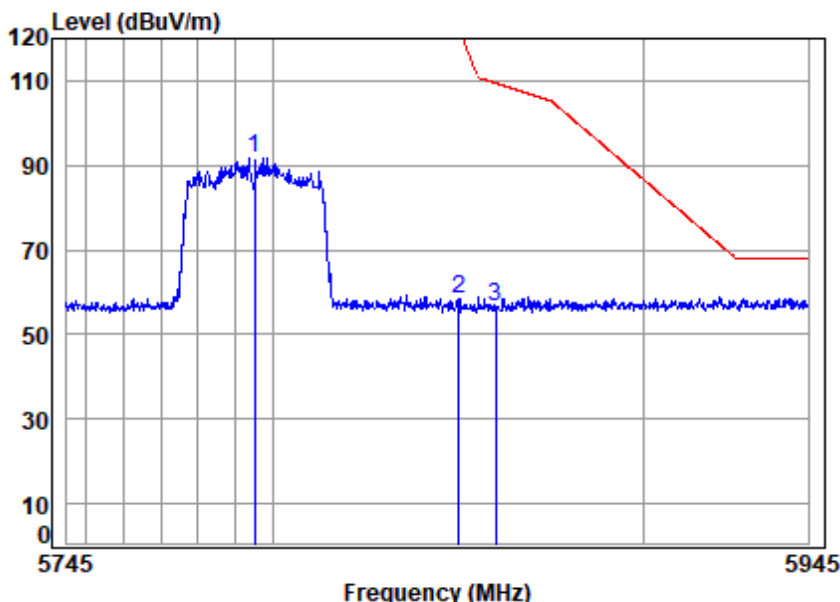


Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



Site : chamber  
Condition: 3m HORIZONTAL  
Job No : 07375CR/07376CR  
Mode : 5795 Band edge  
: 5G WIFI 11AC40

|      |          | Cable  | Ant    | Preamp | Read   | Limit  | Over   |             |
|------|----------|--------|--------|--------|--------|--------|--------|-------------|
| Freq | Loss     | Factor | Factor | Level  | Level  | Line   | Limit  | Remark      |
| MHz  | dB       | dB/m   | dB     | dBuV   | dBuV/m | dBuV/m | dB     |             |
| 1    | 5795.000 | 8.23   | 34.90  | 42.37  | 90.93  | 91.69  | -----  | peak        |
| 2    | 5850.000 | 8.24   | 34.95  | 42.33  | 57.45  | 58.31  | 122.20 | -63.89 peak |
| 3    | 5860.000 | 8.24   | 34.96  | 42.33  | 55.51  | 56.38  | 109.40 | -53.02 peak |

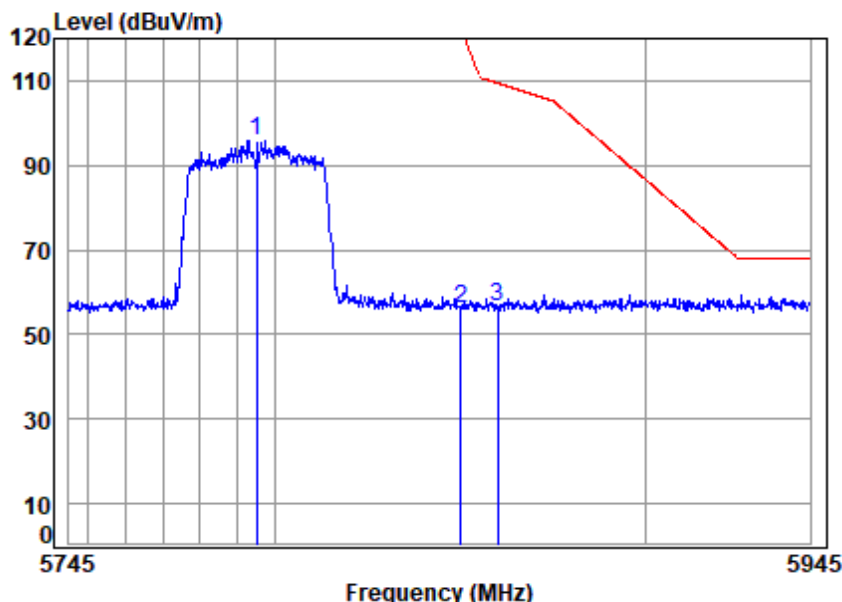


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Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



Site : chamber  
Condition: 3m VERTICAL  
Job No : 07375CR/07376CR  
Mode : 5795 Band edge  
: 5G WIFI 11AC40

|      |          | Cable | Ant    | Preamp | Read  | Limit  | Over   |              |
|------|----------|-------|--------|--------|-------|--------|--------|--------------|
| Freq |          | Loss  | Factor | Factor | Level | Level  | Line   | Limit Remark |
|      | MHz      | dB    | dB/m   | dB     | dBuV  | dBuV/m | dBuV/m | dB           |
| 1    | 5795.000 | 8.23  | 34.90  | 42.37  | 95.14 | 95.90  | -----  | ----- peak   |
| 2    | 5850.000 | 8.24  | 34.95  | 42.33  | 55.35 | 56.21  | 122.20 | -65.99 peak  |
| 3    | 5860.000 | 8.24  | 34.96  | 42.33  | 55.69 | 56.56  | 109.40 | -52.84 peak  |



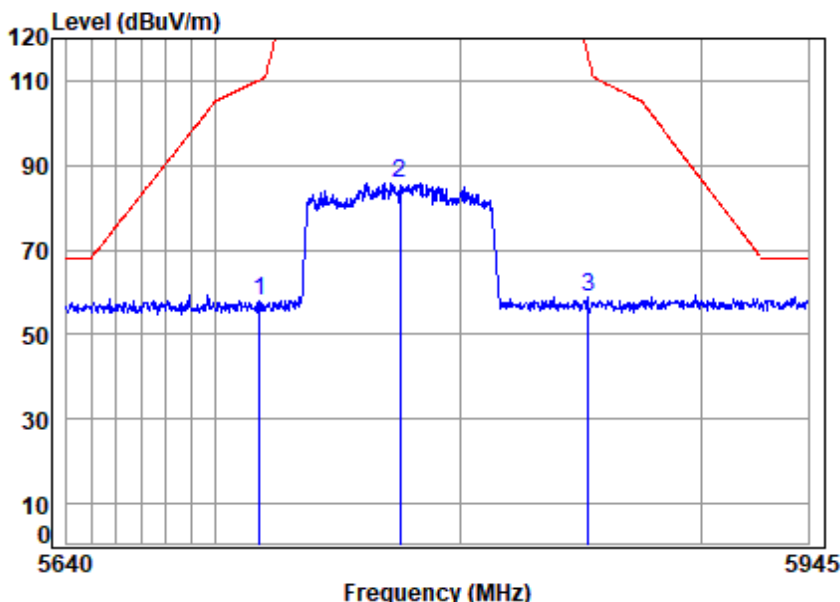
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Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz



Site : chamber  
Condition: 3m HORIZONTAL  
Job No : 07375CR/07376CR  
Mode : 5775 Band edge  
: 5G WIFI 11AC80

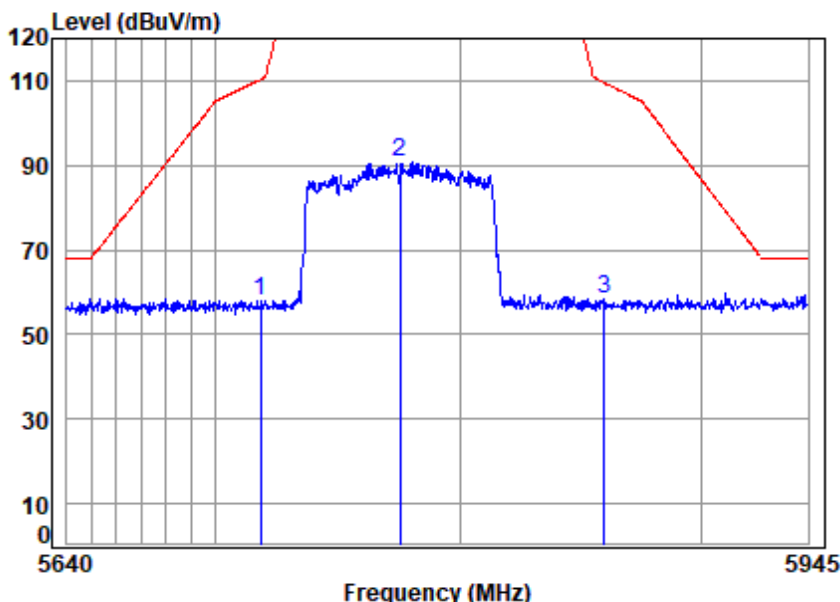
|      |          | Cable | Ant    | Preamp | Read  |        | Limit  | Over   |        |
|------|----------|-------|--------|--------|-------|--------|--------|--------|--------|
| Freq |          | Loss  | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|      | MHz      | dB    | dB/m   | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1    | 5717.761 | 8.22  | 34.82  | 42.41  | 57.14 | 57.77  | 110.17 | -52.40 | peak   |
| 2    | 5775.000 | 8.22  | 34.88  | 42.38  | 85.23 | 85.95  | -----  | -----  | peak   |
| 3    | 5852.732 | 8.24  | 34.96  | 42.33  | 57.84 | 58.71  | 115.97 | -57.26 | peak   |



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Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz



Site : chamber  
Condition: 3m VERTICAL  
Job No : 07375CR/07376CR  
Mode : 5775 Band edge  
: 5G WIFI 11AC80

|      |          | Cable | Ant    | Preamp | Read  |        | Limit  | Over   |        |
|------|----------|-------|--------|--------|-------|--------|--------|--------|--------|
| Freq |          | Loss  | Factor | Factor | Level | Level  | Line   | Limit  | Remark |
|      | MHz      | dB    | dB/m   | dB     | dBuV  | dBuV/m | dBuV/m | dB     |        |
| 1    | 5718.364 | 8.22  | 34.82  | 42.41  | 57.43 | 58.06  | 110.34 | -52.28 | peak   |
| 2    | 5775.000 | 8.22  | 34.88  | 42.38  | 89.98 | 90.70  | -----  | -----  | peak   |
| 3    | 5859.518 | 8.24  | 34.96  | 42.33  | 57.71 | 58.58  | 109.53 | -50.95 | peak   |



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### 7.10 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407(g)  
Test Method: ANSI C63.10 (2013) Section 6.8

#### 7.10.1 E.U.T. Operation

N/A

#### 7.10.2 Test Setup Diagram

N/A

#### 7.10.3 Measurement Procedure and Data

The applicant declares that the emissions are maintained within the band of operation under all conditions of normal operation as specified in the user's manual and meets 47 CFR Part 15, Subpart E 15.407(g) requirements.



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## 7.11 Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1  
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

| Test item                         | Limit                                                                                                     | Applicability                                |                                |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------|
|                                   |                                                                                                           | Master Device or client with Radar Detection | Client without Radar Detection |
| Non-occupancy period              | Minimum 30 minutes                                                                                        | Yes                                          | Not required                   |
| Channel Availability Check Time   | 60 seconds                                                                                                | Yes                                          | Not required                   |
| Channel Move Time                 | 10 seconds<br>See Note 1.                                                                                 | Yes                                          | Yes                            |
| Channel Closing Transmission Time | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.<br>See Notes 1 and 2. | Yes                                          | Yes                            |
| U-NII Detection Bandwidth         | Minimum 100% of the U-NII 99% transmission power bandwidth.<br>See Note 3.                                | Yes                                          | Not required                   |

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

### 7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C Humidity: 52.6 % RH Atmospheric Pressure: 1000 mbar



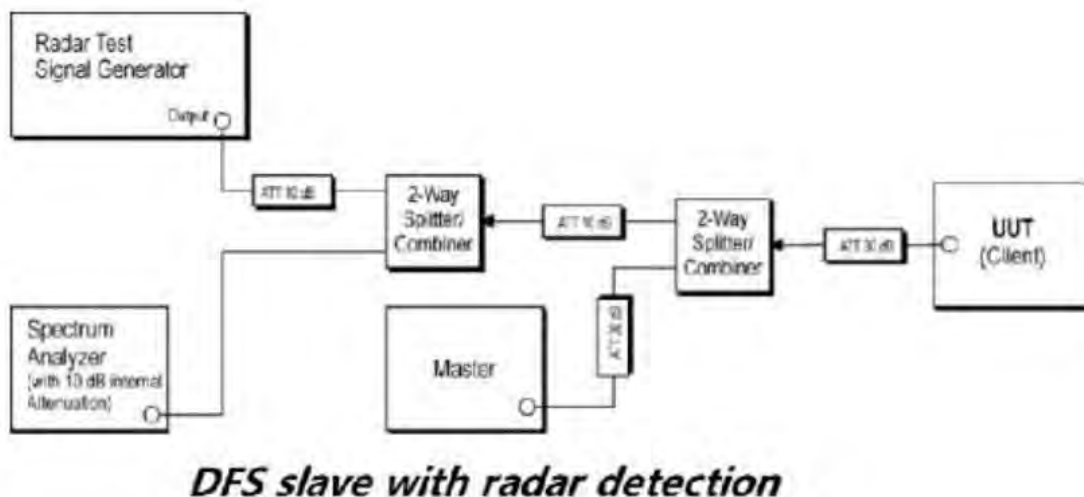
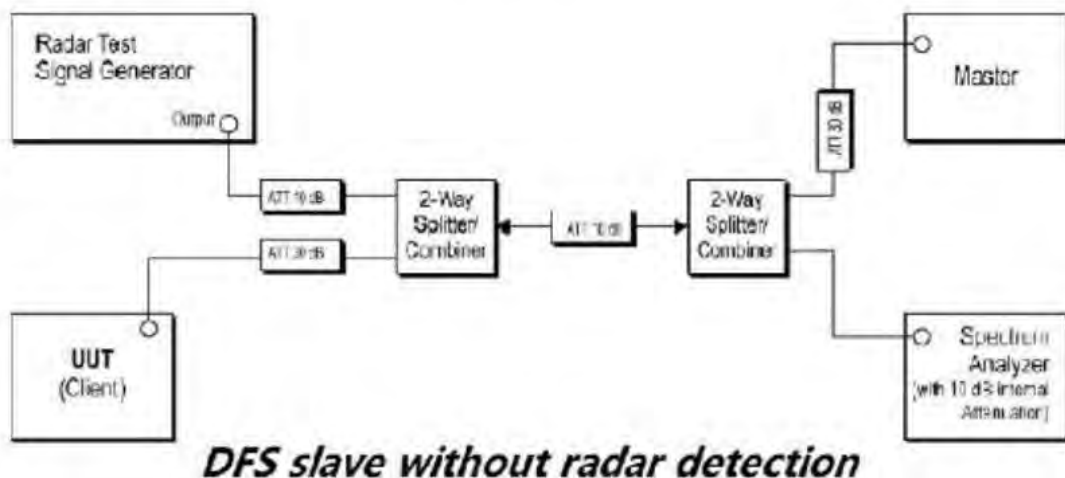
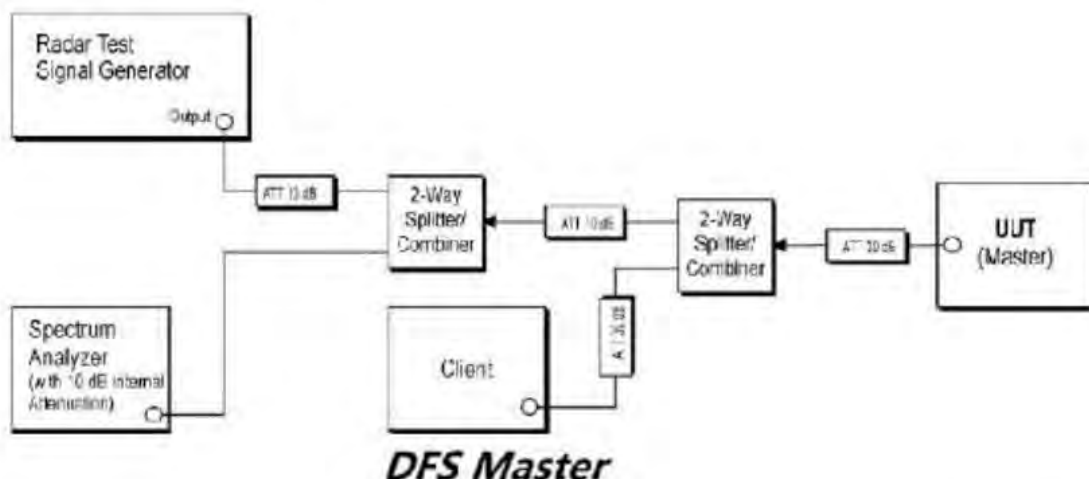
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### 7.11.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test            | 02        | TX mode (U-NII-2A)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Pre-scan              | 03        | TX mode (U-NII-2C)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |

### 7.11.3 Test Setup Diagram



#### 7.11.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by:  $Dwell (0.3ms) = S (12000ms) / B (4000)$ ; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by:  $C (ms) = N \times Dwell (0.3ms)$ ; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer To Appendix For Details

## 7.12 Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1  
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

| Test item                         | Limit                                                                                                     | Applicability                                |                                |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------|
|                                   |                                                                                                           | Master Device or client with Radar Detection | Client without Radar Detection |
| Non-occupancy period              | Minimum 30 minutes                                                                                        | Yes                                          | Not required                   |
| Channel Availability Check Time   | 60 seconds                                                                                                | Yes                                          | Not required                   |
| Channel Move Time                 | 10 seconds<br>See Note 1.                                                                                 | Yes                                          | Yes                            |
| Channel Closing Transmission Time | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.<br>See Notes 1 and 2. | Yes                                          | Yes                            |
| U-NII Detection Bandwidth         | Minimum 100% of the U-NII 99% transmission power bandwidth.<br>See Note 3.                                | Yes                                          | Not required                   |

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

### 7.12.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C Humidity: 52.6 % RH Atmospheric Pressure: 1000 mbar



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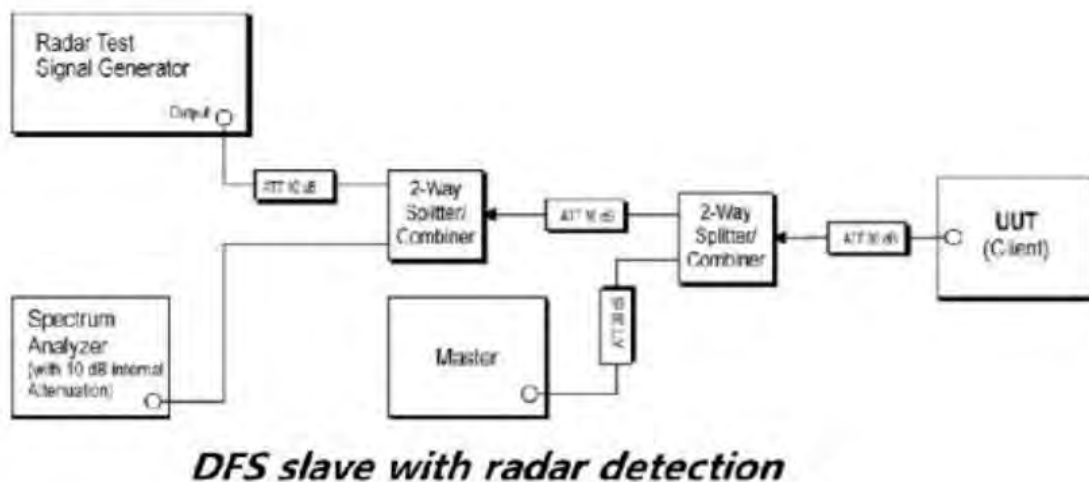
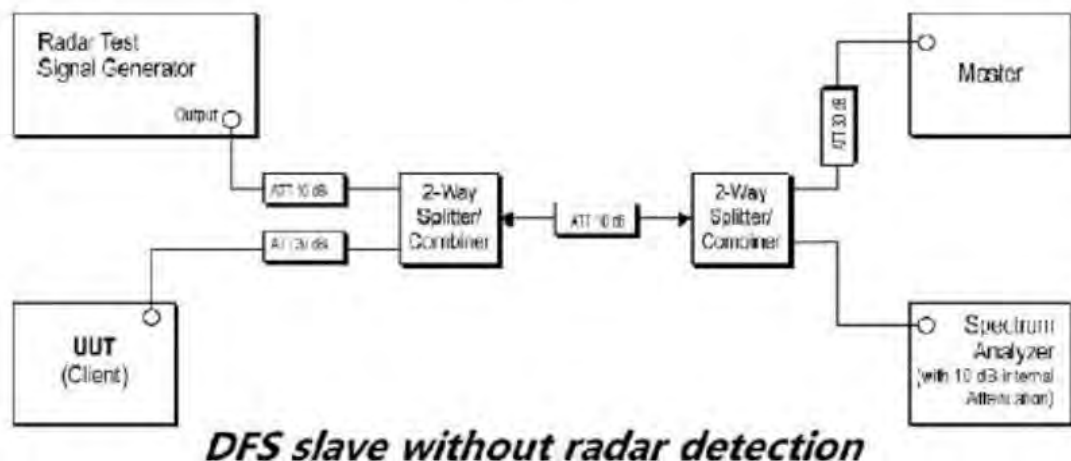
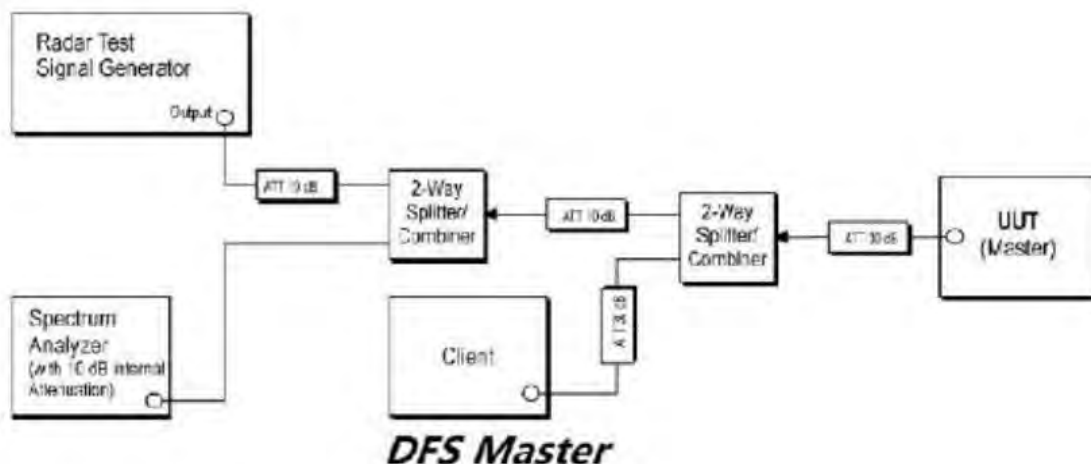
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**7.12.2 Test Mode Description**

| Pre-scan /<br>Final test | Mode<br>Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test               | 02           | TX mode (U-NII-2A)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Pre-scan                 | 03           | TX mode (U-NII-2C)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |

### 7.12.3 Test Setup Diagram



#### 7.12.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by:  $Dwell (0.3ms) = S (12000ms) / B (4000)$ ; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by:  $C (ms) = N \times Dwell (0.3ms)$ ; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer To Appendix For Details

### 7.13 Non-occupancy period

Test Requirement KDB 905462 D02 Section 5.1  
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

| Test item                         | Limit                                                                                                     | Applicability                                |                                |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------|
|                                   |                                                                                                           | Master Device or client with Radar Detection | Client without Radar Detection |
| Non-occupancy period              | Minimum 30 minutes                                                                                        | Yes                                          | Not required                   |
| Channel Availability Check Time   | 60 seconds                                                                                                | Yes                                          | Not required                   |
| Channel Move Time                 | 10 seconds<br>See Note 1.                                                                                 | Yes                                          | Yes                            |
| Channel Closing Transmission Time | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.<br>See Notes 1 and 2. | Yes                                          | Yes                            |
| U-NII Detection Bandwidth         | Minimum 100% of the U-NII 99% transmission power bandwidth.<br>See Note 3.                                | Yes                                          | Not required                   |

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

#### 7.13.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C Humidity: 52.6 % RH Atmospheric Pressure: 1000 mbar



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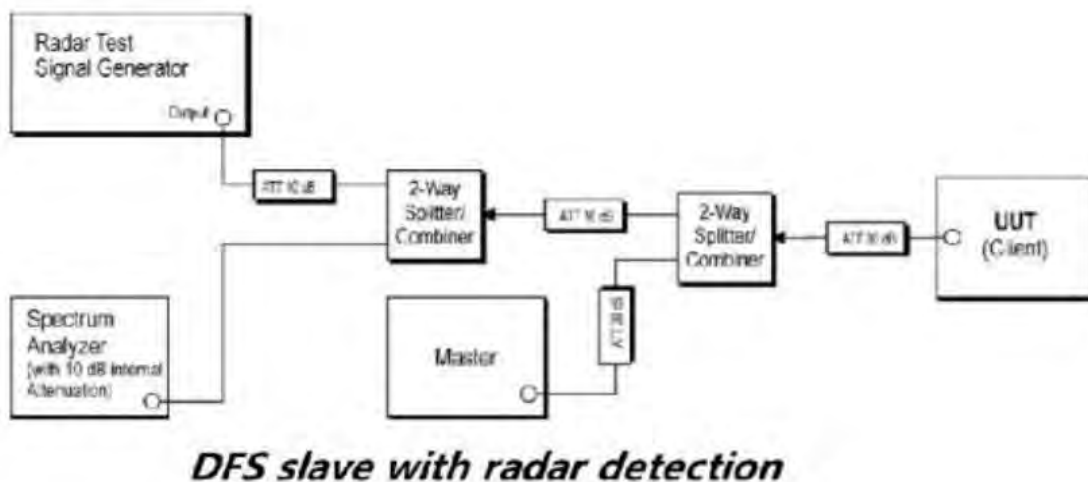
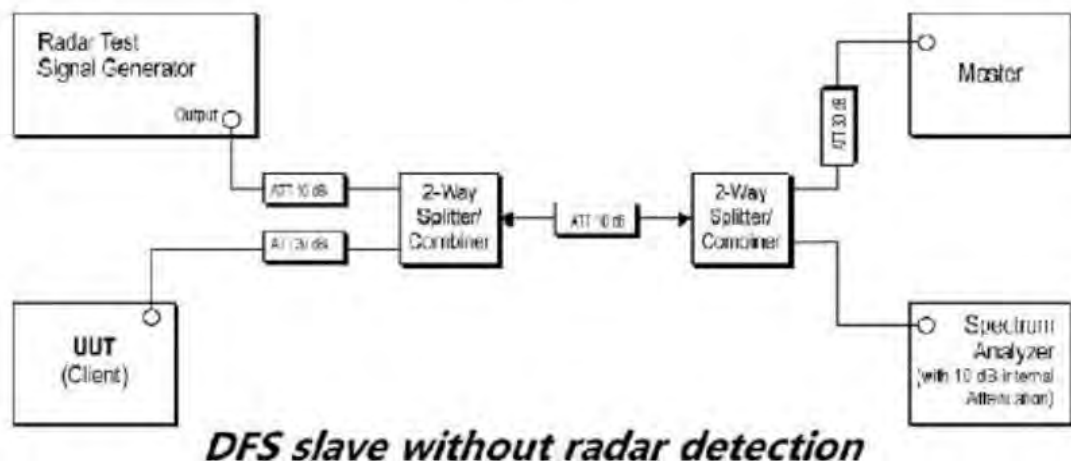
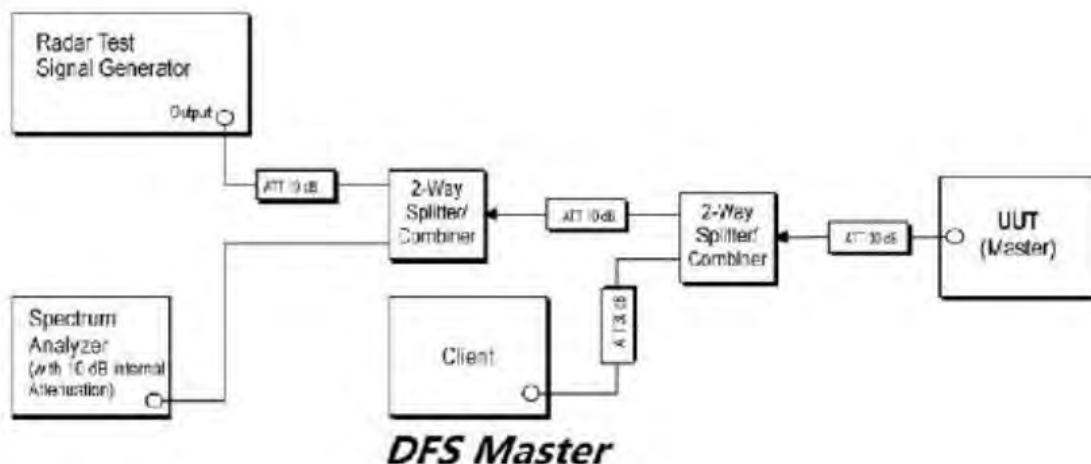
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**7.13.2 Test Mode Description**

| Pre-scan /<br>Final test | Mode<br>Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final test               | 02           | TX mode (U-NII-2A)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Pre-scan                 | 03           | TX mode (U-NII-2C)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |

### 7.13.3 Test Setup Diagram



#### 7.13.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by:  $Dwell (0.3ms) = S (12000ms) / B (4000)$ ; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by:  $C (ms) = N \times Dwell (0.3ms)$ ; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer To Appendix For Details



## 8 Test Setup Photo

Please refer to setup photos.

## 9 EUT Constructional Details (EUT Photos)

Please Refer to external and internal photos for details.



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## 10 Appendix

### Appendix for 15.407

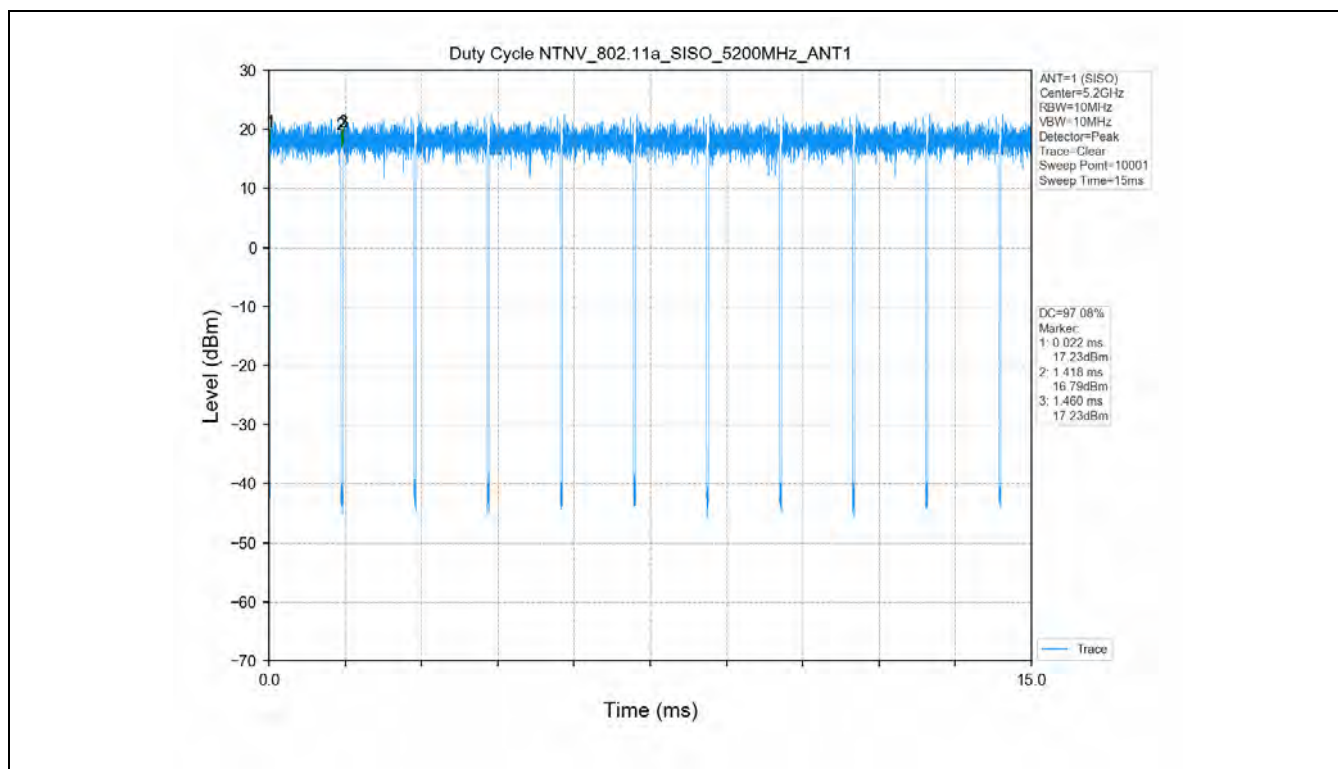
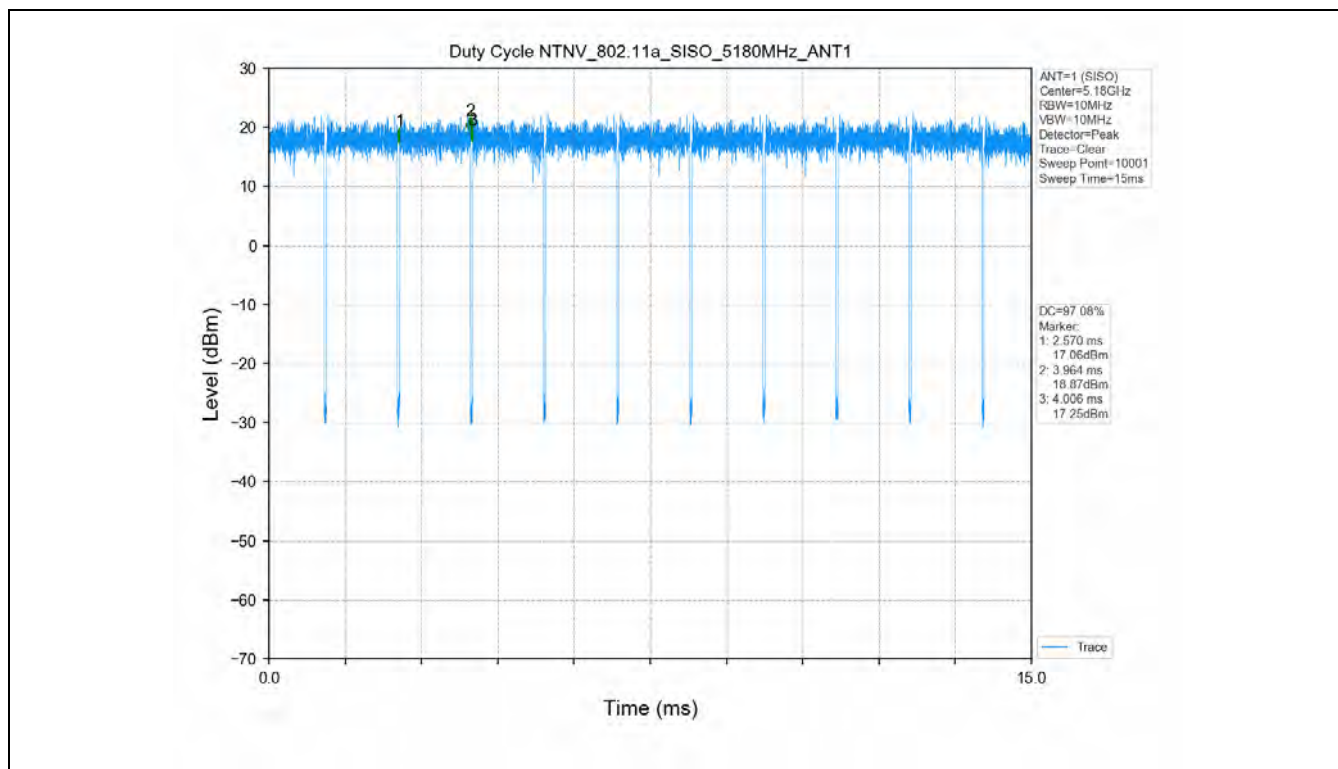
#### 1. Duty Cycle

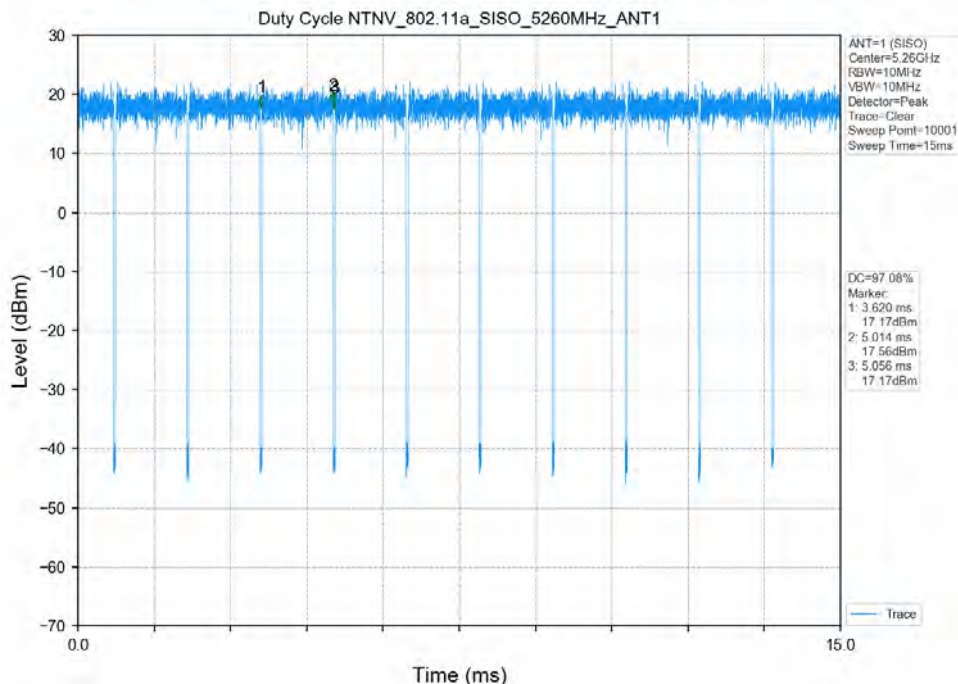
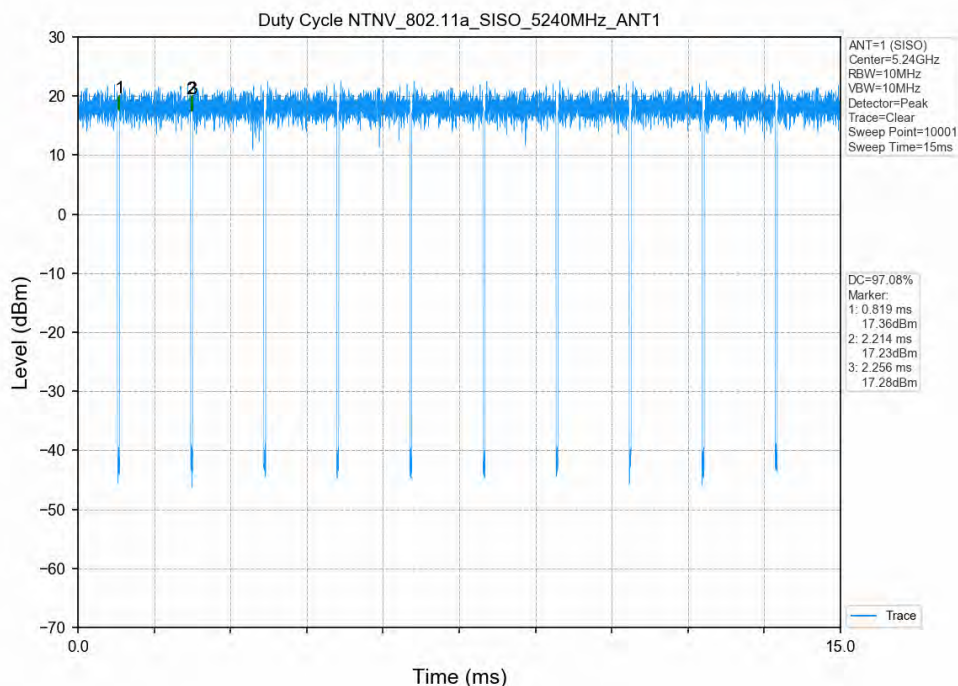
##### 1.1 Test Result

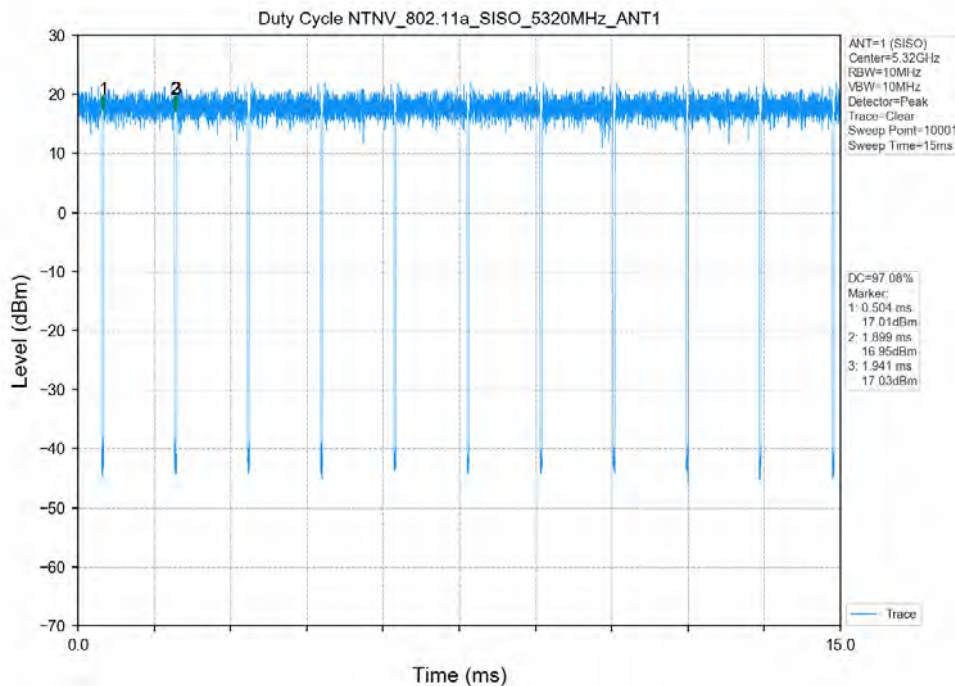
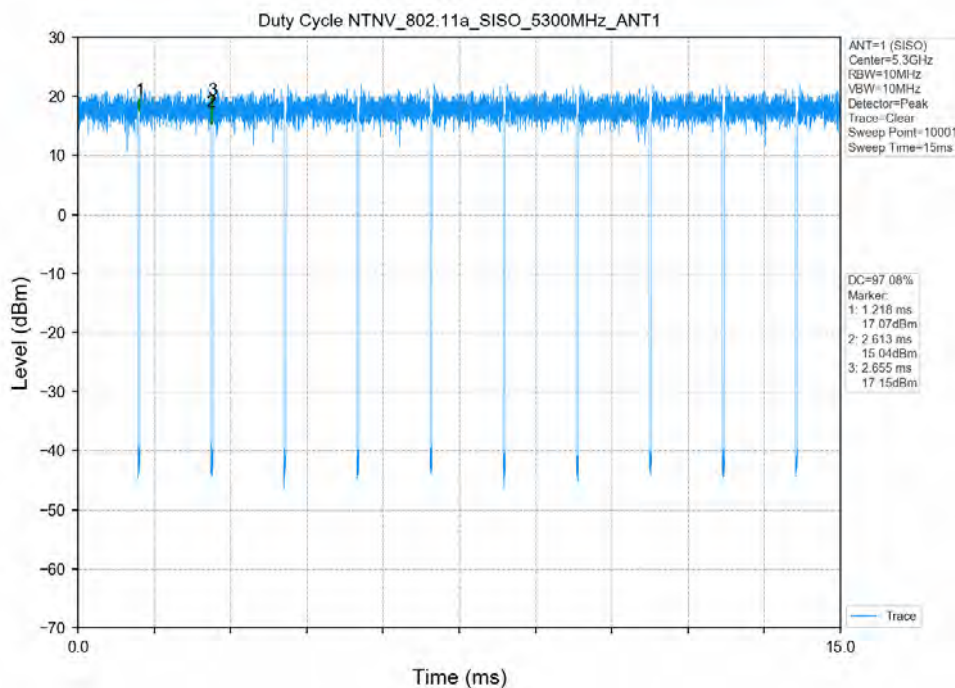
| Test Mode     | Channel Frequency (MHz) | TX Type | ANT No. | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) |
|---------------|-------------------------|---------|---------|-----------|-------------|----------------|-----------------------------------|
| 802.11a       | 5180                    | SISO    | 1       | 1.394     | 1.436       | 97.08          | 0.13                              |
|               | 5200                    | SISO    | 1       | 1.396     | 1.438       | 97.08          | 0.13                              |
|               | 5240                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5260                    | SISO    | 1       | 1.394     | 1.436       | 97.08          | 0.13                              |
|               | 5300                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5320                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5500                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5580                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5600                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5700                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5745                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5785                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
|               | 5825                    | SISO    | 1       | 1.395     | 1.437       | 97.08          | 0.13                              |
| 802.11n(HT20) | 5180                    | SISO    | 1       | 1.307     | 1.351       | 96.74          | 0.14                              |
|               | 5200                    | SISO    | 1       | 1.308     | 1.350       | 96.89          | 0.14                              |
|               | 5240                    | SISO    | 1       | 1.307     | 1.351       | 96.74          | 0.14                              |
|               | 5260                    | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 5300                    | SISO    | 1       | 1.308     | 1.350       | 96.89          | 0.14                              |
|               | 5320                    | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 5500                    | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 5580                    | SISO    | 1       | 1.306     | 1.350       | 96.74          | 0.14                              |
|               | 5600                    | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 5700                    | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 5745                    | SISO    | 1       | 1.307     | 1.351       | 96.74          | 0.14                              |
|               | 5785                    | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
|               | 5825                    | SISO    | 1       | 1.308     | 1.351       | 96.82          | 0.14                              |
| 802.11n(HT40) | 5190                    | SISO    | 1       | 0.647     | 0.689       | 93.90          | 0.27                              |
|               | 5230                    | SISO    | 1       | 0.648     | 0.690       | 93.91          | 0.27                              |
|               | 5270                    | SISO    | 1       | 0.647     | 0.689       | 93.90          | 0.27                              |
|               | 5310                    | SISO    | 1       | 0.648     | 0.690       | 93.91          | 0.27                              |
|               | 5510                    | SISO    | 1       | 0.648     | 0.690       | 93.91          | 0.27                              |
|               | 5550                    | SISO    | 1       | 0.648     | 0.690       | 93.91          | 0.27                              |

