

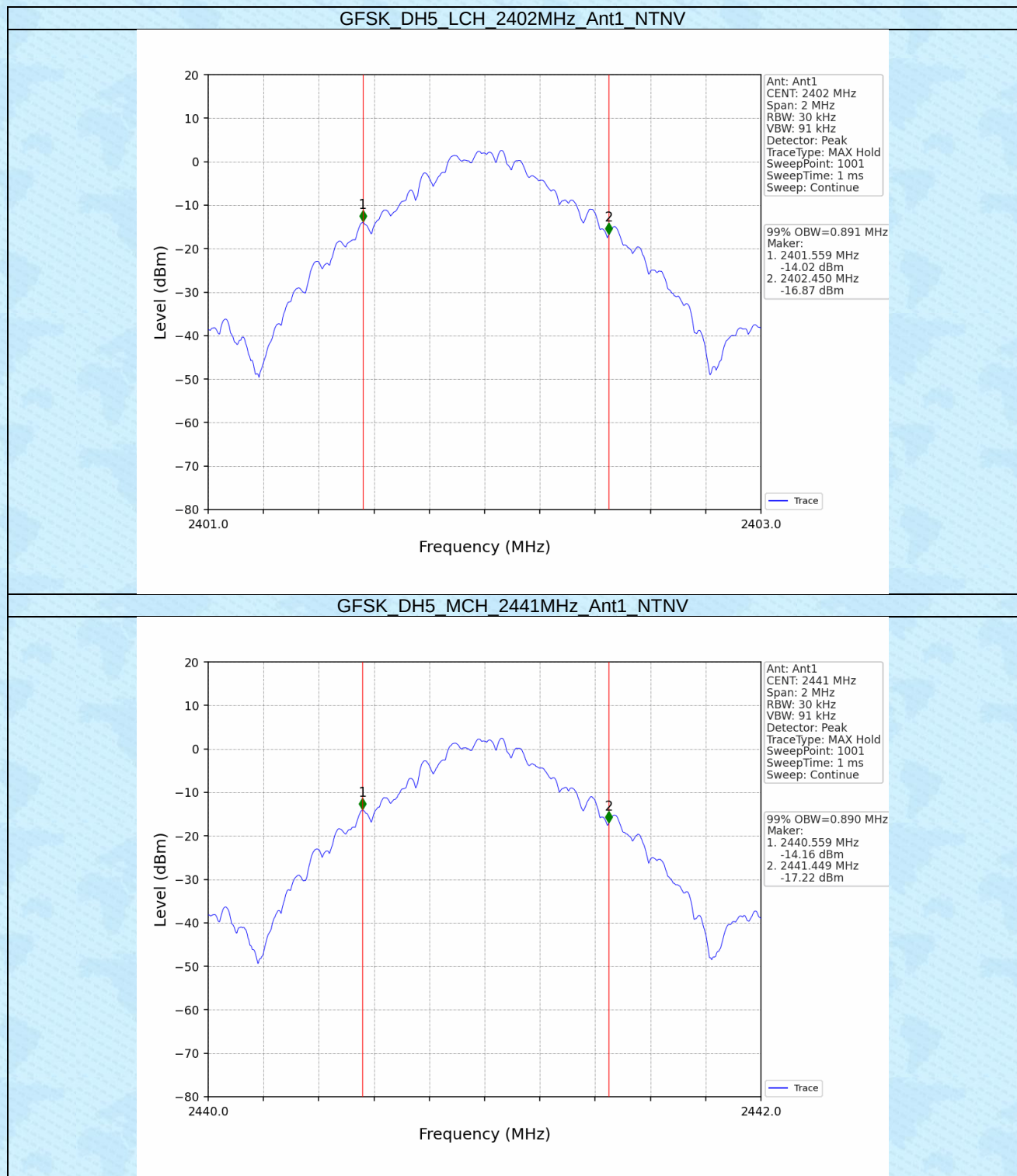
## 1. Bandwidth

### 1.1 OBW

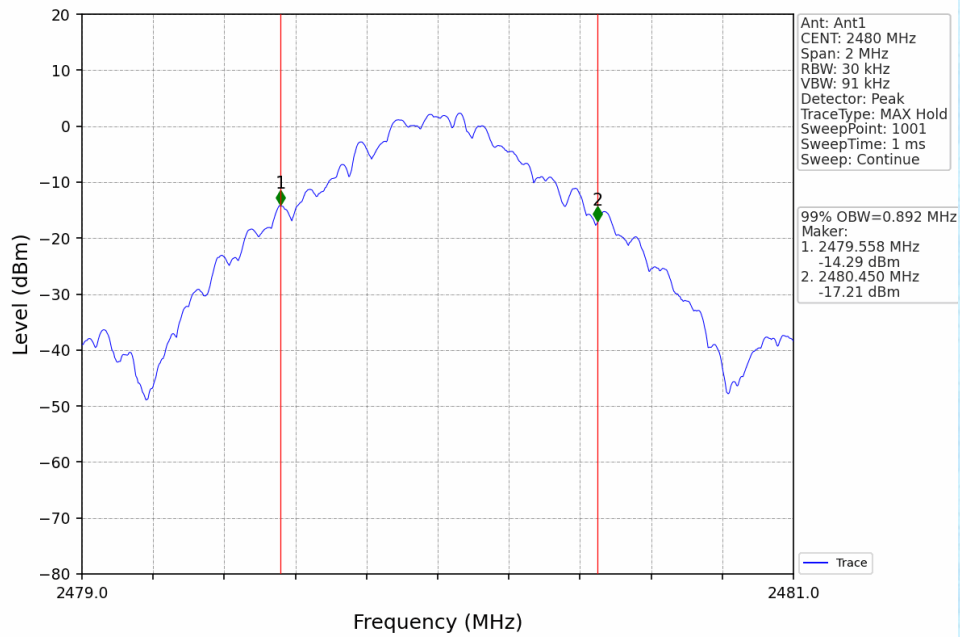
#### 1.1.1 Test Result

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) | Verdict |
|-----------|---------|-----------------|-------------|-----|------------------------------|---------|
|           |         |                 |             |     | Result                       |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.891                        | Pass    |
|           |         | 2441            | DH5         | 1   | 0.890                        | Pass    |
|           |         | 2480            | DH5         | 1   | 0.892                        | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.196                        | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.197                        | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.198                        | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.200                        | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.200                        | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.203                        | Pass    |

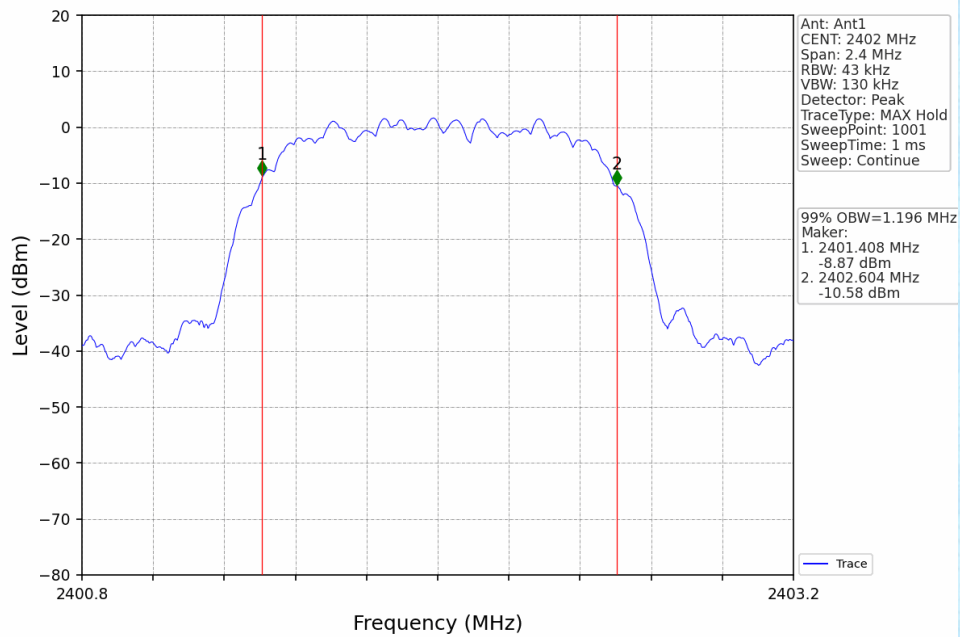
## 1.1.2 Test Graph



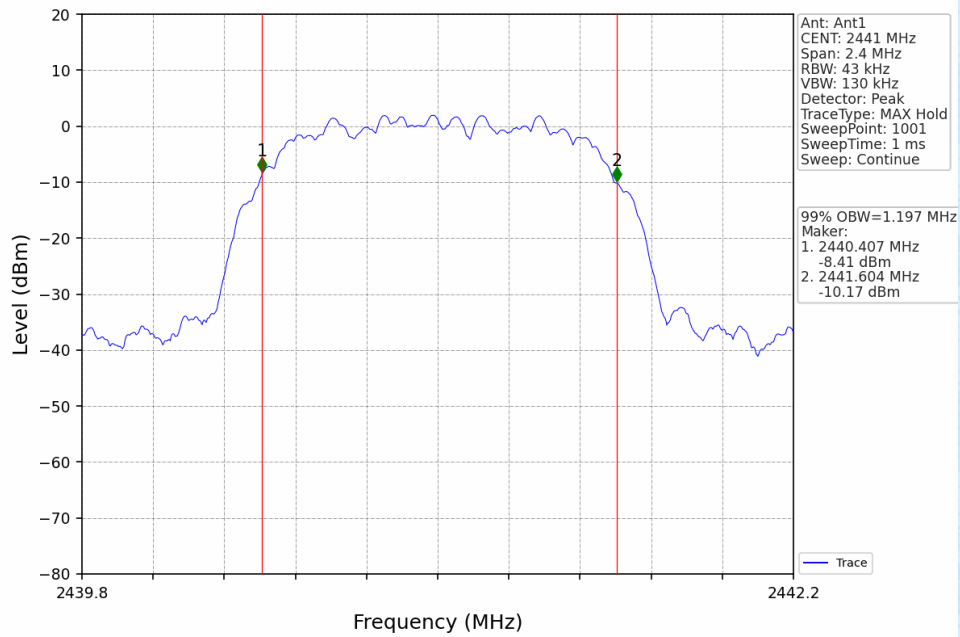
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



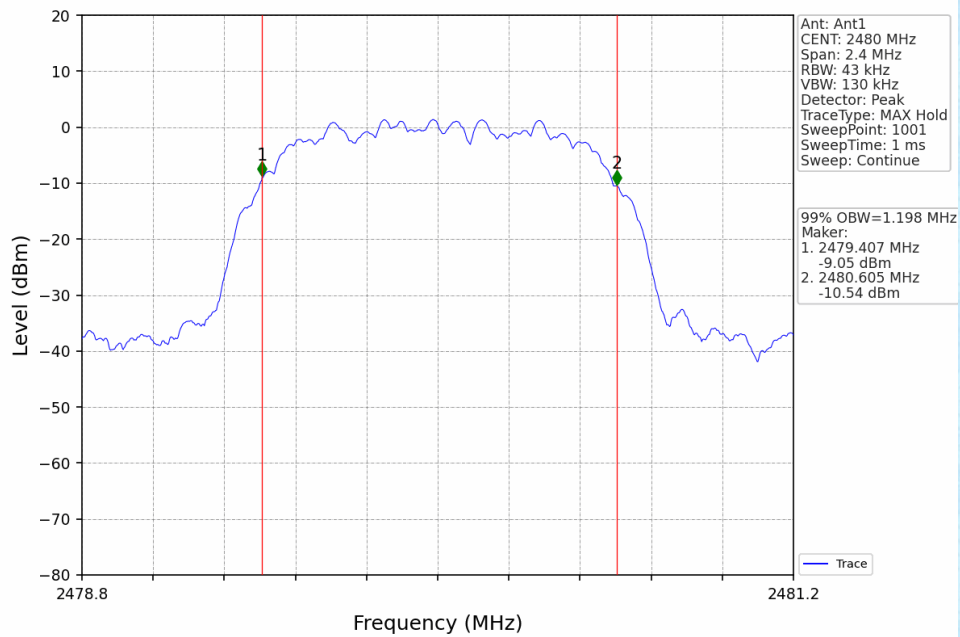
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



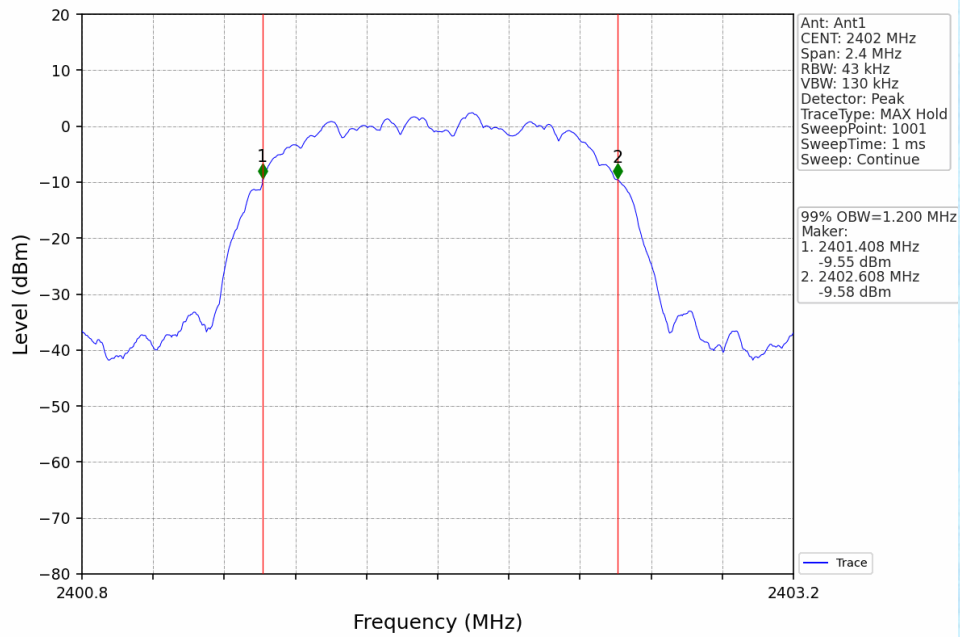
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



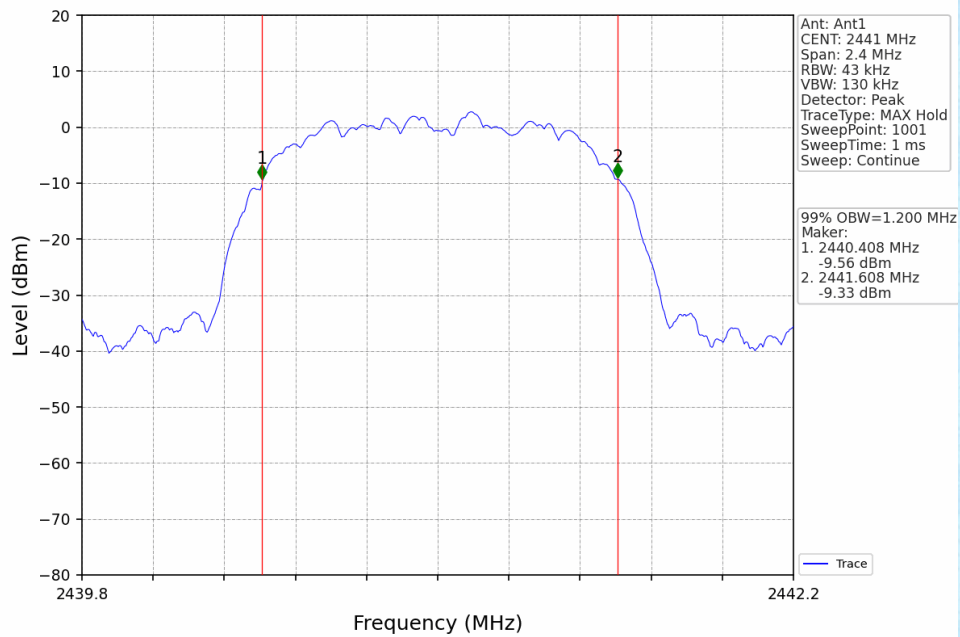
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

