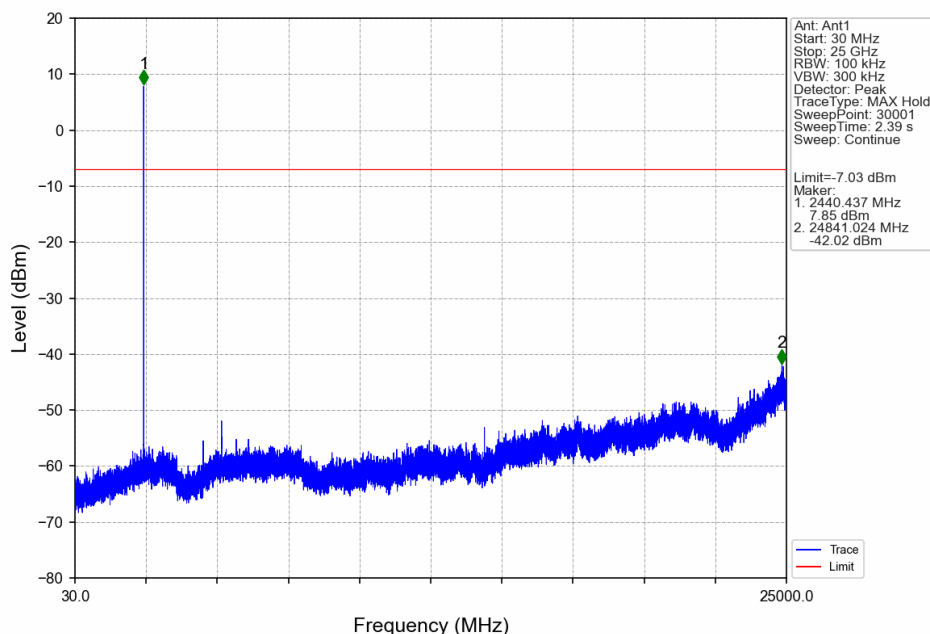
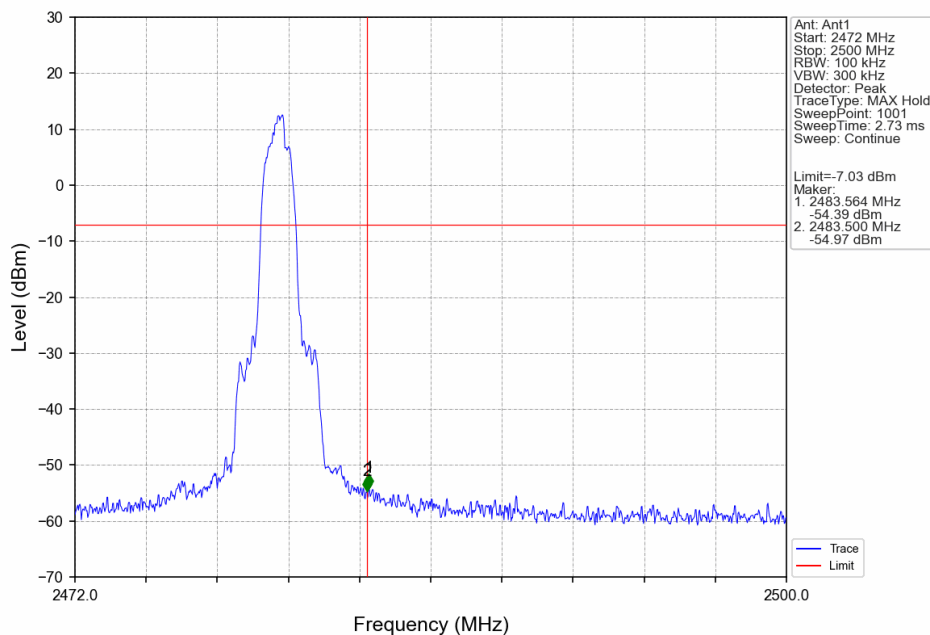


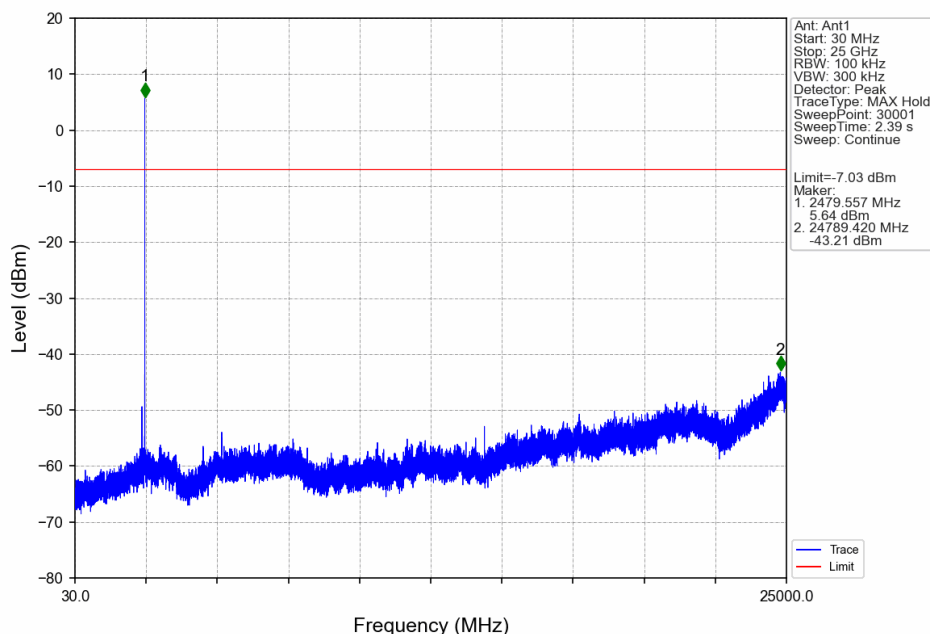
### 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



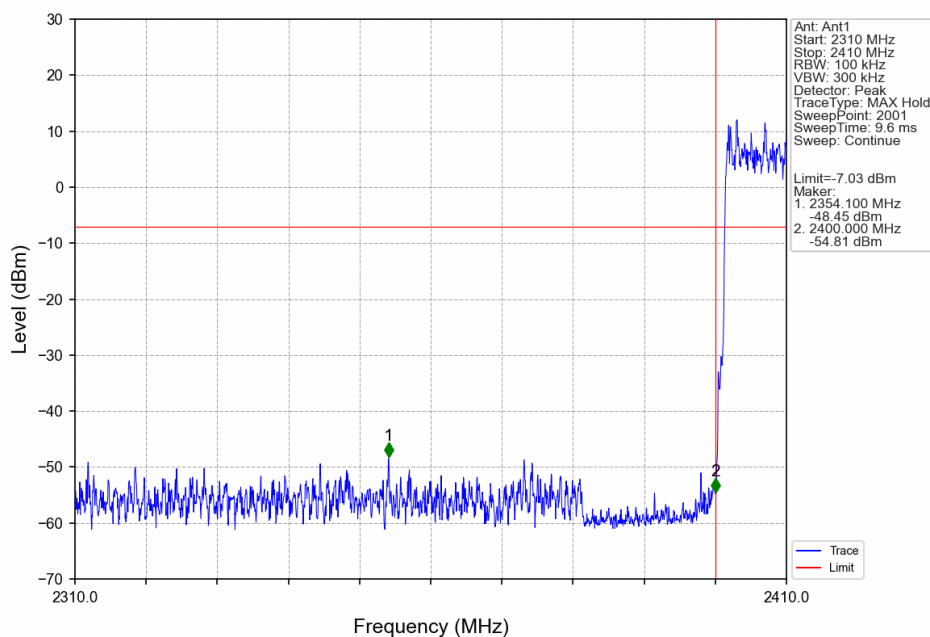
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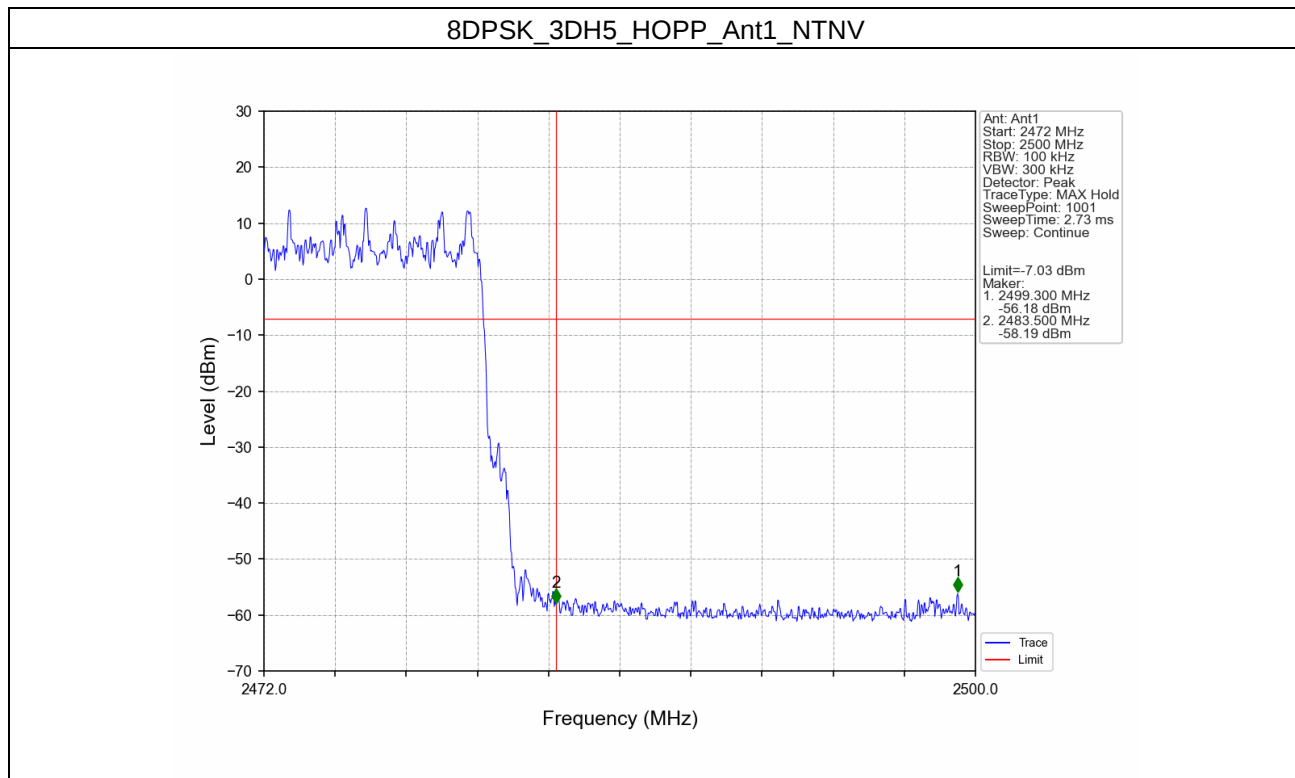


### 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



### 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV





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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR241000389302

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For left earbuds:

### 1. Bandwidth

#### 1.1 Test Result

##### 1.1.1 OBW

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|------------------------------|-------|---------|
|           |         |                 |             |     | Result                       | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.942                        | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 0.950                        | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 0.952                        | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.139                        | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.142                        | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.143                        | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.152                        | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.155                        | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.152                        | /     | Pass    |

##### 1.1.2 20dB BW

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|----------------------|-------|---------|
|           |         |                 |             |     | Result               | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 1.049                | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 1.045                | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 1.050                | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.216                | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.215                | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.217                | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.270                | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.267                | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.258                | /     | Pass    |



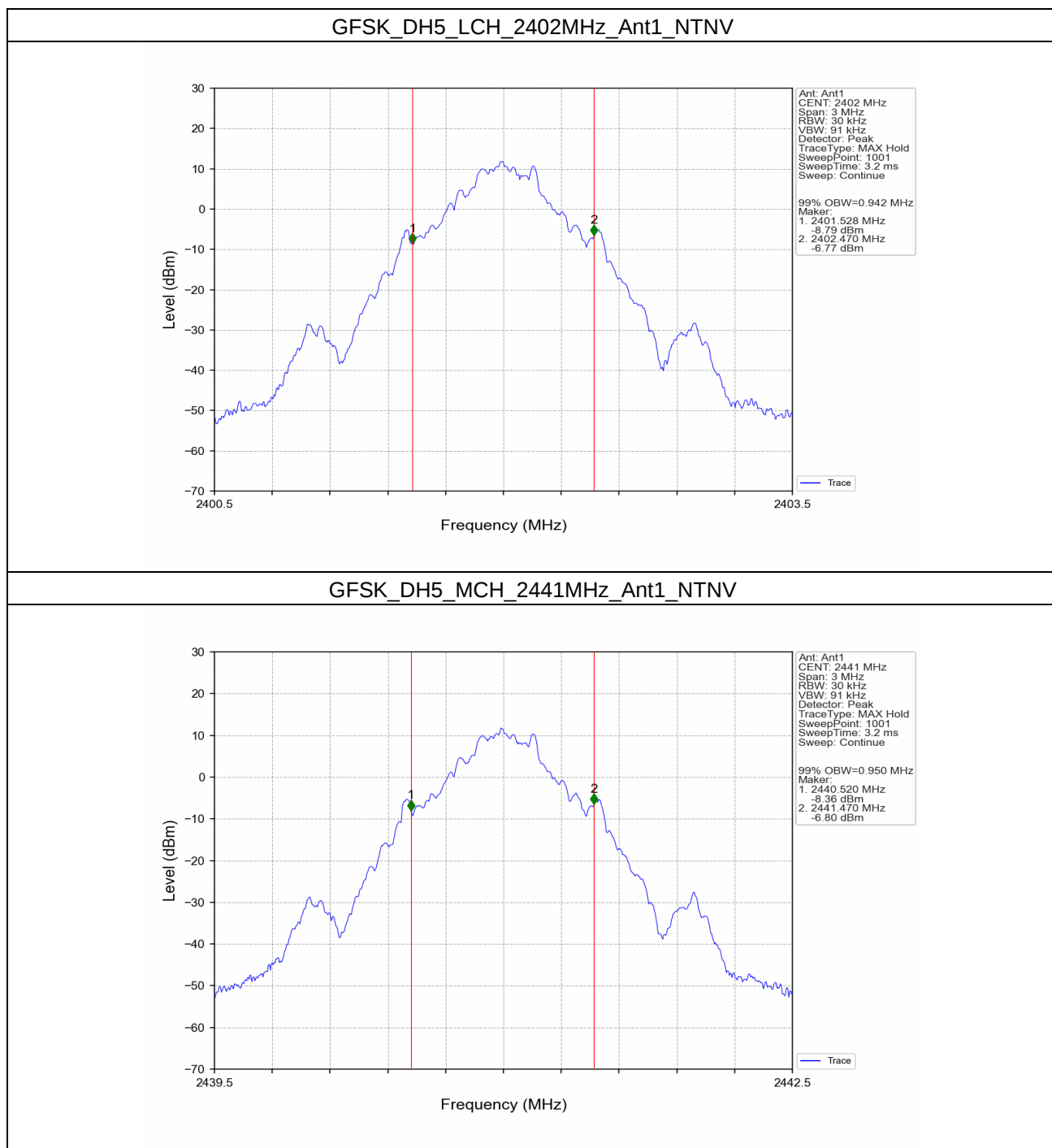
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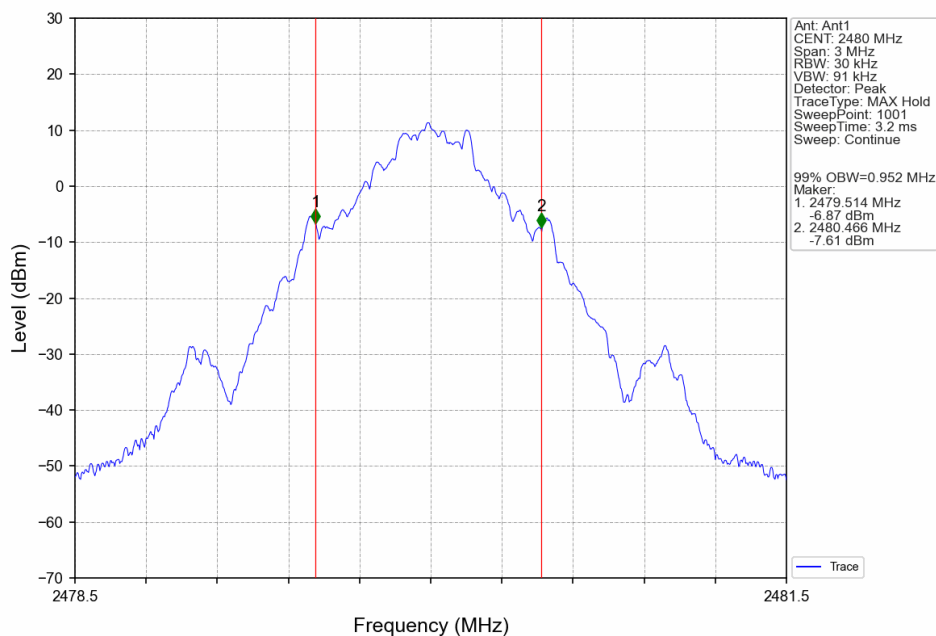
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### 1.2 Test Graph

