

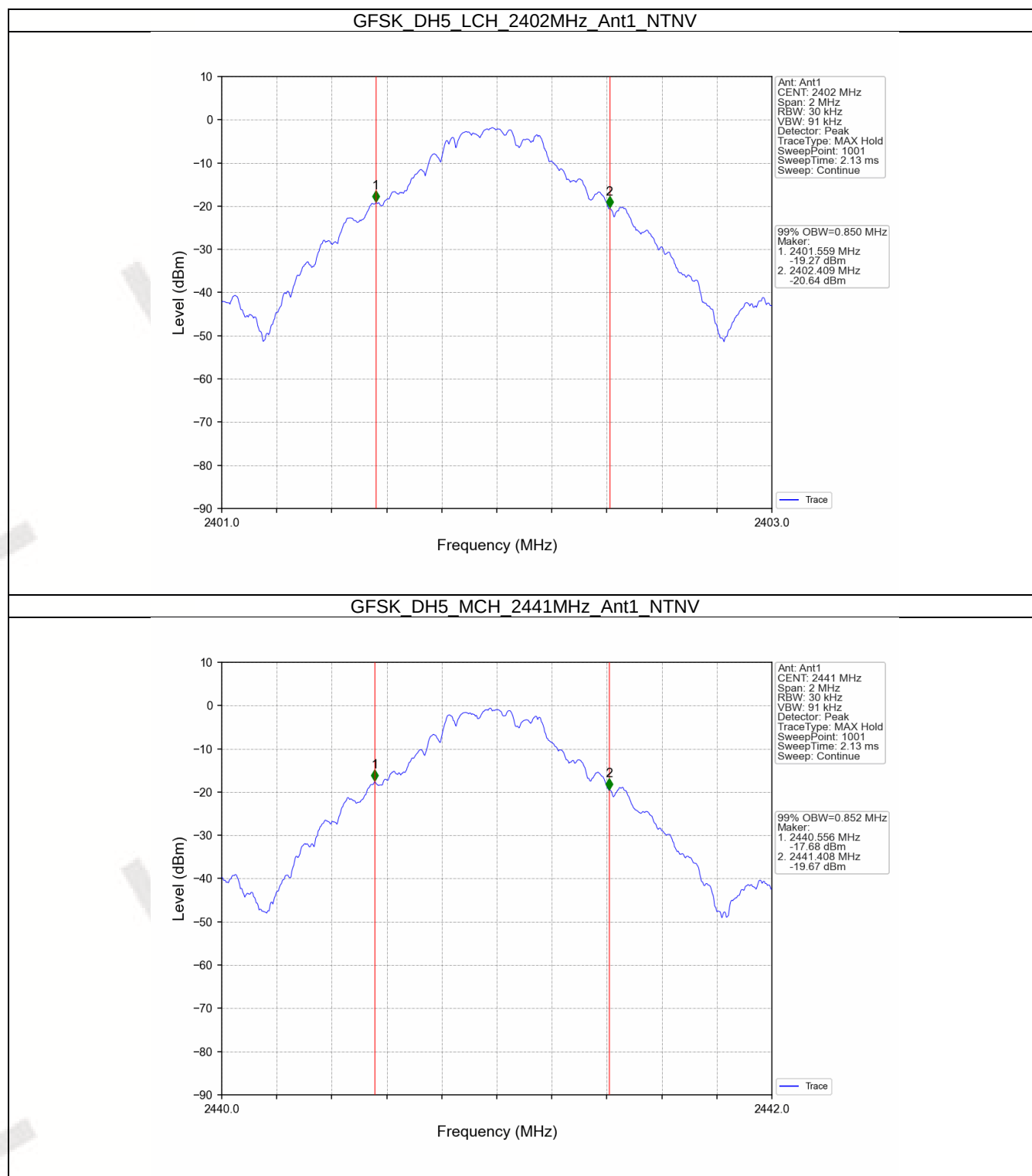
## 1. Bandwidth

### 1.1 OBW

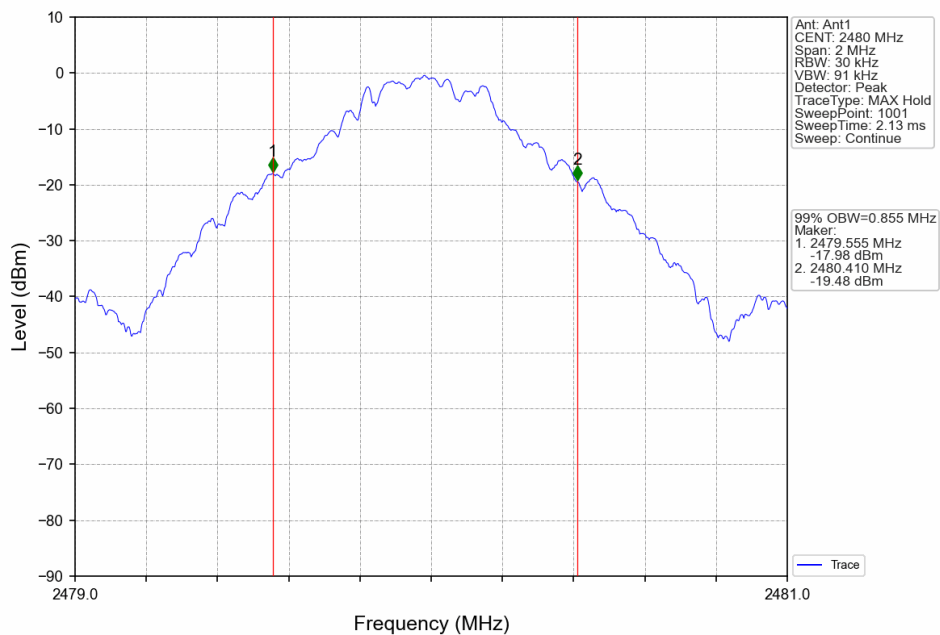
#### 1.1.1 Test Result

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|------------------------------|-------|---------|
|           |         |                 |             |     | Result                       | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.850                        | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 0.852                        | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 0.855                        | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.167                        | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.169                        | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.173                        | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.165                        | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.165                        | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.165                        | /     | Pass    |

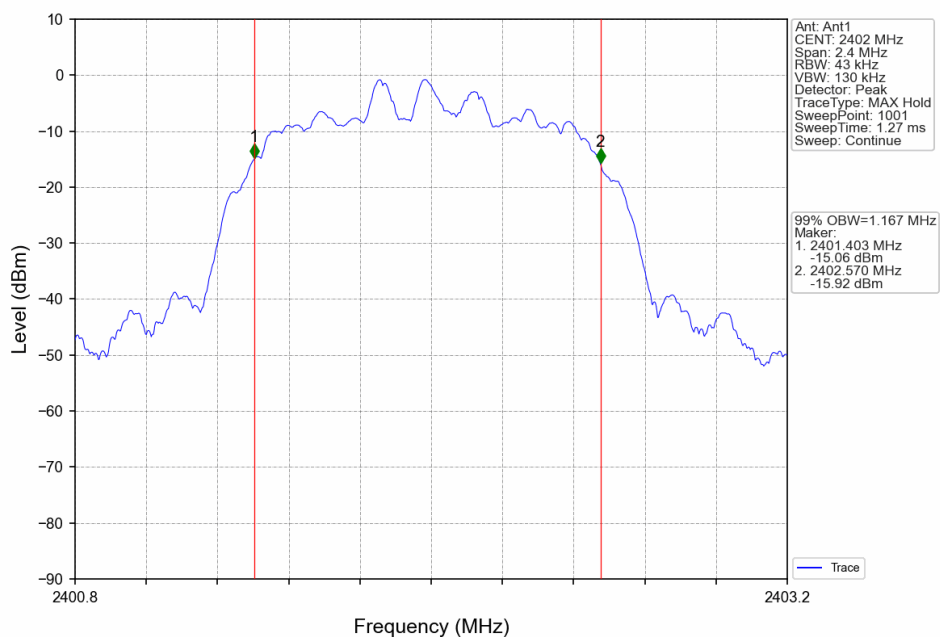
## 1.1.2 Test Graph



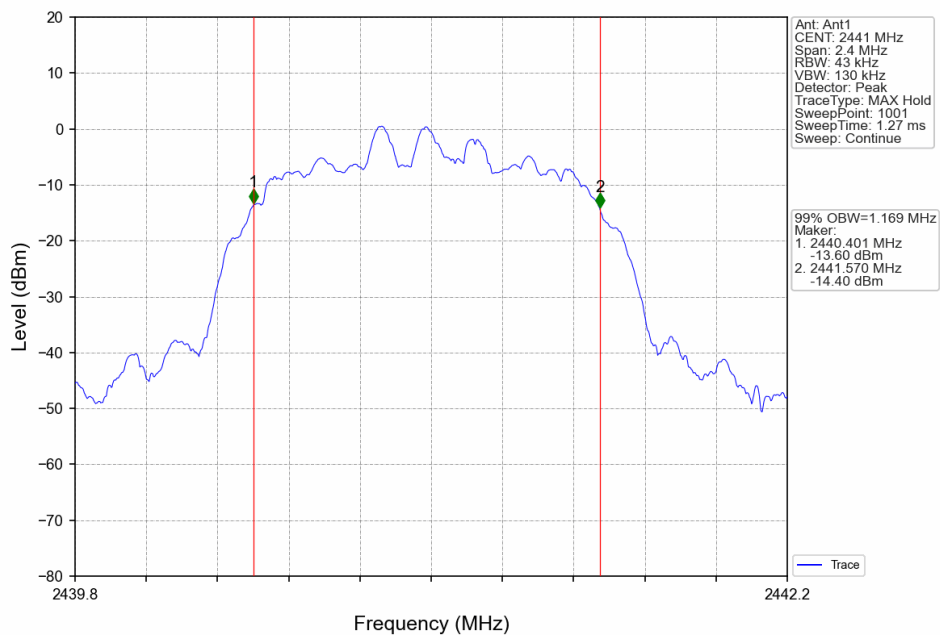
GFSK DH5 HCH 2480MHz Ant1 NTV



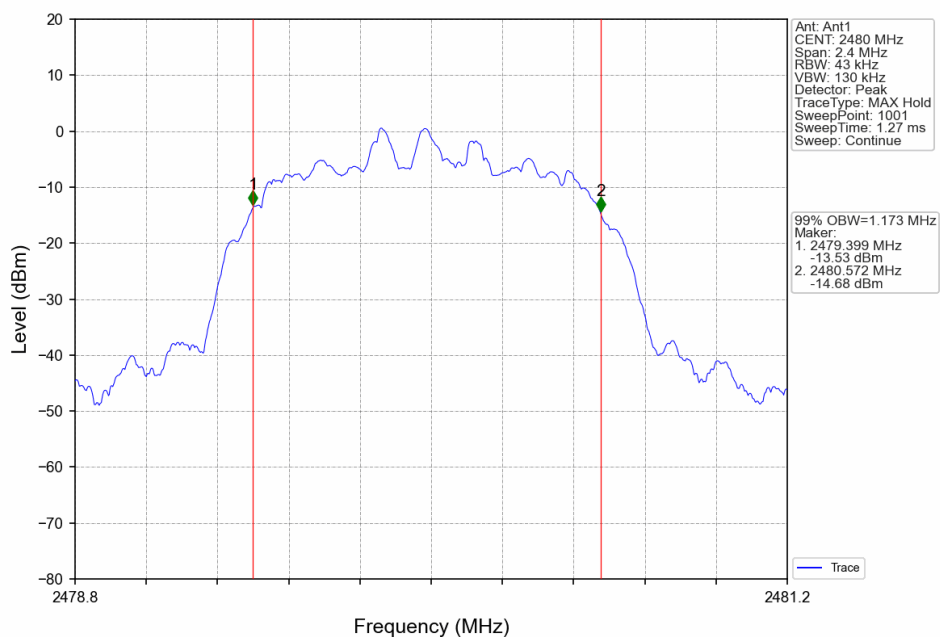
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTV



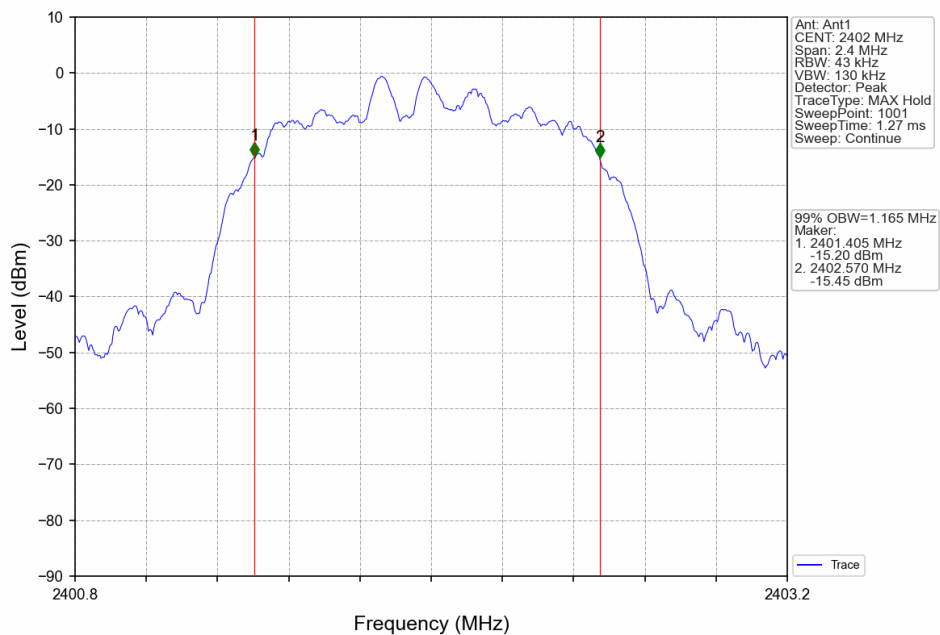
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



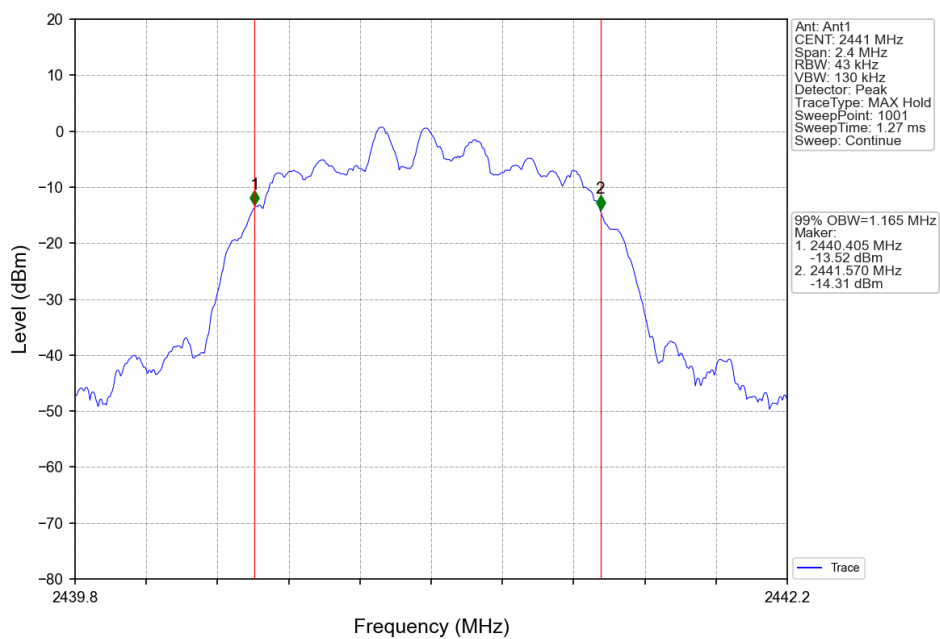
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTN

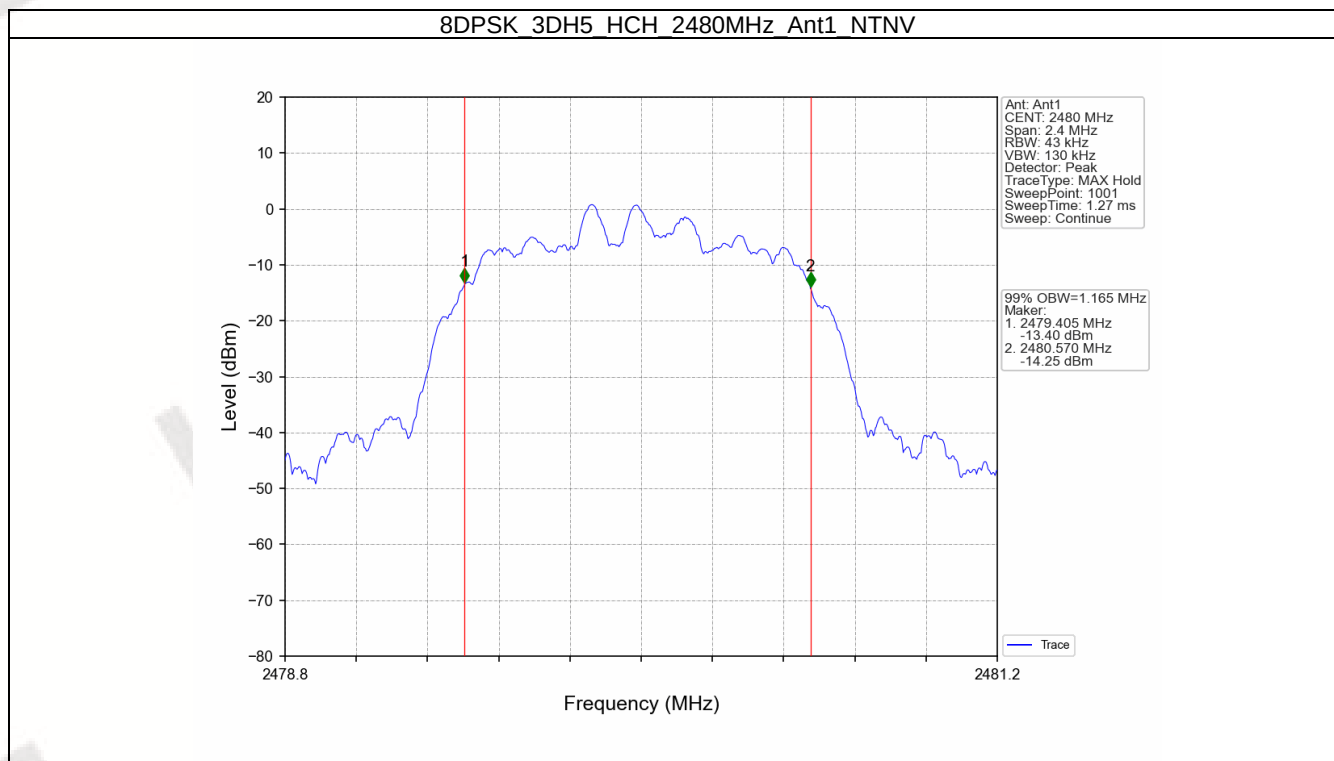


8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN



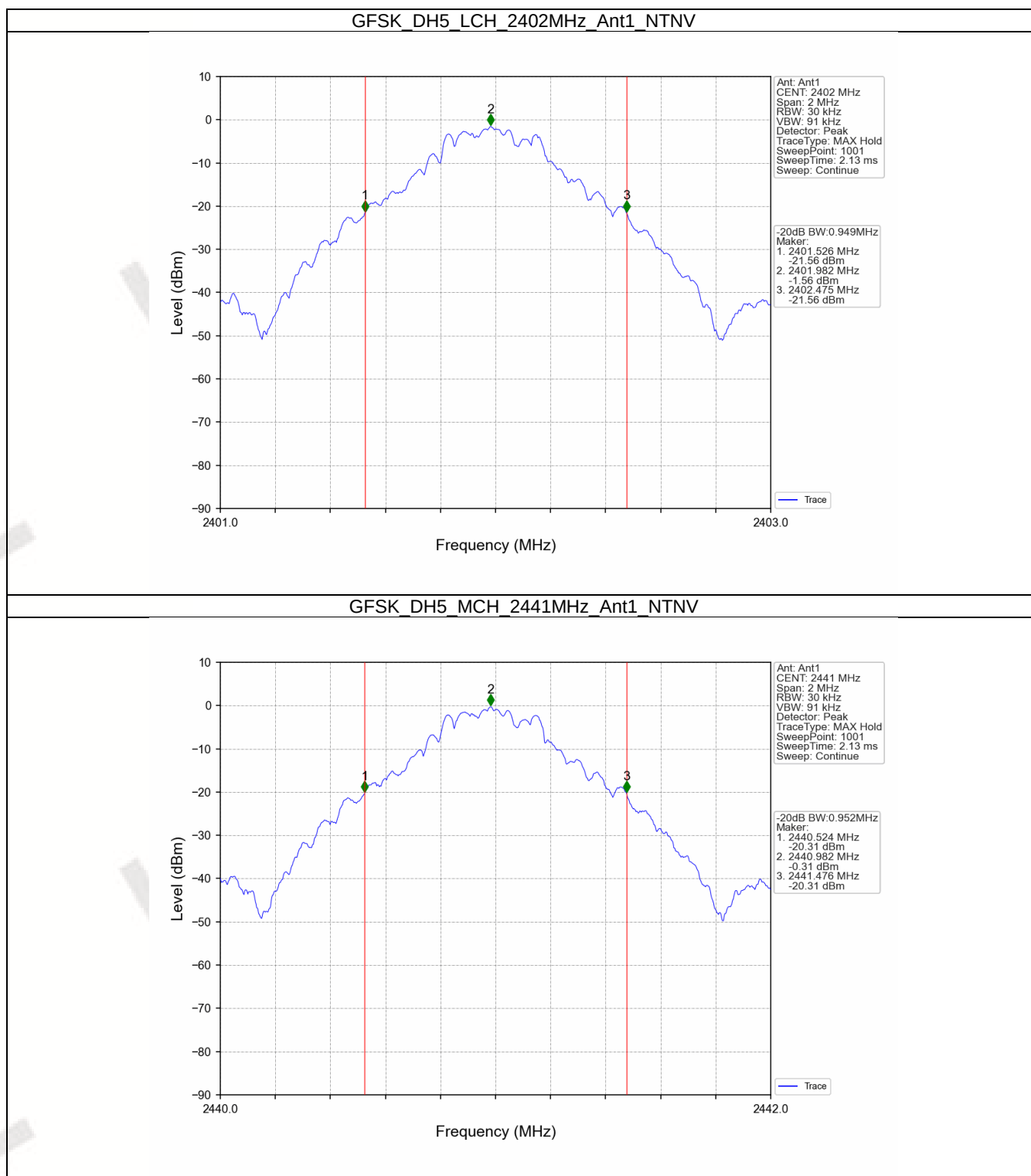


## 1.2 20dB BW

### 1.2.1 Test Result

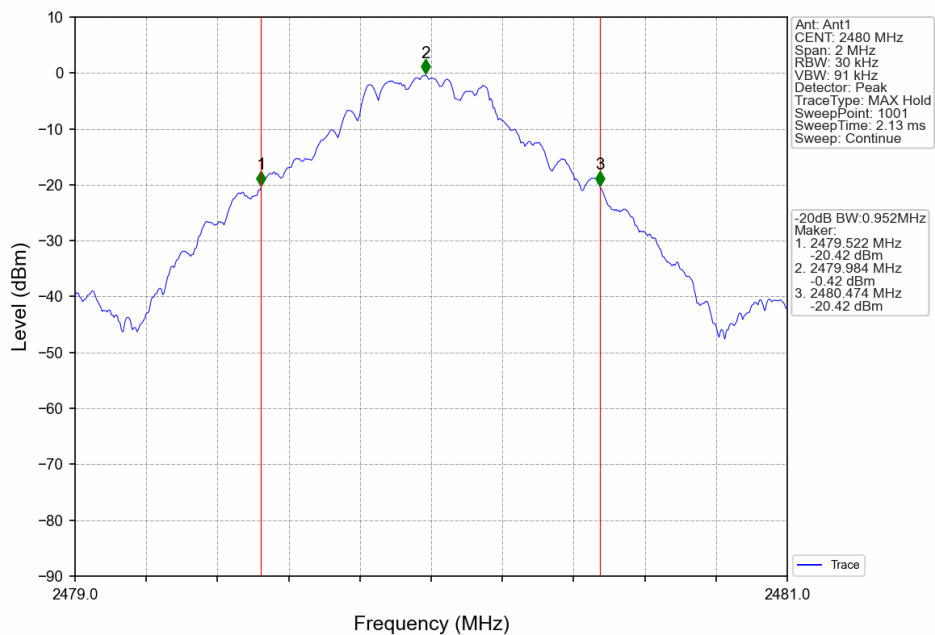
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|----------------------|-------|---------|
|           |         |                 |             |     | Result               | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.949                | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 0.952                | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 0.952                | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.295                | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.321                | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.321                | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.296                | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.289                | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.301                | /     | Pass    |

## 1.2.2 Test Graph

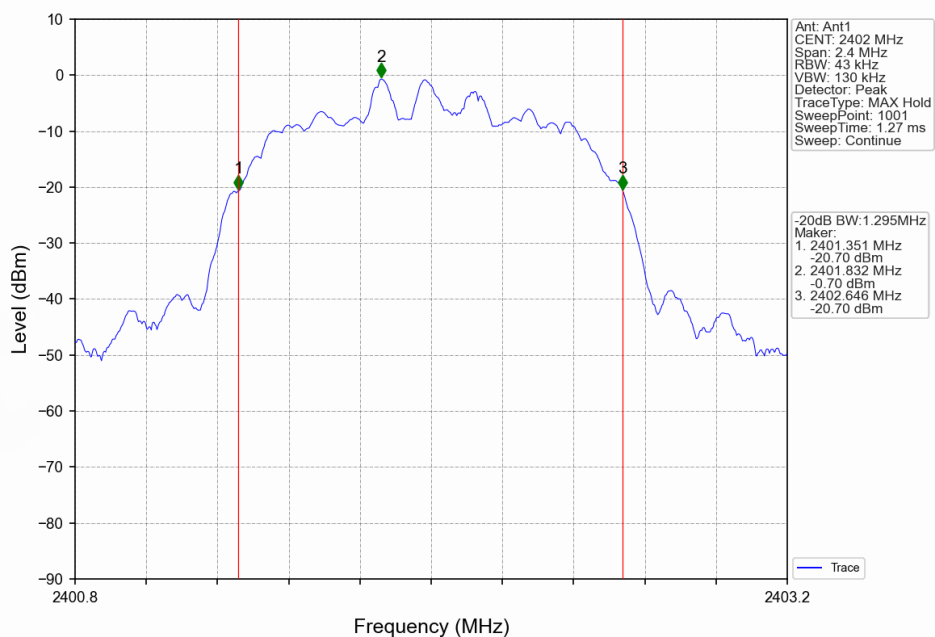




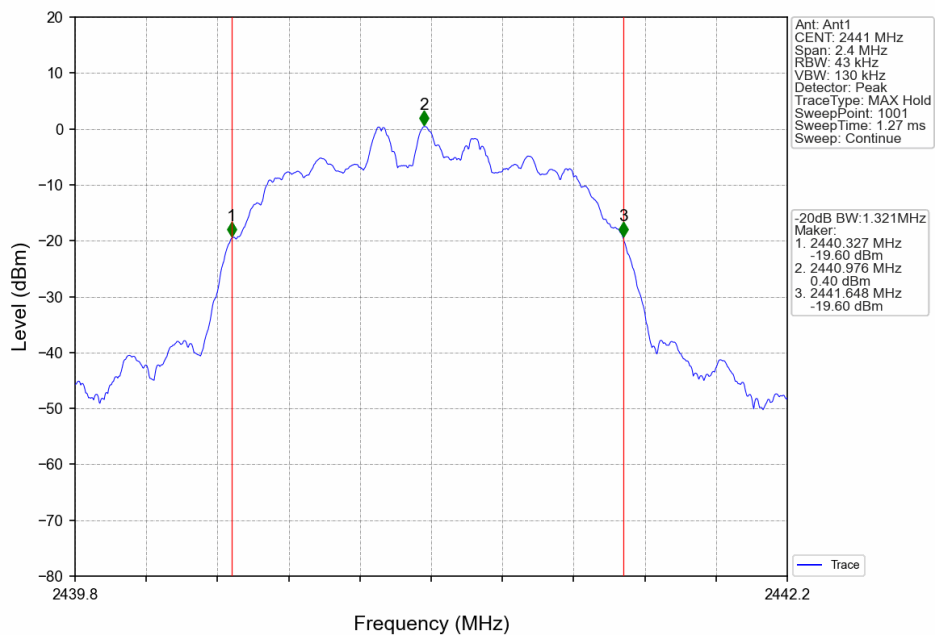
GFSK DH5 HCH 2480MHz Ant1 NTN



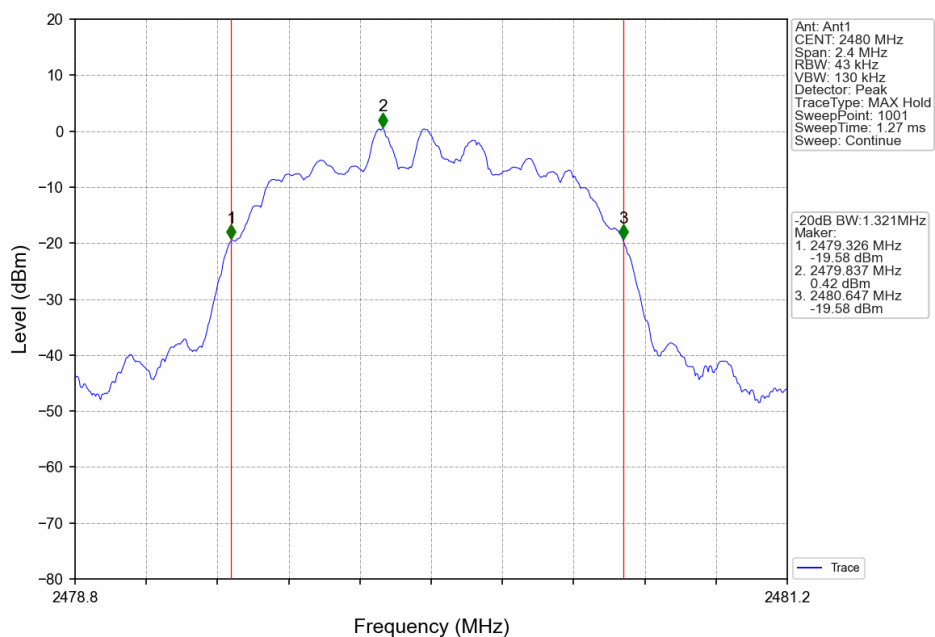
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1 NTN



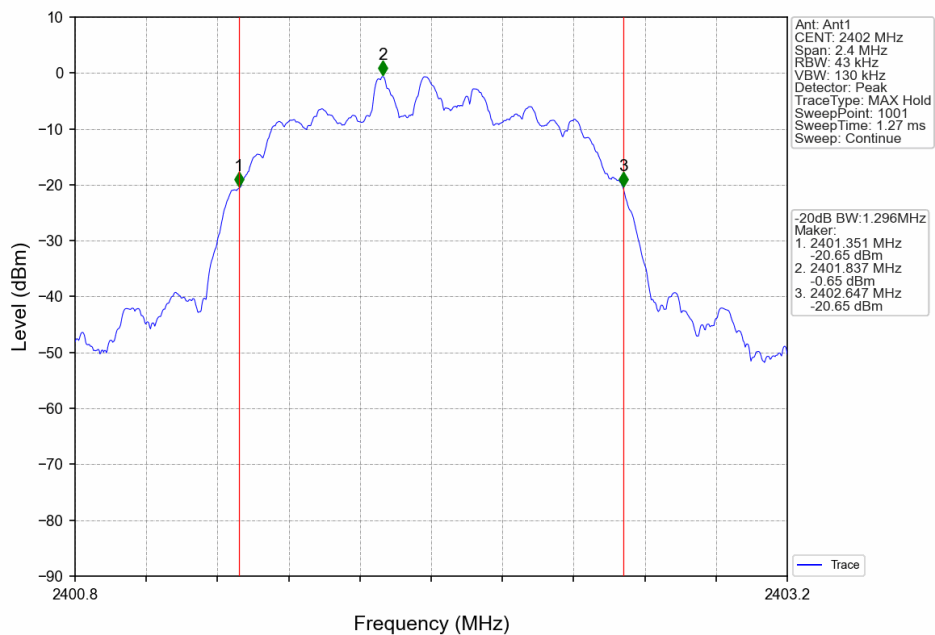
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



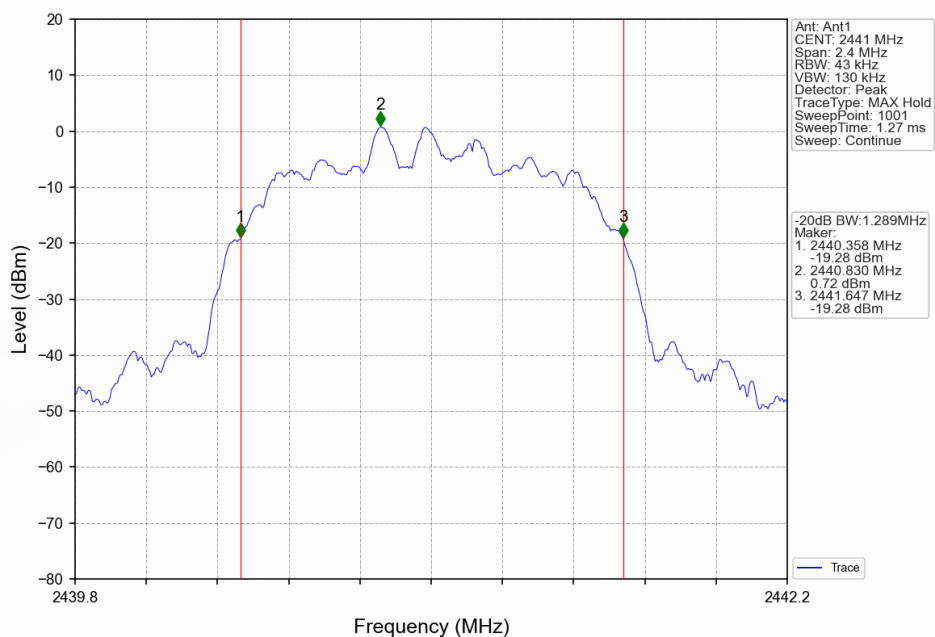
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

