



### Appendix for SHEM2012010711CR -BLE-L

Power level setting using in test:

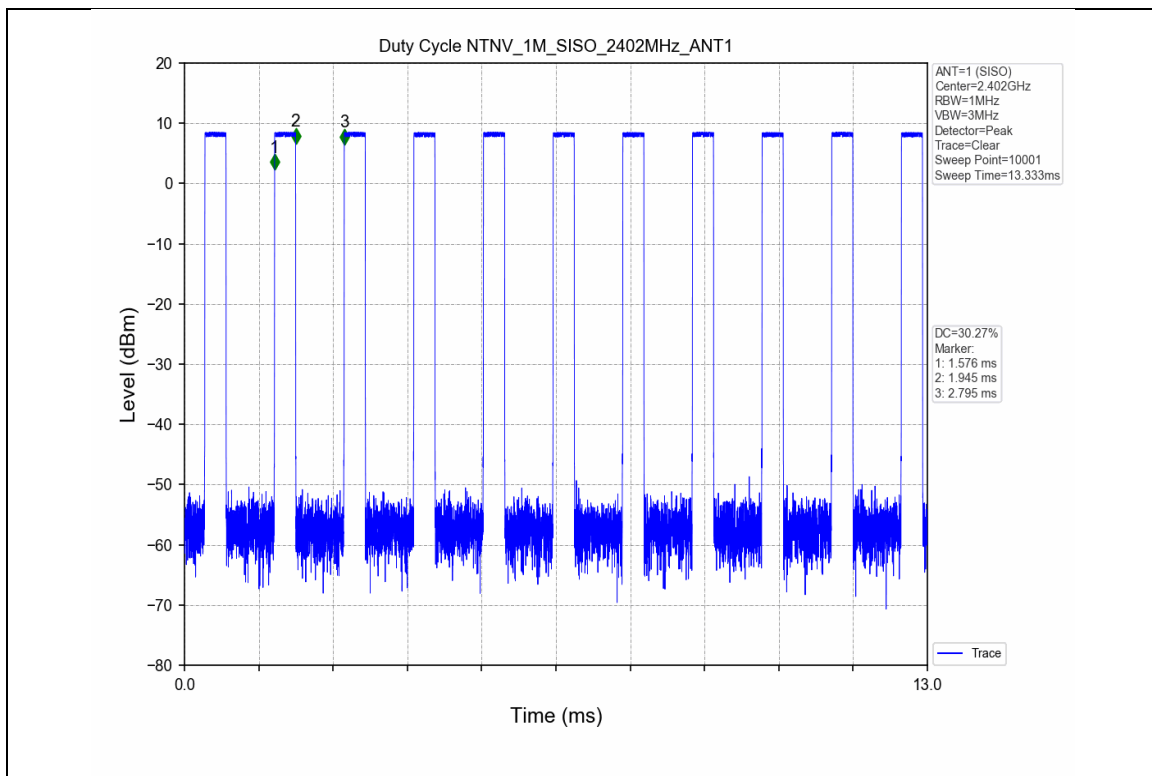
| Channel | BLE |
|---------|-----|
| 0       | 46  |
| 19      | 46  |
| 39      | 46  |

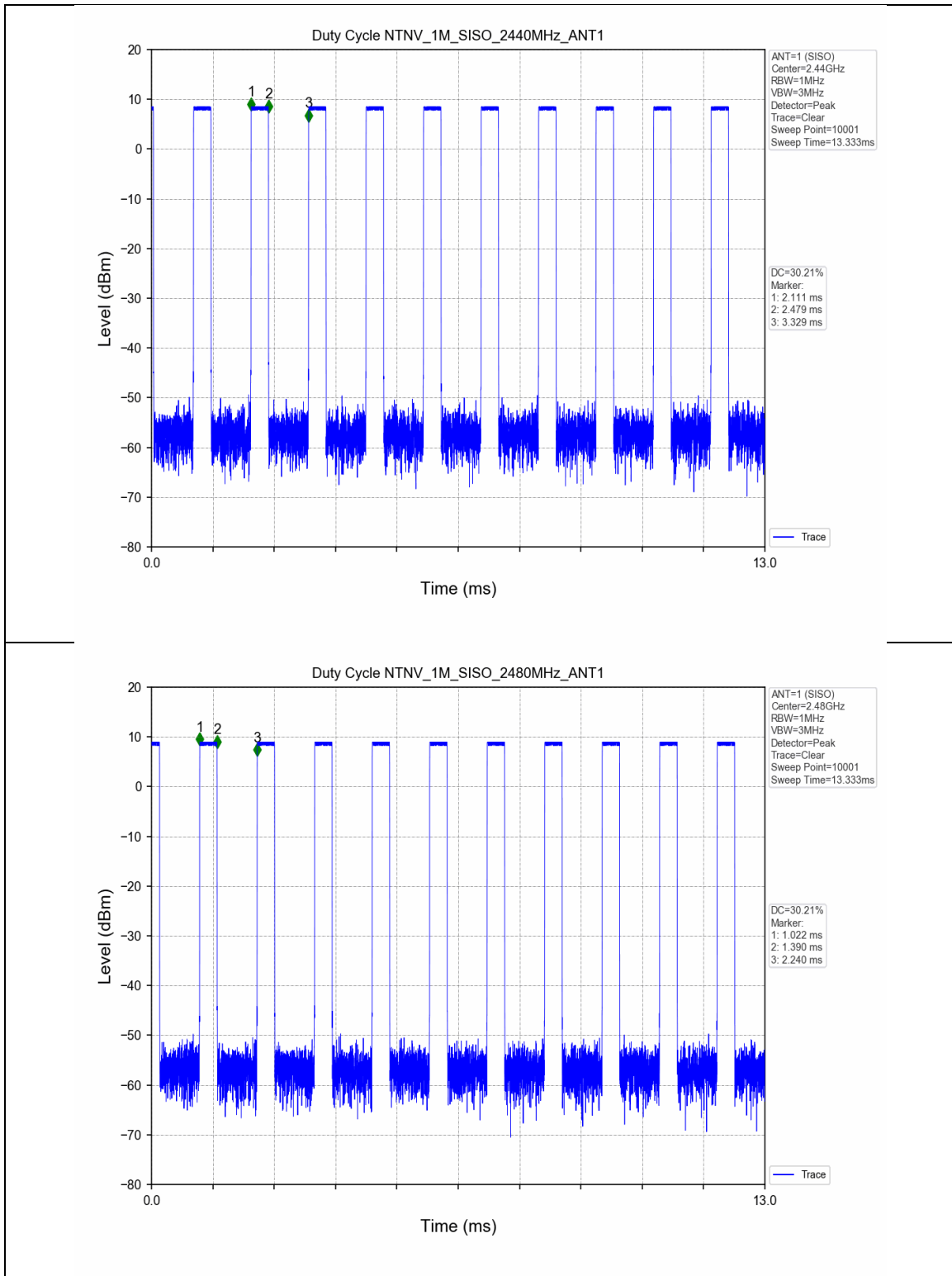
## 1. Duty Cycle

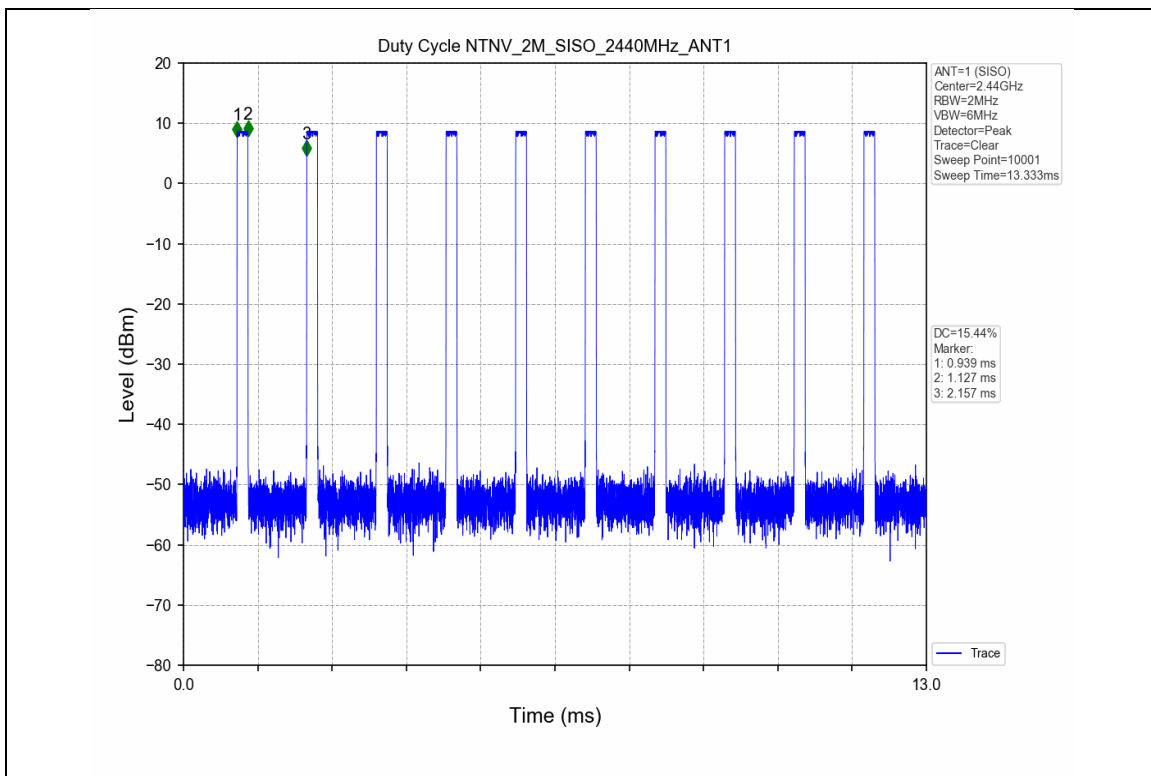
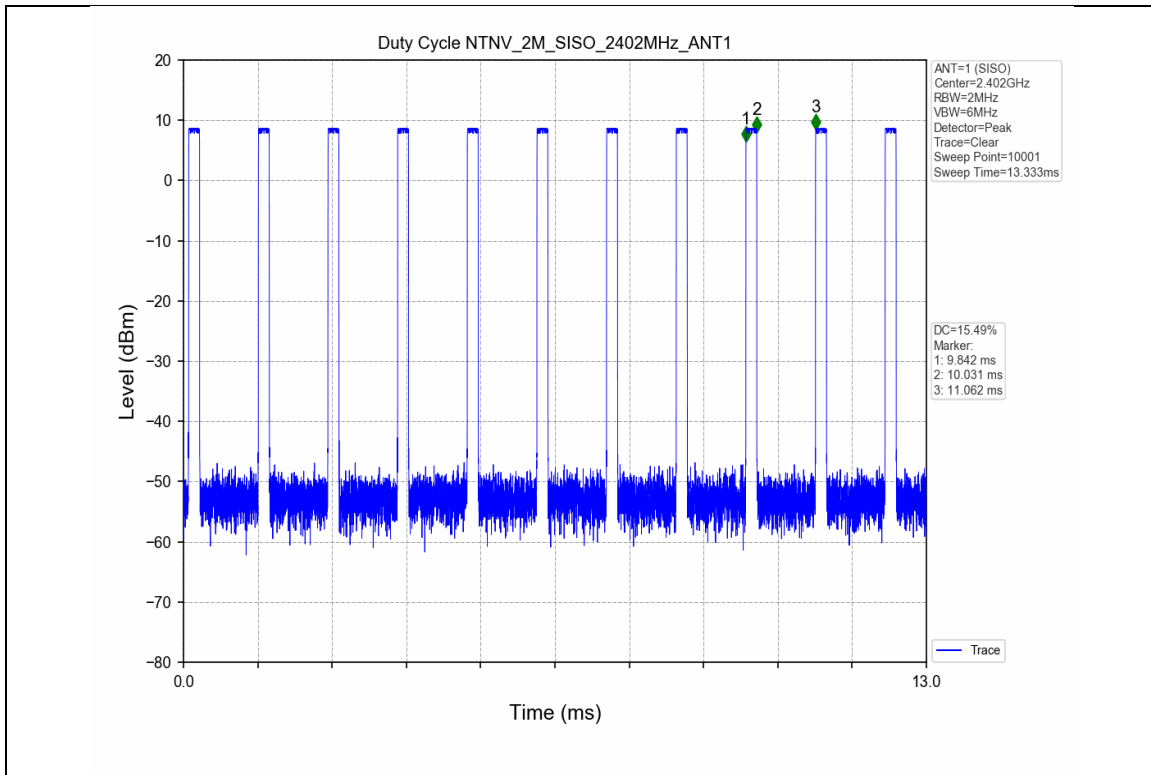
### 1.1 Test Result