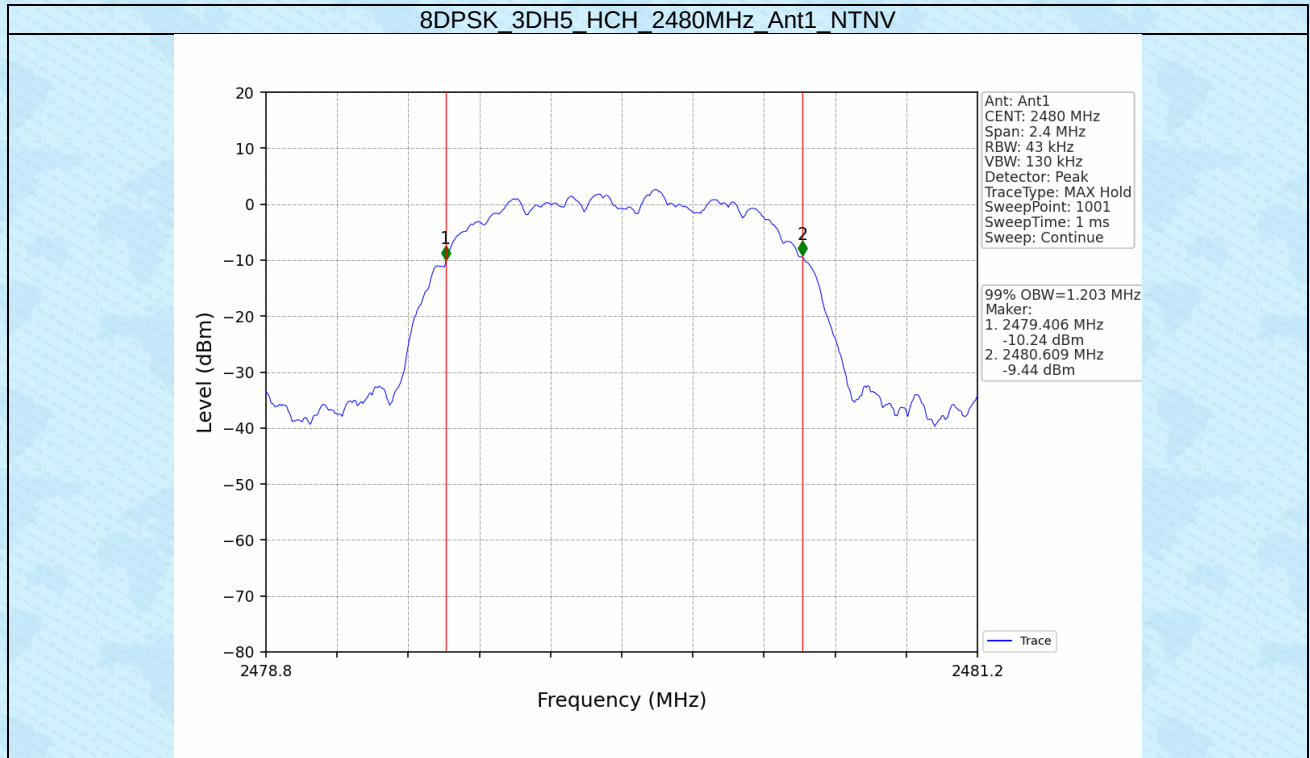


## 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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



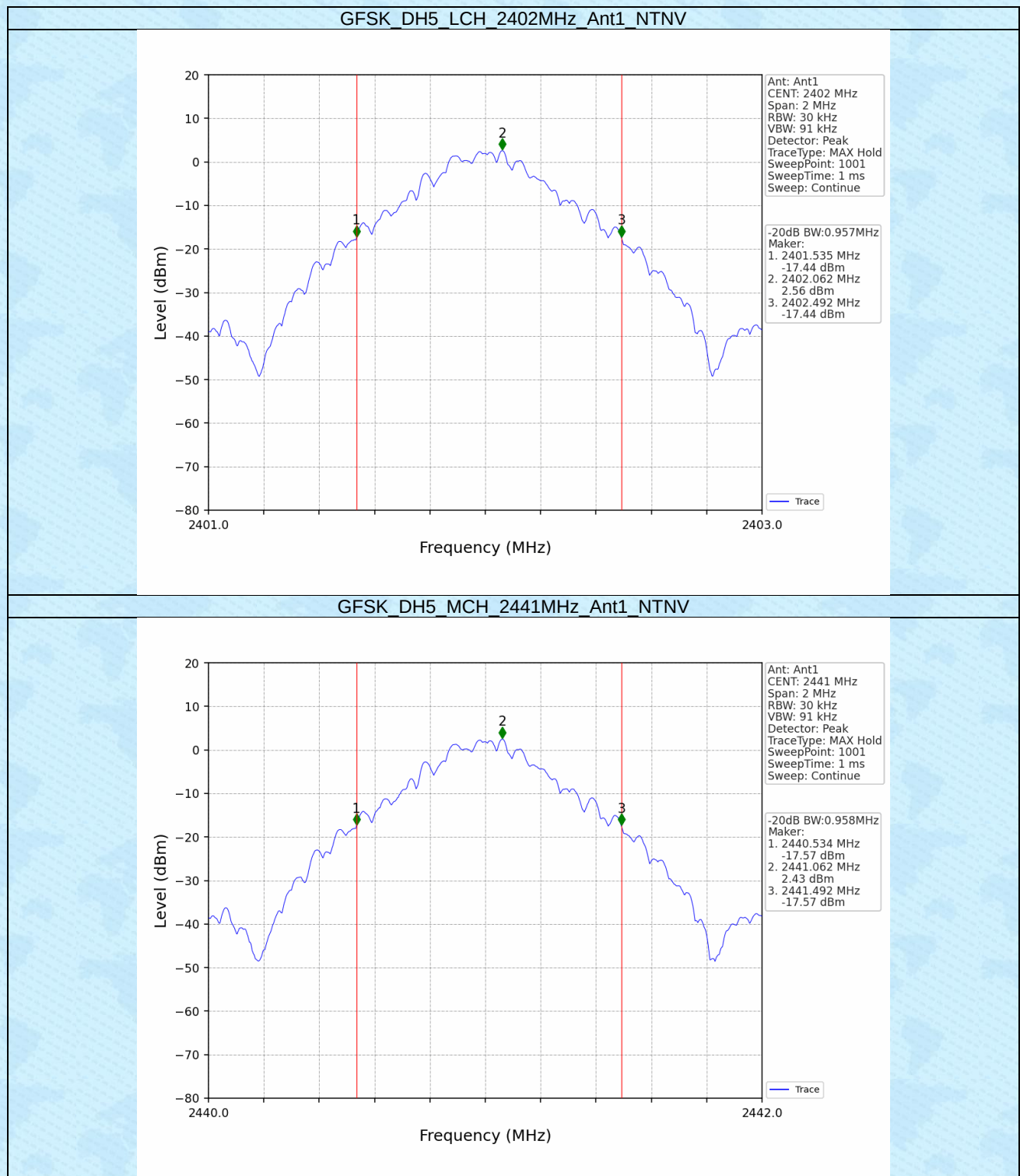


## 1.2 20dB BW

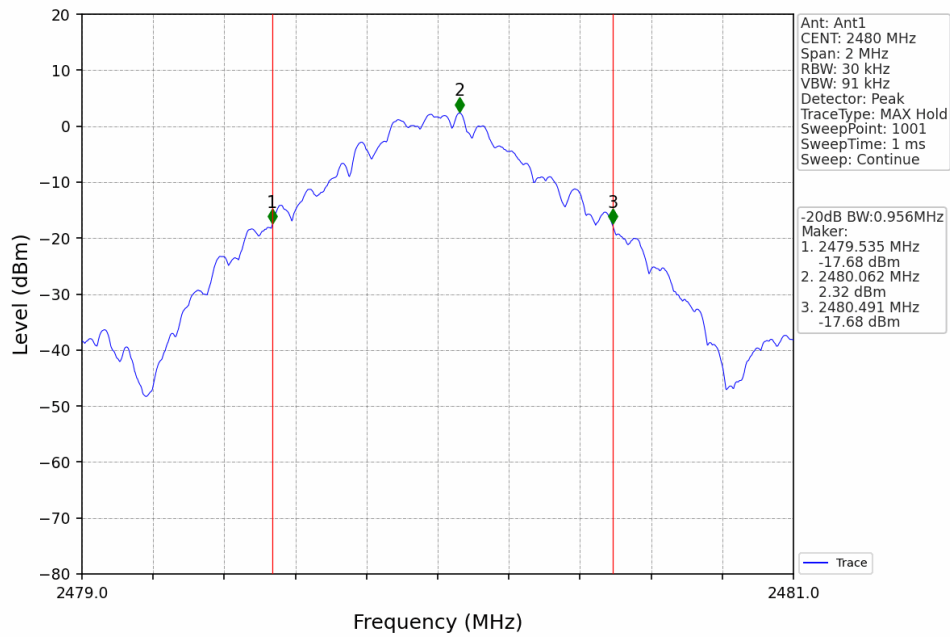
## 1.2.1 Test Result

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) | Verdict |
|-----------|---------|-----------------|-------------|-----|----------------------|---------|
|           |         |                 |             |     | Result               |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.957                | Pass    |
|           |         | 2441            | DH5         | 1   | 0.958                | Pass    |
|           |         | 2480            | DH5         | 1   | 0.956                | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.374                | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.373                | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.376                | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.350                | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.350                | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.353                | Pass    |

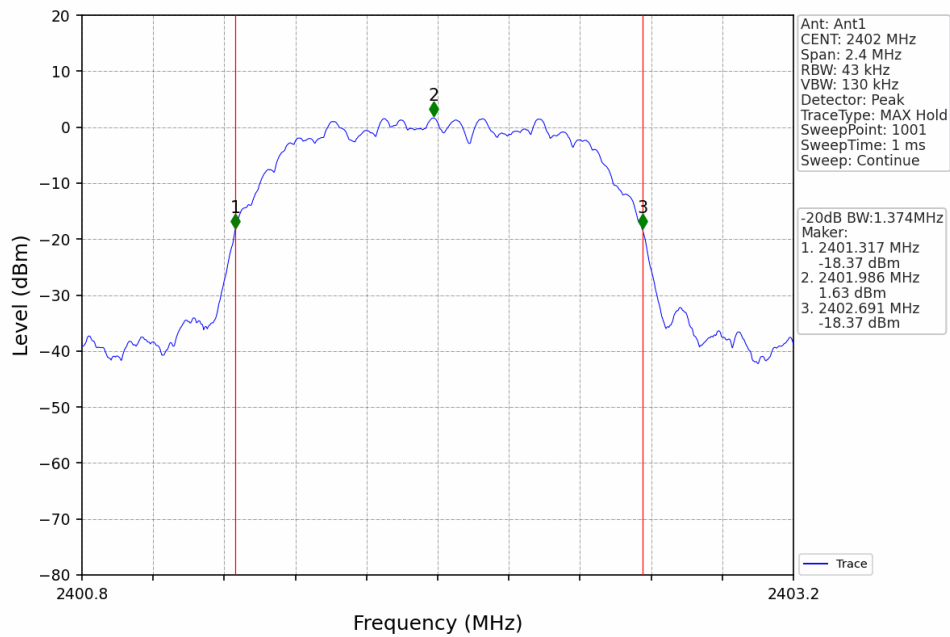
## 1.2.2 Test Graph



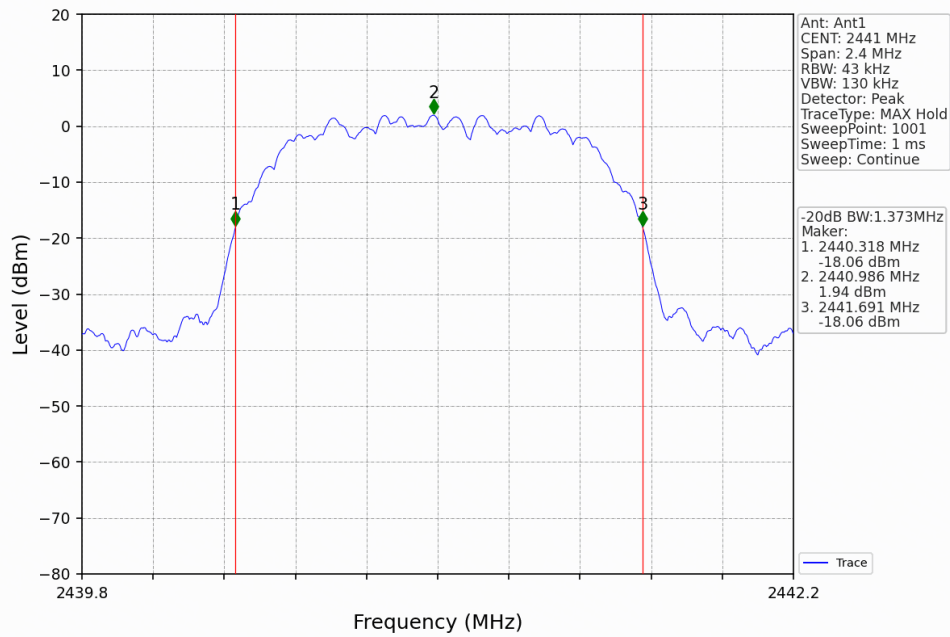
## GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



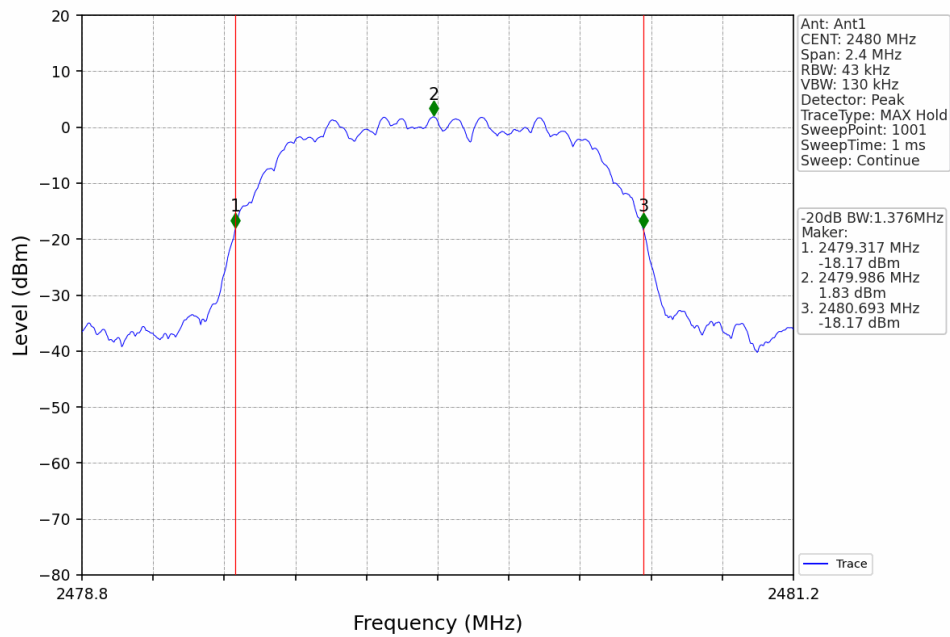
## Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



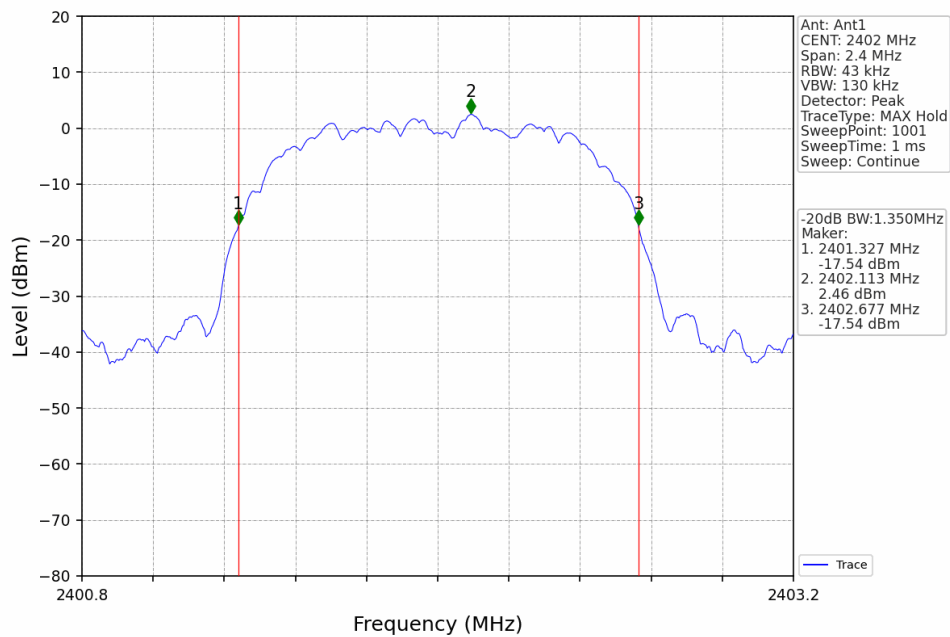
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



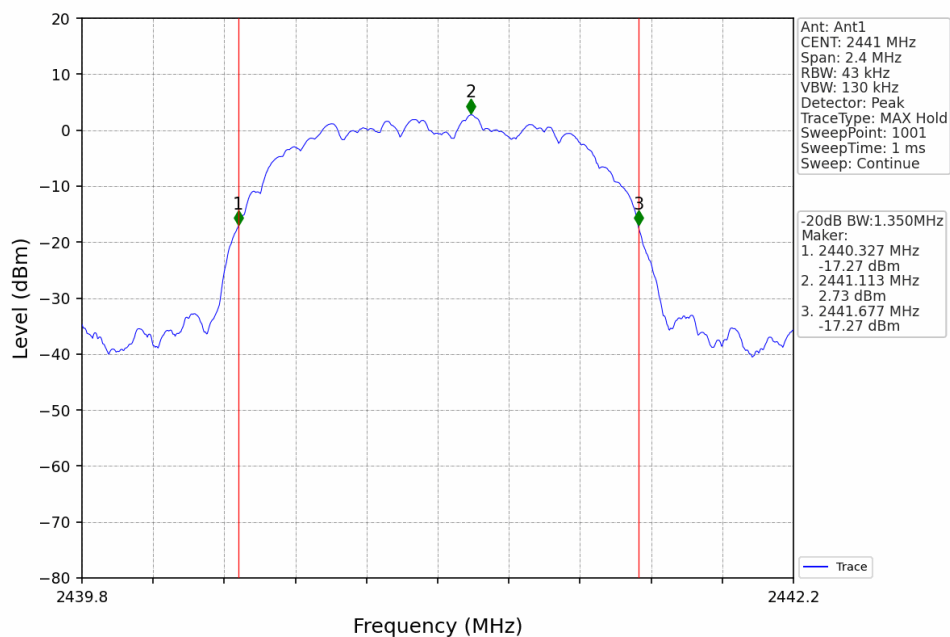
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

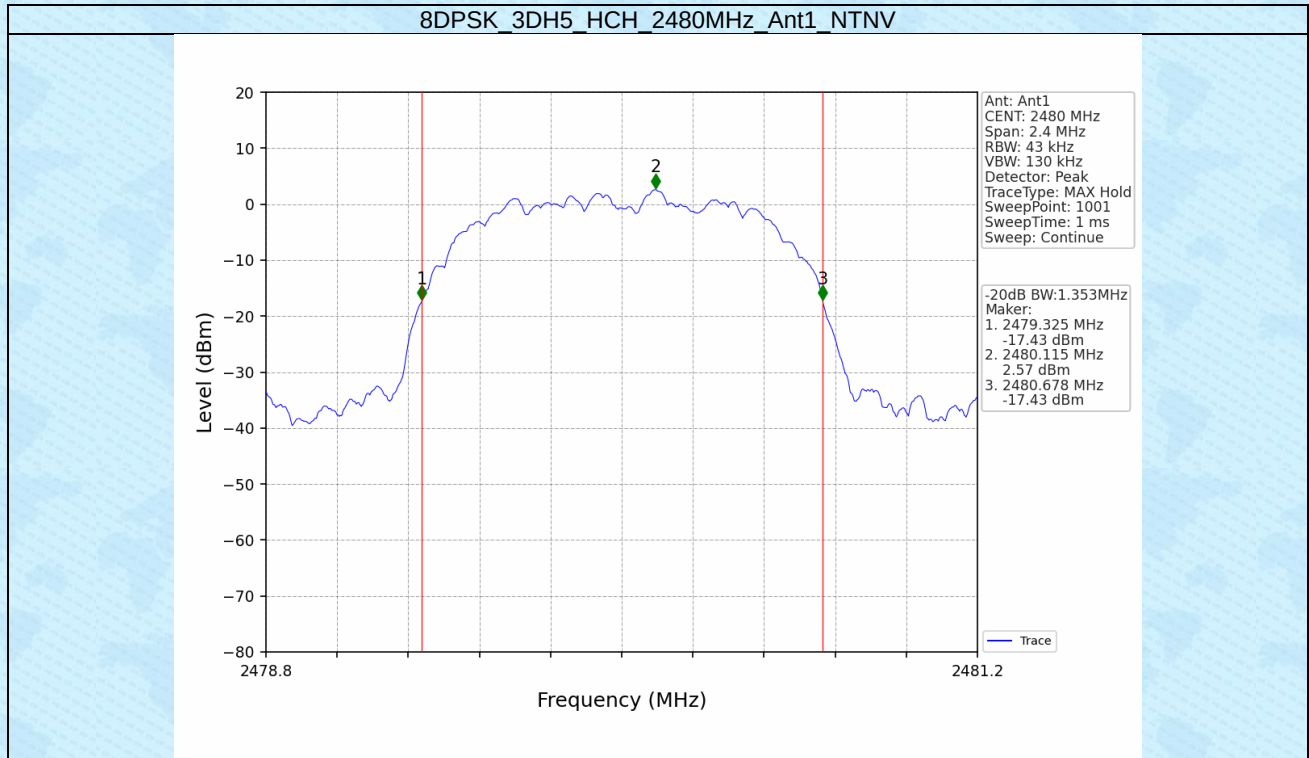


## 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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





## 2. Maximum Conducted Output Power

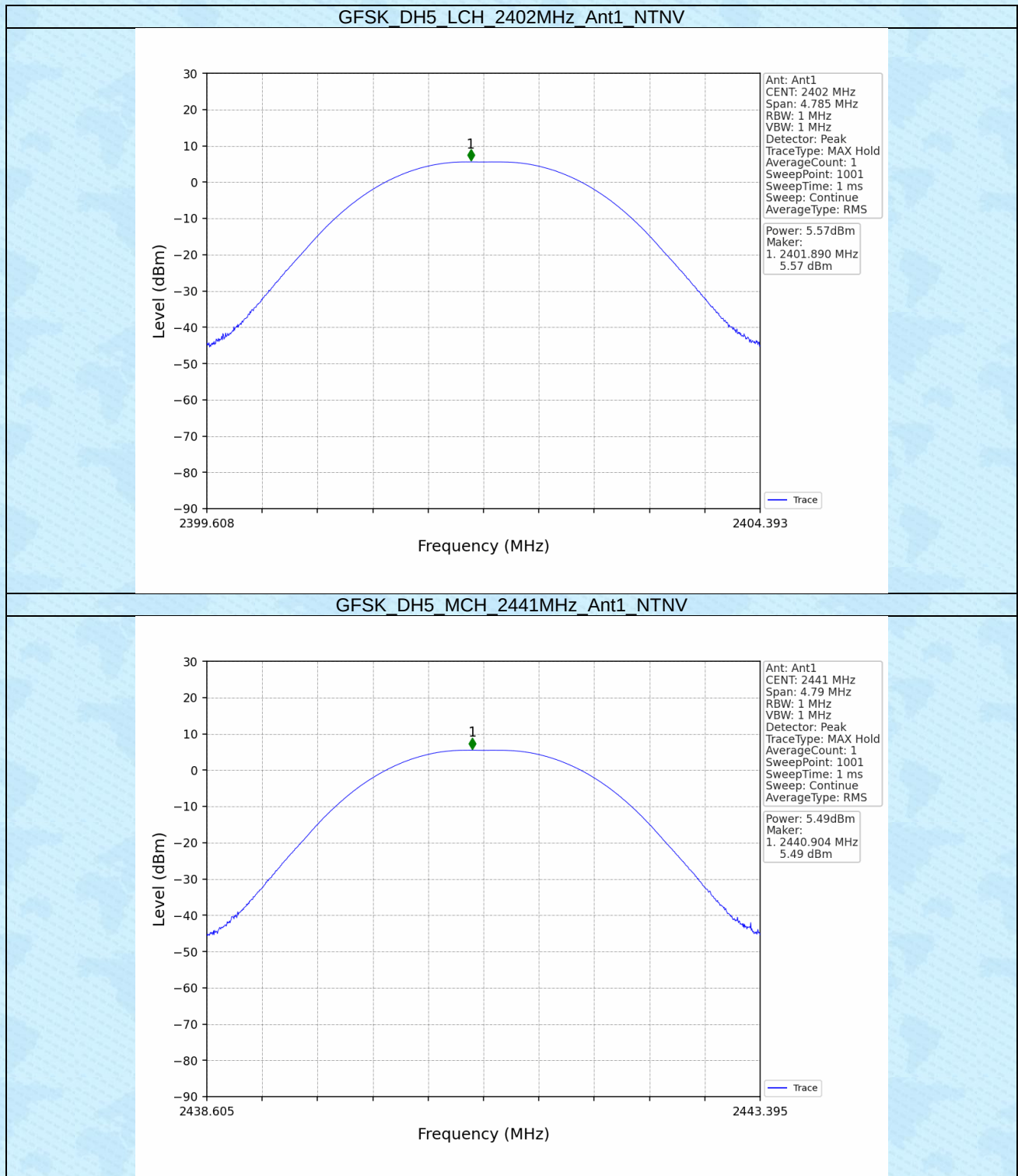
### 2.1 Power

#### 2.1.1 Test Result

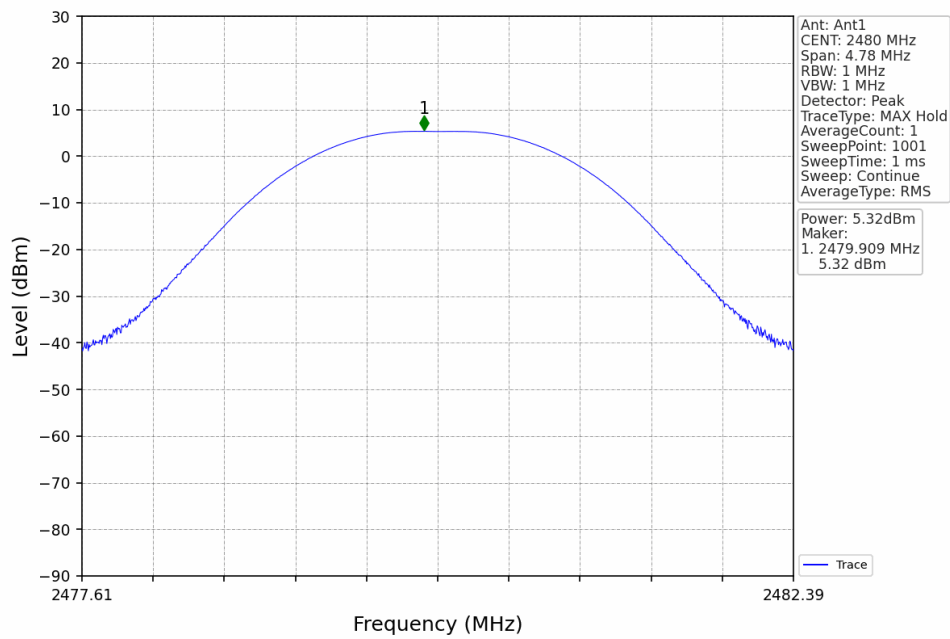
| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |         | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|---------|---------|
|           |         |                 |             | ANT1                                      | Limit   |         |
| GFSK      | SISO    | 2402            | DH5         | 5.57                                      | <=20.97 | Pass    |
|           |         | 2441            | DH5         | 5.49                                      | <=20.97 | Pass    |
|           |         | 2480            | DH5         | 5.32                                      | <=20.97 | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 9.19                                      | <=20.97 | Pass    |
|           |         | 2441            | 2DH5        | 9.50                                      | <=20.97 | Pass    |
|           |         | 2480            | 2DH5        | 9.29                                      | <=20.97 | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 9.72                                      | <=20.97 | Pass    |
|           |         | 2441            | 3DH5        | 10.33                                     | <=20.97 | Pass    |
|           |         | 2480            | 3DH5        | 9.75                                      | <=20.97 | Pass    |

