



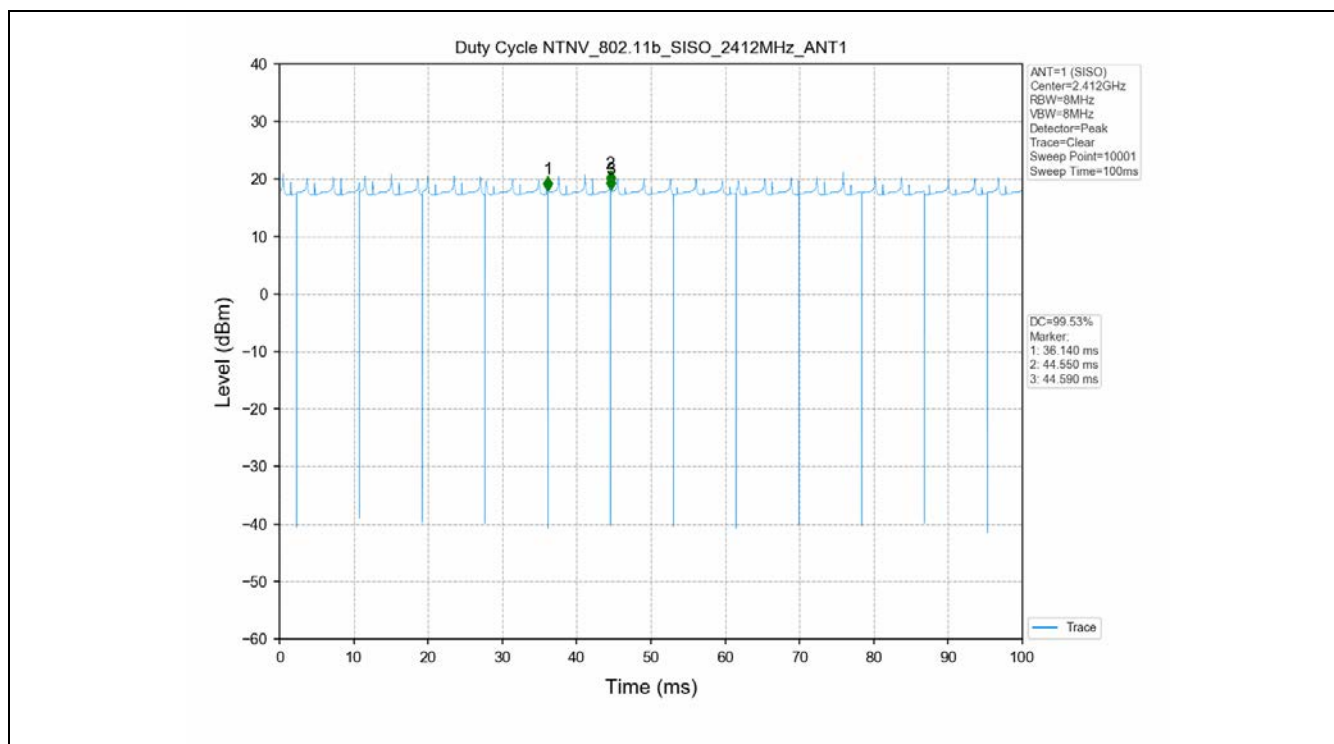
## Appendix A for SHEM200400259601

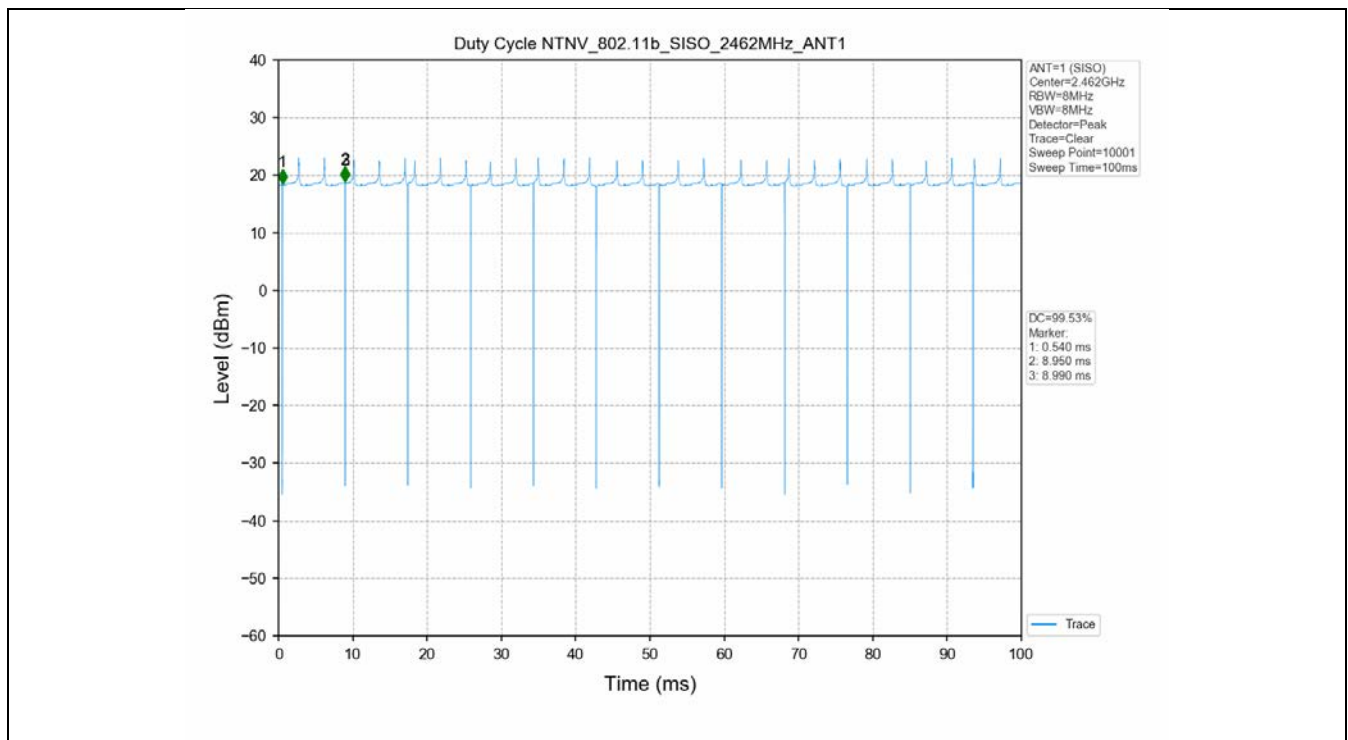
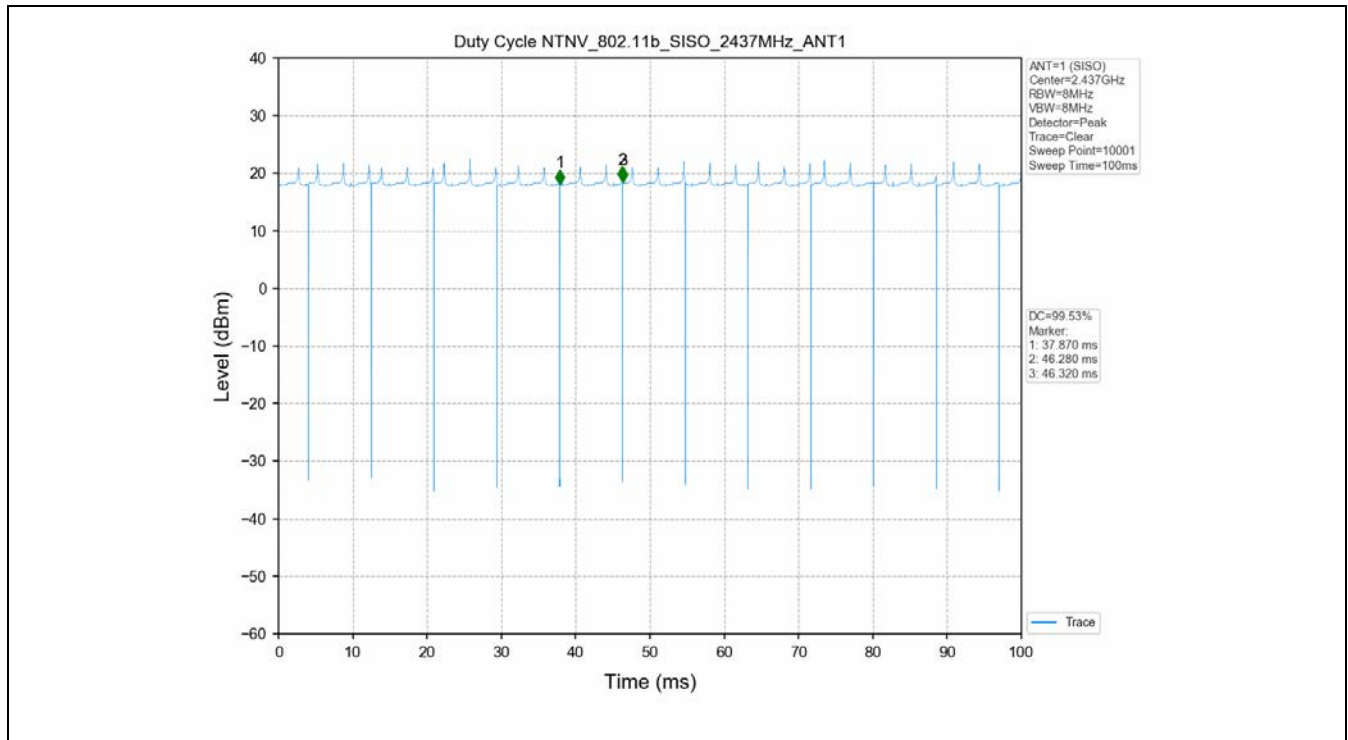
### 1. Duty Cycle

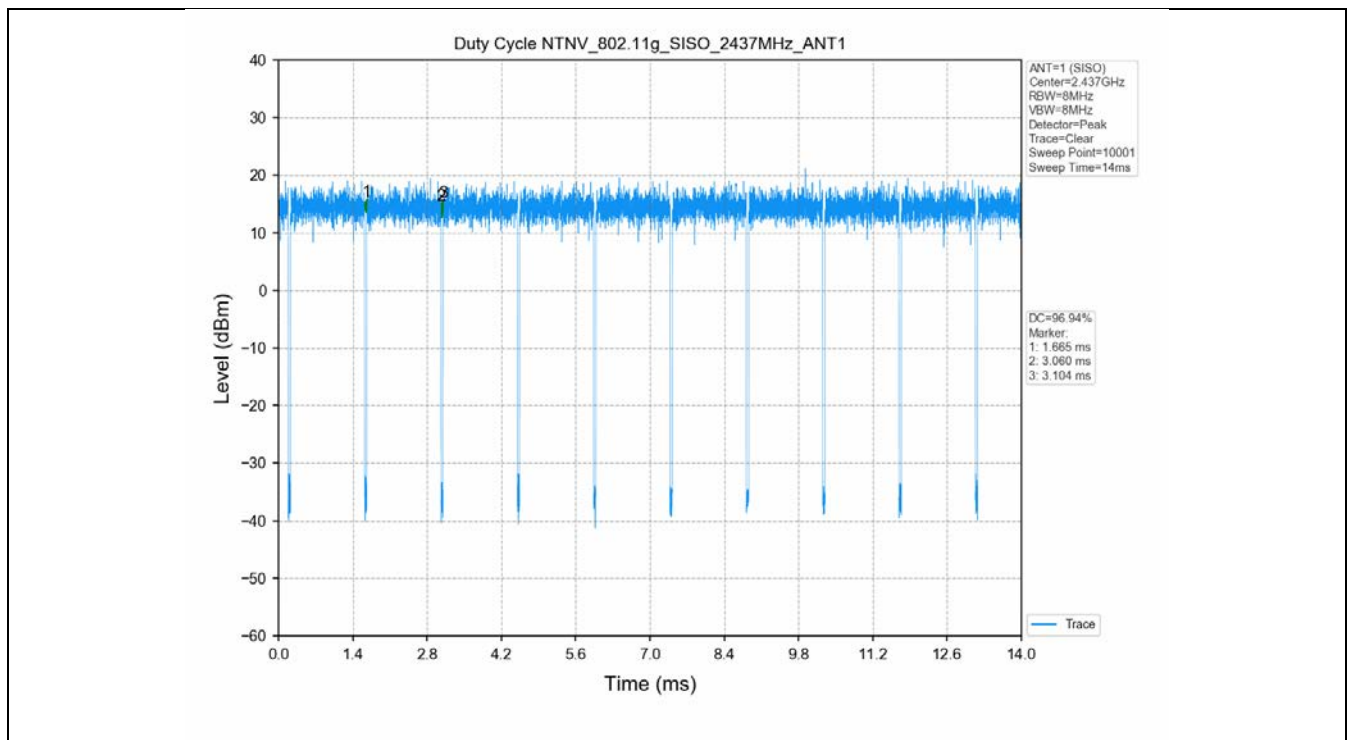
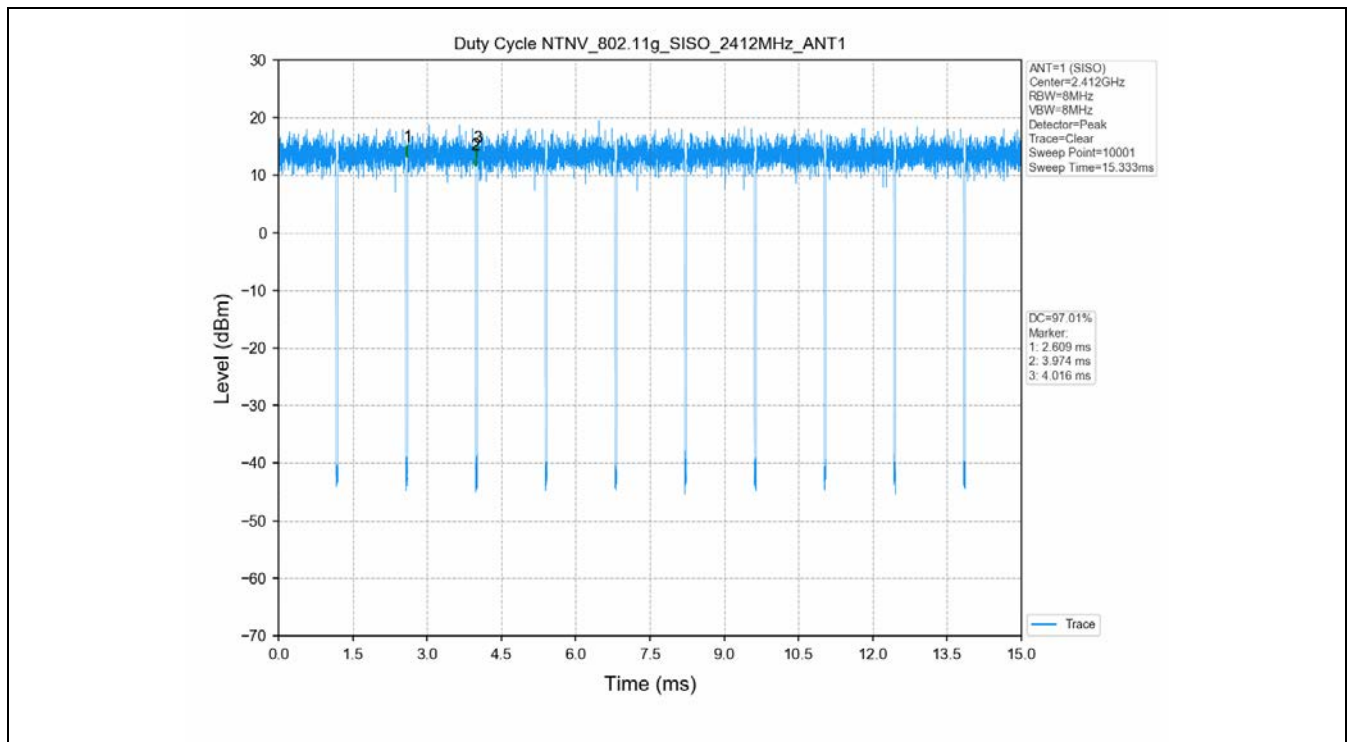
#### 1.1 Test Result

