

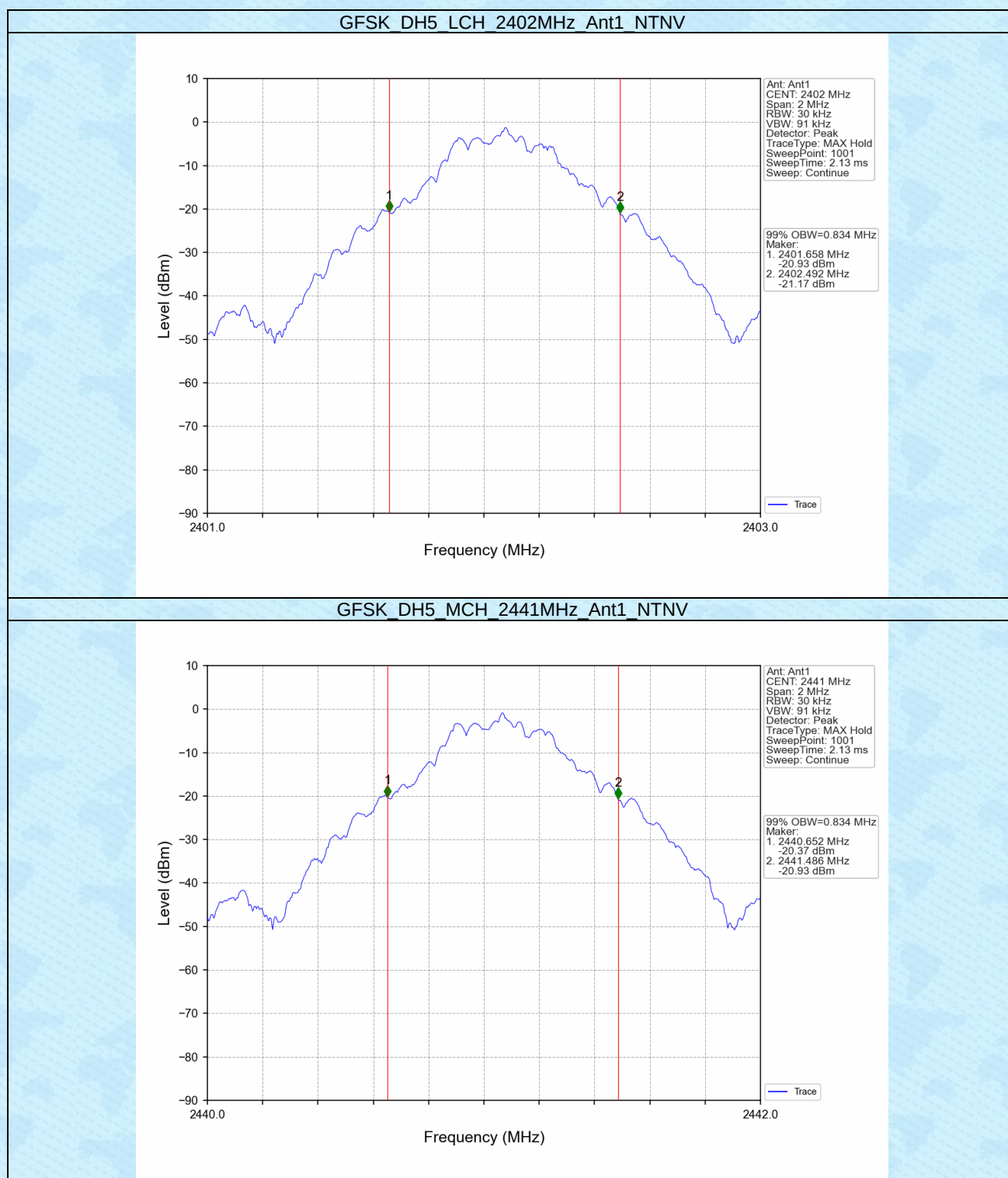
## 1. Bandwidth

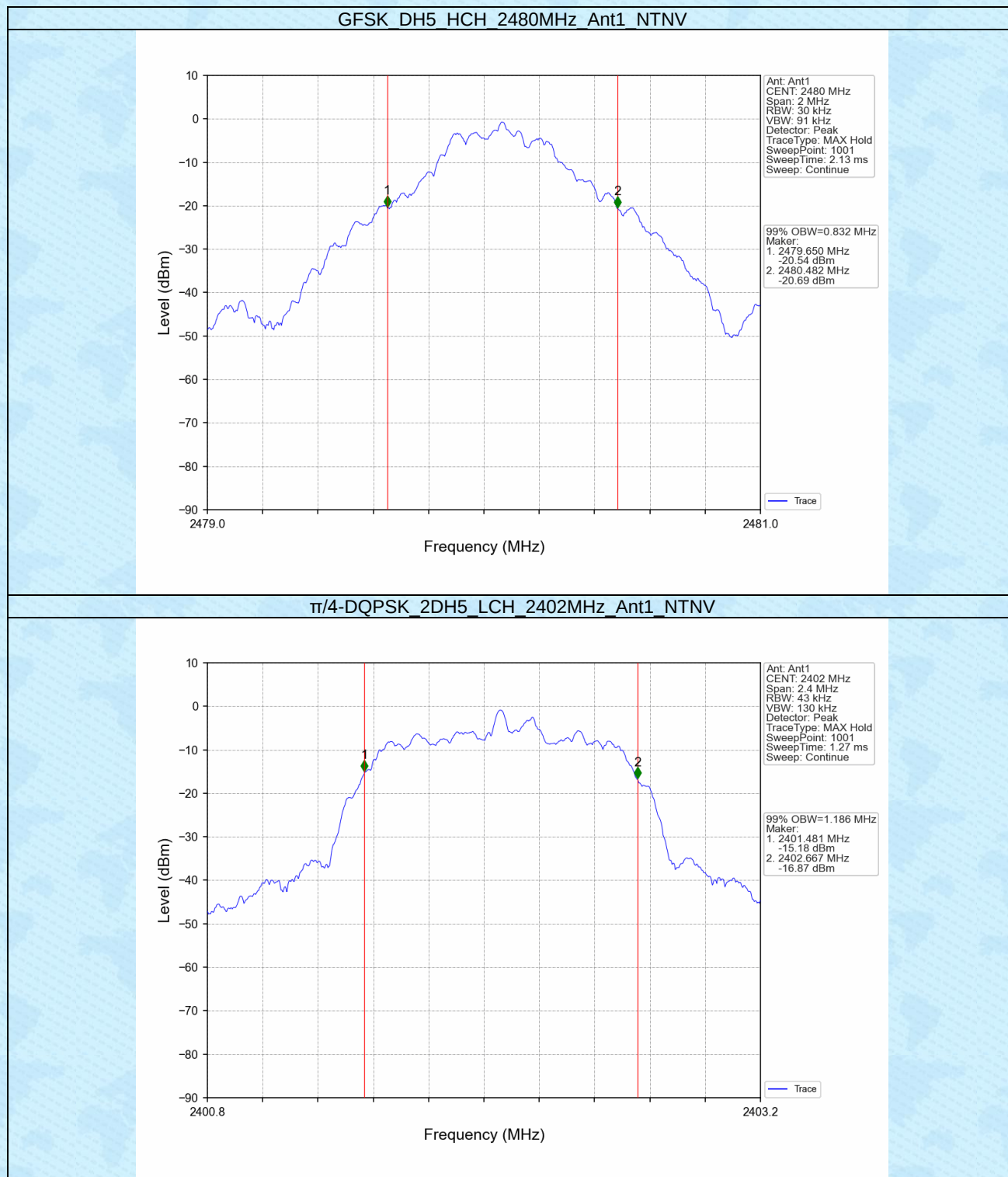
### 1.1 OBW

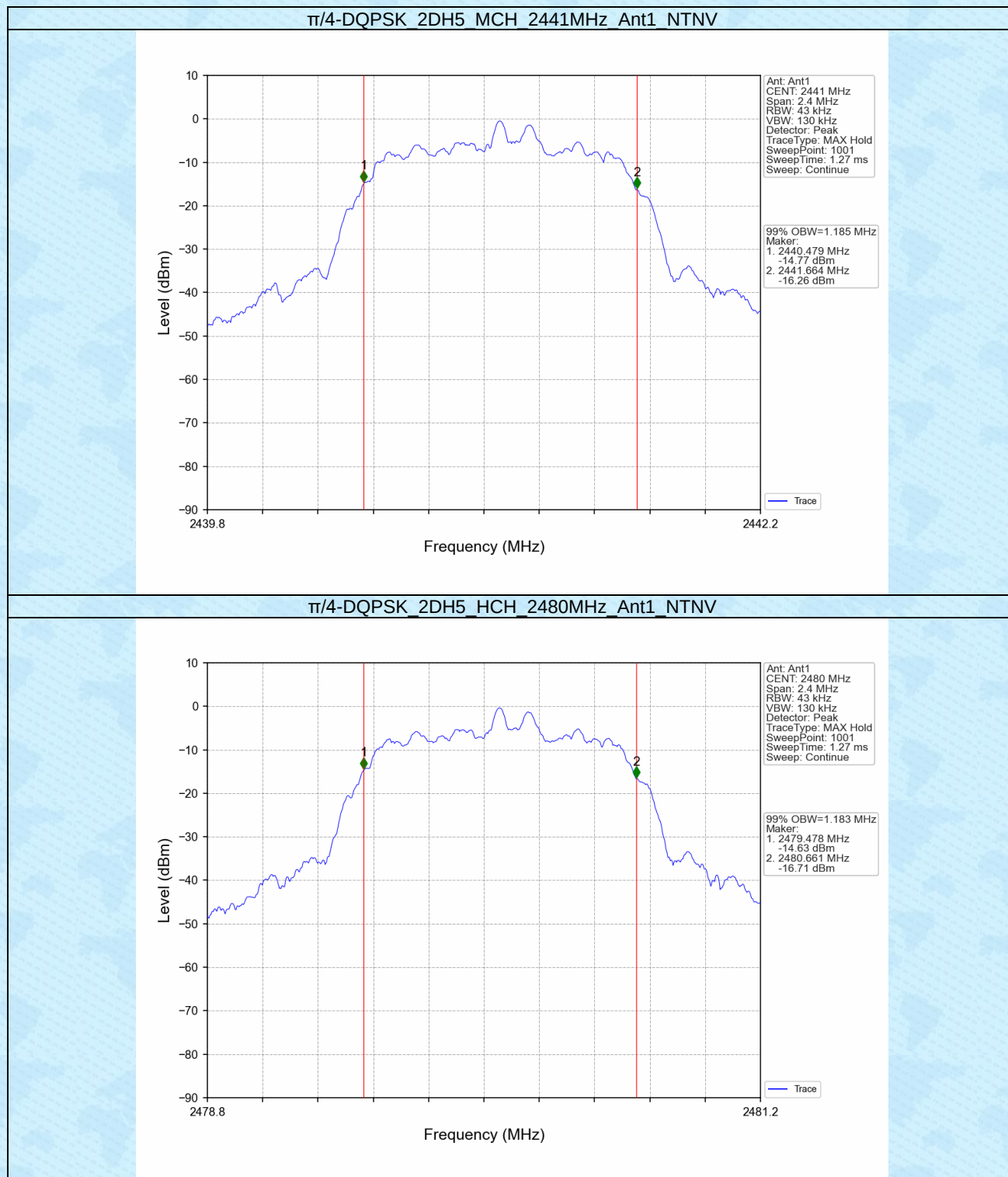
#### 1.1.1 Test Result

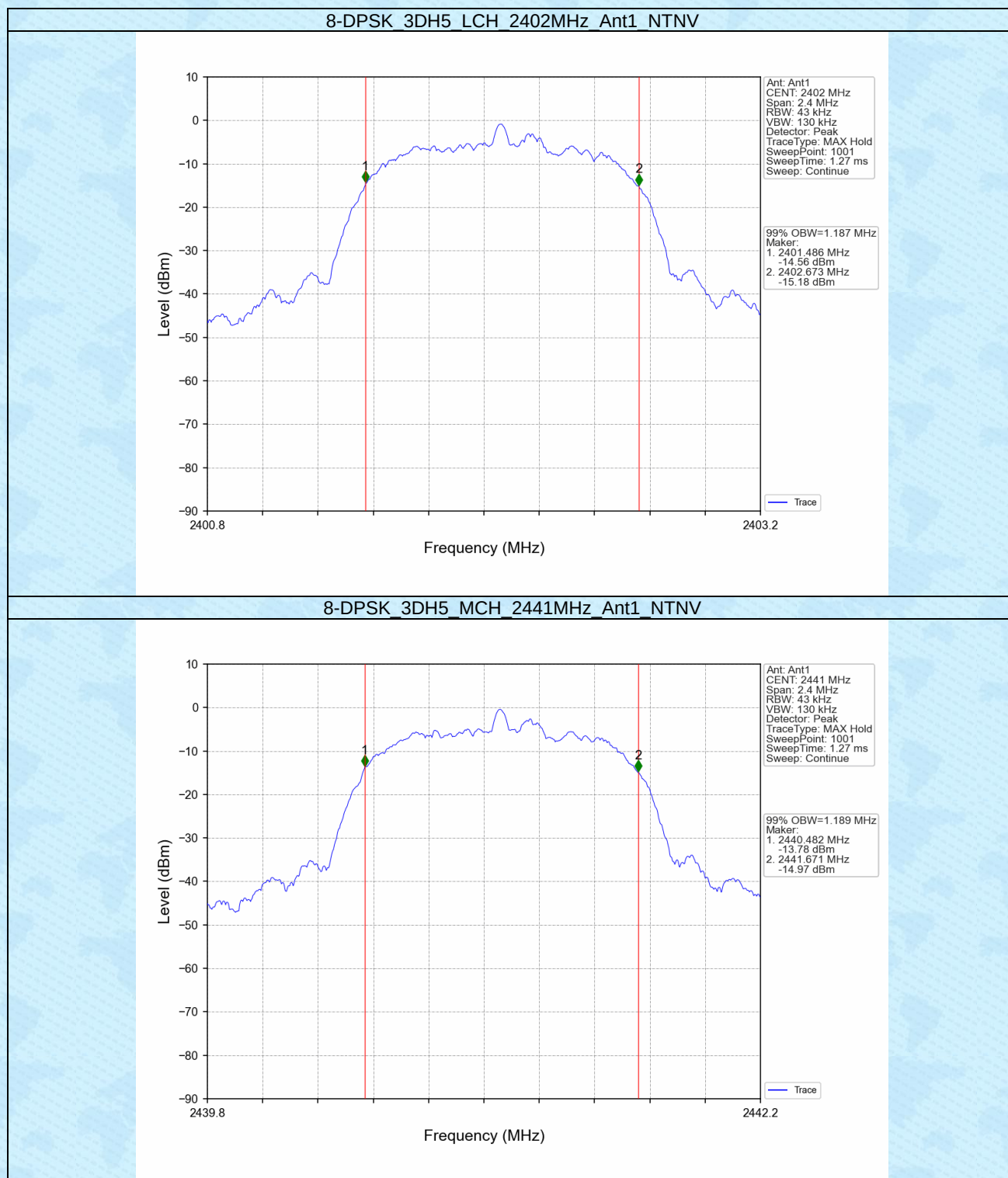
| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) | Verdict |
|----------------|---------|-----------------|-------------|-----|------------------------------|---------|
|                |         |                 |             |     | Result                       |         |
| GFSK           | SISO    | 2402            | DH5         | 1   | 0.834                        | Pass    |
|                |         | 2441            | DH5         | 1   | 0.834                        | Pass    |
|                |         | 2480            | DH5         | 1   | 0.832                        | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.186                        | Pass    |
|                |         | 2441            | 2DH5        | 1   | 1.185                        | Pass    |
|                |         | 2480            | 2DH5        | 1   | 1.183                        | Pass    |
| 8-DPSK         | SISO    | 2402            | 3DH5        | 1   | 1.187                        | Pass    |
|                |         | 2441            | 3DH5        | 1   | 1.189                        | Pass    |
|                |         | 2480            | 3DH5        | 1   | 1.186                        | Pass    |