Note1: Antenna Gain: Ant1: 2.32dBi;

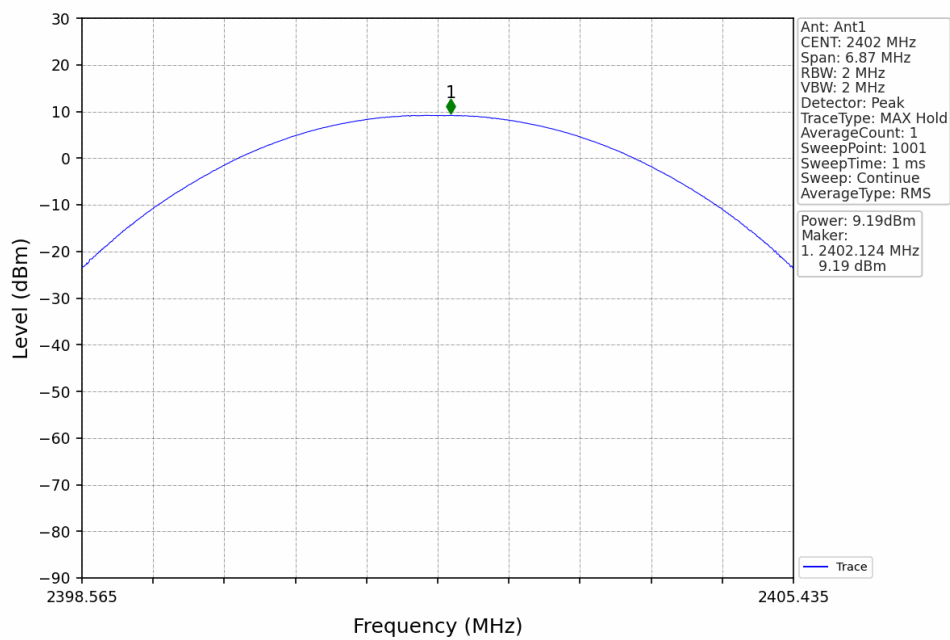
## 2.1.2 Test Graph



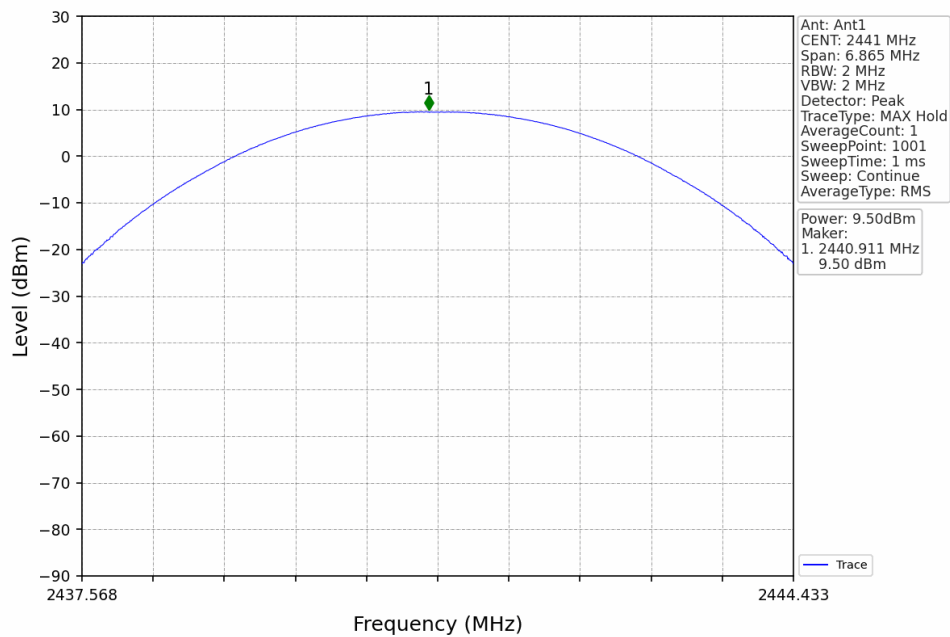
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



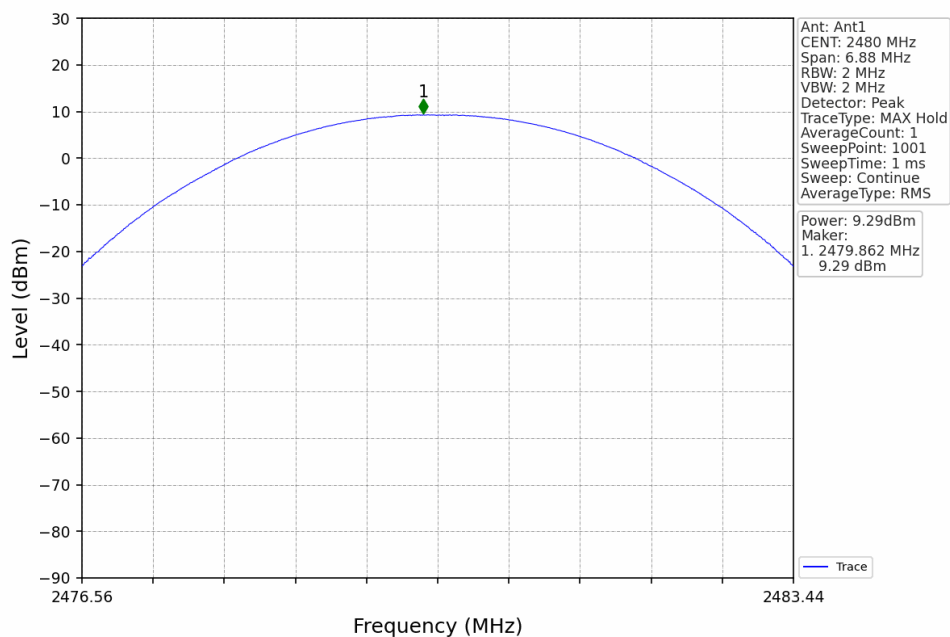
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



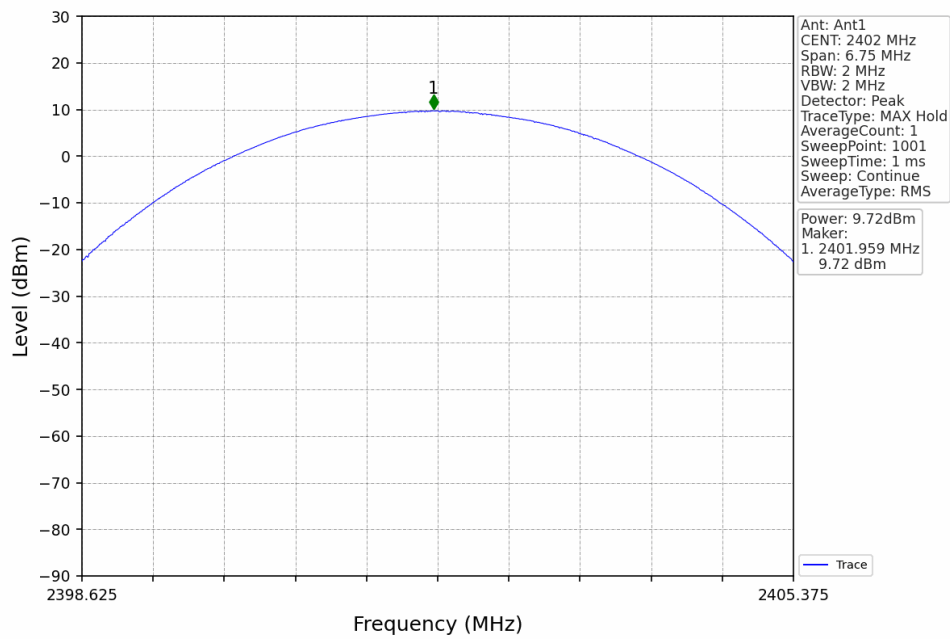
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



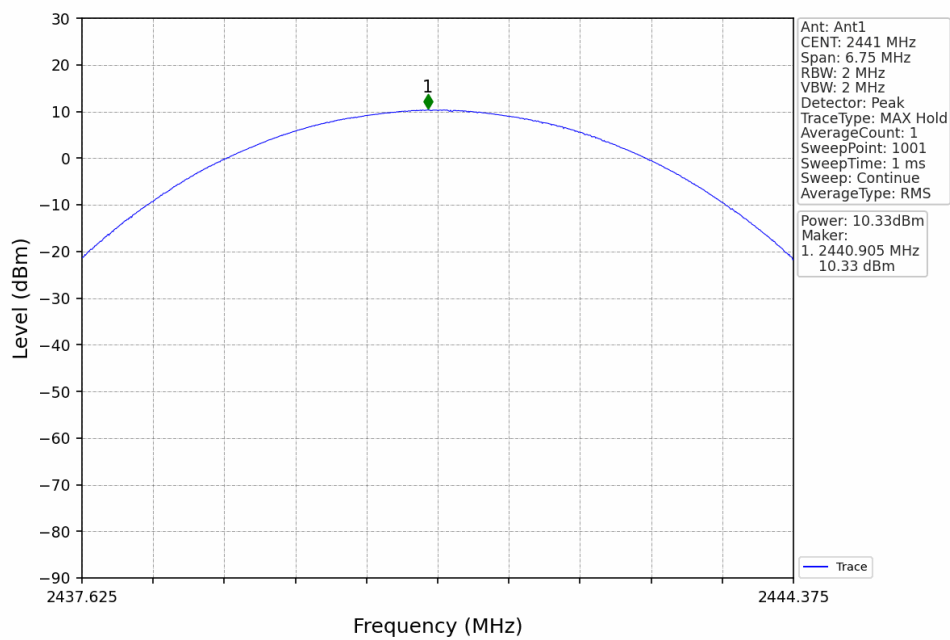
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

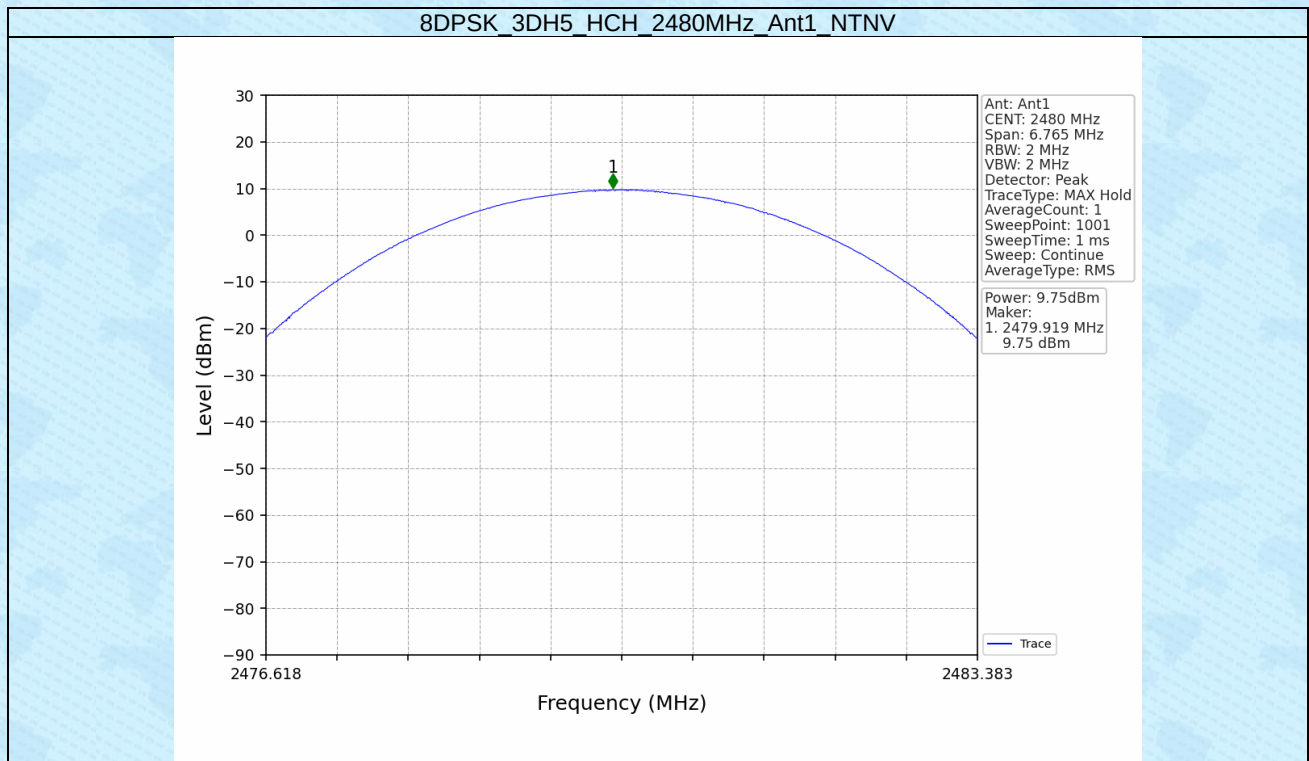


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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





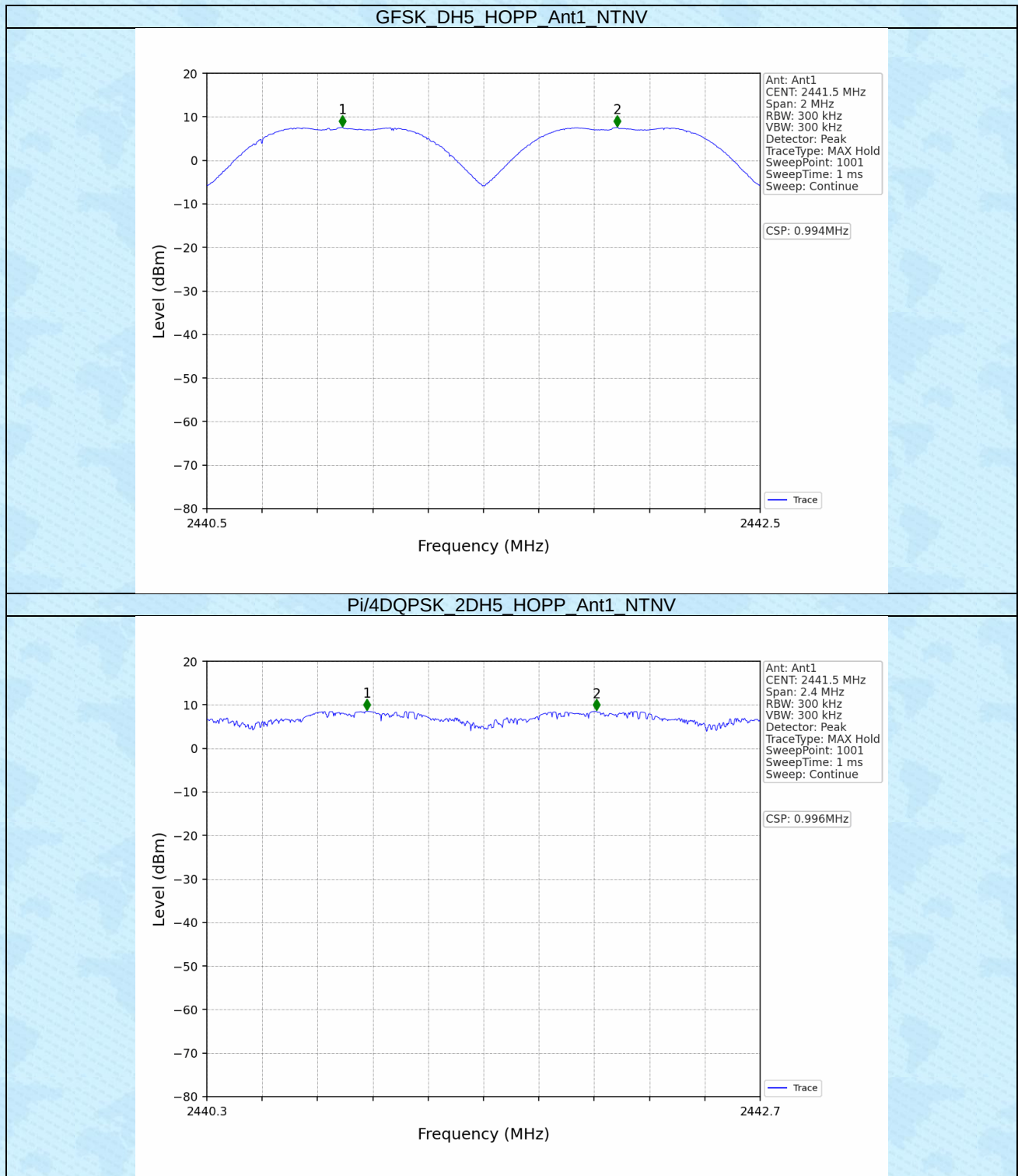
### 3. Carrier Frequency Separation

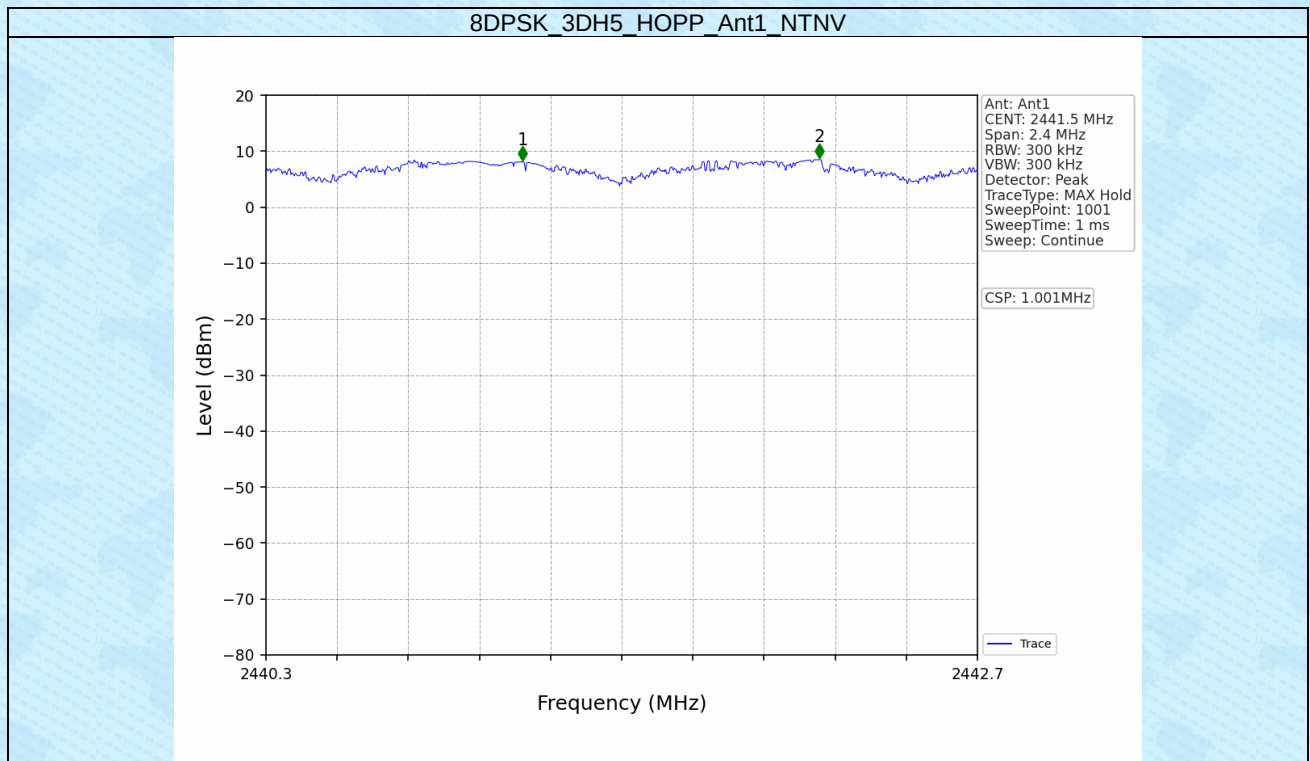
#### 3.1 Ant1

##### 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         | 0.994                    | 0.958                | $\geq 0.958$ | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 0.996                    | 1.376                | $\geq 0.917$ | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 1.001                    | 1.353                | $\geq 0.902$ | Pass    |

