

**ANNEX D**

**Test Report**

**For**

|                      |                                      |
|----------------------|--------------------------------------|
| Project No.:         | 8135EU010416W                        |
| Client:              | Shenzhen Telmall Electronic Co., Ltd |
| Manufacturer:        | Shenzhen Telmall Electronic Co., Ltd |
| Product Description: | Dual 6 inches Party Speaker / T6213  |
| Test Engineer:       | <i>Mikoy zhu</i>                     |
| Test Date:           | 2023-12-11                           |

### 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   |



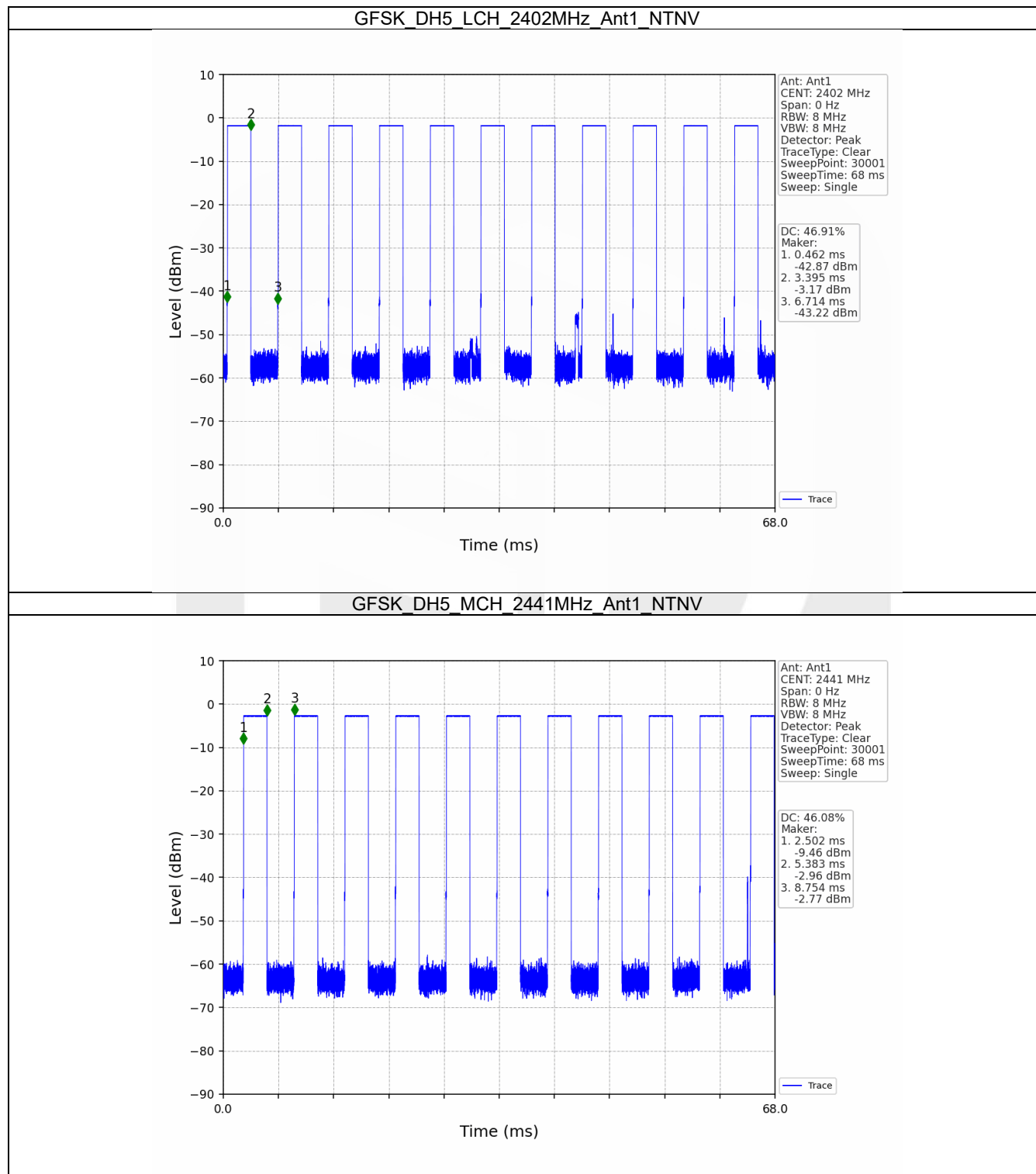
## 1. Duty Cycle

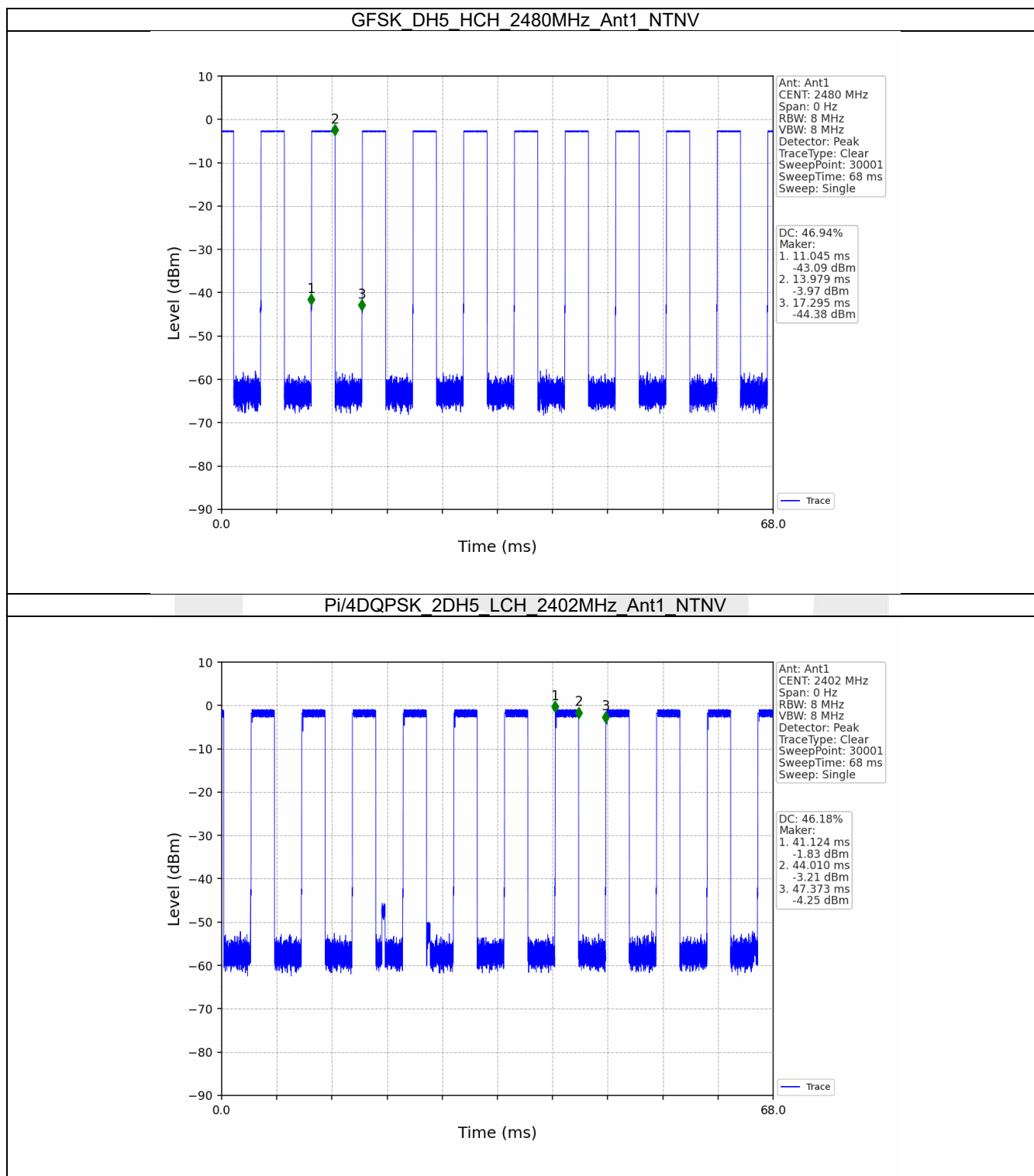
### 1.1 Ant1

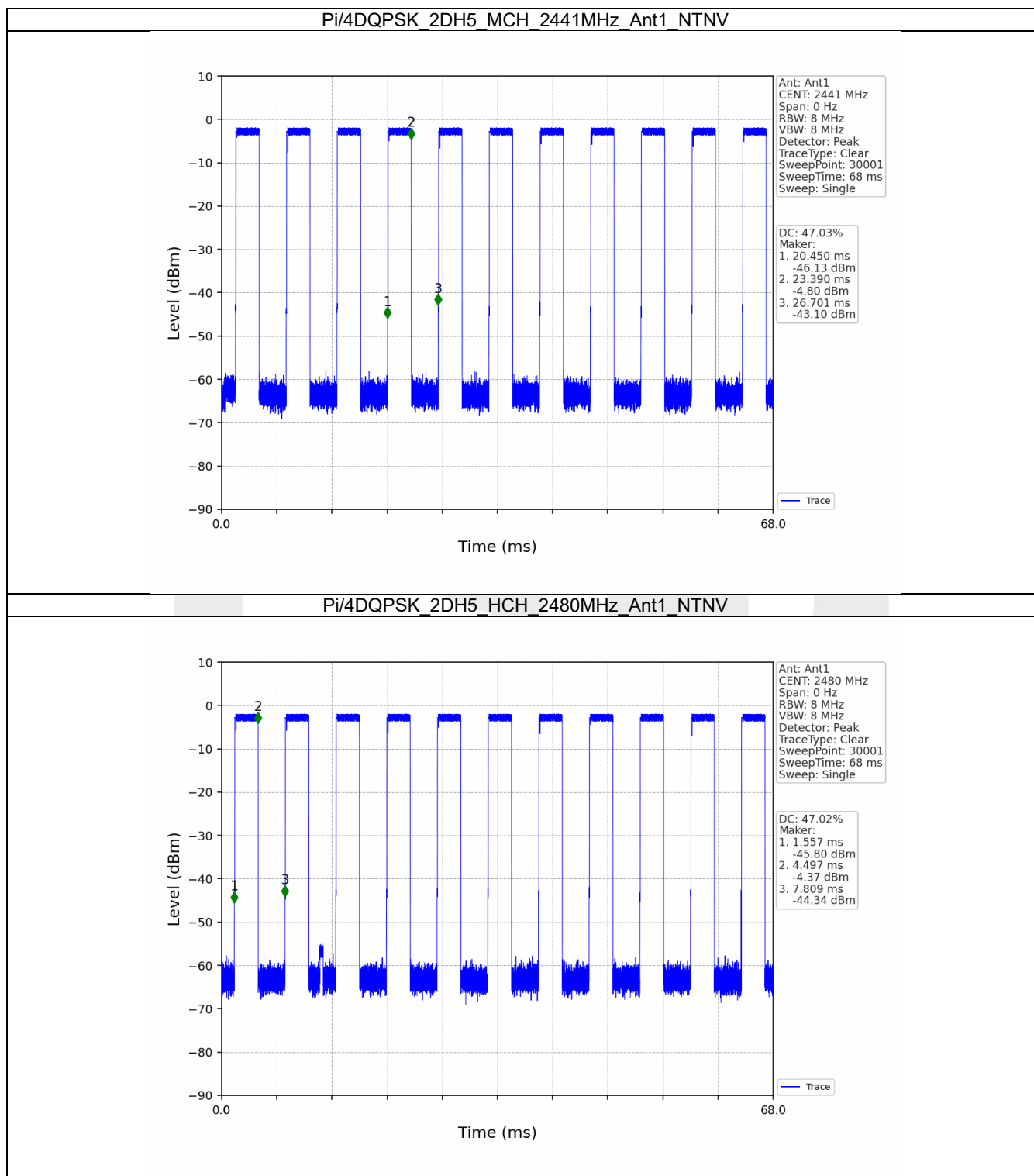
#### 1.1.1 Test Result

| 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         | 2.933     | 6.252       | 46.91          | 3.29                              | 0.04                  |
|           |         | 2441            | DH5         | 2.881     | 6.252       | 46.08          | 3.36                              | 0.02                  |
|           |         | 2480            | DH5         | 2.934     | 6.250       | 46.94          | 3.28                              | 0.04                  |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 2.886     | 6.249       | 46.18          | 3.36                              | 0.04                  |
|           |         | 2441            | 2DH5        | 2.940     | 6.251       | 47.03          | 3.28                              | 0.04                  |
|           |         | 2480            | 2DH5        | 2.940     | 6.252       | 47.02          | 3.28                              | 0.04                  |

