

FCC REPORT

Applicant: Zhejiang Yihe Sanitary Ware Co., Ltd.

Address of Applicant: District A, No. 102 East Taihe Road, Haimen street, Jiaojiang, Taizhou, Zhejiang, China

Manufacturer: Zhejiang Yihe Sanitary Ware Co., Ltd.

Address of Manufacturer: District A, No. 102 East Taihe Road, Haimen street, Jiaojiang, Taizhou, Zhejiang, China

Factory: WUXI DENVEL INTELLIGENT ELECNIC INC

Address of Factory: Building A, No.8 LianHe Road, WuXi, JiangSu, China

Equipment Under Test (EUT)

Product Name: Remote Control

Model No.: 1.03.020.140

Trade Mark: LUXE Bidet[®], UFFU[™], FOREMOST[™], SANIWISE[™], IKAHE

FCC ID: 2AQBQ-103020140

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: July 05, 2018

Date of Test: July 09-30, 2018

Date of report issued: July 31, 2018

Test Result : PASS *

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

Authorized Signature:

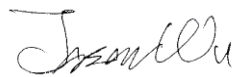

Robinson Lo
Laboratory Manager

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	July 31, 2018	Original

Prepared By:

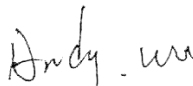


Date:

July 31, 2018

Project Engineer

Check By:



Date:

July 31, 2018

Reviewer

3 Contents

Page

1	COVER PAGE	1
2	VERSION	2
3	CONTENTS	3
4	TEST SUMMARY	4
4.1	MEASUREMENT UNCERTAINTY	4
5	GENERAL INFORMATION	5
5.1	GENERAL DESCRIPTION OF EUT	5
5.2	TEST MODE	7
5.3	DESCRIPTION OF SUPPORT UNITS	7
5.4	TEST FACILITY	7
5.5	TEST LOCATION	7
6	TEST INSTRUMENTS LIST	8
7	TEST RESULTS AND MEASUREMENT DATA	10
7.1	ANTENNA REQUIREMENT	10
7.2	CONDUCTED PEAK OUTPUT POWER	11
7.3	CHANNEL BANDWIDTH	13
7.4	POWER SPECTRAL DENSITY	15
7.5	BAND EDGES	17
7.5.1	Conducted Emission Method	17
7.5.2	Radiated Emission Method	19
7.6	SPURIOUS EMISSION	21
7.6.1	Conducted Emission Method	21
7.6.2	Radiated Emission Method	23
8	TEST SETUP PHOTO	31
9	EUT CONSTRUCTIONAL DETAILS	32

4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	N/A
Conducted Peak Output Power	15.247 (b)(3)	Pass
Channel Bandwidth	15.247 (a)(2)	Pass
Power Spectral Density	15.247 (e)	Pass
Band Edge	15.247(d)	Pass
Spurious Emission	15.205/15.209	Pass

Pass: The EUT complies with the essential requirements in the standard.

Remark : Test according to ANSI C63.10:2013

N/A means not applicable.

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz ~ 30MHz	$\pm 4.34\text{dB}$	(1)
Radiated Emission	30MHz ~ 1000MHz	$\pm 4.24\text{dB}$	(1)
Radiated Emission	1GHz ~ 26.5GHz	$\pm 4.68\text{dB}$	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	$\pm 3.45\text{dB}$	(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:	Remote Control
Model No.:	1.03.020.140
Serial No.:	XXXXXX
Test sample(s) ID:	GTS201807000035-1
Sample(s) Status	Engineer sample
Operation Frequency:	2407MHz~2477MHz
Channel numbers:	12
Modulation type:	FSK
Antenna Type:	PCB Antenna
Antenna gain:	2.5dBi(Declared by applicant)
Power supply:	DC3.0V(2 x 1.5V"AAA" size battery)

Operation Frequency each of channel					
Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2407MHz	5	2421MHz	9	2460MHz
2	2410MHz	6	2428MHz	10	2467MHz
3	2412MHz	7	2435MHz	11	2469MHz
4	2414MHz	8	2442MHz	12	2477MHz

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	2407MHz
The middle channel	2442MHz
The Highest channel	2477MHz

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode.
<i>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.</i>	

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.: 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.
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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 Tel: 0755-27798480 Fax: 0755-27798960

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	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 27 2018	June. 26 2019
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 27 2018	June. 26 2019
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June. 27 2018	June. 26 2019
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 27 2018	June. 26 2019
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 27 2018	June. 26 2019
9	Coaxial Cable	GTS	N/A	GTS211	June. 27 2018	June. 26 2019
10	Coaxial cable	GTS	N/A	GTS210	June. 27 2018	June. 26 2019
11	Coaxial Cable	GTS	N/A	GTS212	June. 27 2018	June. 26 2019
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 27 2018	June. 26 2019
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June. 27 2018	June. 26 2019
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 27 2018	June. 26 2019
15	Band filter	Amindeon	82346	GTS219	June. 27 2018	June. 26 2019
16	Power Meter	Anritsu	ML2495A	GTS540	June. 27 2018	June. 26 2019
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 27 2018	June. 26 2019
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS588	June. 27 2018	June. 26 2019
19	Splitter	Agilent	11636B	GTS237	June. 27 2018	June. 26 2019
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 27 2018	June. 26 2019

RF Conducted Test:						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 27 2018	June. 26 2019
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 27 2018	June. 26 2019
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 27 2018	June. 26 2019
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 27 2018	June. 26 2019
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 27 2018	June. 26 2019
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 27 2018	June. 26 2019
8	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 27 2018	June. 26 2019

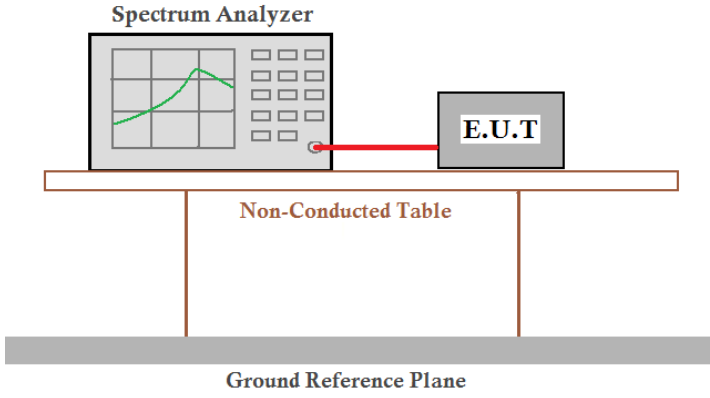
General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	ChangChun	DYM3	GTS257	June 27 2018	June 26 2019

7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
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. 15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.	
EUT Antenna:	
<i>The antenna is PCB antenna, the best case gain of the antenna is 2.5dBi</i> 	