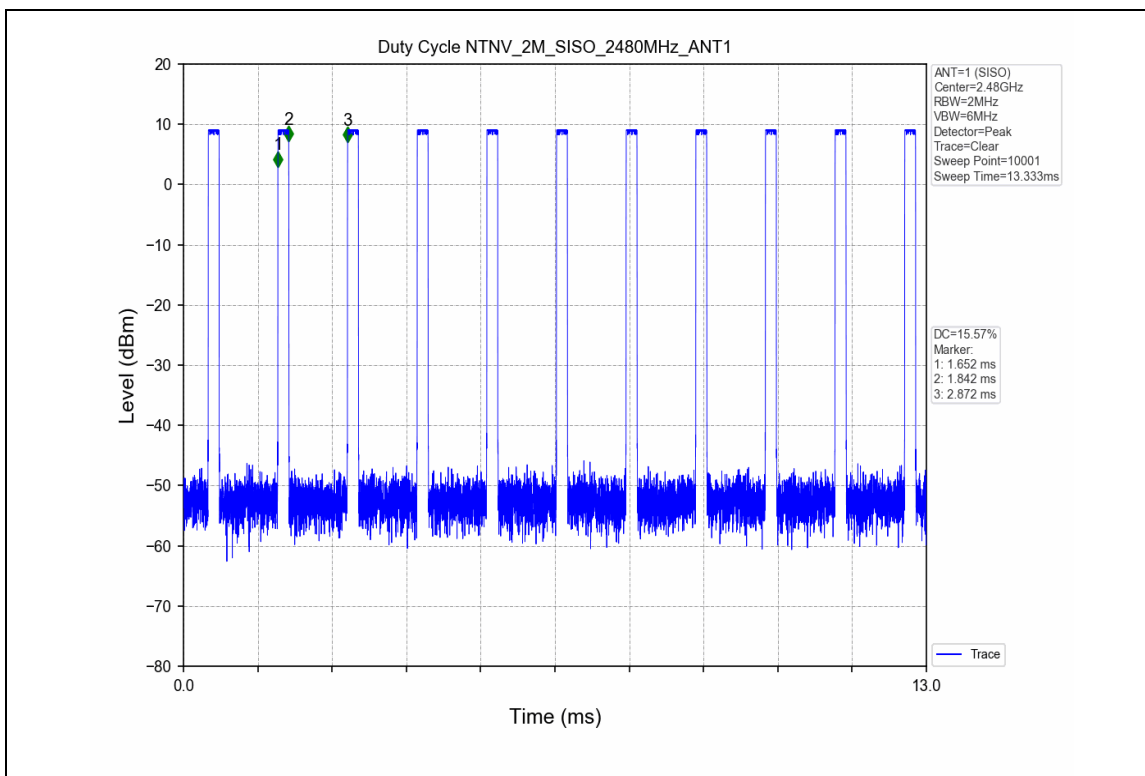
| Test Mode | Channel Frequency(M Hz) | TX Type | ANT No. | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) |
|-----------|-------------------------|---------|---------|-----------|-------------|----------------|-----------------------------------|
| 1M        | 2402                    | SISO    | 1       | 0.369     | 1.219       | 30.27          | 5.19                              |
|           | 2440                    | SISO    | 1       | 0.368     | 1.218       | 30.21          | 5.20                              |
|           | 2480                    | SISO    | 1       | 0.368     | 1.218       | 30.21          | 5.20                              |
| 2M        | 2402                    | SISO    | 1       | 0.189     | 1.220       | 15.49          | 8.10                              |
|           | 2440                    | SISO    | 1       | 0.188     | 1.218       | 15.44          | 8.11                              |
|           | 2480                    | SISO    | 1       | 0.190     | 1.220       | 15.57          | 8.08                              |

### 1.2 Test Graph









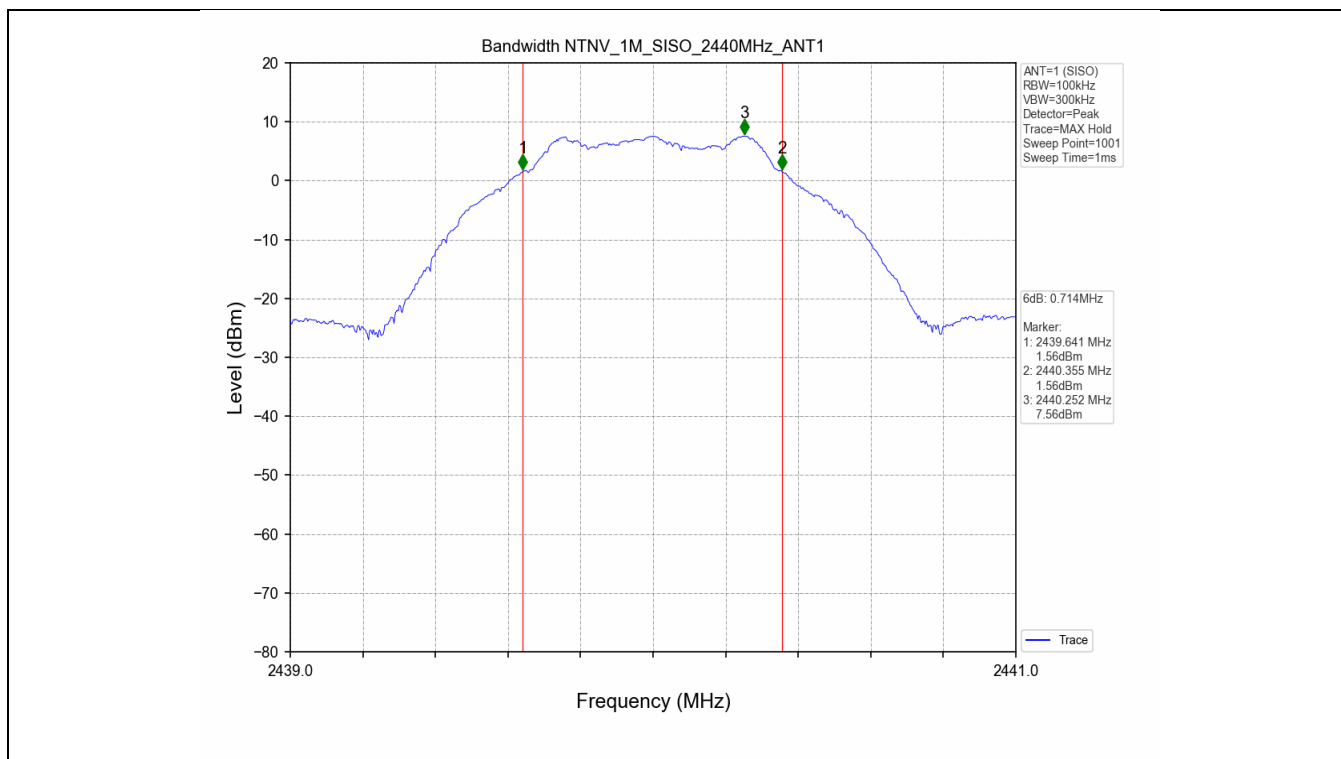
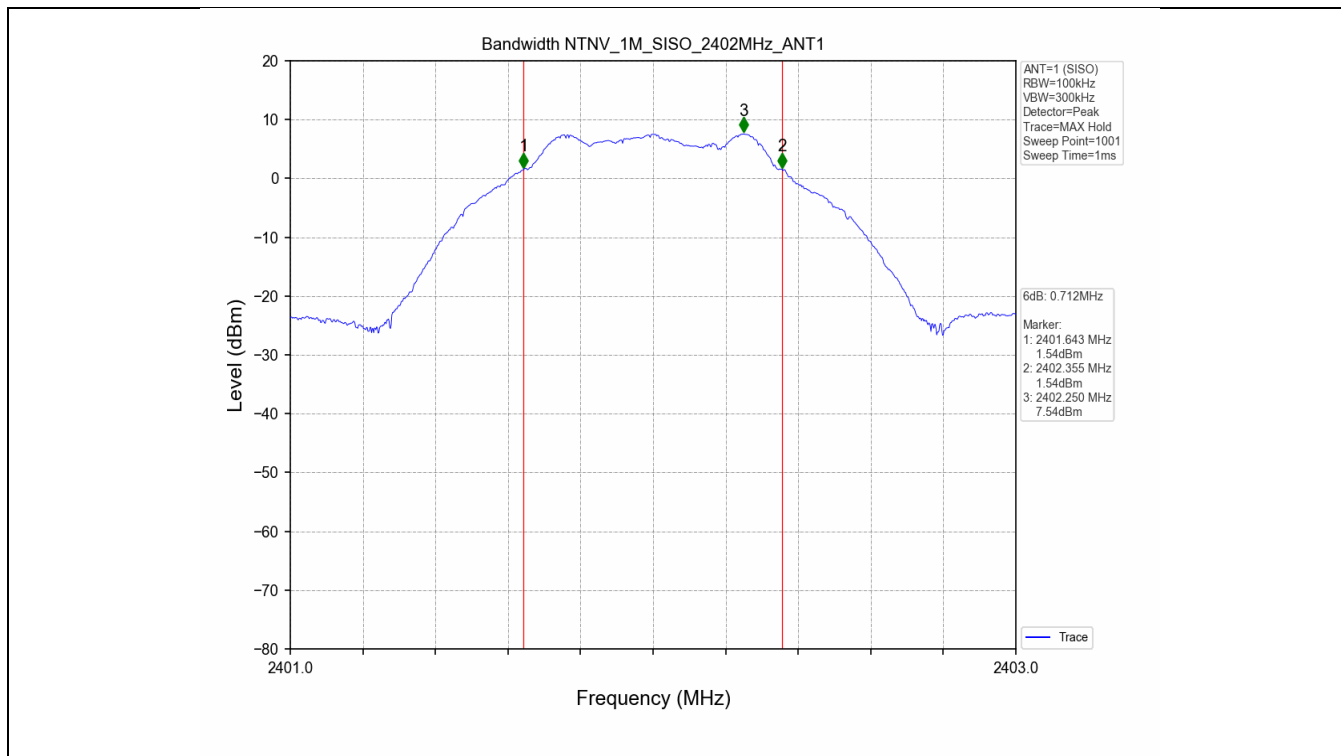
## 2. Bandwidth

