

## Appendix for 15.247

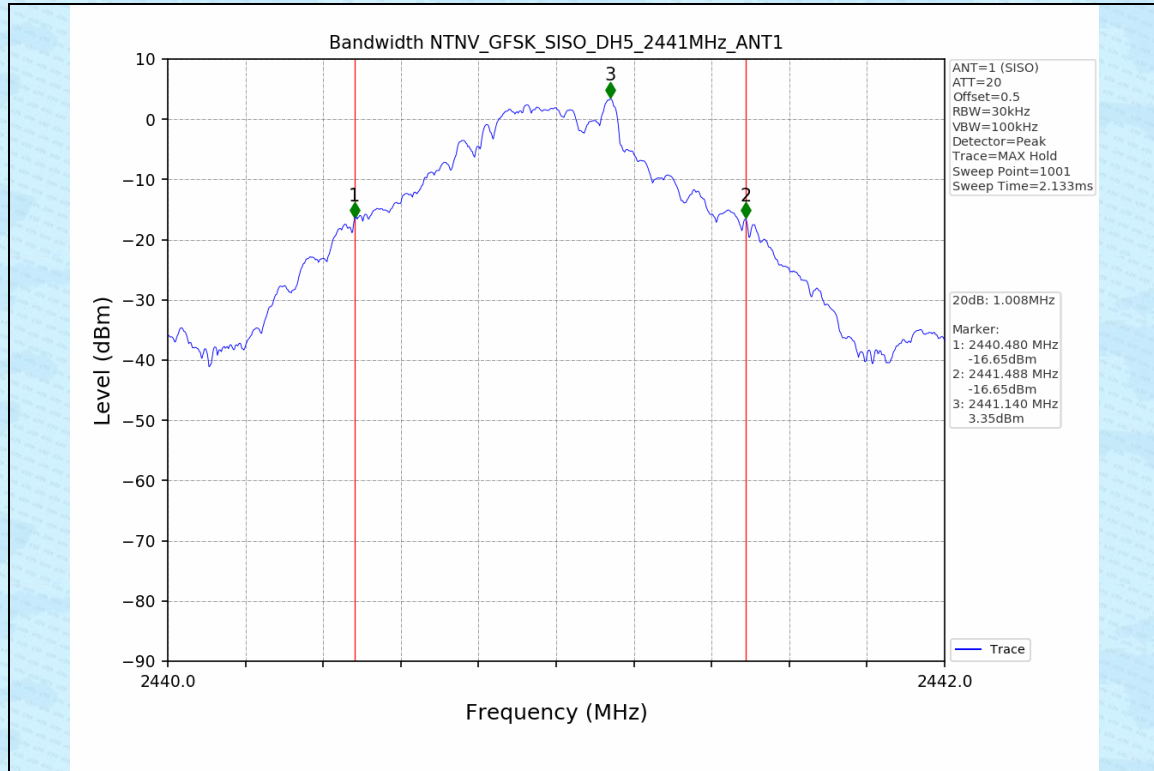
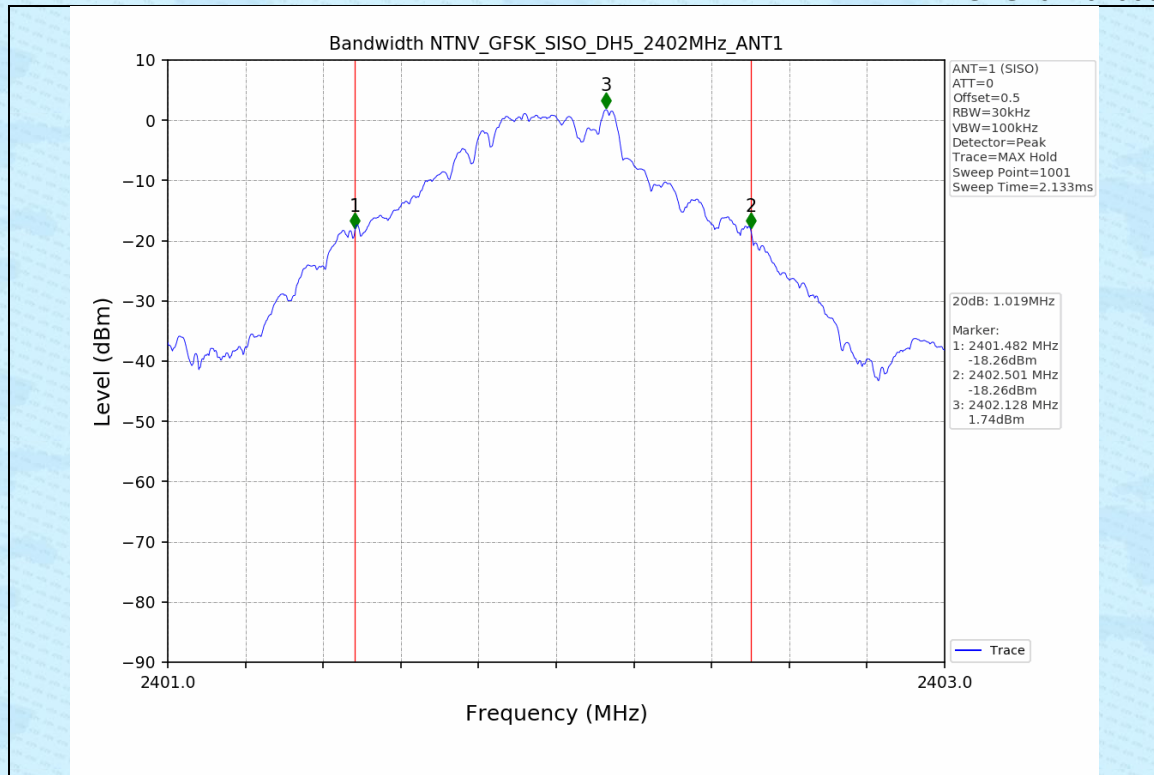
### 1. Bandwidth

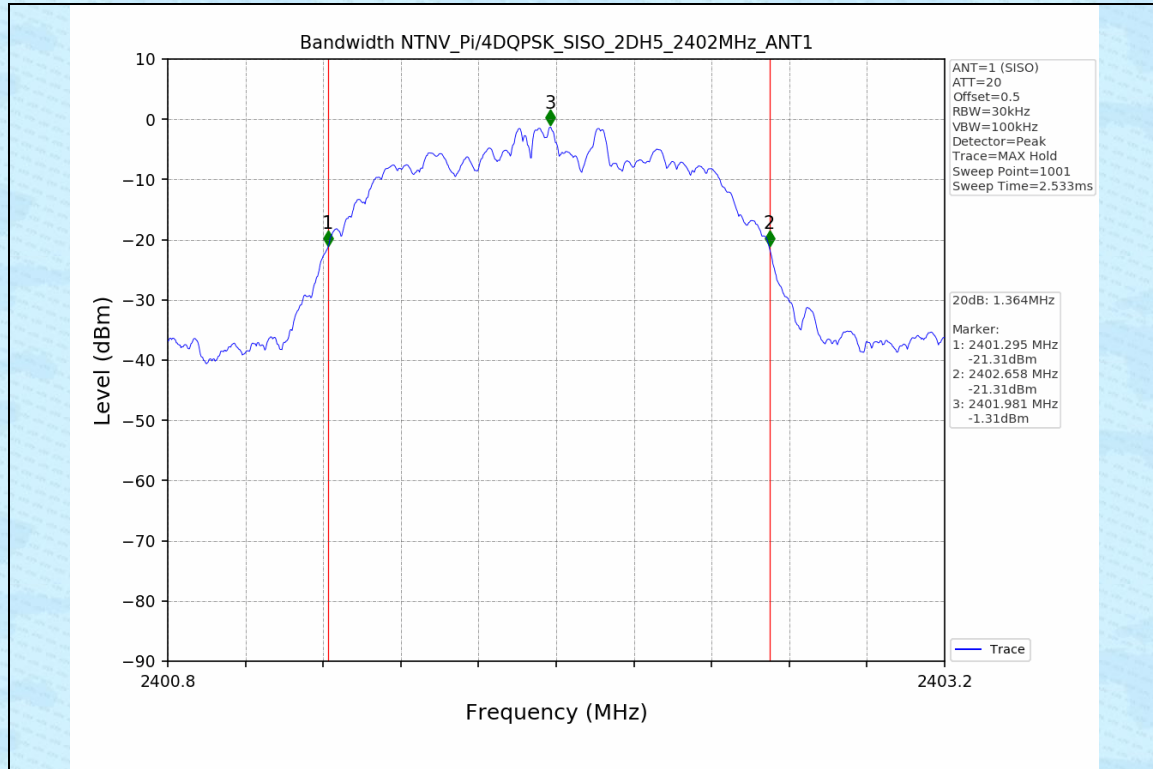
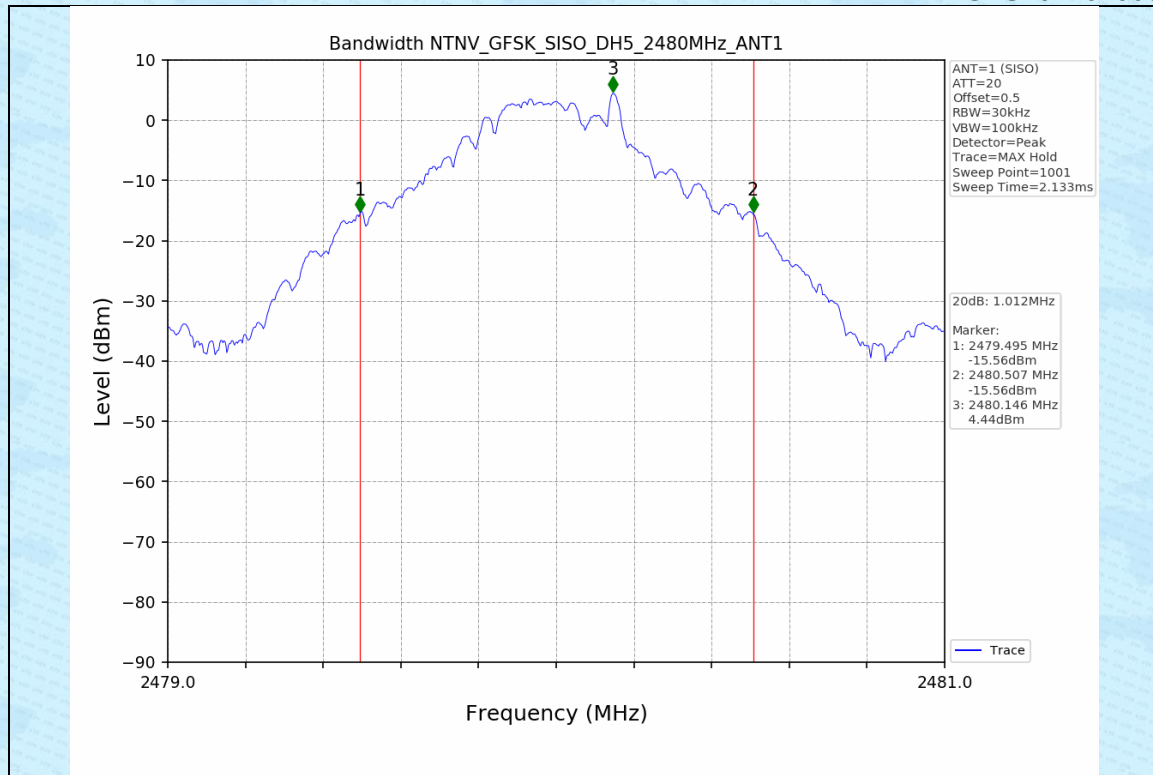
#### 1.1 Test Result

| Test Mode | Frequency (MHz) | TX Type | ANT No. | 20dB Bandwidth    | Verdict |
|-----------|-----------------|---------|---------|-------------------|---------|
|           |                 |         |         | Test Result (MHz) |         |
| GFSK      | 2402            | SISO    | 1       | 1.019             | PASS    |
|           | 2441            | SISO    | 1       | 1.008             | PASS    |
|           | 2480            | SISO    | 1       | 1.012             | PASS    |
| Pi/4DQPSK | 2402            | SISO    | 1       | 1.364             | PASS    |
|           | 2441            | SISO    | 1       | 1.361             | PASS    |
|           | 2480            | SISO    | 1       | 1.363             | PASS    |
| 8DPSK     | 2402            | SISO    | 1       | 1.316             | PASS    |
|           | 2441            | SISO    | 1       | 1.315             | PASS    |
|           | 2480            | SISO    | 1       | 1.313             | PASS    |

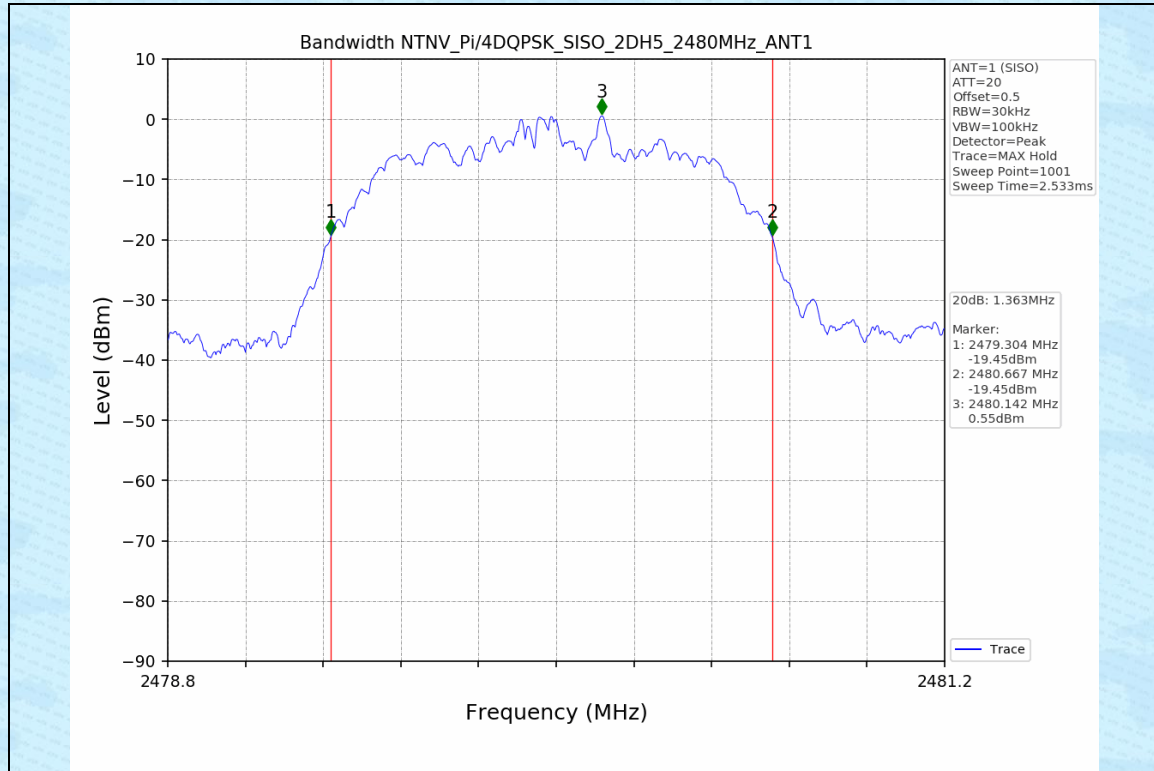
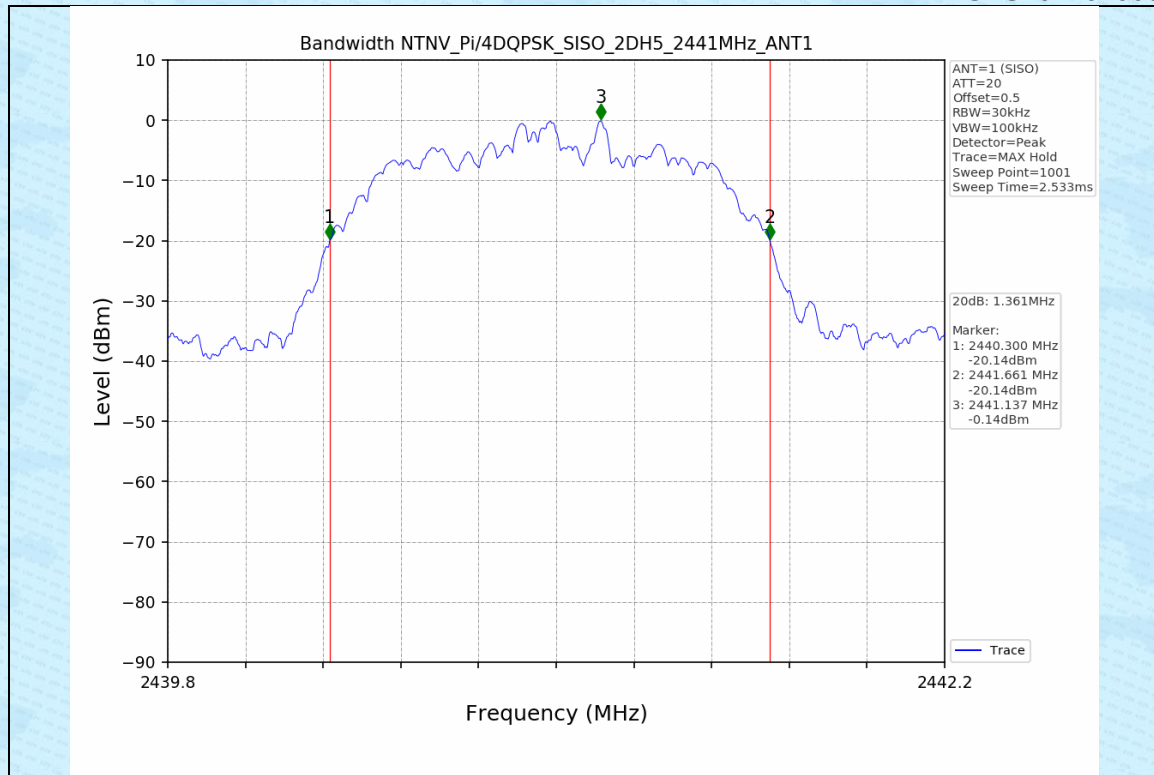
| Test Mode | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth |                     |
|-----------|-----------------|---------|---------|------------------------|---------------------|
|           |                 |         |         | Test Result (MHz)      |                     |
| GFSK      | 2402            | SISO    | 1       | 0.916                  | Only for Report Use |
|           | 2441            | SISO    | 1       | 0.906                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 0.911                  | Only for Report Use |
| Pi/4DQPSK | 2402            | SISO    | 1       | 1.218                  | Only for Report Use |
|           | 2441            | SISO    | 1       | 1.218                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 1.217                  | Only for Report Use |
| 8DPSK     | 2402            | SISO    | 1       | 1.221                  | Only for Report Use |
|           | 2441            | SISO    | 1       | 1.220                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 1.218                  | Only for Report Use |

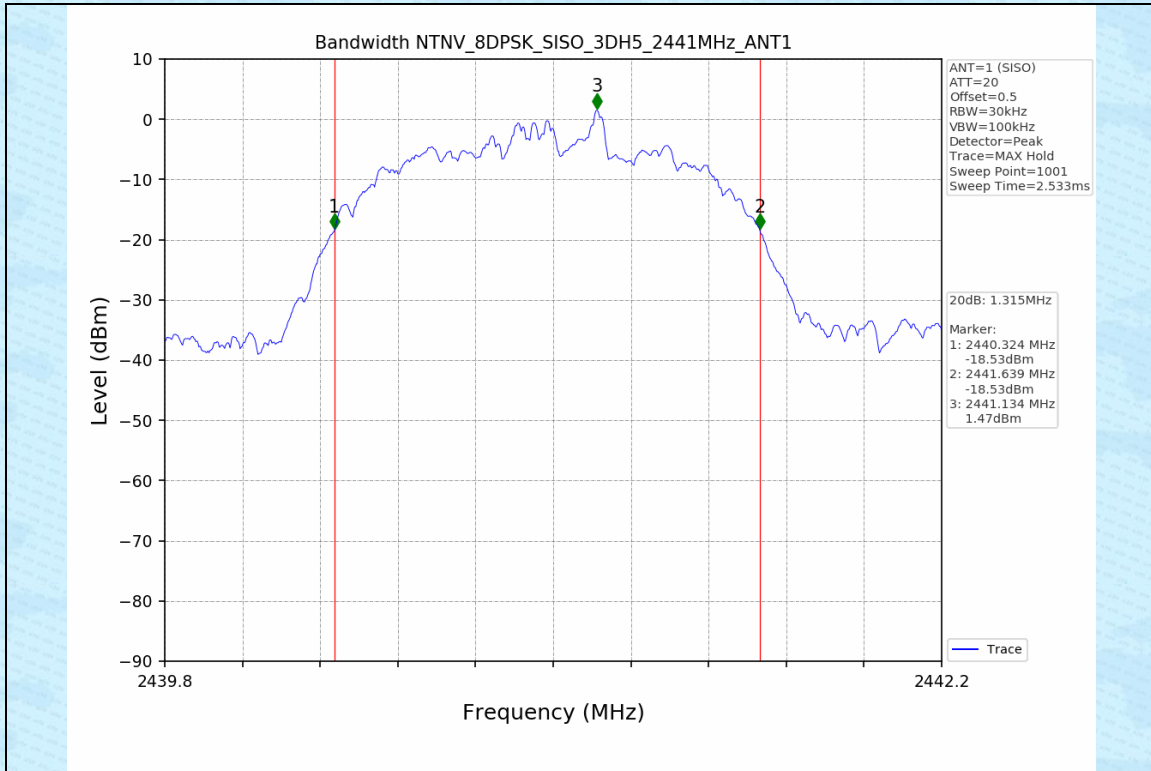
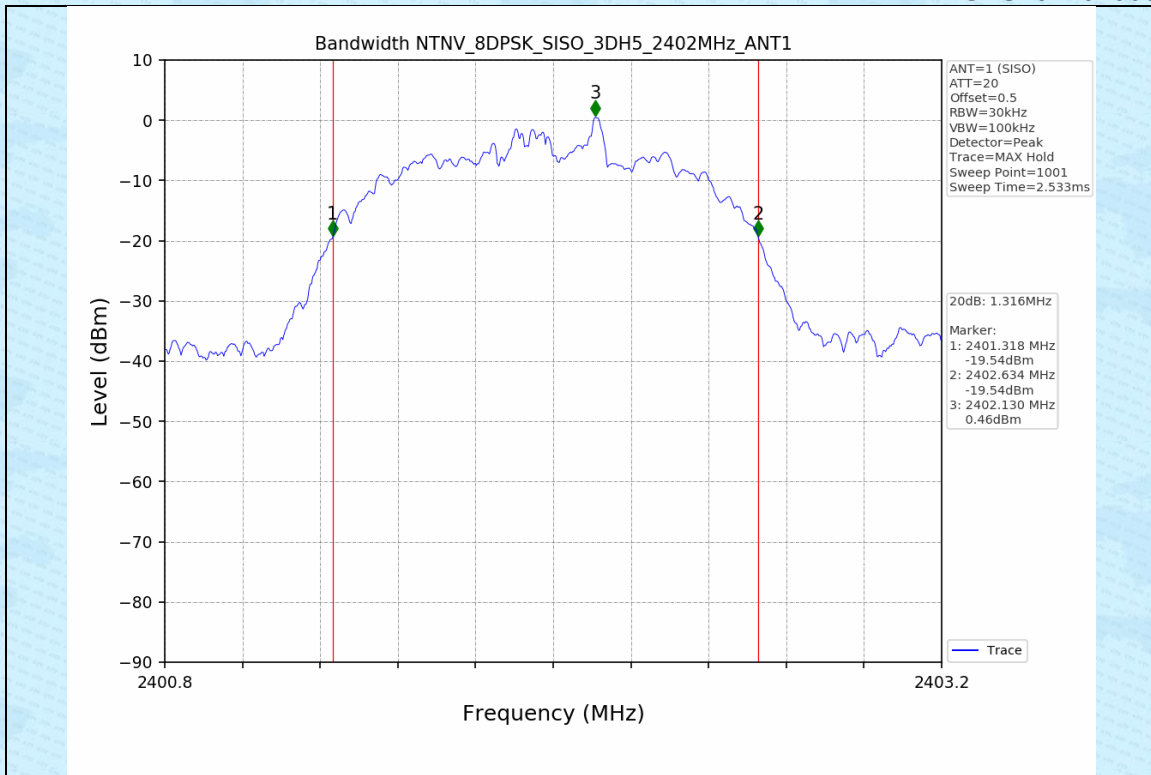
#### 1.2 Test Graph - 20dB Bandwidth

