

TEST REPORT

Applicant: Dongguan Anhong Electronic Technology Co., Ltd
Address of Applicant: Room 901, Building 8, No.95 Jiaoping Road, Tangxia Town, Dongguan City, Guangdong Province, China
Manufacturer: Dongguan Anhong Electronic Technology Co., Ltd
Address of Manufacturer: Room 901, Building 8, No.95 Jiaoping Road, Tangxia Town, Dongguan City, Guangdong Province, China
Equipment Under Test (EUT)
Product Name: Baby Monitor
Model No.: ABM900
Add. Model No.: ABM101,ABM100S,ABM109,ABM200S,ABM201,ABM201S, ABM206,ABM209,ABM210,ABM210S,ABM300,ABM400,ABM500, ABM510,ABM520,ABM520S,ABM530,ABM540,ABM540P,ABM550, ABM560,ABM580,ABM590,ABM601,ABM605,ABM610,ABM609, ABM640,ABM650,ABM670,ABM680,ABM690,ABM700,ABM703, ABM710,ABM720,ABM721,ABM721S,ABM720S,ABM730,ABM740, ABM780,ABM781,ABM781S,ABM791,ABM791S,ABM800,ABM806, ABM808,ABM809,ABM810,ABM840,ABM906,ABM910,ABM950S
Trade Mark: N/A
FCC ID: 2AYKP-ABM900
Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247
Date of sample receipt: 2025-05-09
Date of Test: 2025-05-16 to 2025-06-11
Date of report issued: 2025-07-01
Test Result : PASS *

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

Authorized Signature:



Robinson Luo

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.

Version

Report No.	Version No.	Date	Description
GTSL2025060140	00	2025-07-01	Original

Prepared By:

J. Smith

Date:

2025-07-01

Project Engineer

Check By:

R. Johnson

Date:

2025-07-01

Reviewer

3 Contents

	Page
1 COVER PAGE	1
2 VERSION	2
3 CONTENTS	3
4 TEST SUMMARY	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 DEVIATION FROM STANDARDS	7
5.5 ABNORMALITIES FROM STANDARD CONDITIONS	7
5.6 TEST FACILITY	7
5.7 TEST LOCATION	7
5.8 ADDITIONAL INSTRUCTIONS	7
6 TEST INSTRUMENTS LIST	8
7 TEST RESULTS AND MEASUREMENT DATA	10
7.1 ANTENNA REQUIREMENT	10
7.2 CONDUCTED EMISSIONS	11
7.3 CONDUCTED PEAK OUTPUT POWER	12
7.4 CHANNEL BANDWIDTH & 99% OCCUPY BANDWIDTH	14
7.5 POWER SPECTRAL DENSITY	16
7.6 BAND EDGES	18
7.6.1 Conducted Emission Method	18
7.6.2 Radiated Emission Method	20
7.7 SPURIOUS EMISSION	25
7.7.1 Conducted Emission Method	25
7.7.2 Radiated Emission Method	27
8 TEST SETUP PHOTO	38
9 EUT CONSTRUCTIONAL DETAILS	38

4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	N/A The EUT is DC power supply
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth & 99% OCB	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209	Pass

Remark: Test according to ANSI C63.10:2013 and RSS-Gen

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

N/A: In this whole report not applicable.

Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	1×10^{-7}
2	Duty Cycle	0.37%
3	Occupied Bandwidth	2.8dB
4	RF Conducted Power	0.75dB
5	RF Power Density	3dB
6	Conducted Spurious Emissions	2.58dB
7	AC Power Line Conducted Emission	3.44dB (0.15MHz ~ 30MHz)
8	Radiated Spurious Emission Test	3.1dB (9kHz-30MHz)
		3.8039dB (30MHz-200MHz)
		3.9679dB (200MHz-1GHz)
		4.29dB (1GHz-18GHz)
		3.30dB (18GHz-40GHz)

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:	Baby Monitor
Model No.:	ABM900
Add. Model No.:	ABM101,ABM100S,ABM109,ABM200S,ABM201,ABM201S,ABM206,ABM209,ABM210,ABM210S,ABM300,ABM400,ABM500,ABM510,ABM520,ABM520S,ABM530,ABM540,ABM540P,ABM550,ABM560,ABM580,ABM590,ABM601,ABM605,ABM610,ABM609,ABM640,ABM650,ABM670,ABM680,ABM690,ABM700,ABM703,ABM710,ABM720,ABM721,ABM721S,ABM720S,ABM730,ABM740,ABM780,ABM781,ABM781S,ABM791,ABM791S,ABM800,ABM806,ABM808,ABM809,ABM810,ABM840,ABM906,ABM910,ABM950S
Serial No.:	N/A
Hardware Version:	V1.0
Software Version:	V1.0
Test sample(s) ID:	GTSL2025060140-1
Sample(s) Status:	Engineer sample
Sample(s) Status	Engineer sample
Channel numbers:	13
Channel separation:	5MHz
Modulation technology:	FSK/GFSK
Antenna Type:	Cable Antenna
Antenna gain:	1.95 dBi
Power supply:	5Vdc 1A

Note:

The product (Baby Monitor) models (ABM900) and models (ABM101,ABM100S,ABM109,ABM200S,ABM201,ABM201S,ABM206,ABM209,ABM210,ABM210S,ABM300,ABM400,ABM500,ABM510,ABM520,ABM520S,ABM530,ABM540,ABM540P,ABM550,ABM560,ABM580,ABM590,ABM601,ABM605,ABM610,ABM609,ABM640,ABM650,ABM670,ABM680,ABM690,ABM700,ABM703,ABM710,ABM720,ABM721,ABM721S,ABM720S,ABM730,ABM740,ABM780,ABM781,ABM781S,ABM791,ABM791S,ABM800,ABM806,ABM808,ABM809,ABM810,ABM840,ABM906,ABM910,ABM950S) the difference is only the model name difference, and the circuit principle, safety structure and key parts are all the same. The differences do not affect the EMC performance.

Remark:

1. Antenna gain information provided by the customer
2. The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	5	2432MHz	9	2452 MHz	13	2472 MHz
2	2417MHz	6	2437MHz	10	2457MHz		
3	2422MHz	7	2441.5MHz	11	2462MHz		
4	2427MHz	8	2447MHz	12	2467 MHz		

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:

Test channel	Frequency (MHz)	Data Rate
	GFSK	4Mbps
Lowest channel	2412MHz	4Mbps
Middle channel	2441.5MHz	4Mbps
Highest channel	2472MHz	4Mbps

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
<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>	

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	GFSK
Data rate	4Mbps

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
Dongguan Anhong Electronic Technology Co., Ltd	SWITCHING ADAPTER	G006A0501000U	GLH2439

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

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

- **FCC—Registration No.: 381383**

Designation Number: CN5029

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.

- **ISED—Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.7 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

5.8 Additional Instructions

Test Software	Special test command provided by manufacturer
Power level setup	Default

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	June 23, 2024	June 22, 2026
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	April 14, 2024	April 13, 2026
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 19, 2024	March 18, 2026
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	April 17, 2024	April 16, 2026
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 14, 2024	April 13, 2026
8	Loop Antenna	ZHINAN	ZN30900A	GTS534	June 23, 2024	June 22, 2026
9	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 14, 2024	April 13, 2026
10	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 14, 2024	April 13, 2026
11	Horn Antenna (18-26.5GHz)	/	UG-598A/U	GTS664	June 23, 2024	June 22, 2026
12	Horn Antenna (26.5-40GHz)	A.H Systems	SAS-573	GTS665	June 23, 2024	June 22, 2026
13	FSV-Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	March 13, 2024	March 12, 2026
14	Amplifier	/	LNA-1000-30S	GTS650	April 14, 2024	April 13, 2026
15	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS668	June 23, 2024	June 22, 2026
16	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	April 14, 2024	April 13, 2026
17	Thermo meter	JINCHUANG	GSP-8A	GTS643	April 19, 2024	April 18, 2026
18	RE cable 1	GTS	N/A	GTS675	July 31. 2024	July 30. 2026
19	RE cable 2	GTS	N/A	GTS676	July 31. 2024	July 30. 2026
20	RE cable 3	GTS	N/A	GTS677	July 31. 2024	July 30. 2026
21	RE cable 4	GTS	N/A	GTS678	July 31. 2024	July 30. 2026
22	RE cable 5	GTS	N/A	GTS679	July 31. 2024	July 30. 2026
23	RE cable 6	GTS	N/A	GTS680	July 31. 2024	July 30. 2026
24	RE cable 7	GTS	N/A	GTS681	July 31. 2024	July 30. 2026
25	RE cable 8	GTS	N/A	GTS682	July 31. 2024	July 30. 2026