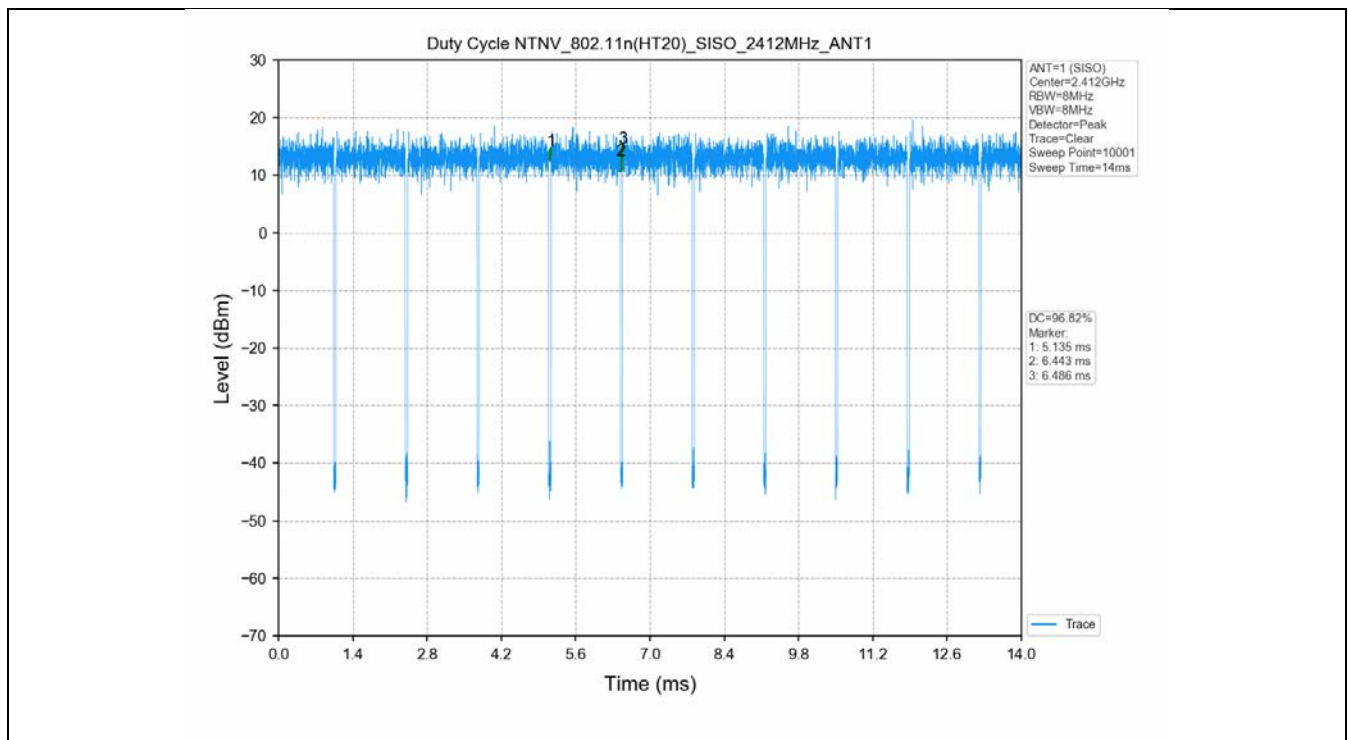
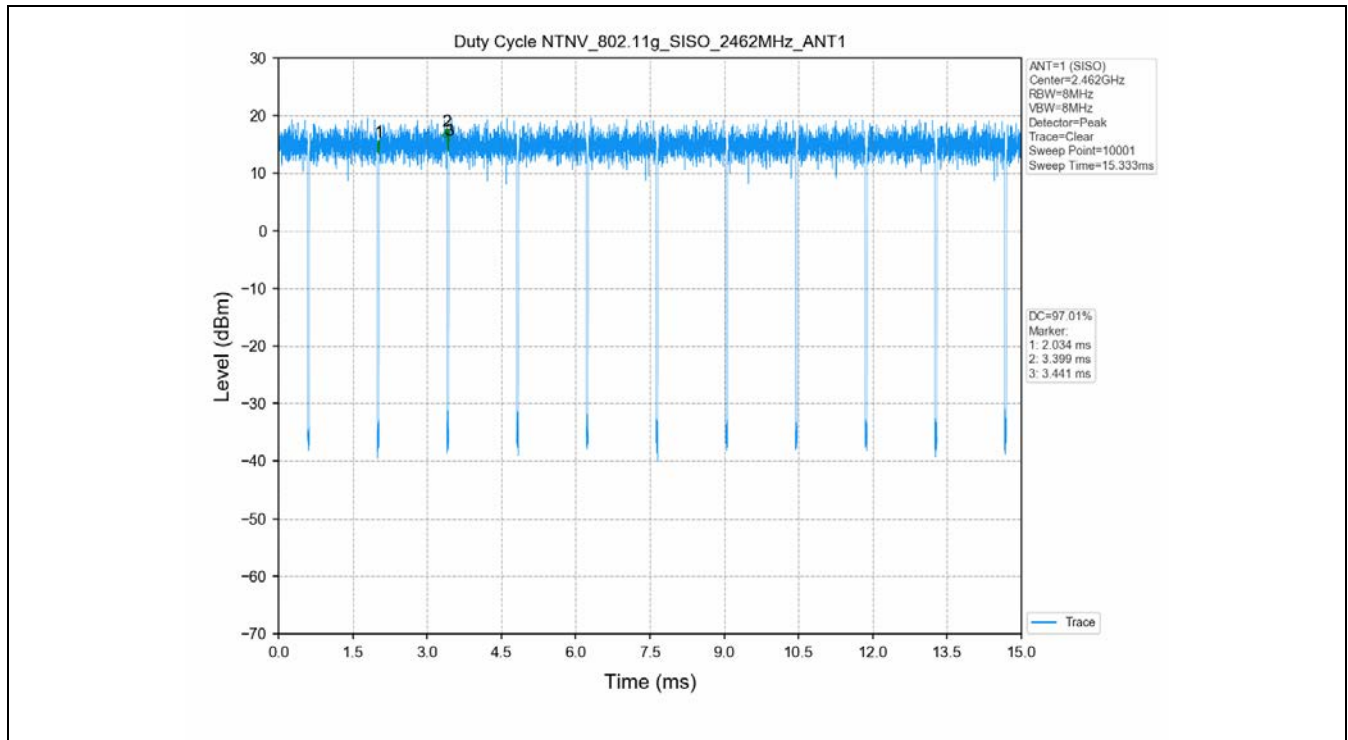
| Test Mode     | Channel Frequency(MHz) | TX Type | ANT No. | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) |
|---------------|------------------------|---------|---------|-----------|-------------|----------------|-----------------------------------|
| 802.11b       | 2412                   | SISO    | 1       | 8.410     | 8.450       | 99.53          | 0.02                              |
|               | 2437                   | SISO    | 1       | 8.410     | 8.450       | 99.53          | 0.02                              |
|               | 2462                   | SISO    | 1       | 8.410     | 8.450       | 99.53          | 0.02                              |
| 802.11g       | 2412                   | SISO    | 1       | 1.365     | 1.407       | 97.01          | 0.13                              |
|               | 2437                   | SISO    | 1       | 1.395     | 1.439       | 96.94          | 0.13                              |
|               | 2462                   | SISO    | 1       | 1.365     | 1.407       | 97.01          | 0.13                              |
| 802.11n(HT20) | 2412                   | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 2437                   | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 2462                   | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |

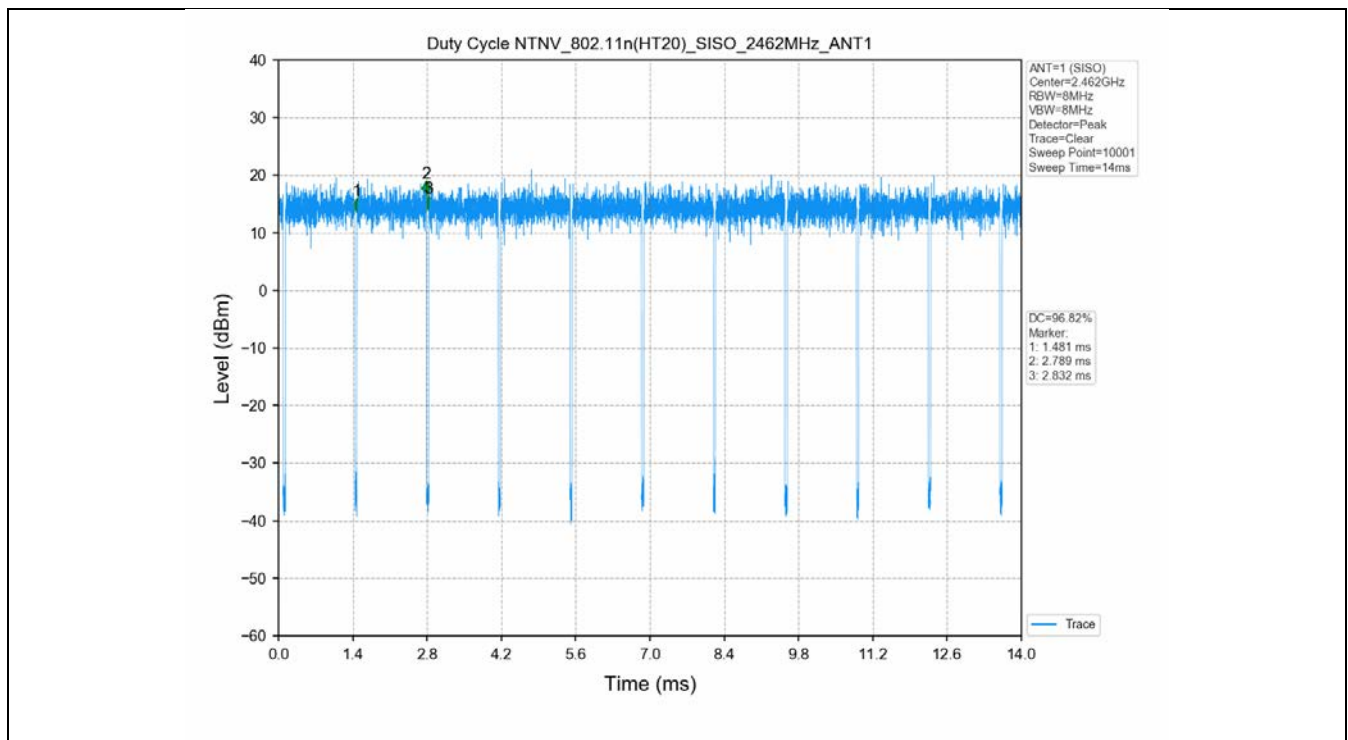
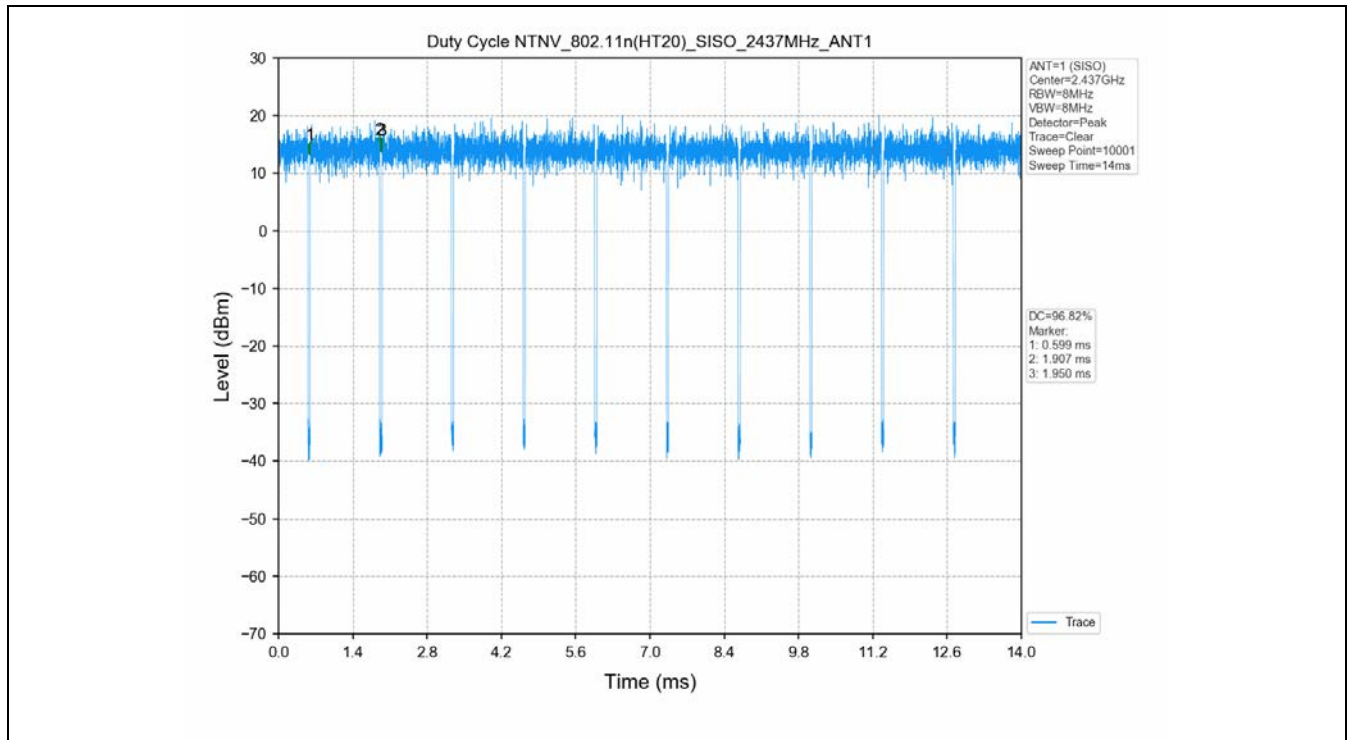
#### 1.2 Test Graph













## 2. Bandwidth

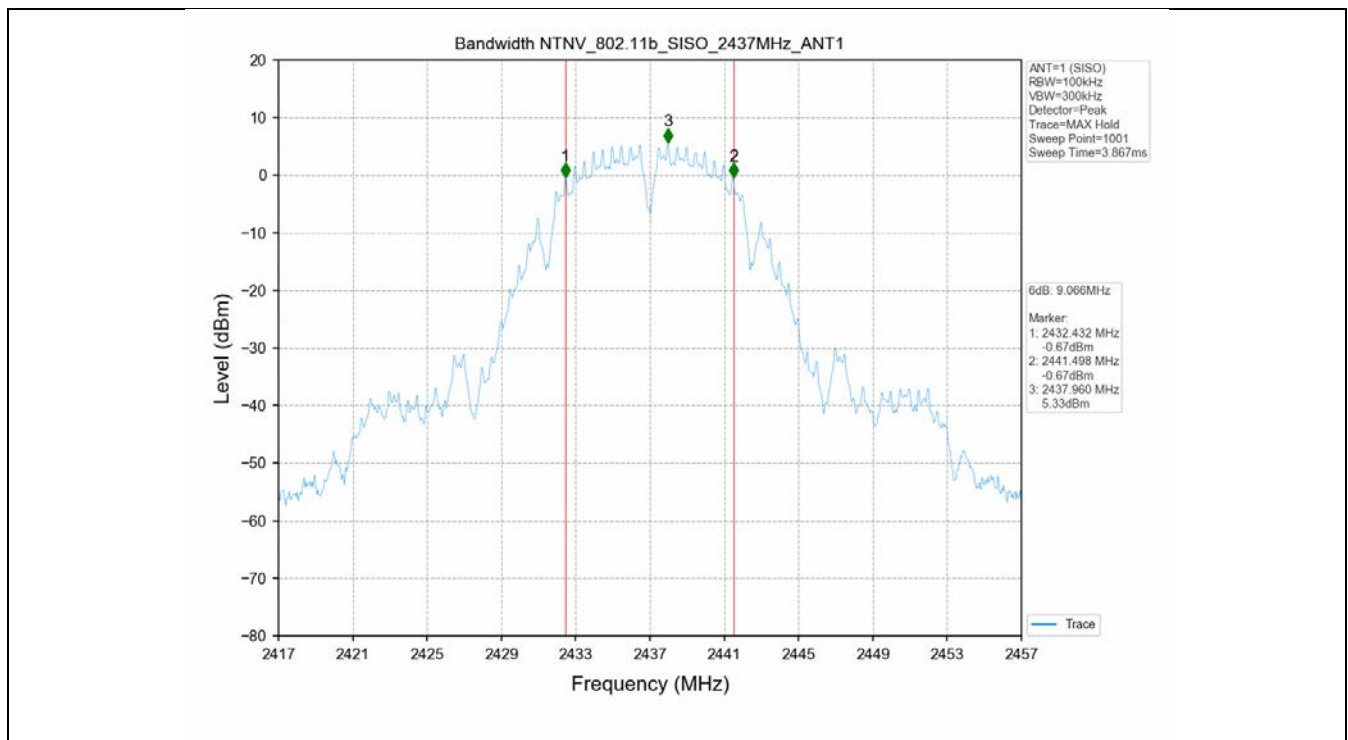
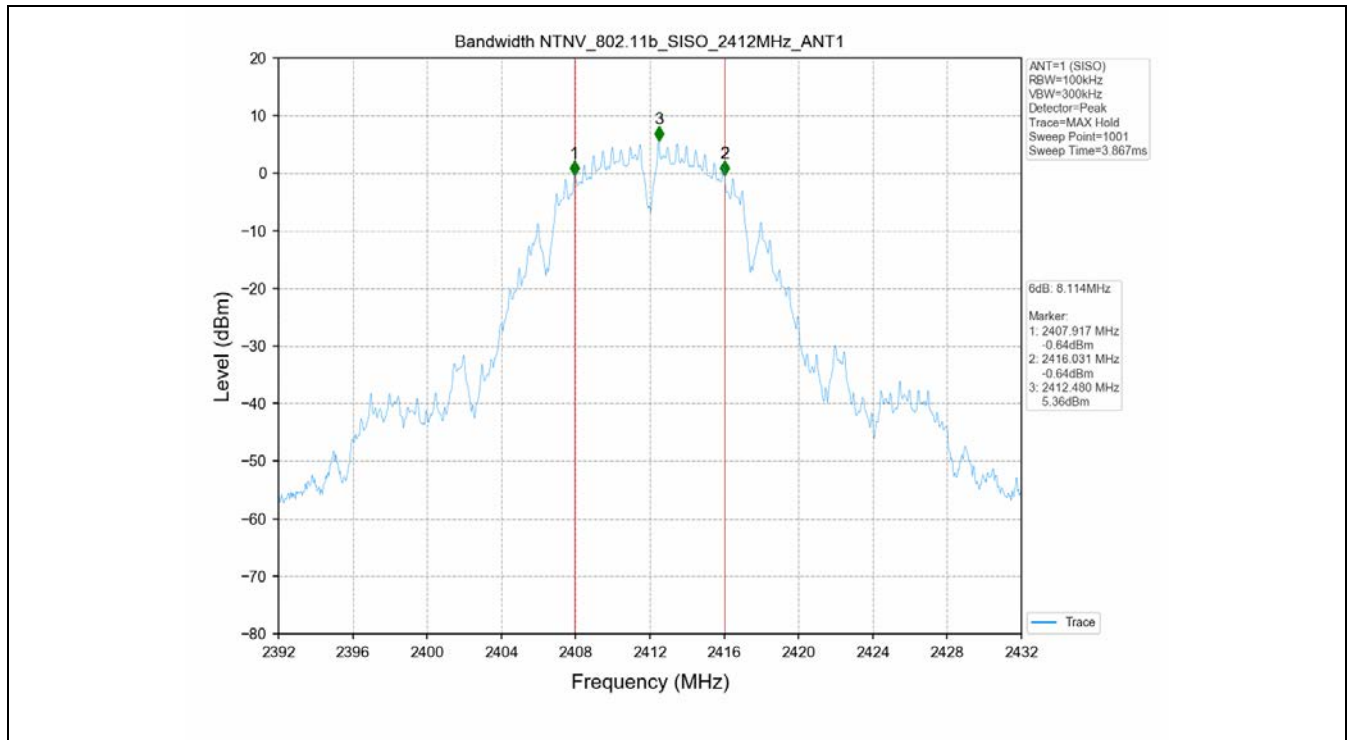
### 2.1 Test Result

