



FCC REPORT

Applicant: Trane US, Inc.

Address of Applicant: 6200 Troup Highway, TYLER, Texas 75707, United States

Manufacturer: COMPUTIME ELECTRONICS (SHENZHEN) CO., LTD.

Address of Manufacturer: Computime Technology Pk, Dan Zhu Tou Cun Buji, Longgang Region Shenzhen China

Equipment Under Test (EUT)

Product Name: Color Touchscreen Wi-Fi

Model No.: TCONT824AS52DAB, ACONT824AS52DAB

FCC ID: XVR-CONT8243

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

Date of sample receipt: January 22, 2018

Date of Test: January 23-31, 2018

Date of report issued: February 01, 2018

Test Result : PASS *

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

Authorized Signature:

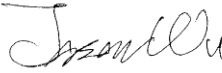
Robinson Lo

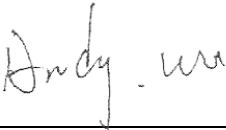
Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	February 01, 2018	Original

Prepared By:  **Date:** February 01, 2018
Project Engineer

Check By:  **Date:** February 01, 2018
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	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 General Description of EUT

Product Name:	Color Touchscreen Wi-Fi
Model No.:	TCONT824AS52DAB, ACONT824AS52DAB
Test Model No:	TCONT824AS52DAB
<i>Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are color and model name for commercial purpose.</i>	
Test sample(s) ID:	GTS201801000184-1
Sample(s) Status:	Engineer sample
Operation Frequency:	908.40MHz
Modulation type:	GFSK
Antenna Type:	Integral antenna
Antenna gain:	2dBi
Power supply:	AC 24V

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode.
<p><i>Remark: During the test, the dutycycle >98%, 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.</i></p>	

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	Y	Z
Field Strength(dBuV/m)	87.49	88.62	87.34

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC Approval
Supplied by client	AC-AC adaptor	KJS-66	N/A	VOC

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383, January 08, 2018.

- **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, August 15, 2016

5.5 Test Location

All tests were performed at:

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
 Tel: 0755-27798480
 Fax: 0755-27798960

5.6 Other Information Requested by the Customer

None.