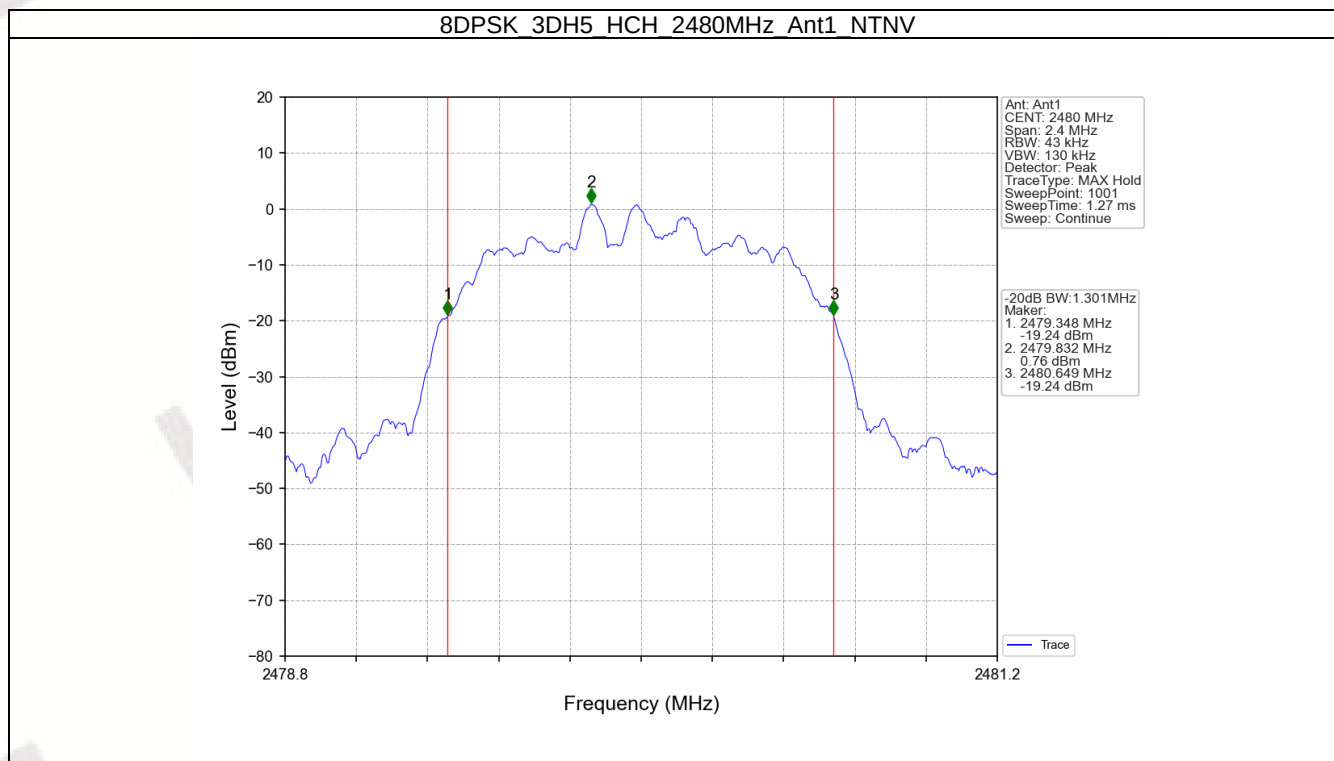


8DPSK 3DH5 LCH 2402MHz Ant1 NTV



8DPSK 3DH5 MCH 2441MHz Ant1 NTV





## 2. Maximum Conducted Output Power

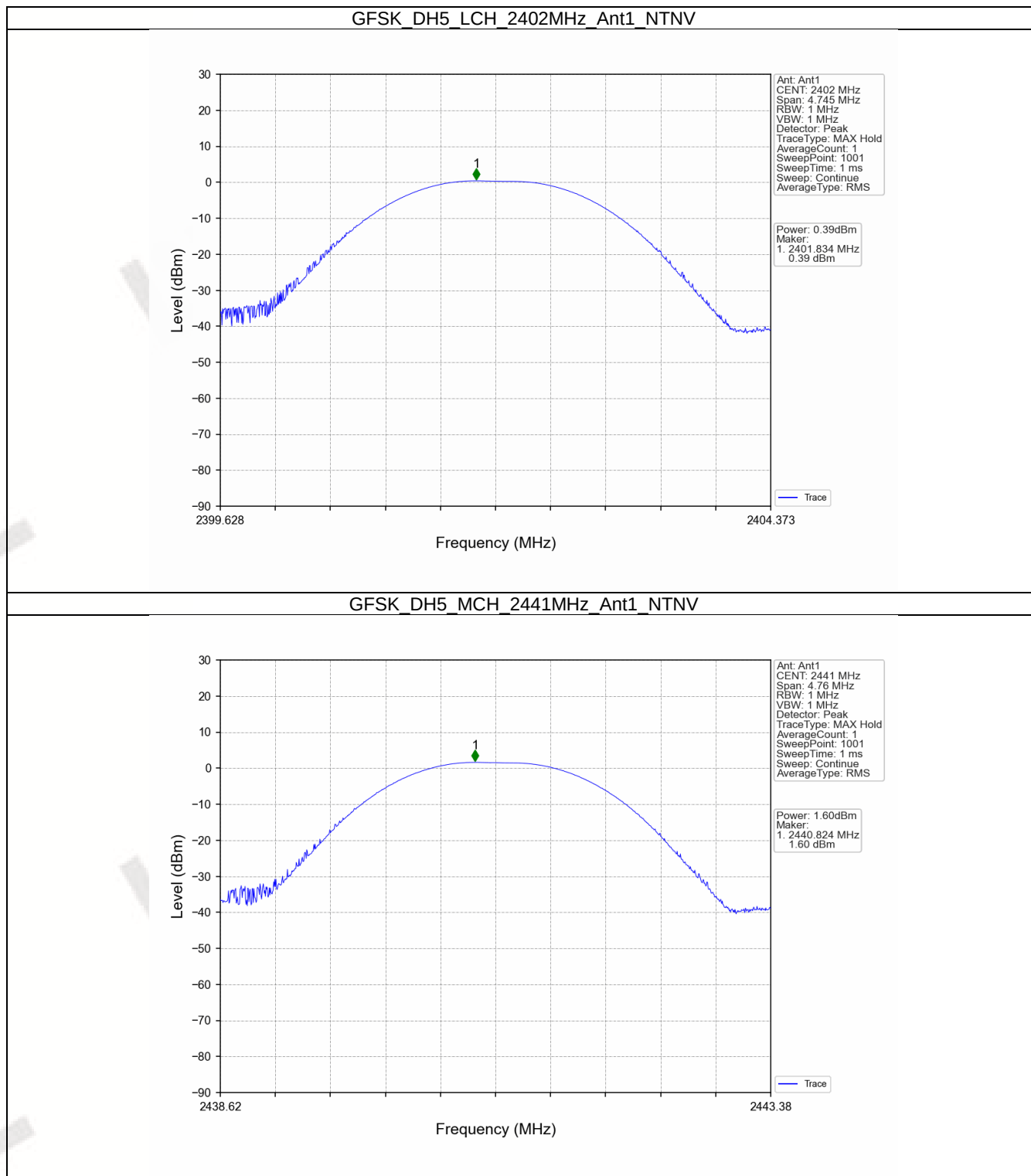
### 2.1 Power

#### 2.1.1 Test Result

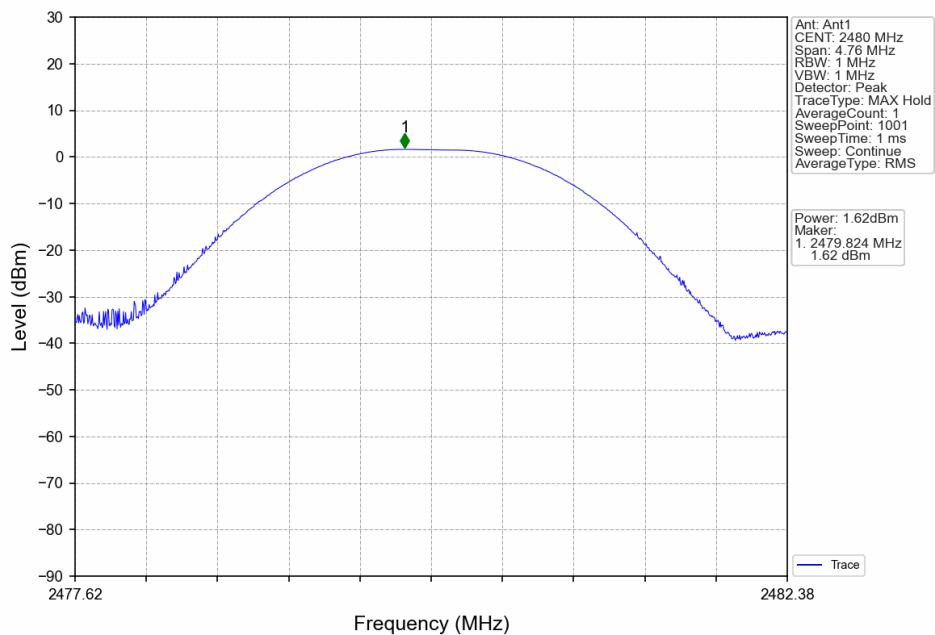
| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |              | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|--------------|---------|
|           |         |                 |             | ANT1                                      | Limit        |         |
| GFSK      | SISO    | 2402            | DH5         | 0.39                                      | $\leq 30$    | Pass    |
|           |         | 2441            | DH5         | 1.60                                      | $\leq 30$    | Pass    |
|           |         | 2480            | DH5         | 1.62                                      | $\leq 30$    | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1.31                                      | $\leq 20.97$ | Pass    |
|           |         | 2441            | 2DH5        | 2.57                                      | $\leq 20.97$ | Pass    |
|           |         | 2480            | 2DH5        | 2.56                                      | $\leq 20.97$ | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1.42                                      | $\leq 20.97$ | Pass    |
|           |         | 2441            | 3DH5        | 2.70                                      | $\leq 20.97$ | Pass    |
|           |         | 2480            | 3DH5        | 2.75                                      | $\leq 20.97$ | Pass    |

Note1: Antenna Gain: Ant1: 2.67dBi;

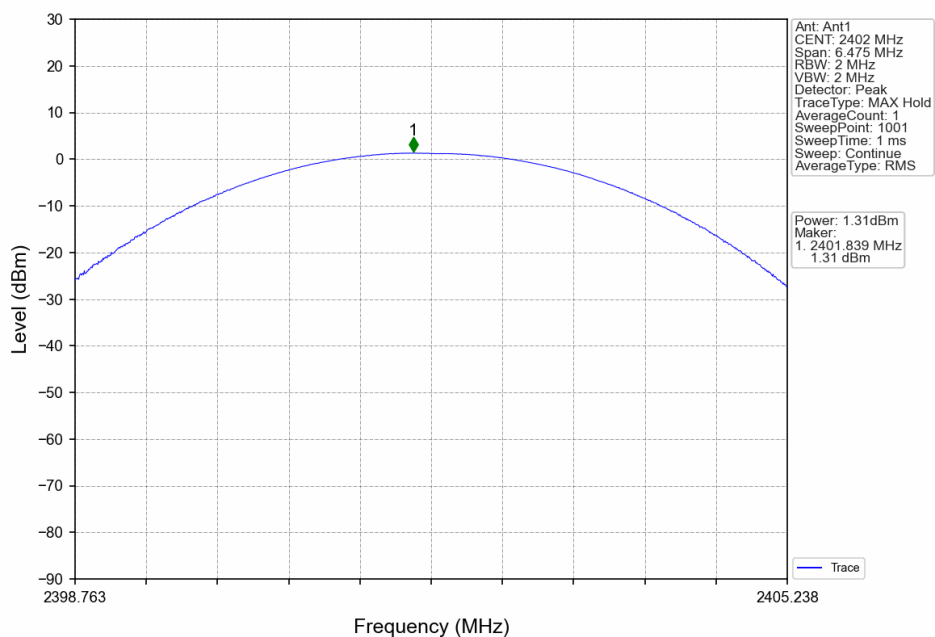
## 2.1.2 Test Graph



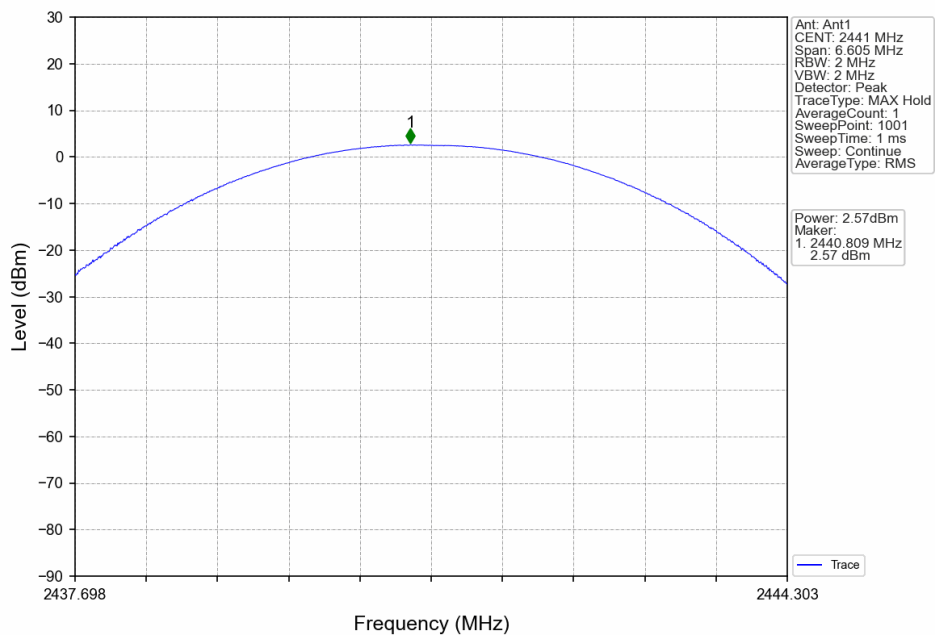
GFSK DH5 HCH 2480MHz Ant1 NTN



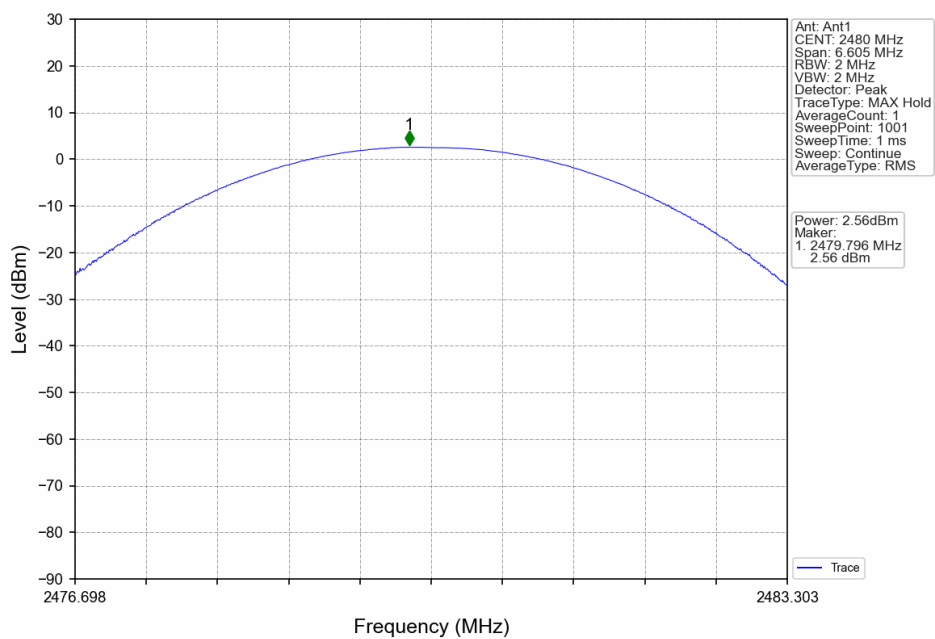
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



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

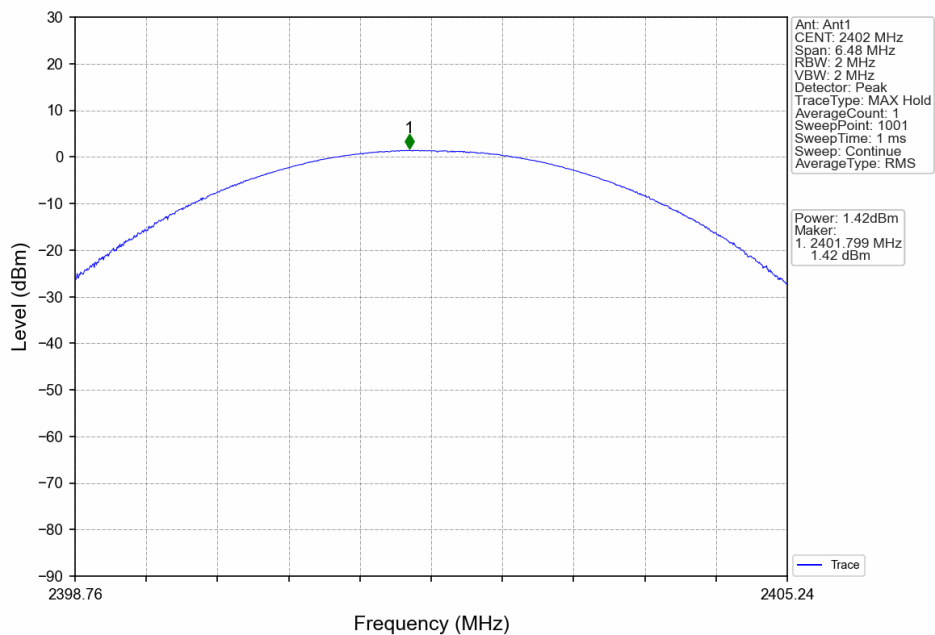


Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

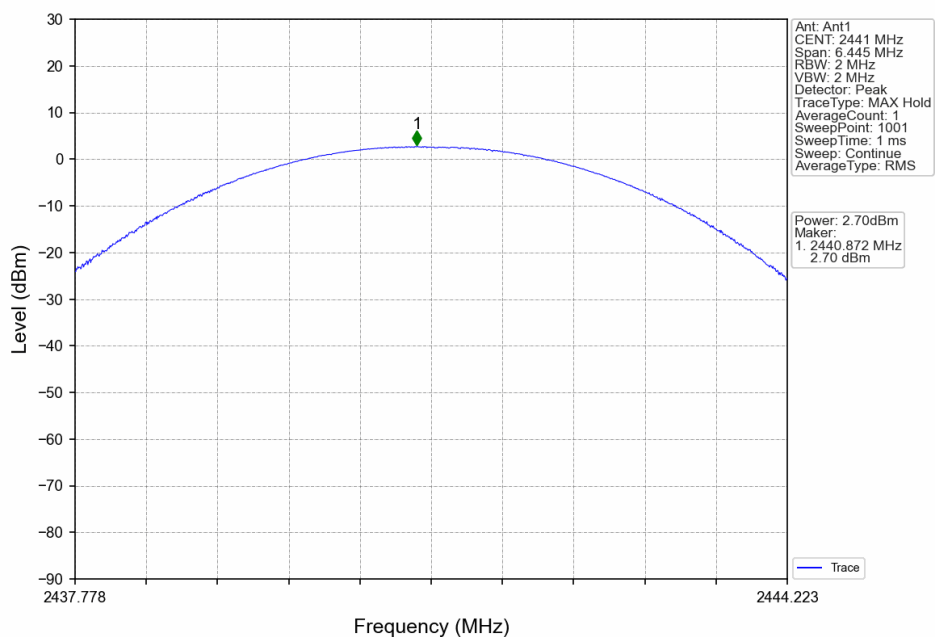


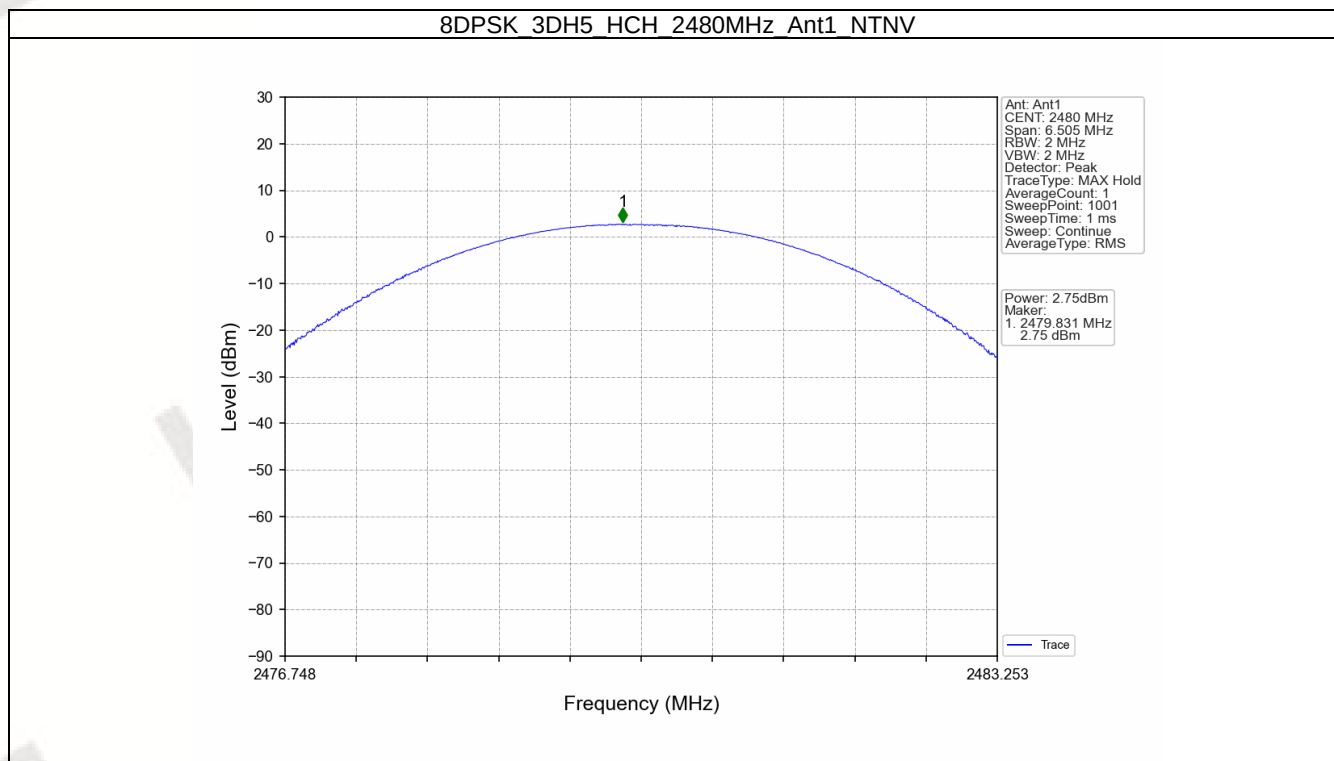


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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





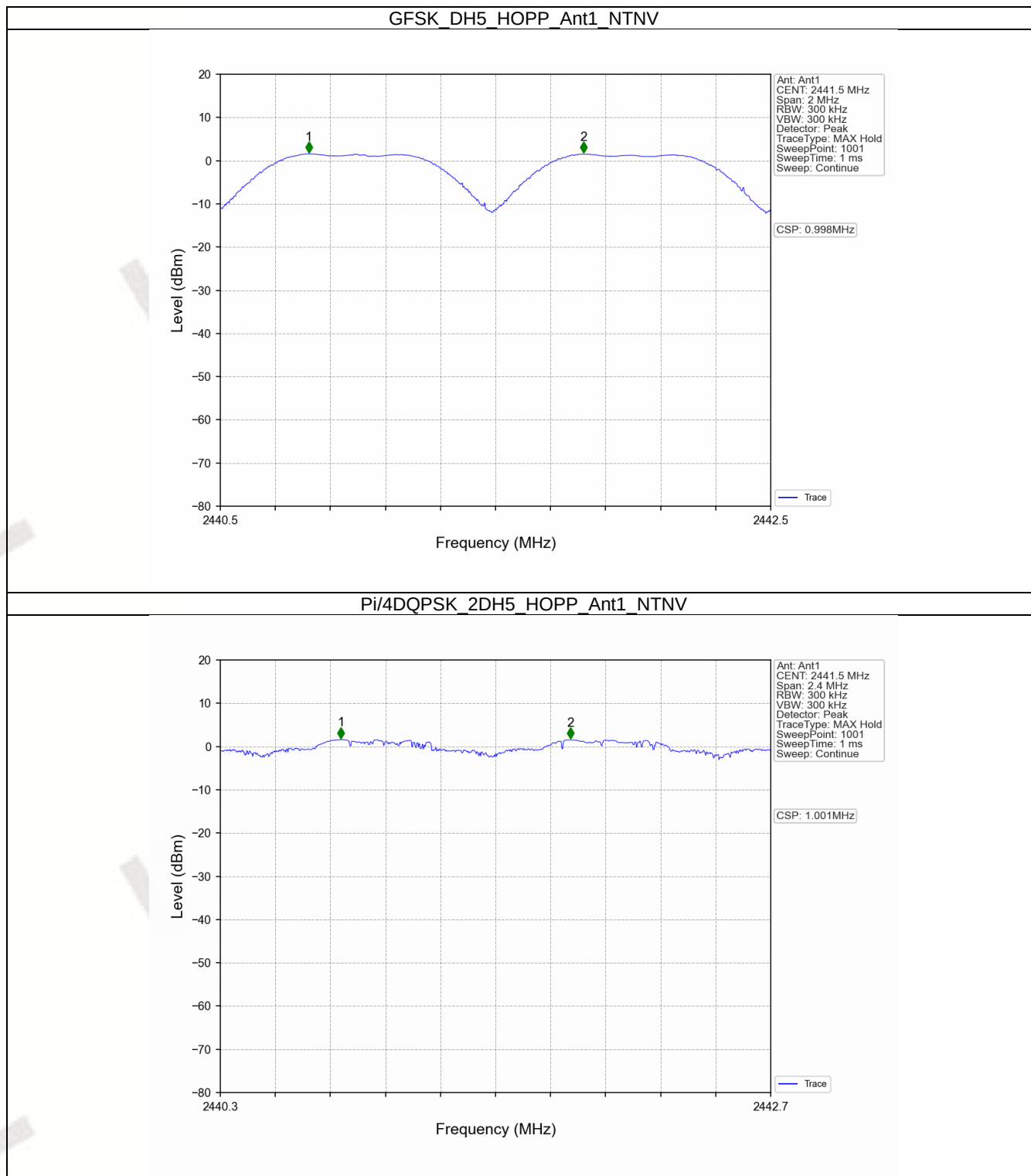
### 3. Carrier Frequency Separation

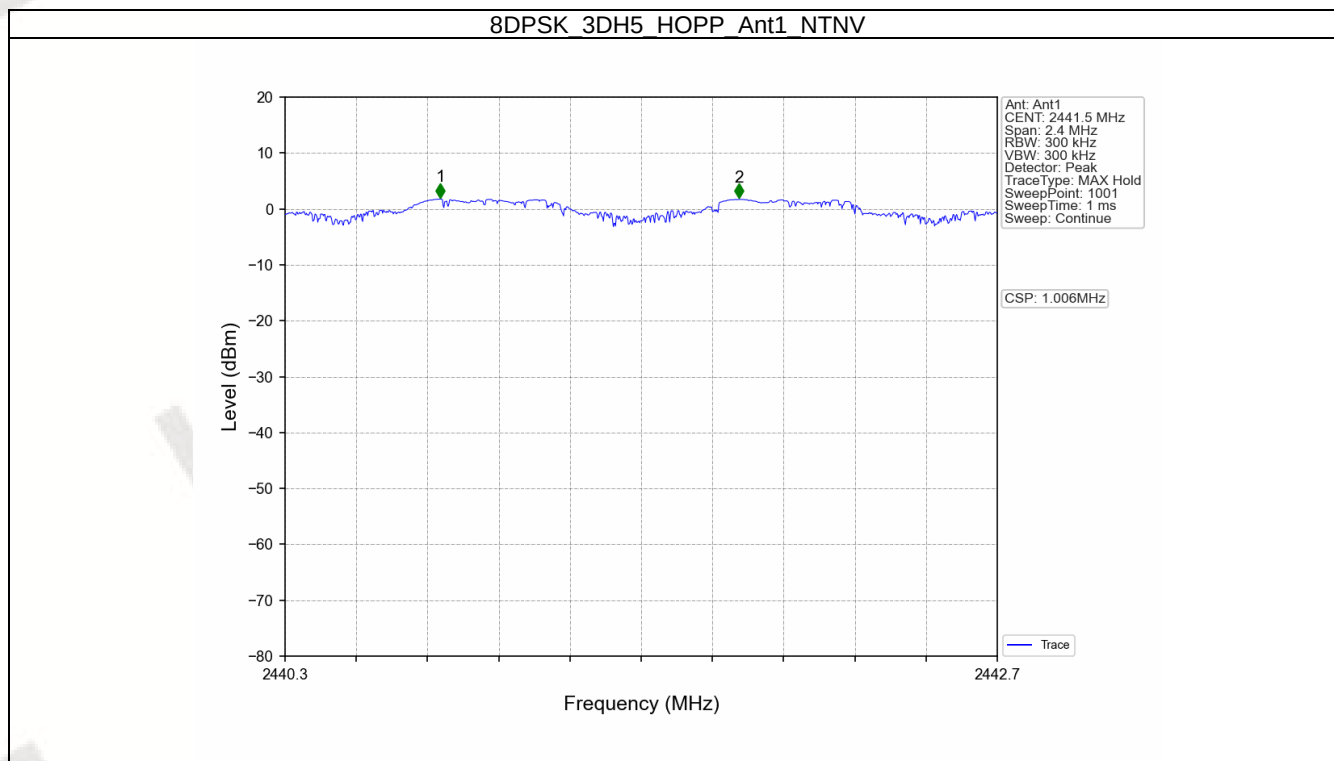
#### 3.1 Ant1

##### 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         | 0.998                    | 0.952                | $\geq 0.952$ | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 1.001                    | 1.321                | $\geq 0.881$ | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 1.006                    | 1.301                | $\geq 0.867$ | Pass    |