## 1.1.2 Test Graph







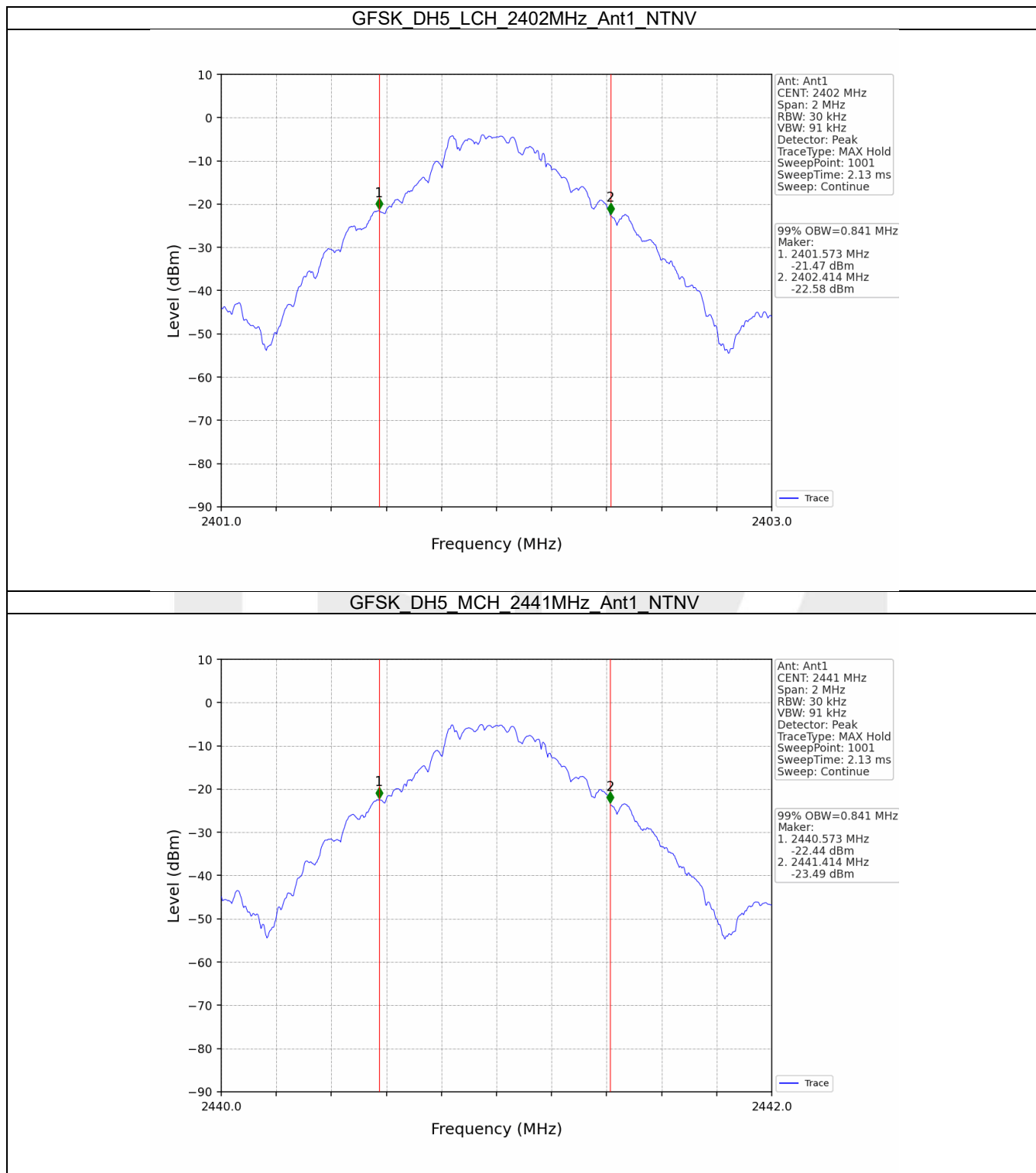
## 2. Bandwidth

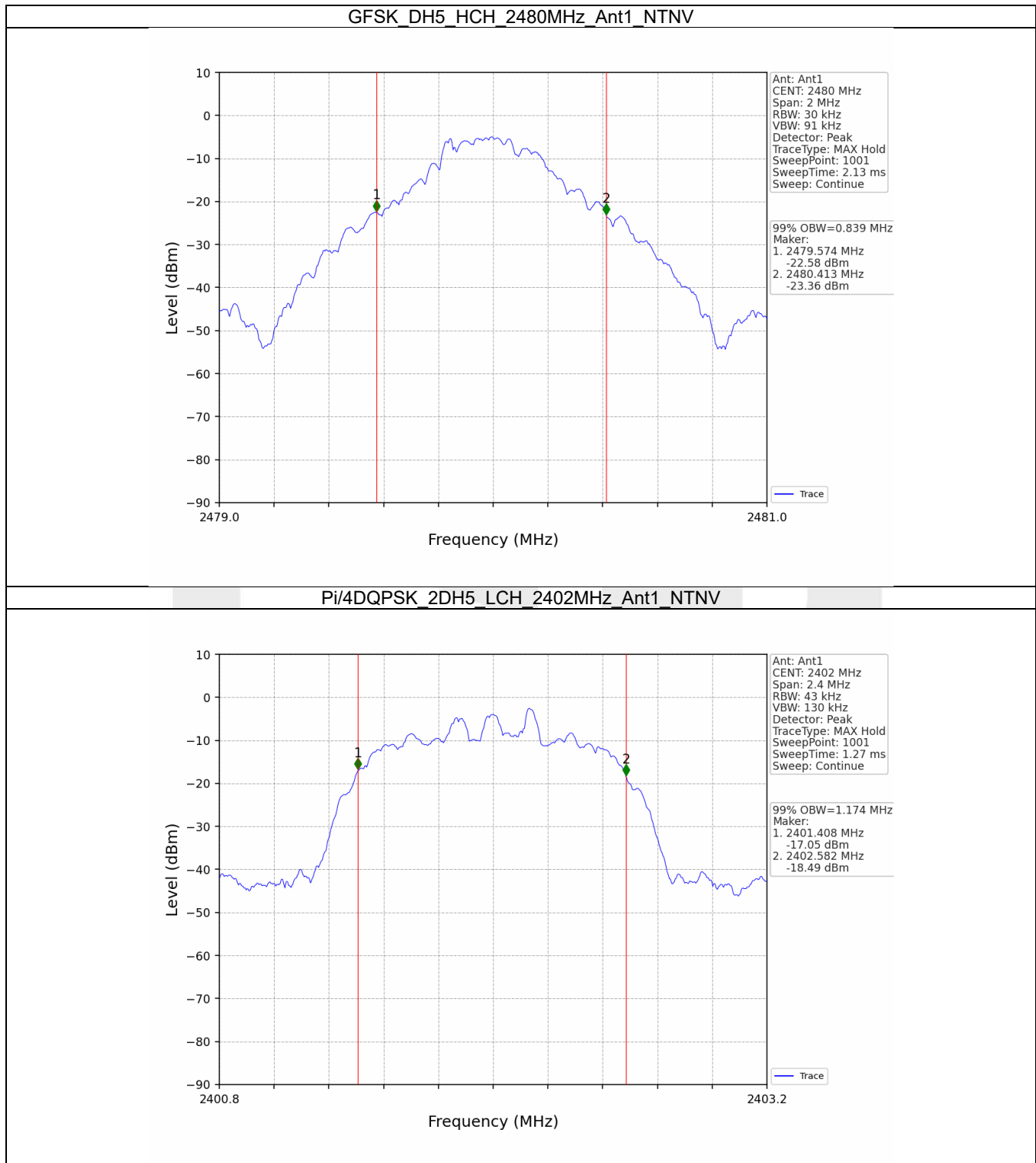
### 2.1 OBW

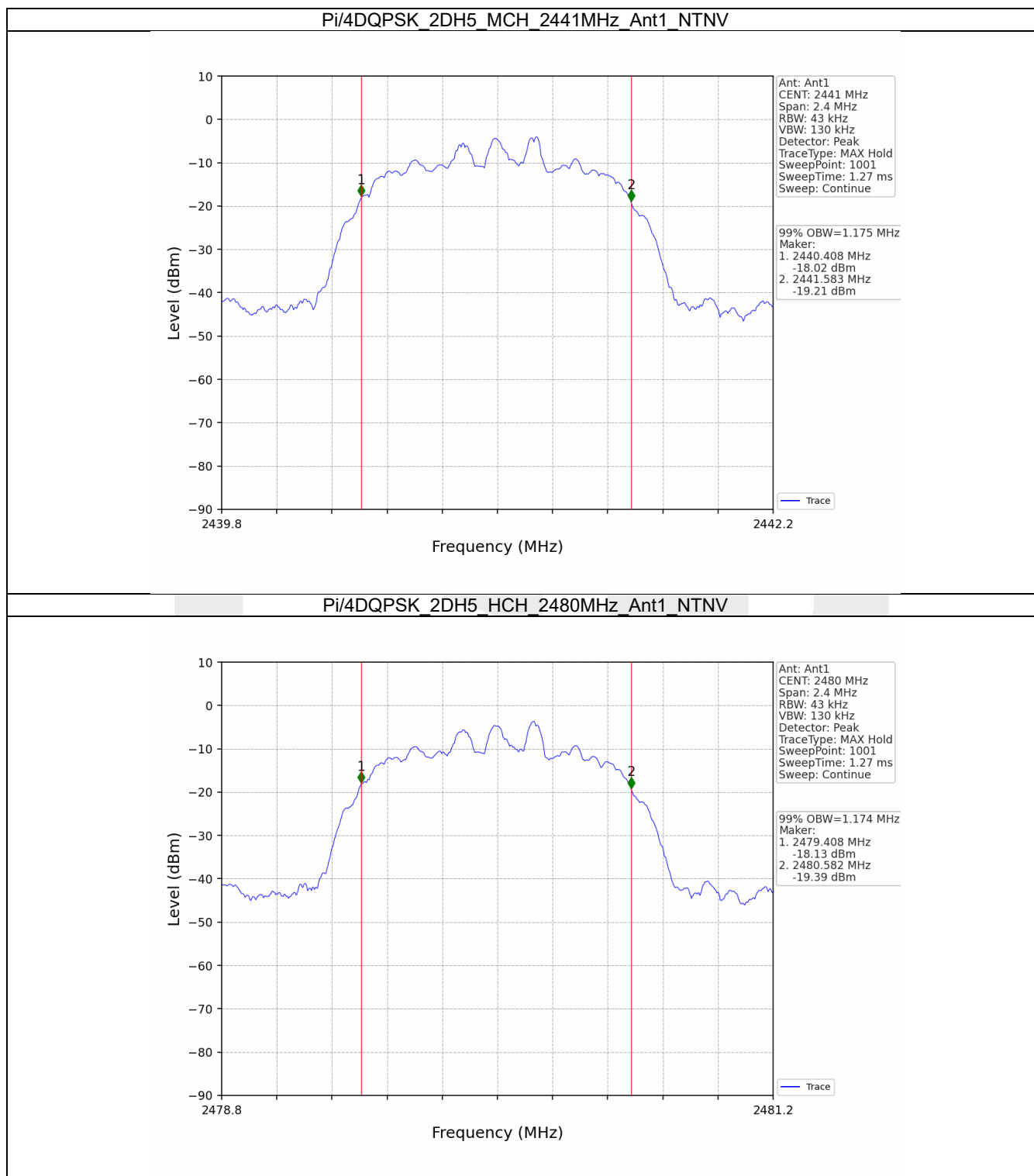
#### 2.1.1 Test Result

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) | Verdict |
|-----------|---------|-----------------|-------------|-----|------------------------------|---------|
|           |         |                 |             |     | Result                       |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.841                        | Pass    |
|           |         | 2441            | DH5         | 1   | 0.841                        | Pass    |
|           |         | 2480            | DH5         | 1   | 0.839                        | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.174                        | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.175                        | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.174                        | Pass    |

