

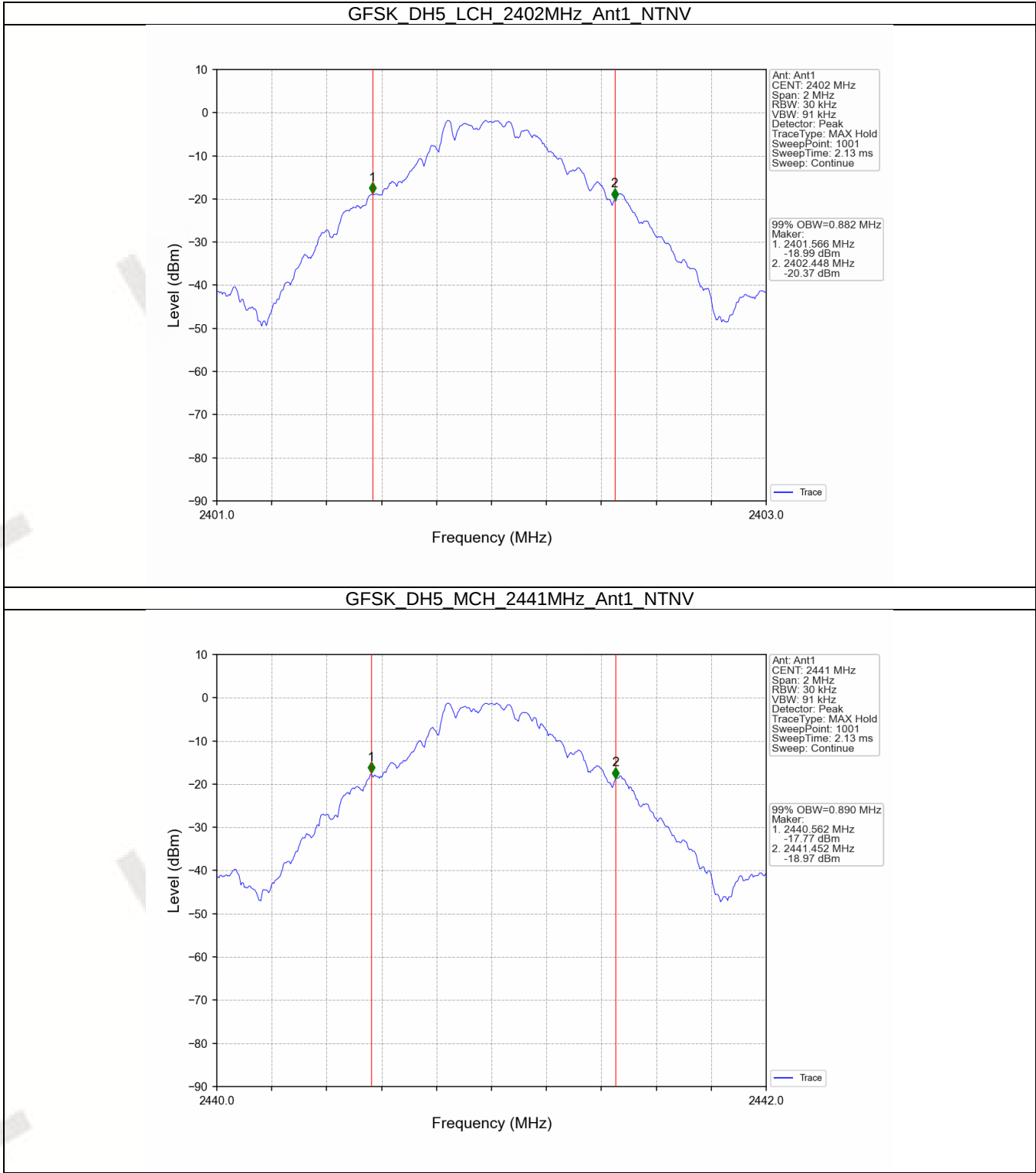
## 1. Bandwidth

### 1.1 OBW

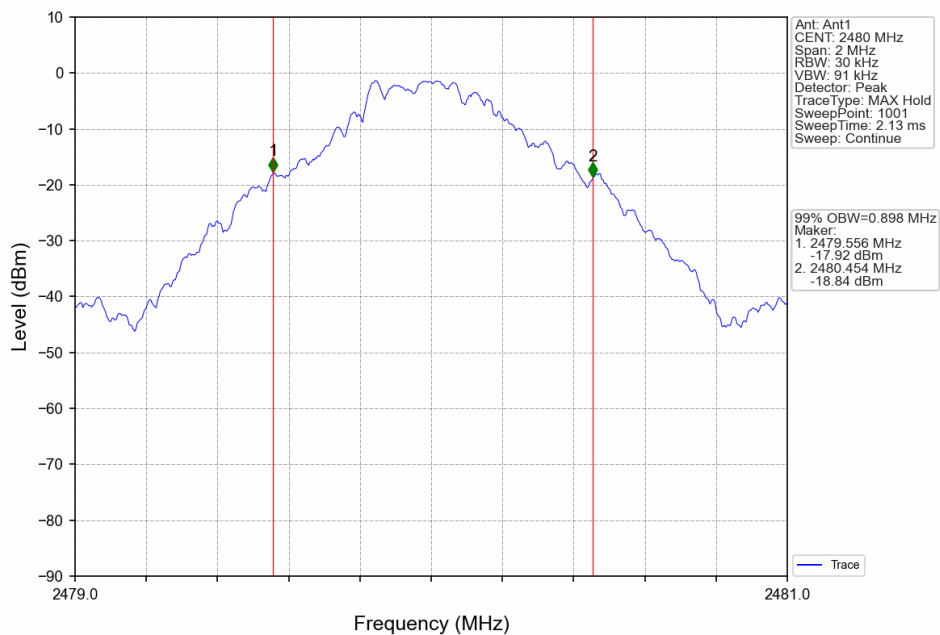
#### 1.1.1 Test Result

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|------------------------------|-------|---------|
|           |         |                 |             |     | Result                       | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.882                        | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 0.890                        | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 0.898                        | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.175                        | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.183                        | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.187                        | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.184                        | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.188                        | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.189                        | /     | Pass    |

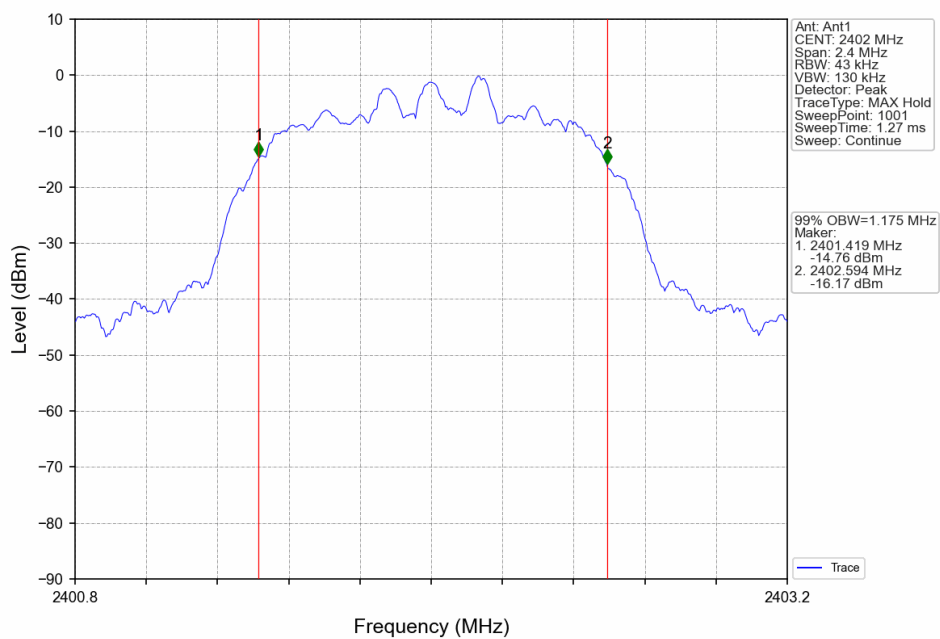
1.1.2 Test Graph



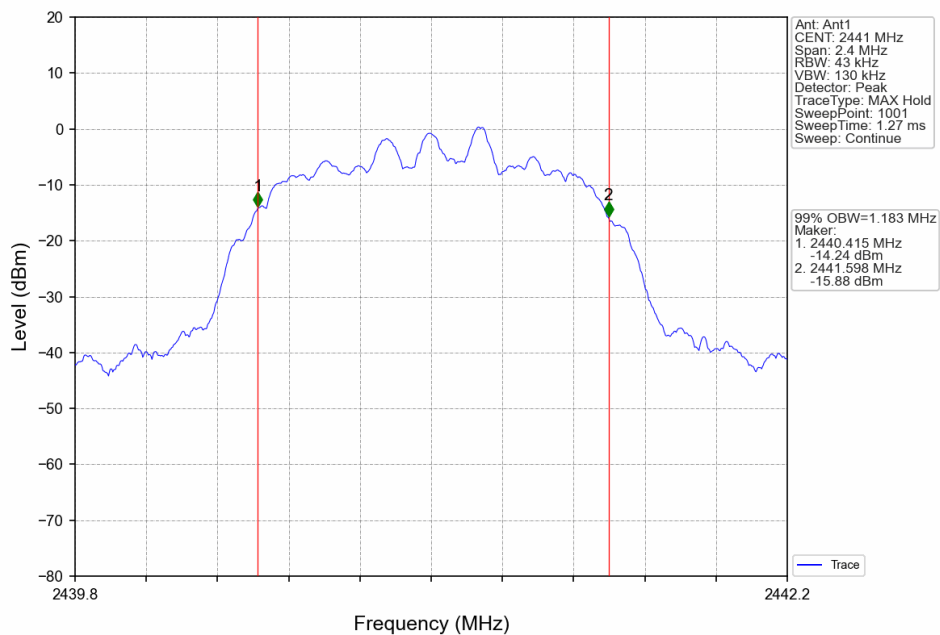
GFSK DH5 HCH 2480MHz Ant1 NTN



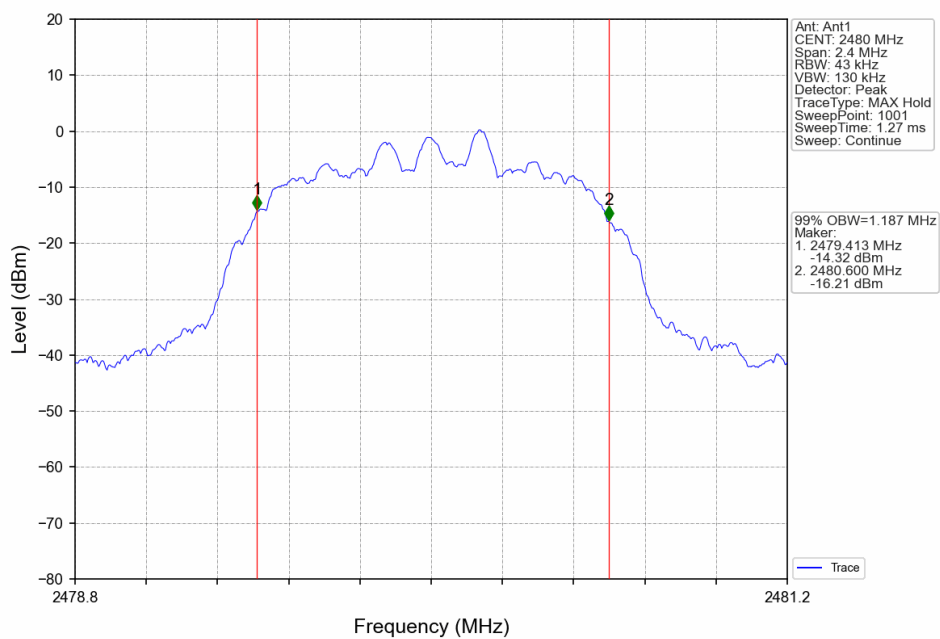
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



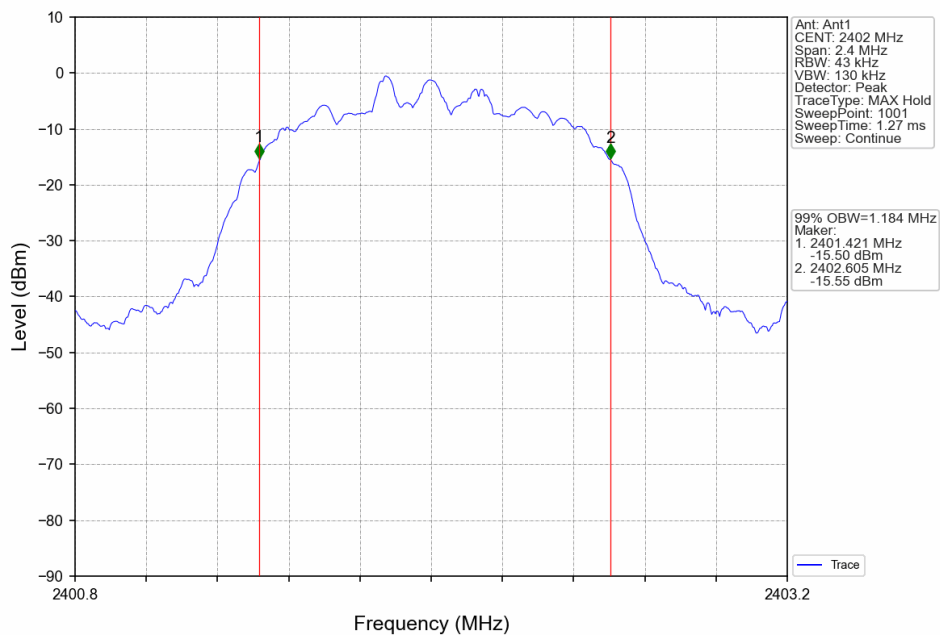
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



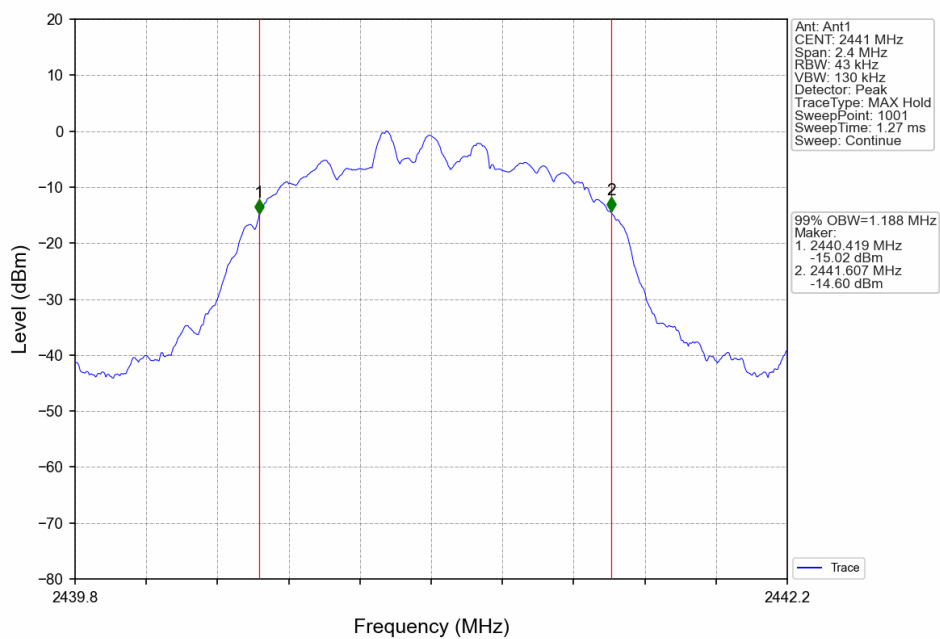
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTN

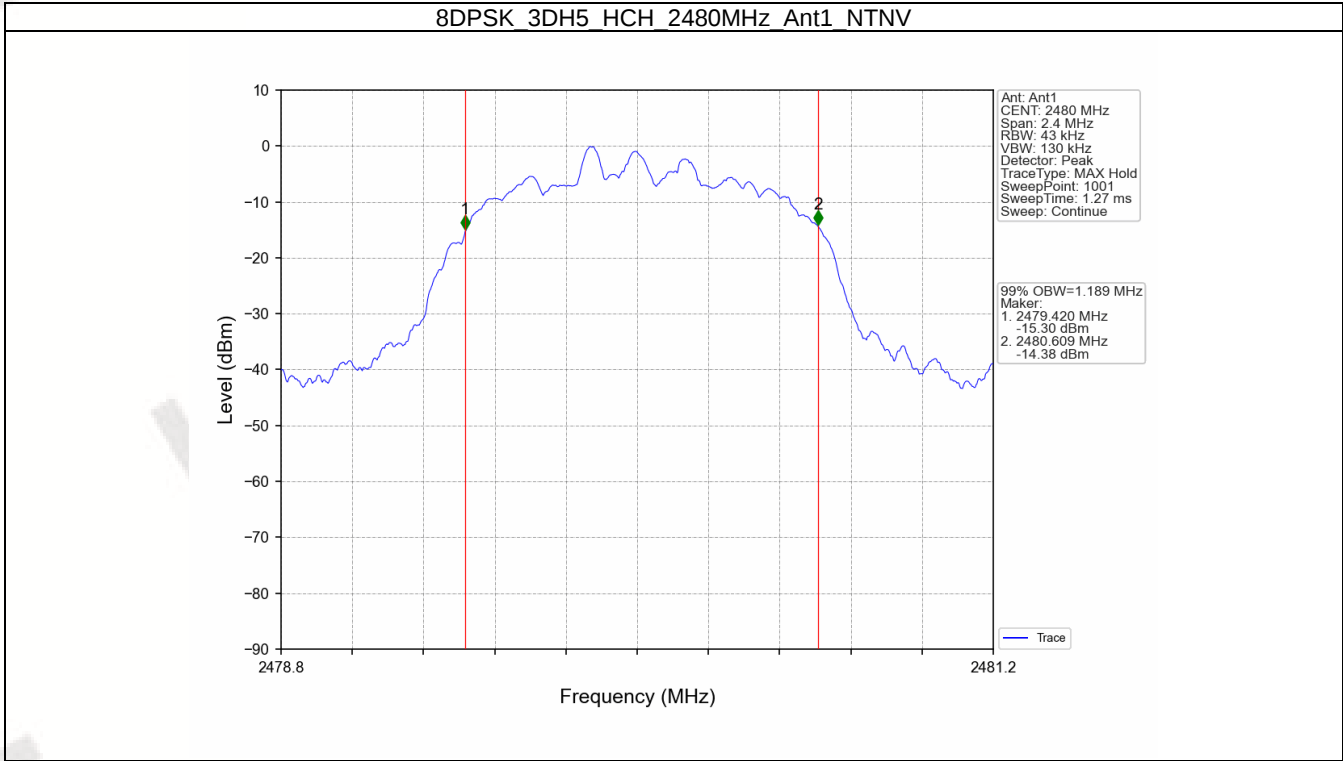


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



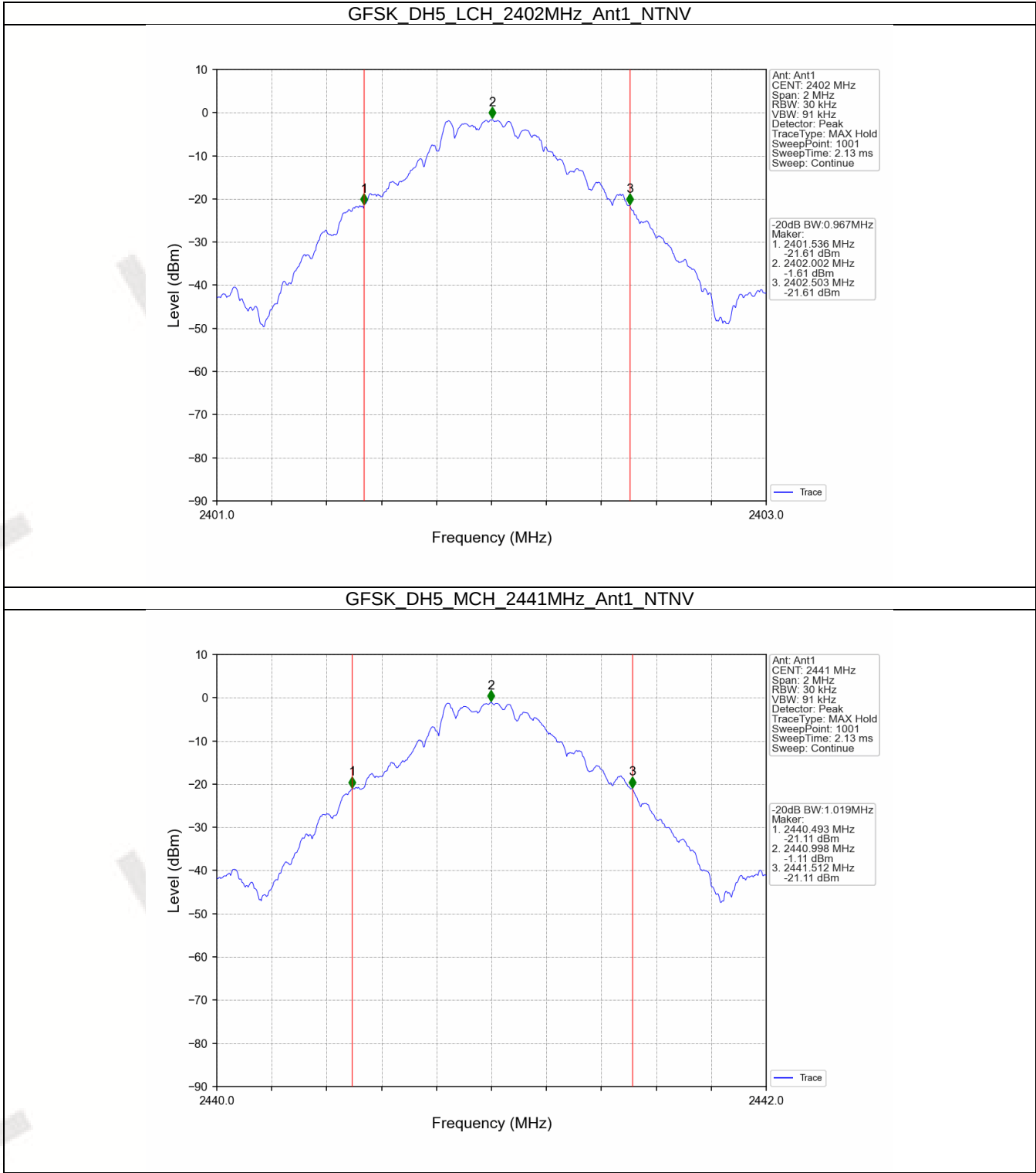


## 1.2 20dB BW

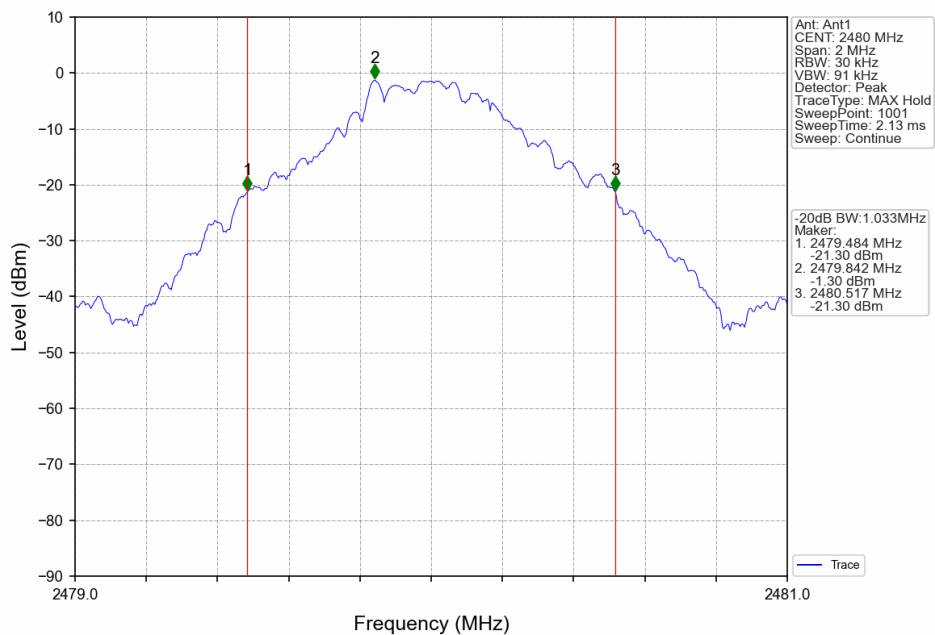
## 1.2.1 Test Result

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|----------------------|-------|---------|
|           |         |                 |             |     | Result               | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.967                | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 1.019                | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 1.033                | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.326                | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.298                | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.300                | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.313                | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.312                | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.311                | /     | Pass    |

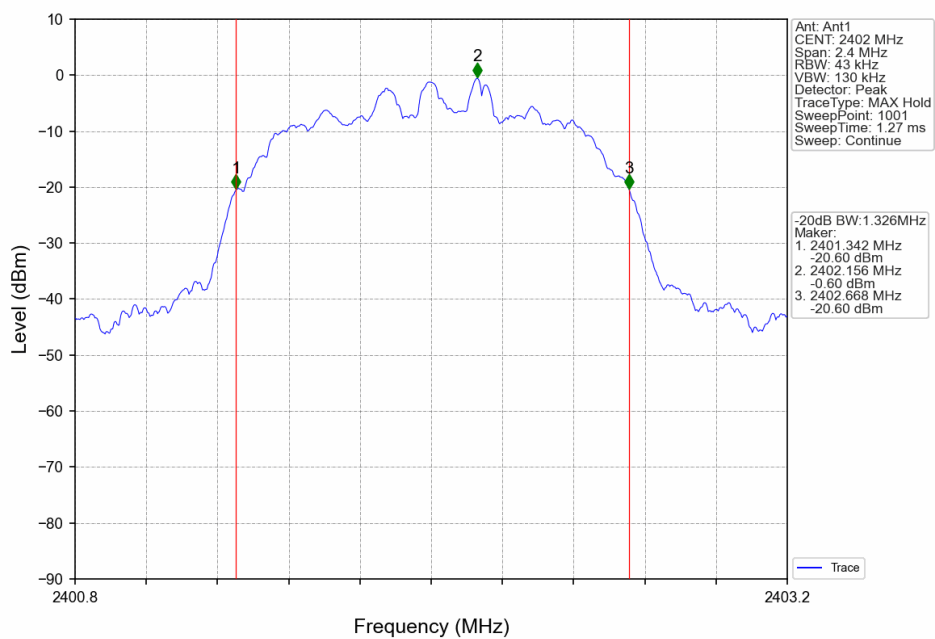
1.2.2 Test Graph



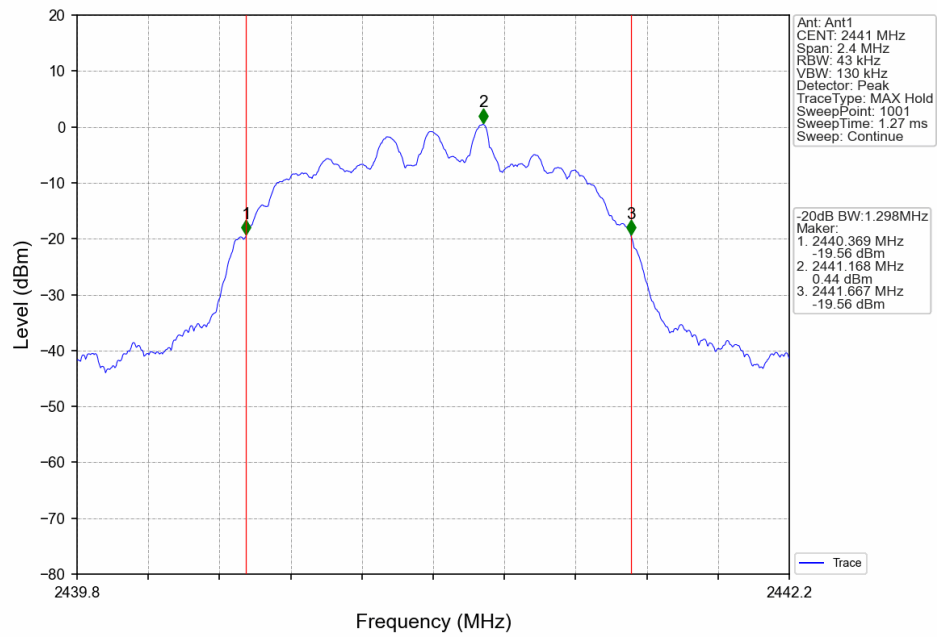
GFSK DH5 HCH 2480MHz Ant1 NTN



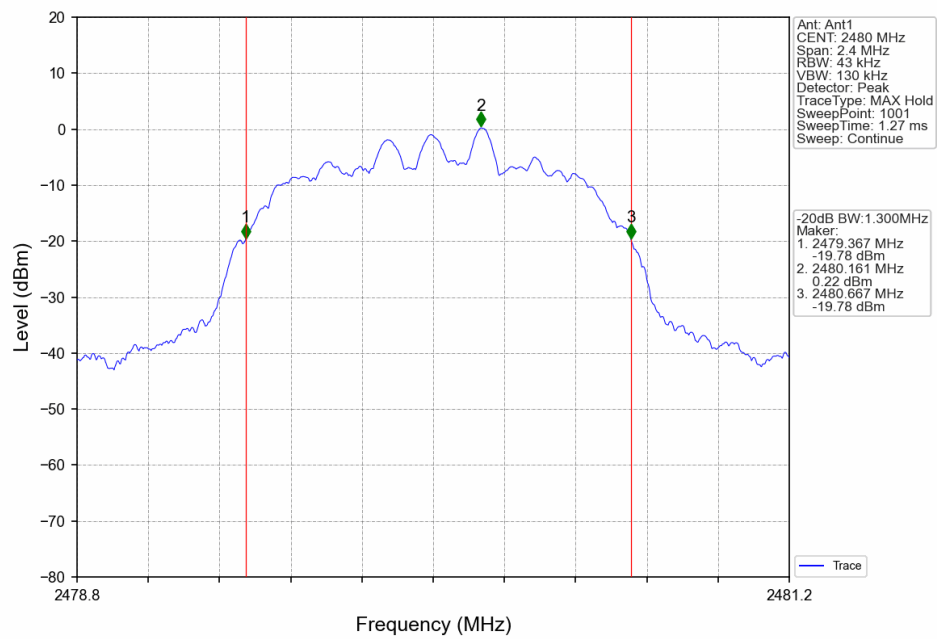
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



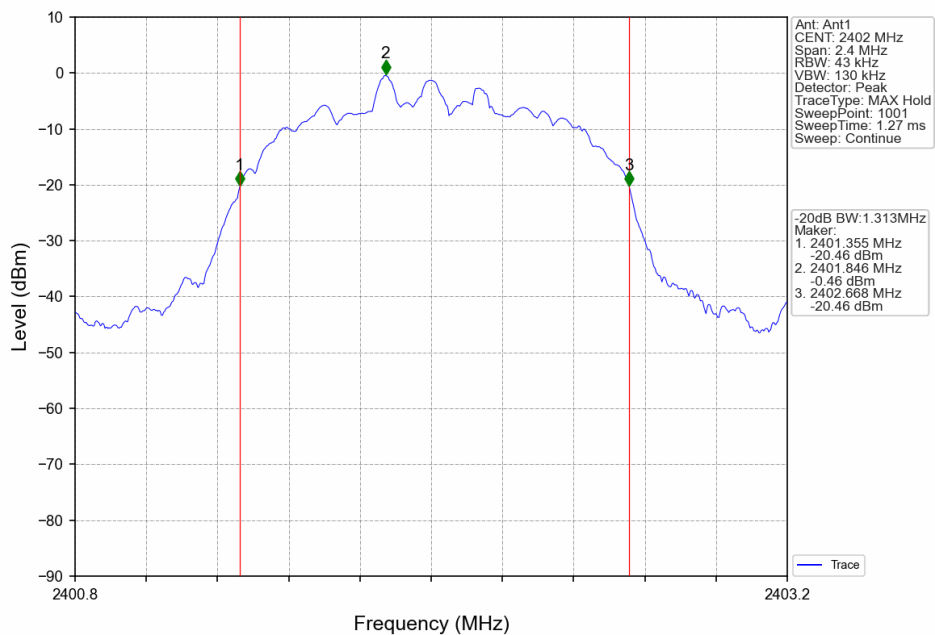
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



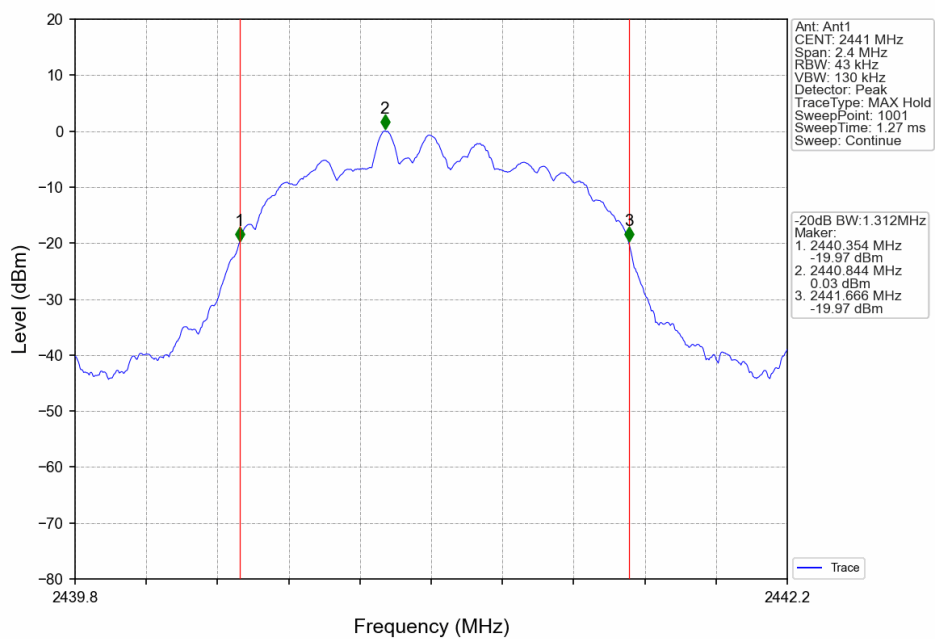
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

