

# ANNEX TEST DATA EDR

## FCC ID: 2BXWL-BT35

Applicant: XFANIC GROUP (HK) LIMITED

Address: FLAT/RM 1214, 12/F, STAR HOUSE, NO.3 SALISBURY ROAD, TSIM SHA TSUI, KOWLOON, HONGKONG

Manufacturer: XFANIC GROUP (HK) LIMITED

Address: FLAT/RM 1214, 12/F, STAR HOUSE, NO.3 SALISBURY ROAD, TSIM SHA TSUI, KOWLOON, HONGKONG

Product Name: Wireless transmitter receiver

Trade Mark: SOOMFON

Model Number: BT35, BT32, BT34, BT50, BT60, BT70, BT80, BT02, BT03, BT04, BT05, BT06, BT12, BT13, BT14, BT15

Date of Receipt: Aug. 11, 2026

Test Date: Aug. 11, 2026 – Aug. 19, 2026

Date of Report: Aug. 19, 2026

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Applicable Standards: FCC PART 15 C 15.247  
ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024

Test Result: Pass

Report Number: DLE-260811020R

## 1. Bandwidth

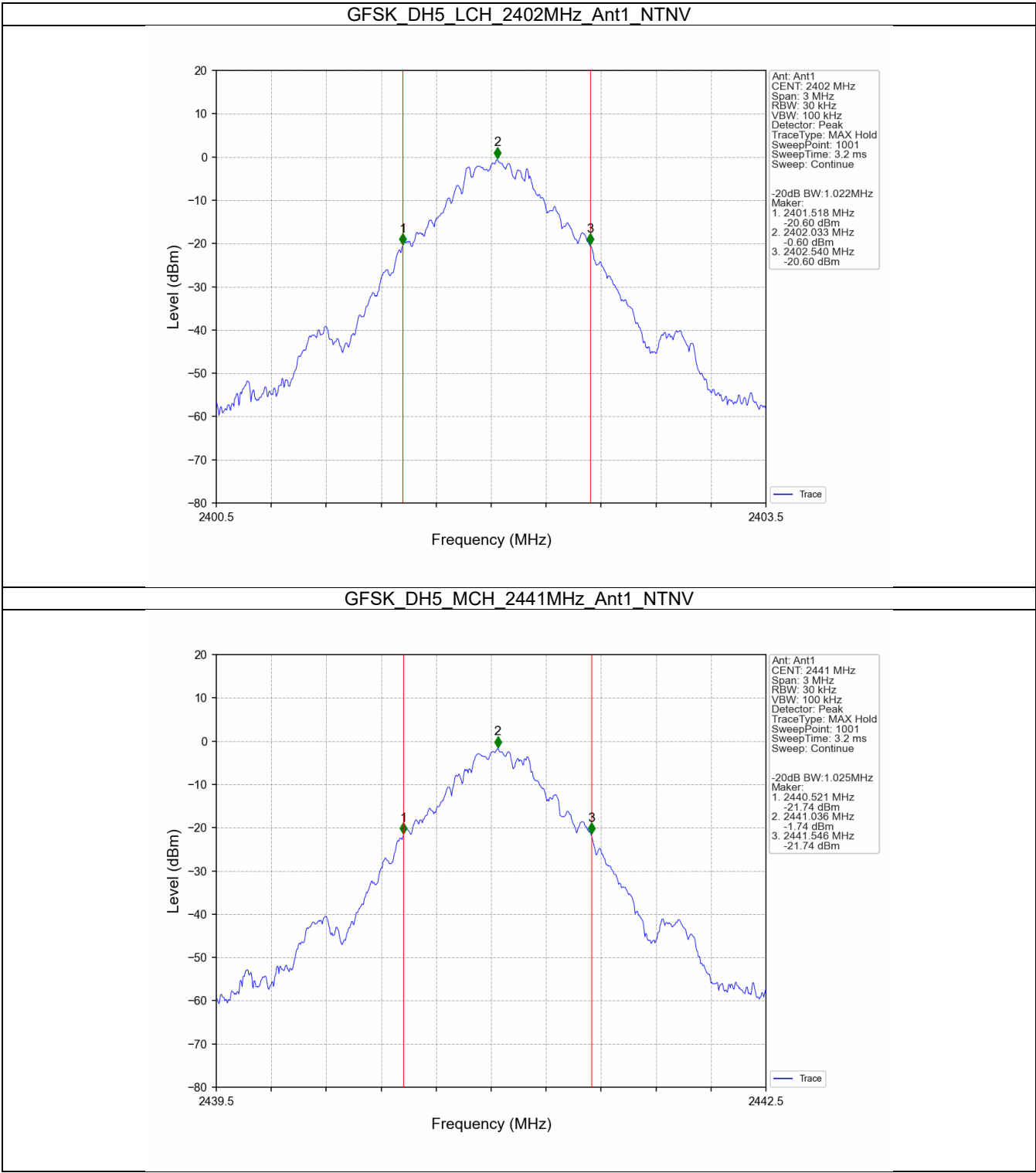
### 1.1 Test Result

#### 1.1.1 20dB BW

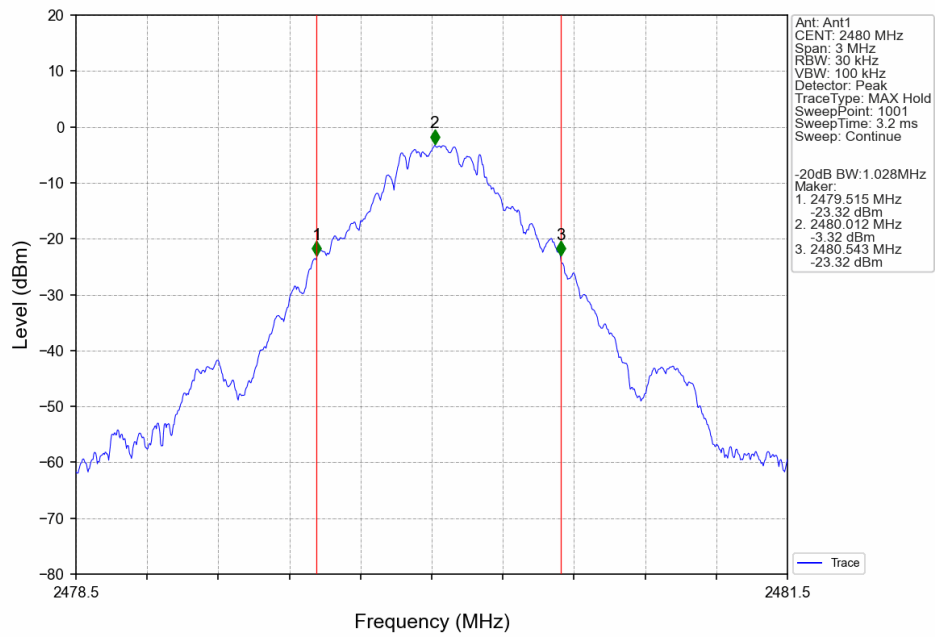
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | 20dB Bandwidth (MHz) |       | Verdict |
|-----------|---------|-----------------|-------------|-----|----------------------|-------|---------|
|           |         |                 |             |     | Result               | Limit |         |
| GFSK      | SISO    | 2402            | DH5         | 1   | 1.022                | /     | Pass    |
|           |         | 2441            | DH5         | 1   | 1.025                | /     | Pass    |
|           |         | 2480            | DH5         | 1   | 1.028                | /     | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.311                | /     | Pass    |
|           |         | 2441            | 2DH5        | 1   | 1.293                | /     | Pass    |
|           |         | 2480            | 2DH5        | 1   | 1.316                | /     | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.302                | /     | Pass    |
|           |         | 2441            | 3DH5        | 1   | 1.304                | /     | Pass    |
|           |         | 2480            | 3DH5        | 1   | 1.302                | /     | Pass    |

# 1.2 Test Graph

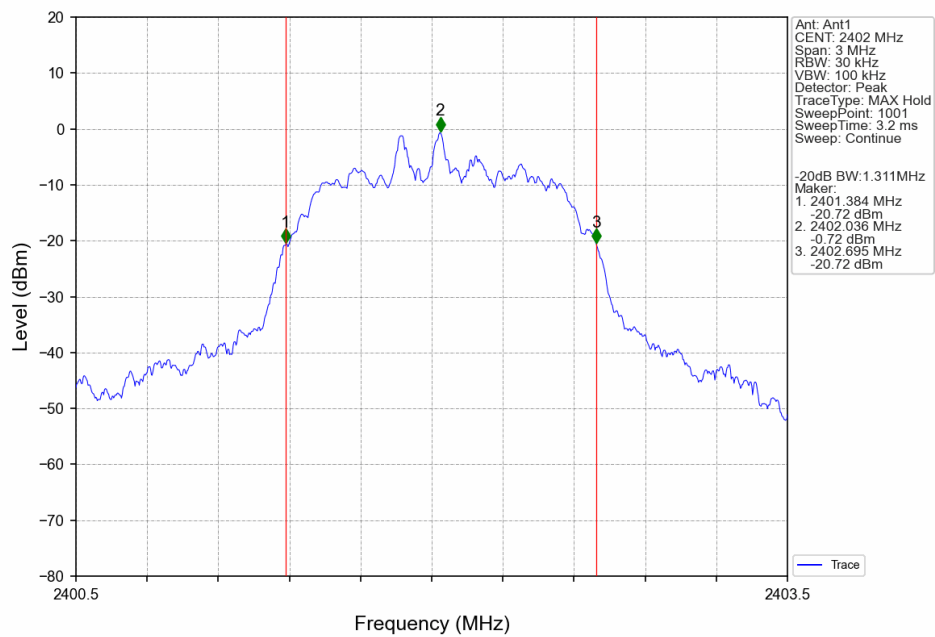
## 1.2.1 20dB BW



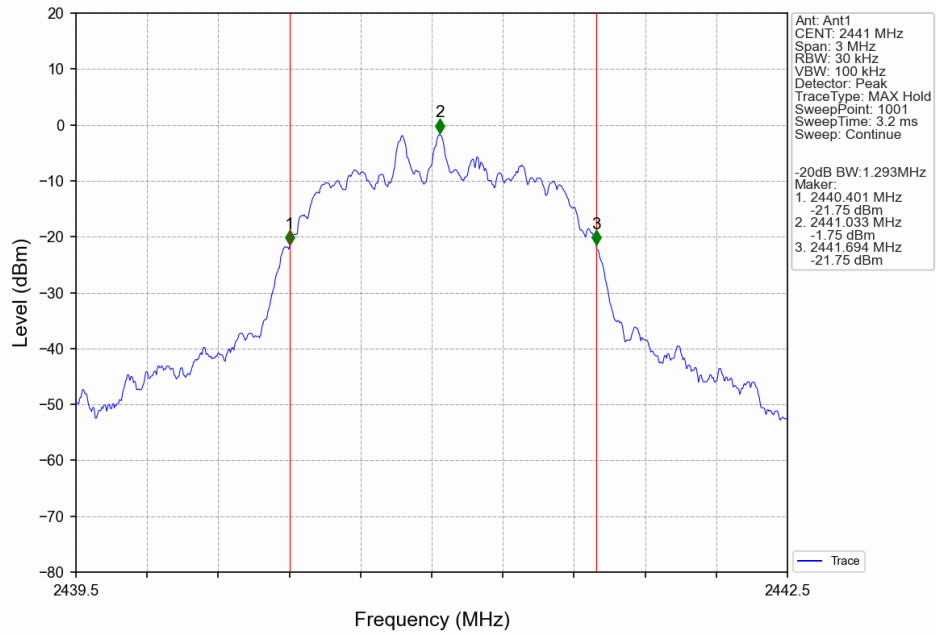
# GFSK DH5 HCH 2480MHz Ant1 NTNV



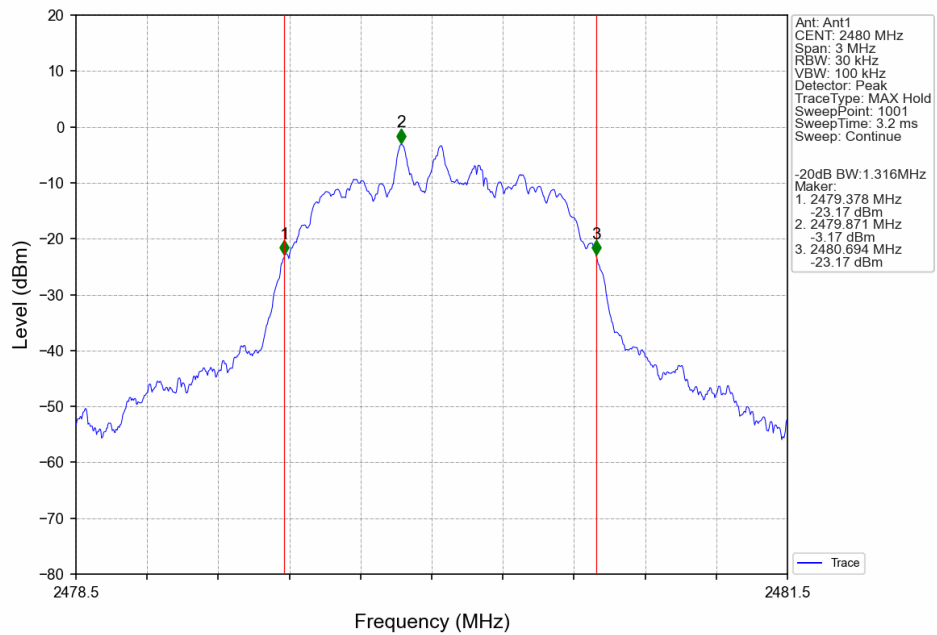
# Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTNV



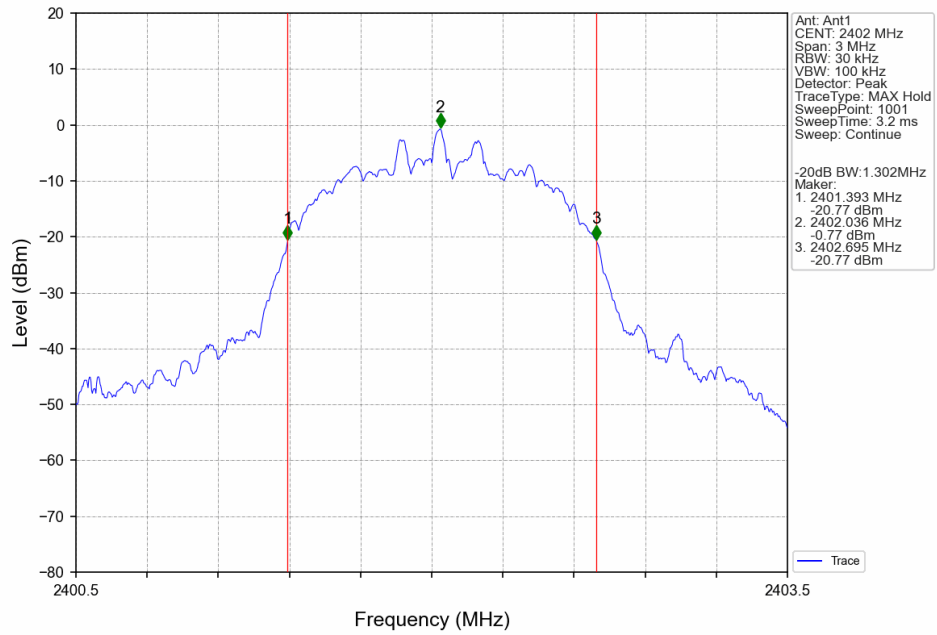
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTNV



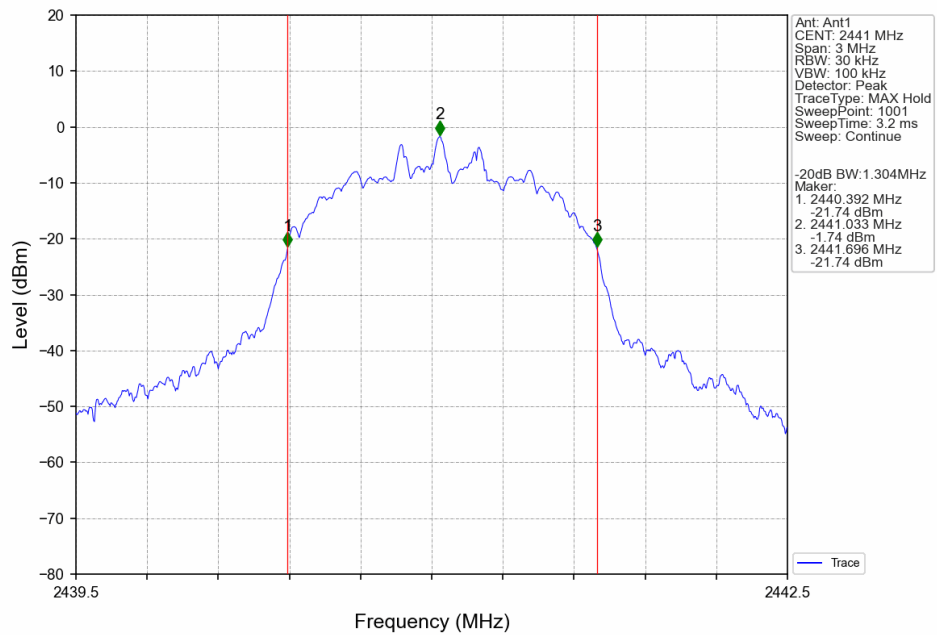
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV



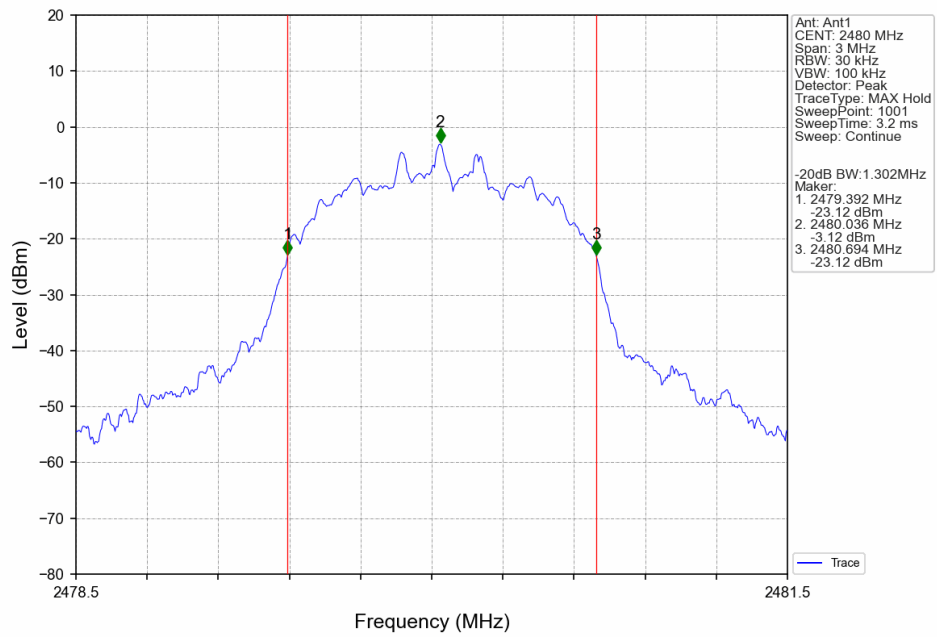
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN



# 8DPSK 3DH5 HCH 2480MHz Ant1 NTN



## 2. Maximum Conducted Output Power

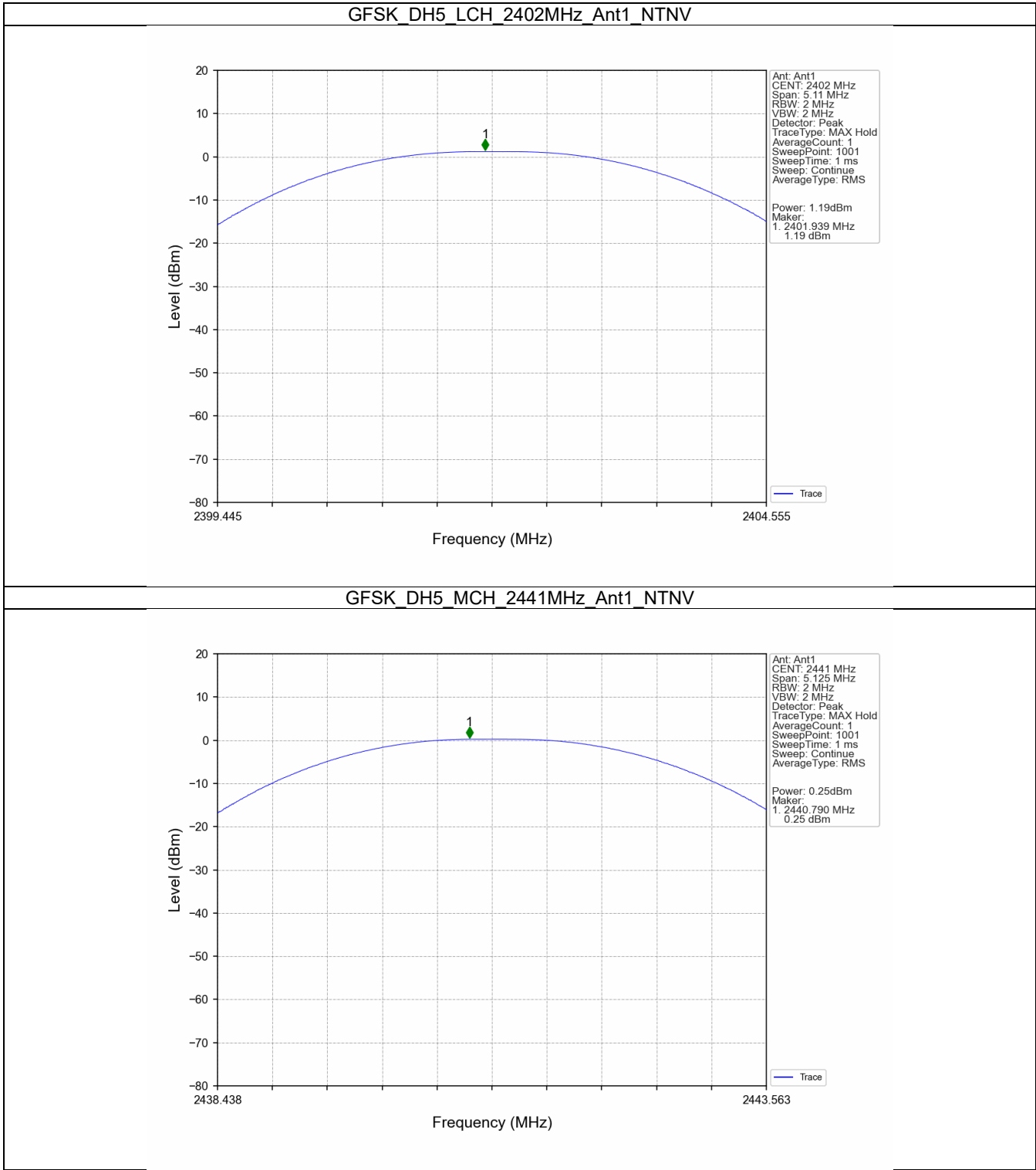
### 2.1 Test Result

#### 2.1.1 Power

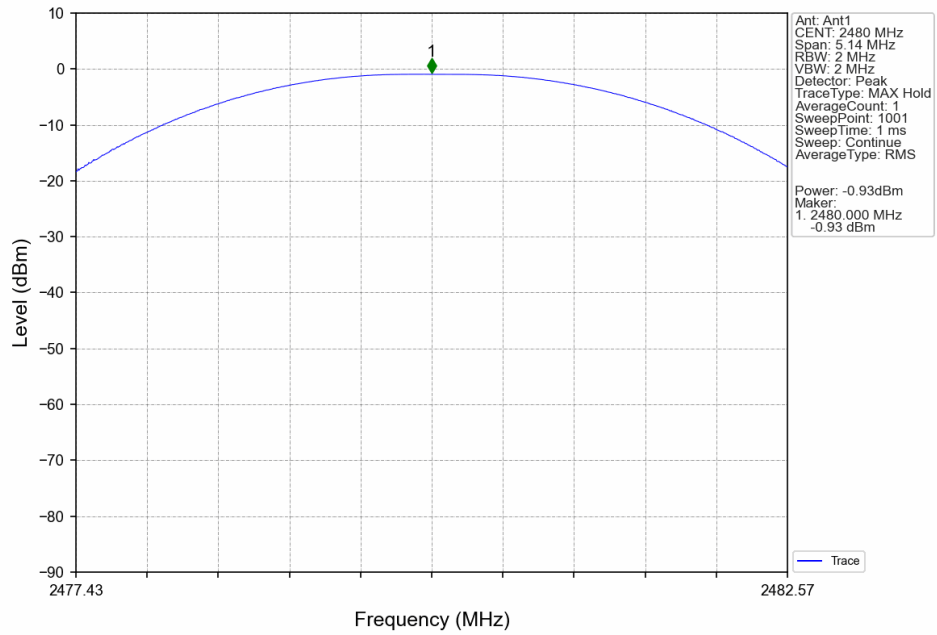
| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |              | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|--------------|---------|
|           |         |                 |             | ANT1                                      | Limit        |         |
| GFSK      | SISO    | 2402            | DH5         | 1.19                                      | $\leq 20.97$ | Pass    |
|           |         | 2441            | DH5         | 0.25                                      | $\leq 20.97$ | Pass    |
|           |         | 2480            | DH5         | -0.93                                     | $\leq 20.97$ | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1.98                                      | $\leq 20.97$ | Pass    |
|           |         | 2441            | 2DH5        | 1.13                                      | $\leq 20.97$ | Pass    |
|           |         | 2480            | 2DH5        | -0.05                                     | $\leq 20.97$ | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 2.34                                      | $\leq 20.97$ | Pass    |
|           |         | 2441            | 3DH5        | 1.46                                      | $\leq 20.97$ | Pass    |
|           |         | 2480            | 3DH5        | 0.25                                      | $\leq 20.97$ | Pass    |

2.2 Test Graph

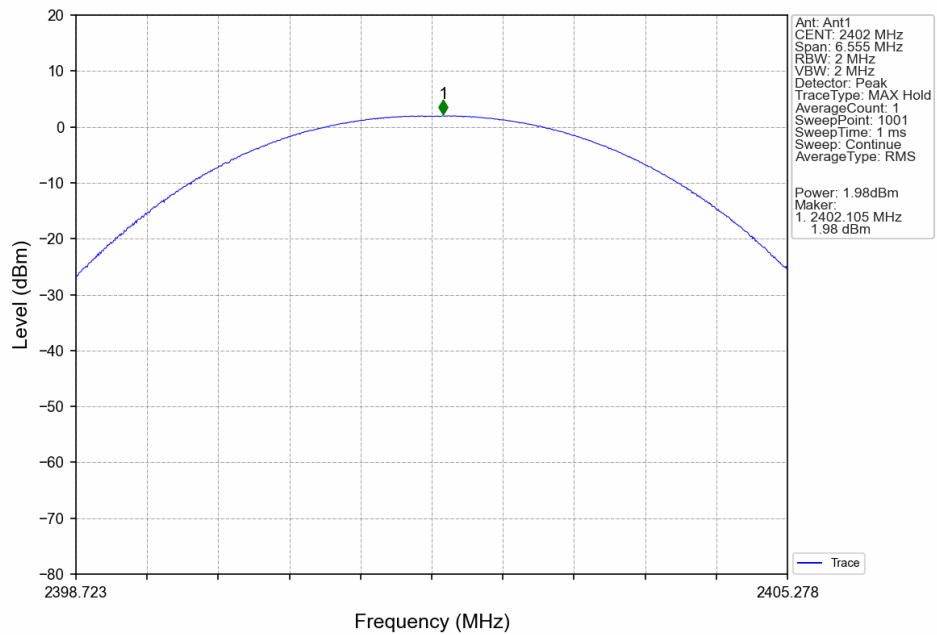
2.2.1 Power



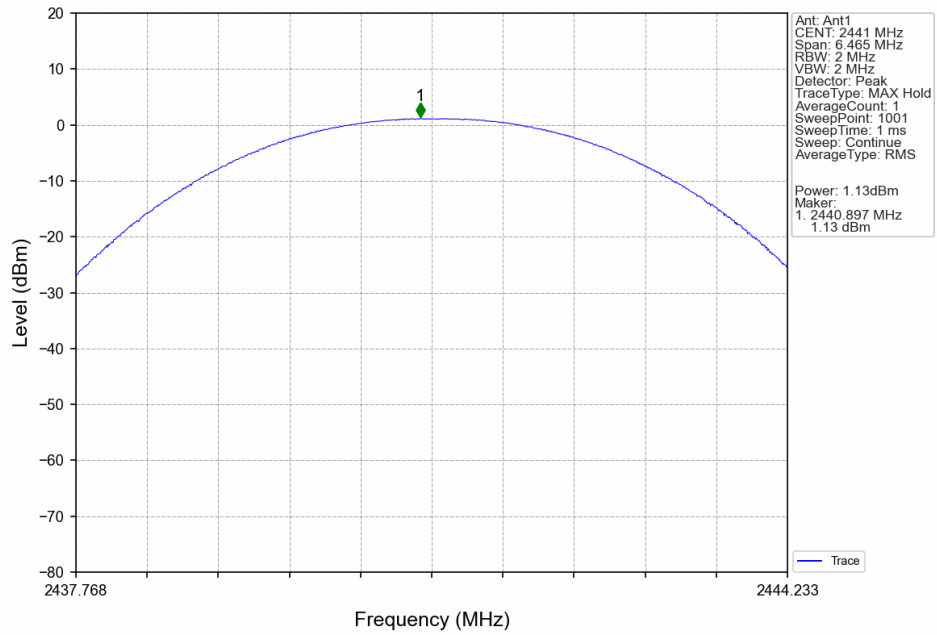
GFSK DH5 HCH 2480MHz Ant1 NTV



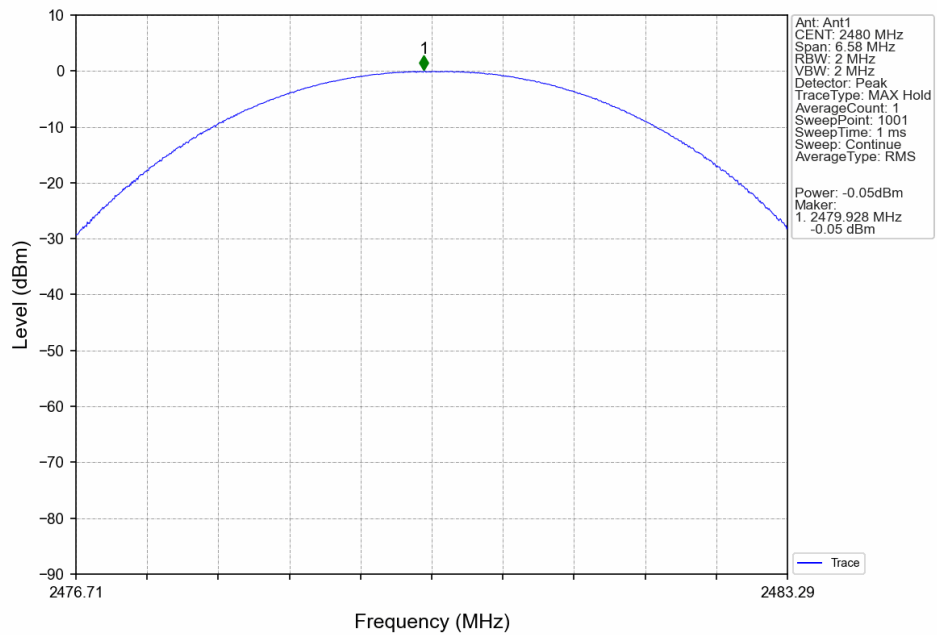
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTV



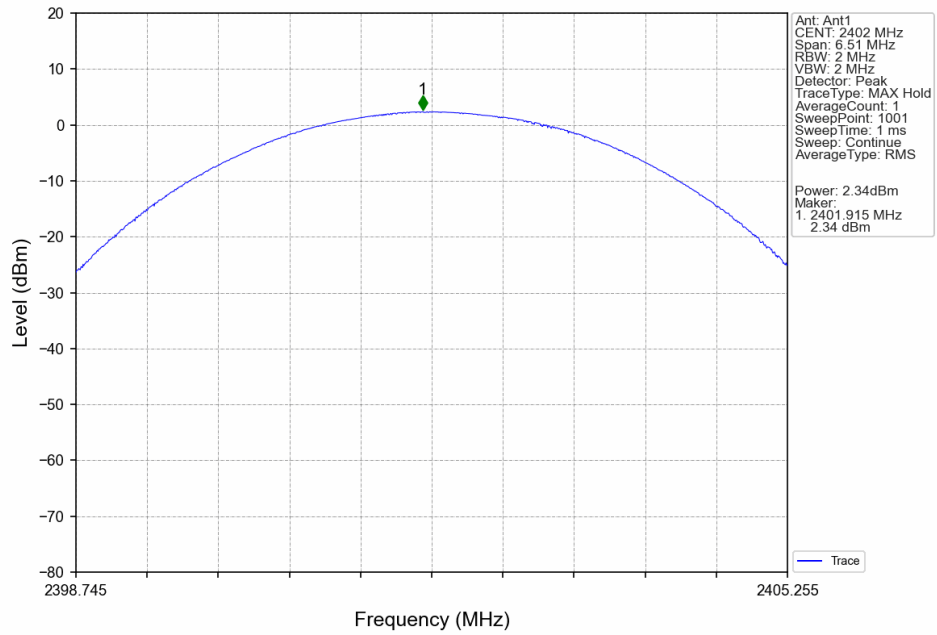
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTNV



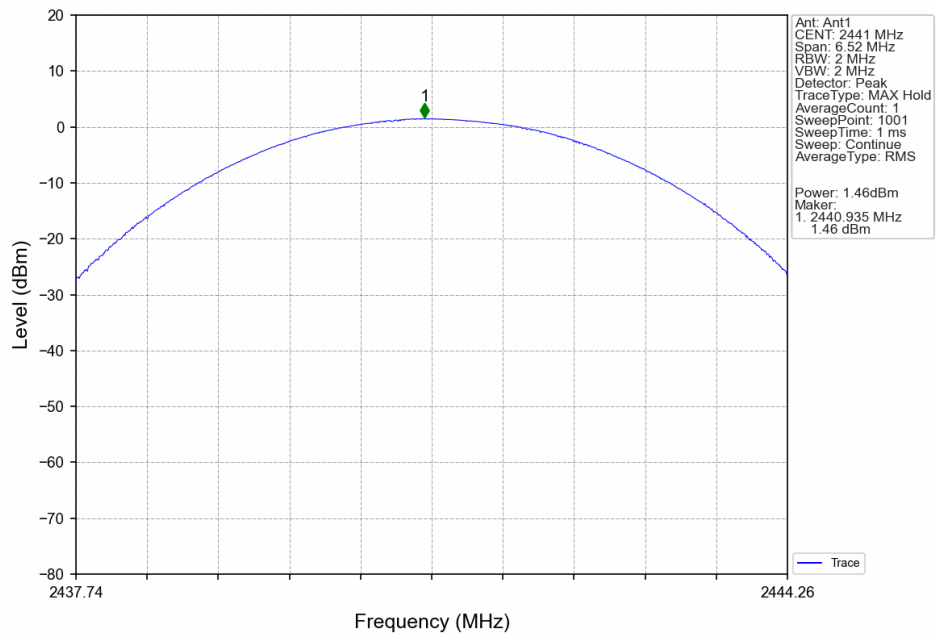
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV



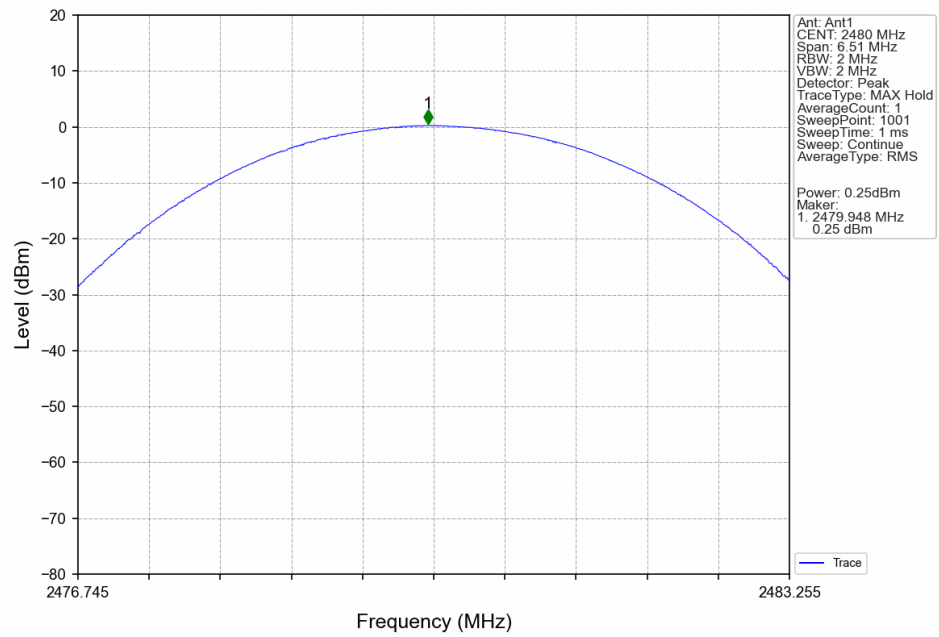
8DPSK 3DH5 LCH 2402MHz Ant1 NTN



8DPSK 3DH5 MCH 2441MHz Ant1 NTN



8DPSK 3DH5 HCH 2480MHz Ant1 NTN



### 3. Carrier Frequency Separation

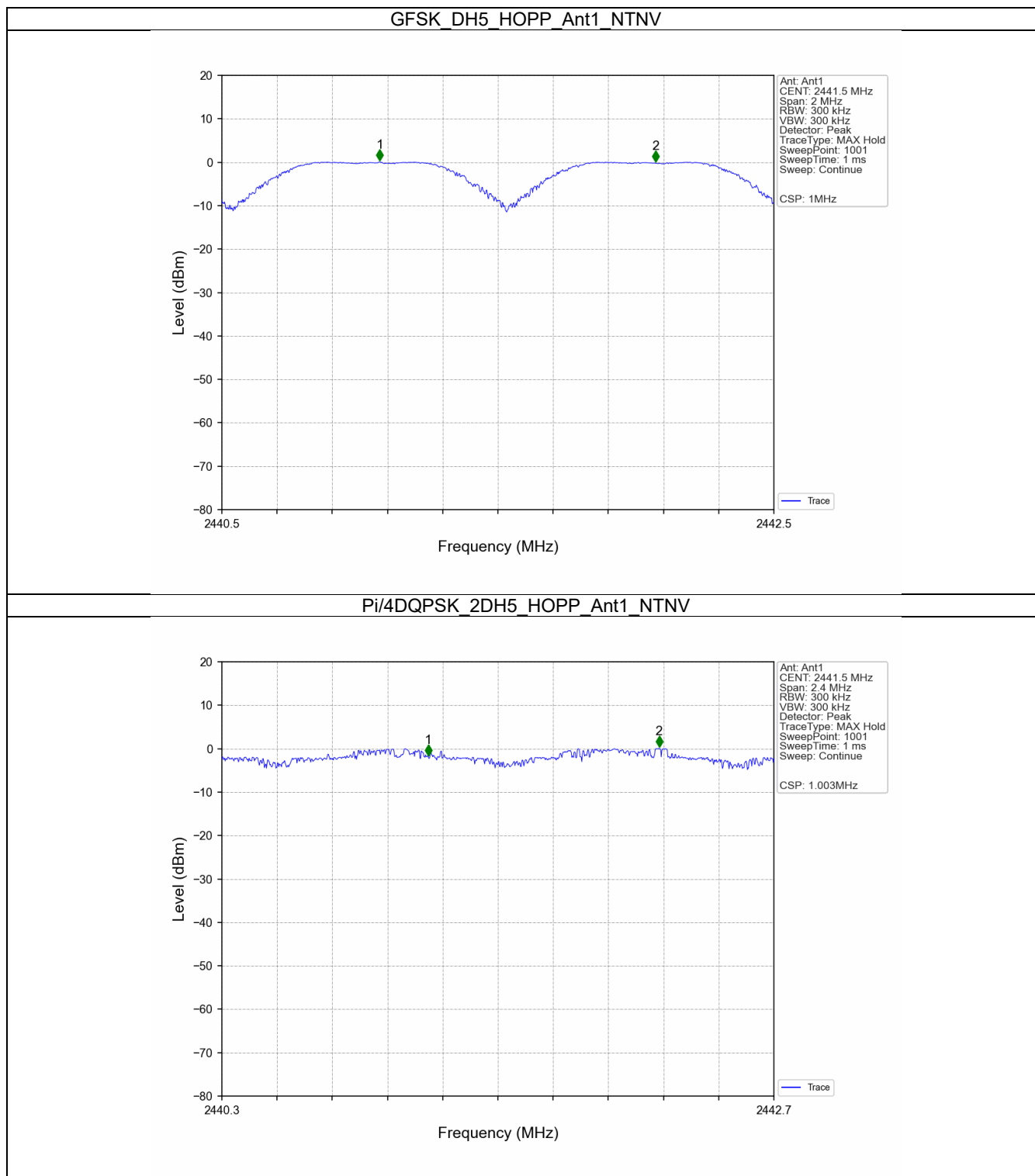
#### 3.1 Test Result

##### 3.1.1 Ant1

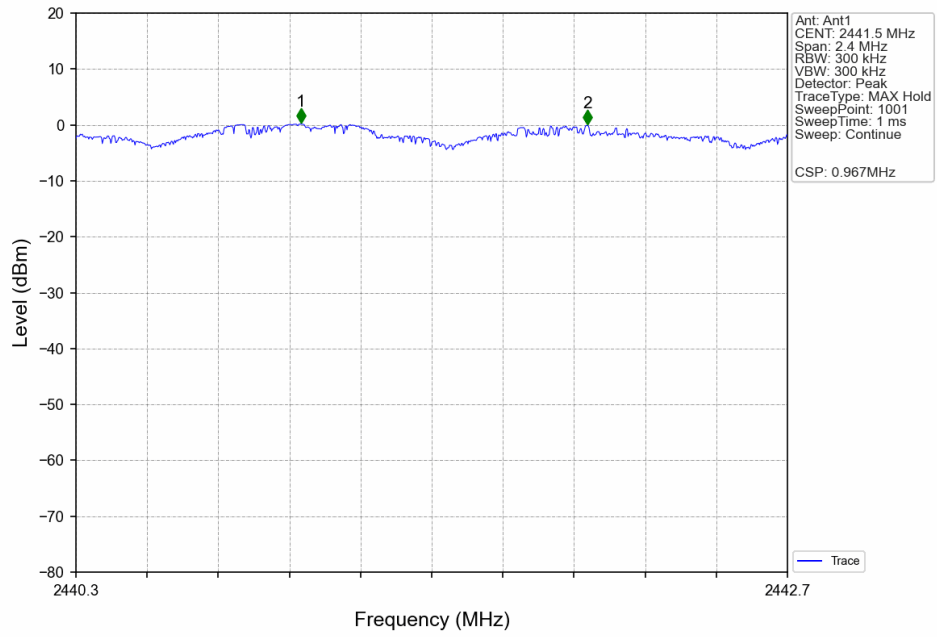
| Ant1      |         |                 |             |                          |                      |              |         |
|-----------|---------|-----------------|-------------|--------------------------|----------------------|--------------|---------|
| Mode      | TX Type | Frequency (MHz) | Packet Type | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limit (MHz)  | Verdict |
| GFSK      | SISO    | HOPP            | DH5         | 1.000                    | 1.028                | $\geq 0.685$ | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 1.003                    | 1.316                | $\geq 0.877$ | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 0.967                    | 1.304                | $\geq 0.869$ | Pass    |

## 3.2 Test Graph

### 3.2.1 Ant1



# 8DPSK 3DH5 HOPP Ant1 NTNV



## 4. Number of Hopping Frequencies

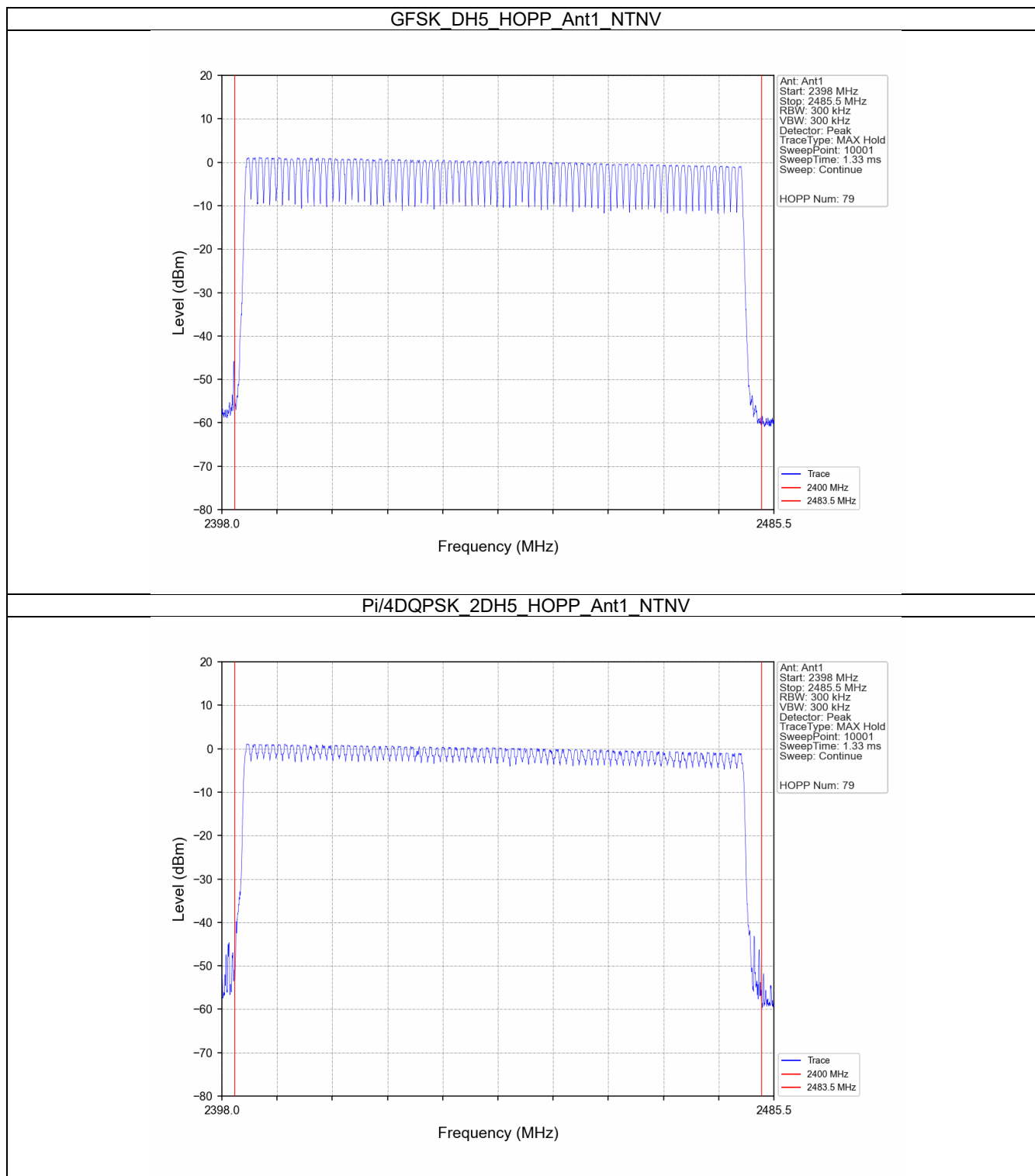
### 4.1 Test Result

#### 4.1.1 HoppNum

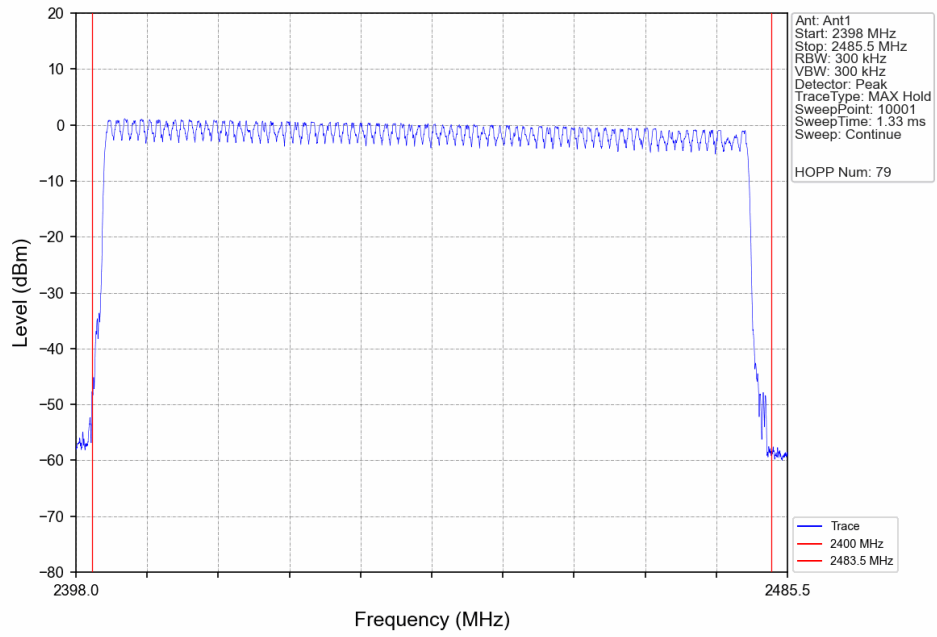
| Mode      | TX Type | Frequency (MHz) | Packet Type | Num of Hopping Frequencies |       | Verdict |
|-----------|---------|-----------------|-------------|----------------------------|-------|---------|
|           |         |                 |             | ANT1                       | Limit |  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

## 4.2 Test Graph

### 4.2.1 HoppNum



# 8DPSK 3DH5 HOPP Ant1 NTNV



## 5. Time of Occupancy (Dwell Time)

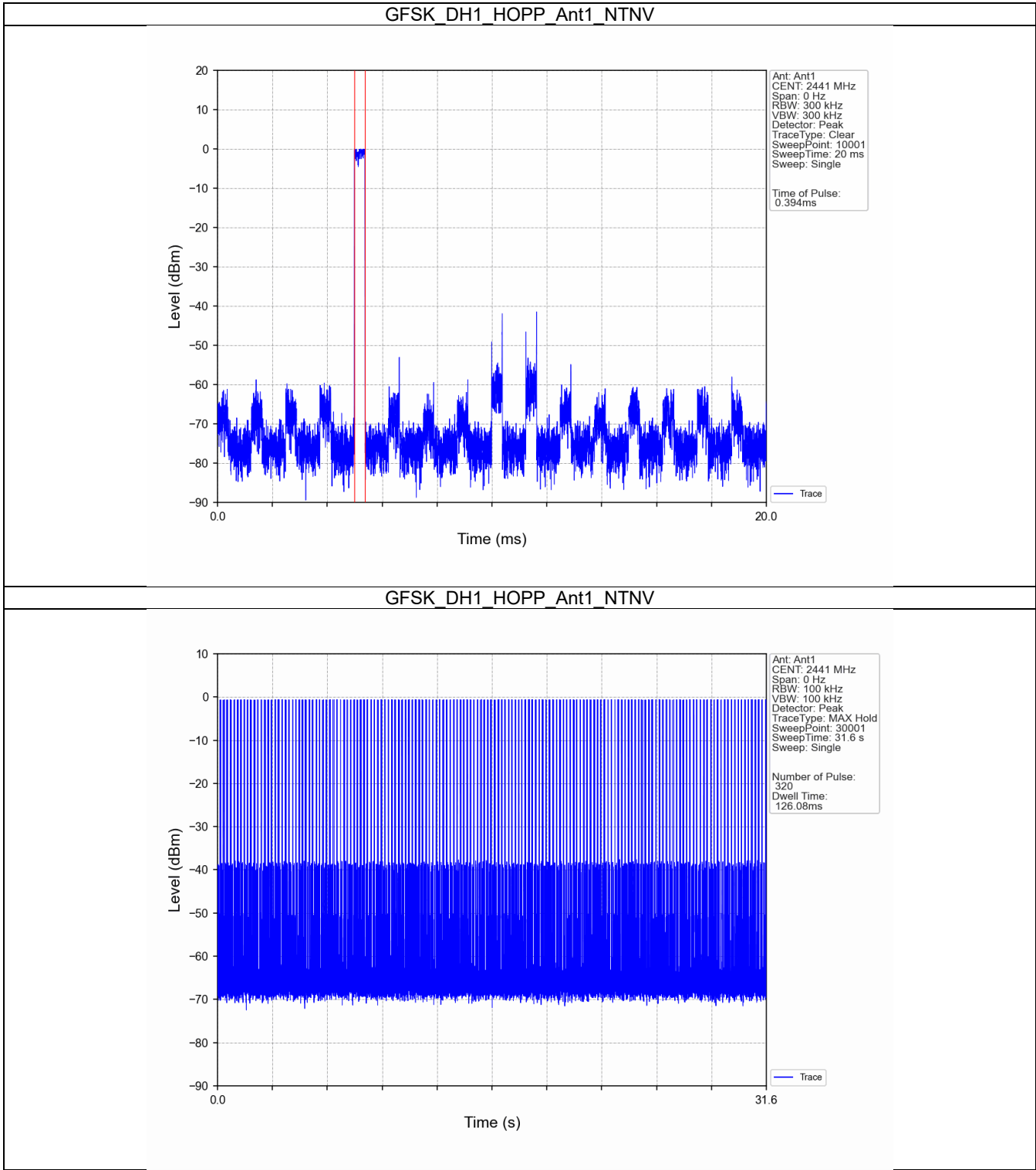
### 5.1 Test Result

#### 5.1.1 Ant1

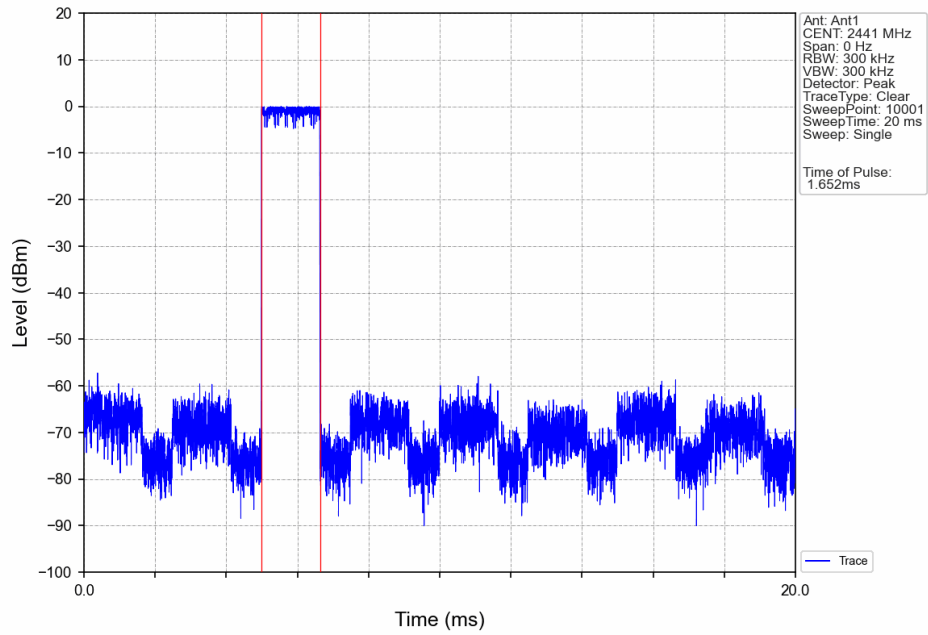
| Ant1      |         |                 |             |                               |                        |                                    |                 |            |         |
|-----------|---------|-----------------|-------------|-------------------------------|------------------------|------------------------------------|-----------------|------------|---------|
| 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         | 0.394                         | 31.600                 | 320                                | 126.080         | <=400      | Pass    |
|           |         |                 | DH3         | 1.652                         | 31.600                 | 148                                | 244.496         | <=400      | Pass    |
|           |         |                 | DH5         | 2.900                         | 31.600                 | 98                                 | 284.200         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.396                         | 31.600                 | 317                                | 125.532         | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.648                         | 31.600                 | 157                                | 258.736         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.902                         | 31.600                 | 106                                | 307.612         | <=400      | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH1        | 0.402                         | 31.600                 | 319                                | 128.238         | <=400      | Pass    |
|           |         |                 | 3DH3        | 1.656                         | 31.600                 | 154                                | 255.024         | <=400      | Pass    |
|           |         |                 | 3DH5        | 2.904                         | 31.600                 | 102                                | 296.208         | <=400      | Pass    |