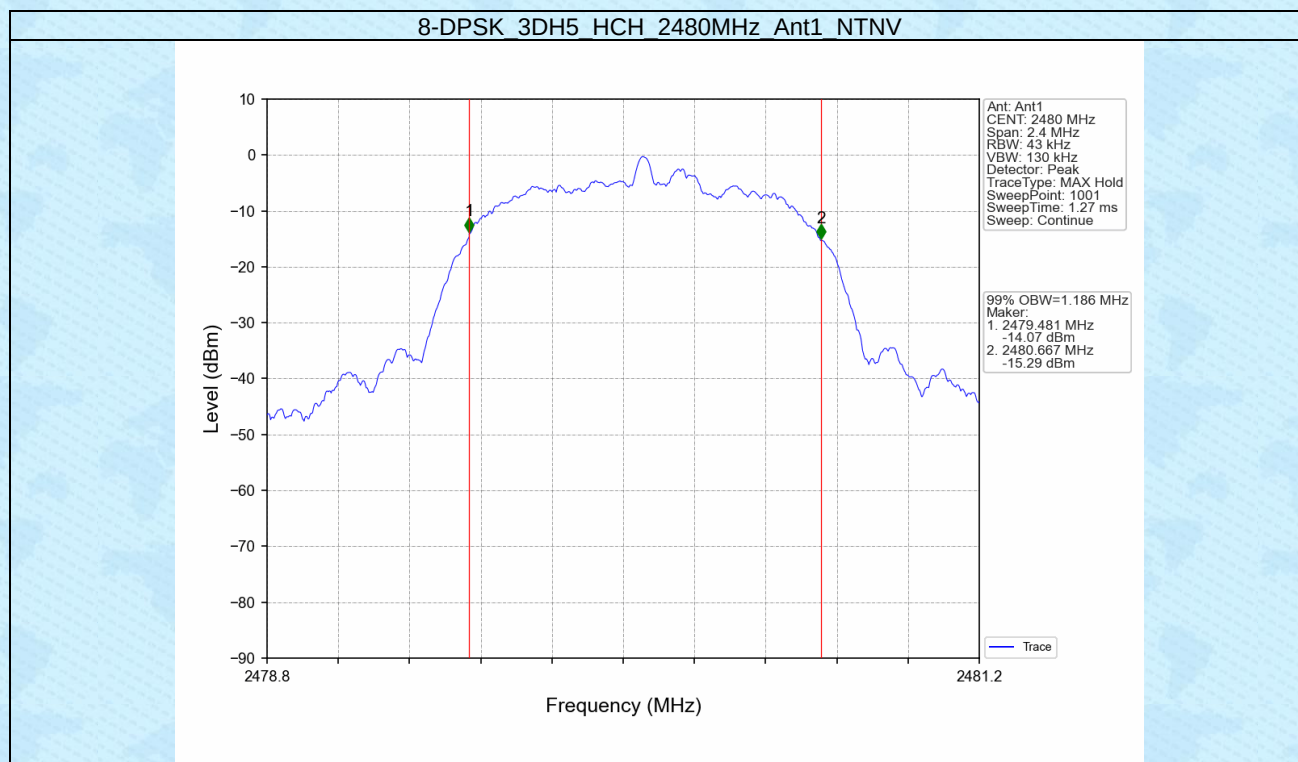
## 1.1.2 Test Graph









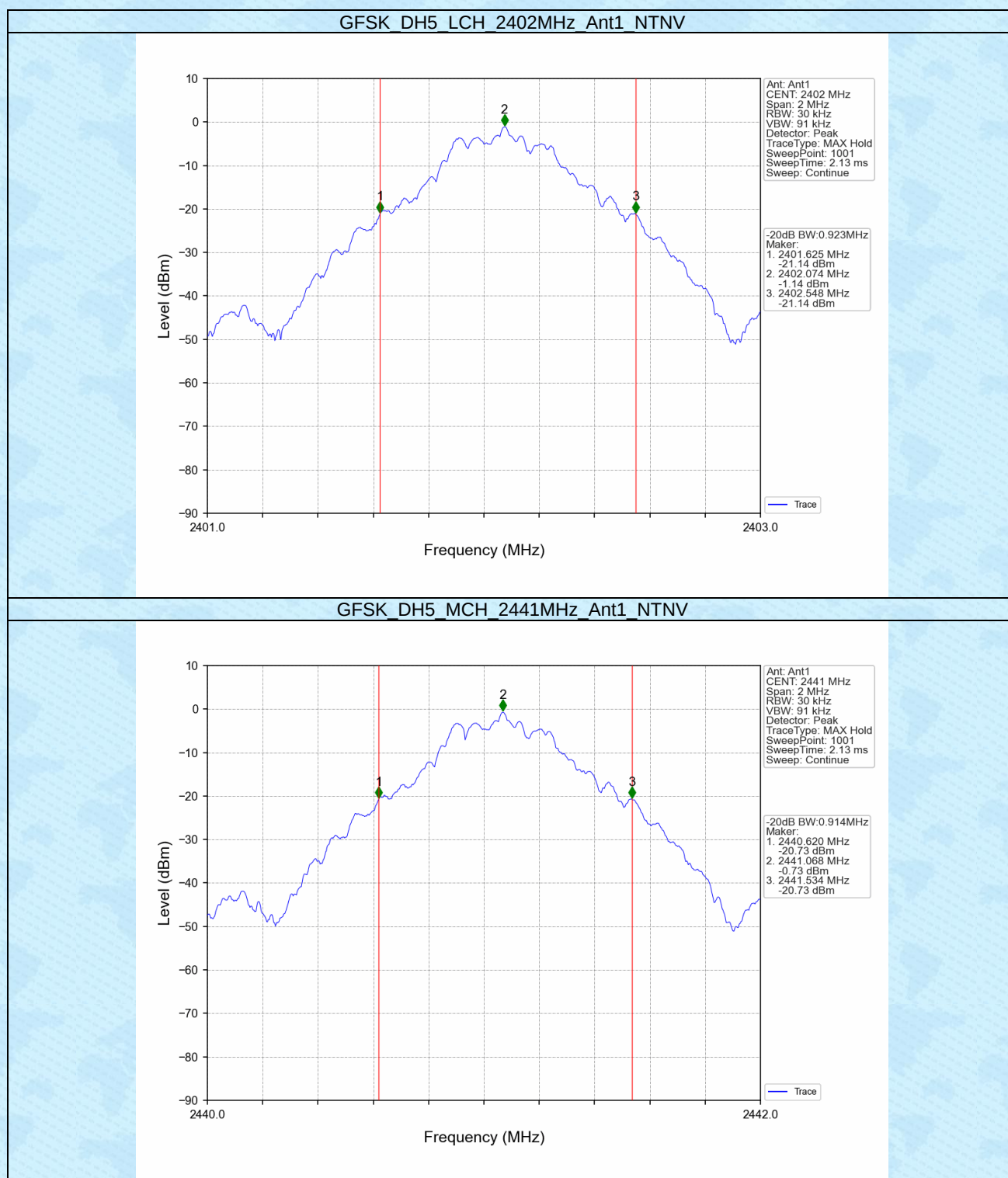


## 1.2 20dB BW

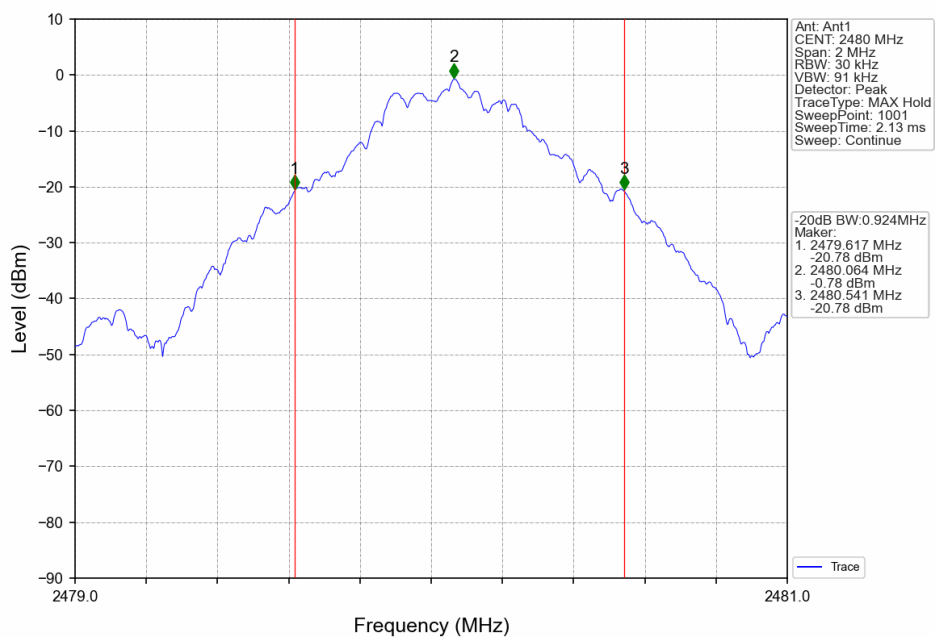
## 1.2.1 Test Result

| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) | Verdict |
|----------------|---------|-----------------|-------------|-----|----------------------|---------|
|                |         |                 |             |     | Result               |         |
| GFSK           | SISO    | 2402            | DH5         | 1   | 0.923                | Pass    |
|                |         | 2441            | DH5         | 1   | 0.914                | Pass    |
|                |         | 2480            | DH5         | 1   | 0.924                | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.301                | Pass    |
|                |         | 2441            | 2DH5        | 1   | 1.297                | Pass    |
|                |         | 2480            | 2DH5        | 1   | 1.321                | Pass    |
| 8-DPSK         | SISO    | 2402            | 3DH5        | 1   | 1.306                | Pass    |
|                |         | 2441            | 3DH5        | 1   | 1.310                | Pass    |
|                |         | 2480            | 3DH5        | 1   | 1.310                | Pass    |

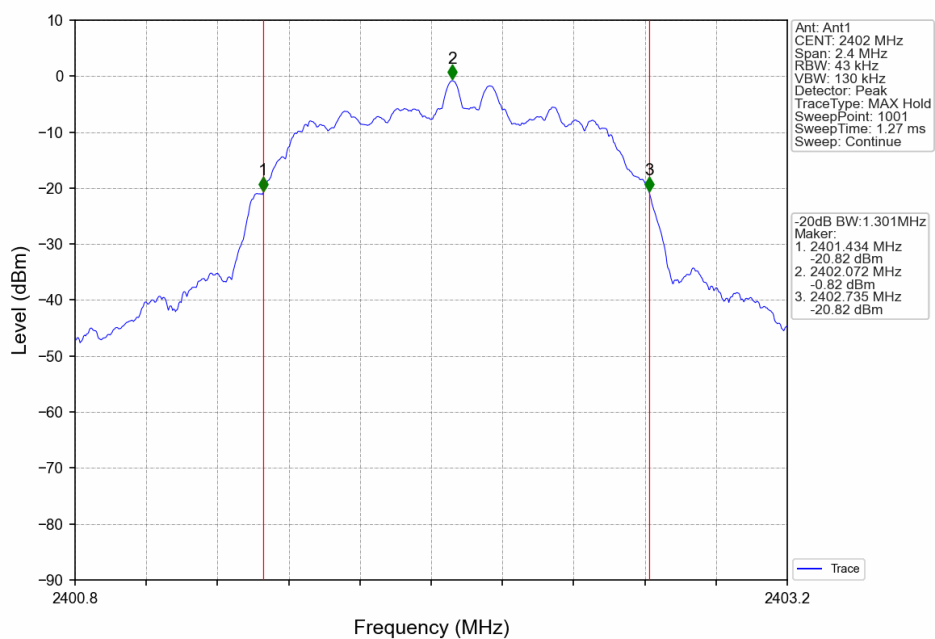
## 1.2.2 Test Graph

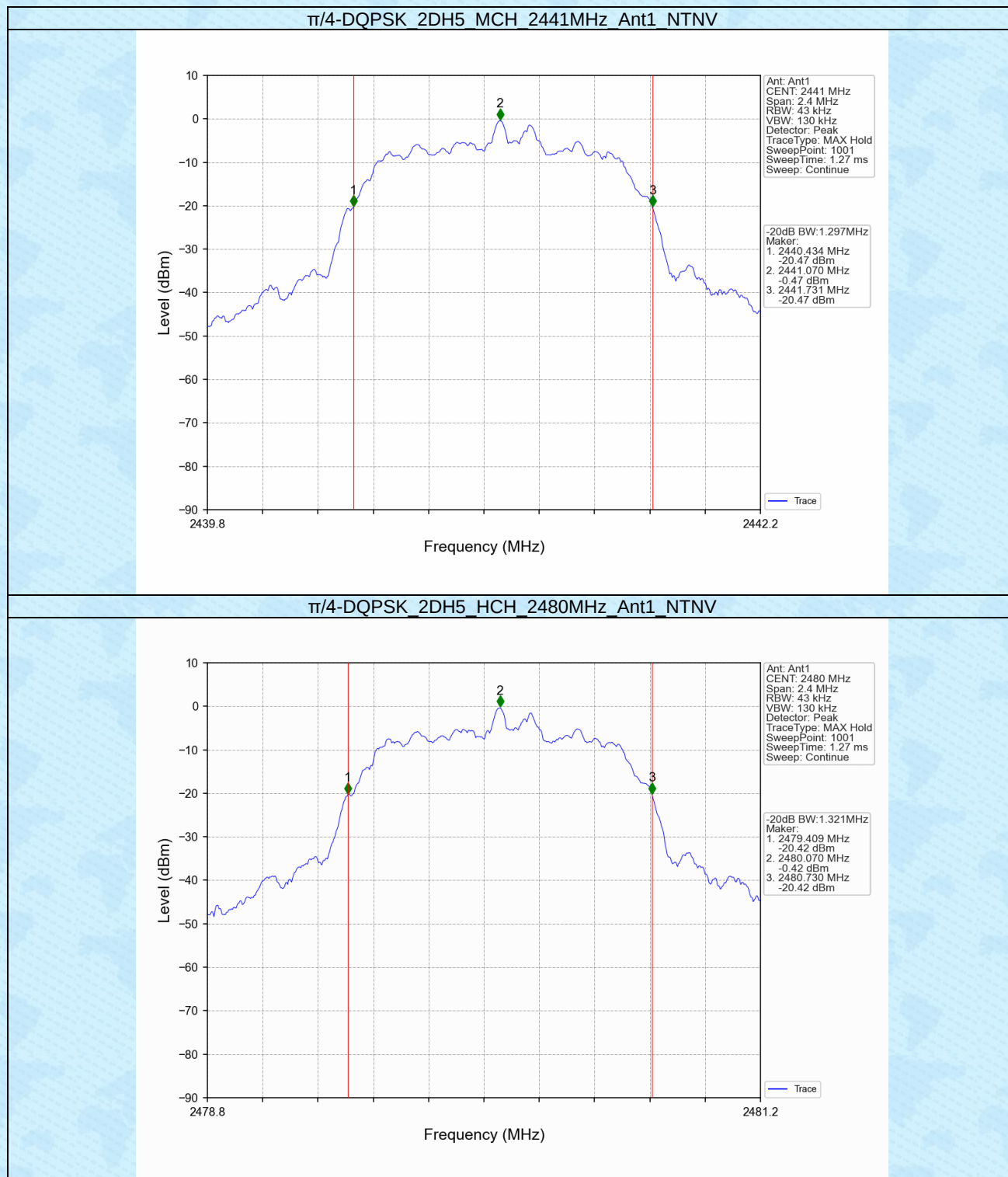


## GFSK DH5 HCH 2480MHz Ant1 NTN

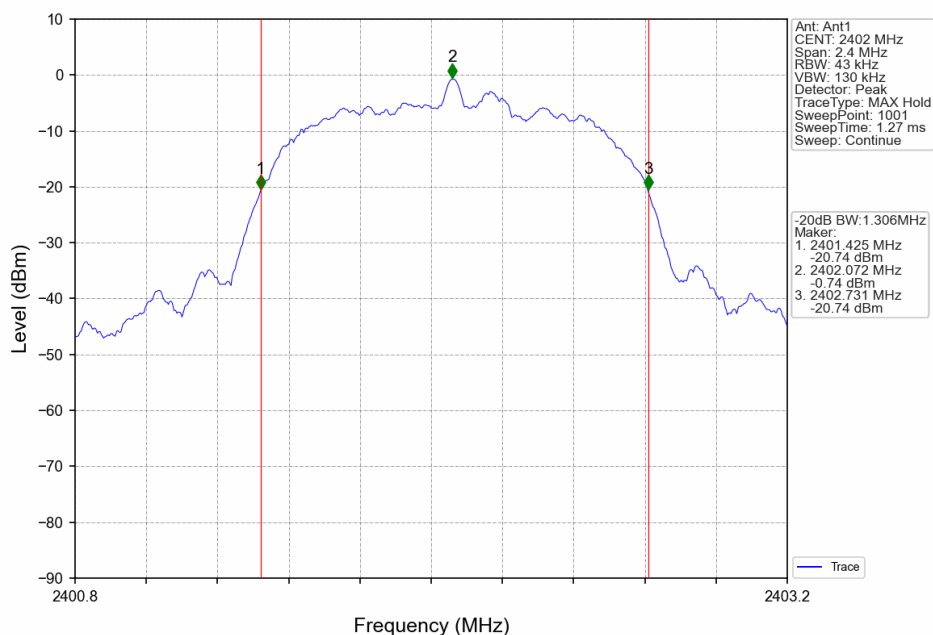


## $\pi/4$ -DQPSK 2DH5 LCH 2402MHz Ant1 NTN

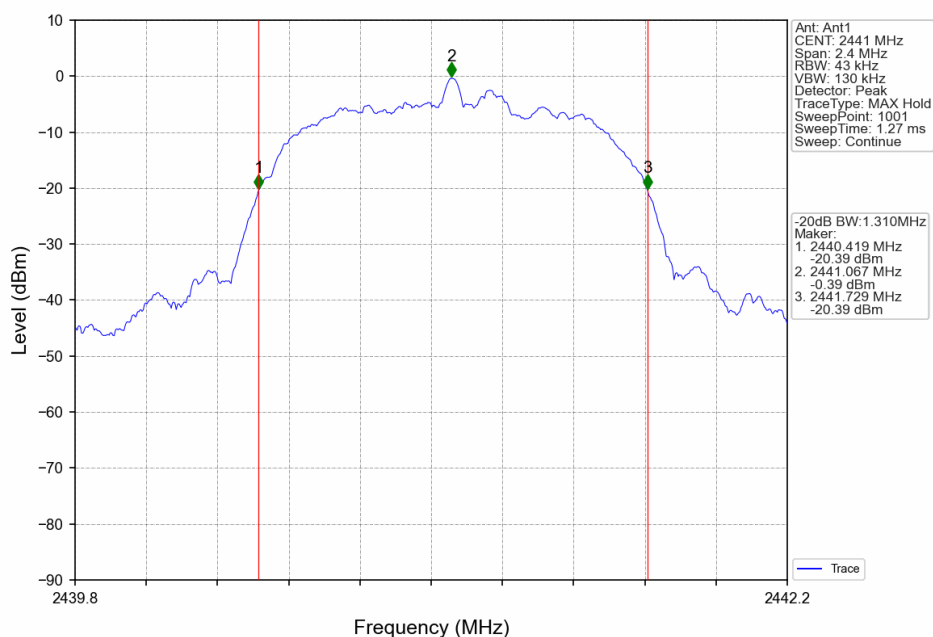


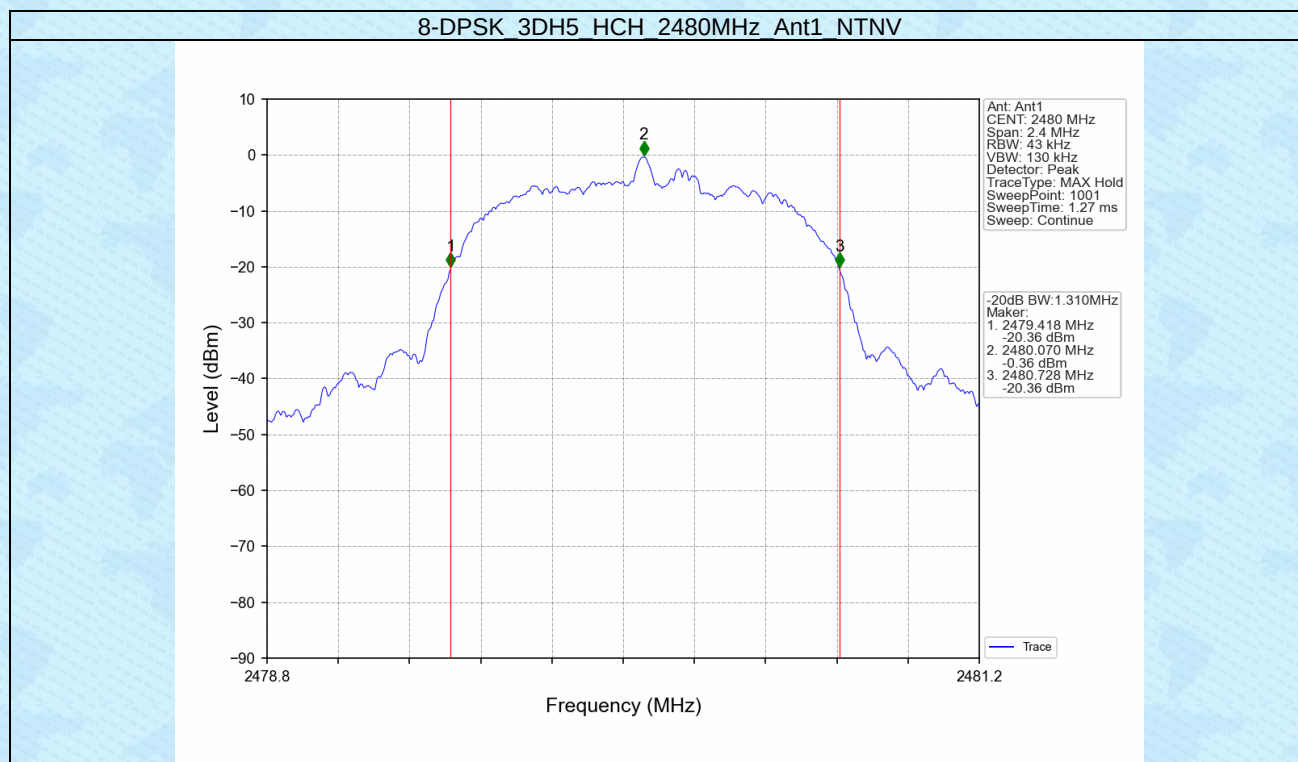


8-DPSK 3DH5 LCH 2402MHz Ant1 NTN



8-DPSK 3DH5 MCH 2441MHz Ant1 NTN



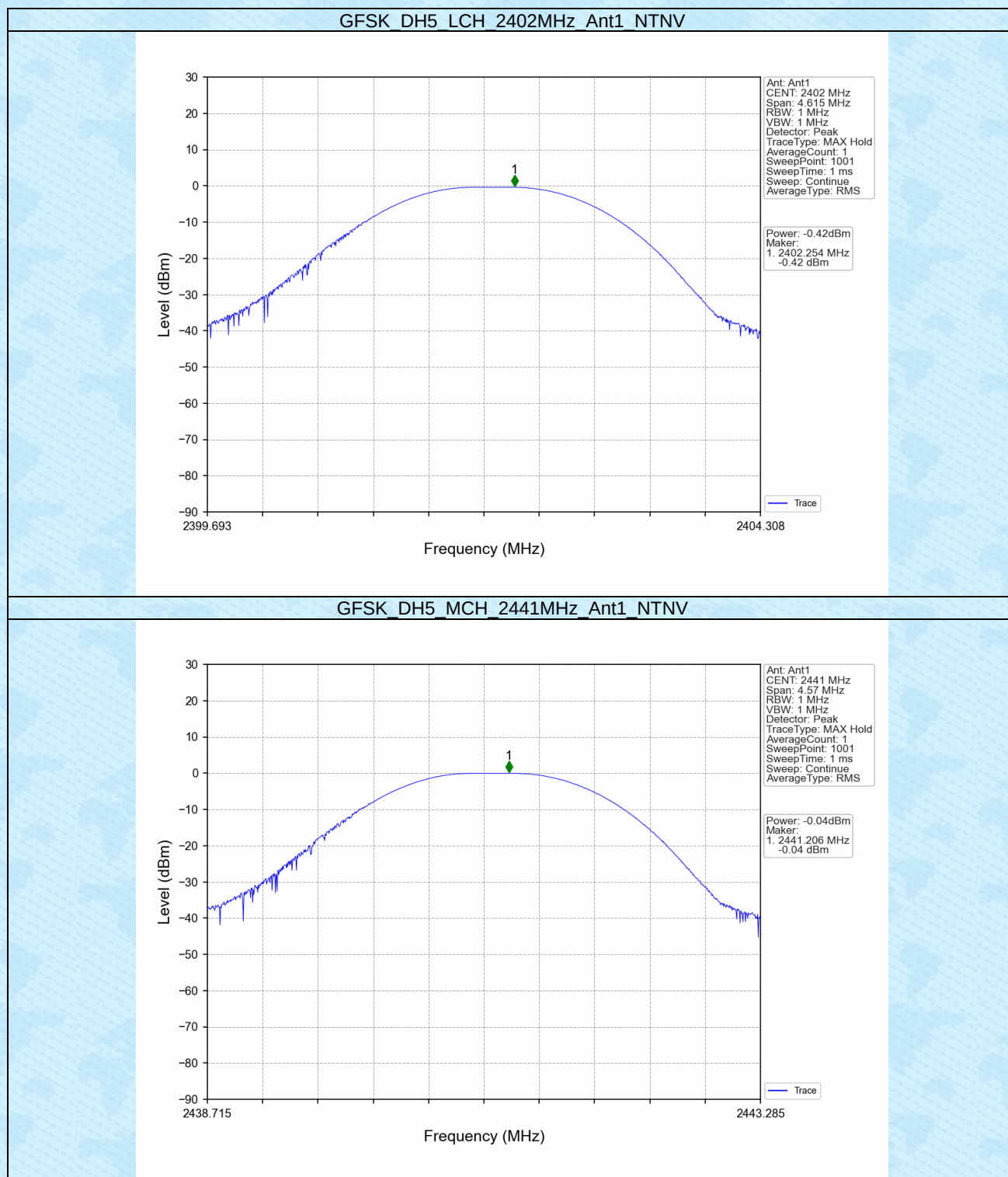


## 2. Maximum Conducted Output Power

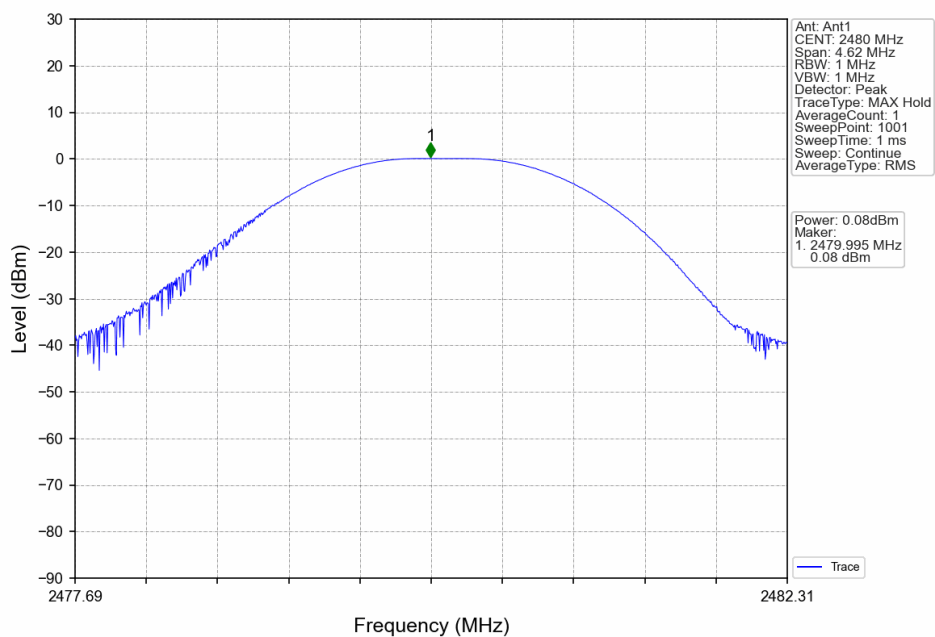
### 2.1 Test Result

| Mode           | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |         | Verdict |
|----------------|---------|-----------------|-------------|-------------------------------------------|---------|---------|
|                |         |                 |             | ANT1                                      | Limit   |         |
| GFSK           | SISO    | 2402            | DH5         | -0.42                                     | <=30    | Pass    |
|                |         | 2441            | DH5         | -0.04                                     | <=30    | Pass    |
|                |         | 2480            | DH5         | 0.08                                      | <=30    | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 2.16                                      | <=20.97 | Pass    |
|                |         | 2441            | 2DH5        | 2.56                                      | <=20.97 | Pass    |
|                |         | 2480            | 2DH5        | 2.63                                      | <=20.97 | Pass    |
| 8-DPSK         | SISO    | 2402            | 3DH5        | 2.72                                      | <=20.97 | Pass    |
|                |         | 2441            | 3DH5        | 3.07                                      | <=20.97 | Pass    |
|                |         | 2480            | 3DH5        | 3.11                                      | <=20.97 | Pass    |