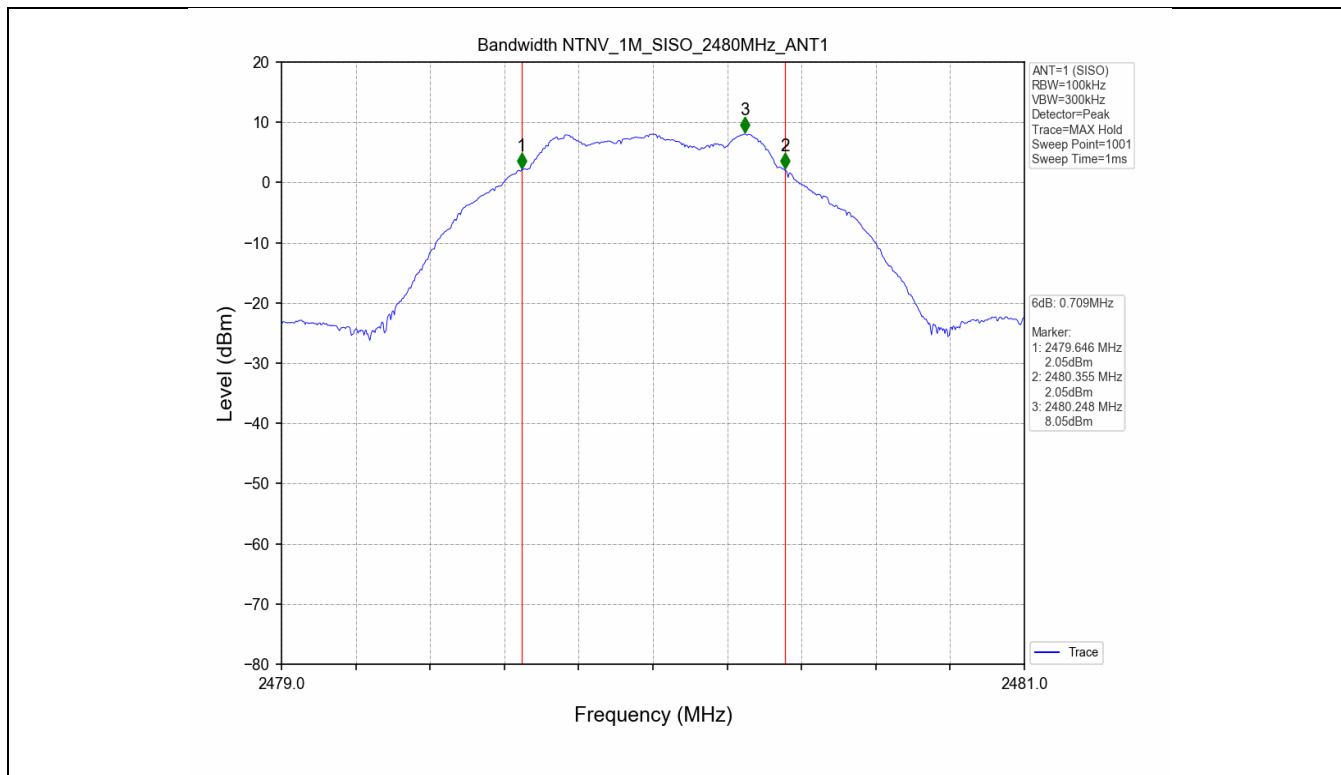
### 2.1 Test Result

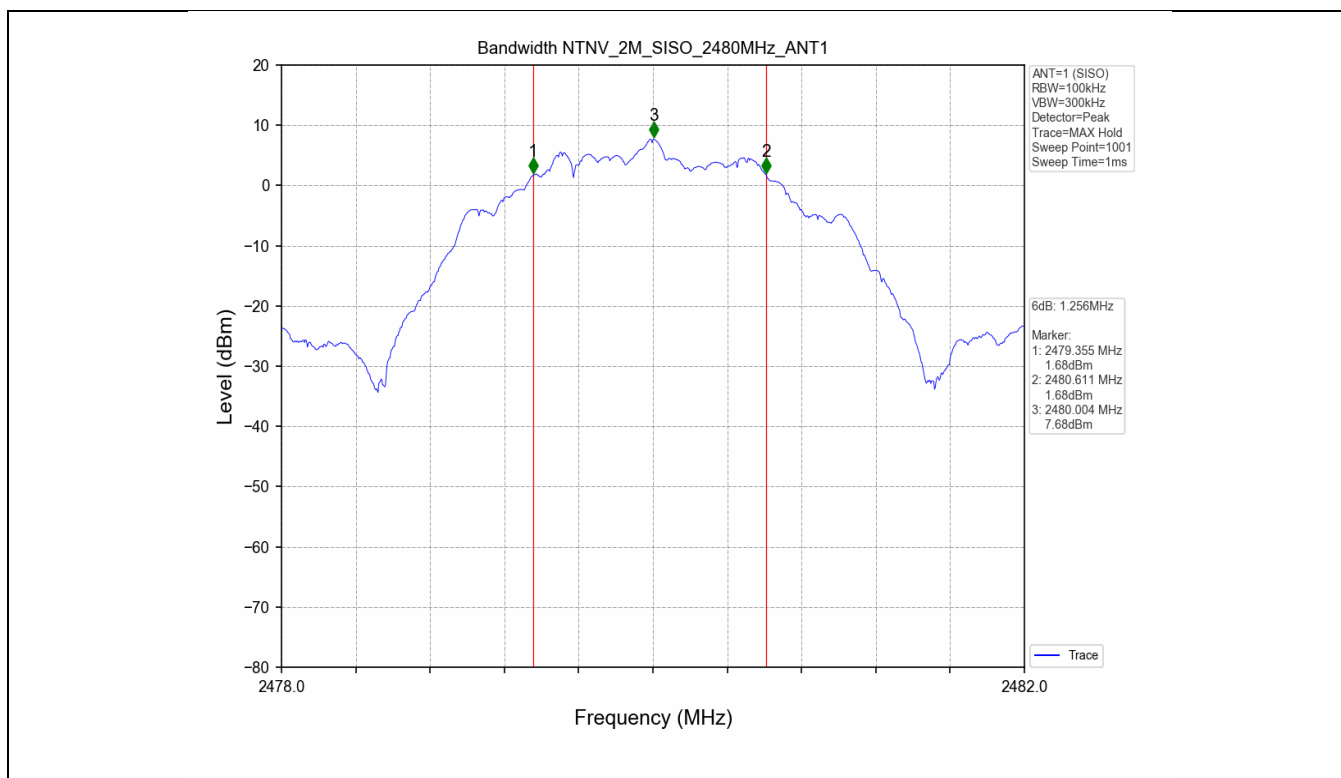
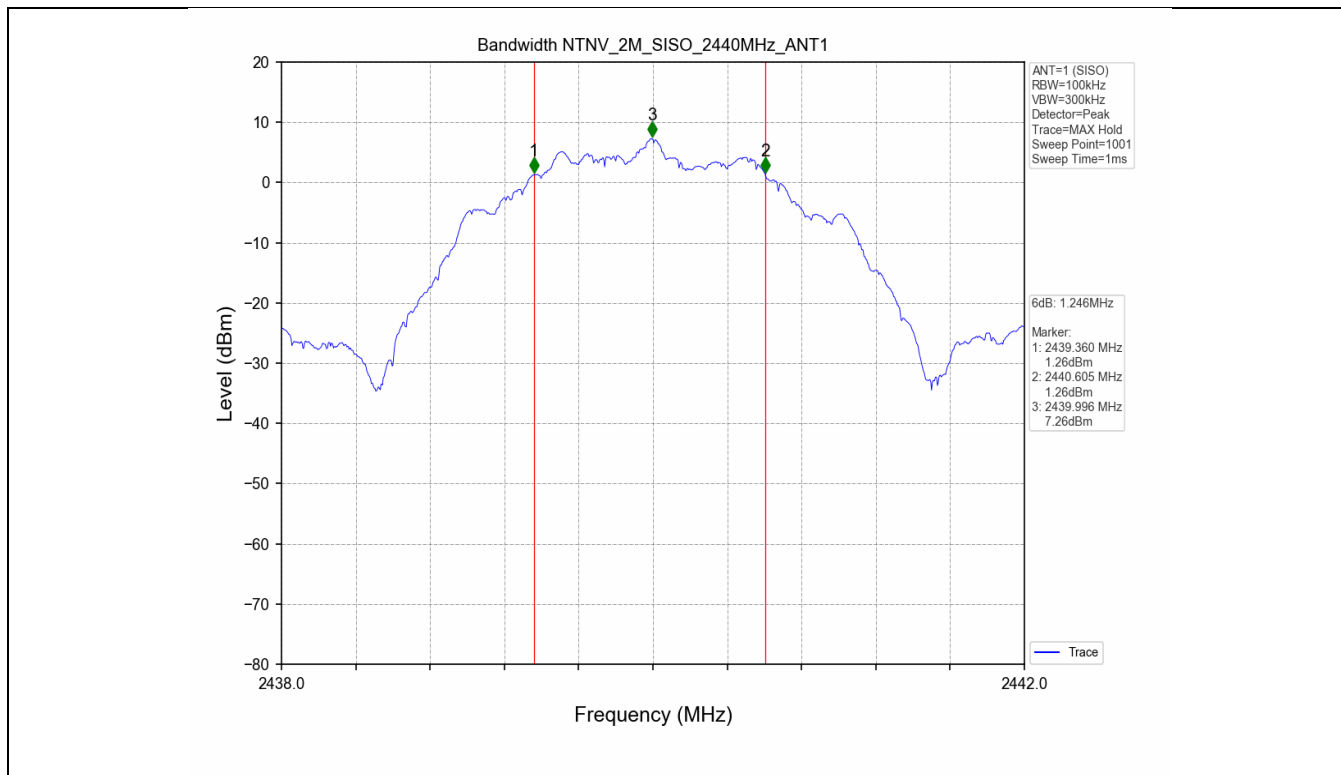
| Test Mode | Frequency (MHz) | TX Type | ANT No. | 6dB Bandwidth     | Verdict |
|-----------|-----------------|---------|---------|-------------------|---------|
|           |                 |         |         | Test Result (MHz) |         |
| 1M        | 2402            | SISO    | 1       | 0.712             | PASS    |
|           | 2440            | SISO    | 1       | 0.714             | PASS    |
|           | 2480            | SISO    | 1       | 0.709             | PASS    |
| 2M        | 2402            | SISO    | 1       | 1.231             | PASS    |
|           | 2440            | SISO    | 1       | 1.246             | PASS    |
|           | 2480            | SISO    | 1       | 1.256             | PASS    |

| Test Mode | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth |                     |
|-----------|-----------------|---------|---------|------------------------|---------------------|
|           |                 |         |         | Test Result (MHz)      |                     |
| 1M        | 2402            | SISO    | 1       | 1.042                  | Only for Report Use |
|           | 2440            | SISO    | 1       | 1.041                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 1.040                  | Only for Report Use |
| 2M        | 2402            | SISO    | 1       | 2.064                  | Only for Report Use |
|           | 2440            | SISO    | 1       | 2.063                  | Only for Report Use |
|           | 2480            | SISO    | 1       | 2.059                  | Only for Report Use |