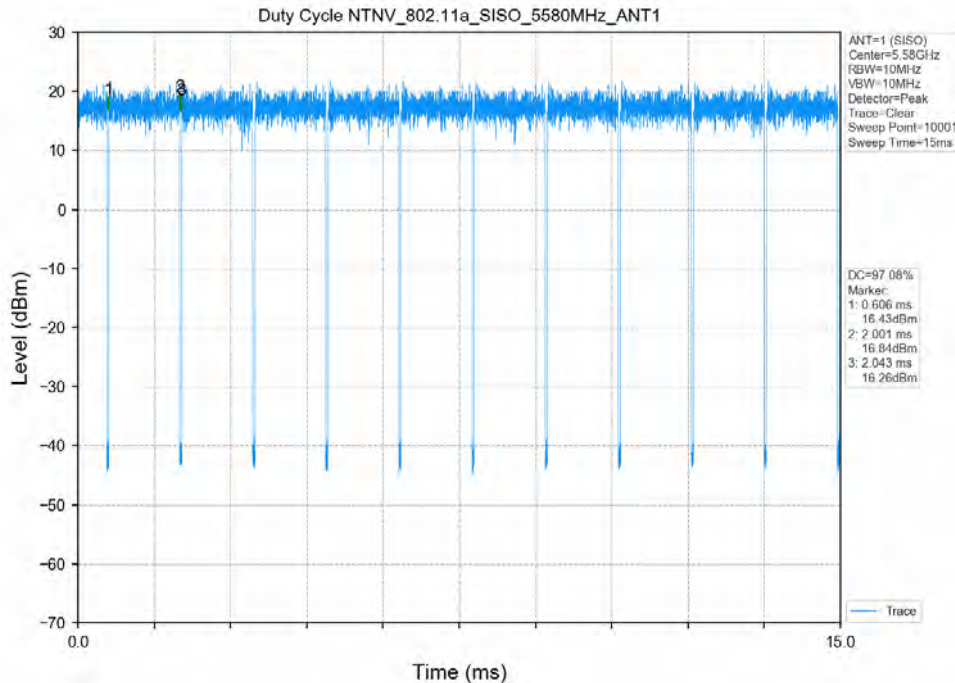
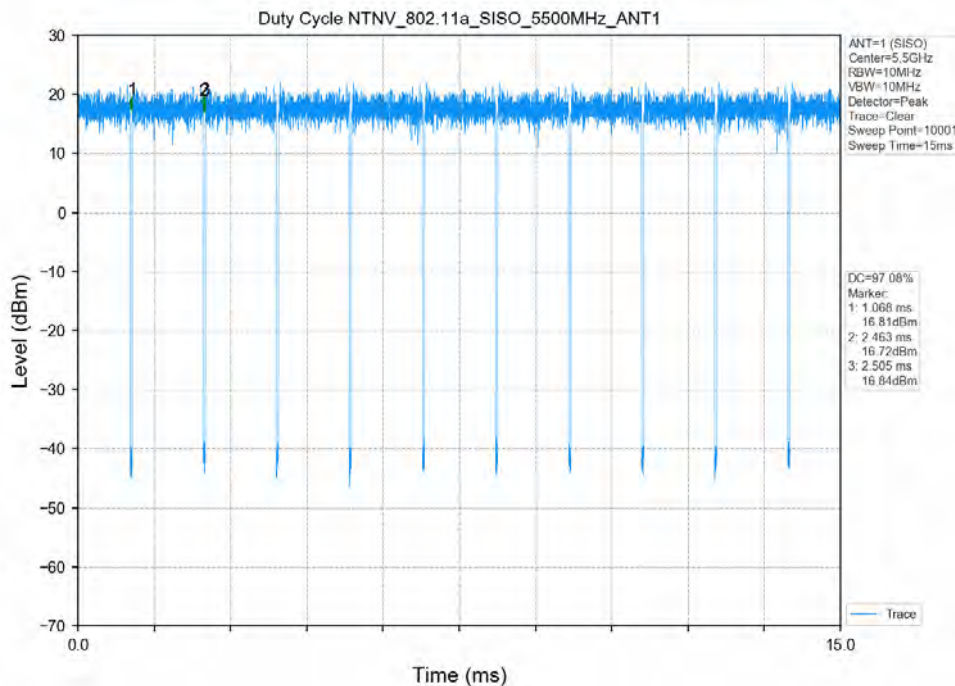
|                 |      |      |   |       |       |       |      |
|-----------------|------|------|---|-------|-------|-------|------|
|                 | 5590 | SISO | 1 | 0.648 | 0.690 | 93.91 | 0.27 |
|                 | 5670 | SISO | 1 | 0.648 | 0.690 | 93.91 | 0.27 |
|                 | 5755 | SISO | 1 | 0.647 | 0.689 | 93.90 | 0.27 |
|                 | 5795 | SISO | 1 | 0.647 | 0.689 | 93.90 | 0.27 |
| 802.11ac(VHT20) | 5180 | SISO | 1 | 1.316 | 1.359 | 96.84 | 0.14 |
|                 | 5200 | SISO | 1 | 1.316 | 1.360 | 96.76 | 0.14 |
|                 | 5240 | SISO | 1 | 1.316 | 1.358 | 96.91 | 0.14 |
|                 | 5260 | SISO | 1 | 1.316 | 1.359 | 96.84 | 0.14 |
|                 | 5300 | SISO | 1 | 1.316 | 1.360 | 96.76 | 0.14 |
|                 | 5320 | SISO | 1 | 1.316 | 1.359 | 96.84 | 0.14 |
|                 | 5500 | SISO | 1 | 1.316 | 1.360 | 96.76 | 0.14 |
|                 | 5580 | SISO | 1 | 1.316 | 1.359 | 96.84 | 0.14 |
|                 | 5600 | SISO | 1 | 1.316 | 1.359 | 96.84 | 0.14 |
|                 | 5700 | SISO | 1 | 1.316 | 1.359 | 96.84 | 0.14 |
|                 | 5745 | SISO | 1 | 1.316 | 1.358 | 96.91 | 0.14 |
|                 | 5785 | SISO | 1 | 1.316 | 1.358 | 96.91 | 0.14 |
|                 | 5825 | SISO | 1 | 1.316 | 1.360 | 96.76 | 0.14 |
| 802.11ac(VHT40) | 5190 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
|                 | 5230 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
|                 | 5270 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
|                 | 5310 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
|                 | 5510 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
|                 | 5550 | SISO | 1 | 0.655 | 0.697 | 93.97 | 0.27 |
|                 | 5590 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
|                 | 5670 | SISO | 1 | 0.658 | 0.698 | 94.27 | 0.26 |
|                 | 5755 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
|                 | 5795 | SISO | 1 | 0.656 | 0.698 | 93.98 | 0.27 |
| 802.11ac(VHT80) | 5210 | SISO | 1 | 0.328 | 0.366 | 89.62 | 0.48 |
|                 | 5290 | SISO | 1 | 0.326 | 0.366 | 89.07 | 0.50 |
|                 | 5530 | SISO | 1 | 0.328 | 0.367 | 89.37 | 0.49 |
|                 | 5610 | SISO | 1 | 0.328 | 0.367 | 89.37 | 0.49 |
|                 | 5775 | SISO | 1 | 0.328 | 0.366 | 89.62 | 0.48 |

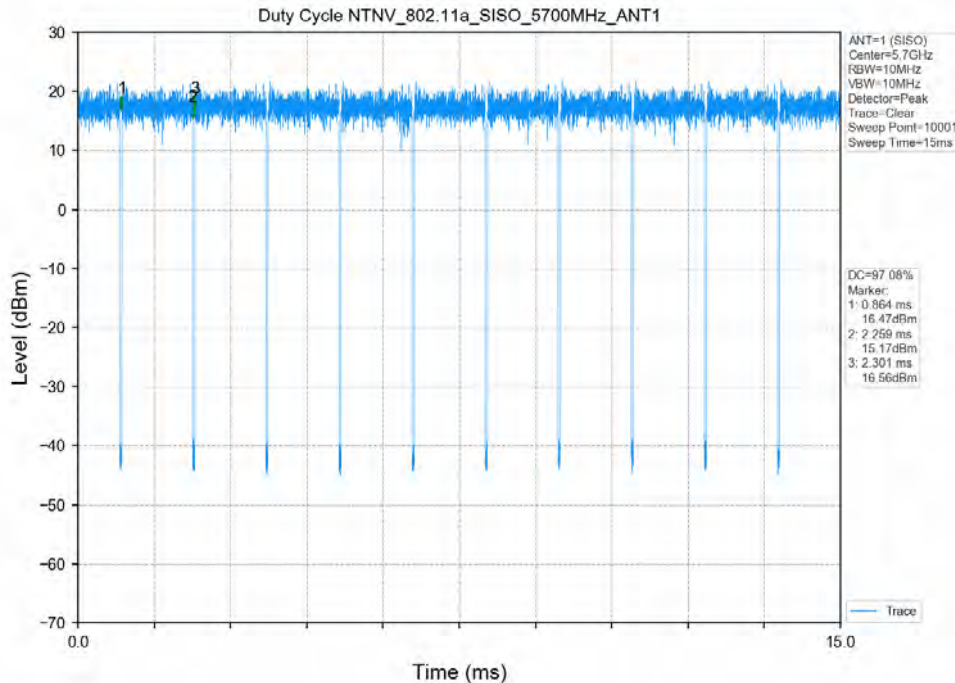
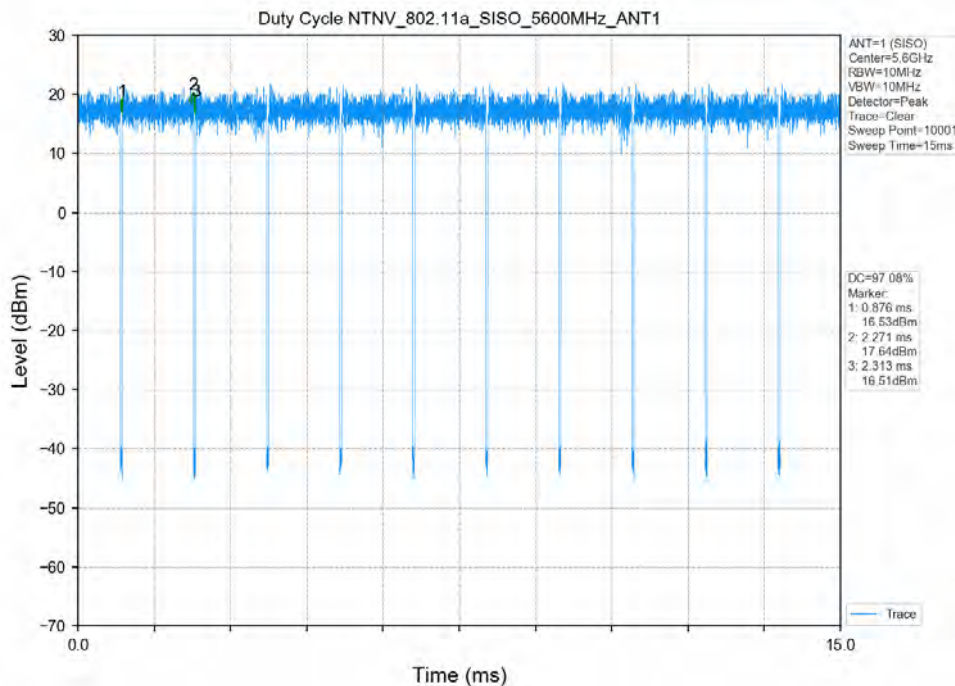
### 1.2 Test Graph

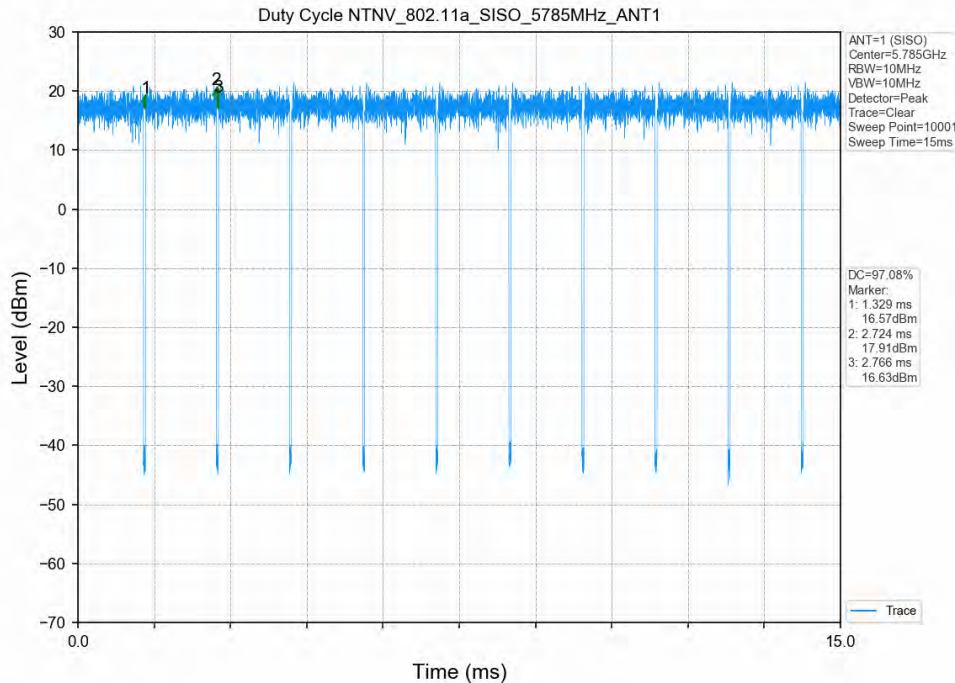
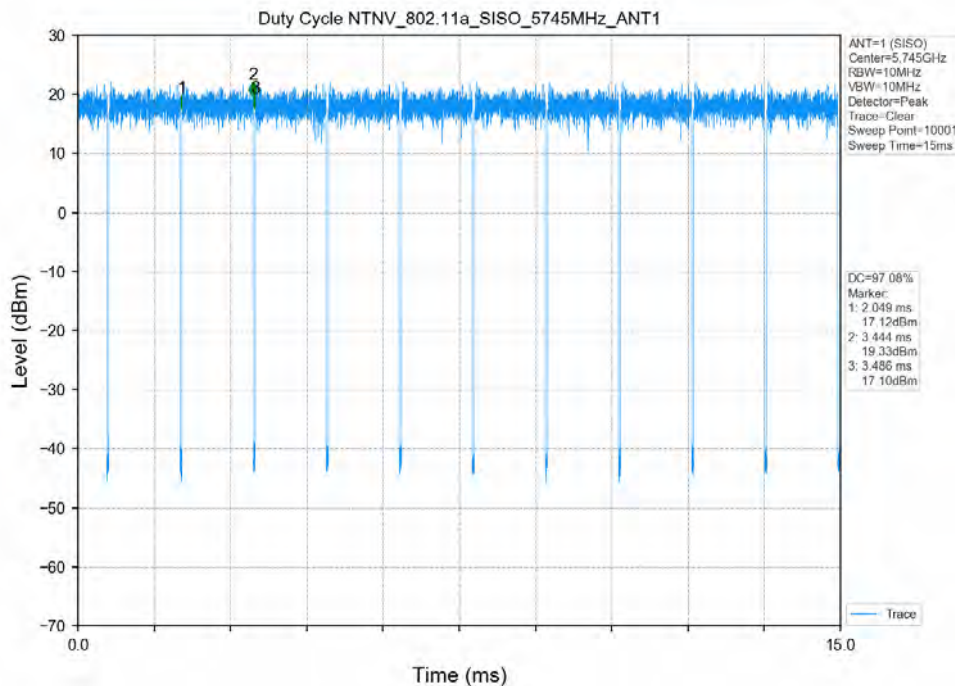


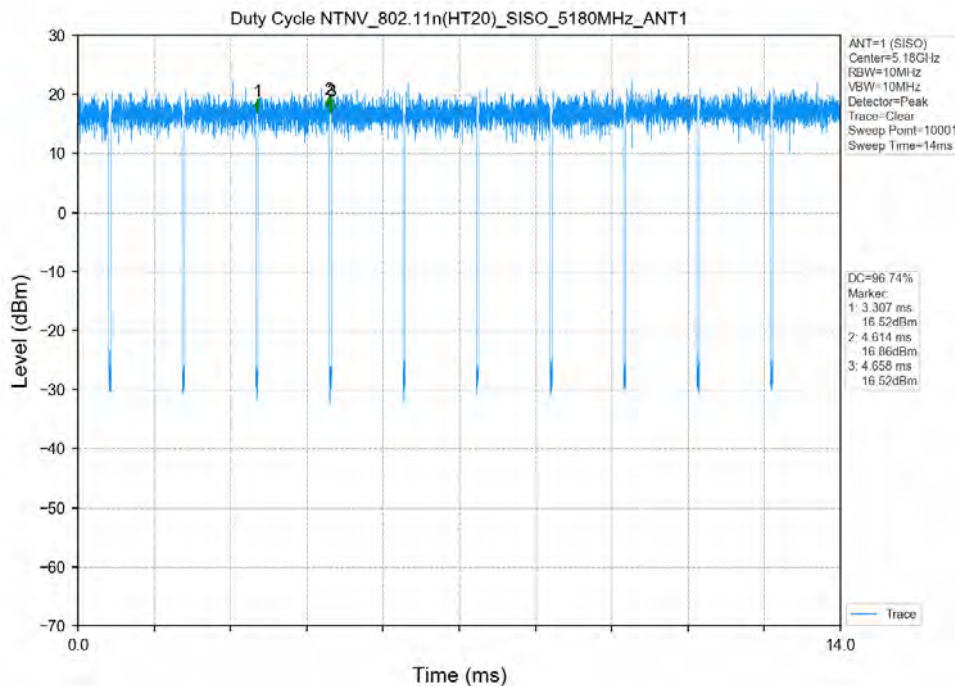
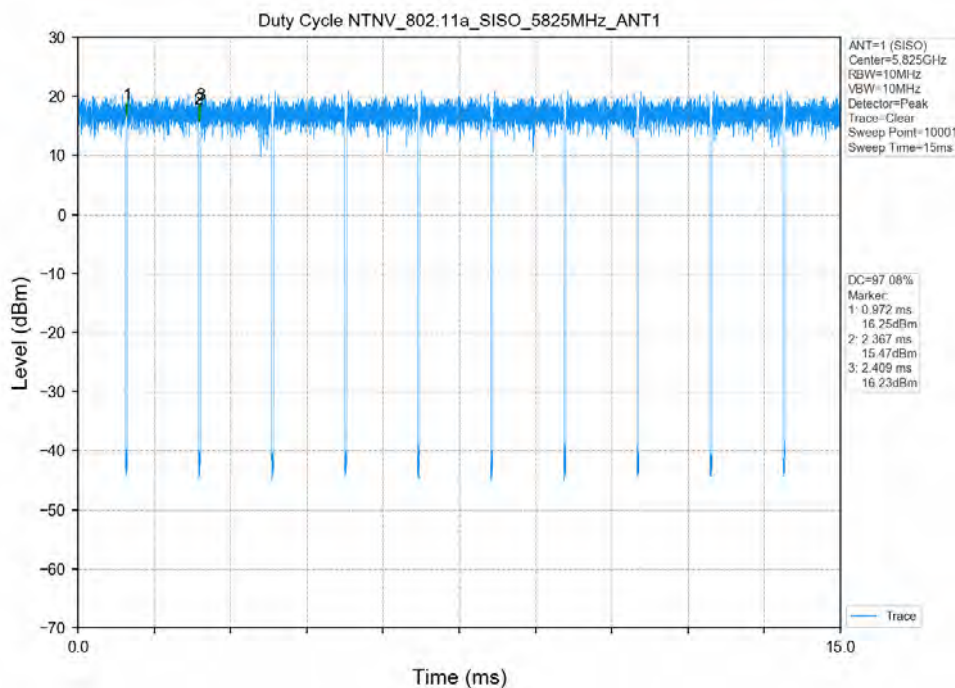


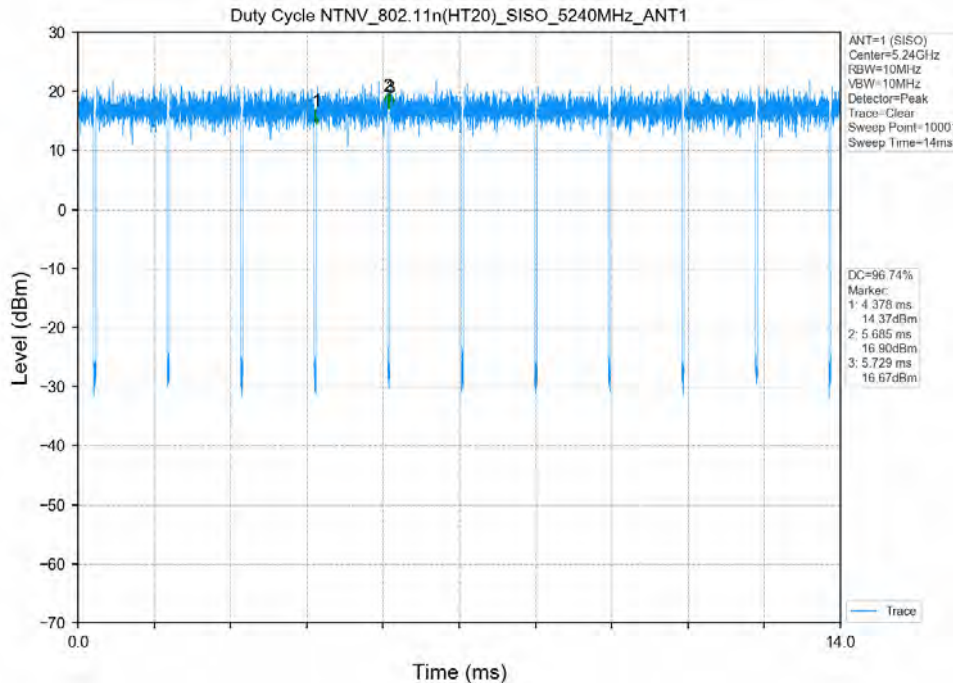
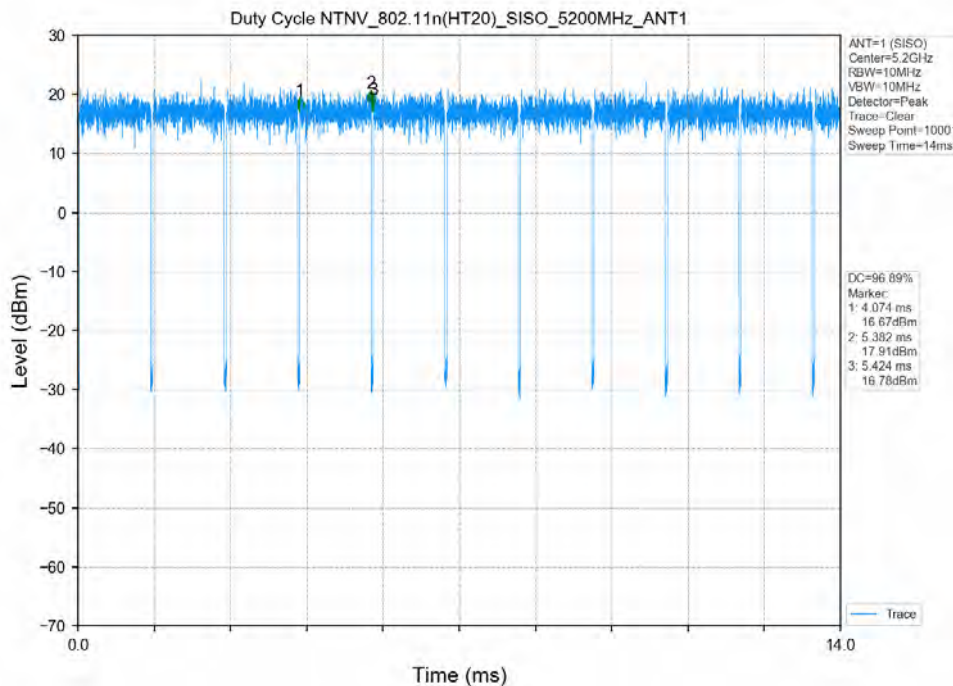


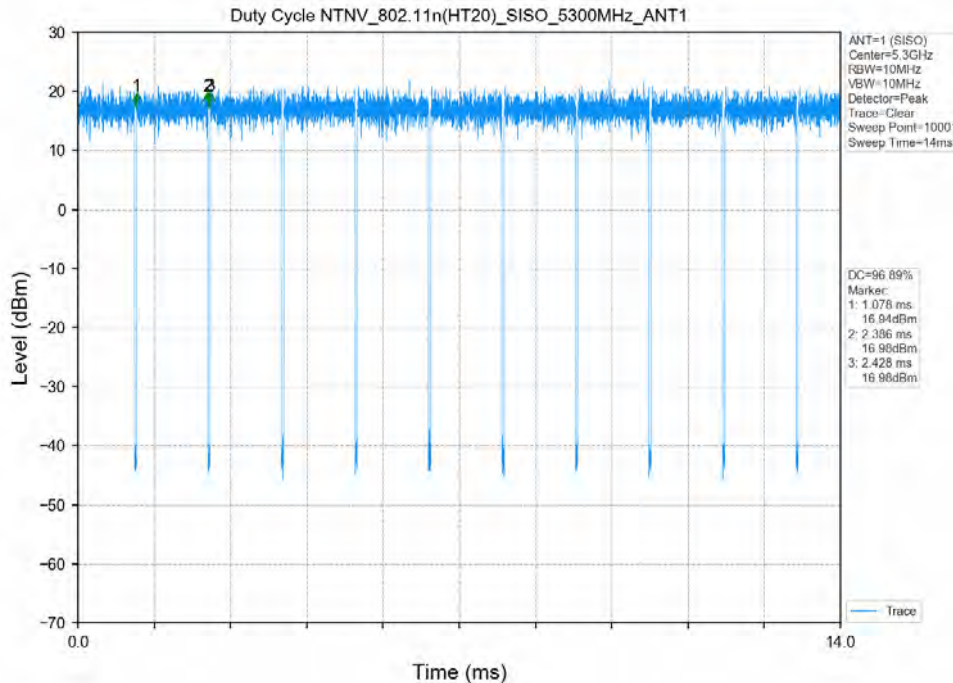
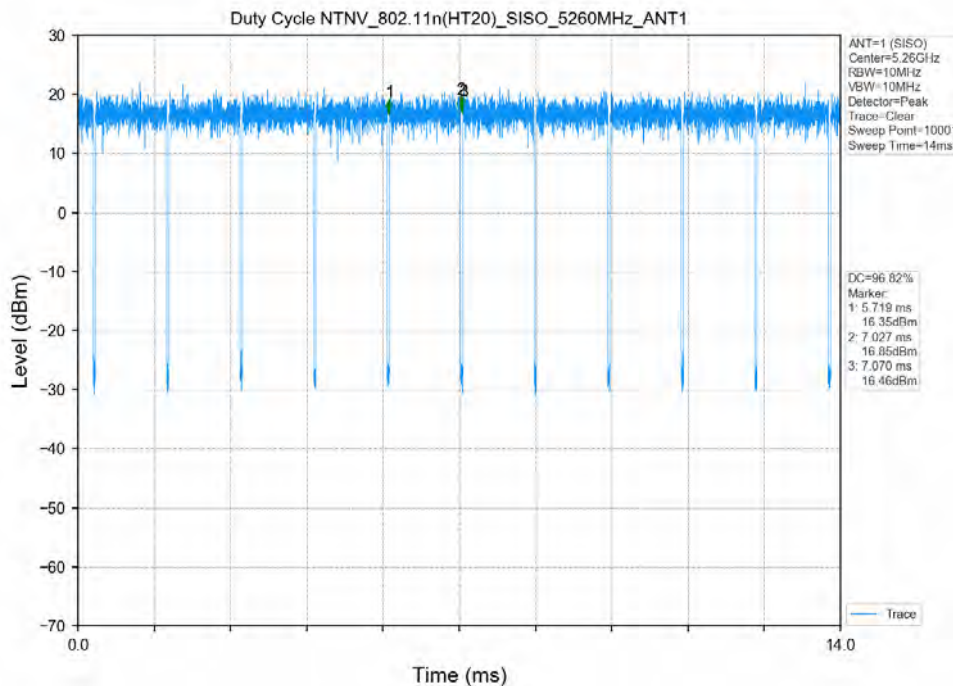


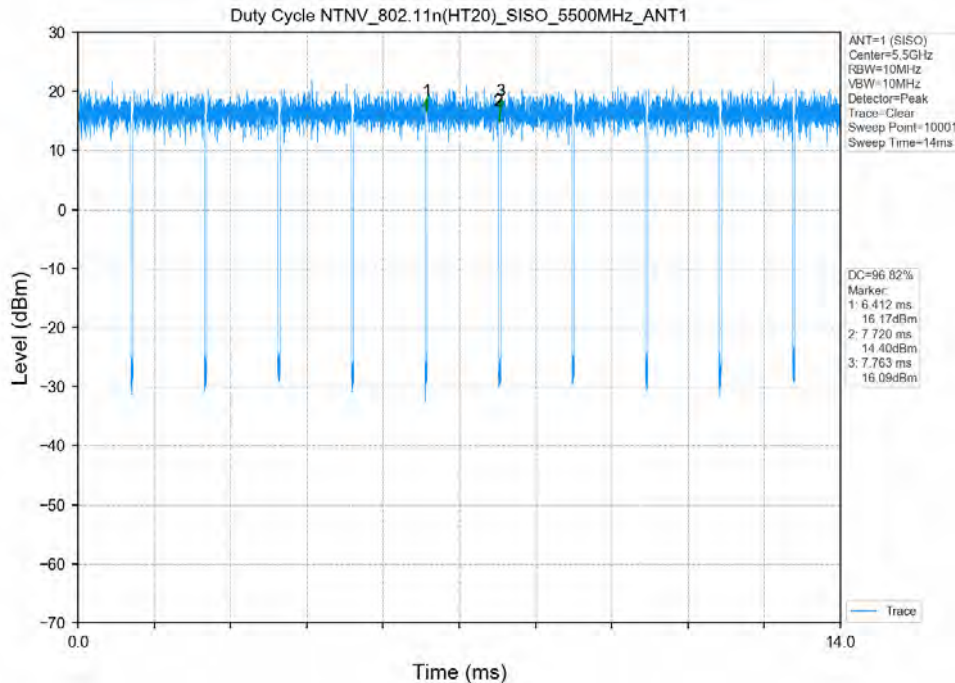
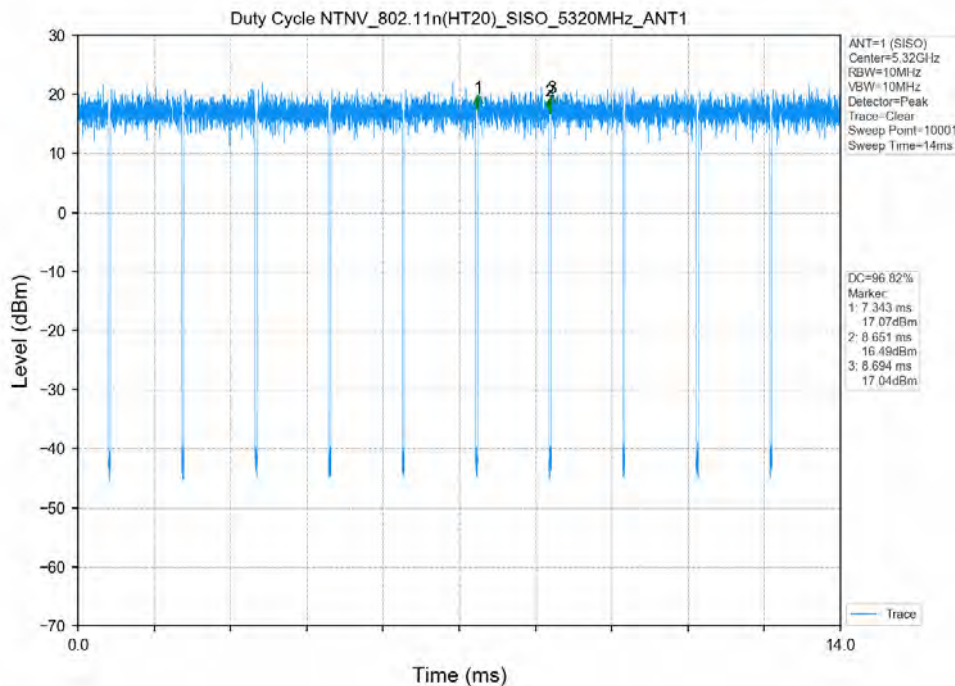


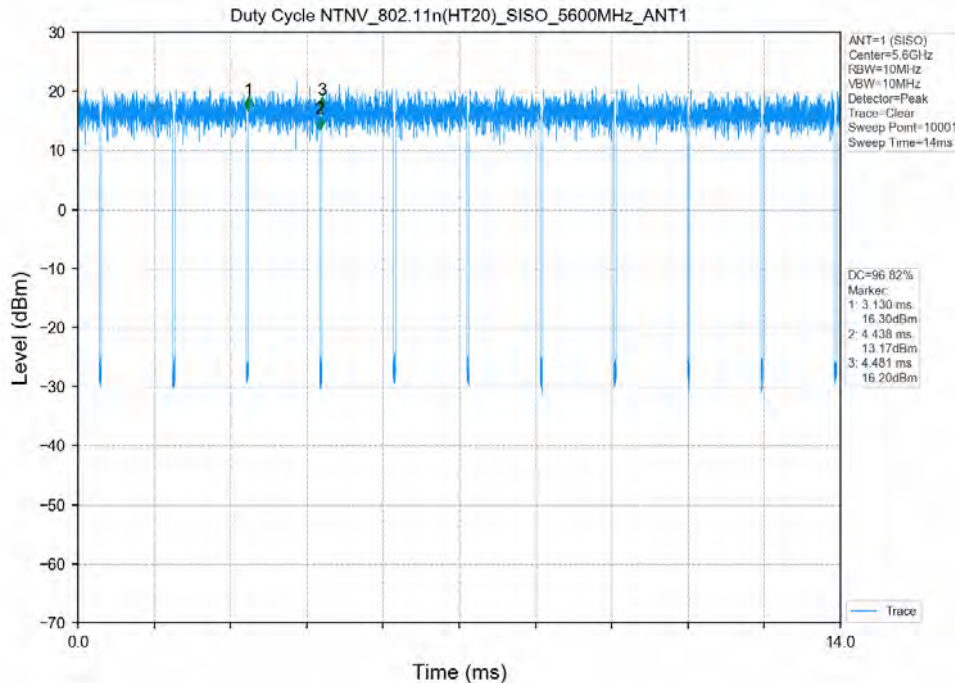
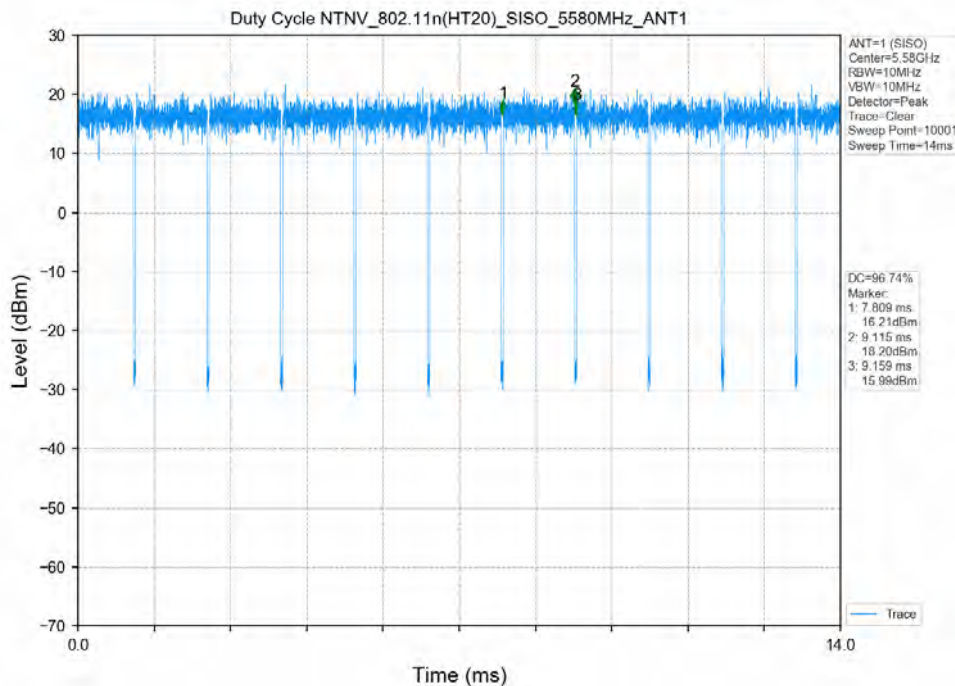


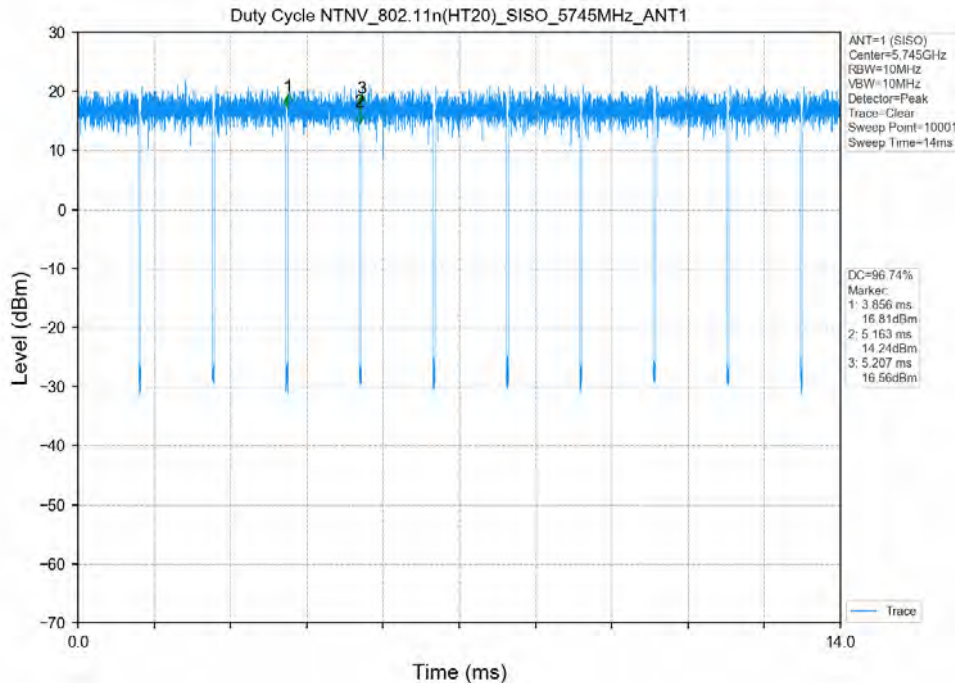
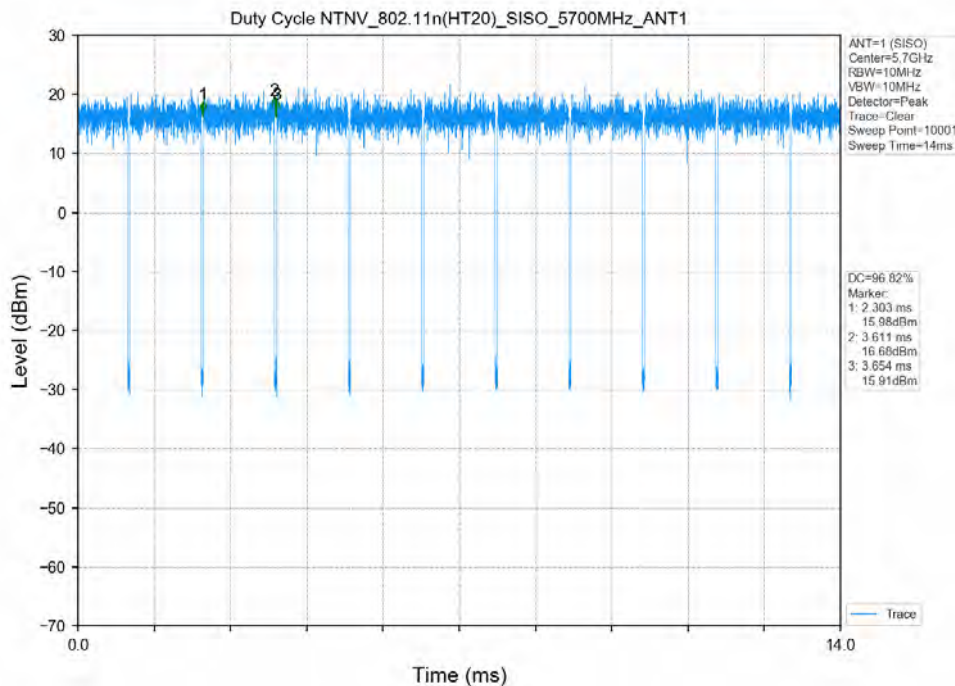