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	July 12, 2024	July 11, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 14, 2024	April 13, 2027
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	April 14, 2024	April 13, 2027
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
6	Thermo meter	JINCHUANG	GSP-8A	GTS642	April 19, 2024	April 18, 2026
7	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	April 14, 2024	April 13, 2026
8	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 14, 2024	April 13, 2026
9	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 14, 2024	April 13, 2026
10	Antenna end assembly	Weinschel	1870A	GTS560	April 14, 2024	April 13, 2026

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	April 14, 2024	April 13, 2026
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 14, 2024	April 13, 2026
3	PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	April 14, 2024	April 13, 2026
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	April 14, 2024	April 13, 2026
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	April 14, 2024	April 13, 2026
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	April 14, 2024	April 13, 2026
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	April 14, 2024	April 13, 2026
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	April 14, 2024	April 13, 2026
9	Thermo meter	JINCHUANG	GSP-8A	GTS641	April 19, 2024	April 18, 2026

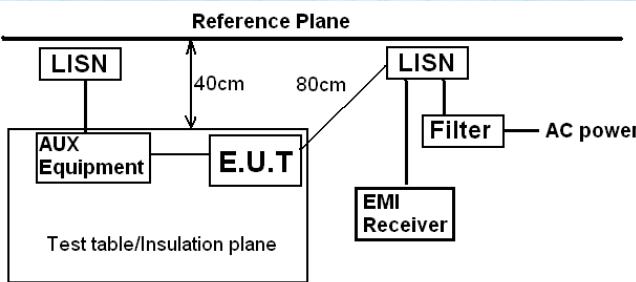
General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	April 19, 2024	April 18, 2026

7 Test results and Measurement Data

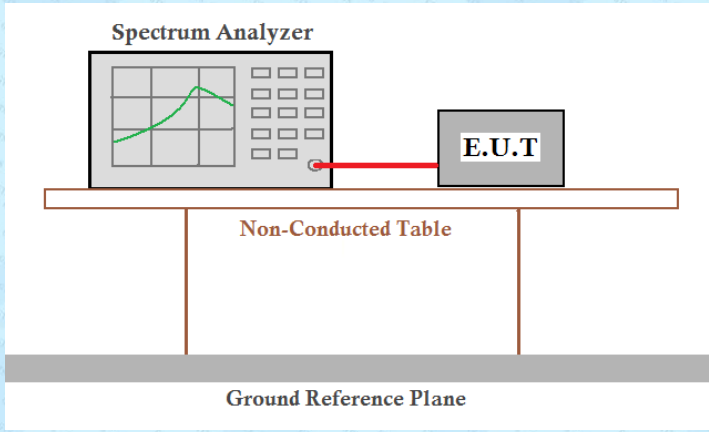
7.1 Antenna requirement

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:	
The antennas are Cable Antenna, the best case gain of the antennas are 1.95dBi, reference to the appendix III for details.	

7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	150KHz to 30MHz					
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto					
Limit:	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	
* Decreases with the logarithm of the frequency.						
Test setup:	Reference Plane  Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m					
Test procedure:	1. 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. 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 environment:	Temp.:	N/A	Humid.:	N/A	Press.:	N/A
Test voltage:	N/A					
Test results:	N/A					

7.3 Conducted Peak Output Power

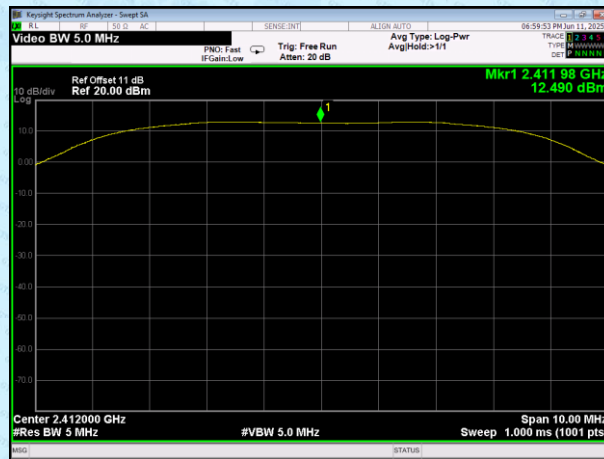
Test Requirement :	FCC Part15 C Section 15.247 (b)(3)
Test Method :	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	30dBm
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

Test CH	Peak Output Power (dBm)	Limit(dBm)	Result
	GFSK		
Lowest	12.490	30.00	Pass
Middle	12.649		
Highest	12.530		

Test plot as follows:

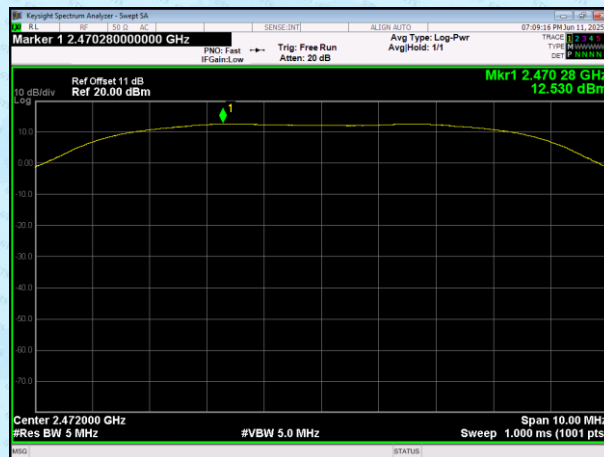
GFSK



Lowest channel

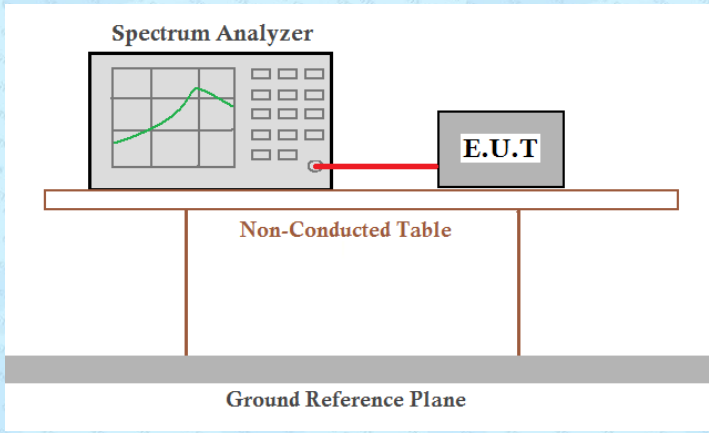


Middle channel



Highest channel

7.4 Channel Bandwidth & 99% Occupy Bandwidth

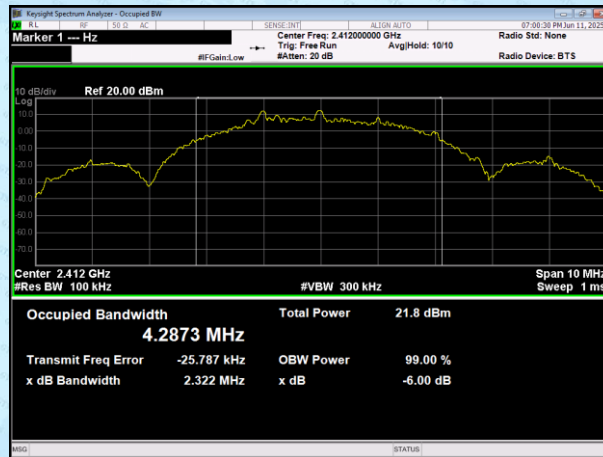
Test Requirement :	FCC Part15 C Section 15.247 (a)(2)
Test Method :	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	>500KHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. 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

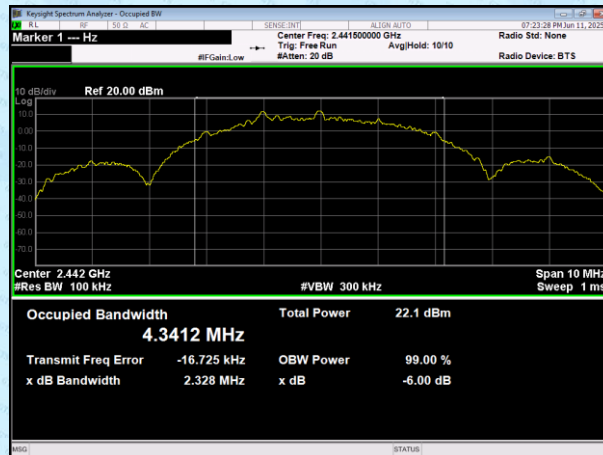
Test CH	Channel Bandwidth (MHz)	Limit(KHz)	Result
	GFSK		
Lowest	2.322	>500	Pass
Middle	2.328		
Highest	1.603		