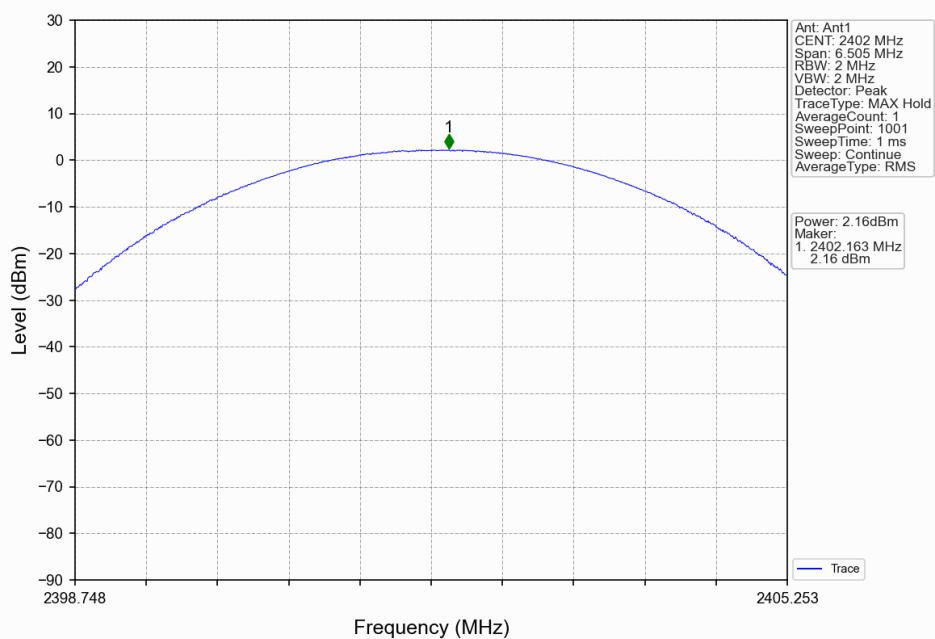
## 2.2 Test Graph

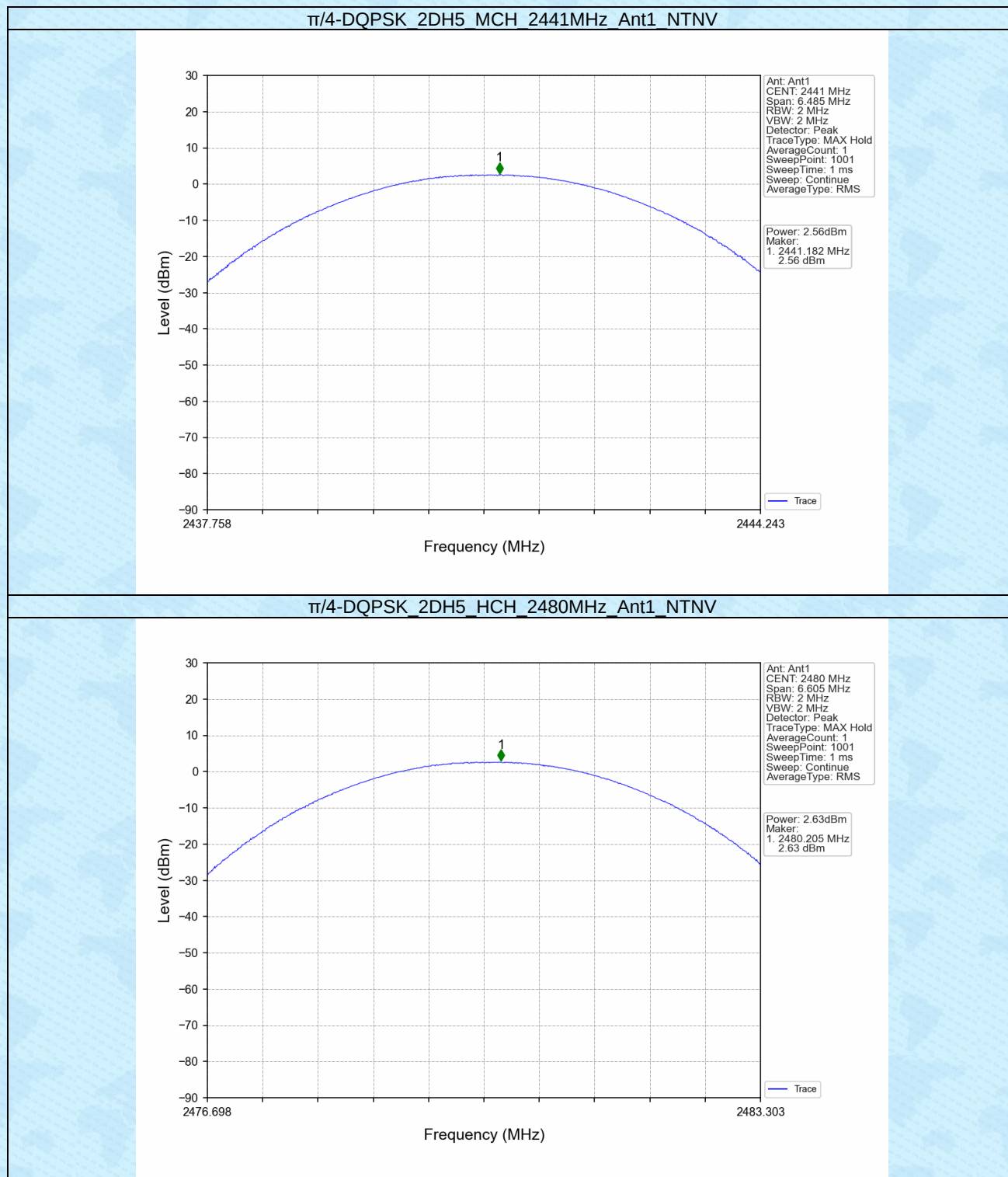


GFSK DH5 HCH 2480MHz Ant1 NTN

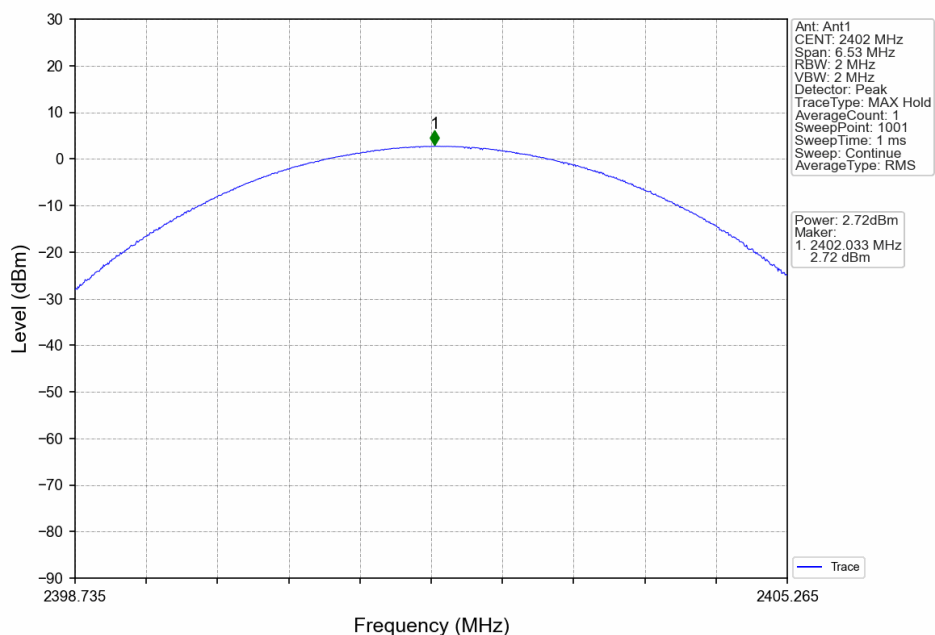


$\pi/4$ -DQPSK 2DH5 LCH 2402MHz Ant1 NTN

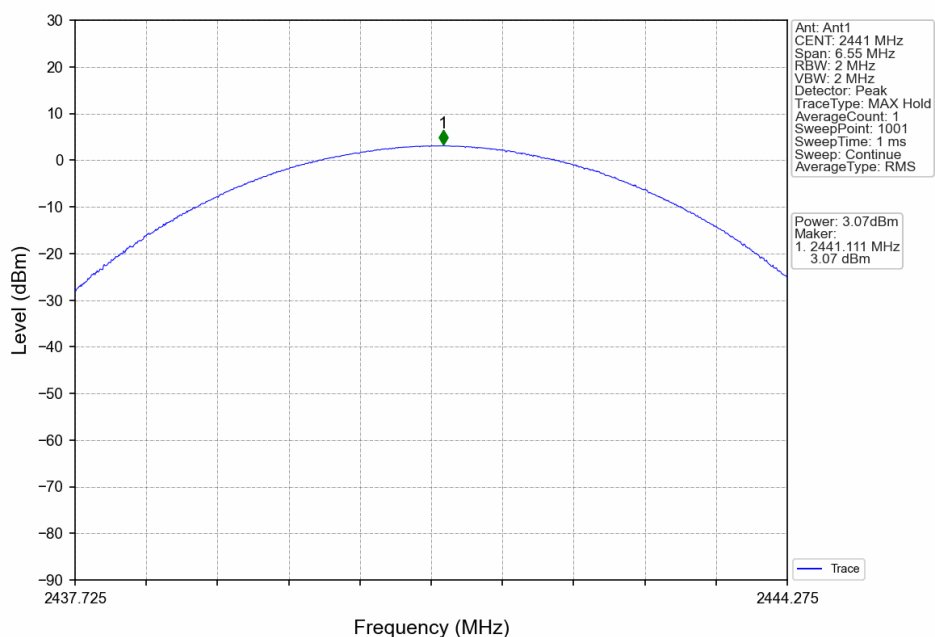


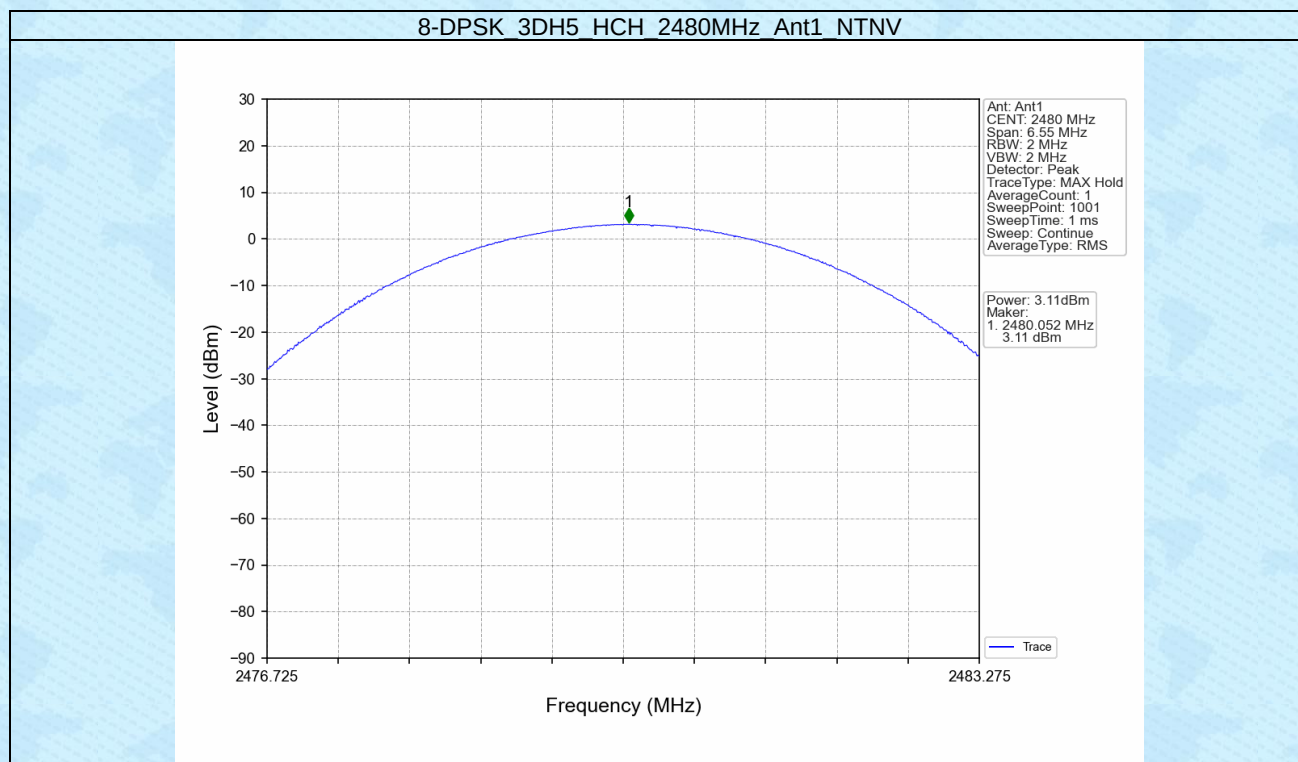


8-DPSK 3DH5 LCH 2402MHz Ant1 NTV



8-DPSK 3DH5 MCH 2441MHz Ant1 NTV



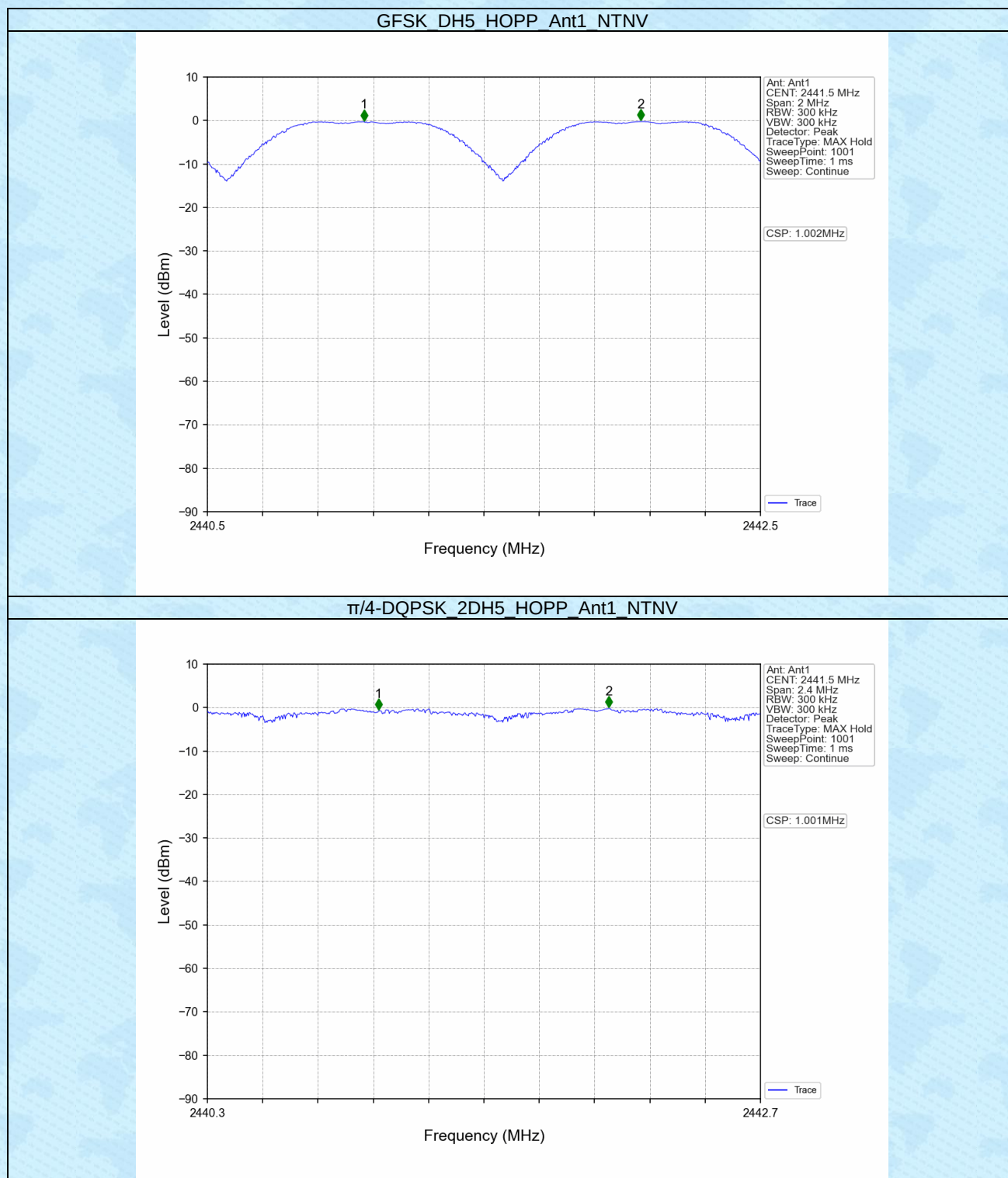


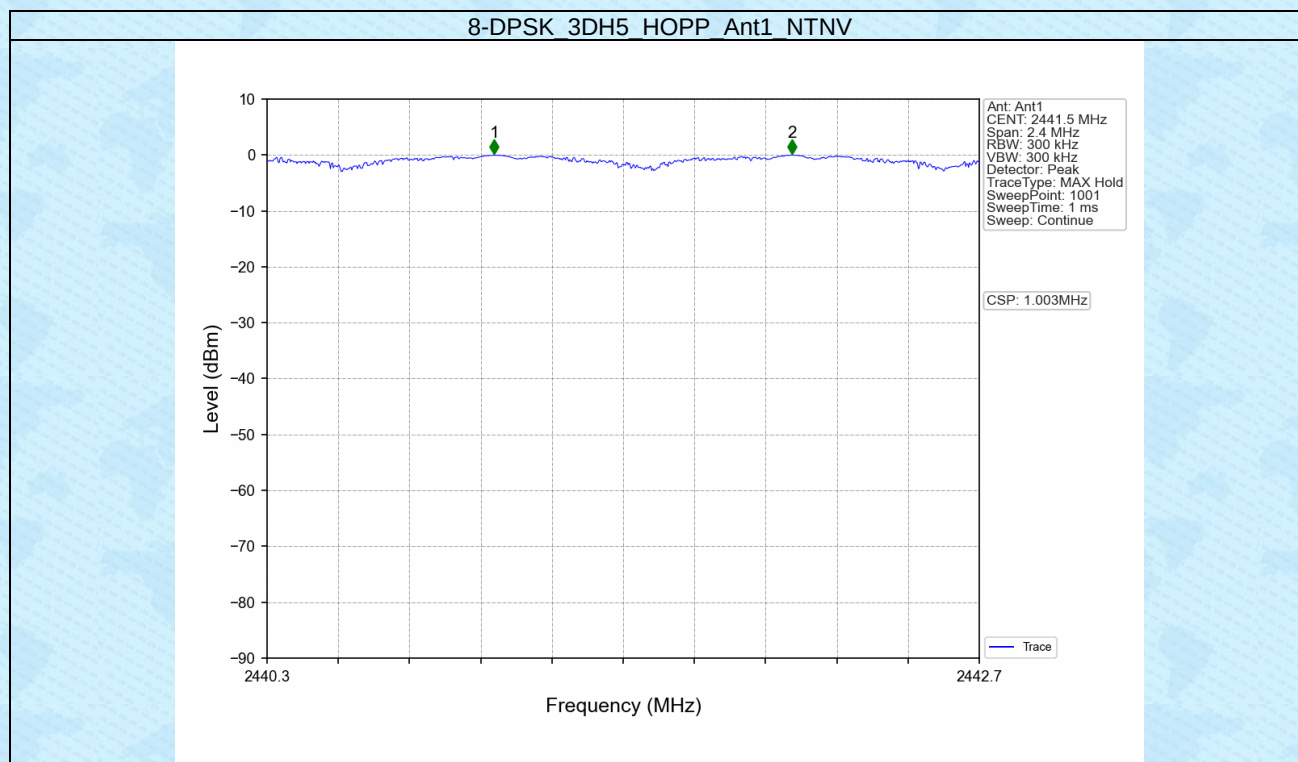
### 3. Carrier Frequency Separation

#### 3.1 Test Result

| Ant1           |         |                 |             |                          |                      |              |         |
|----------------|---------|-----------------|-------------|--------------------------|----------------------|--------------|---------|
| Mode           | TX Type | Frequency (MHz) | Packet Type | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limit (MHz)  | Verdict |
| GFSK           | SISO    | HOPP            | DH5         | 1.002                    | 0.924                | $\geq 0.924$ | Pass    |
| $\pi/4$ -DQPSK | SISO    | HOPP            | 2DH5        | 1.001                    | 1.321                | $\geq 0.881$ | Pass    |
| 8-DPSK         | SISO    | HOPP            | 3DH5        | 1.003                    | 1.310                | $\geq 0.873$ | Pass    |

