

# ANNEX D TEST DATA

## For

|                      |   |
|----------------------|---|
| Project No.:         | 8229EU010809W                                     |
| Client:              | Guangzhou MUNBYN Information Technology Co., Ltd. |
| Product Description: | Photo Printer                                     |
| Model No.:           | PR6   |
| FCC ID:              | 2BF4E-PR6   |
| Technology:          | Bluetooth BDR+EDR                                 |
| Test Engineer:       | <i>Mikoy zhu</i>                                  |
| Test Date:           | 2024-05-15  |

## Test Summary

| Item   | Result |
|--|--------|
| Duty Cycle   | Pass   |
| Bandwidth  | Pass   |
| Maximum Conducted Output Power                       | Pass   |
| Carrier Frequency Separation                         | Pass   |
| Number of Hopping Frequencies                        | Pass   |
| Time of Occupancy (Dwell Time)                       | Pass   |
| Unwanted Emissions In Non-restricted Frequency Bands | Pass   |

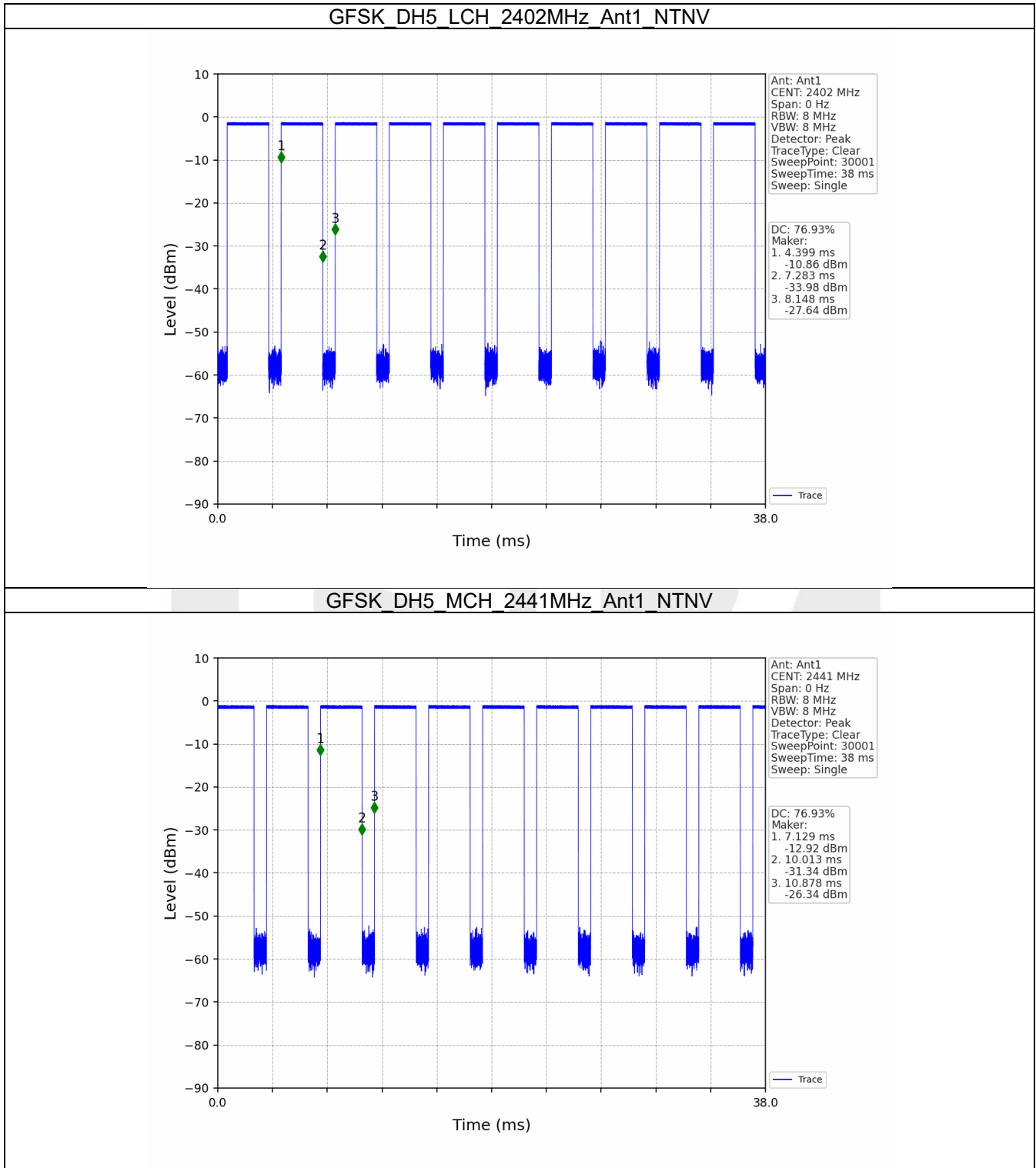
## 1. Duty Cycle

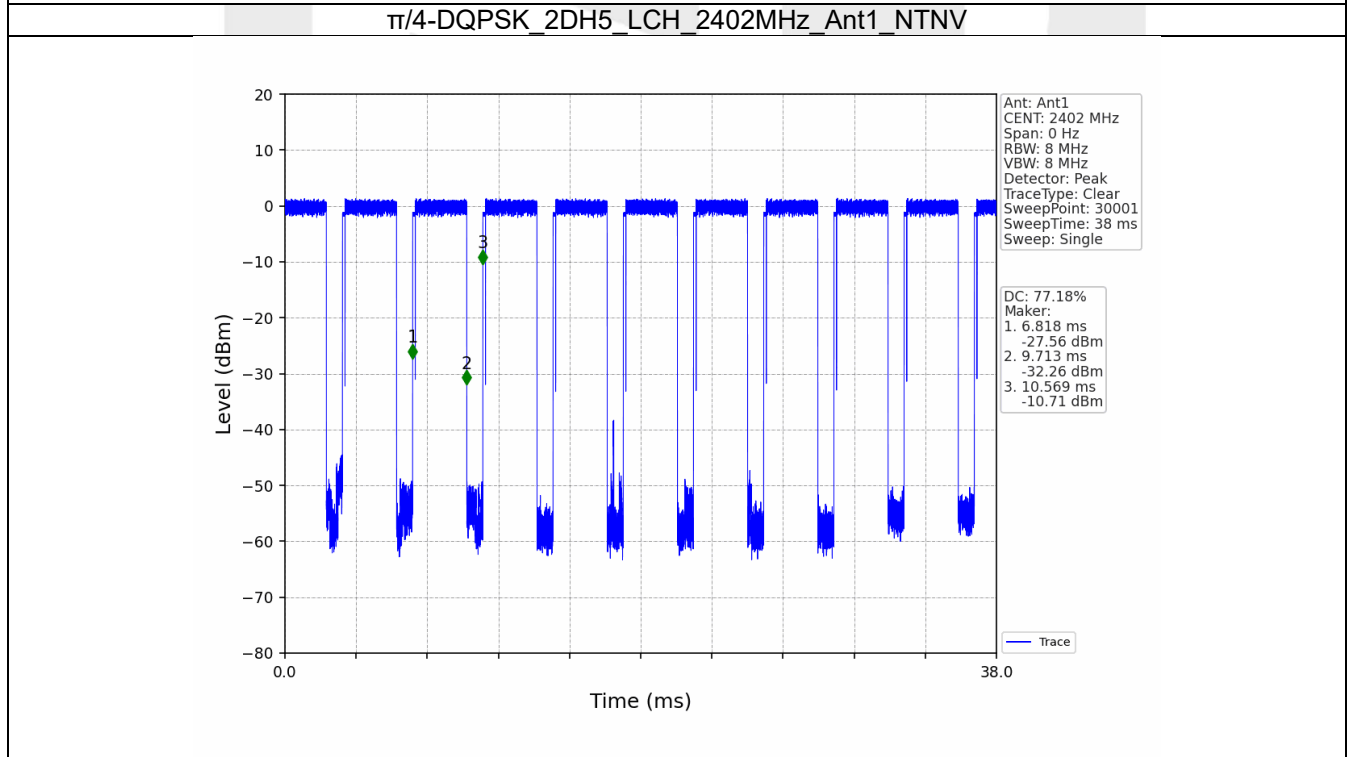
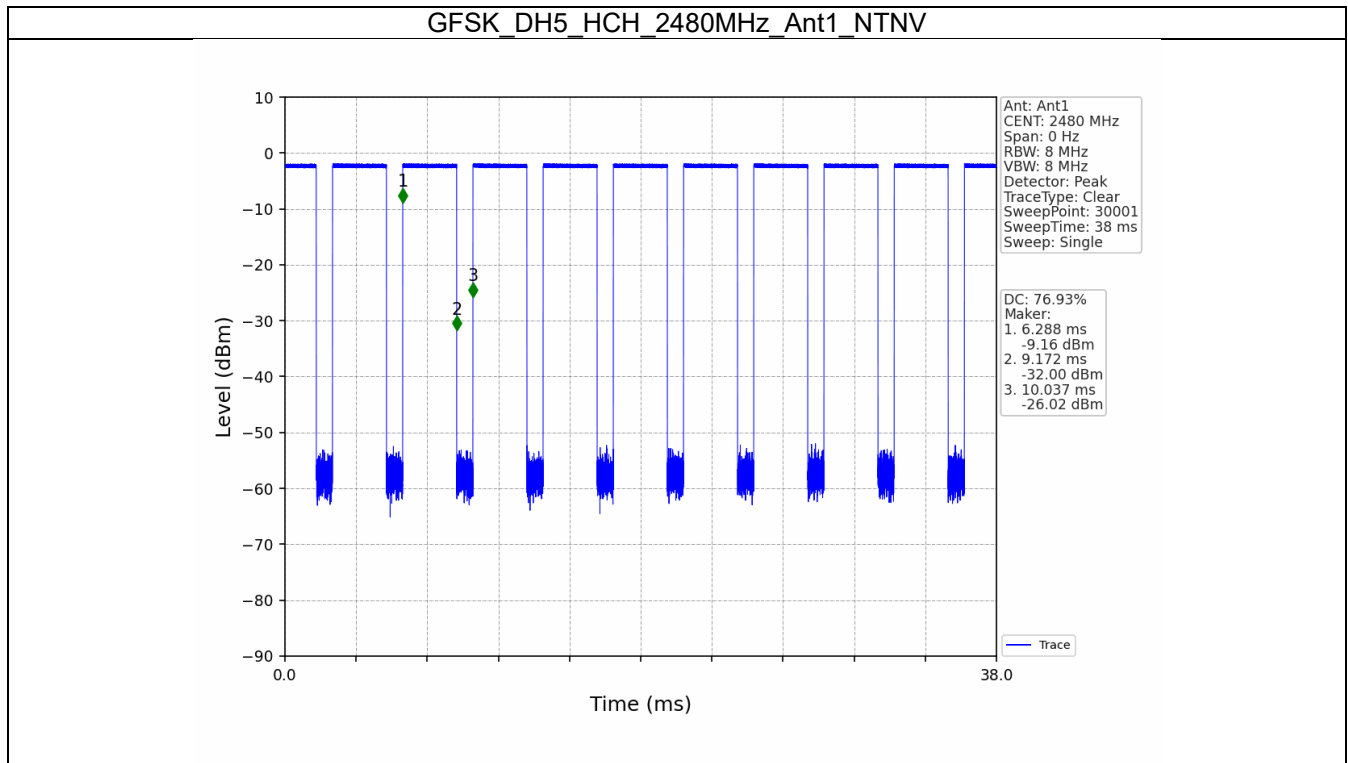
### 1.1 Ant1

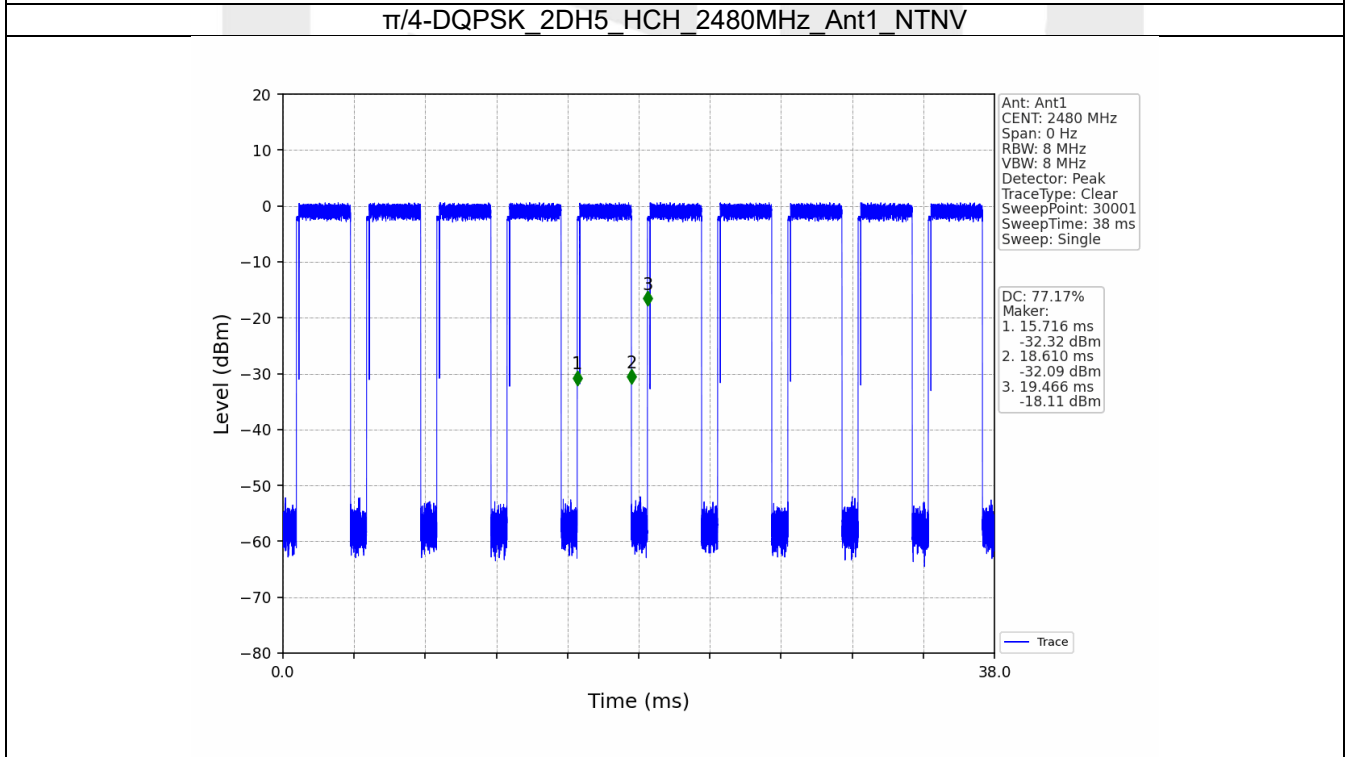
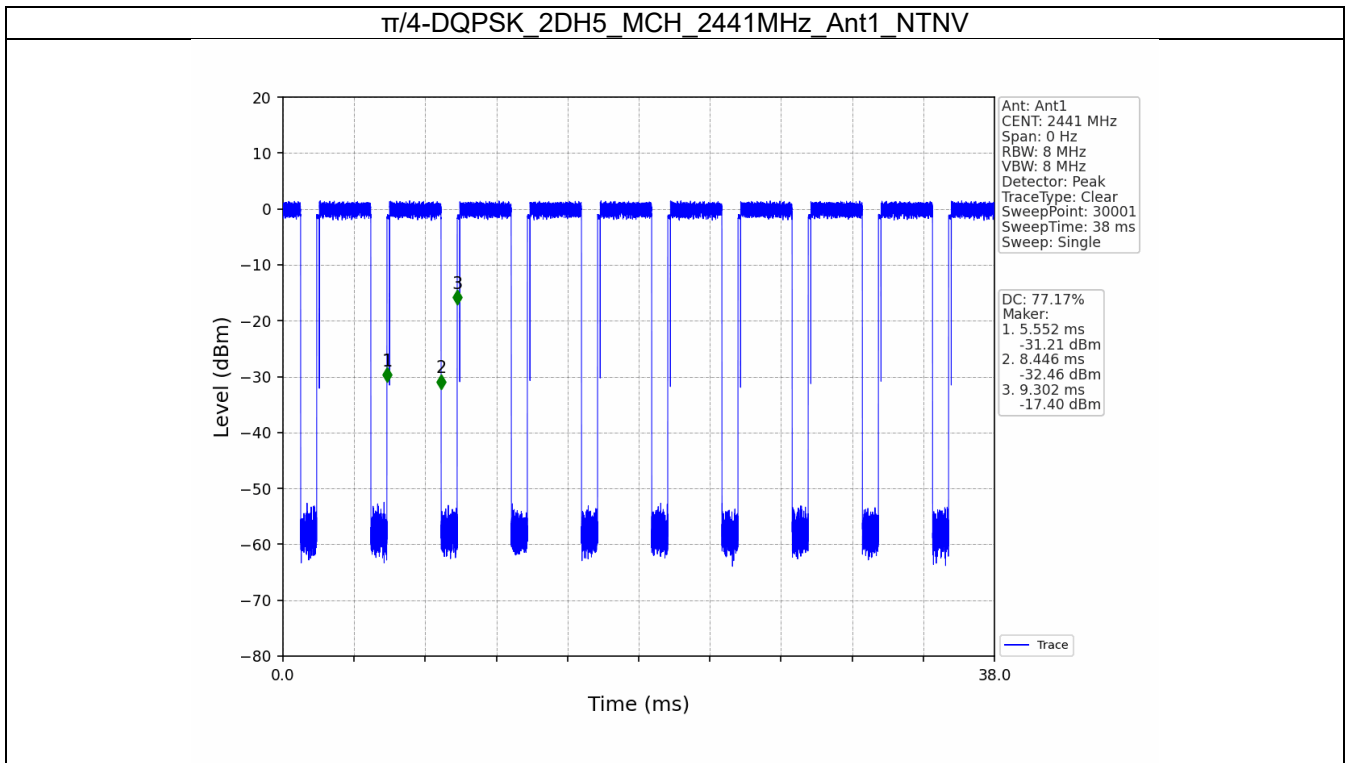
#### 1.1.1 Test Result

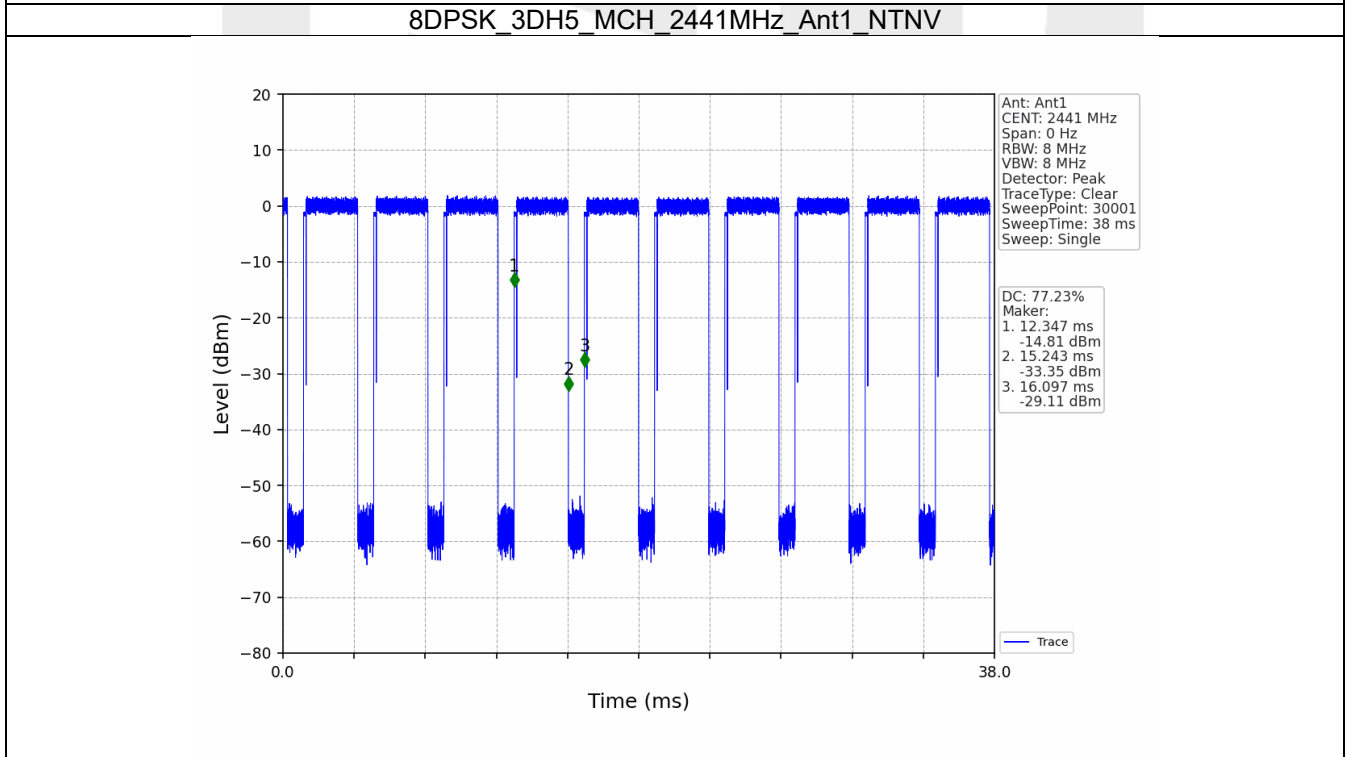
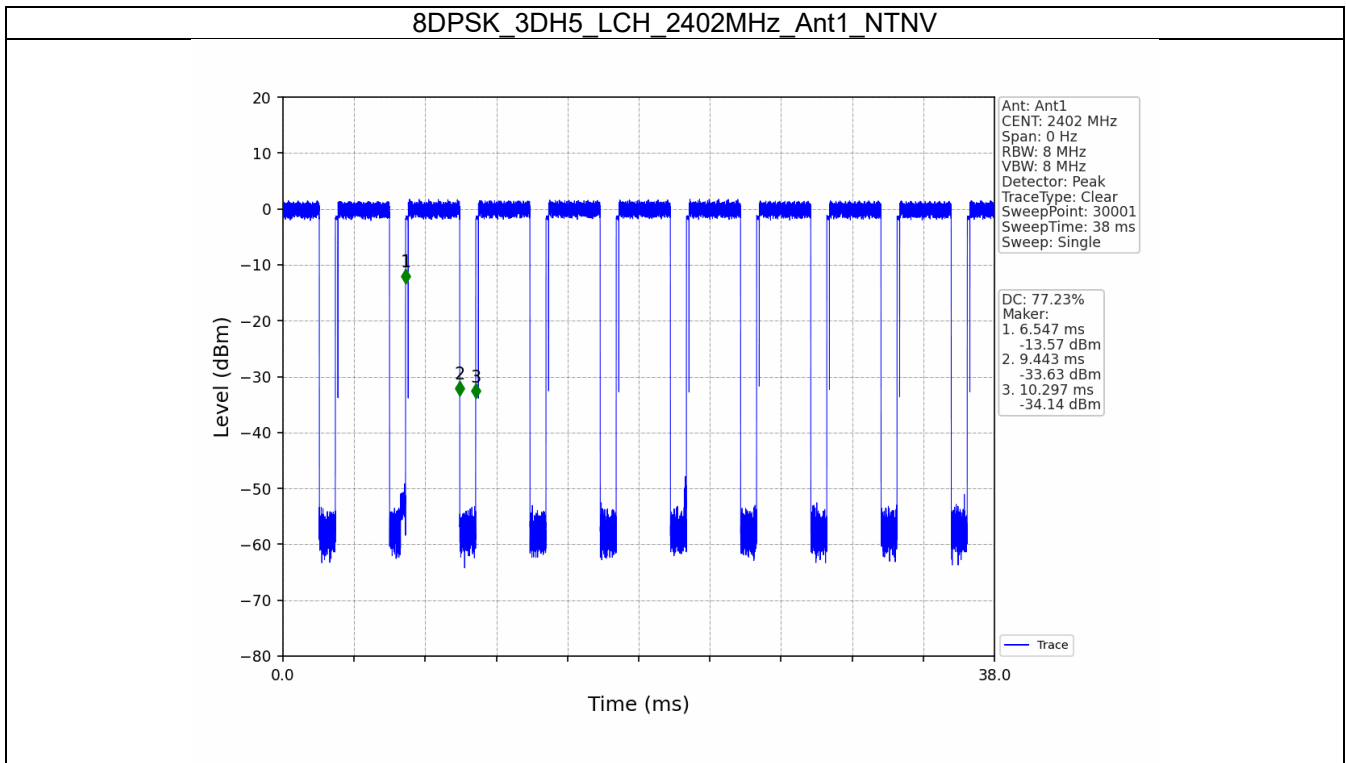
| Ant1           |         |                 |             |           |             |                |                                   |                       |
|----------------|---------|-----------------|-------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode           | TX Type | Frequency (MHz) | Packet Type | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| GFSK           | SISO    | 2402            | DH5         | 2.884     | 3.749       | 76.93          | 1.14                              | 0.03                  |
|                |         | 2441            | DH5         | 2.884     | 3.749       | 76.93          | 1.14                              | 0.01                  |
|                |         | 2480            | DH5         | 2.884     | 3.749       | 76.93          | 1.14                              | 0.03                  |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 2.895     | 3.751       | 77.18          | 1.12                              | 0.03                  |
|                |         | 2441            | 2DH5        | 2.894     | 3.750       | 77.17          | 1.13                              | 0.03                  |
|                |         | 2480            | 2DH5        | 2.894     | 3.750       | 77.17          | 1.13                              | 0.03                  |
| 8DPSK          | SISO    | 2402            | 3DH5        | 2.896     | 3.750       | 77.23          | 1.12                              | 0.03                  |
|                |         | 2441            | 3DH5        | 2.896     | 3.750       | 77.23          | 1.12                              | 0.03                  |
|                |         | 2480            | 3DH5        | 2.895     | 3.749       | 77.22          | 1.12                              | 0.03                  |

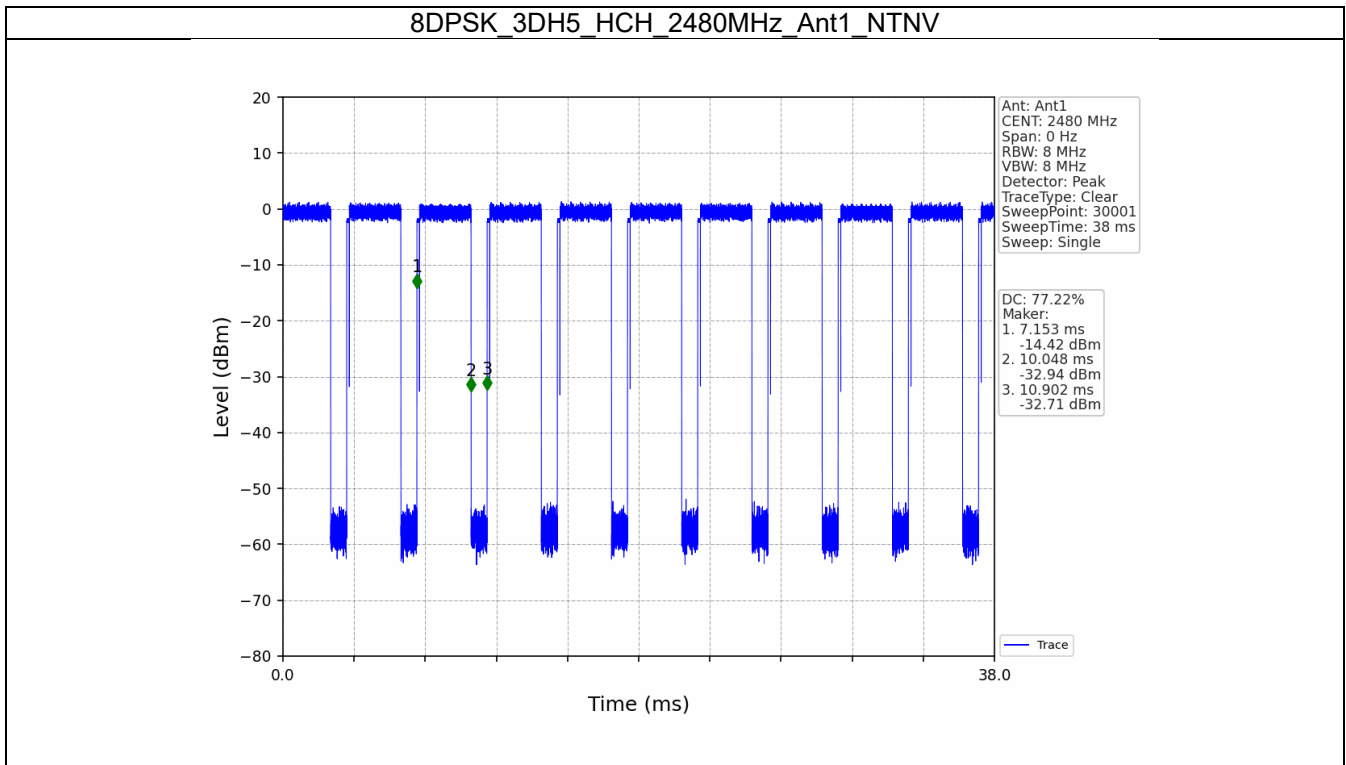
1.1.2 Test Graph













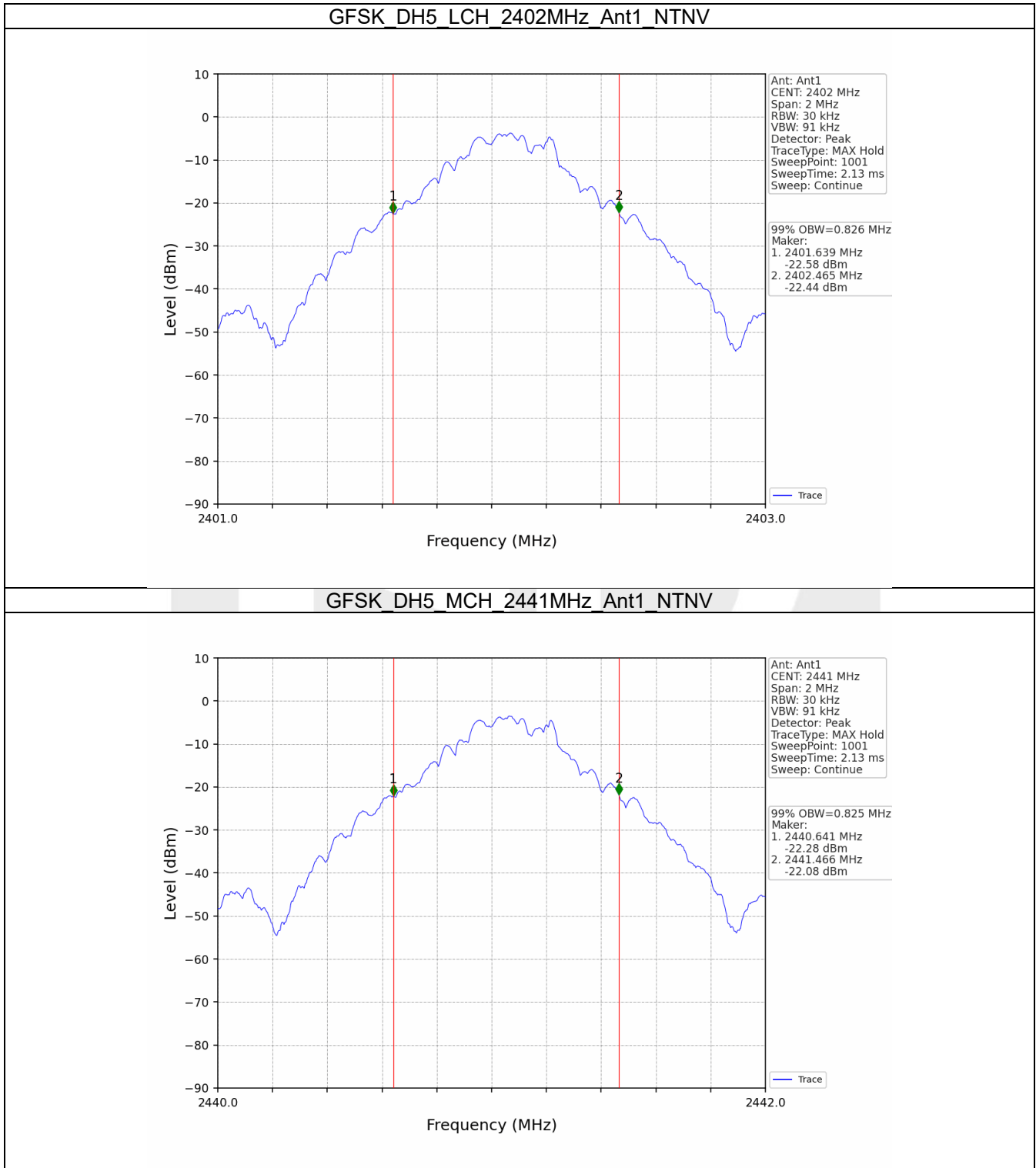
## 2. Bandwidth

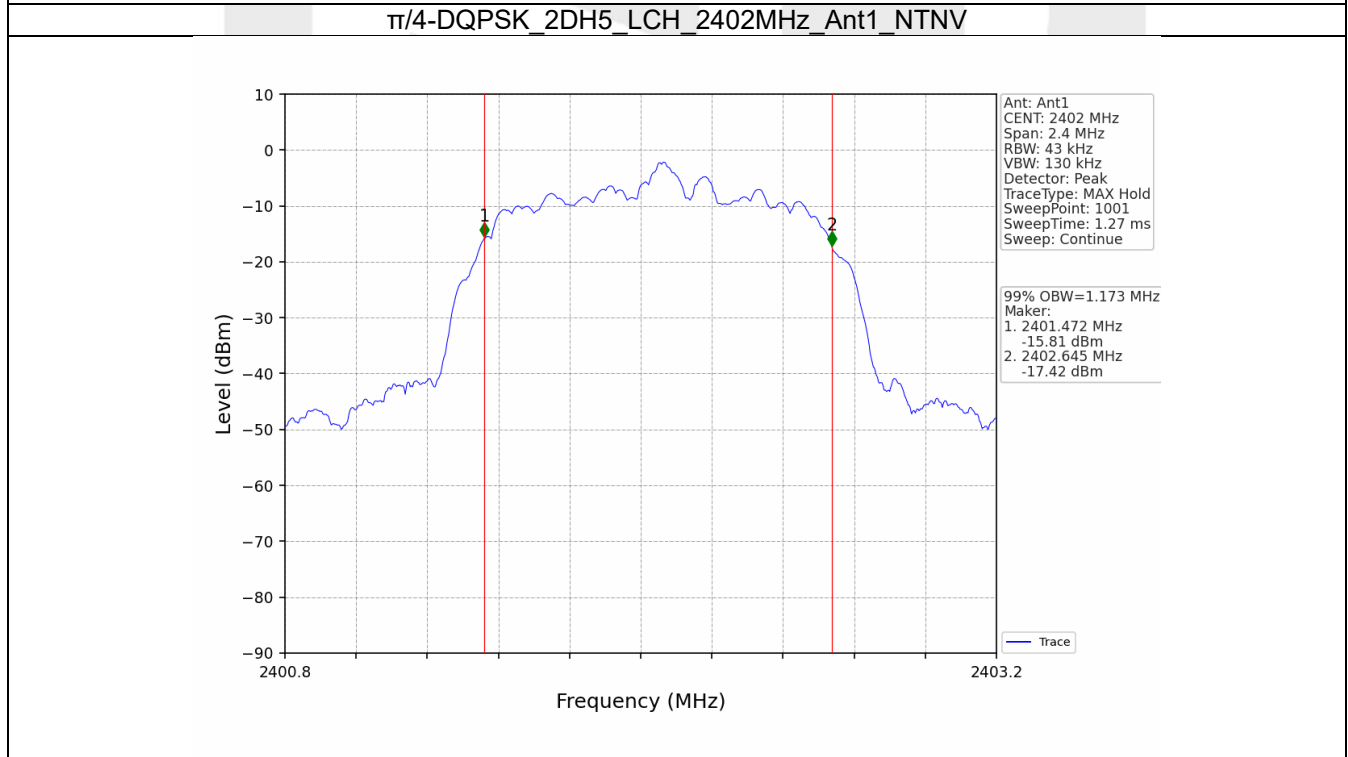
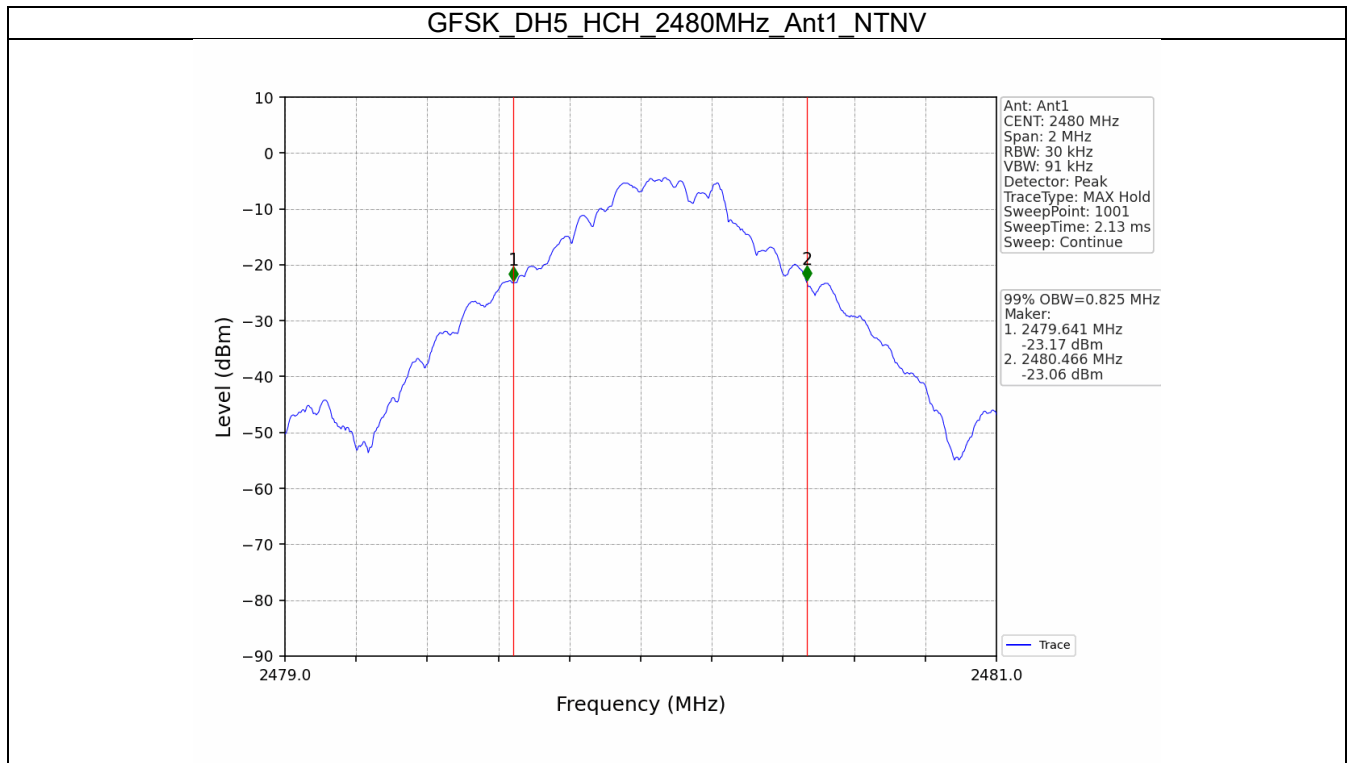
### 2.1 OBW

