

## **Appendix RF Test Data for BT**

**Company:** : Chuting Technology (Shenzhen) Co., LTD

**EUT** : SE-100 Smart eyewear

**FCC ID:** : 2BFNO-SE-100

**Model Number** : SE-100

**Report No.** : HTT202601325F02

**Reviewed By** : Heber He

## 1. Duty Cycle

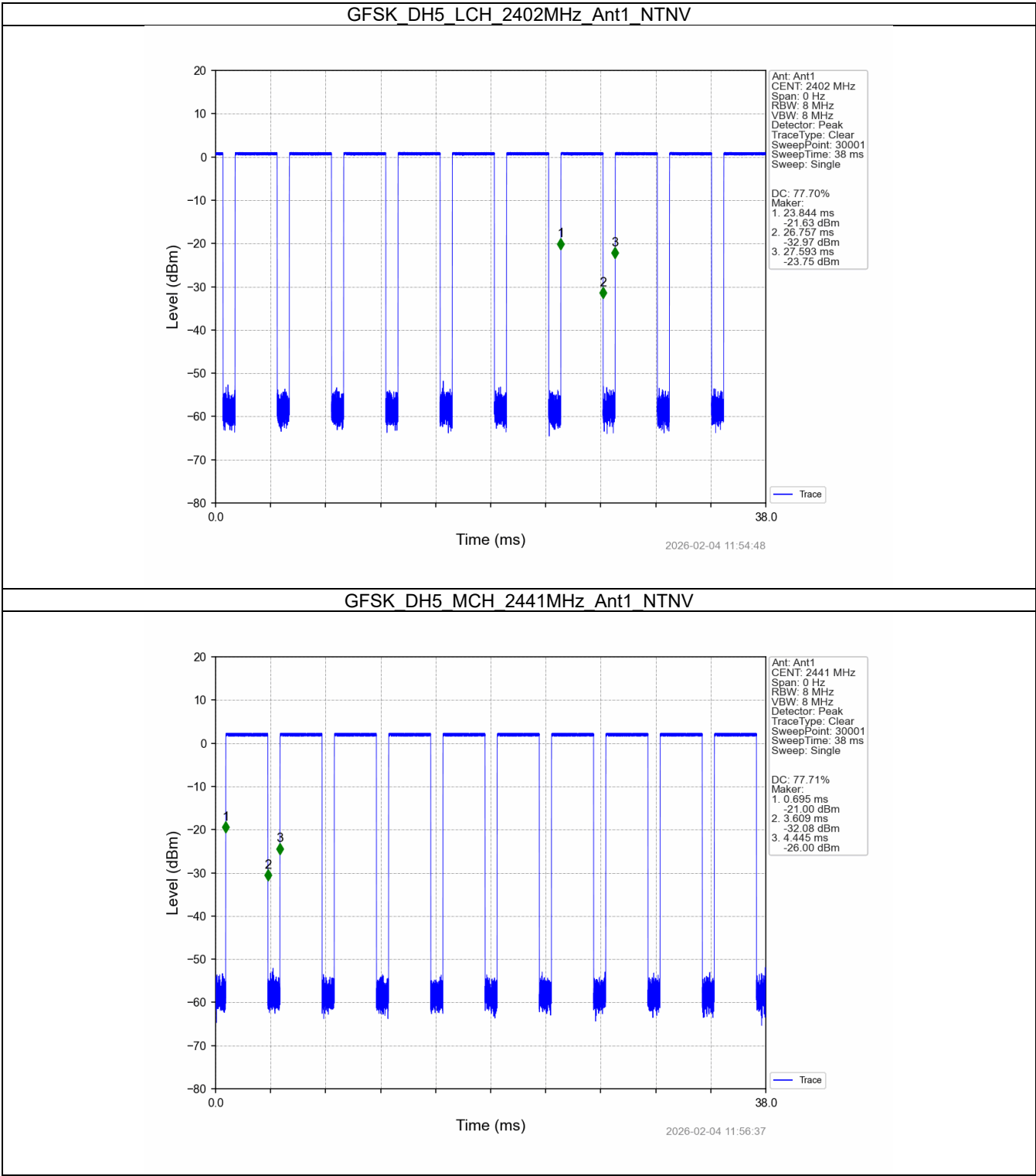
### 1.1 Test Result

#### 1.1.1 Ant1

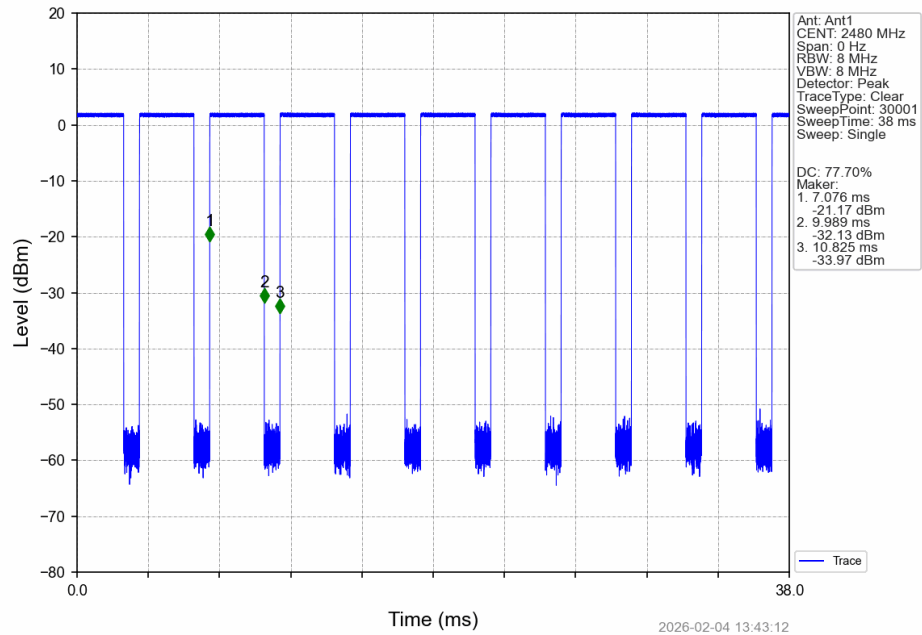
| Ant1      |         |                 |             |           |             |                |                                   |                       |
|-----------|---------|-----------------|-------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| 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         | 2.913     | 3.749       | 77.70          | 1.10                              | 0.03                  |
|           |         | 2441            | DH5         | 2.914     | 3.750       | 77.71          | 1.10                              | 0.03                  |
|           |         | 2480            | DH5         | 2.913     | 3.749       | 77.70          | 1.10                              | 0.03                  |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 2.920     | 3.749       | 77.89          | 1.09                              | 0.01                  |
|           |         | 2441            | 2DH5        | 2.920     | 3.749       | 77.89          | 1.09                              | 0.01                  |
|           |         | 2480            | 2DH5        | 2.920     | 3.750       | 77.87          | 1.09                              | 0.01                  |
| 8DPSK     | SISO    | 2402            | 3DH5        | 2.922     | 3.749       | 77.94          | 1.08                              | 0.03                  |
|           |         | 2441            | 3DH5        | 2.922     | 3.749       | 77.94          | 1.08                              | 0.03                  |
|           |         | 2480            | 3DH5        | 2.922     | 3.749       | 77.94          | 1.08                              | 0.01                  |

# 1.2 Test Graph

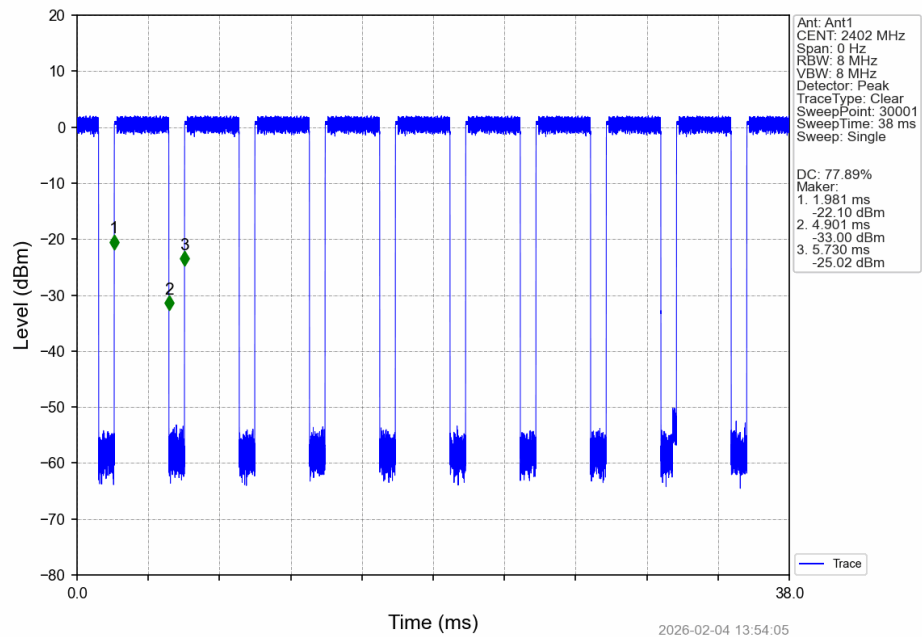
## 1.2.1 Ant1



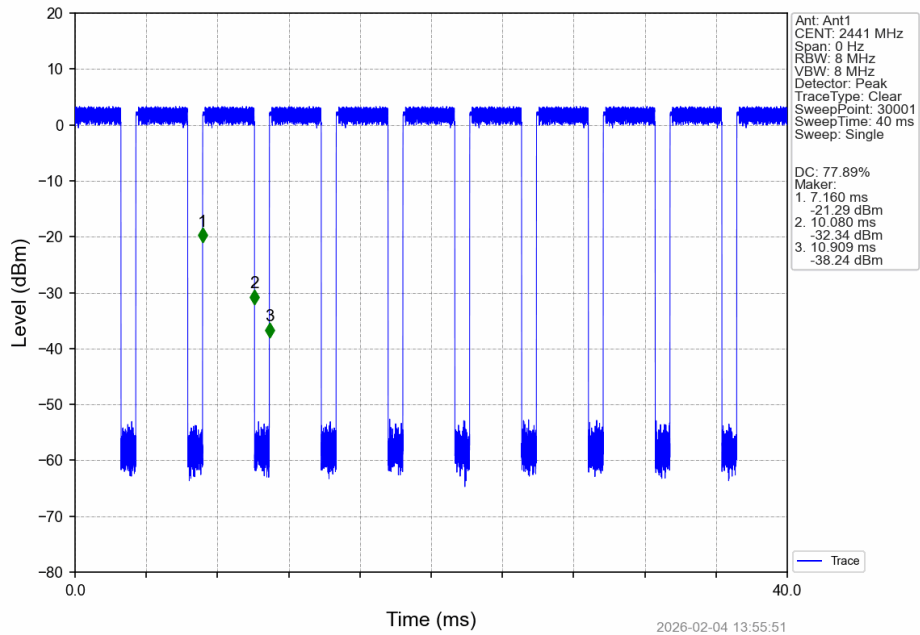
# GFSK DH5\_HCH\_2480MHz\_Ant1\_NTNV



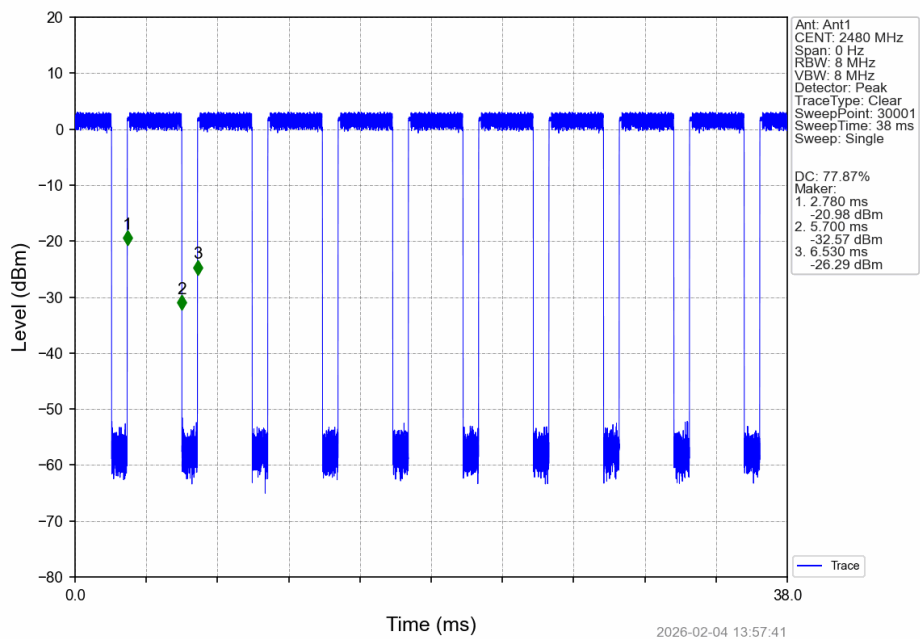
# PI/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



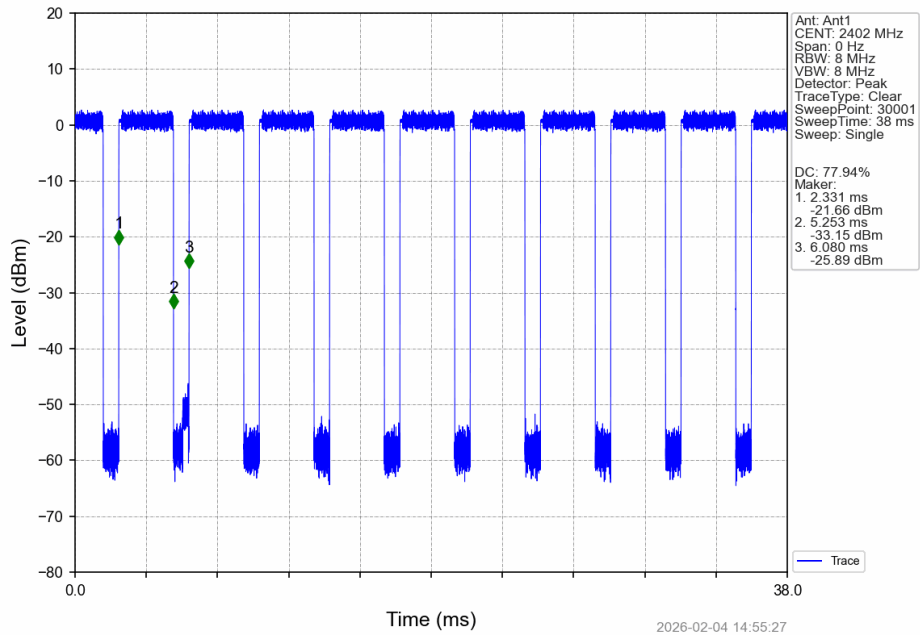
# Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



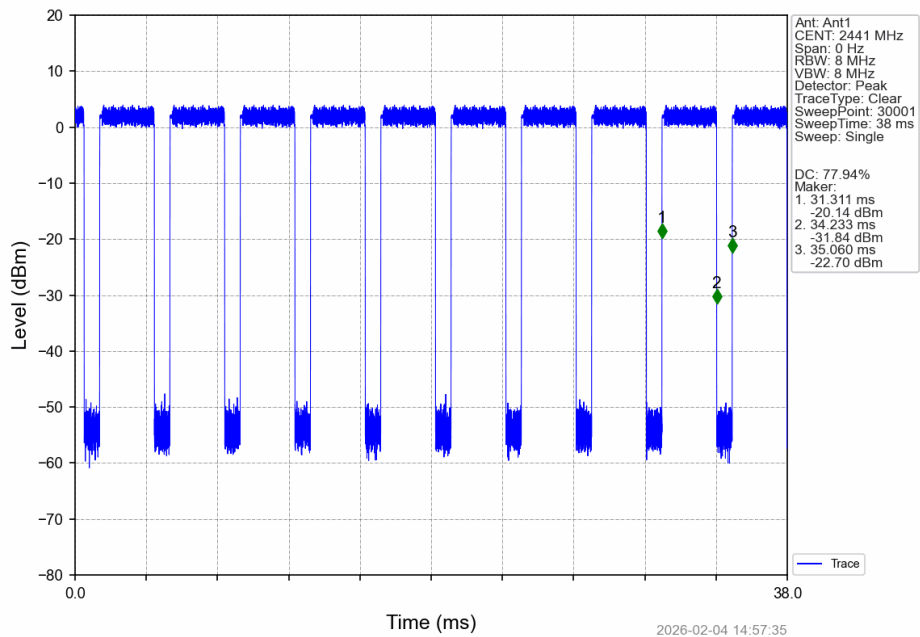
# Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



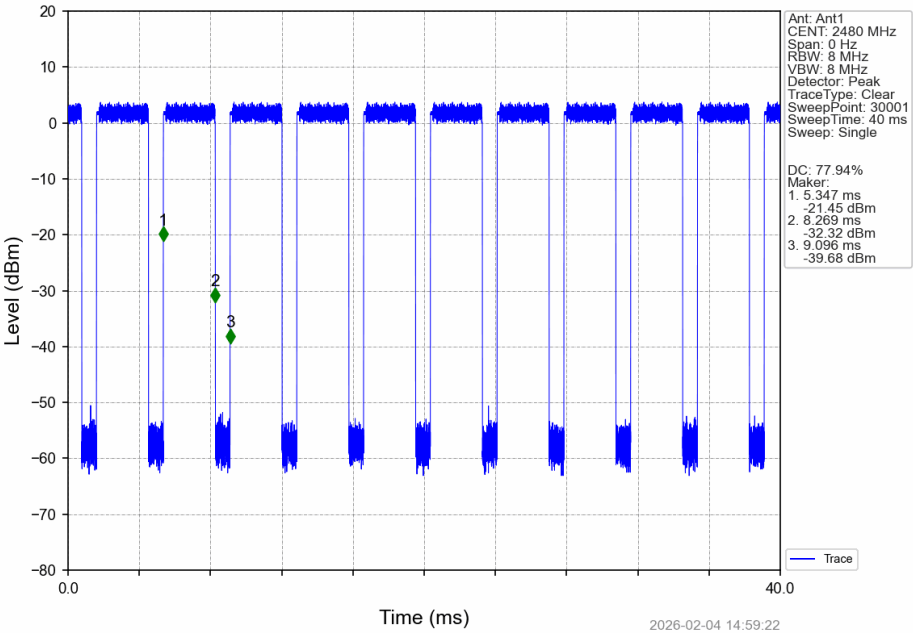
# 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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



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



## 2. Bandwidth

### 2.1 Test Result

#### 2.1.1 OBW

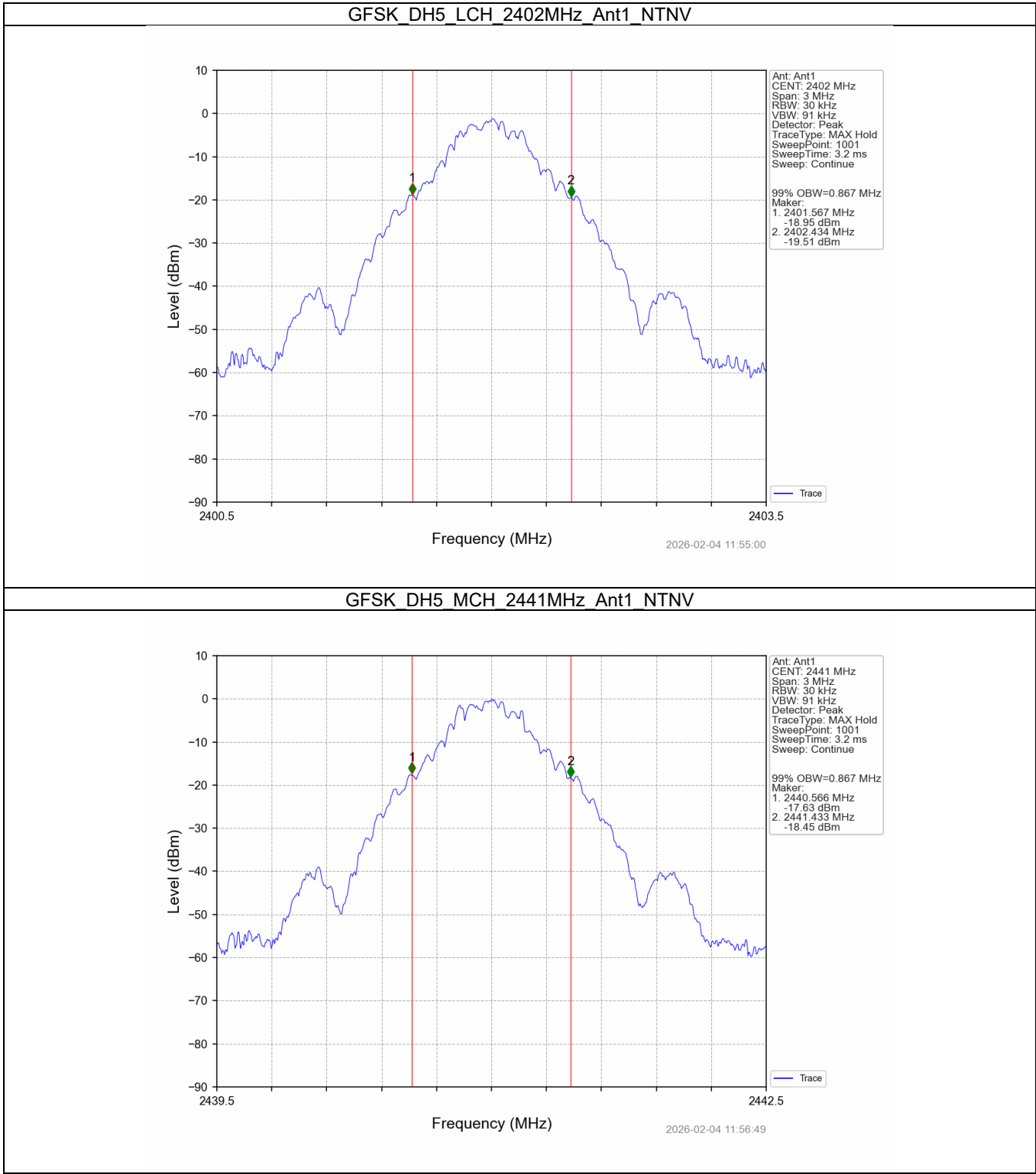
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|------------------------------|-------|---------|
|           |         |                 |             |     | Result                       | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.867                        | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 0.867                        | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 0.864                        | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.158                        | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.182                        | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.156                        | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.177                        | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.181                        | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.190                        | /     | Pass    |