## 2.1.2 Test Graph





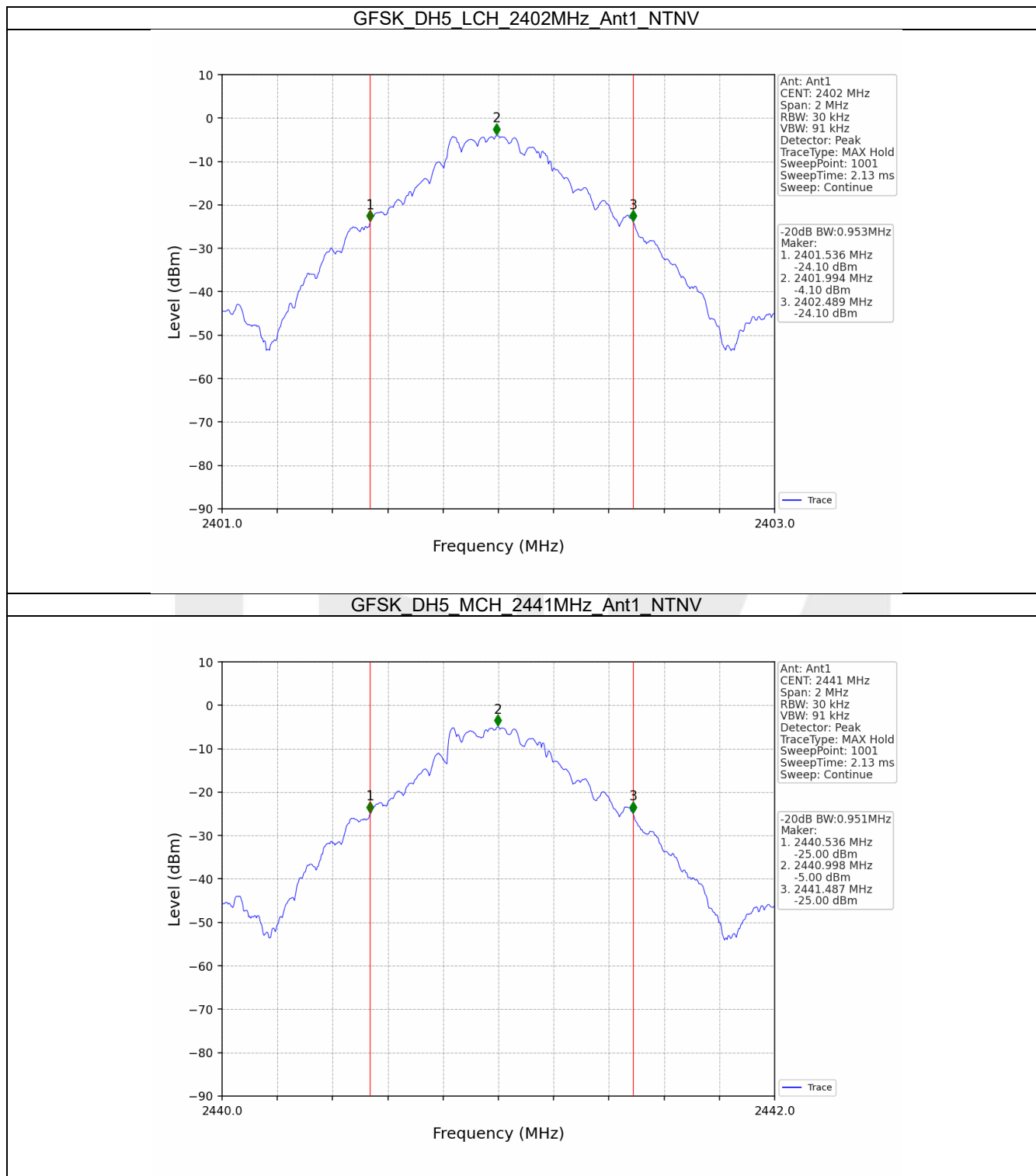


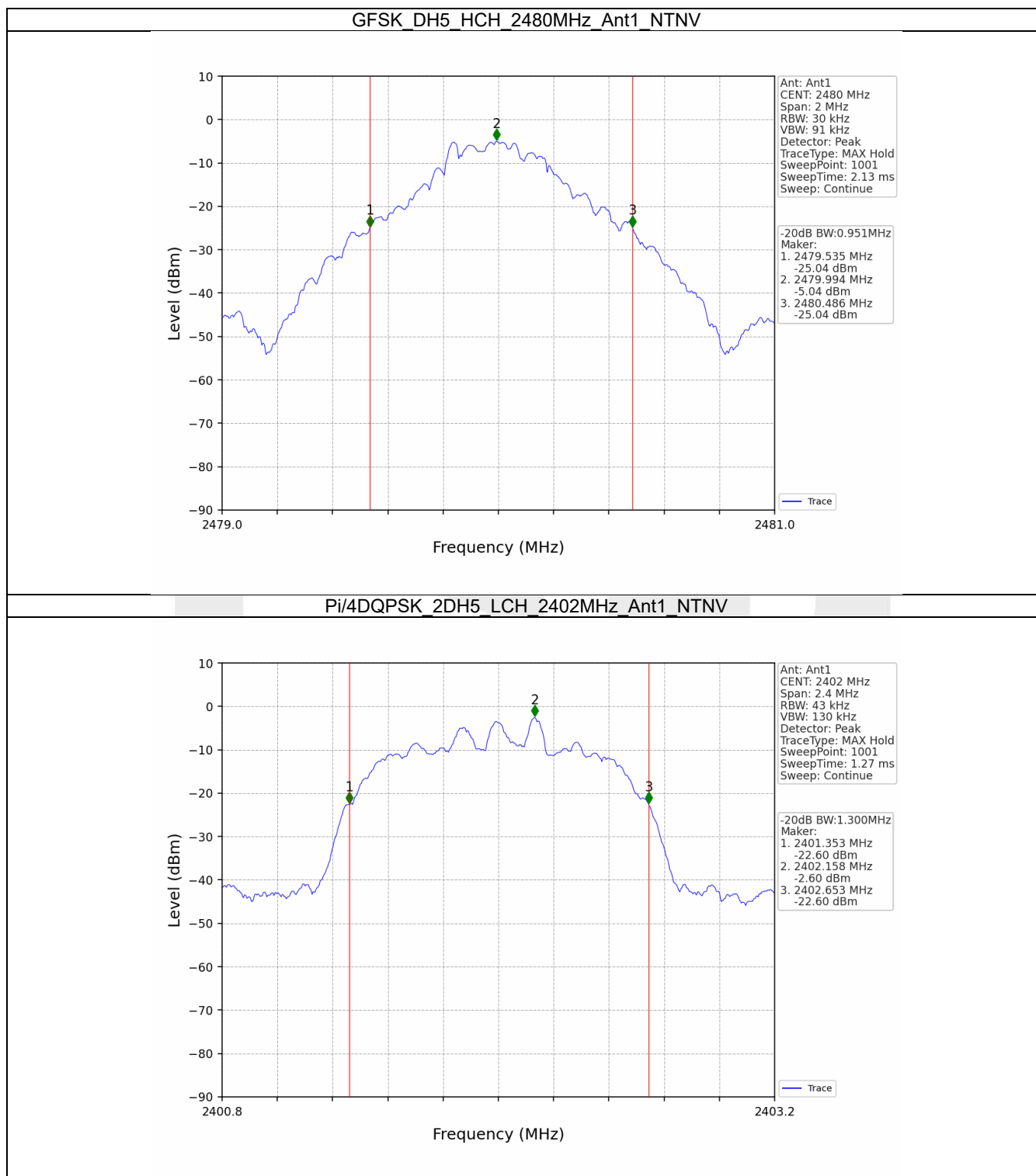
## 2.2 20dB BW

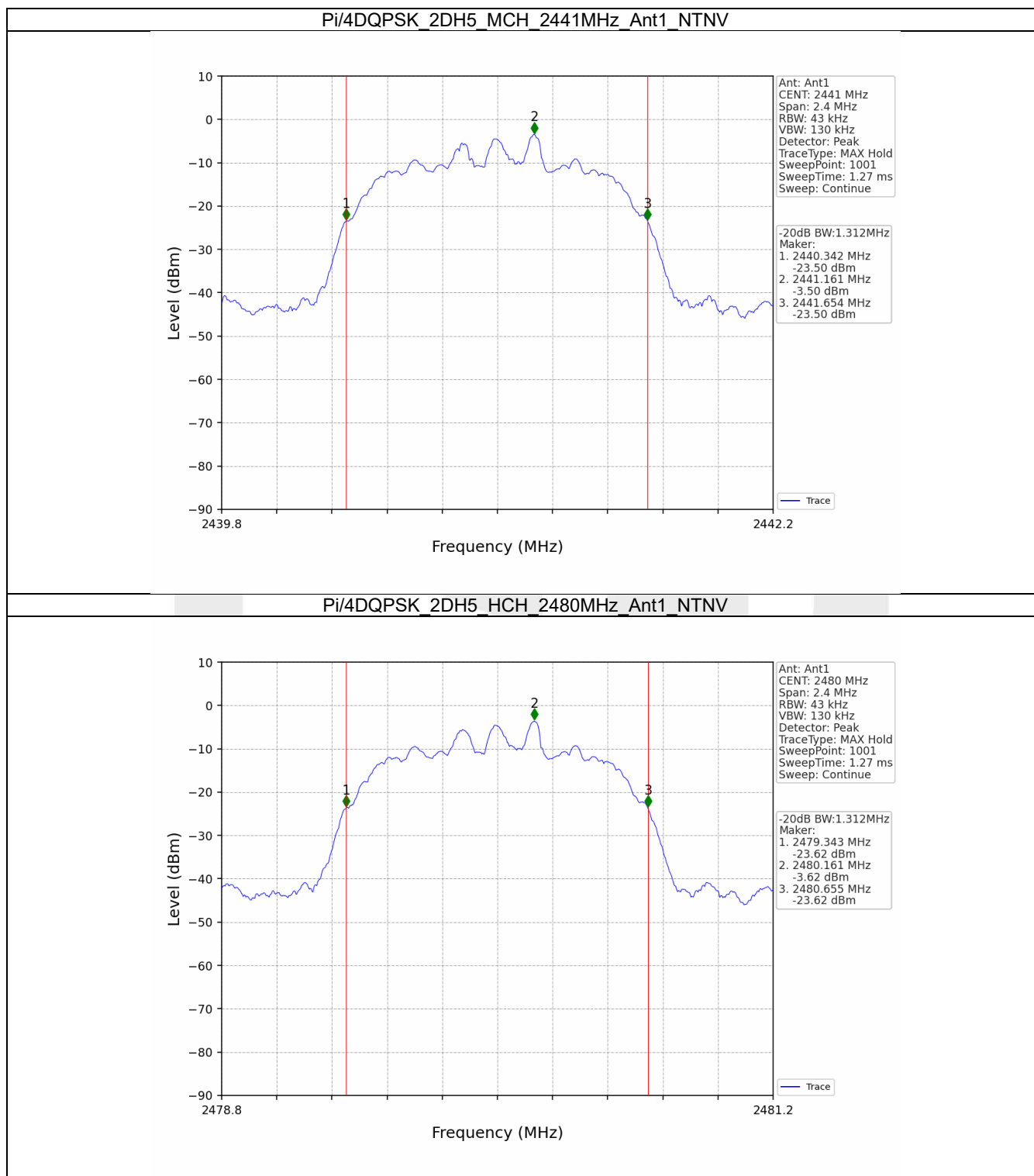
### 2.2.1 Test Result

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) | Verdict |
|-----------|---------|-----------------|-------------|-----|----------------------|---------|
|           |         |                 |             |     | Result               |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.953                | Pass    |
|           |         | 2441            | DH5         | 1   | 0.951                | Pass    |
|           |         | 2480            | DH5         | 1   | 0.951                | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.300                | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.312                | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.312                | Pass    |

