

**Appendix B for SHEM210300243501CR-BT-R**

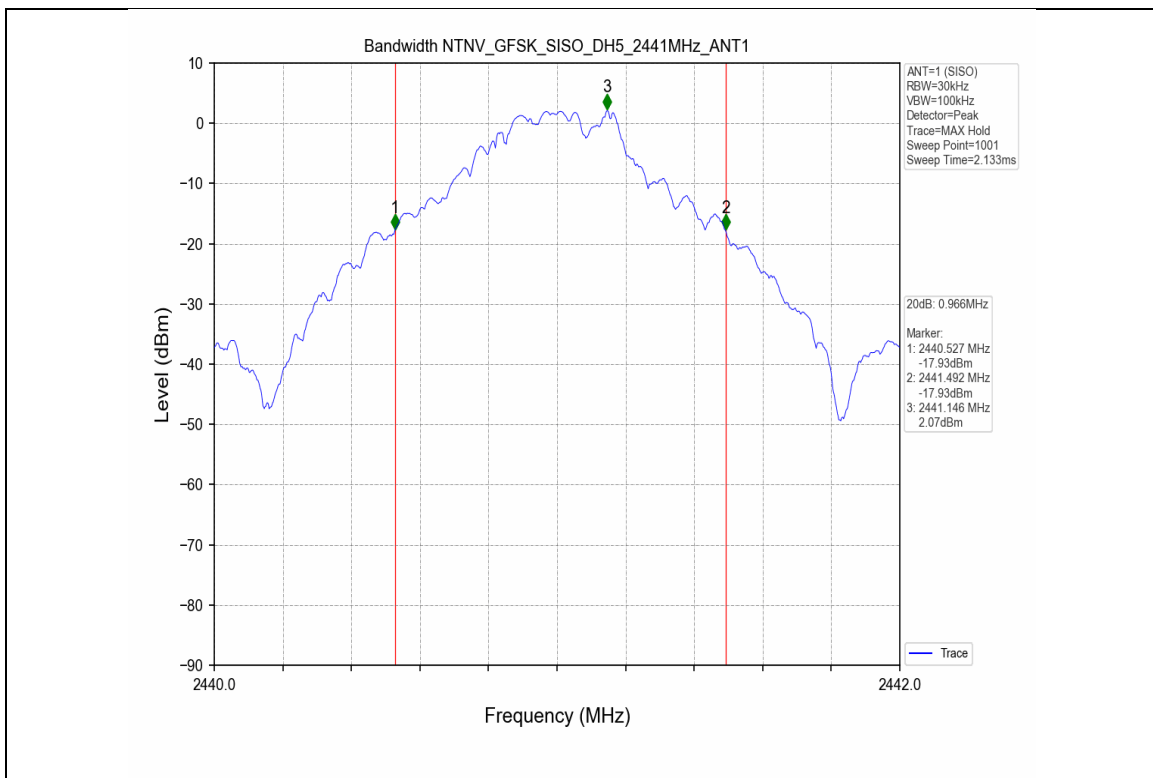
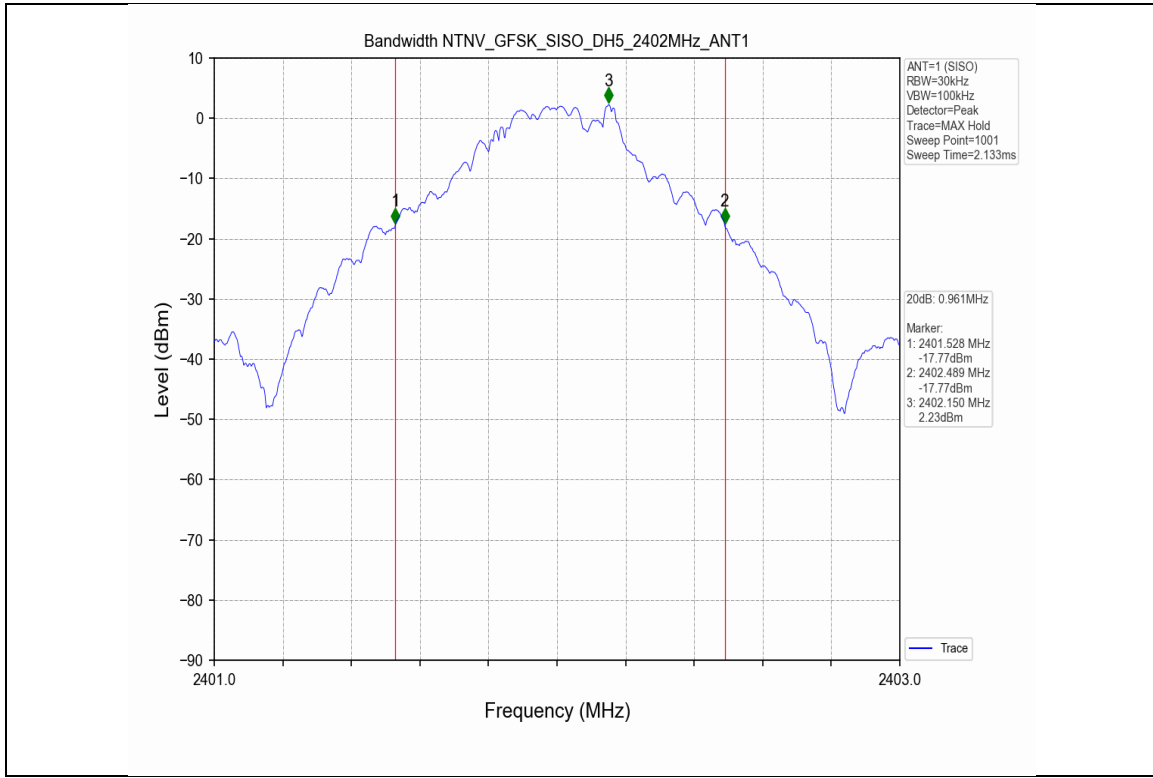
**1. Bandwidth**

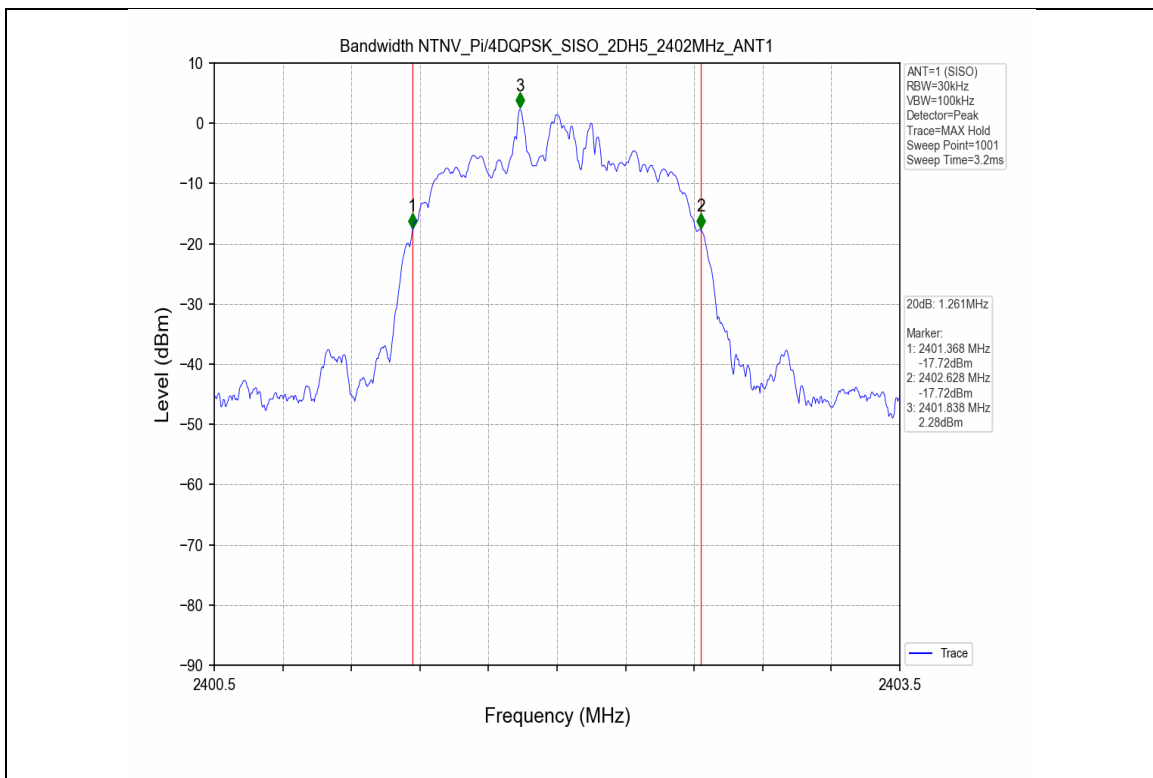
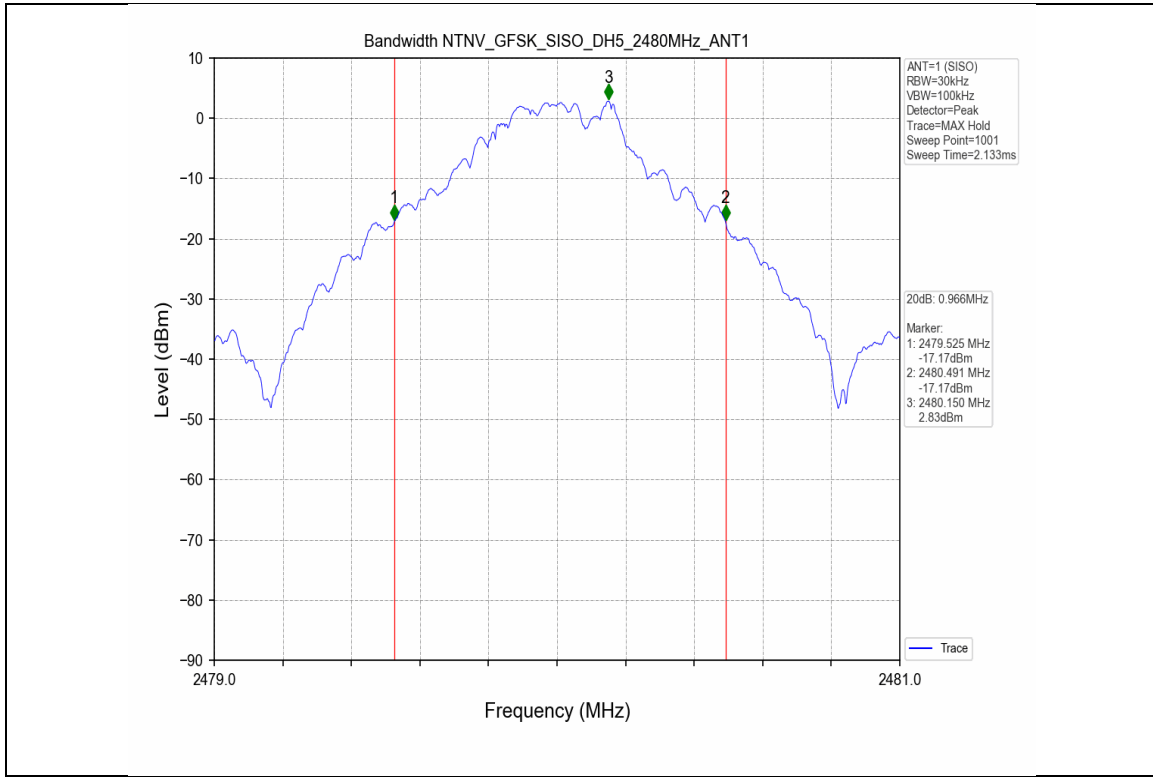
**1.1 Test Result**

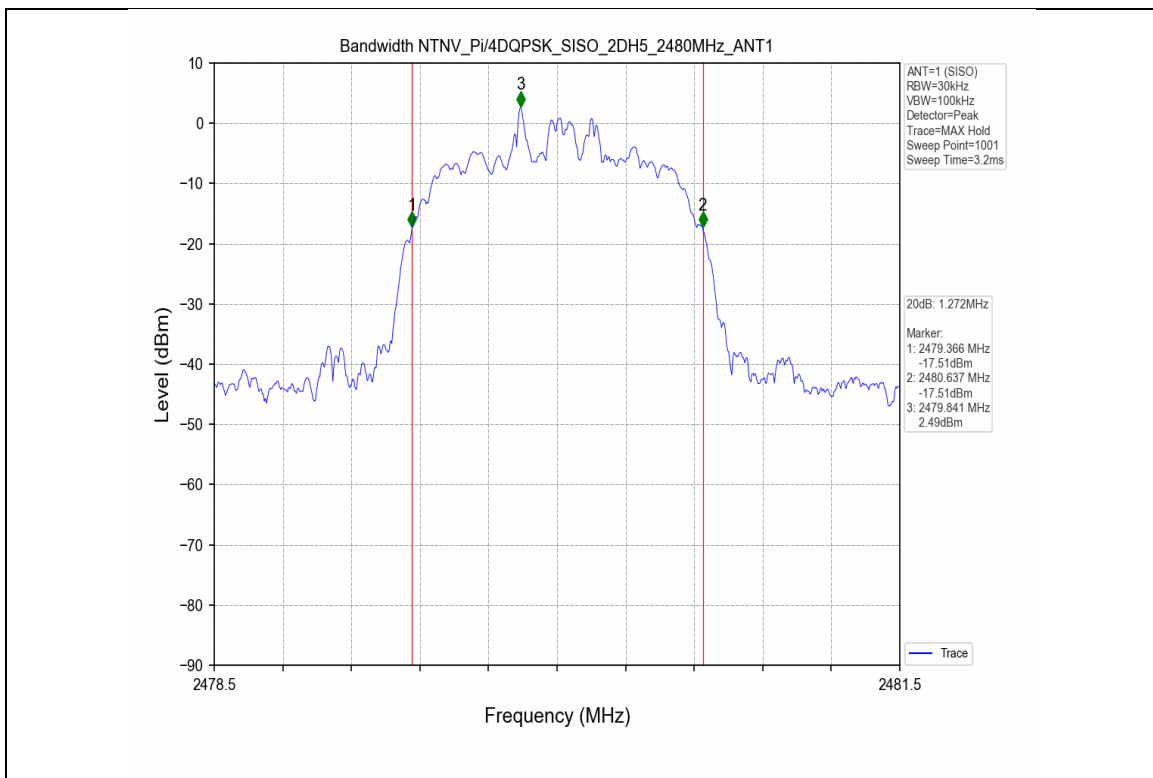
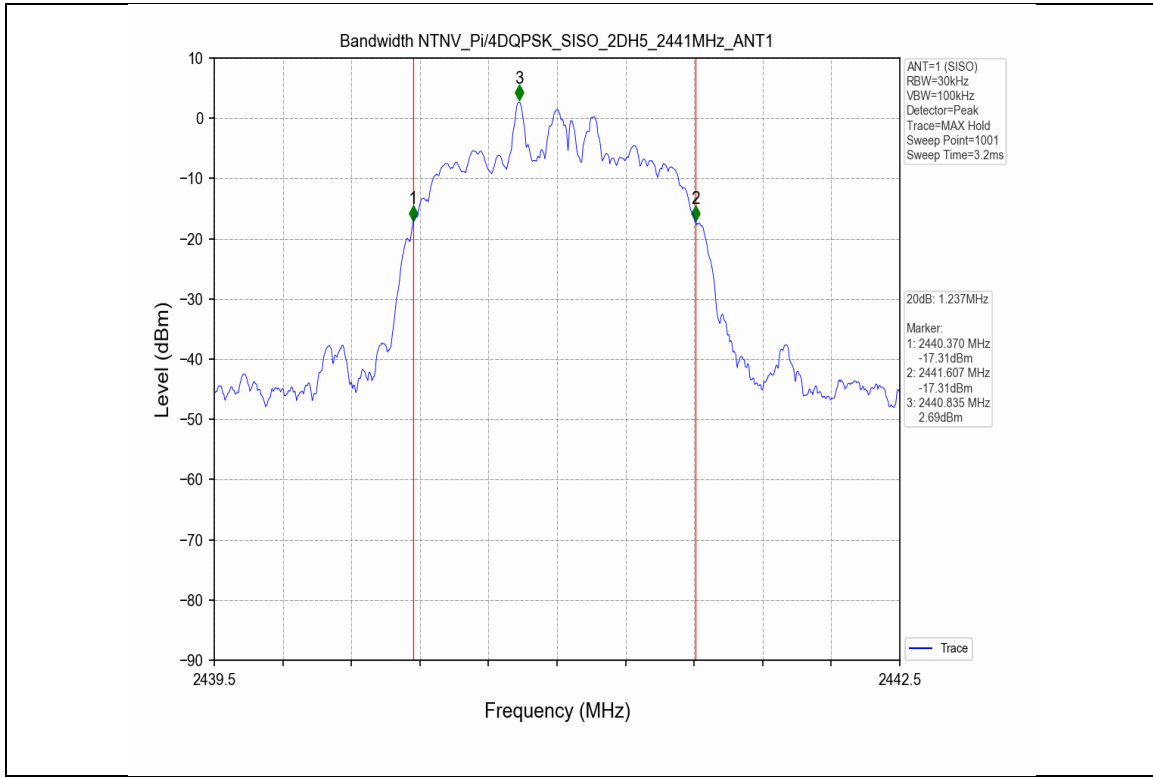
| Test Mode | Frequency (MHz) | TX Type | ANT No. | 20dB Bandwidth    | Verdict |
|-----------|-----------------|---------|---------|-------------------|---------|
|           |                 |         |         | Test Result (MHz) |         |
| GFSK      | 2402            | SISO    | 1       | 0.961             | PASS    |
|           | 2441            | SISO    | 1       | 0.966             | PASS    |
|           | 2480            | SISO    | 1       | 0.966             | PASS    |
| Pi/4DQPSK | 2402            | SISO    | 1       | 1.261             | PASS    |
|           | 2441            | SISO    | 1       | 1.237             | PASS    |
|           | 2480            | SISO    | 1       | 1.272             | PASS    |
| 8DPSK     | 2402            | SISO    | 1       | 1.277             | PASS    |
|           | 2441            | SISO    | 1       | 1.273             | PASS    |
|           | 2480            | SISO    | 1       | 1.280             | PASS    |