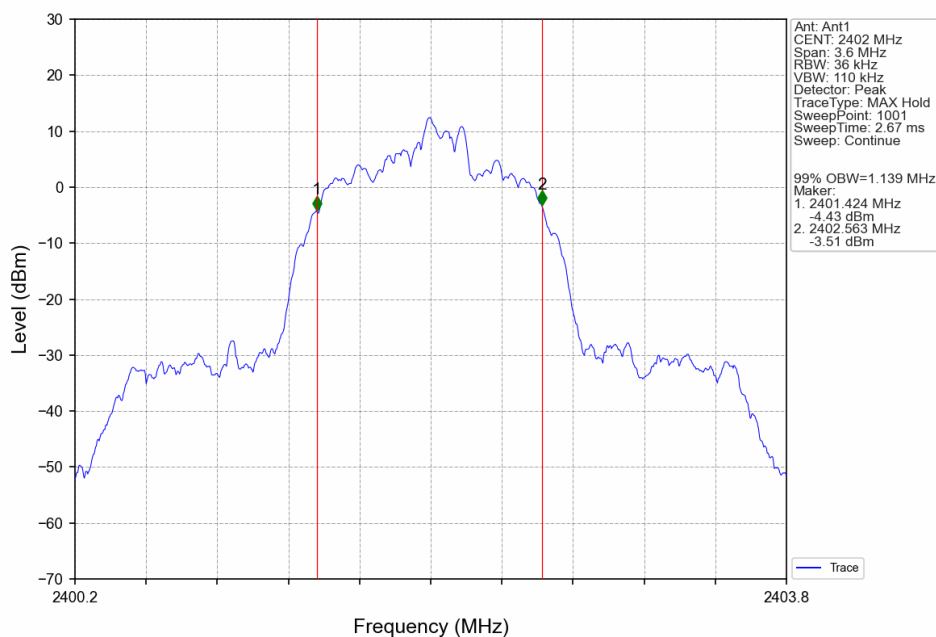
#### 1.2.1 OBW



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



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



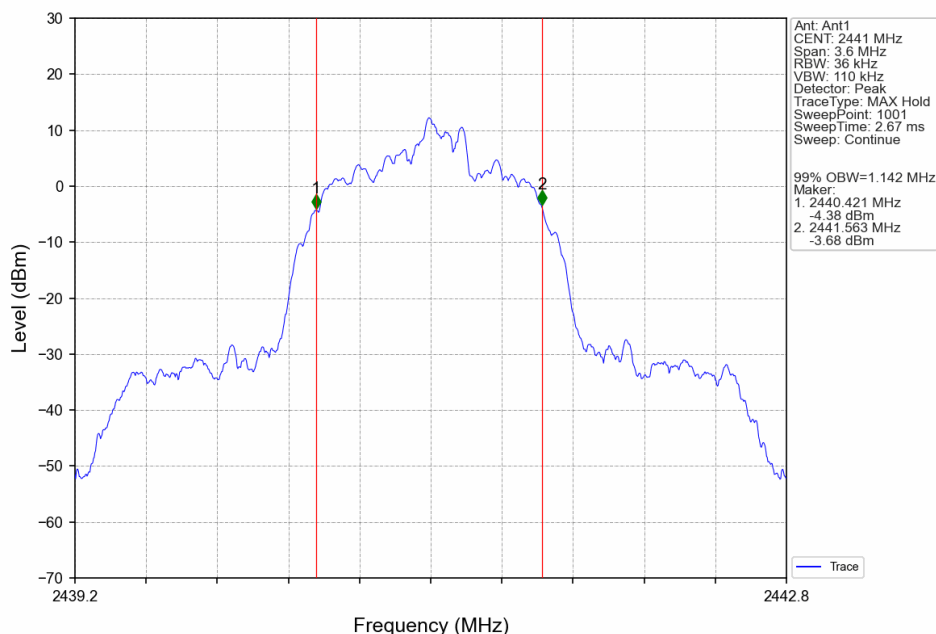
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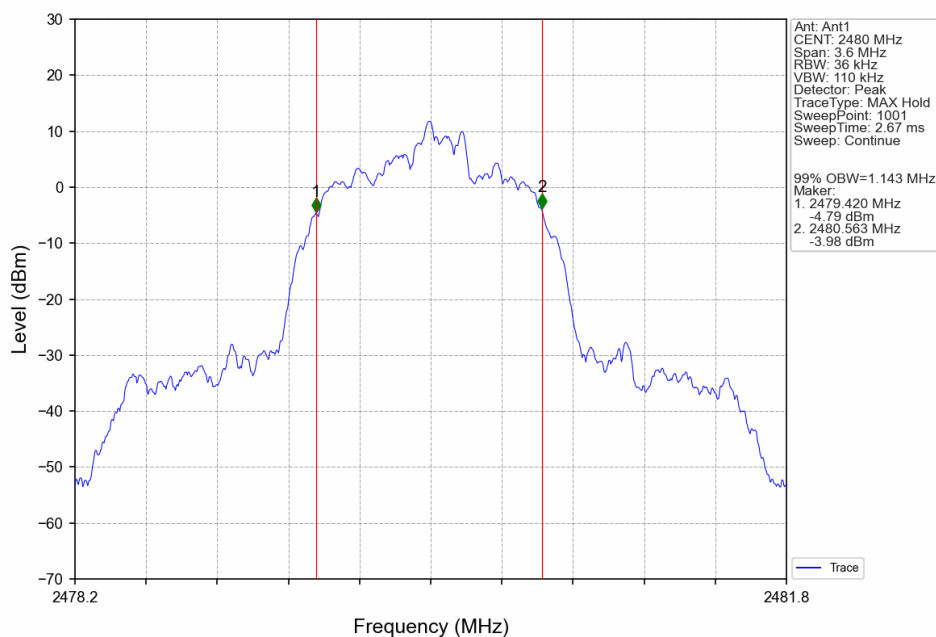
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### Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



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



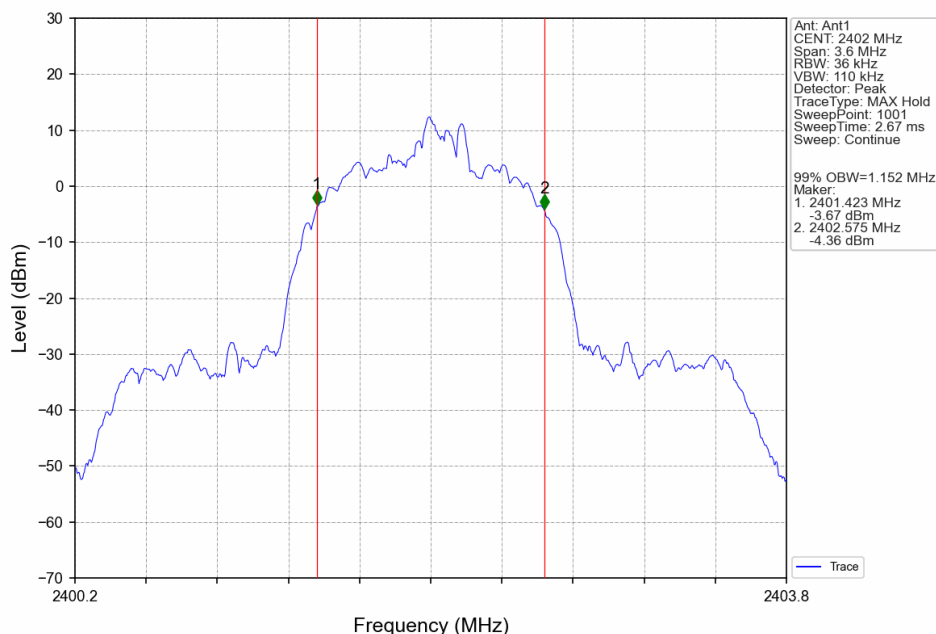
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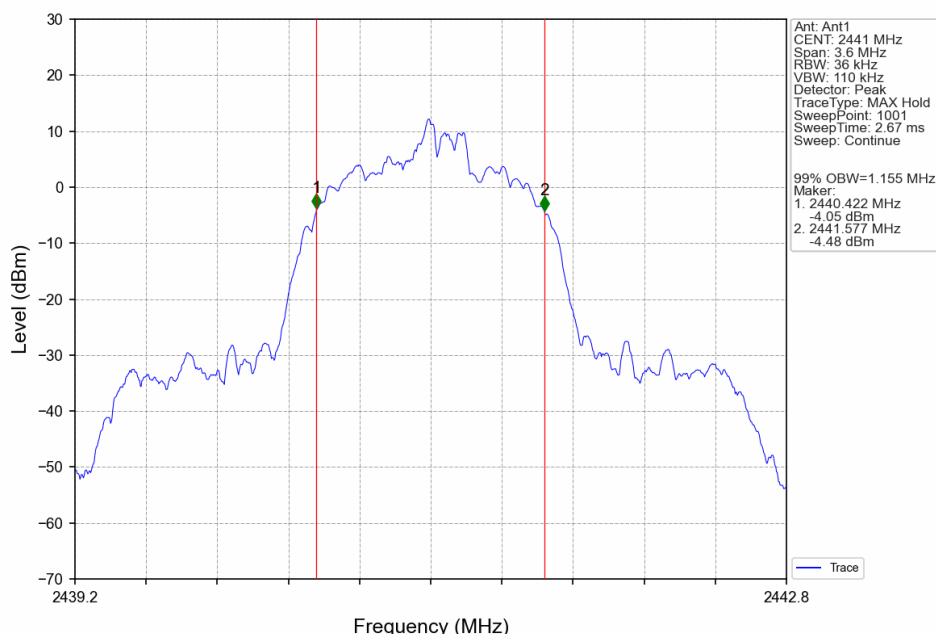
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### 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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



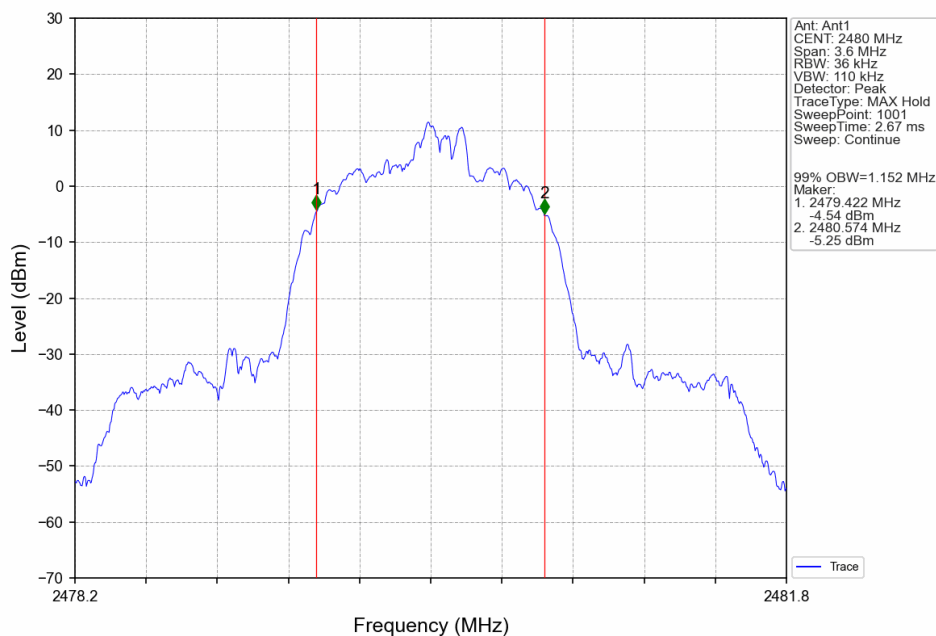
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### 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



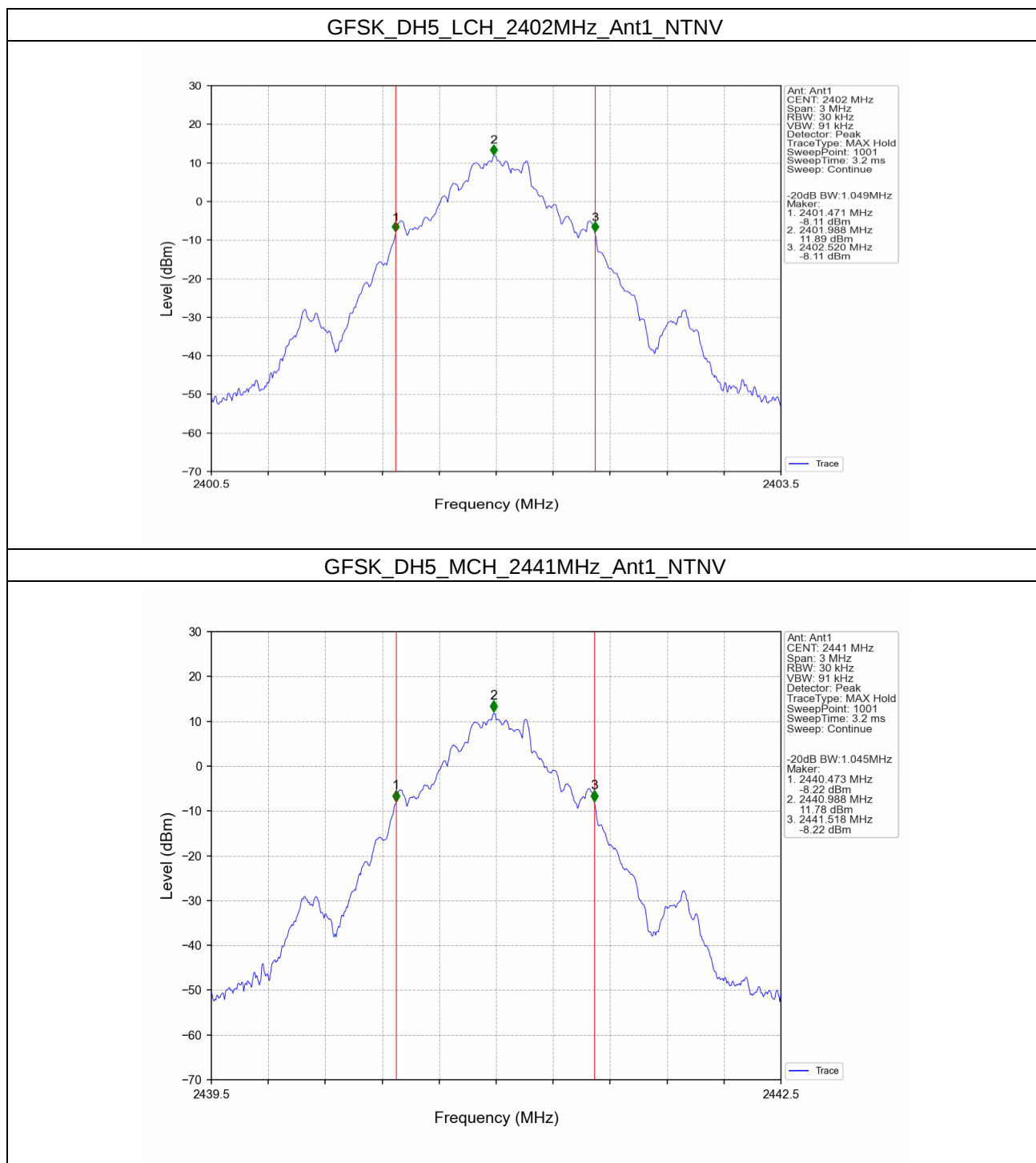
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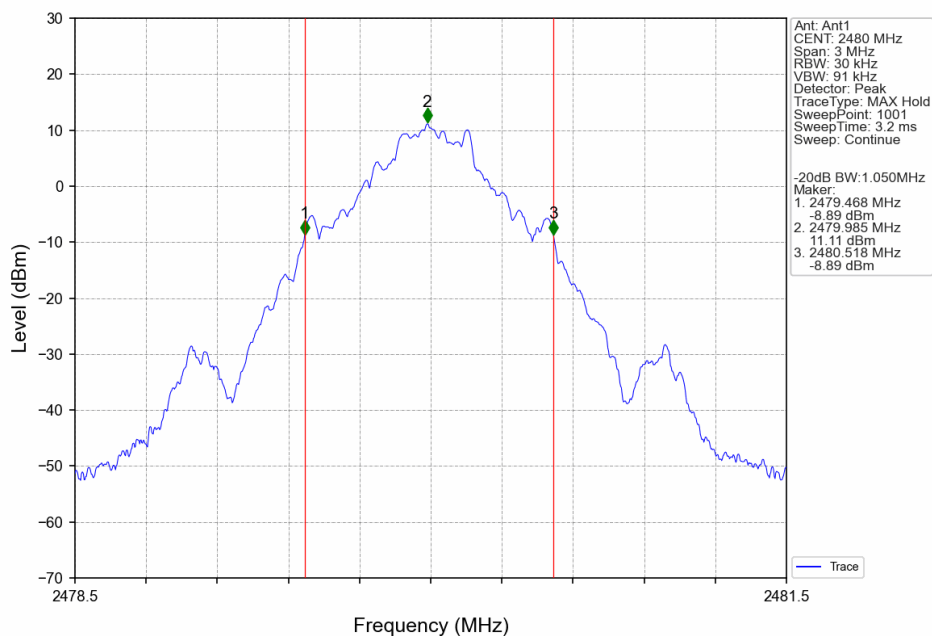
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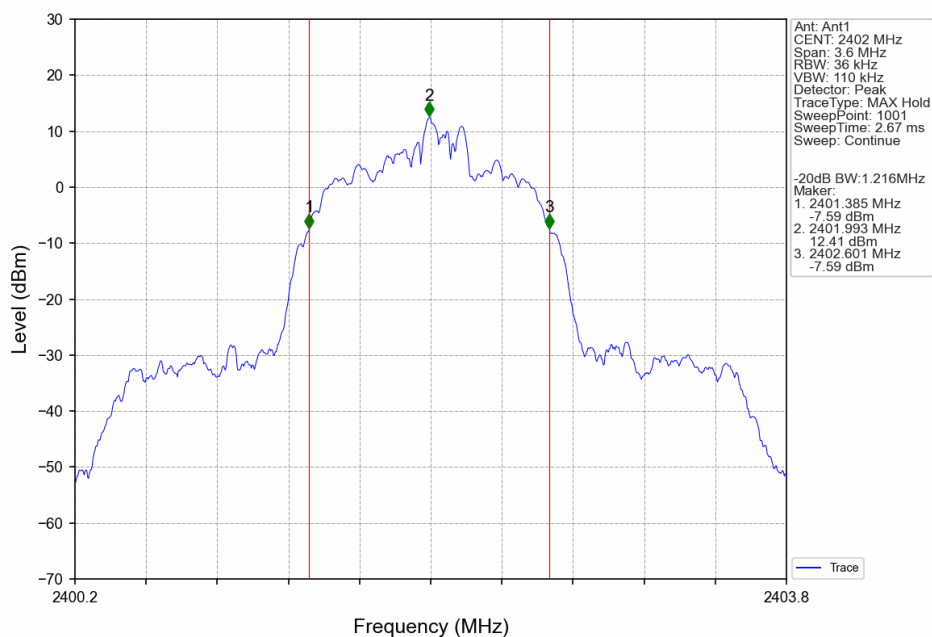
### 1.2.2 20dB BW



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



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



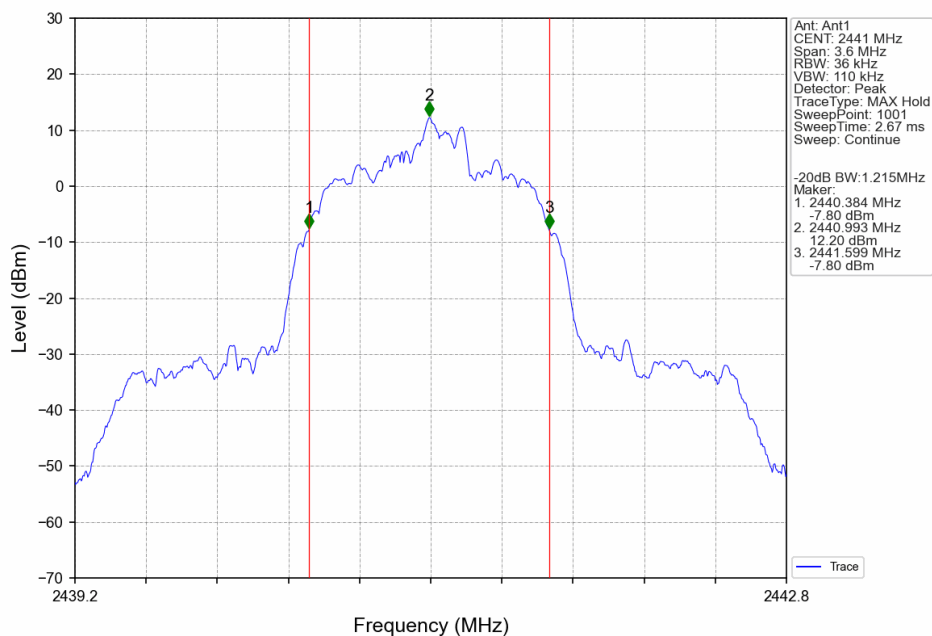
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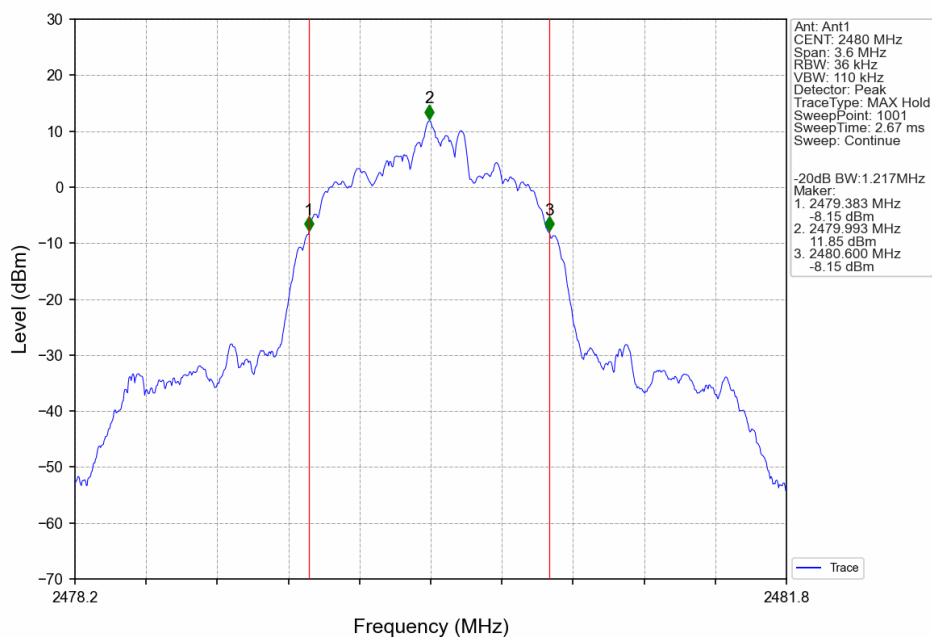
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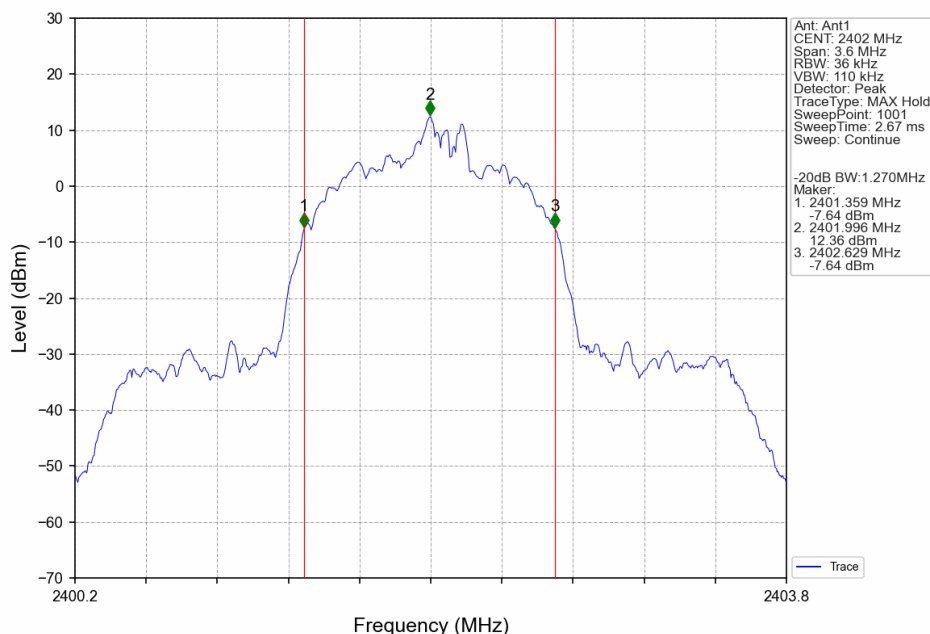
### Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