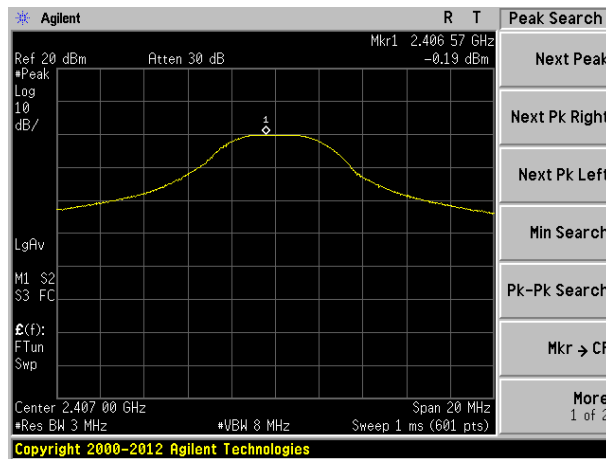
7.2 Conducted Peak Output Power

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04
Limit:	30dBm
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by two legs and is positioned above a Ground Reference Plane, which is represented by a thick grey bar at the bottom of the diagram.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2for details
Test results:	Pass

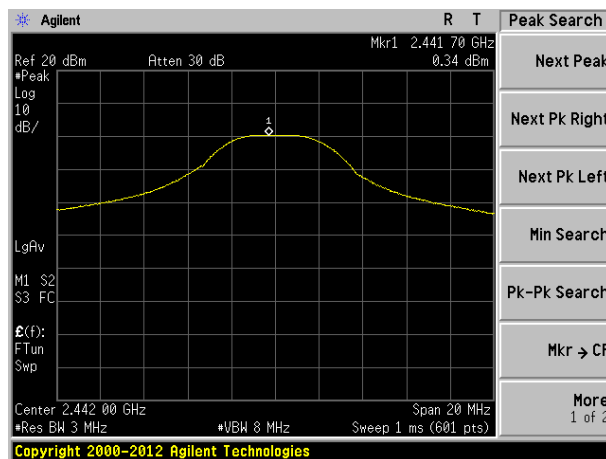
Measurement Data

Frequency (MHz)	Peak Output Power (dBm)	Limit(dBm)	Result
2407	-0.19	30	PASS
2442	0.34		
2477	0.82		

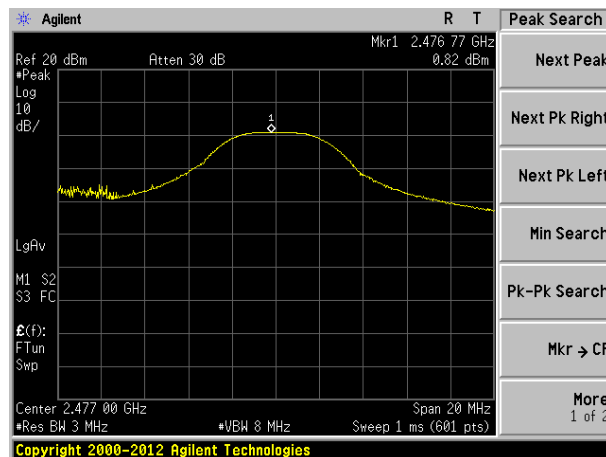
Test plot as follows:



2407MHz

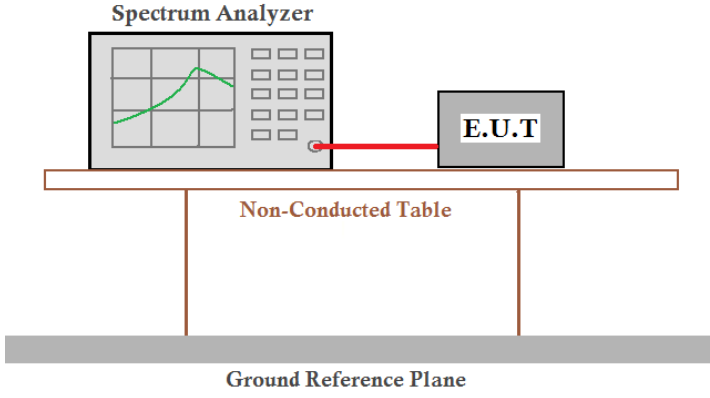


2442MHz



2477MHz

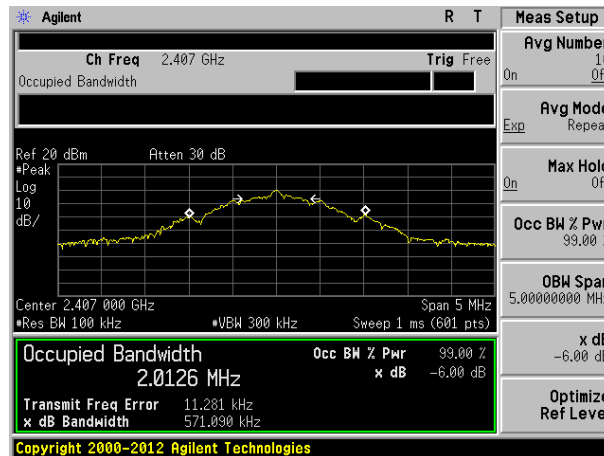
7.3 Channel Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04
Limit:	>500KHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

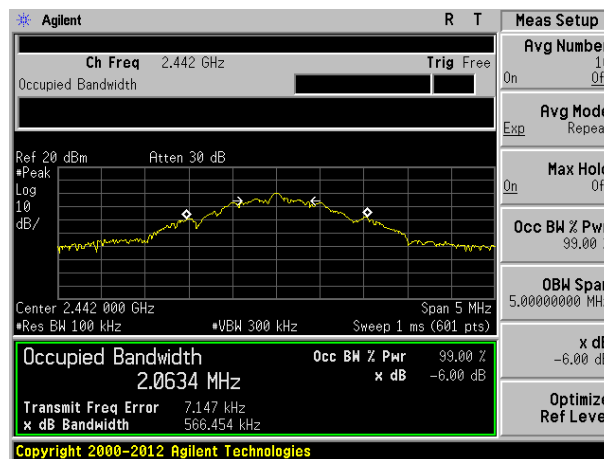
Measurement Data

Frequency (MHz)	Channel Bandwidth (MHz)	Limit(KHz)	Result
2407	0.571	>500	Pass
2442	0.566		
2477	0.560		

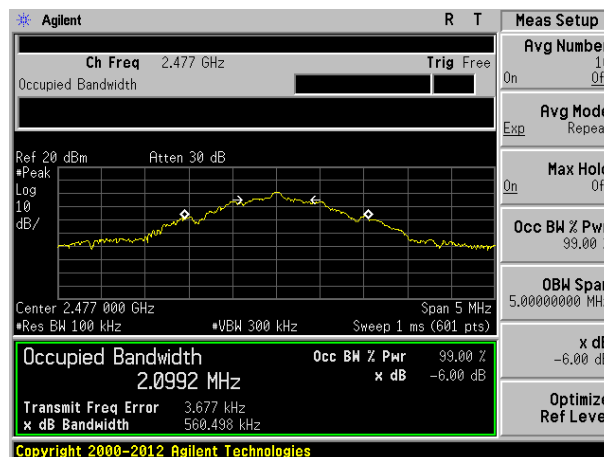
Test plot as follows:



2407MHz

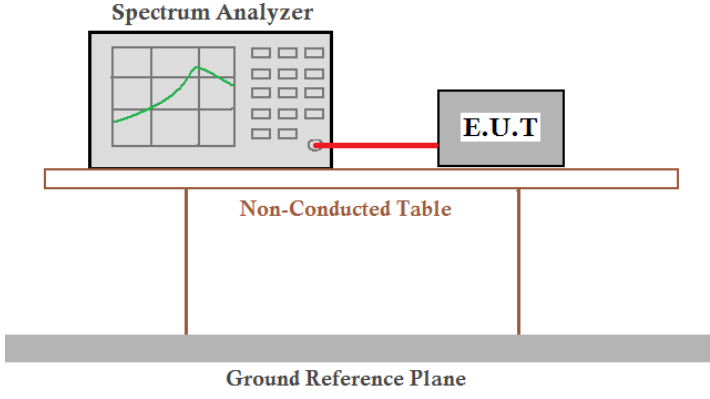


2442MHz



2477MHz

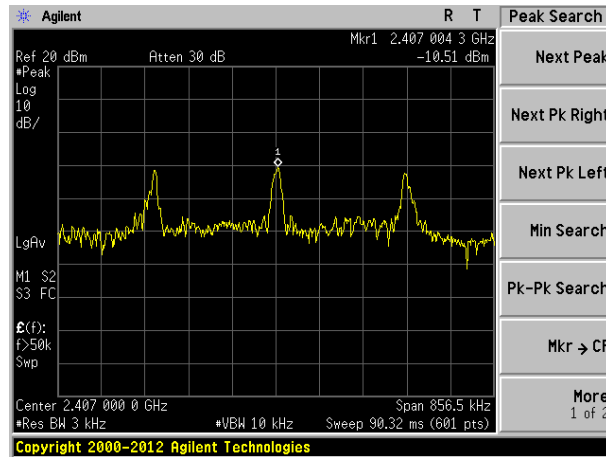
7.4 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04
Limit:	8dBm/3kHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

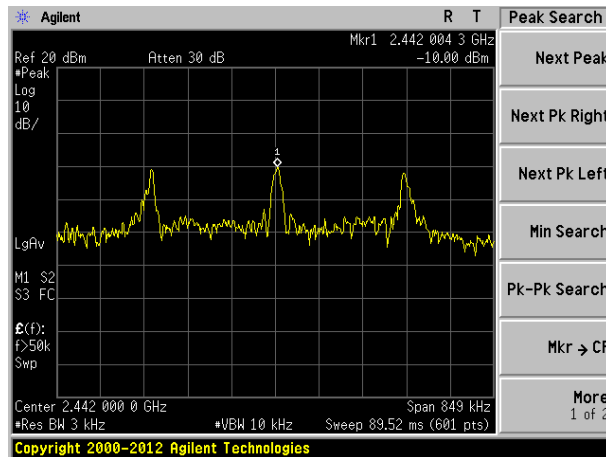
Measurement Data

Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm/3kHz)	Result
2407	-10.51	8.00	Pass
2442	-10.00		
2477	-10.42		

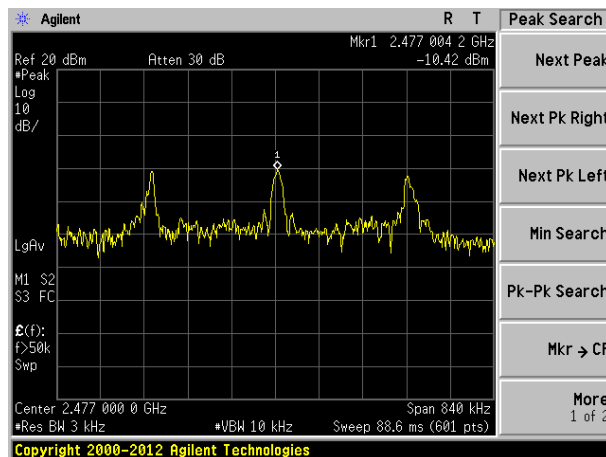
Test plot as follows:



2407MHz



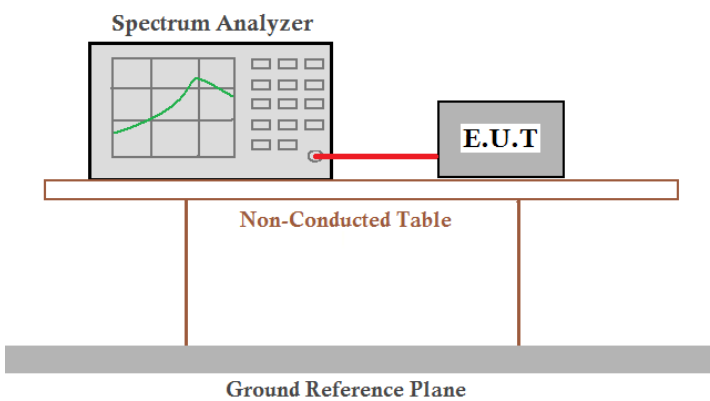
2442MHz



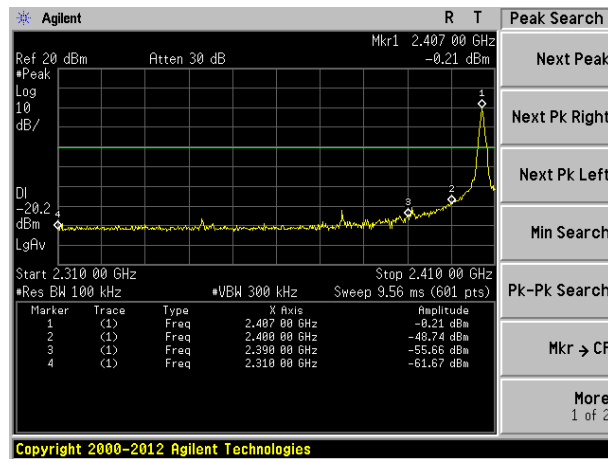
2477MHz

7.5 Band edges

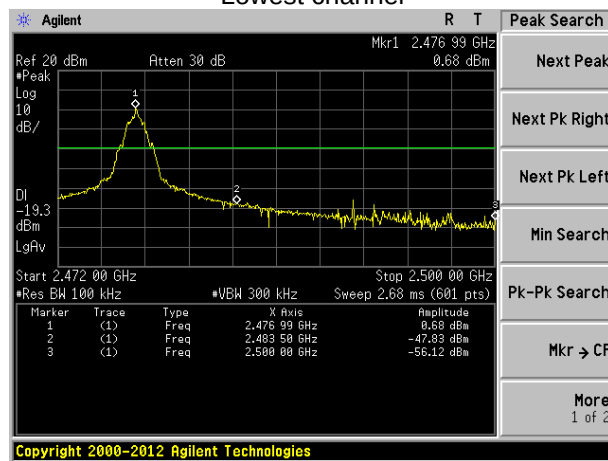
7.5.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Test plot as follows:

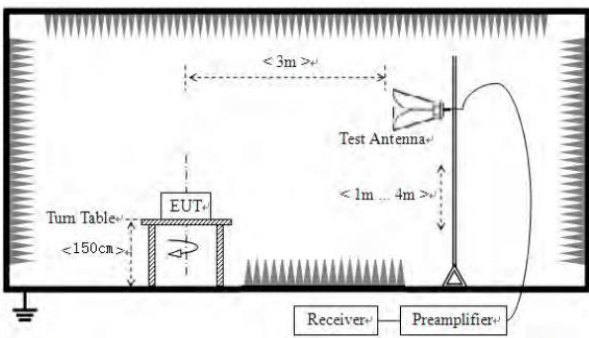


Lowest channel



Highest channel

7.5.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	Above 1GHz	Peak	1MHz	3MHz	Peak
		RMS	1MHz	3MHz	Average
Limit:	Frequency		Limit (dBuV/m @3m)		Value
	Above 1GHz		54.00		Average
			74.00		Peak
Test setup:					
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 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. 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. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer to section 5.2 for details				
Test results:	Pass				

Measurement data:

Remark: The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.

Test channel:	Lowest
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	38.56	27.91	5.30	24.64	47.13	74.00	-26.87	Vertical
2390.00	41.37	27.59	5.38	24.71	49.63	74.00	-24.37	Vertical
2310.00	36.15	27.91	5.30	24.64	44.72	74.00	-29.28	Horizontal
2390.00	38.41	27.59	5.38	24.71	46.67	74.00	-27.33	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	32.49	27.91	5.30	24.64	41.06	54.00	-12.94	Vertical
2390.00	35.66	27.59	5.38	24.71	43.92	54.00	-10.08	Vertical
2310.00	31.17	27.91	5.30	24.64	39.74	54.00	-14.26	Horizontal
2390.00	33.74	27.59	5.38	24.71	42.00	54.00	-12.00	Horizontal

Test channel:	Highest
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	43.16	27.53	5.47	24.80	51.36	74.00	-22.64	Vertical
2500.00	36.75	27.55	5.49	24.86	44.93	74.00	-29.07	Vertical
2483.50	39.26	27.53	5.47	24.80	47.46	74.00	-26.54	Horizontal
2500.00	33.17	27.55	5.49	24.86	41.35	74.00	-32.65	Horizontal

Average value:

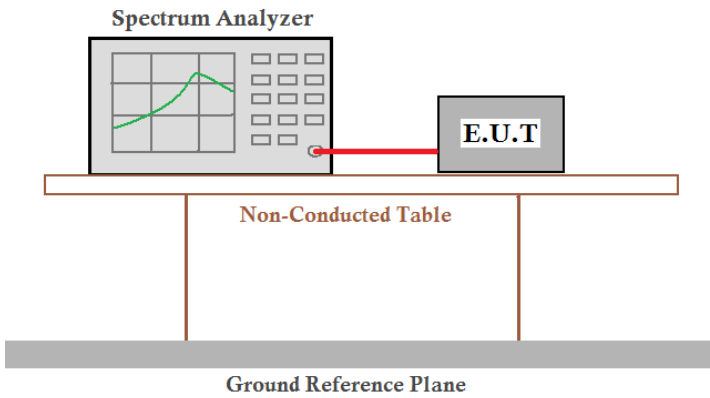
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	37.14	27.53	5.47	24.80	45.34	54.00	-8.66	Vertical
2500.00	30.14	27.55	5.49	24.86	38.32	54.00	-15.68	Vertical
2483.50	33.57	27.53	5.47	24.80	41.77	54.00	-12.23	Horizontal
2500.00	28.67	27.55	5.49	24.86	36.85	54.00	-17.15	Horizontal

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

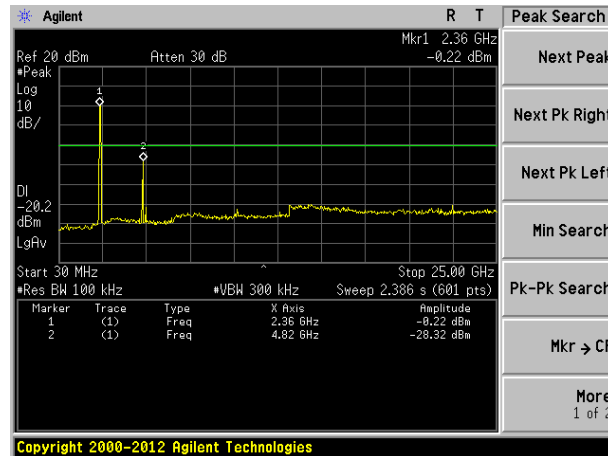
7.6 Spurious Emission

7.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by two vertical legs and sits on a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

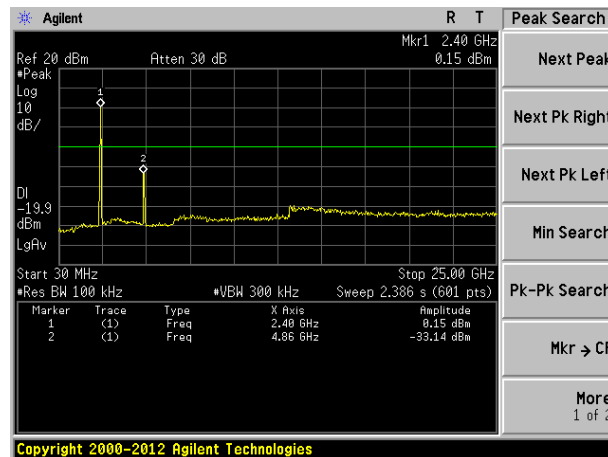
Test plot as follows:

Lowest channel



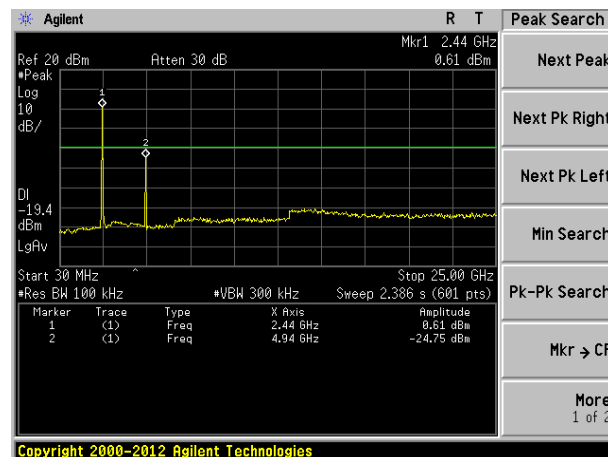
30MHz~25GHz

Middle channel



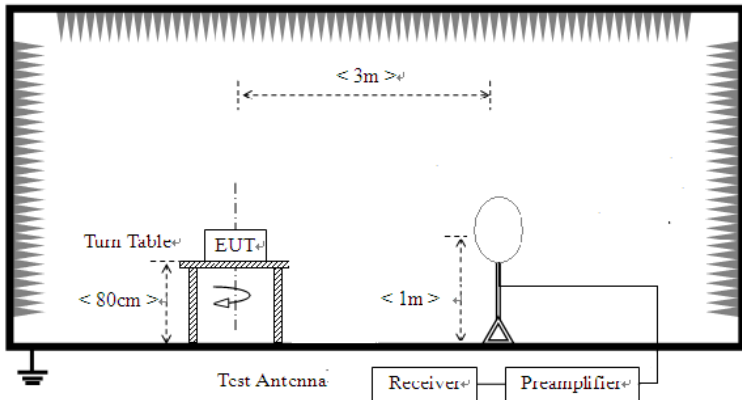
30MHz~25GHz

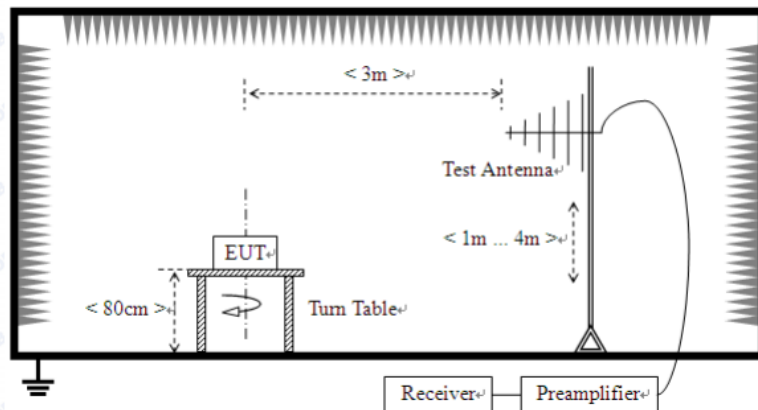
Highest channel



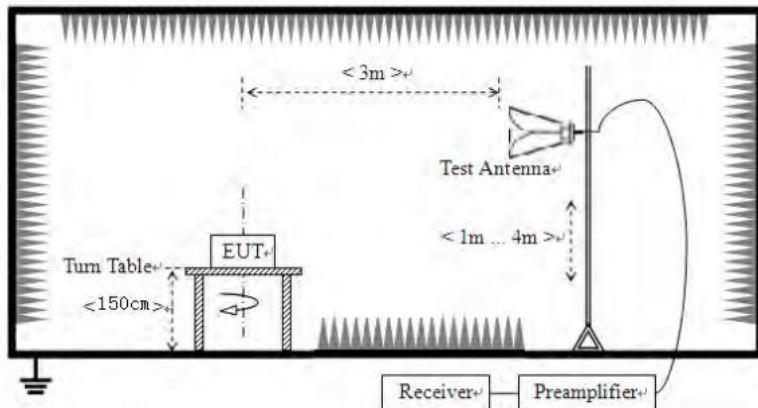
30MHz~25GHz

7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	9kHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Limit: (Spurious Emissions)	Frequency	Limit (uV/m)	Value	Measurement Distance	
	0.009MHz-0.490MHz	2400/F(KHz)	QP	300m	
	0.490MHz-1.705MHz	24000/F(KHz)	QP	300m	
	1.705MHz-30MHz	30	QP	30m	
	30MHz-88MHz	100	QP	3m	
	88MHz-216MHz	150	QP		
	216MHz-960MHz	200	QP		
	960MHz-1GHz	500	QP		
	Above 1GHz	500	Average		
		5000	Peak		
Test setup:	Below 30MHz				
					
	Below 1GHz				



Above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) 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
Test voltage:	DC3V
Test results:	Pass

Measurement data:**9 kHz ~ 30 MHz**

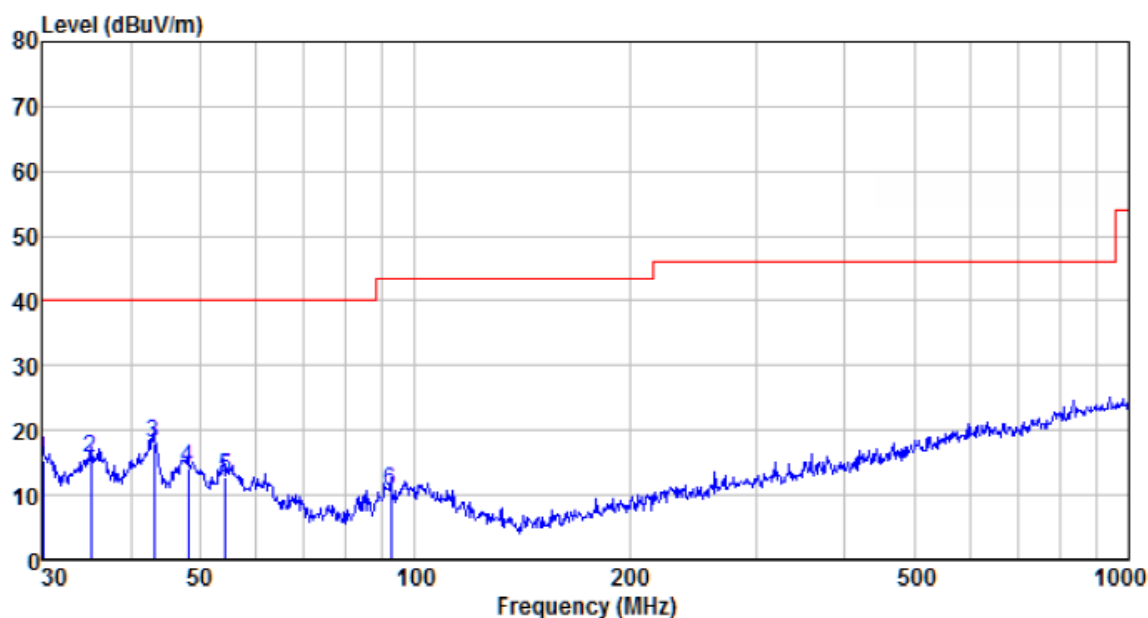
The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