## 3.1.2 Test Graph





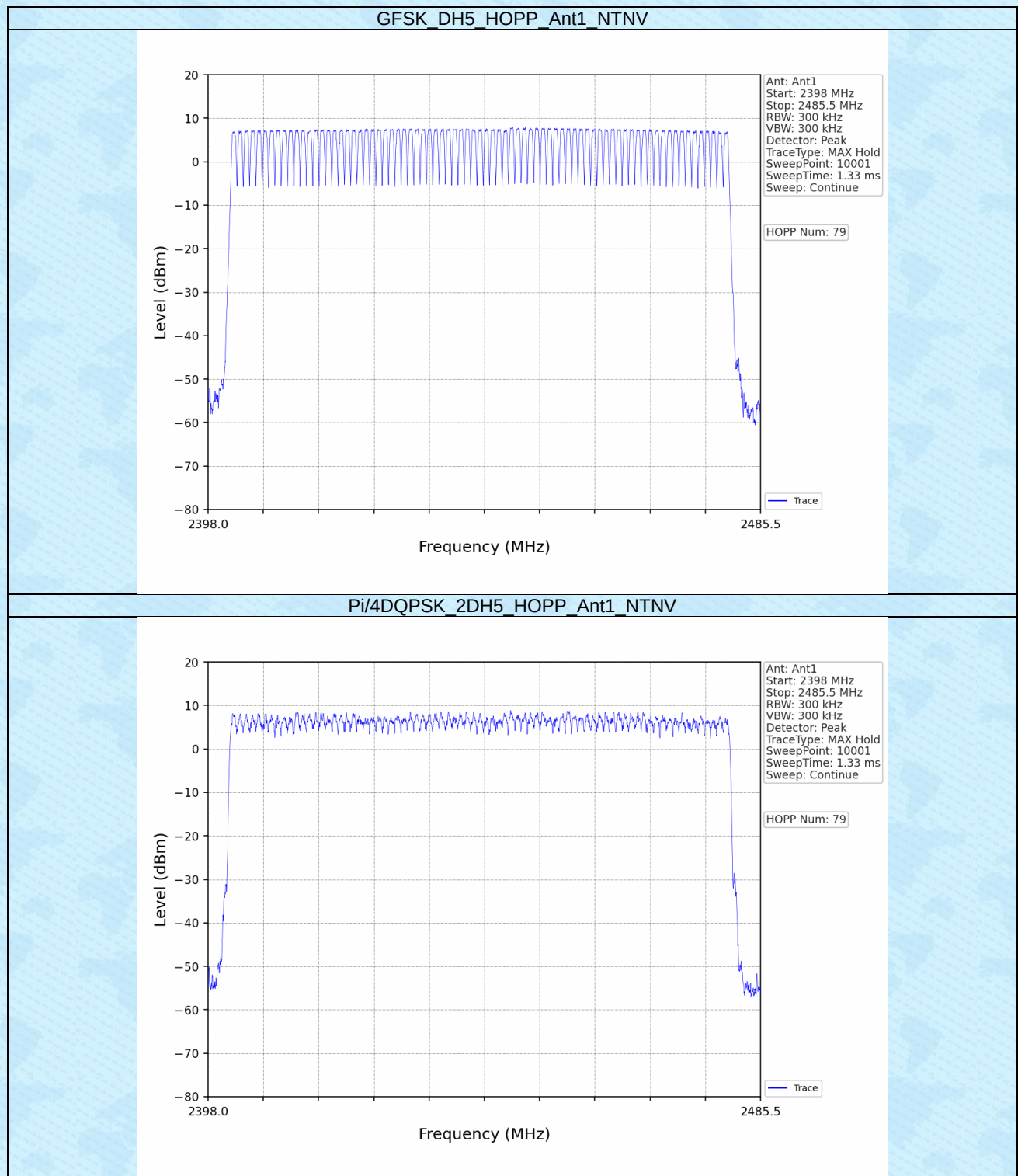
## 4. Number of Hopping Frequencies

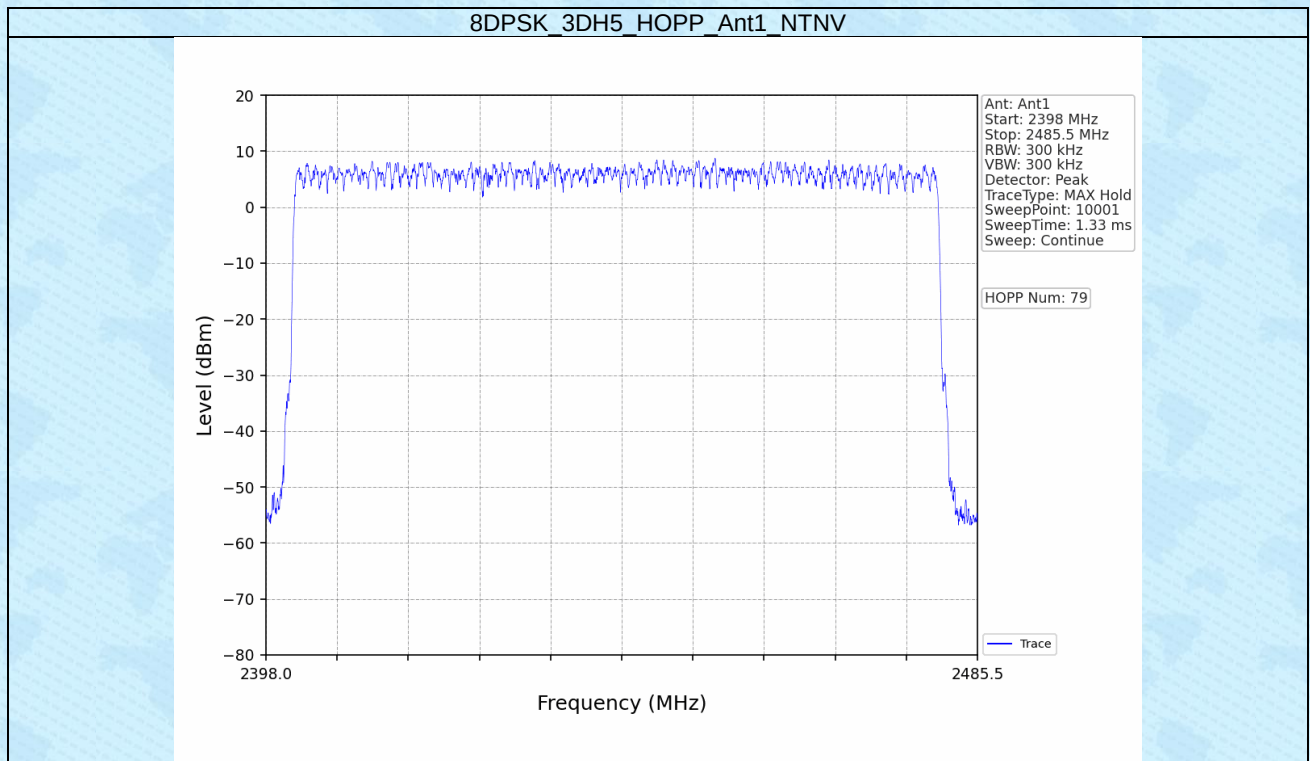
### 4.1 HoppNum

#### 4.1.1 Test Result

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

## 4.1.2 Test Graph





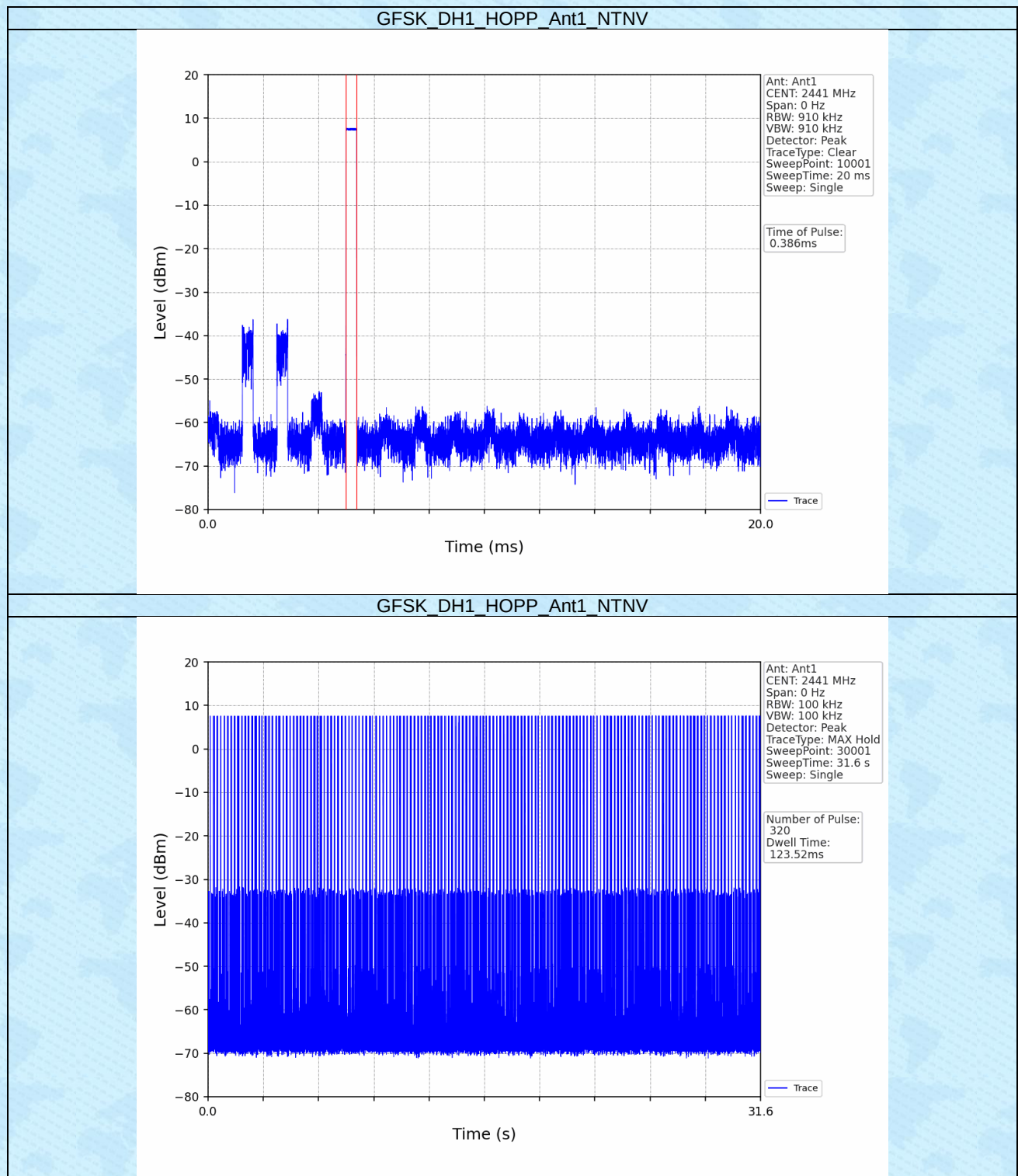
## 5. Time of Occupancy (Dwell Time)

### 5.1 Ant1

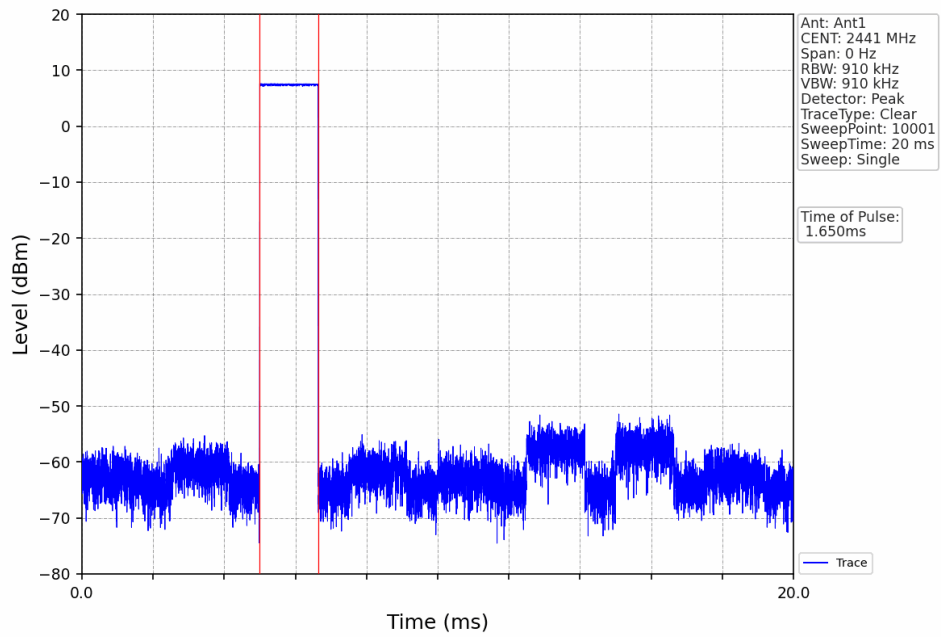
#### 5.1.1 Test Result

| 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         | 0.386                         | 31.600                 | 320                                | 123.520         | <=400      | Pass    |
|           |         |                 | DH3         | 1.650                         | 31.600                 | 153                                | 252.450         | <=400      | Pass    |
|           |         |                 | DH5         | 2.900                         | 31.600                 | 116                                | 336.400         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.404                         | 31.600                 | 320                                | 129.280         | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.648                         | 31.600                 | 166                                | 273.568         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.904                         | 31.600                 | 103                                | 299.112         | <=400      | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH1        | 0.394                         | 31.600                 | 320                                | 126.080         | <=400      | Pass    |
|           |         |                 | 3DH3        | 1.656                         | 31.600                 | 163                                | 269.928         | <=400      | Pass    |
|           |         |                 | 3DH5        | 2.906                         | 31.600                 | 120                                | 348.720         | <=400      | Pass    |