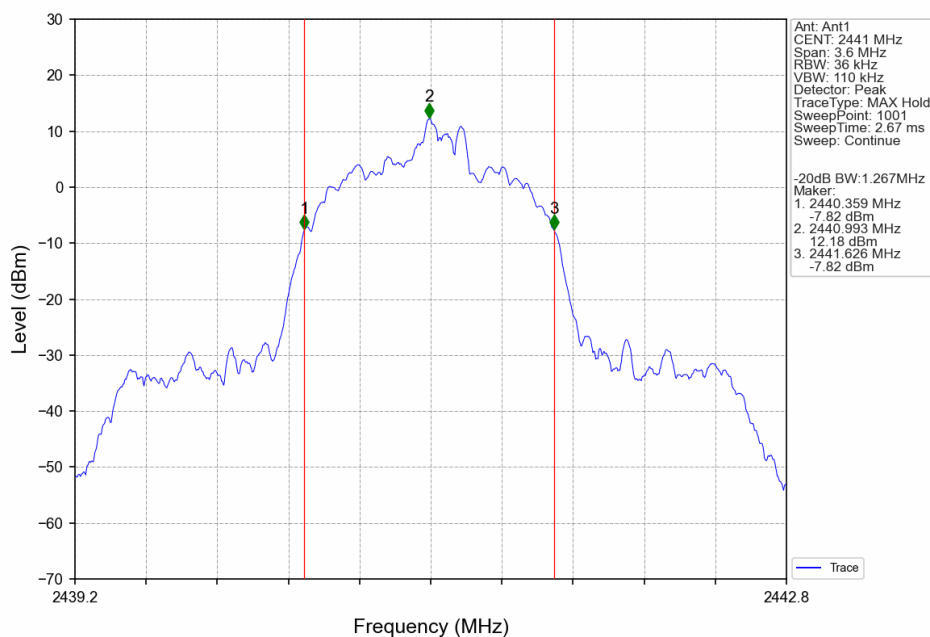
### Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



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



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



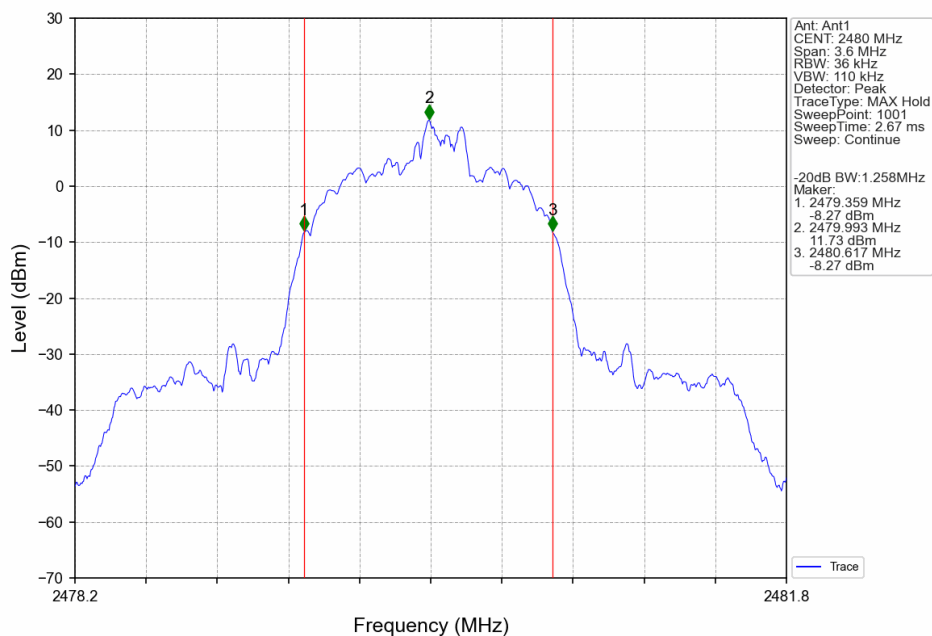
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### 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



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## 2. Maximum Conducted Output Power

### 2.1 Test Result

#### 2.1.1 Power

| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |              | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|--------------|---------|
|           |         |                 |             | ANT1                                      | Limit        |         |
| GFSK      | SISO    | 2402            | DH5         | 13.21                                     | $\leq 20.97$ | Pass    |
|           |         | 2441            | DH5         | 12.99                                     | $\leq 20.97$ | Pass    |
|           |         | 2480            | DH5         | 12.62                                     | $\leq 20.97$ | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 13.18                                     | $\leq 20.97$ | Pass    |
|           |         | 2441            | 2DH5        | 12.99                                     | $\leq 20.97$ | Pass    |
|           |         | 2480            | 2DH5        | 12.65                                     | $\leq 20.97$ | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 13.20                                     | $\leq 20.97$ | Pass    |
|           |         | 2441            | 3DH5        | 12.99                                     | $\leq 20.97$ | Pass    |
|           |         | 2480            | 3DH5        | 12.65                                     | $\leq 20.97$ | Pass    |

Note1: Antenna Gain: Ant1: -2.30dBi;

## 3. Carrier Frequency Separation

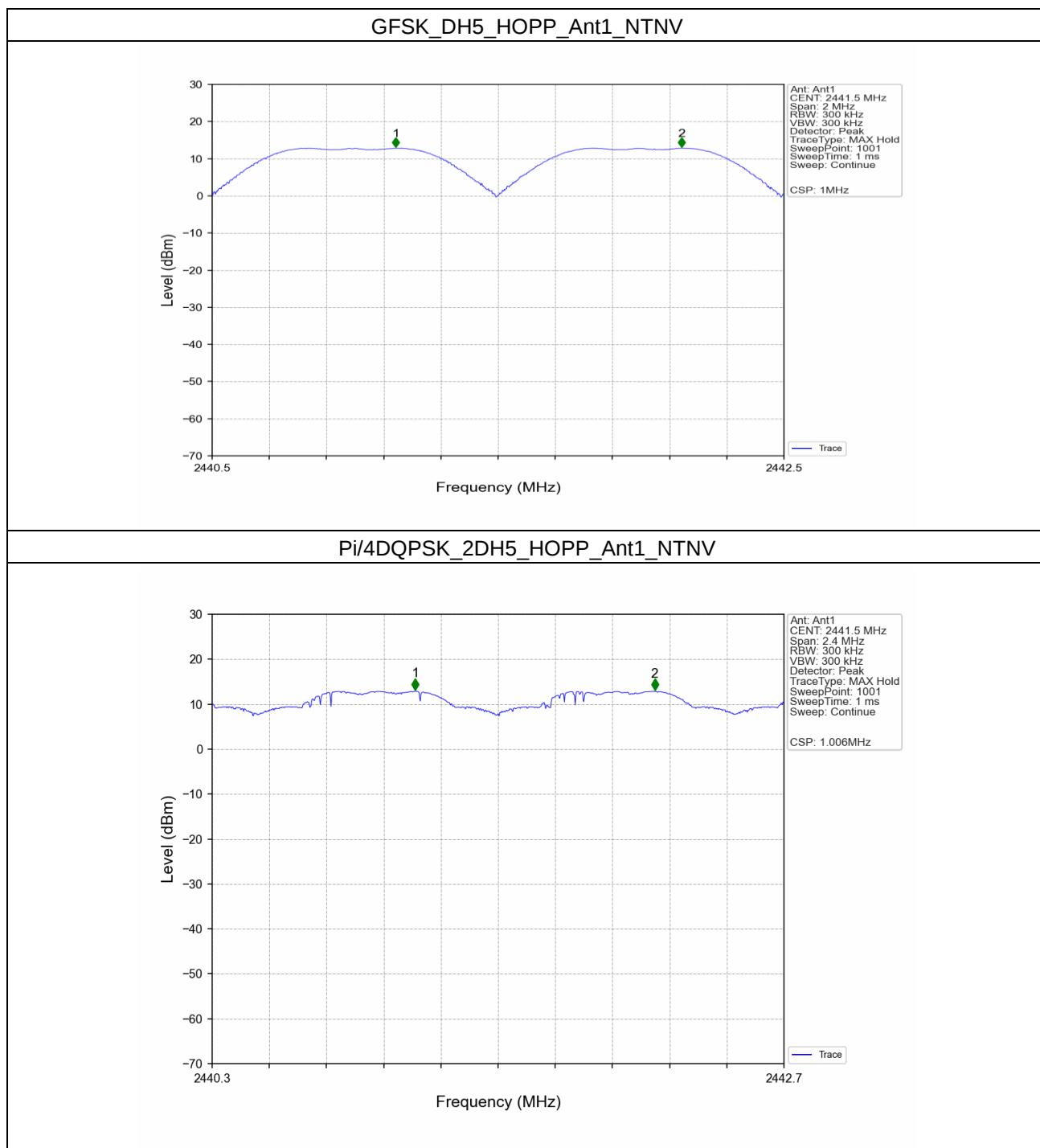
### 3.1 Test Result

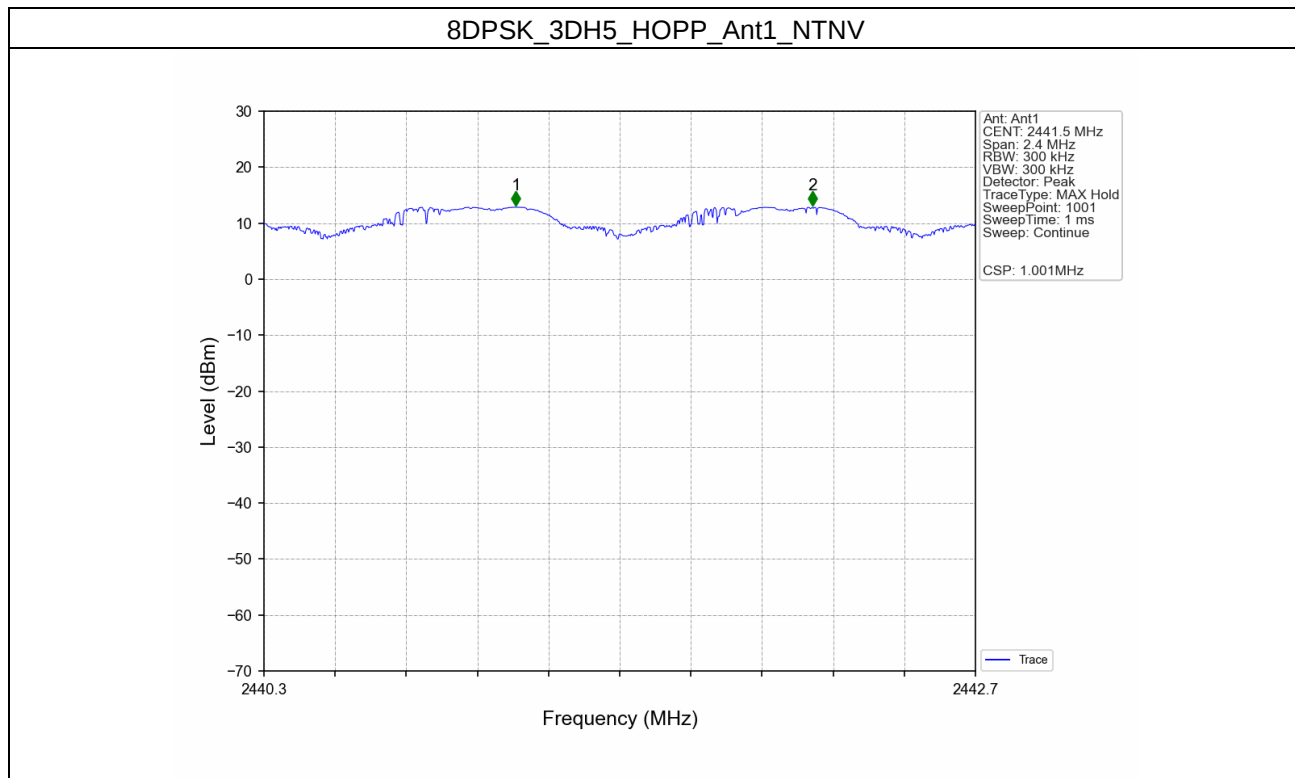
#### 3.1.1 Ant1

| Ant1      |         |                 |             |                          |                      |              |         |
|-----------|---------|-----------------|-------------|--------------------------|----------------------|--------------|---------|
| Mode      | TX Type | Frequency (MHz) | Packet Type | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limit (MHz)  | Verdict |
| GFSK      | SISO    | HOPP            | DH5         | 1.000                    | 1.050                | $\geq 0.7$   | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 1.006                    | 1.217                | $\geq 0.811$ | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 1.001                    | 1.270                | $\geq 0.847$ | Pass    |

### 3.2 Test Graph

#### 3.2.1 Ant1





## 4. Number of Hopping Frequencies

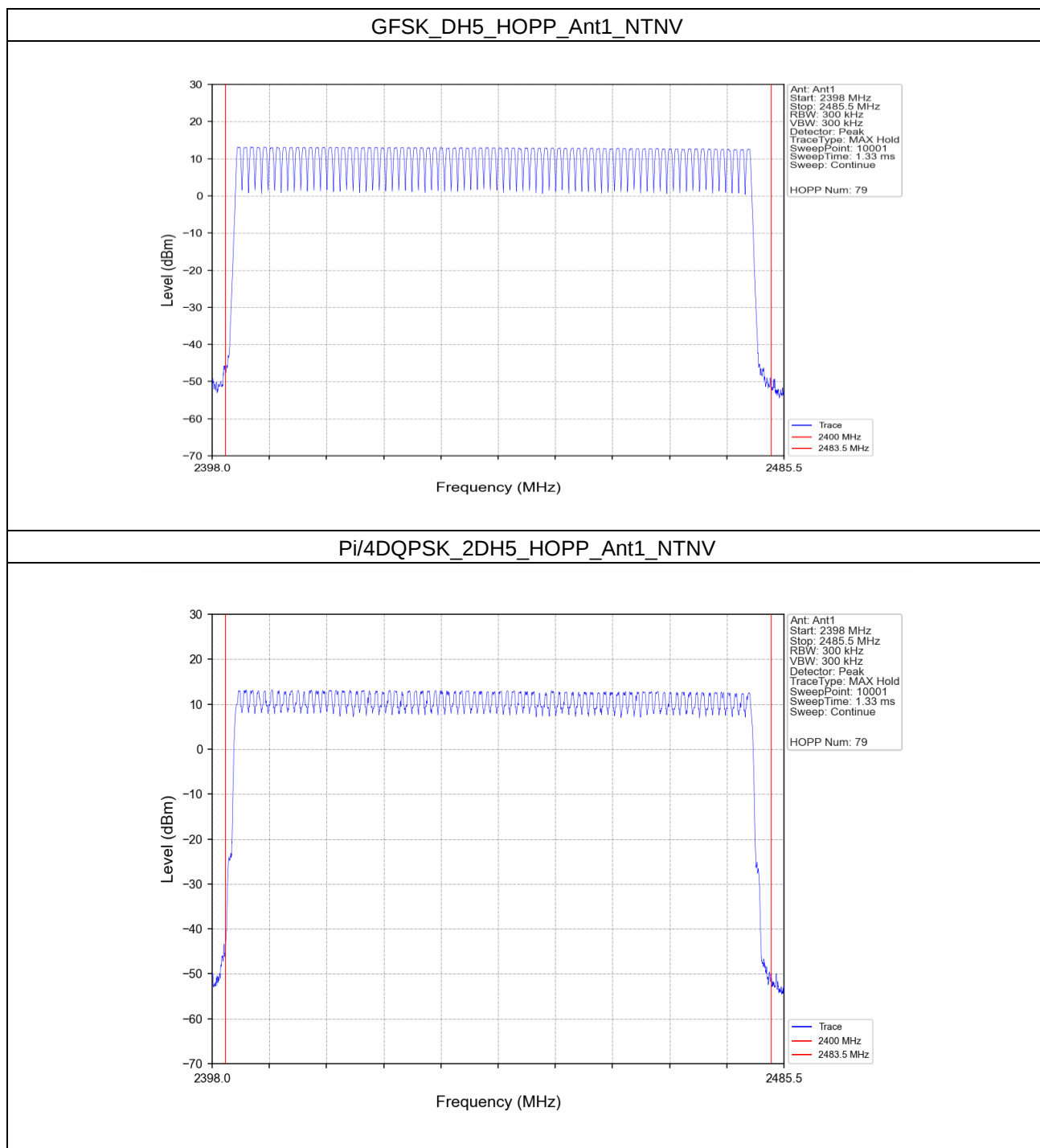
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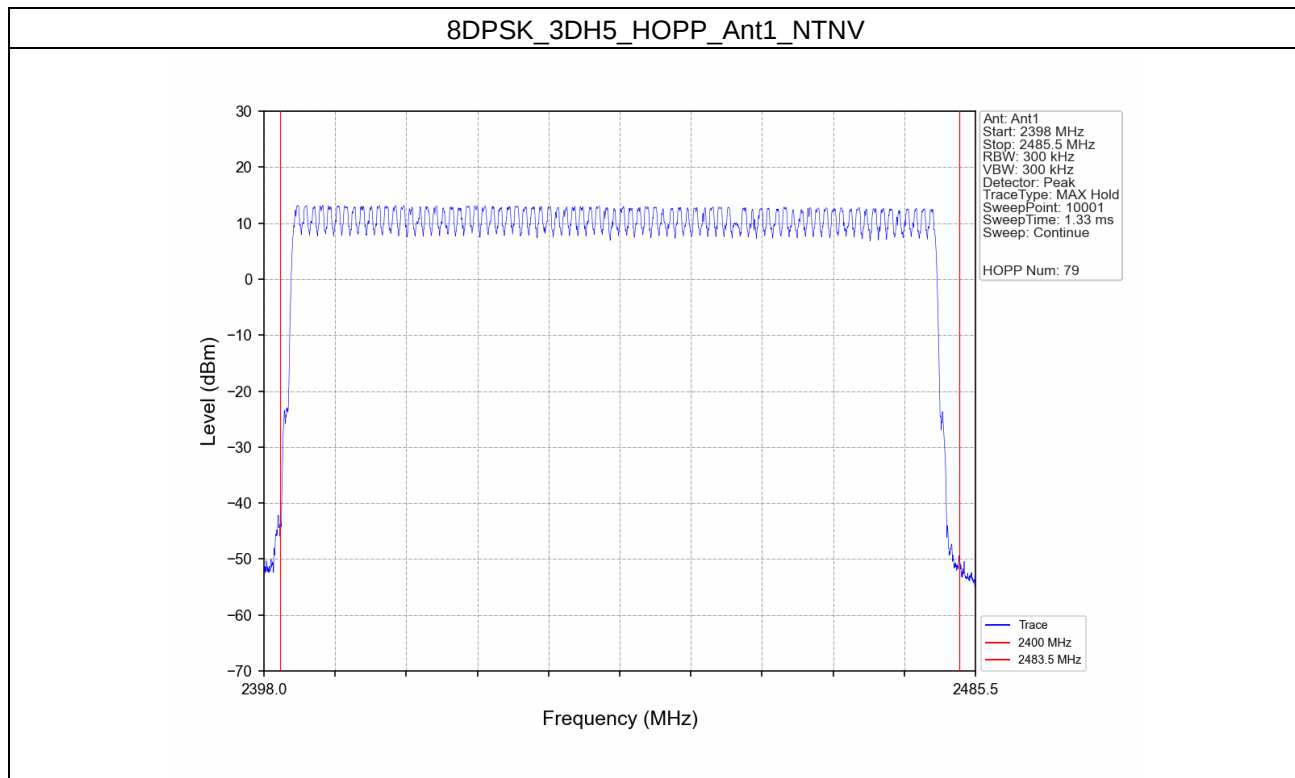
#### 4.1.1 HoppNum