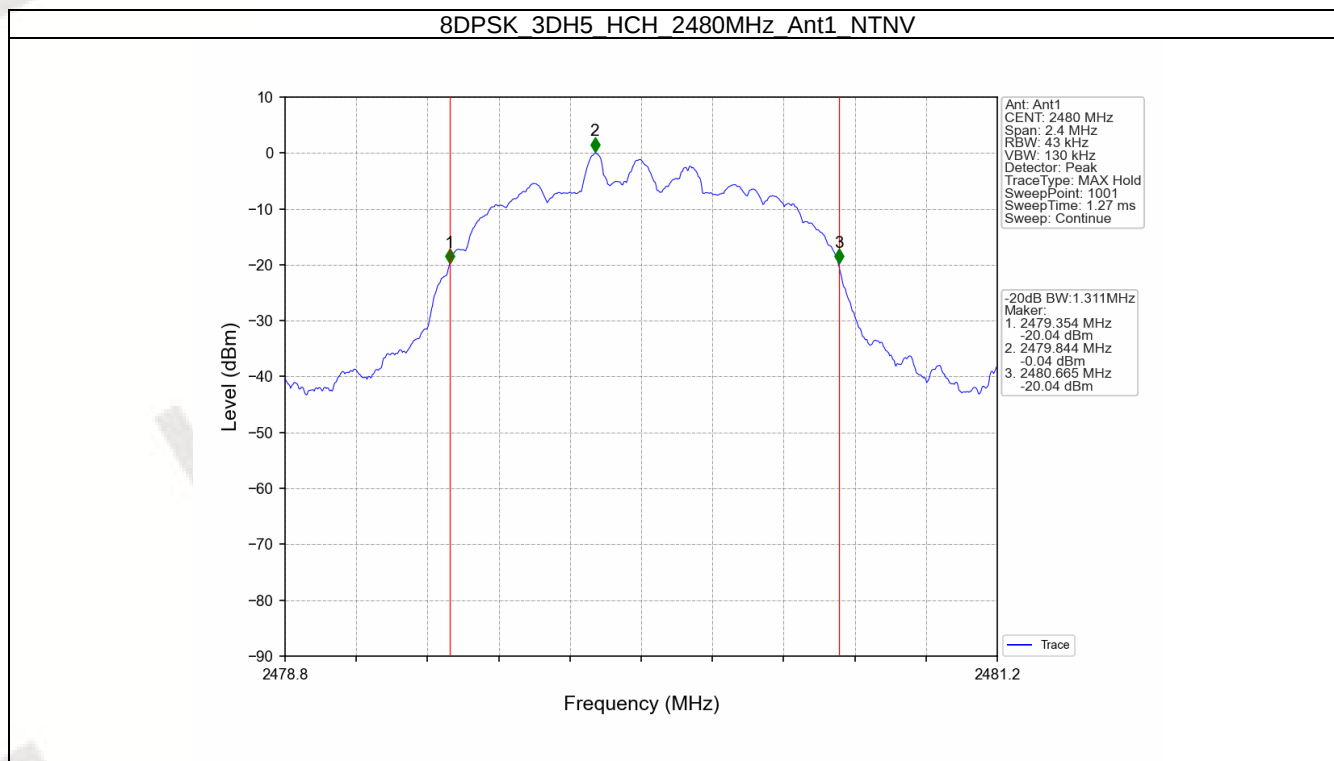


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV





## 2. Maximum Conducted Output Power

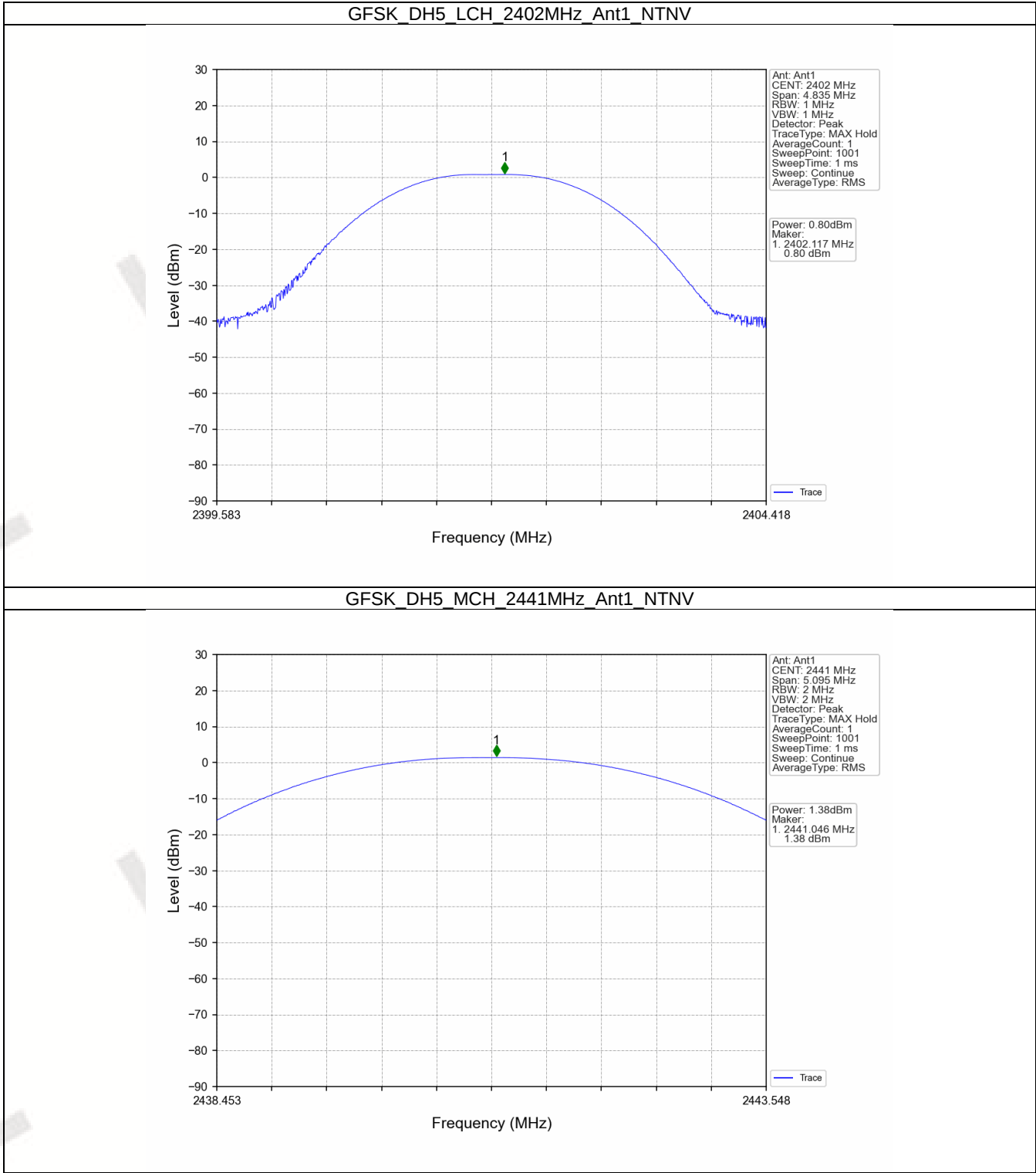
### 2.1 Power

#### 2.1.1 Test Result

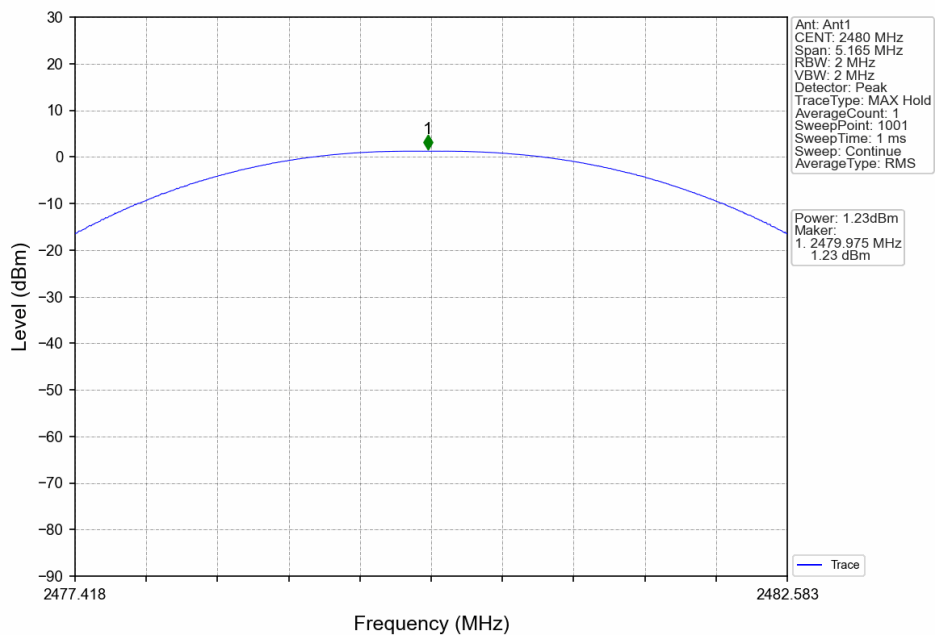
| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |         | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|---------|---------|
|           |         |                 |             | ANT1                                      | Limit   |         |
| GFSK      | SISO    | 2402            | DH5         | 0.80                                      | <=20.97 | Pass    |
|           |         | 2441            | DH5         | 1.38                                      | <=20.97 | Pass    |
|           |         | 2480            | DH5         | 1.23                                      | <=20.97 | Pass    |
| PI/4DQPSK | SISO    | 2402            | 2DH5        | 1.60                                      | <=20.97 | Pass    |
|           |         | 2441            | 2DH5        | 2.13                                      | <=20.97 | Pass    |
|           |         | 2480            | 2DH5        | 2.00                                      | <=20.97 | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 2.00                                      | <=20.97 | Pass    |
|           |         | 2441            | 3DH5        | 2.57                                      | <=20.97 | Pass    |
|           |         | 2480            | 3DH5        | 2.40                                      | <=20.97 | Pass    |

Note1: Antenna Gain: Ant1: 1.08dBi;

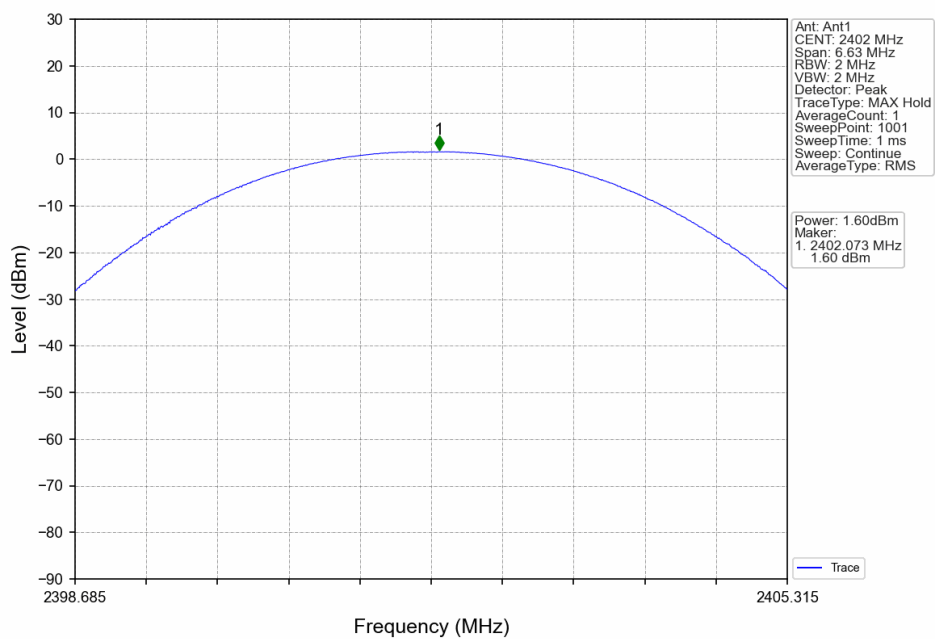
2.1.2 Test Graph



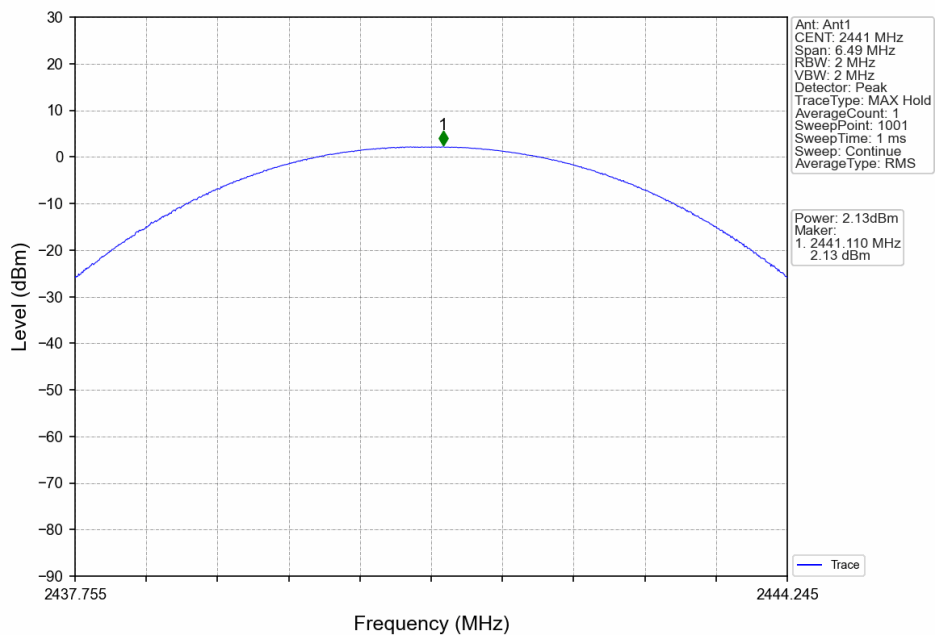
GFSK DH5 HCH 2480MHz Ant1 NTN



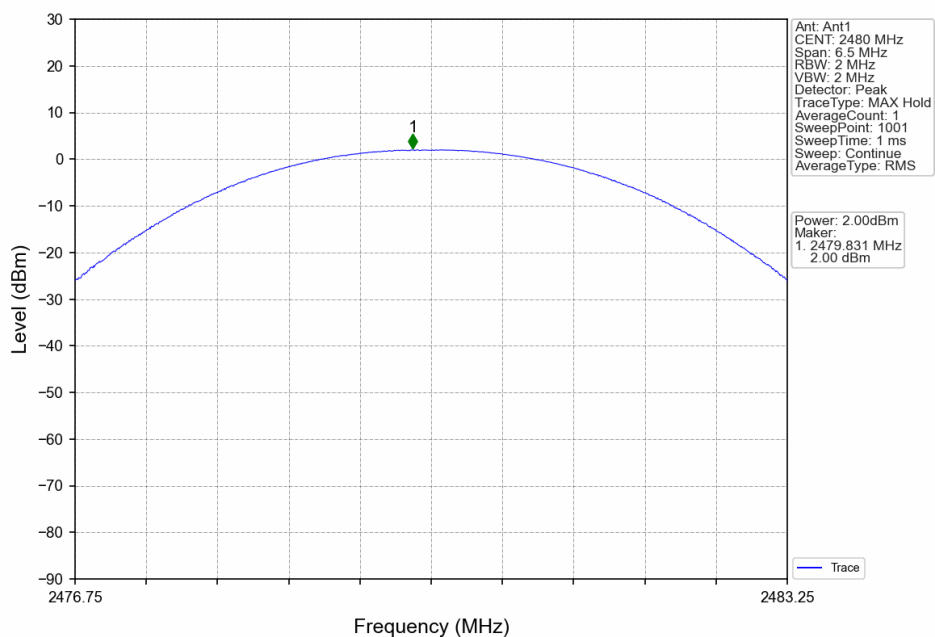
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



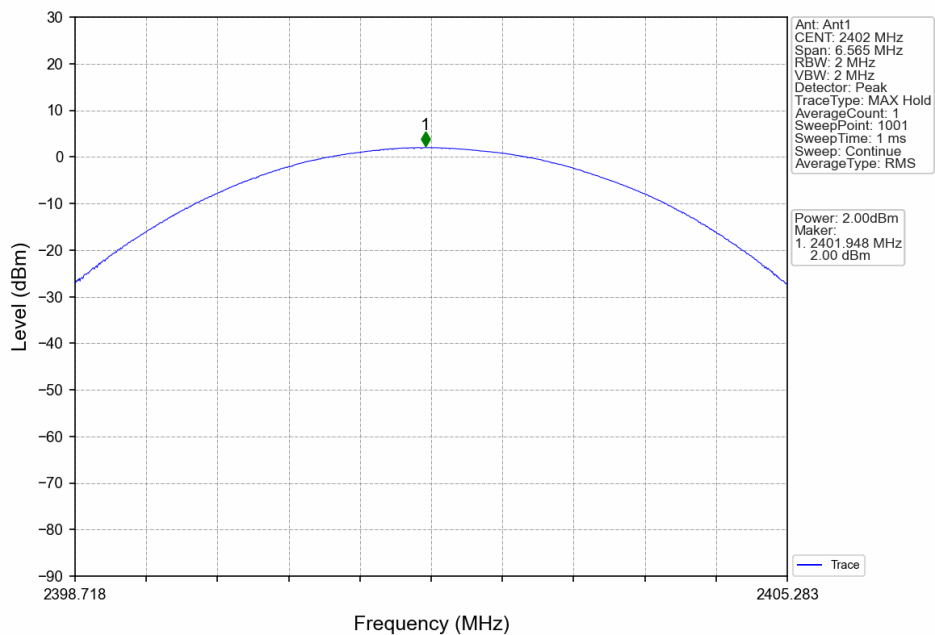
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



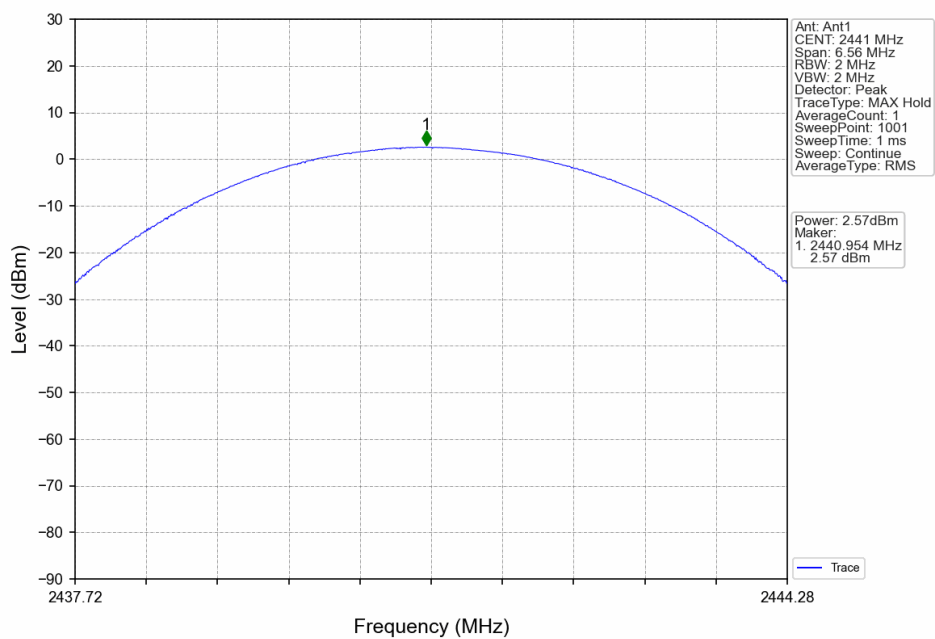
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