#### 2.1.2 20dB BW

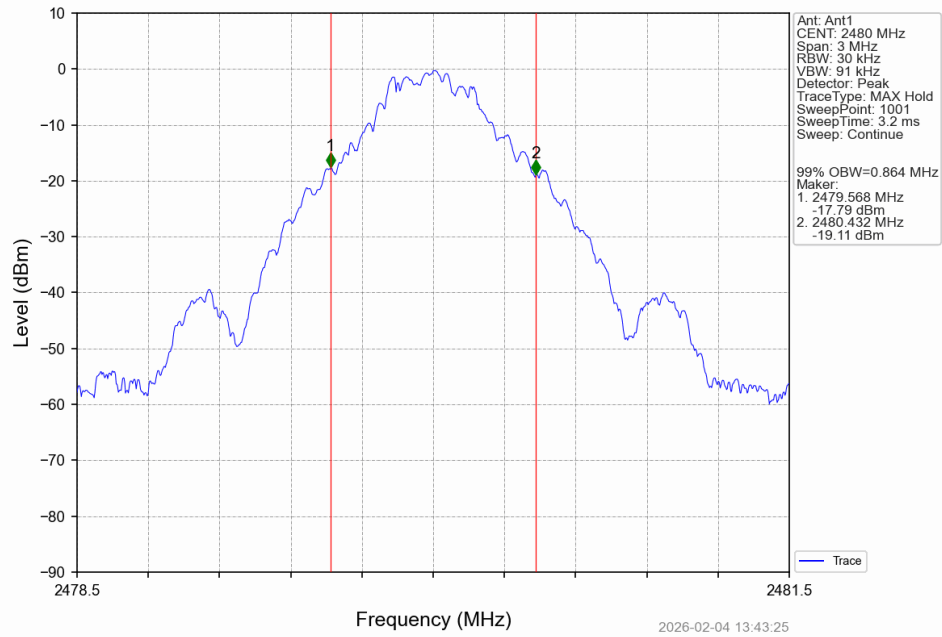
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|----------------------|-------|---------|
|           |         |                 |             |     | Result               | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 0.955                | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 0.954                | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 0.956                | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.278                | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.284                | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.274                | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.289                | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.289                | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.303                | /     | Pass    |

2.2 Test Graph

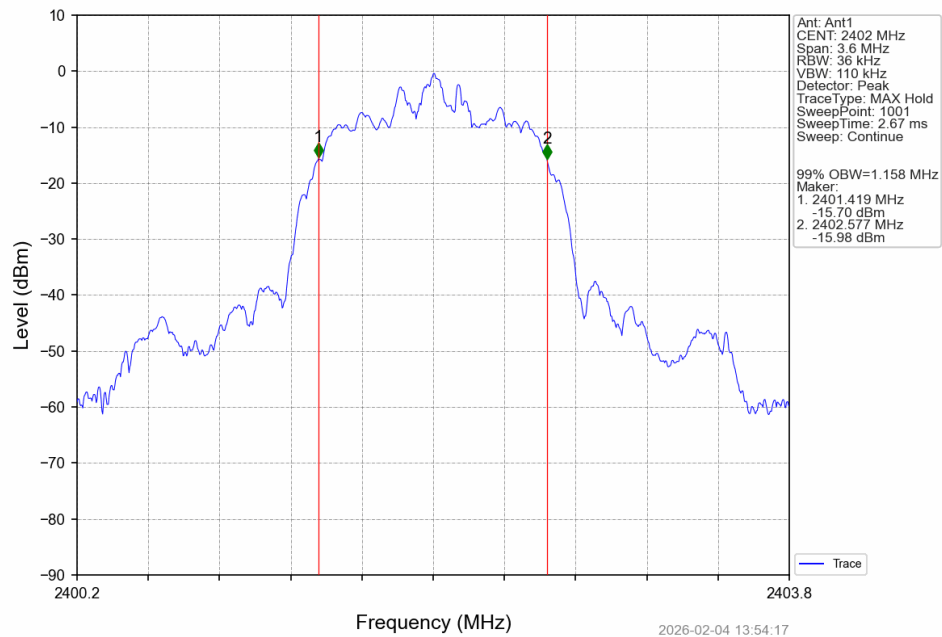
2.2.1 OBW



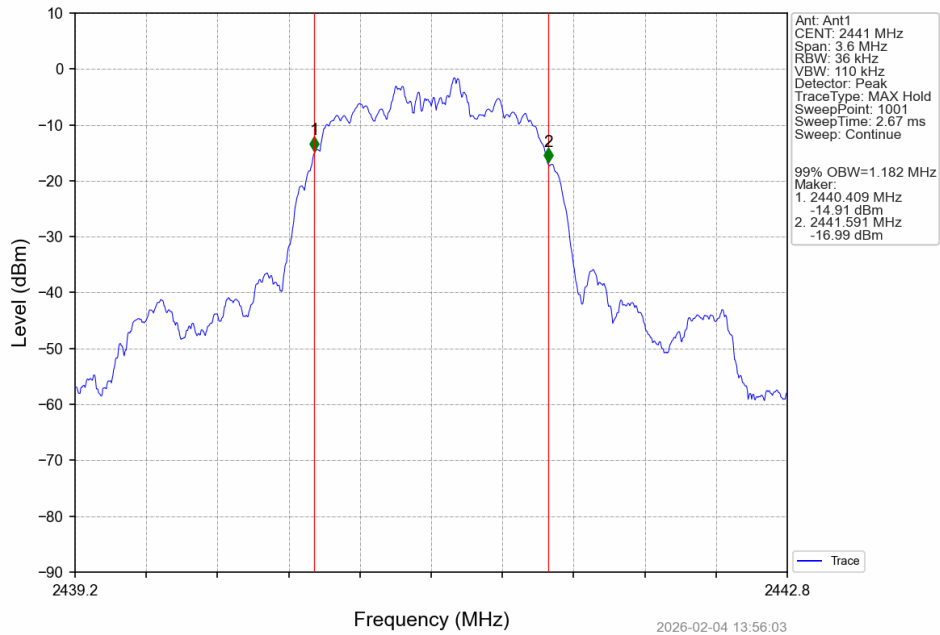
# GFSK DH5\_HCH\_2480MHz\_Ant1\_NTNV



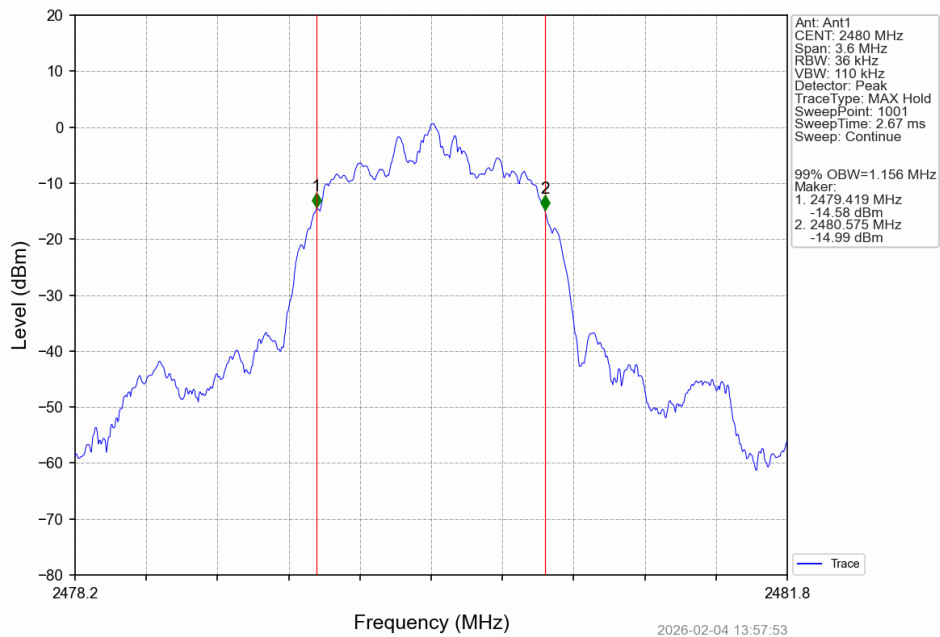
# Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



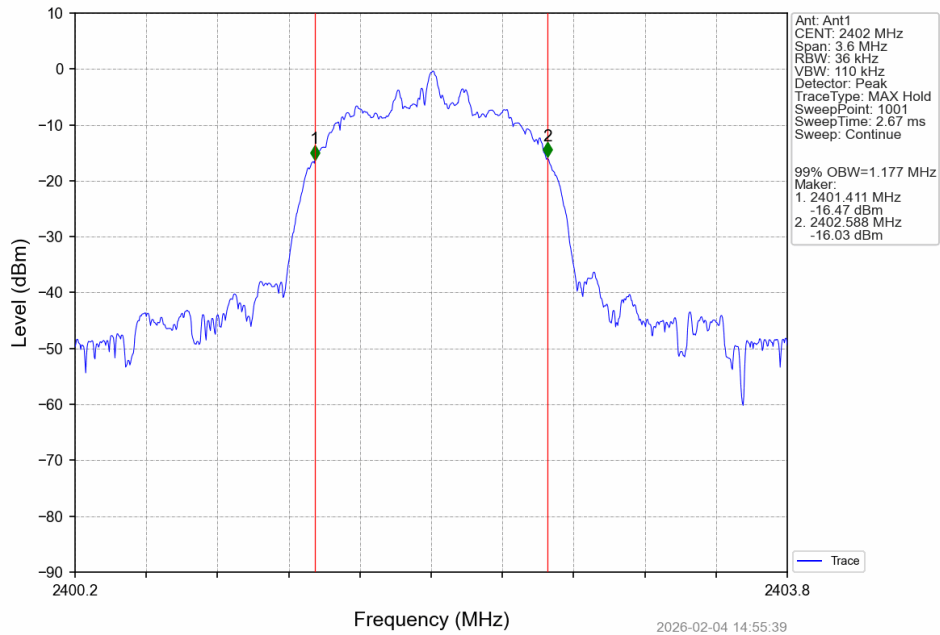
# Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



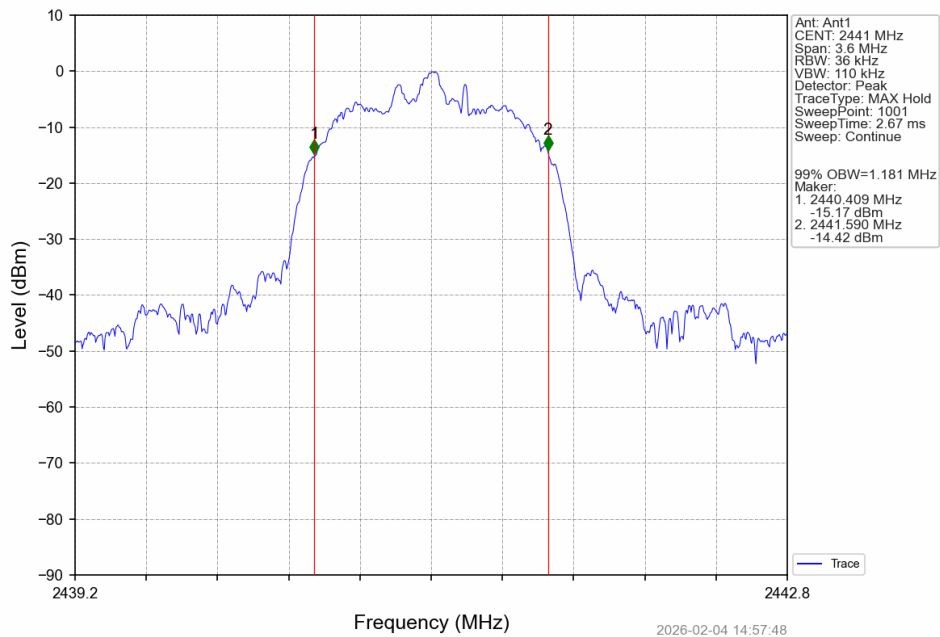
# Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



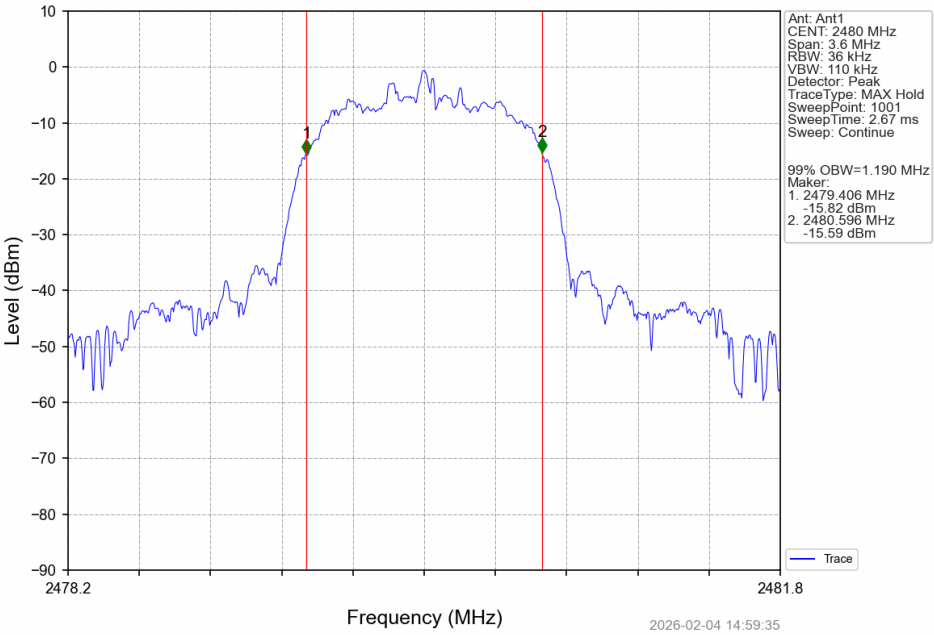
# 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



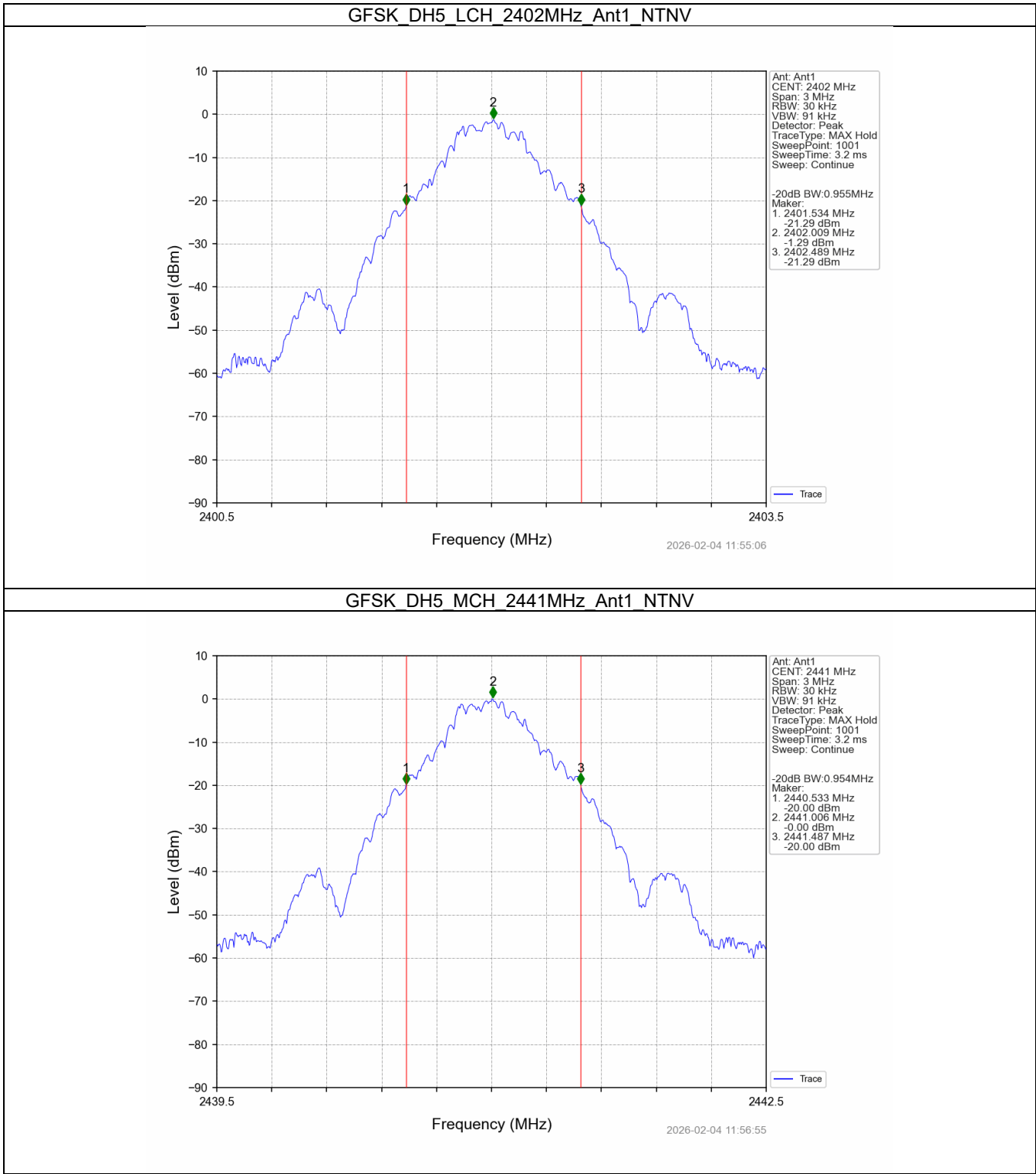
# 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



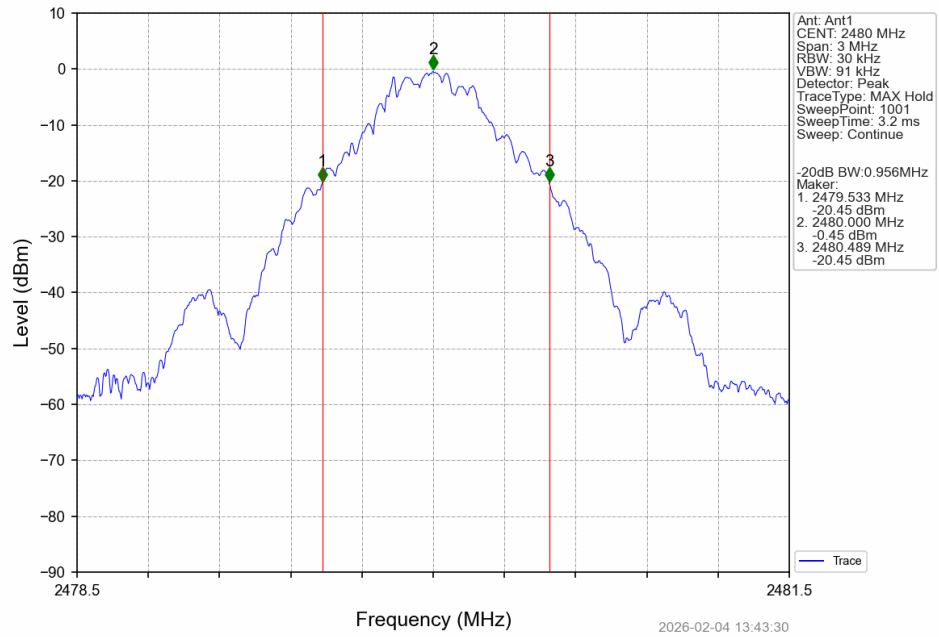
8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