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

### 4.2 Test Graph

#### 4.2.1 HoppNum





### 5. Time of Occupancy (Dwell Time)

#### 5.1 Test Result

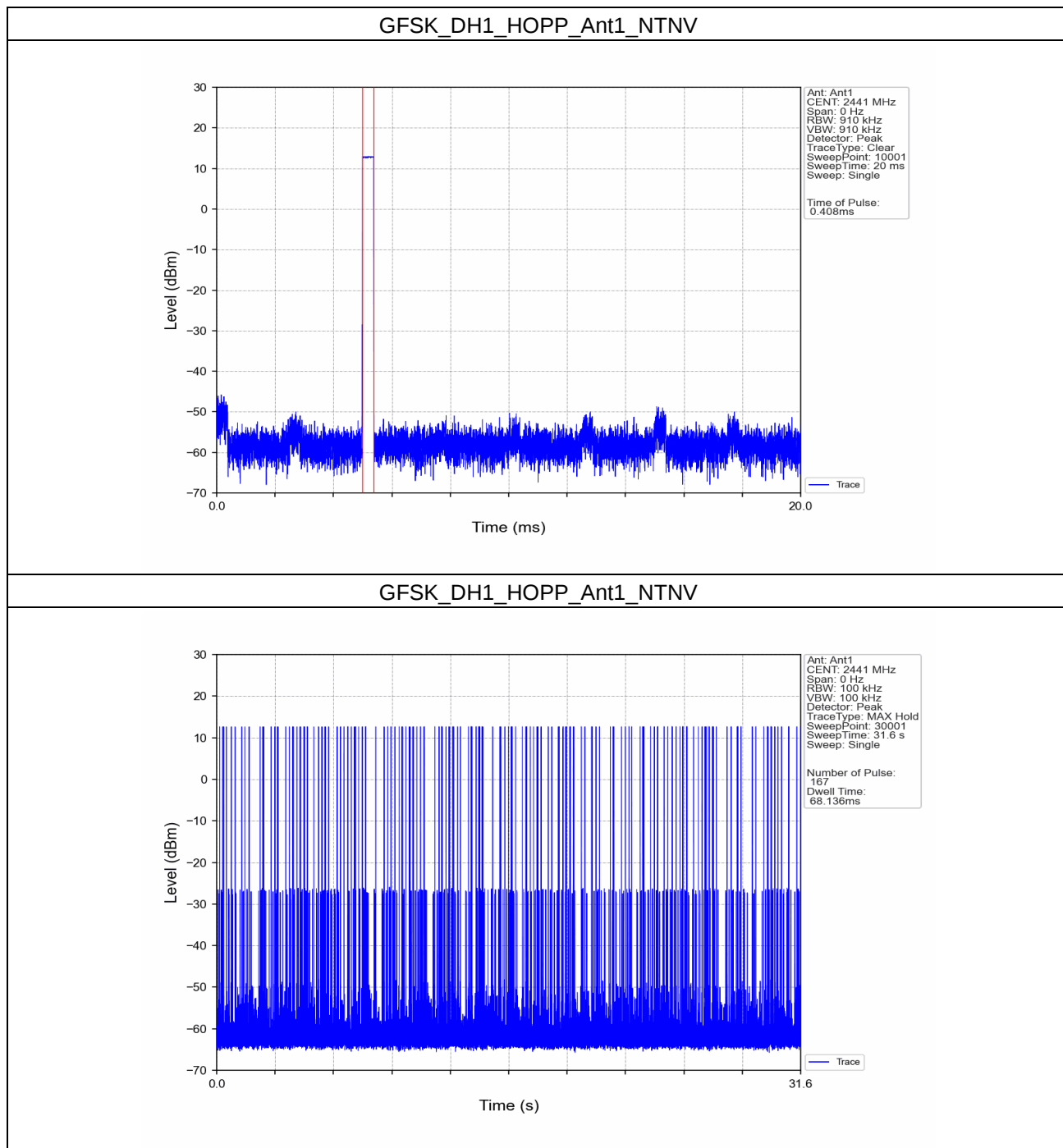
##### 5.1.1 Ant1

| 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         | 0.408                         | 31.600                 | 167                                | 68.136          | <=400      | Pass    |
|           |         |                 | DH3         | 1.648                         | 31.600                 | 96                                 | 158.208         | <=400      | Pass    |
|           |         |                 | DH5         | 2.910                         | 31.600                 | 83                                 | 241.530         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.400                         | 31.600                 | 152                                | 60.800          | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.670                         | 31.600                 | 111                                | 185.370         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.900                         | 31.600                 | 78                                 | 226.200         | <=400      | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH1        | 0.398                         | 31.600                 | 153                                | 60.894          | <=400      | Pass    |
|           |         |                 | 3DH3        | 1.650                         | 31.600                 | 108                                | 178.200         | <=400      | Pass    |
|           |         |                 | 3DH5        | 2.900                         | 31.600                 | 74                                 | 214.600         | <=400      | Pass    |

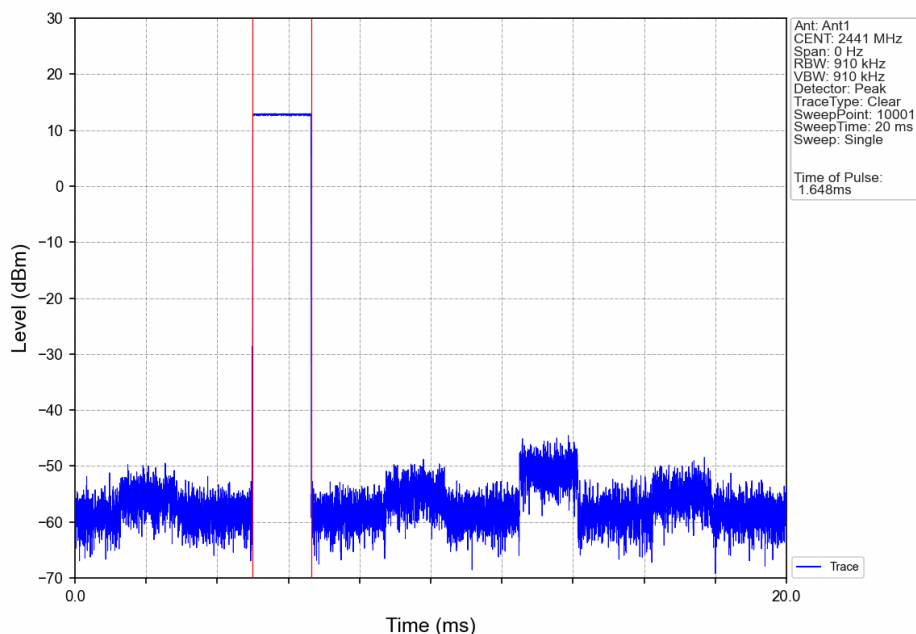


### 5.2 Test Graph

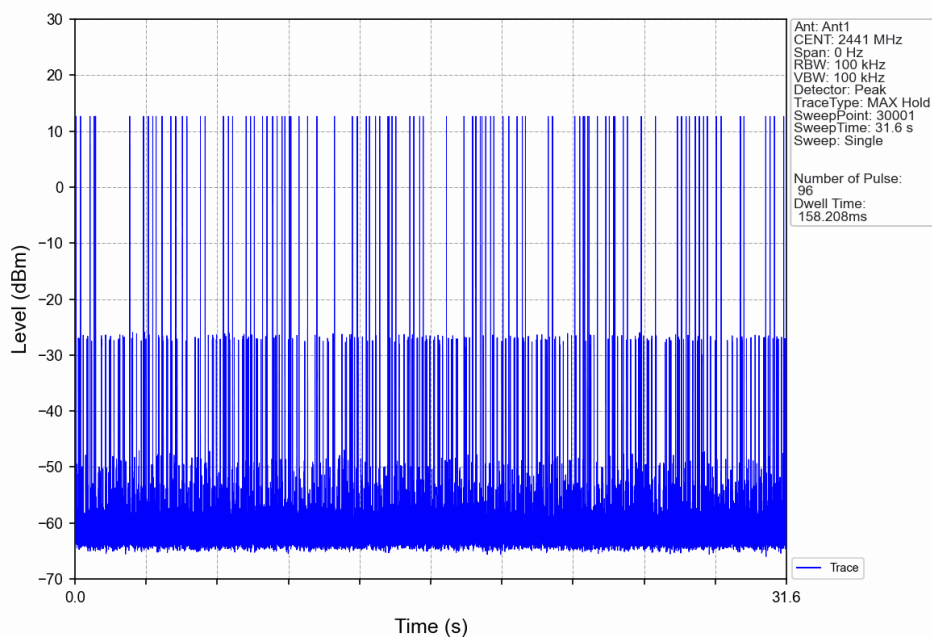
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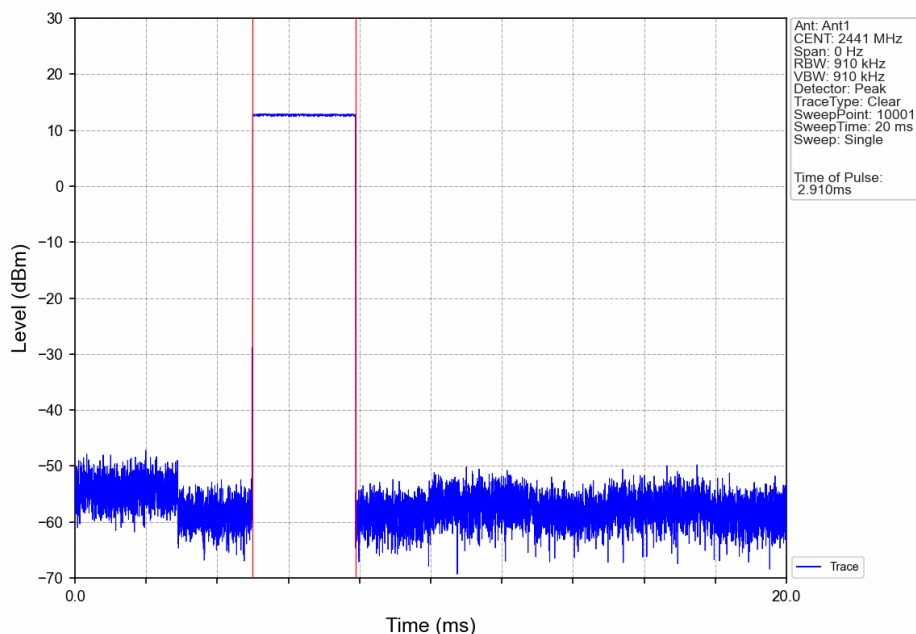
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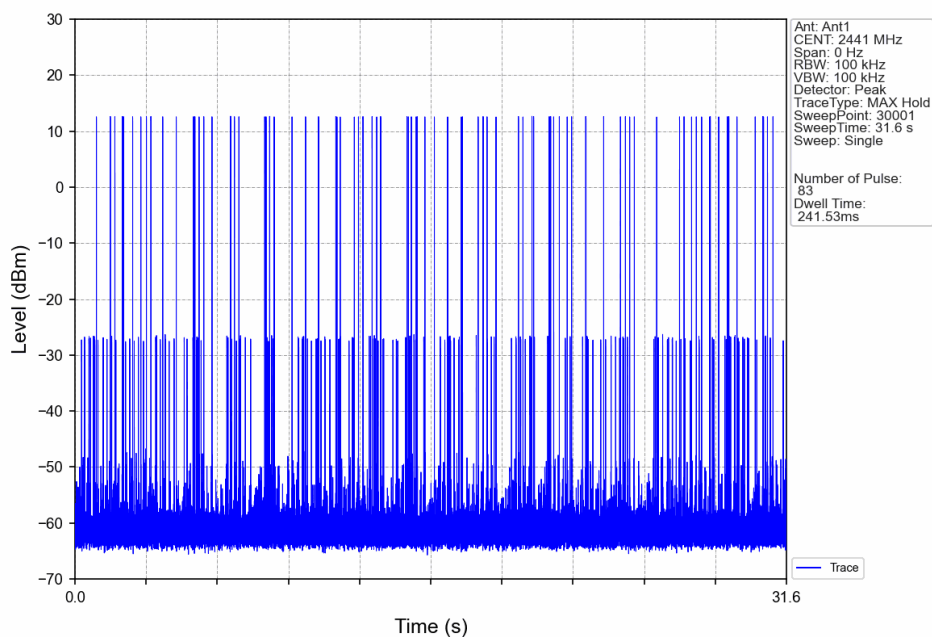
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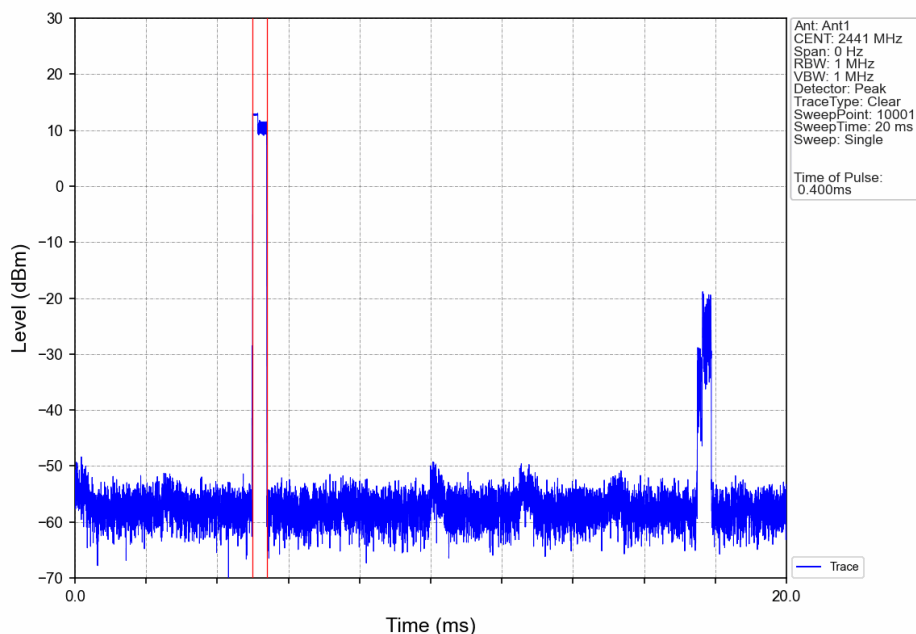
GFSK\_DH5\_HOPP\_Ant1\_NTNV



