

FCC Test Report

Product Name : Headset
Trade Name : Cardo
Model No. : FREECOM 4X
FCC ID : Q95ER25

Applicant : Cardo Systems LTD
Address : 101 E. Park Blvd., Suite 600 Plano, TX 75074

Date of Receipt : Jul. 14, 2020
Issued Date : Jun. 16, 2021
Report No. : 2070523R-E3032110116-A
Report Version : V1.0



The test results relate only to the samples tested.

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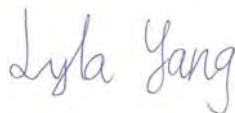
Test Report Certification

Issued Date: Jun. 16, 2021

Report No. : 2070523R-E3032110116-A



Product Name : Headset
Applicant : Cardo Systems LTD
Address : 101 E. Park Blvd., Suite 600 Plano, TX 75074
Manufacturer : Cardo Systems LTD
Address : 101 E. Park Blvd., Suite 600 Plano, TX 75074
Trade Name : Cardo
Model No. : FREECOM 4X
FCC ID : Q95ER25
EUT Voltage : DC 5V (adapter or host equipment)
DC 3.7 for battery
Testing Voltage : DC 5V
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2019
ANSI C63.10: 2013
Laboratory Name : Hsin Chu Laboratory
Address : No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu
County 310, Taiwan, R.O.C.
TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result : Complied

Documented By : 

(Lyla Yang / Engineering Adm. Specialist)

Tested By : 

(Lion Wang / Senior Engineer)

Approved By : 

(Louis Hsu / Deputy Manager)

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Jun. 16, 2021

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1. General Information

1.1 EUT Description

Product Name	Headset
Trade Name	Cardo
Model No.	FREECOM 4X
Frequency Range	1Mbps: 2402~2480MHz 2Mbps: 2402~2478MHz
Channel Number	1Mbps: 40 Channels 2Mbps: 39 Channels
Type of Modulation	GFSK

Antenna Information	
MFR.	Cardo
Model No.	N/A
Antenna Type	Printed Antenna
Antenna Gain	-2 dBi

Accessories Information	
USB Type-C Cable	1pcs, Shielded, 1m
Microphone	1pcs, Non-Shielded, 0.2m
Headphone	1pcs, Non-Shielded, 0.55m
Charging stand	1pcs, Non-Shielded, 0.2m

GFSK (BLE 1Mbps)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	10	2422 MHz	20	2442 MHz	30	2462 MHz
01	2404 MHz	11	2424 MHz	21	2444 MHz	31	2464 MHz
02	2406 MHz	12	2426 MHz	22	2446 MHz	32	2466 MHz
03	2408 MHz	13	2428 MHz	23	2448 MHz	33	2468 MHz
04	2410 MHz	14	2430 MHz	24	2450 MHz	34	2470 MHz
05	2412 MHz	15	2432 MHz	25	2452 MHz	35	2472 MHz
06	2414 MHz	16	2434 MHz	26	2454 MHz	36	2474 MHz
07	2416MHz	17	2436 MHz	27	2456 MHz	37	2476 MHz
08	2418 MHz	18	2438 MHz	28	2458 MHz	38	2478 MHz
09	2420 MHz	19	2440 MHz	29	2460 MHz	39	2480 MHz

GFSK (BLE 2Mbps)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	10	2422 MHz	20	2442 MHz	30	2462 MHz
01	2404 MHz	11	2424 MHz	21	2444 MHz	31	2464 MHz
02	2406 MHz	12	2426 MHz	22	2446 MHz	32	2466 MHz
03	2408 MHz	13	2428 MHz	23	2448 MHz	33	2468 MHz
04	2410 MHz	14	2430 MHz	24	2450 MHz	34	2470 MHz
05	2412 MHz	15	2432 MHz	25	2452 MHz	35	2472 MHz
06	2414 MHz	16	2434 MHz	26	2454 MHz	36	2474 MHz
07	2416MHz	17	2436 MHz	27	2456 MHz	37	2476 MHz
08	2418 MHz	18	2438 MHz	28	2458 MHz	38	2478 MHz
09	2420 MHz	19	2440 MHz	29	2460 MHz	-	-

Note:

1. Regards to the frequency band operation; the lowest , middle and highest frequency of channel were selected to perform the test, and then shown on this report.
2. The EUT description is from the customer declaration.

1.2 Test Mode

DEKRA has 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:

Test Mode	Mode 1: Transmit
-----------	------------------

Test Items	Modulation	Channel	Result
AC power Line Conducted Emission	GFSK (1Mbps)	39	Complies
	GFSK (2Mbps)	38	Complies
Maximum peak conducted output power	GFSK (1Mbps)	00/19/39	Complies
	GFSK (2Mbps)	00/19/38	Complies
Radiated Emission	GFSK (1Mbps)	00/19/39	Complies
	GFSK (2Mbps)	00/19/38	Complies
RF antenna conducted test	GFSK (1Mbps)	00/19/39	Complies
	GFSK (2Mbps)	00/19/38	Complies
Band edge	GFSK (1Mbps)	00/19/39	Complies
	GFSK (2Mbps)	00/19/38	Complies
Occupied Bandwidth & DTS Bandwidth	GFSK (1Mbps)	00/19/39	Complies
	GFSK (2Mbps)	00/19/38	Complies
Power spectral density	GFSK (1Mbps)	00/19/39	Complies
	GFSK (2Mbps)	00/19/38	Complies

Note:

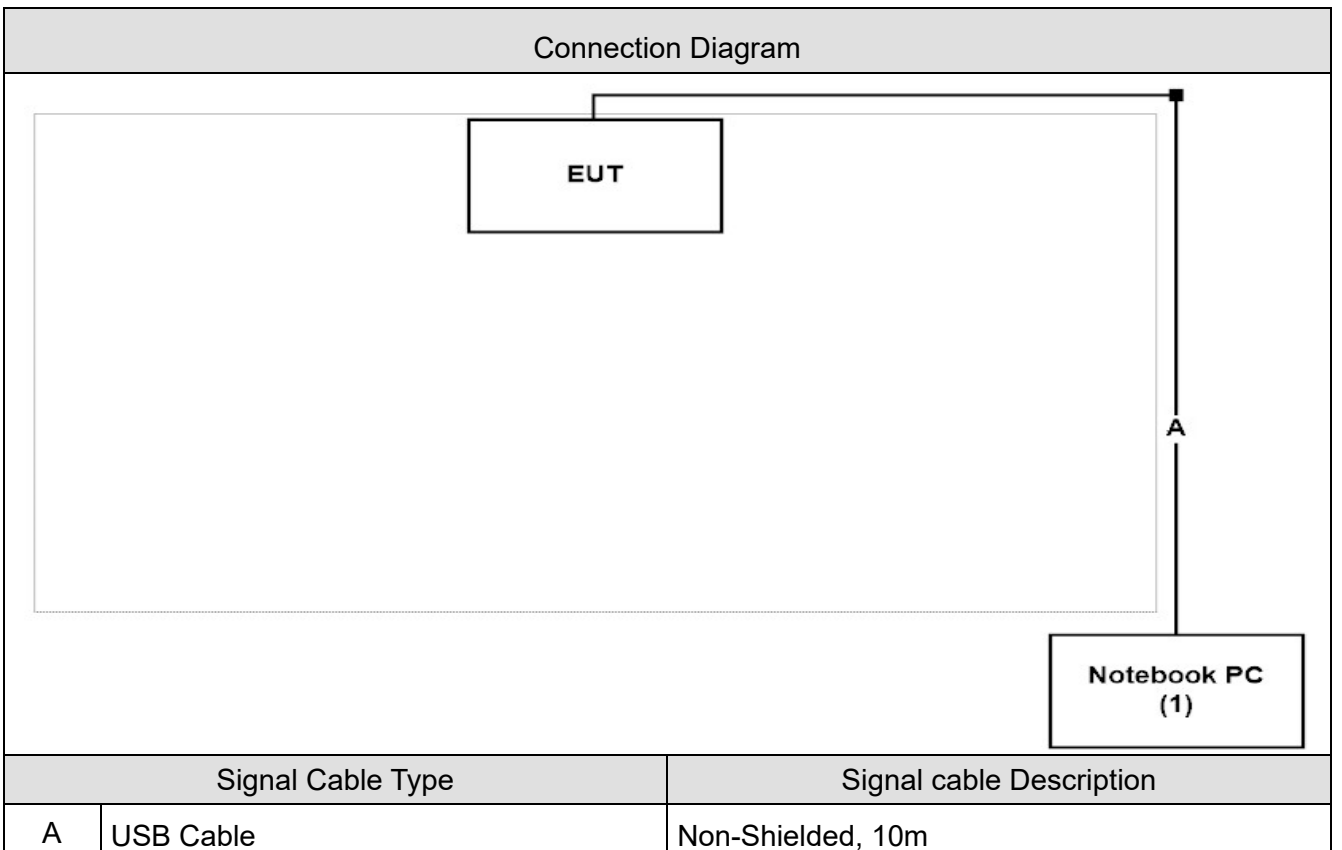
1. Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
3. For below 1 GHz radiated emission and AC power Line Conducted Emission have performed all modes of operation were investigated and the worst-case emissions are reported.

1.3 Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1 Notebook PC	Lenovo	Thinkpad	N/A	DoC	Non-Shielded, 1.8m, one ferrite core bonded.

1.4 Configuration of tested System



1.5 EUT Exercise Software

1	Set the EUT as shown.
2	Execute control command by software "Bluetest3".
3	Configure test mode, test channel and data rate.
4	Let the EUT start transmitting signal continuously.
5	Verify that device is working properly.

1.6 Comments and Remarks

The product specification and testing instructions for the EUT declared in the report are provided by the manufacturer who will take all responsibilities for the accuracy.

1.7 Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required	Test Site
Temperature (°C)	FCC PART 15 C 15.207	15 - 35	2
Humidity (%RH)	AC power Line Conducted Emission	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Maximum peak conducted output power	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Radiated Emission	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	RF antenna conducted test	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Band edge	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Occupied Bandwidth & DTS Bandwidth	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Power spectral density	25 - 75	

Note: Test site information refers to Laboratory Information.

Laboratory Information

USA	:	FCC Registration Number: TW3024
Canada	:	IC Registration Number: 22397-1 / 22397-2 / 22397-3

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: <http://www.dekra.com.tw>

If you have any comments, please don't hesitate to contact us. Our test sites as below:

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
Address	1. No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. 2. No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.
Phone number	1. +886-3-582-8001 2. +886-3-582-8001
Fax number	1. +886-3-582-8958 2. +886-3-582-8958
Email address	info.tw@dekra.com
Website	http://www.dekra.com.tw

1.8 List of Test Equipment

AC power Line Conducted Emission / SR2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2020/12/24	2021/12/23
Test Receiver	R&S	ESCS 30	836858/022	2021/02/22	2022/02/21
LISN	R&S	ENV216	100092	2020/06/22	2021/06/21

Radiated Emission / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2020/10/12	2021/10/11
Signal & Spectrum Analyzer	R&S	FSV40	101049	2021/03/31	2022/03/30
Signal Analyzer	R&S	FSVA40	101435	2020/06/24	2021/06/23
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2021/01/25	2022/01/24
Bilog Antenna	Teseq	CBL6112D	23191	2021/02/26	2022/02/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2020/06/04	2021/06/03
Horn Antenna	Schwarzbeck	BBHA 9170	202	2020/12/16	2021/12/15
Pre-Amplifier	EMCI	EMC01820I	980365	2020/06/19	2021/06/18
Pre-Amplifier	EMEC	EM01G18GA	060741	2020/07/24	2021/07/23
Pre-Amplifier	DEKRA	AP-400C	201801231	2020/11/16	2021/11/15
Band Reject Filter	Micro-Tronics	BRM50702	G258	2020/12/16	2021/12/15
Coaxial Cable(13m)	Huber+Suhner	SF104	CB2-H	2020/07/25	2021/07/24
DEKRA Testing System	DEKRA	Version 2.0	CB2-H	NA	NA

Conducted / SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2020/11/30	2021/11/29
Pulse Power Sensor	Anritsu	MA2411B	1531043	2020/11/30	2021/11/29
Pulse Power Sensor	Anritsu	MA2411B	1531044	2020/11/30	2021/11/29
Power Meter	Keysight	8990B	MY51000248	2020/05/20	2021/05/19
Power Sensor	Keysight	N1923A	MY57240005	2020/05/20	2021/05/19
Spectrum Analyzer	Agilent	N9010A	US47140172	2020/06/18	2021/06/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
				2021/03/31	2022/03/30

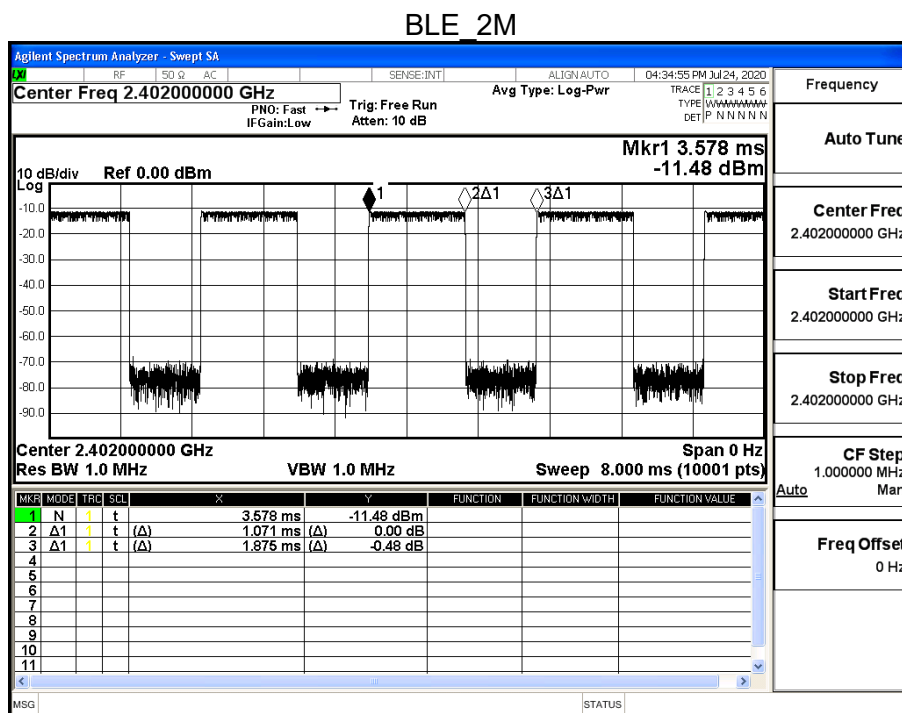
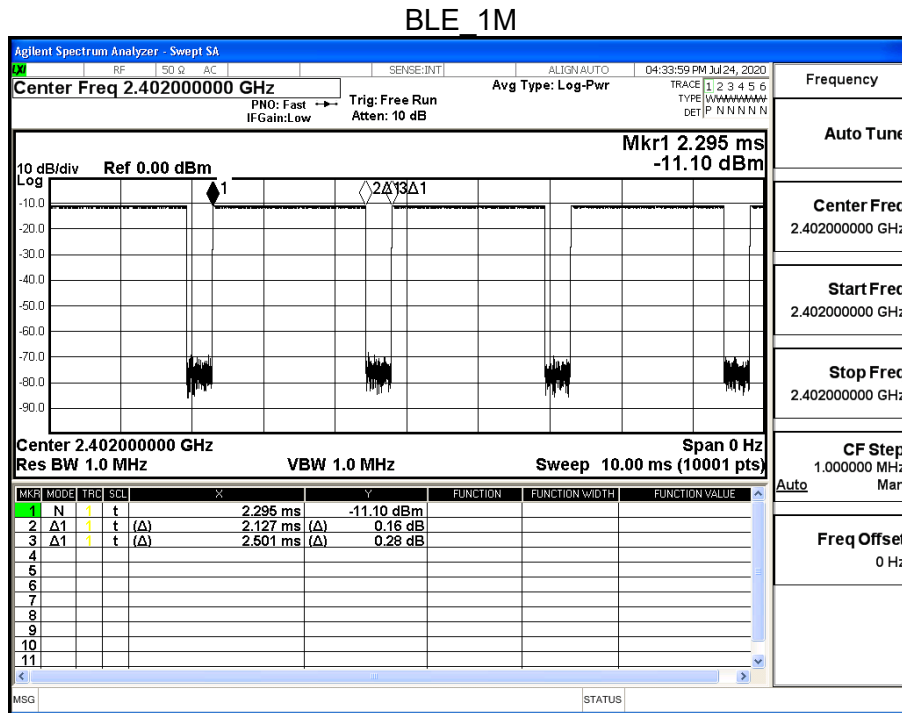
Note: All equipment upon which need to calibrated are with calibration period of 1 year.

1.9 Uncertainty

Test item	Uncertainty
AC power Line Conducted Emission	± 2.26 dB
Maximum peak conducted output power	± 1.27 dB
Radiated Emission	30MHz~1GHz as ± 3.43 dB 1GHz~26.5GHz as ± 3.65 dB
RF antenna conducted test	± 1.27 dB
Band edge	± 1.27 dB
Occupied Bandwidth & DTS Bandwidth	± 50 Hz
Power spectral density	± 1.27 dB

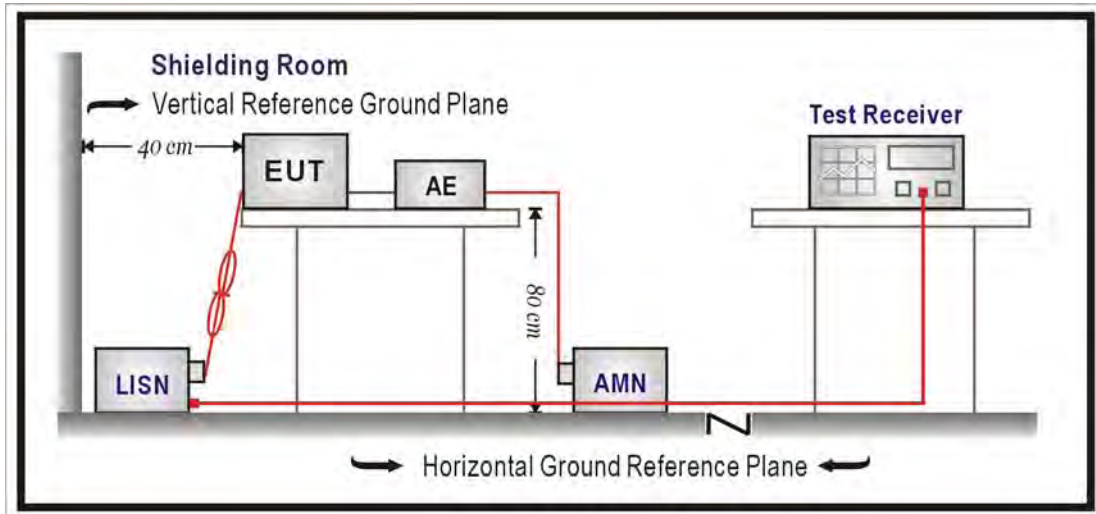
1.10 Duty Cycle

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor(dB) linear voltage	Duty Factor(dB) Power	1/T Minimum VBW (kHz)
BLE_1M	2.127	2.501	85.05%	1.406924	0.70	0.470
BLE_2M	1.071	1.875	57.12%	4.864236	2.43	0.934



2. AC power Line Conducted Emission

2.1 Test Setup



2.2 Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.3 Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /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.

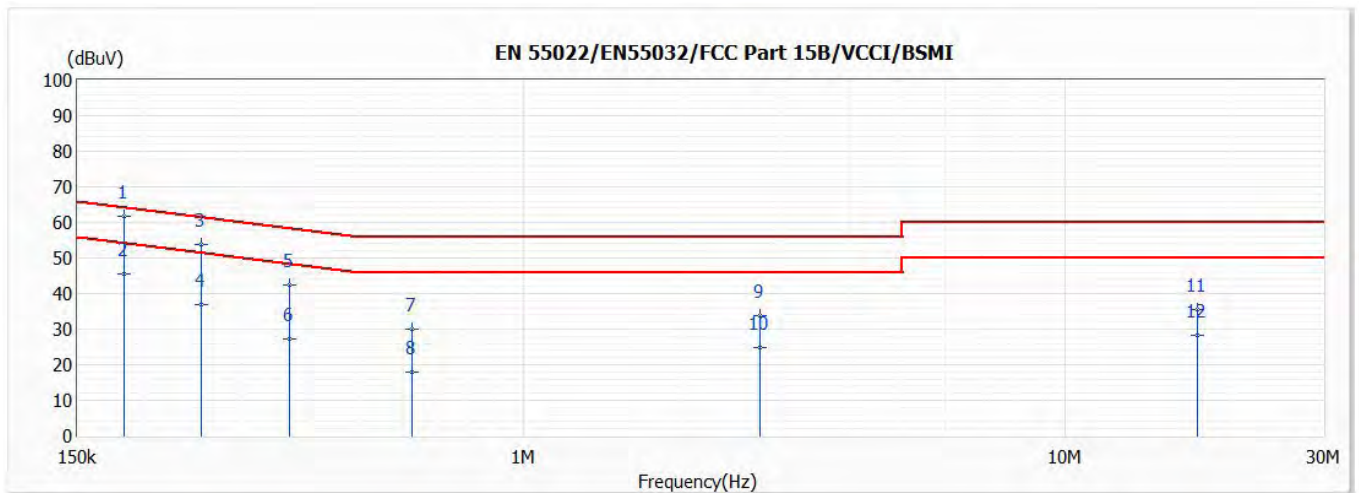
AC power Line Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9KHz.

2.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2019

2.5 Test Result

Model No	FREECOM 4X	Site	SR2-H
Test Voltage	DC 5V	Test Date	2021/4/27
Test Mode	Mode 1: Transmit	Engineer	Scott Lin
Phase	L	Temperature (°C)	22
Test Condition	BT5.0 1M 2480MHz	Humidity (%RH)	67

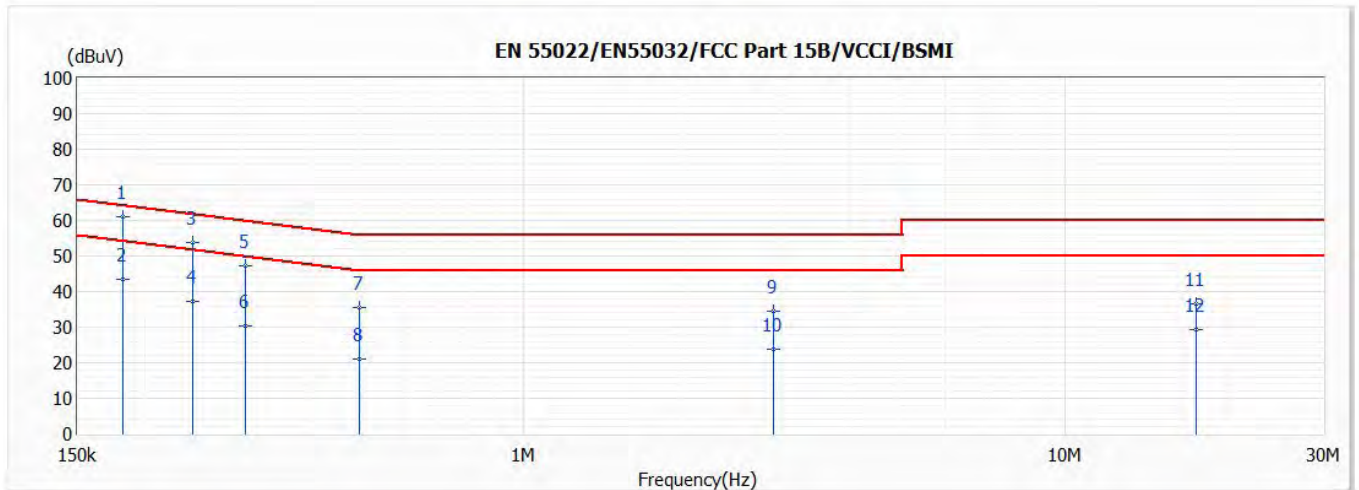


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.183	61.75	64.36	-2.61	52.10	9.64	QP
2	0.183	45.49	54.36	-8.87	35.84	9.64	AV
3	0.254	53.80	61.61	-7.81	44.15	9.65	QP
4	0.254	36.96	51.61	-14.65	27.31	9.65	AV
5	0.370	42.45	58.50	-16.04	32.78	9.68	QP
6	0.370	27.15	48.50	-21.35	17.48	9.68	AV
7	0.624	30.02	56.00	-25.98	20.32	9.70	QP
8	0.624	18.03	46.00	-27.97	8.32	9.70	AV
9	2.729	33.90	56.00	-22.10	24.07	9.83	QP
10	2.729	24.72	46.00	-21.28	14.90	9.83	AV
11	17.584	35.54	60.00	-24.46	25.22	10.32	QP
12	17.584	28.27	50.00	-21.73	17.95	10.32	AV

Remark:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Model No	FREECOM 4X	Site	SR2-H
Test Voltage	DC 5V	Test Date	2021/4/27
Test Mode	Mode 1: Transmit	Engineer	Scott Lin
Phase	N	Temperature (°C)	22
Test Condition	BT5.0 1M 2480MHz	Humidity (%RH)	67

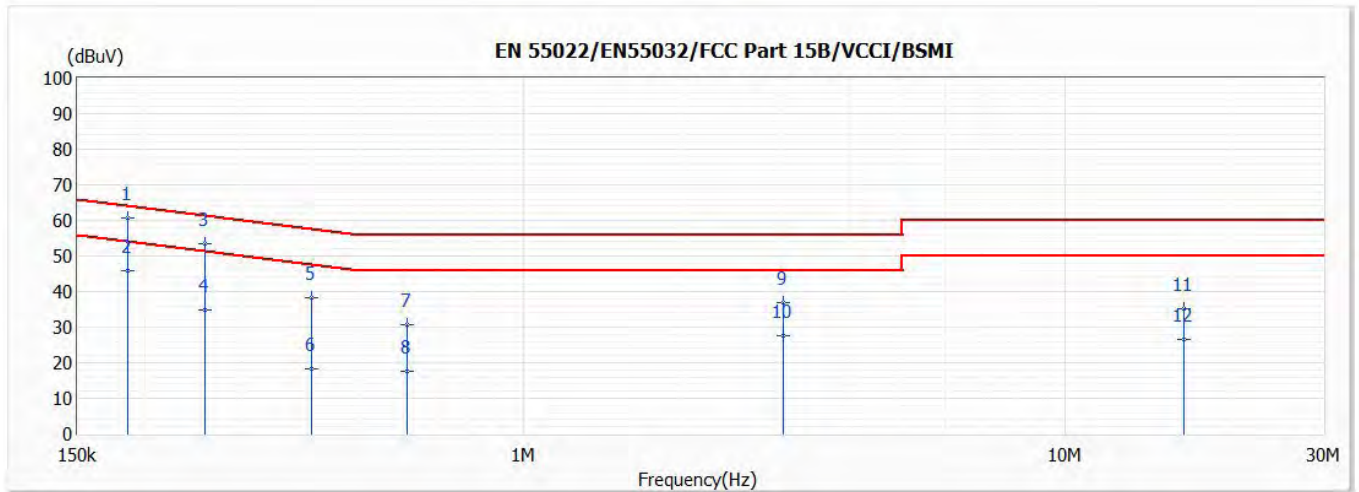


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.182	61.16	64.40	-3.25	51.52	9.63	QP
2	0.182	43.28	54.40	-11.12	33.65	9.63	AV
3	0.245	53.87	61.92	-8.05	44.22	9.64	QP
4	0.245	37.26	51.92	-14.66	27.61	9.64	AV
5	0.306	47.40	60.08	-12.69	37.74	9.66	QP
6	0.306	30.45	50.08	-19.63	20.80	9.66	AV
7	0.497	35.37	56.05	-20.68	25.69	9.68	QP
8	0.497	20.89	46.05	-25.16	11.21	9.68	AV
9	2.888	34.37	56.00	-21.63	24.54	9.83	QP
10	2.888	23.91	46.00	-22.09	14.09	9.83	AV
11	17.463	36.57	60.00	-23.43	26.14	10.44	QP
12	17.463	29.47	50.00	-20.53	19.03	10.44	AV