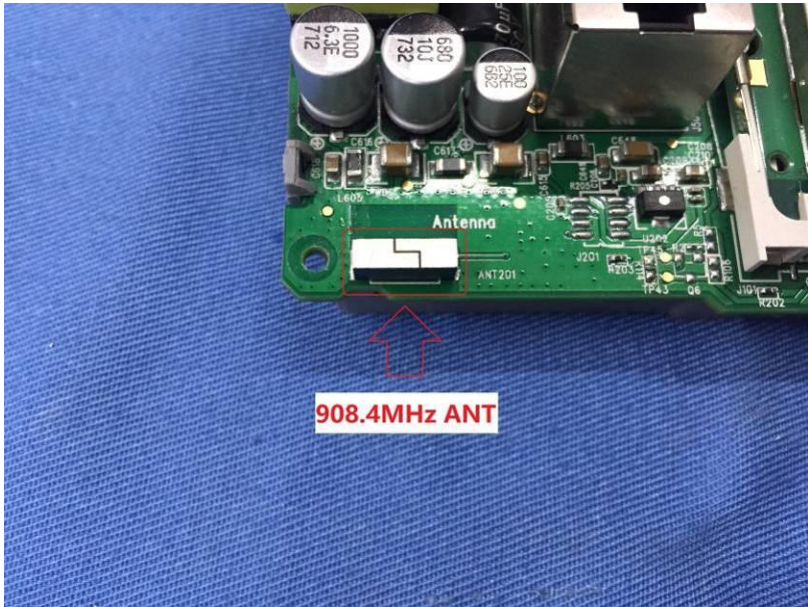
6 Test Instruments list

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	July 03 2015	July 02 2020
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	June 26 2017	June 25 2018
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June 26 2017	June 25 2018
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June 26 2017	June 25 2018
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 26 2017	June 25 2018
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 26 2017	June 25 2018
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
9	Coaxial Cable	GTS	N/A	GTS213	June 26 2017	June 25 2018
10	Coaxial Cable	GTS	N/A	GTS211	June 26 2017	June 25 2018
11	Coaxial cable	GTS	N/A	GTS210	June 26 2017	June 25 2018
12	Coaxial Cable	GTS	N/A	GTS212	June 26 2017	June 25 2018
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June 26 2017	June 25 2018
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June 26 2017	June 25 2018
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 26 2017	June 25 2018
16	Band filter	Amindeon	82346	GTS219	June 26 2017	June 25 2018
17	Power Meter	Anritsu	ML2495A	GTS540	June 26 2017	June 25 2018
18	Power Sensor	Anritsu	MA2411B	GTS541	June 26 2017	June 25 2018

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	7.3(L)x3.1(W)x2.9(H)	GTS252	May.16 2014	May.15 2019
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2017	June. 25 2018
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 26 2017	June. 25 2018
4	Artificial Mains Network	SCHWARZBECK MESS	NSLK8127	GTS226	June. 26 2017	June. 25 2018
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	KTJ	TA328	GTS233	June. 26 2017	June. 25 2018

7 Test results and Measurement Data

7.1 Antenna requirement:

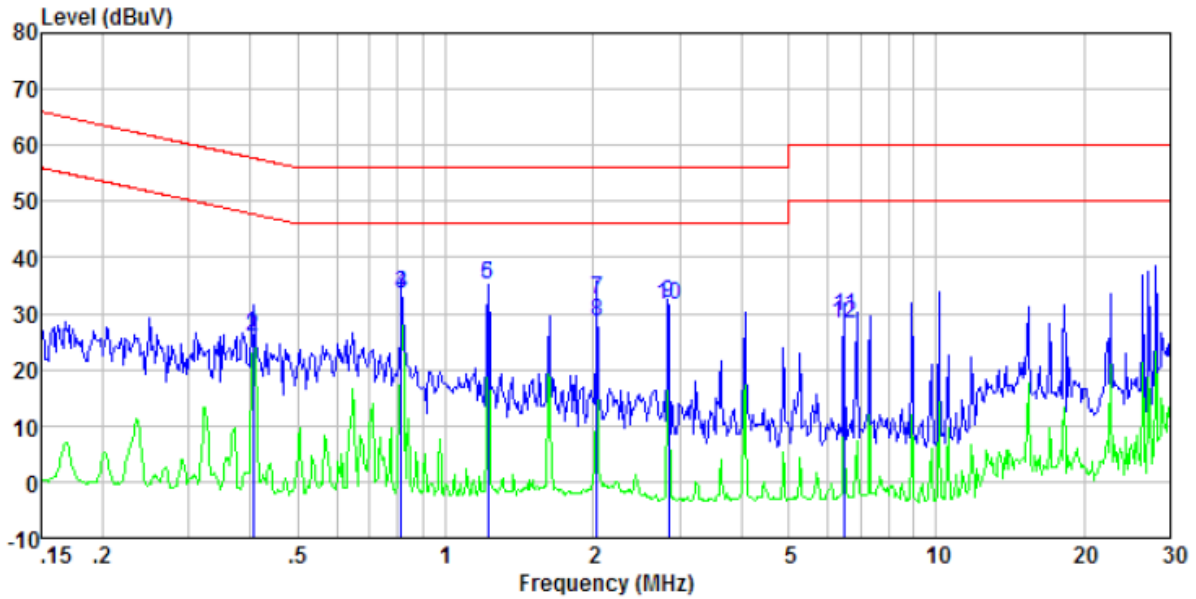
Standard requirement:	FCC Part15 C Section 15.203
<p>15.203 requirement:</p> <p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a 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.</p>	
<p>EUT Antenna:</p>	
<p><i>The antenna is integral antenna, the best case gain of the antenna is 2dBi.</i></p> 	