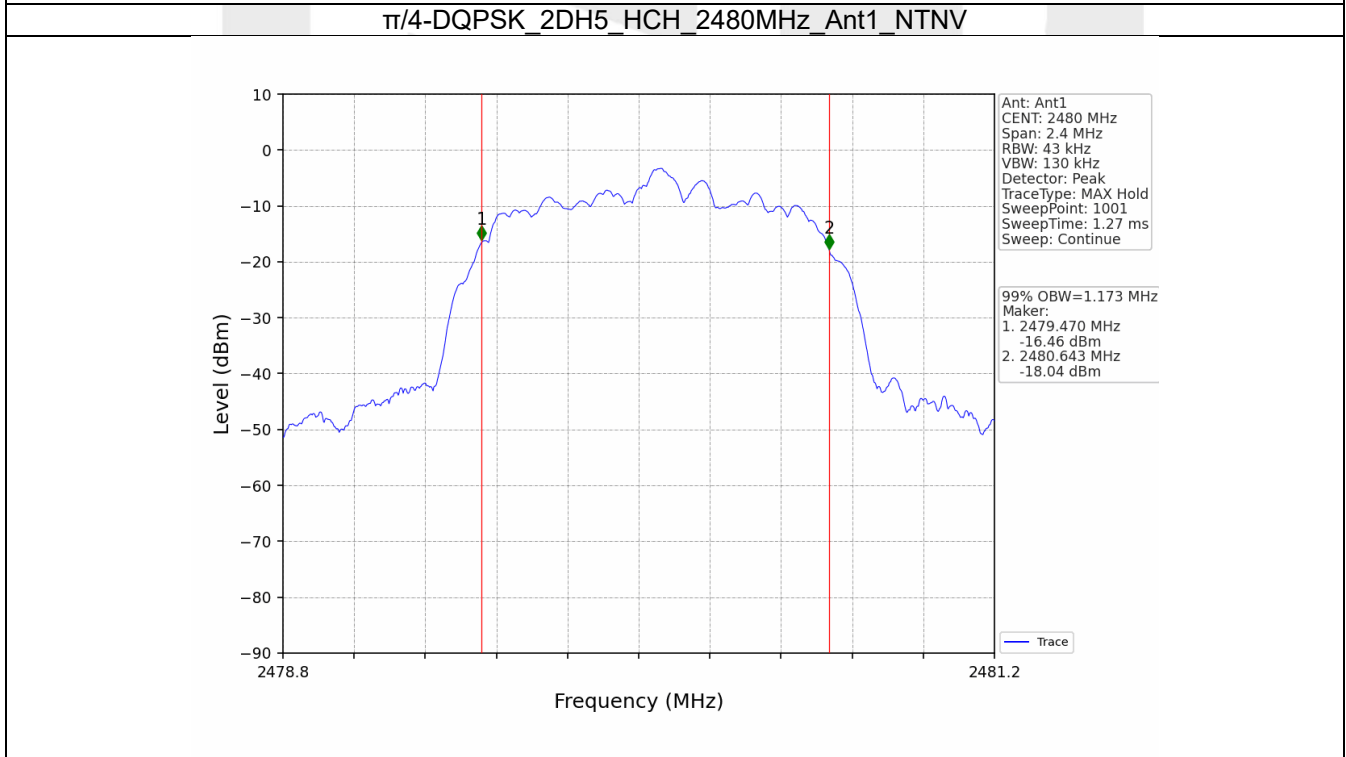
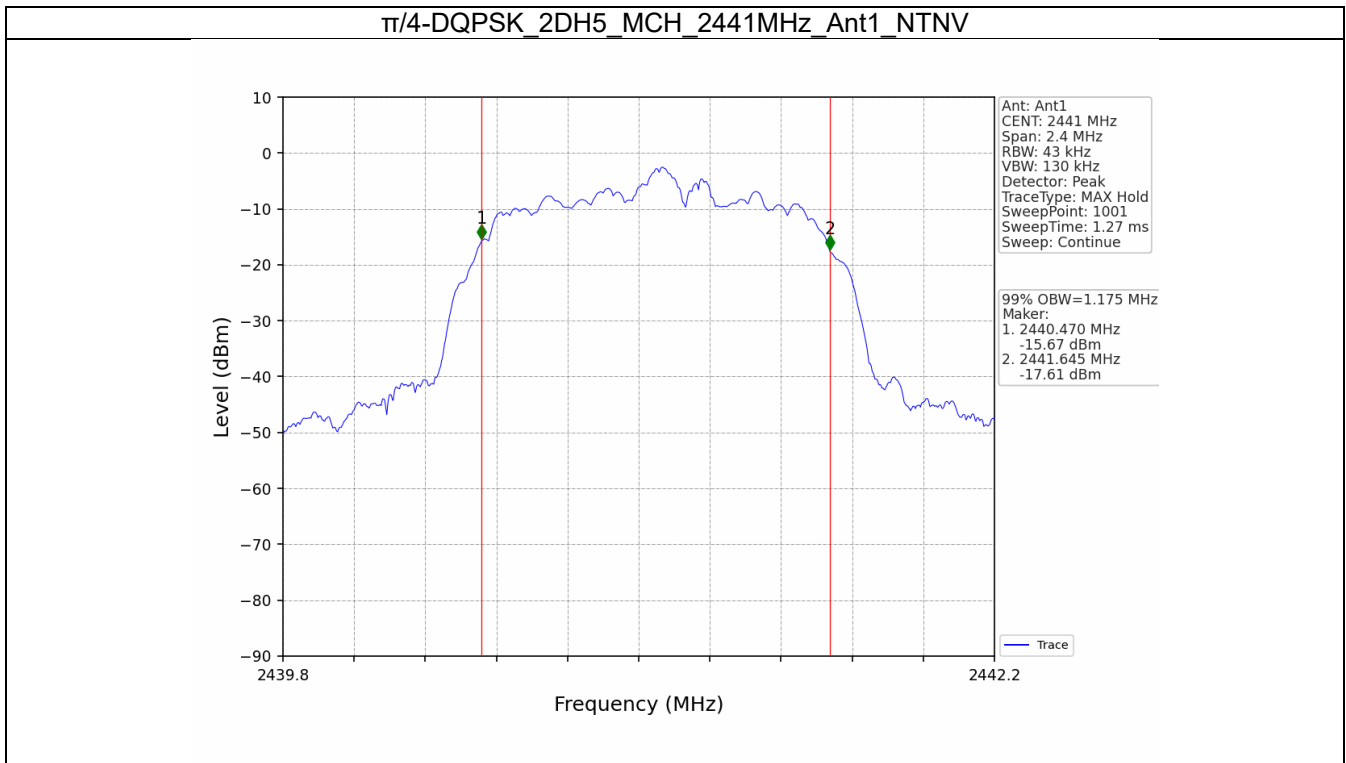
#### 2.1.1 Test Result

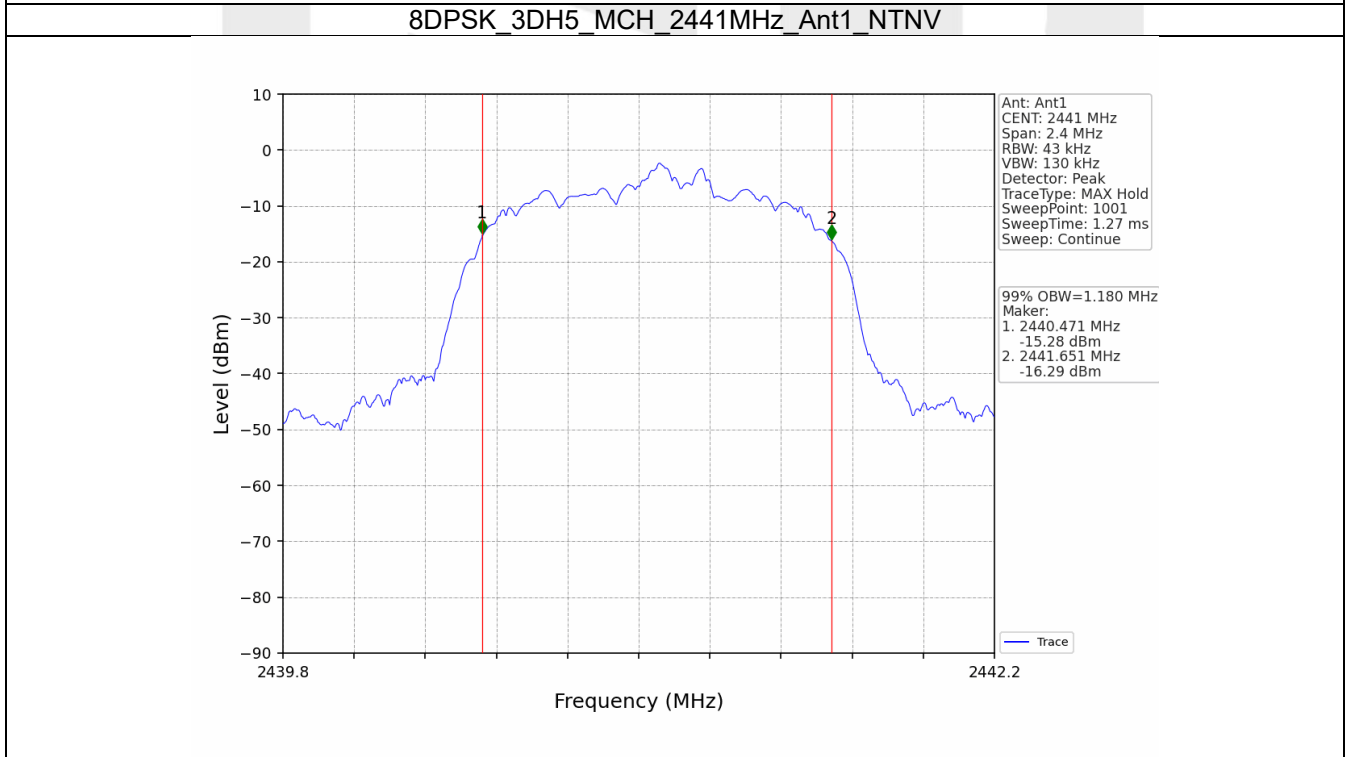
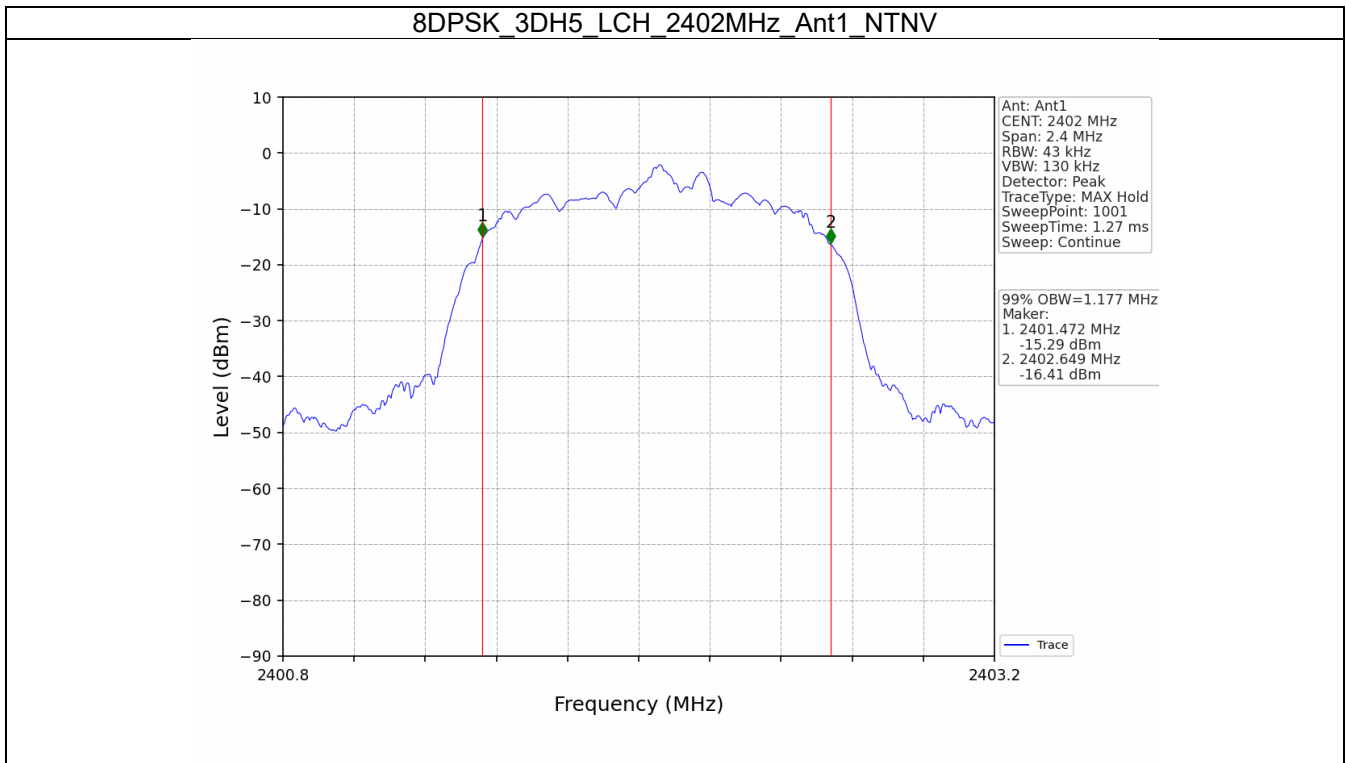
| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|----------------|---------|-----------------|-------------|-----|------------------------------|-------|---------|
|                |         |                 |             |     | Result                       | Limit |         |
| GFSK           | SISO    | 2402            | DH5         | 1   | 0.826                        | /     | Pass    |
|                |         | 2441            | DH5         | 1   | 0.825                        | /     | Pass    |
|                |         | 2480            | DH5         | 1   | 0.825                        | /     | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.173                        | /     | Pass    |
|                |         | 2441            | 2DH5        | 1   | 1.175                        | /     | Pass    |
|                |         | 2480            | 2DH5        | 1   | 1.173                        | /     | Pass    |
| 8DPSK          | SISO    | 2402            | 3DH5        | 1   | 1.177                        | /     | Pass    |
|                |         | 2441            | 3DH5        | 1   | 1.180                        | /     | Pass    |
|                |         | 2480            | 3DH5        | 1   | 1.178                        | /     | Pass    |

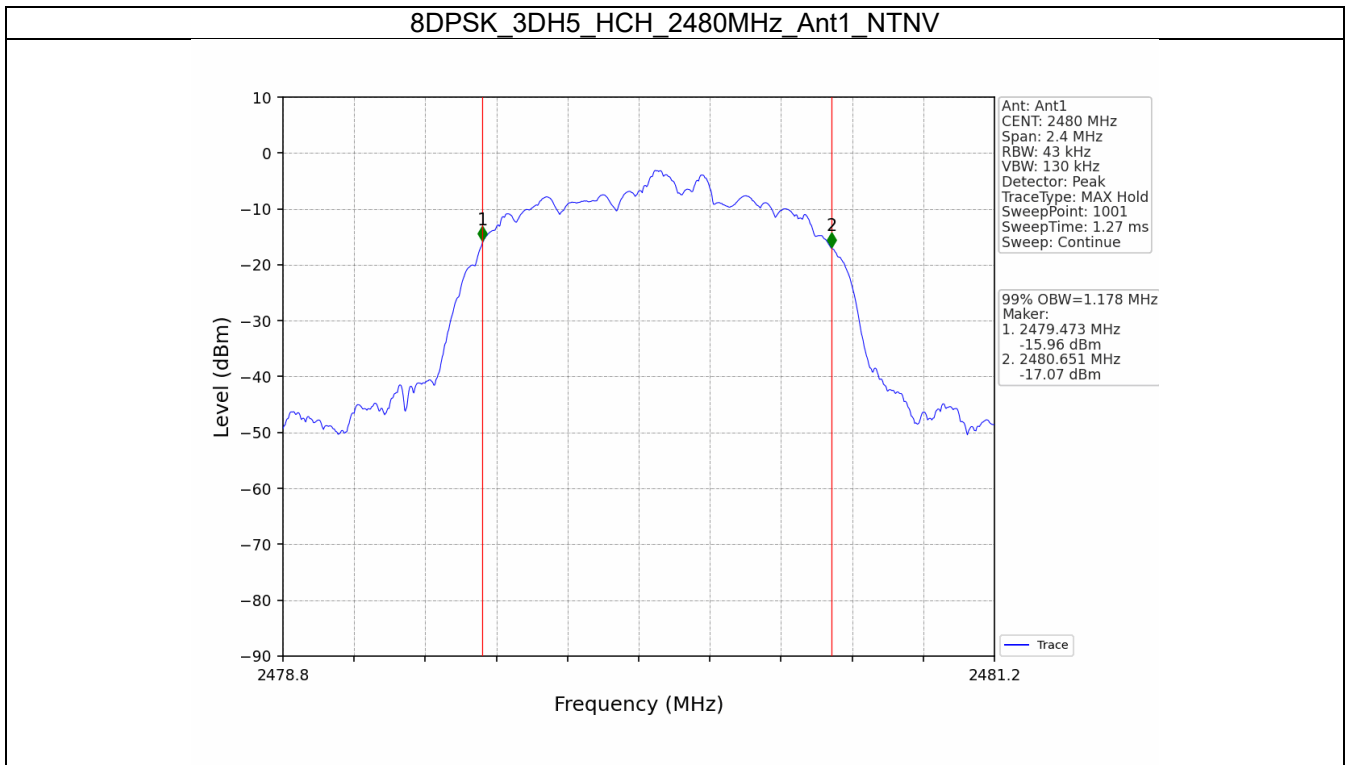
2.1.2 Test Graph









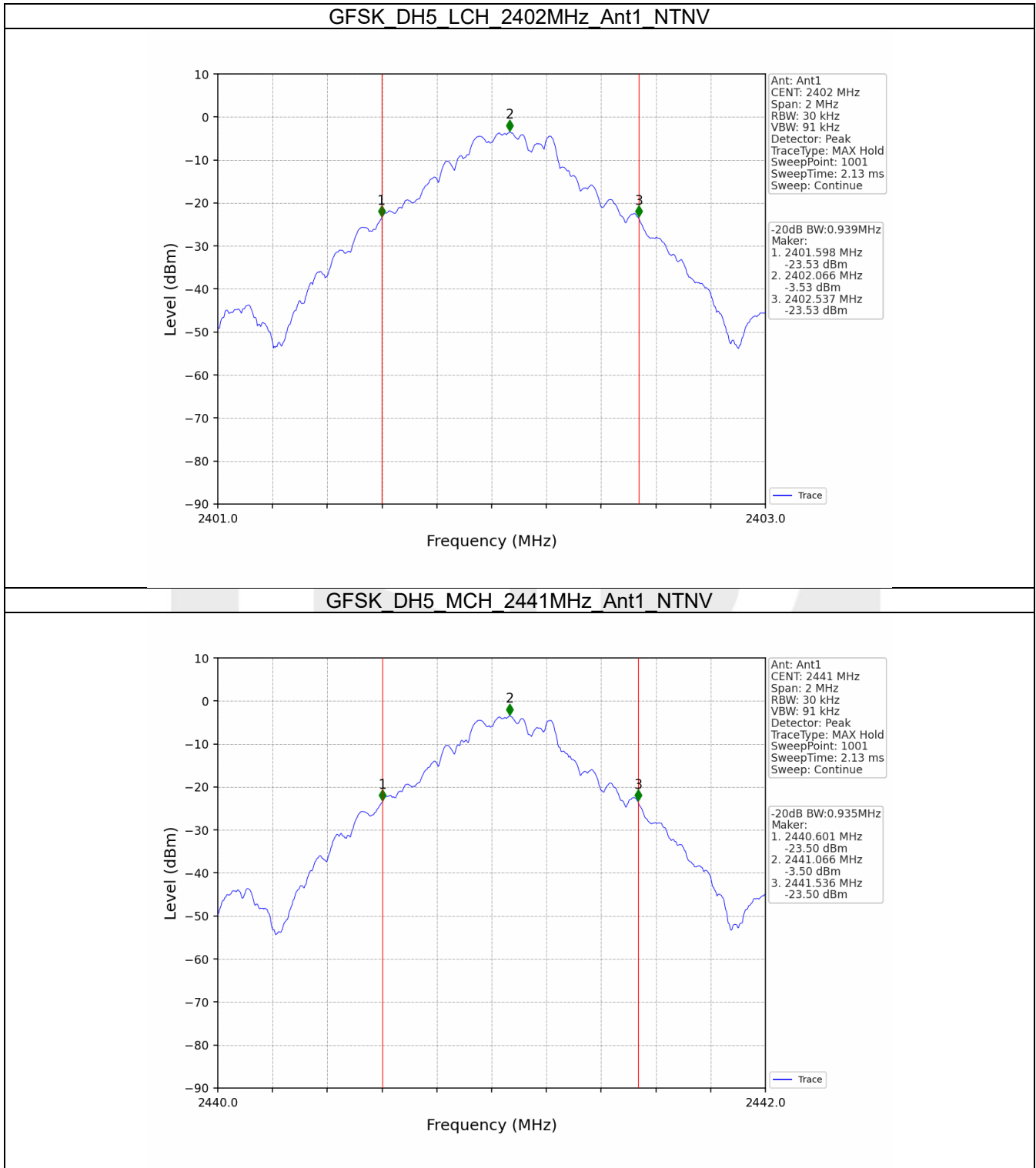


## 2.2 20dB BW

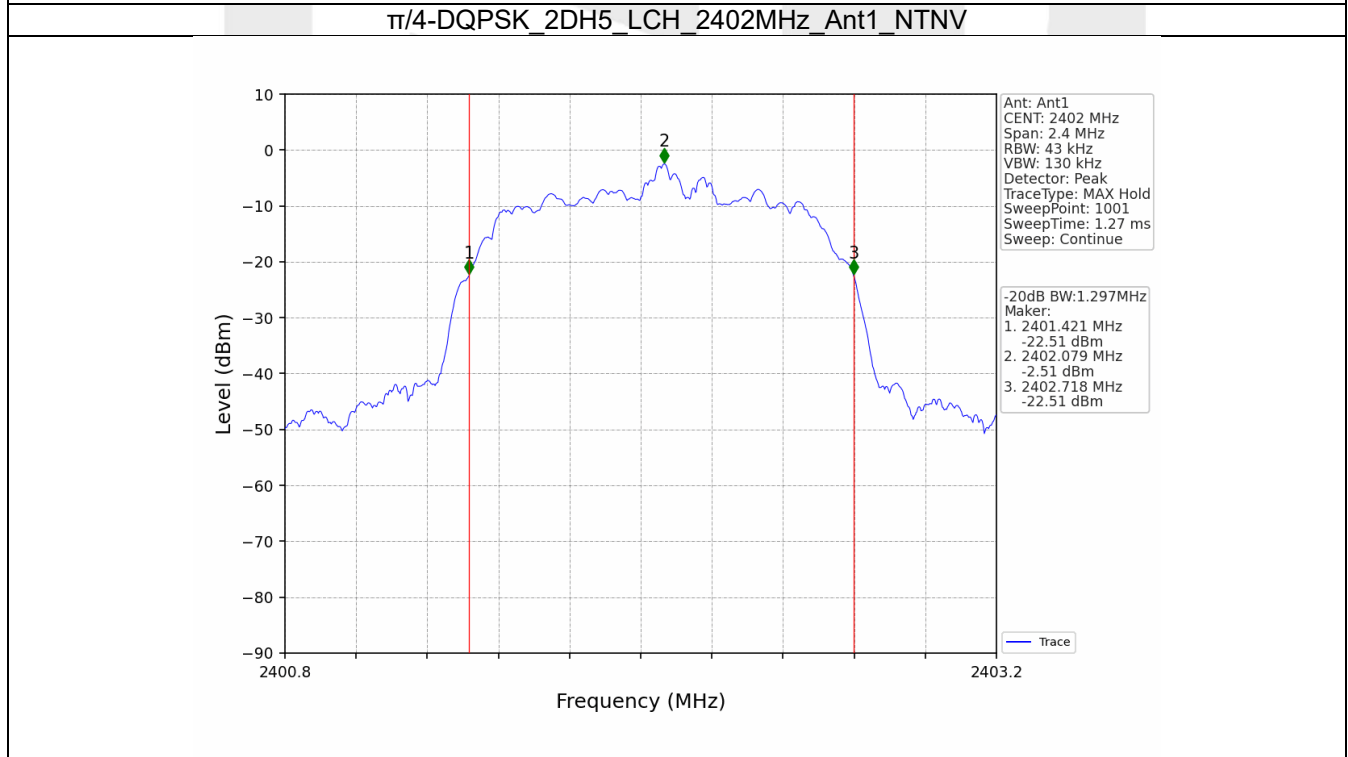
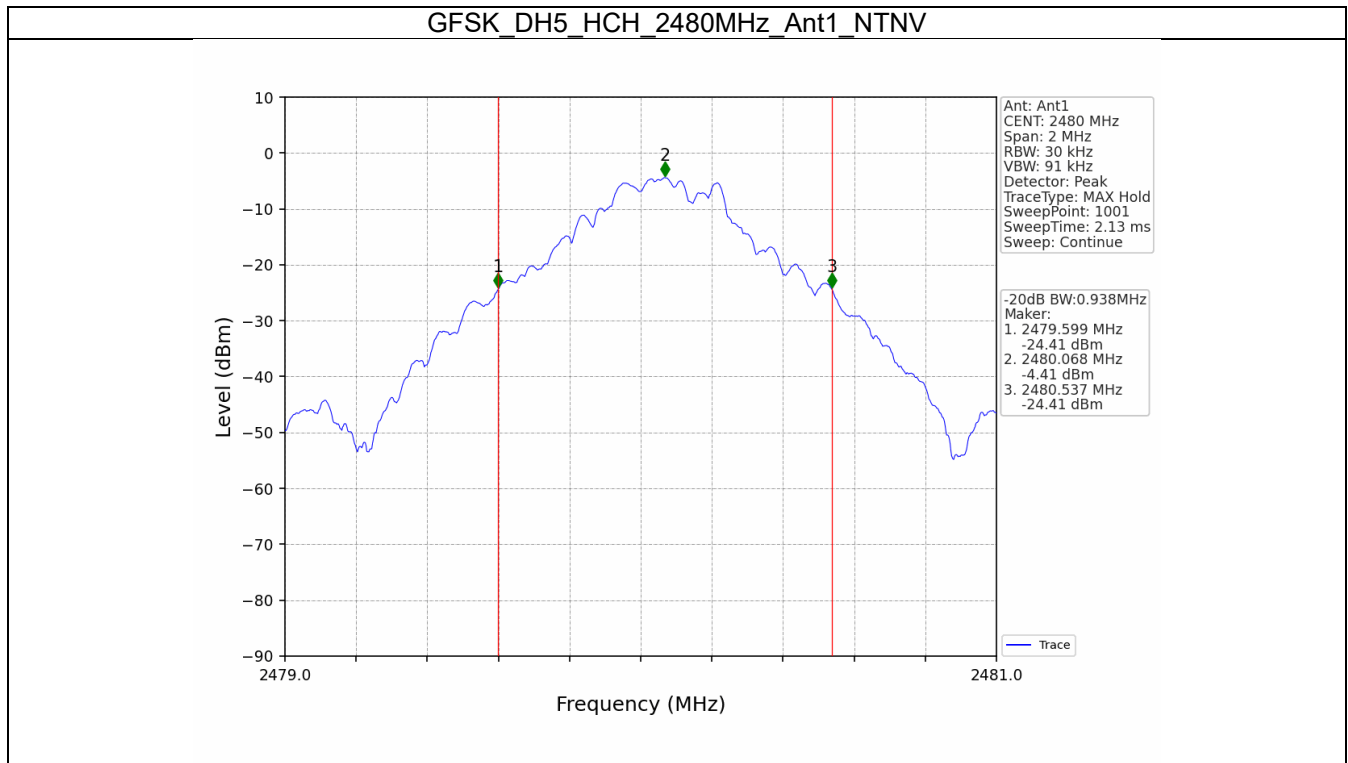
### 2.2.1 Test Result