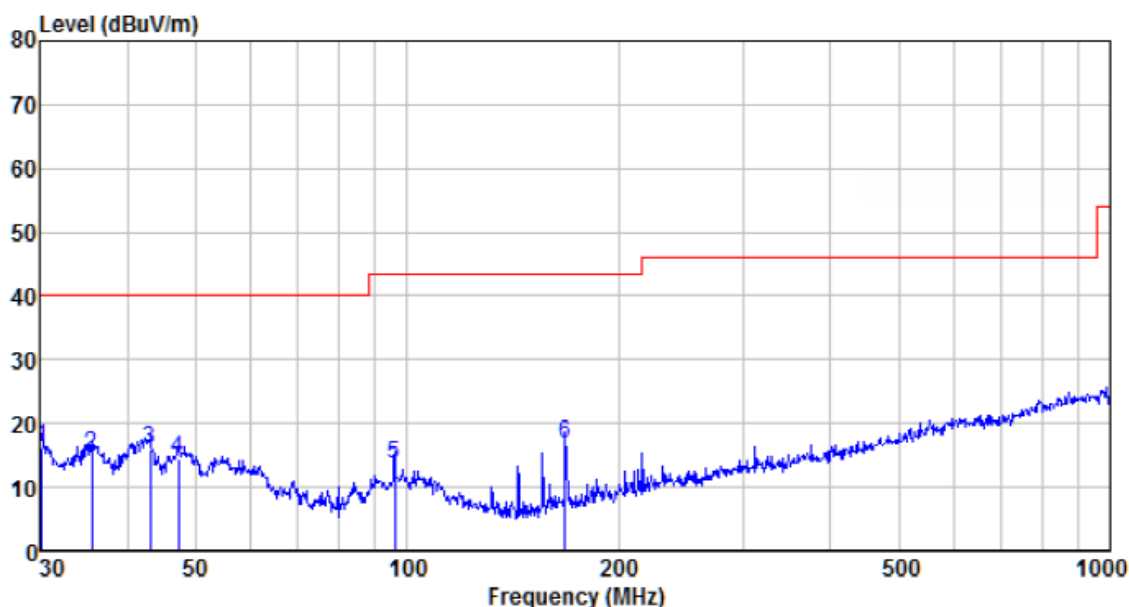
■ Below 1GHz

Mode:	Transmitting mode	Test by:	Jason
Temp./Hum.(%RH):	26°C/56%RH	Polarziation:	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
30.105	38.72	11.20	0.55	35.01	15.46	40.00	-24.54	QP
35.128	38.95	11.33	0.61	35.36	15.53	40.00	-24.47	QP
43.050	40.88	12.23	0.70	35.83	17.98	40.00	-22.02	QP
48.163	37.25	12.28	0.75	36.09	14.19	40.00	-25.81	QP
54.261	36.28	11.85	0.81	36.24	12.70	40.00	-27.30	QP
92.462	35.07	11.04	1.13	36.66	10.58	43.50	-32.92	QP

Mode:	Transmitting mode	Test by:	Jason
Temp./Hum.(%RH):	26°C/56%RH	Polarization:	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
30.211	39.46	11.21	0.55	35.02	16.20	40.00	-23.80	QP
35.624	38.38	11.42	0.62	35.40	15.02	40.00	-24.98	QP
43.050	38.78	12.23	0.70	35.83	15.88	40.00	-24.12	QP
47.326	37.45	12.28	0.74	36.05	14.42	40.00	-25.58	QP
96.099	37.43	11.65	1.16	36.69	13.55	43.50	-29.95	QP
167.824	43.76	8.46	1.67	37.18	16.71	43.50	-26.79	QP

■ Above 1GHz

Test channel:	Lowest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4814.00	50.42	31.17	8.60	37.66	52.53	74.00	-21.47	Vertical
7221.00	39.62	36.09	11.66	35.69	51.68	74.00	-22.32	Vertical
9628.00	30.85	37.84	14.14	34.91	47.92	74.00	-26.08	Vertical
12035.00	27.77	38.61	15.03	36.13	45.28	74.00	-28.72	Vertical
4814.00	47.15	31.17	8.60	37.66	49.26	74.00	-24.74	Horizontal
7221.00	41.68	36.09	11.66	35.69	53.74	74.00	-20.26	Horizontal
9628.00	29.58	37.84	14.14	34.91	46.65	74.00	-27.35	Horizontal
12035.00	27.55	38.61	15.03	36.13	45.06	74.00	-28.94	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4814.00	44.38	31.17	8.60	37.66	46.49	54.00	-7.51	Vertical
7221.00	30.57	36.09	11.66	35.69	42.63	54.00	-11.37	Vertical
9628.00	20.18	37.84	14.14	34.91	37.25	54.00	-16.75	Vertical
12035.00	17.85	38.61	15.03	36.13	35.36	54.00	-18.64	Vertical
4814.00	42.39	31.17	8.60	37.66	44.50	54.00	-9.50	Horizontal
7221.00	31.25	36.09	11.66	35.69	43.31	54.00	-10.69	Horizontal
9628.00	20.11	37.84	14.14	34.91	37.18	54.00	-16.82	Horizontal
12035.00	17.69	38.61	15.03	36.13	35.20	54.00	-18.80	Horizontal

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. “*”, means this data is the too weak instrument of signal is unable to test.

Test channel:	Middle channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4884.00	50.21	31.26	8.66	37.68	52.45	74.00	-21.55	Vertical
7326.00	40.36	36.32	11.72	35.64	52.76	74.00	-21.24	Vertical
9768.00	29.95	38.01	14.25	34.98	47.23	74.00	-26.77	Vertical
12210.00	28.03	38.64	15.14	36.26	45.55	74.00	-28.45	Vertical
4884.00	46.32	31.26	8.66	37.68	48.56	74.00	-25.44	Horizontal
7326.00	28.55	36.32	11.72	35.64	40.95	74.00	-33.05	Horizontal
9768.00	27.74	38.01	14.25	34.98	45.02	74.00	-28.98	Horizontal
12210.00	27.32	38.64	15.14	36.26	44.84	74.00	-29.16	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4884.00	41.87	31.26	8.66	37.68	44.11	54.00	-9.89	Vertical
7326.00	34.26	36.32	11.72	35.64	46.66	54.00	-7.34	Vertical
9768.00	22.65	38.01	14.25	34.98	39.93	54.00	-14.07	Vertical
12210.00	17.79	38.64	15.14	36.26	35.31	54.00	-18.69	Vertical
4884.00	40.26	31.26	8.66	37.68	42.50	54.00	-11.50	Horizontal
7326.00	22.30	36.32	11.72	35.64	34.70	54.00	-19.30	Horizontal
9768.00	21.19	38.01	14.25	34.98	38.47	54.00	-15.53	Horizontal
12210.00	19.05	38.64	15.14	36.26	36.57	54.00	-17.43	Horizontal

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. “*”, means this data is the too weak instrument of signal is unable to test.