Remark:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Model No	FREECOM 4X	Site	SR2-H
Test Voltage	DC 5V	Test Date	2021/4/27
Test Mode	Mode 1: Transmit	Engineer	Scott Lin
Phase	L	Temperature (°C)	22
Test Condition	BT5.0 2M 2478MHz	Humidity (%RH)	67

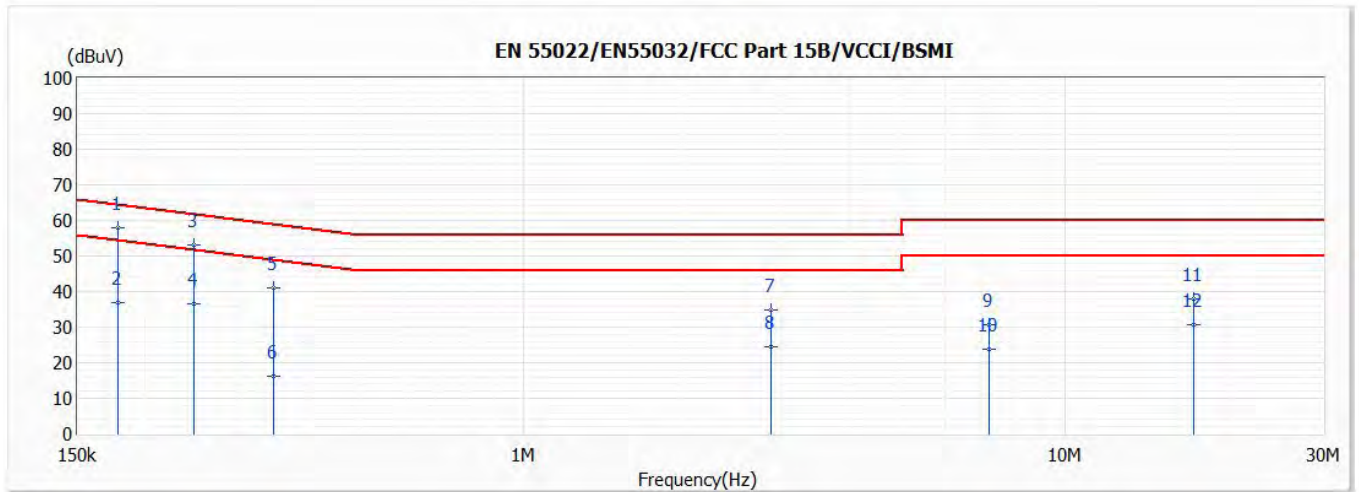


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.185	60.70	64.24	-3.53	51.06	9.64	QP
2	0.185	45.85	54.24	-8.39	36.21	9.64	AV
3	0.258	53.28	61.49	-8.21	43.62	9.65	QP
4	0.258	34.82	51.49	-16.67	25.16	9.65	AV
5	0.406	38.35	57.74	-19.39	28.67	9.68	QP
6	0.406	18.14	47.74	-29.60	8.46	9.68	AV
7	0.609	30.71	56.00	-25.29	21.00	9.70	QP
8	0.609	17.75	46.00	-28.25	8.05	9.70	AV
9	3.011	36.73	56.00	-19.27	26.89	9.84	QP
10	3.011	27.42	46.00	-18.58	17.58	9.84	AV
11	16.543	35.15	60.00	-24.85	24.85	10.29	QP
12	16.543	26.60	50.00	-23.40	16.31	10.29	AV

Remark:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Model No	FREECOM 4X	Site	SR2-H
Test Voltage	DC 5V	Test Date	2021/4/27
Test Mode	Mode 1: Transmit	Engineer	Scott Lin
Phase	N	Temperature (°C)	22
Test Condition	BT5.0 2M 2478MHz	Humidity (%RH)	67



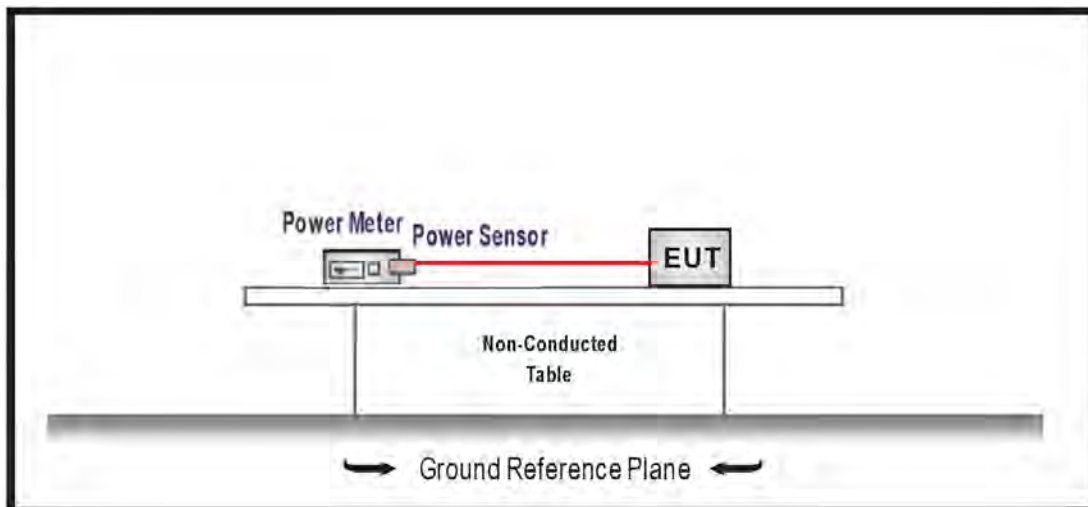
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.178	57.88	64.56	-6.68	48.24	9.63	QP
2	0.178	36.74	54.56	-17.83	27.10	9.63	AV
3	0.246	53.20	61.90	-8.70	43.55	9.64	QP
4	0.246	36.68	51.90	-15.22	27.04	9.64	AV
5	0.345	41.19	59.08	-17.89	31.53	9.66	QP
6	0.345	16.10	49.08	-32.98	6.44	9.66	AV
7	2.864	34.69	56.00	-21.31	24.87	9.82	QP
8	2.864	24.44	46.00	-21.56	14.62	9.82	AV
9	7.237	30.70	60.00	-29.30	20.67	10.02	QP
10	7.237	23.78	50.00	-26.22	13.75	10.02	AV
11	17.225	37.88	60.00	-22.12	27.45	10.43	QP
12	17.225	30.71	50.00	-19.29	20.28	10.43	AV

Remark:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

3. Maximum peak conducted output power

3.1 Test Setup



3.2 Limits

The Maximum peak conducted output power shall be less 1 Watt.

3.3 Test procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01V05r02 for compliance to FCC 47CFR 15.247 requirements.

3.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

3.5 Test Result

Product	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/04/16	Test Site	SR12-H
Temperature(°C)	25.5	Humidity (%RH)	62.0

GFSK_1M

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
00	2402	6.450	≤30
19	2440	6.730	≤30
39	2480	6.790	≤30

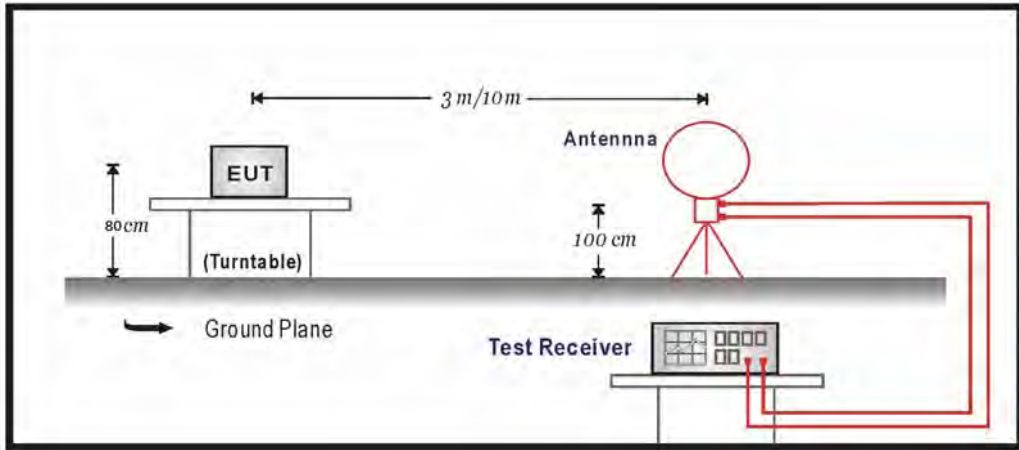
GFSK_2M

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
00	2402	6.310	≤30
19	2440	6.580	≤30
38	2478	6.550	≤30

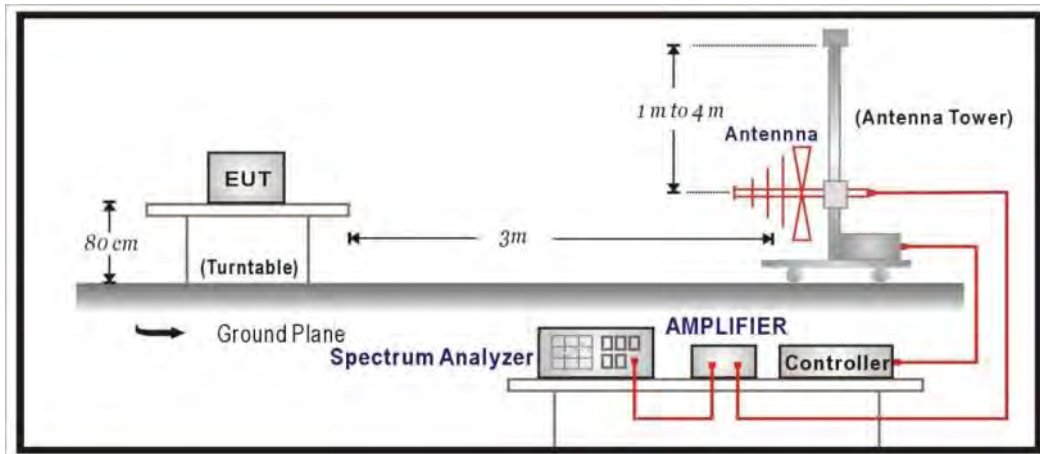
4. Radiated Emission

4.1 Test Setup

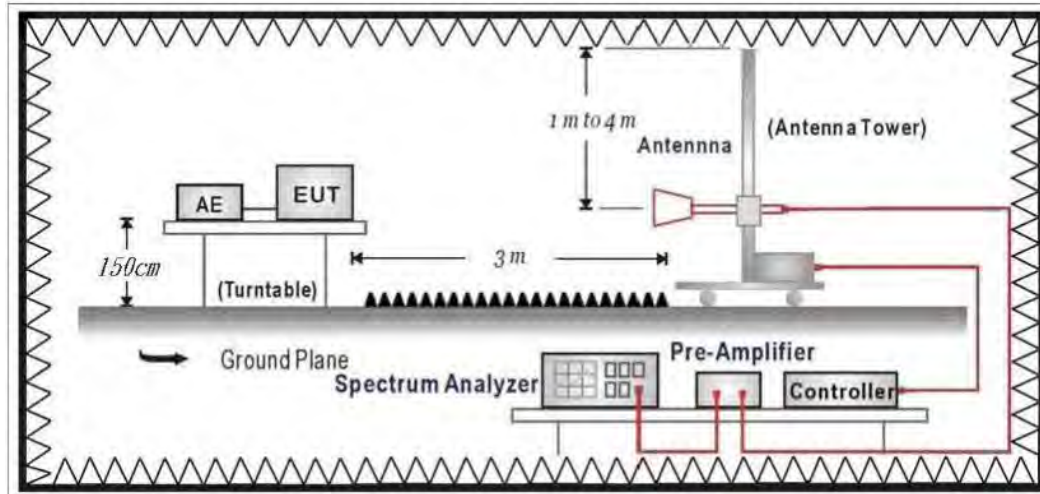
Under 30MHz Test Setup:



Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.2 Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency (MHz)	uV/m	dBuV/m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the Bandedges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.3 Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074 D01V05r02 for compliance to FCC 47CFR 15.247 requirements. The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

On any frequency or frequencies from 9kHz(inclue The the lowest oscillator frequency generated within the device up to the 10th harmonic) to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

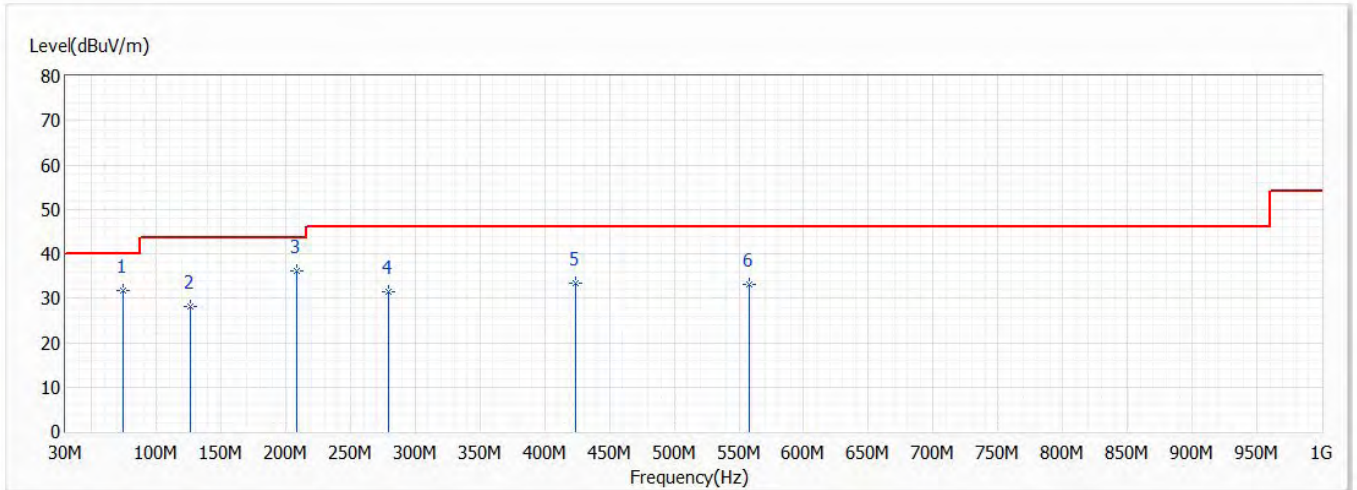
4.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

4.5 Test Result

30MHz-1GHz Spurious

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

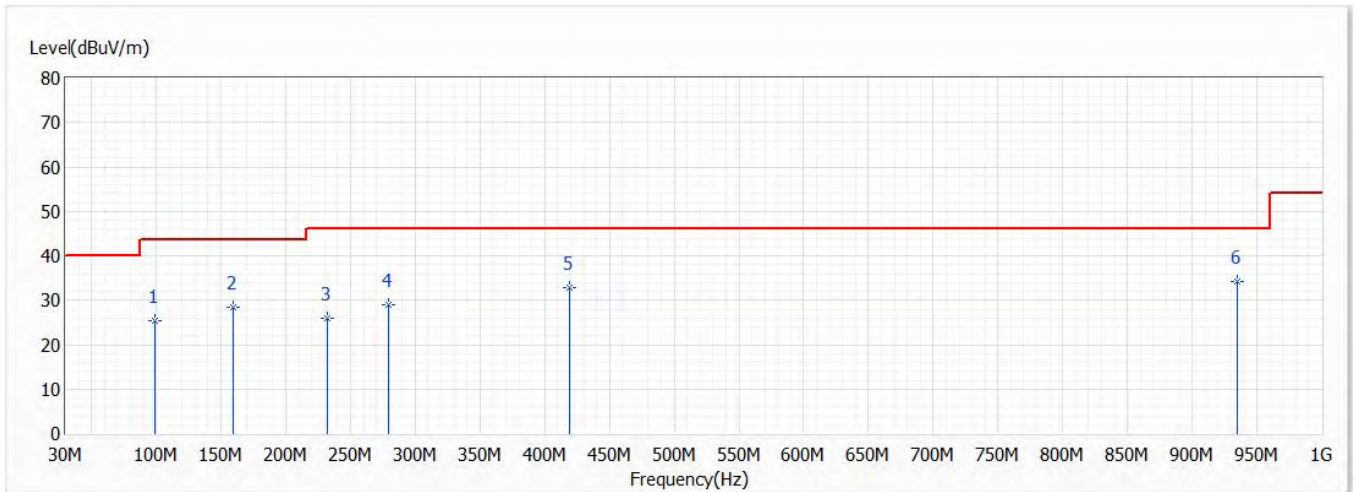


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	74.620	31.67	40.00	-8.33	39.97	-8.30	QP
2	126.515	28.18	43.50	-15.32	30.73	-2.55	QP
* 3	208.965	36.17	43.50	-7.33	40.50	-4.33	QP
4	279.775	31.32	46.00	-14.68	32.87	-1.55	QP
5	424.305	33.50	46.00	-12.50	31.03	2.47	QP
6	557.680	33.03	46.00	-12.97	28.51	4.52	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

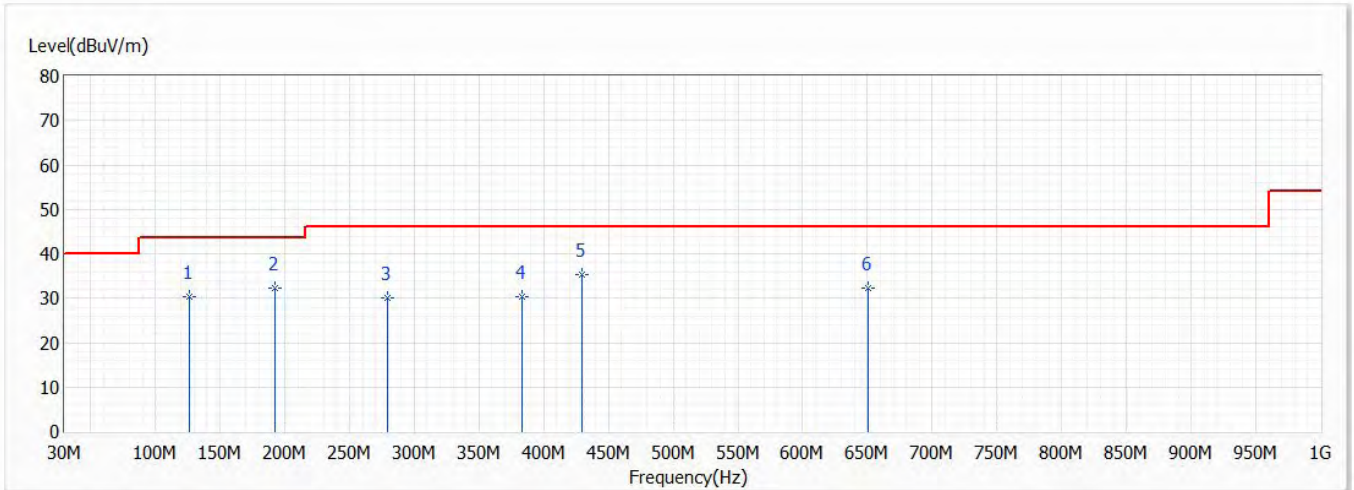


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	99.355	25.30	43.50	-18.20	29.88	-4.58	QP
2	159.495	28.35	43.50	-15.15	32.47	-4.12	QP
3	232.245	25.83	46.00	-20.17	28.86	-3.03	QP
4	279.290	29.06	46.00	-16.94	30.62	-1.56	QP
5	418.970	32.94	46.00	-13.06	30.56	2.38	QP
* 6	935.010	34.18	46.00	-11.82	25.02	9.16	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478G,BW2M	Humidity (%RH)	61.0

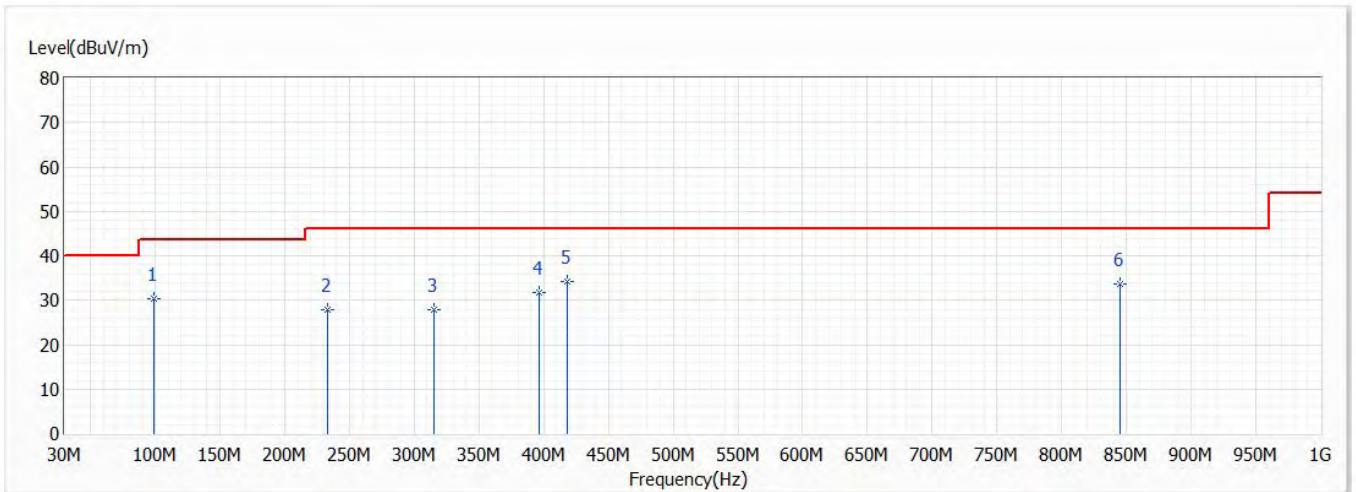


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	126.515	30.43	43.50	-13.07	32.98	-2.55	QP
2	192.475	32.20	43.50	-11.30	37.28	-5.08	QP
3	279.290	29.96	46.00	-16.04	31.52	-1.56	QP
4	383.565	30.41	46.00	-15.59	28.92	1.49	QP
* 5	429.640	35.30	46.00	-10.70	32.73	2.57	QP
6	650.315	32.29	46.00	-13.71	26.69	5.60	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478G,BW2M	Humidity (%RH)	61.0



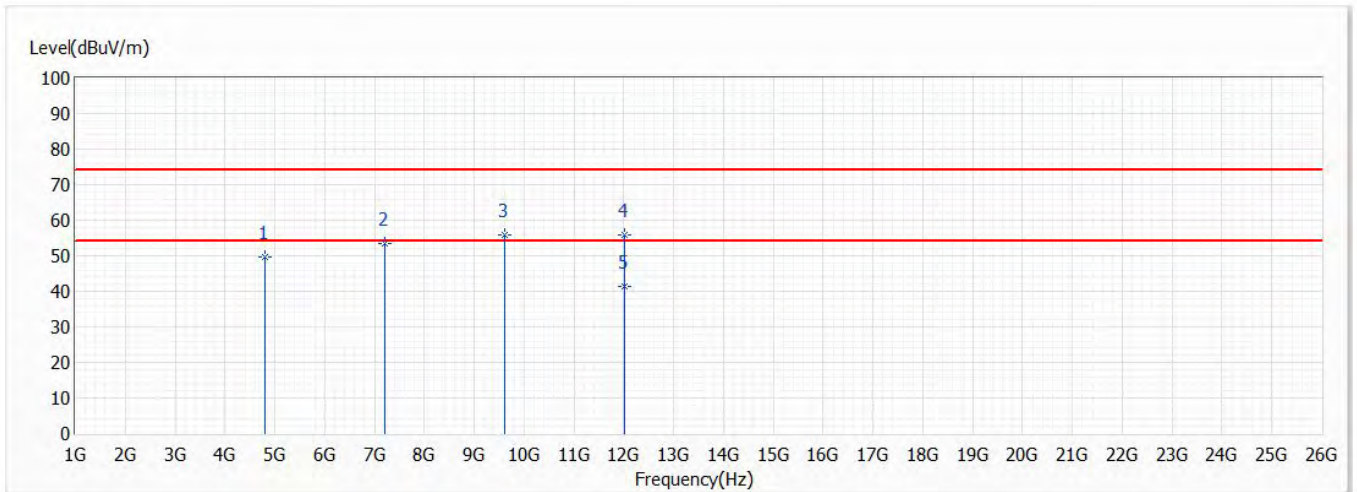
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	99.355	30.48	43.50	-13.02	35.06	-4.58	QP
2	233.215	27.89	46.00	-18.11	30.87	-2.98	QP
3	315.180	27.96	46.00	-18.04	28.69	-0.73	QP
4	396.660	31.68	46.00	-14.32	29.75	1.93	QP
* 5	418.485	34.14	46.00	-11.86	31.77	2.37	QP
6	845.285	33.70	46.00	-12.30	25.78	7.92	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Harmonic & Spurious:

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW1M	Humidity (%RH)	61.0

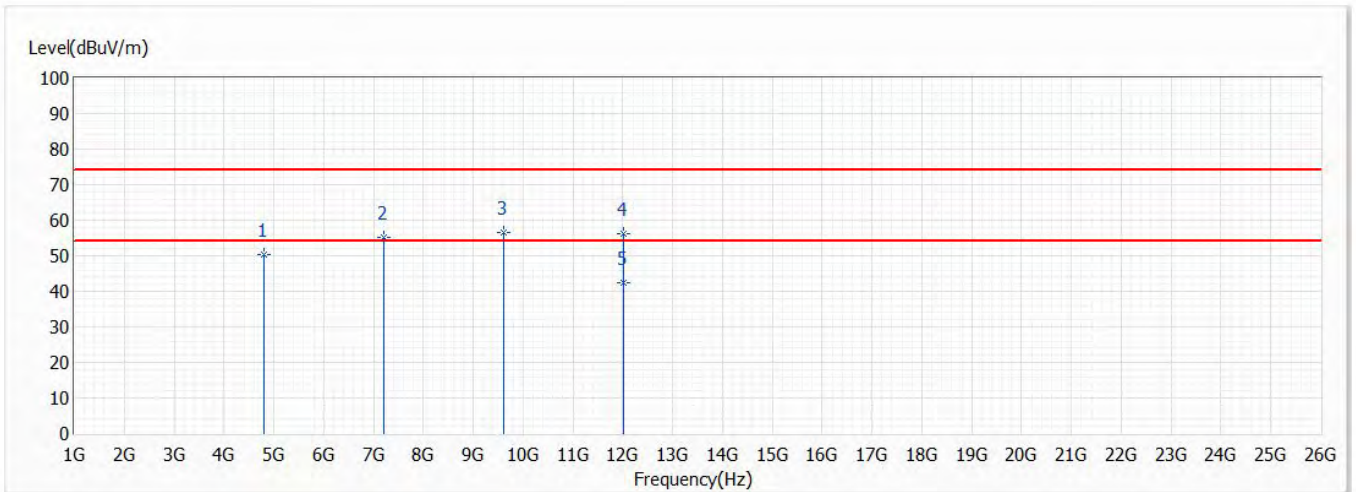


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	49.78	74.00	-24.22	61.81	-12.03	PK
2	7206.000	53.62	74.00	-20.38	58.30	-4.68	PK
3	9608.000	55.75	74.00	-18.25	57.08	-1.33	PK
4	12010.000	55.81	74.00	-18.19	53.00	2.81	PK
* 5	12010.000	41.36	54.00	-12.64	38.55	2.81	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW1M	Humidity (%RH)	61.0