## 2.2.2 Test Graph







### 3. Maximum Conducted Output Power

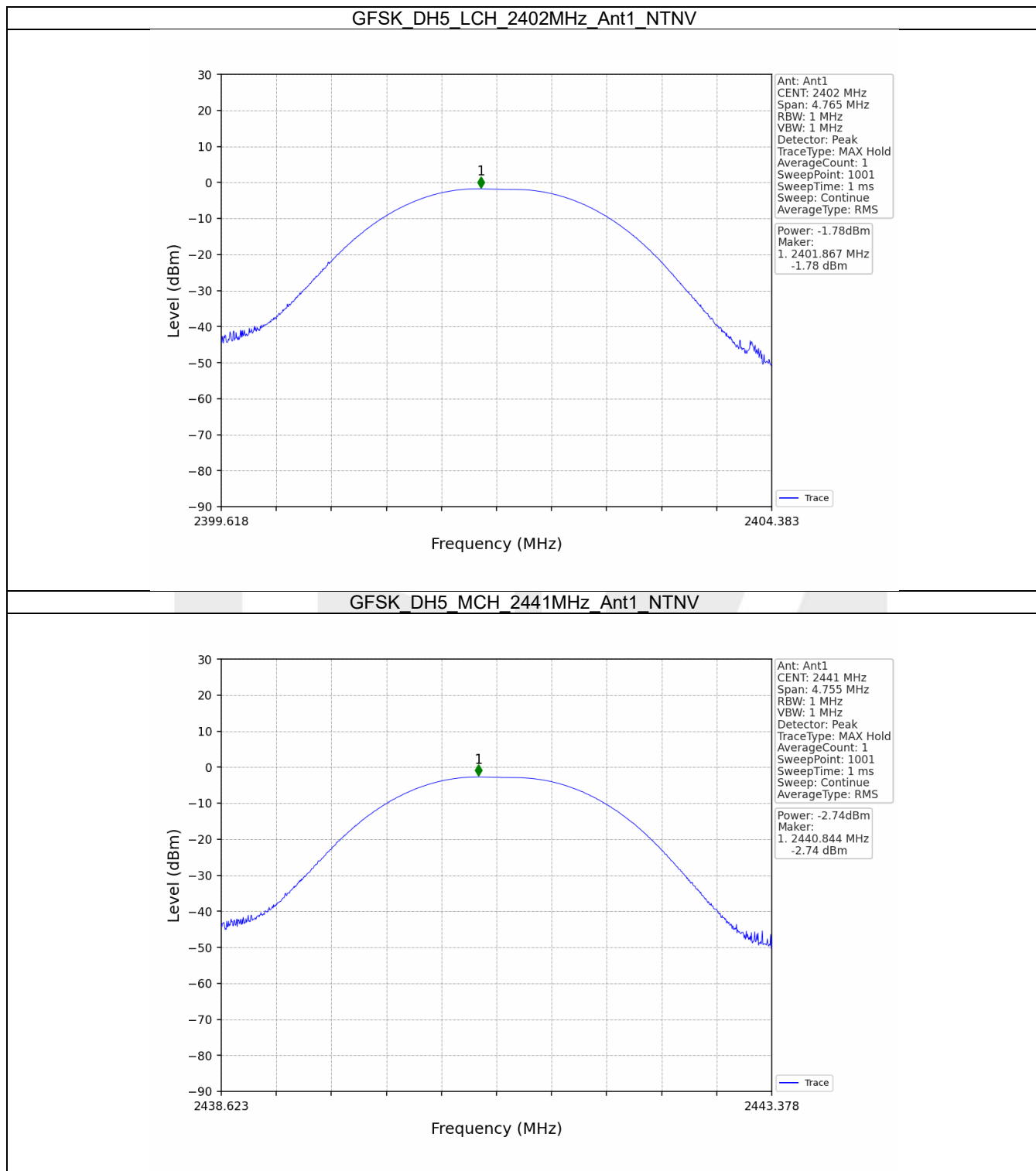
#### 3.1 Power

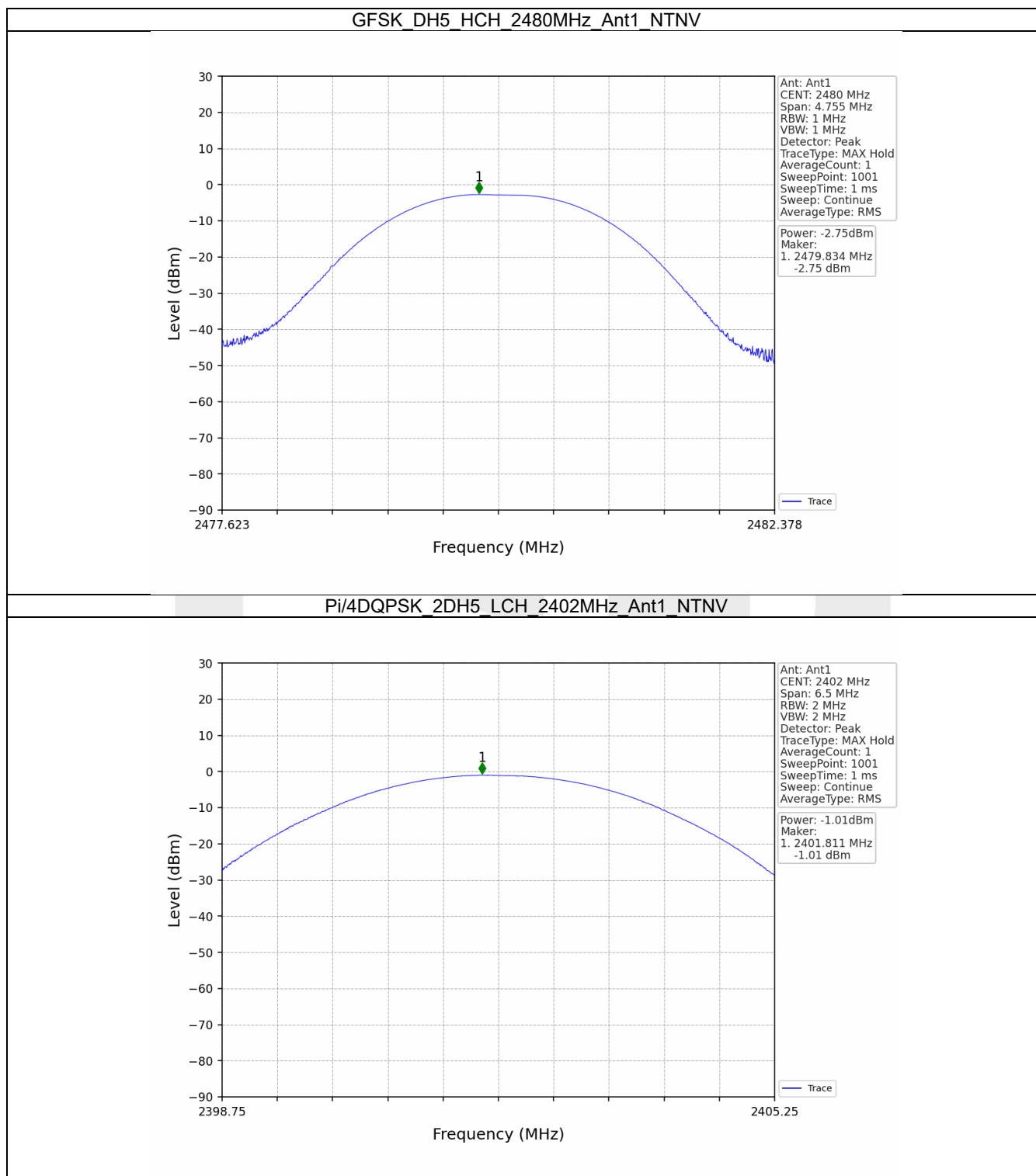
##### 3.1.1 Test Result

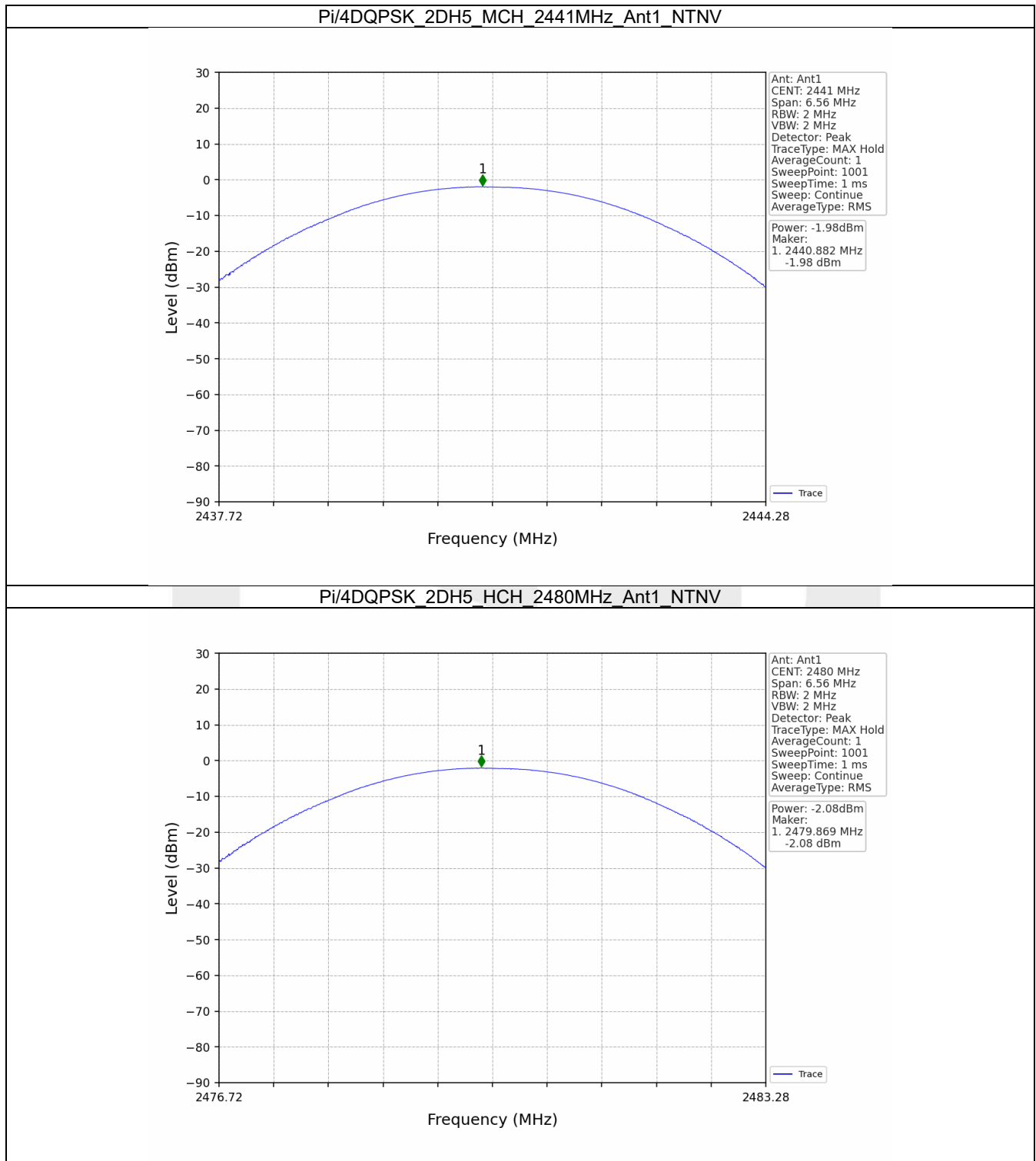
| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |              | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|--------------|---------|
|           |         |                 |             | ANT1                                      | Limit        |         |
| GFSK      | SISO    | 2402            | DH5         | -1.78                                     | $\leq 30$    | Pass    |
|           |         | 2441            | DH5         | -2.74                                     | $\leq 30$    | Pass    |
|           |         | 2480            | DH5         | -2.75                                     | $\leq 30$    | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | -1.01                                     | $\leq 20.97$ | Pass    |
|           |         | 2441            | 2DH5        | -1.98                                     | $\leq 20.97$ | Pass    |
|           |         | 2480            | 2DH5        | -2.08                                     | $\leq 20.97$ | Pass    |

Note1: Antenna Gain: Ant1: -0.58dBi;

### 3.1.2 Test Graph







## 4. Carrier Frequency Separation

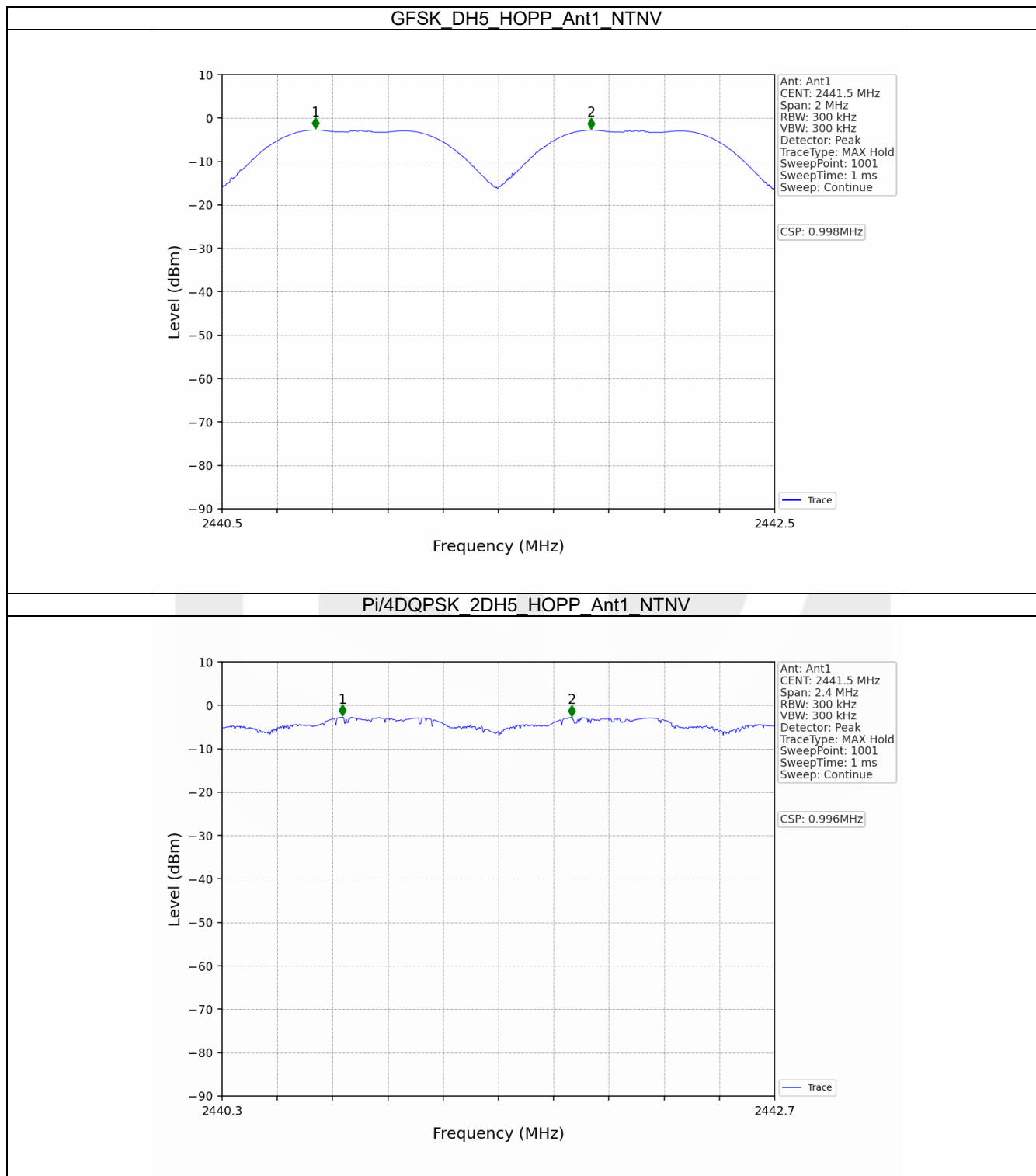
### 4.1 Ant1

#### 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         | 0.998                    | 0.953                | $\geq 0.953$ | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 0.996                    | 1.312                | $\geq 0.875$ | Pass    |



#### 4.1.2 Test Graph



## 5. Number of Hopping Frequencies

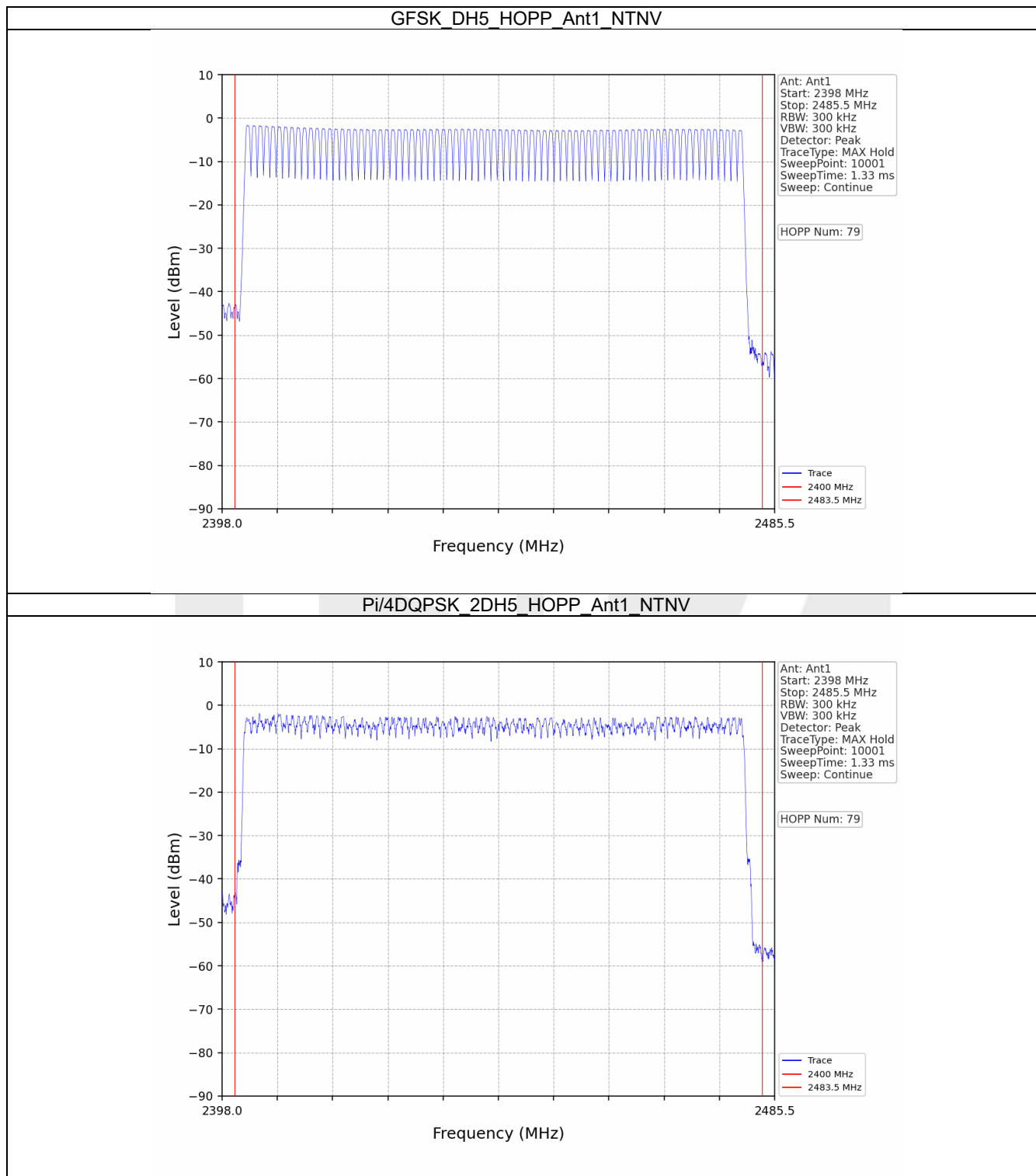
### 5.1 HoppNum

#### 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/4DQPSK | SISO    | HOPP            | 2DH5        | 79                         | $\geq 15$ | Pass    |



### 5.1.2 Test Graph



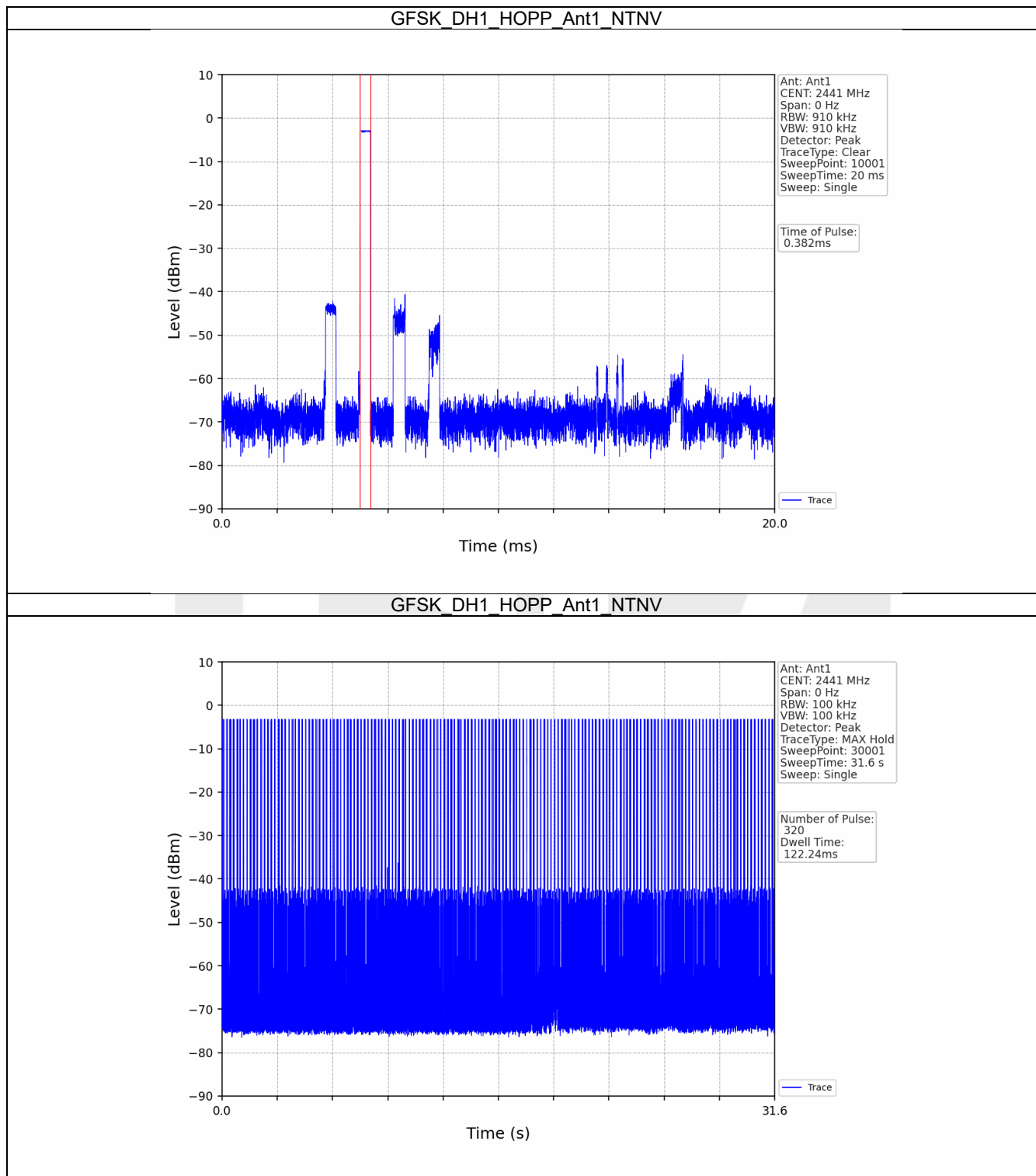
## 6. Time of Occupancy (Dwell Time)