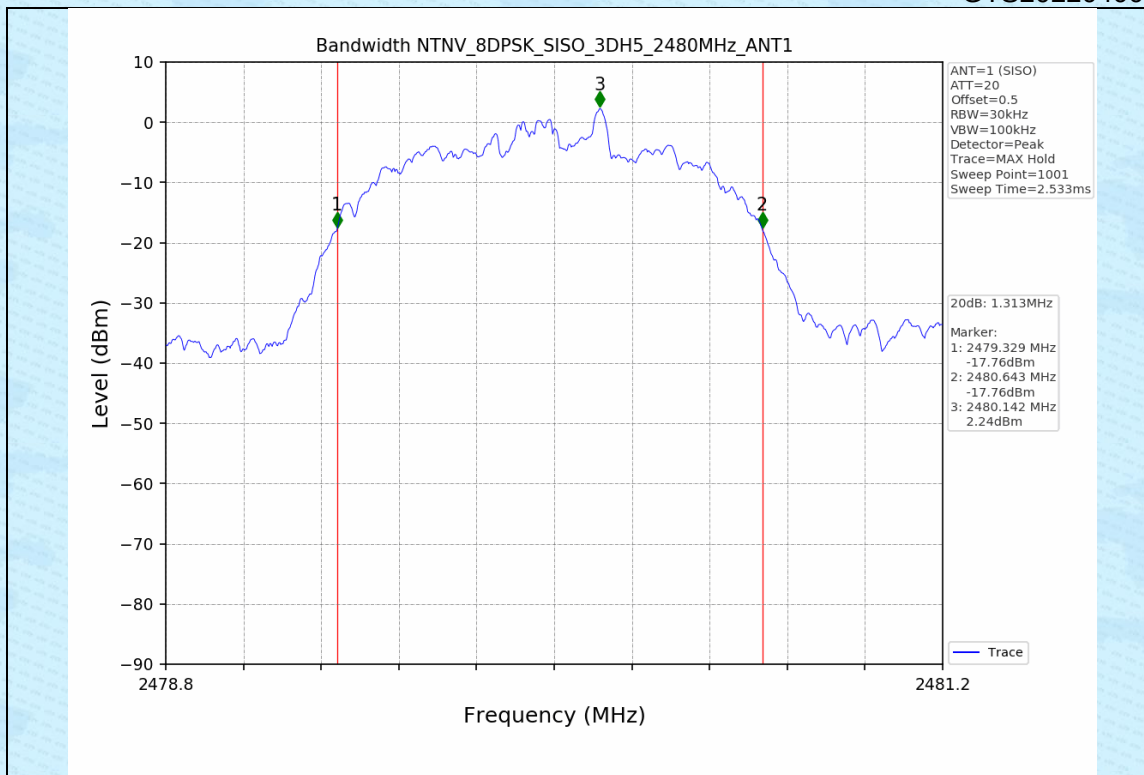




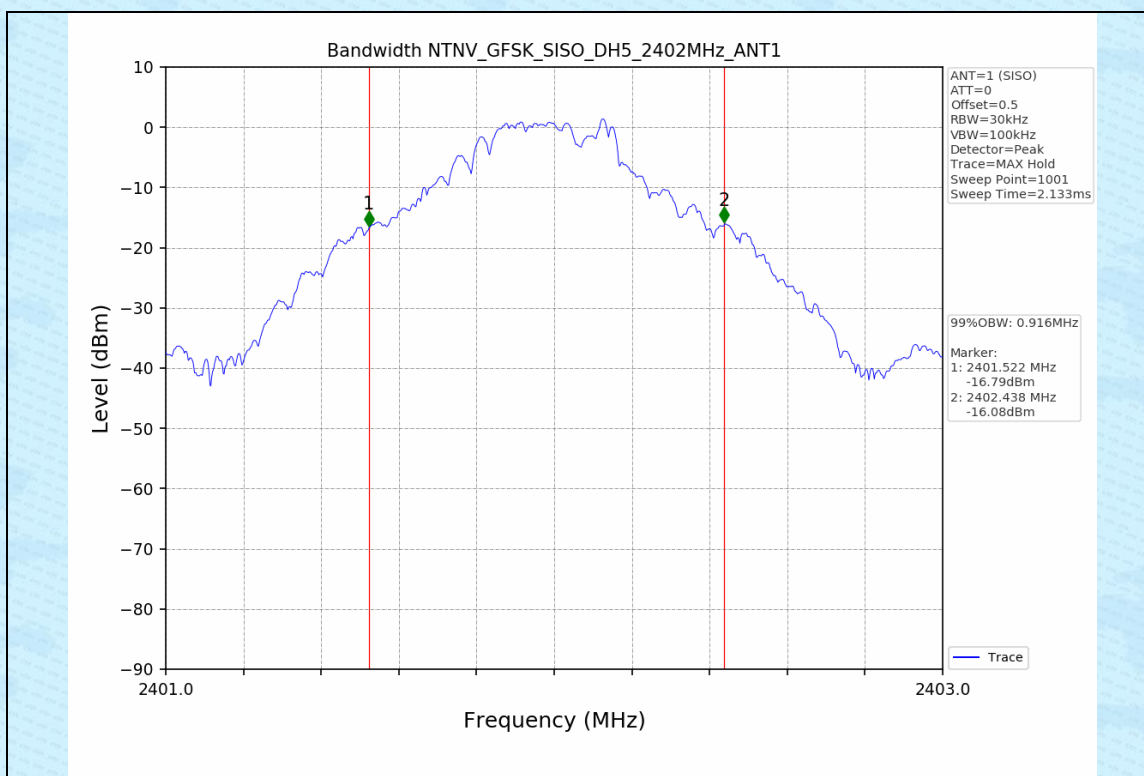




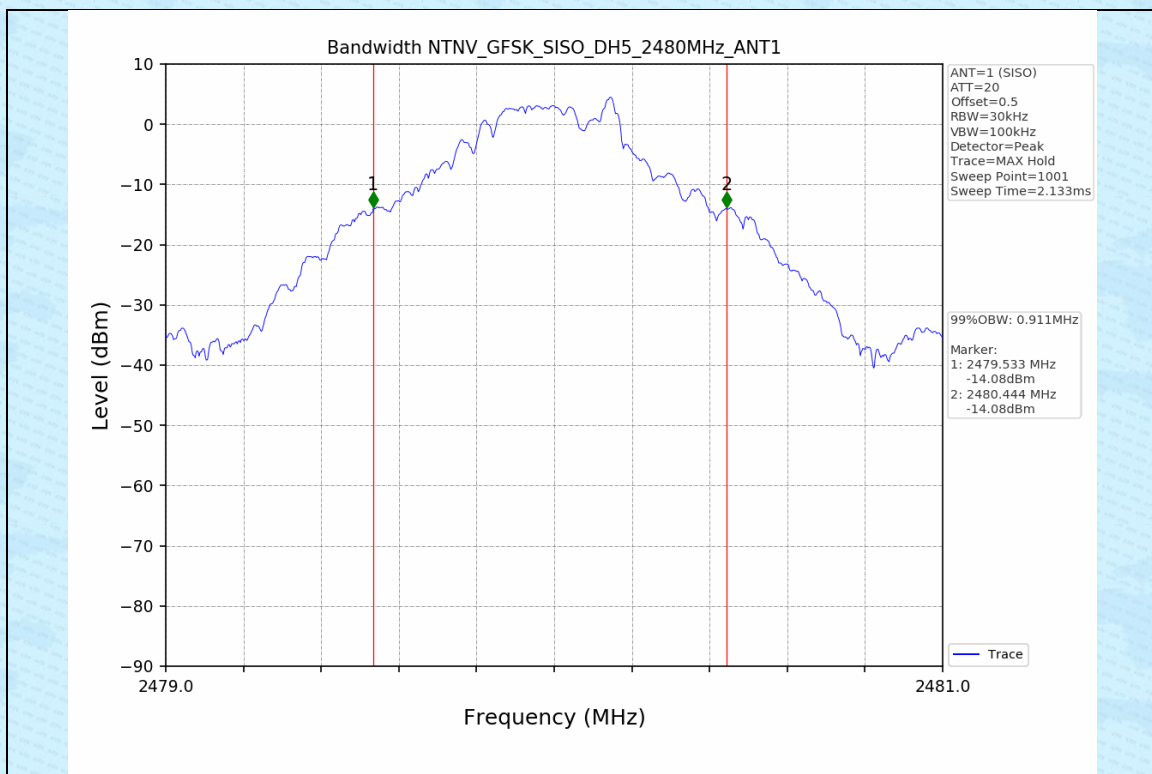
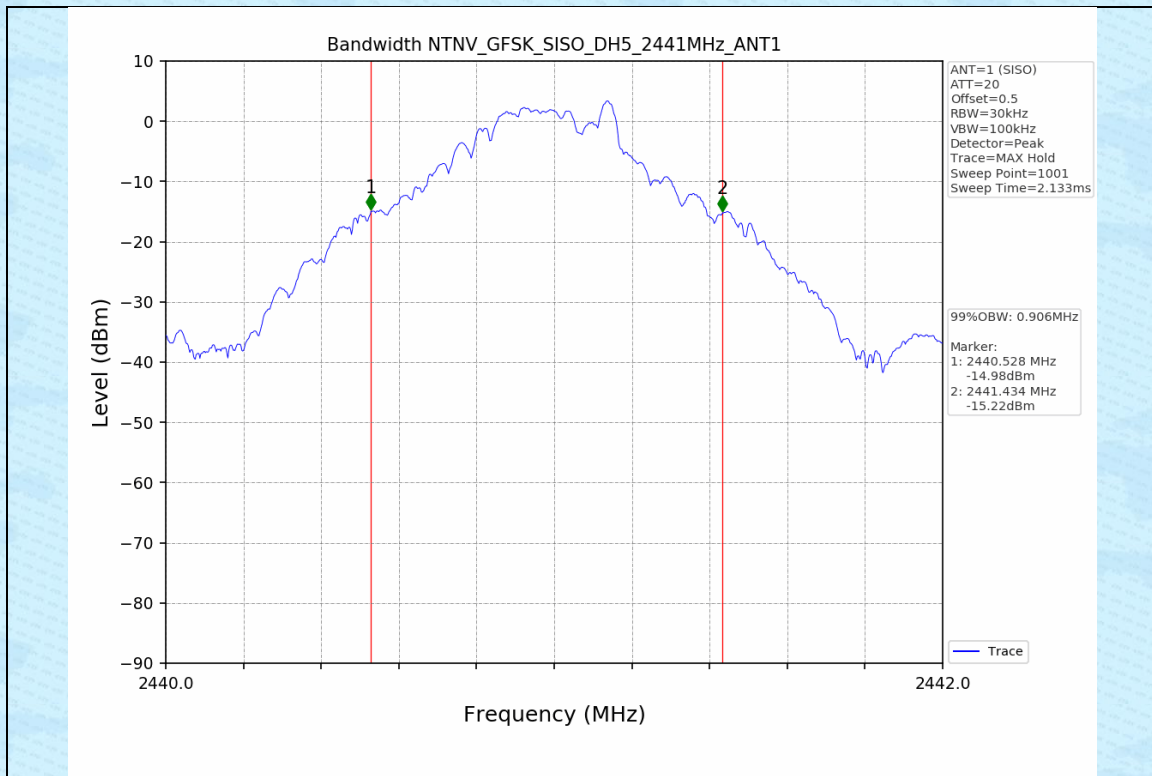


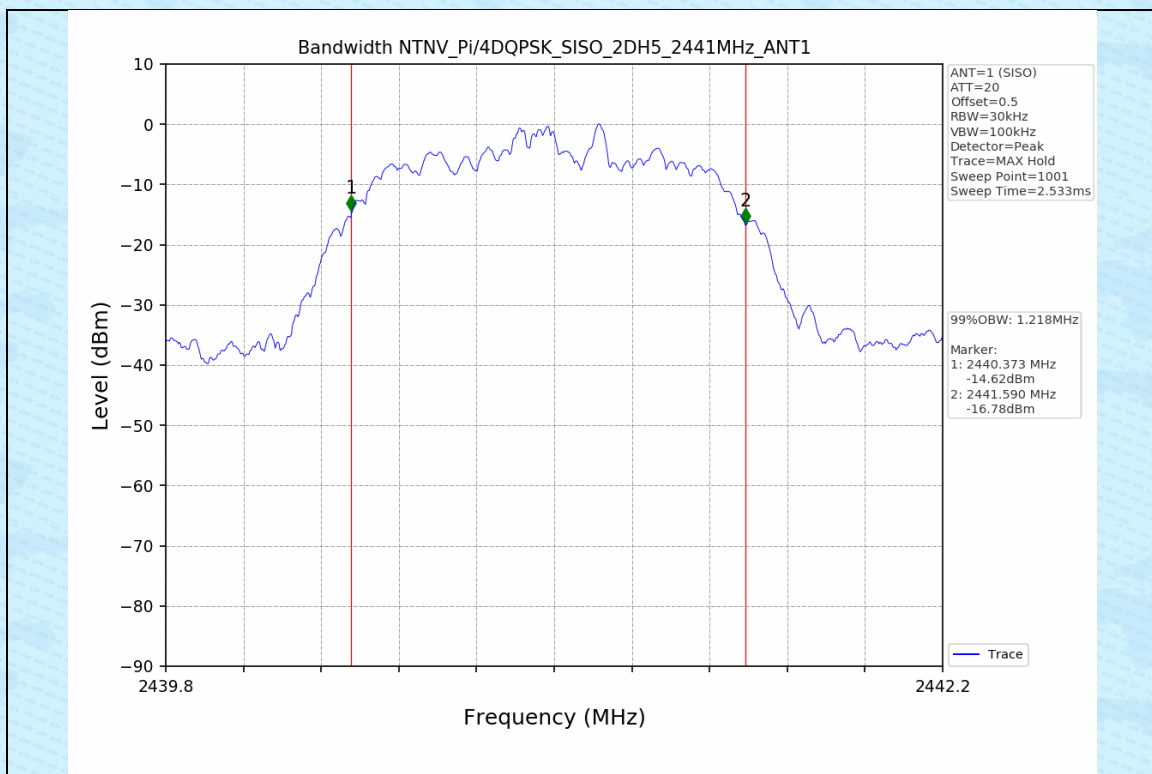
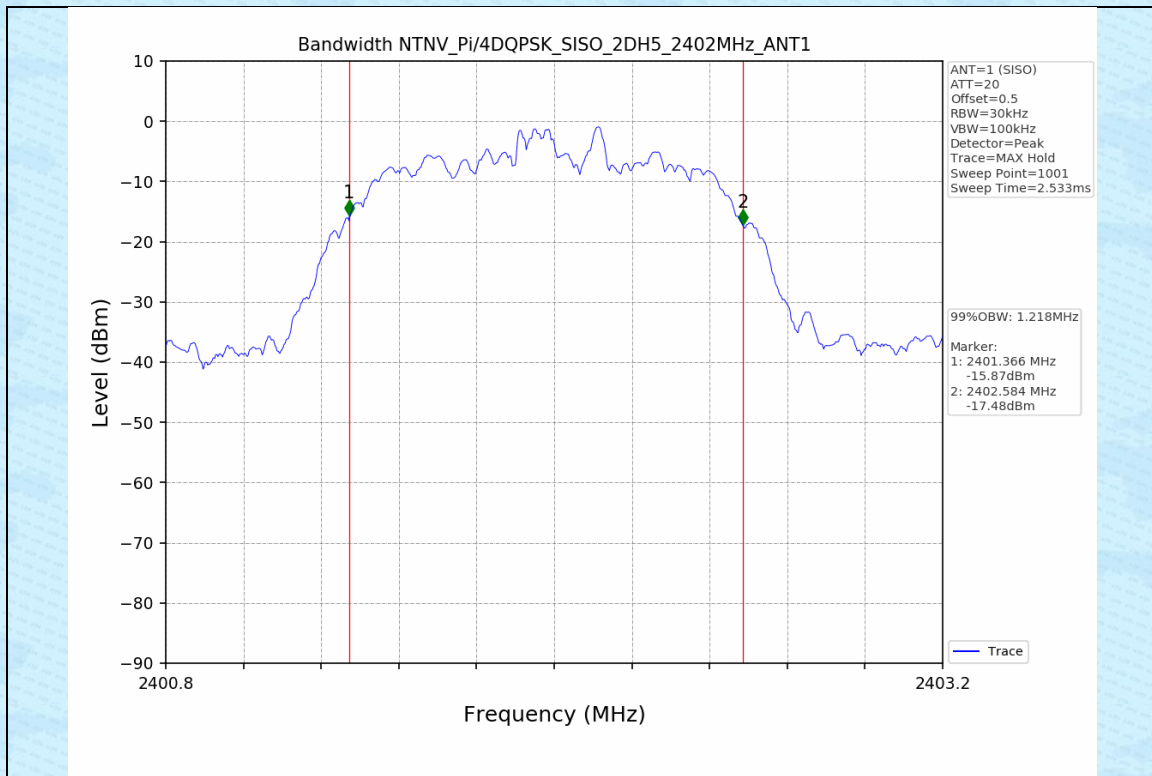


### 1.3 Test Graph - 99% Occupied Bandwidth

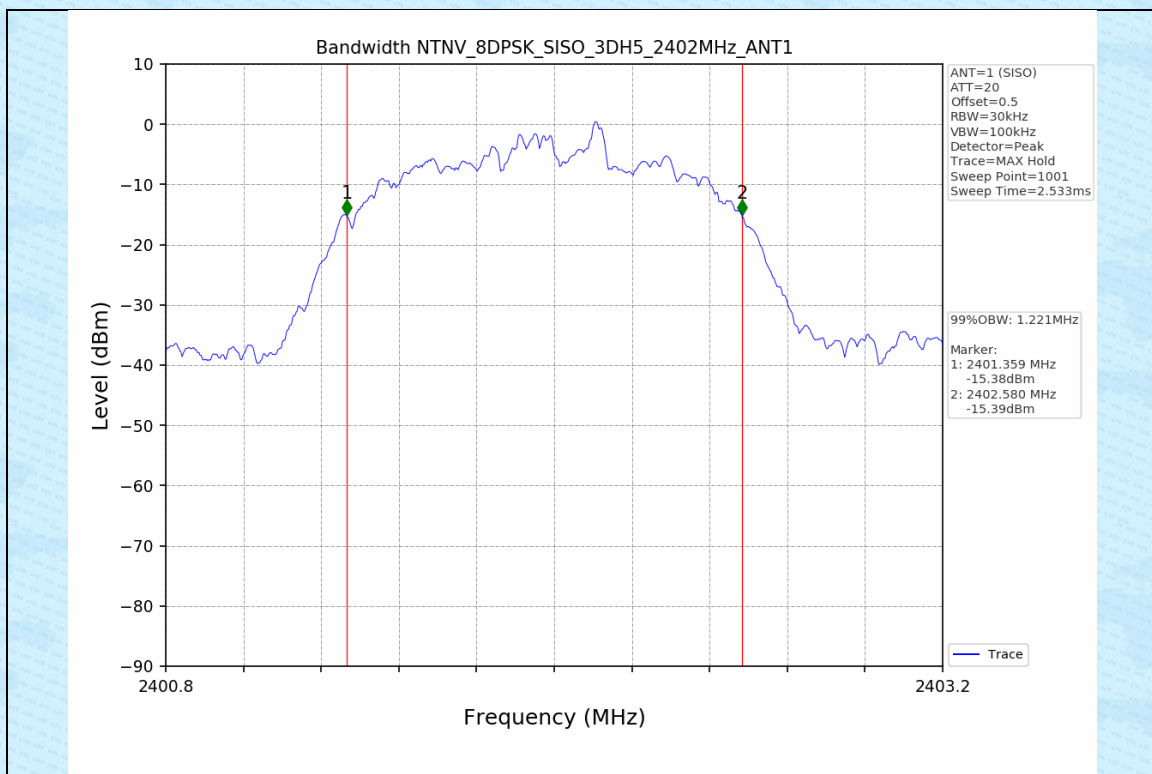
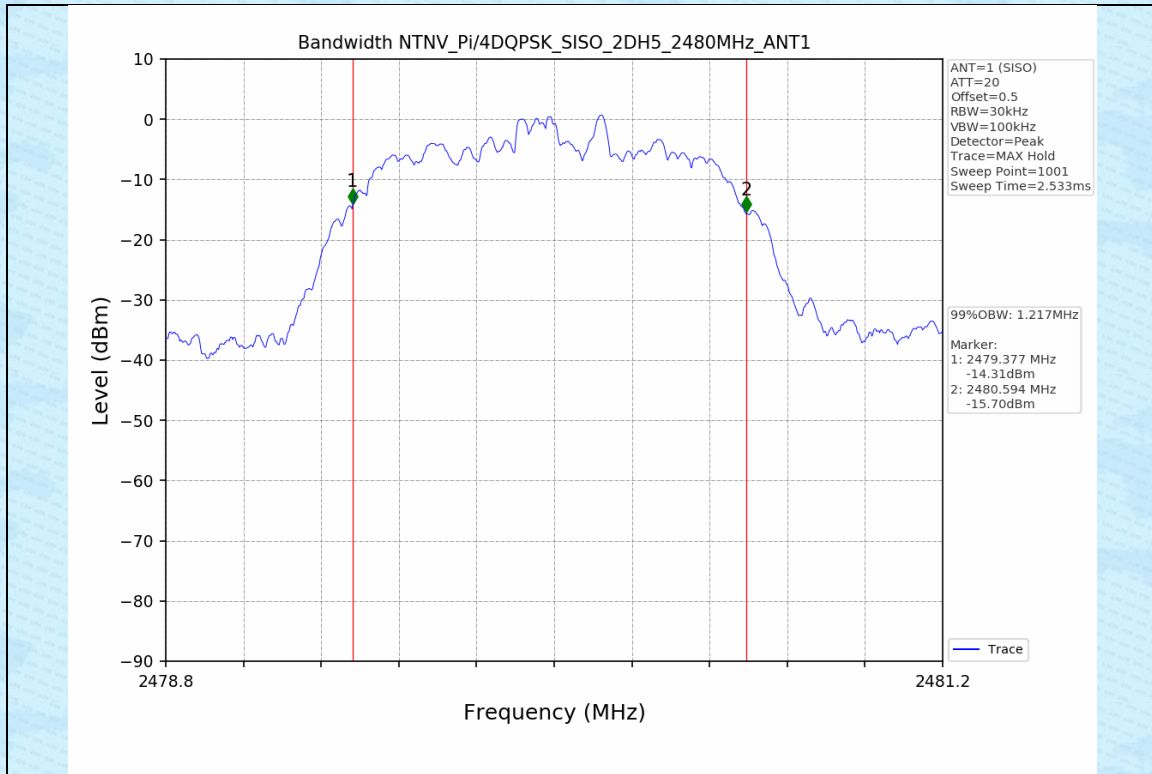


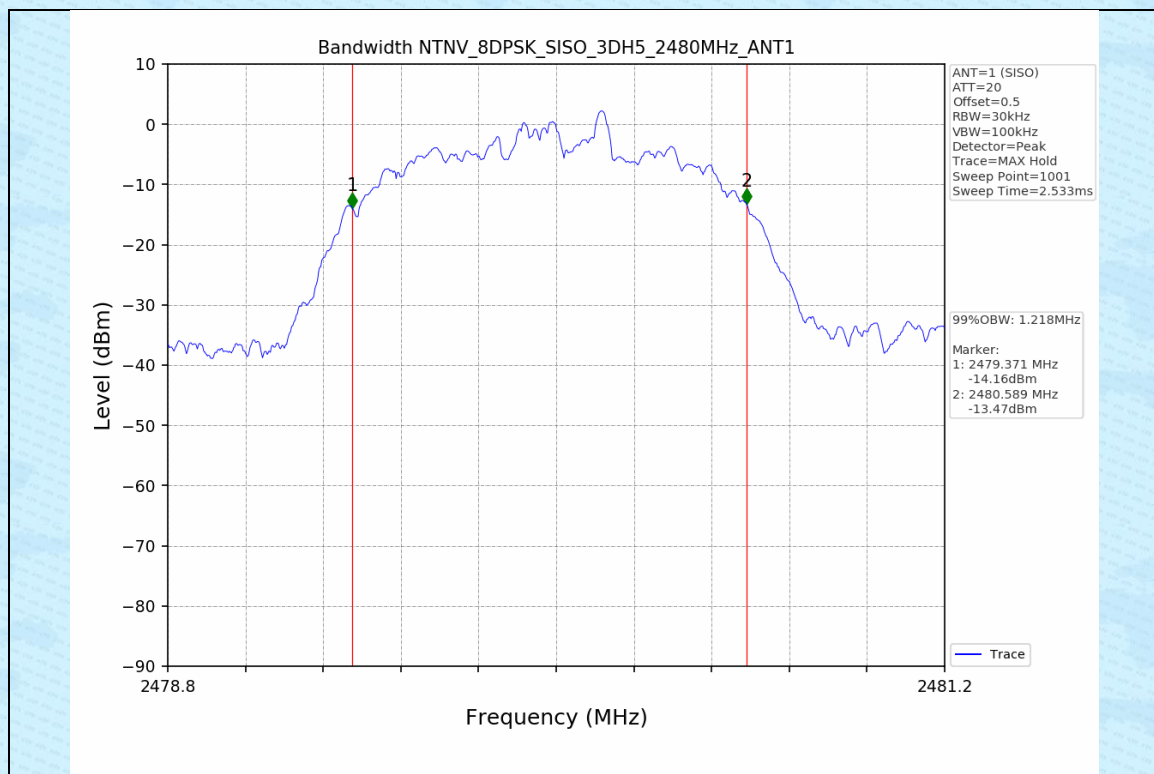
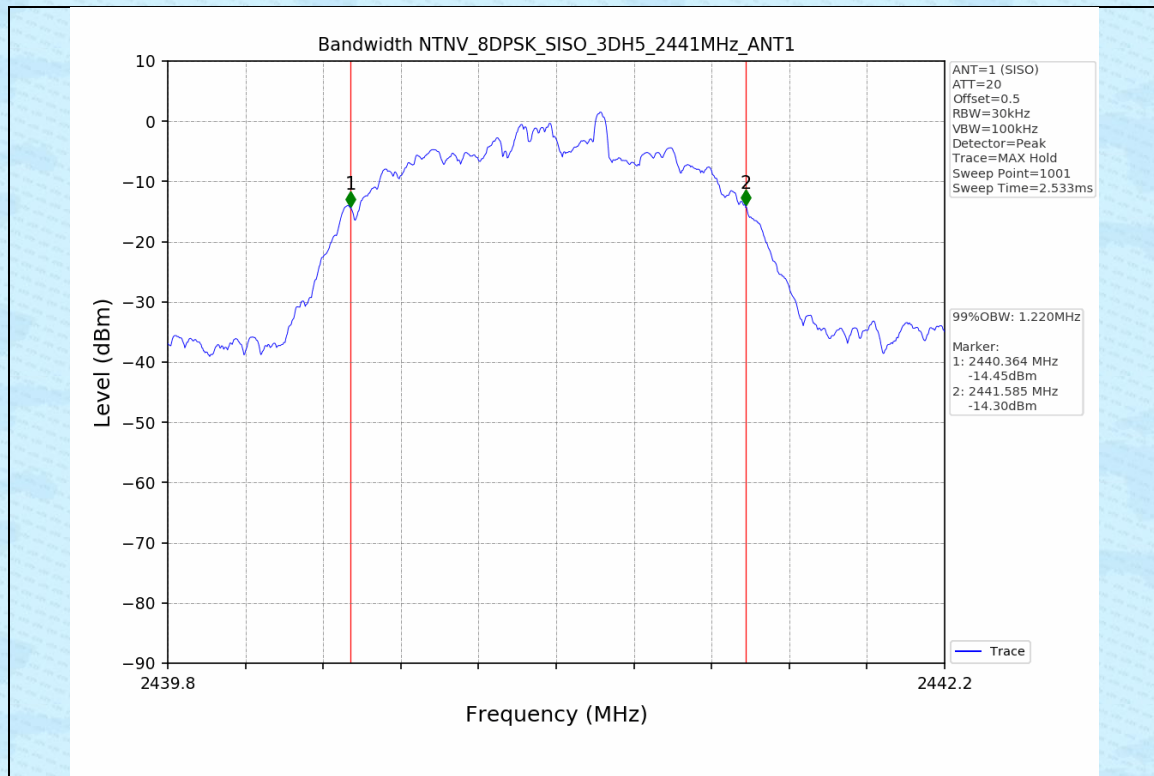










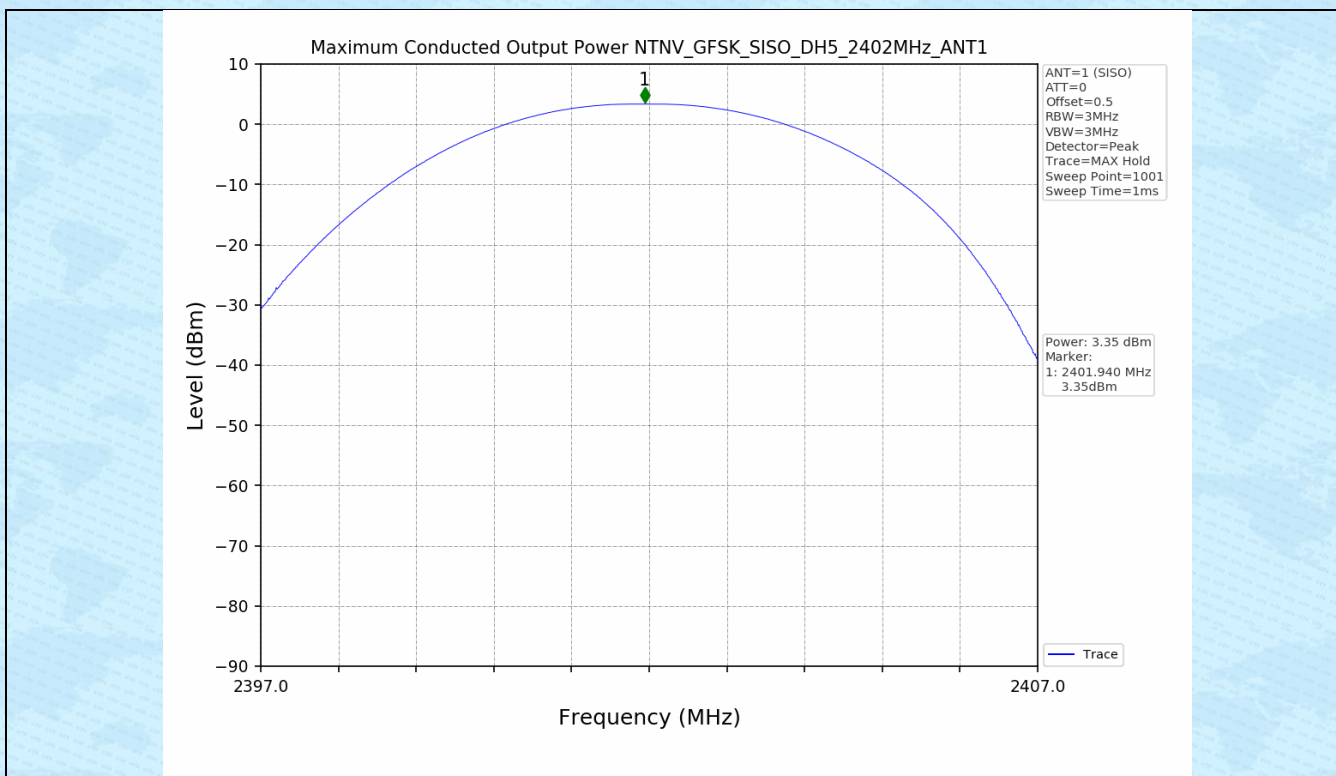


## 2. Maximum Conducted Output Power

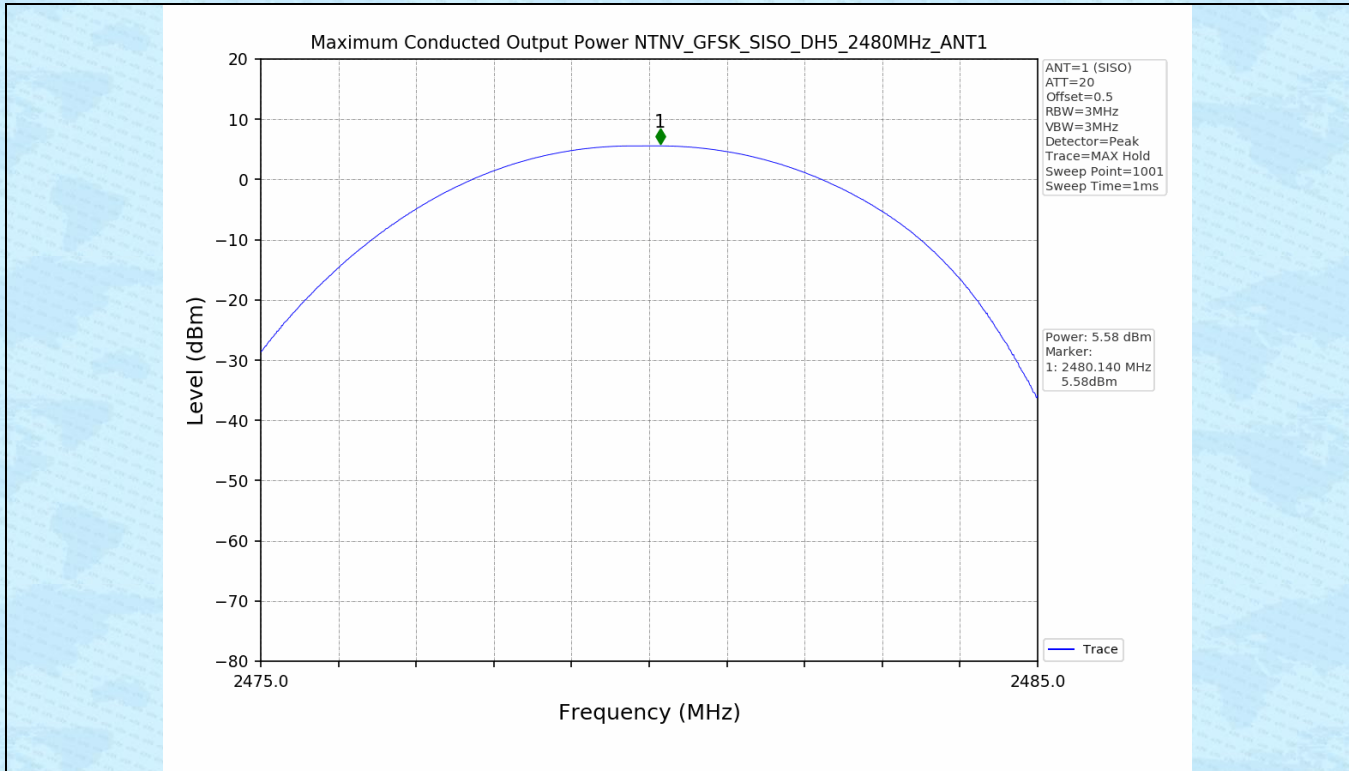
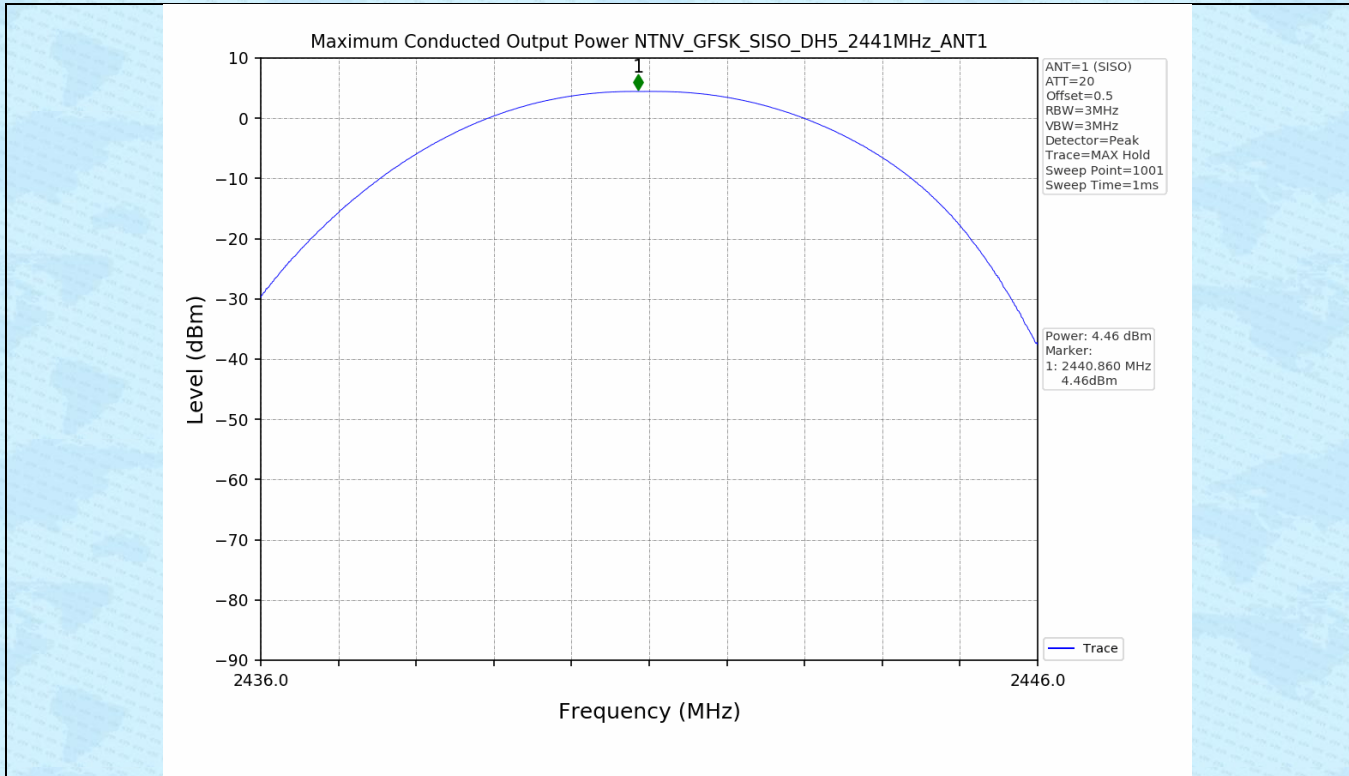
### 2.1 Test Result

