Test Report

Verified code: 295350

Report No.: E20220927529001-3

Customer:	OnePlus Technology (Shenzhen) Co., Ltd.
Address:	18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen,China
Sample Name:	Wireless Earbuds
Sample Model:	E508A
Receive Sample Date:	Sep.29,2022
Test Date:	Oct.08,2022 ~ Oct.25,2022
Reference Document:	CFR 47, FCC Part 15 Subpart C RADIO FREQUENCY DEVICES:Subpart C—Intentional Radiators
Test Result:	Pass

Prepared by: Chen XiaoCong Reviewed by: Wu Haoting Approved by: Xiao Liang

GUANGZHOU GRG METROLOGY & TEST CO., LTD

Issued Date: 2022-11-08

GUANGZHOU GRG METROLOGY & TEST CO., LTD.
Address: No.163, Pingyun Road, West of Huangpu Avenue, Guangzhou, Guangdong, China
Tel：（+86）400-602-0999 FAX：（+86）020-38698685 Web：http://www.grgtest.com

Statement

1. The report is invalid without "special seal for inspection and testing"; some copies are invalid; The report is invalid if it is altered or missing; The report is invalid without the signature of the person who prepared, reviewed and approved it.

2. The sample information is provided by the client and responsible for its authenticity; The content of the report is only valid for the samples sent this time.

3. When there are reports in both Chinese and English, the Chinese version will prevail when the language problems are inconsistent.

4. If there is any objection concerning the report, please inform us within 15 days from the date of receiving the report.

5. Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.

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REPORT ISSUED HISTORY

Report Version	Report No.	Description	Compile Date
1.0	E20220927529001-3	Original Issue	2022-10-26

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1. TEST RESULT SUMMARY

FCC 47 CFR Part 15 Subpart C 15.247，ANSI C63.10-2013 KDB 558074 D01 15.247 measurement guidance v05r02			
Standard	**Item**	**Limit / Severity**	**Result**
FCC 47 CFR Part 15 Subpart C (15.247)	Antenna Requirement	Section 15.203	PASS
	20dB Bandwidth	Section 15.247(a)(1)	PASS
	Carrier Frequencies Separated	Section 15.247(a)(1)	PASS
	Hopping Channel Number	Section 15.247(a)(1)(ii)	PASS
	Dwell Time	Section 15.247(a)(1)(iii)	PASS
	Maximum Peak Output Power	Section 15.247(b)(1)	PASS
	Conducted Emission	Section 15.207	PASS
	Conducted band edges and Spurious Emission	Section 15.209 &15.247(d)	PASS
	Radiated Spurious Emission	Section 15.209 &15.247(d)	PASS
	Restricted bands of operation	Section 15.247 (d) &15.205	PASS

Note: The EUT antenna is FPC antenna. The max gain of antenna is -1.5dBi for left wireless earbuds and -1.5dBi for right wireless earbuds .which accordance 15.203.is considered sufficient to comply with the provisions of this section

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2. GENERAL DESCRIPTION OF EUT

2.1 APPLICANT

Name:	OnePlus Technology (Shenzhen) Co., Ltd.
Address:	18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen,China

2.2 MANUFACTURER

Name:	OnePlus Technology (Shenzhen) Co., Ltd.
Address:	18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen,China

2.3 FACTORY

Name:	Jiangxi Risound Electronics Co.,Ltd.
Address:	No.271, Innovation Avenue, Jinggangshan Economic and Technological Development Zone, Ji'an City, Jiangxi Province

2.4 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment:	Wireless Earbuds
Model No.:	E508A
Adding Model:	/
Trade Name:	ONEPLUS
FCC ID:	2ABZ2-E508A
Power supply:	DC 3.8V power supplied by battery DC 5V power supplied by E508A charging case or DC 3.7V power supplied by charging case battery
Charging Case:	Input:5V ⎓ 0.9A Output:5V ⎓ 0.3A Rated Capacity: 480mAh, 1.77Wh
Charging Case Battery Specification:	Model:751443-1 Nominal Voltage:3.7Vdc Rated Capacity: 480mAh, 1.77Wh
Earbuds Battery 1 Specification:	Manufacturer: Xinyu Ganfeng Electronics Co., LTD. Model: 1058 Ratings: 3.8Vdc, 41mAh, 0.155Wh
Earbuds Battery 2 Specification:	Manufacturer: Chongqing VDL Electronics Co., Ltd. Model: 1058PF3 Ratings: 3.8Vdc, 41mAh, 0.155Wh
Frequency Range:	2402MHz~2480MHz

Transmit Power:	Left earbuds: GFSK:11.78dBm π/4-DQPSK:11.76dBm 8DPSK:11.74dBm Right earbuds: GFSK:12.20dBm π/4-DQPSK:12.25dBm 8DPSK:12.17dBm
Type of Modulation:	FHSS (GFSK for 1Mbps, π/4-DQPSK for 2Mbps,8DPSK for 3Mbps)
Antenna Specification:	Left earbuds:-1.5dBi Right earbuds: -1.5dBi
Temperature Range:	0℃~+35℃
Hardware Version:	07
Software Version:	X22E6_07_A.1.0.0
Sample No:	E20220927529001-0001,E20220927529001-0002
Note:	Earbuds battery have two manufacturers, the manufacturer of earbuds battery 1 is Xinyu Ganfeng Electronics Co., LTD. The manufacturer of earbuds battery 2 is Chongqing VDL Electronics Co., Ltd. Just different manufacturers, the earbuds battery specifications, size and capacity are the same, earbuds is just the battery manufacturer is different, other technical parameters are the same, after assessment, the EUT of earbuds battery 1 is fully tested. The data of earbuds battery 2 is need to test the radiation spurious emission of 30MHz-1GHz.

2.5 TEST OPERATION MODE

Mode No.	Description of the modes
1	Bluetooth(BT) fixed frequency transmitting

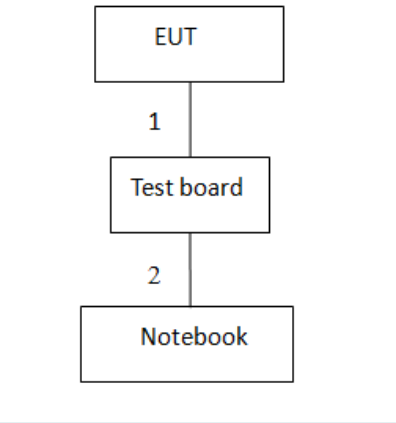
2.6 LOCAL SUPPORTIVE

Name of equipment	Manufacturer	Model	Serial number	Note
Notebook	DELL	Latitude3490	5GSXKP2	/
Test board	/	/	/	/

No.	Cable Type	Qty.	Shielded Type	Ferrite Core(Qty.)	Length
1	DC cable	1	No	0	Unshielded 0.15m
2	USB extension cable	1	No	0	Unshielded 1m

2.7 CONFIGURATION OF SYSTEM UNDER TEST

For Conducted Emission, 20dB bandwidth, Carrier Frequencies Separated, Hopping Channel Number , Dwell Time ,Maximum Peak Output Power, Conducted band edges and Spurious Emission measurement



For Radiated Spurious Emission, Restricted bands of operation

Test software:

Software version	Test level
BQB	3

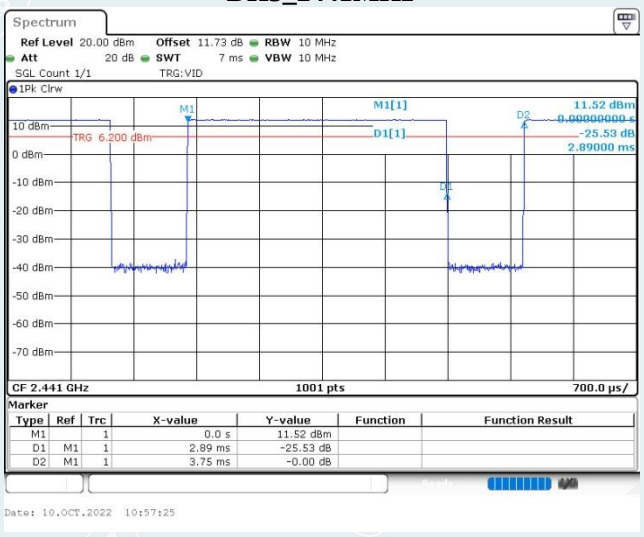
2.8 DUTY CYCLE

EUT Name	Wireless Earbuds	Model	E508A
Environmental Conditions	25.0℃/45%RH/101.0kPa	Test Voltage	DC 3.8V
Tested By	Qin Tingting	Tested Date	2022-10-10~2022-10-12

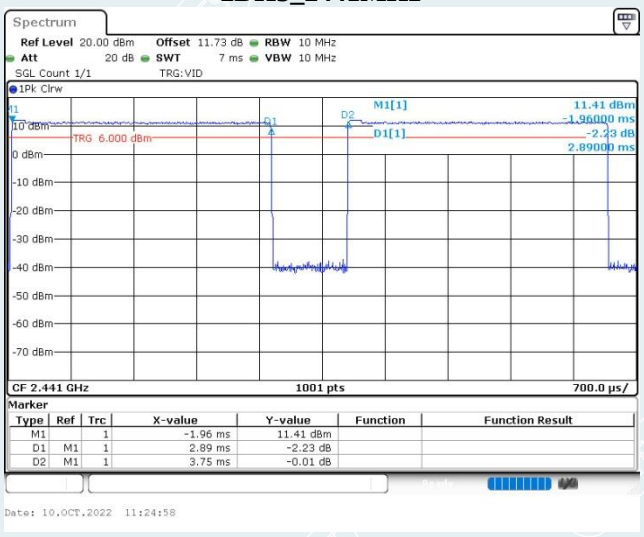
Left earbuds

TestMode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	DC [%]	T [s]
DH5	Ant1	2441	2.89	3.75	77.07	0.00289
2DH5	Ant1	2441	2.89	3.75	77.07	0.00289
3DH5	Ant1	2441	2.90	3.75	77.33	0.00290

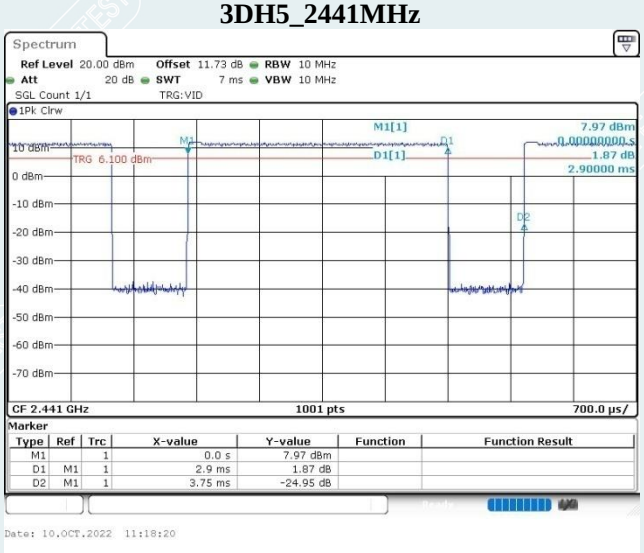
DH5_2441MHz



2DH5_2441MHz



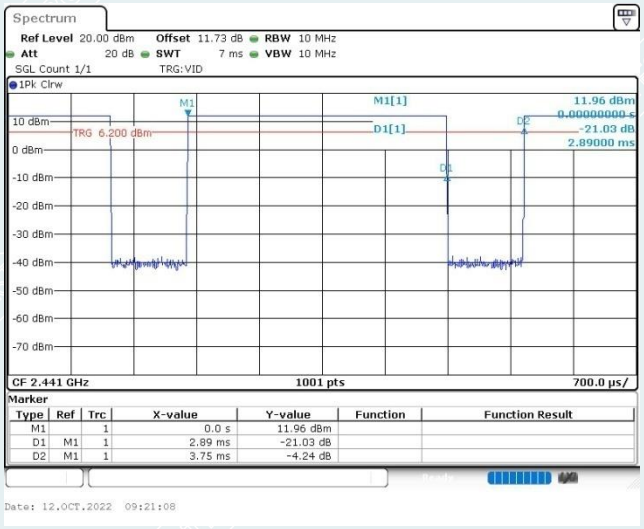
3DH5_2441MHz



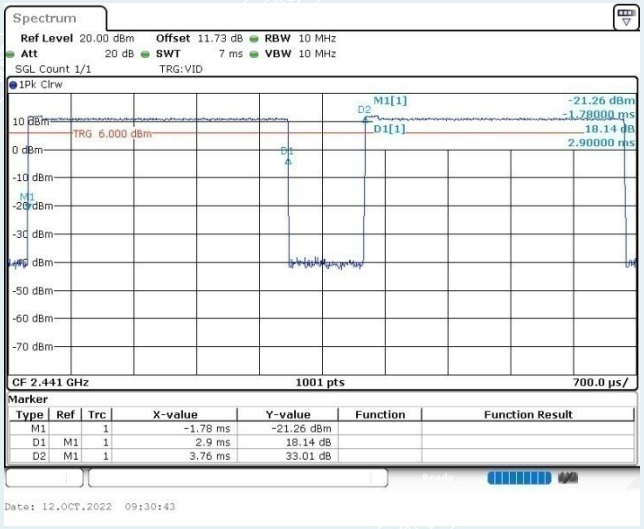
Right earbuds

TestMode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	DC [%]	T [s]
DH5	Ant1	2441	2.89	3.75	77.07	0.00289
2DH5	Ant1	2441	2.90	3.76	77.13	0.00290
3DH5	Ant1	2441	2.90	3.75	77.33	0.00290

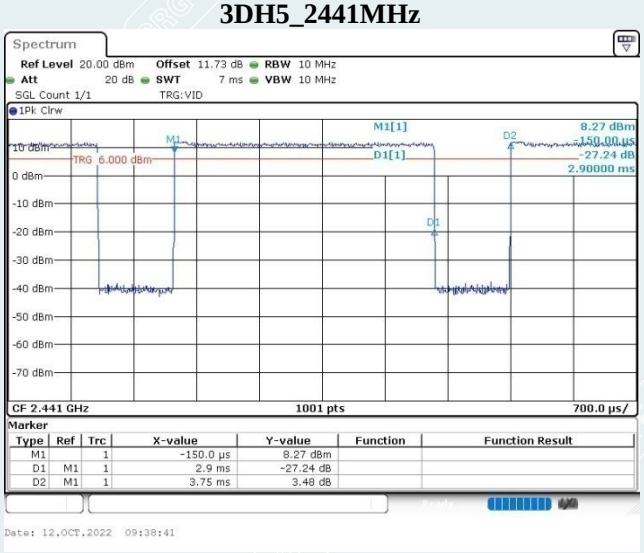
DH5_2441MHz



2DH5_2441MHz



3DH5_2441MHz



3. LABORATORY AND ACCREDITATIONS

3.1 LABORATORY

The tests & measurements refer to this report were performed by Shenzhen EMC Laboratory of Guangzhou GRG Metrology & Test Co., Ltd.

