FCC Test Report

Product Name	：	Headset
Trade Name	：	Cardo
Model No.	：	SPIRIT HD, SPIRIT
FCC ID	：	Q95ER26

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

Date of Receipt	：	Jul. 14, 2020
Issued Date	：	Jun. 24, 2021
Report No.	：	2070525R-E3032110116
Report Version	：	V1.0

Test Report Certification

Issued Date : Jun. 24, 2021
Report No. : 2070525R-E3032110116

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.	:	SPIRIT HD, SPIRIT
FCC ID	:	Q95ER26
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

(Lyla Yang / Engineering Adm. Specialist)

Tested By : Lion Wang

(Lion Wang / Senior Engineer)

Approved By : Louis Hsu

(Louis Hsu / Deputy Manager)

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Jun. 24, 2021

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	Headset
Trade Name	Cardo
Model No.	SPIRIT HD, SPIRIT
Frequency Range	2402~2480MHz
Channel Number	79 Channels
Type of Modulation	GFSK, π/4-DQPSK, 8-DPSK

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

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	20	2422 MHz	40	2442 MHz	60	2462 MHz
01	2403 MHz	21	2423 MHz	41	2443 MHz	61	2463 MHz
02	2404 MHz	22	2424 MHz	42	2444 MHz	62	2464 MHz
03	2405 MHz	23	2425 MHz	43	2445 MHz	63	2465 MHz
04	2406 MHz	24	2426 MHz	44	2446 MHz	64	2466 MHz
05	2407 MHz	25	2427 MHz	45	2447 MHz	65	2467 MHz
06	2408 MHz	26	2428 MHz	46	2448 MHz	66	2468 MHz
07	2409 MHz	27	2429 MHz	47	2449 MHz	67	2469 MHz
08	2410 MHz	28	2430 MHz	8	2450 MHz	68	2470 MHz
09	2411 MHz	29	2431 MHz	49	2451 MHz	69	2471 MHz
10	2412 MHz	30	2432 MHz	50	2452 MHz	70	2472 MHz
11	2413 MHz	31	2433 MHz	51	2453 MHz	71	2473 MHz
12	2414 MHz	32	2434 MHz	52	2454 MHz	72	2474 MHz
13	2415 MHz	33	2435 MHz	53	2455 MHz	73	2475 MHz
14	2416 MHz	34	2436 MHz	54	2456 MHz	74	2476 MHz
15	2417 MHz	35	2437 MHz	55	2457 MHz	75	2477 MHz
16	2418 MHz	36	2438 MHz	56	2458 MHz	76	2478 MHz
17	2419 MHz	37	2439 MHz	57	2459 MHz	77	2479 MHz
18	2420 MHz	38	2440 MHz	58	2460 MHz	78	2480 MHz
19	2421 MHz	39	2441 MHz	59	2461 MHz		

Note:

1. The difference between these two model numbers is SPIRIT model removes FM radio receiver component.
2. 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.
3. 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	8-DPSK	78	Complies
Maximum peak conducted output power	GFSK / π/4-DQPSK / 8-DPSK	00/39/78	Complies
Radiated Emission	GFSK / 8-DPSK	00/39/78	Complies
RF antenna conducted test	GFSK / 8-DPSK	00/39/78	Complies
Band edge	GFSK / 8-DPSK	00/39/78	Complies
Number of hopping Frequency	GFSK	Hopping mode	Complies
Carrier Frequency Separation	GFSK / 8-DPSK	00/39/78	Complies
20dB Bandwidth	GFSK / 8-DPSK	00/39/78	Complies
Dwell Time	GFSK / 8-DPSK	00/39/78	Complies

Note:

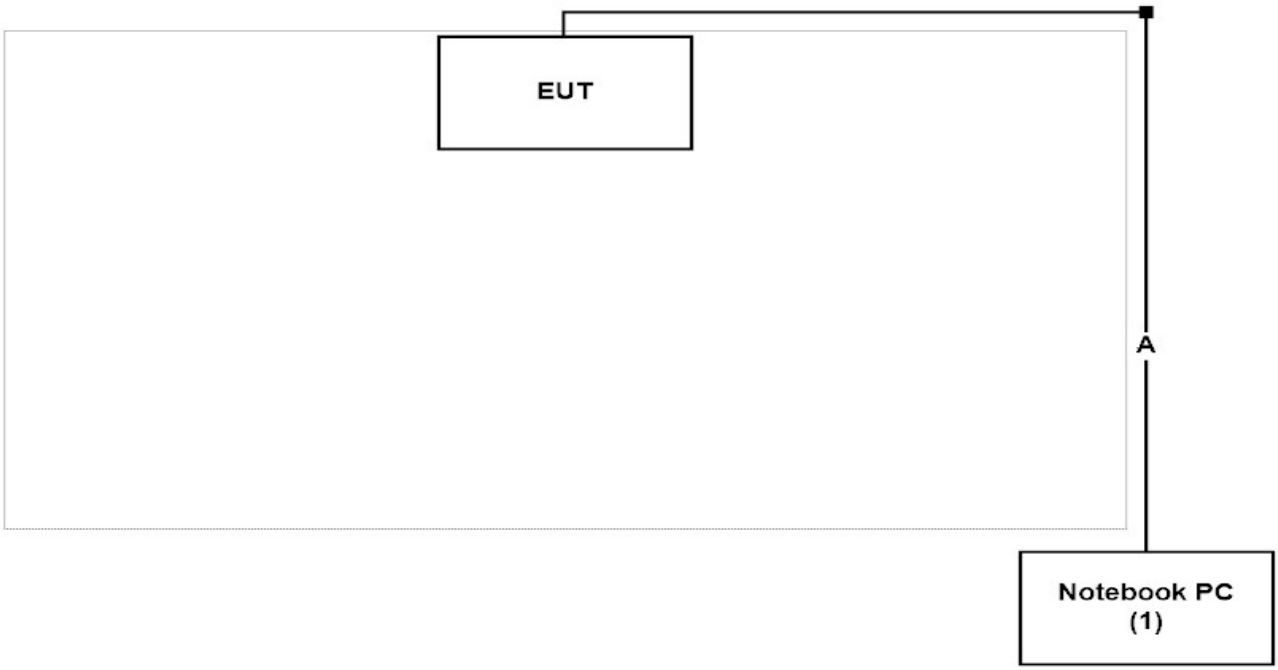
1. Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna 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

Connection Diagram


Signal Cable Type		Signal cable Description
A	USB Cable	Non-Shielded, 10m

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)	Number of hopping Frequency	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Carrier Frequency Separation	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	20dB Bandwidth	25 - 75	
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	1
Humidity (%RH)	Dwell Time	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	2020/02/25	2021/02/24
LISN	R&S	ENV216	100092	2020/06/22	2021/06/21

Radiated / 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

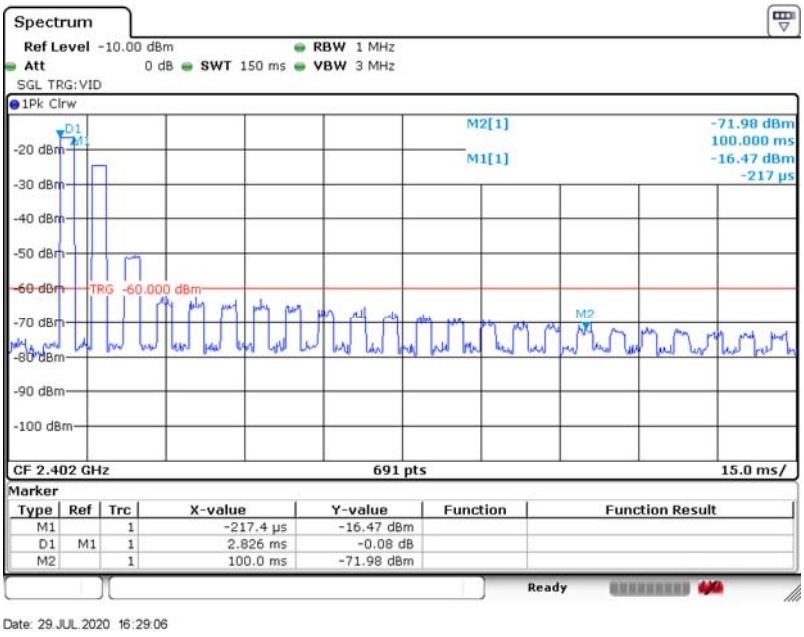
Test item	Uncertainty
AC power Line Conducted Emission	± 2.26 dB
Maximum peak conducted output power	± 1.27 dB
Radiated Emission	30MHz~1GHz as ±3.43 dB 1GHz~26.5Ghz as ±3.65 dB
RF antenna conducted test	± 1.27 dB
Band edge	± 1.27 dB
Number of hopping frequency	± 1.27 dB
Carrier Frequency Separation	± 50 Hz
20dB Bandwidth	± 50 Hz
Dwell Time	± 25 msec

1.10. Duty Cycle

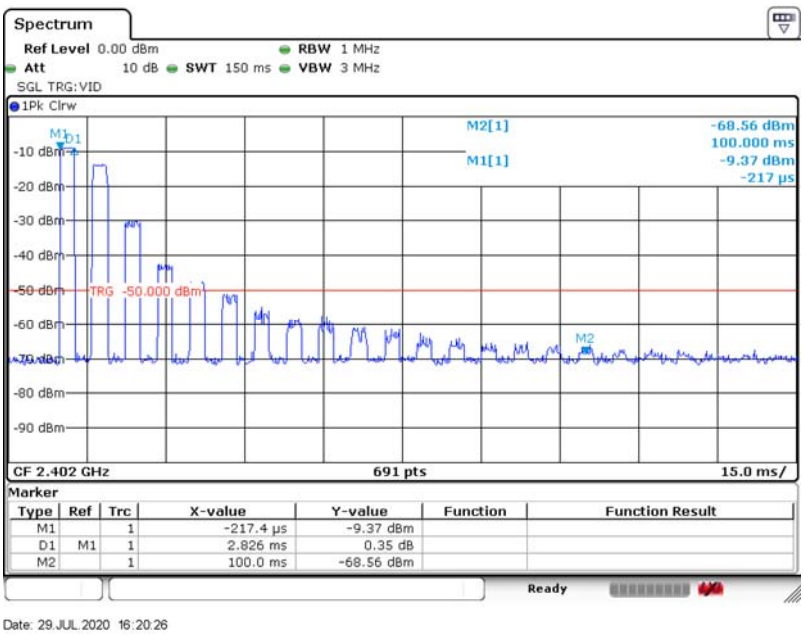
Mode	On Time(ms)	On+Off Time(ms)	Duty Cycle(%)	Duty Cycle Correction Factor (dB)
DH5	2.826	100.000	2.83%	-30.977
3DH5	2.826	100.000	2.83%	-30.977

Note: If the duty cycle correction factor lower than -20dB, the Max. duty cycle correction factor is -20dB.

DH5

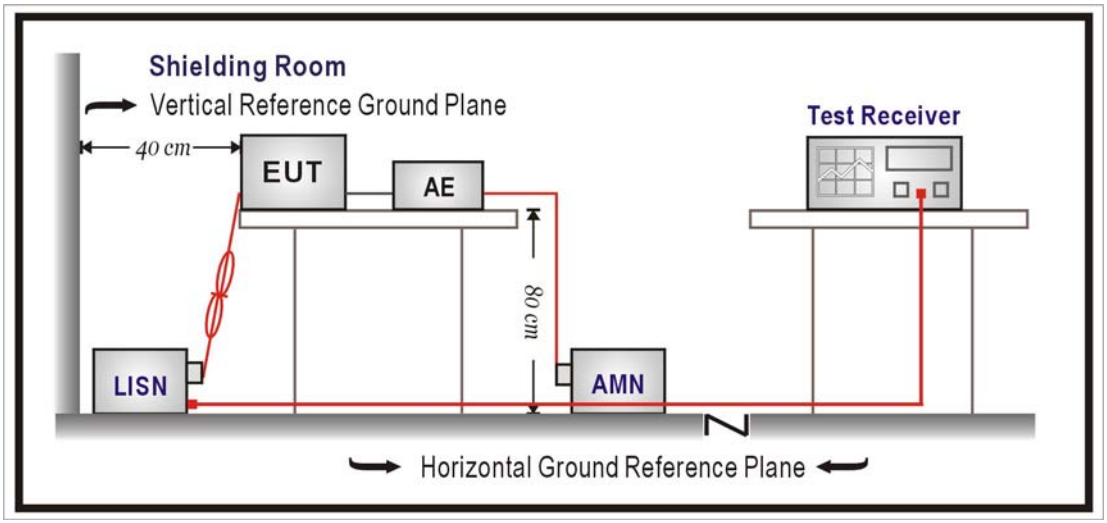


3DH5



2. AC power Line Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency	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.

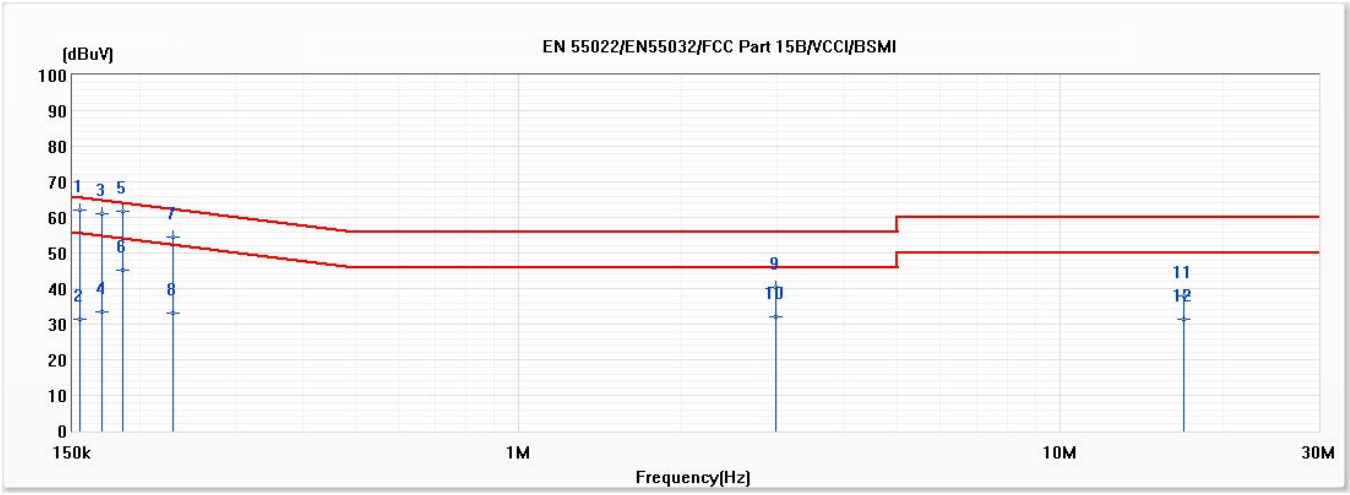
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2019

2.5. Test Result

Model No	SPIRIT HD	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/21
Test Mode	Mode 1: Transmit	Engineer	Lion Wang
Phase	L	Temperature (℃)	21.7
Test Condition	BT2.0_3DH5_2480MHz	Humidity (%RH)	54.6



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.155	61.98	65.73	-3.76	52.33	9.65	QP
2	0.155	31.43	55.73	-24.30	21.78	9.65	AV
3	0.170	60.99	64.97	-3.97	51.35	9.65	QP
4	0.170	33.36	54.97	-21.60	23.71	9.65	AV
*5	0.186	61.74	64.23	-2.48	52.10	9.64	QP
6	0.186	45.30	54.23	-8.93	35.65	9.64	AV
7	0.230	54.37	62.46	-8.09	44.72	9.65	QP
8	0.230	33.00	52.46	-19.46	23.35	9.65	AV
9	2.988	40.43	56.00	-15.57	30.59	9.84	QP
10	2.988	31.99	46.00	-14.01	22.15	9.84	AV
11	16.905	37.96	60.00	-22.04	27.65	10.31	QP
12	16.905	31.53	50.00	-18.47	21.22	10.31	AV

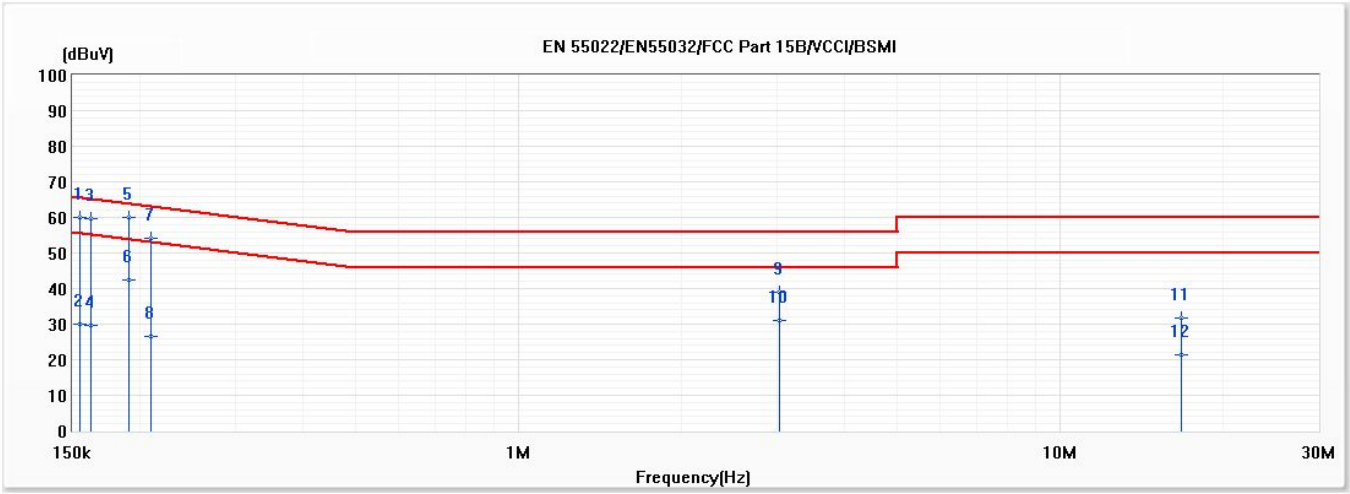
Remark:

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	SPIRIT HD	Site	SR2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/21
Test Mode	Mode 1: Transmit	Engineer	Lion Wang
Phase	N	Temperature (℃)	21.7
Test Condition	BT2.0_3DH5_2480MHz	Humidity (%RH)	54.6



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.155	60.15	65.74	-5.60	50.51	9.64	QP
2	0.155	29.96	55.74	-25.78	20.32	9.64	AV
3	0.163	59.50	65.33	-5.83	49.86	9.64	QP
4	0.163	29.63	55.33	-25.71	19.99	9.64	AV
*5	0.191	59.98	64.00	-4.02	50.35	9.63	QP
6	0.191	42.48	54.00	-11.52	32.85	9.63	AV
7	0.210	54.12	63.21	-9.10	44.48	9.64	QP
8	0.210	26.53	53.21	-26.68	16.89	9.64	AV
9	3.037	39.08	56.00	-16.92	29.24	9.83	QP
10	3.037	31.07	46.00	-14.93	21.24	9.83	AV
11	16.720	31.64	60.00	-28.36	21.23	10.41	QP
12	16.720	21.25	50.00	-28.75	10.85	10.41	AV

Remark:

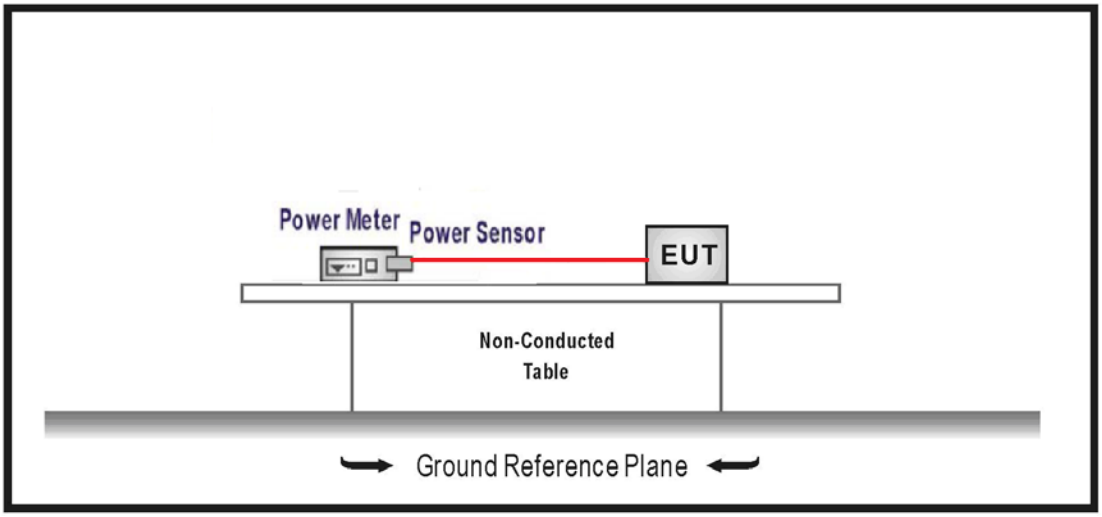
1. "*" means this data is the worst emission level.

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

For frequency hopping systems operating in the 902-928 MHz band: 1 Watt for systems employing at least 50 hopping channels; and, 0.25 Watts for systems employing less than 50 hopping channels.

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

3.3. Test procedures

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

3.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019.

3.5. Test Result

Product Name	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/01/13	Test Site	SR12-H
Temperature(°C)	20.0	Humidity (%RH)	59.0

GFSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
00	2402	9.370	≦30
39	2441	9.180	≦30
78	2480	9.050	≦30

Pi/4DQPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
00	2402	12.110	≦30
39	2441	11.950	≦30
78	2480	11.840	≦30

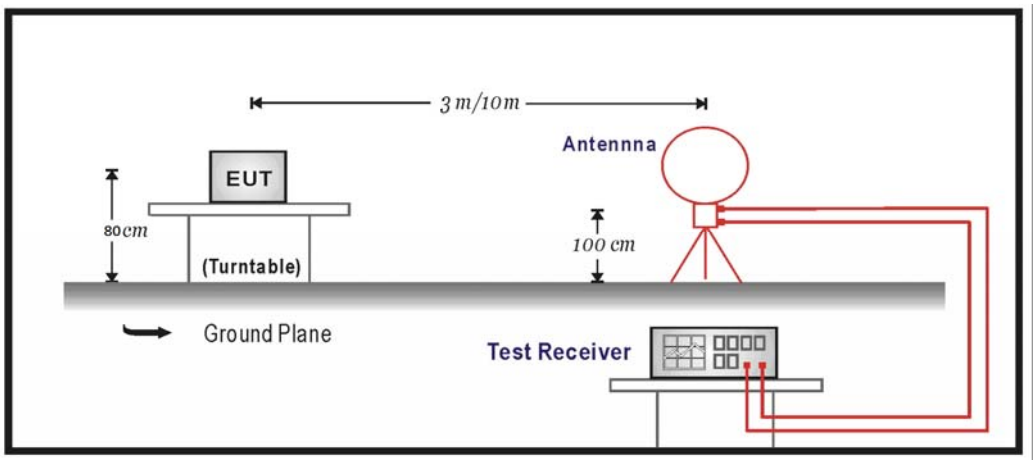
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
00	2402	12.610	≦30
39	2441	12.460	≦30
78	2480	12.380	≦30

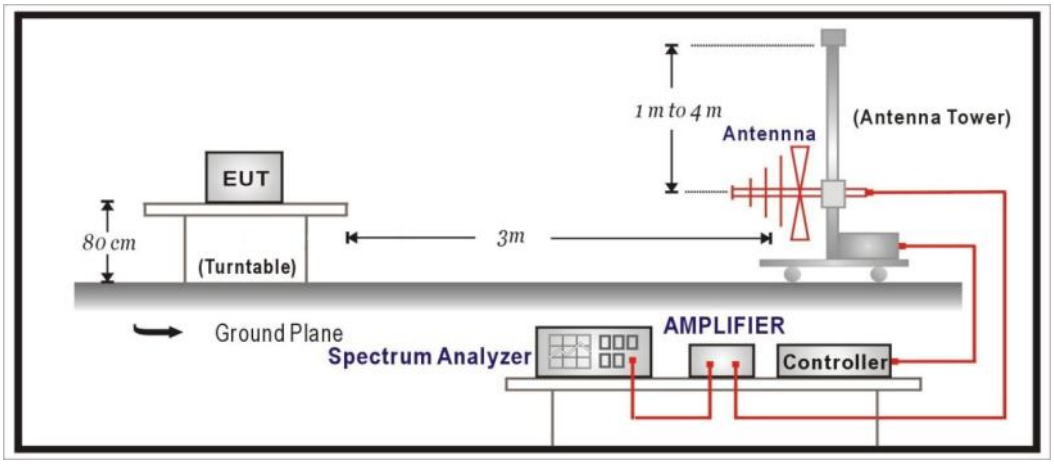
4. Radiated Emission

4.1. Test Setup

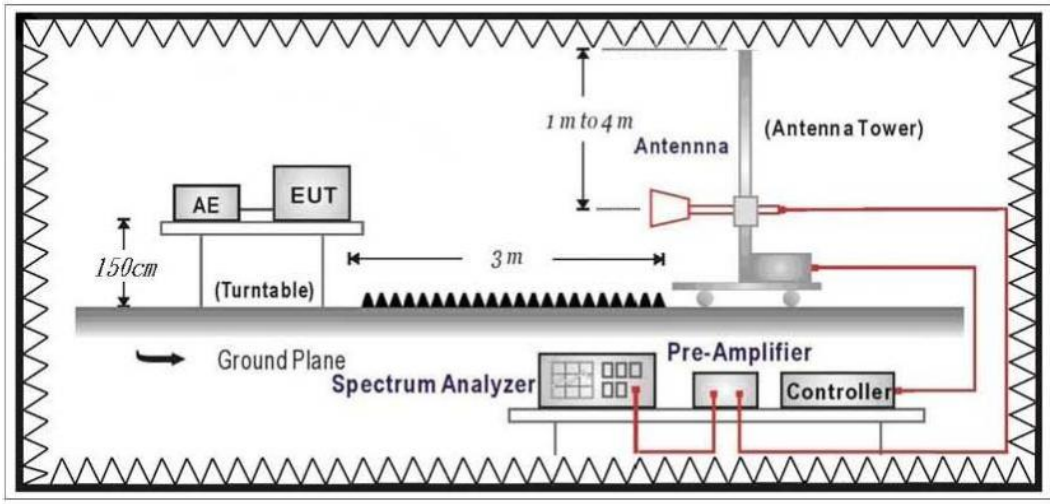
Under 30MHz Test Setup:



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 band edges.
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 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 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 form 9kHz(inculde 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.