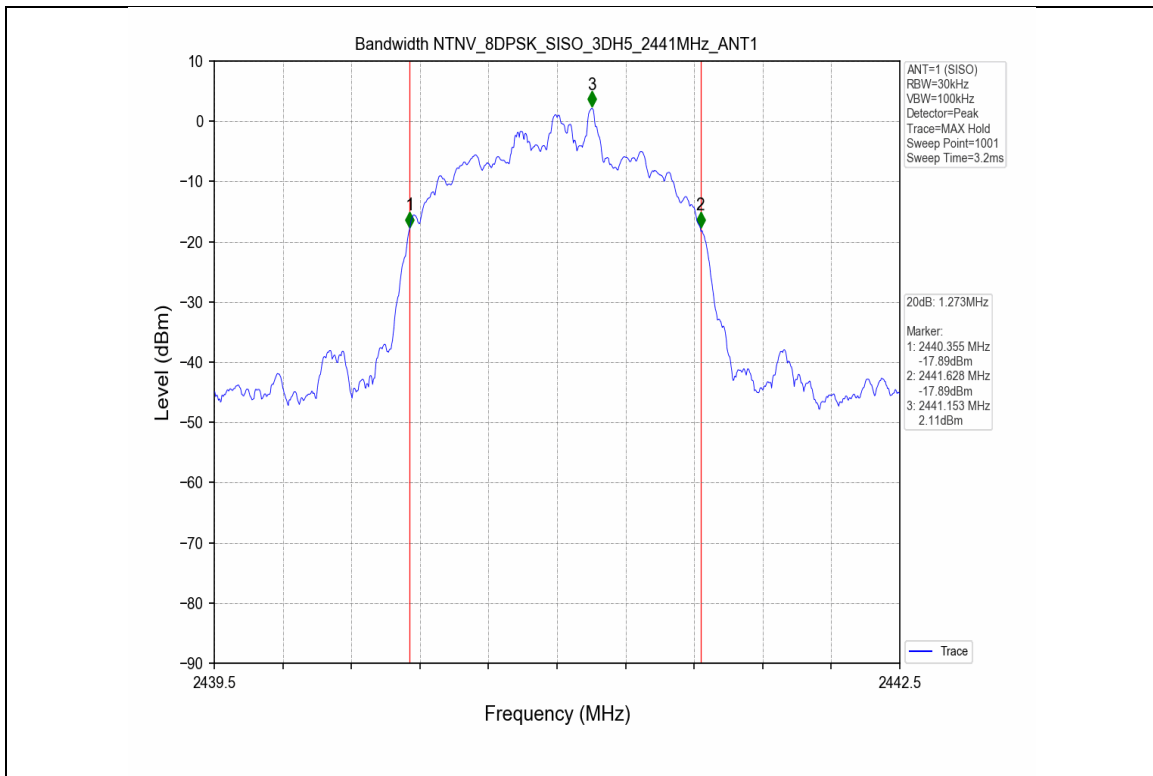
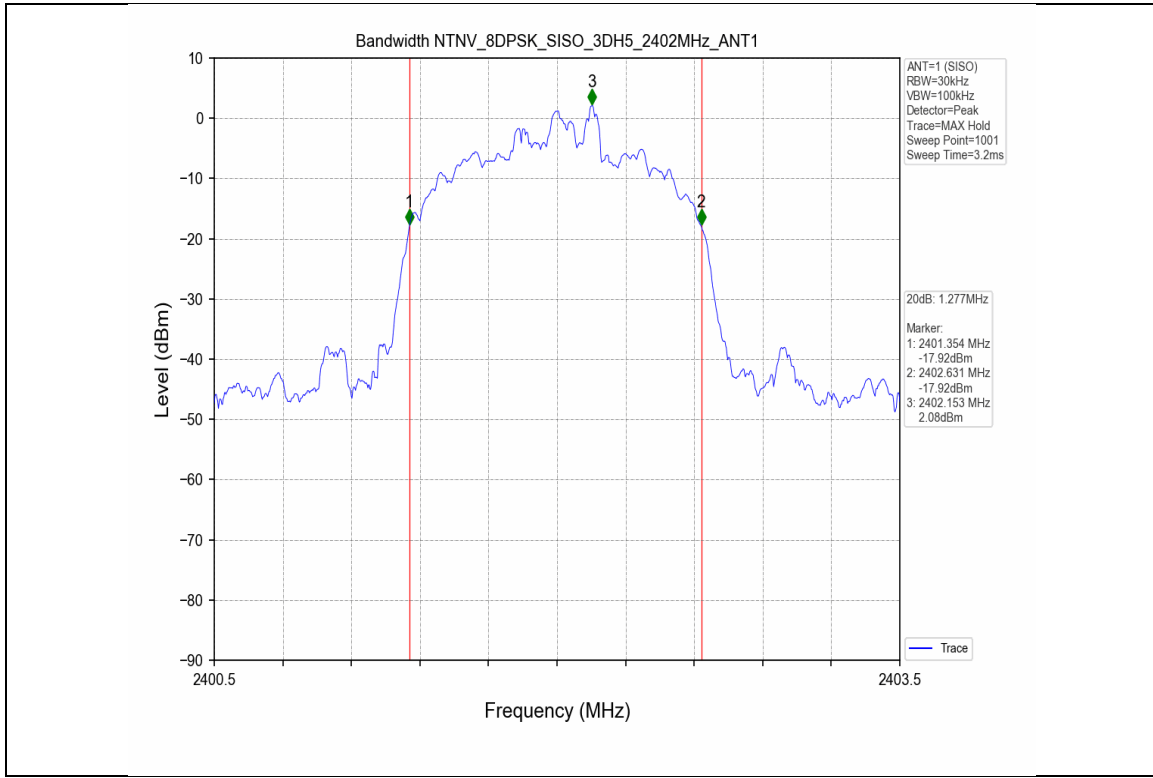
| Test Mode | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth |                     |
|-----------|-----------------|---------|---------|------------------------|---------------------|
|           |                 |         |         | Test Result (MHz)      |                     |
| GFSK      | 2402            | SISO    | 1       | 0.884                  | Only for Report Use |
|           | 2441            | SISO    | 1       | 0.885                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 0.893                  | Only for Report Use |
| Pi/4DQPSK | 2402            | SISO    | 1       | 1.153                  | Only for Report Use |
|           | 2441            | SISO    | 1       | 1.155                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 1.155                  | Only for Report Use |
| 8DPSK     | 2402            | SISO    | 1       | 1.163                  | Only for Report Use |
|           | 2441            | SISO    | 1       | 1.167                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 1.163                  | Only for Report Use |

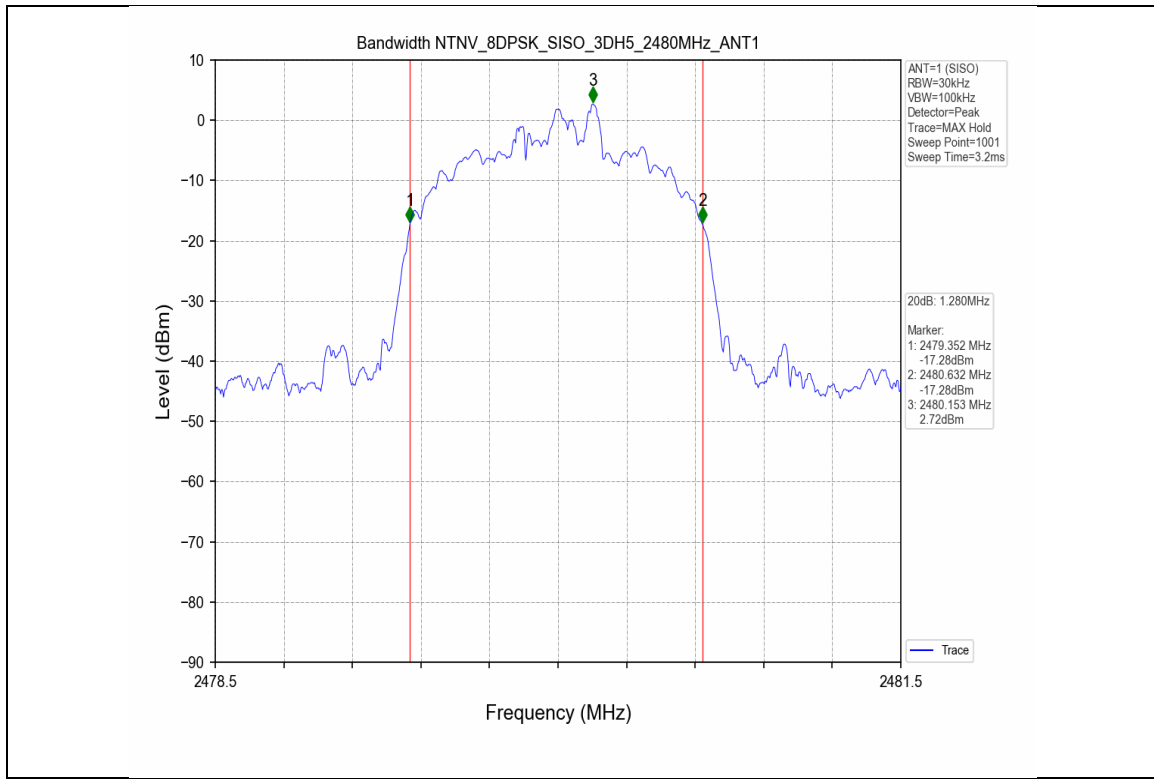
**1.2 Test Graph - 20dB Bandwidth**



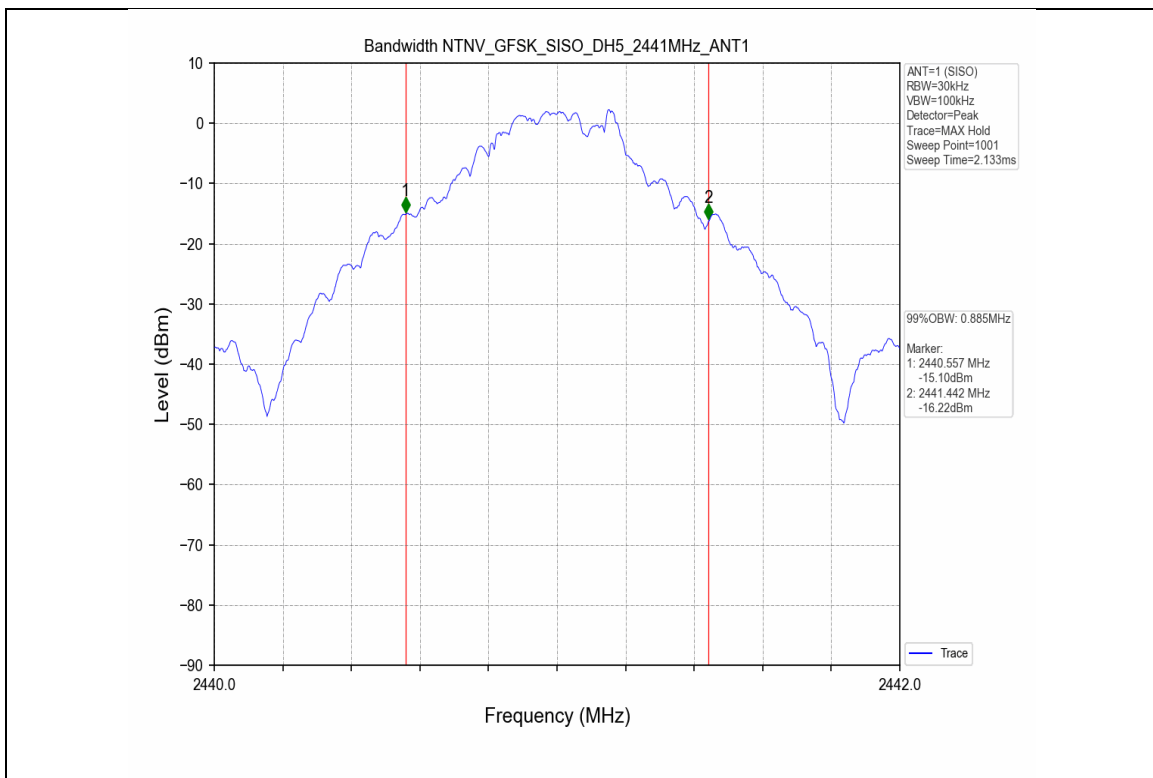
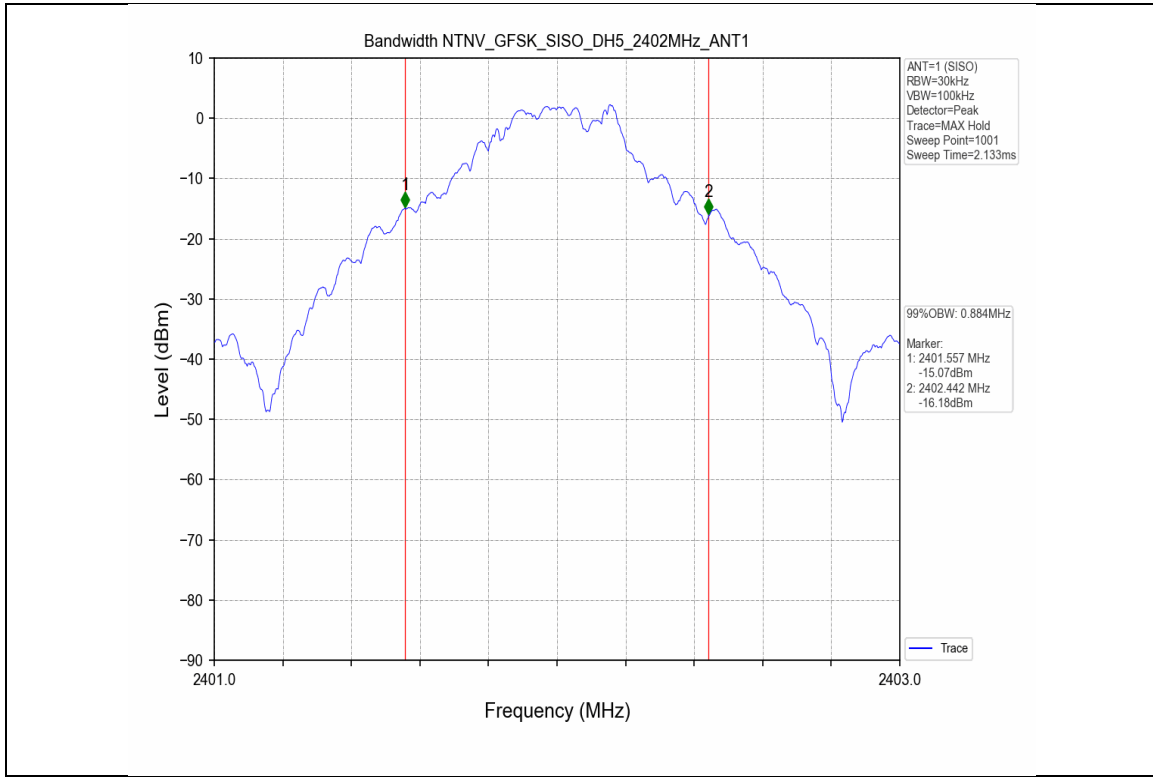


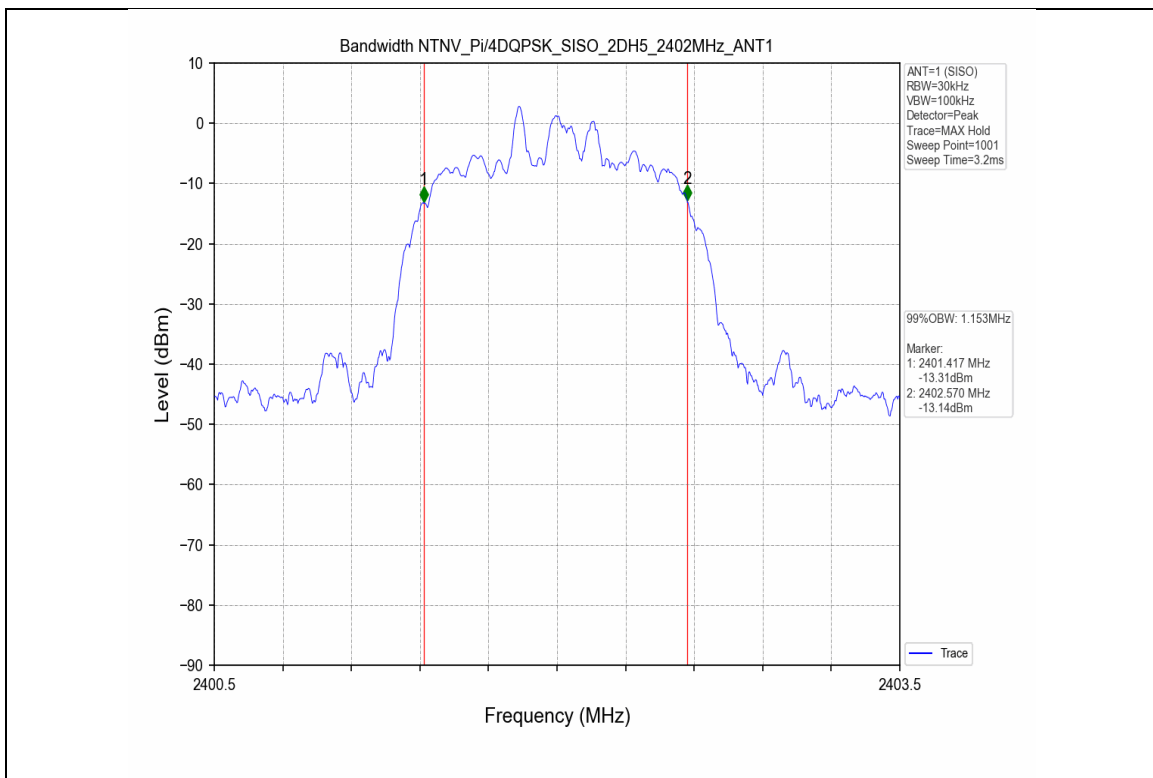
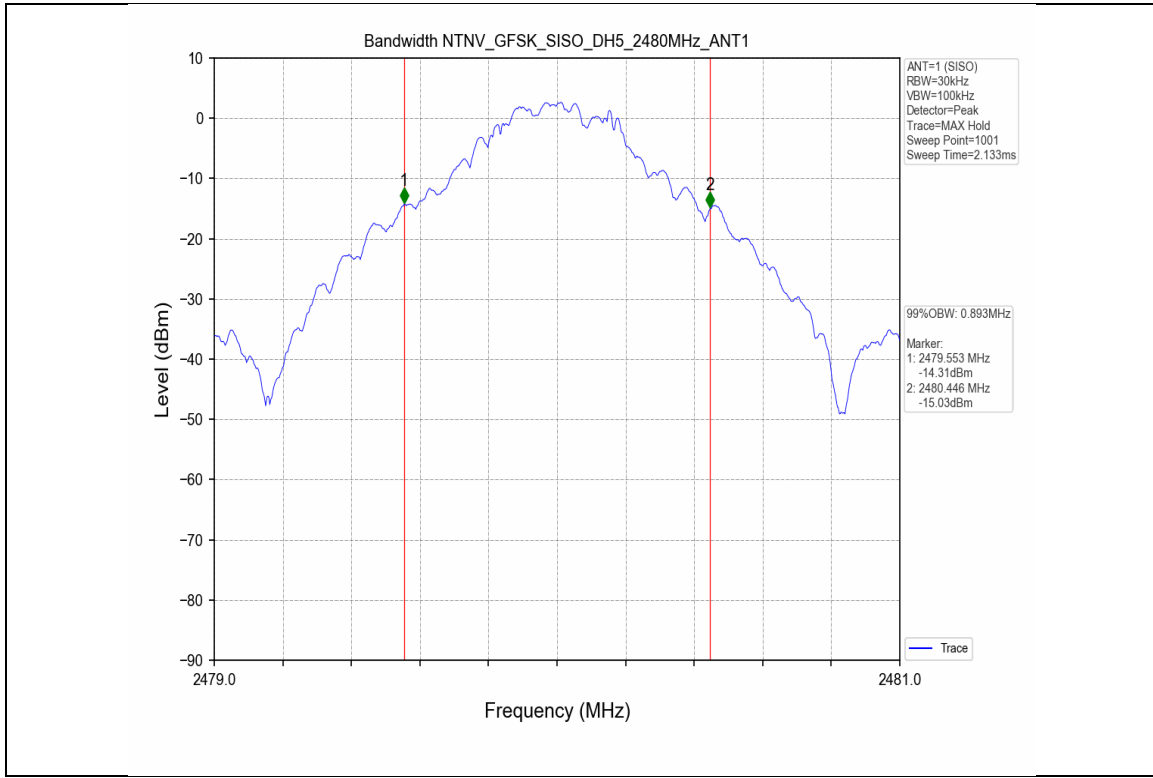




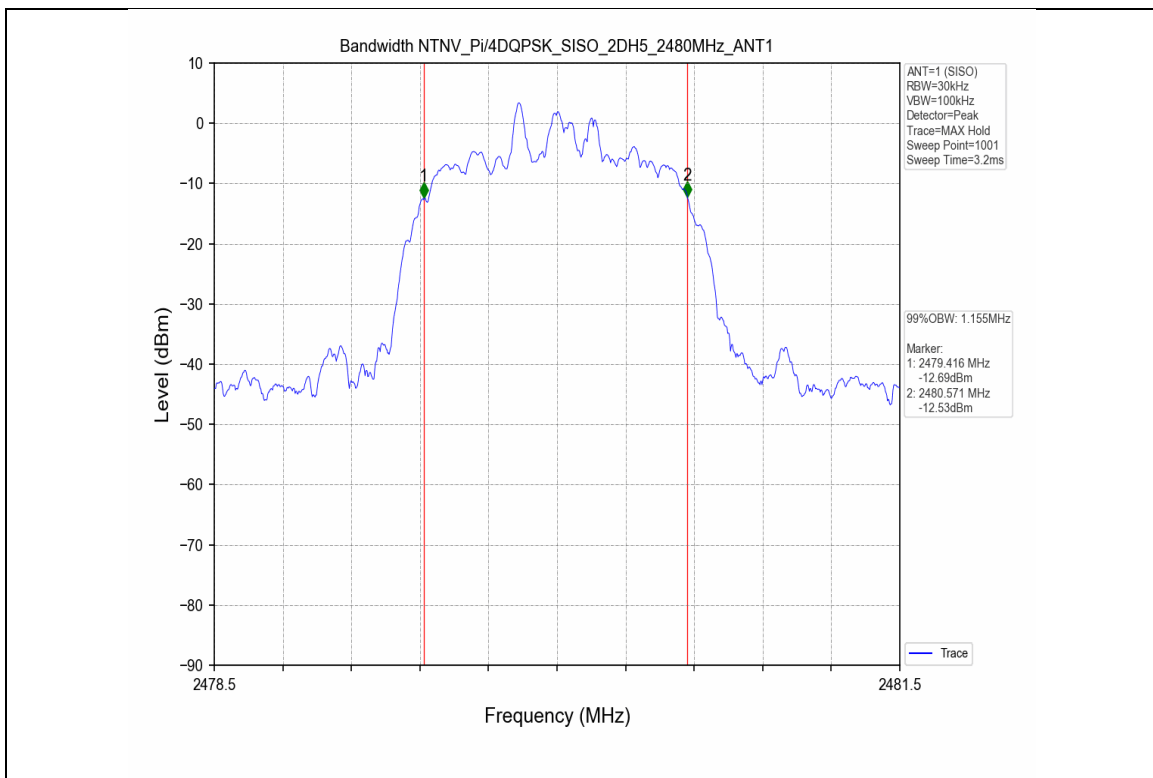
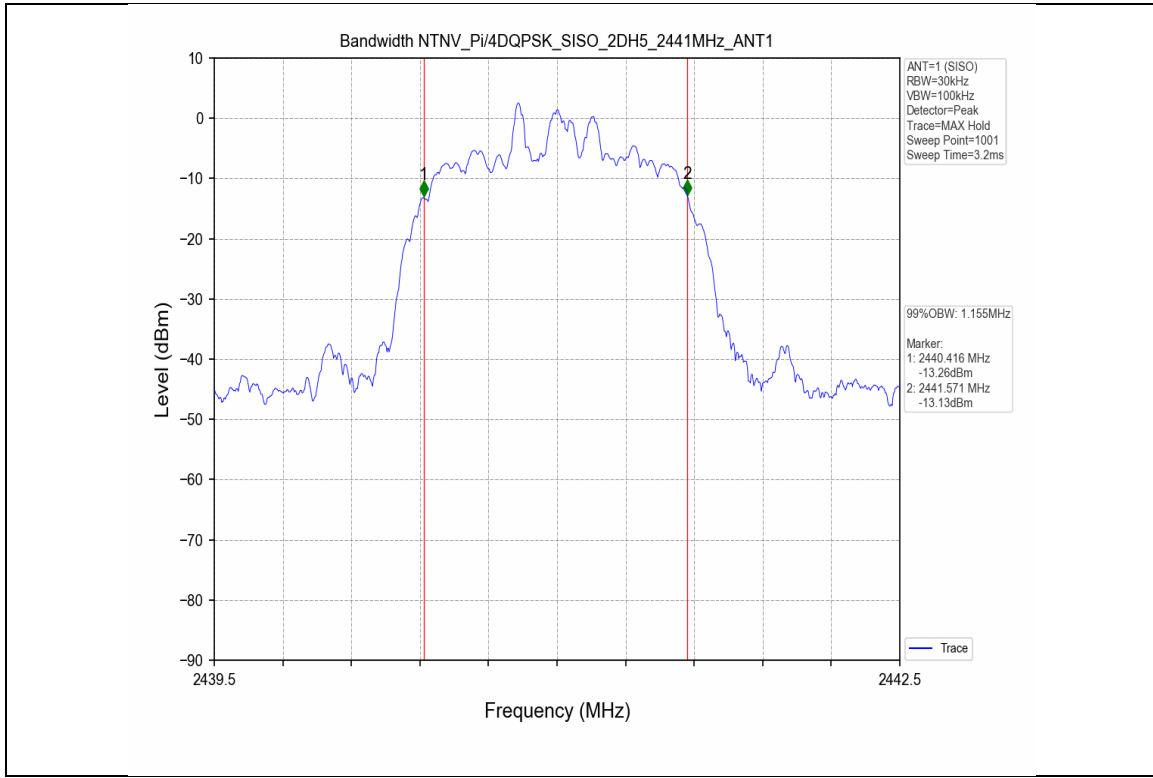