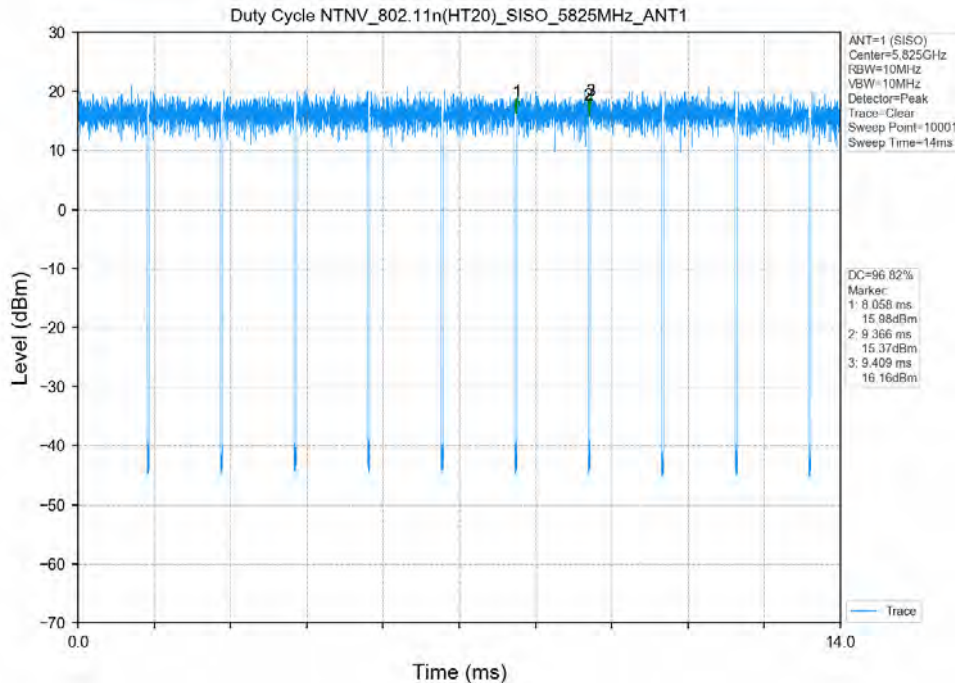
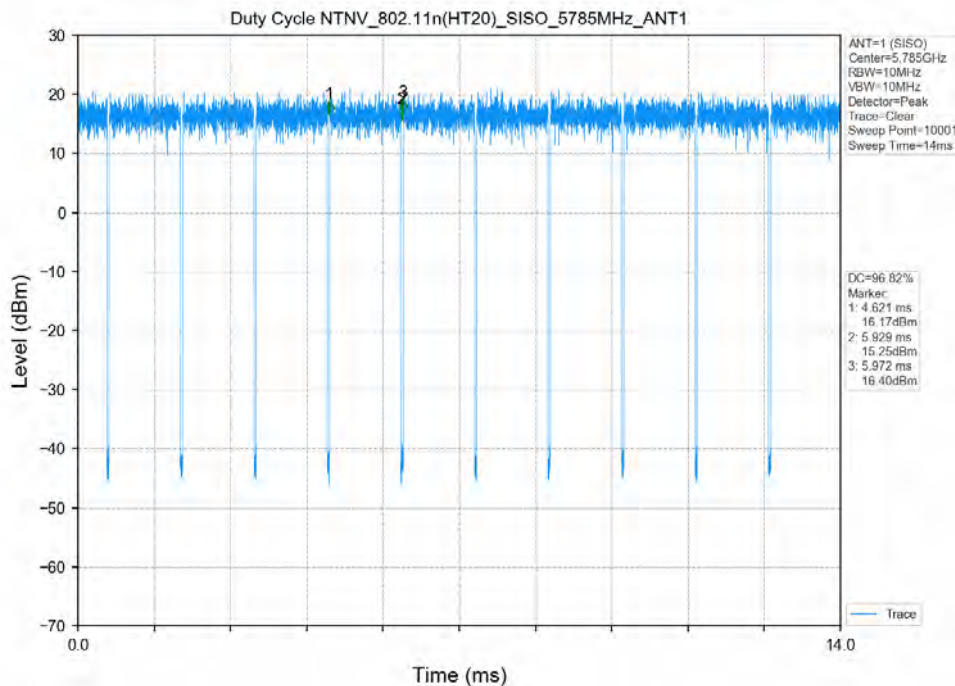


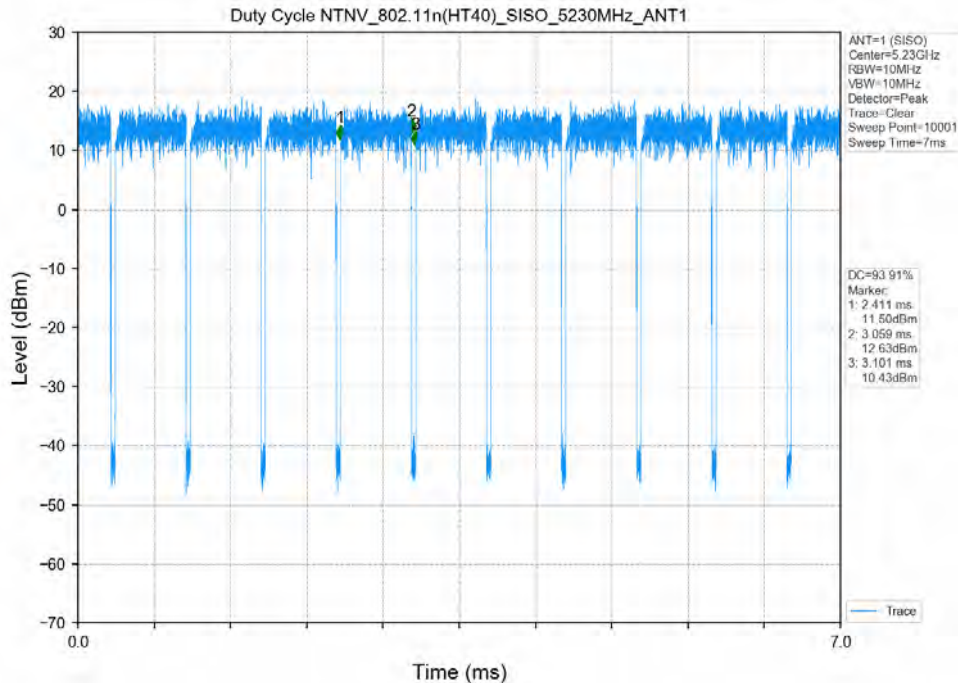
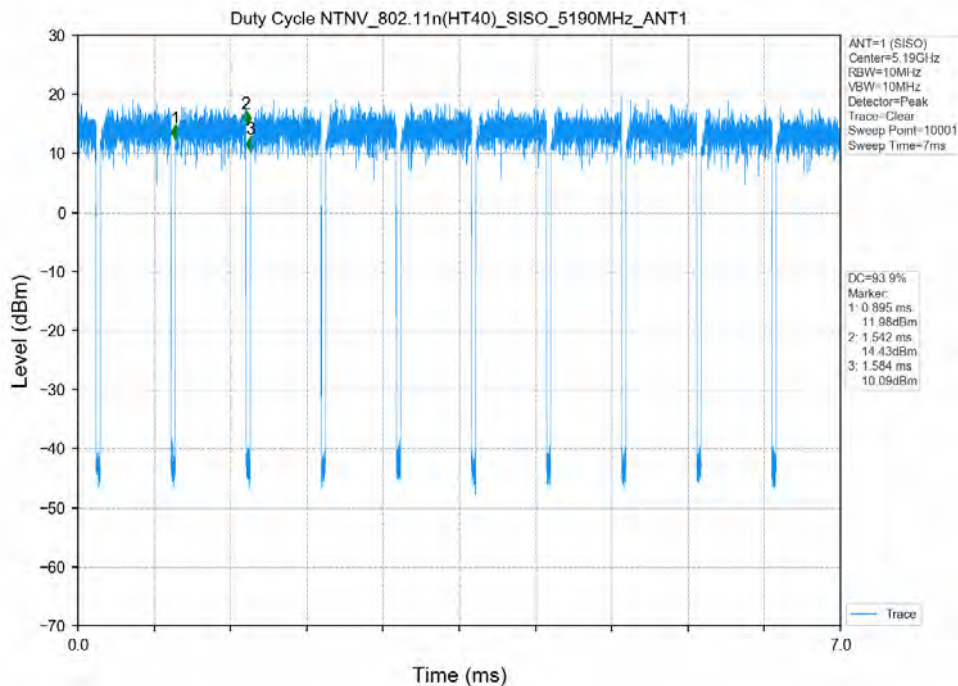


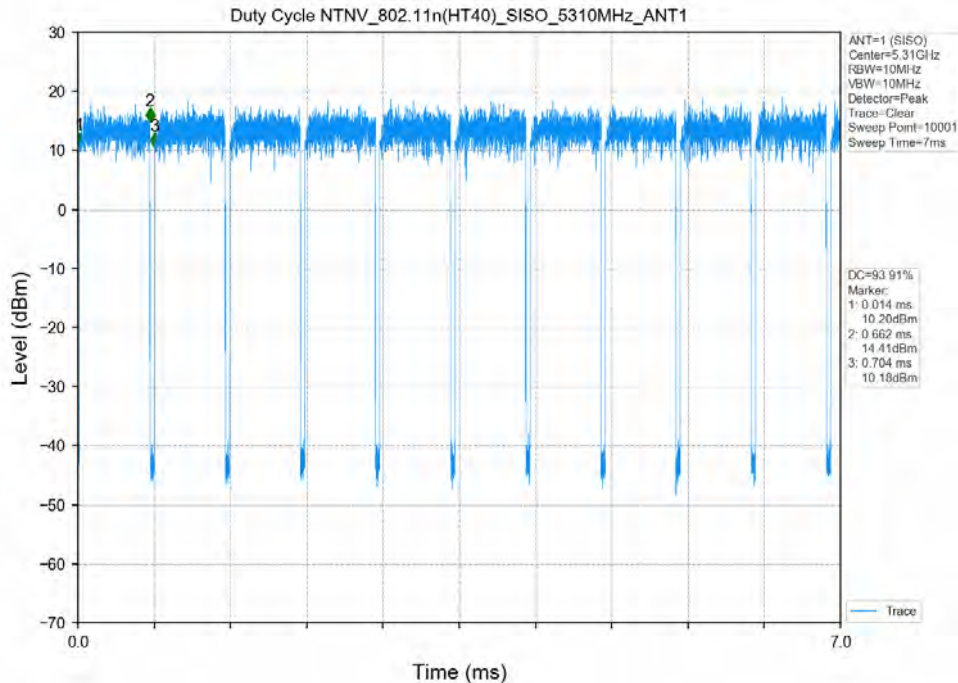
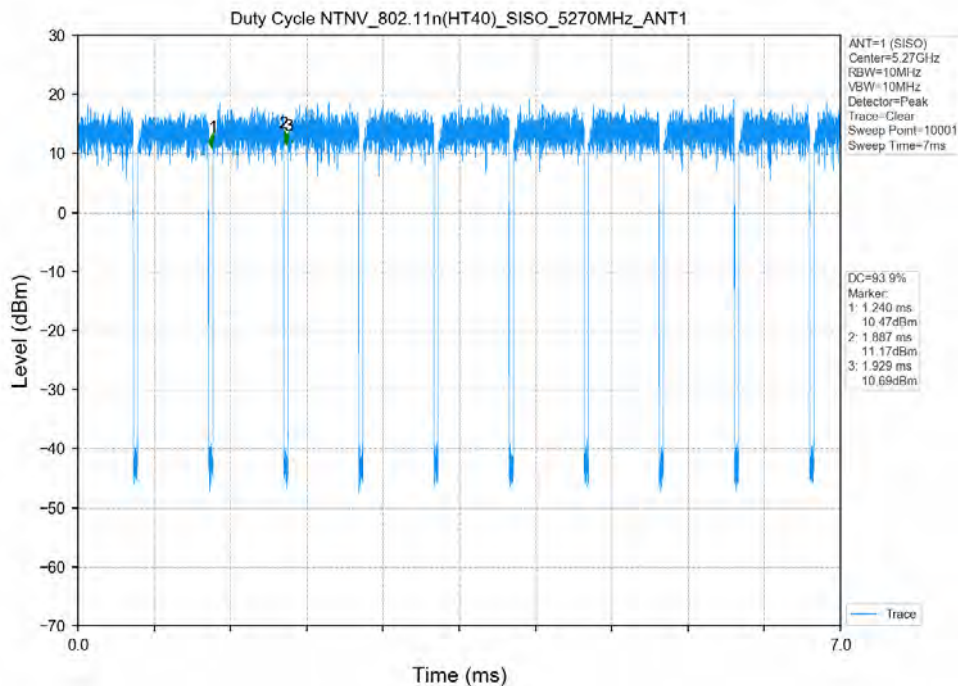


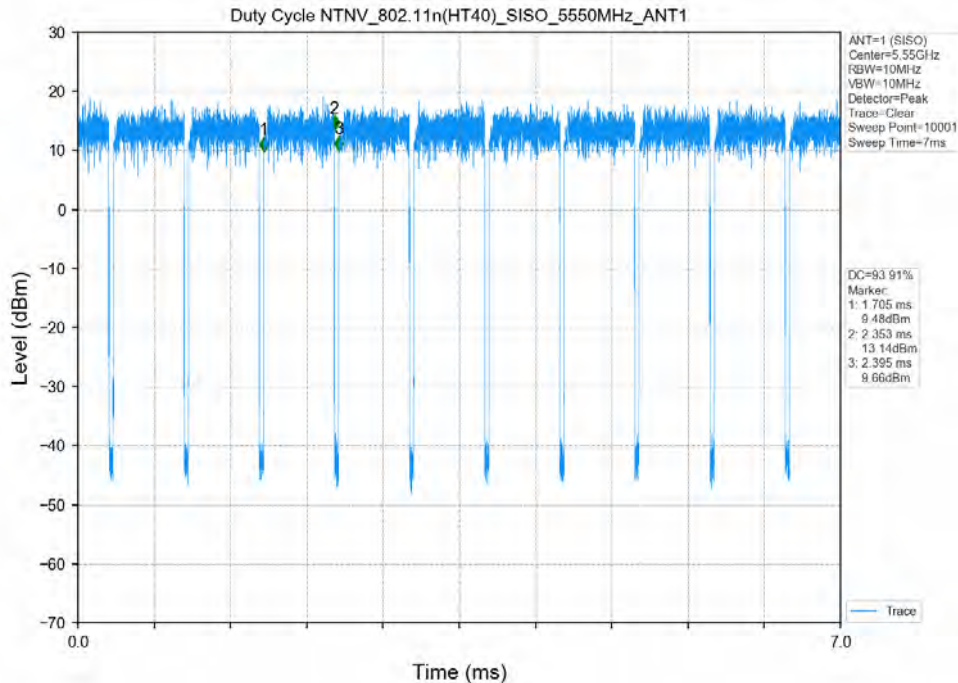
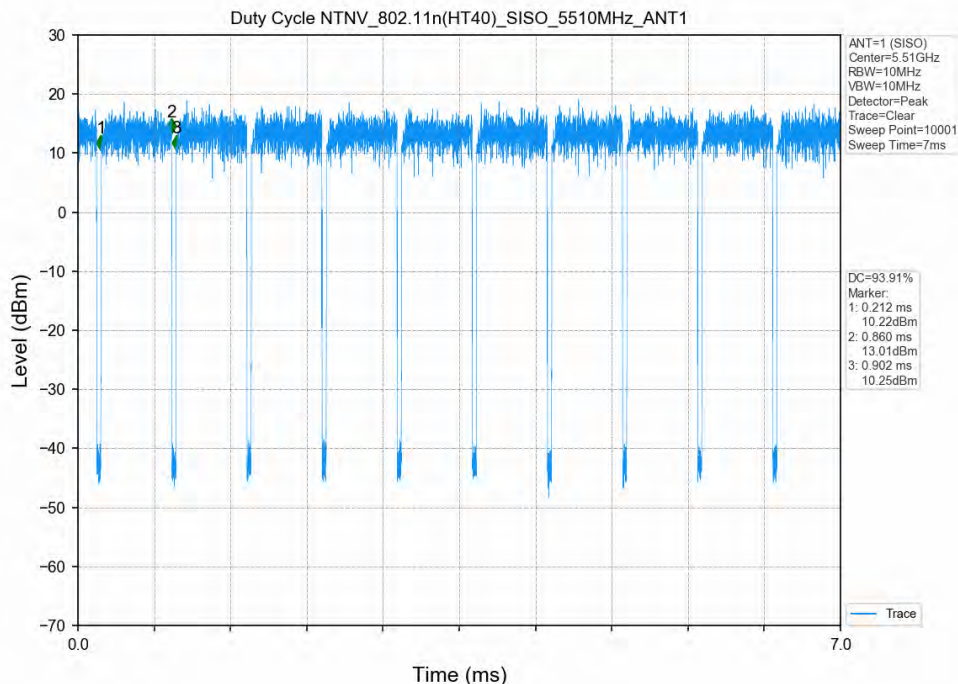


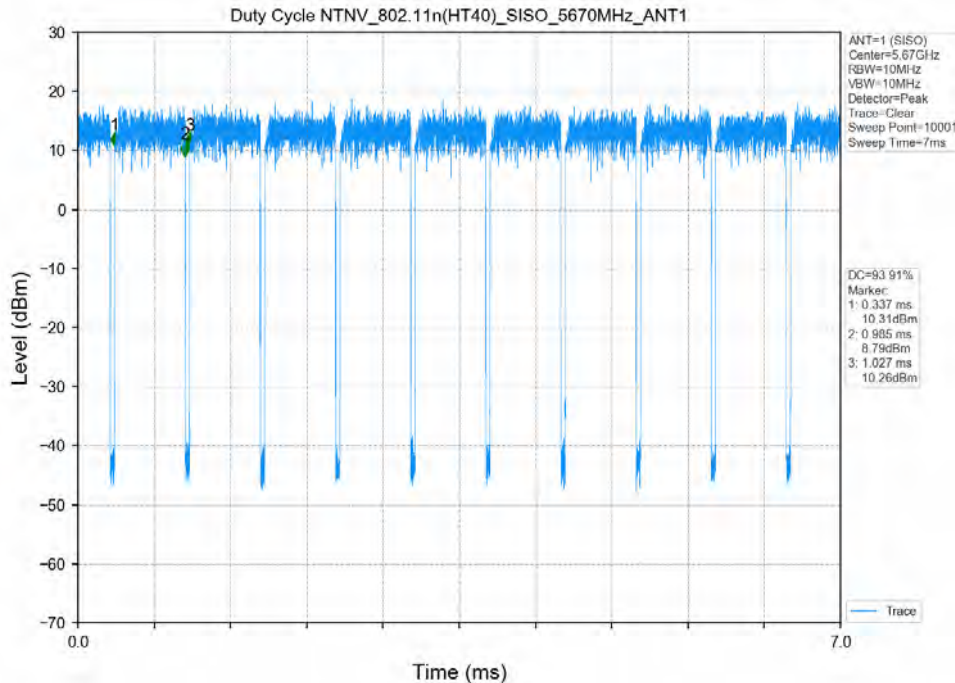
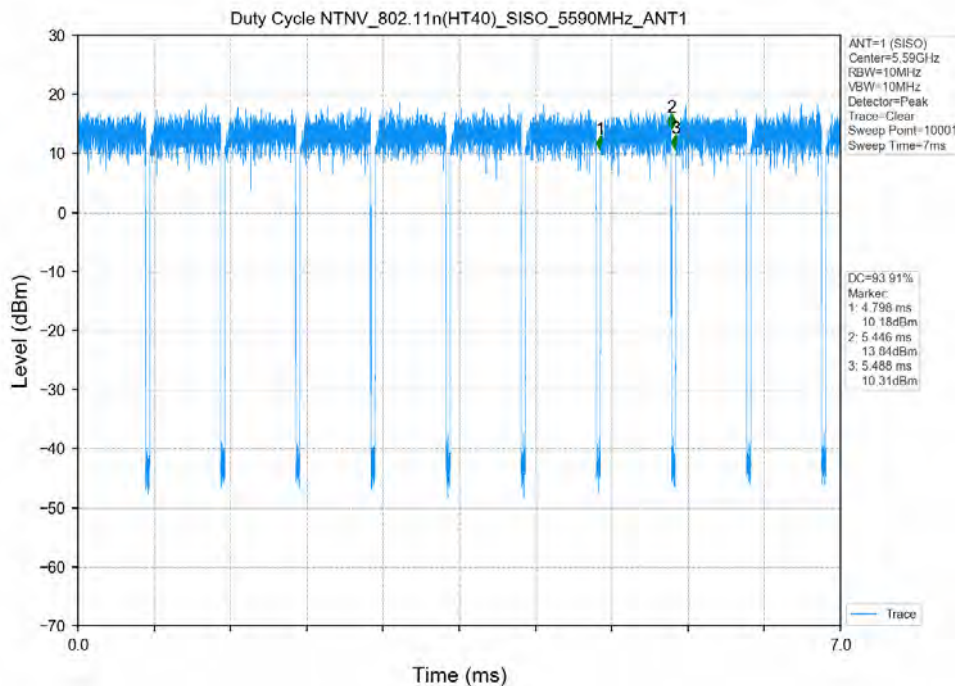


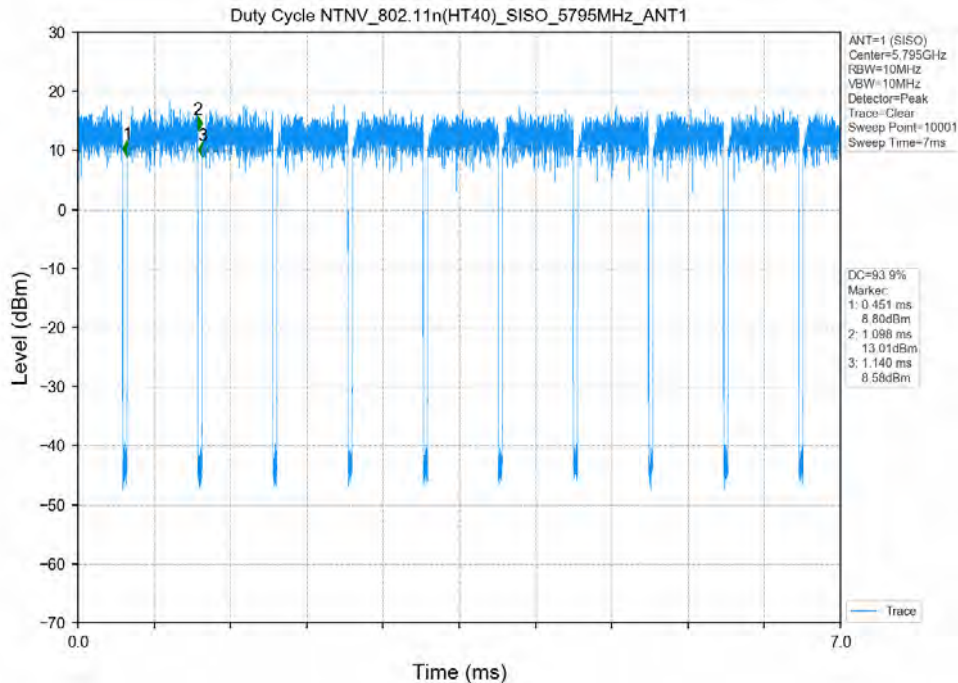
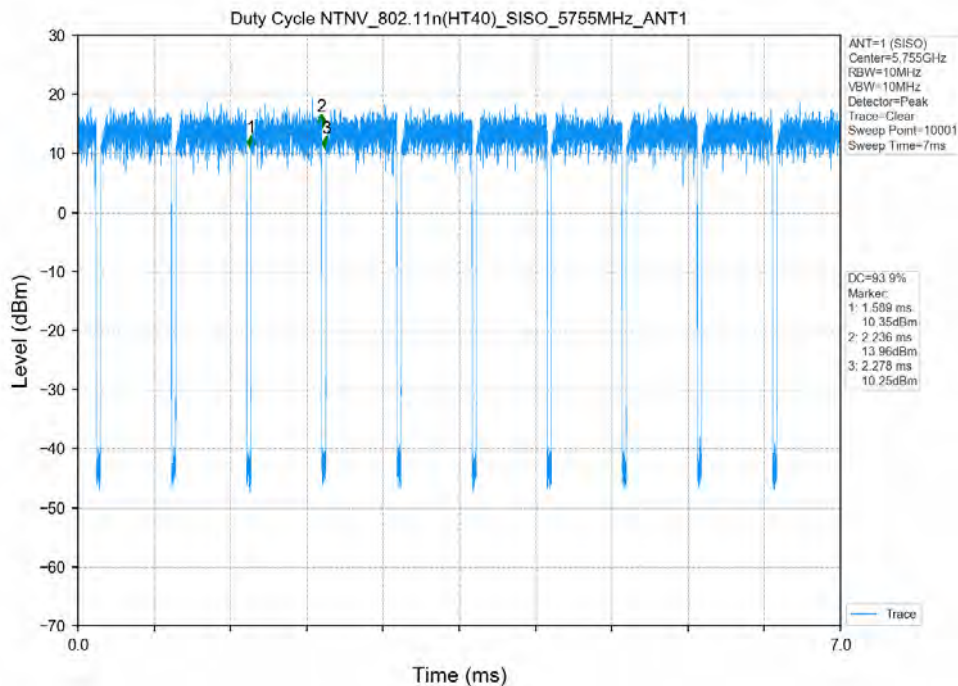


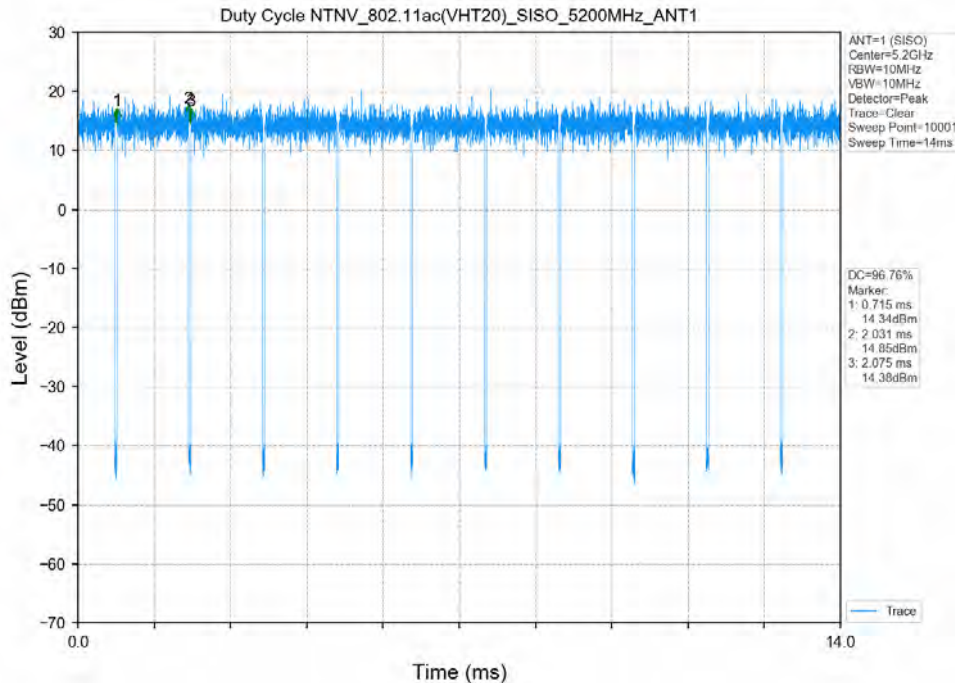
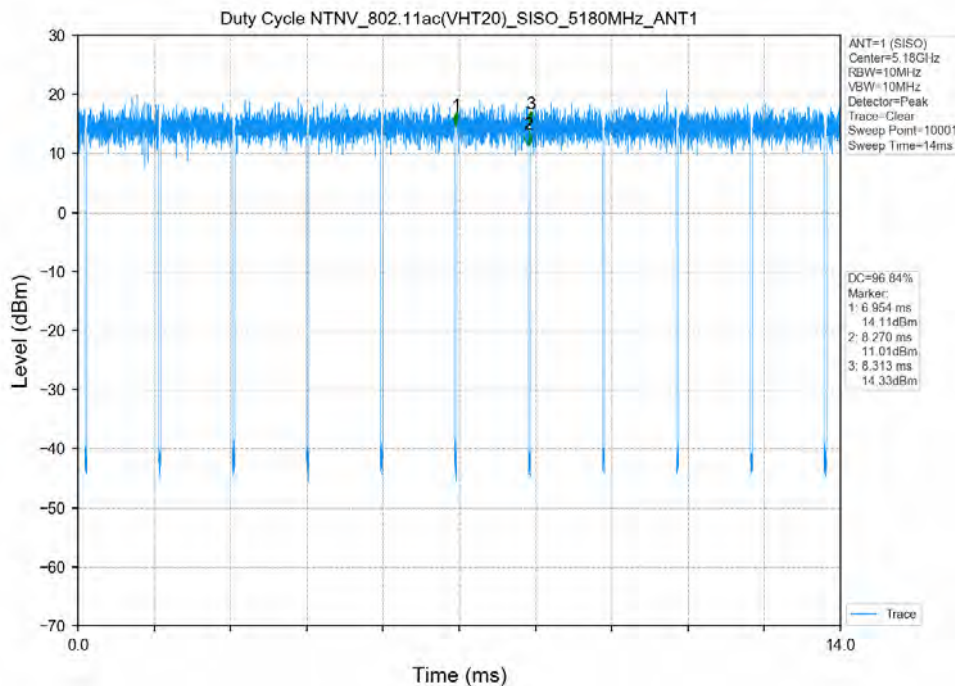


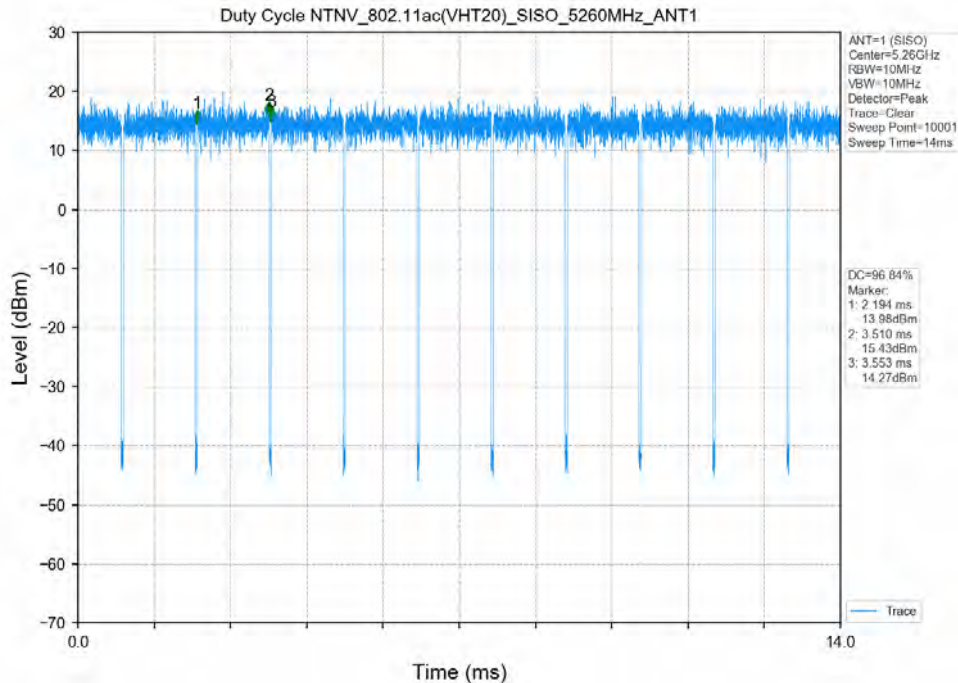
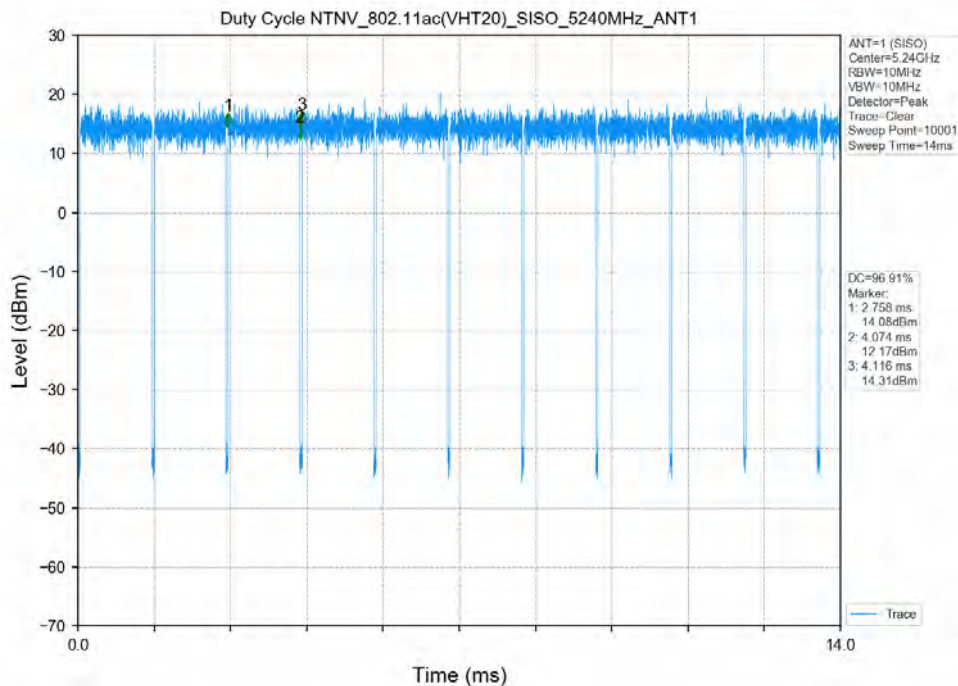


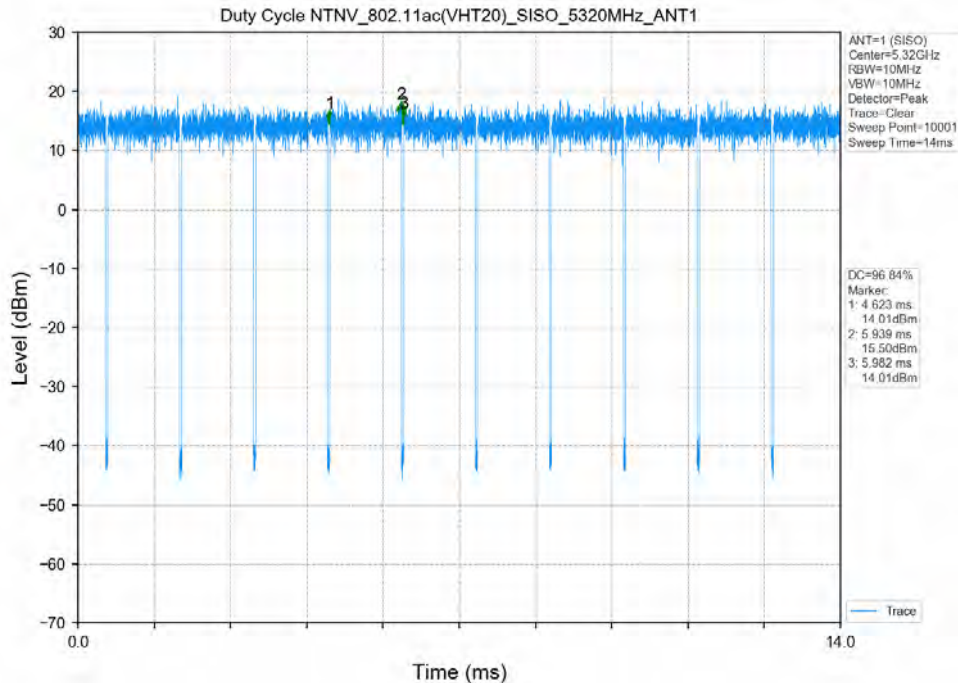
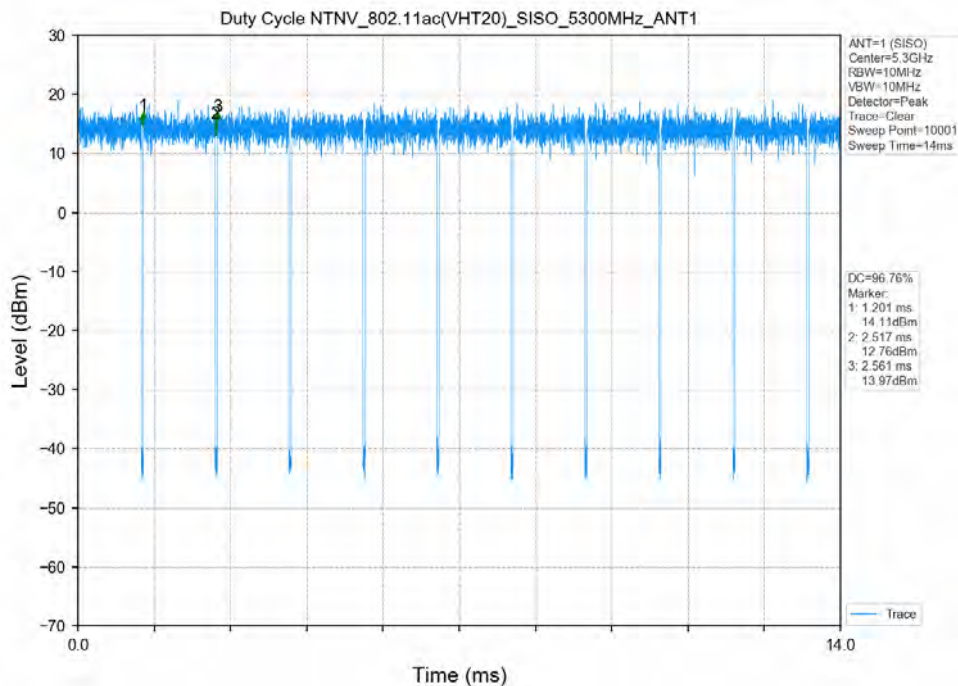


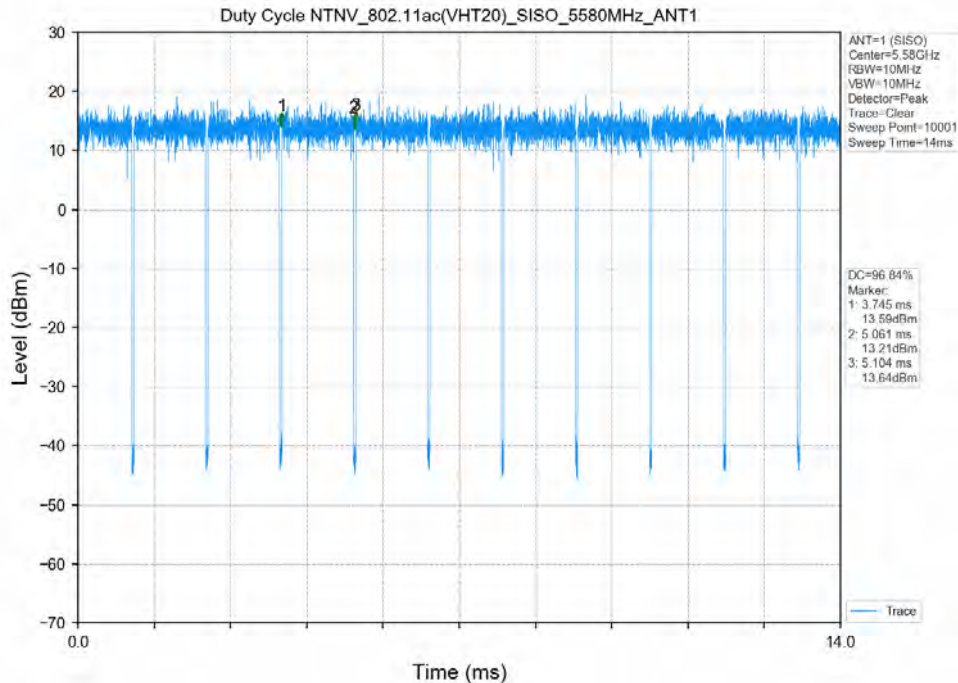
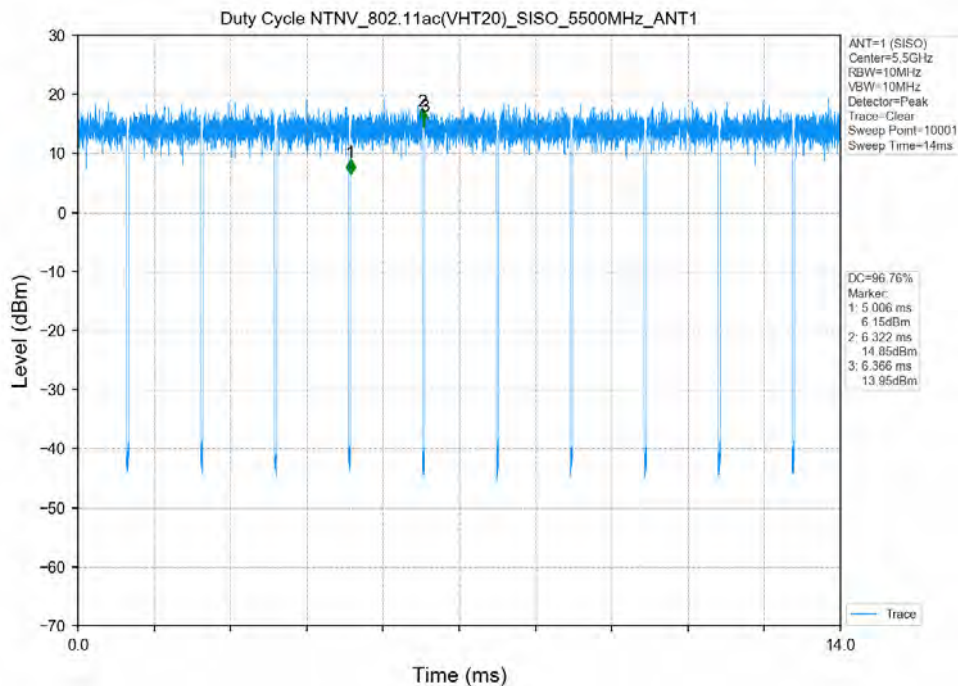