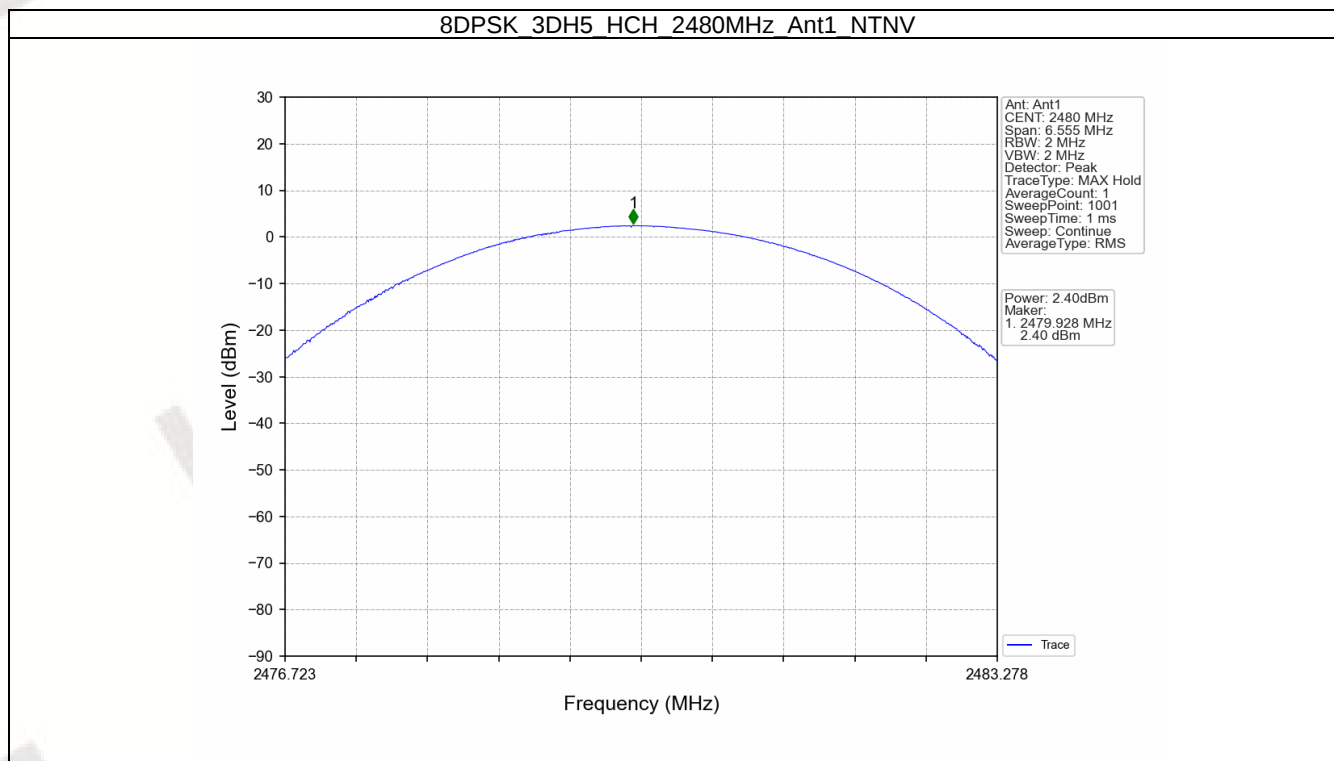


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV





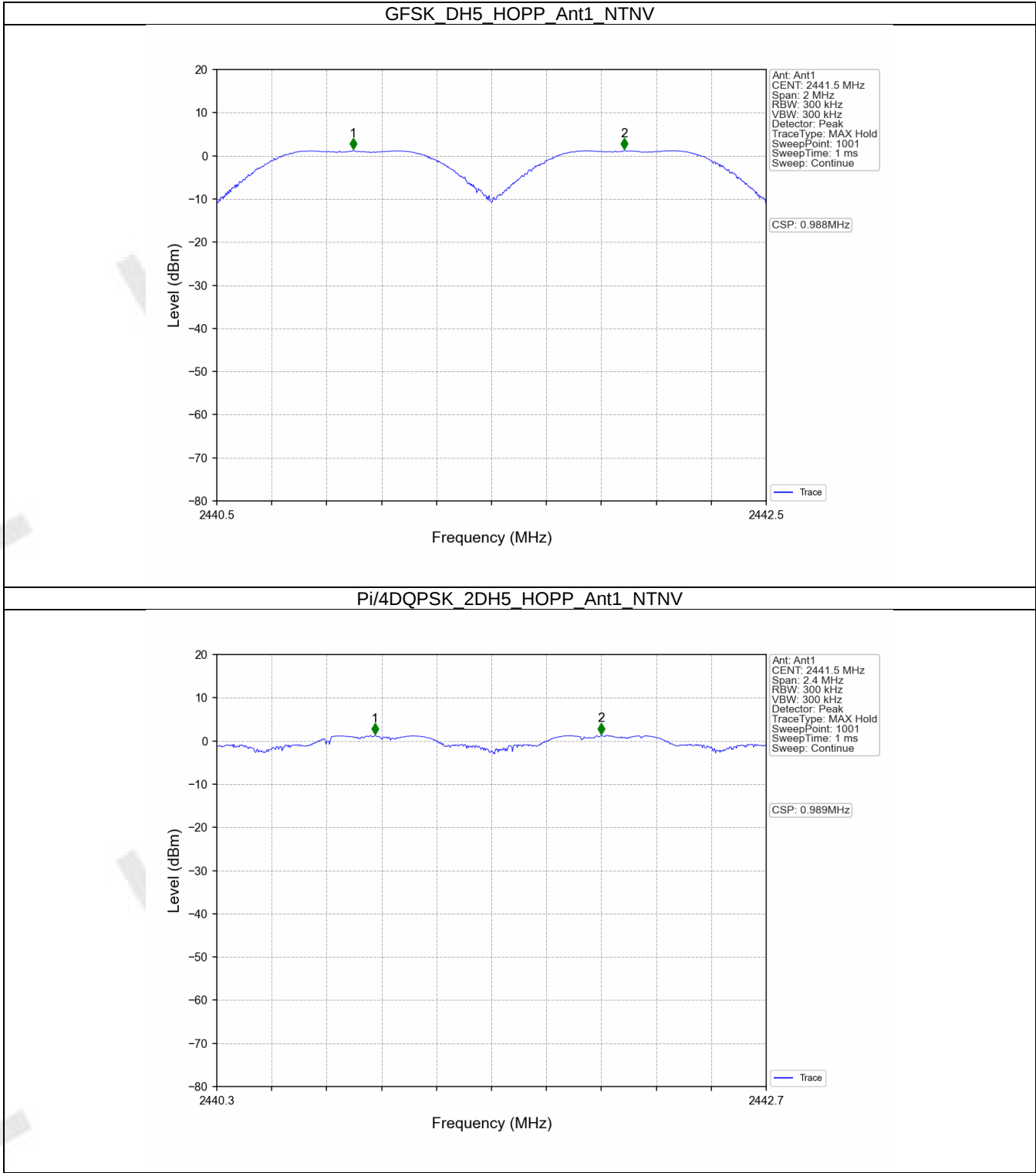
### 3. Carrier Frequency Separation

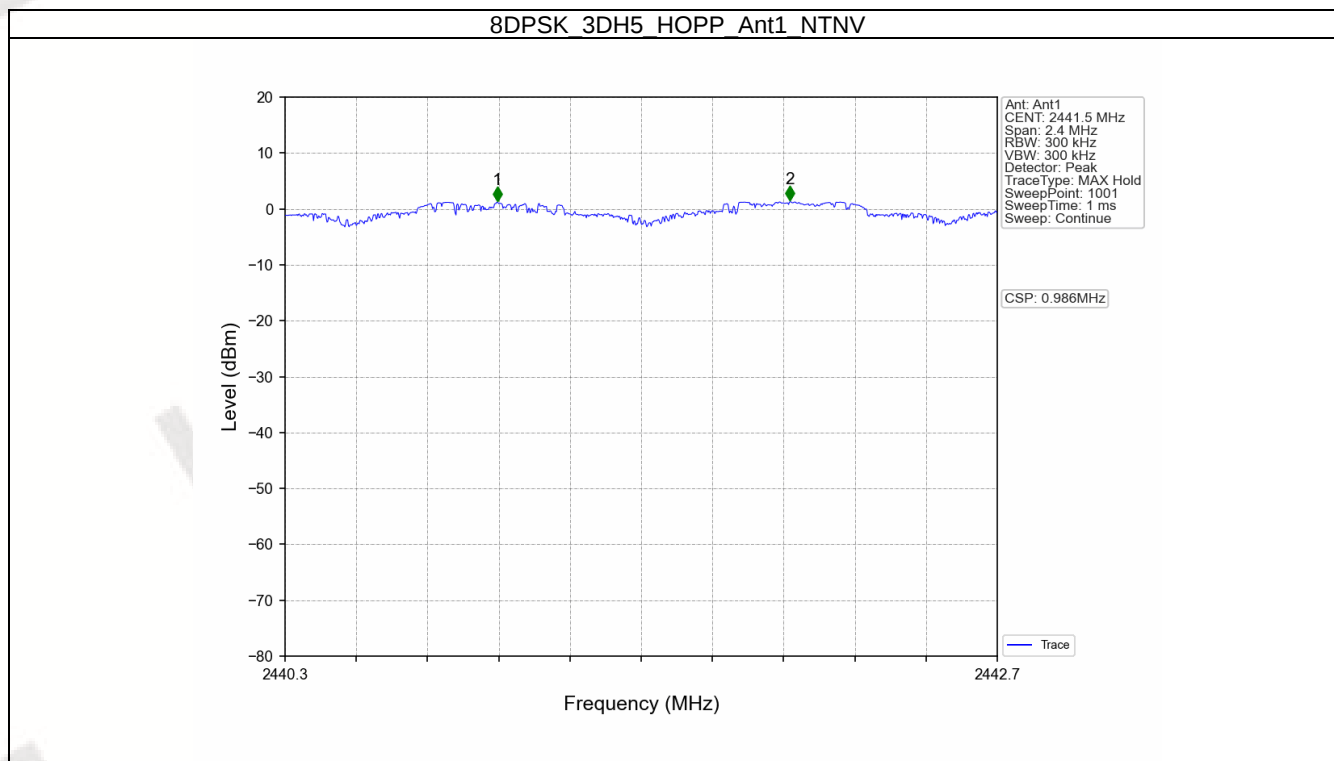
#### 3.1 Ant1

##### 3.1.1 Test Result

| Ant1      |         |                 |             |                          |                      |              |         |
|-----------|---------|-----------------|-------------|--------------------------|----------------------|--------------|---------|
| Mode      | TX Type | Frequency (MHz) | Packet Type | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limit (MHz)  | Verdict |
| GFSK      | SISO    | HOPP            | DH5         | 0.988                    | 1.033                | $\geq 0.689$ | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 0.989                    | 1.326                | $\geq 0.884$ | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 0.986                    | 1.313                | $\geq 0.875$ | Pass    |

3.1.2 Test Graph





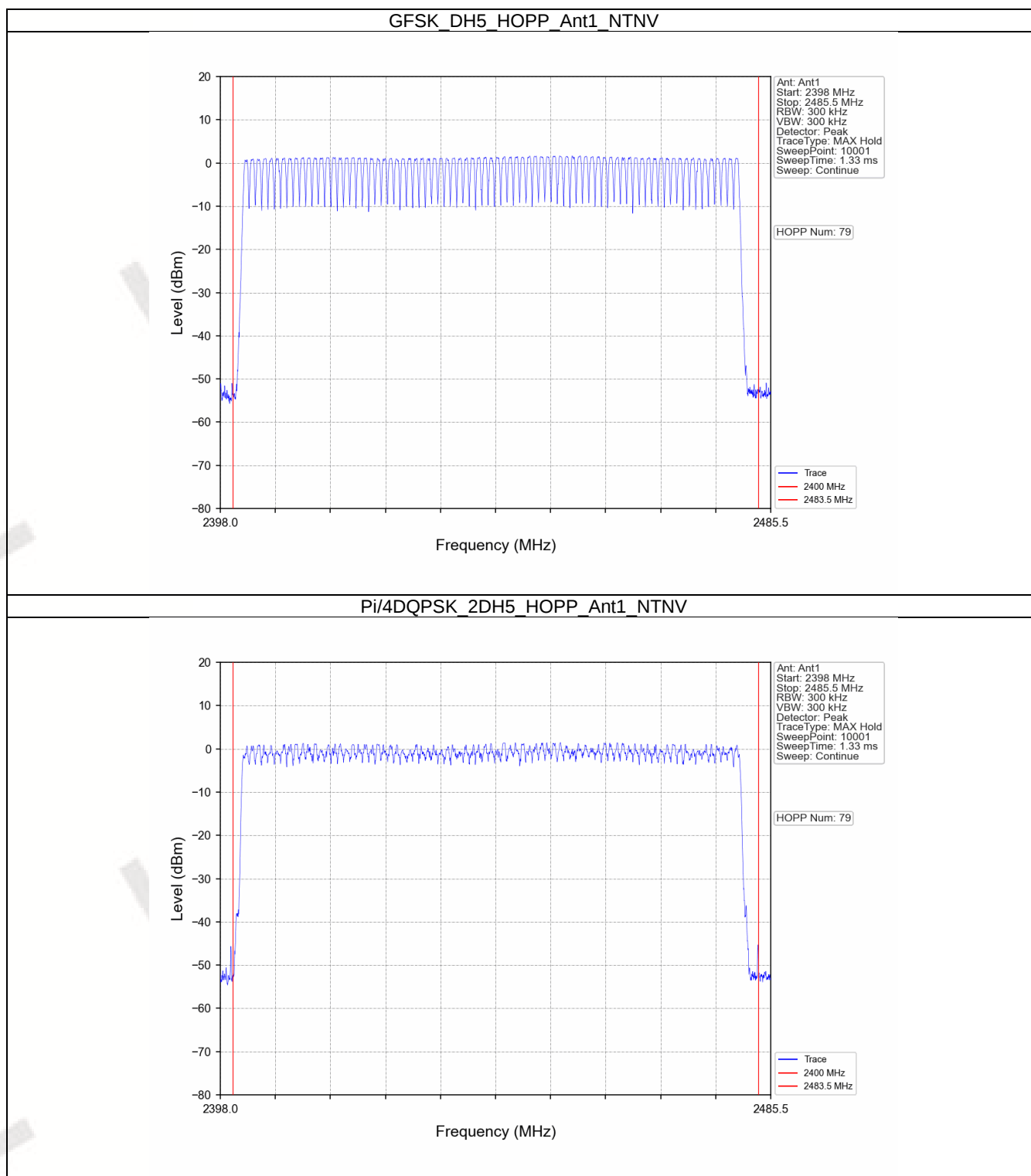
## 4. Number of Hopping Frequencies

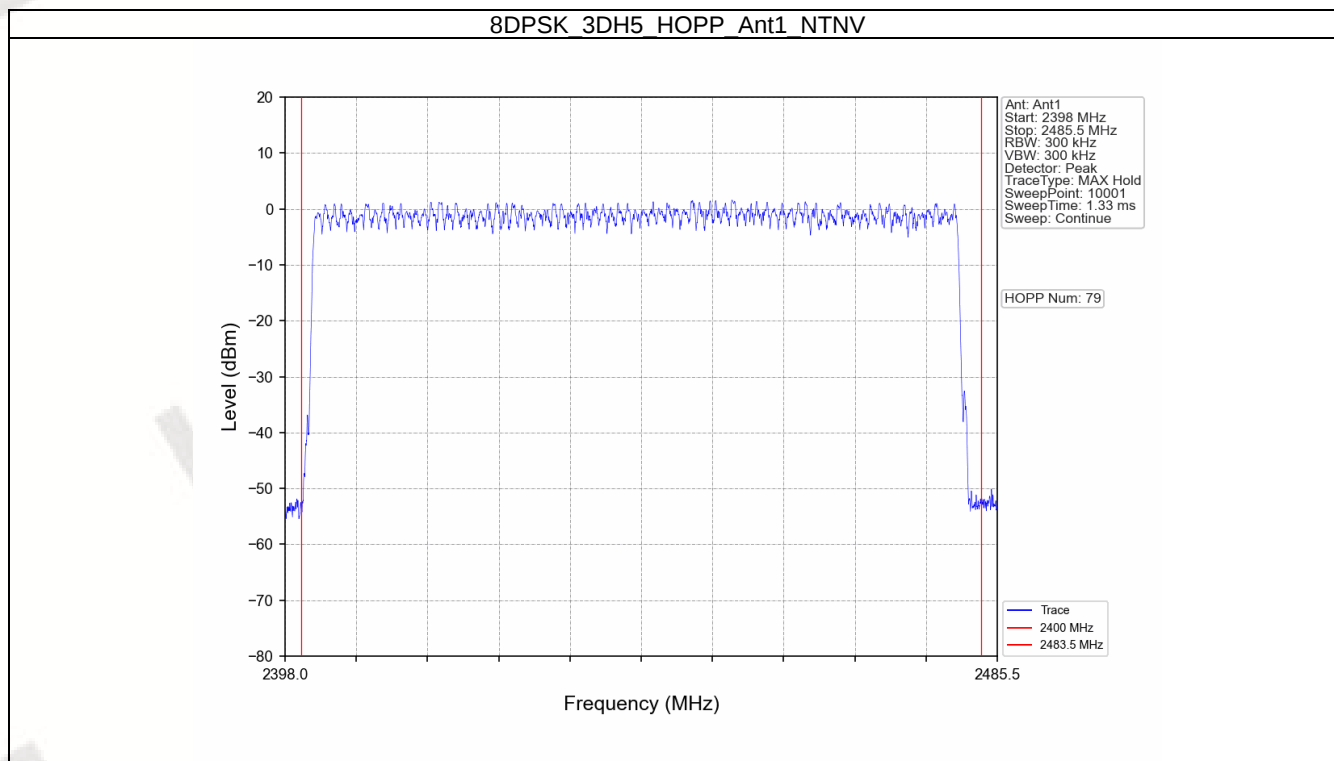
### 4.1 HoppNum

#### 4.1.1 Test Result

| 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    |

## 4.1.2 Test Graph





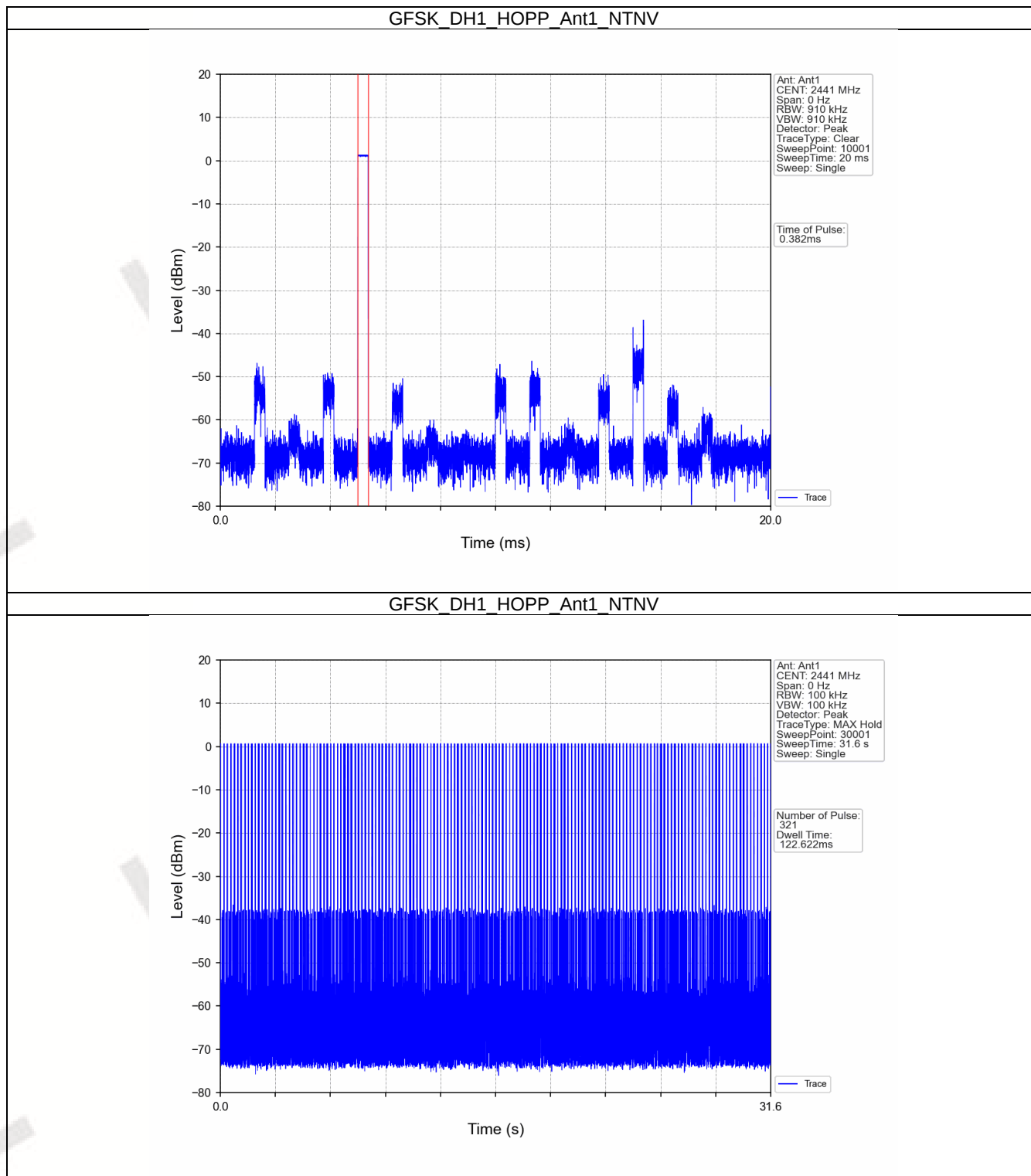
## 5. Time of Occupancy (Dwell Time)

## 5.1 Ant1

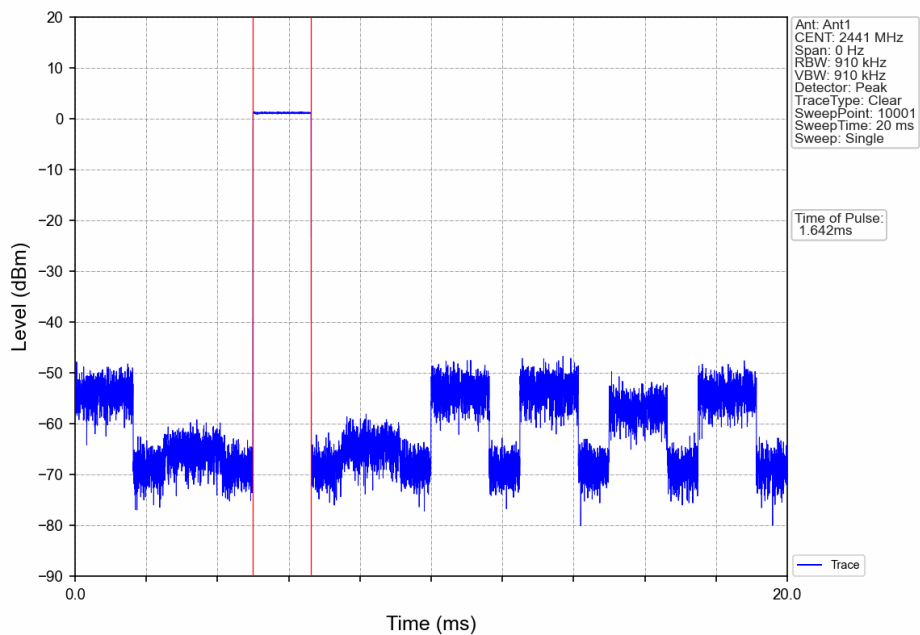
## 5.1.1 Test Result

| 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         | 0.382                         | 31.600                 | 321                                | 122.622         | <=400      | Pass    |
|           |         |                 | DH3         | 1.642                         | 31.600                 | 172                                | 282.424         | <=400      | Pass    |
|           |         |                 | DH5         | 2.892                         | 31.600                 | 84                                 | 242.928         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.390                         | 31.600                 | 319                                | 124.410         | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.644                         | 31.600                 | 162                                | 266.328         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.896                         | 31.600                 | 101                                | 292.496         | <=400      | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH1        | 0.390                         | 31.600                 | 318                                | 124.020         | <=400      | Pass    |
|           |         |                 | 3DH3        | 1.642                         | 31.600                 | 161                                | 264.362         | <=400      | Pass    |
|           |         |                 | 3DH5        | 2.898                         | 31.600                 | 106                                | 307.188         | <=400      | Pass    |