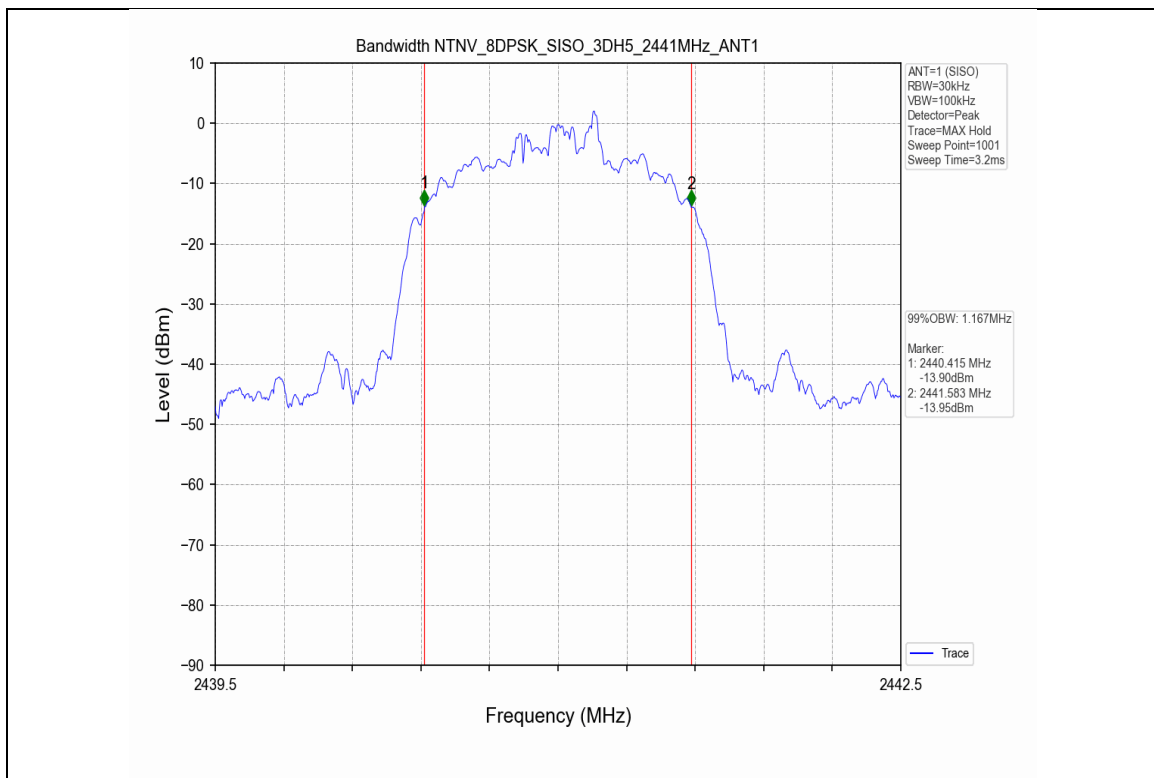
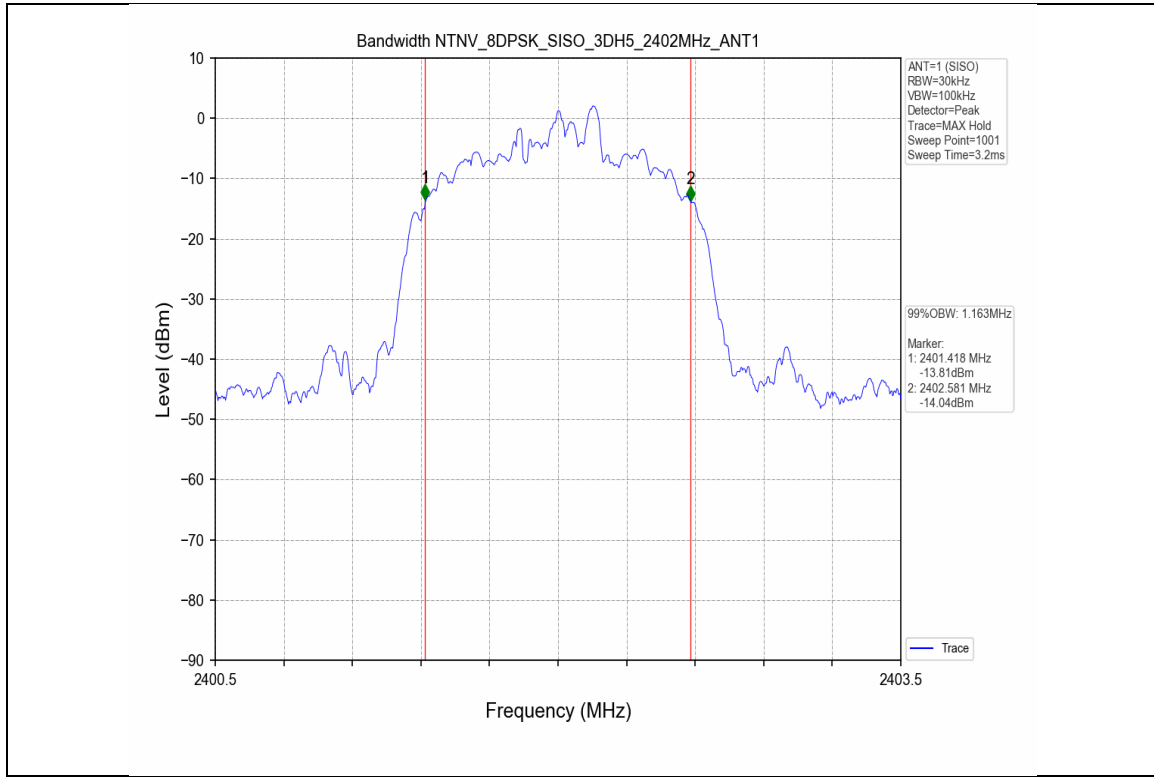
### 1.3 Test Graph - 99% Occupied Bandwidth

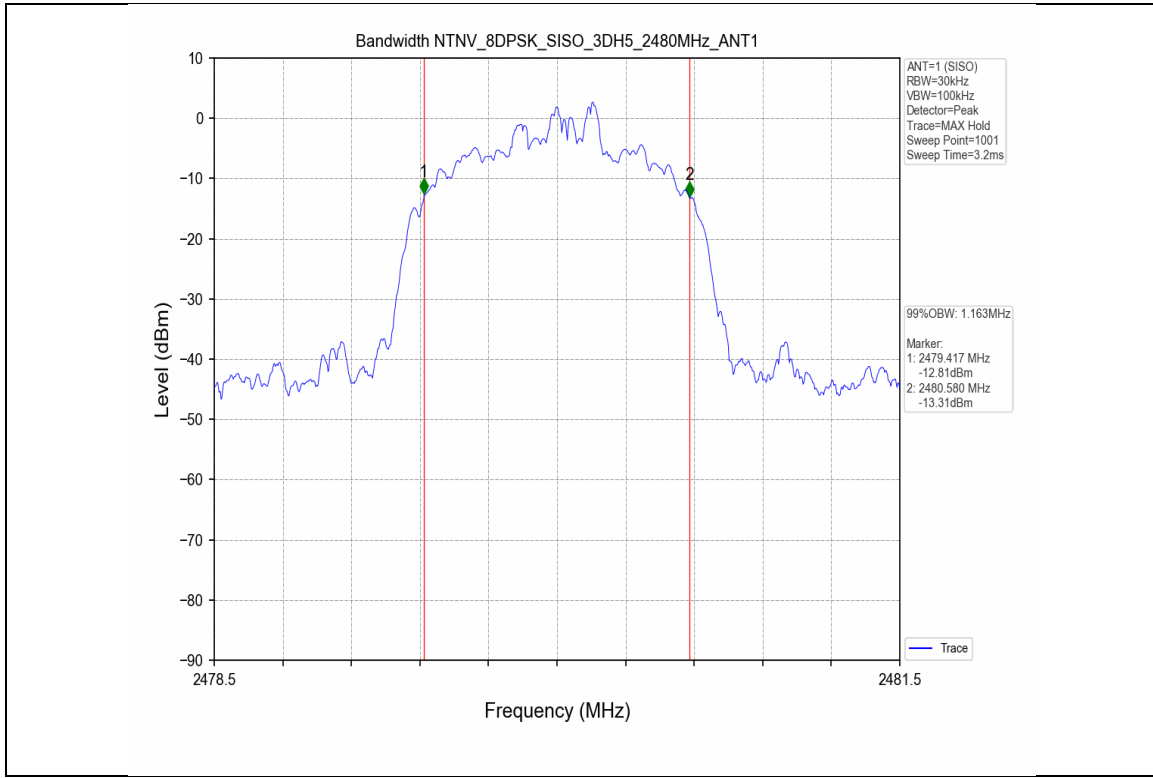










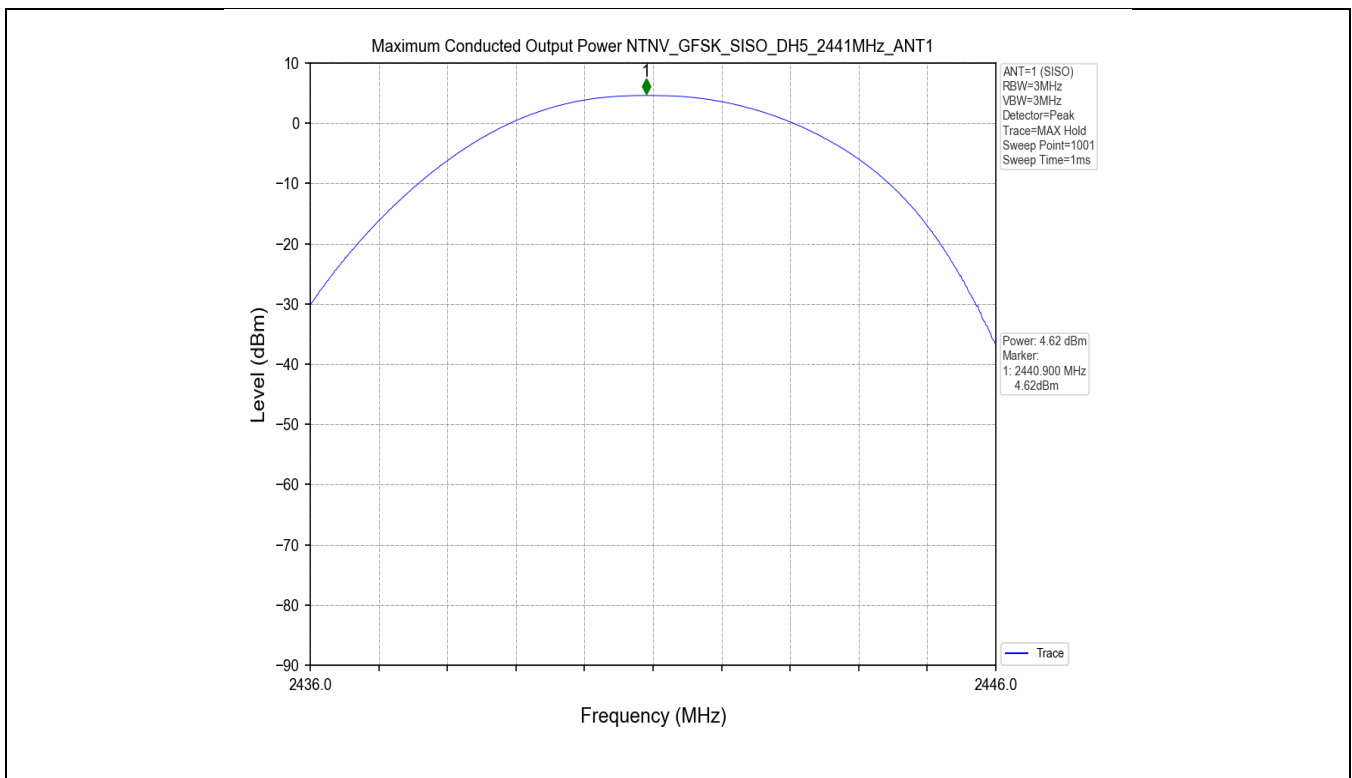
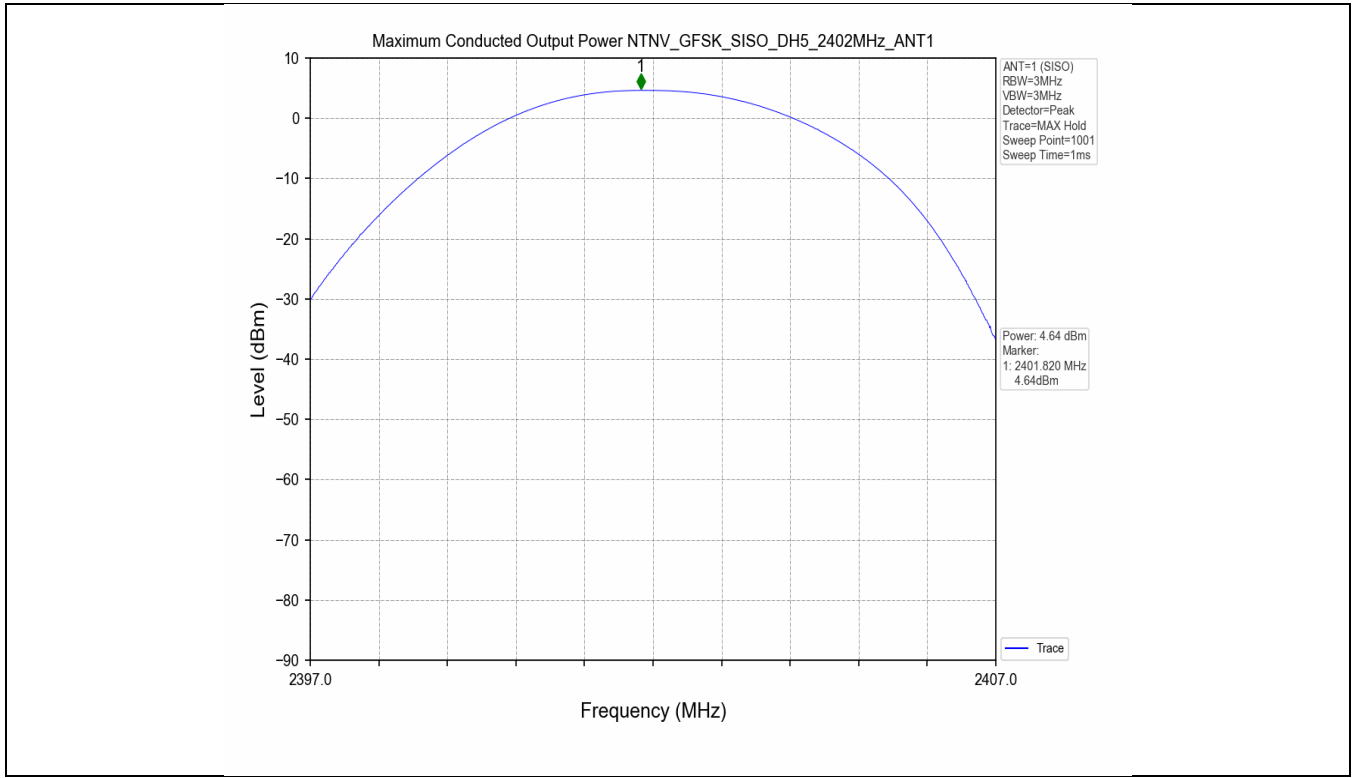