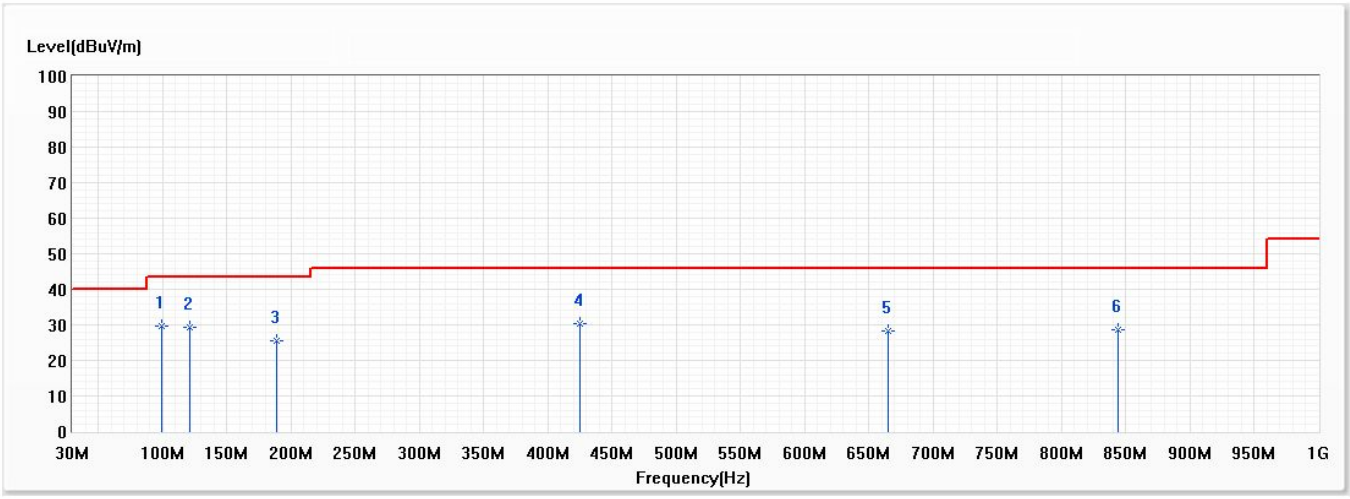
4.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

4.5. Test Result

30MHz-1GHz Spurious

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/11
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

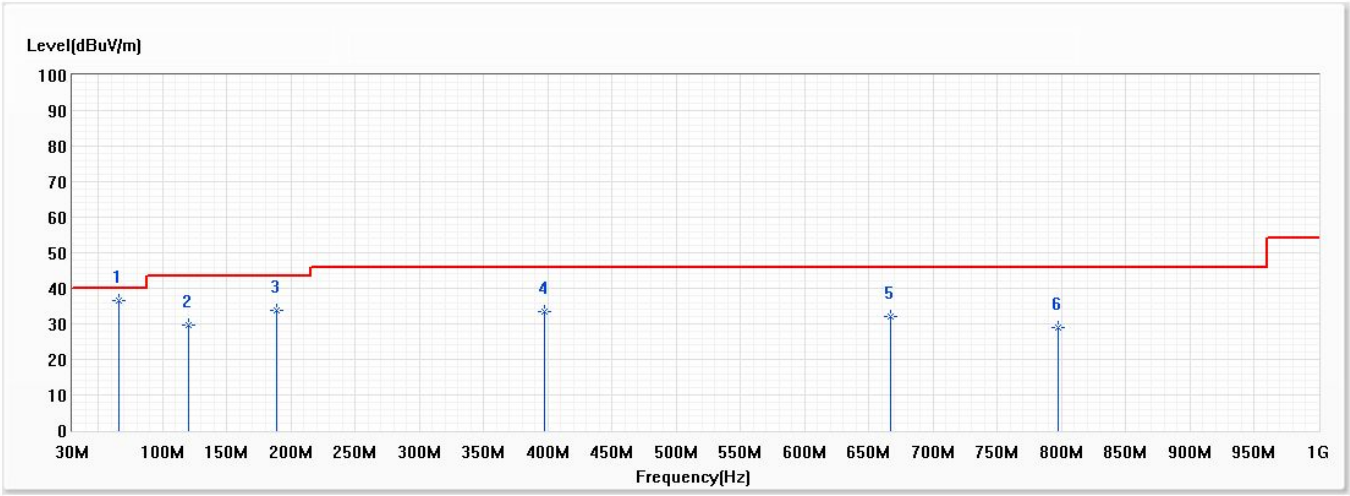


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	99.840	29.57	43.52	-13.95	34.08	-4.51	QP
2	121.665	29.35	43.52	-14.17	31.79	-2.44	QP
3	189.080	25.50	43.52	-18.02	30.70	-5.20	QP
4	424.790	30.23	46.02	-15.79	27.75	2.48	QP
5	664.865	28.17	46.02	-17.85	22.42	5.75	QP
6	844.315	28.49	46.02	-17.53	20.59	7.90	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	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/11
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

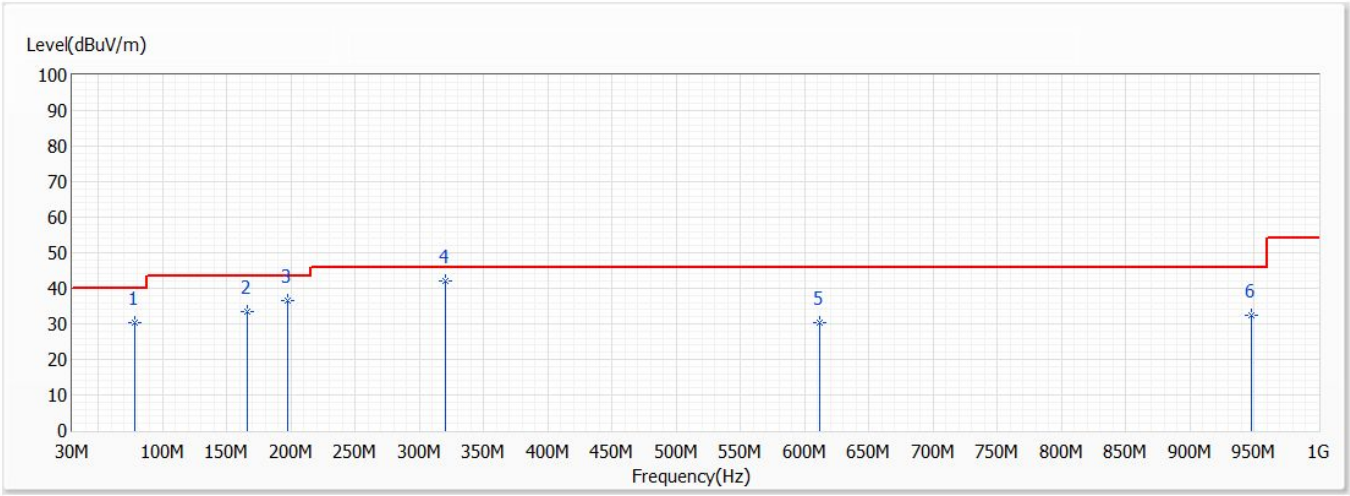


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	65.890	36.42	40.00	-3.58	45.11	-8.69	QP
2	120.695	29.54	43.52	-13.98	32.03	-2.49	QP
3	189.080	33.92	43.52	-9.60	39.12	-5.20	QP
4	397.145	33.36	46.02	-12.66	31.42	1.94	QP
5	666.805	32.01	46.02	-14.01	26.25	5.76	QP
6	797.270	28.93	46.02	-17.09	21.61	7.32	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	SPIRIT	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/6/11
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	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	78.500	30.44	40.00	-9.56	38.37	-7.93	QP
2	166.285	33.29	43.50	-10.21	37.86	-4.57	QP
3	197.325	36.58	43.50	-6.92	41.50	-4.92	QP
* 4	320.030	42.17	46.00	-3.83	42.74	-0.57	QP
5	612.000	30.20	46.00	-15.80	25.01	5.19	QP
6	948.105	32.32	46.00	-13.68	22.93	9.39	QP

Note:

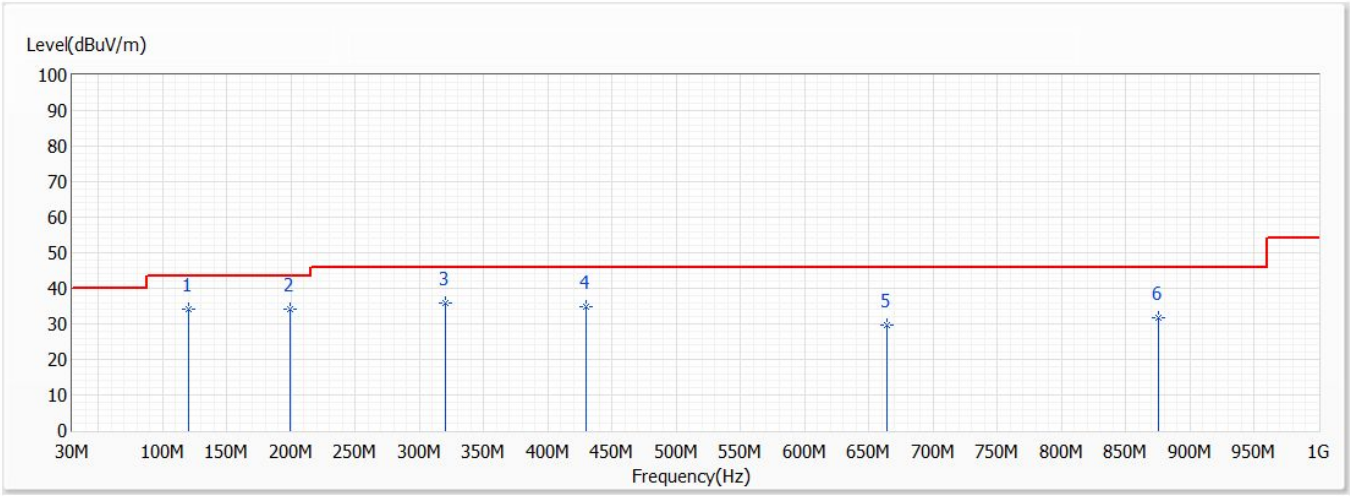
1. All reading levels is Quasi-Peak value.

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	SPIRIT	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/6/11
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	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	120.210	34.29	43.50	-9.21	36.80	-2.51	QP
* 2	199.750	34.31	43.50	-9.19	39.16	-4.85	QP
3	320.030	35.73	46.00	-10.27	36.30	-0.57	QP
4	429.640	34.68	46.00	-11.32	32.11	2.57	QP
5	663.895	29.57	46.00	-16.43	23.83	5.74	QP
6	874.870	31.83	46.00	-14.17	23.57	8.26	QP

Note:

1. All reading levels is Quasi-Peak value.

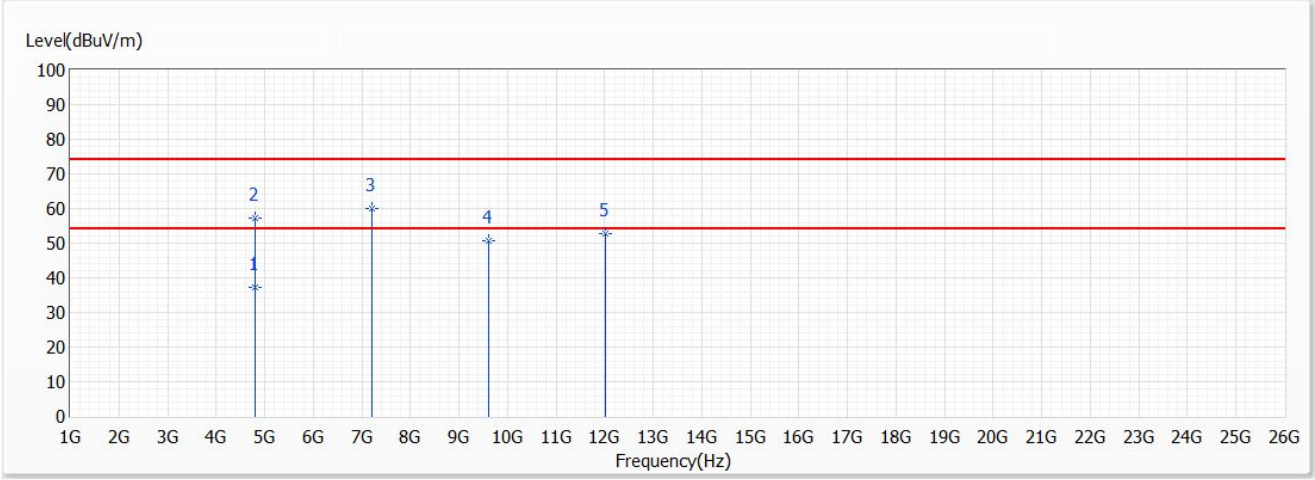
2. “ * ”, means this data is the worst value.

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	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0



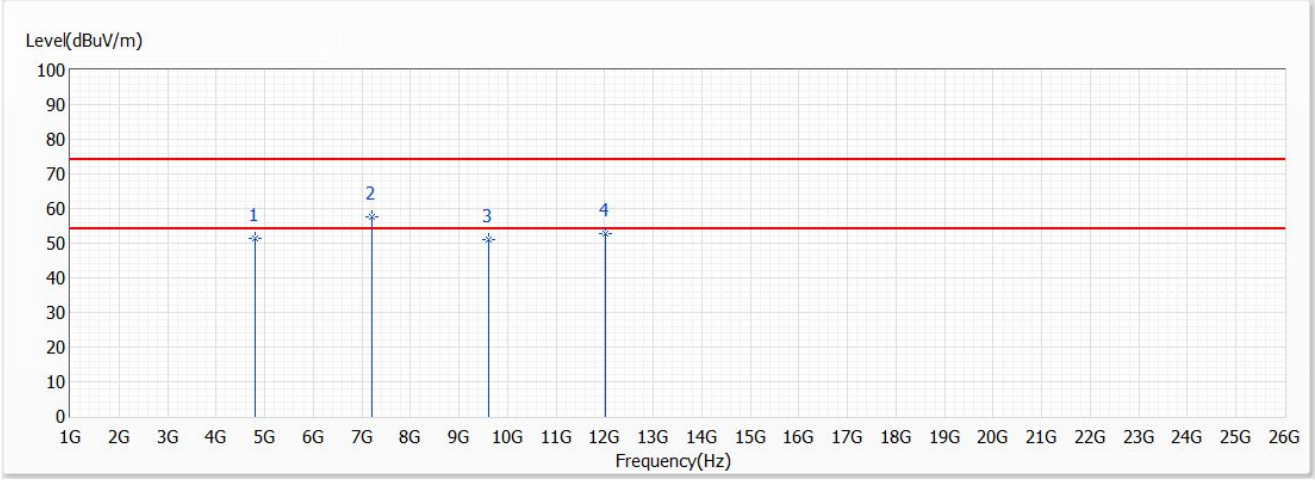
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4803.865	37.35	54.00	-16.65	49.38	-12.03	AV
2	4804.000	57.35	74.00	-16.65	69.38	-12.03	PK
* 3	7206.000	60.09	74.00	-13.91	64.77	-4.68	PK
4	9608.000	50.73	74.00	-23.27	52.06	-1.33	PK
5	12010.000	52.70	74.00	-21.30	49.89	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 calculation of average value :

   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0

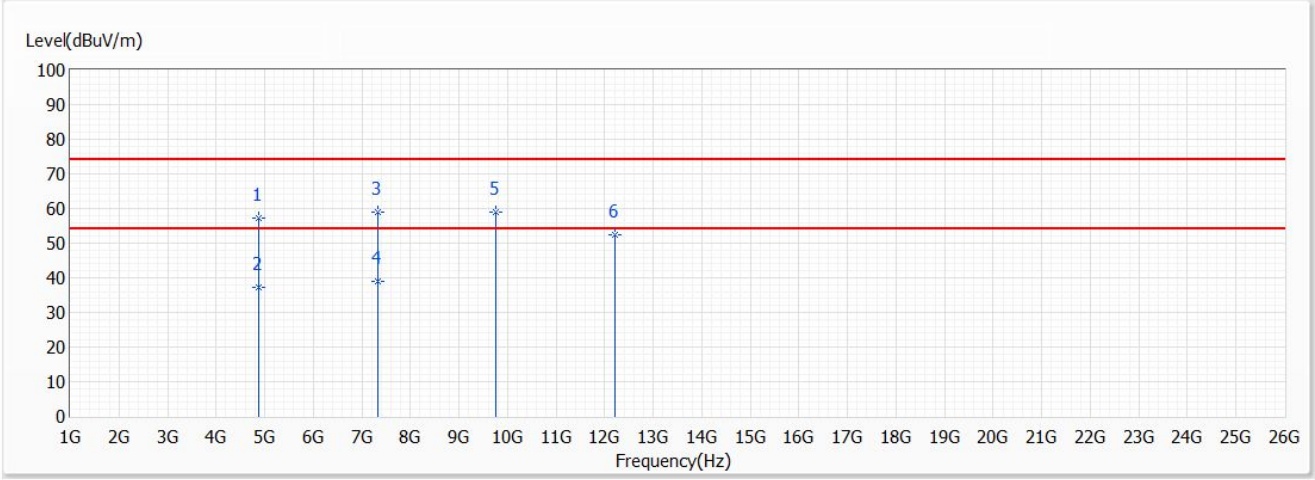


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	51.35	74.00	-22.65	63.38	-12.03	PK
* 2	7206.000	57.58	74.00	-16.42	62.26	-4.68	PK
3	9608.000	50.95	74.00	-23.05	52.28	-1.33	PK
4	12010.000	52.64	74.00	-21.36	49.83	2.81	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	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0

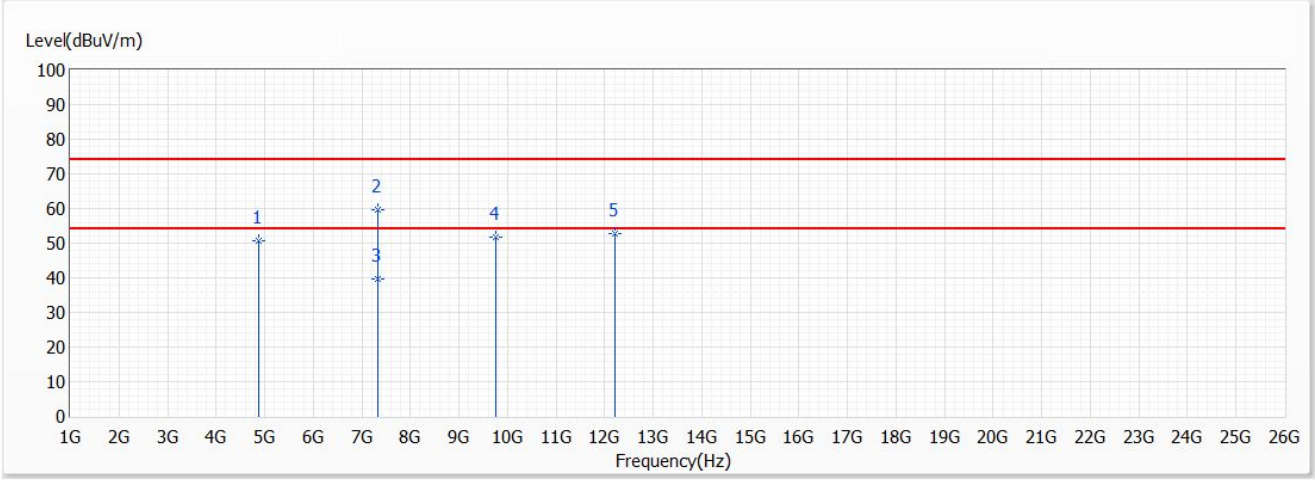


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	57.35	74.00	-16.65	69.17	-11.82	PK
2	4882.000	37.35	54.00	-16.65	49.17	-11.82	AV
* 3	7323.000	58.90	74.00	-15.10	63.24	-4.34	PK
4	7323.000	38.90	54.00	-15.10	43.24	-4.34	AV
5	9764.000	58.90	74.00	-15.10	60.17	-1.27	PK
6	12205.000	52.27	74.00	-21.73	49.70	2.57	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 calculation of average value :
   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0



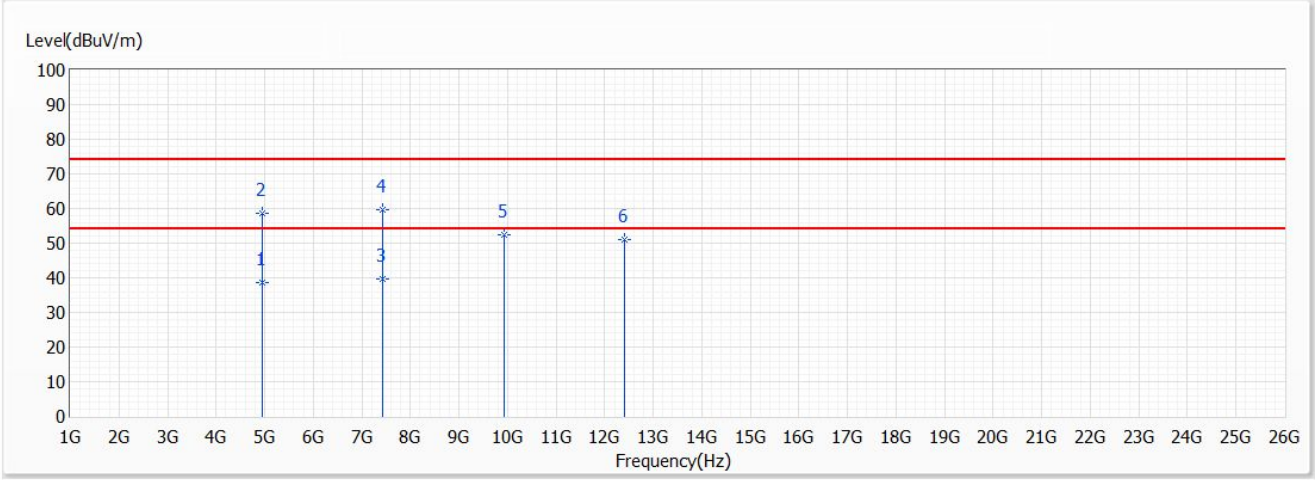
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	50.65	74.00	-23.35	62.47	-11.82	PK
* 2	7323.000	59.57	74.00	-14.43	63.91	-4.34	PK
3	7323.000	39.57	54.00	-14.43	43.91	-4.34	AV
4	9764.000	51.88	74.00	-22.12	53.15	-1.27	PK
5	12205.000	52.63	74.00	-21.37	50.06	2.57	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 calculation of average value :

   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

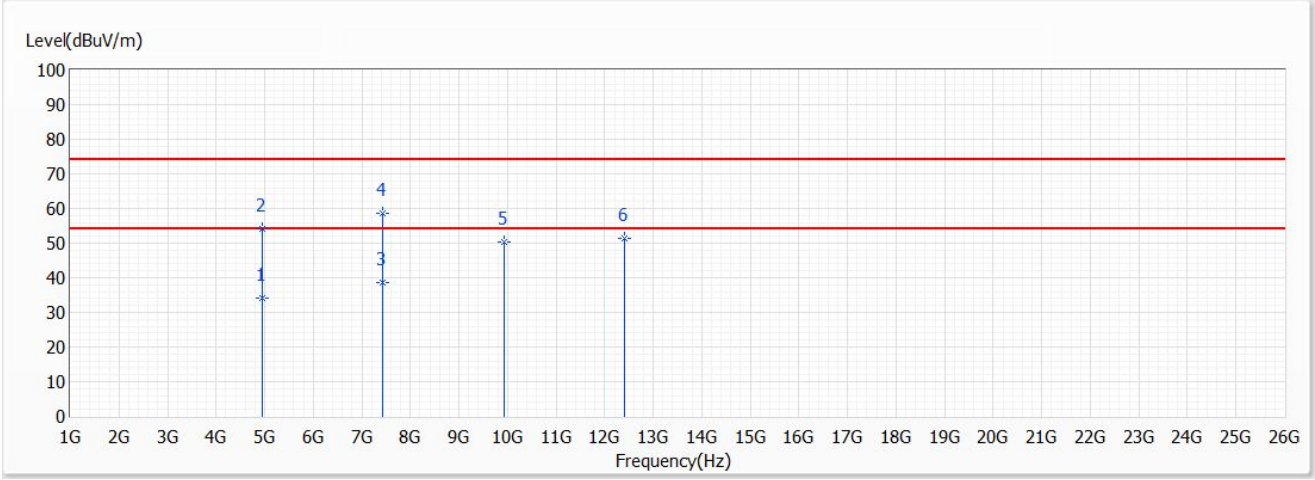


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	38.60	54.00	-15.40	50.20	-11.60	AV
2	4960.000	58.60	74.00	-15.40	70.20	-11.60	PK
* 3	7440.000	39.54	54.00	-14.46	43.55	-4.01	AV
4	7440.000	59.54	74.00	-14.46	63.55	-4.01	PK
5	9920.000	52.25	74.00	-21.75	53.44	-1.19	PK
6	12400.000	51.16	74.00	-22.84	48.82	2.34	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 calculation of average value :
   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