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, Sweep time=auto														
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> <p>* Decreases with the logarithm of the frequency.</p>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test setup:	<p><i>Remark:</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
Test procedure:	<ol style="list-style-type: none"> 1. The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 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 5.2 for details														
Test results:	Pass														

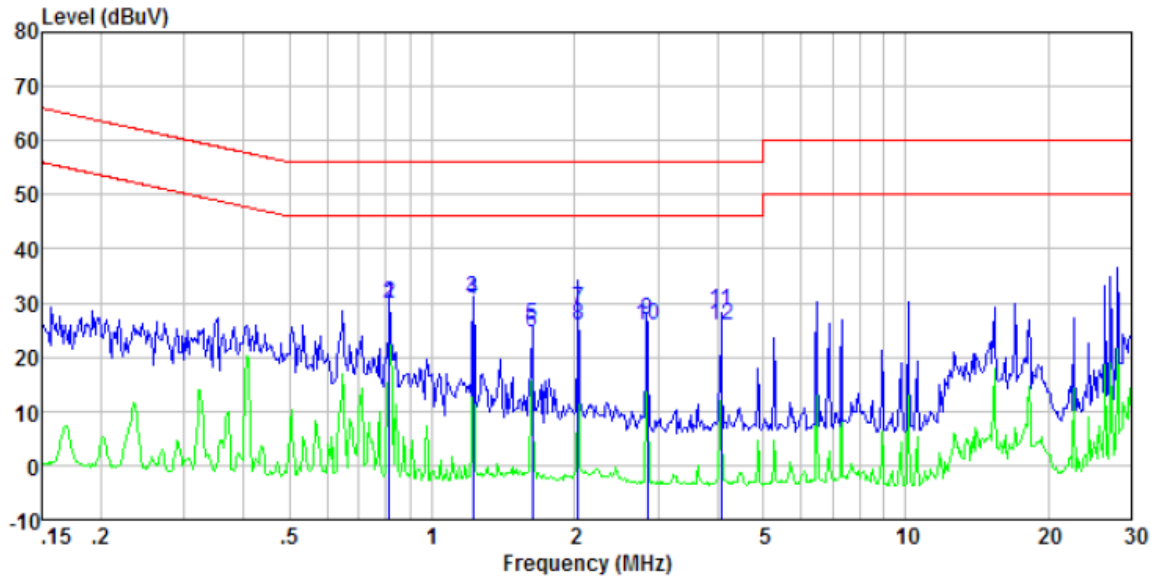
Measurement data:

Line:



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	level dBuV	Limit level dBuV	Over limit dB	Remark
0.406	25.92	0.35	0.11	26.38	57.73	-31.35	QP
0.406	25.41	0.35	0.11	25.87	47.73	-21.86	Average
0.813	33.01	0.23	0.14	33.38	56.00	-22.62	QP
0.813	33.06	0.23	0.14	33.43	46.00	-12.57	Average
1.223	34.70	0.20	0.16	35.06	56.00	-20.94	QP
1.223	34.65	0.20	0.16	35.01	46.00	-10.99	Average
2.033	32.06	0.20	0.18	32.44	56.00	-23.56	QP
2.033	28.05	0.20	0.18	28.43	46.00	-17.57	Average
2.853	31.38	0.20	0.19	31.77	56.00	-24.23	QP
2.853	31.04	0.20	0.19	31.43	46.00	-14.57	Average
6.523	29.12	0.20	0.18	29.50	60.00	-30.50	QP
6.523	27.91	0.20	0.18	28.29	50.00	-21.71	Average

Neutral:



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	level dBuV	Limit level dBuV	Over limit dB	Remark
0.813	29.37	0.23	0.14	29.74	56.00	-26.26	QP
0.813	29.35	0.23	0.14	29.72	46.00	-16.28	Average
1.223	30.42	0.20	0.16	30.78	56.00	-25.22	QP
1.223	30.24	0.20	0.16	30.60	46.00	-15.40	Average
1.630	25.49	0.20	0.17	25.86	56.00	-30.14	QP
1.630	24.32	0.20	0.17	24.69	46.00	-21.31	Average
2.033	28.42	0.20	0.18	28.80	56.00	-27.20	QP
2.033	25.54	0.20	0.18	25.92	46.00	-20.08	Average
2.853	26.38	0.20	0.19	26.77	56.00	-29.23	QP
2.853	25.61	0.20	0.19	26.00	46.00	-20.00	Average
4.076	28.09	0.20	0.18	28.47	56.00	-27.53	QP
4.076	25.33	0.20	0.18	25.71	46.00	-20.29	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

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	30MHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Peak		1MHz	10Hz	Average Value	
Limit: (Field strength of the fundamental signal)	Frequency	Limit (dBuV/m @3m)		Remark	
	908.4MHz	94.00		Average Value	
Limit: (Spurious Emissions)	Frequency	Limit (dBuV/m @3m)		Remark	
	30MHz-88MHz	40.00		Quasi-peak Value	
	88MHz-216MHz	43.50		Quasi-peak Value	
	216MHz-960MHz	46.00		Quasi-peak Value	
	960MHz-1GHz	54.00		Quasi-peak Value	
	Above 1GHz	54.00		Average Value	
74.00		Peak Value			
Limit: (band edge)	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.				
Test setup:	Below 1GHz				
	<p>The diagram illustrates the test setup for frequencies below 1GHz. It shows an Equipment Under Test (EUT) placed on a turn table, which is positioned 80cm above the ground. A test antenna is located 3m away from the EUT and is oriented vertically, with its height adjustable between 1m and 4m. The antenna is connected to a preamplifier, which is then connected to a receiver. The entire setup is enclosed within a shielded chamber to prevent external interference.</p>				
	Above 1GHz				

	<p>The diagram illustrates the test setup. An EUT (Equipment Under Test) is placed on a rotating table at a height of approximately 150 cm. The table is rotated 360 degrees. A test antenna is mounted on a variable-height antenna tower, positioned 3 meters away from the EUT. The antenna height is varied from 1 meter to 4 meters. The test receiver system consists of a Receiver and a Preamplifier connected to the antenna.</p>
<p>Test Procedure:</p>	<ol style="list-style-type: none"> 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 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. 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.
<p>Test Instruments:</p>	<p>Refer to section 6.0 for details</p>
<p>Test mode:</p>	<p>Refer to section 5.2 for details</p>
<p>Test results:</p>	<p>Pass</p>

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
908.40	88.10	22.25	4.88	37.59	77.64	94.00	-16.36	Vertical
908.40	99.08	22.25	4.88	37.59	88.62	94.00	-5.38	Horizontal