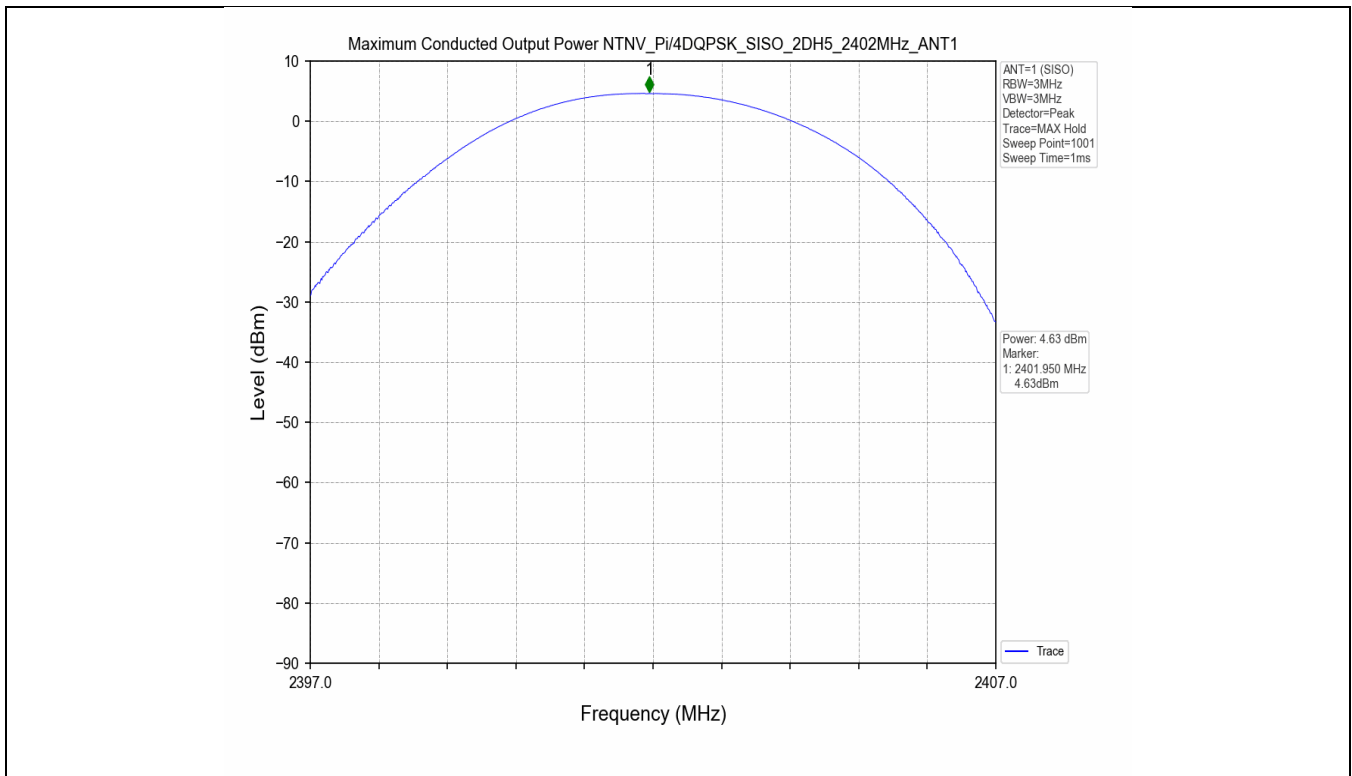
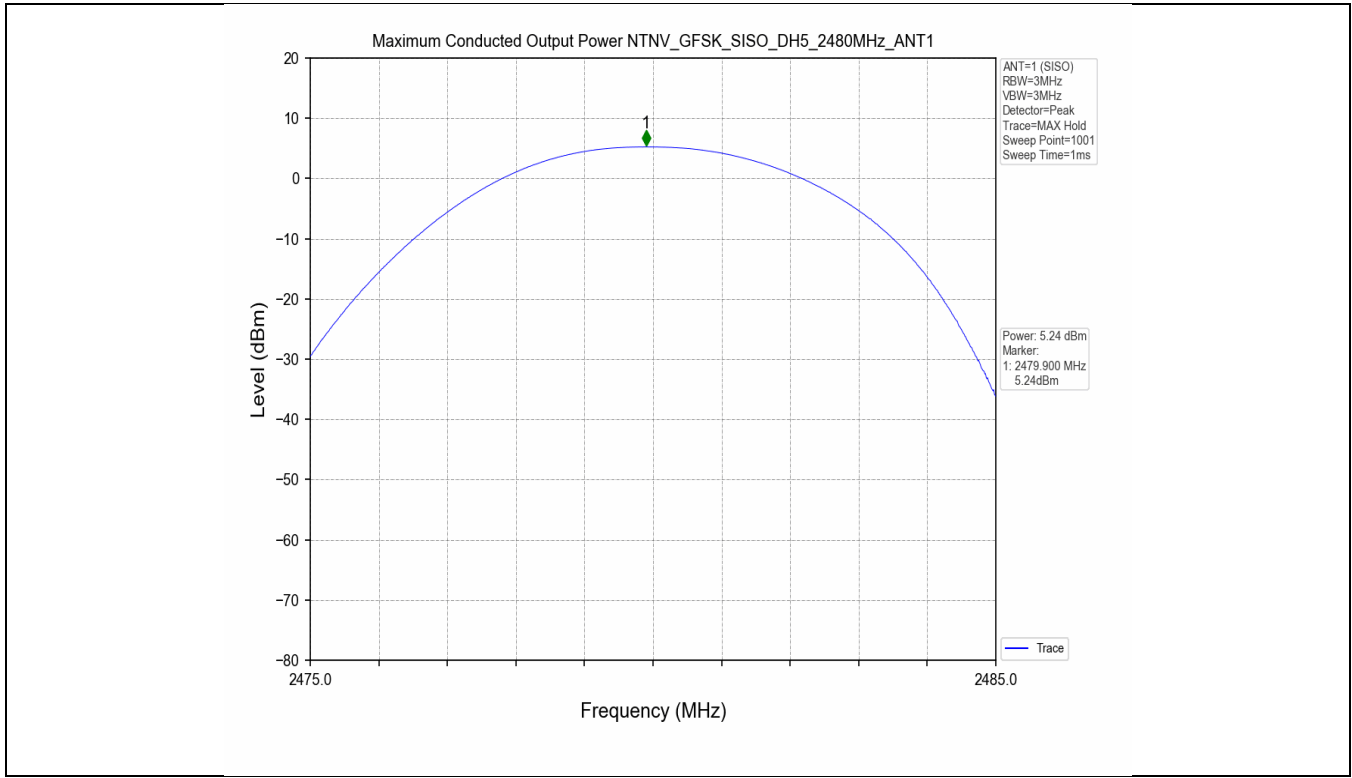
## 2. Maximum Conducted Output Power

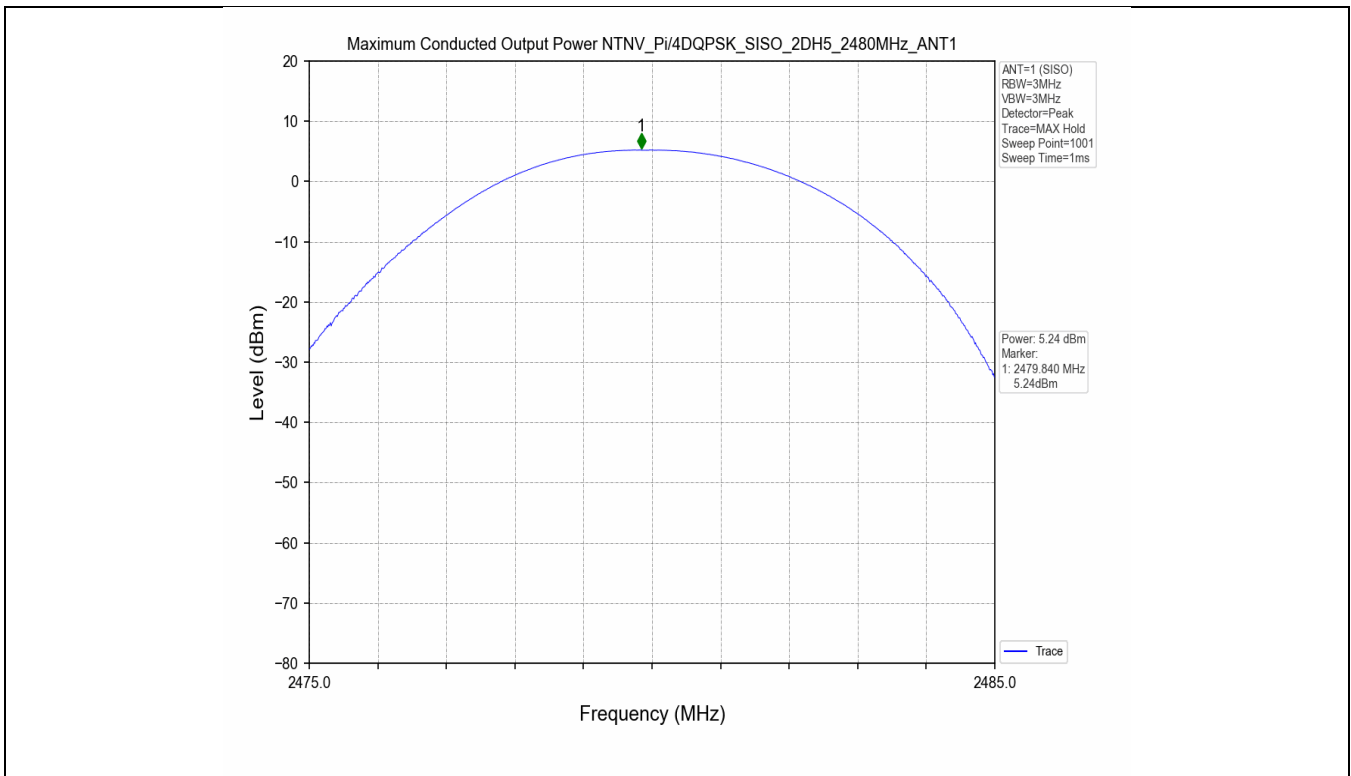
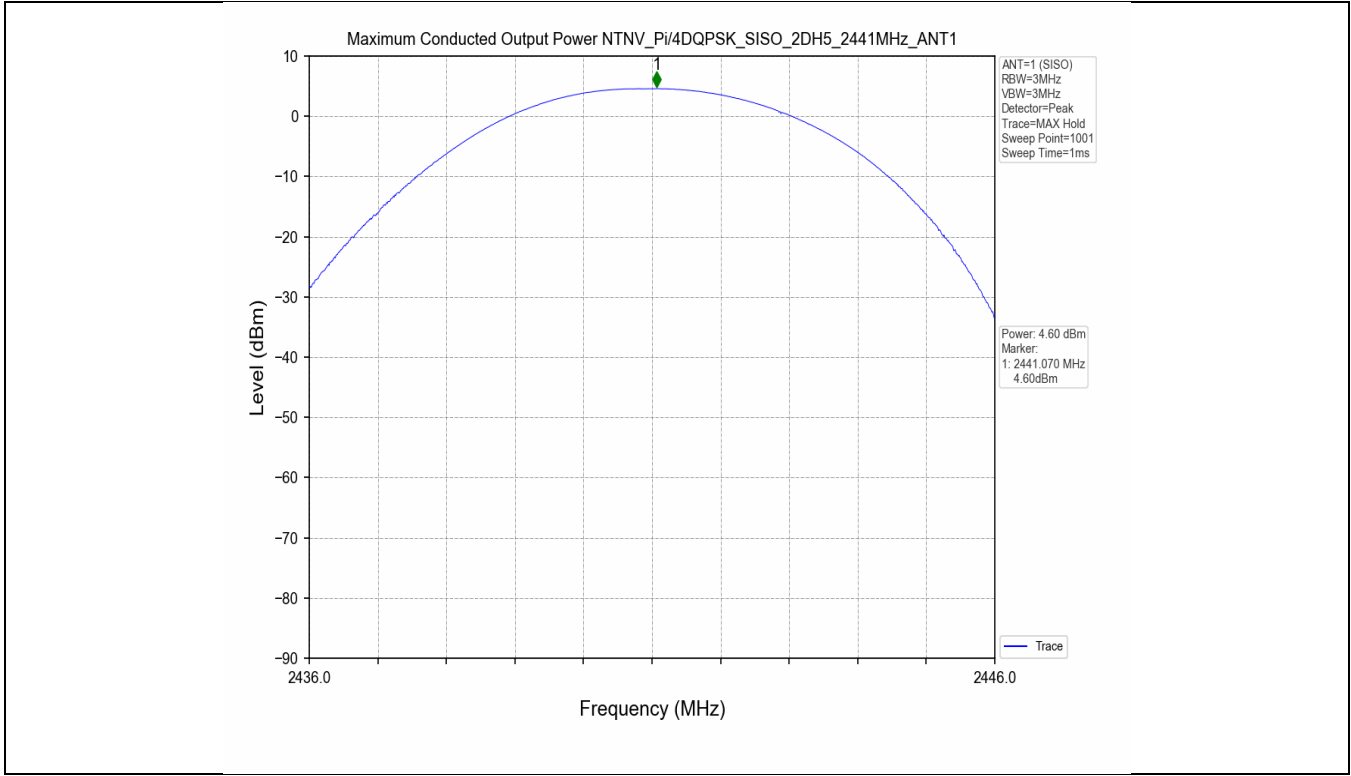
### 2.1 Test Result

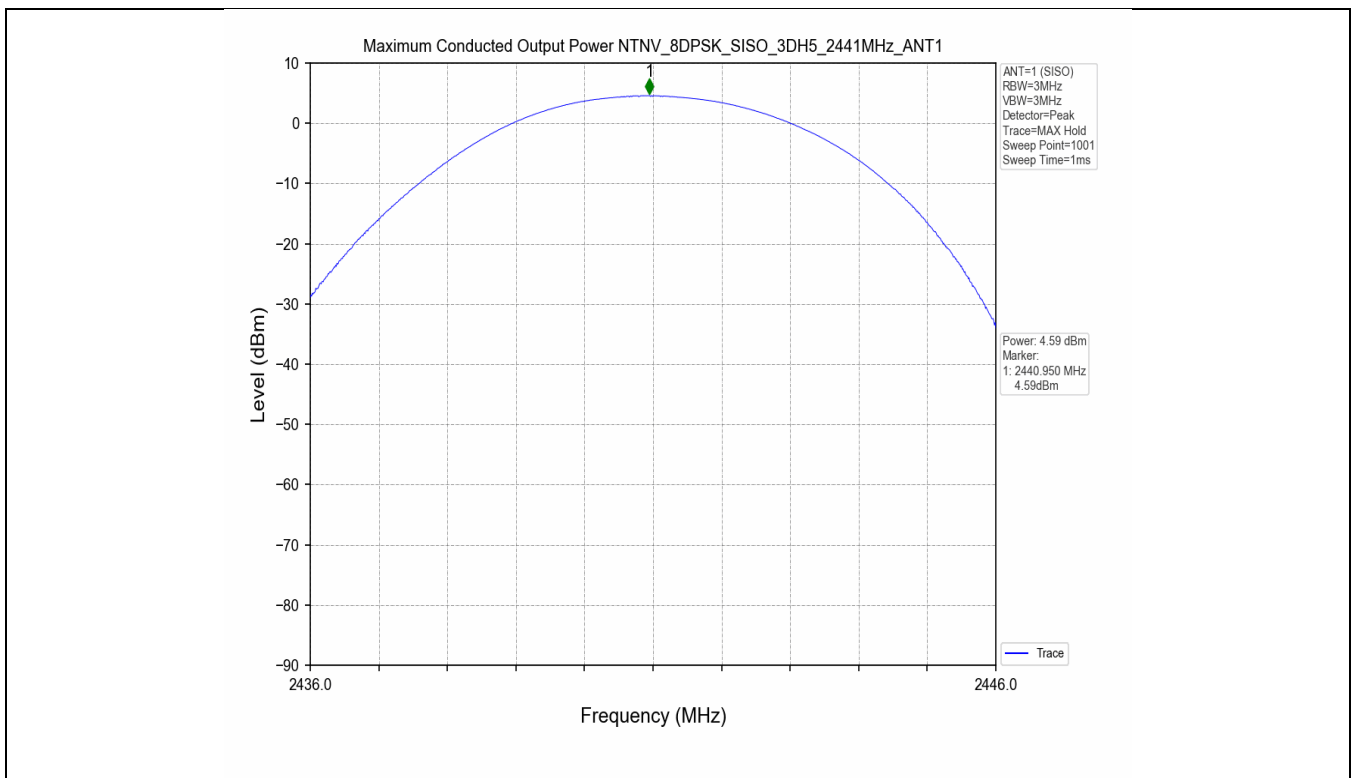
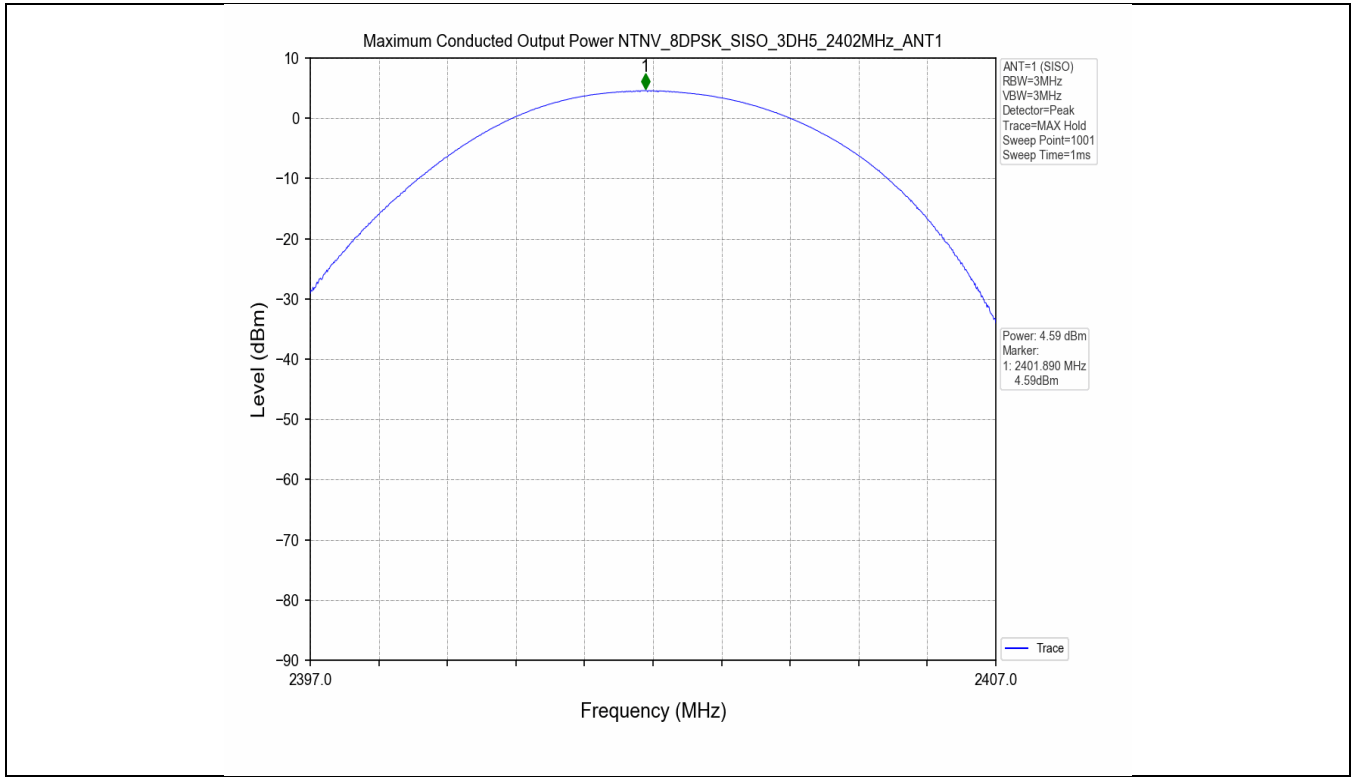
| Test Mode | Frequency (MHz) | Tx Type | Measured Peak Output Power (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|----------------------------------|--------------|---------|
|           |                 |         | Ant 1                            |              |         |
| GFSK      | 2402            | SISO    | 4.64                             | 30           | PASS    |
|           | 2441            | SISO    | 4.62                             | 30           | PASS    |
|           | 2480            | SISO    | 5.24                             | 30           | PASS    |
| Pi/4DQPSK | 2402            | SISO    | 4.63                             | 20.97        | PASS    |
|           | 2441            | SISO    | 4.60                             | 20.97        | PASS    |
|           | 2480            | SISO    | 5.24                             | 20.97        | PASS    |
| 8DPSK     | 2402            | SISO    | 4.59                             | 20.97        | PASS    |
|           | 2441            | SISO    | 4.59                             | 20.97        | PASS    |
|           | 2480            | SISO    | 5.23                             | 20.97        | PASS    |