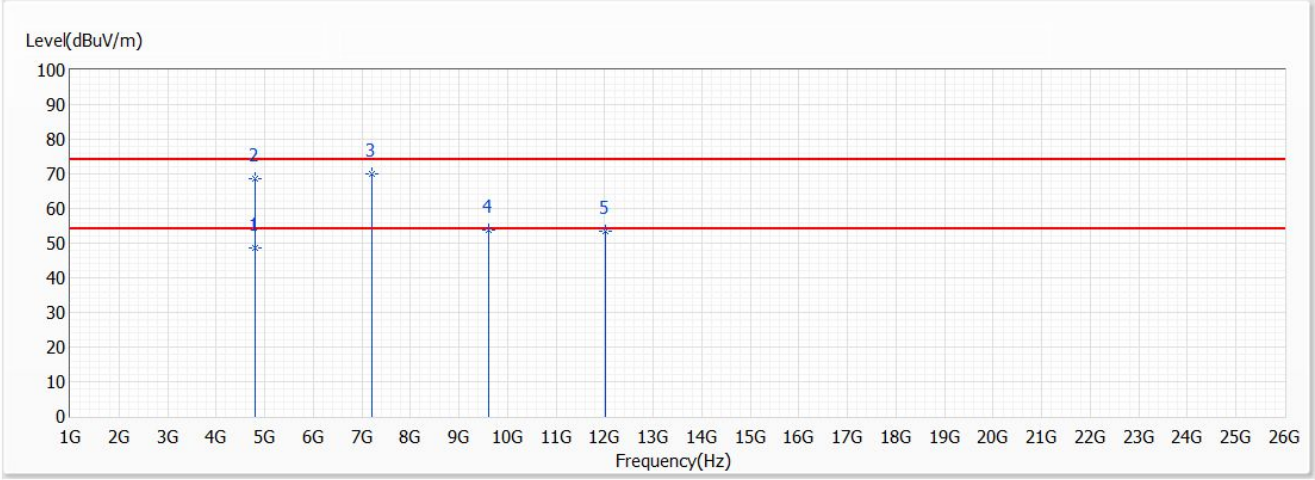


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	34.28	54.00	-19.72	45.88	-11.60	AV
2	4960.000	54.28	74.00	-19.72	65.88	-11.60	PK
* 3	7440.000	38.58	54.00	-15.42	42.59	-4.01	AV
4	7440.000	58.58	74.00	-15.42	62.59	-4.01	PK
5	9920.000	50.26	74.00	-23.74	51.45	-1.19	PK
6	12400.000	51.47	74.00	-22.53	49.13	2.34	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 calculation of average value :
   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0



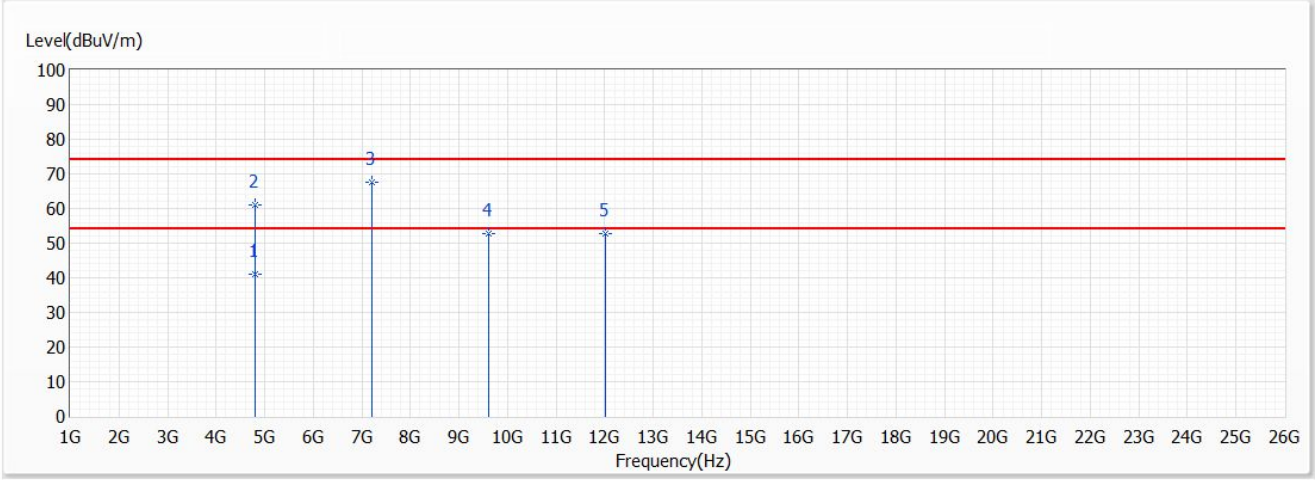
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	48.72	54.00	-5.28	60.75	-12.03	AV
2	4804.000	68.72	74.00	-5.28	80.75	-12.03	PK
* 3	7206.000	70.08	74.00	-3.92	74.76	-4.68	PK
4	9608.000	53.65	74.00	-20.35	54.98	-1.33	PK
5	12010.000	53.32	74.00	-20.68	50.51	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 calculation of average value :

   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0



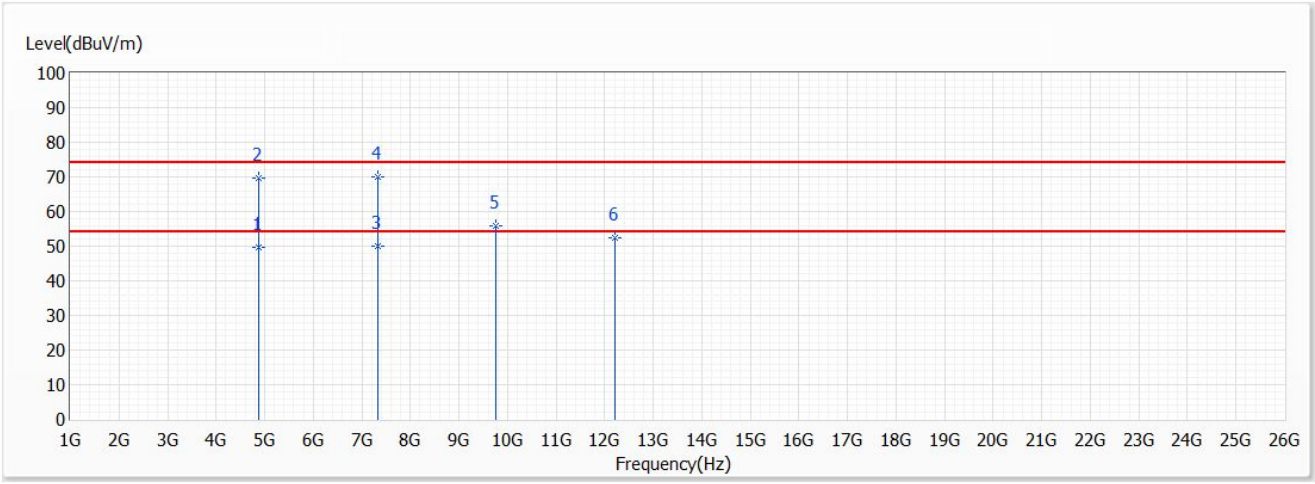
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	41.06	54.00	-12.94	53.09	-12.03	AV
2	4804.000	61.06	74.00	-12.94	73.09	-12.03	PK
* 3	7206.000	67.53	74.00	-6.47	72.21	-4.68	PK
4	9608.000	52.60	74.00	-21.40	53.93	-1.33	PK
5	12010.000	52.89	74.00	-21.11	50.08	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 calculation of average value :

   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0

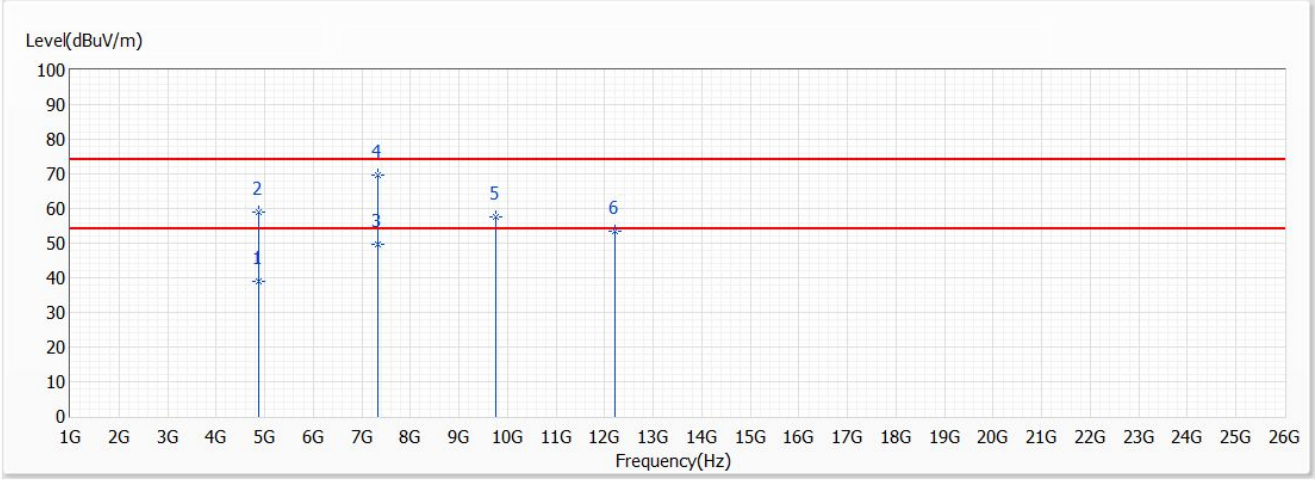


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	49.52	54.00	-4.48	61.34	-11.82	AV
2	4882.000	69.52	74.00	-4.48	81.34	-11.82	PK
* 3	7323.000	50.17	54.00	-3.83	54.51	-4.34	AV
4	7323.000	70.17	74.00	-3.83	74.51	-4.34	PK
5	9764.000	55.94	74.00	-18.06	57.21	-1.27	PK
6	12205.000	52.34	74.00	-21.66	49.77	2.57	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 calculation of average value :
   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0

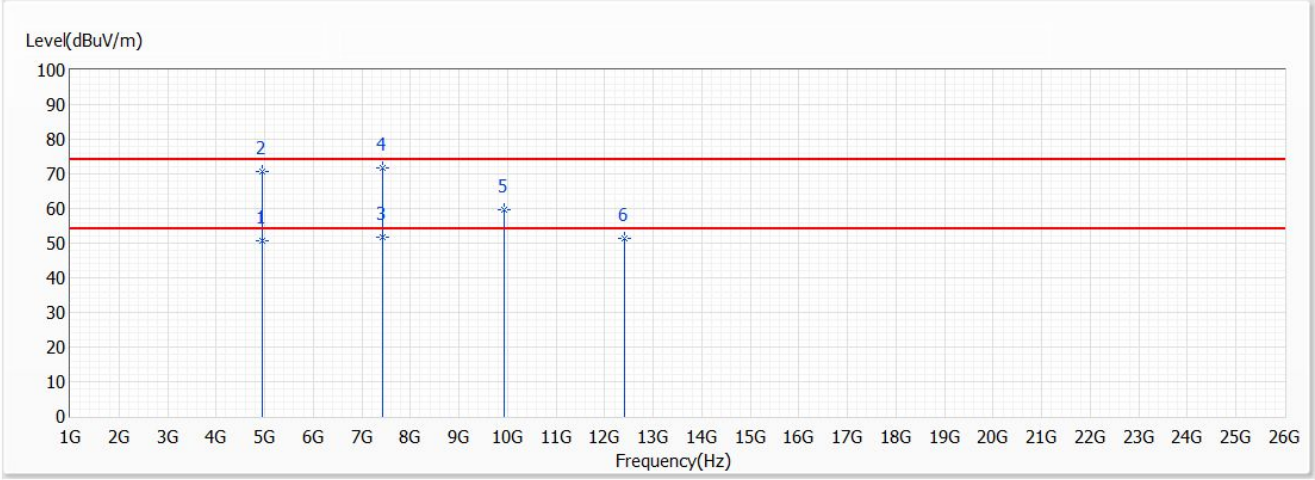


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	39.04	54.00	-14.96	50.86	-11.82	AV
2	4882.000	59.04	74.00	-14.96	70.86	-11.82	PK
* 3	7323.000	49.49	54.00	-4.51	53.83	-4.34	AV
4	7323.000	69.49	74.00	-4.51	73.83	-4.34	PK
5	9764.000	57.53	74.00	-16.47	58.80	-1.27	PK
6	12205.000	53.32	74.00	-20.68	50.75	2.57	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 calculation of average value :
   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

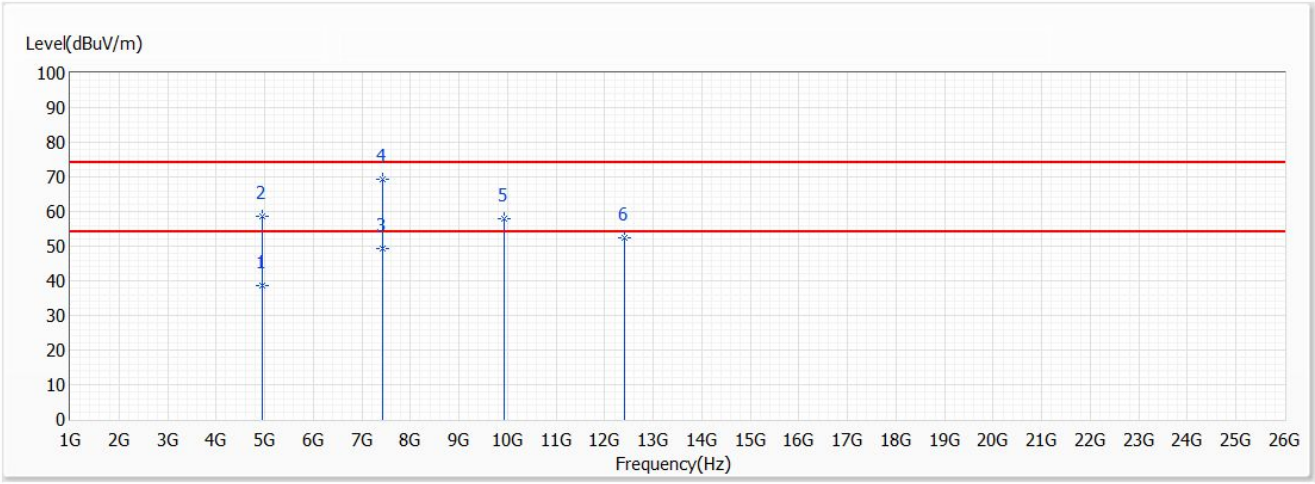


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	50.71	54.00	-3.29	62.31	-11.60	AV
2	4960.000	70.71	74.00	-3.29	82.31	-11.60	PK
* 3	7440.000	51.85	54.00	-2.15	55.86	-4.01	AV
4	7440.000	71.85	74.00	-2.15	75.86	-4.01	PK
5	9920.000	59.82	74.00	-14.18	61.01	-1.19	PK
6	12400.000	51.49	74.00	-22.51	49.15	2.34	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 calculation of average value :
   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60Hz	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0



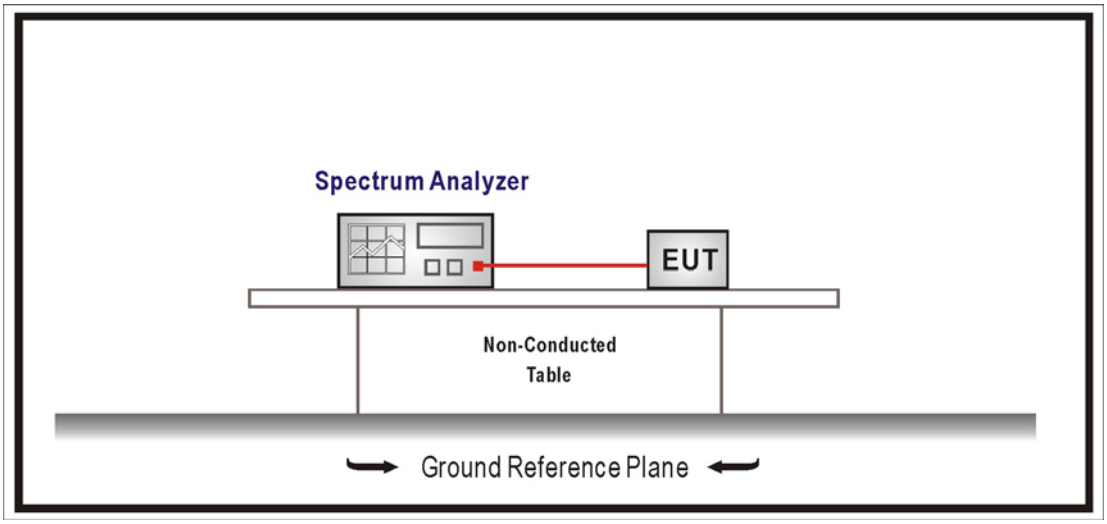
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	38.75	54.00	-15.25	50.35	-11.60	AV
2	4960.000	58.75	74.00	-15.25	70.35	-11.60	PK
* 3	7440.000	49.33	54.00	-4.67	53.34	-4.01	AV
4	7440.000	69.33	74.00	-4.67	73.34	-4.01	PK
5	9920.000	57.80	74.00	-16.20	58.99	-1.19	PK
6	12400.000	52.41	74.00	-21.59	50.07	2.34	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 calculation of average value :
   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")
5. 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 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 an RF conducted or radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.3. 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

5.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

5.5. Test Result

Product Name	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/01/13	Test Site	SR12-H
Temperature(°C)	20.0	Humidity (%RH)	59.0

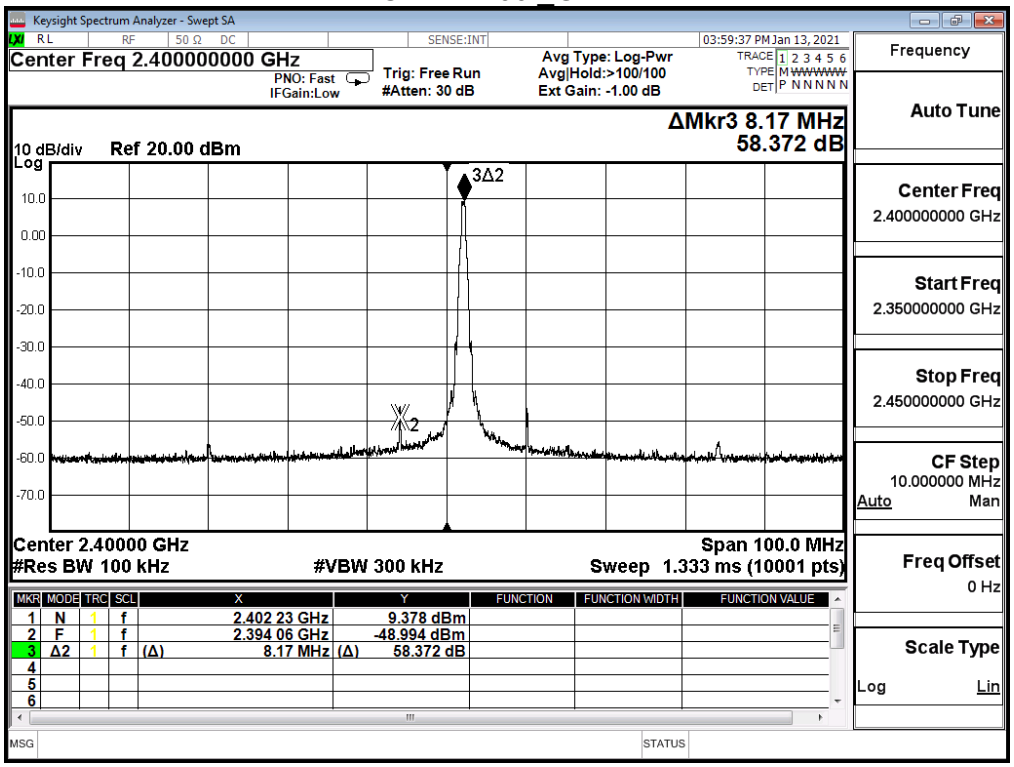
GFSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)
00	2402	31.011	≧20
39	2441	30.722	≧20
78	2480	33.117	≧20

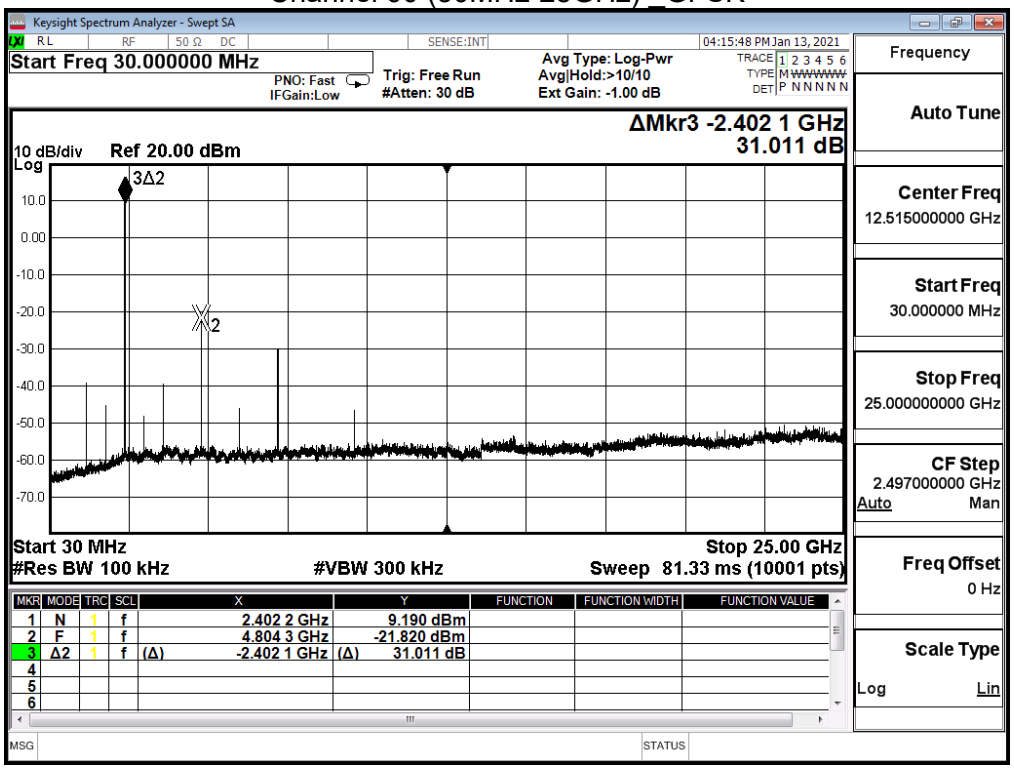
8-DPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)
00	2402	32.293	≧20
39	2441	33.506	≧20
78	2480	32.679	≧20