### 2.2 Test Graph - 6dB Bandwidth

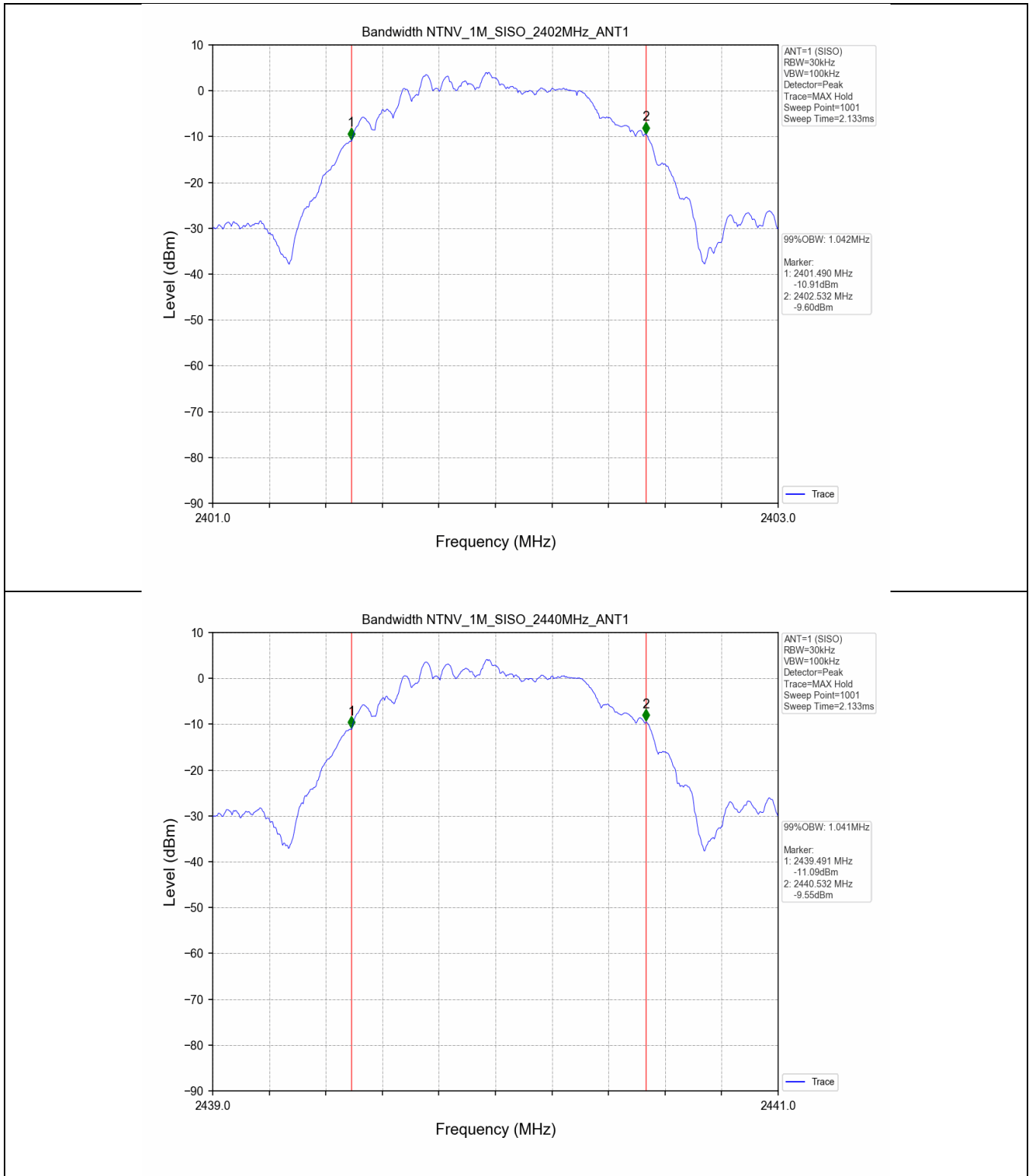




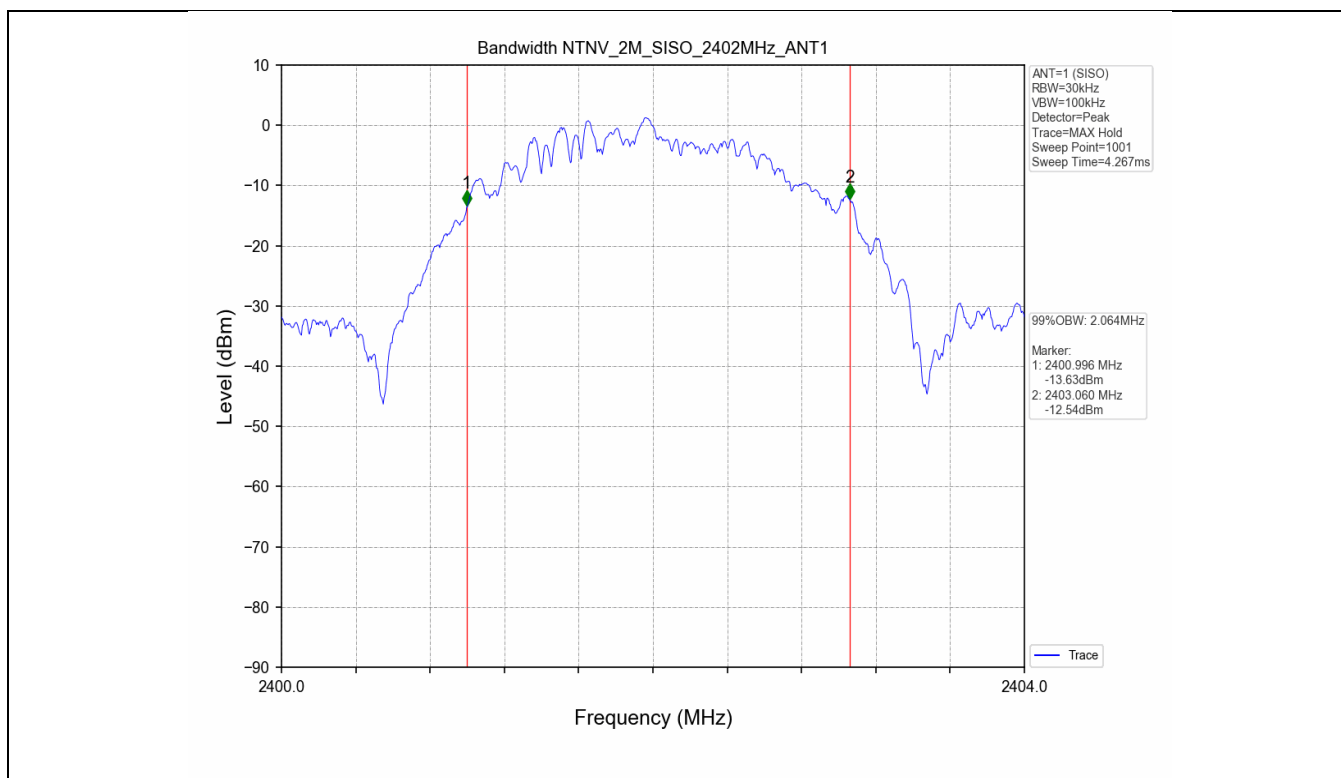
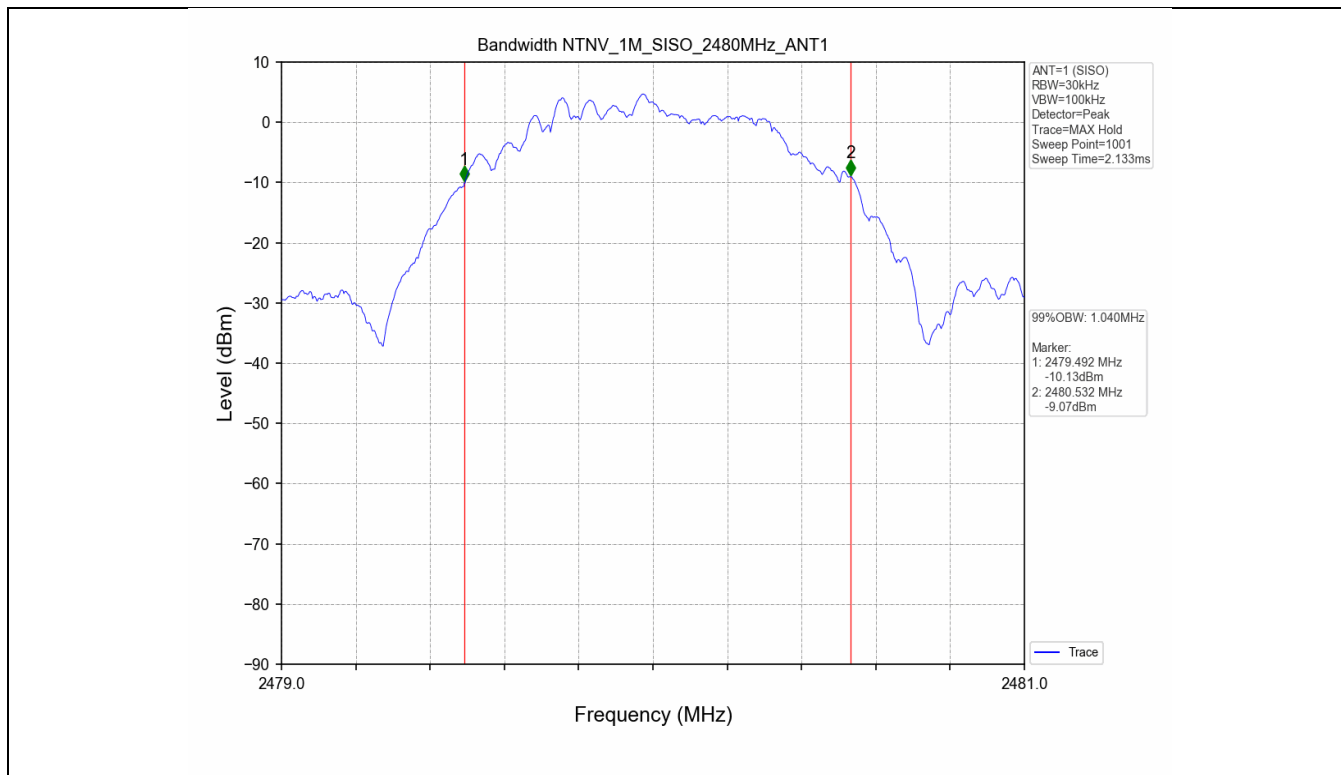


