

FCC/ISED - TEST REPORT

Report Number : **6895025040901** Date of Issue: **2025-05-07**

Model/HVIN : **A2430**

Product Type : Smart Watch

Applicant : Anhui Huami Information Technology Co., Ltd.

Address : 7/F, Building B2, Huami Global Innovation Center, No. 900,
Wangjiang West Road, High-tech Zone, 518000 Hefei City,
PEOPLE'S REPUBLIC OF CHINA

Manufacturer : Anhui Huami Information Technology Co., Ltd.

Address : 7/F, Building B2, Huami Global Innovation Center, No. 900,
Wangjiang West Road, High-tech Zone, 518000 Hefei City,
PEOPLE'S REPUBLIC OF CHINA

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including Appendices : **73**

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou,
Nanshan District
Shenzhen 518052
P.R. China

Telephone: 86 755 8828 6998

Fax: 86 755 828 5299

FCC Registration No.: 514049

FCC Designation Number: CN5009

ISED CAB identifier CN0077

IC Registration No.: 10320A

3 Description of the Equipment Under Test

Product:	Smart Watch
Model no.:	A2430
Hardware Version Identification No. (HVIN)	A2430
Product Marketing Name (PMN)	Smart Watch
FCC ID:	2AC8UA2430
IC:	21806-A2430
Options and accessories:	N/A
Rating:	5VDC, 1.5A
RF Transmission Frequency:	2402MHz-2480MHz
No. of Operated Channel:	79
Modulation:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Antenna Type:	Metal Case
Antenna Gain:	-4.92dBi
Description of the EUT:	The EUT is a Smart Watch. It supports Bluetooth Low Energy/Bluetooth BDR+EDR and 2.4G Wi-Fi functions. Only Bluetooth (BR+EDR) is included in this report.

NOTE 1: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C 10-1-2023 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators
RSS-Gen Issue 5, April 2018 Amendment 1, March 2019 + Amendment 2, February 2021	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 3 August 2023	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSS) and License-Exempt Local Area Network (LE-LAN) Devices

All the test methods were according to KDB 558074 D01 15.247 Meas Guidance v05r02 Measurement Guidance and ANSI C63.10-2020.

5 Summary of Test Results

Technical Requirements			
FCC Part 15 Subpart C/ RSS-247 Issue 3/RSS-Gen Issue 5			
Test Condition		Test Site	Test Result
§15.207 & RSS-Gen 8.8	Conducted emission AC power port	Site 1	Pass
§15.247(b)(1)	Conducted peak output power	Site 1	Pass
RSS-247 5.4(b)	Conducted peak output power and Equivalent Isotropic Radiated Power	Site 1	Pass
§15.247(a)(1) & RSS-247 5.1(a) & RSS-Gen 6.7	20dB bandwidth and 99% occupied bandwidth	Site 1	Pass
§15.247(a)(1) & RSS-247 5.1(b)	Carrier channel frequency separation	Site 1	Pass
§15.247(a)(1)(iii) & RSS-247 5.1(d)	Number of hopping frequencies	Site 1	Pass
§15.247(a)(1)(iii) & RSS-247 5.1(d)	Dwell Time - Average Time of Occupancy	Site 1	Pass
§15.247(d) & RSS-247 5.5	Spurious RF conducted emissions	Site 1	Pass
§15.247(d) & RSS-247 5.5	Band edge	Site 1	Pass
§15.247(d) & §15.209 & §15.205 & RSS-247 5.5 & RSS-Gen 6.13	Spurious radiated emissions for transmitter	Site 1	Pass
§15.203 & RSS-Gen 6.8	Antenna requirement	See note 2	Pass

Note 1: N/A=Not Applicable.

Note 2: The EUT uses a Metal Case antenna, which gain is -4.92dBi. In accordance to §15.203 & RSS-Gen 6.8, it is considered sufficiently to comply with the provisions of this section.

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2AC8UA2430, IC: 21806-A2430, complies with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C rules and RSS-247, RSS-GEN.

SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

□ - **Not** Performed

The Equipment Under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

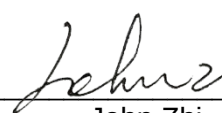
Sample Received Date: 2025-04-09

Testing Start Date: 2025-04-09

Testing End Date: 2025-04-22

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch -

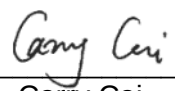
Reviewed by:


John Zhi
Section Manager

Prepared by:

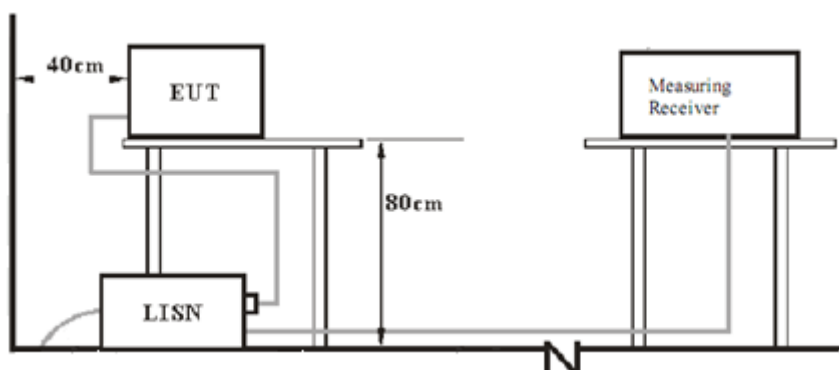

Sanvin Zheng
Project Engineer

Tested by:


Carry Cai
Test Engineer

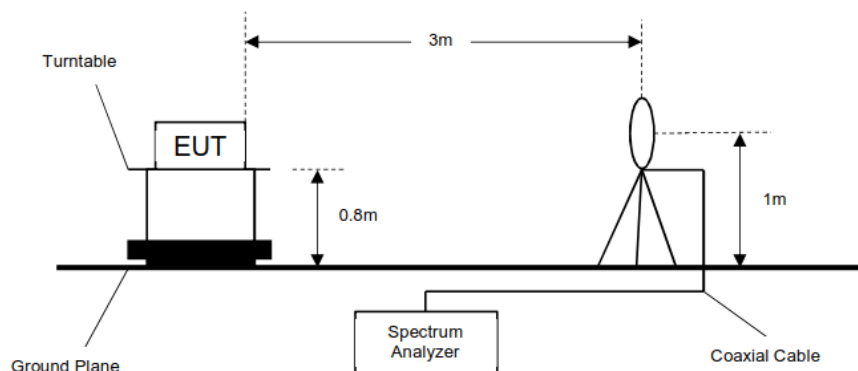
7 Test Setups

7.1 AC Power Line Conducted Emission test setups

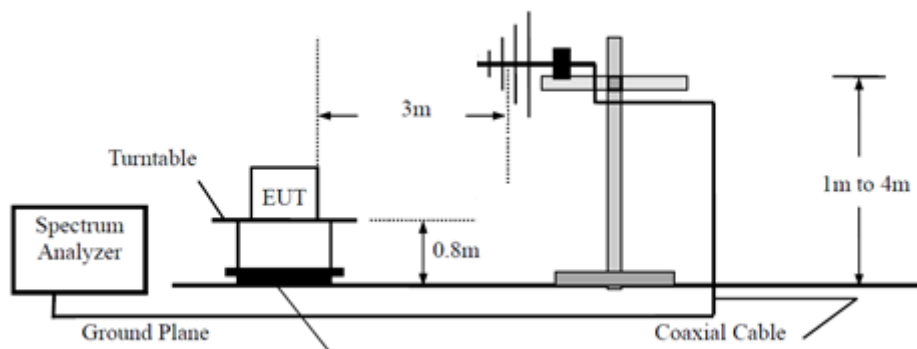


7.2 Radiated test setups

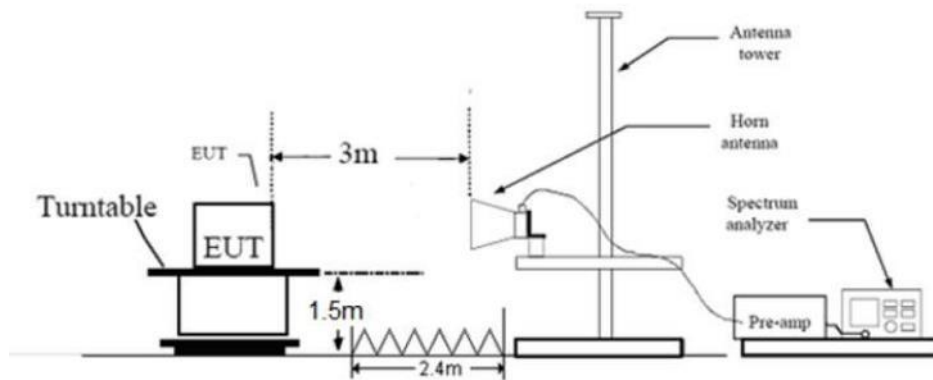
9KHz - 30MHz



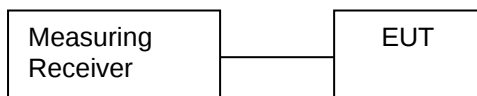
30MHz - 1GHz



Above 1GHz



7.3 Conducted RF test setups



8 Systems Test Configuration

Auxiliary Equipment Used during Test:

Description	Manufacturer	Model NO.	S/N
Notebook	LENOVO	X220	429044C
Watch Charger	HUAMI	---	---
Adapter	HUAWEI	HW-110600C02	---

Cables Used During Test:

Cable	Length	Shielded/unshielded	With / without ferrite
USB Cable	100cm	Unshielded	without ferrite

Test software information:

Test Software	SSCOM.exe	
Modulation	Setting TX Power	Packet Type
GFSK	Default	PRBS9
$\pi/4$ -DQPSK	Default	PRBS9
8DPSK	Default	PRBS9

The system was configured to hopping mode and non-hopping mode.

Hopping mode: typical working mode (normal hopping status)

Non-hopping mode: The system was configured to operate at a signal channel transmitting. The test software allows the configuration and operation at the worst-case duty and the highest transmit power.

9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. Both sides of AC line were checked for maximum conducted interference.
6. The frequency range from 150 kHz to 30 MHz was searched.
7. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

Limit

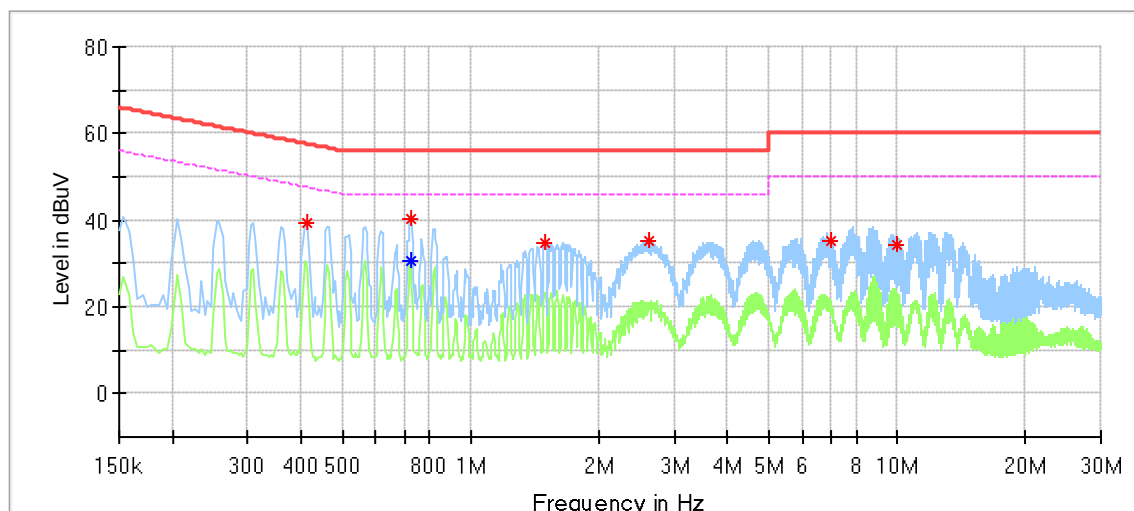
According to §15.207& RSS-Gen 8.8, Conducted Emission limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

Conducted Emission

Product Type : Smart Watch
M/N : A2430
Operating Condition : Transmit mode
Test Specification : Line
Comment : AC 120V/60Hz



Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.414000	39.51	---	57.57	18.06	L1	9.67
0.722000	---	30.82	46.00	15.18	L1	9.68
0.726000	40.32	---	56.00	15.68	L1	9.68
1.494000	34.99	---	56.00	21.01	L1	9.71
2.618000	35.23	---	56.00	20.77	L1	9.75
6.986000	35.14	---	60.00	24.86	L1	9.87
9.970000	34.20	---	60.00	25.80	L1	9.92

Remark:

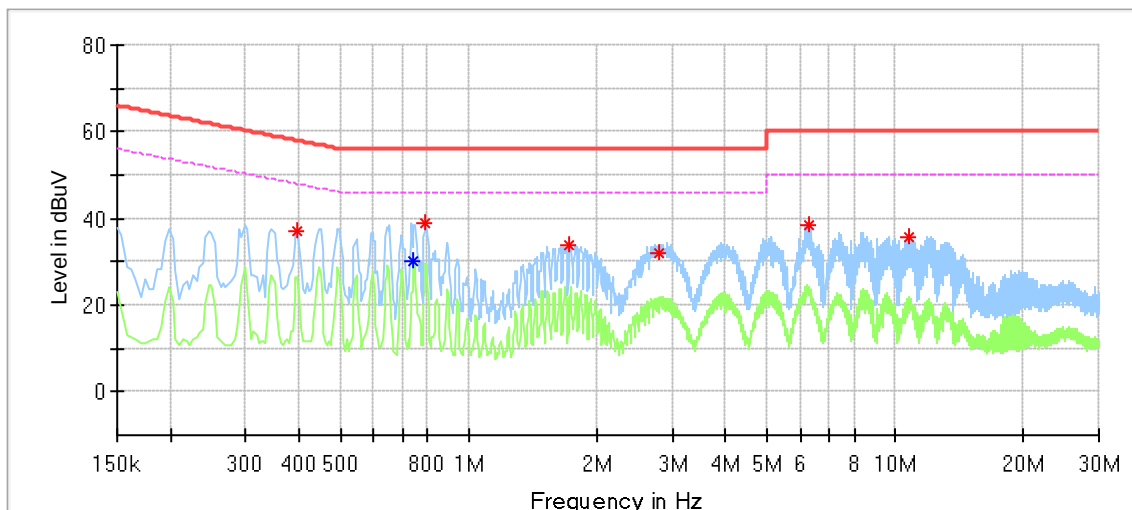
Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

(The Reading Level is recorded by software which is not shown in the sheet)

Conducted Emission

Product Type : Smart Watch
 M/N : A2430
 Operating Condition : Transmit mode
 Test Specification : Neutral
 Comment : AC 120V/60Hz



Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.398000	37.04	---	57.90	20.85	N	9.66
0.742000	---	29.98	46.00	16.02	N	9.67
0.794000	39.04	---	56.00	16.96	N	9.67
1.726000	33.93	---	56.00	22.07	N	9.69
2.806000	32.02	---	56.00	23.98	N	9.72
6.262000	38.33	---	60.00	21.67	N	9.83
10.714000	35.48	---	60.00	24.52	N	9.92

Remark:

Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

(The Reading Level is recorded by software which is not shown in the sheet)

9.2 Conducted Peak Output Power & EIRP

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Use the following test receiver settings:
Span = approximately 5 times the 20dB bandwidth, centered on a hopping channel
RBW > the 20dB bandwidth of the emission being measured, VBW ≥ RBW,
Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power and record the results in the test report.
5. Repeat above procedures until all frequencies measured were complete.

Limits

According to §15.247 (b) (1) & RSS-247 5.4(b), conducted peak output power limit as below:

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤1	≤30

According to & RSS-247 5.4(b), EIRP limit as below:

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤4	≤36

Remark: EIRP=Conducted output power + Antenna Gain

Conducted Peak Output Power & EIRP

Bluetooth Mode GFSK modulation Test Result

Frequency MHz	Conducted Peak Output Power dBm	Antenna Gain dBi	EIRP dBm	Result
Low channel 2402MHz	9.85	-4.92	4.93	Pass
Middle channel 2441MHz	10.05	-4.92	5.13	Pass
High channel 2480MHz	10.32	-4.92	5.40	Pass

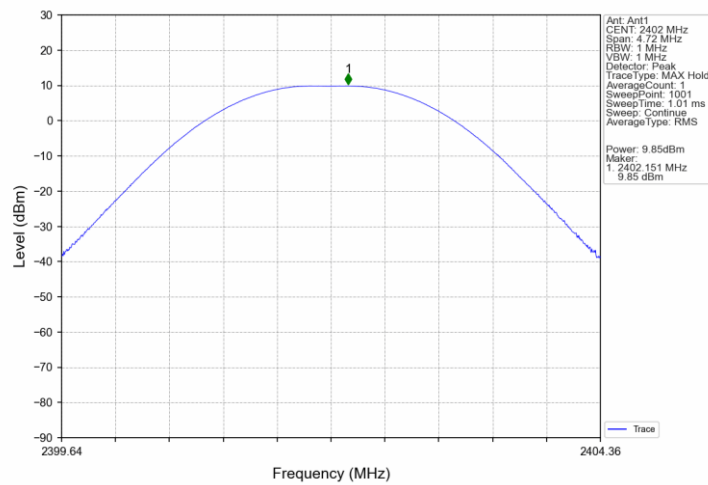
Bluetooth Mode $\pi/4$ -DQPSK modulation Test Result

Frequency MHz	Conducted Peak Output Power dBm	Antenna Gain dBi	EIRP dBm	Result
Low channel 2402MHz	9.80	-4.92	4.88	Pass
Middle channel 2441MHz	10.01	-4.92	5.09	Pass
High channel 2480MHz	10.32	-4.92	5.40	Pass

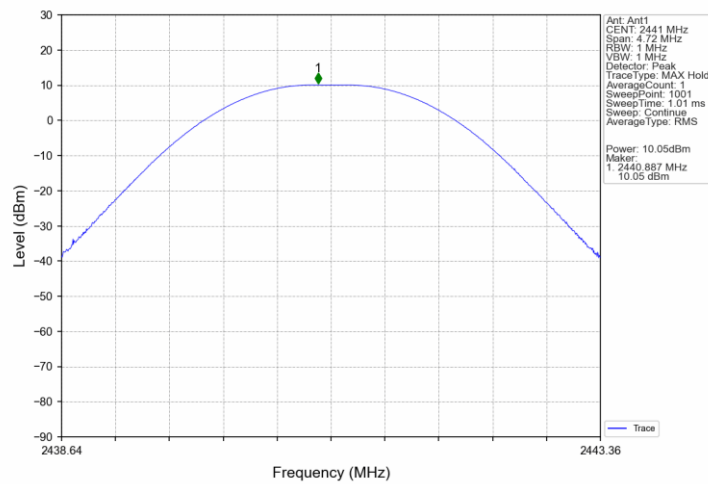
Bluetooth Mode 8DPSK modulation Test Result

Frequency MHz	Conducted Peak Output Power dBm	Antenna Gain dBi	EIRP dBm	Result
Low channel 2402MHz	10.10	-4.92	5.18	Pass
Middle channel 2441MHz	10.32	-4.92	5.40	Pass
High channel 2480MHz	10.64	-4.92	5.72	Pass

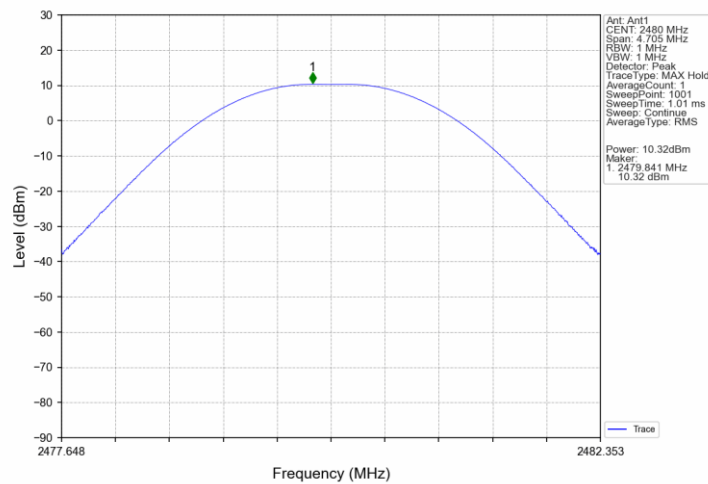
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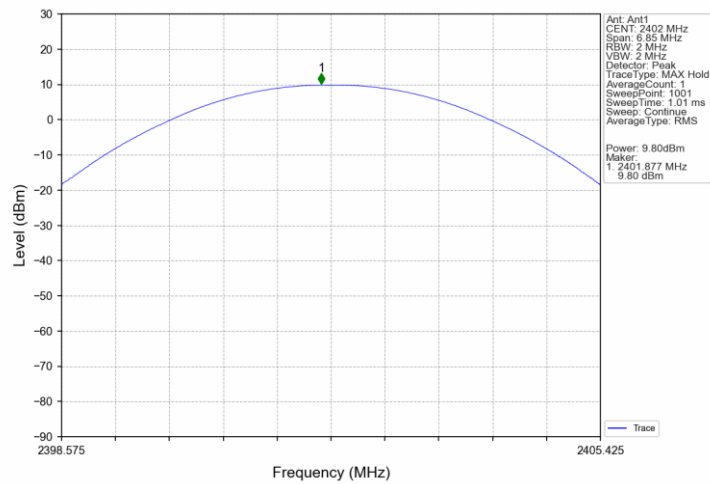
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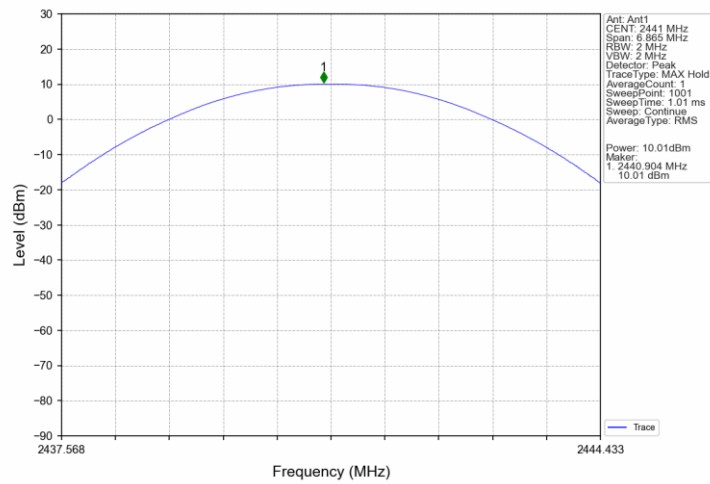
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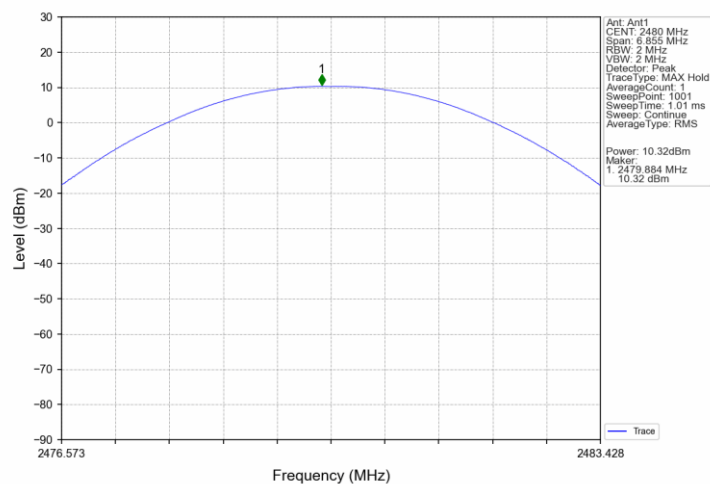
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



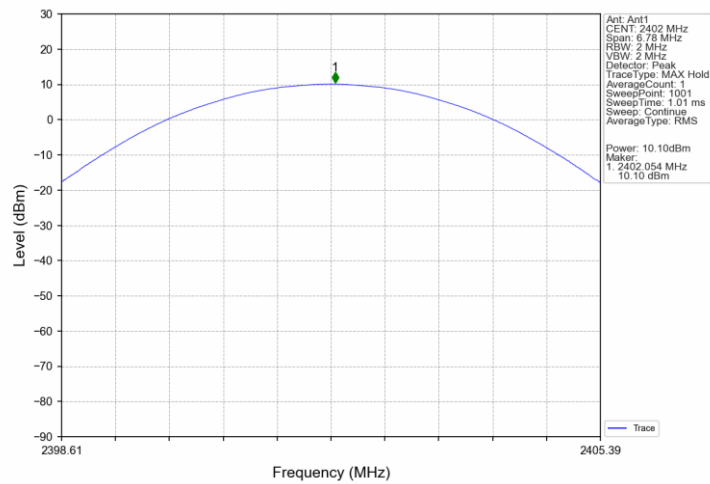
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTNv



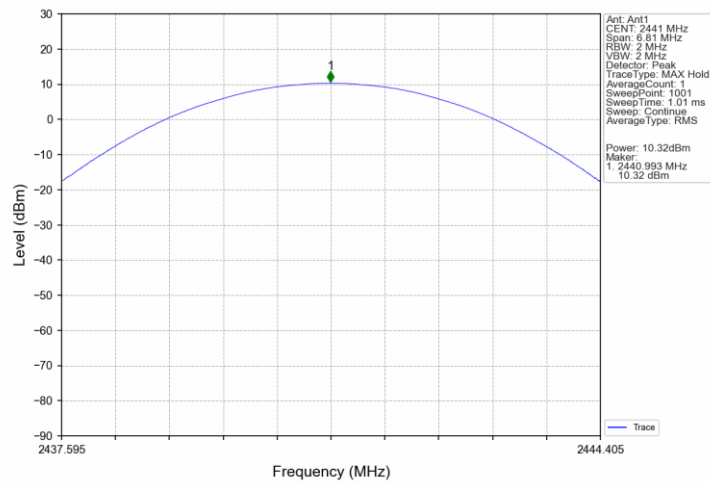
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNv



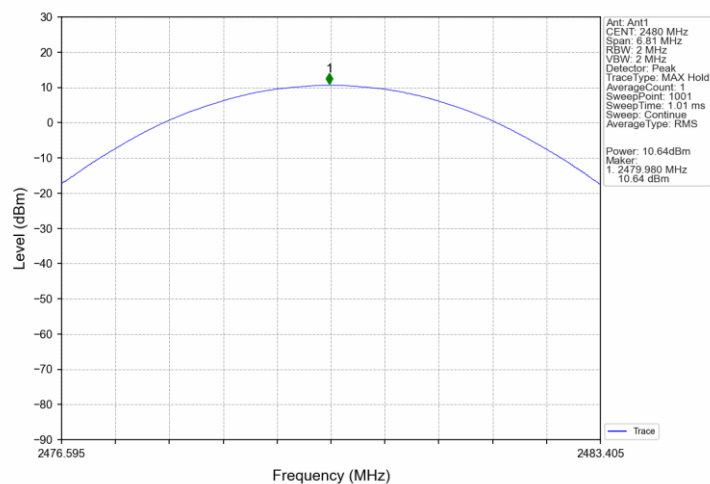
8DPSK 3DH5 LCH 2402MHz Ant1 NTNv



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



9.3 20 dB Bandwidth and 99% Occupied Bandwidth

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Use the following test receiver settings:
Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel
RBW $\geq$ 1% to 5% of the 20 dB bandwidth/99% OBW, VBW $\geq$ 3RBW,
Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Measure the frequency difference of two frequencies that were attenuated 20 dB/99% OBW from the reference level. Record the frequency difference as the emission bandwidth. Record the results.
5. Repeat above procedures until all frequencies measured were complete.