Add	:	No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District Shenzhen, 518110, People's Republic of China
P.C.	:	518110
Tel	:	0755-61180008
Fax	:	0755-61180008

3.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to GB/T 27025(ISO/IEC 17025:2017)

USA	A2LA(Certificate #2861.01)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	ISED (Company Number: 24897，CAB identifier:CN0069)
USA	FCC (Registration Number: 759402，Designation Number:CN1198)

Copies of granted accreditation certificates are available for downloading from our web site, http://www.grgtest.com

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4. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	9kHz～30MHz	5.1dB[1)]
		30MHz～200MHz	4.5dB[1)]
		200MHz～1000MHz	4.4dB[1)]
		1GHz～18GHz	5.6dB[1)]
		18GHz～26.5GHz	3.7dB[1)]
	Vertical	9kHz～30MHz	5.1dB[1)]
		30MHz～200MHz	4.4dB[1)]
		200MHz～1000MHz	4.5dB[1)]
		1GHz～18GHz	5.6dB[1)]
		18GHz～26.5GHz	3.7dB[1)]
Conduction Emission		150kHz～30MHz	3.40dB[1)]

Measurement	Uncertainty
RF frequency	6.0×10^{-6}
RF power conducted	0.78dB
Occupied channel bandwidth	0.4dB
Unwanted emission, conducted	0.68dB
Humidity	6%
Temperature	2℃

Note:

[1)] This uncertainty represents an expanded uncertainty expressed at approximately the 95%.

This uncertainty represents an expanded uncertainty factor of *k*=2.

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5. LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Conducted Emissions				
EMI TEST RECEIVER	R&S	ESCI	100783	2023-08-28
LISN(EUT)	R&S	ENV216	101543	2023-09-13
Test S/W	EZ	CCS-3A1-CE		
Hopping Channel Number				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10
Dwell Time				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10
Radiated Spurious Emission&Restricted bands of operation				
Test S/W	EZ	CCS-03A1		
Test Receiver	R&S	ESR7	102444	2023-09-02
Preamplifier	EMEC	EM330	I00426	2023-03-05
Bi-log Antenna	Schwarzbeck	VULB9160	VULB9160-3401	2022-10-27
Loop Antenna	TESEQ	HLA6121	52599	2023-04-02
Spectrum Analyzer	KEYSIGHT	N9010A	MY52221469	2023-06-29
Horn Antenna	Schwarzbeck	BBHA9120D	02143	2023-10-15
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	BBHA 9170-497	2023-10-14
Amplifier	Tonscend	TAP01018048	AP20E8060075	2023-05-05
Amplifier	Tonscend	TAP184050	AP20E806071	2023-05-05
Amplifier	SHIRONG ELECTRONIC	DLNA-1G18G-G40	20200928005	2023-05-08
Test S/W	Tonscend	JS36-RE/2.5.1.5		
20 dB Bandwidth				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10
Maximum Peak Output Power				
Pulse power sensor	Anritsu	MA2411B	1126150	2023-03-01
Power meter	Anritsu	ML2495A	1204003	2023-02-28
Conducted band edges and Spurious Emission				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10
Carrier Frequencies Separated				
Spectrum Analyzer	R&S	FSV30	104381	2022-12-10

Note: The calibration interval of the above test instruments is 12 months.

6. E.U.T. TEST CONDITIONS

Type of antenna: FPC

Test frequencies: According to the 15.31(m) Measurements on intentional radiators or receivers, other than TV broadcast receivers, shall be performed and. if required. reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table:

Frequency range over which device operates	Number of frequencies	Location in the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top 1 near middle and 1 near bottom

EUT channels and frequencies list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	**2402**	14	2416	28	2430
1	2403	15	2417	29	2431
2	2404	16	2418	30	2432
3	2405	17	2419	31	2433
4	2406	18	2420	32	2434
5	2407	19	2421	33	2435
6	2408	20	2422	34	2436
7	2409	21	2423	35	2437
8	2410	22	2424	36	2438
9	2411	23	2425	37	2439
10	2412	24	2426	38	2440
11	2413	25	2427	39	**2441**
12	2414	26	2428	40	2442
13	2415	27	2429	41	2443

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	2444	55	2457	68	2470
43	2445	56	2458	69	2471
44	2446	57	2459	70	2472
45	2447	58	2460	71	2473
46	2448	59	2461	72	2474
47	2449	60	2462	73	2475
48	2450	61	2463	74	2476
49	2451	62	2464	75	2477
50	2452	63	2465	76	2478
51	2453	64	2466	77	2479
52	2454	65	2467	78	**2480**
53	2455	66	2468		
54	2456	67	2469		

Test frequency is the lowest channel: 0 frequency(2402MHz), middle channel: 39 frequency (2441MHz) and highest channel: 78 frequency(2480MHz)

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7. 20dB BANDWIDTH

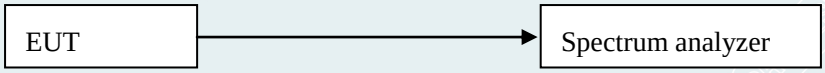
7.1 LIMITS

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 output power no greater than 125 mW.

7.2 TEST PROCEDURES

1) Remove the antenna from the EUT, and then connect a low loss RF cable from antenna port to the spectrum analyzer.
2) Set the spectrum analyzer as RBW=30 kHz, VBW=100 kHz, Span=3MHz, Sweep = auto. Allow the trace to stabilize, record 20dB bandwidth value
3) Repeat until all the test channels are investigated.

7.3 TEST SETUP



7.4 TEST RESULTS

Environment: 25.0℃/45%RH/101.0kPa Voltage: DC 3.8V
Tested By: Qin Tingting Date: 2022-10-10~2022-10-12

Left earbuds

Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
DH5	Lowest	2402	1032
	Middle	2441	1029
	Highest	2480	1029
Test mode	**Channel**	**Frequency (MHz)**	**20 dB Bandwidth (kHz)**
2DH5	Lowest	2402	1206
	Middle	2441	1206
	Highest	2480	1212
Test mode	**Channel**	**Frequency (MHz)**	**20 dB Bandwidth (kHz)**
3DH5	Lowest	2402	1203
	Middle	2441	1236
	Highest	2480	1242

Right earbuds

Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
DH5	Lowest	2402	1038
	Middle	2441	1041
	Highest	2480	1041
Test mode	**Channel**	**Frequency (MHz)**	**20 dB Bandwidth (kHz)**
2DH5		2402	1188
	Middle	2441	1185
	Highest	2480	1188
Test mode	**Channel**	**Frequency (MHz)**	**20 dB Bandwidth (kHz)**
3DH5	Lowest	2402	1200
	Middle	2441	1203
	Highest	2480	1203

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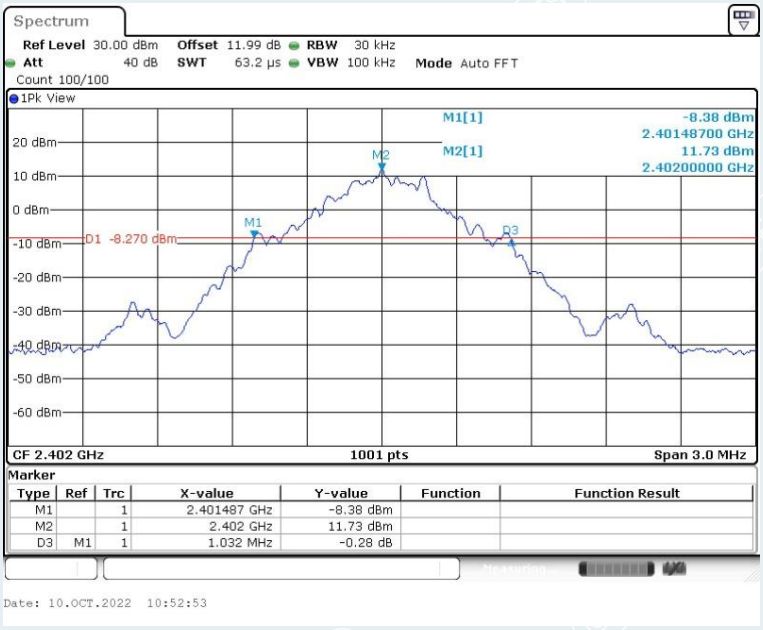
Left earbuds

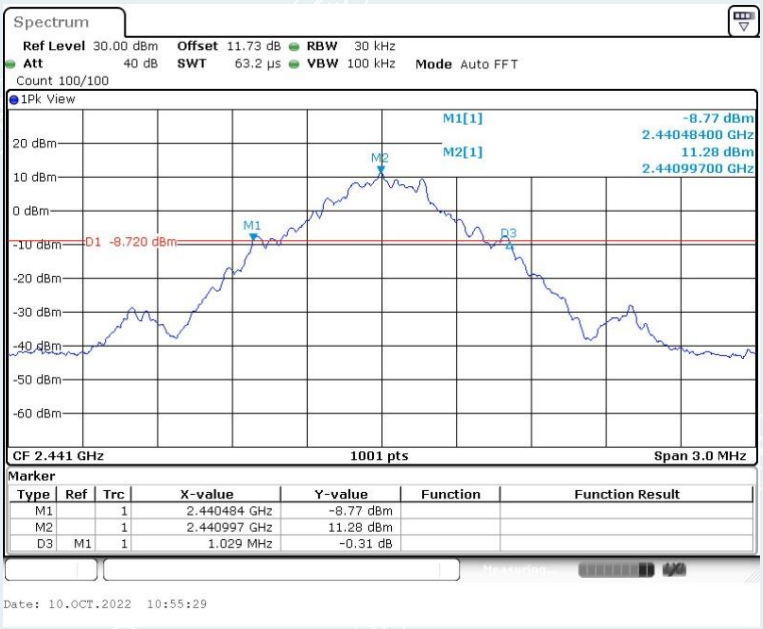
Result plot as follows:

DH5

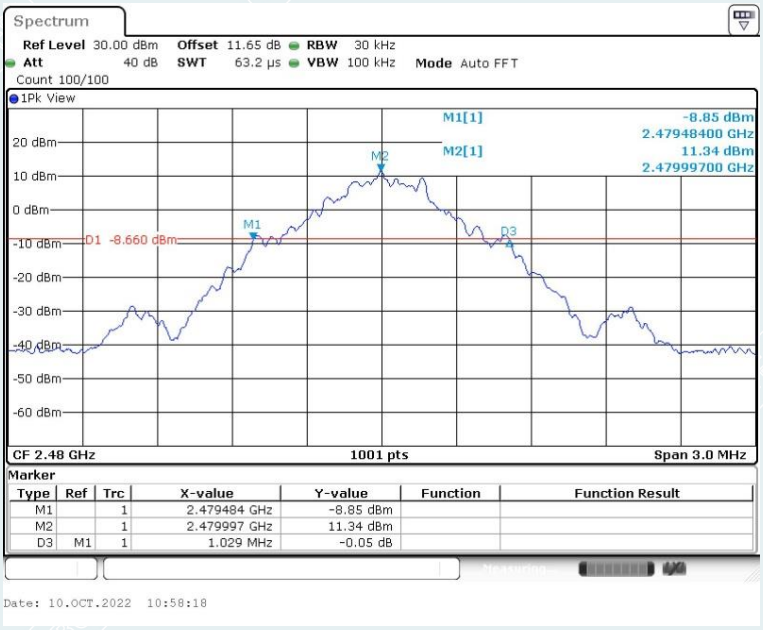
Lowest Channel



Middle Channel

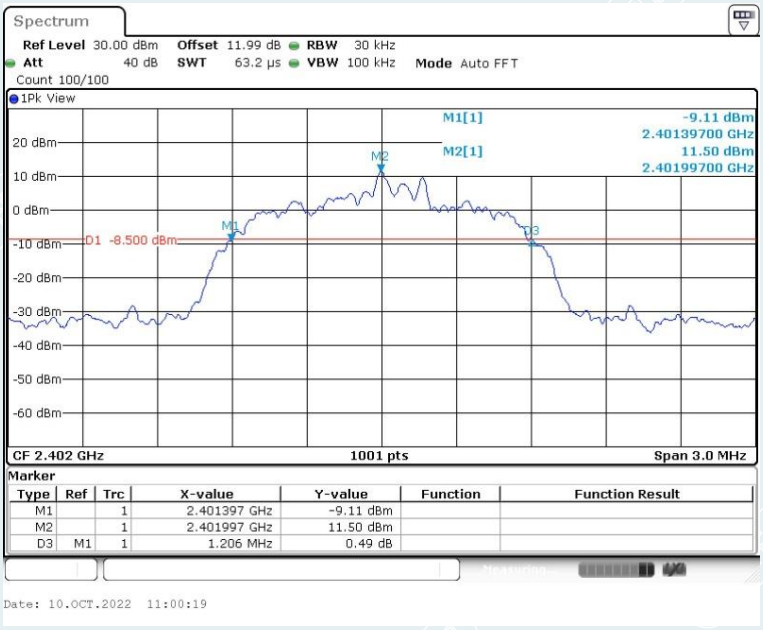


Highest Channel

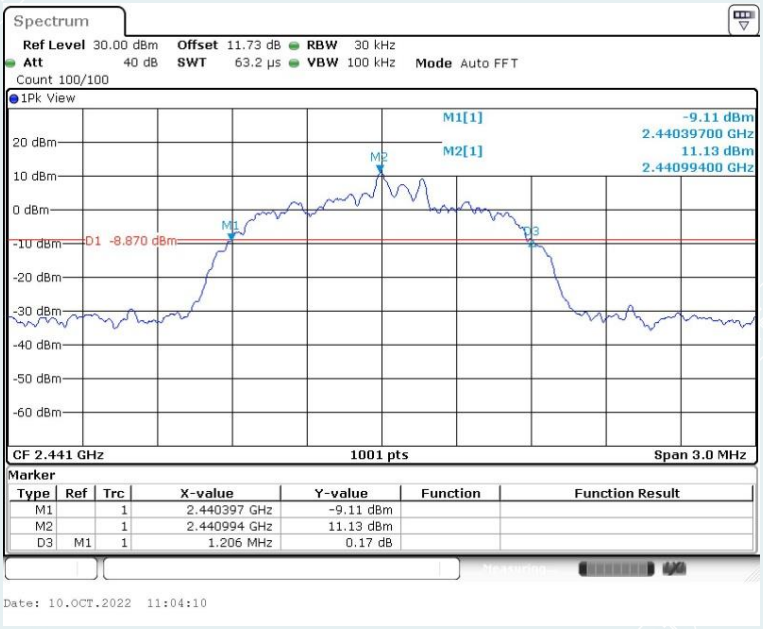


2DH5

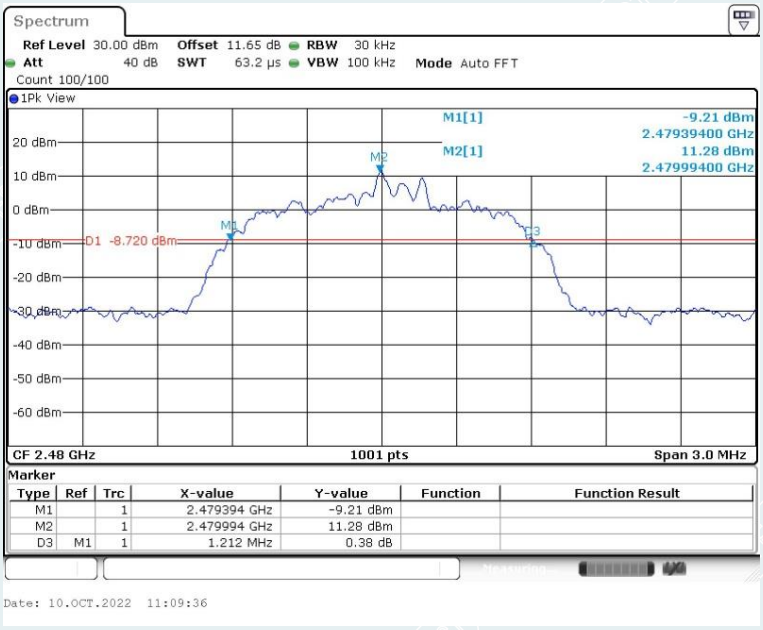
Lowest Channel



Middle Channel

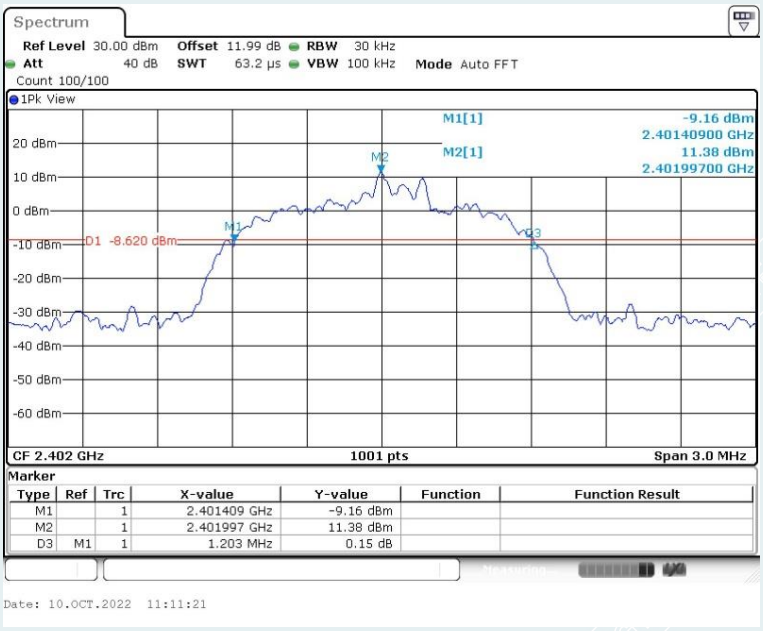


Highest Channel



3DH5

Lowest Channel



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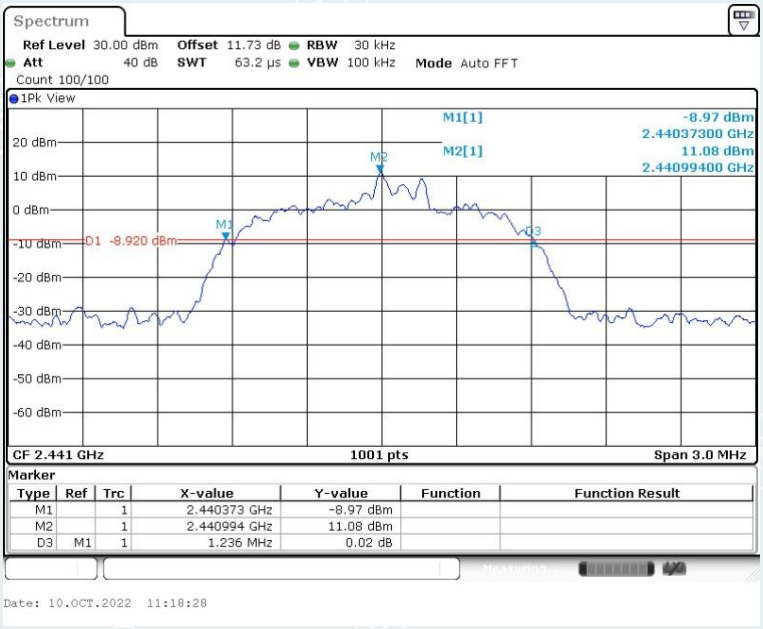
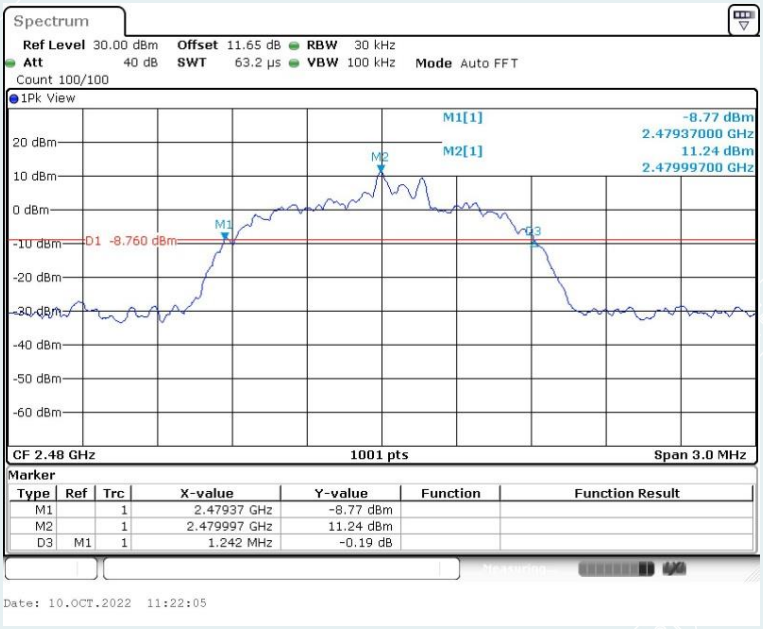


Highest Channel



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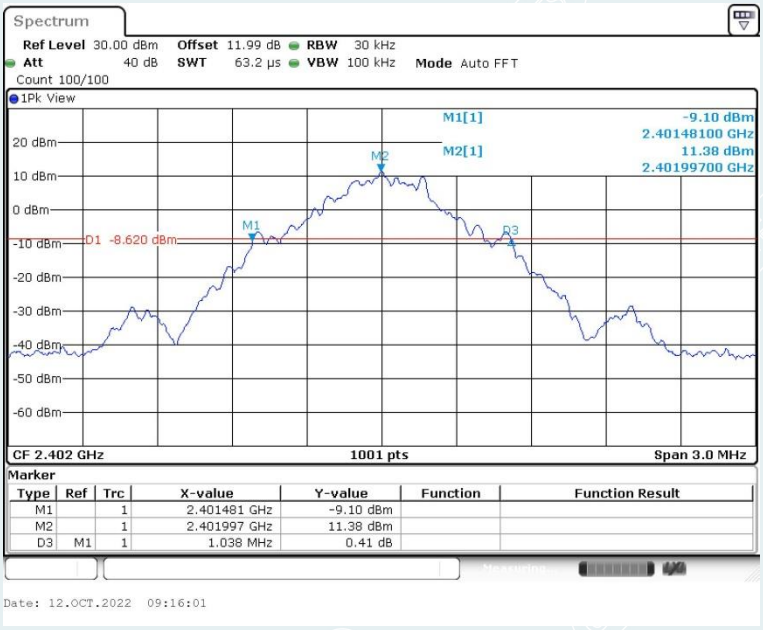
Right earbuds

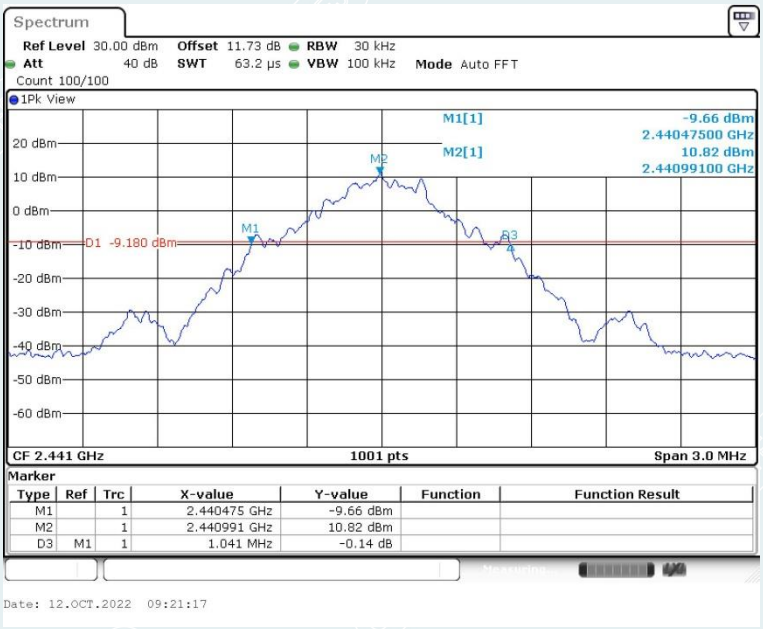
Result plot as follows:

DH5

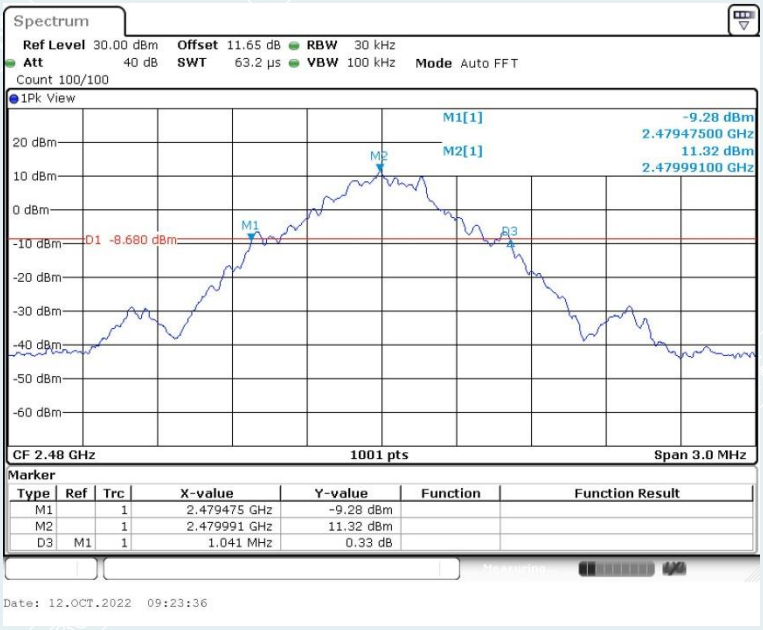
Lowest Channel



Middle Channel

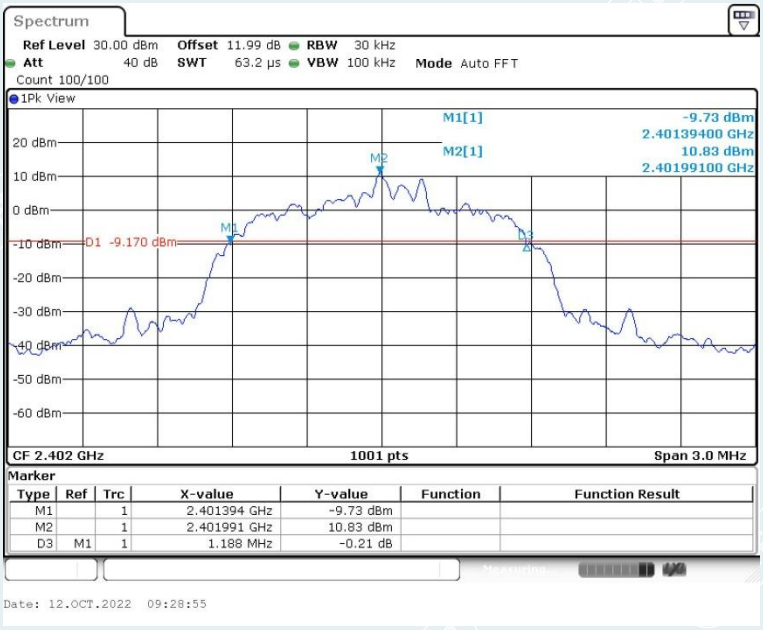


Highest Channel

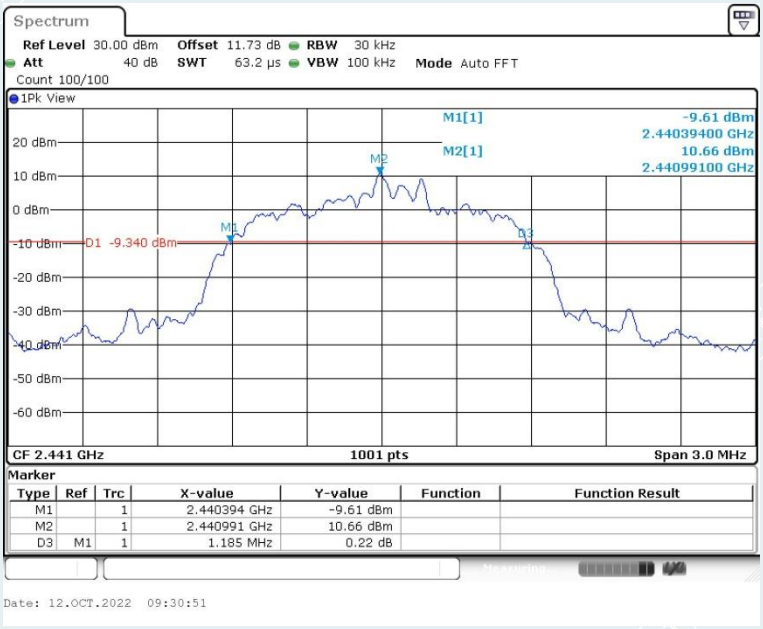


2DH5

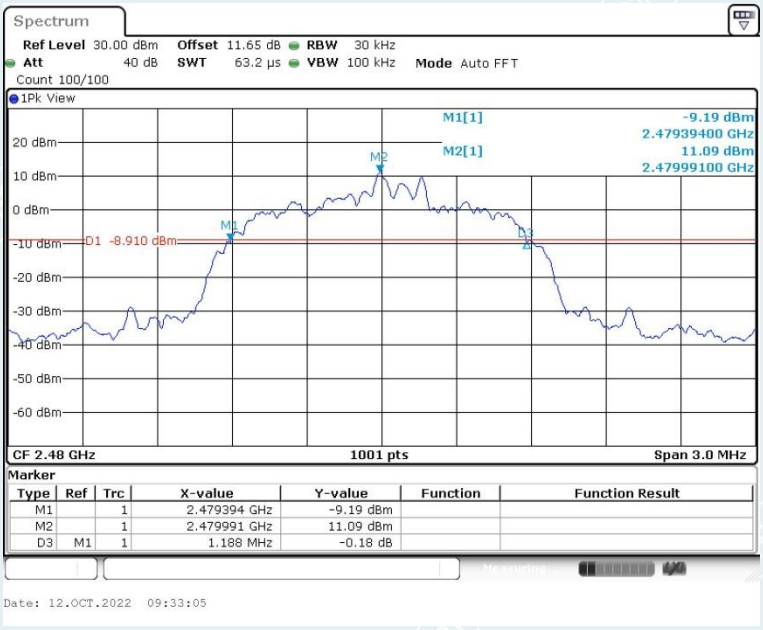
Lowest Channel



Middle Channel

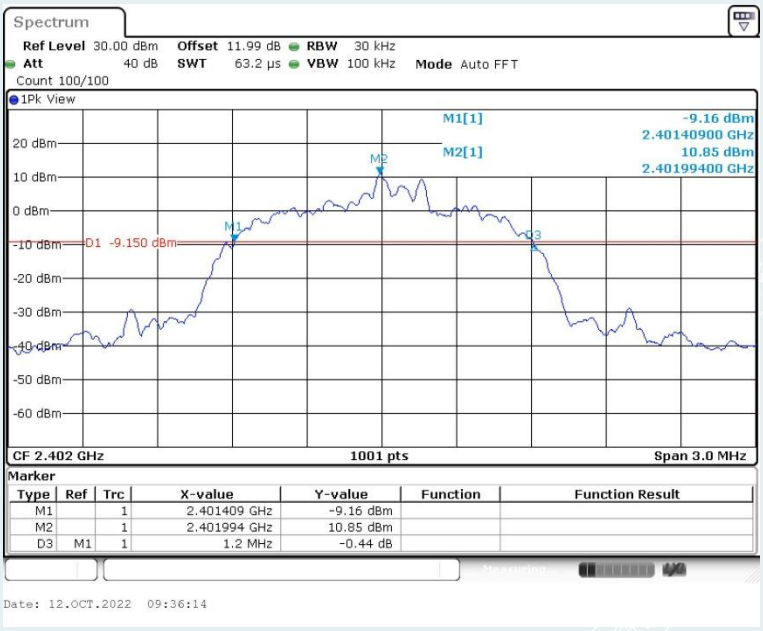


Highest Channel

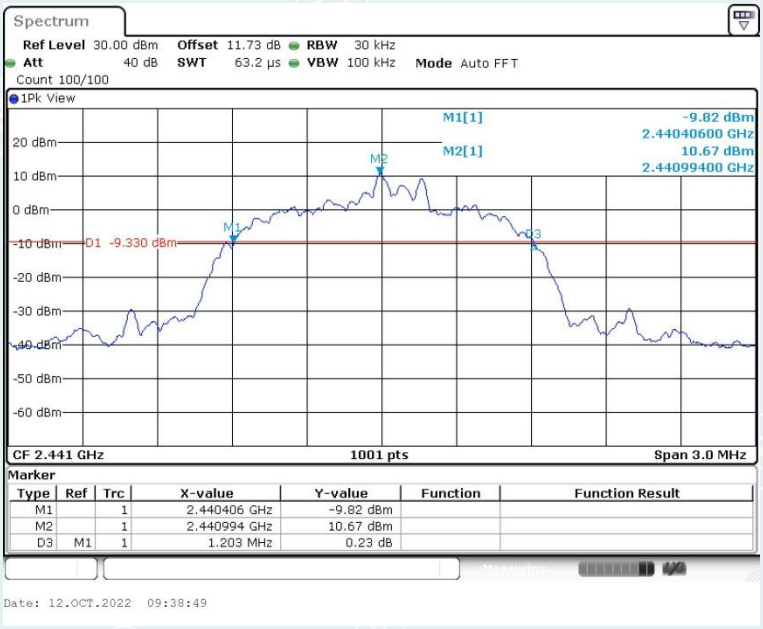


3DH5

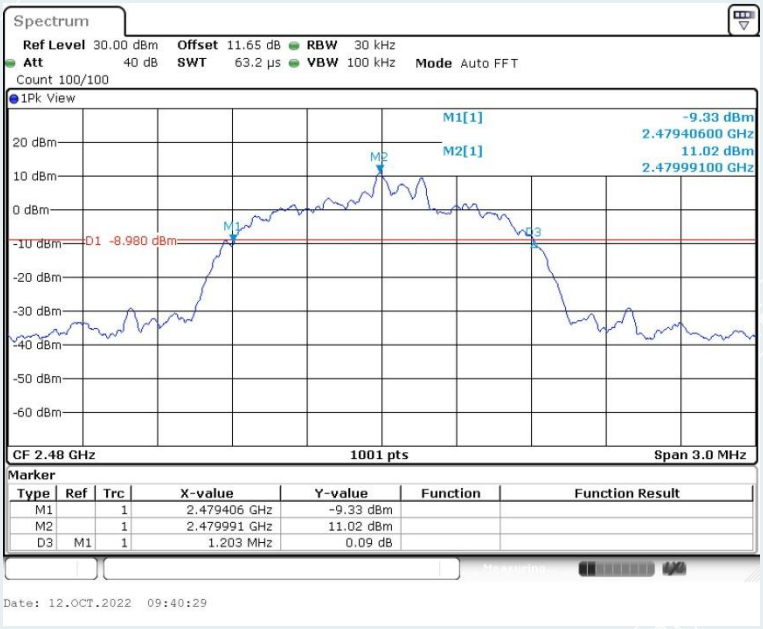
Lowest Channel



Middle Channel



Highest Channel



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8. CARRIER FREQUENCIES SEPARATED

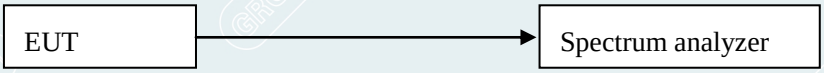
8.1 LIMITS

1) 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 output power no greater than 125 mW.

8.2 TEST PROCEDURES

1) Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2) Set center frequency of spectrum analyzer = middle of hopping channel.
3) Set the spectrum analyzer as RBW=100kHz, VBW=300kHz, Adjust Span to 2MHz, Sweep = auto
4) Use the marker-delta function to mark hopping channel carrier frequencies and record the channel separation.

