

Global United Technology Services Co., Ltd.

Report No.: GTSE15080162003

FCC REPORT

Applicant: Yuko Technology Co., Ltd.

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

Road, FuYong Town, Bao'an District, ShenZhen

Equipment Under Test (EUT)

Product Name: 8" tablet PC

Model No.: \$853, U807

FCC ID: 2ADQN-S853

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

Date of sample receipt: August 27, 2015

Date of Test: August 28-September 02, 2015

Date of report issued: September 06, 2015

Test Result: PASS *

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

Authorized Signature:



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	September 06, 2015	Original	

Prepared By:	Edward.Pan	Date:	September 06, 2015
	Project Engineer		
Check By:	hank. yan	Date:	September 06, 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.

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	on 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:	Yuko Technology Co., Ltd.
Address of Applicant:	6th Floor, A9 building, TianRui Industrial Park, FuYuan 1st Road,
	FuYong Town,Bao'an District,ShenZhen
Manufacturer:	Yuko Technology Co., Ltd.
Address of Manufacturer:	6th Floor, A9 building, TianRui Industrial Park, FuYuan 1st Road,
	FuYong Town,Bao'an District,ShenZhen

5.2 General Description of EUT

Product Name:	8" tablet PC	
Model No.:	S853, U807	
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:	Adapter:	
	Model No.: FJ-SW0502000UA	
	Input: AC 100-240V, 50/60Hz, 0.35A Max	
	Output: DC 5V, 2000mA	
	Or	
	DC 3.8V 4400mAh 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)	86.74	89.43	87.34	

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

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

Radi	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 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	BiConiLog Antenna SCHWARZBECK MESS-ELEKTRONIK		GTS214	Jun 30 2015	Jun 29 2016	
6	6 Double -ridged SCHWARZBECK waveguide horn MESS-ELEKTRONIK		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	

Con	Conducted Emission:												
Item	Test Equipment	Manufacturer	Model No.	Inventory	Cal.Date	Cal.Due date							
	root =qaipinoitt	marrara otar or	model ito	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	NSLK 8127	GTS226	Jun. 30 2015	Jun. 29 2016							
6	MESS-ELEKTRON 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	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





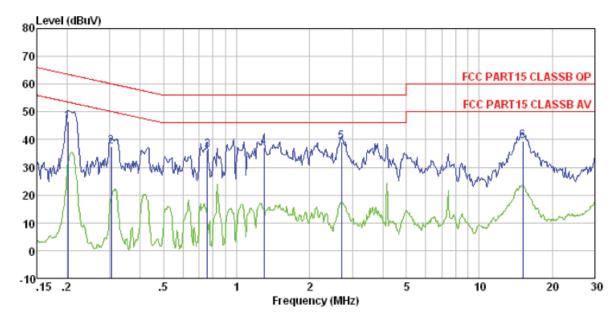
7.2 Conducted Emissions

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:	Fraguerov 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								
	5-30 60 50								
- , ,	* Decreases with the logarithm of the frequency.								
Test setup:	Reference Plane		_						
	AUX Filter AC power Equipment E.U.T Remark E.U.T: Equipment Under Test LISN Filter AC power 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						
	2. The peripheral devices are LISN that provides a 50ohn termination. (Please refer to photographs).	n/50uH coupling imped	dance with 50ohm						
	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:



Condition : FCC PART15 CLASSB QP LISN-2013 LINE

Job No. : 1620RF

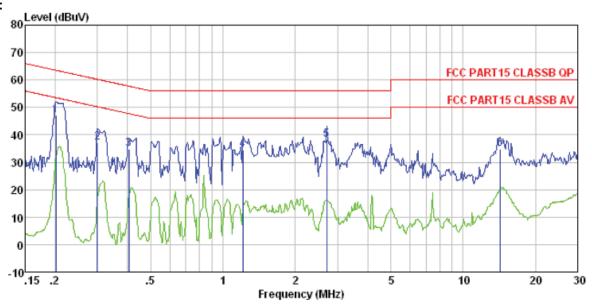
Test mode : Bluetooth 4.0 mode

Test Engineer: Song

MHz dBuV dB dB dBuV dBuV dB 1 0.202 46.25 0.14 0.13 46.52 63.54 -17.02 QP 2 0.303 37.35 0.11 0.10 37.56 60.15 -22.59 QP 3 0.759 35.84 0.14 0.13 36.11 56.00 -19.89 QP 4 1.296 36.82 0.12 0.13 37.07 56.00 -18.93 QP 5 2.707 38.77 0.14 0.15 39.06 56.00 -16.94 QP		Freq	Read	LISN Factor				Over Limit	Remark	
2 0.303 37.35 0.11 0.10 37.56 60.15 -22.59 QP 3 0.759 35.84 0.14 0.13 36.11 56.00 -19.89 QP 4 1.296 36.82 0.12 0.13 37.07 56.00 -18.93 QP		MHz	dBu∀	dB	d₿	dBu₹	dBuV	dB		_
6 15.146 39.06 0.28 0.22 39.56 60.00 -20.44 QP	4 5	0.303 0.759 1.296 2.707	37. 35 35. 84 36. 82 38. 77	0.11 0.14 0.12 0.14	0.10 0.13 0.13 0.15	37.56 36.11 37.07 39.06	60.15 56.00 56.00 56.00	-22.59 -19.89 -18.93 -16.94	QP QP QP QP	



Neutral:



: FCC PART15 CLASSB QP LISN-2013 NEUTRAL Condition

1620RF

Job No. Test mode : Bluetooth 4.0 mode

Test Engineer: Song

	2.1.621.1002 .	_	LISN	Cable		Limit	Over	
	Freq		Factor					Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.202	46.79	0.07	0.13	46.99	63.54	-16.55	QP
2	0.300	37.07	0.06	0.10	37.23	60.24	-23.01	QP
3	0.406	34.76	0.06	0.11	34.93	57.73	-22.80	QP
4	1.210	34.33	0.08	0.13	34.54	56.00	-21.46	QP
5	2.707	38.03	0.10	0.15	38. 28	56.00	-17.72	QP
6	14.213	34.44	0.33	0.22	34.99	60.00	-25.01	QP

Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss
- 4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.



7.3 Radiated Emission Method

7.0	7.5 Radiated Emission Method									
	Test Requirement:	FCC Part15 C S	Section 15.20	9						
	Test Method:	ANSI C63.10:20	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:	Freque	ency	Liı	mit (dBuV/	/m @3m)	Remark			
	(Field strength of the fundamental signal)	2400MHz-24	183.5MHz		94.0	0	Average Value			
	Limit:	Freque		Liı	mit (dBuV/		Remark			
	(Spurious Emissions)	30MHz-8			40.0 43.5		Quasi-peak Value			
		88MHz-2			Quasi-peak Value					
		216MHz-9 960MHz-			46.0 54.0		Quasi-peak Value Quasi-peak Value			
			Average Value							
		Above 1	1GHz		54.0 74.0		Peak Value			
	Limit: (band edge)	harmonics, sha	II 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 Ground Plane Above 1GHz								
		ADOVE TOTIZ								



Report No.: GTSE15080162003 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	90.19	27.58	5.39	34.01	89.15	114.00	-24.85	Vertical
2402.00	85.16	27.58	5.39	34.01	84.12	114.00	-29.88	Horizontal
2440.00	90.48	27.48	5.43	33.96	89.43	114.00	-24.57	Vertical
2440.00	84.58	27.48	5.43	33.96	83.53	114.00	-30.47	Horizontal
2480.00	89.58	27.52	5.47	33.92	88.65	114.00	-25.35	Vertical
2480.00	83.82	27.52	5.47	33.92	82.89	114.00	-31.11	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	80.51	27.58	5.39	34.01	79.47	94.00	-14.53	Vertical
2402.00	75.49	27.58	5.39	34.01	74.45	94.00	-19.55	Horizontal
2440.00	80.51	27.48	5.43	33.96	79.46	94.00	-14.54	Vertical
2440.00	73.98	27.48	5.43	33.96	72.93	94.00	-21.07	Horizontal
2480.00	79.53	27.52	5.47	33.92	78.60	94.00	-15.40	Vertical
2480.00	74.15	27.52	5.47	33.92	73.22	94.00	-20.78	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