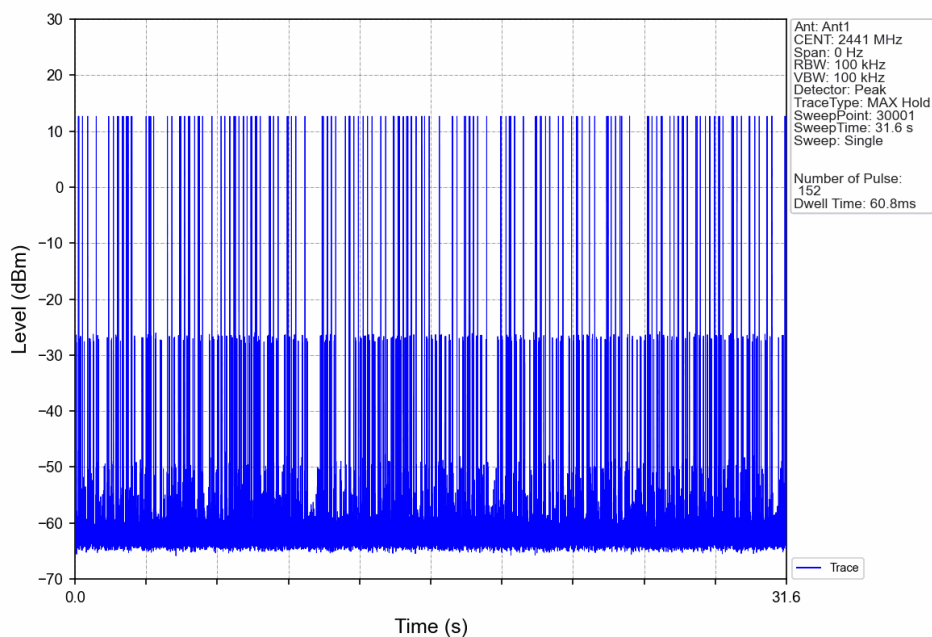
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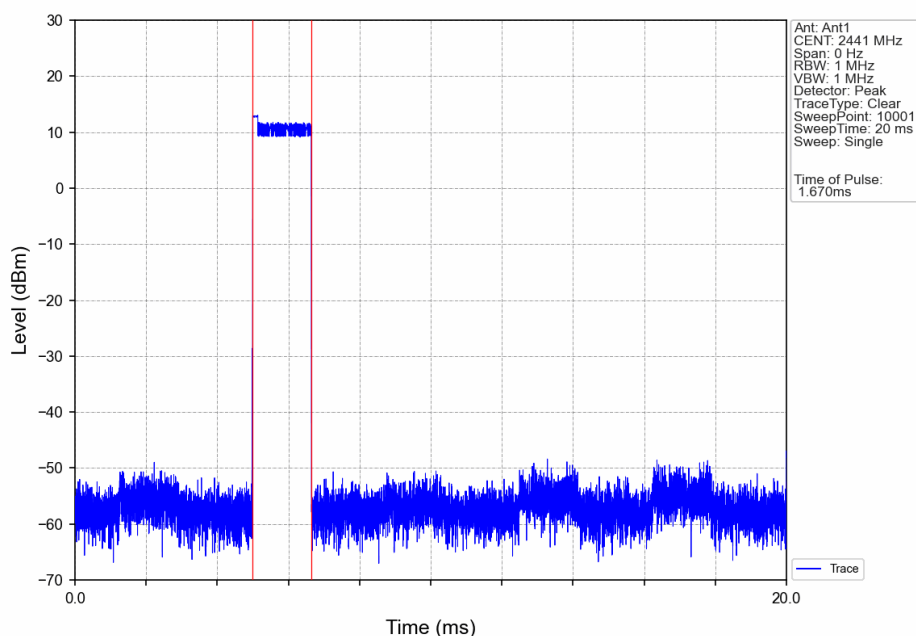
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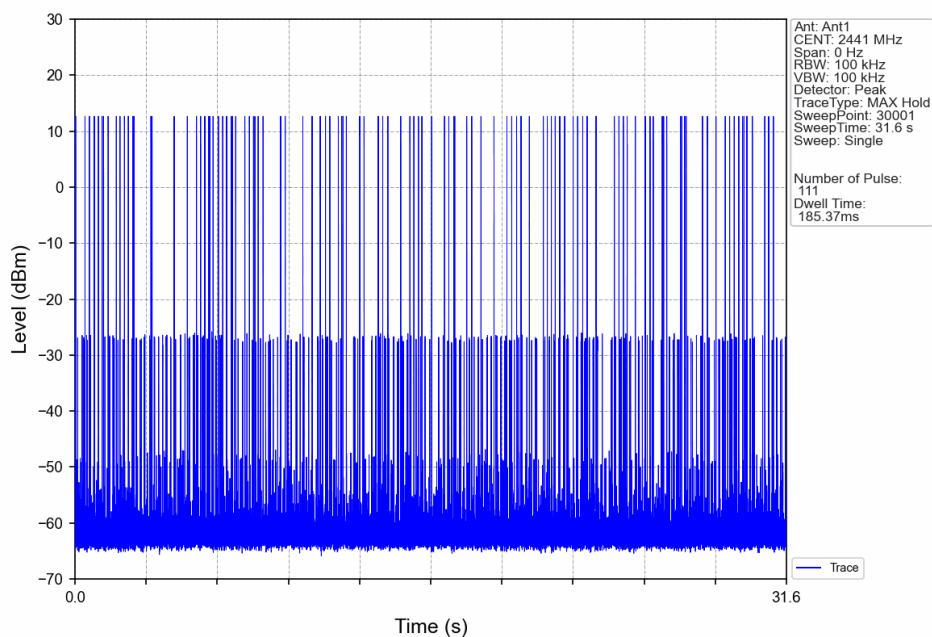
Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



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



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



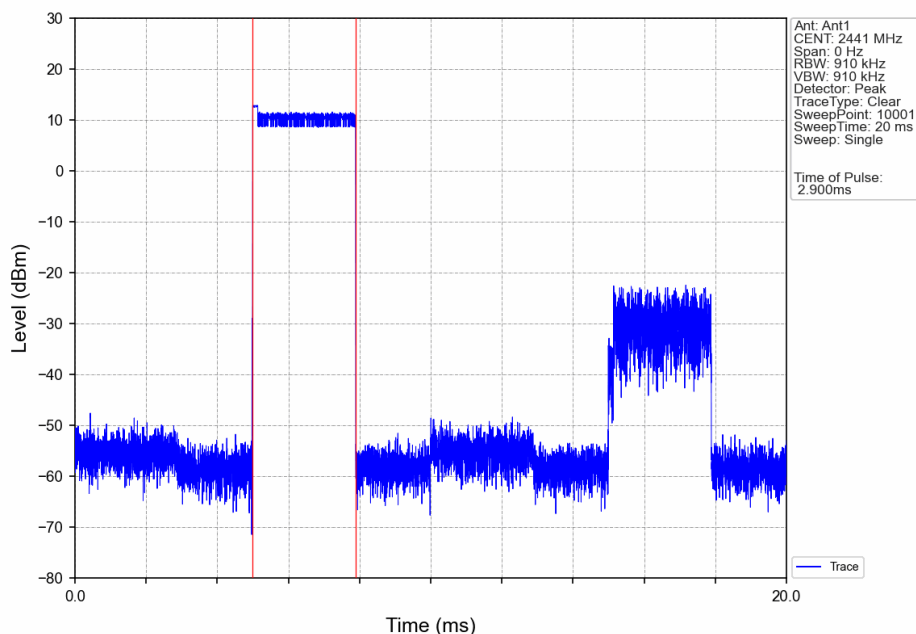
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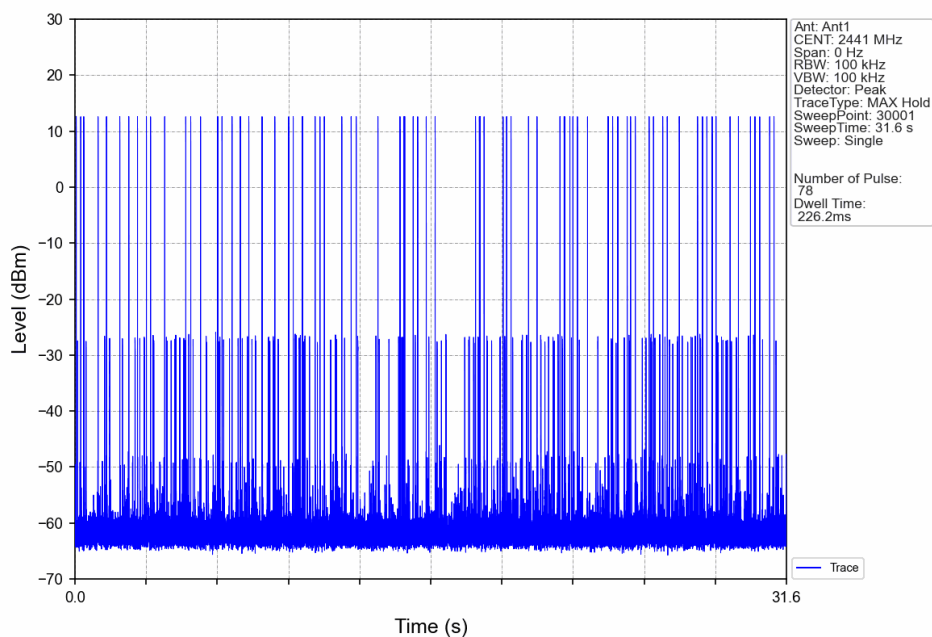
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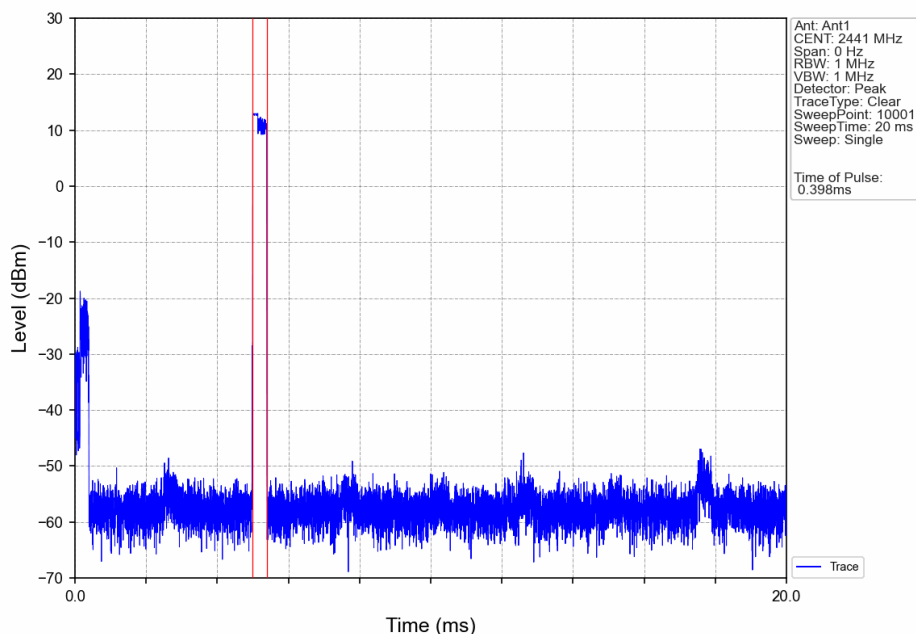
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



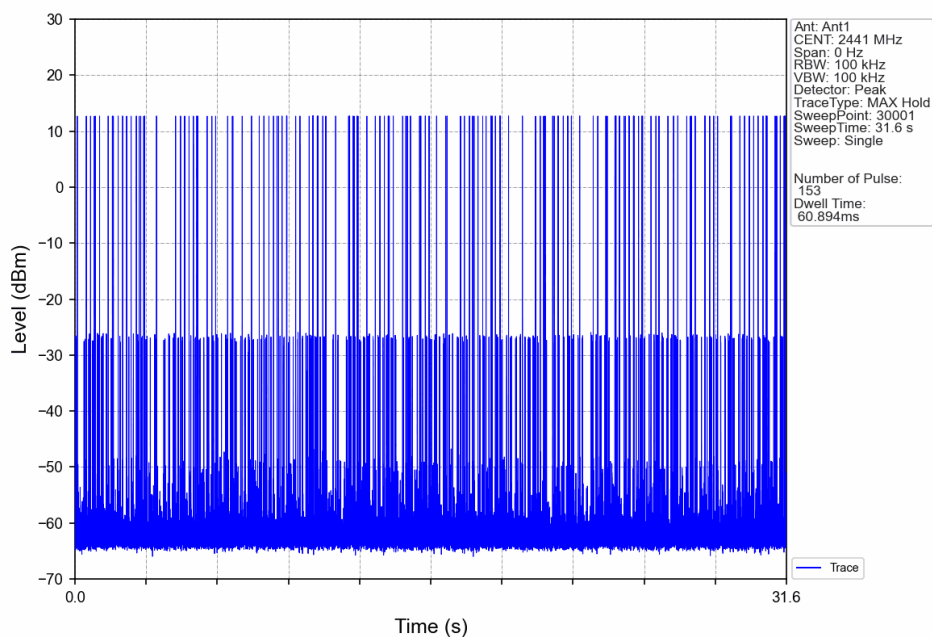
Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



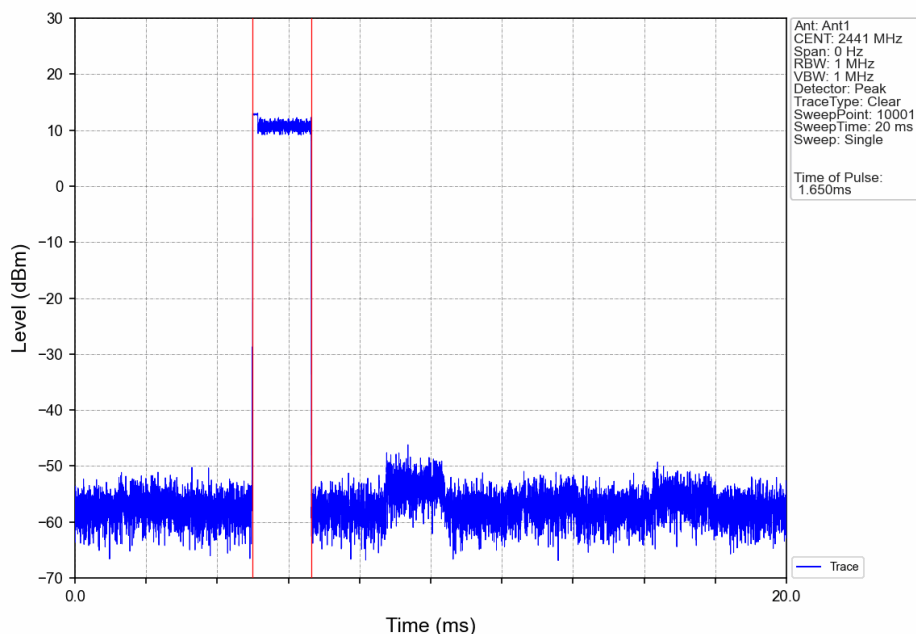
### 8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



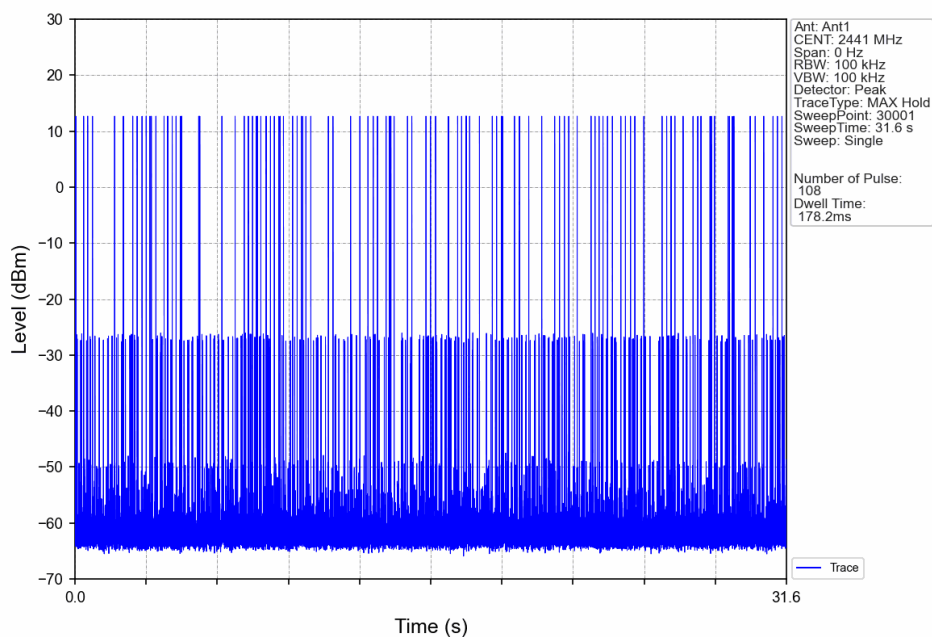
### 8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



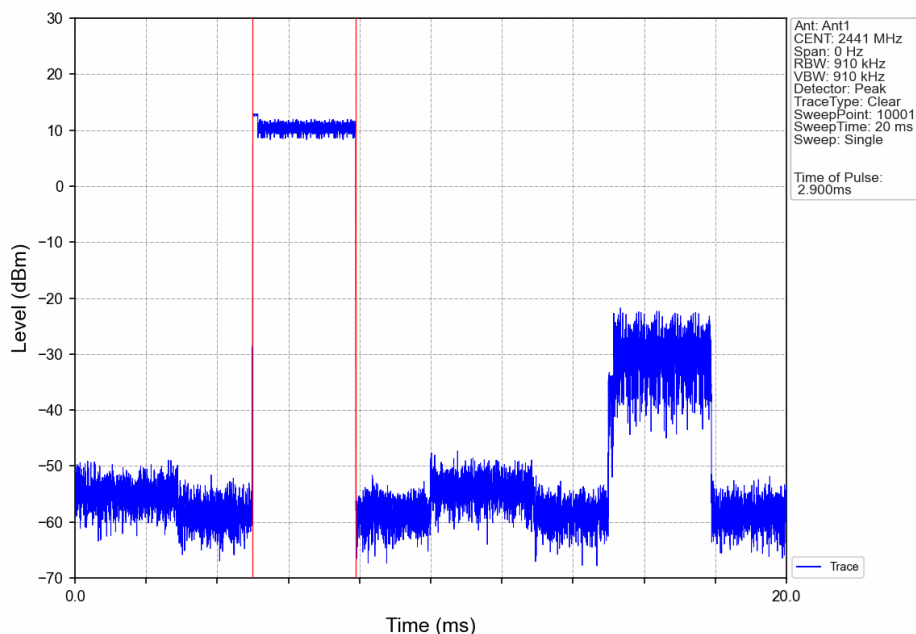
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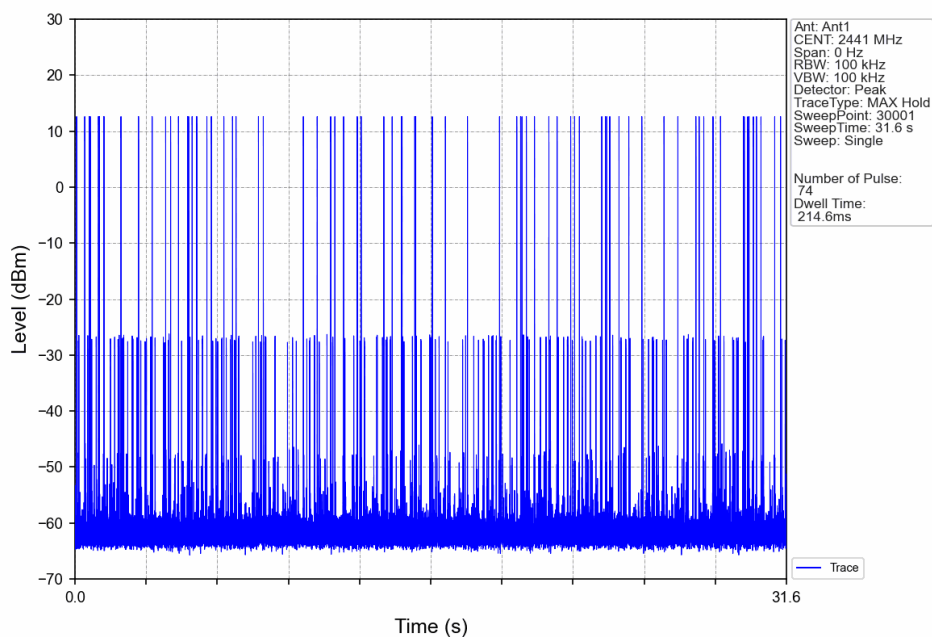
### 8DPSK\_3DH3\_HOPP\_Ant1\_NTNV



### 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



### 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



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

### 6.1 Test Result

#### 6.1.1 Ref

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-----------|---------|-----------------|-------------|-----|--------------------------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 12.98                    |
|           |         | 2441            | DH5         | 1   | 12.76                    |
|           |         | 2480            | DH5         | 1   | 12.43                    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 12.83                    |
|           |         | 2441            | 2DH5        | 1   | 12.72                    |
|           |         | 2480            | 2DH5        | 1   | 12.41                    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 13.04                    |
|           |         | 2441            | 3DH5        | 1   | 12.81                    |
|           |         | 2480            | 3DH5        | 1   | 12.47                    |

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.



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## 6.1.2 CSE

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-----------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 12.98                    | -7.02       | Pass    |
|           |         | 2441            | DH5         | 1   | 12.98                    | -7.02       | Pass    |
|           |         | 2480            | DH5         | 1   | 12.98                    | -7.02       | Pass    |
|           |         | HOPP            | DH5         | 1   | 12.98                    | -7.02       | Pass    |
|           |         |                 |             |     | 12.98                    | -7.02       | Pass    |
|           |         |                 |             |     |                          |             |         |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 12.83                    | -7.17       | Pass    |
|           |         | 2441            | 2DH5        | 1   | 12.83                    | -7.17       | Pass    |
|           |         | 2480            | 2DH5        | 1   | 12.83                    | -7.17       | Pass    |
|           |         | HOPP            | 2DH5        | 1   | 12.83                    | -7.17       | Pass    |
|           |         |                 |             |     | 12.83                    | -7.17       | Pass    |
|           |         |                 |             |     |                          |             |         |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 13.04                    | -6.96       | Pass    |
|           |         | 2441            | 3DH5        | 1   | 13.04                    | -6.96       | Pass    |
|           |         | 2480            | 3DH5        | 1   | 13.04                    | -6.96       | Pass    |
|           |         | HOPP            | 3DH5        | 1   | 13.04                    | -6.96       | Pass    |
|           |         |                 |             |     | 13.04                    | -6.96       | 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.