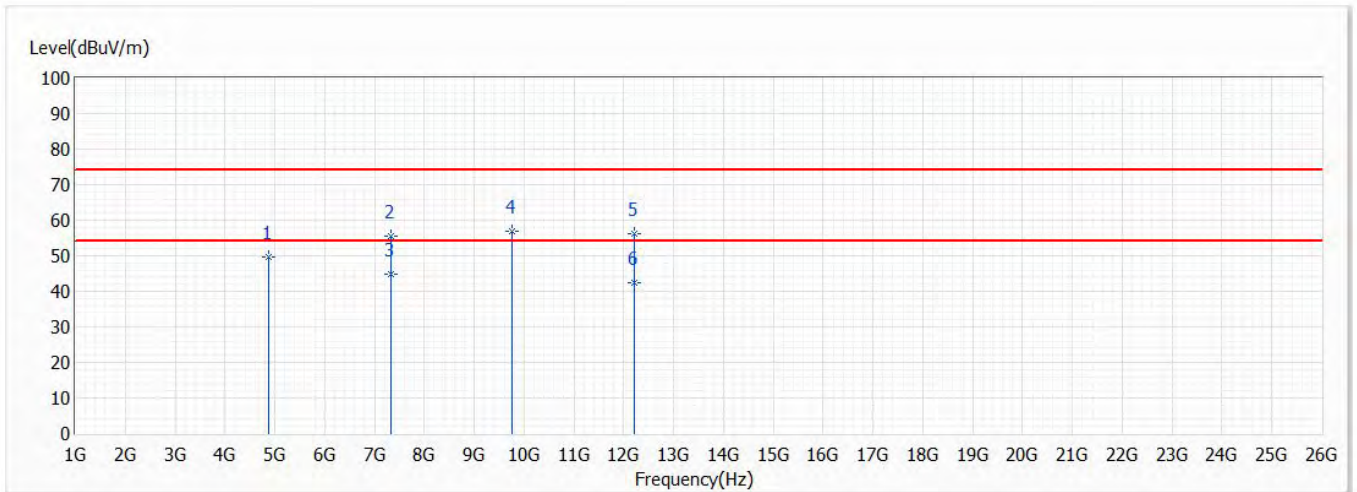


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	50.32	74.00	-23.68	62.35	-12.03	PK
2	7206.000	55.18	74.00	-18.82	59.86	-4.68	PK
3	9608.000	56.59	74.00	-17.41	57.92	-1.33	PK
4	12010.000	56.28	74.00	-17.72	53.47	2.81	PK
* 5	12010.000	42.25	54.00	-11.75	39.44	2.81	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW1M	Humidity (%RH)	61.0

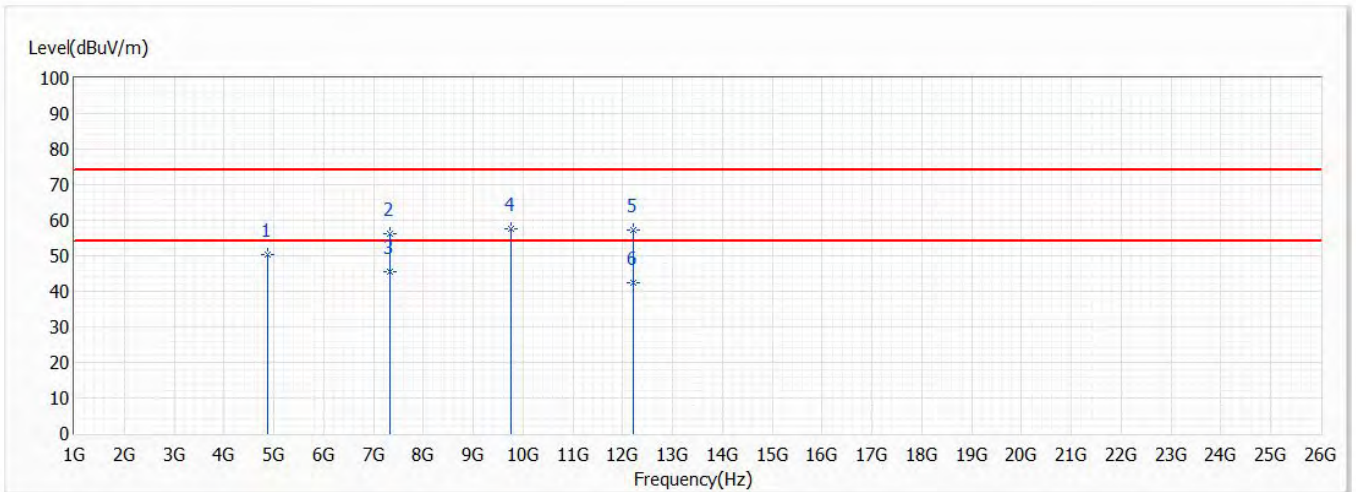


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	49.81	74.00	-24.19	61.64	-11.83	PK
2	7320.000	55.46	74.00	-18.54	59.81	-4.35	PK
* 3	7320.000	44.89	54.00	-9.11	49.24	-4.35	AV
4	9760.000	56.86	74.00	-17.14	58.13	-1.27	PK
5	12200.000	56.33	74.00	-17.67	53.75	2.58	PK
6	12200.000	42.29	54.00	-11.71	39.71	2.58	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW1M	Humidity (%RH)	61.0

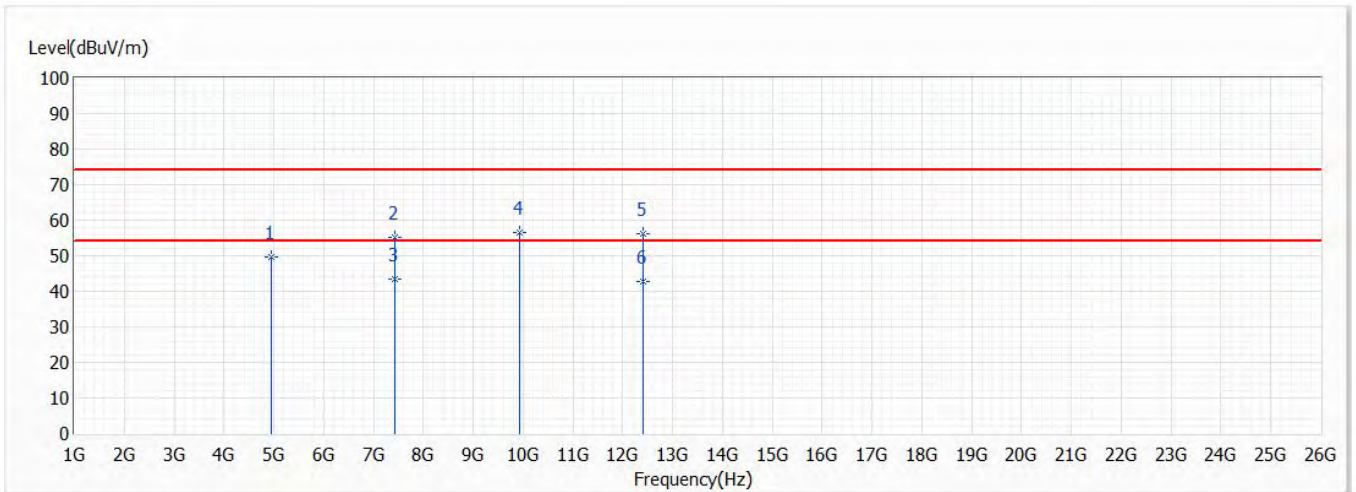


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	50.21	74.00	-23.79	62.04	-11.83	PK
2	7320.000	56.15	74.00	-17.85	60.50	-4.35	PK
* 3	7320.000	45.51	54.00	-8.49	49.86	-4.35	AV
4	9760.000	57.58	74.00	-16.42	58.85	-1.27	PK
5	12200.000	57.28	74.00	-16.72	54.70	2.58	PK
6	12200.000	42.41	54.00	-11.59	39.83	2.58	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

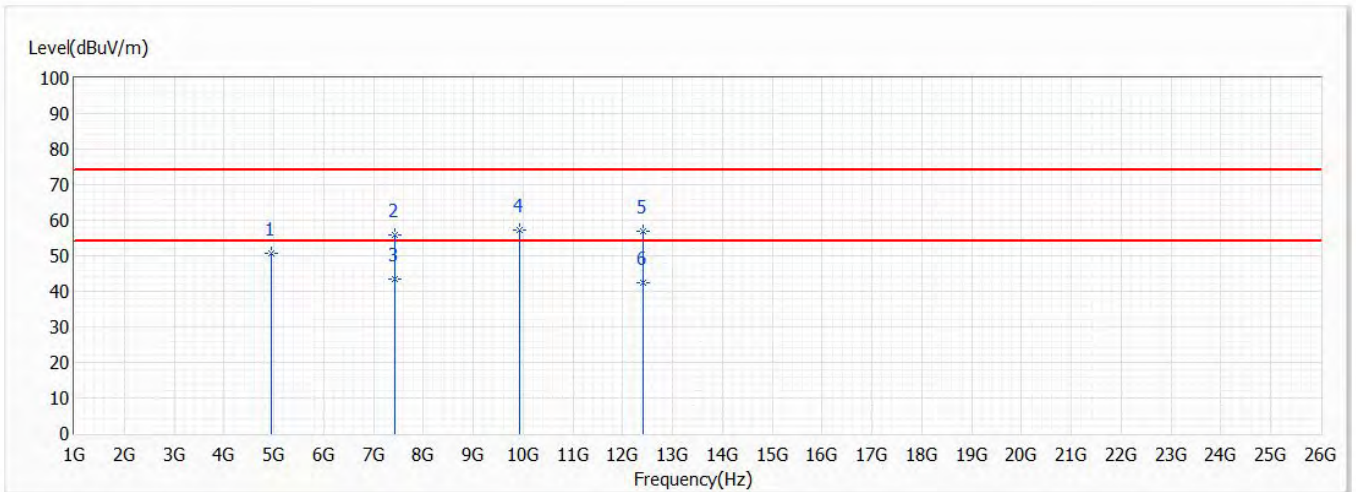


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	49.57	74.00	-24.43	61.17	-11.60	PK
2	7440.000	55.13	74.00	-18.87	59.14	-4.01	PK
* 3	7440.000	43.46	54.00	-10.54	47.47	-4.01	AV
4	9920.000	56.69	74.00	-17.31	57.88	-1.19	PK
5	12400.000	56.18	74.00	-17.82	53.84	2.34	PK
6	12400.000	42.74	54.00	-11.26	40.40	2.34	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

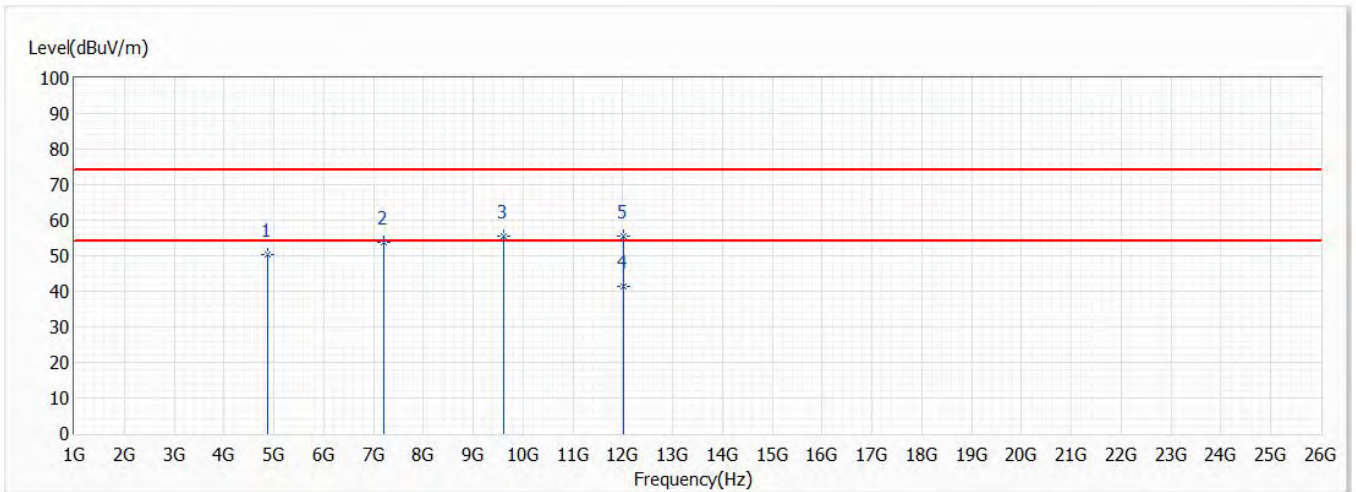


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	50.62	74.00	-23.38	62.22	-11.60	PK
2	7440.000	55.88	74.00	-18.12	59.89	-4.01	PK
* 3	7440.000	43.35	54.00	-10.65	47.36	-4.01	AV
4	9920.000	57.21	74.00	-16.79	58.40	-1.19	PK
5	12400.000	56.73	74.00	-17.27	54.39	2.34	PK
6	12400.000	43.36	54.00	-11.64	40.02	2.34	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW2M	Humidity (%RH)	61.0

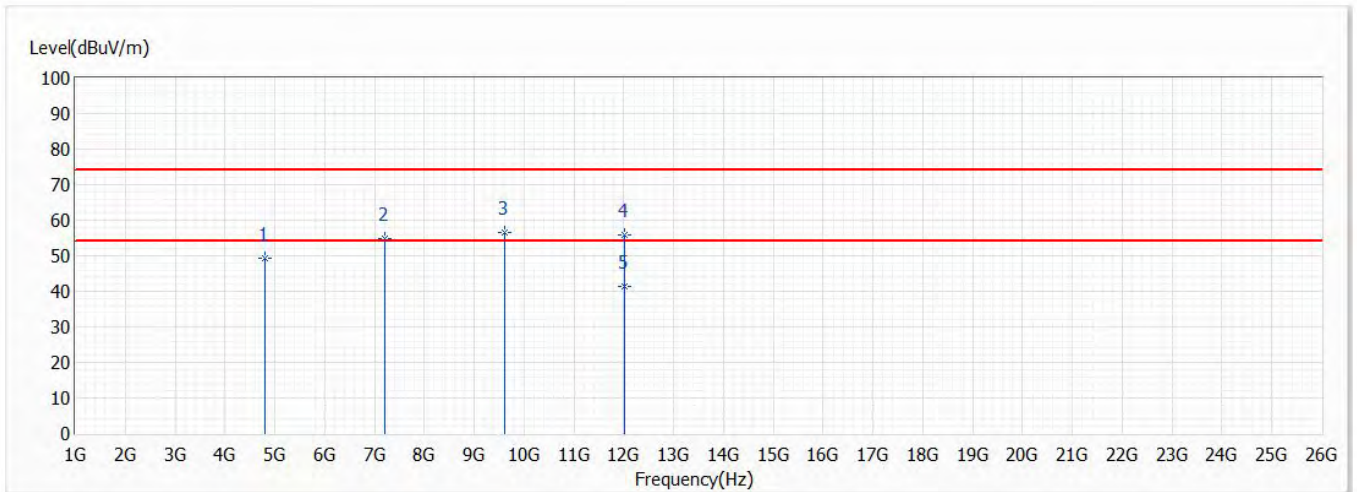


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	50.34	74.00	-23.66	62.17	-11.83	PK
2	7206.000	53.76	74.00	-20.24	58.44	-4.68	PK
3	9608.000	55.49	74.00	-18.51	56.82	-1.33	PK
* 4	12010.000	41.32	54.00	-12.68	38.51	2.81	AV
5	12010.000	55.37	74.00	-18.63	52.56	2.81	PK

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW2M	Humidity (%RH)	61.0

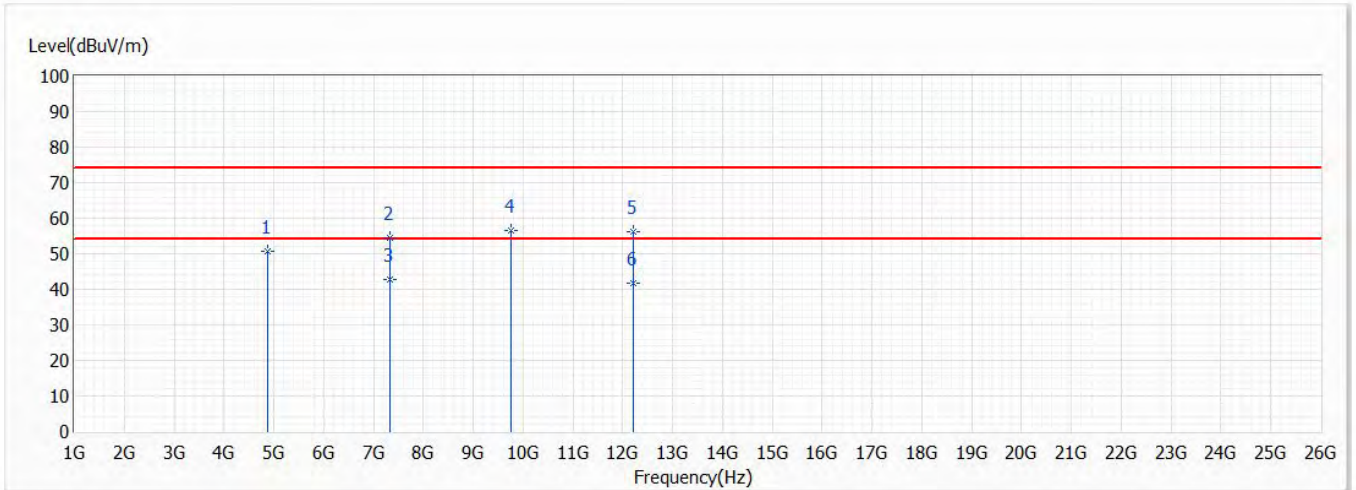


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	49.23	74.00	-24.77	61.26	-12.03	PK
2	7206.000	54.67	74.00	-19.33	59.35	-4.68	PK
3	9608.000	56.39	74.00	-17.61	57.72	-1.33	PK
4	12010.000	55.85	74.00	-18.15	53.04	2.81	PK
* 5	12010.000	41.53	54.00	-12.47	38.72	2.81	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW2M	Humidity (%RH)	61.0

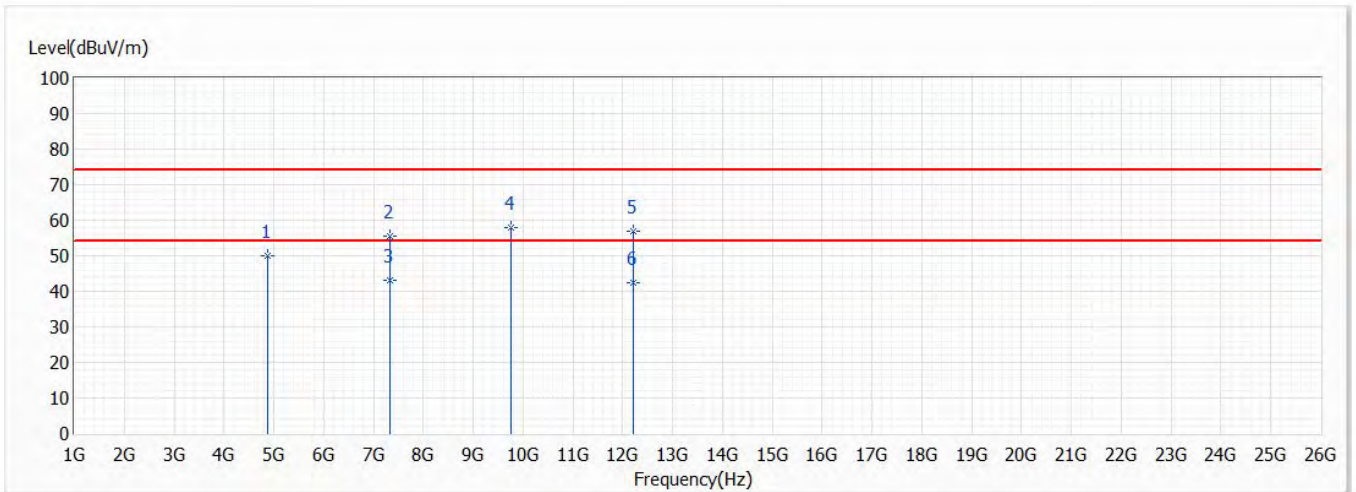


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	50.83	74.00	-23.17	62.66	-11.83	PK
2	7320.000	54.58	74.00	-19.42	58.93	-4.35	PK
* 3	7320.000	42.63	54.00	-11.37	46.98	-4.35	AV
4	9760.000	56.43	74.00	-17.57	57.70	-1.27	PK
5	12200.000	56.28	74.00	-17.72	53.70	2.58	PK
6	12200.000	41.87	54.00	-12.13	39.29	2.58	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW2M	Humidity (%RH)	61.0

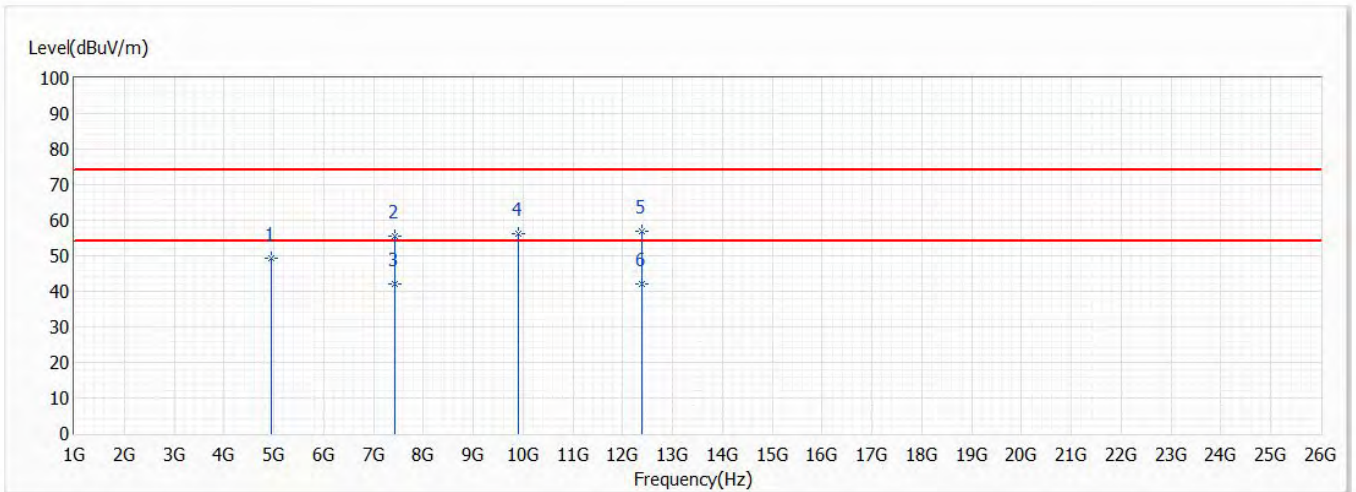


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	50.17	74.00	-23.83	62.00	-11.83	PK
2	7320.000	55.68	74.00	-18.32	60.03	-4.35	PK
* 3	7320.000	43.14	54.00	-10.86	47.49	-4.35	AV
4	9760.000	57.88	74.00	-16.12	59.15	-1.27	PK
5	12200.000	56.95	74.00	-17.05	54.37	2.58	PK
6	12200.000	42.33	54.00	-11.67	39.75	2.58	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478GHz,BW2M	Humidity (%RH)	61.0

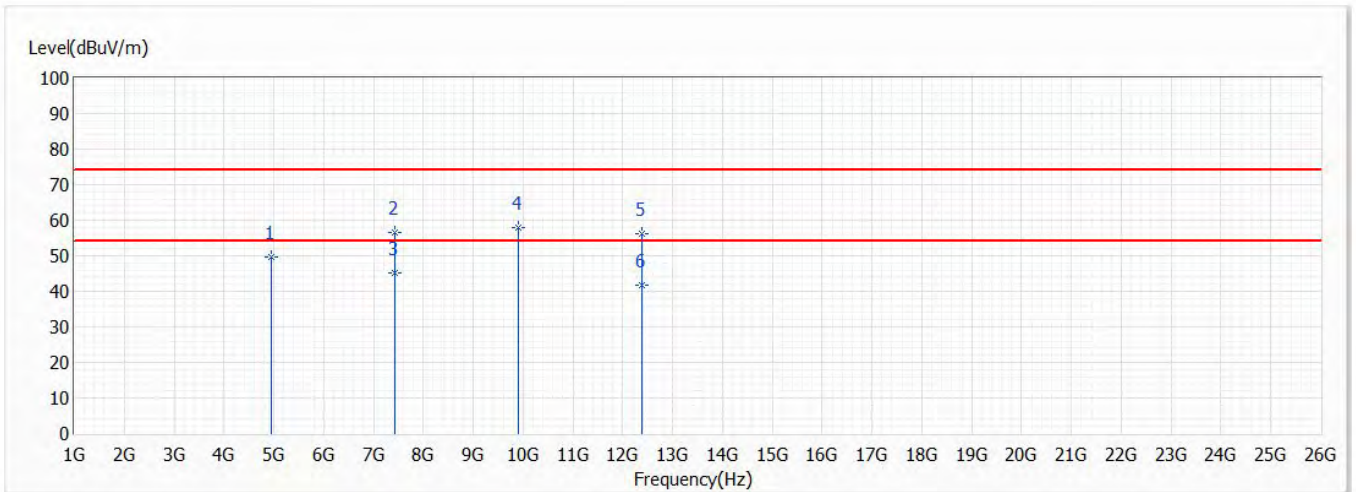


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4956.000	49.28	74.00	-24.72	60.90	-11.62	PK
2	7434.000	55.49	74.00	-18.51	59.51	-4.02	PK
* 3	7434.000	42.09	54.00	-11.91	46.11	-4.02	AV
4	9912.000	56.23	74.00	-17.77	57.43	-1.20	PK
5	12390.000	56.75	74.00	-17.25	54.39	2.36	PK
6	12390.000	41.98	54.00	-12.02	39.62	2.36	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478G,BW2M	Humidity (%RH)	61.0