Limit

According to §15.247(a)(1) & RSS-247 5.1(a) & RSS-Gen 6.7, 20 dB Bandwidth and 99% Occupied Bandwidth limit as below:

Limit [kHz]

N/A

20 dB bandwidth and 99% Occupied Bandwidth

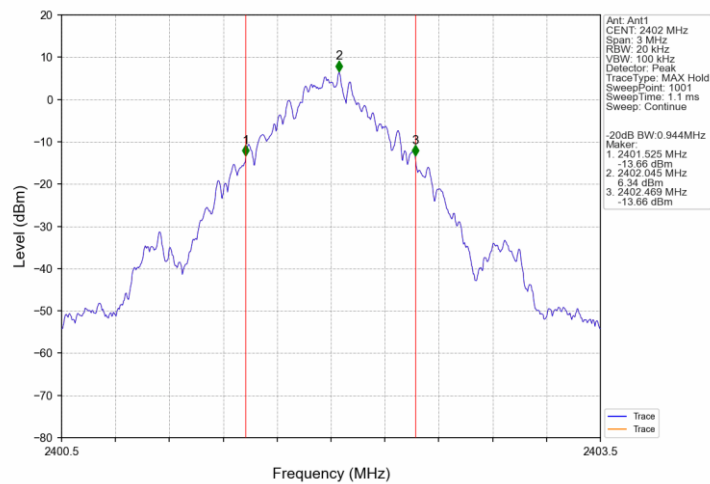
Test result

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.944	/	Pass
		2441	DH5	1	0.944	/	Pass
		2480	DH5	1	0.941	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.370	/	Pass
		2441	2DH5	1	1.373	/	Pass
		2480	2DH5	1	1.371	/	Pass
8DPSK	SISO	2402	3DH5	1	1.356	/	Pass
		2441	3DH5	1	1.362	/	Pass
		2480	3DH5	1	1.362	/	Pass

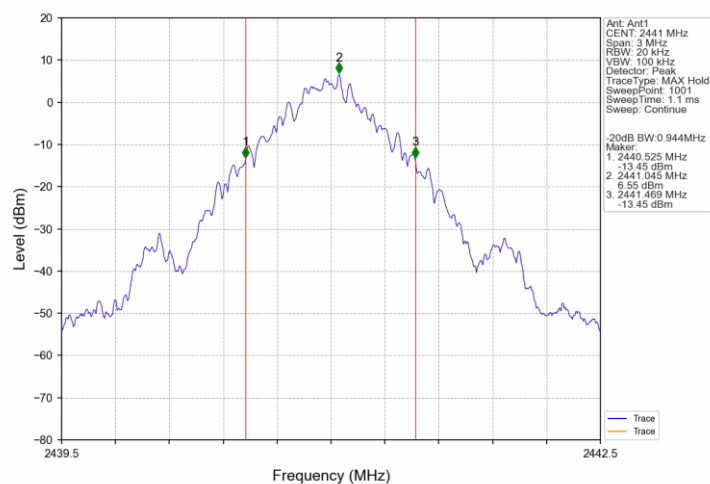
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.901	/	Pass
		2441	DH5	1	0.903	/	Pass
		2480	DH5	1	0.902	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.214	/	Pass
		2441	2DH5	1	1.217	/	Pass
		2480	2DH5	1	1.217	/	Pass
8DPSK	SISO	2402	3DH5	1	1.222	/	Pass
		2441	3DH5	1	1.226	/	Pass
		2480	3DH5	1	1.223	/	Pass

20 dB Bandwidth

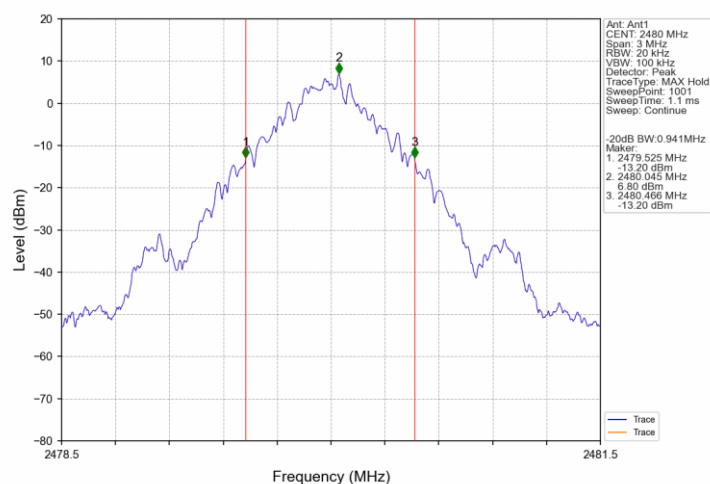
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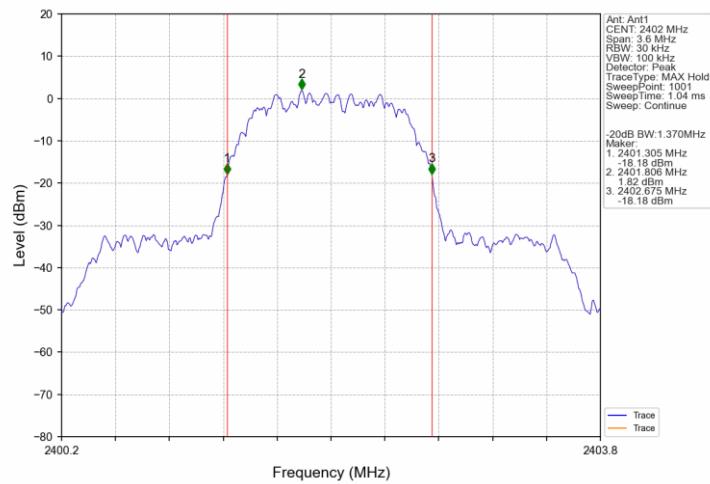
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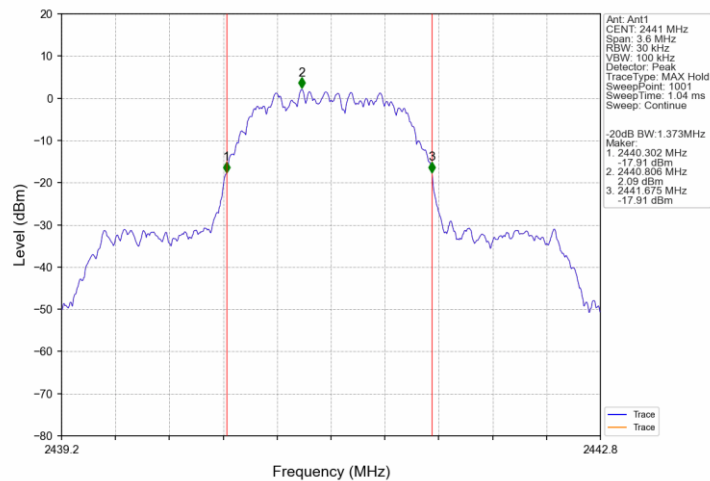
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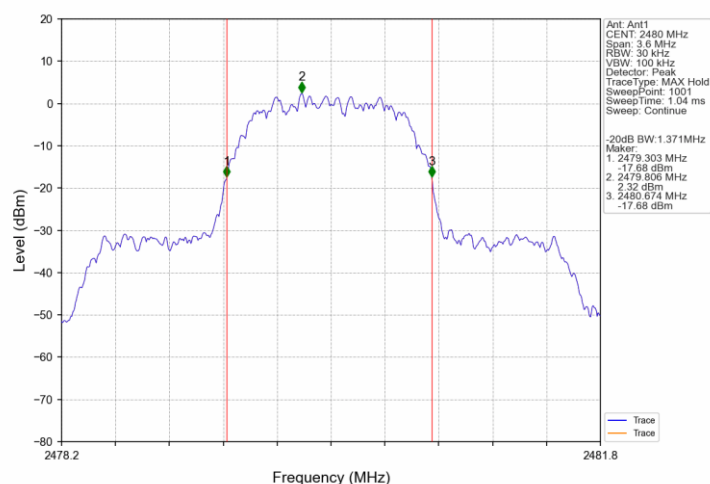
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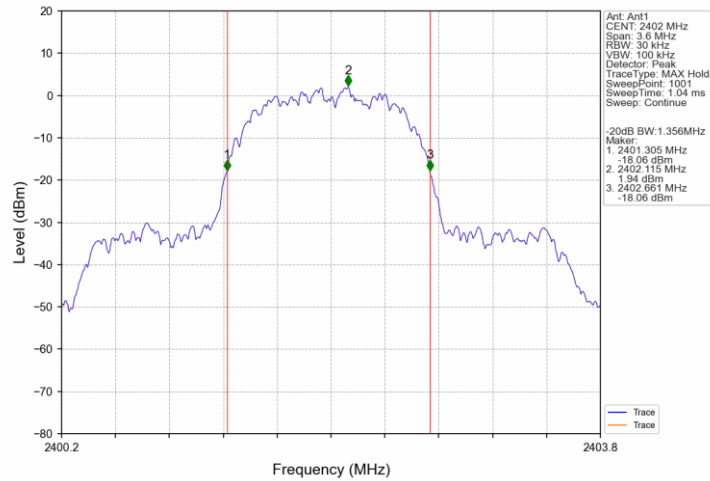
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTNv



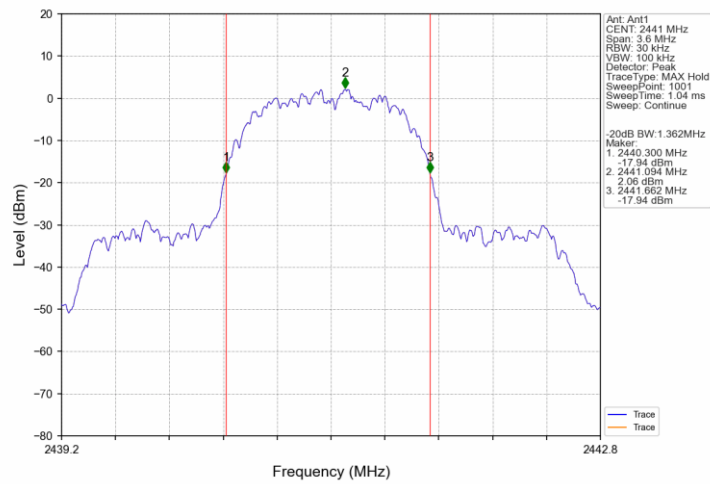
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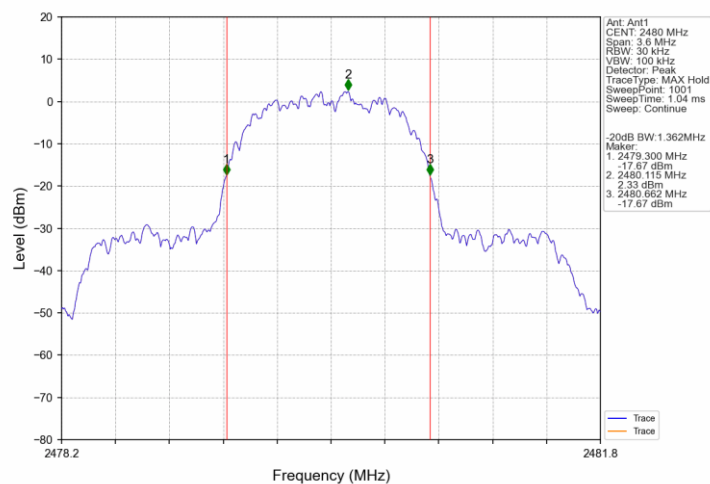
8DPSK 3DH5 LCH 2402MHz Ant1 NTNv



