coupling impedance with 500hm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative</li> </ol>									
	positions of equipment and according to ANSI C63.4: 2	2009 on conducted me								
Test Instruments:	Refer to section 6.0 for details									
Test mode:	Refer to section 5.3 for details	3								
Test results:	Pass									

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#### Measurement data

Line:



Condition : FCC PART15 CLASSB QP LISN-2013 LINE

Job No. : 0147RF

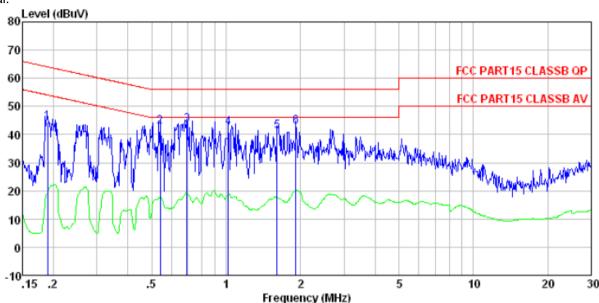
Test mode : Bluetooth mode (BLE)

Test Engineer: Mike

CDC	Freq	Read	LISN Factor					Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1 2 3 4 5	0.546 0.751 0.885 1.503	42. 61 42. 58 40. 94	0.13 0.14	0.11 0.13 0.13 0.14	41.71 42.88 42.85 41.20	56.00 56.00 56.00 56.00	-14. 29 -13. 12 -13. 15 -14. 80	QP QP QP QP



#### Neutral:



Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

Job No. : 0147RF

Test mode : Bluetooth mode (BLE)

Test Engineer: Mike

	Freq		LISN Factor					Remark
_	MHz	dBuV	dB	dB	dBuV	dBuV	-dB	
1 2 3 4 5	0.541 0.694 1.021	43.23 42.31 41.07	0. 07 0. 07 0. 07 0. 09	0.13 0.13	42. 96 43. 43 42. 51 41. 30	56.00 56.00 56.00 56.00	-13.04 -12.57 -13.49 -14.70	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.

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## 7.3 Radiated Emission Method

7.5 Radiated Lillission W	ctiloa							
Test Requirement:	FCC Part15 C S	FCC Part15 C Section 15.209						
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	Limit (dBu\	//m @3m)	Remark			
(Field strength of the fundamental signal)	2400MHz-24	2400MHz-2483.5MHz 94.00 Average Val						
Limit:	Freque		Limit (dBu\	//m @3m)	Remark			
(Spurious Emissions)	30MHz-8		40.		Quasi-peak Value			
,	88MHz-2		43.		Quasi-peak Value			
	216MHz-9		46.		Quasi-peak Value			
	960MHz-	-1GHZ	54. 54.		Quasi-peak Value Average Value			
	Above 1	IGHz	74.		Peak Value			
Limit: (band edge)	harmonics, sha	II be attenuat to the genera	ed by at leas al radiated en	50 dB belo	bands, except for w the level of the in Section 15.209,			
Test setup:	Below 1GHz	4m 4m 0.8m 1m		Sea	na Tower urch enna			

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	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.
	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:



## 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	93.98	27.58	5.39	30.18	96.77	114.00	-17.23	Vertical
2402.00	90.20	27.58	5.39	30.18	92.99	114.00	-21.01	Horizontal
2440.00	92.50	27.55	5.43	30.06	95.42	114.00	-18.58	Vertical
2440.00	89.25	27.55	5.43	30.06	92.17	114.00	-21.84	Horizontal
2480.00	91.20	27.52	5.47	29.93	94.26	114.00	-19.74	Vertical
2480.00	87.83	27.52	5.47	29.93	90.89	114.00	-23.11	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	82.06	27.58	5.39	30.18	84.85	94.00	-9.15	Vertical
2402.00	79.29	27.58	5.39	30.18	82.08	94.00	-11.92	Horizontal
2440.00	80.22	27.55	5.43	30.06	83.14	94.00	-10.86	Vertical
2440.00	76.91	27.55	5.43	30.06	79.83	94.00	-14.17	Horizontal
2480.00	82.50	27.52	5.47	29.93	85.56	94.00	-8.44	Vertical
2480.00	79.11	27.52	5.47	29.93	82.17	94.00	-11.83	Horizontal