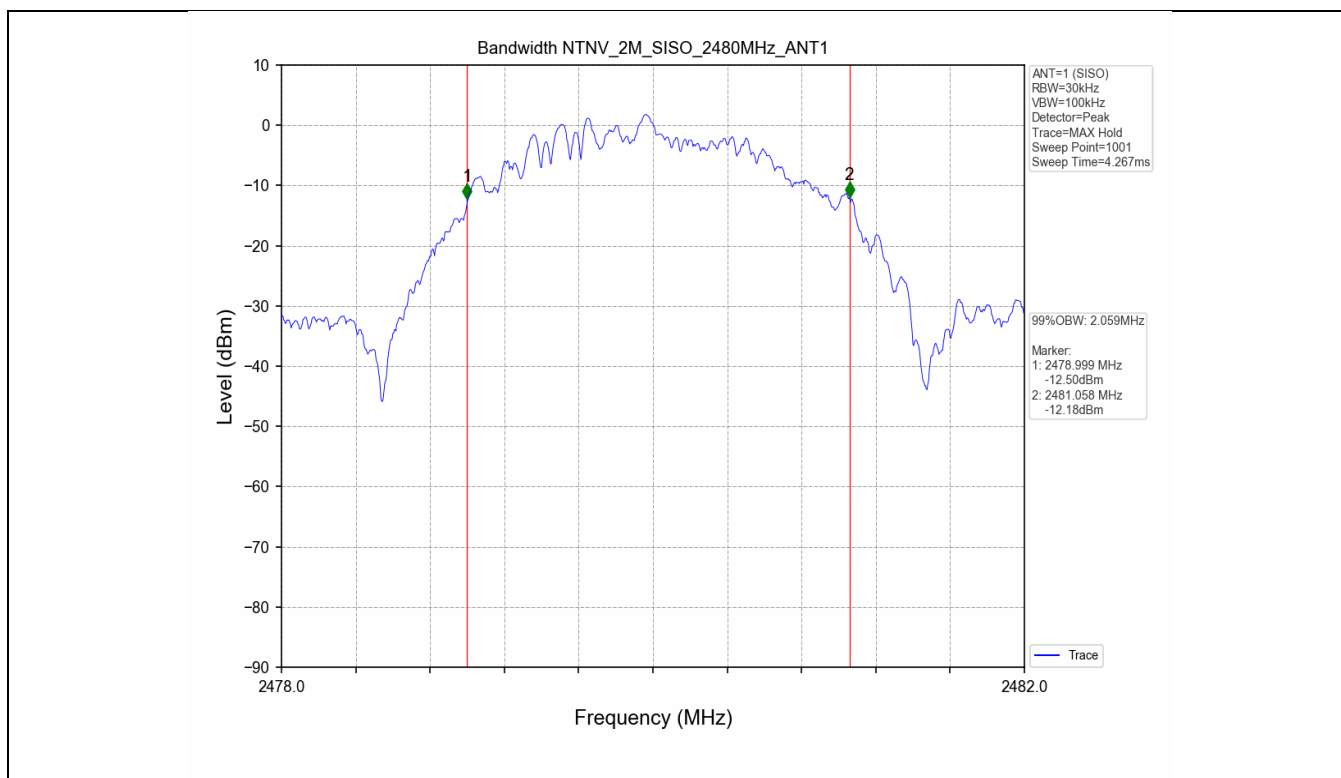
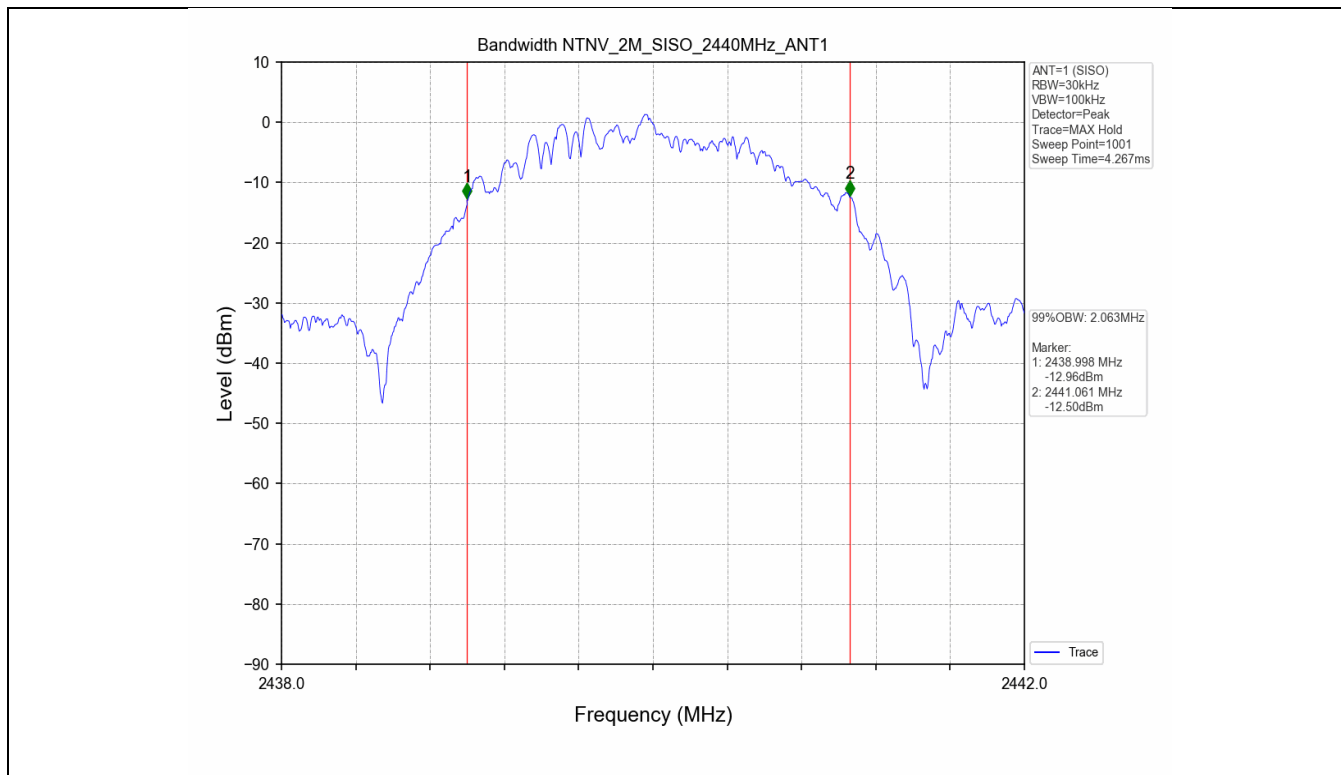