8DPSK 3DH5_MCH_2441MHz_Ant1_NTNV

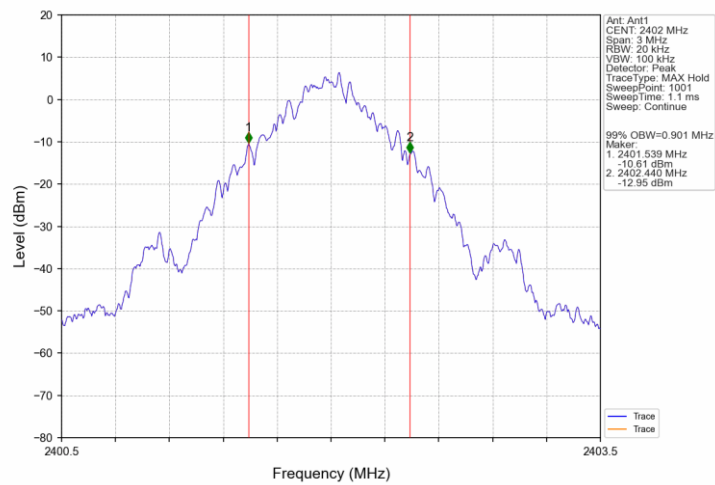


8DPSK 3DH5_HCH_2480MHz_Ant1_NTNV

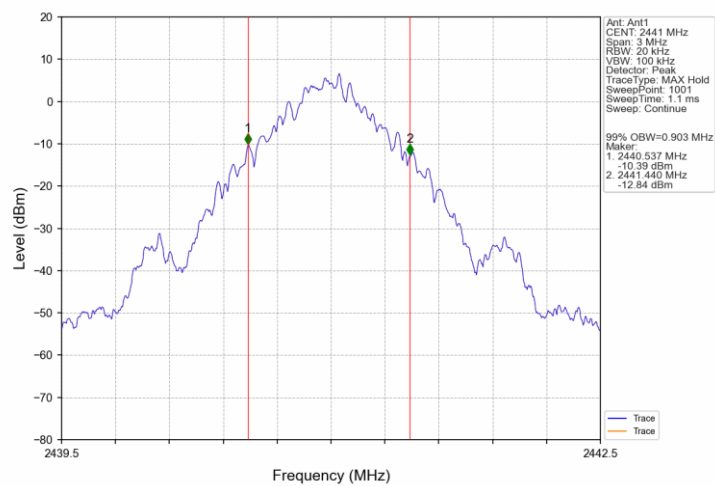


99% Occupied Bandwidth

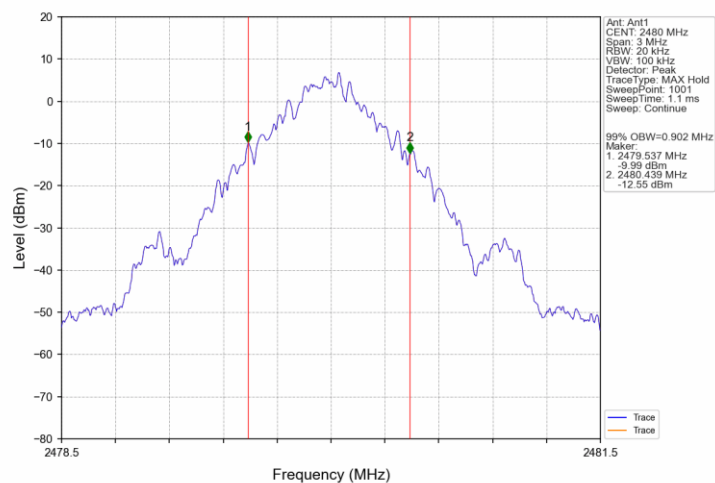
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



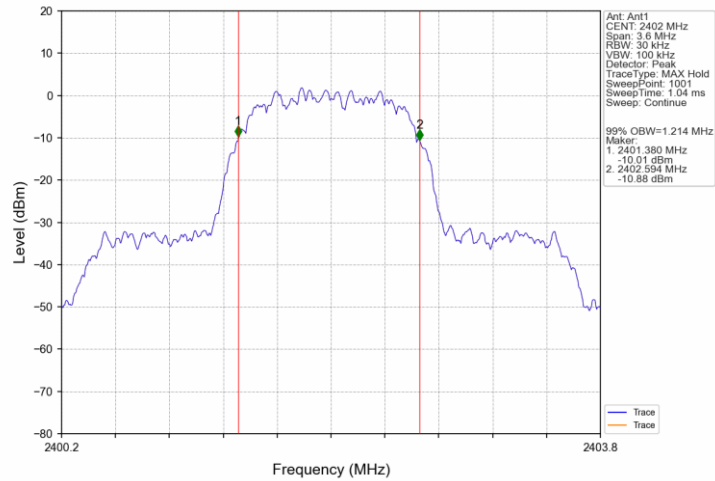
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



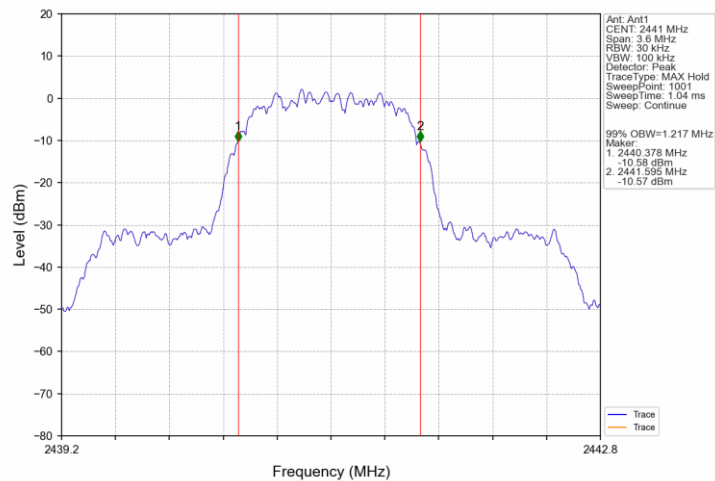
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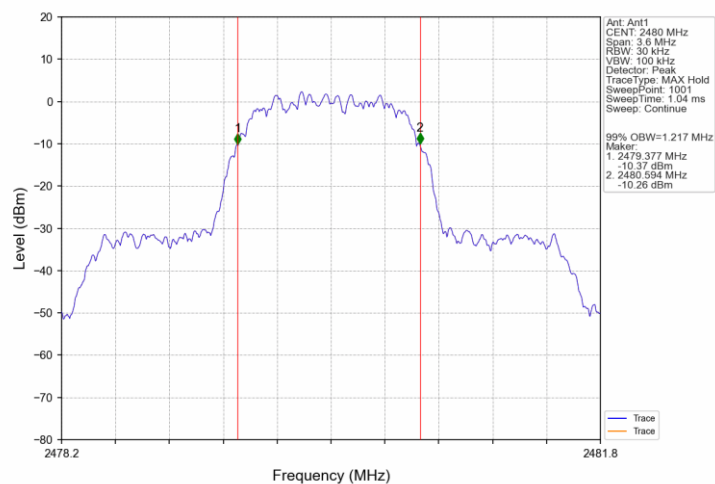
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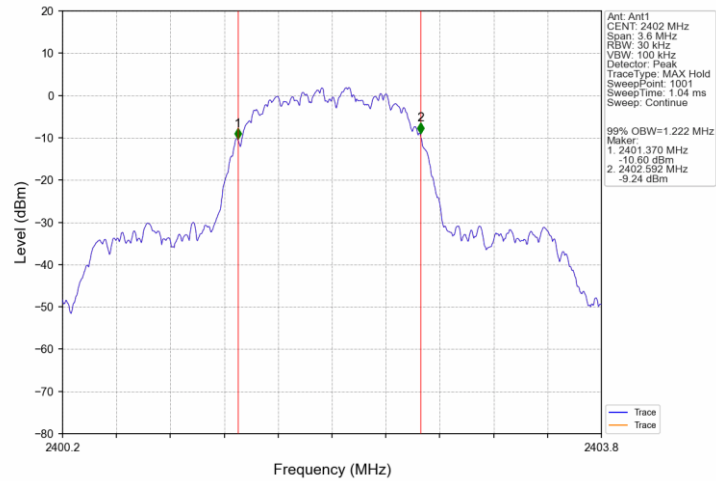
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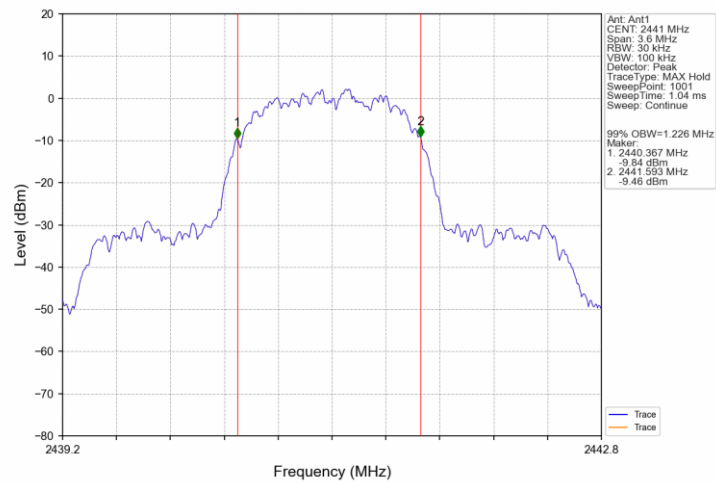
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNv



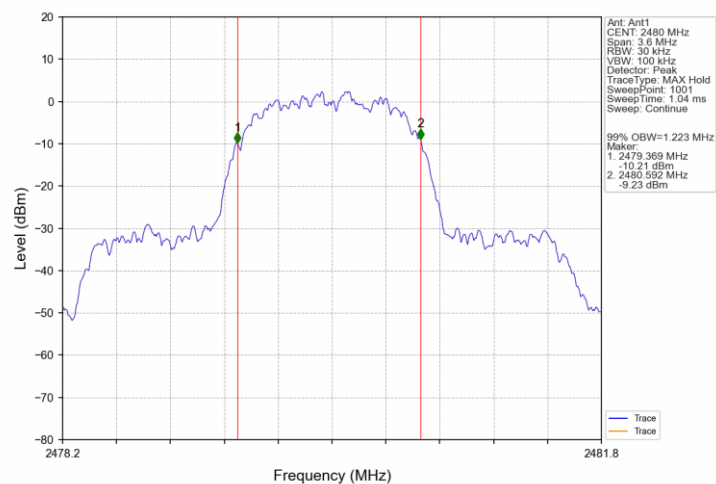
8DPSK 3DH5 LCH 2402MHz Ant1 NTNv



8DPSK 3DH5_MCH_2441MHz_Ant1_NTNV



8DPSK 3DH5_HCH_2480MHz_Ant1_NTNV



9.4 Carrier Frequency Separation

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit to hopping mode.
3. Use the following spectrum analyzer settings:
Span = wide enough to capture the peaks of two adjacent channels, RBW: Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel. VBW $\geq$ RBW, Sweep = auto, Detector function = peak.
4. By using the Max-Hold function record the separation of two adjacent channels.
5. Measure the frequency difference of these two adjacent channels by spectrum analyzer marker function. Record the results.
6. Repeat above procedures until all frequencies measured were complete.

Limit

According to §15.247(a)(1) & RSS-247 5.1(b), Carrier Frequency Separation limit as below:

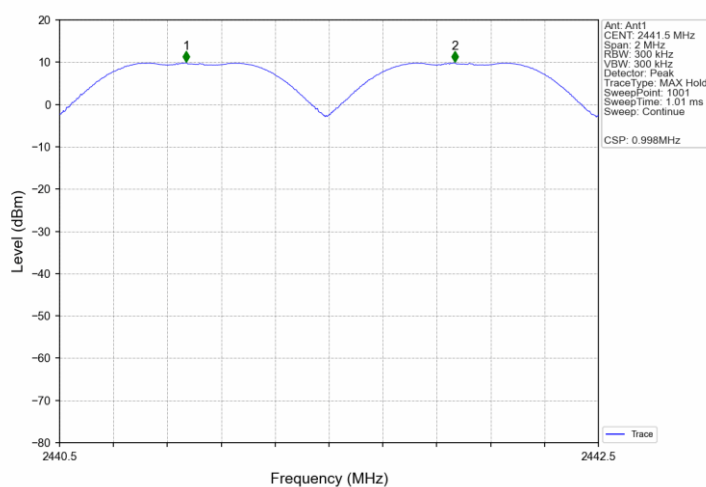
Limit kHz
$\geq 25\text{KHz}$ or $2/3$ of the 20 dB bandwidth which is greater

Carrier Frequency Separation

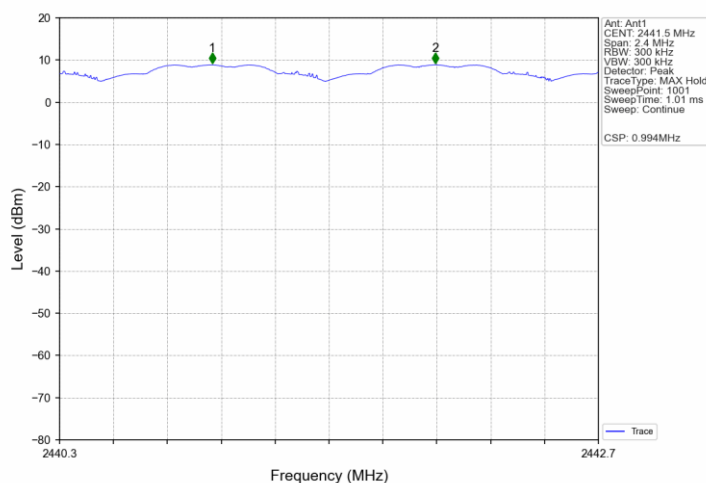
Test result: The measurement was performed with the typical configuration (normal hopping status).

