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Certificate # 2861.01

GRGTEST®

TEST REPORT

Verified Code: 743912

Report No.:	E202012093384-2	Application No.:	E202012093384
Client:	Realme Chongqing Mobile Telecommunications Corp., Ltd.		
Address:	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China.		
Sample Description:	realme Buds Q2		
Model:	RMA2010		
Test Specification:	FCC 47 CFR Part 15 Subpart C		
Receipt Date:	2020-12-11		
Test Date:	2020-12-16 to 2021-01-06		
Issue Date:	2021-01-15		
Test Result:	Pass		
Prepared By: Test Engineer Xie Jang	Reviewed By: Technical Manager Jiang Tao	Approved By: Manager Wu Chengrong	
Other Aspects:			
Note: Note			
Abbreviations: ok / P = passed; fail / F = failed; n.a. / N = not applicable;			
The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.			



DIRECTIONS OF TEST

- 1. This station carries out test task according to the national regulation of verifications which can be traced to National Primary Standards and BIPM.**
- 2. The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.**
- 3. If there is any objection concerning the test, the client should inform the laboratory within 15 days from the date of receiving the test report.**

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1. TEST RESULT SUMMARY

FCC 47 CFR Part 15 Subpart C			
Standard	Item	Limit / Severity	Result
FCC 47 CFR Part 15 Subpart C (15.247)	Antenna Requirement	Section 15.247 (b)(1)	PASS ¹⁾
	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	N/A ²⁾
	Conducted band edges and Spurious Emission (30MHz to 25GHz)	Section 15.209 & 15.247(d)	PASS
	Radiated Spurious Emission (30MHz to 25GHz)	Section 15.209 & 15.247(d)	PASS
	Restricted bands of operation	Section 15.247 (d) & 15.205	PASS

Note: 1.The EUT antenna is internal antenna. Max antenna gain is -3.12dBi and -4.07dBi .which accordance 15.203.is considered sufficient to comply with the provisions of this section

2.EUT received DC3.7V power form battery

2. GENERAL DESCRIPTION OF EUT

2.1. APPLICANT

Name: Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address: No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China.

2.2. MANUFACTURER

Name: Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address: No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China.

2.3. FACTORY

Name : /
Address : /

2.4. BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment: realme Buds Q2
Model No.: RMA2010
Adding Model: /
Trade Name: realme
FCC ID: 2AUYFRMA2010
Power Supply: DC5V power supplied by charging case
DC 3.7V power supplied by the earphone battery or charging case battery
Earphone Battery ZWD541112
Specification: 3.7V, 40mAh, 0.15Wh
Charging Case ZWD802028
Battery 3.7V, 400mAh, 1.48Wh
Specification:
Frequency 2402MHz~2480MHz
Range:
Transmit Power: Left earphone:
DH5: 11.945dBm
2DH5: 11.997dBm
3DH5: 11.949dBm
Right earphone:
DH5: 11.534dBm
2DH5: 11.537dBm
3DH5: 11.522dBm
Type of Modulation: FHSS (GFSK for 1Mbps, $\pi/4$ -DQPSK for 2Mbps, 8DPSK for 3Mbps)

Antenna Specification: Left earphone: Intenna antenna -3.12dBi
 Right earphone: Intenna antenna -4.07dBi
 Temperature Range: 0°C~45°C
 Hardware Version: V4
 Software Version: V 1.1.09
 Sample No: 0004, 0005
 Note: /

2.5. TEST OPERATION MODE

Mode No.	Description of the modes
1	Bluetooth BR+EDR fixed Transmitting

2.6. LOCAL SUPPORTIVE

Name of equipment	Manufacturer	Model	Serial number	Note
Notebook	LENOVO	TianYi 310-14ISK	MP18DLC6	Unshielded, 1m (AC Cable) Shielded, 1.8m (DC Cable)
/	/	/	/	/

Test software:

Software version	Test level
BQB_20190830	Default

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 : Address: No.1301 Guanguang Road Xinlan Community, Guanlan Street,
Longhua District Shenzhen, 518110, People's Republic of China

P.C. : 518000

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)
China CNAS(L0446)

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

Canada Industry Canada
USA FCC

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

3.3. 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	30MHz~1000MHz	4.3dB
		1GHz~18GHz	5.6dB
	Vertical	30MHz~1000MHz	4.3dB
		1GHz~18GHz	5.6dB
Conduction Emission		9 kHz ~ 150 kHz	2.8 dB
		150 kHz ~ 10 MHz	2.8 dB
		10 MHz ~ 30 MHz	2.2 dB

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

4. LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Hopping Channel Number				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021/05/16
Dwell Time				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021/05/16
Radiated Spurious Emission& Restricted bands of operation				
Test S/W	EZ	CCS-2ANT	/	/
Test receiver	R&S	ESCI	100145	2021/10/07
Amplifier	EMEC	EM330	/	2021/04/01
Bilog Antenna	TESEQ	CBL6143A	26039	2021/11/25
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021/05/16
Horn Antenna	Schwarzbeck	BBHA 9120D(1201)	02143	2020/12/28
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	BBHA 9170-497	2021/11/05
Amplifier	Tonscend	TAP9E6343	AP20E806065	2021/06/28
Amplifier	Tonscend	TAP01018048	AP20E8060075	2021/06/28
Amplifier	Tonscend	TAP037030	AP20E8060081	2021/06/28
Amplifier	Tonscend	TAP184050	AP20E806071	2021/06/15
Test S/W	Tonscend	JS32-RSE/2.5.1.5	/	/
20 dB Bandwidth				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021/05/16
Maximum Peak Output Power				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021/05/16
Conducted band edges and Spurious Emission				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021/05/16
Carrier Frequencies Separated				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021/05/16

5. TEST RESULTS

5.1. E.U.T. TEST CONDITIONS

Type of antenna: Internal

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:

the range	Frequency range over which device operates	Number of frequencies	Location in 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 channel(2402MHz), middle channel: 39 channel(2441MHz) and highest channel: 78 channel(2480MHz)

5.2. 20dB BANDWIDTH

5.2.1. LIMITS

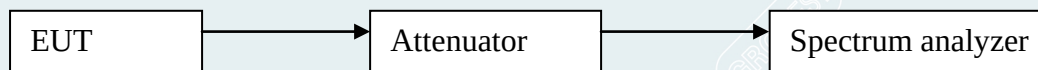
Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

5.2.2. 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.

Remark: /

5.2.3. TEST SETUP



5.2.4. TEST RESULTS

Left earphone

Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
DH5	Low	2402	1039
	Mid	2441	1036
	High	2480	1037
Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
2DH5	Low	2402	1185
	Mid	2441	1205
	High	2480	1225
Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
3DH5	Low	2402	1200
	Mid	2441	1243
	High	2480	1245

Right earphone

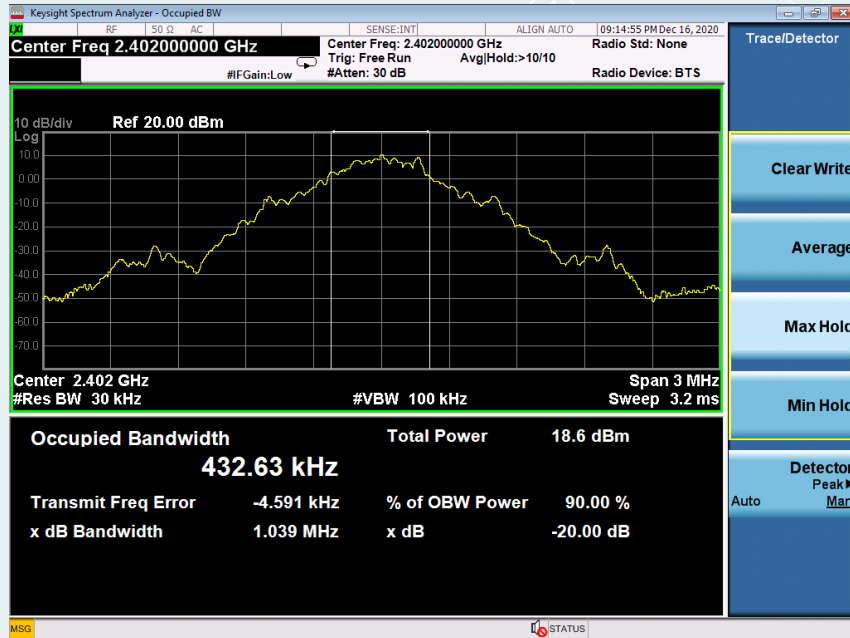
Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
DH5	Low	2402	1037
	Mid	2441	1038
	High	2480	1031
Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
2DH5	Low	2402	1201
	Mid	2441	1206
	High	2480	1223
Test mode	Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
3DH5	Low	2402	1200
	Mid	2441	1243
	High	2480	1248

Result plot as follows:

Left earphone

DH5

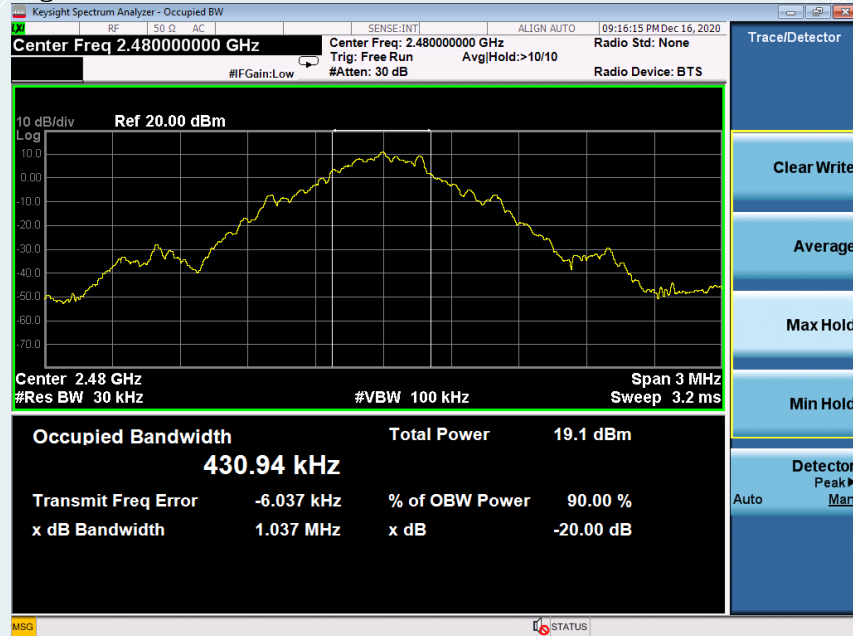
Low Channel



Mid Channel

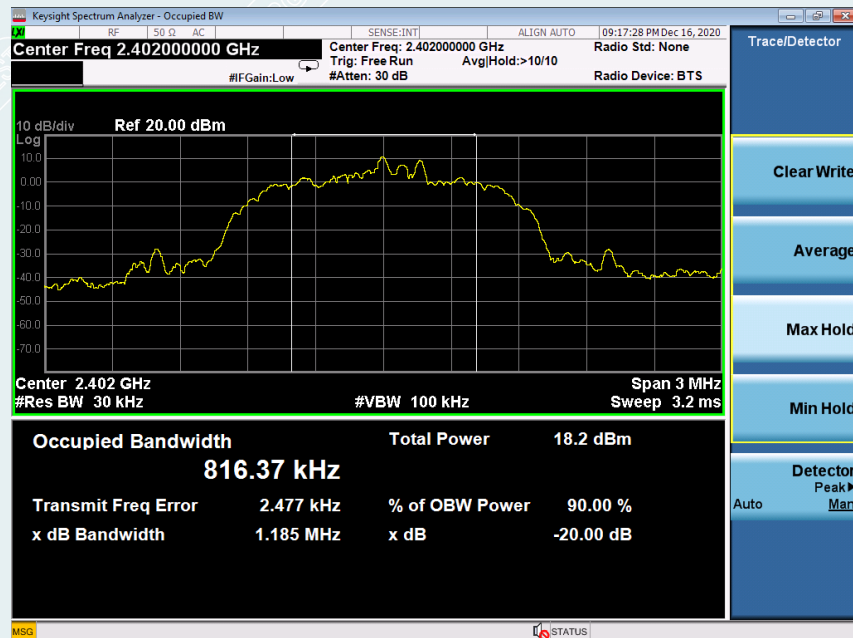


High Channel

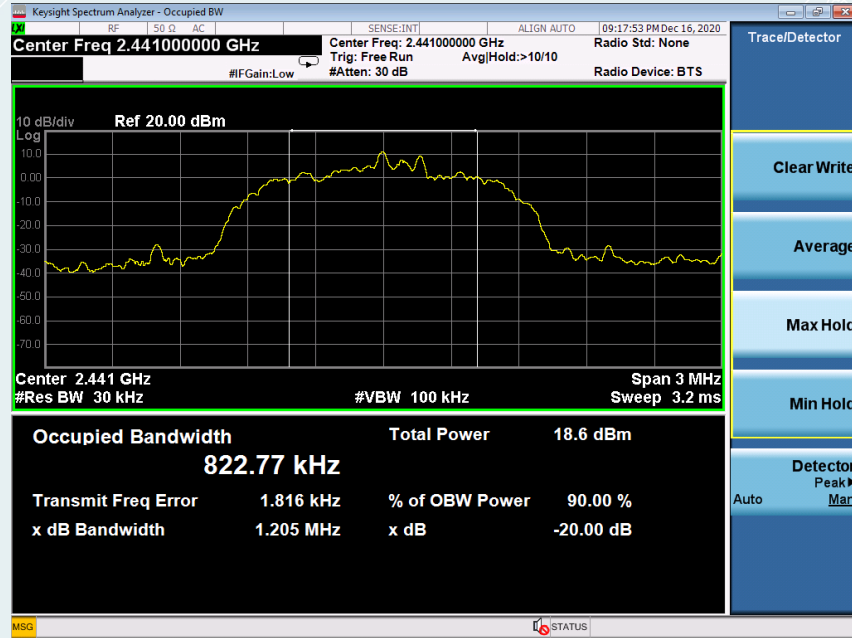


2DH5

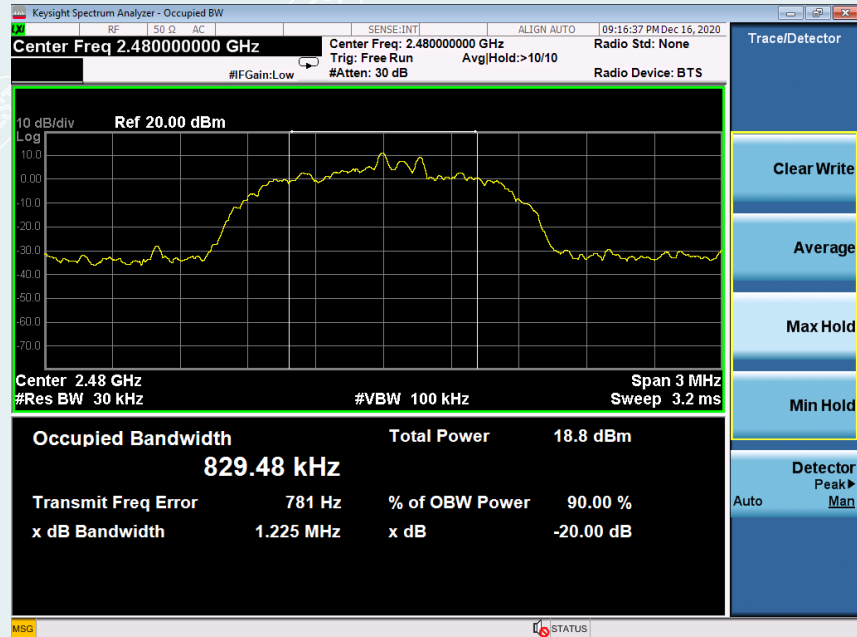
Low Channel



Mid Channel

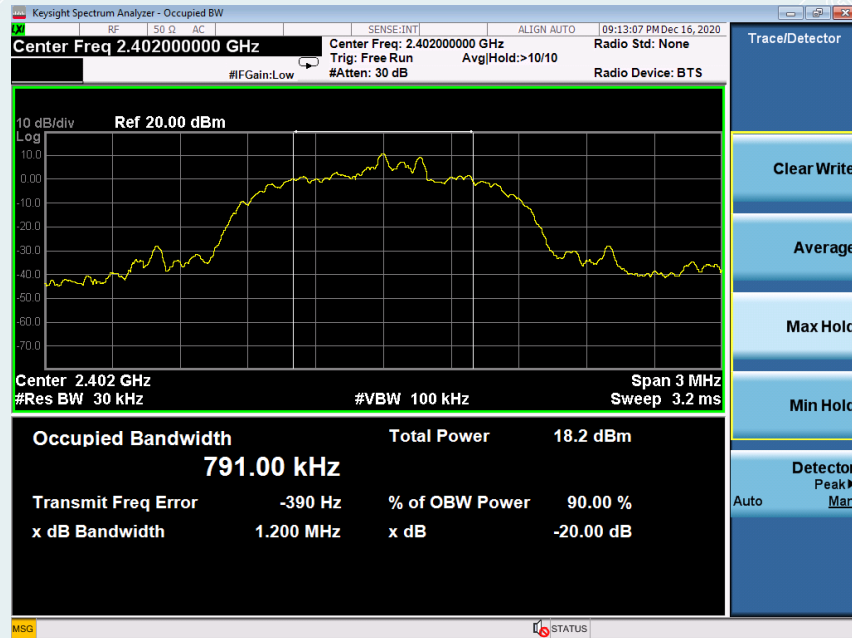


High Channel



3DH5

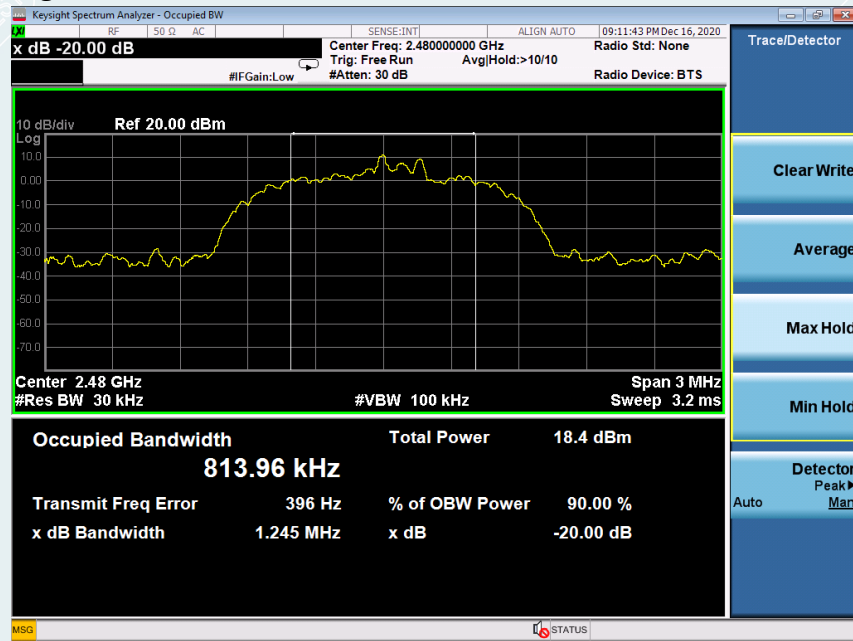
Low Channel



Mid Channel



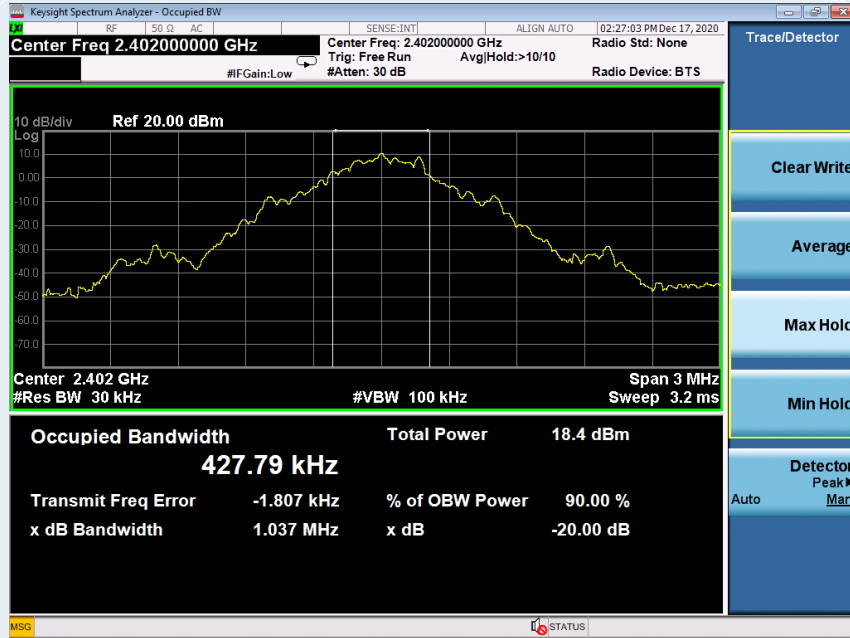
High Channel



Right earphone

DH5

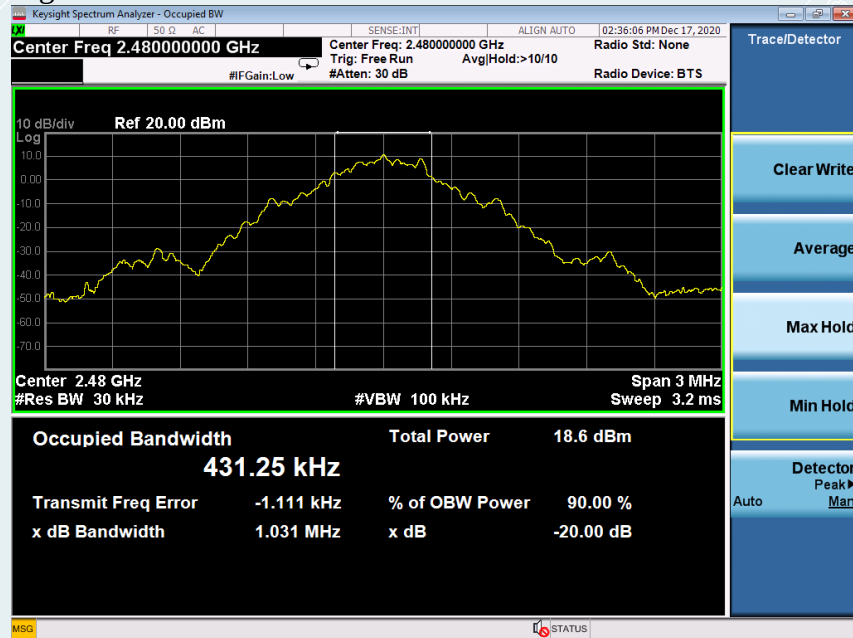
Low Channel



Mid Channel

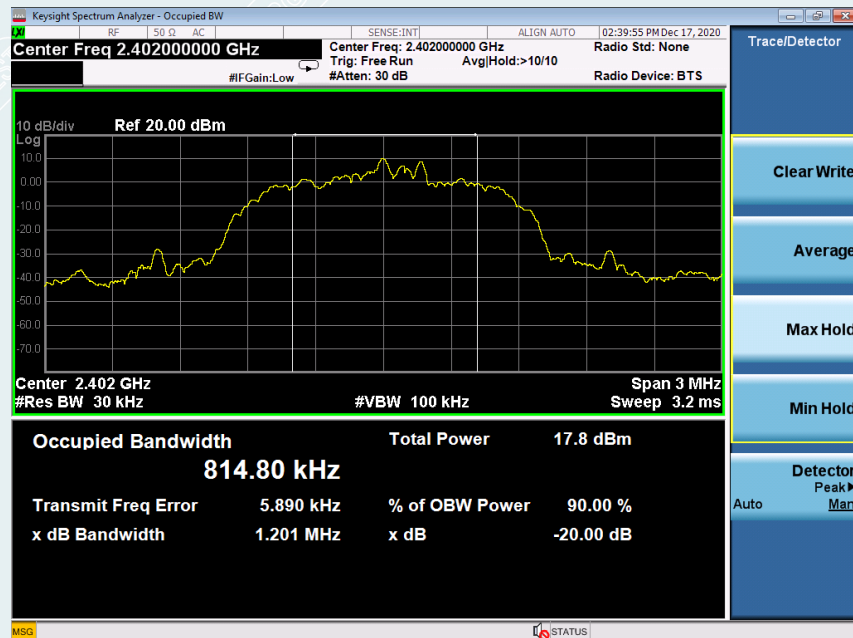


High Channel



2DH5

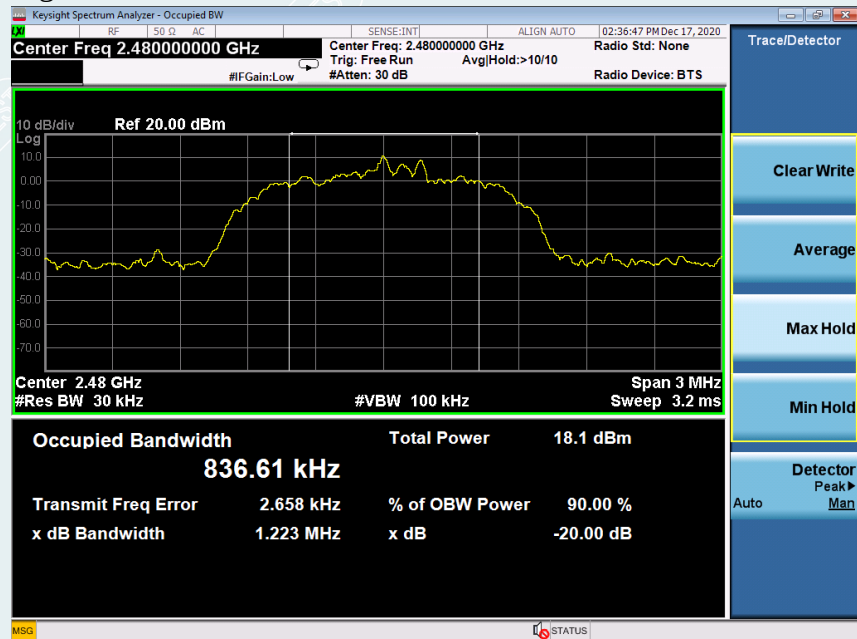
Low Channel



Mid Channel

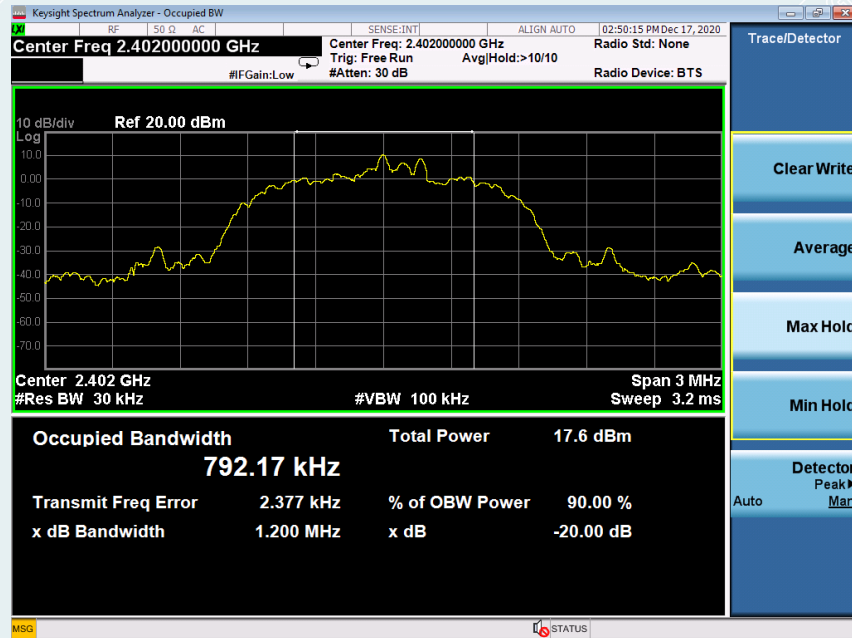


High Channel

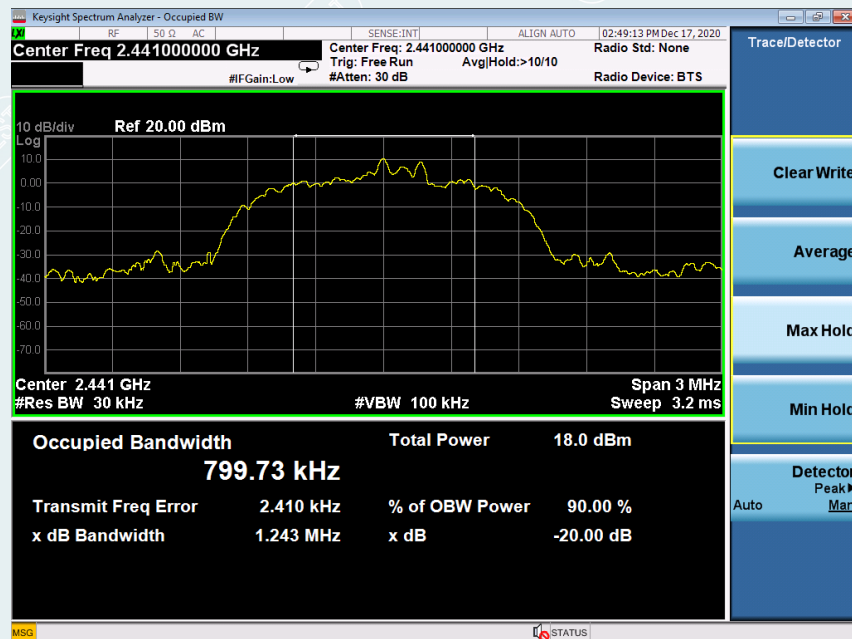


3DH5

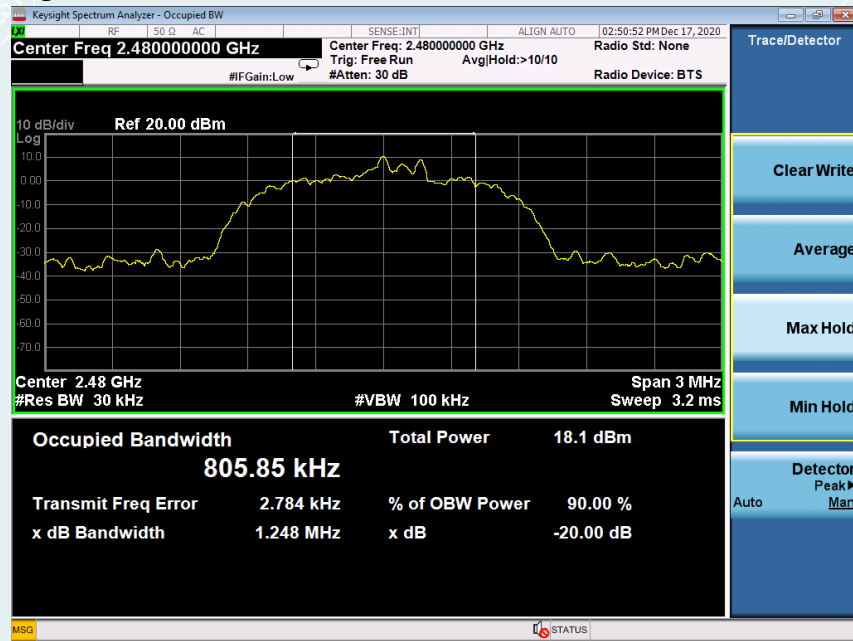
Low Channel



Mid Channel



High Channel



5.3. CARRIER FREQUENCIES SEPARATED

5.3.1. 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.

5.3.2. 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=30kHz, VBW=30kHz, Adjust Span to 2 MHz, Sweep = auto
- 4) Max hold. Mark 3 Peaks of hopping channel and record the 3 peaks frequency.

Remark : /

5.3.3. TEST SETUP



5.3.4. TEST RESULTS**Left earphone****DH5**

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.000	692.667	> 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	816.667	> Two-thirds of the 20 dB Bandwidth	Pass

3DH5

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.000	830.000	> Two-thirds of the 20 dB Bandwidth	Pass

Right earphone**DH5**

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.000	692.000	> 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	815.333	> Two-thirds of the 20 dB Bandwidth	Pass

3DH5

Channel Separation (MHz)	Two-thirds of the 20 dB Bandwidth (kHz)	Channel Separation Limit	Result
1.000	832.000	> Two-thirds of the 20 dB Bandwidth	Pass

Result plot as follows:

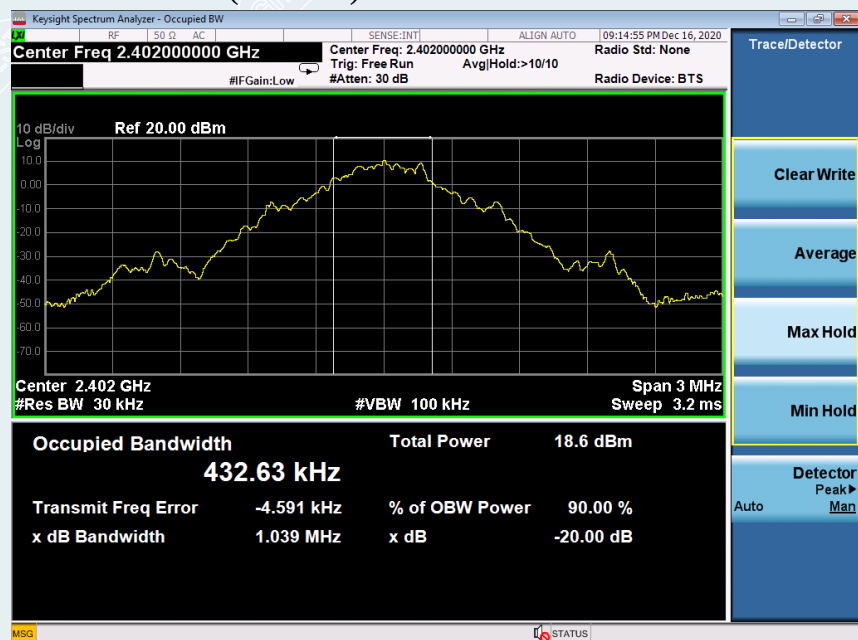
Left earphone

DH5

Measurement of Channel Separation

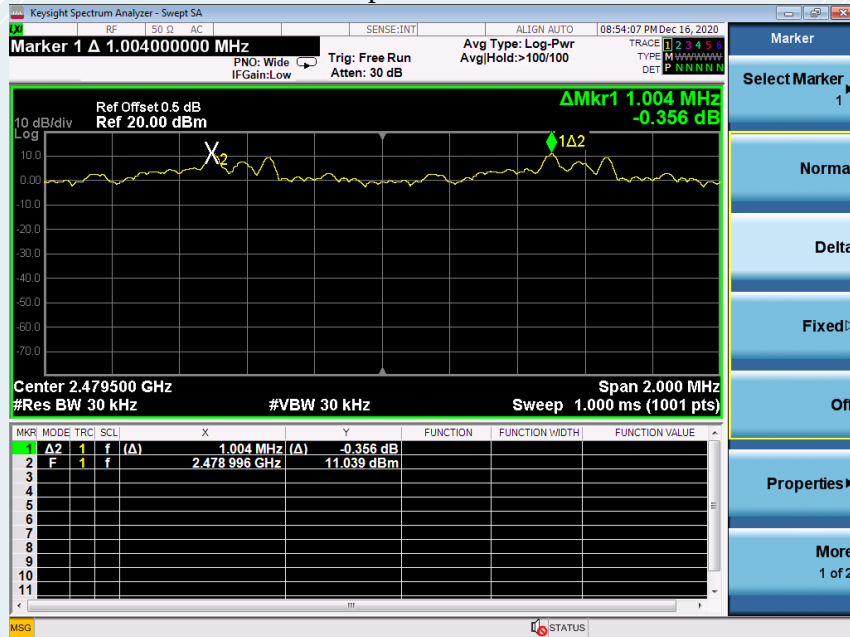


20 dB bandwidth(CH Low)

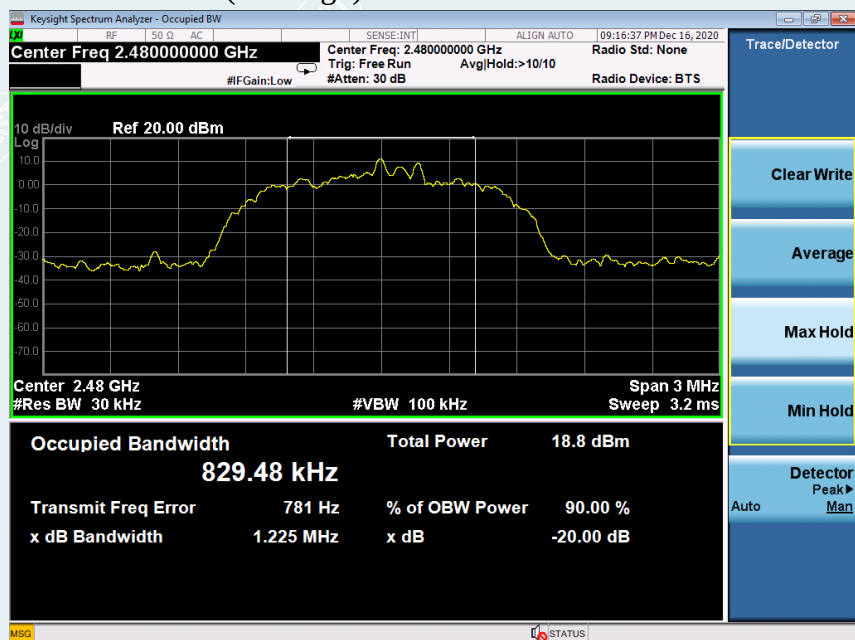


2DH5

Measurement of Channel Separation



20 dB bandwidth(CH High)