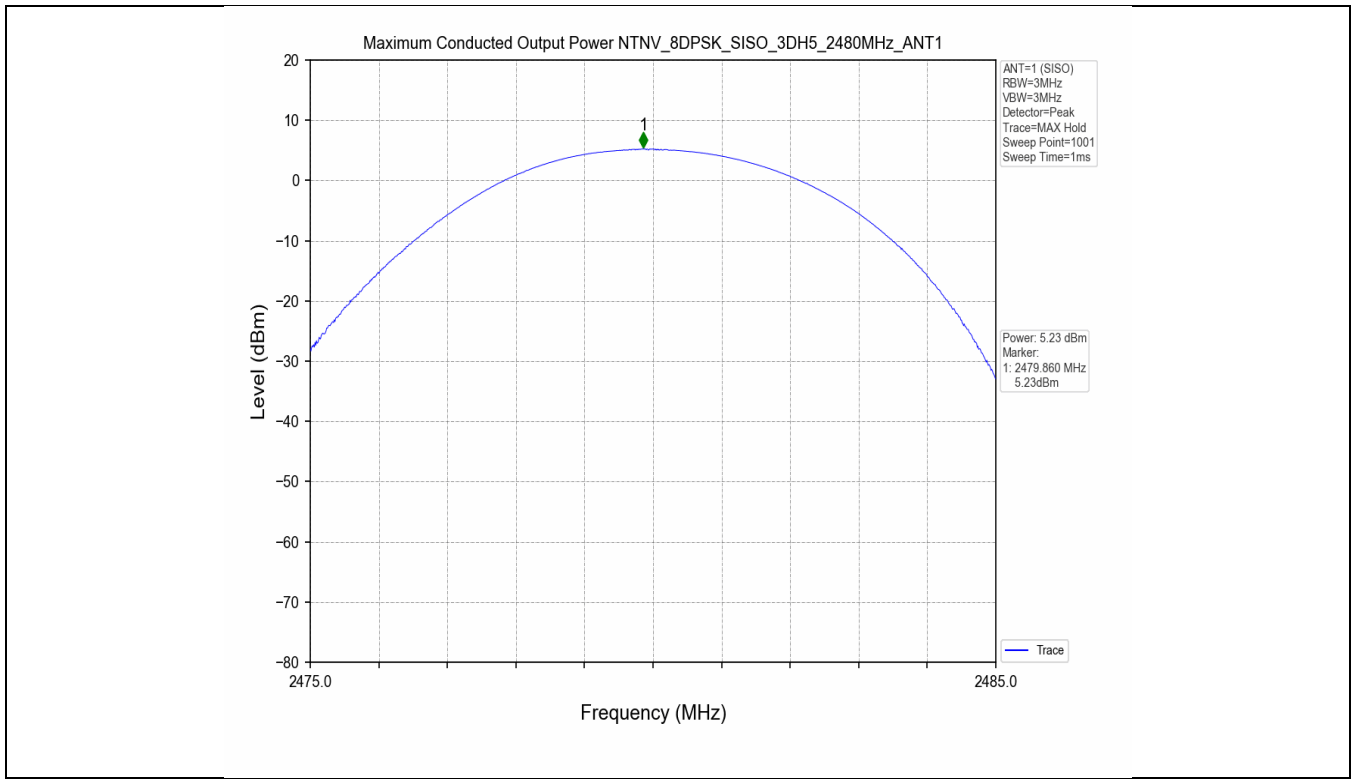
### 2.2 Test Graph











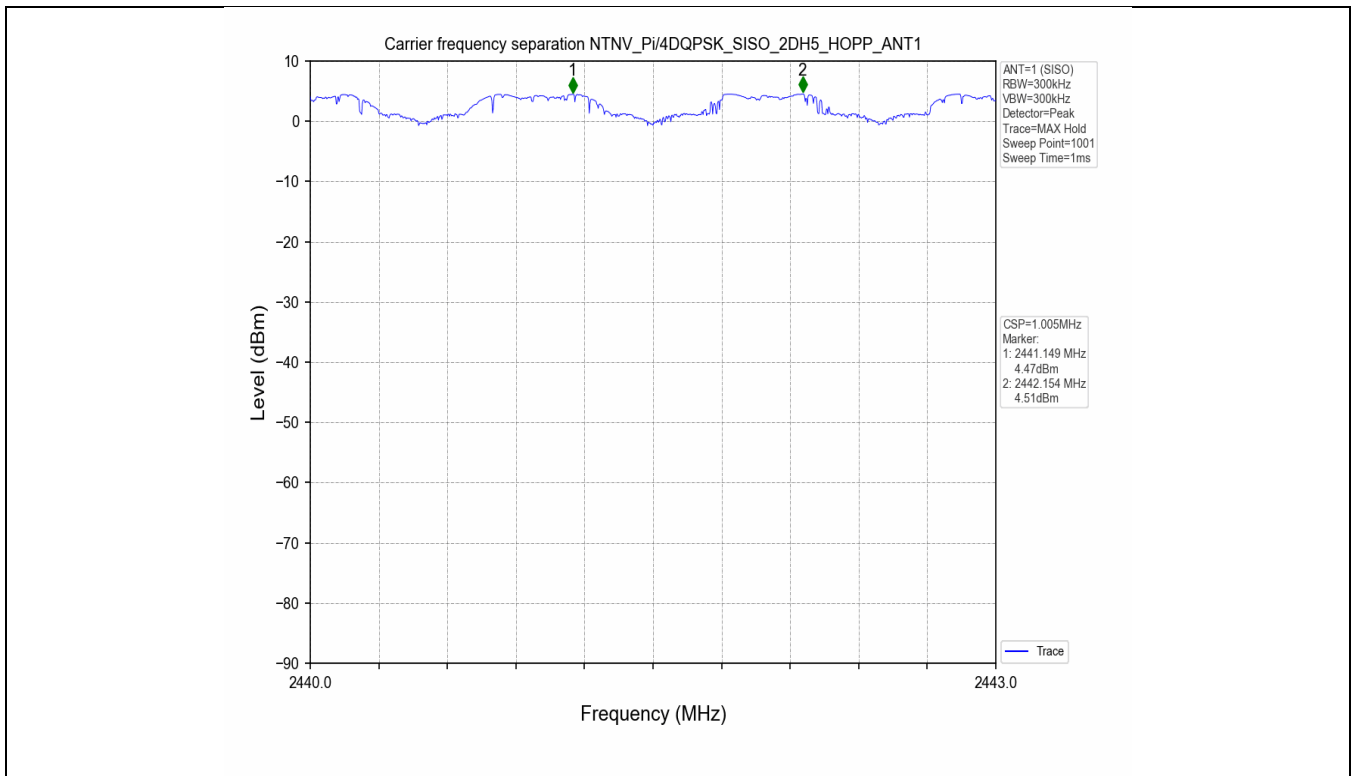
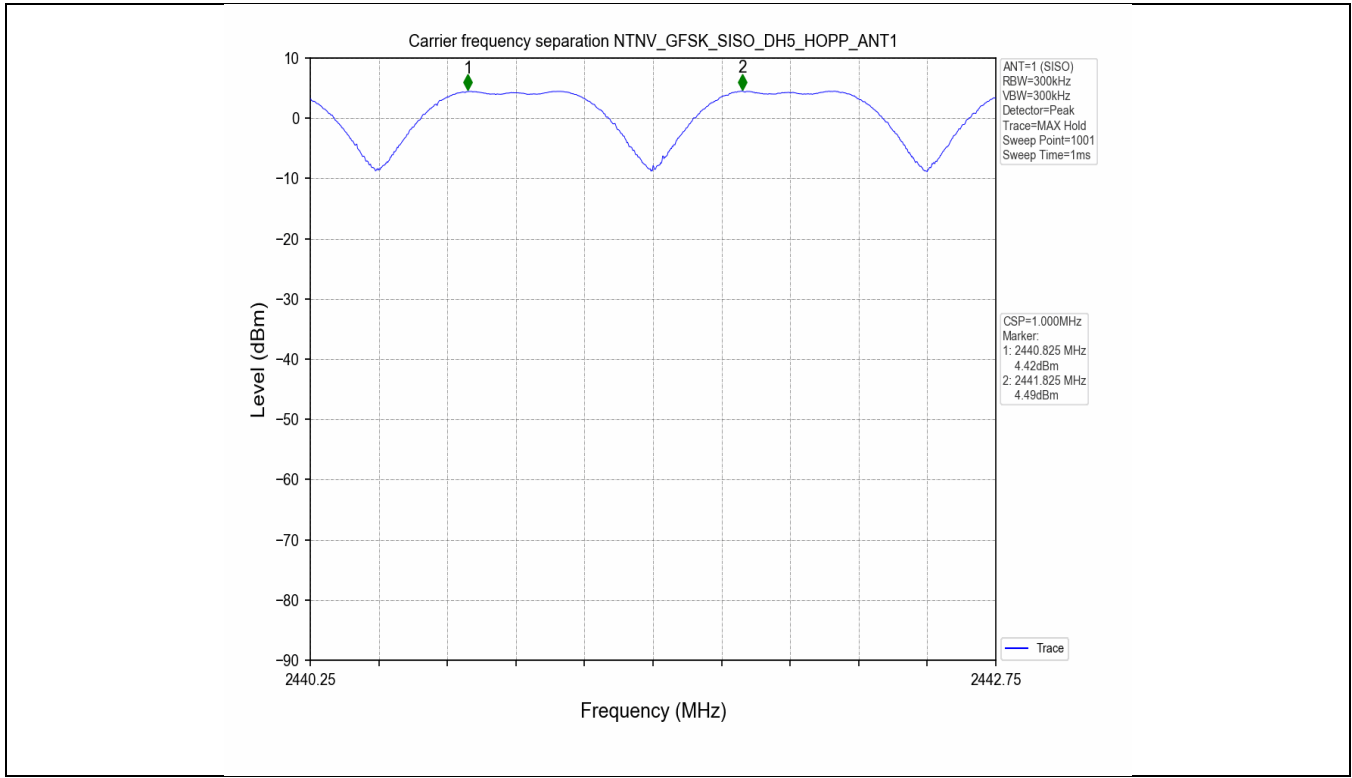
### 3. Carrier frequency separation

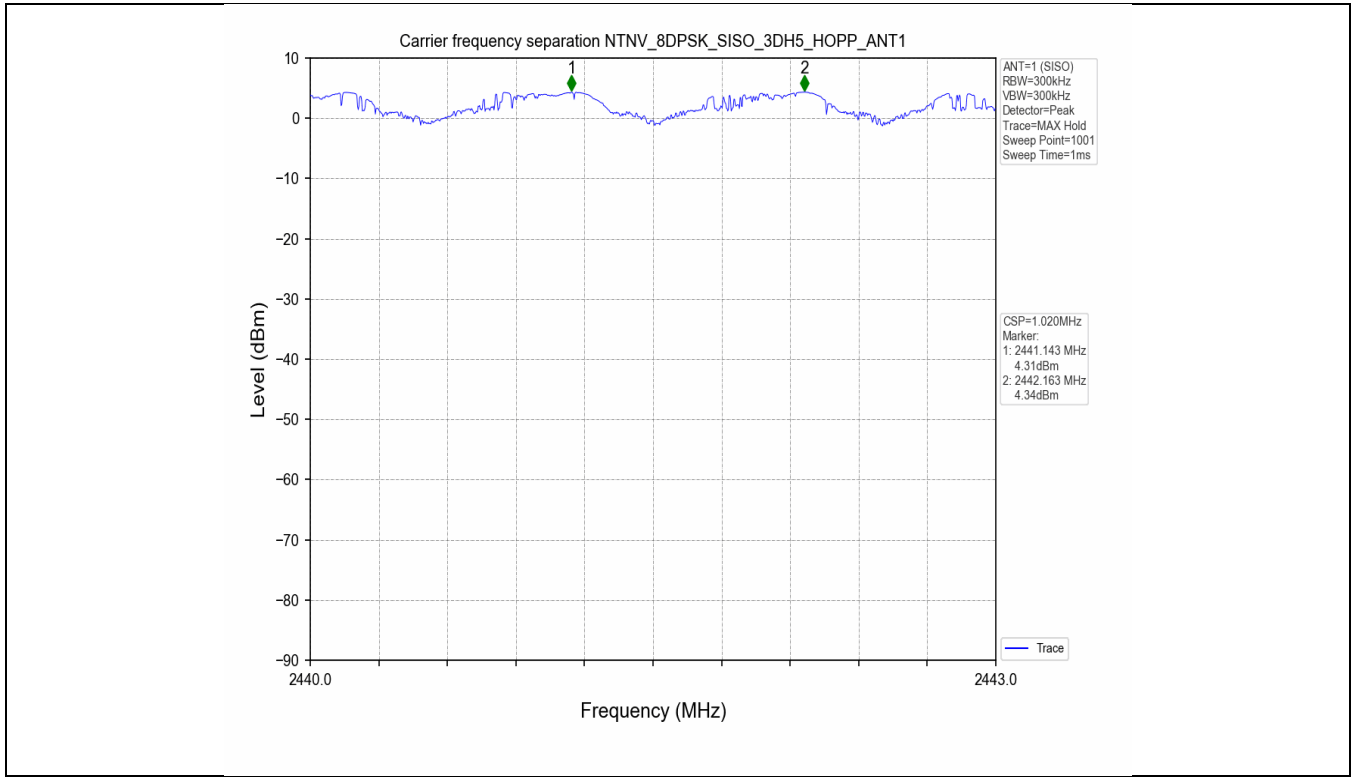
#### 3.1 Test Result

| Test Mode | TX Type | ANT No. | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limits (MHz) | Verdict |
|-----------|---------|---------|--------------------------|----------------------|--------------|---------|
| GFSK      | SISO    | 1       | 1.000                    | 0.966                | ≥0.966       | PASS    |
| π/4DQPSK  | SISO    | 1       | 1.005                    | 1.272                | ≥0.848       | PASS    |
| 8DPSK     | SISO    | 1       | 1.020                    | 1.280                | ≥0.853       | PASS    |

#### 3.2 Test Graph





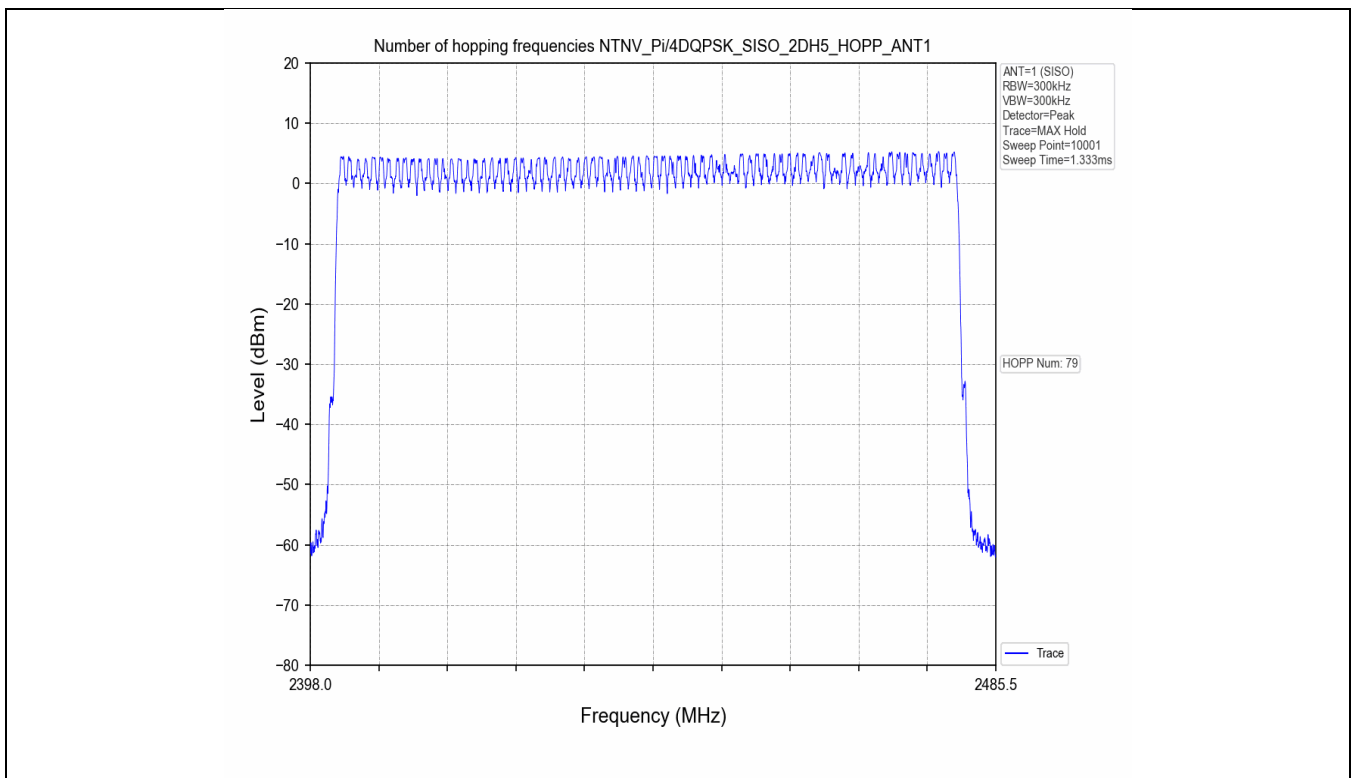
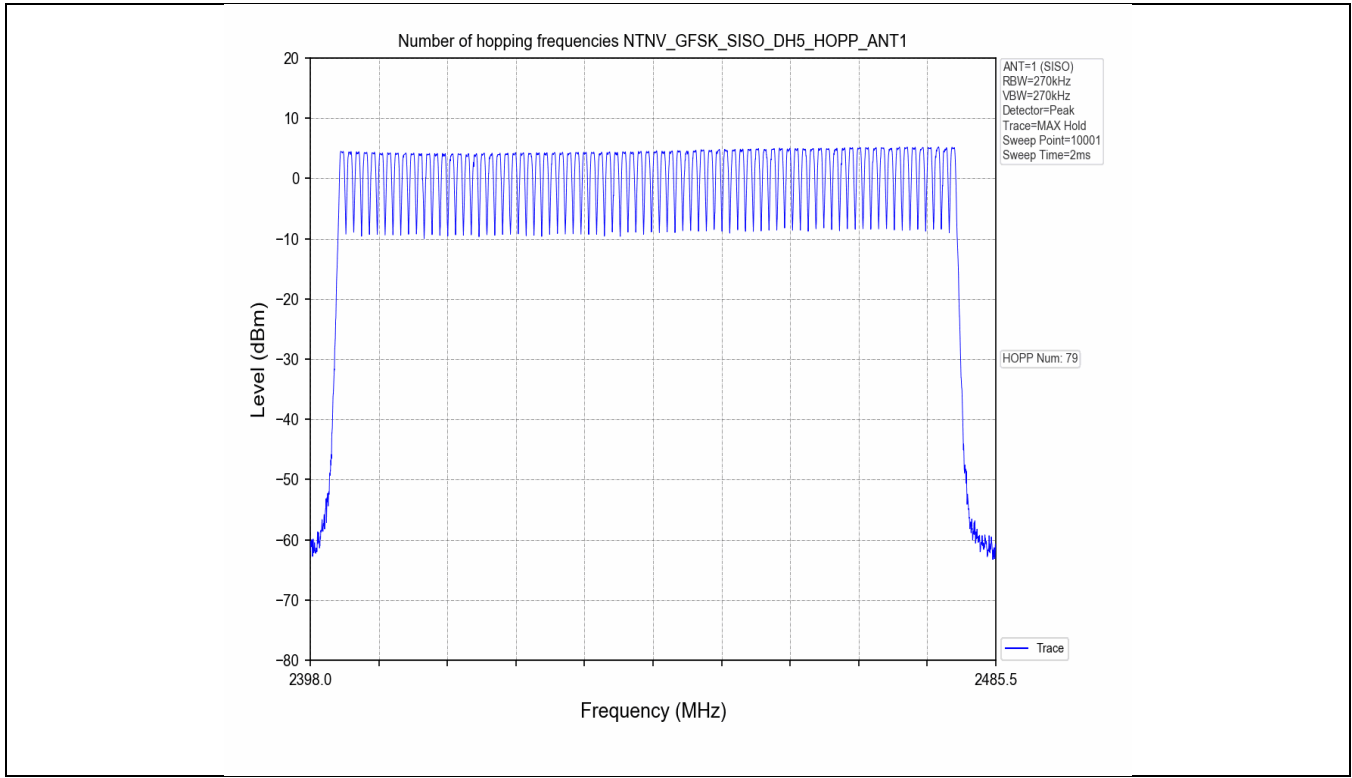


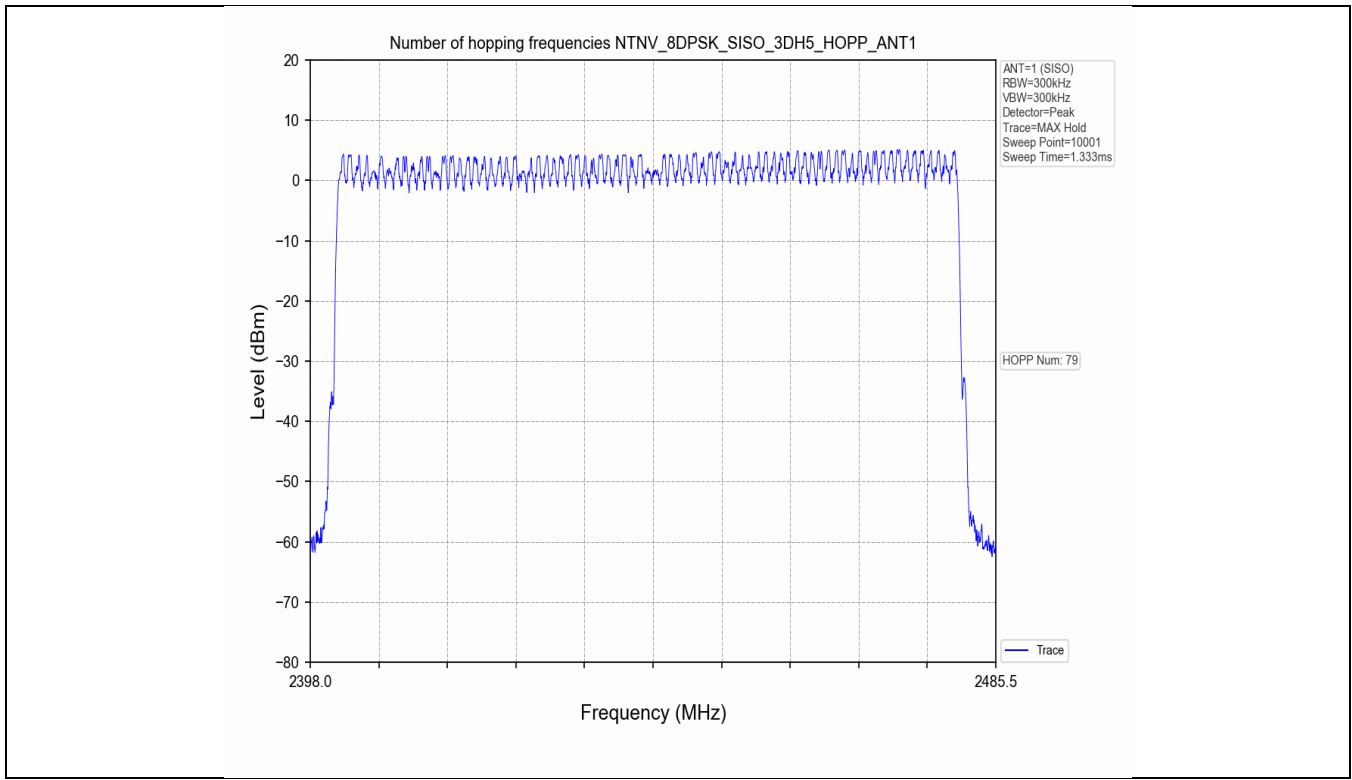
## 4. Number of hopping frequencies

### 4.1 Test Result

| Test Mode | TX Type | ANT No. | Num of Hopping Frequencies | Limits | Verdict |
|-----------|---------|---------|----------------------------|--------|---------|
| GFSK      | SISO    | 1       | 79                         | ≥15    | PASS    |
| Pi/4DQPSK | SISO    | 1       | 79                         | ≥15    | PASS    |
| 8DPSK     | SISO    | 1       | 79                         | ≥15    | PASS    |