## 3.2 Test Graph



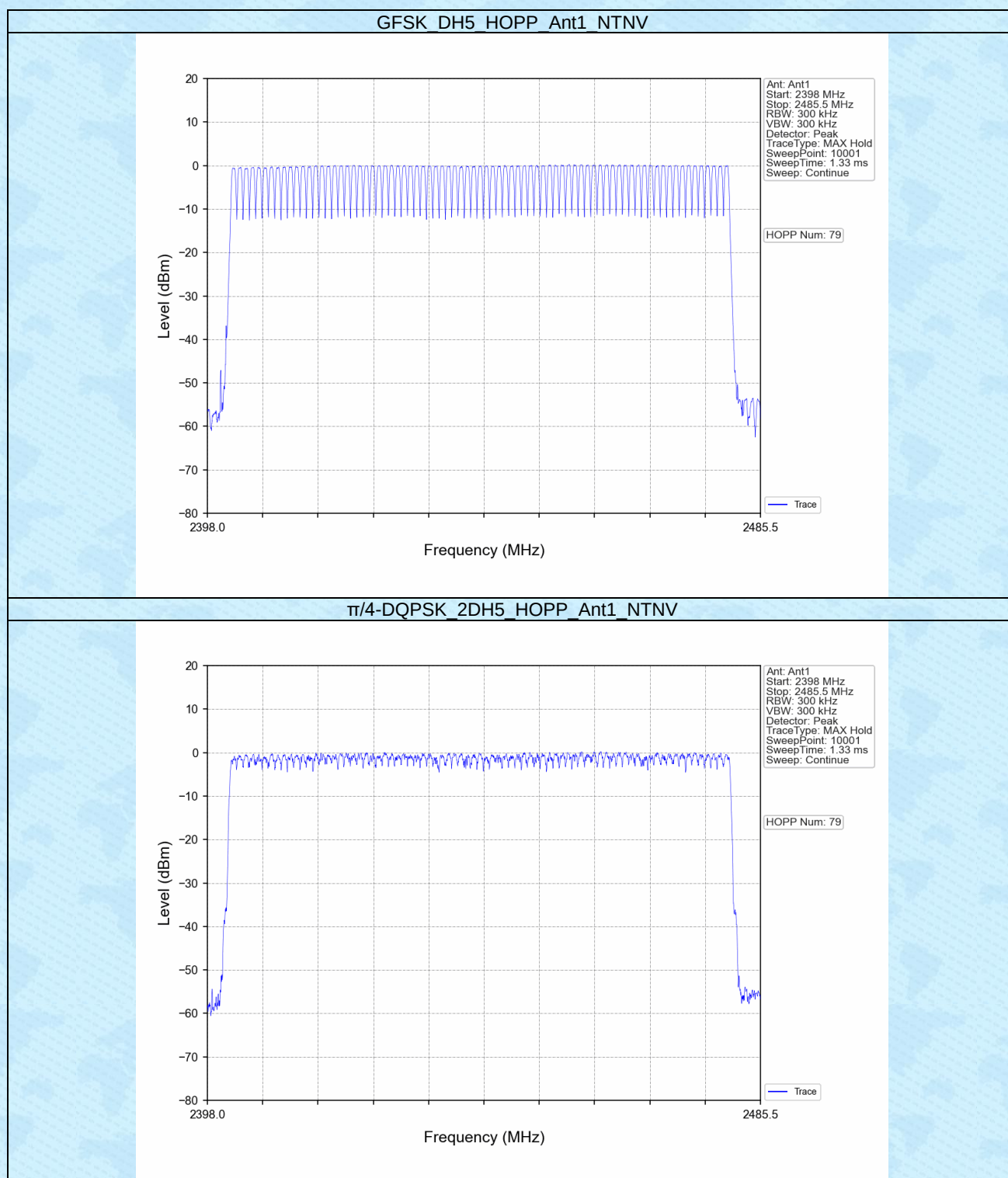


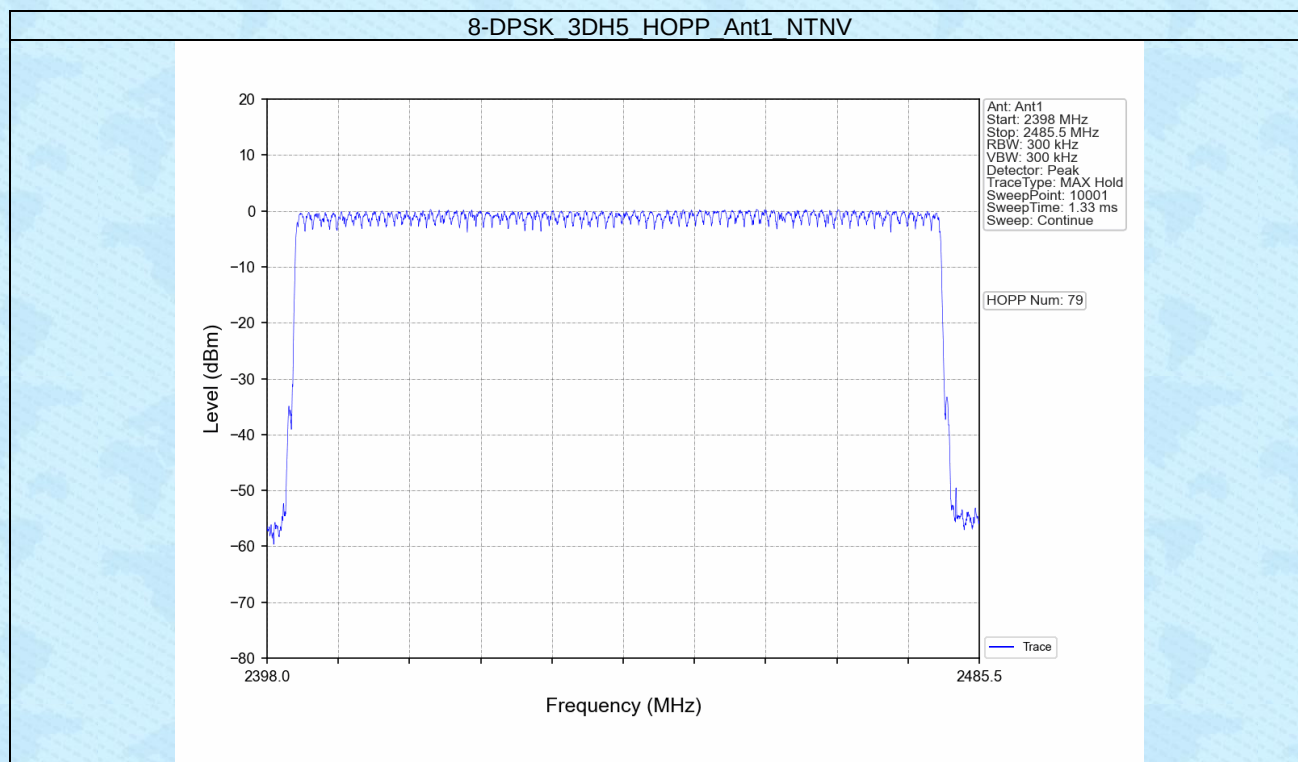
## 4. Number of Hopping Frequencies

### 4.1 Test Result

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

## 4.2 Test Graph



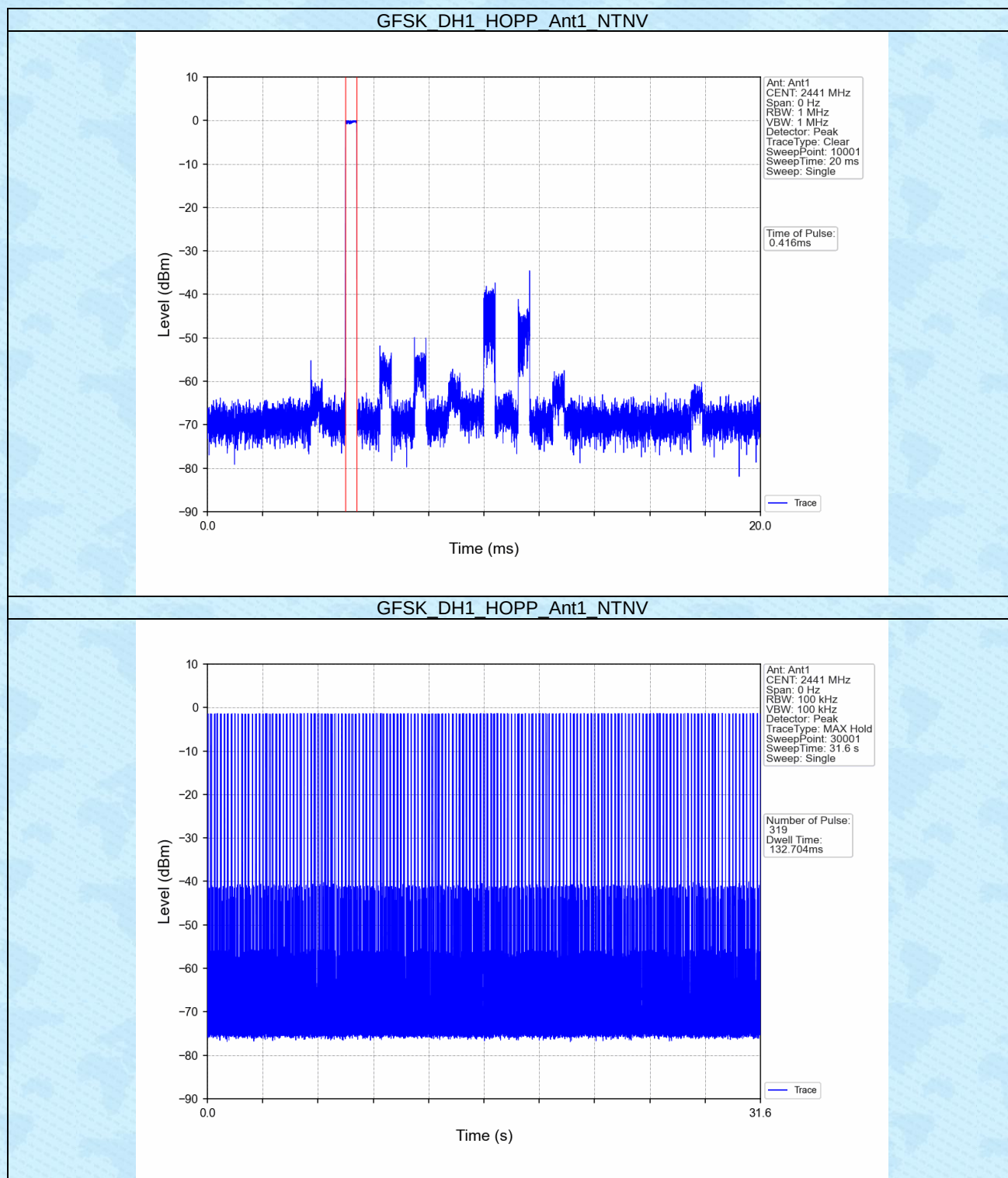


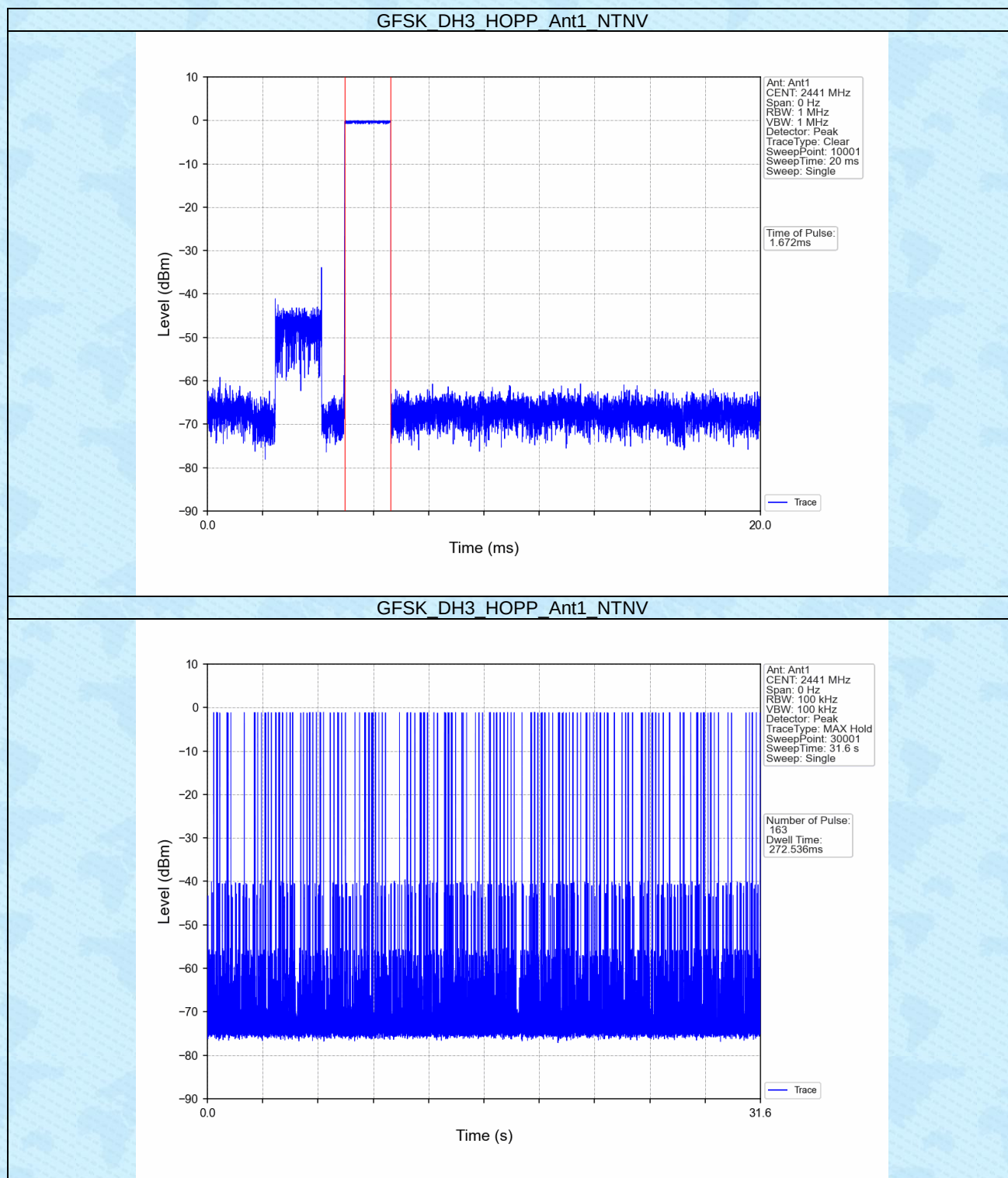
## 5. Time of Occupancy (Dwell Time)