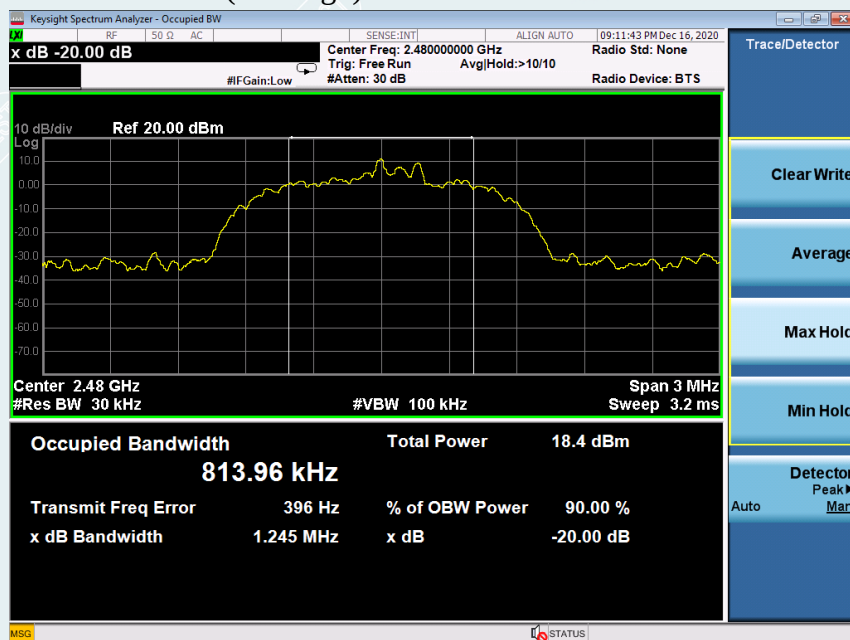


3DH5

Measurement of Channel Separation



20 dB bandwidth(CH High)



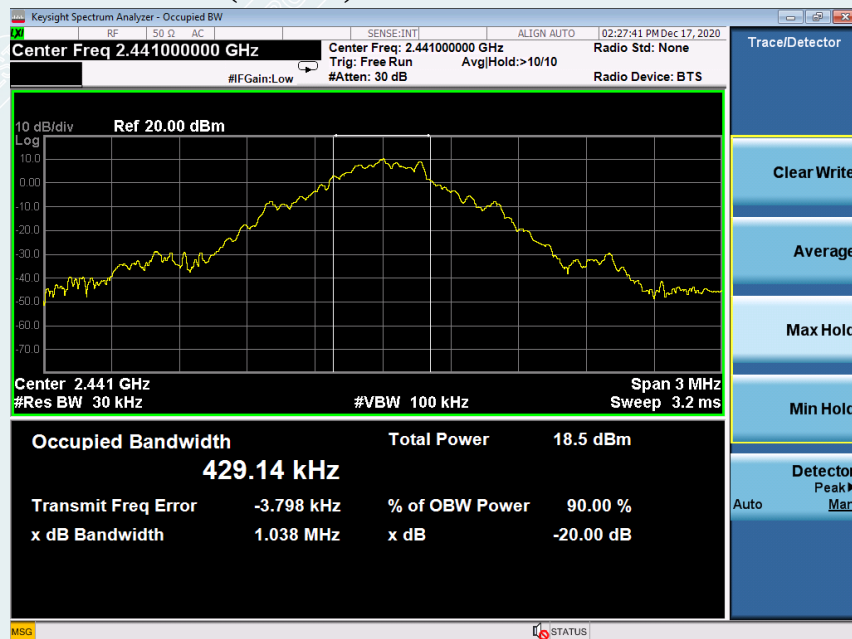
Right earphone

DH5

Measurement of Channel Separation



20 dB bandwidth(CH Mid)

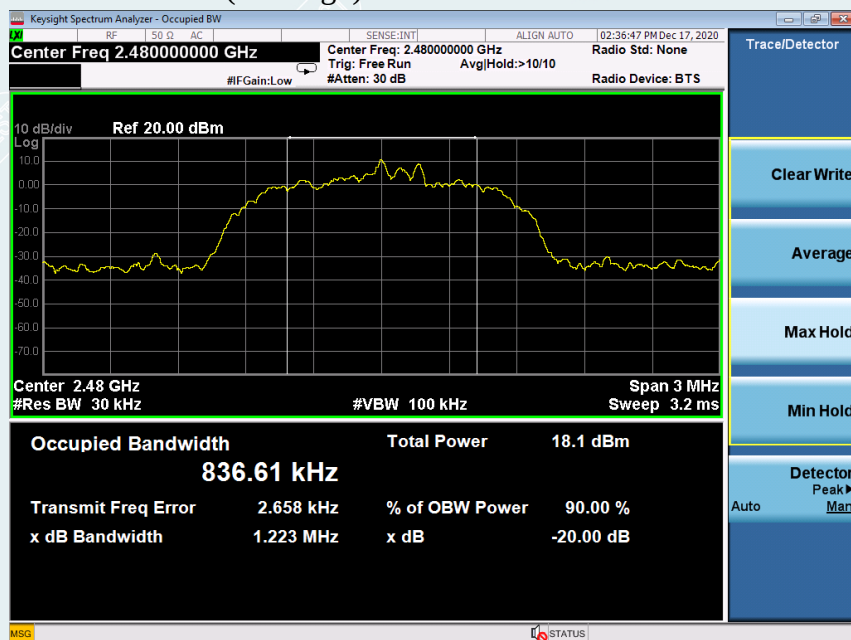


2DH5

Measurement of Channel Separation



20 dB bandwidth(CH High)

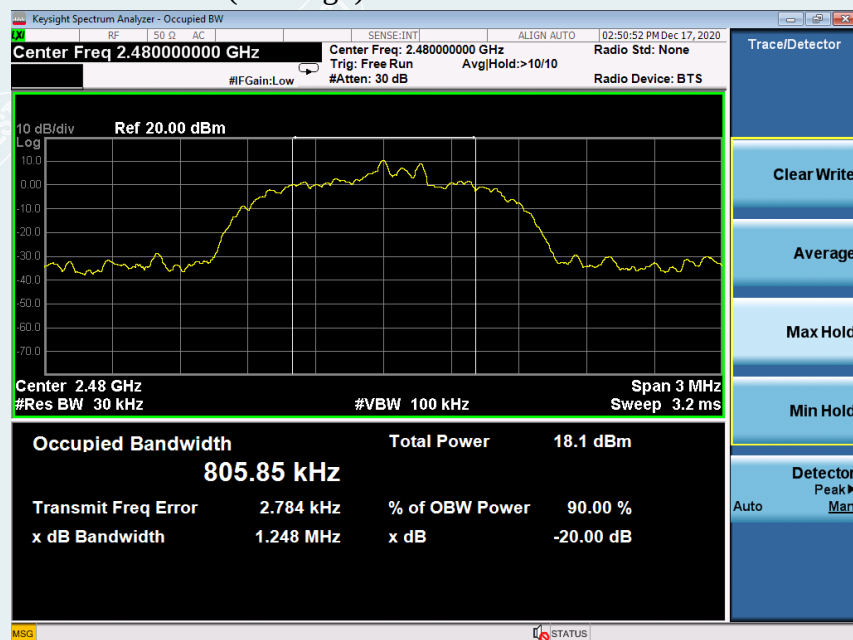


3DH5

Measurement of Channel Separation



20 dB bandwidth(CH High)



Test result: The unit does meet the FCC requirements.

5.4. HOPPING CHANNEL NUMBER

5.4.1. LIMITS

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

5.4.2. 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, VBW=300kHz,
- 3) Set the spectrum analyzer: start frequency = 2400MHz. stop frequency = 2483.5MHz. Submit the test result graph.

5.4.3. TEST SETUP



5.4.4. TEST RESULTS

Left earphone

Result (No. of CH)	Limit (No. of CH)	Result
79	>15	PASS

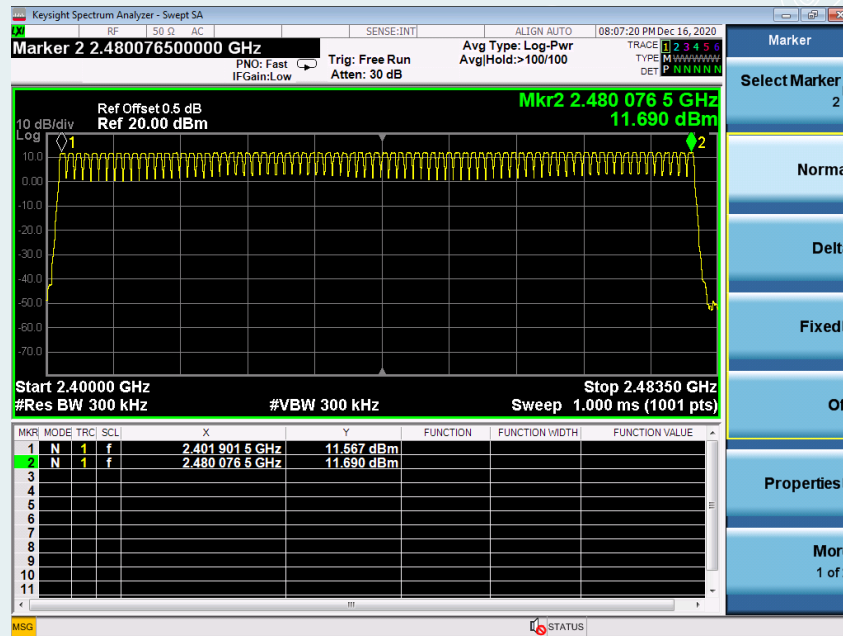
Right earphone

Result (No. of CH)	Limit (No. of CH)	Result
79	>15	PASS

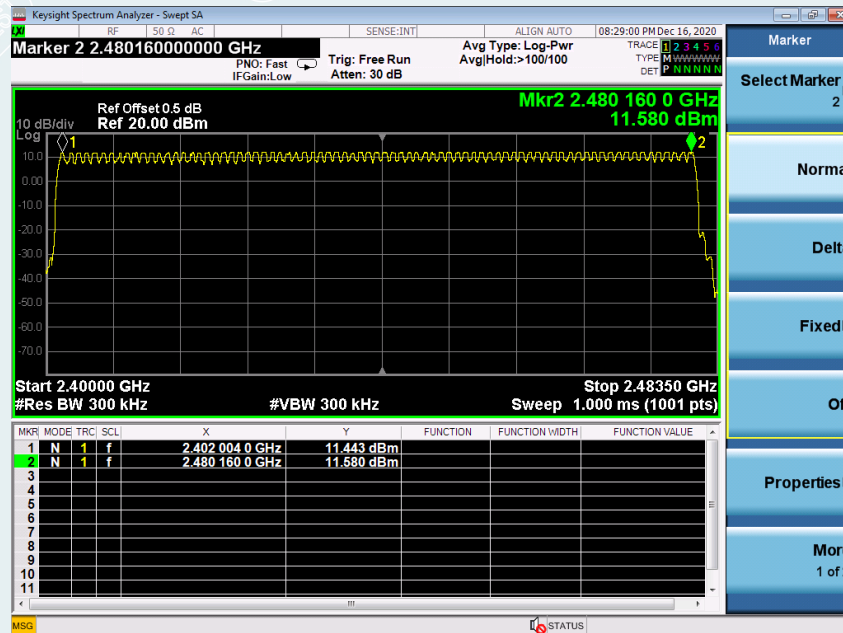
Left earphone

GFSK

2.400 GHz – 2.4835 GHz

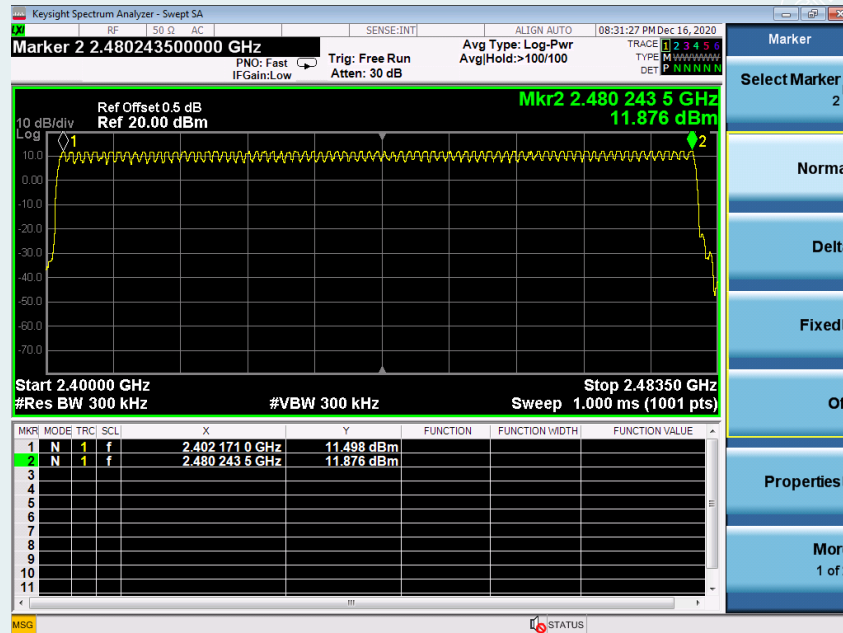
 $\pi/4$ -DQPSK

2.400 GHz – 2.4835 GHz



8DPSK

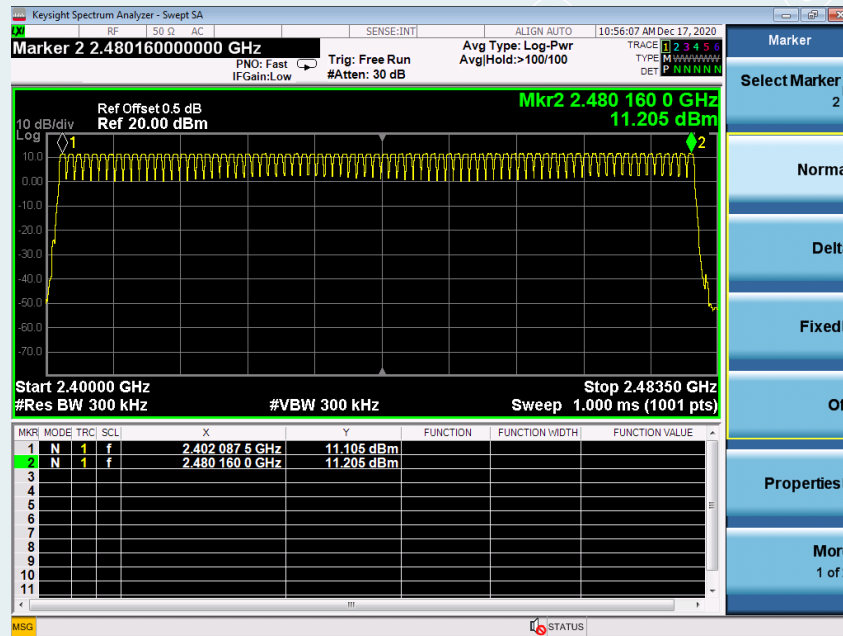
2.400 GHz – 2.4835 GHz



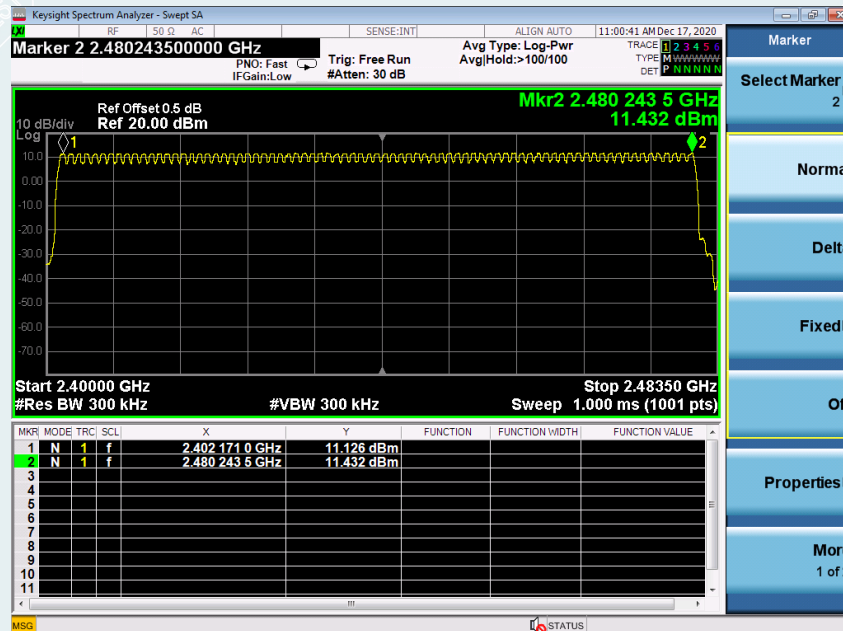
Right earphone

GFSK

2.400 GHz – 2.4835 GHz

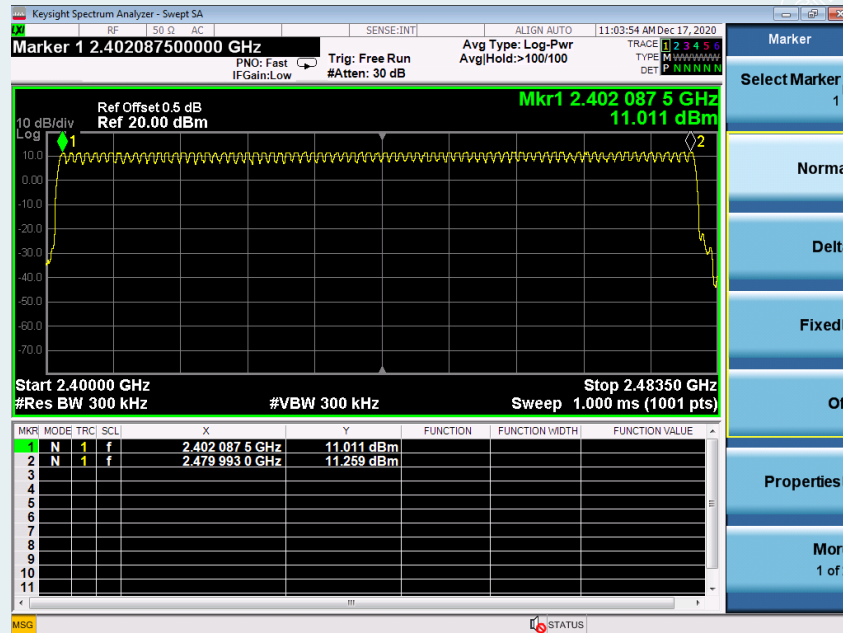
 $\pi/4$ -DQPSK

2.400 GHz – 2.4835 GHz



8DPSK

2.400 GHz – 2.4835 GHz



Test result: The unit does meet the FCC requirements.