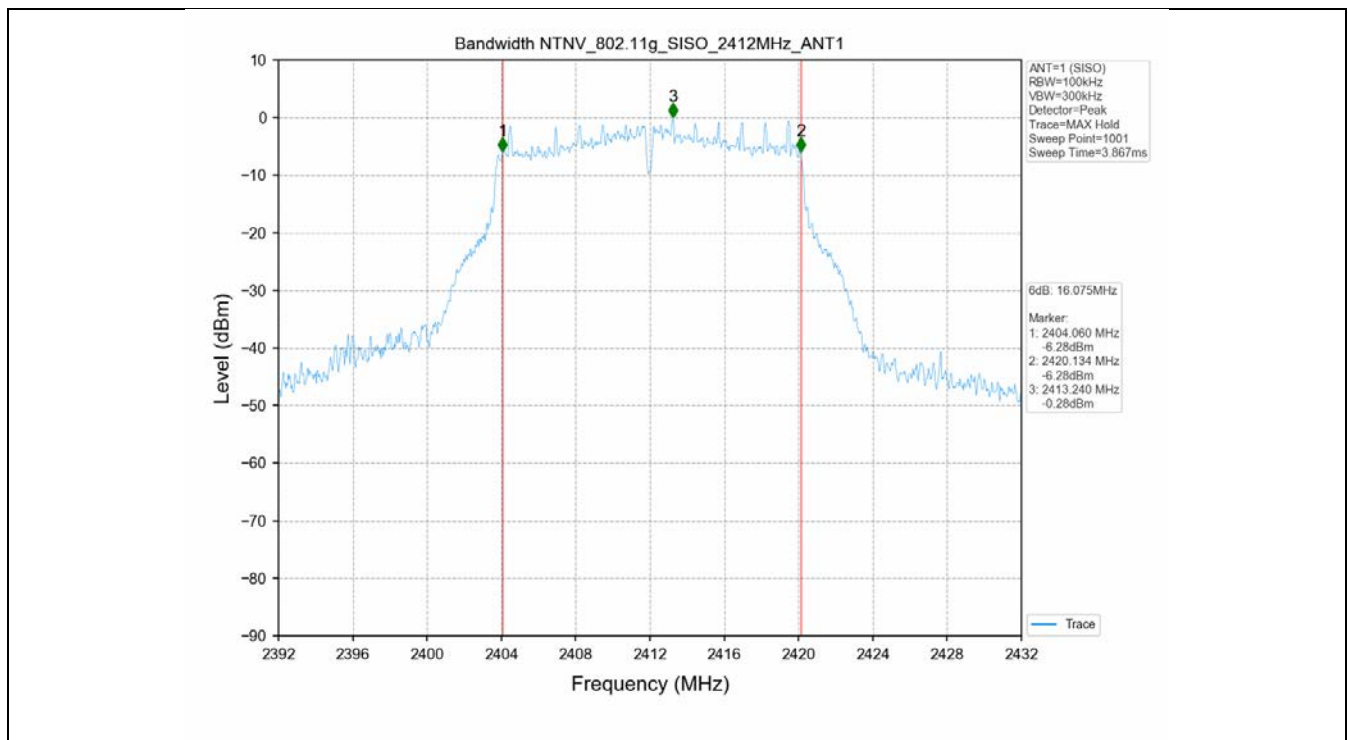
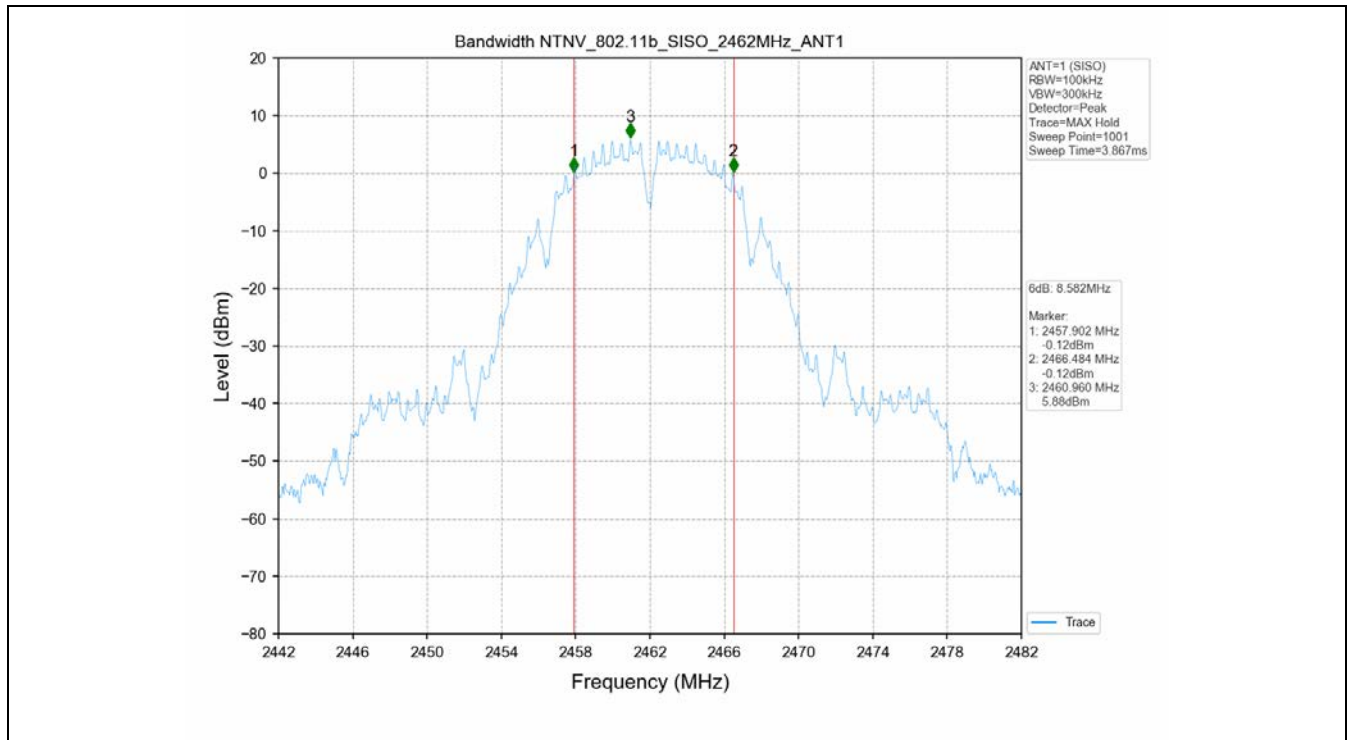
| Test Mode     | Frequency (MHz) | TX Type | ANT No. | 6dB Bandwidth     | Verdict |
|---------------|-----------------|---------|---------|-------------------|---------|
|               |                 |         |         | Test Result (MHz) |         |
| 802.11b       | 2412            | SISO    | 1       | 8.114             | PASS    |
|               | 2437            | SISO    | 1       | 9.066             | PASS    |
|               | 2462            | SISO    | 1       | 8.582             | PASS    |
| 802.11g       | 2412            | SISO    | 1       | 16.075            | PASS    |
|               | 2437            | SISO    | 1       | 16.112            | PASS    |
|               | 2462            | SISO    | 1       | 16.001            | PASS    |
| 802.11n(HT20) | 2412            | SISO    | 1       | 16.660            | PASS    |
|               | 2437            | SISO    | 1       | 17.310            | PASS    |
|               | 2462            | SISO    | 1       | 16.895            | PASS    |

| Test Mode     | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth |                     |
|---------------|-----------------|---------|---------|------------------------|---------------------|
|               |                 |         |         | Test Result (MHz)      |                     |
| 802.11b       | 2412            | SISO    | 1       | 11.769                 | Only for Report Use |
|               | 2437            | SISO    | 1       | 11.875                 | Only for Report Use |
|               | 2462            | SISO    | 1       | 11.824                 | Only for Report Use |
| 802.11g       | 2412            | SISO    | 1       | 16.846                 | Only for Report Use |
|               | 2437            | SISO    | 1       | 16.867                 | Only for Report Use |
|               | 2462            | SISO    | 1       | 16.756                 | Only for Report Use |
| 802.11n(HT20) | 2412            | SISO    | 1       | 17.990                 | Only for Report Use |
|               | 2437            | SISO    | 1       | 17.921                 | Only for Report Use |
|               | 2462            | SISO    | 1       | 17.814                 | Only for Report Use |

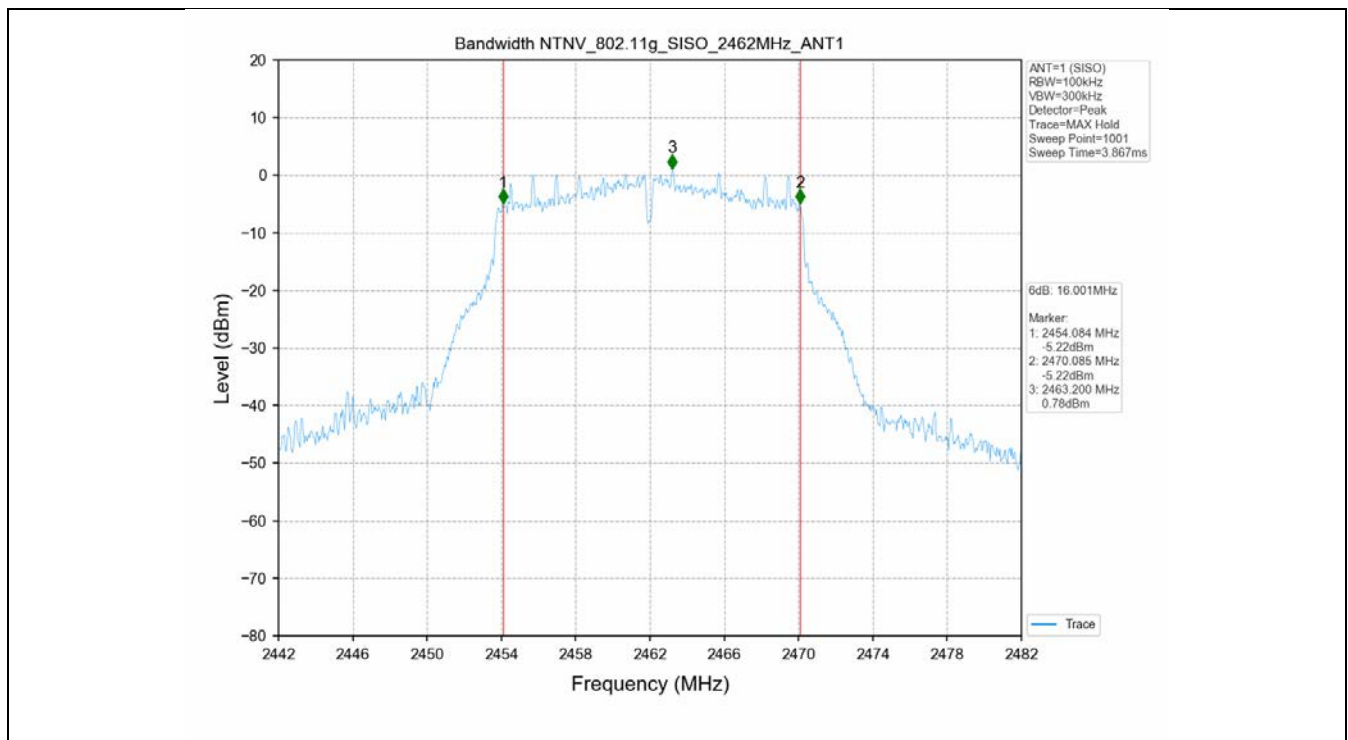
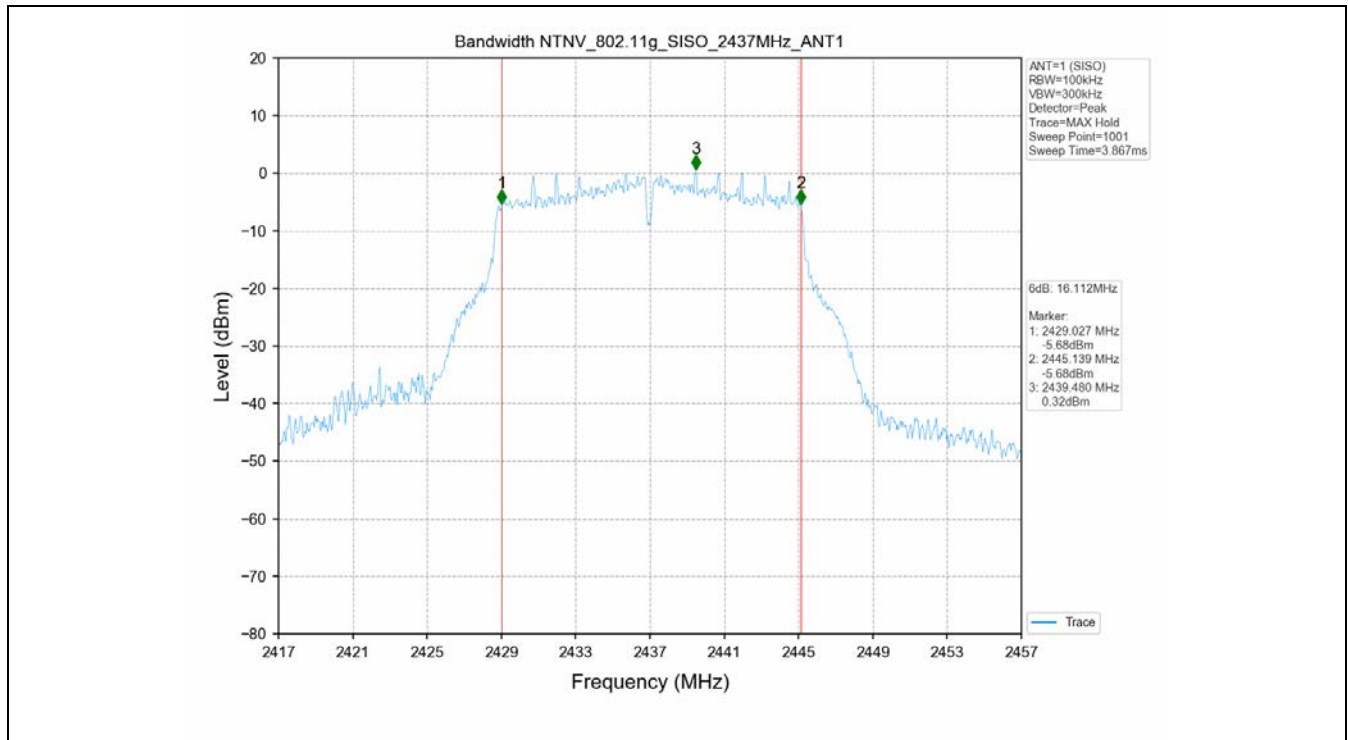
### 2.2 Test Graph - 6dB Bandwidth

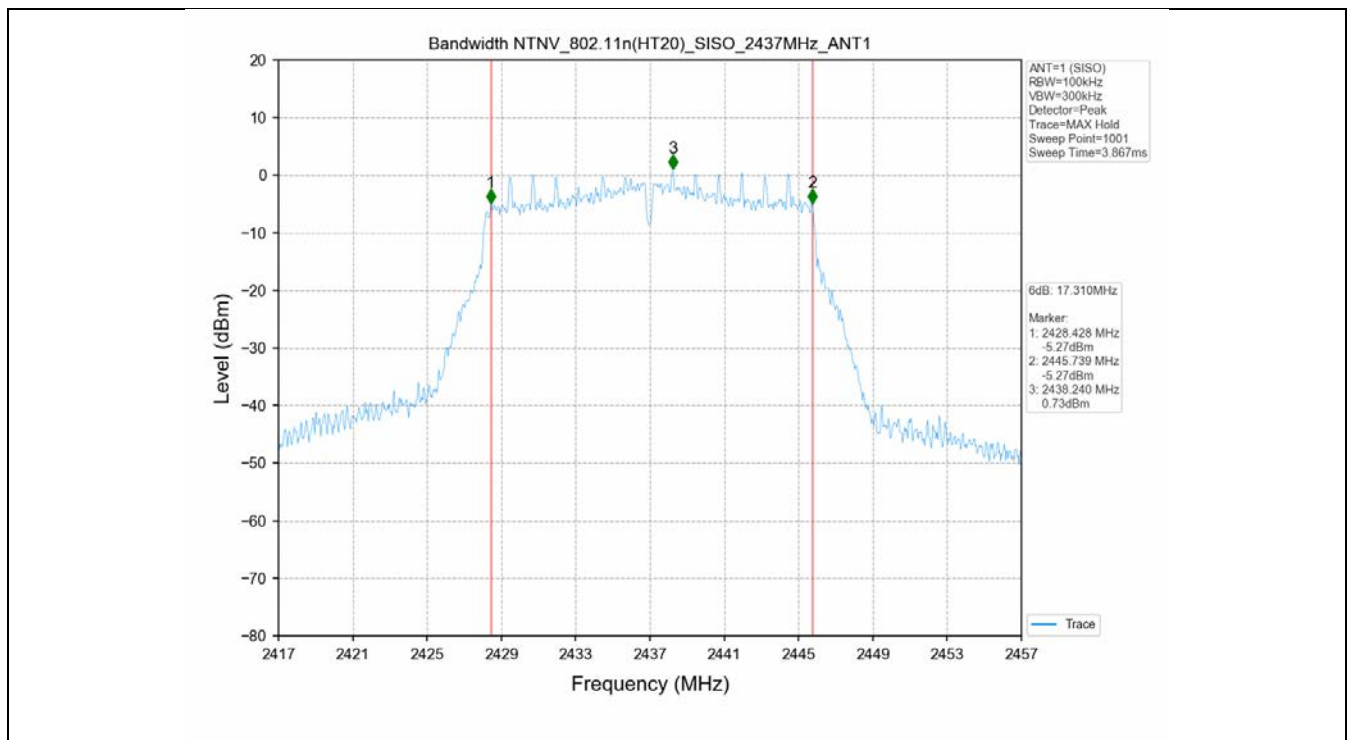
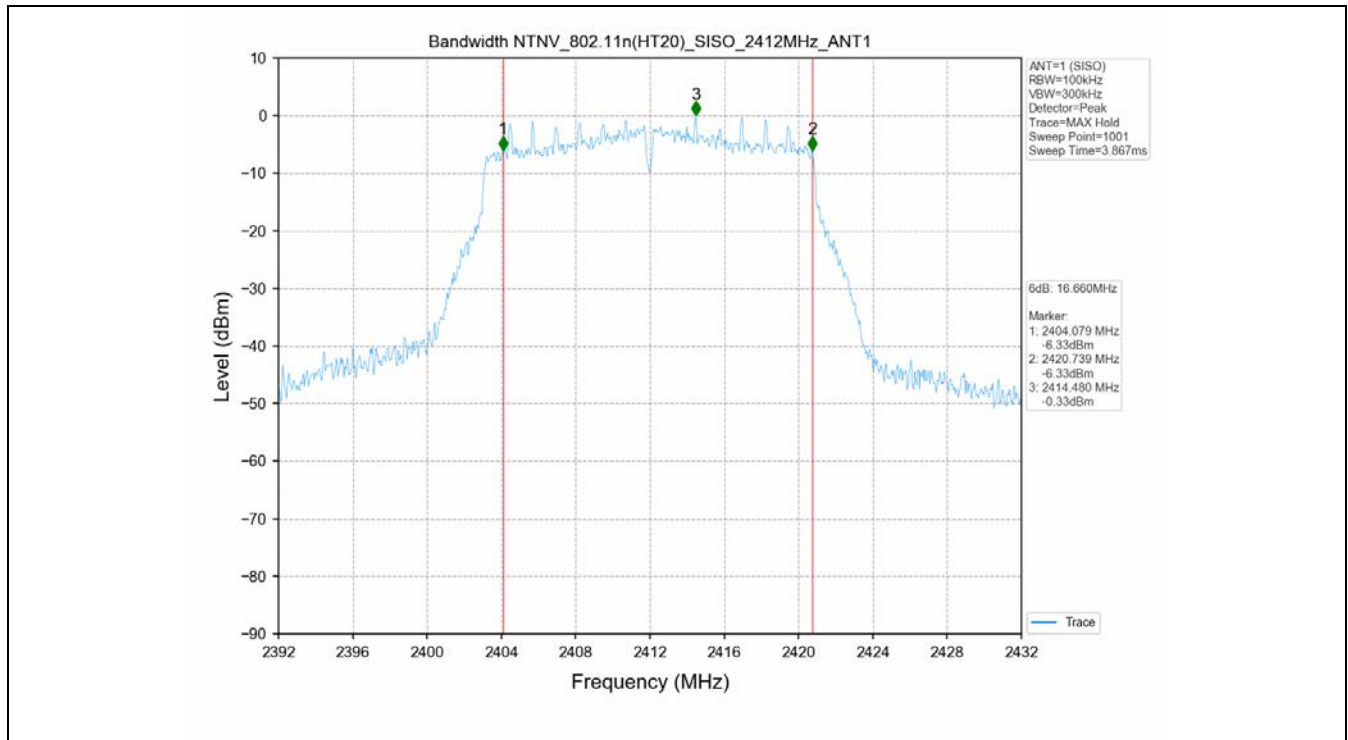