5.2 Test Graph

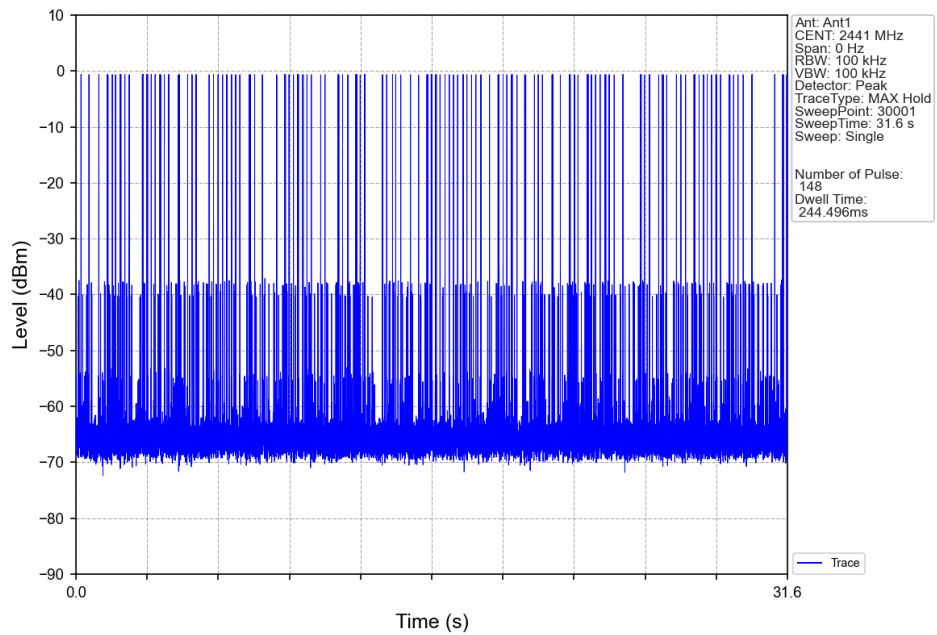
5.2.1 Ant1



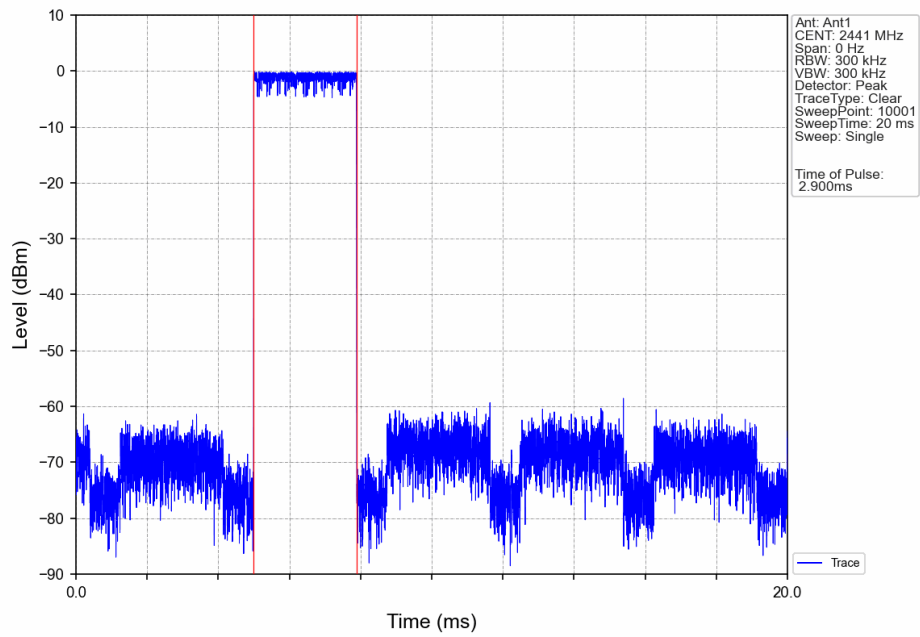
# GFSK DH3 HOPP Ant1 NTN



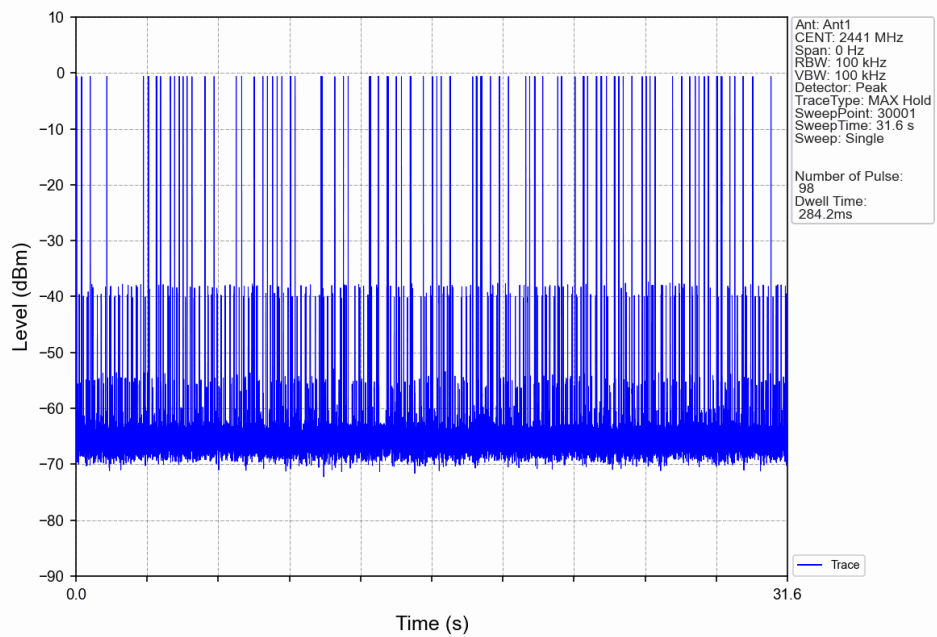
# GFSK DH3 HOPP Ant1 NTN



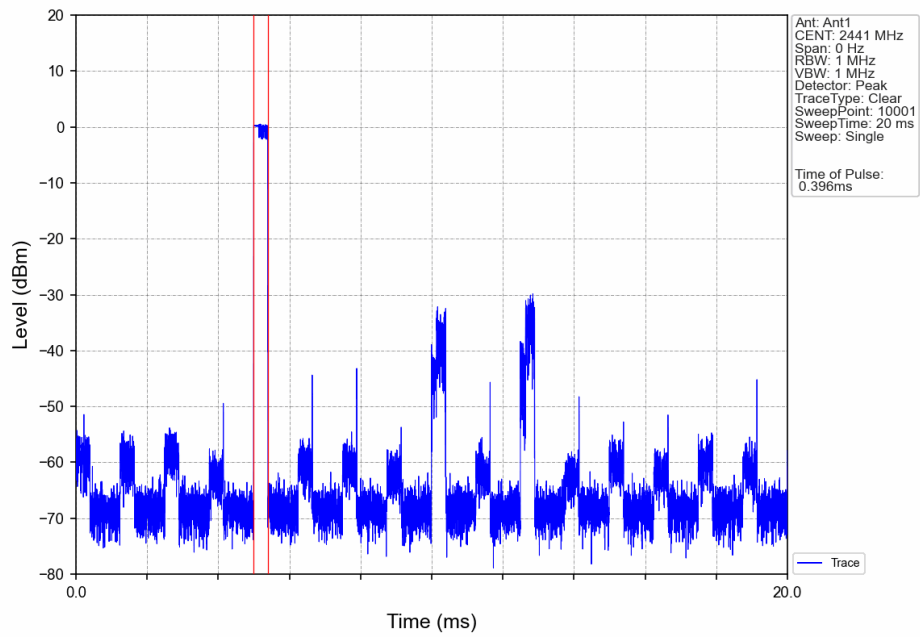
# GFSK DH5 HOPP Ant1 NTN



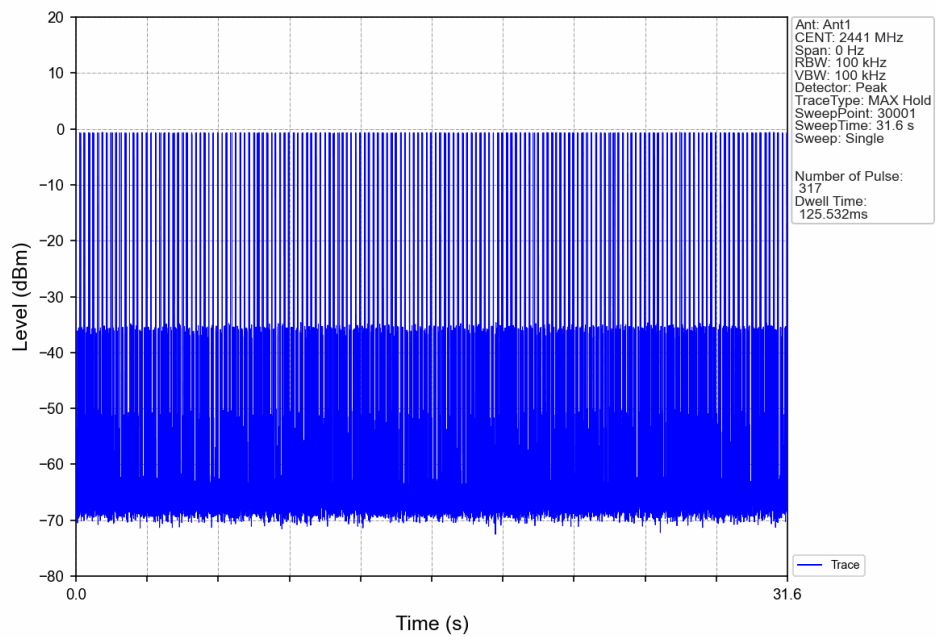
# GFSK DH5 HOPP Ant1 NTN



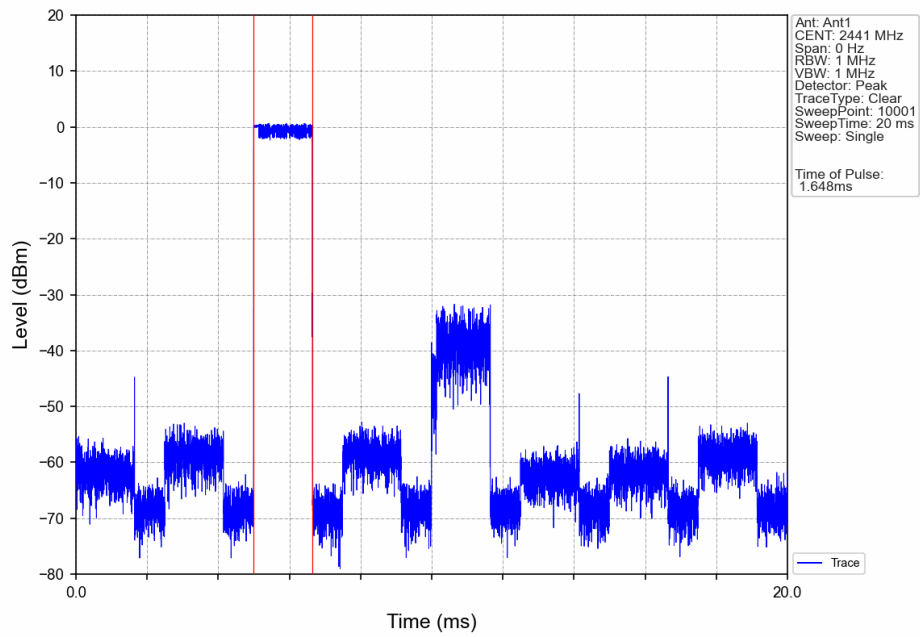
# Pi/4DQPSK 2DH1 HOPP Ant1 NTN



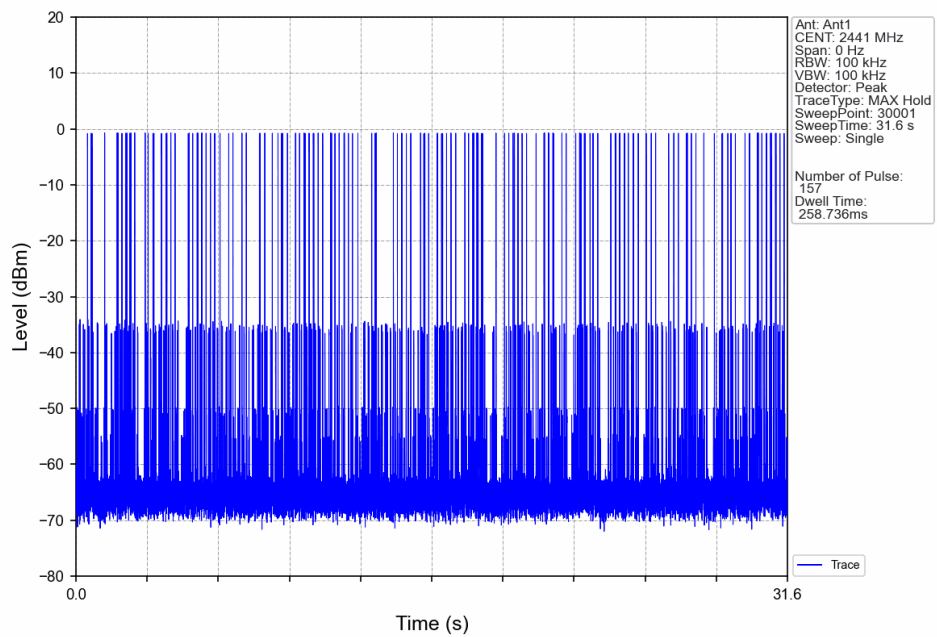
# Pi/4DQPSK 2DH1 HOPP Ant1 NTN



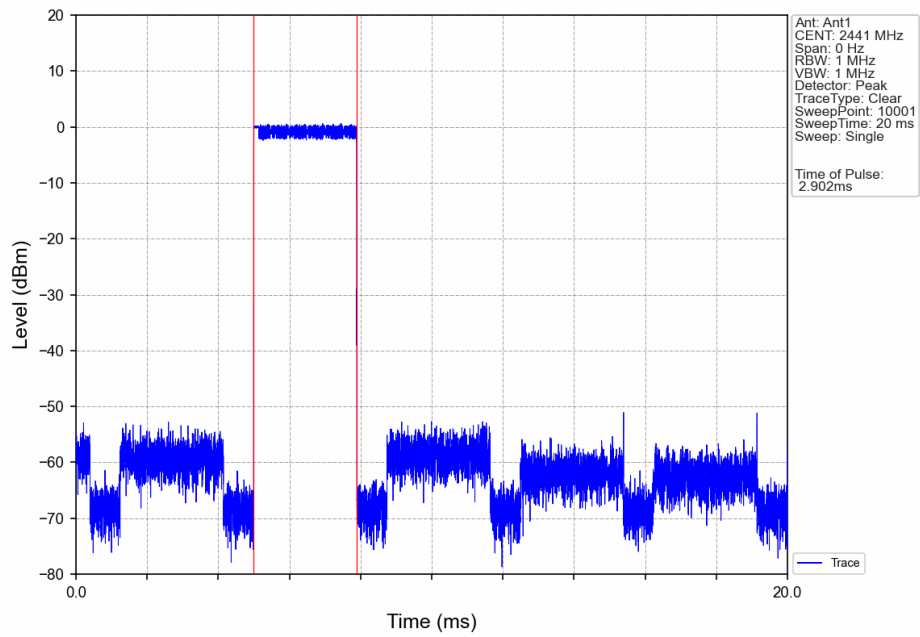
Pi/4DQPSK 2DH3 HOPP Ant1 NTN



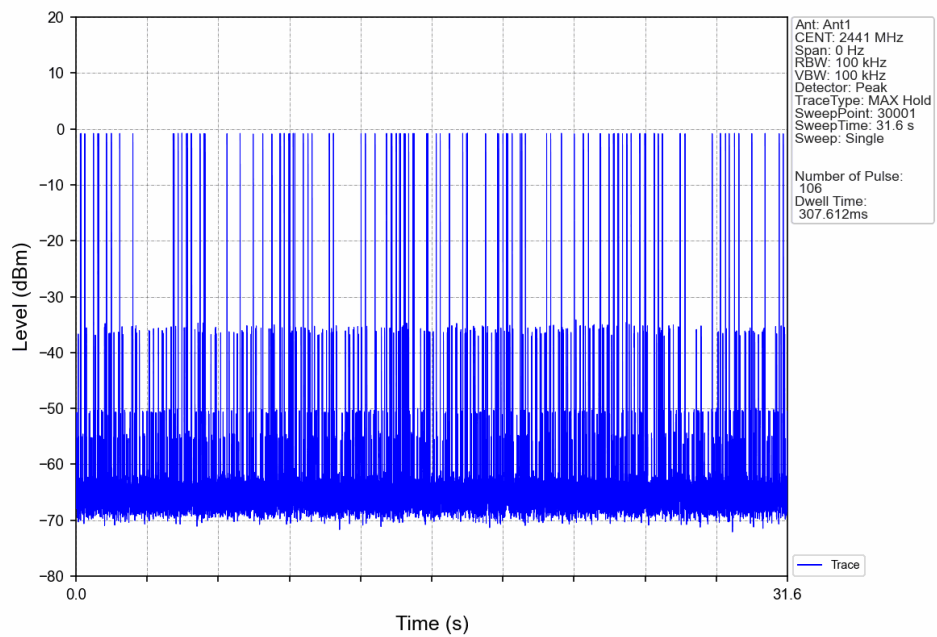
Pi/4DQPSK 2DH3 HOPP Ant1 NTN



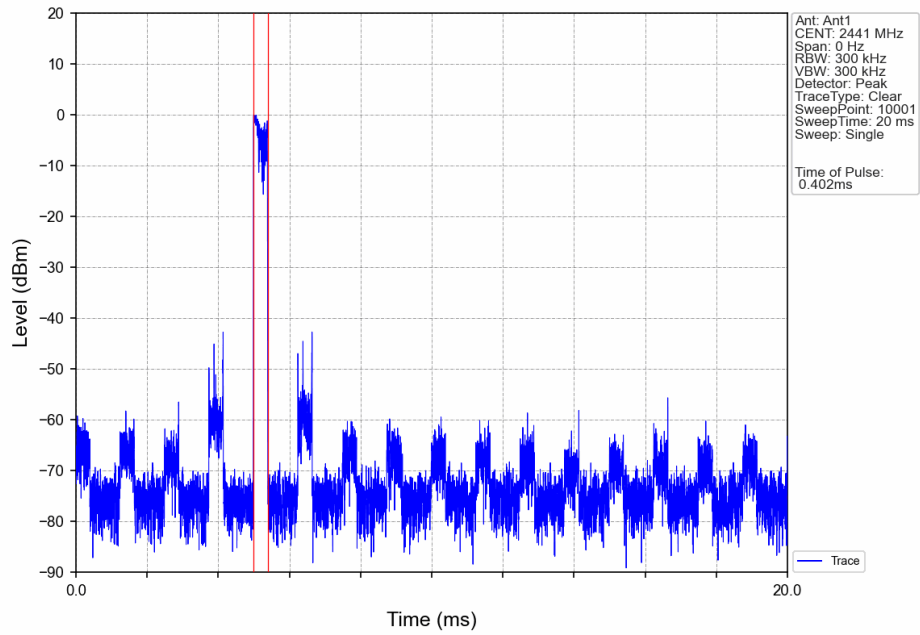
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



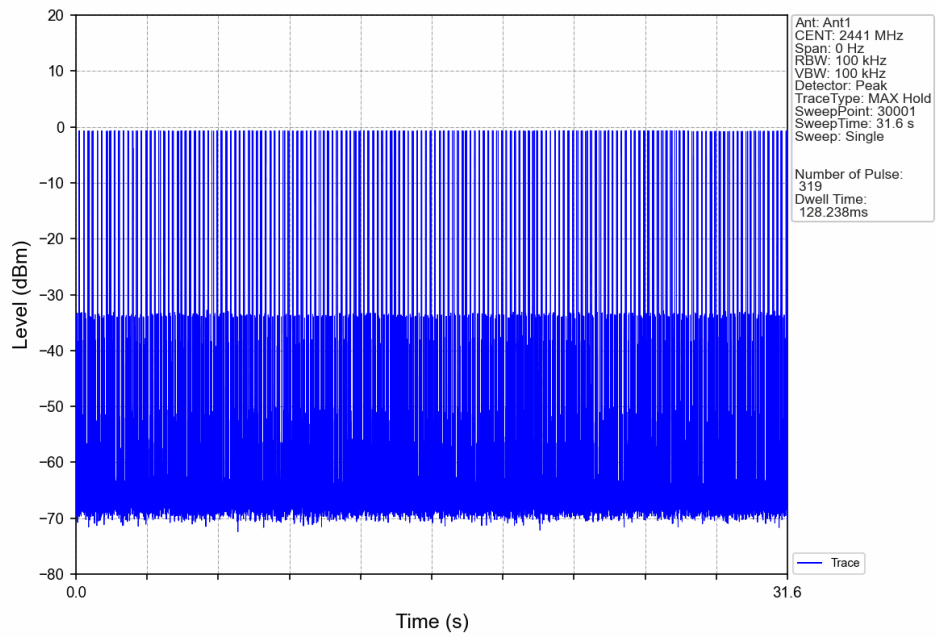
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