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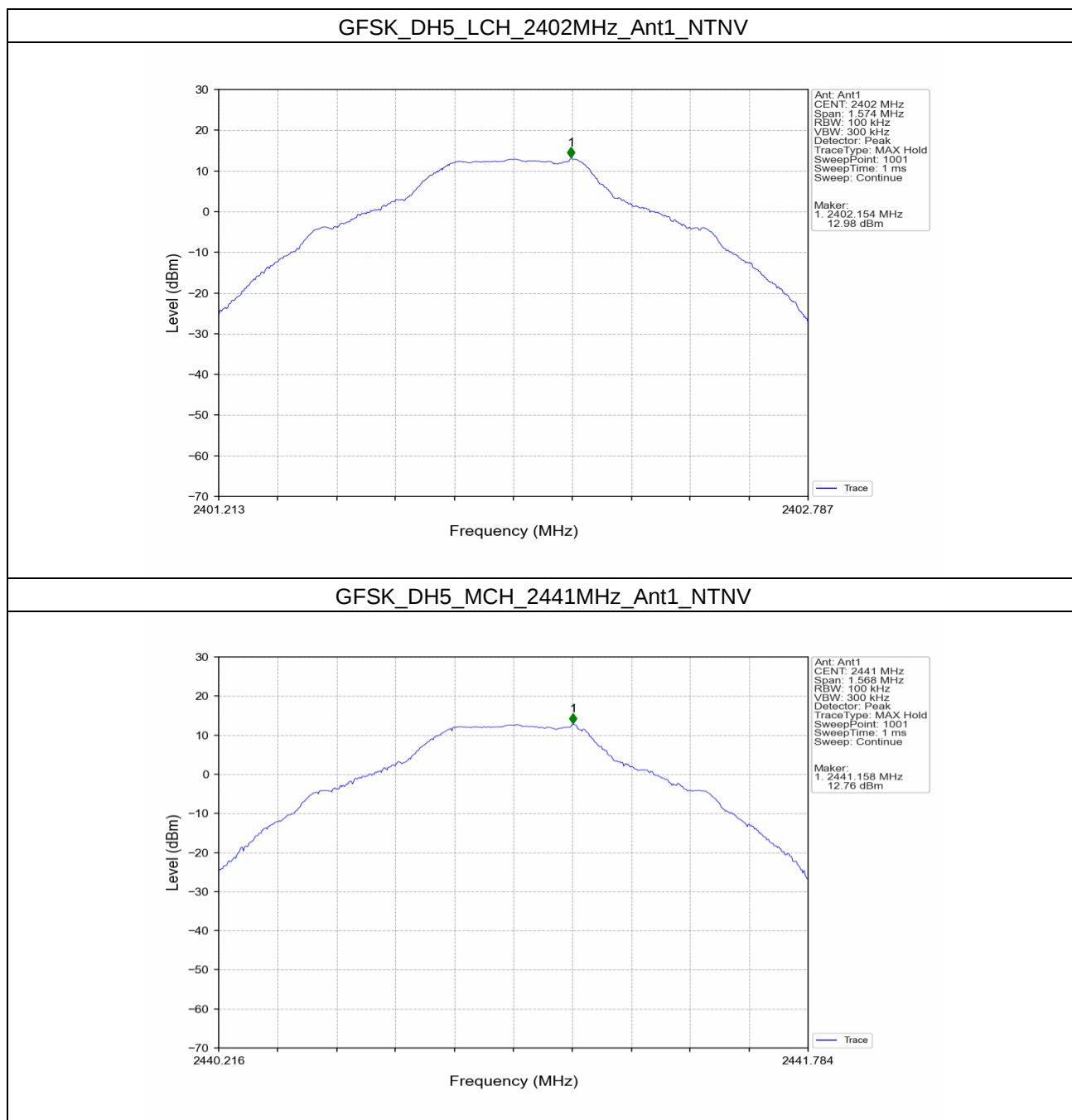
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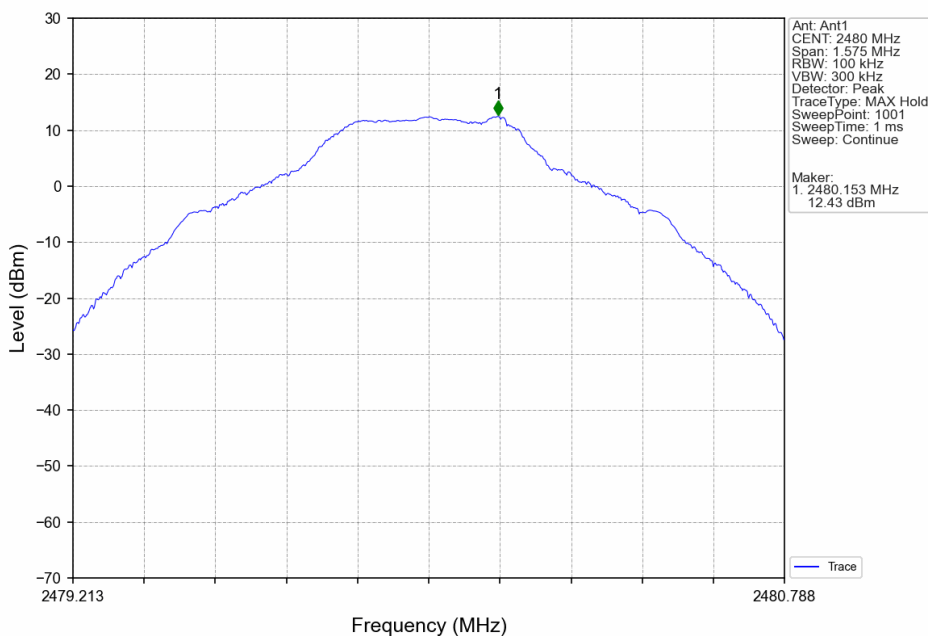
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### 6.2 Test Graph

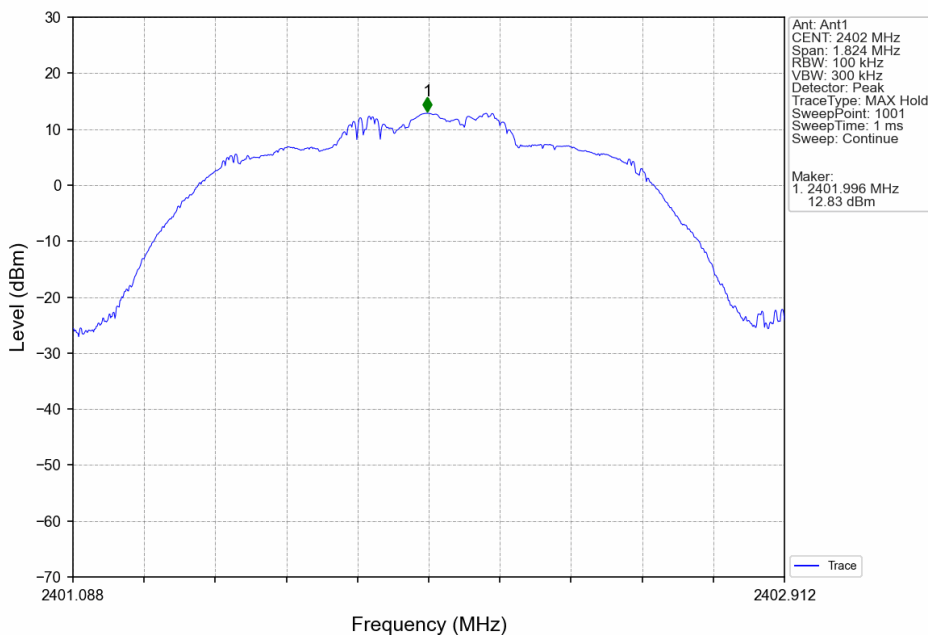
#### 6.2.1 Ref



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



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



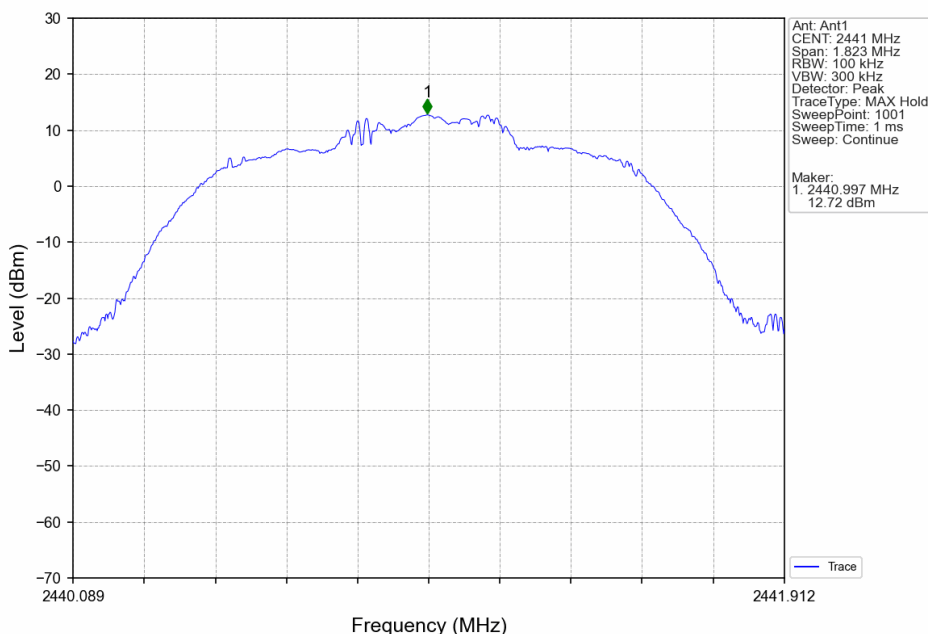
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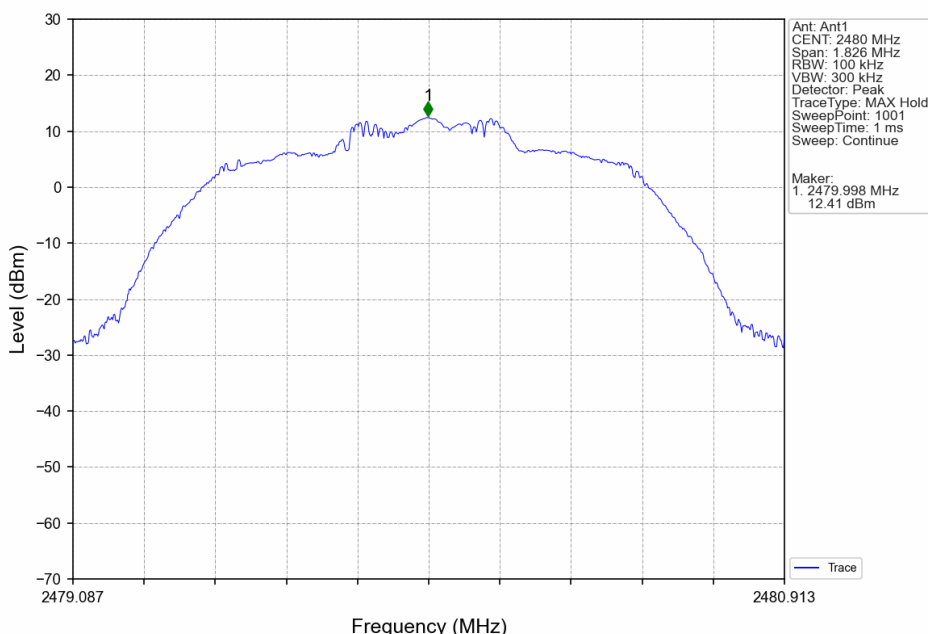
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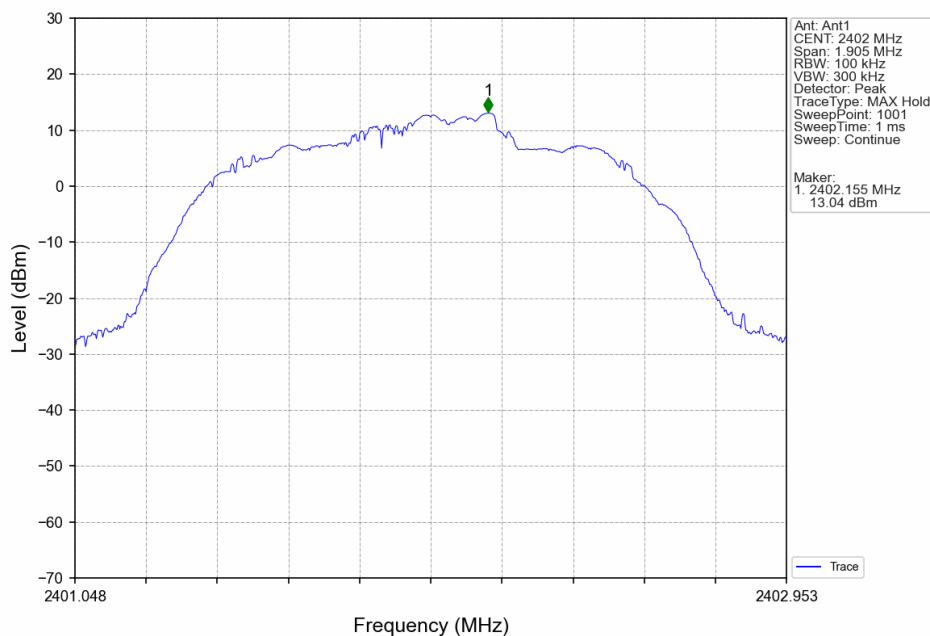
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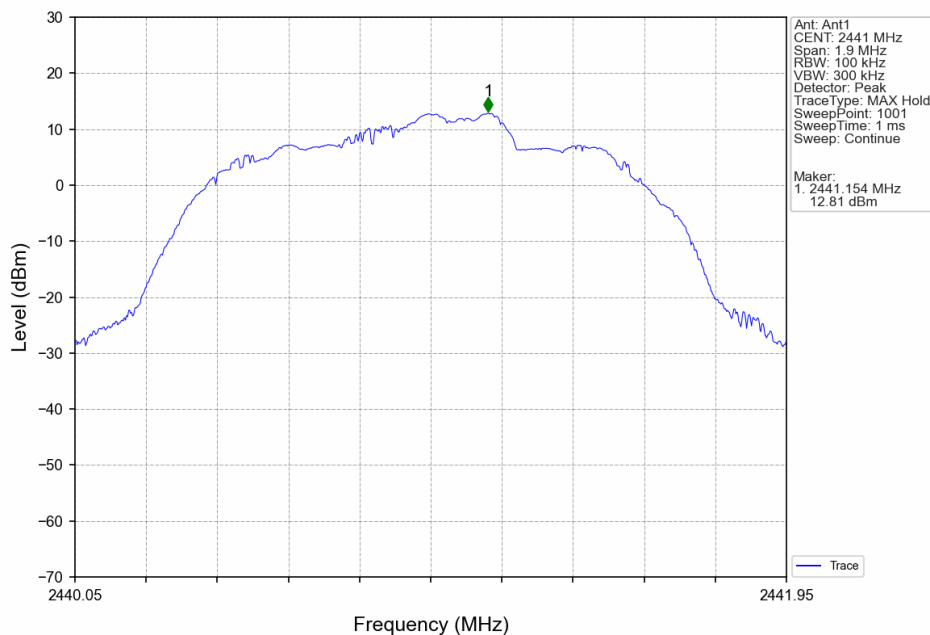
Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



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



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



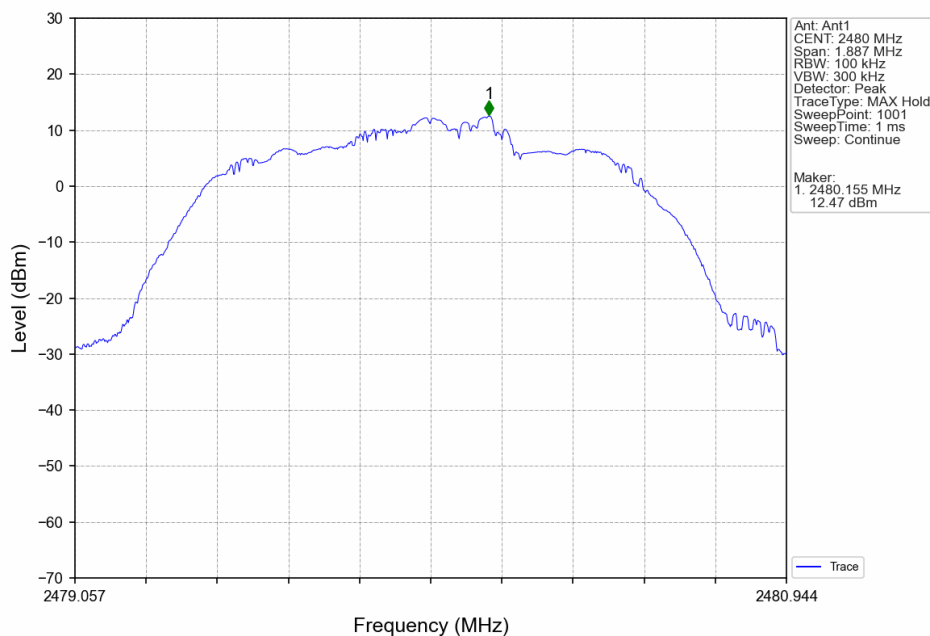
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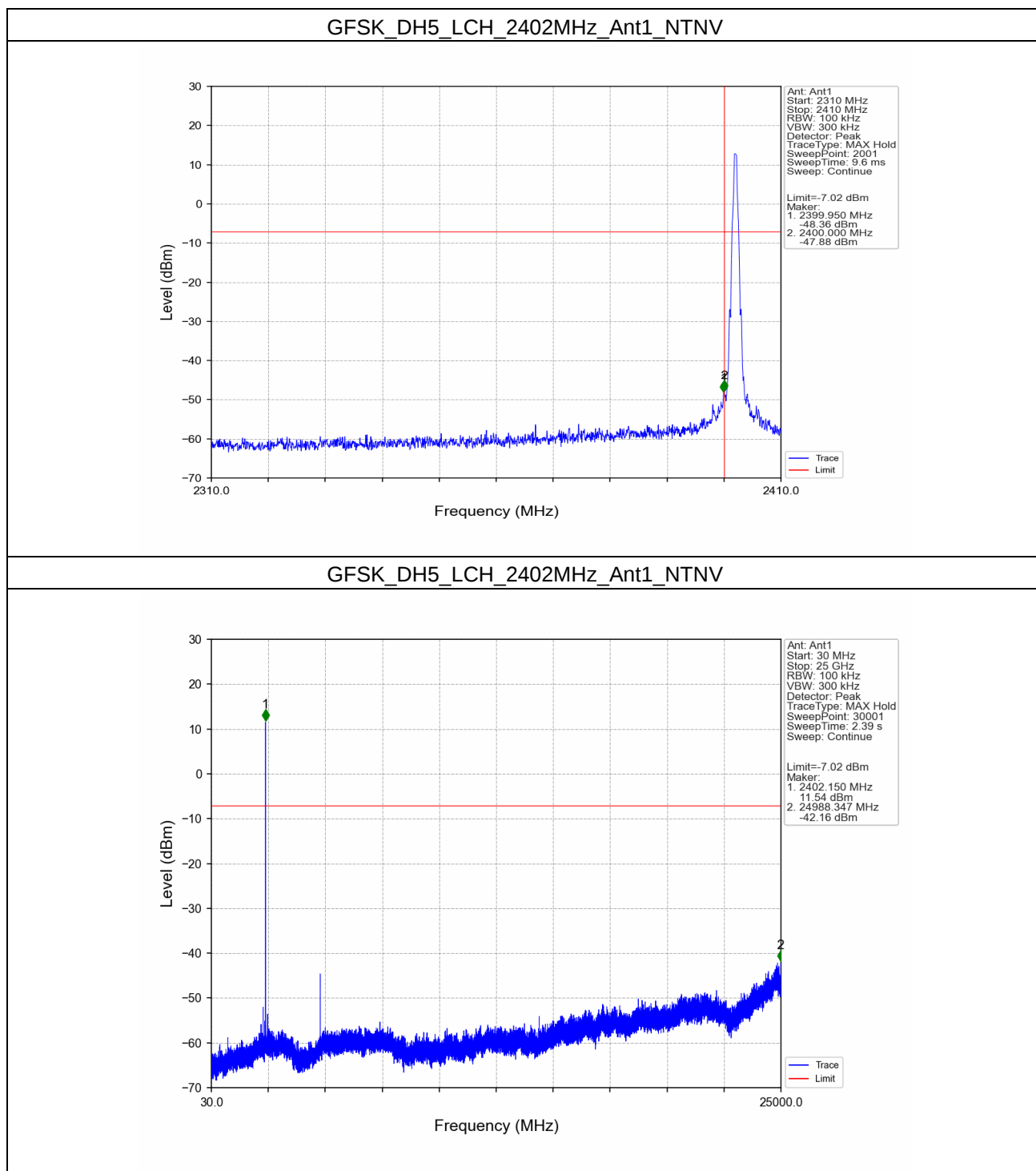
### 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