Test plot as follows:

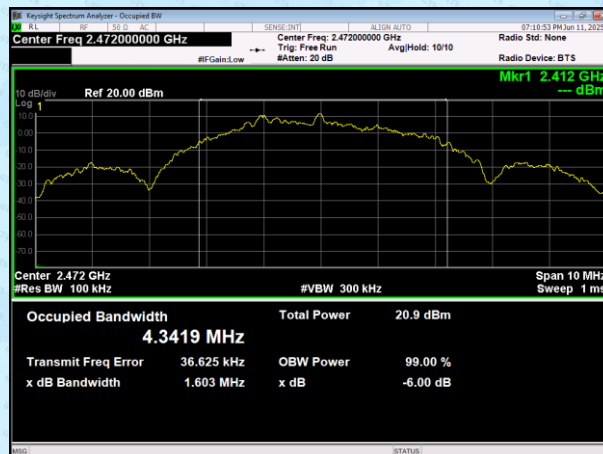
GFSK



Lowest channel

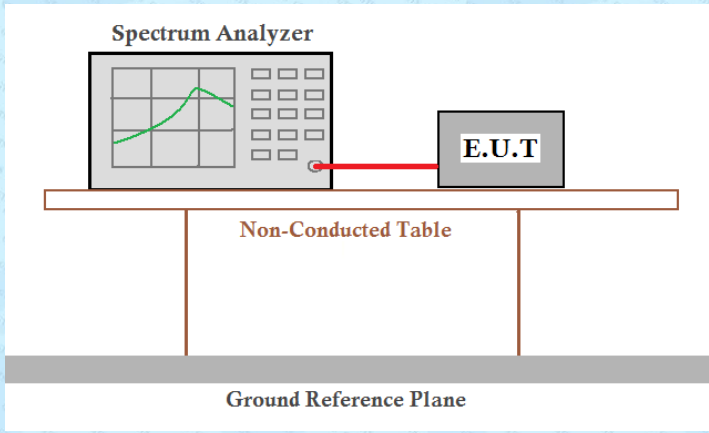


Middle channel



Highest channel

7.5 Power Spectral Density

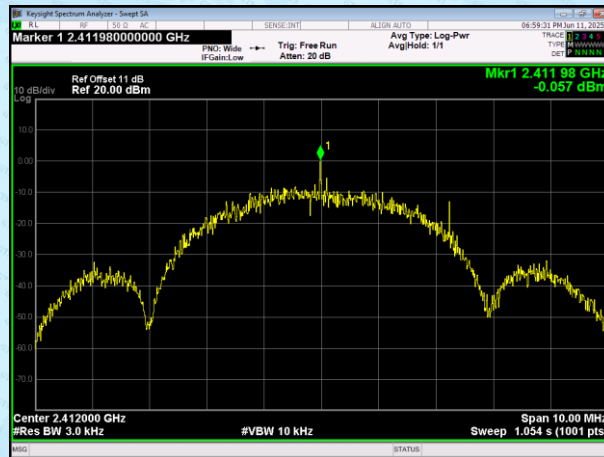
Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	8dBm/3kHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T 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

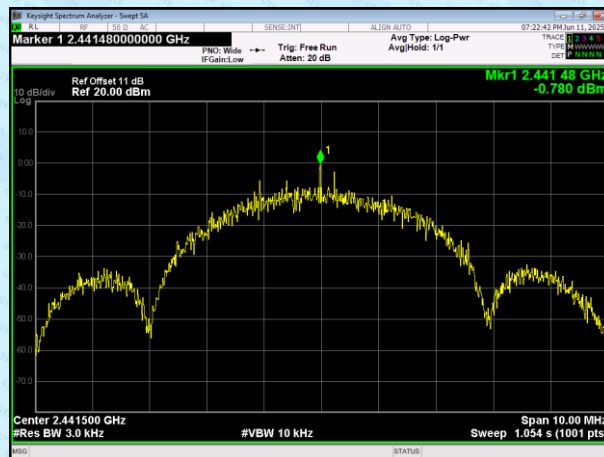
Test CH	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
	GFSK		
Lowest	-0.057	8.00	Pass
Middle	-0.780		
Highest	0.835		

Test plot as follows:

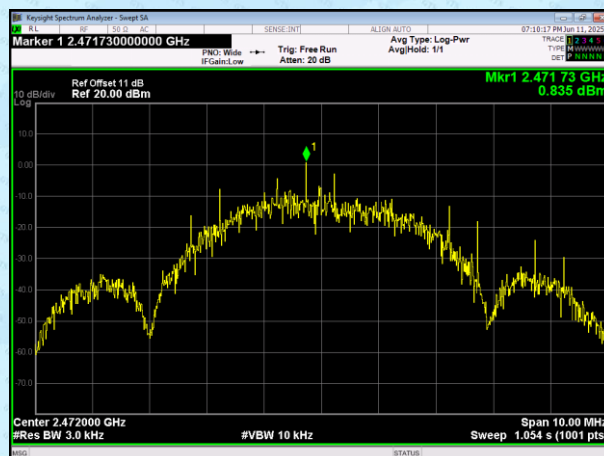
GFSK



Lowest channel



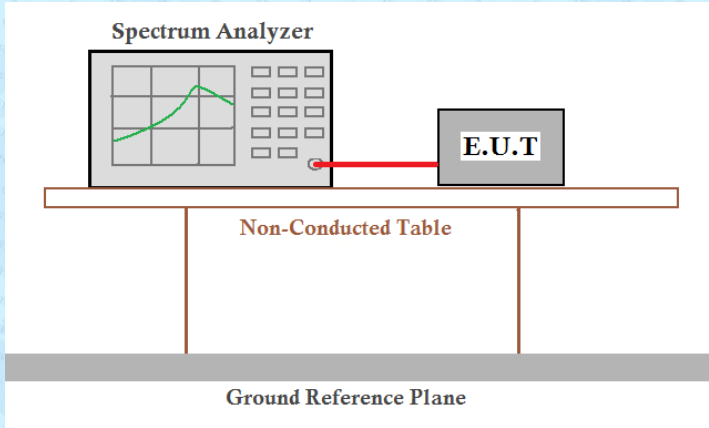
Middle channel



Highest channel

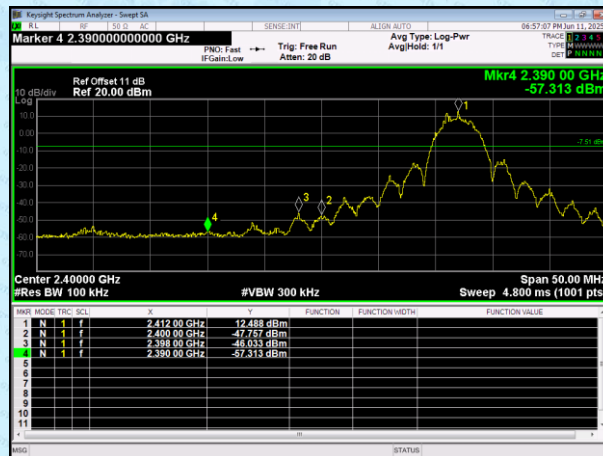
7.6 Band edges

7.6.1 Conducted Emission Method

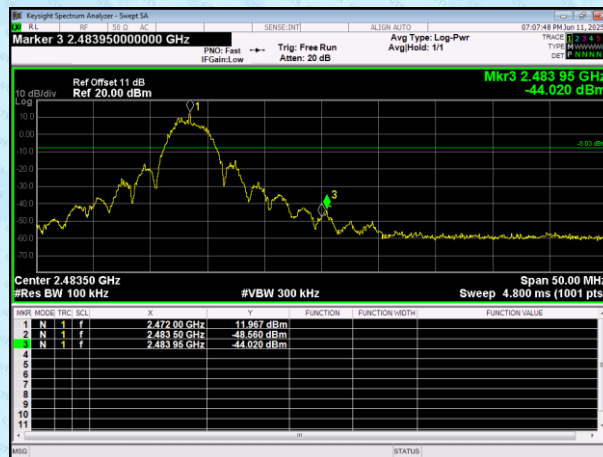
Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall 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:

GFSK

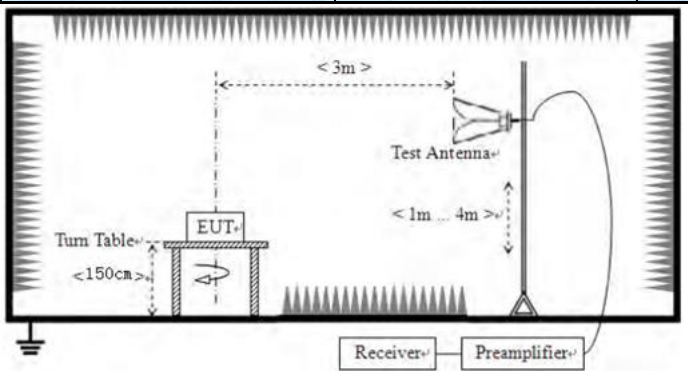


Lowest channel



Highest channel

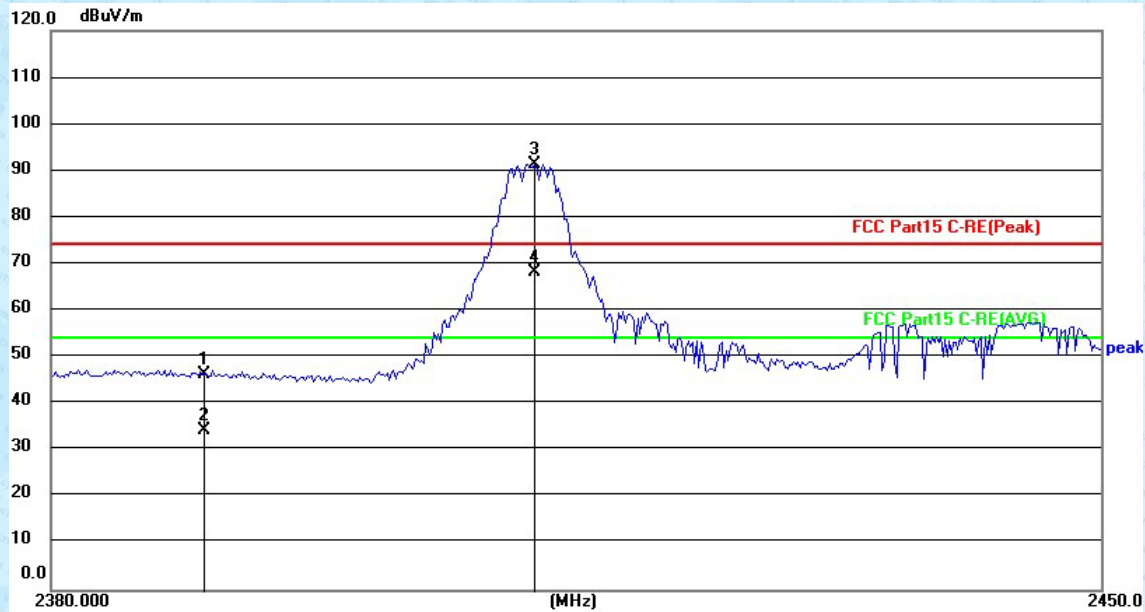
7.6.2 Radiated Emission Method

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
		Average	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:

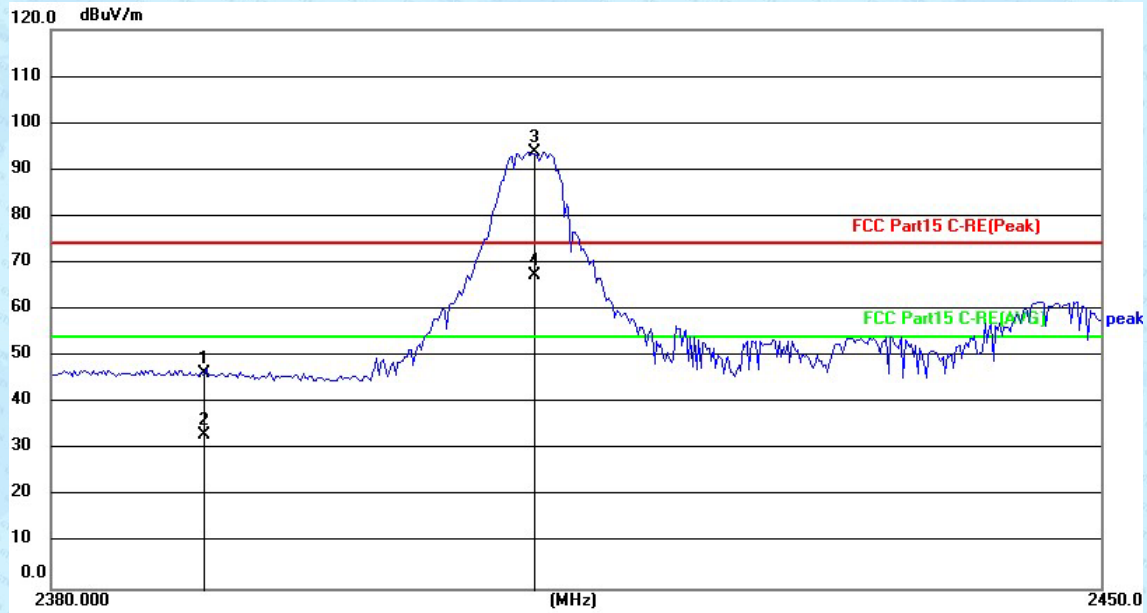
Test mode:	GFSK 2412Hz	Test channel:	Lowest
------------	-------------	---------------	--------

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	20.10	26.32	46.42	74.00	-27.58	peak
2	2390.000	7.97	26.32	34.29	54.00	-19.71	AVG
3	2412.000	65.05	26.36	91.41	74.00	17.41	peak
4	2412.000	41.78	26.36	68.14	54.00	14.14	AVG

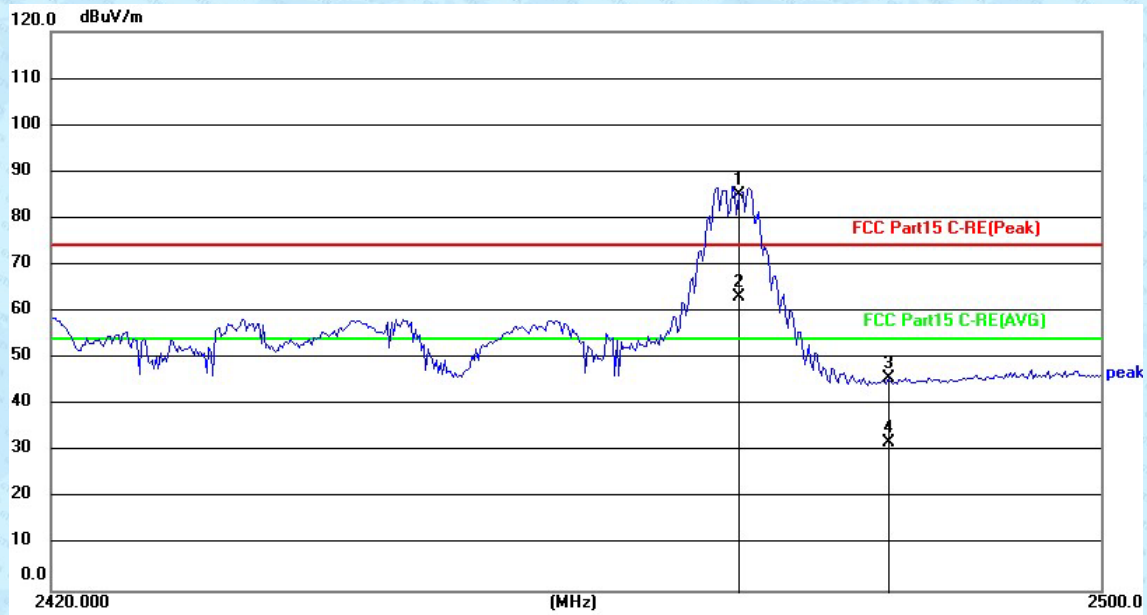
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	19.89	26.32	46.21	74.00	-27.79	peak
2	2390.000	6.85	26.32	33.17	54.00	-20.83	AVG
3	2412.000	67.30	26.36	93.66	74.00	19.66	peak
4	2412.000	40.89	26.36	67.25	54.00	13.25	AVG