Test channel:	Highest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4954.00	49.22	31.36	8.73	37.69	51.62	74.00	-22.38	Vertical
7431.00	40.31	36.59	11.79	35.58	53.11	74.00	-20.89	Vertical
9908.00	28.64	38.22	14.38	35.07	46.17	74.00	-27.83	Vertical
12385.00	26.33	38.68	15.27	36.43	43.85	74.00	-30.15	Vertical
4954.00	47.16	31.36	8.73	37.69	49.56	74.00	-24.44	Horizontal
7431.00	38.55	36.59	11.79	35.58	51.35	74.00	-22.65	Horizontal
9908.00	28.50	38.22	14.38	35.07	46.03	74.00	-27.97	Horizontal
12385.00	28.20	38.68	15.27	36.43	45.72	74.00	-28.28	Horizontal

Average value:

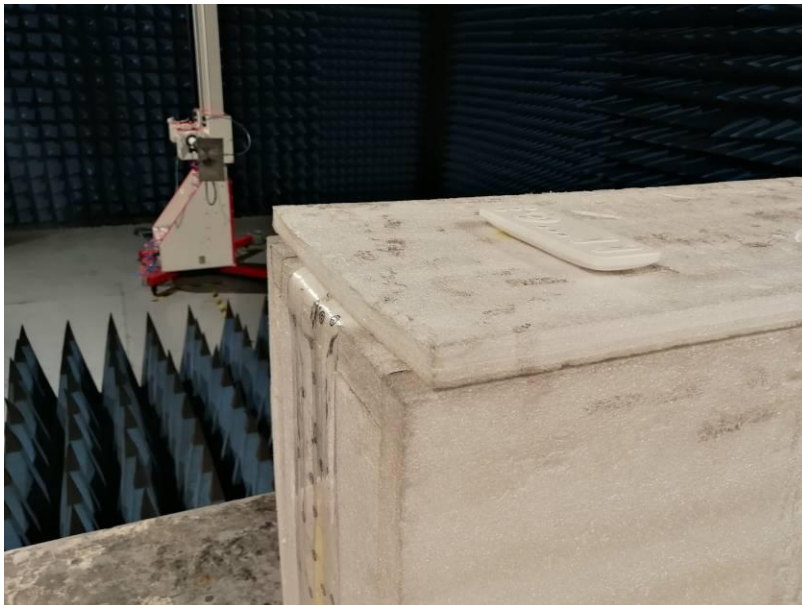
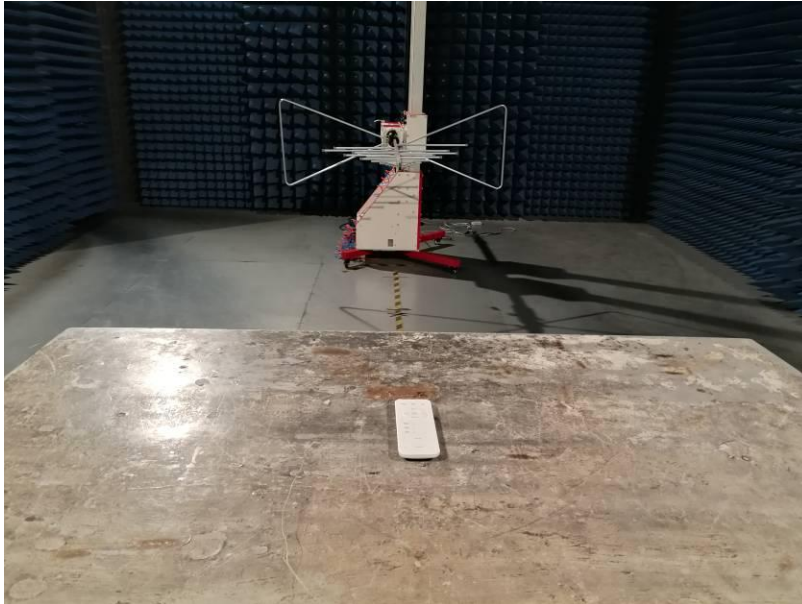
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4954.00	41.17	31.36	8.73	37.69	43.57	54.00	-10.43	Vertical
7431.00	31.29	36.59	11.79	35.58	44.09	54.00	-9.91	Vertical
9908.00	21.65	38.22	14.38	35.07	39.18	54.00	-14.82	Vertical
12385.00	18.33	38.68	15.27	36.43	35.85	54.00	-18.15	Vertical
4954.00	40.68	31.36	8.73	37.69	43.08	54.00	-10.92	Horizontal
7431.00	31.59	36.59	11.79	35.58	44.39	54.00	-9.61	Horizontal
9908.00	21.75	38.22	14.38	35.07	39.28	54.00	-14.72	Horizontal
12385.00	18.93	38.68	15.27	36.43	36.45	54.00	-17.55	Horizontal

Remark:

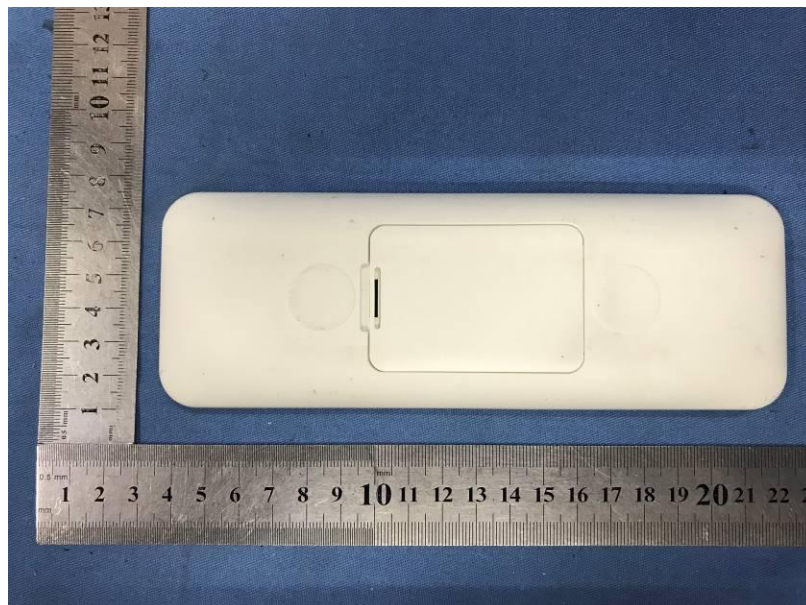
1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. “*”, means this data is the too weak instrument of signal is unable to test.