## 3.1.2 Test Graph





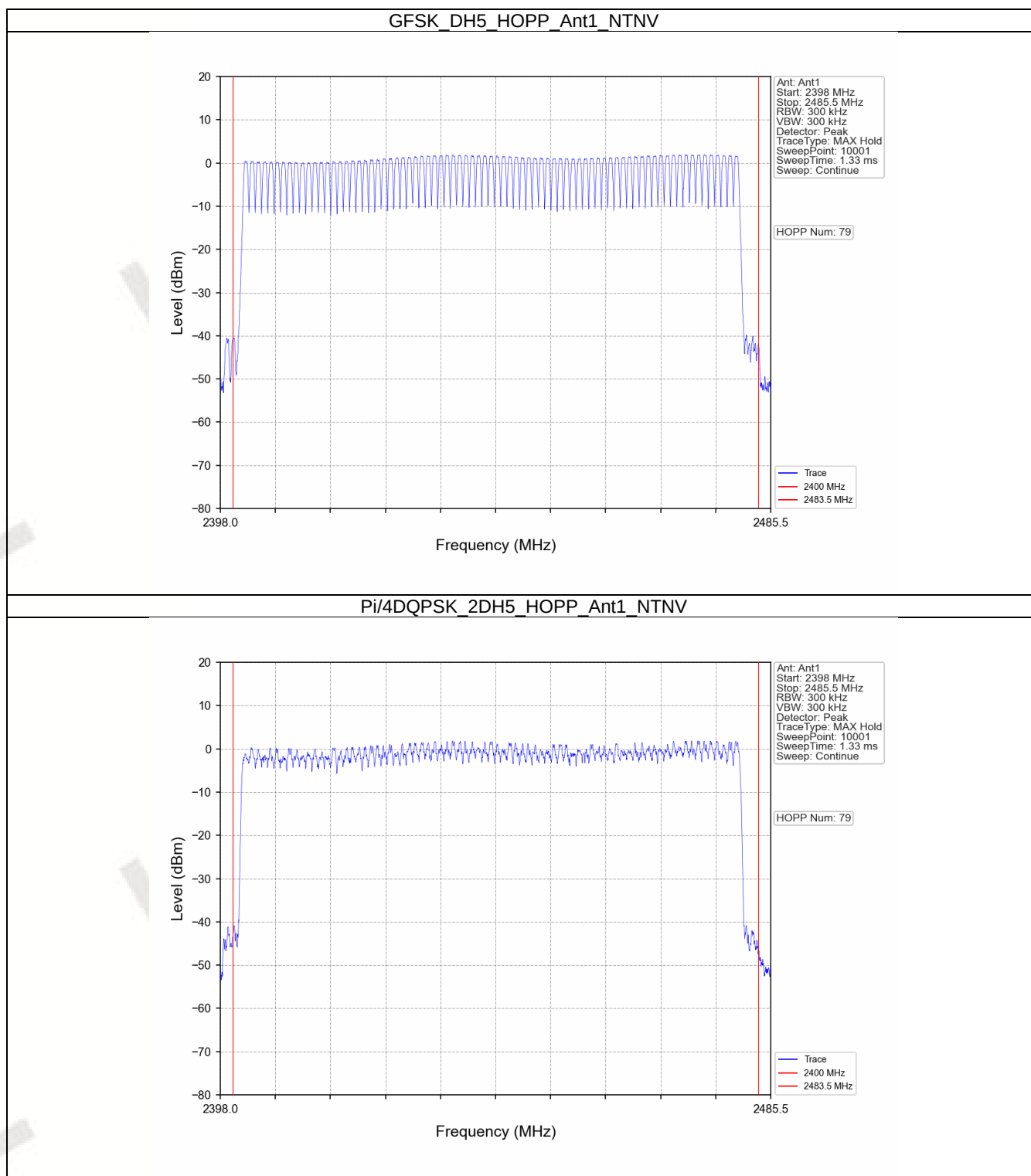
## 4. Number of Hopping Frequencies

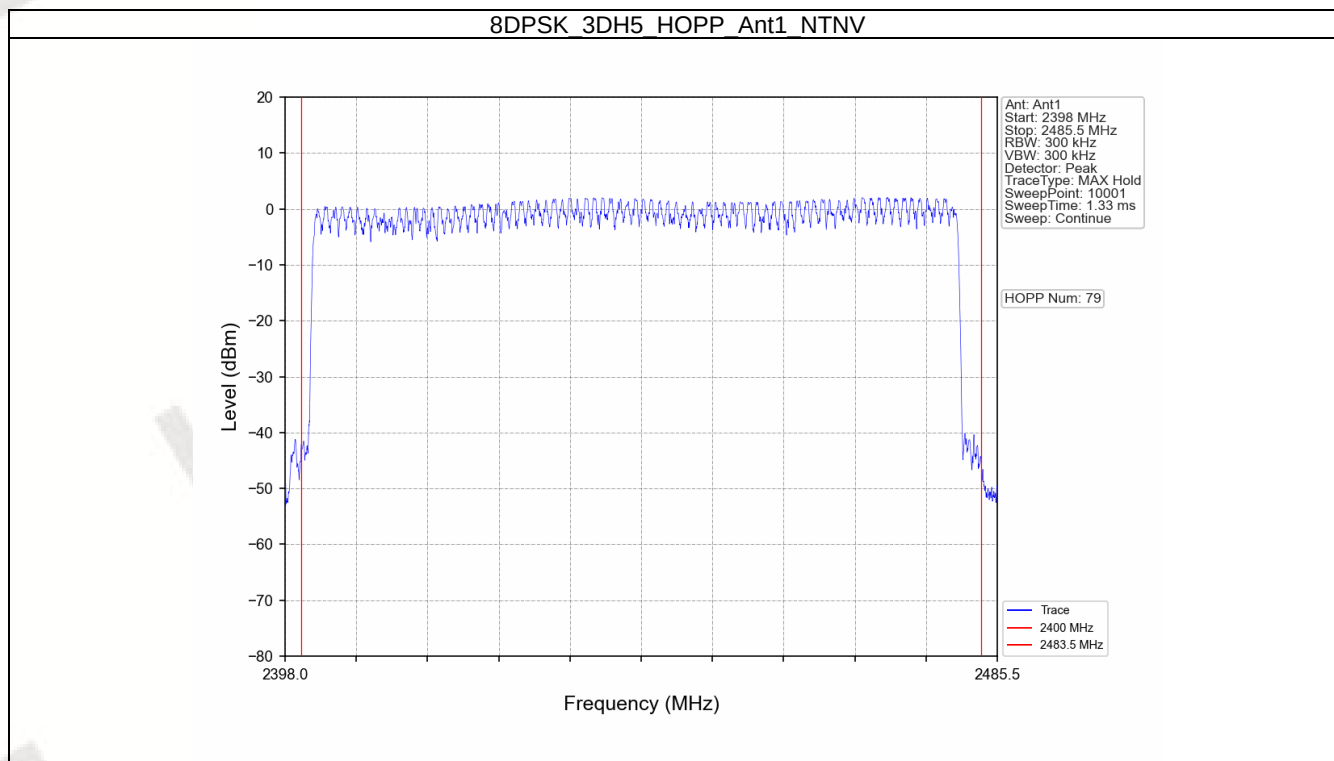
### 4.1 HoppNum

#### 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







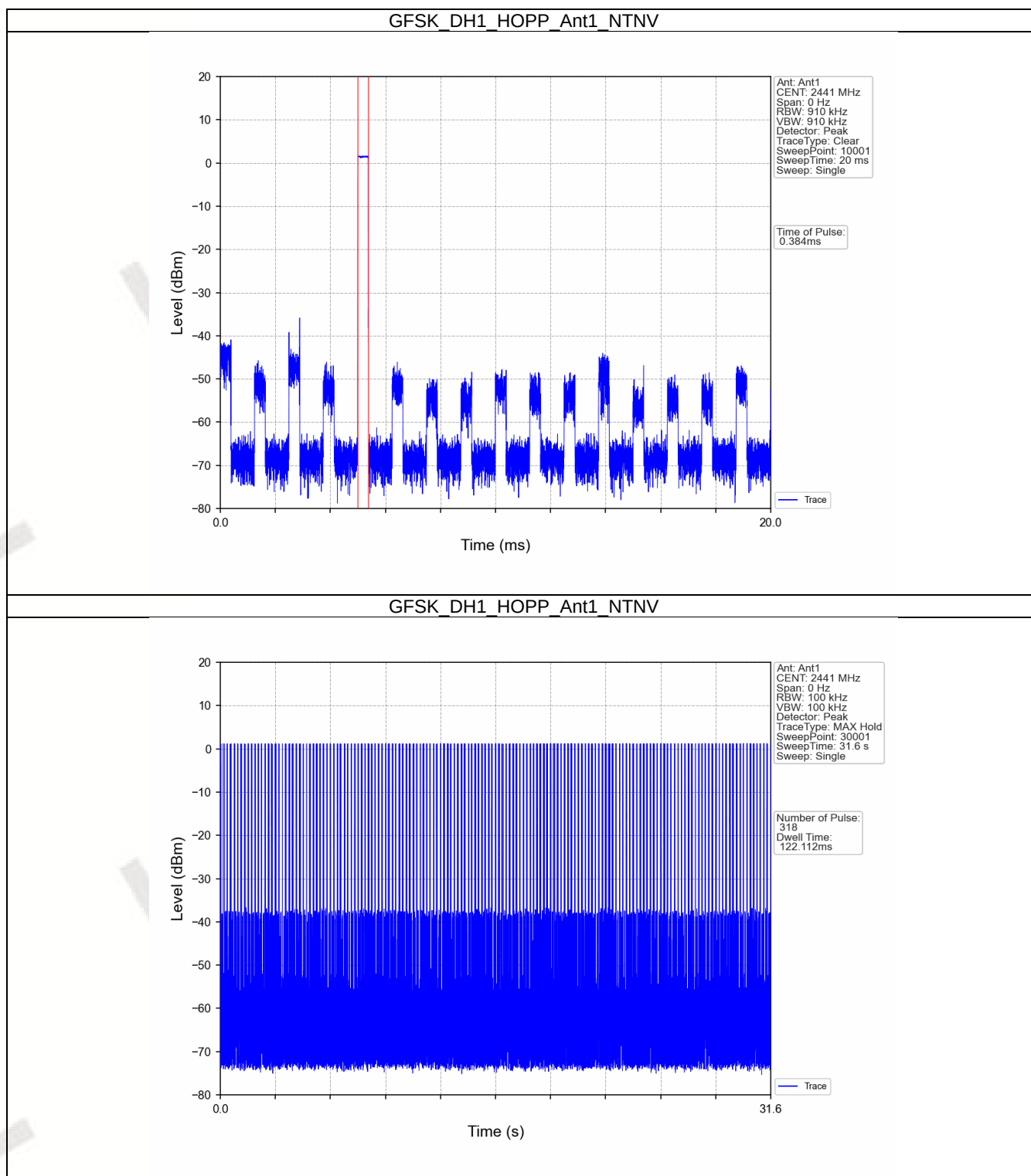
## 5. Time of Occupancy (Dwell Time)

### 5.1 Ant1

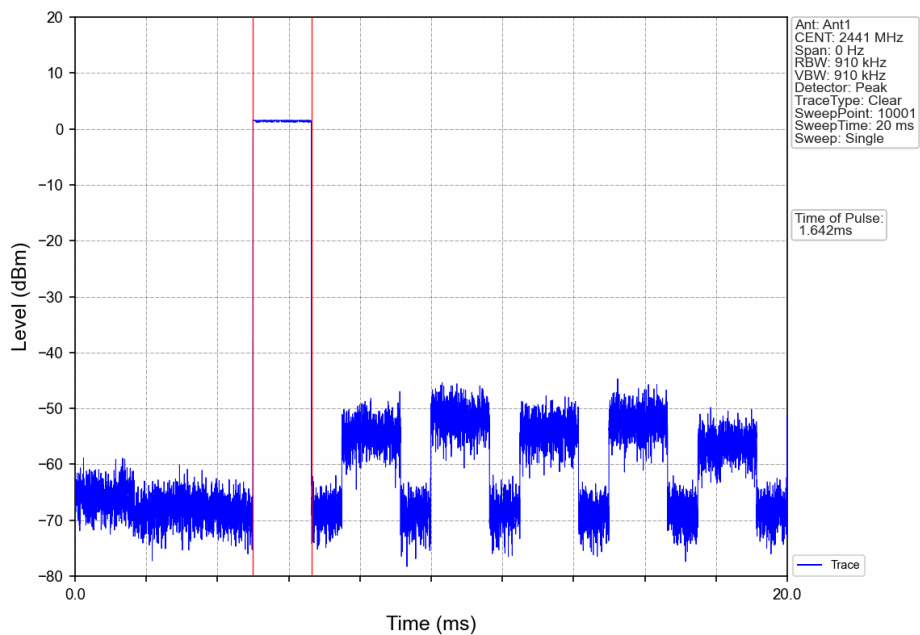
#### 5.1.1 Test Result

| 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         | 0.384                         | 31.600                 | 318                                | 122.112         | <=400      | Pass    |
|           |         |                 | DH3         | 1.642                         | 31.600                 | 155                                | 254.510         | <=400      | Pass    |
|           |         |                 | DH5         | 2.890                         | 31.600                 | 105                                | 303.450         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.396                         | 31.600                 | 318                                | 125.928         | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.648                         | 31.600                 | 154                                | 253.792         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.898                         | 31.600                 | 113                                | 327.474         | <=400      | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH1        | 0.396                         | 31.600                 | 318                                | 125.928         | <=400      | Pass    |
|           |         |                 | 3DH3        | 1.650                         | 31.600                 | 158                                | 260.700         | <=400      | Pass    |
|           |         |                 | 3DH5        | 2.896                         | 31.600                 | 94                                 | 272.224         | <=400      | Pass    |