### 2.3 Test Graph - 99% Occupied Bandwidth









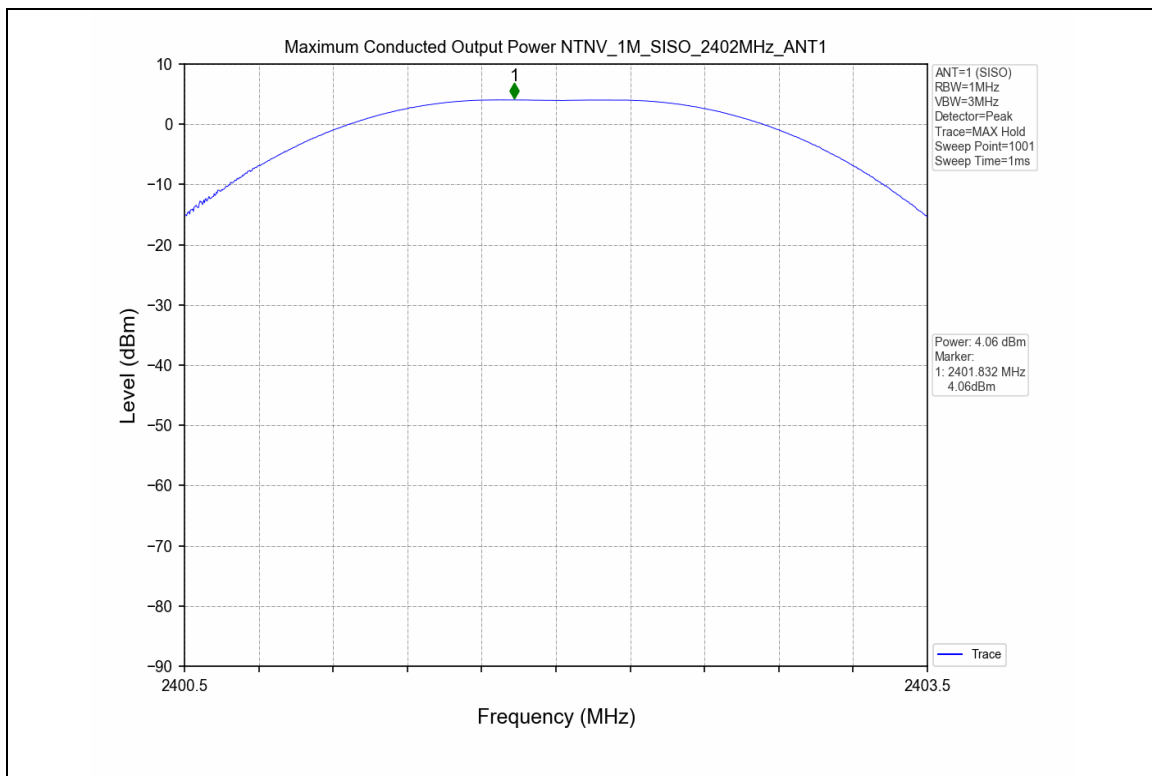


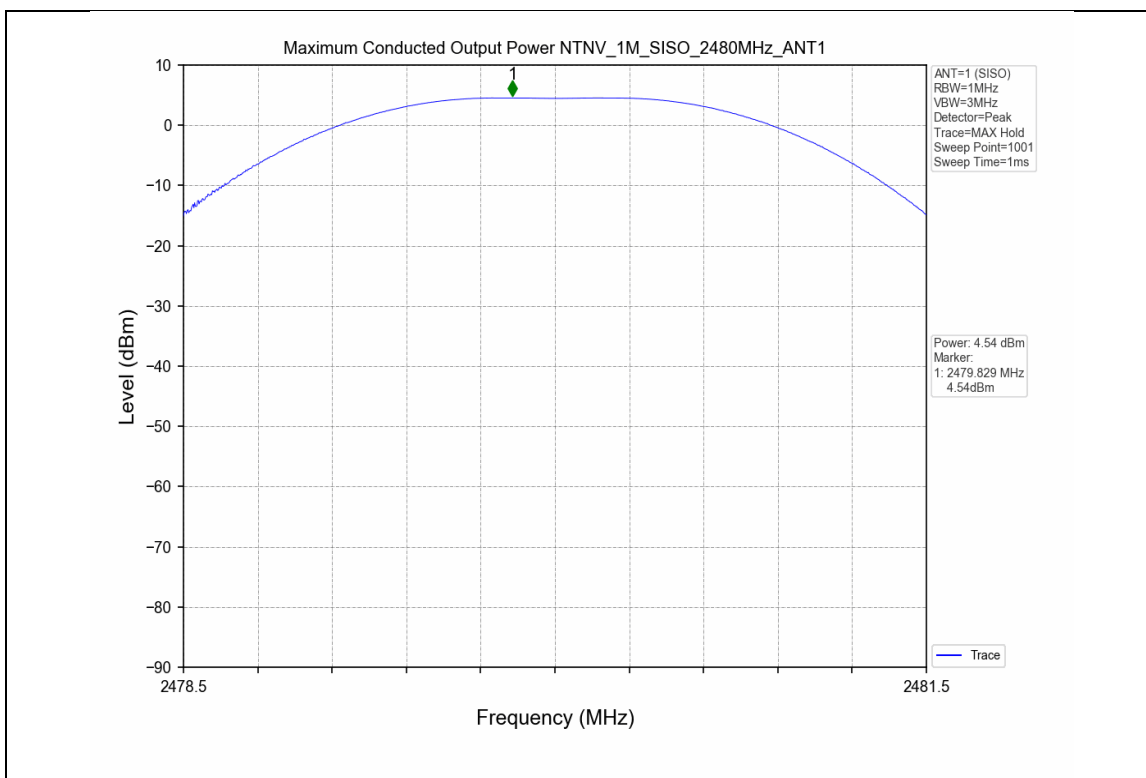
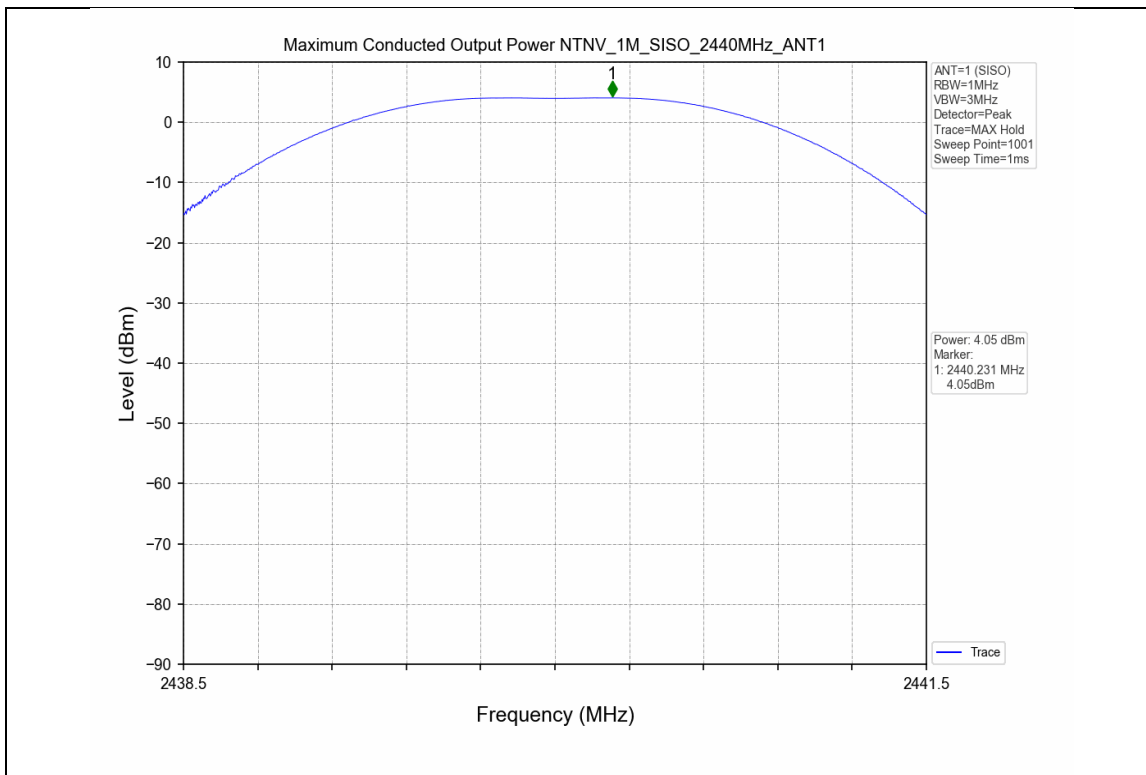
### 3. Maximum Conducted Output Power