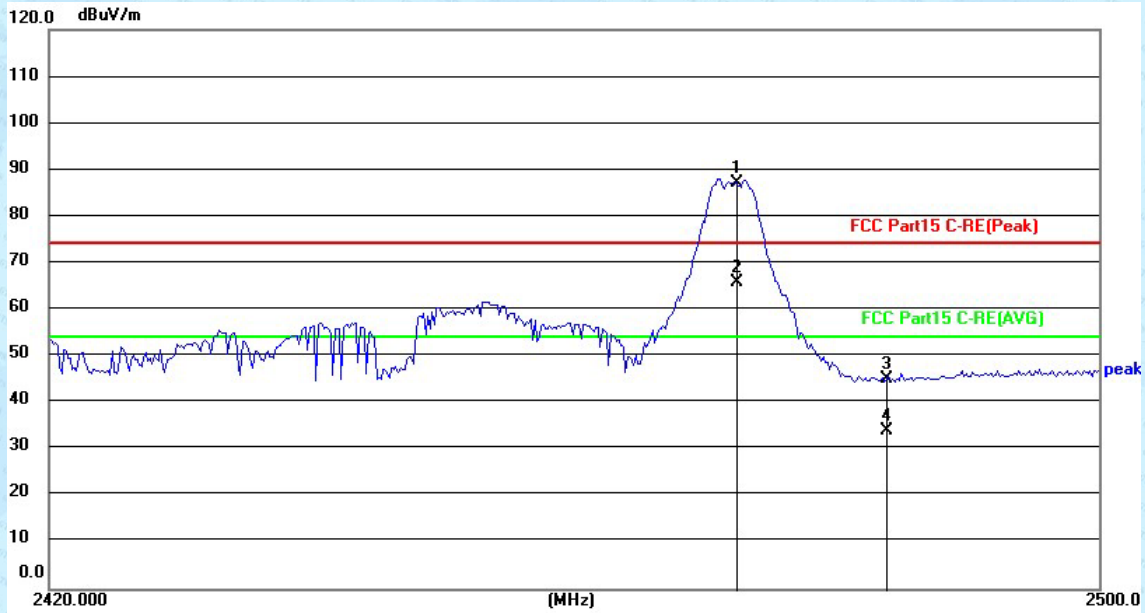
Test mode:	GFSK 2472Hz	Test channel:	Highest
------------	-------------	---------------	---------

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2472.000	58.49	26.46	84.95	74.00	10.95	peak
2	2472.000	36.62	26.46	63.08	54.00	9.08	AVG
3	2483.500	19.22	26.47	45.69	74.00	-28.31	peak
4	2483.500	5.37	26.47	31.84	54.00	-22.16	AVG

Vertical



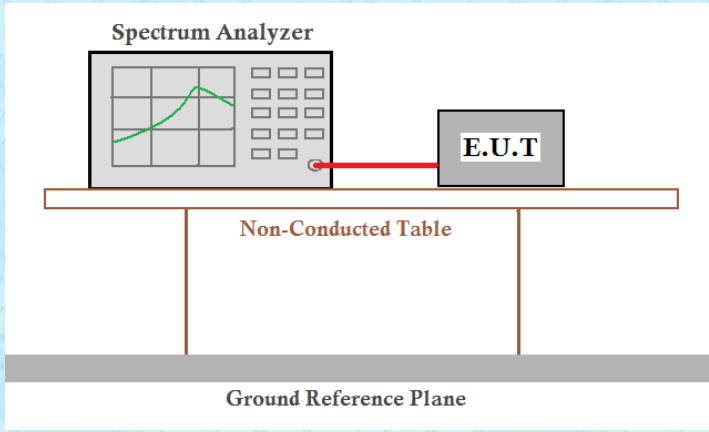
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2472.000	60.82	26.46	87.28	74.00	13.28	peak
2	2472.000	39.41	26.46	65.87	54.00	11.87	AVG
3	2483.500	18.63	26.47	45.10	74.00	-28.90	peak
4	2483.500	7.62	26.47	34.09	54.00	-19.91	AVG

Remarks:

- Only the worst case Main Antenna test data.
- The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.
- Final Level = Receiver Read level + Antenna Factor
- The emission levels of other frequencies are very lower than the limit and not show in test report.

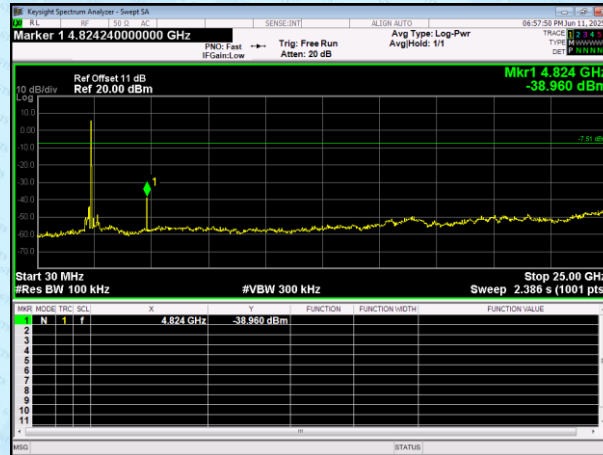
7.7 Spurious Emission

7.7.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02
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

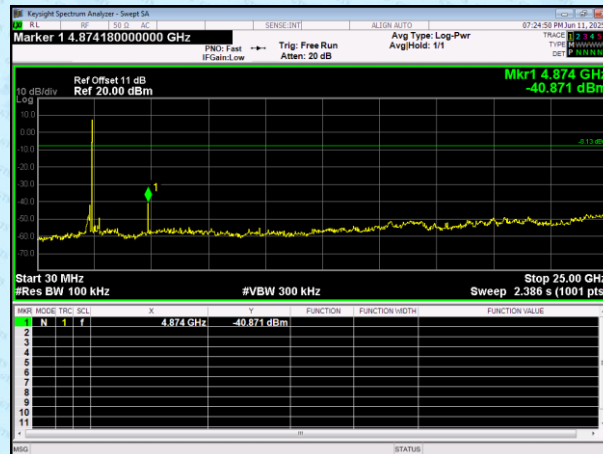
Test plot as follows:

GFSK Lowest channel



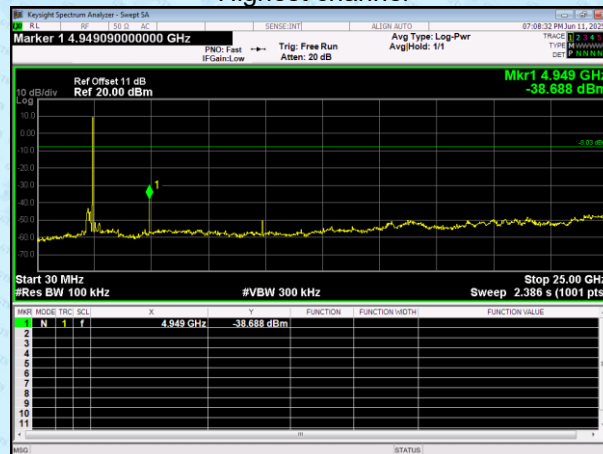
30MHz~25GHz

Middle channel



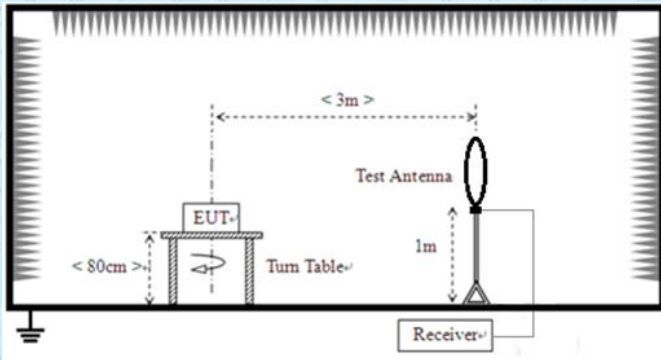
30MHz~25GHz

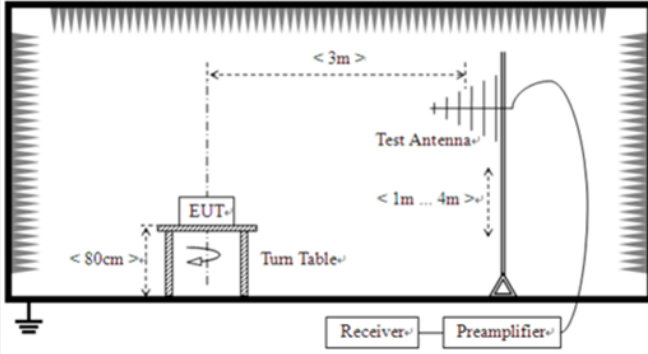
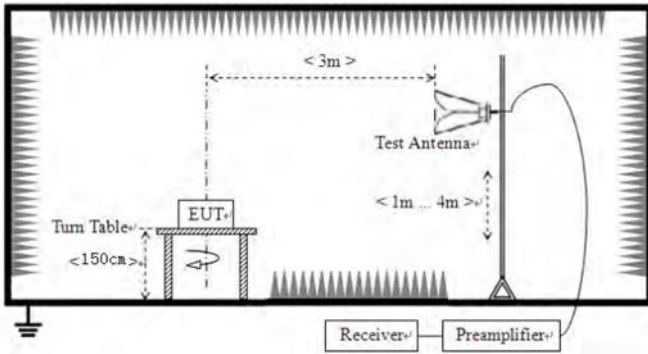
Highest channel