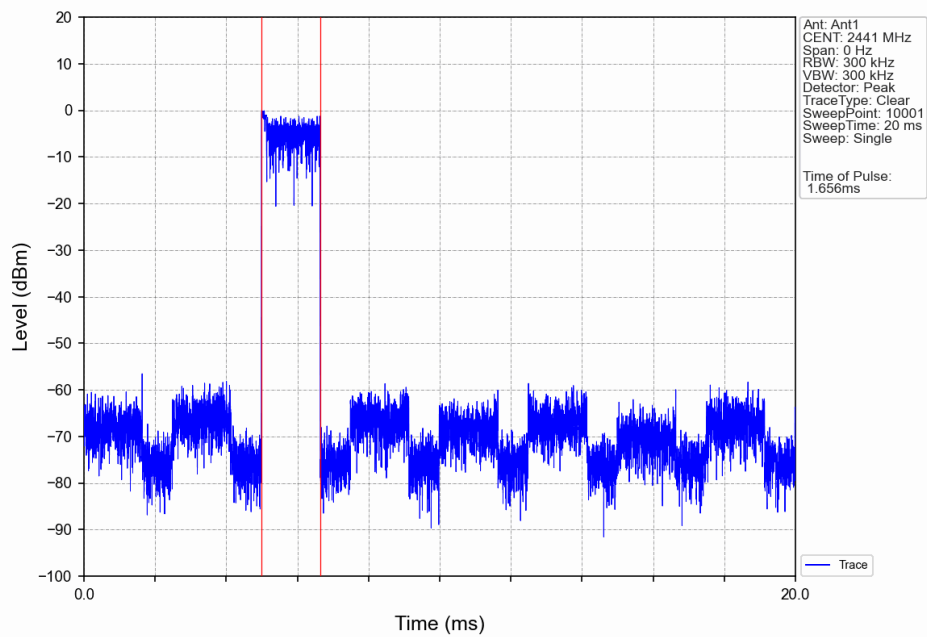
# 8DPSK 3DH1 HOPP Ant1 NTNV



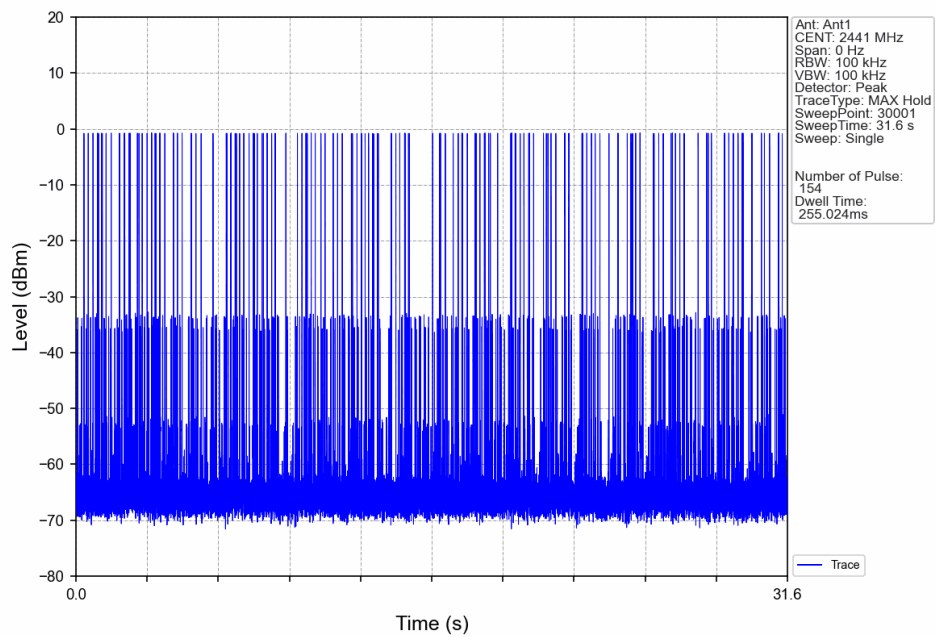
# 8DPSK 3DH1 HOPP Ant1 NTNV



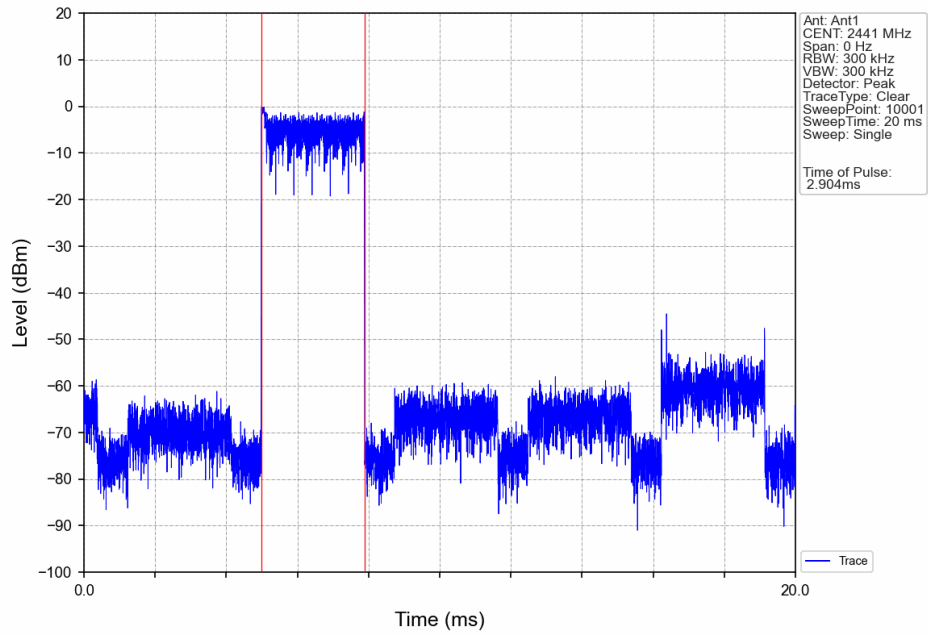
8DPSK 3DH3 HOPP Ant1 NTNV



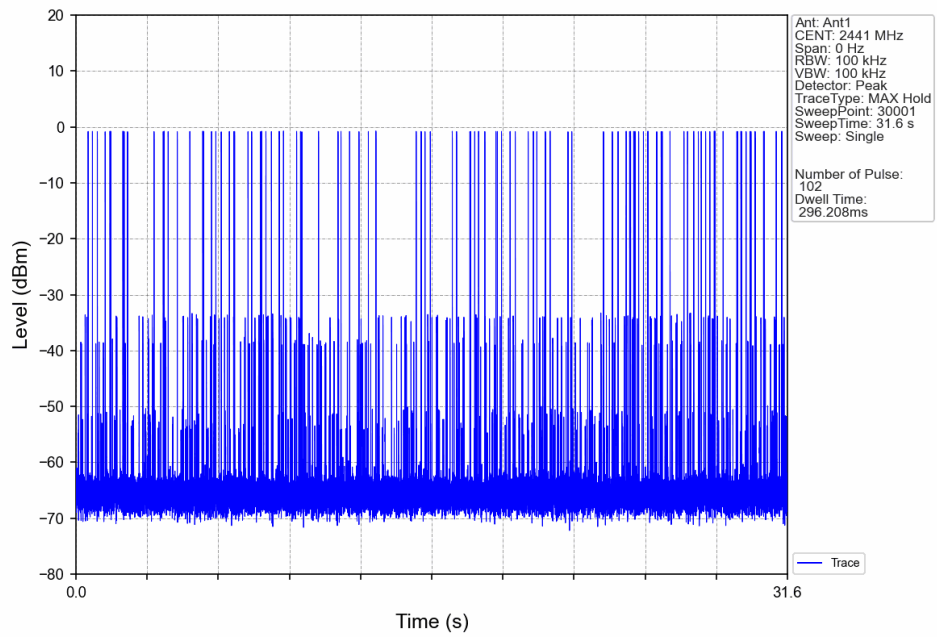
8DPSK 3DH3 HOPP Ant1 NTNV



# 8DPSK 3DH5 HOPP Ant1 NTNV



# 8DPSK 3DH5 HOPP Ant1 NTNV



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

### 6.1 Test Result

#### 6.1.1 Ref

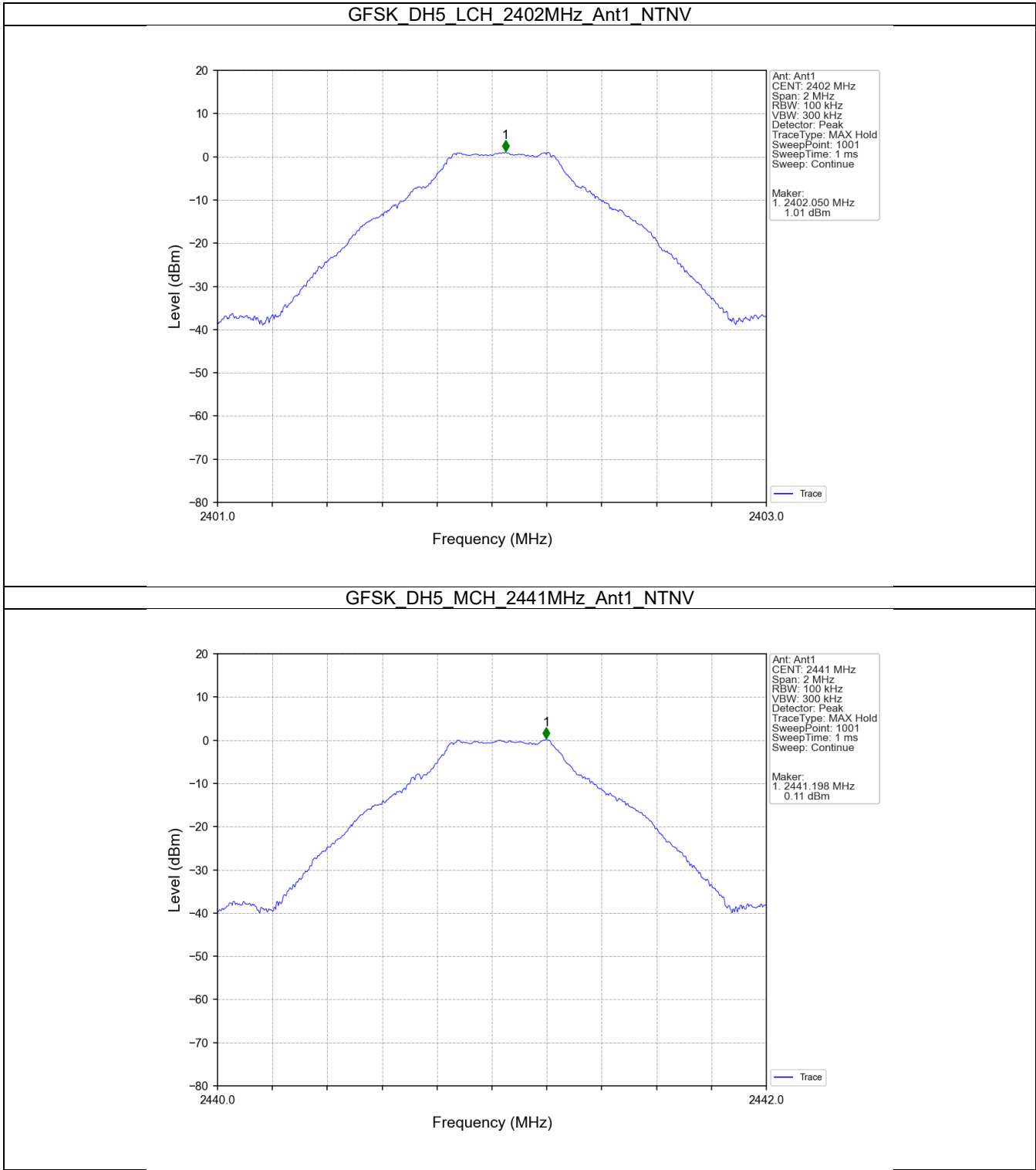
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-----------|---------|-----------------|-------------|-----|--------------------------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 1.01                     |
|           |         | 2441            | DH5         | 1   | 0.11                     |
|           |         | 2480            | DH5         | 1   | -1.05                    |
|           |         | HOPP            | DH5         | 1   | 0.97                     |
|           |         |                 |             |     | 0.97                     |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.01                     |
|           |         | 2441            | 2DH5        | 1   | 0.16                     |
|           |         | 2480            | 2DH5        | 1   | -1.06                    |
|           |         | HOPP            | 2DH5        | 1   | 0.91                     |
|           |         |                 |             |     | 0.91                     |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.00                     |
|           |         | 2441            | 3DH5        | 1   | 0.12                     |
|           |         | 2480            | 3DH5        | 1   | -1.15                    |
|           |         | HOPP            | 3DH5        | 1   | 1.08                     |
|           |         |                 |             |     | 1.08                     |

#### 6.1.2 CSE

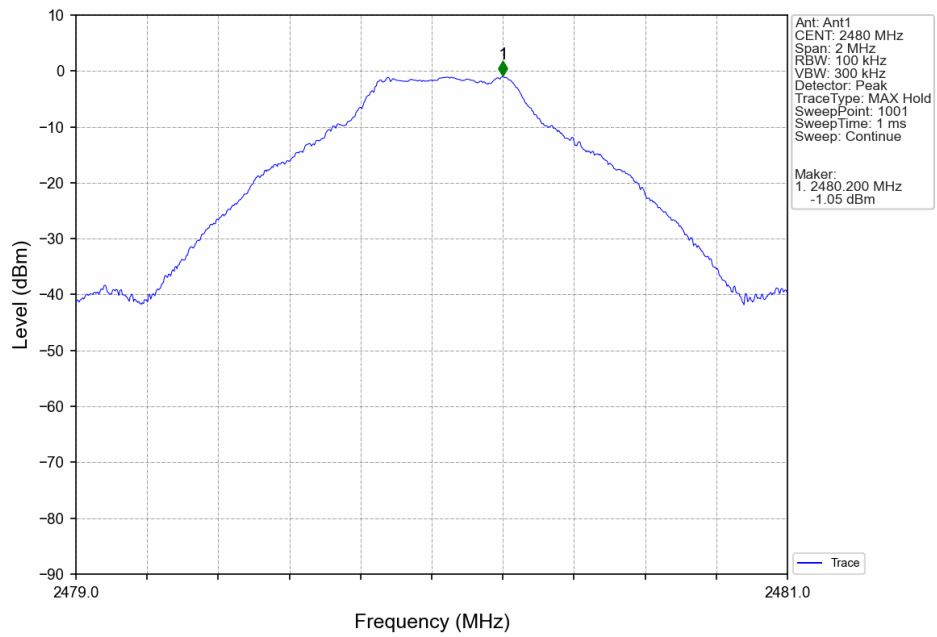
| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-----------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 1.01                     | -18.99      | Pass    |
|           |         | 2441            | DH5         | 1   | 0.11                     | -19.89      | Pass    |
|           |         | 2480            | DH5         | 1   | -1.05                    | -21.05      | Pass    |
|           |         | HOPP            | DH5         | 1   | 0.97                     | -19.03      | Pass    |
|           |         |                 |             |     | 0.97                     | -19.03      | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 1.01                     | -18.99      | Pass    |
|           |         | 2441            | 2DH5        | 1   | 0.16                     | -19.84      | Pass    |
|           |         | 2480            | 2DH5        | 1   | -1.06                    | -21.06      | Pass    |
|           |         | HOPP            | 2DH5        | 1   | 0.91                     | -19.09      | Pass    |
|           |         |                 |             |     | 0.91                     | -19.09      | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 1.00                     | -19.00      | Pass    |
|           |         | 2441            | 3DH5        | 1   | 0.12                     | -19.88      | Pass    |
|           |         | 2480            | 3DH5        | 1   | -1.15                    | -21.15      | Pass    |
|           |         | HOPP            | 3DH5        | 1   | 1.08                     | -18.92      | Pass    |
|           |         |                 |             |     | 1.08                     | -18.92      | Pass    |