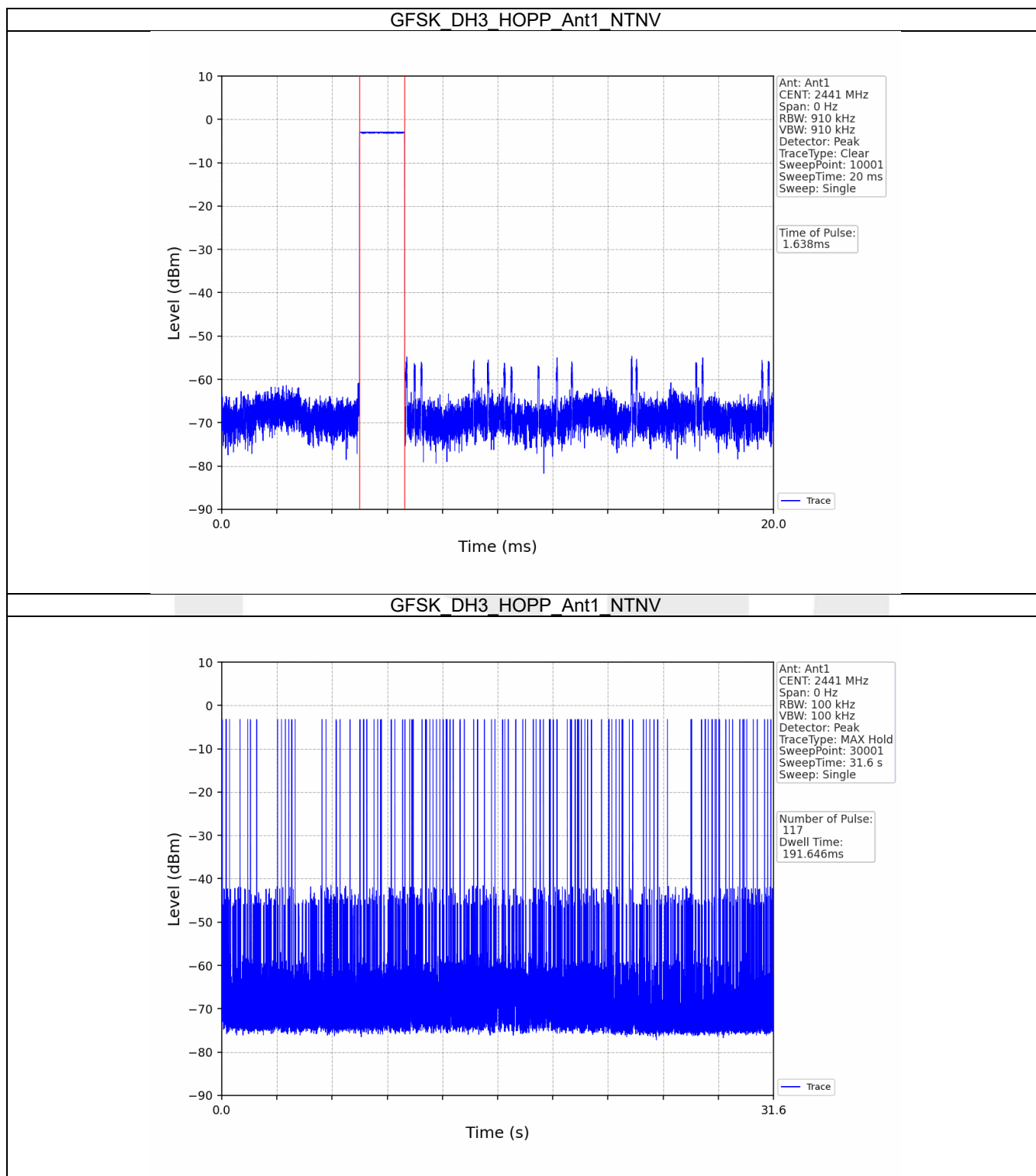
### 6.1 Ant1

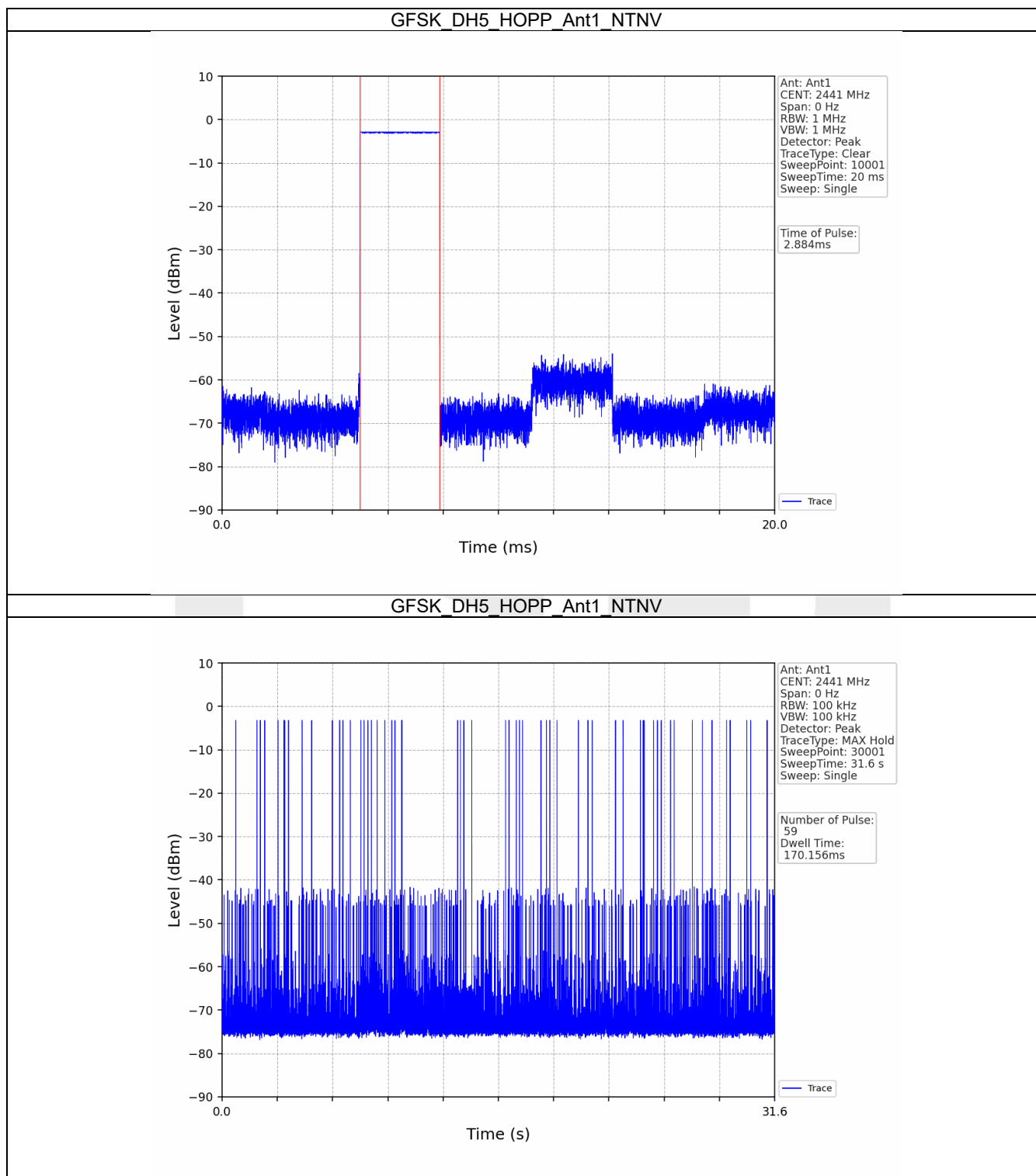
#### 6.1.1 Test Result

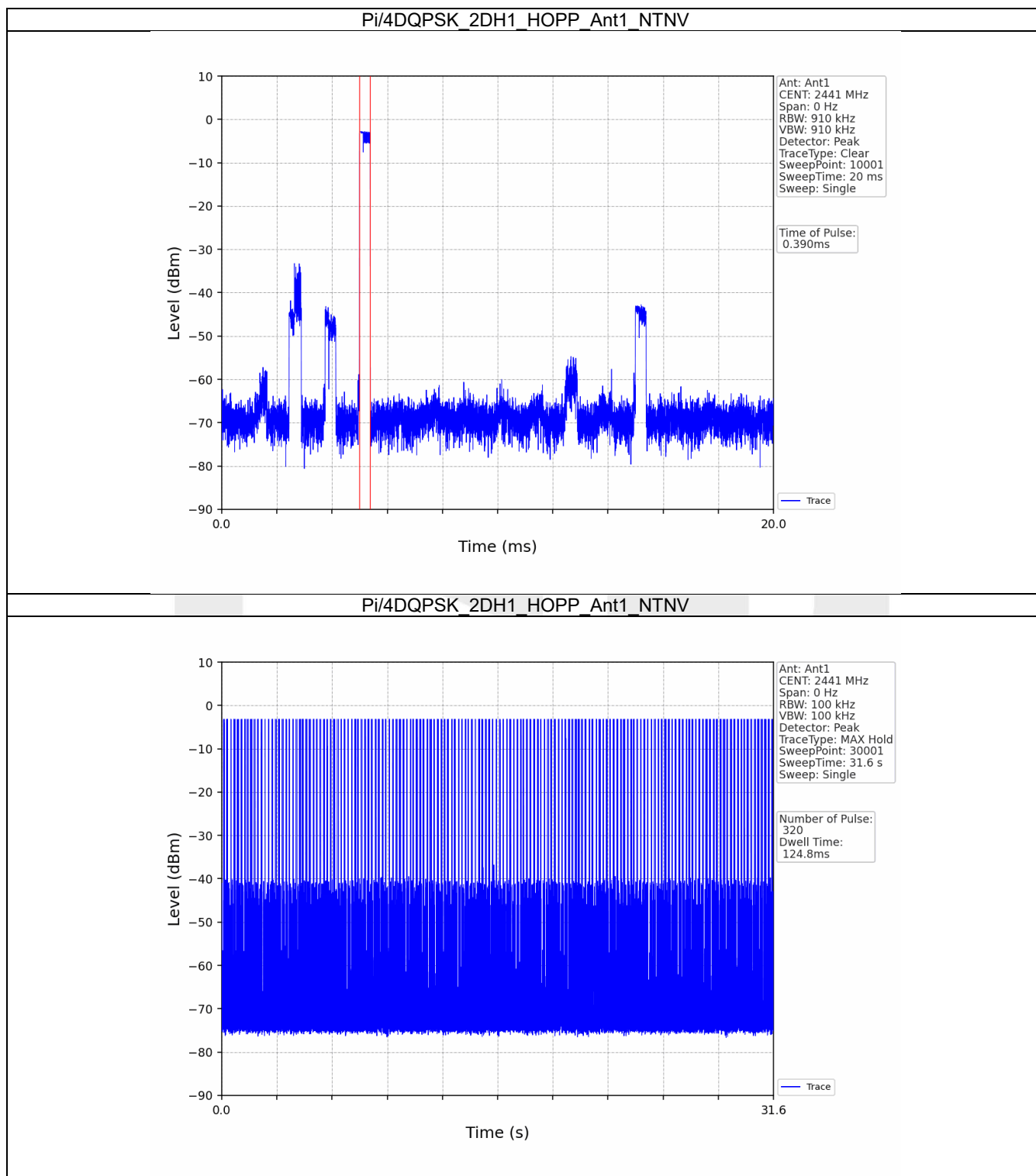
| Ant1      |         |                 |             |                               |                        |                                    |                 |            |         |
|-----------|---------|-----------------|-------------|-------------------------------|------------------------|------------------------------------|-----------------|------------|---------|
| 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         | 0.382                         | 31.600                 | 320                                | 122.240         | <=400      | Pass    |
|           |         |                 | DH3         | 1.638                         | 31.600                 | 117                                | 191.646         | <=400      | Pass    |
|           |         |                 | DH5         | 2.884                         | 31.600                 | 59                                 | 170.156         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.390                         | 31.600                 | 320                                | 124.800         | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.644                         | 31.600                 | 103                                | 169.332         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.890                         | 31.600                 | 69                                 | 199.410         | <=400      | Pass    |