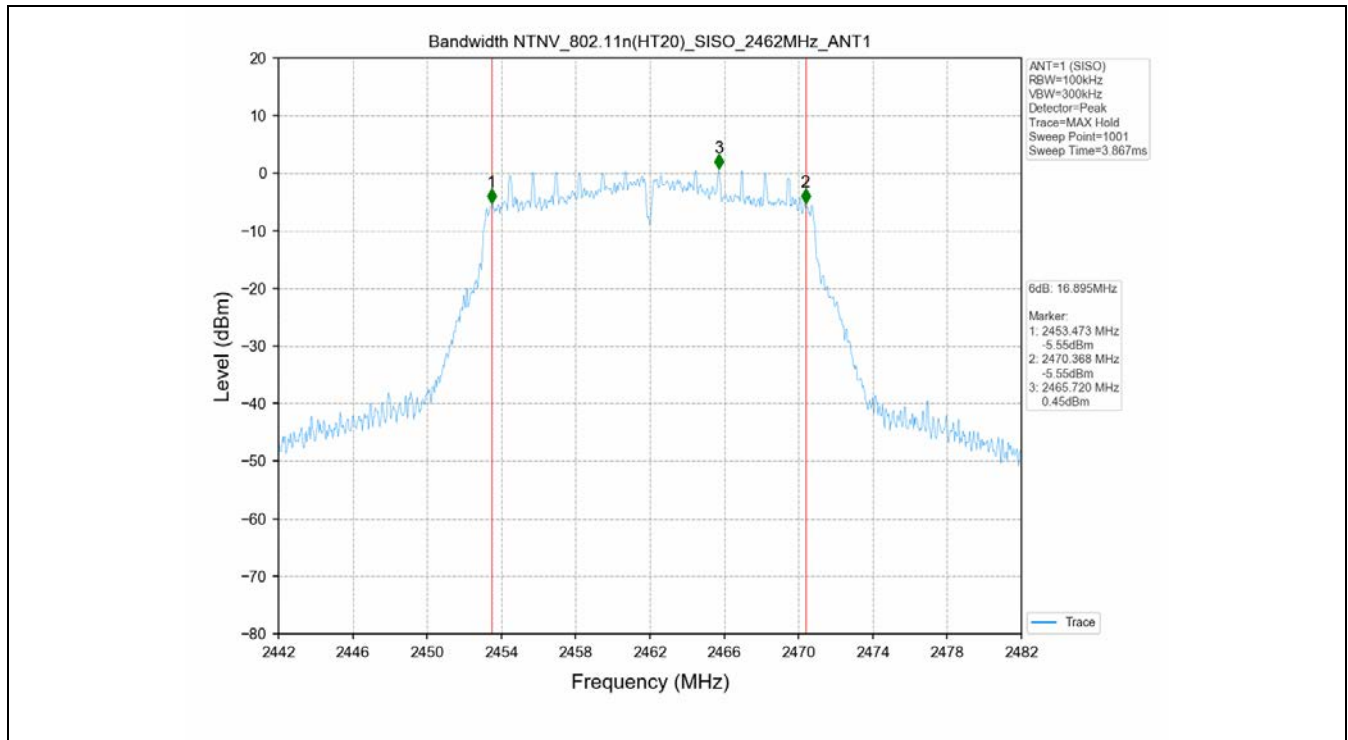




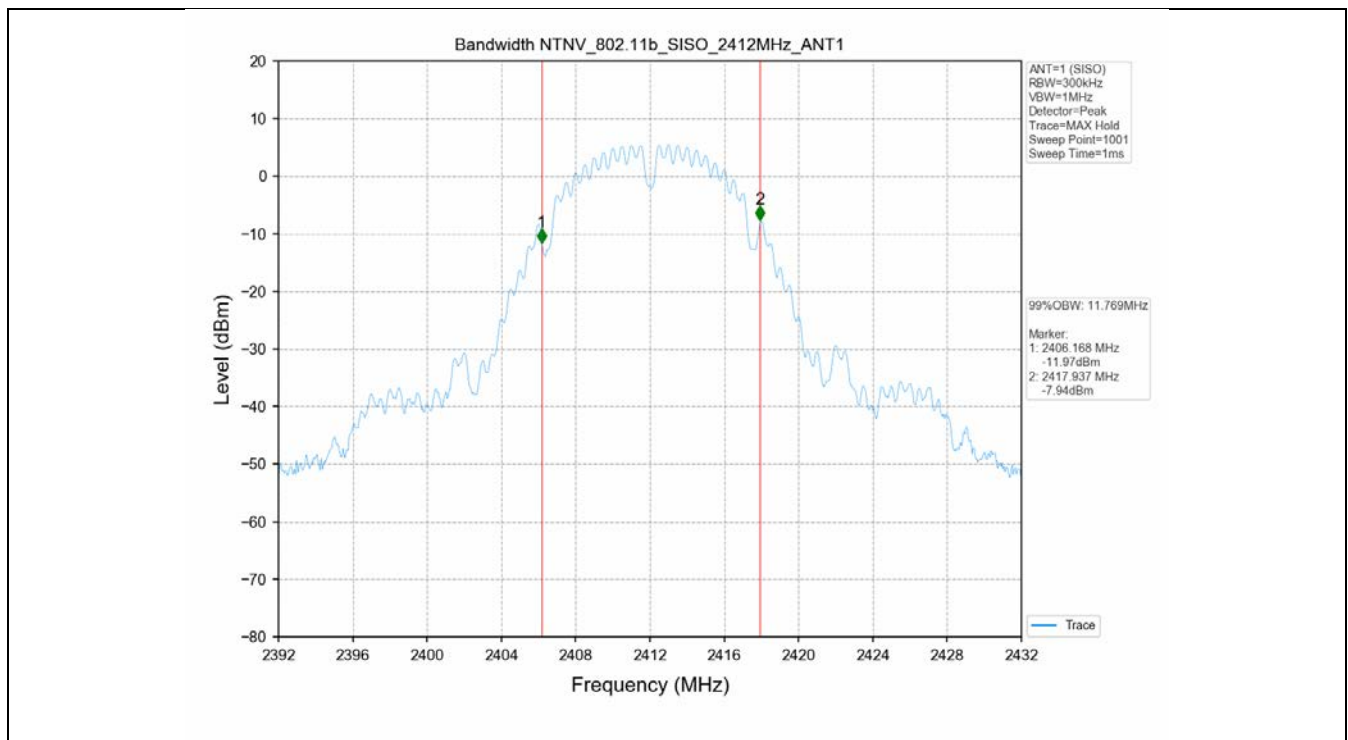


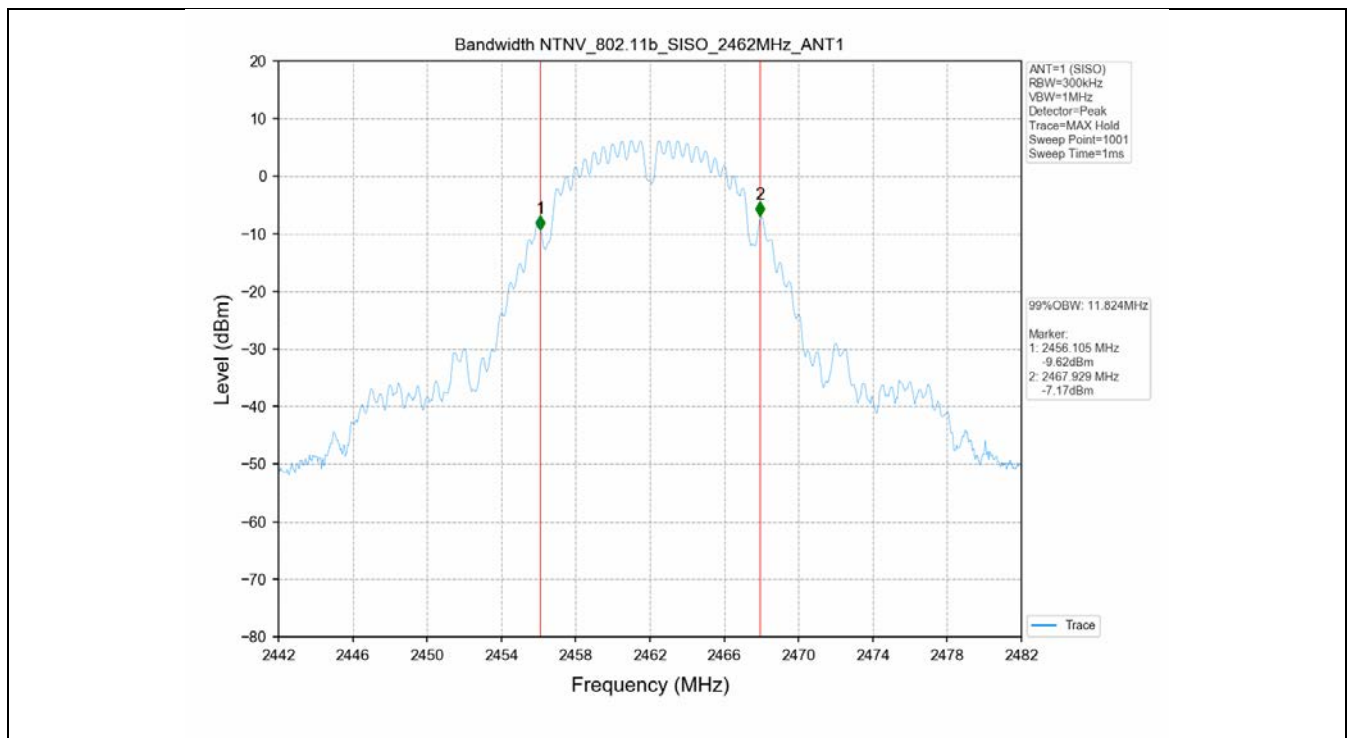
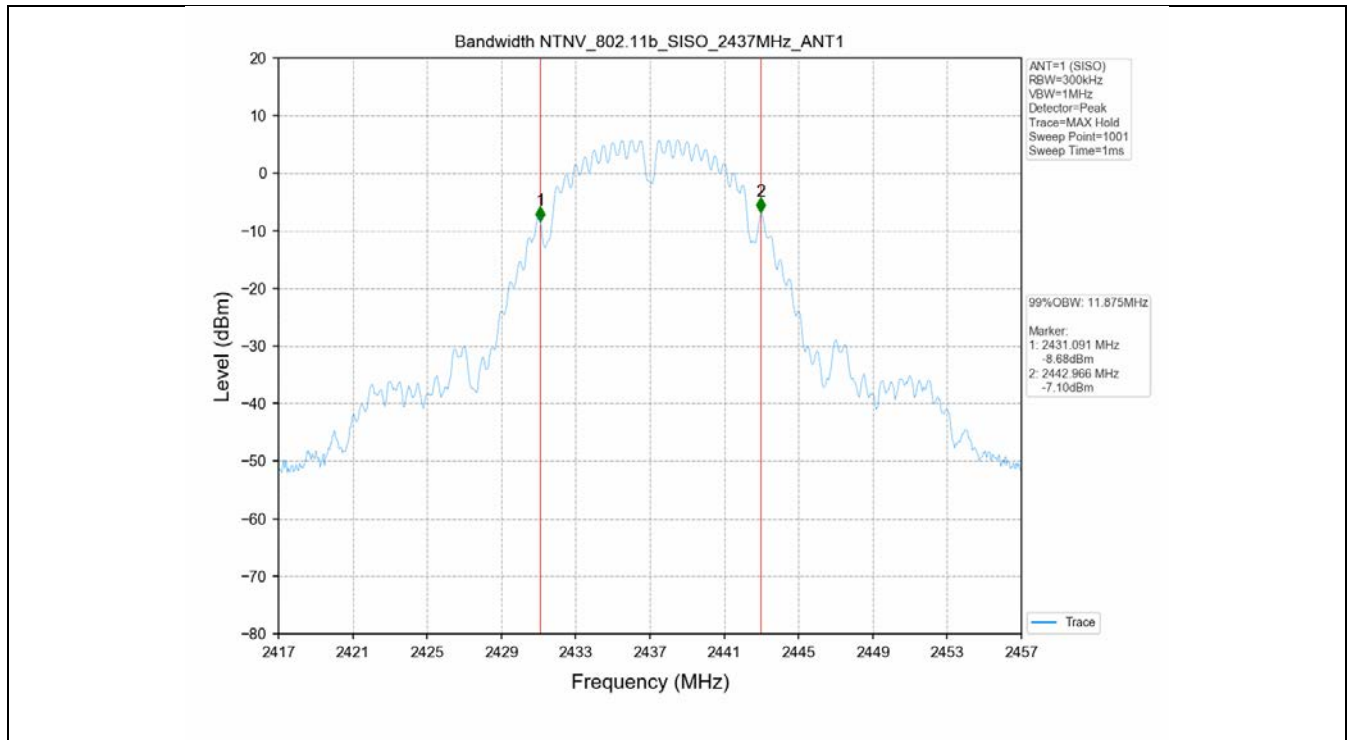


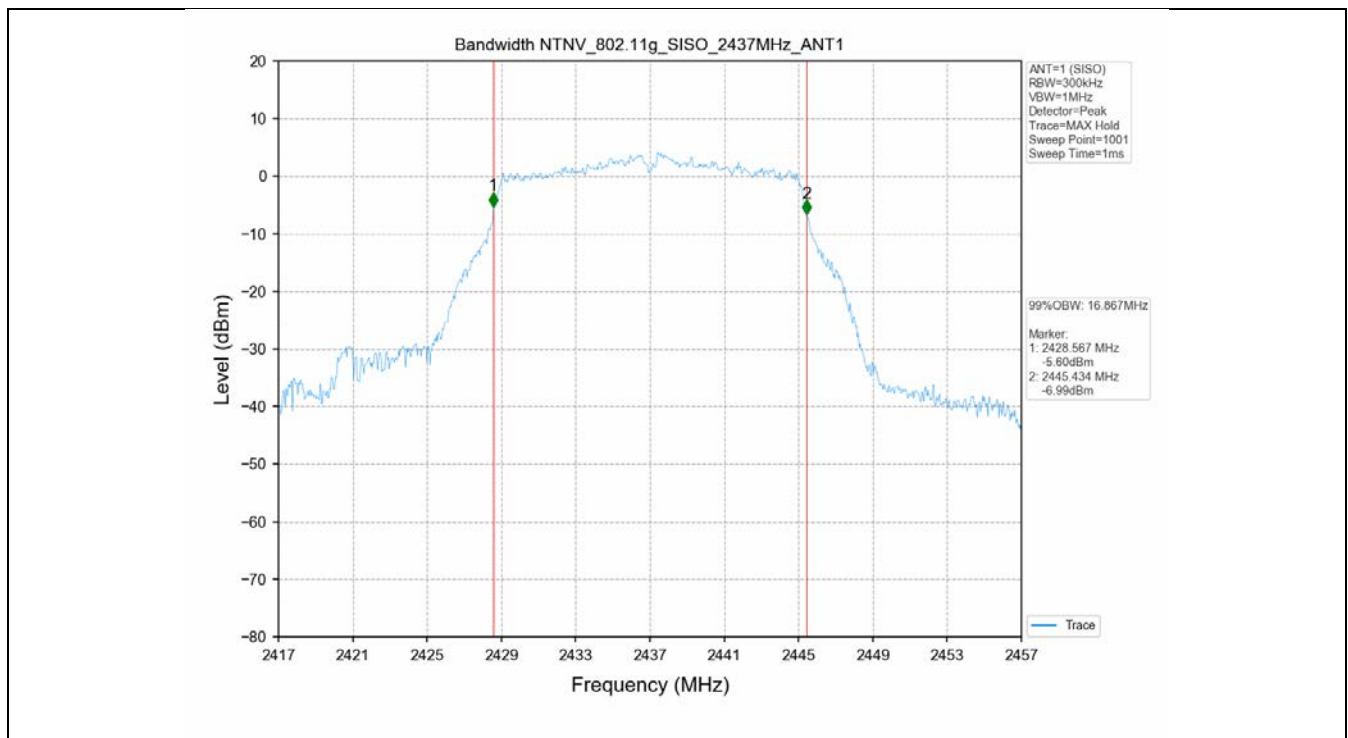
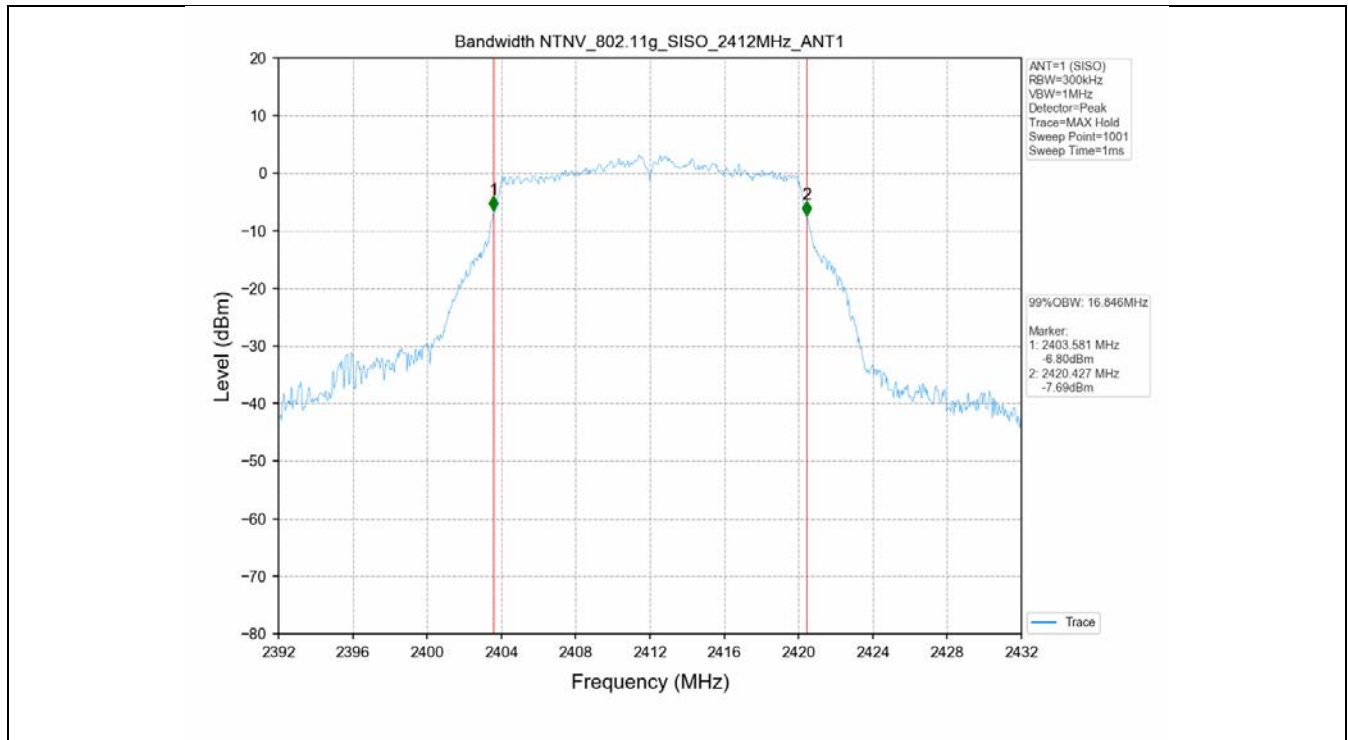