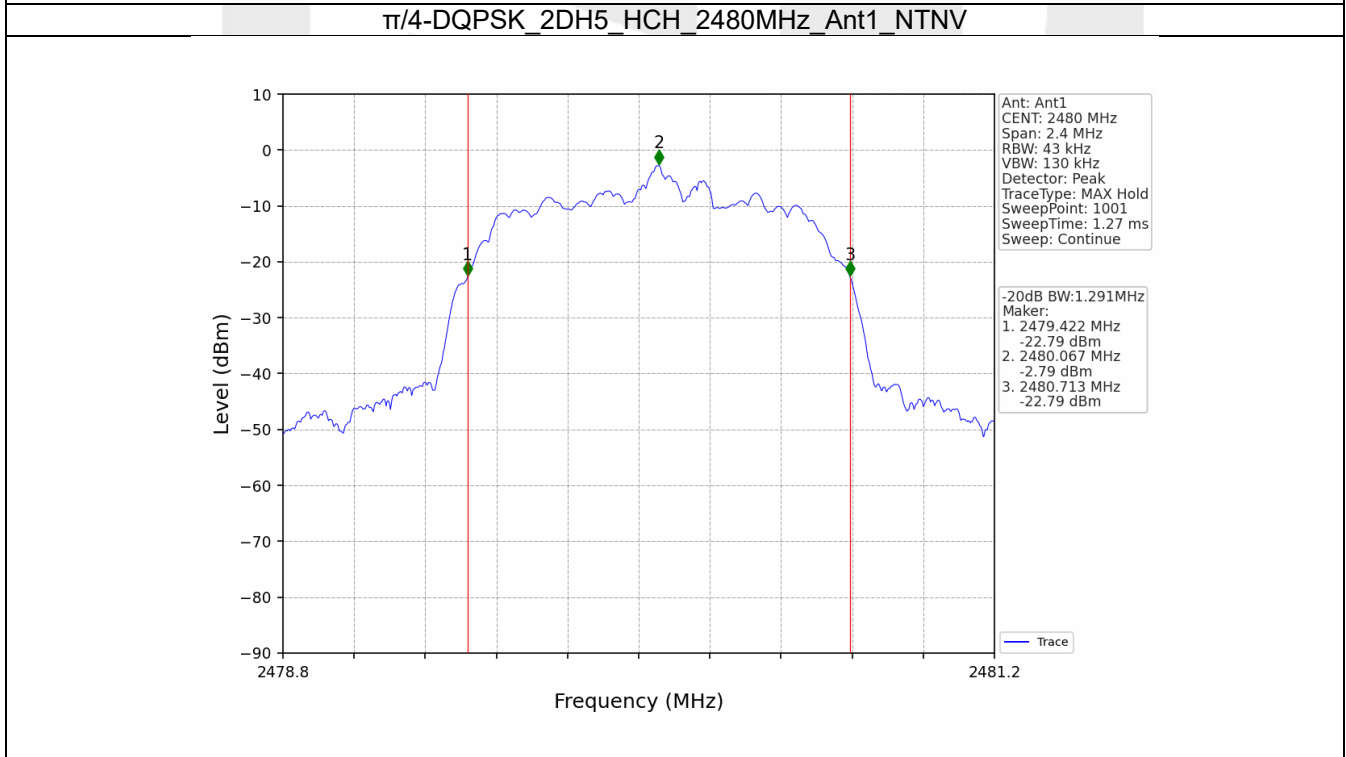
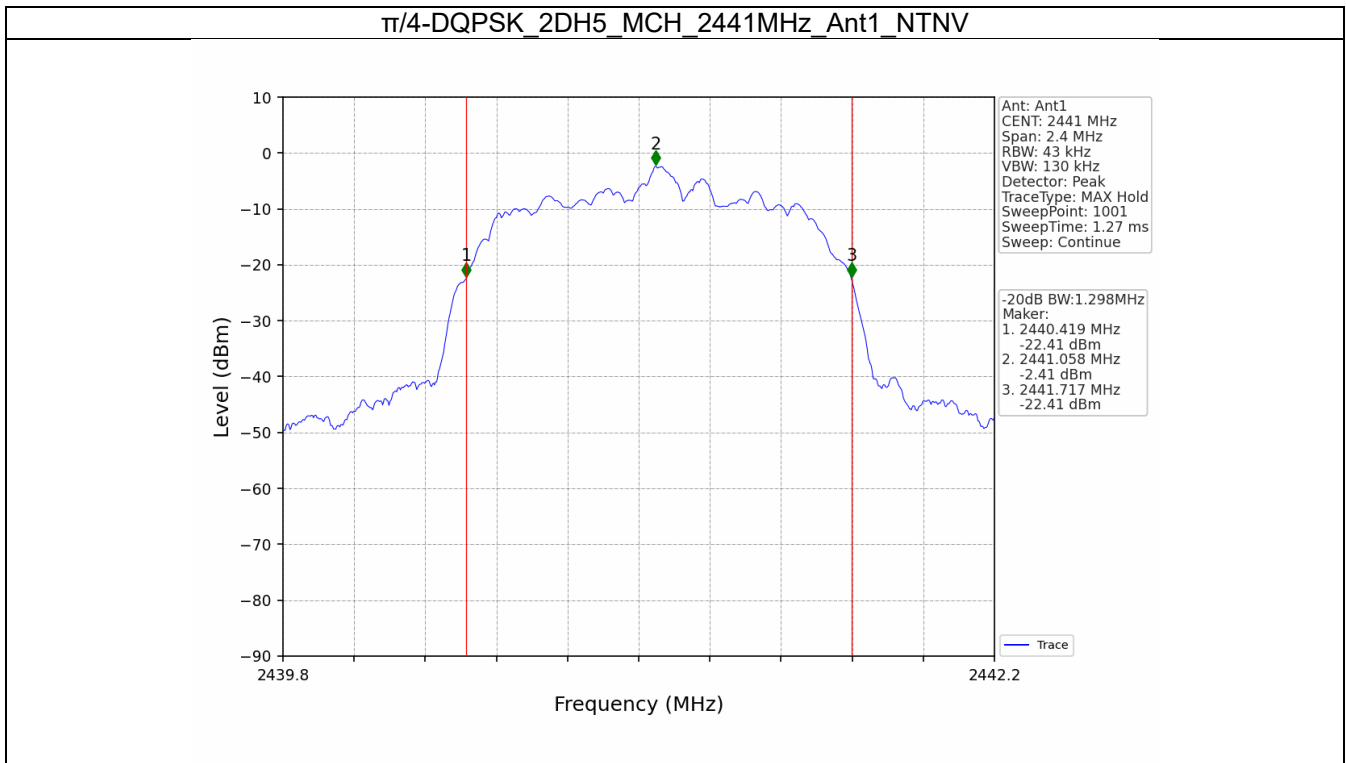
| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) |       | Verdict |
|----------------|---------|-----------------|-------------|-----|----------------------|-------|---------|
|                |         |                 |             |     | Result               | Limit |         |
| GFSK           | SISO    | 2402            | DH5         | 1   | 0.939                | /     | Pass    |
|                |         | 2441            | DH5         | 1   | 0.935                | /     | Pass    |
|                |         | 2480            | DH5         | 1   | 0.938                | /     | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.297                | /     | Pass    |
|                |         | 2441            | 2DH5        | 1   | 1.298                | /     | Pass    |
|                |         | 2480            | 2DH5        | 1   | 1.291                | /     | Pass    |
| 8DPSK          | SISO    | 2402            | 3DH5        | 1   | 1.308                | /     | Pass    |
|                |         | 2441            | 3DH5        | 1   | 1.307                | /     | Pass    |
|                |         | 2480            | 3DH5        | 1   | 1.307                | /     | Pass    |

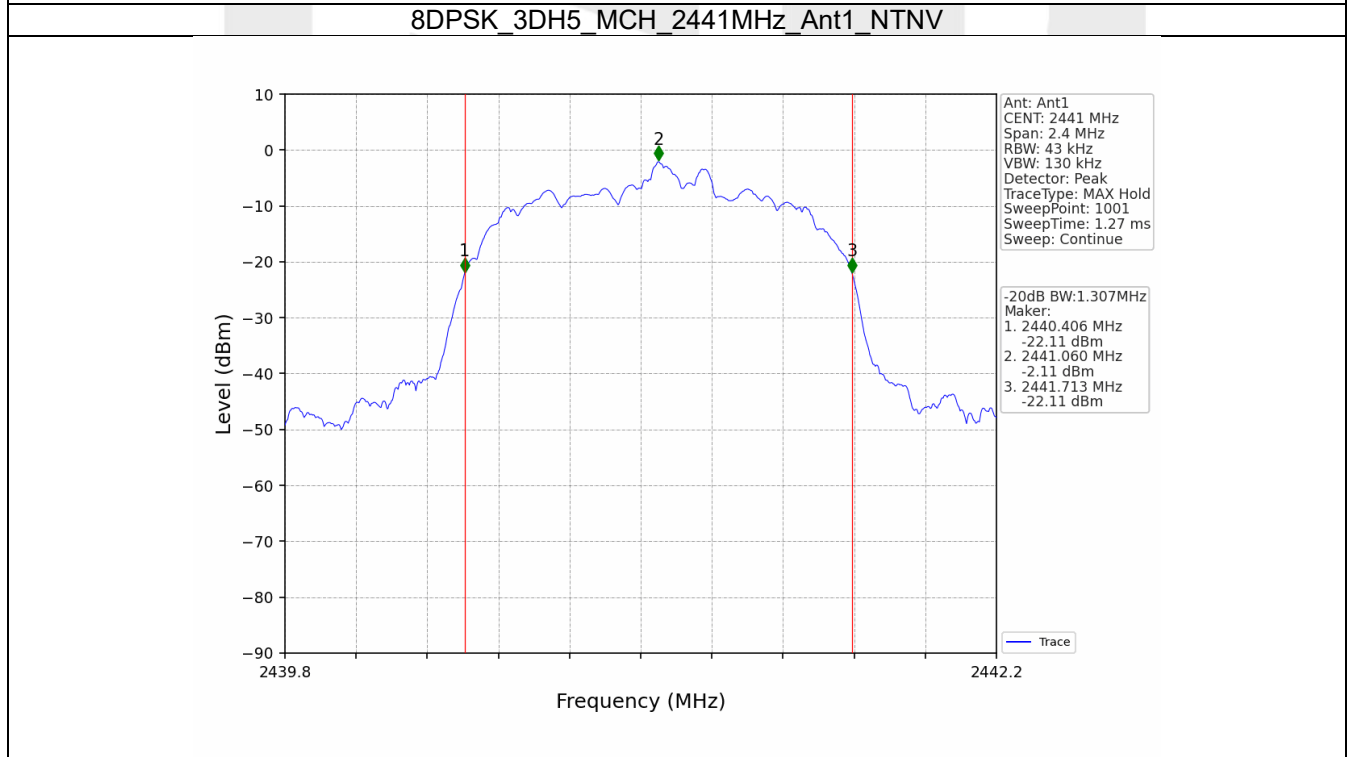
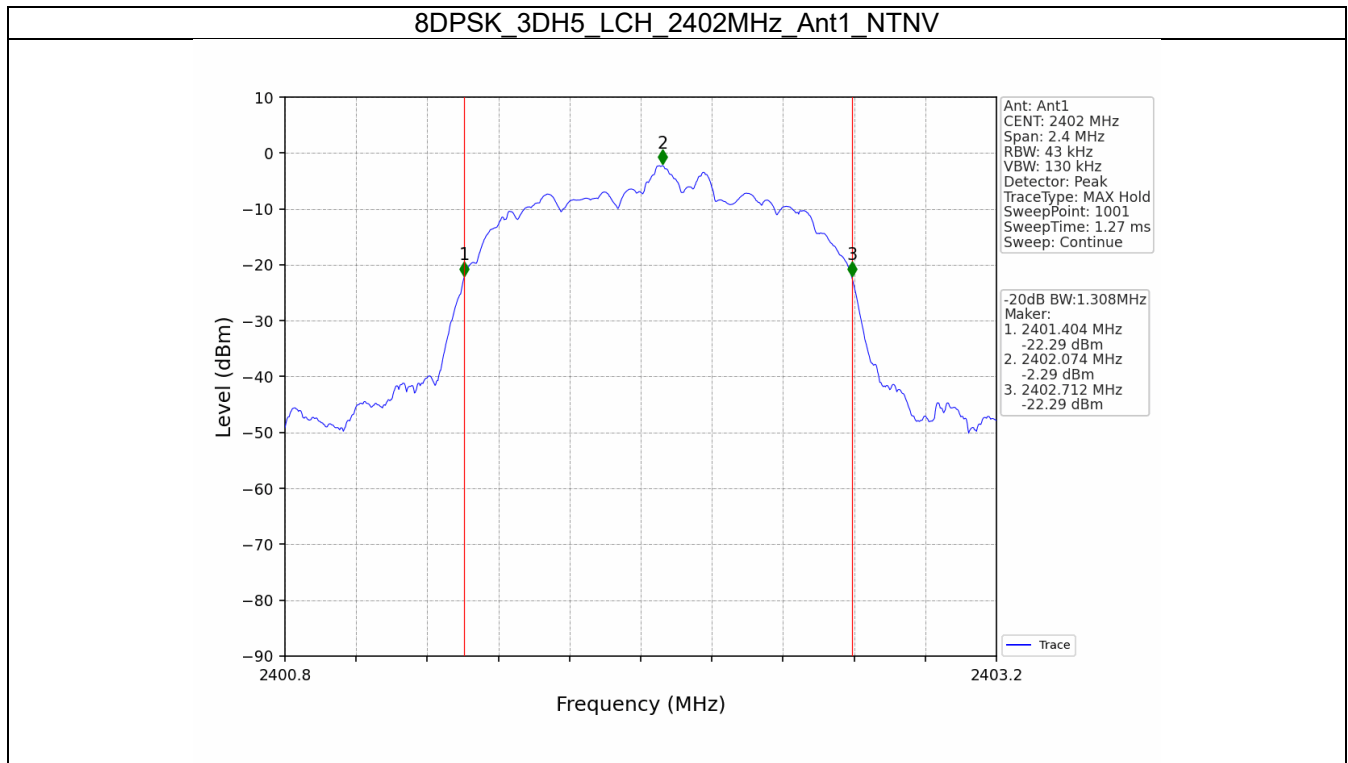
2.2.2 Test Graph

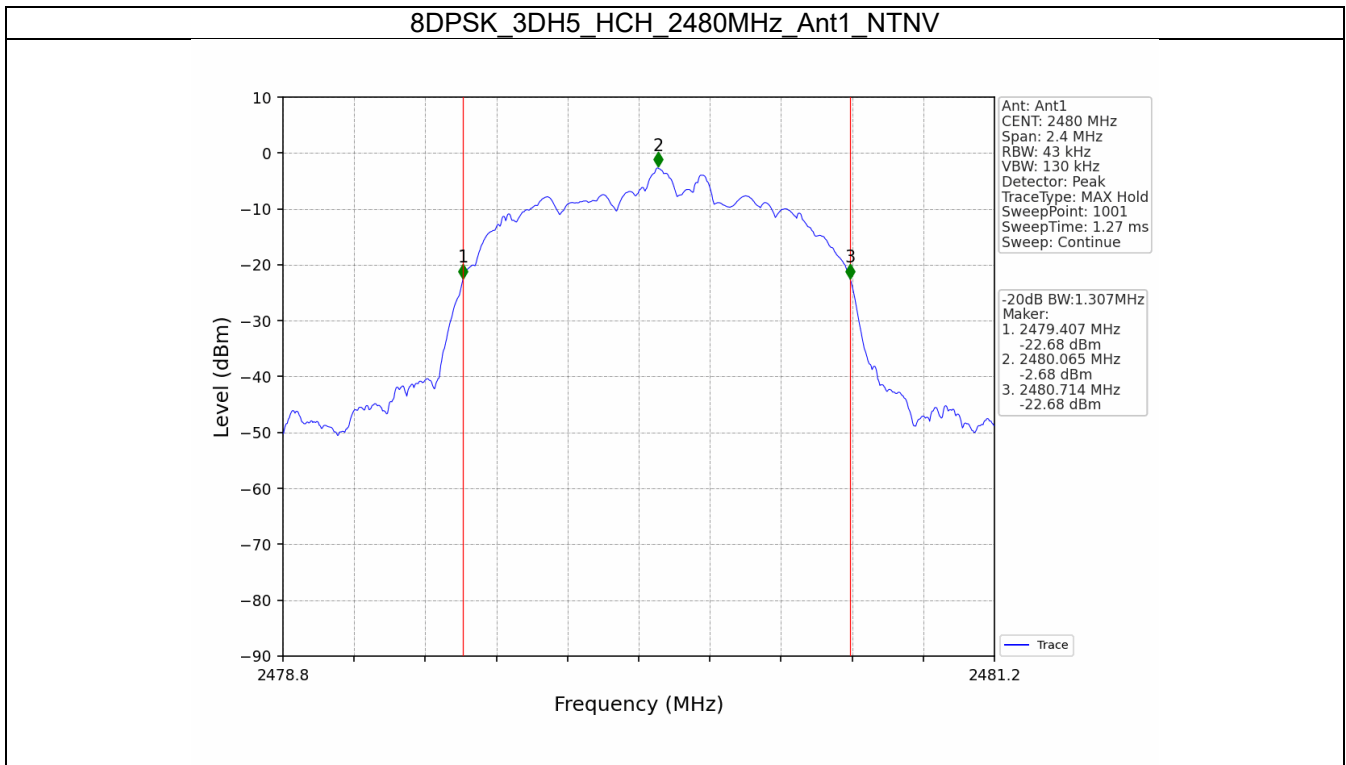












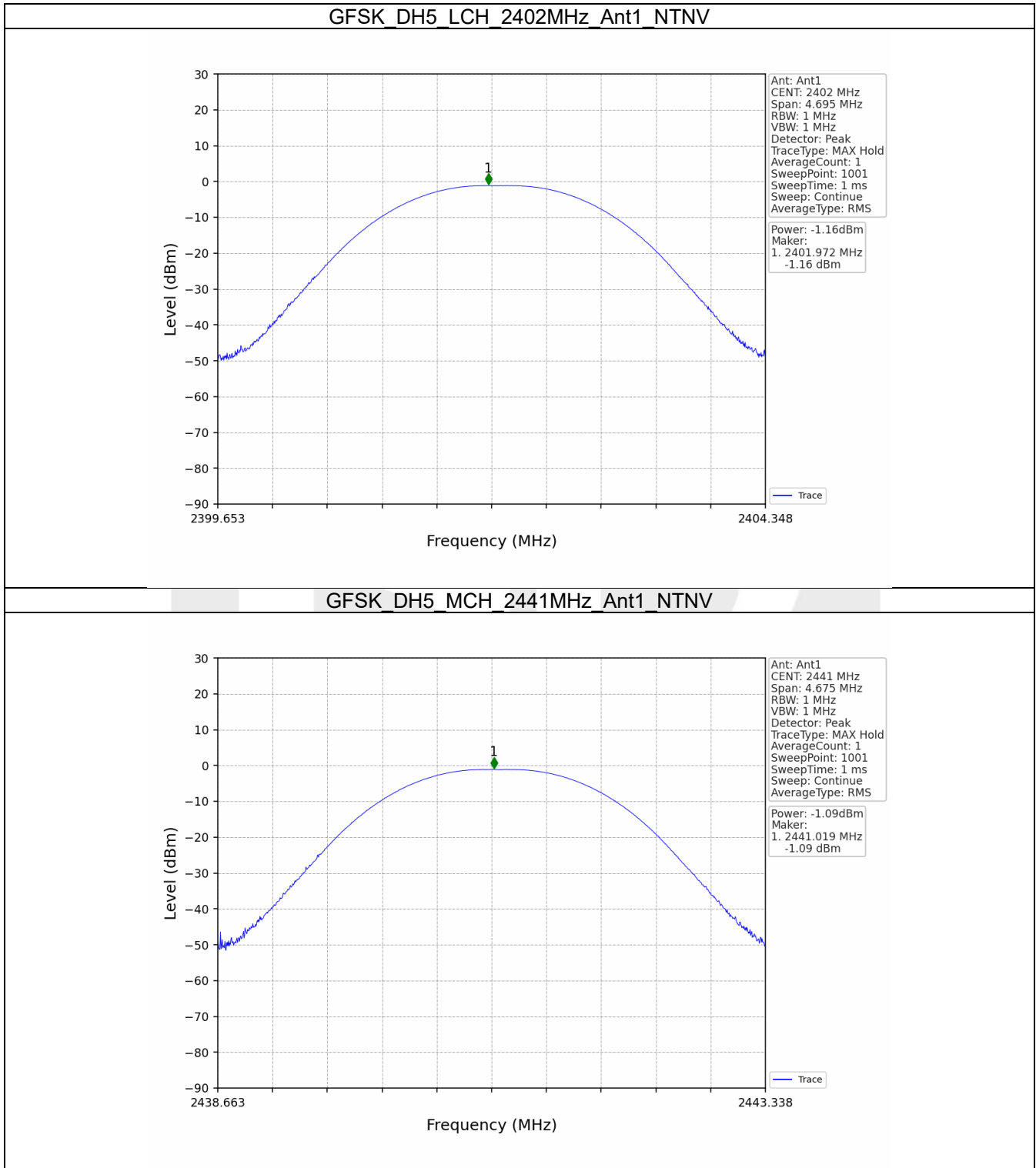
### 3. Maximum Conducted Output Power

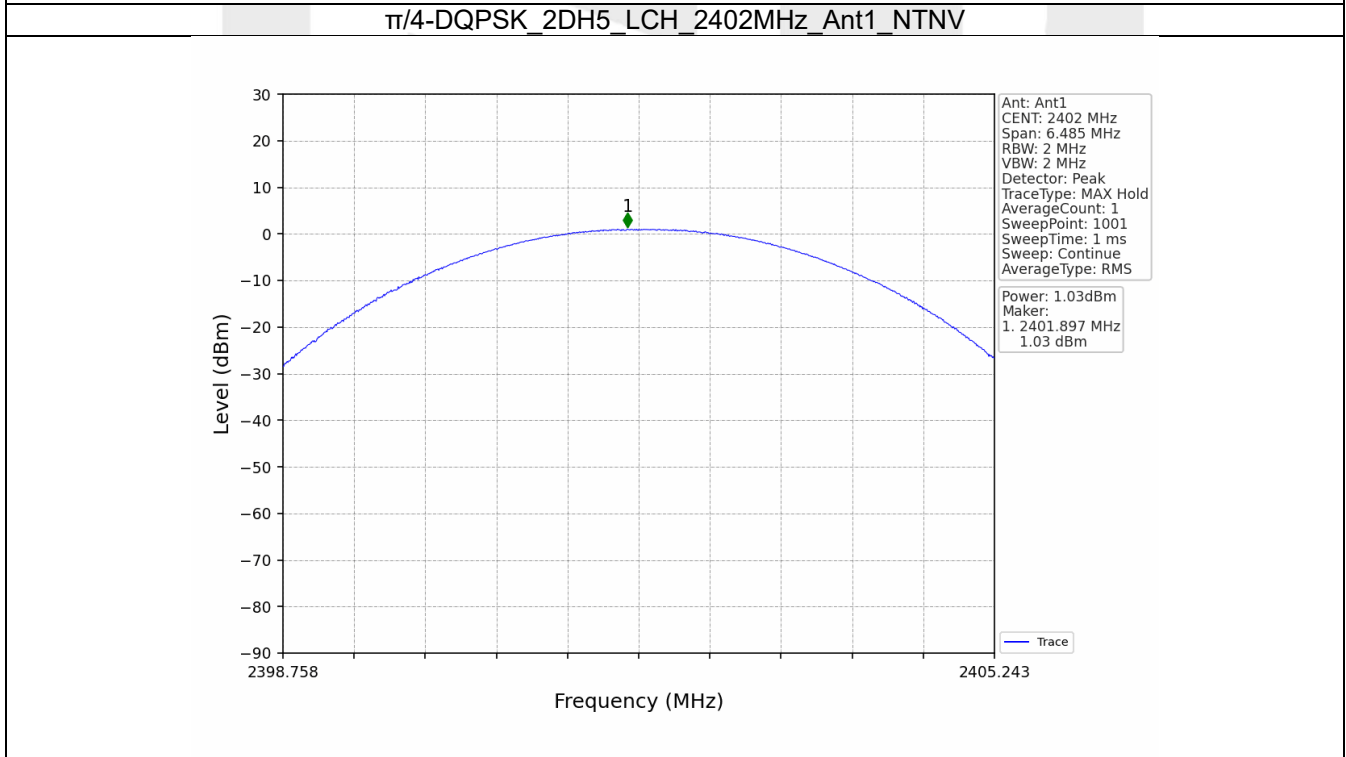
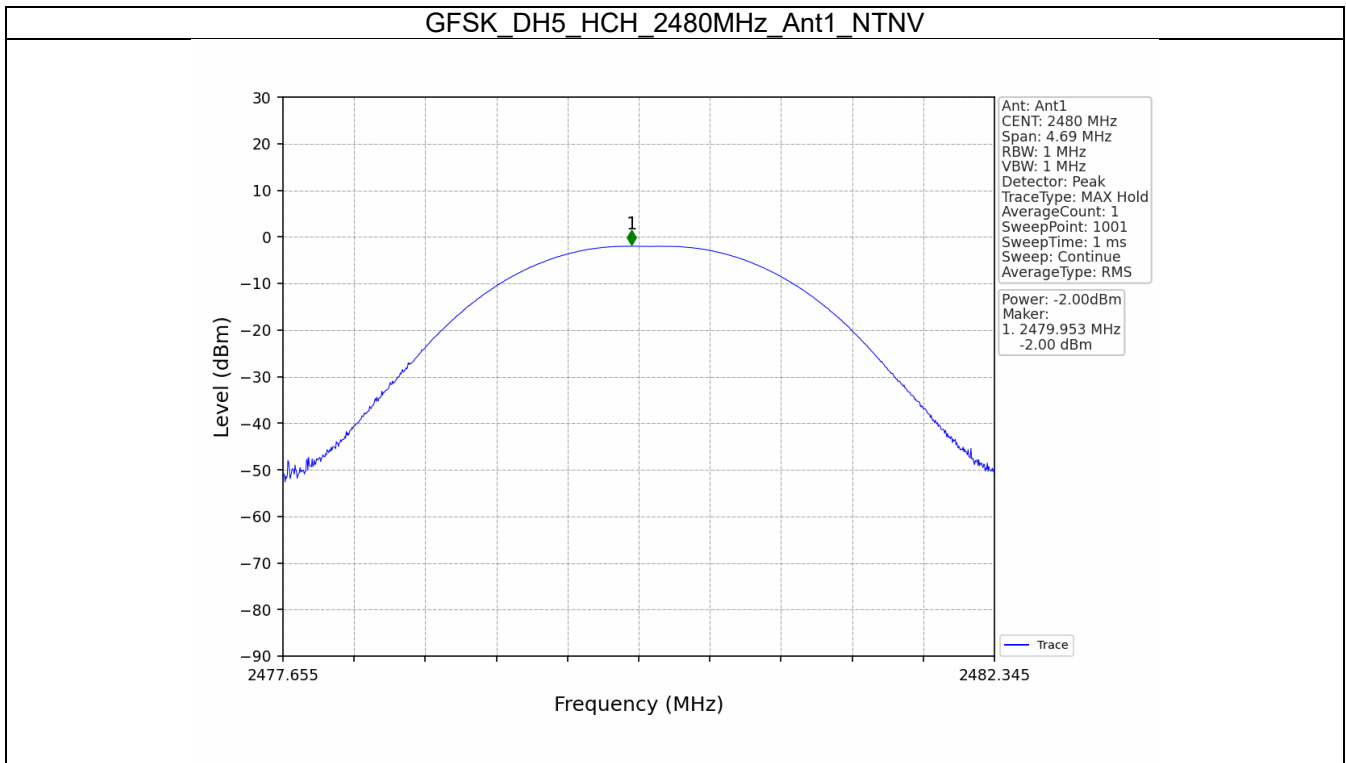
#### 3.1 Power

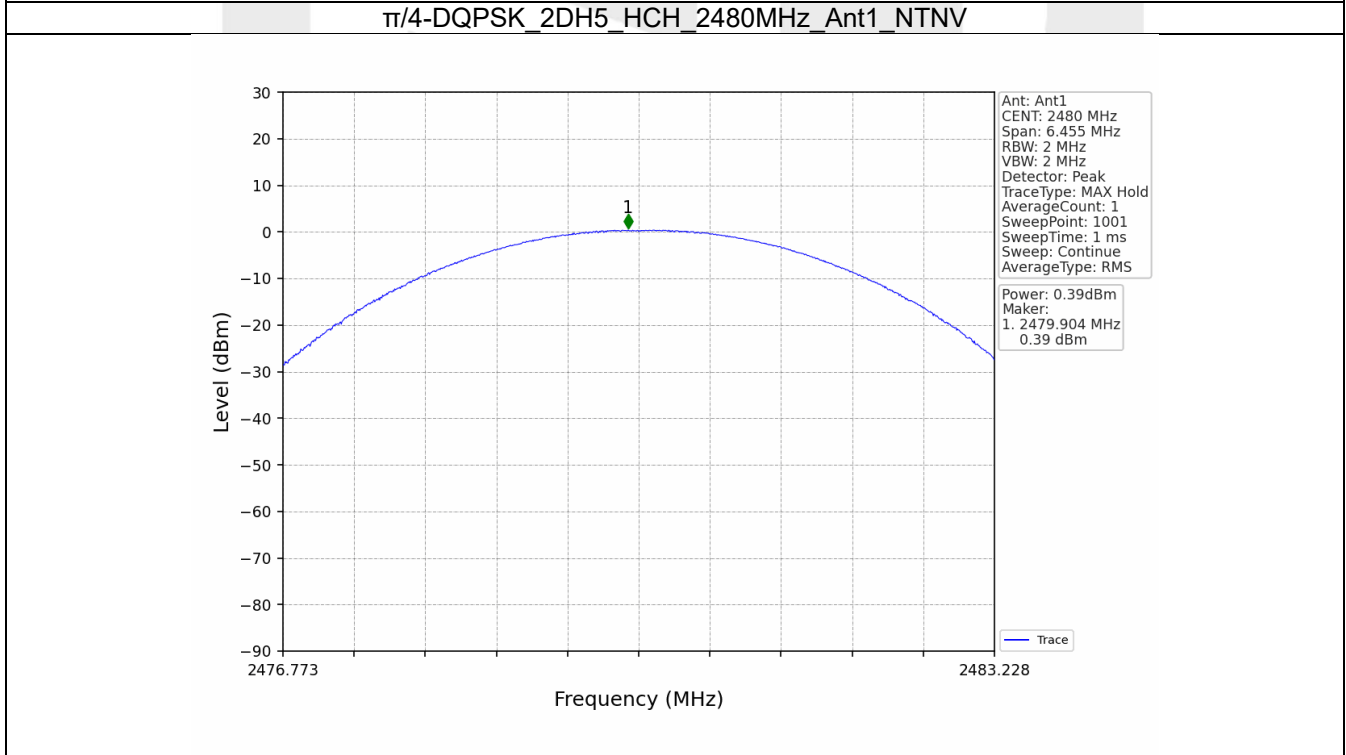
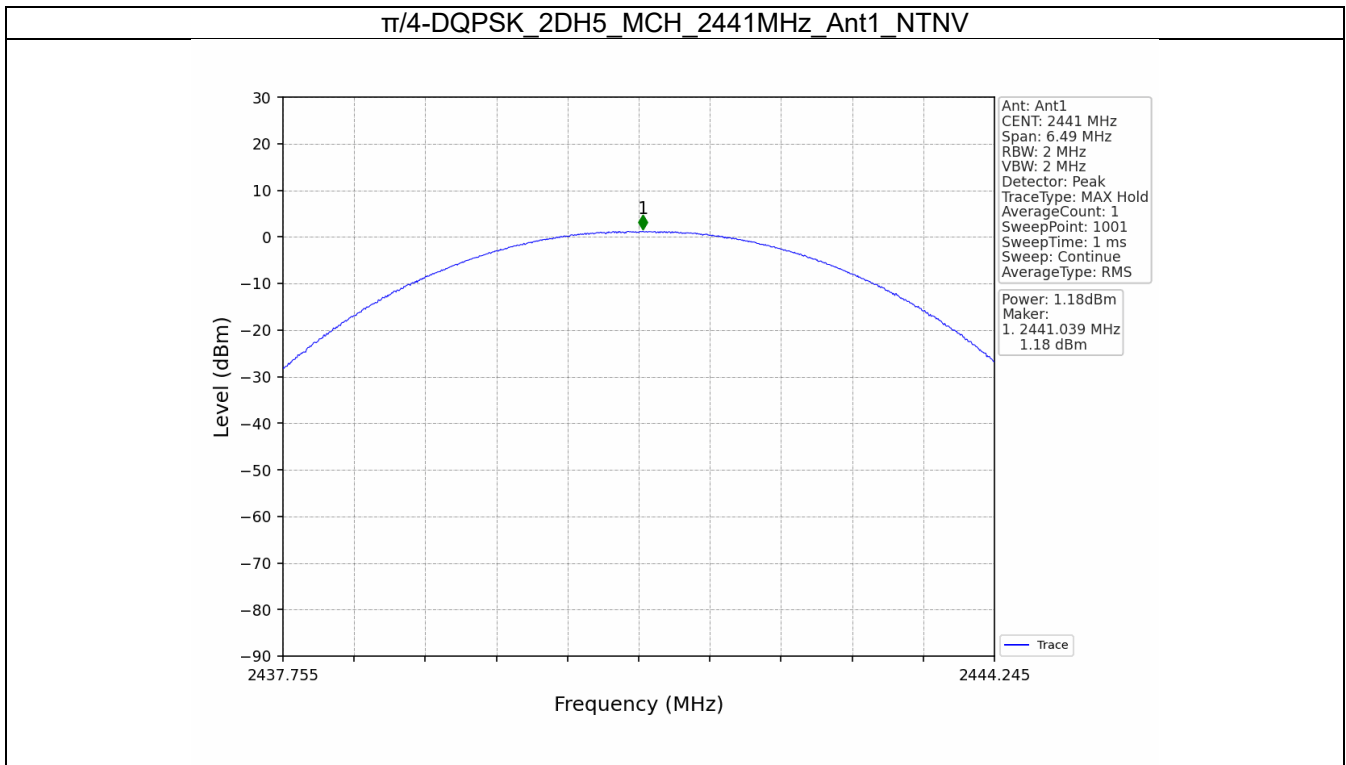
##### 3.1.1 Test Result

| Mode           | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |         | Verdict |
|----------------|---------|-----------------|-------------|---|---------|---------|
|                |         |                 |             | ANT1                                      | Limit   |         |
| GFSK           | SISO    | 2402            | DH5         | -1.16                                     | <=30    | Pass    |
|                |         | 2441            | DH5         | -1.09                                     | <=30    | Pass    |
|                |         | 2480            | DH5         | -2.00                                     | <=30    | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1.03                                      | <=20.97 | Pass    |
|                |         | 2441            | 2DH5        | 1.18                                      | <=20.97 | Pass    |
|                |         | 2480            | 2DH5        | 0.39                                      | <=20.97 | Pass    |
| 8DPSK          | SISO    | 2402            | 3DH5        | 1.49                                      | <=20.97 | Pass    |
|                |         | 2441            | 3DH5        | 1.71                                      | <=20.97 | Pass    |
|                |         | 2480            | 3DH5        | 1.04                                      | <=20.97 | Pass    |