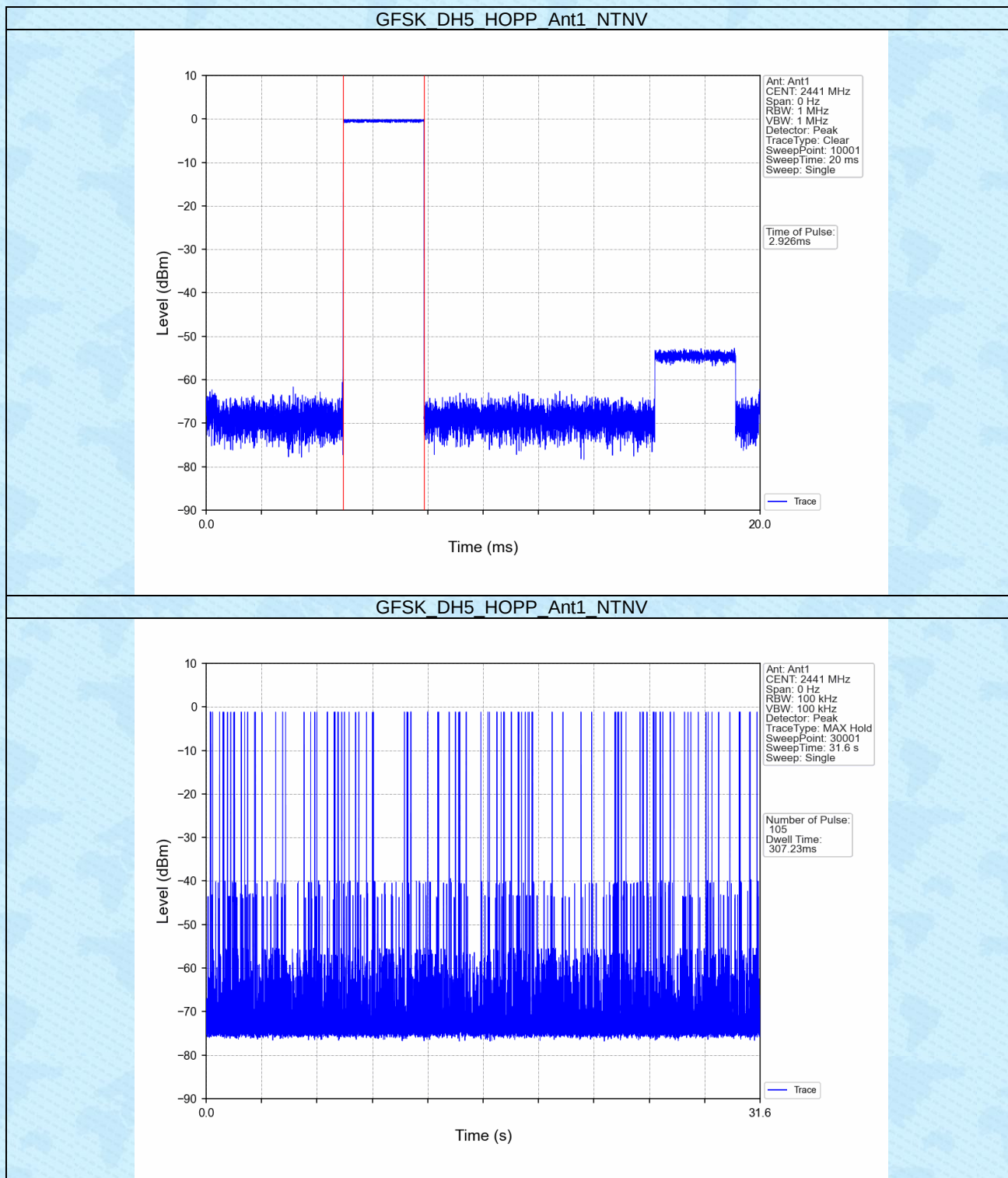
### 5.1 Test Result

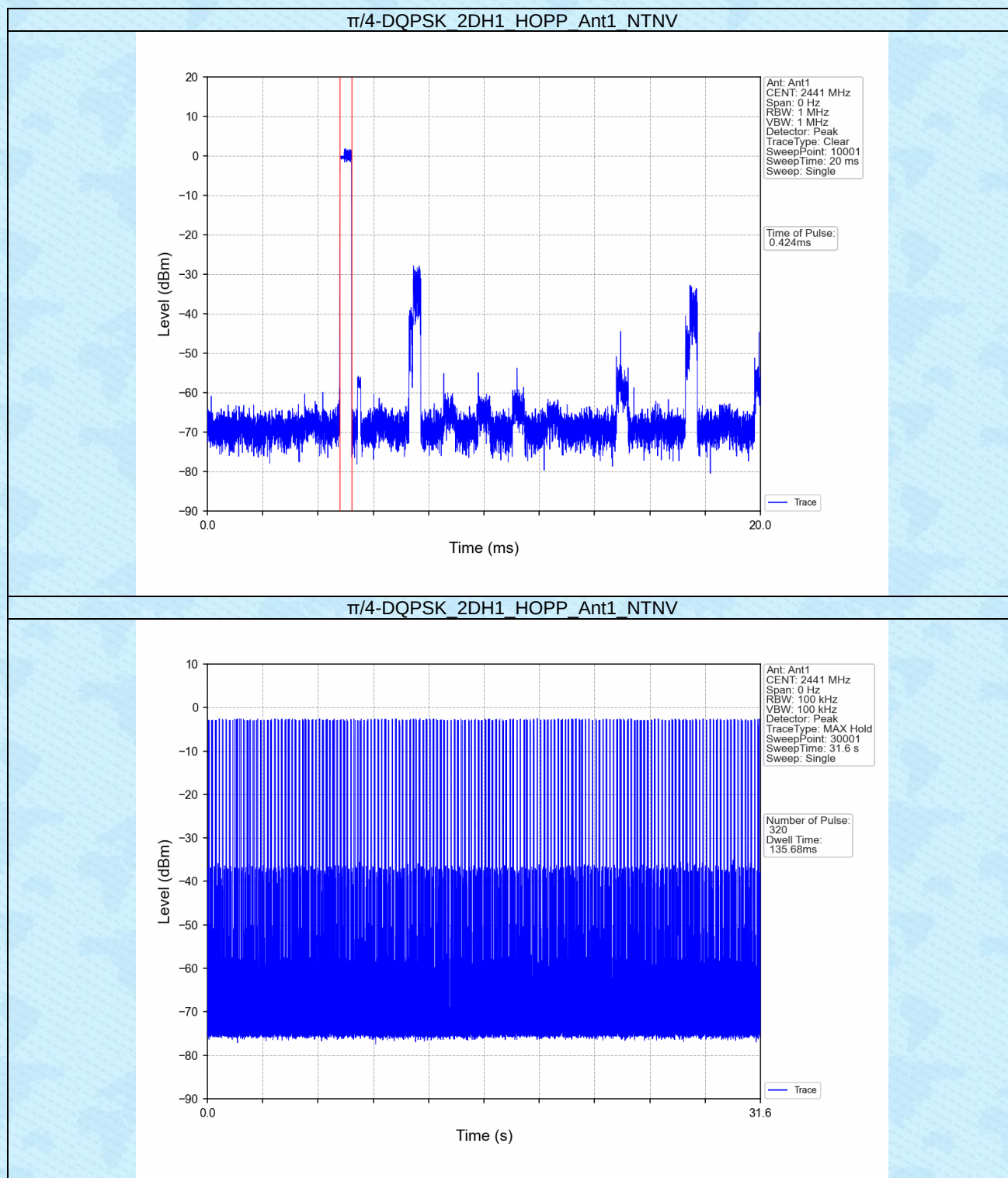
| Ant1           |         |                 |             |                               |                        |                                    |                 |            |         |
|----------------|---------|-----------------|-------------|-------------------------------|------------------------|------------------------------------|-----------------|------------|---------|
| 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         | 0.416                         | 31.600                 | 319                                | 132.704         | <=400      | Pass    |
|                |         |                 | DH3         | 1.672                         | 31.600                 | 163                                | 272.536         | <=400      | Pass    |
|                |         |                 | DH5         | 2.926                         | 31.600                 | 105                                | 307.230         | <=400      | Pass    |
| $\pi/4$ -DQPSK | SISO    | HOPP            | 2DH1        | 0.424                         | 31.600                 | 320                                | 135.680         | <=400      | Pass    |
|                |         |                 | 2DH3        | 1.670                         | 31.600                 | 161                                | 268.870         | <=400      | Pass    |
|                |         |                 | 2DH5        | 2.938                         | 31.600                 | 100                                | 293.800         | <=400      | Pass    |
| 8-DPSK         | SISO    | HOPP            | 3DH1        | 0.428                         | 31.600                 | 317                                | 135.676         | <=400      | Pass    |
|                |         |                 | 3DH3        | 1.680                         | 31.600                 | 161                                | 270.480         | <=400      | Pass    |
|                |         |                 | 3DH5        | 2.934                         | 31.600                 | 114                                | 334.476         | <=400      | Pass    |