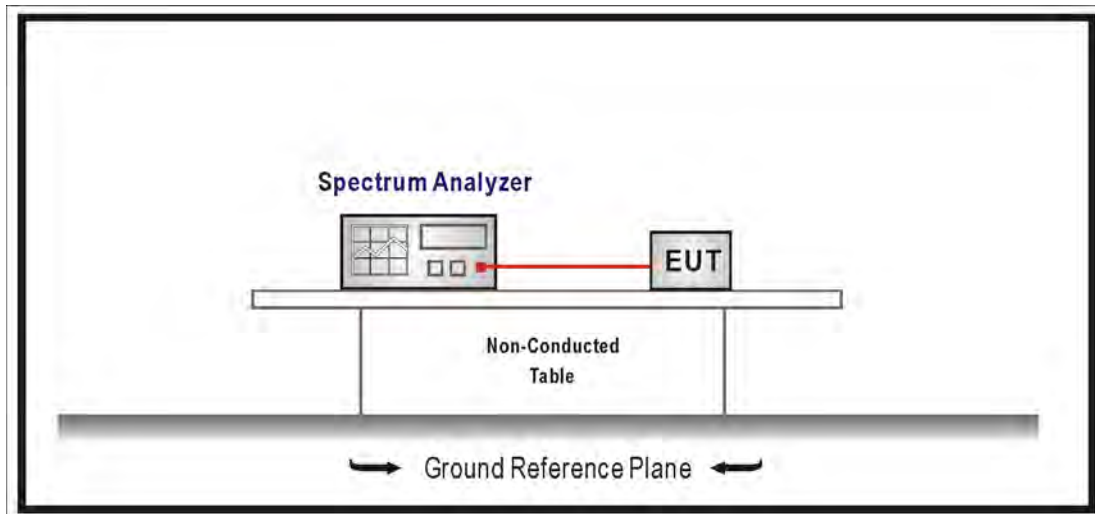
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4956.000	49.74	74.00	-24.26	61.36	-11.62	PK
2	7434.000	56.65	74.00	-17.35	60.67	-4.02	PK
* 3	7434.000	45.13	54.00	-8.87	49.15	-4.02	AV
4	9912.000	57.86	74.00	-16.14	59.06	-1.20	PK
5	12390.000	56.09	74.00	-17.91	53.73	2.36	PK
6	12390.000	41.65	54.00	-12.35	39.29	2.36	AV

Note:

1. “ * ”, means this data is the worst value.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.
4. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

5. RF antenna conducted test

5.1 Test Setup



5.2 Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

5.3 Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

5.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

5.5 Test Result

Product	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/04/16	Test Site	SR12-H
Temperature(°C)	25.5	Humidity (%RH)	62.0

GFSK_1M

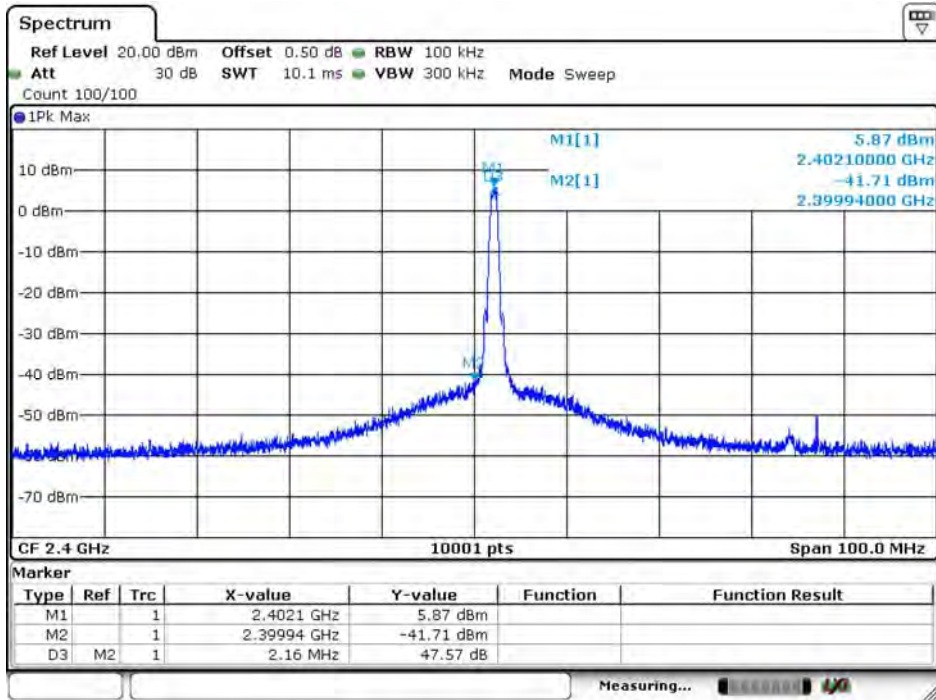
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)
00	2402	47.570	≥ 20
19	2440	55.730	≥ 20
39	2480	47.820	≥ 20

GFSK_2M

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)
00	2402	36.410	≥ 20
19	2440	52.250	≥ 20
38	2478	48.390	≥ 20

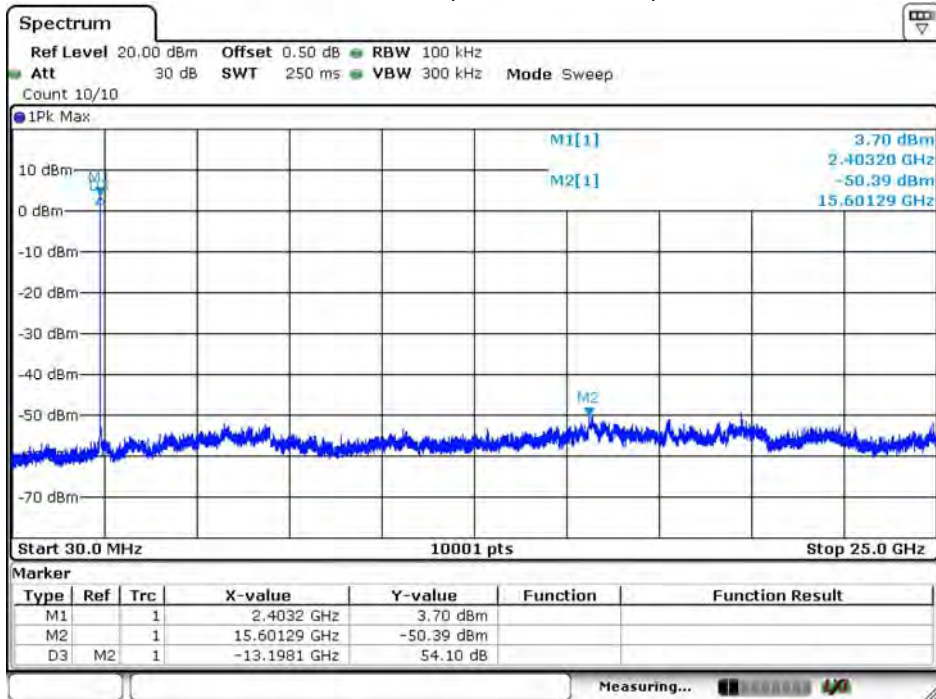
GFSK_1M

Channel 00



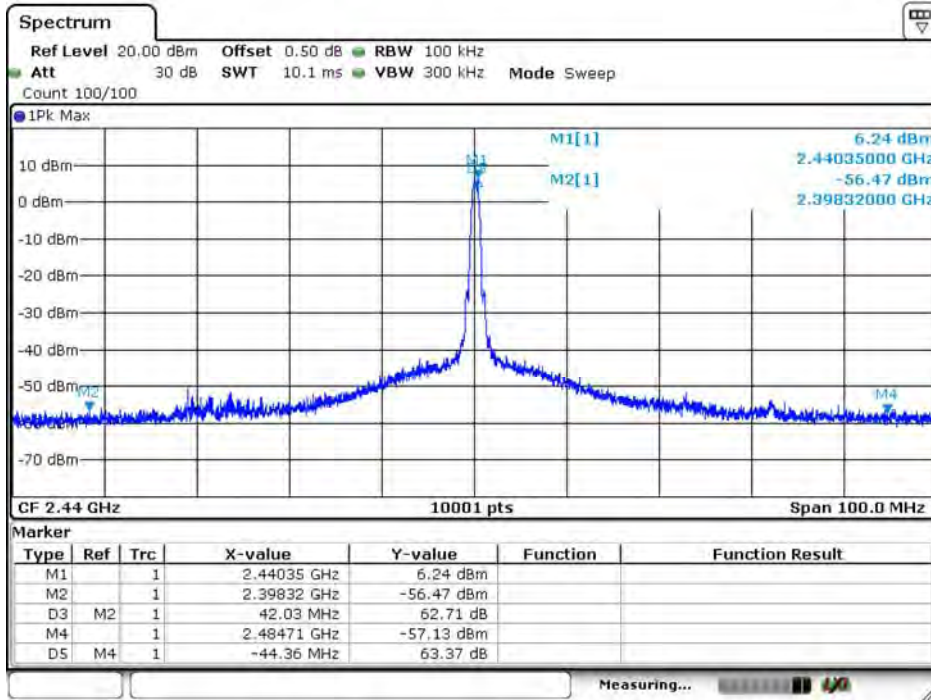
Date: 16.APR.2021 16:41:16

Channel 00 (30MHz-25GHz)



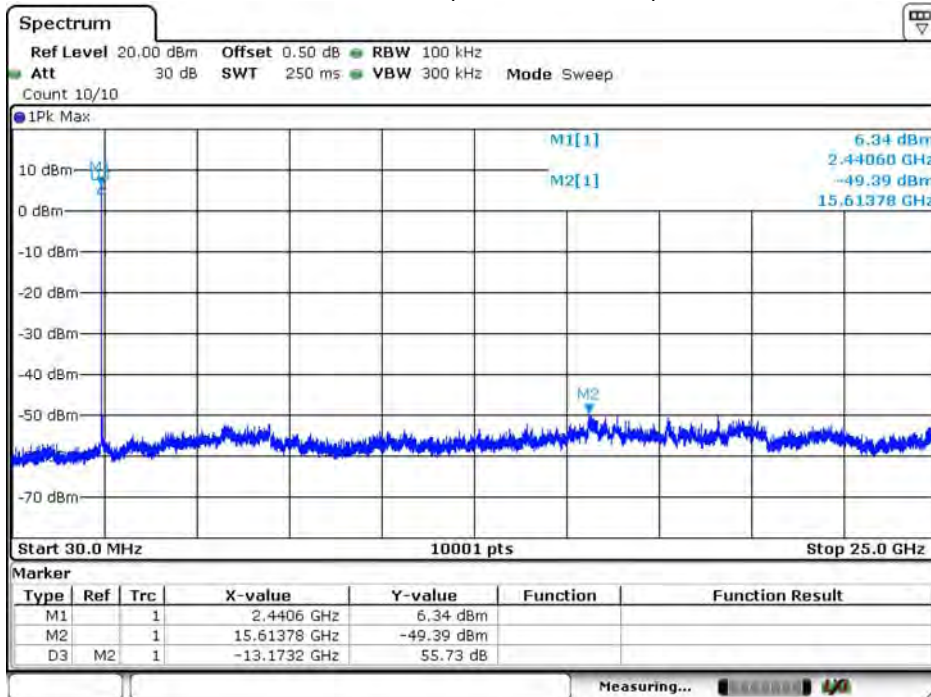
Date: 16.APR.2021 16:42:22

Channel 19



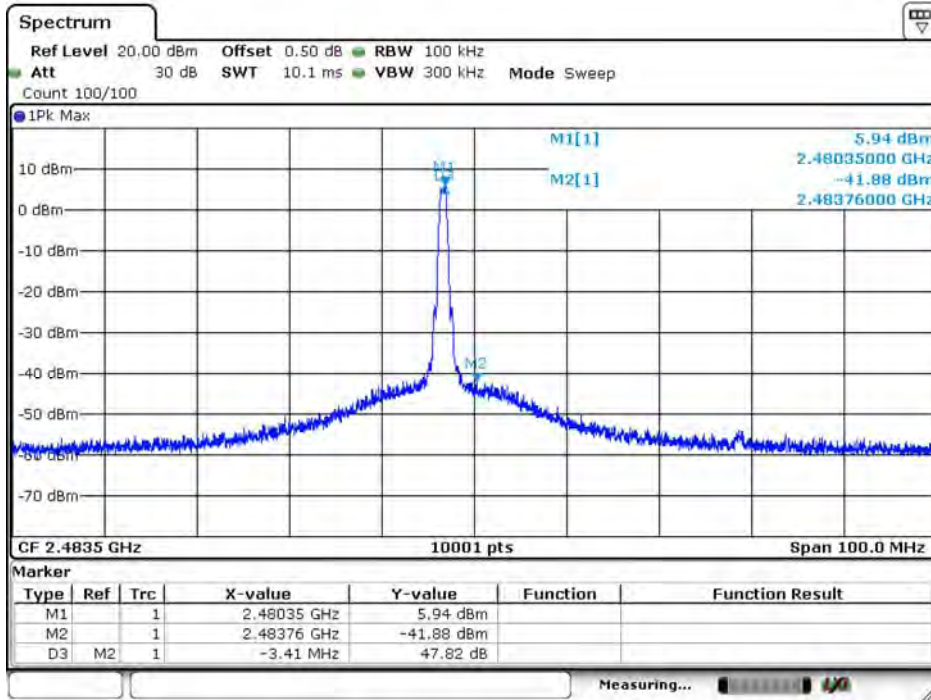
Date: 16 APR 2021 16:40:45

Channel 19 (30MHz-25GHz)



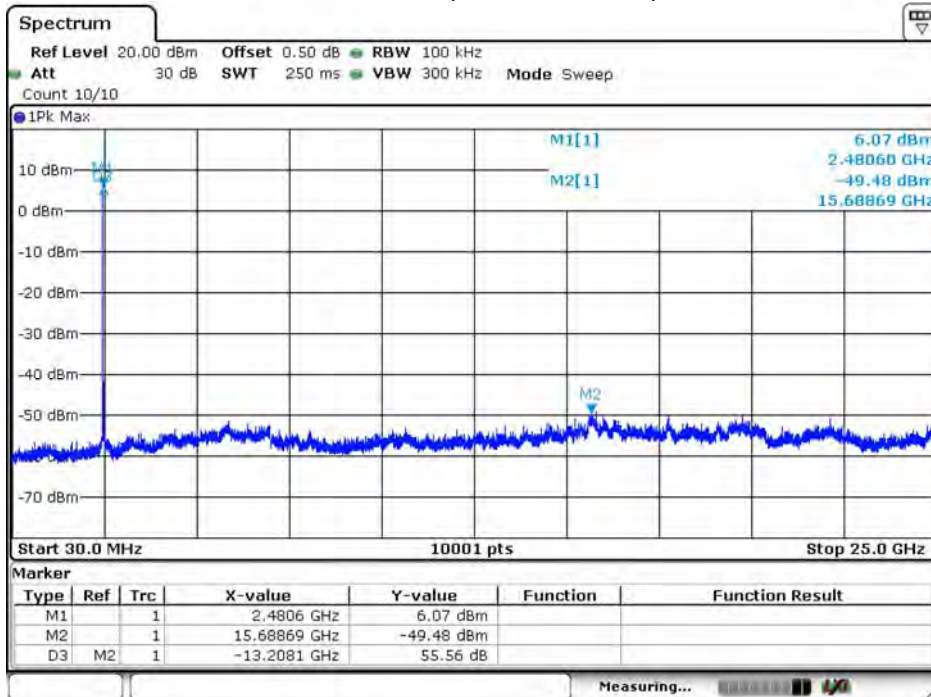
Date: 16 APR 2021 16:43:37

Channel 39



Date: 16 APR 2021 16:39:24

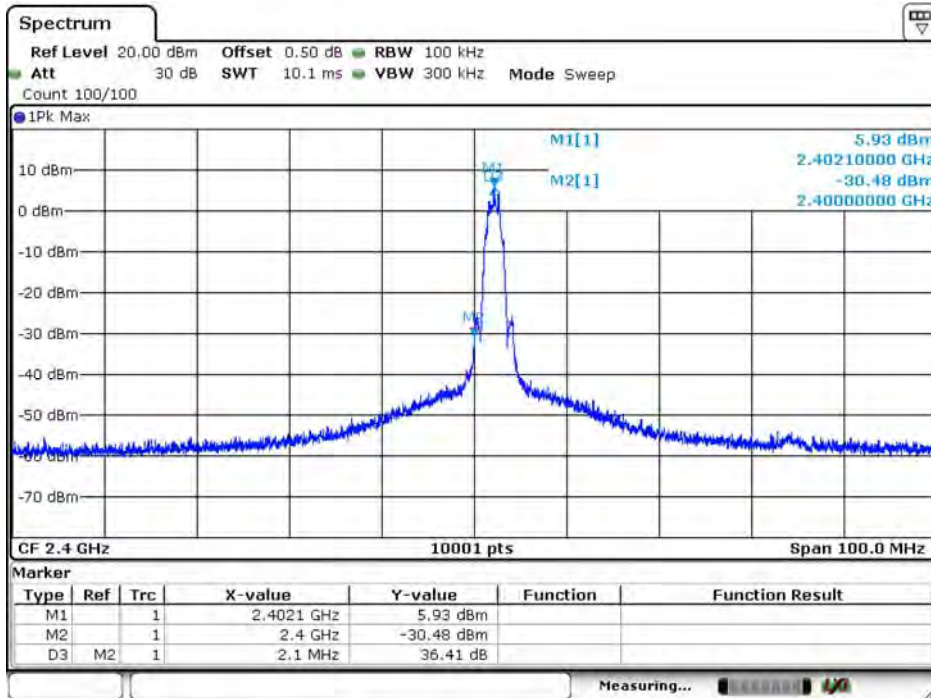
Channel 39 (30MHz-25GHz)



Date: 16 APR 2021 16:44:23

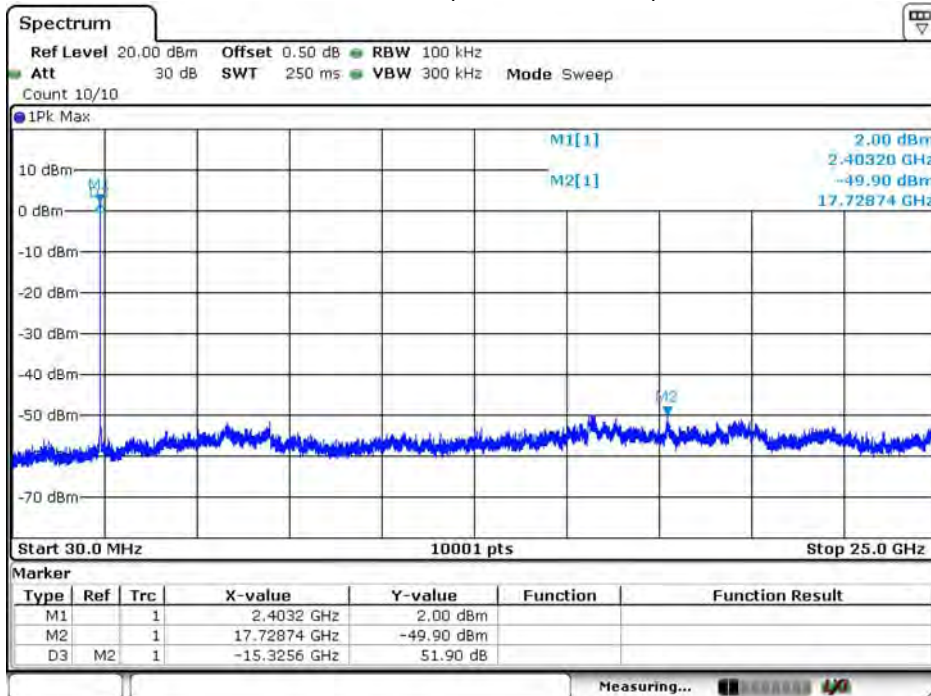
GFSK_2M

Channel 00



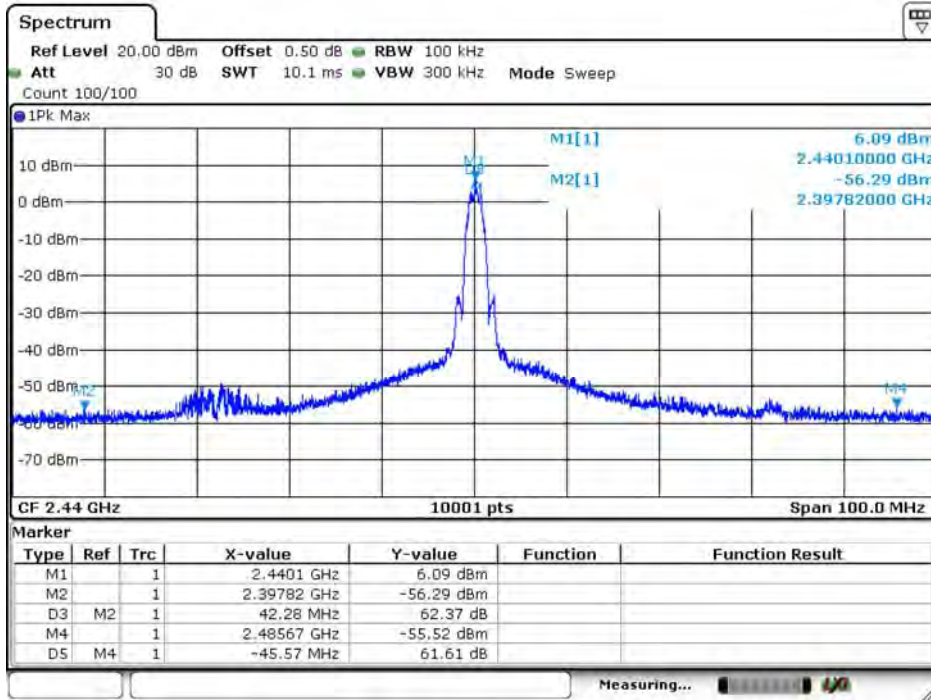
Date: 16 APR 2021 16:51:42

Channel 00 (30MHz-25GHz)



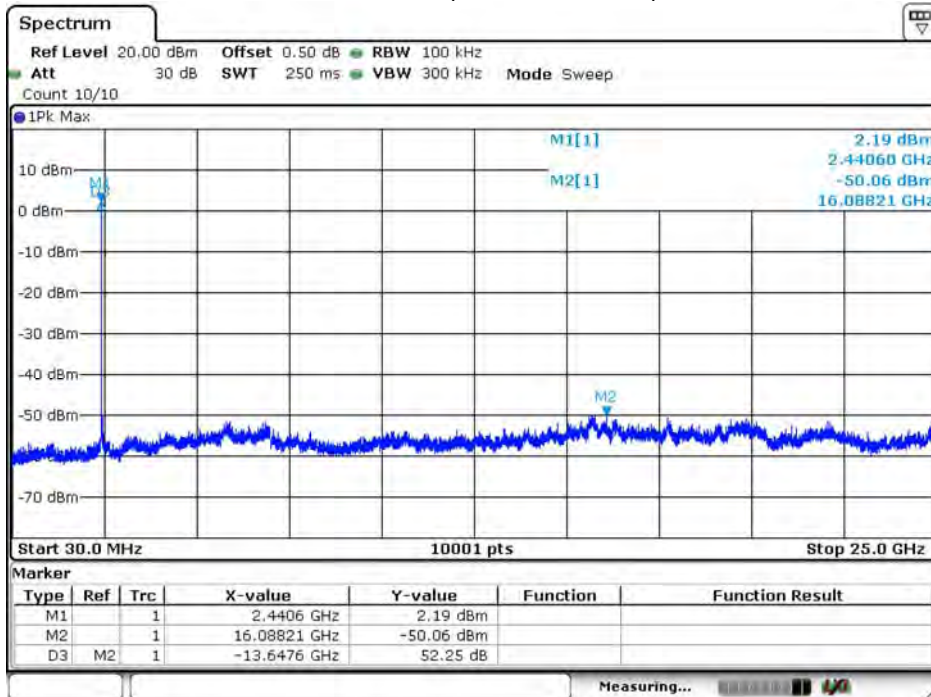
Date: 16 APR 2021 16:50:02

Channel 19



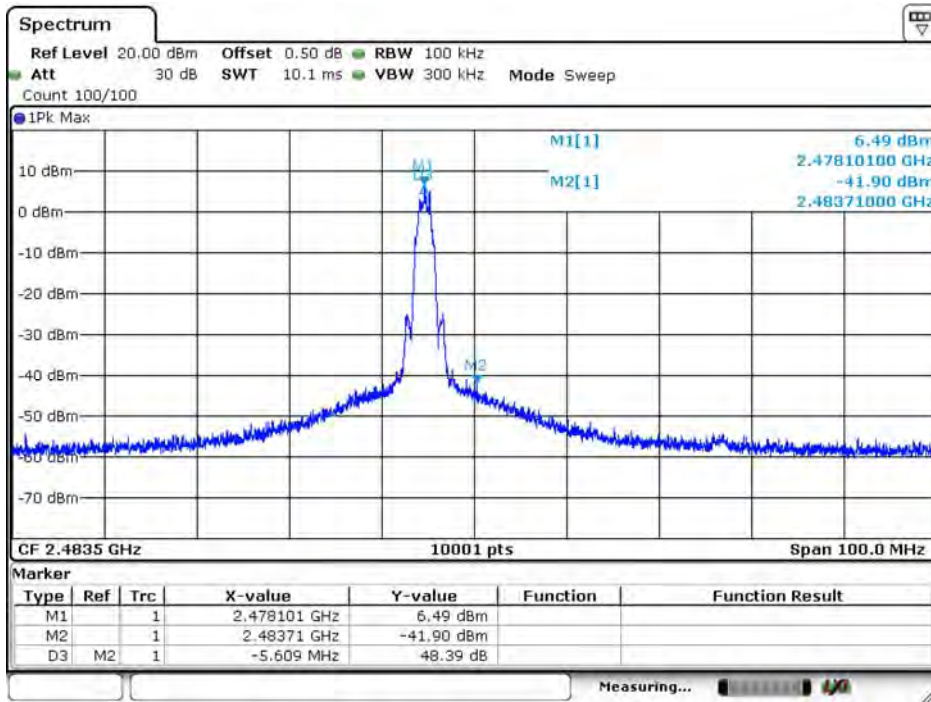
Date: 16 APR 2021 16:53:20

Channel 19 (30MHz-25GHz)