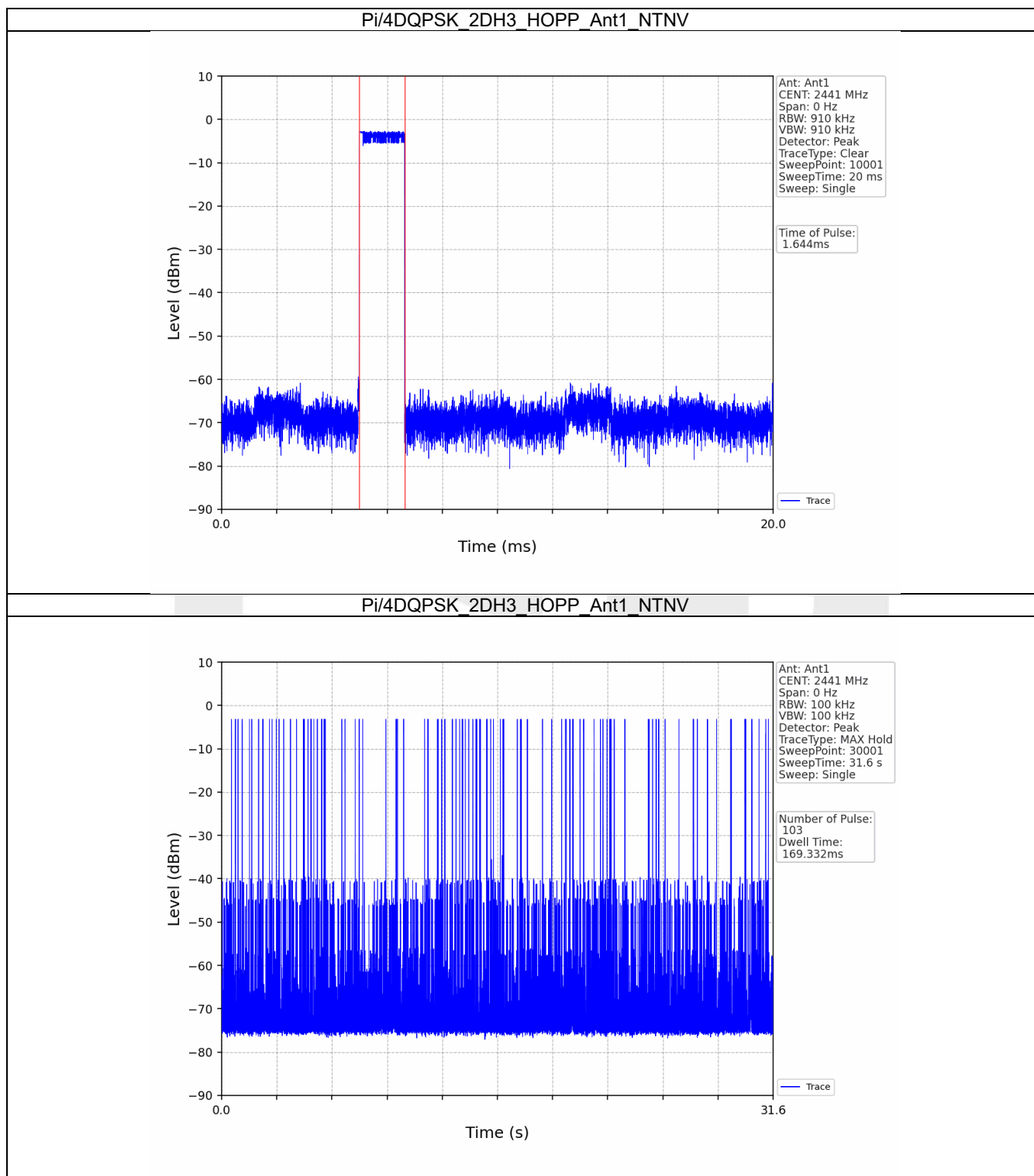
## 6.1.2 Test Graph

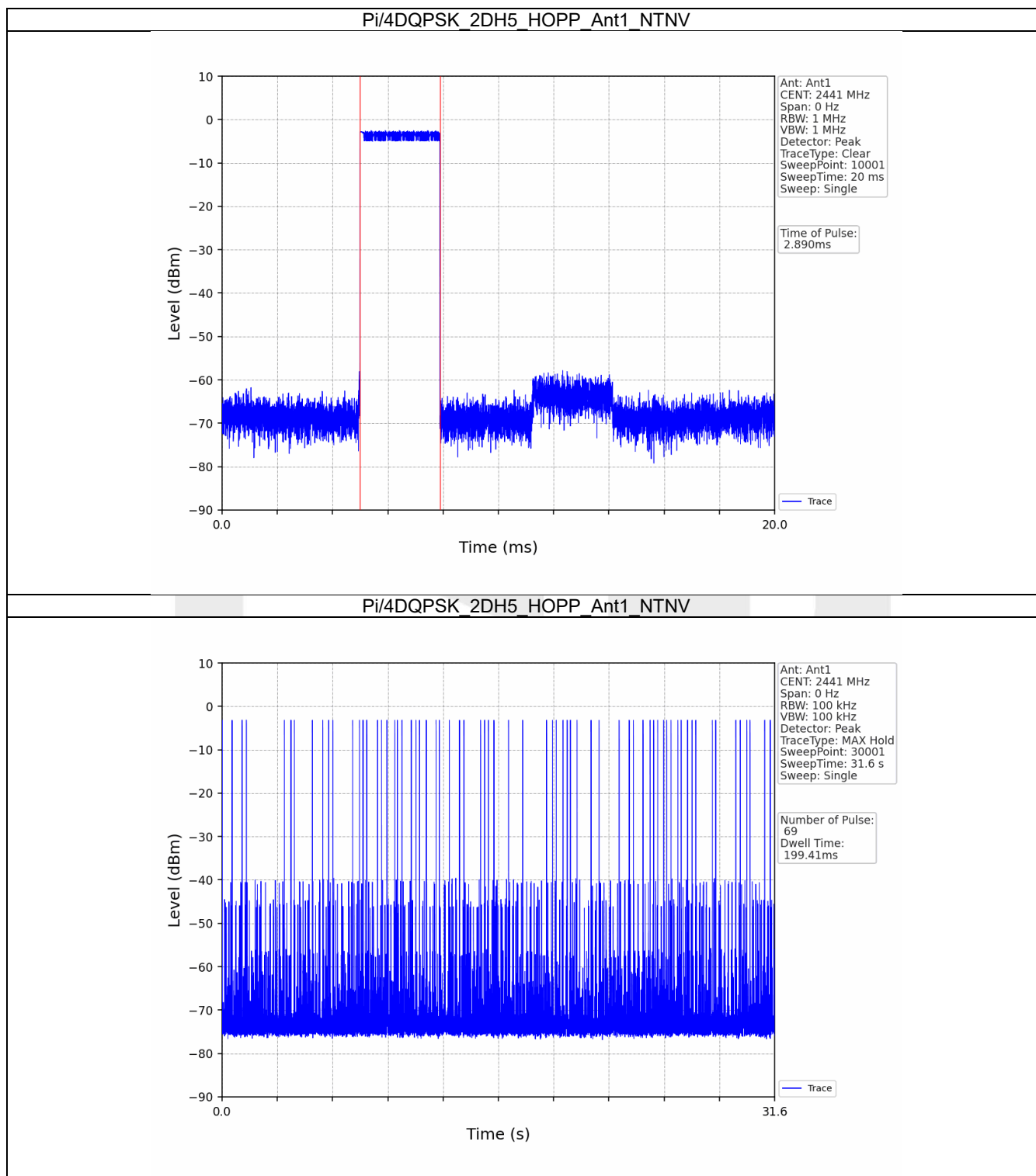












## 7. Unwanted Emissions In Non-restricted Frequency Bands

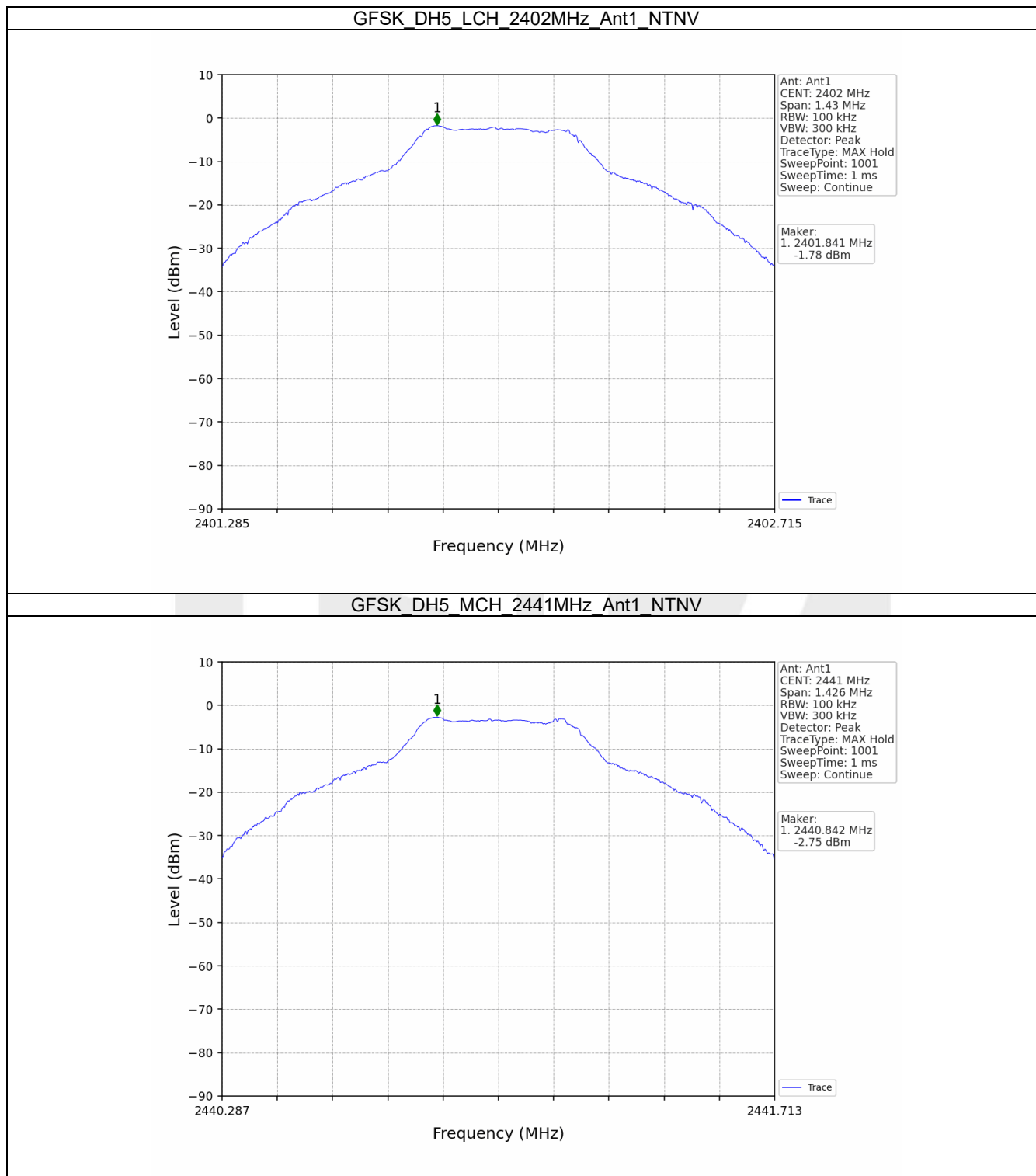
### 7.1 Ref

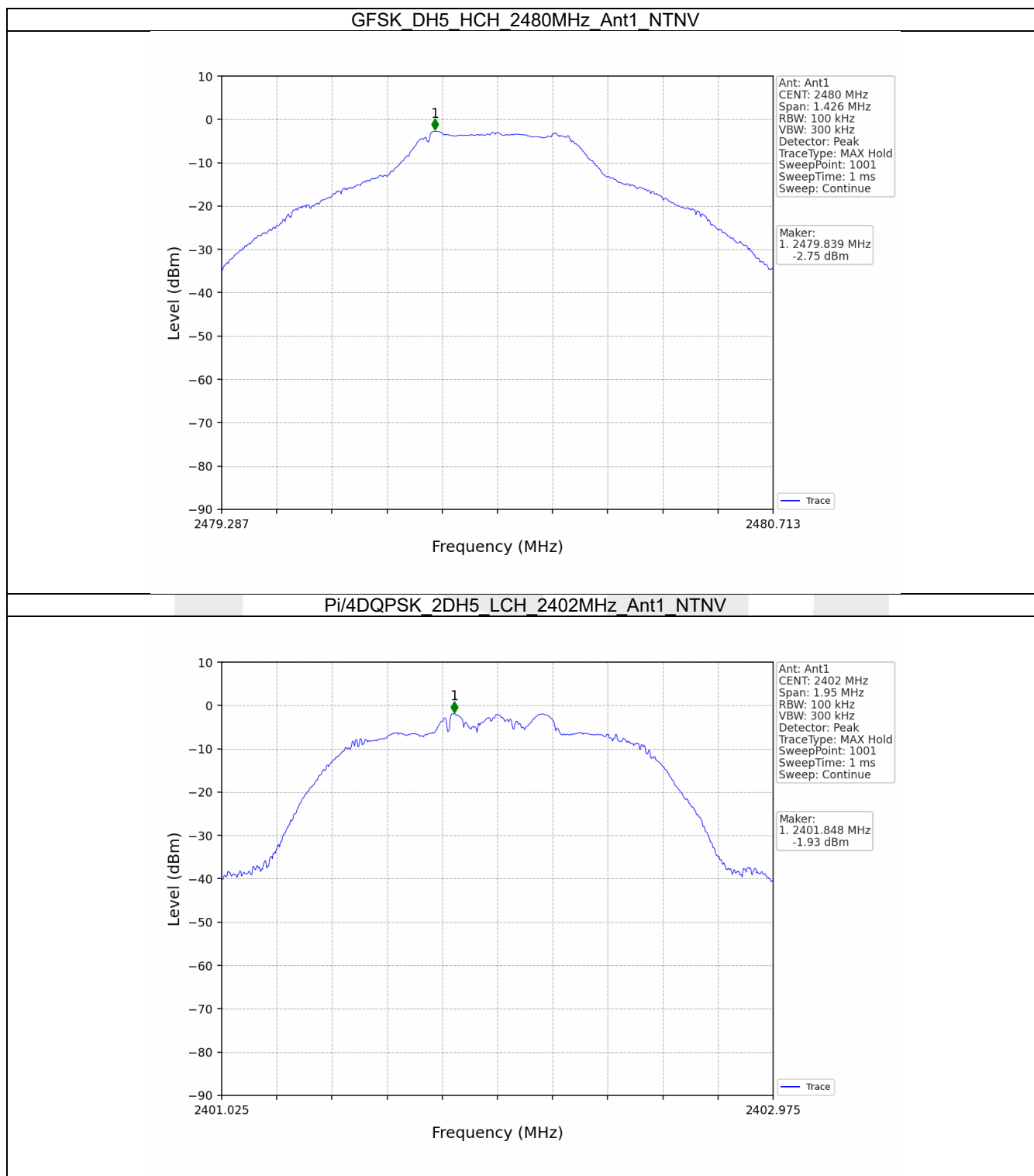
#### 7.1.1 Test Result

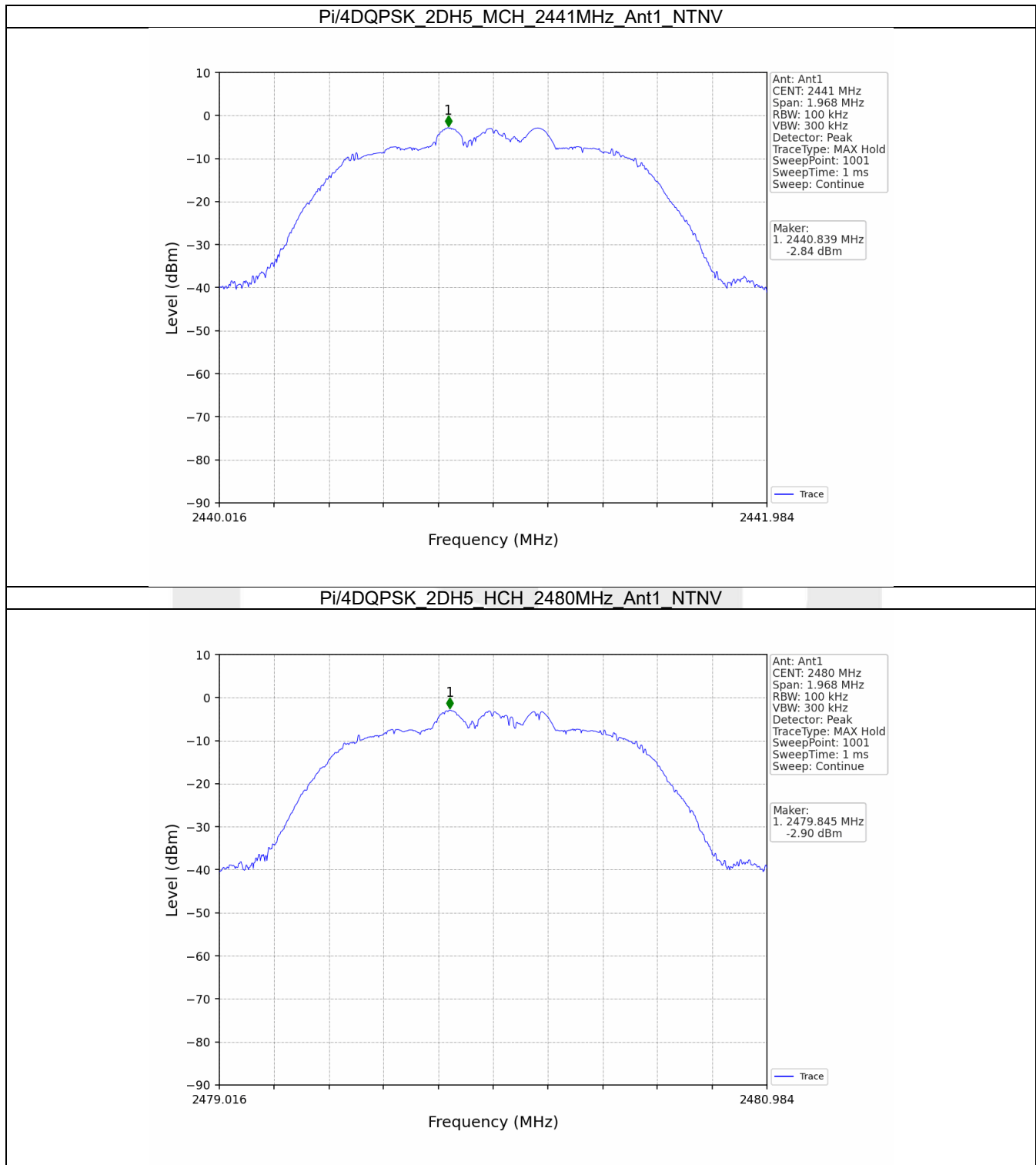
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-----------|---------|-----------------|-------------|-----|--------------------------|
| GFSK      | SISO    | 2402            | DH5         | 1   | -1.78                    |
|           |         | 2441            | DH5         | 1   | -2.75                    |
|           |         | 2480            | DH5         | 1   | -2.75                    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | -1.93                    |
|           |         | 2441            | 2DH5        | 1   | -2.84                    |
|           |         | 2480            | 2DH5        | 1   | -2.90                    |