5.5. DWELL TIME

5.5.1. LIMITS

Regulation 15.247(a)(1)(iii) 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.

5.5.2. 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 = 1MHz. 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. The limit is specified in one of the subparagraphs of this Section. Submit this plot(s). An oscilloscope may be used instead of a spectrum analyzer.

5.5.3. TEST SETUP



5.5.4. TEST RESULTS

The test period: $T = 0.4 \text{ Second/Channel} \times 79 \text{ Channel} = 31.6 \text{ s}$

Left earphone

GFSK: Lowest Channel (2.402GHz)

DH1	time slot=	0.397	(ms)*	$(1600/(2*79))$	*	31.6	=	127.04	ms
DH3	time slot=	1.659	(ms)*	$(1600/(4*79))$	*	31.6	=	265.44	ms
DH5	time slot=	2.904	(ms)*	$(1600/(6*79))$	*	31.6	=	309.76	ms

$\pi/4$ -DQPSK: Lowest Channel (2.402GHz)

2DH1	time slot=	0.410	(ms)*	$(1600/(2*79))$	*	31.6	=	131.20	ms
2DH3	time slot=	1.662	(ms)*	$(1600/(4*79))$	*	31.6	=	265.92	ms
2DH5	time slot=	2.912	(ms)*	$(1600/(6*79))$	*	31.6	=	310.61	ms

8DPSK: Lowest Channel (2.402GHz)

3DH1	time slot=	0.411	(ms)*	$(1600/(2*79))$	*	31.6	=	131.52	ms
3DH3	time slot=	1.665	(ms)*	$(1600/(4*79))$	*	31.6	=	266.40	ms
3DH5	time slot=	2.912	(ms)*	$(1600/(6*79))$	*	31.6	=	310.61	ms

The results are not greater than 0.4 seconds.

The unit does meet the requirements.

Right earphone

GFSK: Lowest Channel (2.402GHz)

DH1	time slot=	0.401	(ms)*	$(1600/(2*79))$	*	31.6	=	128.32	ms
DH3	time slot=	1.656	(ms)*	$(1600/(4*79))$	*	31.6	=	264.96	ms
DH5	time slot=	2.900	(ms)*	$(1600/(6*79))$	*	31.6	=	309.33	ms

$\pi/4$ -DQPSK: Lowest Channel (2.402GHz)

2DH1	time slot=	0.409	(ms)*	$(1600/(2*79))$	*	31.6	=	130.88	ms
2DH3	time slot=	1.662	(ms)*	$(1600/(4*79))$	*	31.6	=	265.92	ms
2DH5	time slot=	2.912	(ms)*	$(1600/(6*79))$	*	31.6	=	310.61	ms

8DPSK: Lowest Channel (2.402GHz)

3DH1	time slot=	0.409	(ms)*	$(1600/(2*79))$	*	31.6	=	130.88	ms
3DH3	time slot=	1.662	(ms)*	$(1600/(4*79))$	*	31.6	=	265.92	ms
3DH5	time slot=	2.912	(ms)*	$(1600/(6*79))$	*	31.6	=	310.61	ms

The results are not greater than 0.4 seconds.

The unit does meet the requirements.

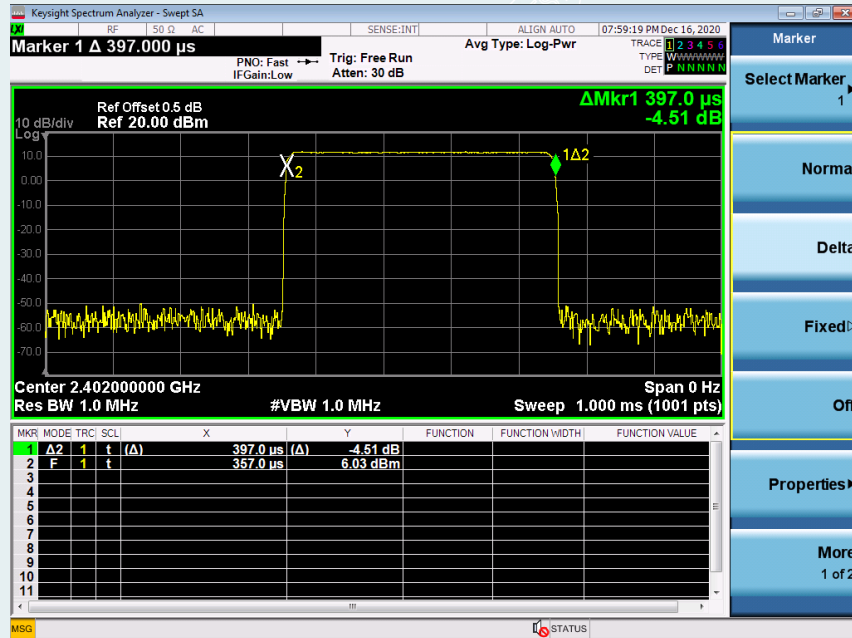
Please refer the graph as below:

Left earphone

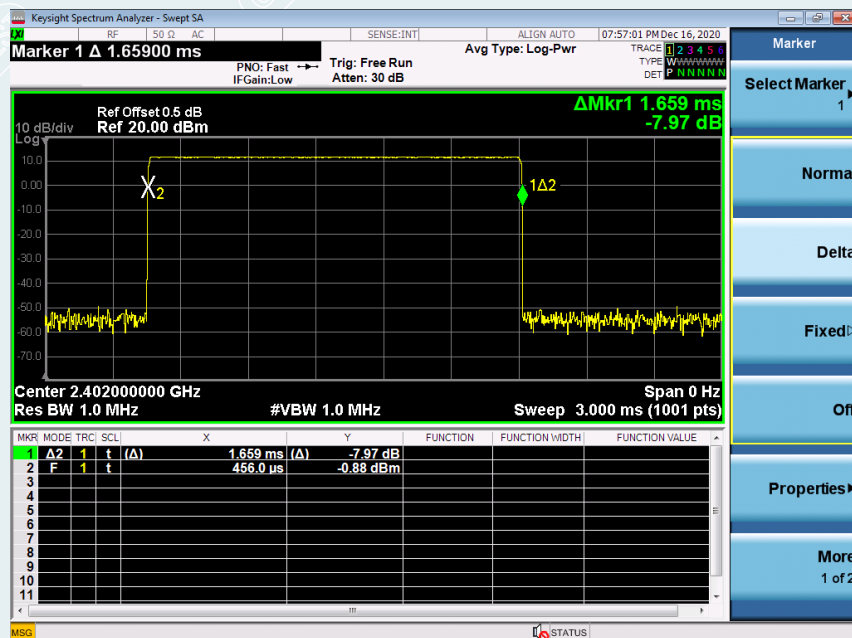
GFSK

Lowest Channel (2.402GHz)

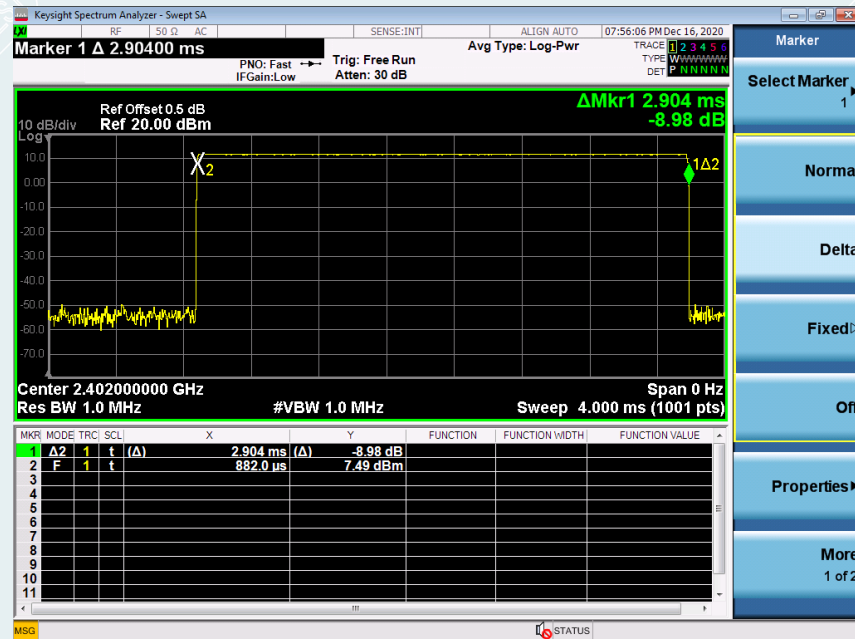
DH1



DH3

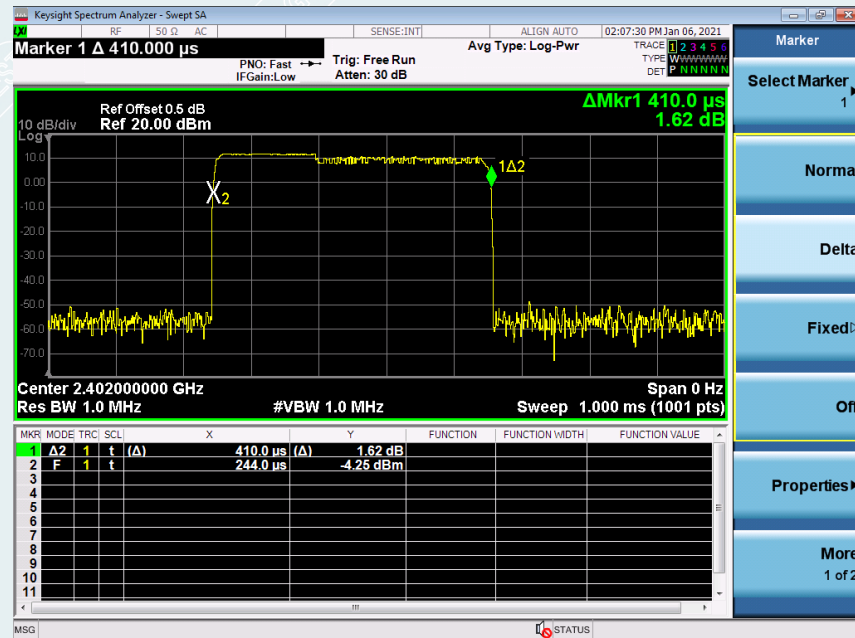


DH5

 $\pi/4$ -DQPSK

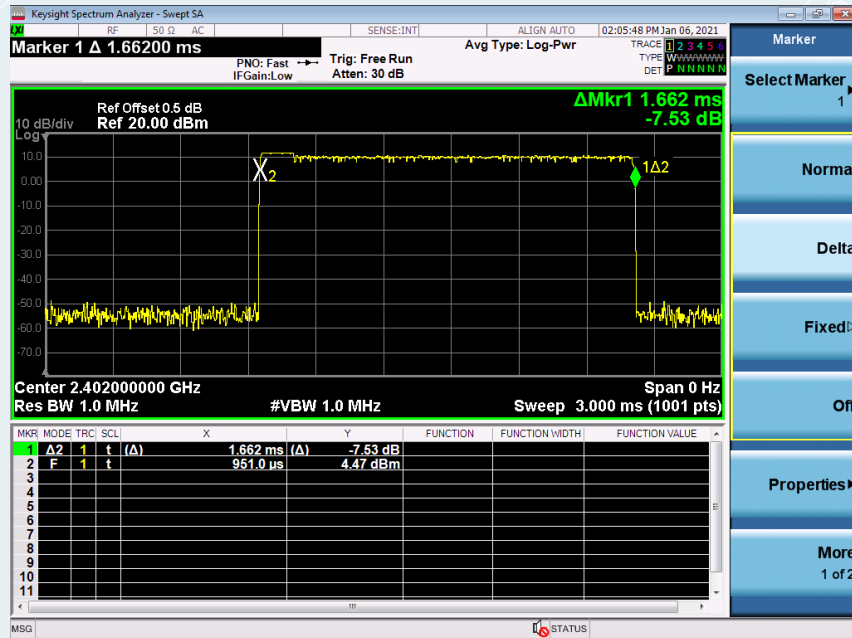
Lowest Channel (2.402GHz)

2DH1

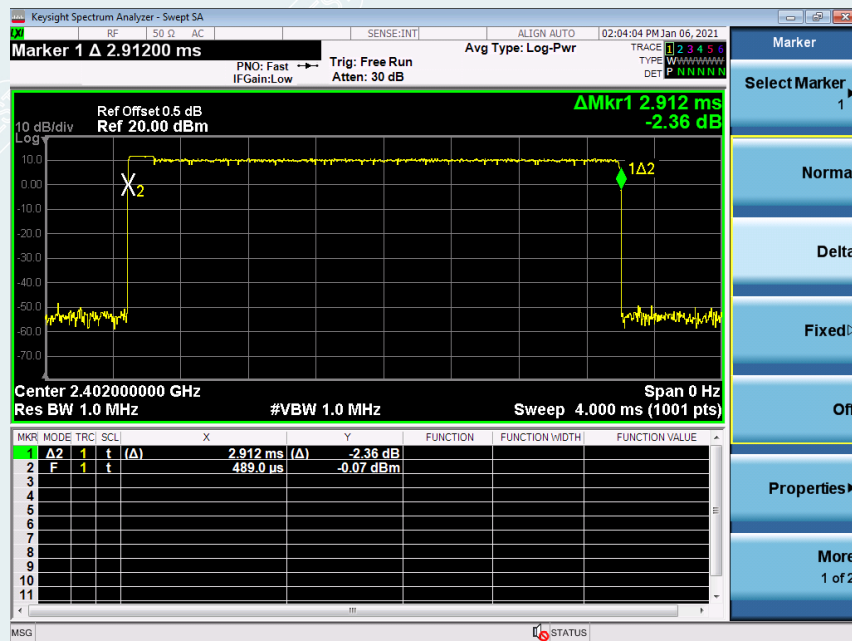


Lowest Channel (2.402GHz)

2DH3



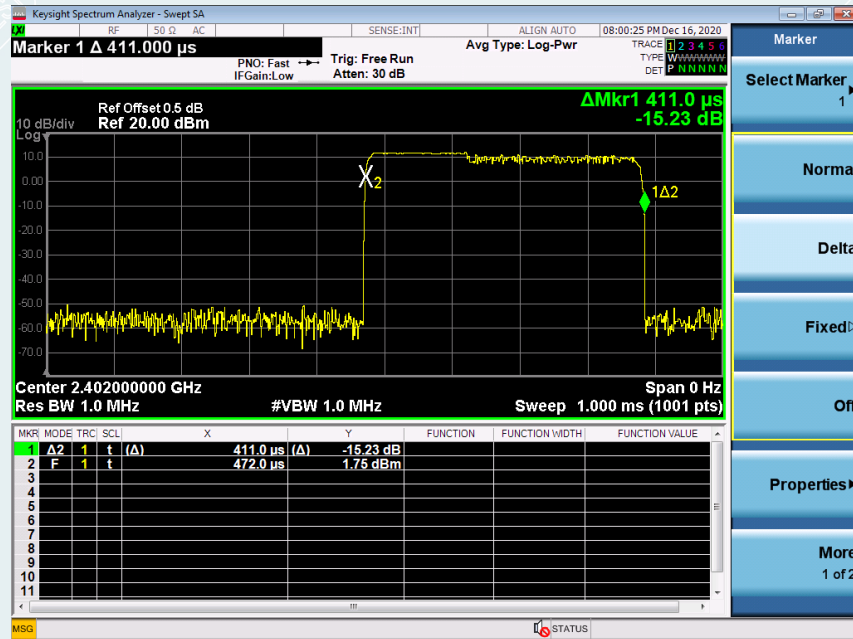
2DH5



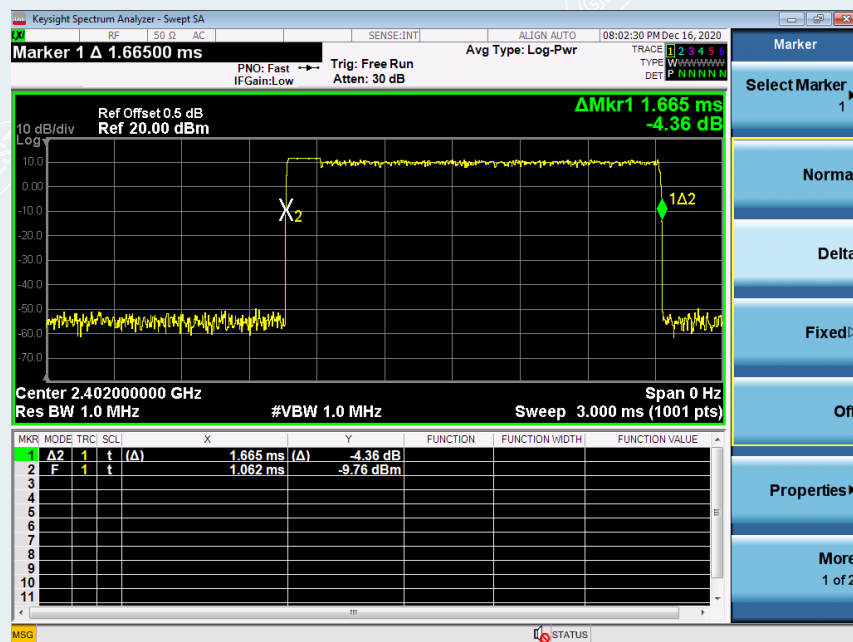
8DPSK

Lowest Channel (2.402GHz)