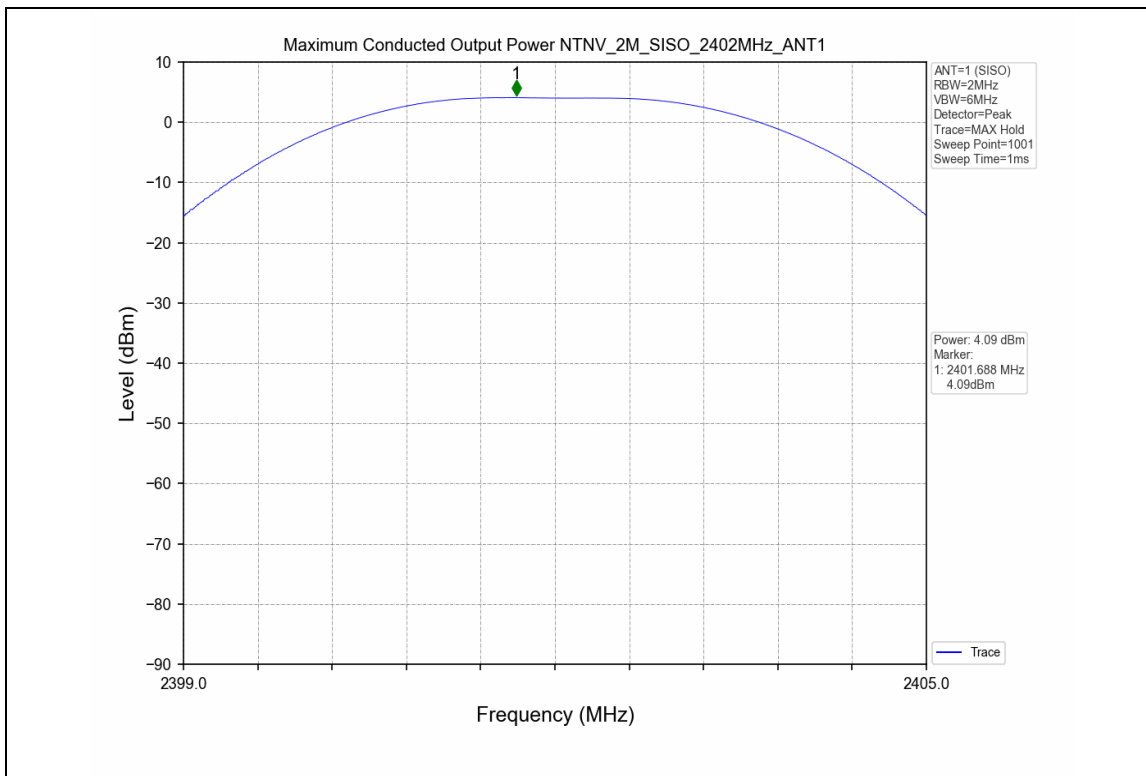
#### 3.1 Test Result

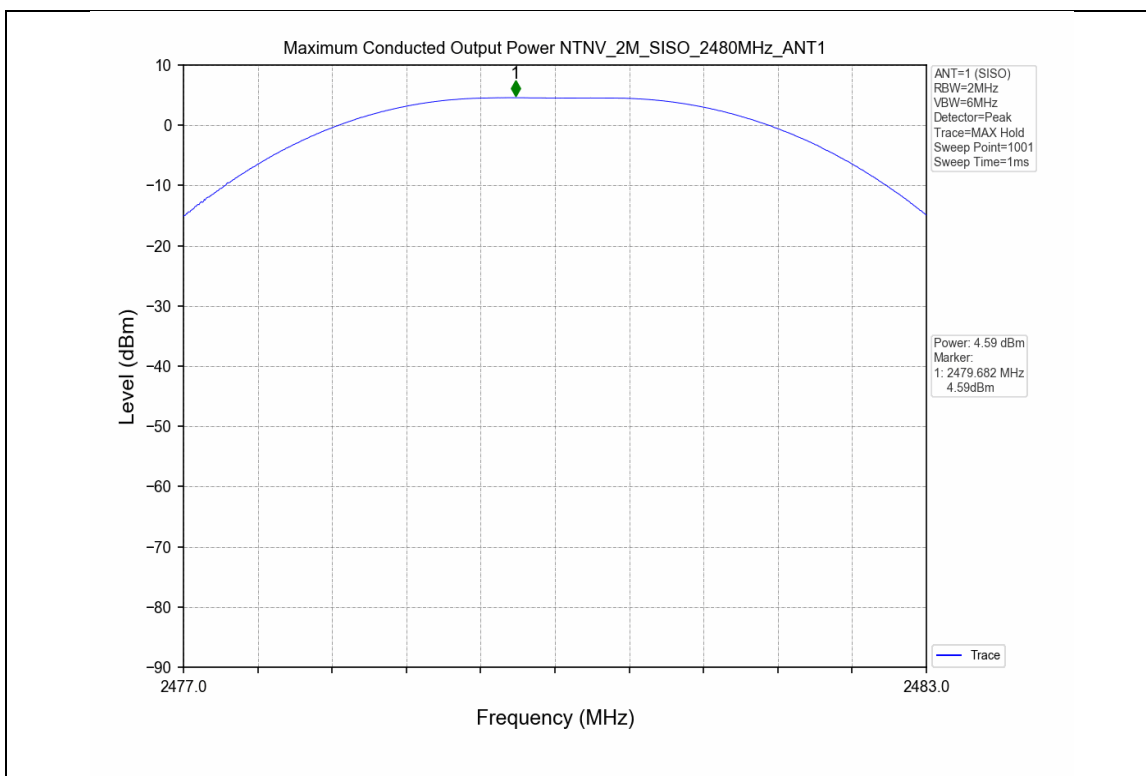
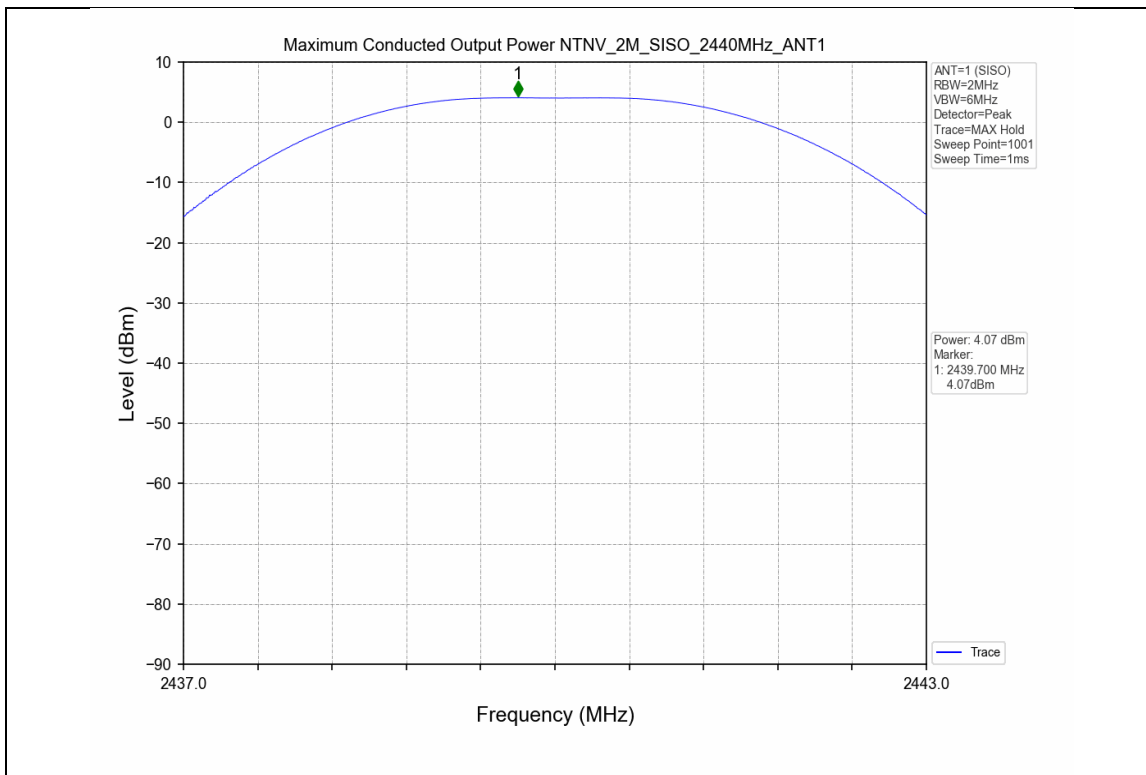
| Test Mode | Frequency (MHz) | Tx Type | Measured Peak Output Power (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|----------------------------------|--------------|---------|
|           |                 |         | Ant 1                            |              |         |
| 1M        | 2402            | SISO    | 4.06                             | 30           | PASS    |
|           | 2440            | SISO    | 4.05                             | 30           | PASS    |
|           | 2480            | SISO    | 4.54                             | 30           | PASS    |
| 2M        | 2402            | SISO    | 4.09                             | 30           | PASS    |
|           | 2440            | SISO    | 4.07                             | 30           | PASS    |
|           | 2480            | SISO    | 4.59                             | 30           | PASS    |

#### 3.2 Test Graph









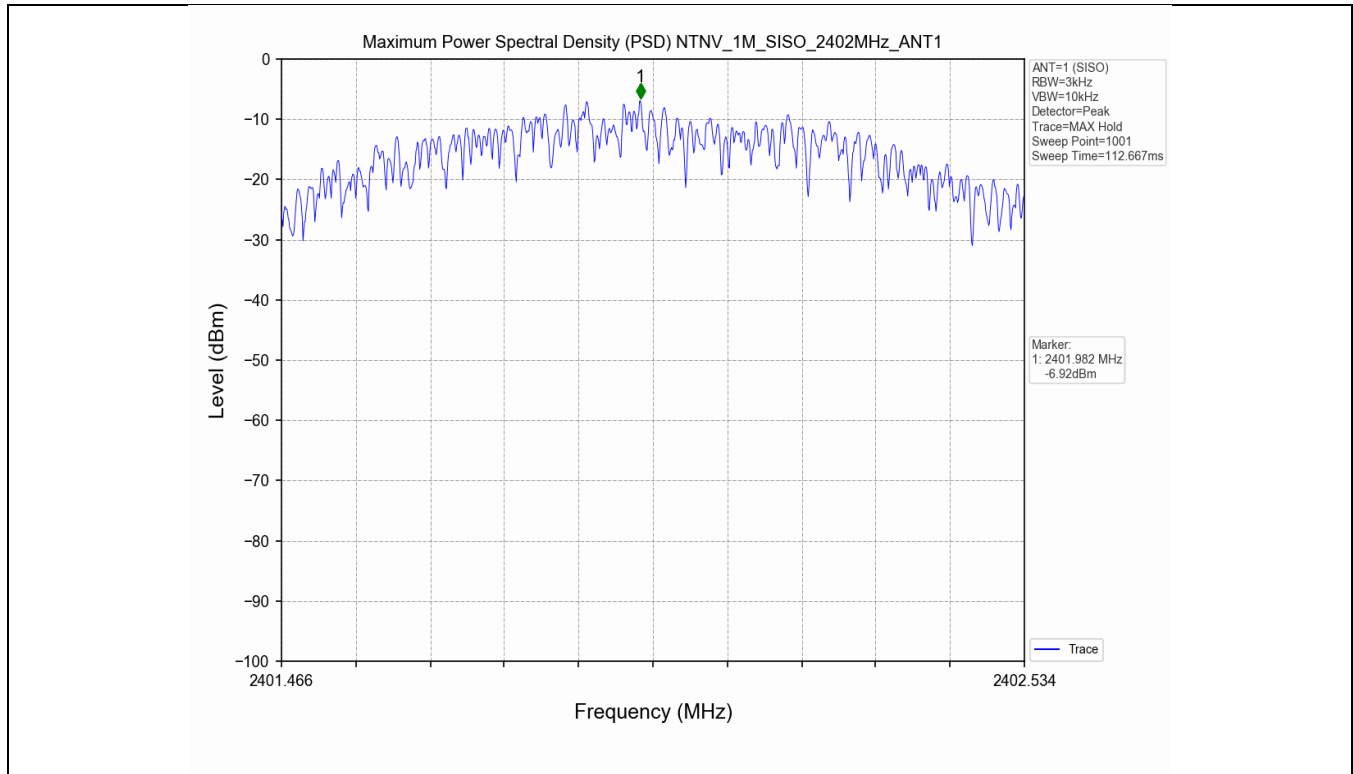


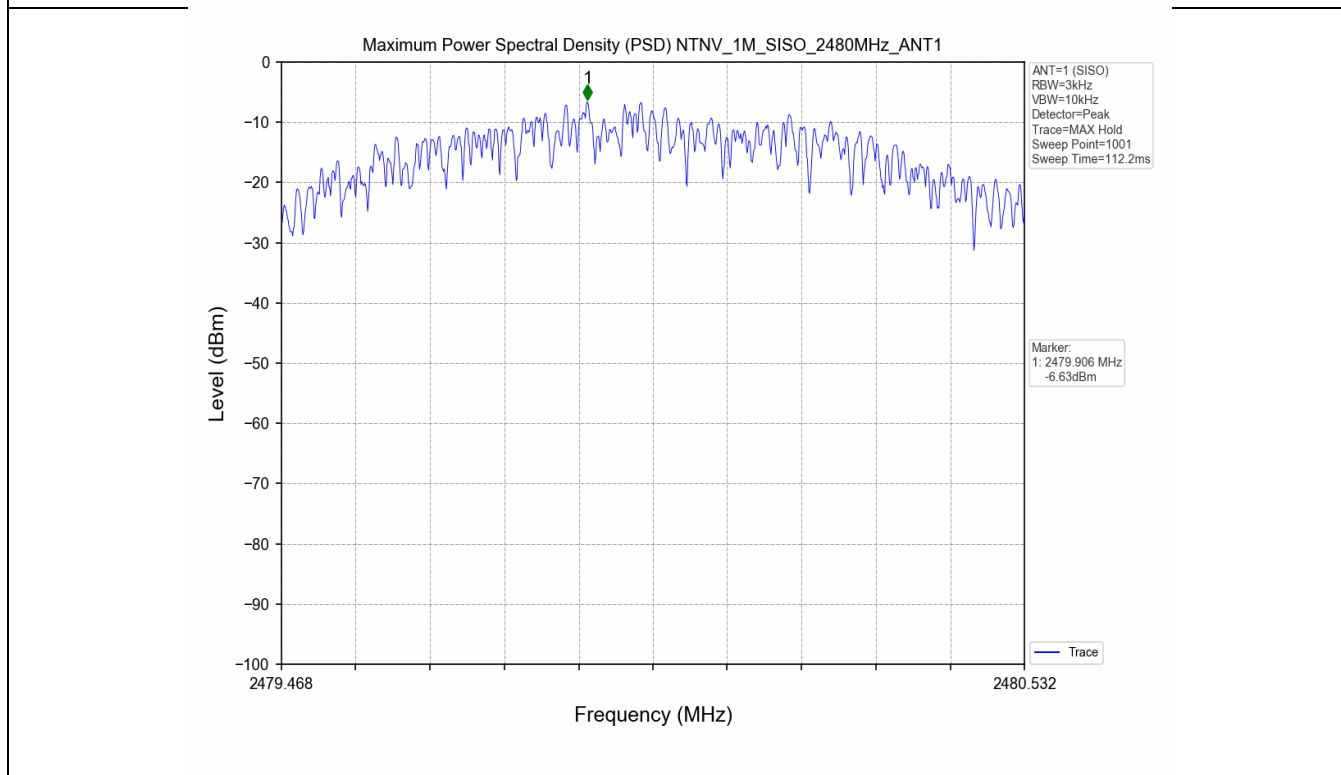
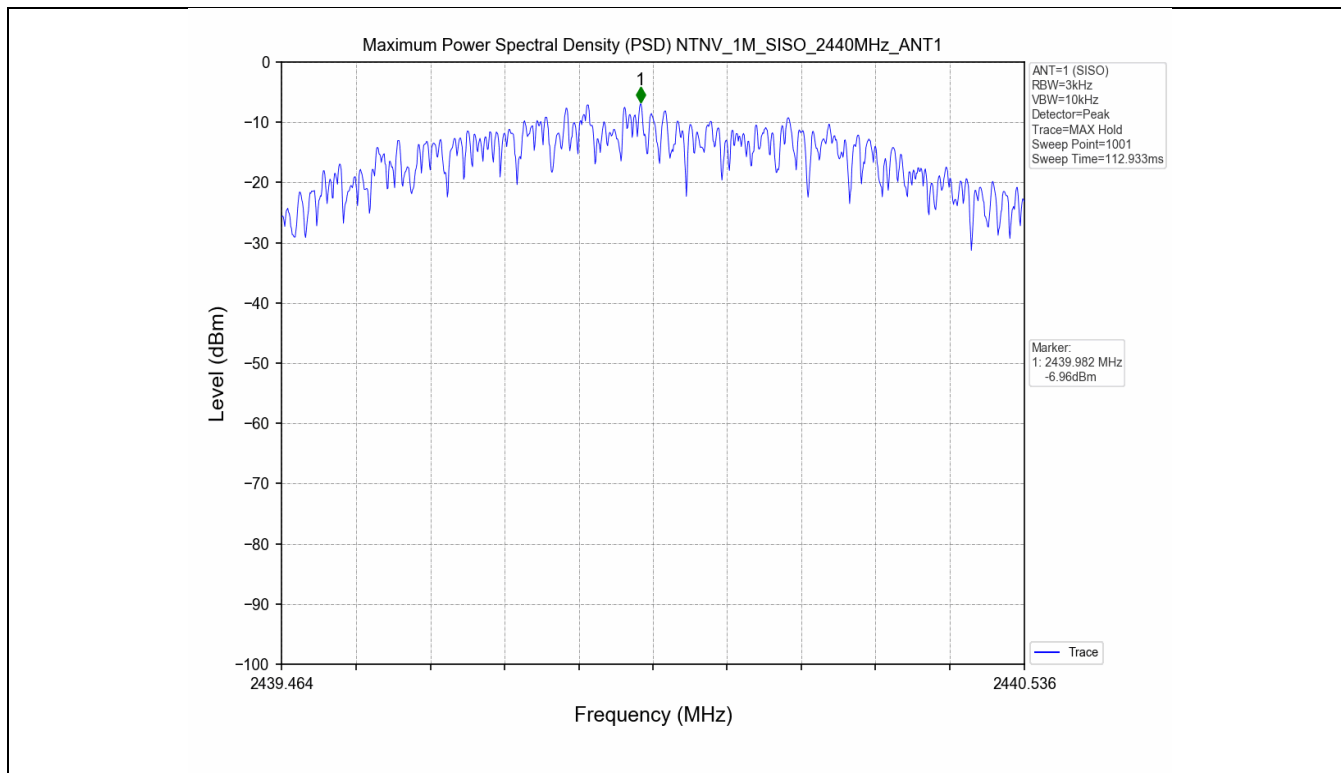
## 4. Maximum Power Spectral Density (PSD)