30MHz~25GHz

7.7.2 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	120KHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Limit:	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:	For radiated emissions from 9kHz to 30MHz				
					
For radiated emissions from 30MHz to1GHz					

	 For radiated emissions 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:	AC120V 60Hz						
Test environment:	Temp.:	24°C	Humid.:	50%	Press.:	1010mbar	

Test voltage:	5Vdc 1A
Test results:	Pass

Remarks:

1. Only the worst case Main Antenna test data.
2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

Measurement data:**■ 9kHz~30MHz**

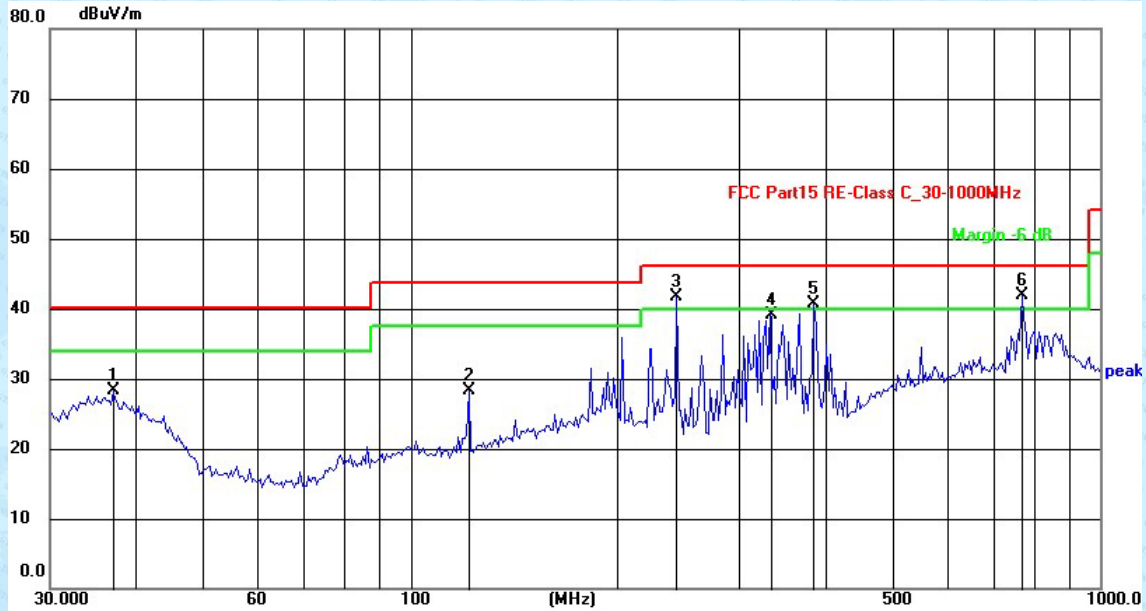
The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

■ Above 18GHz

The emission from Above 18GHz was pre-tested and found the result was 20dB lower than the limit, the test result no need to reported.

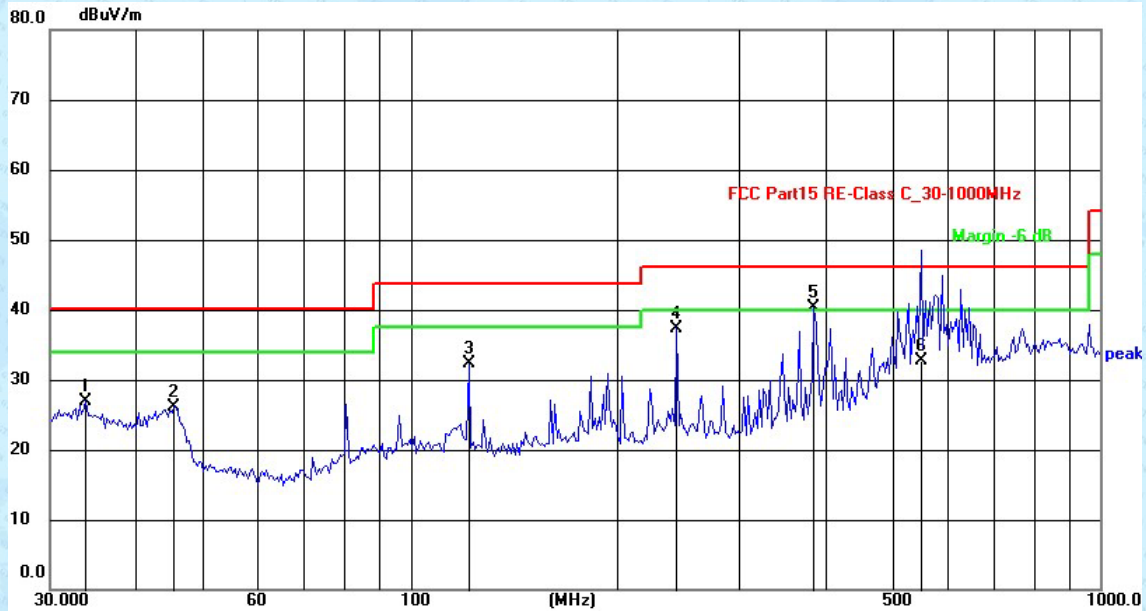
Below 1GHz

Ant. Pol.	Horizontal
Test Mode:	GFSK
Remark:	Only worse case is reported



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	37.0405	28.74	-0.44	28.30	40.00	-11.70	QP
2	121.4623	35.76	-7.37	28.39	43.50	-15.11	QP
3	243.5431	45.06	-3.35	41.71	46.00	-4.29	QP
4	331.7858	42.82	-3.62	39.20	46.00	-6.80	QP
5	384.5447	44.17	-3.42	40.75	46.00	-5.25	QP
6	771.0475	37.89	3.96	41.85	46.00	-4.15	QP

Ant. Pol.	Vertical
Test Mode:	GFSK
Remark:	Only worse case is reported

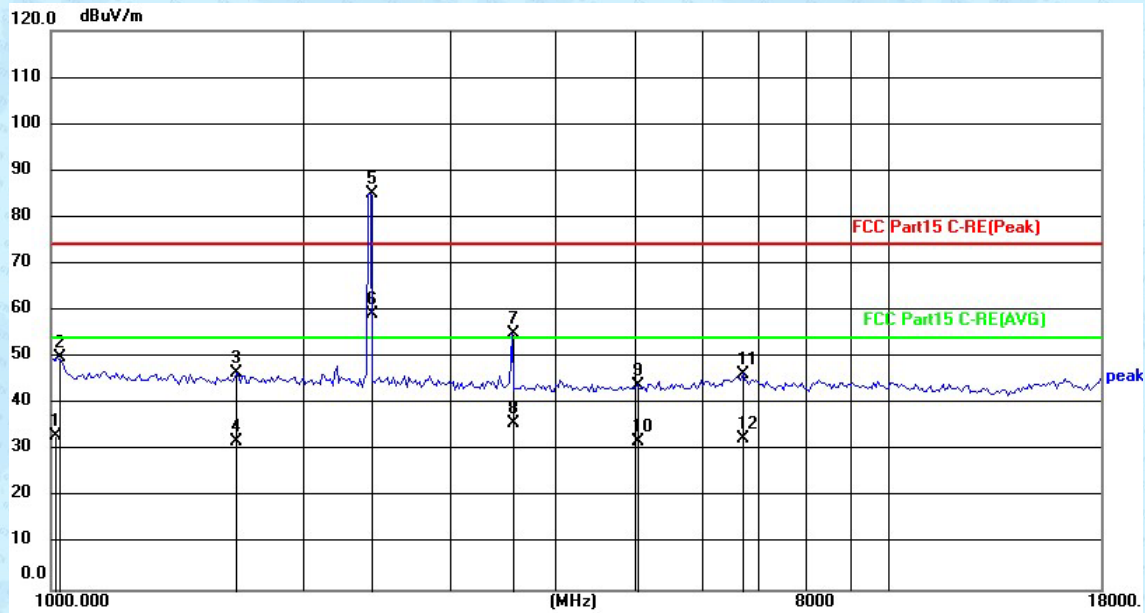


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	33.8067	29.38	-2.45	26.93	40.00	-13.07	QP
2	45.4130	31.15	-4.99	26.16	40.00	-13.84	QP
3	121.4623	39.99	-7.78	32.21	43.50	-11.29	QP
4	243.5431	40.49	-3.26	37.23	46.00	-8.77	QP
5	384.5447	43.53	-3.22	40.31	46.00	-5.69	QP
6	550.2902	29.12	3.55	32.67	46.00	-13.33	QP