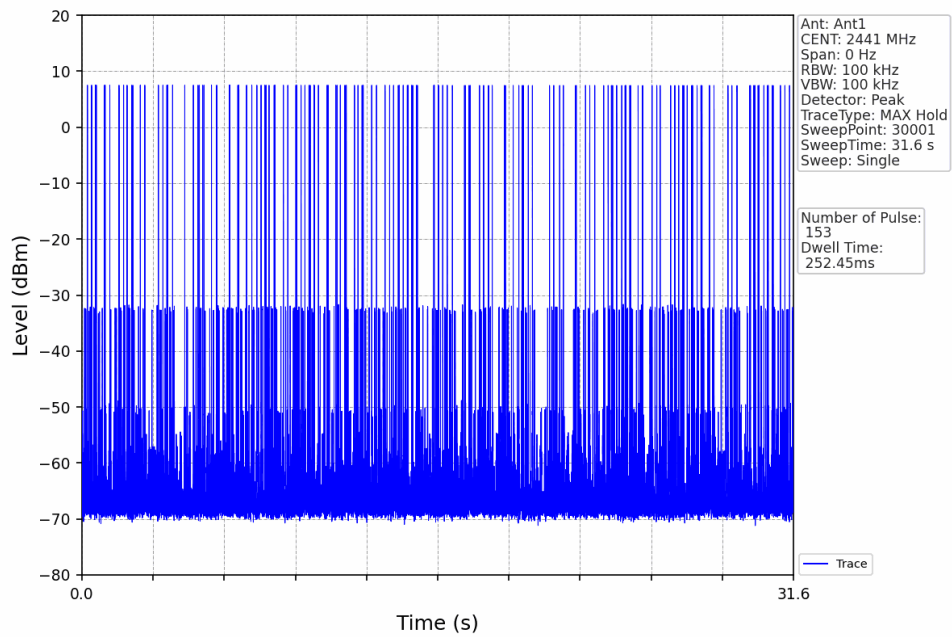
## 5.1.2 Test Graph



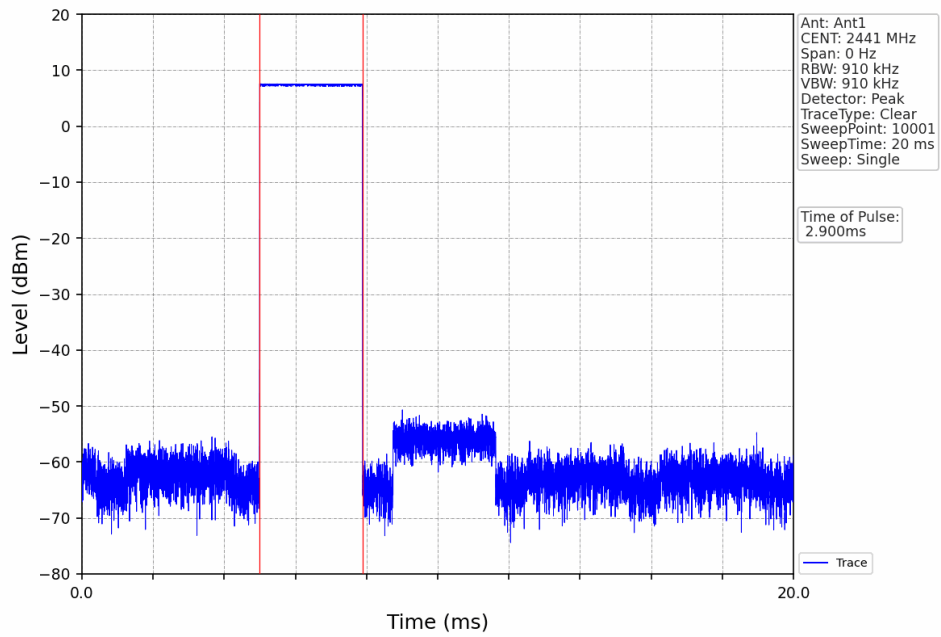
## GFSK DH3 HOPP\_Ant1\_NTNV



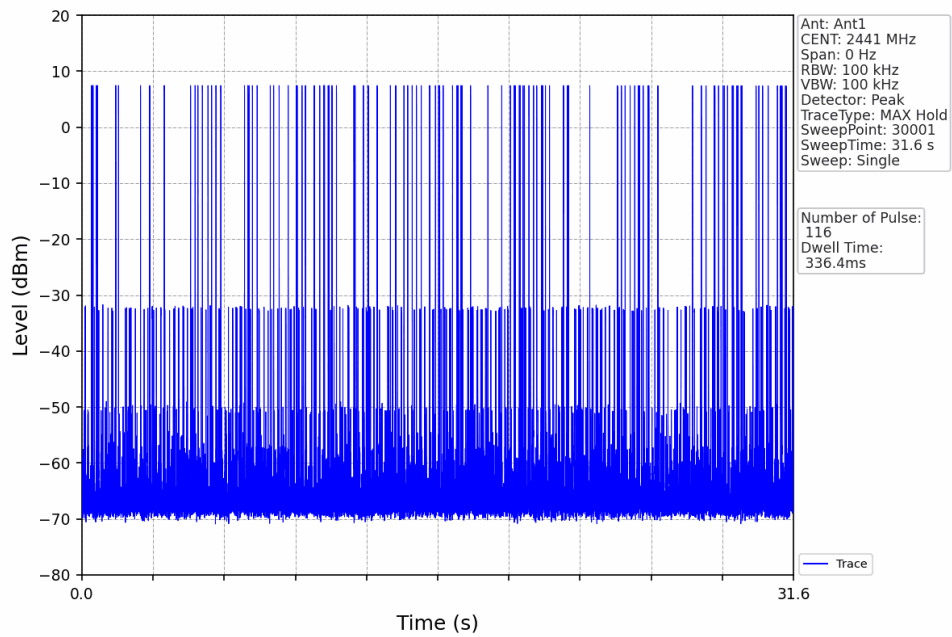
## GFSK DH3 HOPP\_Ant1\_NTNV



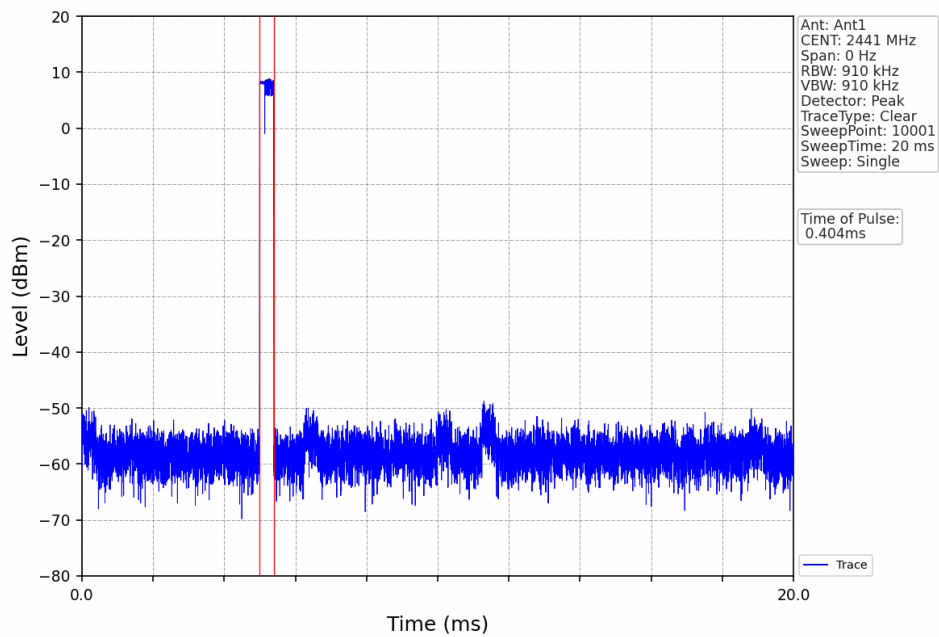
GFSK DH5\_HOPP\_Ant1\_NTNV



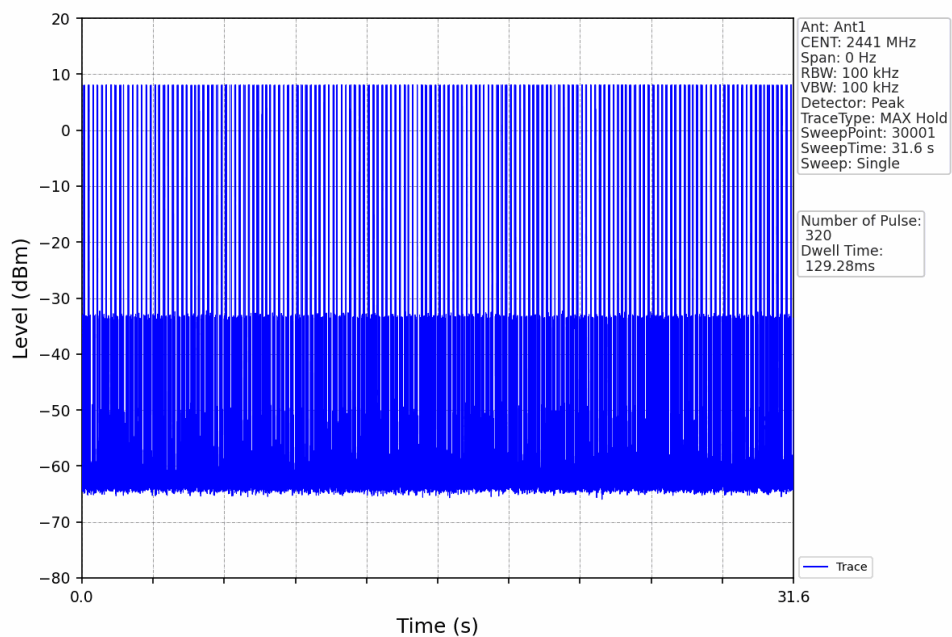
GFSK\_DH5\_HOPP\_Ant1\_NTNV



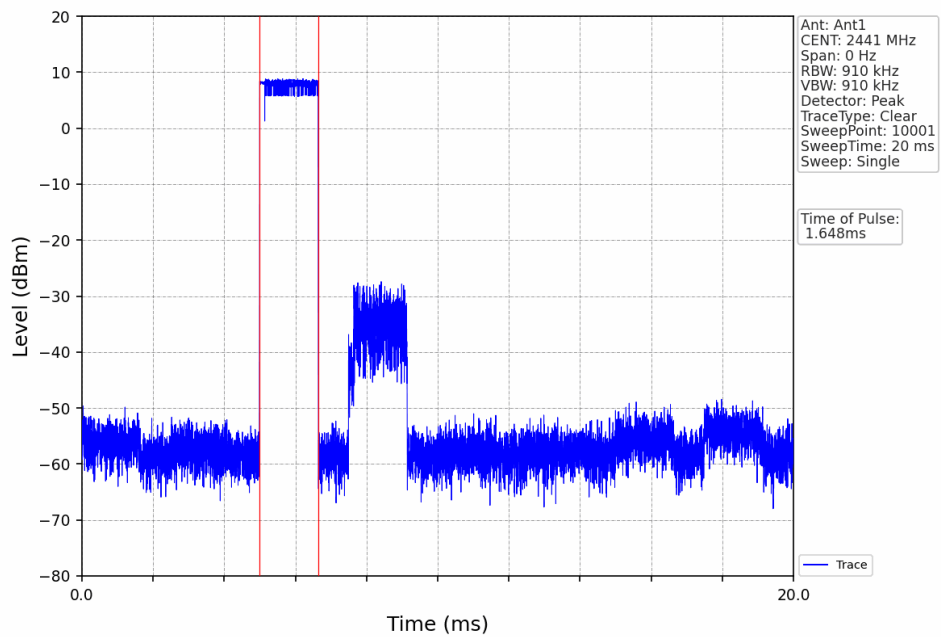
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



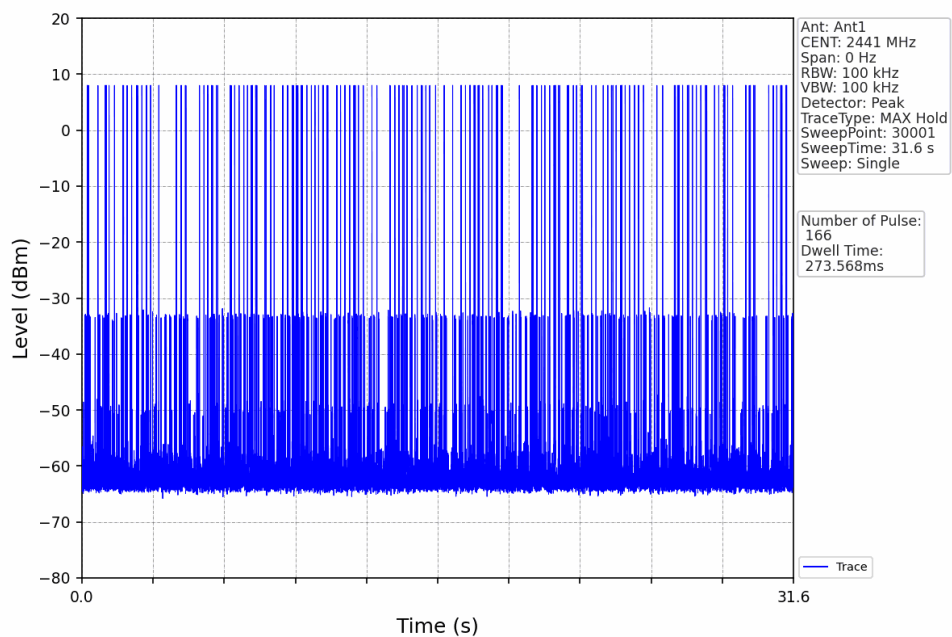
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



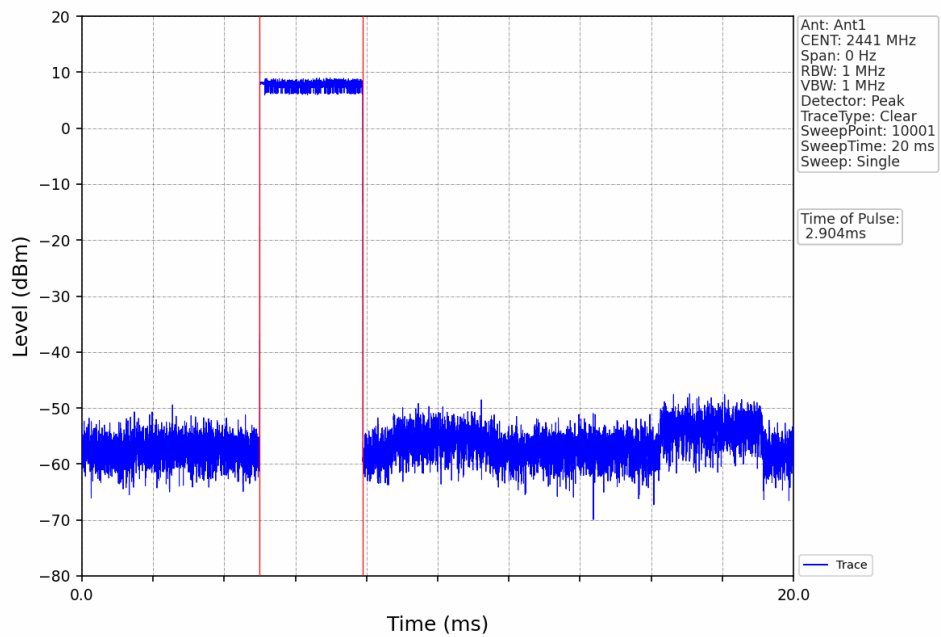
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



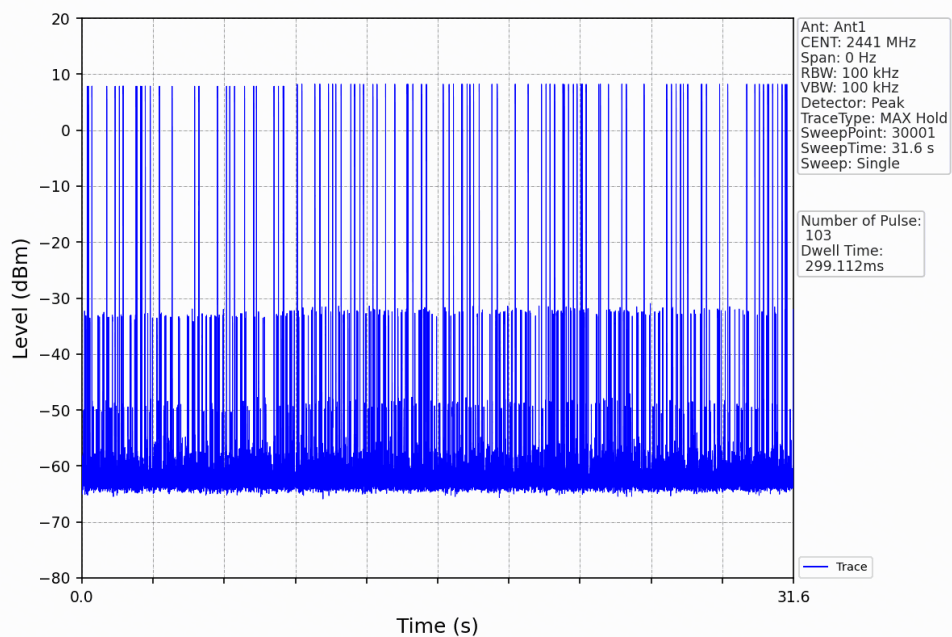
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



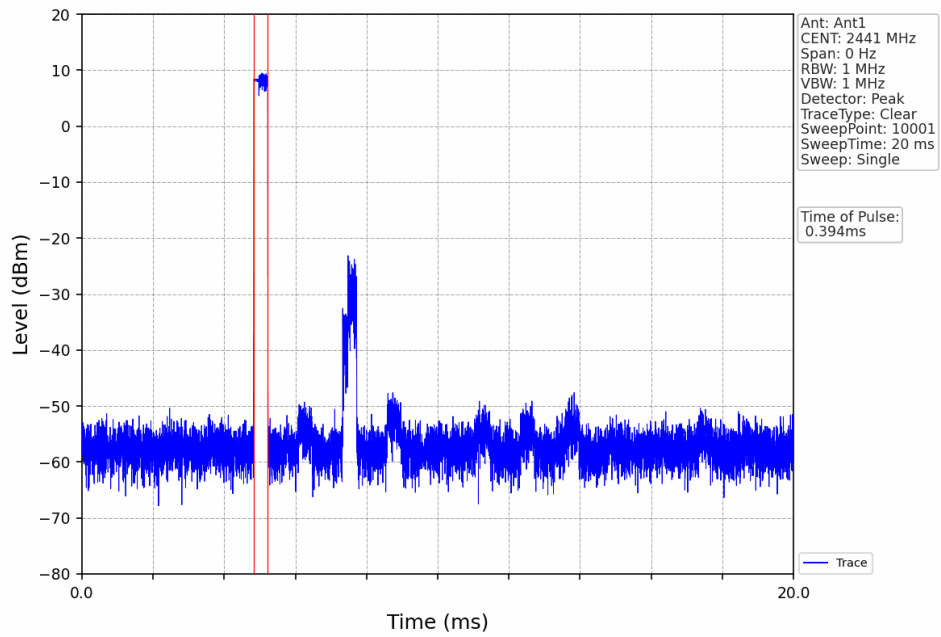
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



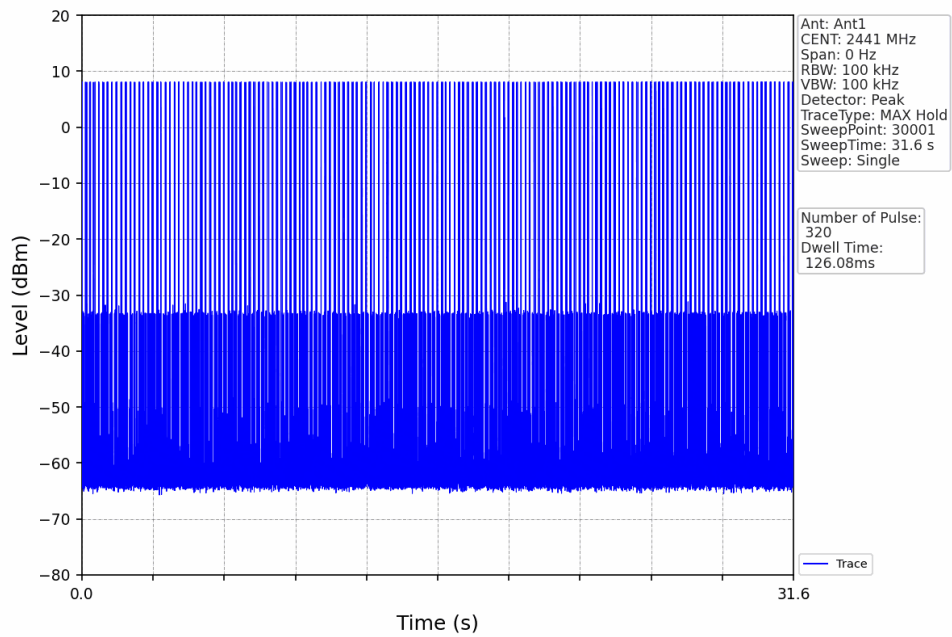
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



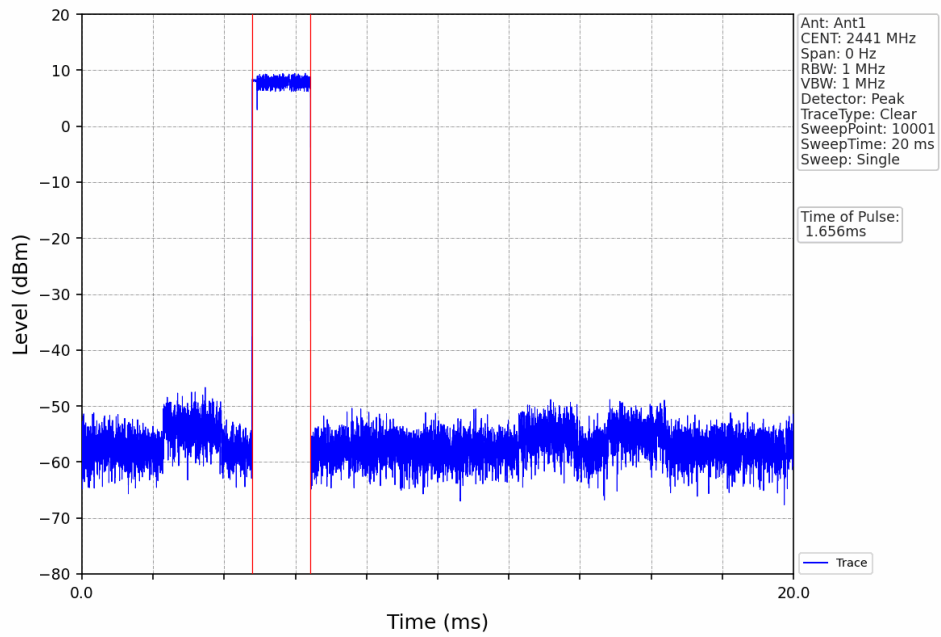
8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



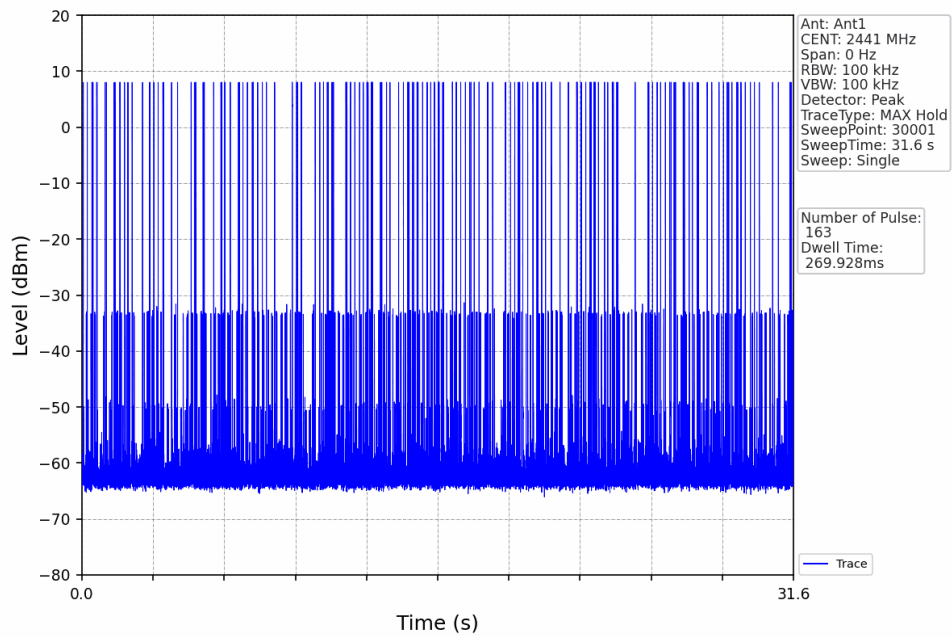
8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