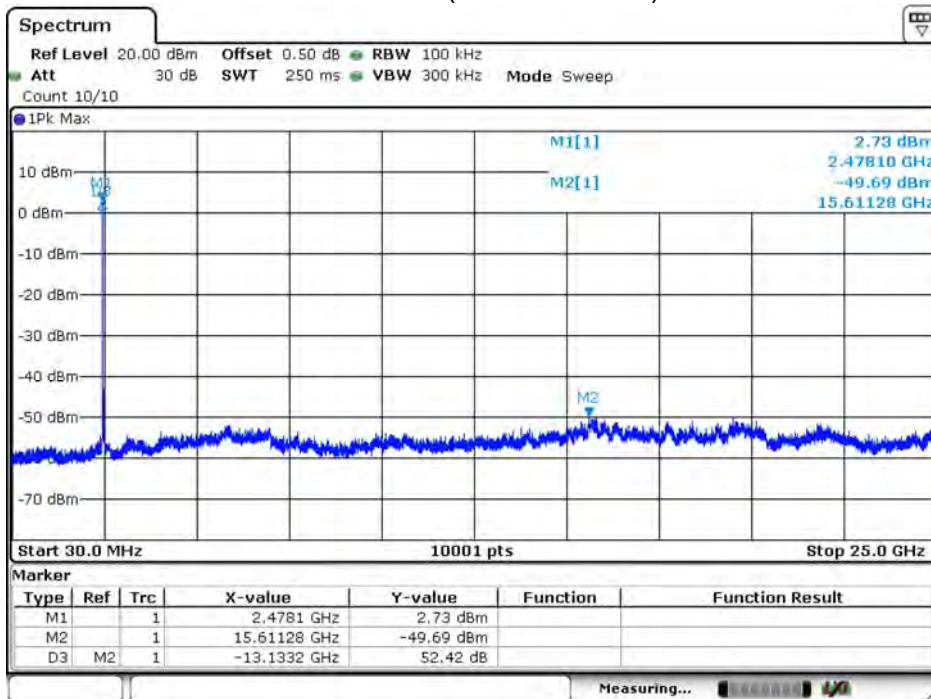
Date: 16 APR 2021 16:49:32

Channel 38



Date: 16 APR 2021 16:53:55

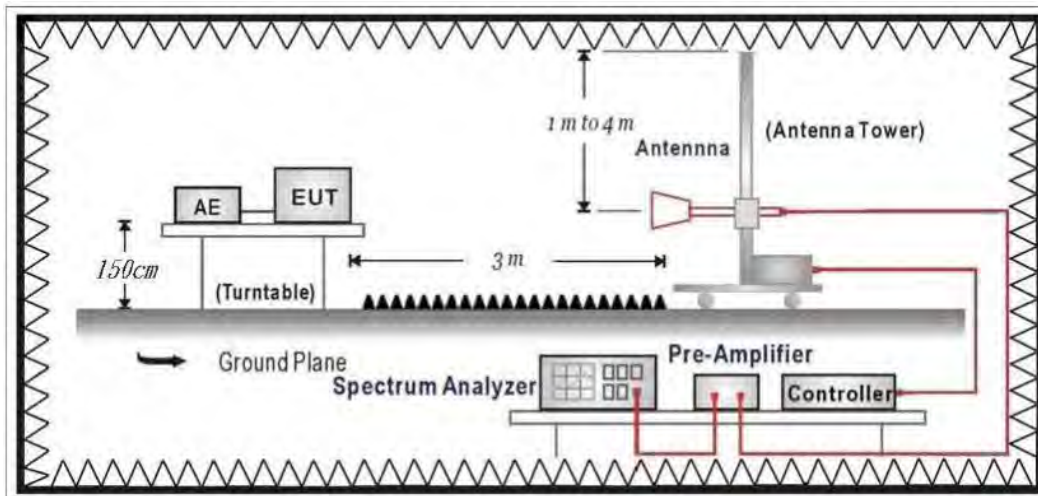
Channel 38 (30MHz-25GHz)



Date: 16 APR 2021 16:48:29

6. Band edge

6.1 Test Setup



6.2 Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.3 Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

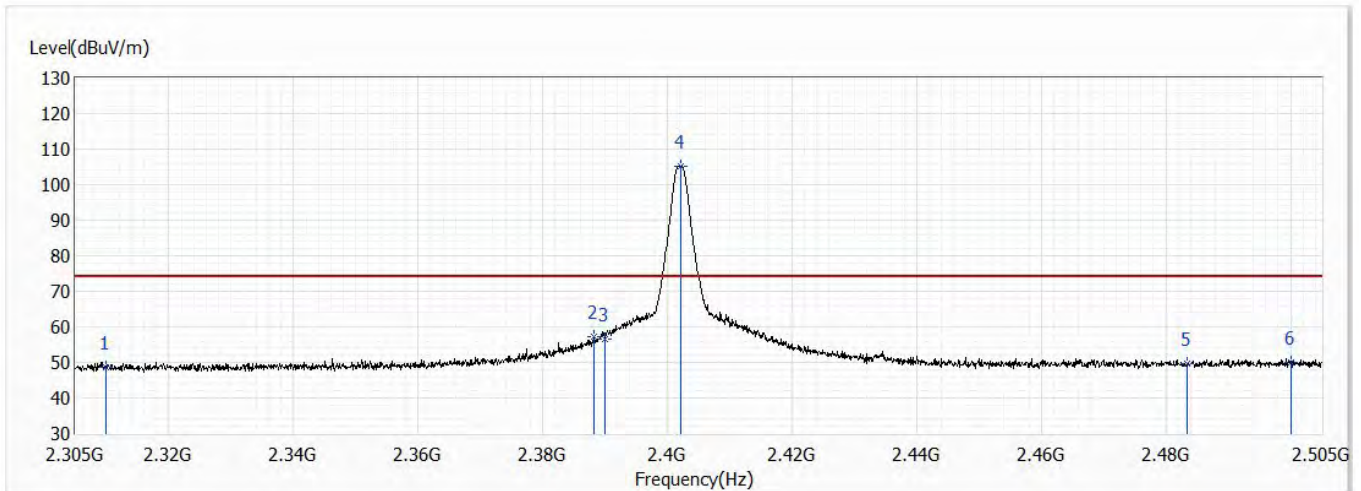
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

6.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

6.5 Test Result

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW1M	Humidity (%RH)	61.0

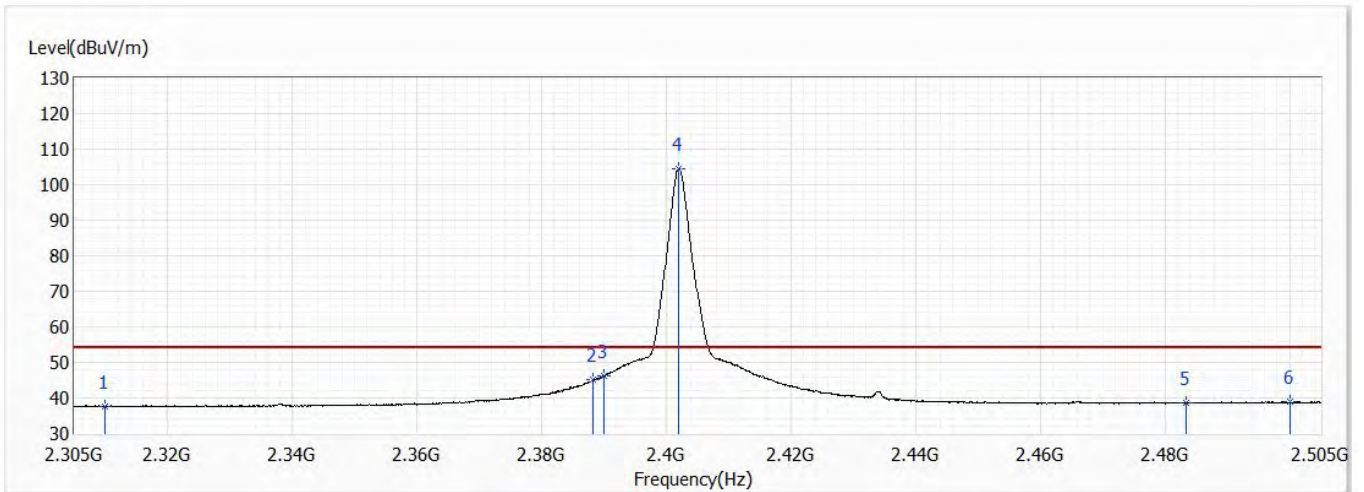


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	48.69	74.00	-25.31	35.54	13.15	PK
2	2388.200	57.11	74.00	-16.89	43.41	13.70	PK
3	2390.000	56.49	74.00	-17.51	42.79	13.70	PK
! 4	2402.200	105.34	74.00	31.34	91.55	13.79	PK
5	2483.500	49.62	74.00	-24.38	35.26	14.36	PK
6	2500.000	49.89	74.00	-24.11	35.41	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW1M	Humidity (%RH)	61.0

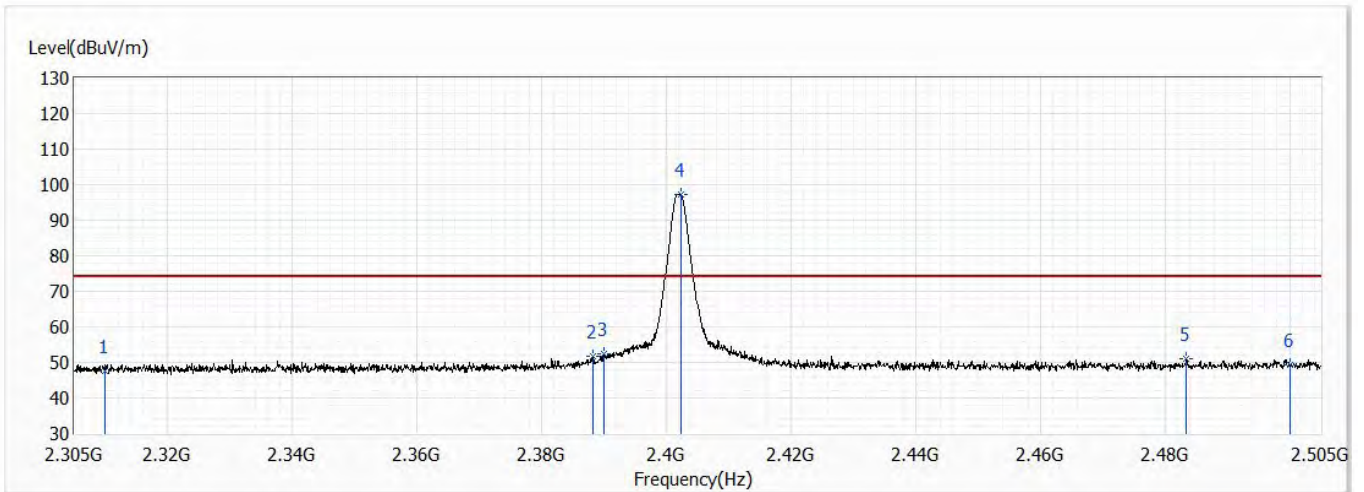


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.66	54.00	-16.34	24.51	13.15	AV
2	2388.300	45.02	54.00	-8.98	31.32	13.70	AV
3	2390.000	46.10	54.00	-7.90	32.40	13.70	AV
! 4	2402.000	104.48	54.00	50.48	90.69	13.79	AV
5	2483.500	38.64	54.00	-15.36	24.28	14.36	AV
6	2500.000	38.82	54.00	-15.18	24.34	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW1M	Humidity (%RH)	61.0

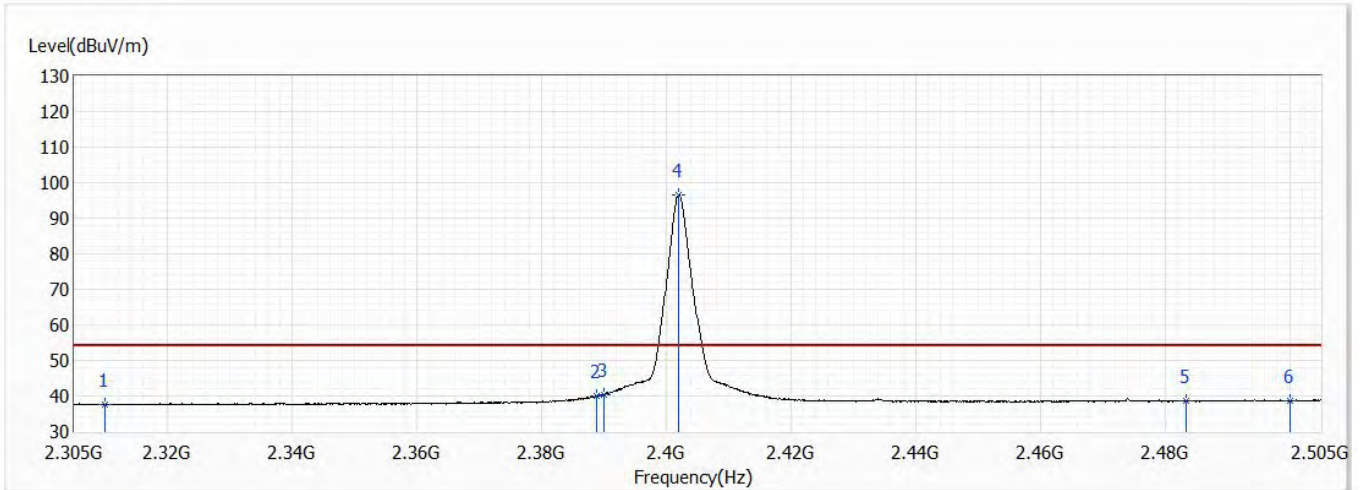


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	47.59	74.00	-26.41	34.44	13.15	PK
2	2388.200	51.89	74.00	-22.11	38.19	13.70	PK
3	2390.000	52.34	74.00	-21.66	38.64	13.70	PK
! 4	2402.300	97.31	74.00	23.31	83.52	13.79	PK
5	2483.500	51.00	74.00	-23.00	36.64	14.36	PK
6	2500.000	49.15	74.00	-24.85	34.67	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW1M	Humidity (%RH)	61.0

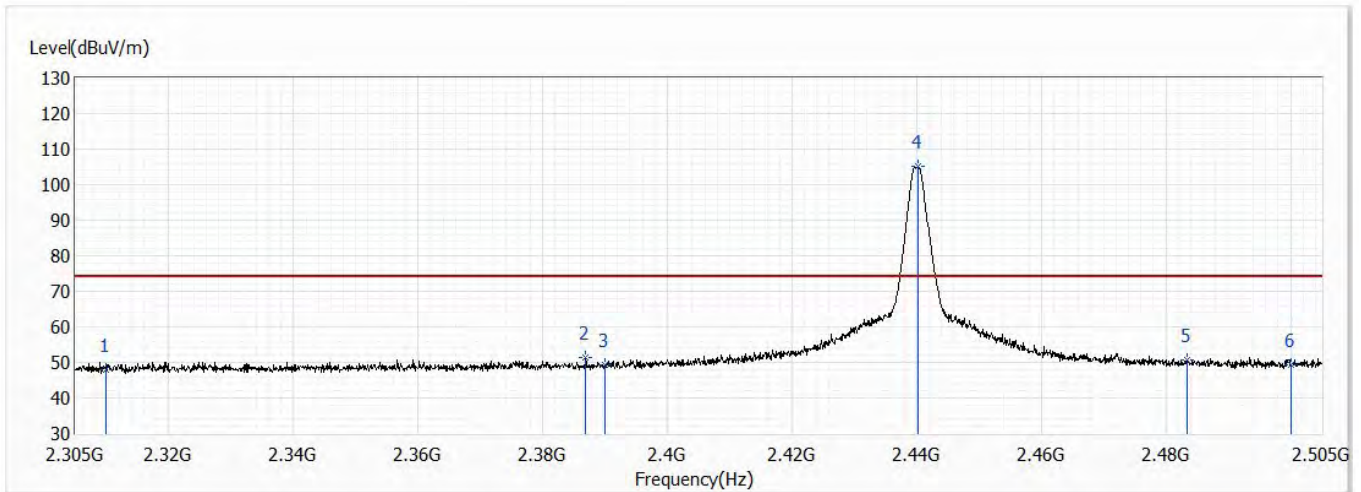


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.52	54.00	-16.48	24.37	13.15	AV
2	2388.800	40.05	54.00	-13.95	26.35	13.70	AV
3	2390.000	40.41	54.00	-13.59	26.71	13.70	AV
! 4	2402.000	96.47	54.00	42.47	82.68	13.79	AV
5	2483.500	38.64	54.00	-15.36	24.28	14.36	AV
6	2500.000	38.68	54.00	-15.32	24.20	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW1M	Humidity (%RH)	61.0

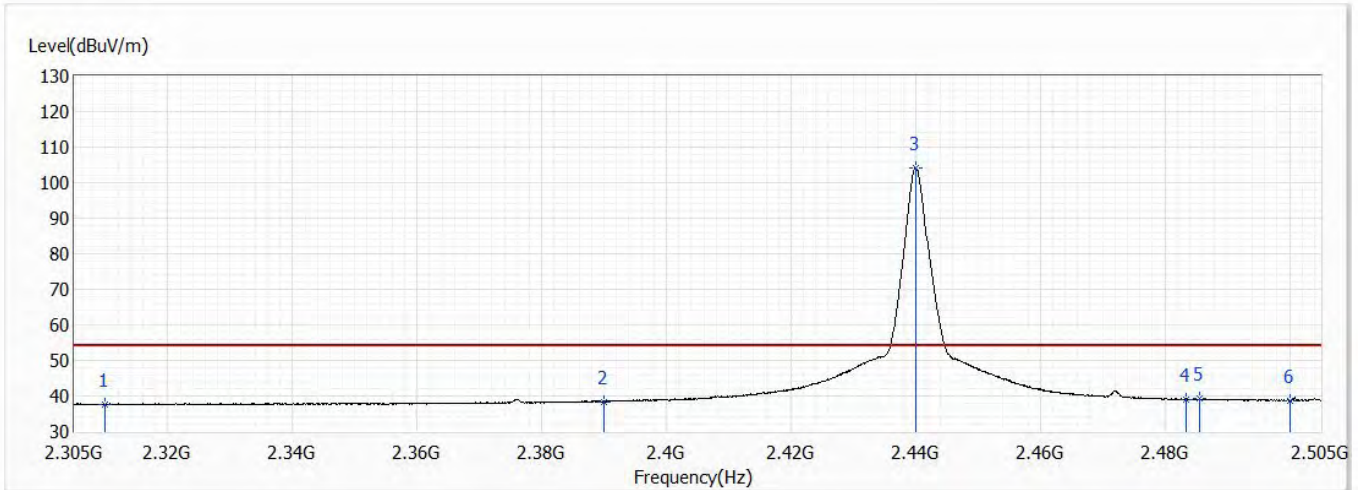


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	47.85	74.00	-26.15	34.70	13.15	PK
2	2386.900	51.28	74.00	-22.72	37.60	13.68	PK
3	2390.000	49.19	74.00	-24.81	35.49	13.70	PK
! 4	2440.300	105.04	74.00	31.04	90.98	14.06	PK
5	2483.500	50.70	74.00	-23.30	36.34	14.36	PK
6	2500.000	49.36	74.00	-24.64	34.88	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW1M	Humidity (%RH)	61.0

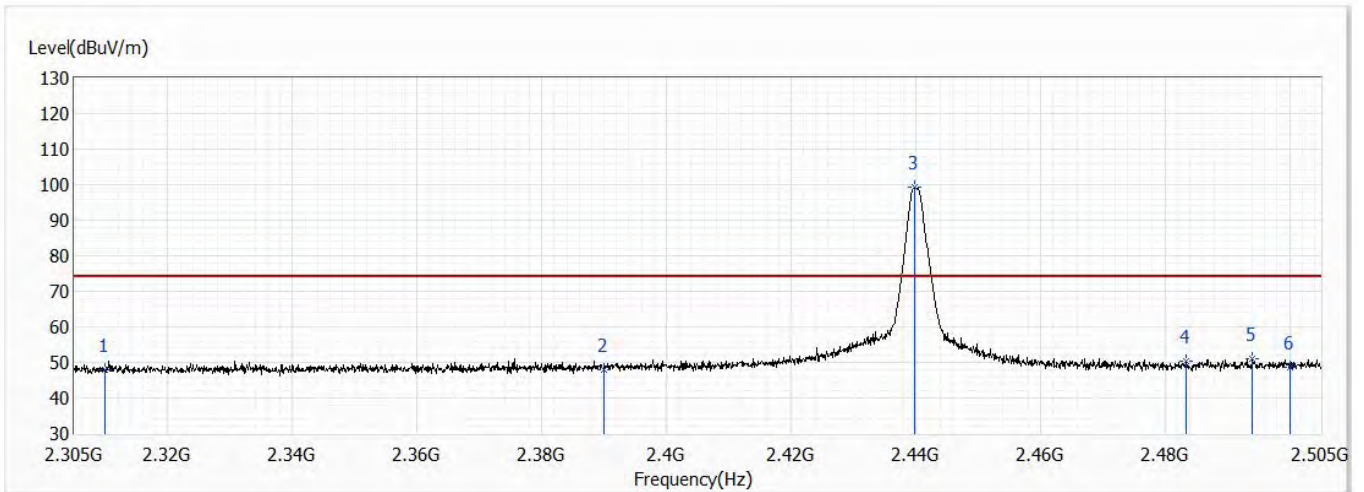


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.62	54.00	-16.38	24.47	13.15	AV
2	2390.000	38.40	54.00	-15.60	24.70	13.70	AV
! 3	2440.000	104.17	54.00	50.17	90.12	14.05	AV
4	2483.500	38.99	54.00	-15.01	24.63	14.36	AV
5	2485.500	39.24	54.00	-14.76	24.86	14.38	AV
6	2500.000	38.68	54.00	-15.32	24.20	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW1M	Humidity (%RH)	61.0

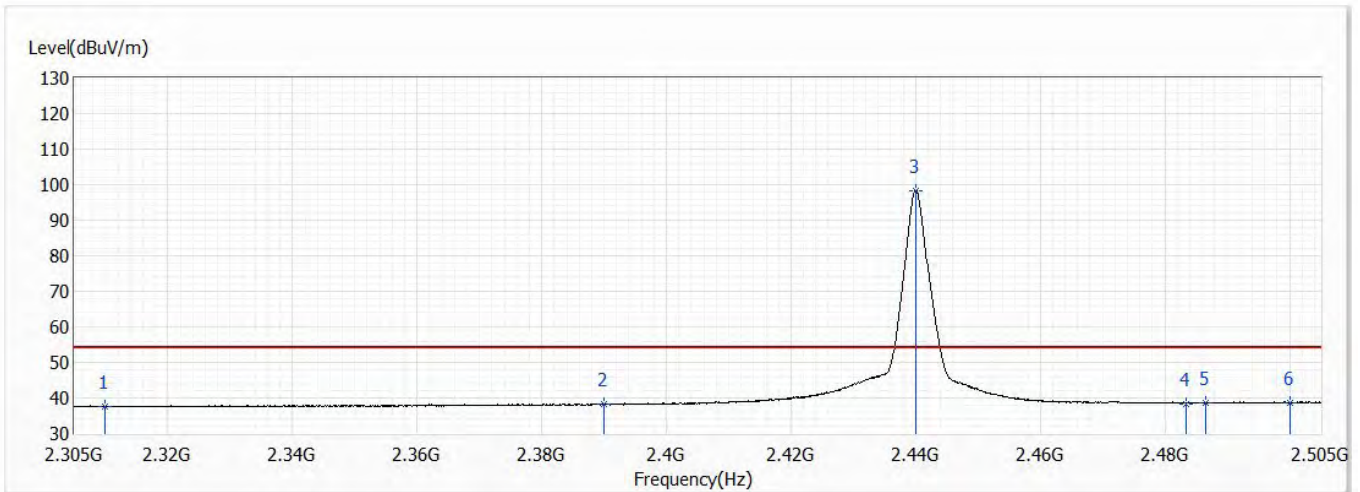


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	47.86	74.00	-26.14	34.71	13.15	PK
2	2390.000	47.94	74.00	-26.06	34.24	13.70	PK
! 3	2439.800	99.15	74.00	25.15	85.10	14.05	PK
4	2483.500	50.23	74.00	-23.77	35.87	14.36	PK
5	2494.100	51.16	74.00	-22.84	36.72	14.44	PK
6	2500.000	48.45	74.00	-25.55	33.97	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW1M	Humidity (%RH)	61.0

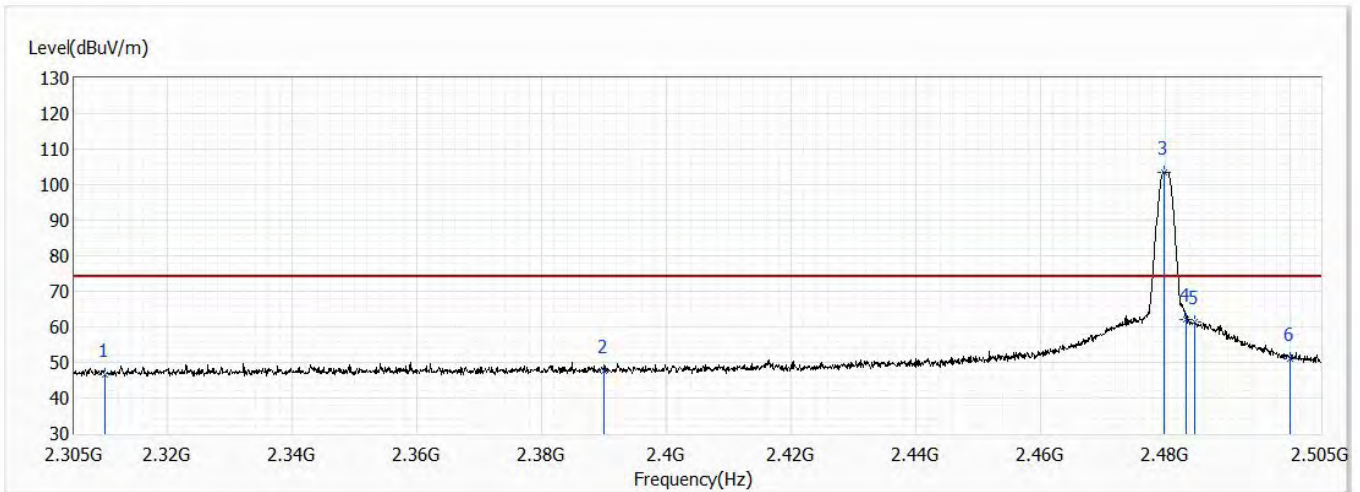


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.65	54.00	-16.35	24.50	13.15	AV
2	2390.000	38.11	54.00	-15.89	24.41	13.70	AV
! 3	2440.000	98.34	54.00	44.34	84.29	14.05	AV
4	2483.500	38.44	54.00	-15.56	24.08	14.36	AV
5	2486.500	38.72	54.00	-15.28	24.33	14.39	AV
6	2500.000	38.74	54.00	-15.26	24.26	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

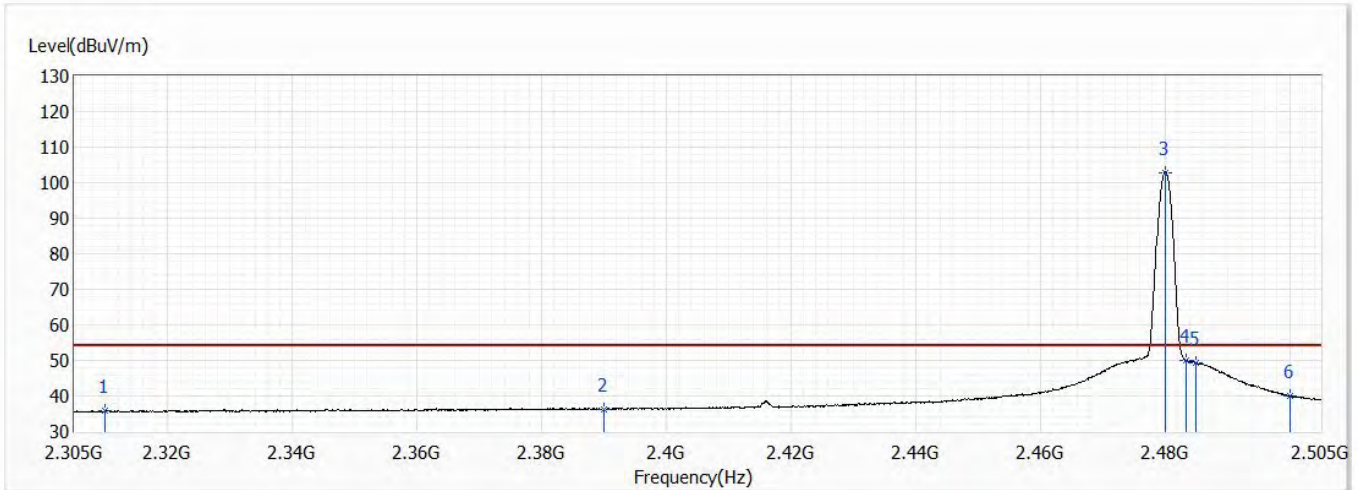


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	46.48	74.00	-27.52	33.33	13.15	PK
2	2390.000	47.72	74.00	-26.28	34.02	13.70	PK
! 3	2479.800	103.62	74.00	29.62	89.28	14.34	PK
4	2483.500	61.93	74.00	-12.07	47.57	14.36	PK
5	2484.800	61.35	74.00	-12.65	46.98	14.37	PK
6	2500.000	51.07	74.00	-22.93	36.59	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