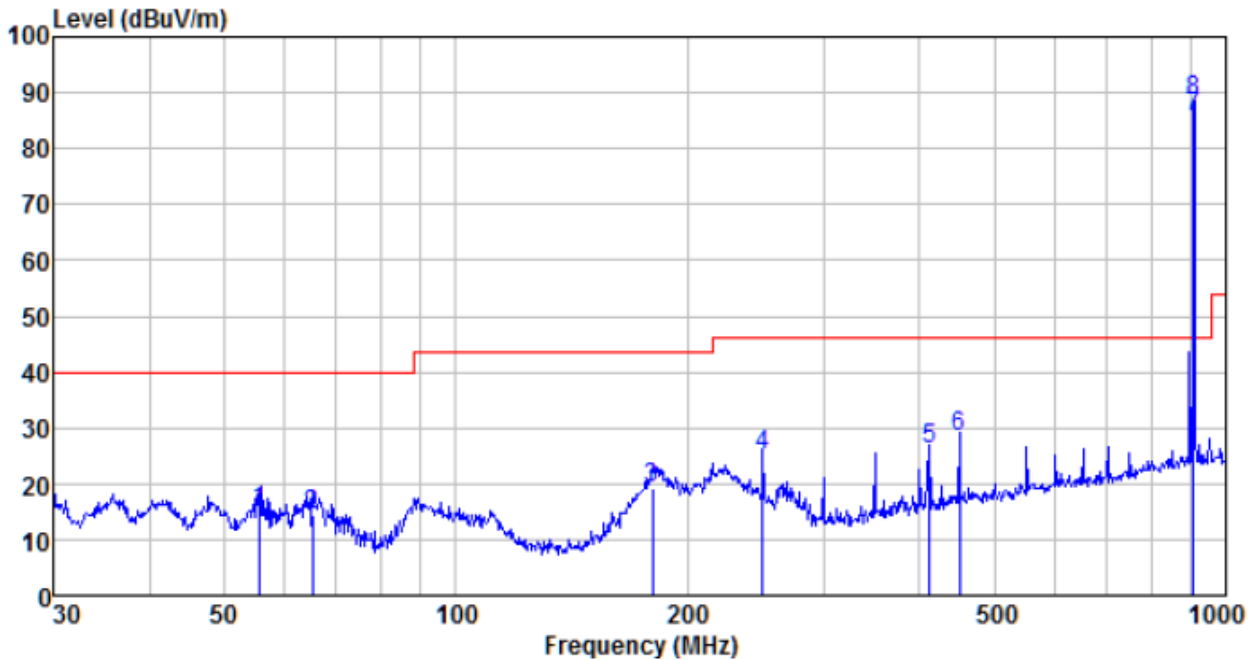
Average value:

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
908.40	86.10	22.25	4.88	37.59	75.64	94.00	-18.36	Vertical
908.40	96.20	22.25	4.88	37.59	85.74	94.00	-8.26	Horizontal