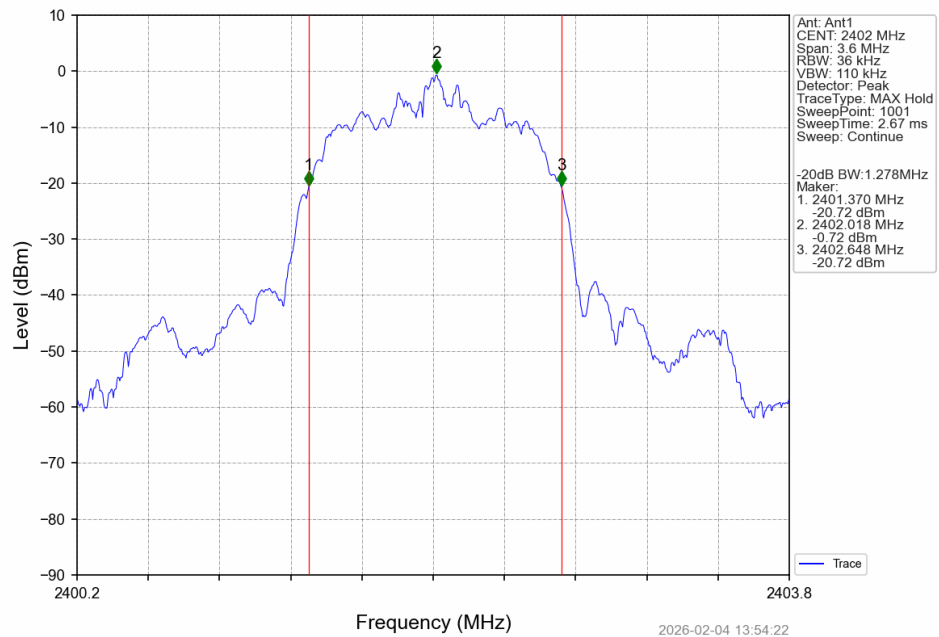
2.2.2 20dB BW



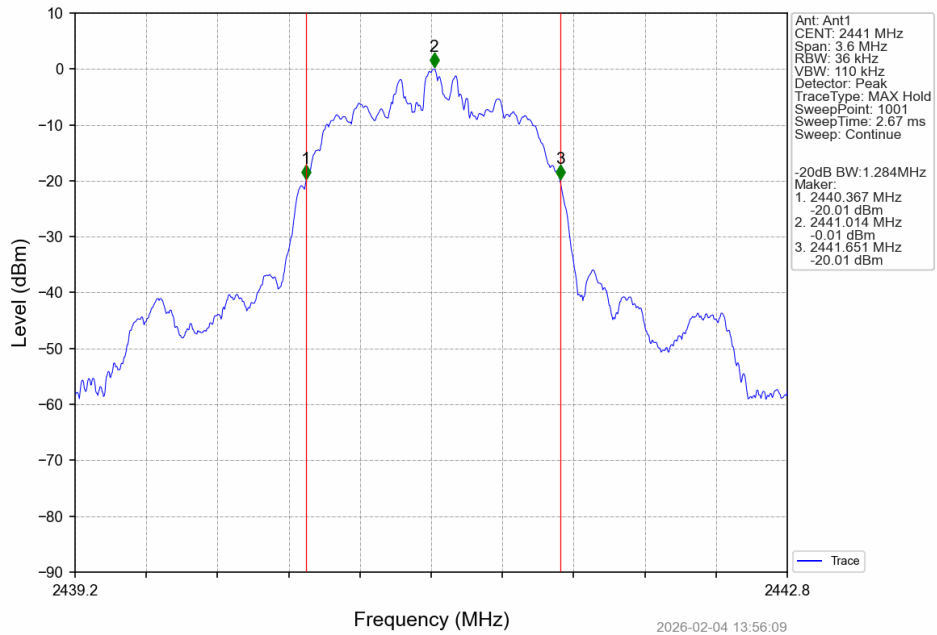
# GFSK DH5\_HCH\_2480MHz\_Ant1\_NTNV



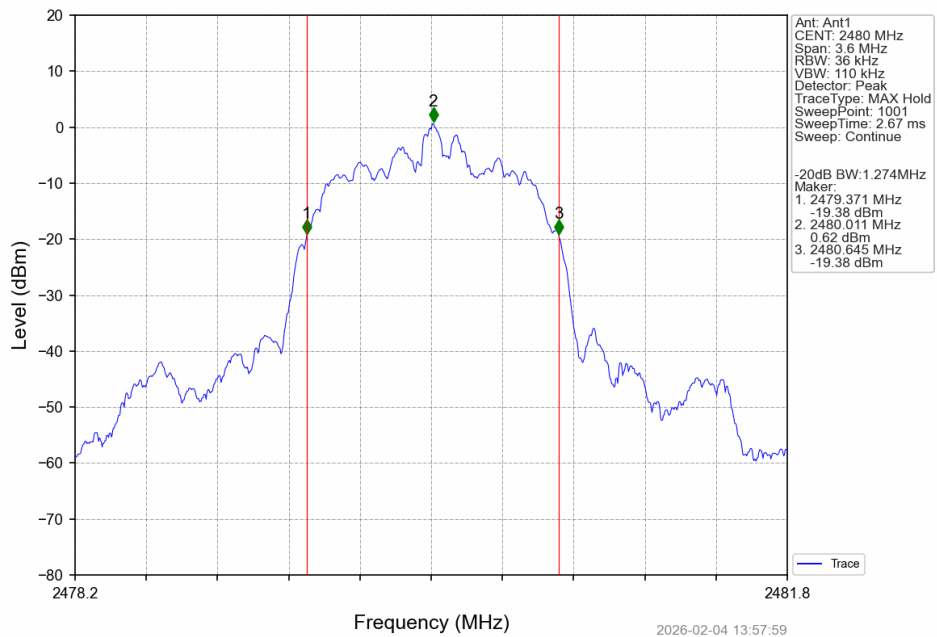
# PI/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



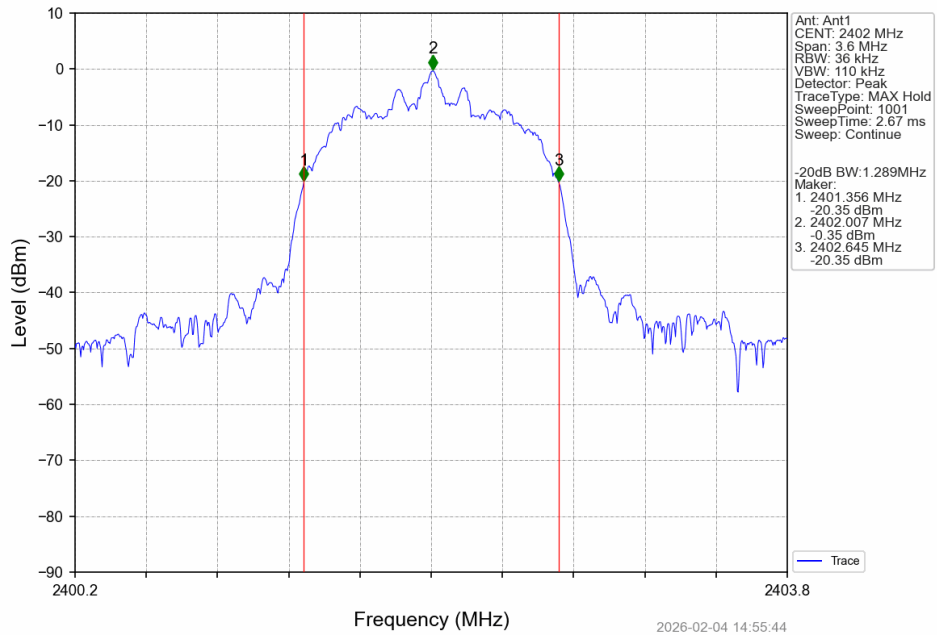
# Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



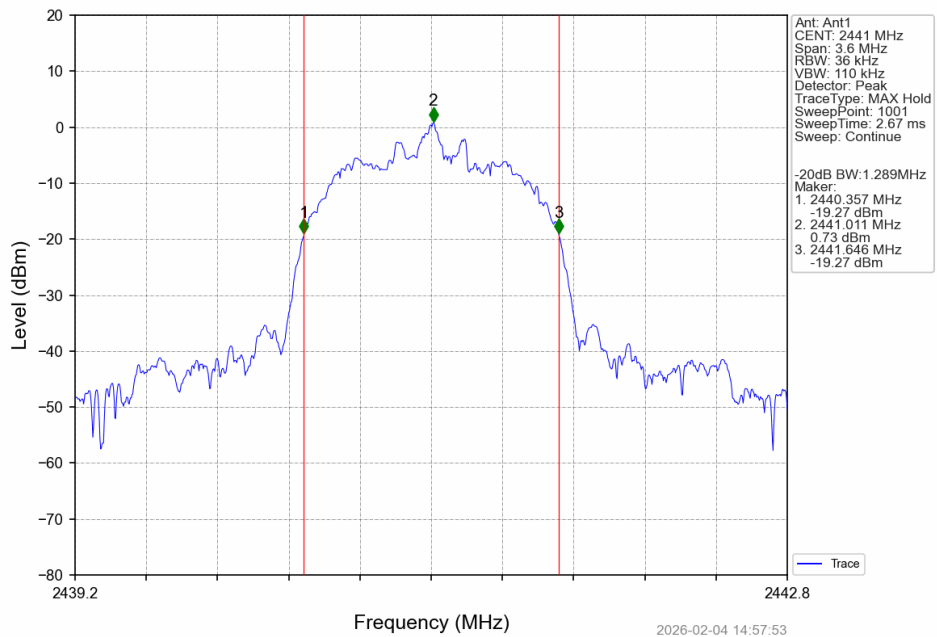
# Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



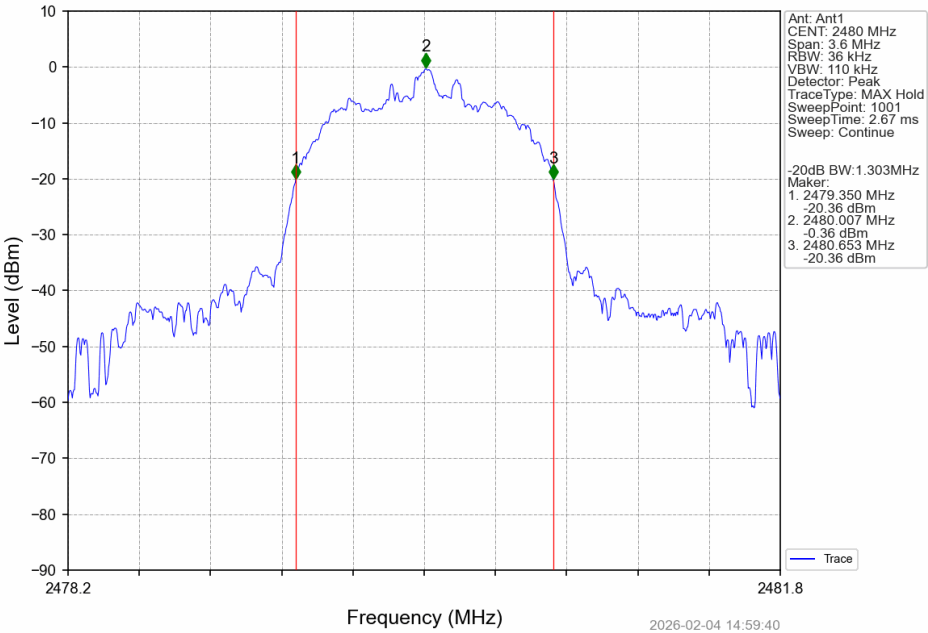
# 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



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



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



### 3. Maximum Conducted Output Power

#### 3.1 Test Result

##### 3.1.1 Power

| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |         | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|---------|---------|
|           |         |                 |             | ANT1                                      | Limit   |         |
| GFSK      | SISO    | 2402            | DH5         | 1.00                                      | <=30    | Pass    |
|           |         | 2441            | DH5         | 2.24                                      | <=30    | Pass    |
|           |         | 2480            | DH5         | 2.03                                      | <=30    | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1.89                                      | <=20.97 | Pass    |
|           |         | 2441            | 2DH5        | 3.17                                      | <=20.97 | Pass    |
|           |         | 2480            | 2DH5        | 2.96                                      | <=20.97 | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 2.50                                      | <=20.97 | Pass    |
|           |         | 2441            | 3DH5        | 3.78                                      | <=20.97 | Pass    |
|           |         | 2480            | 3DH5        | 3.55                                      | <=20.97 | Pass    |

## 4. Carrier Frequency Separation

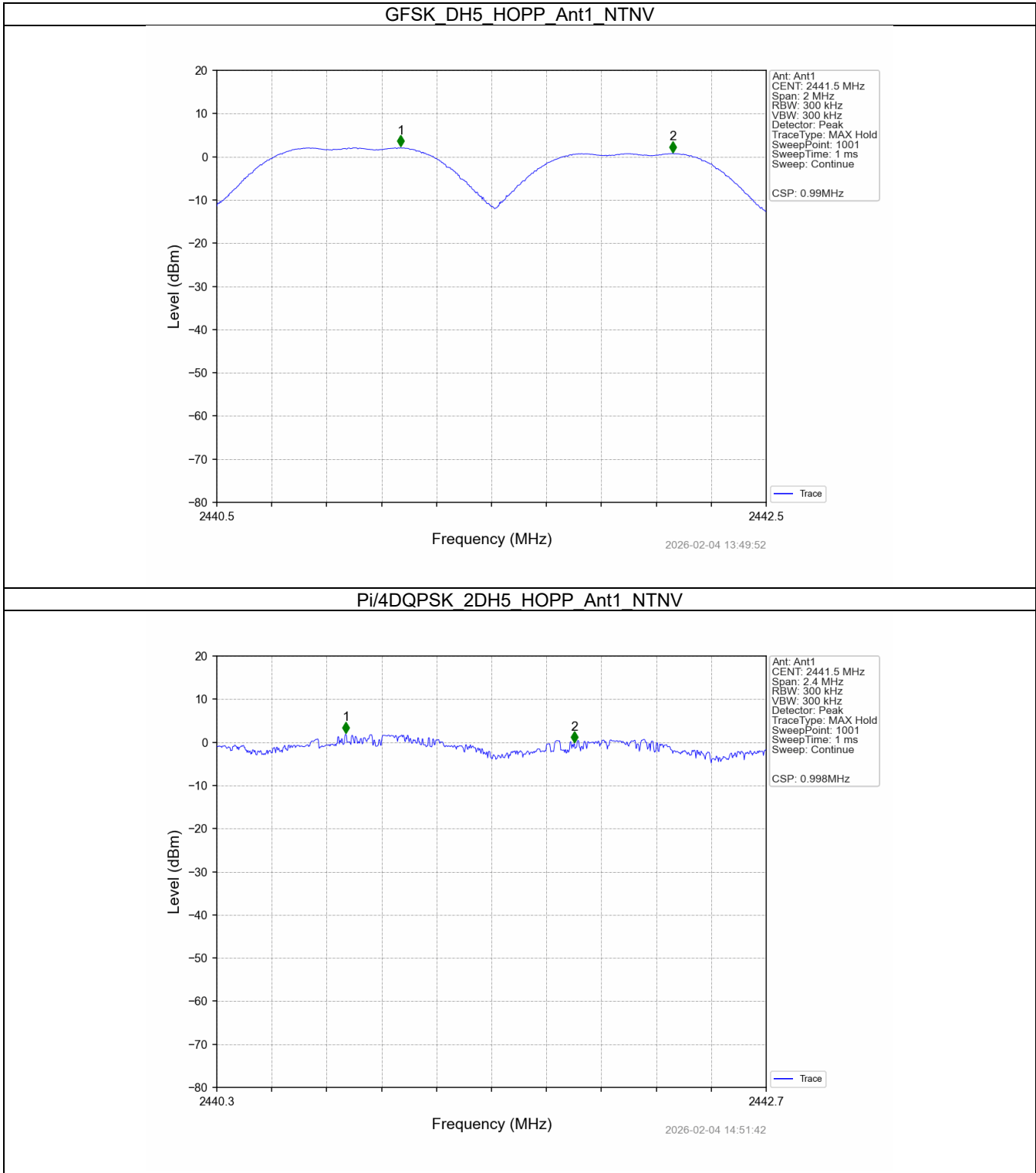
### 4.1 Test Result

#### 4.1.1 Ant1

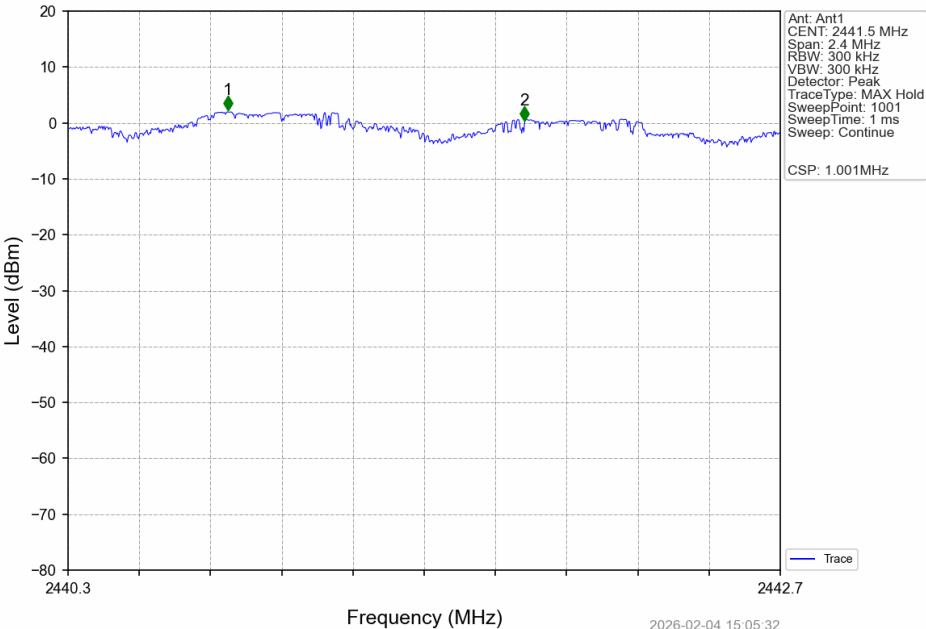
| Ant1      |         |                 |             |                          |                      |              |         |
|-----------|---------|-----------------|-------------|--------------------------|----------------------|--------------|---------|
| Mode      | TX Type | Frequency (MHz) | Packet Type | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limit (MHz)  | Verdict |
| GFSK      | SISO    | HOPP            | DH5         | 0.990                    | 0.956                | $\geq 0.956$ | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 0.998                    | 1.284                | $\geq 0.856$ | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 1.001                    | 1.303                | $\geq 0.869$ | Pass    |

4.2 Test Graph

4.2.1 Ant1



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



## 5. Number of Hopping Frequencies

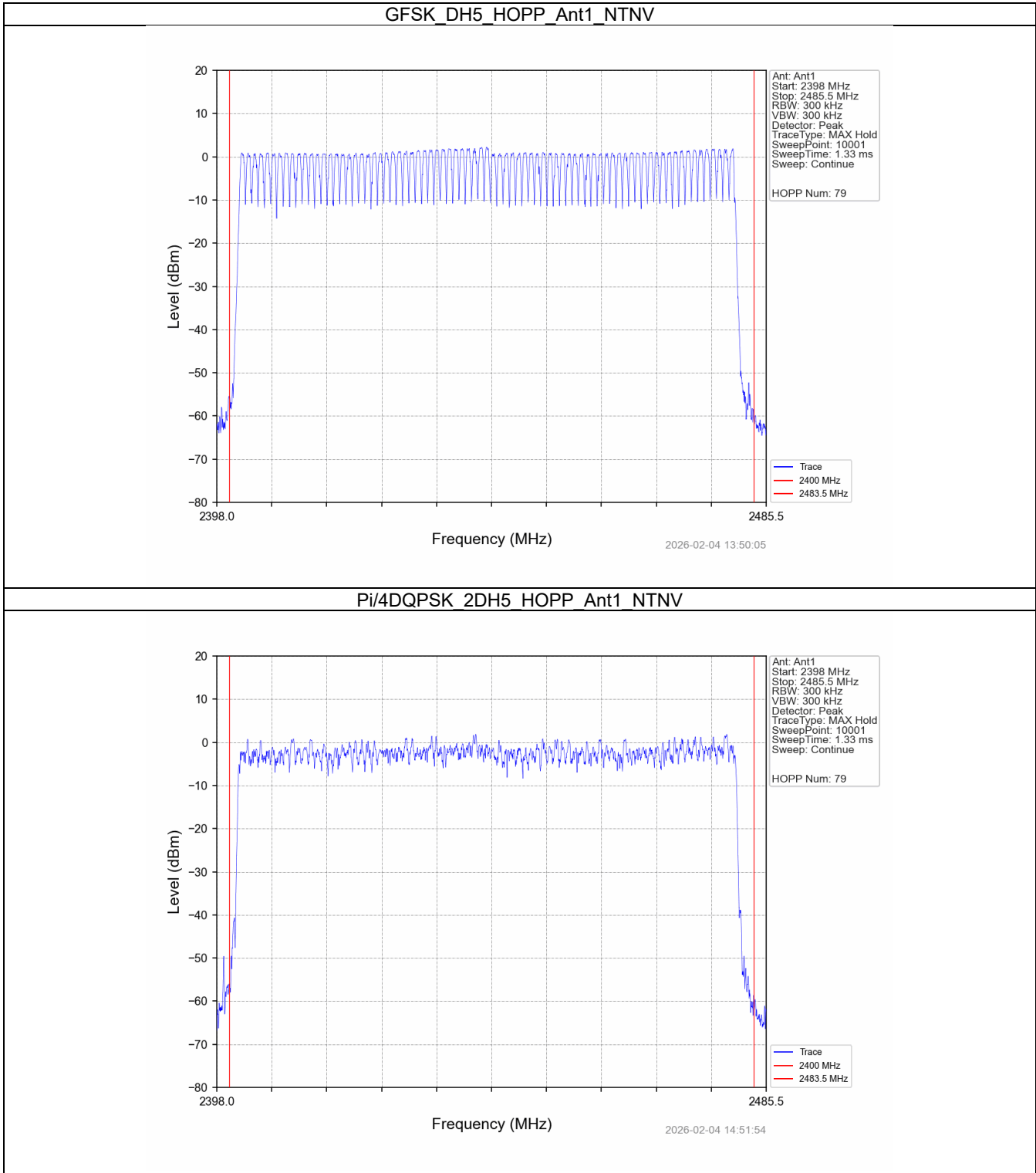
### 5.1 Test Result

#### 5.1.1 HoppNum

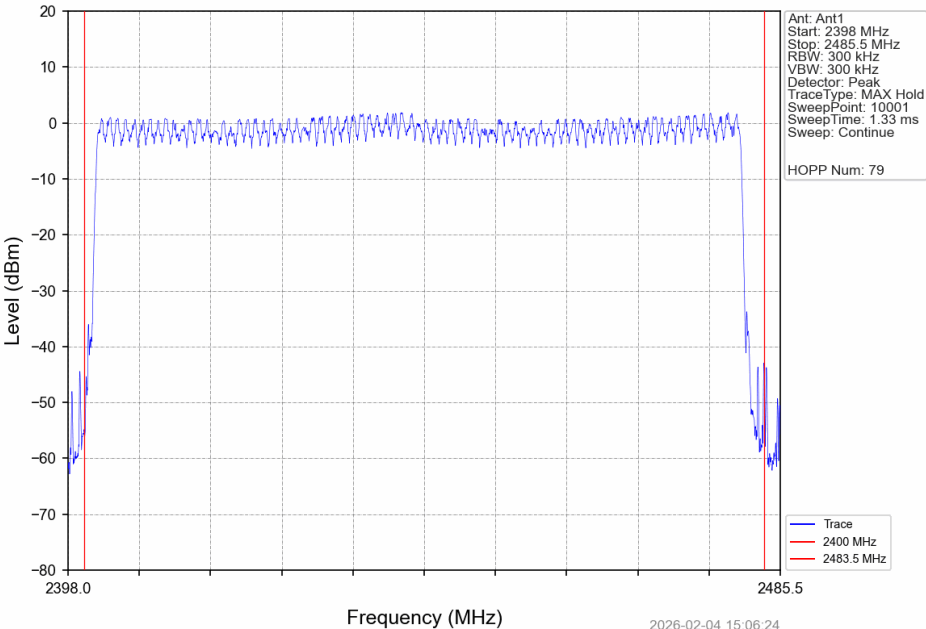
| Mode      | TX Type | Frequency (MHz) | Packet Type | Num of Hopping Frequencies |       | Verdict |
|-----------|---------|-----------------|-------------|----------------------------|-------|---------|
|           |         |                 |             | ANT1                       | Limit |  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