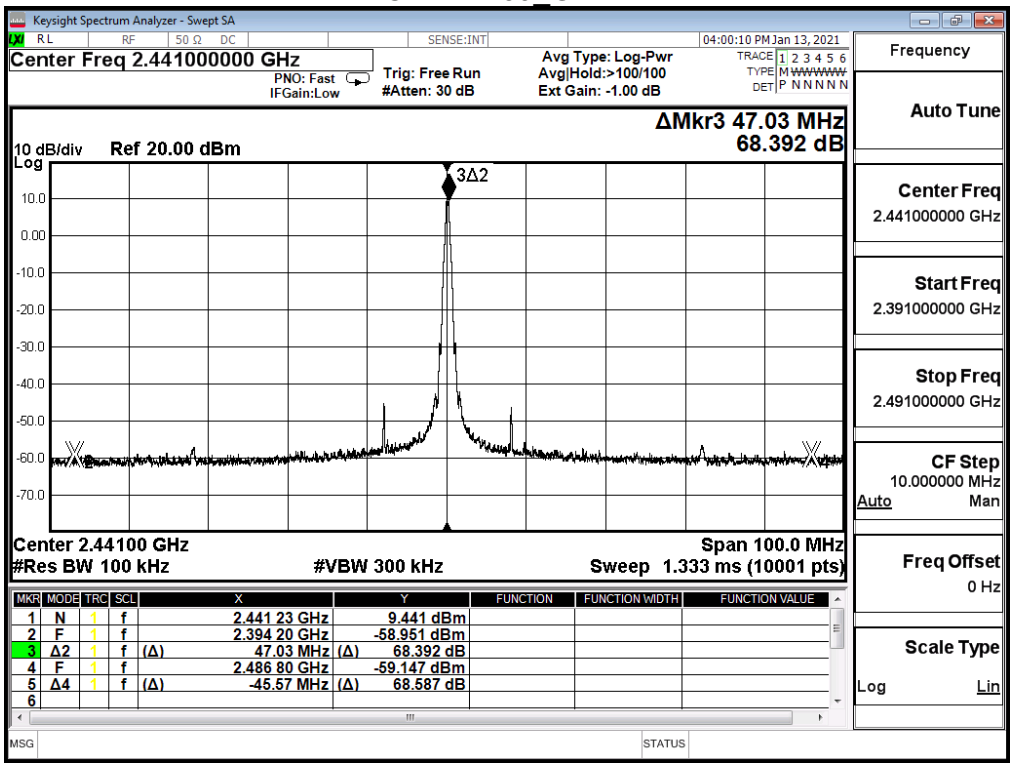
Channel 00 _GFSK



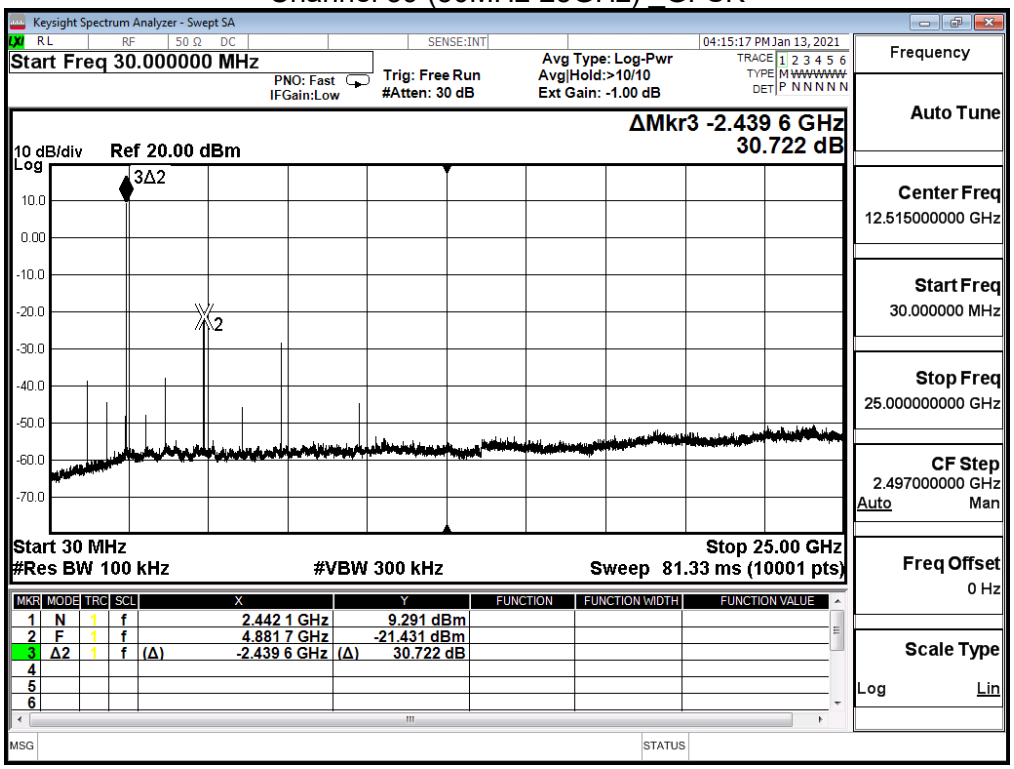
Channel 00 (30MHz-25GHz) _GFSK



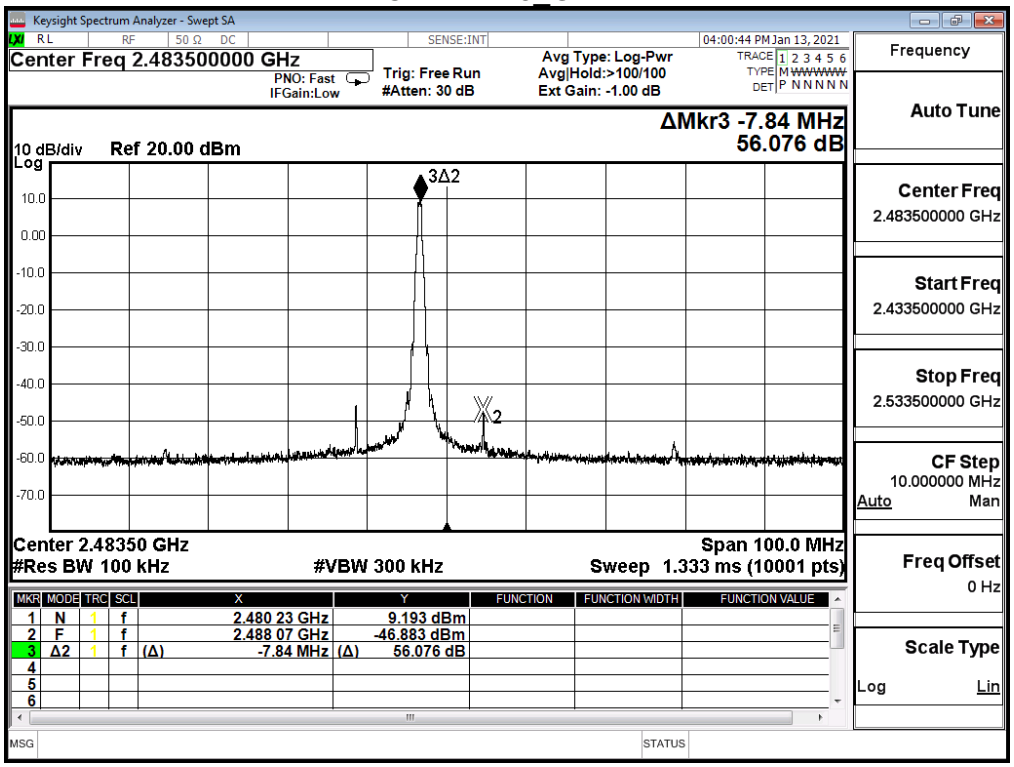
Channel 39_GFSK



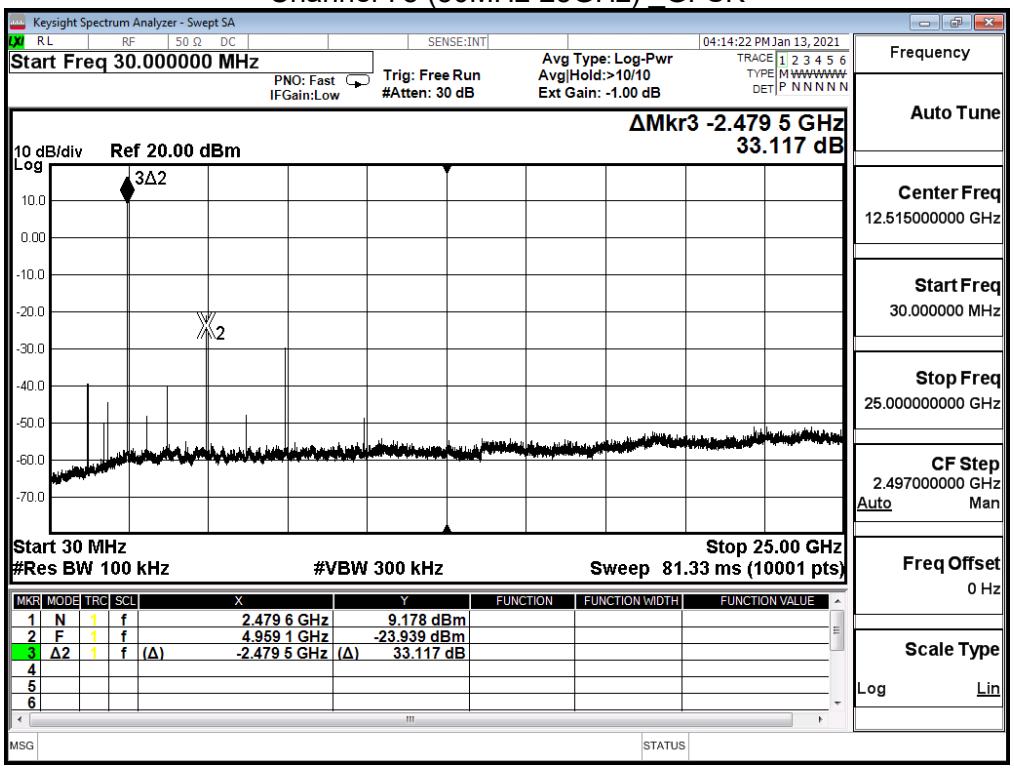
Channel 39 (30MHz-25GHz)_GFSK



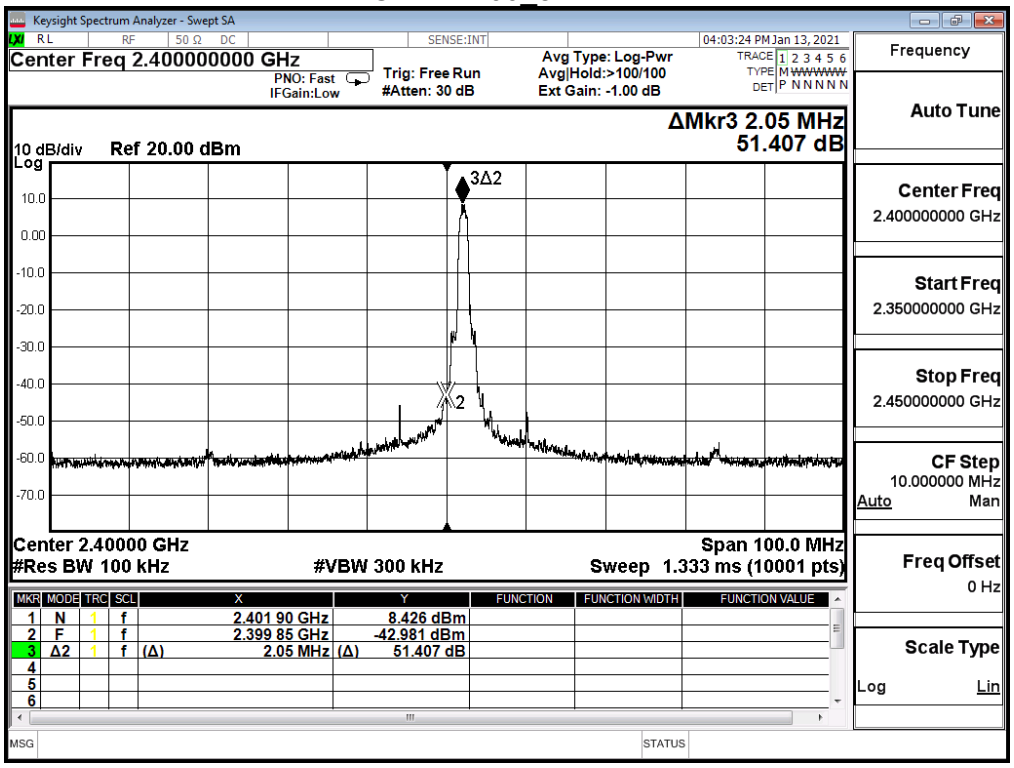
Channel 78_GFSK



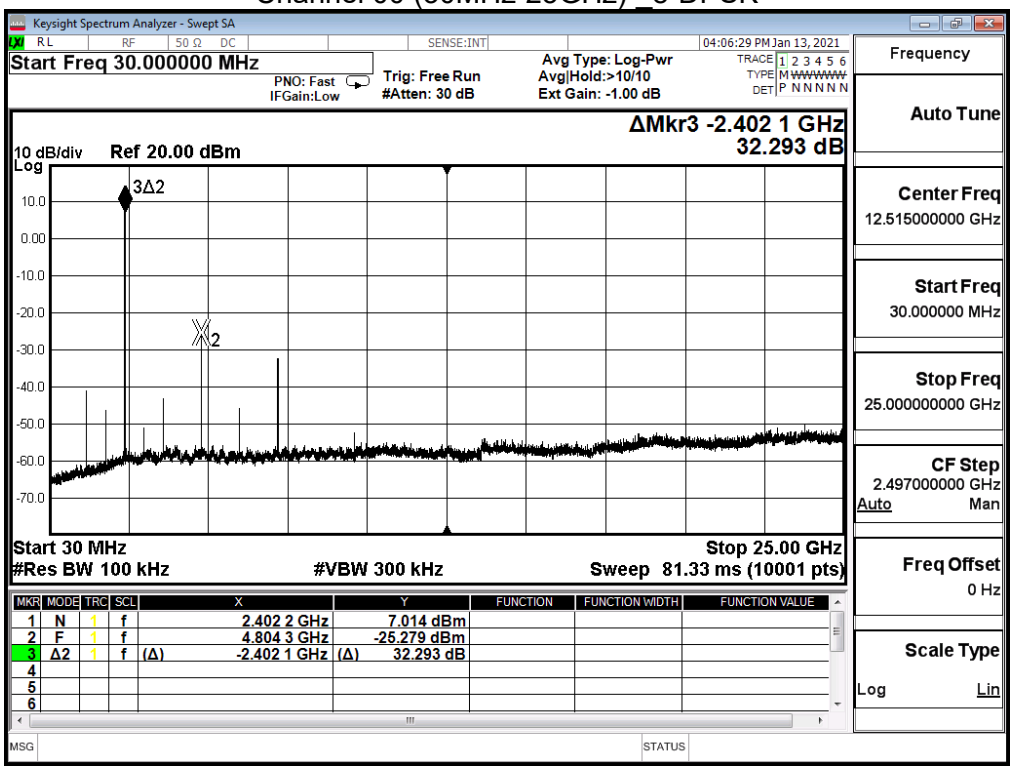
Channel 78 (30MHz-25GHz)_GFSK



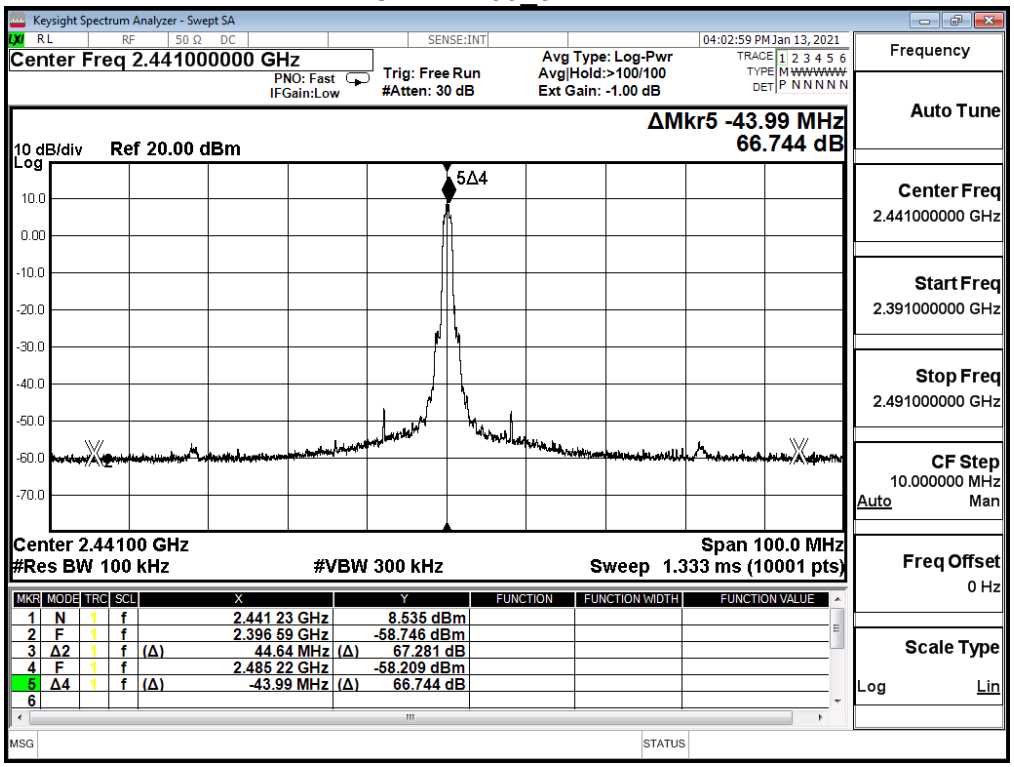
Channel 00_8-DPSK



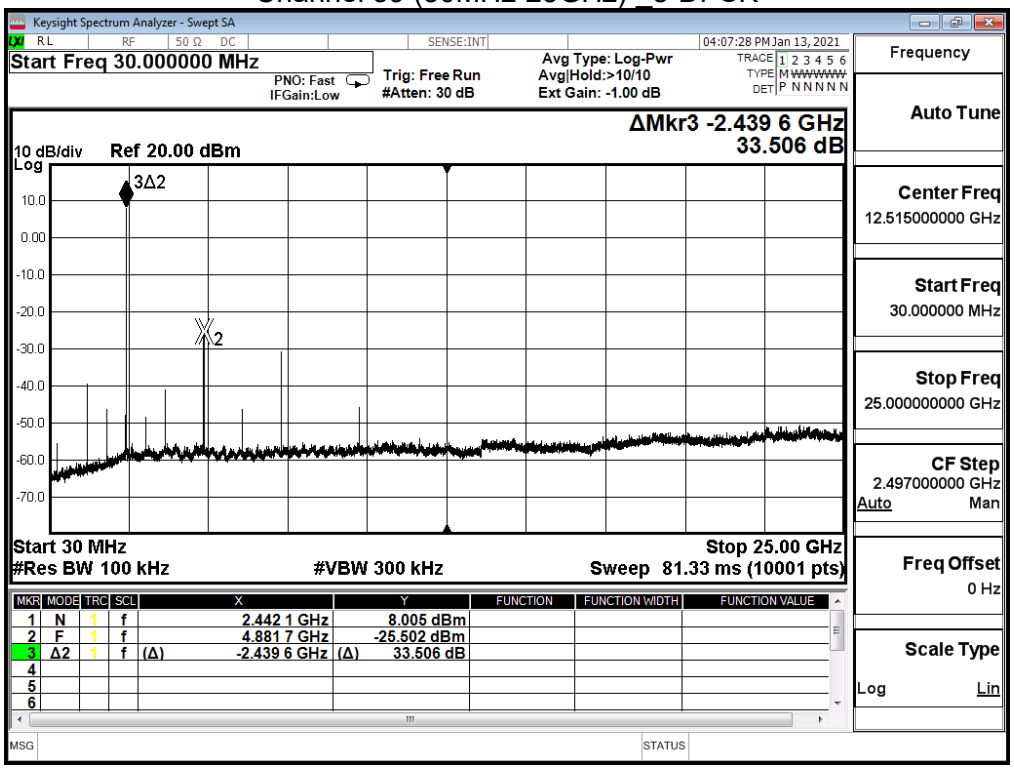
Channel 00 (30MHz-25GHz)_8-DPSK



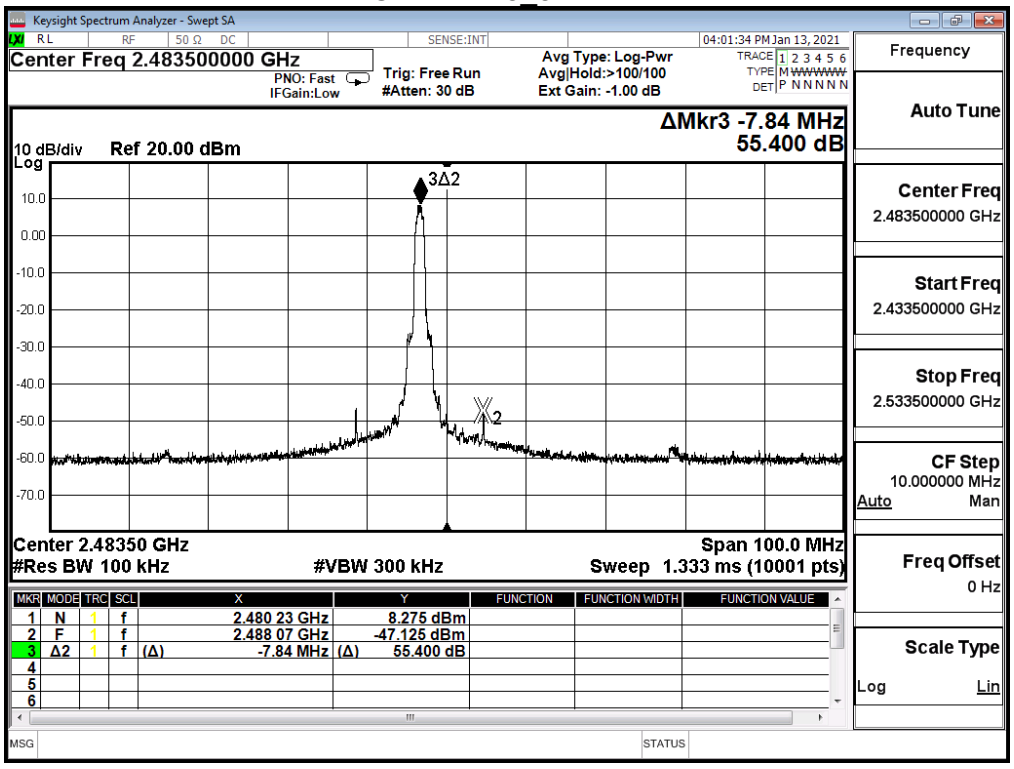
Channel 39_8-DPSK



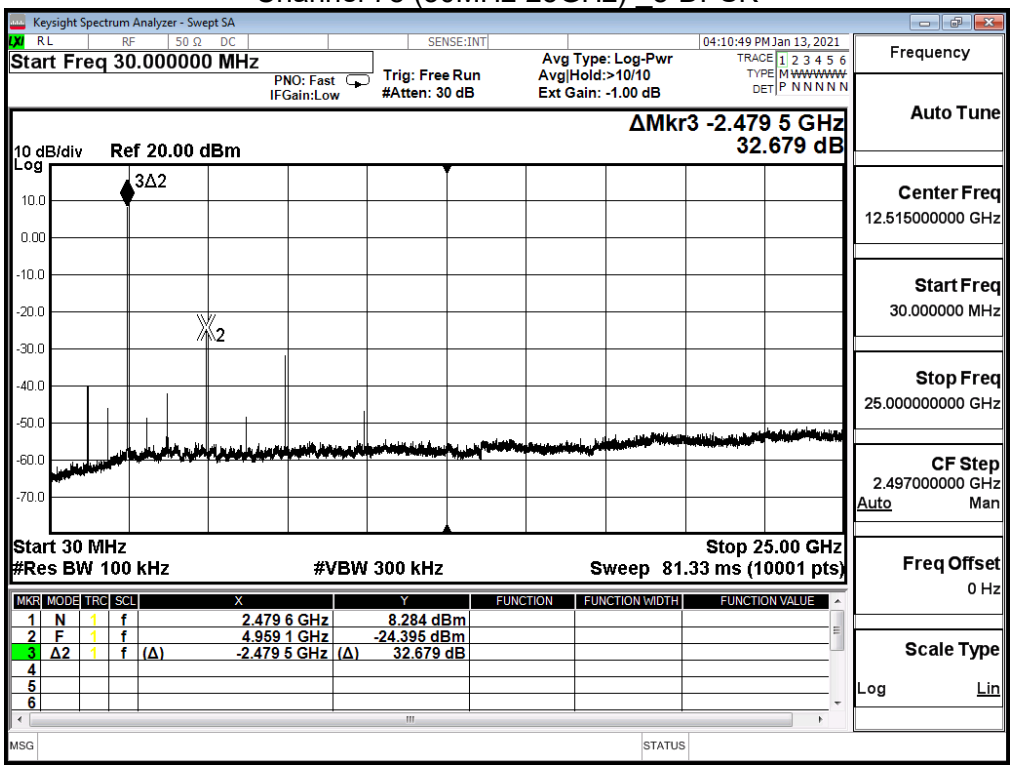
Channel 39 (30MHz-25GHz) _8-DPSK



Channel 78_8-DPSK

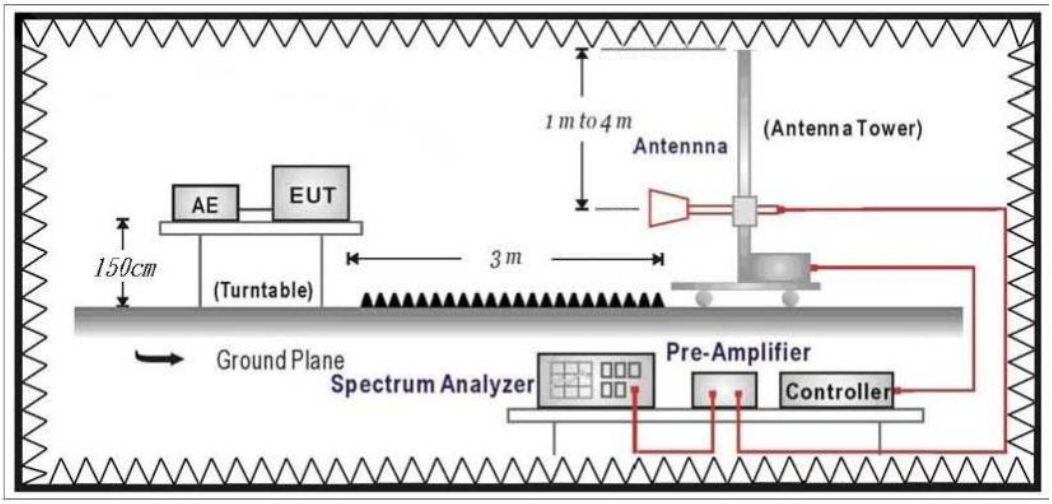


Channel 78 (30MHz-25GHz) _8-DPSK



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.