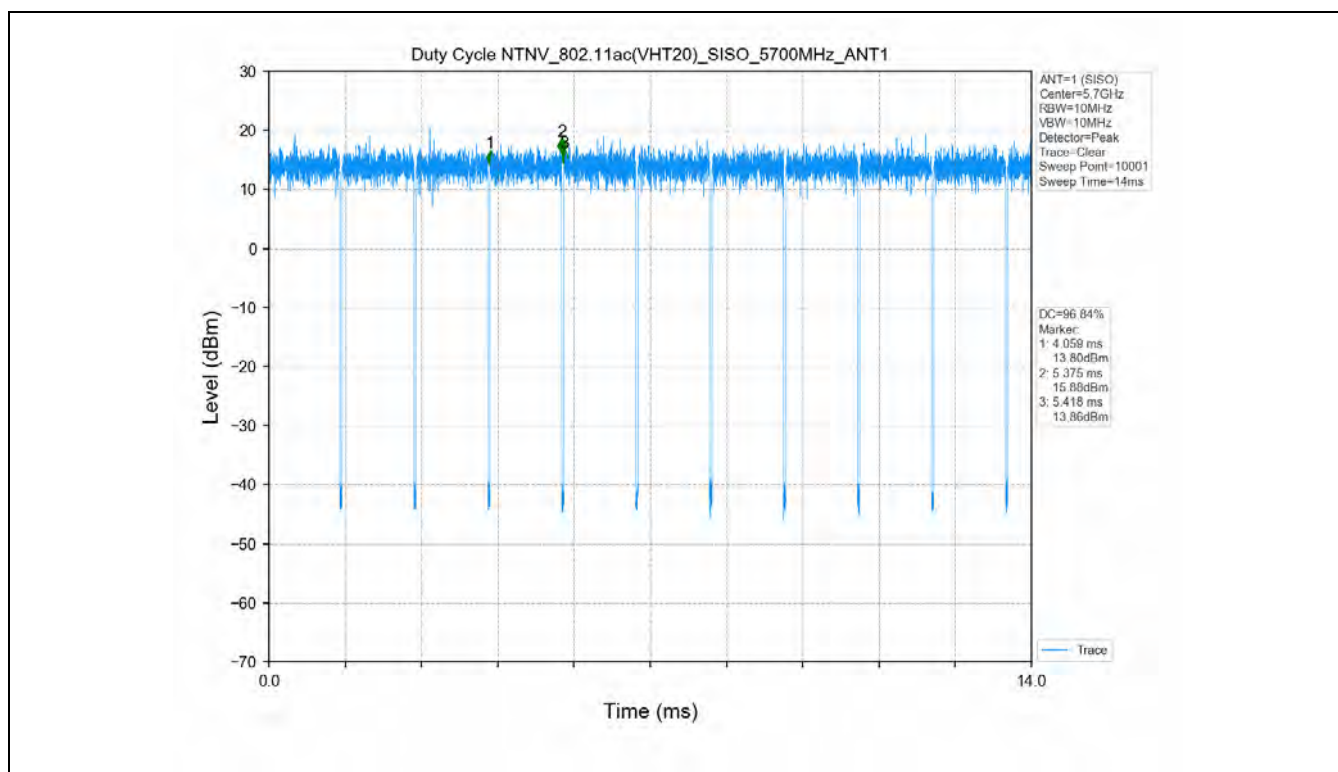
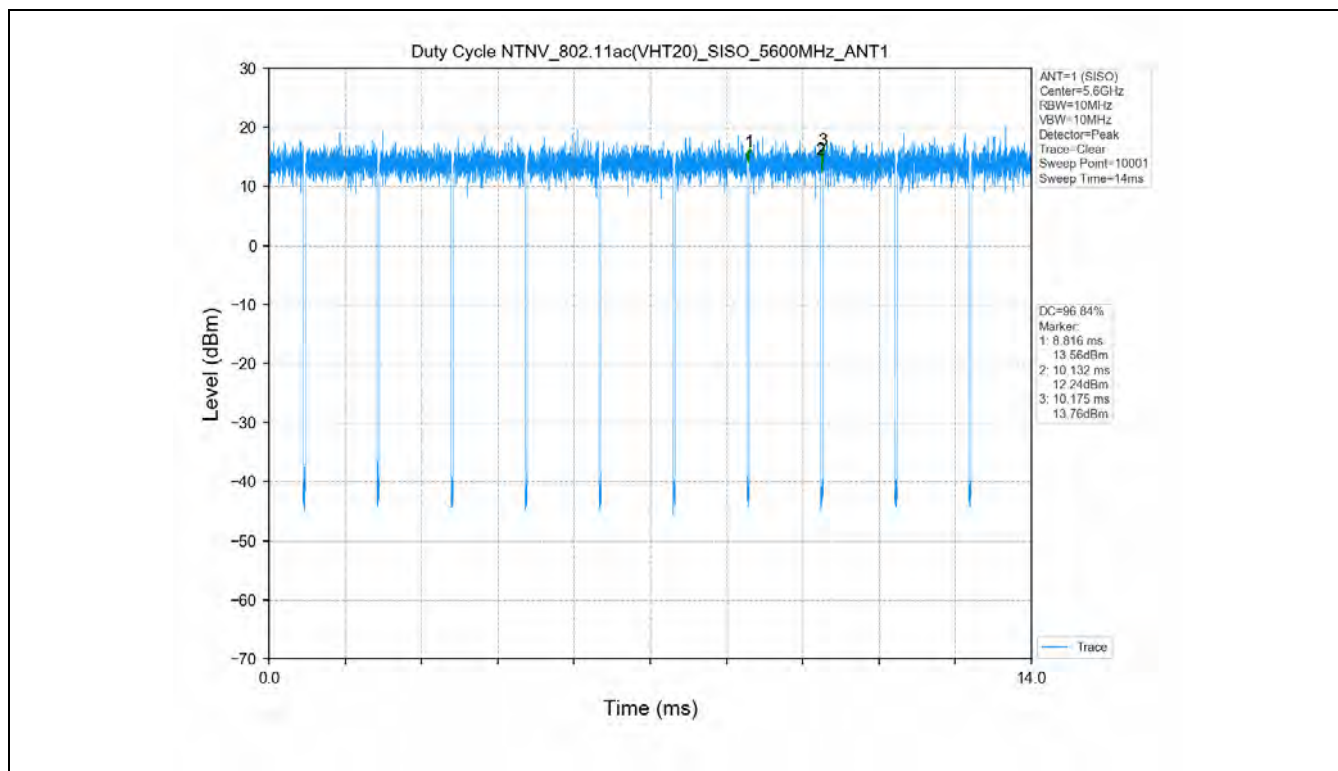


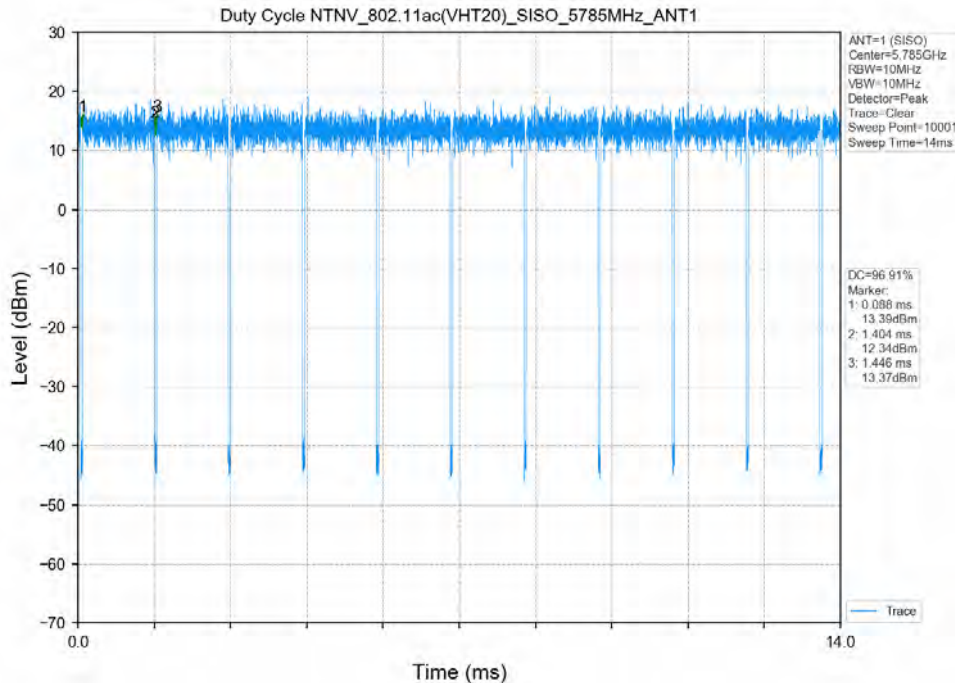
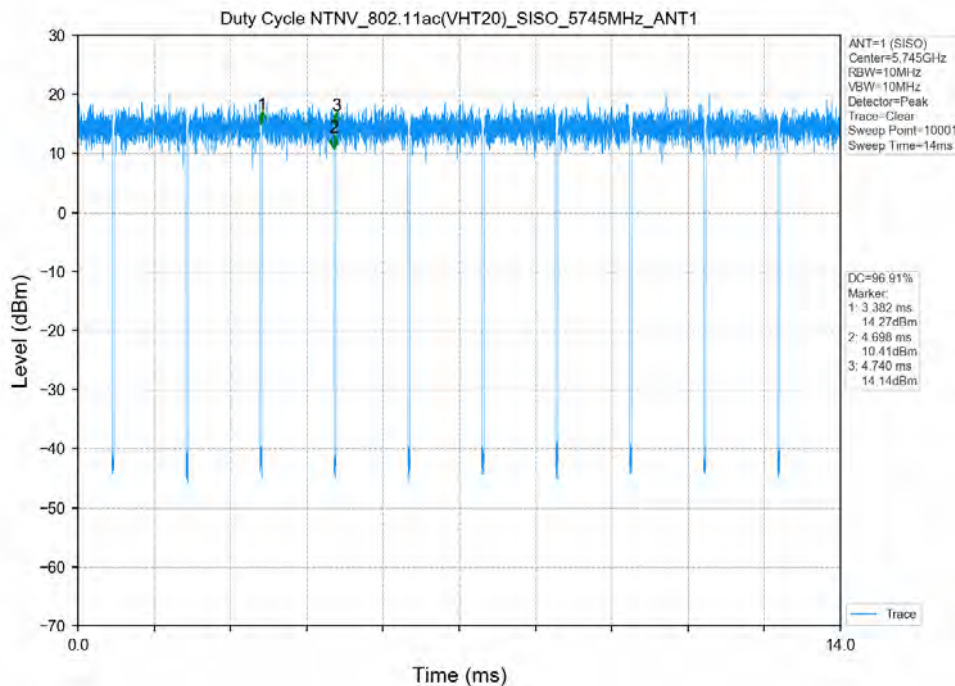


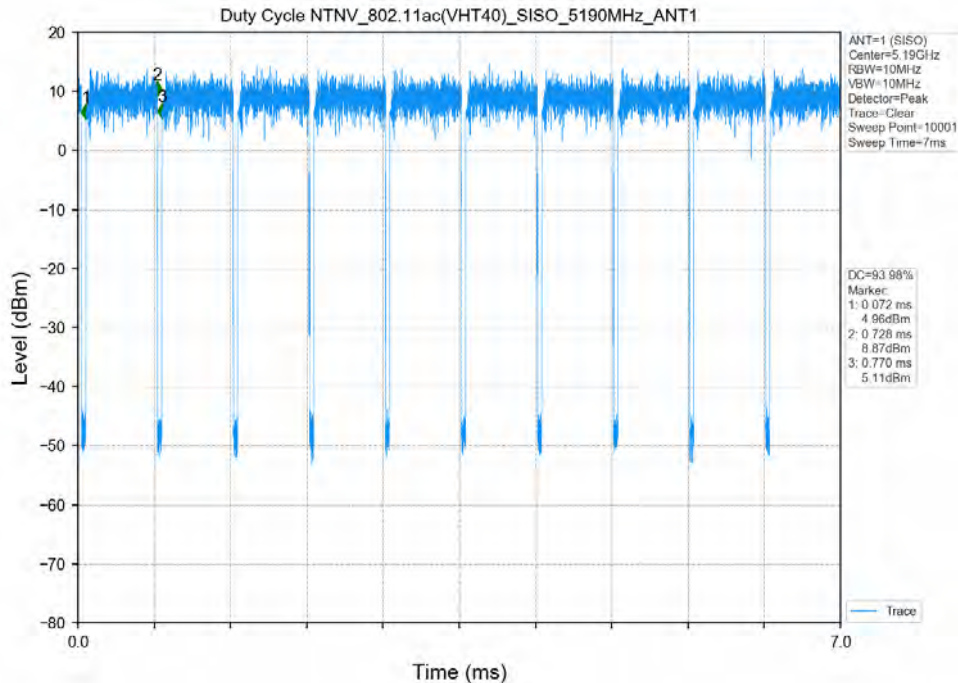
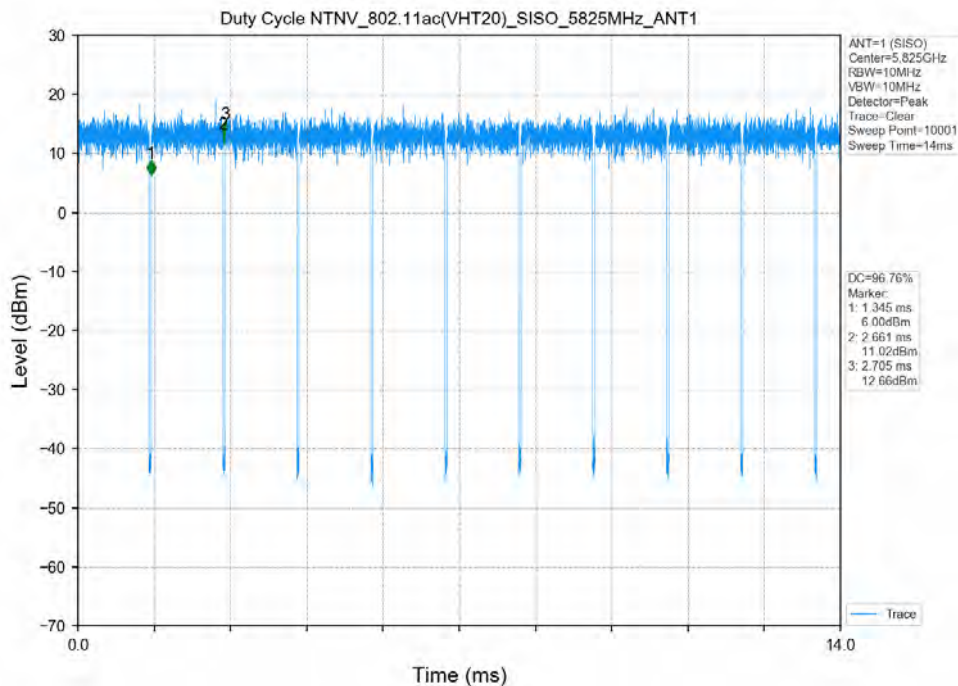


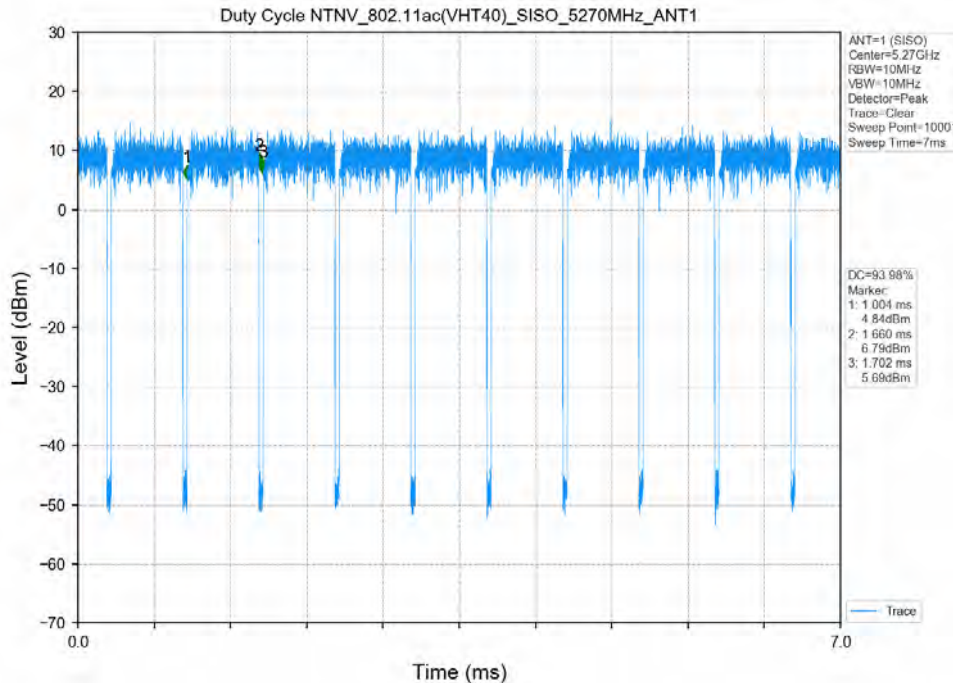
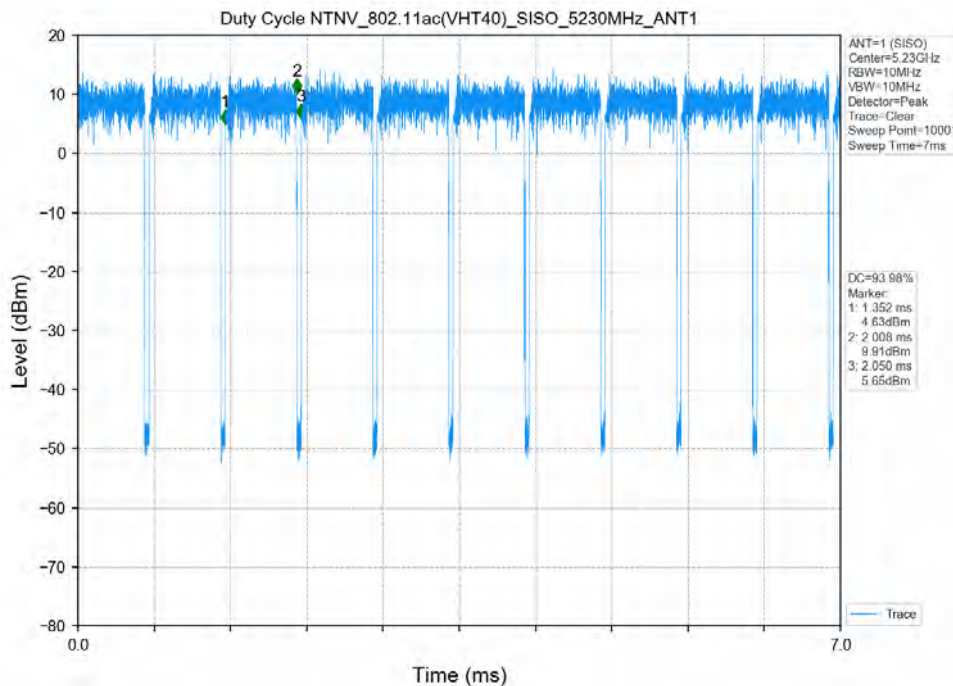


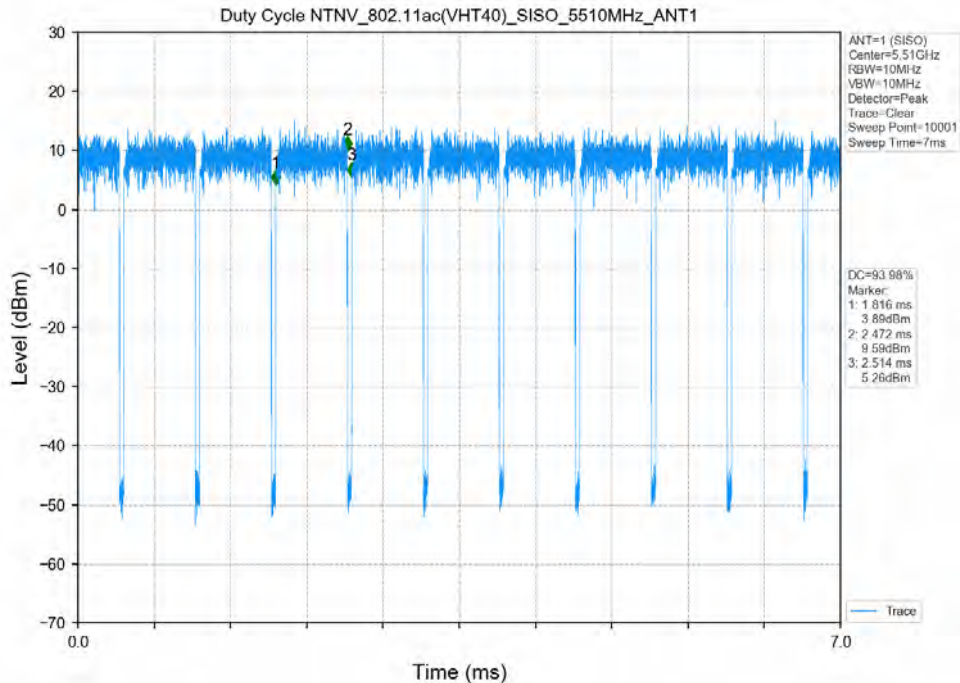
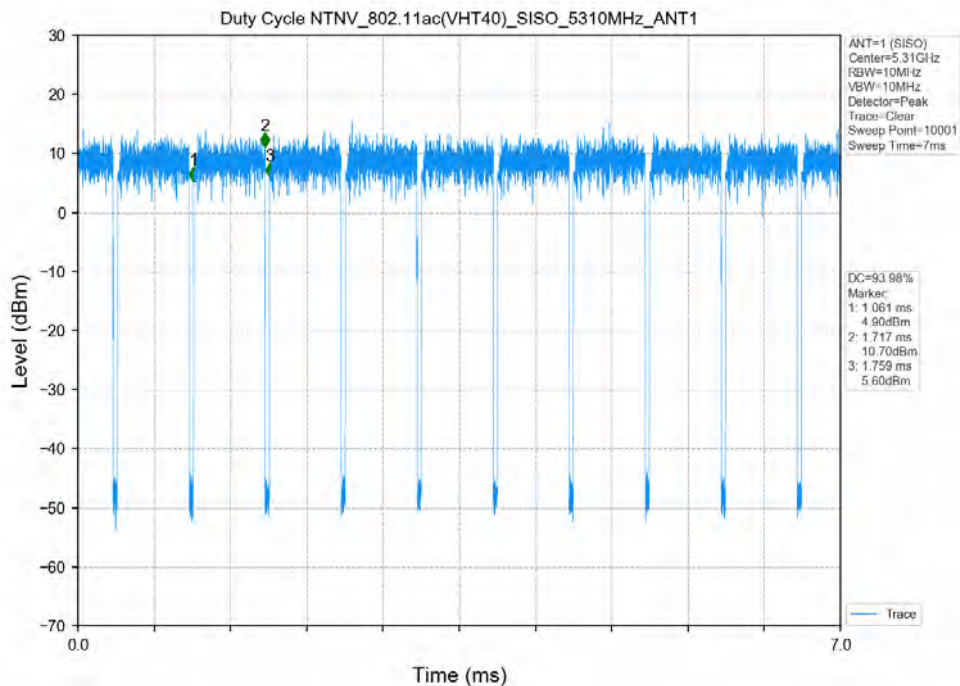


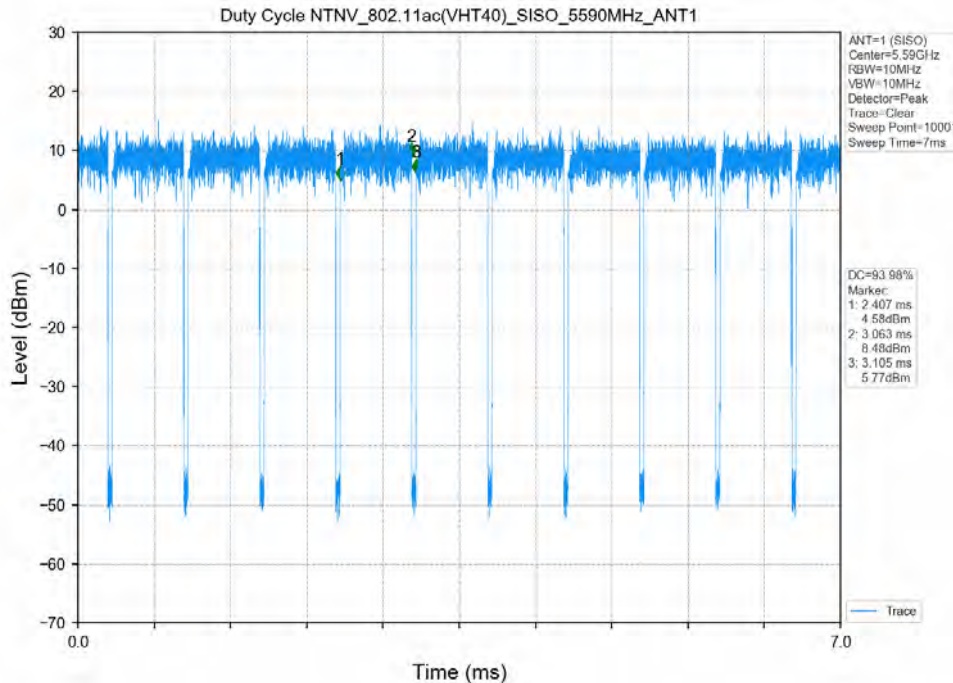
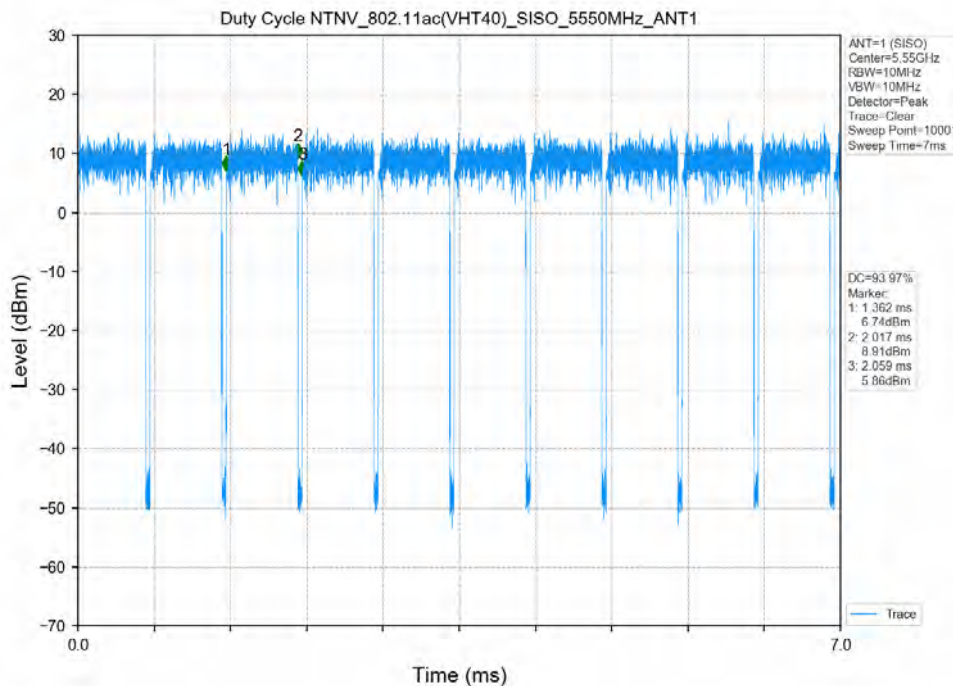


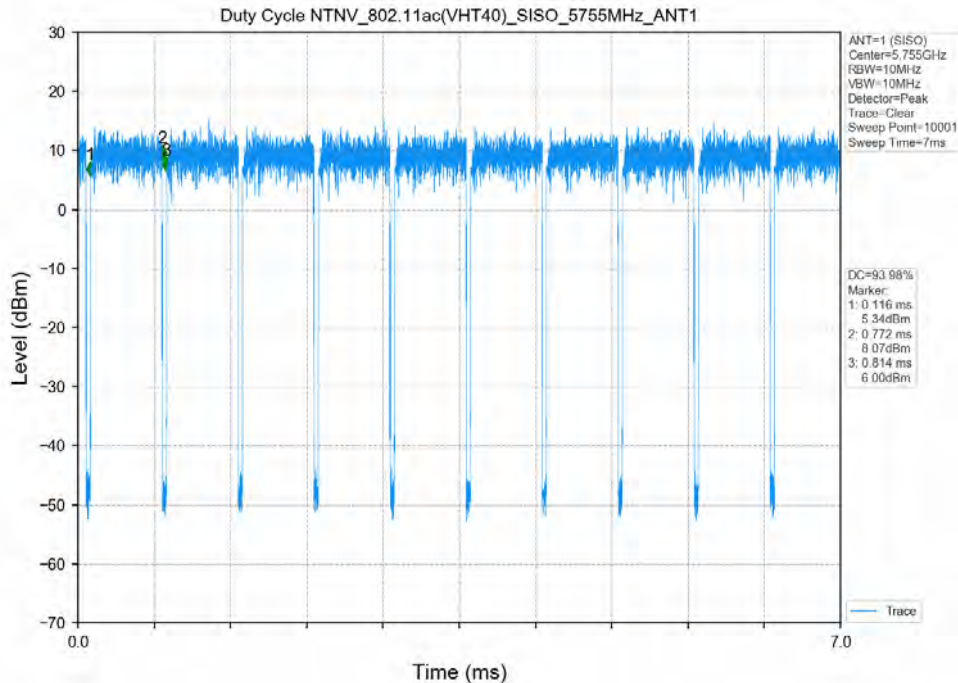
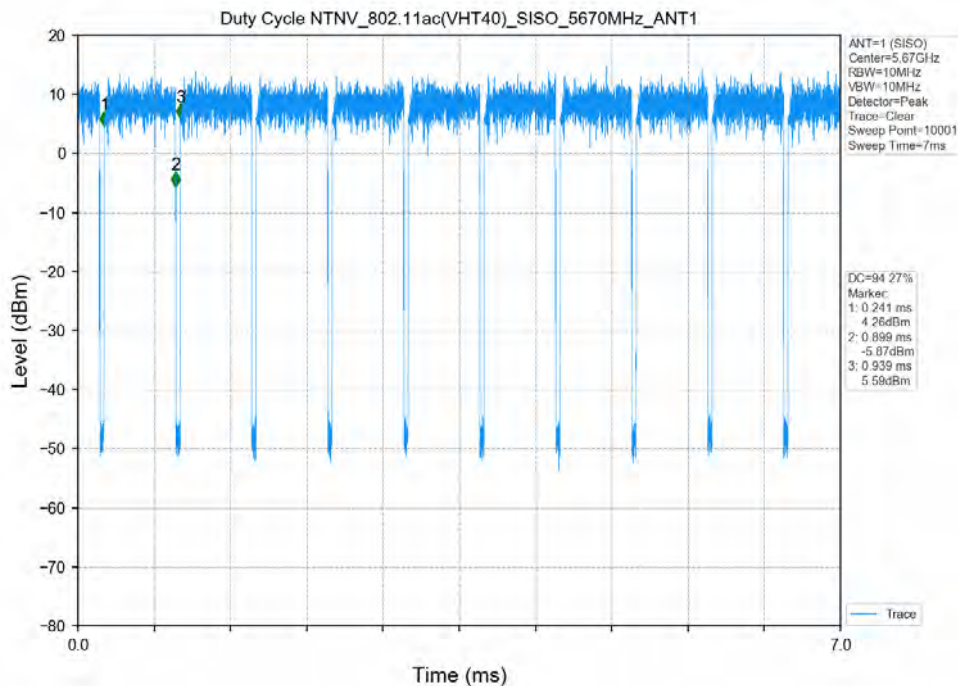


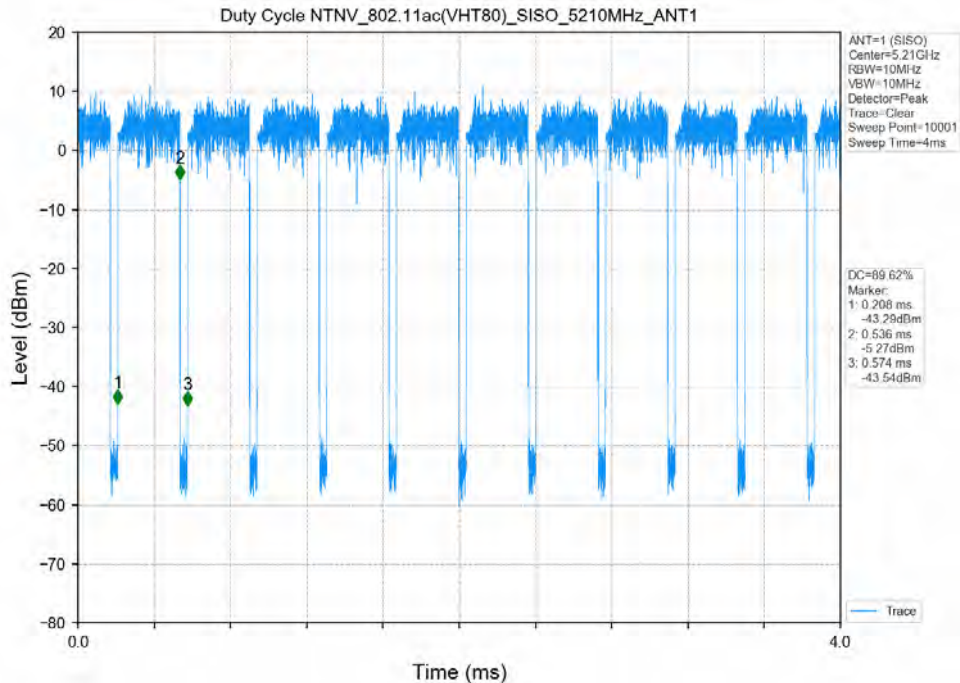
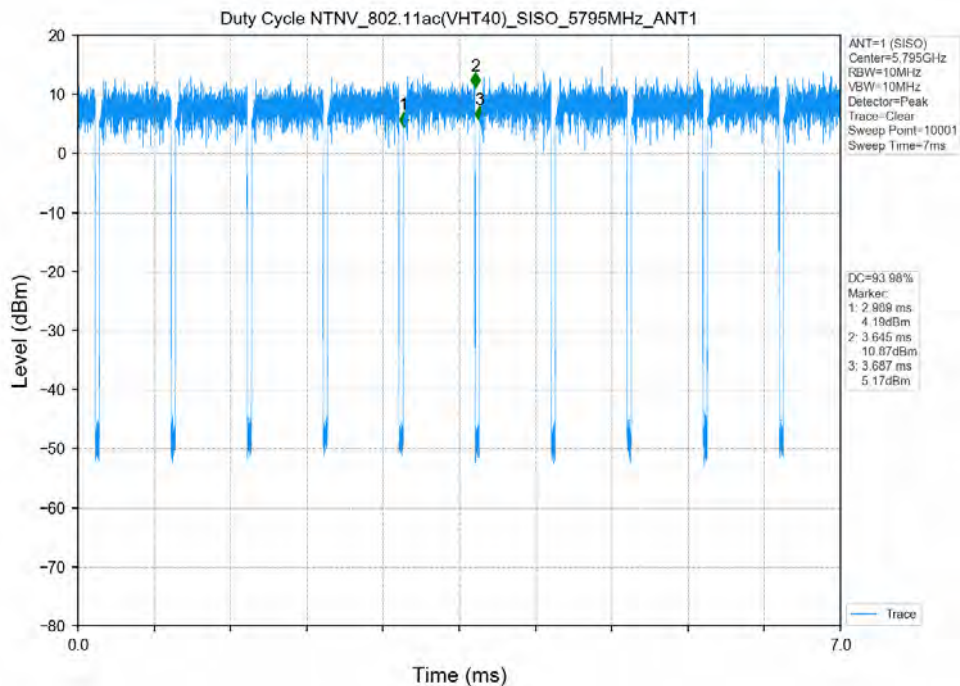


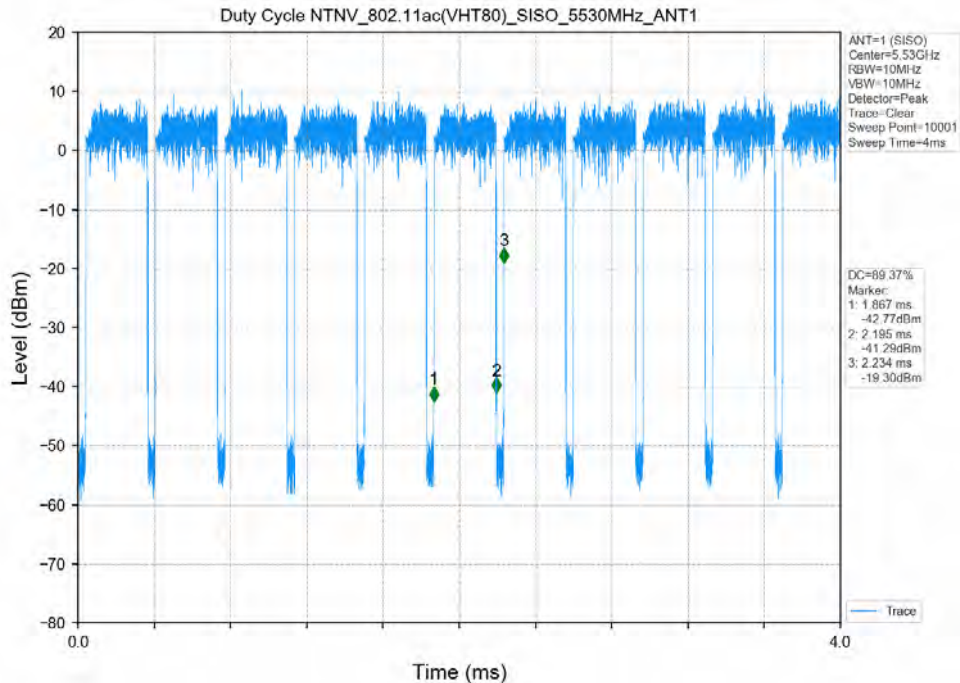
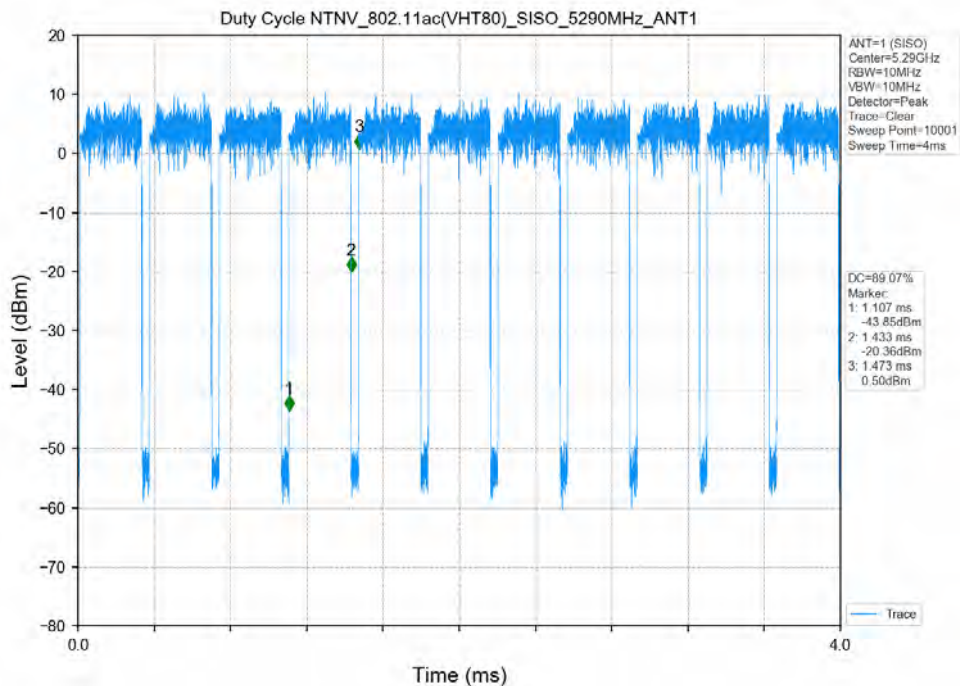


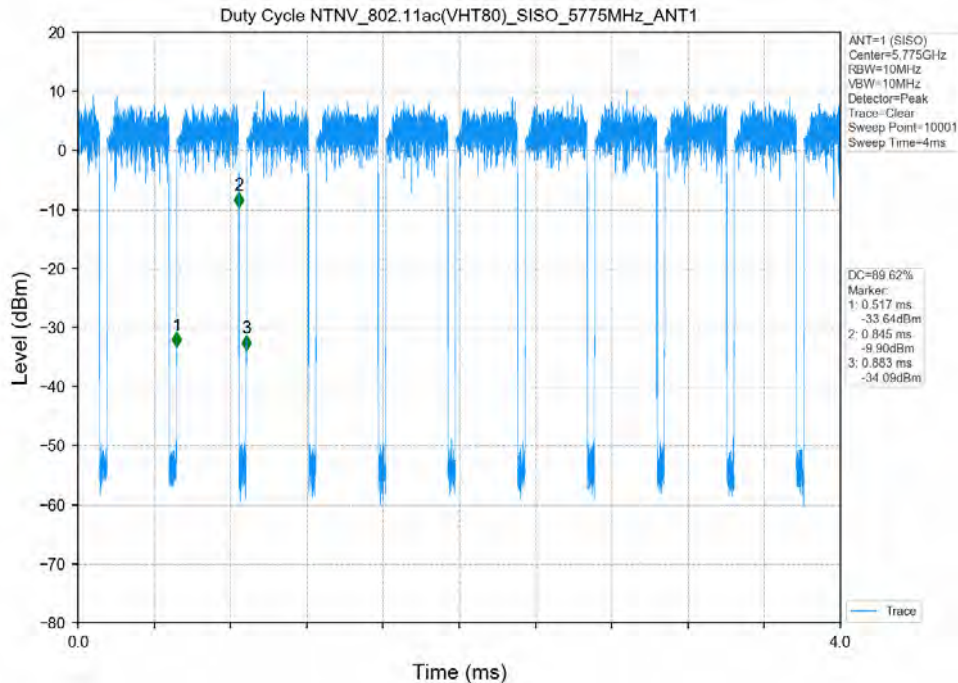
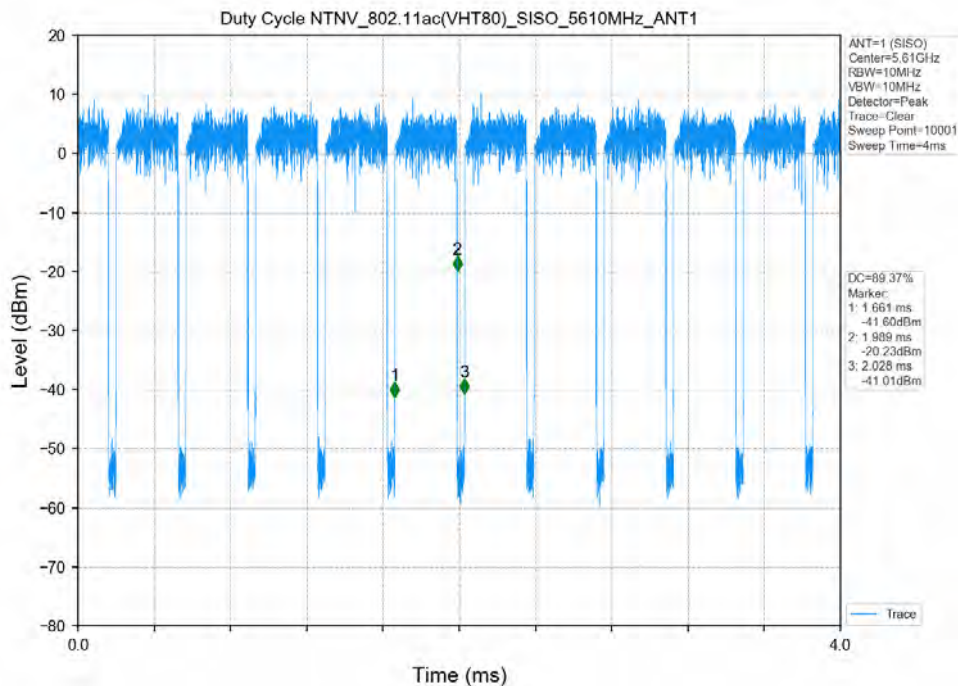