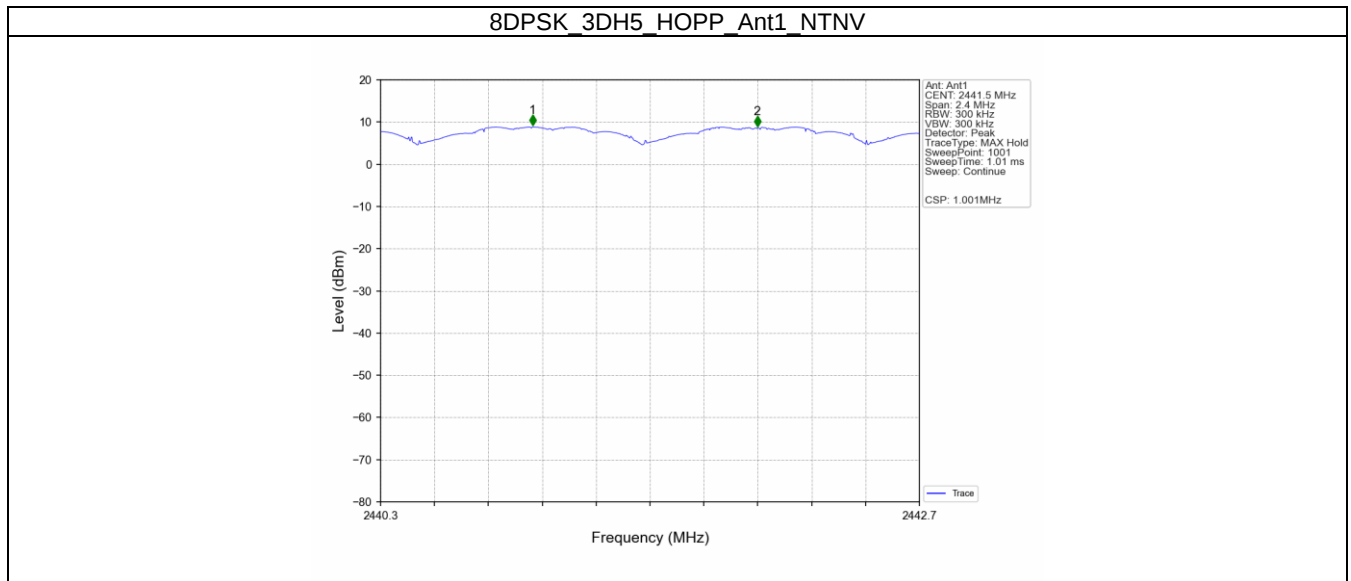
Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	0.998	0.944	≥ 0.944	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	0.994	1.373	≥ 0.915	Pass
8DPSK	SISO	HOPP	3DH5	1.001	1.362	≥ 0.908	Pass

GFSK_DH5_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV





9.5 Number of Hopping Frequencies

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit to hopping mode.
3. Use the following spectrum analyzer settings:
Span = the frequency band of operation, RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller, VBW $\geq$ RBW, Sweep = auto, Detector function = peak, Trace=Max hold.
4. Allow the trace to stabilize. It may prove necessary to break the span up to sections, in order to clearly show all of the hopping frequencies. The limit is specified in one of the subparagraphs of this Section. Submit this plot(s).

Limit

According to §15.247(a)(1)(iii) & RSS-247 5.1(d), Number of Hopping Frequencies limit as below:

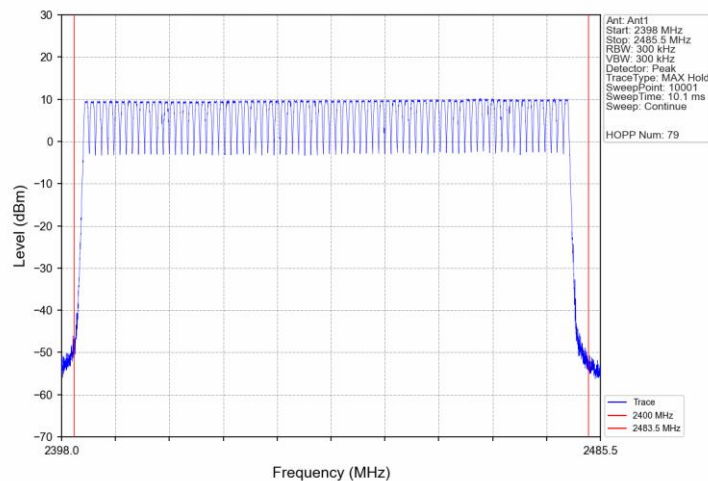
**Limit
number**

≥ 15

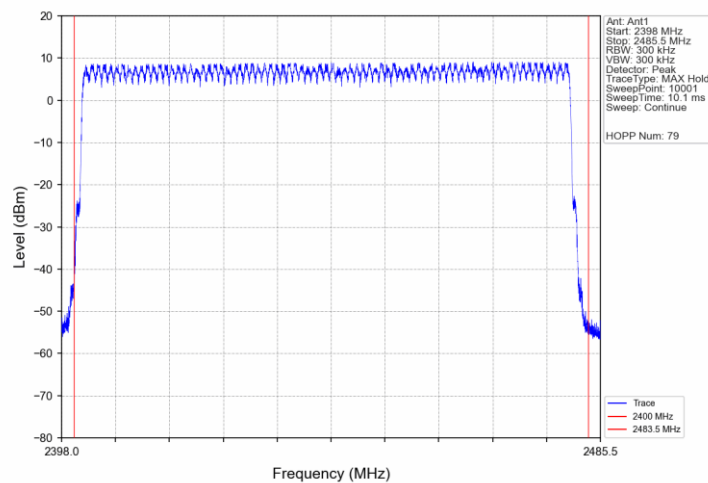
Number of Hopping Frequencies

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	≥ 15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	≥ 15	Pass
8DPSK	SISO	HOPP	3DH5	79	≥ 15	Pass

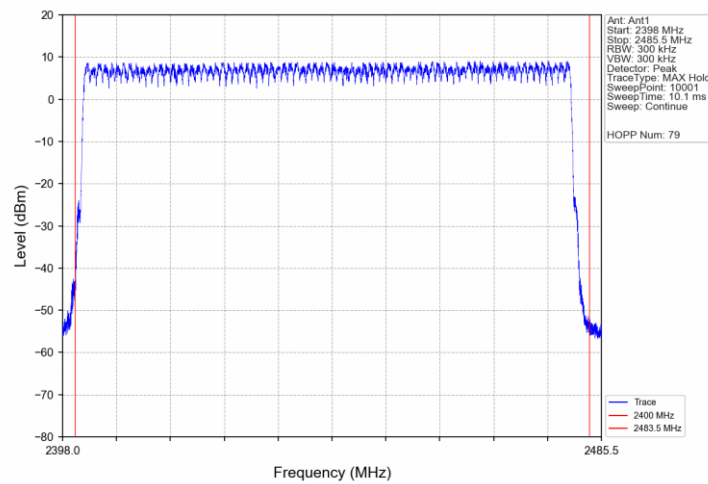
GFSK_DH5_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



9.6 Dwell Time

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit to hopping mode.
3. Span: Zero span, centered on a hopping channel.
4. RBW shall be $\leq$ channel spacing and where possible RBW should be set $\gg 1 / T$, where T is the expected dwell time per channel.
5. Sweep: As necessary to capture the entire dwell time per hopping channel; where possible use a video trigger and trigger delay so that the transmitted signal starts a little to the right of the start of the plot. The trigger level might need slight adjustment to prevent triggering when the system hops on an adjacent channel; a second plot might be needed with a longer sweep time to show two successive hops on a channel.
6. Detector function: Peak.
7. Trace: Max hold. Use the marker-delta function to determine the transmit time per hop. If this value varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation in transmit time.

Limit

According to §15.247(a)(1)(iii) & RSS-247 5.1(d), Dwell Time limit as below:

The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

Dwell Time

Dwell time

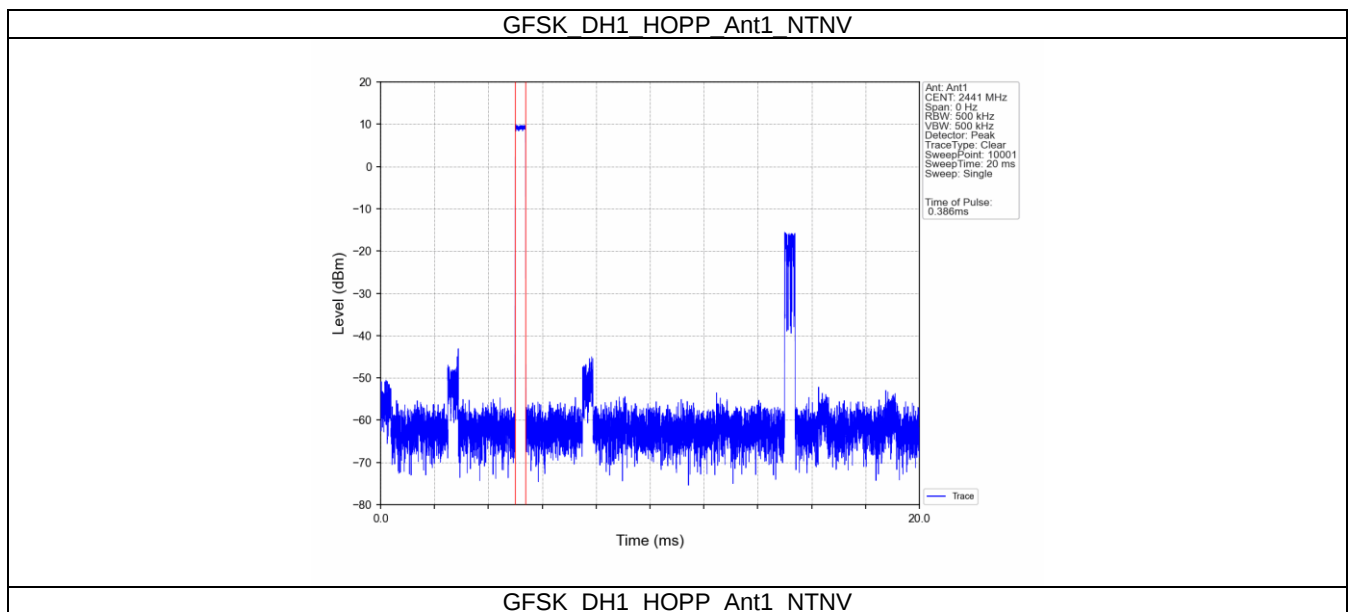
The maximum dwell time shall be 0.4 s.

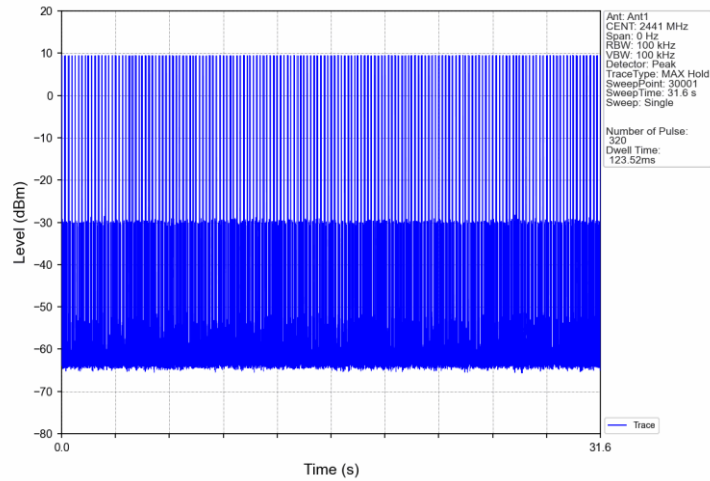
According to the Bluetooth Core Specification,

The duration for dwell time calculation: $0.4 \text{ [s]} \times \text{hopping number} = 0.4 \text{ [s]} \times 79 \text{ [ch]} = 31.6 \text{ [s]}$

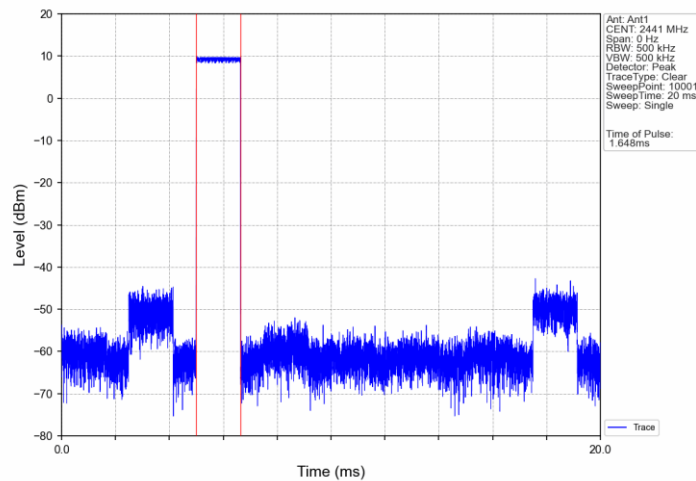
The Dwell Time = Burst Width * Total Hops.

Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.386	31.600	320	123.520	<=400	Pass
			DH3	1.648	31.600	156	257.088	<=400	Pass
			DH5	2.896	31.600	106	306.976	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.398	31.600	320	127.360	<=400	Pass
			2DH3	1.648	31.600	157	258.736	<=400	Pass
			2DH5	2.904	31.600	93	270.072	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.404	31.600	320	129.280	<=400	Pass
			3DH3	1.646	31.600	156	256.776	<=400	Pass
			3DH5	2.908	31.600	109	316.972	<=400	Pass

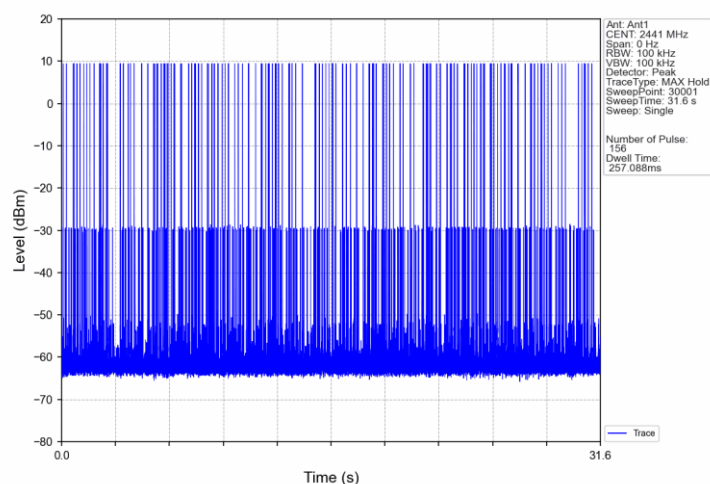




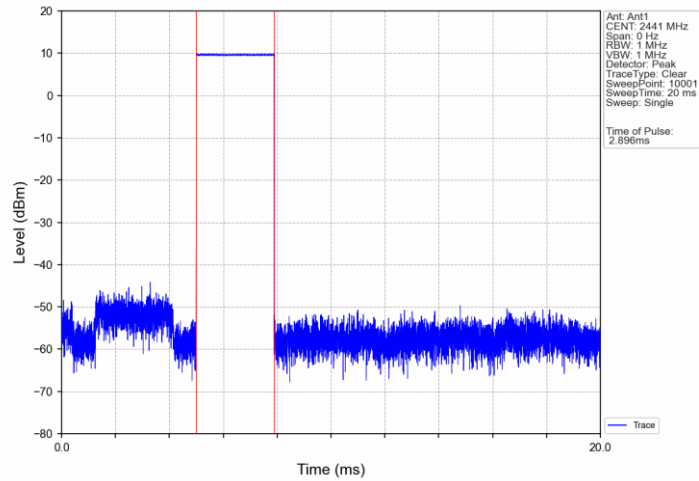
GFSK_DH3_HOPP_Ant1_NTNV



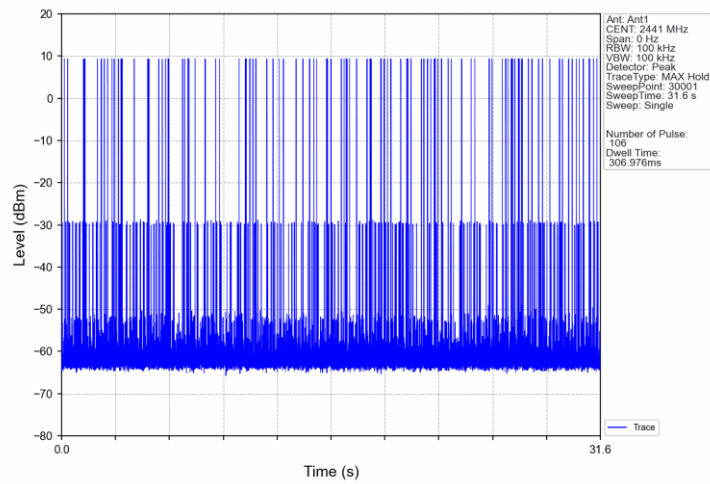
GFSK_DH3_HOPP_Ant1_NTNV



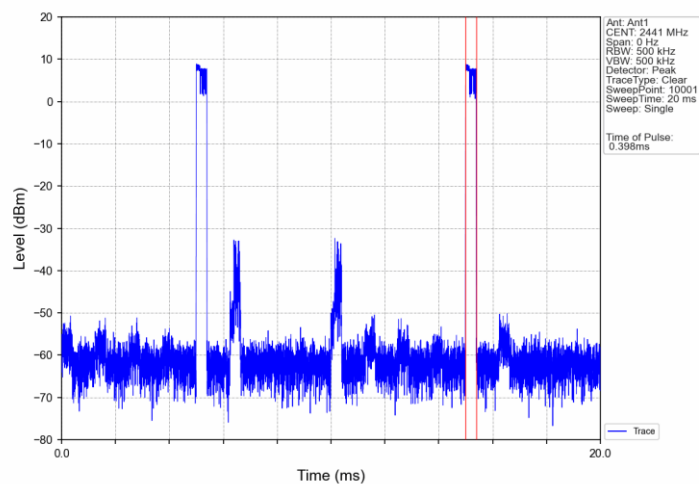
GFSK_DH5_HOPP_Ant1_NTNV



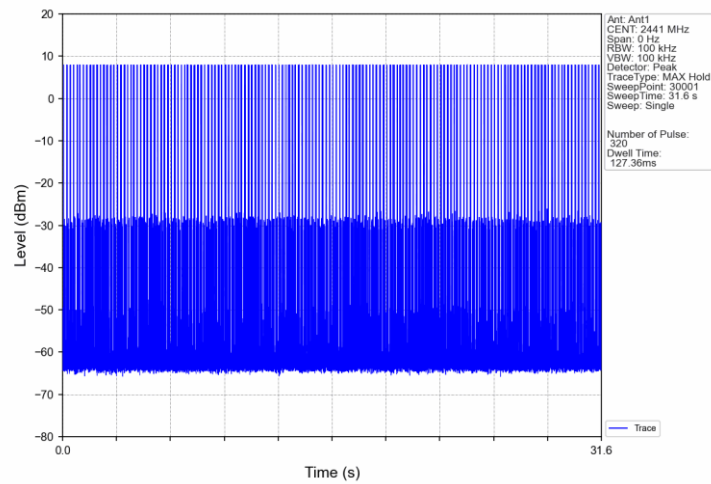
GFSK_DH5_HOPP_Ant1_NTNV



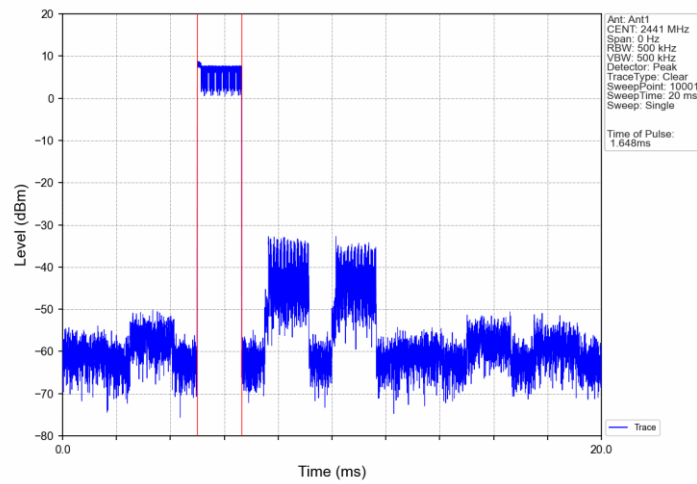
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



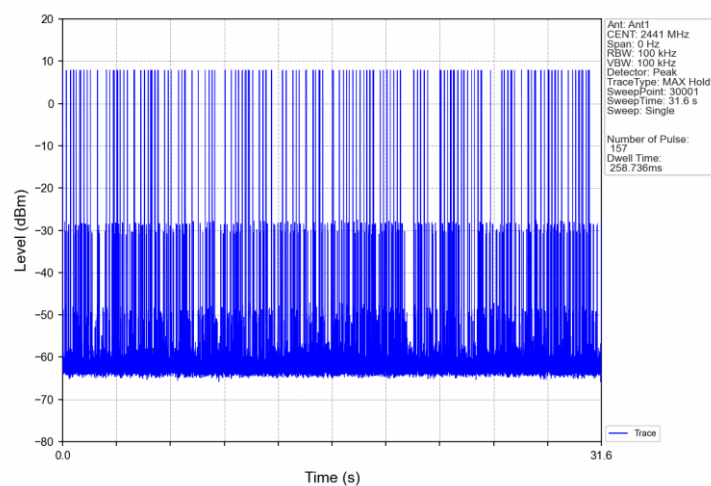
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



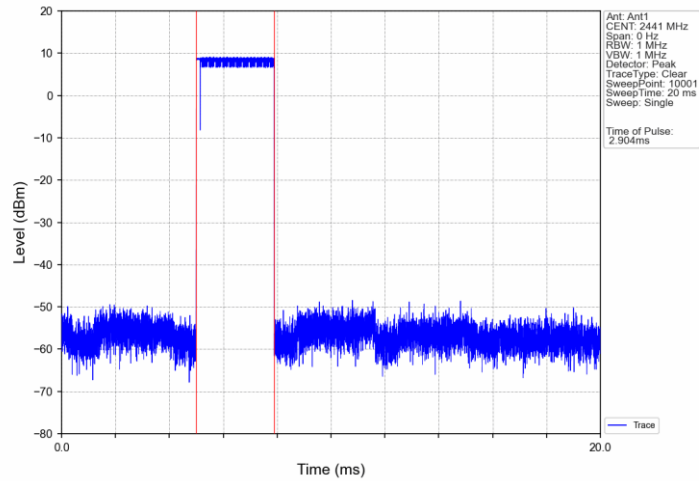
Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



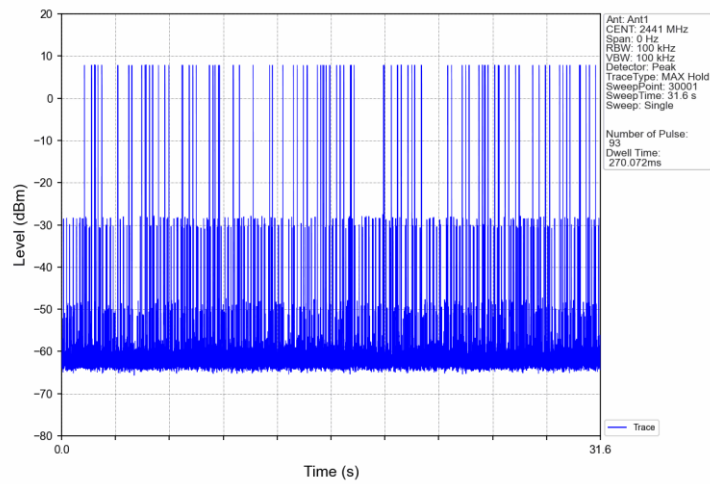
Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



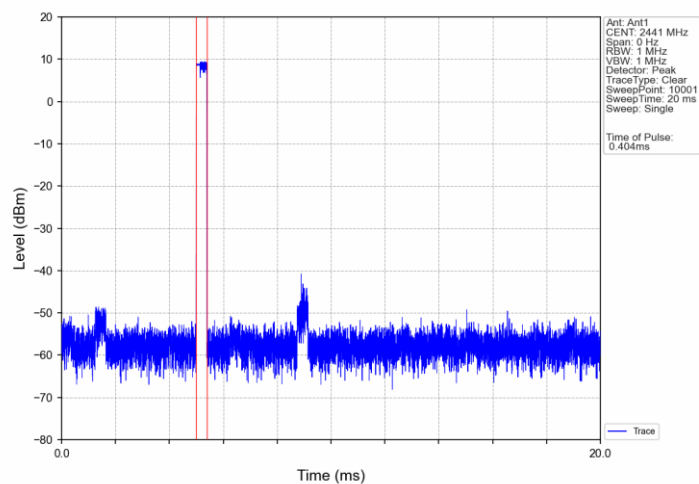
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