8.3 TEST SETUP



8.4 TEST RESULTS

Environment: 25.0℃/45%RH/101.0kPa Voltage: DC 3.8V
Tested By: Qin Tingting Date: 2022-10-10~2022-10-12

Left earbuds

DH5

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
0.997	688	> Two-thirds of the 20 dB Bandwidth	Pass

2DH5

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.012	808	> Two-thirds of the 20 dB Bandwidth	Pass

3DH5

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.003	828	> Two-thirds of the 20 dB Bandwidth	Pass

Right earbuds

DH5

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.000	694	> Two-thirds of the 20 dB Bandwidth	Pass

2DH5

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.000	792	> Two-thirds of the 20 dB Bandwidth	Pass

3DH5

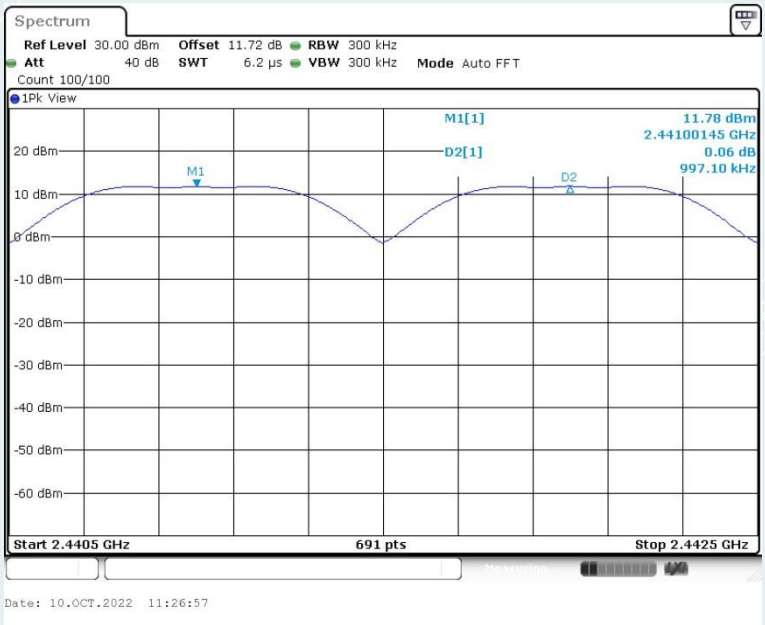
Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.006	802	> Two-thirds of the 20 dB Bandwidth	Pass

Left earbuds

Result plot as follows:

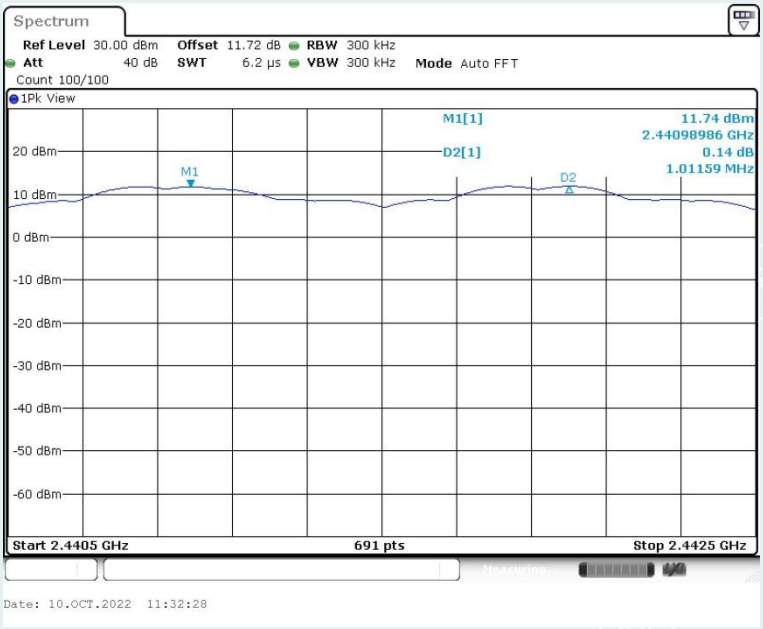
DH5

Measurement of Channel Separation



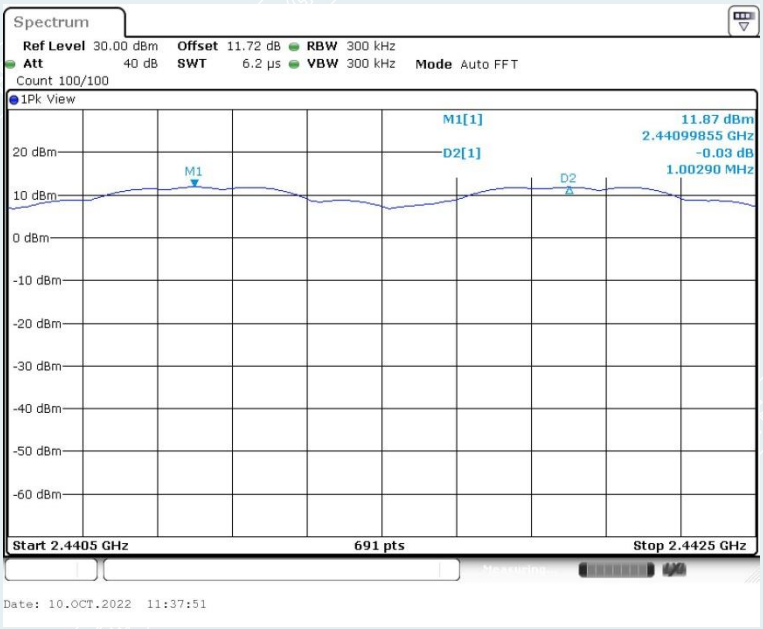
2DH5

Measurement of Channel Separation



3DH5

Measurement of Channel Separation



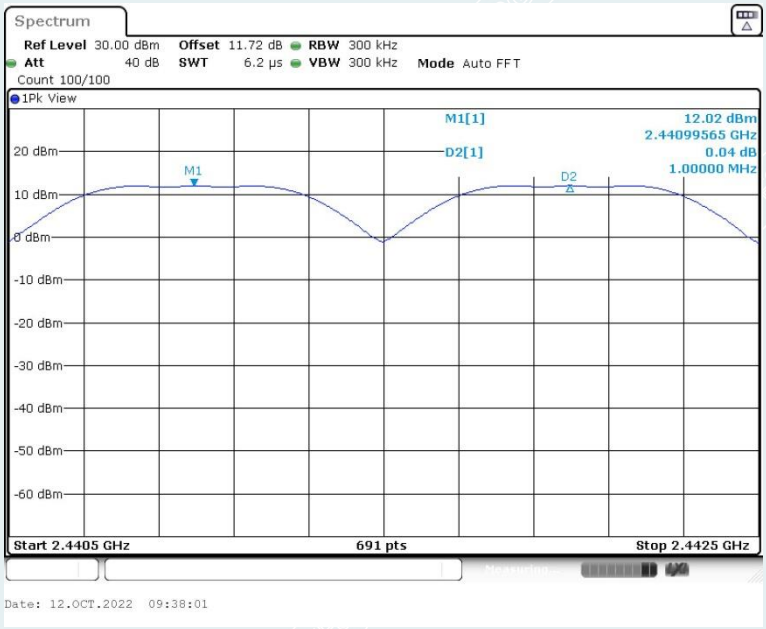
Test result: The unit does meet the FCC requirements.

Right earbuds

Result plot as follows:

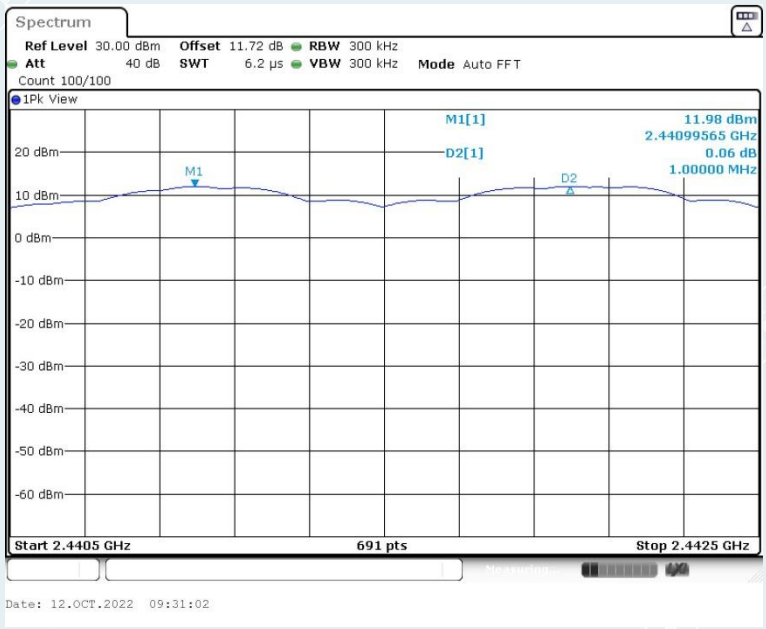
DH5

Measurement of Channel Separation



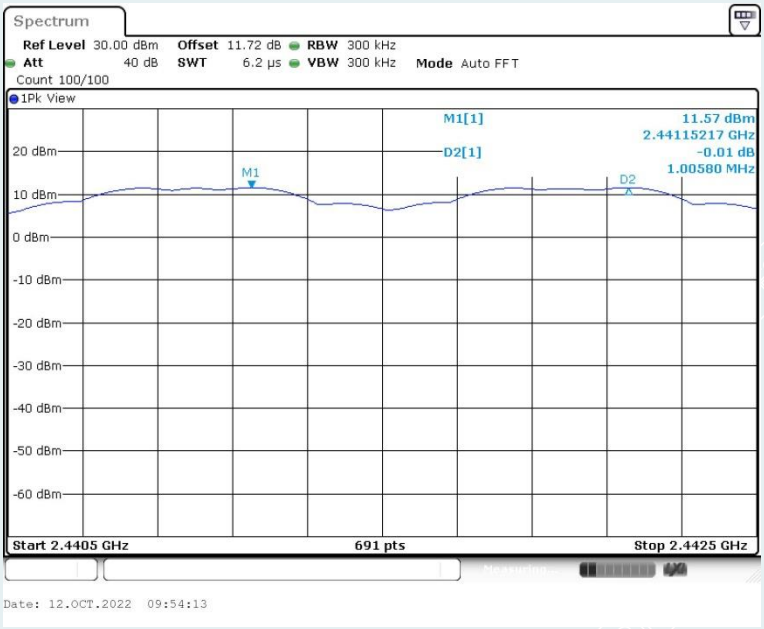
2DH5

Measurement of Channel Separation



3DH5

Measurement of Channel Separation



Test result: The unit does meet the FCC requirements.

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9. HOPPING CHANNEL NUMBER

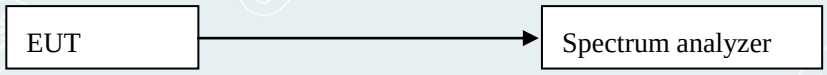
9.1 LIMITS

Regulation 15.247 (a) (1)(iii) Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

9.2 TEST PROCEDURES

1) Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2) Set the spectrum analyzer as RBW=100kHz, VBW=300kHz.
3) Set the spectrum analyzer: start frequency = 2400MHz. stop frequency = 2483.5MHz. Submit the test result graph.

9.3 TEST SETUP



9.4 TEST RESULTS

Environment: 25.0℃/45%RH/101.0kPa Voltage: DC 3.8V
Tested By: Qin Tingting Date: 2022-10-10~2022-10-12

Left earbuds

Type of Modulation	Result (No. of CH)	Limit (No. of CH)	Result
GFSK	79	≥15	PASS
π/4-DQPSK	79	≥15	PASS
8DPSK	79	≥15	PASS

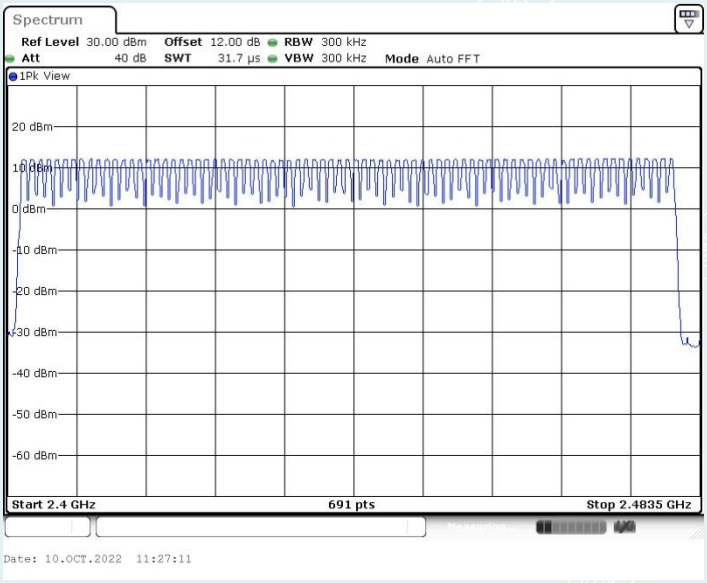
Right earbuds

Type of Modulation	Result (No. of CH)	Limit (No. of CH)	Result
GFSK	79	≥15	PASS
π/4-DQPSK	79	≥15	PASS
8DPSK	79	≥15	PASS