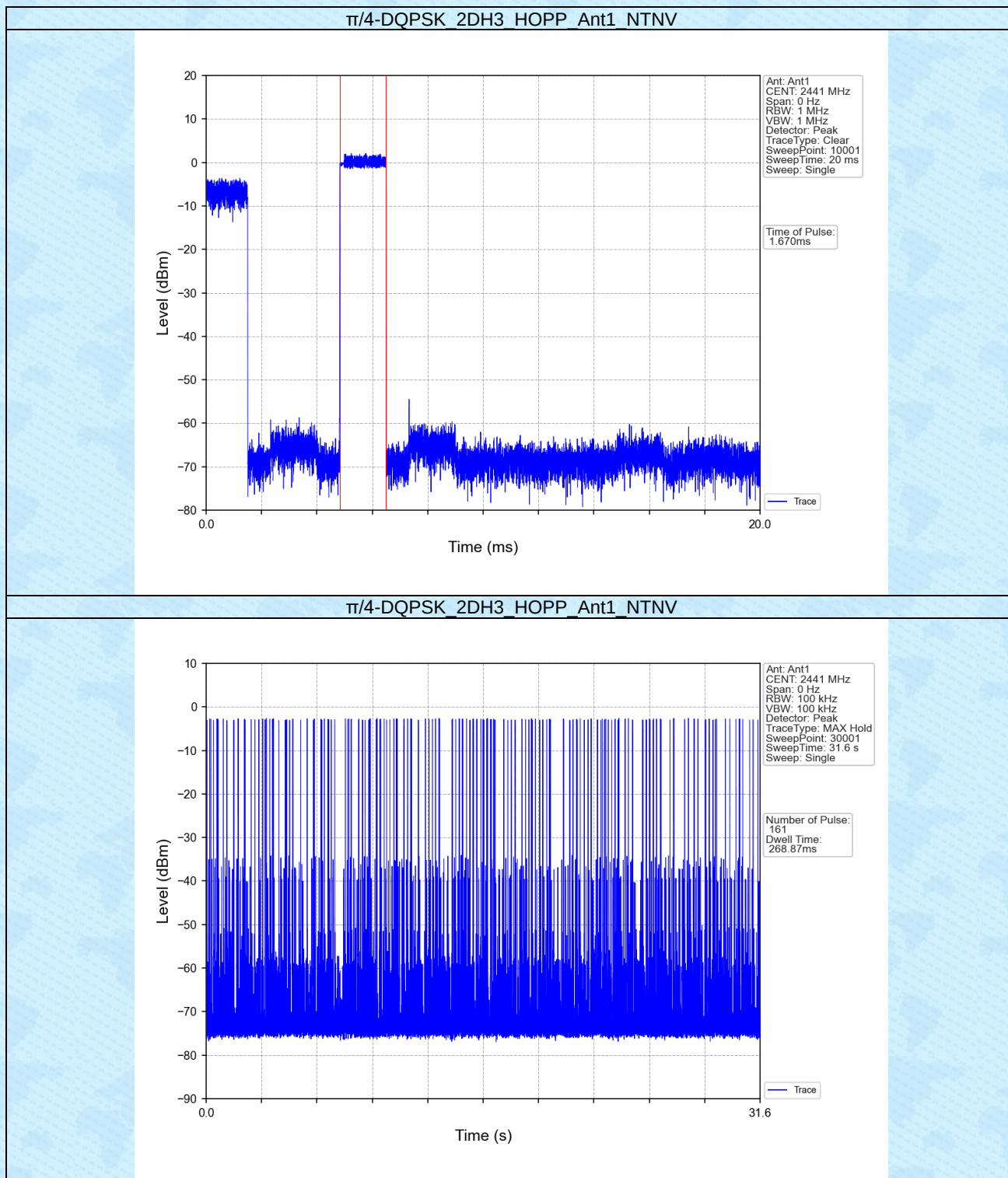
## 5.2 Test Graph



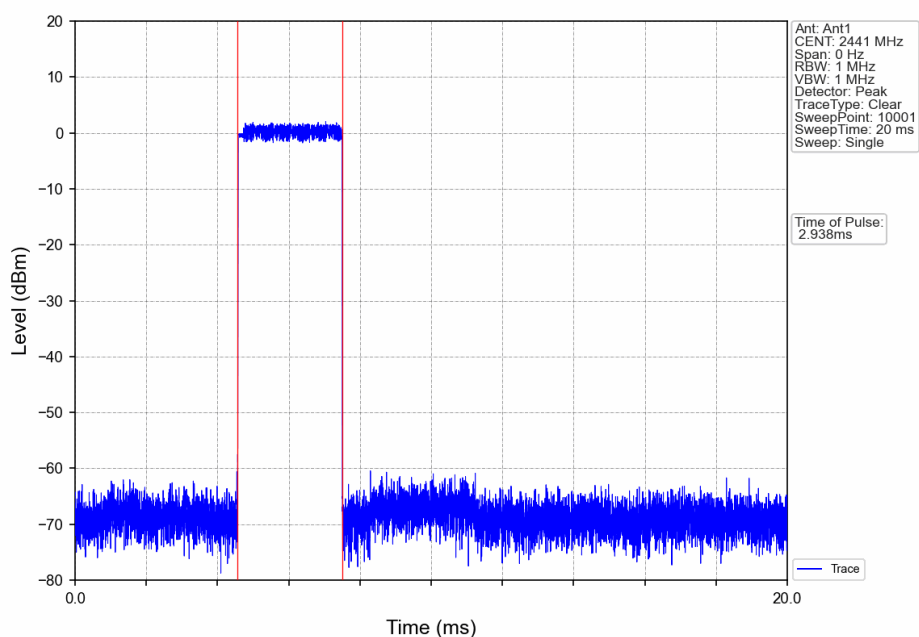




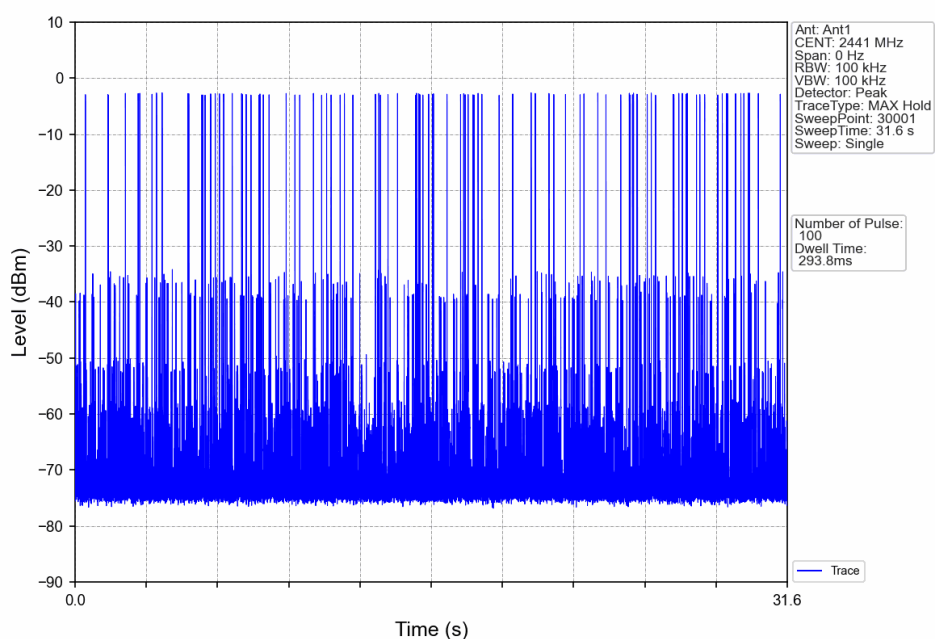




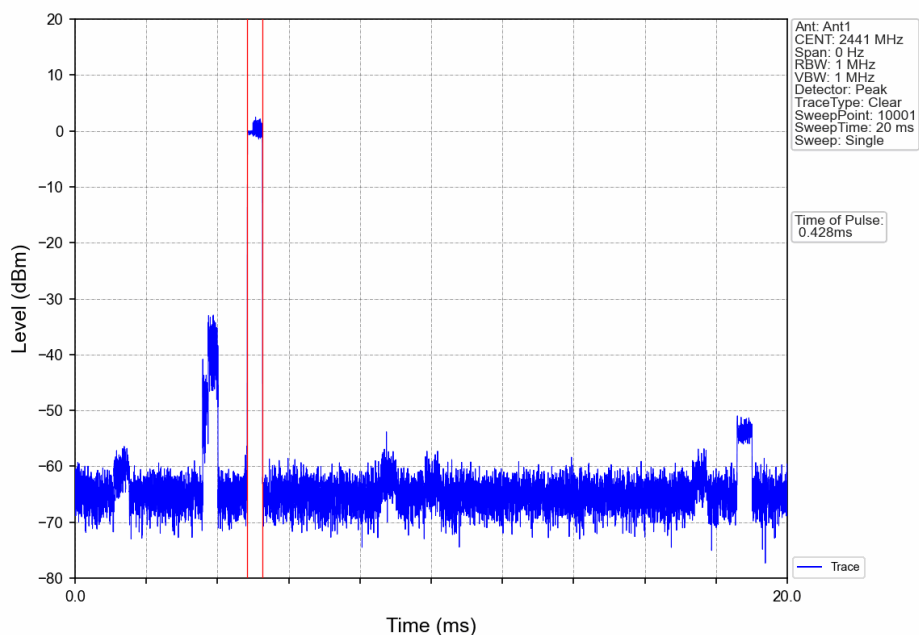
$\pi/4$ -DQPSK 2DH5\_HOPP\_Ant1\_NTNV



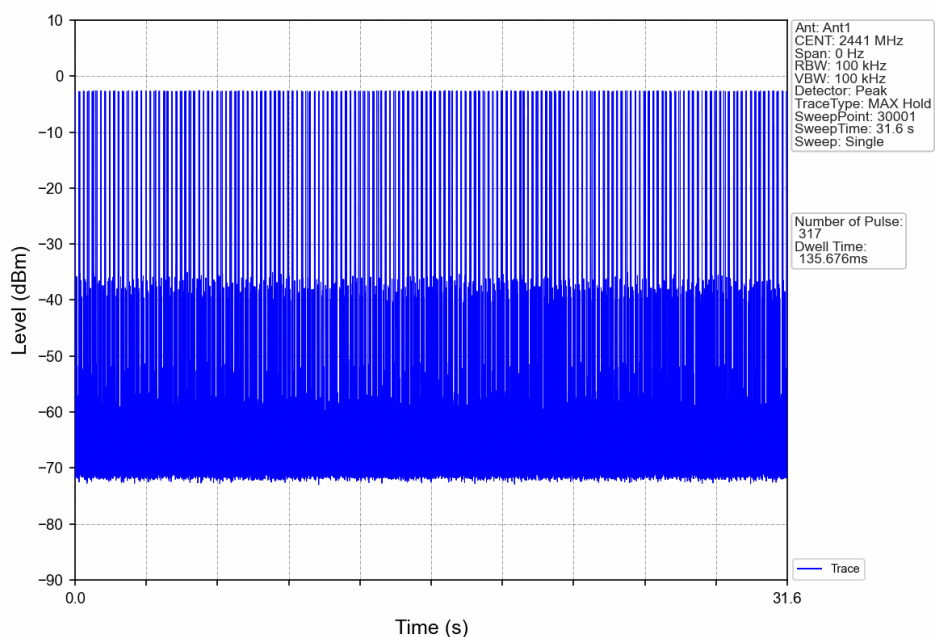
$\pi/4$ -DQPSK 2DH5\_HOPP\_Ant1\_NTNV



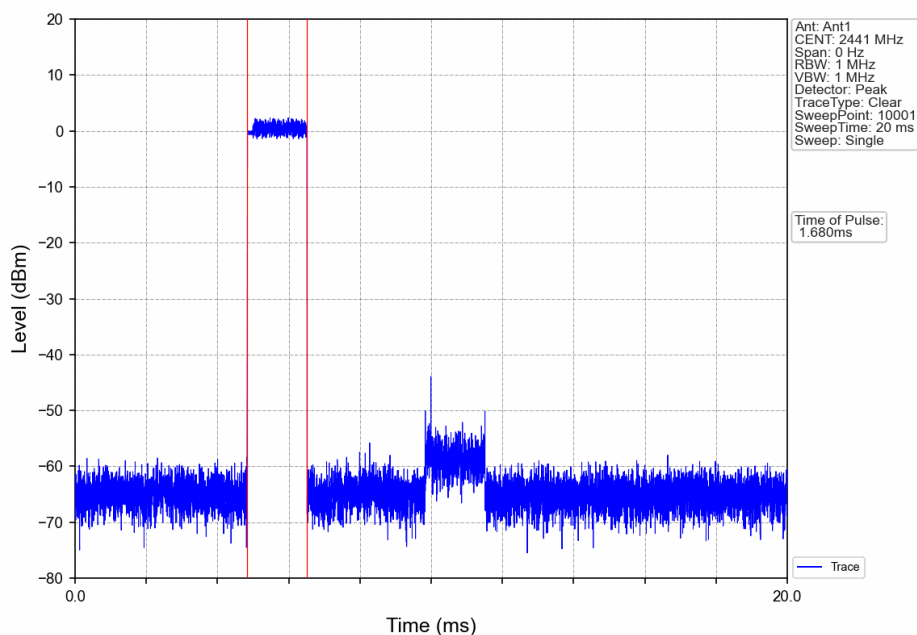
8-DPSK 3DH1 HOPP Ant1 NTN



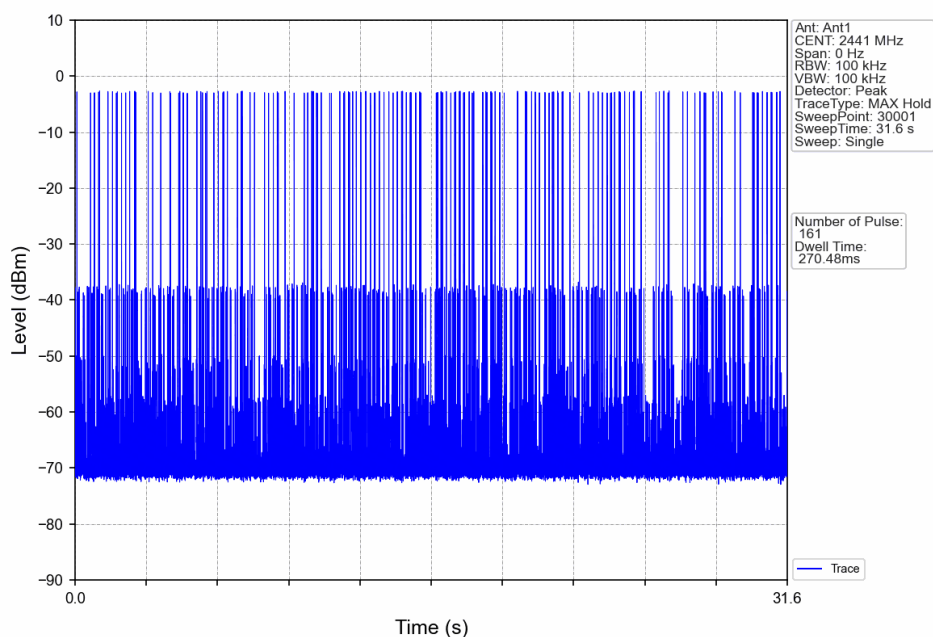
8-DPSK 3DH1 HOPP Ant1 NTN



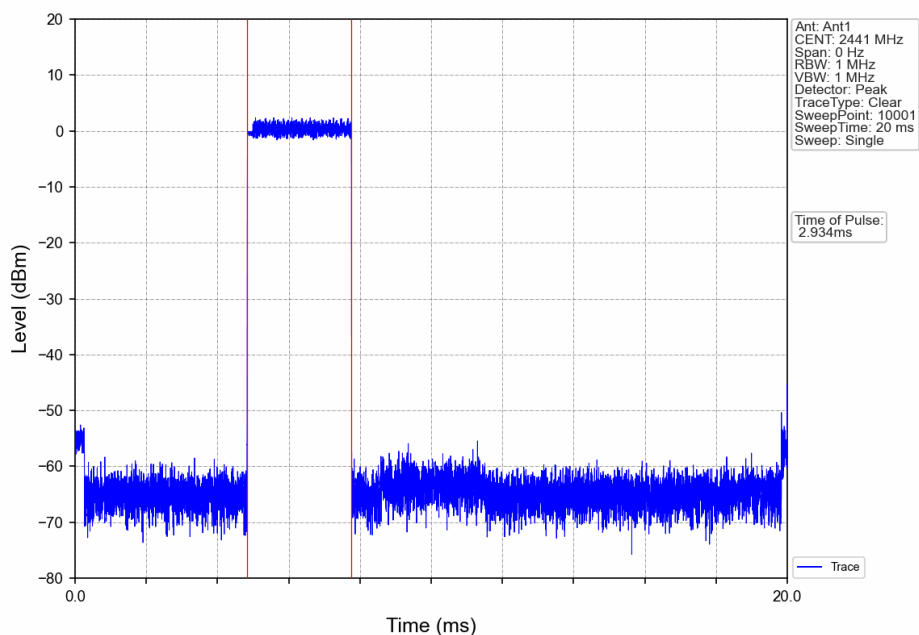
## 8-DPSK 3DH3 HOPP Ant1 NTN



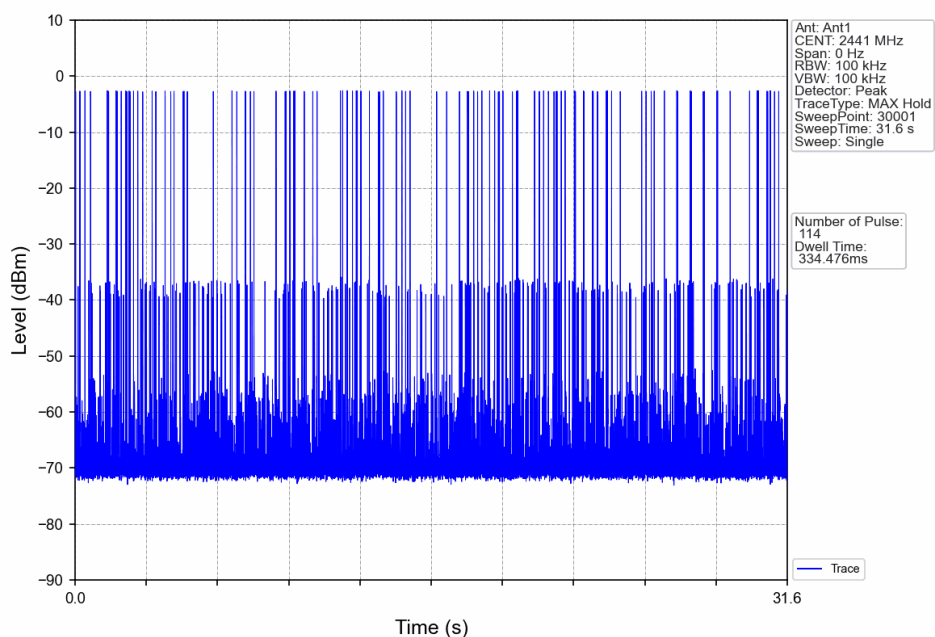
## 8-DPSK 3DH3 HOPP Ant1 NTN



8-DPSK 3DH5 HOPP Ant1 NTN



8-DPSK 3DH5 HOPP Ant1 NTN



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

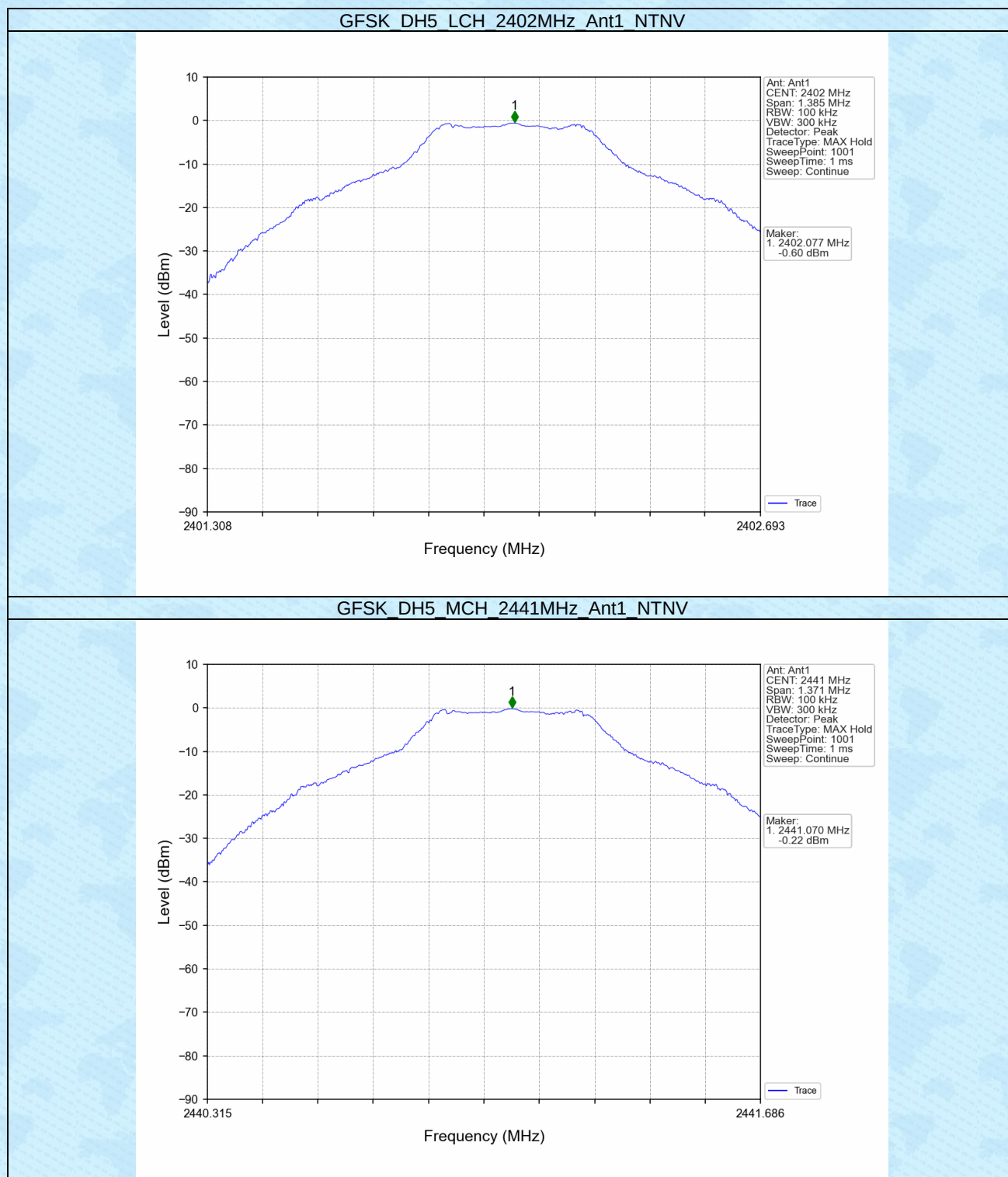
### 6.1 Ref

#### 6.1.1 Test Result

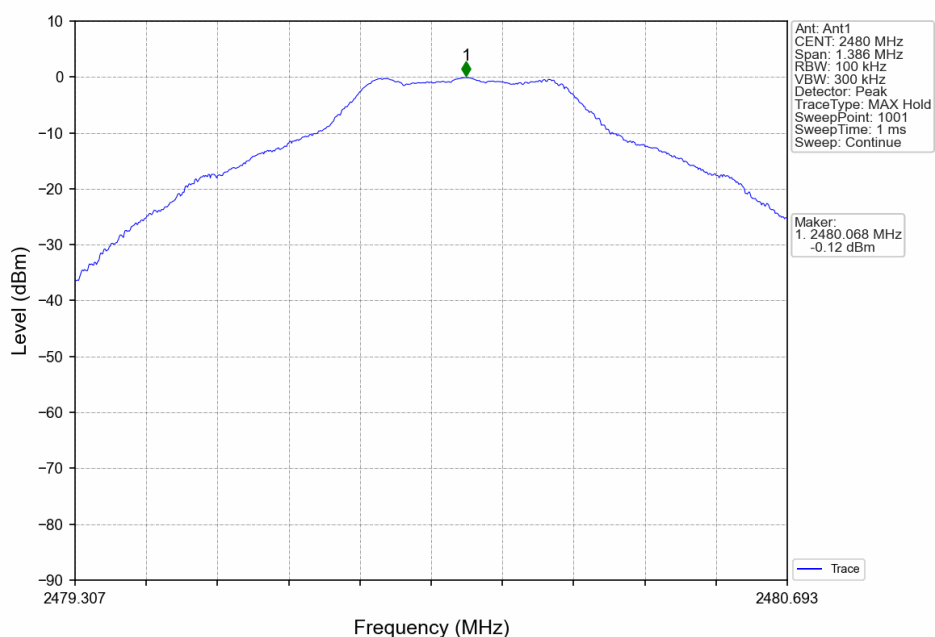
| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|----------------|---------|-----------------|-------------|-----|--------------------------|
| GFSK           | SISO    | 2402            | DH5         | 1   | -0.60                    |
|                |         | 2441            | DH5         | 1   | -0.22                    |
|                |         | 2480            | DH5         | 1   | -0.12                    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | -0.66                    |
|                |         | 2441            | 2DH5        | 1   | -0.25                    |
|                |         | 2480            | 2DH5        | 1   | -0.20                    |
| 8-DPSK         | SISO    | 2402            | 3DH5        | 1   | -0.57                    |
|                |         | 2441            | 3DH5        | 1   | -0.05                    |
|                |         | 2480            | 3DH5        | 1   | 0.01                     |

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.