5.2 Test Graph

5.2.1 HoppNum



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



## 6. Time of Occupancy (Dwell Time)

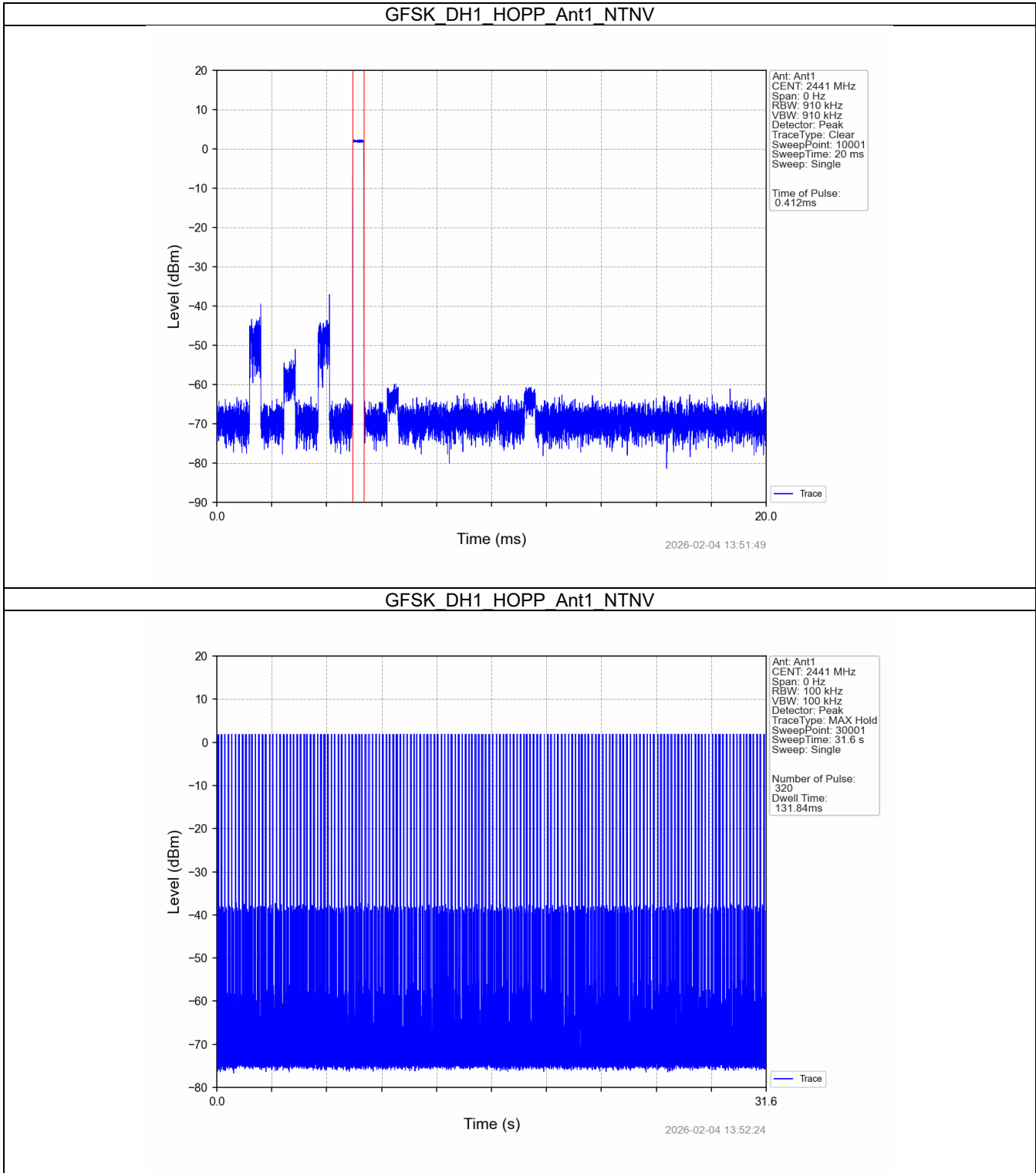
### 6.1 Test Result

#### 6.1.1 Ant1

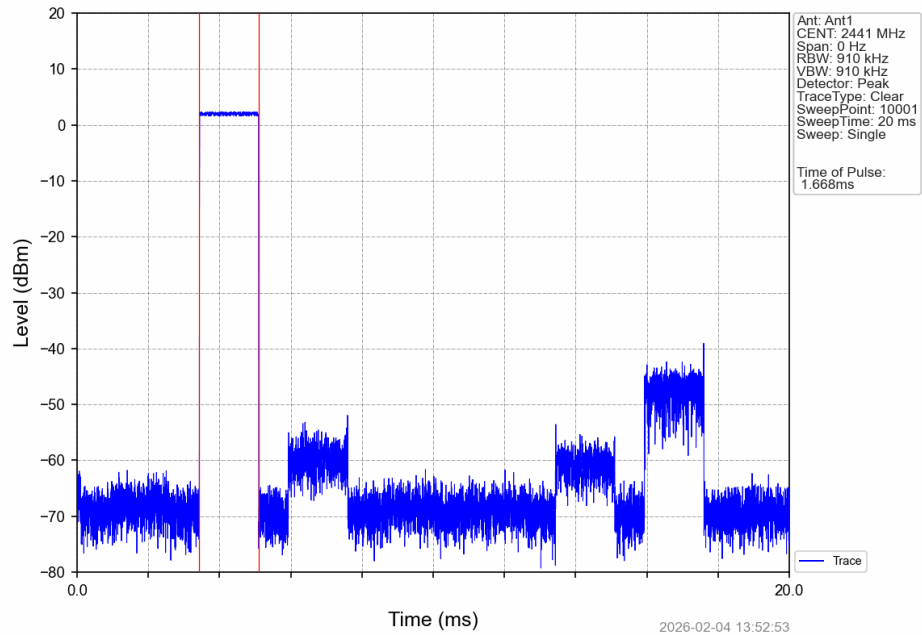
| Ant1      |         |                 |             |                               |                        |                                    |                 |            |         |
|-----------|---------|-----------------|-------------|-------------------------------|------------------------|------------------------------------|-----------------|------------|---------|
| 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         | 0.412                         | 31.600                 | 320                                | 131.840         | <=400      | Pass    |
|           |         |                 | DH3         | 1.668                         | 31.600                 | 157                                | 261.876         | <=400      | Pass    |
|           |         |                 | DH5         | 2.918                         | 31.600                 | 115                                | 335.570         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.422                         | 31.600                 | 320                                | 135.040         | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.670                         | 31.600                 | 150                                | 250.500         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.924                         | 31.600                 | 110                                | 321.640         | <=400      | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH1        | 0.422                         | 31.600                 | 317                                | 133.774         | <=400      | Pass    |
|           |         |                 | 3DH3        | 1.672                         | 31.600                 | 163                                | 272.536         | <=400      | Pass    |
|           |         |                 | 3DH5        | 2.926                         | 31.600                 | 97                                 | 283.822         | <=400      | Pass    |

6.2 Test Graph

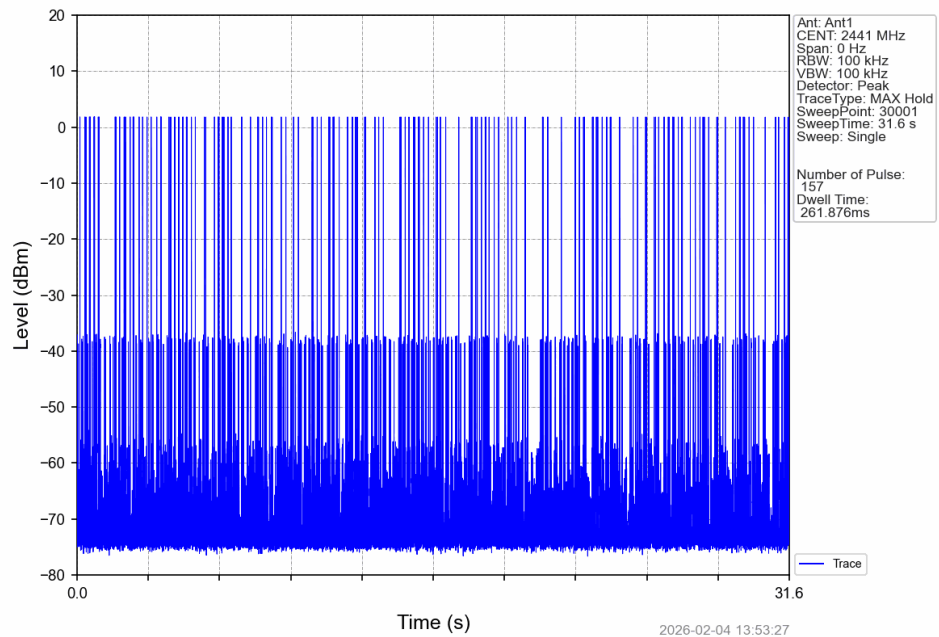
6.2.1 Ant1



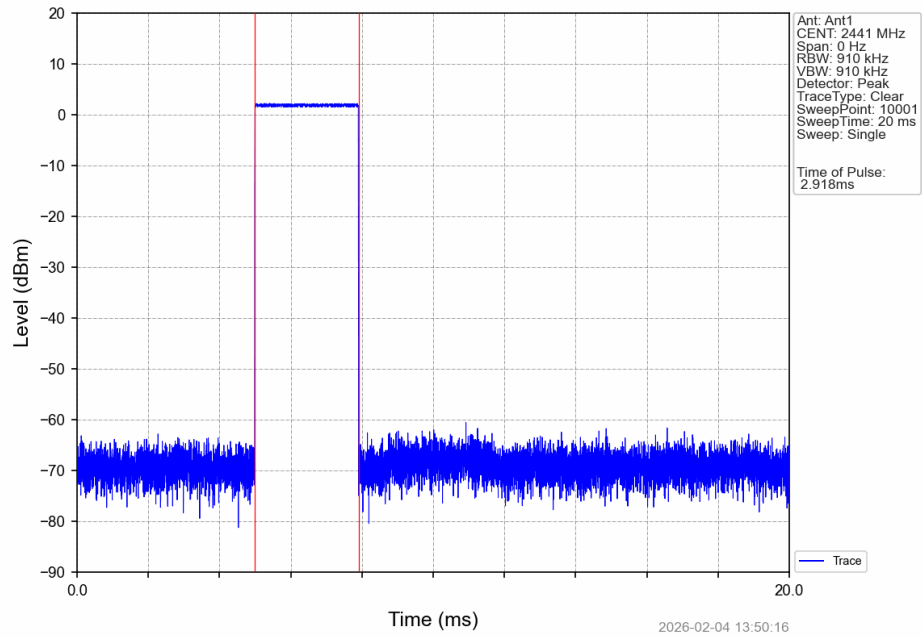
# GFSK\_DH3\_HOPP\_Ant1\_NTNV



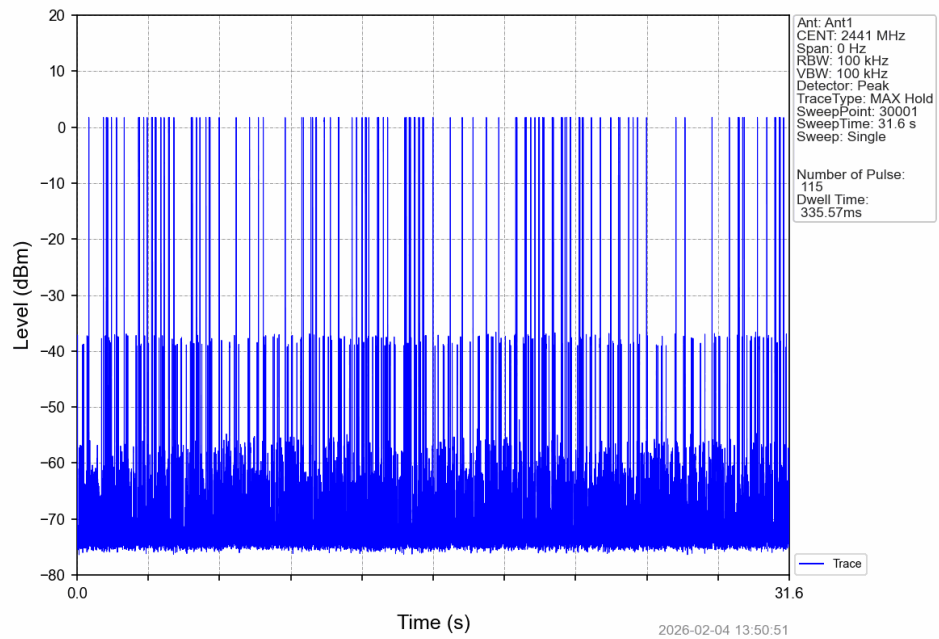
# GFSK\_DH3\_HOPP\_Ant1\_NTNV



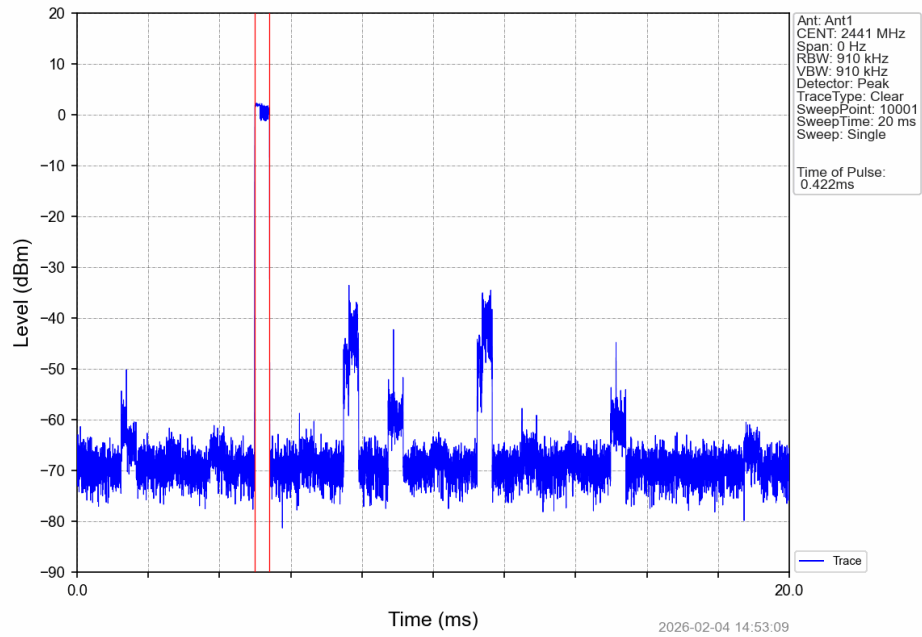
# GFSK\_DH5\_HOPP\_Ant1\_NTNV



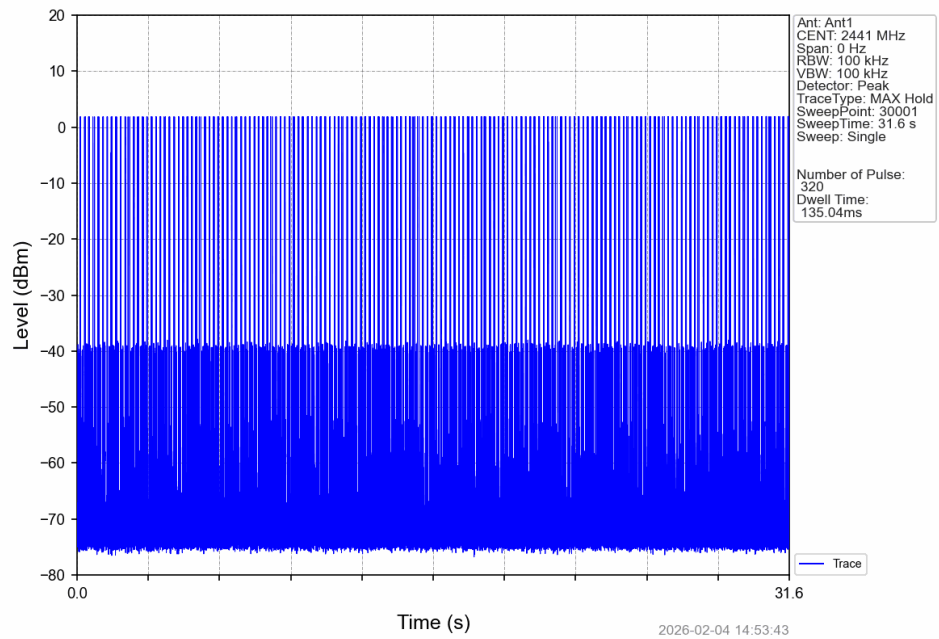
# GFSK\_DH5\_HOPP\_Ant1\_NTNV



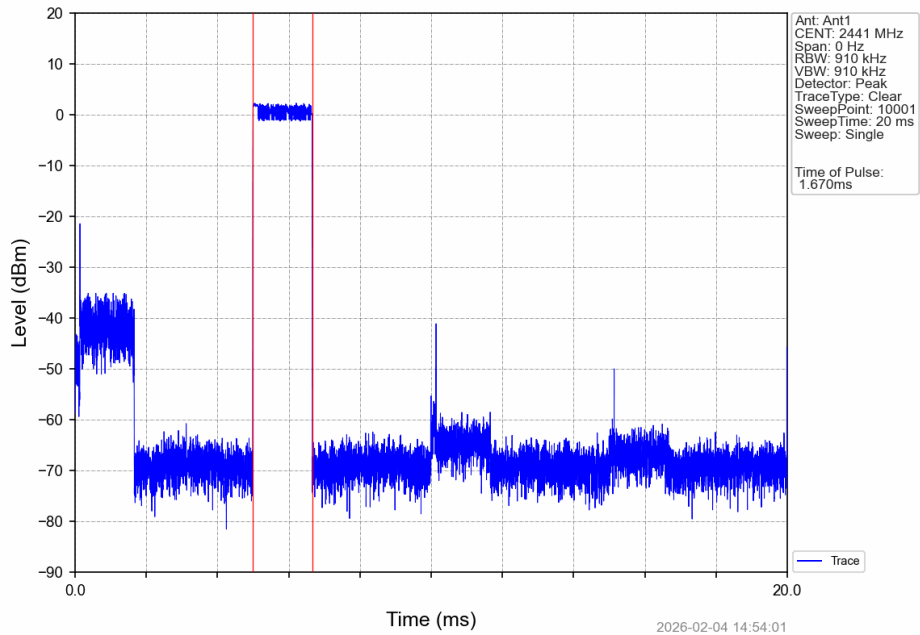
# Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