Left earbuds

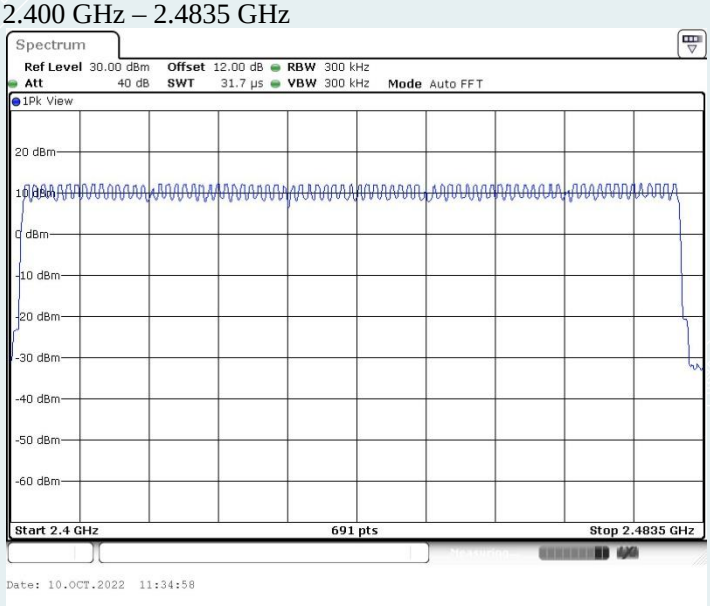
GFSK

2.400 GHz – 2.4835 GHz



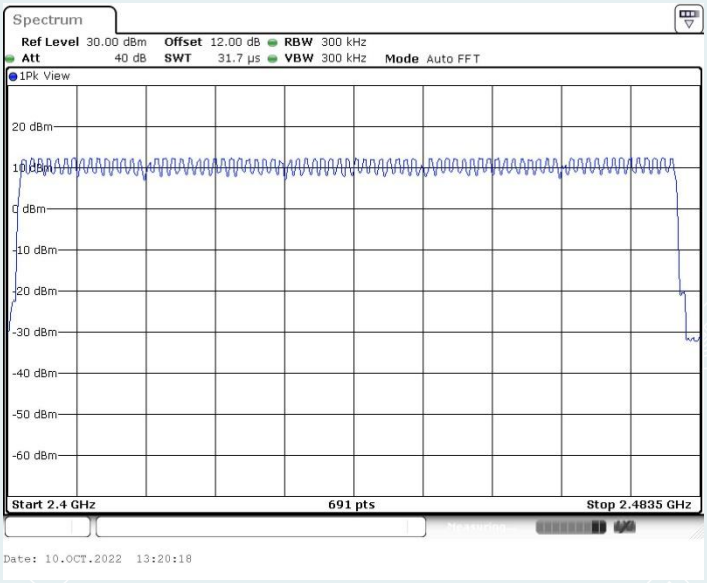
π/4-DQPSK

2.400 GHz – 2.4835 GHz



8DPSK

2.400 GHz – 2.4835 GHz

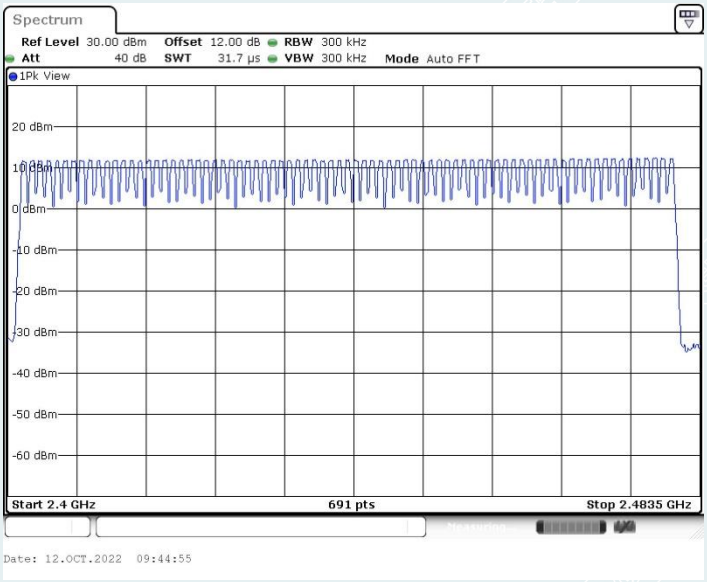


Test result: The unit does meet the FCC requirements.

Right earbuds

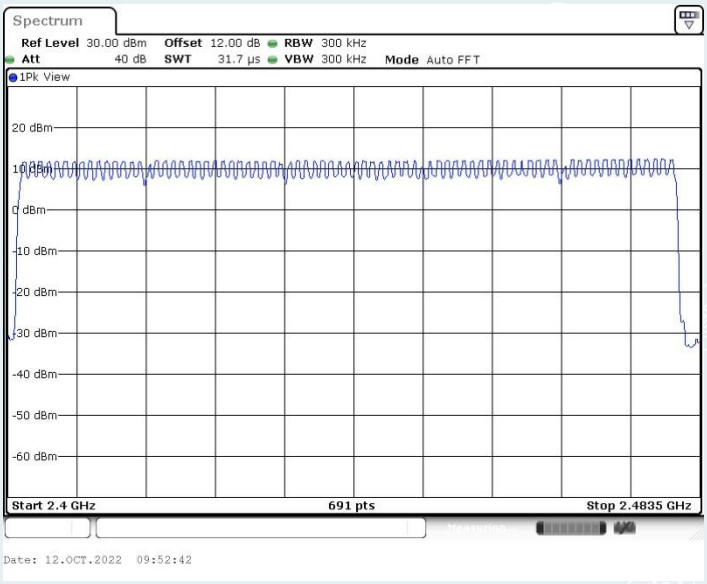
GFSK

2.400 GHz – 2.4835 GHz



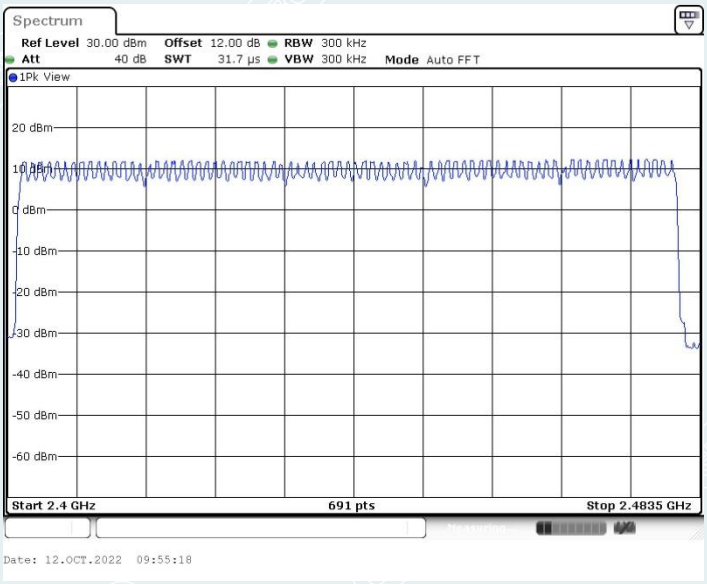
π/4-DQPSK

2.400 GHz – 2.4835 GHz



8DPSK

2.400 GHz – 2.4835 GHz



Test result: The unit does meet the FCC requirements.

10. DWELL TIME

10.1 LIMITS

Regulation 15.247(a)(1)(iii) Frequency hopping systems in the 2400-2483.5MHz 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.

10.2 TEST PROCEDURES

1) Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2) Set spectrum analyzer span = 0. centered on a hopping channel;
3) Set RBW = 1MHz and VBW = 3MHz.Sweep = as necessary to capture the entire dwell time per hopping channel. Detector Function = Peak. Trace = Max hold;
4) Use the marker-delta function to determine the dwell time. If this value varies with different modes of operation (e.g.. data rate. modulation format. etc.). Repeat this test for each variation.
5) DH1 Packet permit maximum 1600 / 79 /2 = 10.12 hops per second in each channel (1 time slot TX, 1 time slot RX).So, the dwell time is the time duration of the pulse times 10.12 x 31.6 = 320 within 31.6 seconds
6) DH3 Packet permit maximum 1600 / 79 / 4 = 5.06 hops per second in each channel (3 time slotsTX, 1 time slot RX).So, the dwell time is the time duration of the pulse times 5.06 x 31.6 = 160 within 31.6 seconds
7) DH5 Packet permit maximum 1600/ 79 / 6 = 3.37 hops per second in each channel (5 time slotsTX, 1 time slot RX).So, the dwell time is the time duration of the pulse times 3.37 x 31.6 = 106.6 within 31.6 seconds

10.3 TEST SETUP

10.4 TEST RESULTS

Environment: 25.0℃/45%RH/101.0kPa Voltage: DC 3.8V
Tested By: Qin Tingting Date:2022-10-10~ 2022-10-12

Left earbuds

The test period: T= 0.4 Second/Channel x 79 Channel = 31.6 s

GFSK: Middle Channel (2.441GHz)

DH1	time slot=	0.385	(ms)*	(1600/(2*79))	*	31.6	=	123	ms
DH3	time slot=	1.634	(ms)*	(1600/(4*79))	*	31.6	=	261	ms
DH5	time slot=	2.874	(ms)*	(1600/(6*79))	*	31.6	=	307	ms

π/4-DQPSK: Middle Channel (2.441GHz)

2DH1	time slot=	0.394	(ms)*	(1600/(2*79))	*	31.6	=	126	ms
2DH3	time slot=	1.639	(ms)*	(1600/(4*79))	*	31.6	=	262	ms
2DH5	time slot=	2.879	(ms)*	(1600/(6*79))	*	31.6	=	307	ms

8DPSK: Middle Channel (2.441GHz)

3DH1	time slot=	0.394	(ms)*	(1600/(2*79))	*	31.6	=	126	ms
3DH3	time slot=	1.638	(ms)*	(1600/(4*79))	*	31.6	=	262	ms
3DH5	time slot=	2.880	(ms)*	(1600/(6*79))	*	31.6	=	307	ms

The results are not greater than 0.4 seconds.
The unit does meet the requirements.

Right earbuds

The test period: T= 0.4 Second/Channel x 79 Channel = 31.6 s

GFSK: Middle Channel (2.441GHz)

DH1	time slot=	0.385	(ms)*	(1600/(2*79))	*	31.6	=	123	ms
DH3	time slot=	1.633	(ms)*	(1600/(4*79))	*	31.6	=	261	ms
DH5	time slot=	2.873	(ms)*	(1600/(6*79))	*	31.6	=	306	ms

π/4-DQPSK: Middle Channel (2.441GHz)

2DH1	time slot=	0.393	(ms)*	(1600/(2*79))	*	31.6	=	126	ms
2DH3	time slot=	1.638	(ms)*	(1600/(4*79))	*	31.6	=	262	ms
2DH5	time slot=	2.879	(ms)*	(1600/(6*79))	*	31.6	=	307	ms

8DPSK: Middle Channel (2.441GHz)

3DH1	time slot=	0.394	(ms)*	(1600/(2*79))	*	31.6	=	126	ms
3DH3	time slot=	1.636	(ms)*	(1600/(4*79))	*	31.6	=	262	ms
3DH5	time slot=	2.879	(ms)*	(1600/(6*79))	*	31.6	=	307	ms

The results are not greater than 0.4 seconds.
The unit does meet the requirements.

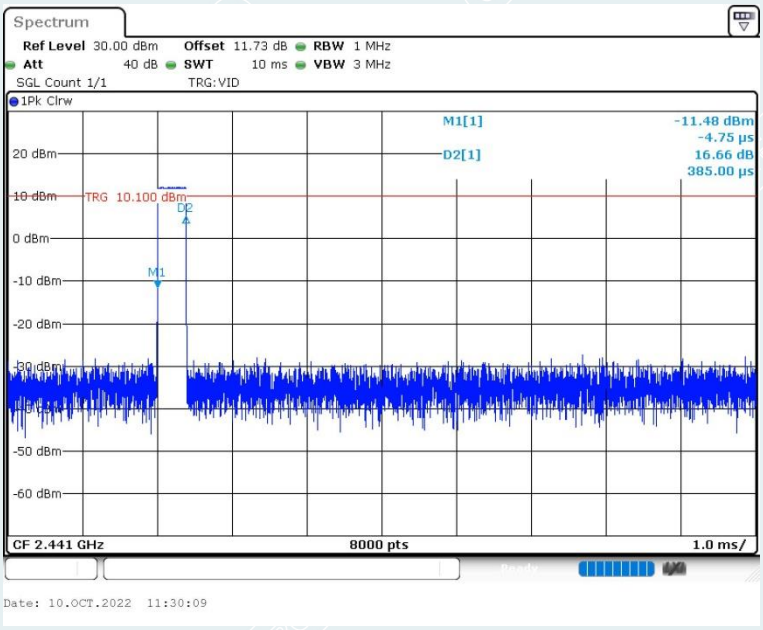
Left earbuds

Please refer the graph as below:

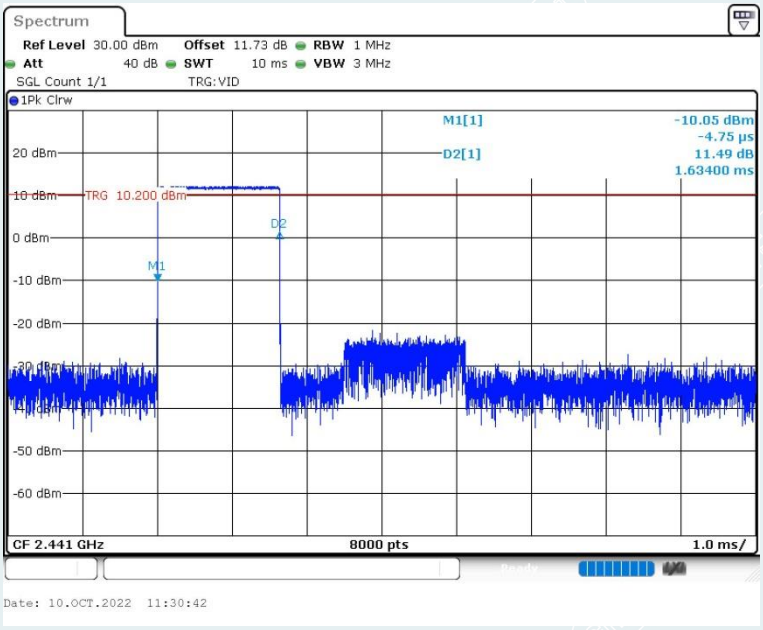
GFSK

Middle Frequency (2.441GHz)