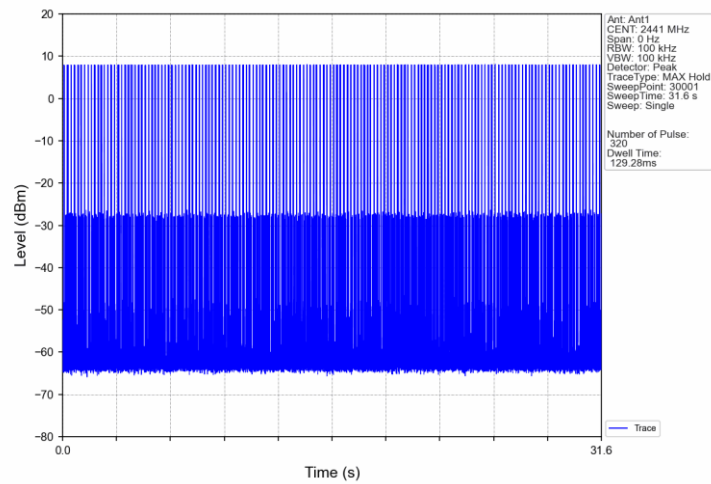
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



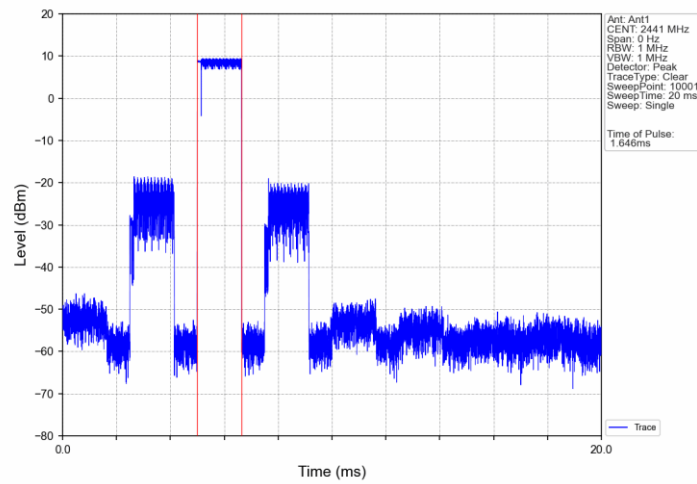
8DPSK_3DH1_HOPP_Ant1_NTNV



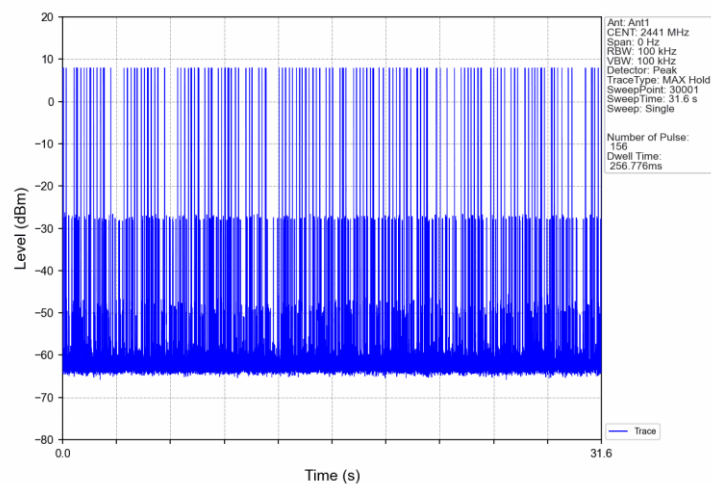
8DPSK_3DH1_HOPP_Ant1_NTNV



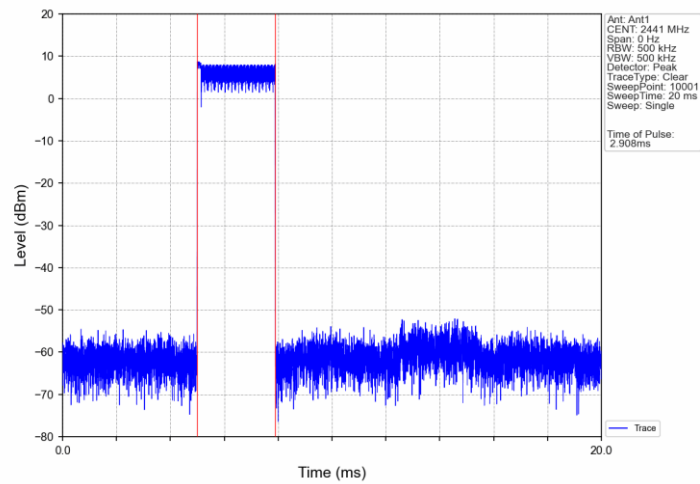
8DPSK_3DH3_HOPP_Ant1_NTNV



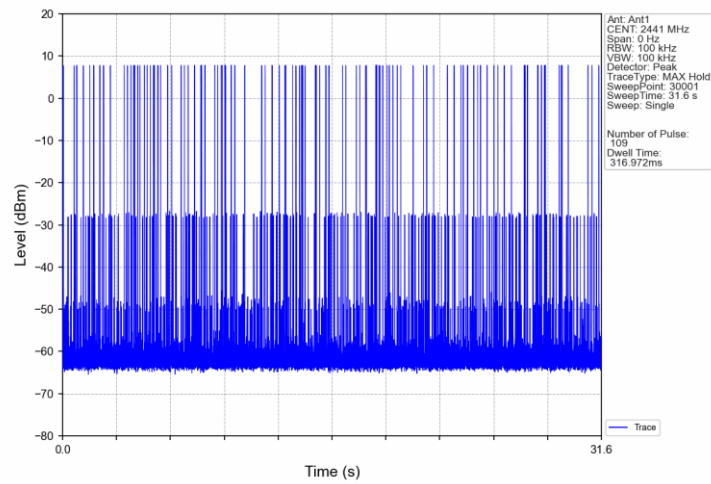
8DPSK_3DH3_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



9.7 Spurious RF Conducted Emissions

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector, Sweep = auto, Span = wide enough to capture the peak level of the in-band emission and all spurious emissions, Trace = max hold. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this Section.
4. Measure and record the results in the test report.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency

Limit

According to §15.247(d) & RSS-247 5.5, Spurious RF Conducted Emissions limit as below:

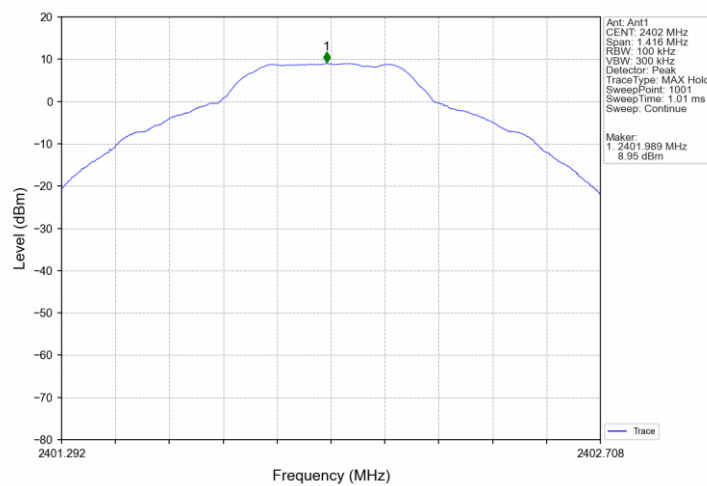
Frequency Range MHz	Limit (dBc)
30-25000	-20

Spurious RF Conducted Emissions

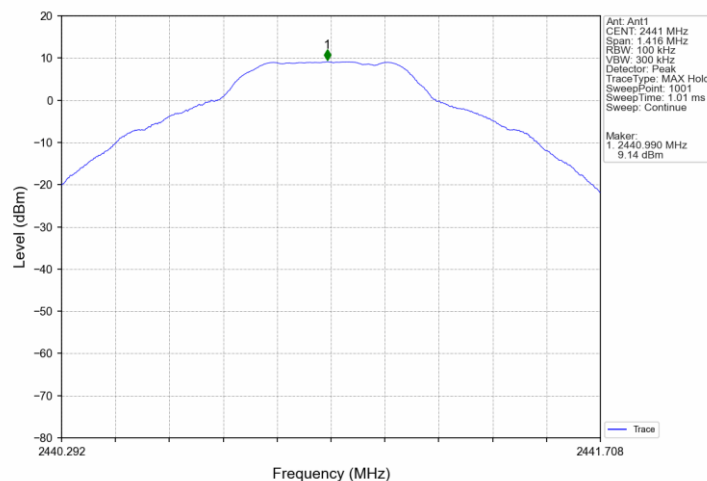
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	8.95	-11.05	Pass
		2441	DH5	1	9.14	-10.86	Pass
		2480	DH5	1	9.42	-10.58	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	6.03	-13.97	Pass
		2441	2DH5	1	6.26	-13.74	Pass
		2480	2DH5	1	6.49	-13.51	Pass
8DPSK	SISO	2402	3DH5	1	5.88	-14.12	Pass
		2441	3DH5	1	6.13	-13.87	Pass
		2480	3DH5	1	6.41	-13.59	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

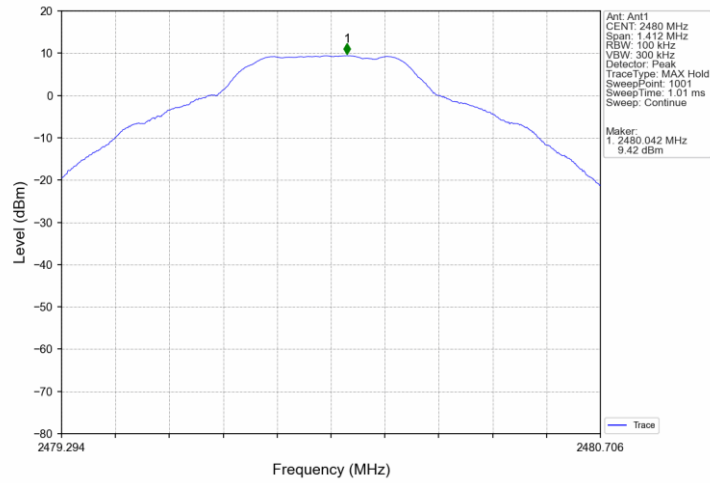
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



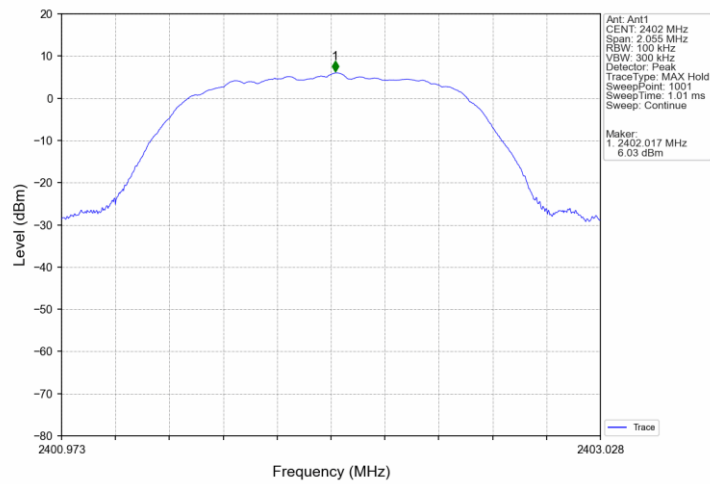
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



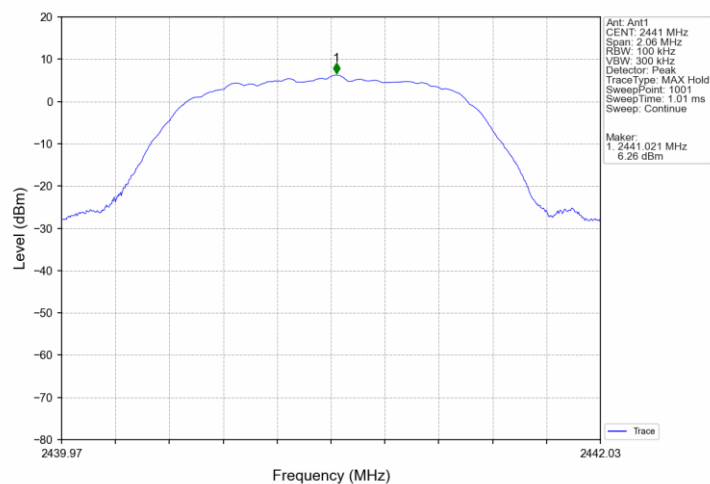
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



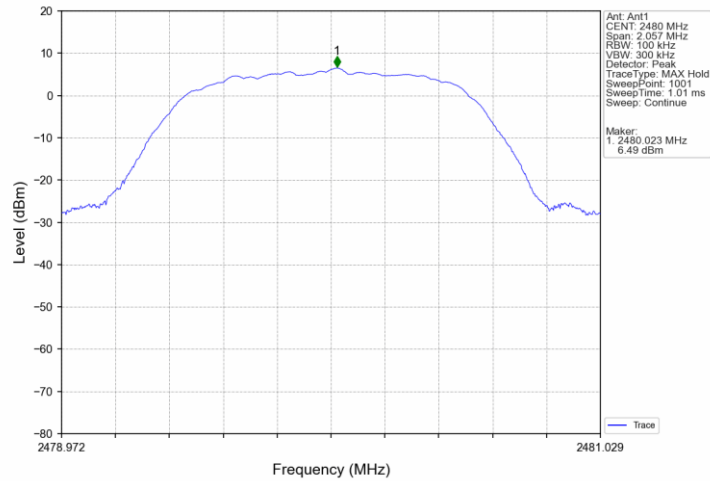
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