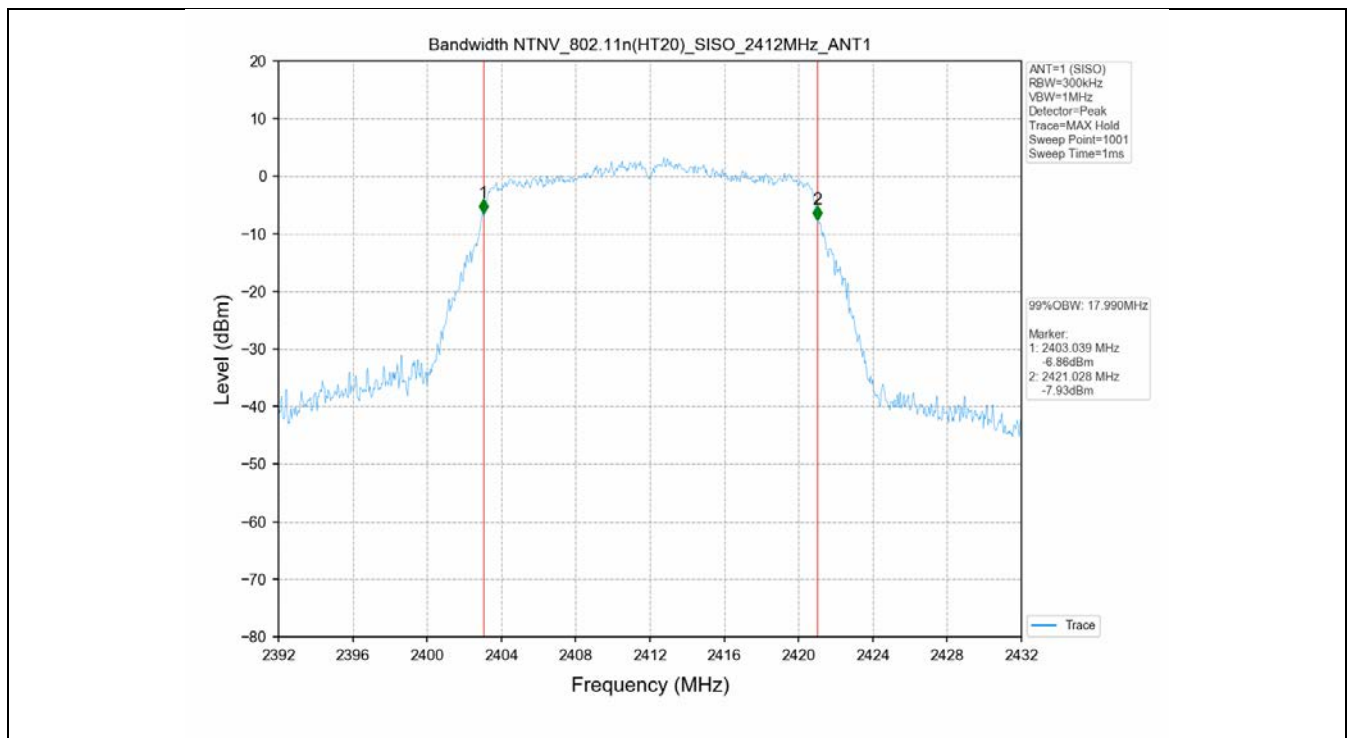
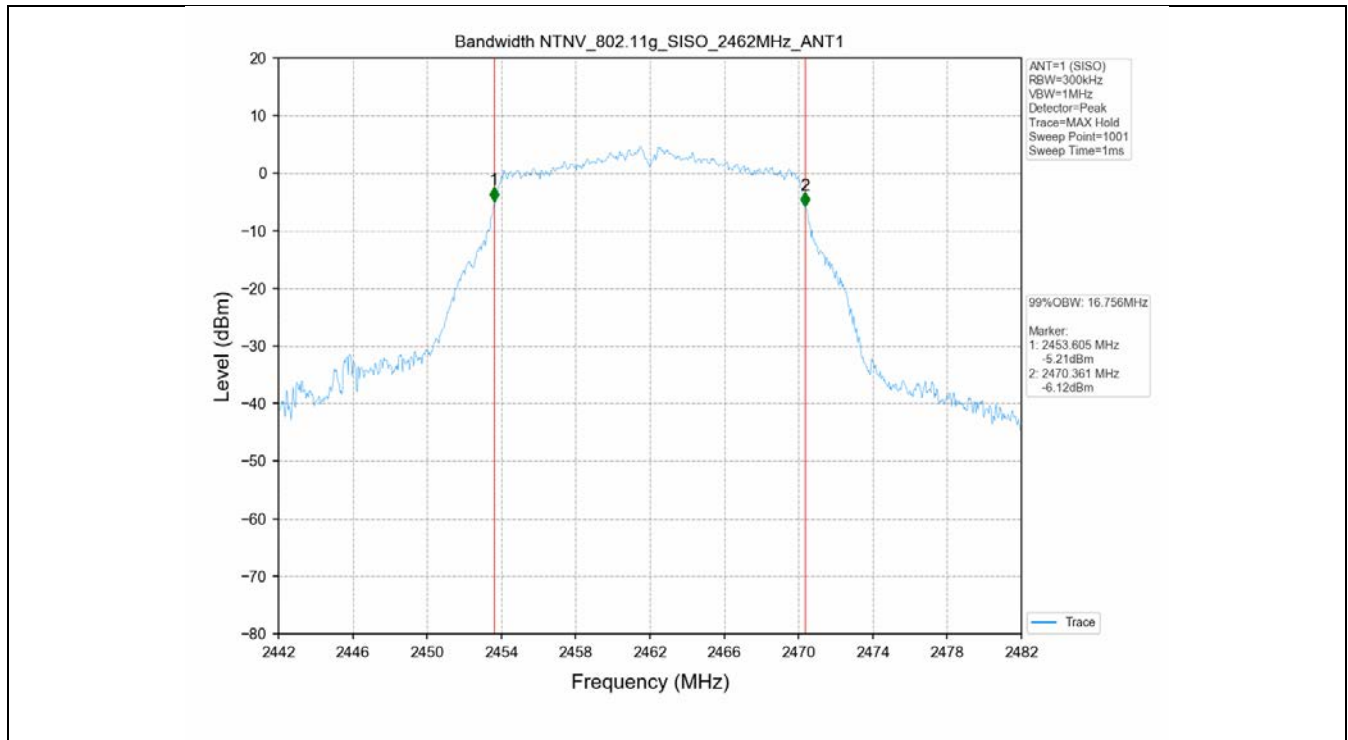


### 2.3 Test Graph - 99% Occupied Bandwidth

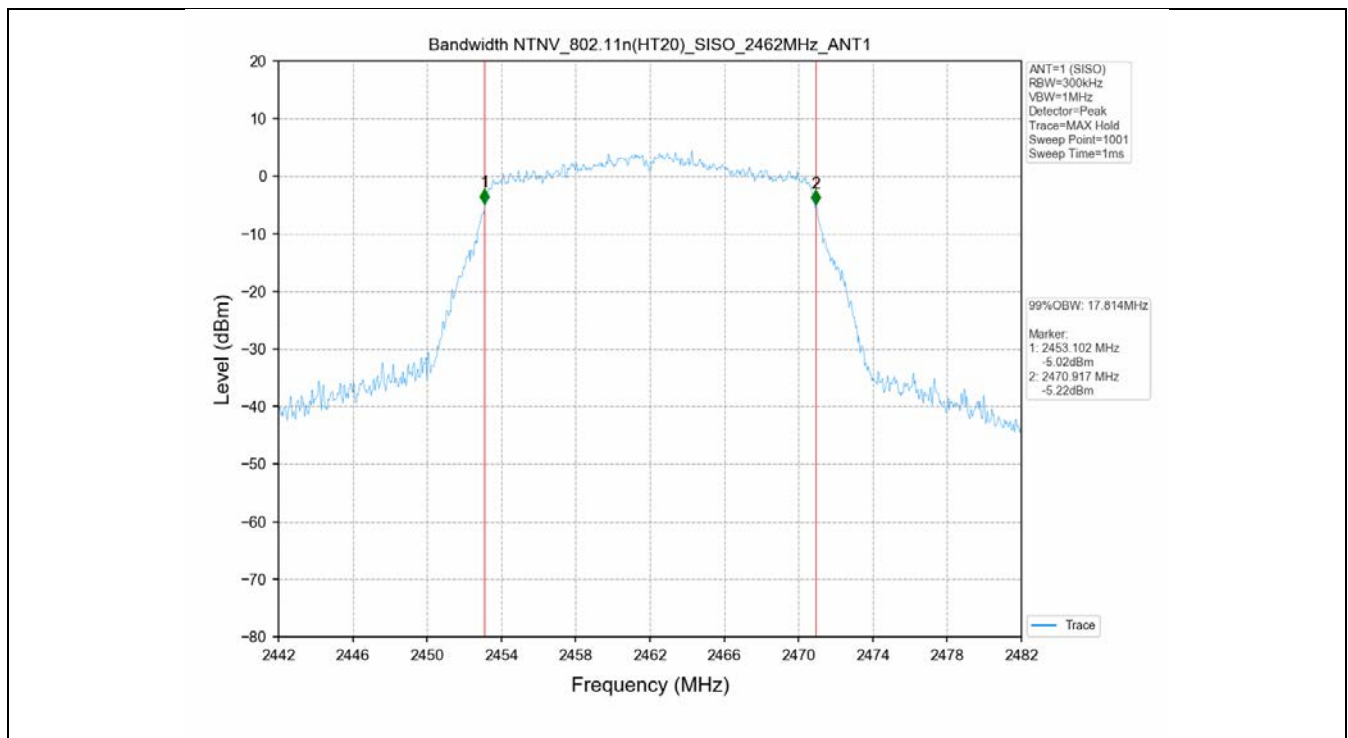
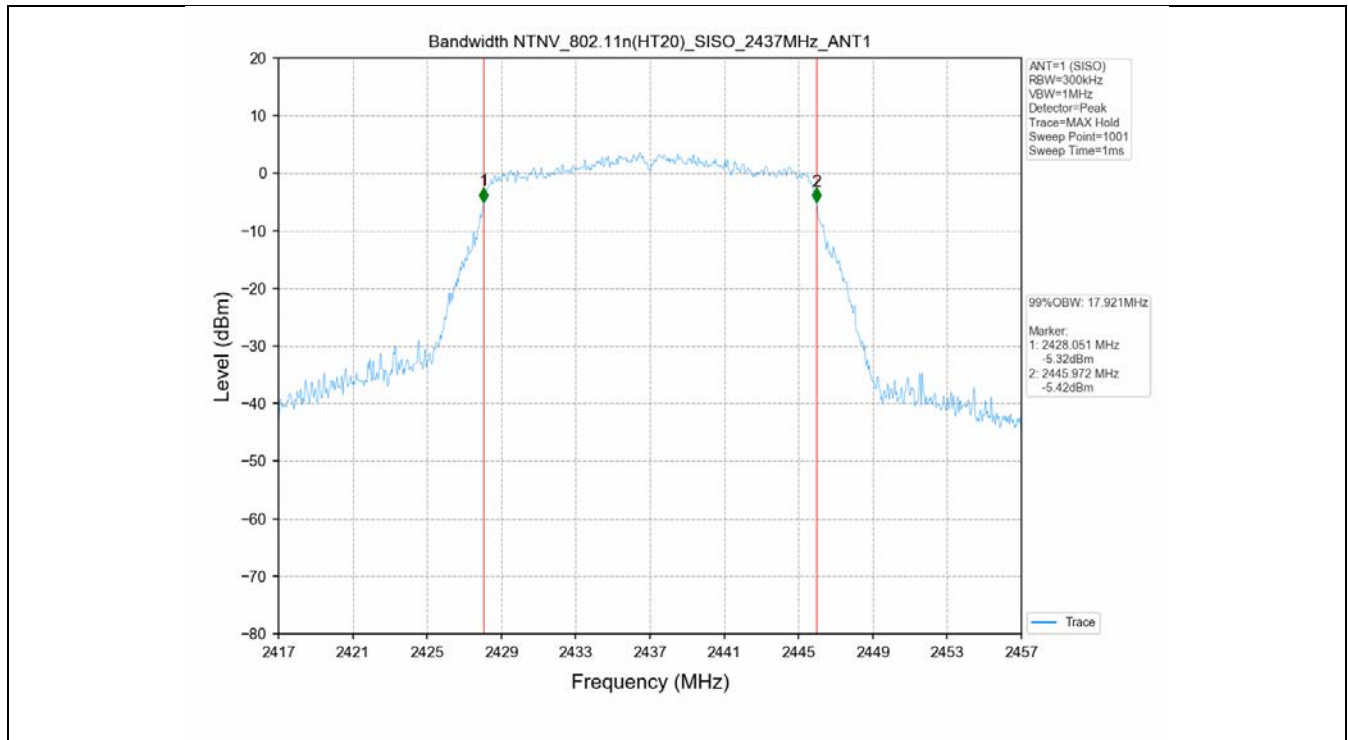