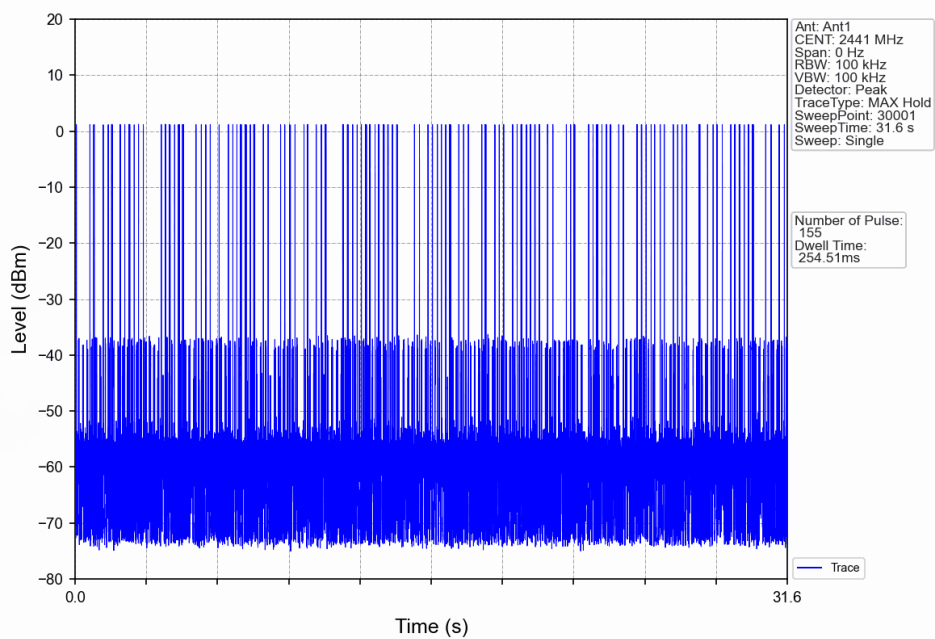
## 5.1.2 Test Graph



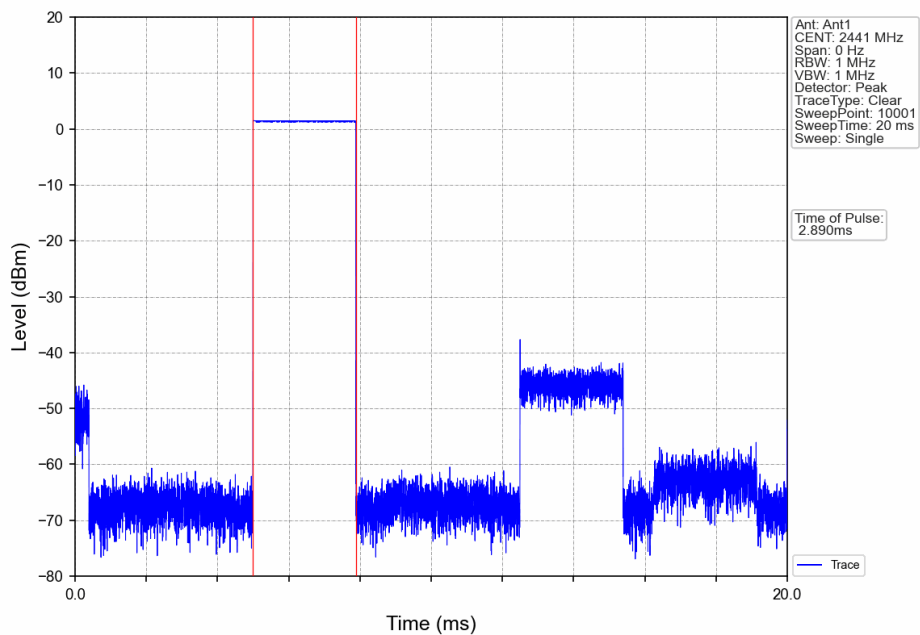
GFSK DH3 HOPP Ant1 NTN



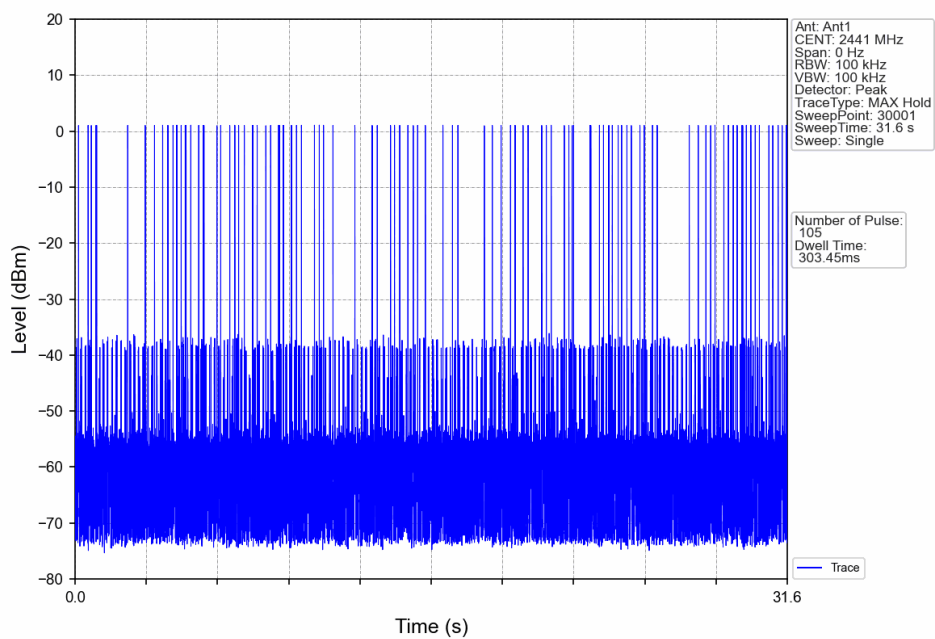
GFSK\_DH3\_HOPP\_Ant1\_NTNV



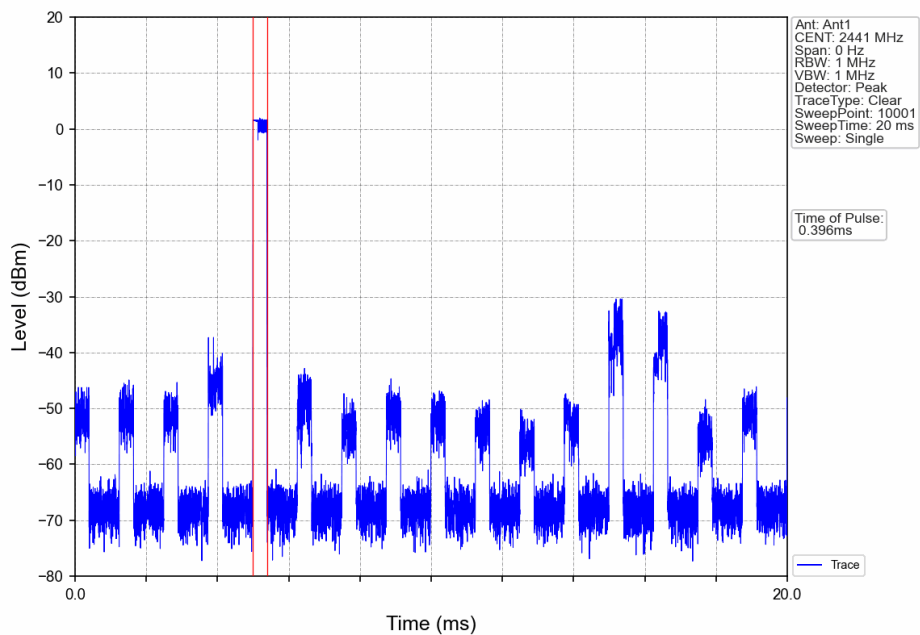
GFSK DH5 HOPP Ant1 NTN



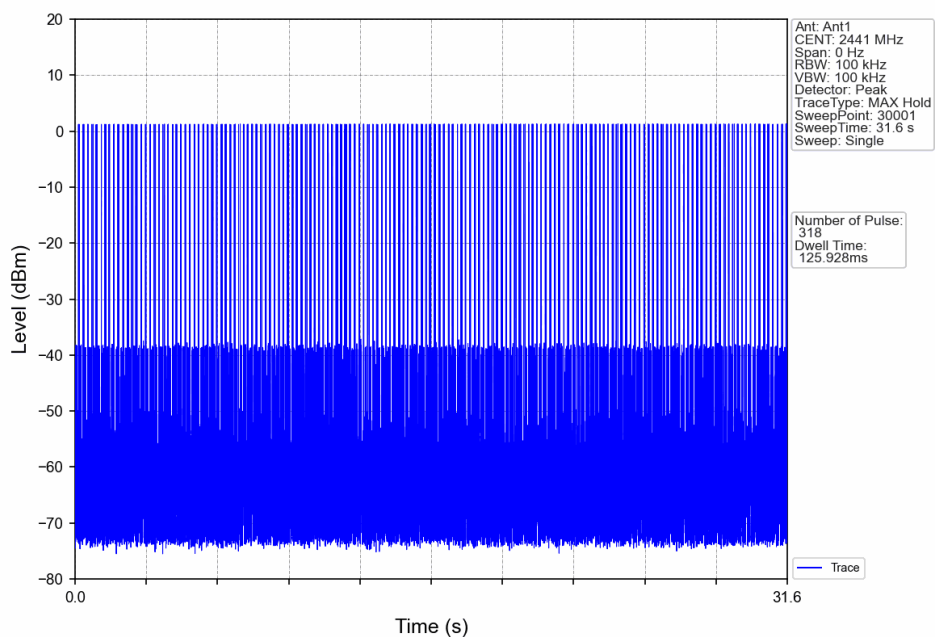
GFSK\_DH5\_HOPP\_Ant1\_NTNV



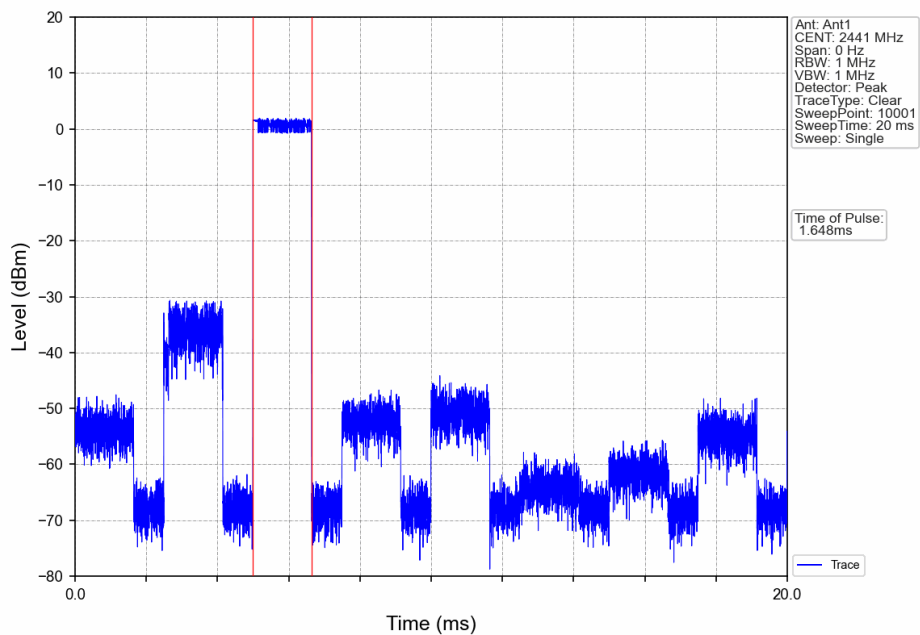
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



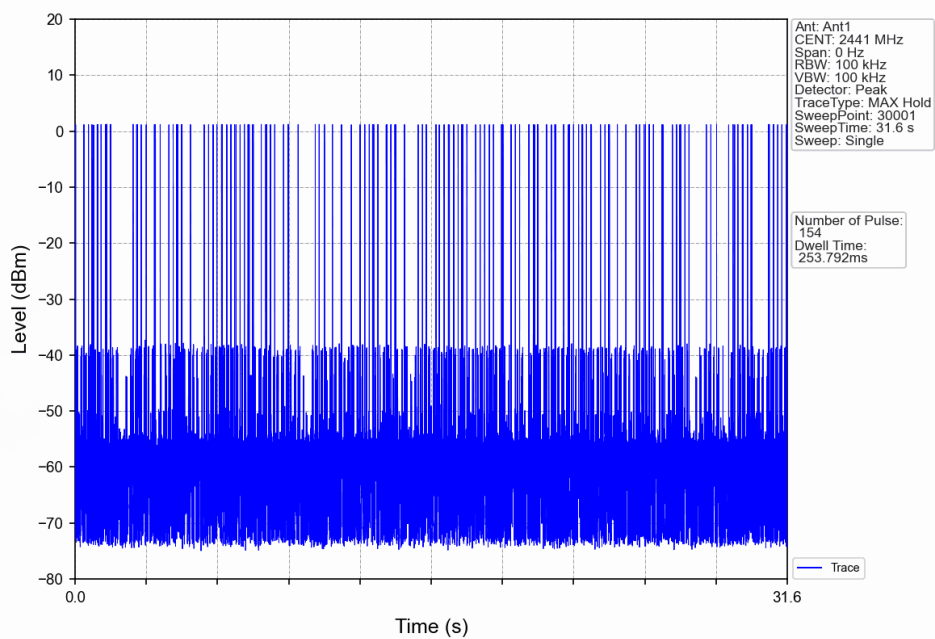
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



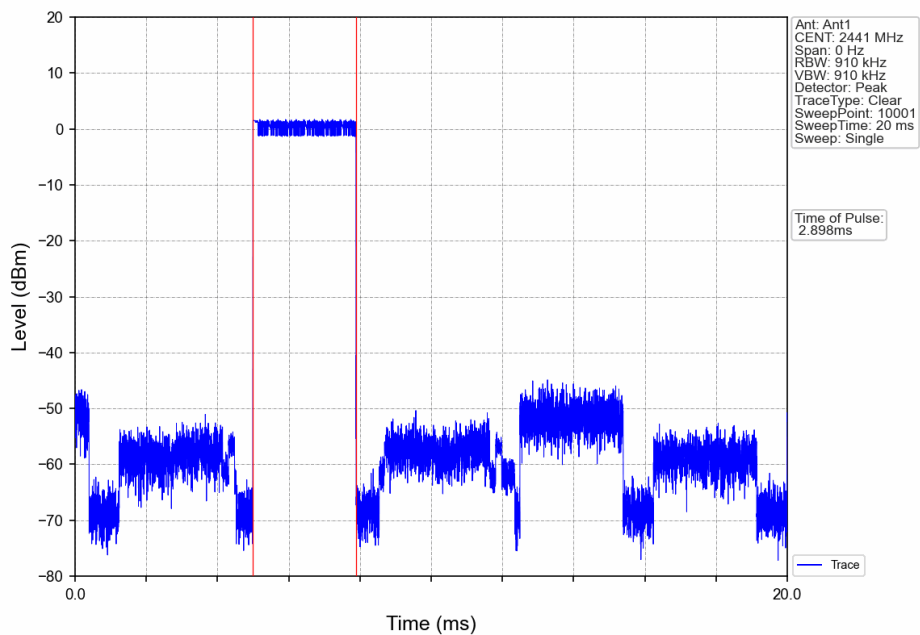
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



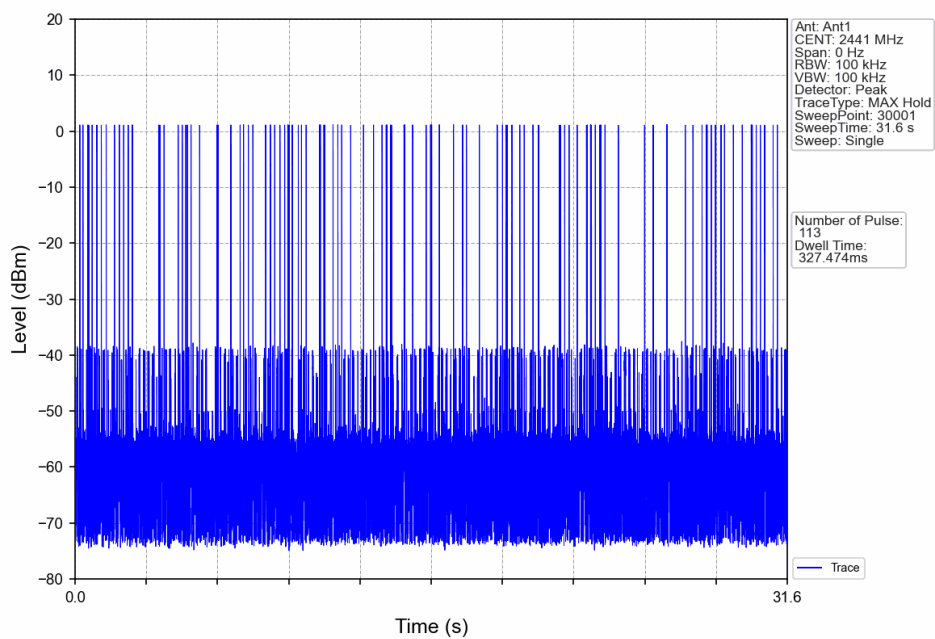
Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



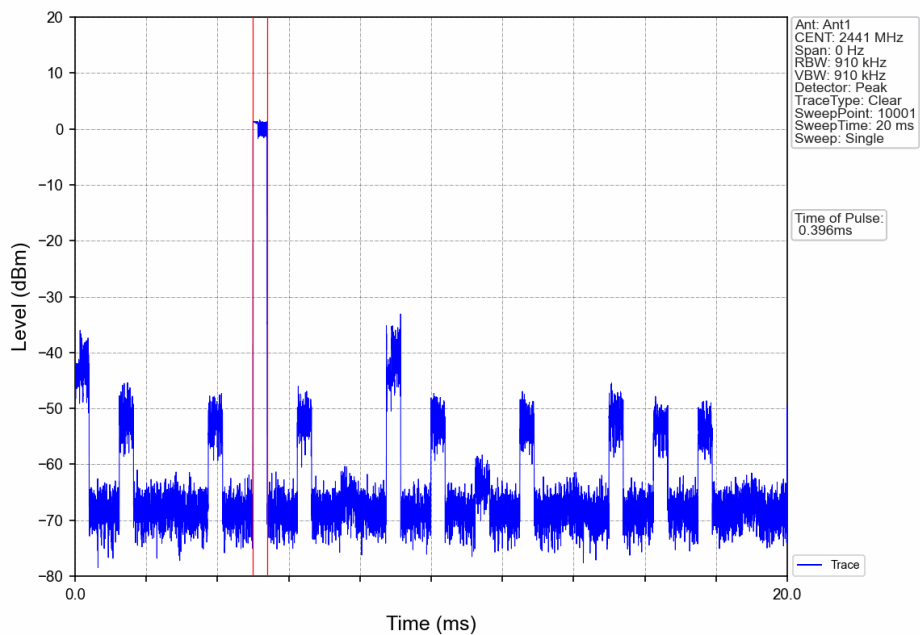
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



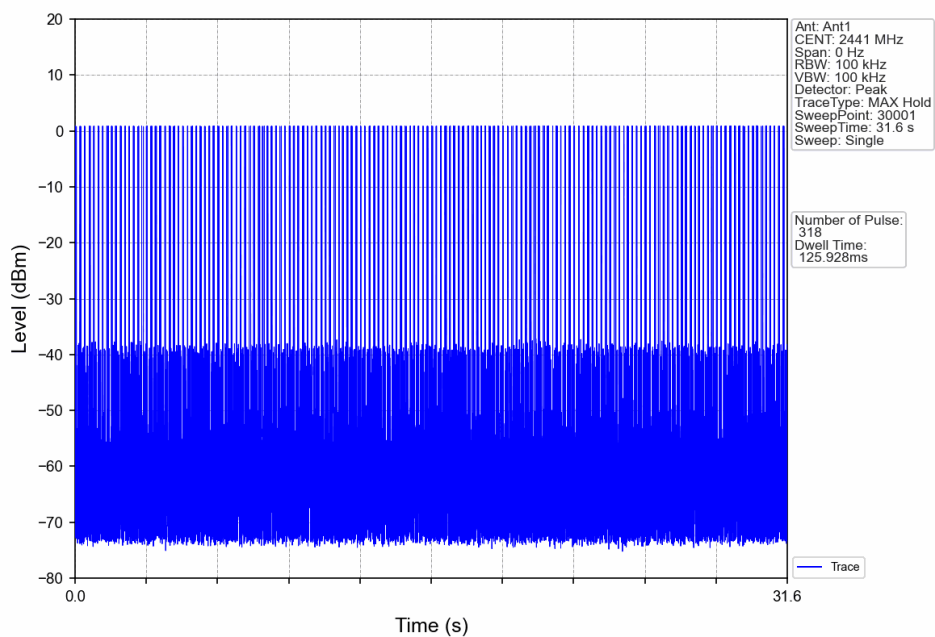
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