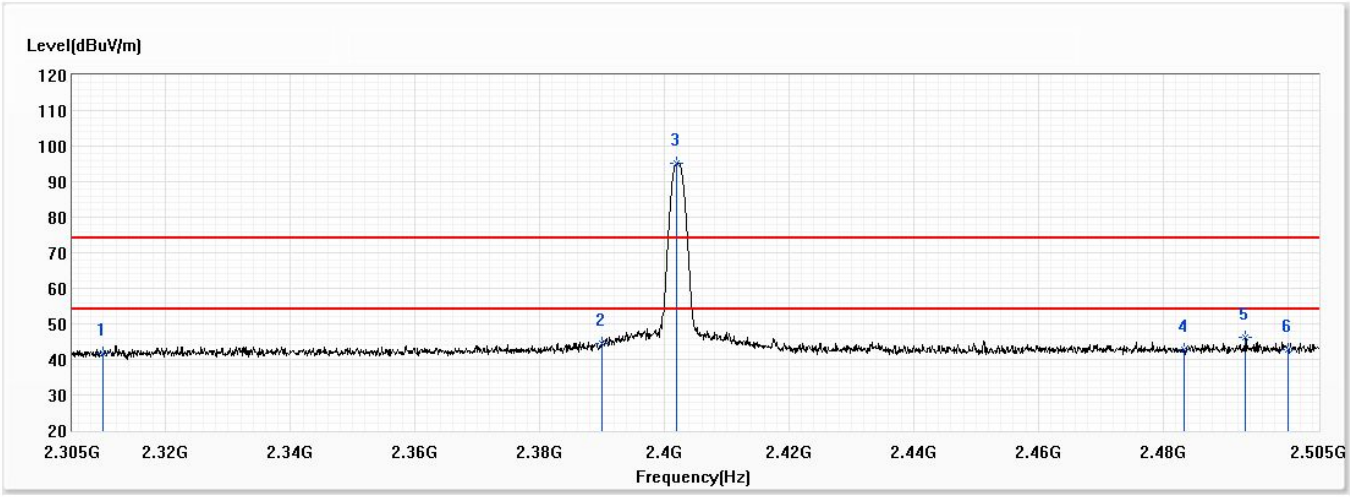
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

6.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

6.5. Test Result

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0

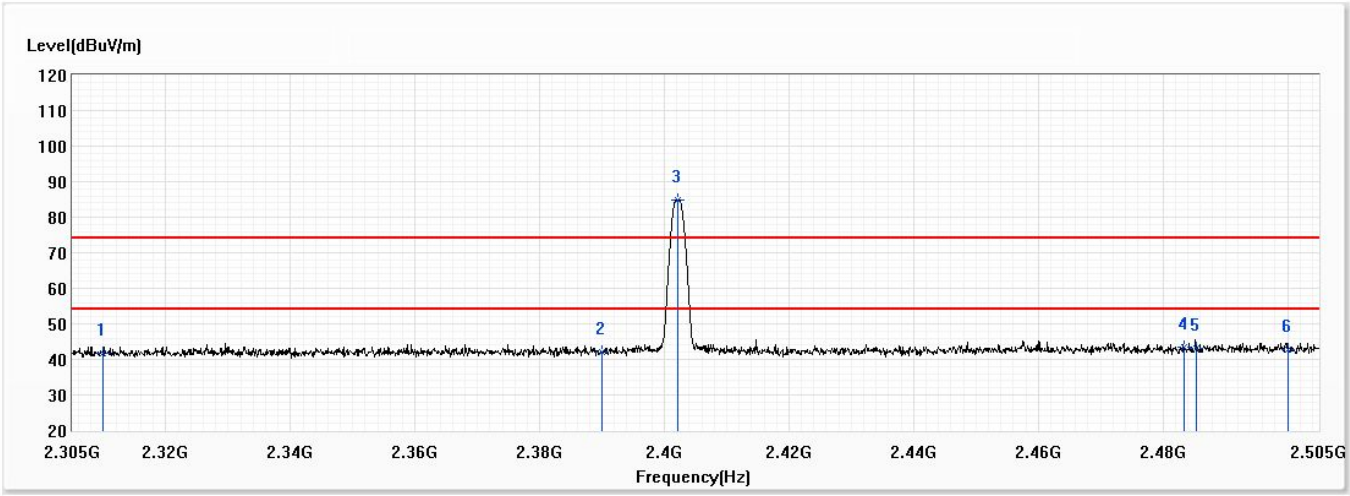


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	41.86	74.00	-32.14	28.71	13.15	PK
2	2390.000	44.43	74.00	-29.57	30.73	13.70	PK
! 3	2402.000	95.10	74.00	21.10	81.31	13.79	PK
4	2483.500	42.66	74.00	-31.34	28.30	14.36	PK
5	2493.300	46.08	74.00	-27.92	31.64	14.44	PK
6	2500.000	42.90	74.00	-31.10	28.42	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it's not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0

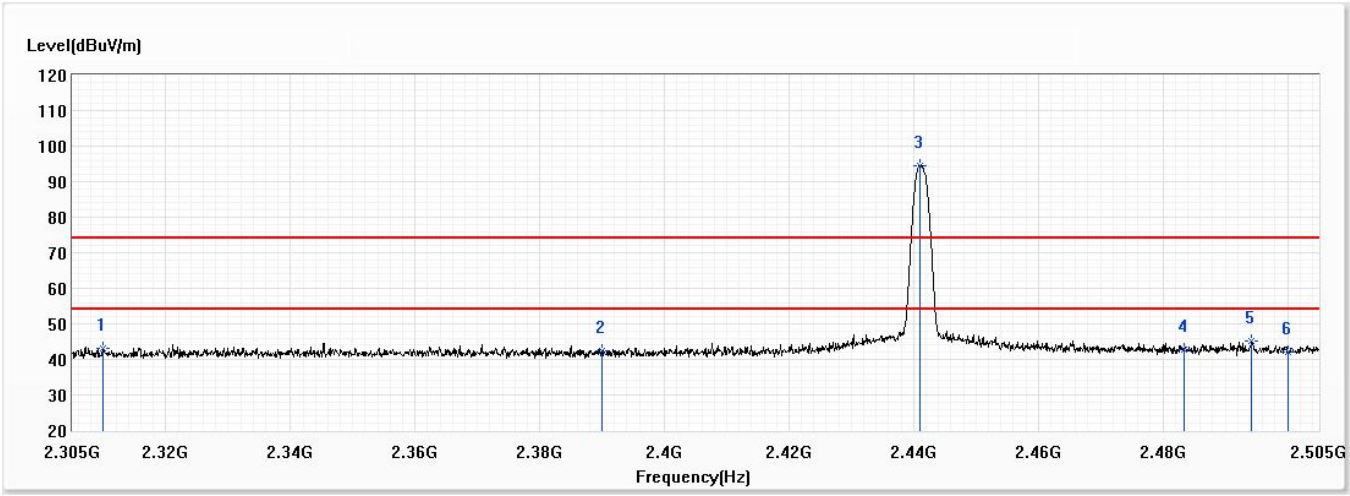


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	41.88	74.00	-32.12	28.73	13.15	PK
2	2390.000	42.15	74.00	-31.85	28.45	13.70	PK
! 3	2402.100	84.99	74.00	10.99	71.20	13.79	PK
4	2483.500	43.36	74.00	-30.64	29.00	14.36	PK
5	2485.300	43.10	74.00	-30.90	28.73	14.37	PK
6	2500.000	42.60	74.00	-31.40	28.12	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0

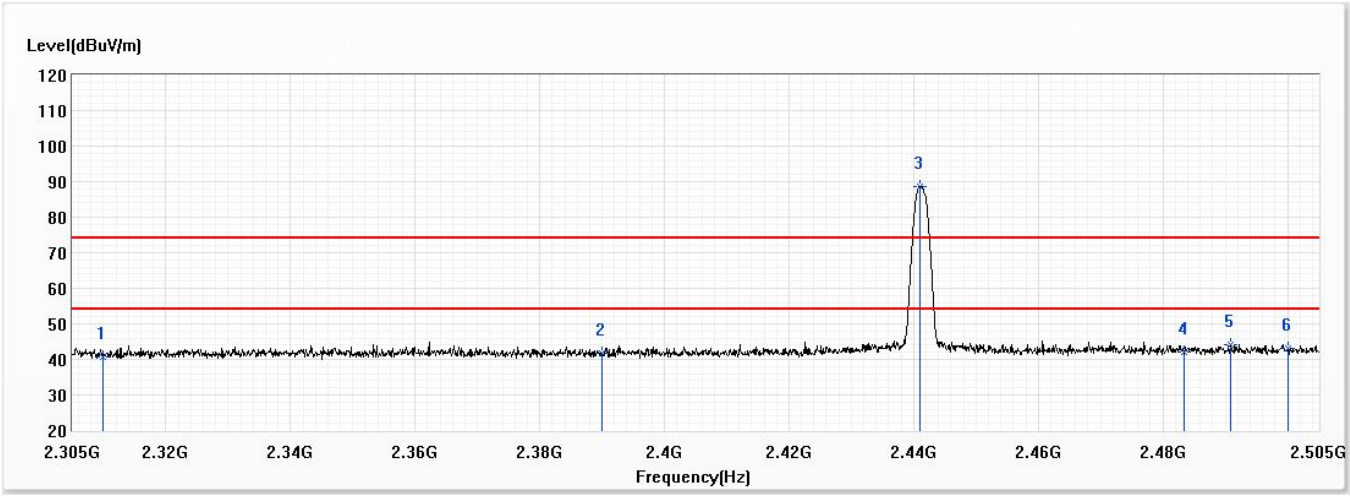


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	43.21	74.00	-30.79	30.06	13.15	PK
2	2390.000	42.40	74.00	-31.60	28.70	13.70	PK
! 3	2441.000	94.37	74.00	20.37	80.31	14.06	PK
4	2483.500	42.93	74.00	-31.07	28.57	14.36	PK
5	2494.300	45.06	74.00	-28.94	30.62	14.44	PK
6	2500.000	42.15	74.00	-31.85	27.67	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0

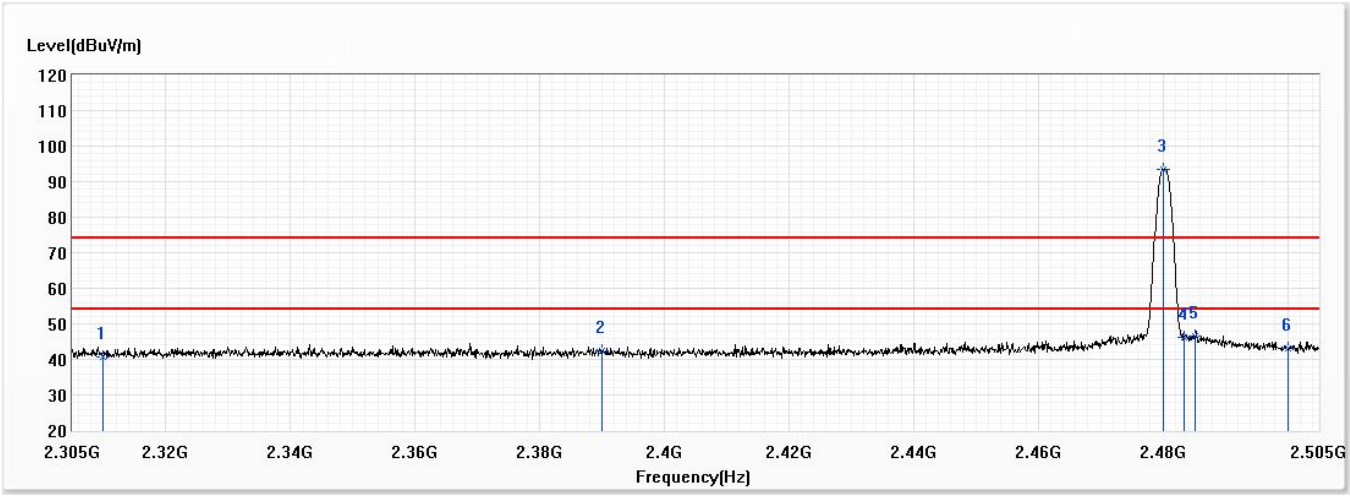


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	40.85	74.00	-33.15	27.70	13.15	PK
2	2390.000	41.65	74.00	-32.35	27.95	13.70	PK
! 3	2441.000	88.57	74.00	14.57	74.51	14.06	PK
4	2483.500	42.11	74.00	-31.89	27.75	14.36	PK
5	2490.900	44.21	74.00	-29.79	29.80	14.41	PK
6	2500.000	43.11	74.00	-30.89	28.63	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

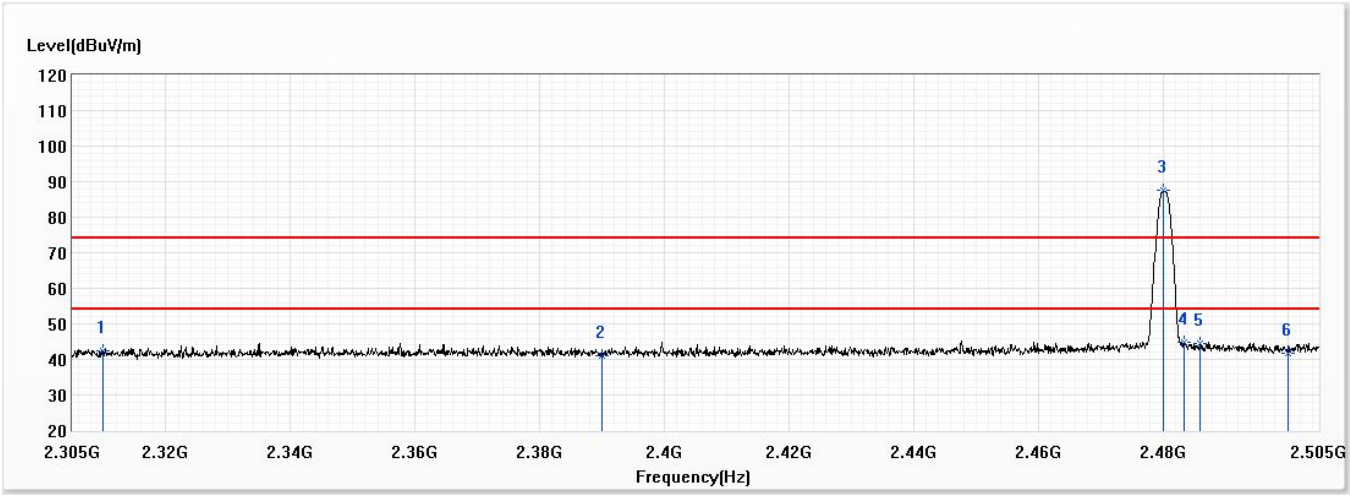


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	40.68	74.00	-33.32	27.53	13.15	PK
2	2390.000	42.37	74.00	-31.63	28.67	13.70	PK
! 3	2480.000	93.58	74.00	19.58	79.24	14.34	PK
4	2483.500	46.10	74.00	-27.90	31.74	14.36	PK
5	2485.100	46.43	74.00	-27.57	32.06	14.37	PK
6	2500.000	43.22	74.00	-30.78	28.74	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

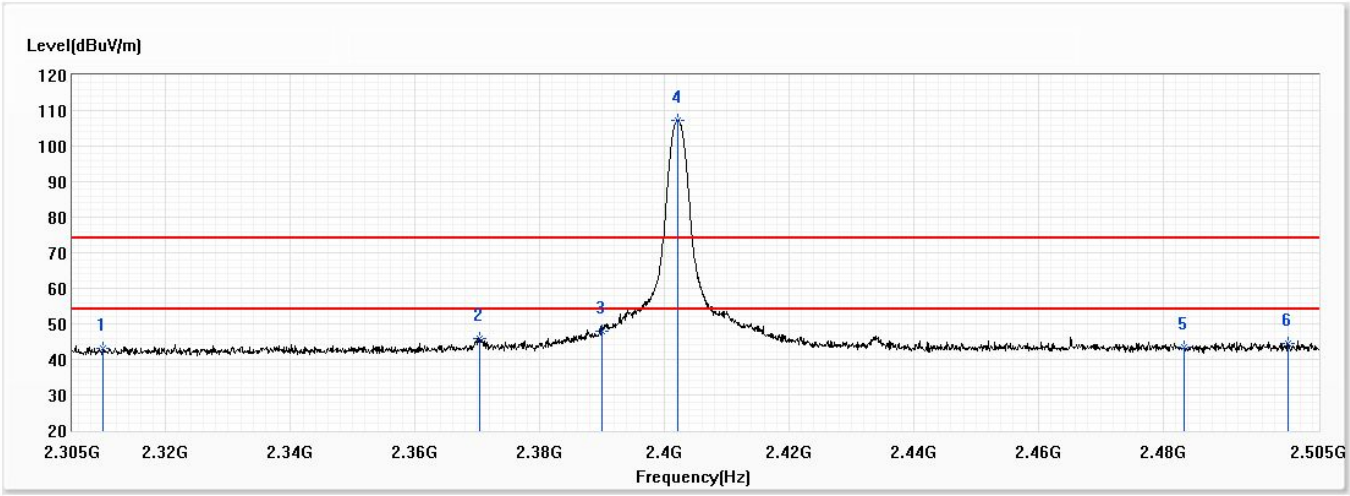


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	42.26	74.00	-31.74	29.11	13.15	PK
2	2390.000	41.17	74.00	-32.83	27.47	13.70	PK
! 3	2480.000	87.44	74.00	13.44	73.10	14.34	PK
4	2483.500	44.67	74.00	-29.33	30.31	14.36	PK
5	2486.000	44.60	74.00	-29.40	30.22	14.38	PK
6	2500.000	41.83	74.00	-32.17	27.35	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0

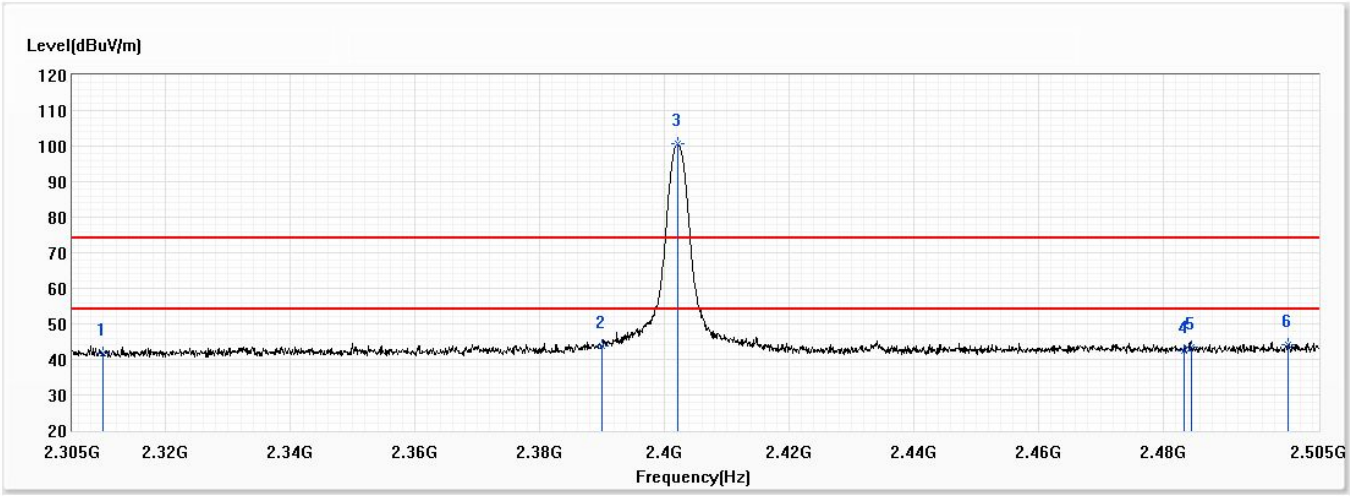


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	43.15	74.00	-30.85	30.00	13.15	PK
2	2370.400	45.71	74.00	-28.29	32.14	13.57	PK
3	2390.000	47.86	74.00	-26.14	34.16	13.70	PK
! 4	2402.100	107.34	74.00	33.34	93.55	13.79	PK
5	2483.500	43.36	74.00	-30.64	29.00	14.36	PK
6	2500.000	44.56	74.00	-29.44	30.08	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 0,2.402GHz	Humidity (%RH)	61.0

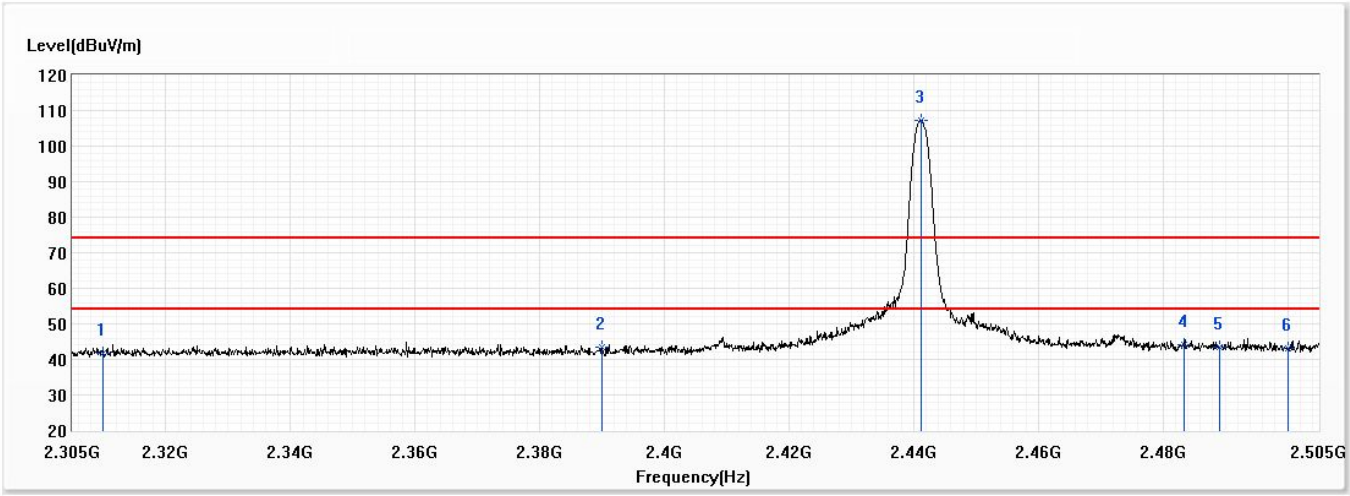


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	41.62	74.00	-32.38	28.47	13.15	PK
2	2390.000	43.88	74.00	-30.12	30.18	13.70	PK
! 3	2402.100	100.62	74.00	26.62	86.83	13.79	PK
4	2483.500	42.52	74.00	-31.48	28.16	14.36	PK
5	2484.500	43.35	74.00	-30.65	28.99	14.36	PK
6	2500.000	44.14	74.00	-29.86	29.66	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0

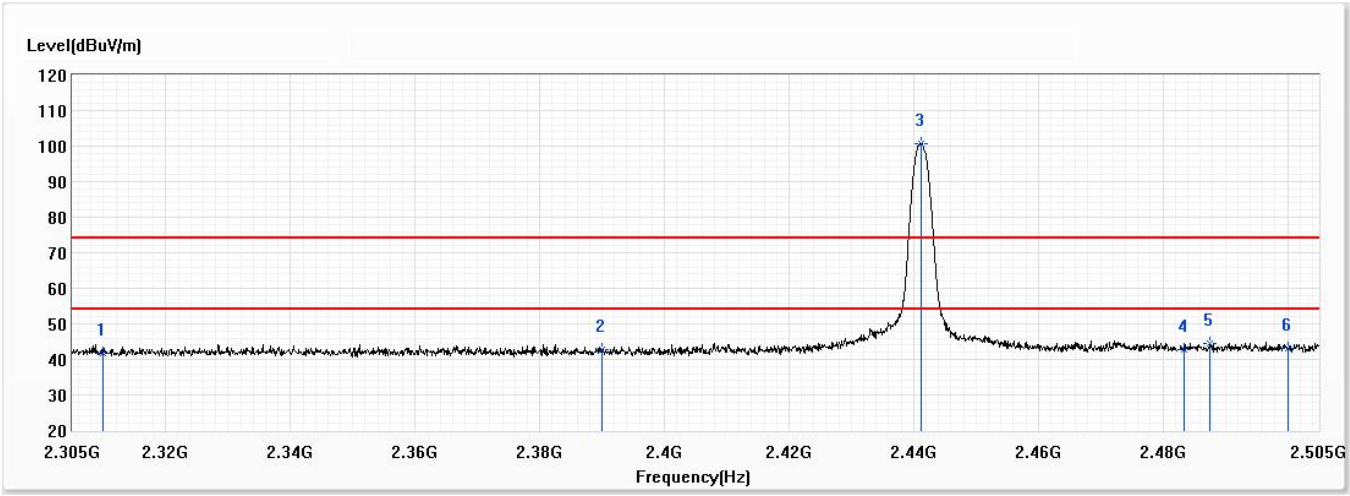


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	41.78	74.00	-32.22	28.63	13.15	PK
2	2390.000	43.51	74.00	-30.49	29.81	13.70	PK
! 3	2441.200	107.40	74.00	33.40	93.34	14.06	PK
4	2483.500	44.22	74.00	-29.78	29.86	14.36	PK
5	2489.200	43.49	74.00	-30.51	29.09	14.40	PK
6	2500.000	42.94	74.00	-31.06	28.46	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 39,2.441GHz	Humidity (%RH)	61.0

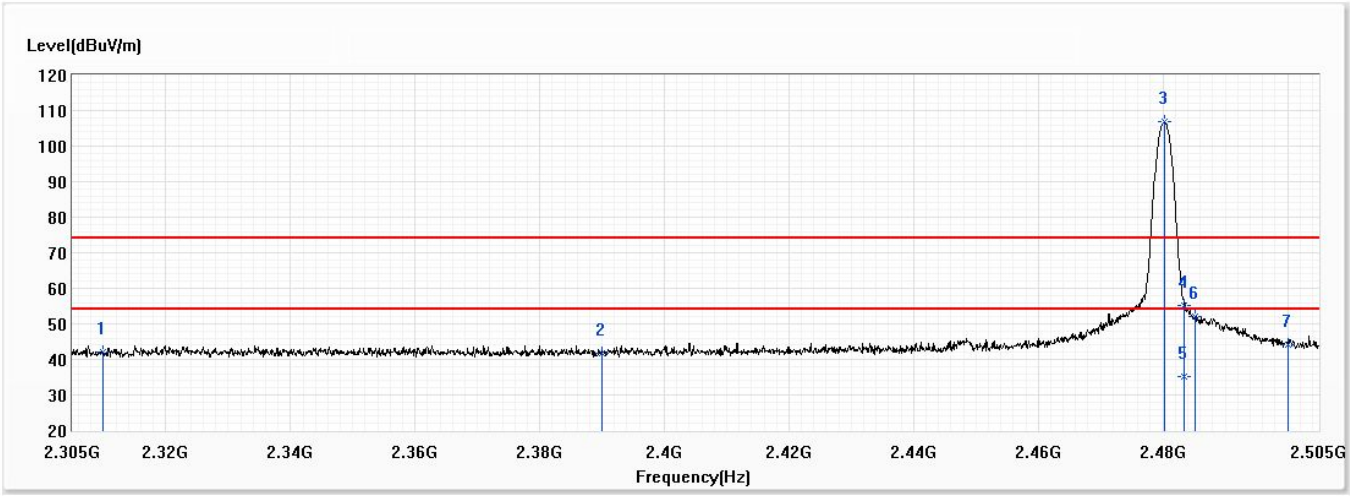


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	41.75	74.00	-32.25	28.60	13.15	PK
2	2390.000	42.62	74.00	-31.38	28.92	13.70	PK
! 3	2441.200	100.83	74.00	26.83	86.77	14.06	PK
4	2483.500	42.79	74.00	-31.21	28.43	14.36	PK
5	2487.600	44.48	74.00	-29.52	30.08	14.40	PK
6	2500.000	43.14	74.00	-30.86	28.66	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0



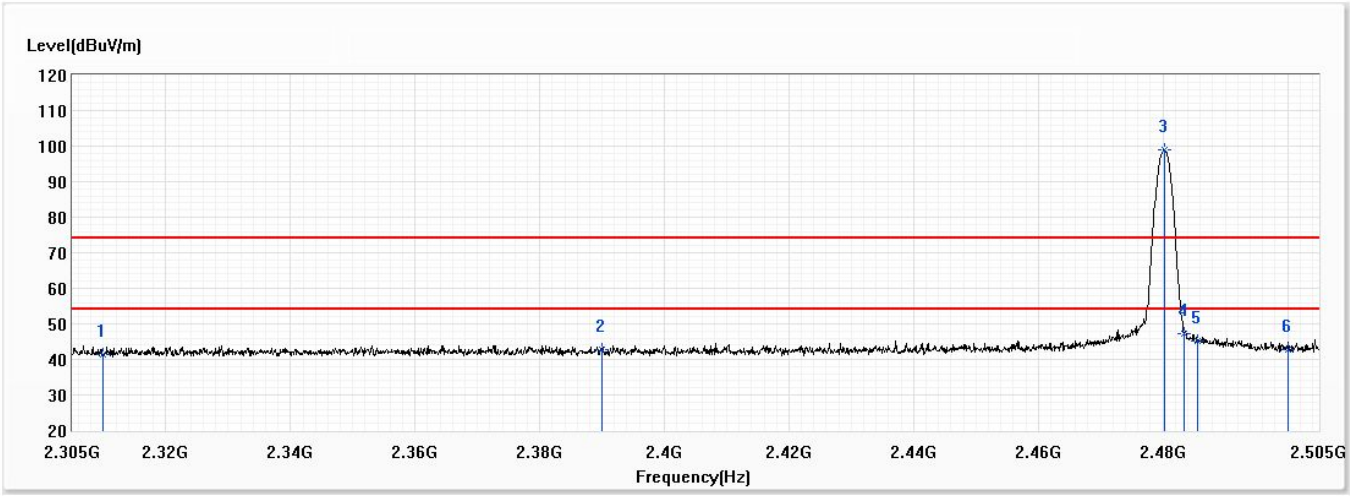
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	42.03	74.00	-31.97	28.88	13.15	PK
2	2390.000	41.59	74.00	-32.41	27.89	13.70	PK
! 3	2480.200	106.74	74.00	32.74	92.40	14.34	PK
4	2483.500	55.08	74.00	-18.92	40.72	14.36	PK
5	2483.500	35.08	54.00	-18.92	20.72	14.36	AV
6	2485.100	51.90	74.00	-22.10	37.53	14.37	PK
7	2500.000	44.10	74.00	-29.90	29.62	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.
4. The calculation of average value :