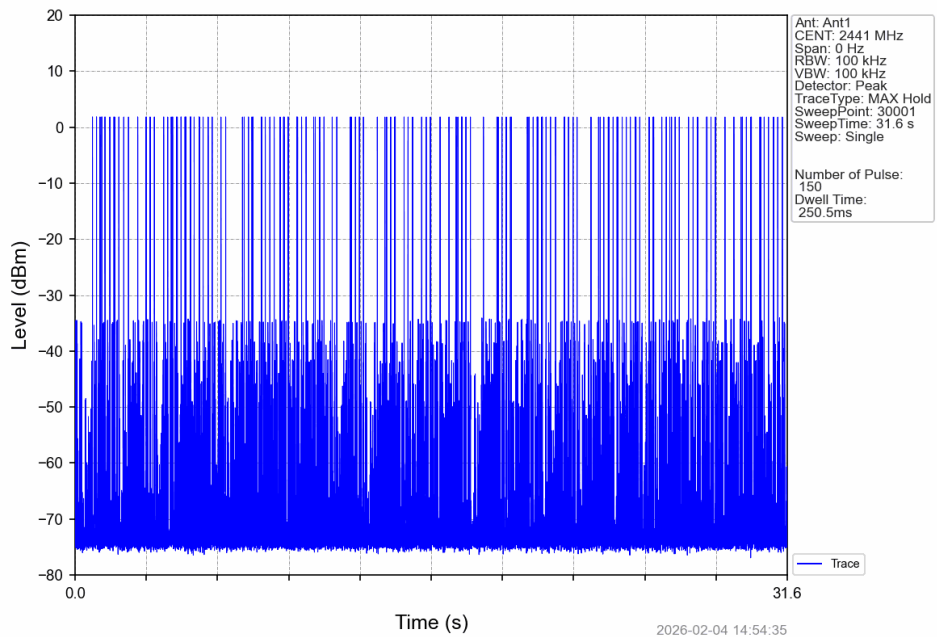
# Pi/4DQPSK\_2DH1\_HOPP\_Ant1\_NTNV



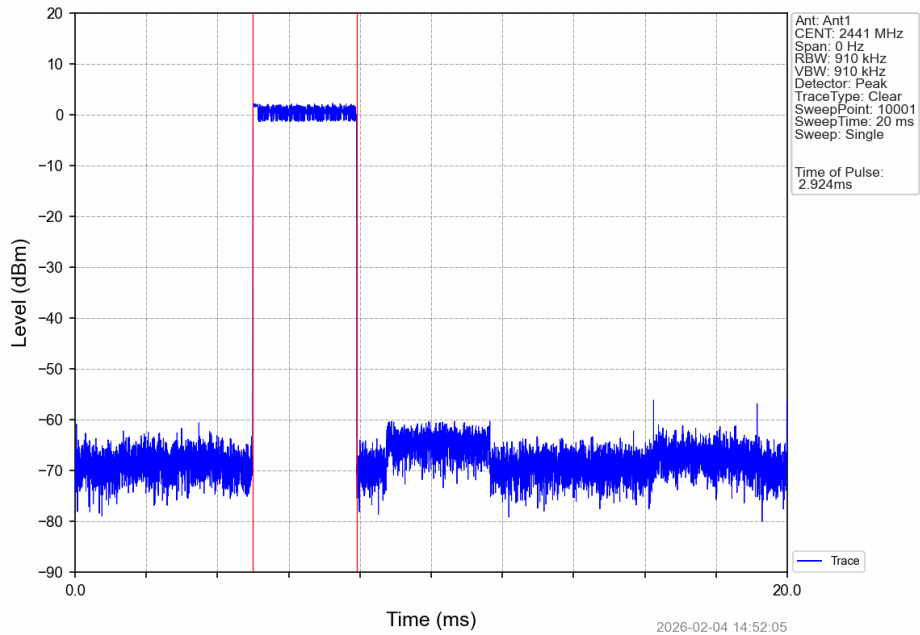
# Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



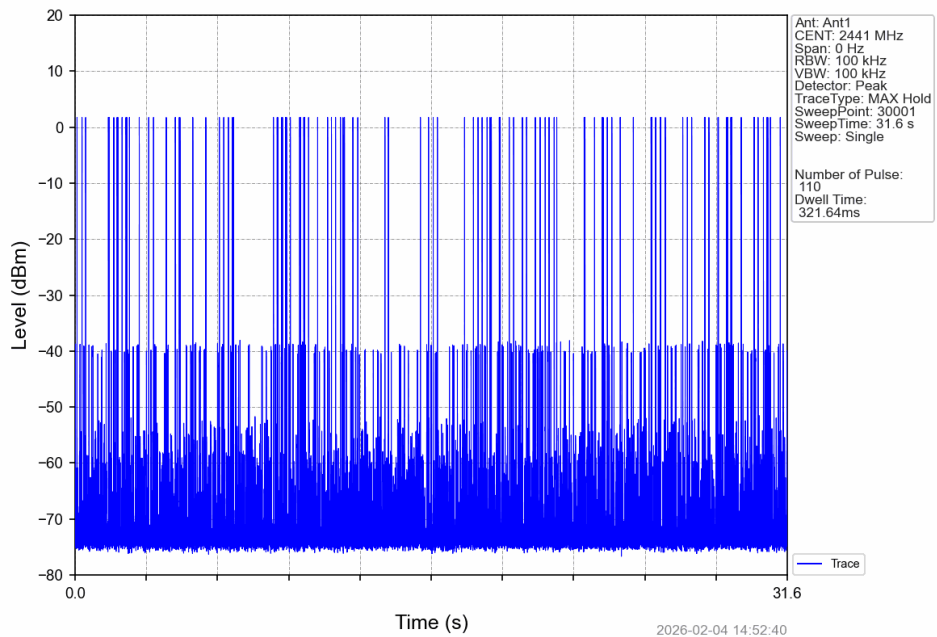
# Pi/4DQPSK\_2DH3\_HOPP\_Ant1\_NTNV



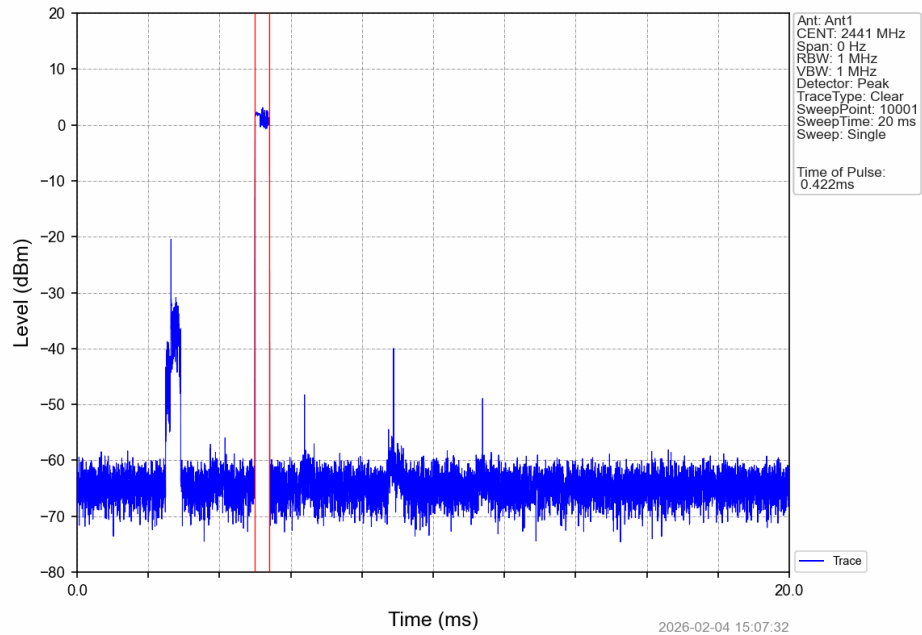
# Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



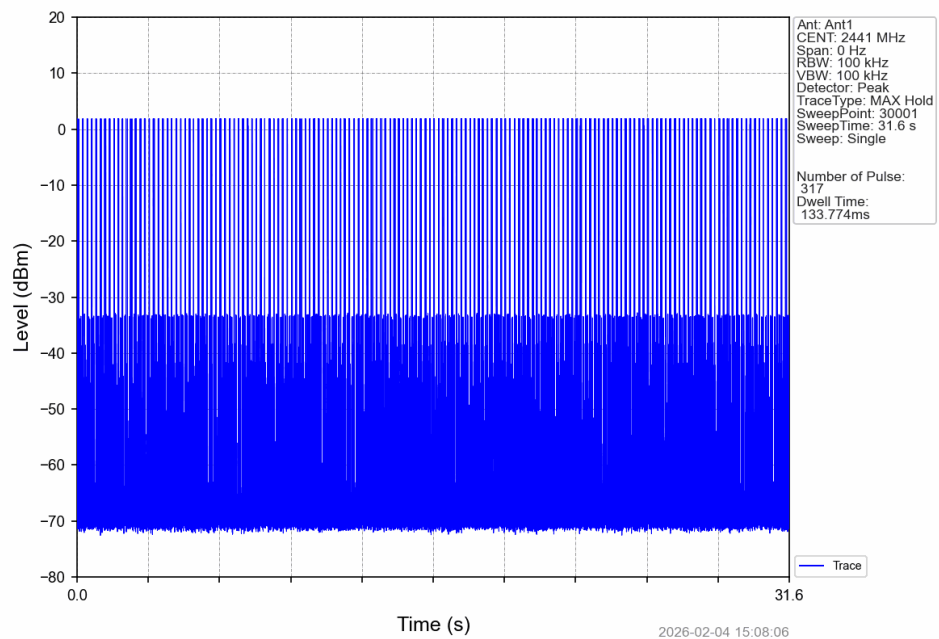
# Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



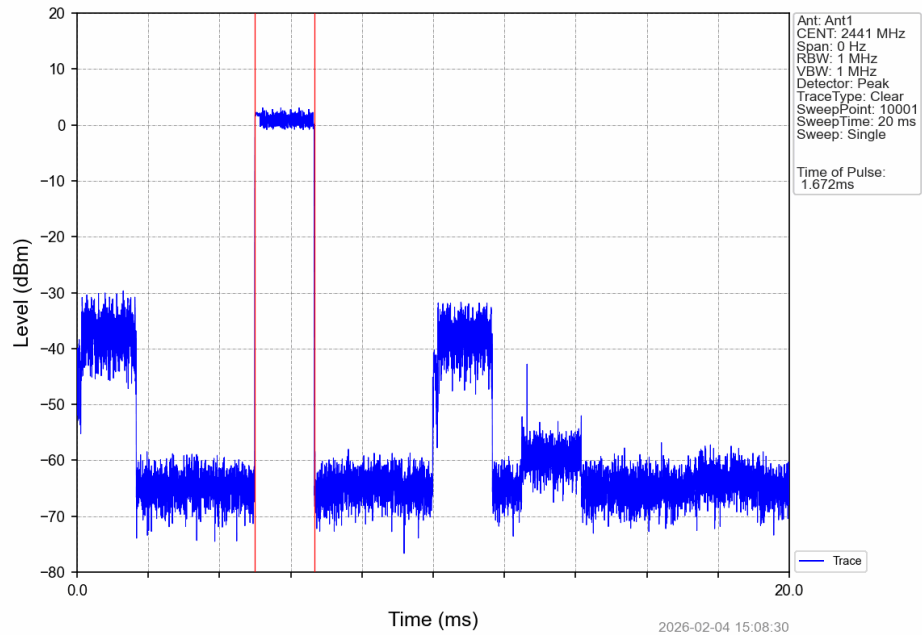
# 8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



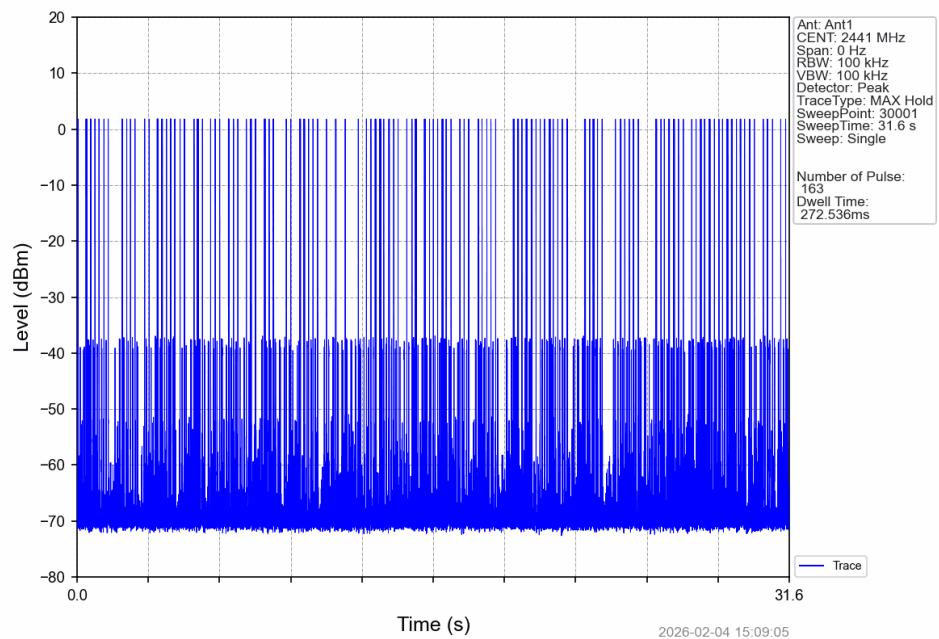
# 8DPSK\_3DH1\_HOPP\_Ant1\_NTNV



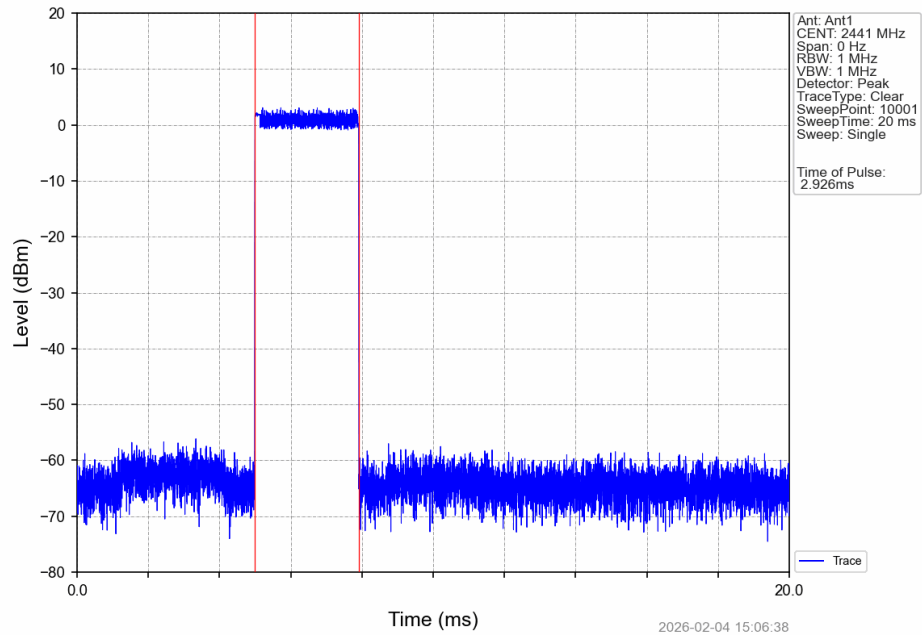
# 8DPSK\_3DH3\_HOPP\_Ant1\_NTNV



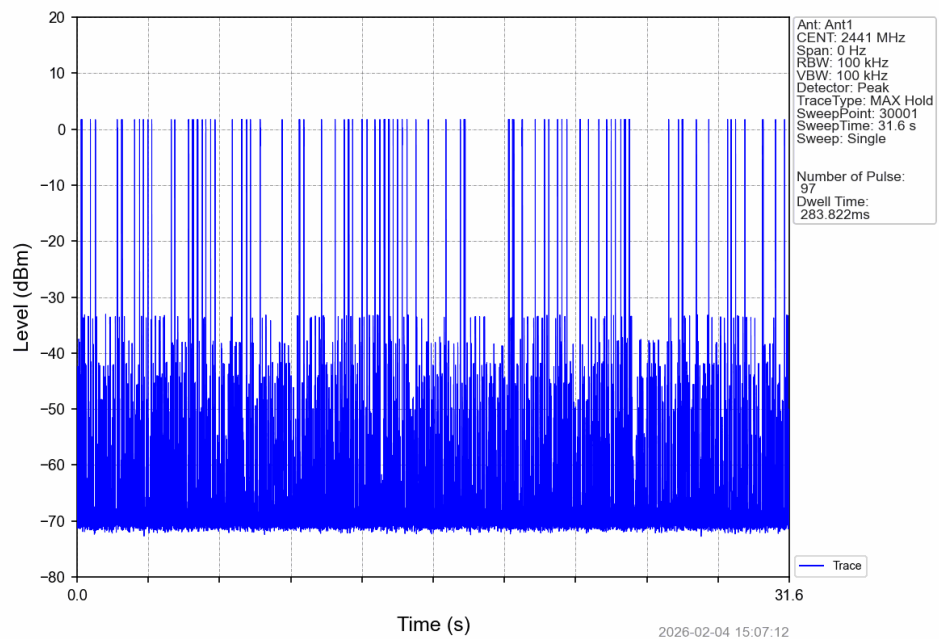
# 8DPSK\_3DH3\_HOPP\_Ant1\_NTNV



# 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



# 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



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

### 7.1 Test Result

#### 7.1.1 Ref

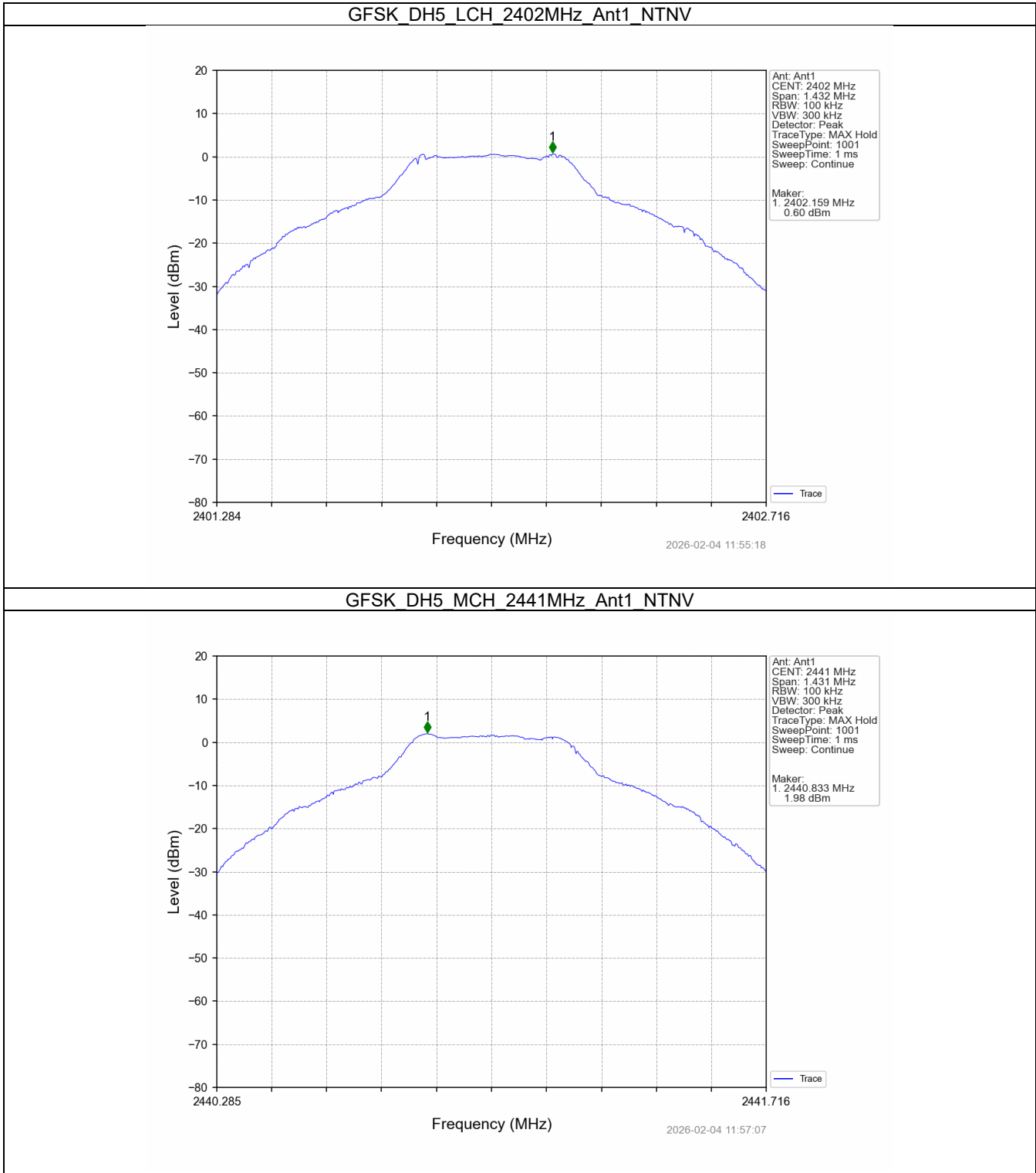
| Mode                                                                                                                                            | Tx Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-------------|-----|--------------------------|
| GFSK                                                                                                                                            | SISO    | 2402            | DH5         | 1   | 0.60                     |
|                                                                                                                                                 |         | 2441            | DH5         | 1   | 1.98                     |
|                                                                                                                                                 |         | 2480            | DH5         | 1   | 1.79                     |
|                                                                                                                                                 |         | HOPP            | DH5         | 1   | 1.91                     |
|                                                                                                                                                 |         |                 |             |     | 1.91                     |
| Pi/4DQPSK                                                                                                                                       | SISO    | 2402            | 2DH5        | 1   | 0.30                     |
|                                                                                                                                                 |         | 2441            | 2DH5        | 1   | 1.82                     |
|                                                                                                                                                 |         | 2480            | 2DH5        | 1   | 1.62                     |
|                                                                                                                                                 |         | HOPP            | 2DH5        | 1   | 1.72                     |
|                                                                                                                                                 |         |                 |             |     | 1.72                     |
| 8DPSK                                                                                                                                           | SISO    | 2402            | 3DH5        | 1   | 0.55                     |
|                                                                                                                                                 |         | 2441            | 3DH5        | 1   | 1.79                     |
|                                                                                                                                                 |         | 2480            | 3DH5        | 1   | 1.58                     |
|                                                                                                                                                 |         | HOPP            | 3DH5        | 1   | 1.70                     |
|                                                                                                                                                 |         |                 |             |     | 1.70                     |
| 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 CSE