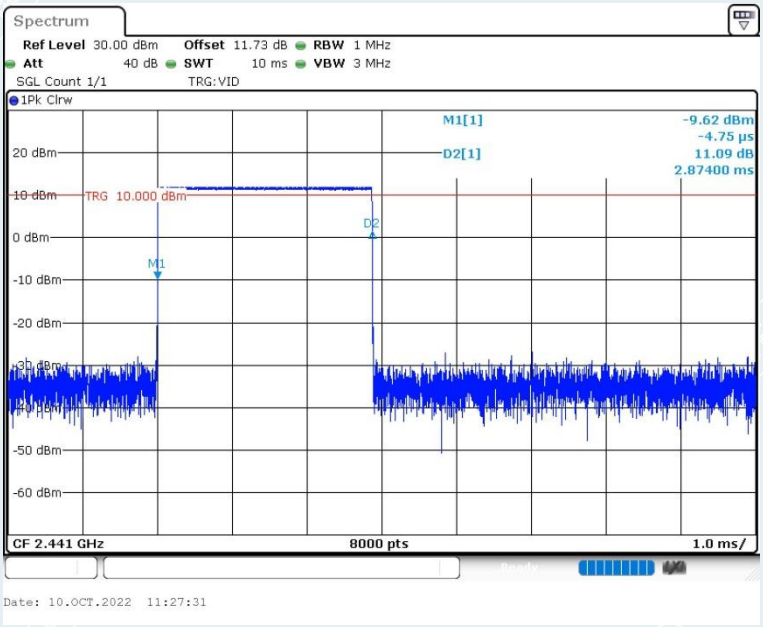
DH1



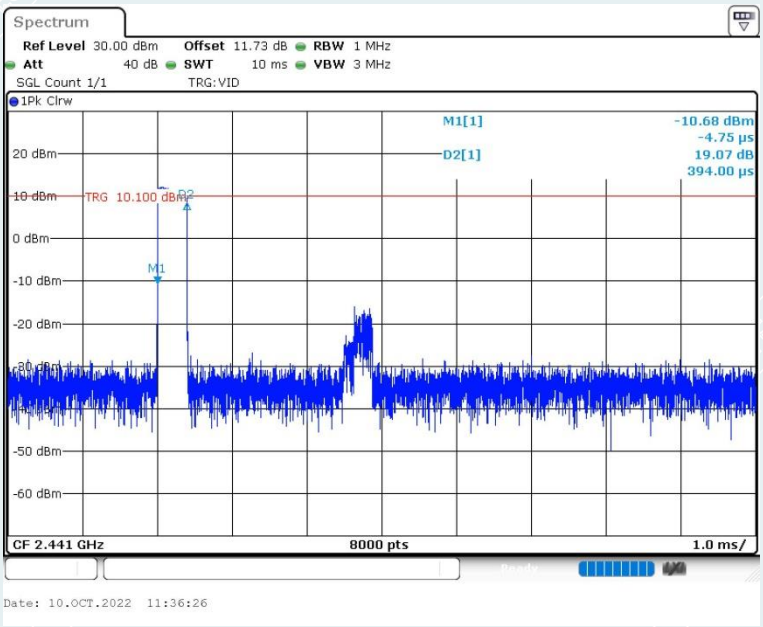
DH3



DH5

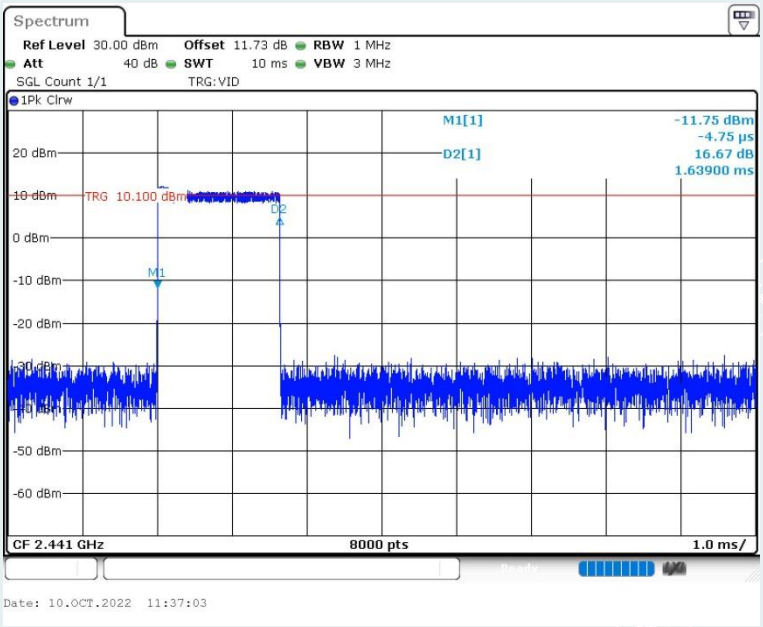


π/4-DQPSK
Middle Frequency (2.441GHz)
2DH1

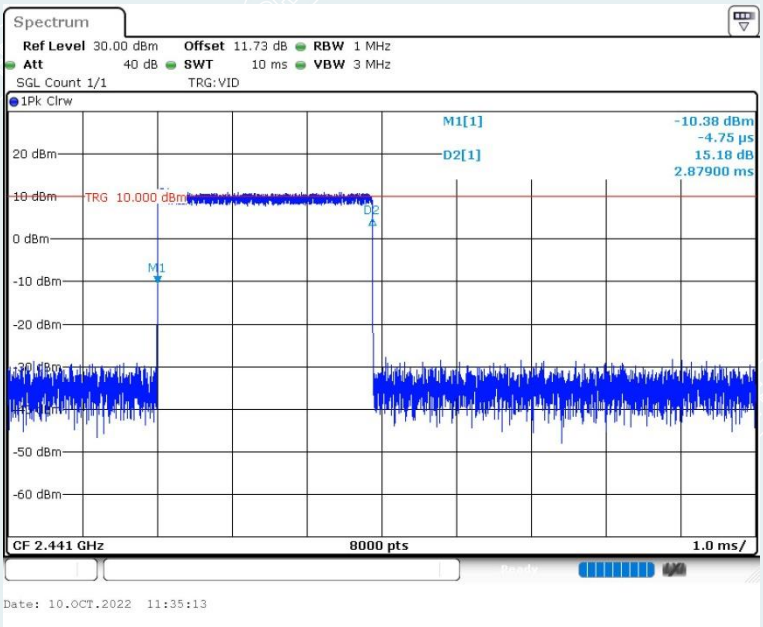


Mid Frequency (2.441GHz)

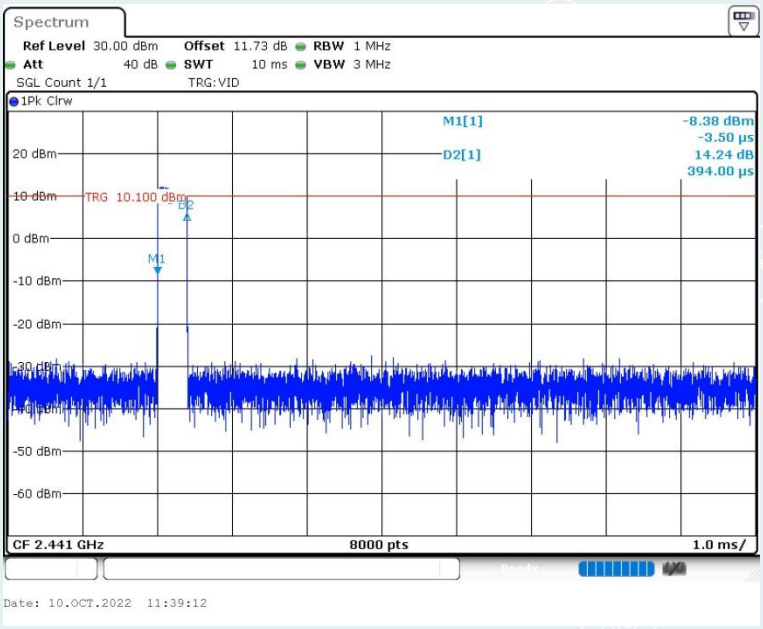
2DH3



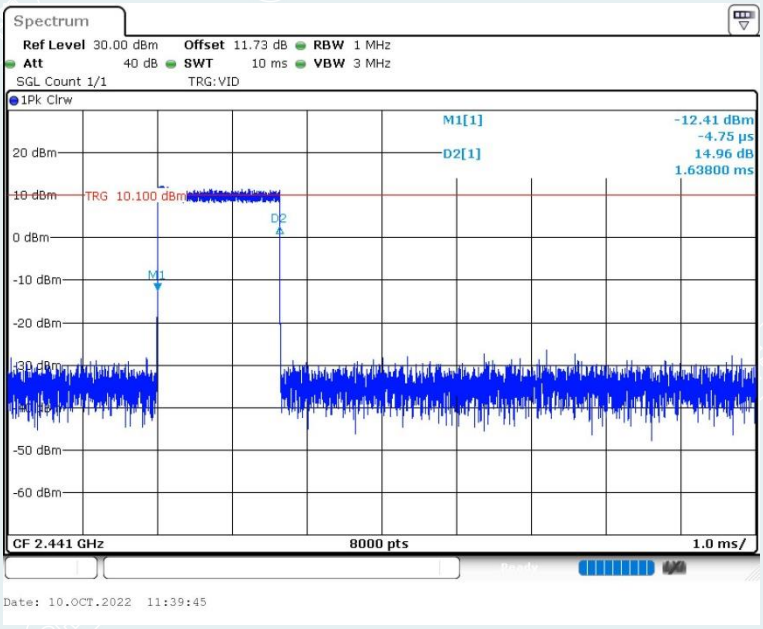
2DH5



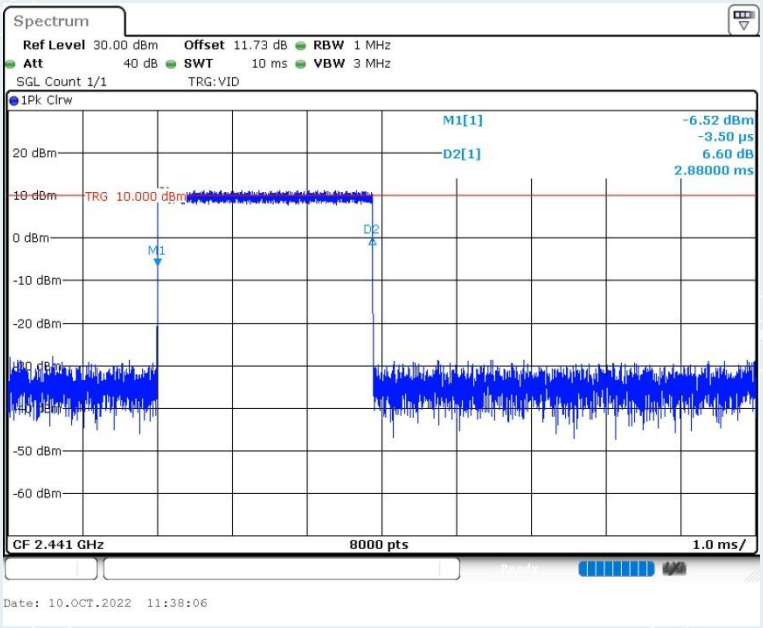
8DPSK
Middle Frequency (2.441GHz)
3DH1



3DH3



3DH5



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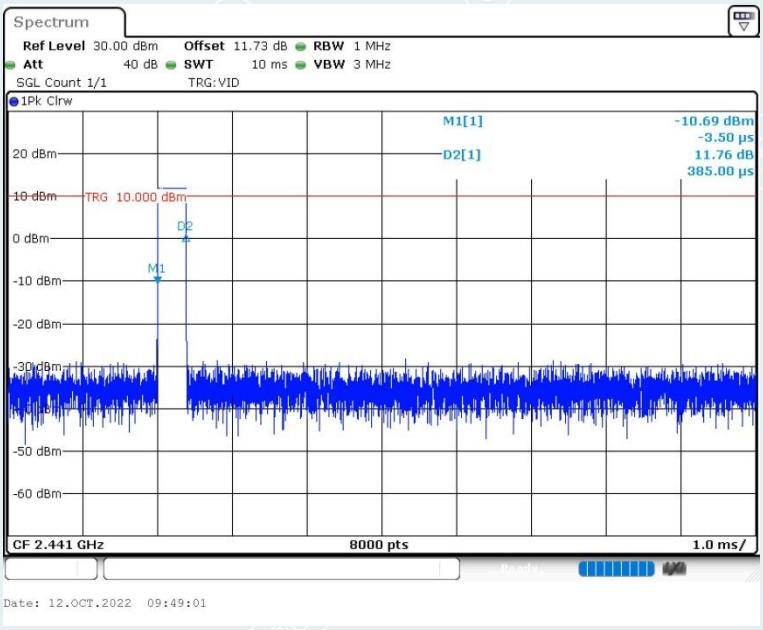
Right earbuds