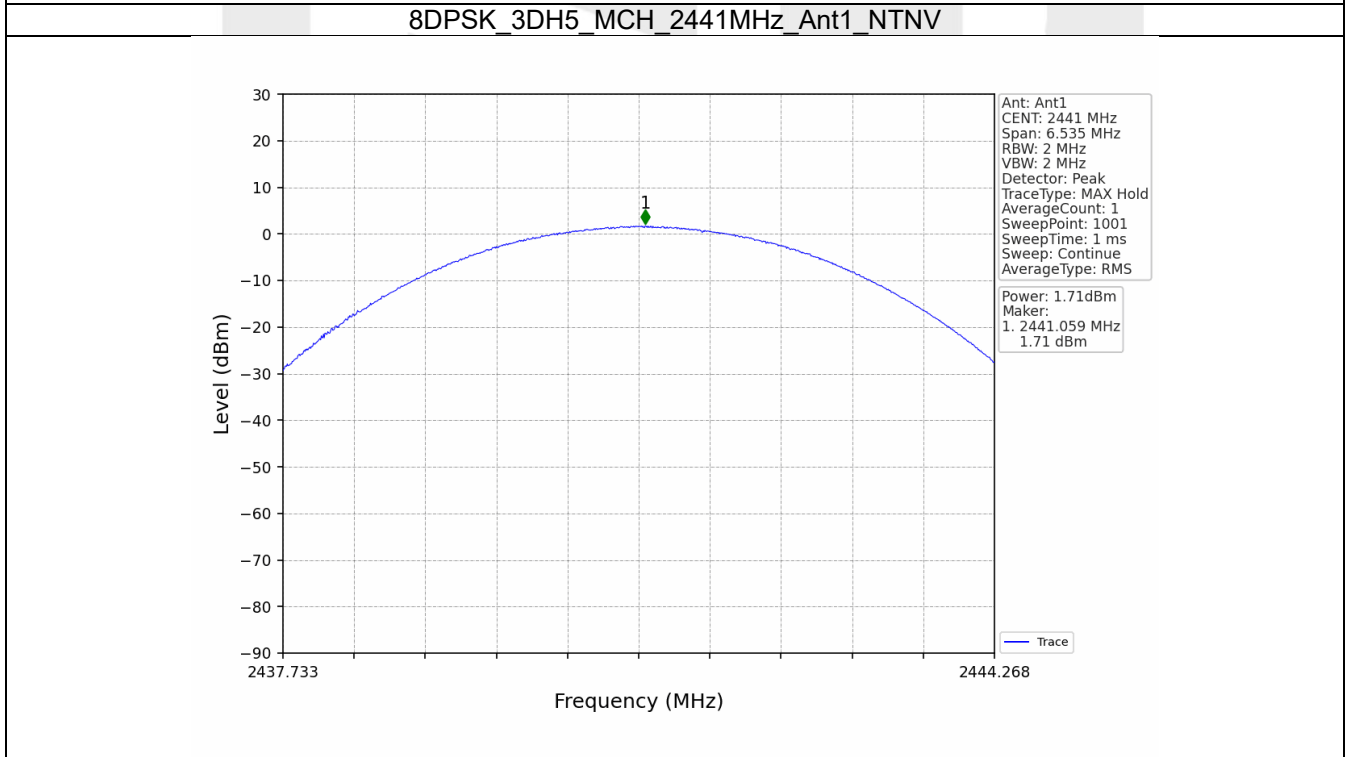
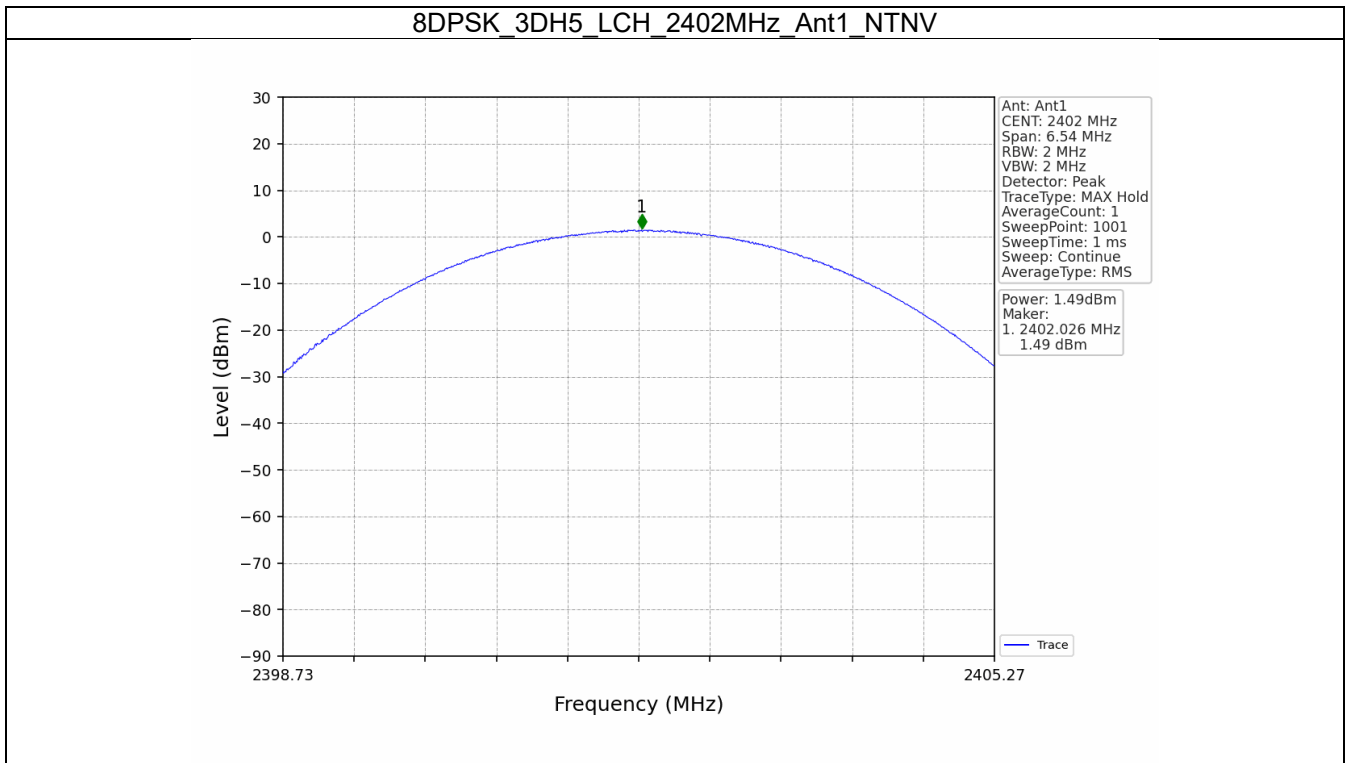
3.1.2 Test Graph

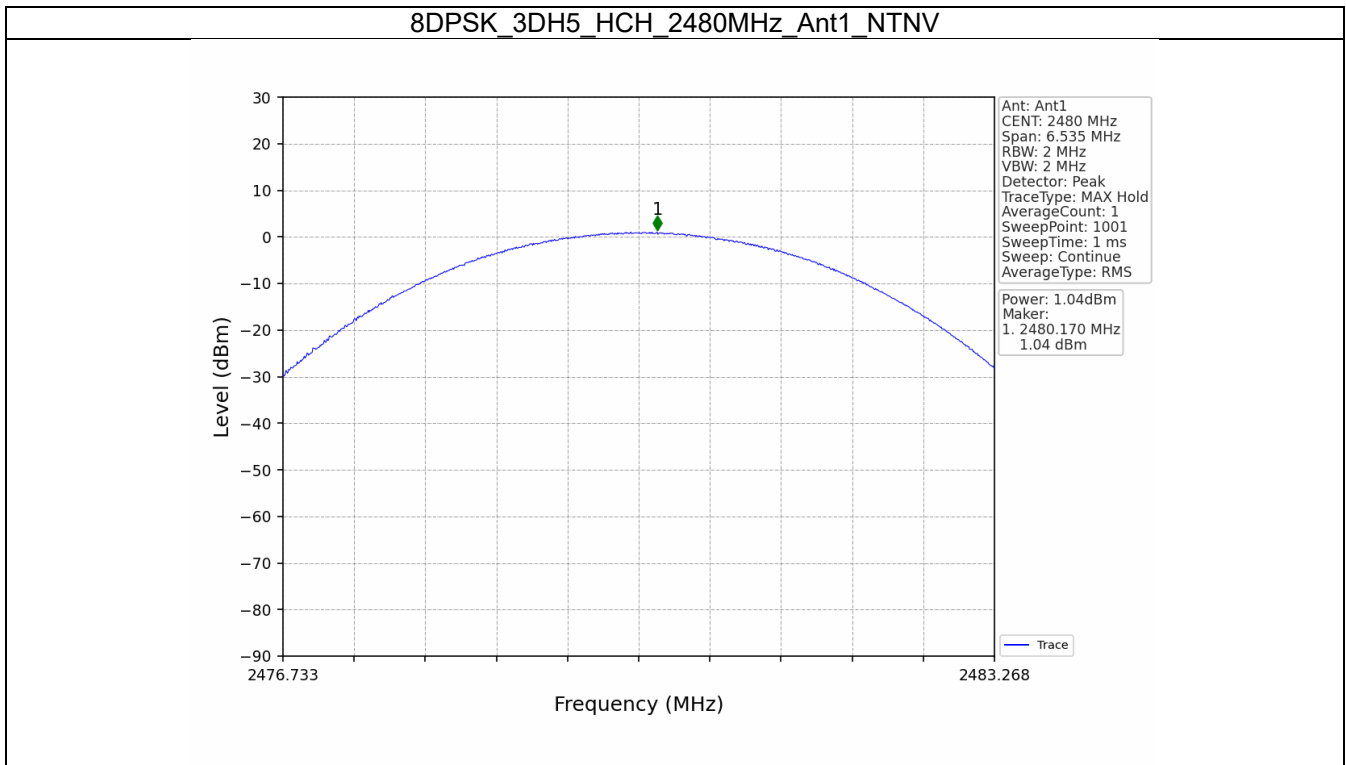












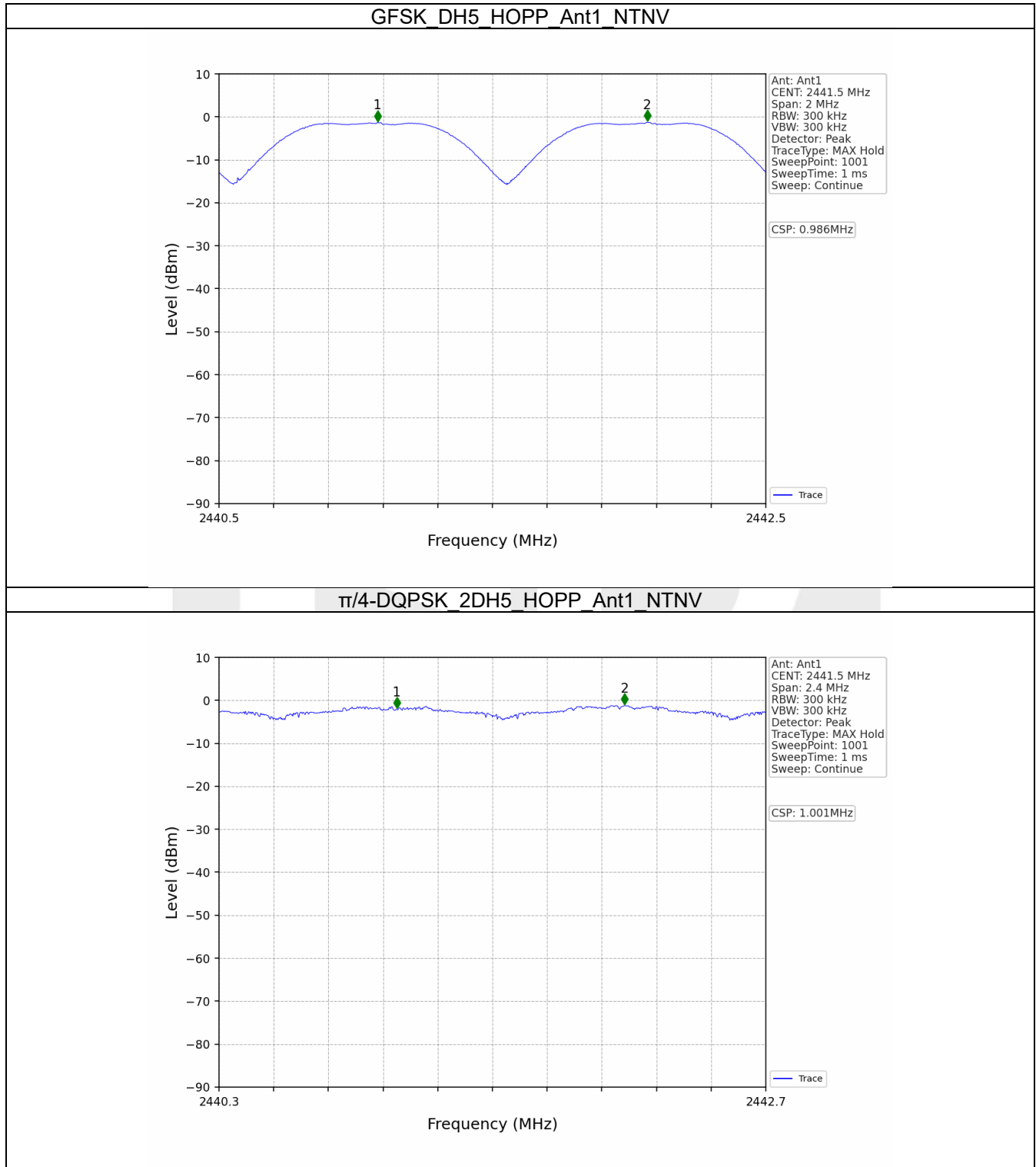
#### 4. Carrier Frequency Separation

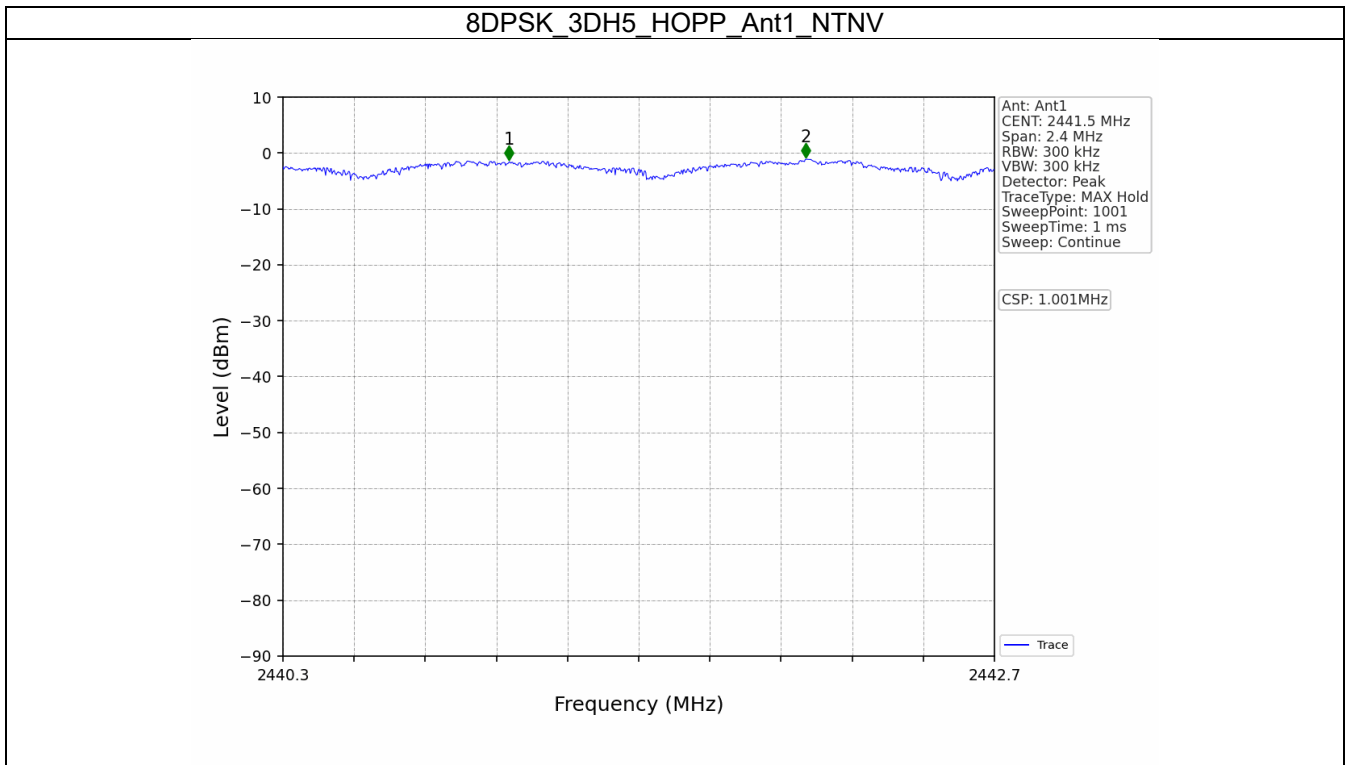
##### 4.1 Ant1

##### 4.1.1 Test Result

| Ant1           |         |                 |             |                          |                      |              |         |
|----------------|---------|-----------------|-------------|--------------------------|----------------------|--------------|---------|
| Mode           | TX Type | Frequency (MHz) | Packet Type | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limit (MHz)  | Verdict |
| GFSK           | SISO    | HOPP            | DH5         | 0.986                    | 0.939                | $\geq 0.939$ | Pass    |
| $\pi/4$ -DQPSK | SISO    | HOPP            | 2DH5        | 1.001                    | 1.298                | $\geq 0.865$ | Pass    |
| 8DPSK          | SISO    | HOPP            | 3DH5        | 1.001                    | 1.308                | $\geq 0.872$ | Pass    |

4.1.2 Test Graph





## 5. Number of Hopping Frequencies

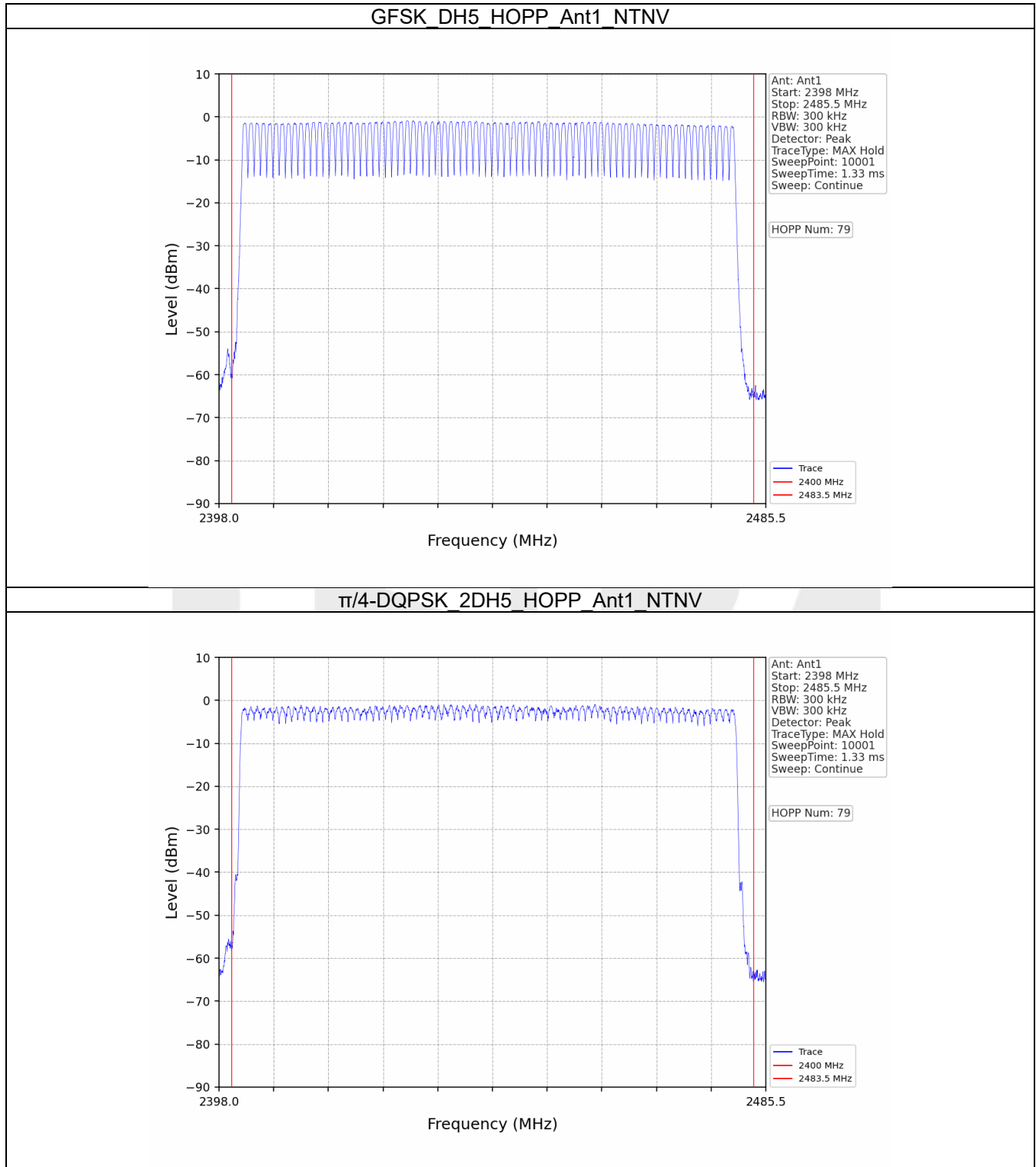
### 5.1 HoppNum

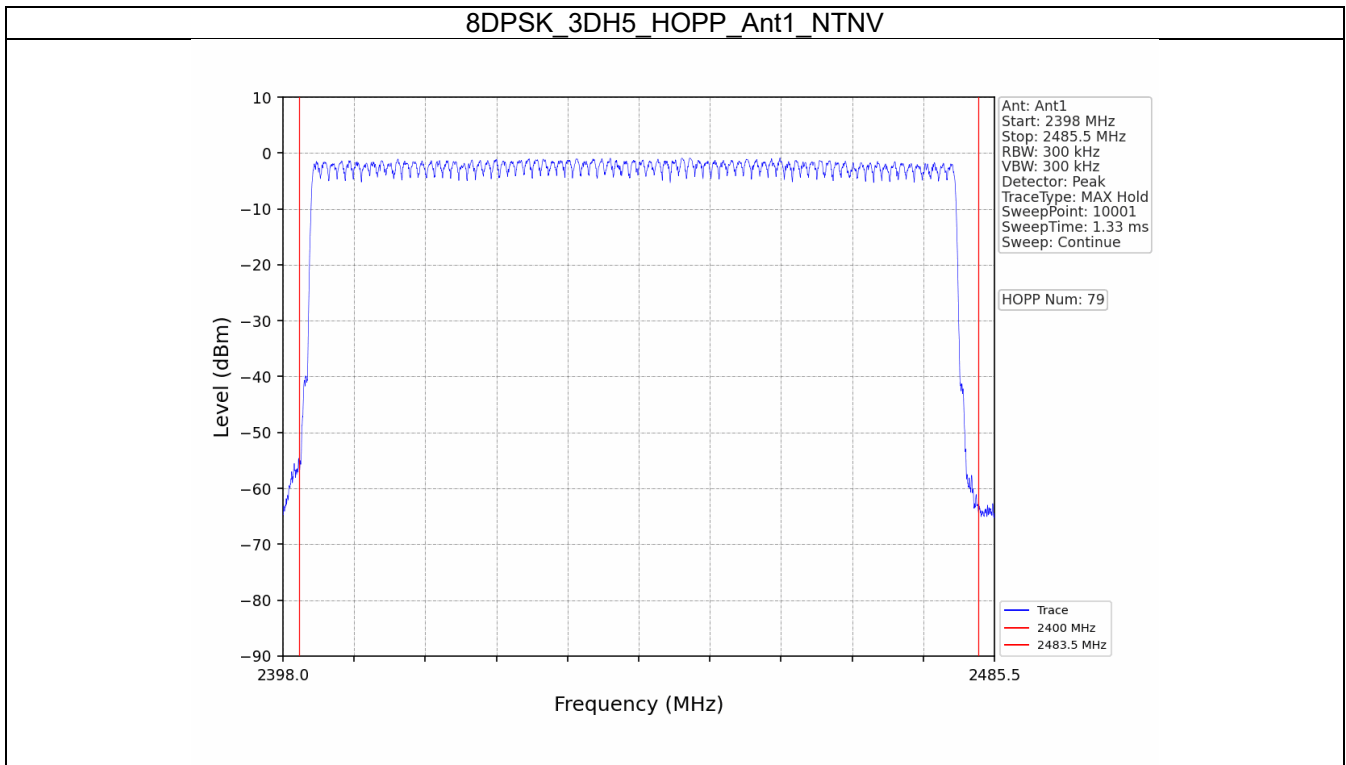
#### 5.1.1 Test Result

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



5.1.2 Test Graph







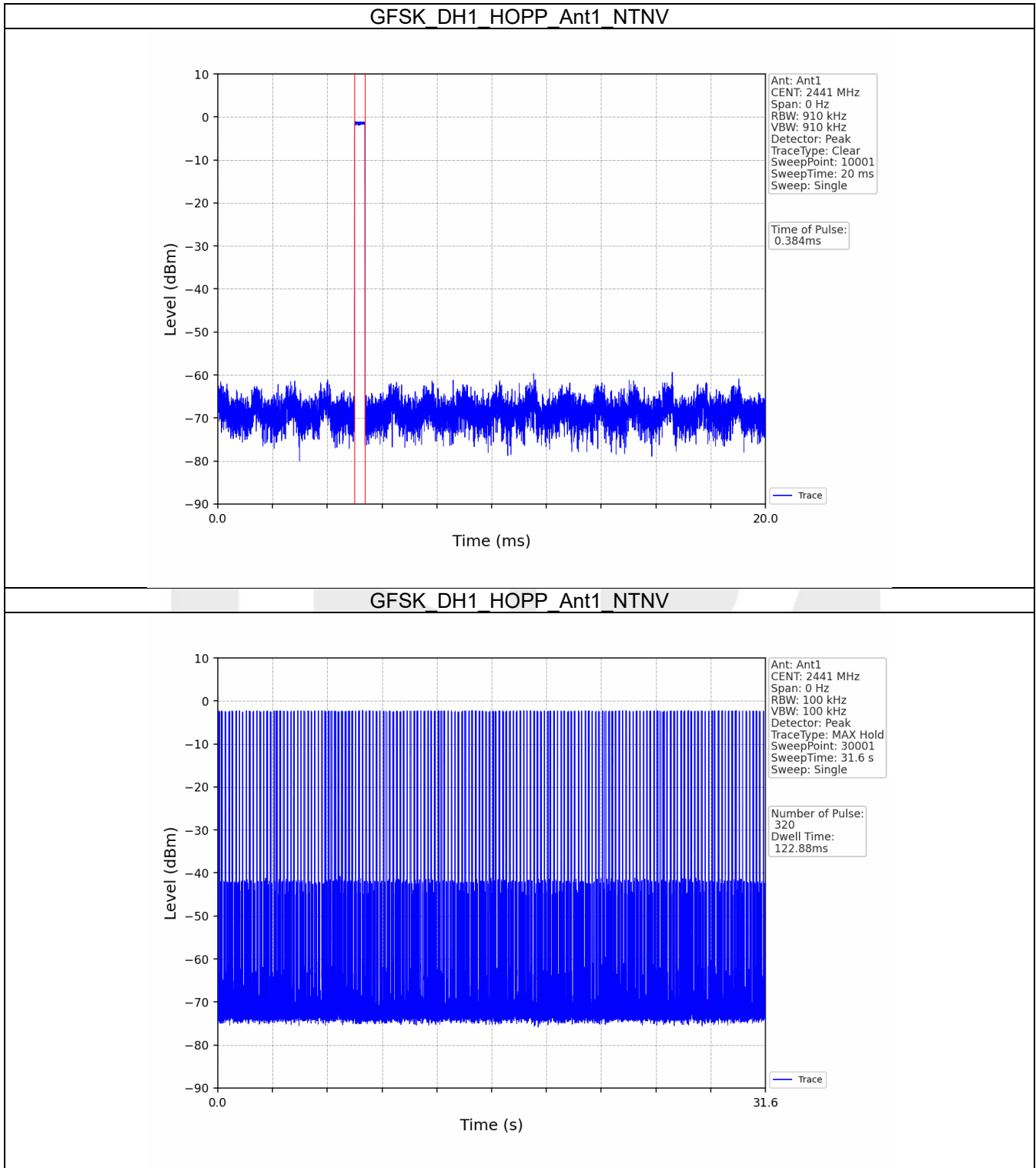
## 6. Time of Occupancy (Dwell Time)

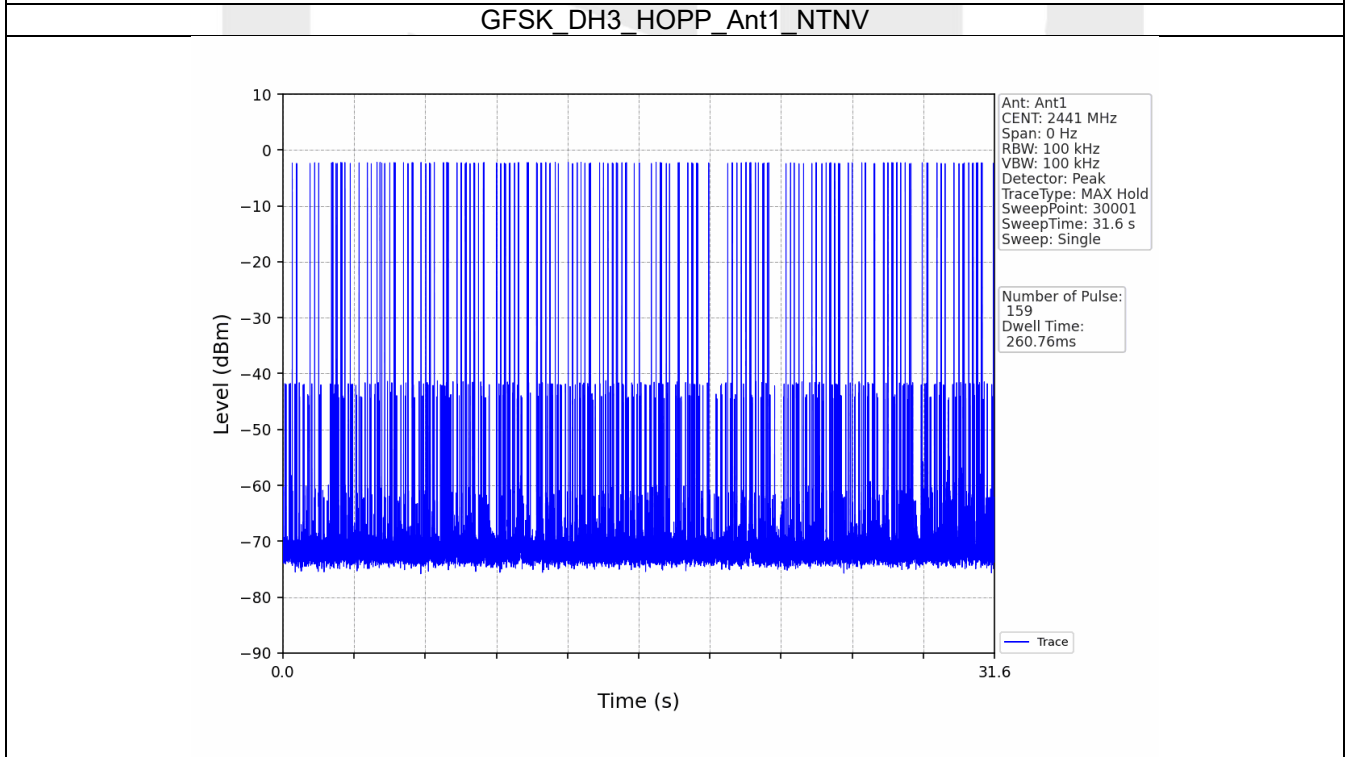
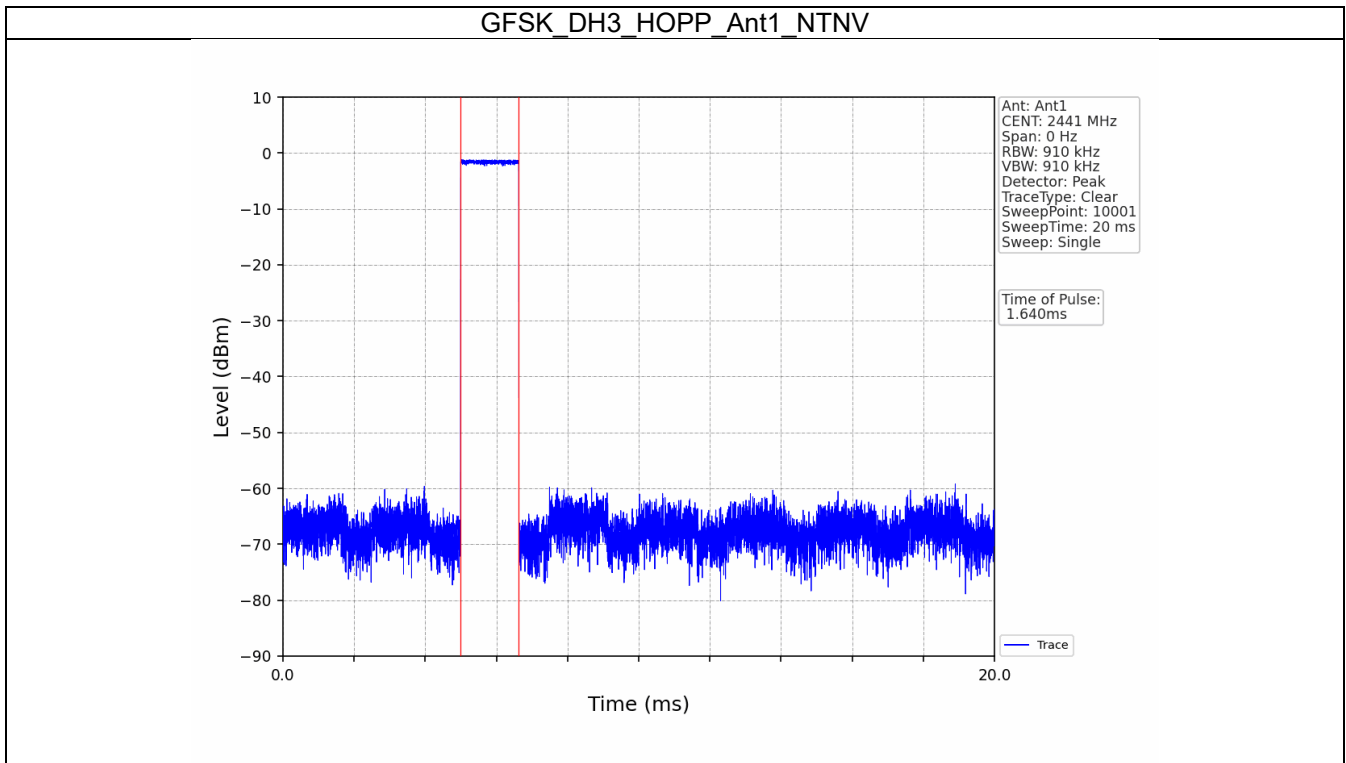
### 6.1 Ant1