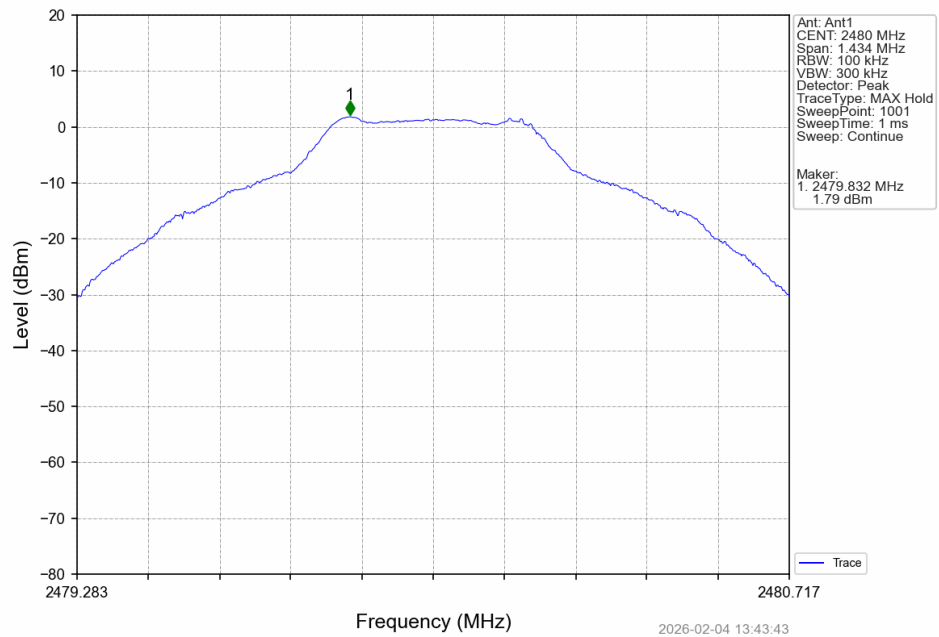
| Mode                                                                                                                                            | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK                                                                                                                                            | SISO    | 2402            | DH5         | 1   | 0.60                     | -19.40      | Pass    |
|                                                                                                                                                 |         | 2441            | DH5         | 1   | 1.98                     | -18.02      | Pass    |
|                                                                                                                                                 |         | 2480            | DH5         | 1   | 1.79                     | -18.21      | Pass    |
|                                                                                                                                                 |         | HOPP            | DH5         | 1   | 1.91                     | -18.09      | Pass    |
|                                                                                                                                                 |         |                 |             |     | 1.91                     | -18.09      | Pass    |
| Pi/4DQPSK                                                                                                                                       | SISO    | 2402            | 2DH5        | 1   | 0.30                     | -19.70      | Pass    |
|                                                                                                                                                 |         | 2441            | 2DH5        | 1   | 1.82                     | -18.18      | Pass    |
|                                                                                                                                                 |         | 2480            | 2DH5        | 1   | 1.62                     | -18.38      | Pass    |
|                                                                                                                                                 |         | HOPP            | 2DH5        | 1   | 1.72                     | -18.28      | Pass    |
|                                                                                                                                                 |         |                 |             |     | 1.72                     | -18.28      | Pass    |
| 8DPSK                                                                                                                                           | SISO    | 2402            | 3DH5        | 1   | 0.55                     | -19.45      | Pass    |
|                                                                                                                                                 |         | 2441            | 3DH5        | 1   | 1.79                     | -18.21      | Pass    |
|                                                                                                                                                 |         | 2480            | 3DH5        | 1   | 1.58                     | -18.42      | Pass    |
|                                                                                                                                                 |         | HOPP            | 3DH5        | 1   | 1.70                     | -18.30      | Pass    |
|                                                                                                                                                 |         |                 |             |     | 1.70                     | -18.30      | 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 Test Graph

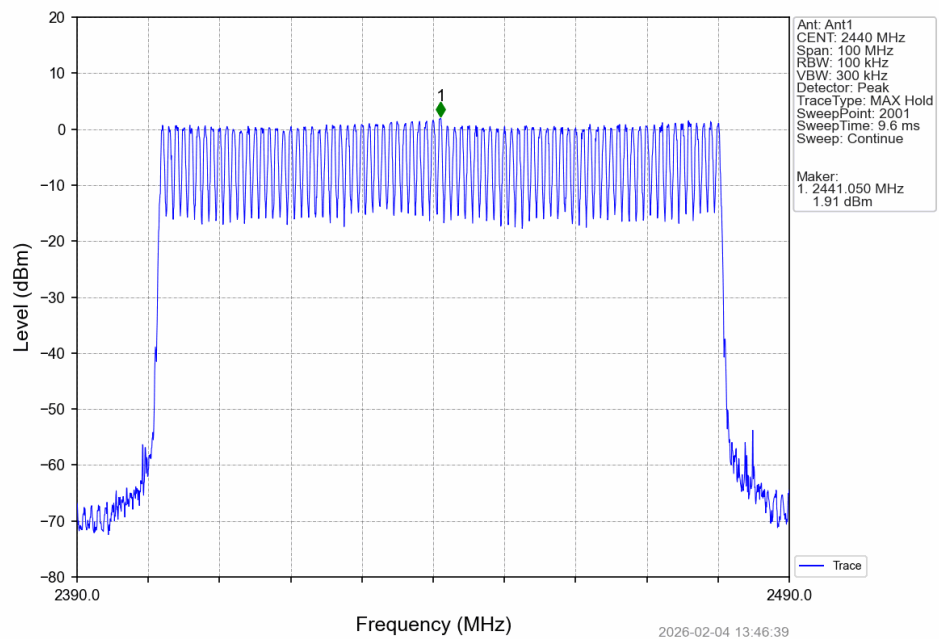
7.2.1 Ref



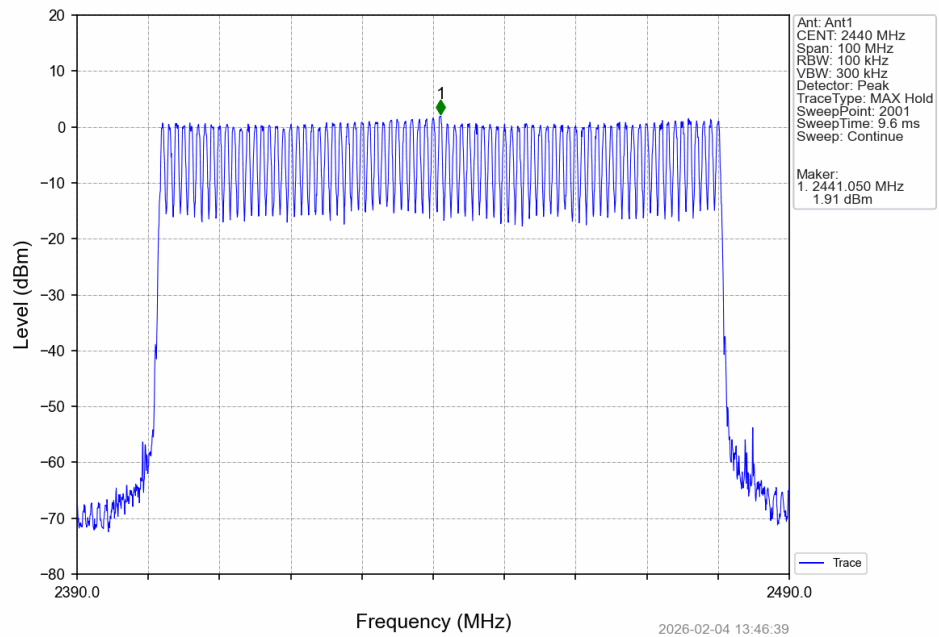
# GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



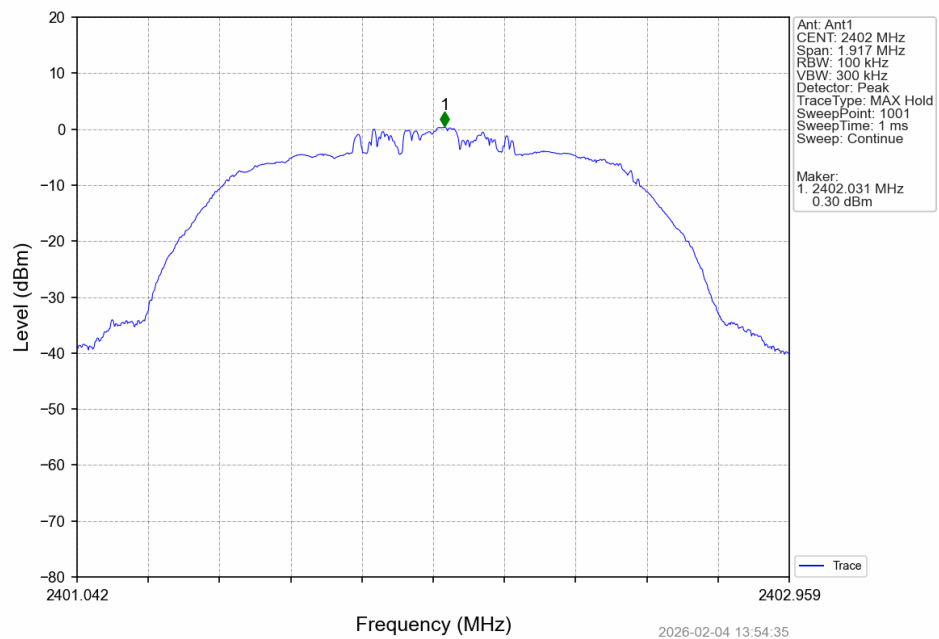
# GFSK\_DH5\_HOPP\_Ant1\_NTNV



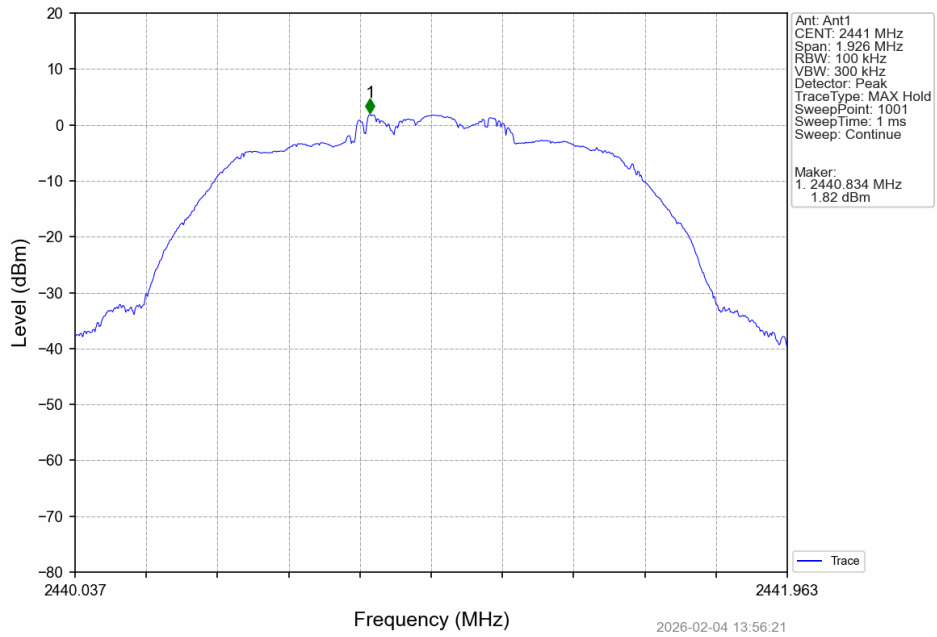
# GFSK\_DH5\_HOPP\_Ant1\_NTNV



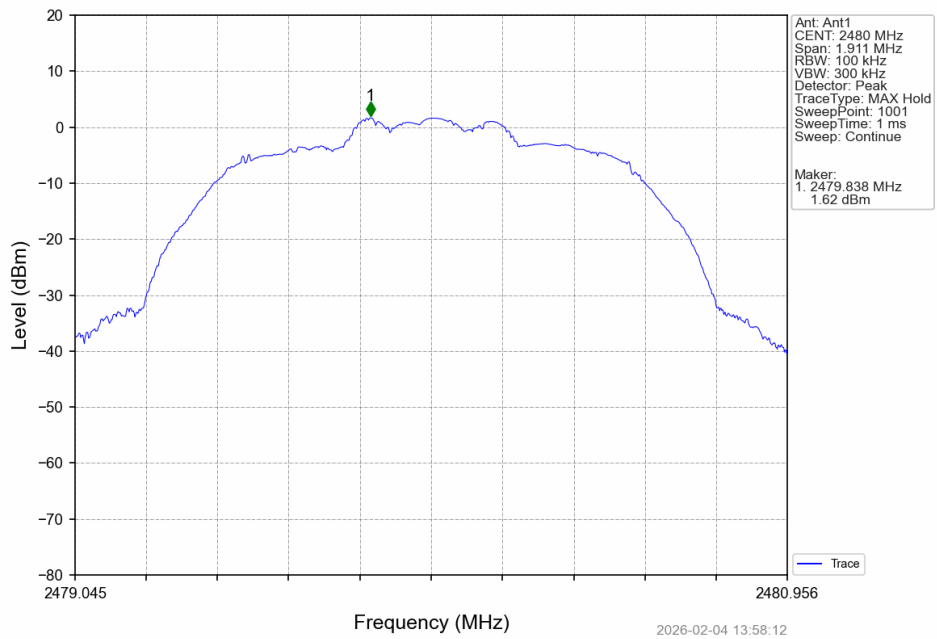
# Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



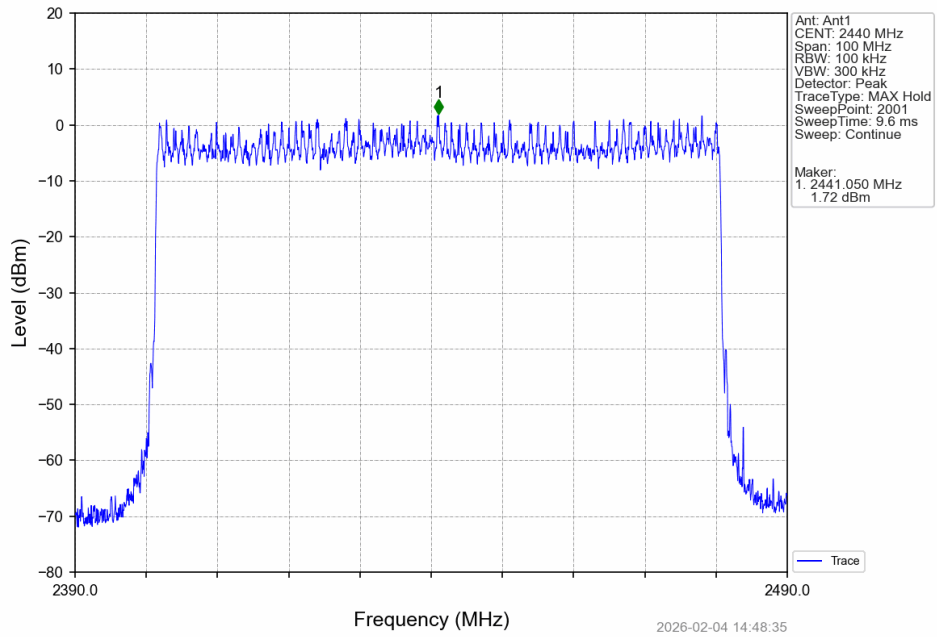
# Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



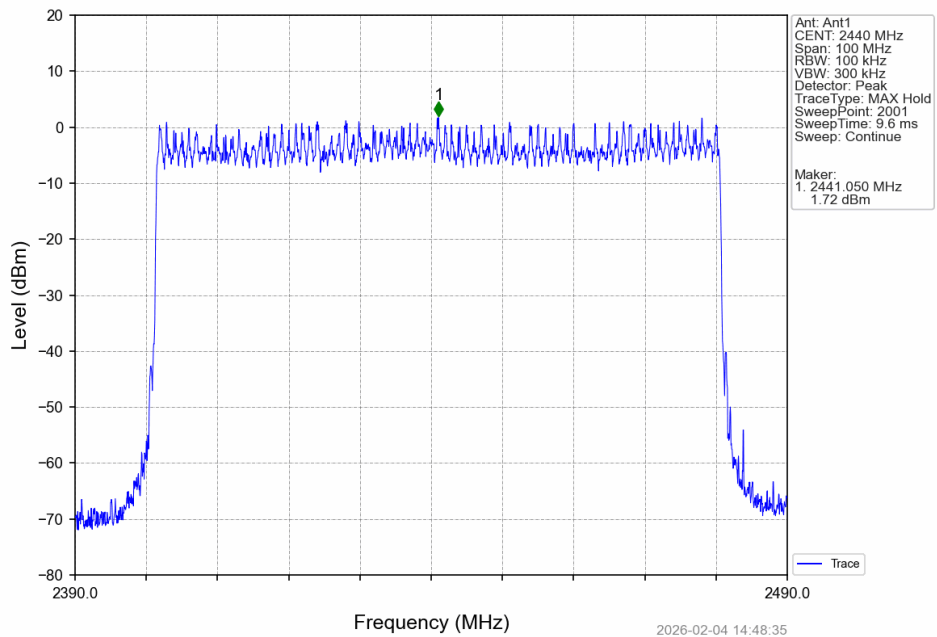
# Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



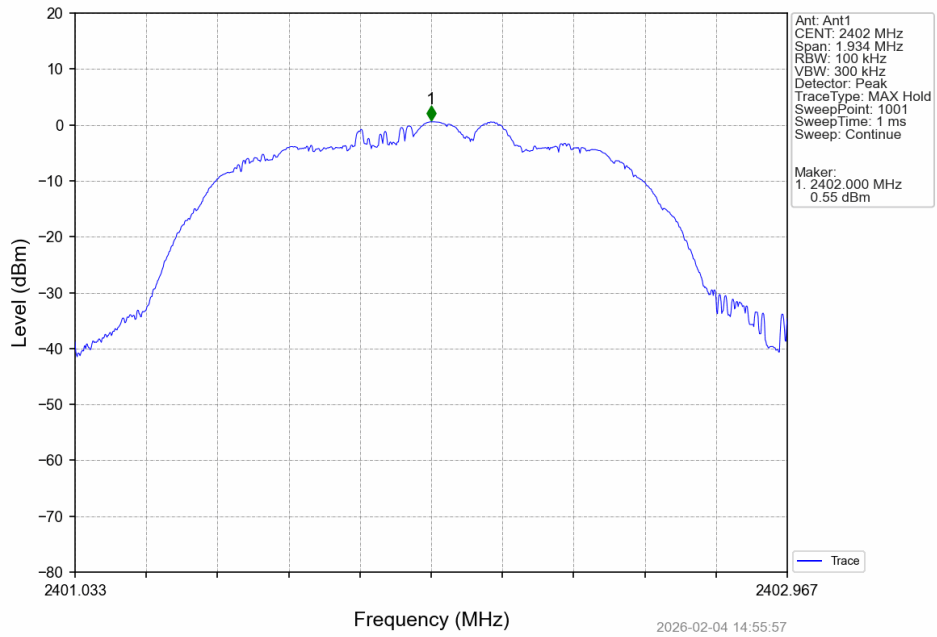
# Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



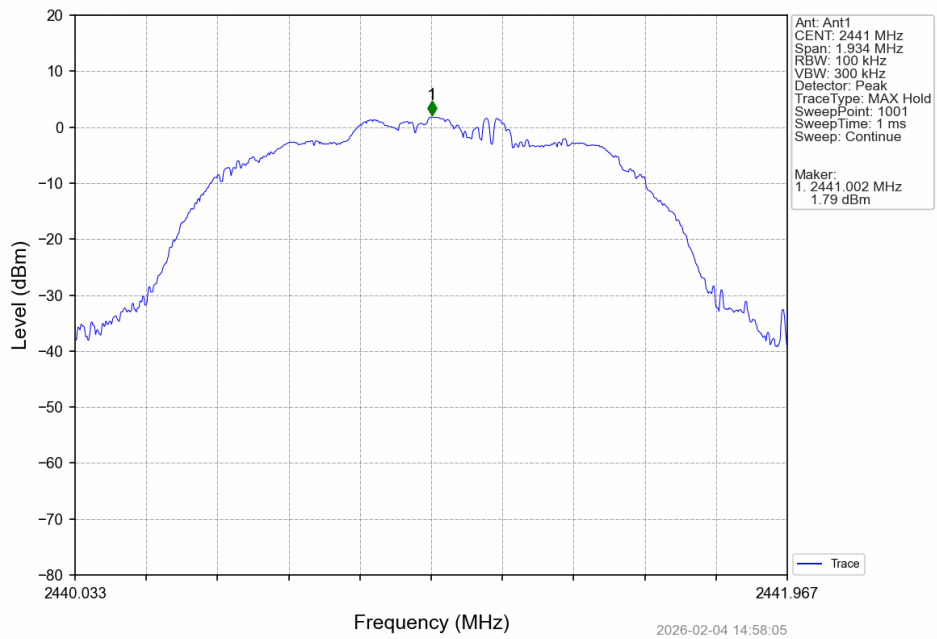
# Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



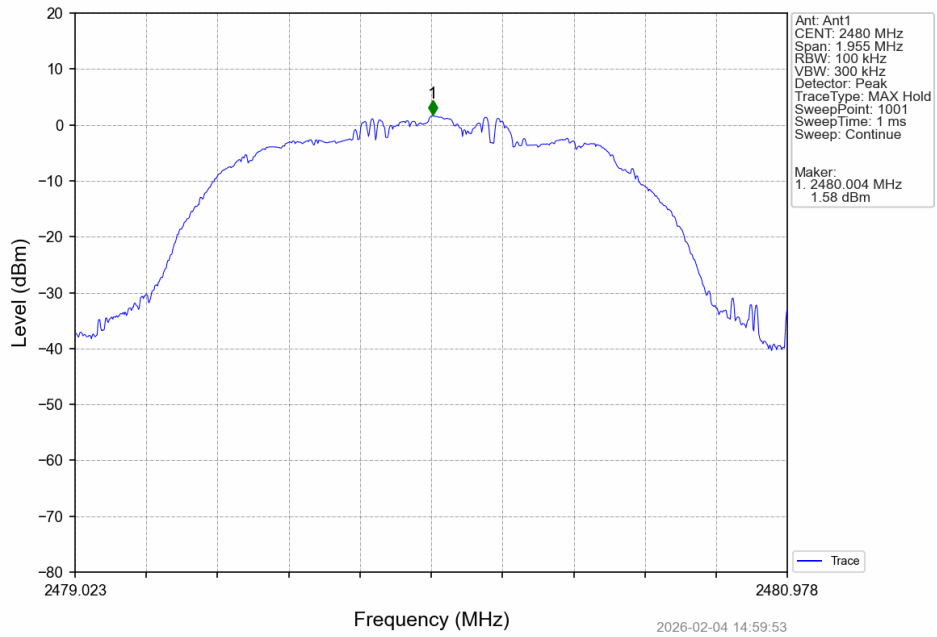
# 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