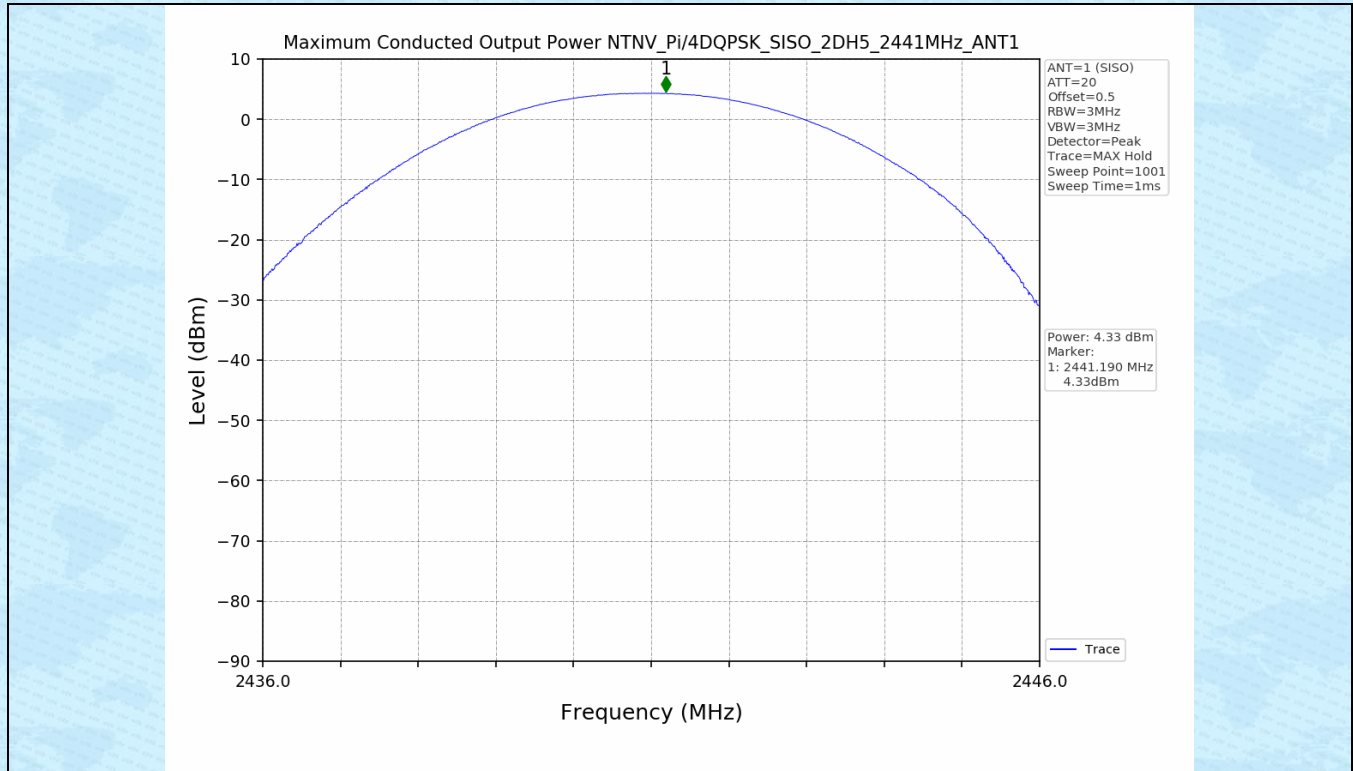
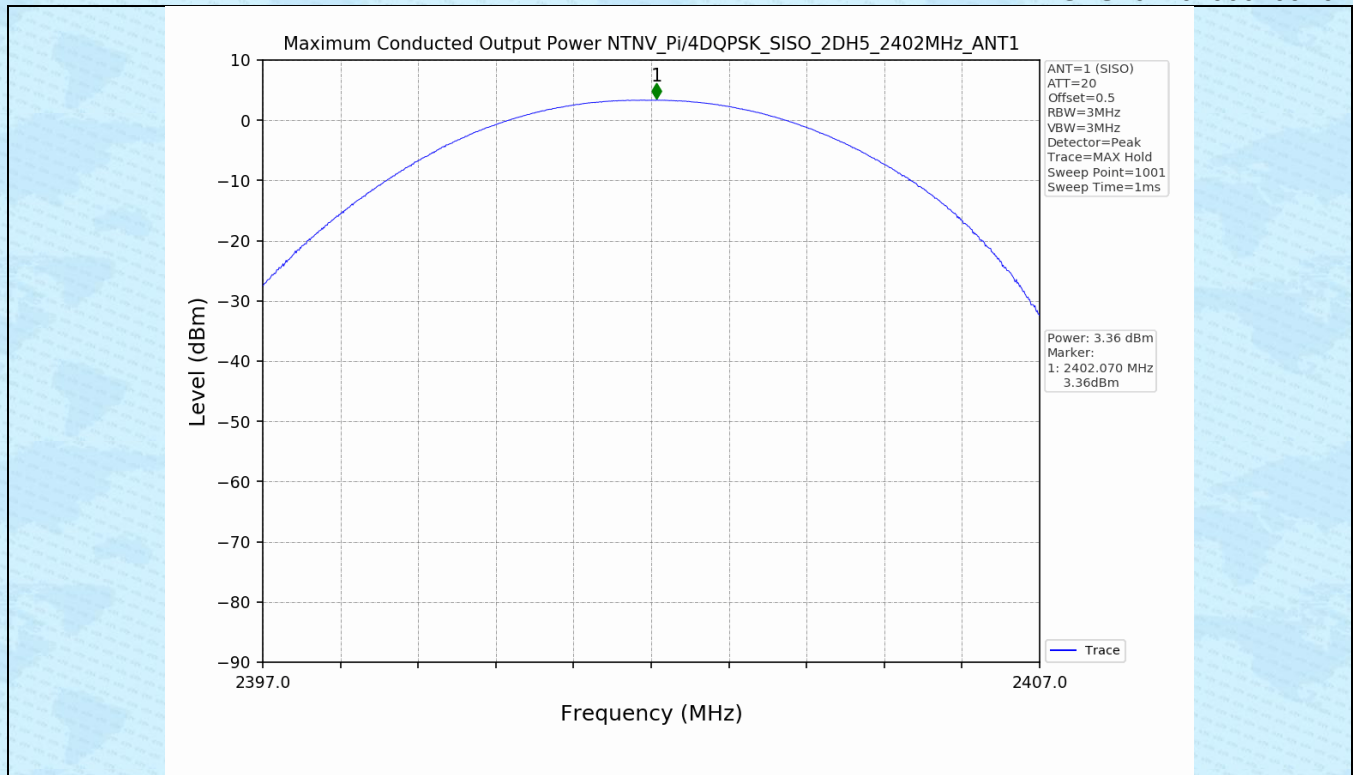
| Test Mode | Frequency (MHz) | Tx Type | Measured Peak Output Power (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|----------------------------------|--------------|---------|
| GFSK      | 2402            | SISO    | 3.35                             | 20.97        | PASS    |
|           | 2441            | SISO    | 4.46                             | 20.97        | PASS    |
|           | 2480            | SISO    | 5.58                             | 20.97        | PASS    |
| Pi/4DQPSK | 2402            | SISO    | 3.36                             | 20.97        | PASS    |
|           | 2441            | SISO    | 4.33                             | 20.97        | PASS    |
|           | 2480            | SISO    | 5.04                             | 20.97        | PASS    |
| 8DPSK     | 2402            | SISO    | 3.63                             | 20.97        | PASS    |
|           | 2441            | SISO    | 4.61                             | 20.97        | PASS    |
|           | 2480            | SISO    | 5.32                             | 20.97        | PASS    |

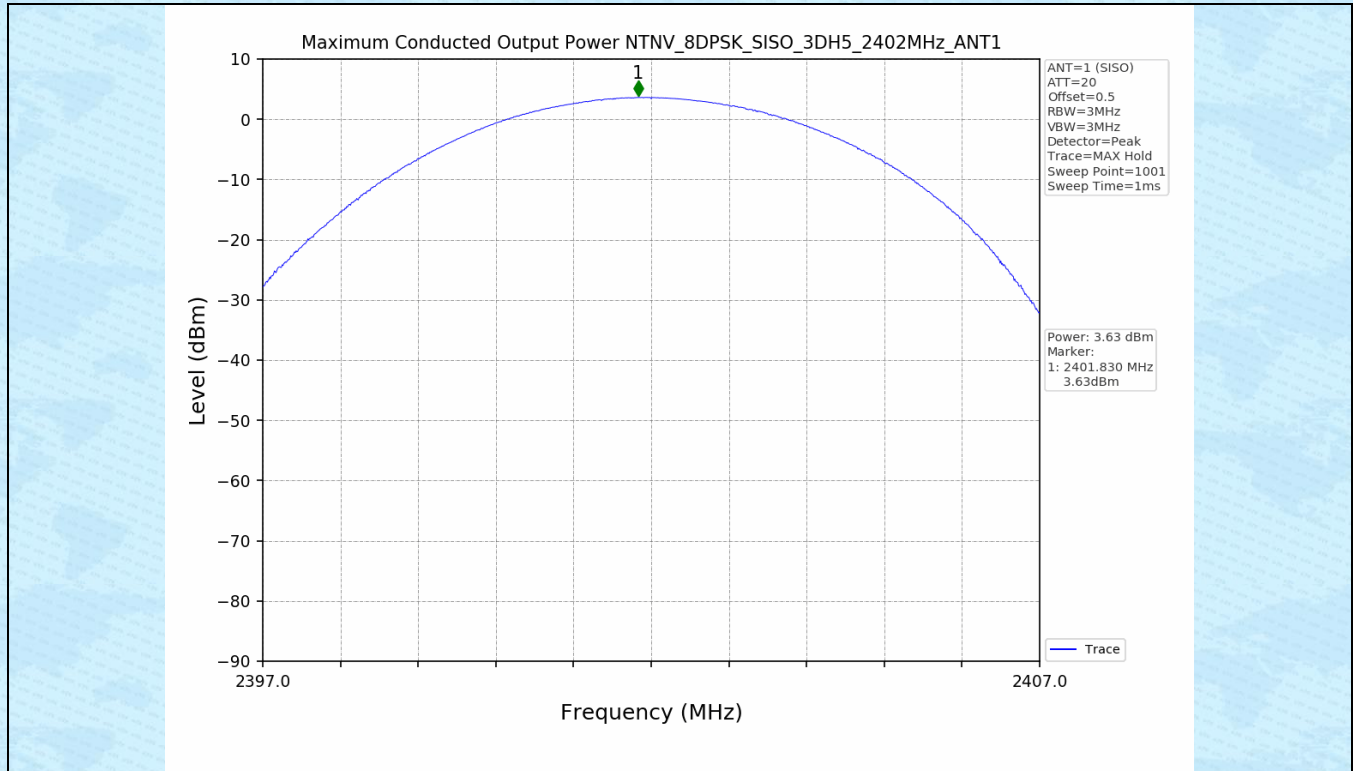
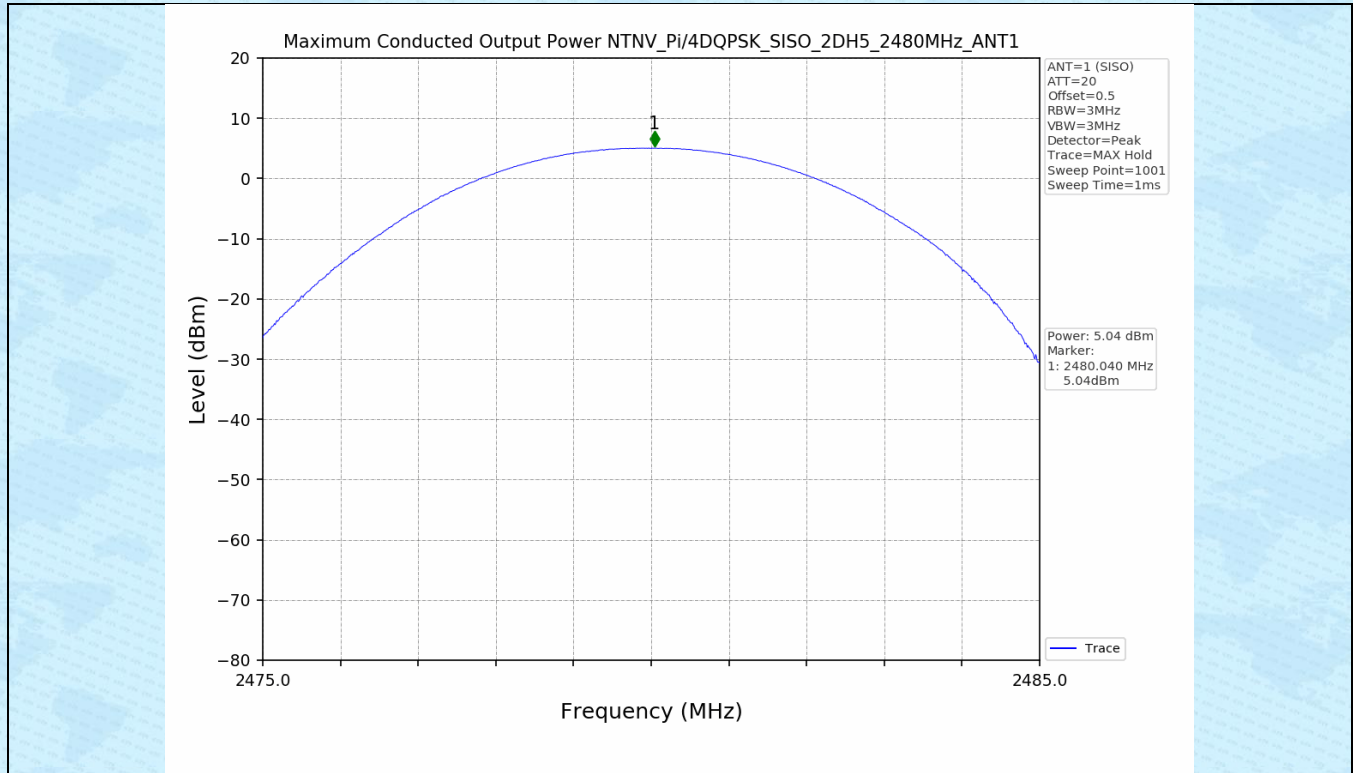
### 2.2 Test Graph



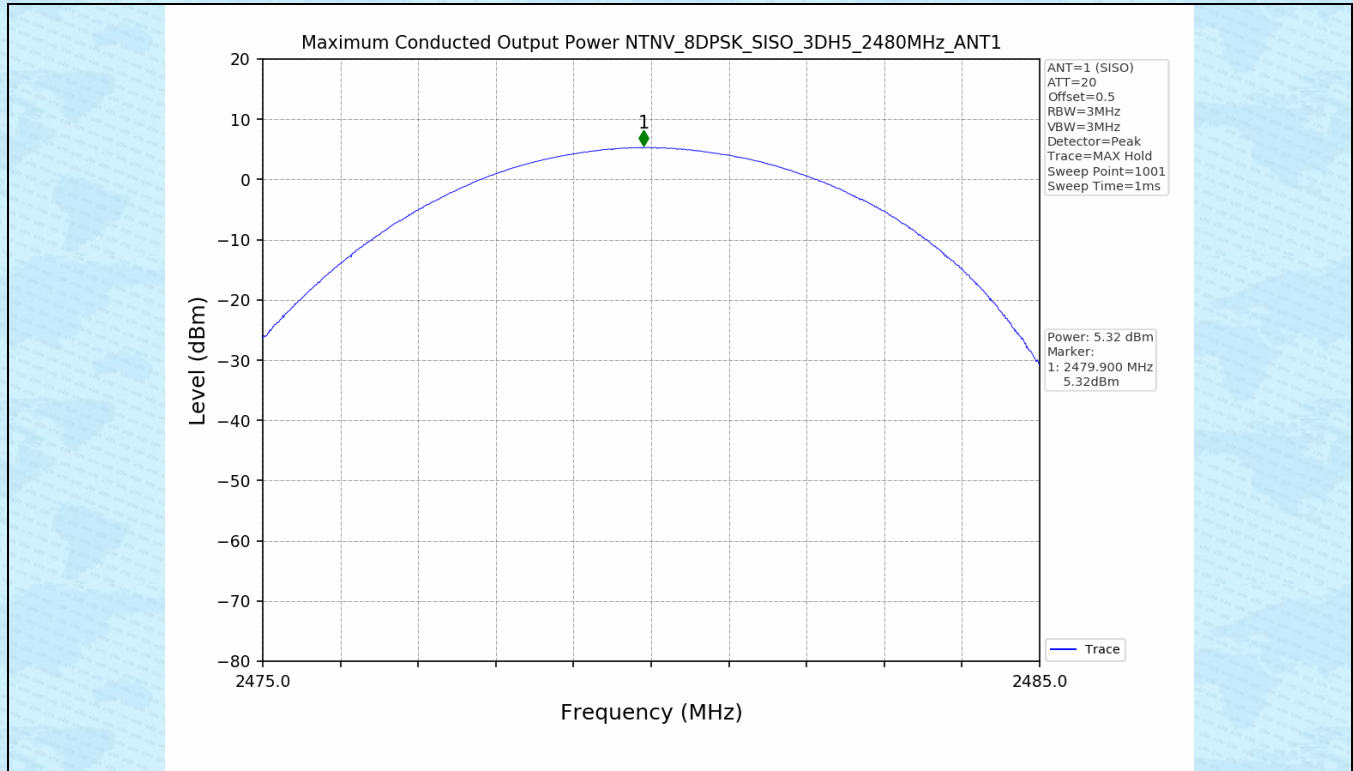
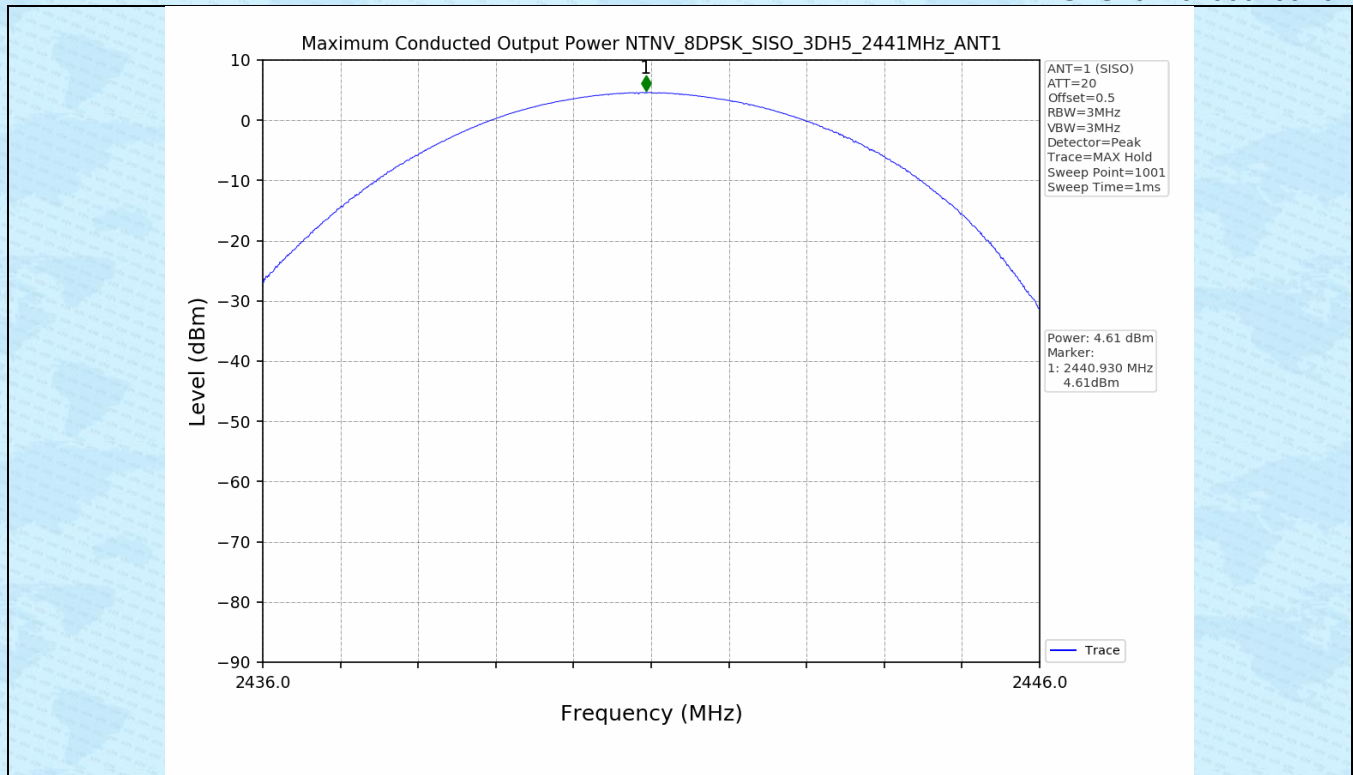










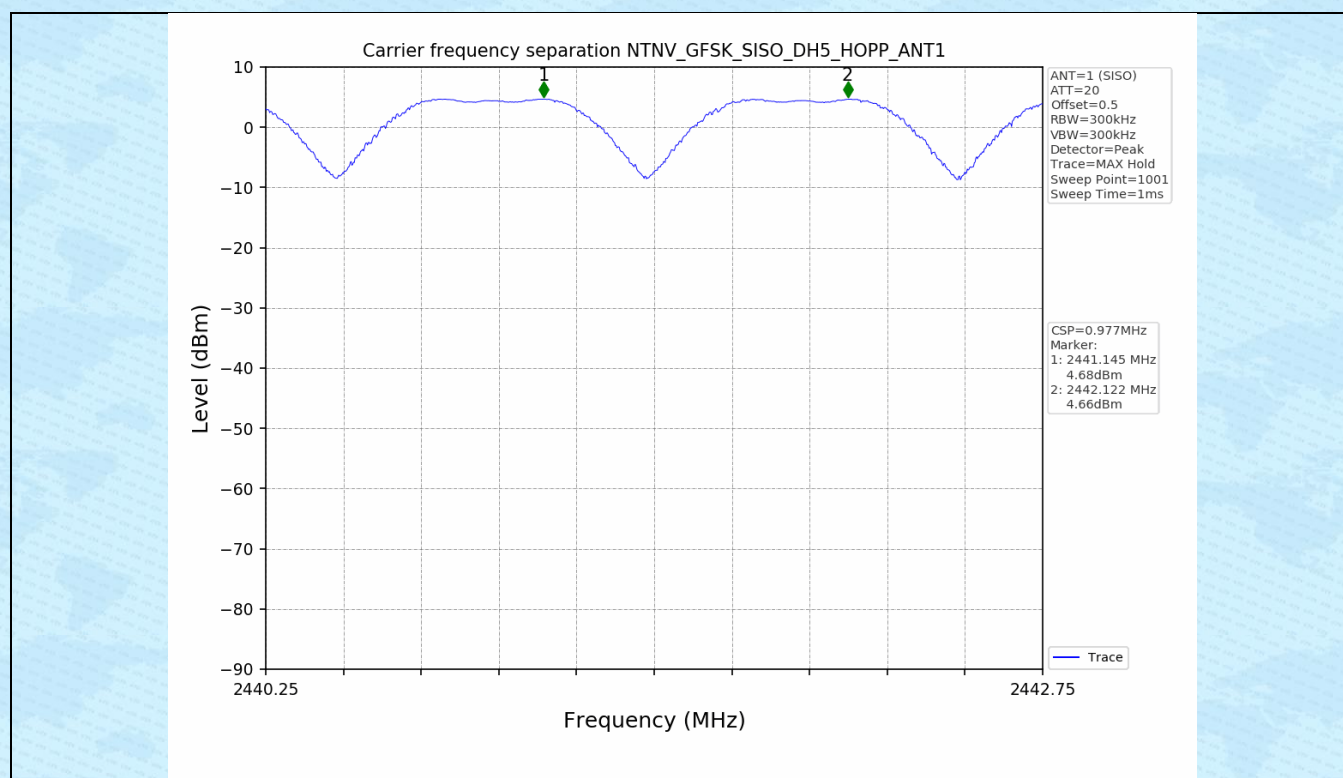


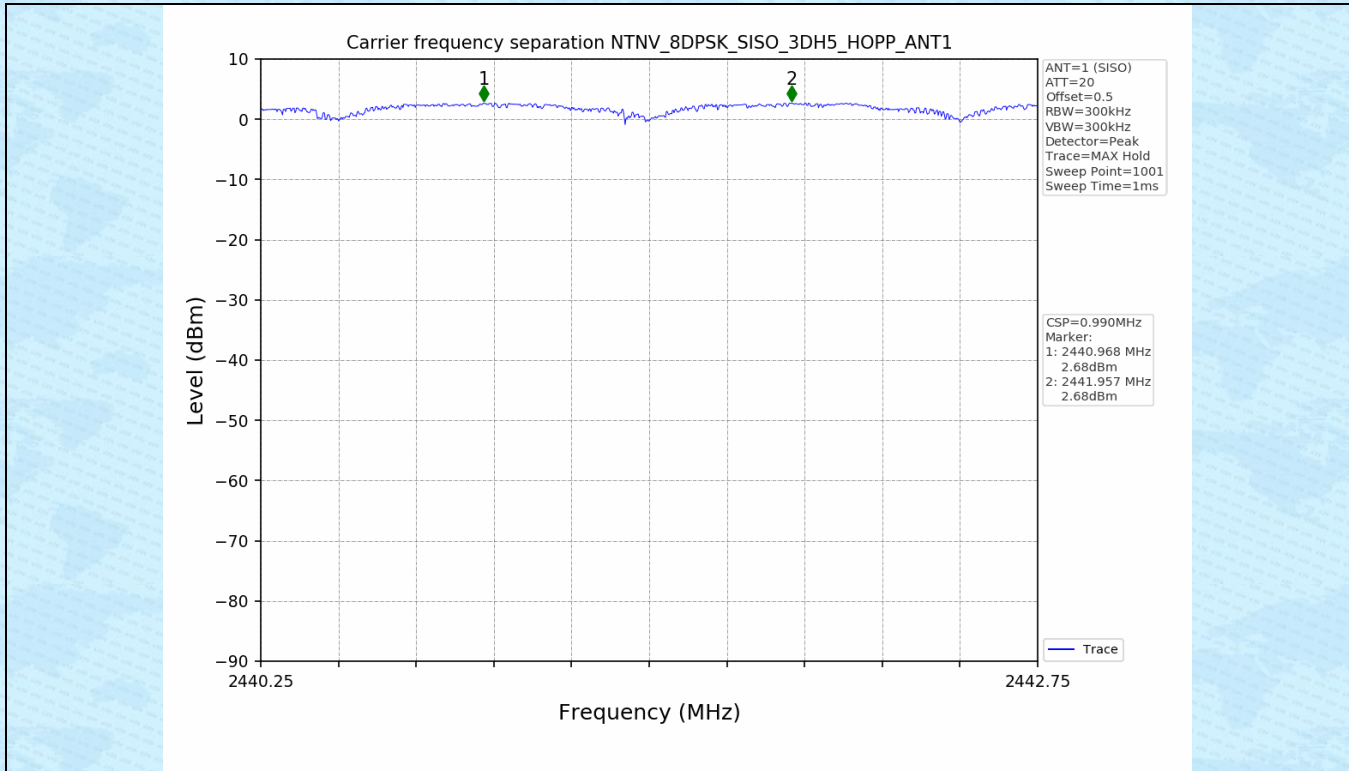
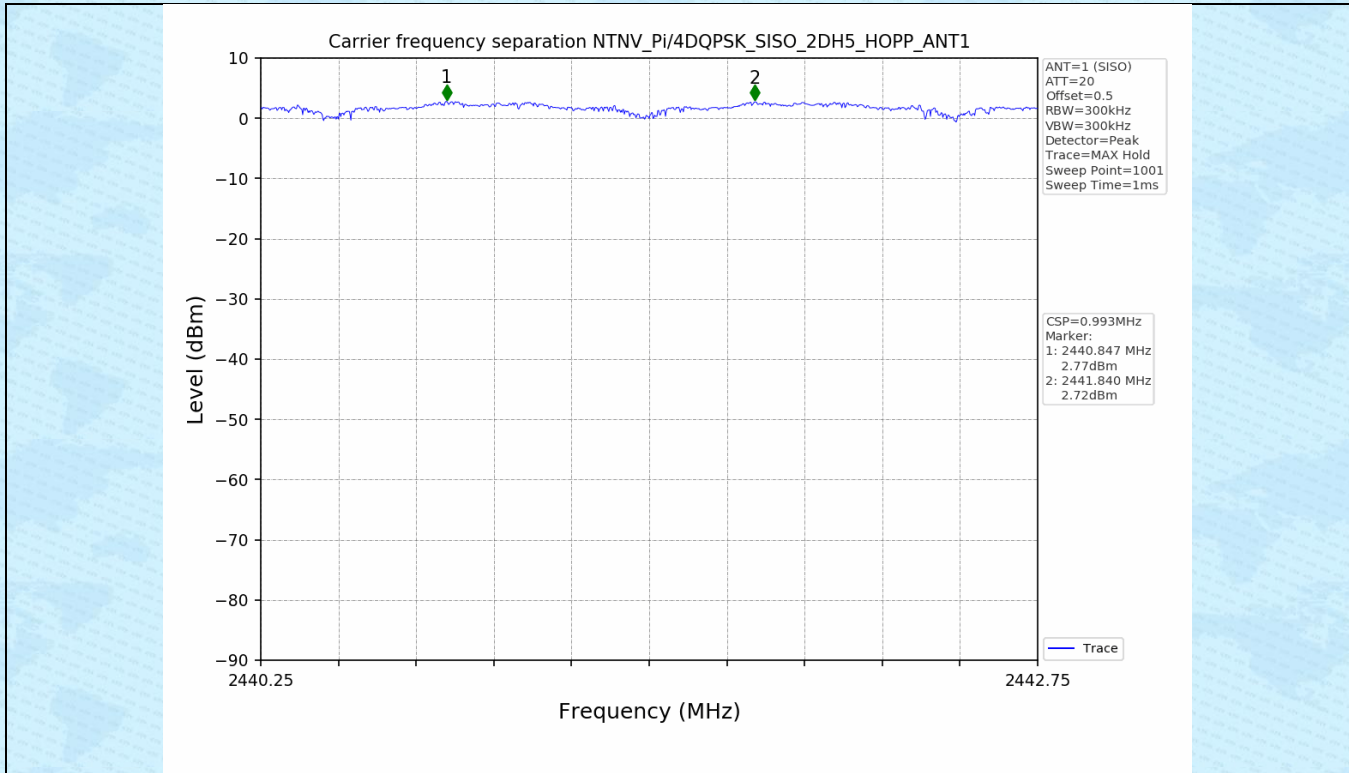
## 3. Carrier frequency separation

