

Global United Technology Services Co., Ltd.

Report No.: GTS201703000001F02

FCC REPORT

Applicant: Shenzhen eMeet technology Co.,Ltd

Address of Applicant: 14F, Building B1, Nanshan I Park, No. 1001 Xueyuan Road,

Nanshan District.Shenzhen.China

Shenzhen eMeet technology Co.,Ltd Manufacturer:

Address of 14F, Building B1, Nanshan I Park, No. 1001 Xueyuan Road,

Nanshan District, Shenzhen, China Manufacturer:

Equipment Under Test (EUT)

Product Name: Business Smart Assistant

Model No.: OfficeCore M1

Trade Mark:

eMeet

FCC ID: 2ALCN-M1

FCC CFR Title 47 Part 15 Subpart C Section 15.249:2016 Applicable standards:

Date of sample receipt: March 01, 2017

Date of Test: March 01-06, 2017

March 06, 2017 Date of report issued:

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	March 06, 2017	Original

Prepared By:	Jasan Wu	Date:	March 06, 2017
Check By:	Project Engineer Andy www	Date:	March 06, 2017
	Reviewer		



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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 Uncertain		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 0.15MHz ~ 30MHz ± 3.45dB					
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.					



5 General Information

5.1 General Description of EUT

Product Name:	Business Smart Assistant	
Model No.:	OfficeCore M1	
Operation Frequency:	2402MHz~2480MHz	
Channel numbers:	40	
Channel separation:	2MHz	
Modulation type:	GFSK	
Antenna Type:	PCB antenna	
Antenna gain:	2.0dBi	
Power supply:	Rechargeable battery: DC3.7V 5200mAh	
	Input voltage: DC5V 2A	
	Output voltage: DC5V 1A	



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



5.2 Test mode

Transmitting mode Keep the EUT in continuously transmitting mode

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.

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	Υ	Z
Field Strength(dBuV/m)	88.41	89.53	87.18

5.3 Description of Support Units

None.

5.4 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 fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, June 22, 2016.

• 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.

Address: 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 29 2016	June 28 2017
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June 29 2016	June 28 2017
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June 29 2016	June 28 2017
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 29 2016	June 28 2017
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 29 2016	June 28 2017
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
9	Coaxial Cable	GTS	N/A	GTS213	June 29 2016	June 28 2017
10	Coaxial Cable	GTS	N/A	GTS211	June 29 2016	June 28 2017
11	Coaxial cable	GTS	N/A	GTS210	June 29 2016	June 28 2017
12	Coaxial Cable	GTS	N/A	GTS212	June 29 2016	June 28 2017
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June 29 2016	June 28 2017
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June 29 2016	June 28 2017
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 29 2016	June 28 2017
16	Band filter	Amindeon	82346	GTS219	June 29 2016	June 28 2017
17	Power Meter	Anritsu	ML2495A	GTS540	June 29 2016	June 28 2017
18	Power Sensor	Anritsu	MA2411B	GTS541	June 29 2016	June 28 2017

Conduc	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. 29 2016	June. 28 2017
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 29 2016	June. 28 2017
4	Artificial Mains Network	SCHWARZBECK MESS	NSLK8127	GTS226	June. 29 2016	June. 28 2017
5	Coaxial Cable	GTS	N/A	GTS227	June. 29 2016	June. 28 2017
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	KTJ	TA328	GTS233	June. 29 2016	June. 28 2017



7 Test results and Measurement Data

7.1 Antenna requirement

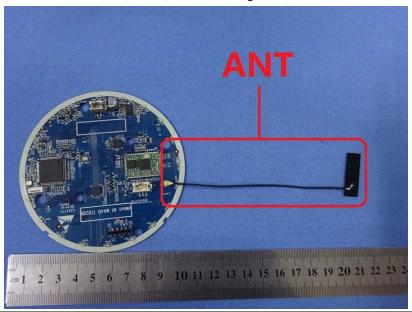
Standard requirement: FCC Part15 C Section 15.203

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 PCB antenna, the best case gain of the antenna is 2.0dBi