   Average value = Peak value + Duty cycle correction factor (The duty cycle correction factor refer to section "Duty Cycle")

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/7
Test Mode	Mode 1: Transmit	Engineer	Marisa Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Ch 78,2.48GHz	Humidity (%RH)	61.0

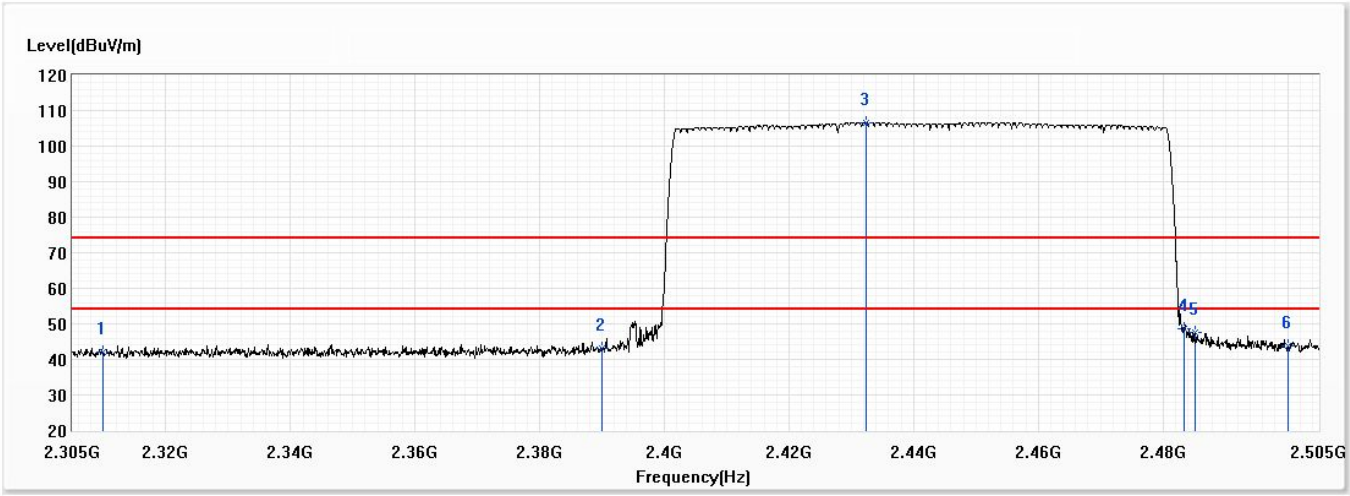


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	41.41	74.00	-32.59	28.26	13.15	PK
2	2390.000	42.86	74.00	-31.14	29.16	13.70	PK
! 3	2480.200	98.86	74.00	24.86	84.52	14.34	PK
4	2483.500	47.16	74.00	-26.84	32.80	14.36	PK
5	2485.500	45.12	74.00	-28.88	30.74	14.38	PK
6	2500.000	42.86	74.00	-31.14	28.38	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/12
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Hopping	Humidity (%RH)	61.0

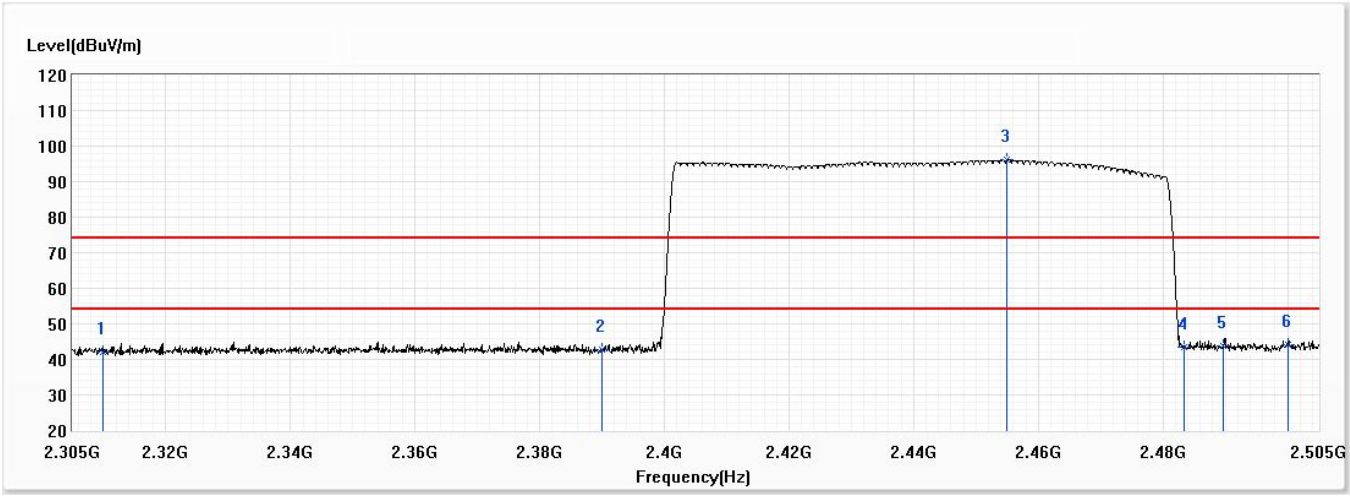


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	42.13	74.00	-31.87	28.98	13.15	PK
2	2390.000	43.00	74.00	-31.00	29.30	13.70	PK
! 3	2432.300	106.71	74.00	32.71	92.70	14.01	PK
4	2483.500	48.59	74.00	-25.41	34.23	14.36	PK
5	2485.100	47.49	74.00	-26.51	33.12	14.37	PK
6	2500.000	43.71	74.00	-30.29	29.23	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/12
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,DH5,Ant0,Hopping	Humidity (%RH)	61.0

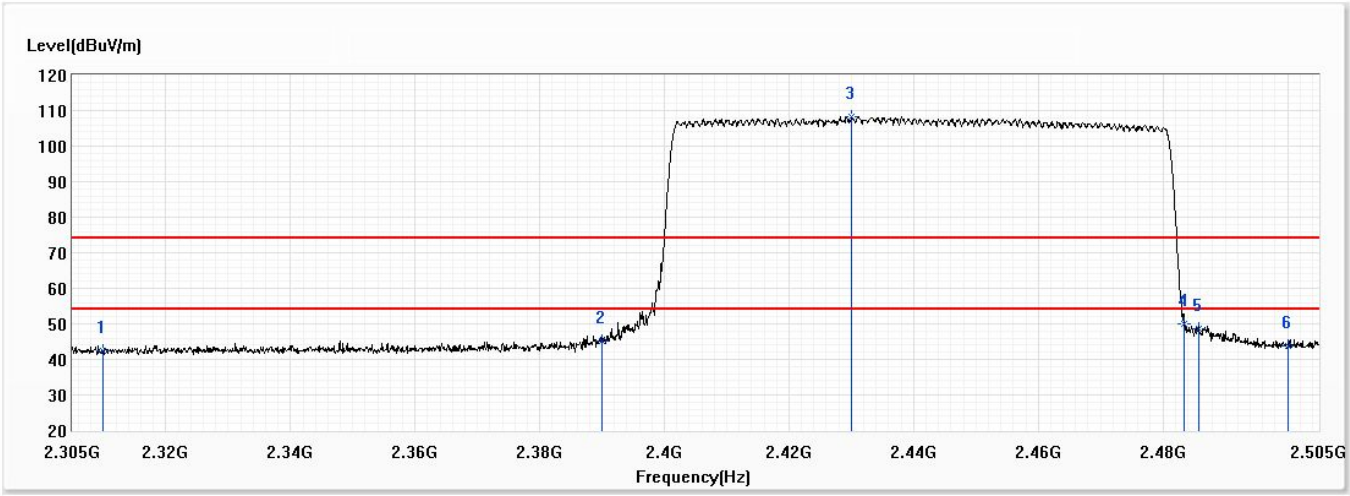


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	42.21	74.00	-31.79	29.06	13.15	PK
2	2390.000	42.72	74.00	-31.28	29.02	13.70	PK
! 3	2455.000	96.06	74.00	22.06	81.89	14.17	PK
4	2483.500	43.34	74.00	-30.66	28.98	14.36	PK
5	2489.700	43.88	74.00	-30.12	29.48	14.40	PK
6	2500.000	44.03	74.00	-29.97	29.55	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/12
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Horizontal	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Hopping	Humidity (%RH)	61.0

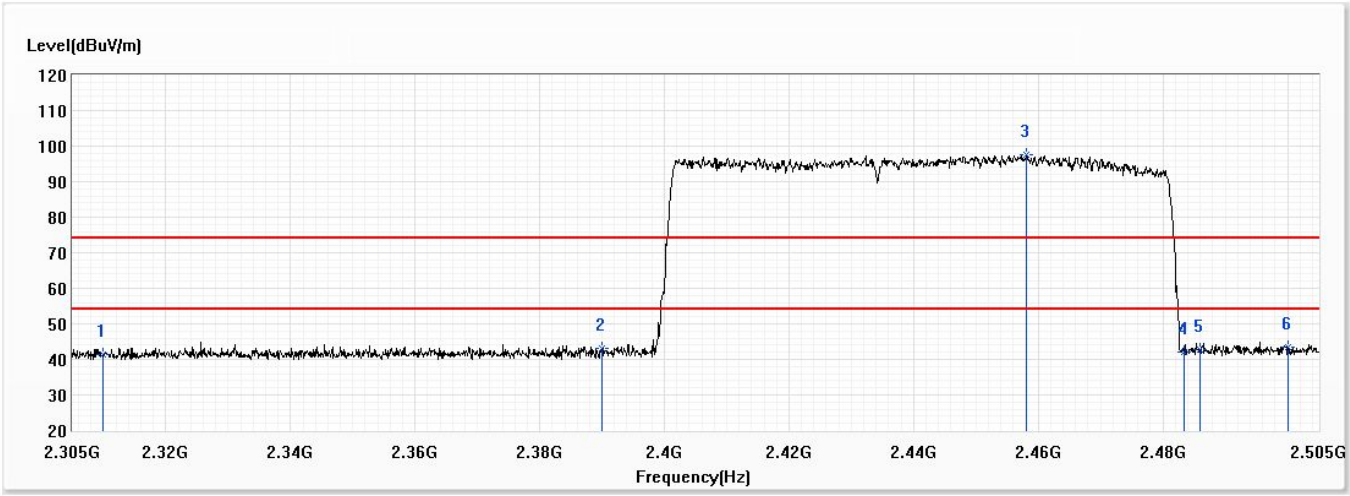


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	42.52	74.00	-31.48	29.37	13.15	PK
2	2390.000	45.34	74.00	-28.66	31.64	13.70	PK
! 3	2430.100	108.37	74.00	34.37	94.38	13.99	PK
4	2483.500	50.07	74.00	-23.93	35.71	14.36	PK
5	2485.800	48.56	74.00	-25.44	34.18	14.38	PK
6	2500.000	43.64	74.00	-30.36	29.16	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Model No	SPIRIT HD	Site	CB2-H
Test Voltage	AC 120V/60HZ	Test Date	2021/1/12
Test Mode	Mode 1: Transmit	Engineer	Ling Chen
Polarity	Vertical	Temperature (℃)	24.0
Test Condition	BT 2.0,3DH5,Ant0,Hopping	Humidity (%RH)	61.0



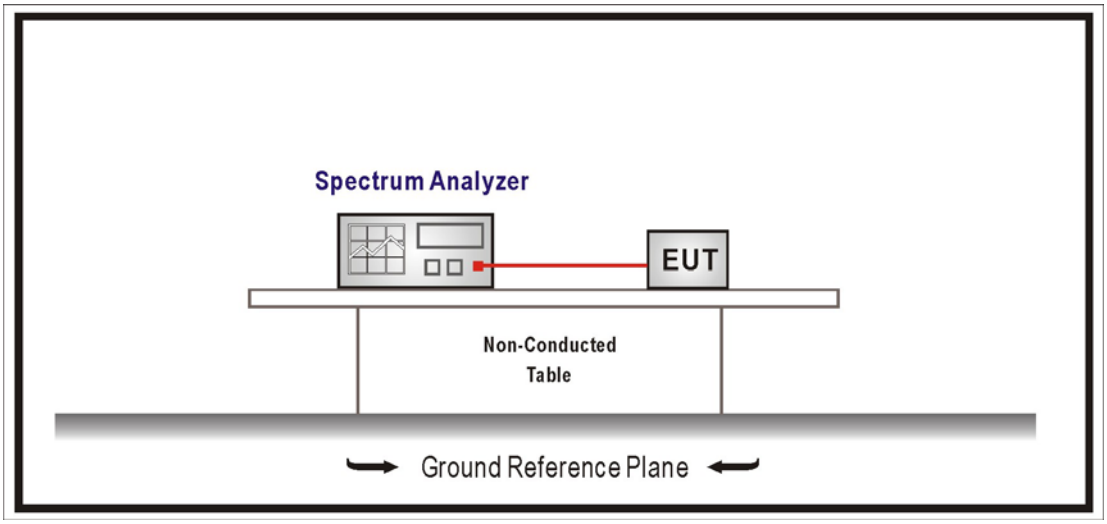
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310.000	41.25	74.00	-32.75	28.10	13.15	PK
2	2390.000	43.04	74.00	-30.96	29.34	13.70	PK
! 3	2458.100	97.65	74.00	23.65	83.47	14.18	PK
4	2483.500	42.19	74.00	-31.81	27.83	14.36	PK
5	2486.000	42.63	74.00	-31.37	28.25	14.38	PK
6	2500.000	43.44	74.00	-30.56	28.96	14.48	PK

Note:

1. Emission Level = Reading Level + Correct Factor.
2. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
3. The fundamental for reference only, it’s not restricted by unwanted emission limit.

7. Number of hopping frequency

7.1. Test Setup



7.2. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

7.3. Test Procedures

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.

7.4. Test Specification

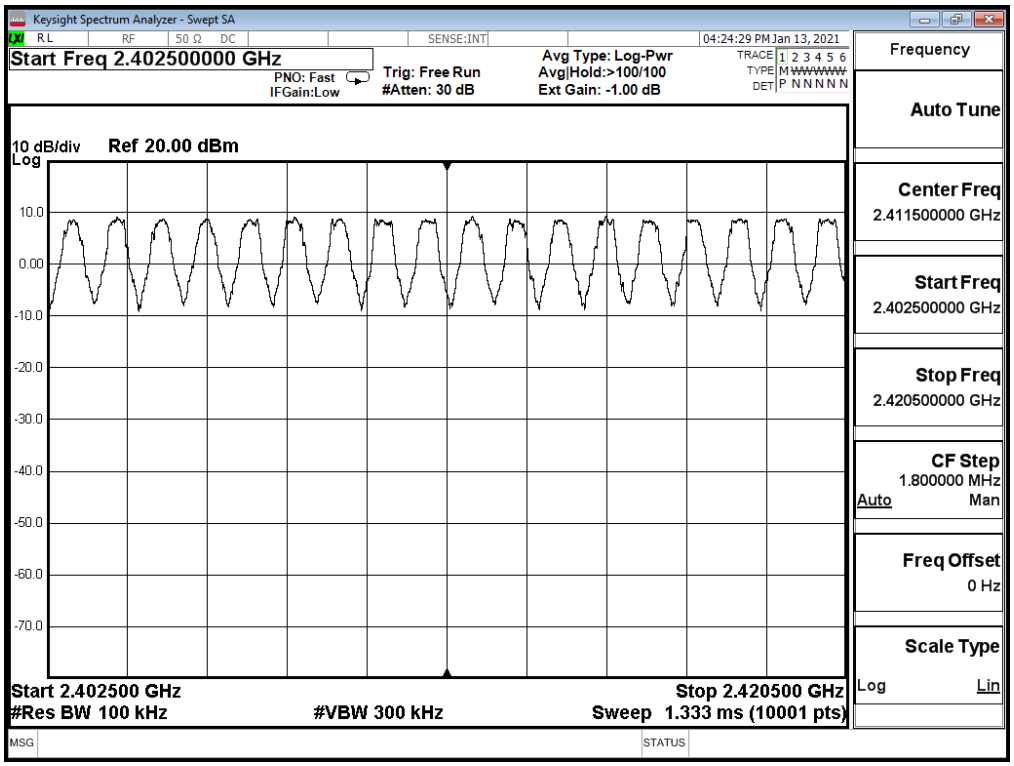
According to FCC Part 15 Subpart C Paragraph 15.247: 2019

7.5. Test Result

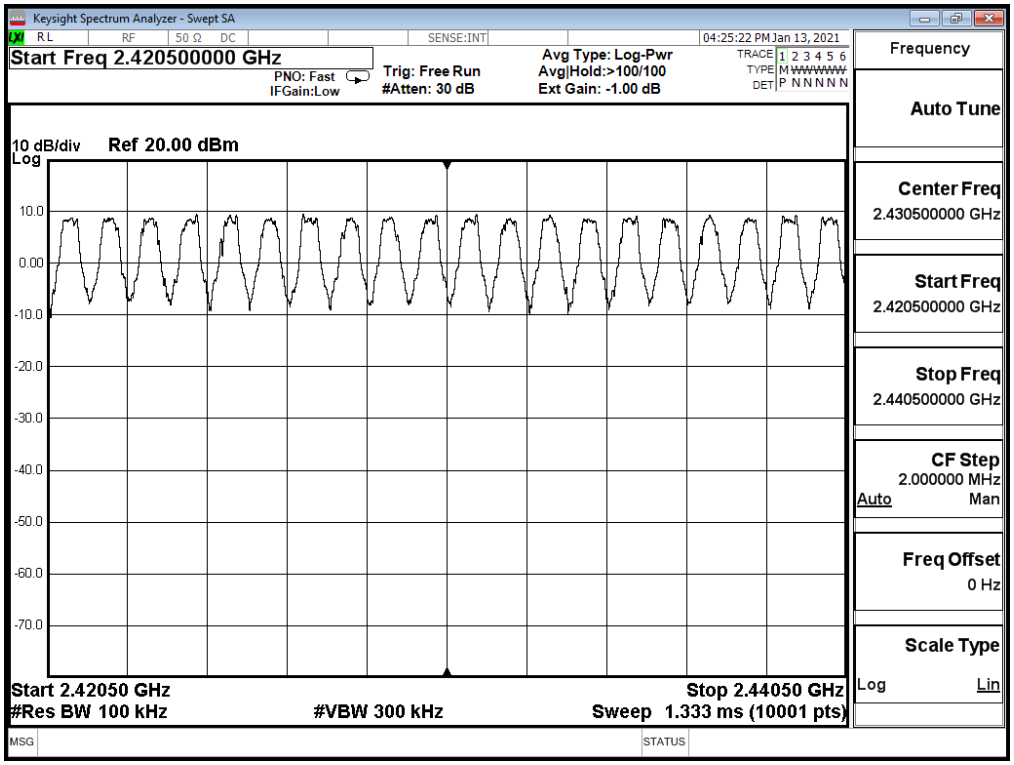
Product Name	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/01/13	Test Site	SR12-H
Temperature(°C)	20.0	Humidity (%RH)	59.0

Frequency Range (MHz)	Measure Level (Channels)	Limit (Channels)
2402 - 2480	79	≧ 75

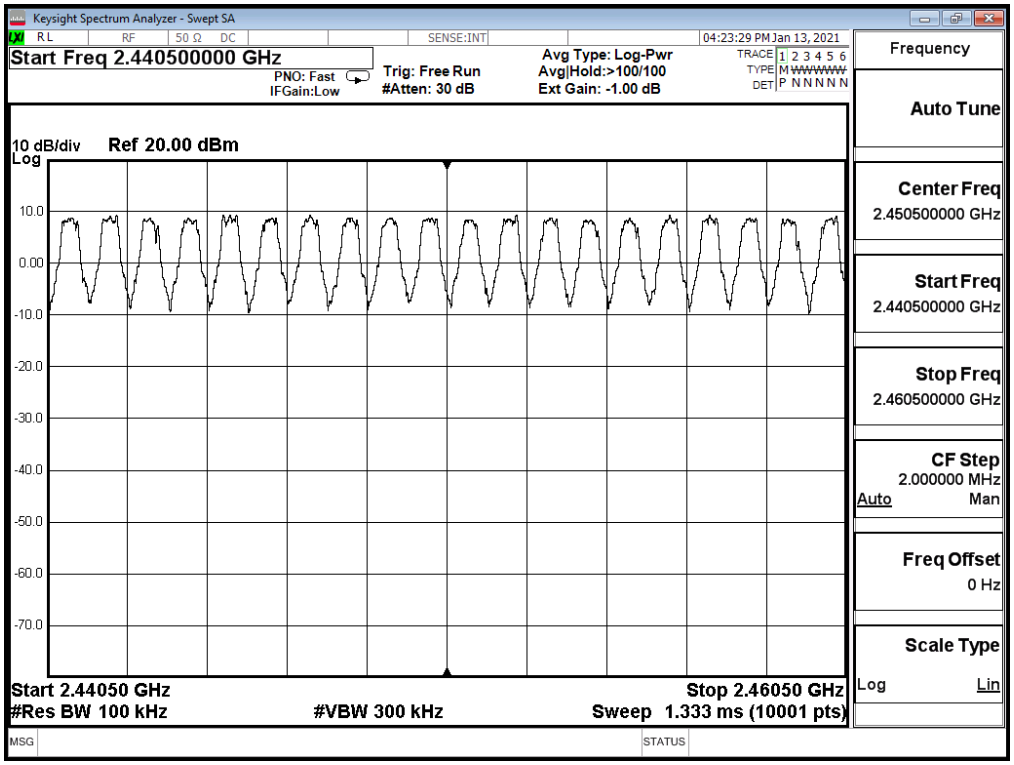
2402.5-2420.5MHz



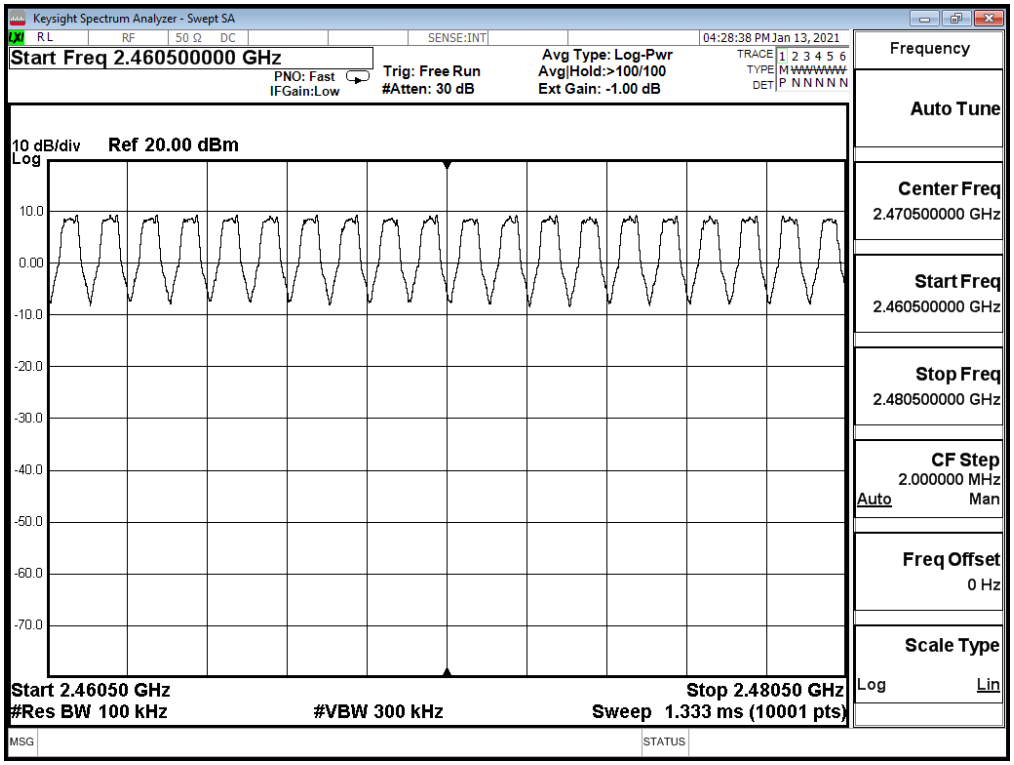
2420.5-2440.5MHz



2440.5-2460.5MHz

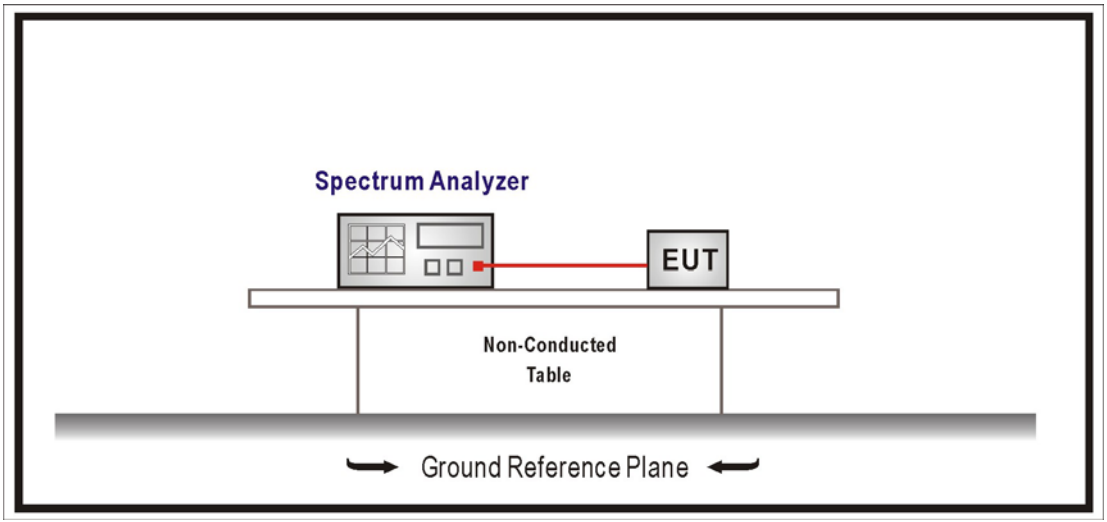


2460.5-2480.5MHz



8. Carrier Frequency Separation

8.1. Test Setup



8.2. Limits

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an Maximum peak conducted output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

8.3. Test Procedures

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.