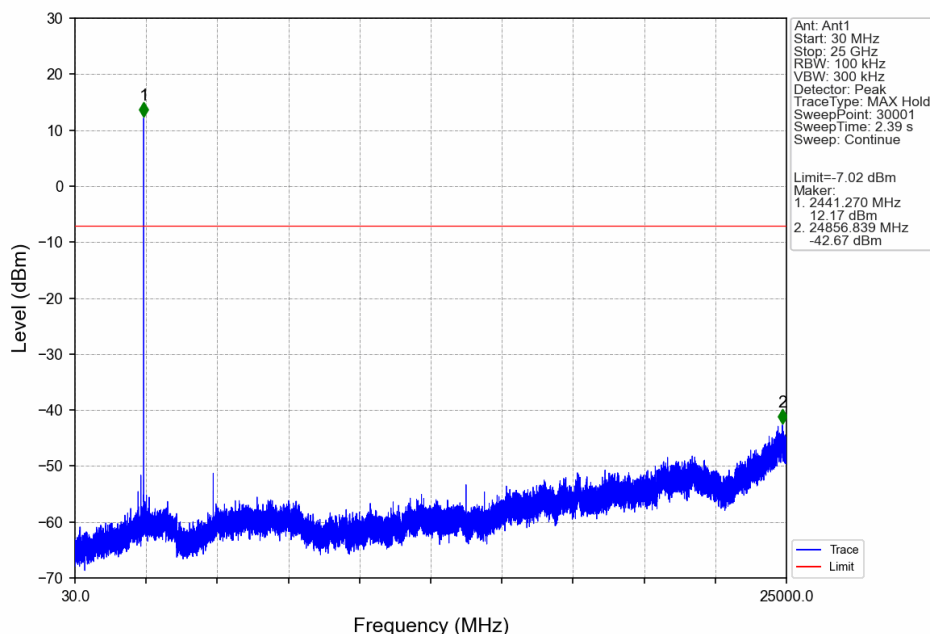
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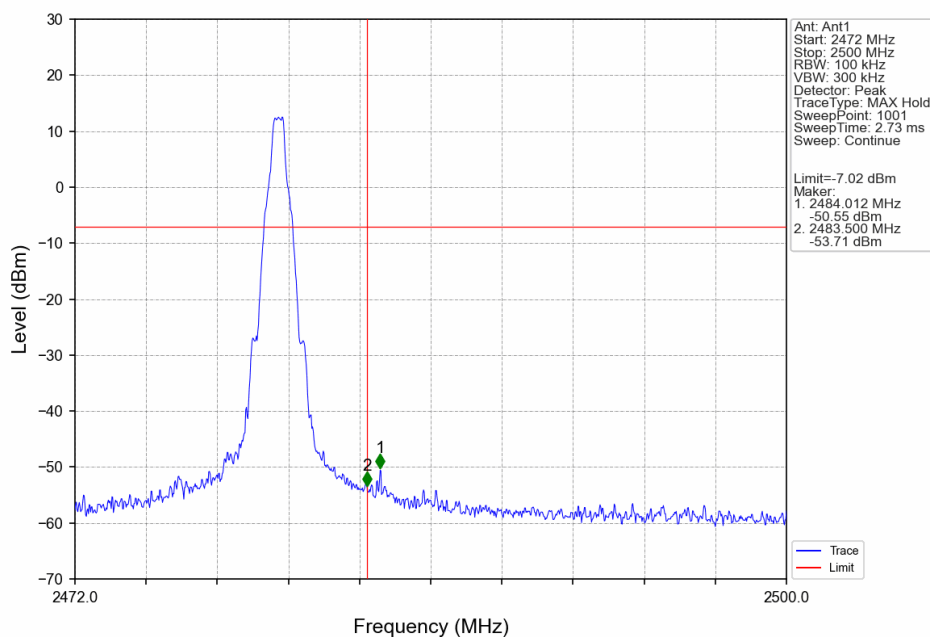
### 6.2.2 CSE



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



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



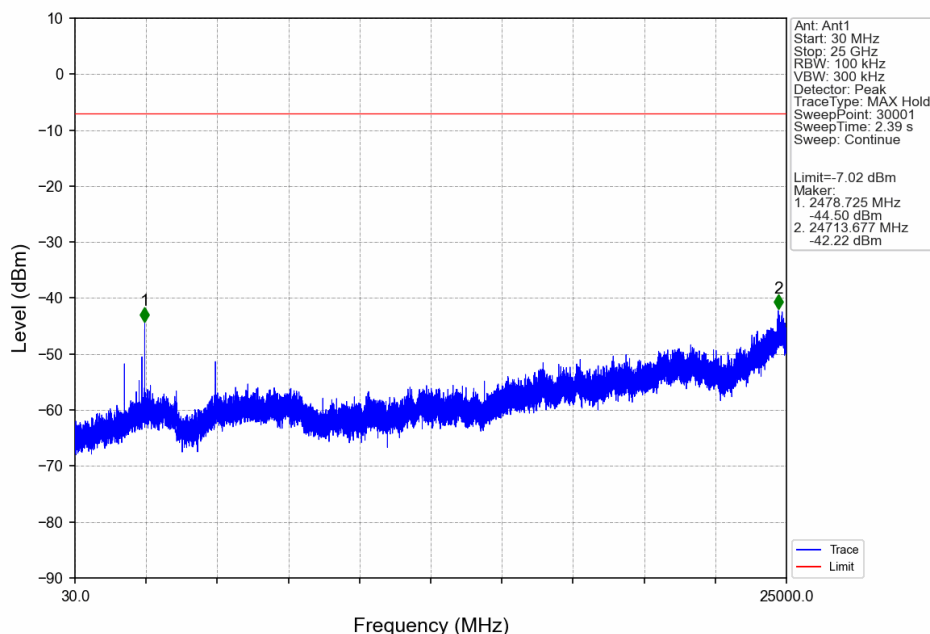
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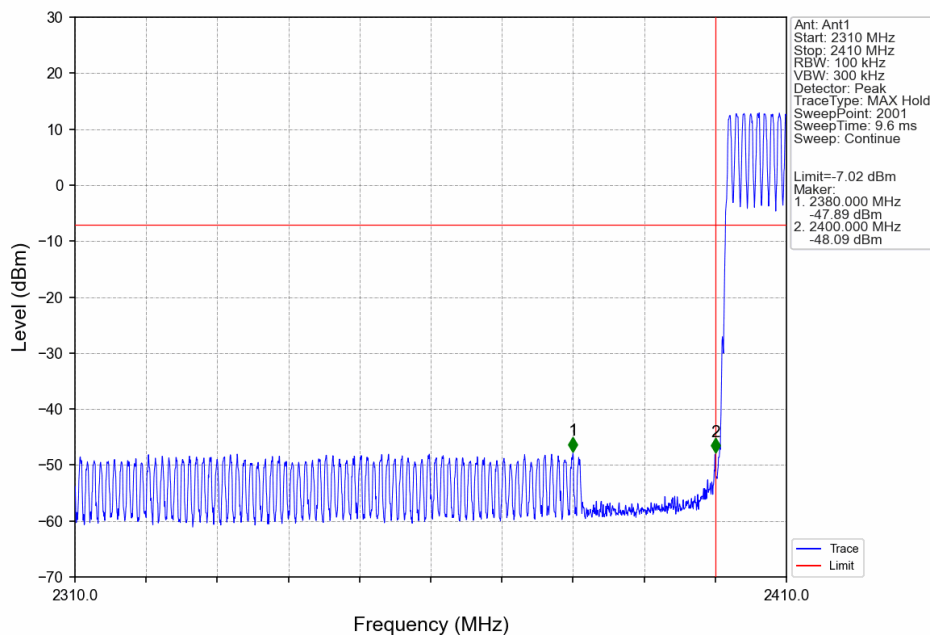
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GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



GFSK\_DH5\_HOPP\_Ant1\_NTNV



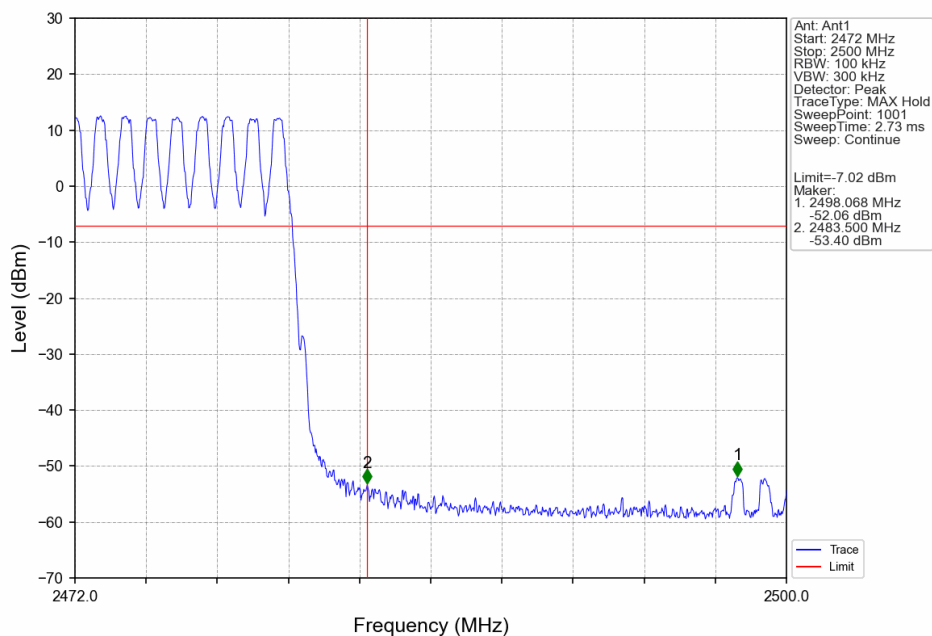
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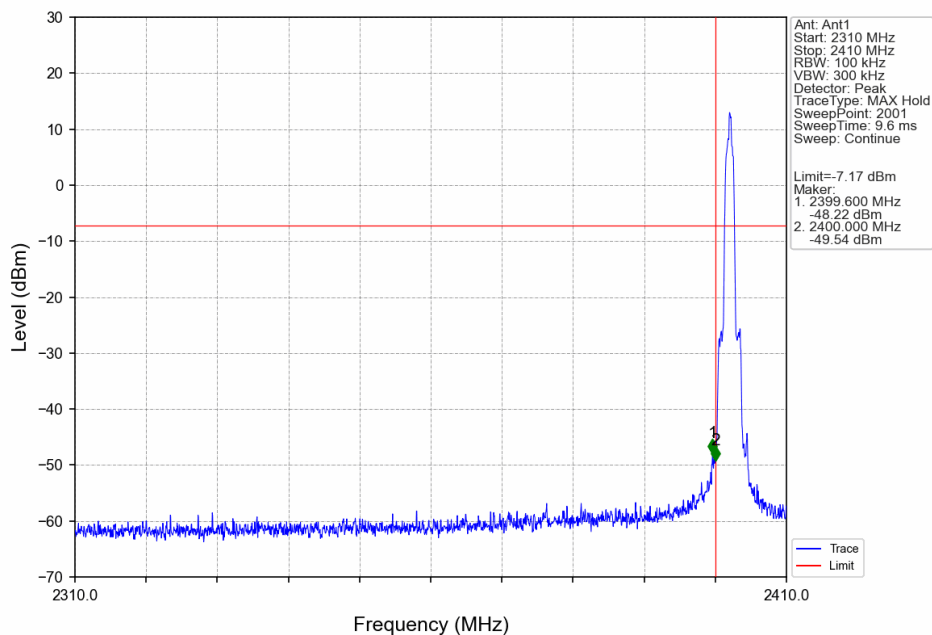
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### GFSK\_DH5\_HOPP\_Ant1\_NTNV



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



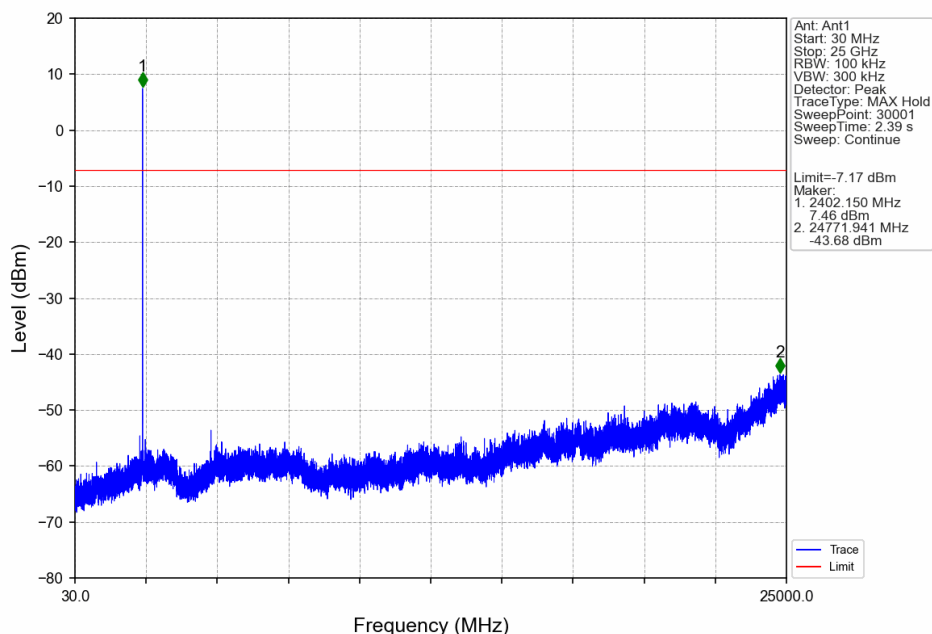
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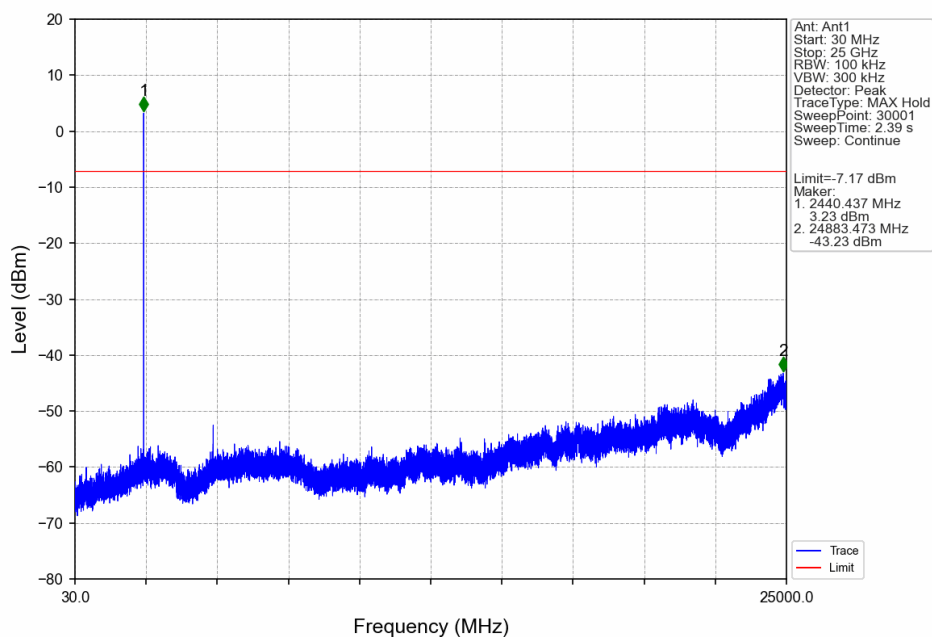
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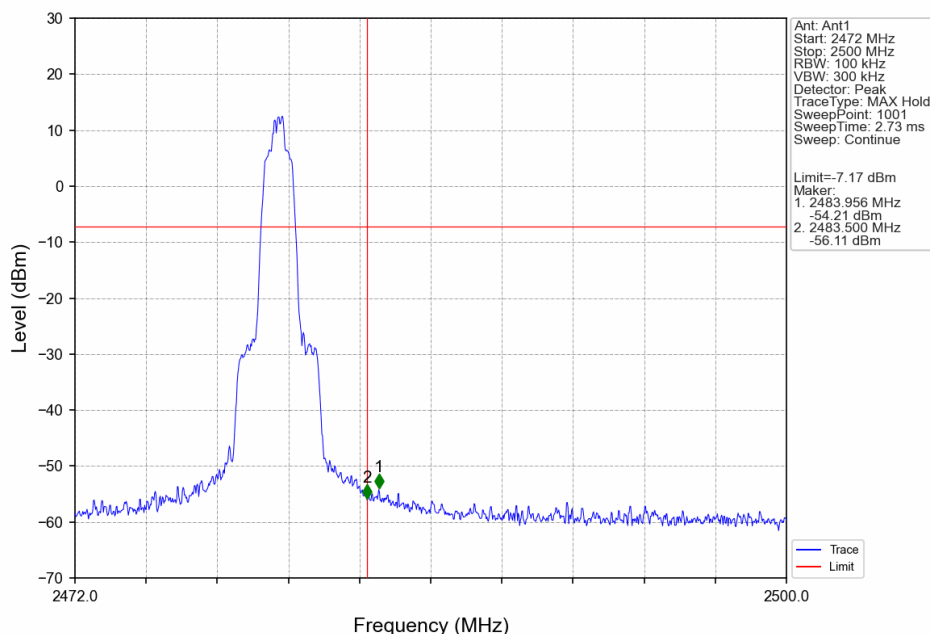
Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