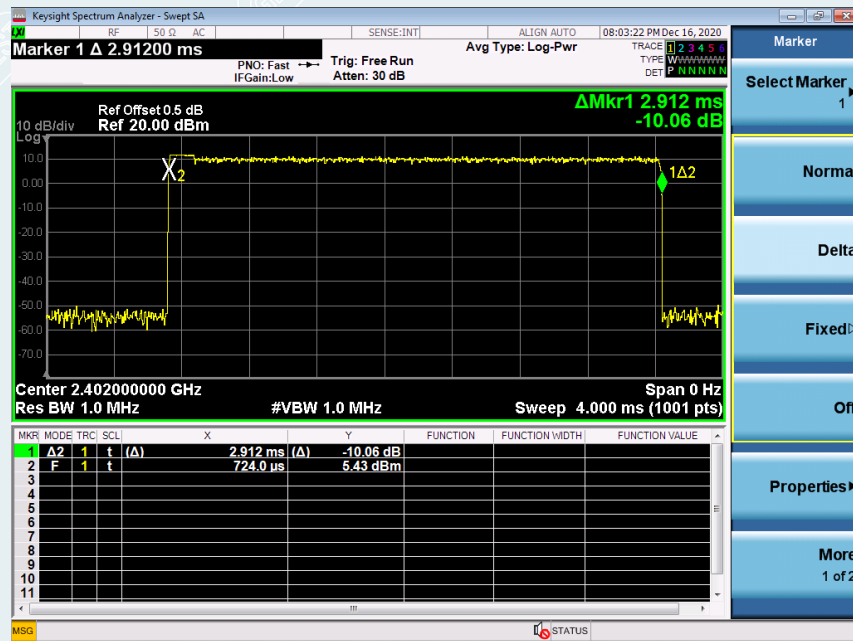
3DH1



3DH3



3DH5

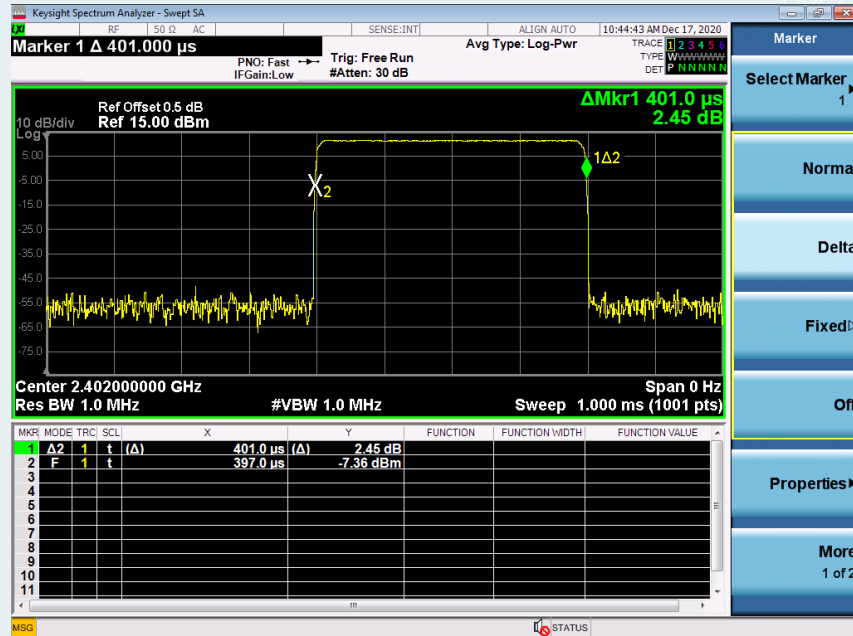


Right earphone

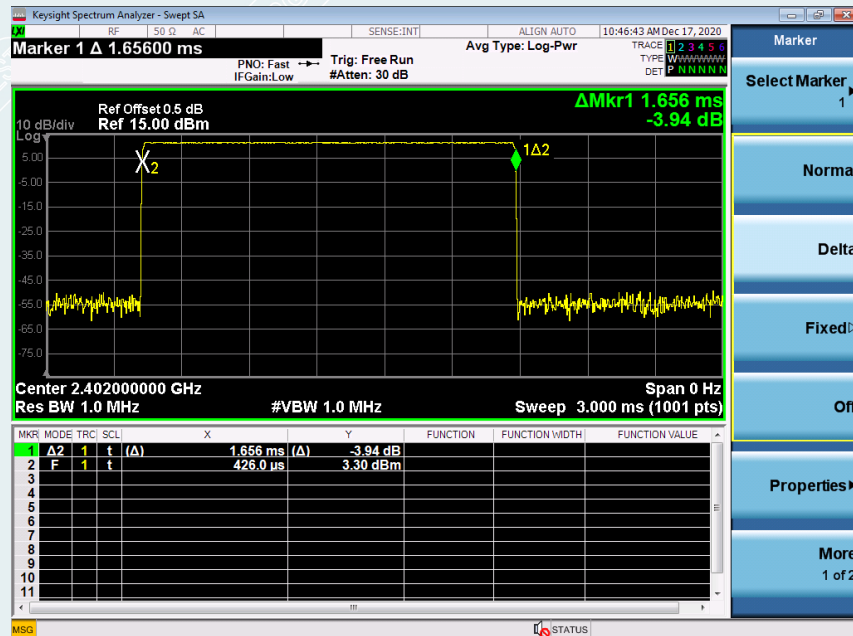
GFSK

Lowest Channel (2.402GHz)

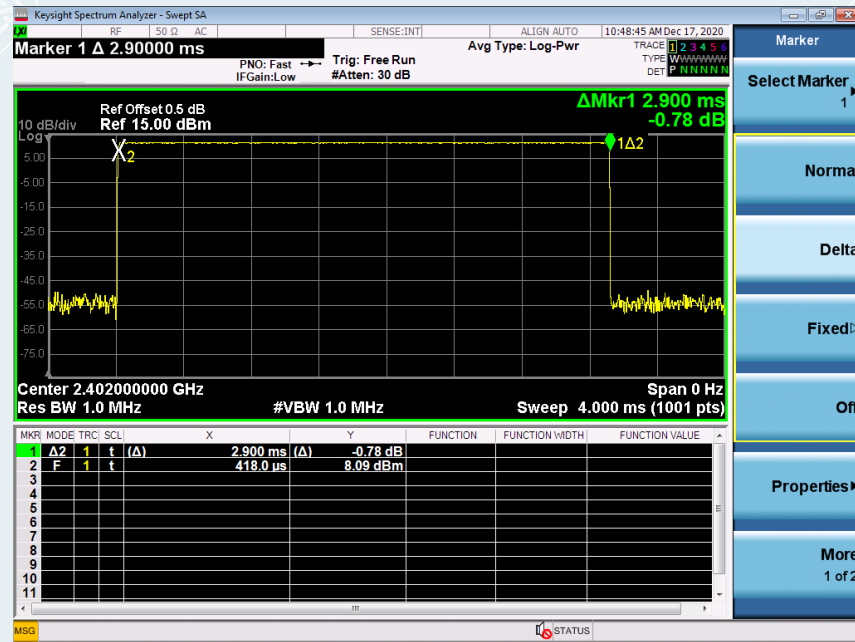
DH1



DH3

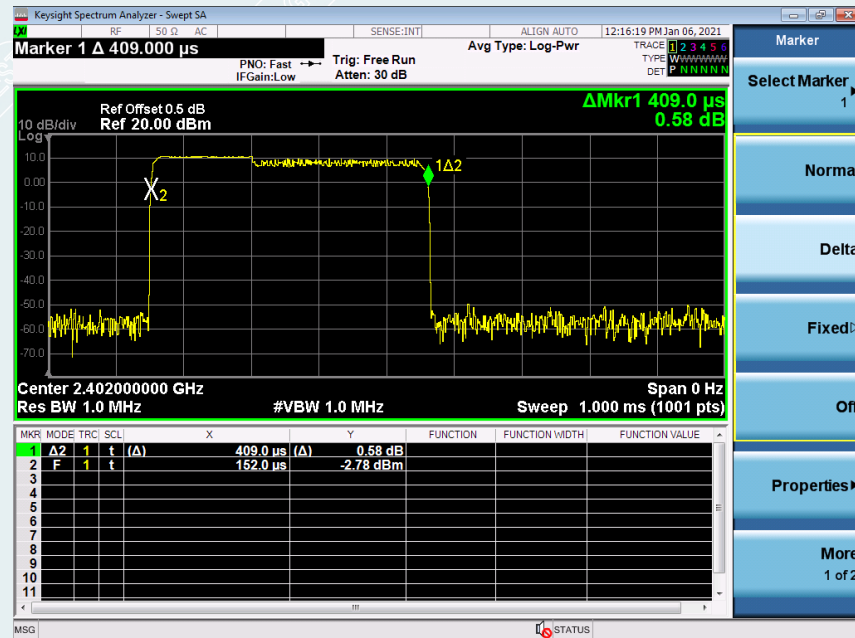


DH5

 $\pi/4$ -DQPSK

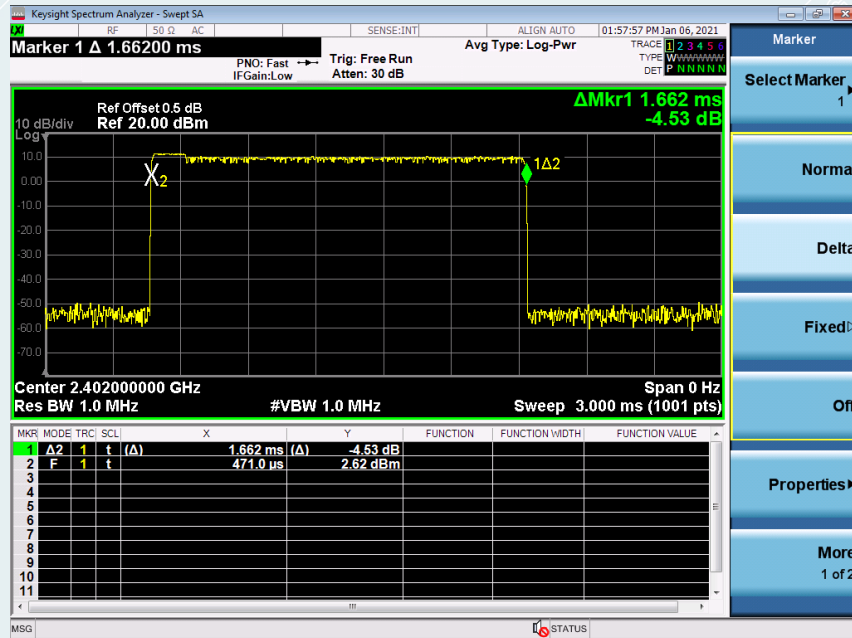
Lowest Channel (2.402GHz)

2DH1

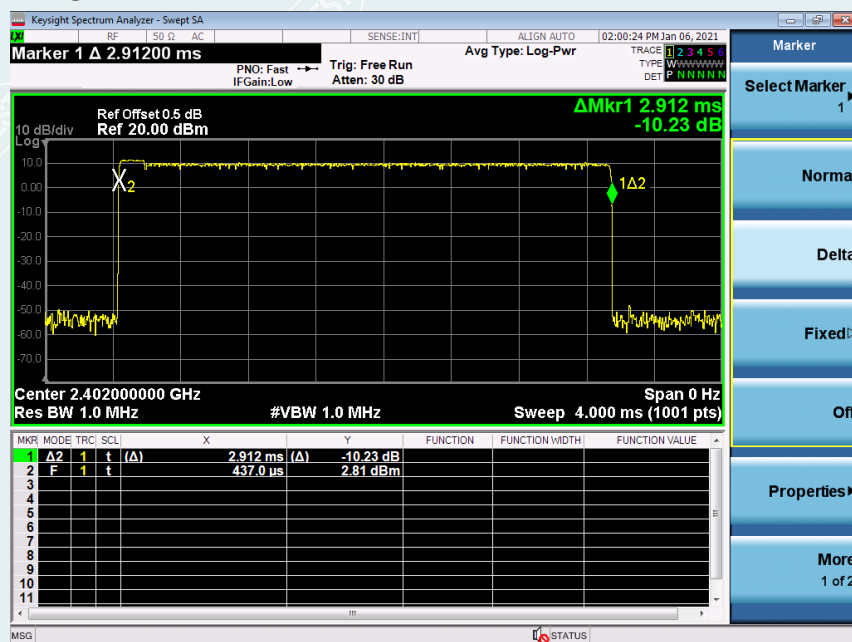


Lowest Channel (2.402GHz)

2DH3



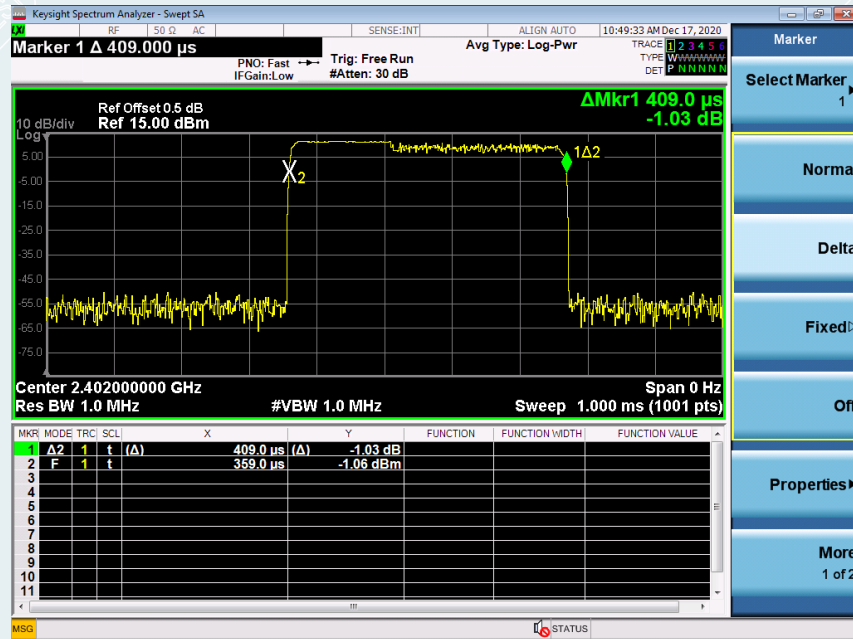
2DH5



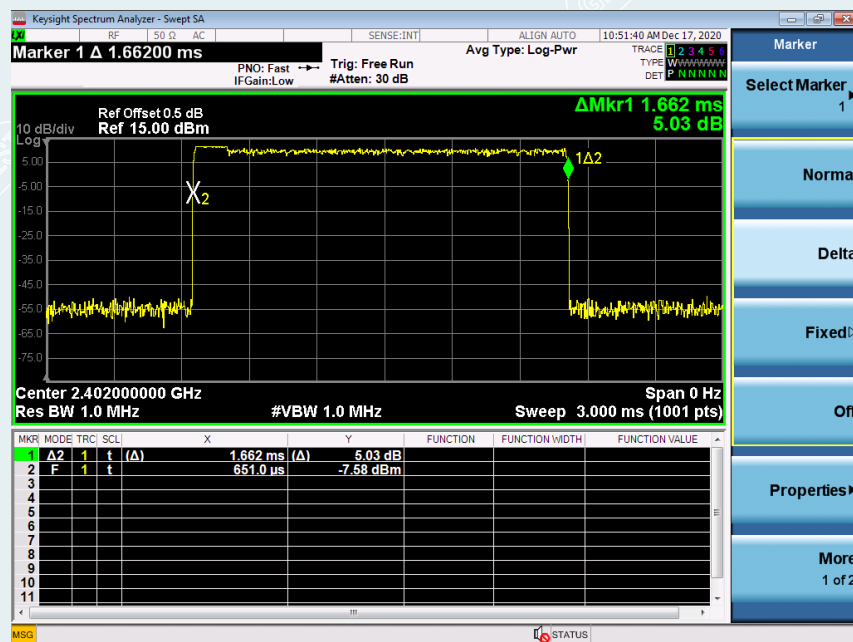
8DPSK

Lowest Channel (2.402GHz)

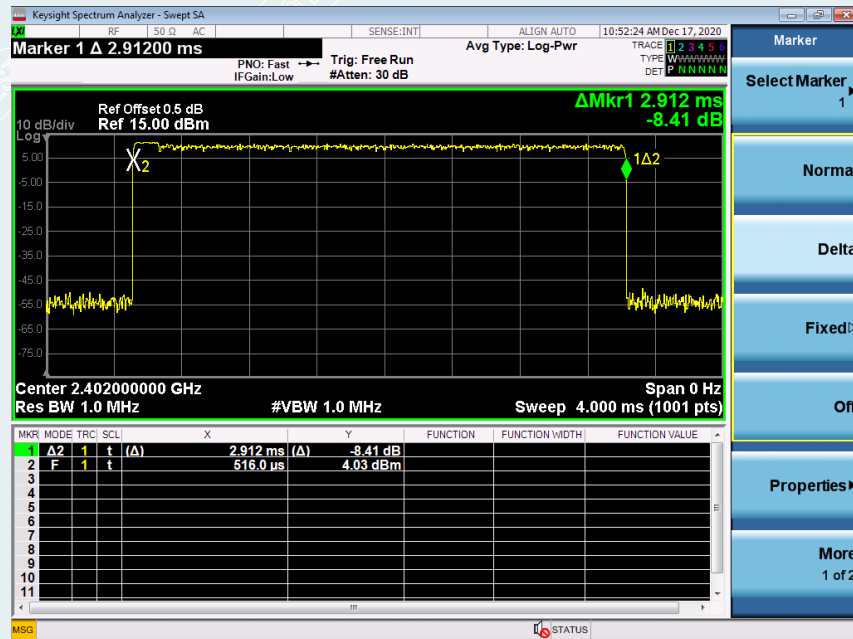
3DH1



3DH3



3DH5



5.6. MAXIMUM PEAK OUTPUT POWER

5.6.1. LIMITS

Regulation 15.247 (b)(1) 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.

5.6.2. 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 the spectrum analyzer: RBW = 3 MHz. VBW = 3 MHz. Sweep = auto; Detector Function = Peak.
- 3) Keep the EUT in transmitting at lowest, medium and highest channel individually. Record the max value.

Remark: /

5.6.3. TEST SETUP



5.6.4. TEST RESULTS**Left earphone**

DH5

Test Channel	Fundamental Frequency (GHz)	Max Output Power(dBm)	Limit (dBm)	Peak/Average	Pass/Fail
Lowest	2.402	11.812	20.97	Peak	Pass
Middle	2.441	11.945			Pass
Highest	2.480	11.925			Pass

2DH5

Test Channel	Fundamental Frequency (GHz)	Max Output Power(dBm)	Limit (dBm)	Peak/Average	Pass/Fail
Lowest	2.402	11.760	20.97	Peak	Pass
Middle	2.441	11.860			Pass
Highest	2.480	11.997			Pass

3DH5

Test Channel	Fundamental Frequency (GHz)	Max Output Power(dBm)	Limit (dBm)	Peak/Average	Pass/Fail
Lowest	2.402	11.732	20.97	Peak	Pass
Middle	2.441	11.884			Pass
Highest	2.480	11.949			Pass

Right earphone

DH5

Test Channel	Fundamental Frequency (GHz)	Max Output Power(dBm)	Limit (dBm)	Peak/Average	Pass/Fail
Lowest	2.402	11.432	20.97	Peak	Pass
Middle	2.441	11.497			Pass
Highest	2.480	11.534			Pass

2DH5

Test Channel	Fundamental Frequency (GHz)	Max Output Power(dBm)	Limit (dBm)	Peak/Average	Pass/Fail
Lowest	2.402	11.422	20.97	Peak	Pass
Middle	2.441	11.537			Pass
Highest	2.480	11.511			Pass

3DH5

Test Channel	Fundamental Frequency (GHz)	Max Output Power(dBm)	Limit (dBm)	Peak/Average	Pass/Fail
Lowest	2.402	11.397	20.97	Peak	Pass
Middle	2.441	11.522			Pass
Highest	2.480	11.490			Pass

Test result: The unit does meet the FCC requirements.