7.2 Conducted Emissions

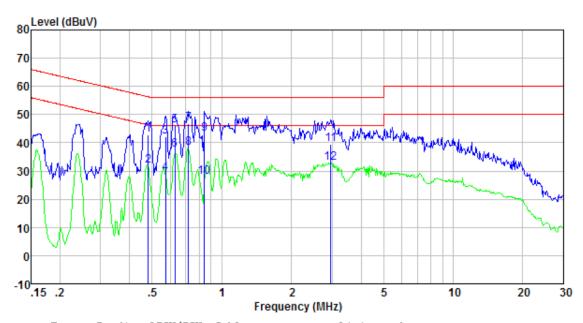
Test Requirement:	FCC Part15 C Section 15.207	•			
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	150KHz to 30MHz				
Class / Severity:	Class B				
Receiver setup:	RBW=9KHz, VBW=30KHz, Sv	weep time=auto			
Limit:	· · · · · · · · · · · · · · · · · · ·	Limit (c	IRu\/)		
Littiit.	Frequency range (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 logarithn	n of the frequency.			
Test setup:	Reference Plane				
	AUX Equipment Test table/Insulation plane 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 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. 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). 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:

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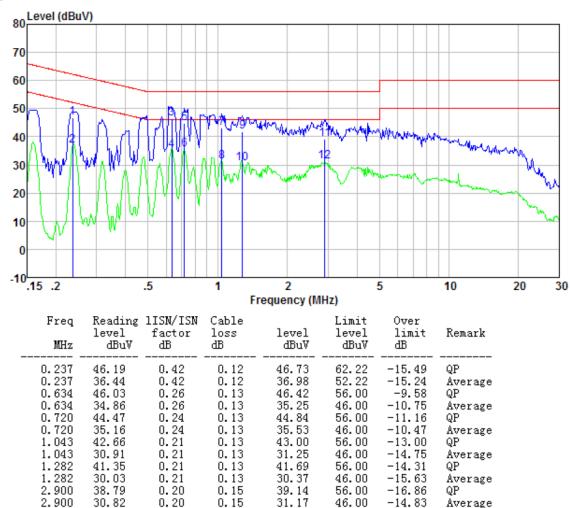
Line:



	Freq MHz	Reading level dBuV	lISN/ISN factor dB	Cable loss dB	_	level dBuV	Limit level dBuV	Over limit dB	Remark
0	.481	42.23	0.39	0.11		42.73	56.32	-13.59	QP
0	0.481	31.41	0.39	0.11		31.91	46.32	-14.41	Average
0).573	41.59	0.32	0.12		42.03	56.00	-13.97	QP
0).573	28.71	0.32	0.12		29.15	46.00	-16.85	Average
0	0.627	45.60	0.30	0.12		46.02	56.00	-9.98	QP
0	0.627	36.97	0.30	0.12		37.39	46.00	-8.61	Average
0	720	46.35	0.28	0.13		46.76	56.00	-9.24	QP
0	720	37.90	0.28	0.13		38.31	46.00	-7.69	Average
0	. 844	42.60	0.26	0.13		42.99	56.00	-13.01	QP
0	. 844	27.39	0.26	0.13		27.78	46.00	-18.22	Average
2	2.962	38.99	0.20	0.15		39.34	56.00	-16.66	QP
2	2.962	32.57	0.20	0.15		32.92	46.00	-13.08	Average



Neutral:



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

Test Requirement: FCC Part15 C Section 15.209 ANSI C63.10:2013 Test Frequency Range: Test site: Measurement Distance: 3m 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) Limit: (Spurious Emissions) Frequency Limit (dBuV/m @3m) Remark 2400MHz-2483.5MHz 94.00 Average Value 8MHz-216MHz 43.50 Quasi-peak Value 8MHz-216MHz 43.50 Quasi-peak Value 960MHz-1GHz 54.00 Quasi-peak Value Above 1GHz 74.00 Peak Value 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. Below 1GHz Above 1GHz Frequency Limit (dBuV/m @3m) Remark 40.00 Quasi-peak Value 216MHz-960MHz 46.00 Quasi-peak Value 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. Below 1GHz	7.3	Radiated Emission Method									
Test site: Receiver setup: Peak		Test Requirement:	FCC Part15 C Section 15.209								
Test site: Receiver setup: Frequency		Test Method:	ANSI C63.10:20	013							
Receiver setup: Frequency		Test Frequency Range:	30MHz to 25GH	Ηz							
Source S		Test site:	Measurement D	Distance: 3m							
Above 1GHz Above 1GHz Peak IMHz 10Hz Average Value Frequency Limit (dBuV/m @3m) Remark 2400MHz-2483.5MHz 2400MHz-2483.5MHz Prequency Limit (dBuV/m @3m) Limit: (Spurious Emissions) Frequency SaMHz-216MHz 40.00 Quasi-peak Value 2400MHz-960MHz 46.00 Quasi-peak Value 2400MHz-1GHz 960MHz-1GHz Above 1GHz Tak.00 Average Value Limit: (band edge) Limit: 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. Below 1GHz Test setup: Below 1GHz		Receiver setup:	Frequency	Detector	RBW	VBW	Remark				
Limit: (Field strength of the fundamental signal) Limit: (Spurious Emissions) Frequency Limit (dBuV/m @3m) Frequency Limit (dBuV/m @3m) Remark 2400MHz-2483.5MHz 94.00 Average Value Frequency Limit (dBuV/m @3m) Remark 30MHz-88MHz 40.00 Quasi-peak Value 88MHz-216MHz 43.50 Quasi-peak Value 960MHz-1GHz Above 1GHz Fmissions 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				Quasi-peal	120KHz	300KHz	Quasi-peak Value				
Peak			Al 4011	Above 1GHz Peak 1MHz 3MHz							
(Field strength of the fundamental signal) 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 74.00 Peak Value Limit: (band edge) 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. Below 1GHz Below 1GHz			Above 1GHz	Average Value							
Frequency Limit (dBuV/m @3m) Remark (Spurious Emissions) Frequency Limit (dBuV/m @3m) Remark		Limit:	Freque	ency	Limit (dBuV	/m @3m)	Remark				
(Spurious Emissions) 30MHz-88MHz			2400MHz-24	183.5MHz	94.0	00	Average Value				
88MHz-216MHz		Limit:									
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 T4.00 Peak Value 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 Receivery Preamplifier		(Spurious Emissions)					Quasi-peak Value				
960MHz-1GHz Above 1GHz 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 Above 1GHz 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. Below 1GHz Above 1GHz 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. Below 1GHz Above 1GHz Freather Above 1GHz Above 1GHz Above 1GHz Freather Above 1GHz Abo		(0)									
Above 1GHz 54.00 Average Value 74.00 Peak Value 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 Fest Antenna Tum Table Receiver Preamplifier											
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 Below 1GHz			960MHz-	-1GHz			·				
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 Receiver Preamplifier			Above 1	IGHz							
Test Antenna		(band edge)	fundamental or	to the genera	al radiated em						
Above 1GHz		Test setup:	Test Antenna 4m > **Socm > **Test Antenna **Test Antenn								
Above Total			Above 1GHz								

Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102



Report No.: GTS201703000001F02 < 1m ... 4m > EUT Turn Table <150cm; Preamplifier+ Receiver+ 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 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. Test Instruments: Refer to section 6.0 for details Test mode: Refer to section 5.2 for details

Measurement data:

Test results:

Pass



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	85.76	27.58	5.39	30.18	88.55	114.00	-25.45	Vertical
2402.00	84.25	27.58	5.39	30.18	87.04	114.00	-26.96	Horizontal
2440.00	84.65	27.55	5.43	30.06	87.57	114.00	-26.43	Vertical
2440.00	83.40	27.55	5.43	30.06	86.32	114.00	-27.68	Horizontal
2480.00	86.47	27.52	5.47	29.93	89.53	114.00	-24.47	Vertical
2480.00	84.17	27.52	5.47	29.93	87.23	114.00	-26.77	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	76.25	27.58	5.39	30.18	79.04	94.00	-14.96	Vertical
2402.00	74.54	27.58	5.39	30.18	77.33	94.00	-16.67	Horizontal
2440.00	74.83	27.55	5.43	30.06	77.75	94.00	-16.25	Vertical
2440.00	72.16	27.55	5.43	30.06	75.08	94.00	-18.92	Horizontal
2480.00	76.87	27.52	5.47	29.93	79.93	94.00	-14.07	Vertical
2480.00	74.58	27.52	5.47	29.93	77.64	94.00	-16.36	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

- DCIOW I	O1 12							
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
138.39	45.61	7.57	1.50	29.46	25.22	43.50	-18.28	Vertical
221.39	41.88	10.88	1.97	29.40	25.33	46.00	-20.67	Vertical
270.38	44.89	12.53	2.22	29.80	29.84	46.00	-16.16	Vertical
319.94	44.04	13.91	2.47	29.88	30.54	46.00	-15.46	Vertical
492.47	40.55	17.38	3.27	29.32	31.88	46.00	-14.12	Vertical
909.67	31.98	22.25	4.88	29.10	30.01	46.00	-15.99	Vertical
138.39	41.79	7.57	1.50	29.46	21.40	43.50	-22.10	Horizontal
270.38	48.67	12.53	2.22	29.80	33.62	46.00	-12.38	Horizontal
319.94	49.93	13.91	2.47	29.88	36.43	46.00	-9.57	Horizontal
369.41	37.20	14.85	2.72	29.64	25.13	46.00	-20.87	Horizontal
492.47	35.33	17.38	3.27	29.32	26.66	46.00	-19.34	Horizontal
909.67	34.54	22.25	4.88	29.10	32.57	46.00	-13.43	Horizontal