### 4.2 Test Graph



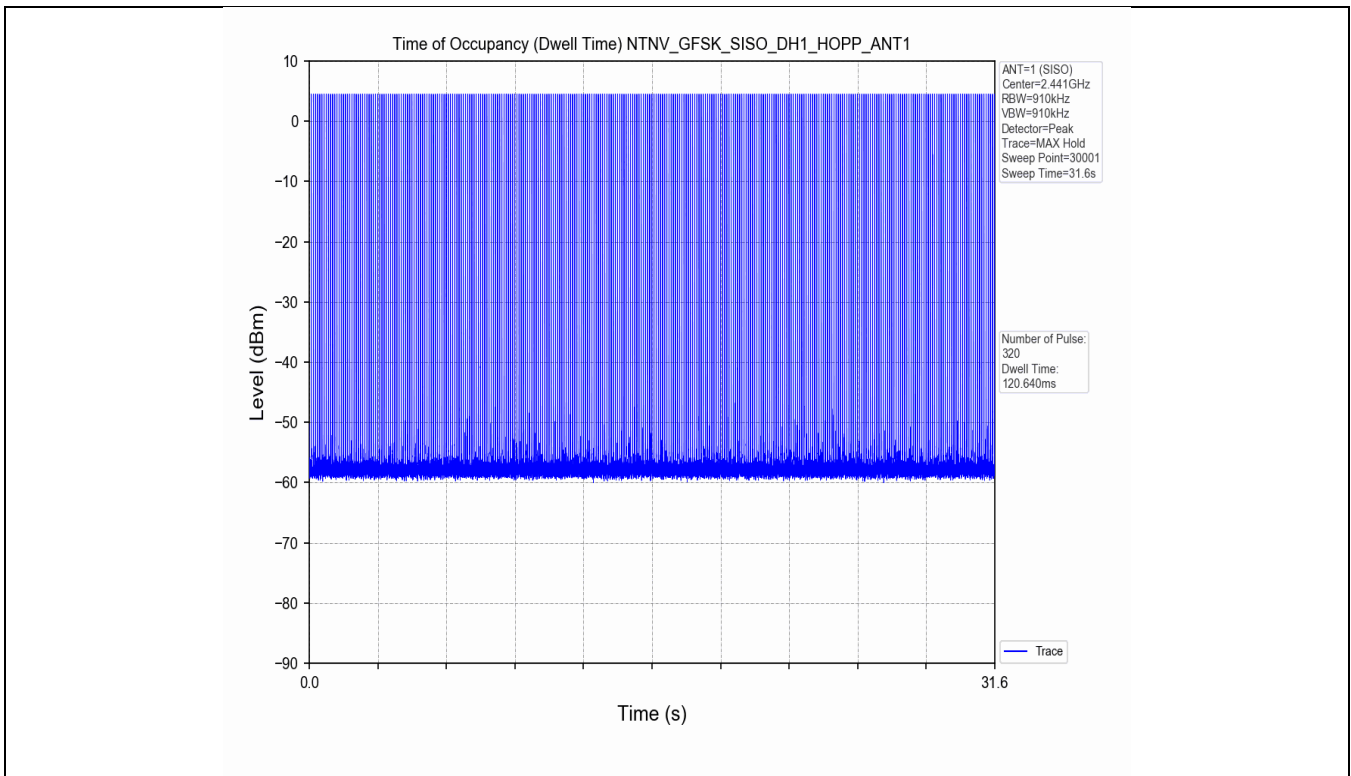
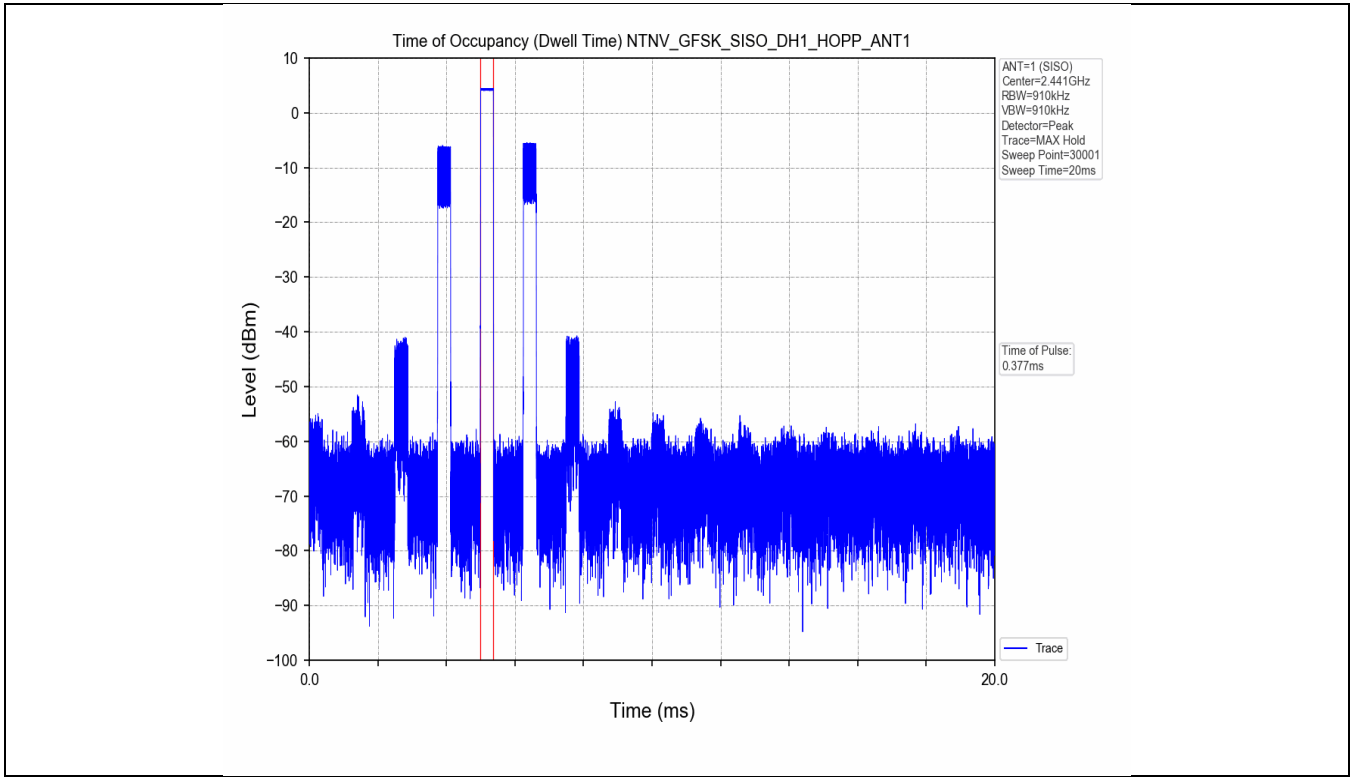


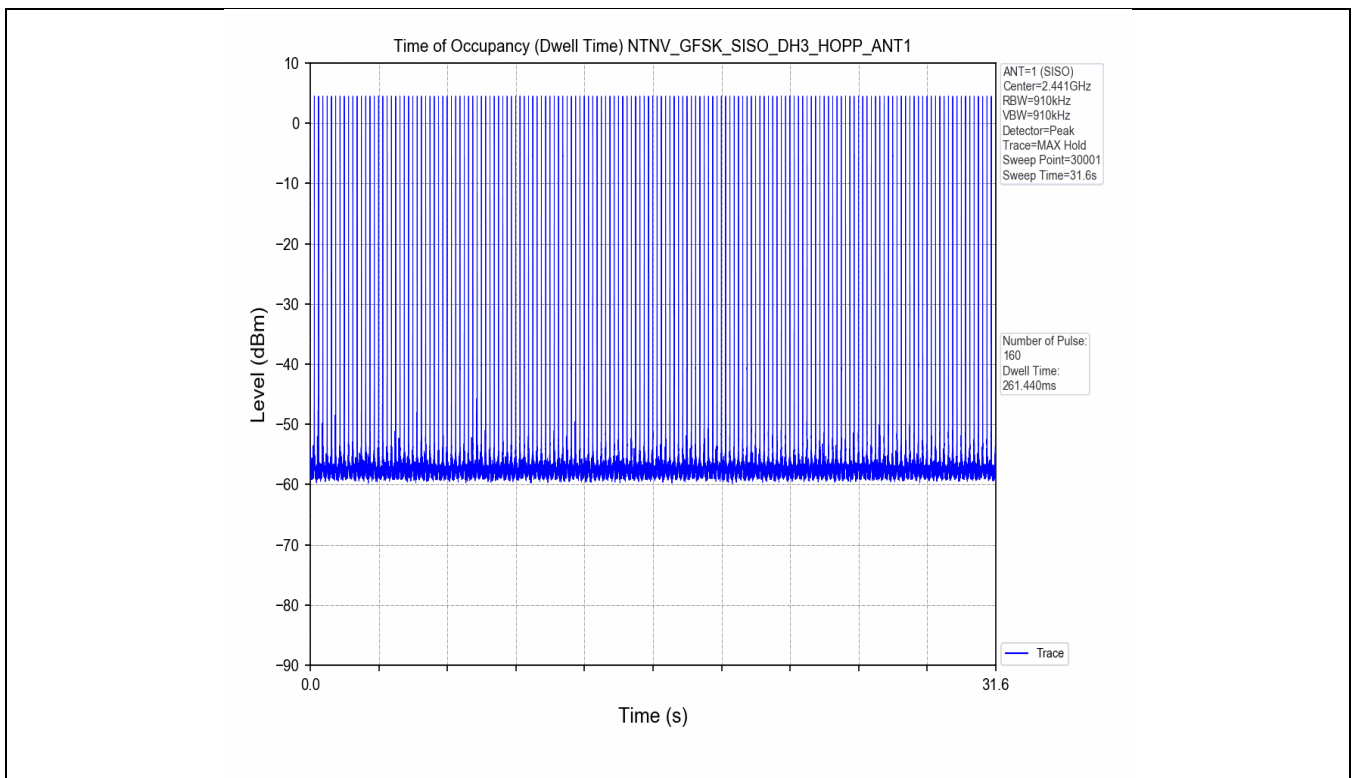
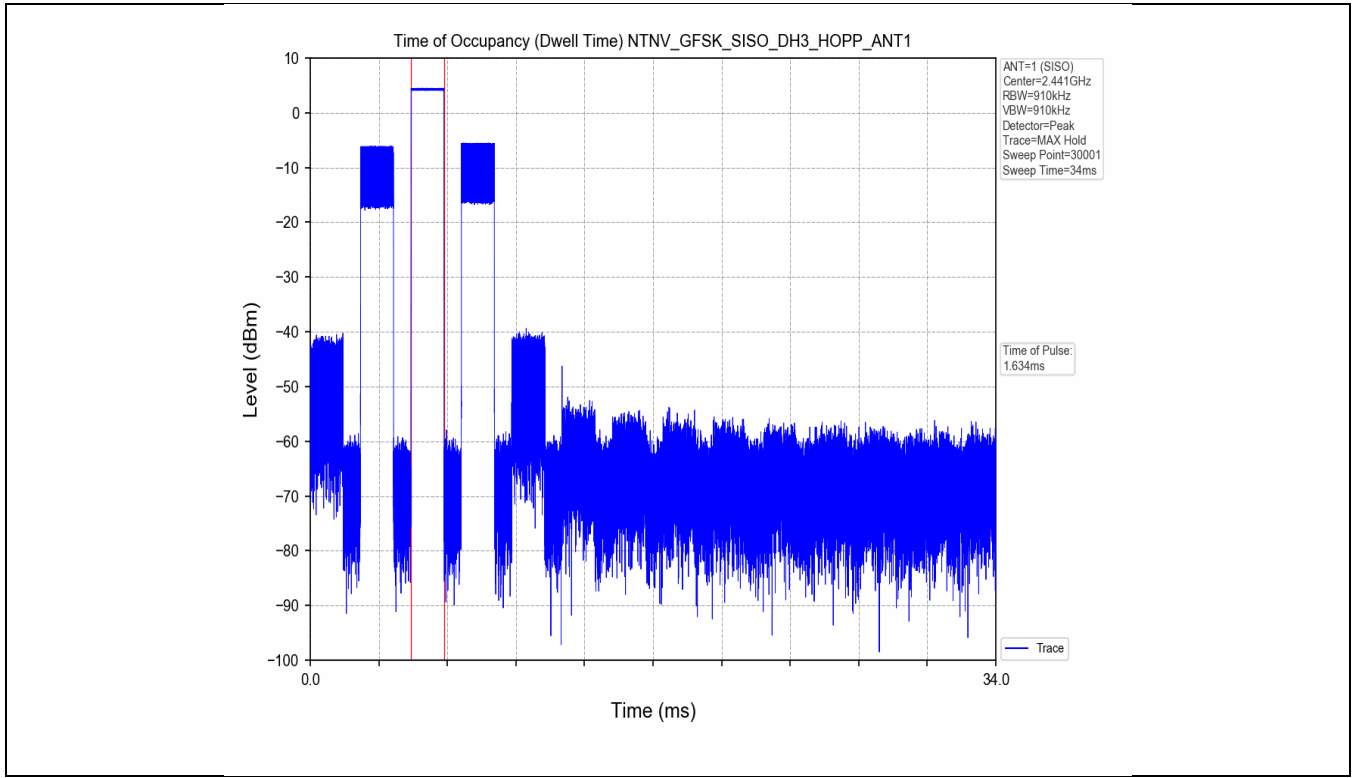
## 5. Time of Occupancy (Dwell Time)

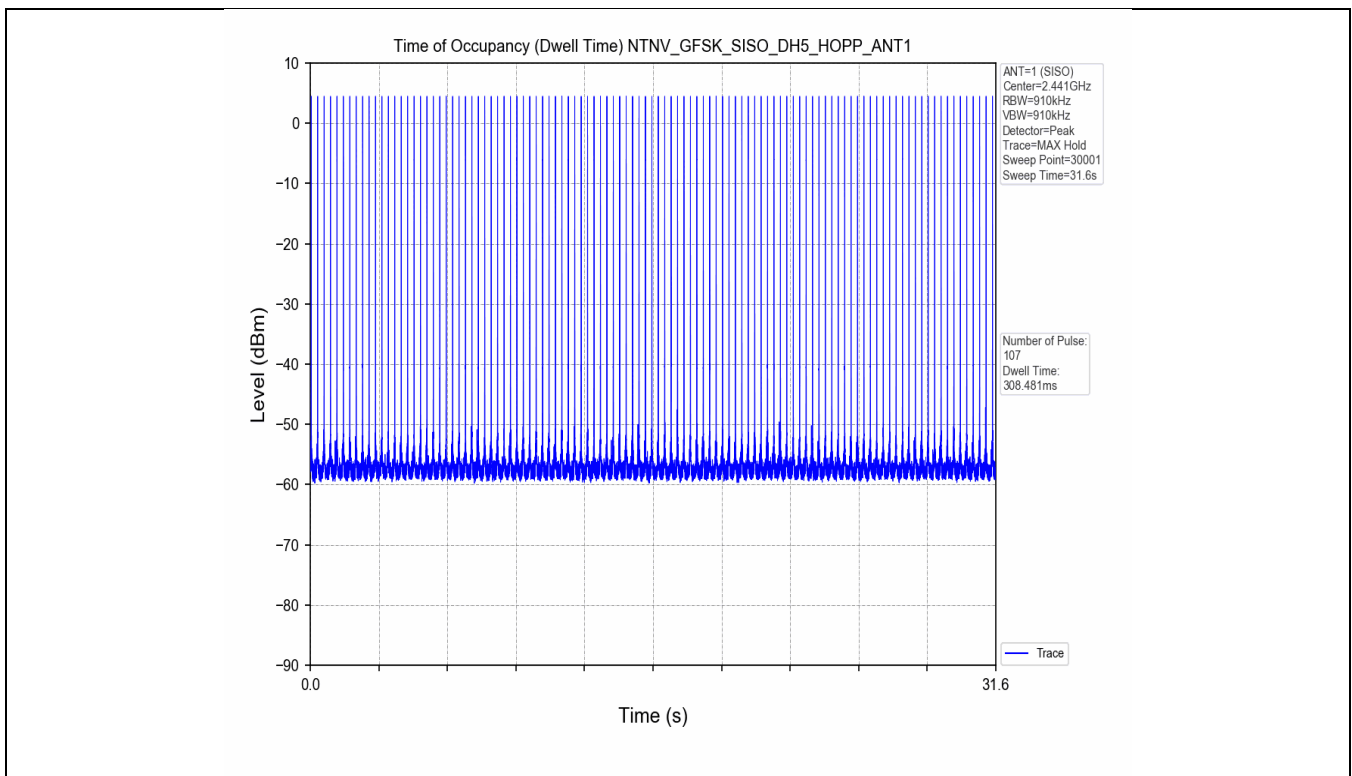
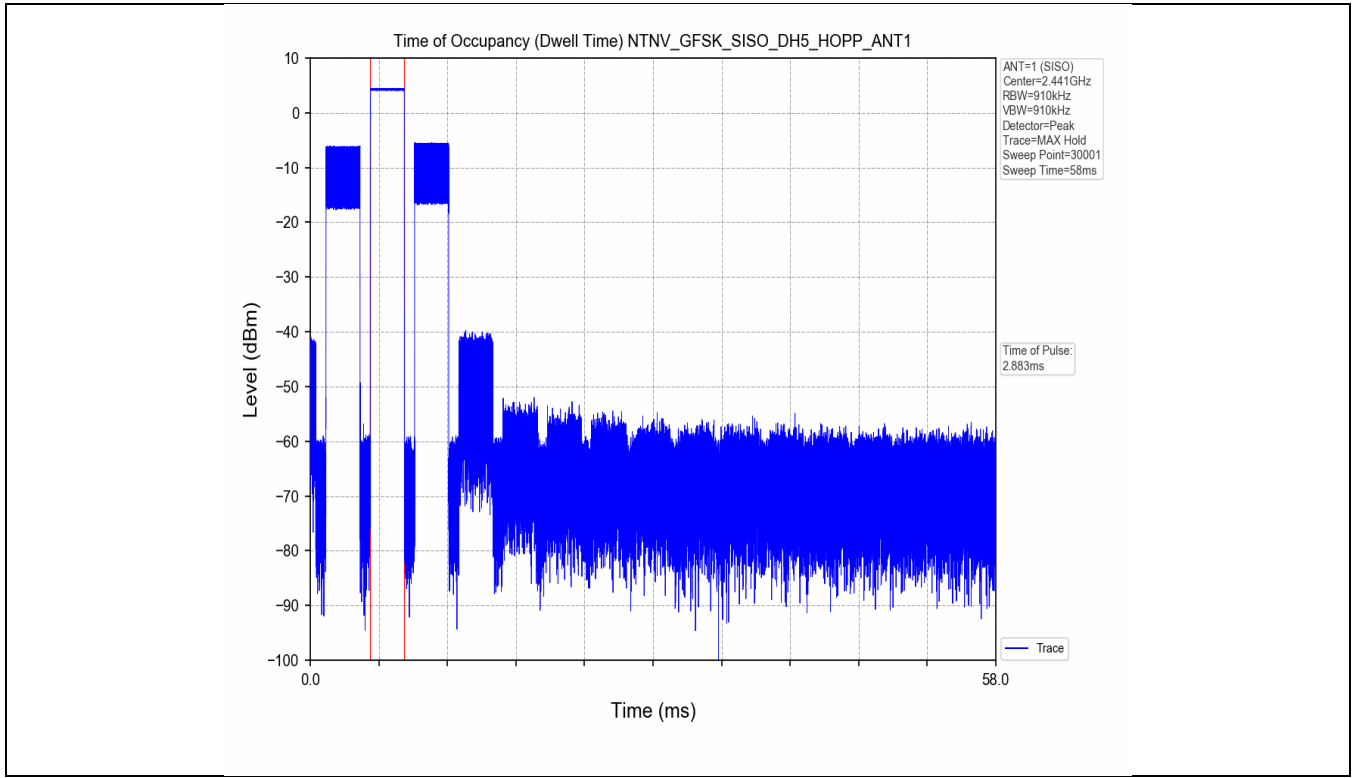
### 5.1 Test Result