5.7. CONDUCTED BAND EDGES AND SPURIOUS EMISSIONS

5.7.1. LIMITS

(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.7.2. TEST PROCEDURES

- 1) Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.
- 2) Set the spectrum analyzer: RBW =100KHz; VBW =300KHz, Span = 30MHz to 26GHz; Sweep = auto; Detector Function = Peak. Trace = Max, hold.
- 3) Measure and record the results in the test report.
- 4) The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 5) Measurements are made over the 9 kHz to 26GHz range with the transmitter set to the lowest, middle, and highest channels. No emission found between lowest internal used/generated frequency to 10MHz, it is only recorded 10MHz to 26GHz.

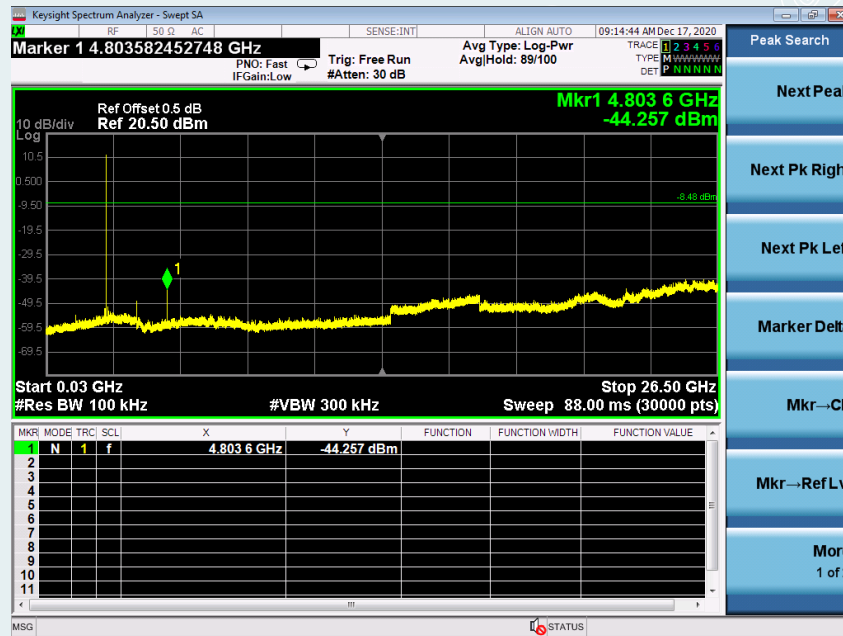
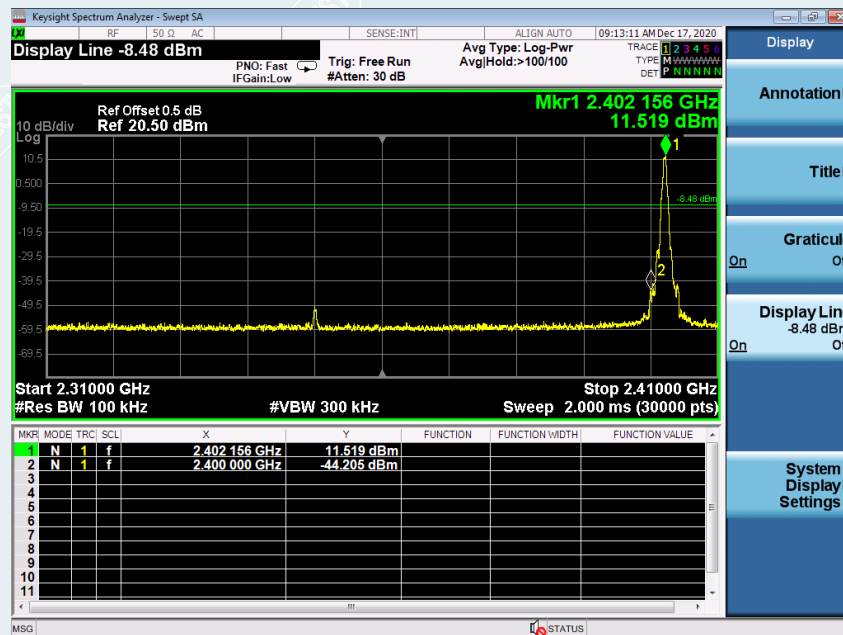
5.7.3. TEST SETUP



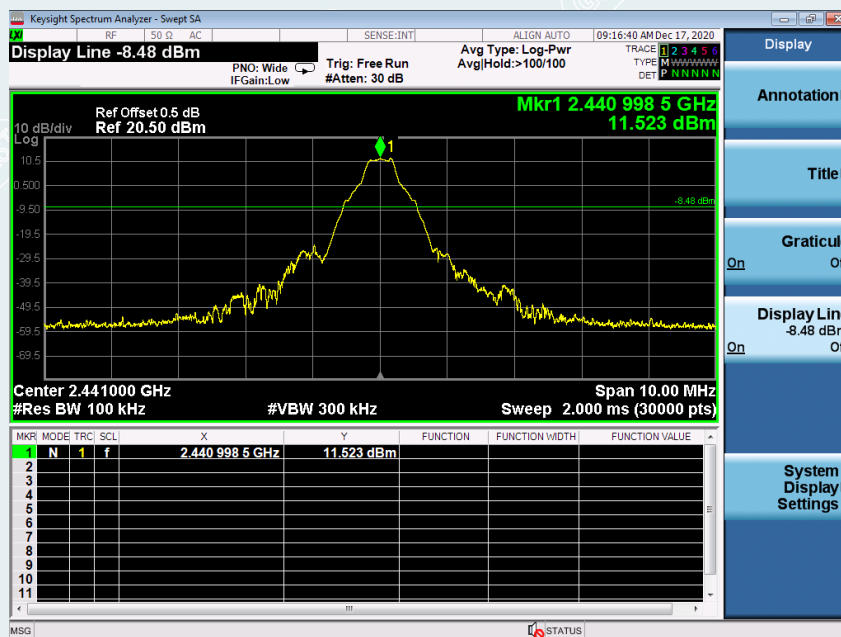
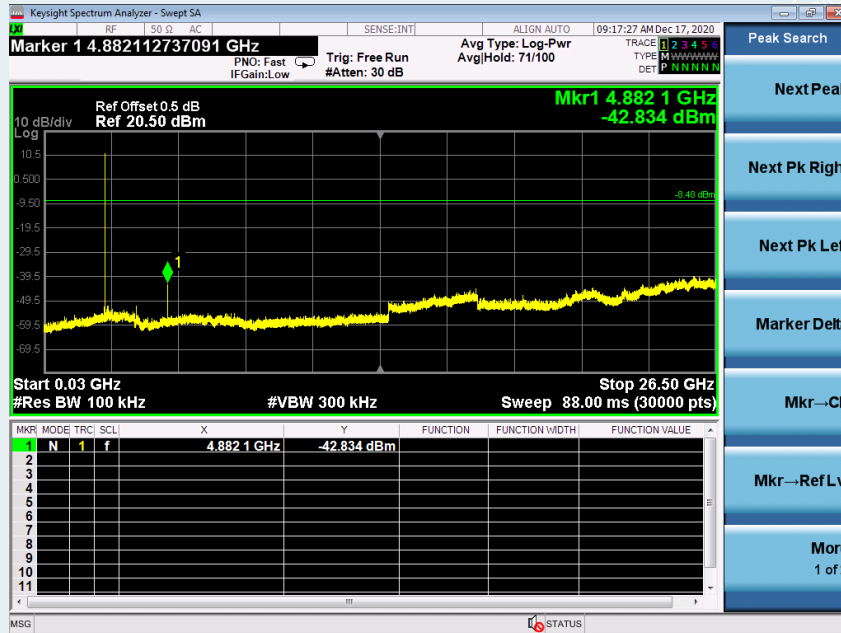
5.7.4. TEST RESULTS

The unit does meet the FCC requirements.

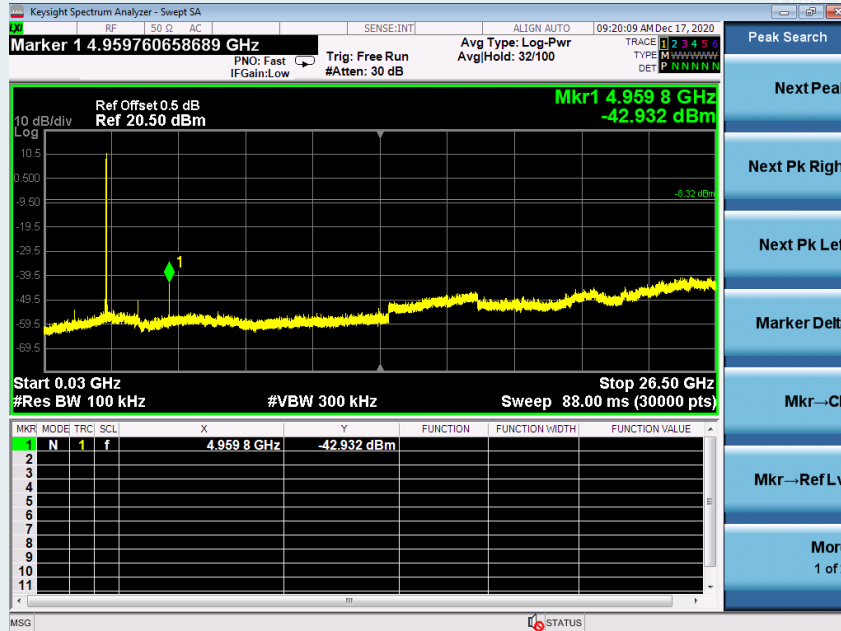
Test result plot as follows:

**Left earphone
Hopping Off****DH5****CH Low (30MHz ~26.5GHz)****CH Low (2.31GHz ~2.41GHz)**

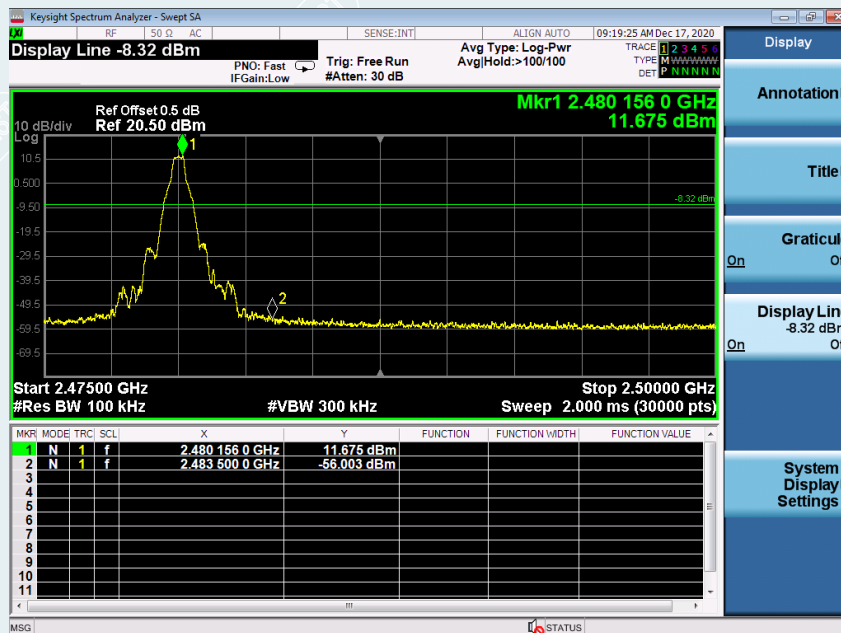
CH Mid (30MHz ~26.5GHz)



CH High (30MHz ~26.5GHz)

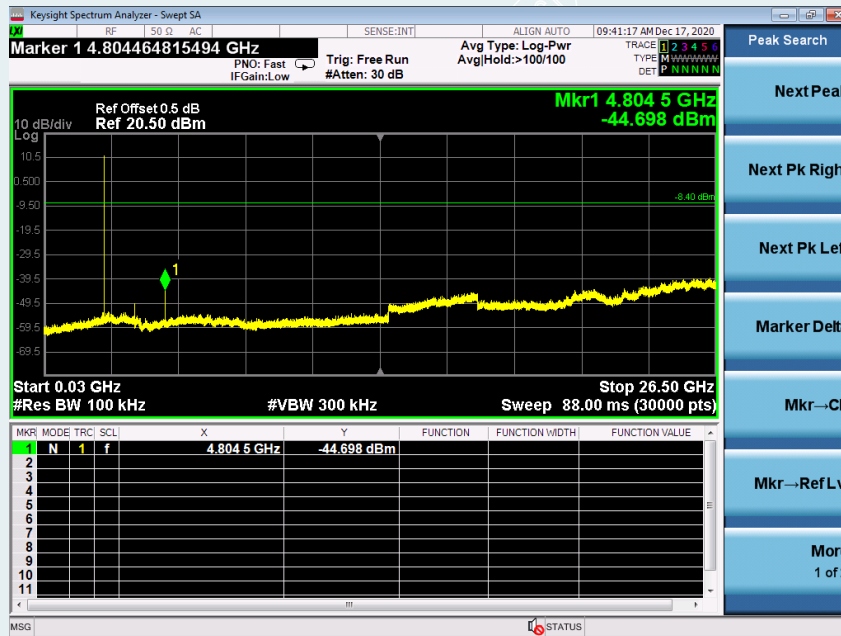


CH High (2.475GHz ~ 2.5GHz)

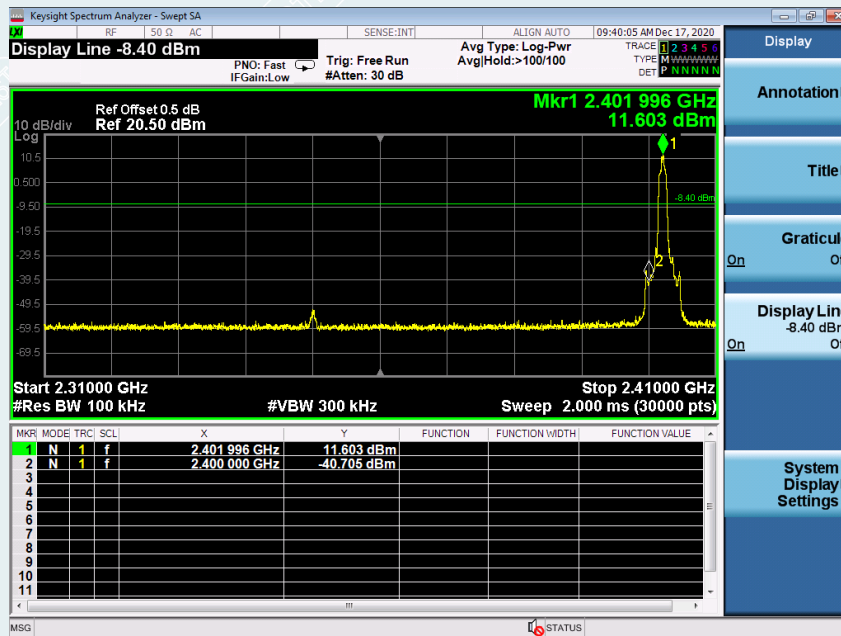


2DH5

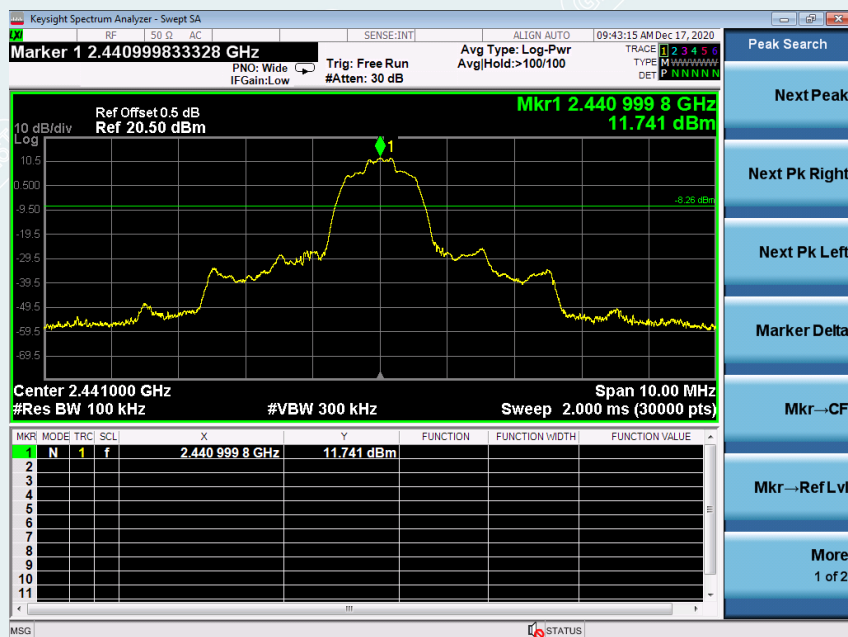
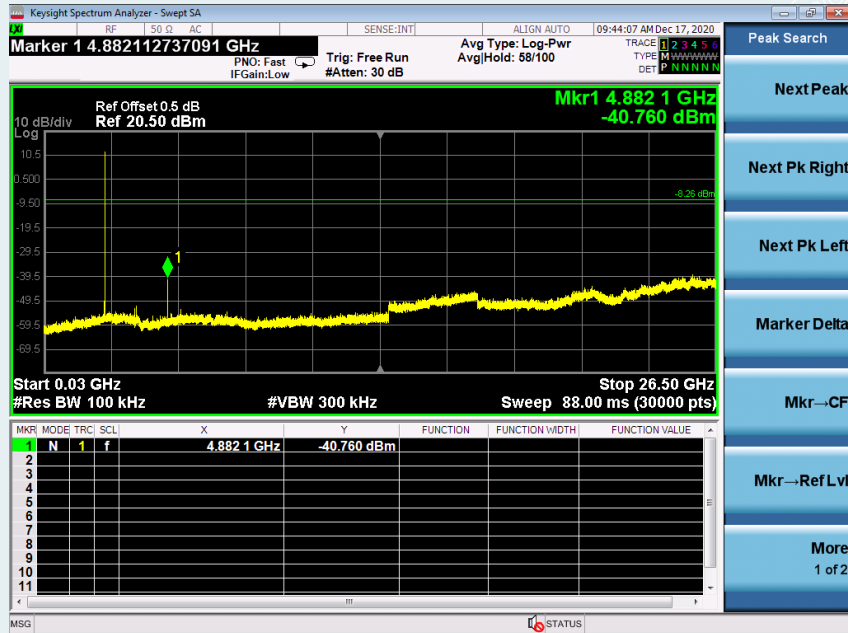
CH Low (30MHz ~26.5GHz)