■ Above 1GHz

Test channel: Lowest channel

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	35.11	31.78	8.60	32.09	43.40	74.00	-30.60	Vertical
7206.00	30.38	36.15	11.65	32.00	46.18	74.00	-27.82	Vertical
9608.00	30.17	37.95	14.14	31.62	50.64	74.00	-23.36	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	38.95	31.78	8.60	32.09	47.24	74.00	-26.76	Horizontal
7206.00	31.94	36.15	11.65	32.00	47.74	74.00	-26.26	Horizontal
9608.00	29.39	37.95	14.14	31.62	49.86	74.00	-24.14	Horizontal
12010.00	*					74.00		Horizontal
14412.00	*					74.00		Horizontal

Average value:

Average var	u0.							
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	24.34	31.78	8.60	32.09	32.63	54.00	-21.37	Vertical
7206.00	19.31	36.15	11.65	32.00	35.11	54.00	-18.89	Vertical
9608.00	18.52	37.95	14.14	31.62	38.99	54.00	-15.01	Vertical
12010.00	*					54.00		Vertical
14412.00	*					54.00		Vertical
4804.00	28.33	31.78	8.60	32.09	36.62	54.00	-17.38	Horizontal
7206.00	21.34	36.15	11.65	32.00	37.14	54.00	-16.86	Horizontal
9608.00	18.07	37.95	14.14	31.62	38.54	54.00	-15.46	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:			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
4880.00	35.39	31.85	8.67	32.12	43.79	74.00	-30.21	Vertical
7320.00	30.56	36.37	11.72	31.89	46.76	74.00	-27.24	Vertical
9760.00	30.34	38.35	14.25	31.62	51.32	74.00	-22.68	Vertical
12200.00	*					74.00		Vertical
14640.00	*					74.00		Vertical
4880.00	39.29	31.85	8.67	32.12	47.69	74.00	-26.31	Horizontal
7320.00	32.15	36.37	11.72	31.89	48.35	74.00	-25.65	Horizontal
9760.00	29.58	38.35	14.25	31.62	50.56	74.00	-23.44	Horizontal
12200.00	*					74.00		Horizontal
14640.00	*					74.00		Horizontal
Average val	ue:							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.00	24.57	31.85	8.67	32.12	32.97	54.00	-21.03	Vertical
7320.00	19.47	36.37	11.72	31.89	35.67	54.00	-18.33	Vertical
9760.00	18.66	38.35	14.25	31.62	39.64	54.00	-14.36	Vertical
12200.00	*					54.00		Vertical
14640.00	*					54.00		Vertical
4880.00	28.59	31.85	8.67	32.12	36.99	54.00	-17.01	Horizontal
7320.00	21.51	36.37	11.72	31.89	37.71	54.00	-16.29	Horizontal
9760.00	18.23	38.35	14.25	31.62	39.21	54.00	-14.79	Horizontal
12200.00	*					54.00		Horizontal

Remark:

14640.00

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

Horizontal

54.00



Test channel	:			Hig	hest			
Peak value:				<u>'</u>				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	35.56	31.93	8.73	32.16	44.06	74.00	-29.94	Vertical
7440.00	30.67	36.59	11.79	31.78	47.27	74.00	-26.73	Vertical
9920.00	30.44	38.81	14.38	31.88	51.75	74.00	-22.25	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	39.49	31.93	8.73	32.16	47.99	74.00	-26.01	Horizontal
7440.00	32.27	36.59	11.79	31.78	48.87	74.00	-25.13	Horizontal
9920.00	29.69	38.81	14.38	31.88	51.00	74.00	-23.00	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	24.74	31.93	8.73	32.16	33.24	54.00	-20.76	Vertical
7440.00	19.58	36.59	11.79	31.78	36.18	54.00	-17.82	Vertical
9920.00	18.76	38.81	14.38	31.88	40.07	54.00	-13.93	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	28.77	31.93	8.73	32.16	37.27	54.00	-16.73	Horizontal
7440.00	21.64	36.59	11.79	31.78	38.24	54.00	-15.76	Horizontal
9920.00	18.35	38.81	14.38	31.88	39.66	54.00	-14.34	Horizontal
12400.00	*					54.00		Horizontal
14880.00	*					54.00		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.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