## 2. Emission Bandwidth, 6dB Bandwidth & 99% Occupied Bandwidth

### 2.1 Test Result

| Test Mode       | Frequency (MHz) | TX Type | ANT No. | Emission Bandwidth |                     | Verdict |
|-----------------|-----------------|---------|---------|--------------------|---------------------|---------|
|                 |                 |         |         | Test Result (MHz)  | Limits (MHz)        |         |
| 802.11a         | 5180            | SISO    | 1       | 21.056             | Only for Report Use | PASS    |
|                 | 5200            | SISO    | 1       | 21.149             | Only for Report Use | PASS    |
|                 | 5240            | SISO    | 1       | 21.137             | Only for Report Use | PASS    |
|                 | 5260            | SISO    | 1       | 21.140             | Only for Report Use | PASS    |
|                 | 5300            | SISO    | 1       | 21.151             | Only for Report Use | PASS    |
|                 | 5320            | SISO    | 1       | 21.104             | Only for Report Use | PASS    |
|                 | 5500            | SISO    | 1       | 21.182             | Only for Report Use | PASS    |
|                 | 5580            | SISO    | 1       | 21.338             | Only for Report Use | PASS    |
|                 | 5600            | SISO    | 1       | 21.193             | Only for Report Use | PASS    |
|                 | 5700            | SISO    | 1       | 21.270             | Only for Report Use | PASS    |
| 802.11n(HT20)   | 5180            | SISO    | 1       | 21.535             | Only for Report Use | PASS    |
|                 | 5200            | SISO    | 1       | 21.684             | Only for Report Use | PASS    |
|                 | 5240            | SISO    | 1       | 21.615             | Only for Report Use | PASS    |
|                 | 5260            | SISO    | 1       | 21.639             | Only for Report Use | PASS    |
|                 | 5300            | SISO    | 1       | 21.611             | Only for Report Use | PASS    |
|                 | 5320            | SISO    | 1       | 21.636             | Only for Report Use | PASS    |
|                 | 5500            | SISO    | 1       | 21.515             | Only for Report Use | PASS    |
|                 | 5580            | SISO    | 1       | 21.659             | Only for Report Use | PASS    |
|                 | 5600            | SISO    | 1       | 21.624             | Only for Report Use | PASS    |
|                 | 5700            | SISO    | 1       | 21.727             | Only for Report Use | PASS    |
| 802.11n(HT40)   | 5190            | SISO    | 1       | 47.232             | Only for Report Use | PASS    |
|                 | 5230            | SISO    | 1       | 48.685             | Only for Report Use | PASS    |
|                 | 5270            | SISO    | 1       | 40.602             | Only for Report Use | PASS    |
|                 | 5310            | SISO    | 1       | 40.293             | Only for Report Use | PASS    |
|                 | 5510            | SISO    | 1       | 40.215             | Only for Report Use | PASS    |
|                 | 5550            | SISO    | 1       | 40.321             | Only for Report Use | PASS    |
|                 | 5590            | SISO    | 1       | 40.513             | Only for Report Use | PASS    |
|                 | 5670            | SISO    | 1       | 40.444             | Only for Report Use | PASS    |
| 802.11ac(VHT20) | 5180            | SISO    | 1       | 21.550             | Only for Report Use | PASS    |
|                 | 5200            | SISO    | 1       | 21.504             | Only for Report Use | PASS    |
|                 | 5240            | SISO    | 1       | 21.749             | Only for Report Use | PASS    |
|                 | 5260            | SISO    | 1       | 21.719             | Only for Report Use | PASS    |
|                 | 5300            | SISO    | 1       | 21.764             | Only for Report Use | PASS    |
|                 | 5320            | SISO    | 1       | 21.398             | Only for Report Use | PASS    |
|                 | 5500            | SISO    | 1       | 21.607             | Only for Report Use | PASS    |
|                 | 5580            | SISO    | 1       | 21.580             | Only for Report Use | PASS    |



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|                 |      |      |   |        |                     |      |
|-----------------|------|------|---|--------|---------------------|------|
| 802.11ac(VHT40) | 5600 | SISO | 1 | 21.698 | Only for Report Use | PASS |
|                 | 5700 | SISO | 1 | 21.640 | Only for Report Use | PASS |
|                 | 5190 | SISO | 1 | 40.074 | Only for Report Use | PASS |
|                 | 5230 | SISO | 1 | 40.148 | Only for Report Use | PASS |
|                 | 5270 | SISO | 1 | 40.298 | Only for Report Use | PASS |
|                 | 5310 | SISO | 1 | 40.327 | Only for Report Use | PASS |
|                 | 5510 | SISO | 1 | 40.135 | Only for Report Use | PASS |
|                 | 5550 | SISO | 1 | 40.395 | Only for Report Use | PASS |
|                 | 5590 | SISO | 1 | 40.091 | Only for Report Use | PASS |
| 802.11ac(VHT80) | 5670 | SISO | 1 | 40.204 | Only for Report Use | PASS |
|                 | 5210 | SISO | 1 | 82.006 | Only for Report Use | PASS |
|                 | 5290 | SISO | 1 | 82.182 | Only for Report Use | PASS |
|                 | 5530 | SISO | 1 | 82.017 | Only for Report Use | PASS |
|                 | 5610 | SISO | 1 | 82.262 | Only for Report Use | PASS |

| Test Mode       | Frequency (MHz) | TX Type | ANT No. | 6dB Bandwidth     |              | Verdict |
|-----------------|-----------------|---------|---------|-------------------|--------------|---------|
|                 |                 |         |         | Test Result (MHz) | Limits (MHz) |         |
| 802.11a         | 5745            | SISO    | 1       | 16.370            | ≥0.5         | PASS    |
|                 | 5785            | SISO    | 1       | 16.369            | ≥0.5         | PASS    |
|                 | 5825            | SISO    | 1       | 16.374            | ≥0.5         | PASS    |
| 802.11n(HT20)   | 5745            | SISO    | 1       | 17.551            | ≥0.5         | PASS    |
|                 | 5785            | SISO    | 1       | 17.580            | ≥0.5         | PASS    |
|                 | 5825            | SISO    | 1       | 17.116            | ≥0.5         | PASS    |
| 802.11n(HT40)   | 5755            | SISO    | 1       | 36.005            | ≥0.5         | PASS    |
|                 | 5795            | SISO    | 1       | 36.048            | ≥0.5         | PASS    |
| 802.11ac(VHT20) | 5745            | SISO    | 1       | 17.538            | ≥0.5         | PASS    |
|                 | 5785            | SISO    | 1       | 17.565            | ≥0.5         | PASS    |
|                 | 5825            | SISO    | 1       | 17.545            | ≥0.5         | PASS    |
| 802.11ac(VHT40) | 5755            | SISO    | 1       | 36.033            | ≥0.5         | PASS    |
|                 | 5795            | SISO    | 1       | 35.878            | ≥0.5         | PASS    |
| 802.11ac(VHT80) | 5775            | SISO    | 1       | 75.533            | ≥0.5         | PASS    |

| Test Mode | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth |                     |
|-----------|-----------------|---------|---------|------------------------|---------------------|
|           |                 |         |         | Test Result (MHz)      |                     |
| 802.11a   | 5180            | SISO    | 1       | 17.139                 | Only for Report Use |
|           | 5200            | SISO    | 1       | 17.145                 | Only for Report Use |
|           | 5240            | SISO    | 1       | 17.144                 | Only for Report Use |
|           | 5260            | SISO    | 1       | 17.159                 | Only for Report Use |
|           | 5300            | SISO    | 1       | 17.177                 | Only for Report Use |
|           | 5320            | SISO    | 1       | 17.151                 | Only for Report Use |
|           | 5500            | SISO    | 1       | 17.163                 | Only for Report Use |
|           | 5580            | SISO    | 1       | 17.218                 | Only for Report Use |



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|                 |      |      |   |        |                     |
|-----------------|------|------|---|--------|---------------------|
|                 | 5600 | SISO | 1 | 17.217 | Only for Report Use |
|                 | 5700 | SISO | 1 | 17.216 | Only for Report Use |
|                 | 5745 | SISO | 1 | 17.308 | Only for Report Use |
|                 | 5785 | SISO | 1 | 17.329 | Only for Report Use |
|                 | 5825 | SISO | 1 | 17.329 | Only for Report Use |
| 802.11n(HT20)   | 5180 | SISO | 1 | 18.252 | Only for Report Use |
|                 | 5200 | SISO | 1 | 18.252 | Only for Report Use |
|                 | 5240 | SISO | 1 | 18.285 | Only for Report Use |
|                 | 5260 | SISO | 1 | 18.207 | Only for Report Use |
|                 | 5300 | SISO | 1 | 18.303 | Only for Report Use |
|                 | 5320 | SISO | 1 | 18.314 | Only for Report Use |
|                 | 5500 | SISO | 1 | 18.243 | Only for Report Use |
|                 | 5580 | SISO | 1 | 18.265 | Only for Report Use |
|                 | 5600 | SISO | 1 | 18.360 | Only for Report Use |
|                 | 5700 | SISO | 1 | 18.291 | Only for Report Use |
|                 | 5745 | SISO | 1 | 18.345 | Only for Report Use |
|                 | 5785 | SISO | 1 | 18.362 | Only for Report Use |
|                 | 5825 | SISO | 1 | 18.367 | Only for Report Use |
| 802.11n(HT40)   | 5190 | SISO | 1 | 36.894 | Only for Report Use |
|                 | 5230 | SISO | 1 | 36.974 | Only for Report Use |
|                 | 5270 | SISO | 1 | 36.890 | Only for Report Use |
|                 | 5310 | SISO | 1 | 37.001 | Only for Report Use |
|                 | 5510 | SISO | 1 | 36.881 | Only for Report Use |
|                 | 5550 | SISO | 1 | 36.884 | Only for Report Use |
|                 | 5590 | SISO | 1 | 36.902 | Only for Report Use |
|                 | 5670 | SISO | 1 | 36.958 | Only for Report Use |
|                 | 5755 | SISO | 1 | 36.982 | Only for Report Use |
| 802.11ac(VHT20) | 5795 | SISO | 1 | 37.006 | Only for Report Use |
|                 | 5180 | SISO | 1 | 18.189 | Only for Report Use |
|                 | 5200 | SISO | 1 | 18.199 | Only for Report Use |
|                 | 5240 | SISO | 1 | 18.179 | Only for Report Use |
|                 | 5260 | SISO | 1 | 18.171 | Only for Report Use |
|                 | 5300 | SISO | 1 | 18.169 | Only for Report Use |
|                 | 5320 | SISO | 1 | 18.197 | Only for Report Use |
|                 | 5500 | SISO | 1 | 18.229 | Only for Report Use |
|                 | 5580 | SISO | 1 | 18.176 | Only for Report Use |
|                 | 5600 | SISO | 1 | 18.209 | Only for Report Use |
|                 | 5700 | SISO | 1 | 18.169 | Only for Report Use |
|                 | 5745 | SISO | 1 | 18.233 | Only for Report Use |
|                 | 5785 | SISO | 1 | 18.236 | Only for Report Use |
| 802.11ac(VHT40) | 5825 | SISO | 1 | 18.231 | Only for Report Use |
|                 | 5190 | SISO | 1 | 36.786 | Only for Report Use |



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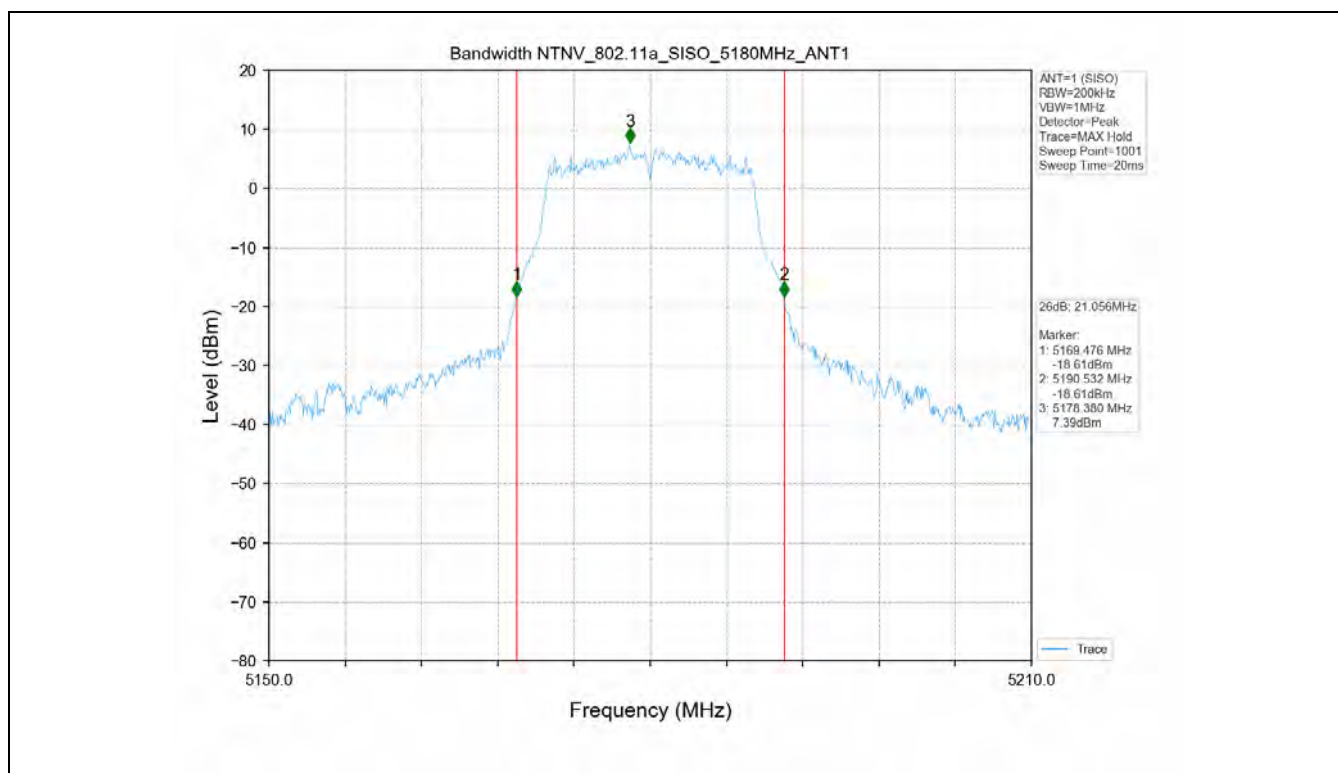
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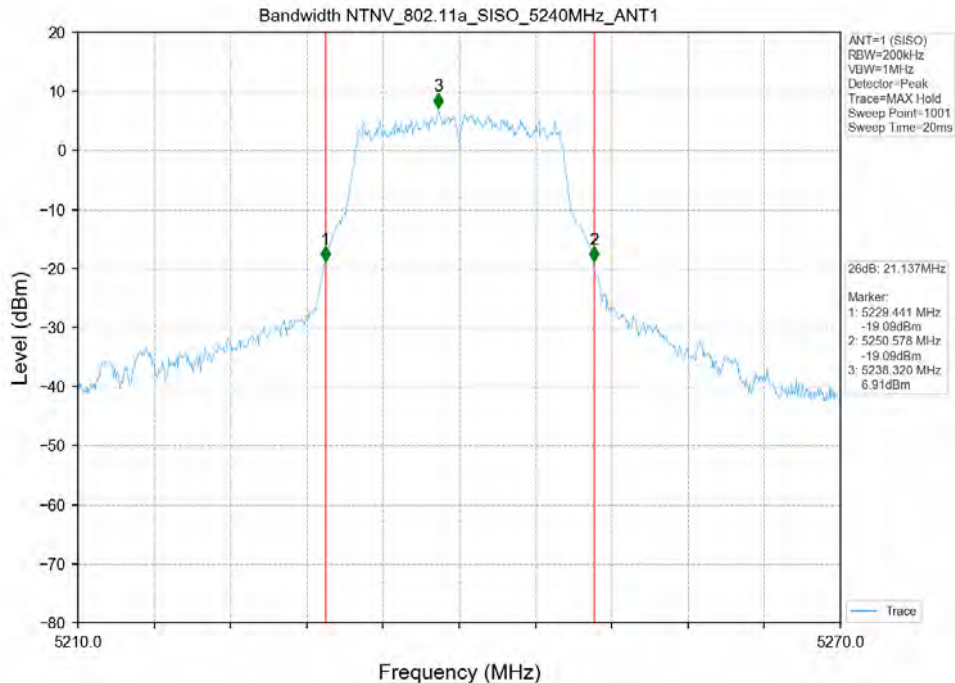
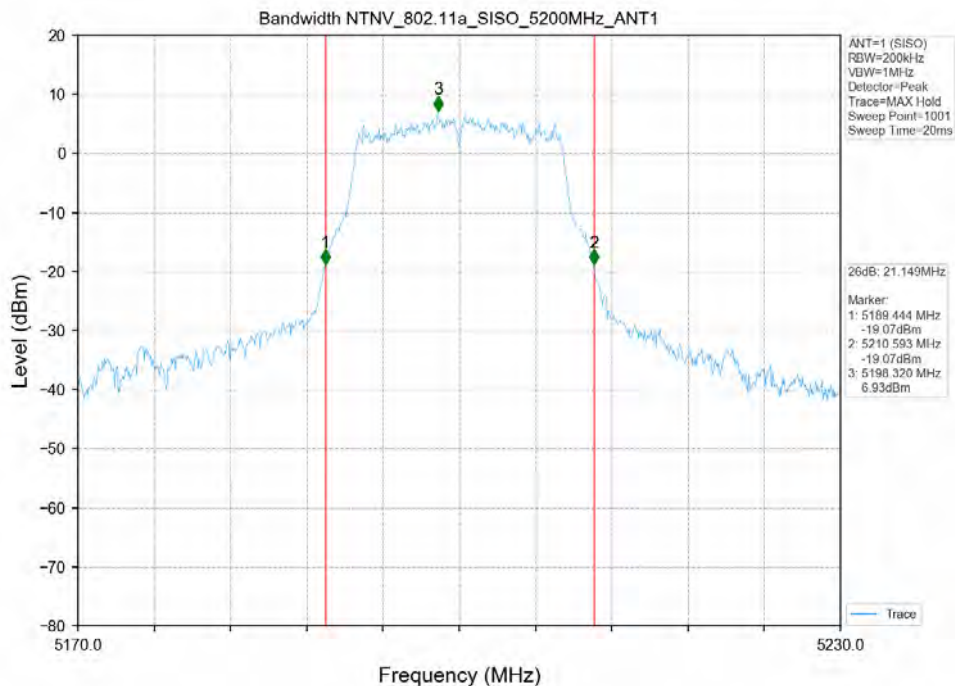
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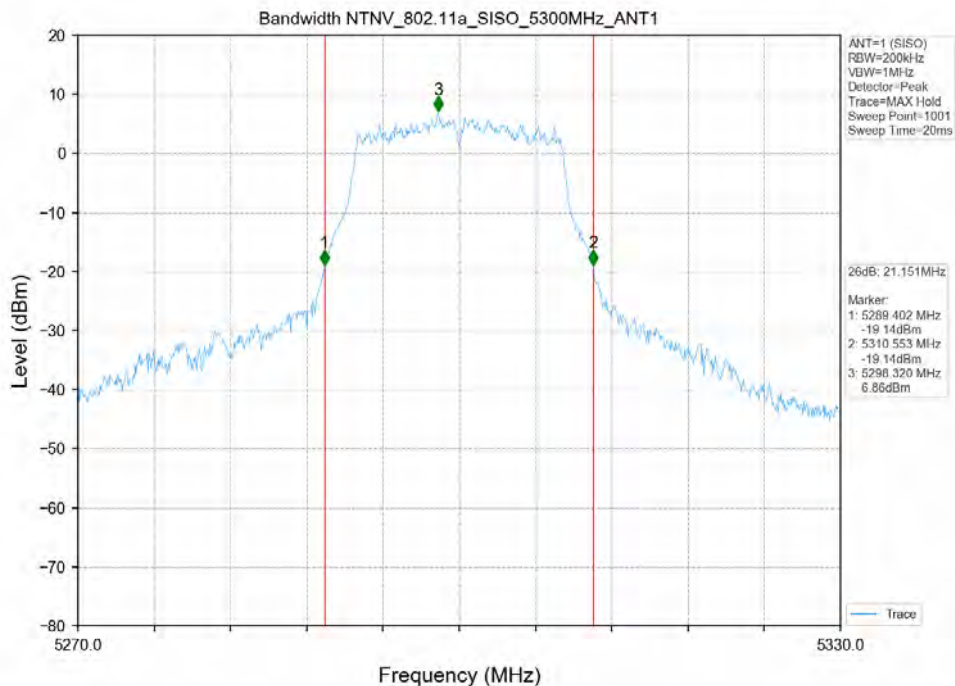
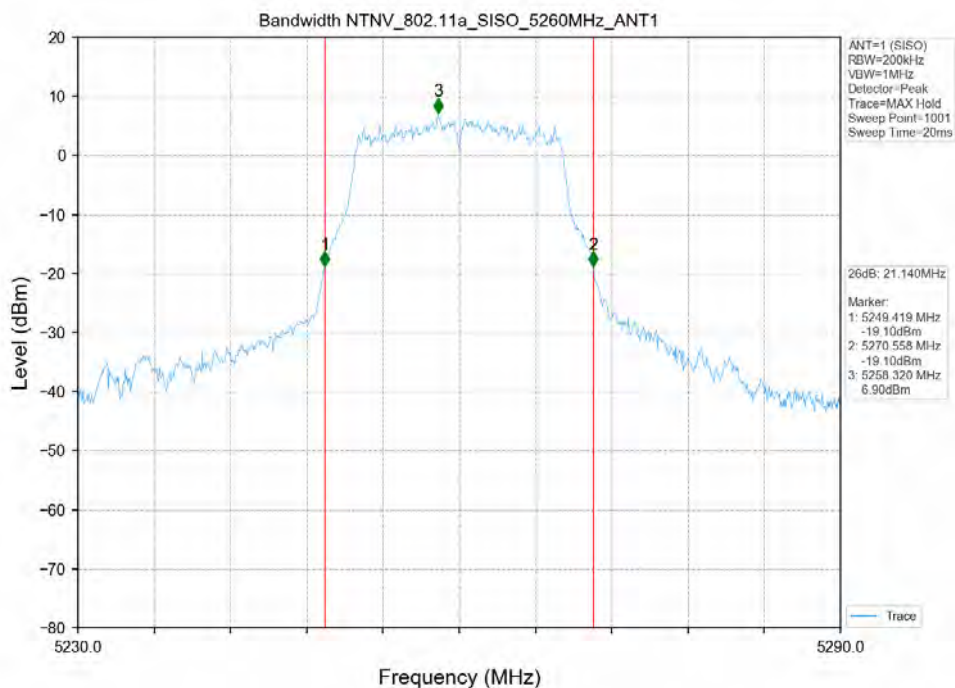
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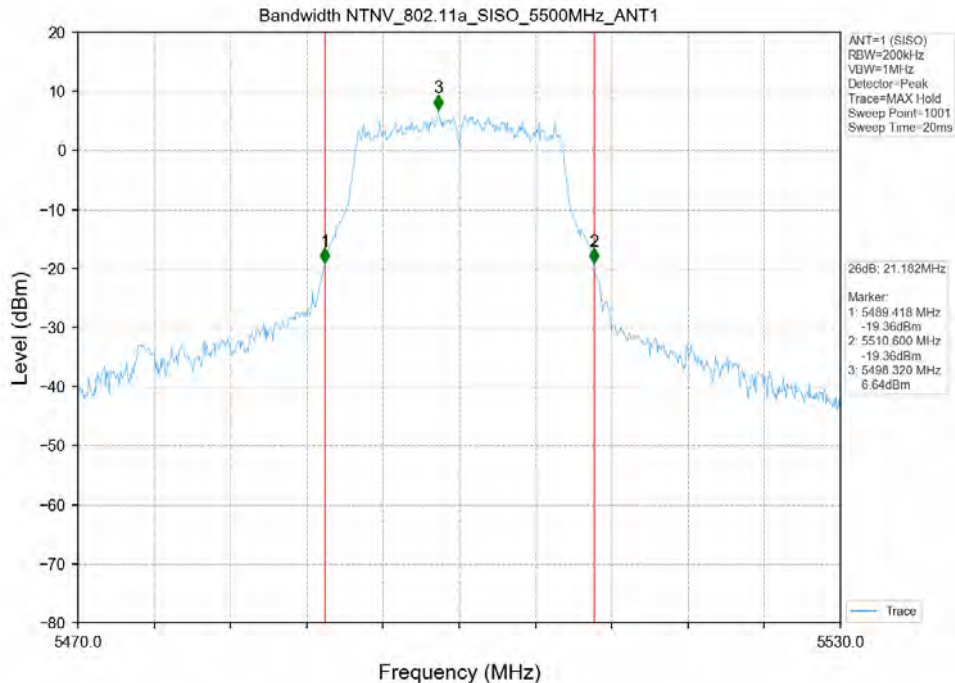
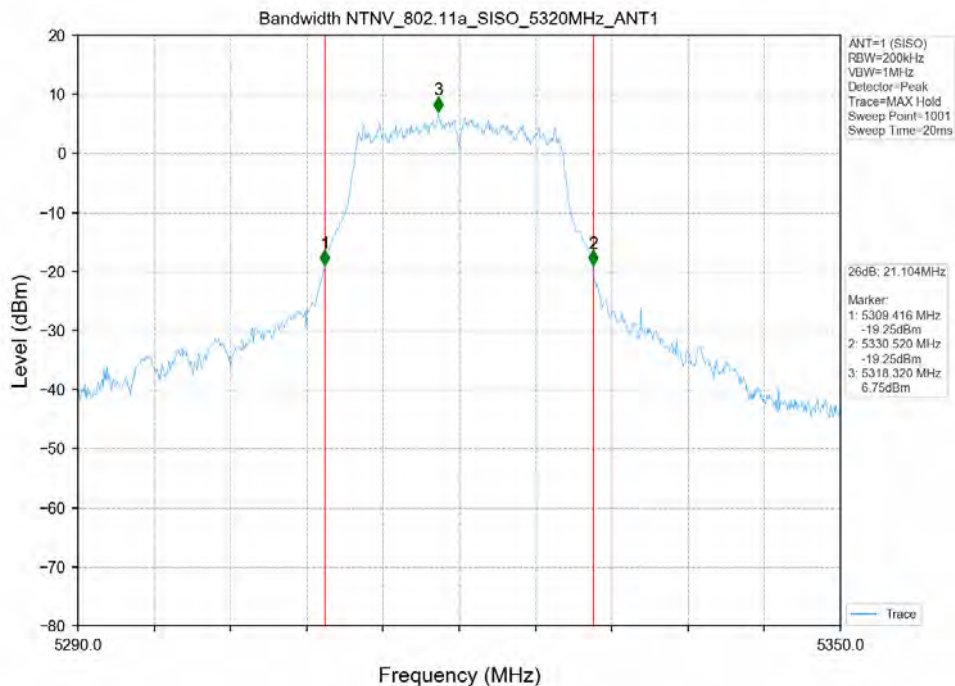
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|                 | 5310 | SISO | 1 | 36.698 | Only for Report Use |
|                 | 5510 | SISO | 1 | 36.735 | Only for Report Use |
|                 | 5550 | SISO | 1 | 36.820 | Only for Report Use |
|                 | 5590 | SISO | 1 | 36.728 | Only for Report Use |
|                 | 5670 | SISO | 1 | 36.733 | Only for Report Use |
|                 | 5755 | SISO | 1 | 36.852 | Only for Report Use |
|                 | 5795 | SISO | 1 | 36.739 | Only for Report Use |
| 802.11ac(VHT80) | 5210 | SISO | 1 | 75.561 | Only for Report Use |
|                 | 5290 | SISO | 1 | 75.547 | Only for Report Use |
|                 | 5530 | SISO | 1 | 75.642 | Only for Report Use |
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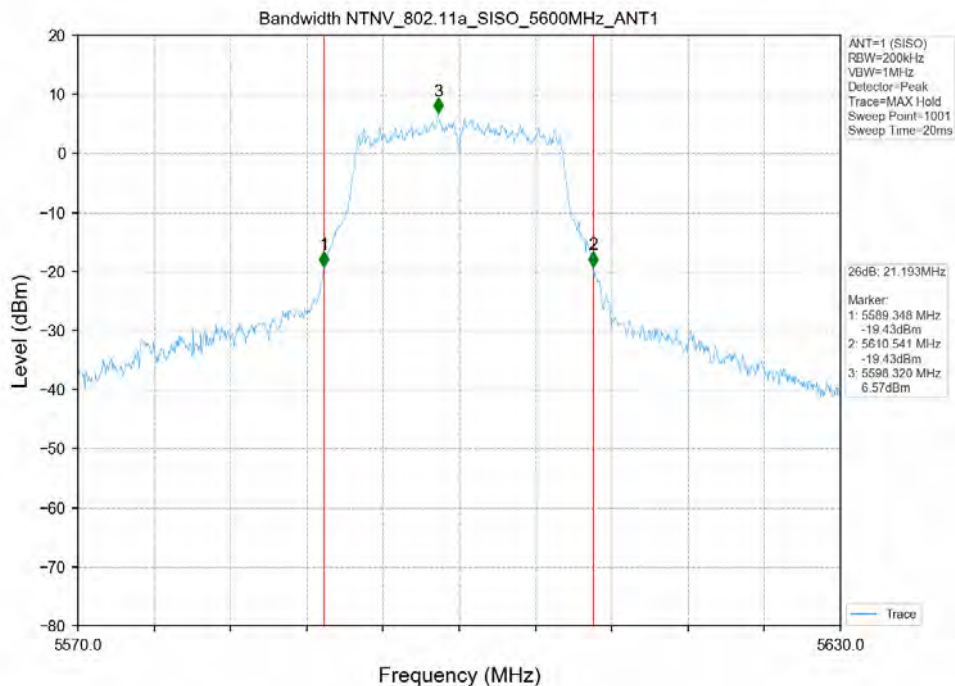
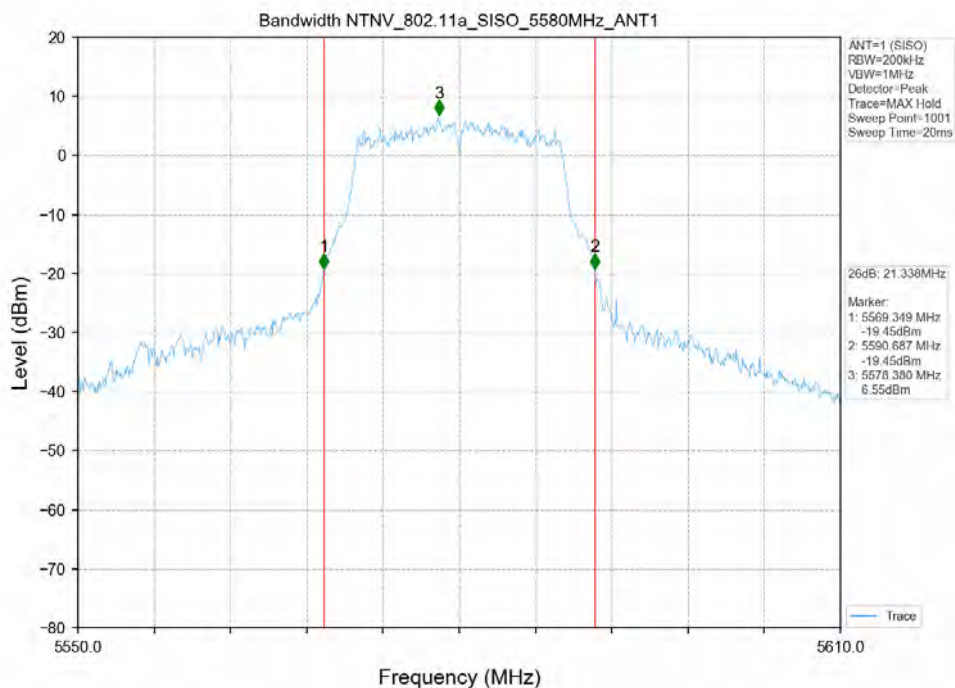
## 2.2 Test Graph - Emission Bandwidth

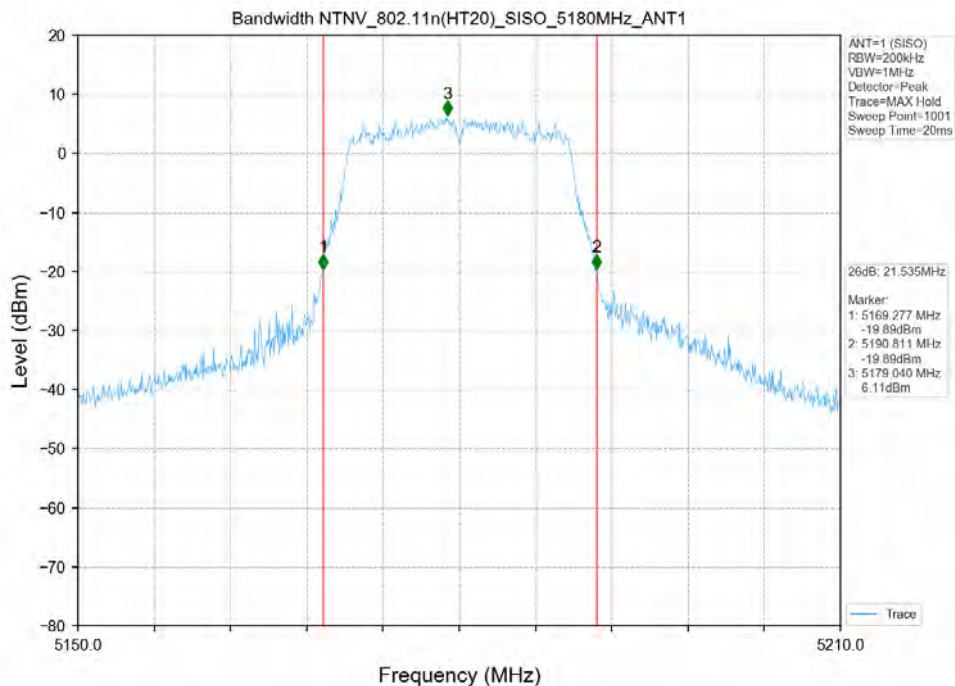
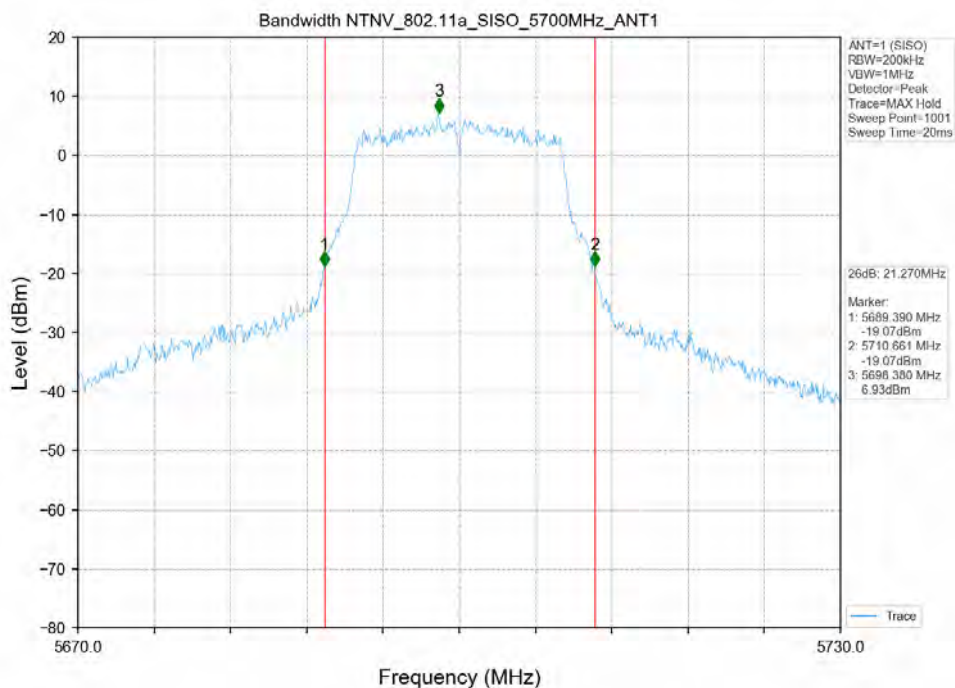


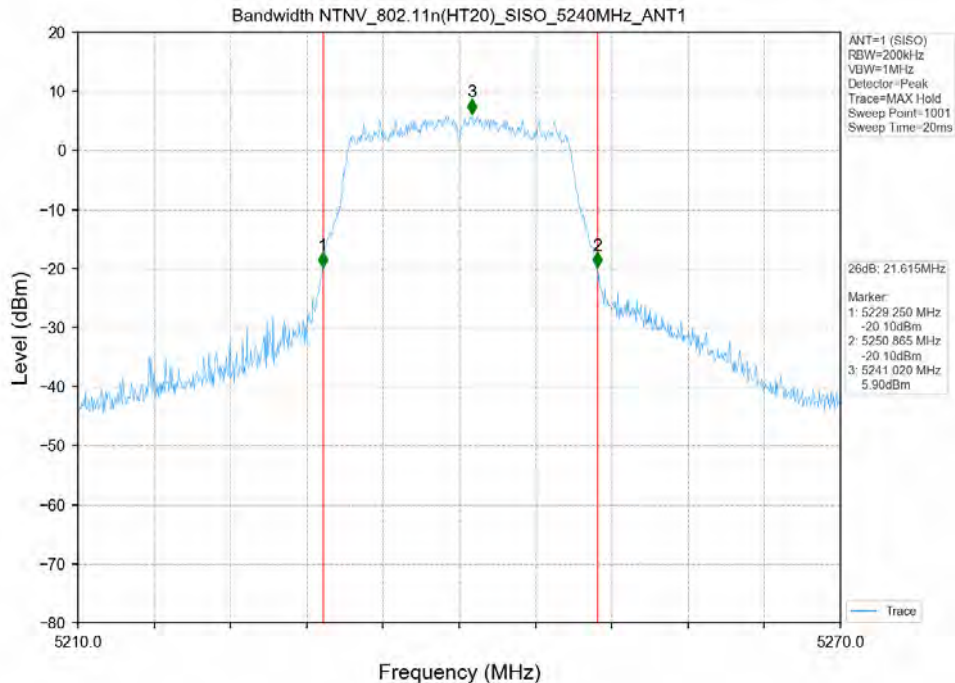
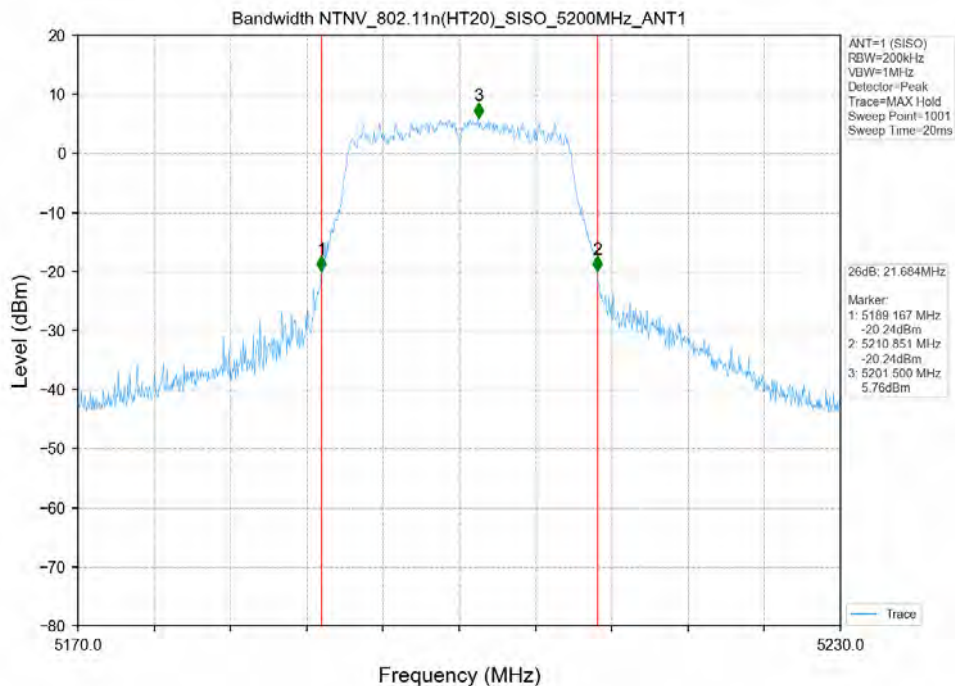


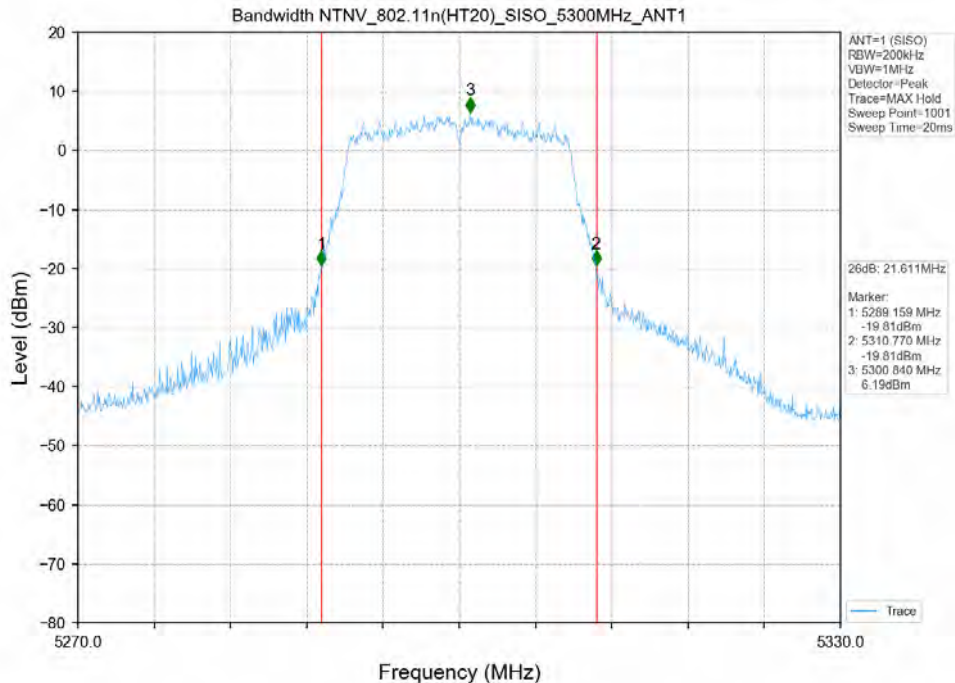
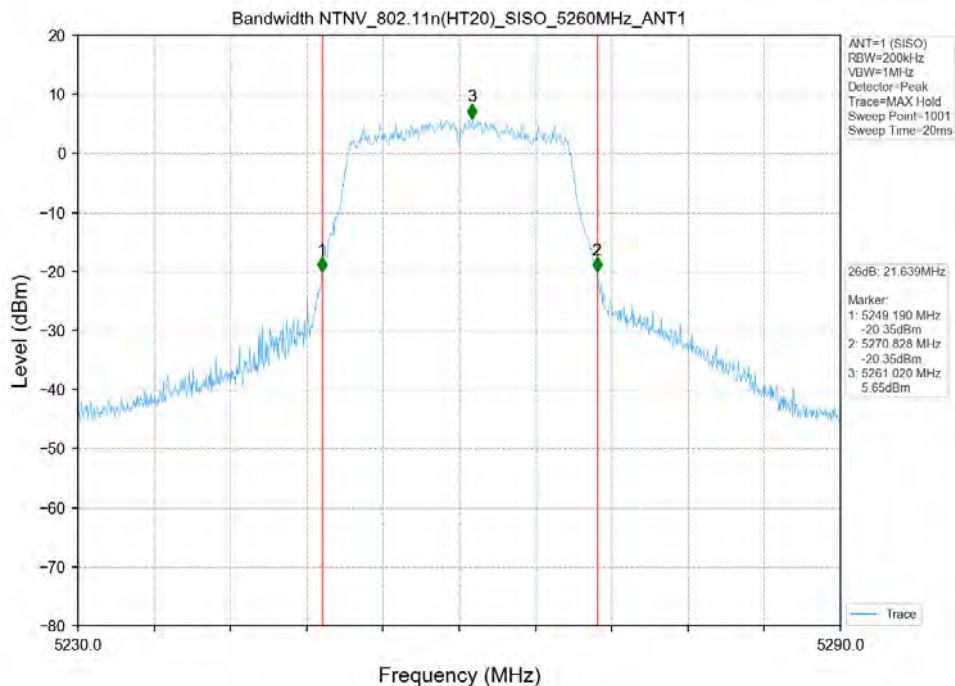