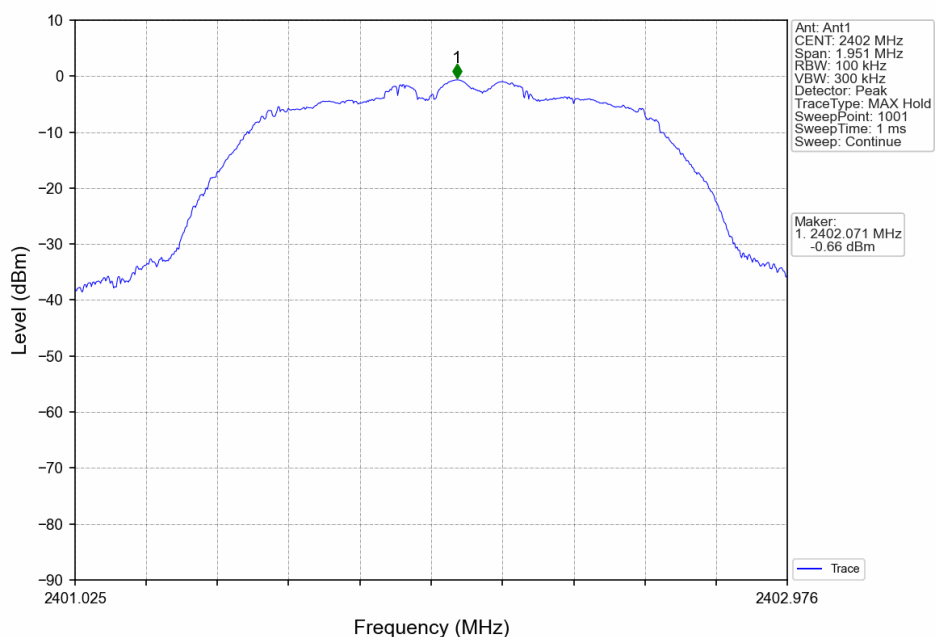
## 6.1.2 Test Graph

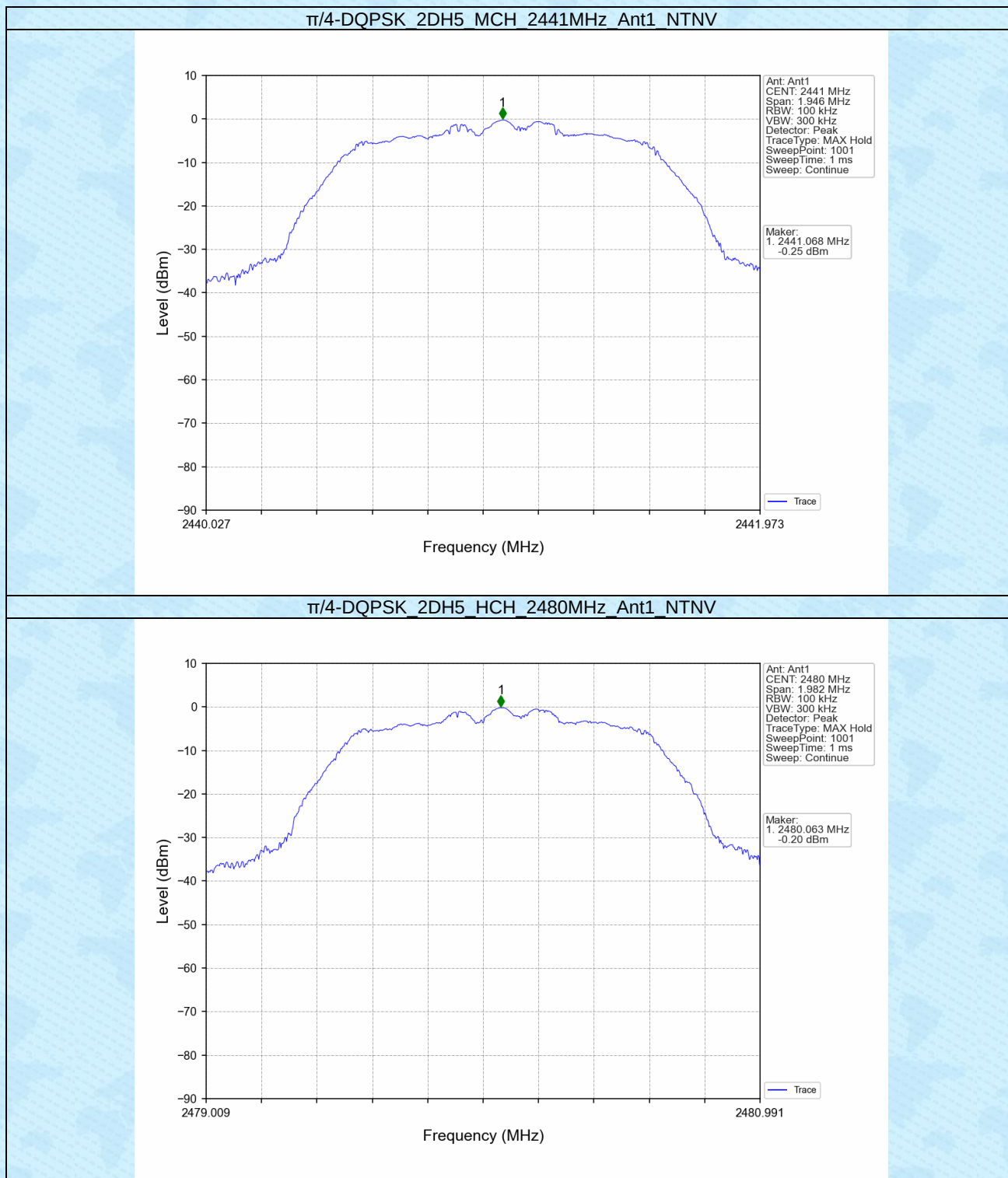


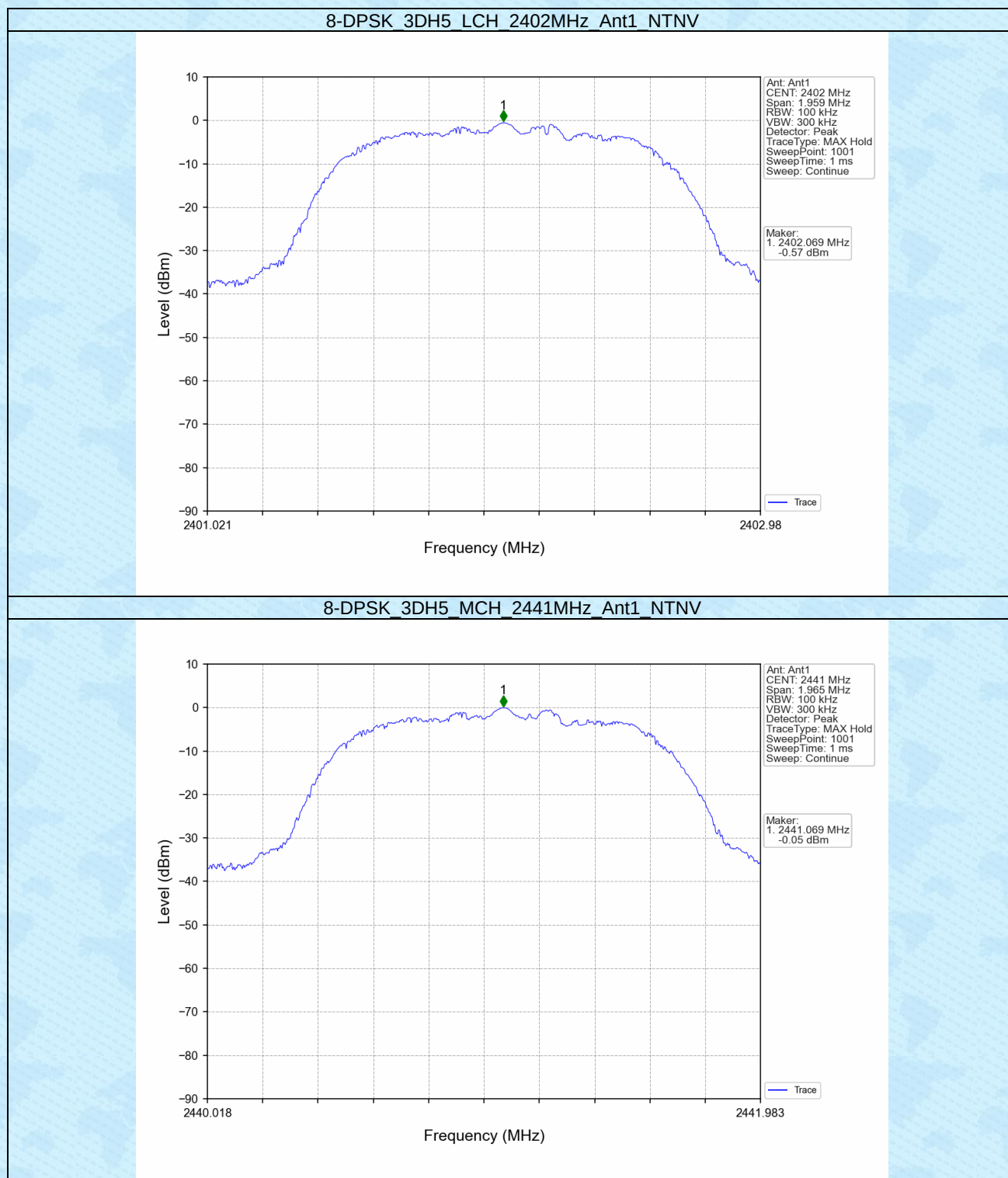
GFSK DH5 HCH 2480MHz Ant1 NTN

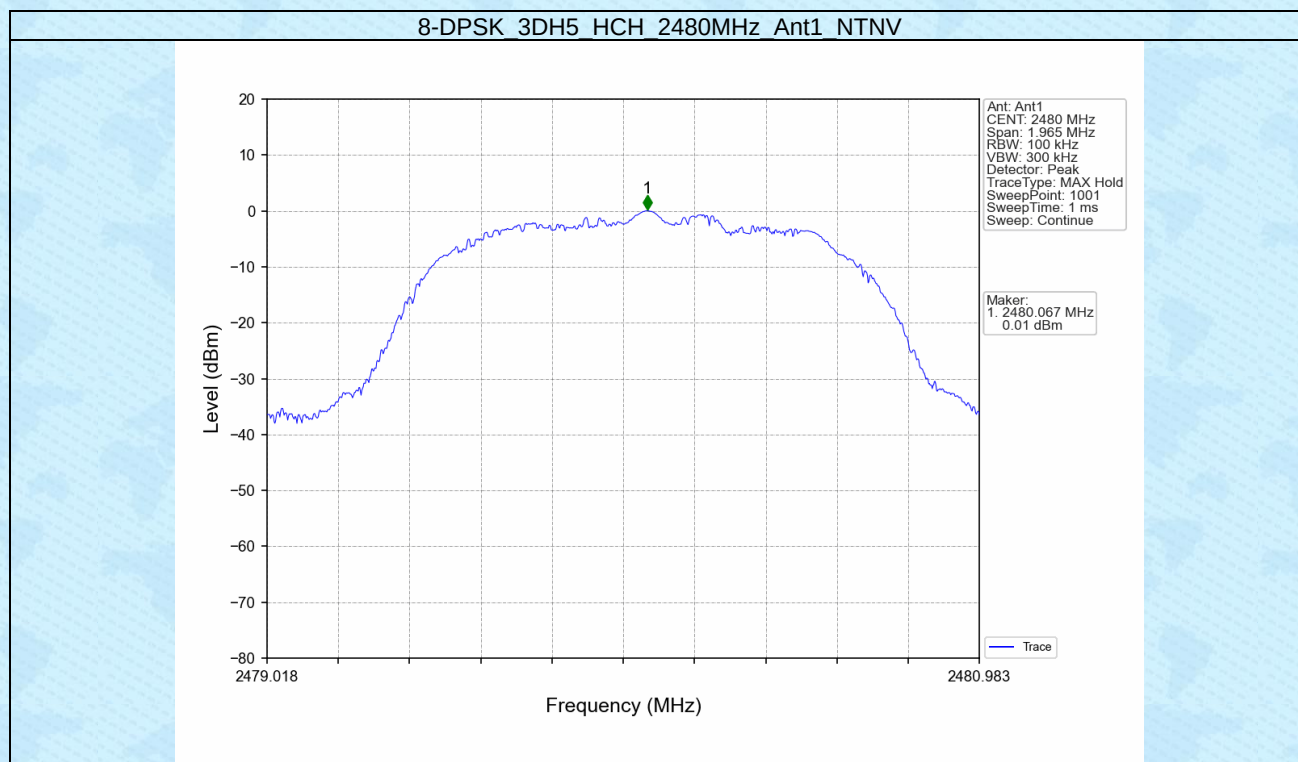


$\pi/4$ -DQPSK 2DH5 LCH 2402MHz Ant1 NTN









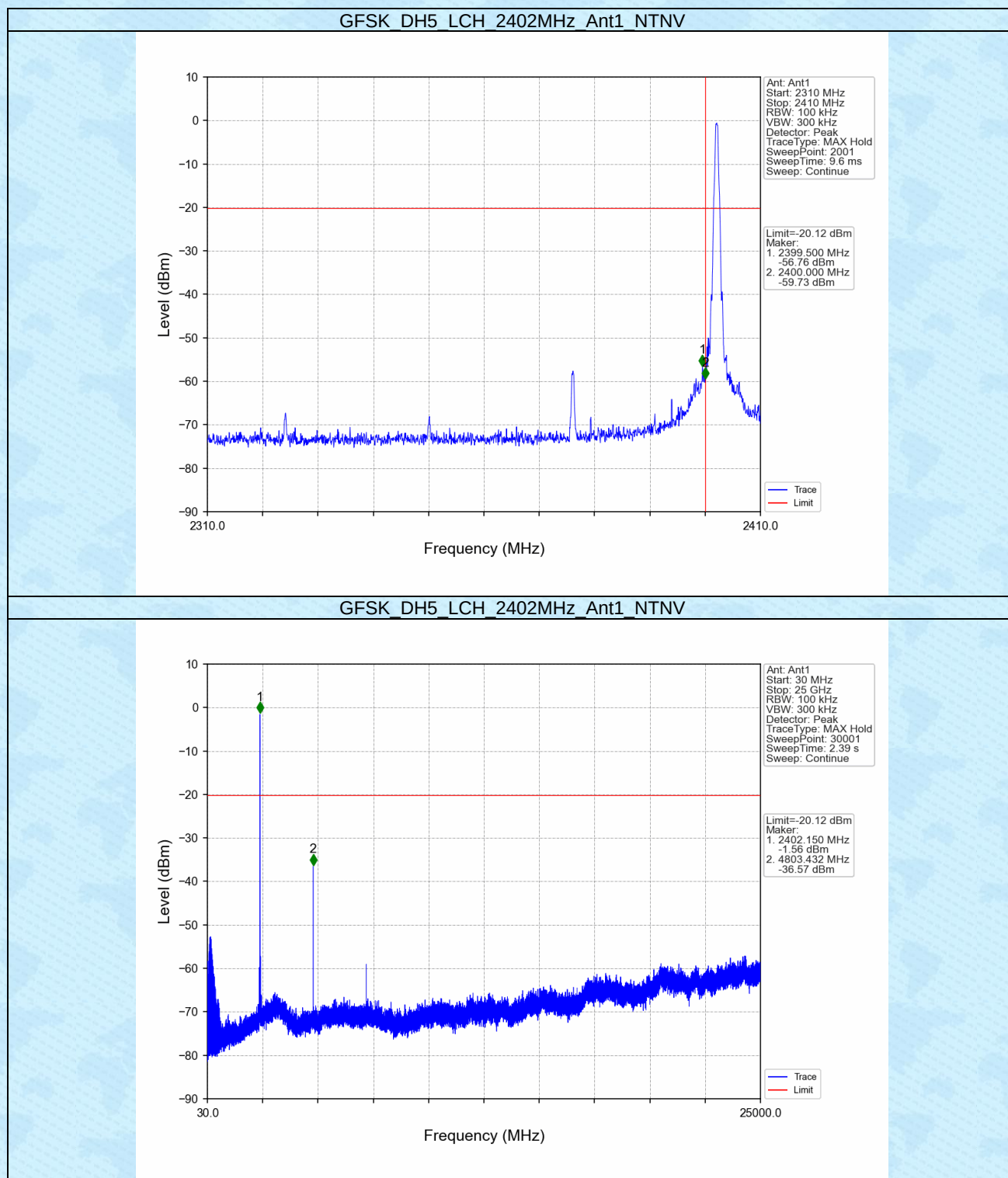
## 6.2 CSE

### 6.2.1 Test Result

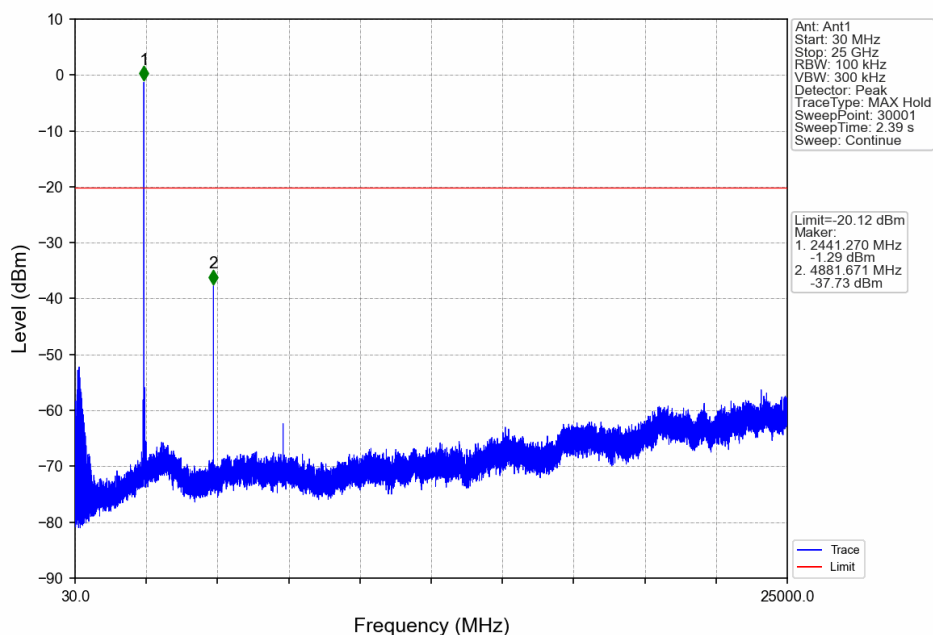
| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|----------------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK           | SISO    | 2402            | DH5         | 1   | -0.12                    | -20.12      | Pass    |
|                |         | 2441            | DH5         | 1   | -0.12                    | -20.12      | Pass    |
|                |         | 2480            | DH5         | 1   | -0.12                    | -20.12      | Pass    |
|                |         | HOPP            | DH5         | 1   | -0.12                    | -20.12      | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | -0.20                    | -20.20      | Pass    |
|                |         | 2441            | 2DH5        | 1   | -0.20                    | -20.20      | Pass    |
|                |         | 2480            | 2DH5        | 1   | -0.20                    | -20.20      | Pass    |
|                |         | HOPP            | 2DH5        | 1   | -0.20                    | -20.20      | Pass    |
| 8-DPSK         | SISO    | 2402            | 3DH5        | 1   | 0.01                     | -19.99      | Pass    |
|                |         | 2441            | 3DH5        | 1   | 0.01                     | -19.99      | Pass    |
|                |         | 2480            | 3DH5        | 1   | 0.01                     | -19.99      | Pass    |
|                |         | HOPP            | 3DH5        | 1   | 0.01                     | -19.99      | 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.