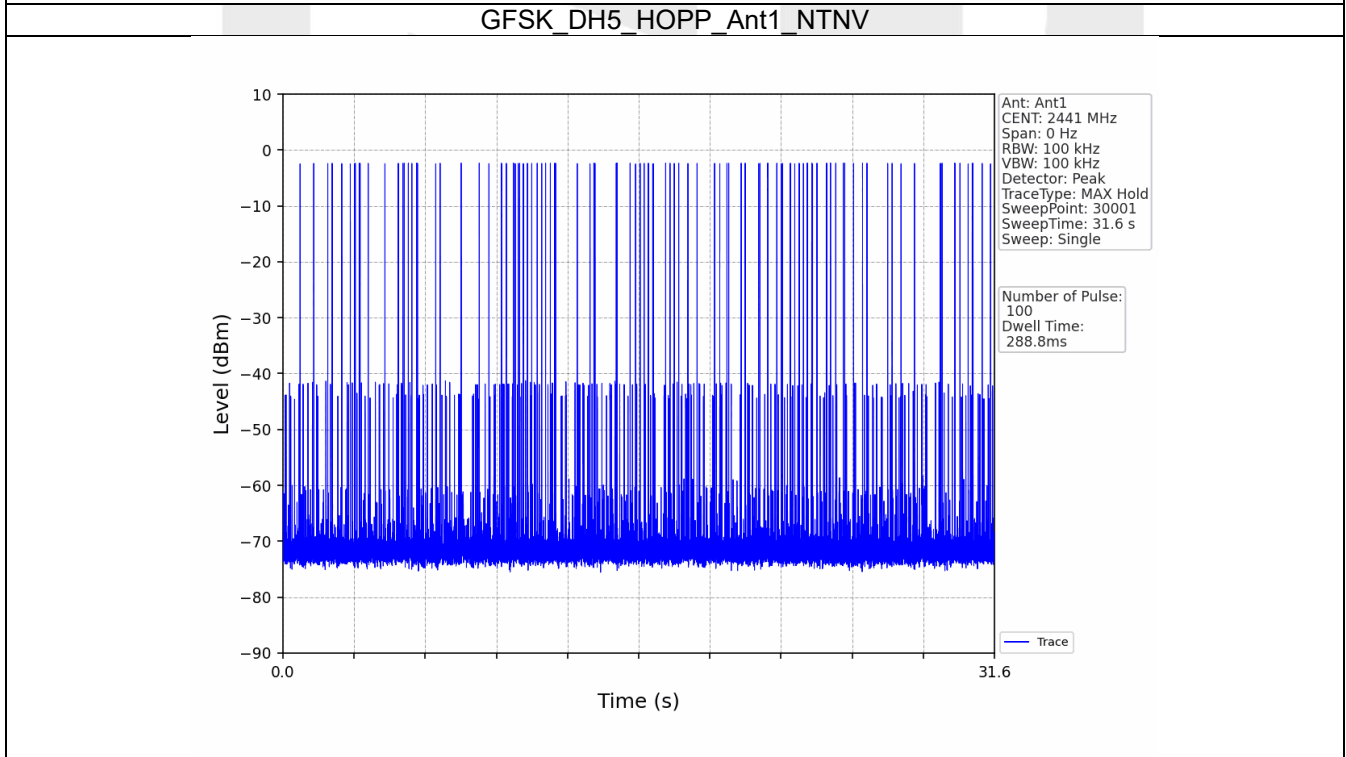
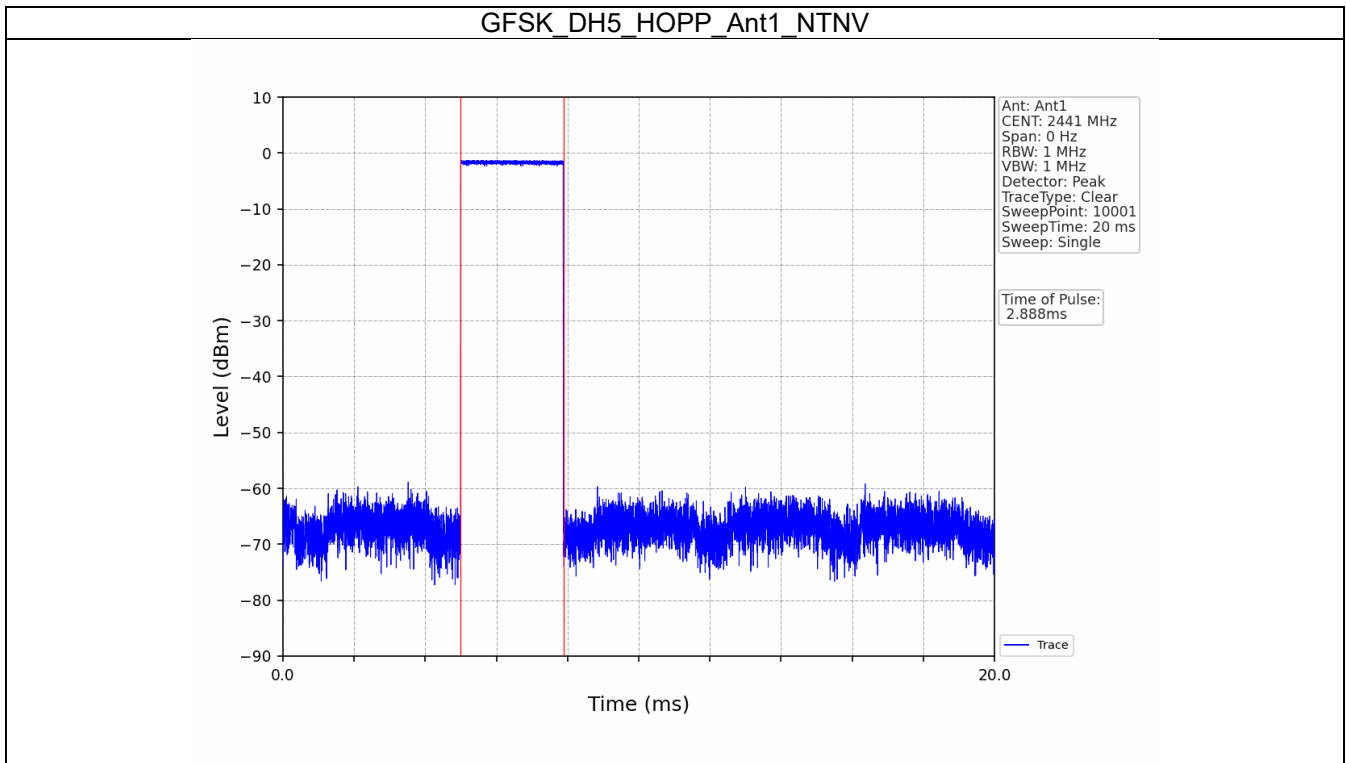
#### 6.1.1 Test Result

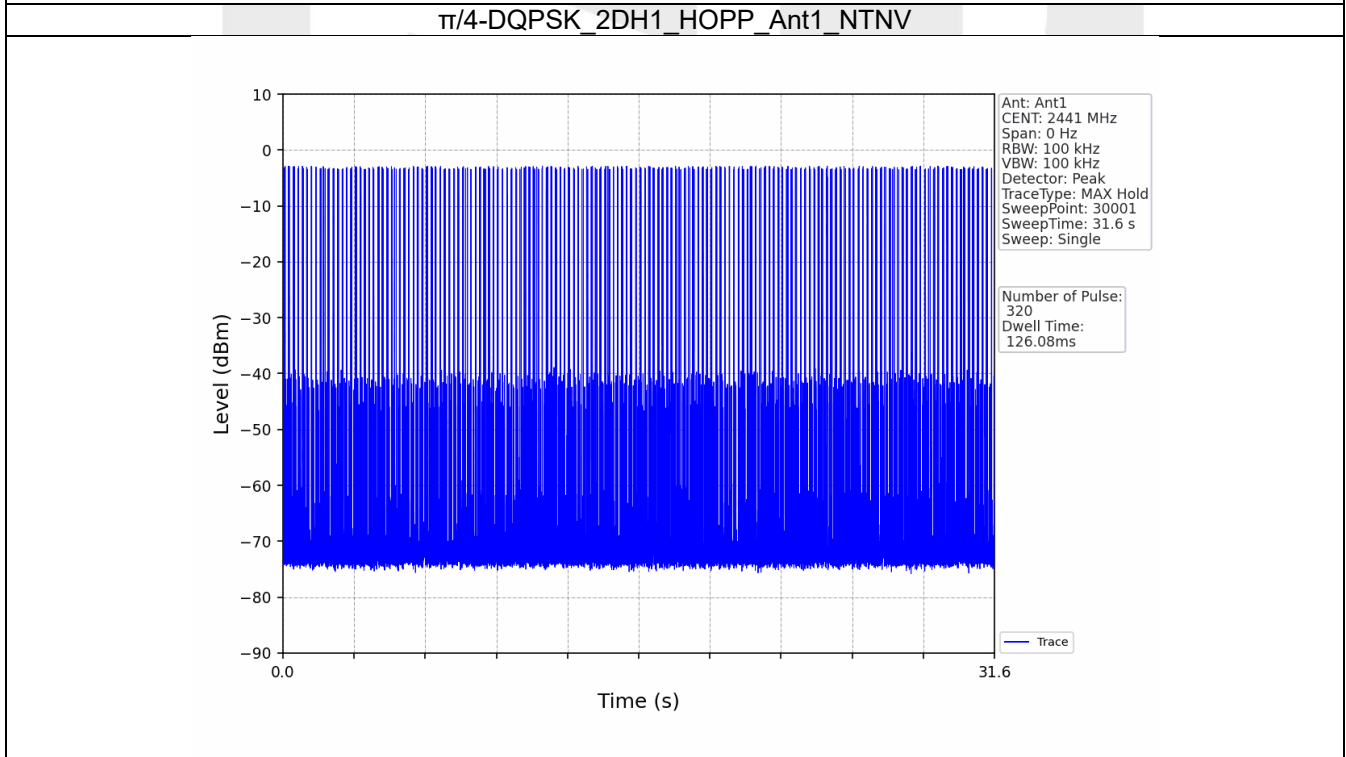
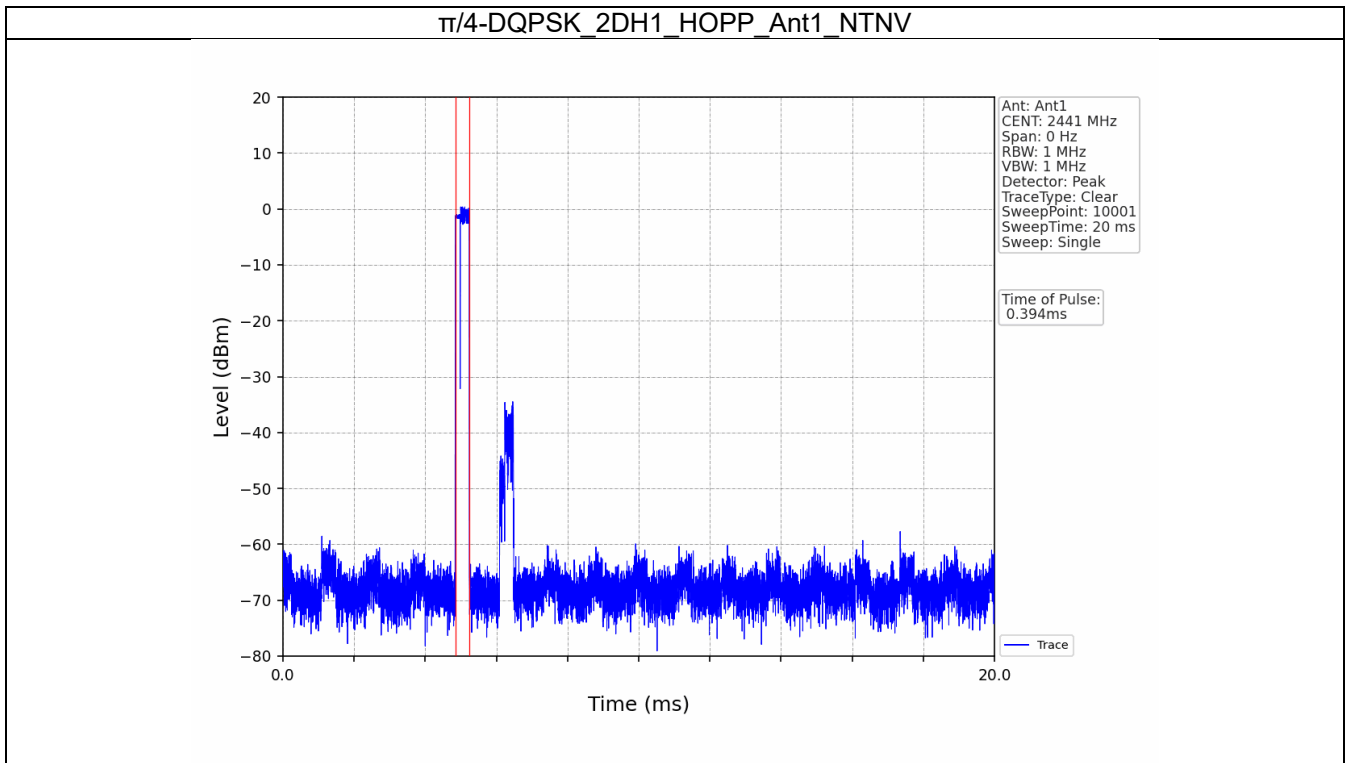
| Ant1           |         |                 |             |                               |                        |                                    |                 |            |         |
|----------------|---------|-----------------|-------------|-------------------------------|------------------------|------------------------------------|-----------------|------------|---------|
| 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                 | 320                                | 122.880         | <=400      | Pass    |
|                |         |                 | DH3         | 1.640                         | 31.600                 | 159                                | 260.760         | <=400      | Pass    |
|                |         |                 | DH5         | 2.888                         | 31.600                 | 100                                | 288.800         | <=400      | Pass    |
| $\pi/4$ -DQPSK | SISO    | HOPP            | 2DH1        | 0.394                         | 31.600                 | 320                                | 126.080         | <=400      | Pass    |
|                |         |                 | 2DH3        | 1.650                         | 31.600                 | 156                                | 257.400         | <=400      | Pass    |
|                |         |                 | 2DH5        | 2.896                         | 31.600                 | 96                                 | 278.016         | <=400      | Pass    |
| 8DPSK          | SISO    | HOPP            | 3DH1        | 0.394                         | 31.600                 | 320                                | 126.080         | <=400      | Pass    |
|                |         |                 | 3DH3        | 1.650                         | 31.600                 | 168                                | 277.200         | <=400      | Pass    |
|                |         |                 | 3DH5        | 2.900                         | 31.600                 | 113                                | 327.700         | <=400      | Pass    |

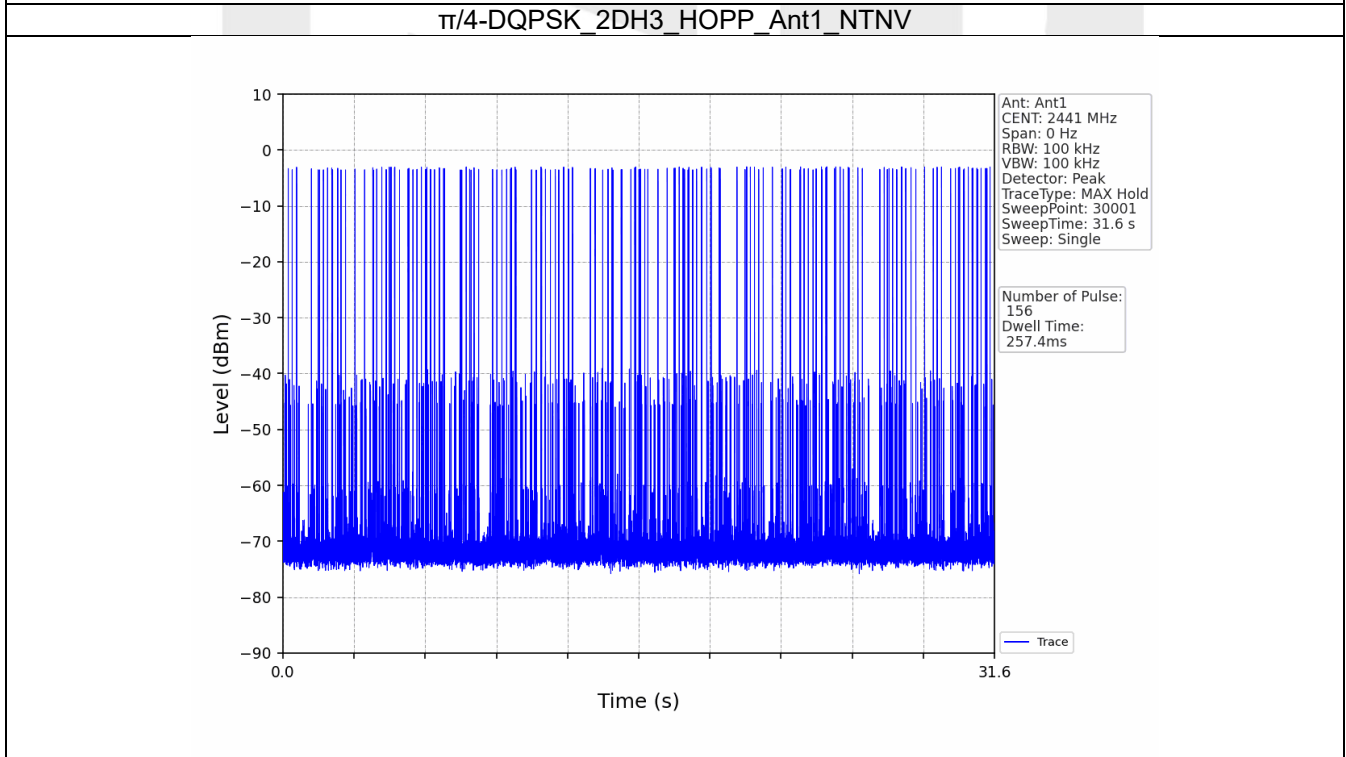
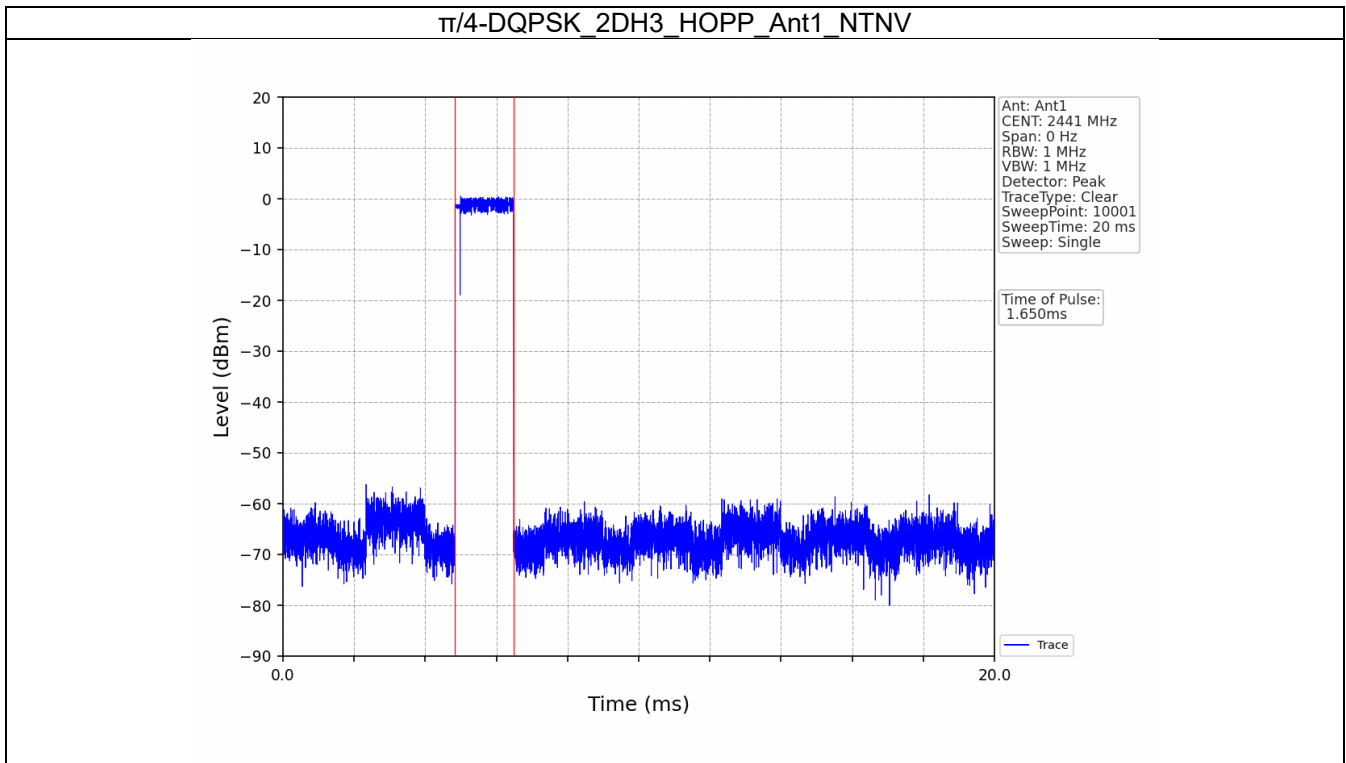
6.1.2 Test Graph

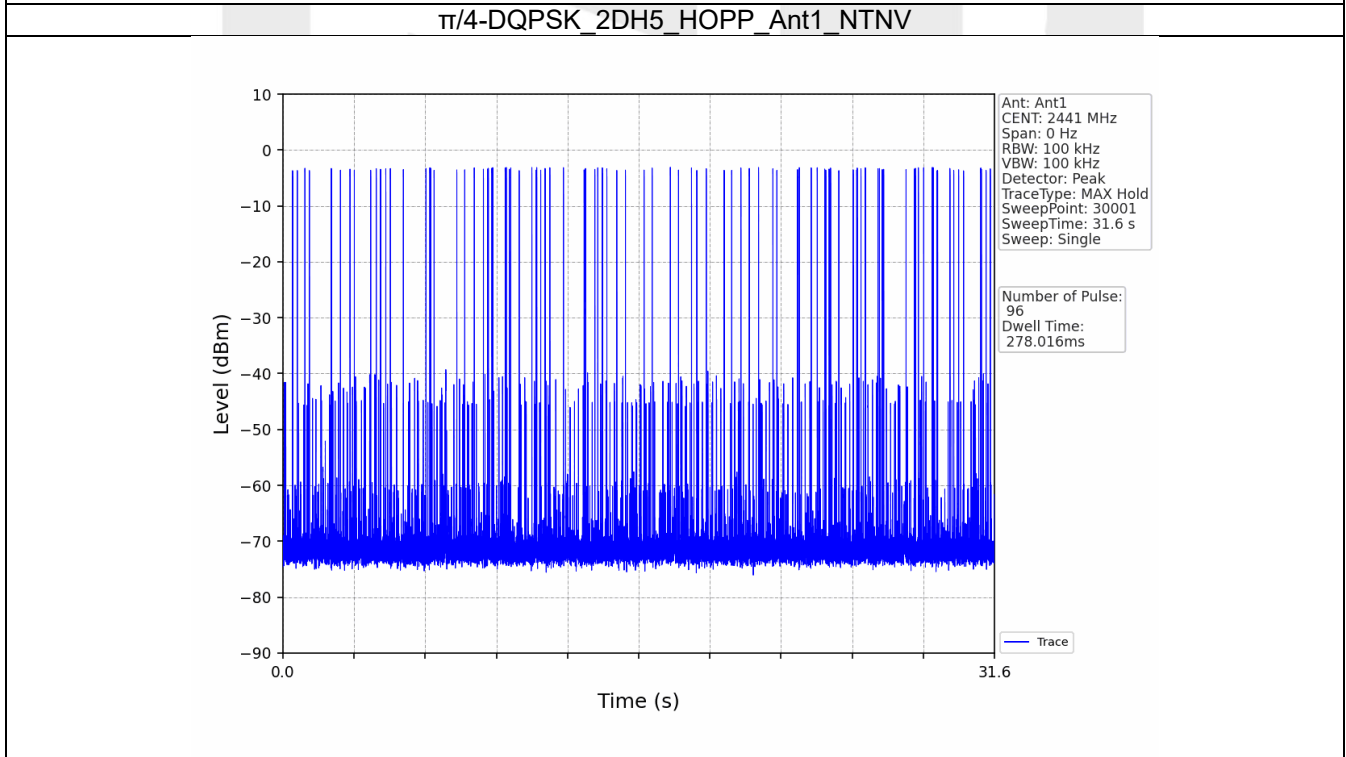
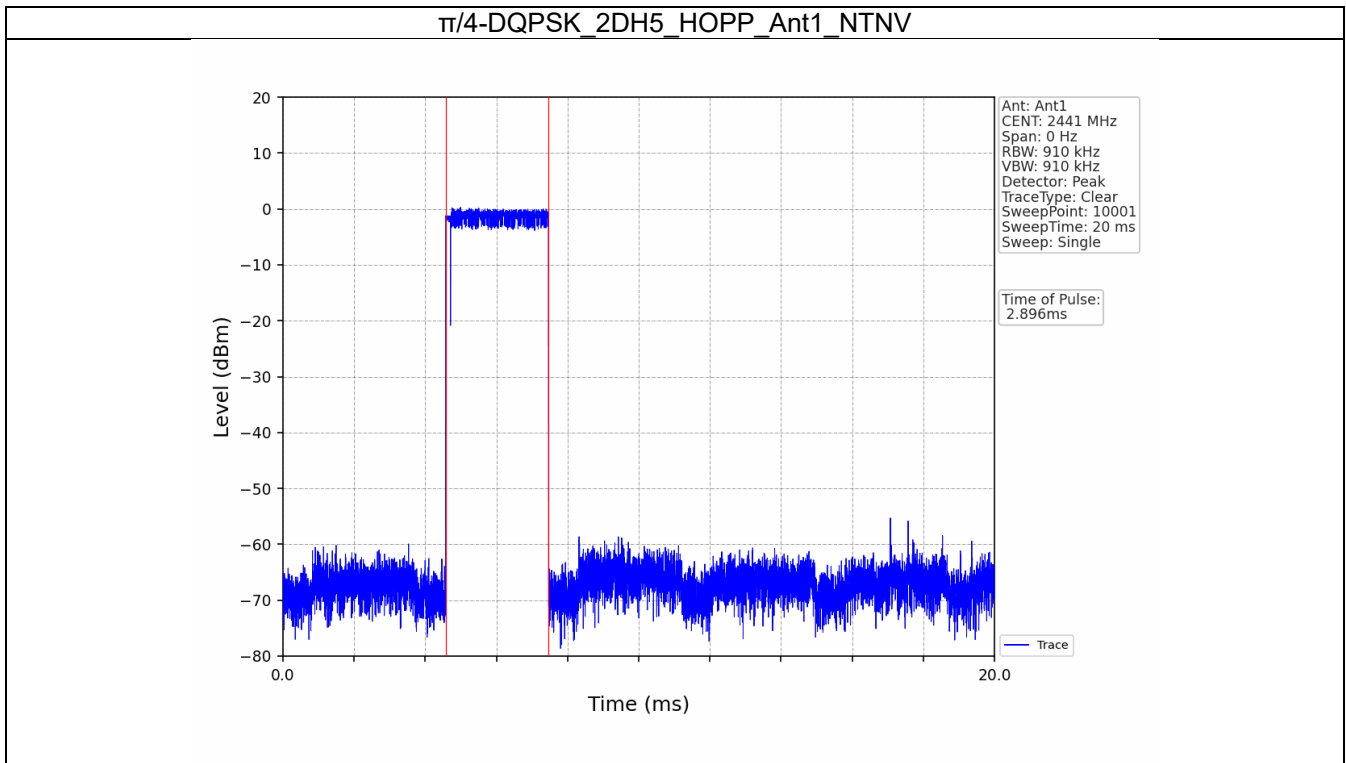


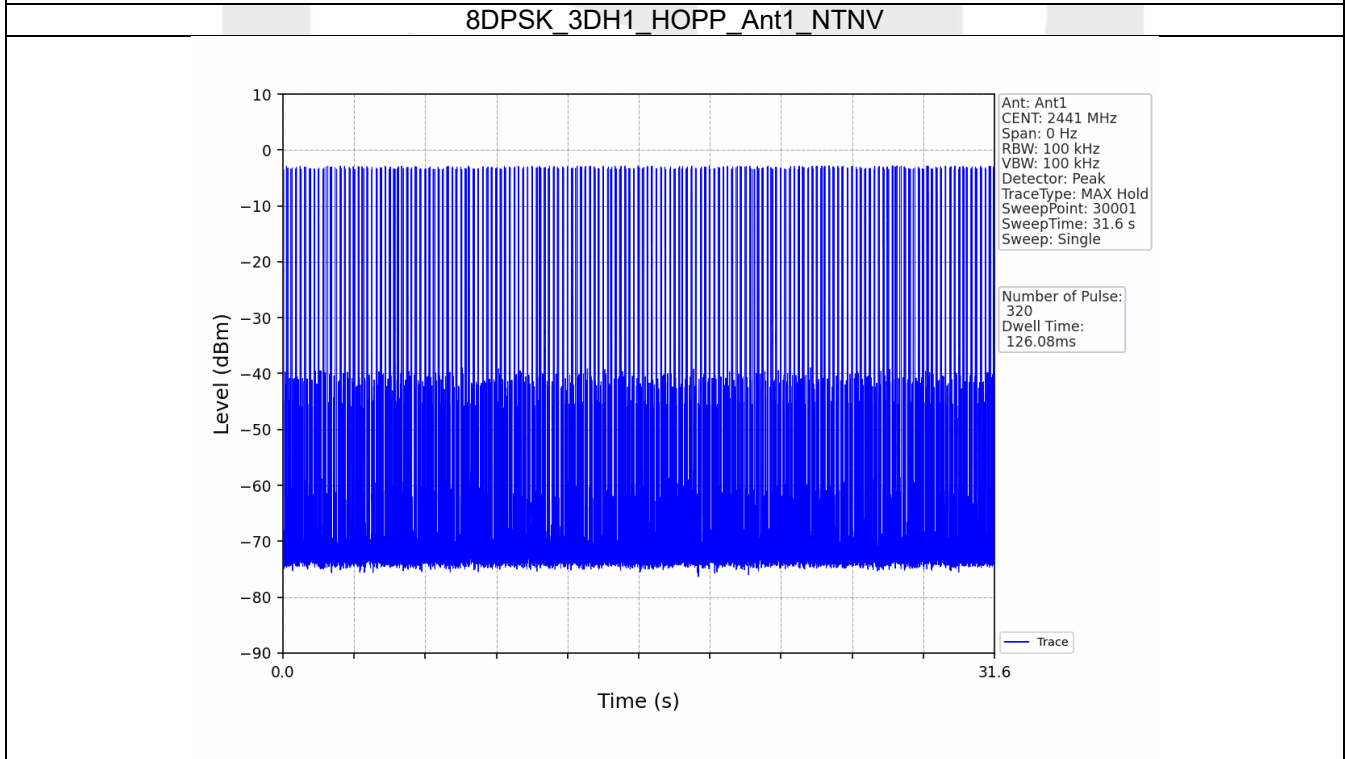
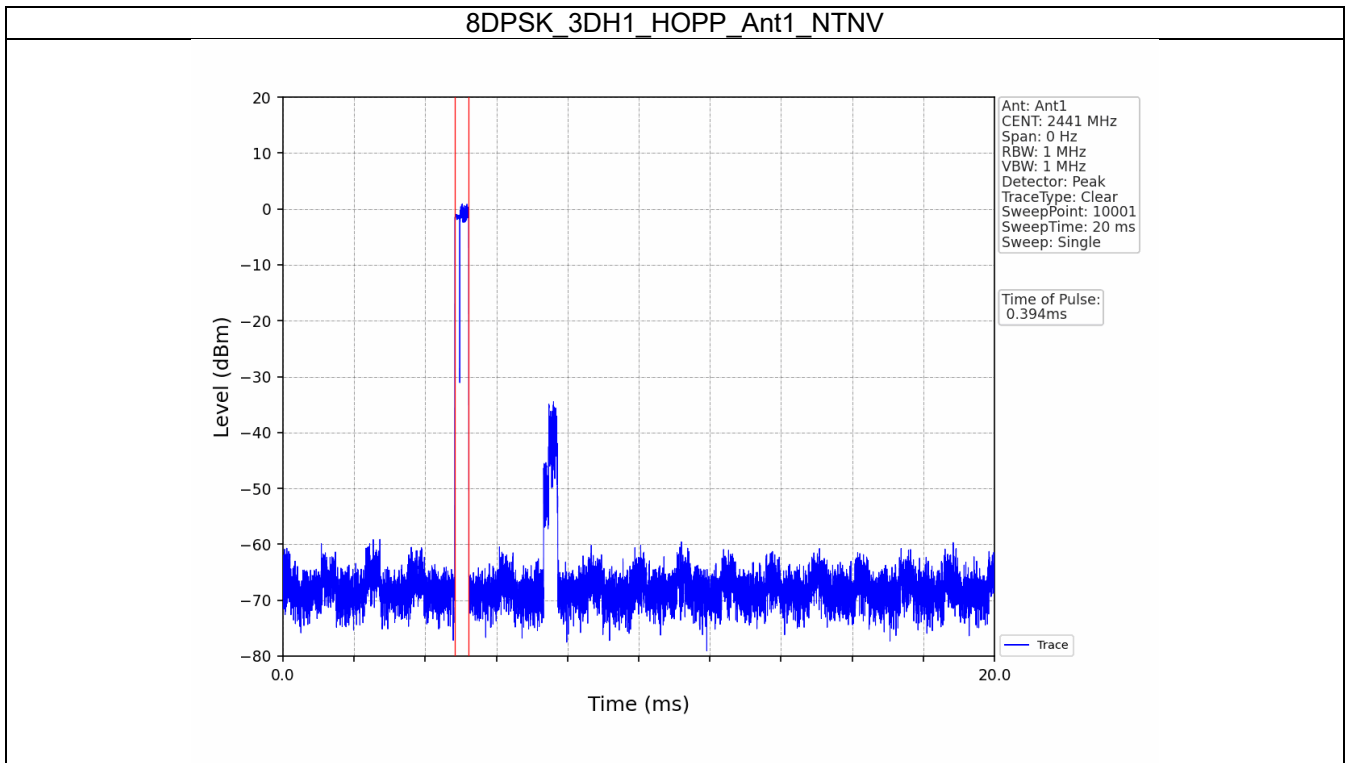




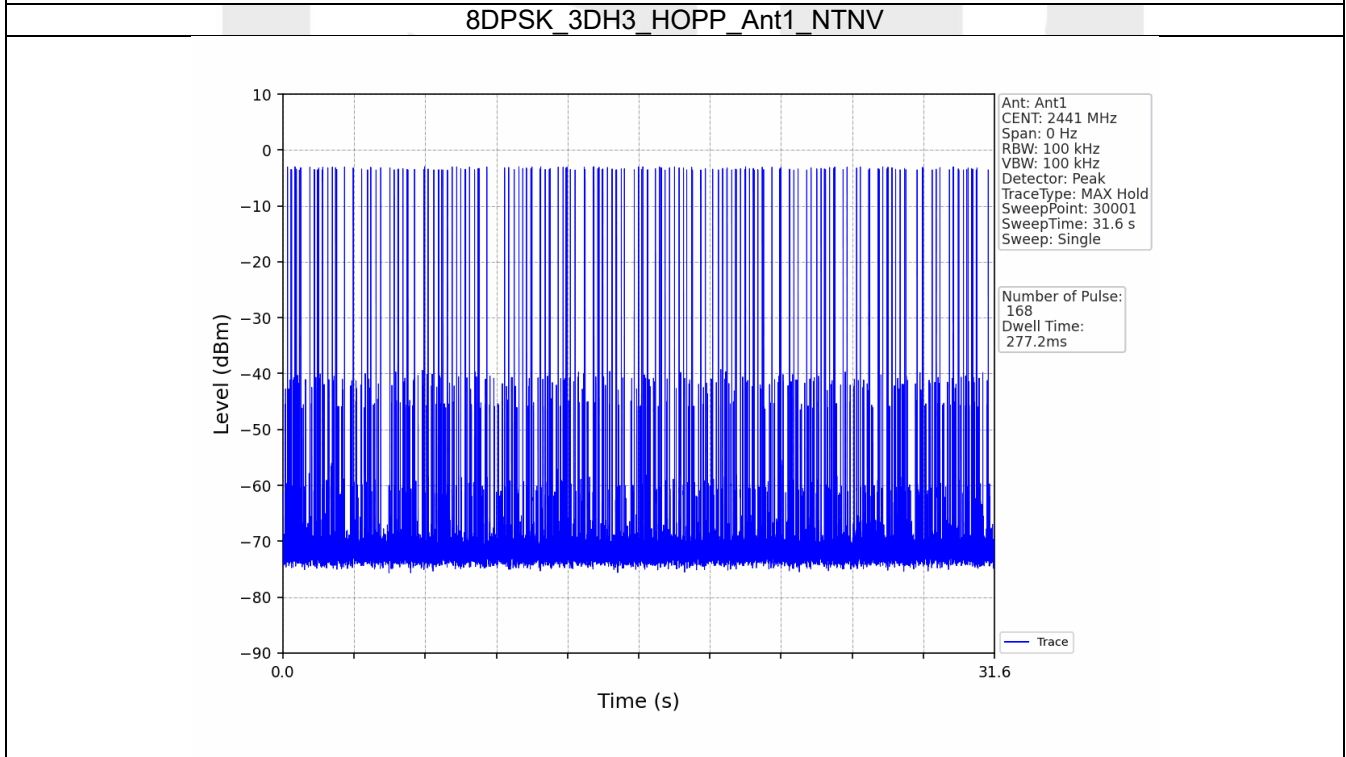
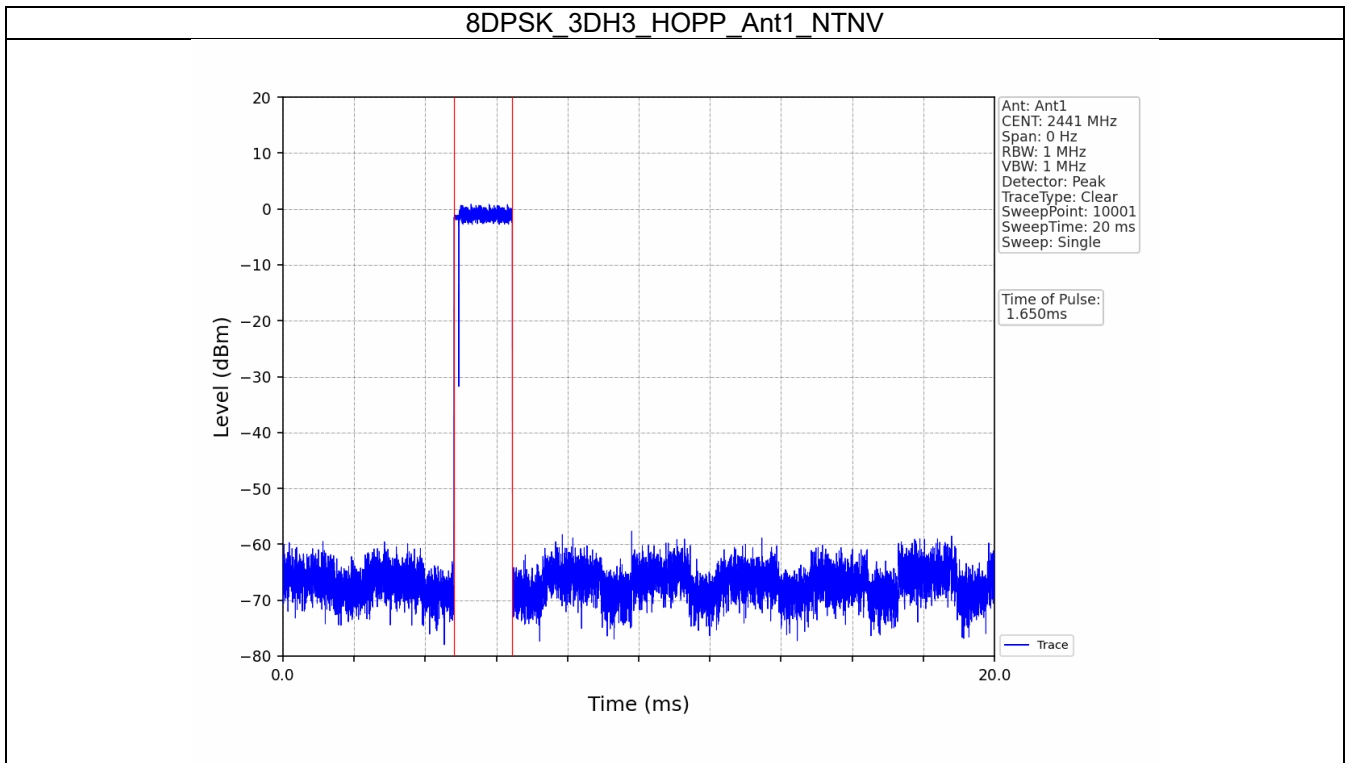