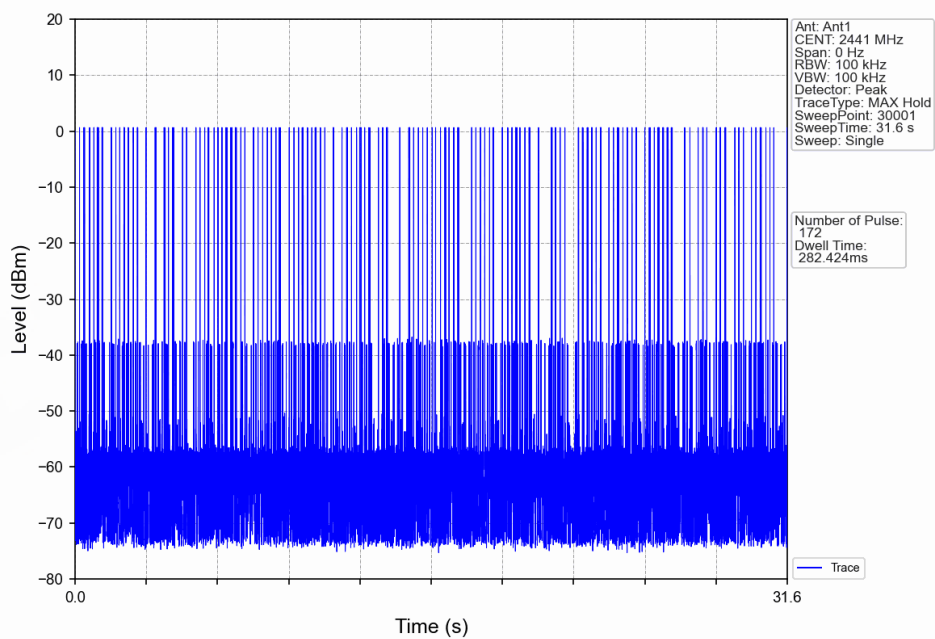
## 5.1.2 Test Graph



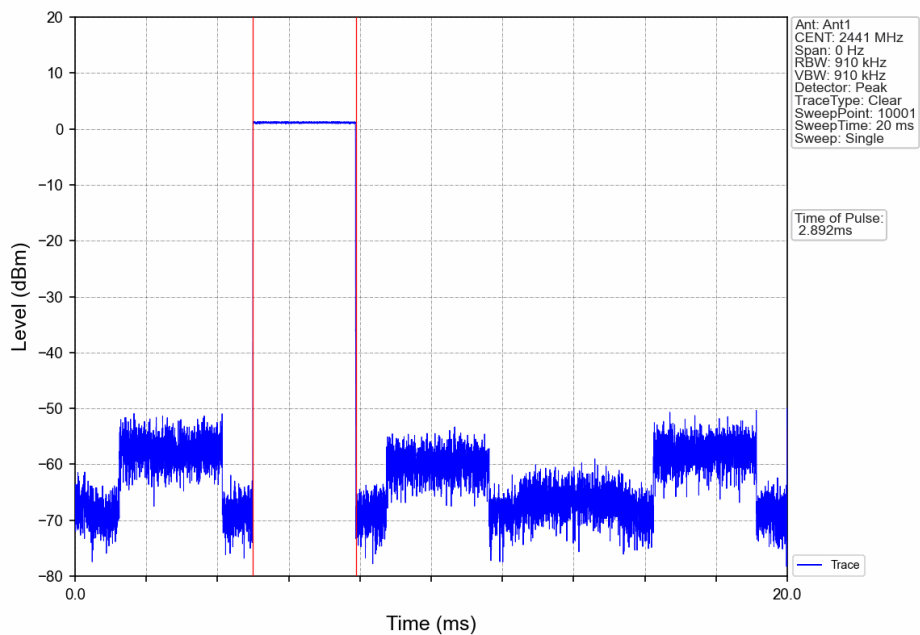
GFSK DH3 HOPP Ant1 NTN



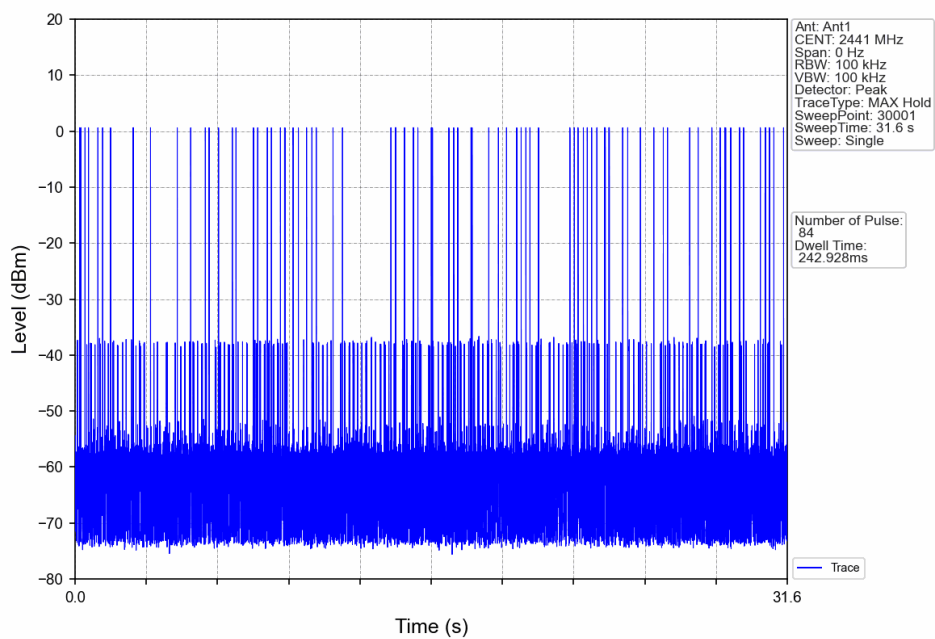
GFSK\_DH3\_HOPP\_Ant1\_NTNV



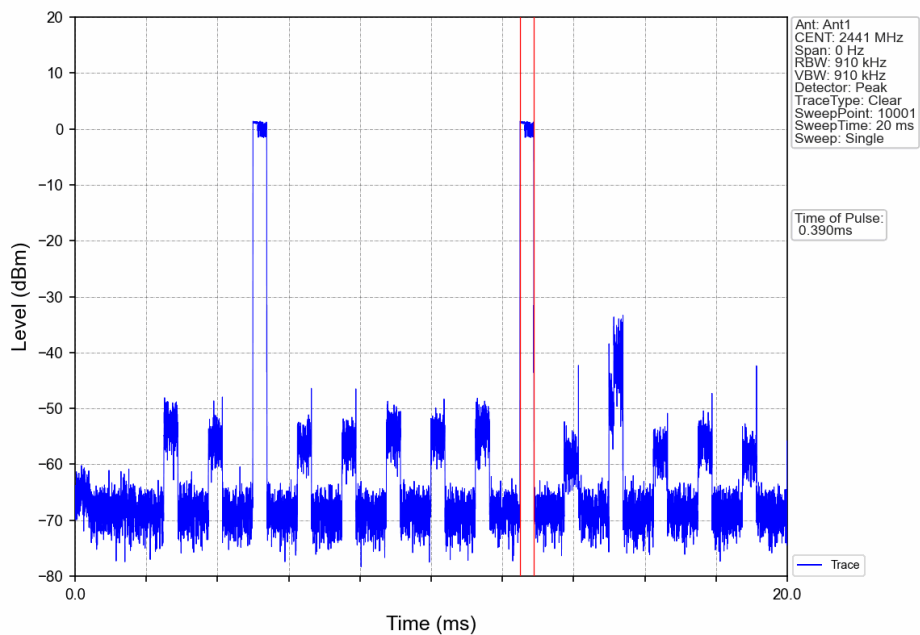
GFSK DH5 HOPP Ant1 NTN



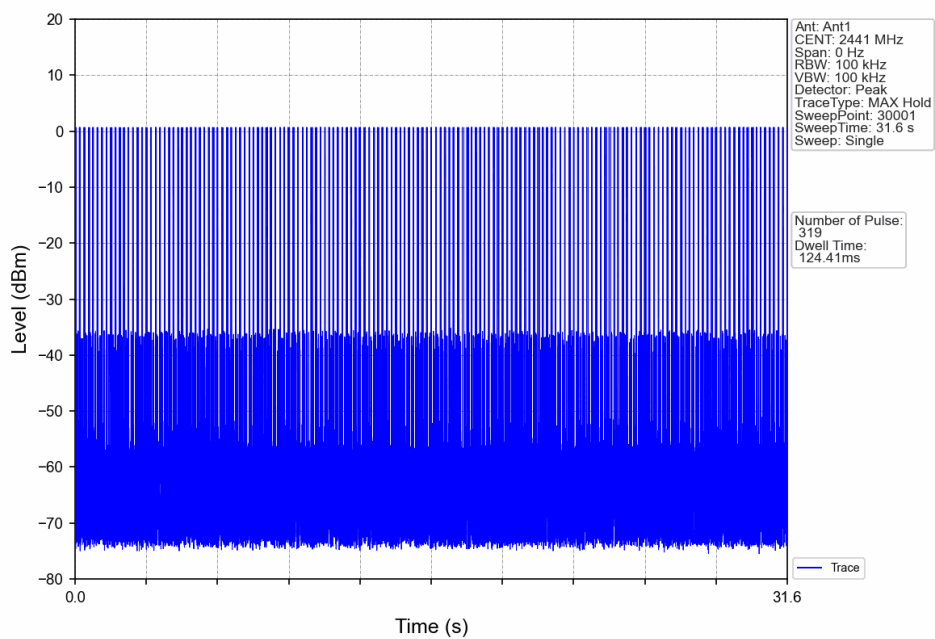
GFSK\_DH5\_HOPP\_Ant1\_NTNV



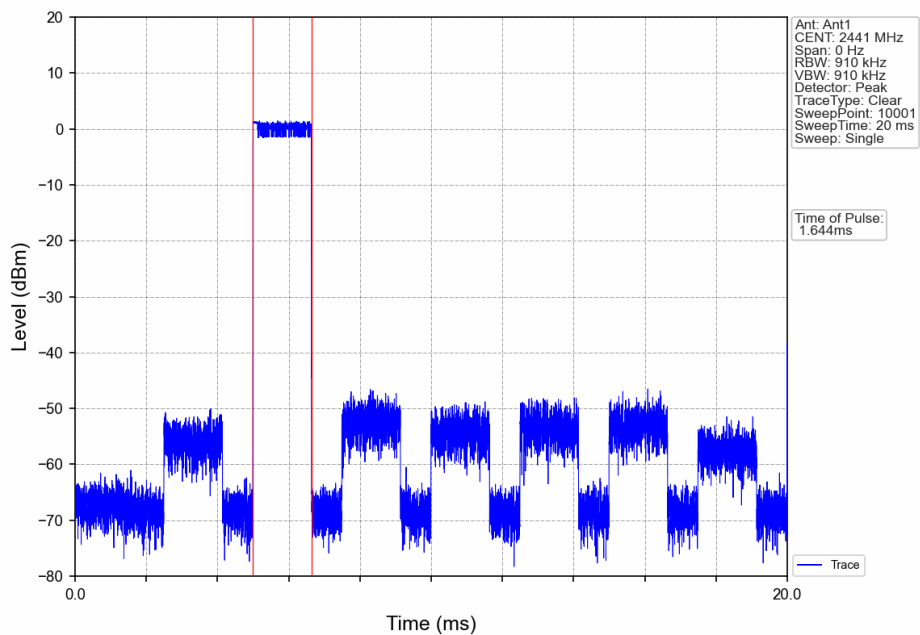
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



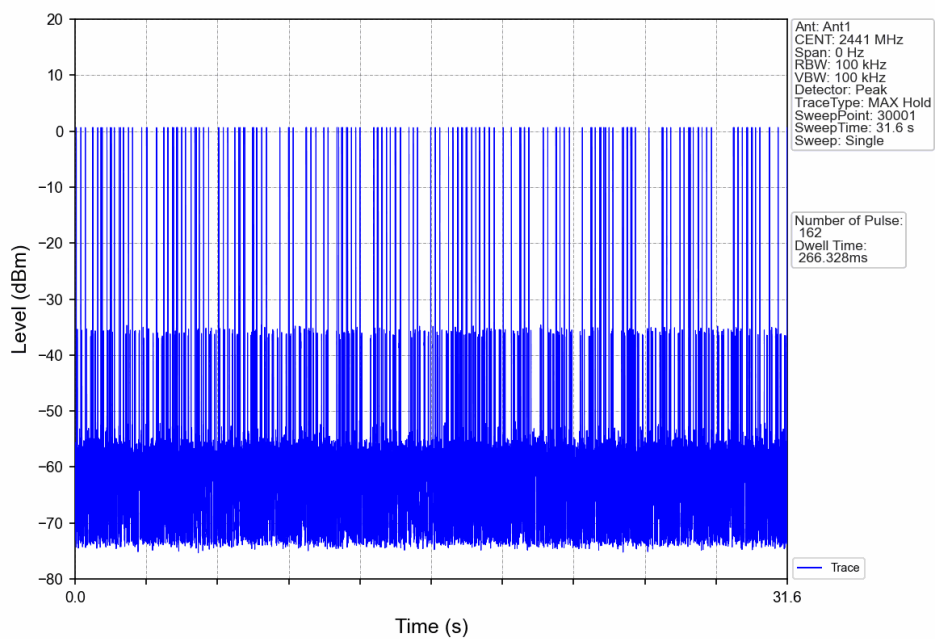
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



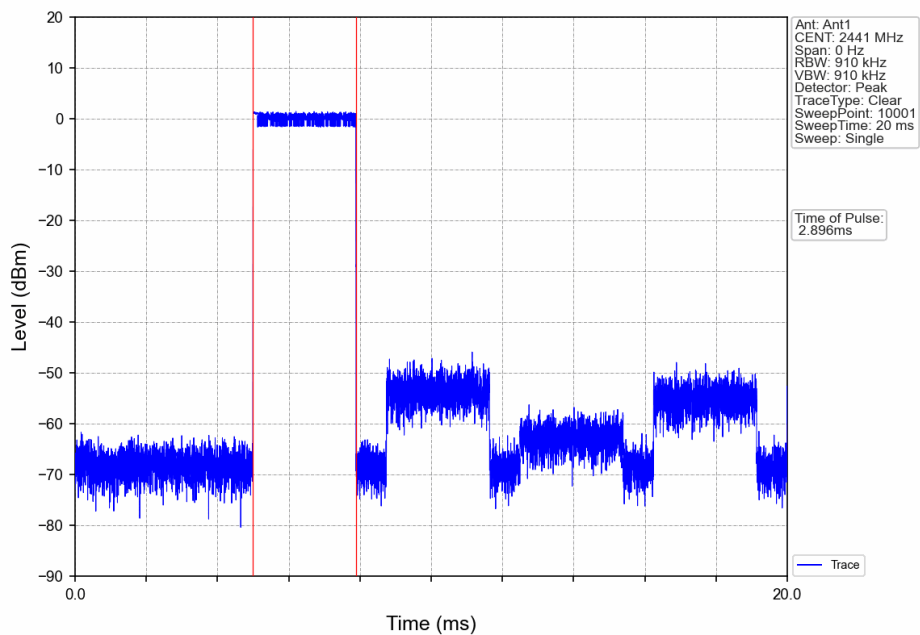
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



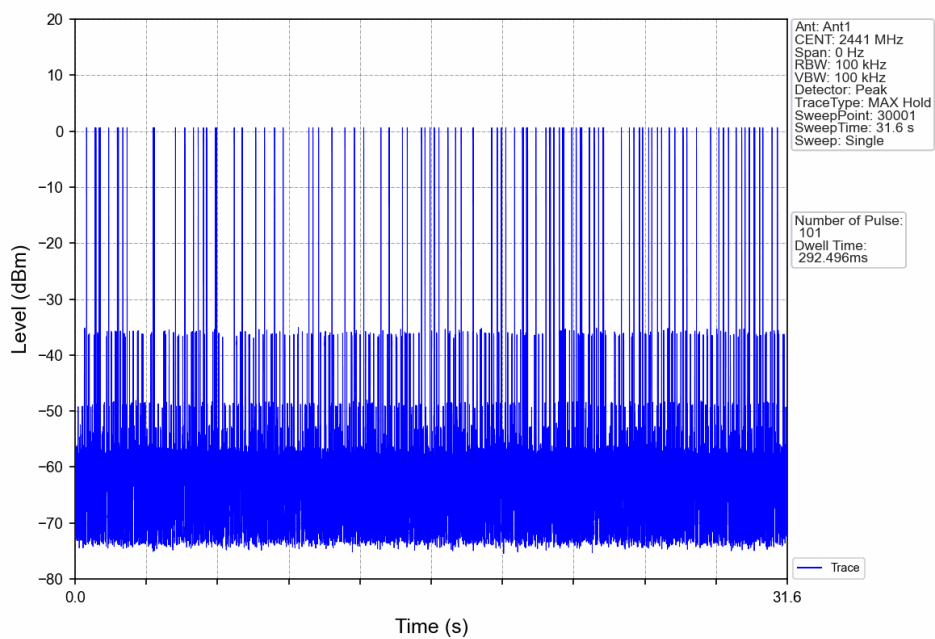
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV

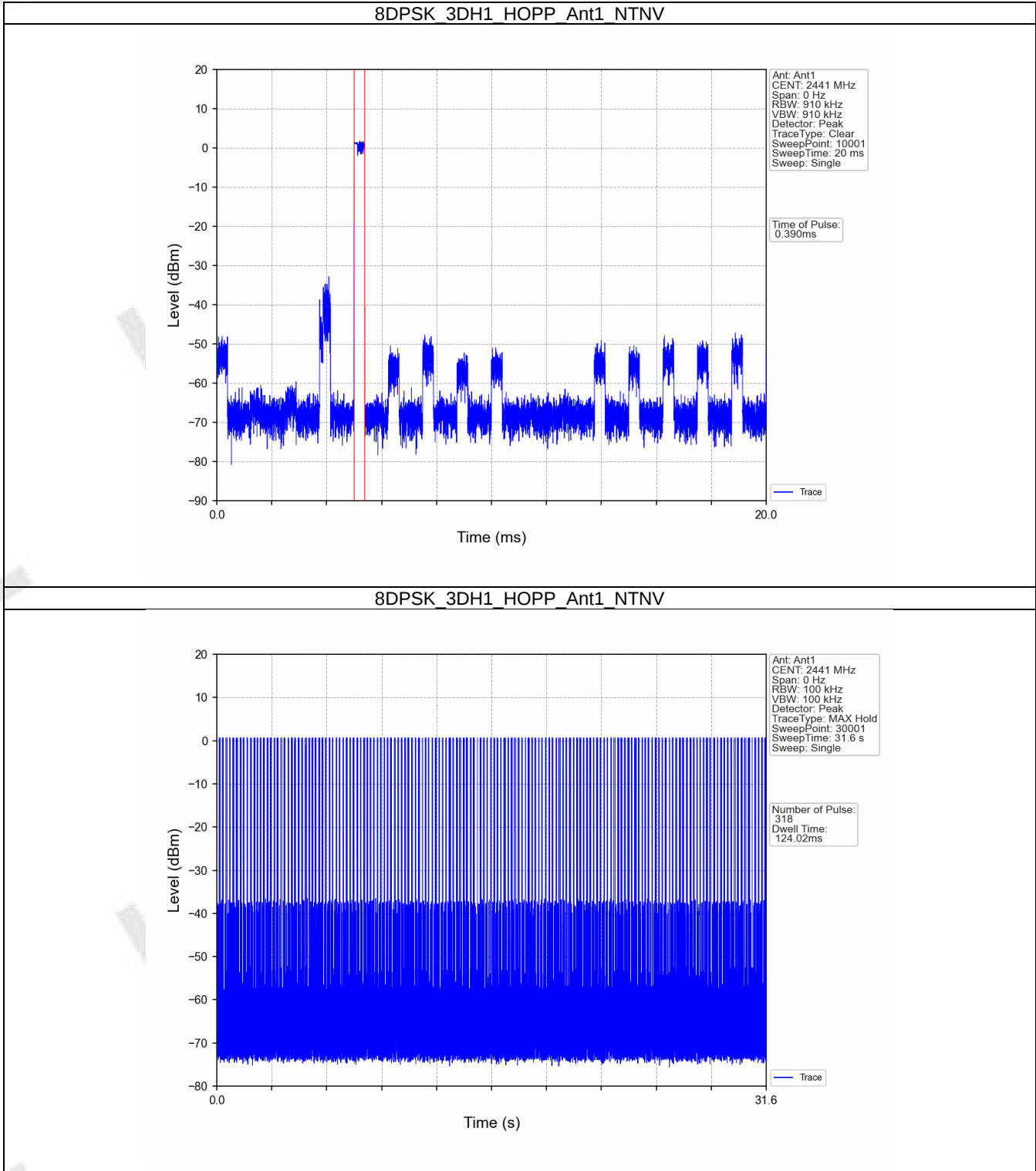


Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV

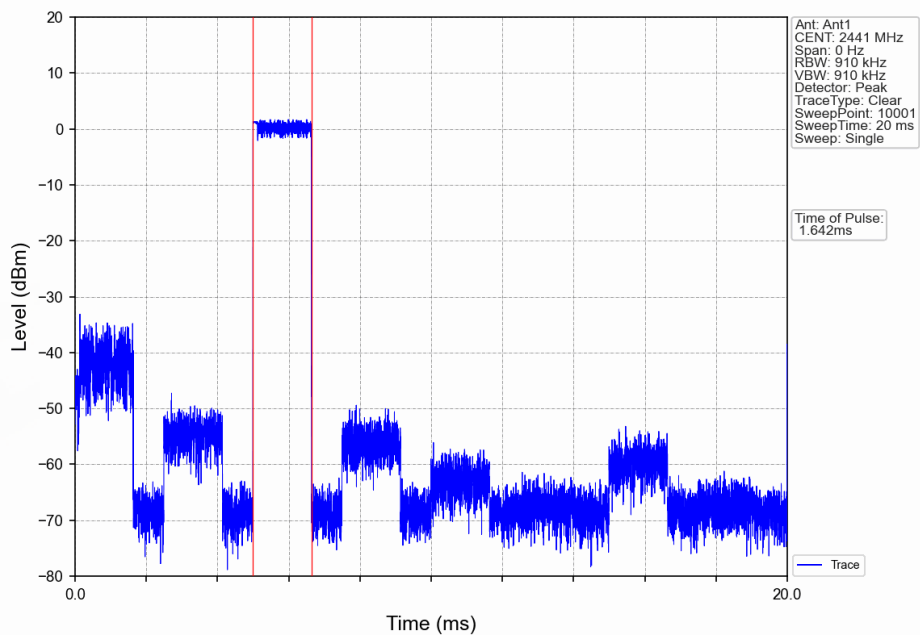


Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV

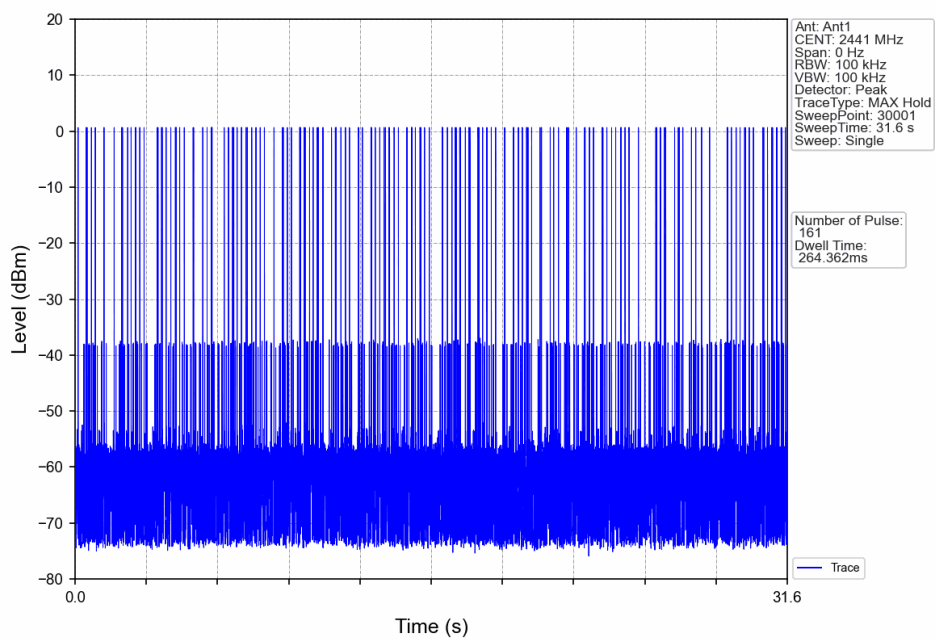




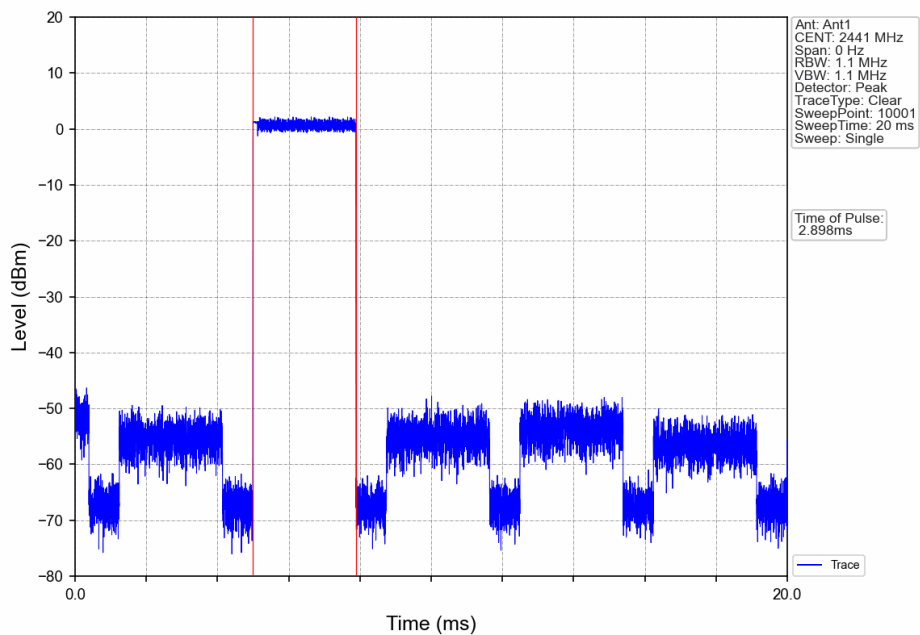
8DPSK 3DH3 HOPP Ant1 NTN



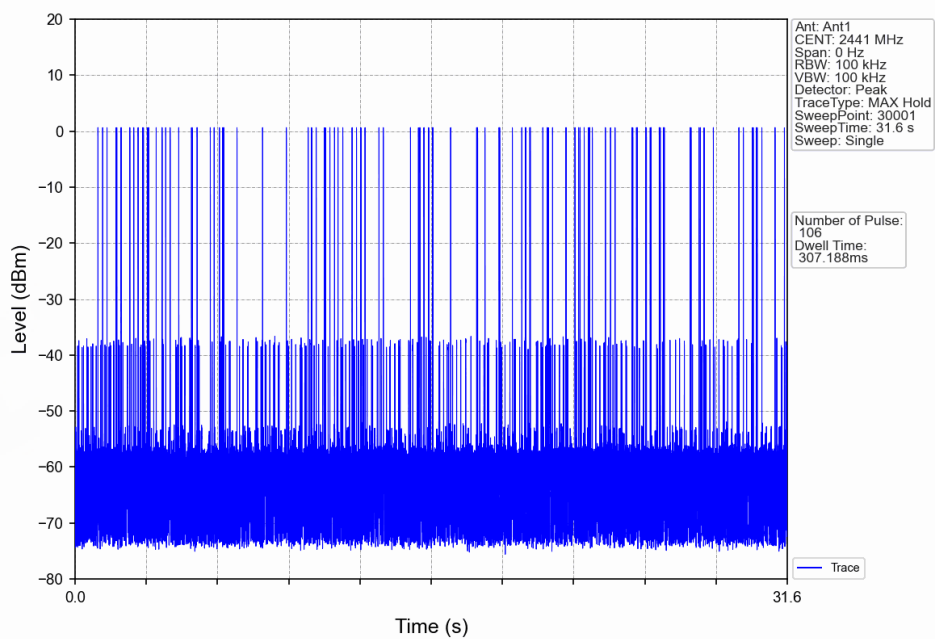
8DPSK\_3DH3\_HOPP\_Ant1\_NTN



8DPSK 3DH5 HOPP Ant1 NTN



8DPSK\_3DH5\_HOPP\_Ant1\_NTN



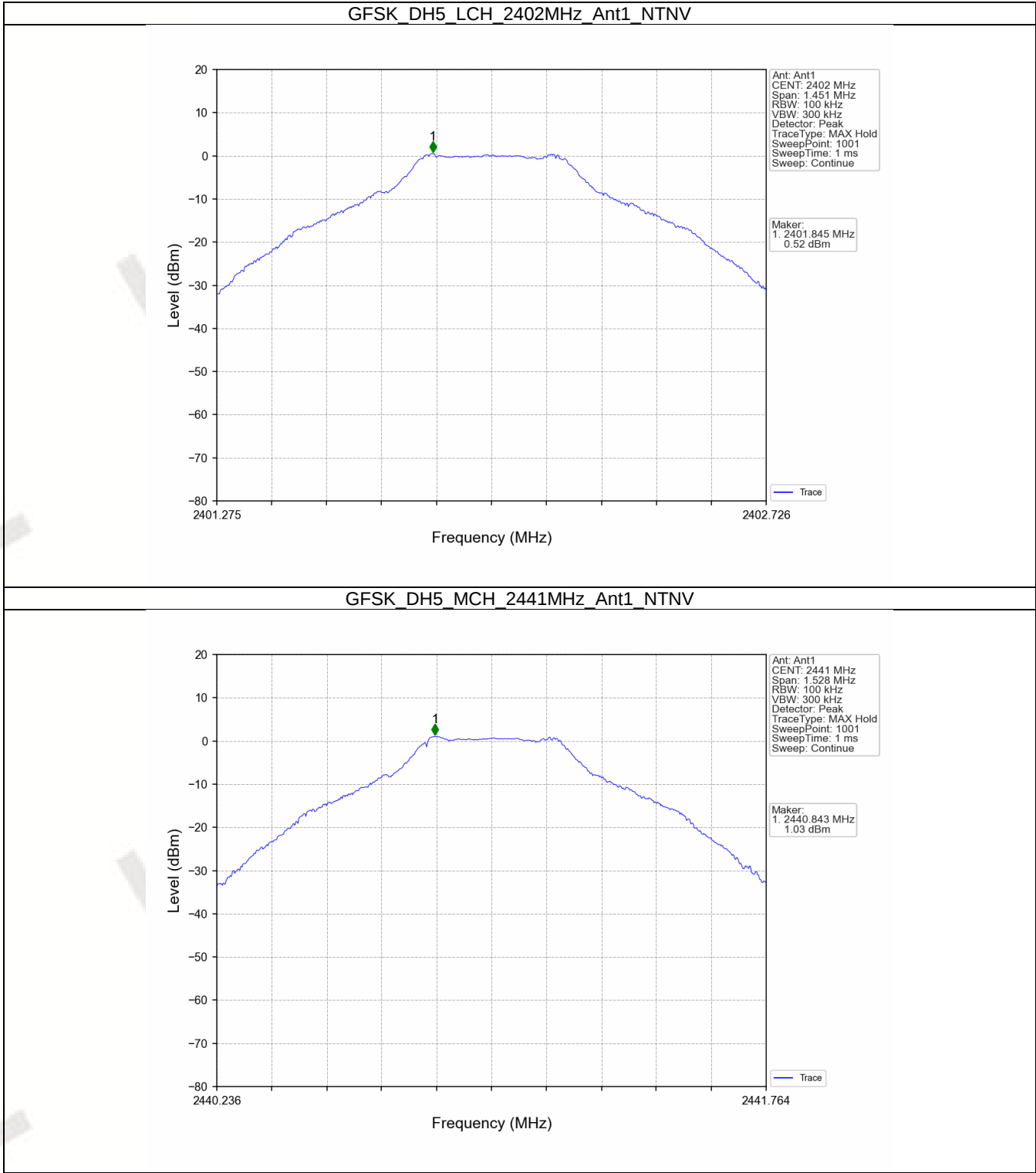
## 6. Unwanted Emissions In Non-restricted Frequency Bands

### 6.1 Ref

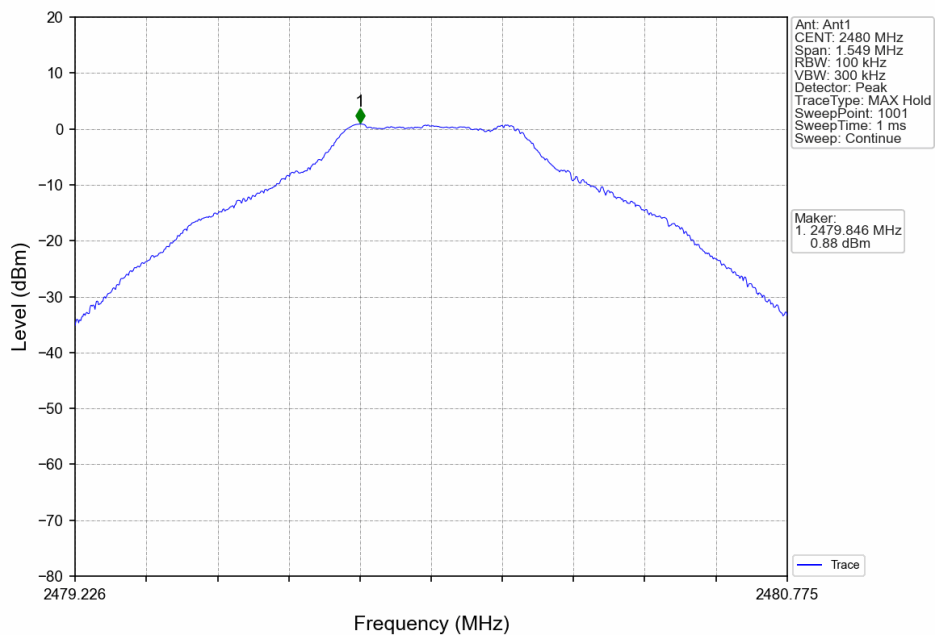
#### 6.1.1 Test Result

| Mode                                                                                                                                            | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-------------|-----|--------------------------|
| GFSK                                                                                                                                            | SISO    | 2402            | DH5         | 1   | 0.52                     |
|                                                                                                                                                 |         | 2441            | DH5         | 1   | 1.03                     |
|                                                                                                                                                 |         | 2480            | DH5         | 1   | 0.88                     |
| Pi/4DQPSK                                                                                                                                       | SISO    | 2402            | 2DH5        | 1   | 0.55                     |
|                                                                                                                                                 |         | 2441            | 2DH5        | 1   | 0.94                     |
|                                                                                                                                                 |         | 2480            | 2DH5        | 1   | 0.87                     |
| 8DPSK                                                                                                                                           | SISO    | 2402            | 3DH5        | 1   | 0.54                     |
|                                                                                                                                                 |         | 2441            | 3DH5        | 1   | 1.05                     |
|                                                                                                                                                 |         | 2480            | 3DH5        | 1   | 0.88                     |
| Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level. |         |                 |             |     |                          |

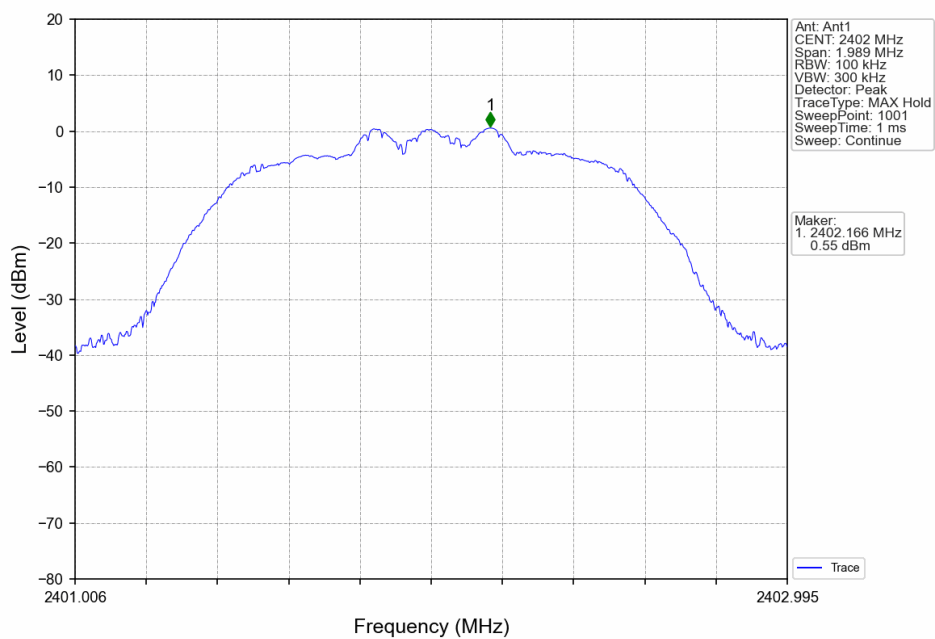
6.1.2 Test Graph



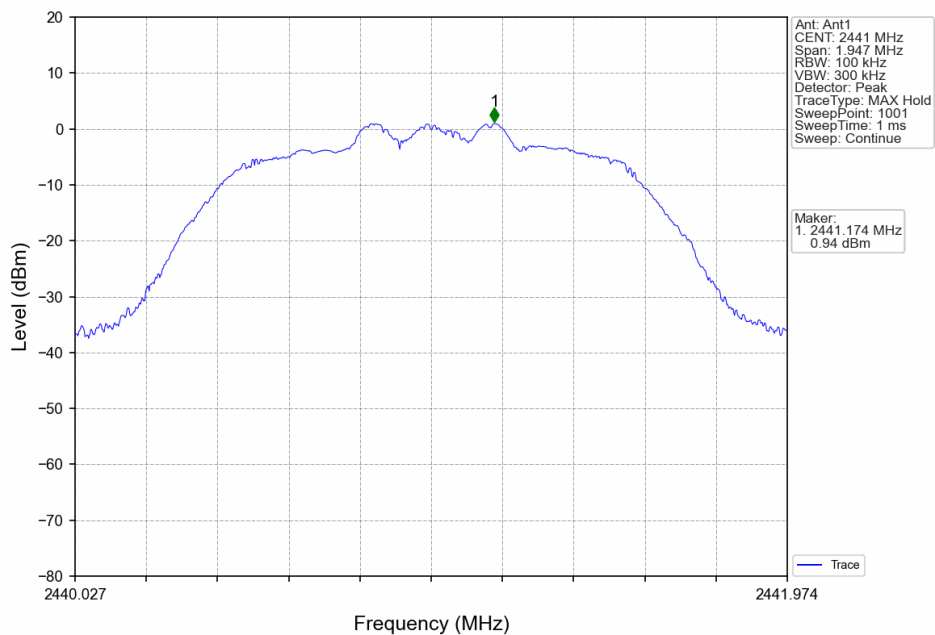
GFSK DH5 HCH 2480MHz Ant1 NTV



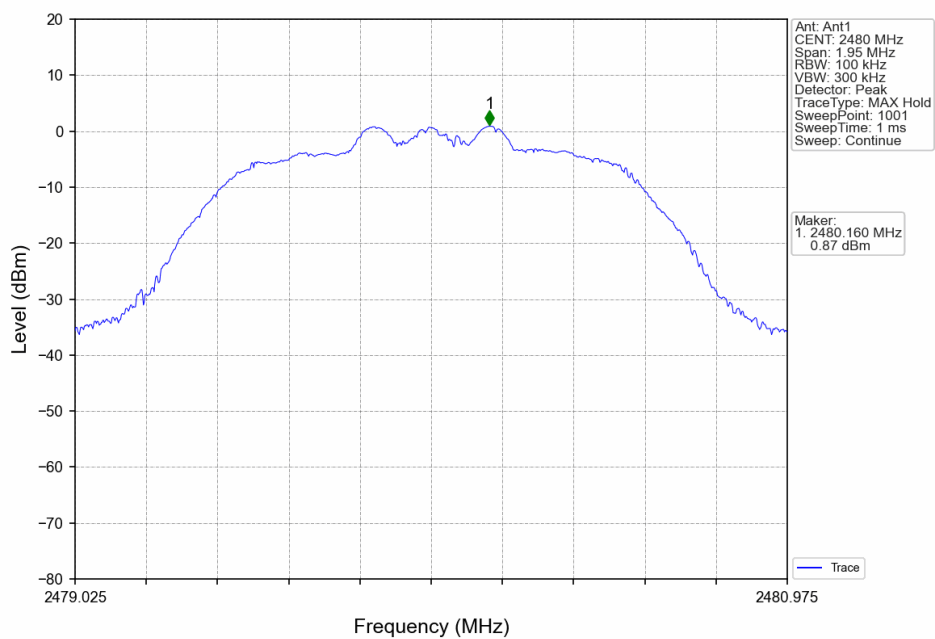
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



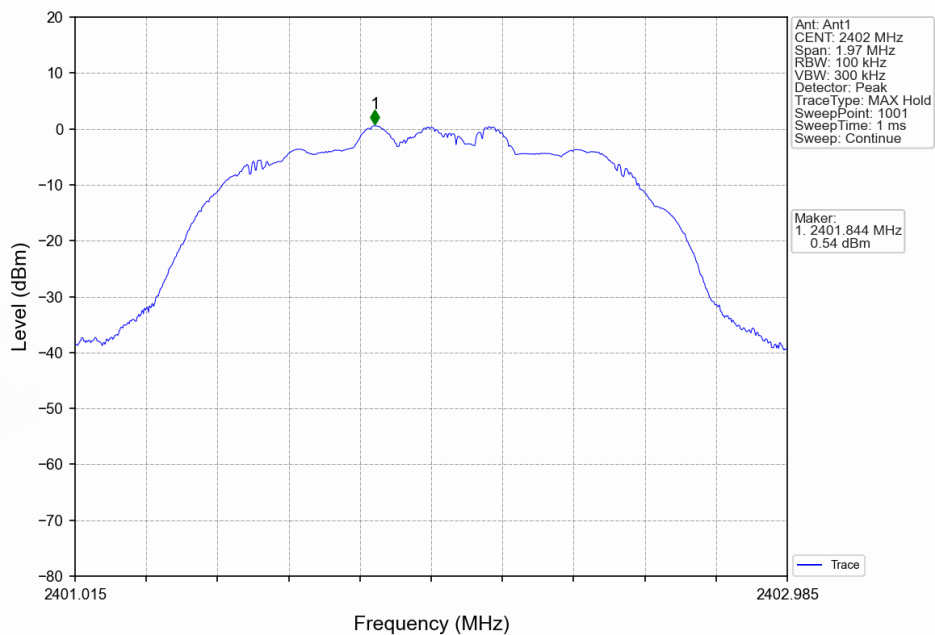
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



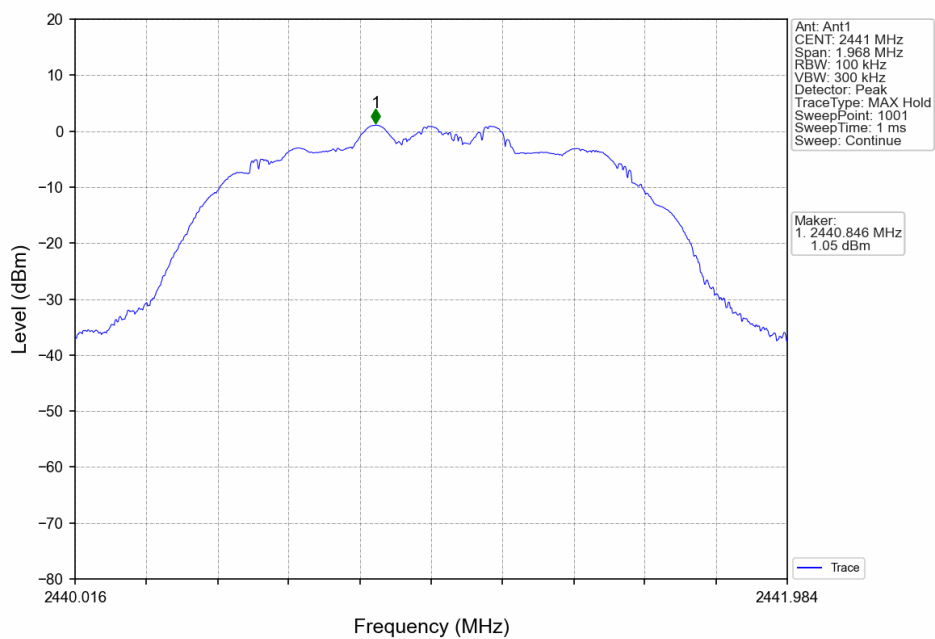
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