7.3.2 Spurious emissions

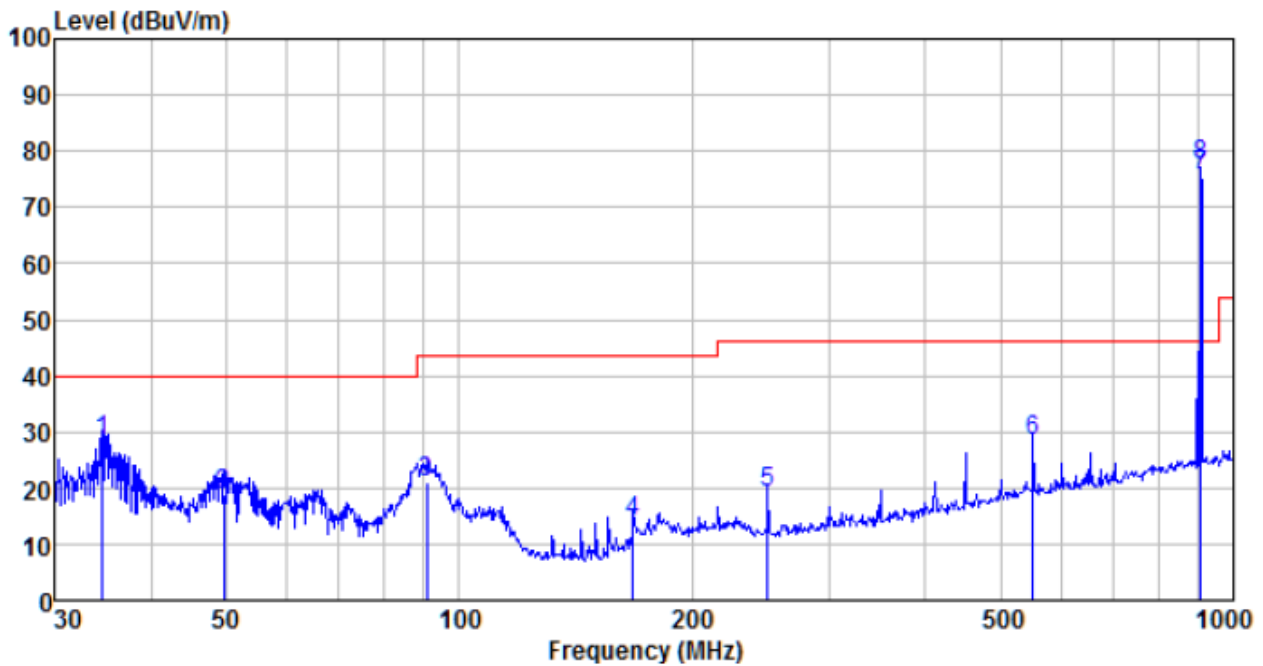
■ Below 1GHz

Horizontal :



Freq MHz	Reading level dBUV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBUV	Limit level dBUV/m	Over limit dB	Remark
55.609	38.77	11.67	0.82	36.26	15.00	40.00	-25.00	QP
65.114	41.03	8.73	0.90	36.39	14.27	40.00	-25.73	QP
180.017	45.99	8.80	1.74	37.24	19.29	43.50	-24.21	QP
250.301	48.45	11.85	2.12	37.38	25.04	46.00	-20.96	QP
411.824	44.95	15.74	2.91	37.52	26.08	46.00	-19.92	QP
451.135	46.14	16.53	3.09	37.51	28.25	46.00	-17.75	QP
908.400	96.20	22.25	4.88	37.59	85.74	46.00	39.74	Average
908.400	99.08	22.25	4.88	37.59	88.62	46.00	42.62	Peak

Vertical:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
34.639	51.76	11.20	0.61	35.33	28.24	40.00	-11.76	QP
49.707	41.92	12.20	0.77	36.17	18.72	40.00	-21.28	QP
90.855	45.96	10.60	1.12	36.65	21.03	43.50	-22.47	QP
167.824	41.32	8.33	1.67	37.18	14.14	43.50	-29.36	QP
250.301	42.67	11.85	2.12	37.38	19.26	46.00	-26.74	QP
550.948	43.94	18.40	3.53	37.53	28.34	46.00	-17.66	QP
908.400	86.10	22.25	4.88	37.59	75.64	46.00	29.64	Average
908.400	88.10	22.25	4.88	37.59	77.64	46.00	31.64	Peak