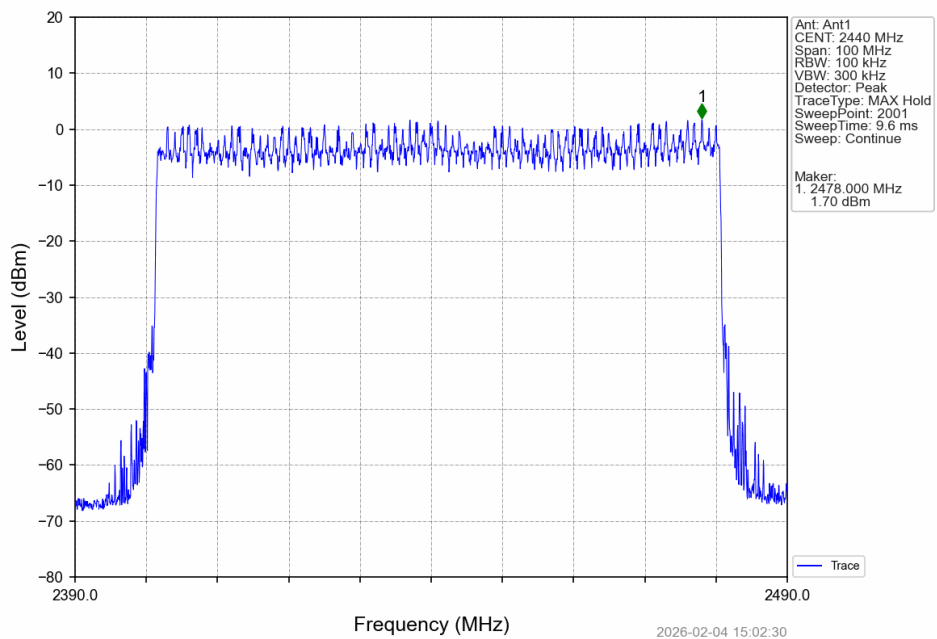
# 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



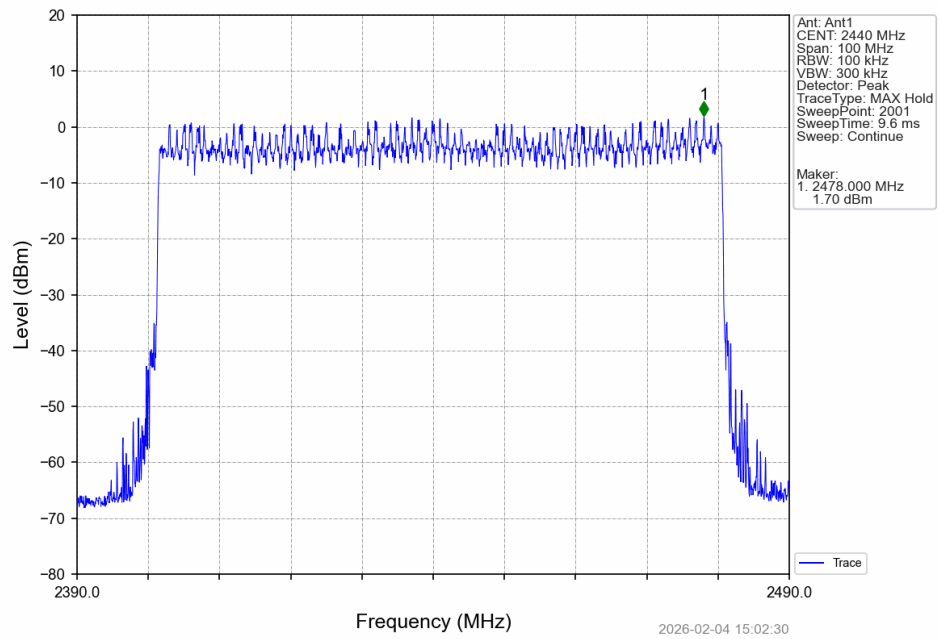
# 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



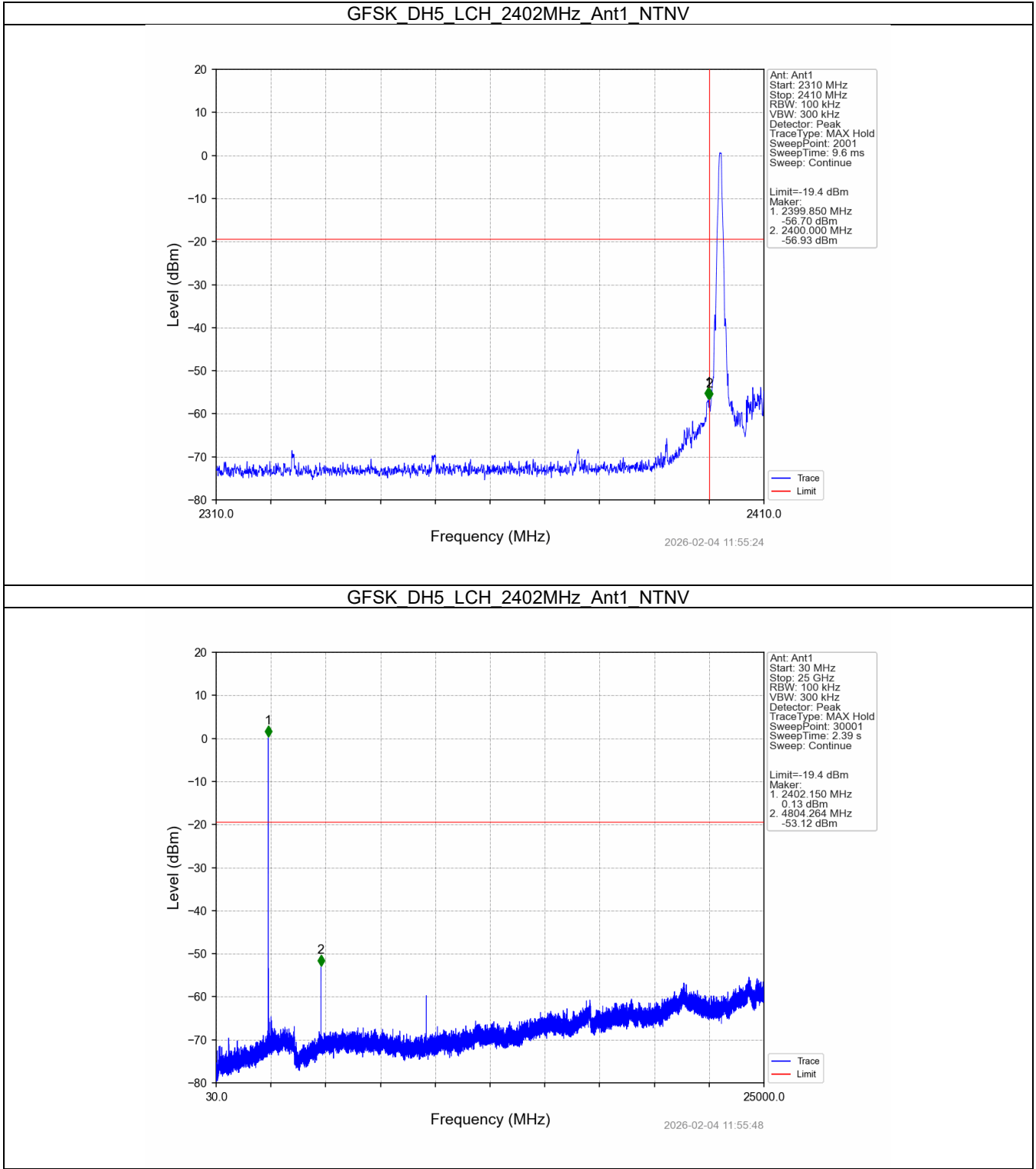
# 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



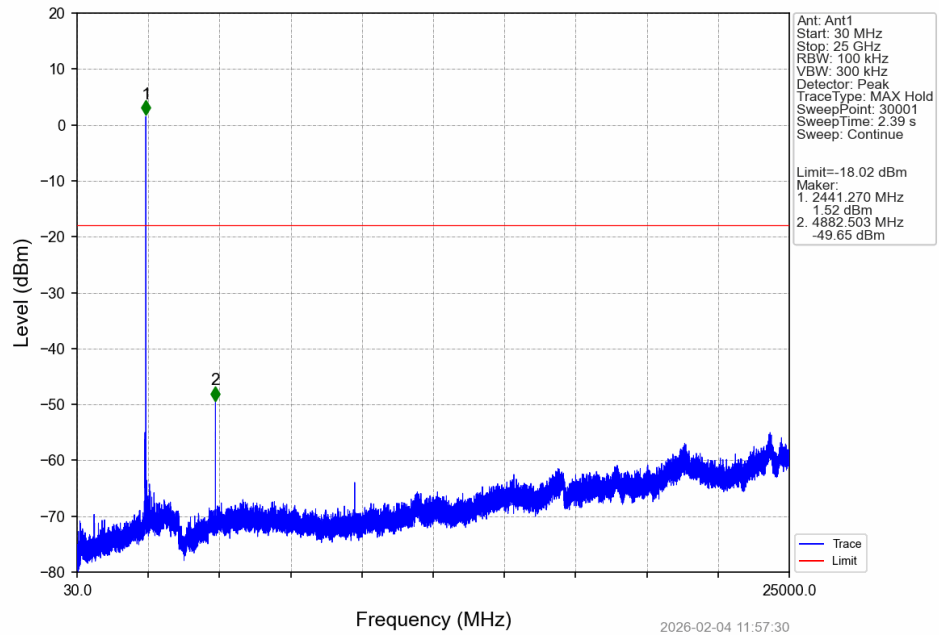
# 8DPSK\_3DH5\_HOPP\_Ant1\_NTNV



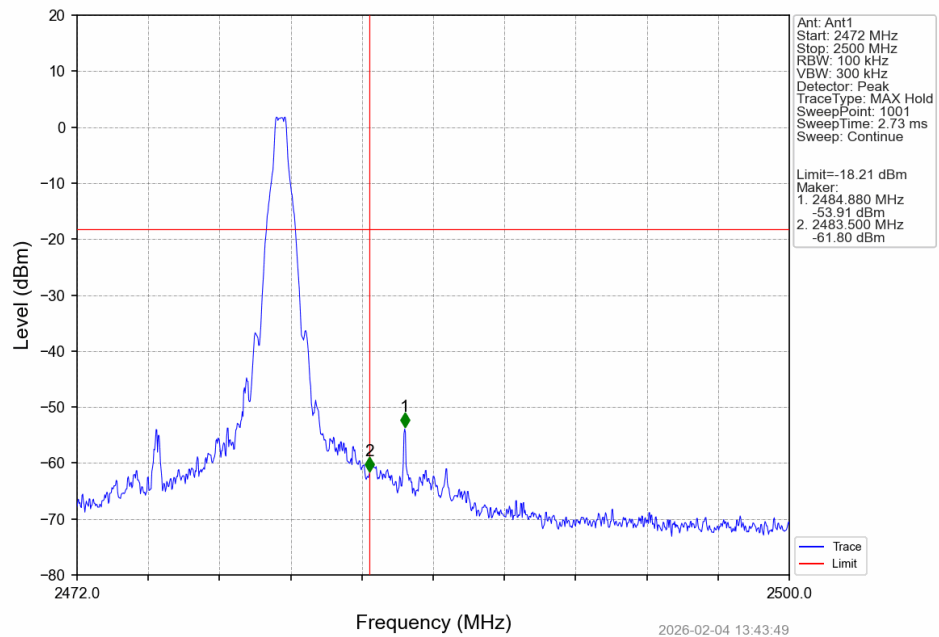
7.2.2 CSE



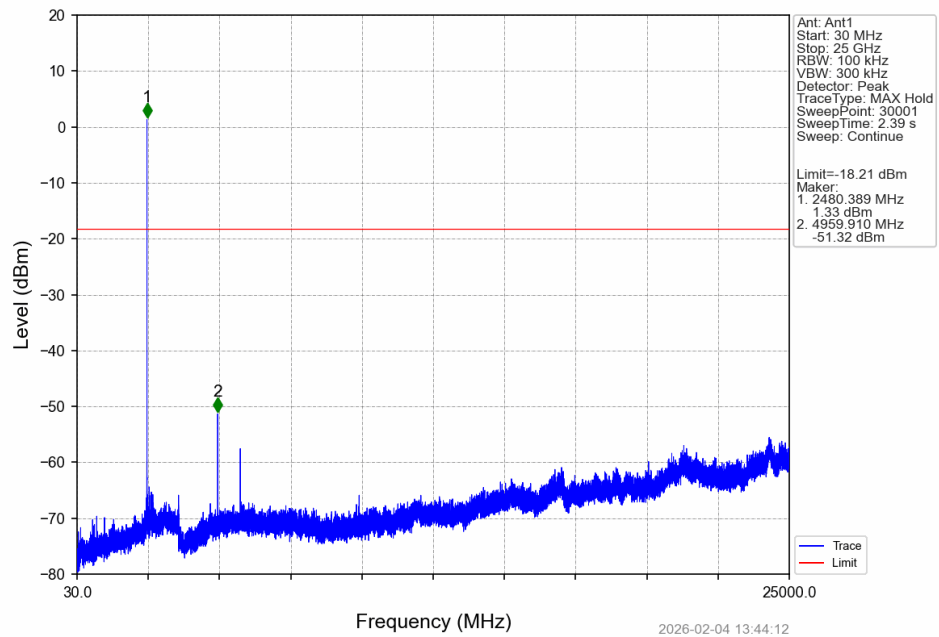
# GFSK\_DH5\_MCH\_2441MHz\_Ant1\_NTNV



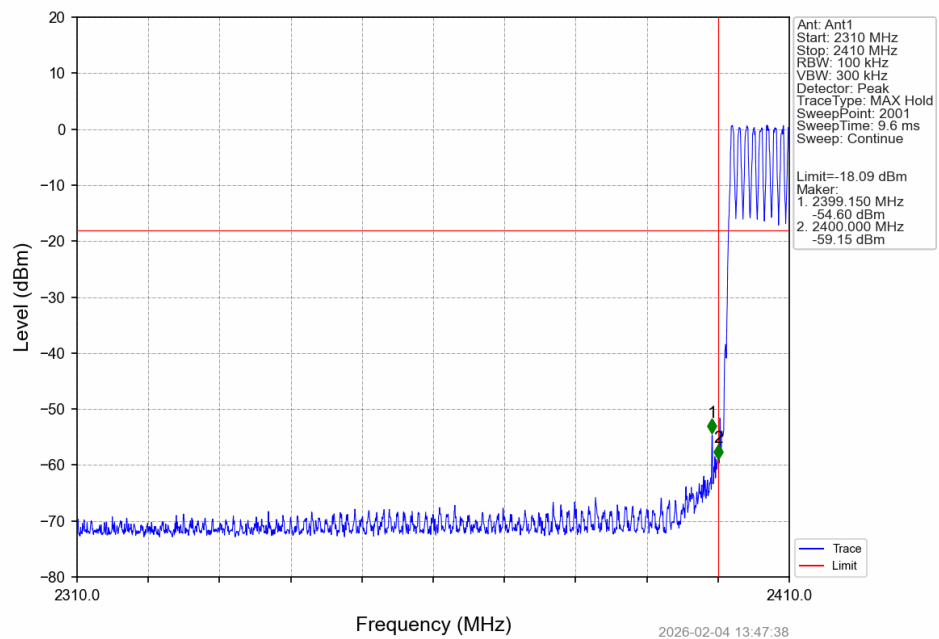
# GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



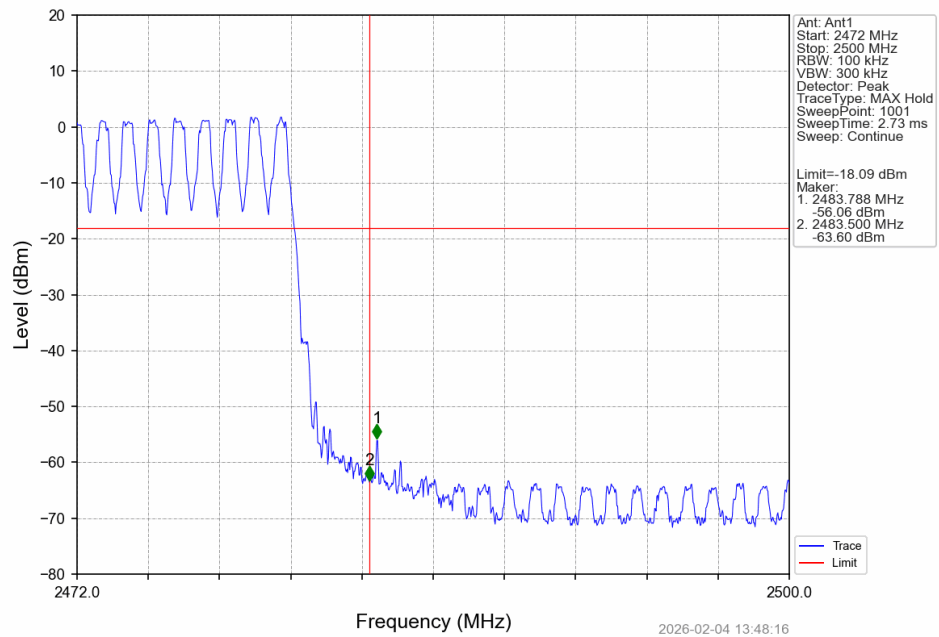
# GFSK\_DH5\_HCH\_2480MHz\_Ant1\_NTNV



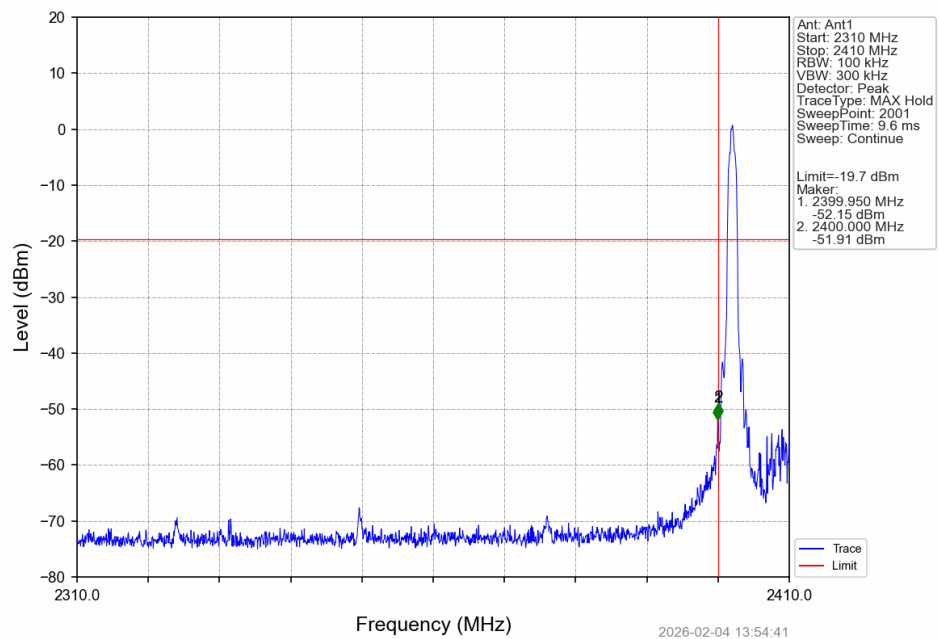
# GFSK\_DH5\_HOPP\_Ant1\_NTNV



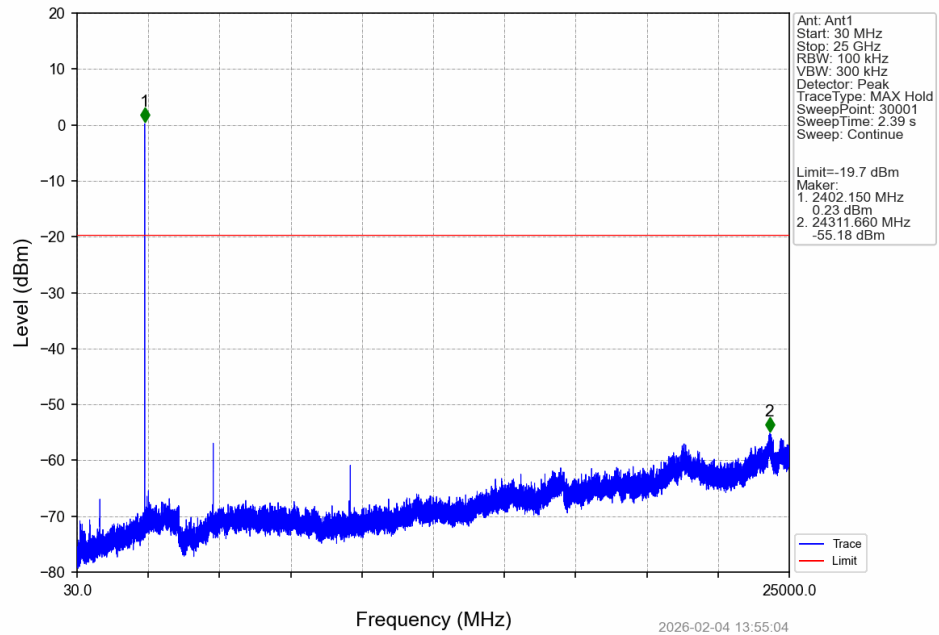
# GFSK\_DH5\_HOPP\_Ant1\_NTNV



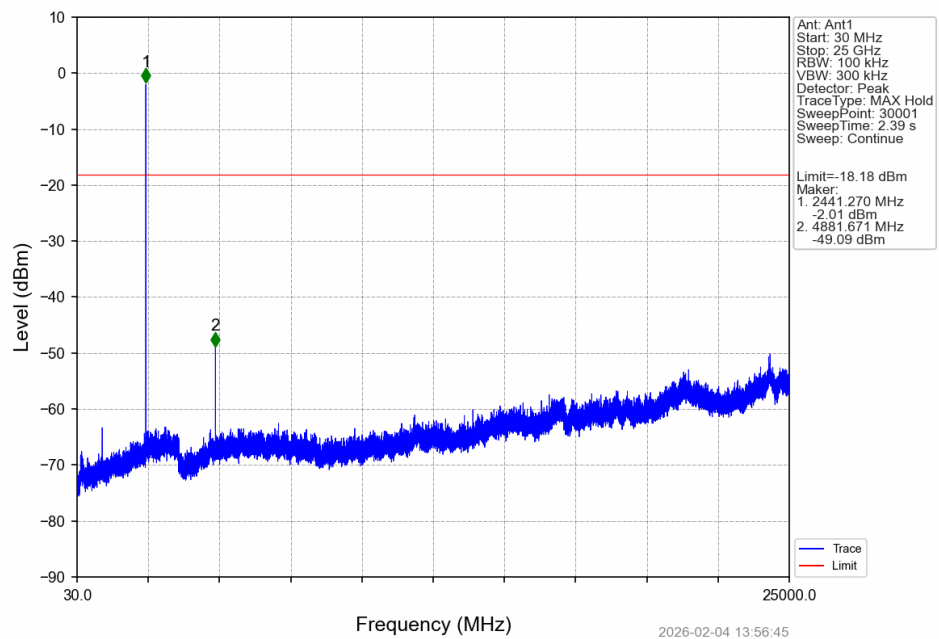
# Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