### 3.1 Test Result

| Test Mode | TX Type | ANT No. | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limits (MHz) | Verdict |
|-----------|---------|---------|--------------------------|----------------------|--------------|---------|
| GFSK      | SISO    | 1       | 0.977                    | 1.019                | $\geq 0.679$ | PASS    |
| Pi/4DQPSK | SISO    | 1       | 0.993                    | 1.364                | $\geq 0.909$ | PASS    |
| 8DPSK     | SISO    | 1       | 0.990                    | 1.316                | $\geq 0.877$ | PASS    |

### 3.2 Test Graph





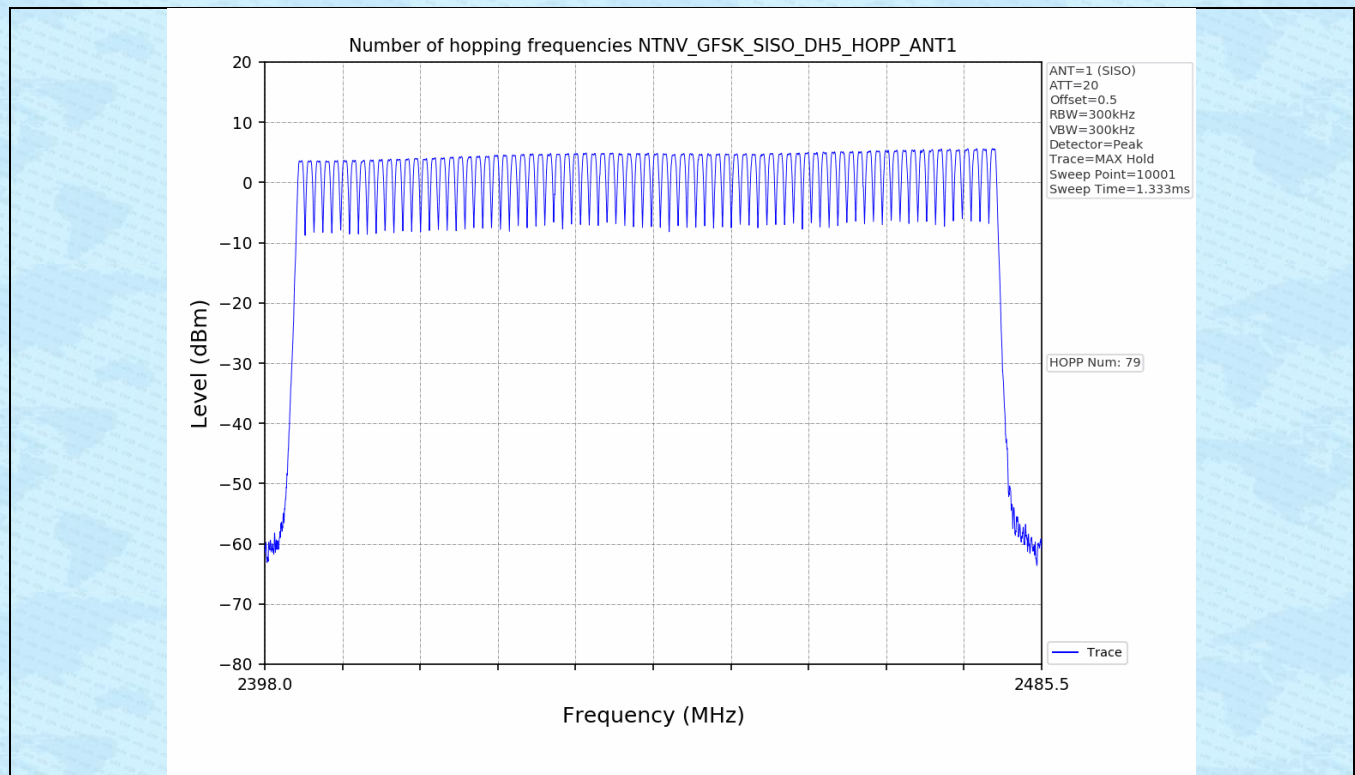


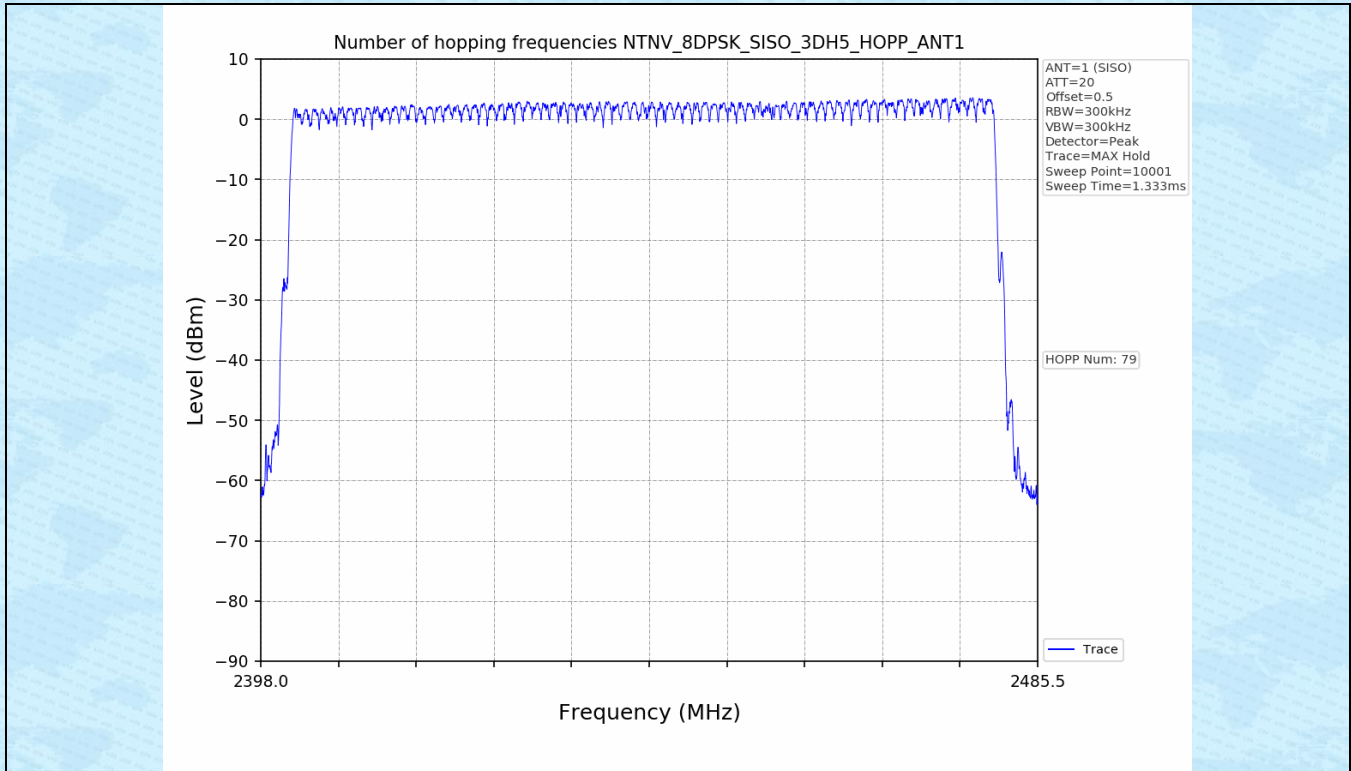
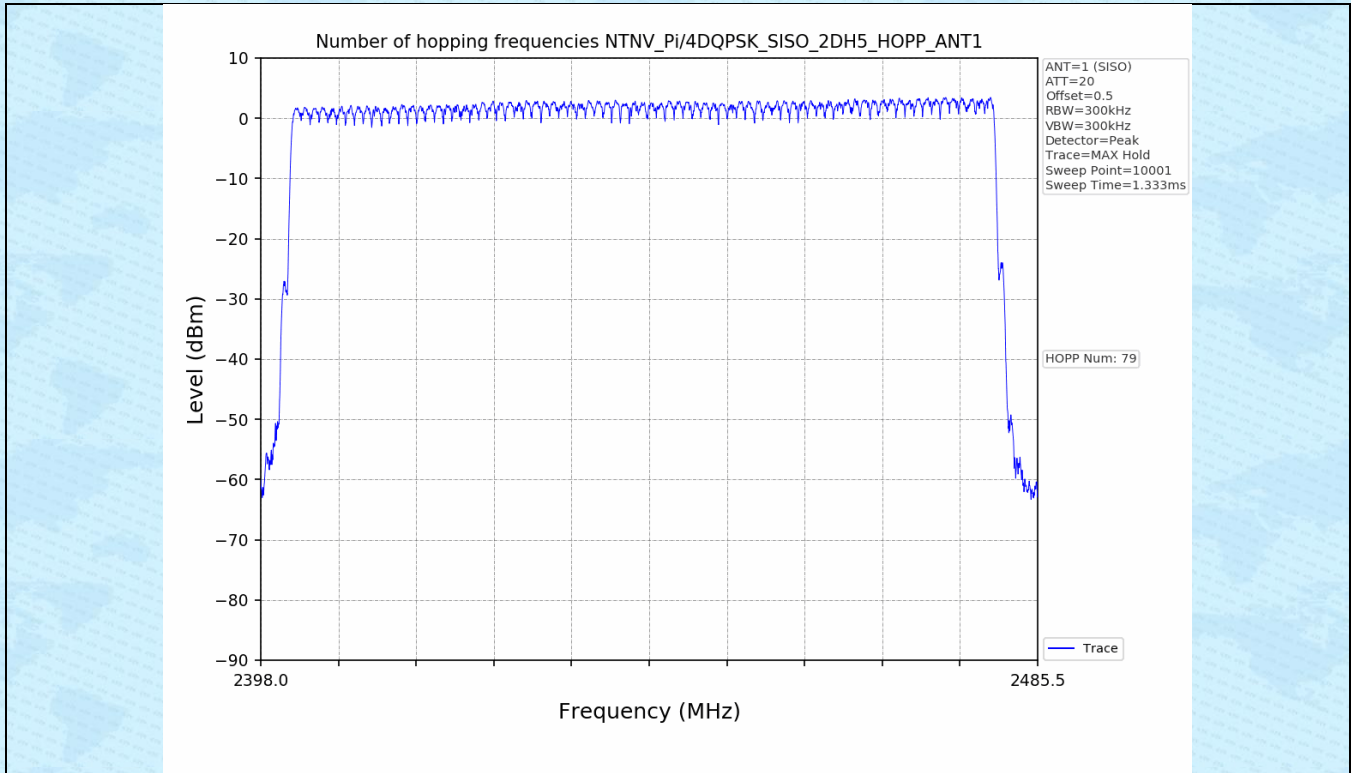
## 4. Number of hopping frequencies

### 4.1 Test Result

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

### 4.2 Test Graph



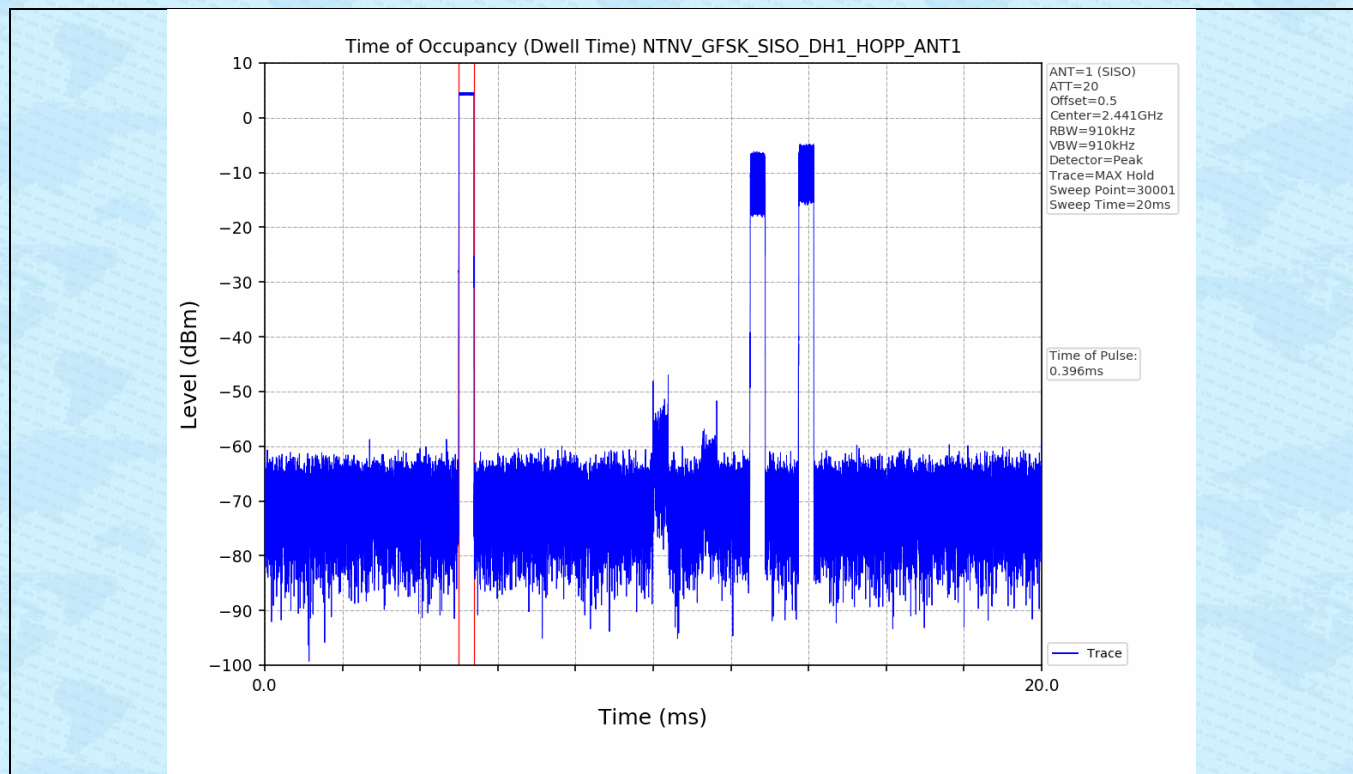


## 5. Time of Occupancy (Dwell Time)

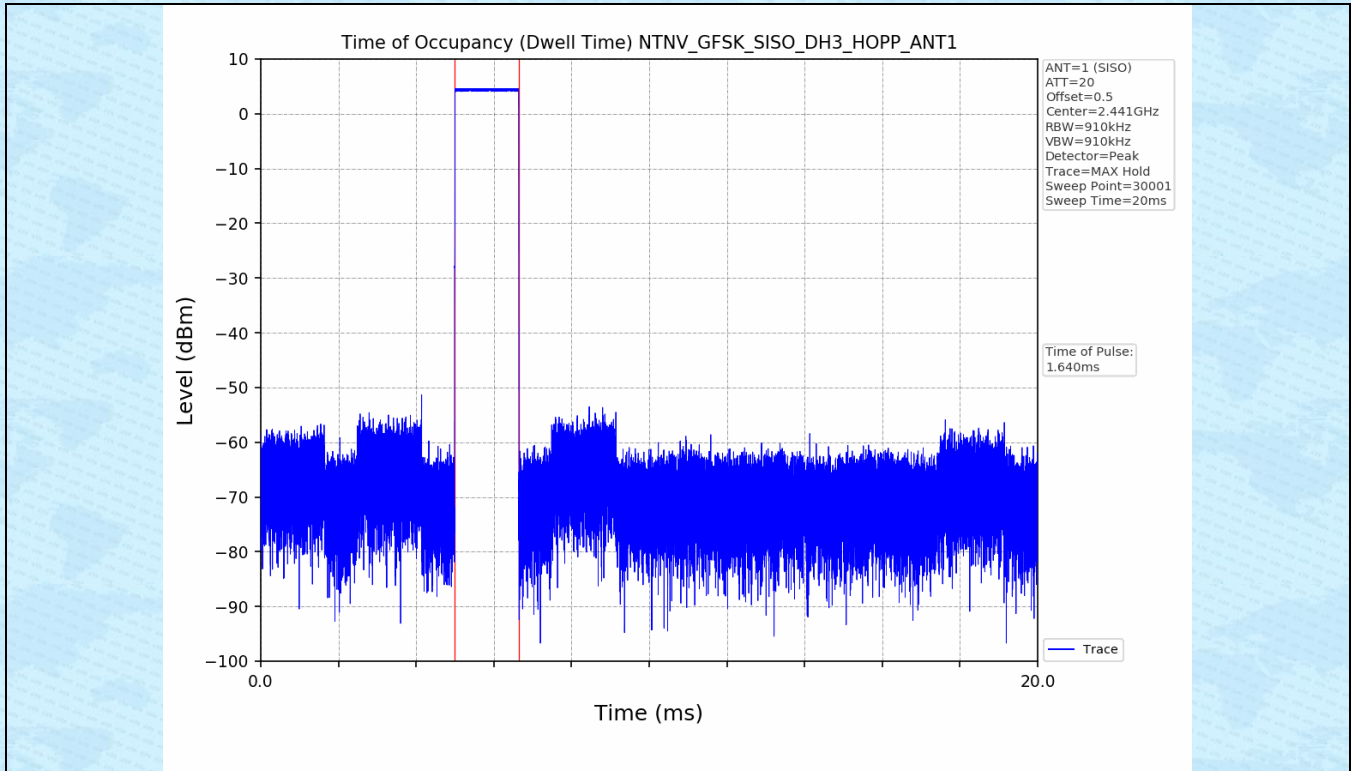
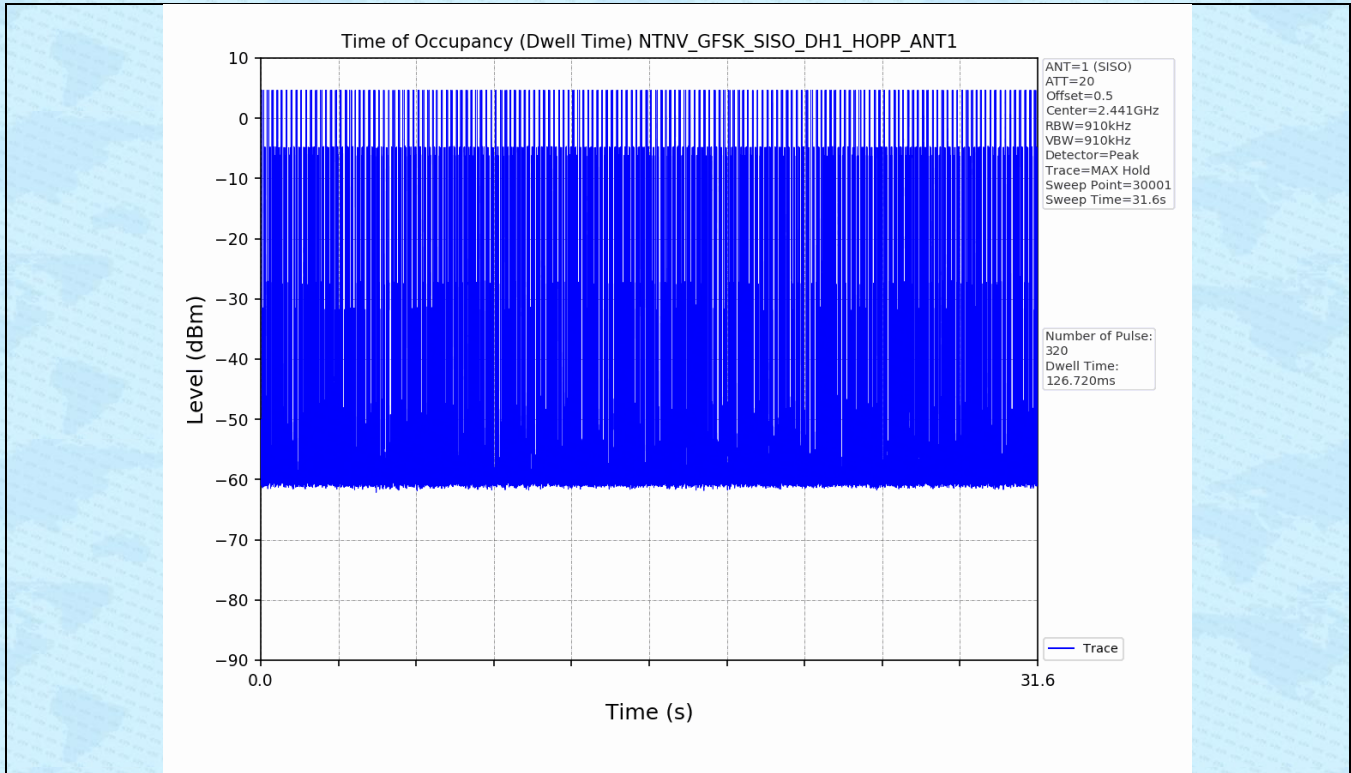
### 5.1 Test Result

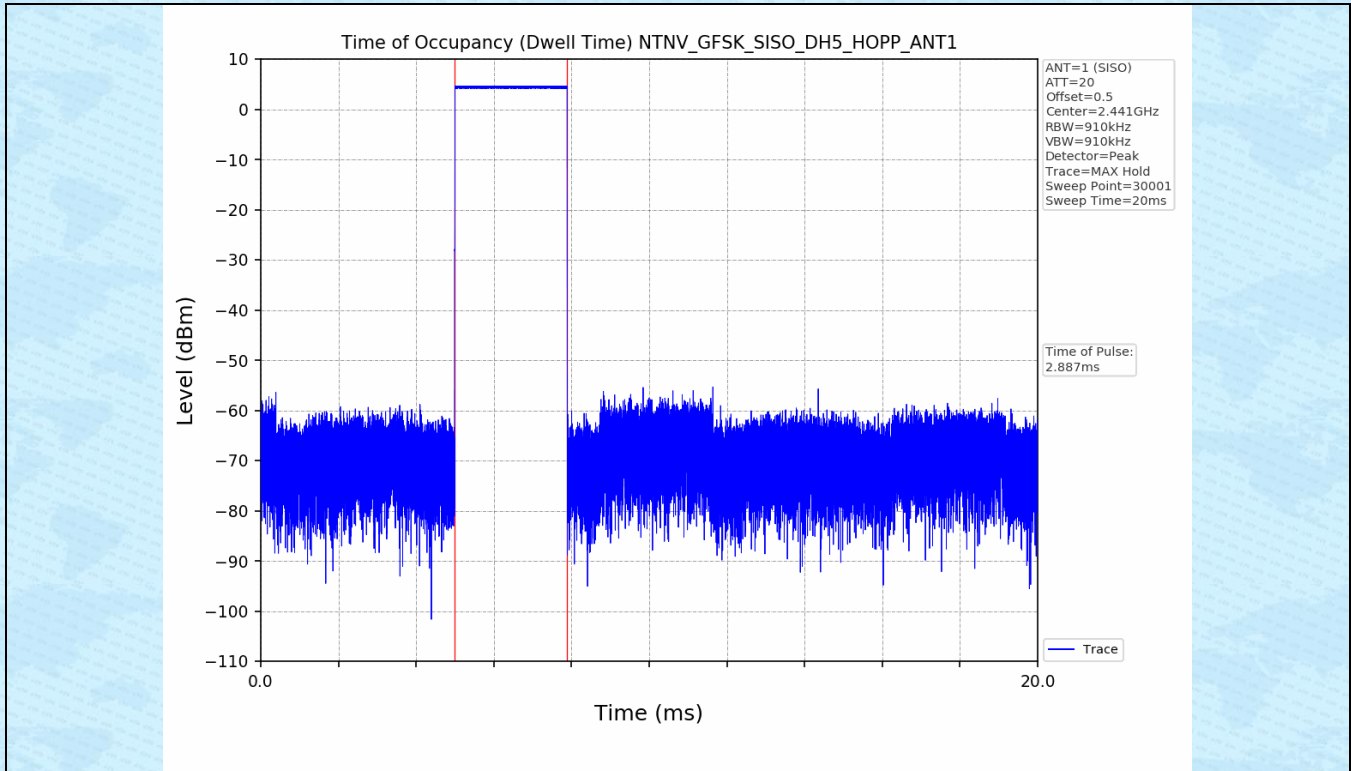
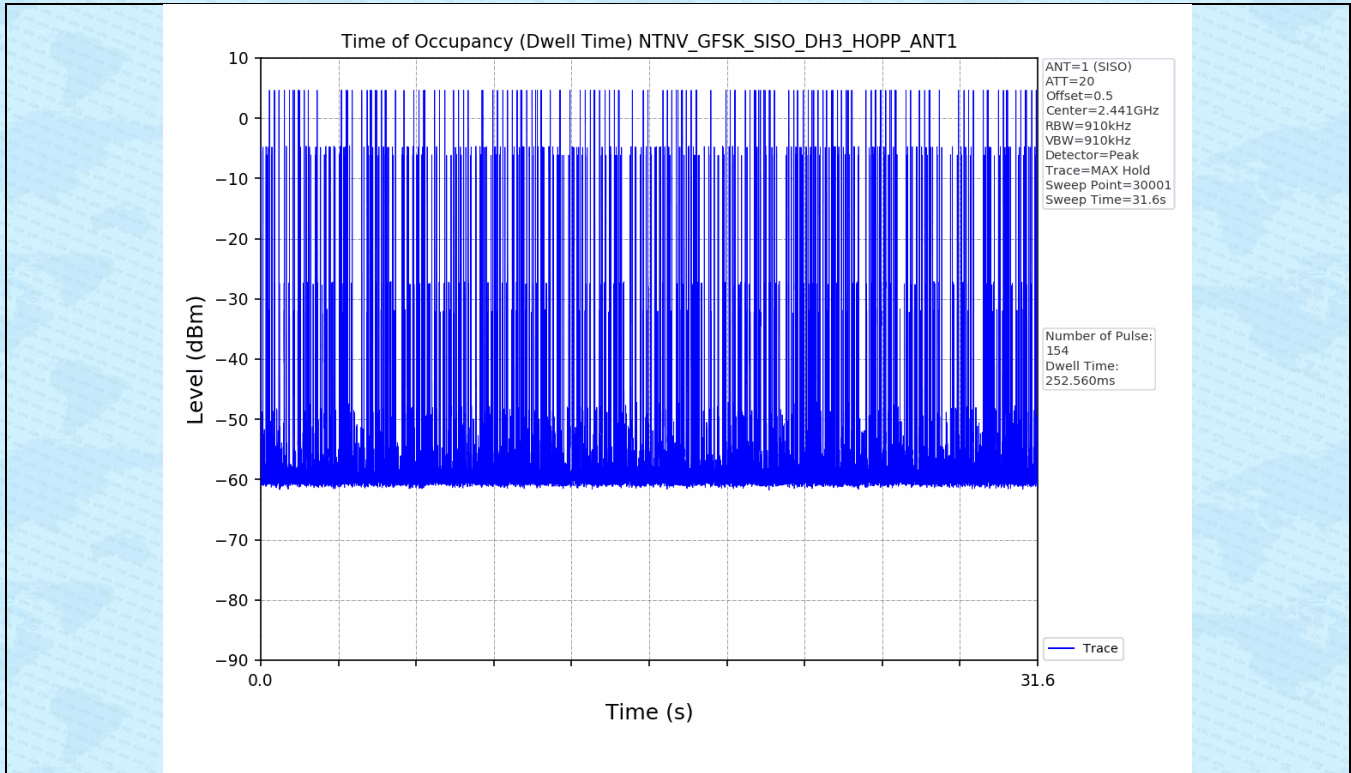
| Test Mode  | Packet Type | TX Type | ANT No. | Duration of Single Pulse (ms) | Observation Period (s) | Num of Pulse in Observation Period | Dwell Time (ms) | Limits (ms) | Verdict |
|------------|-------------|---------|---------|-------------------------------|------------------------|------------------------------------|-----------------|-------------|---------|
| GFSK       | DH1         | SISO    | 1       | 0.396                         | 31.6                   | 320                                | 126.720         | ≤400        | PASS    |
|            | DH3         | SISO    | 1       | 1.640                         | 31.6                   | 154                                | 252.560         | ≤400        | PASS    |
|            | DH5         | SISO    | 1       | 2.887                         | 31.6                   | 100                                | 288.700         | ≤400        | PASS    |
| Pi/4DQ PSK | 2DH1        | SISO    | 1       | 0.390                         | 31.6                   | 320                                | 124.800         | ≤400        | PASS    |
|            | 2DH3        | SISO    | 1       | 1.643                         | 31.6                   | 161                                | 264.523         | ≤400        | PASS    |
|            | 2DH5        | SISO    | 1       | 2.890                         | 31.6                   | 96                                 | 277.440         | ≤400        | PASS    |
| 8DPSK      | 3DH1        | SISO    | 1       | 0.391                         | 31.6                   | 320                                | 125.120         | ≤400        | PASS    |
|            | 3DH3        | SISO    | 1       | 1.653                         | 31.6                   | 159                                | 262.827         | ≤400        | PASS    |
|            | 3DH5        | SISO    | 1       | 2.836                         | 31.6                   | 108                                | 306.288         | ≤400        | PASS    |