### 4.1 Test Result

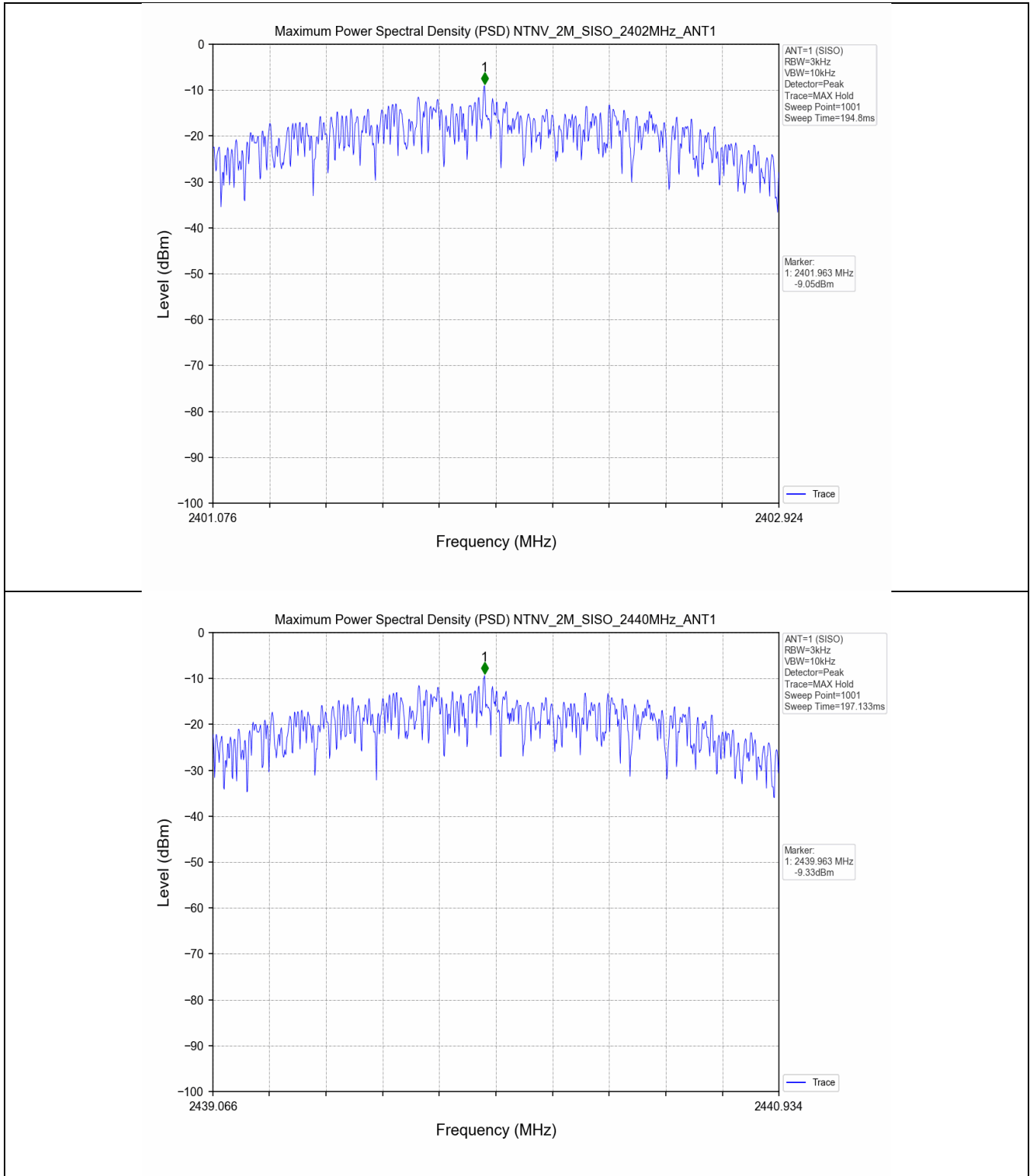
| Test Mode | Frequency (MHz) | Tx Type | Maximum Power Spectral Density (dBm/3KHz) | Limits (dBm/3kHz) | Verdict |
|-----------|-----------------|---------|---|-------------------|---------|
|           |                 |         | Ant 1                                     |                   |         |
| 1M        | 2402            | SISO    | -6.92                                     | ≤8                | PASS    |
|           | 2440            | SISO    | -6.96                                     | ≤8                | PASS    |
|           | 2480            | SISO    | -6.63                                     | ≤8                | PASS    |
| 2M        | 2402            | SISO    | -9.05                                     | ≤8                | PASS    |
|           | 2440            | SISO    | -9.33                                     | ≤8                | PASS    |
|           | 2480            | SISO    | -8.61                                     | ≤8                | PASS    |

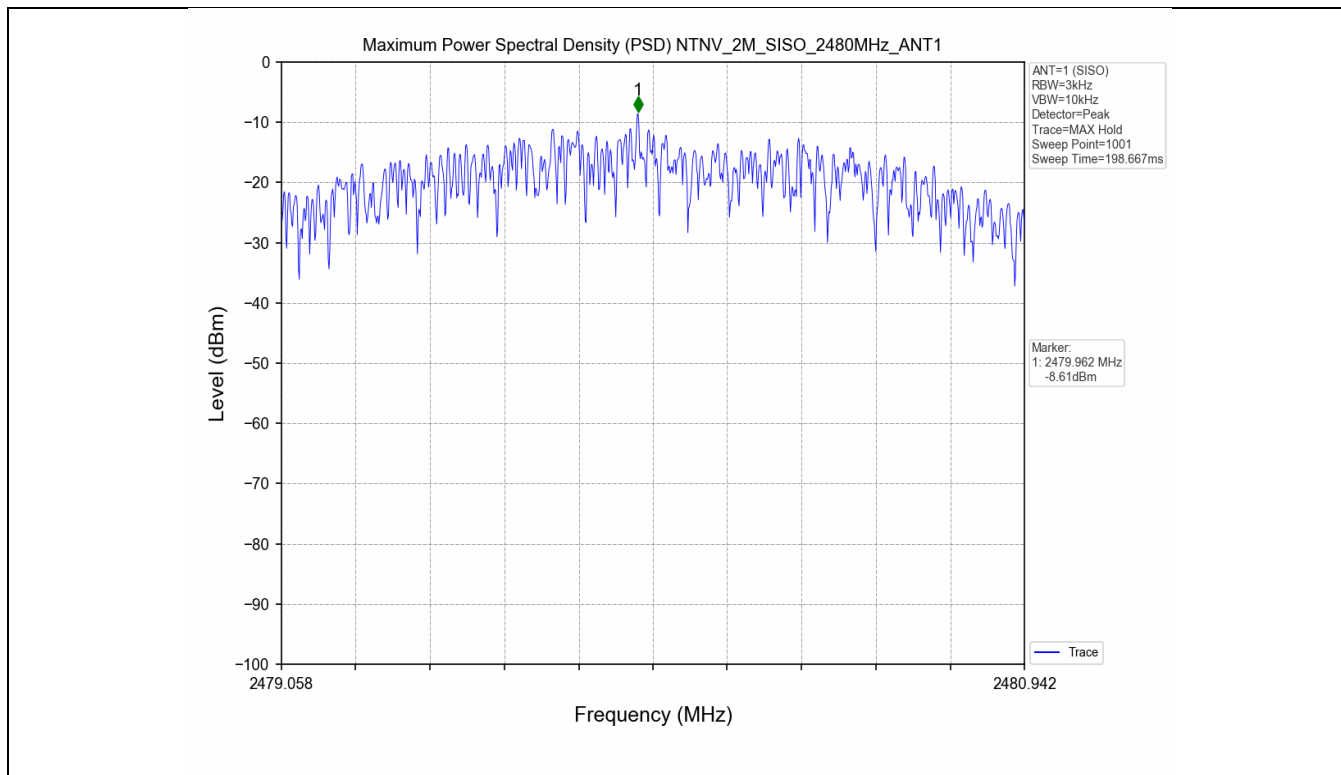
### 4.2 Test Graph











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

### 5.1 Test Result

| Test Mode | Frequency (MHz) | TX Type | ANT No. | Spurious Conducted Emission (dBm) | Limits (dBm) | Verdict |
|-----------|-----------------|---------|---------|-----------------------------------|--------------|---------|
| 1M        | 2402            | SISO    | 1       | Refer to test graph               | -11.94       | PASS    |
|           | 2440            | SISO    | 1       | Refer to test graph               | -11.94       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -11.94       | PASS    |
| 2M        | 2402            | SISO    | 1       | Refer to test graph               | -12.26       | PASS    |
|           | 2440            | SISO    | 1       | Refer to test graph               | -12.26       | PASS    |
|           | 2480            | SISO    | 1       | Refer to test graph               | -12.26       | PASS    |

### 5.2 Test Graph