8.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

8.5. Test Result

Product Name	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/01/13	Test Site	SR12-H
Temperature(°C)	20.0	Humidity (%RH)	59.0

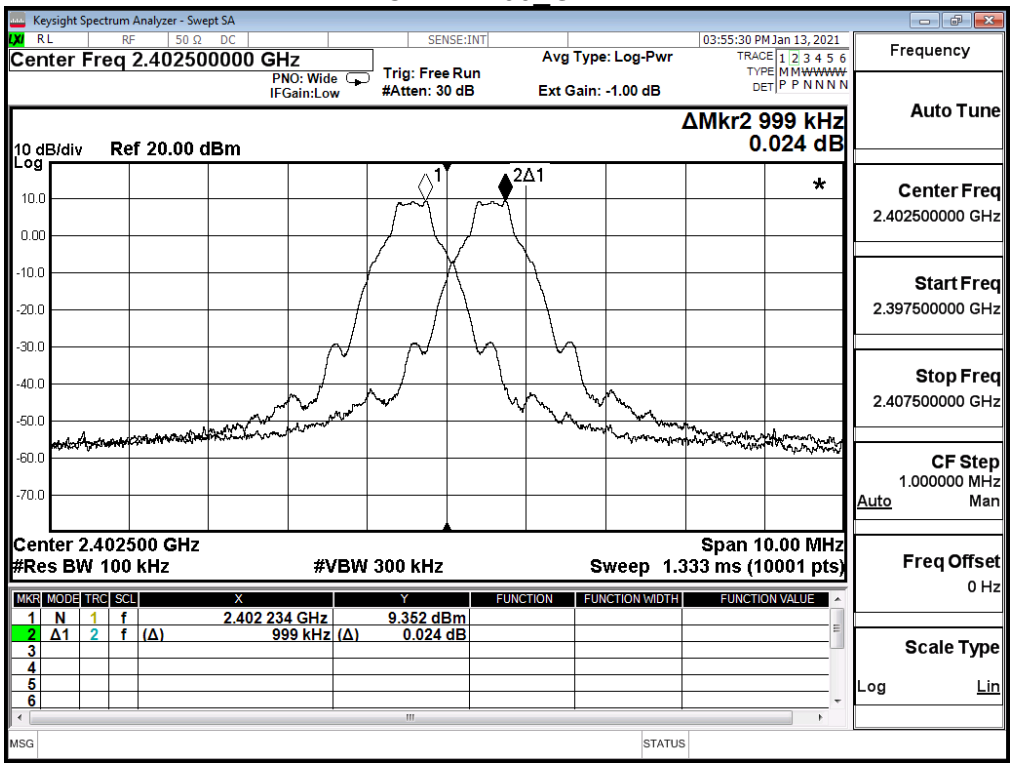
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	0.999	≧0.742
39	2441	0.999	≧0.742
78	2480	0.999	≧0.741

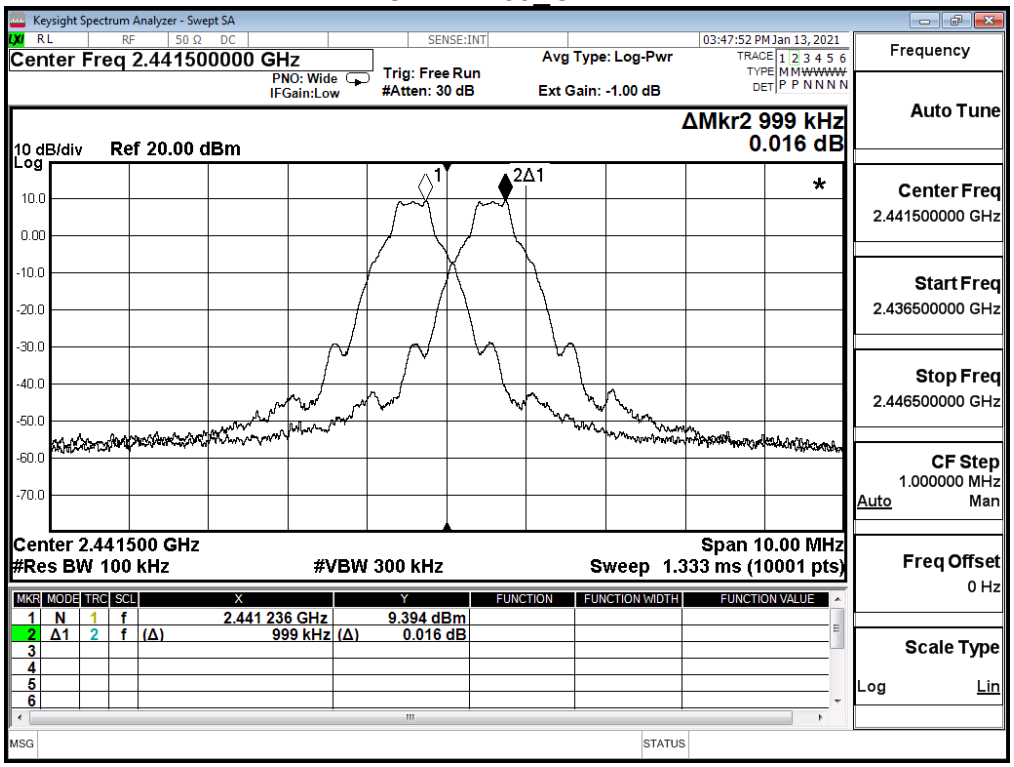
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	0.999	≧0.930
39	2441	0.999	≧0.929
78	2480	0.999	≧0.931

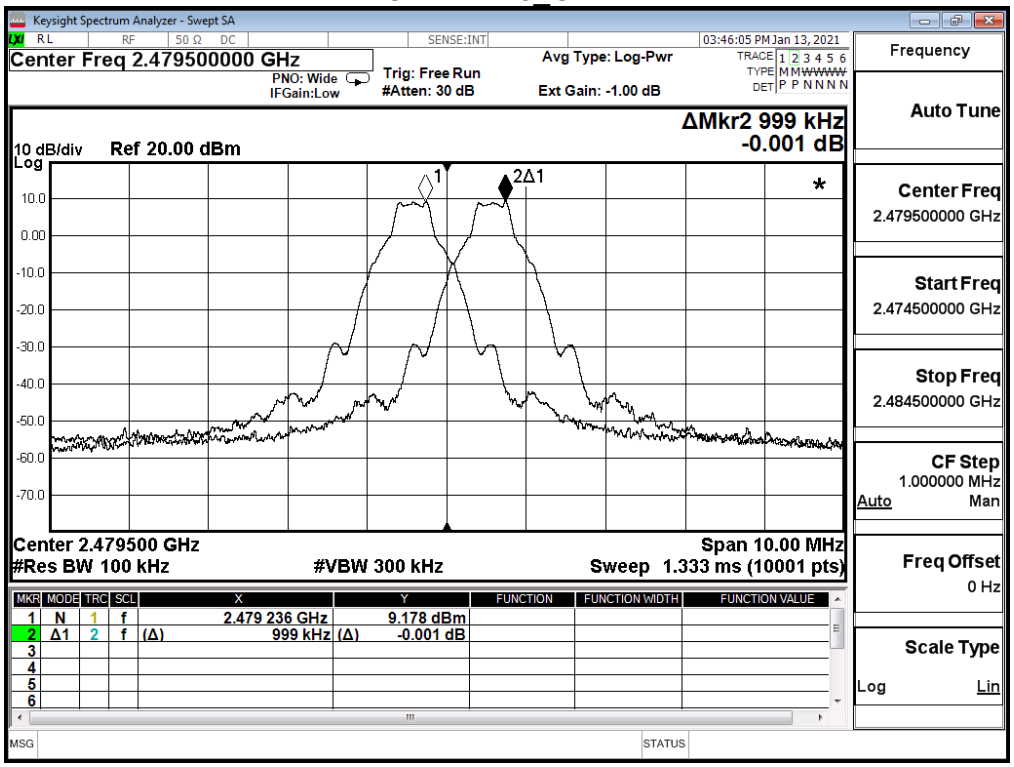
Channel 00_GFSK



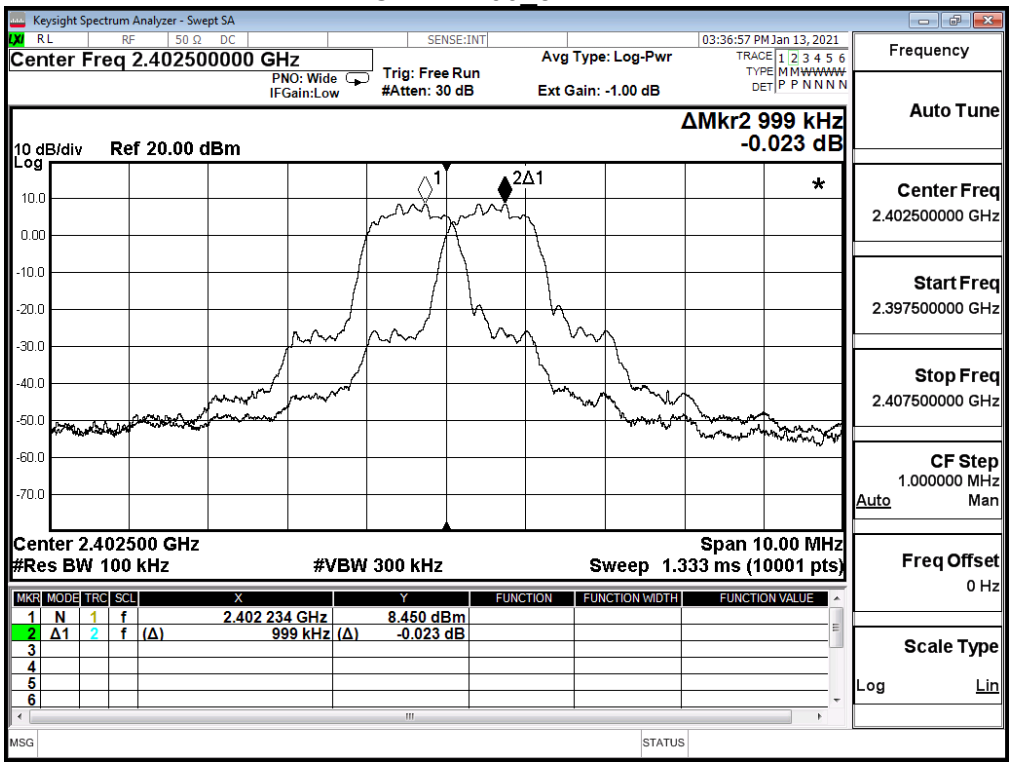
Channel 39_GFSK



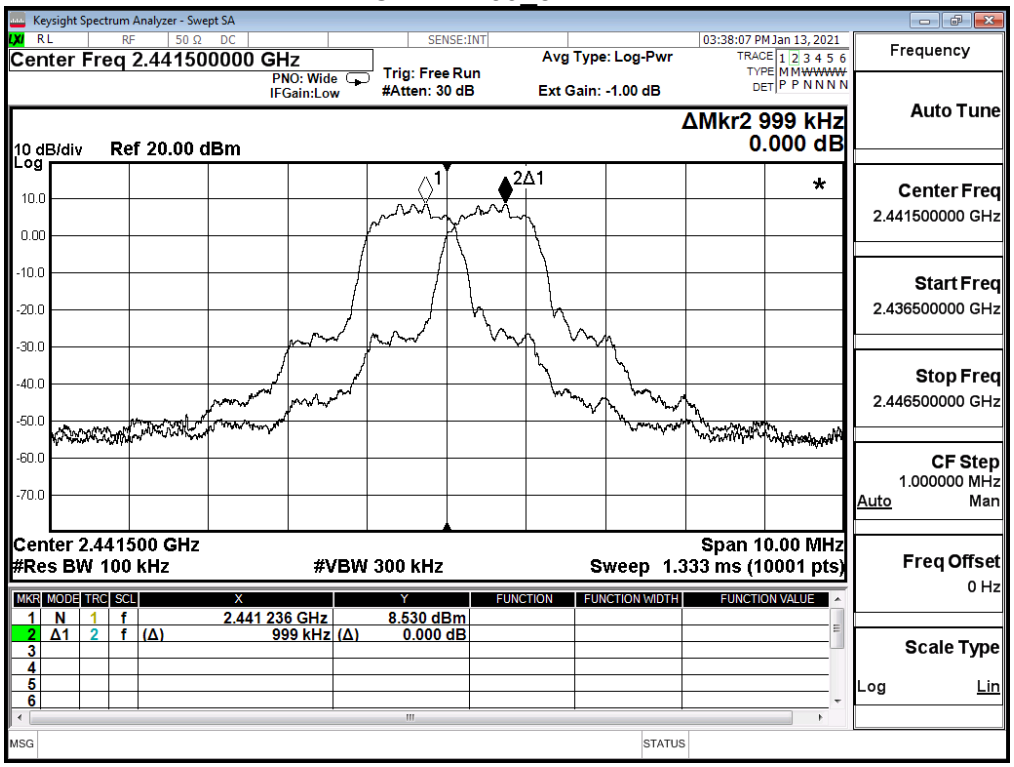
Channel 78_GFSK



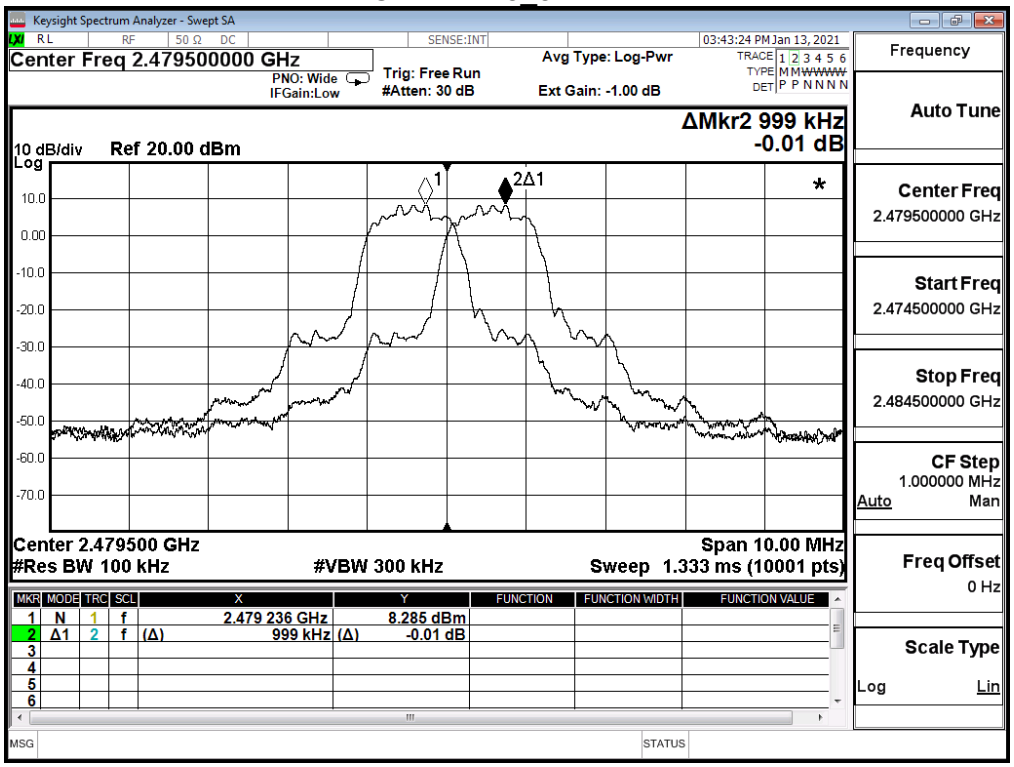
Channel 00_8-DPSK



Channel 39_8-DPSK

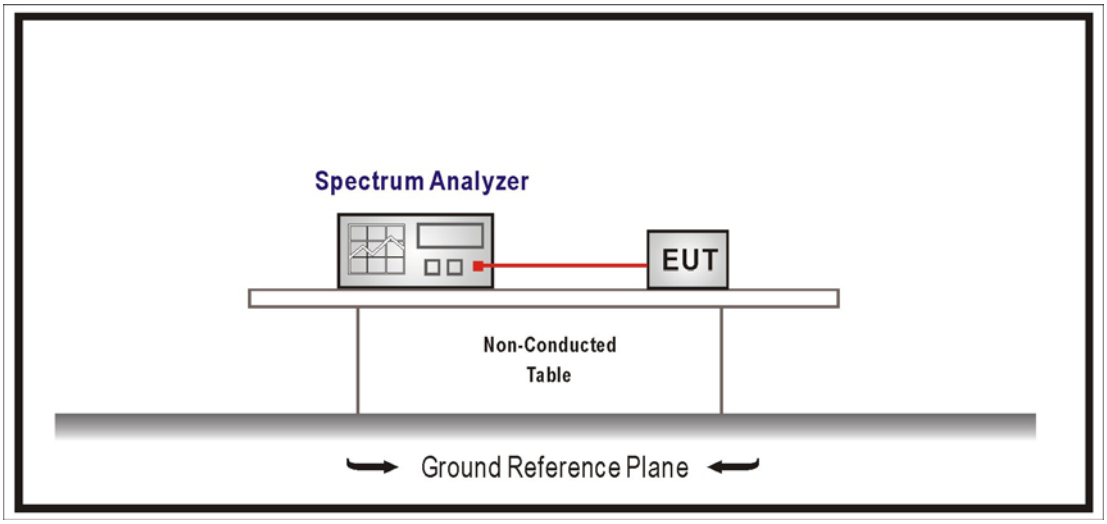


Channel 78_8-DPSK



9. 20dB Bandwidth

9.1. Test Setup



9.2. Limits

N/A

9.3. Test Procedures

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

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW, Sweep = auto, Detector function = peak, Trace = max hold, The EUT should be transmitting at its maximum data rate.

9.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019.

9.5. Test Result

Product Name	Headset		
Test Mode	Mode 1: Transmit mode		
Date of Test	2021/02/03	Test Site	SR12-H
Temperature(°C)	22.0	Humidity (%RH)	67.0

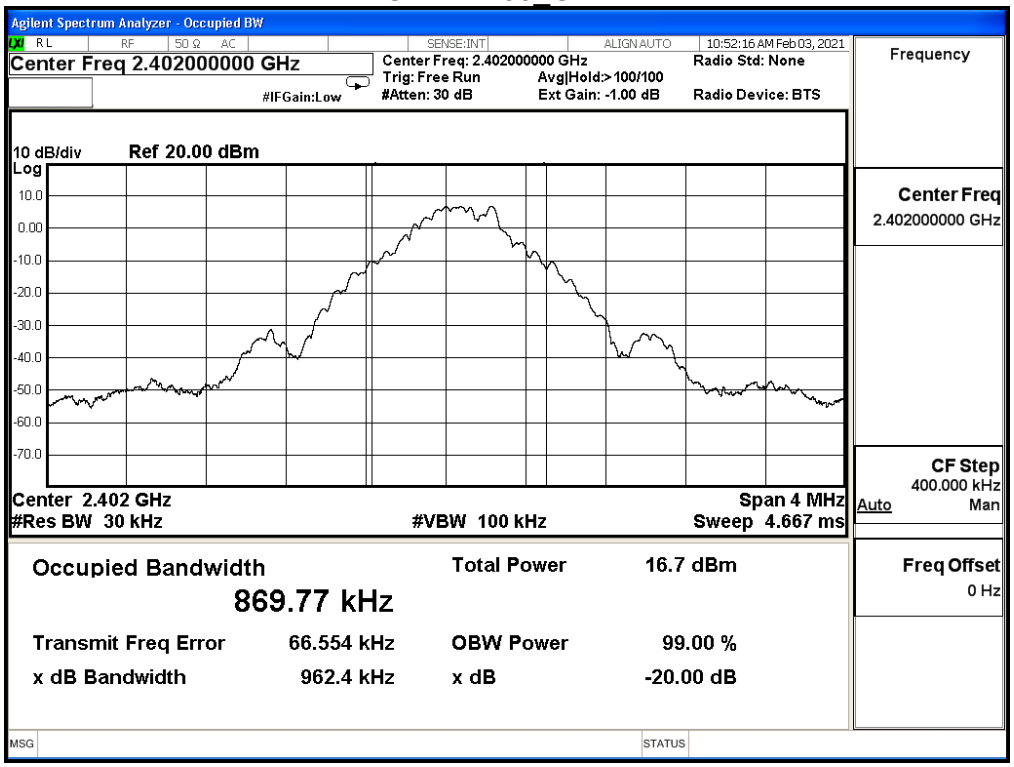
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	0.962	---
39	2441	0.959	---
78	2480	0.958	---

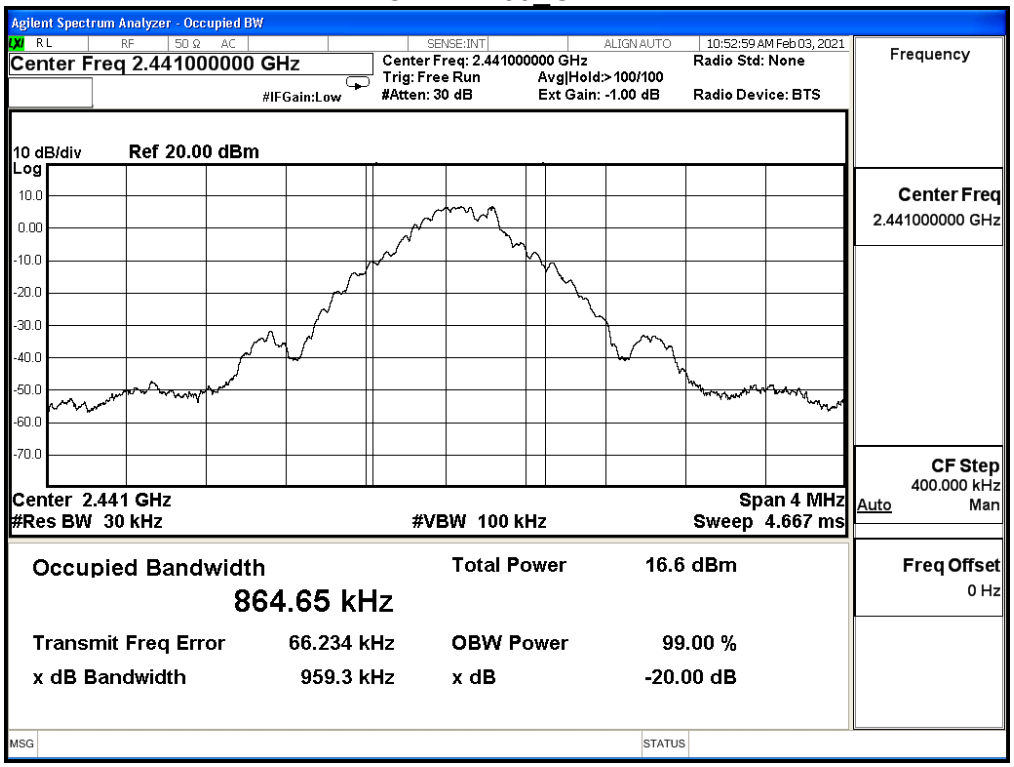
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
00	2402	1.307	---
39	2441	1.307	---
78	2480	1.307	---