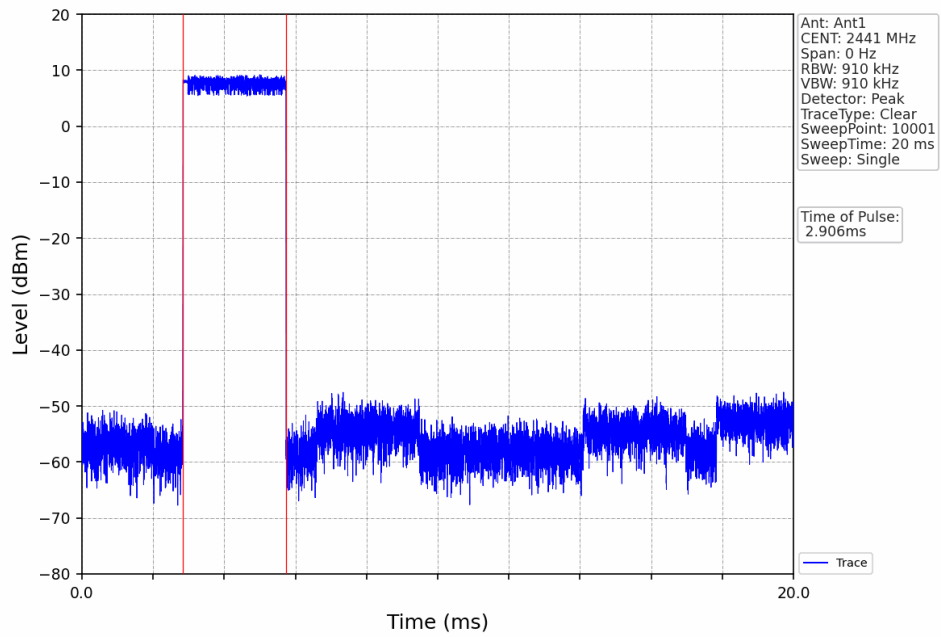
8DPSK\_3DH3\_HOPP\_Ant1\_NTNV



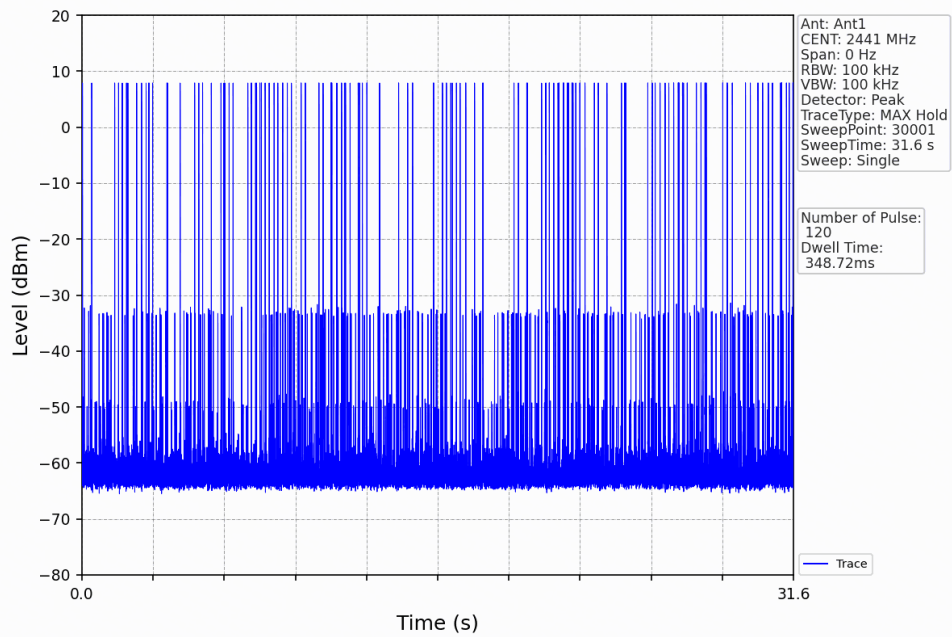
8DPSK\_3DH3\_HOPP\_Ant1\_NTNV



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



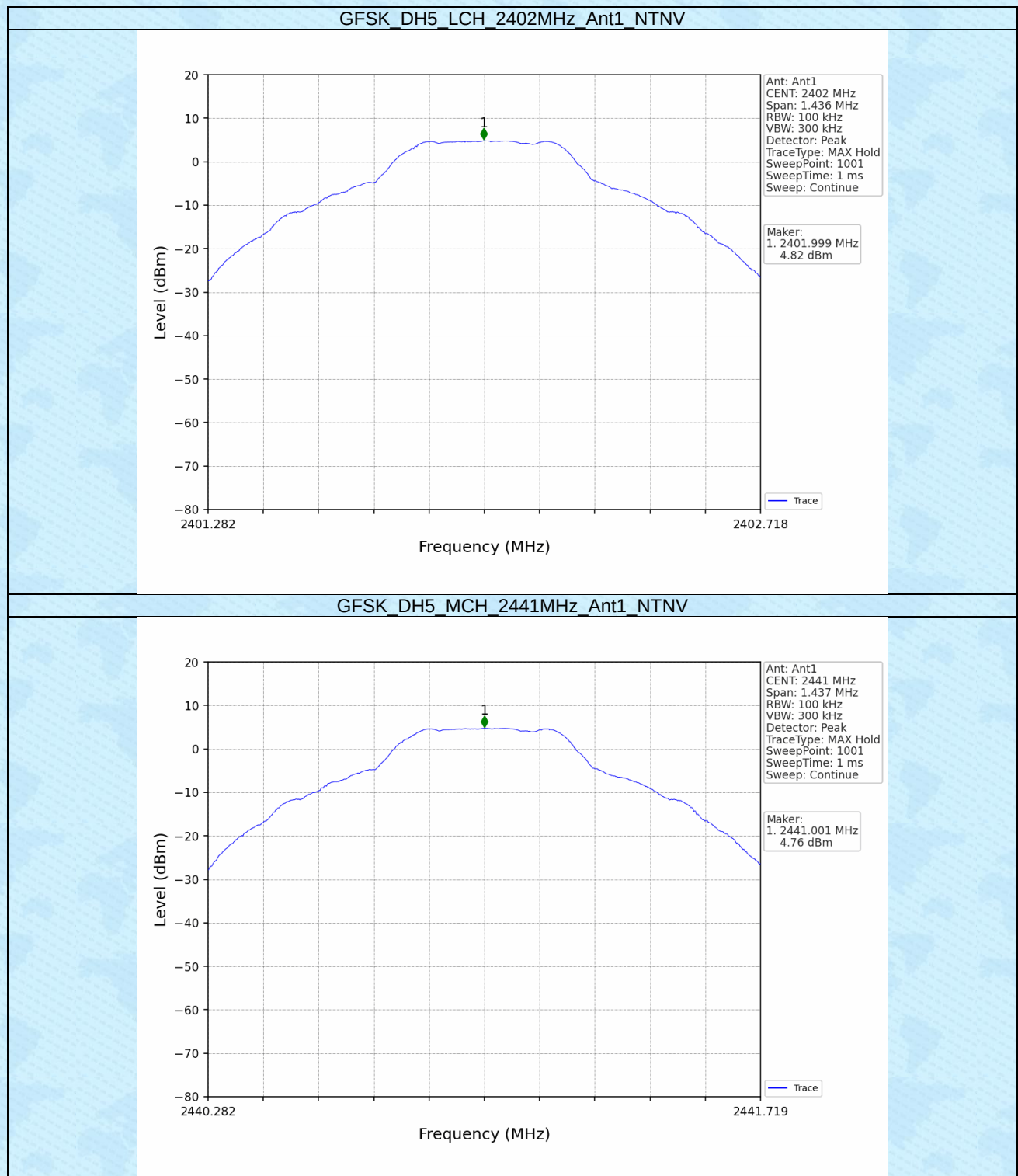
## 6. Unwanted Emissions In Non-restricted Frequency Bands

### 6.1 Ref

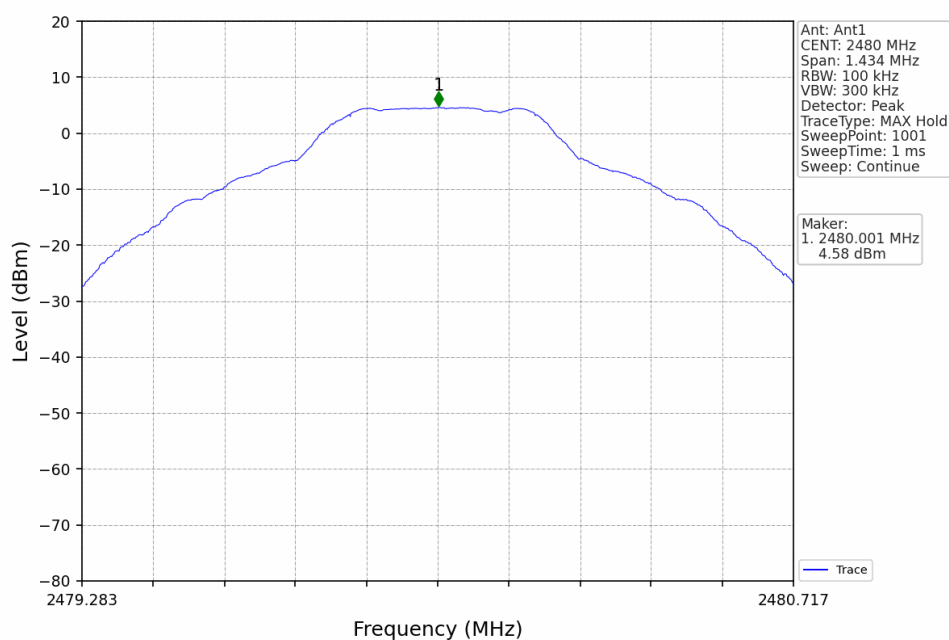
#### 6.1.1 Test Result

| Mode                                                                                                                                            | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-------------|-----|--------------------------|
| GFSK                                                                                                                                            | SISO    | 2402            | DH5         | 1   | 4.82                     |
|                                                                                                                                                 |         | 2441            | DH5         | 1   | 4.76                     |
|                                                                                                                                                 |         | 2480            | DH5         | 1   | 4.58                     |
| Pi/4DQPSK                                                                                                                                       | SISO    | 2402            | 2DH5        | 1   | 5.20                     |
|                                                                                                                                                 |         | 2441            | 2DH5        | 1   | 5.88                     |
|                                                                                                                                                 |         | 2480            | 2DH5        | 1   | 5.37                     |
| 8DPSK                                                                                                                                           | SISO    | 2402            | 3DH5        | 1   | 5.06                     |
|                                                                                                                                                 |         | 2441            | 3DH5        | 1   | 5.78                     |
|                                                                                                                                                 |         | 2480            | 3DH5        | 1   | 5.30                     |
| 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. |         |                 |             |     |                          |

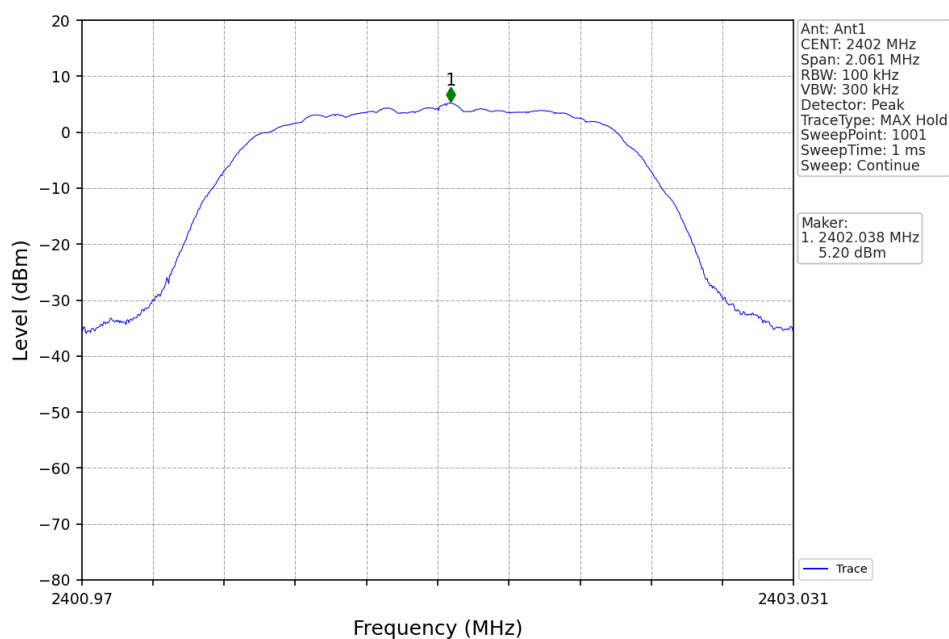
## 6.1.2 Test Graph



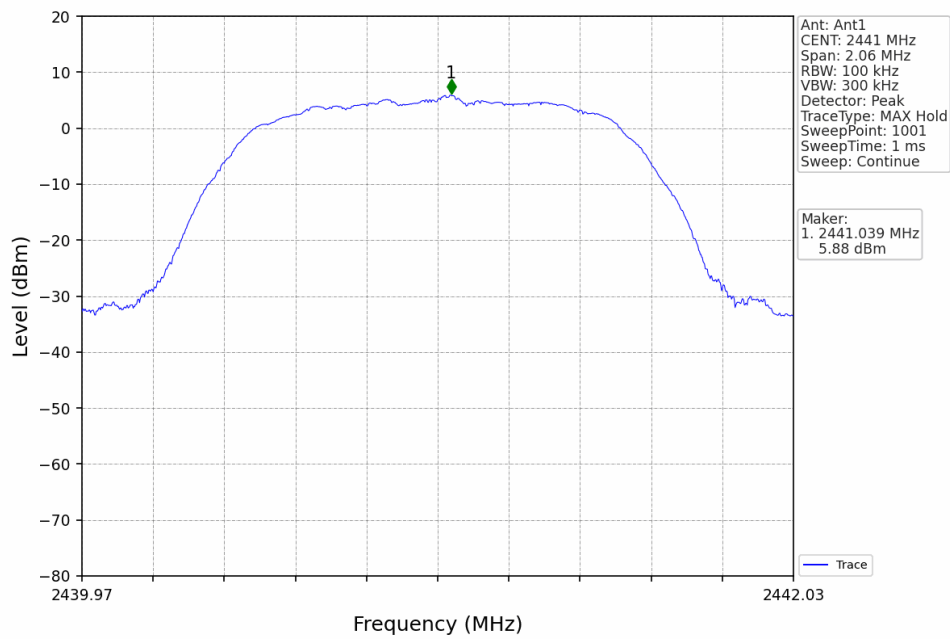
## GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



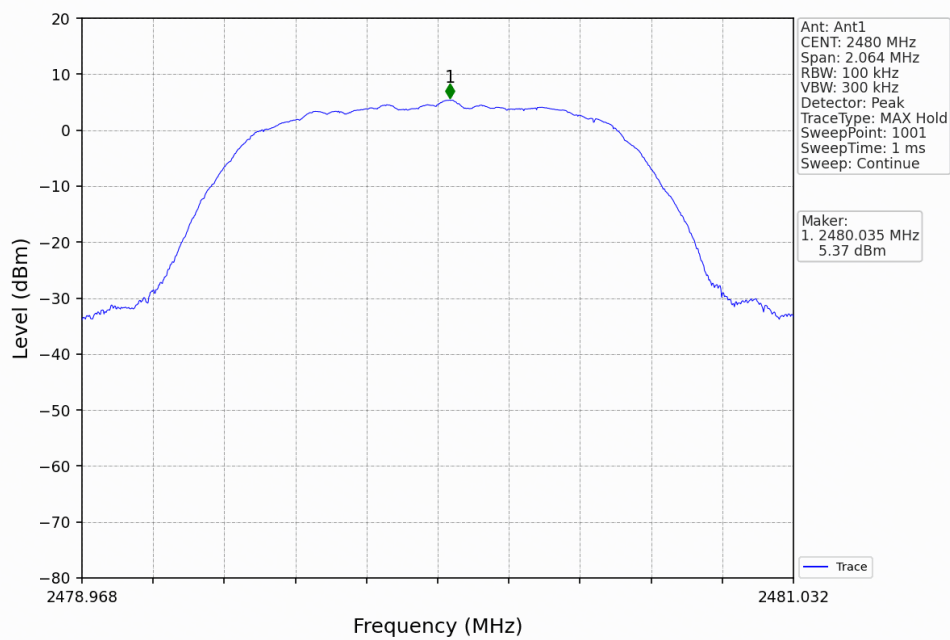
## Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



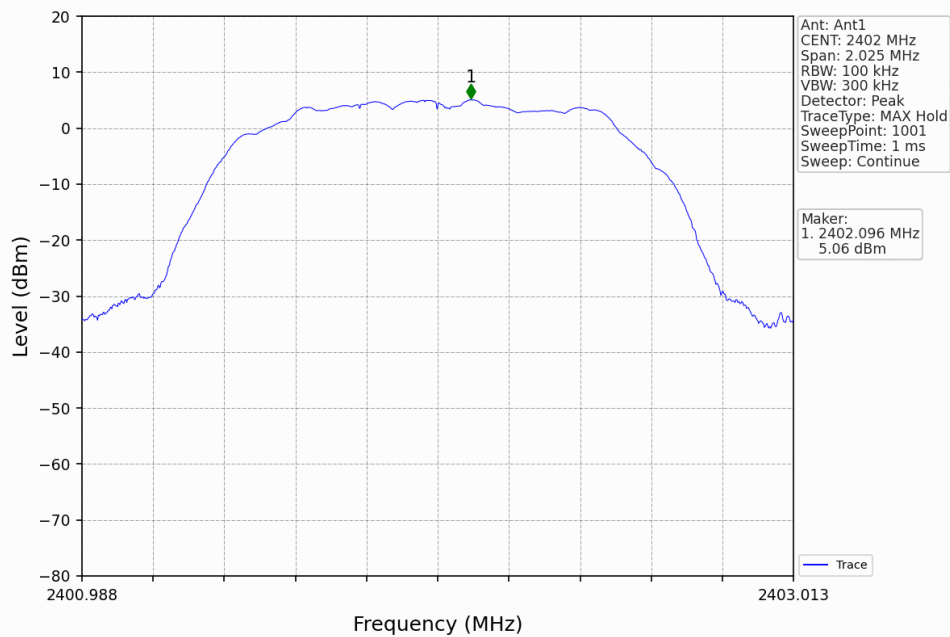
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



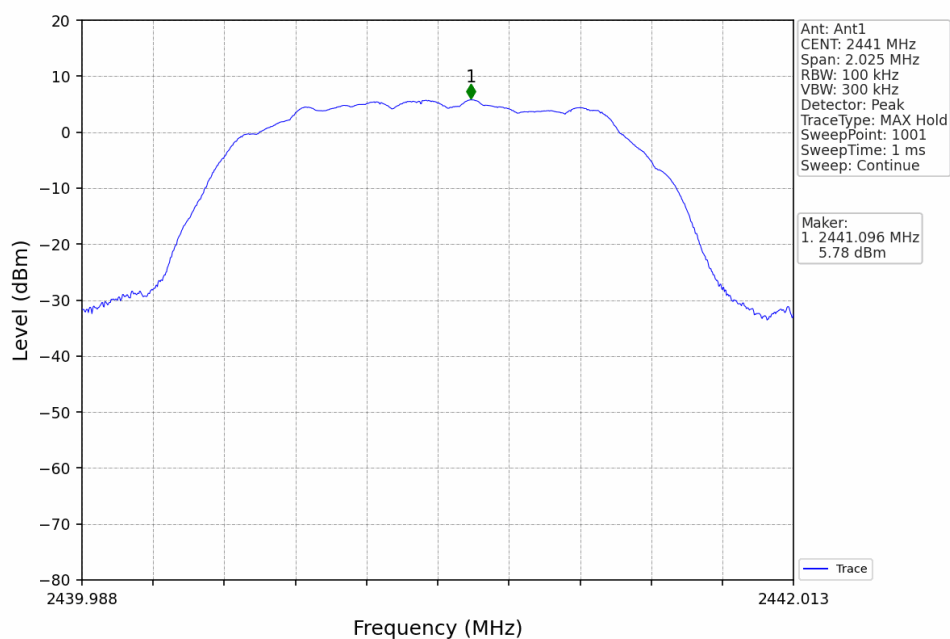
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