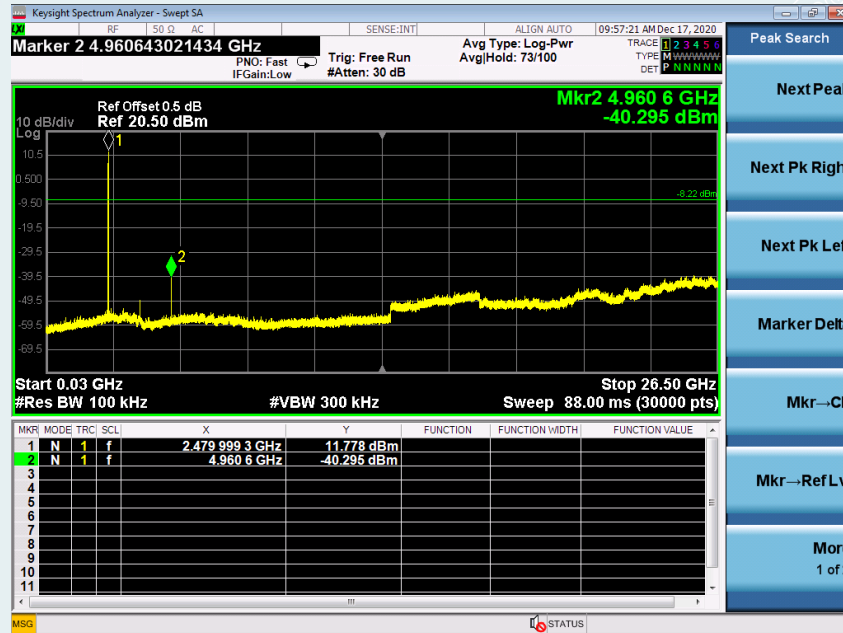
CH Low (2.31GHz ~2.41GHz)



CH Mid (30MHz ~26.5GHz)



CH High (30MHz ~26.5GHz)

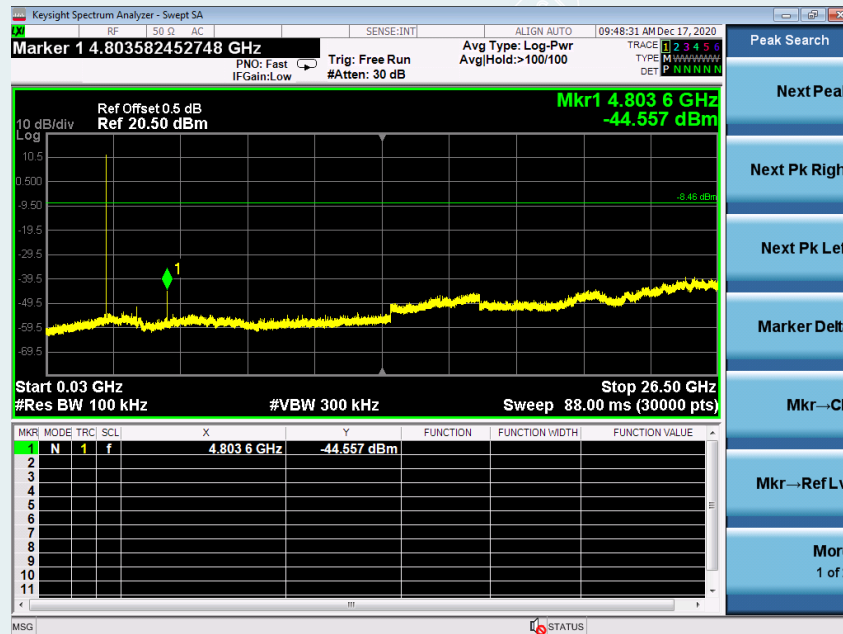


CH High (2.475GHz ~ 2.5GHz)

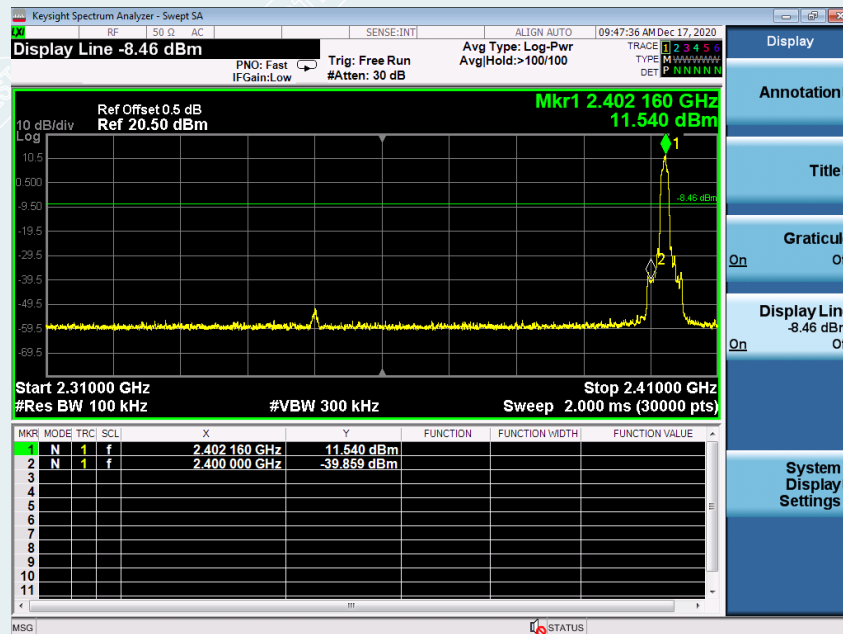


3DH5

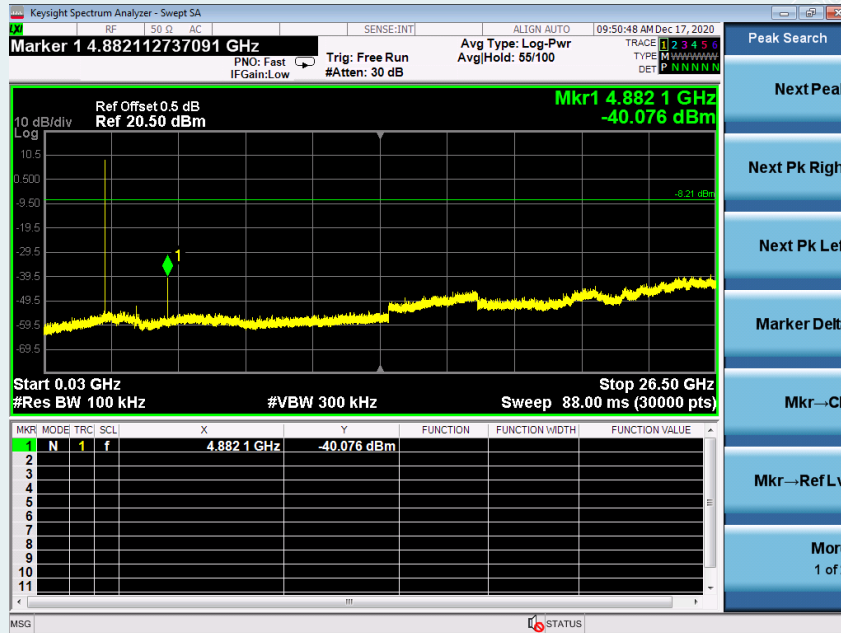
CH Low (30MHz ~26.5GHz)



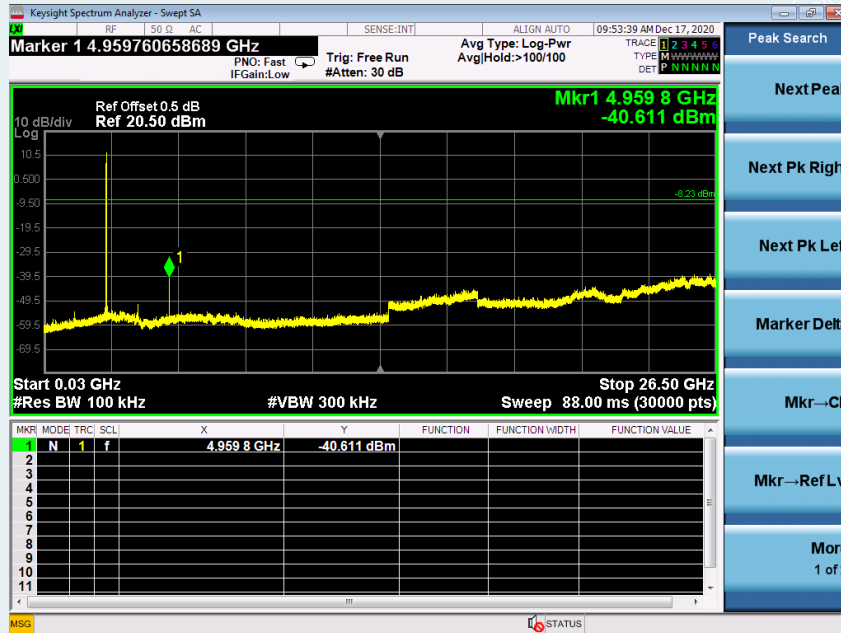
CH Low (2.31GHz ~2.41GHz)



CH Mid (30MHz ~26.5GHz)



CH High (30MHz ~26.5GHz)



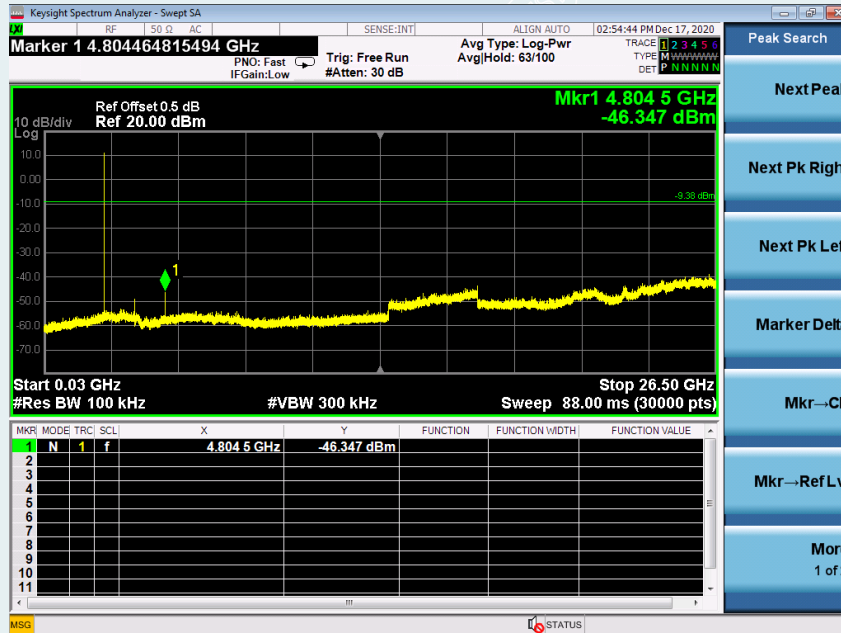
CH High (2.475GHz ~ 2.5GHz)



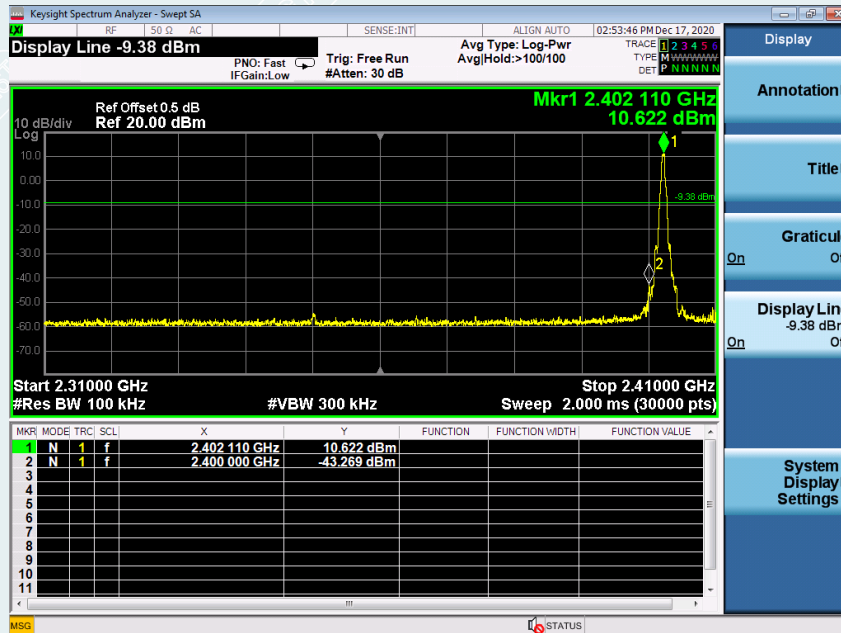
Right earphone Hopping Off

DH5

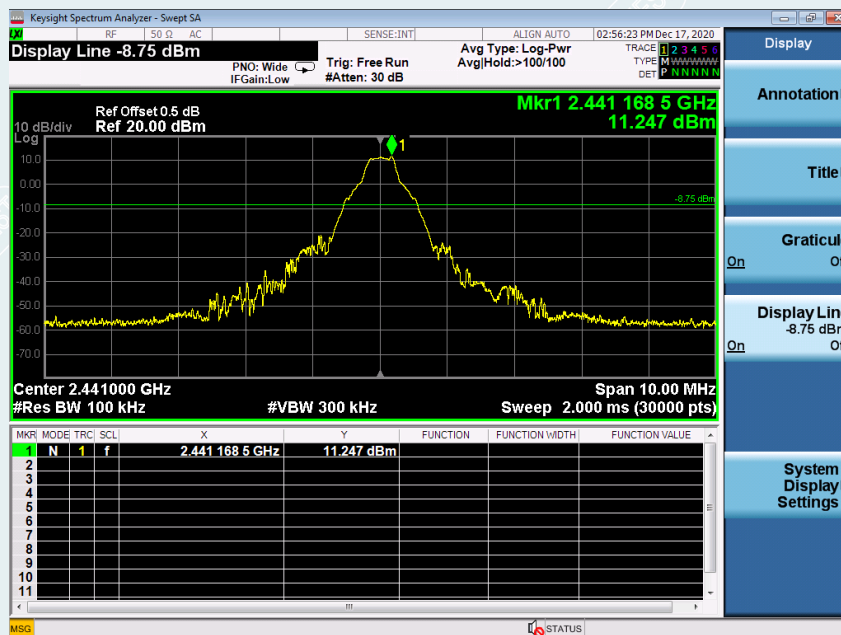
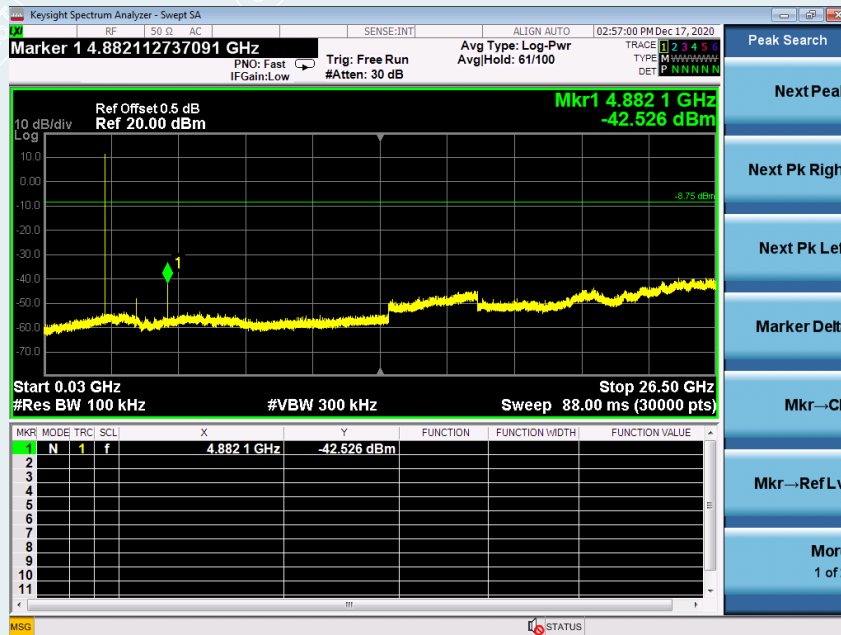
CH Low (30MHz ~26.5GHz)



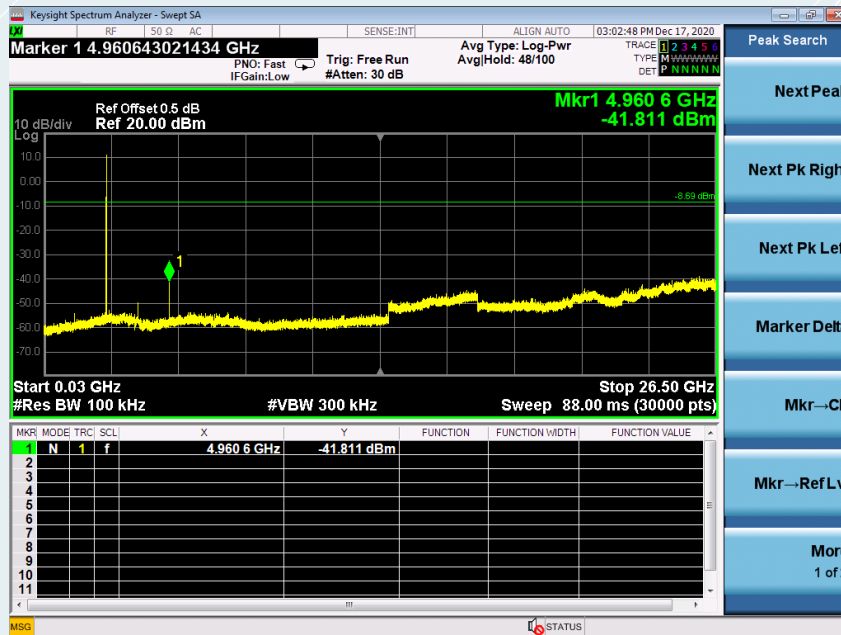
CH Low (2.31GHz ~2.41GHz)



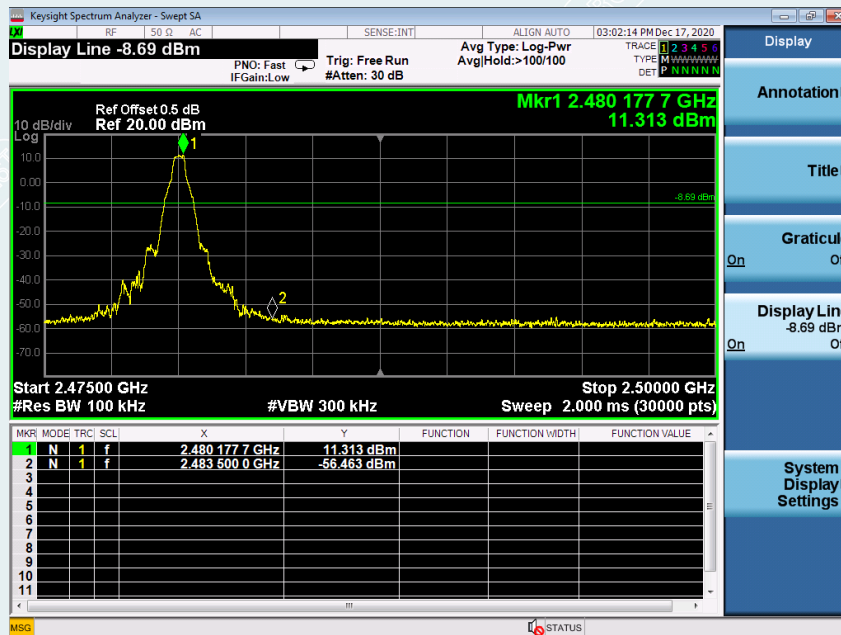
CH Mid (30MHz ~26.5GHz)