■ Delow I	OLIZ							
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
36.51	24.66	14.73	0.62	30.06	9.95	40.00	-30.05	Vertical
59.44	23.58	14.73	0.86	29.93	9.24	40.00	-30.76	Vertical
101.29	24.22	15.02	1.20	29.69	10.75	43.50	-32.75	Vertical
244.23	24.25	14.08	2.09	29.59	10.83	46.00	-35.17	Vertical
333.69	25.31	15.92	2.54	29.81	13.96	46.00	-32.04	Vertical
599.32	23.65	20.45	3.72	29.30	18.52	46.00	-27.48	Vertical
38.89	24.30	15.30	0.65	30.05	10.20	40.00	-29.80	Horizontal
57.59	24.60	14.85	0.84	29.94	10.35	40.00	-29.65	Horizontal
95.76	24.89	14.90	1.16	29.72	11.23	43.50	-32.27	Horizontal
188.41	31.72	12.40	1.78	29.24	16.66	43.50	-26.84	Horizontal
344.39	29.08	16.20	2.60	29.76	18.12	46.00	-27.88	Horizontal
744.87	24.49	21.39	4.26	29.20	20.94	46.00	-25.06	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	37.19	31.78	8.60	32.09	45.48	74.00	-28.52	Vertical
7206.00	31.75	36.15	11.65	32.00	47.55	74.00	-26.45	Vertical
9608.00	31.40	37.95	14.14	31.62	51.87	74.00	-22.13	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	41.45	31.78	8.60	32.09	49.74	74.00	-24.26	Horizontal
7206.00	33.50	36.15	11.65	32.00	49.30	74.00	-24.70	Horizontal
9608.00	30.81	37.95	14.14	31.62	51.28	74.00	-22.72	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	26.02	31.78	8.60	32.09	34.31	54.00	-19.69	Vertical
7206.00	20.45	36.15	11.65	32.00	36.25	54.00	-17.75	Vertical
9608.00	19.54	37.95	14.14	31.62	40.01	54.00	-13.99	Vertical
12010.00	*					54.00		Vertical
14412.00	*					54.00		Vertical
4804.00	30.24	31.78	8.60	32.09	38.53	54.00	-15.47	Horizontal
7206.00	22.62	36.15	11.65	32.00	38.42	54.00	-15.58	Horizontal
9608.00	19.26	37.95	14.14	31.62	39.73	54.00	-14.27	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	l:			N	Middle			
Peak value:				•				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Factor (dB)		Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	36.86	31.85	8.67	32.12	45.26	74.00	-28.74	Vertical
7440.00	31.54	36.37	11.72	31.89	47.74	74.00	-26.26	Vertical
9920.00	31.21	38.35	14.25	31.62	52.19	74.00	-21.81	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	41.06	31.85	8.67	32.12	49.46	74.00	-24.54	Horizontal
7440.00	33.25	36.37	11.72	31.89	49.45	74.00	-24.55	Horizontal
9920.00	30.59	38.35	14.25	31.62	51.57	74.00	-22.43	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)	Pream Factor (dB)	' 6\/6	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	25.77	31.85	8.67	32.12	34.17	54.00	-19.83	Vertical
7440.00	20.28	36.37	11.72	31.89	36.48	54.00	-17.52	Vertical
9920.00	19.38	38.35	14.25	31.62	40.36	54.00	-13.64	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	29.95	31.85	8.67	32.12	38.35	54.00	-15.65	Horizontal
7440.00	22.43	36.37	11.72	31.89	38.63	54.00	-15.37	Horizontal
9920.00	19.08	38.35	14.25	31.62	40.06	54.00	-13.94	Horizontal
12400.00	*					54.00		Horizontal

Remark:

14880.00

- 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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54.00

Horizontal



Test channel	:			Hi	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	35.96	31.93	8.73	32.16	44.46	74.00	-29.54	Vertical	
7440.00	30.94	36.59	11.79	31.78	47.54	74.00	-26.46	Vertical	
9920.00	30.67	38.81	14.38	31.88	51.98	74.00	-22.02	Vertical	
12400.00	*					74.00		Vertical	
14880.00	*					74.00		Vertical	
4960.00	39.97	31.93	8.73	32.16	48.47	74.00	-25.53	Horizontal	
7440.00	32.57	36.59	11.79	31.78	49.17	74.00	-24.83	Horizontal	
9920.00	29.97	38.81	14.38	31.88	51.28	74.00	-22.72	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	25.07	31.93	8.73	32.16	33.57	54.00	-20.43	Vertical	
7440.00	19.81	36.59	11.79	31.78	36.41	54.00	-17.59	Vertical	
9920.00	18.96	38.81	14.38	31.88	40.27	54.00	-13.73	Vertical	
12400.00	*					54.00		Vertical	
14880.00	*					54.00		Vertical	
4960.00	29.16	31.93	8.73	32.16	37.66	54.00	-16.34	Horizontal	
7440.00	21.89	36.59	11.79	31.78	38.49	54.00	-15.51	Horizontal	
9920.00	18.59	38.81	14.38	31.88	39.90	54.00	-14.10	Horizontal	