■ 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
1816.80	50.45	25.37	4.87	34.14	46.55	74.00	-27.45	Vertical
2725.20	40.06	28.21	5.69	33.63	40.33	74.00	-33.67	Vertical
3633.60	37.58	29.18	7.23	32.60	41.39	74.00	-32.61	Vertical
4542.00	34.98	31.42	8.38	31.96	42.82	74.00	-31.18	Vertical
5450.40	31.43	31.89	9.42	32.41	40.33	74.00	-33.67	Vertical
6358.80	32.12	33.39	10.70	32.08	44.13	74.00	-29.87	Vertical
7267.20	27.87	36.28	11.69	31.96	43.88	74.00	-30.12	Vertical
8175.60	28.78	36.99	12.39	31.59	46.57	74.00	-27.43	Vertical
9084.00	28.49	37.28	13.76	32.17	47.36	74.00	-26.64	Vertical
1816.80	54.34	25.37	4.87	34.14	50.44	74.00	-23.56	Horizontal
2725.20	39.31	28.21	5.69	33.63	39.58	74.00	-34.42	Horizontal
3633.60	38.11	29.18	7.23	32.60	41.92	74.00	-32.08	Horizontal
4542.00	35.55	31.42	8.38	31.96	43.39	74.00	-30.61	Horizontal
5450.40	33.00	31.89	9.42	32.41	41.90	74.00	-32.10	Horizontal
6358.80	31.74	33.39	10.70	32.08	43.75	74.00	-30.25	Horizontal
7267.20	29.15	36.28	11.69	31.96	45.16	74.00	-28.84	Horizontal
8175.60	31.55	36.99	12.39	31.59	49.34	74.00	-24.66	Horizontal
9084.00	29.80	37.23	13.71	32.23	48.51	74.00	-25.49	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
1816.80	42.52	25.37	4.87	34.14	38.62	54.00	-15.38	Vertical
2725.20	32.38	28.21	5.69	33.63	32.65	54.00	-21.35	Vertical
3633.60	29.70	29.18	7.23	32.60	33.51	54.00	-20.49	Vertical
4542.00	26.80	31.42	8.38	31.96	34.64	54.00	-19.36	Vertical
5450.40	24.30	31.89	9.42	32.41	33.20	54.00	-20.80	Vertical
6358.80	24.55	33.39	10.70	32.08	36.56	54.00	-17.44	Vertical
7267.20	20.34	36.28	11.69	31.96	36.35	54.00	-17.65	Vertical
8175.60	20.23	36.99	12.39	31.59	38.02	54.00	-15.98	Vertical
9084.00	20.90	37.28	13.76	32.17	39.77	54.00	-14.23	Vertical
1816.80	45.90	25.37	4.87	34.14	42.00	54.00	-12.00	Horizontal
2725.20	31.16	28.21	5.69	33.63	31.43	54.00	-22.57	Horizontal
3633.60	29.70	29.18	7.23	32.60	33.51	54.00	-20.49	Horizontal
4542.00	27.47	31.42	8.38	31.96	35.31	54.00	-18.69	Horizontal
5450.40	25.10	31.89	9.42	32.41	34.00	54.00	-20.00	Horizontal
6358.80	24.09	33.39	10.70	32.08	36.10	54.00	-17.90	Horizontal
7267.20	21.40	36.28	11.69	31.96	37.41	54.00	-16.59	Horizontal
8175.60	23.35	36.99	12.39	31.59	41.14	54.00	-12.86	Horizontal
9084.00	21.87	37.23	13.71	32.23	40.58	54.00	-13.42	Horizontal

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.*

7.3.3 Bandedge emissions

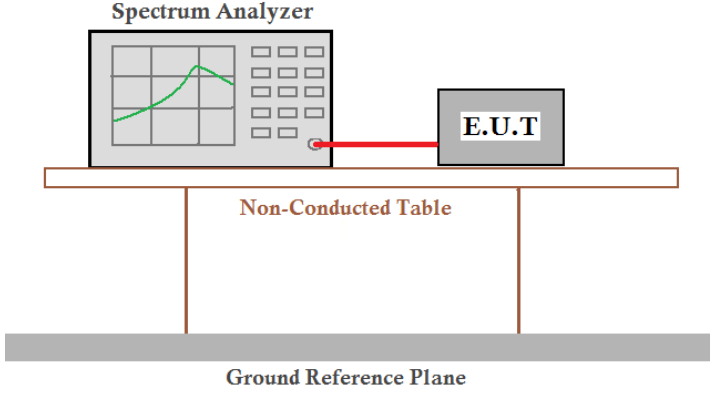
Quasi-peak value:

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
902.00	37.04	22.22	4.87	37.6	26.53	46.00	-19.47	Horizontal
928.00	37.14	22.36	4.96	37.57	26.89	46.00	-19.11	Horizontal
960.00	37.58	22.55	5.08	37.54	27.67	46.00	-18.33	Horizontal
902.00	36.54	22.22	4.87	37.6	26.03	46.00	-19.97	Vertical
928.00	36.18	22.36	4.96	37.57	25.93	46.00	-20.07	Vertical
960.00	37.38	22.55	5.08	37.54	27.47	46.00	-18.53	Vertical