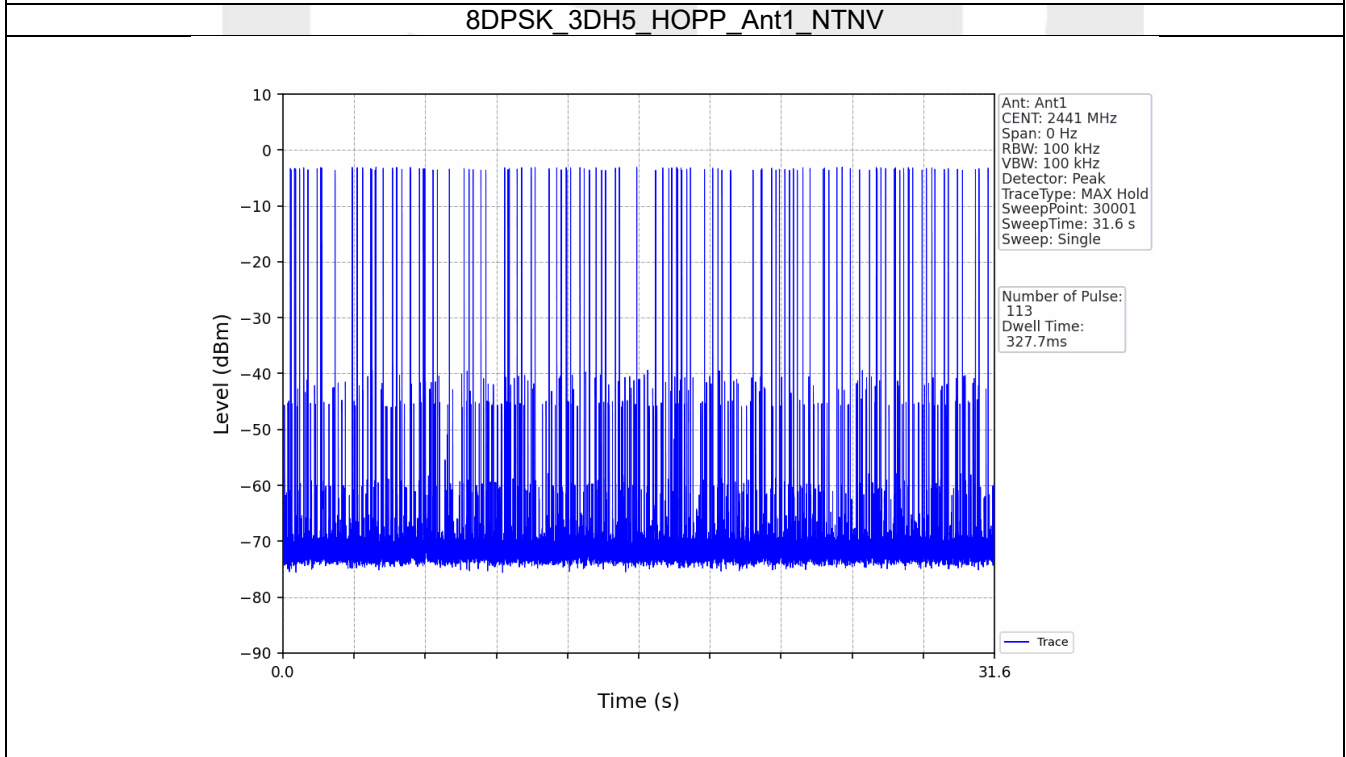
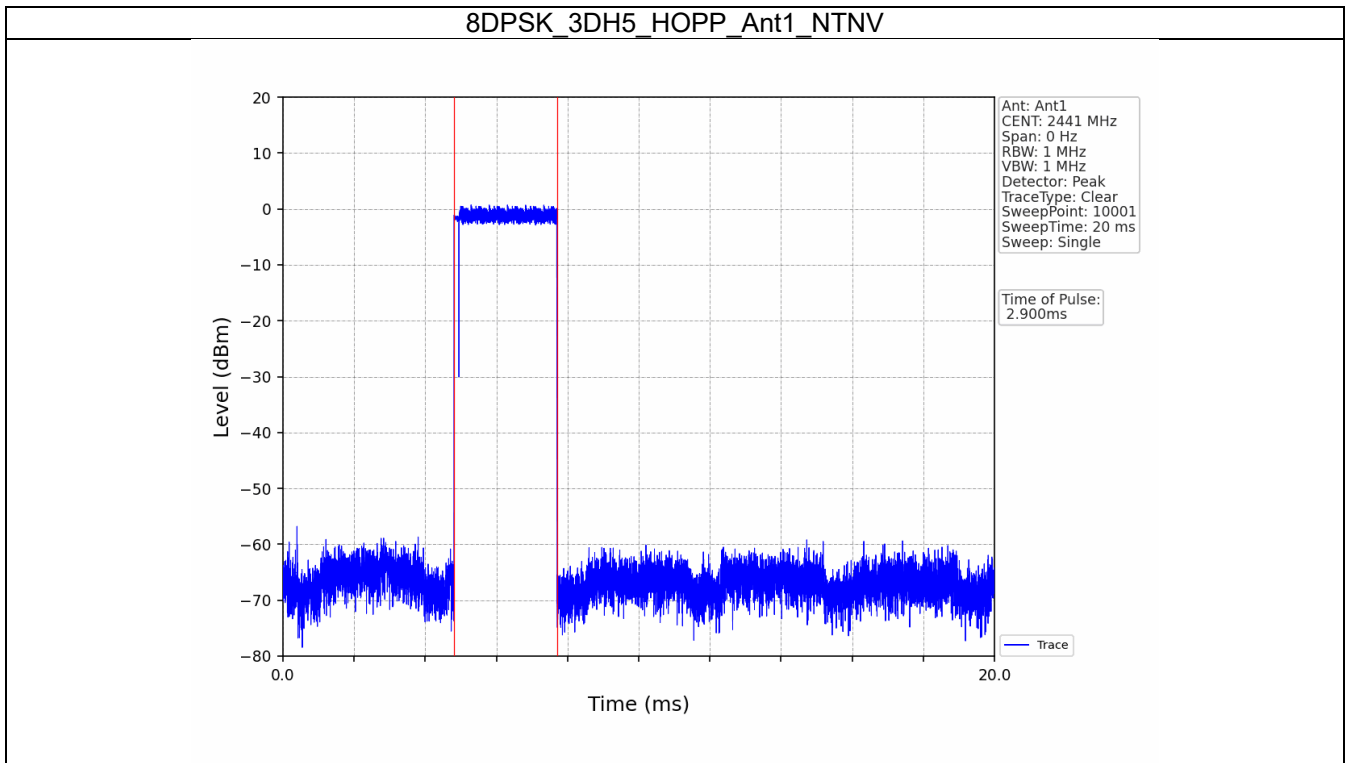












## 7. Unwanted Emissions In Non-restricted Frequency Bands

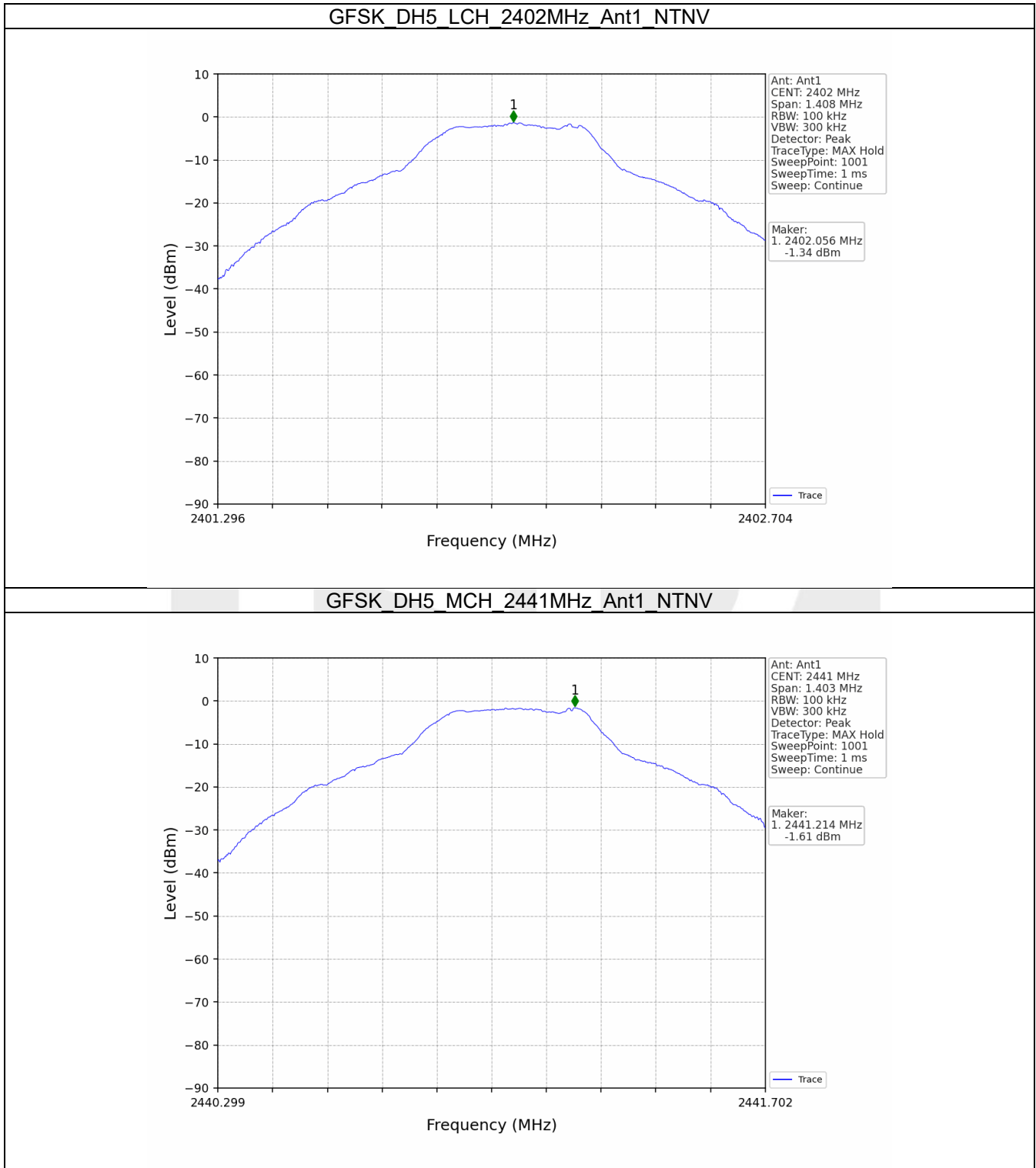
### 7.1 Ref

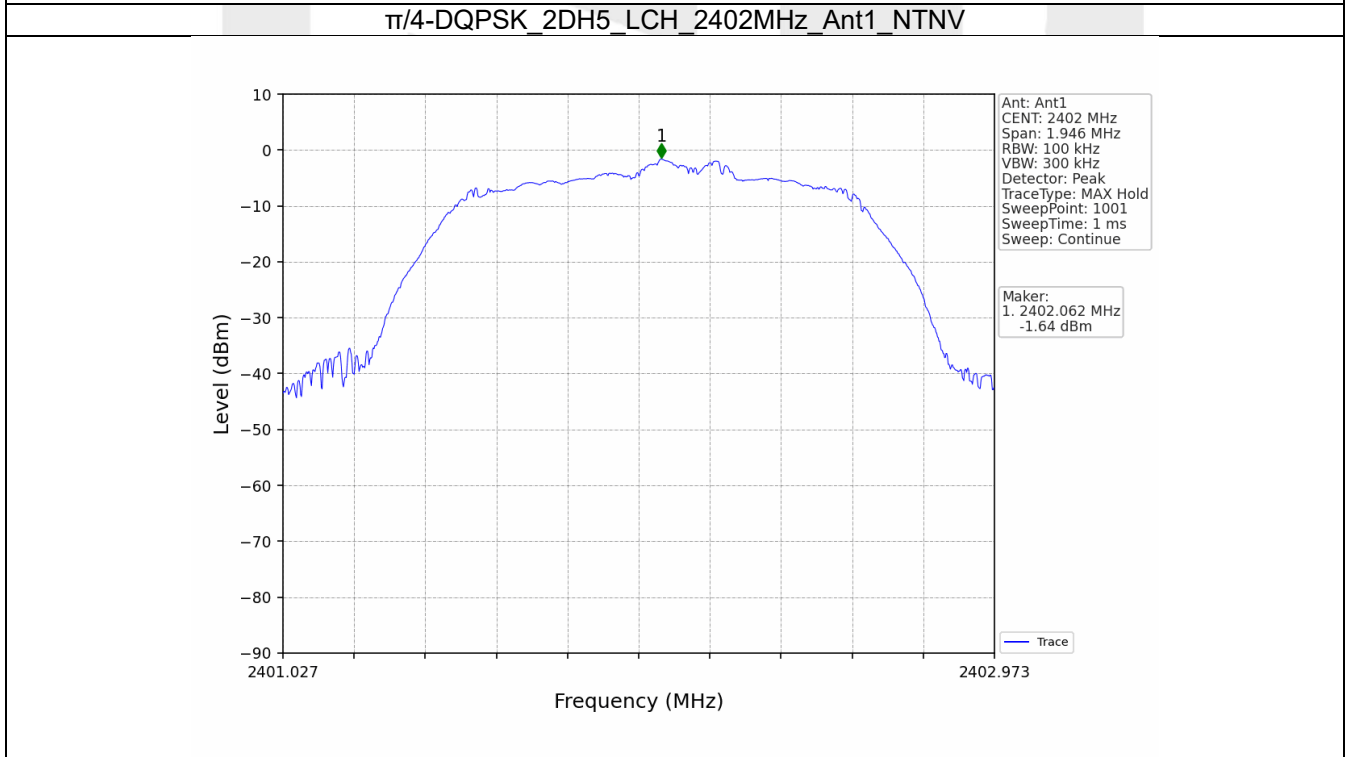
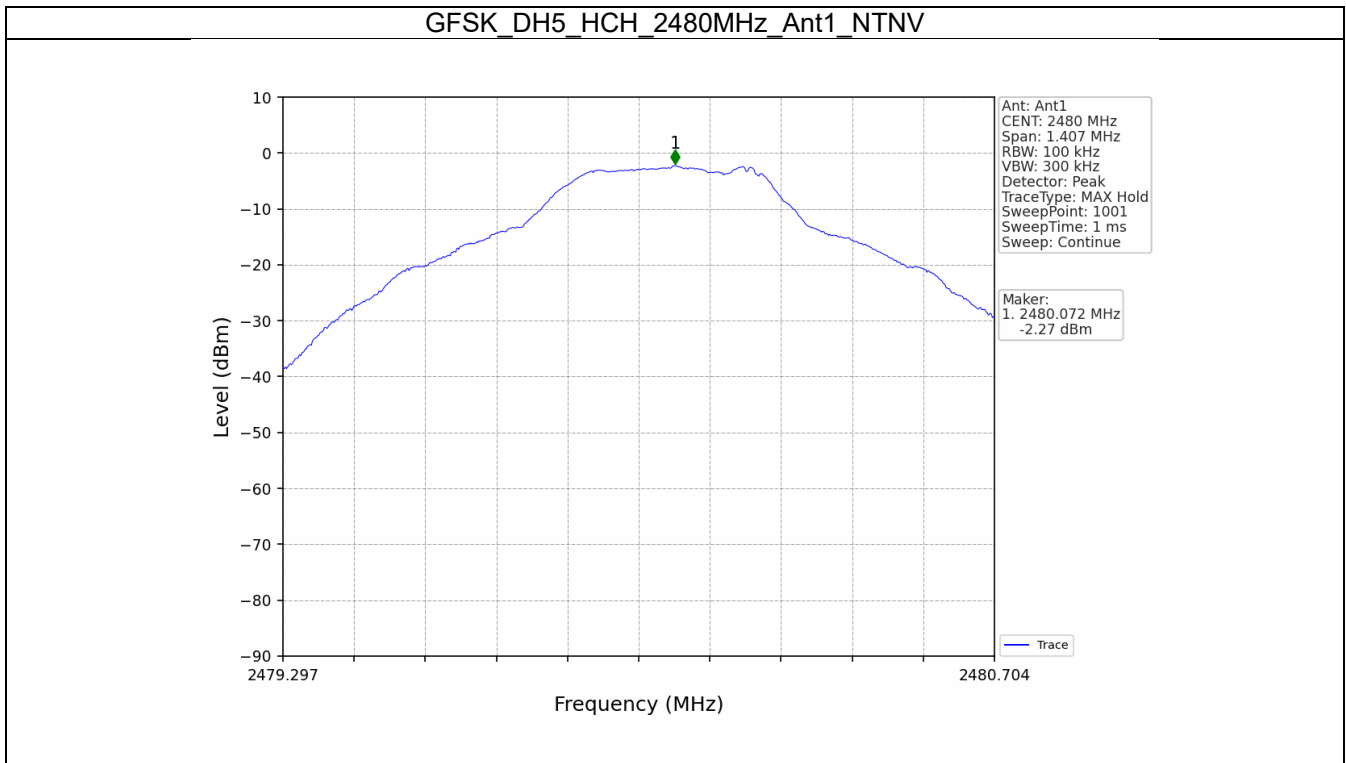
#### 7.1.1 Test Result

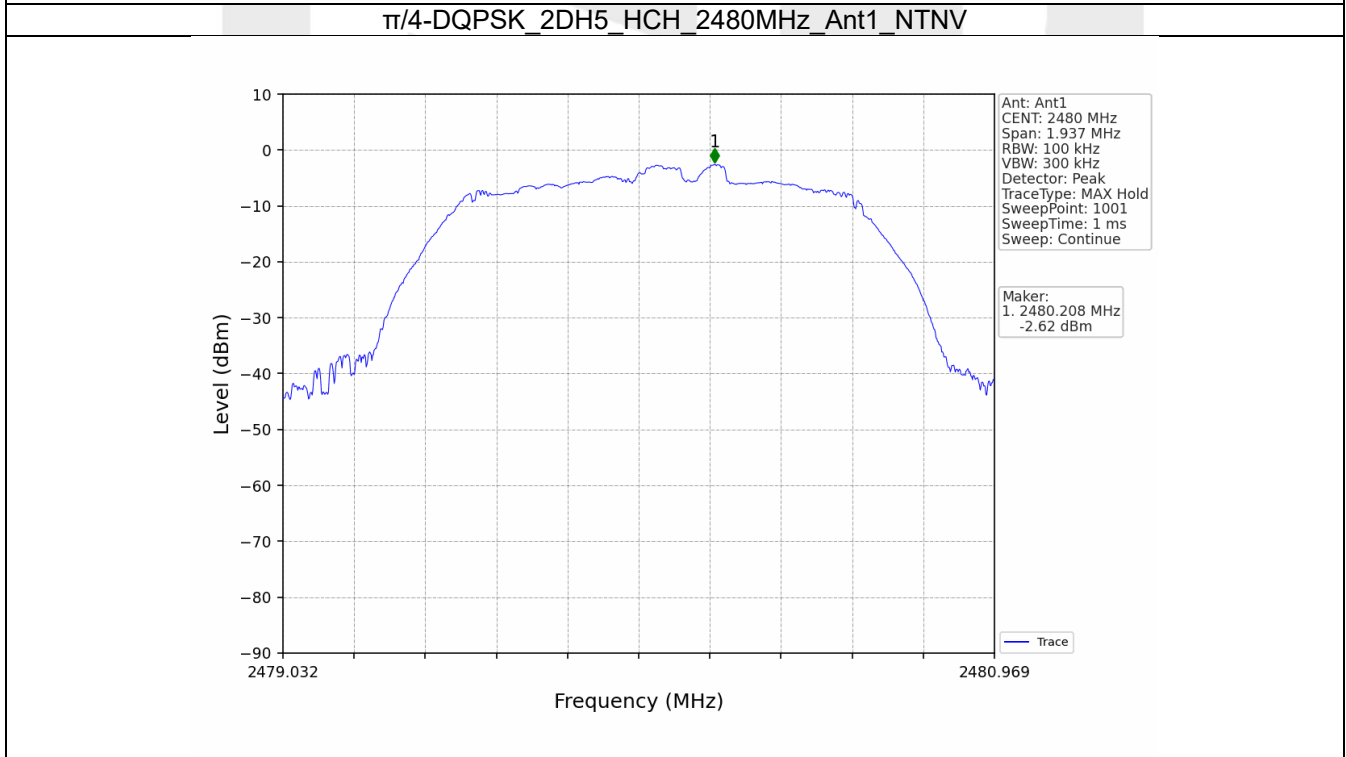
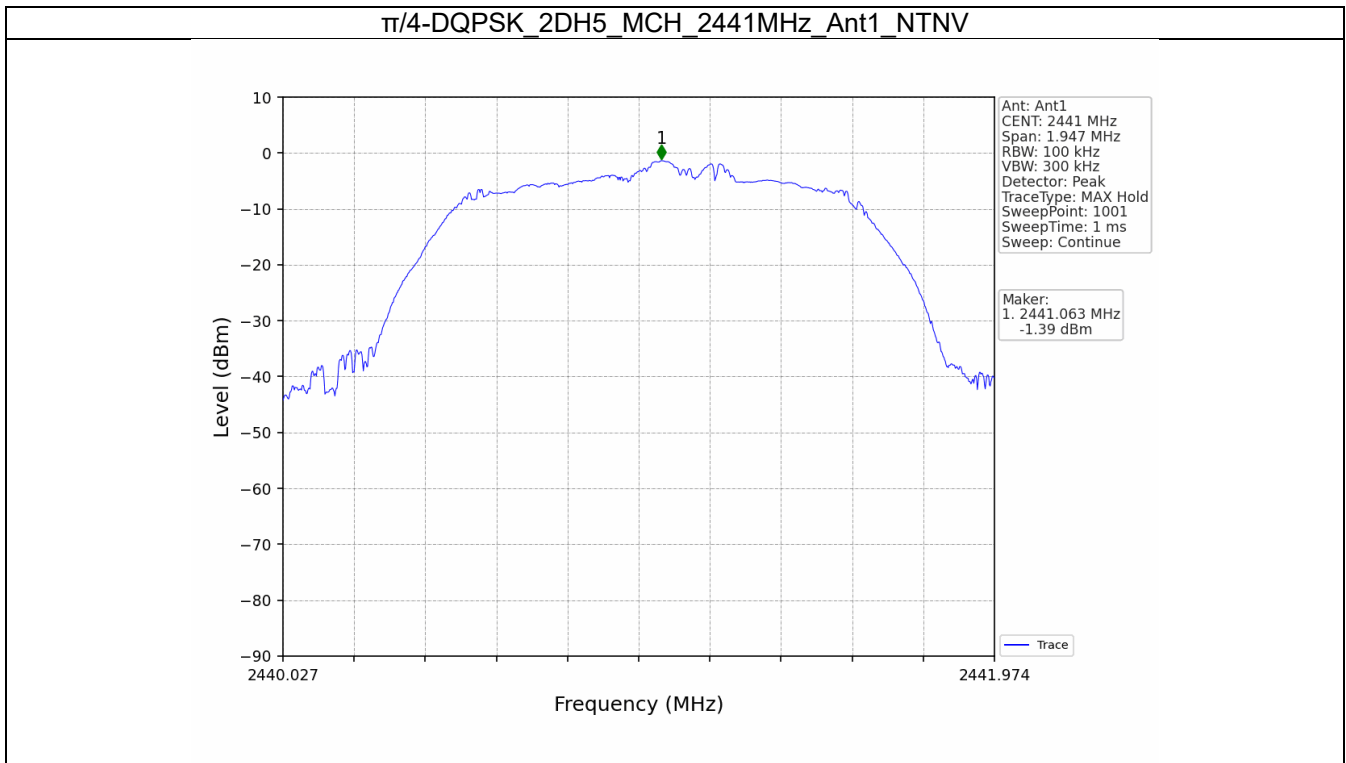
| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|----------------|---------|-----------------|-------------|-----|--------------------------|
| GFSK           | SISO    | 2402            | DH5         | 1   | -1.34                    |
|                |         | 2441            | DH5         | 1   | -1.61                    |
|                |         | 2480            | DH5         | 1   | -2.27                    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | -1.64                    |
|                |         | 2441            | 2DH5        | 1   | -1.39                    |
|                |         | 2480            | 2DH5        | 1   | -2.62                    |
| 8DPSK          | SISO    | 2402            | 3DH5        | 1   | -1.48                    |
|                |         | 2441            | 3DH5        | 1   | -1.31                    |
|                |         | 2480            | 3DH5        | 1   | -2.02                    |

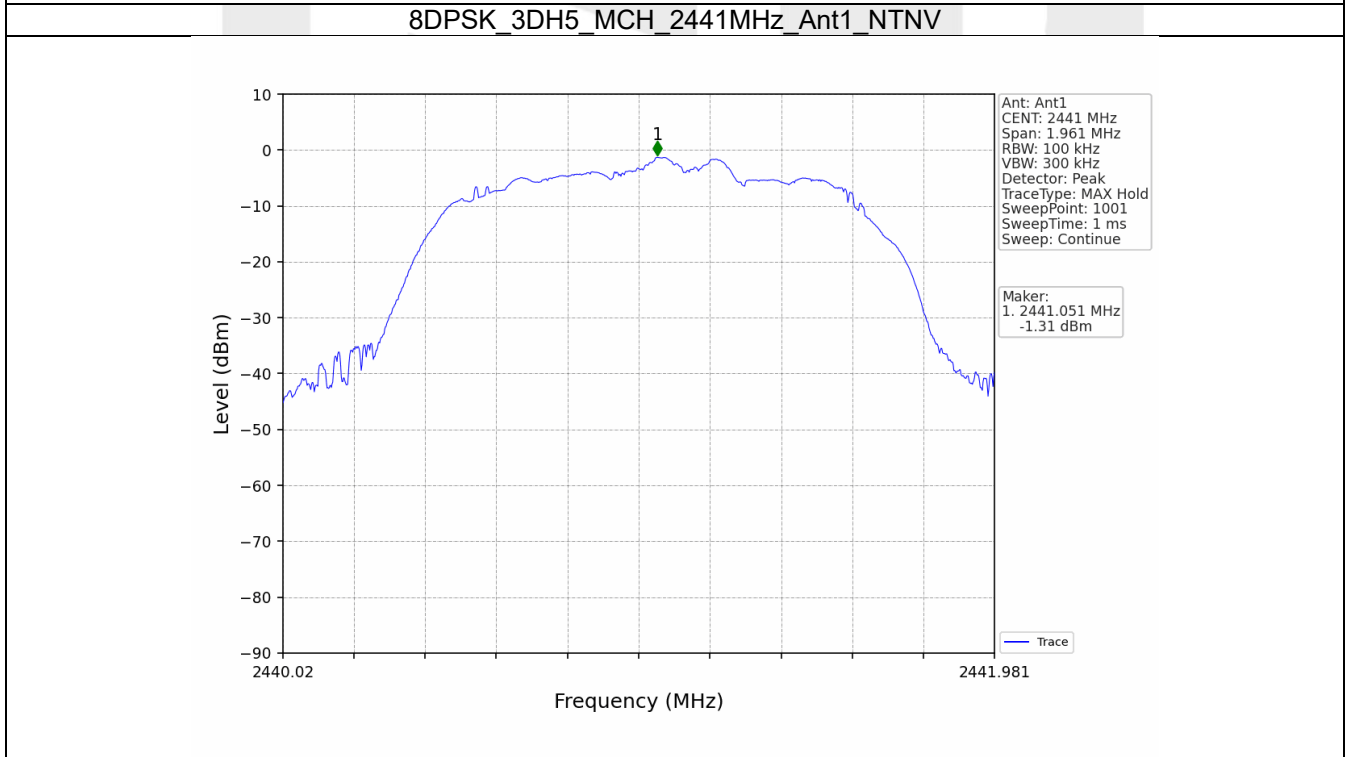
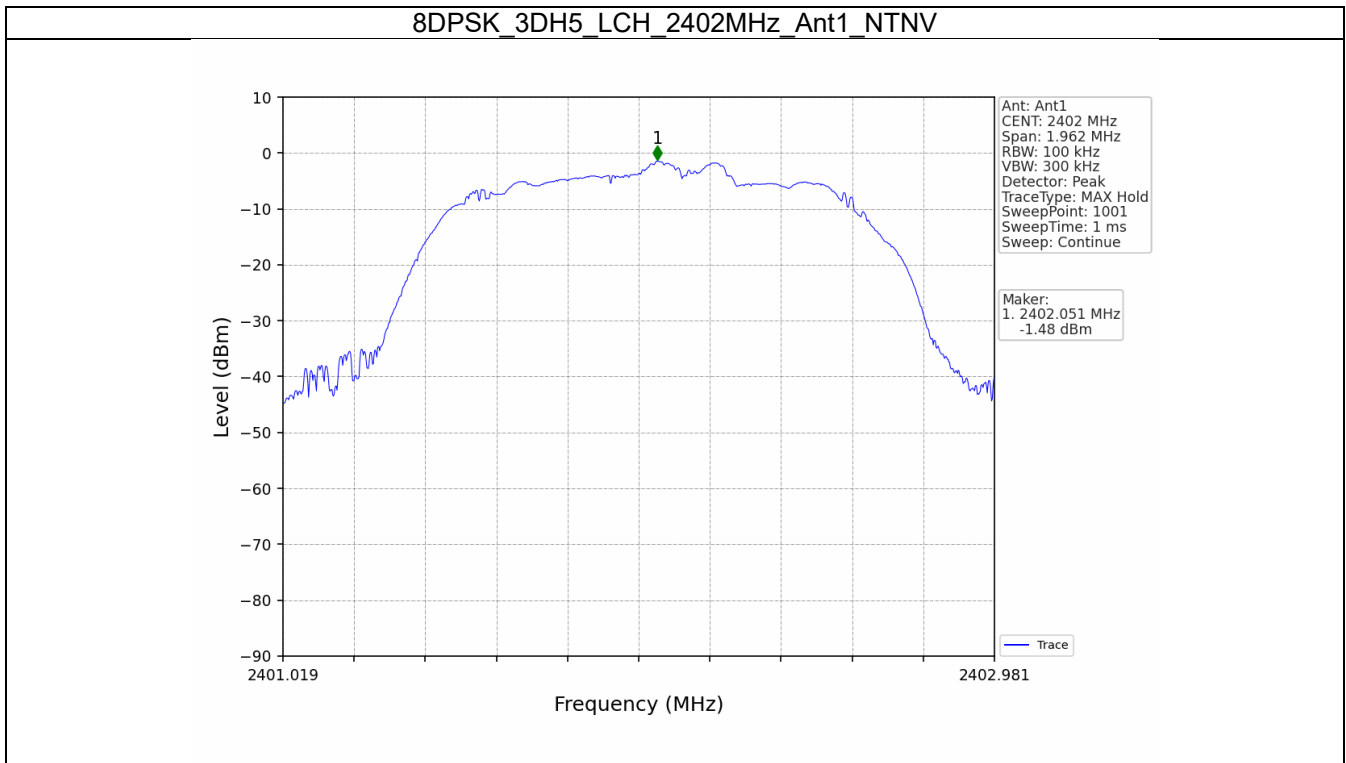
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