Remark:

12400.00

14880.00

*

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

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54.00

54.00

Horizontal

Horizontal



7.3.3 Bandedge emissions

43.75

32.45

45.30

27.58

27.59

27.58

5.39

5.38

5.39

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

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	
2390.00	41.78	27.59	5.38	30.18	44.57	74.00	-29.43	Horizontal	
2400.00	58.41	27.58	5.39	30.18	61.20	74.00	-12.80	Horizontal	
2390.00	42.23	27.59	5.38	30.18	45.02	74.00	-28.98	Vertical	
2400.00	60.33	27.58	5.39	30.18	63.12	74.00	-10.88	Vertical	
Average va	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	32.58	27.59	5.38	30.18	35.37	54.00	-18.63	Horizontal	

Test channel:	Highest channel

30.18

30.18

30.18

46.54

35.24

48.09

54.00

54.00

54.00

-7.46

-18.76

-5.91

Horizontal

Vertical

Vertical

Peak value:

2400.00

2390.00

2400.00

i eak 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	43.75	27.53	5.47	29.93	46.82	74.00	-27.18	Horizontal
2500.00	43.14	27.55	5.49	29.93	46.25	74.00	-27.75	Horizontal
2483.50	44.41	27.53	5.47	29.93	47.48	74.00	-26.52	Vertical
2500.00	44.03	27.55	5.49	29.93	47.14	74.00	-26.86	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	35.39	27.53	5.47	29.93	38.46	54.00	-15.54	Horizontal
2500.00	33.55	27.55	5.49	29.93	36.66	54.00	-17.34	Horizontal
2483.50	36.51	27.53	5.47	29.93	39.58	54.00	-14.42	Vertical
2500.00	33.38	27.55	5.49	29.93	36.49	54.00	-17.51	Vertical

Remark:

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



7.4 20dB Occupy Bandwidth

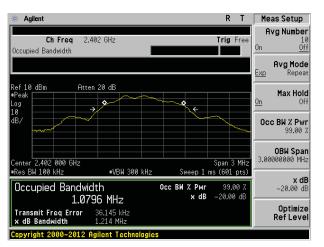
Test Requirement:	FCC Part15 C Section 15.249/15.215				
Test Method:	ANSI C63.10:2013				
Limit:	Operation Frequency range 2400MHz~2483.5MHz				
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer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

Measurement Data

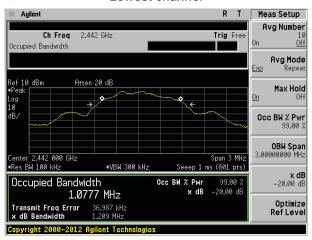
Test channel	20dB bandwidth(MHz)	Result
Lowest	1.214	Pass
Middle	1.209	Pass
Highest	1.214	Pass

Test plot as follows:

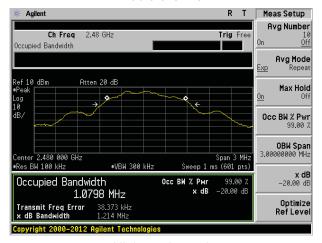




Lowest channel



Middle channel

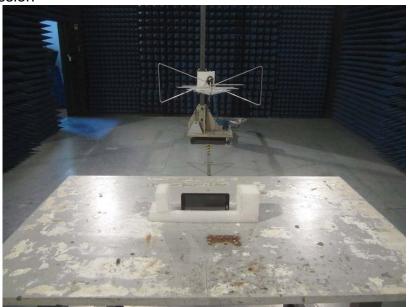


Highest channel



8 Test Setup Photo

Radiated Emission







Conducted Emission



9 EUT Constructional Details

Reference to the test report No. GTSE15080162001

----- End -----