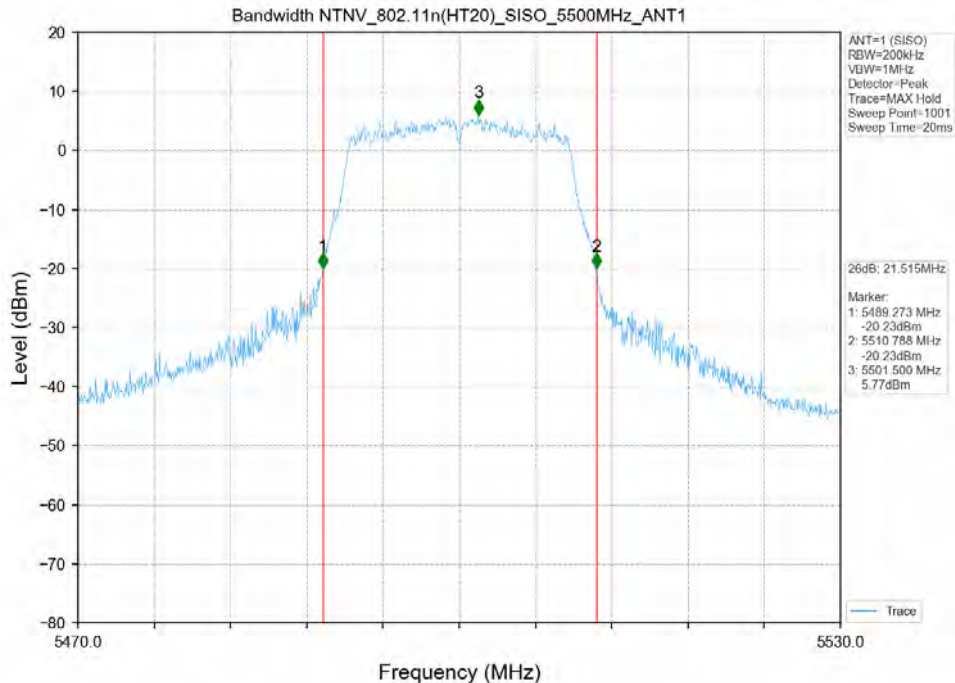
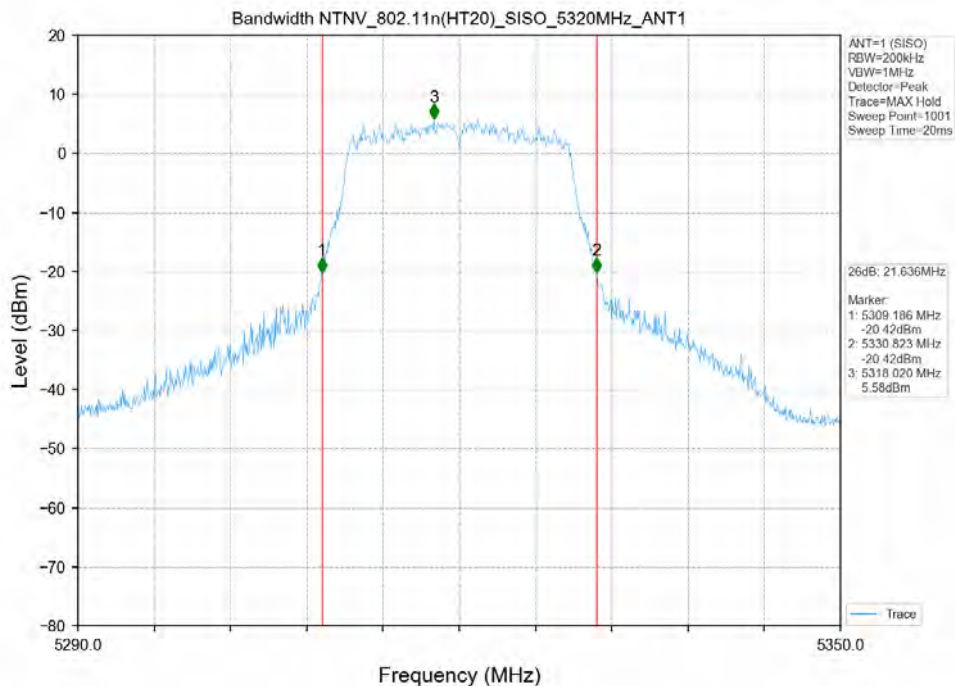


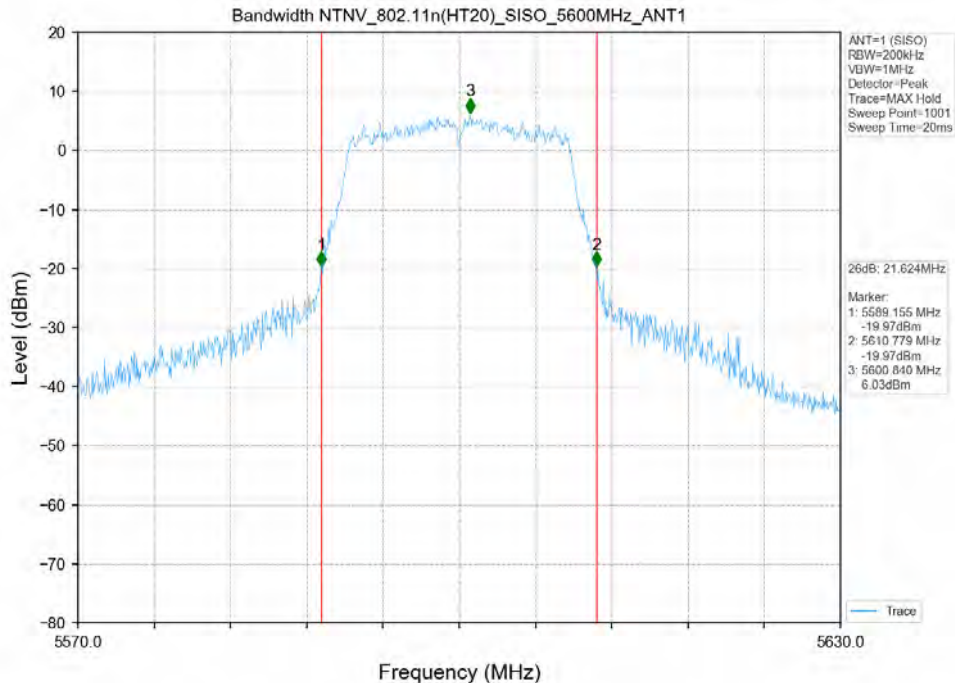
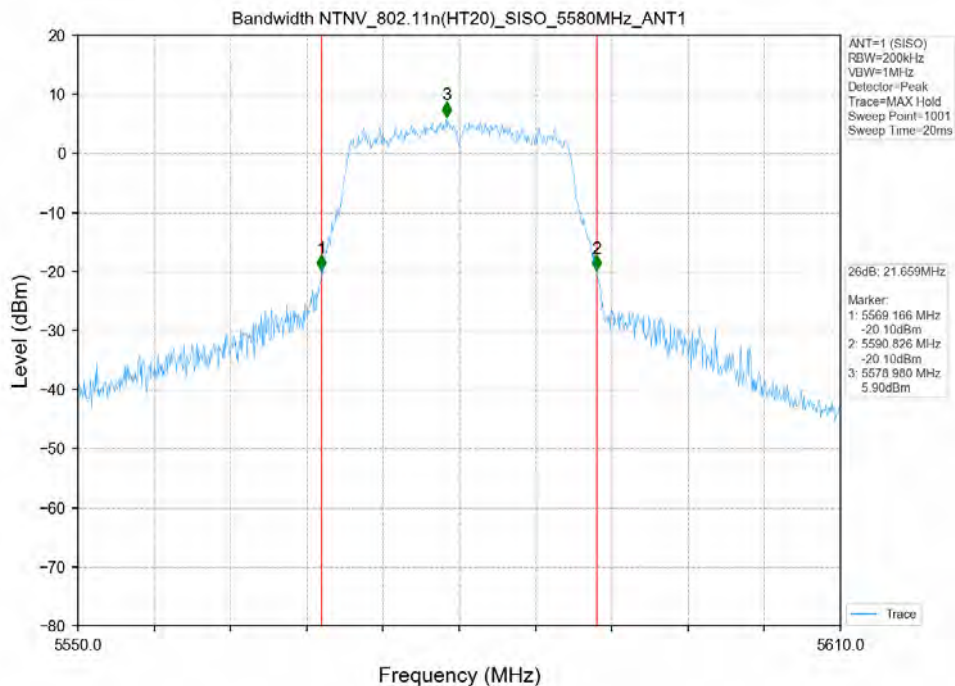


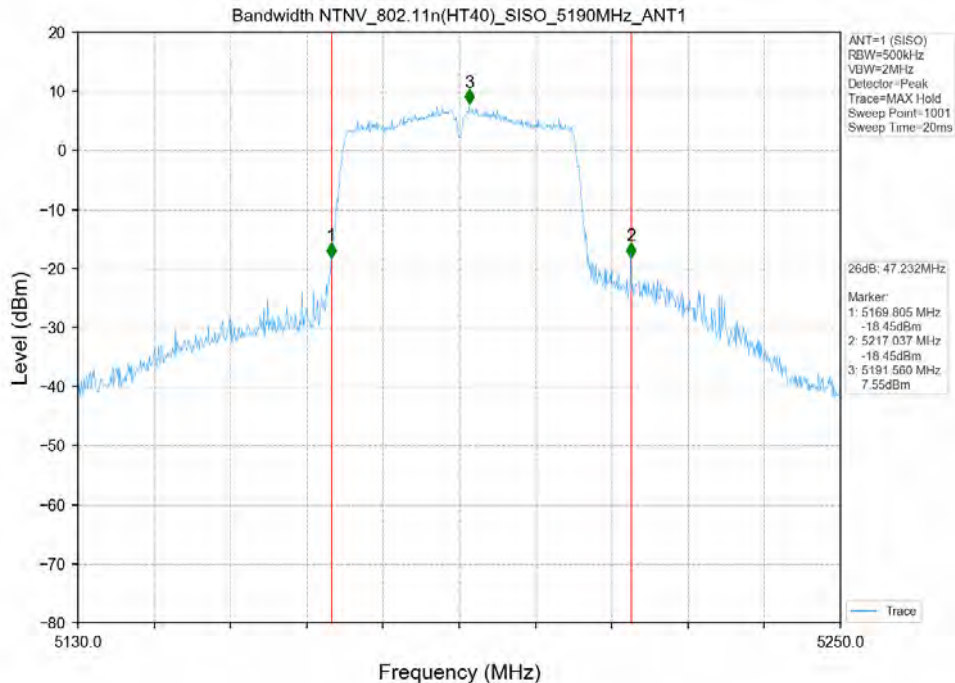
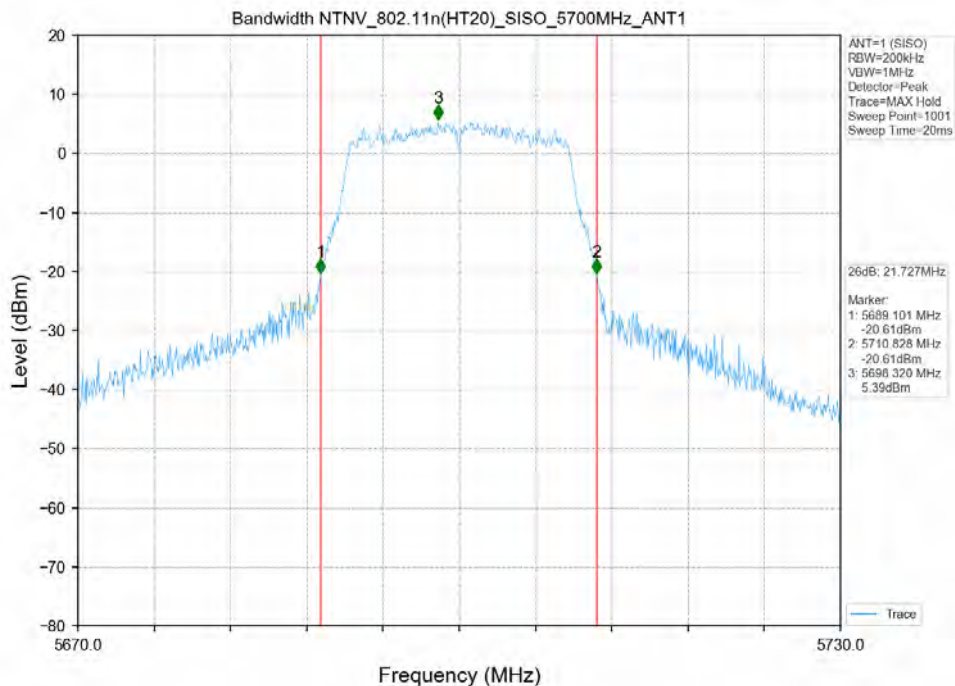


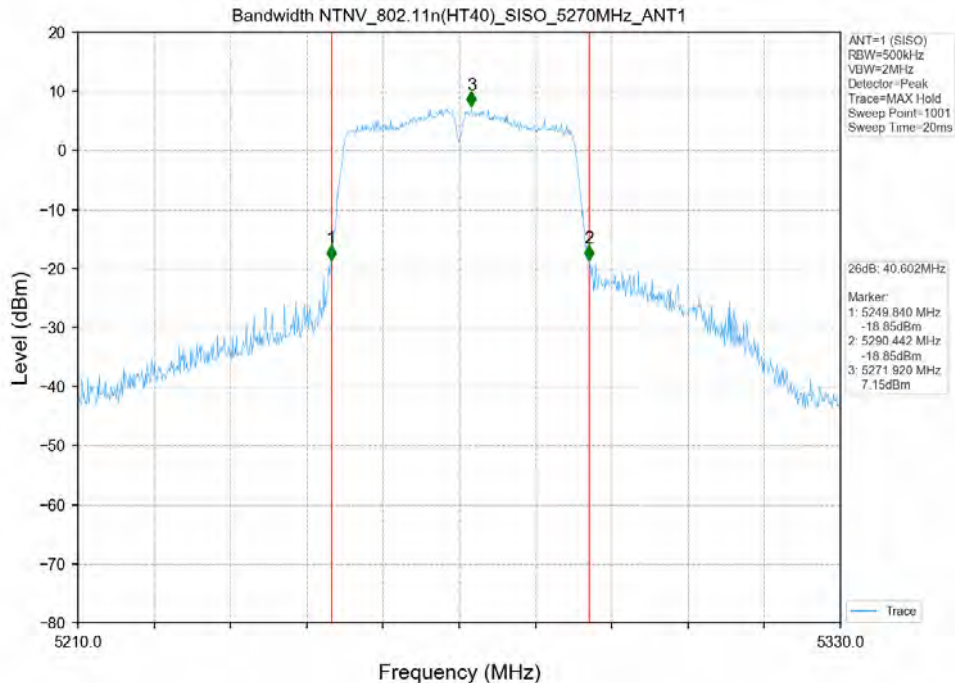
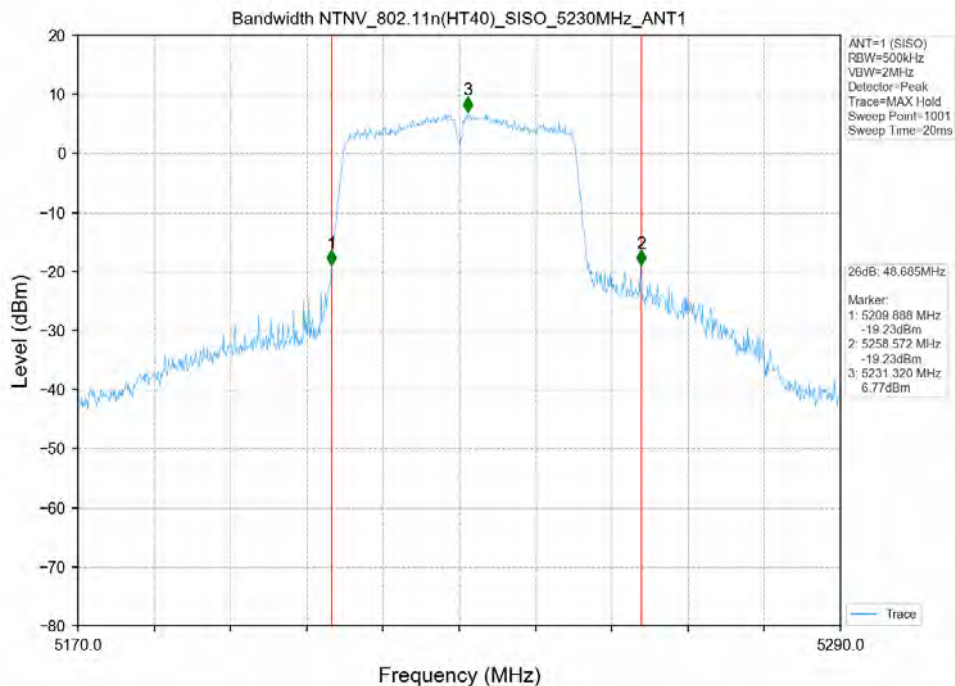


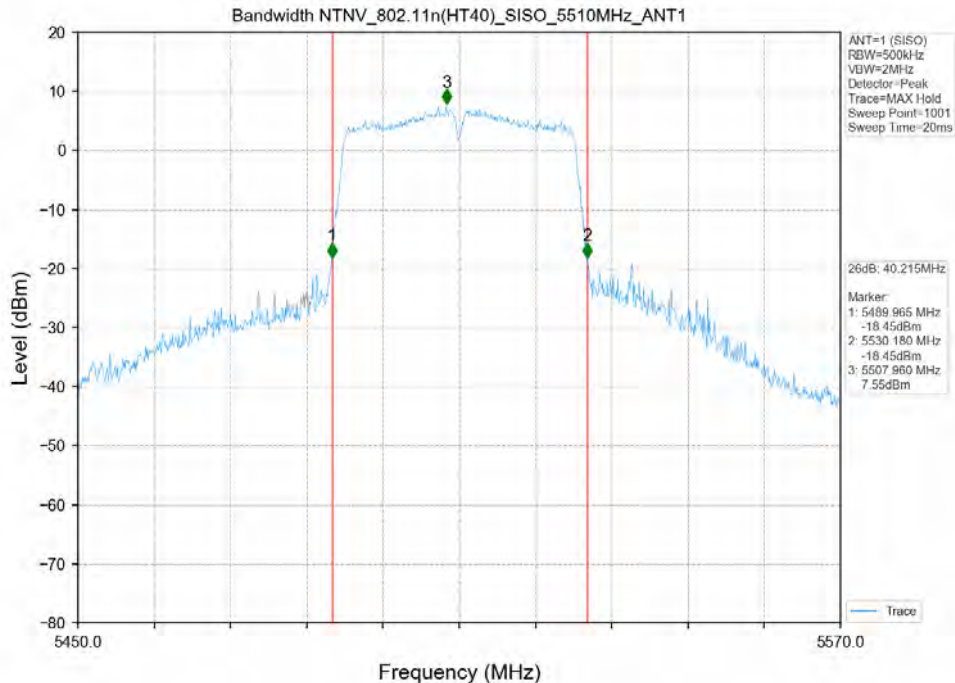
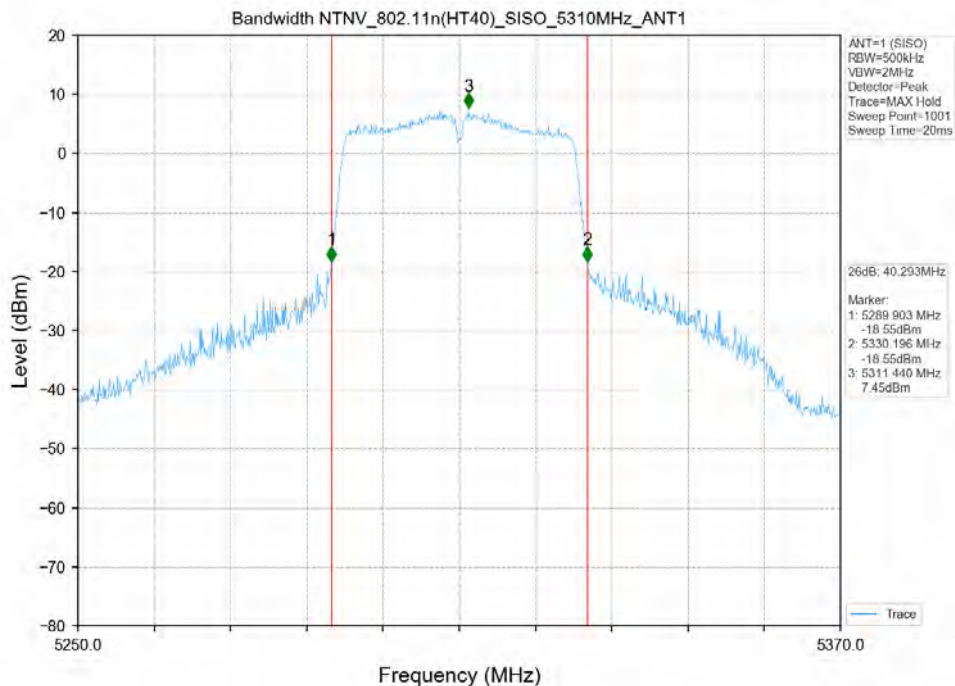


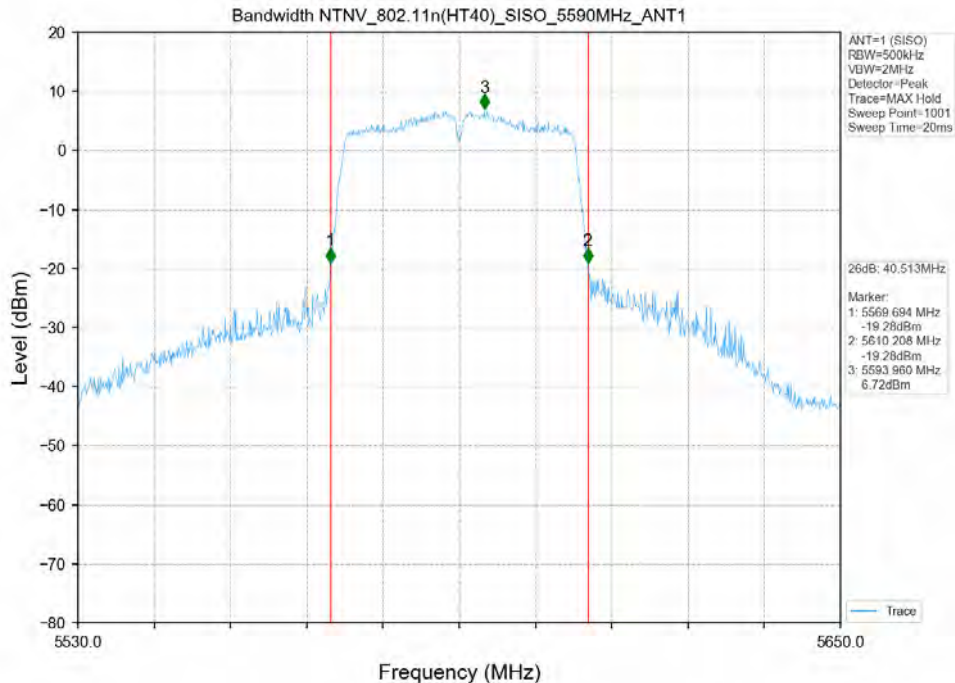
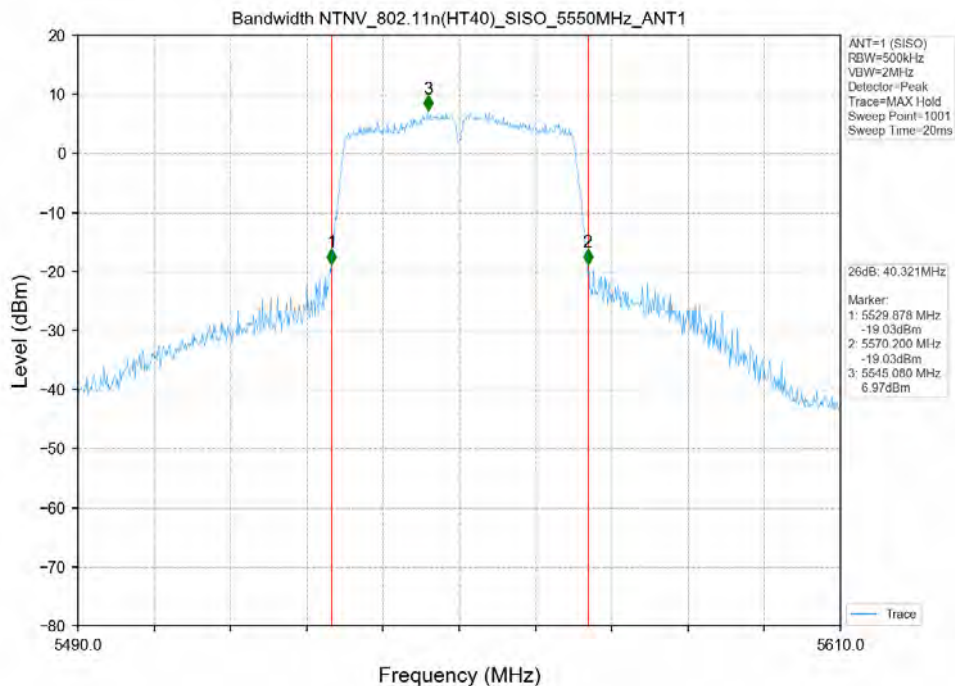


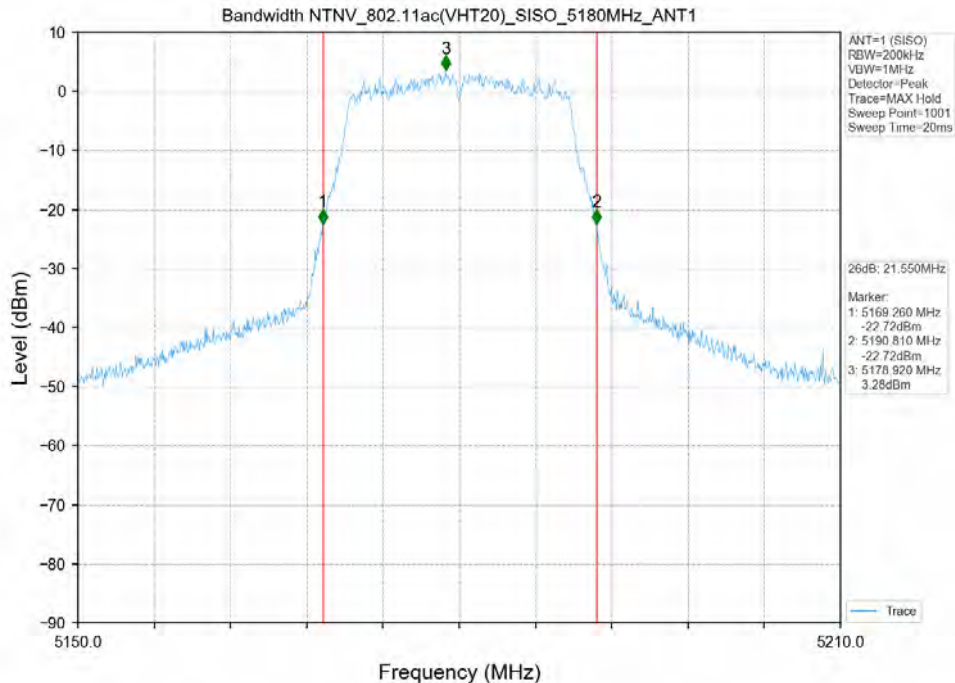
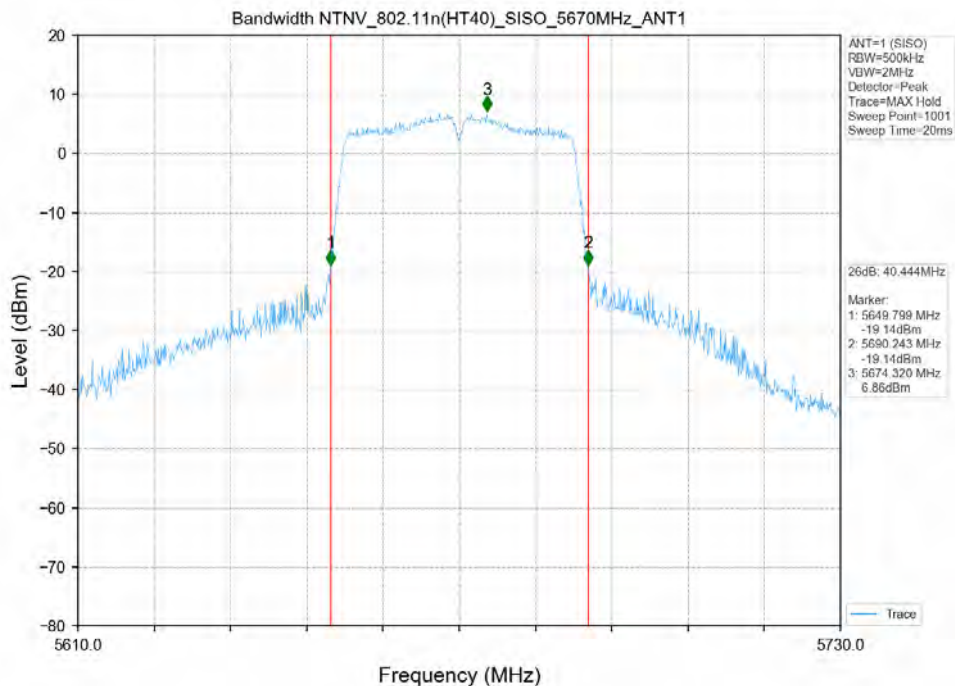


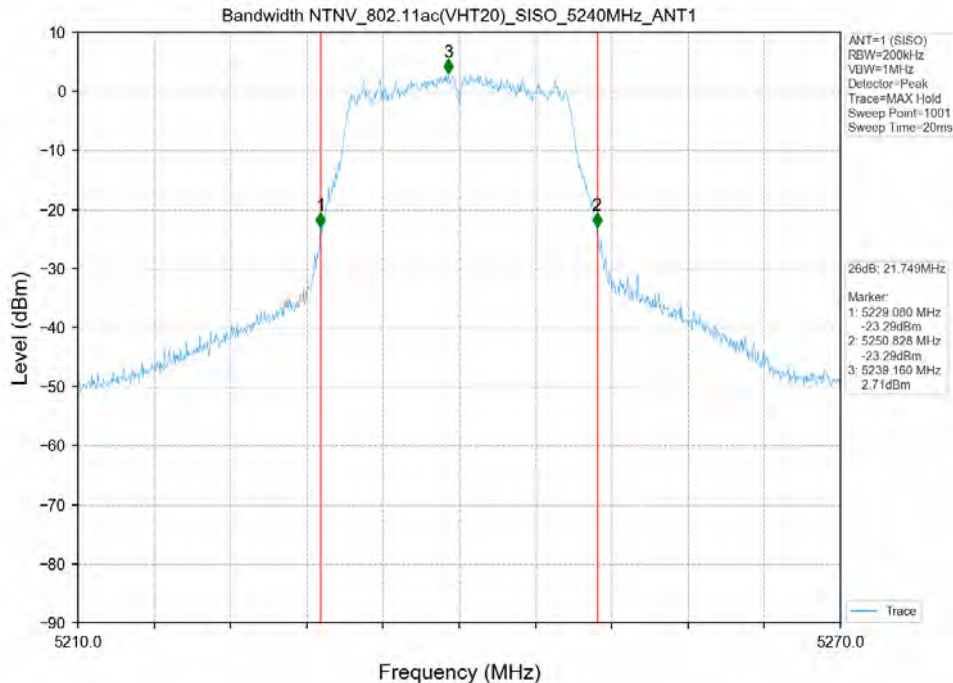
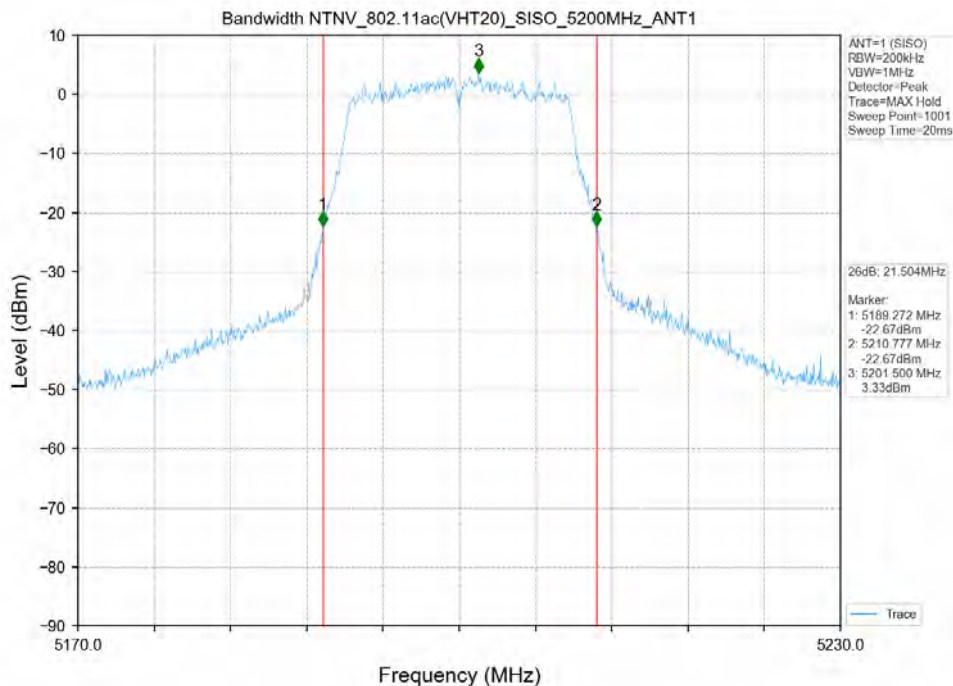


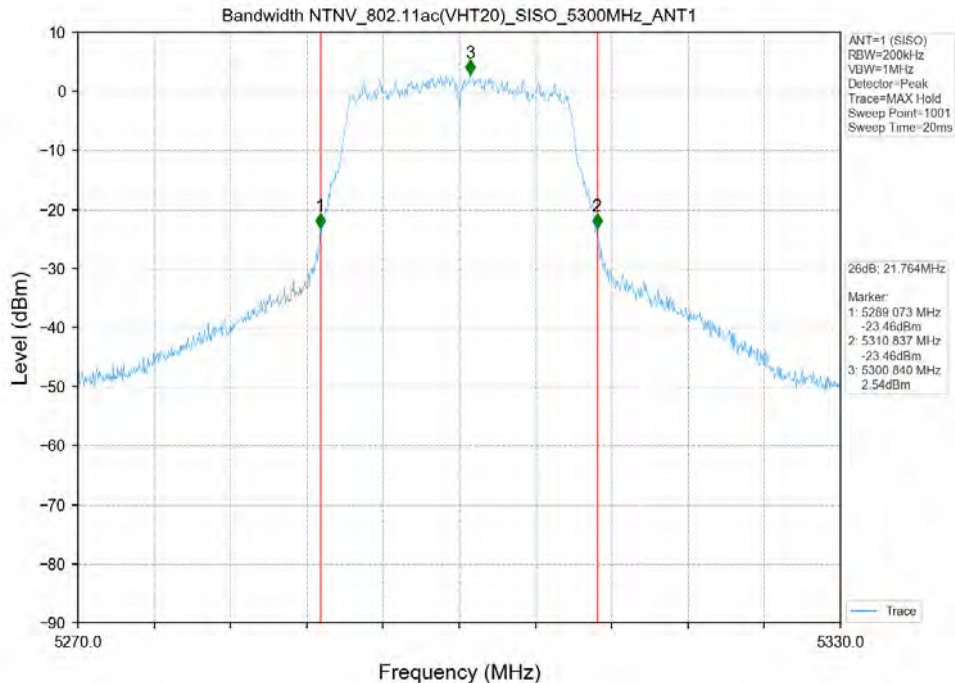
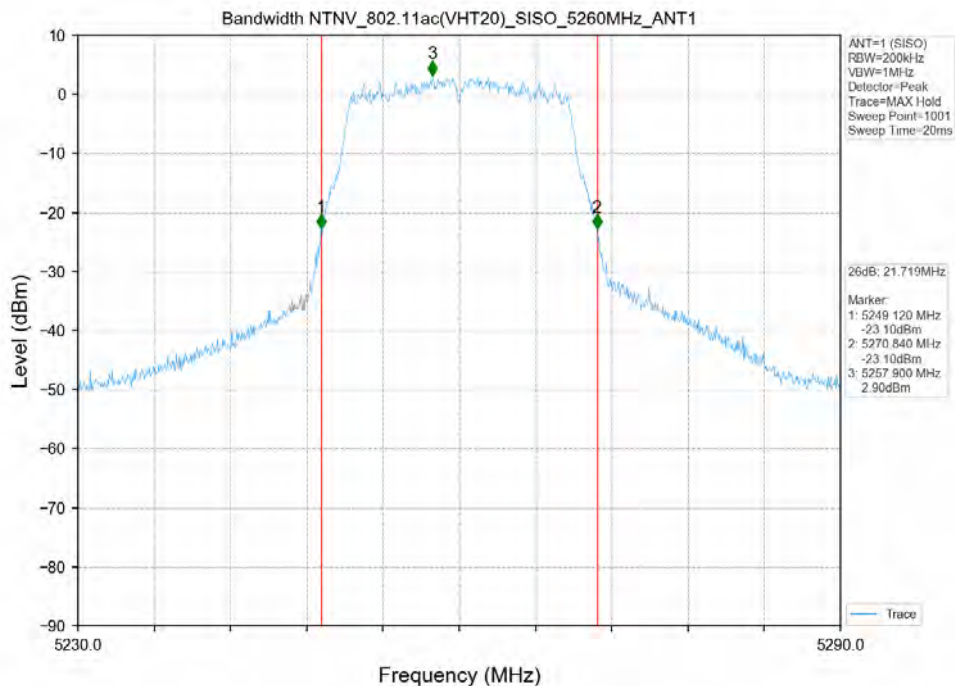


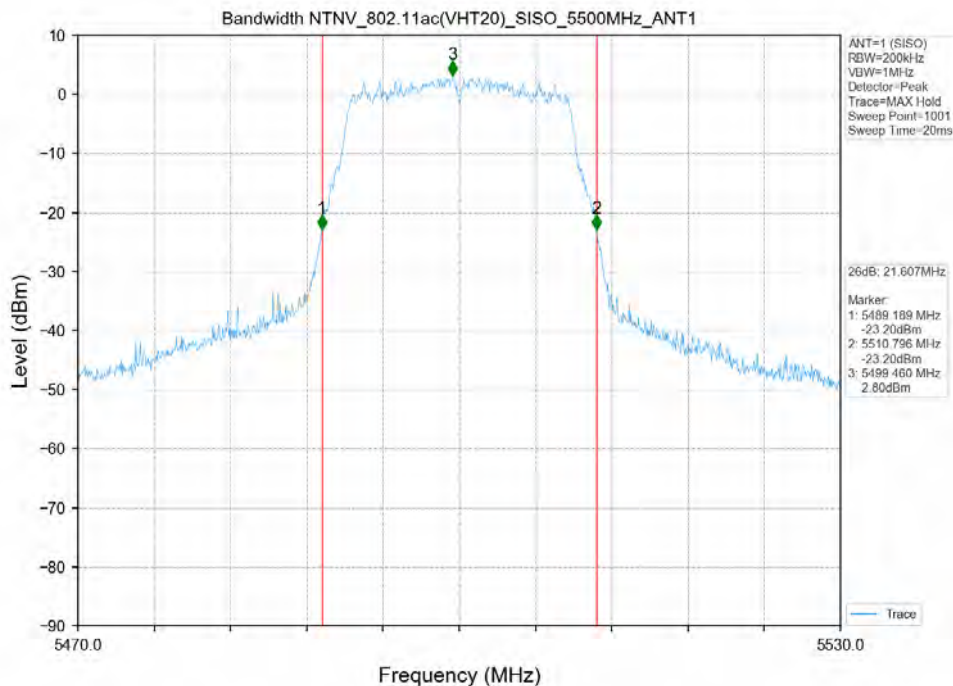
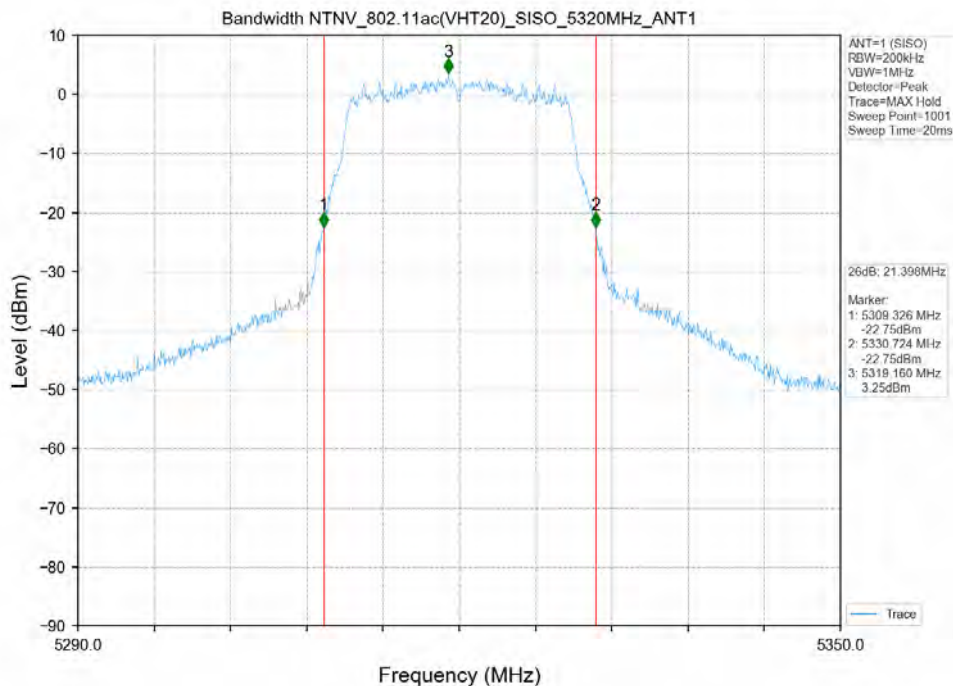