6.2 Test Graph

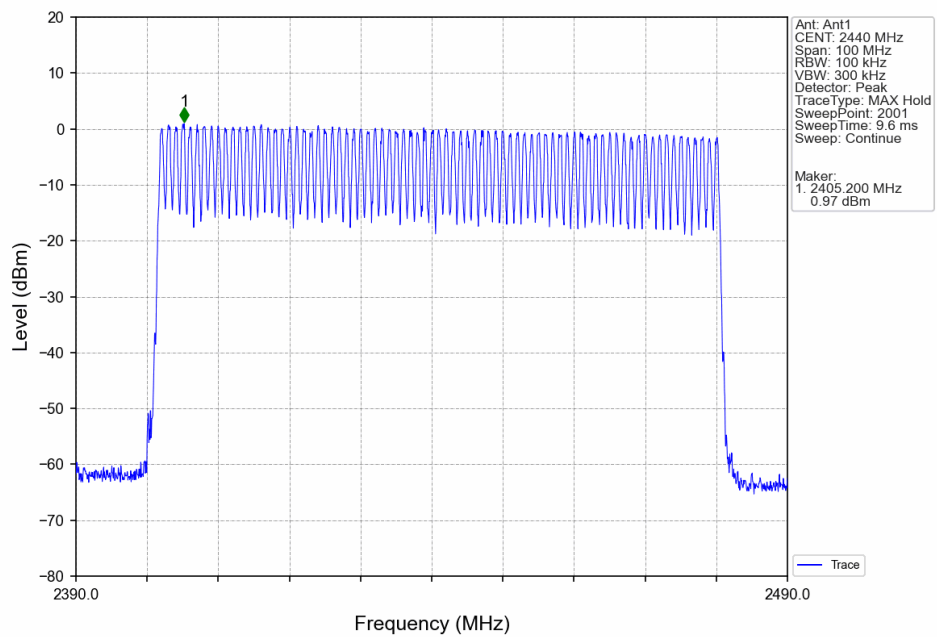
6.2.1 Ref



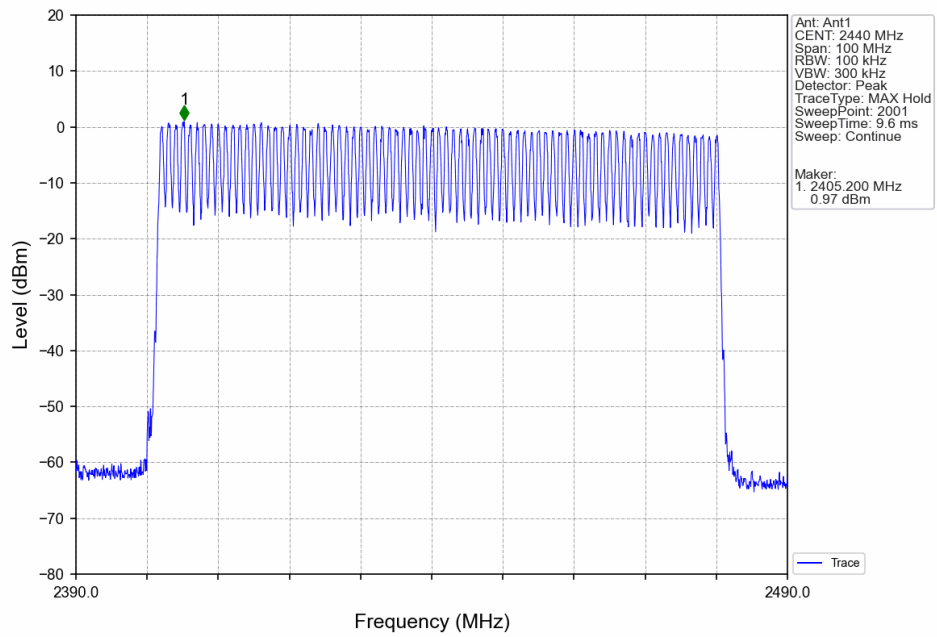
# GFSK DH5 HCH 2480MHz Ant1 NTNV



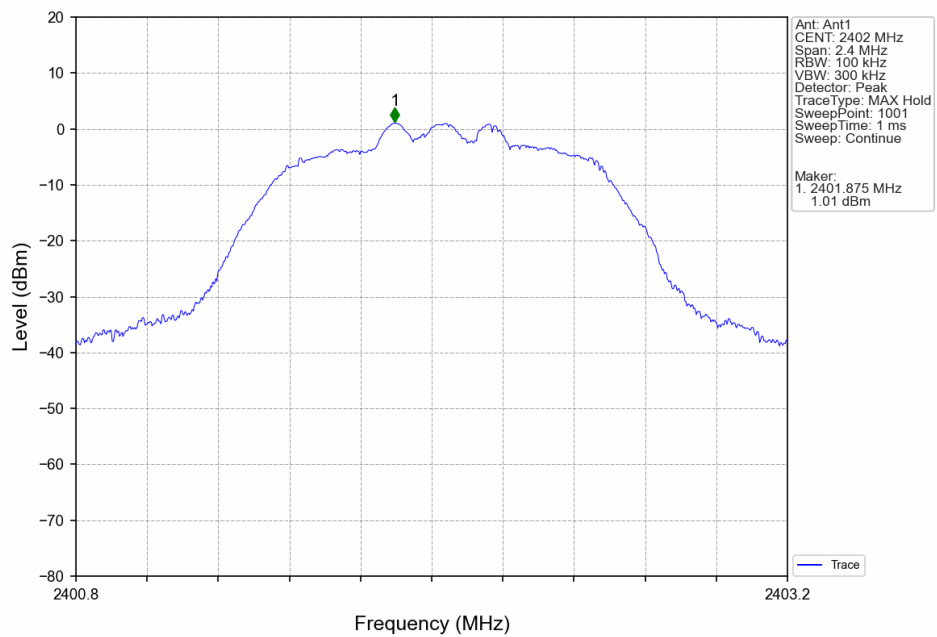
# GFSK DH5 HOPP Ant1 NTNV



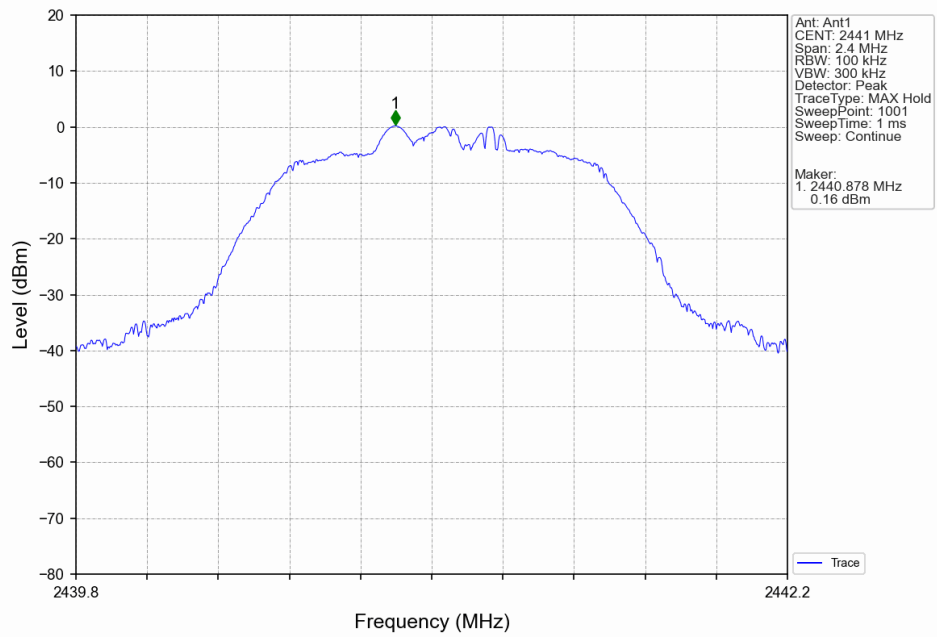
# GFSK DH5 HOPP Ant1 NTN



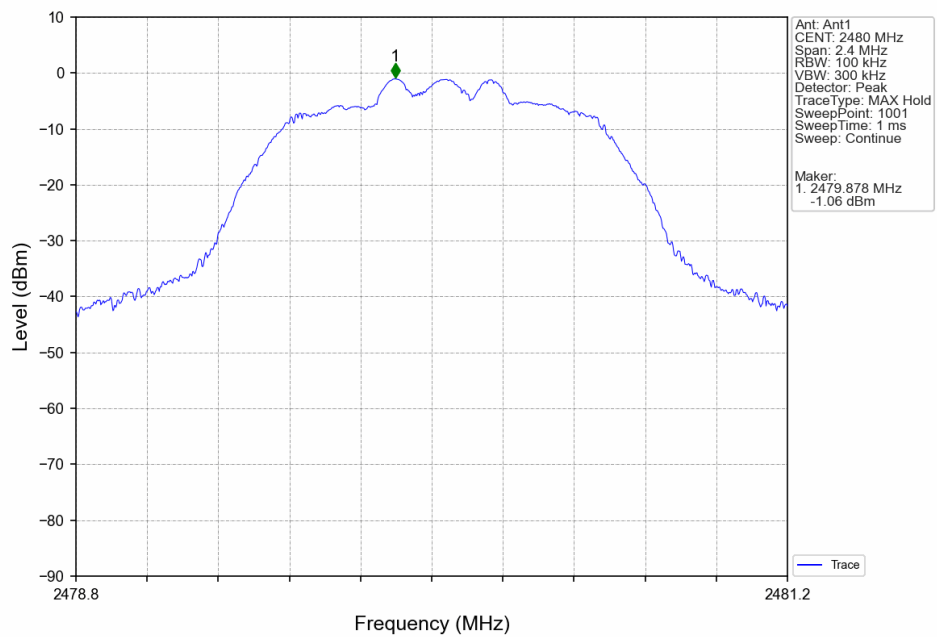
# Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



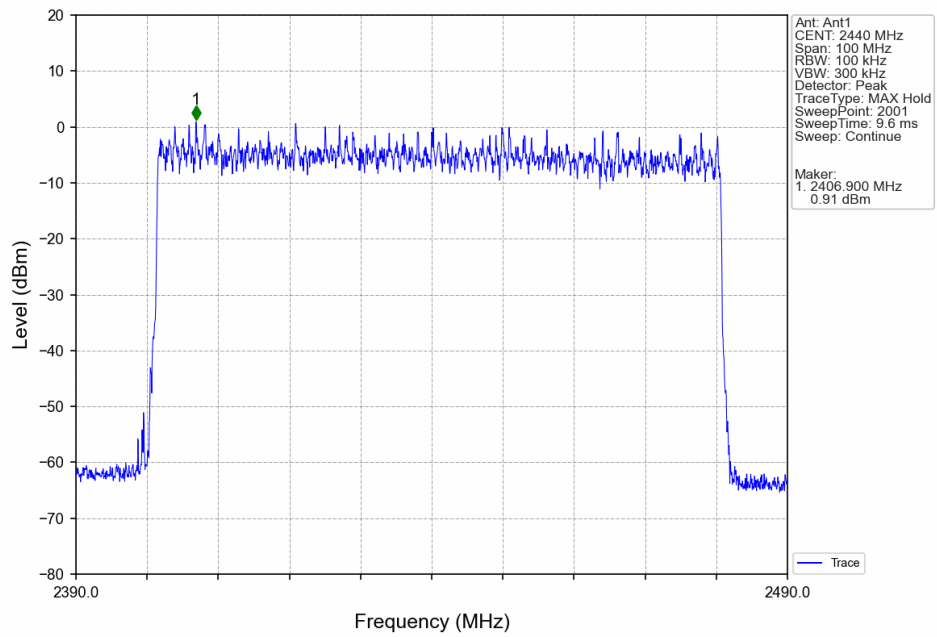
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTV



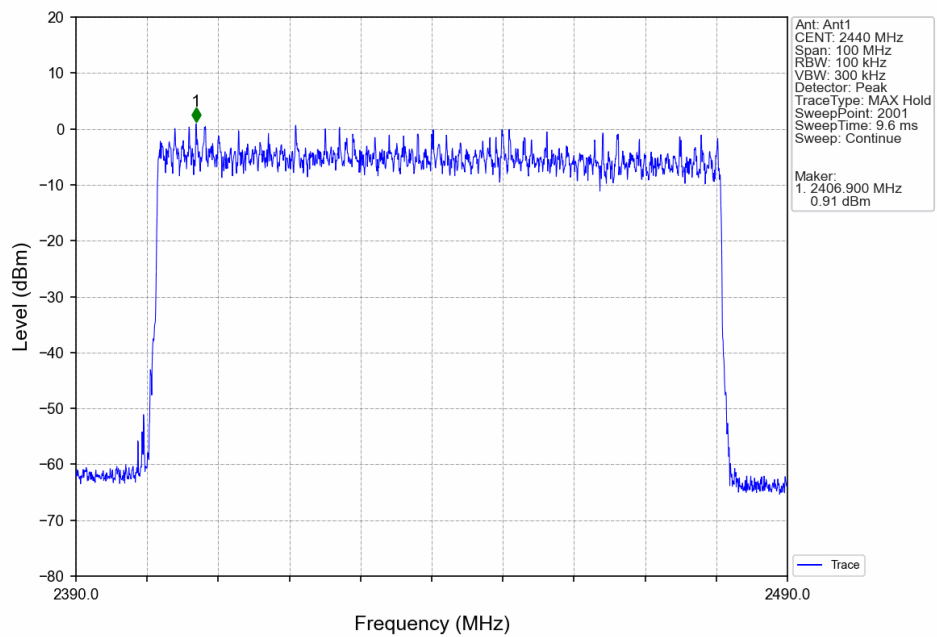
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTV



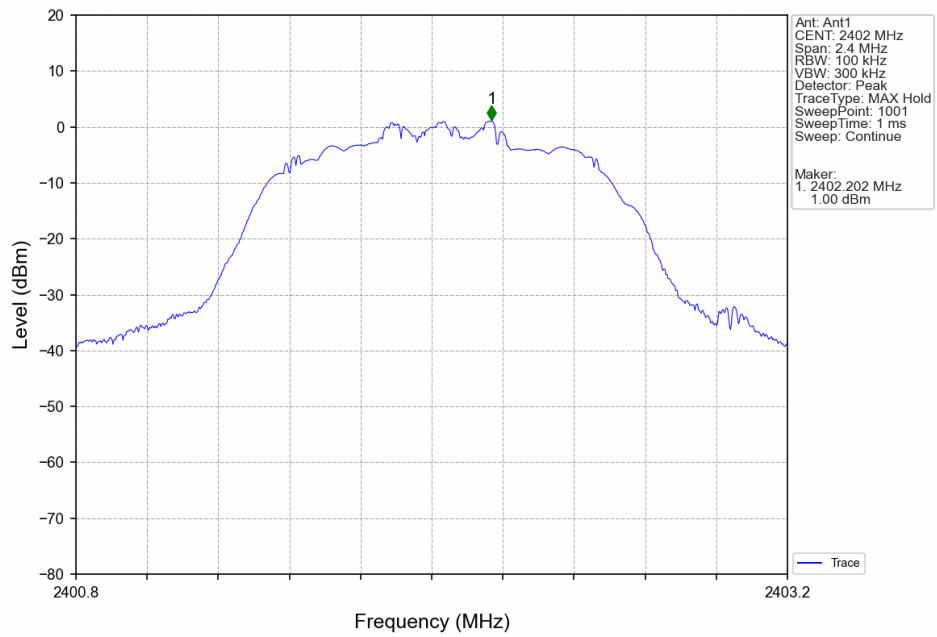
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



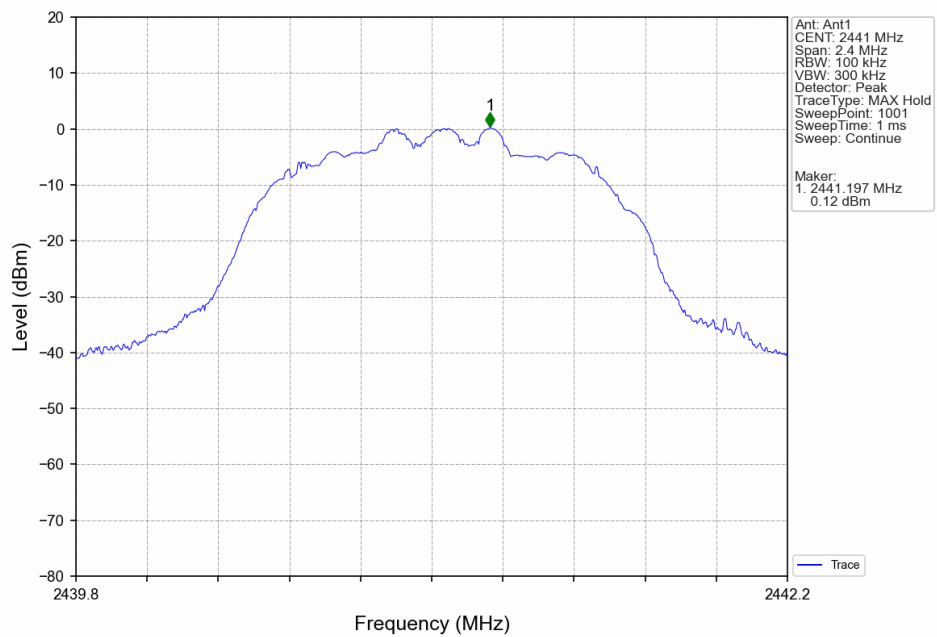
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



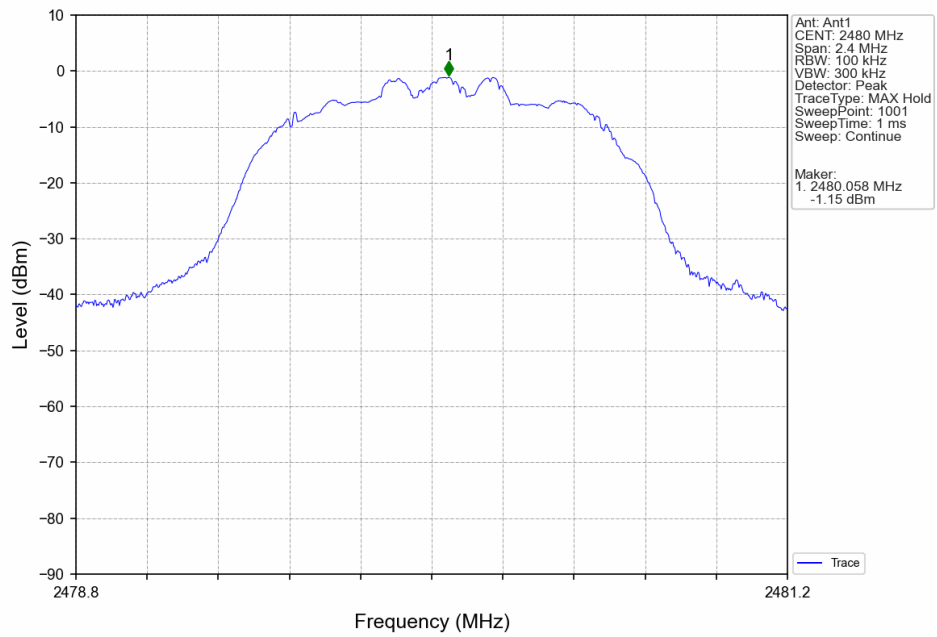
8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