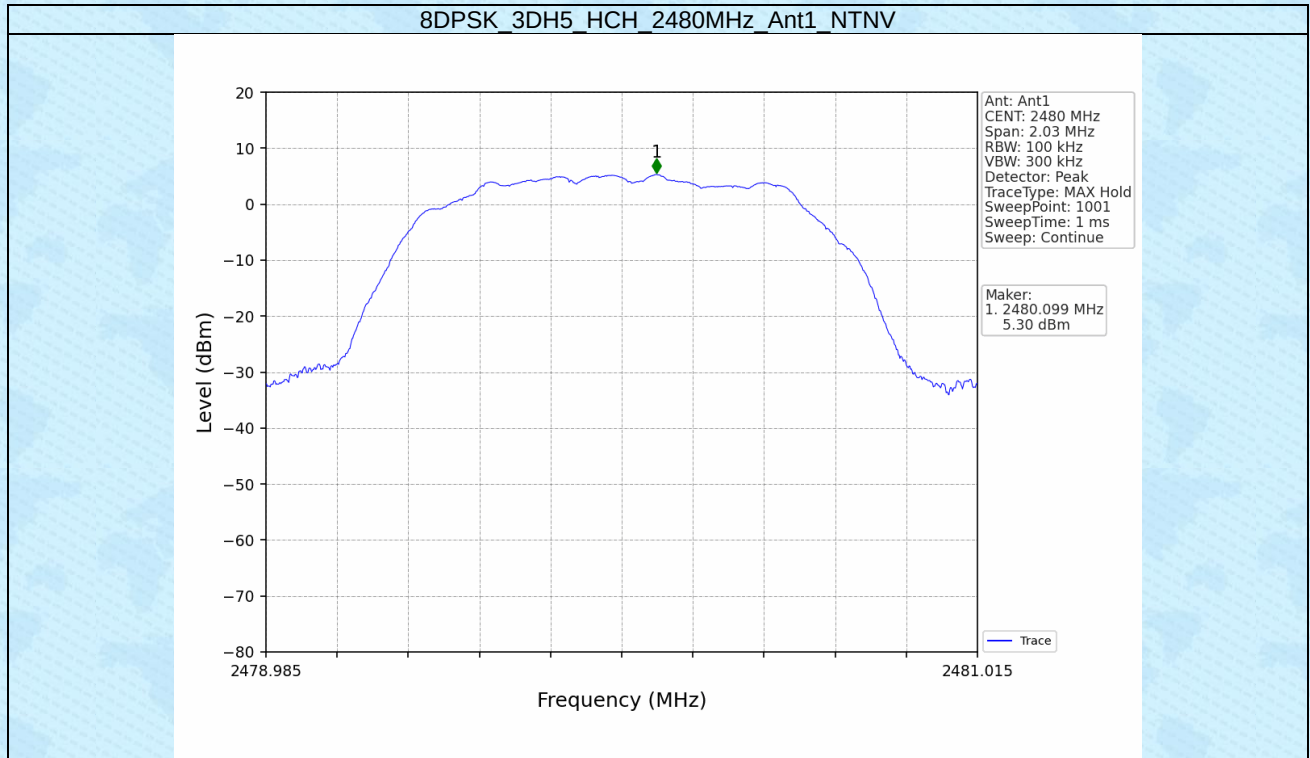


## 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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





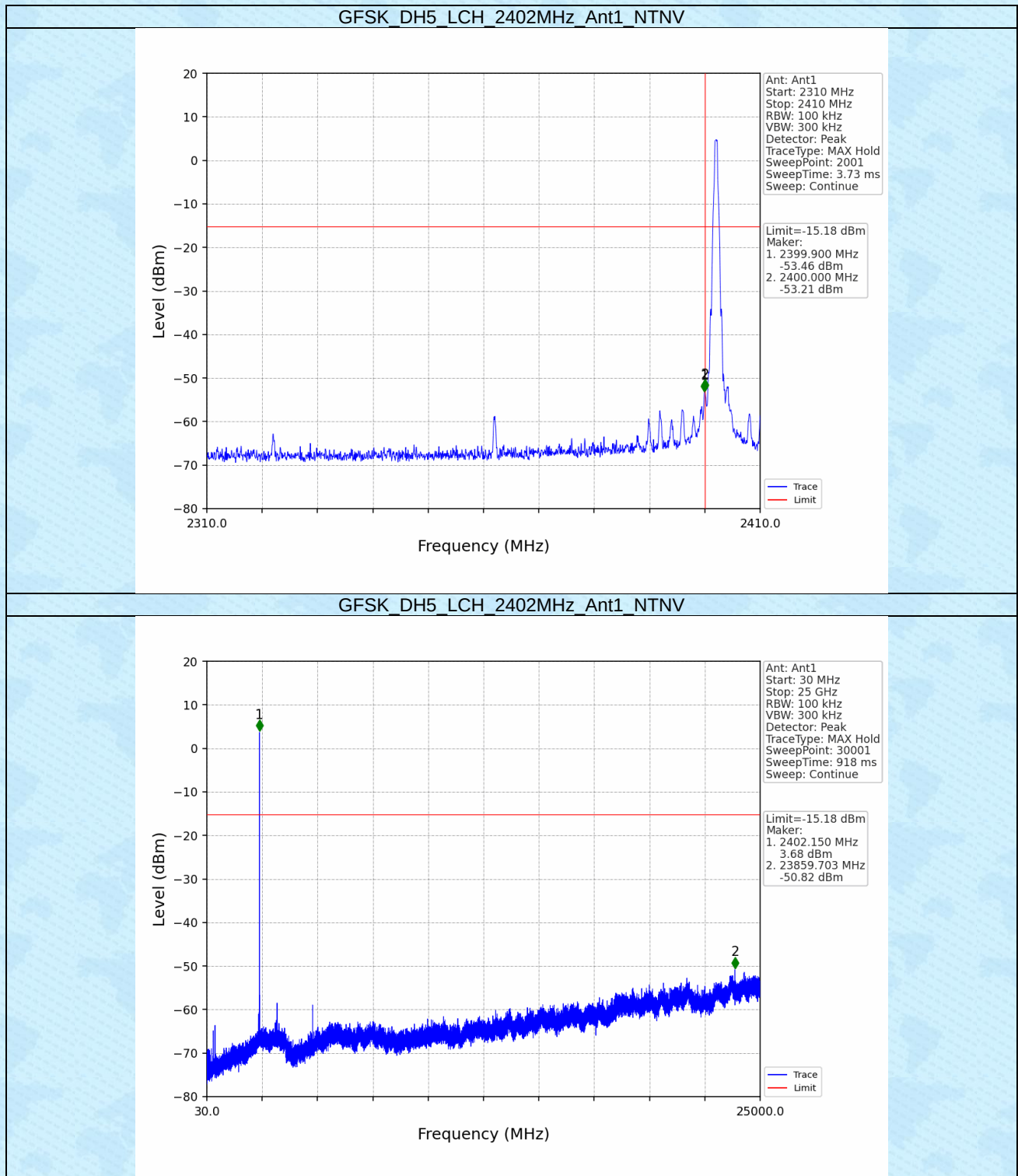
## 6.2 CSE

## 6.2.1 Test Result

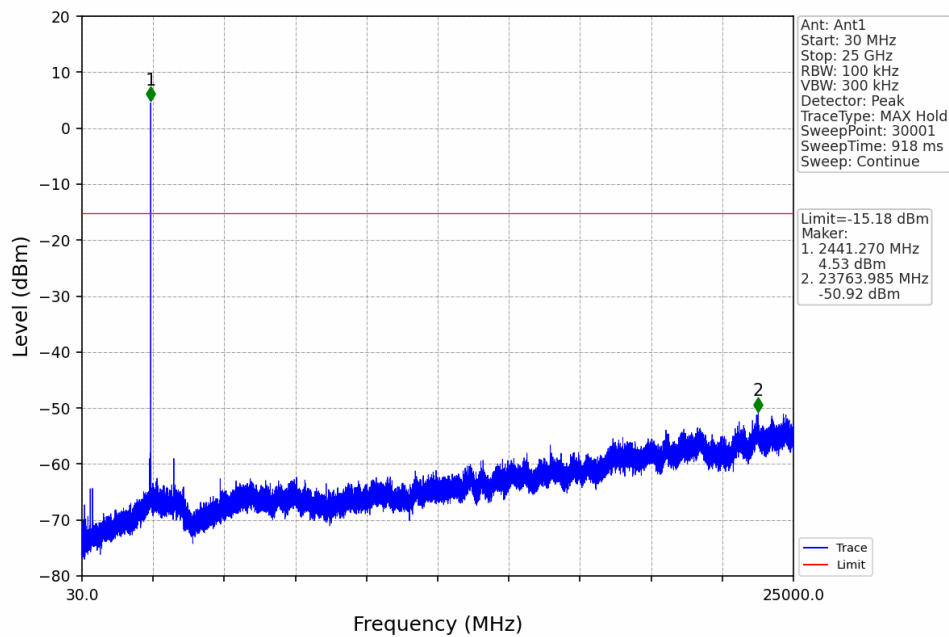
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-----------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 4.82                     | -15.18      | Pass    |
|           |         | 2441            | DH5         | 1   | 4.82                     | -15.18      | Pass    |
|           |         | 2480            | DH5         | 1   | 4.82                     | -15.18      | Pass    |
|           |         | HOPP            | DH5         | 1   | 4.82                     | -15.18      | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 5.88                     | -14.12      | Pass    |
|           |         | 2441            | 2DH5        | 1   | 5.88                     | -14.12      | Pass    |
|           |         | 2480            | 2DH5        | 1   | 5.88                     | -14.12      | Pass    |
|           |         | HOPP            | 2DH5        | 1   | 5.88                     | -14.12      | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 5.78                     | -14.22      | Pass    |
|           |         | 2441            | 3DH5        | 1   | 5.78                     | -14.22      | Pass    |
|           |         | 2480            | 3DH5        | 1   | 5.78                     | -14.22      | Pass    |
|           |         | HOPP            | 3DH5        | 1   | 5.78                     | -14.22      | 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.

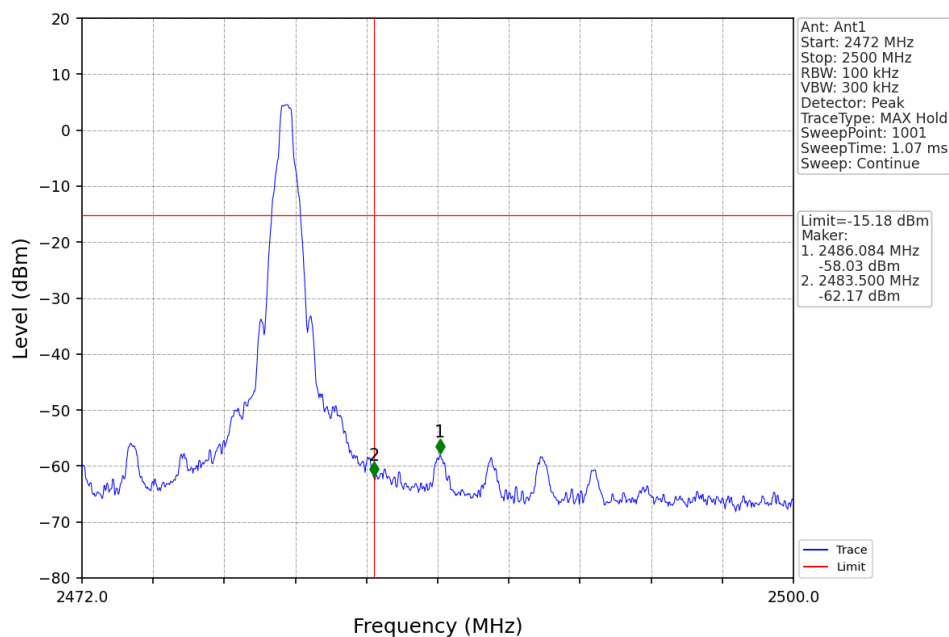
## 6.2.2 Test Graph



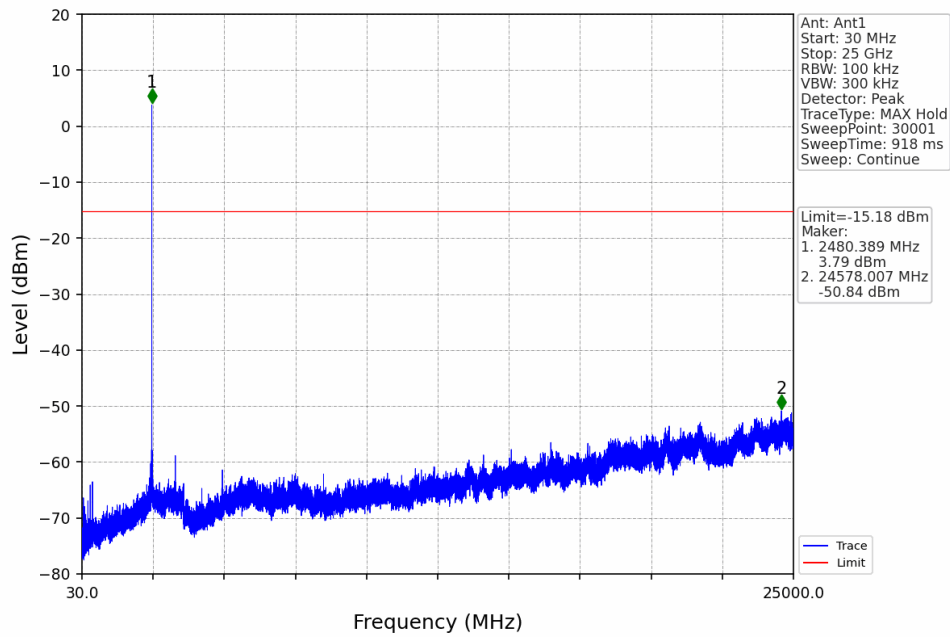
## GFSK\_DH5\_MCH\_2441MHz\_Ant1\_NTNV



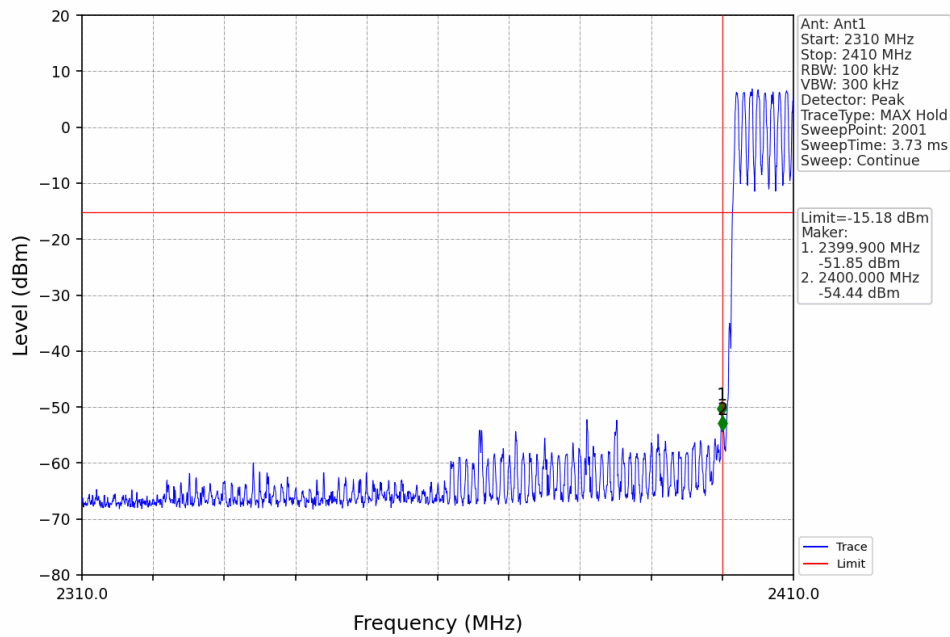
## GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV

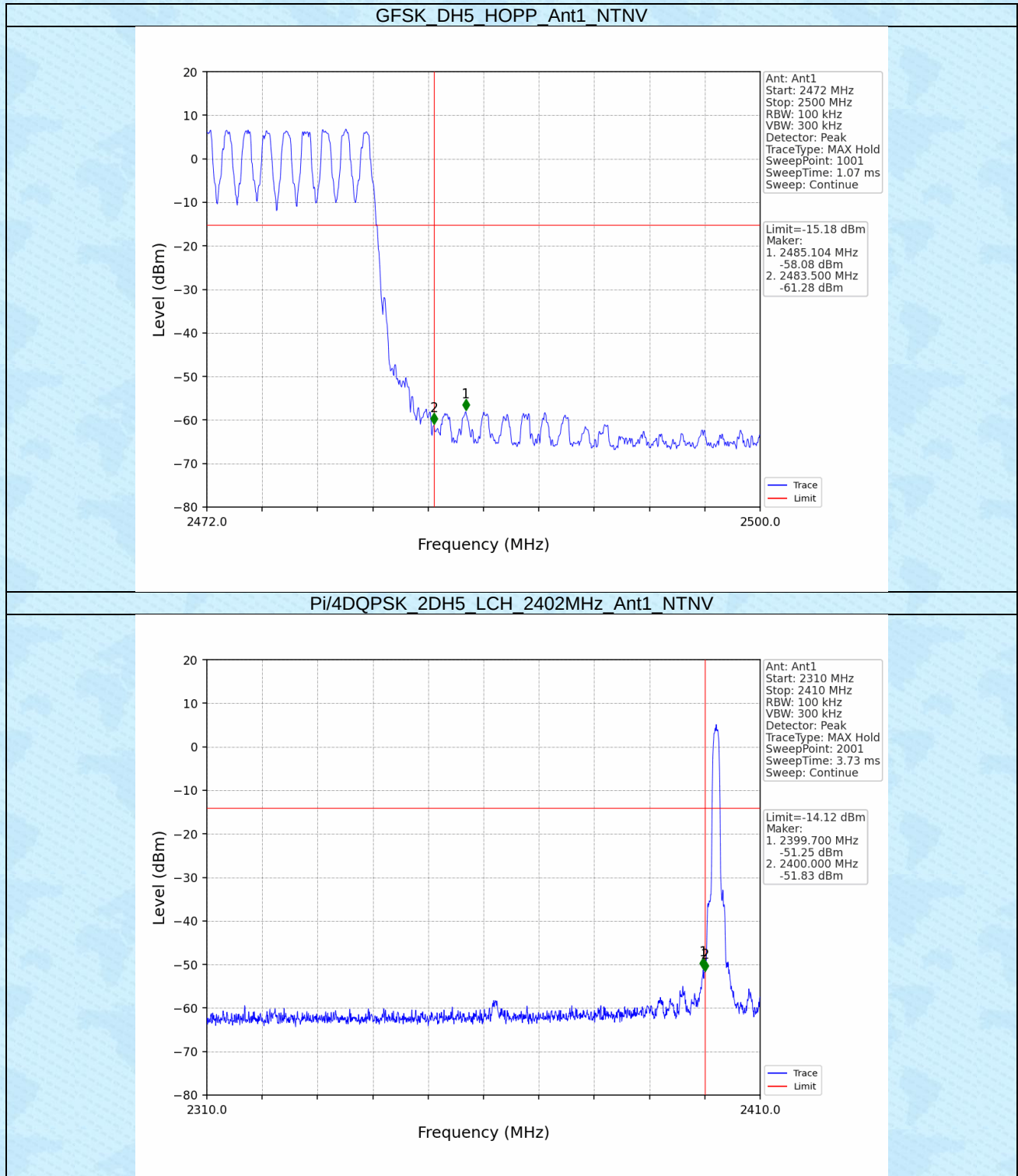


## GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV

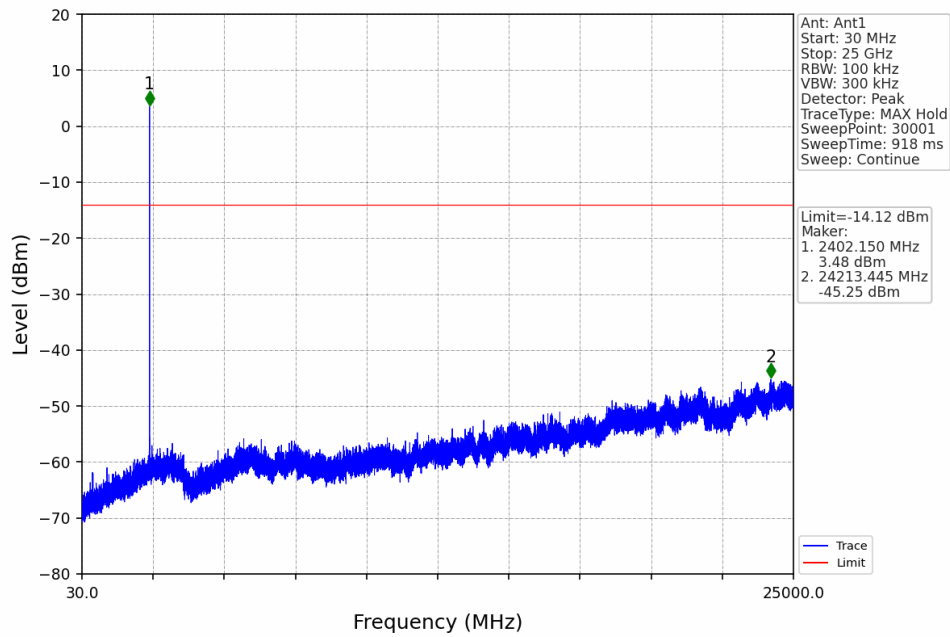


## GFSK\_DH5\_HOPP\_Ant1\_NTNV

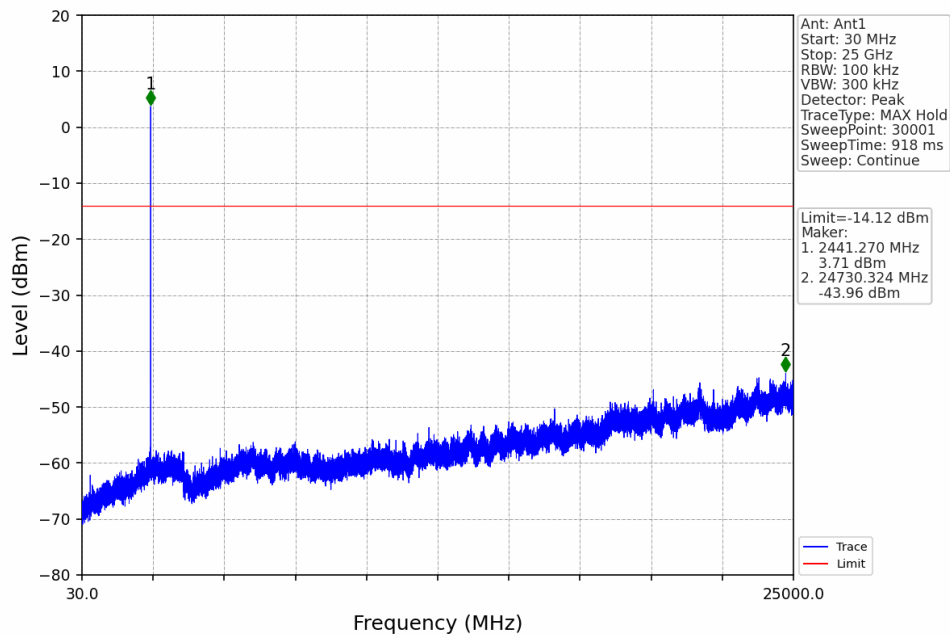




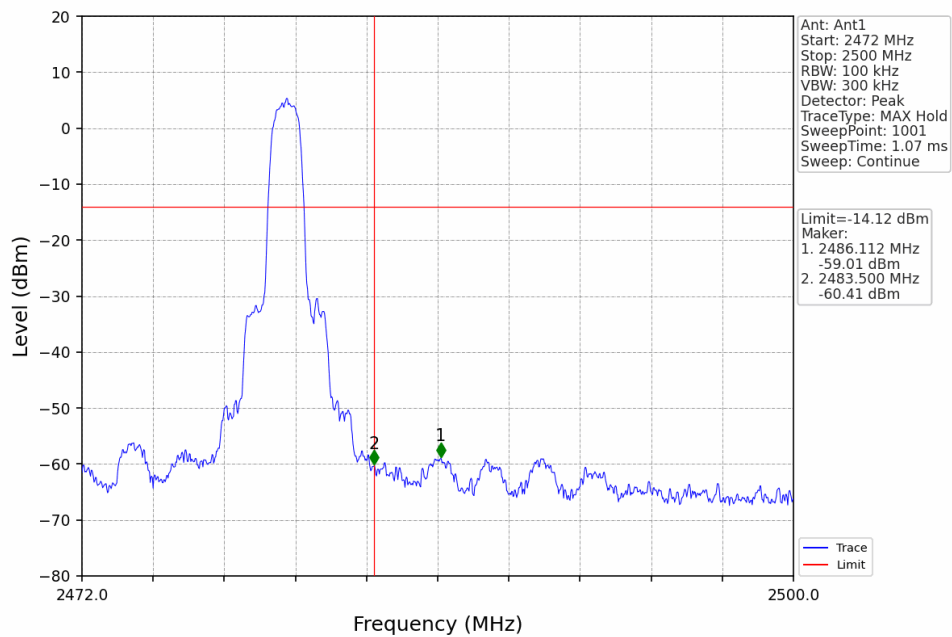
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