## 8DPSK 3DH1 HOPP Ant1 NTN

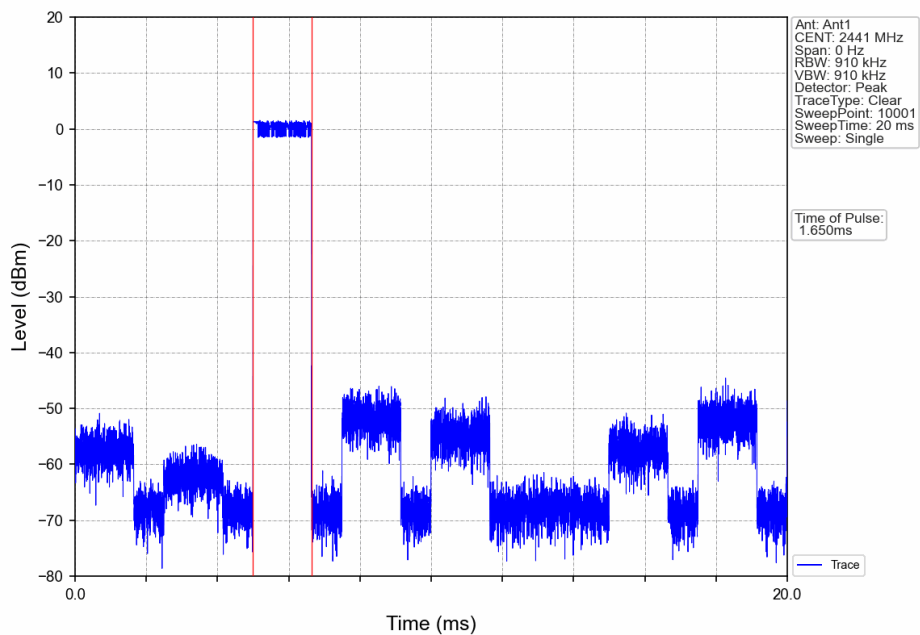


## 8DPSK 3DH1 HOPP Ant1 NTN

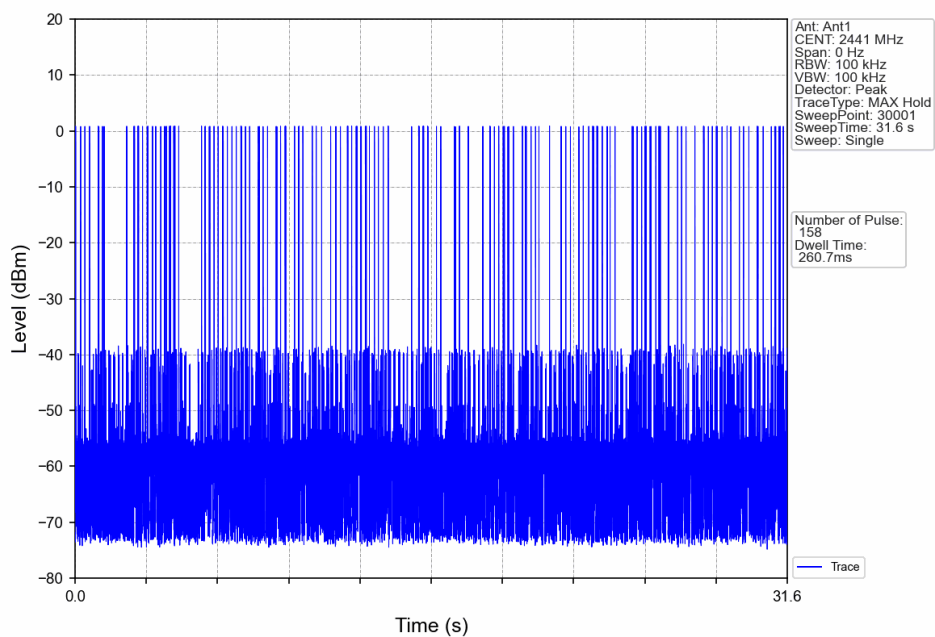




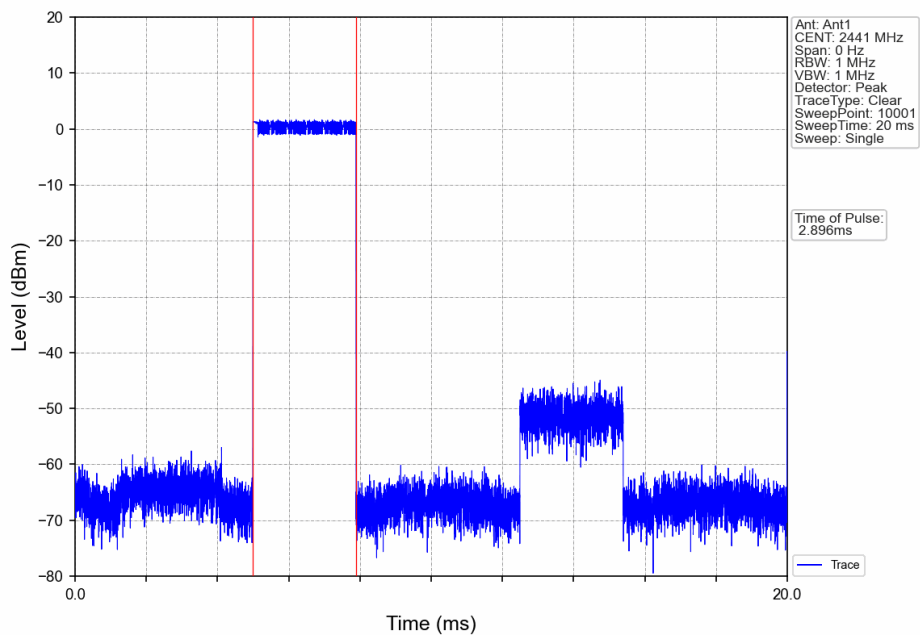
## 8DPSK 3DH3 HOPP Ant1 NTNV



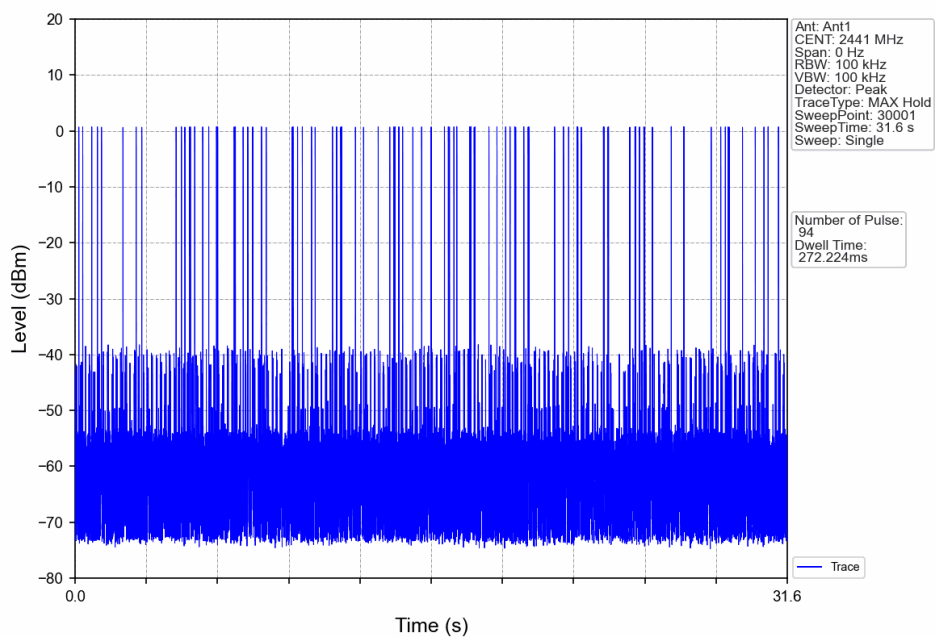
## 8DPSK 3DH3 HOPP Ant1 NTNV



## 8DPSK 3DH5 HOPP Ant1 NTNV



## 8DPSK 3DH5 HOPP Ant1 NTNV



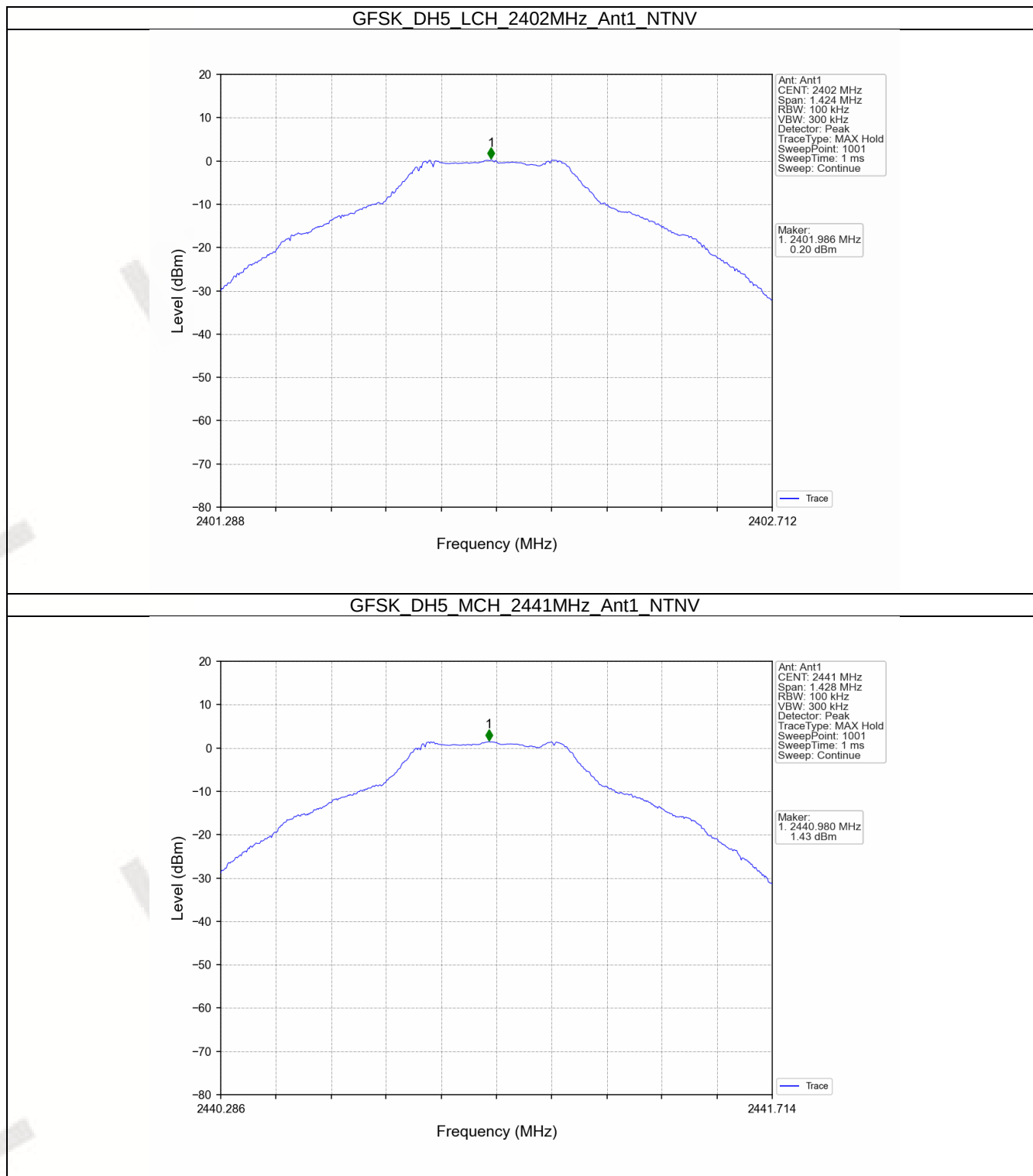
## 6. Unwanted Emissions In Non-restricted Frequency Bands

### 6.1 Ref

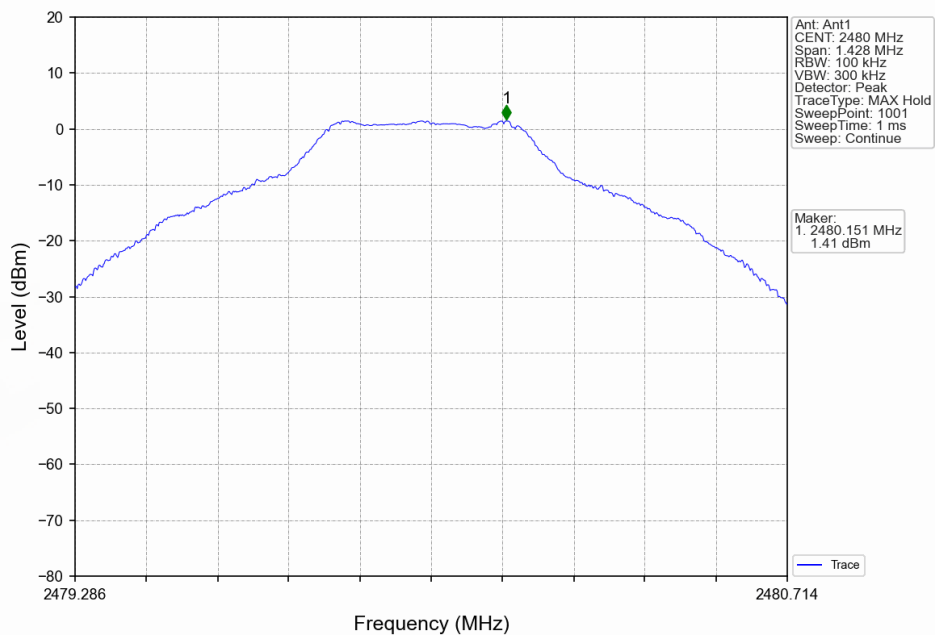
#### 6.1.1 Test Result

| Mode                                                                                                                                            | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-------------|-----|--------------------------|
| GFSK                                                                                                                                            | SISO    | 2402            | DH5         | 1   | 0.20                     |
|                                                                                                                                                 |         | 2441            | DH5         | 1   | 1.43                     |
|                                                                                                                                                 |         | 2480            | DH5         | 1   | 1.41                     |
| Pi/4DQPSK                                                                                                                                       | SISO    | 2402            | 2DH5        | 1   | 0.35                     |
|                                                                                                                                                 |         | 2441            | 2DH5        | 1   | 1.62                     |
|                                                                                                                                                 |         | 2480            | 2DH5        | 1   | 1.66                     |
| 8DPSK                                                                                                                                           | SISO    | 2402            | 3DH5        | 1   | 0.46                     |
|                                                                                                                                                 |         | 2441            | 3DH5        | 1   | 1.76                     |
|                                                                                                                                                 |         | 2480            | 3DH5        | 1   | 1.75                     |
| 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. |         |                 |             |     |                          |

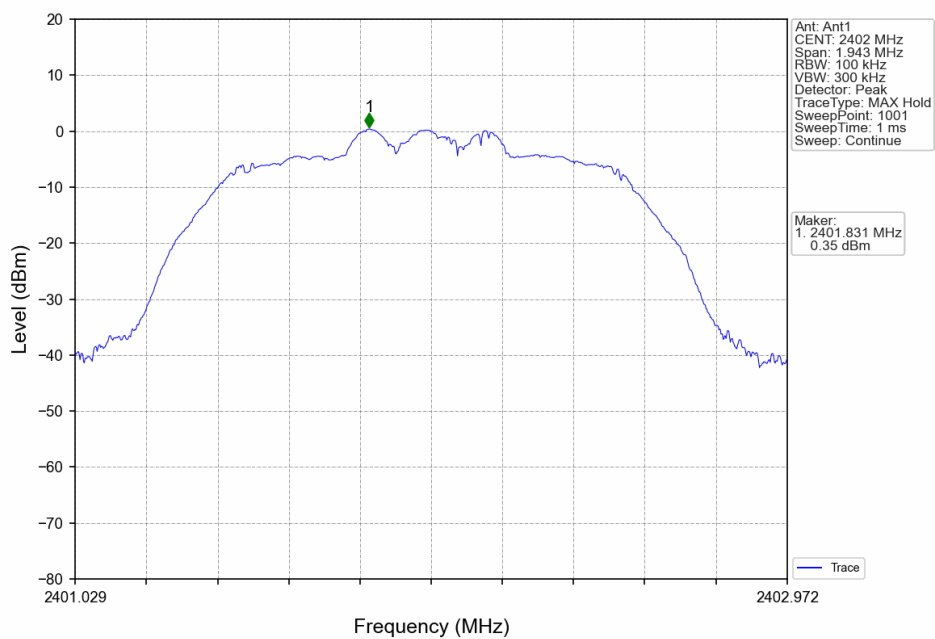
## 6.1.2 Test Graph



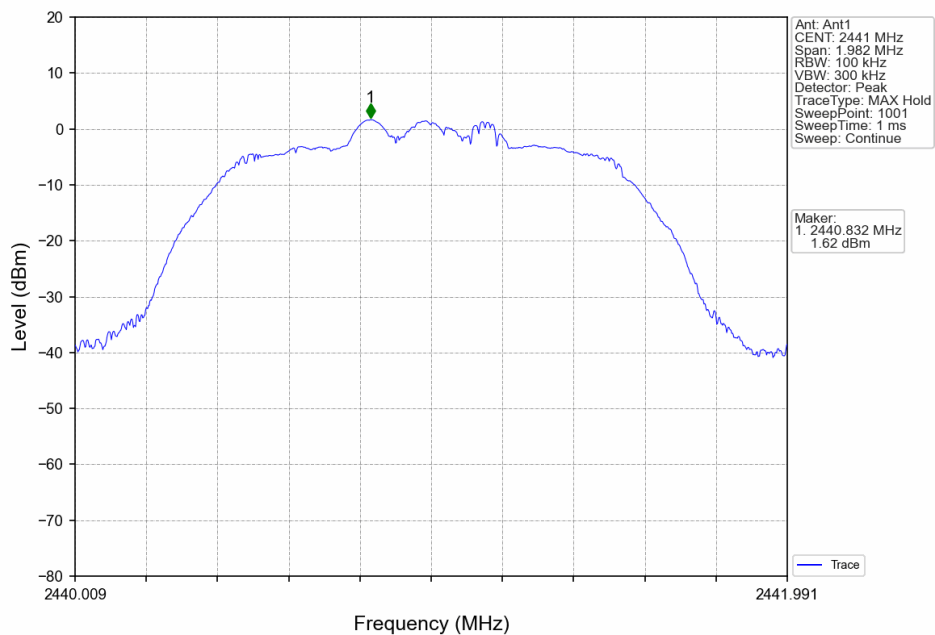
GFSK DH5 HCH 2480MHz Ant1 NTV



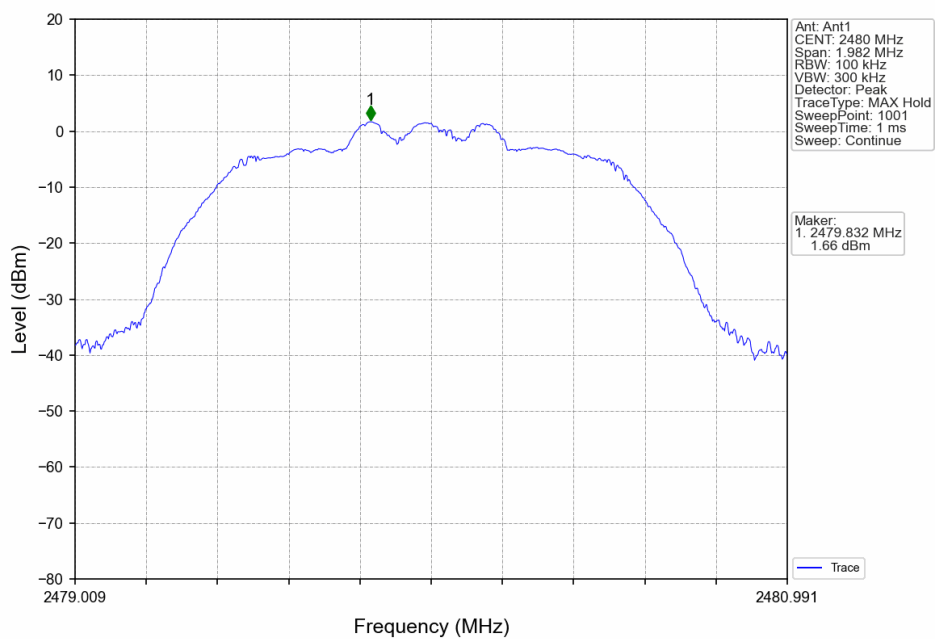
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTV



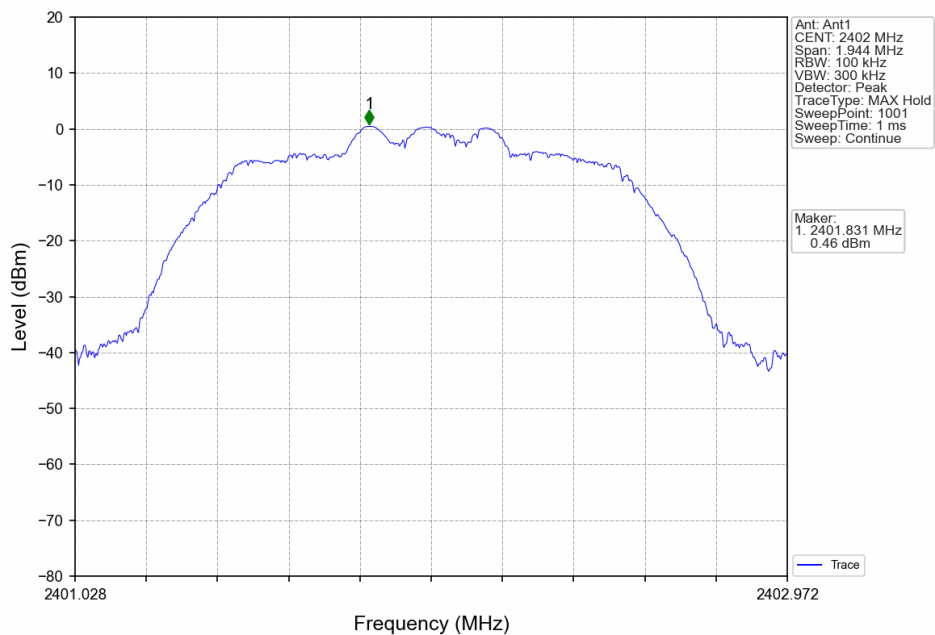
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



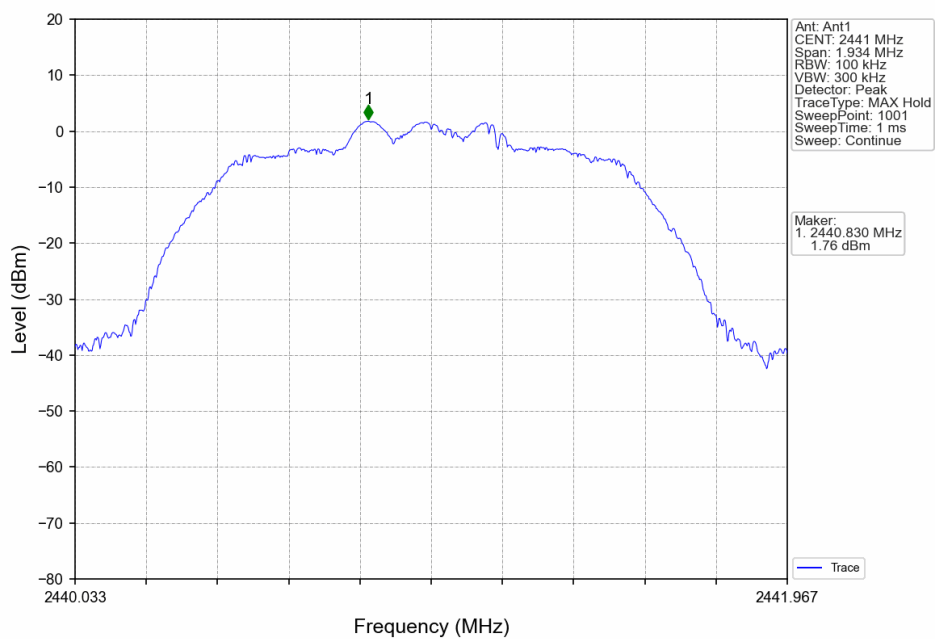
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV