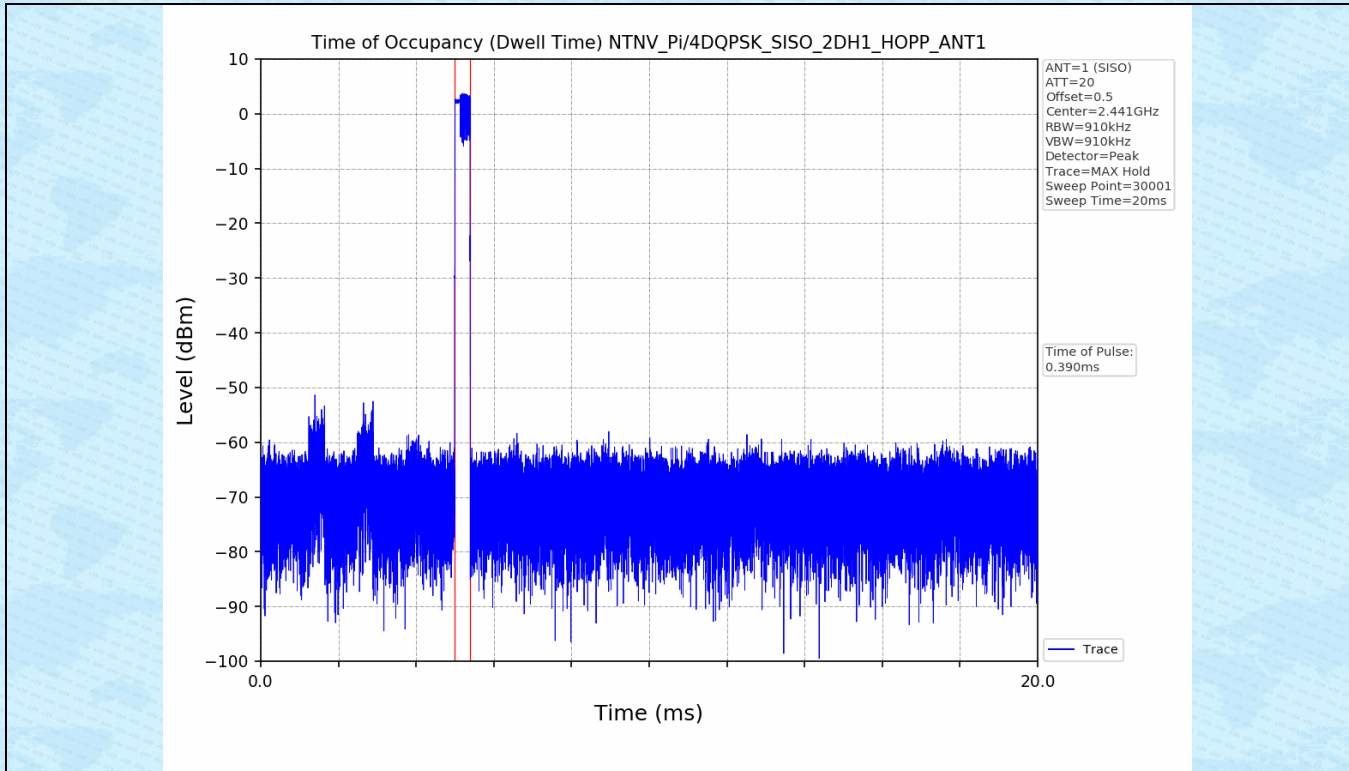
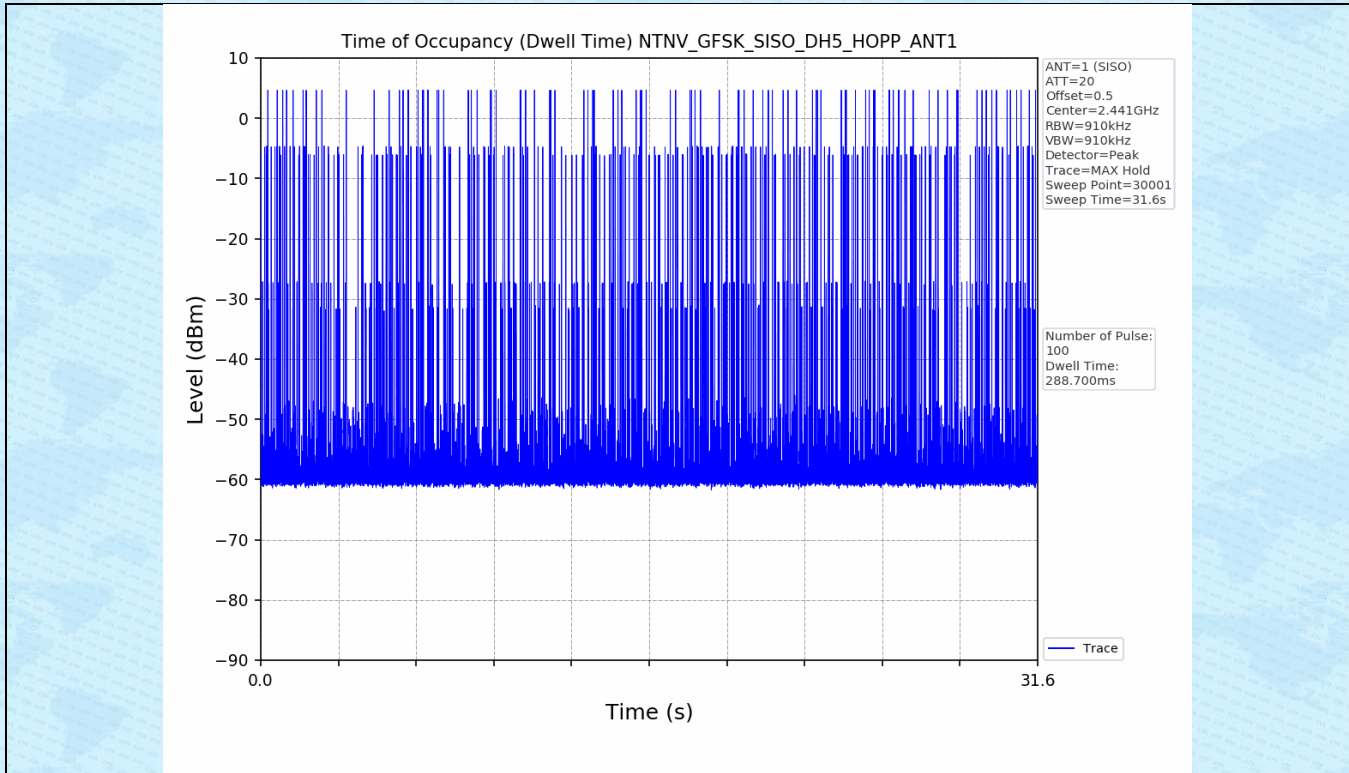
### 5.2 Test Graph



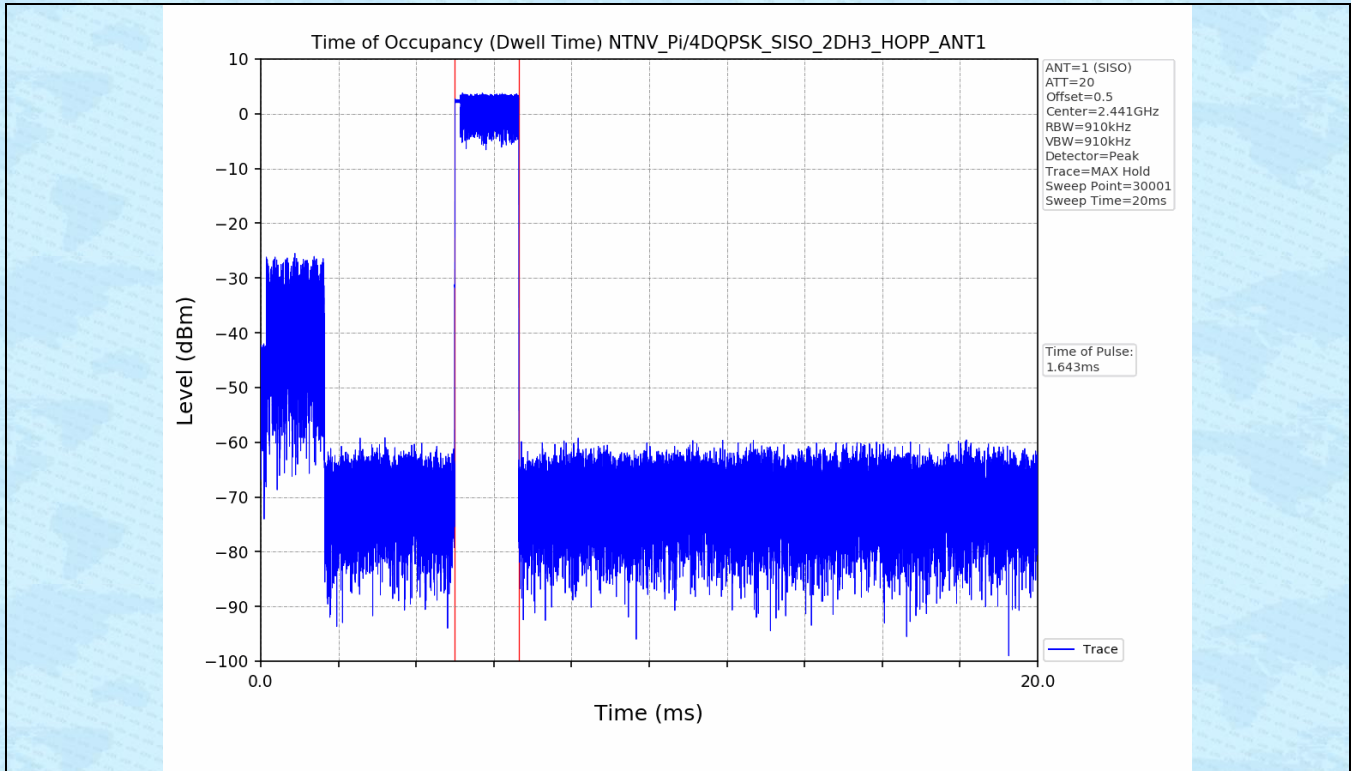
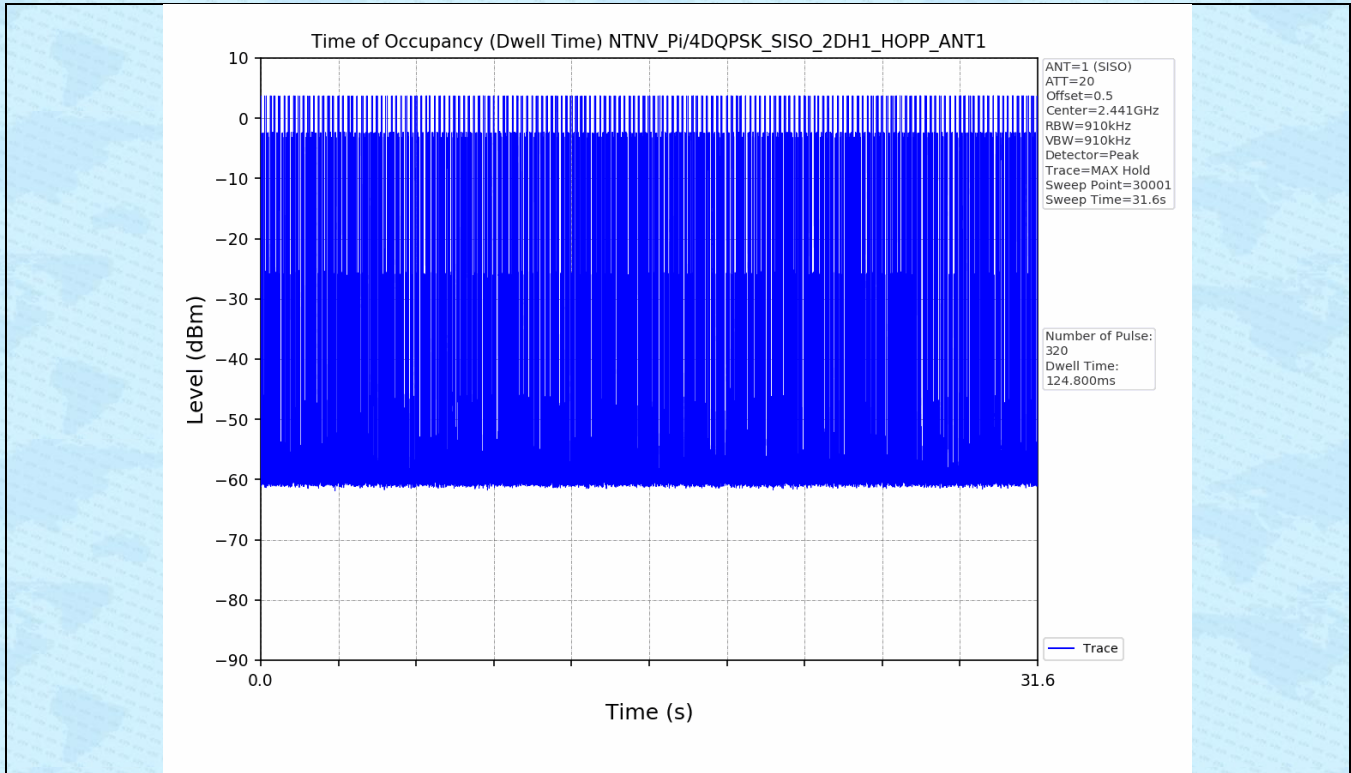


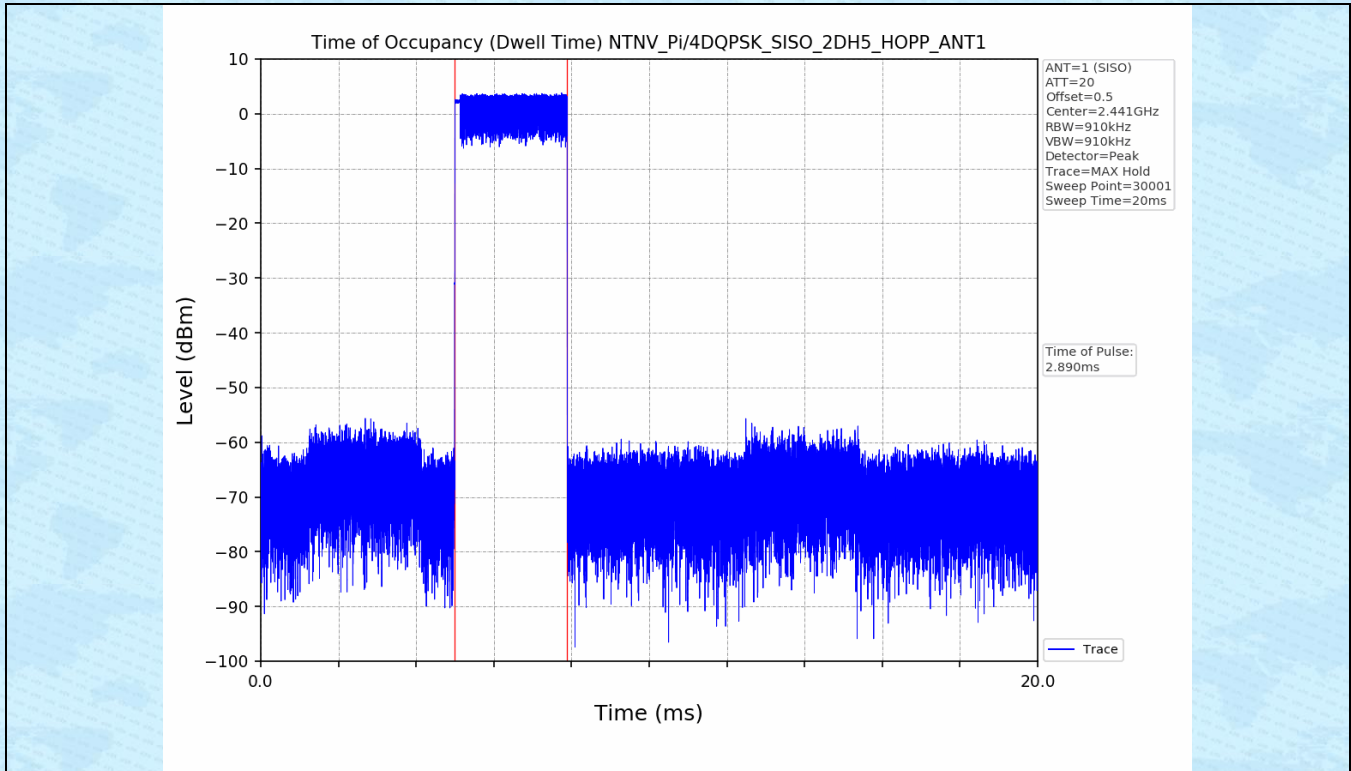
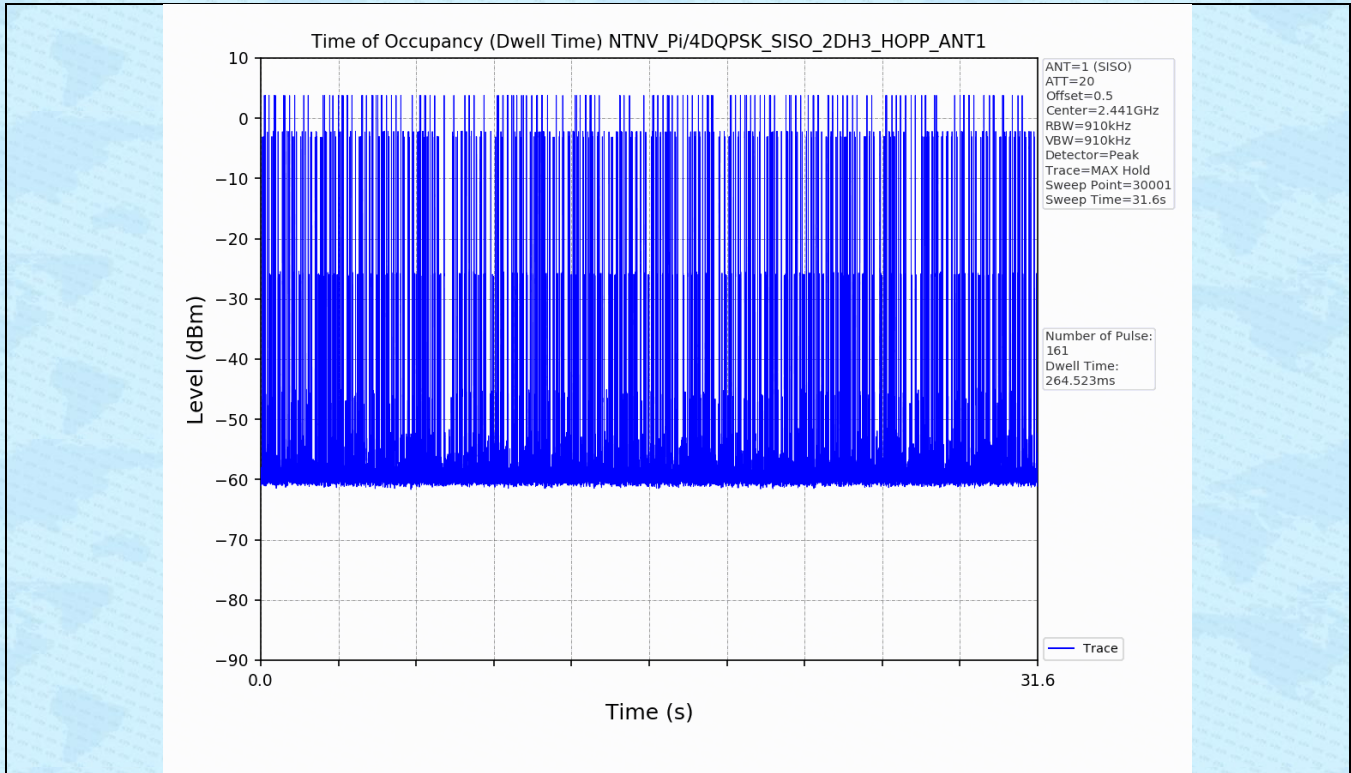


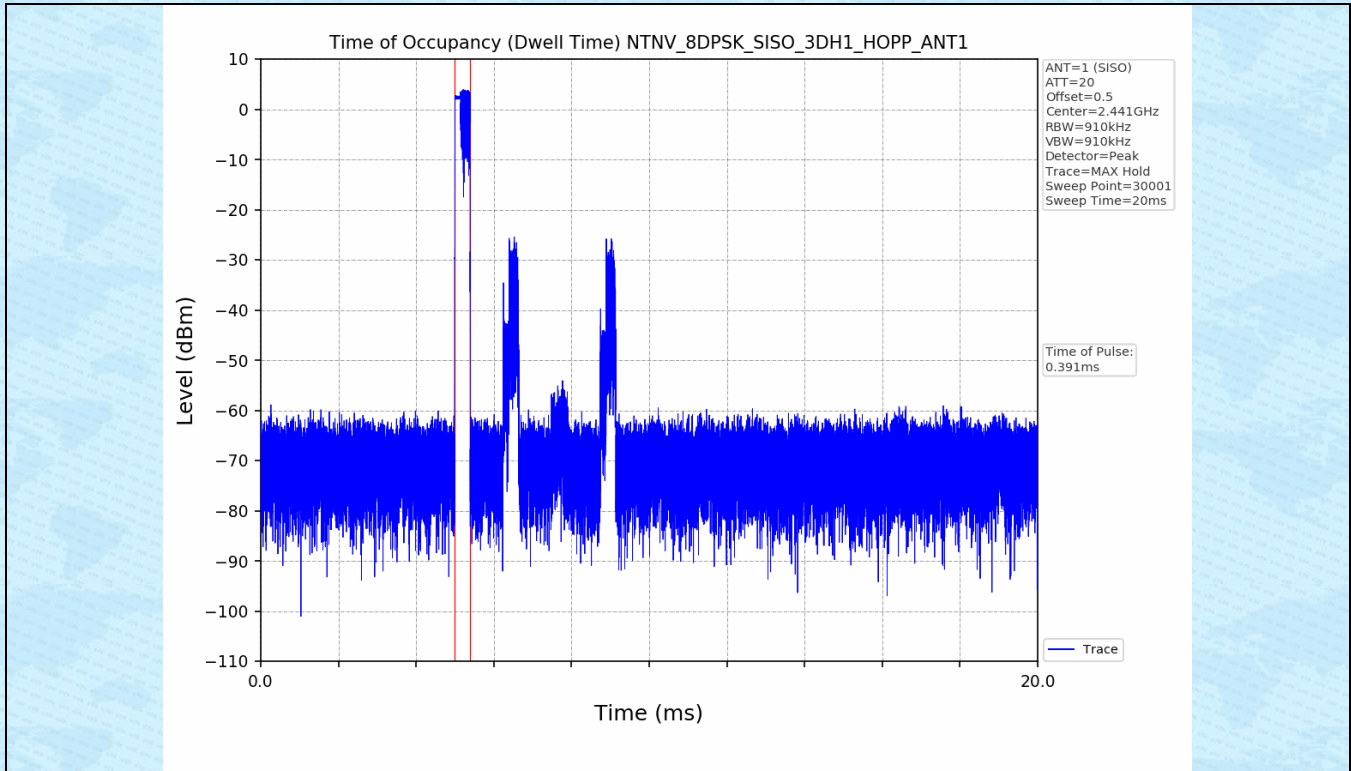
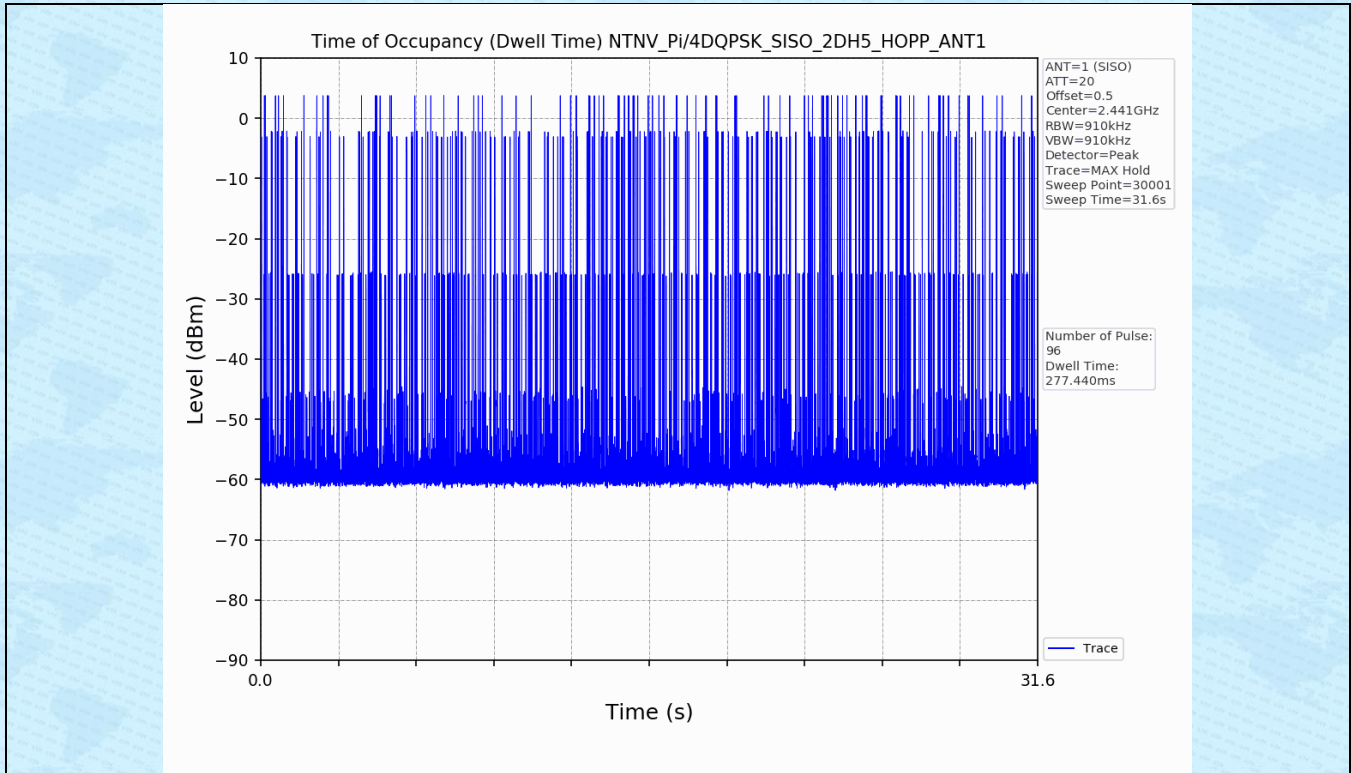




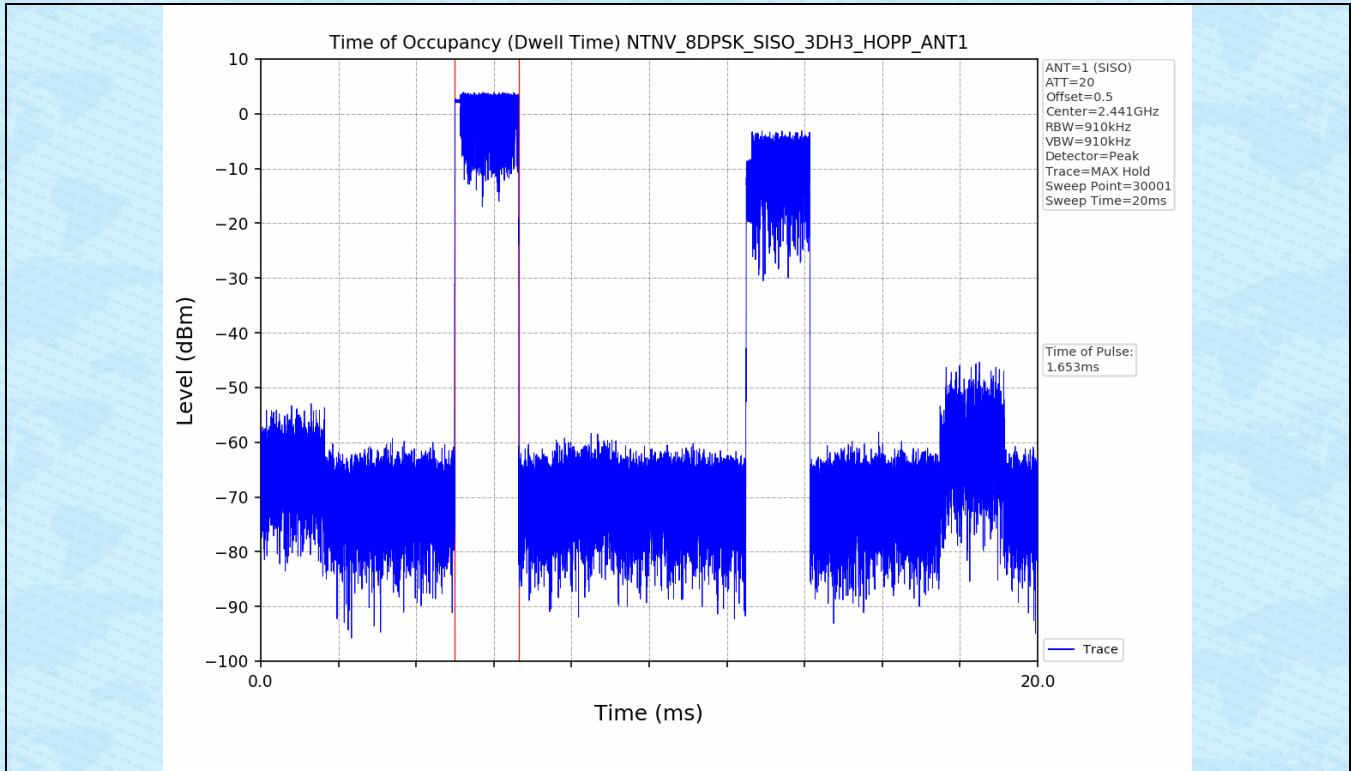
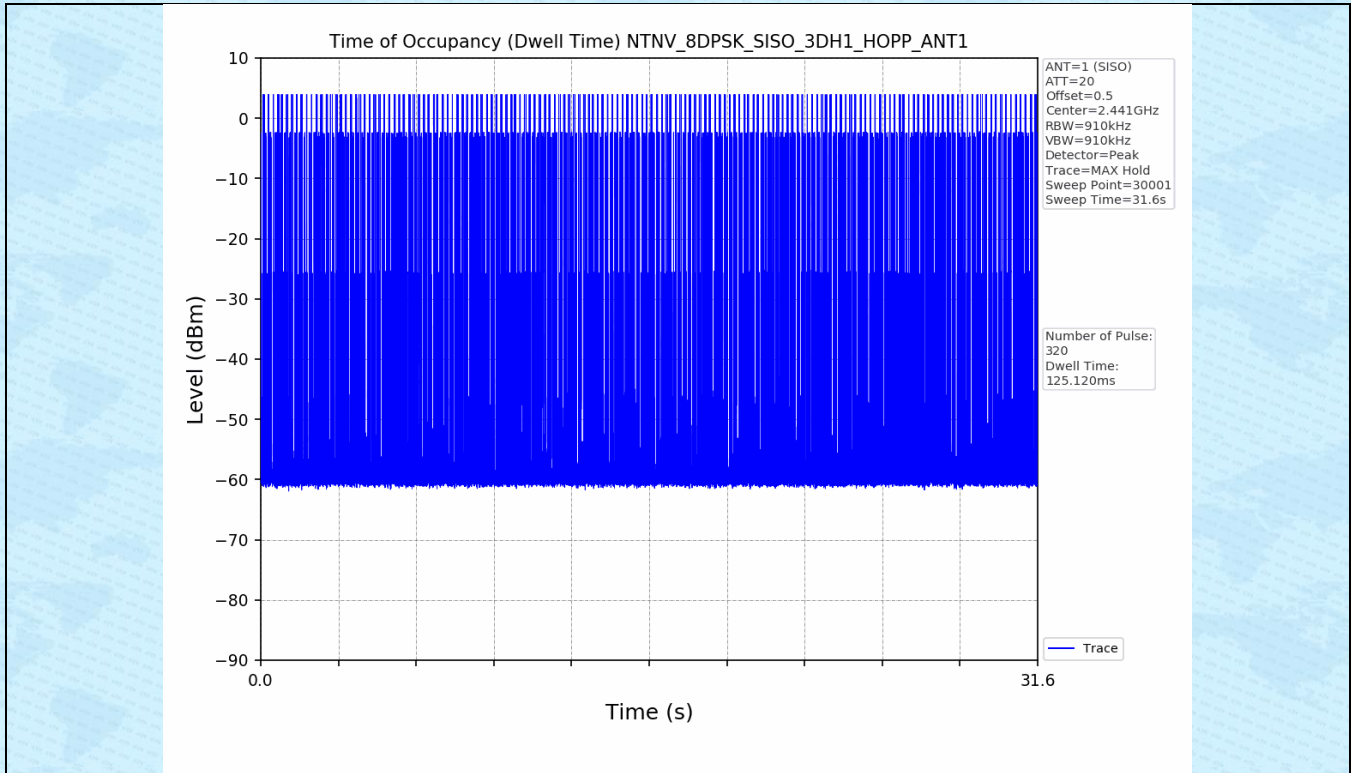