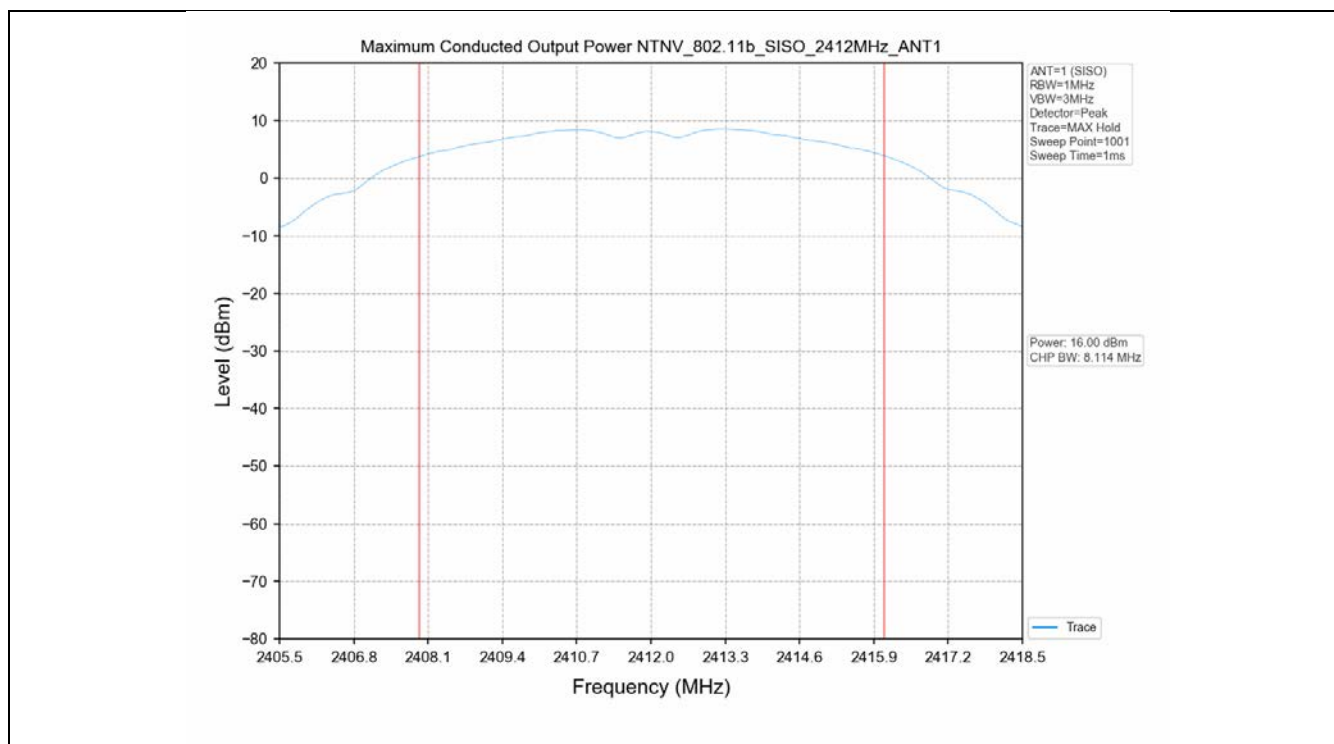


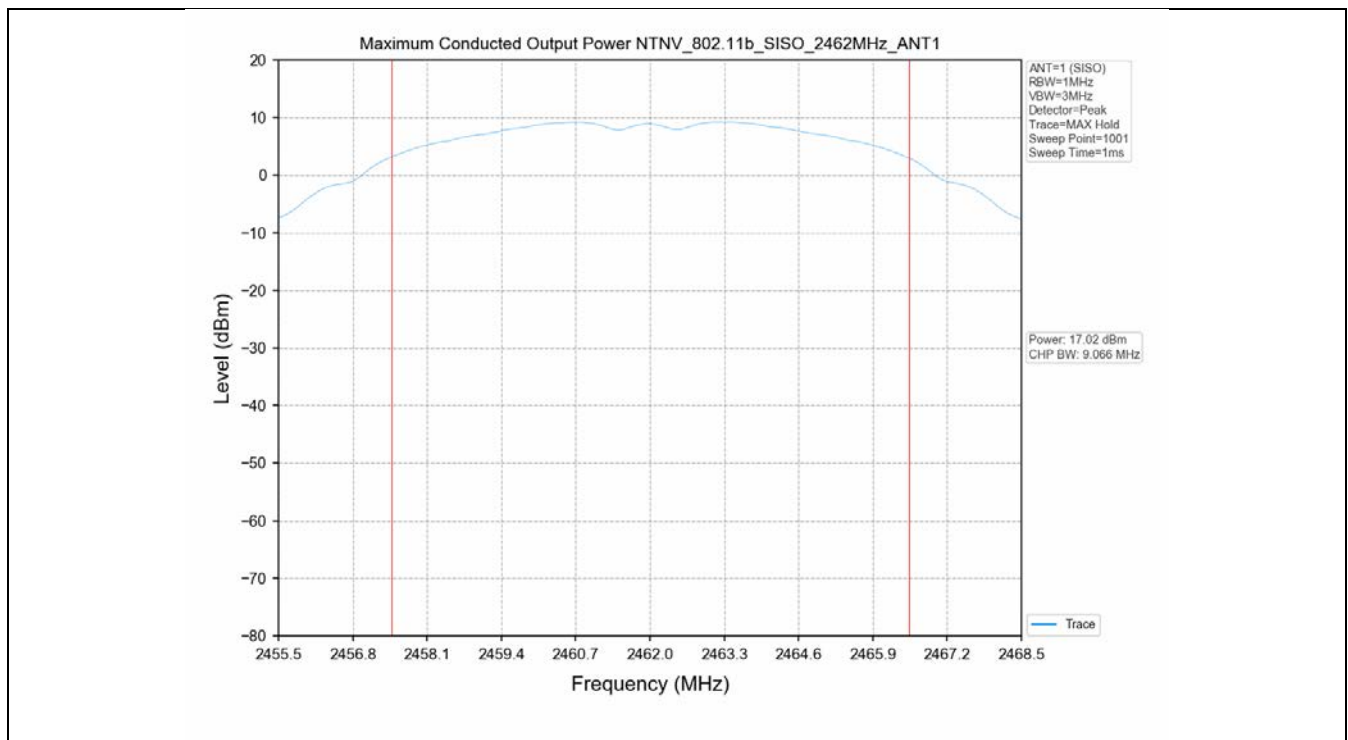
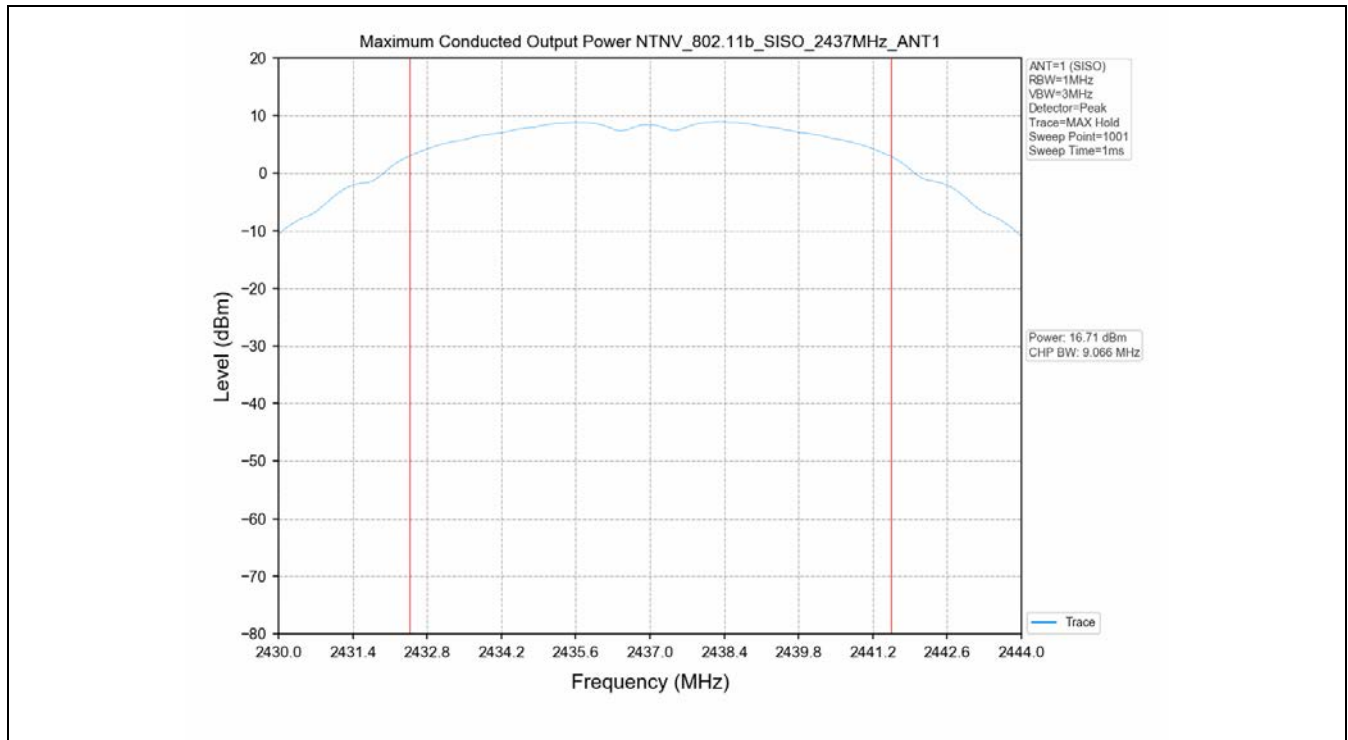
### 3. Maximum Conducted Output Power

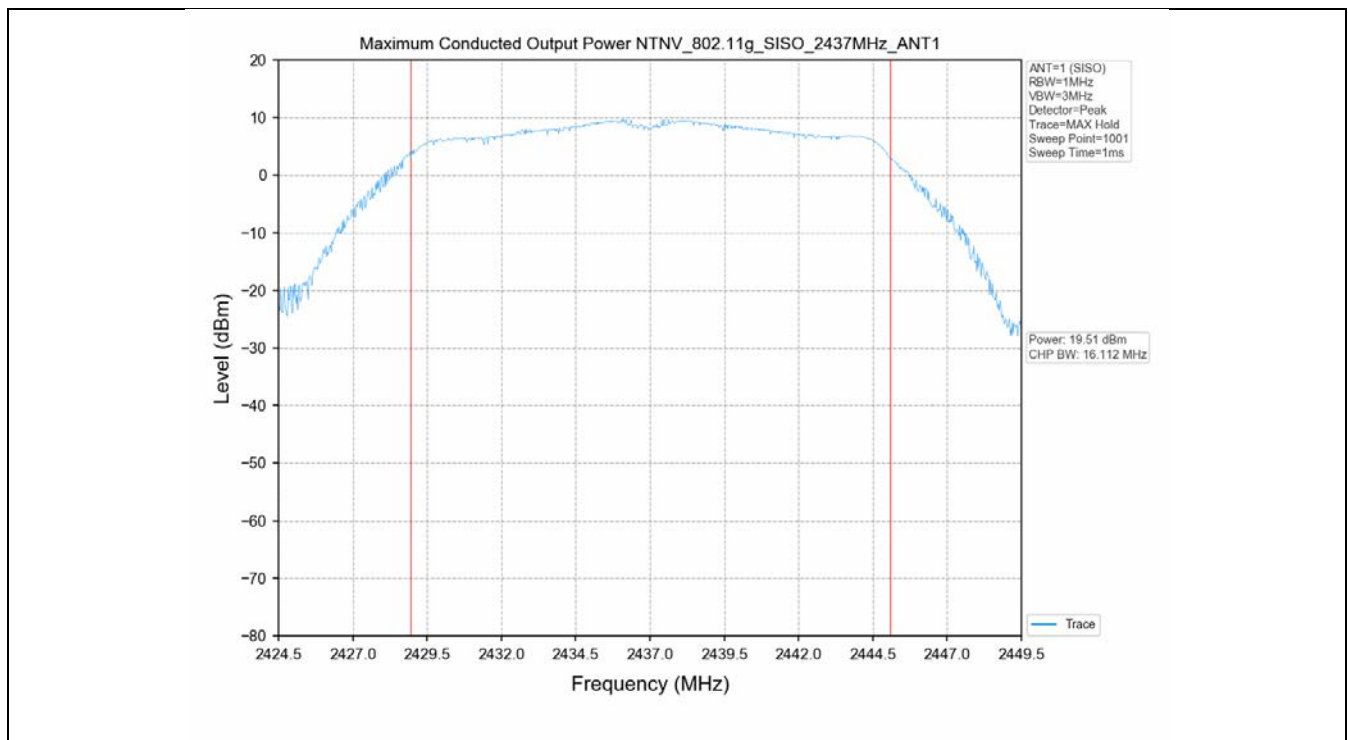
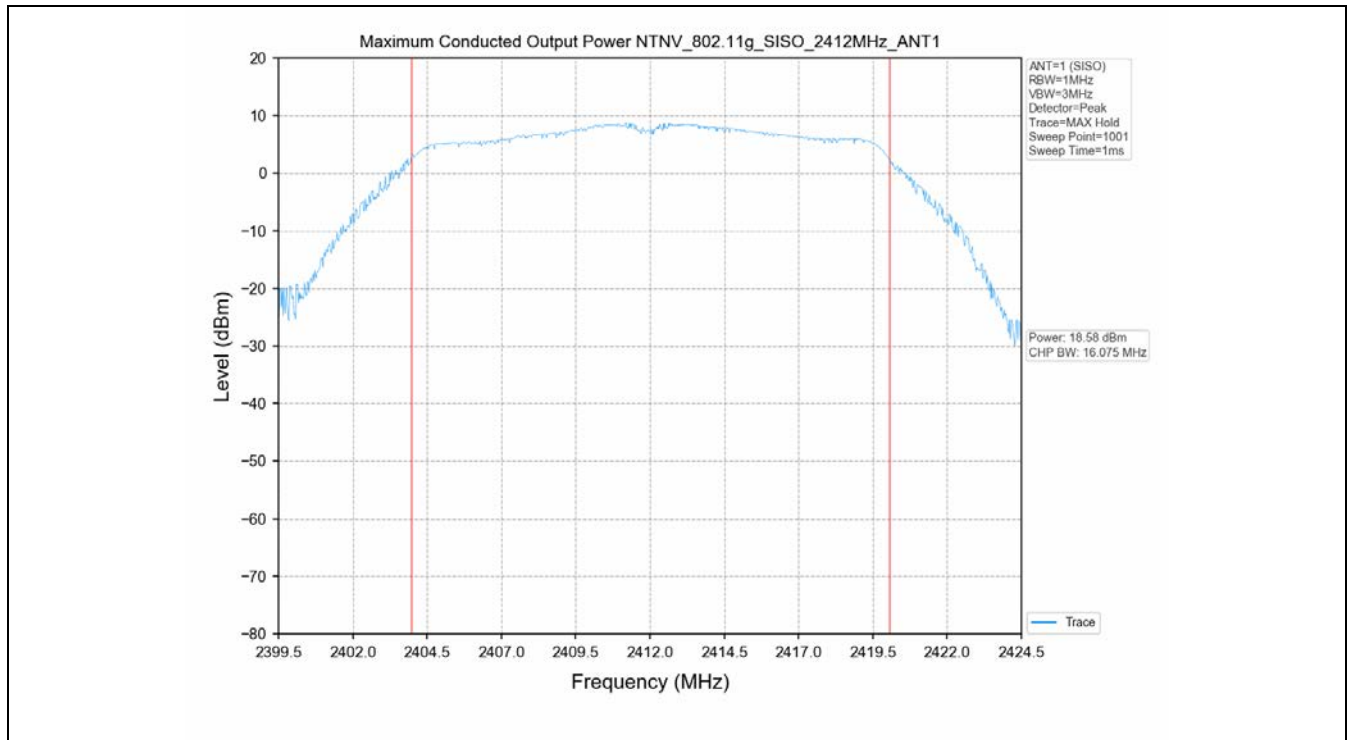
#### 3.1 Test Result

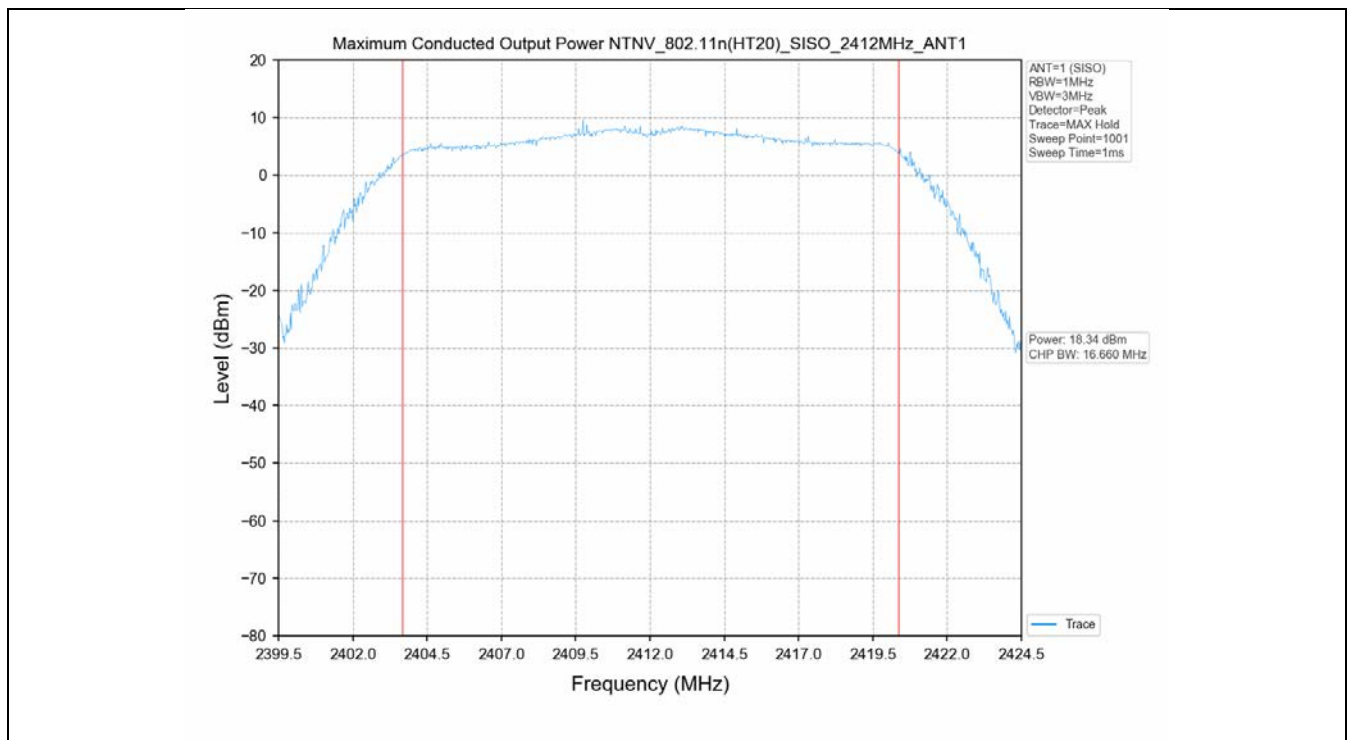
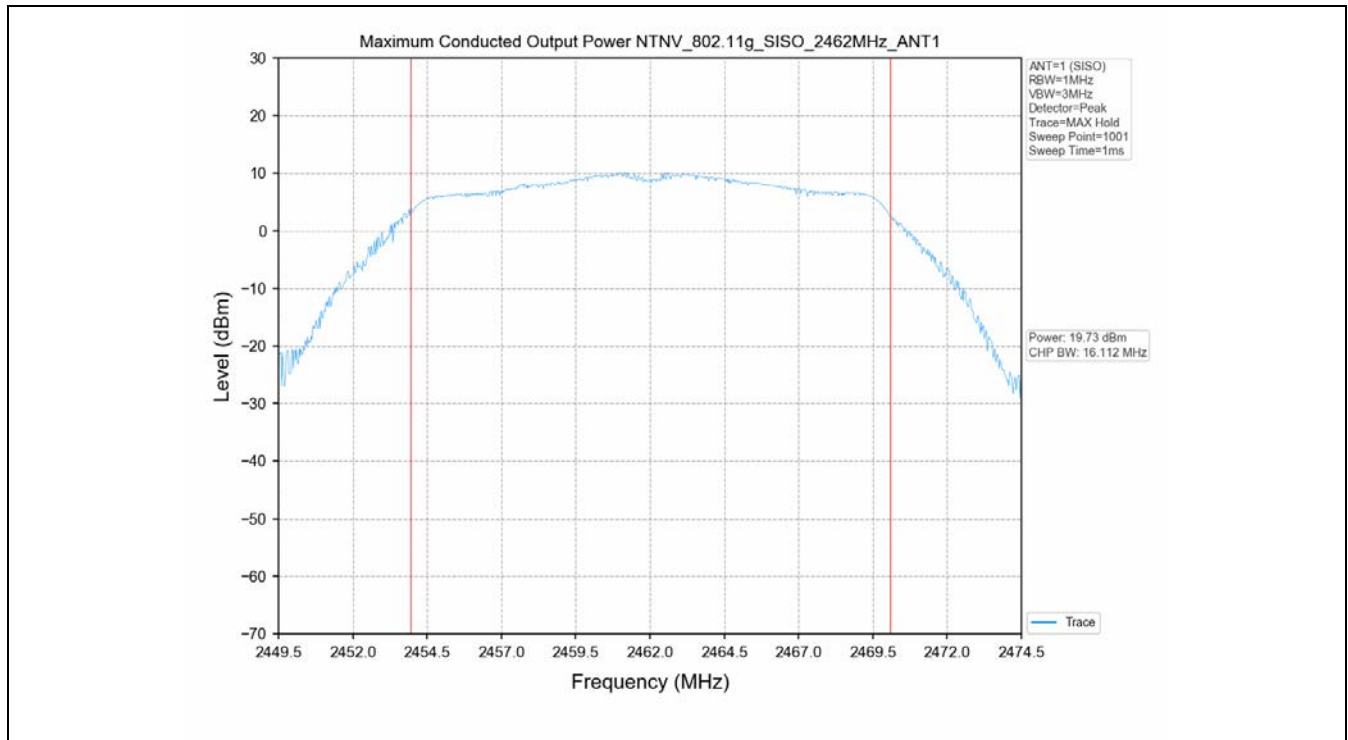
| Test Mode     | Frequency (MHz) | Tx Type | Measured Peak Output Power (dBm) | Limits (dBm) | Verdict |
|---------------|-----------------|---------|----------------------------------|--------------|---------|
|               |                 |         | Ant 1                            |              |         |
| 802.11b       | 2412            | SISO    | 16.00                            | 30           | PASS    |
|               | 2437            | SISO    | 16.71                            | 30           | PASS    |
|               | 2462            | SISO    | 17.02                            | 30           | PASS    |
| 802.11g       | 2412            | SISO    | 18.58                            | 30           | PASS    |
|               | 2437            | SISO    | 19.51                            | 30           | PASS    |
|               | 2462            | SISO    | 19.73                            | 30           | PASS    |
| 802.11n(HT20) | 2412            | SISO    | 18.34                            | 30           | PASS    |
|               | 2437            | SISO    | 19.26                            | 30           | PASS    |
|               | 2462            | SISO    | 19.47                            | 30           | PASS    |