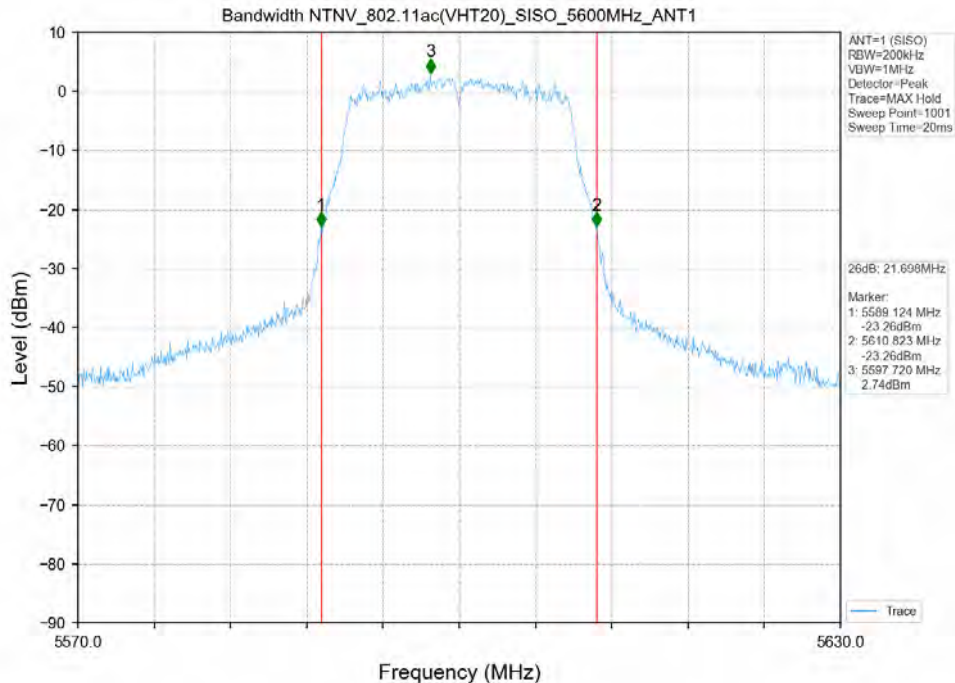
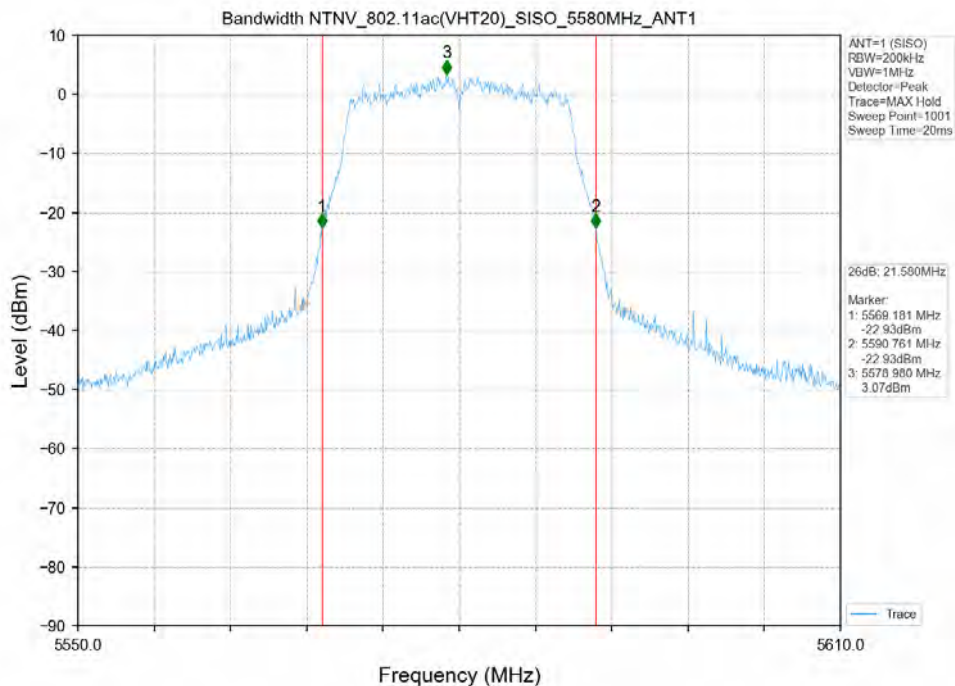


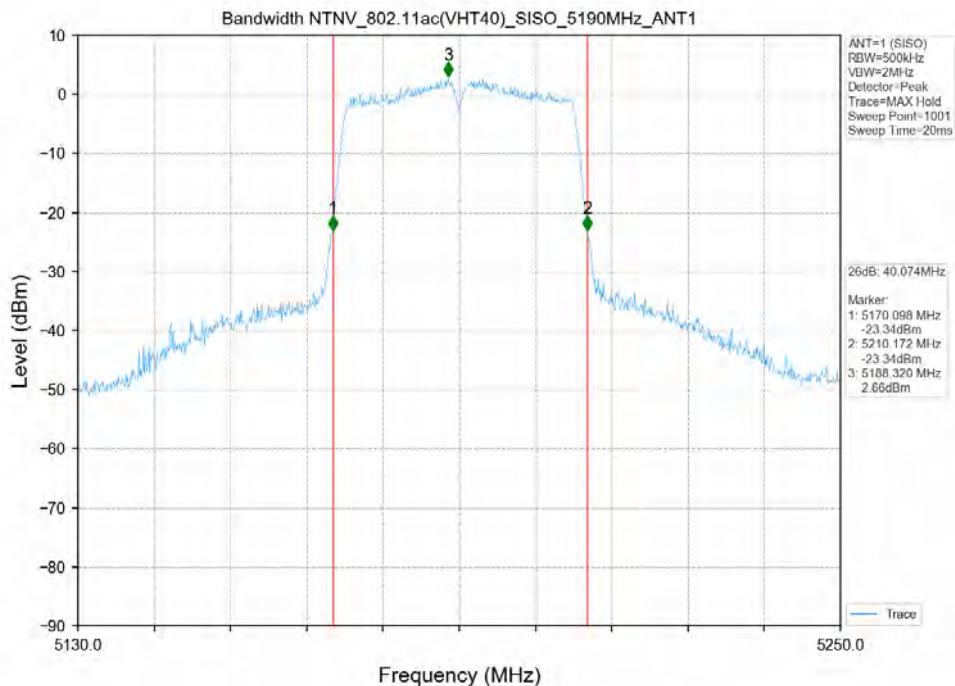
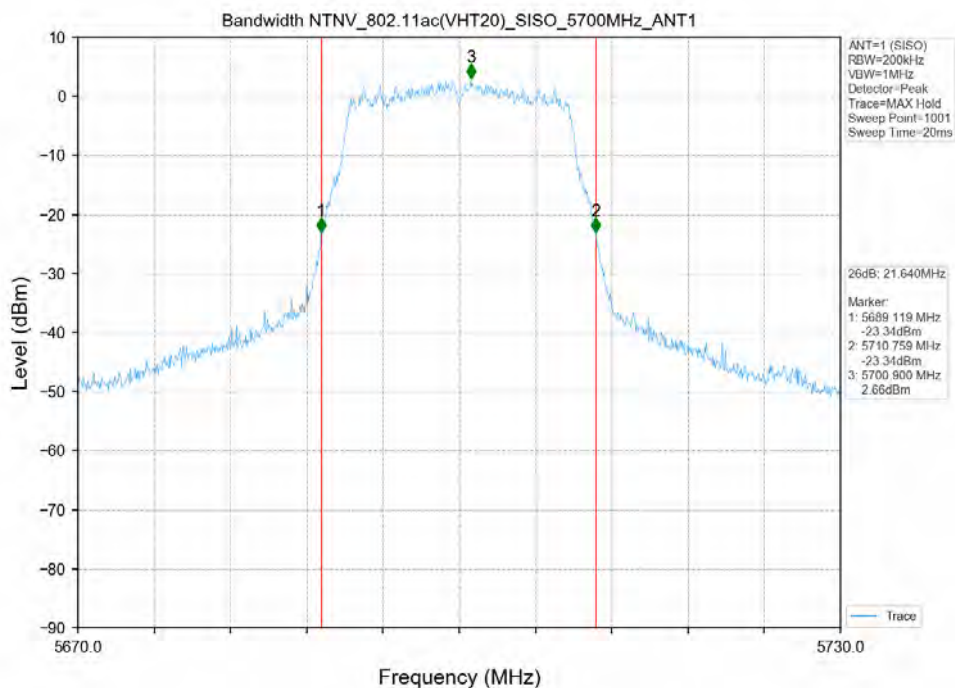


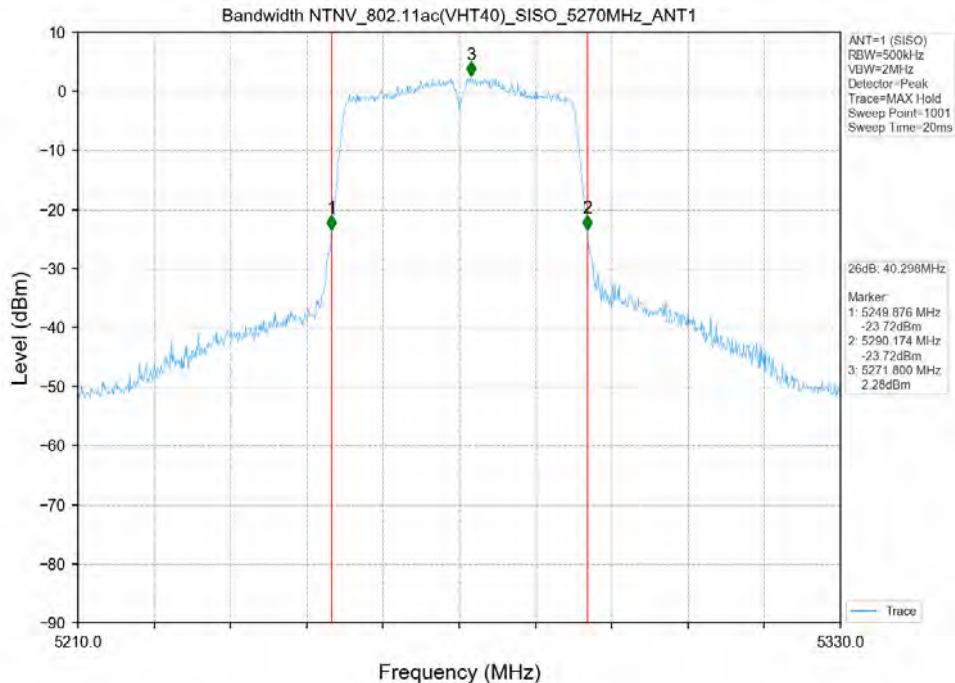
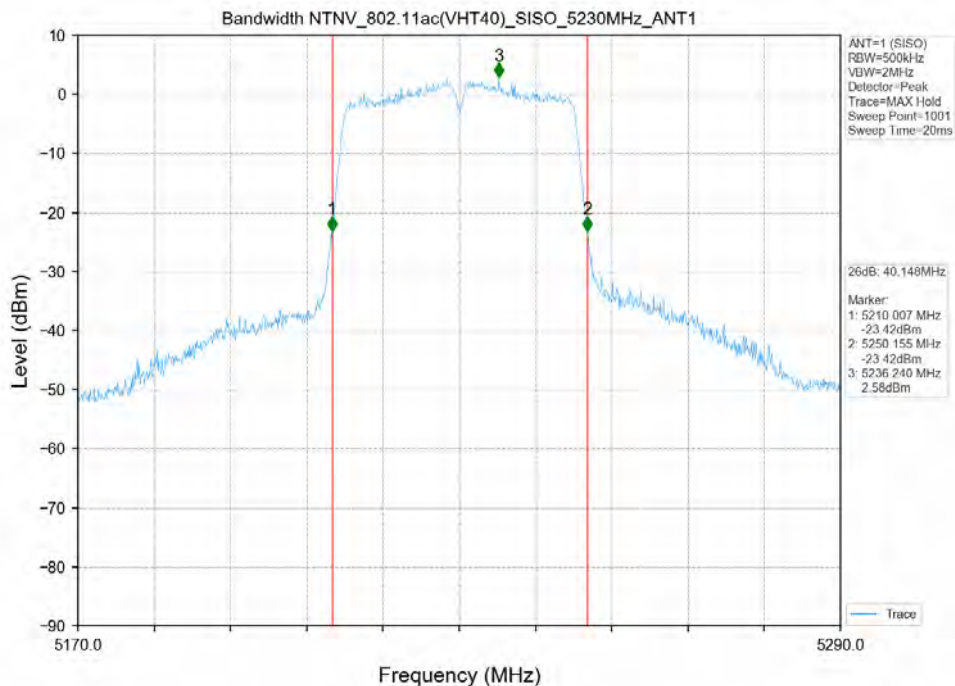


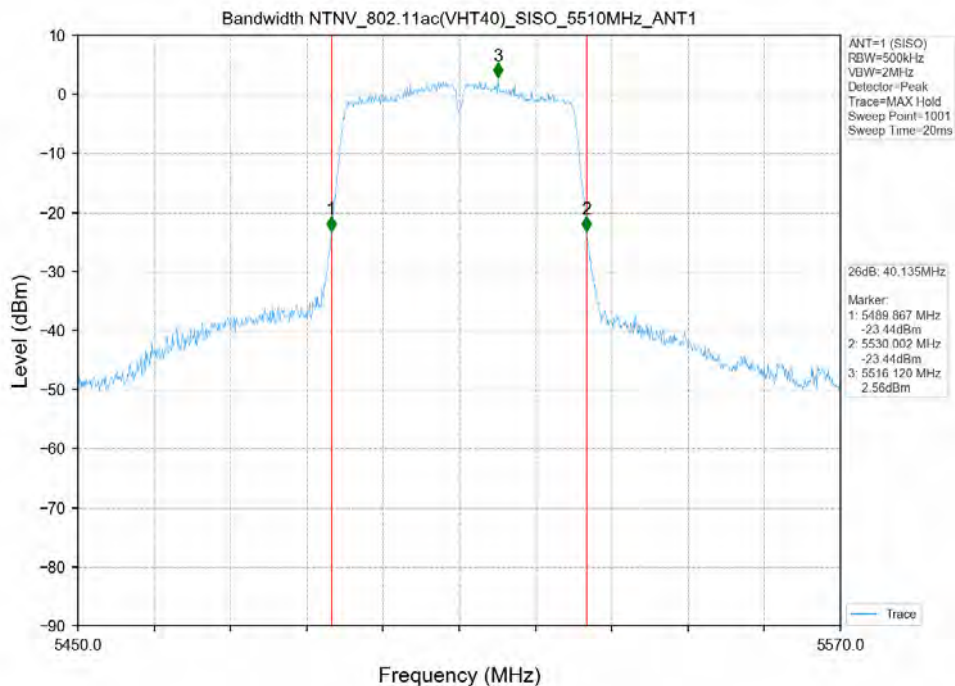
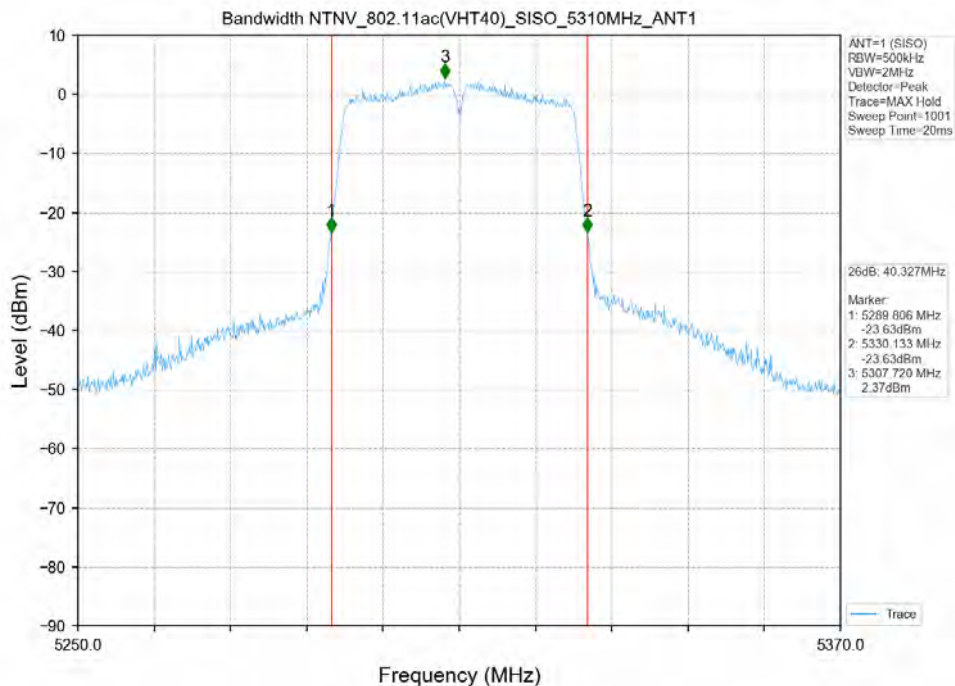


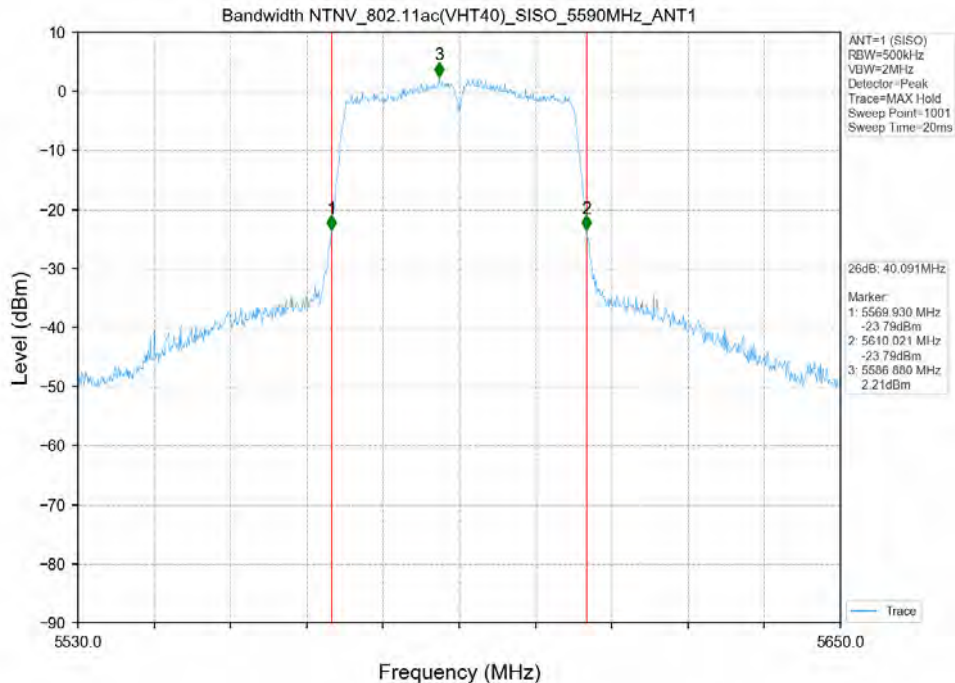
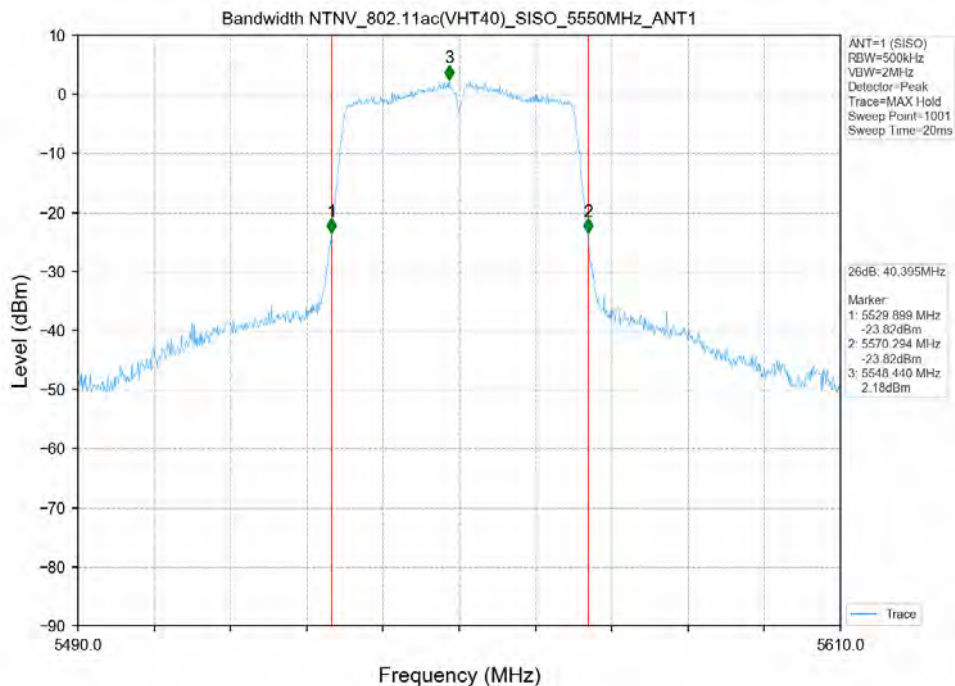


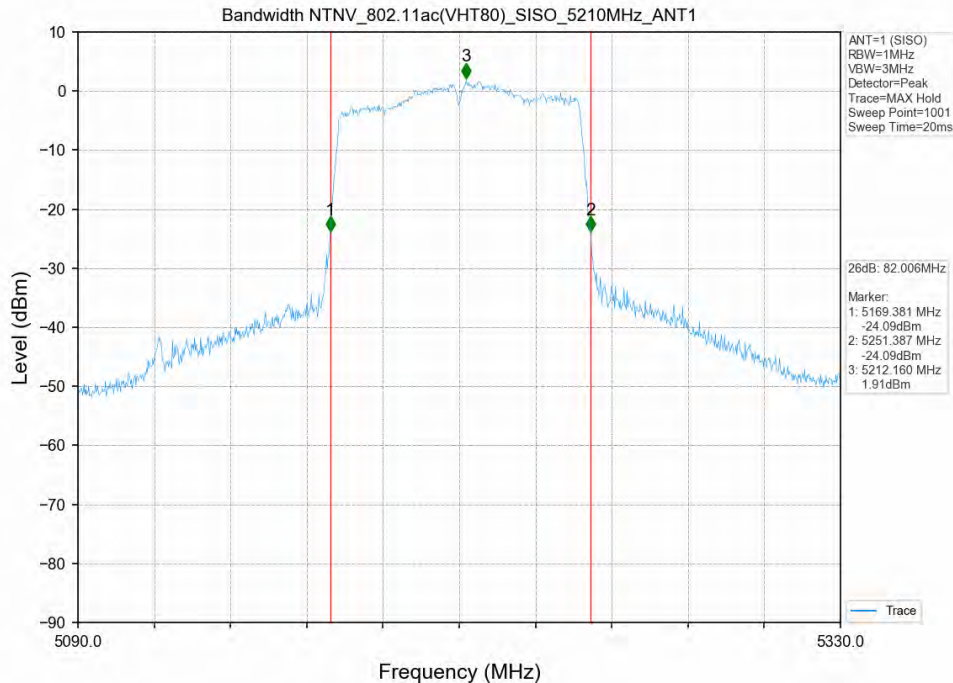
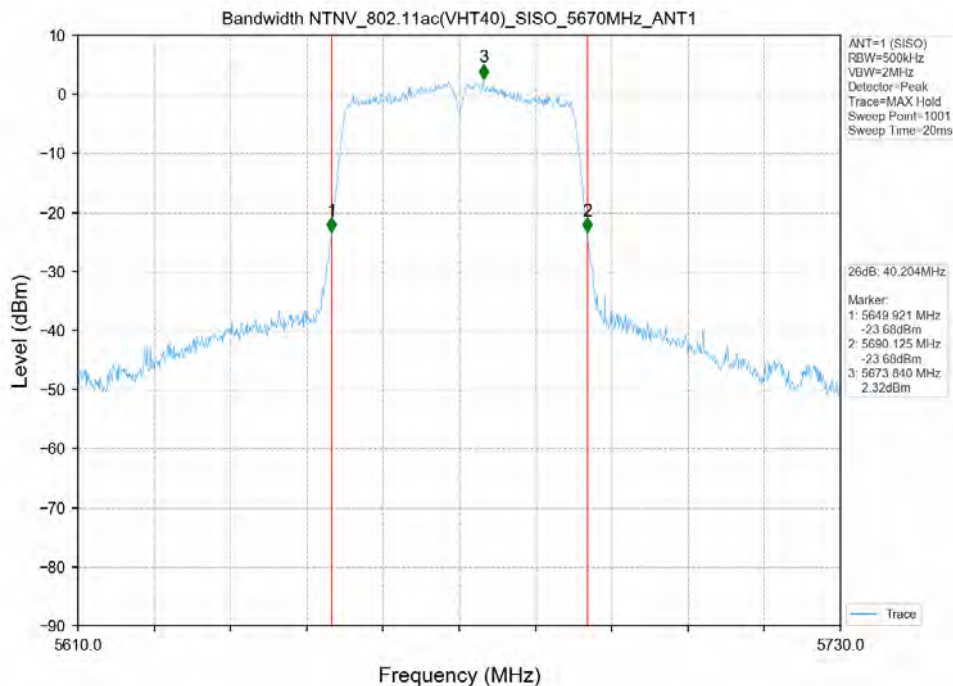


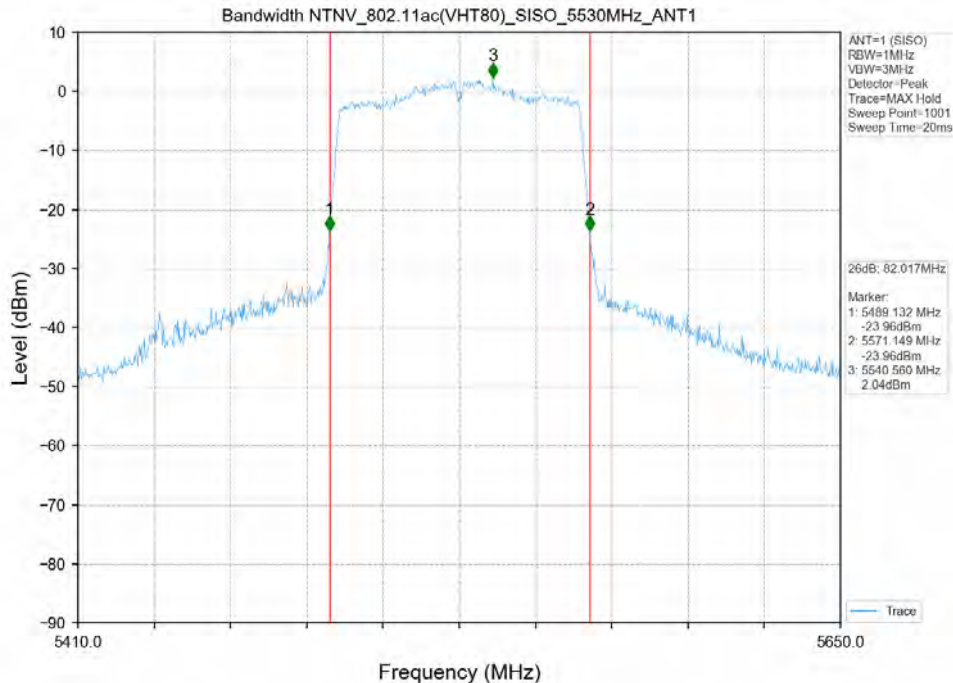
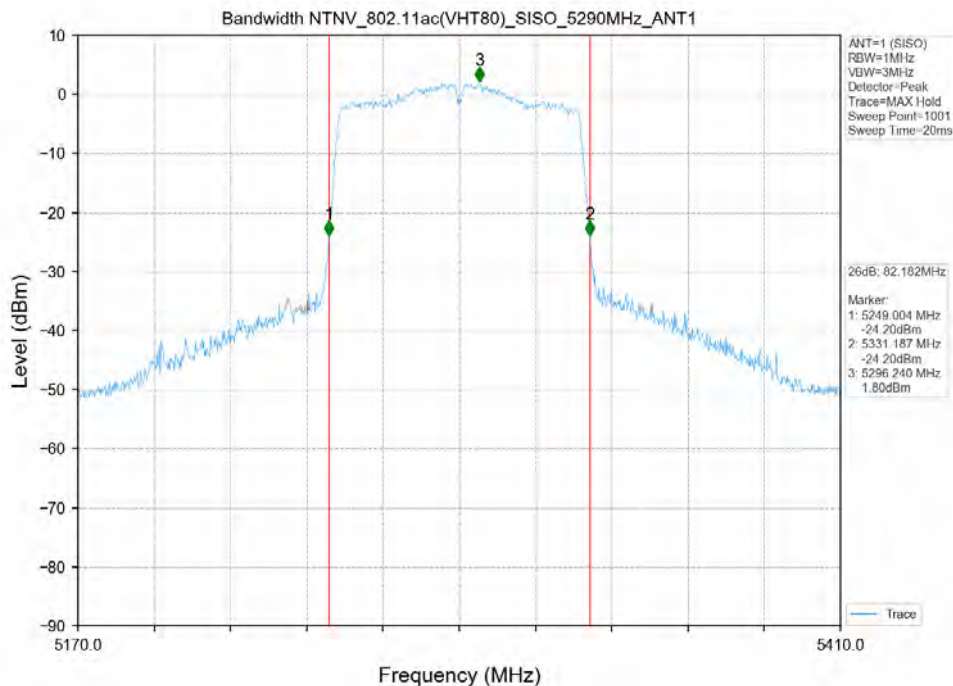


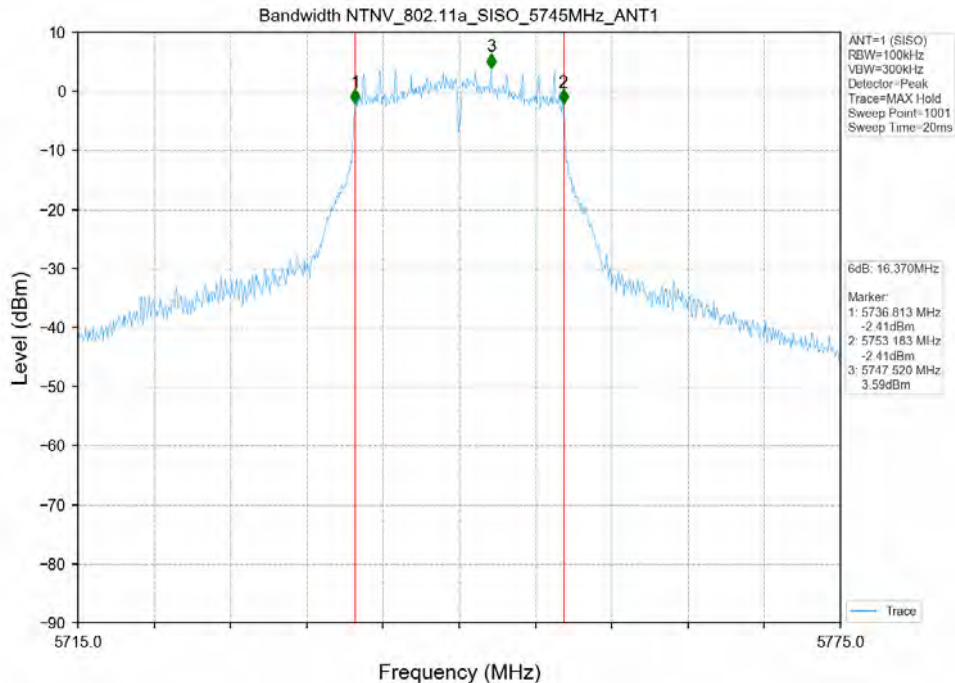
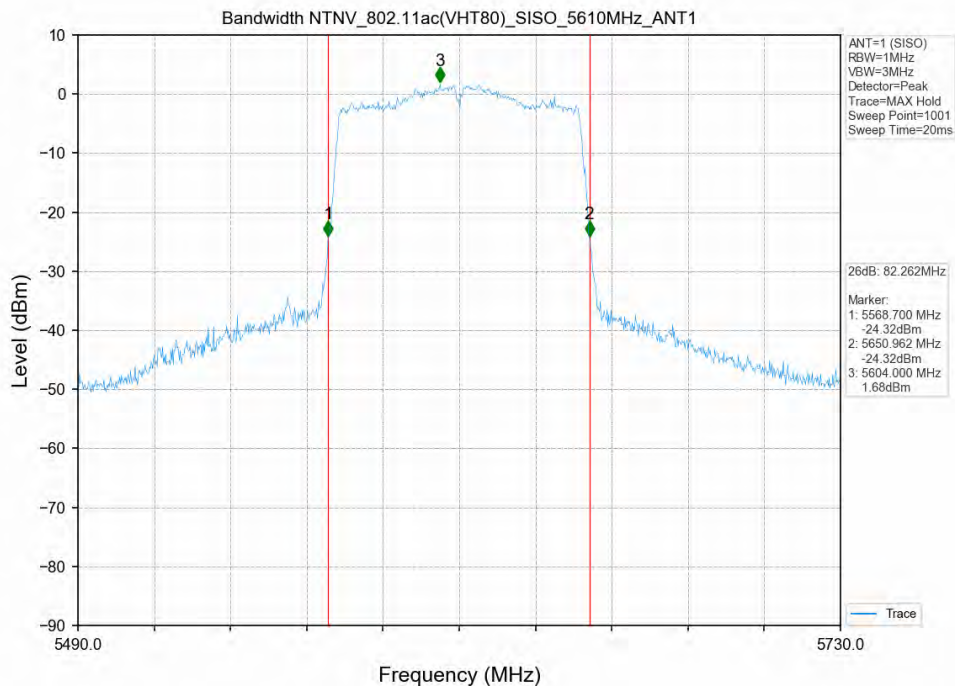


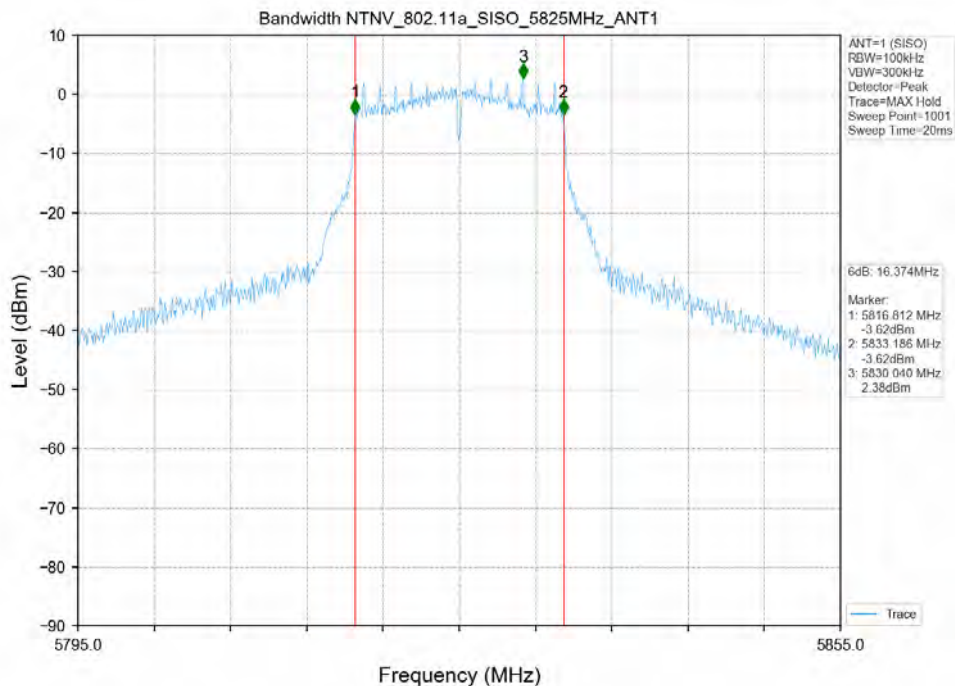
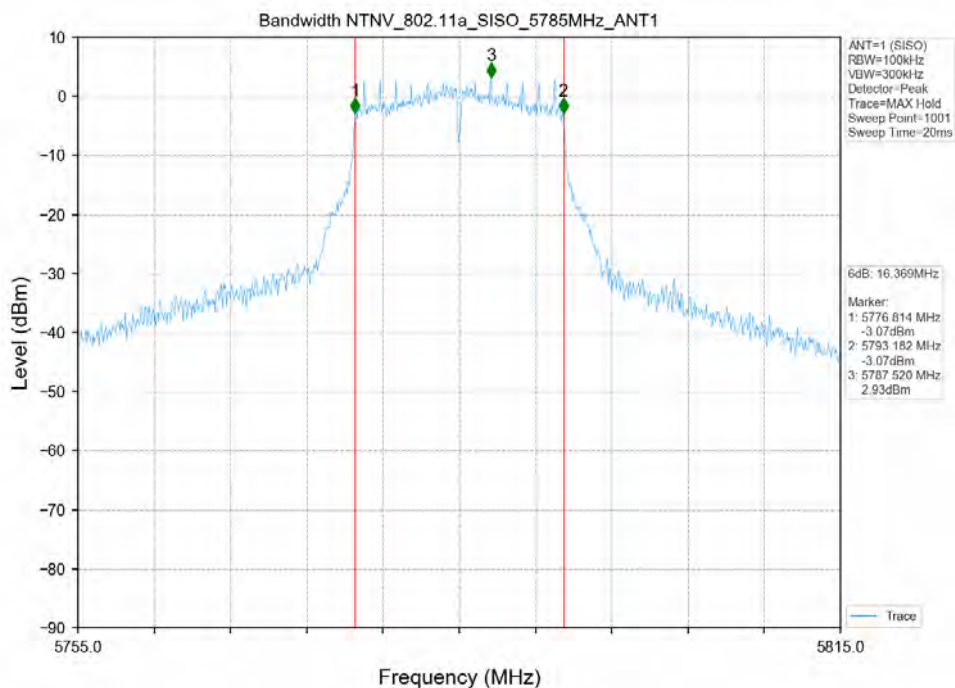


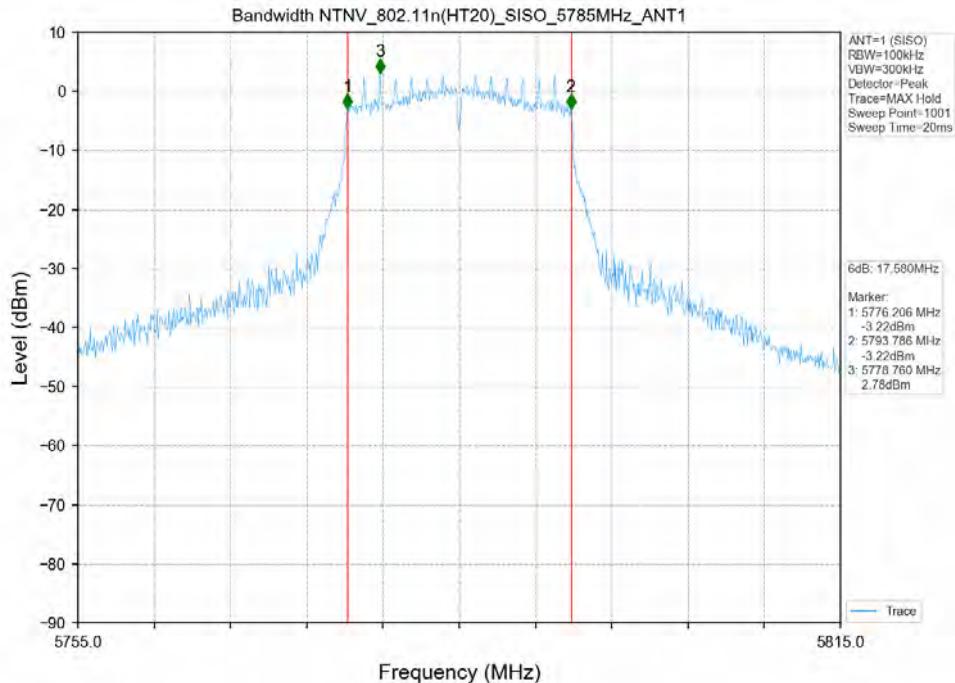
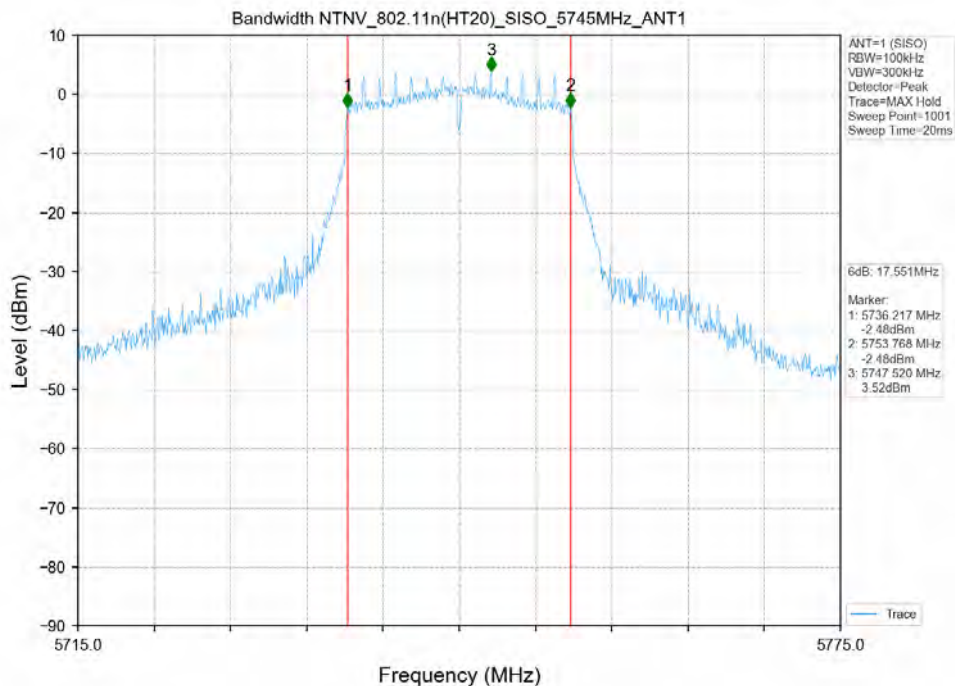


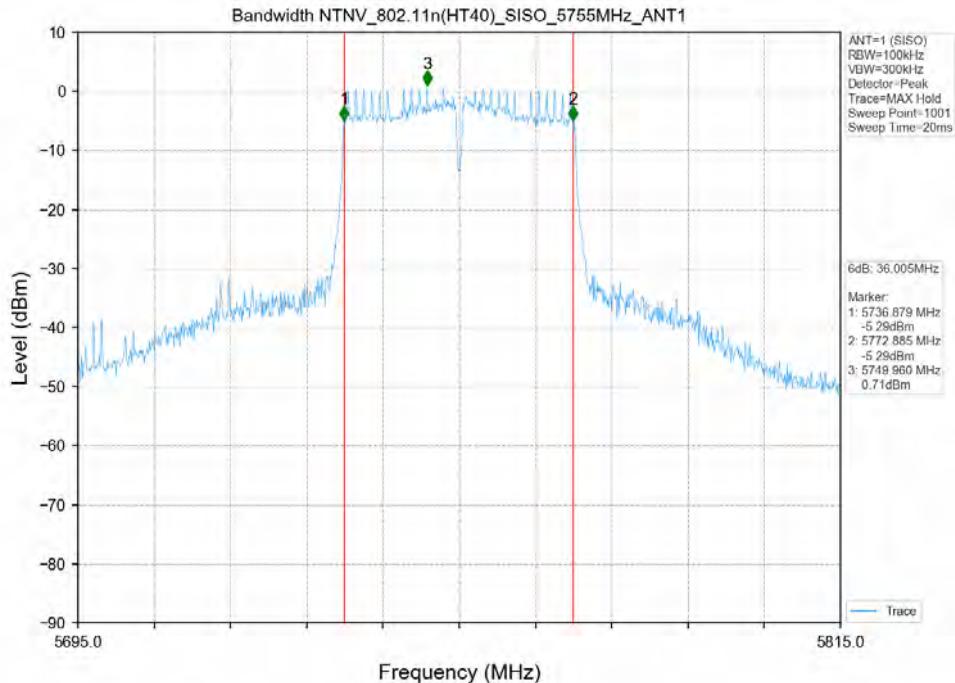
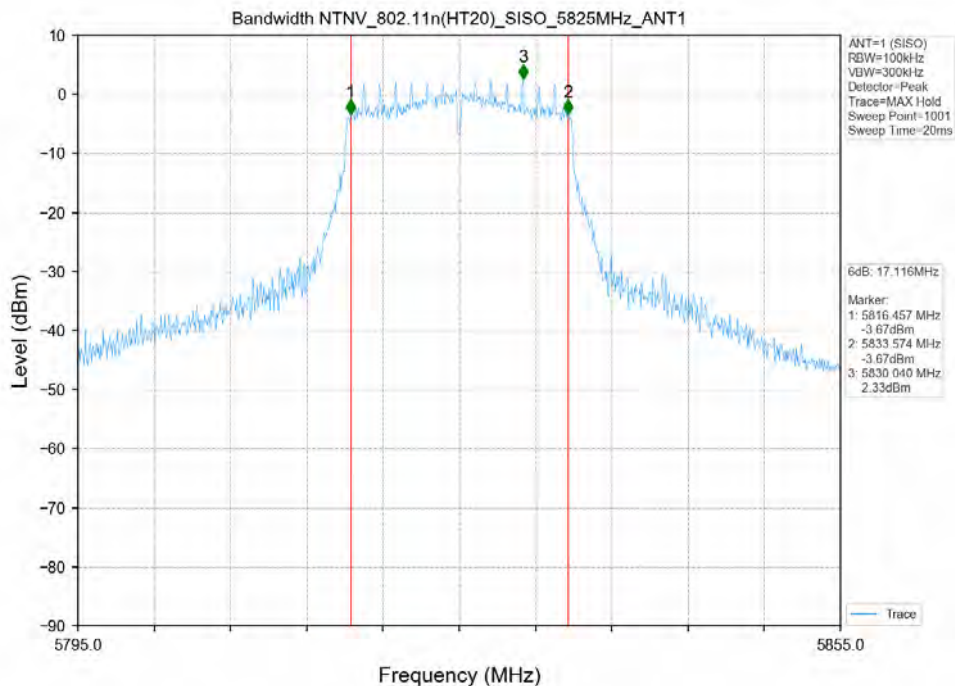