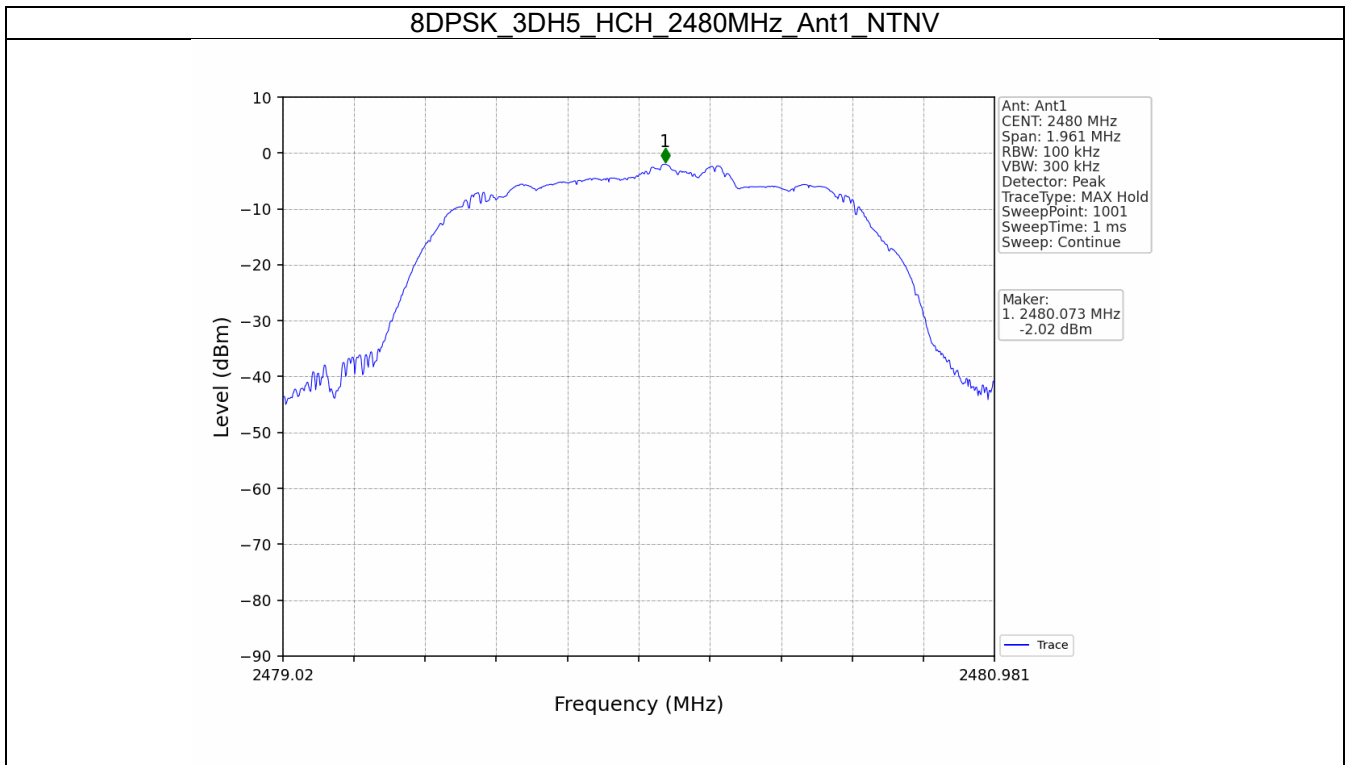
7.1.2 Test Graph











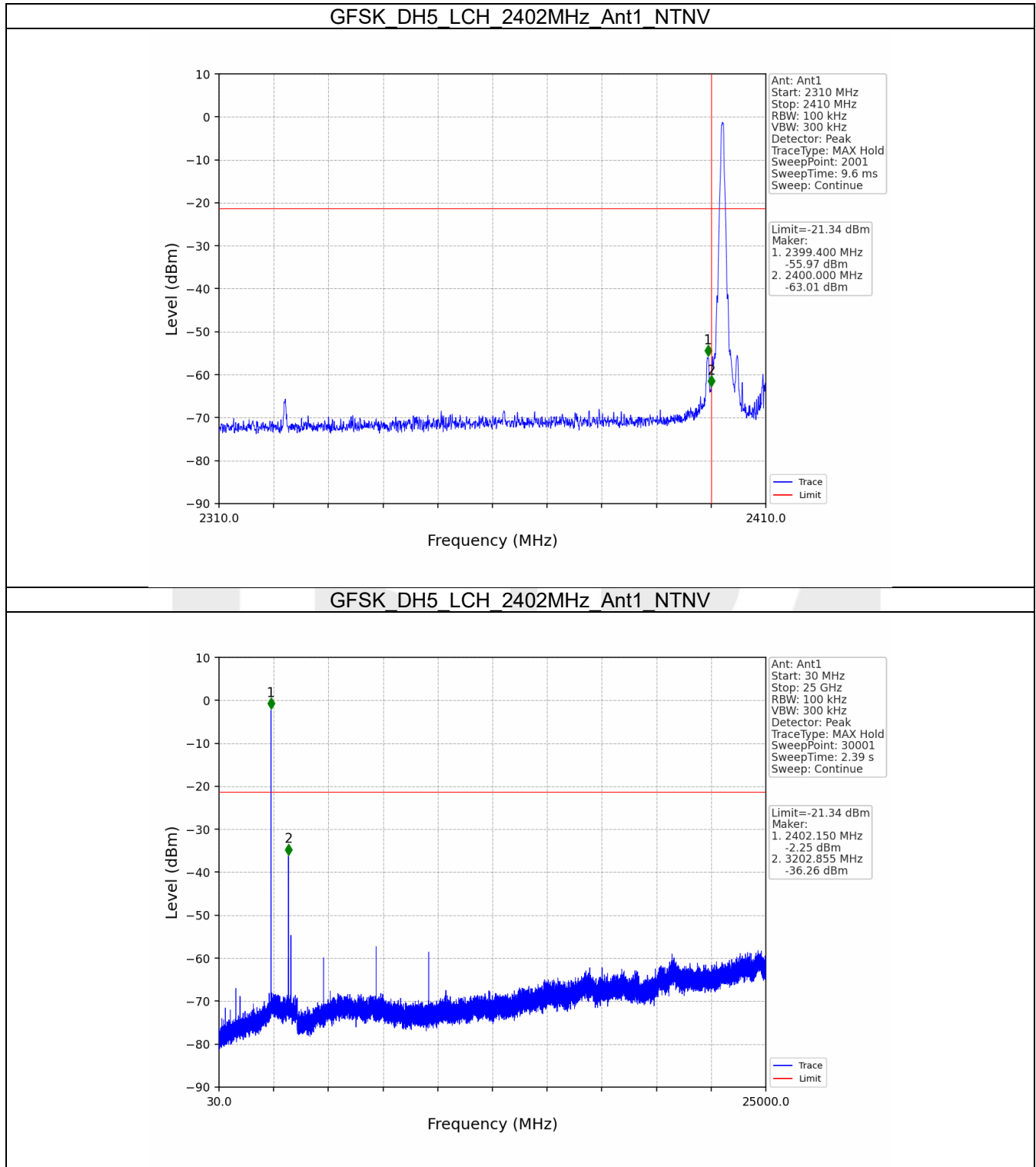


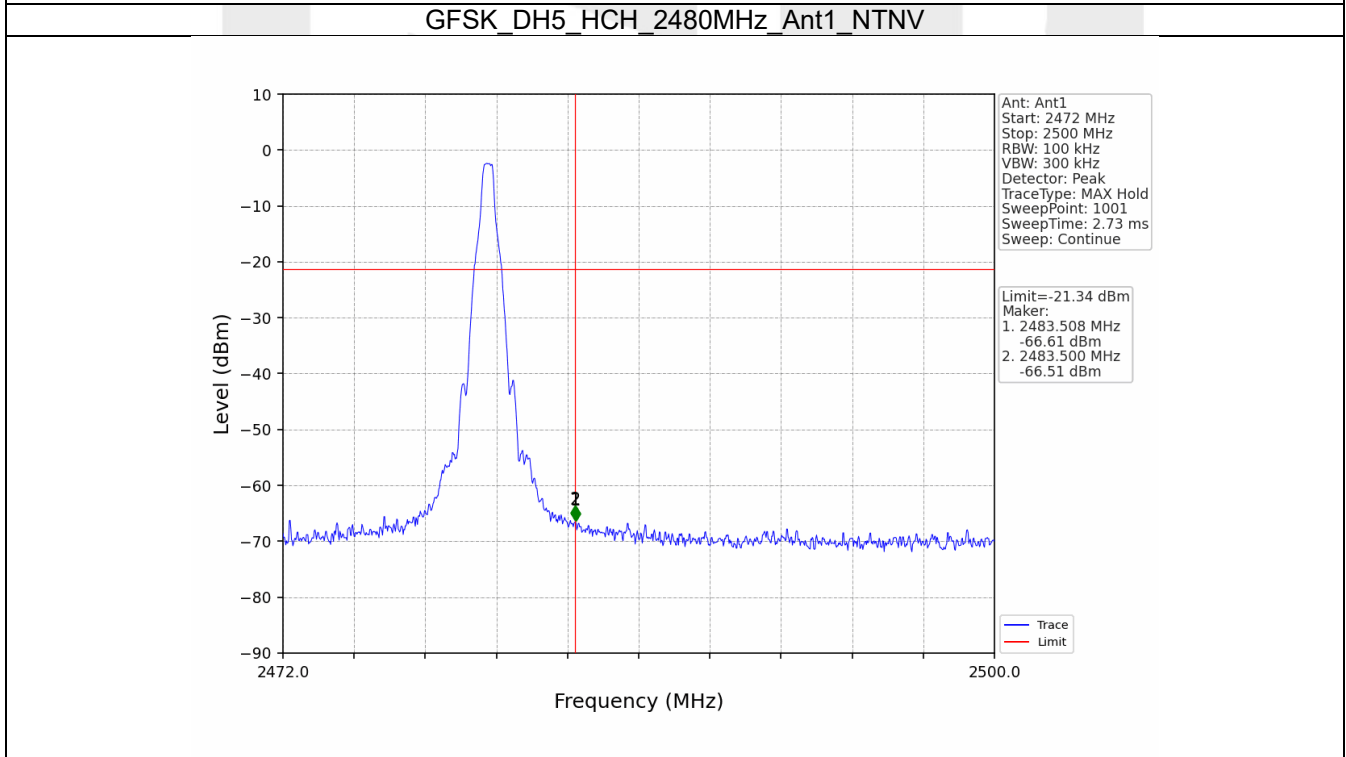
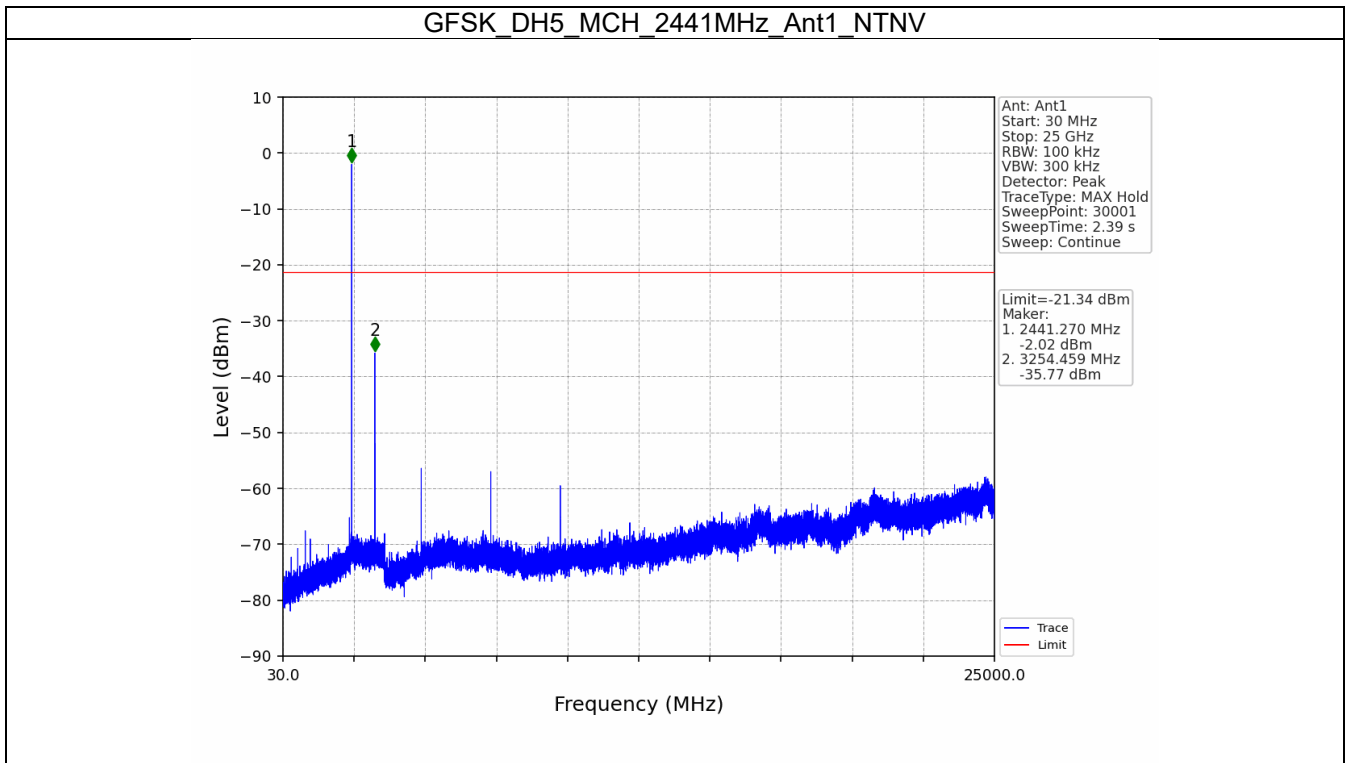
**7.2 CSE**
**7.2.1 Test Result**

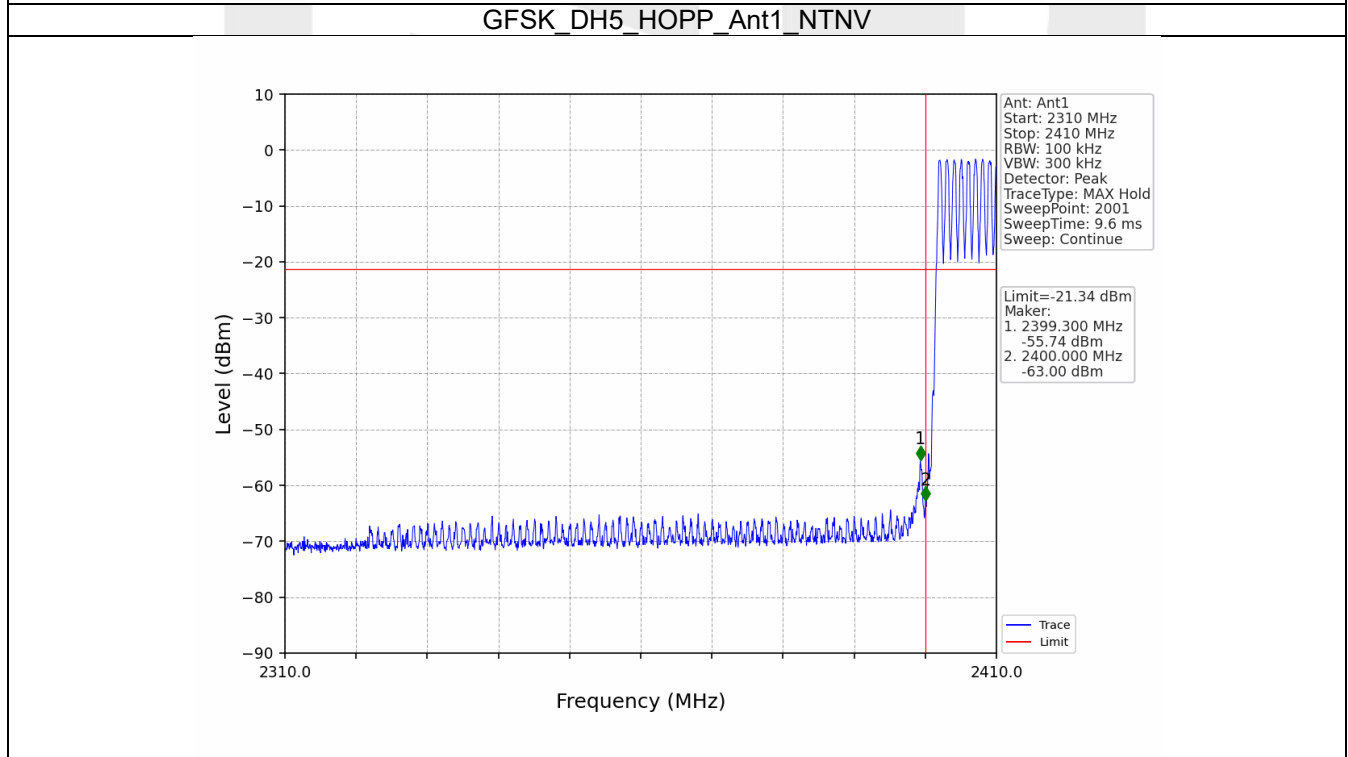
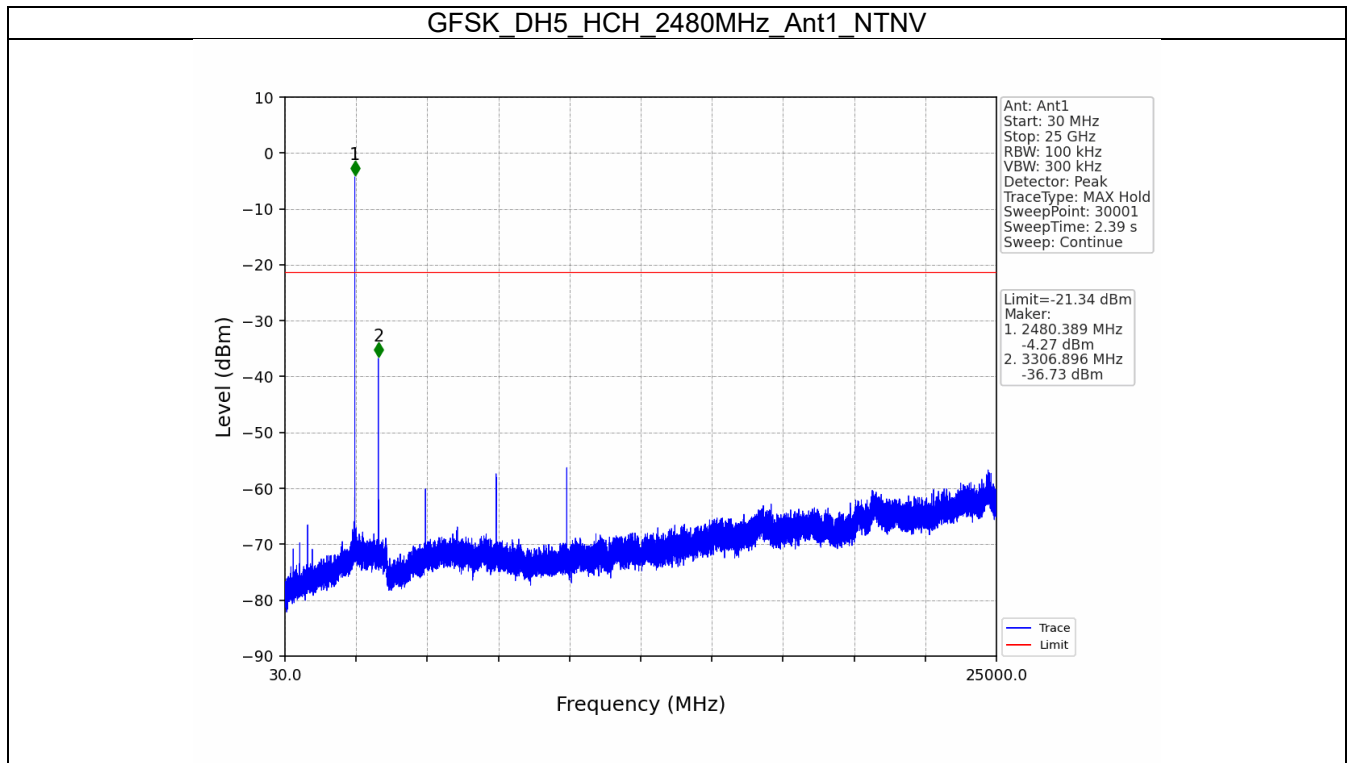
| Mode           | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|----------------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK           | SISO    | 2402            | DH5         | 1   | -1.34                    | -21.34      | Pass    |
|                |         | 2441            | DH5         | 1   | -1.34                    | -21.34      | Pass    |
|                |         | 2480            | DH5         | 1   | -1.34                    | -21.34      | Pass    |
|                |         | HOPP            | DH5         | 1   | -1.34                    | -21.34      | Pass    |
|                |         |                 |             |     | -1.34                    | -21.34      | Pass    |
| $\pi/4$ -DQPSK | SISO    | 2402            | 2DH5        | 1   | -1.39                    | -21.39      | Pass    |
|                |         | 2441            | 2DH5        | 1   | -1.39                    | -21.39      | Pass    |
|                |         | 2480            | 2DH5        | 1   | -1.39                    | -21.39      | Pass    |
|                |         | HOPP            | 2DH5        | 1   | -1.39                    | -21.39      | Pass    |
|                |         |                 |             |     | -1.39                    | -21.39      | Pass    |
| 8DPSK          | SISO    | 2402            | 3DH5        | 1   | -1.31                    | -21.31      | Pass    |
|                |         | 2441            | 3DH5        | 1   | -1.31                    | -21.31      | Pass    |
|                |         | 2480            | 3DH5        | 1   | -1.31                    | -21.31      | Pass    |
|                |         | HOPP            | 3DH5        | 1   | -1.31                    | -21.31      | Pass    |
|                |         |                 |             |     | -1.31                    | -21.31      | Pass    |

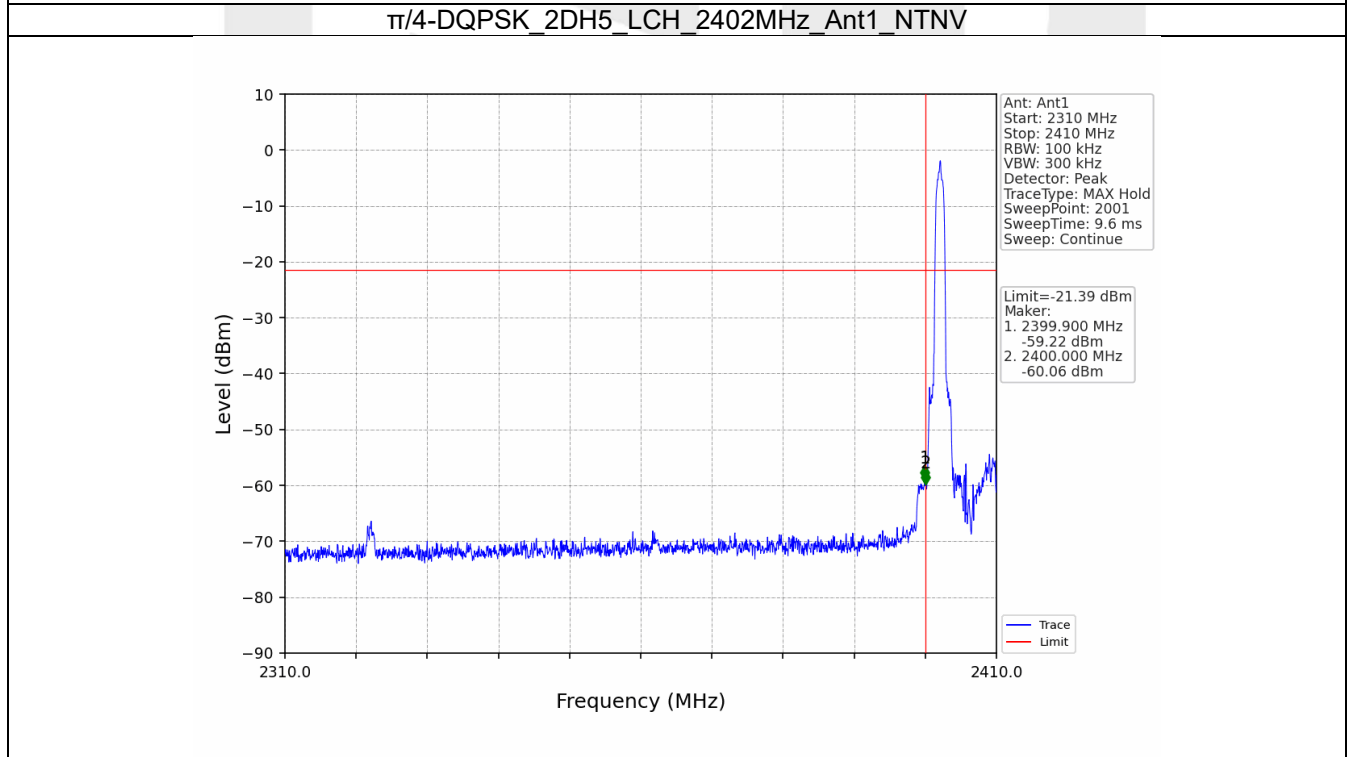
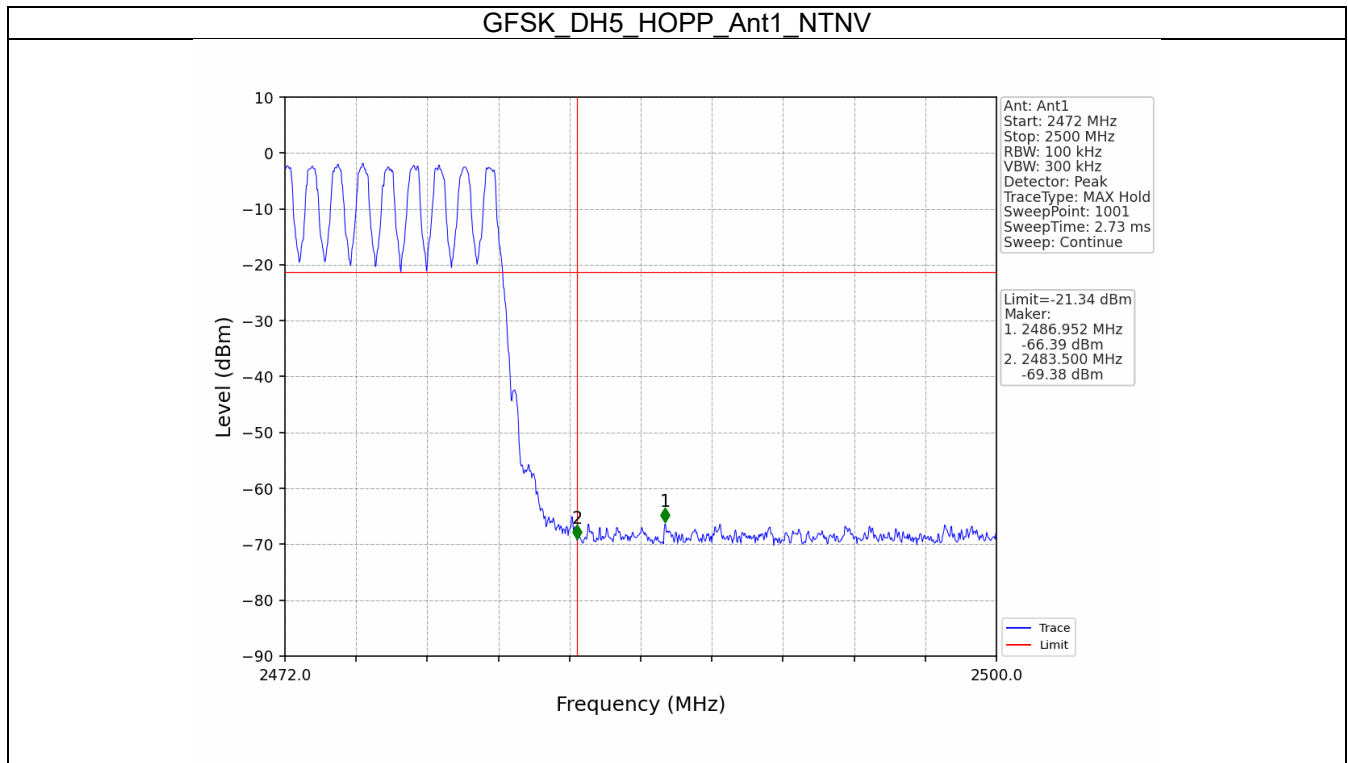
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

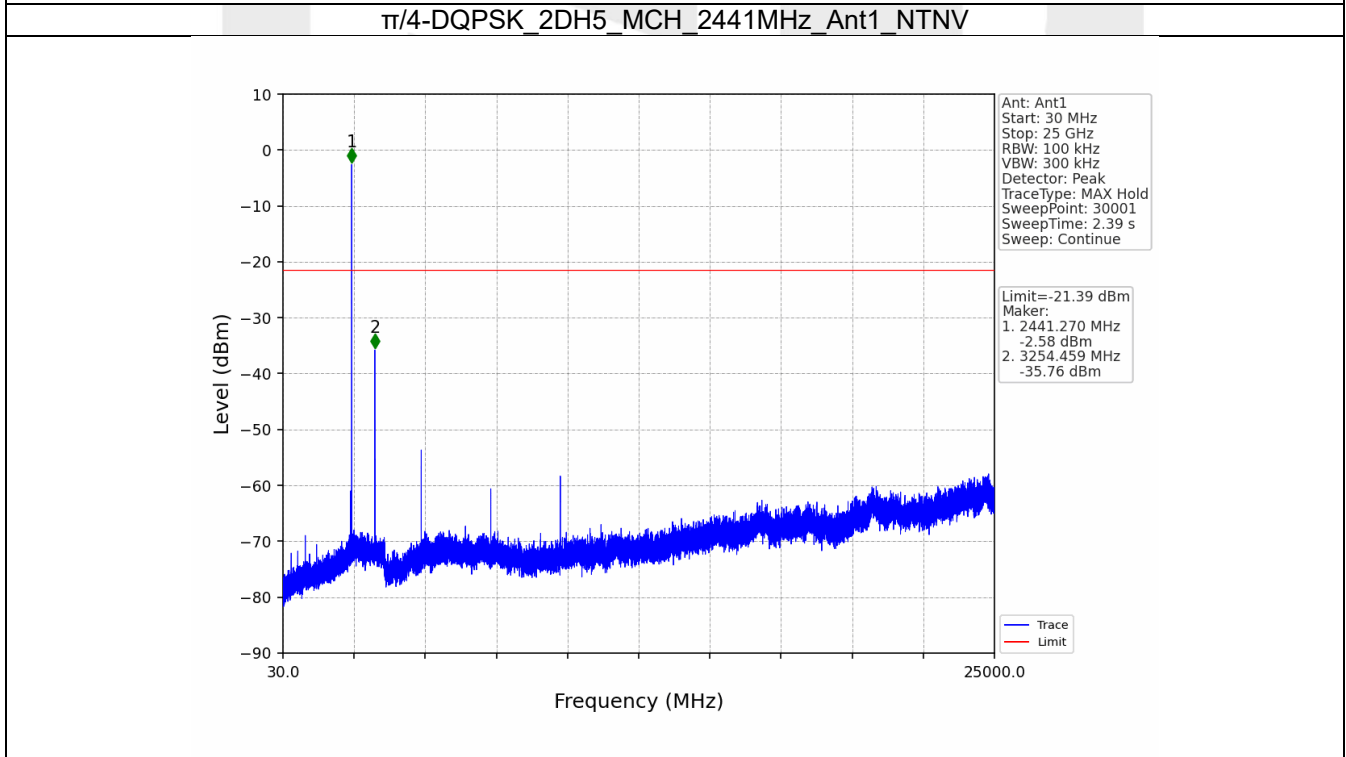
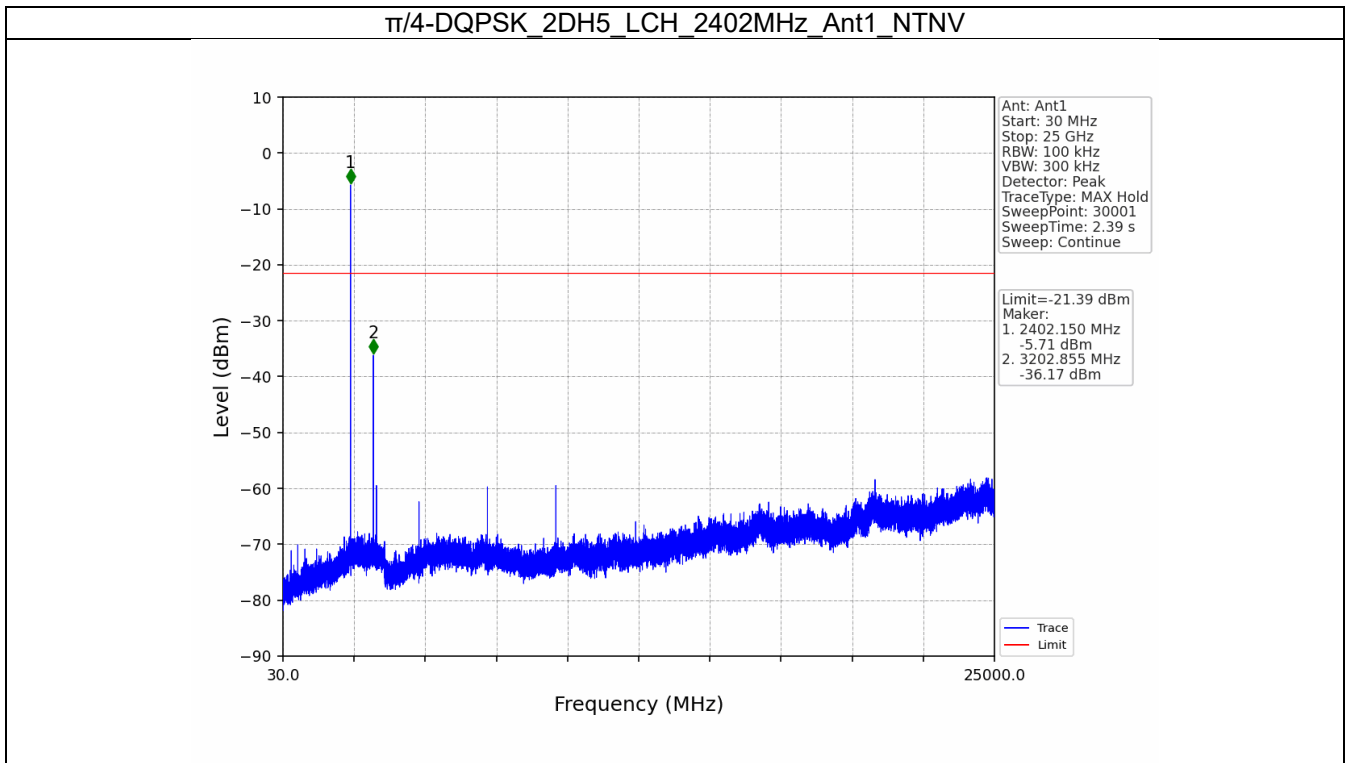
7.2.2 Test Graph