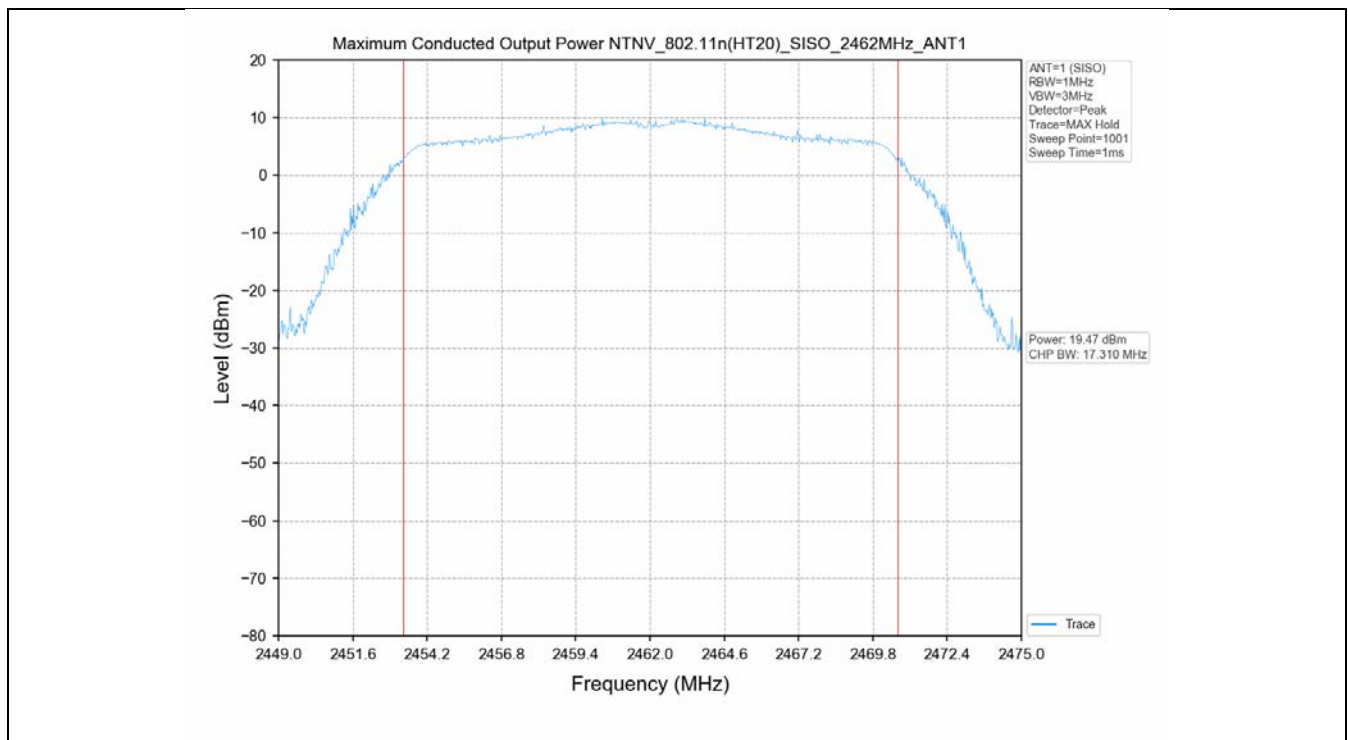
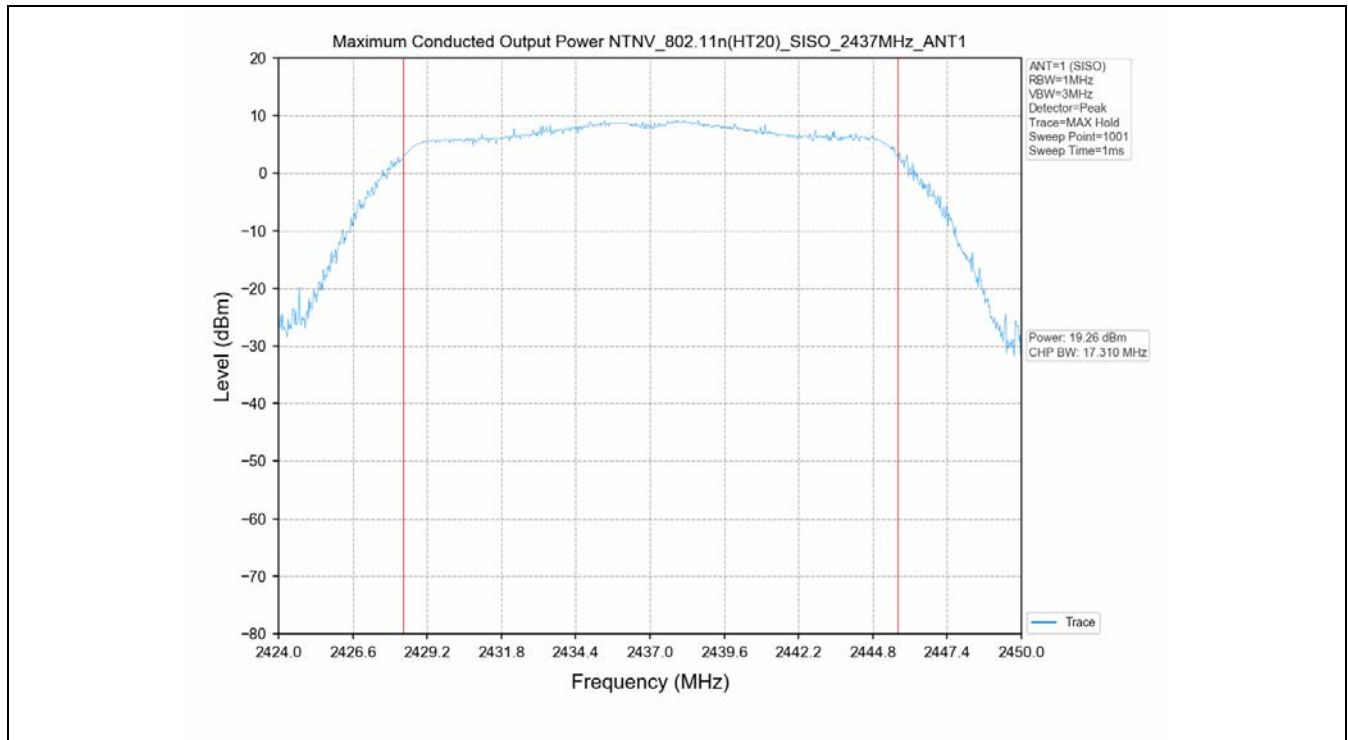
#### 3.2 Test Graph













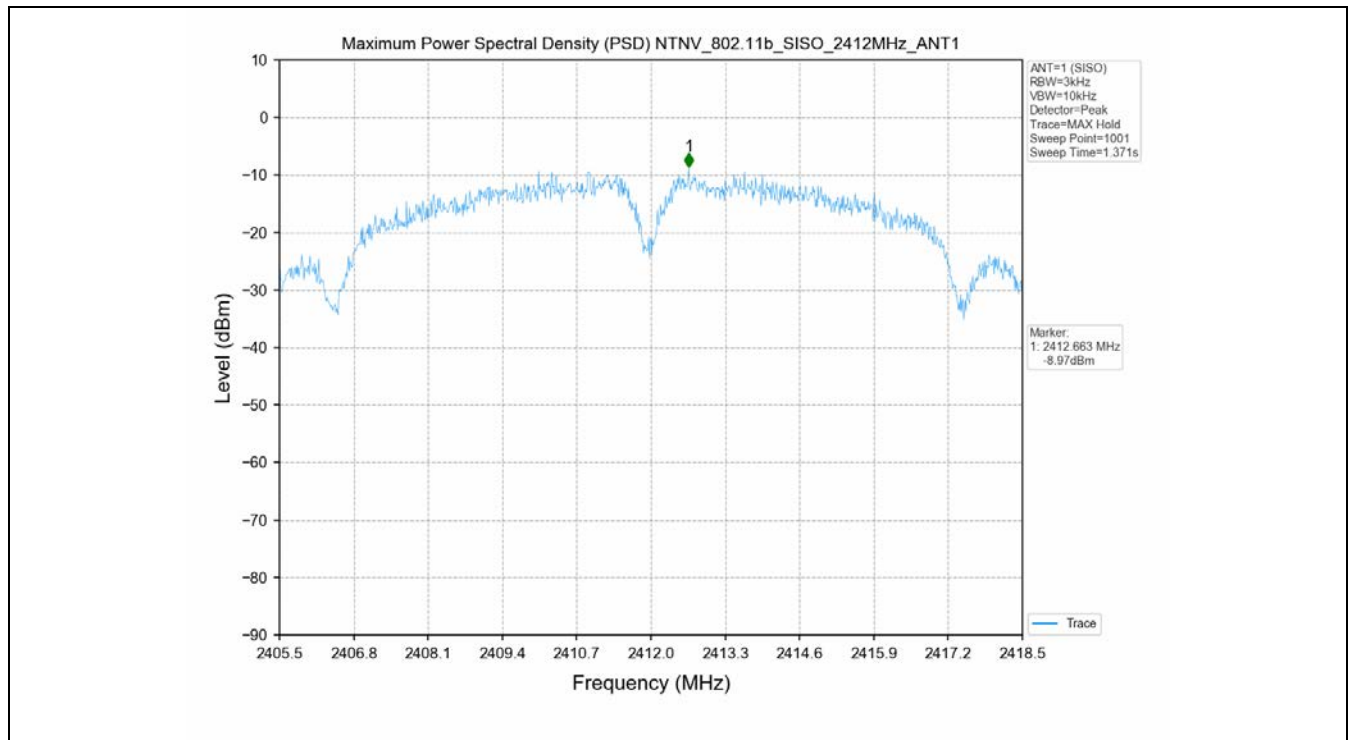


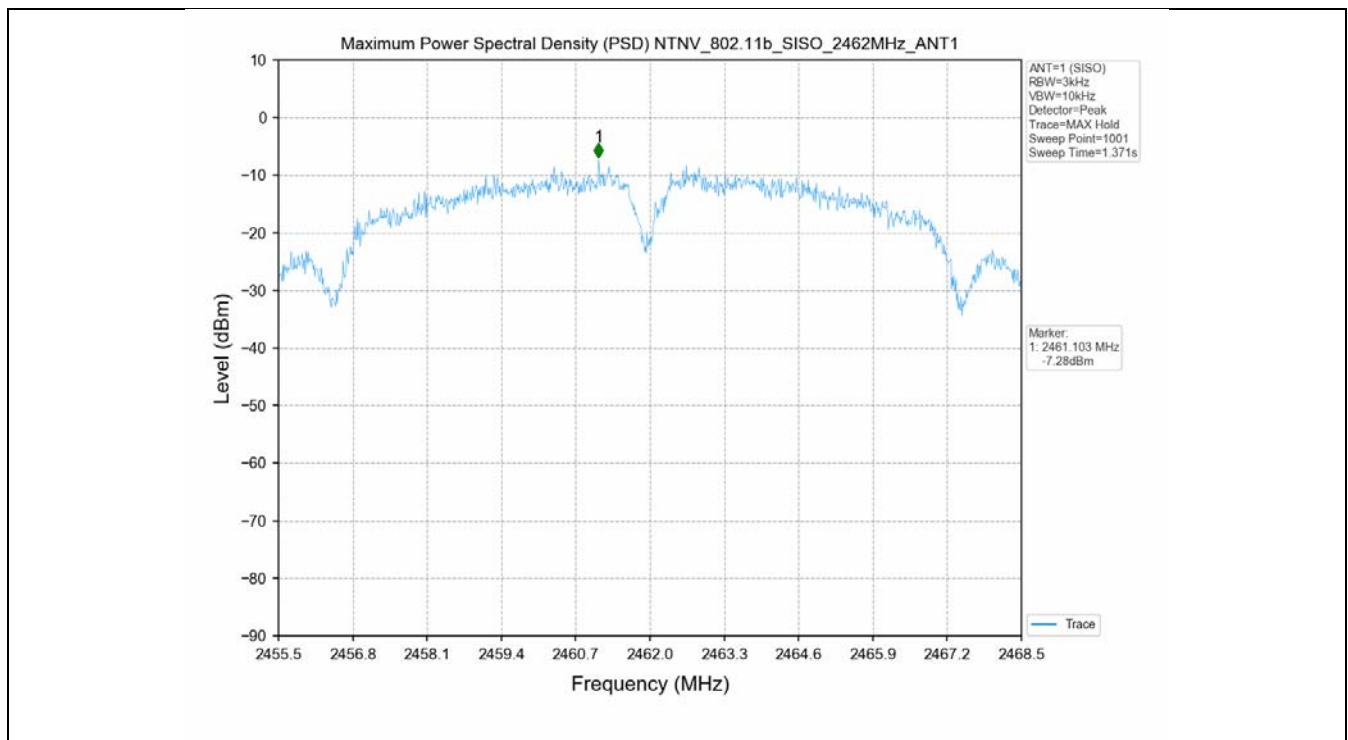
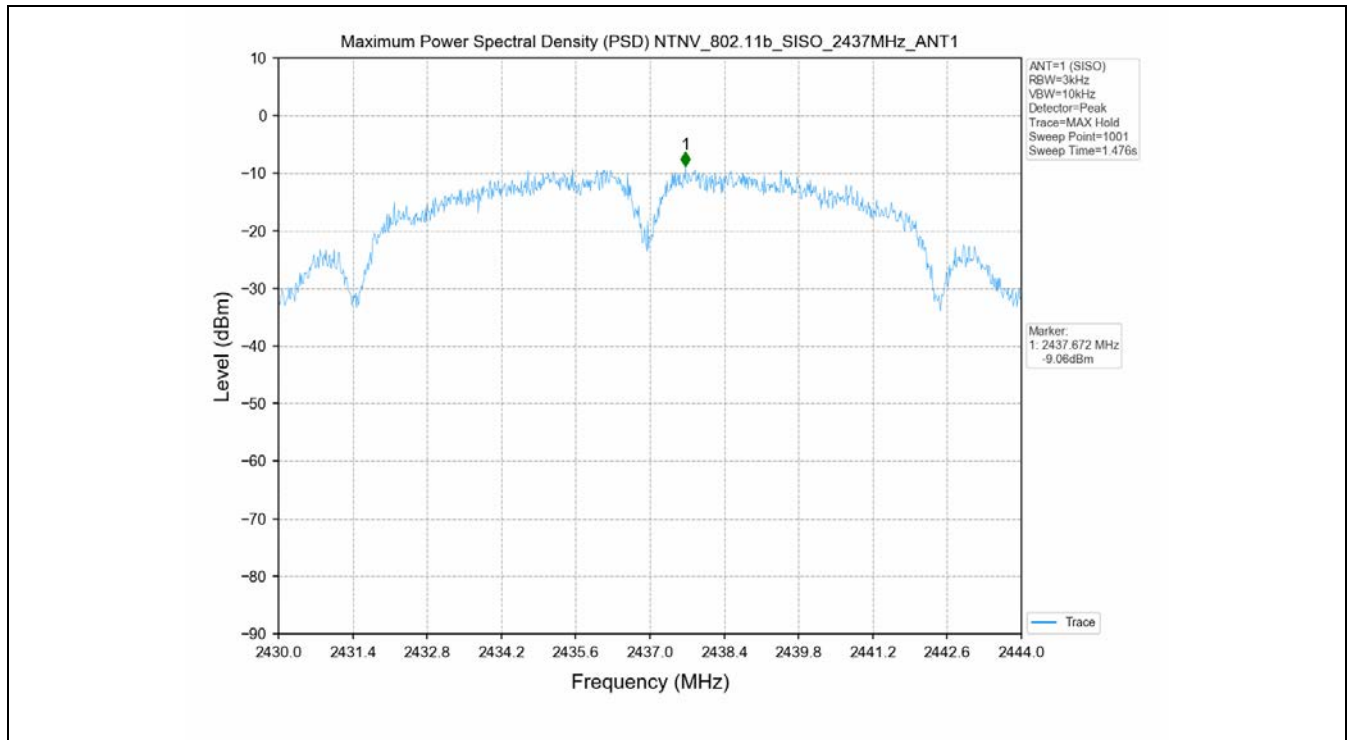
## 4. Maximum Power Spectral Density (PSD)