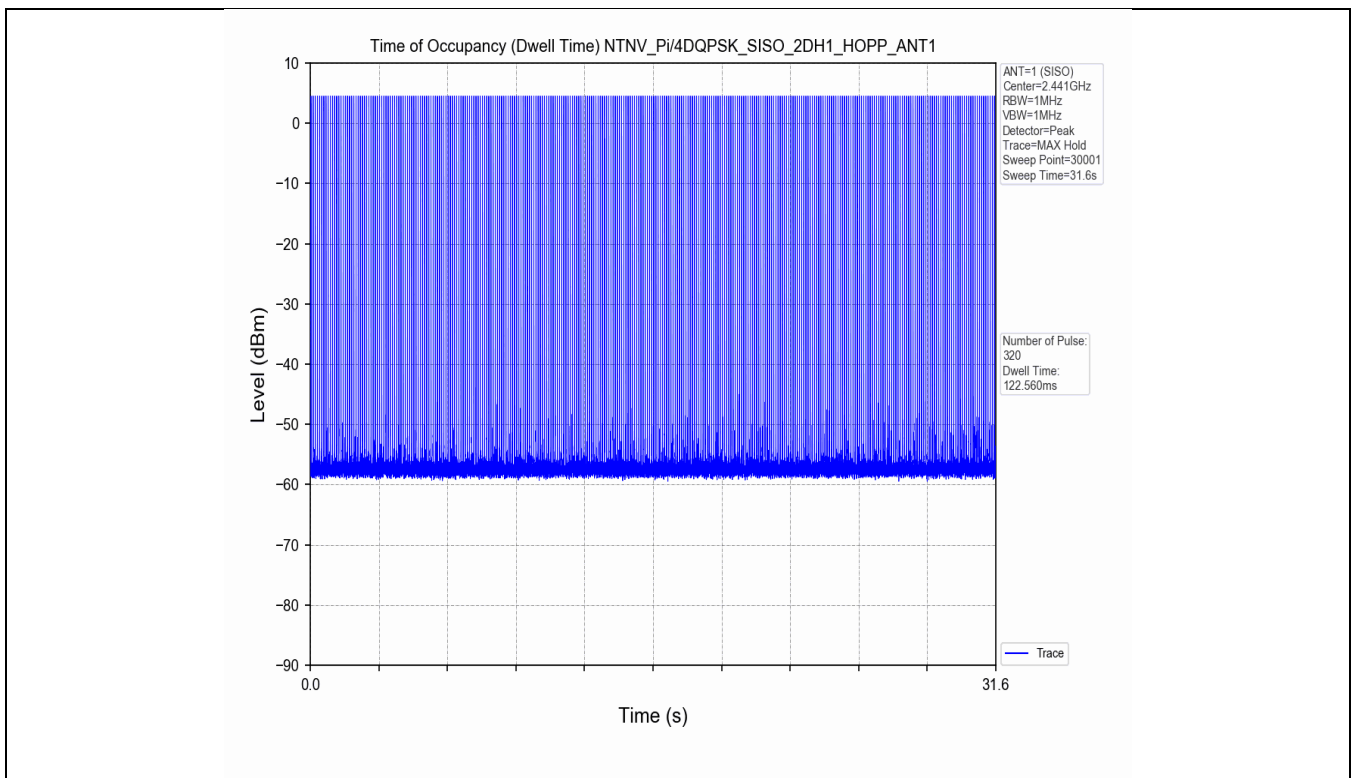
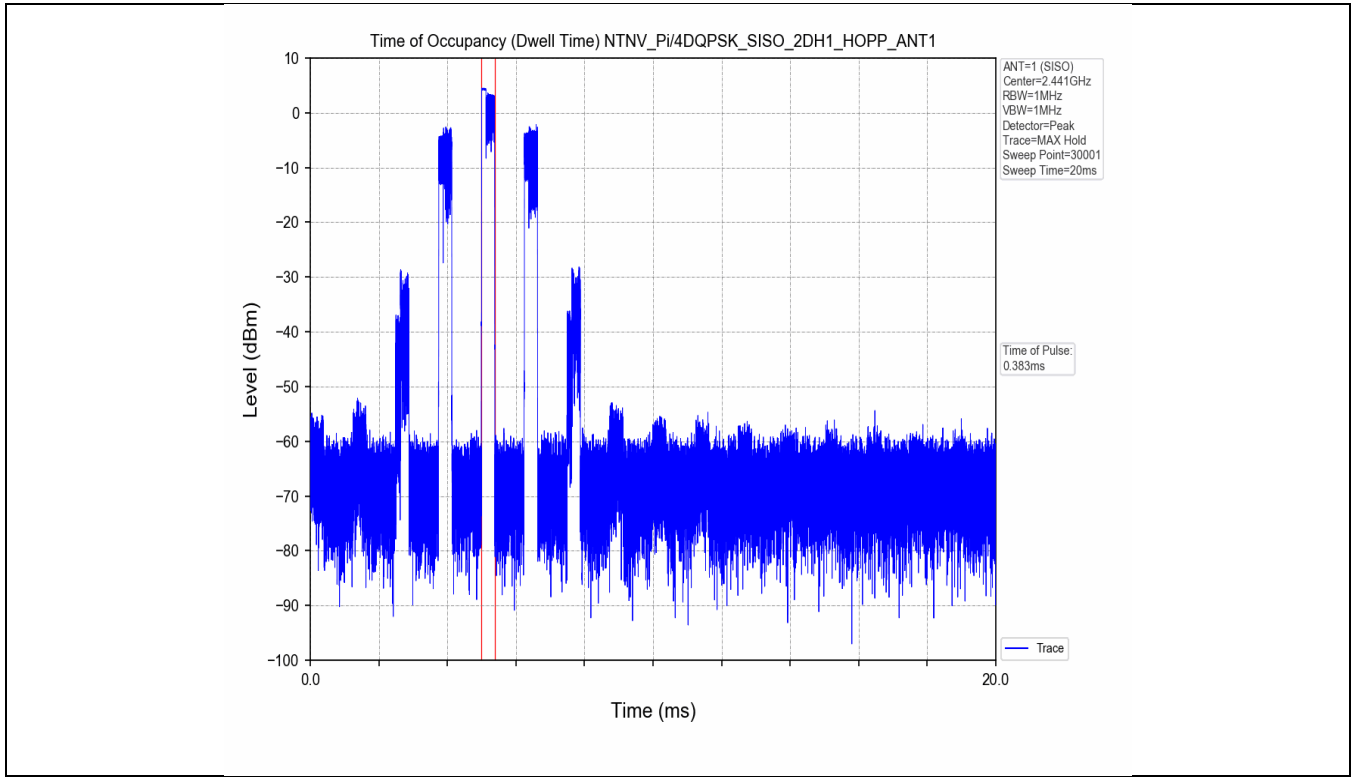
| Test Mode | Packet Type | TX Type | ANT No. | Duration of Single Pulse (ms) | Observation Period (s) | Num of Pulse in Observation Period | Dwell Time (ms) | Limits (ms) | Verdict |
|-----------|-------------|---------|---------|-------------------------------|------------------------|------------------------------------|-----------------|-------------|---------|
| GFSK      | DH1         | SISO    | 1       | 0.377                         | 31.6                   | 320                                | 120.640         | ≤400        | PASS    |
|           | DH3         | SISO    | 1       | 1.634                         | 31.6                   | 160                                | 261.440         | ≤400        | PASS    |
|           | DH5         | SISO    | 1       | 2.883                         | 31.6                   | 107                                | 308.481         | ≤400        | PASS    |
| Pi/4DQPSK | 2DH1        | SISO    | 1       | 0.383                         | 31.6                   | 320                                | 122.560         | ≤400        | PASS    |
|           | 2DH3        | SISO    | 1       | 1.634                         | 31.6                   | 160                                | 261.440         | ≤400        | PASS    |
|           | 2DH5        | SISO    | 1       | 2.834                         | 31.6                   | 107                                | 303.238         | ≤400        | PASS    |
| 8DPSK     | 3DH1        | SISO    | 1       | 0.383                         | 31.6                   | 320                                | 122.560         | ≤400        | PASS    |
|           | 3DH3        | SISO    | 1       | 1.634                         | 31.6                   | 160                                | 261.440         | ≤400        | PASS    |
|           | 3DH5        | SISO    | 1       | 2.843                         | 31.6                   | 106                                | 301.358         | ≤400        | PASS    |

### 5.2 Test Graph

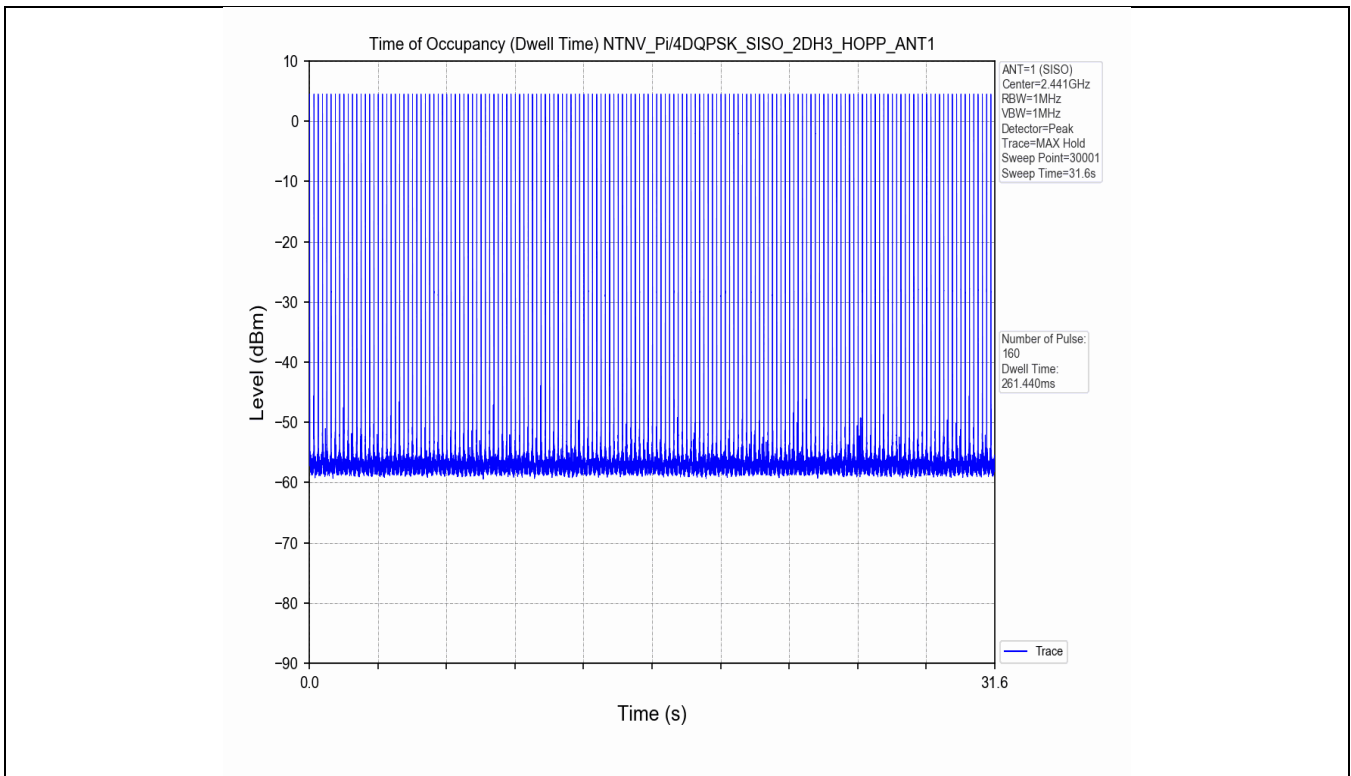
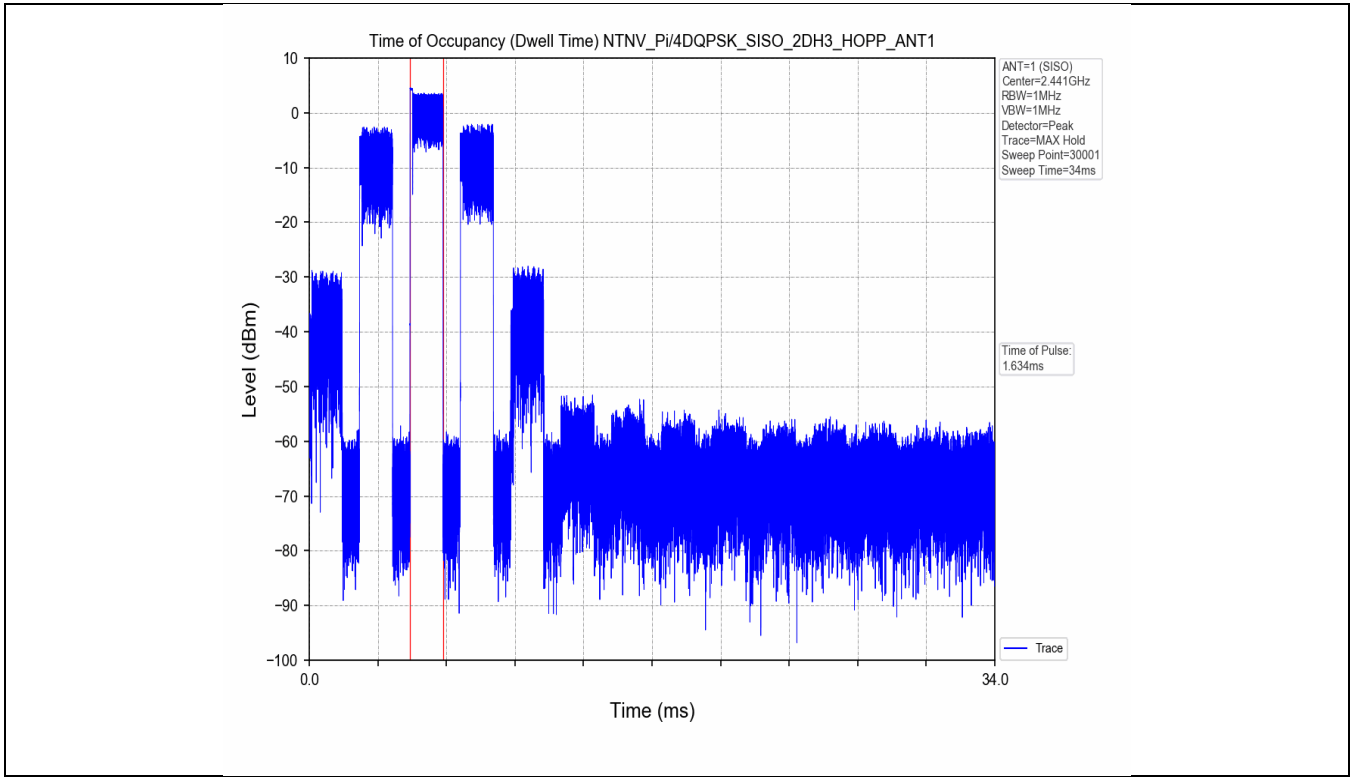


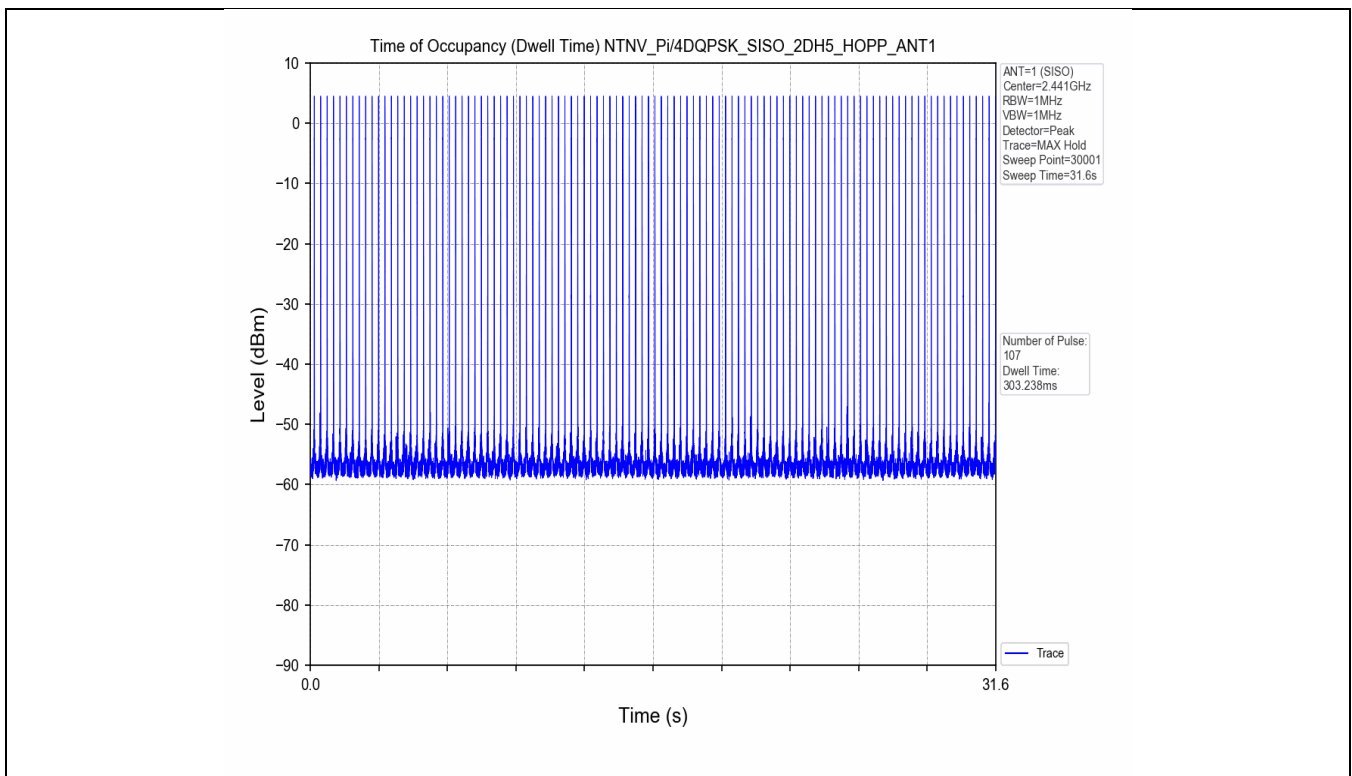
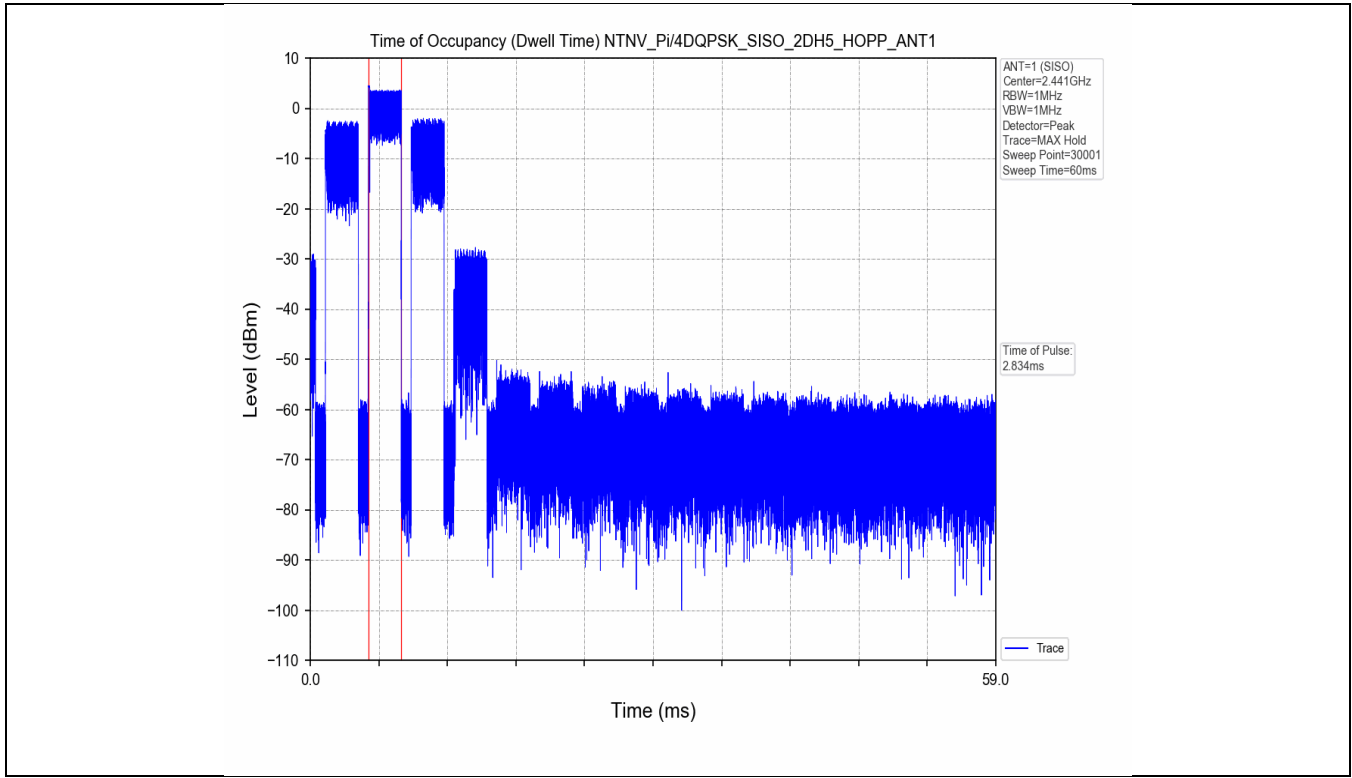