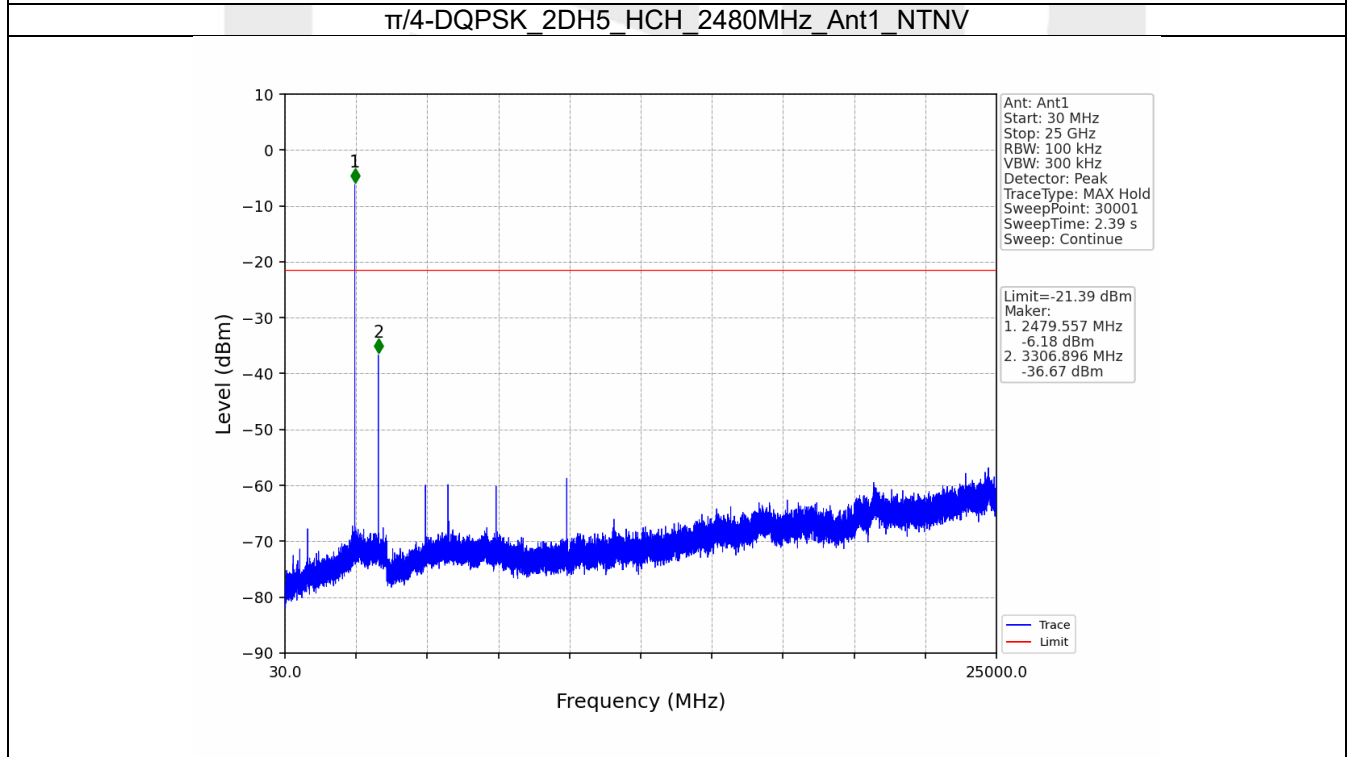
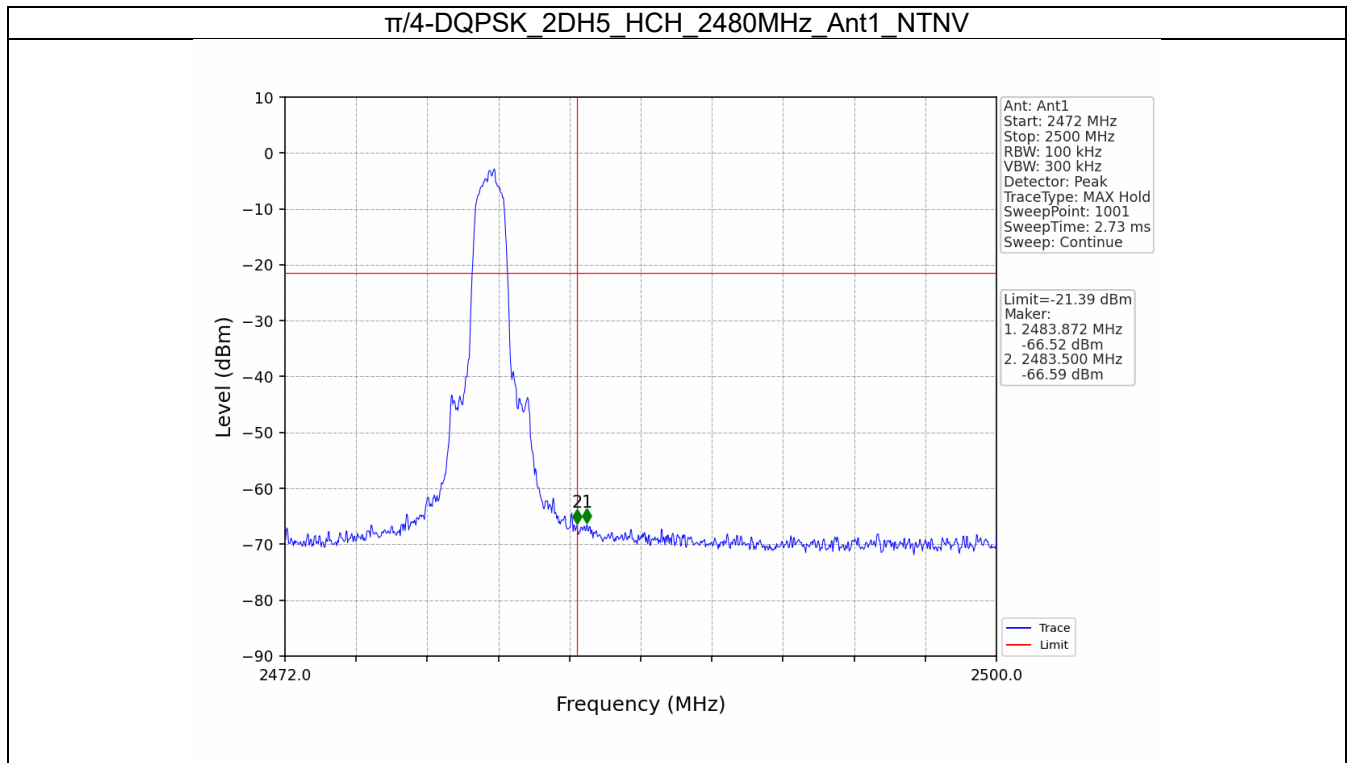


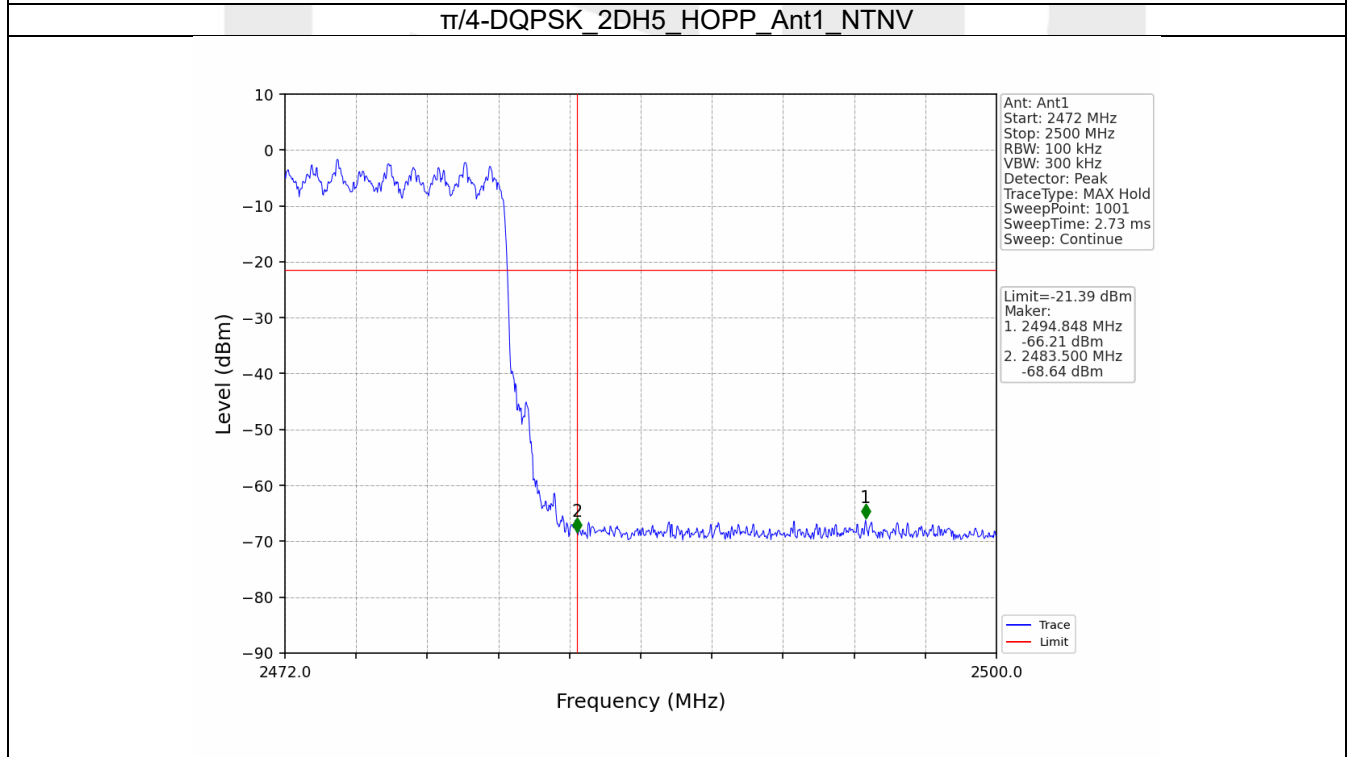
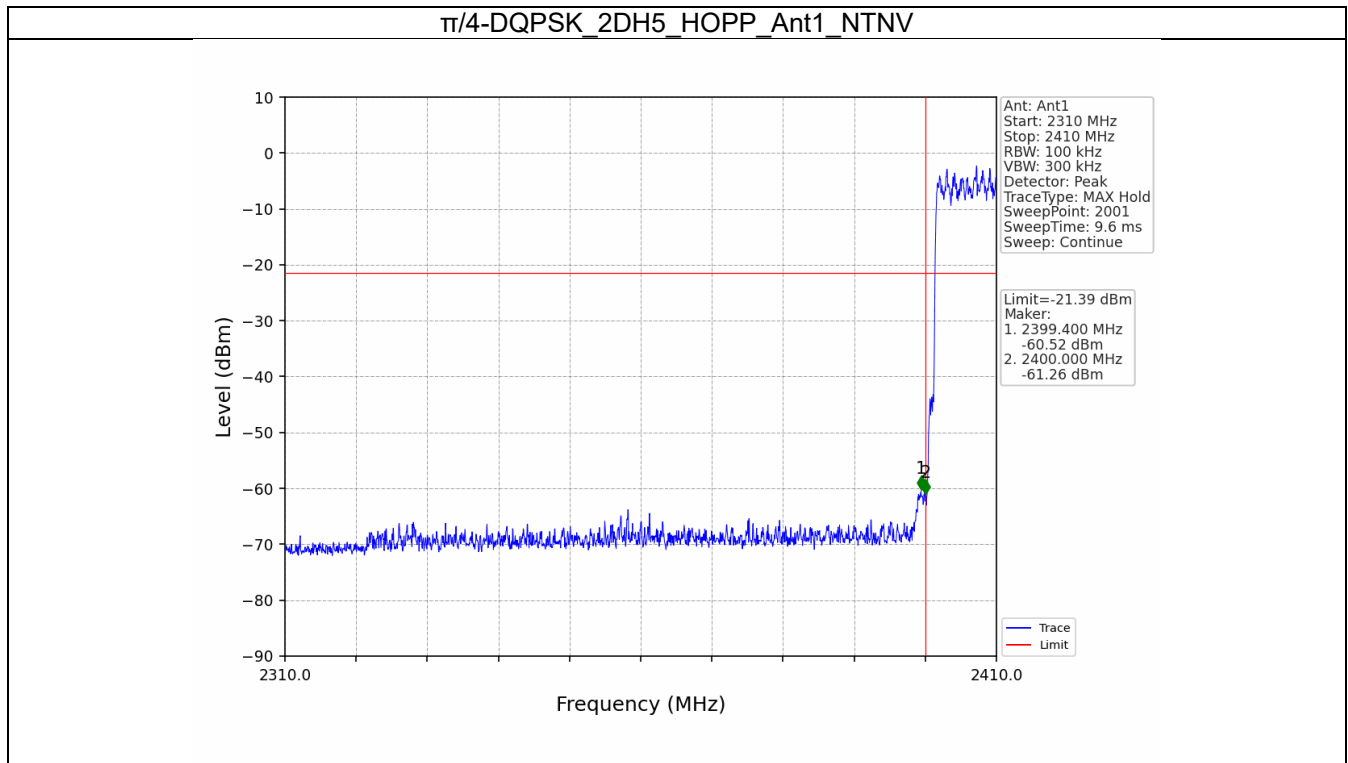




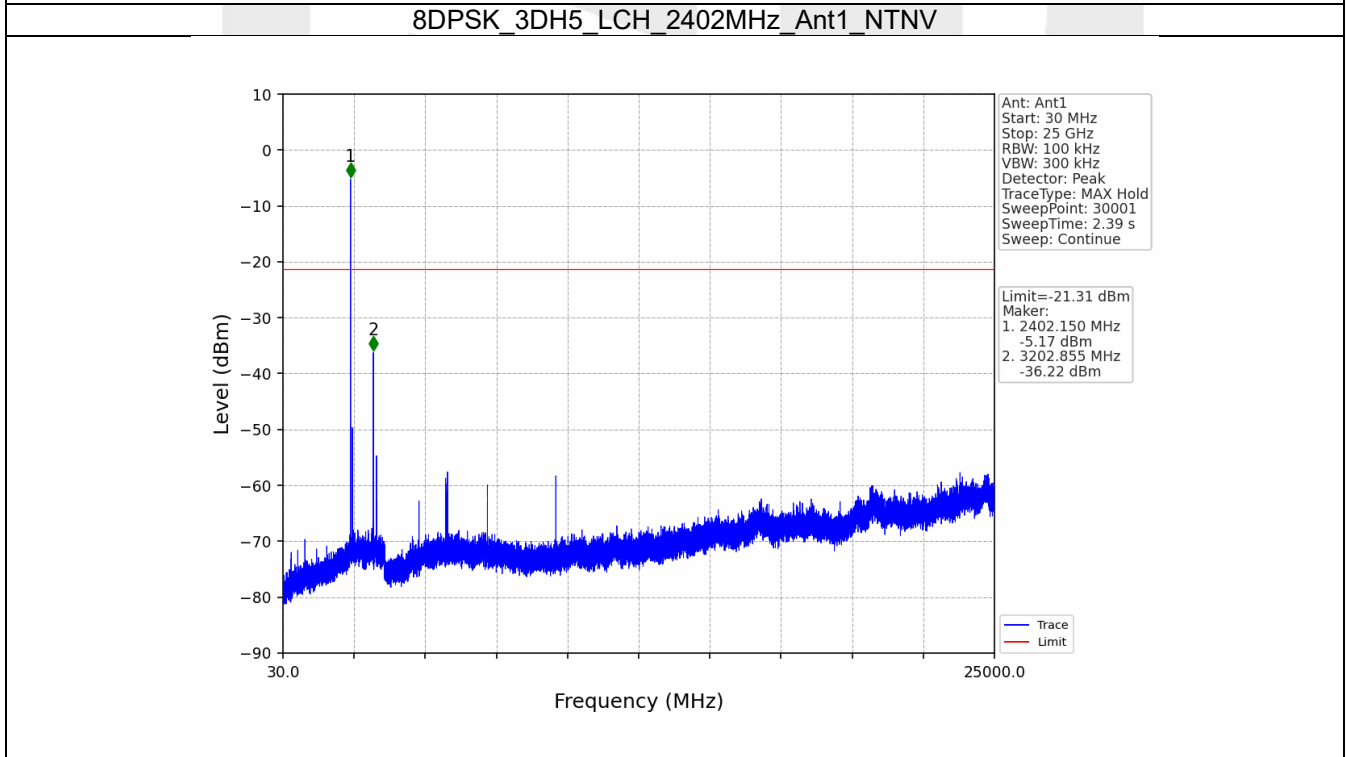
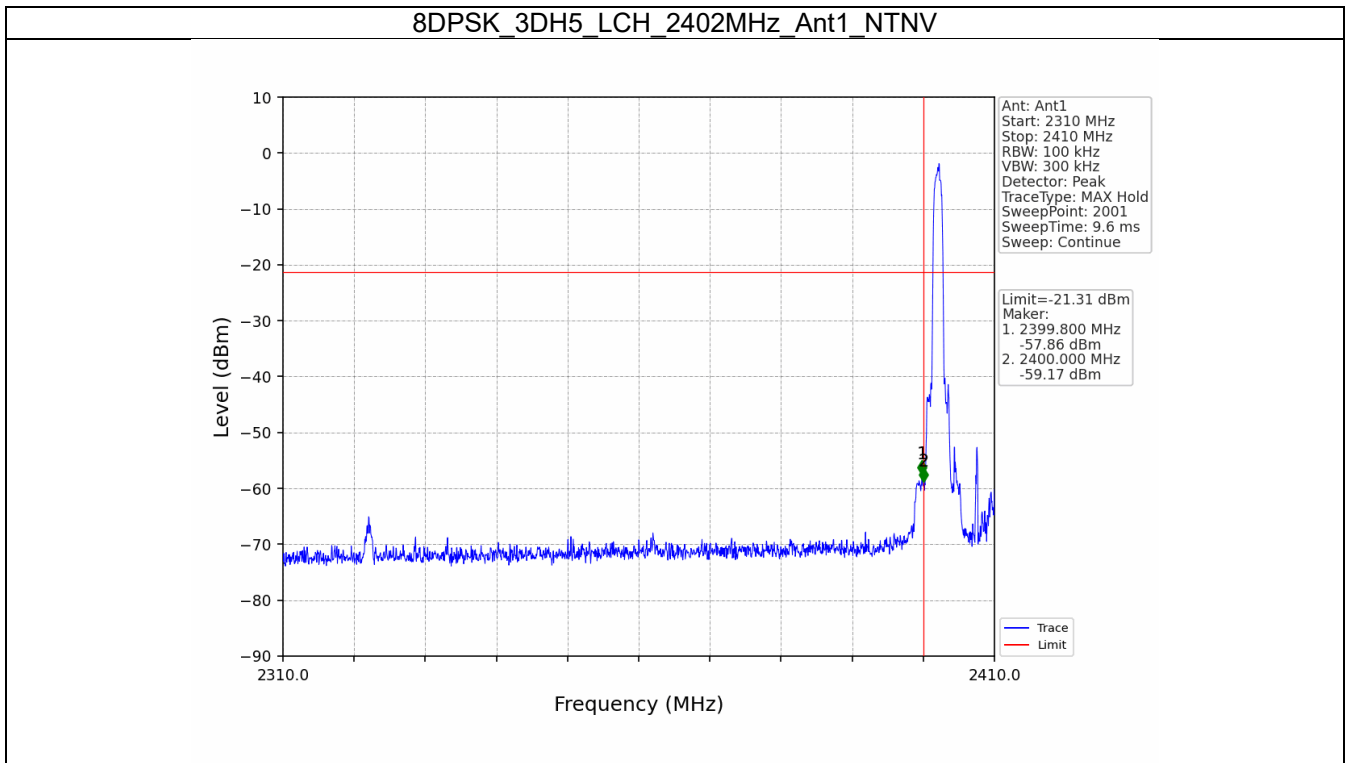


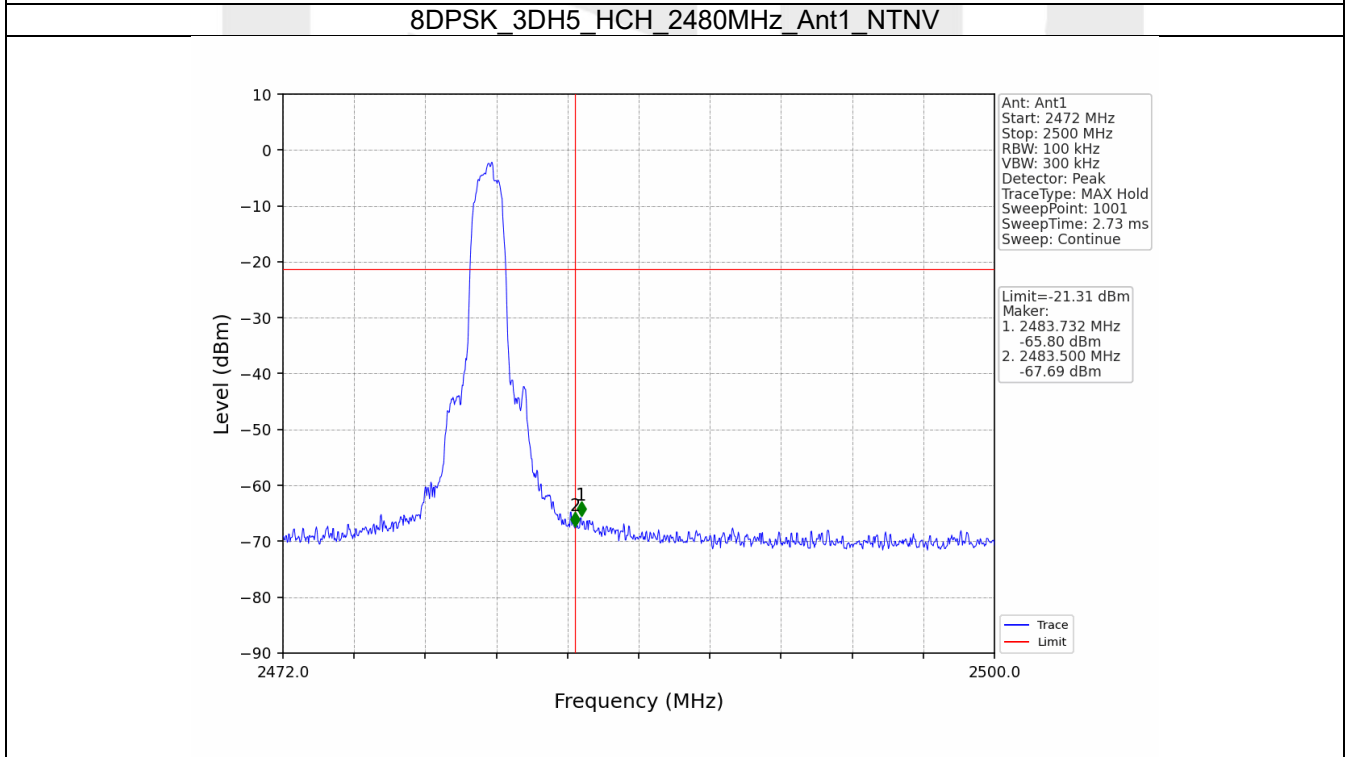
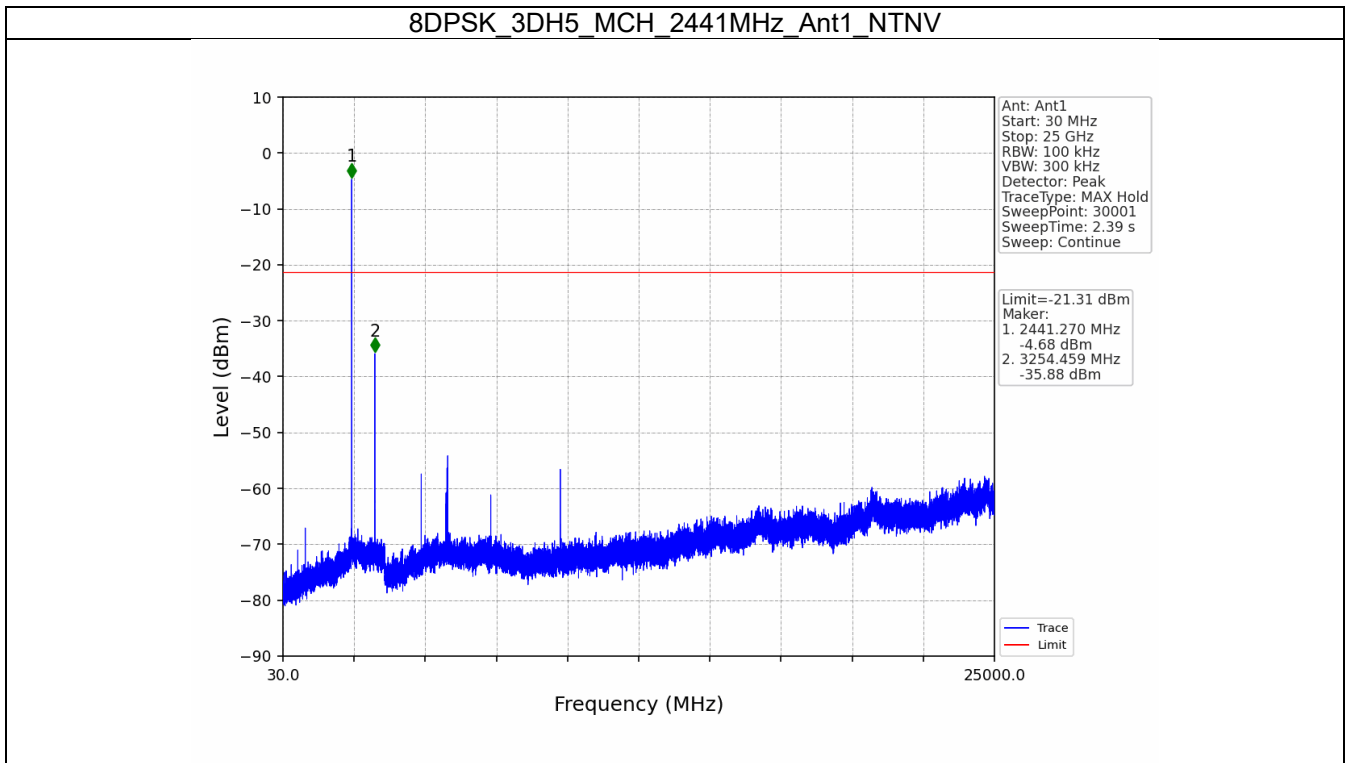


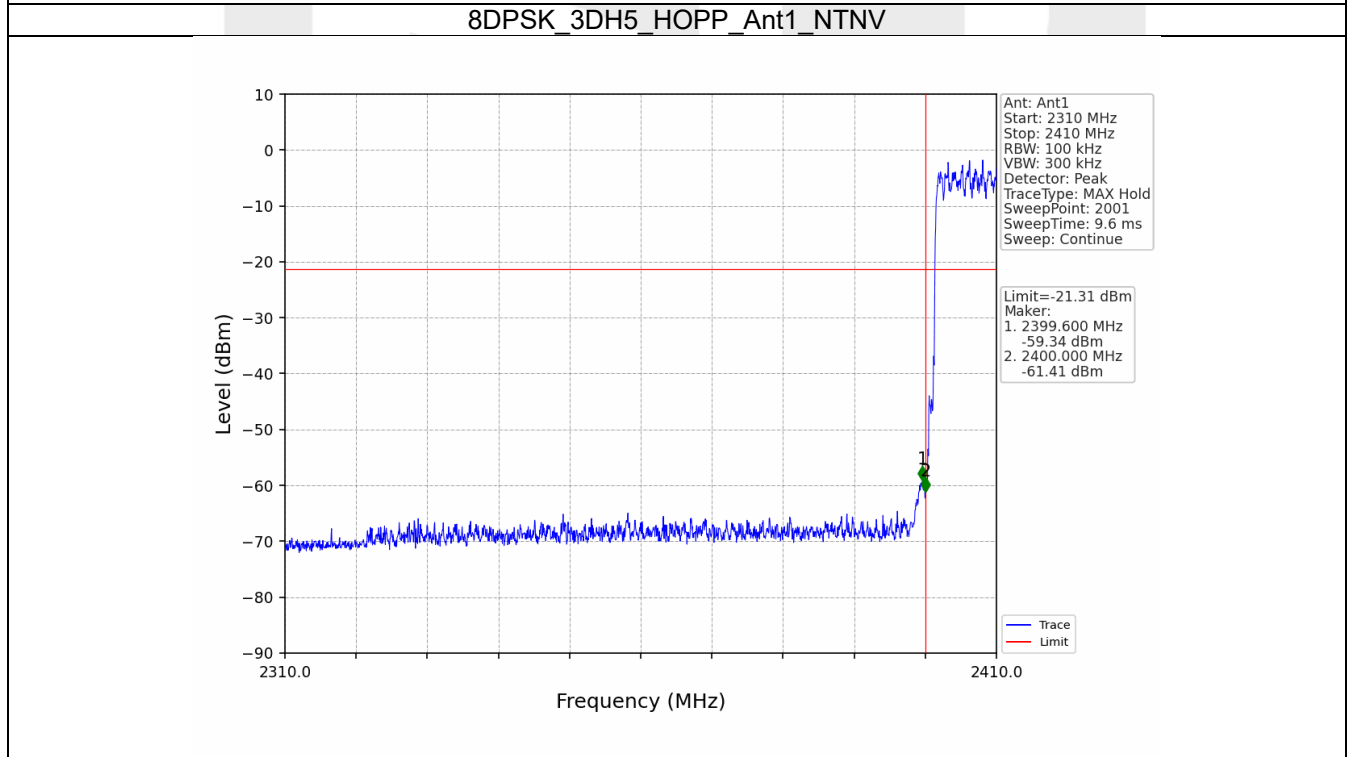
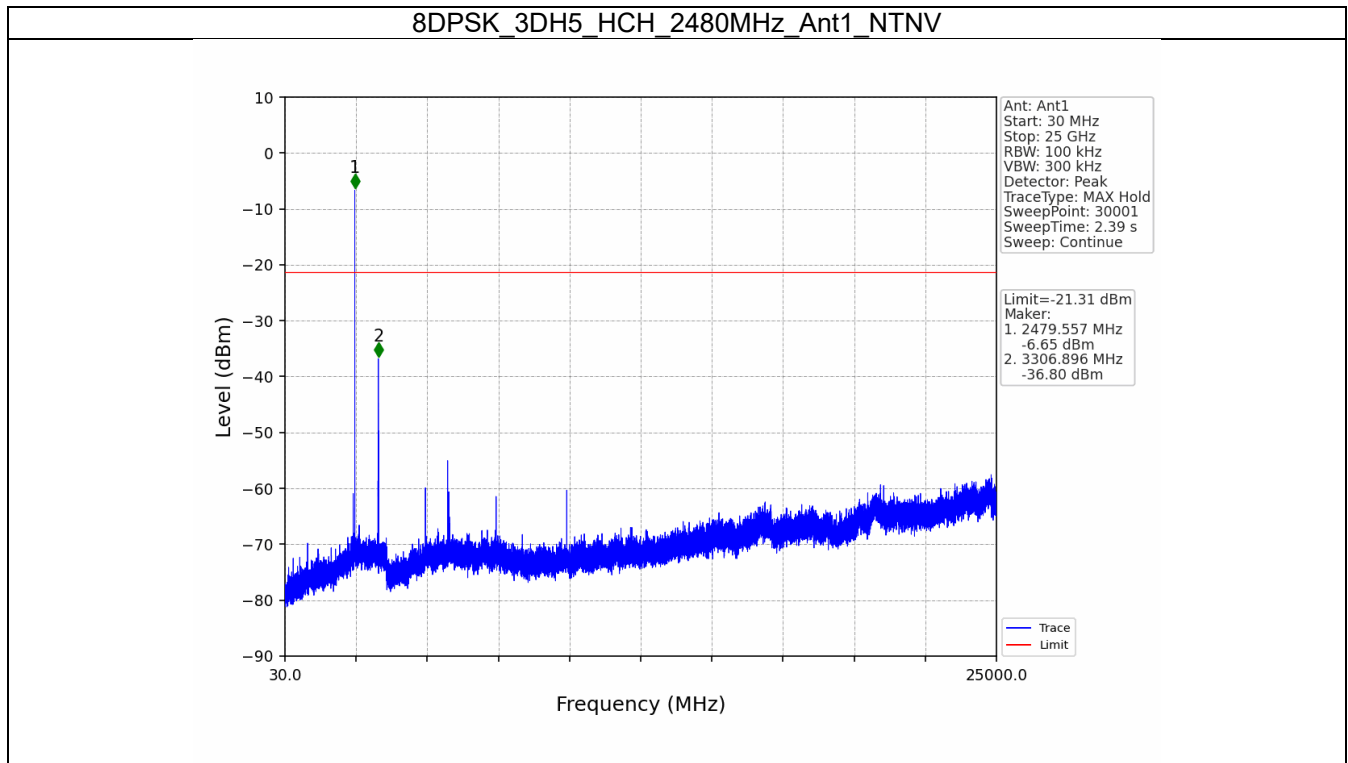


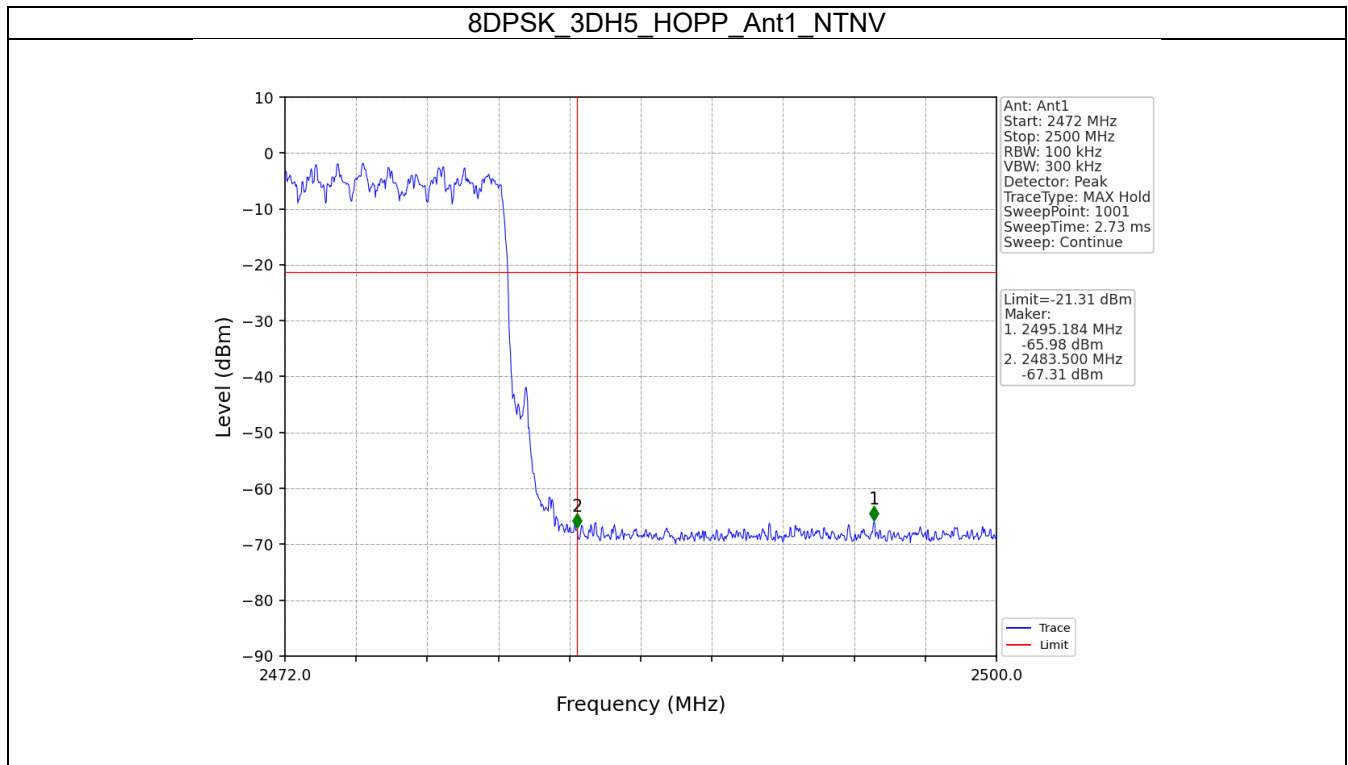












----- End of Report -----