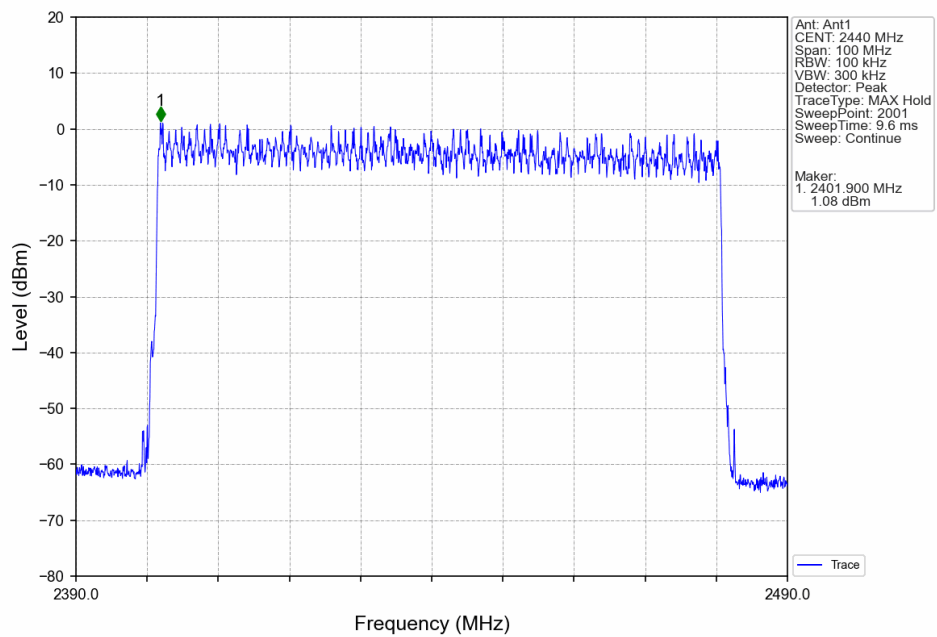
8DPSK 3DH5 MCH 2441MHz Ant1 NTNV



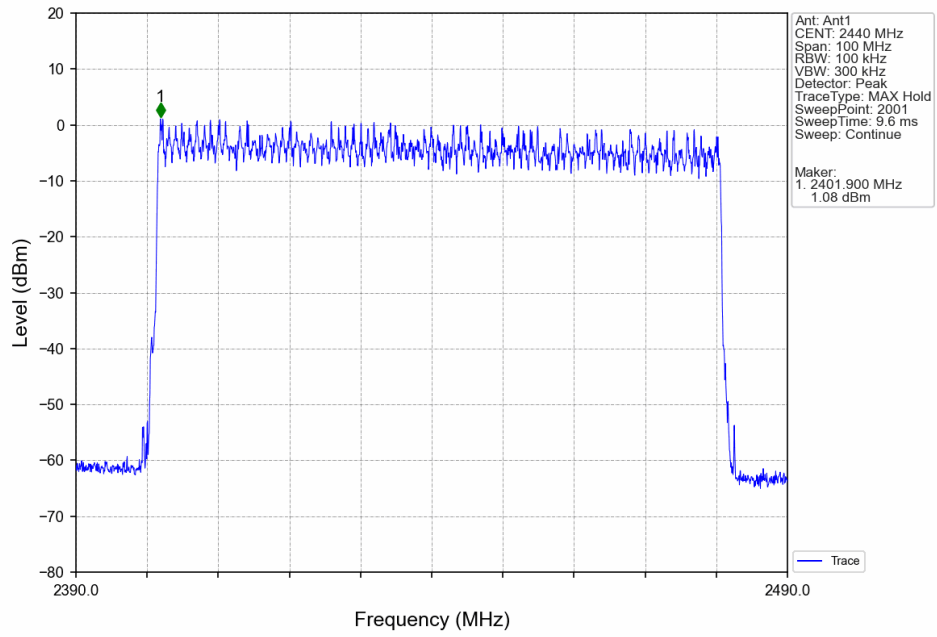
# 8DPSK 3DH5 HCH 2480MHz Ant1 NTN



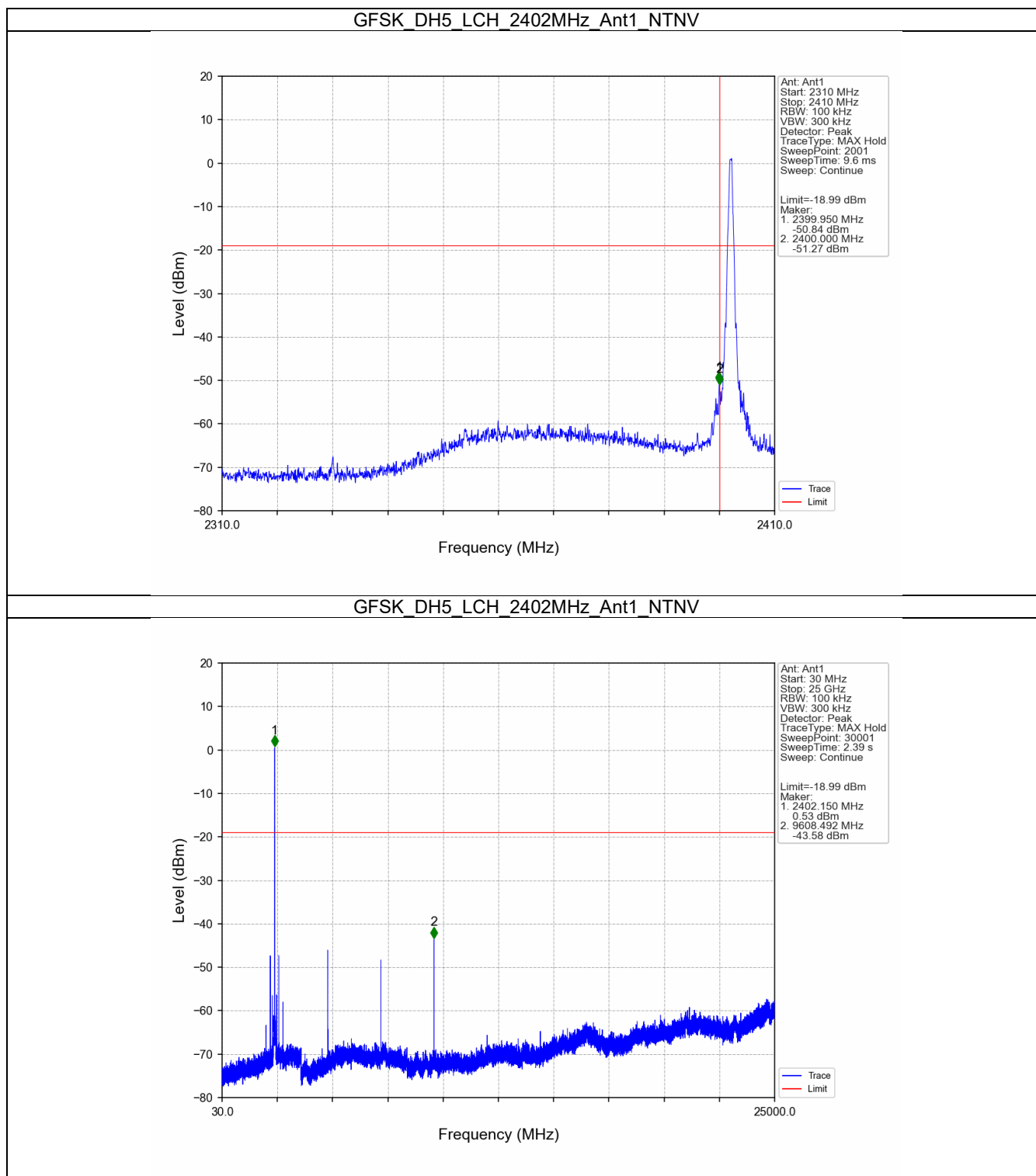
# 8DPSK 3DH5 HOPP Ant1 NTN



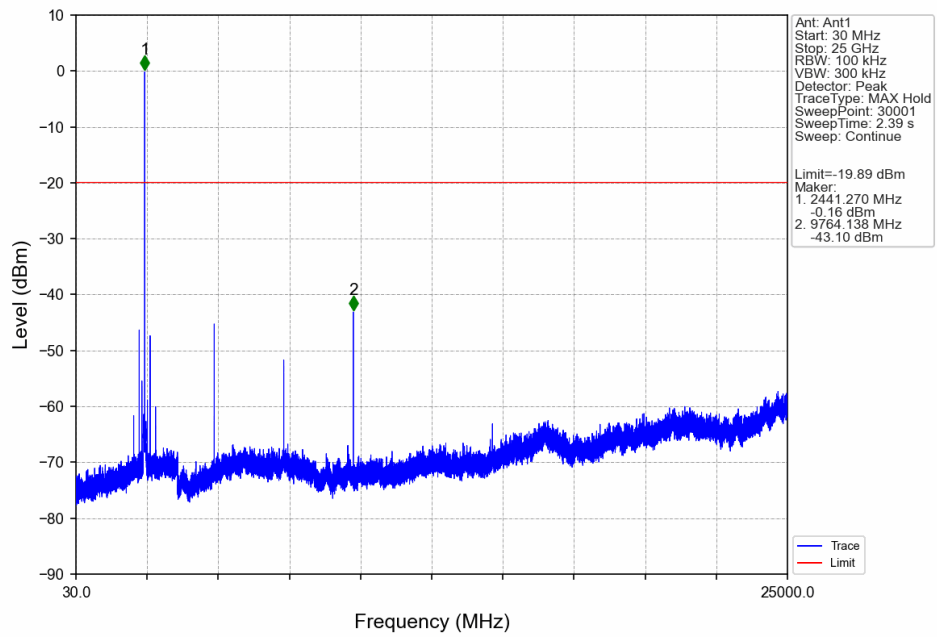
# 8DPSK 3DH5 HOPP Ant1 NTN



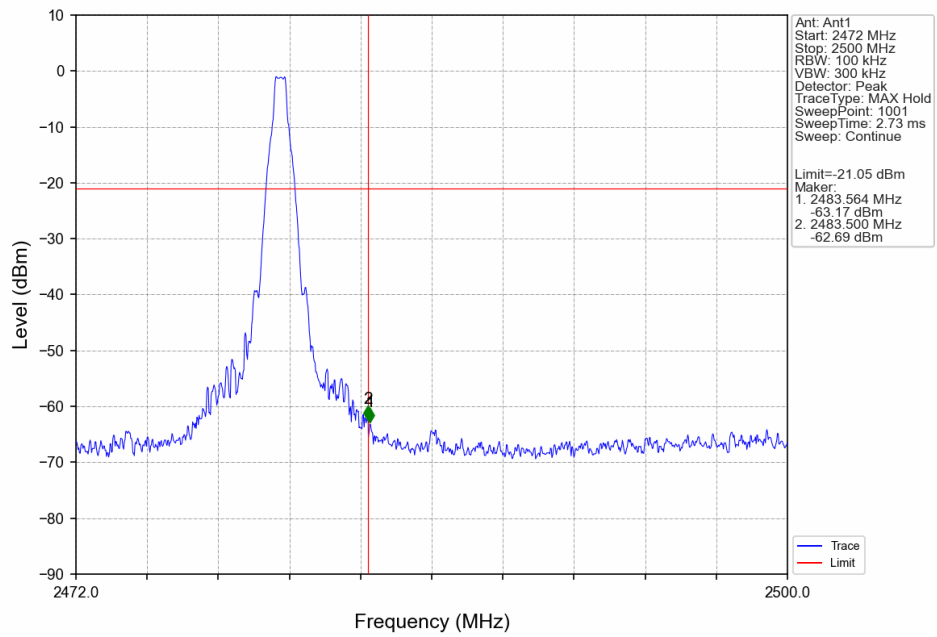
## 6.2.2 CSE



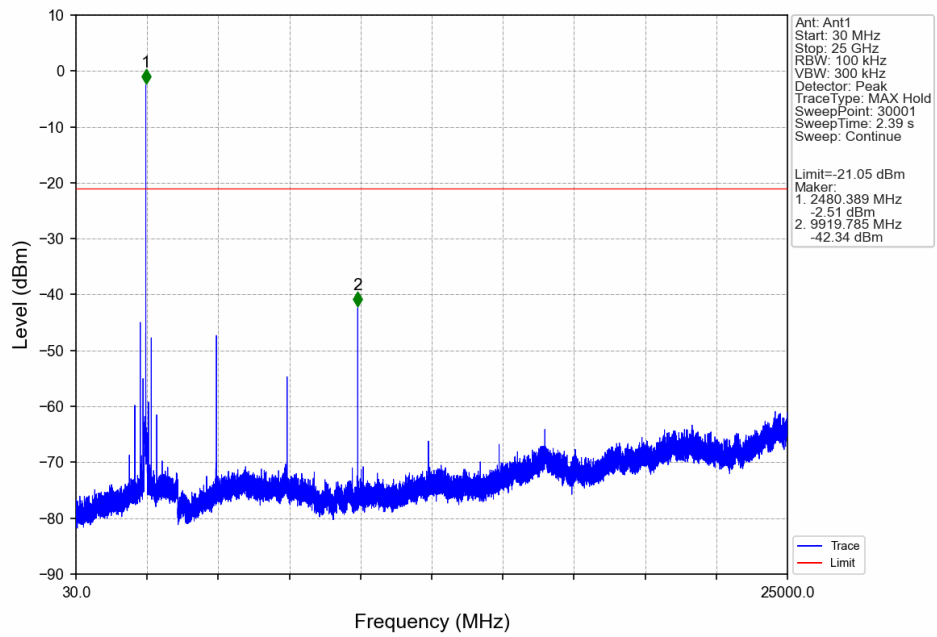
# GFSK DH5 MCH 2441MHz Ant1 NTNV



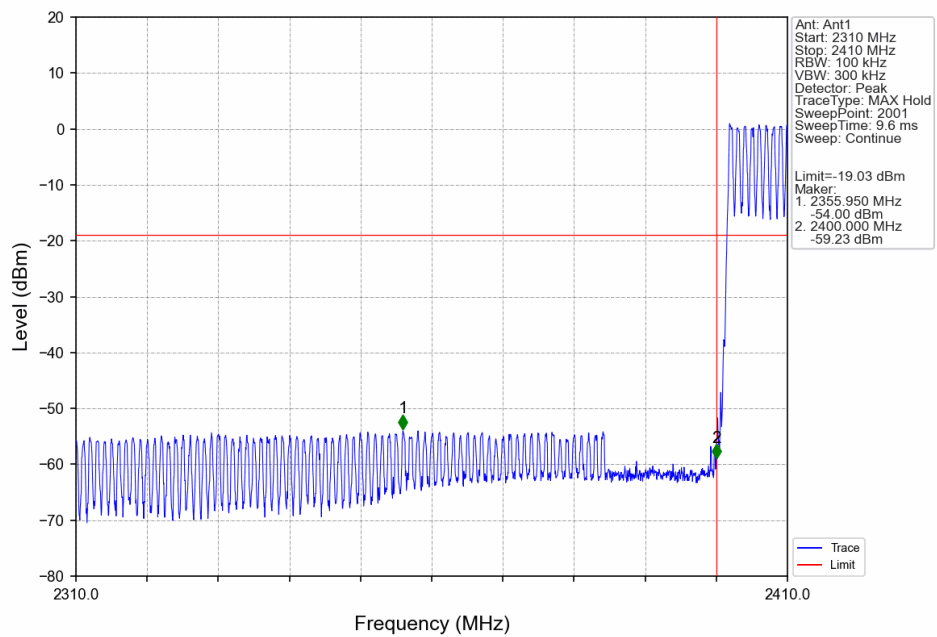
# GFSK DH5 HCH 2480MHz Ant1 NTNV



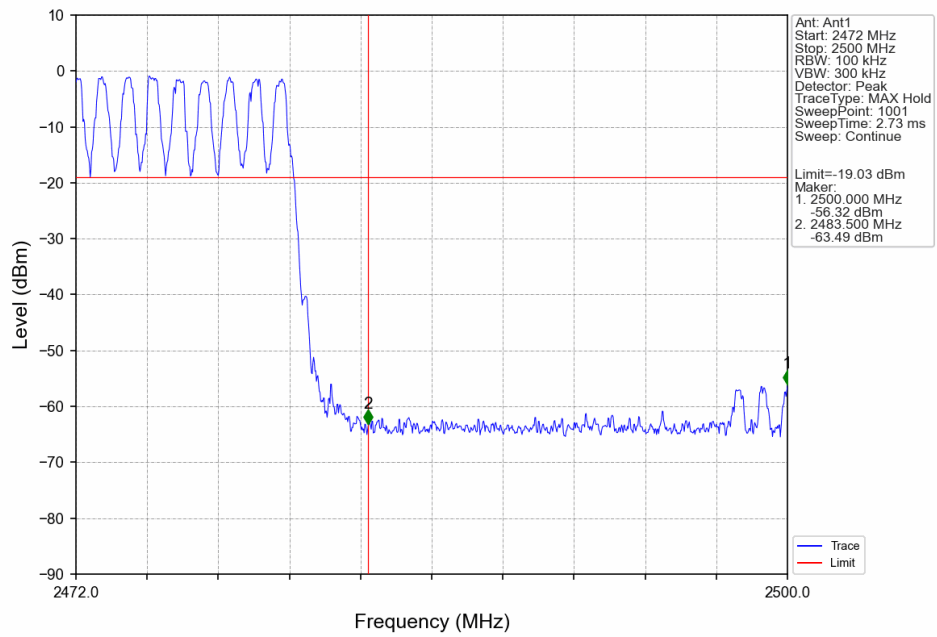
# GFSK DH5 HCH 2480MHz Ant1 NTNV



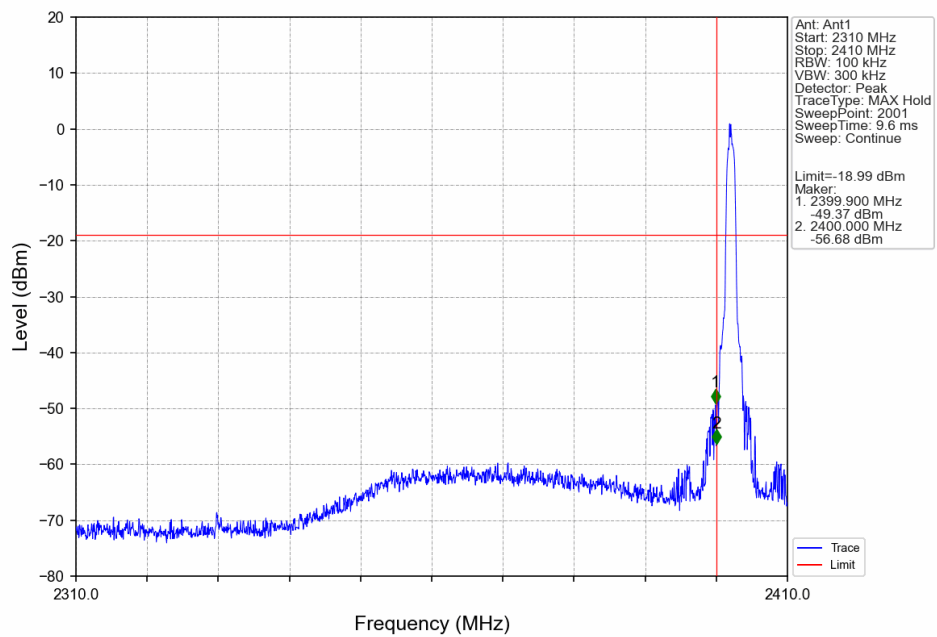
# GFSK DH5 HOPP Ant1 NTNV



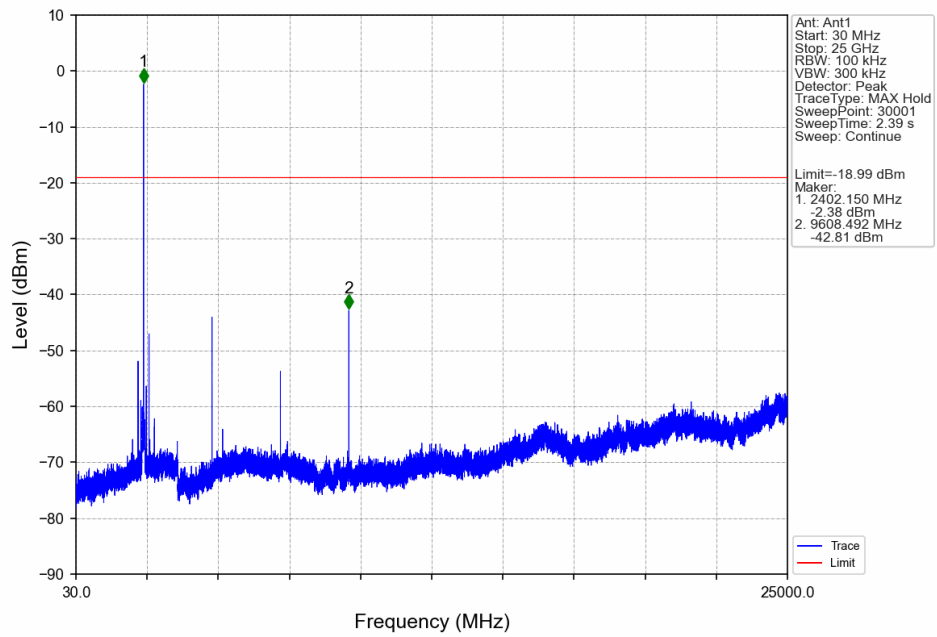
# GFSK DH5 HOPP Ant1 NTN



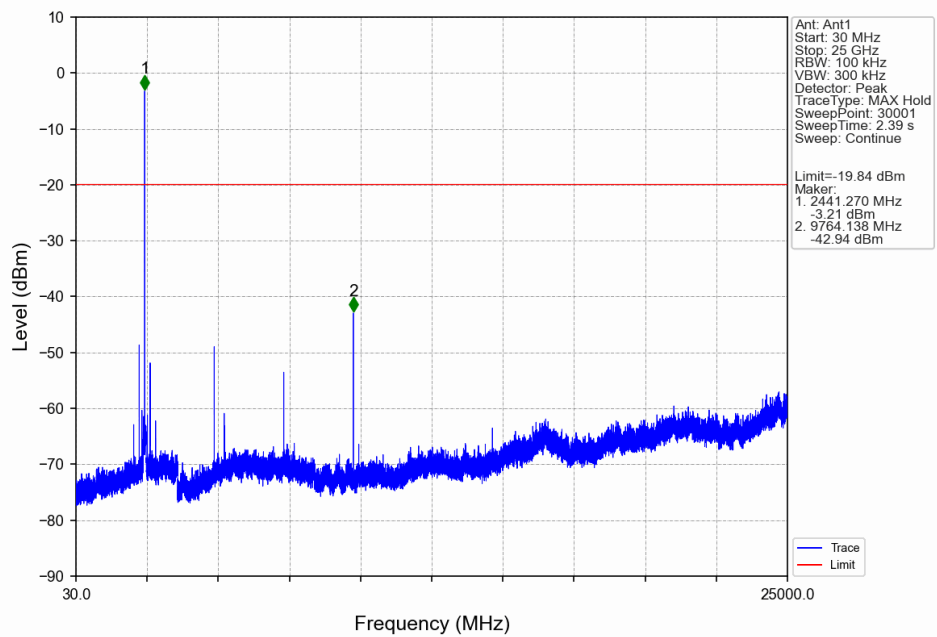
# Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