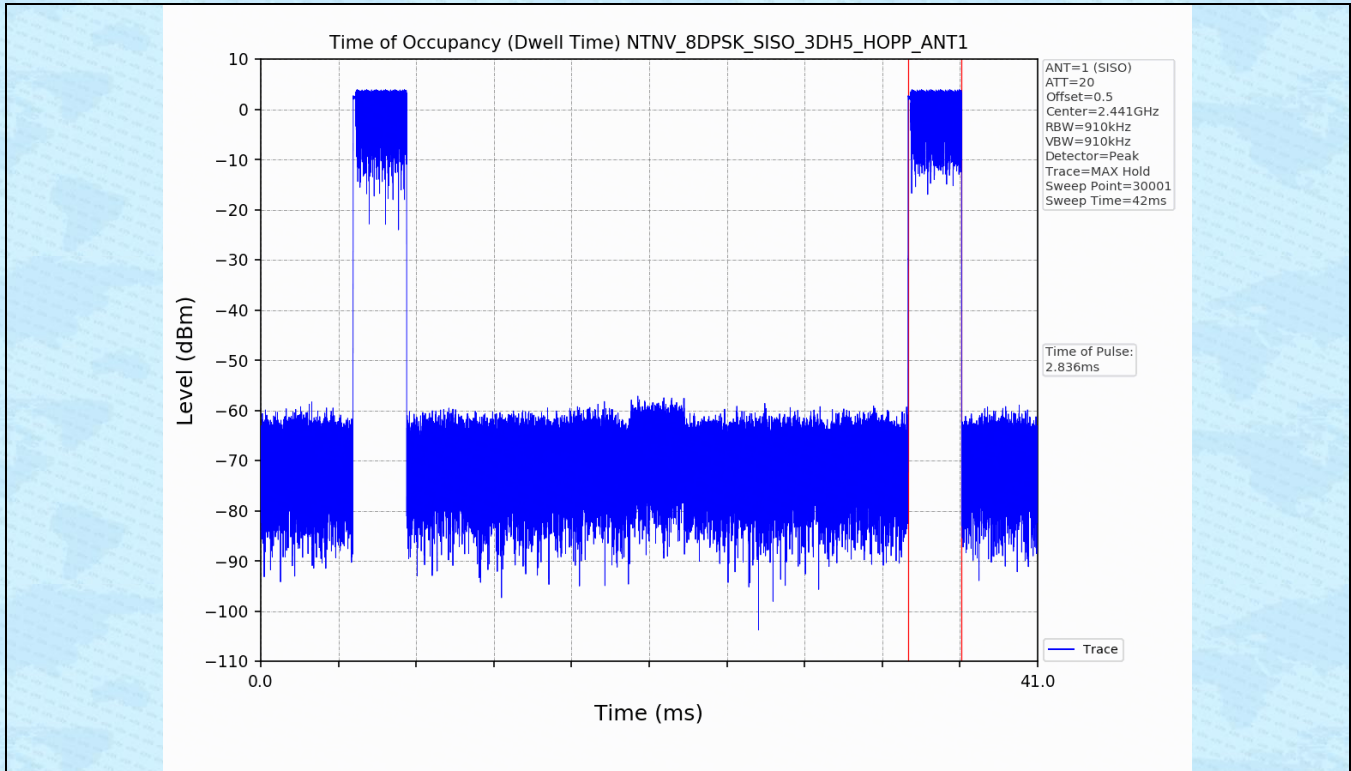
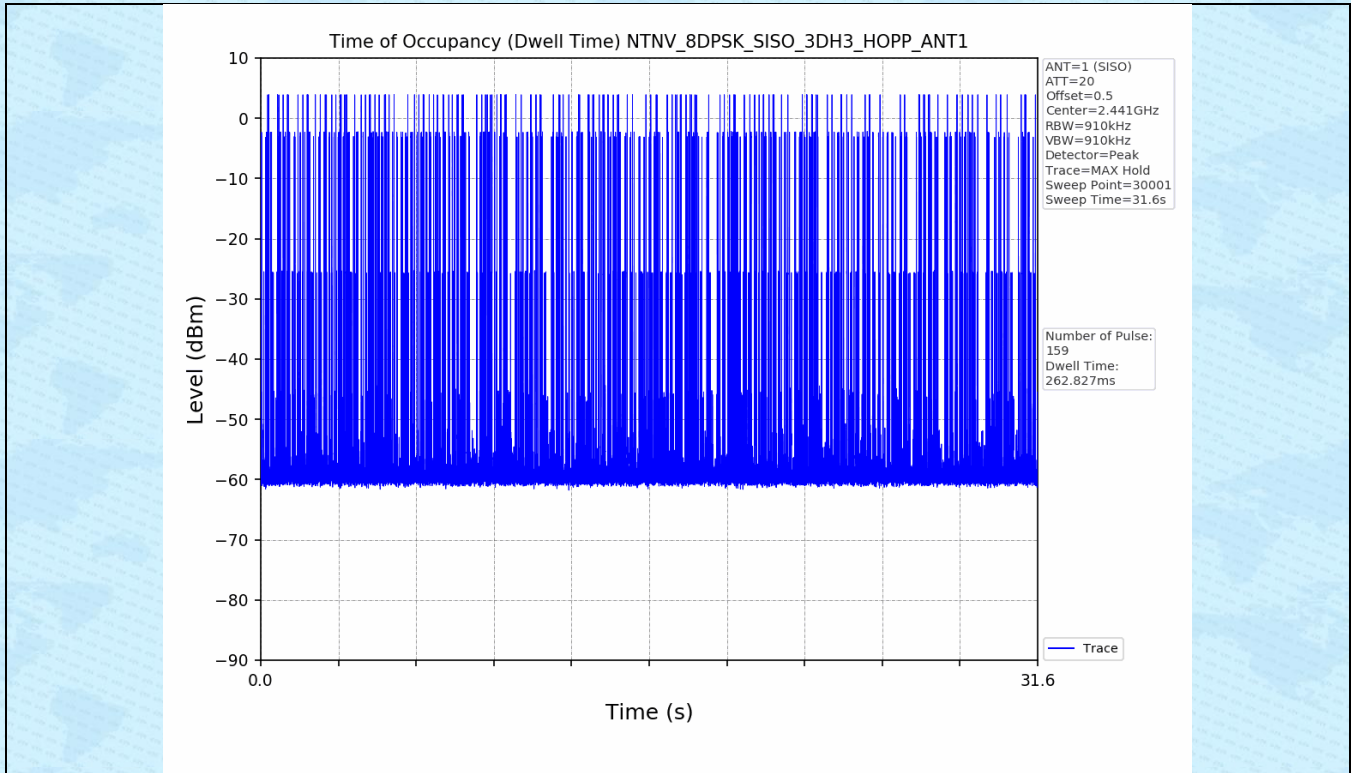


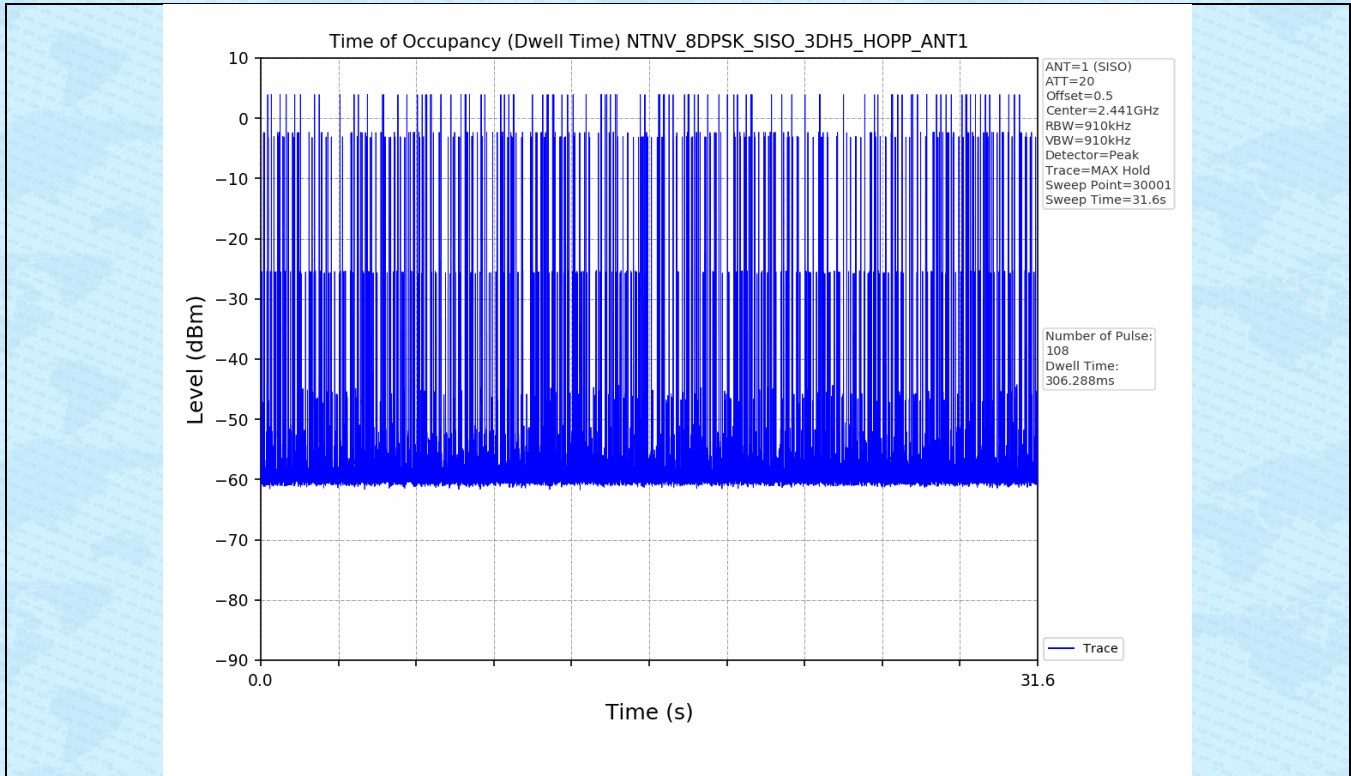












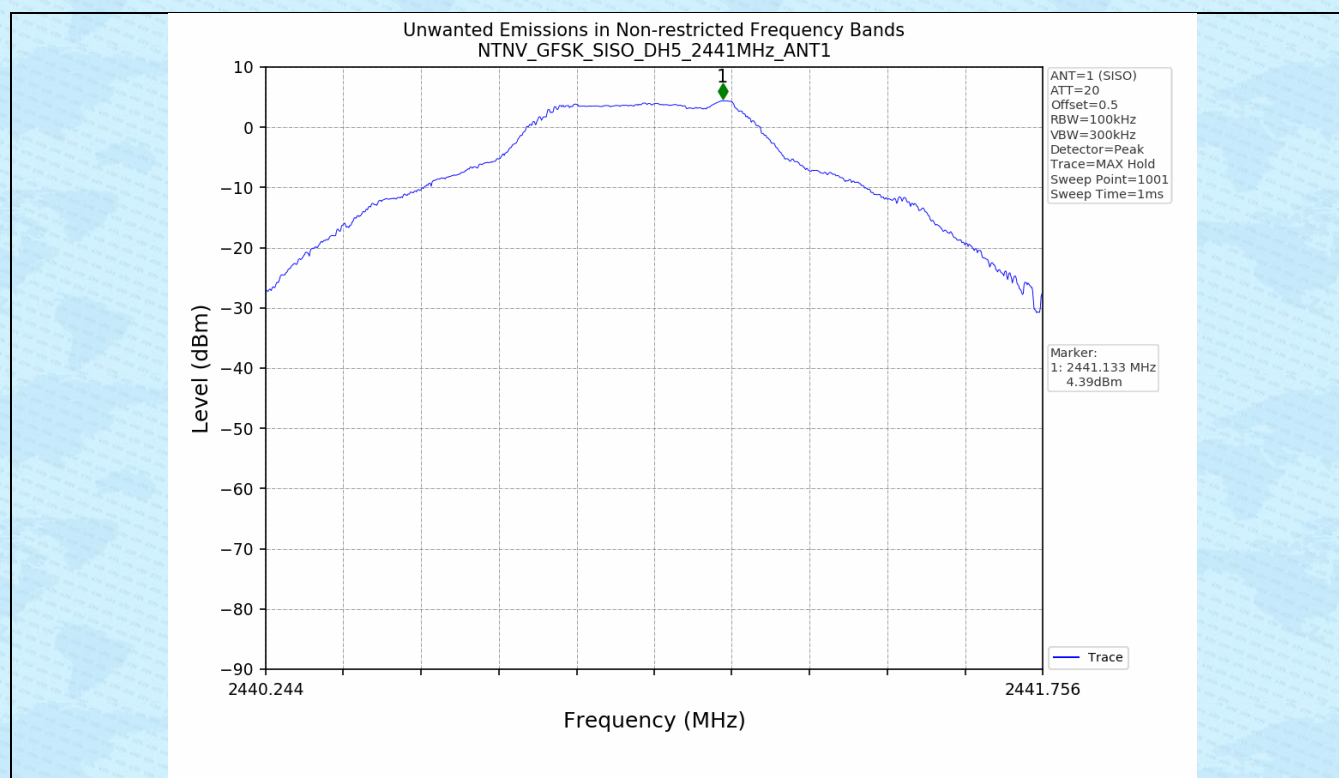


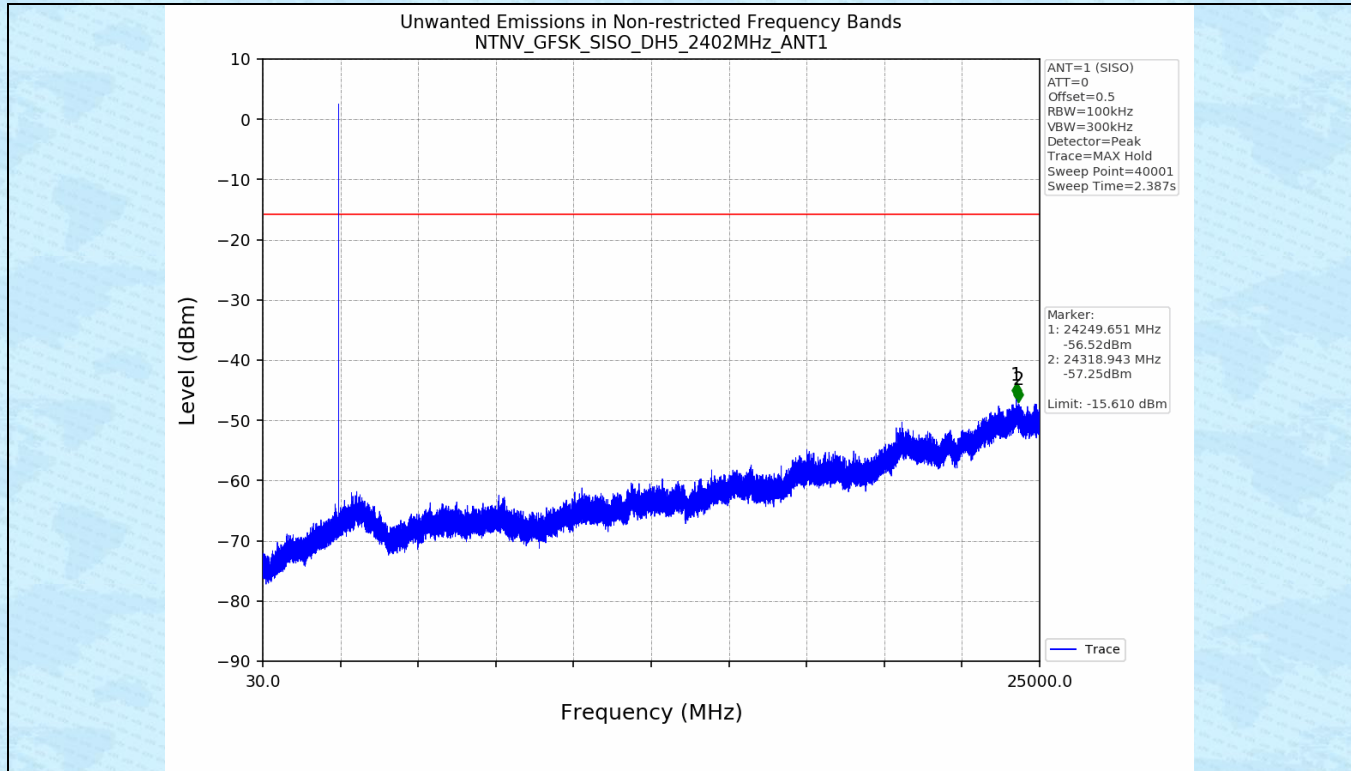
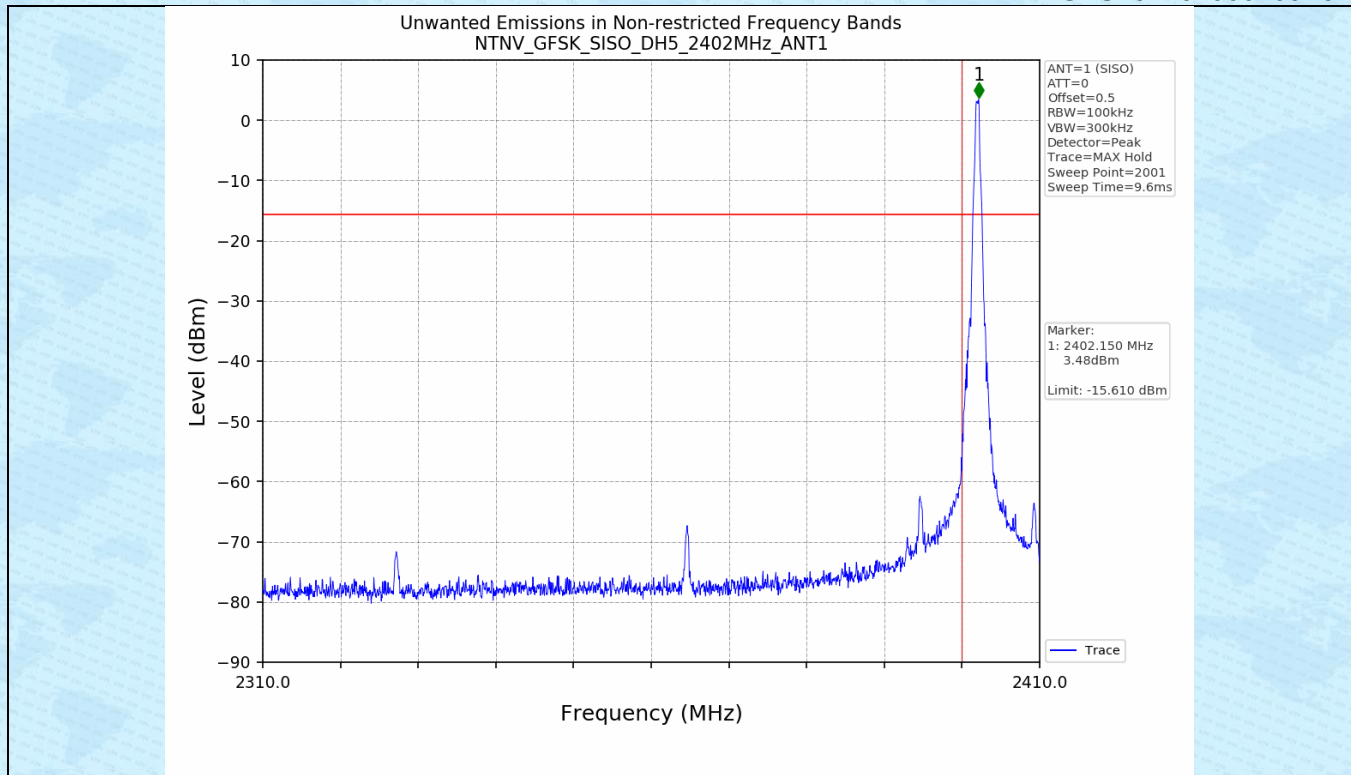
## 6. Unwanted Emissions in Non-restricted Frequency Bands

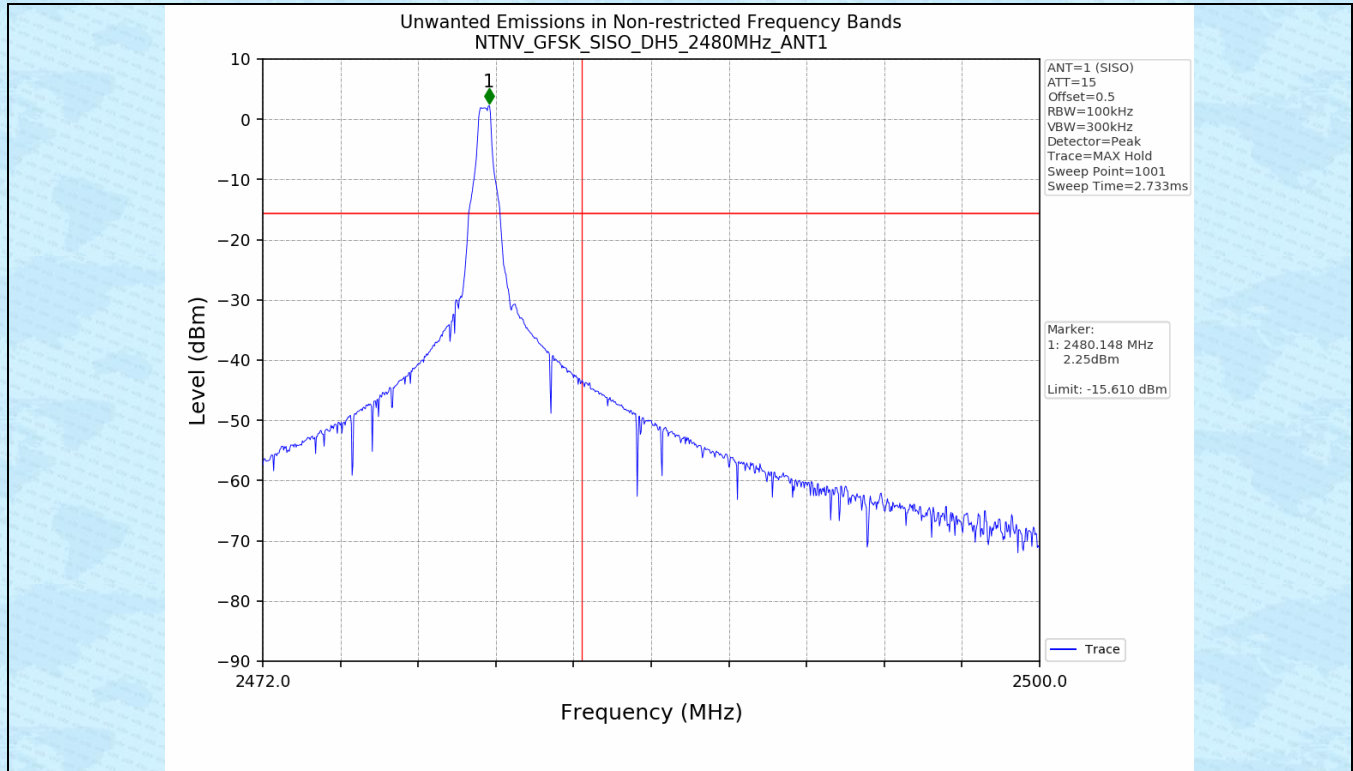
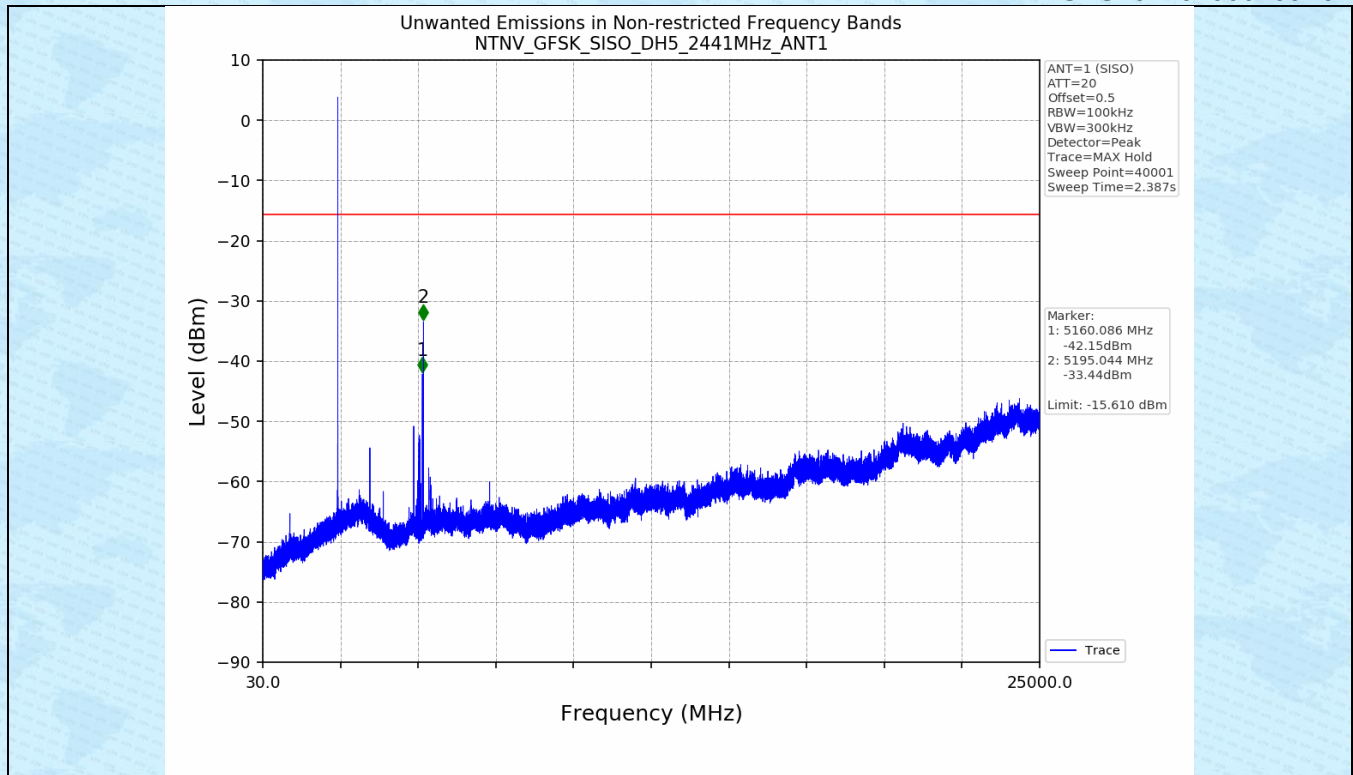
### 6.1 Test Result

| Test Mode | Frequency (MHz) | TX Type | ANT No. | Spurious Conducted Emission (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|---------|-----------------------------------|--------------|---------|
| GFSK      | 2402            | SISO    | 1       | Refer to test graph               | -15.61       | PASS    |
|           | 2441            | SISO    | 1       | Refer to test graph               | -15.61       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -15.61       | PASS    |
|           | Hopping         | SISO    | 1       | Refer to test graph               | -15.61       | PASS    |
| PI/4DQPSK | 2402            | SISO    | 1       | Refer to test graph               | -17.43       | PASS    |
|           | 2441            | SISO    | 1       | Refer to test graph               | -17.43       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -17.43       | PASS    |
|           | Hopping         | SISO    | 1       | Refer to test graph               | -17.43       | PASS    |
| 8DPSK     | 2402            | SISO    | 1       | Refer to test graph               | -16.76       | PASS    |
|           | 2441            | SISO    | 1       | Refer to test graph               | -16.76       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -16.76       | PASS    |
|           | Hopping         | SISO    | 1       | Refer to test graph               | -16.76       | PASS    |