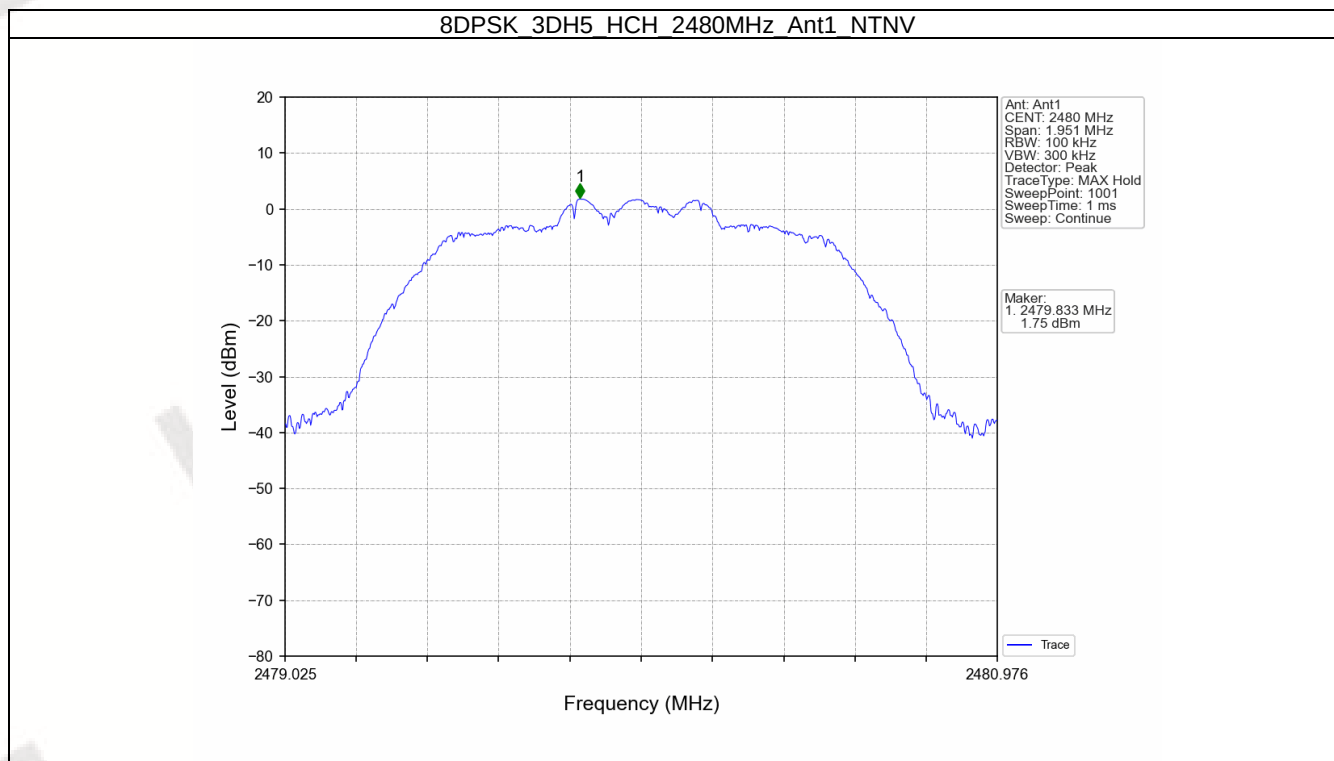


8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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







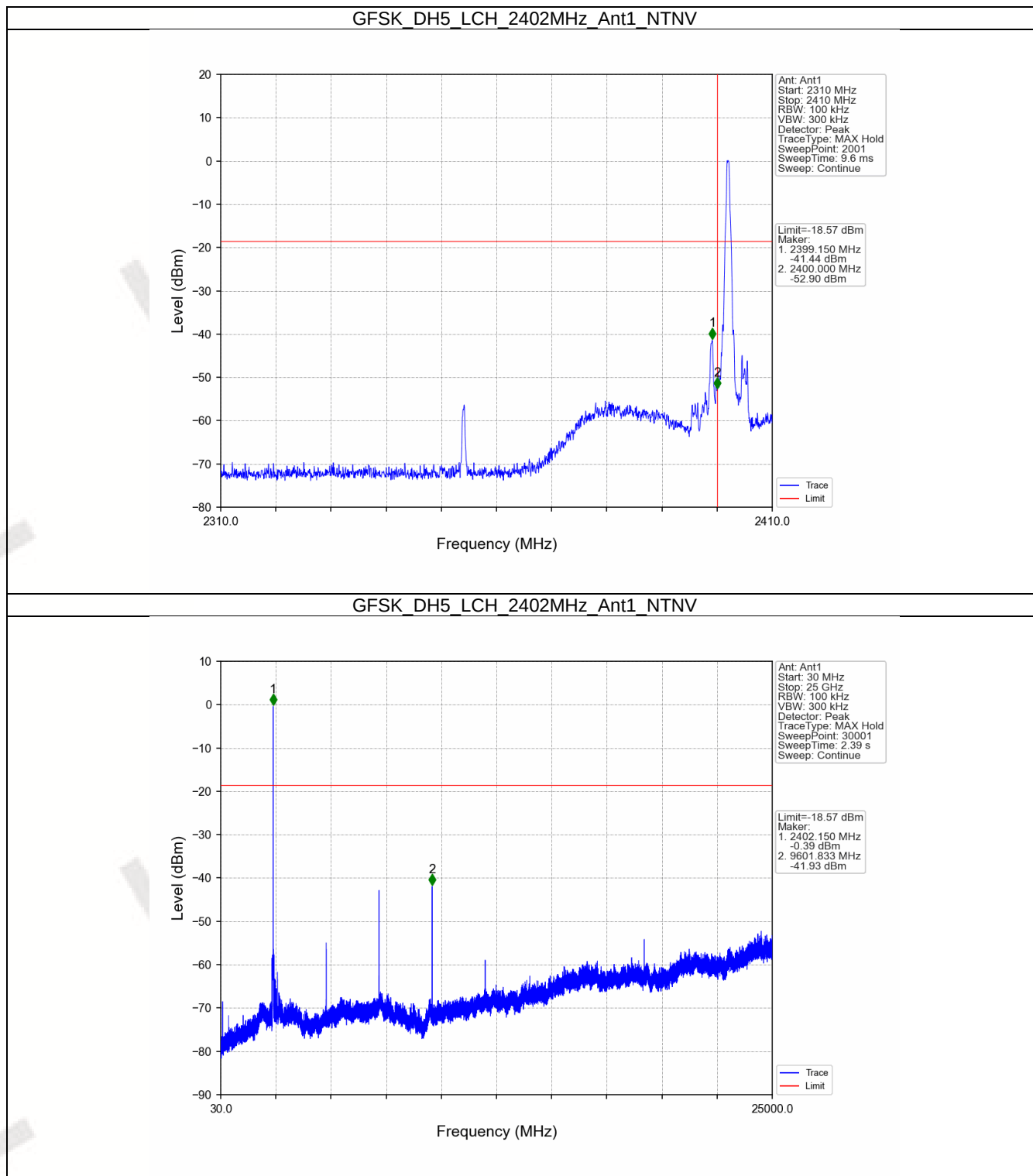
## 6.2 CSE

### 6.2.1 Test Result

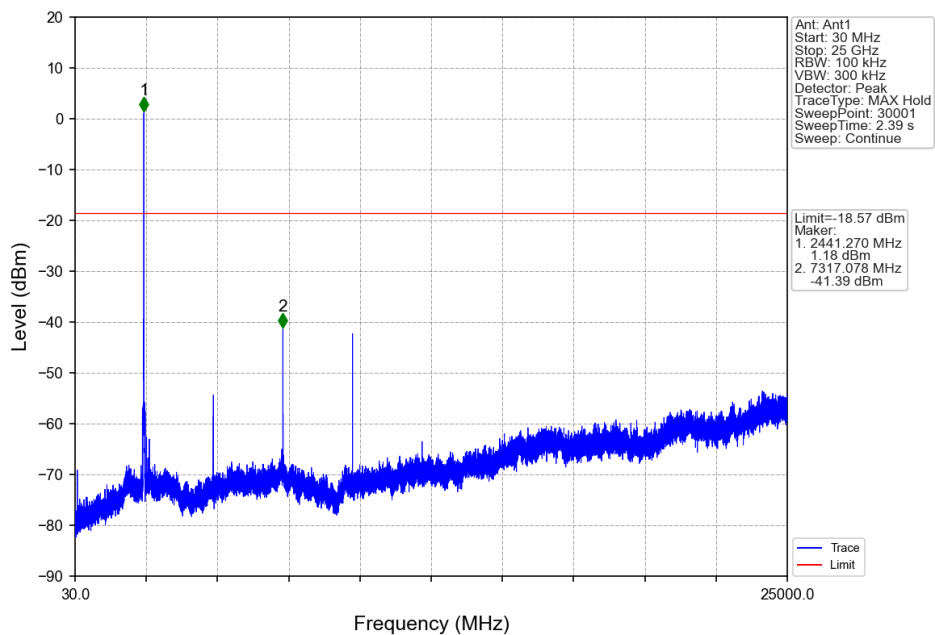
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-----------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 1.43                     | -18.57      | Pass    |
|           |         | 2441            | DH5         | 1   | 1.43                     | -18.57      | Pass    |
|           |         | 2480            | DH5         | 1   | 1.43                     | -18.57      | Pass    |
|           |         | HOPP            | DH5         | 1   | 1.43                     | -18.57      | Pass    |
|           |         |                 |             |     | 1.43                     | -18.57      | Pass    |
|           |         |                 |             |     |                          |             |         |
| PI/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.66                     | -18.34      | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.66                     | -18.34      | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.66                     | -18.34      | Pass    |
|           |         | HOPP            | 2DH5        | 1   | 1.66                     | -18.34      | Pass    |
|           |         |                 |             |     | 1.66                     | -18.34      | Pass    |
|           |         |                 |             |     |                          |             |         |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.76                     | -18.24      | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.76                     | -18.24      | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.76                     | -18.24      | Pass    |
|           |         | HOPP            | 3DH5        | 1   | 1.76                     | -18.24      | Pass    |
|           |         |                 |             |     | 1.76                     | -18.24      | 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.

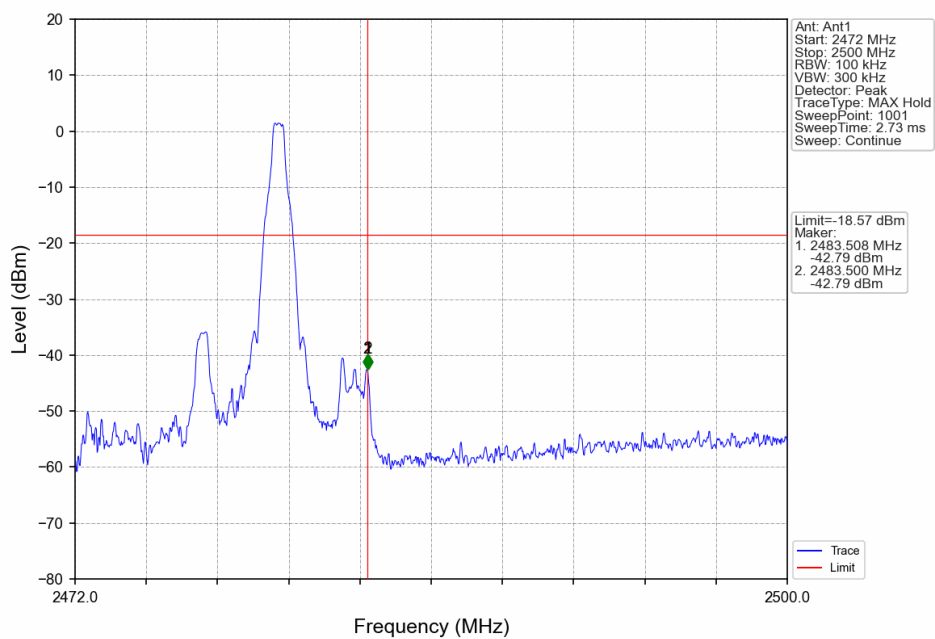
## 6.2.2 Test Graph



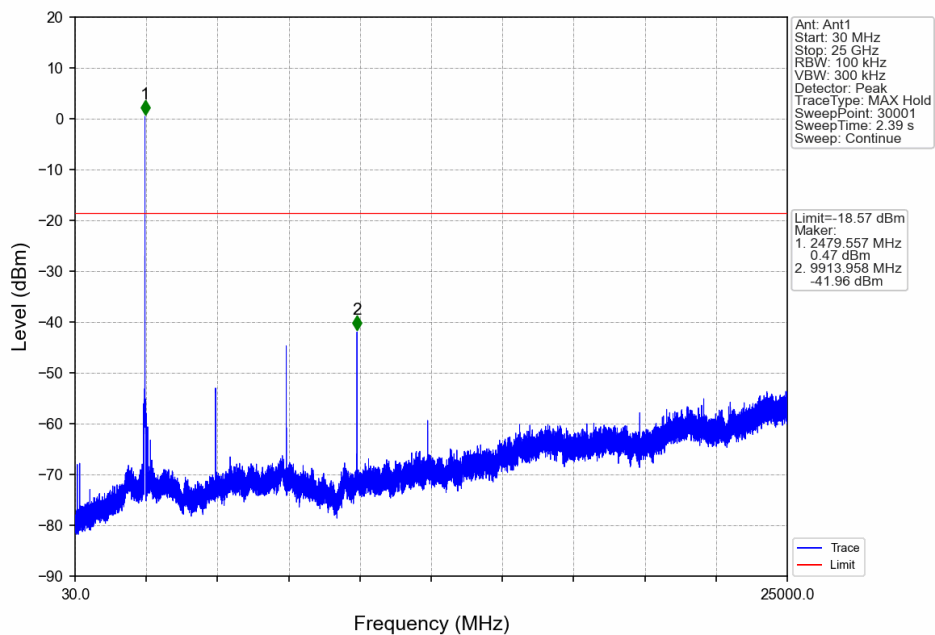
GFSK DH5 MCH 2441MHz Ant1 NTN



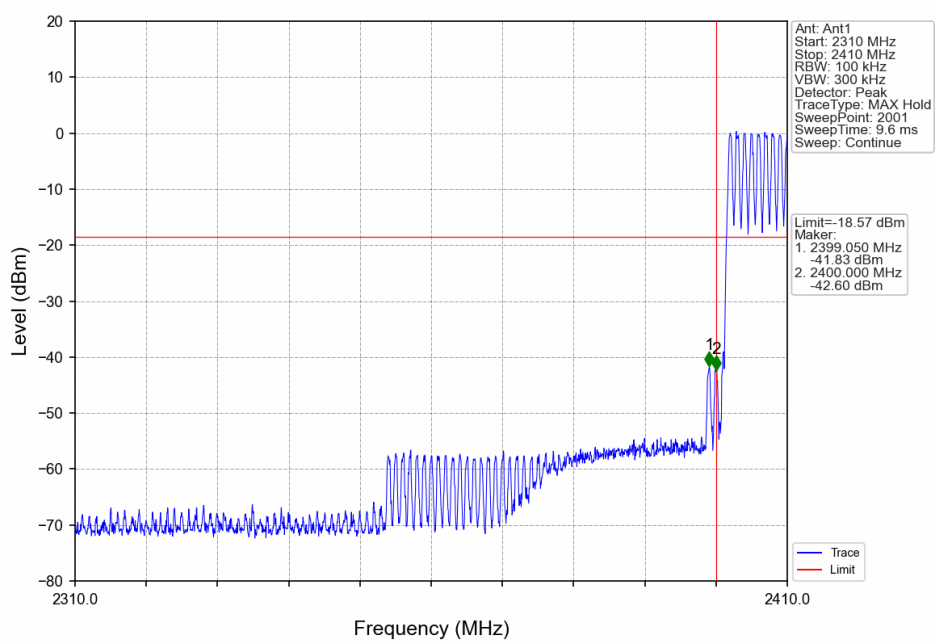
GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTN



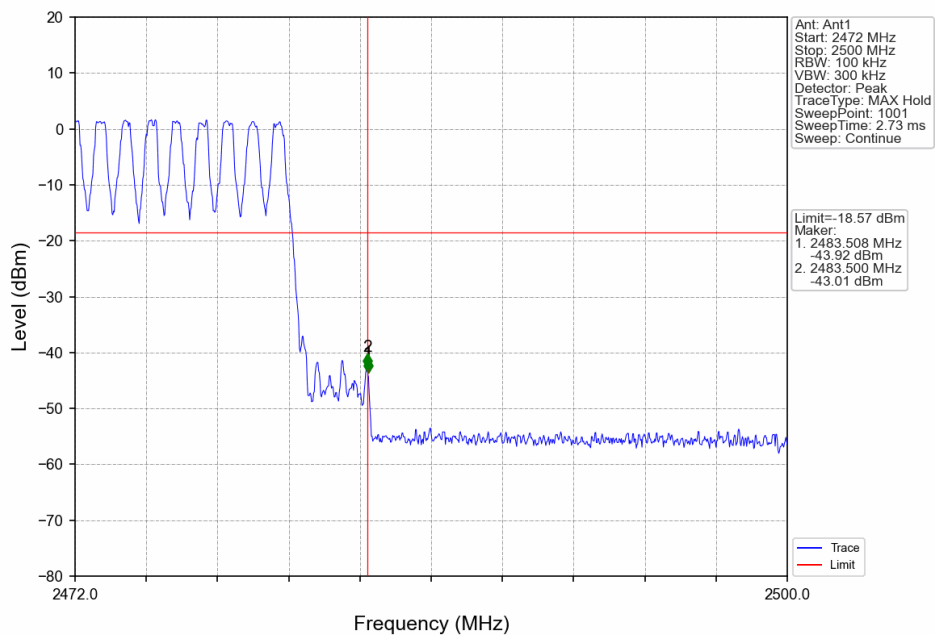
## GFSK DH5 HCH 2480MHz Ant1 NTN



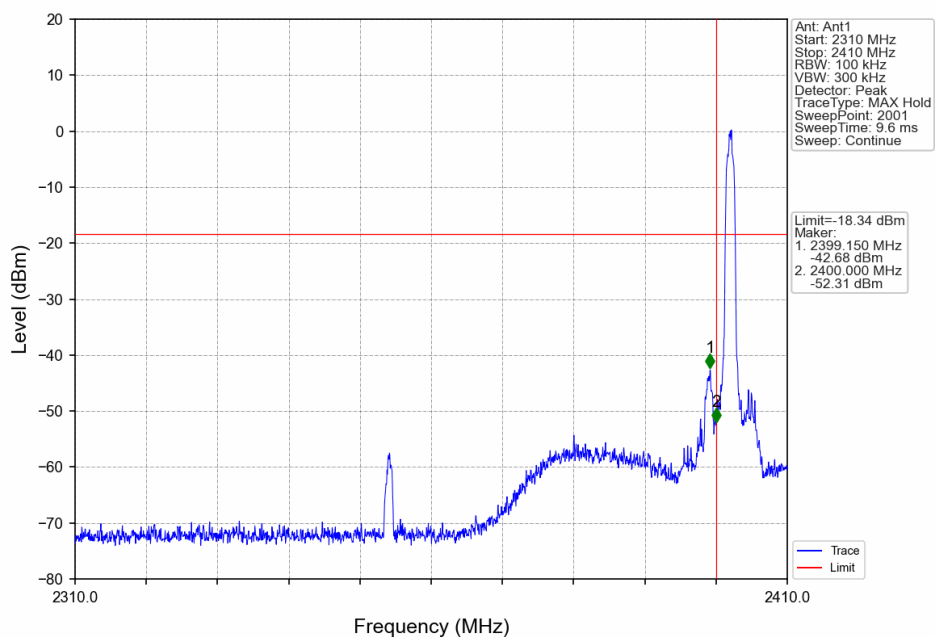
## GFSK\_DH5\_HOPP\_Ant1\_NTNV



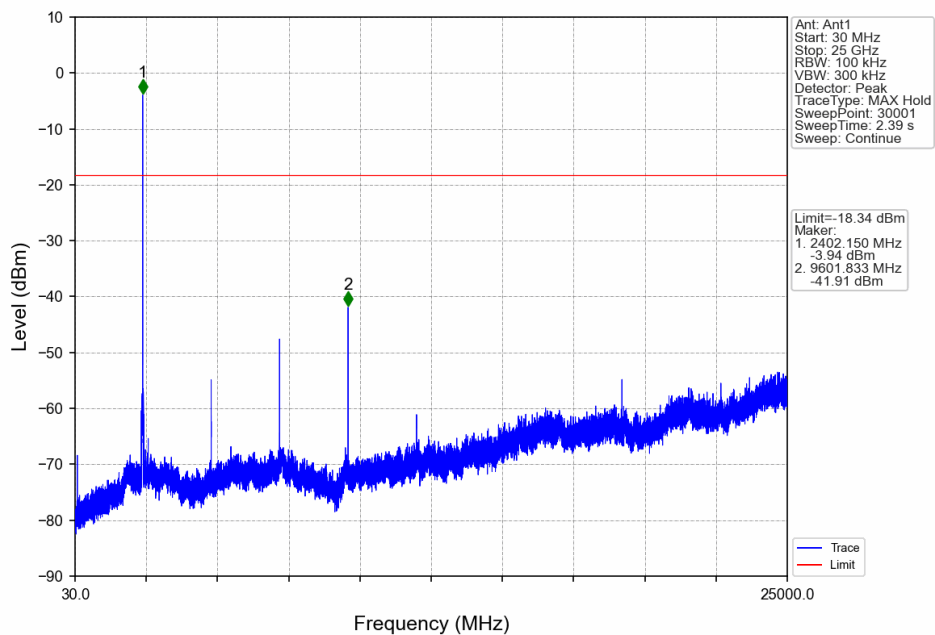
## GFSK DH5 HOPP Ant1 NTN



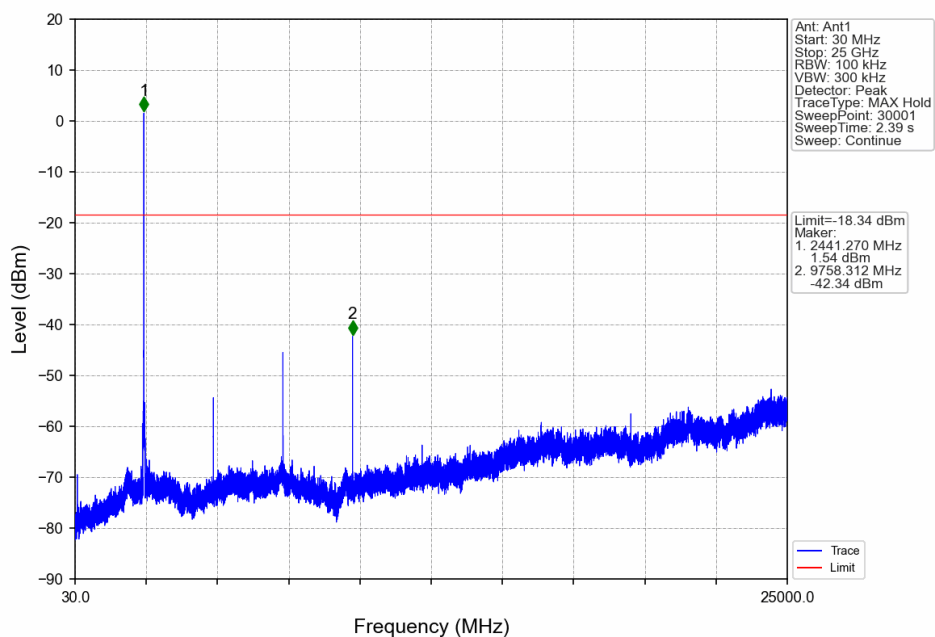
## Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1 NTN



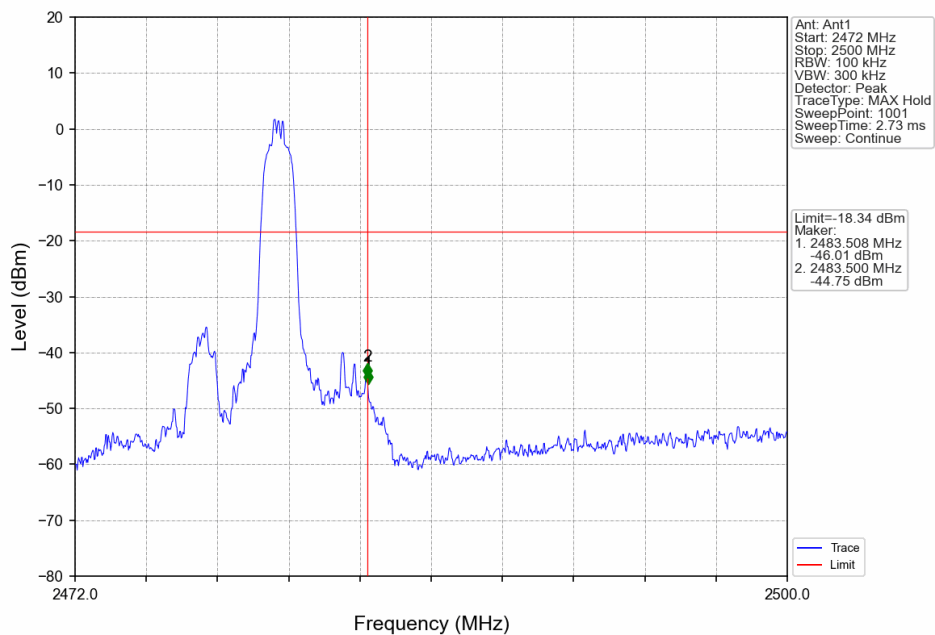
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



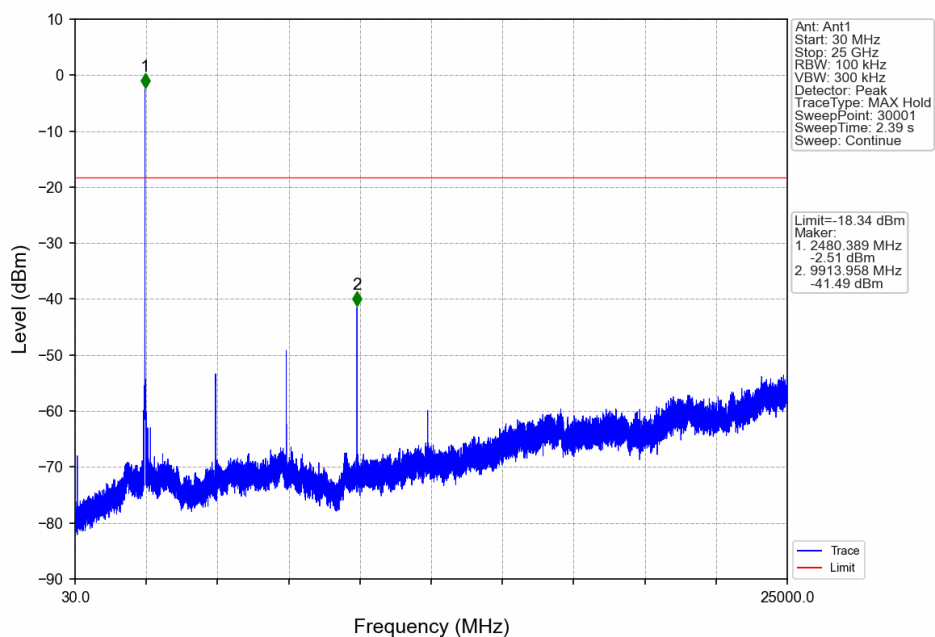
Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



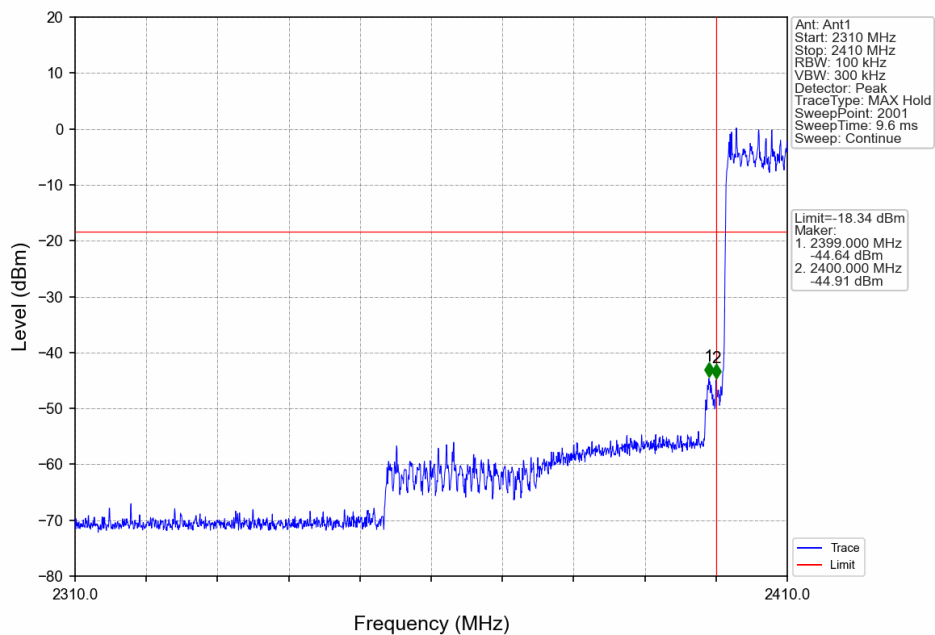
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



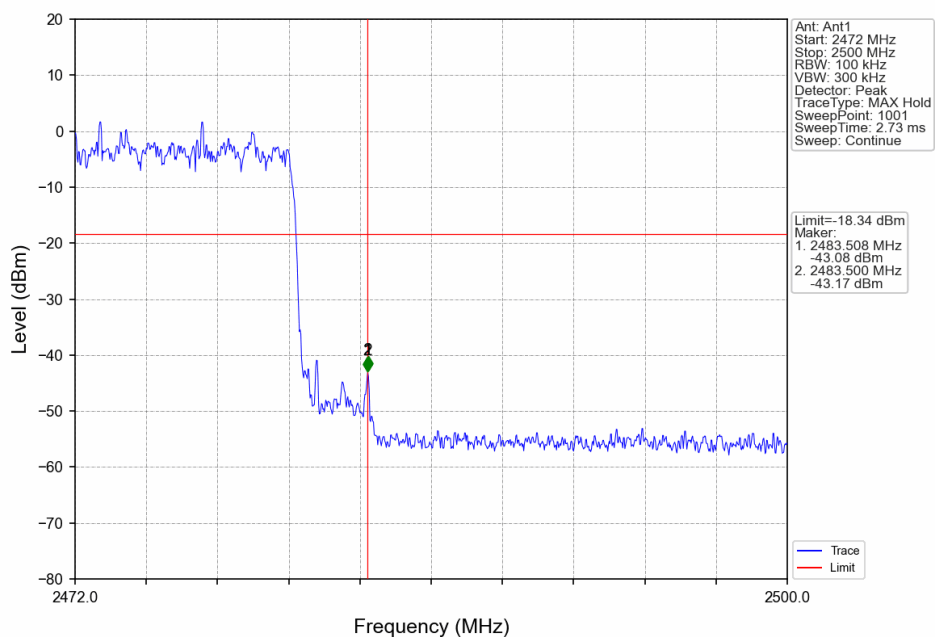
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



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

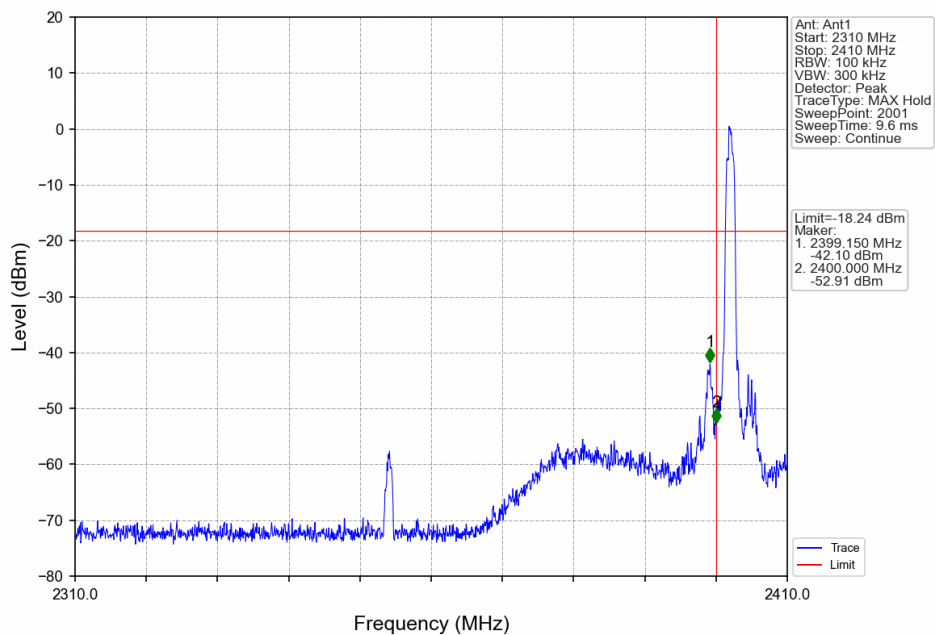


Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV

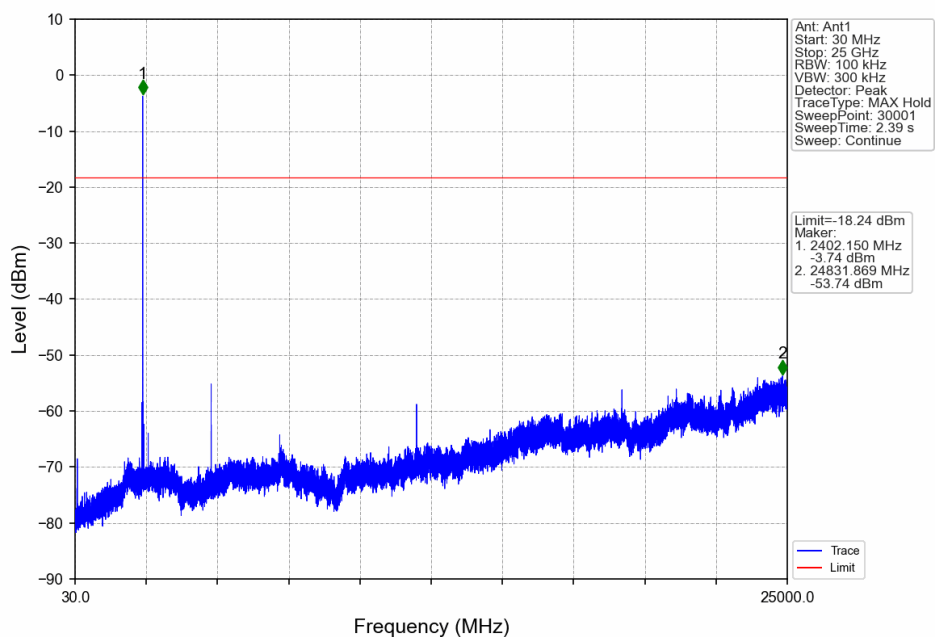




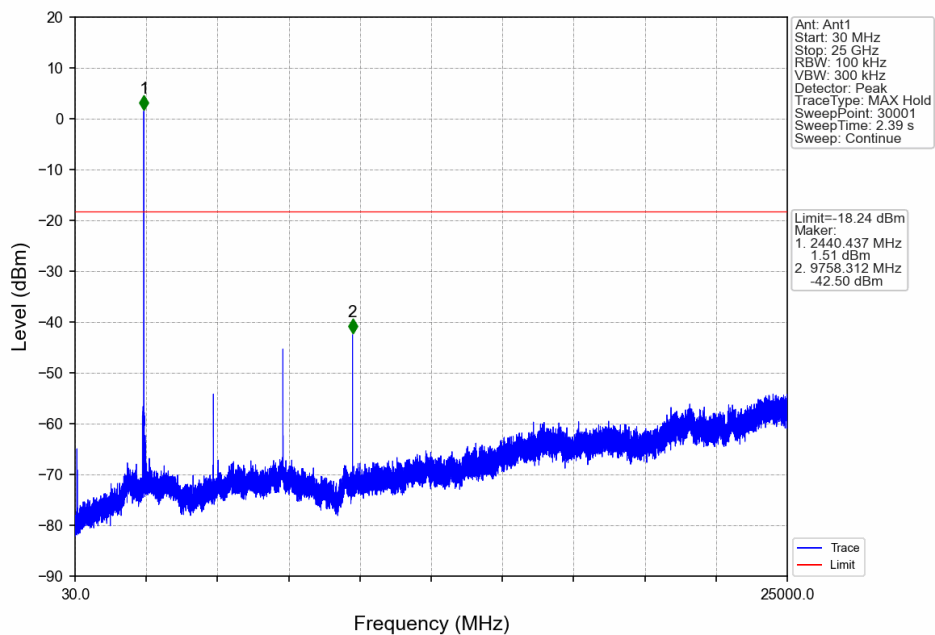
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



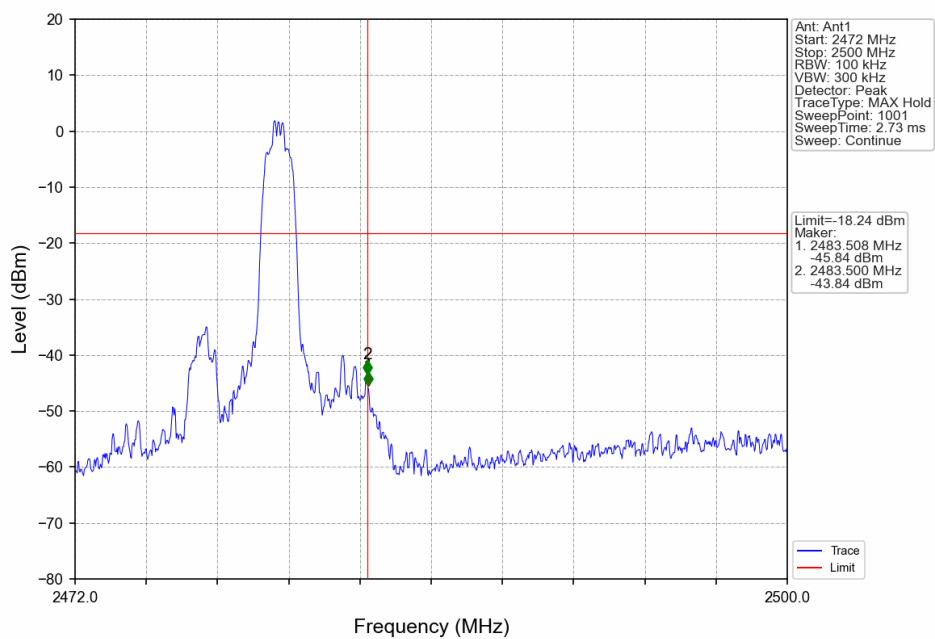
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



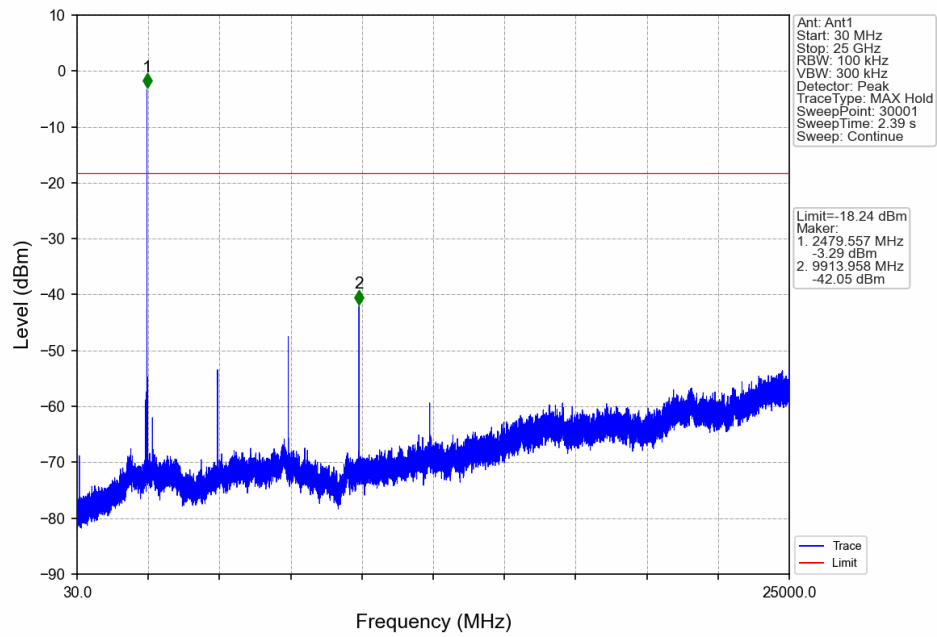
## 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



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



## 8DPSK 3DH5 HCH 2480MHz Ant1 NTN



## 8DPSK 3DH5 HOPP Ant1 NTN