Above 1GHz

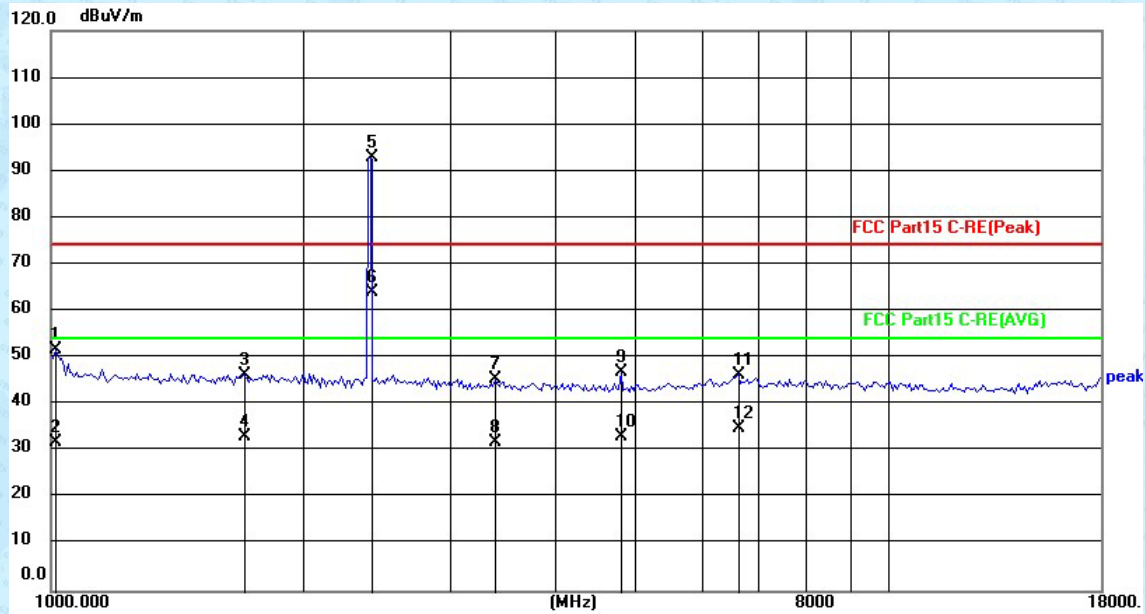
Test mode:	GFSK 2412z	Test channel:	Lowest
------------	------------	---------------	--------

Horizontal:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1011.652	31.51	1.58	33.09	54.00	-20.91	AVG
2	1017.529	48.20	1.67	49.87	74.00	-24.13	peak
3	1664.833	22.02	24.69	46.71	74.00	-27.29	peak
4	1664.833	7.15	24.69	31.84	54.00	-22.16	AVG
5	2412.000	58.58	26.36	84.94	74.00	10.94	peak
6	2412.000	32.81	26.36	59.17	54.00	5.17	AVG
7	3555.586	26.74	28.37	55.11	74.00	-18.89	peak
8	3555.586	7.40	28.37	35.77	54.00	-18.23	AVG
9	5033.218	13.44	30.55	43.99	74.00	-30.01	peak
10	5033.218	1.33	30.55	31.88	54.00	-22.12	AVG
11	6723.951	11.58	34.92	46.50	74.00	-27.50	peak
12	6723.951	-2.47	34.92	32.45	54.00	-21.55	AVG

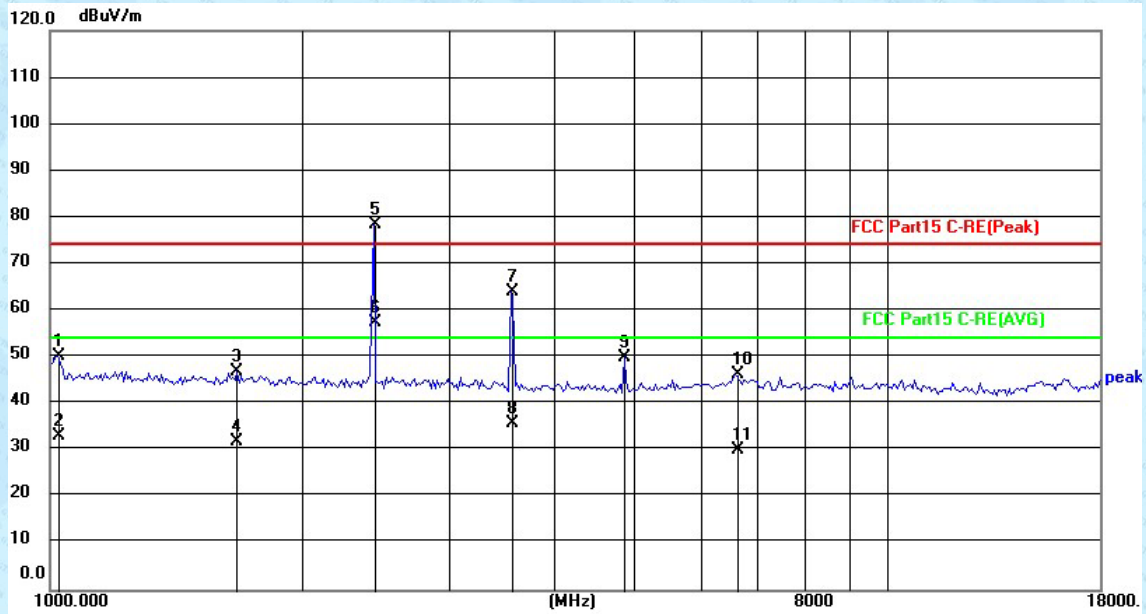
Vertical:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1011.652	50.23	1.58	51.81	74.00	-22.19	peak
2	1011.652	30.26	1.58	31.84	54.00	-22.16	AVG
3	1703.856	21.59	24.81	46.40	74.00	-27.60	peak
4	1703.856	8.48	24.81	33.29	54.00	-20.71	AVG
5	2412.000	66.39	26.36	92.75	74.00	18.75	peak
6	2412.000	37.72	26.36	64.08	54.00	10.08	AVG
7	3394.584	17.31	28.11	45.42	74.00	-28.58	peak
8	3394.584	3.85	28.11	31.96	54.00	-22.04	AVG
9	4805.307	16.75	30.07	46.82	74.00	-27.18	peak
10	4805.307	3.20	30.07	33.27	54.00	-20.73	AVG
11	6646.506	11.53	34.67	46.20	74.00	-27.80	peak
12	6646.506	0.20	34.67	34.87	54.00	-19.13	AVG

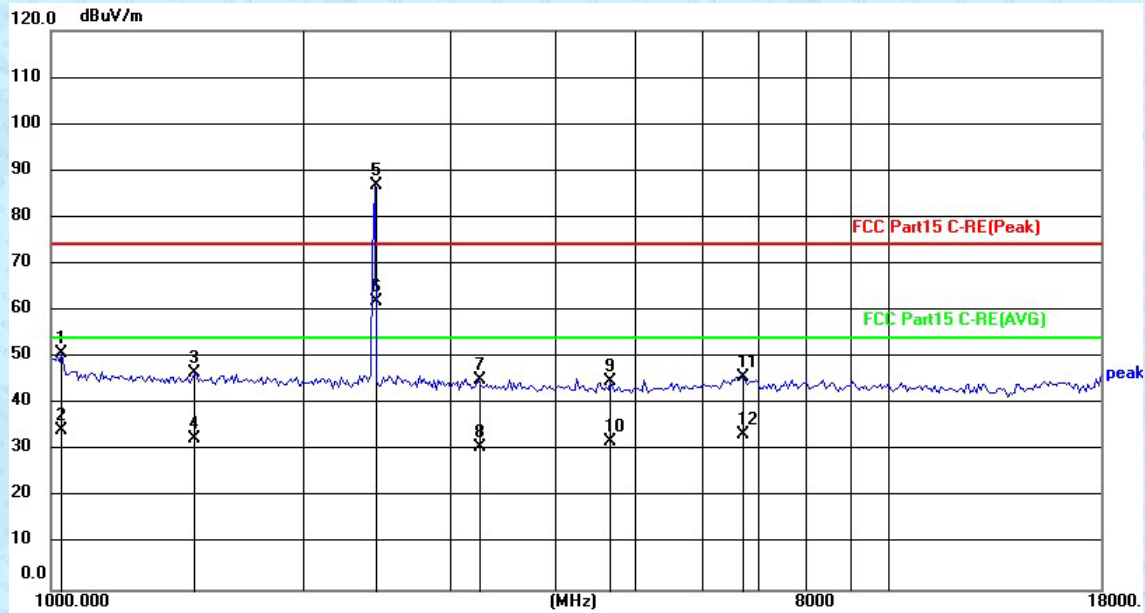
Test mode:	GFSK 2441.5MHz	Test channel:	Middle
------------	----------------	---------------	--------