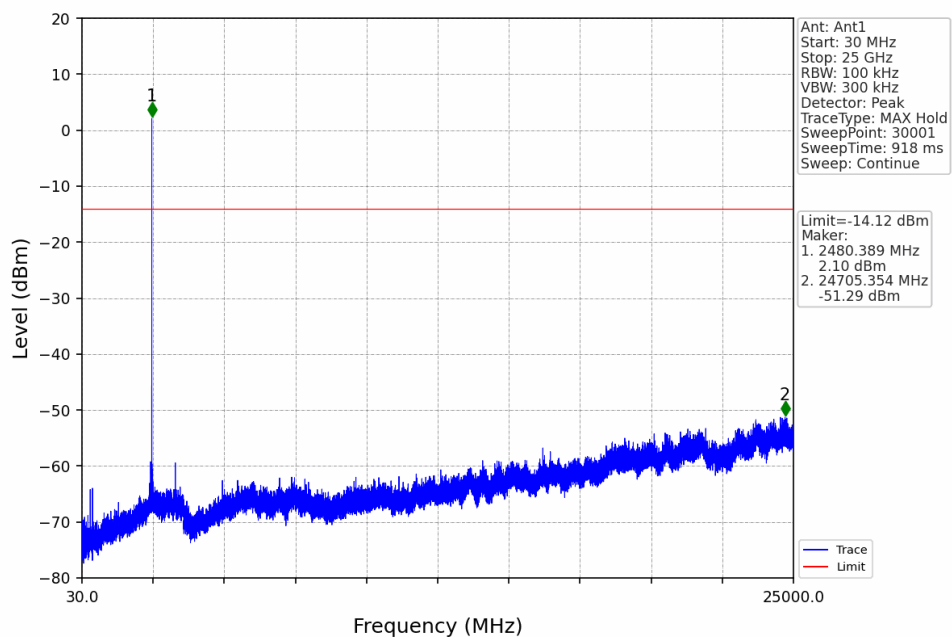
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



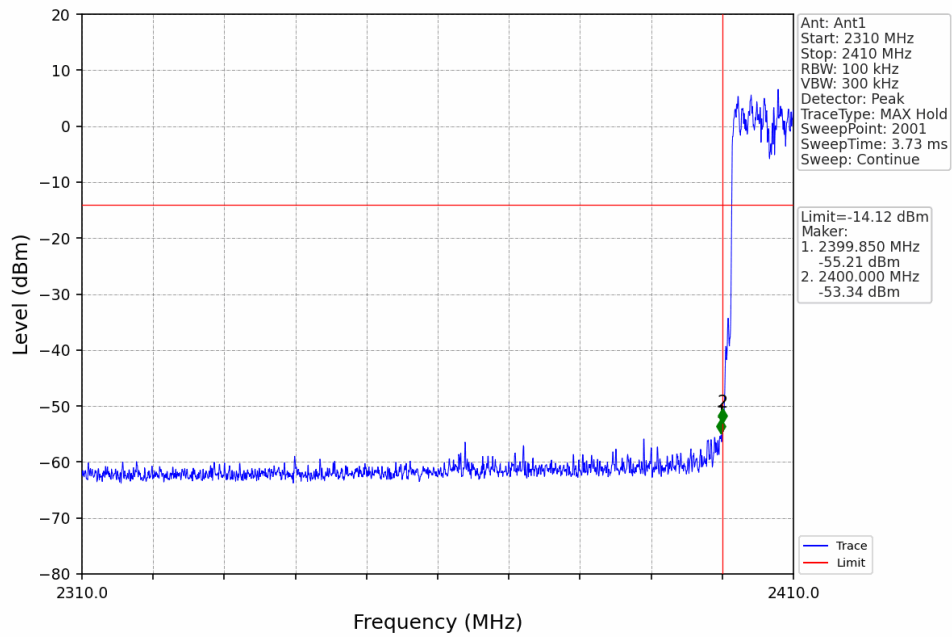
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



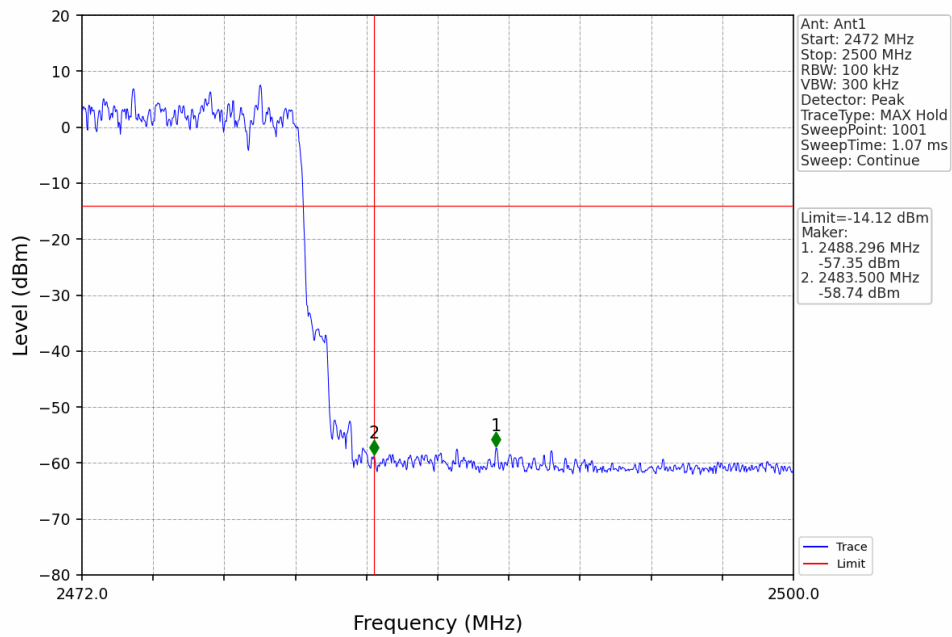
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



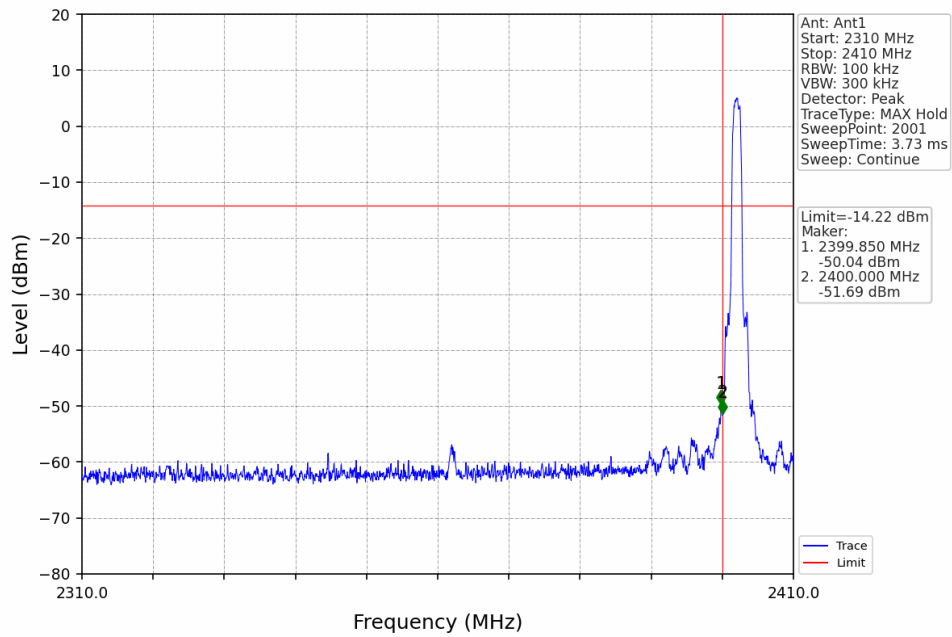
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



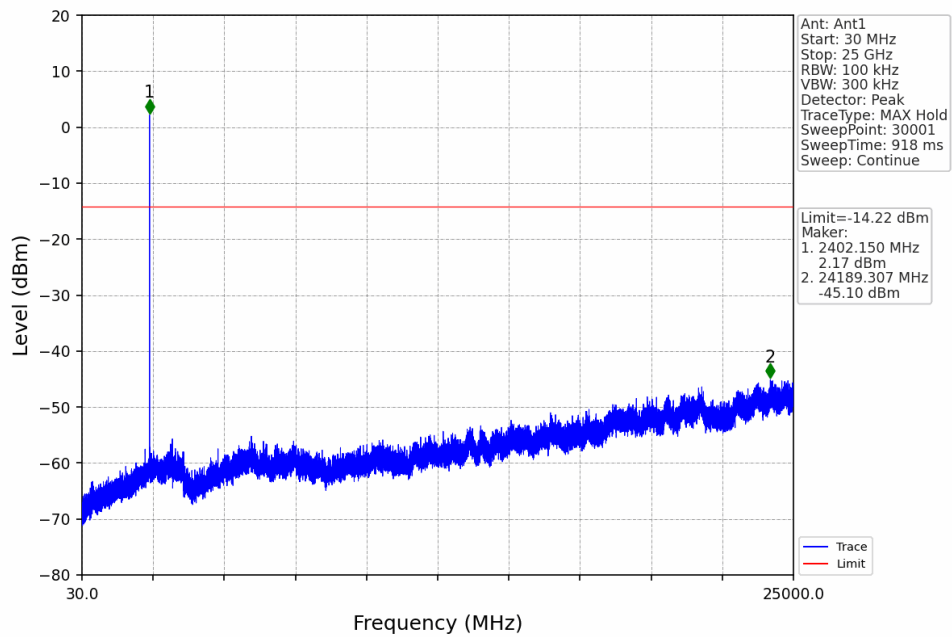
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



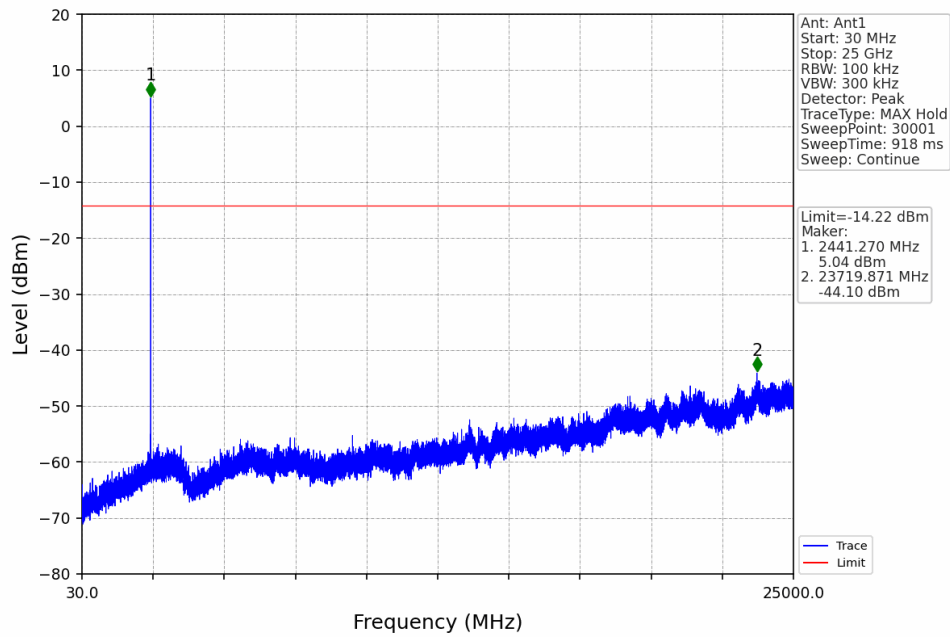
## 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



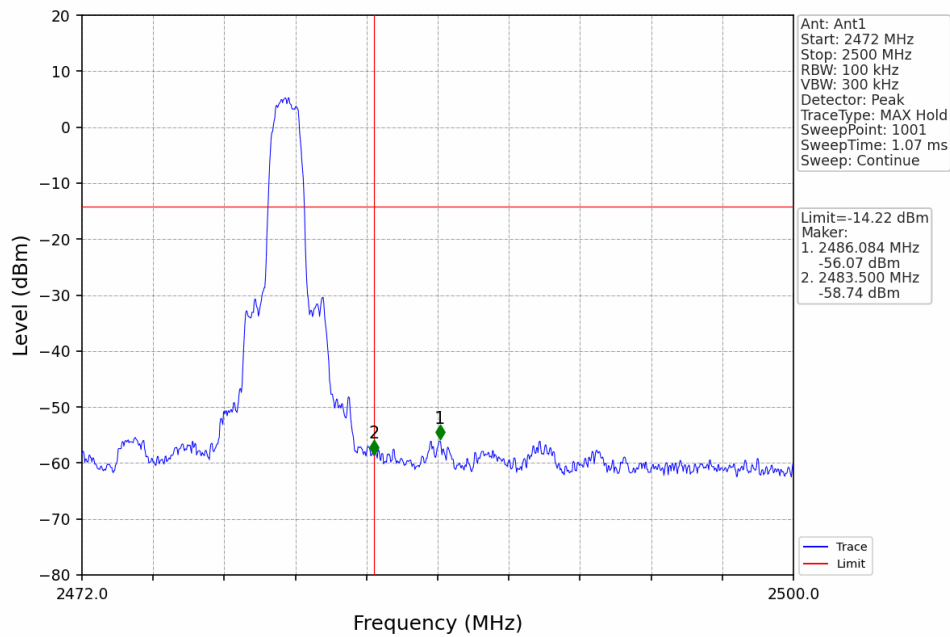
## 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



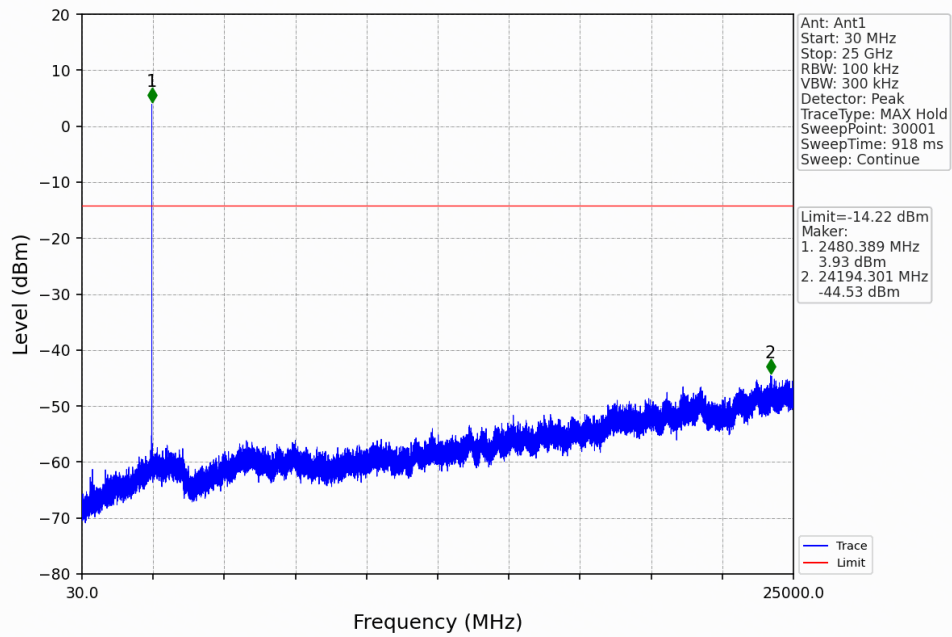
## 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



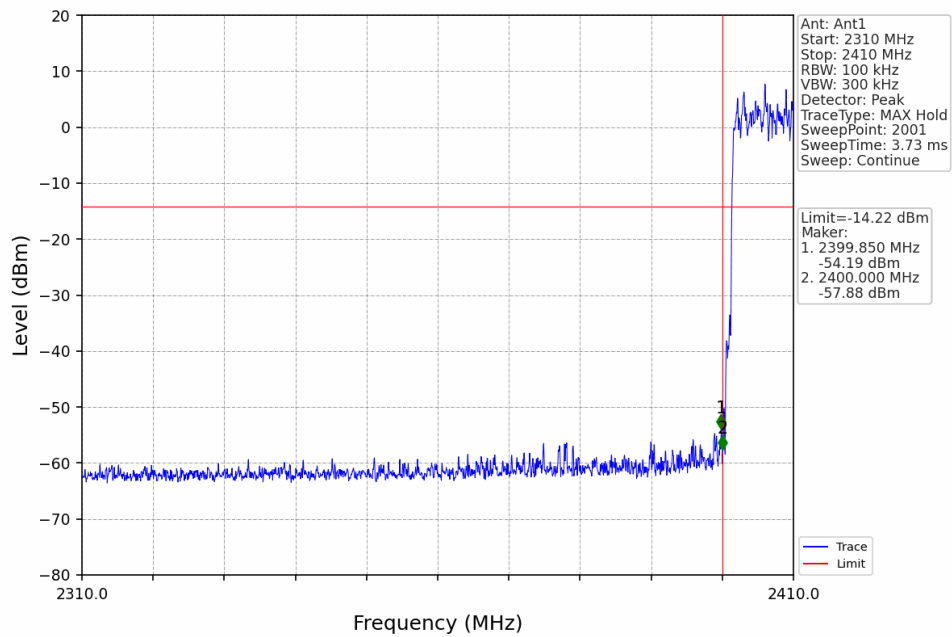
## 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV

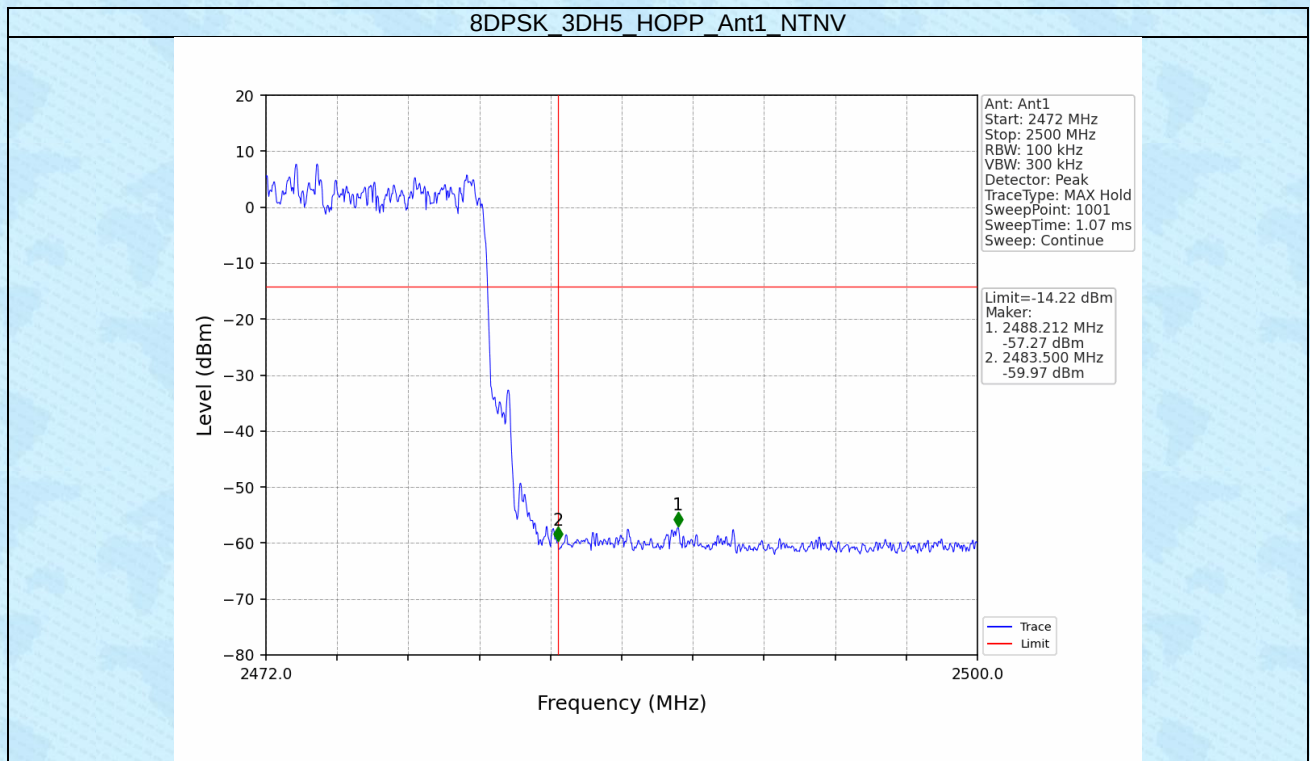


8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV





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