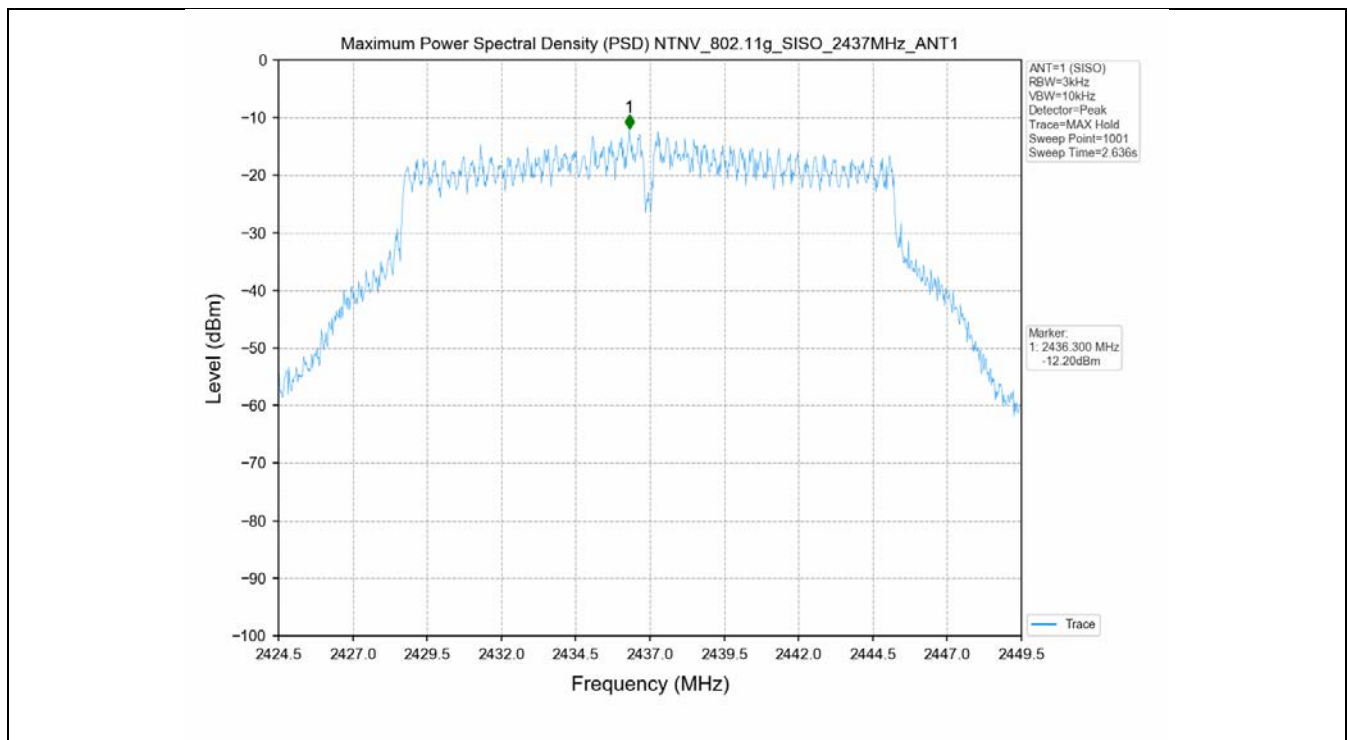
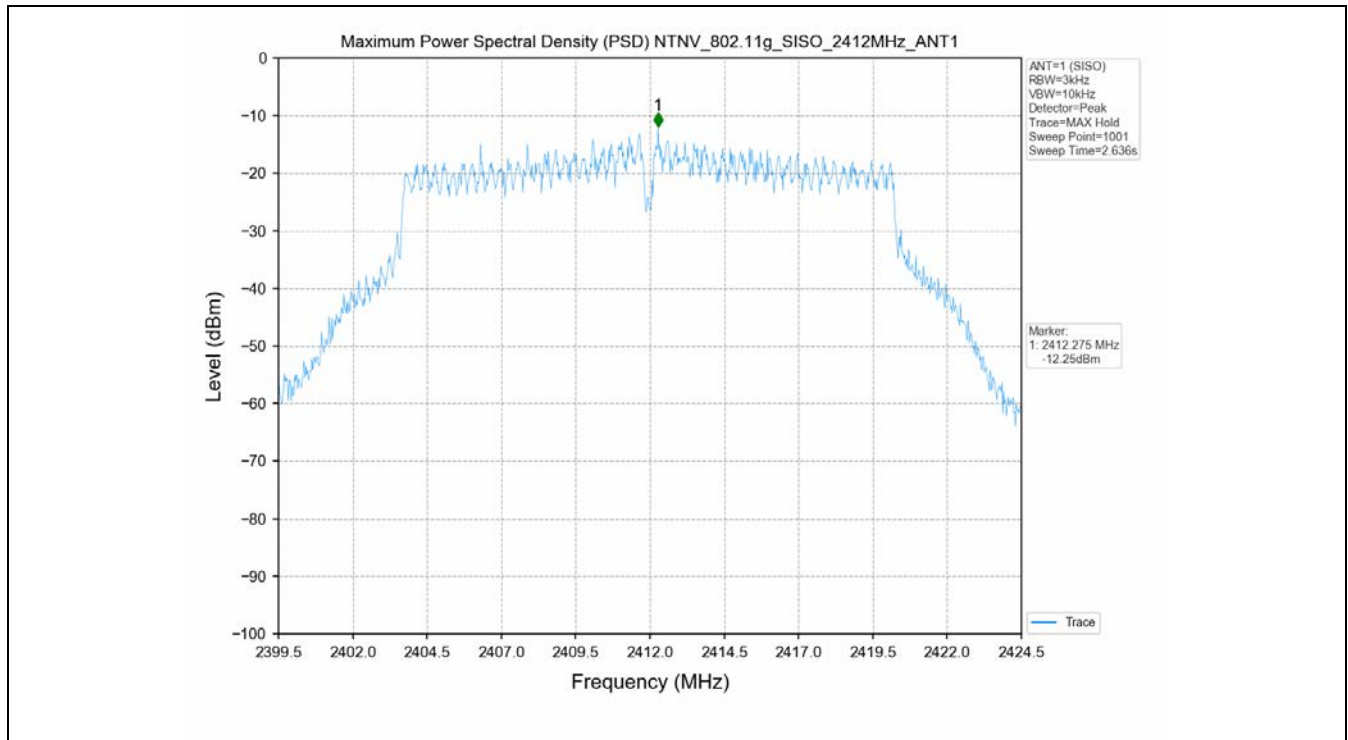
### 4.1 Test Result

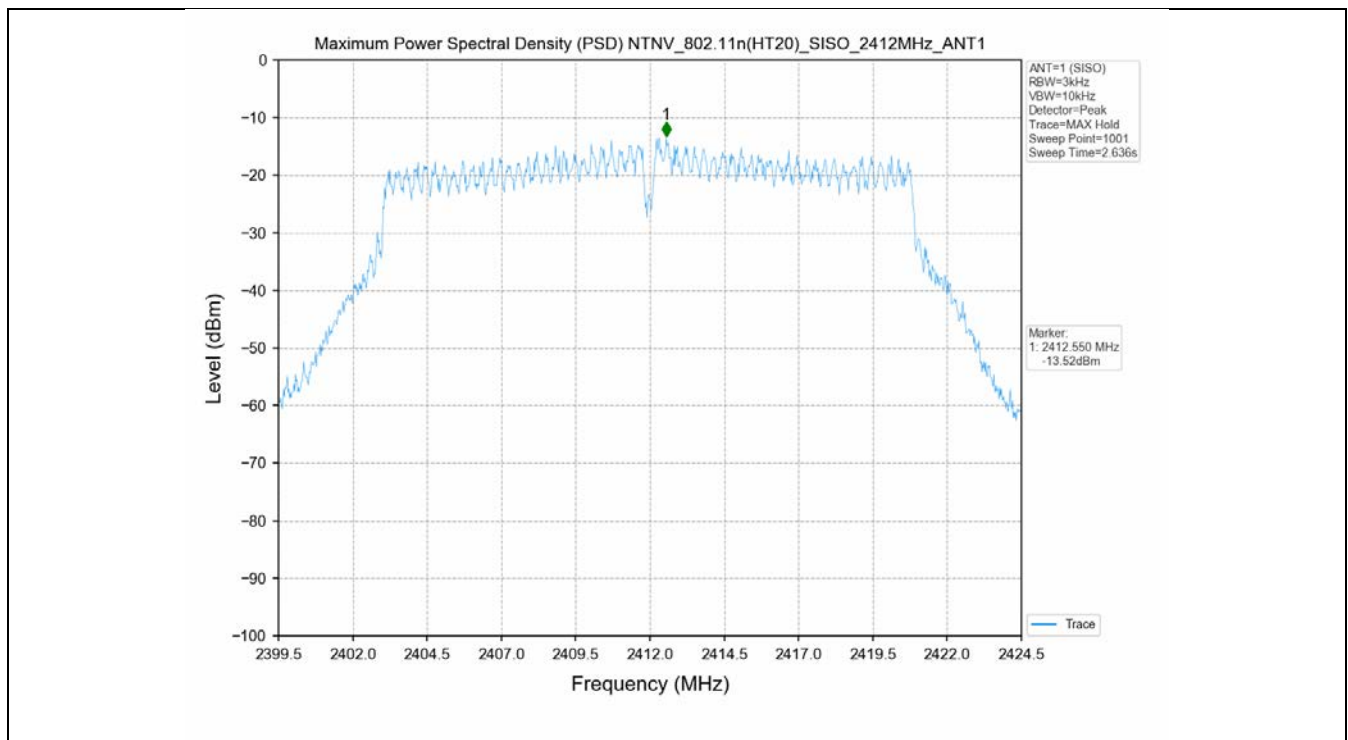
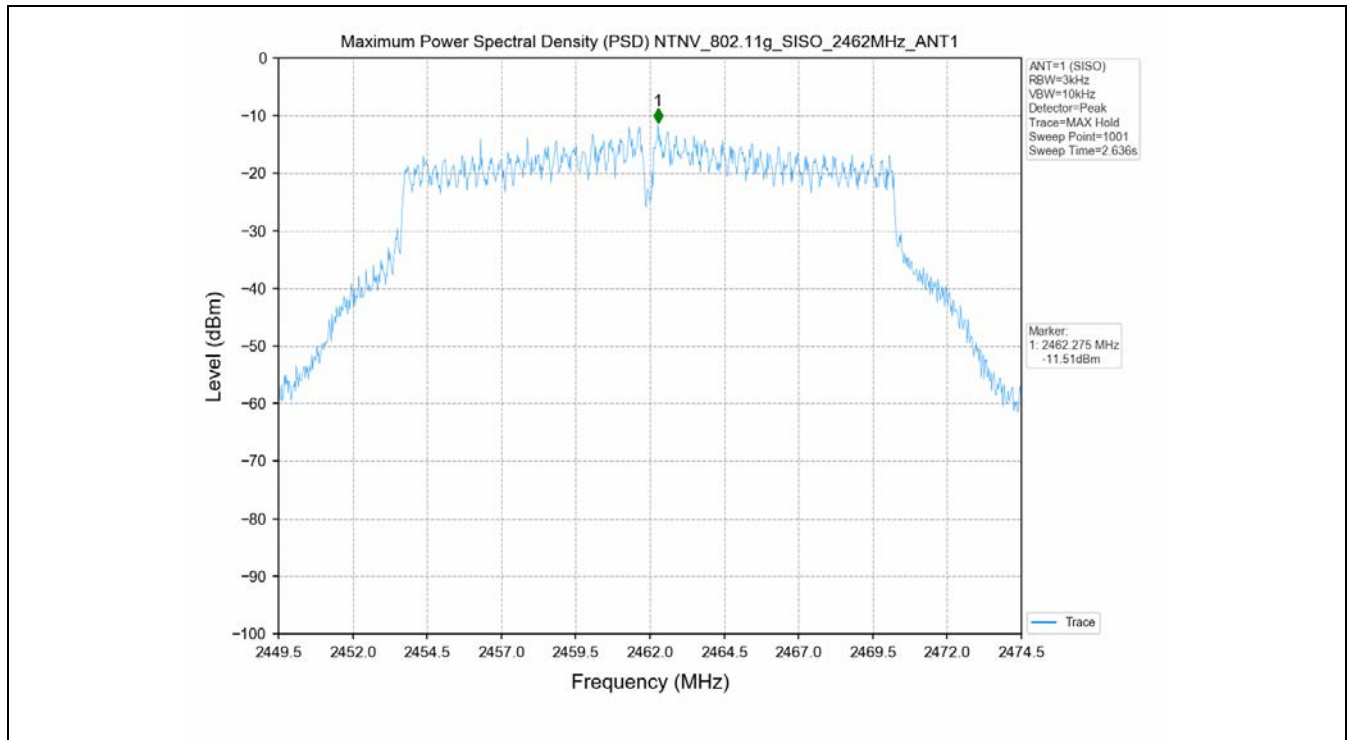
| Test Mode     | Frequency (MHz) | Tx Type | Maximum Power Spectral Density (dBm/3KHz) | Limits (dBm/3kHz) | Verdict |
|---------------|-----------------|---------|-------------------------------------------|-------------------|---------|
|               |                 |         | Ant 1                                     |                   |         |
| 802.11b       | 2412            | SISO    | -8.97                                     | $\leq 8$          | PASS    |
|               | 2437            | SISO    | -9.06                                     | $\leq 8$          | PASS    |
|               | 2462            | SISO    | -7.28                                     | $\leq 8$          | PASS    |
| 802.11g       | 2412            | SISO    | -12.25                                    | $\leq 8$          | PASS    |
|               | 2437            | SISO    | -12.20                                    | $\leq 8$          | PASS    |
|               | 2462            | SISO    | -11.51                                    | $\leq 8$          | PASS    |
| 802.11n(HT20) | 2412            | SISO    | -13.52                                    | $\leq 8$          | PASS    |
|               | 2437            | SISO    | -12.03                                    | $\leq 8$          | PASS    |
|               | 2462            | SISO    | -9.80                                     | $\leq 8$          | PASS    |

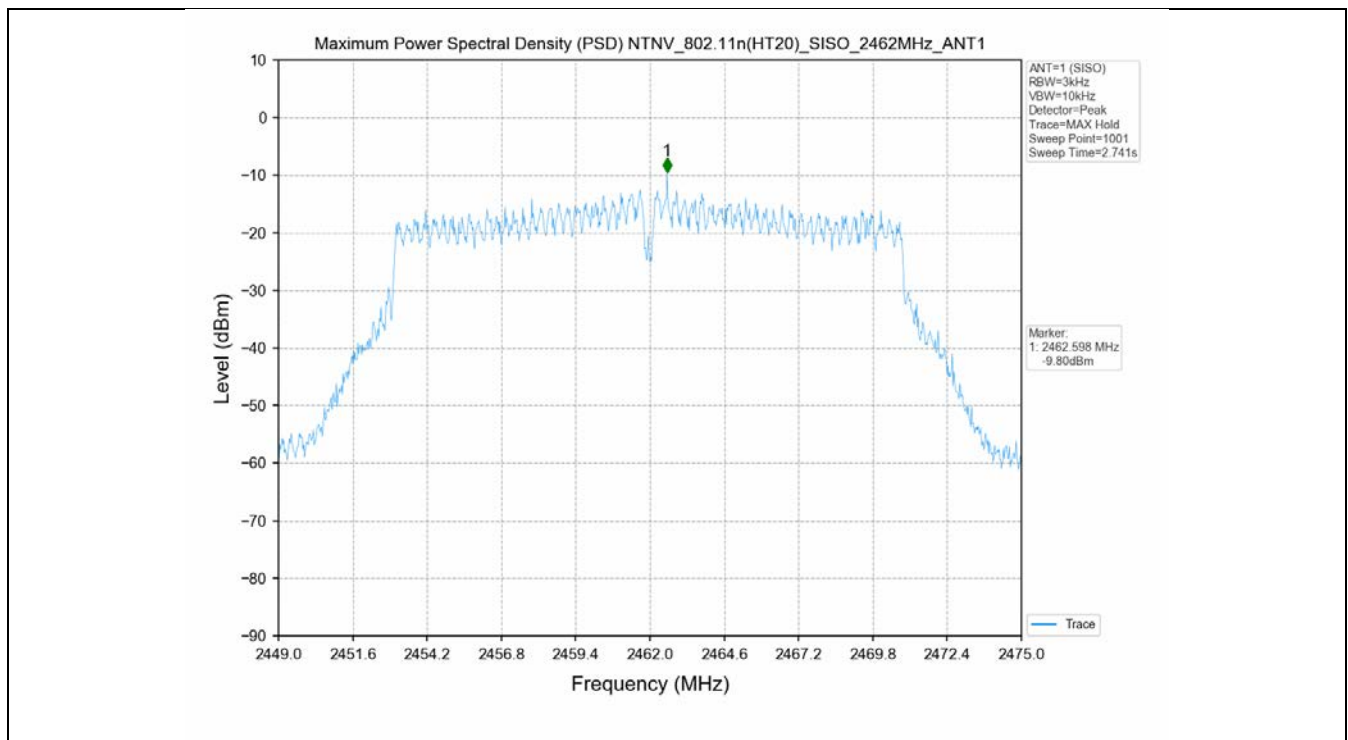
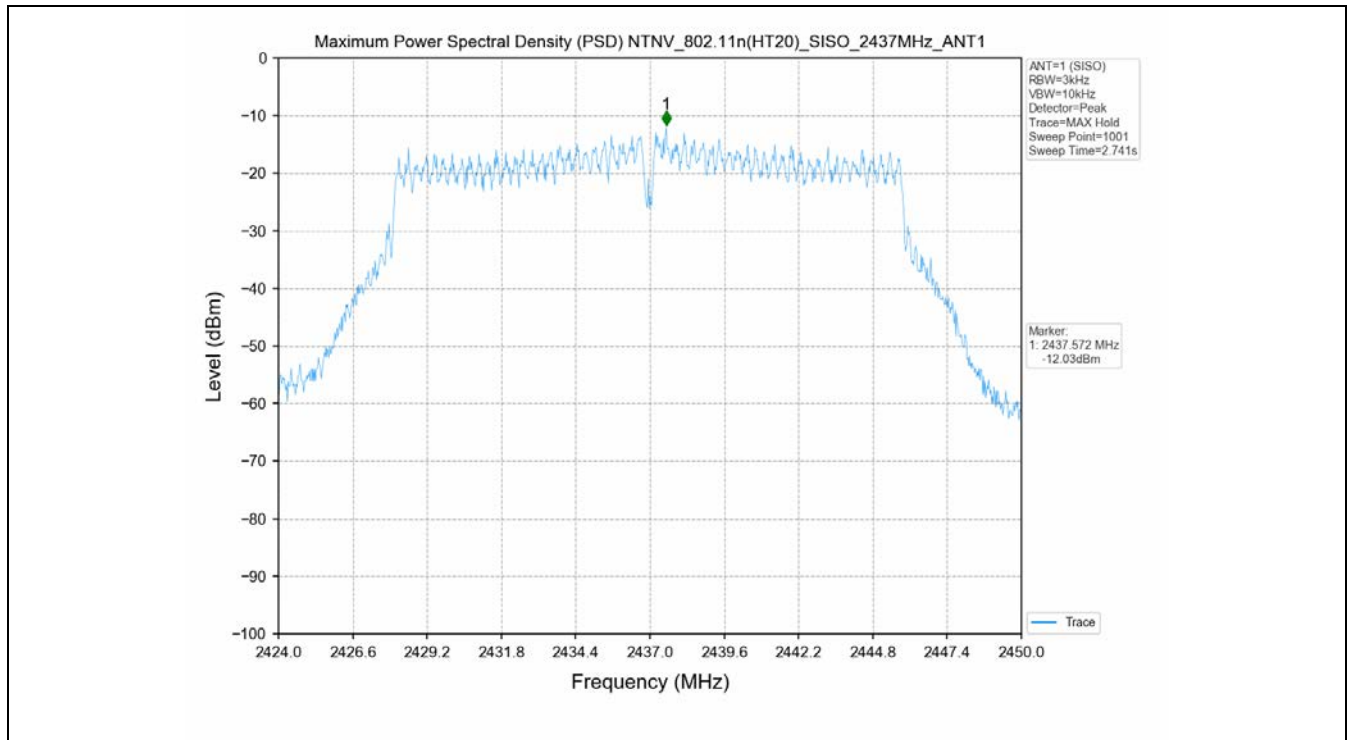
### 4.2 Test Graph













## 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 (dBc) | Verdict |
|---------------|-----------------|---------|---------|-----------------------------------|--------------|---------|
| 802.11b       | 2412            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
|               | 2437            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
|               | 2462            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
| 802.11g       | 2412            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
|               | 2437            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
|               | 2462            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
| 802.11n(HT20) | 2412            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
|               | 2437            | SISO    | 1       | Refer to test graph               | -20          | PASS    |
|               | 2462            | SISO    | 1       | Refer to test graph               | -20          | PASS    |

### 5.2 Test Graph