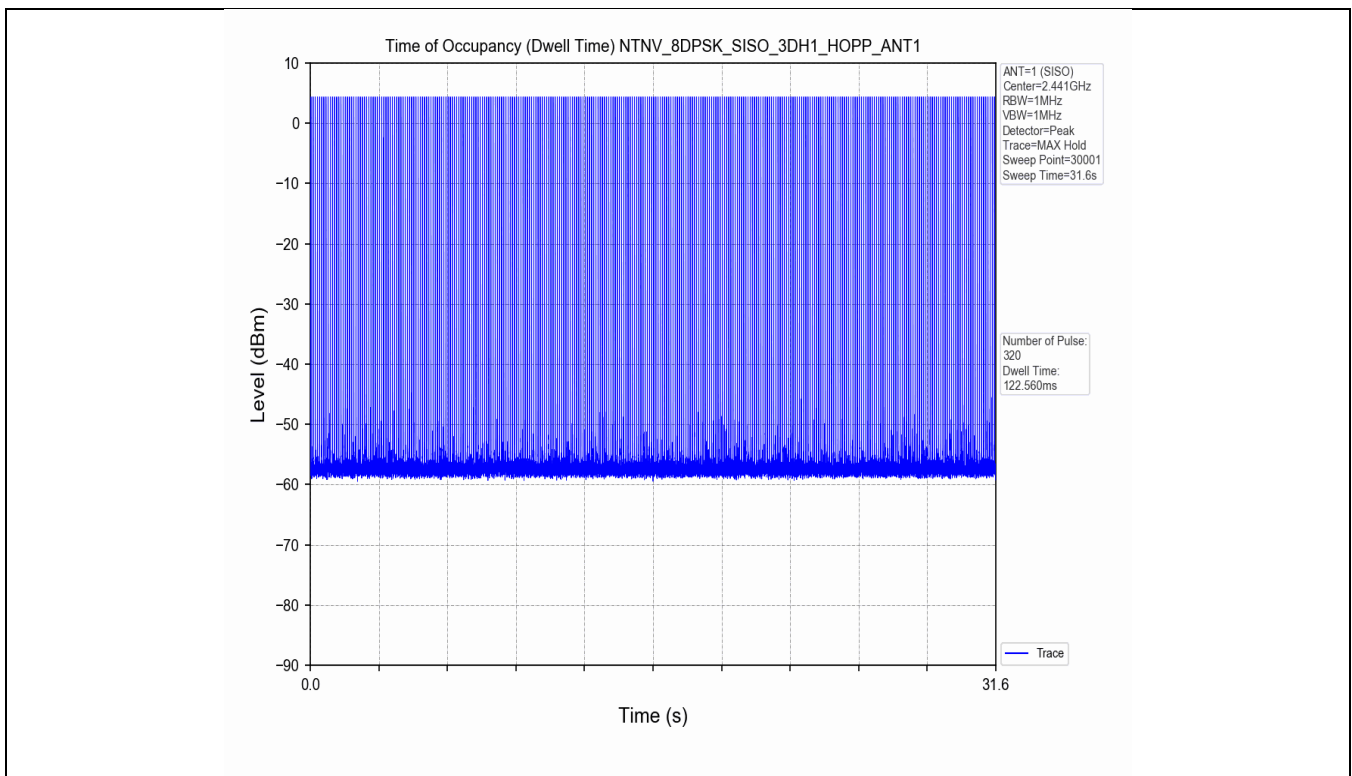
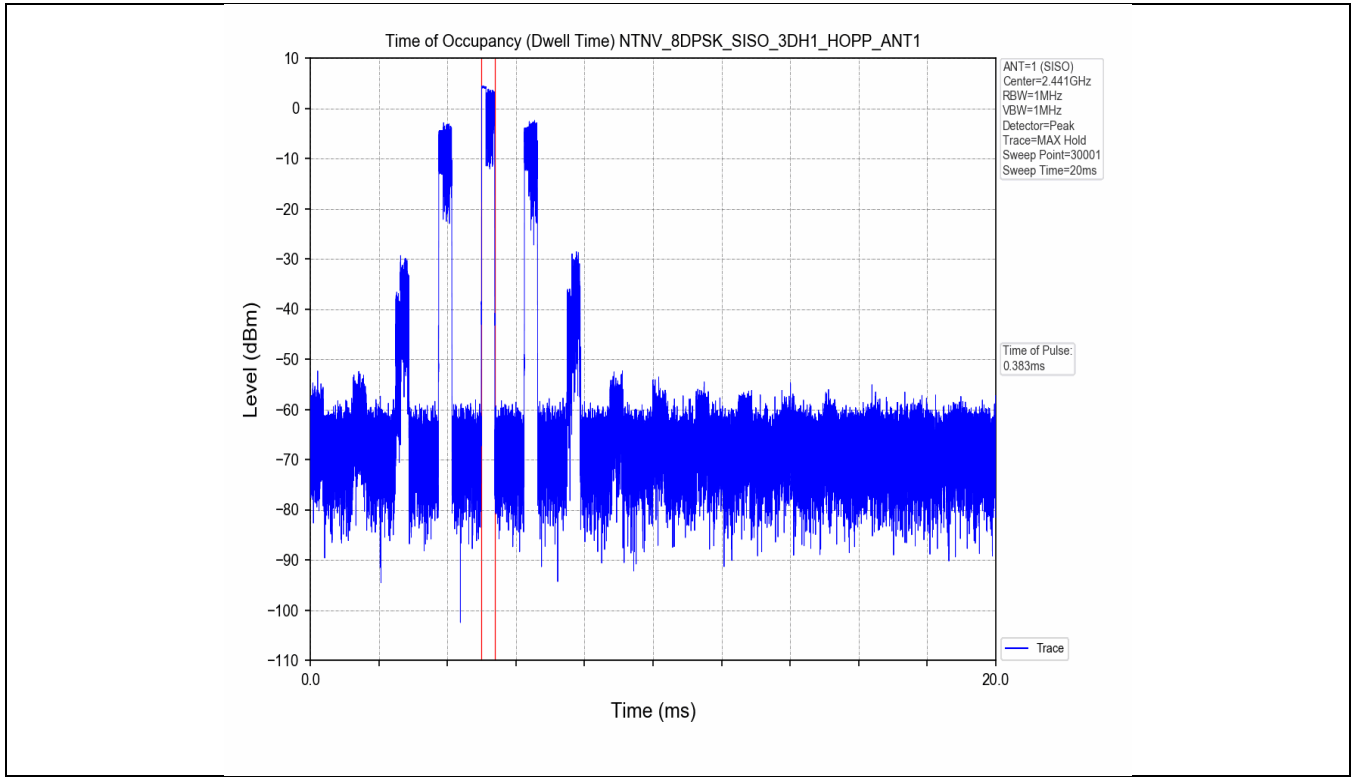


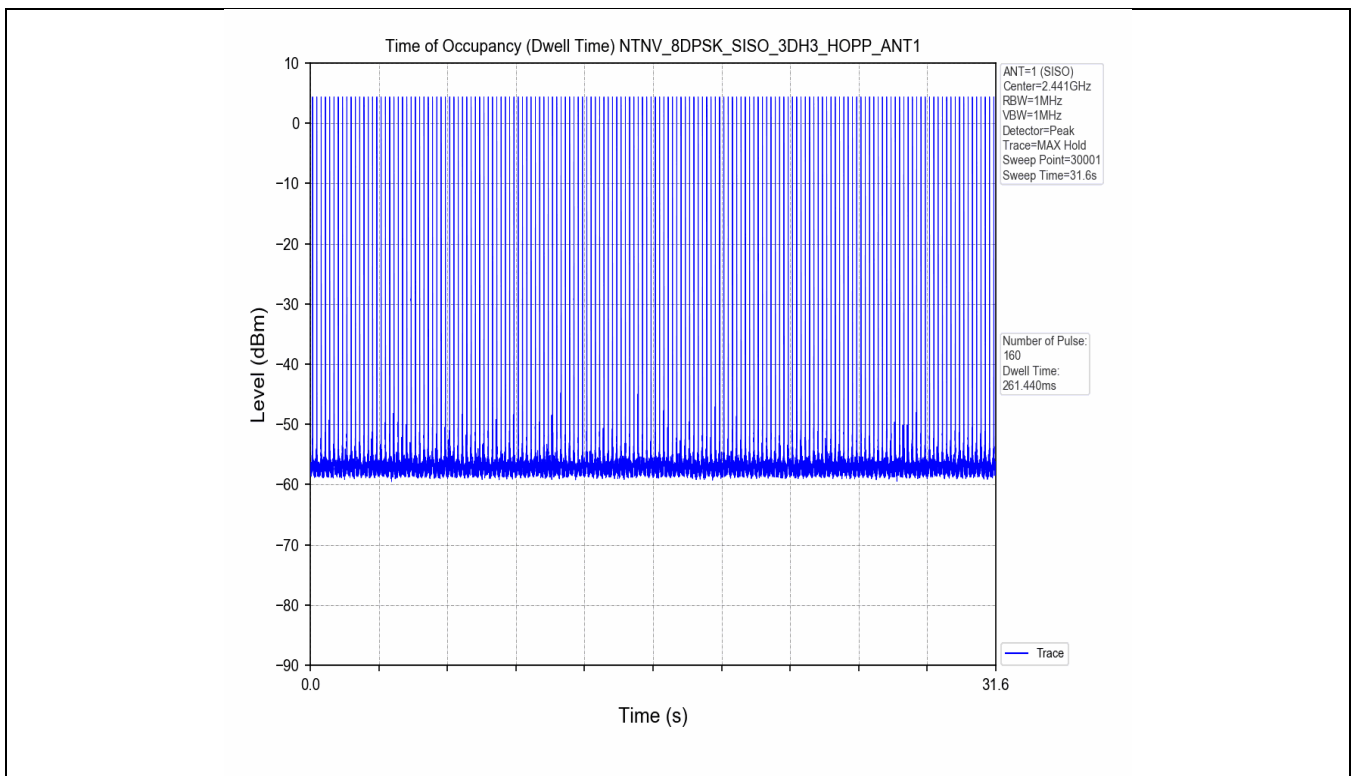
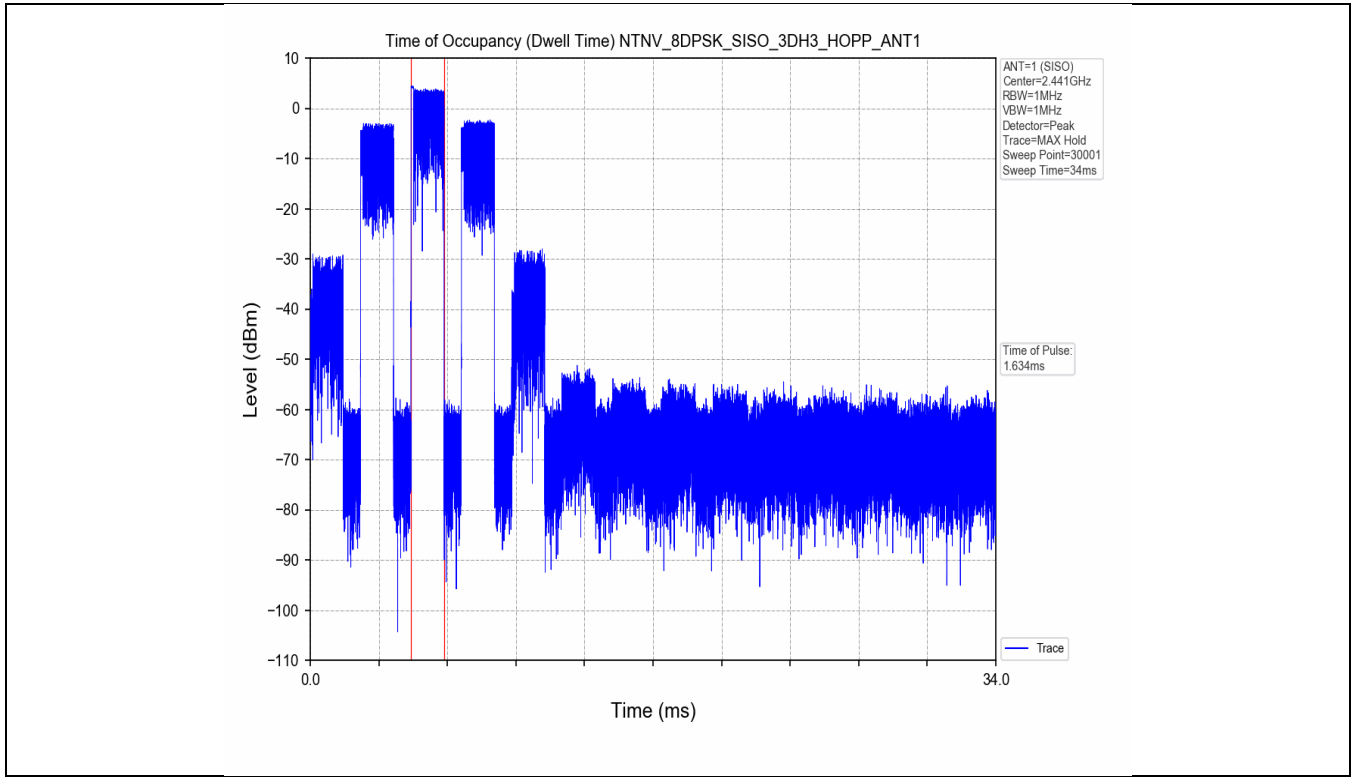


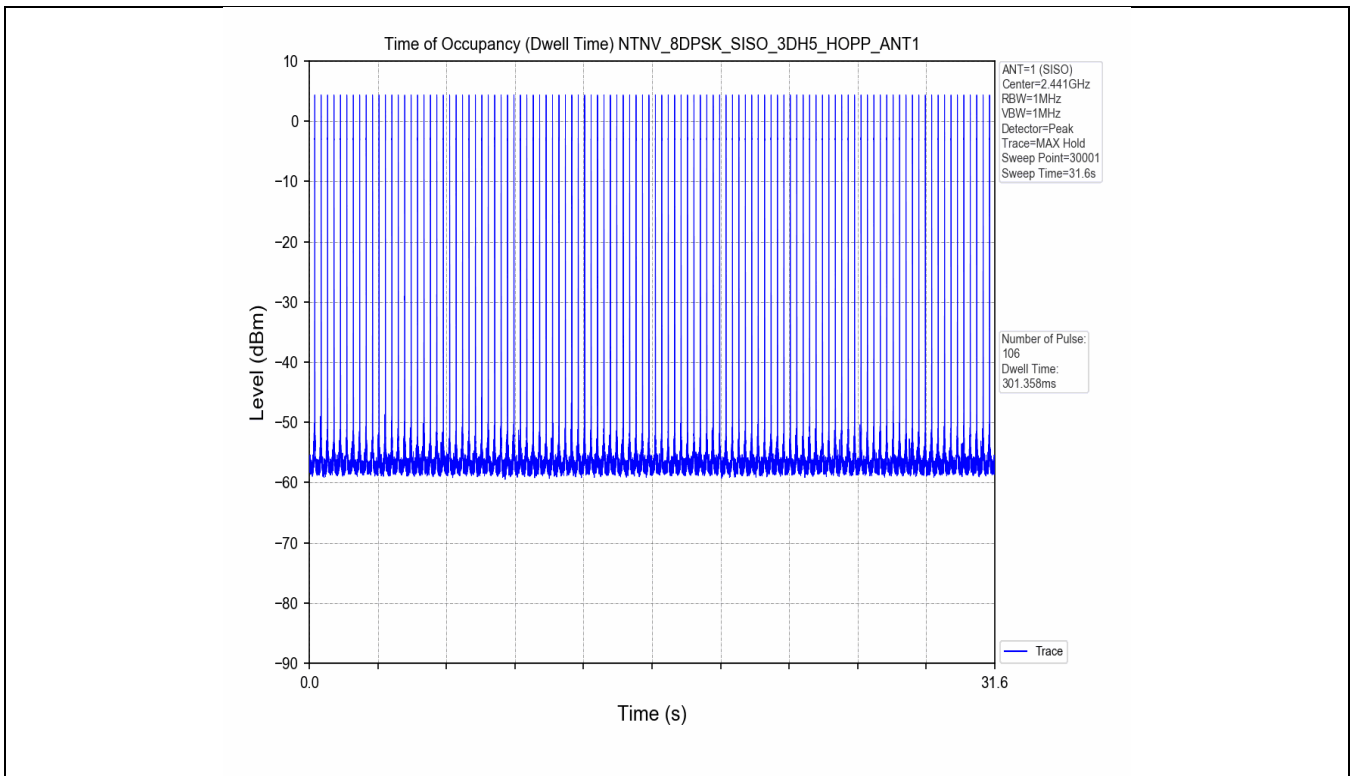
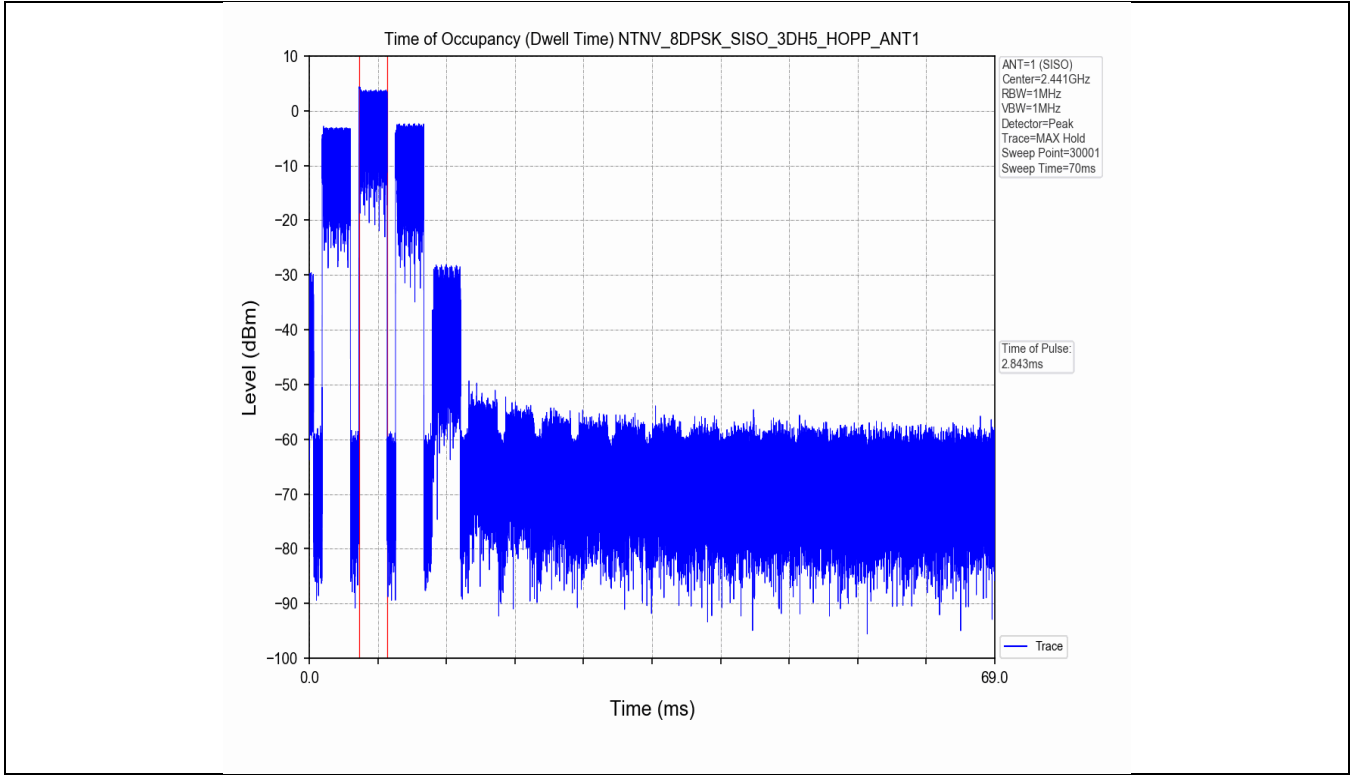












## 6. Unwanted Emissions in Non-restricted Frequency Bands

### 6.1 Test Result

| Test Mode | Frequency (MHz) | TX Type | ANT No. | Spurious Conducted Emission (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|---------|-----------------------------------|--------------|---------|
| GFSK      | 2402            | SISO    | 1       | Refer to test graph               | -14.94       | PASS    |
|           | 2441            | SISO    | 1       | Refer to test graph               | -14.94       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -14.94       | PASS    |
|           | Hopping         | SISO    | 1       | Refer to test graph               | -14.94       | PASS    |
| Pi/4DQPSK | 2402            | SISO    | 1       | Refer to test graph               | -14.93       | PASS    |
|           | 2441            | SISO    | 1       | Refer to test graph               | -14.93       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -14.93       | PASS    |
|           | Hopping         | SISO    | 1       | Refer to test graph               | -14.93       | PASS    |
| 8DPSK     | 2402            | SISO    | 1       | Refer to test graph               | -15.08       | PASS    |
|           | 2441            | SISO    | 1       | Refer to test graph               | -15.08       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -15.08       | PASS    |
|           | Hopping         | SISO    | 1       | Refer to test graph               | -15.08       | PASS    |

### 6.2 Test Graph