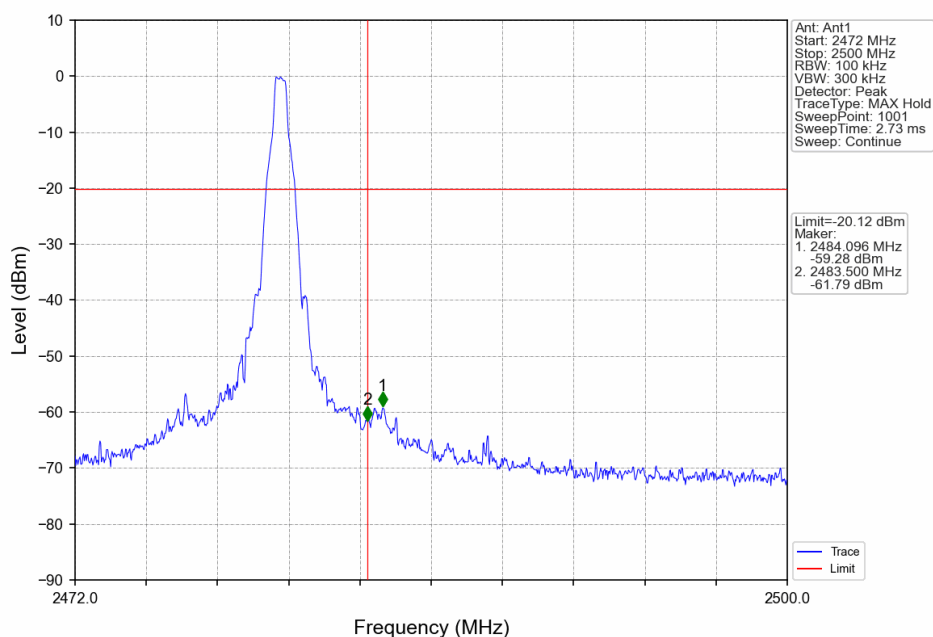
## 6.2.2 Test Graph



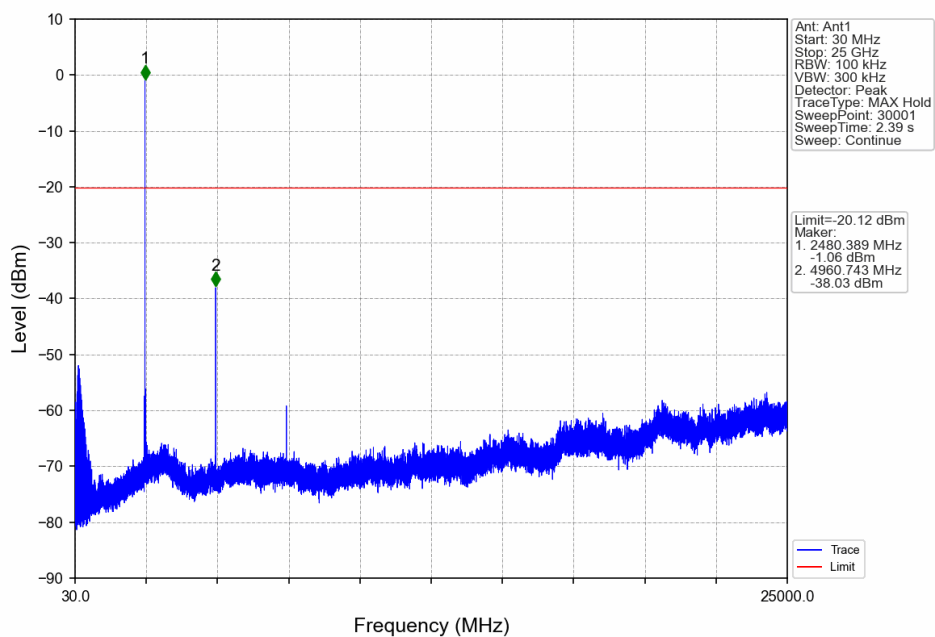
## GFSK DH5 MCH 2441MHz Ant1 NTN



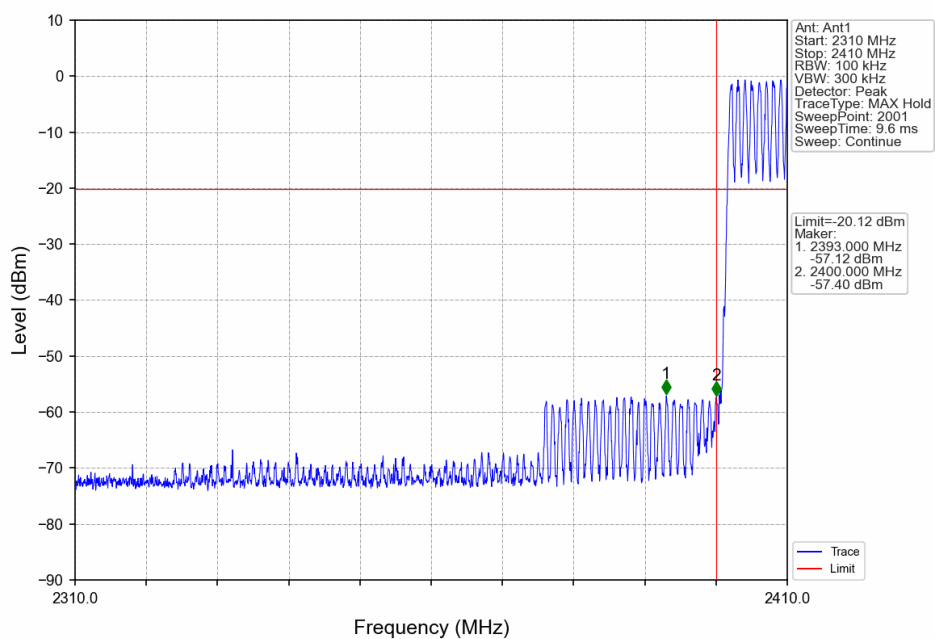
## GFSK DH5 HCH 2480MHz Ant1 NTN

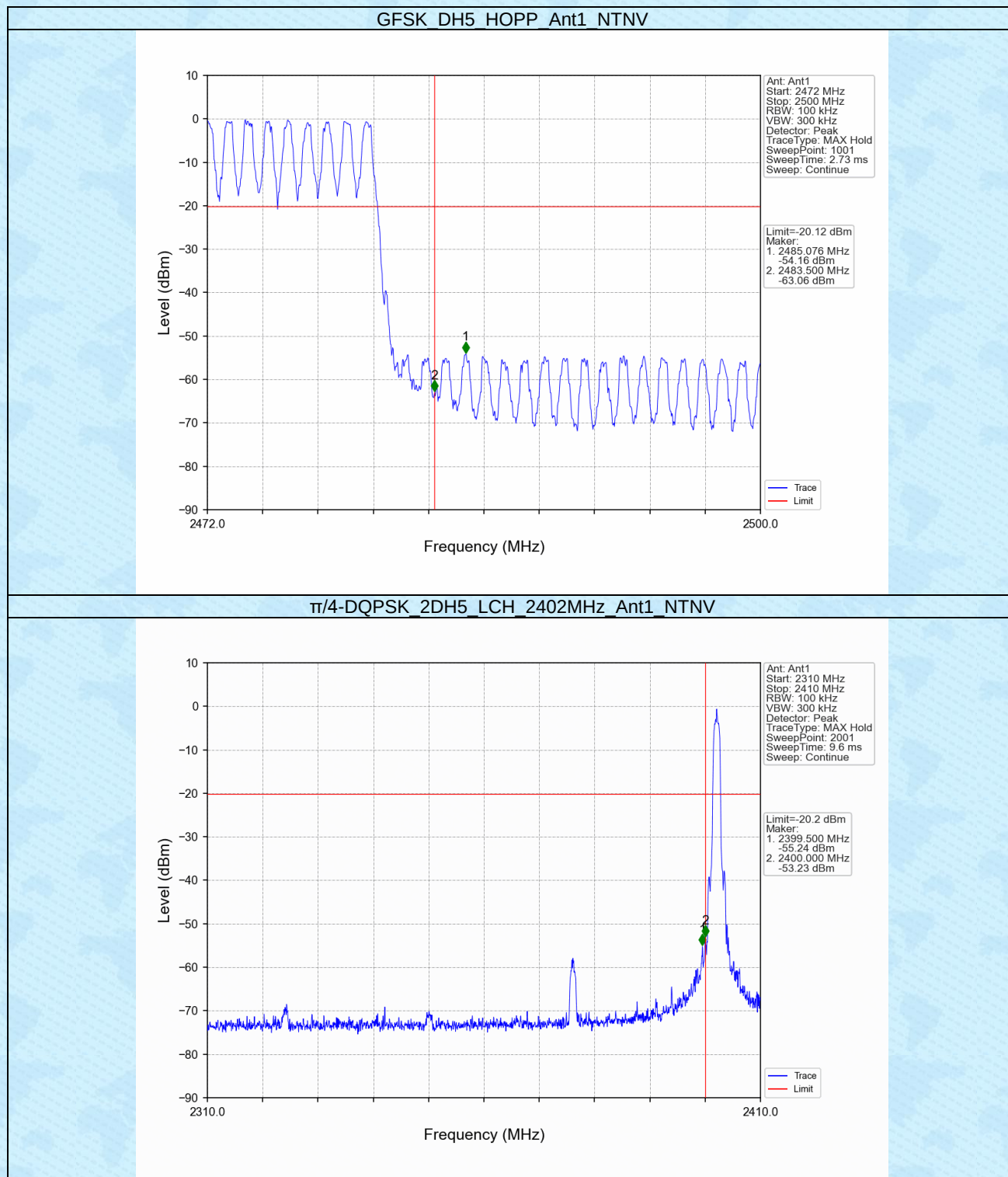


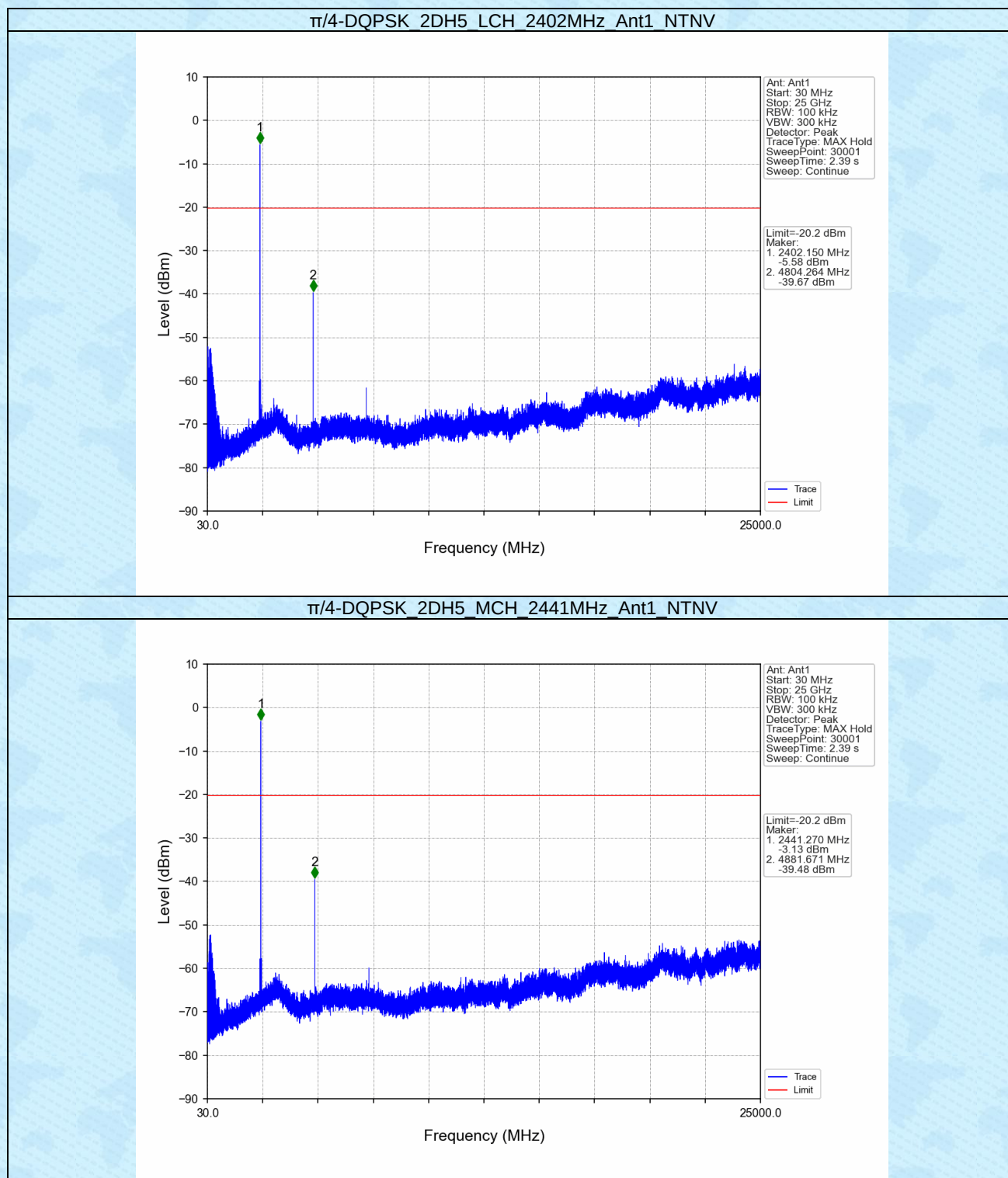
## GFSK DH5 HCH 2480MHz Ant1 NTN

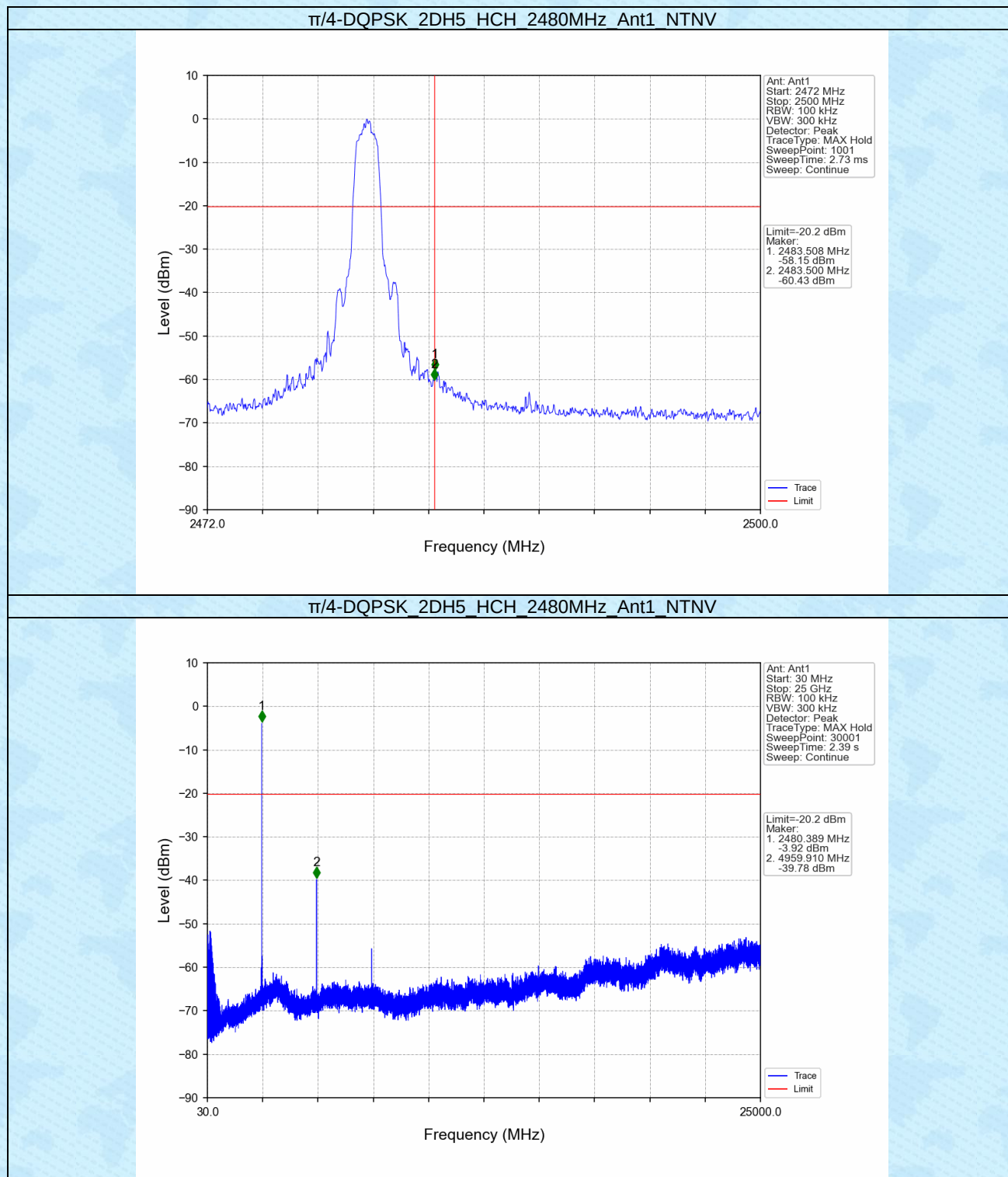


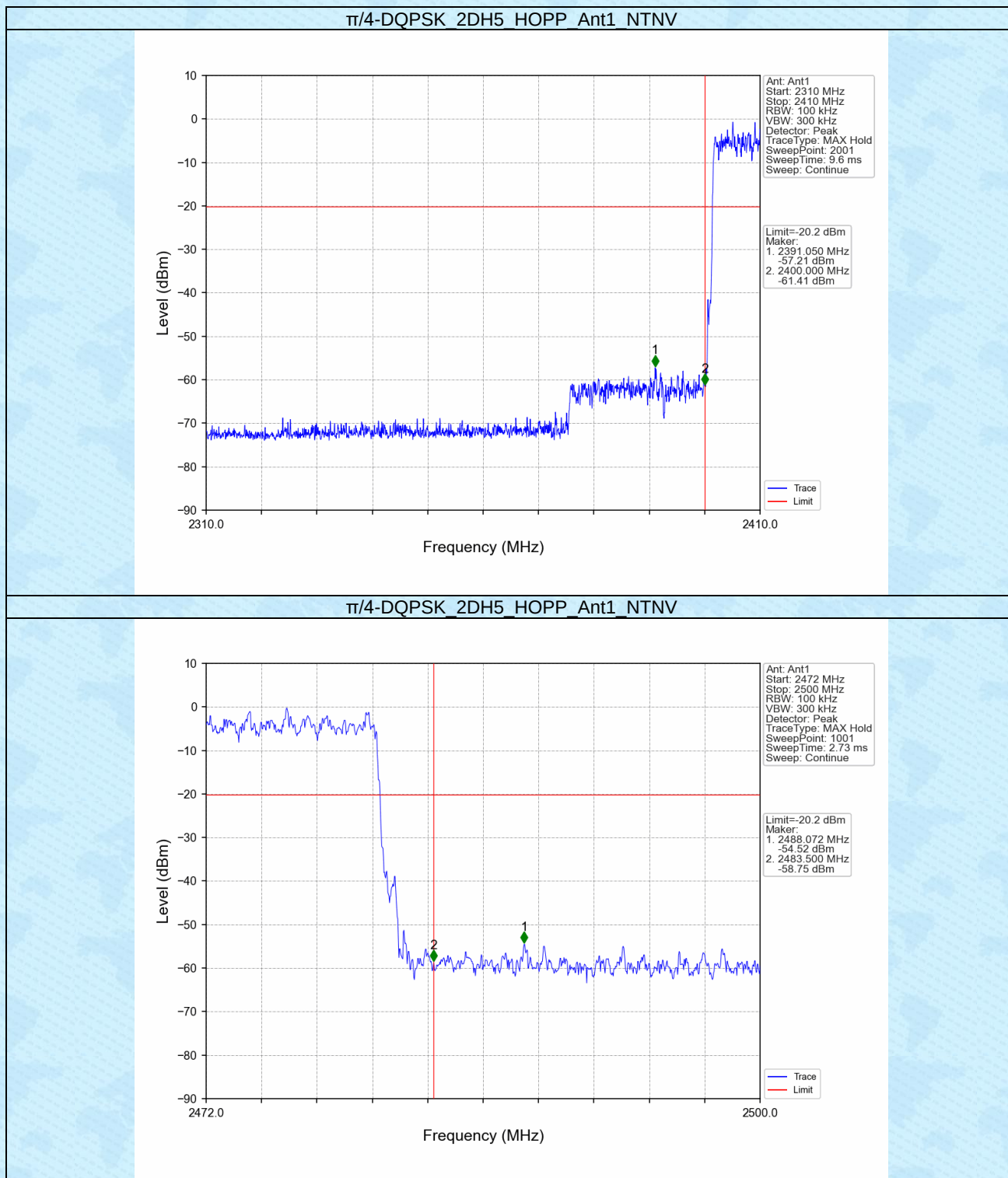
## GFSK DH5 HOPP Ant1 NTN



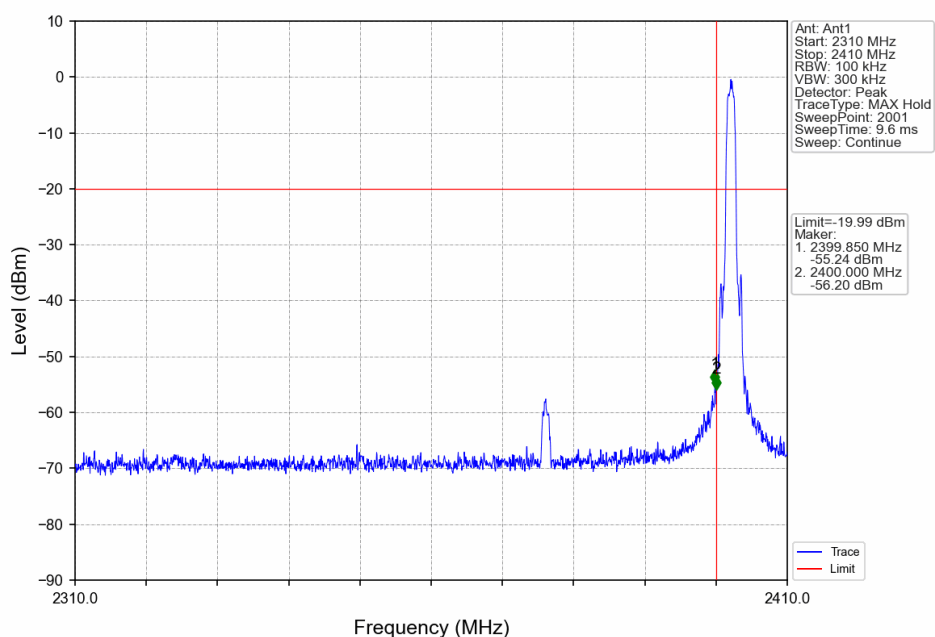




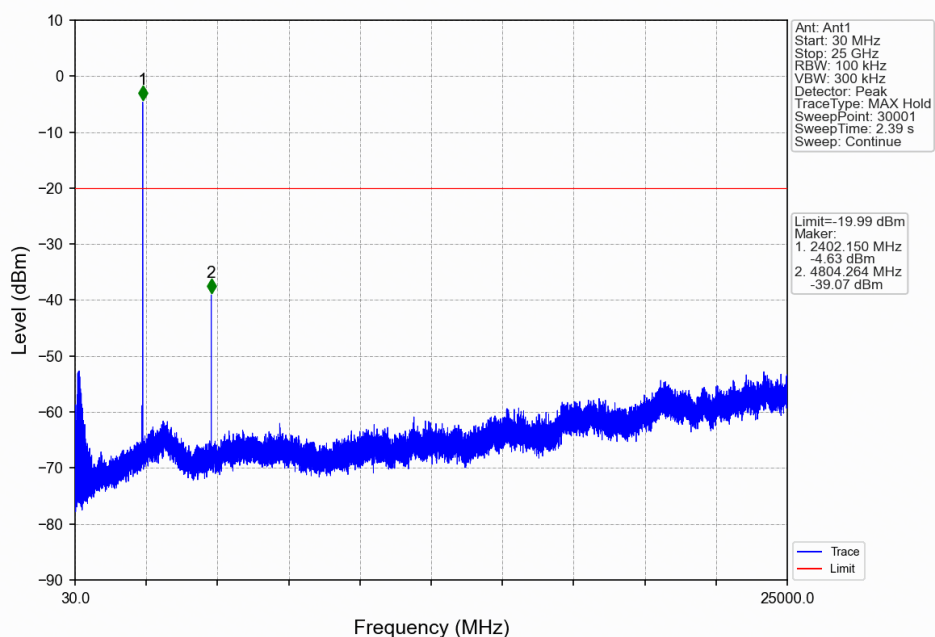


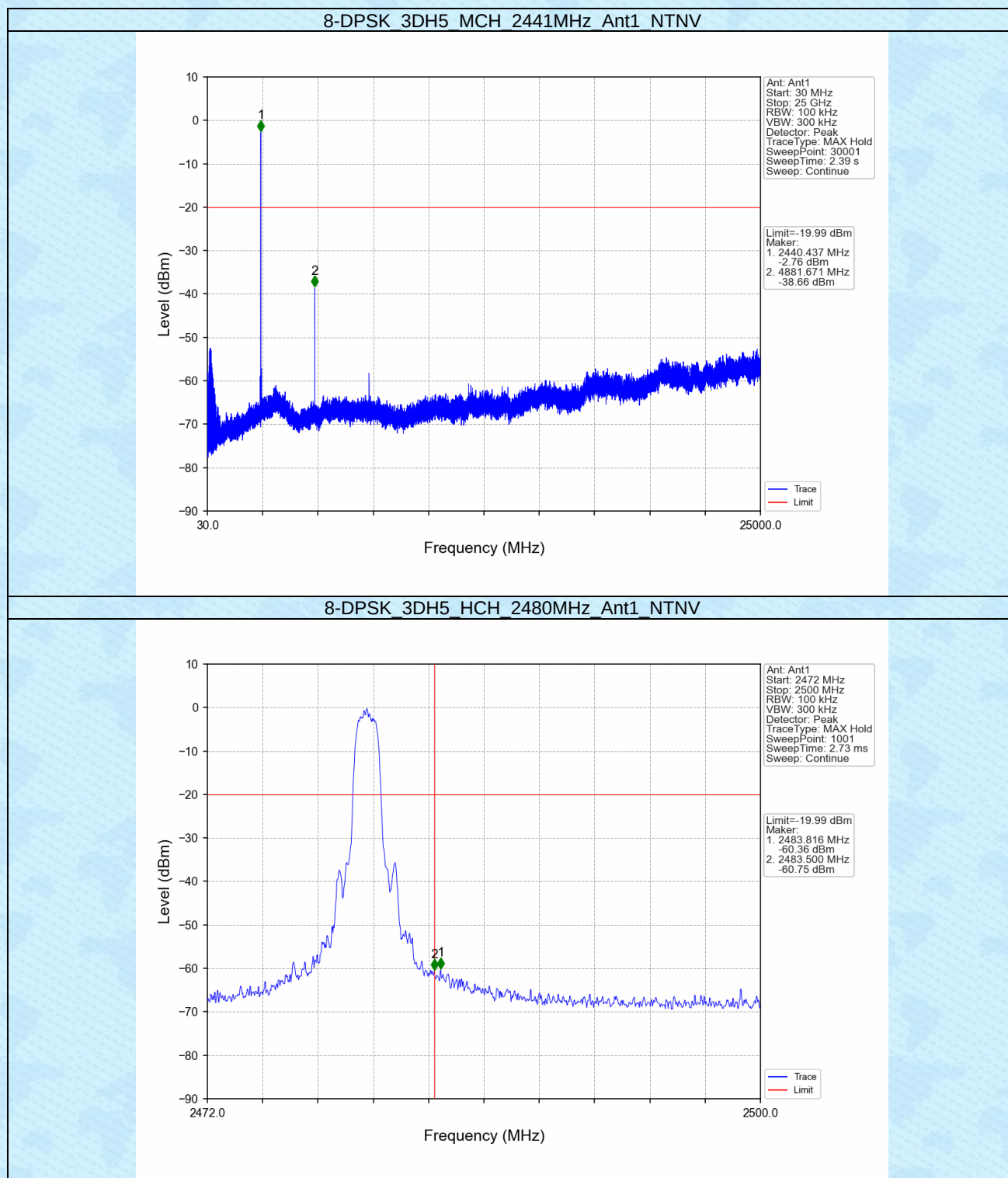


8-DPSK 3DH5 LCH 2402MHz Ant1 NTN

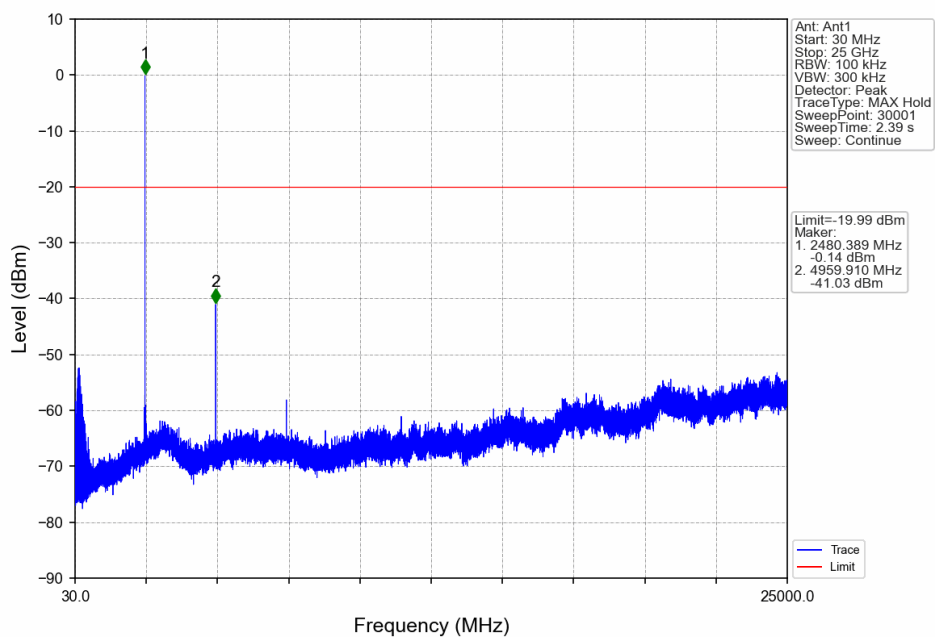


8-DPSK 3DH5 LCH 2402MHz Ant1 NTN

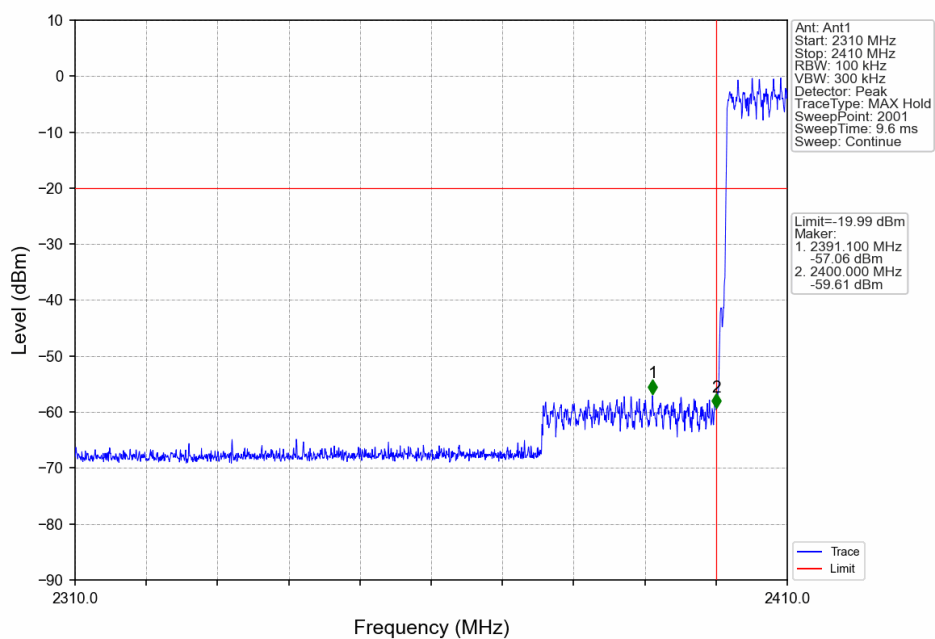


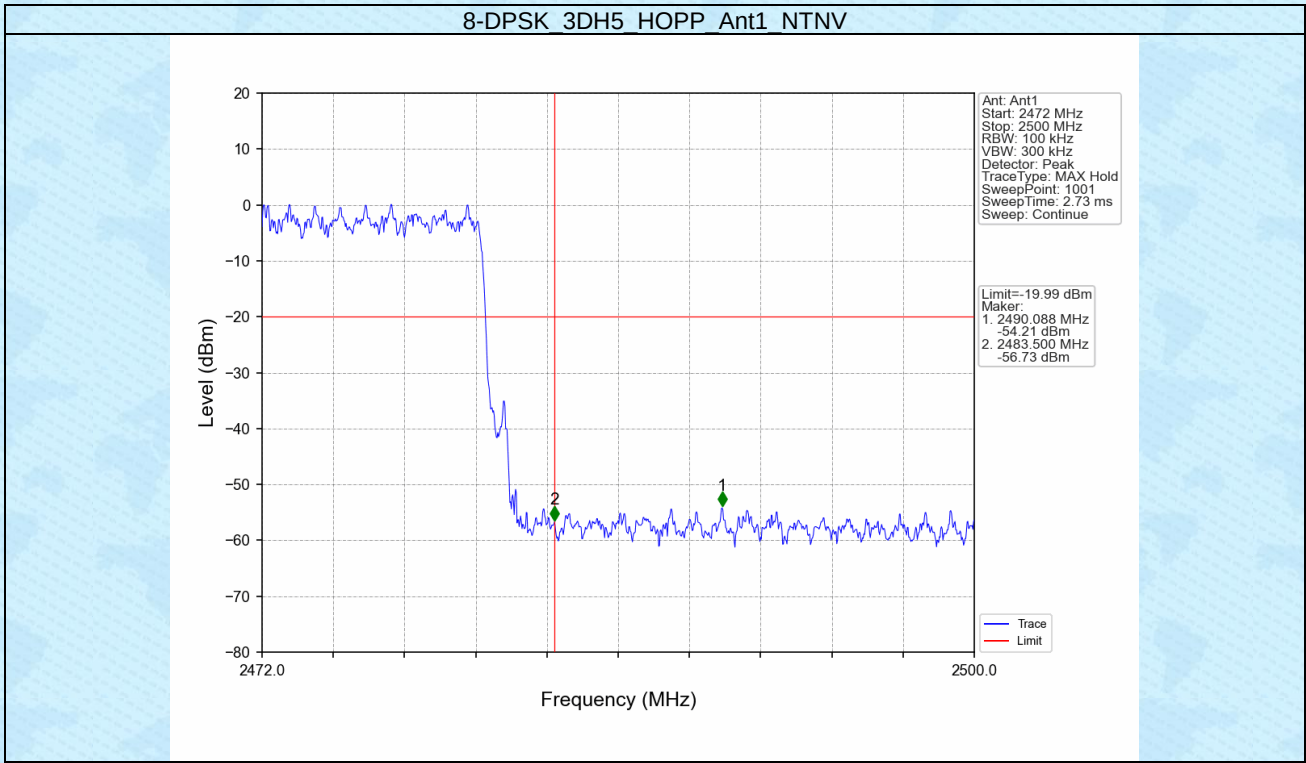


8-DPSK 3DH5 HCH 2480MHz Ant1 NTN



8-DPSK 3DH5 HOPP Ant1 NTN





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