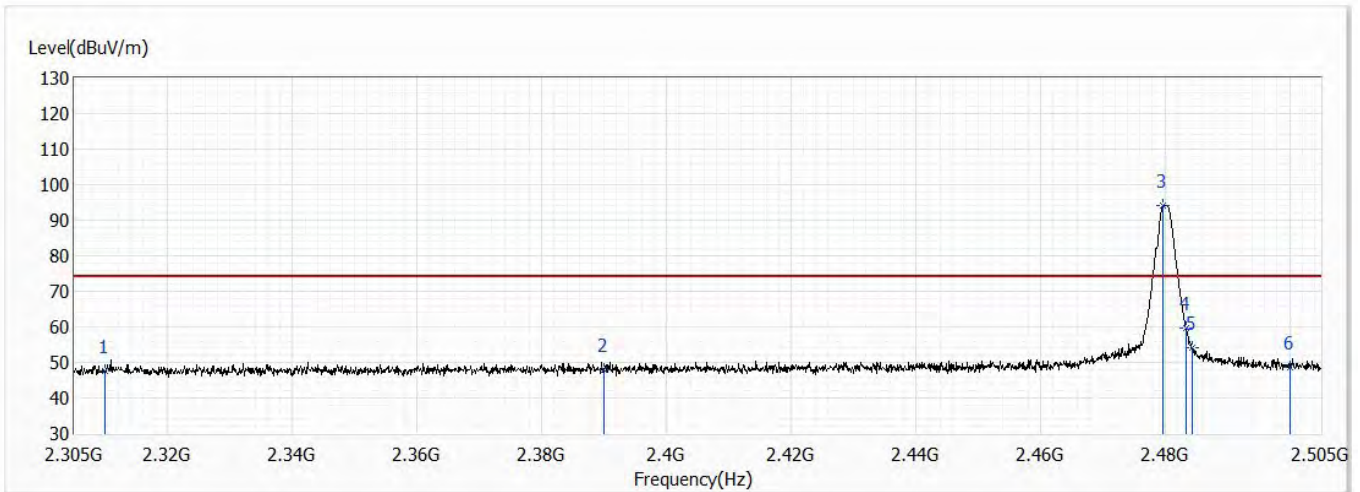


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	35.72	54.00	-18.28	22.57	13.15	AV
2	2390.000	36.27	54.00	-17.73	22.57	13.70	AV
! 3	2480.000	102.93	54.00	48.93	88.59	14.34	AV
4	2483.500	50.03	54.00	-3.97	35.67	14.36	AV
5	2484.900	49.34	54.00	-4.66	34.97	14.37	AV
6	2500.000	40.02	54.00	-13.98	25.54	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

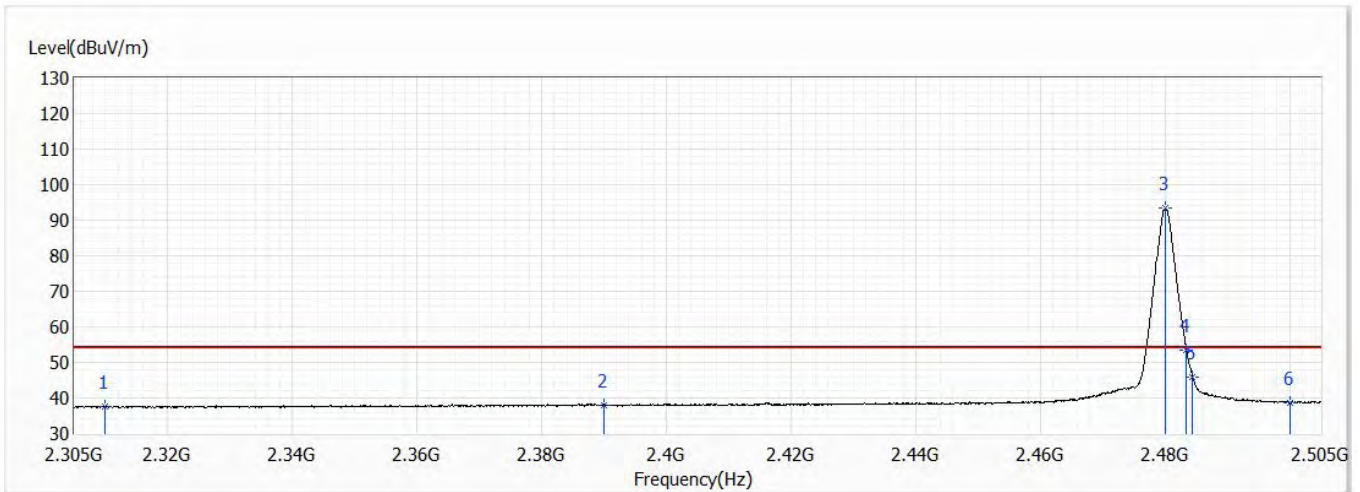


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	47.50	74.00	-26.50	34.35	13.15	PK
2	2390.000	47.89	74.00	-26.11	34.19	13.70	PK
! 3	2479.700	94.27	74.00	20.27	79.93	14.34	PK
4	2483.500	59.50	74.00	-14.50	45.14	14.36	PK
5	2484.400	53.99	74.00	-20.01	39.63	14.36	PK
6	2500.000	48.67	74.00	-25.33	34.19	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 39,2.48GHz,BW1M	Humidity (%RH)	61.0

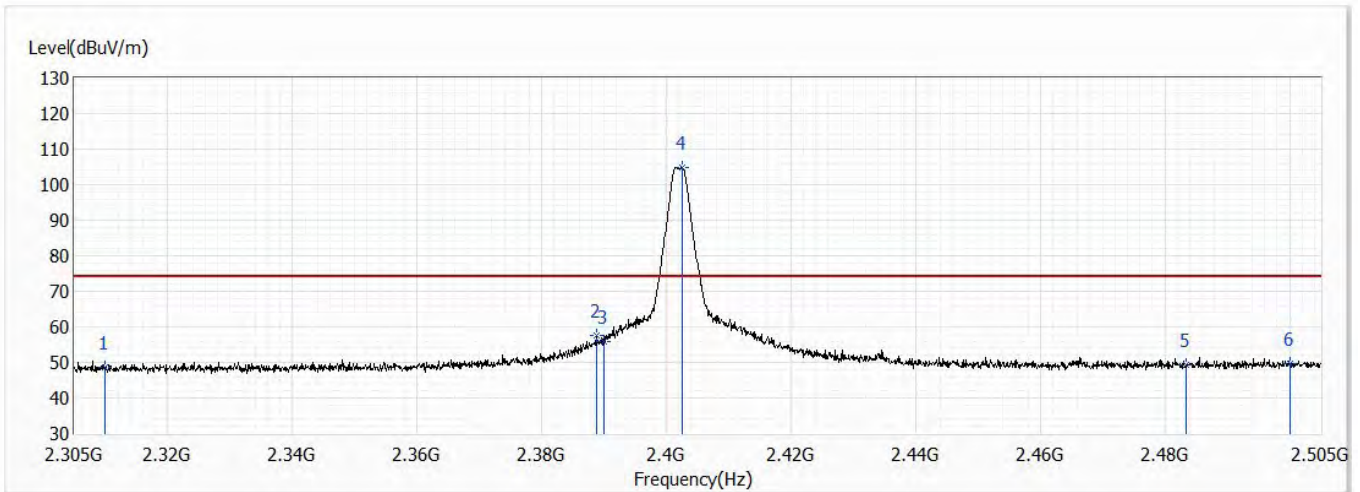


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.59	54.00	-16.41	24.44	13.15	AV
2	2390.000	37.83	54.00	-16.17	24.13	13.70	AV
! 3	2480.000	93.32	54.00	39.32	78.98	14.34	AV
4	2483.500	53.57	54.00	-0.43	39.21	14.36	AV
5	2484.400	45.92	54.00	-8.08	31.56	14.36	AV
6	2500.000	38.75	54.00	-15.25	24.27	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW2M	Humidity (%RH)	61.0

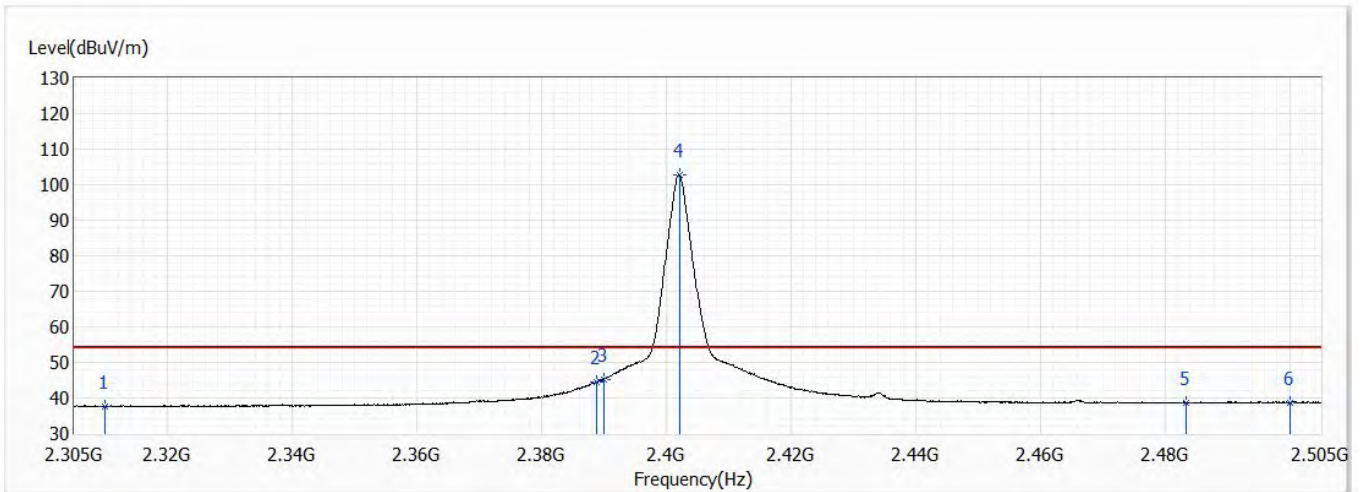


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	48.73	74.00	-25.27	35.58	13.15	PK
2	2388.800	57.61	74.00	-16.39	43.91	13.70	PK
3	2390.000	55.87	74.00	-18.13	42.17	13.70	PK
! 4	2402.600	104.78	74.00	30.78	90.99	13.79	PK
5	2483.500	49.36	74.00	-24.64	35.00	14.36	PK
6	2500.000	49.50	74.00	-24.50	35.02	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW2M	Humidity (%RH)	61.0

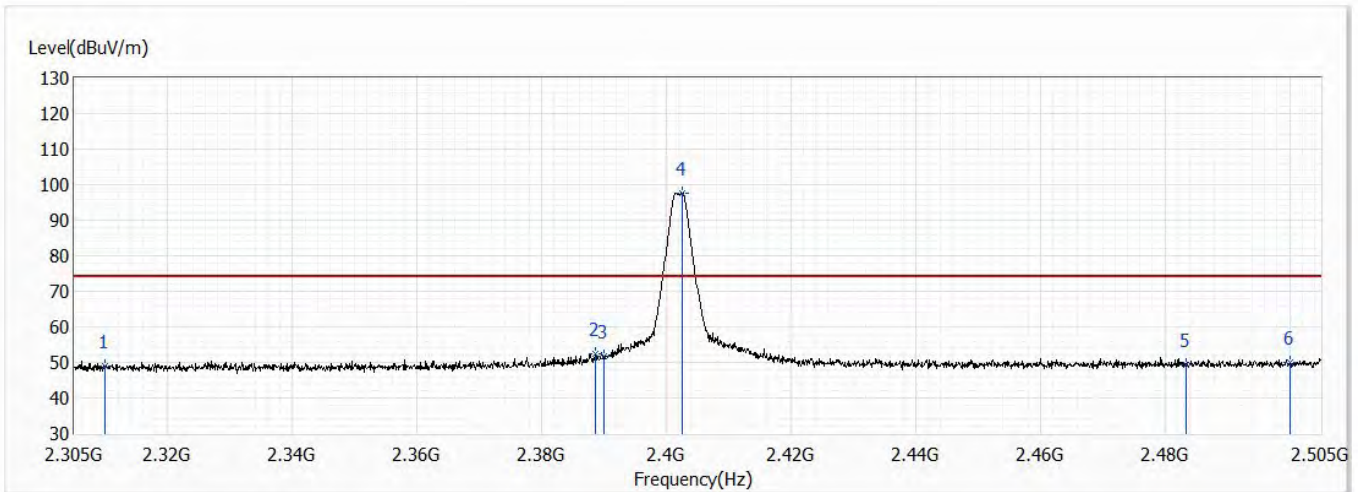


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.61	54.00	-16.39	24.46	13.15	AV
2	2388.800	44.51	54.00	-9.49	30.81	13.70	AV
3	2390.000	45.25	54.00	-8.75	31.55	13.70	AV
! 4	2402.100	102.73	54.00	48.73	88.94	13.79	AV
5	2483.500	38.69	54.00	-15.31	24.33	14.36	AV
6	2500.000	38.76	54.00	-15.24	24.28	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW2M	Humidity (%RH)	61.0

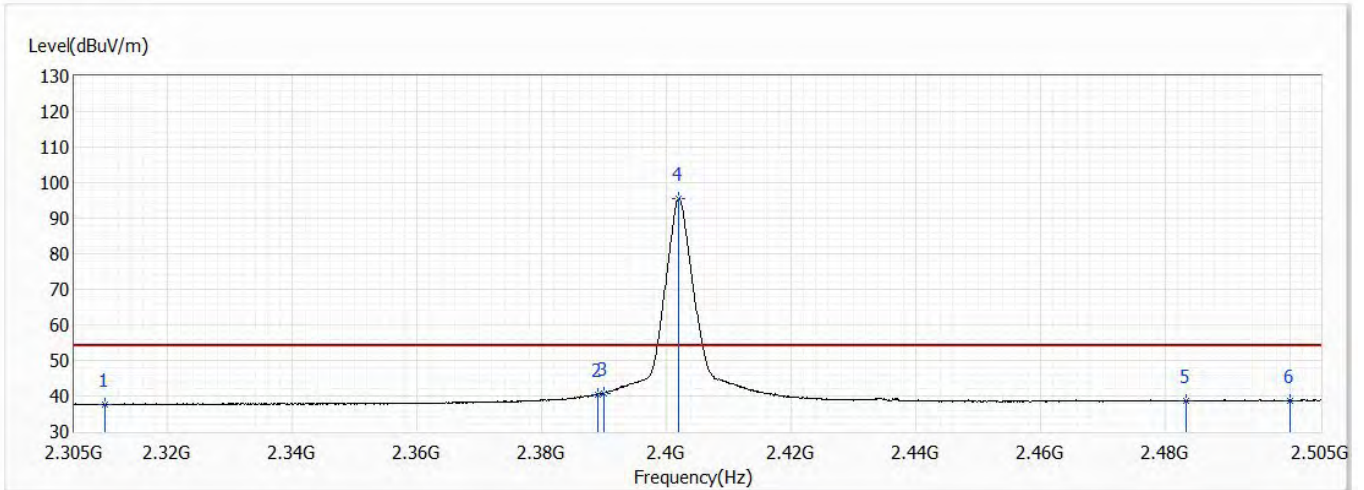


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	48.95	74.00	-25.05	35.80	13.15	PK
2	2388.700	52.42	74.00	-21.58	38.72	13.70	PK
3	2390.000	51.79	74.00	-22.21	38.09	13.70	PK
! 4	2402.500	97.70	74.00	23.70	83.91	13.79	PK
5	2483.500	49.48	74.00	-24.52	35.12	14.36	PK
6	2500.000	50.00	74.00	-24.00	35.52	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 0,2.402GHz,BW2M	Humidity (%RH)	61.0

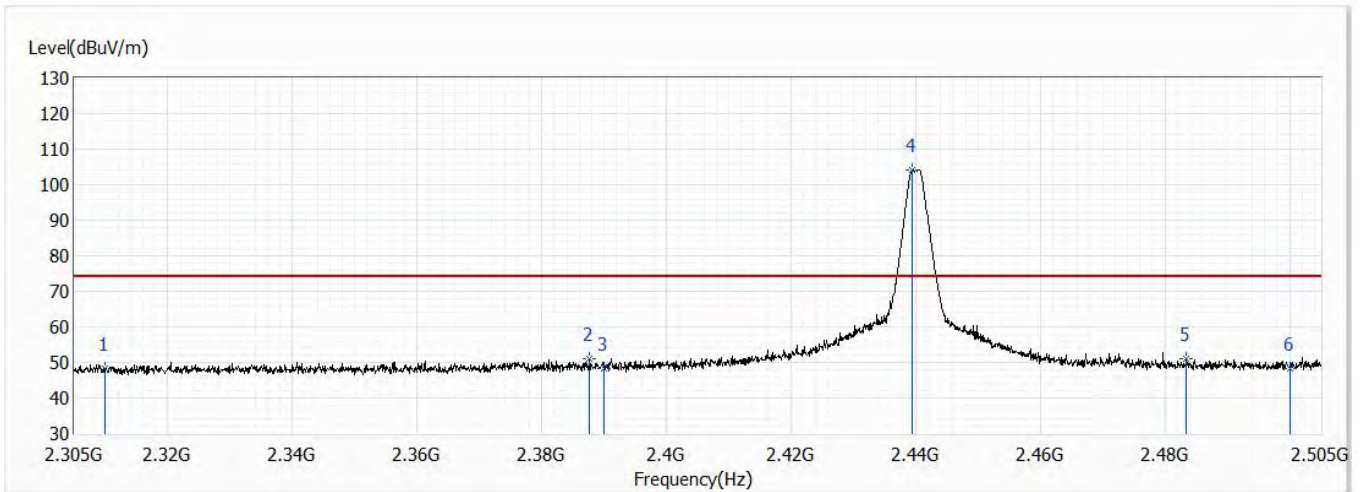


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.70	54.00	-16.30	24.55	13.15	AV
2	2389.000	40.41	54.00	-13.59	26.71	13.70	AV
3	2390.000	40.81	54.00	-13.19	27.11	13.70	AV
! 4	2402.000	95.56	54.00	41.56	81.77	13.79	AV
5	2483.500	38.57	54.00	-15.43	24.21	14.36	AV
6	2500.000	38.69	54.00	-15.31	24.21	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW2M	Humidity (%RH)	61.0

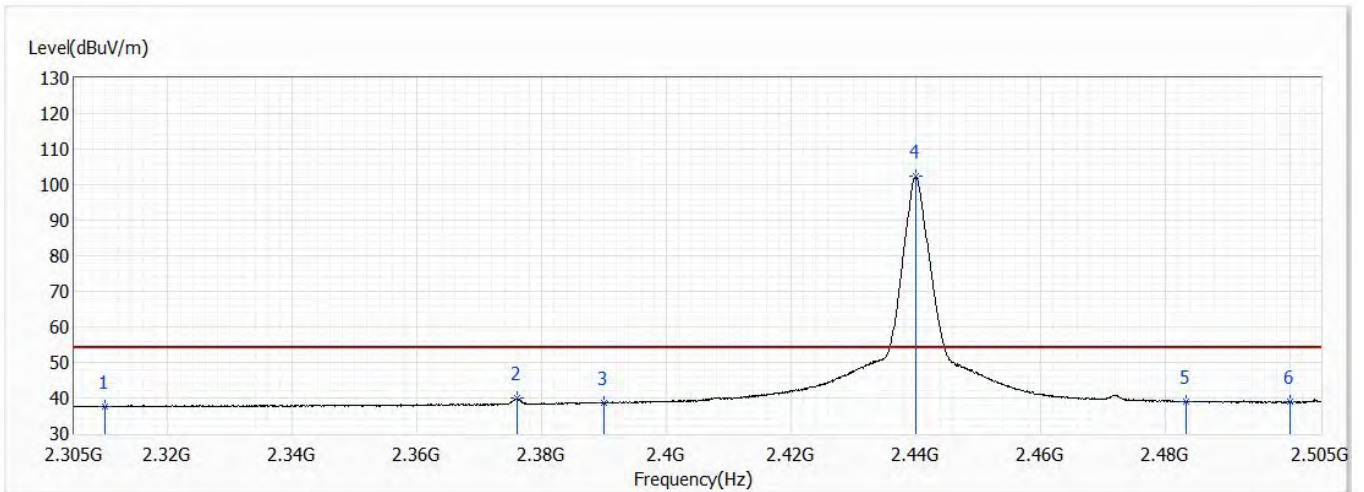


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	48.26	74.00	-25.74	35.11	13.15	PK
2	2387.700	51.07	74.00	-22.93	37.37	13.70	PK
3	2390.000	48.12	74.00	-25.88	34.42	13.70	PK
! 4	2439.500	104.31	74.00	30.31	90.26	14.05	PK
5	2483.500	51.09	74.00	-22.91	36.73	14.36	PK
6	2500.000	48.28	74.00	-25.72	33.80	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW2M	Humidity (%RH)	61.0

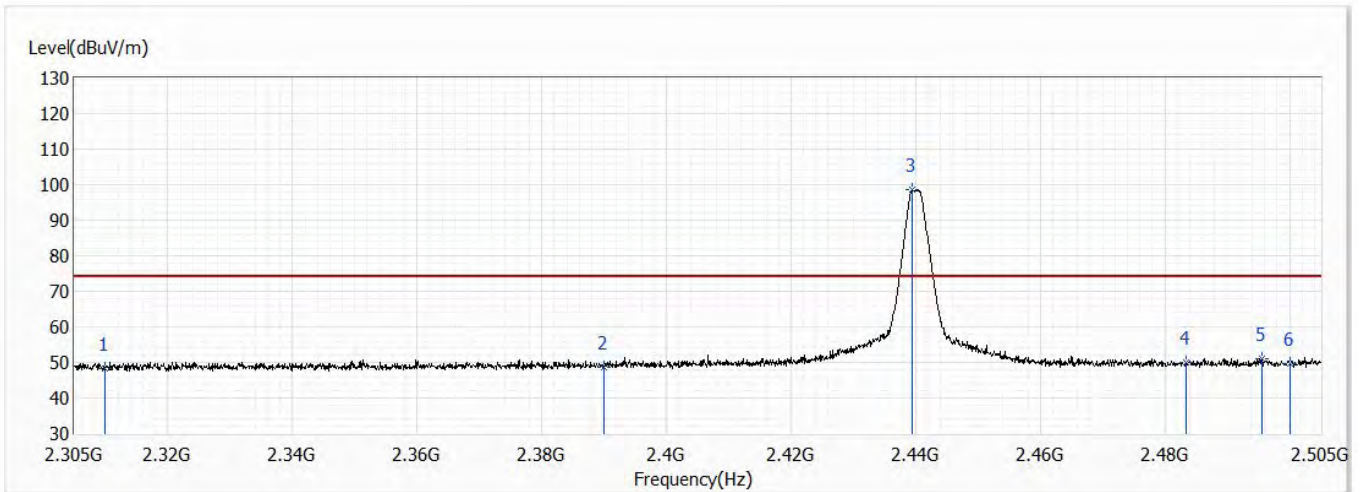


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.67	54.00	-16.33	24.52	13.15	AV
2	2376.000	39.85	54.00	-14.15	26.24	13.61	AV
3	2390.000	38.64	54.00	-15.36	24.94	13.70	AV
! 4	2440.000	102.29	54.00	48.29	88.24	14.05	AV
5	2483.500	38.99	54.00	-15.01	24.63	14.36	AV
6	2500.000	38.99	54.00	-15.01	24.51	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW2M	Humidity (%RH)	61.0

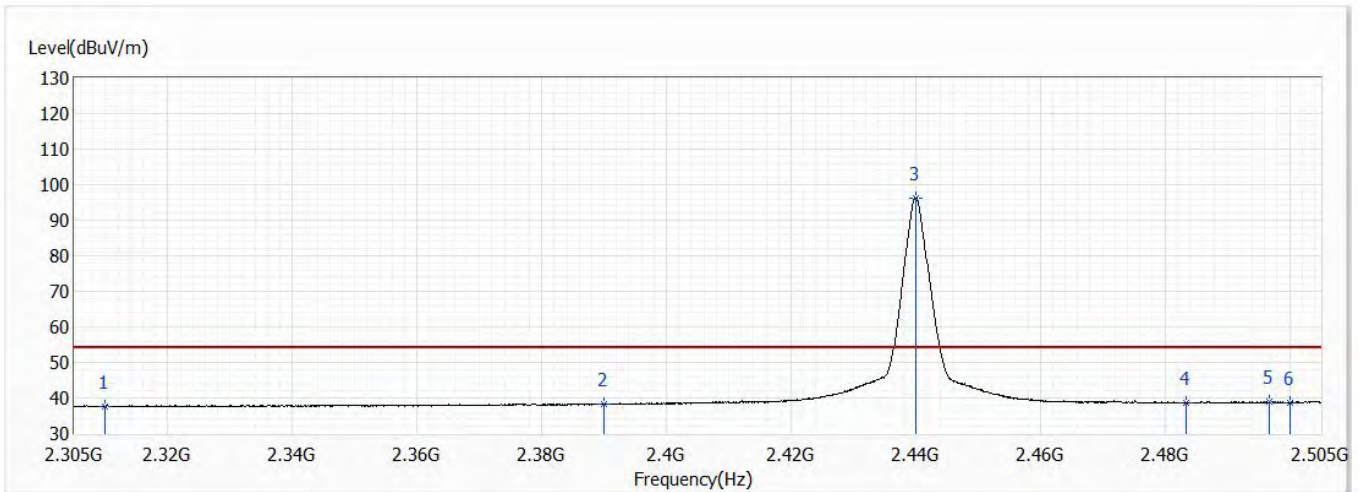


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	48.43	74.00	-25.57	35.28	13.15	PK
2	2390.000	48.67	74.00	-25.33	34.97	13.70	PK
! 3	2439.500	98.50	74.00	24.50	84.45	14.05	PK
4	2483.500	49.88	74.00	-24.12	35.52	14.36	PK
5	2495.600	51.20	74.00	-22.80	36.76	14.44	PK
6	2500.000	49.58	74.00	-24.42	35.10	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 19,2.44GHz,BW2M	Humidity (%RH)	61.0