Remark:

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

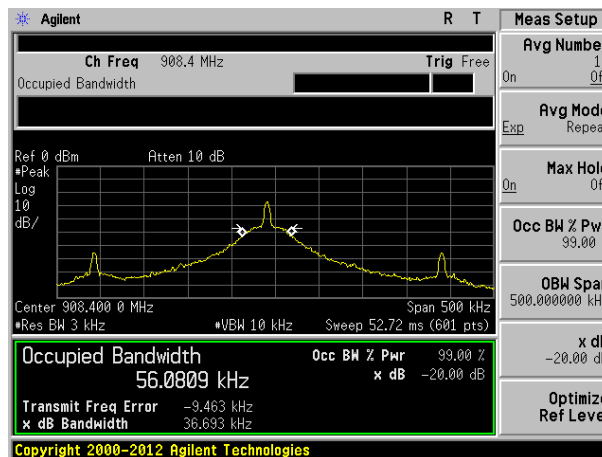
7.4 20dB Occupy Bandwidth

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:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

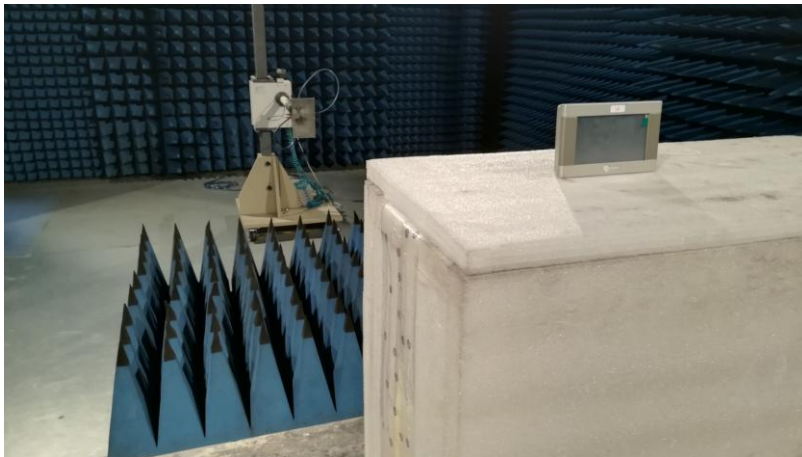
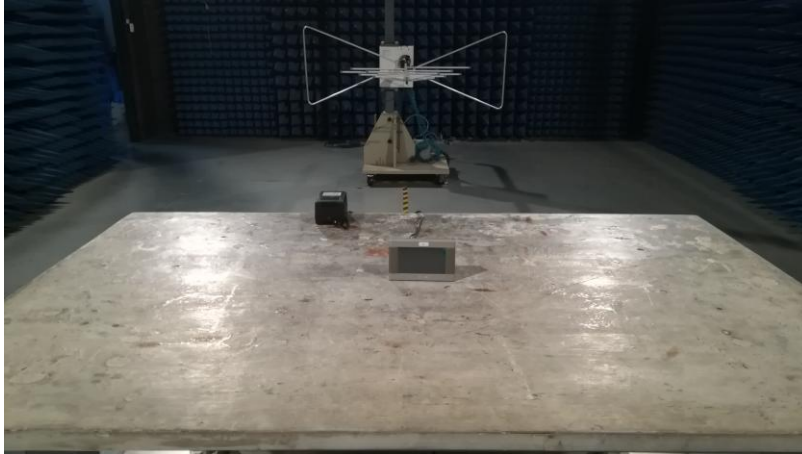
Operation Frequency	20dB bandwidth(MHz)	Result
908.40MHz	0.037	Pass

Test plot as follows:



8 Test Setup Photo

Radiated Emission



Conducted Emission



9 EUT Constructional Details

Reference to the test report No. GTS201801000184F01

-----End-----