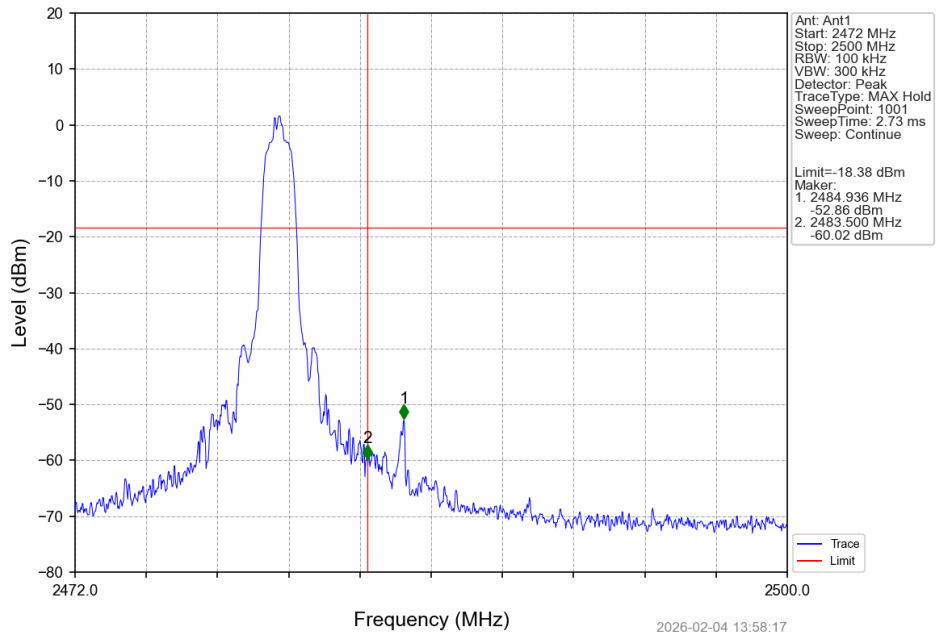
# Pi/4DQPSK\_2DH5\_LCH\_2402MHz\_Ant1\_NTNV



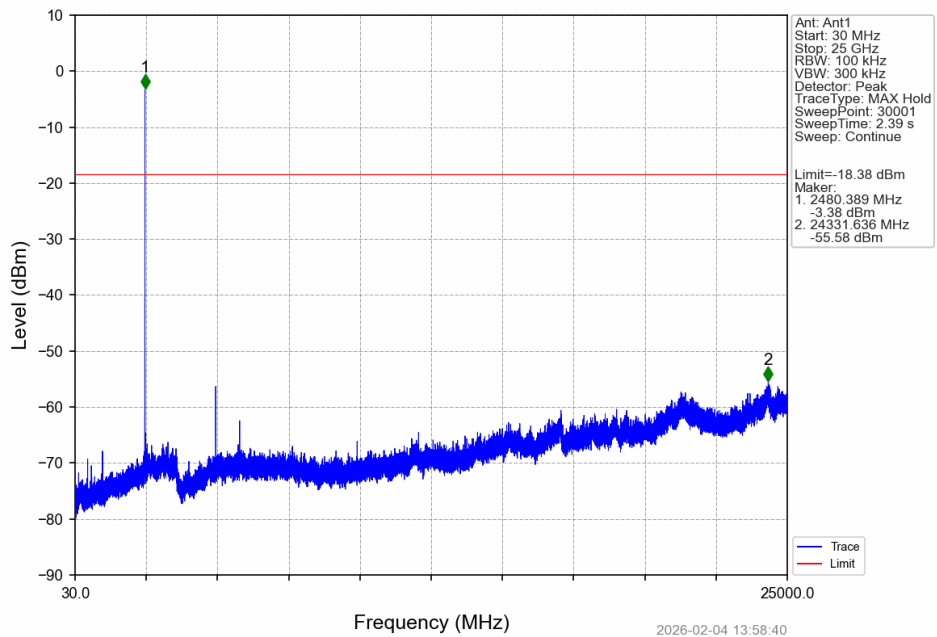
# Pi/4DQPSK\_2DH5\_MCH\_2441MHz\_Ant1\_NTNV



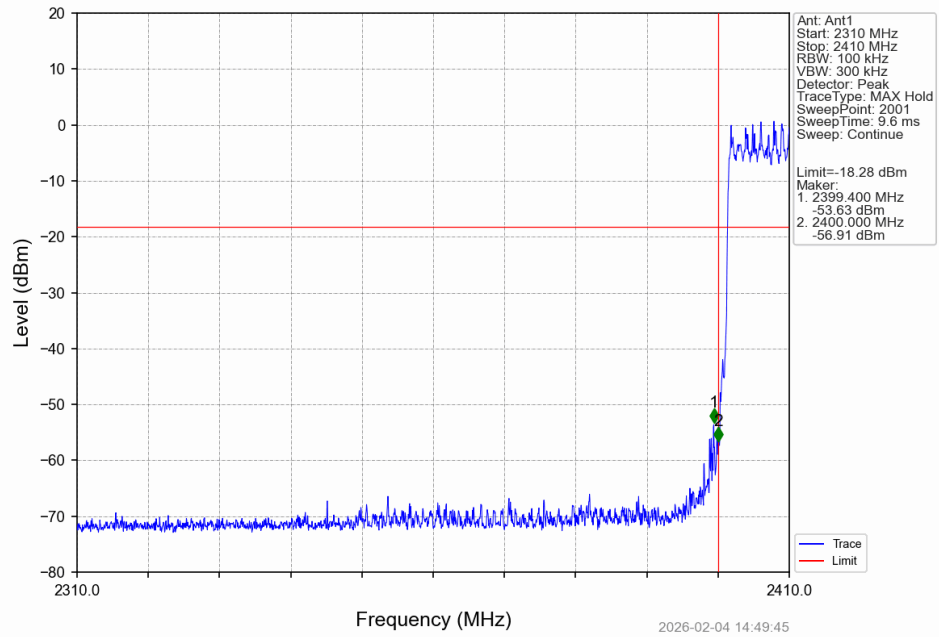
# Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



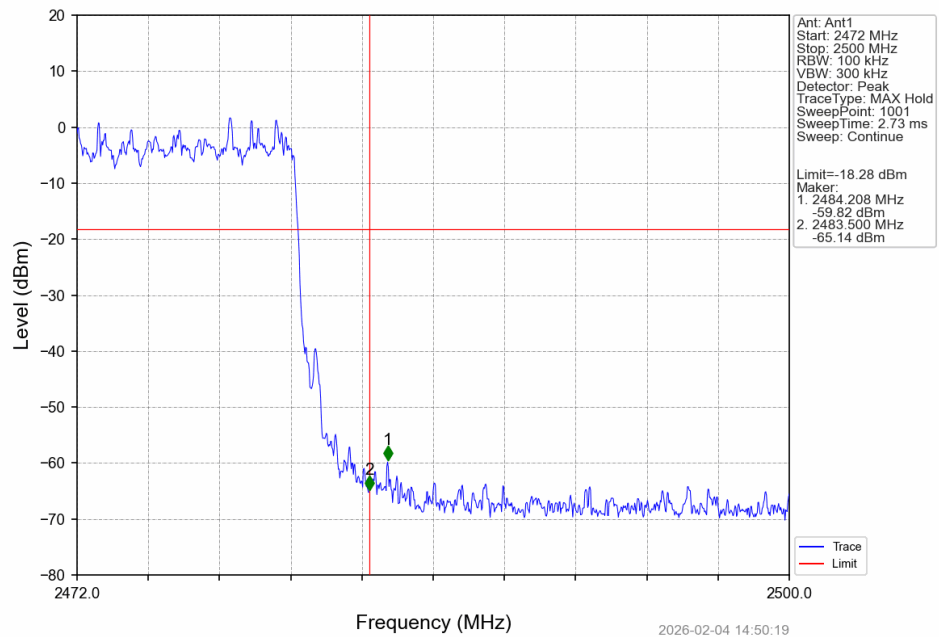
# Pi/4DQPSK\_2DH5\_HCH\_2480MHz\_Ant1\_NTNV



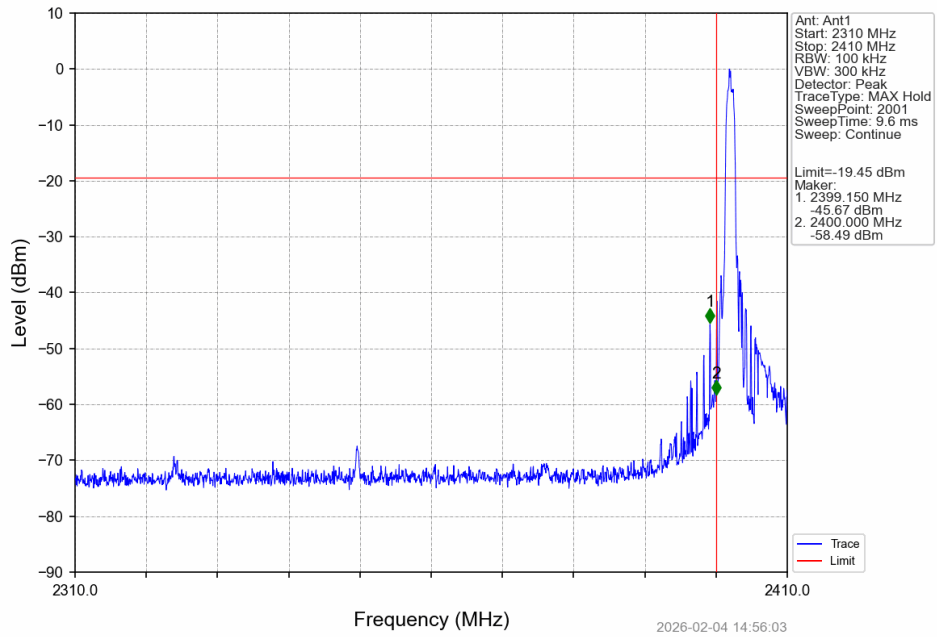
# Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



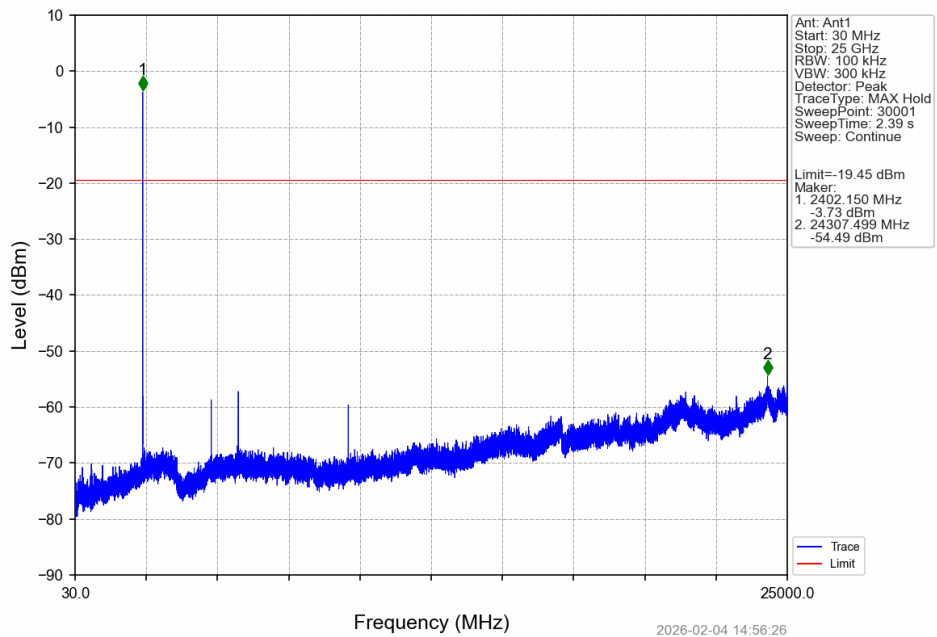
# Pi/4DQPSK\_2DH5\_HOPP\_Ant1\_NTNV



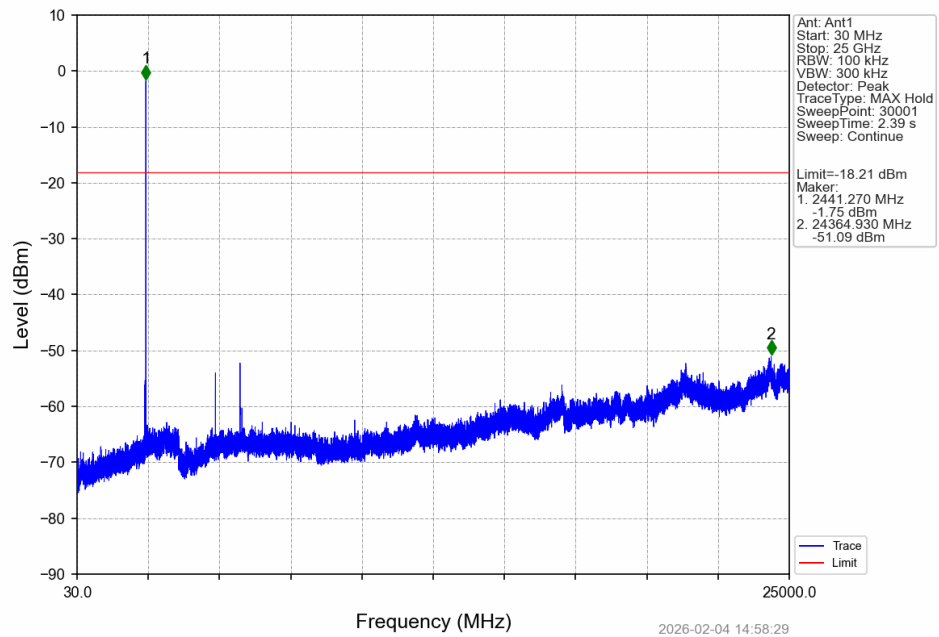
# 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



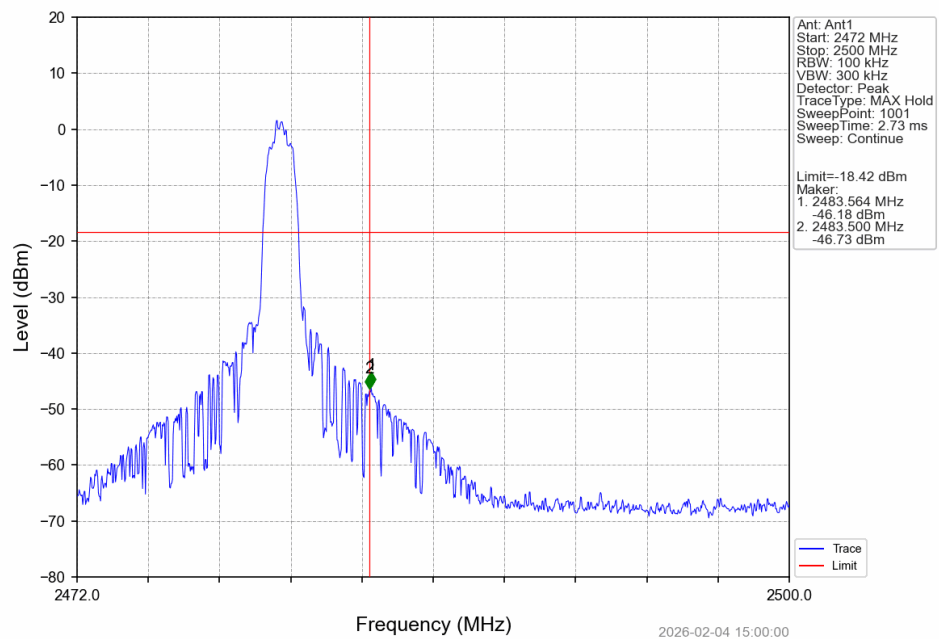
# 8DPSK\_3DH5\_LCH\_2402MHz\_Ant1\_NTNV



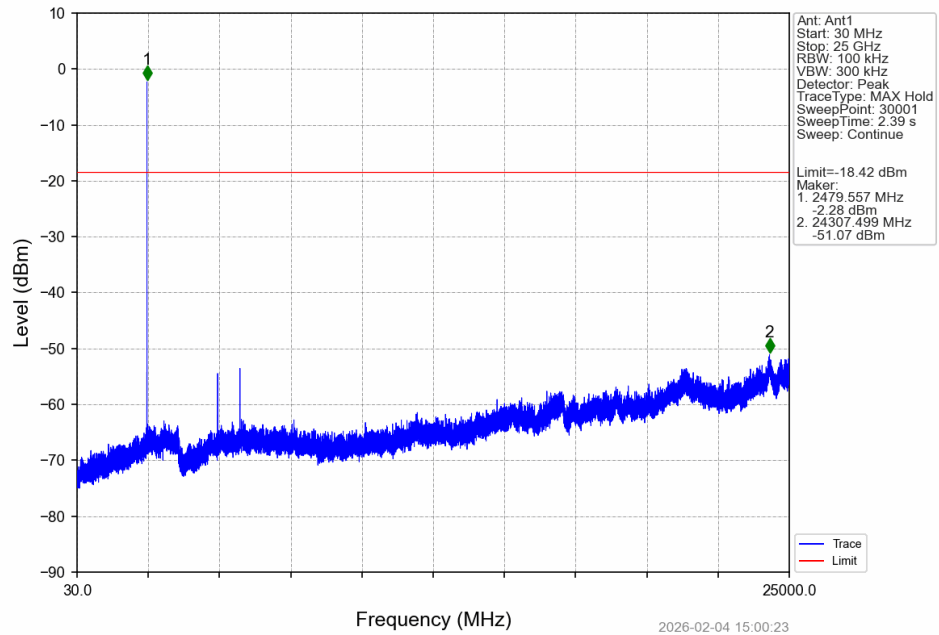
# 8DPSK\_3DH5\_MCH\_2441MHz\_Ant1\_NTNV



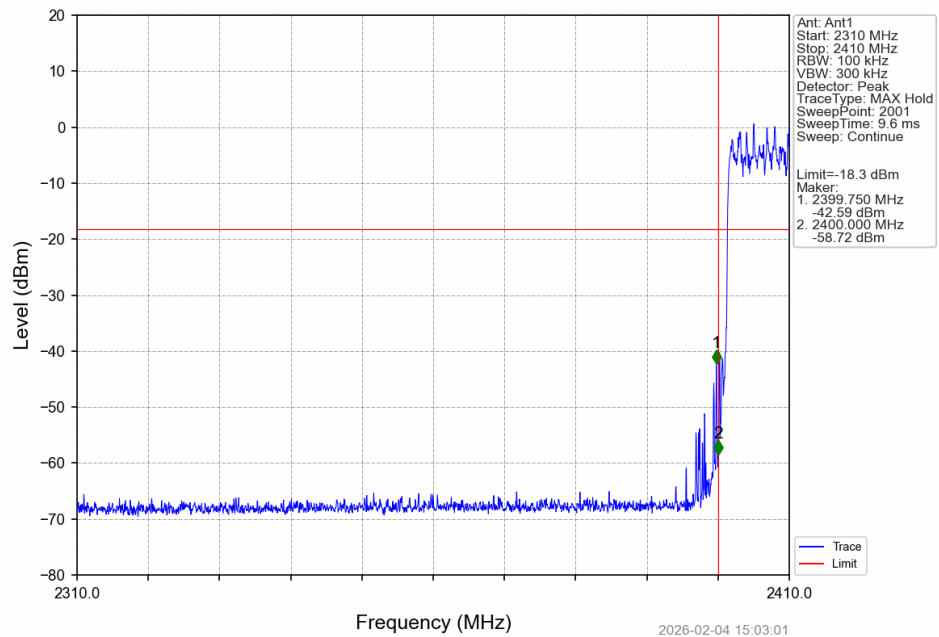
# 8DPSK\_3DH5\_HCH\_2480MHz\_Ant1\_NTNV



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



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



8DPSK\_3DH5\_HOPP\_Ant1\_NTNV