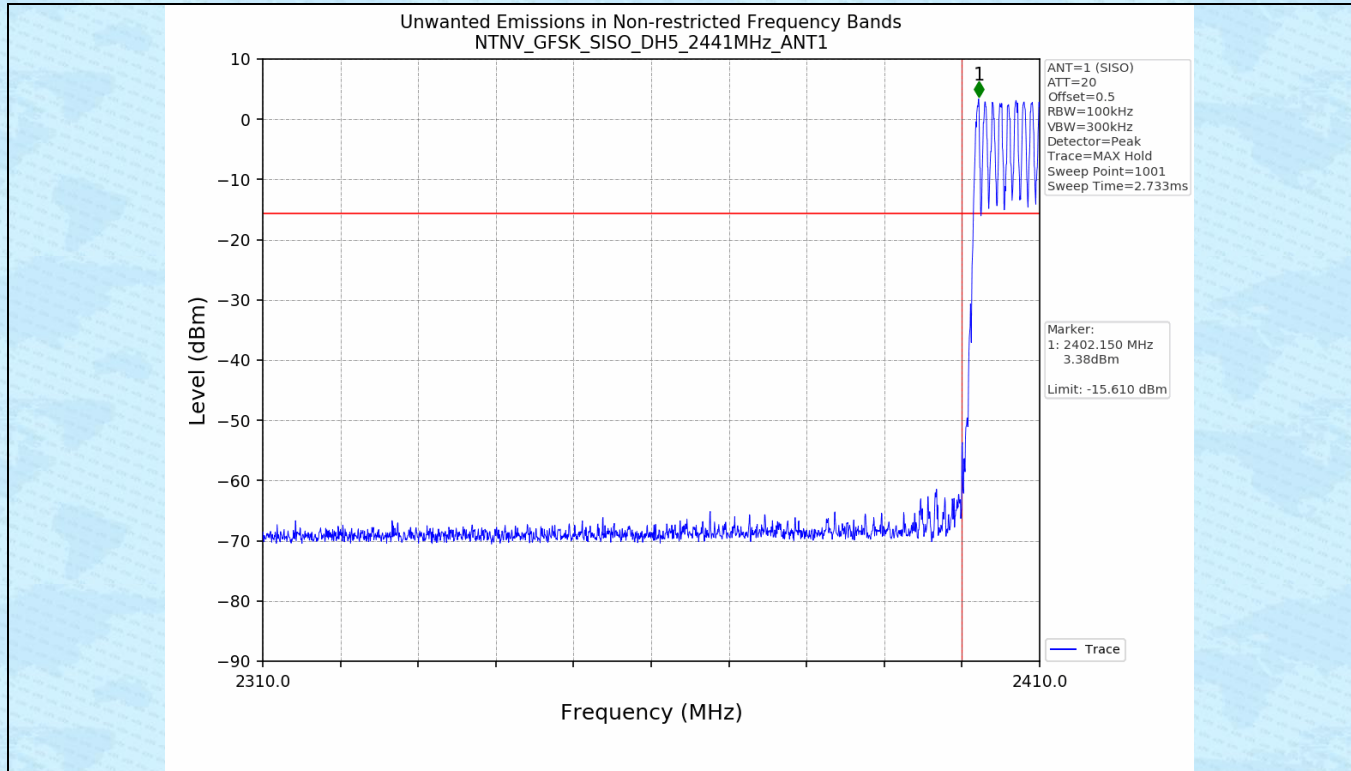
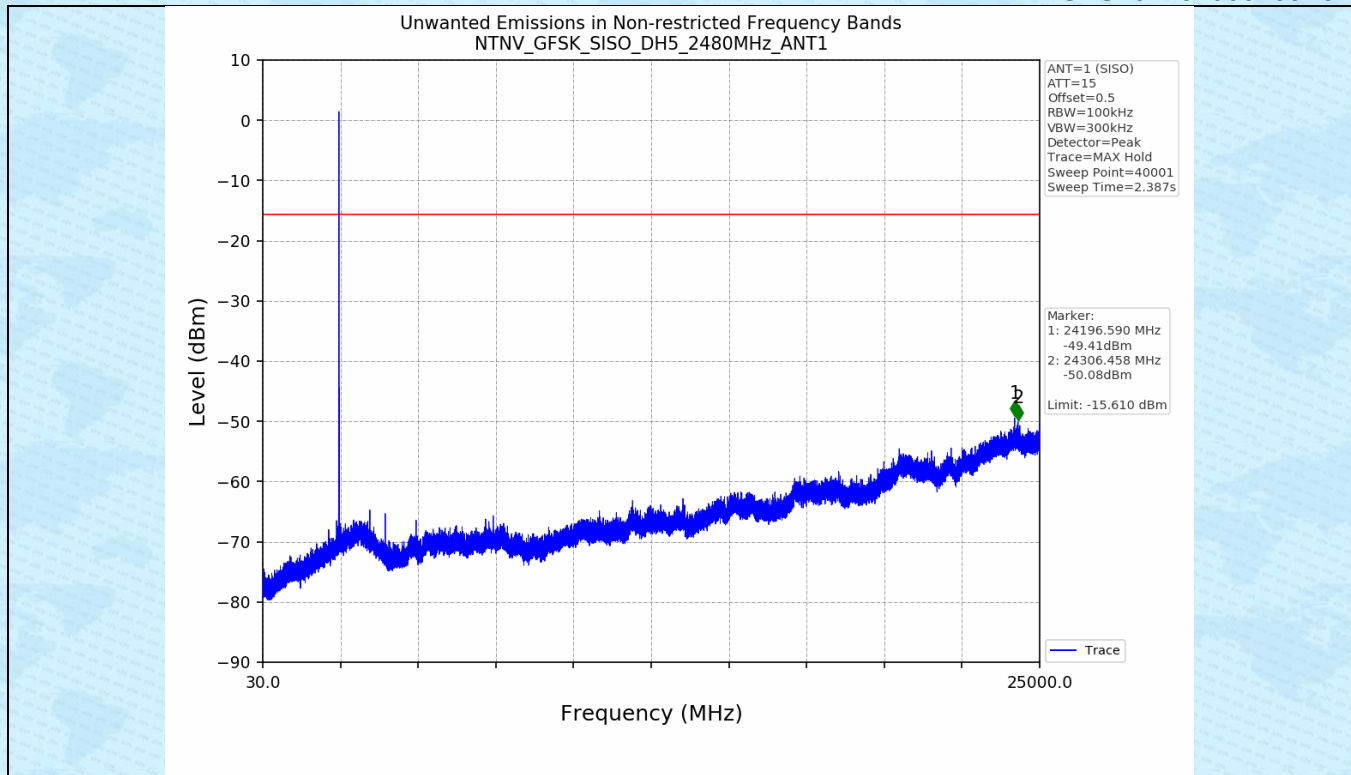
### 6.2 Test Graph

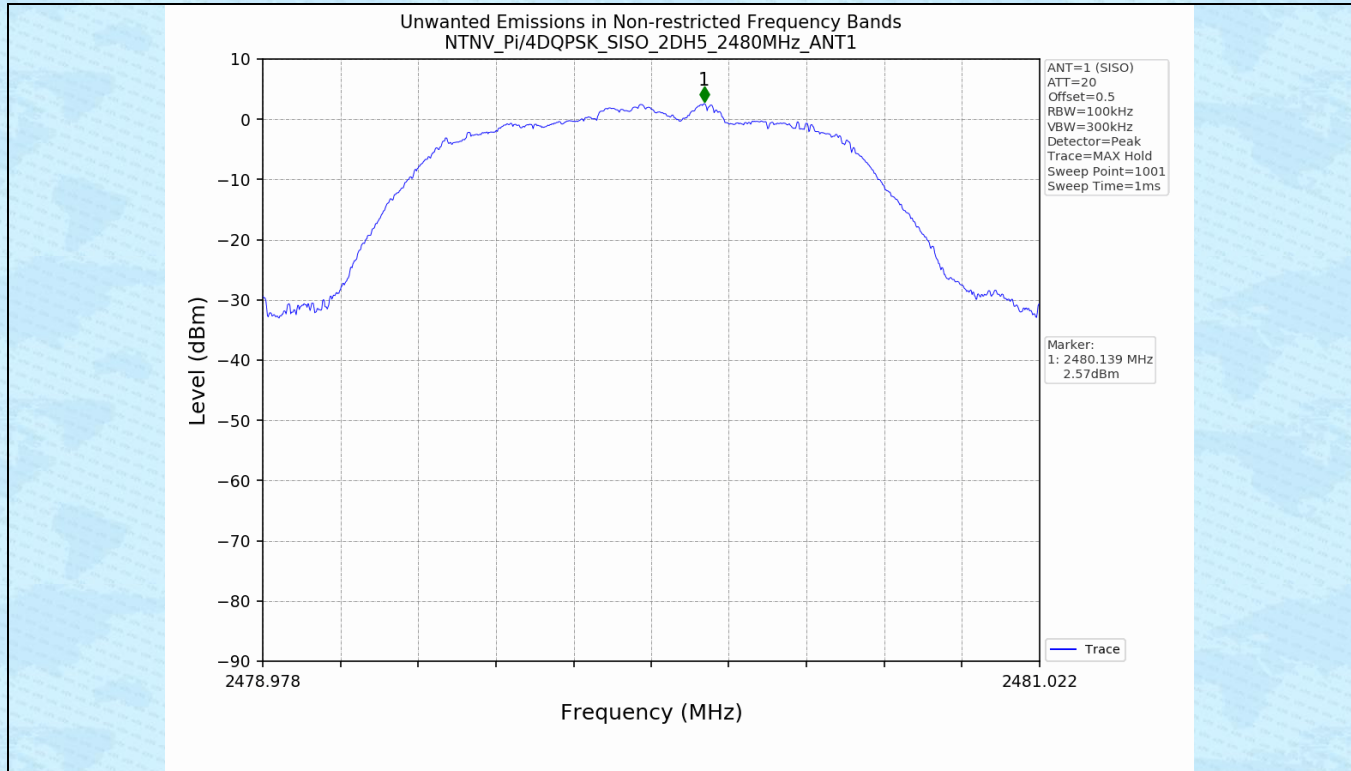
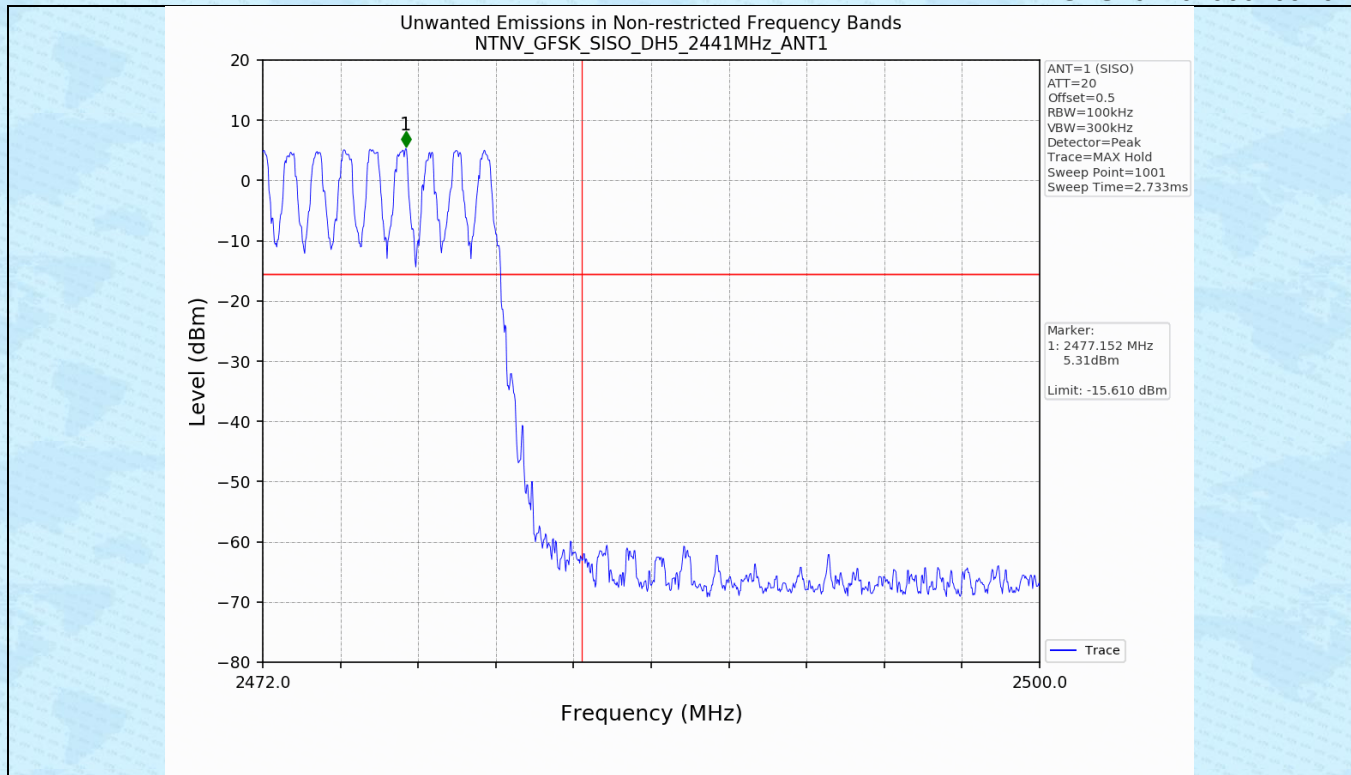


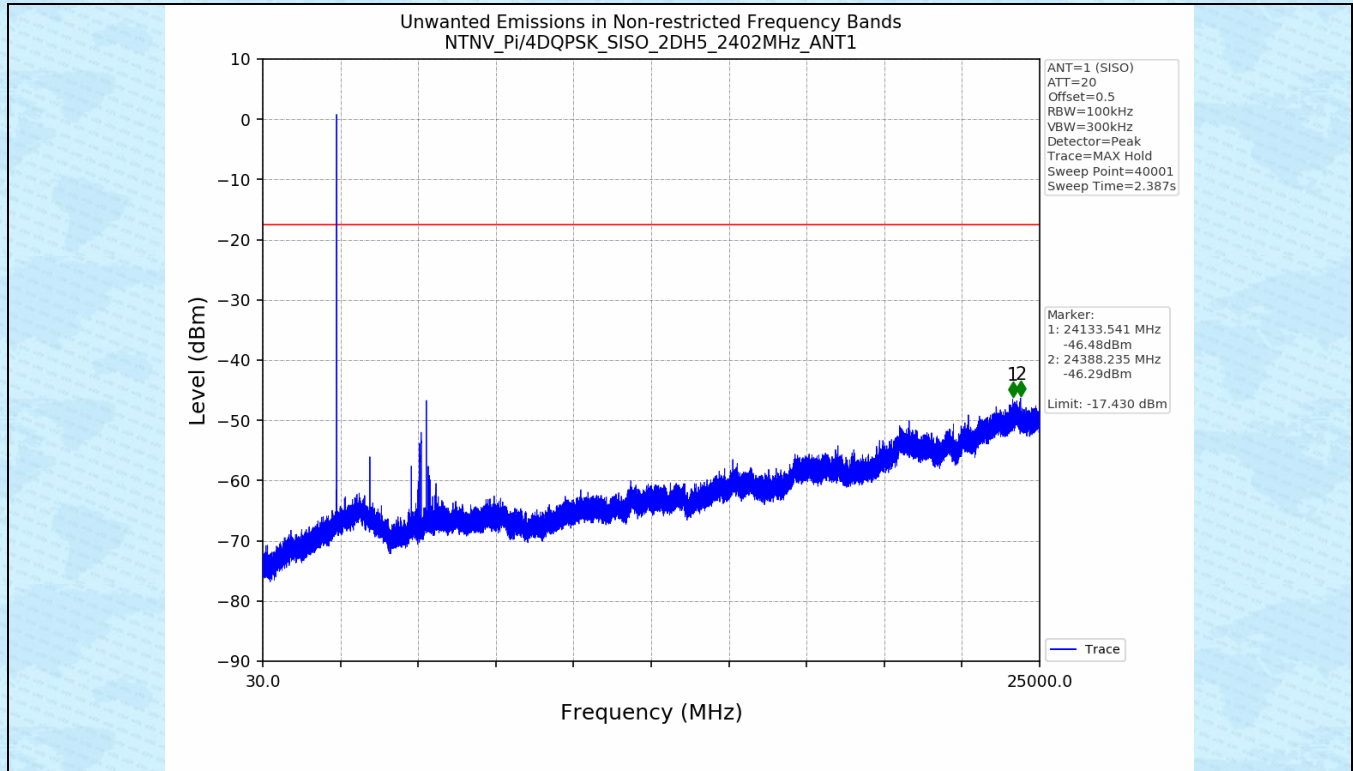
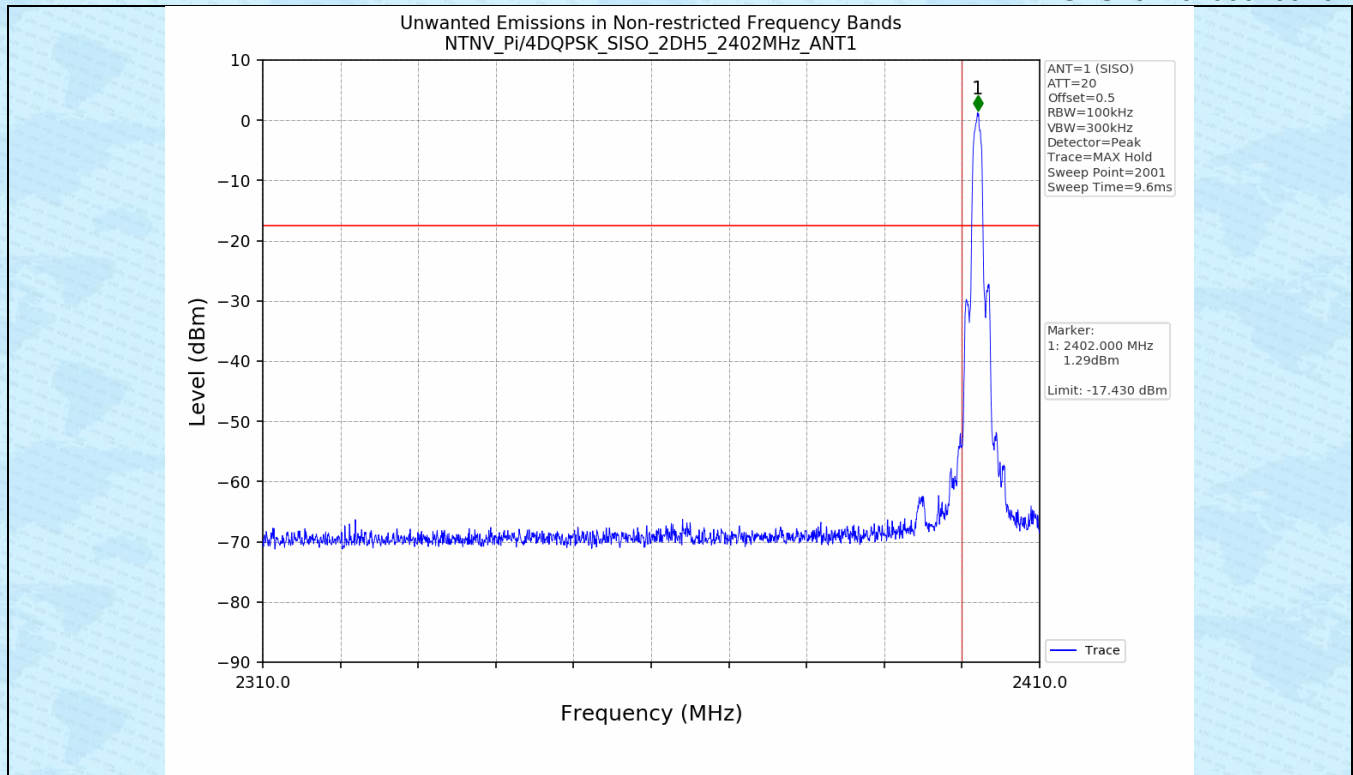




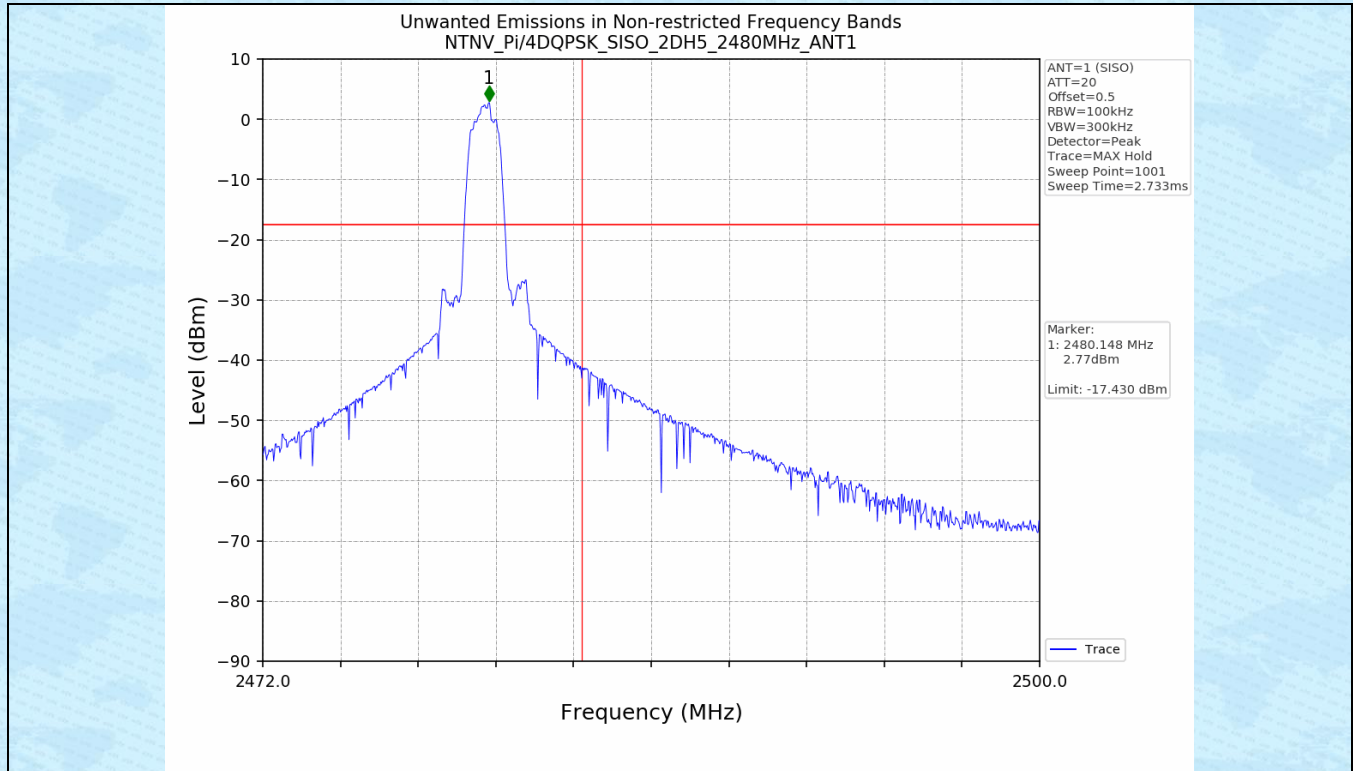
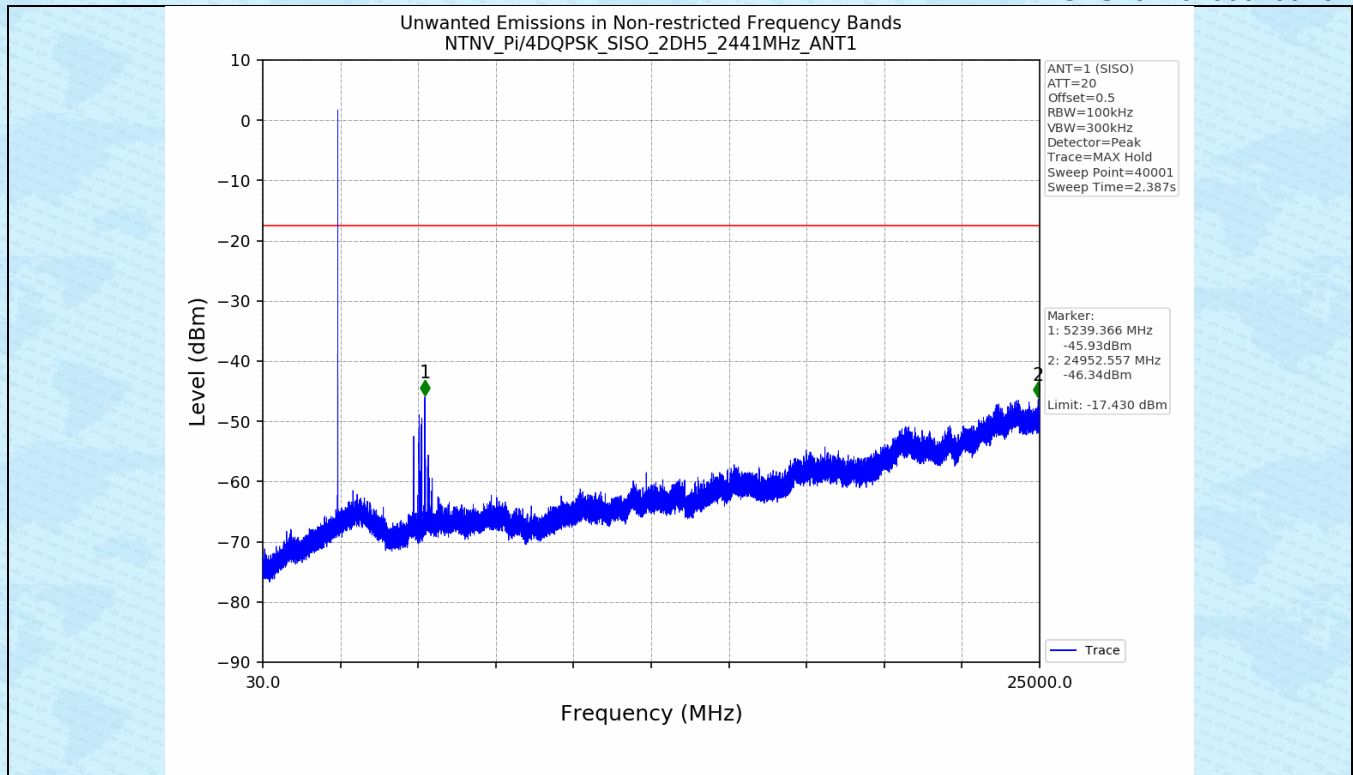


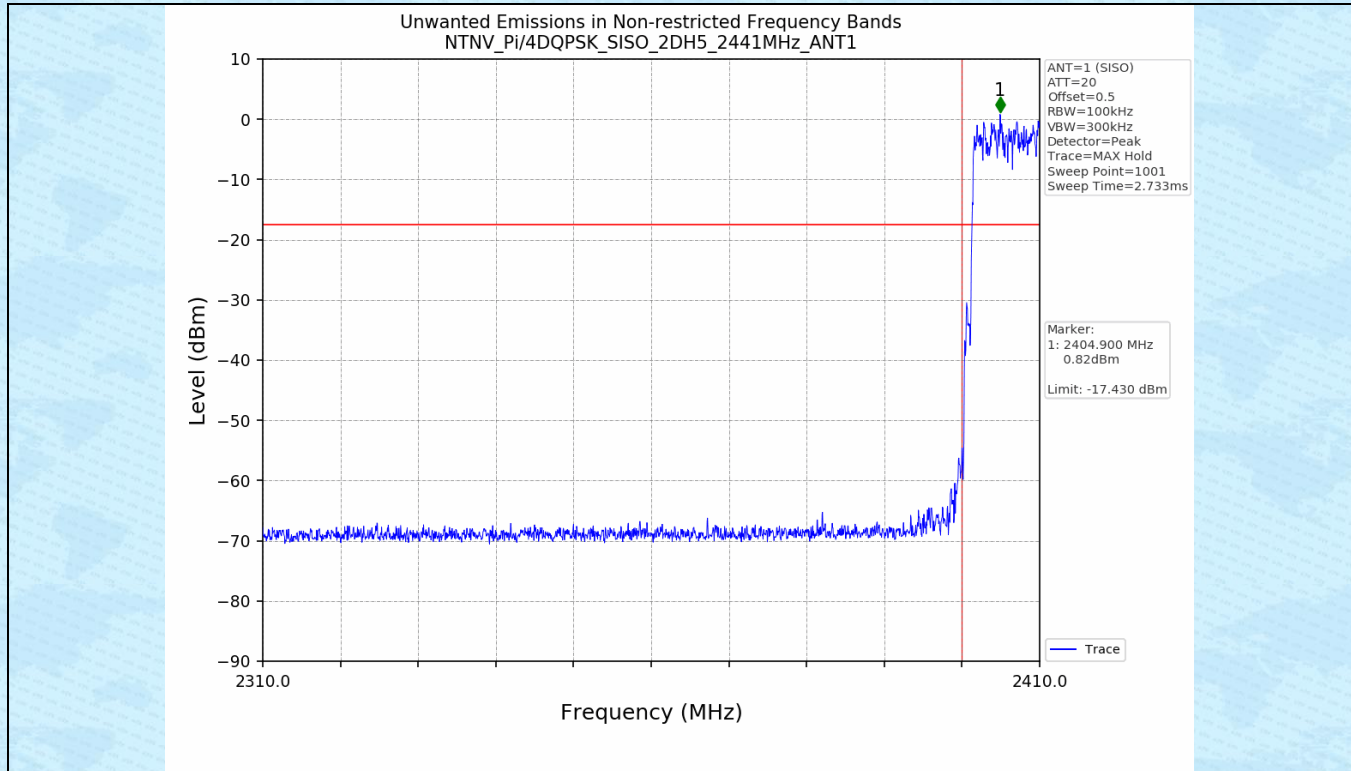
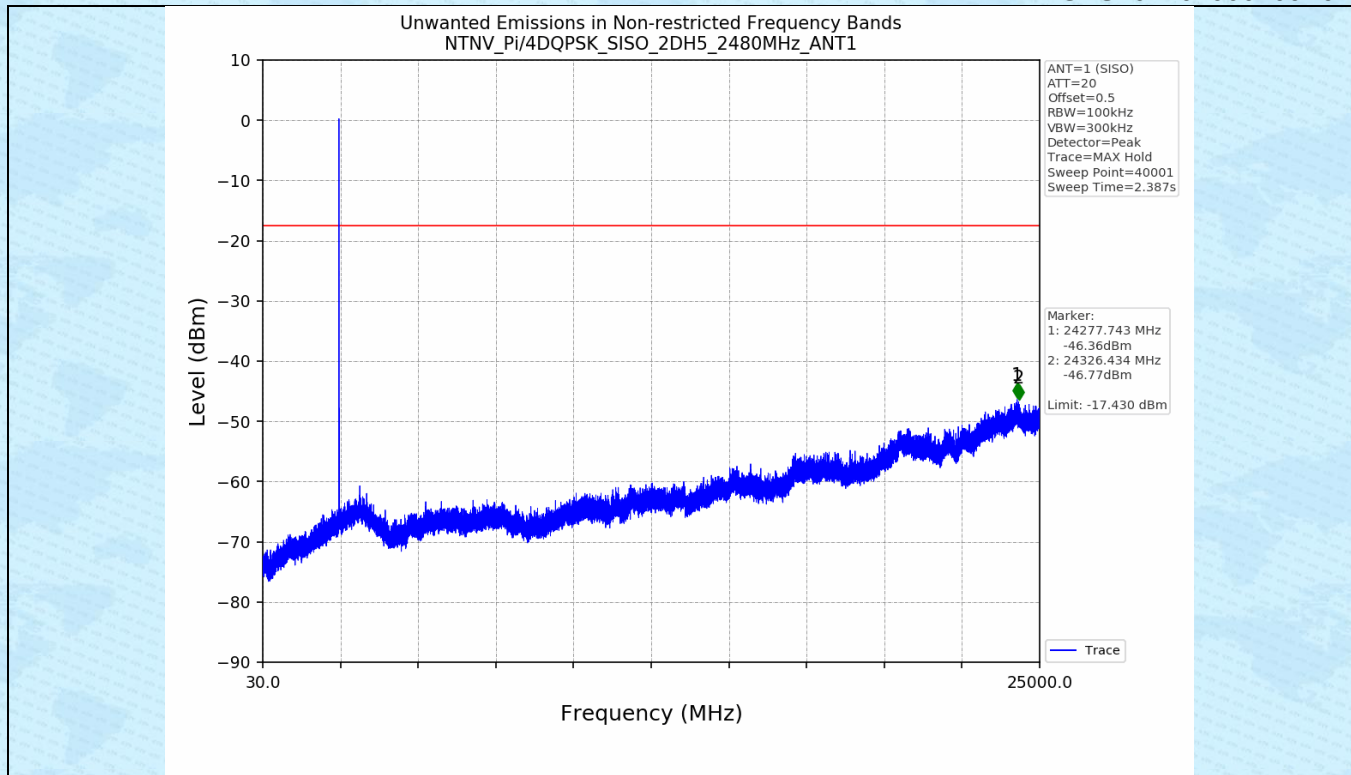