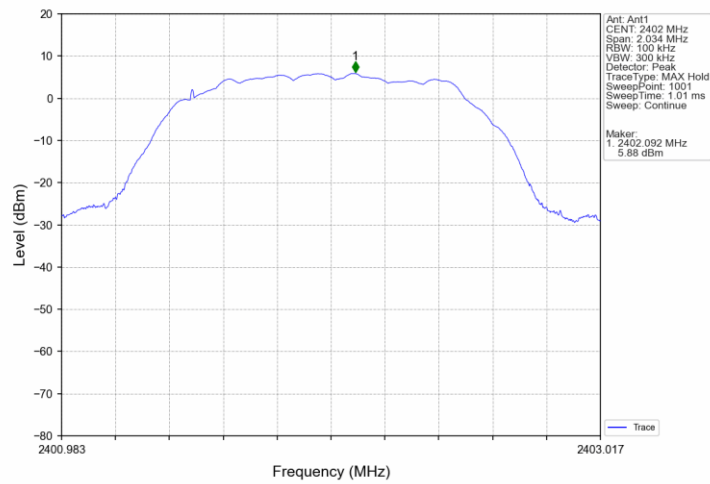
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



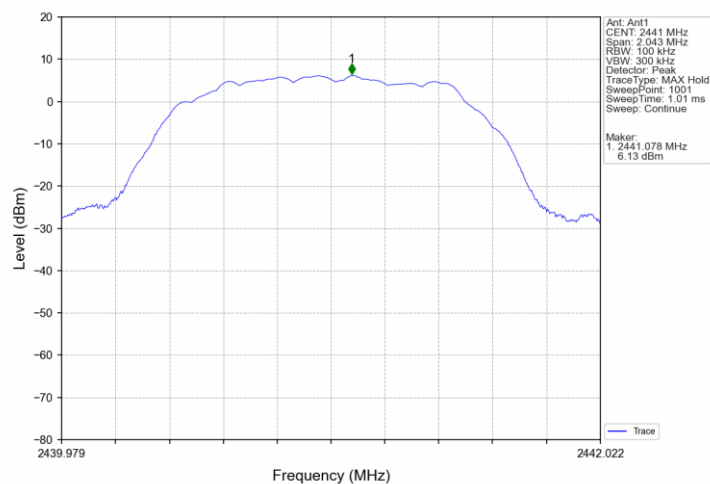
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTN



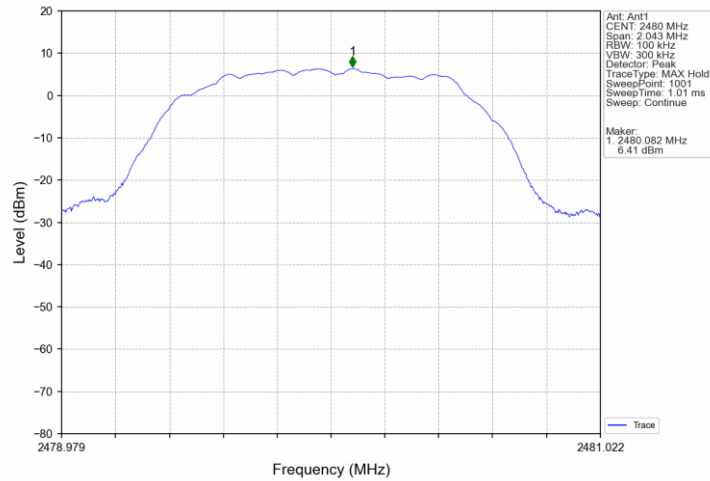
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



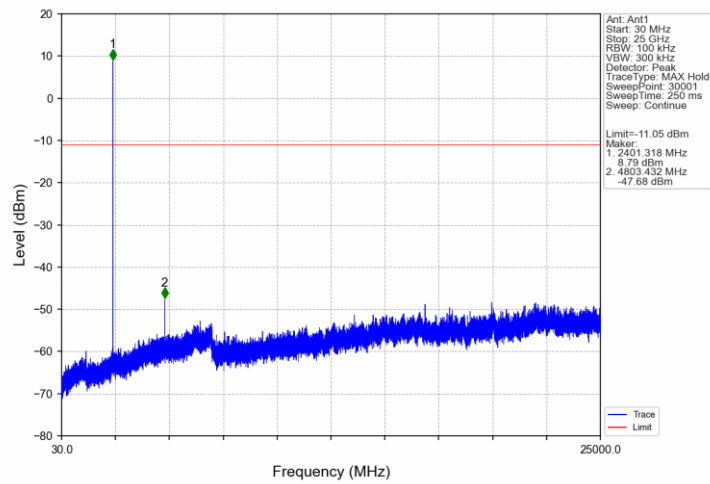
8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



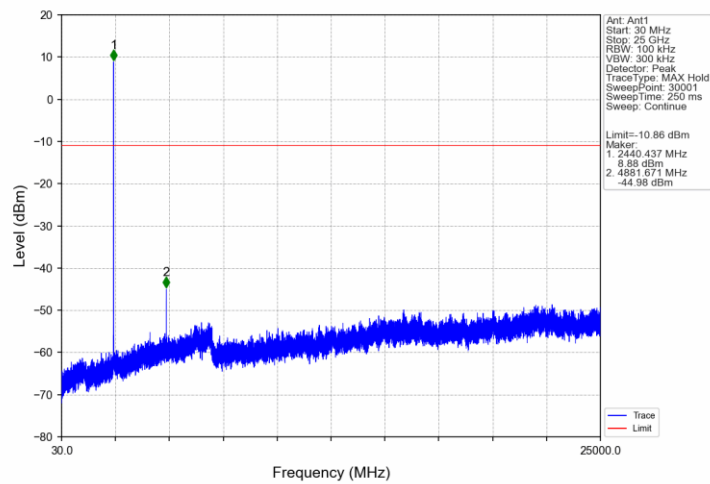
DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



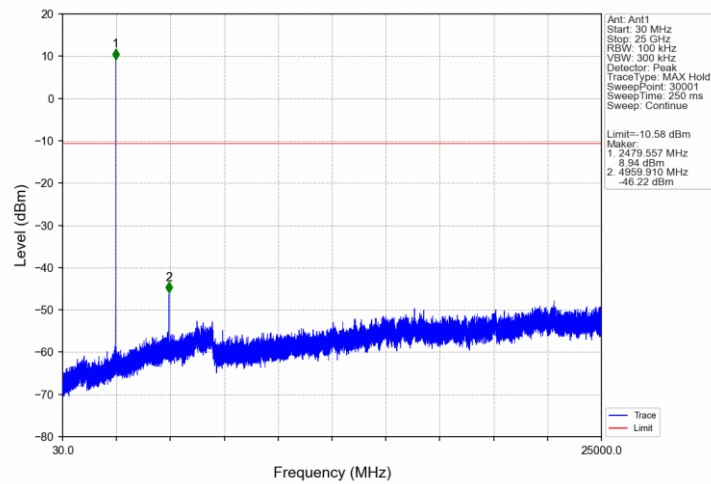
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



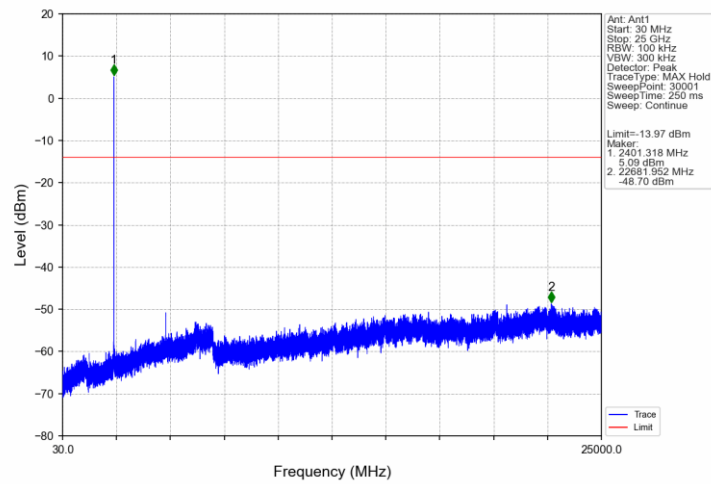
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



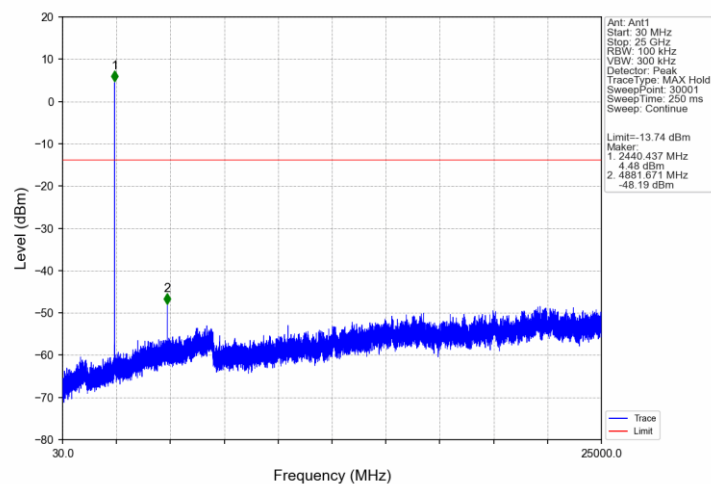
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



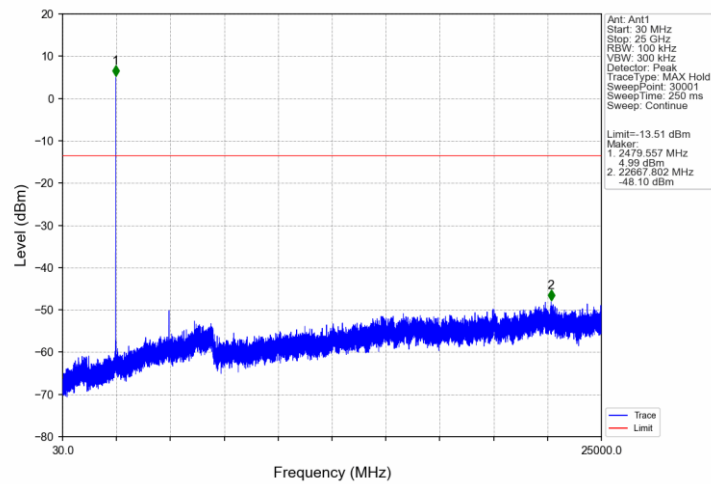
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



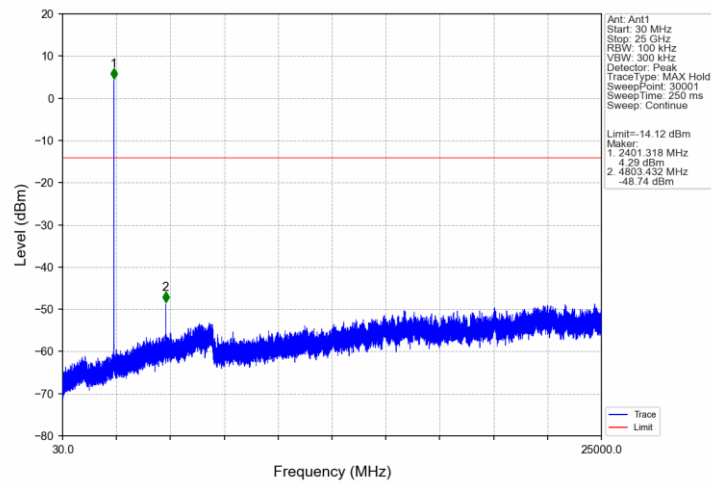
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



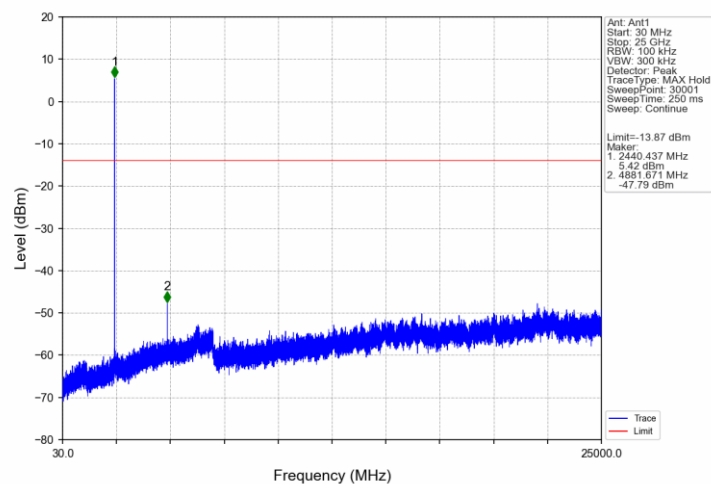
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV