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



## 7.3.2 Spurious emissions

## ■ Below 1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
30.11	45.54	14.33	0.55	30.10	30.32	40.00	-9.68	Vertical
35.50	45.14	14.44	0.61	30.07	30.12	40.00	-9.88	Vertical
92.79	44.44	14.41	1.13	29.73	30.25	43.50	-13.25	Vertical
140.84	45.02	10.20	1.51	29.45	27.28	43.50	-16.22	Vertical
175.04	46.81	11.29	1.72	29.30	30.52	43.50	-12.98	Vertical
329.04	32.15	15.73	2.52	29.83	20.57	46.00	-25.43	Vertical
81.78	52.10	11.28	1.04	29.79	34.63	40.00	-5.37	Horizontal
92.79	42.70	14.41	1.13	29.73	28.51	43.50	-14.99	Horizontal
144.84	46.74	10.23	1.53	29.43	29.07	43.50	-14.43	Horizontal
178.76	45.41	11.62	1.73	29.28	29.48	43.50	-14.02	Horizontal
237.48	38.29	13.99	2.06	29.54	24.80	46.00	-21.20	Horizontal
329.04	36.27	15.73	2.52	29.83	24.69	46.00	-21.31	Horizontal



## ■ Above 1GHz

Test channel	l:			Low	est 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	35.70	31.78	8.60	32.09	43.99	74.00	-30.01	Vertical
7206.00	30.77	36.15	11.65	32.00	46.57	74.00	-27.43	Vertical
9608.00	30.52	37.95	14.14	31.62	50.99	74.00	-23.01	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	39.66	31.78	8.60	32.09	47.95	74.00	-26.05	Horizontal
7206.00	32.38	36.15	11.65	32.00	48.18	74.00	-25.82	Horizontal
9608.00	29.79	37.95	14.14	31.62	50.26	74.00	-23.74	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	24.82	31.78	8.60	32.09	33.11	54.00	-20.89	Vertical
7206.00	19.63	36.15	11.65	32.00	35.43	54.00	-18.57	Vertical
9608.00	18.81	37.95	14.14	31.62	39.28	54.00	-14.72	Vertical
12010.00	*					54.00		Vertical
14412.00	*					54.00		Vertical
4804.00	28.87	31.78	8.60	32.09	37.16	54.00	-16.84	Horizontal
7206.00	21.70	36.15	11.65	32.00	37.50	54.00	-16.50	Horizontal
9608.00	18.41	37.95	14.14	31.62	38.88	54.00	-15.12	Horizontal
12010.00	*					54.00		Horizontal
14412.00	*					54.00		Horizontal

## Remark:

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<sup>1.</sup> Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test channe	:			Mid	dle			
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	34.25	31.85	8.67	32.12	42.65	74.00	-31.35	Vertical
7323.00	29.80	36.37	11.72	31.89	46.00	74.00	-28.00	Vertical
9764.00	29.66	38.35	14.25	31.62	50.64	74.00	-23.36	Vertical
12205.00	*					74.00		Vertical
14646.00	*					74.00		Vertical
4882.00	37.91	31.85	8.67	32.12	46.31	74.00	-27.69	Horizontal
7323.00	31.29	36.37	11.72	31.89	47.49	74.00	-26.51	Horizontal
9764.00	28.80	38.35	14.25	31.62	49.78	74.00	-24.22	Horizontal
12205.00	*					74.00		Horizontal
14646.00	*					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
4882.00	23.64	31.85	8.67	32.12	32.04	54.00	-21.96	Vertical
7323.00	18.83	36.37	11.72	31.89	35.03	54.00	-18.97	Vertical
9764.00	18.10	38.35	14.25	31.62	39.08	54.00	-14.92	Vertical
12205.00	*					54.00		Vertical
14646.00	*					54.00		Vertical
4882.00	27.53	31.85	8.67	32.12	35.93	54.00	-18.07	Horizontal
7323.00	20.80	36.37	11.72	31.89	37.00	54.00	-17.00	Horizontal
9764.00	17.58	38.35	14.25	31.62	38.56	54.00	-15.44	Horizontal
12205.00	*					54.00		Horizontal
14646.00	*					54.00		Horizontal

#### Remark:

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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.



Test channel:

Report No.: GTSE15020014703

				9				
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	33.11	31.93	8.73	32.16	41.61	74.00	-32.39	Vertical
7440.00	29.05	36.59	11.79	31.78	45.65	74.00	-28.35	Vertical
9920.00	28.99	38.81	14.38	31.88	50.30	74.00	-23.70	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	36.54	31.93	8.73	32.16	45.04	74.00	-28.96	Horizontal
7440.00	30.43	36.59	11.79	31.78	47.03	74.00	-26.97	Horizontal
9920.00	28.01	38.81	14.38	31.88	49.32	74.00	-24.68	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	22.67	31.93	8.73	32.16	31.17	54.00	-22.83	Vertical
7440.00	18.18	36.59	11.79	31.78	34.78	54.00	-19.22	Vertical
9920.00	17.52	38.81	14.38	31.88	38.83	54.00	-15.17	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	26.43	31.93	8.73	32.16	34.93	54.00	-19.07	Horizontal
7440.00	20.07	36.59	11.79	31.78	36.67	54.00	-17.33	Horizontal
9920.00	16.90	38.81	14.38	31.88	38.21	54.00	-15.79	Horizontal
12400.00	*					54.00		Horizontal
14880.00	*					54.00		Horizontal

Highest

#### Remark

- 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.
- 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.

(MHz)         (dBuV)         (dB/m)         (dB)         (dB)         (dBuV/m)         (dBuV/m)         (dBuV/m)         (dB)           2390.00         46.81         27.59         5.38         30.18         49.60         74.00         -24.40         Horizon           2400.00         64.16         27.58         5.39         30.18         66.95         74.00         -7.05         Horizon           2390.00         47.74         27.59         5.38         30.18         50.53         74.00         -23.47         Vert           2400.00         66.62         27.58         5.39         30.18         69.41         74.00         -4.59         Vert           Average value:           Frequency         Read         Antenna         Cable         Preamp         Level         Limit Line         Over	Frequency	Test channel:					Lowest channel			
Frequency (MHz)		Peak value:								
2400.00         64.16         27.58         5.39         30.18         66.95         74.00         -7.05         Horizon           2390.00         47.74         27.59         5.38         30.18         50.53         74.00         -23.47         Vert           2400.00         66.62         27.58         5.39         30.18         69.41         74.00         -4.59         Vert           Average value:           Frequency         Read         Antenna         Cable         Preamp         Level         Limit Line         Over		Level	Factor	Loss	Factor			Limit	Polarization	
2390.00         47.74         27.59         5.38         30.18         50.53         74.00         -23.47         Vert           2400.00         66.62         27.58         5.39         30.18         69.41         74.00         -4.59         Vert           Average value:           Frequency         Read         Antenna         Cable         Preamp         Level         Limit Line         Over	2390.00	46.81	27.59	5.38	30.18	49.60	74.00	-24.40	Horizontal	
2400.00         66.62         27.58         5.39         30.18         69.41         74.00         -4.59         Vert           Average value:           Frequency         Read         Antenna         Cable         Preamp         Level         Limit Line         Over	2400.00	64.16	27.58	5.39	30.18	66.95	74.00	-7.05	Horizontal	
Average value:  Read Antenna Cable Preamp Level Limit Line Over	2390.00	47.74	27.59	5.38	30.18	50.53	74.00	-23.47	Vertical	
Frequency Read Antenna Cable Preamp Level Limit Line Over	2400.00	66.62	27.58	5.39	30.18	69.41	74.00	-4.59	Vertical	
Frequency	Average value:									
(MHz) Level Factor Loss Factor (dBuV/m) (dBuV/m) Limit Polariz	Frequency (MHz)	Level	Factor	Loss	Factor			Limit	Polarization	
2390.00 36.47 27.59 5.38 30.18 39.26 54.00 -14.74 Horizo	2390.00	36.47	27.59	5.38	30.18	39.26	54.00	-14.74	Horizontal	
2400.00 38.67 27.58 5.39 30.18 41.46 54.00 -12.54 Horizo	2400.00	38.67	27.58	5.39	30.18	41.46	54.00	-12.54	Horizontal	
2390.00 36.70 27.59 5.38 30.18 39.49 54.00 -14.51 Vert	2390.00	36.70	27.59	5.38	30.18	39.49	54.00	-14.51	Vertical	
2400.00 40.86 27.58 5.39 30.18 43.65 54.00 -10.35 Vert		40.86	27.58	5.39	30.18	43.65	54.00	-10.35	Vertical	

Test channel:	Highest channel
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#### Peak value:

I can 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	49.38	27.53	5.47	29.93	52.45	74.00	-21.55	Horizontal
2500.00	47.81	27.55	5.49	29.93	50.92	74.00	-23.08	Horizontal
2483.50	50.88	27.53	5.47	29.93	53.95	74.00	-20.05	Vertical
2500.00	49.18	27.55	5.49	29.93	52.29	74.00	-21.71	Vertical

#### Average value:

7 troluge ru								
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	39.35	27.53	5.47	29.93	42.42	54.00	-11.58	Horizontal
2500.00	36.79	27.55	5.49	29.93	39.90	54.00	-14.10	Horizontal
2483.50	40.89	27.53	5.47	29.93	43.96	54.00	-10.04	Vertical
2500.00	37.04	27.55	5.49	29.93	40.15	54.00	-13.85	Vertical

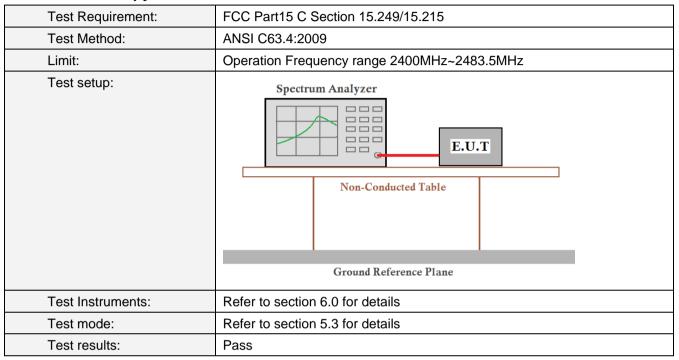
#### Remark:

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

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## 7.4 20dB Occupy Bandwidth

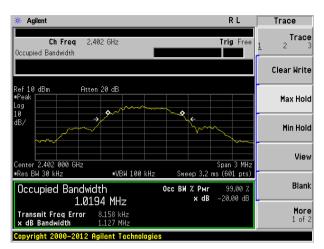


#### **Measurement Data**

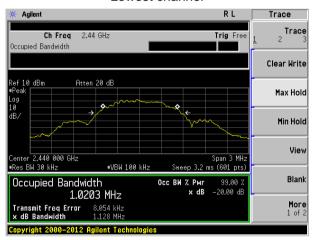
Test channel	20dB bandwidth(MHz)	Result
Lowest	1.127	Pass
Middle	1.128	Pass
Highest	1.128	Pass

Test plot as follows:





#### Lowest channel



#### Middle channel

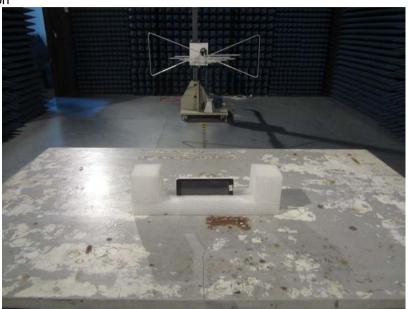


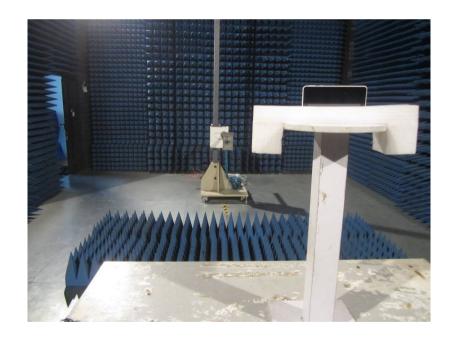
Highest channel



## 8 Test Setup Photo

Radiated Emission







Conducted Emission



## 9 EUT Constructional Details

Reference to the test report No. GTSE15020014701

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