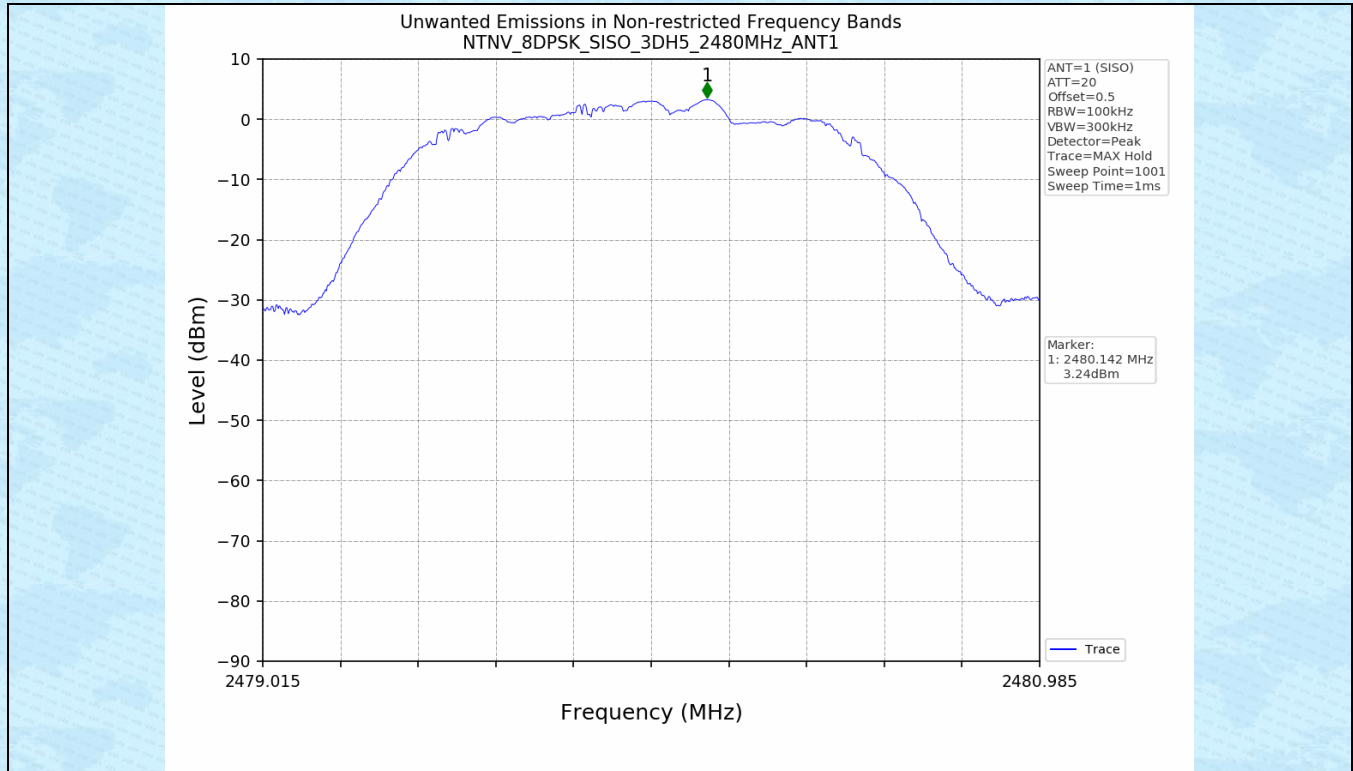
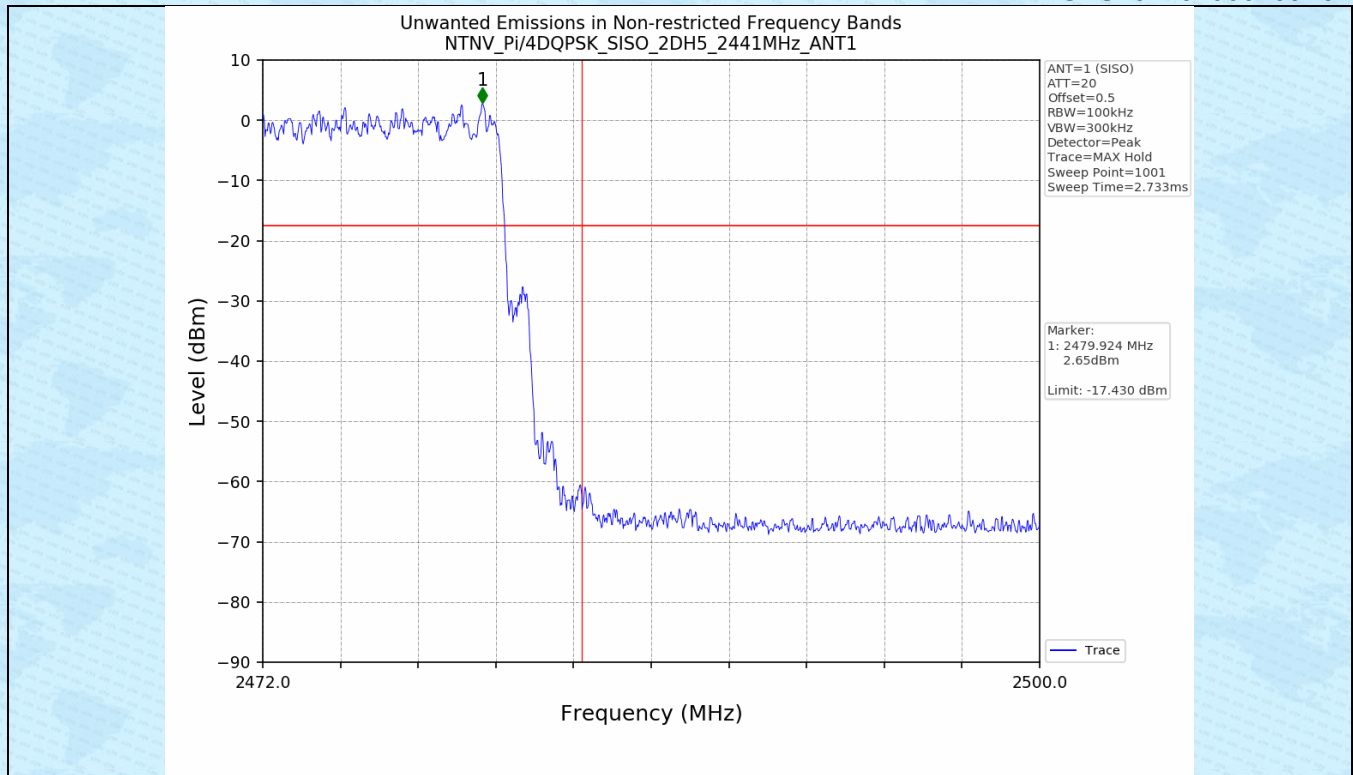




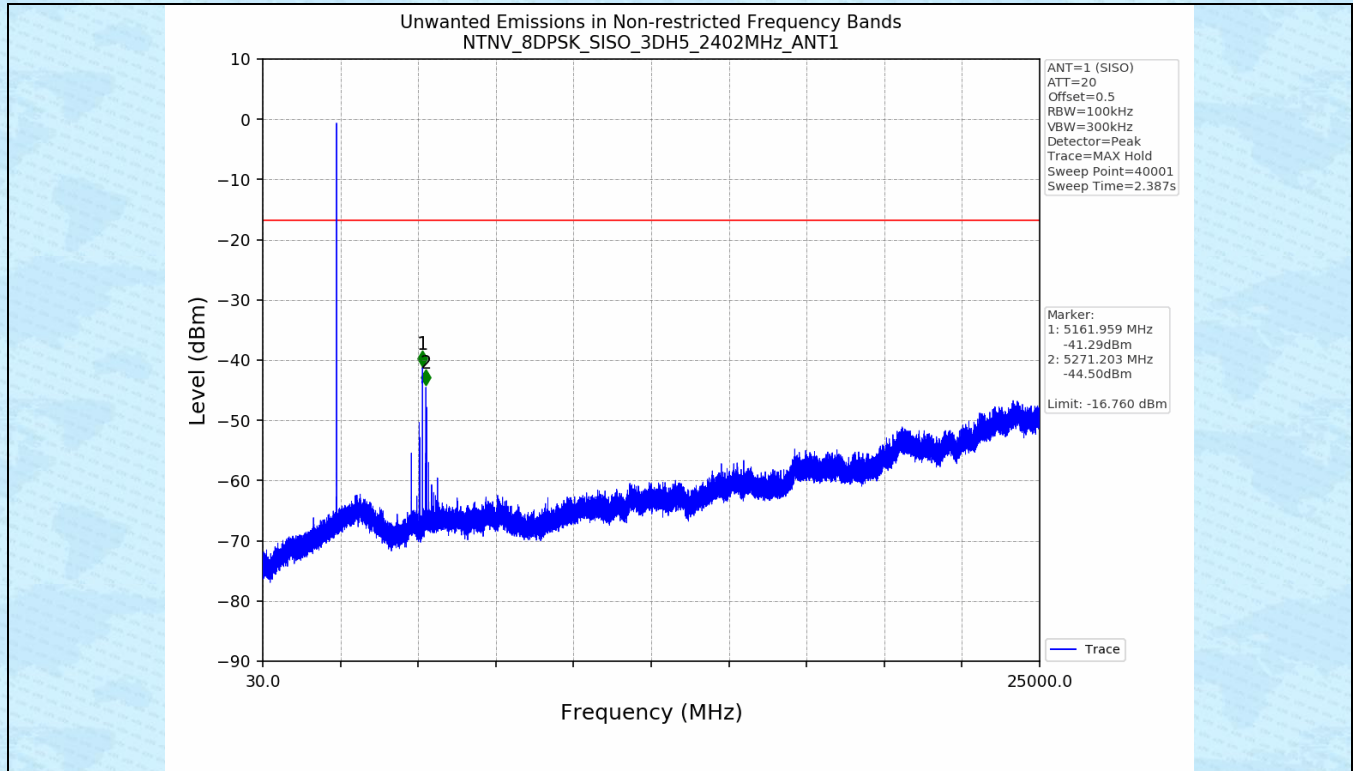
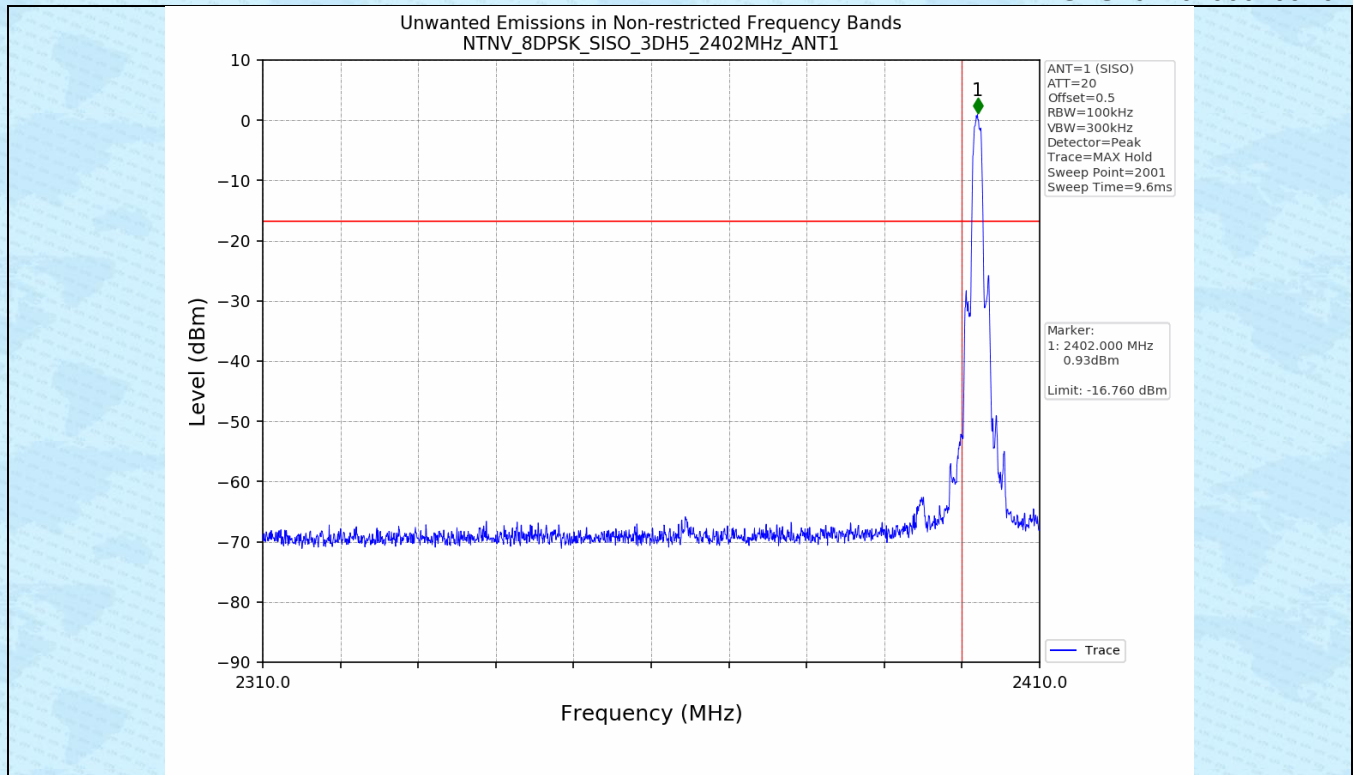


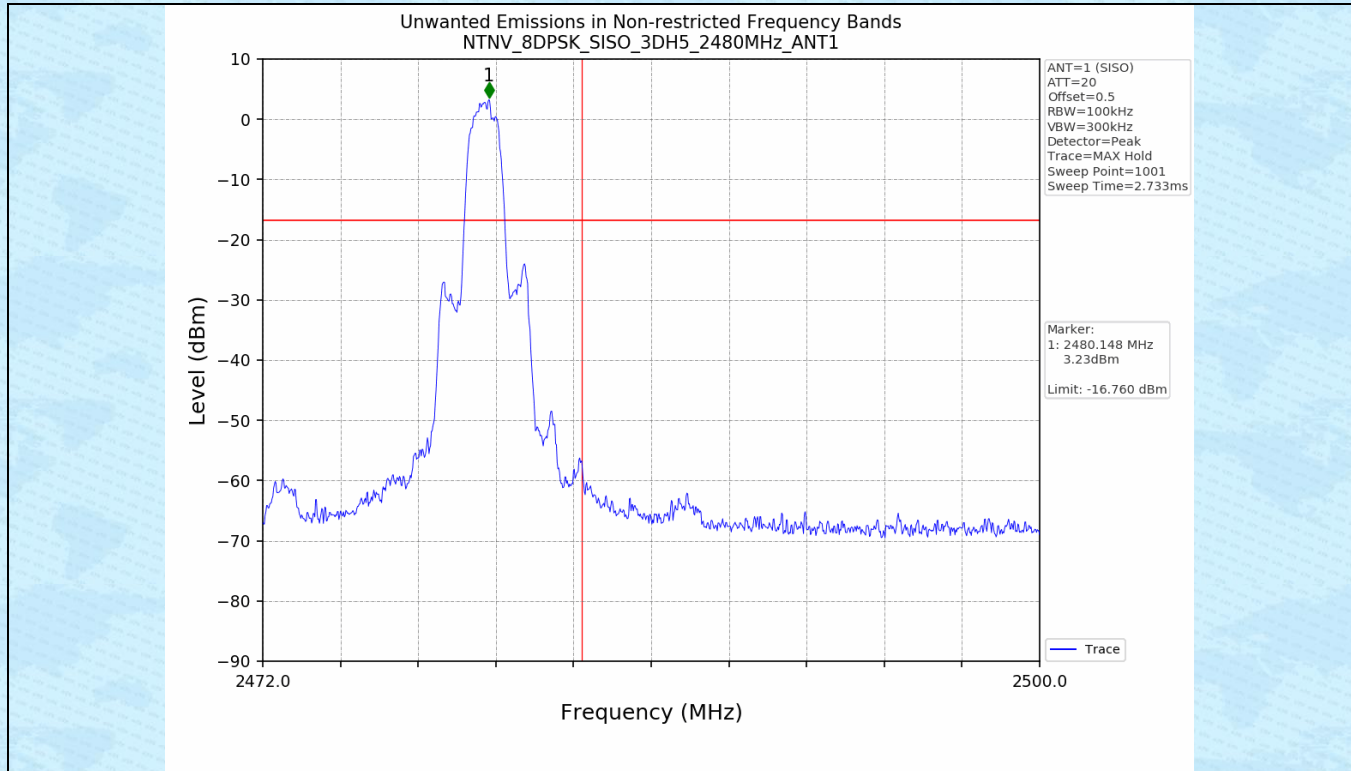
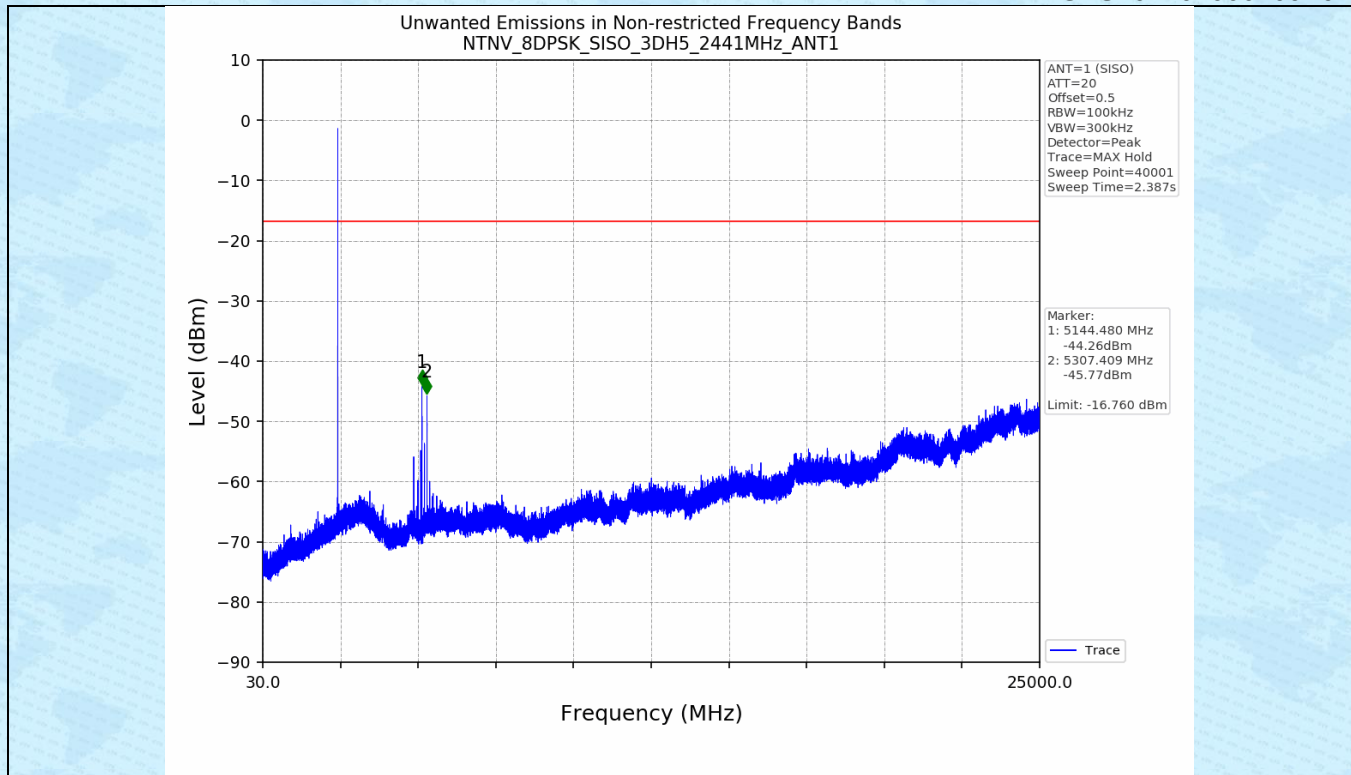


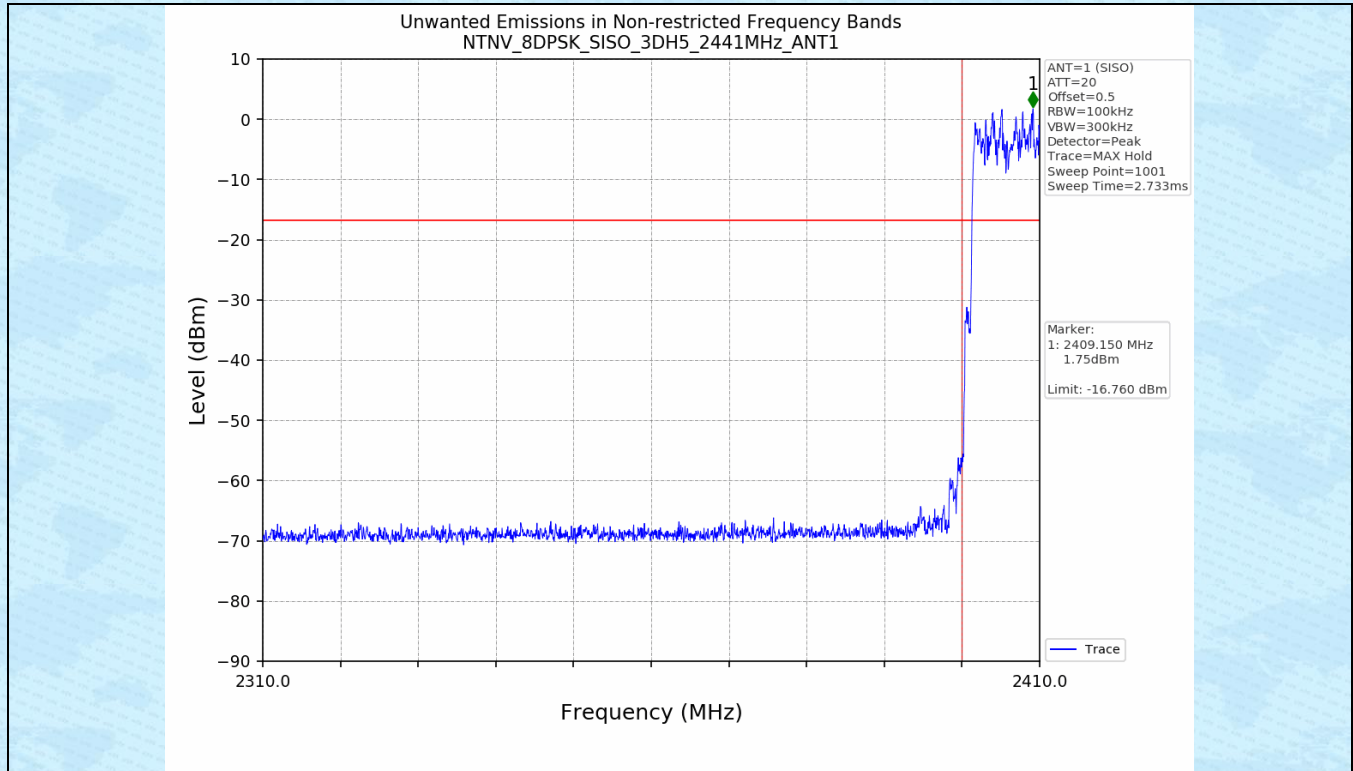
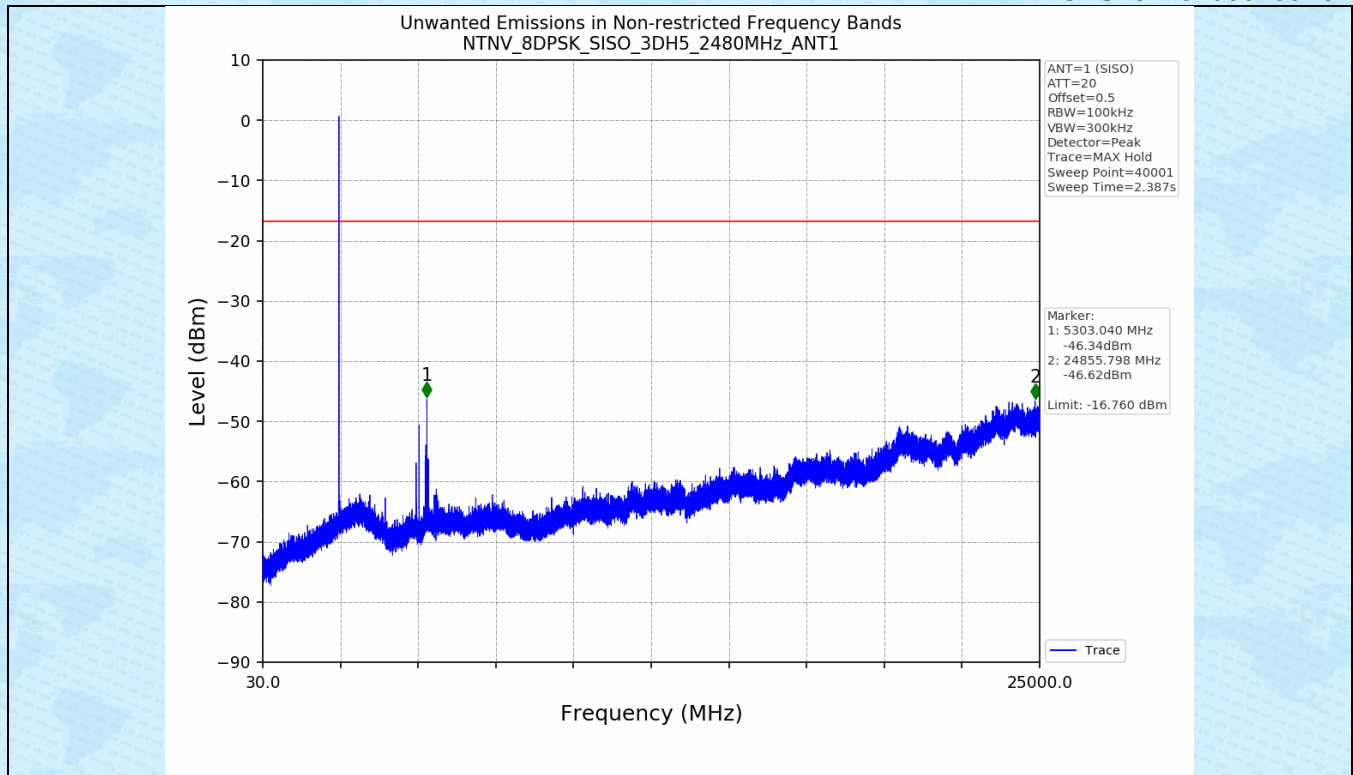




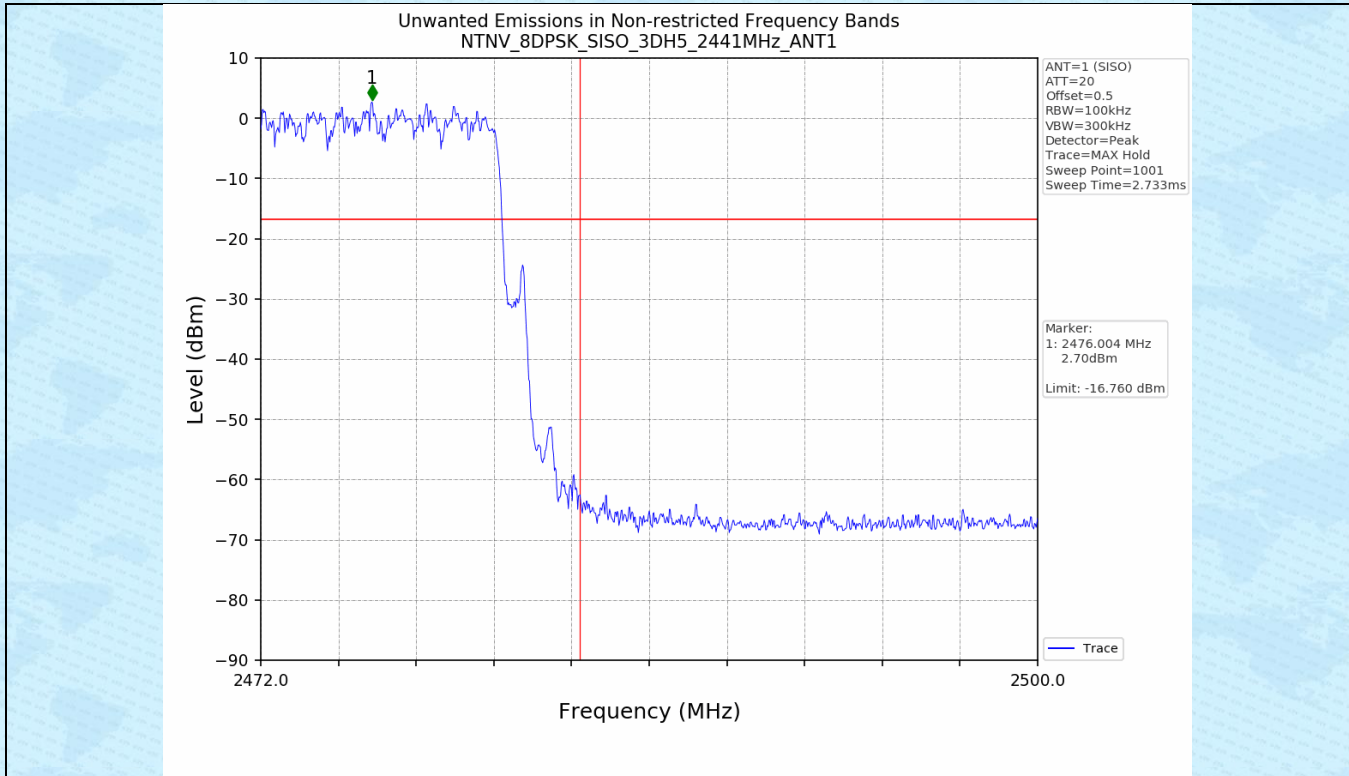












-----End-----