7.3.3 Bandedge emissions

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

Test channel:	Lowest channel
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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	40.03	27.59	5.38	30.18	42.82	74.00	-31.18	Horizontal
2400.00	56.41	27.58	5.39	30.18	59.20	74.00	-14.80	Horizontal
2390.00	40.30	27.59	5.38	30.18	43.09	74.00	-30.91	Vertical
2400.00	58.14	27.58	5.39	30.18	60.93	74.00	-13.07	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	31.22	27.59	5.38	30.18	34.01	54.00	-19.99	Horizontal
2400.00	42.29	27.58	5.39	30.18	45.08	54.00	-8.92	Horizontal
2390.00	30.96	27.59	5.38	30.18	33.75	54.00	-20.25	Vertical
2400.00	43.67	27.58	5.39	30.18	46.46	54.00	-7.54	Vertical

Test channel:	Highest channel	
1 3 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	1	

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	41.79	27.53	5.47	29.93	44.86	74.00	-29.14	Horizontal
2500.00	41.51	27.55	5.49	29.93	44.62	74.00	-29.38	Horizontal
2483.50	42.16	27.53	5.47	29.93	45.23	74.00	-28.77	Vertical
2500.00	42.23	27.55	5.49	29.93	45.34	74.00	-28.66	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	34.01	27.53	5.47	29.93	37.08	54.00	-16.92	Horizontal
2500.00	32.42	27.55	5.49	29.93	35.53	54.00	-18.47	Horizontal
2483.50	34.99	27.53	5.47	29.93	38.06	54.00	-15.94	Vertical
2500.00	32.11	27.55	5.49	29.93	35.22	54.00	-18.78	Vertical

Remark:

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



7.4 20dB Occupy Bandwidth

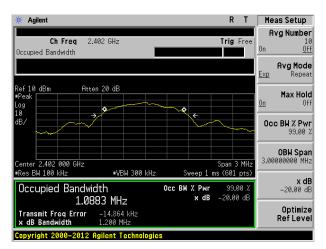
Test Requirement:	FCC Part15 C Section 15.249/15.215			
Test Method:	ANSI C63.10:2013			
Limit:	Operation Frequency range 2400MHz~2483.5MHz			
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane			
Test Instruments:	Refer to section 6.0 for details			
Test mode:	Refer to section 5.2 for details			
Test results:	Pass			

Measurement Data

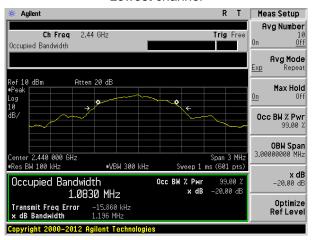
Test channel	20dB bandwidth(MHz)	Result
Lowest	1.200	Pass
Middle	1.196	Pass
Highest	1.188	Pass

Test plot as follows:

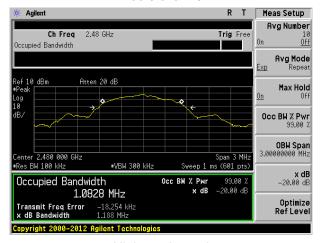




Lowest channel



Middle channel

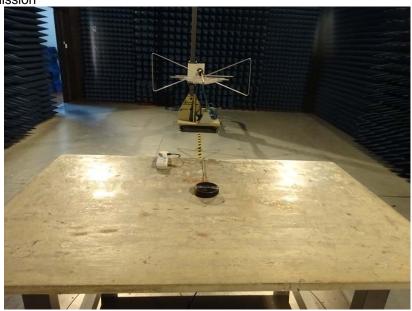


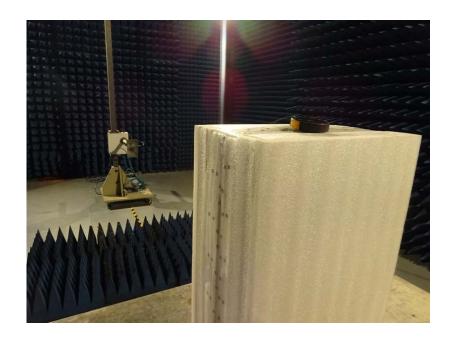
Highest channel



8 Test Setup Photo

Radiated Emission







Conducted Emission



9 EUT Constructional Details

Reference to the test report No. GTS201703000001F01

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