CH High (30MHz ~26.5GHz)

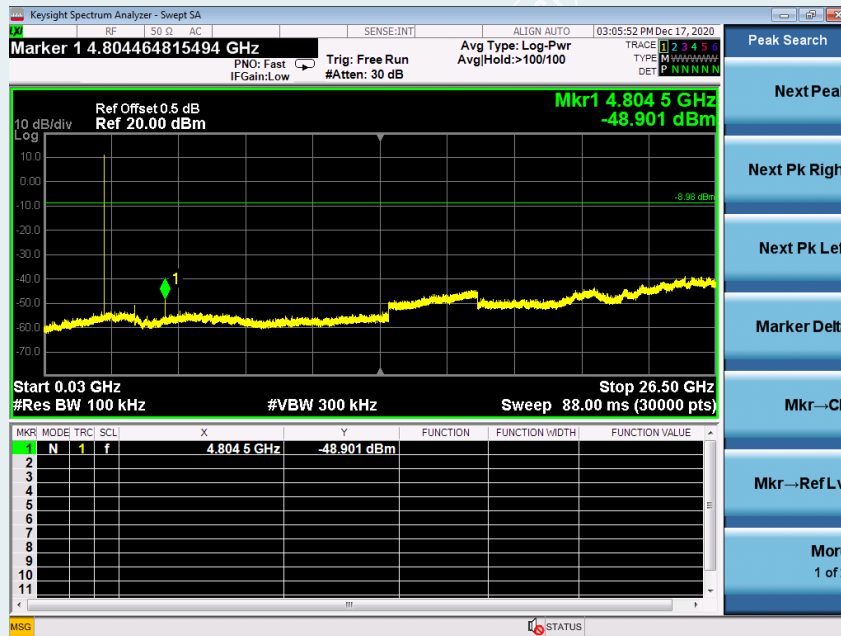


CH High (2.475GHz ~ 2.5GHz)

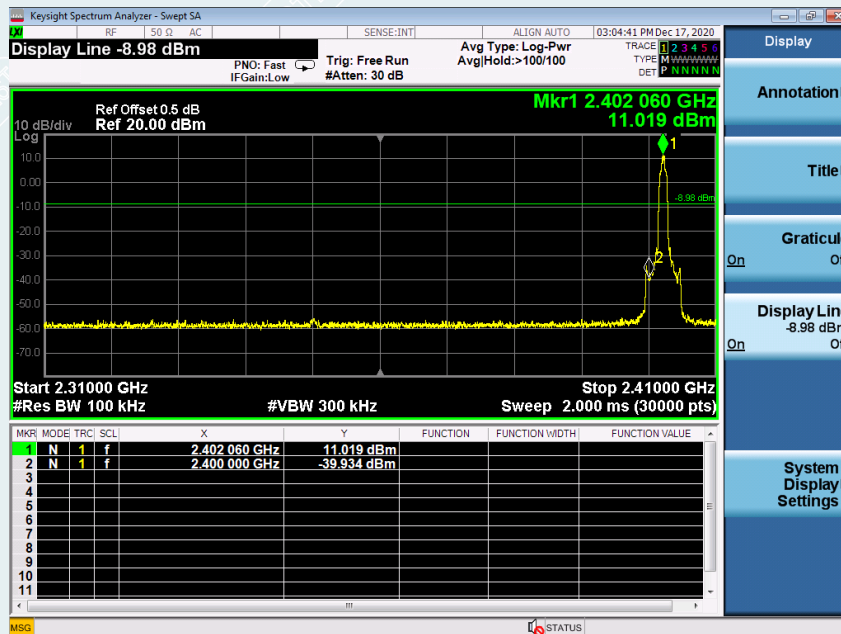


2DH5

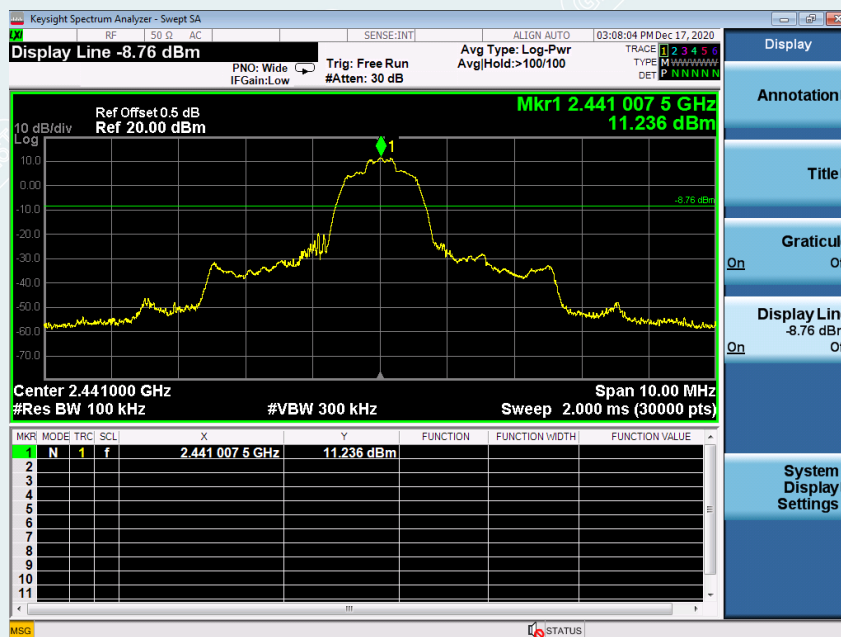
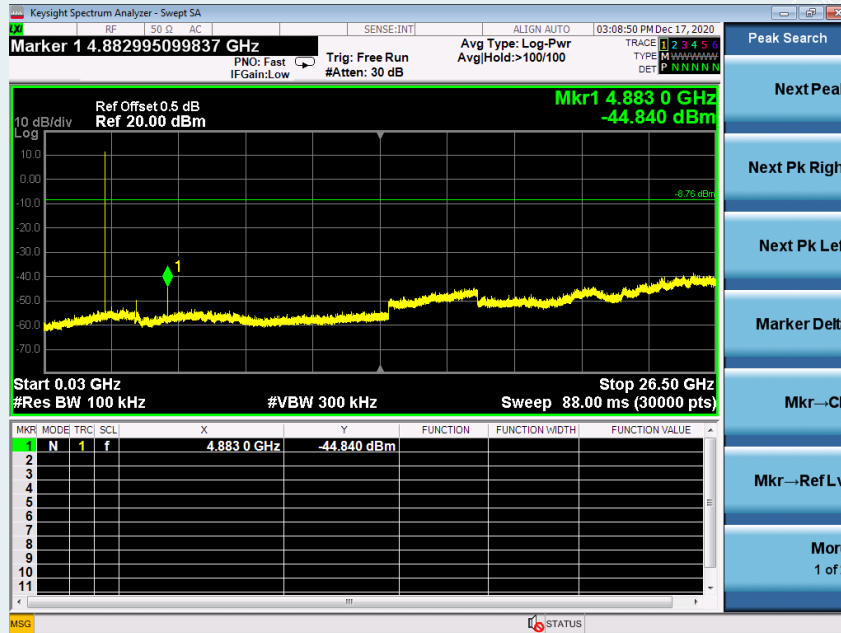
CH Low (30MHz ~26.5GHz)



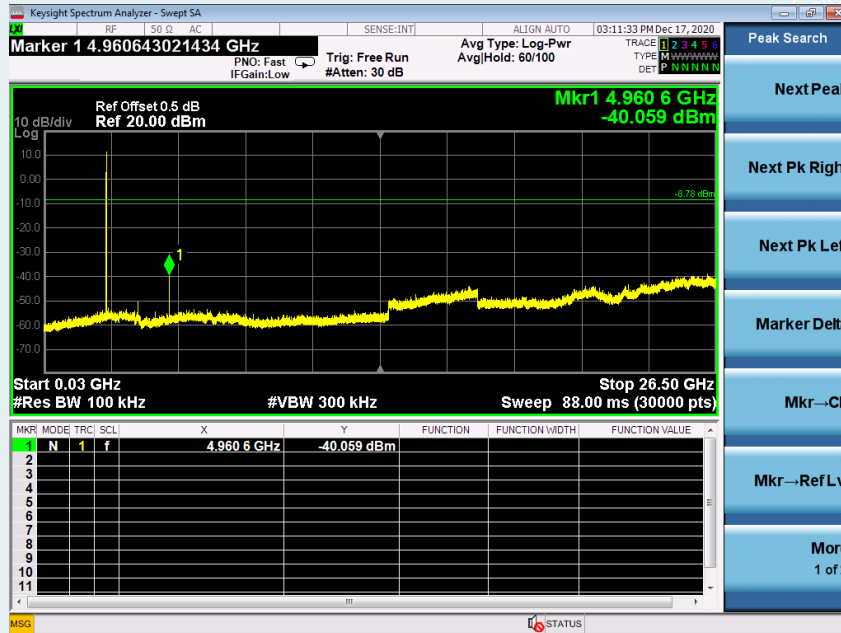
CH Low (2.31GHz ~2.41GHz)



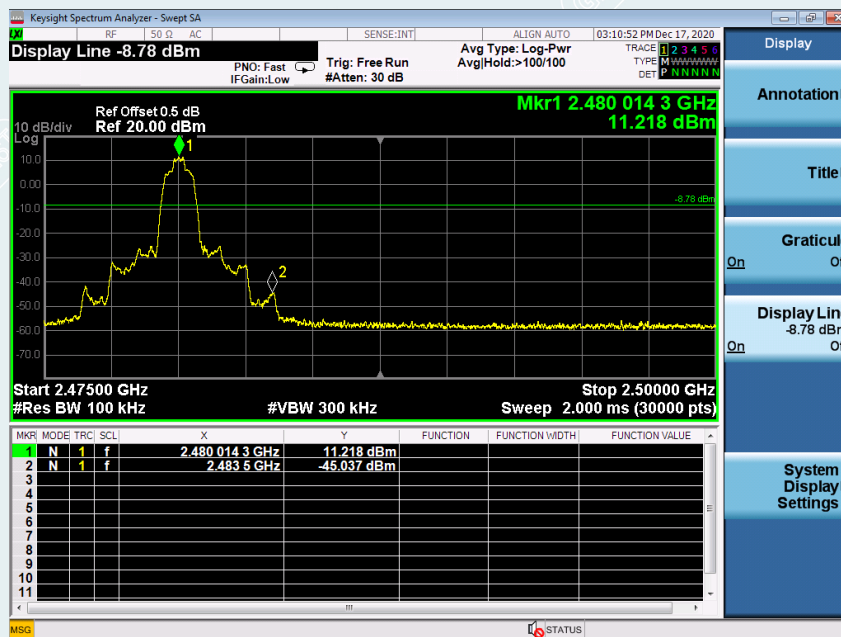
CH Mid (30MHz ~26.5GHz)

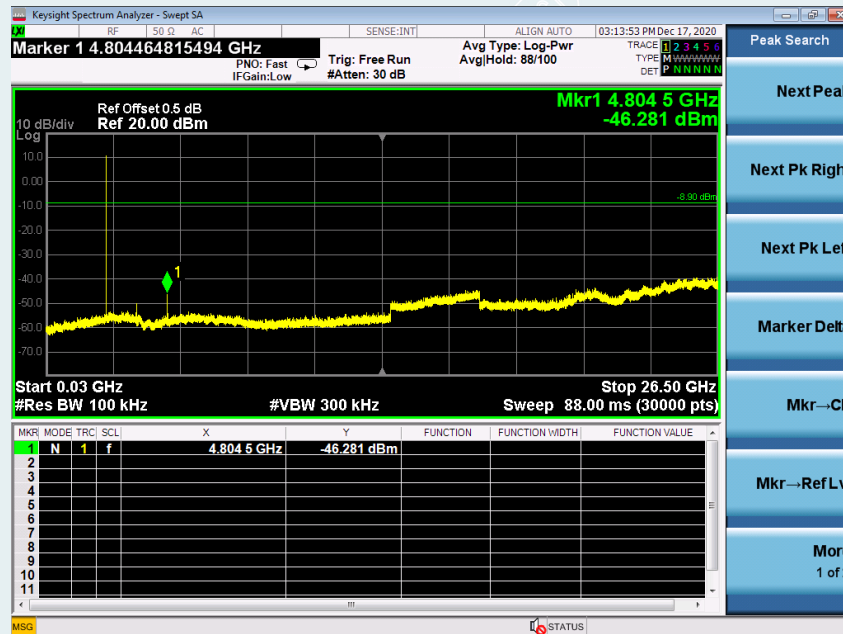
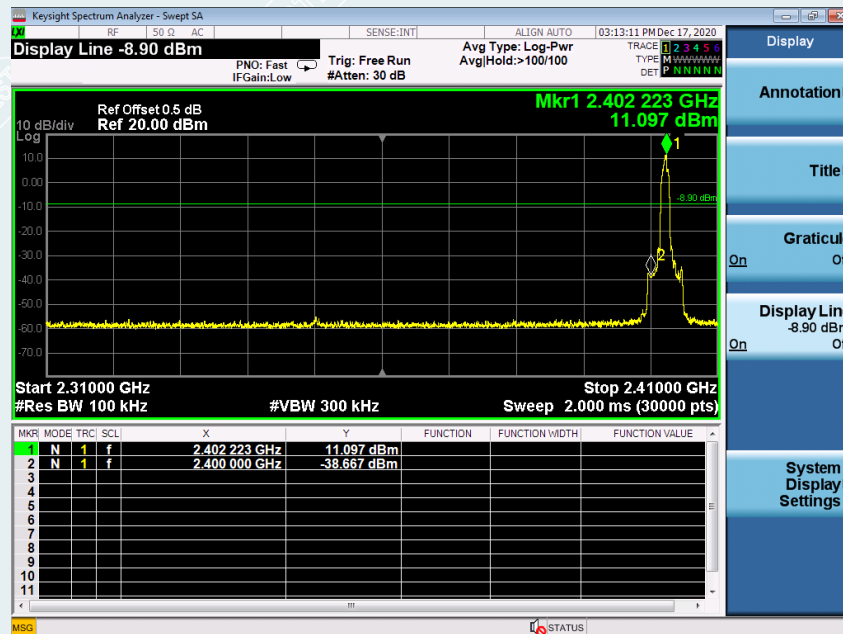


CH High (30MHz ~26.5GHz)

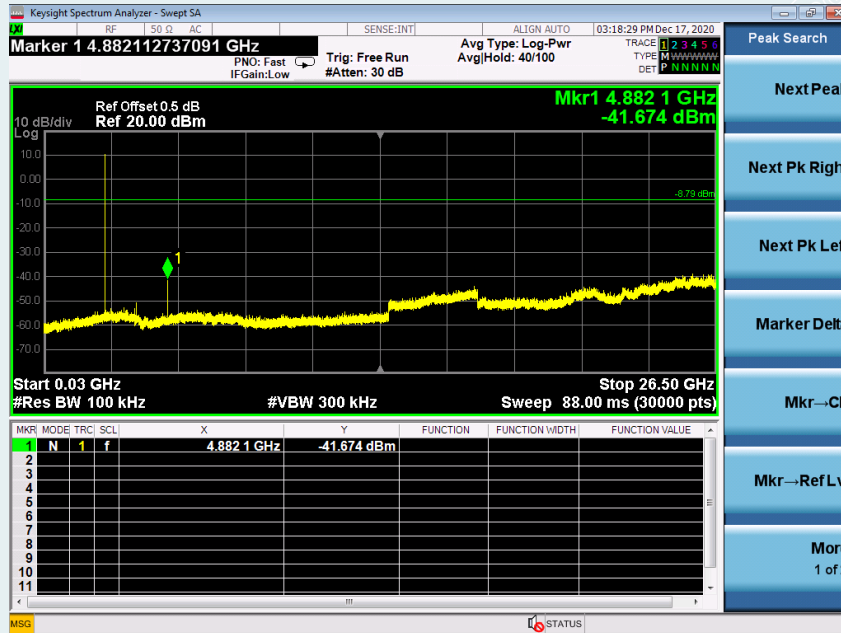


CH High (2.475GHz ~ 2.5GHz)

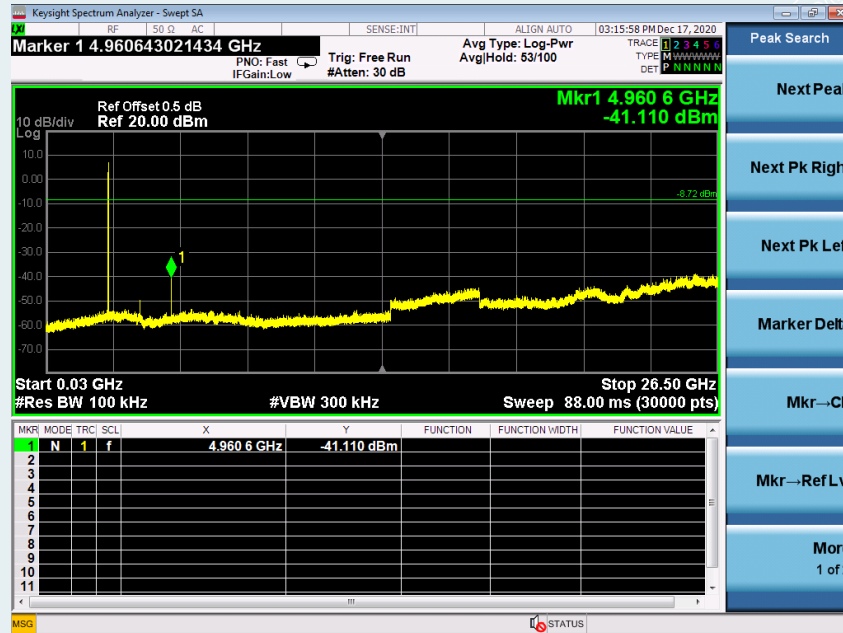


3DH5**CH Low (30MHz ~26.5GHz)****CH Low (2.31GHz ~2.41GHz)**

CH Mid (30MHz ~26.5GHz)



CH High (30MHz ~26.5GHz)



CH High (2.475GHz ~ 2.5GHz)