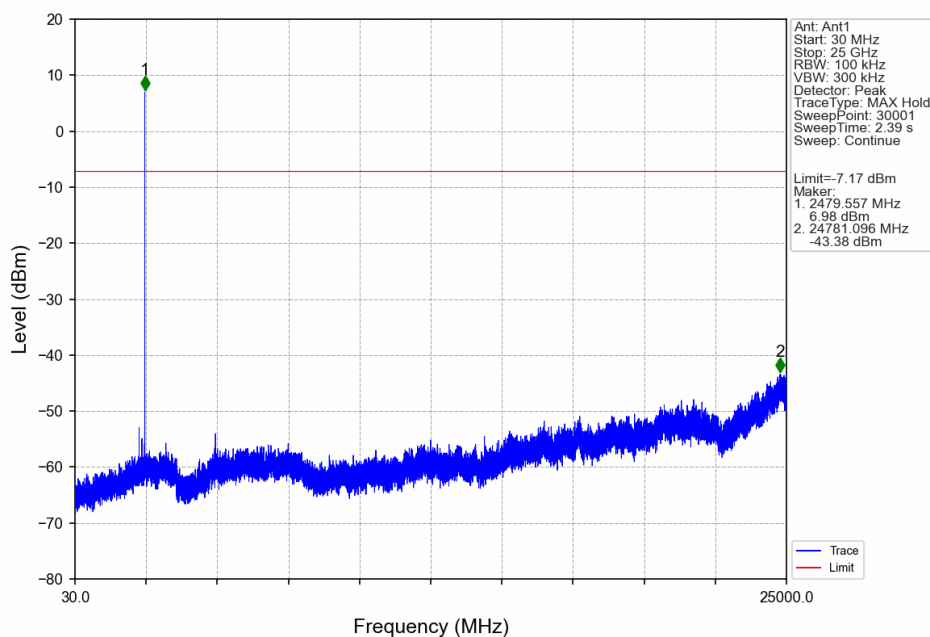
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Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



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



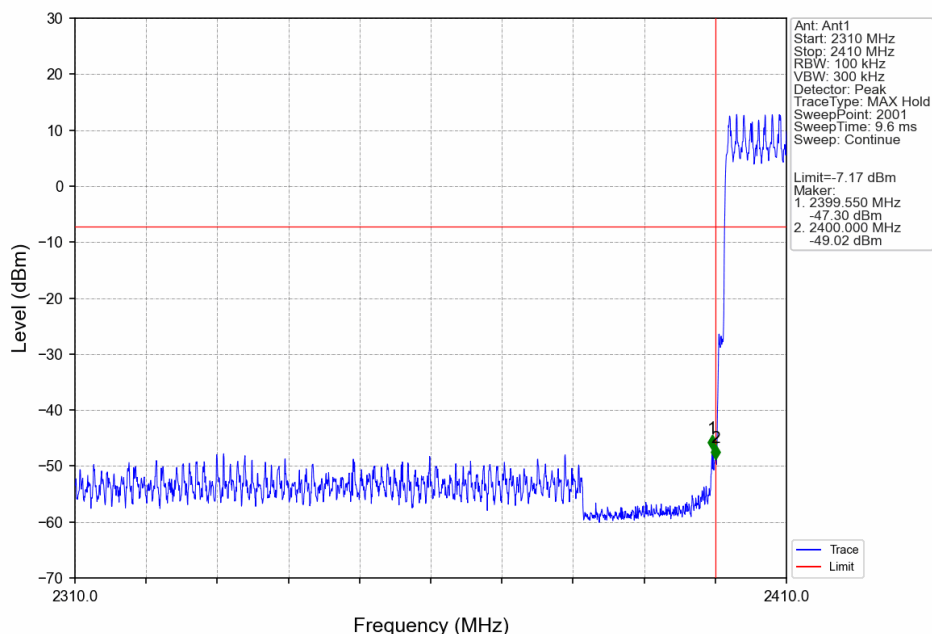
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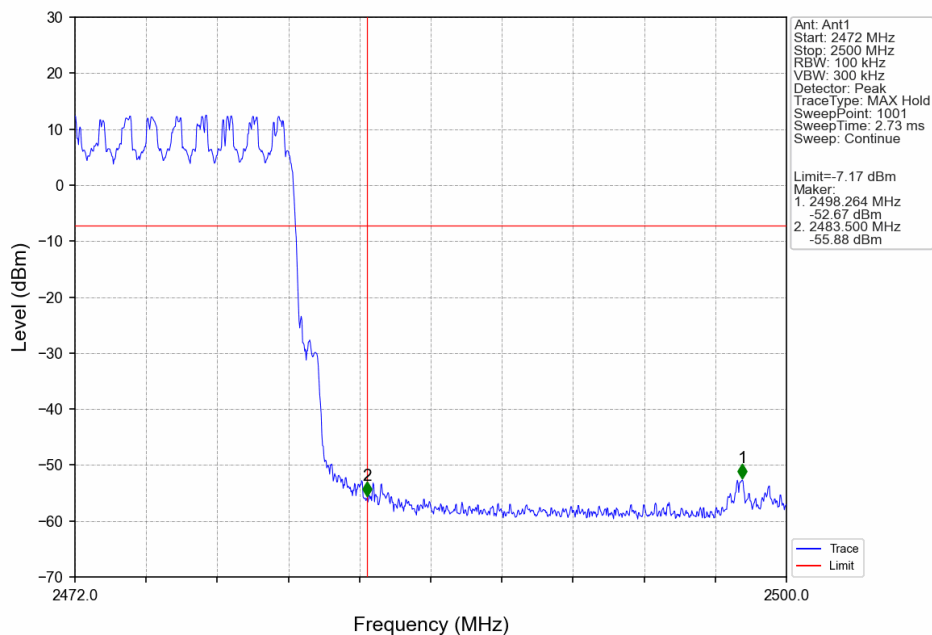
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Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



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



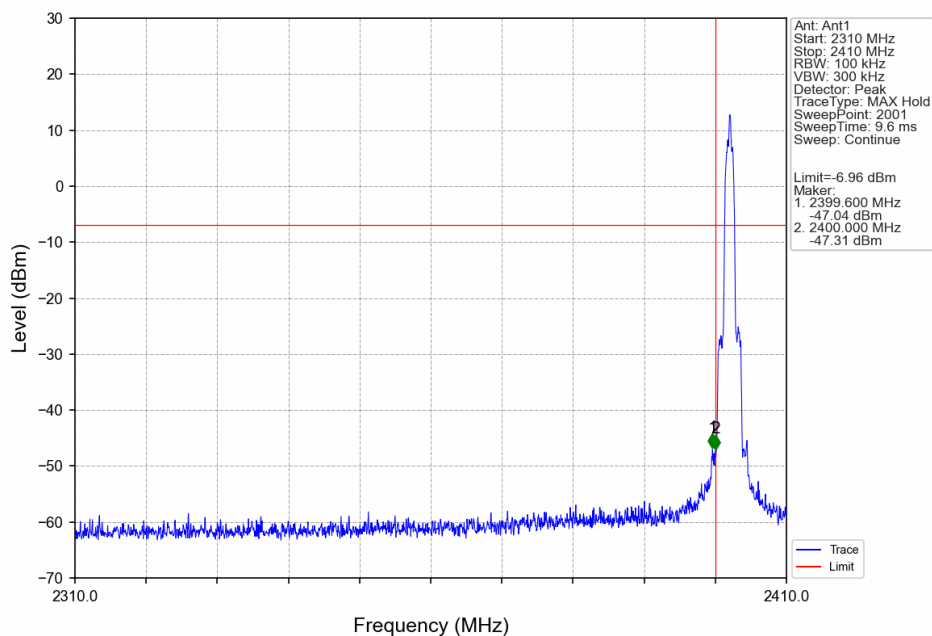
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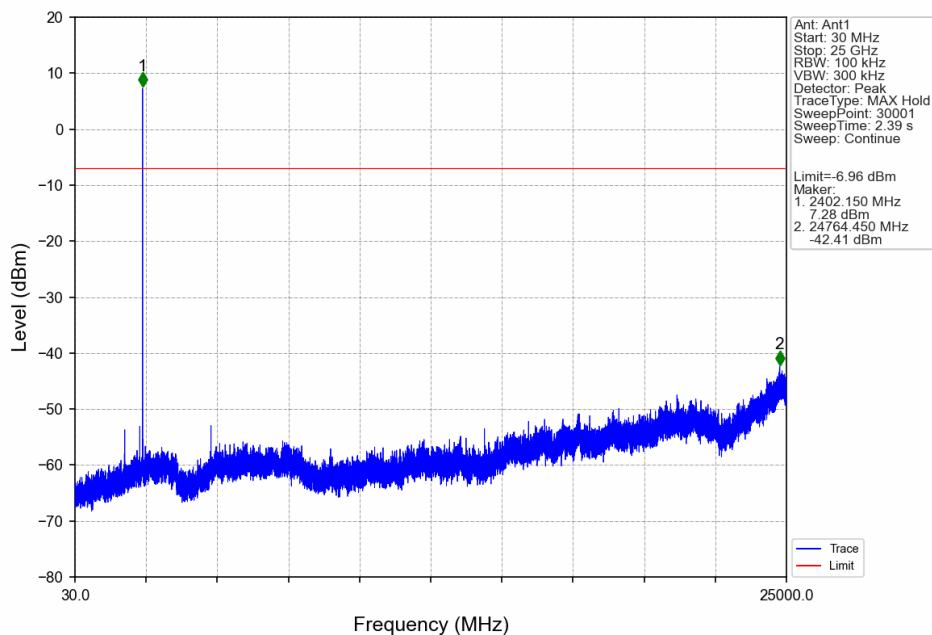
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### 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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



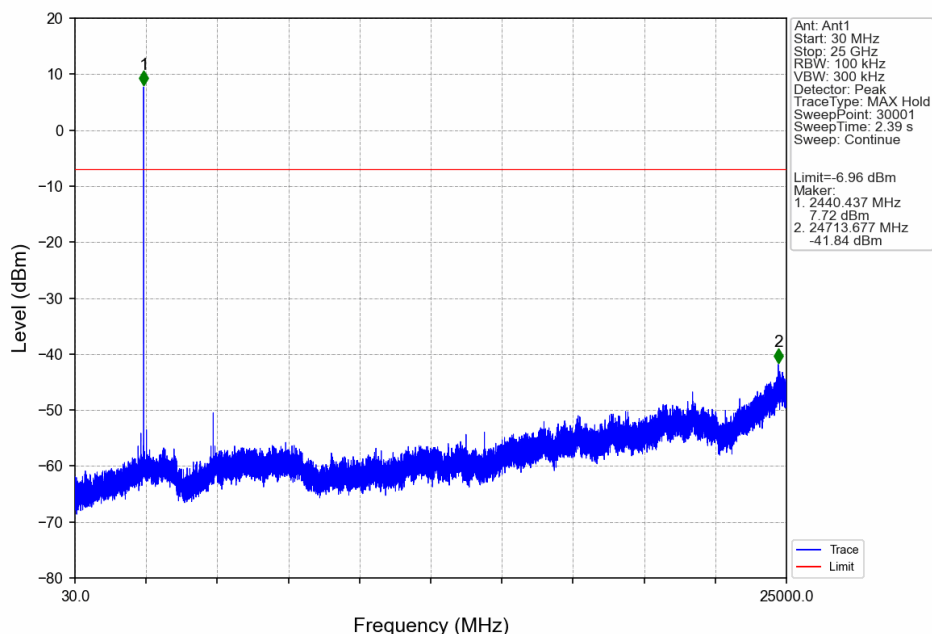
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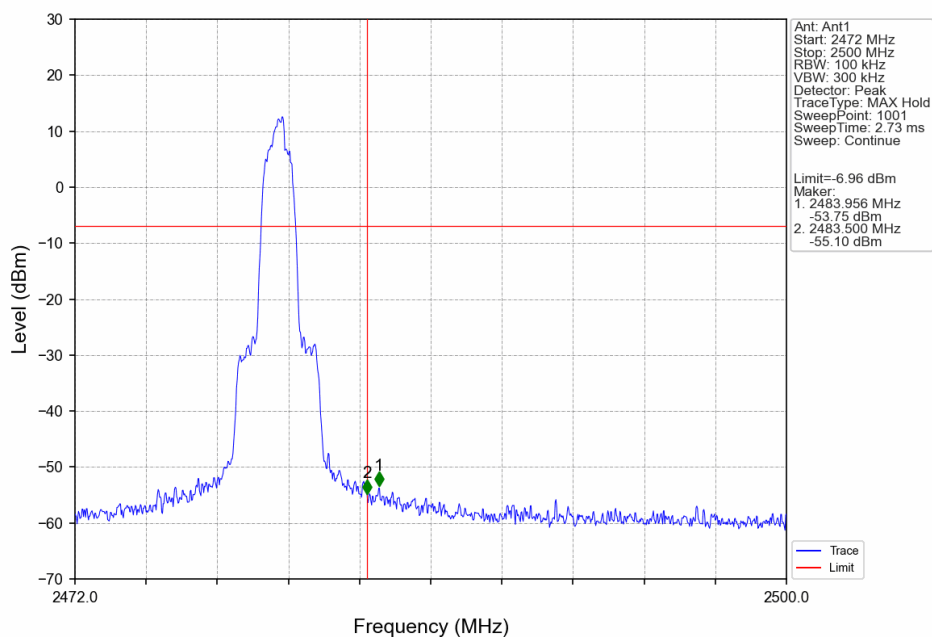
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### 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



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



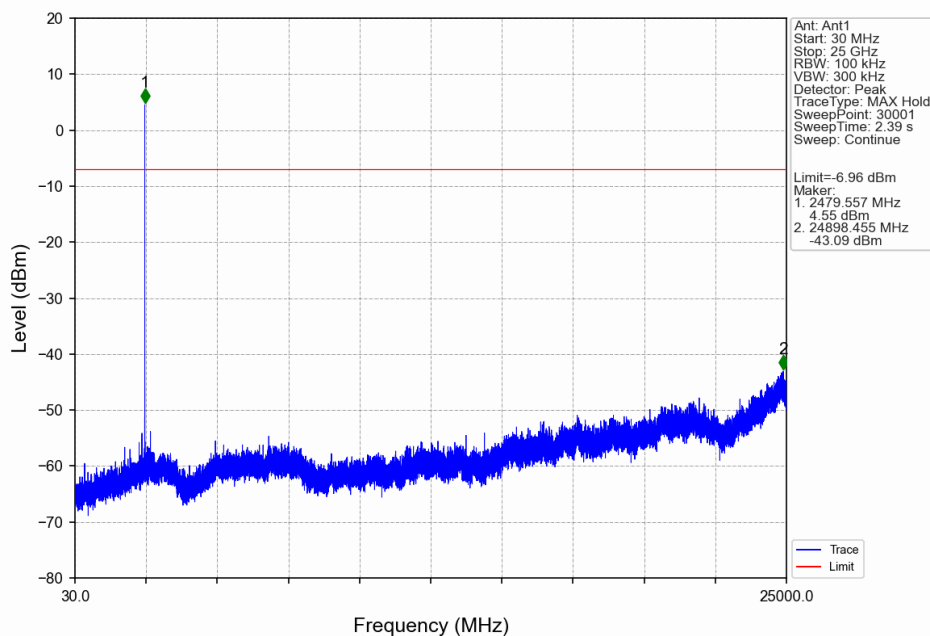
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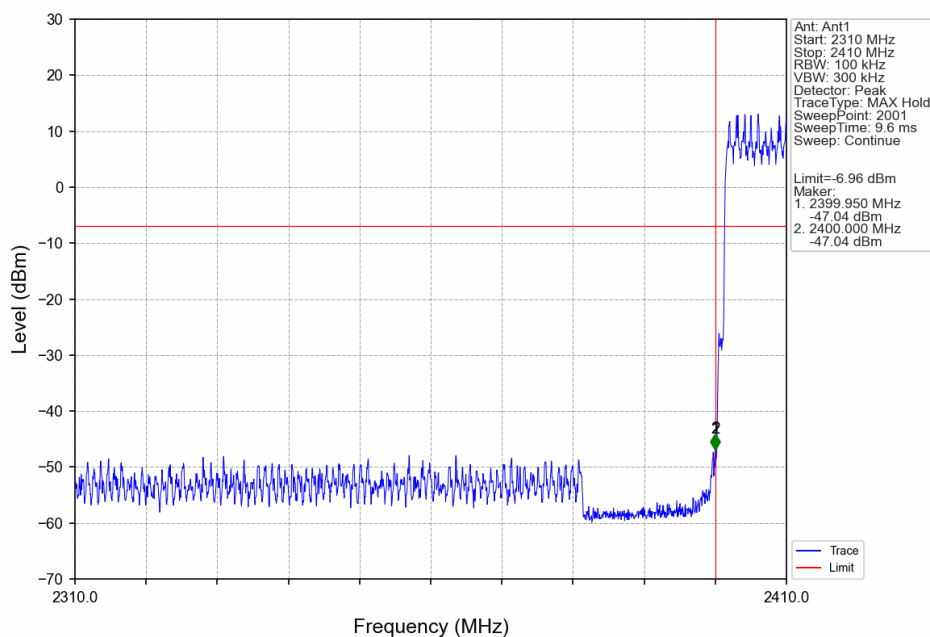
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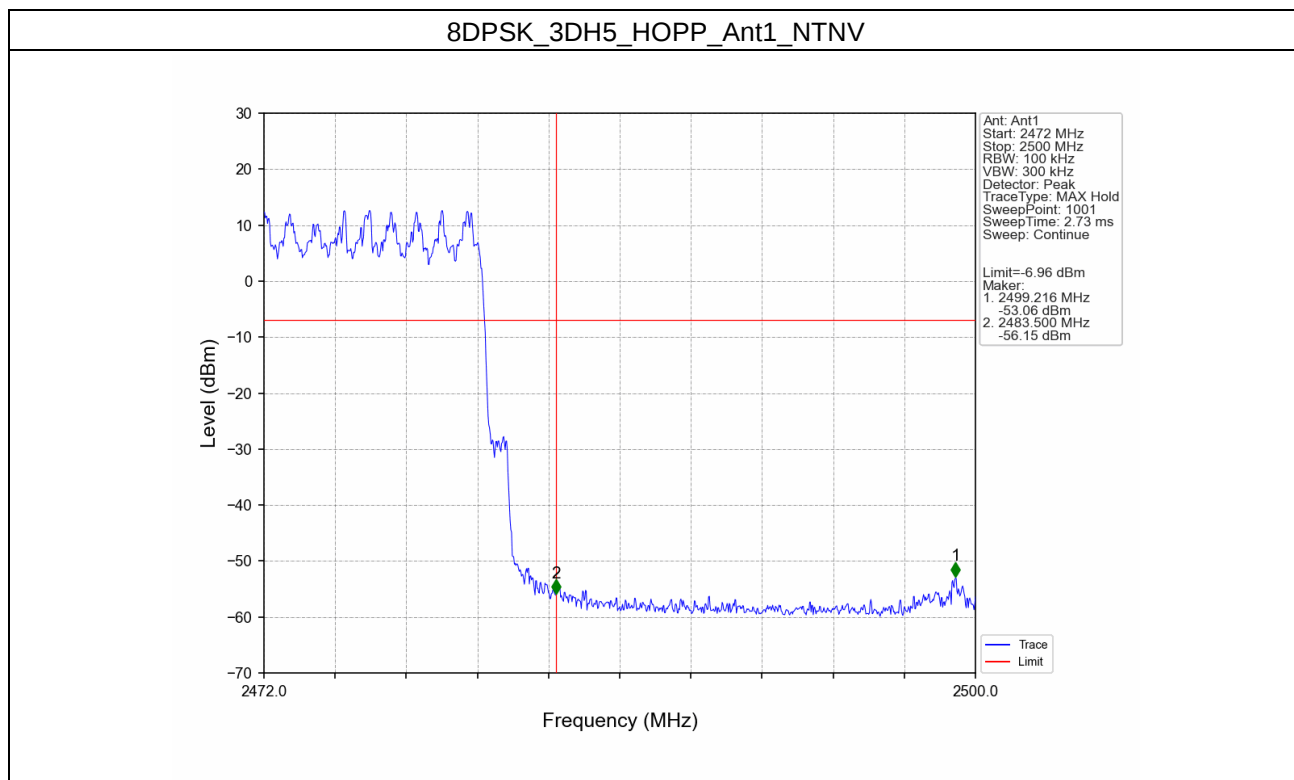
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### 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



### 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV





- End of the Report -