8 Test Setup Photo

Radiated Emission

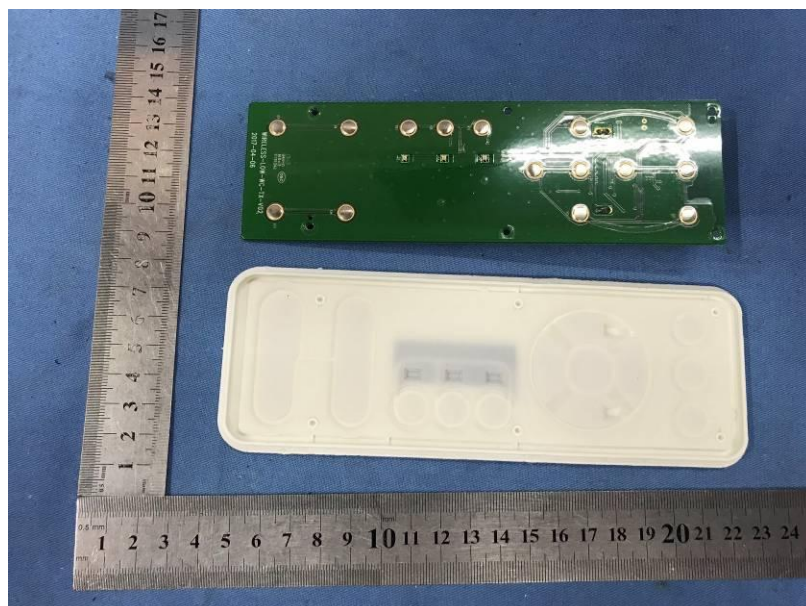
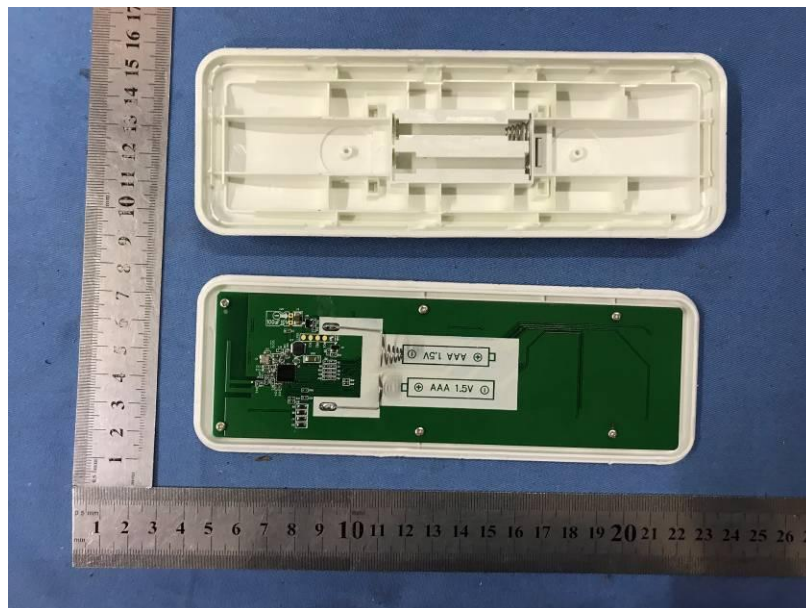


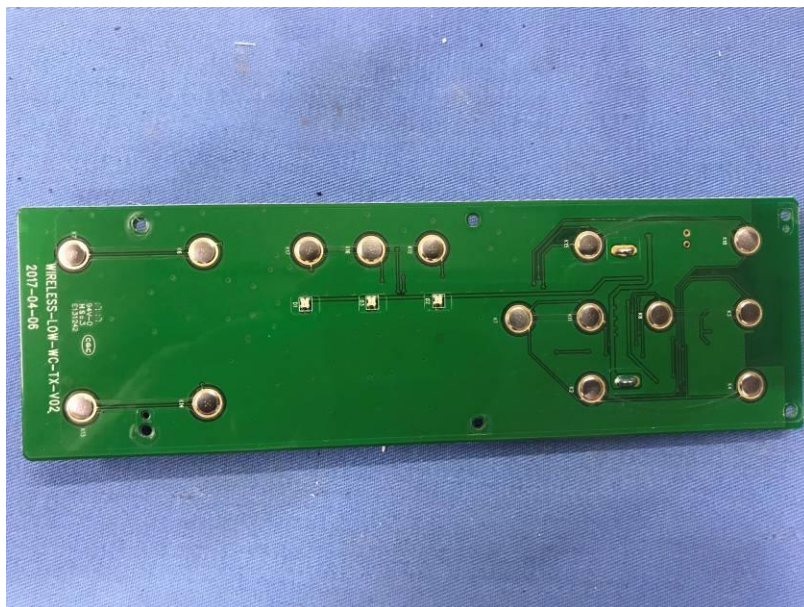
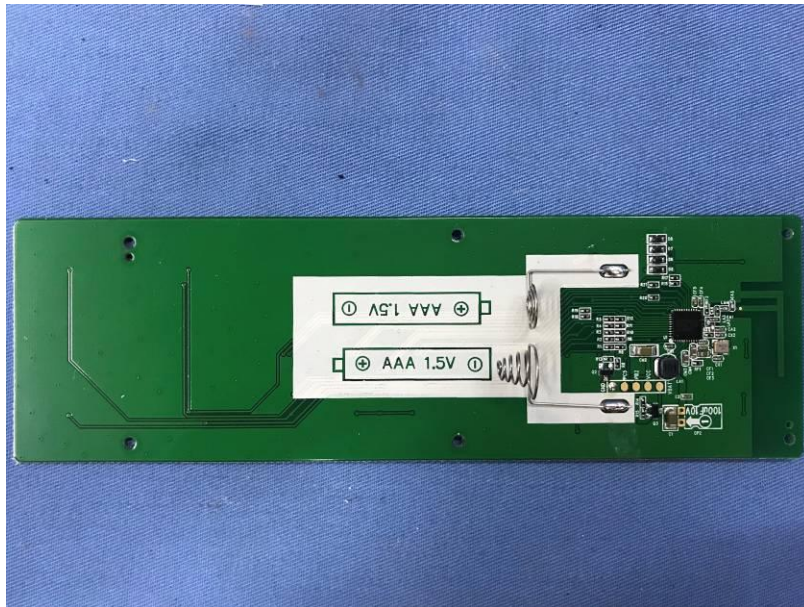
9 EUT Constructional Details

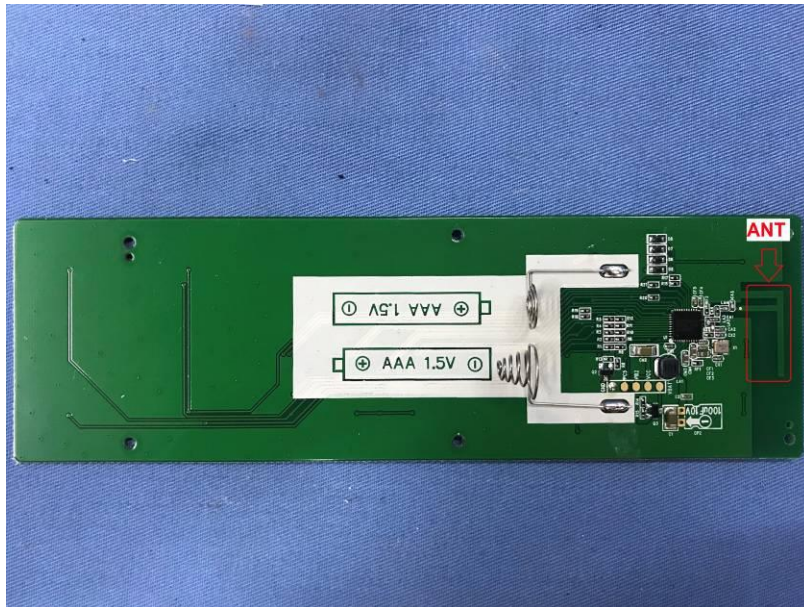












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