Horizontal:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1017.529	48.64	1.67	50.31	74.00	-23.69	peak
2	1017.529	31.59	1.67	33.26	54.00	-20.74	AVG
3	1674.504	22.27	24.72	46.99	74.00	-27.01	peak
4	1674.504	7.22	24.72	31.94	54.00	-22.06	AVG
5	2442.000	51.93	26.41	78.34	74.00	4.34	peak
6	2442.000	30.98	26.41	57.39	54.00	3.39	AVG
7	3555.586	35.74	28.37	64.11	74.00	-9.89	peak
8	3555.586	7.50	28.37	35.87	54.00	-18.13	AVG
9	4861.298	19.90	30.19	50.09	74.00	-23.91	peak
10	6608.119	11.91	34.55	46.46	74.00	-27.54	peak
11	6608.119	-4.38	34.55	30.17	54.00	-23.83	AVG

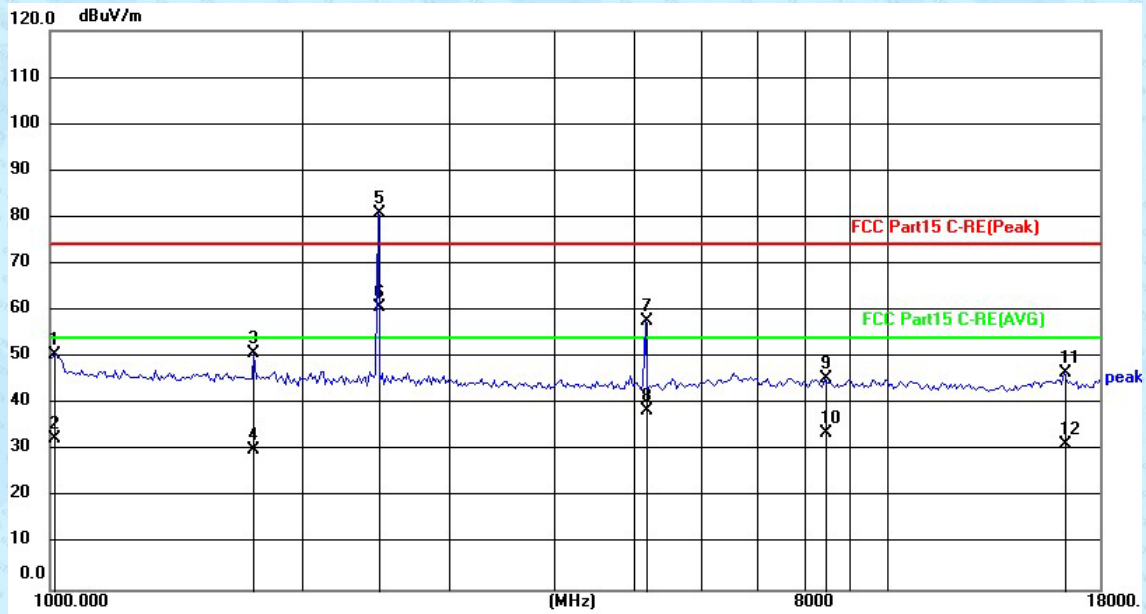
Vertical:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1029.385	48.95	1.86	50.81	74.00	-23.19	peak
2	1029.385	32.42	1.86	34.28	54.00	-19.72	AVG
3	1482.720	22.35	24.38	46.73	74.00	-27.27	peak
4	1482.720	8.31	24.38	32.69	54.00	-21.31	AVG
5	2442.000	60.46	26.41	86.87	74.00	12.87	peak
6	2442.000	35.44	26.41	61.85	54.00	7.85	AVG
7	3240.873	17.20	27.83	45.03	74.00	-28.97	peak
8	3240.873	2.79	27.83	30.62	54.00	-23.38	AVG
9	4668.133	14.99	29.77	44.76	74.00	-29.24	peak
10	4668.133	2.26	29.77	32.03	54.00	-21.97	AVG
11	6723.951	10.91	34.92	45.83	74.00	-28.17	peak
12	6723.951	-1.47	34.92	33.45	54.00	-20.55	AVG

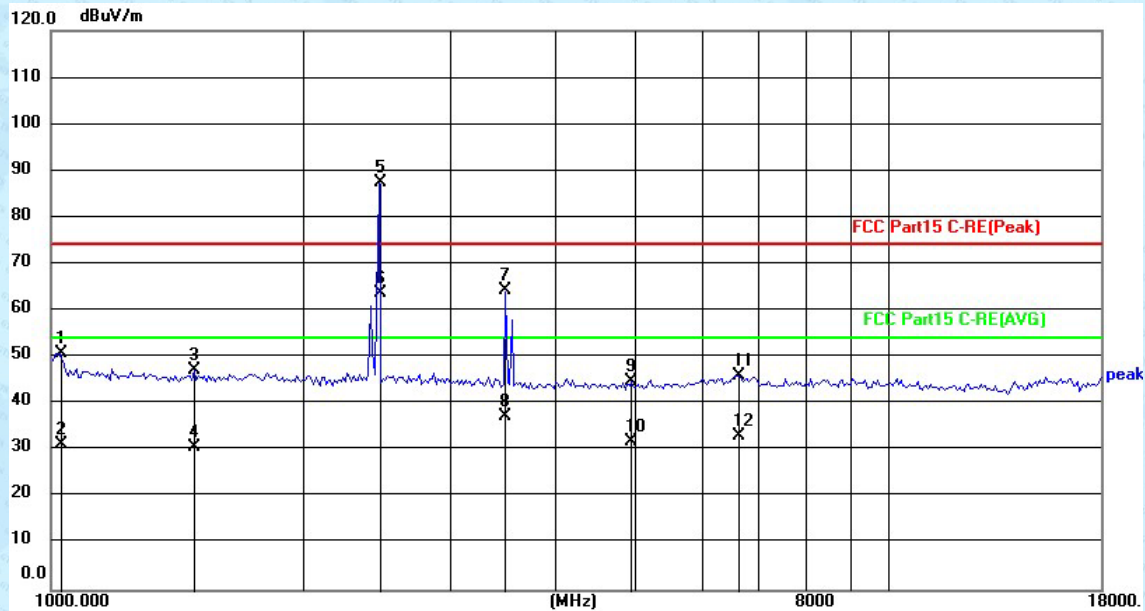
Test mode:	GFSK 2472Hz	Test channel:	Highest
------------	-------------	---------------	---------

Horizontal:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1011.652	49.05	1.58	50.63	74.00	-23.37	peak
2	1011.652	31.00	1.58	32.58	54.00	-21.42	AVG
3	1753.924	25.79	24.96	50.75	74.00	-23.25	peak
4	1753.924	5.13	24.96	30.09	54.00	-23.91	AVG
5	2472.000	54.32	26.46	80.78	74.00	6.78	peak
6	2472.000	34.28	26.46	60.74	54.00	6.74	AVG
7	5151.196	27.13	30.71	57.84	74.00	-16.16	peak
8	5151.196	7.76	30.71	38.47	54.00	-15.53	AVG
9	8428.146	8.79	36.74	45.53	74.00	-28.47	peak
10	8428.146	-3.10	36.74	33.64	54.00	-20.36	AVG
11	16312.019	8.41	38.22	46.63	74.00	-27.37	peak
12	16312.019	-6.75	38.22	31.47	54.00	-22.53	AVG

Vertical:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1023.440	49.08	1.76	50.84	74.00	-23.16	peak
2	1023.440	29.49	1.76	31.25	54.00	-22.75	AVG
3	1482.720	22.75	24.38	47.13	74.00	-26.87	peak
4	1482.720	6.23	24.38	30.61	54.00	-23.39	AVG
5	2472.000	61.05	26.46	87.51	74.00	13.51	peak
6	2472.000	37.28	26.46	63.74	54.00	9.74	AVG
7	3494.334	35.91	28.29	64.20	74.00	-9.80	peak
8	3494.334	9.19	28.29	37.48	54.00	-16.52	AVG
9	4946.511	14.52	30.38	44.90	74.00	-29.10	peak
10	4946.511	1.48	30.38	31.86	54.00	-22.14	AVG
11	6608.119	11.61	34.55	46.16	74.00	-27.84	peak
12	6608.119	-1.46	34.55	33.09	54.00	-20.91	AVG

Remark:

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

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** and **appendix III** for details.

-----End-----