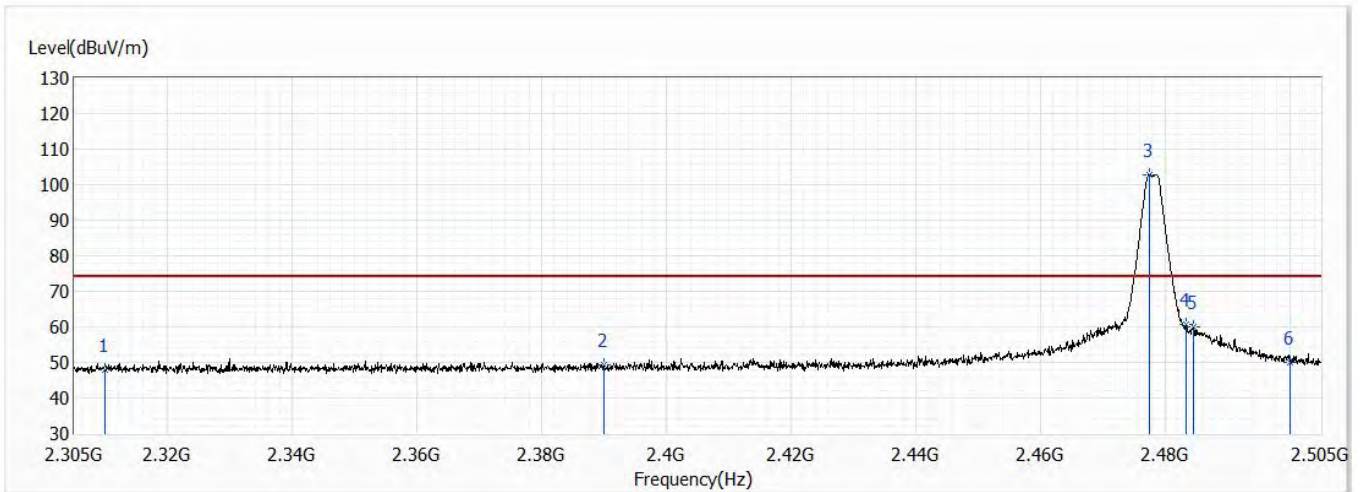


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.56	54.00	-16.44	24.41	13.15	AV
2	2390.000	38.18	54.00	-15.82	24.48	13.70	AV
! 3	2440.000	96.36	54.00	42.36	82.31	14.05	AV
4	2483.500	38.65	54.00	-15.35	24.29	14.36	AV
5	2496.800	38.82	54.00	-15.18	24.37	14.45	AV
6	2500.000	38.79	54.00	-15.21	24.31	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478GHz,BW2M	Humidity (%RH)	61.0

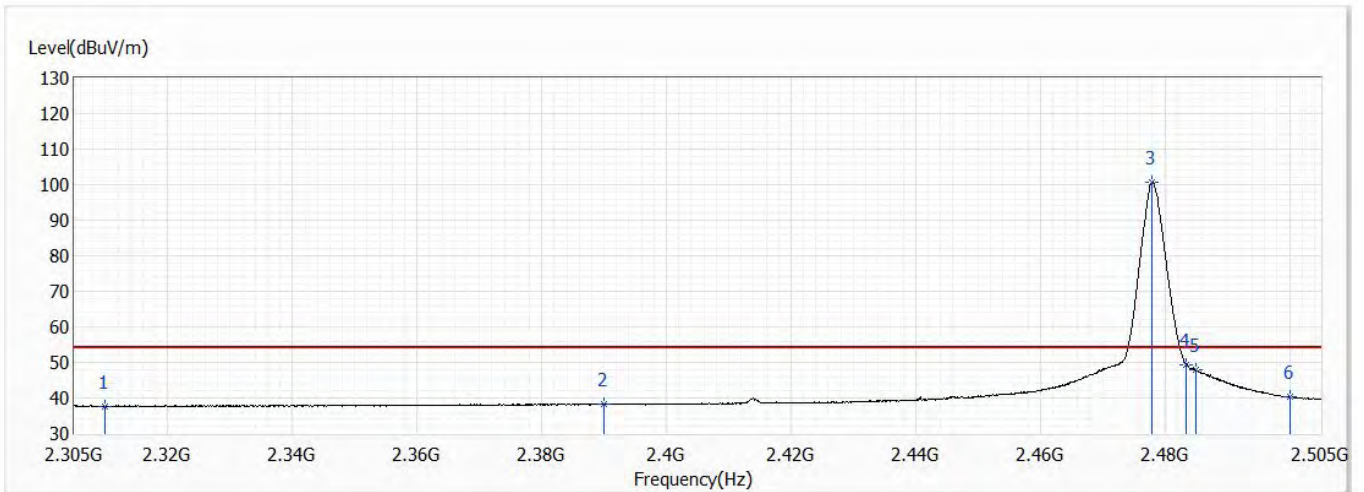


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	47.98	74.00	-26.02	34.83	13.15	PK
2	2390.000	49.15	74.00	-24.85	35.45	13.70	PK
! 3	2477.600	102.86	74.00	28.86	88.54	14.32	PK
4	2483.500	60.55	74.00	-13.45	46.19	14.36	PK
5	2484.500	60.00	74.00	-14.00	45.64	14.36	PK
6	2500.000	49.99	74.00	-24.01	35.51	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478GHz,BW2M	Humidity (%RH)	61.0

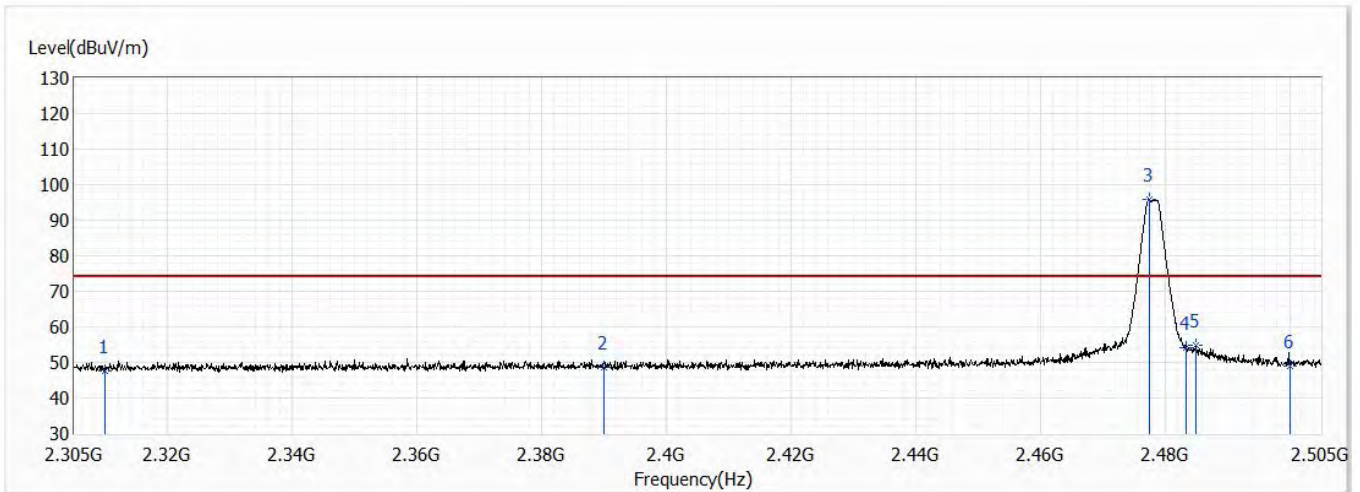


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.65	54.00	-16.35	24.50	13.15	AV
2	2390.000	38.29	54.00	-15.71	24.59	13.70	AV
! 3	2478.000	100.79	54.00	46.79	86.47	14.32	AV
4	2483.500	49.18	54.00	-4.82	34.82	14.36	AV
5	2485.000	47.80	54.00	-6.20	33.43	14.37	AV
6	2500.000	40.21	54.00	-13.79	25.73	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478GHz,BW2M	Humidity (%RH)	61.0

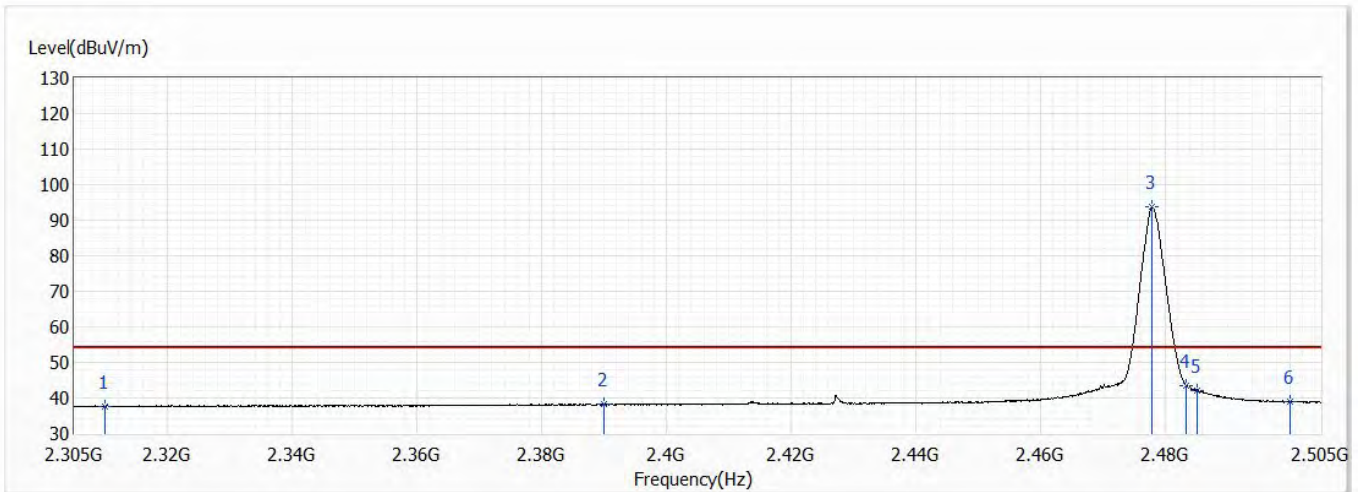


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	47.73	74.00	-26.27	34.58	13.15	PK
2	2390.000	48.59	74.00	-25.41	34.89	13.70	PK
! 3	2477.500	95.83	74.00	21.83	81.51	14.32	PK
4	2483.500	54.13	74.00	-19.87	39.77	14.36	PK
5	2485.000	54.72	74.00	-19.28	40.35	14.37	PK
6	2500.000	48.92	74.00	-25.08	34.44	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	FREECOM 4X	Site	CB2-H
Test Voltage	DC 5V	Test Date	2021/4/14
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (°C)	22.0
Test Condition	BT 5.0,Ant0,Ch 38,2.478GHz,BW2M	Humidity (%RH)	61.0



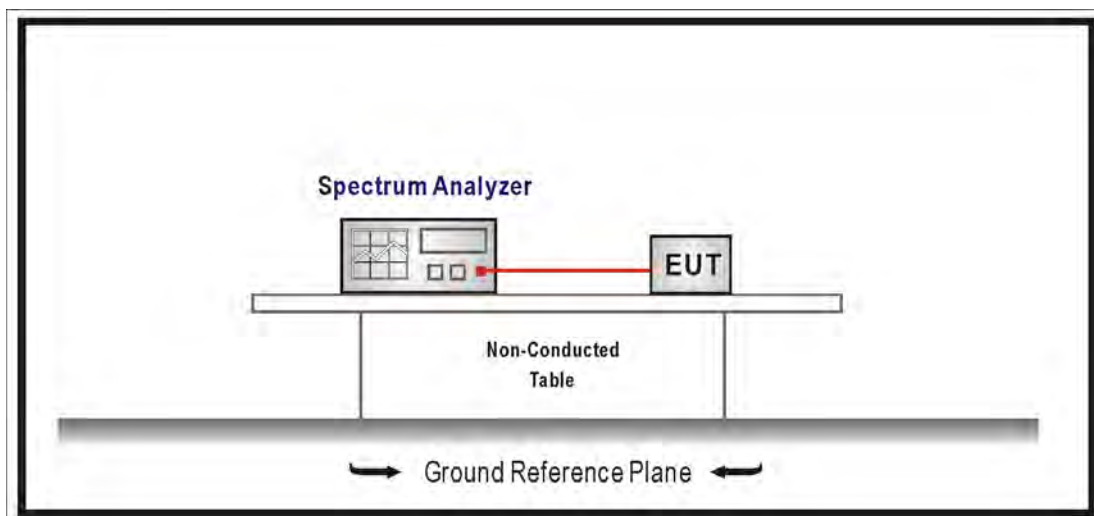
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	37.65	54.00	-16.35	24.50	13.15	AV
2	2390.000	38.11	54.00	-15.89	24.41	13.70	AV
! 3	2478.000	93.71	54.00	39.71	79.39	14.32	AV
4	2483.500	43.41	54.00	-10.59	29.05	14.36	AV
5	2485.100	42.24	54.00	-11.76	27.87	14.37	AV
6	2500.000	38.93	54.00	-15.07	24.45	14.48	AV

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The fundamental for reference only, it's not restricted by unwanted emission limit.

7. Occupied Bandwidth & DTS Bandwidth

7.1 Test Setup



7.2 Limits

The 6 dB bandwidth: ≥ 500 kHz.

Occupied Bandwidth: NA

7.3 Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

7.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

7.5 Test Result

Product	Headset		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2021/04/16	Test Site	SR12-H
Temperature(°C)	25.5	Humidity (%RH)	62.0

GFSK_1M

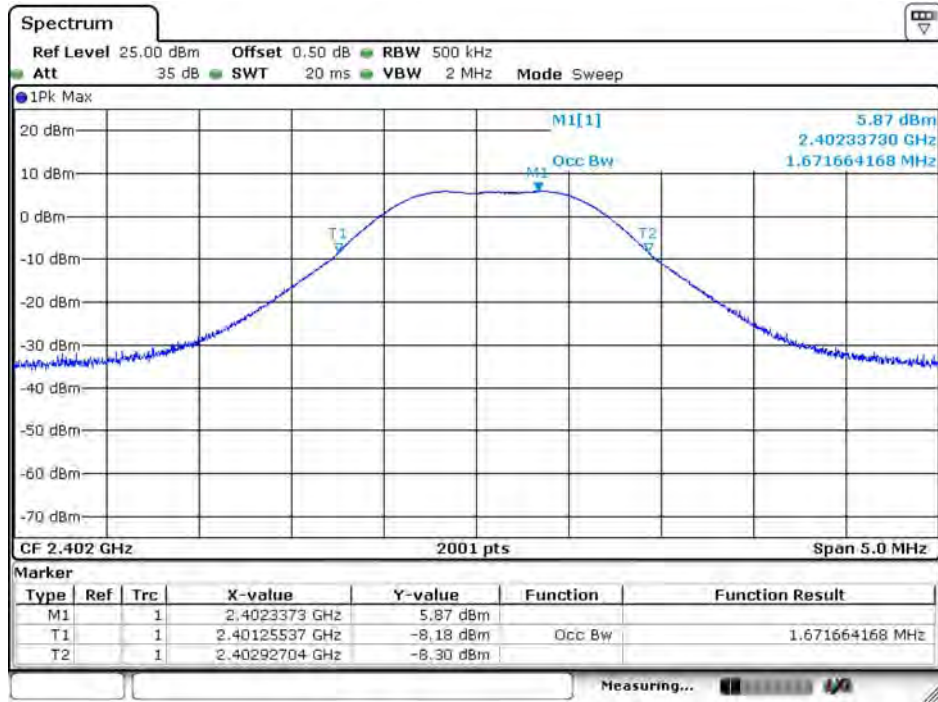
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	1.672	--
19	2440	1.669	--
39	2480	1.657	--

GFSK_2M

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	2.415	--
19	2440	2.412	--
38	2478	2.413	--

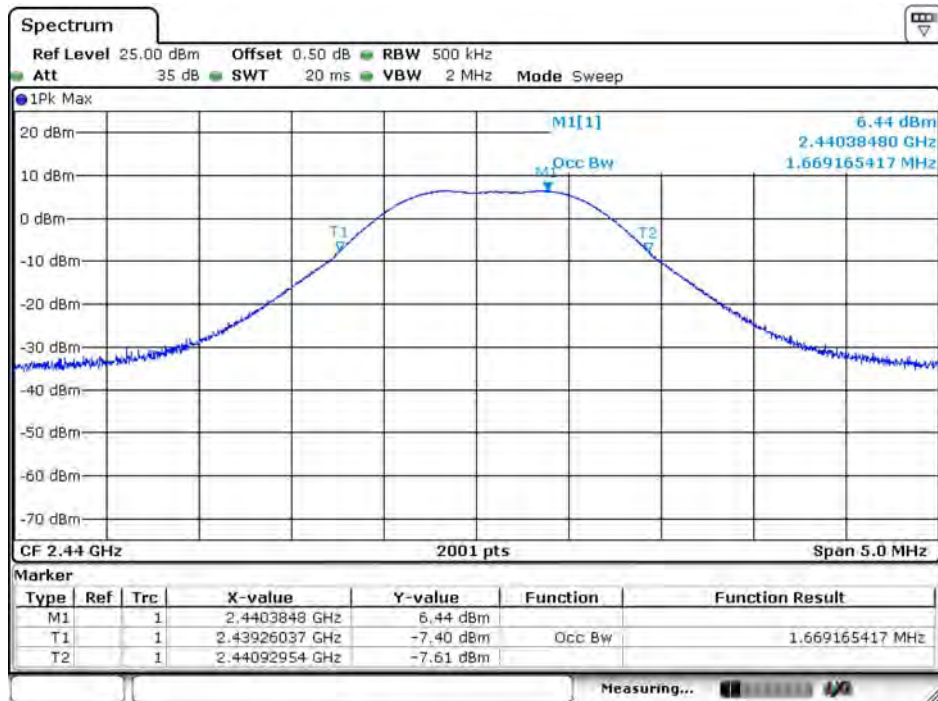
GFSK_1M

Channel 00



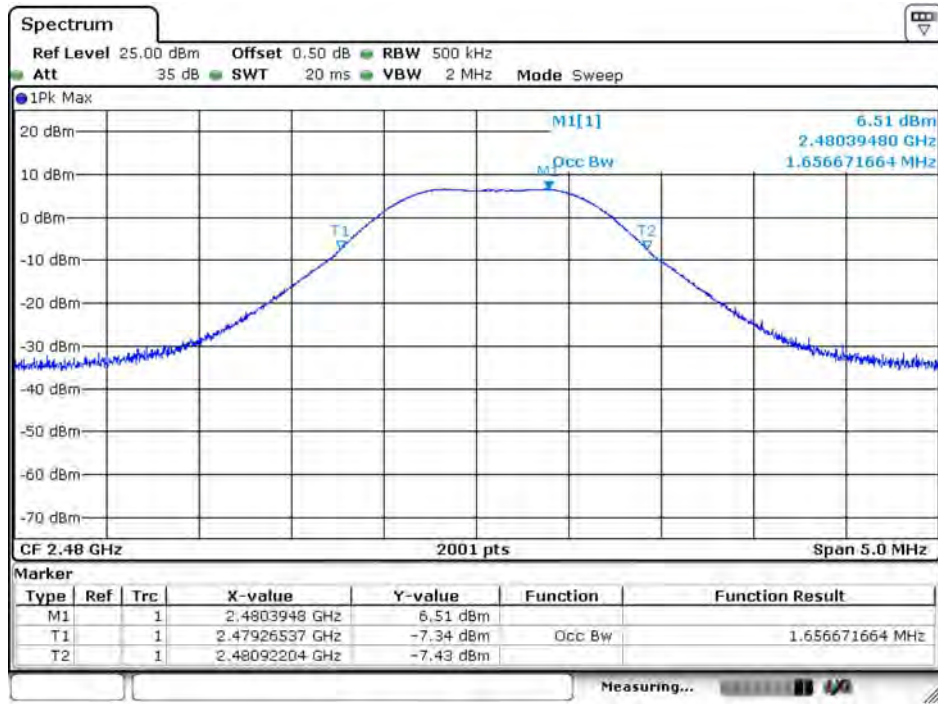
Date: 16 APR 2021 16:36:18

Channel 19



Date: 16 APR 2021 16:36:48

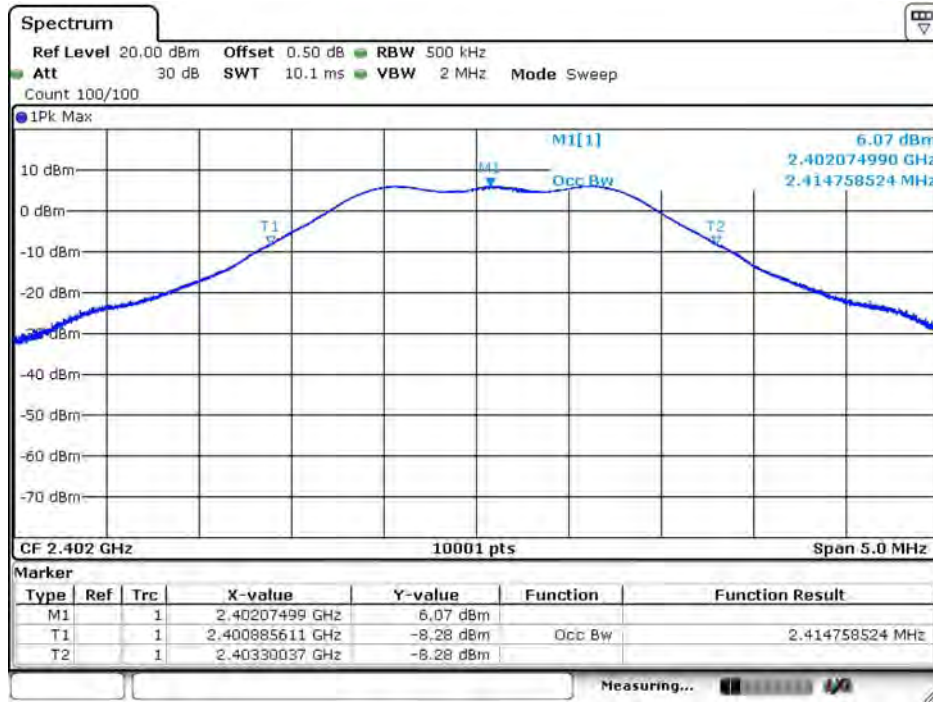
Channel 39



Date: 16 APR 2021 16:37:31

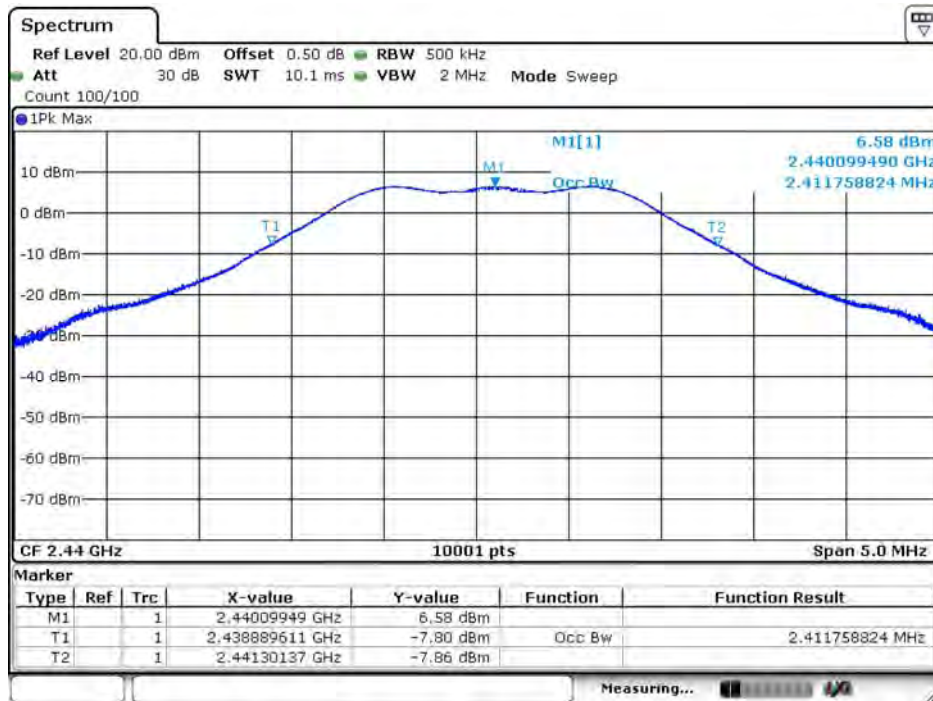
GFSK_2M

Channel 00



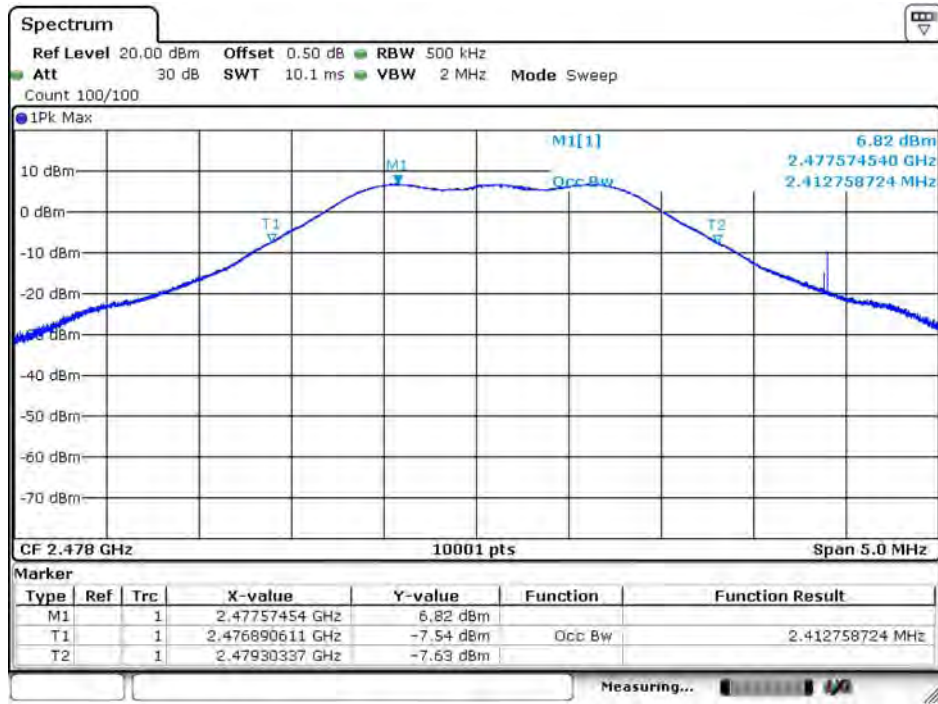
Date: 16 APR 2021 17:22:31

Channel 19



Date: 16 APR 2021 17:21:53

Channel 38



Date: 16 APR 2021 17:19:32

Product	Headset		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2021/04/16	Test Site	SR12-H
Temperature(°C)	25.5	Humidity (%RH)	62.0

GFSK_1M

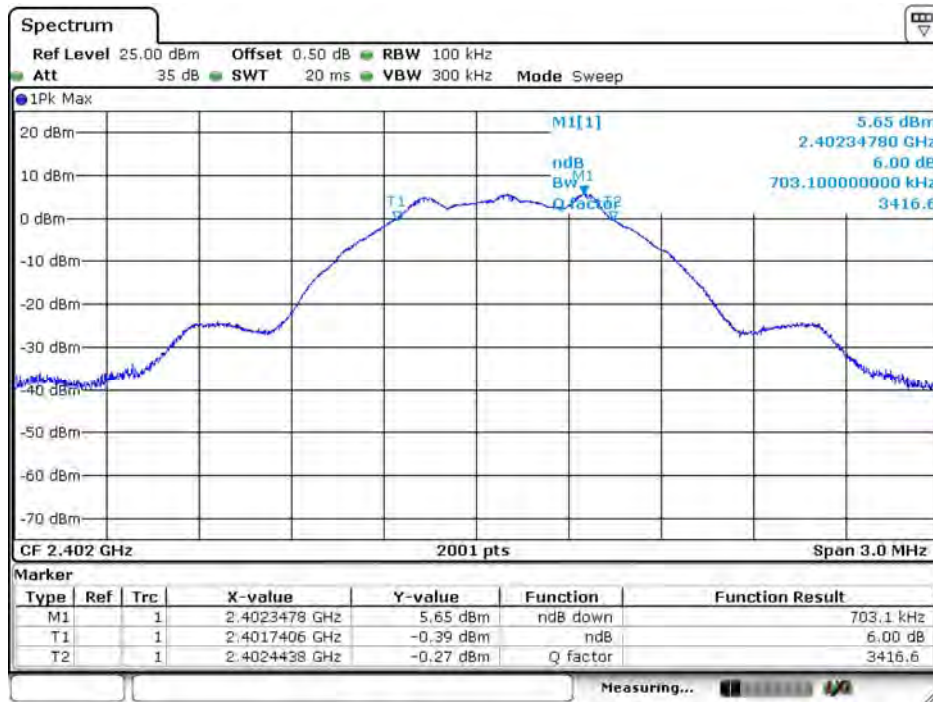
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	0.703	≥ 0.500
19	2440	0.696	≥ 0.500
39	2480	0.697	≥ 0.500