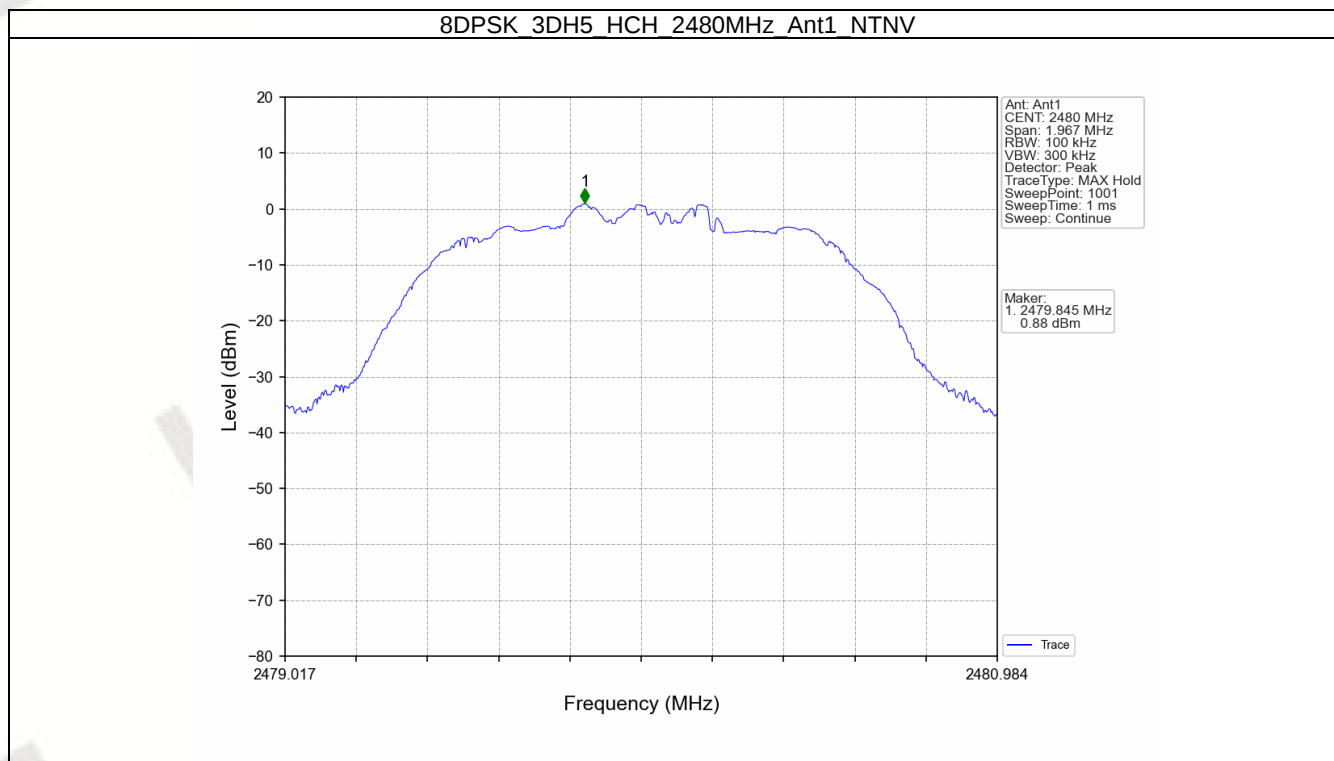


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV





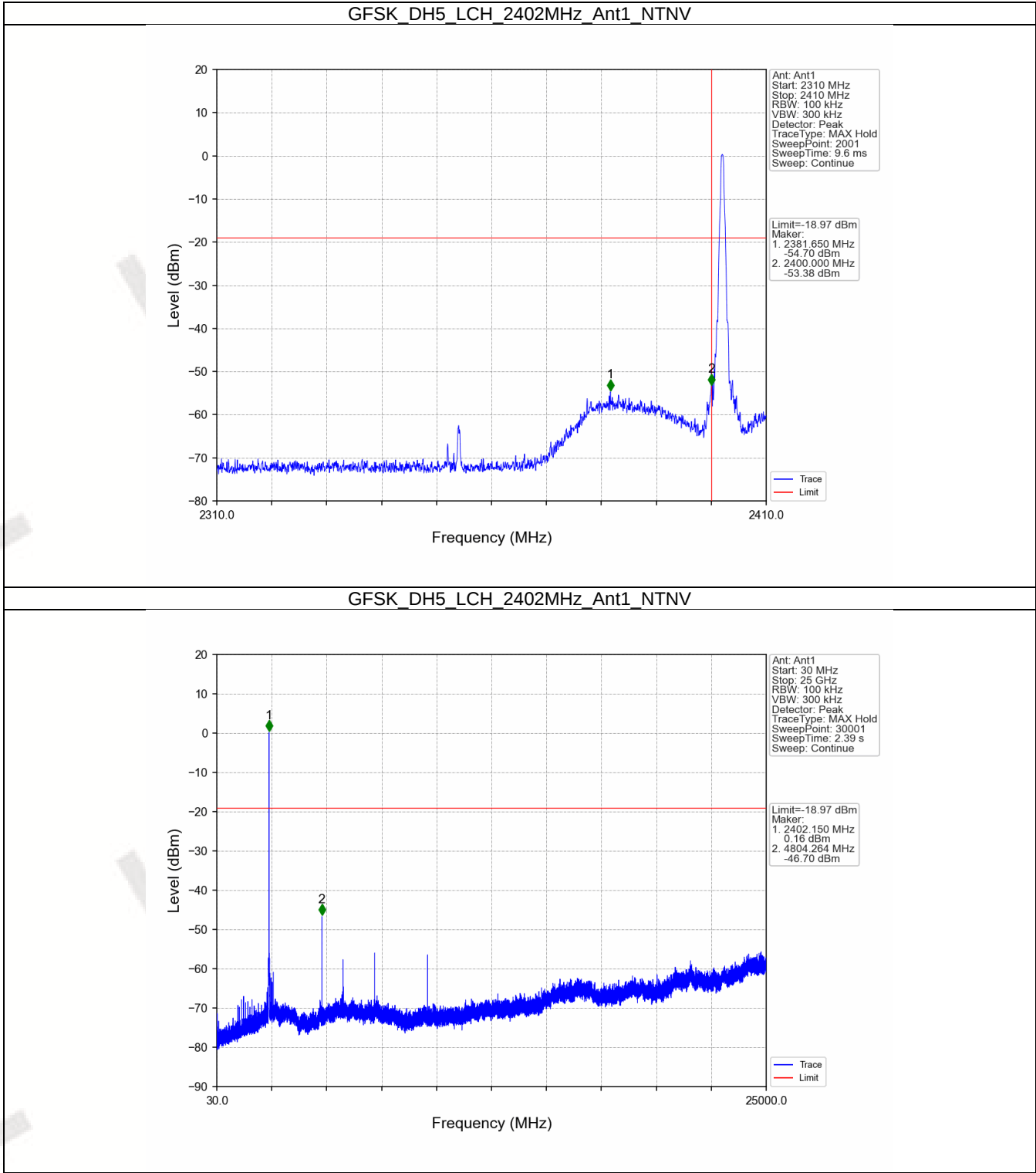
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### 6.2.1 Test Result

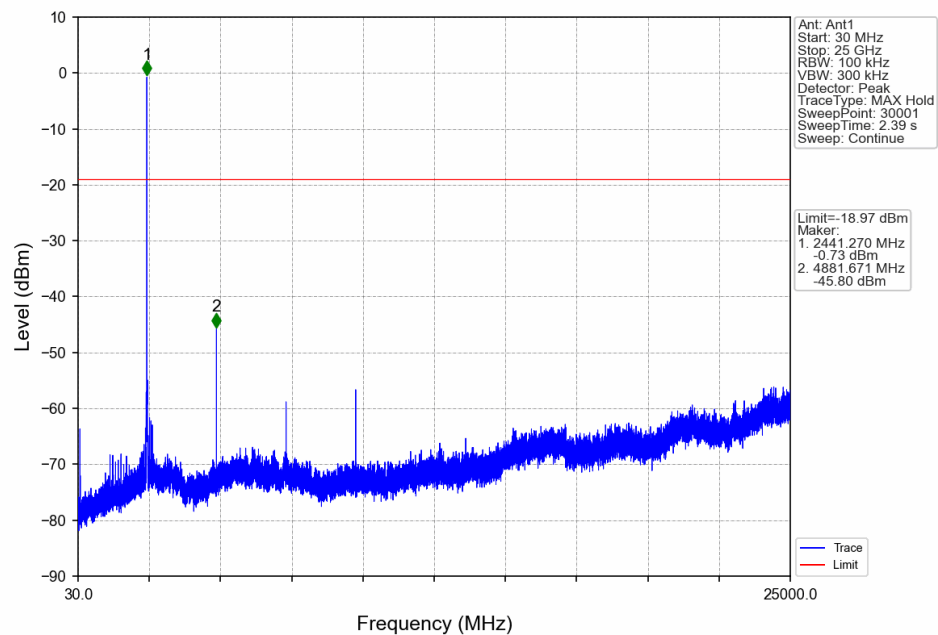
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-----------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 1.03                     | -18.97      | Pass    |
|           |         | 2441            | DH5         | 1   | 1.03                     | -18.97      | Pass    |
|           |         | 2480            | DH5         | 1   | 1.03                     | -18.97      | Pass    |
|           |         | HOPP            | DH5         | 1   | 1.03                     | -18.97      | Pass    |
|           |         |                 |             |     | 1.03                     | -18.97      | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 0.94                     | -19.06      | Pass    |
|           |         | 2441            | 2DH5        | 1   | 0.94                     | -19.06      | Pass    |
|           |         | 2480            | 2DH5        | 1   | 0.94                     | -19.06      | Pass    |
|           |         | HOPP            | 2DH5        | 1   | 0.94                     | -19.06      | Pass    |
|           |         |                 |             |     | 0.94                     | -19.06      | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.05                     | -18.95      | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.05                     | -18.95      | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.05                     | -18.95      | Pass    |
|           |         | HOPP            | 3DH5        | 1   | 1.05                     | -18.95      | Pass    |
|           |         |                 |             |     | 1.05                     | -18.95      | Pass    |

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

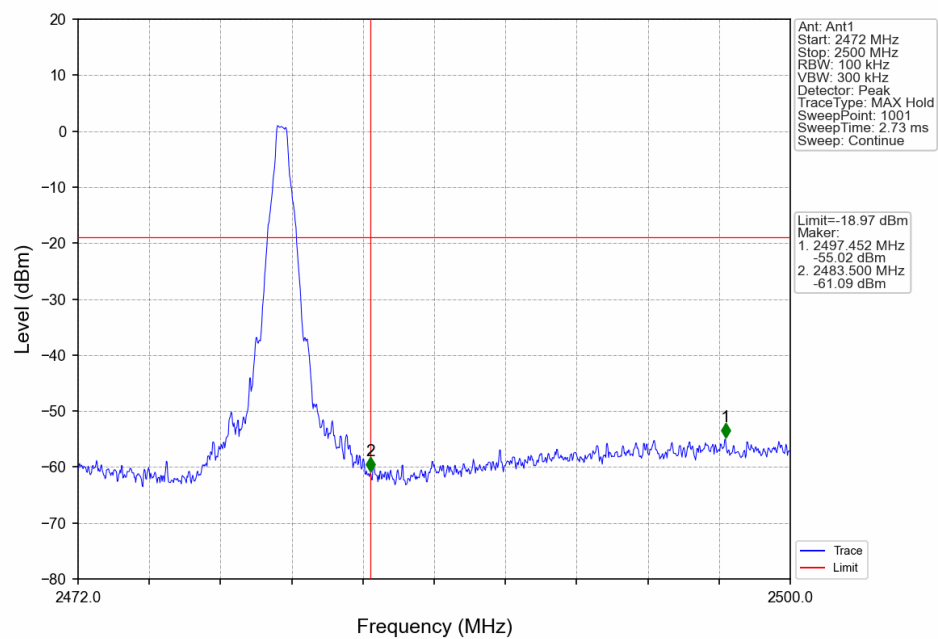
6.2.2 Test Graph



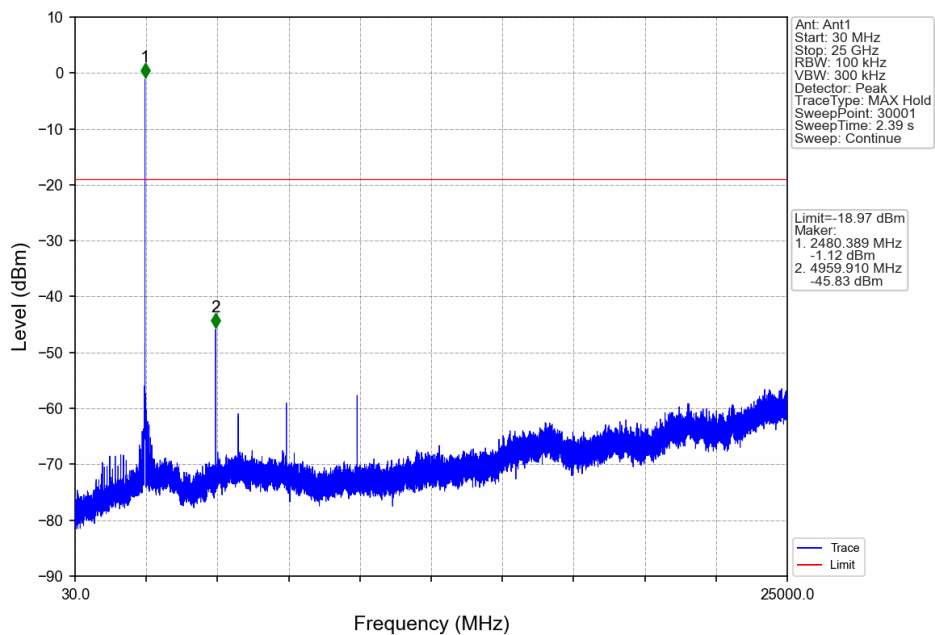
GFSK DH5 MCH 2441MHz Ant1 NTN



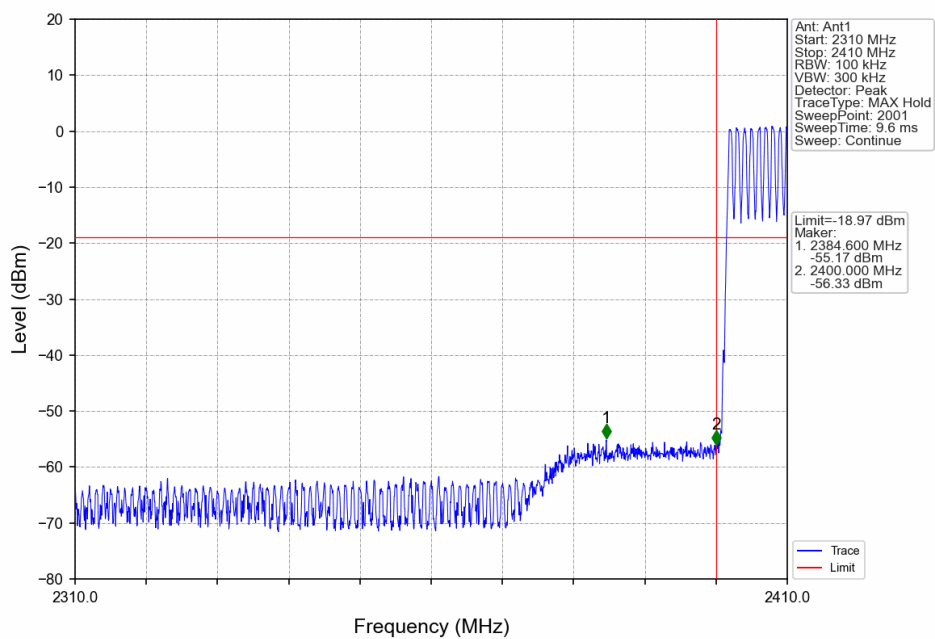
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTN



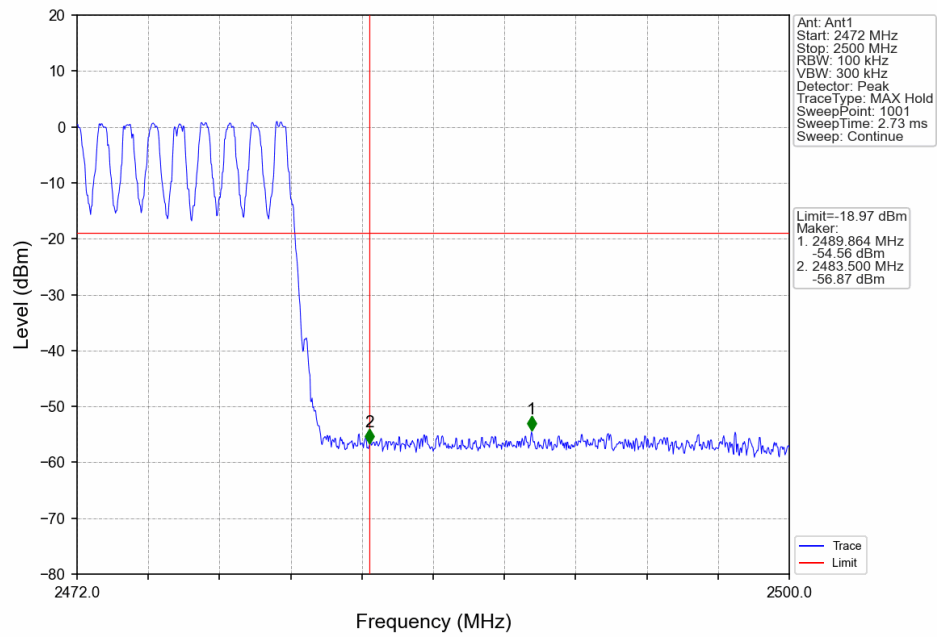
## GFSK DH5 HCH 2480MHz Ant1 NTV



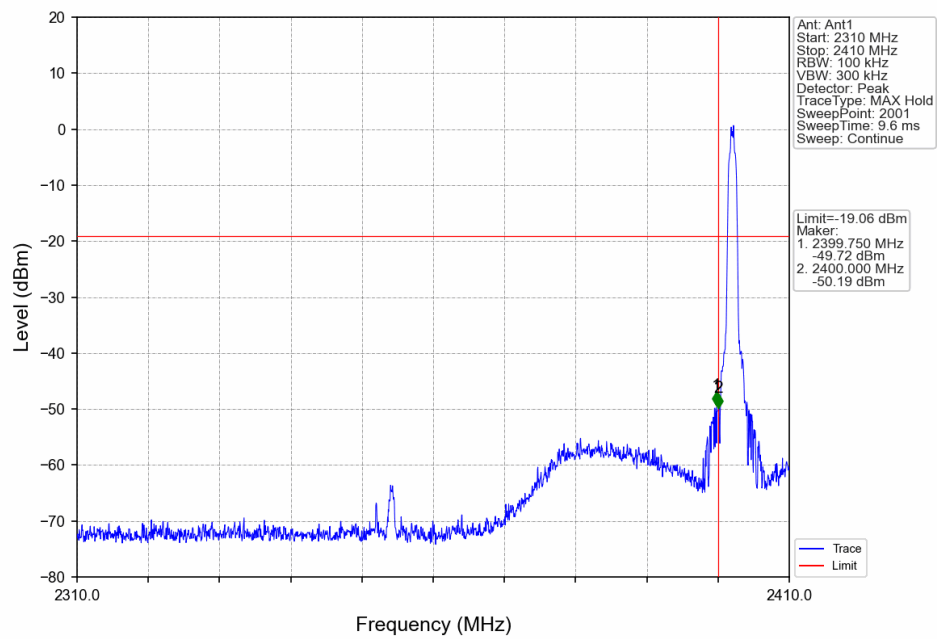
## GFSK\_DH5\_HOPP\_Ant1\_NTNV



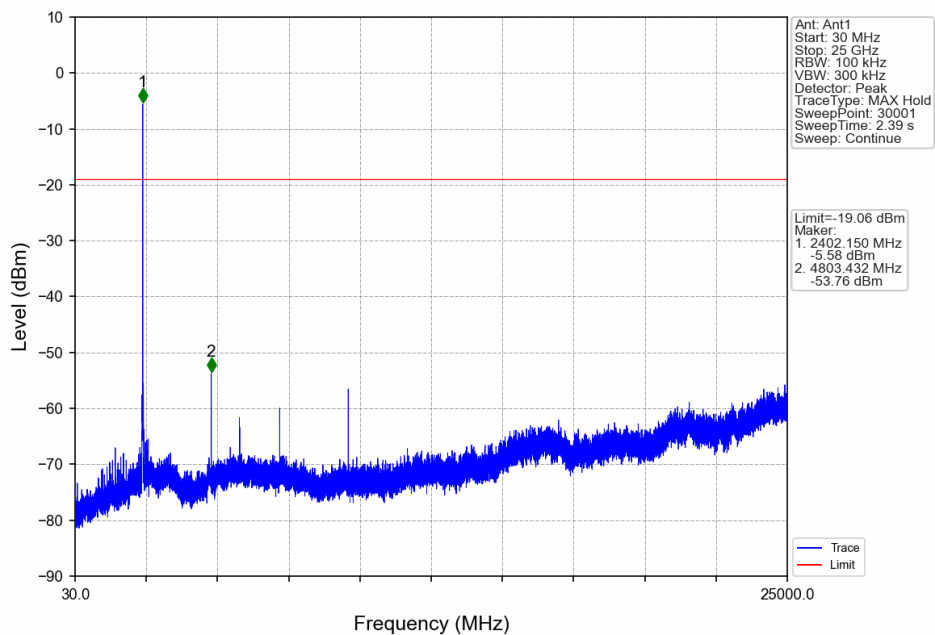
## GFSK DH5 HOPP Ant1 NTN



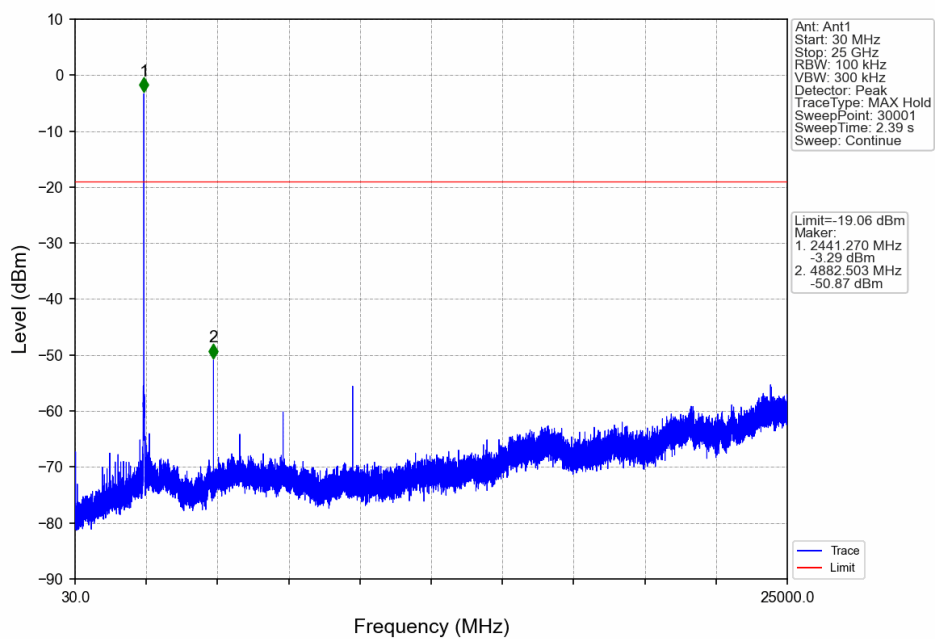
## Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1 NTN



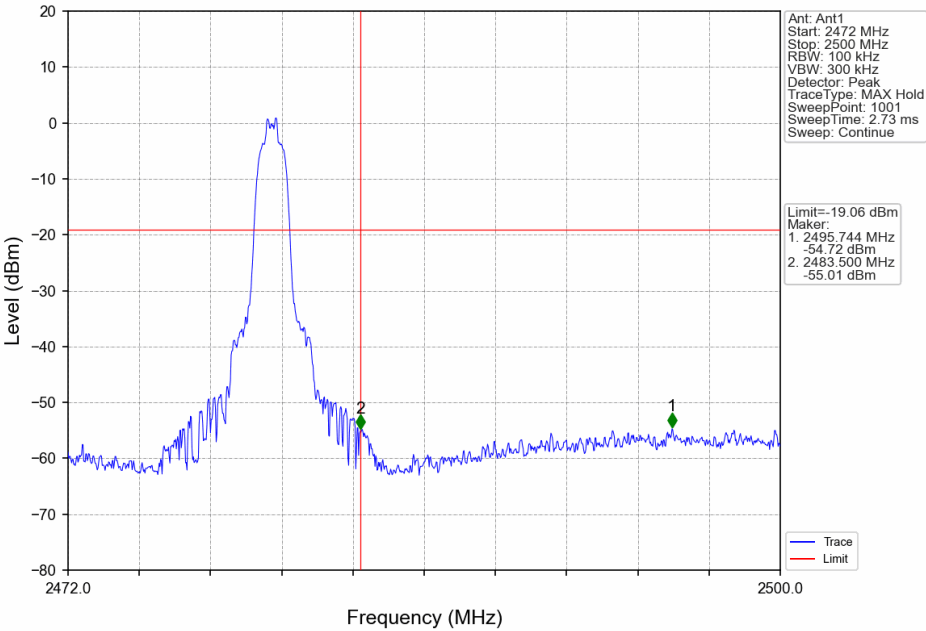
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



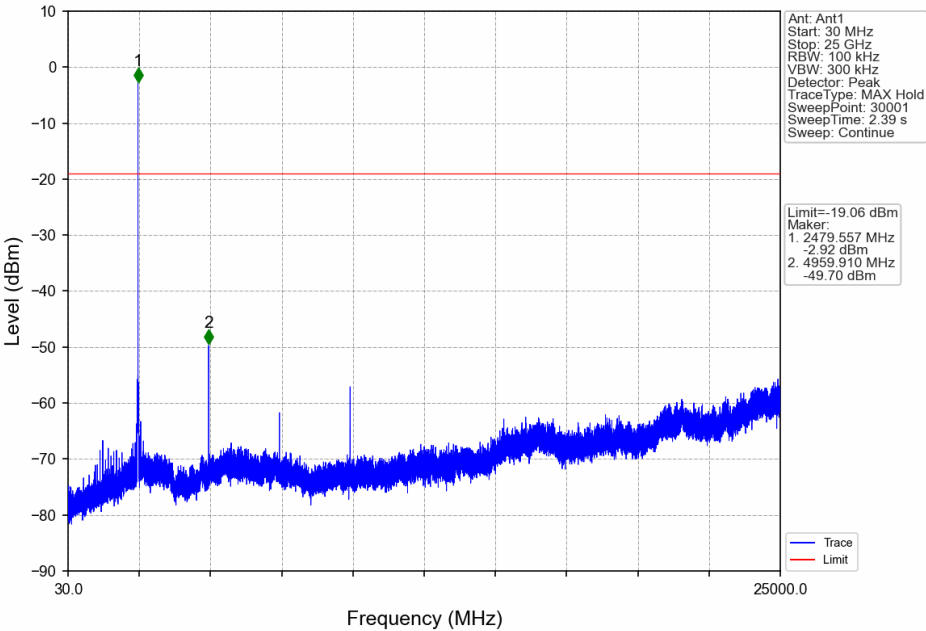
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



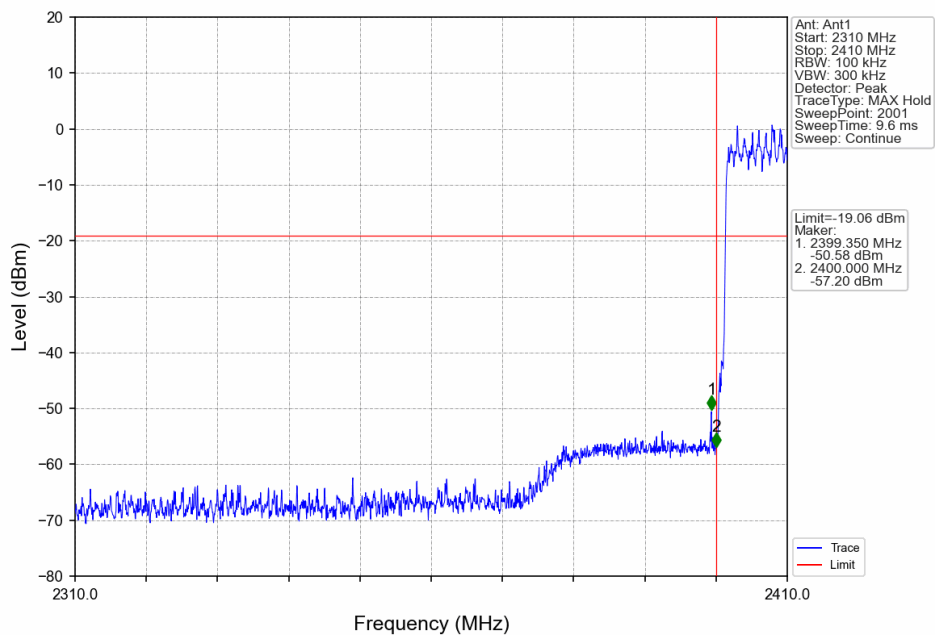
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



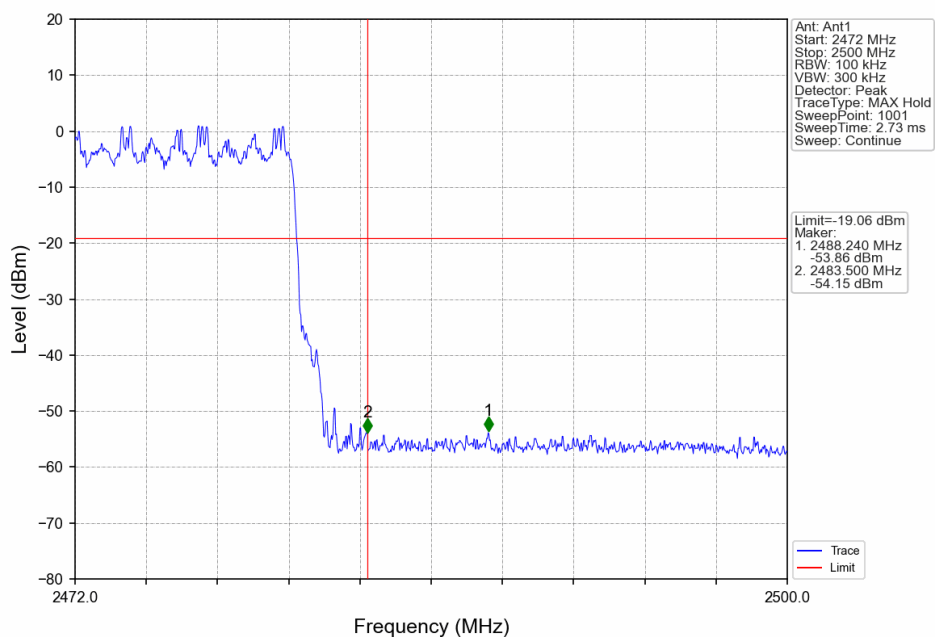
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



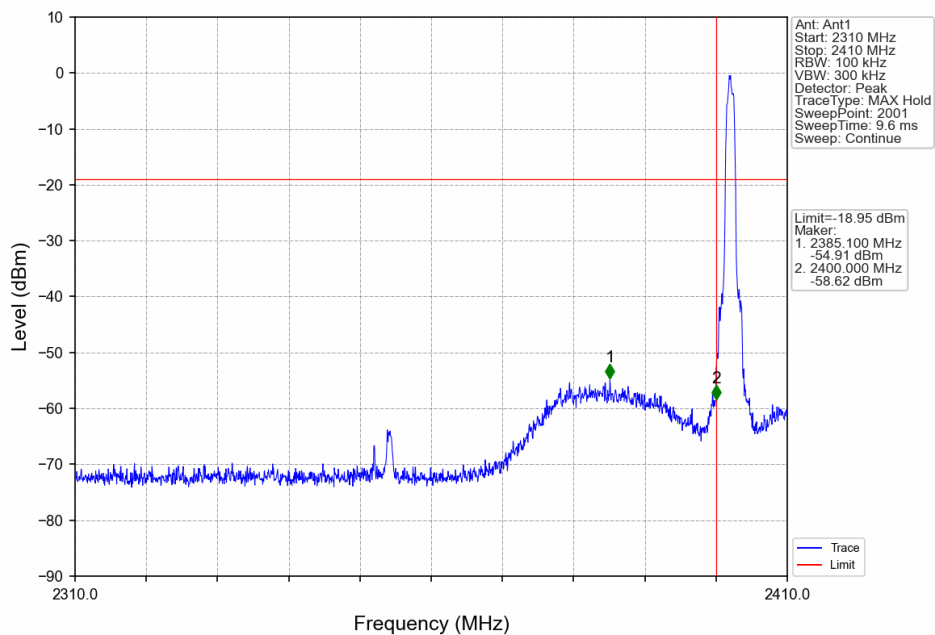
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



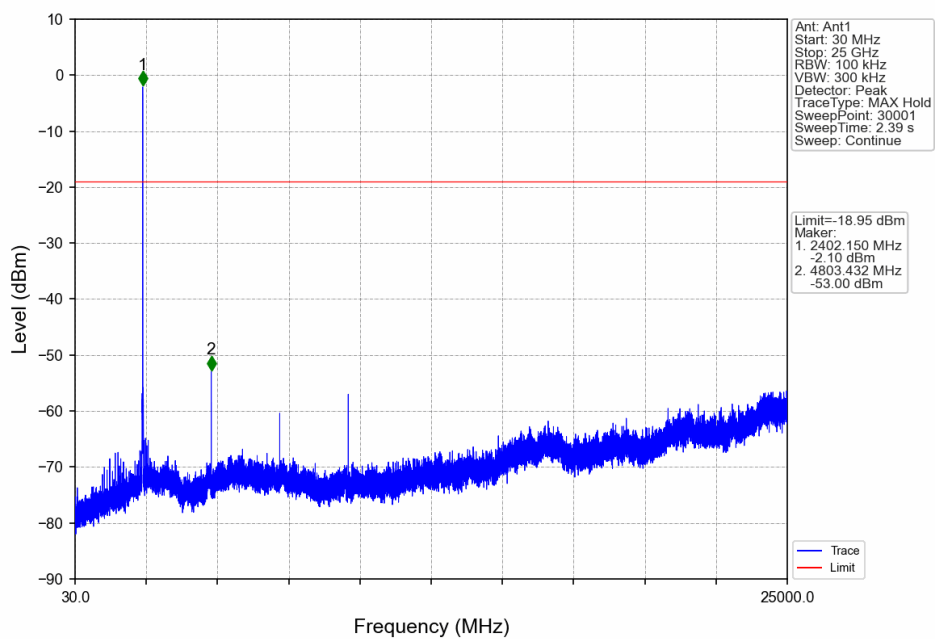
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



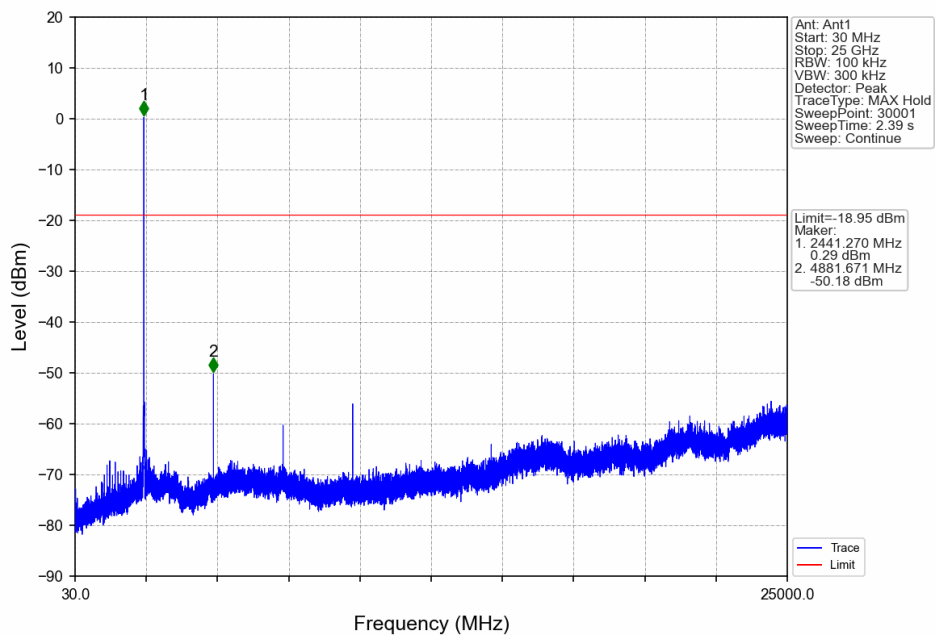
## 8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



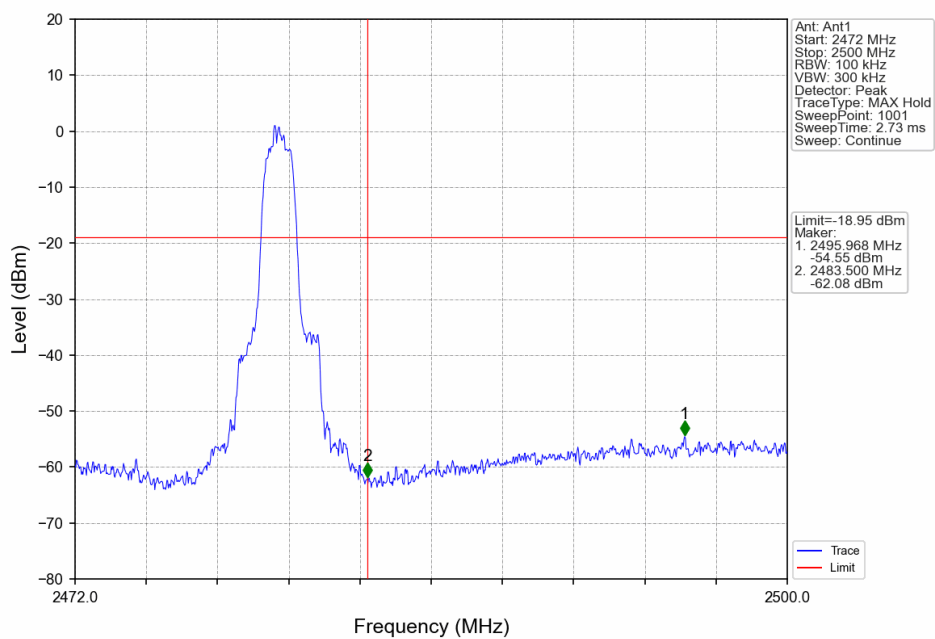
## 8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



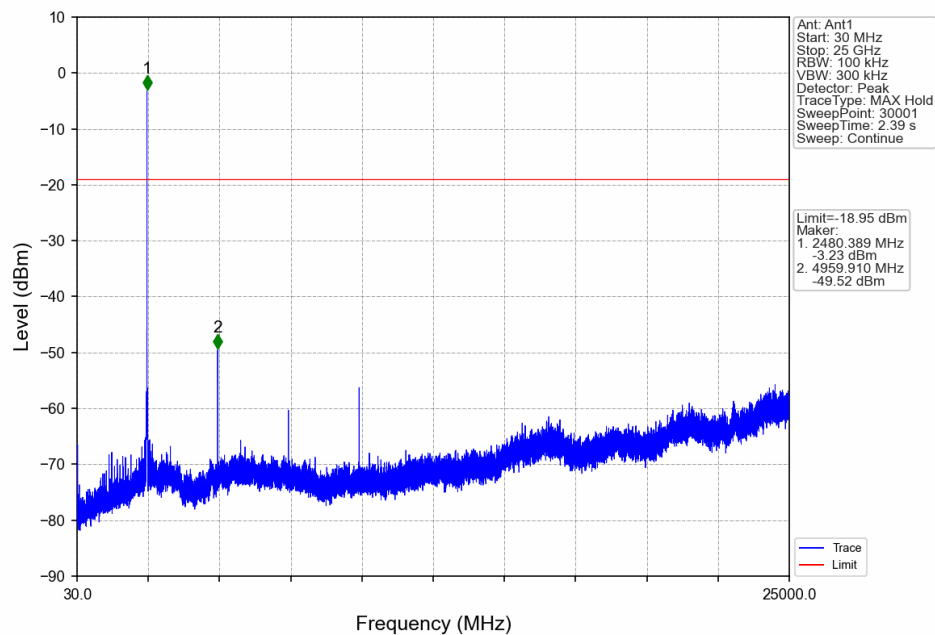
## 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



## 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



8DPSK 3DH5 HCH 2480MHz Ant1 NTN



8DPSK 3DH5 HOPP Ant1 NTN