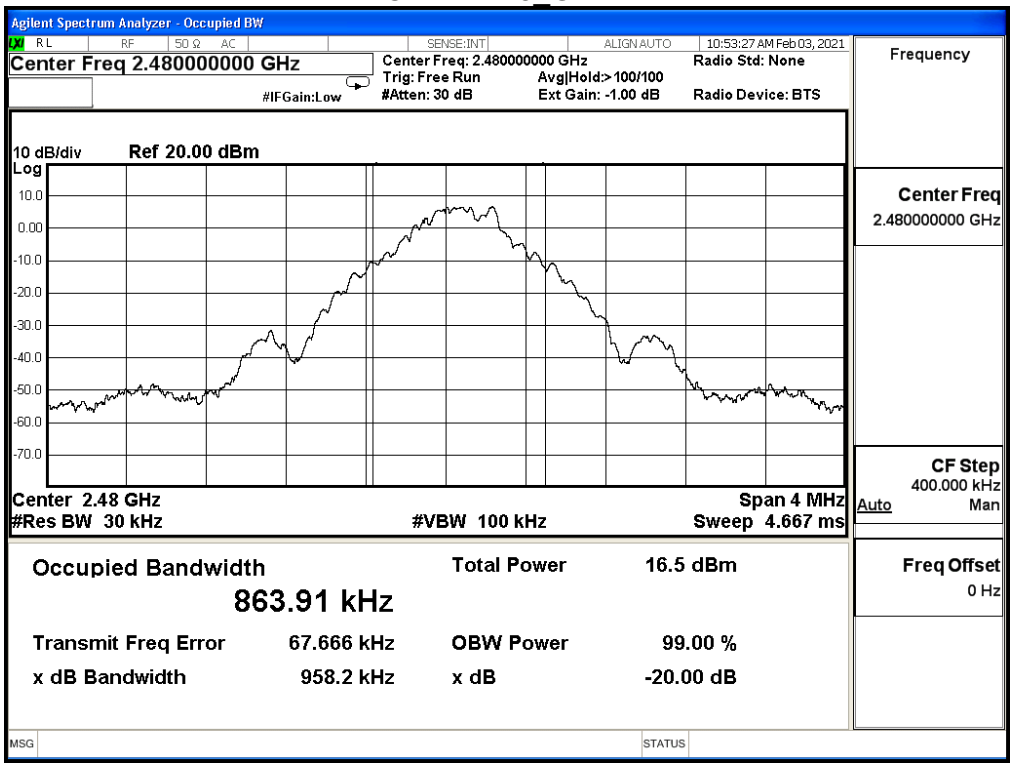
Channel 00_GFSK



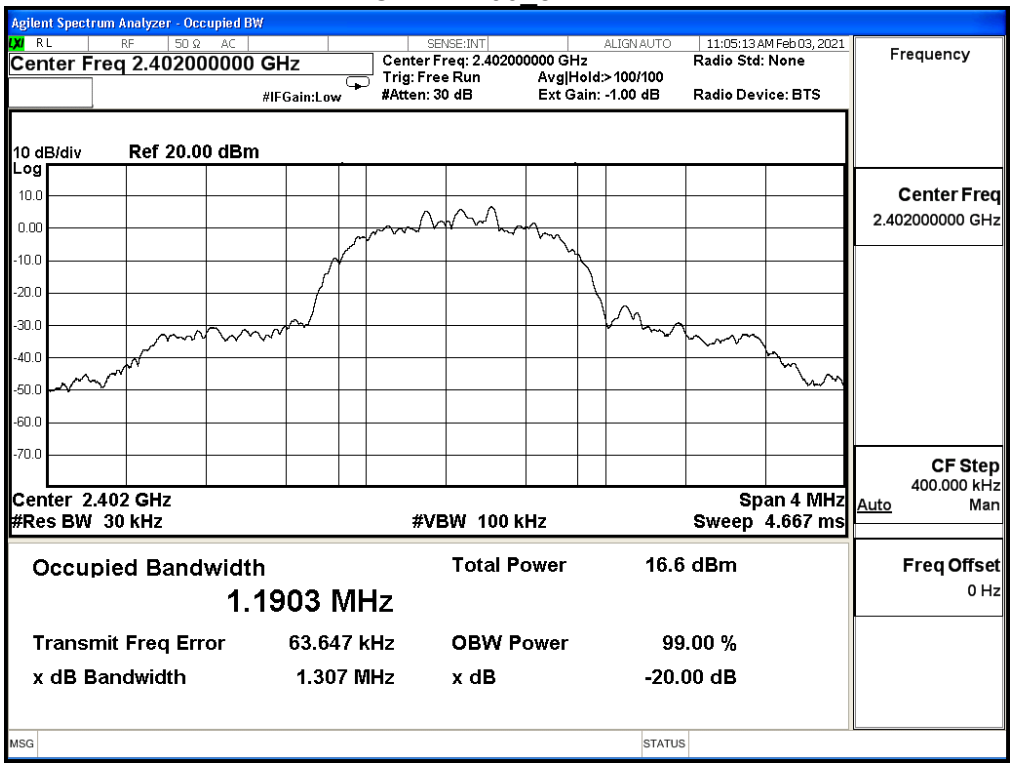
Channel 39_GFSK



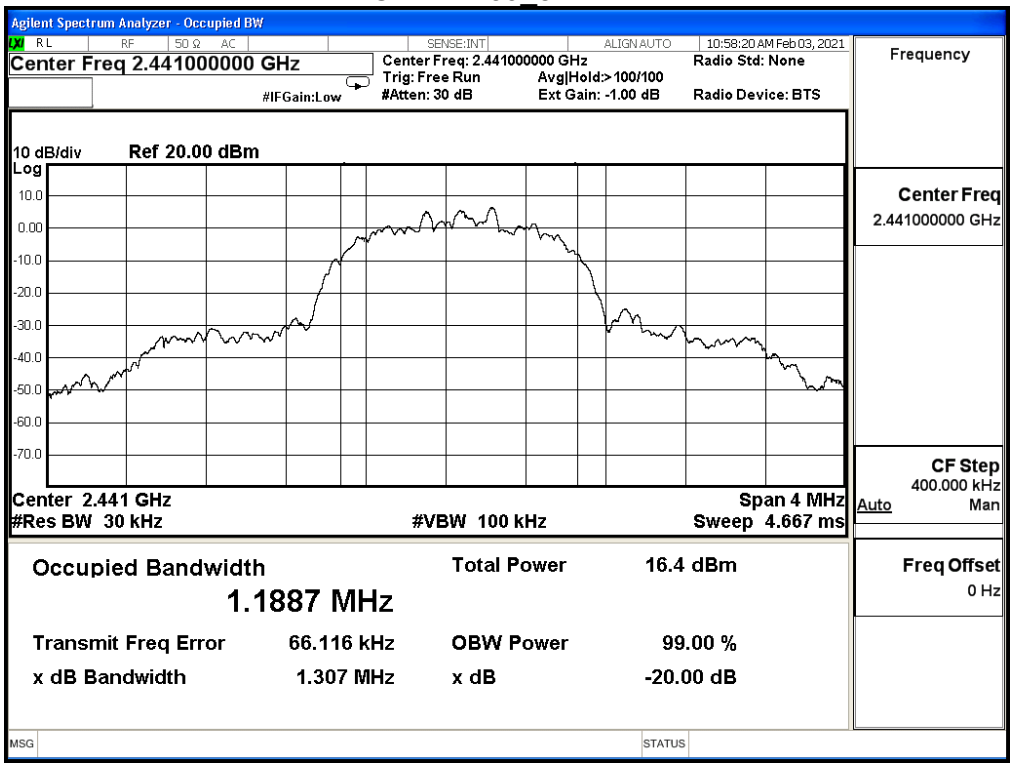
Channel 78_GFSK



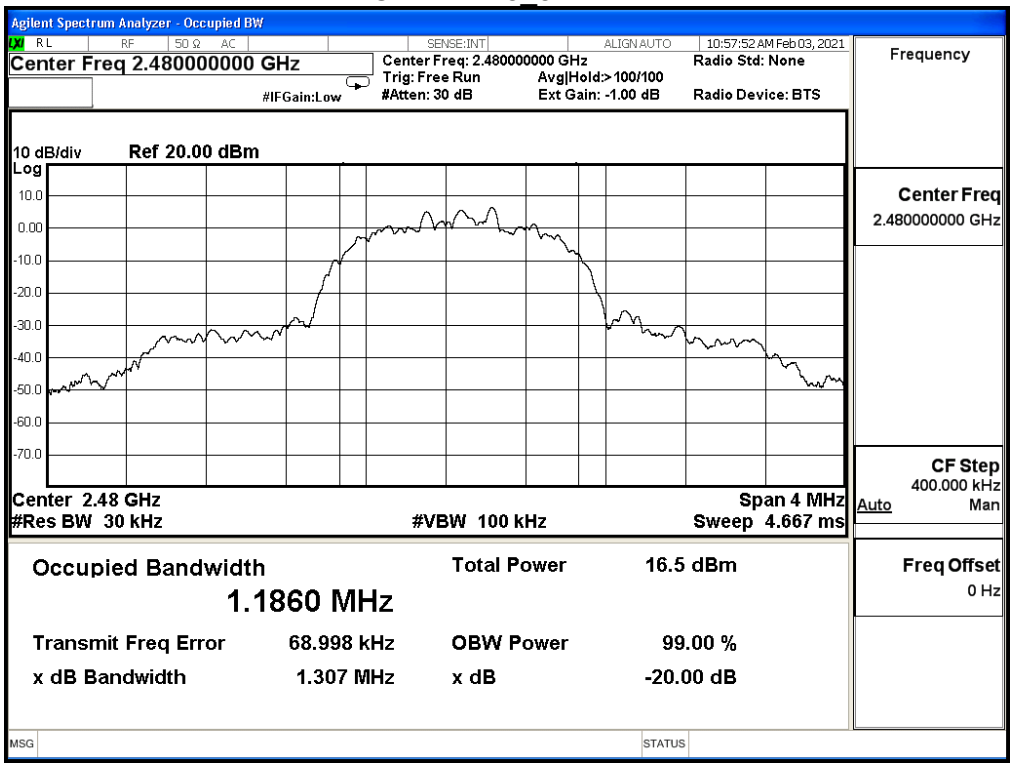
Channel 00_8-DPSK



Channel 39_8-DPSK

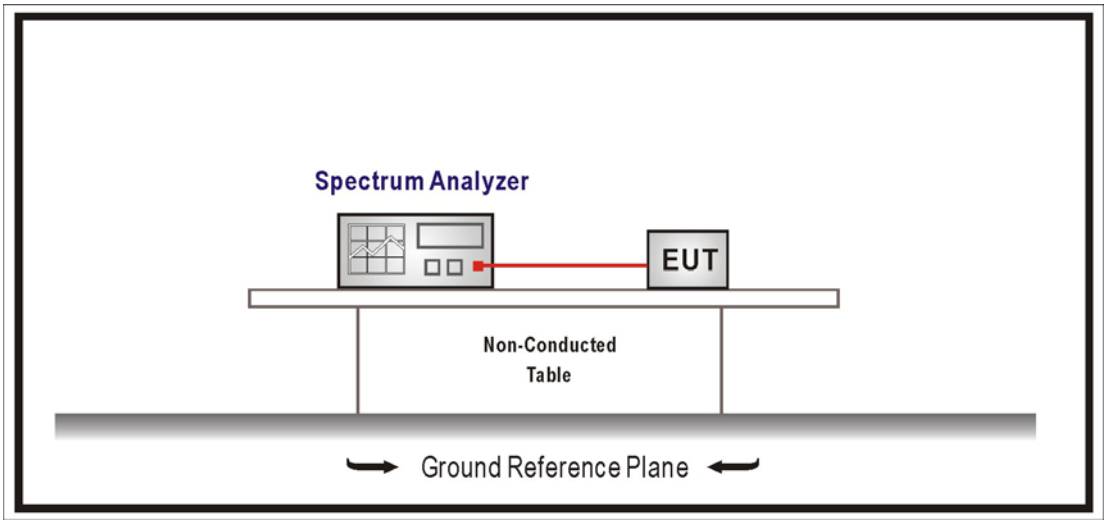


Channel 78_8-DPSK



10. Dwell Time

10.1. Test Setup



10.2. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

For frequency hopping systems operating in the 2400-2483.5 MHz bands. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

For frequency hopping systems operating in the 5725-5850 MHz bands. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

10.3. Test Procedures

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

Span = zero span, centered on a hopping channel, RBW = 1 MHz, VBW ≥ RBW,

Sweep = as necessary to capture the entire dwell time per hopping channel,

Detector function = peak, Trace = max hold.

10.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

10.5. Test Result

Product Name	Headset		
Test Mode	Mode 1: Transmit		
Date of Test	2021/01/13	Test Site	SR12-H
Temperature(°C)	20.0	Humidity (%RH)	59.0

GFSK

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.878 ms = 0.002878 sec
Dwell Time : 0.002878 *(266.67/79)* 31.60= 0.307 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.878 ms = 0.002878 sec
Dwell Time : 0.002878 *(266.67/79)* 31.60= 0.307 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.878 ms = 0.002878 sec
Dwell Time : 0.002878 *(266.67/79)* 31.60= 0.307 sec。

Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

8-DPSK

Occupancy Time of Frequency Hopping System

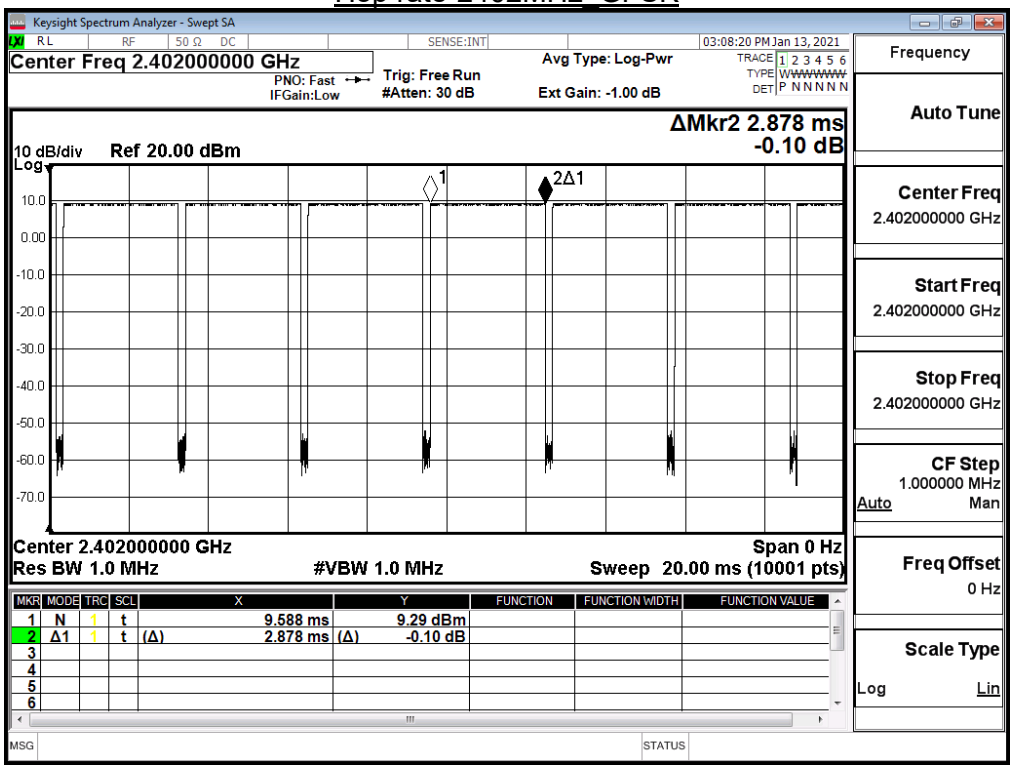
A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.880 ms = 0.002880 sec
Dwell Time : 0.002880 *(266.67/79)* 31.60= 0.3072 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.880 ms = 0.002880 sec
Dwell Time : 0.002880 *(266.67/79)* 31.60= 0.3072 sec。

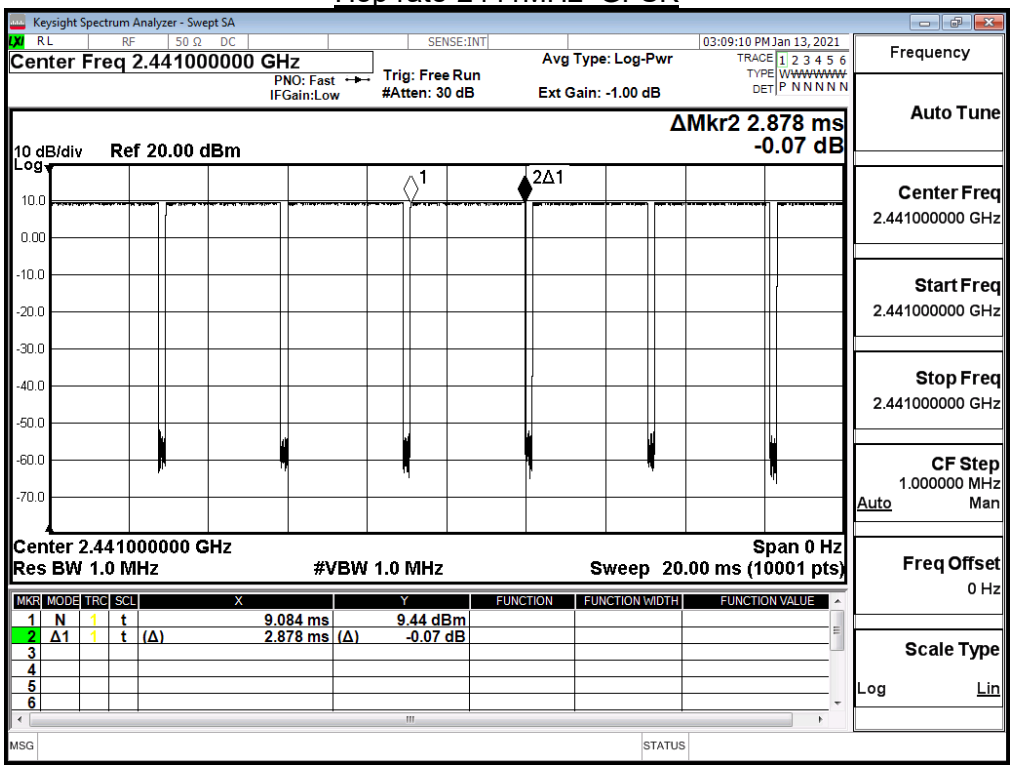
C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.880 ms = 0.002880 sec
Dwell Time : 0.002880 *(266.67/79)* 31.60= 0.3072 sec。

Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

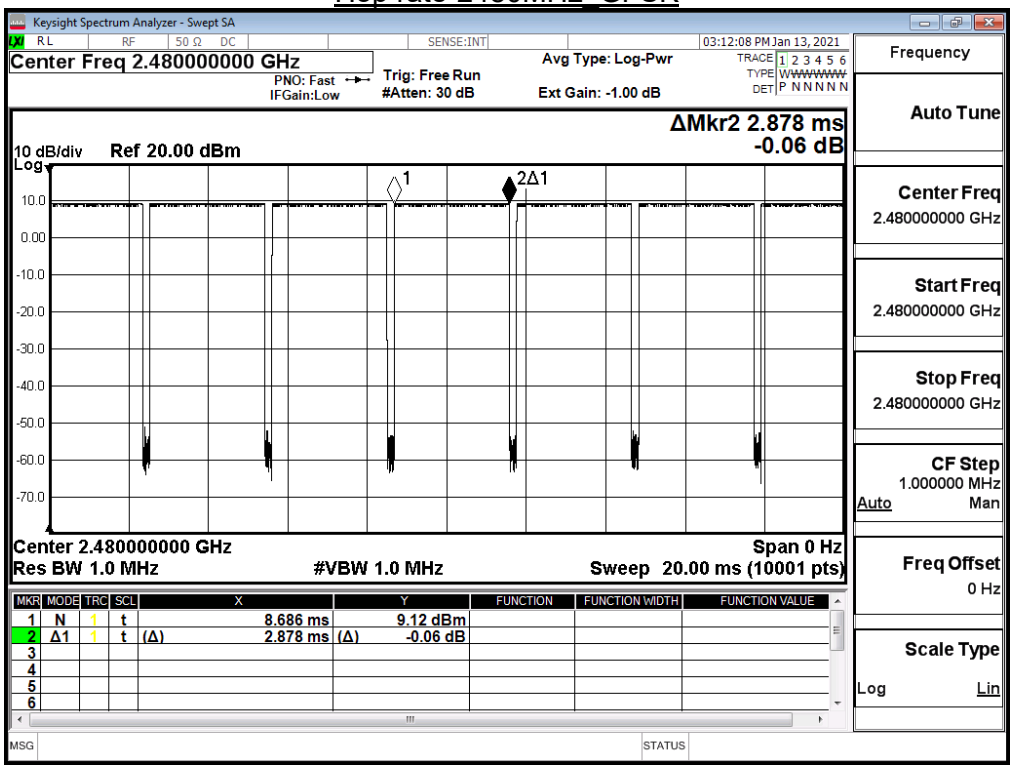
Hop rate-2402MHz_GFSK



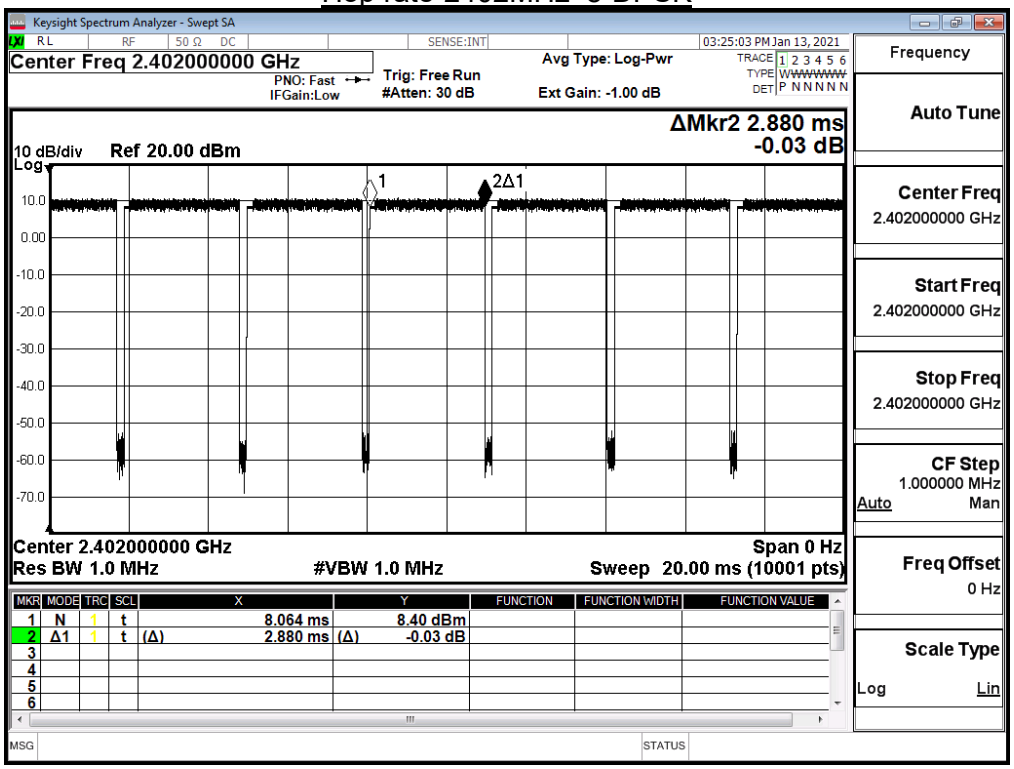
Hop rate-2441MHz_GFSK



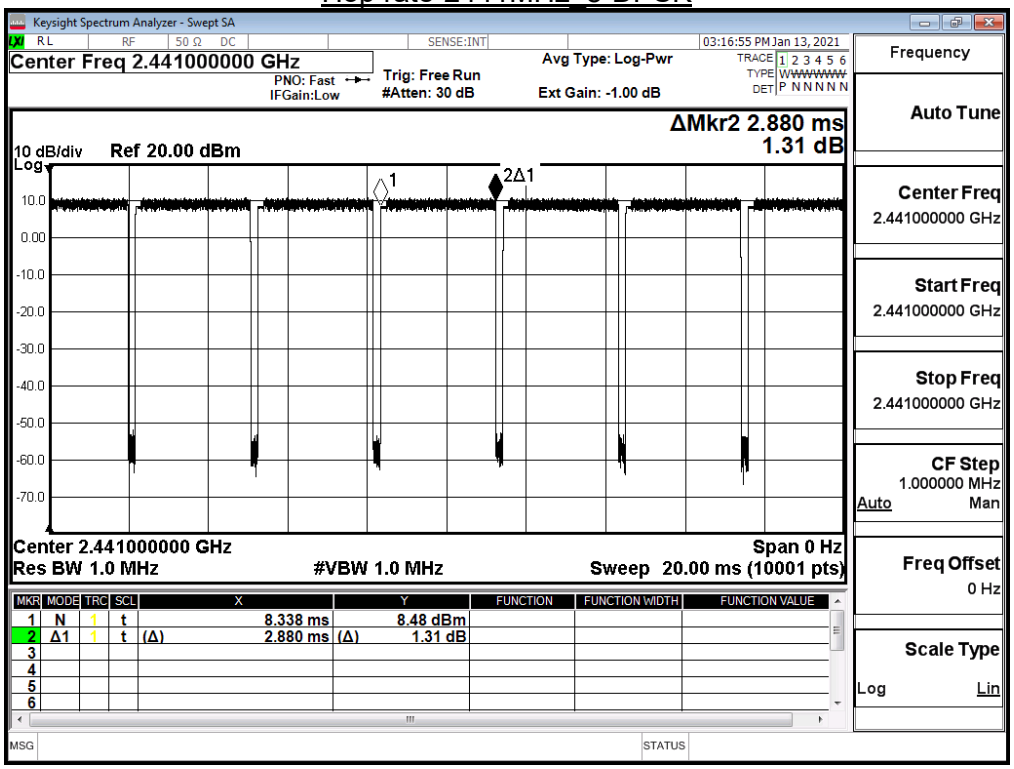
Hop rate-2480MHz_GFSK



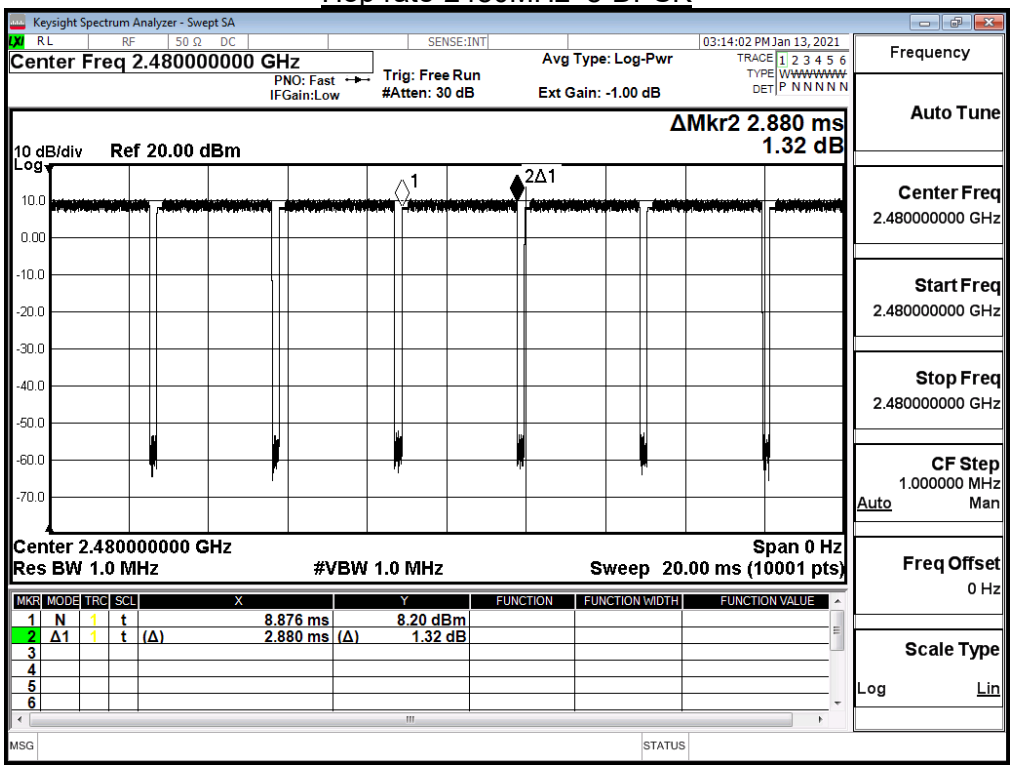
Hop rate-2402MHz_8-DPSK



Hop rate-2441MHz_8-DPSK



Hop rate-2480MHz_8-DPSK



Note: Dwell time＝time slot length * hop rate / number of hopping channels * period