GFSK_2M

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	0.527	≥ 0.500
19	2440	0.527	≥ 0.500
38	2478	0.527	≥ 0.500

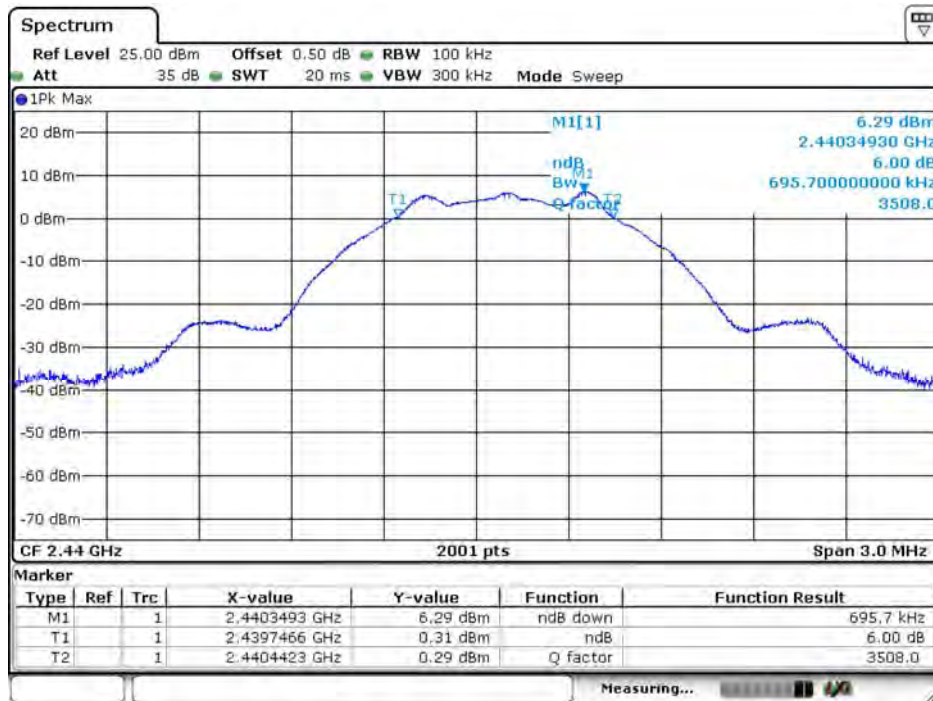
GFSK_1M

Channel 00



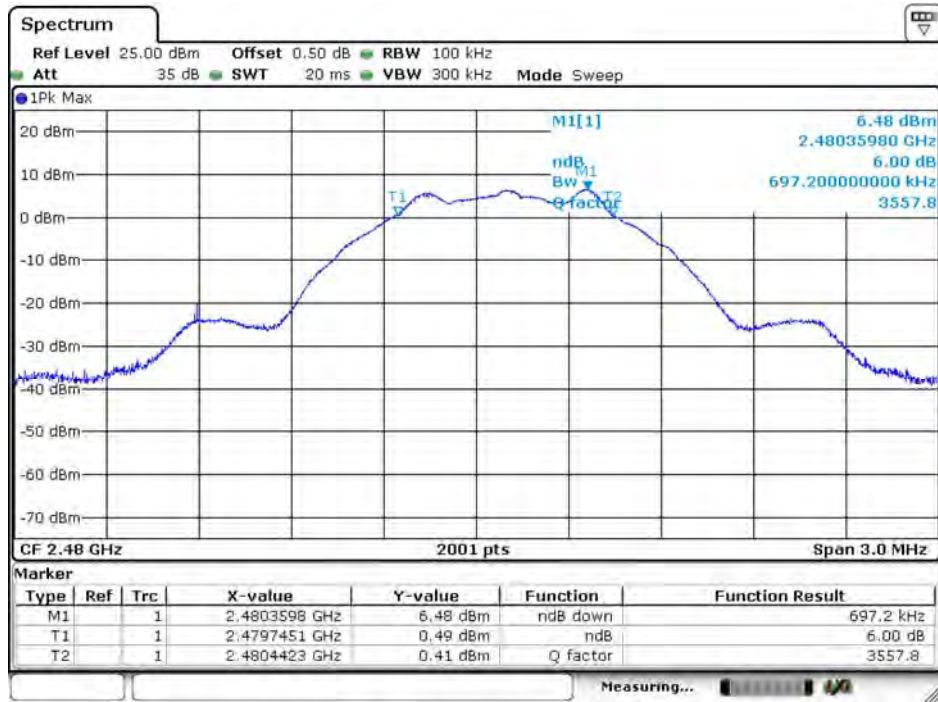
Date: 16.APR.2021 16:35:24

Channel 19



Date: 16.APR.2021 16:34:59

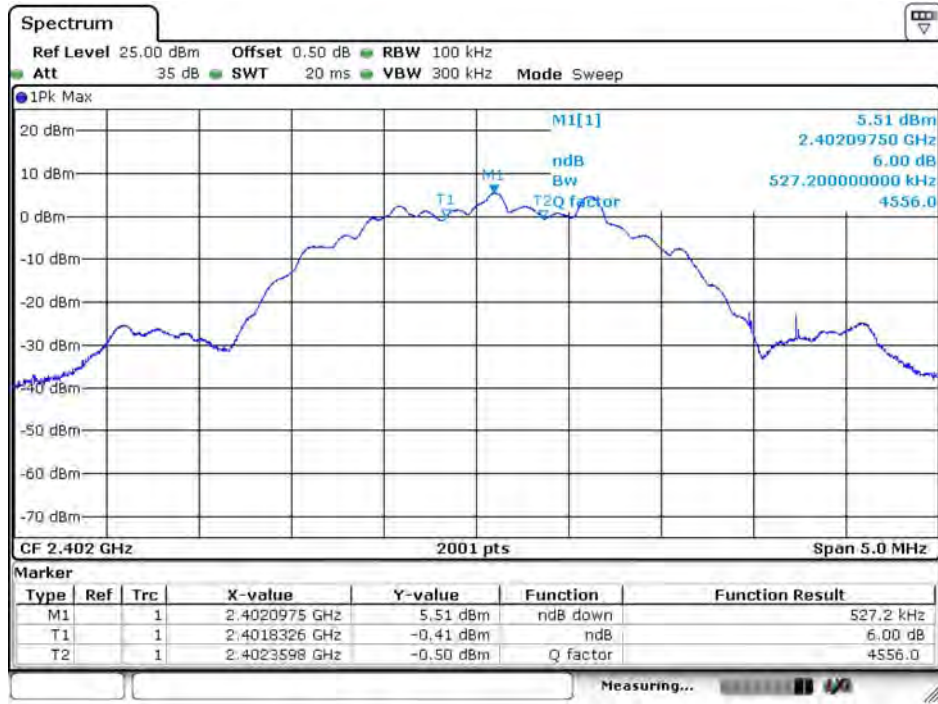
Channel 39



Date: 16 APR 2021 16:34:24

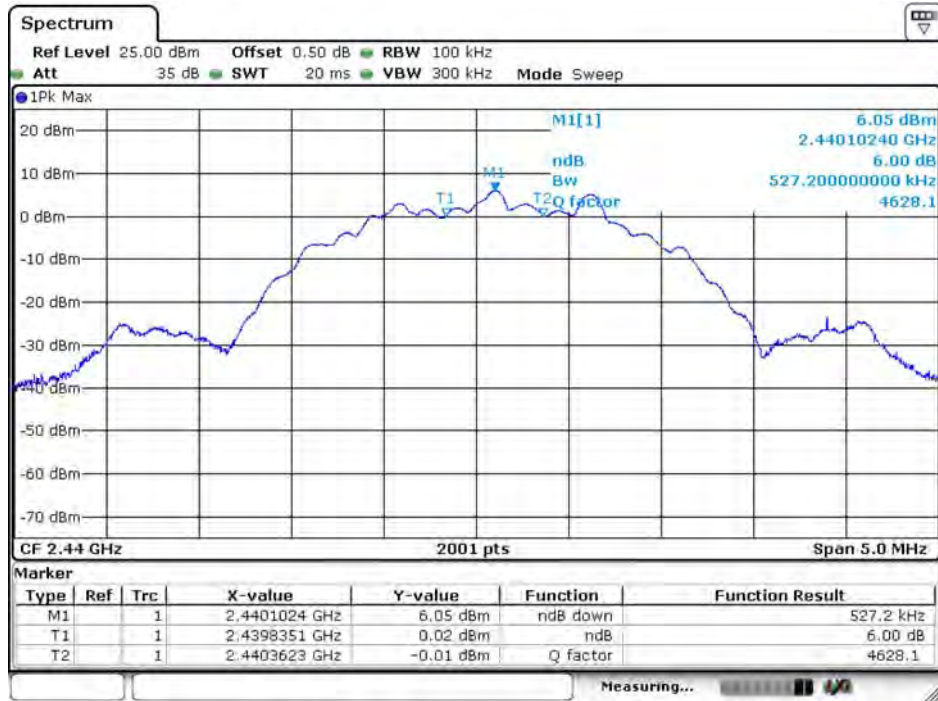
GFSK_2M

Channel 00



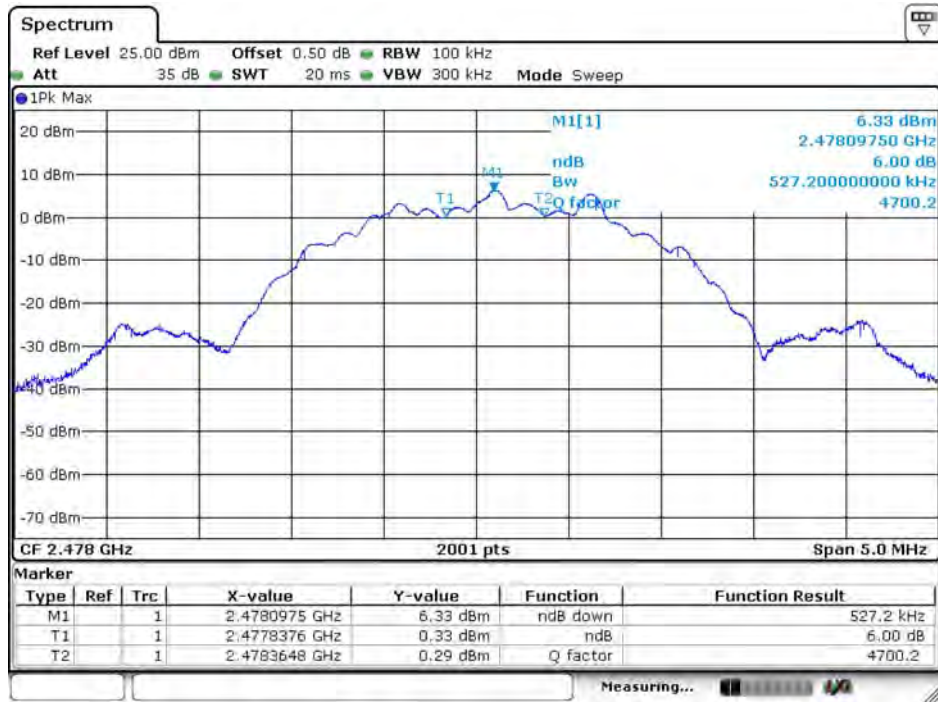
Date: 16.APR.2021 16:30:45

Channel 19



Date: 16.APR.2021 16:31:48

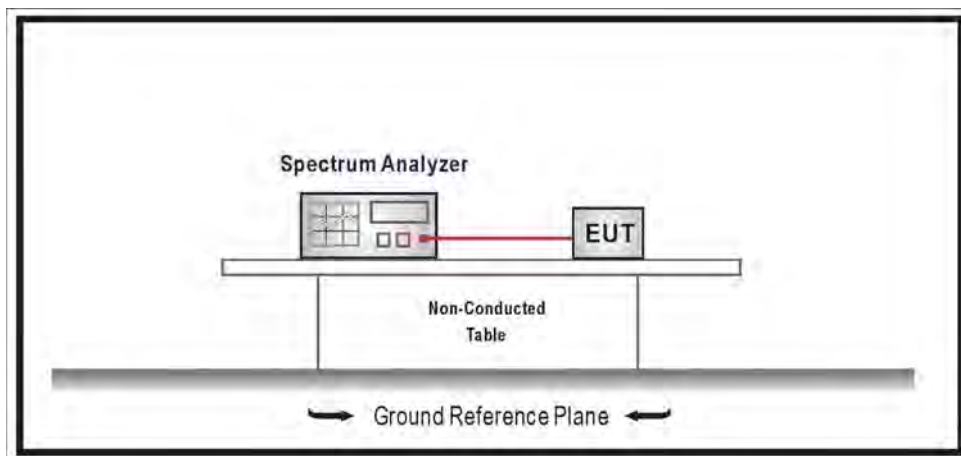
Channel 38



Date: 16 APR 2021 16:32:23

8. Power spectral density

8.1 Test Setup



8.2 Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

8.3 Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

8.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247

8.5 Test Result

Product	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/04/16	Test Site	SR12-H
Temperature(°C)	25.5	Humidity (%RH)	62.0

GFSK_1M

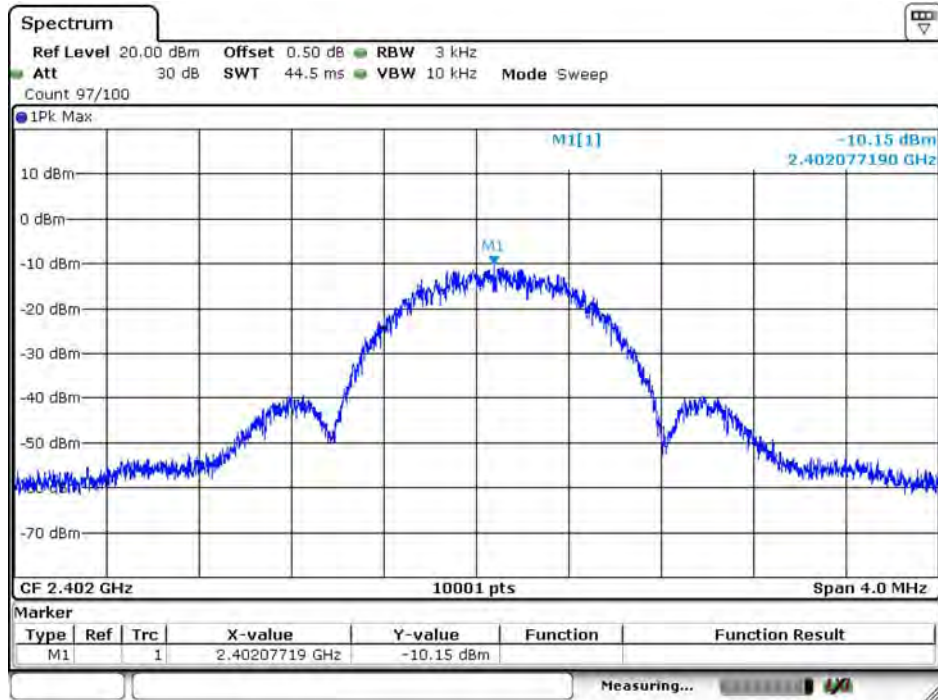
Channel No.	Frequency (MHz)	Measure Value (dBm/10kHz)	Limit (dBm/10kHz)
00	2402	-10.150	≤8.000
19	2440	-9.720	≤8.000
39	2480	-9.420	≤8.000

GFSK_2M

Channel No.	Frequency (MHz)	Measure Value (dBm/10kHz)	Limit (dBm/10kHz)
00	2402	-11.250	≤8.000
19	2440	-10.860	≤8.000
38	2478	-10.700	≤8.000

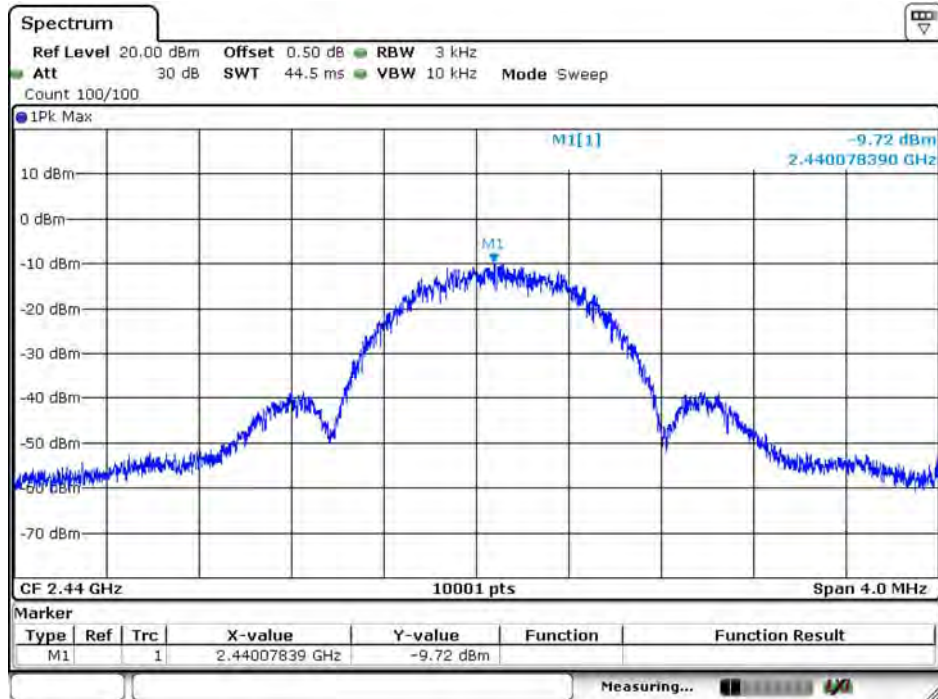
GFSK_1M

Channel 00



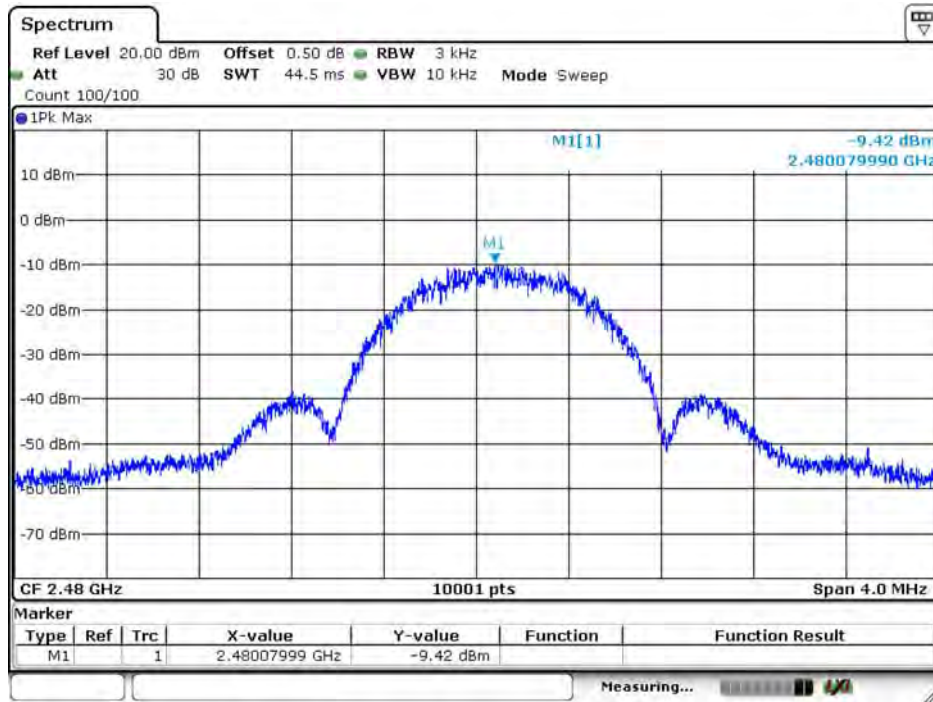
Date: 16.APR.2021 17:28:32

Channel 19



Date: 16.APR.2021 17:27:48

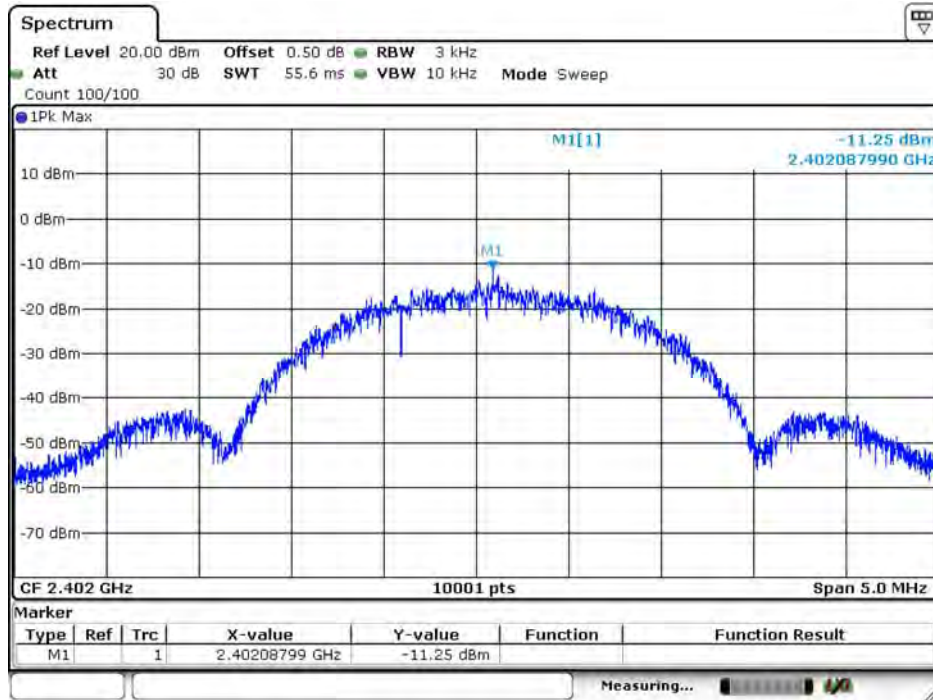
Channel 39



Date: 16 APR 2021 17:26:54

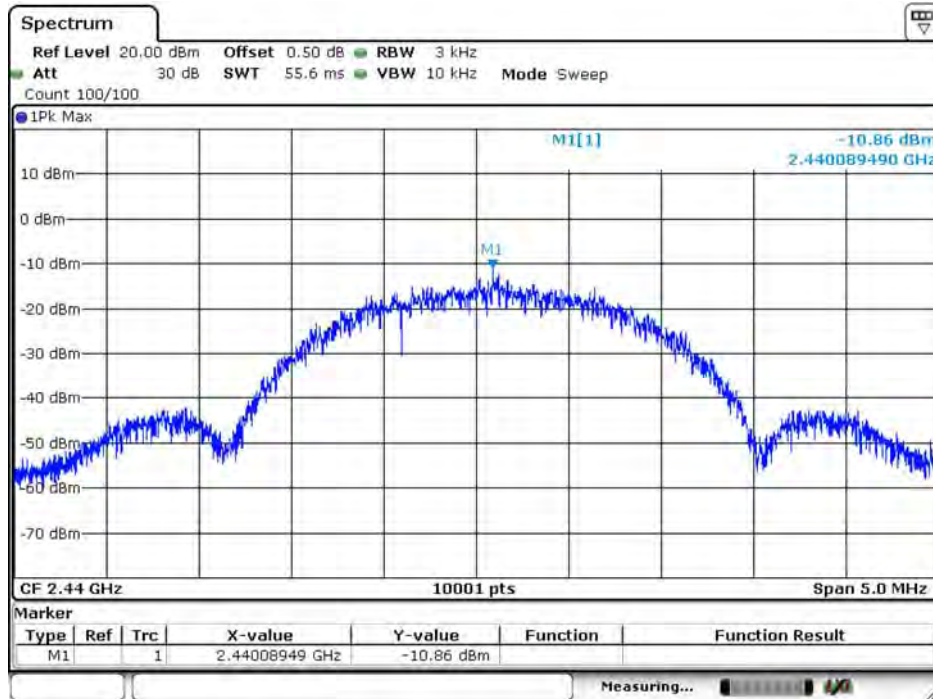
GFSK_2M

Channel 00



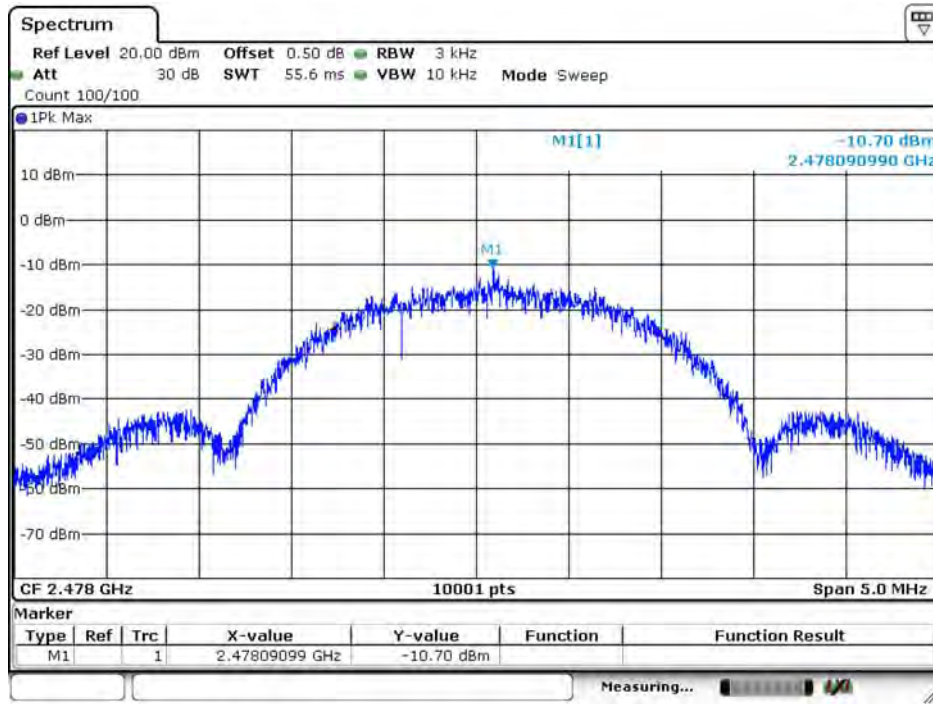
Date: 16.APR.2021 17:23:41

Channel 19



Date: 16.APR.2021 17:24:35

Channel 38



Date: 16.APR.2021 17:25:13