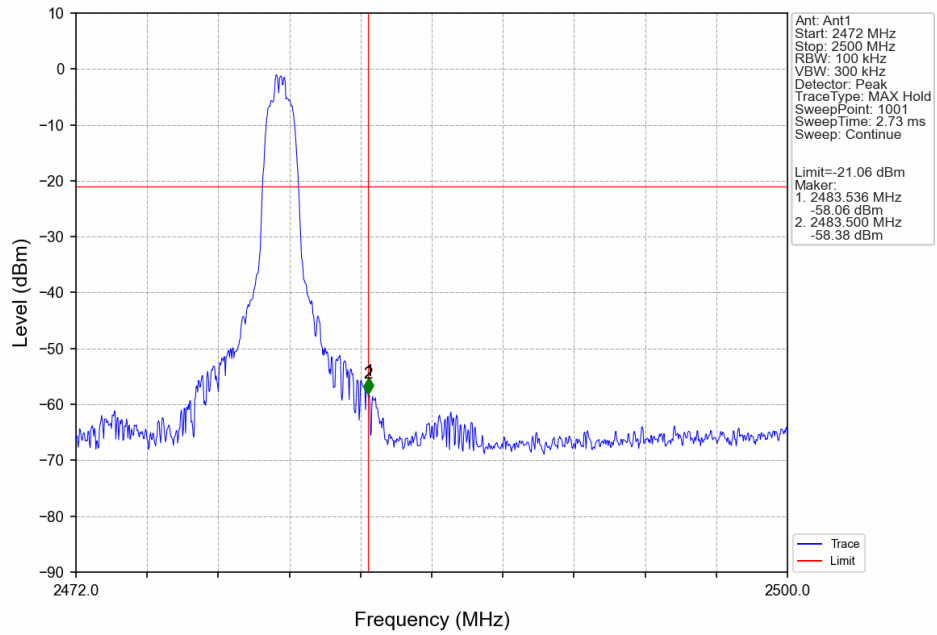
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



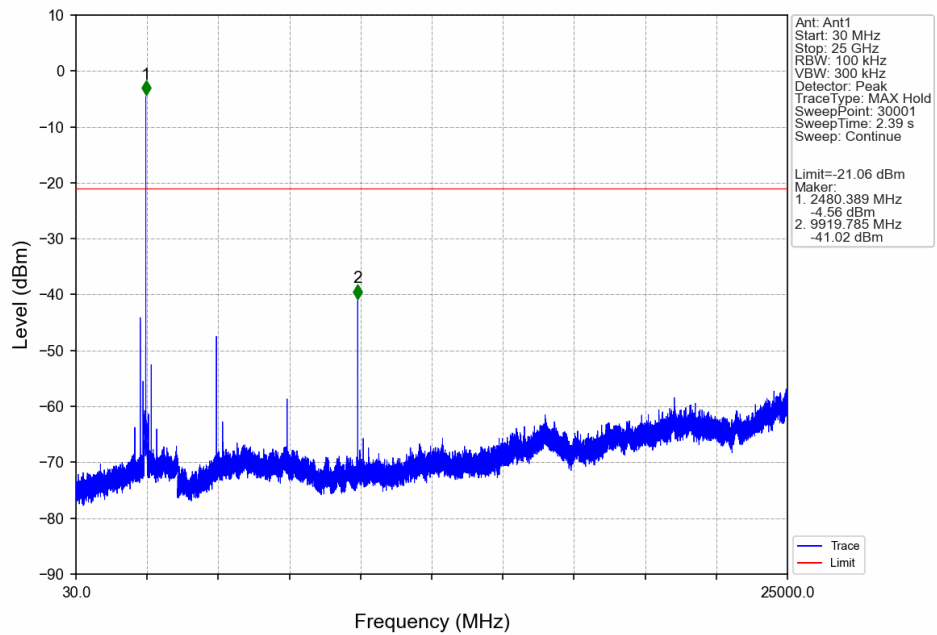
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



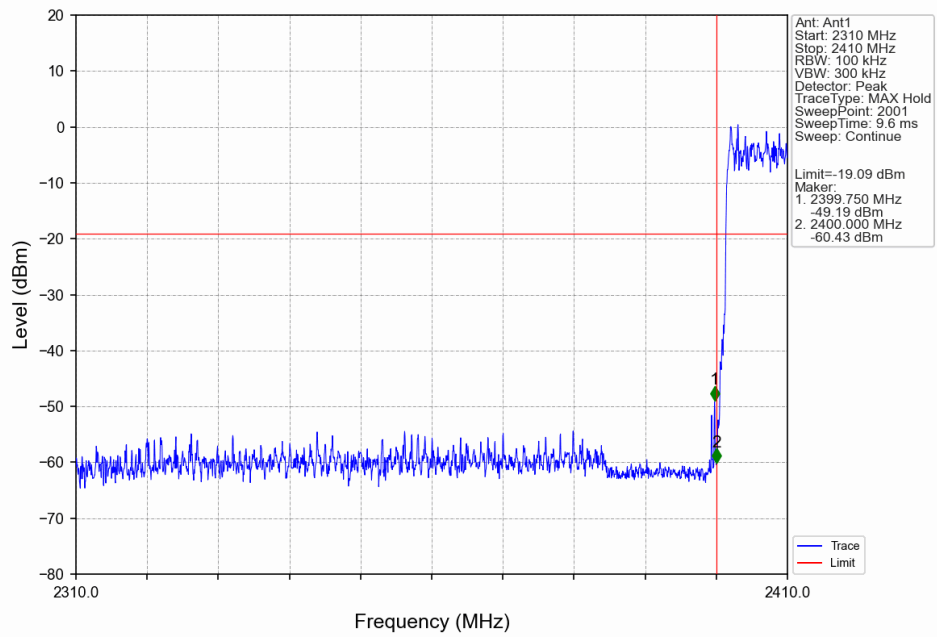
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV



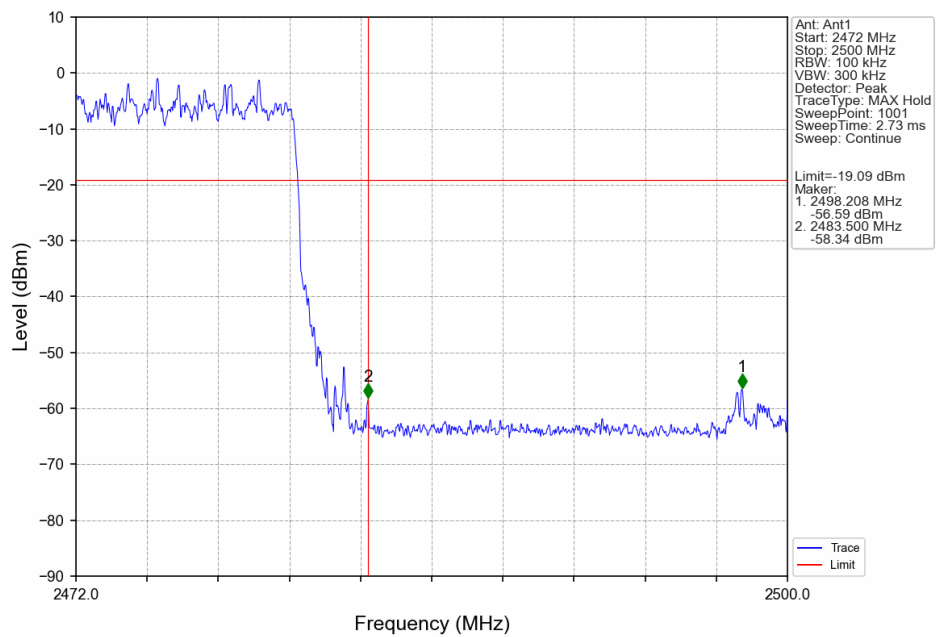
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV



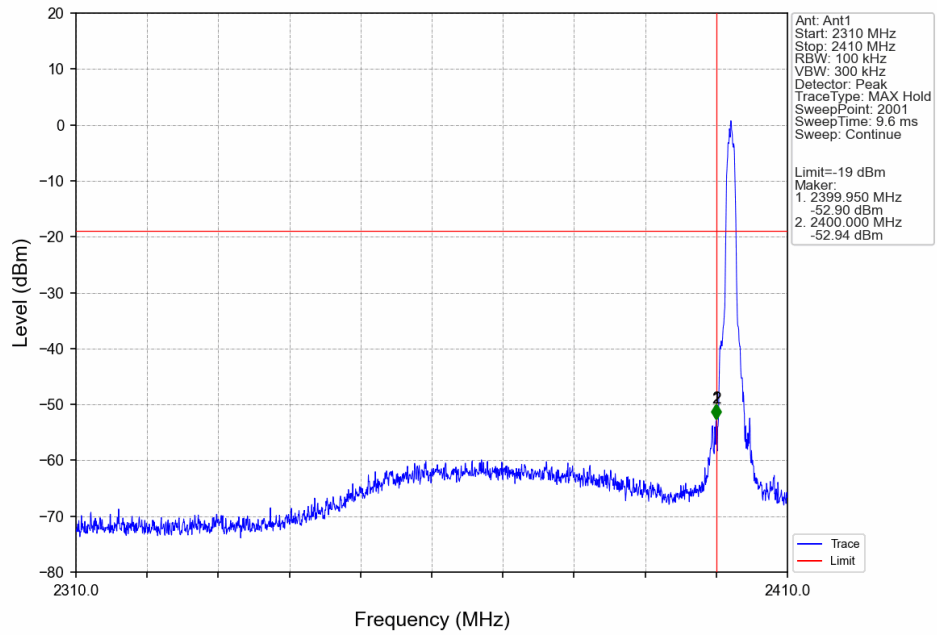
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



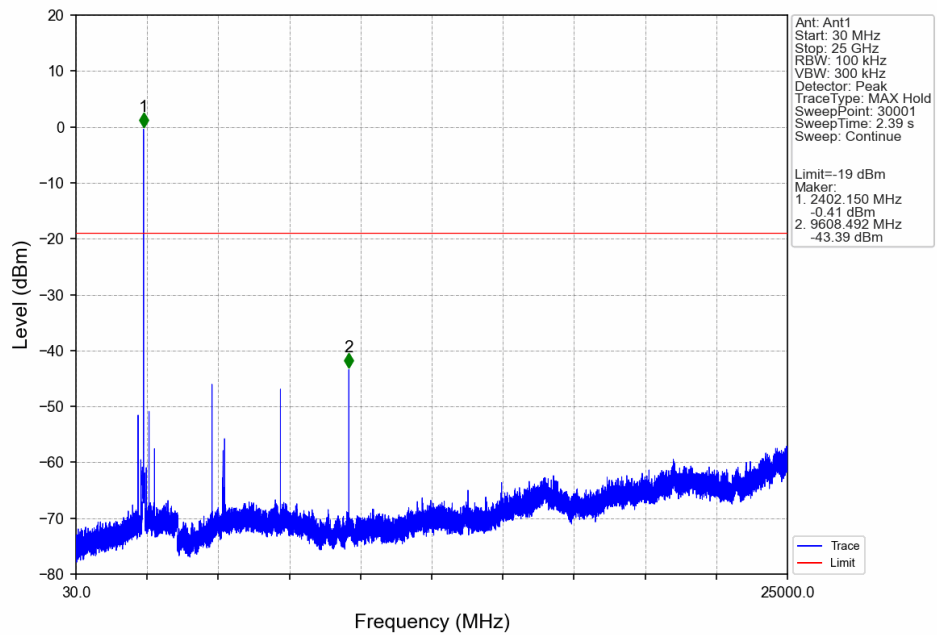
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



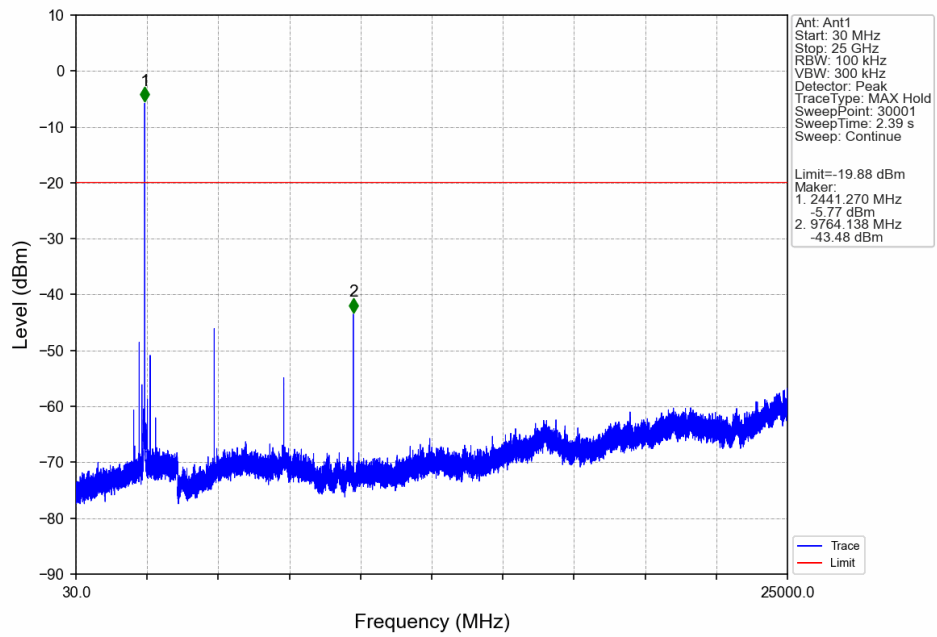
8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



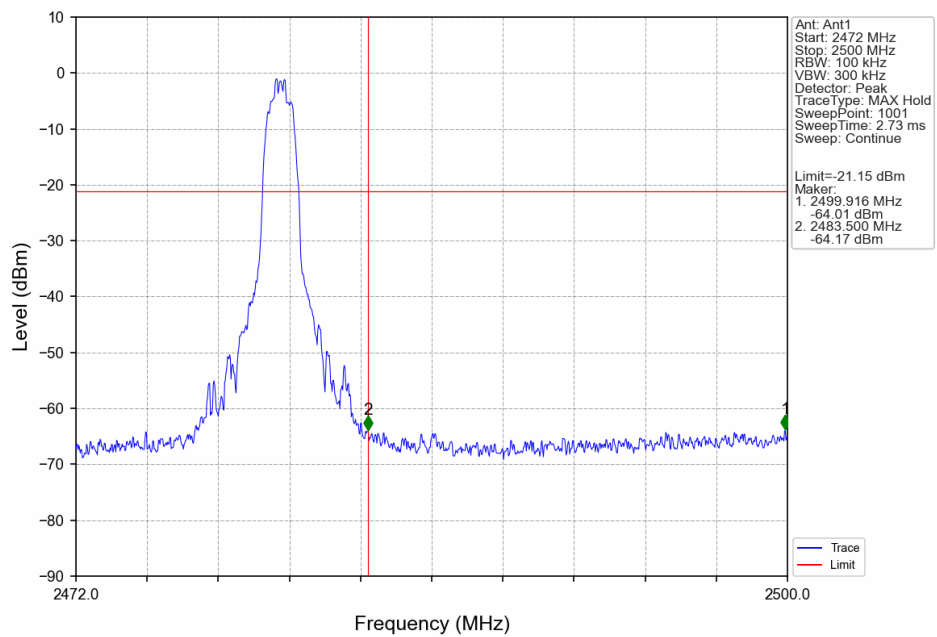
8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



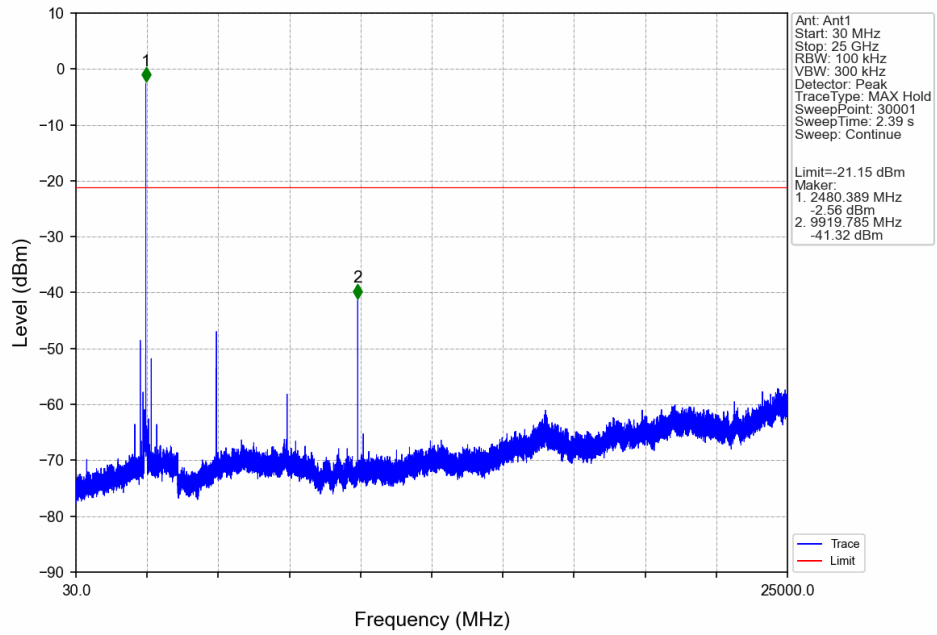
# 8DPSK 3DH5 MCH 2441MHz Ant1 NTV



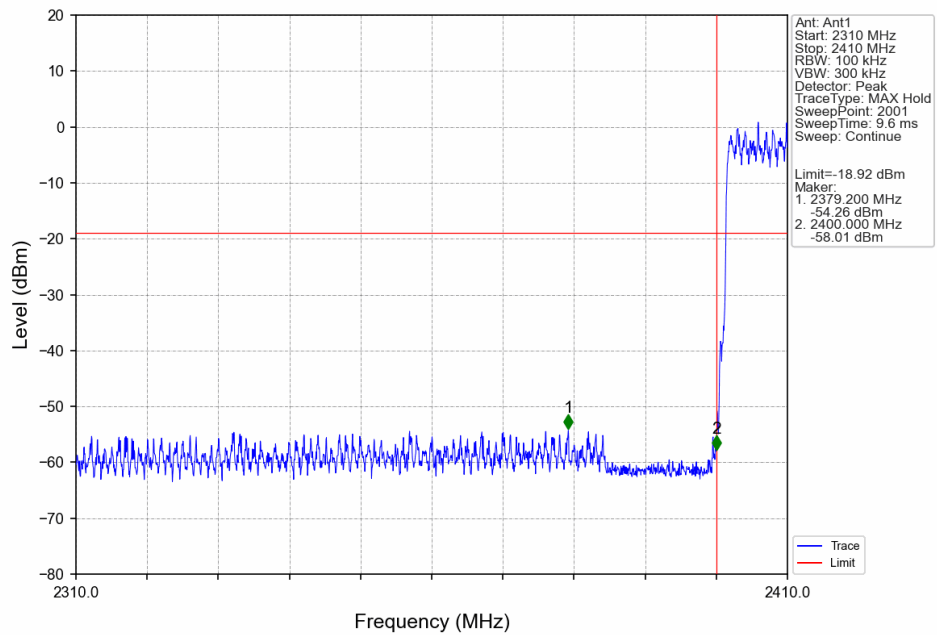
# 8DPSK 3DH5 HCH 2480MHz Ant1 NTV



# 8DPSK 3DH5 HCH 2480MHz Ant1 NTNV



# 8DPSK 3DH5 HOPP Ant1 NTNV



# 8DPSK 3DH5 HOPP Ant1 NTN