Please refer the graph as below:

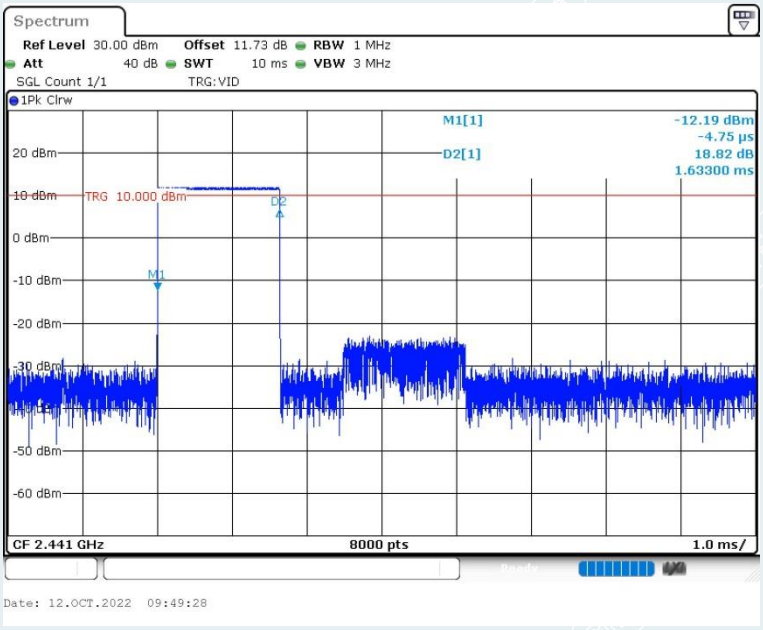
GFSK

Middle Frequency (2.441GHz)

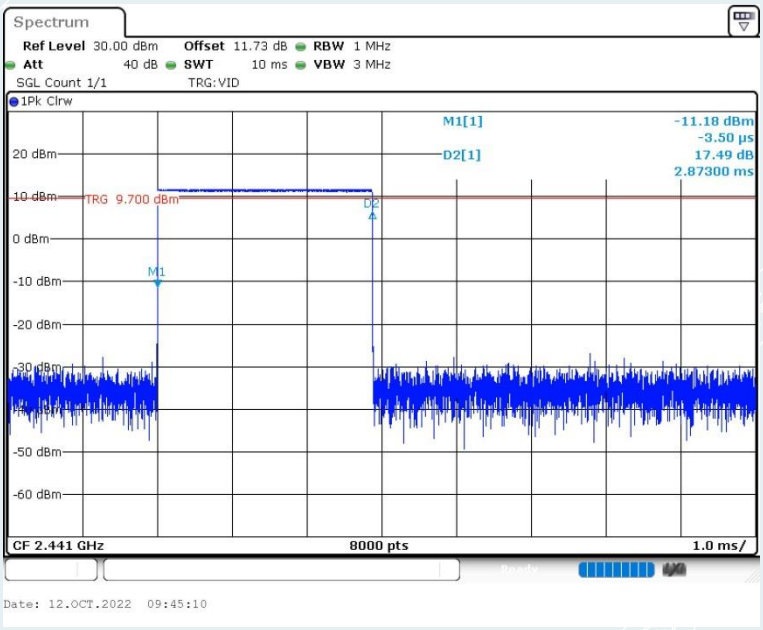
DH1



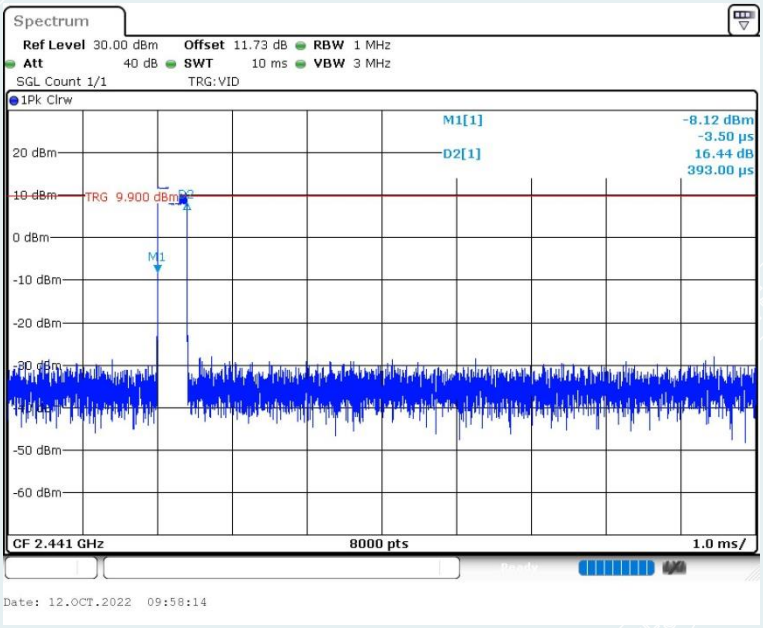
DH3



DH5

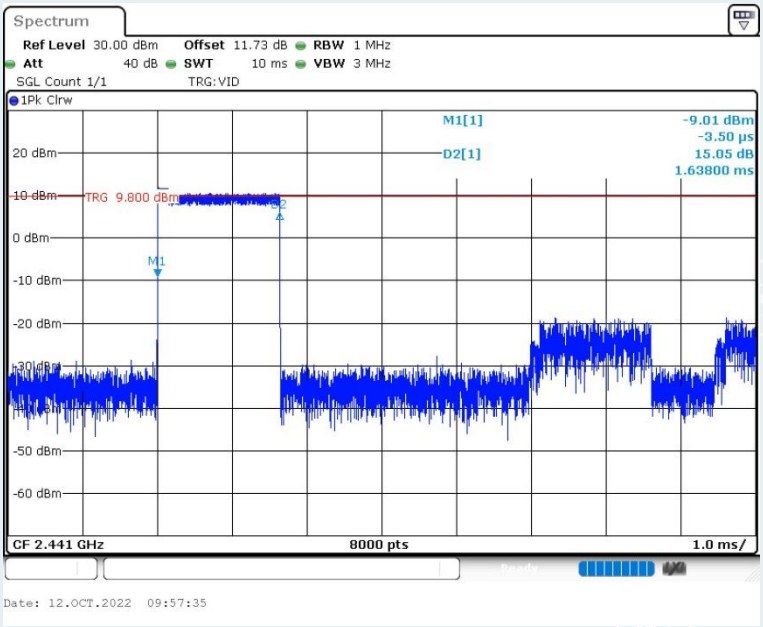


π/4-DQPSK
Middle Frequency (2.441GHz)
2DH1

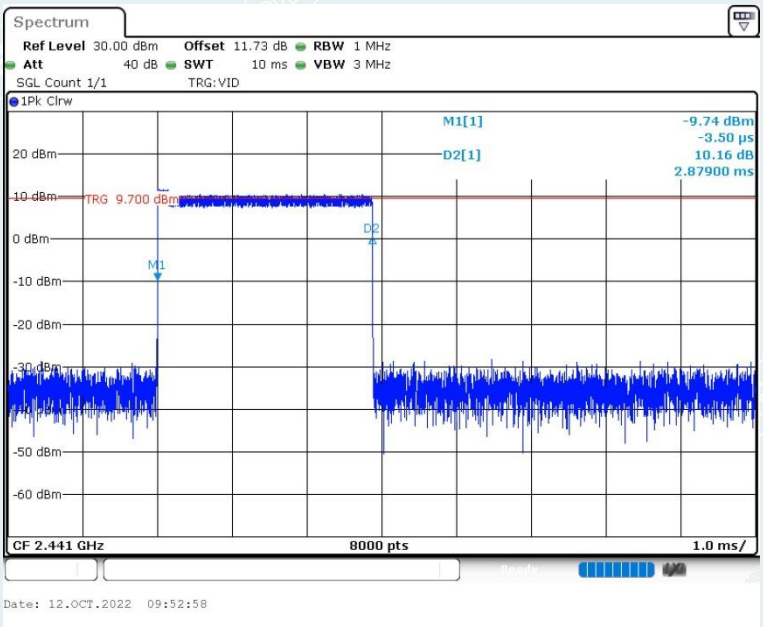


Mid Frequency (2.441GHz)

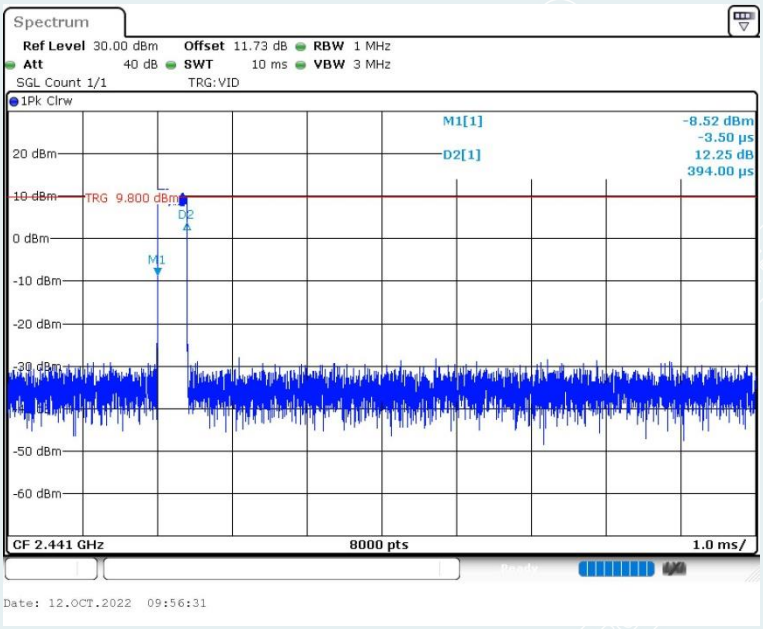
2DH3



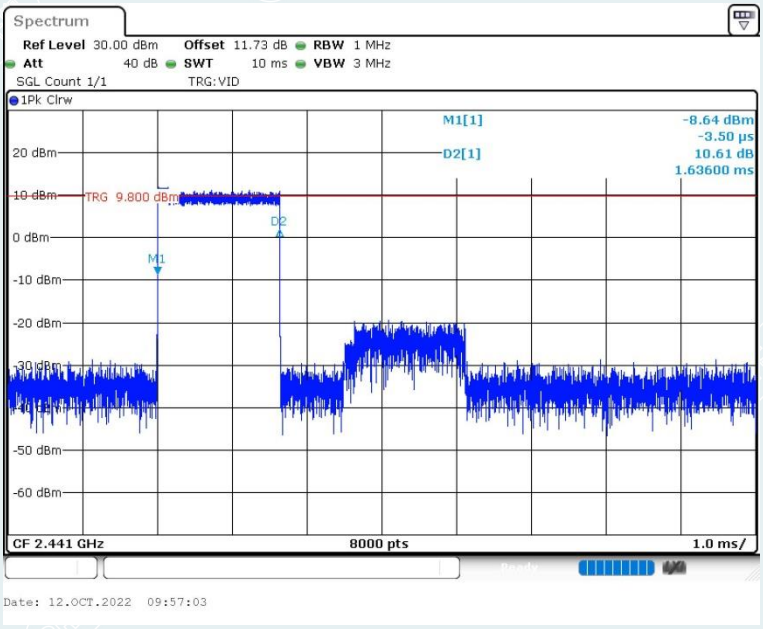
2DH5



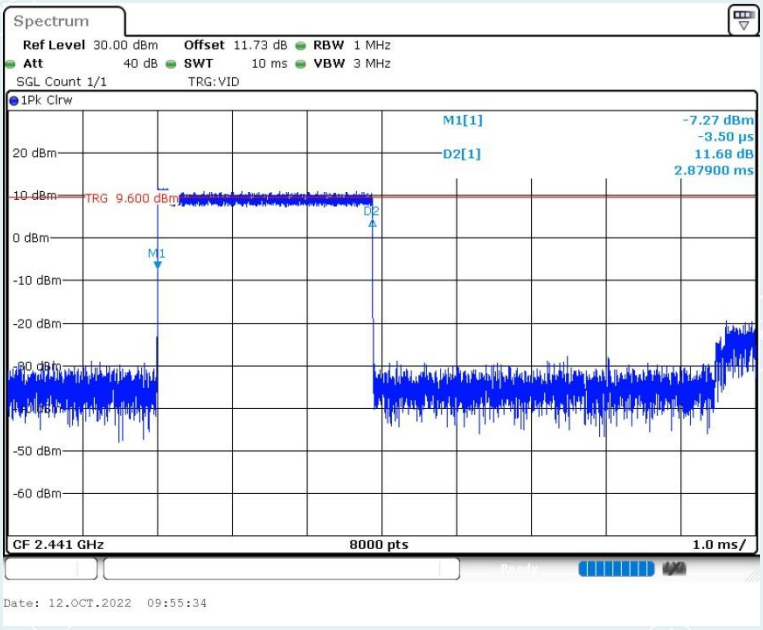
8DPSK
Middle Frequency (2.441GHz)
3DH1



3DH3



3DH5



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