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





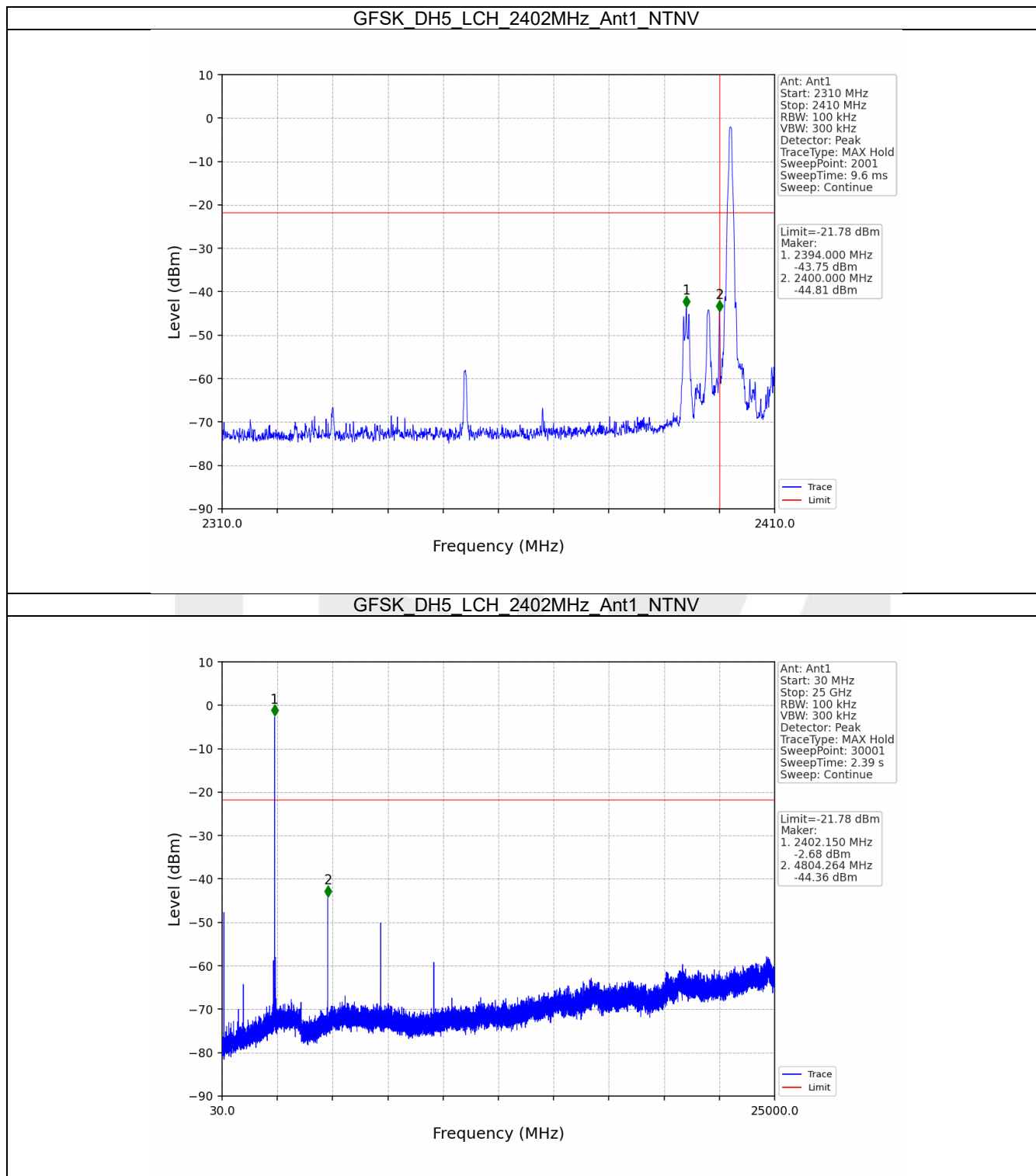


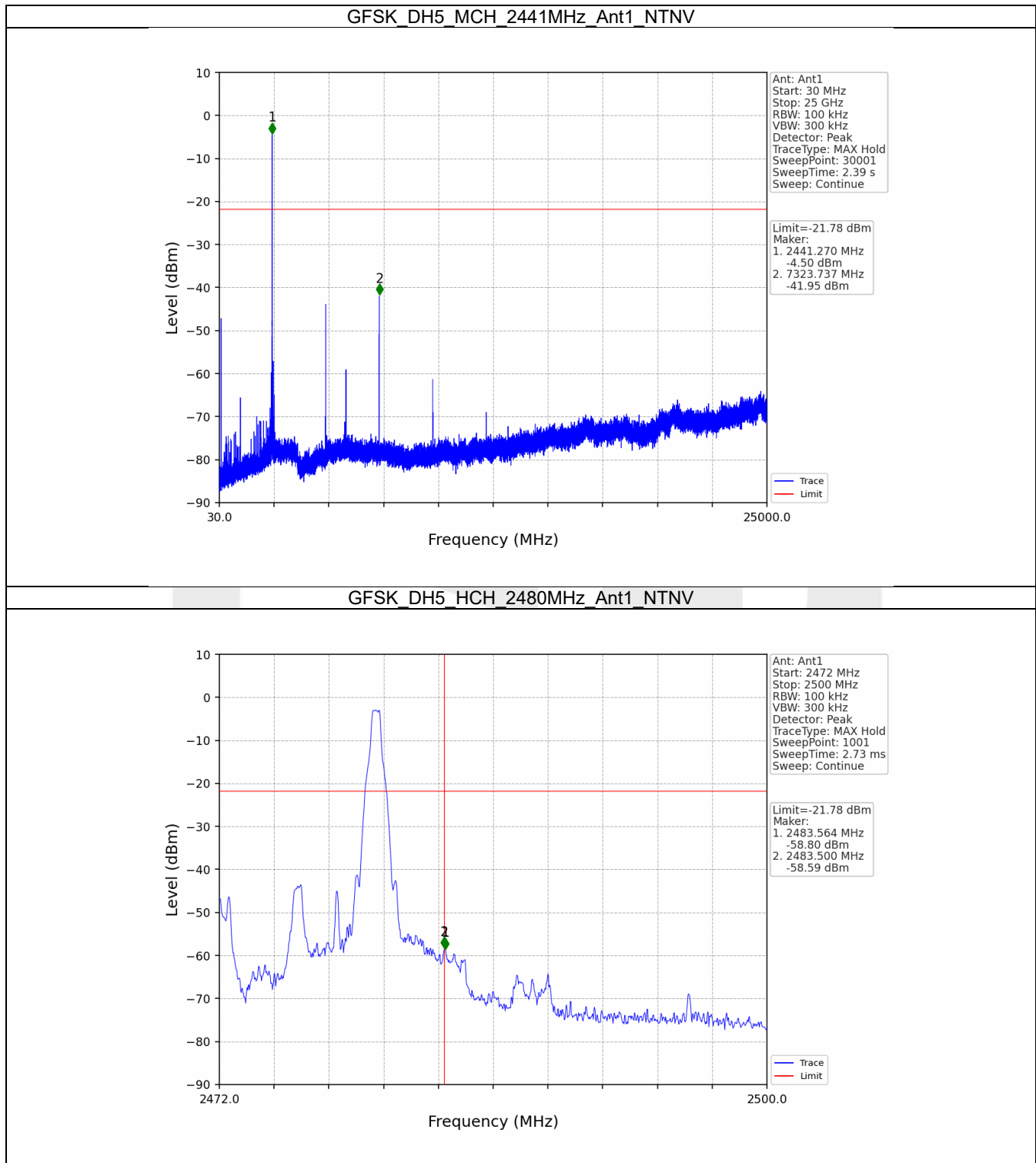
## 7.2 CSE

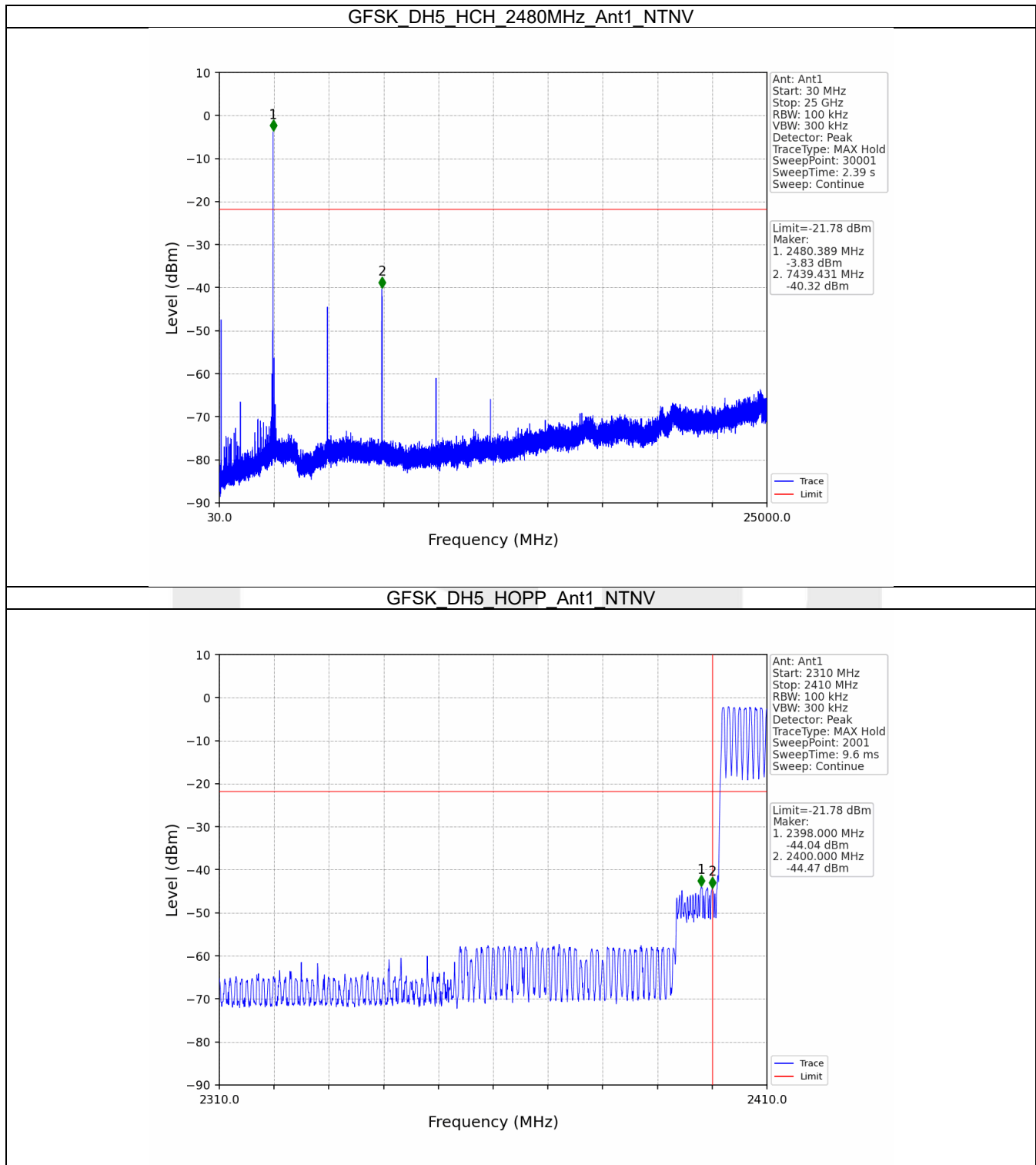
### 7.2.1 Test Result

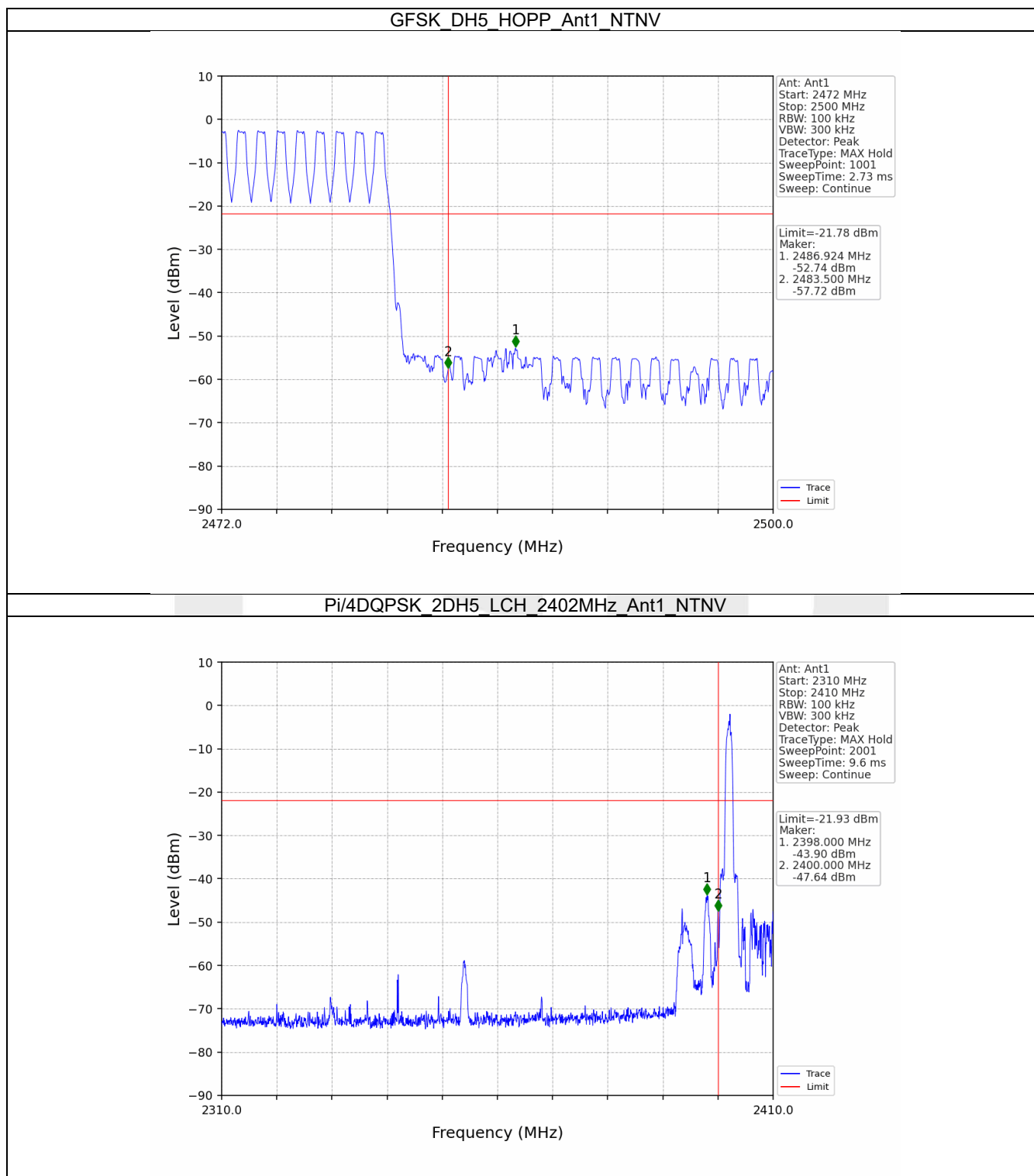
| Mode                                                                                                                                            | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK                                                                                                                                            | SISO    | 2402            | DH5         | 1   | -1.78                    | -21.78      | Pass    |
|                                                                                                                                                 |         | 2441            | DH5         | 1   | -1.78                    | -21.78      | Pass    |
|                                                                                                                                                 |         | 2480            | DH5         | 1   | -1.78                    | -21.78      | Pass    |
|                                                                                                                                                 |         | HOPP            | DH5         | 1   | -1.78                    | -21.78      | Pass    |
| Pi/4DQPSK                                                                                                                                       | SISO    | 2402            | 2DH5        | 1   | -1.93                    | -21.93      | Pass    |
|                                                                                                                                                 |         | 2441            | 2DH5        | 1   | -1.93                    | -21.93      | Pass    |
|                                                                                                                                                 |         | 2480            | 2DH5        | 1   | -1.93                    | -21.93      | Pass    |
|                                                                                                                                                 |         | HOPP            | 2DH5        | 1   | -1.93                    | -21.93      | 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. |         |                 |             |     |                          |             |         |

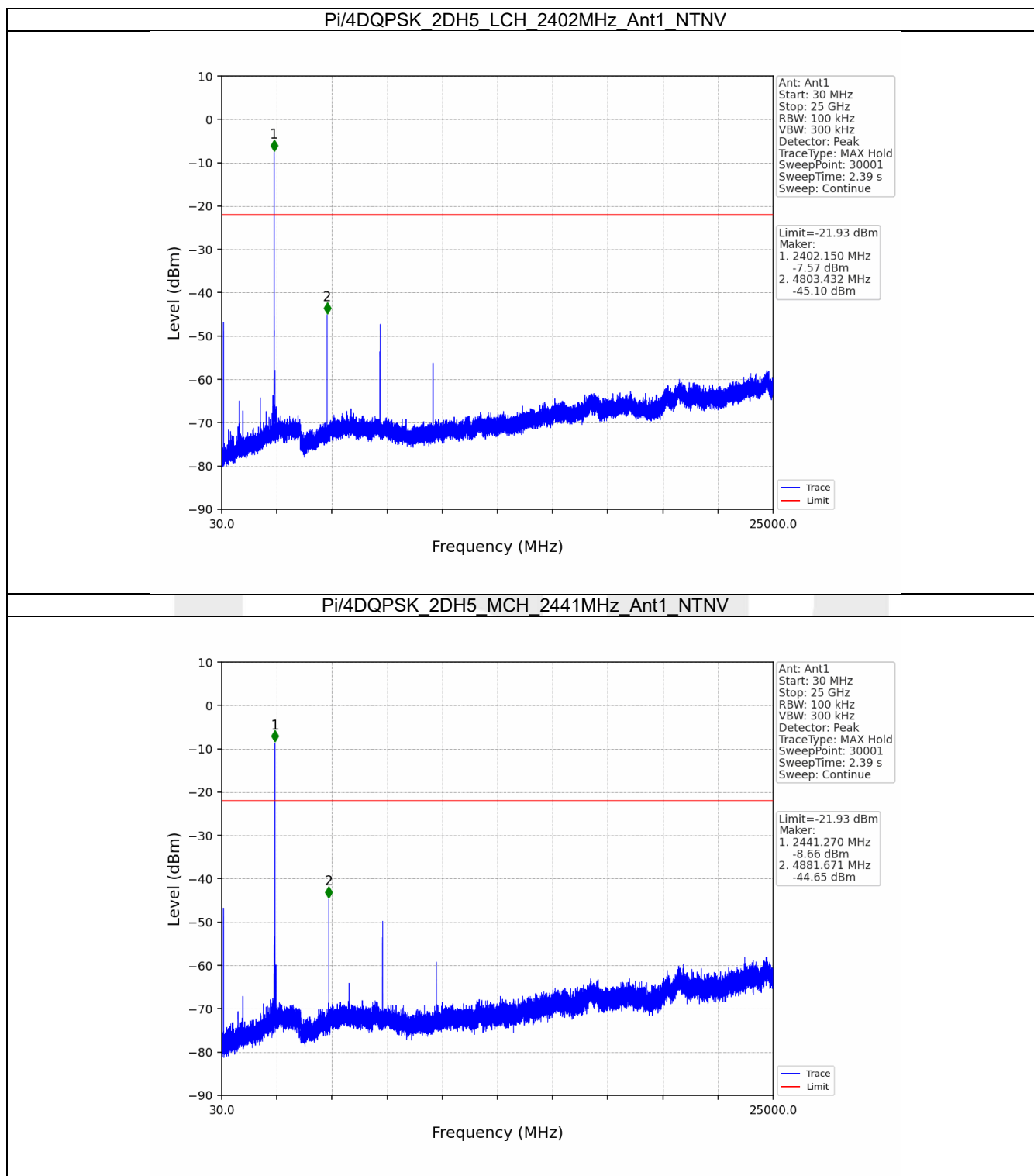
## 7.2.2 Test Graph

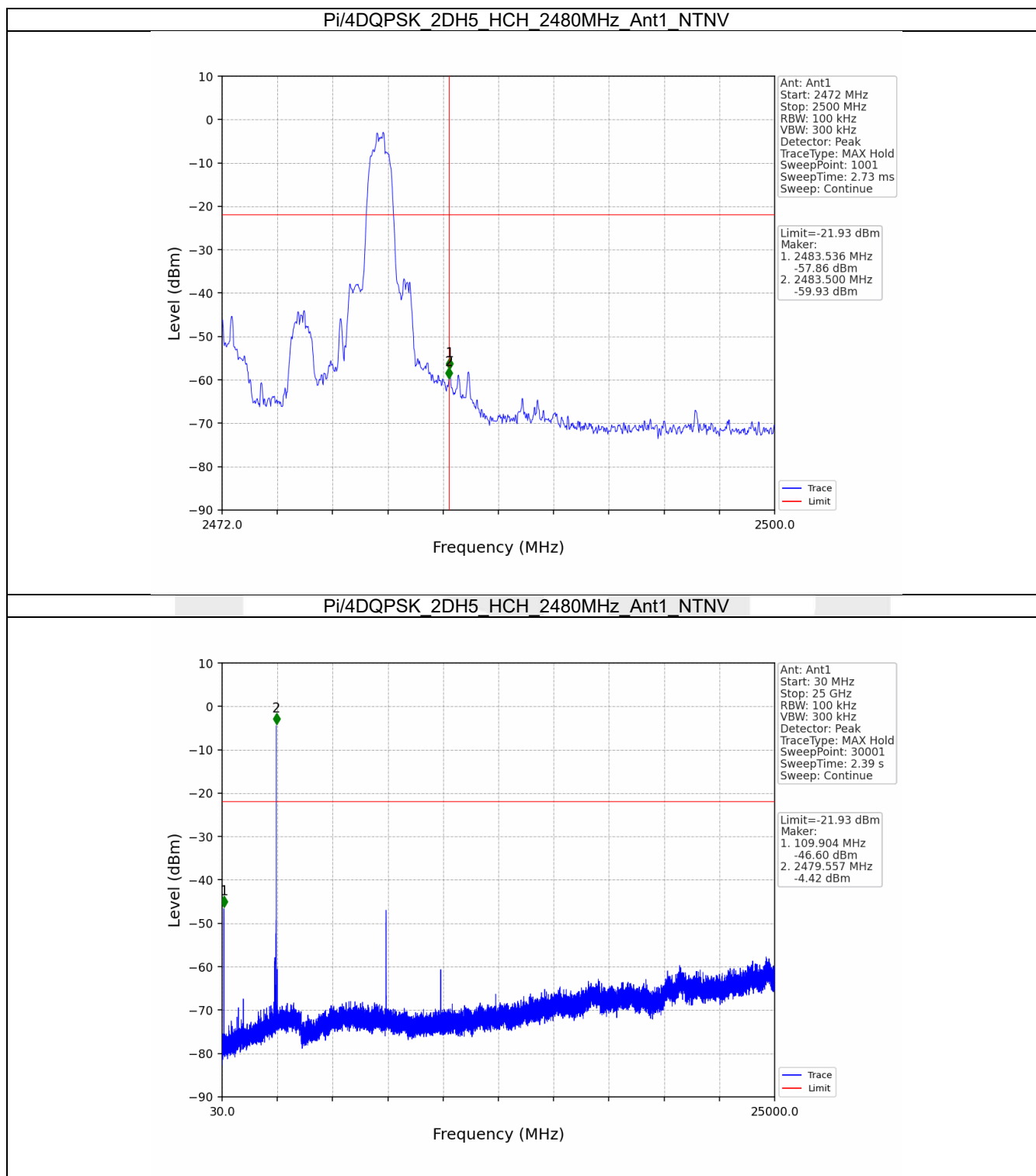


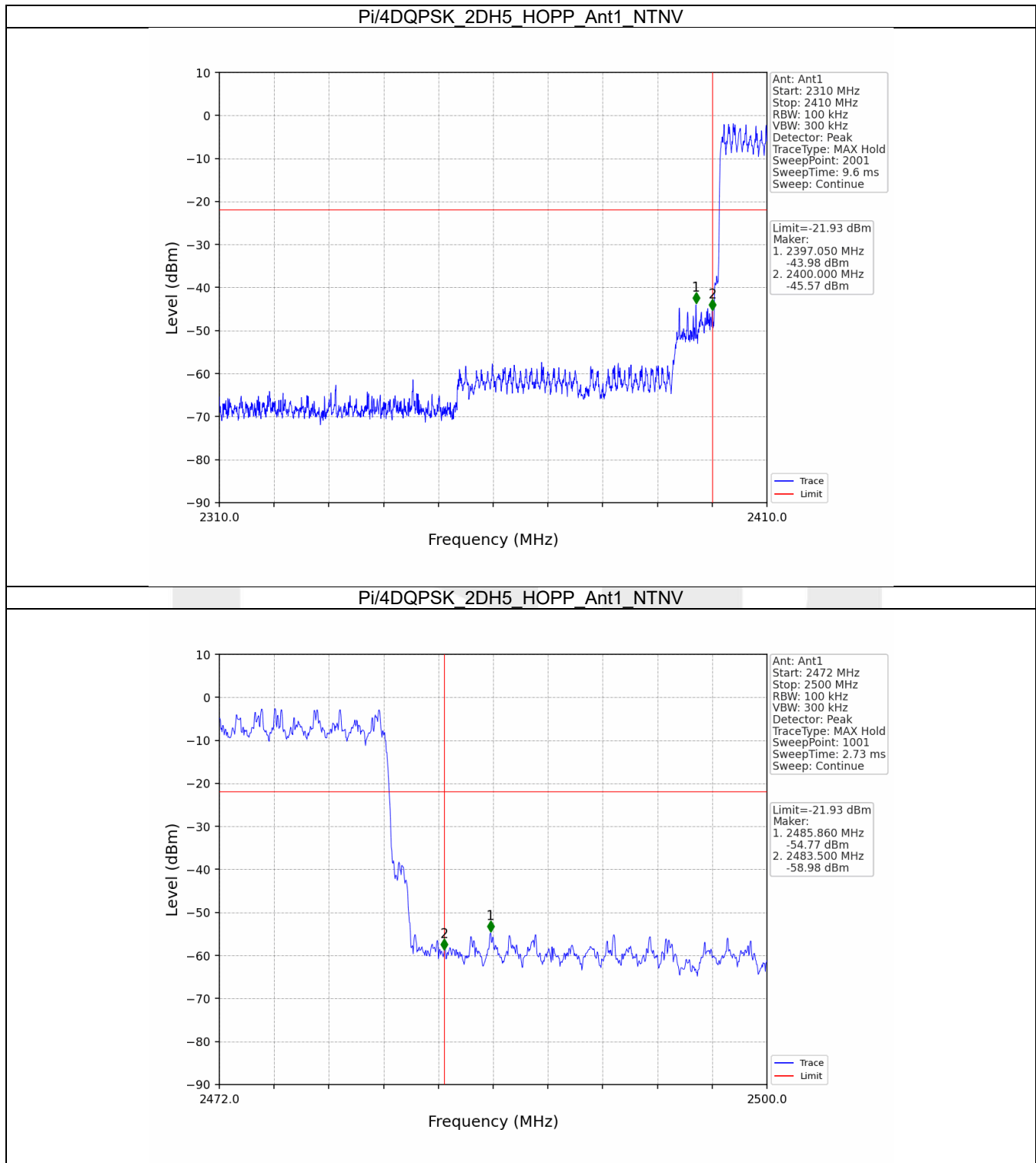












----- End of Report -----