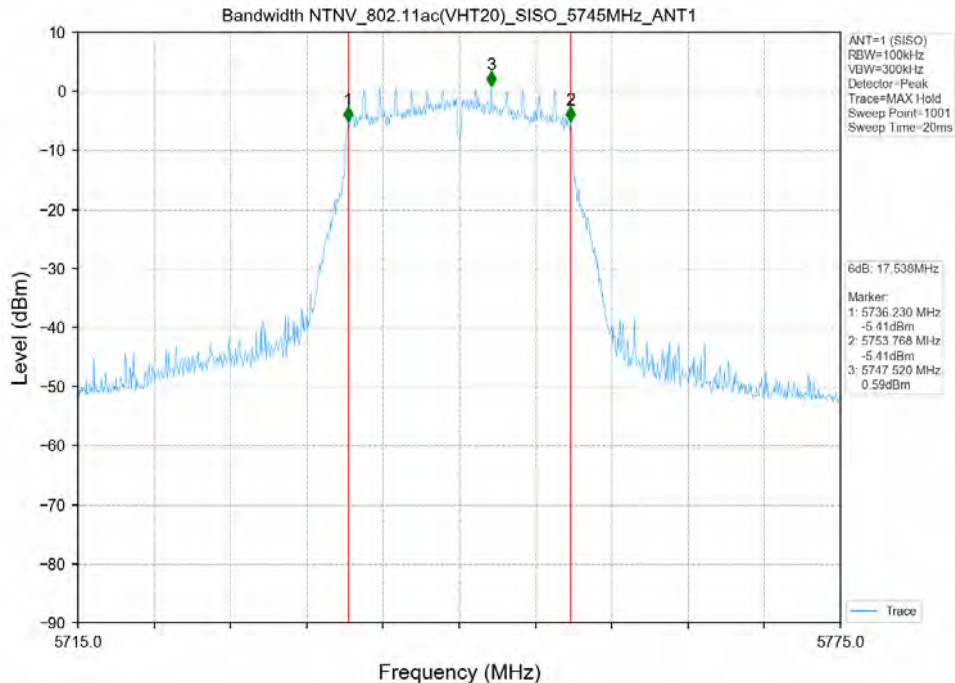
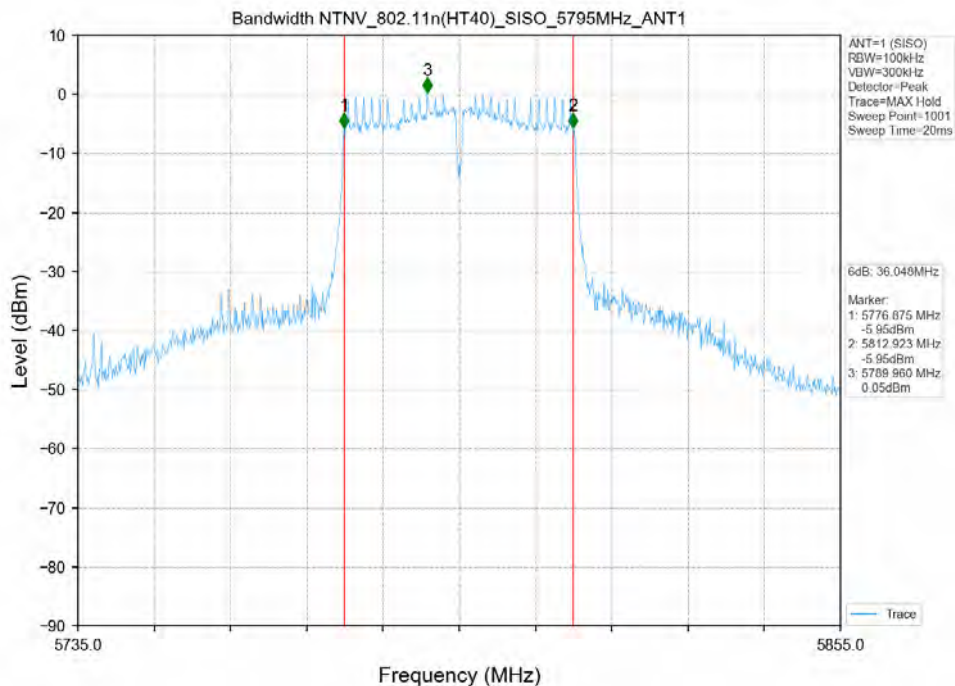


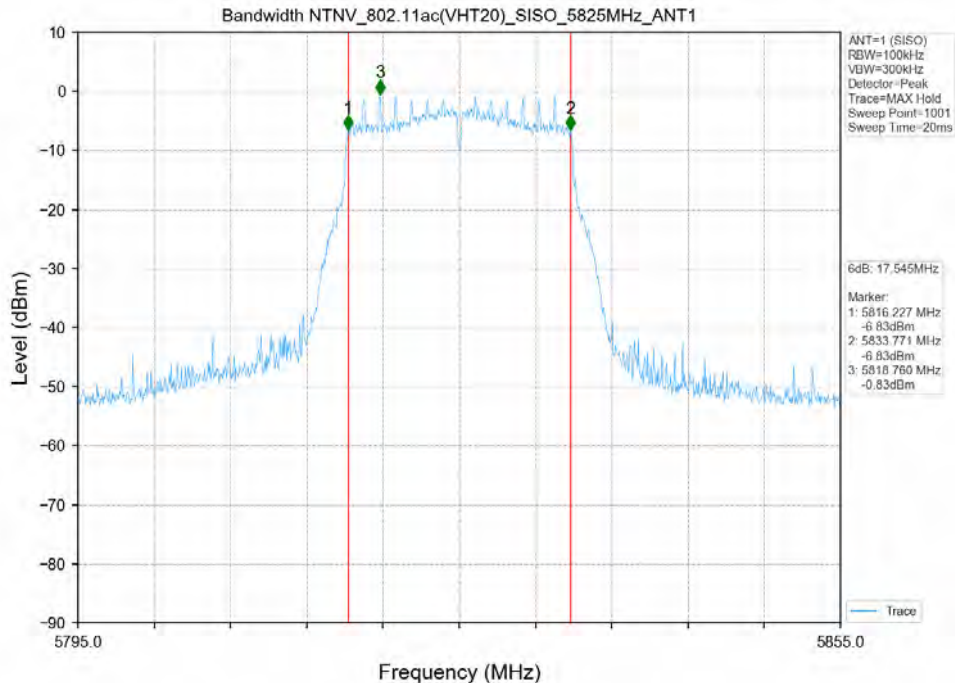
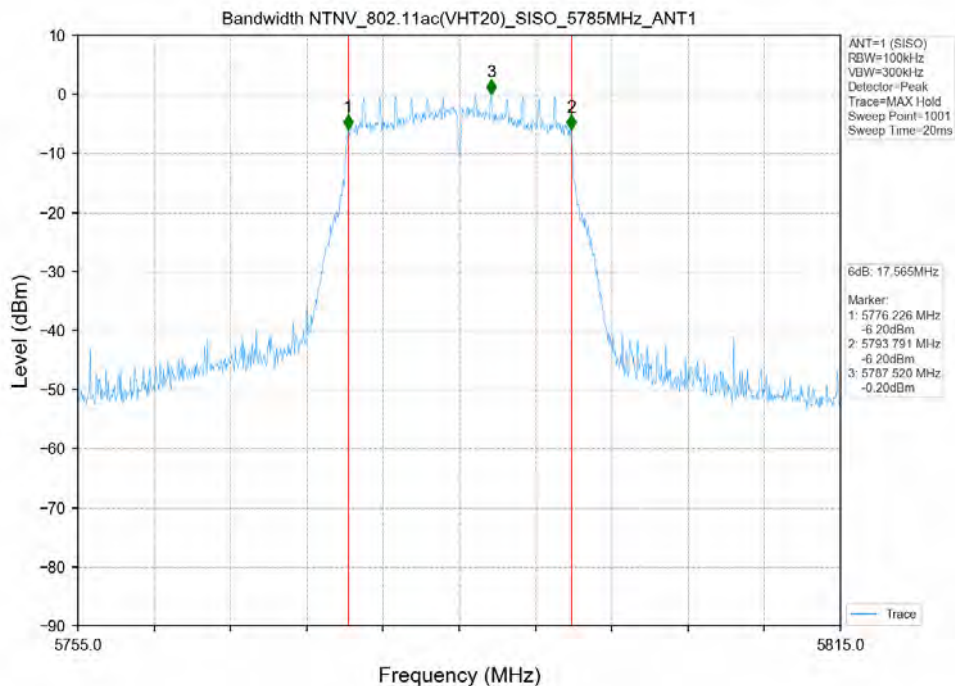


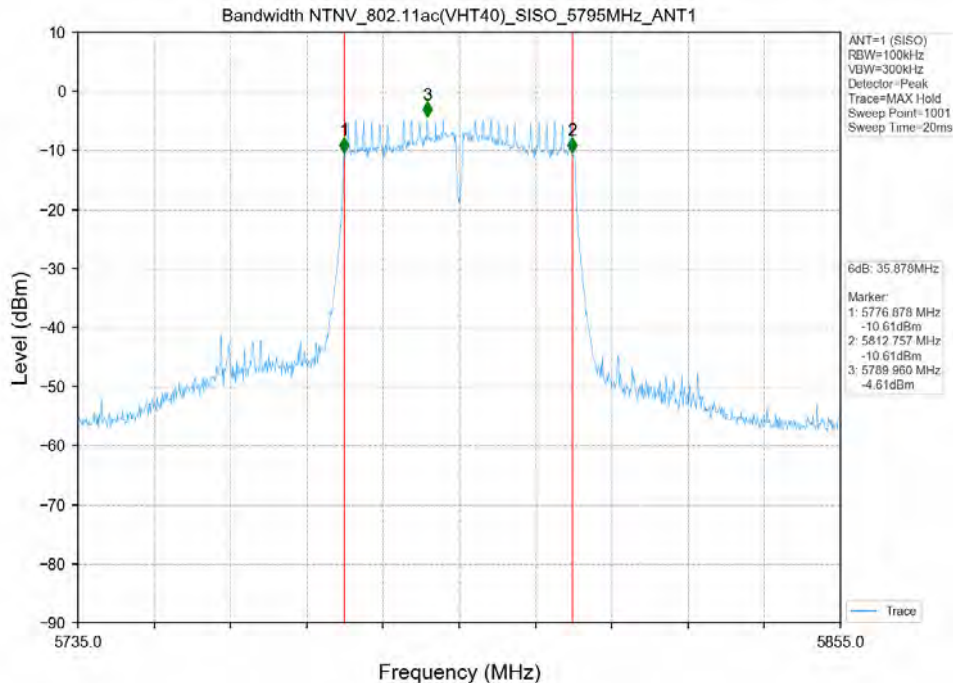
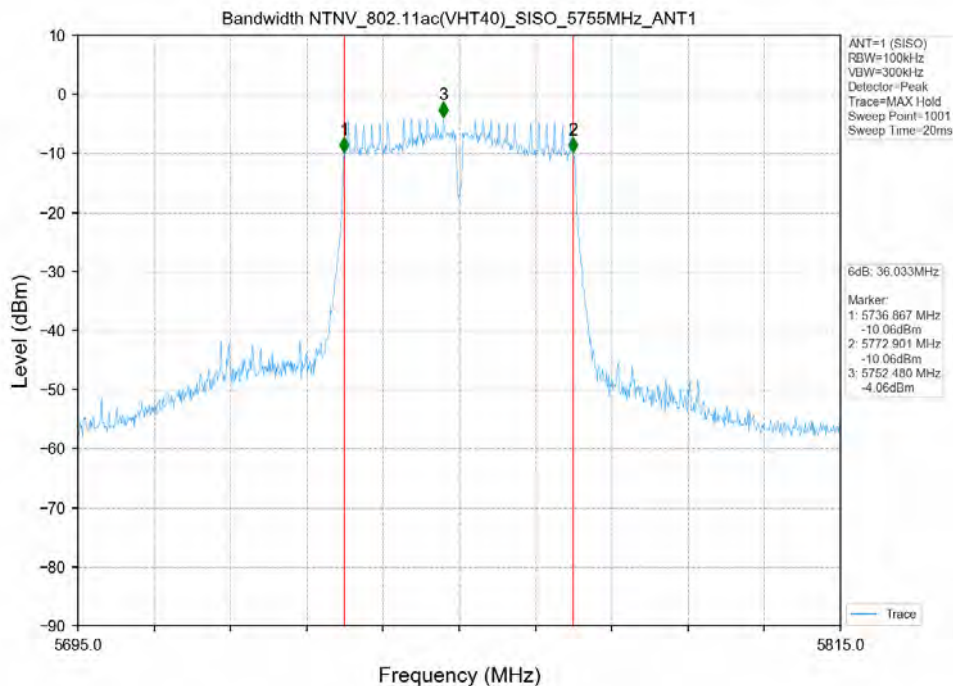


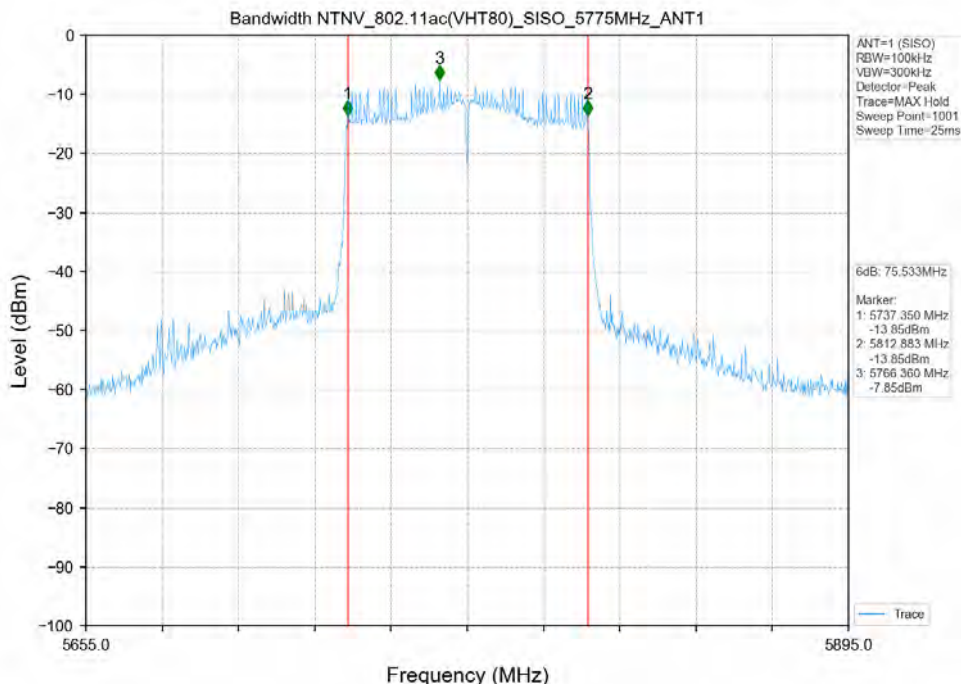




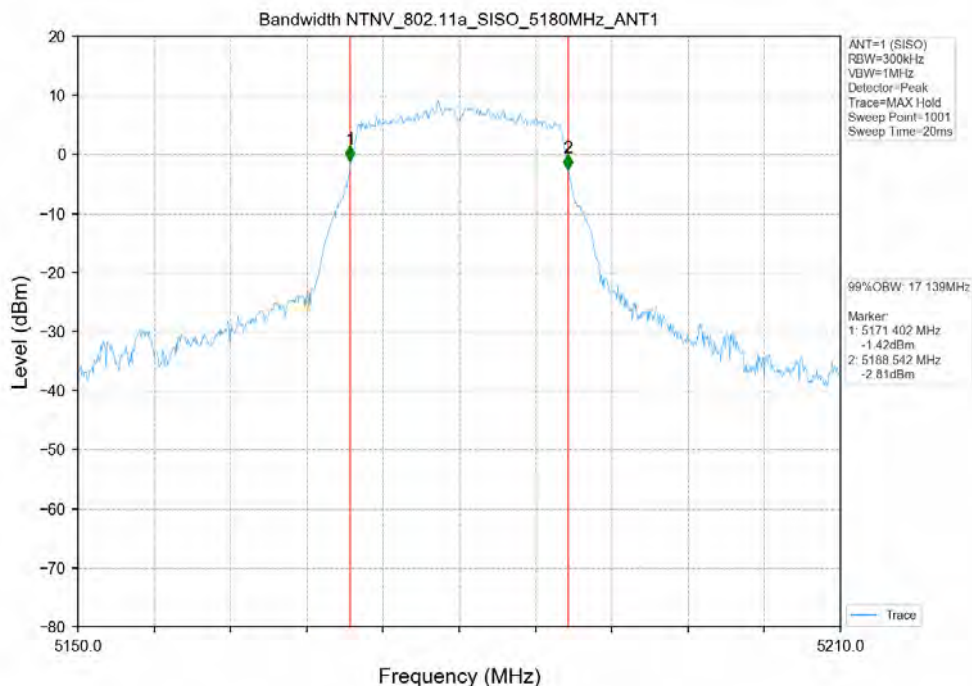


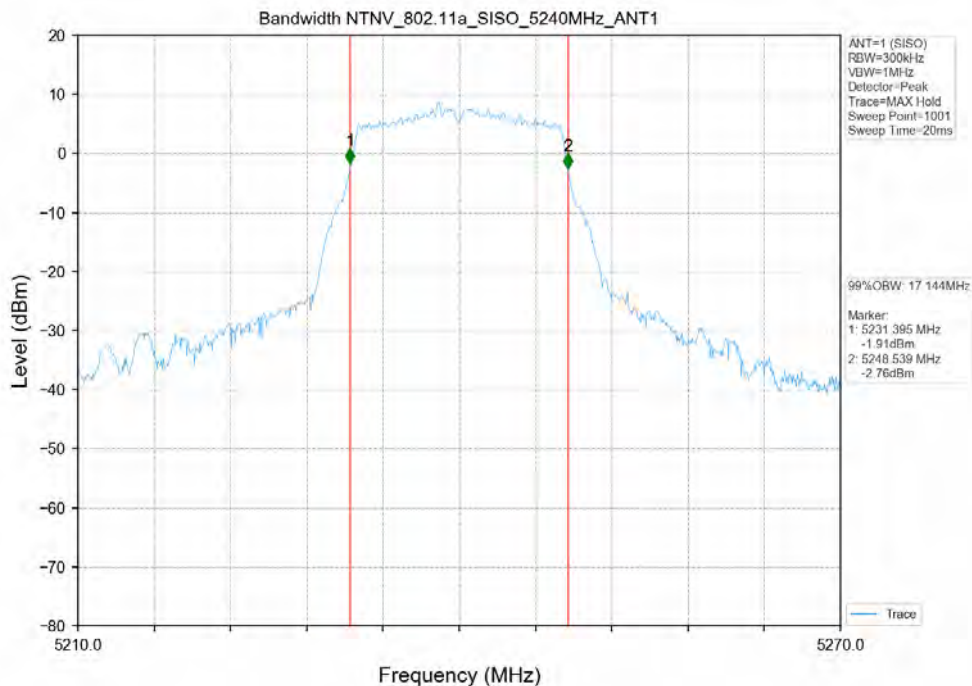
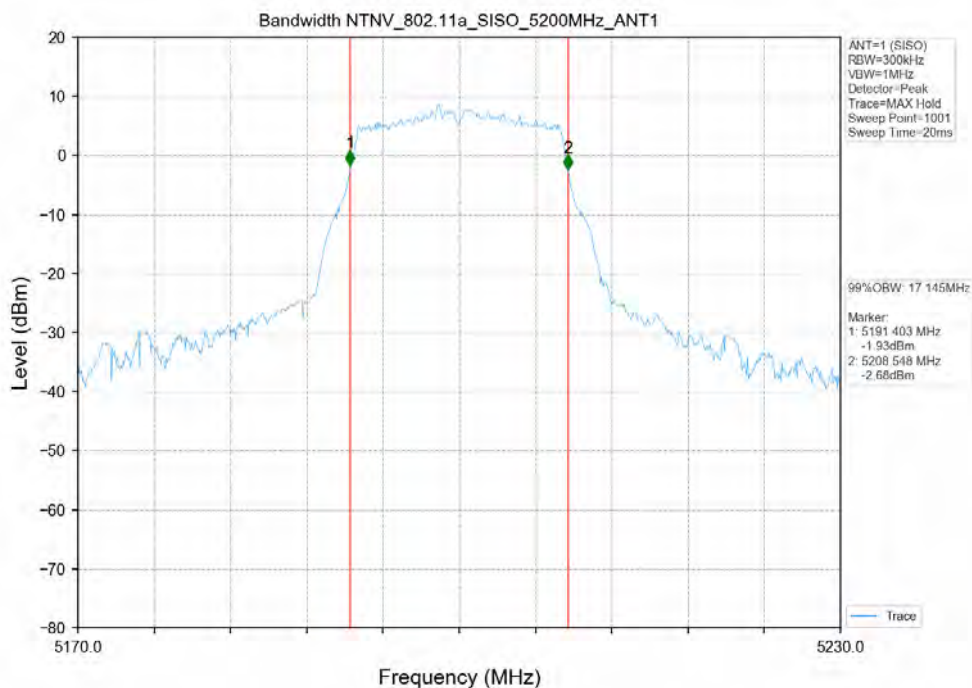


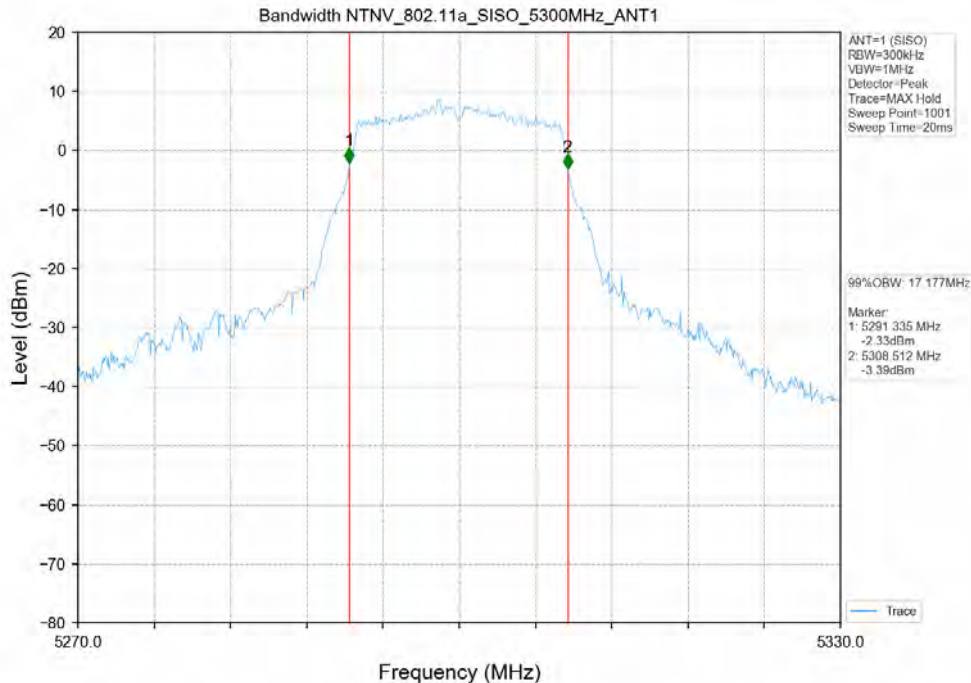
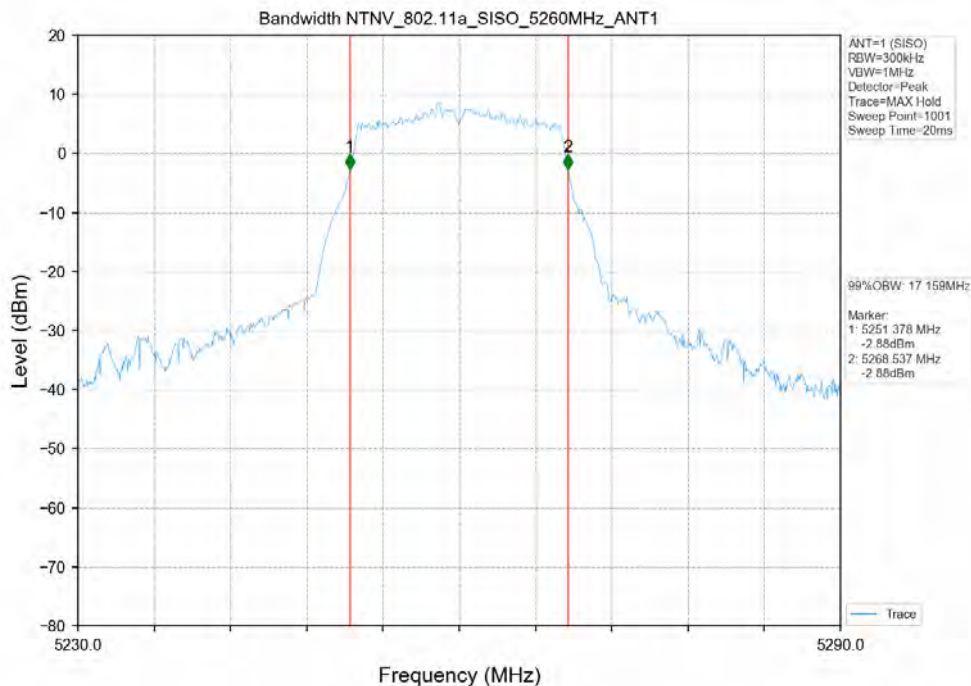


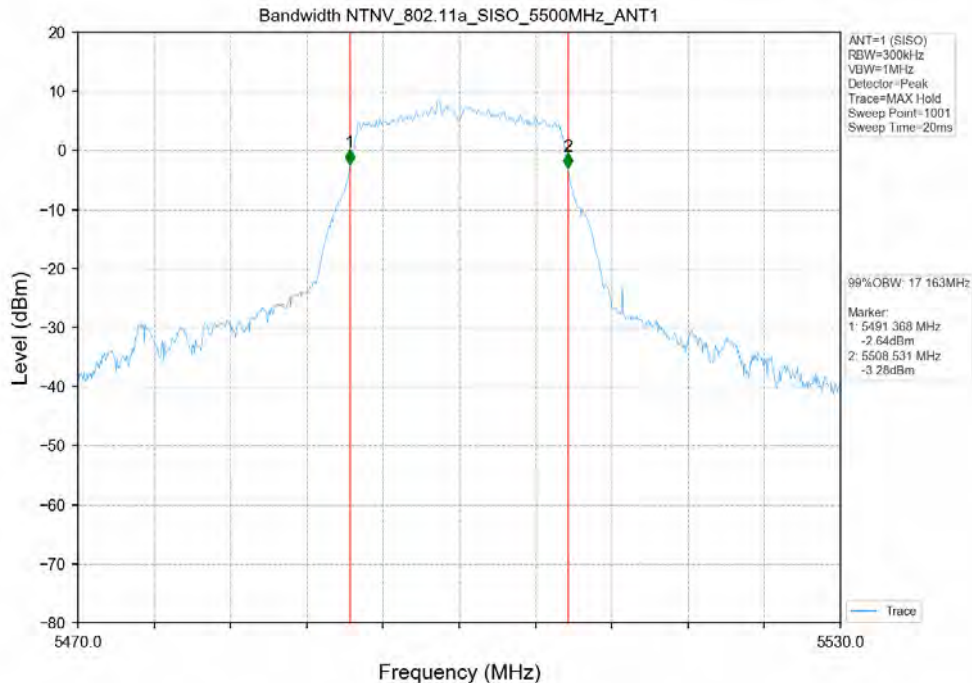
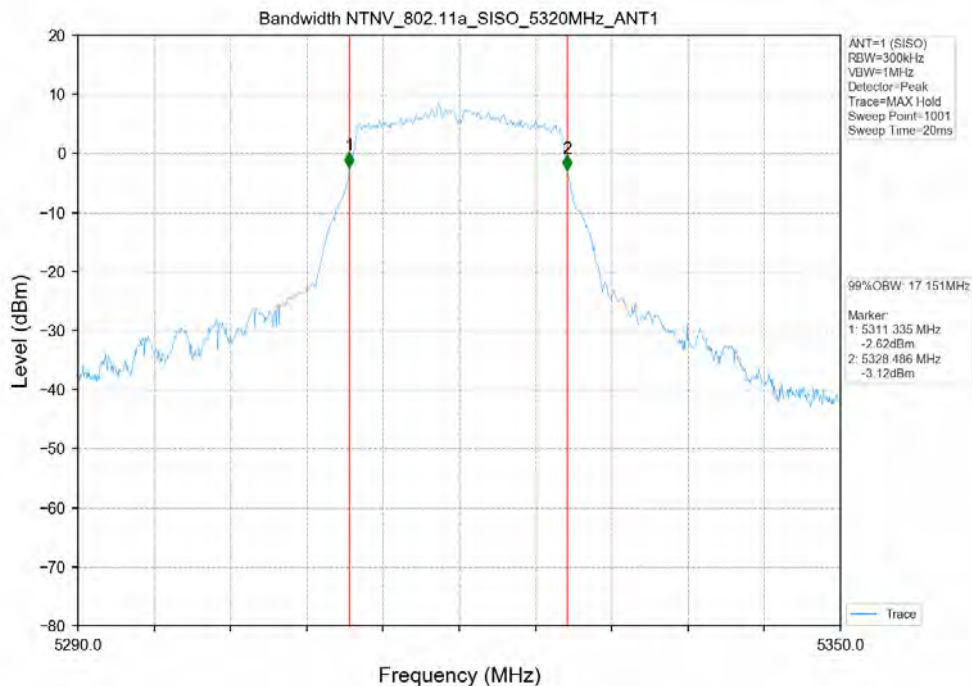


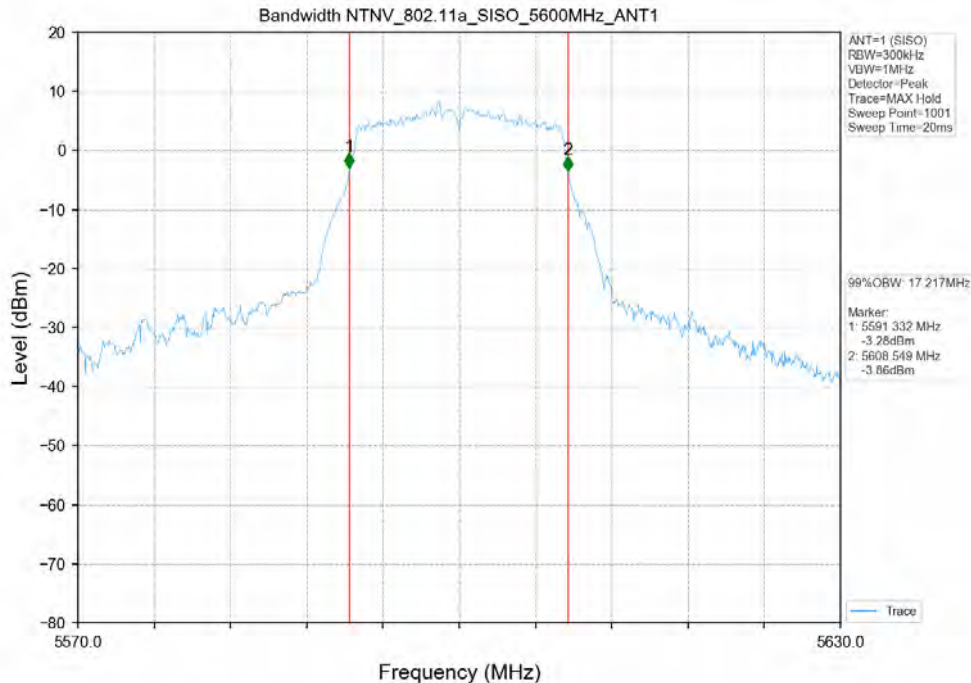
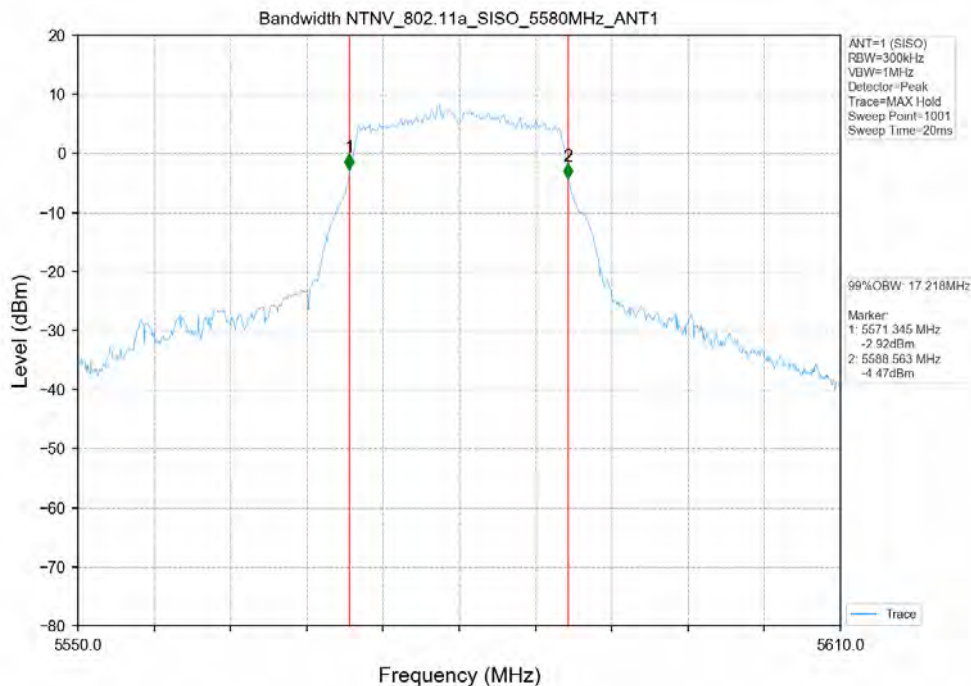
## 2.3 Test Graph - 99% Occupied Bandwidth

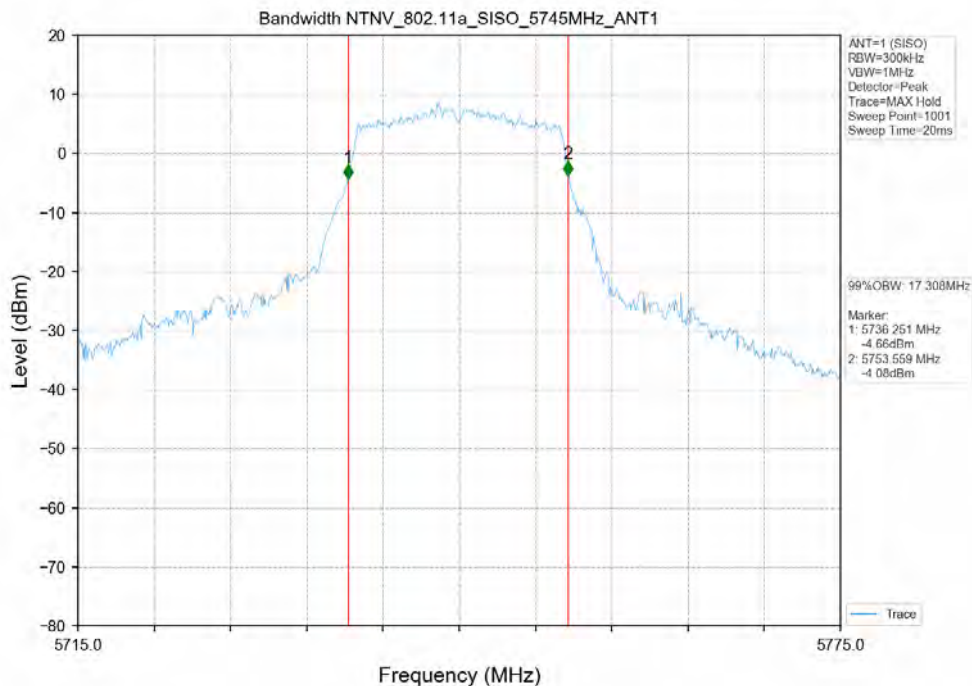
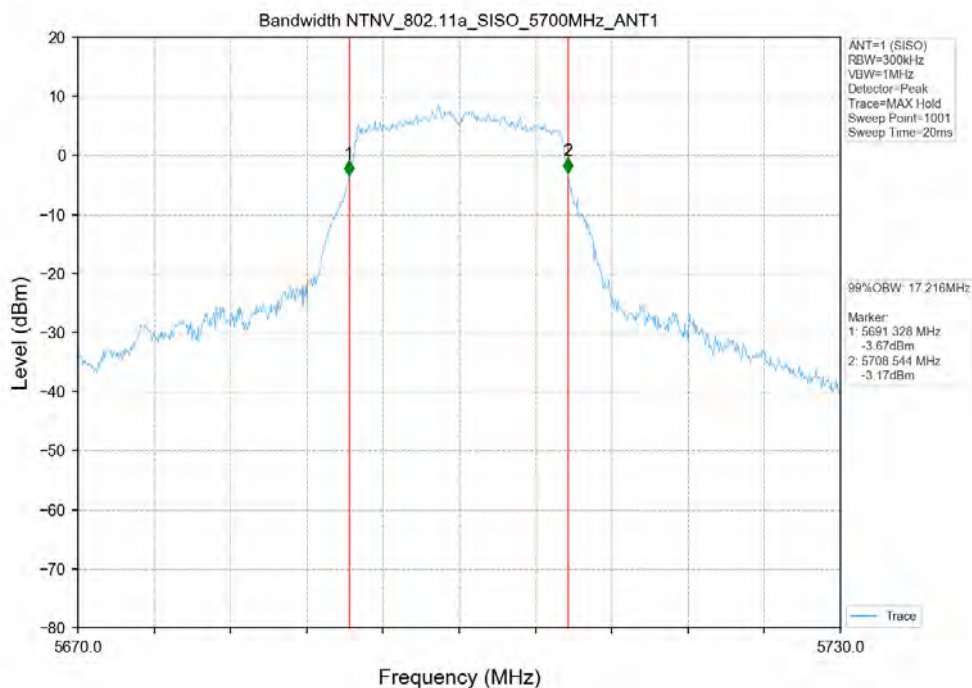


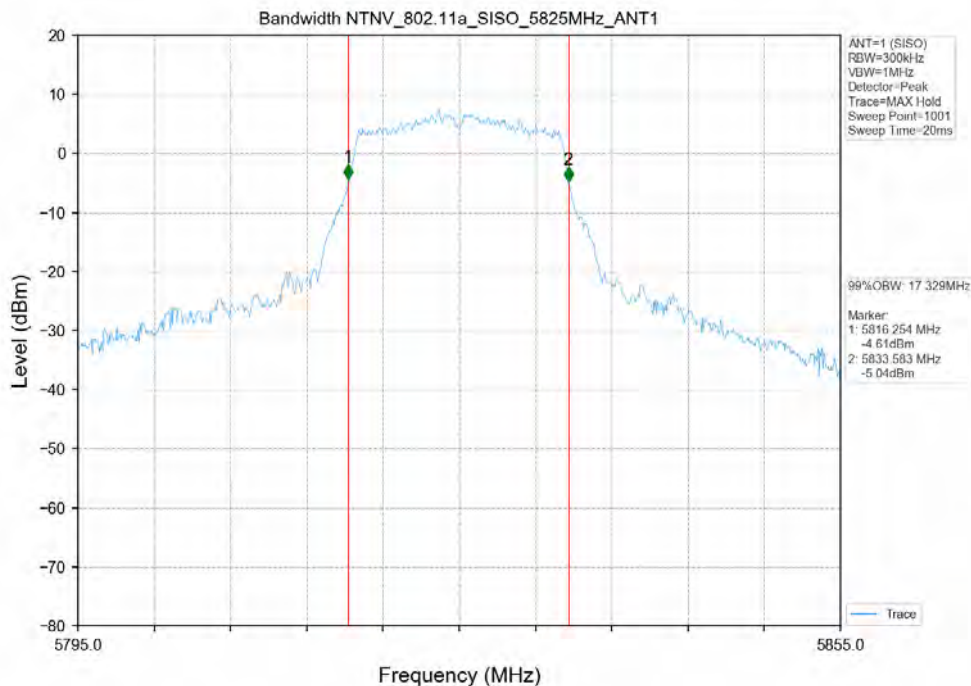
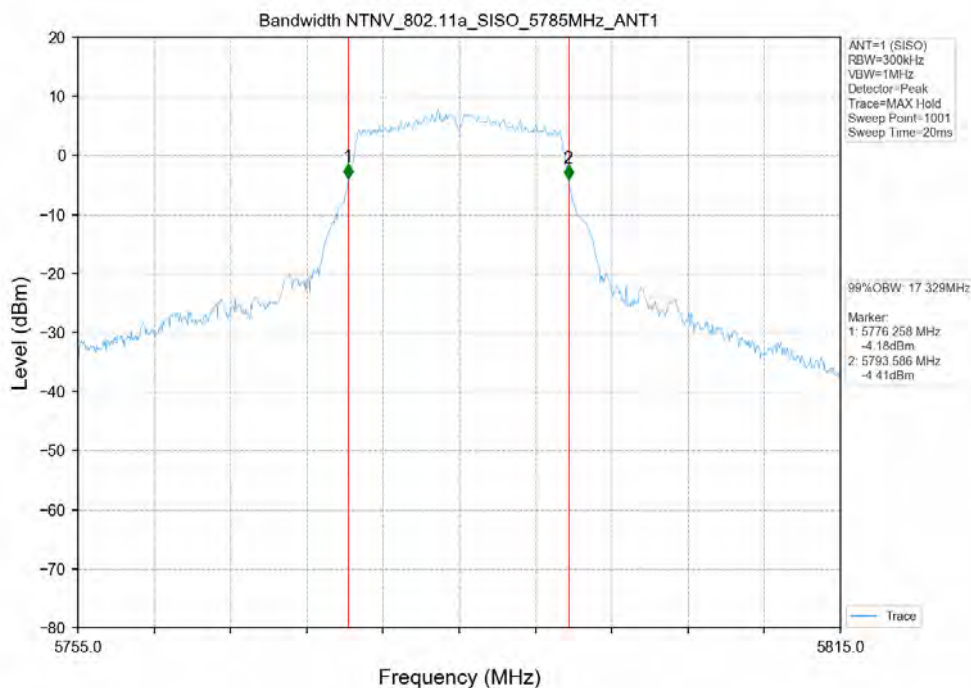


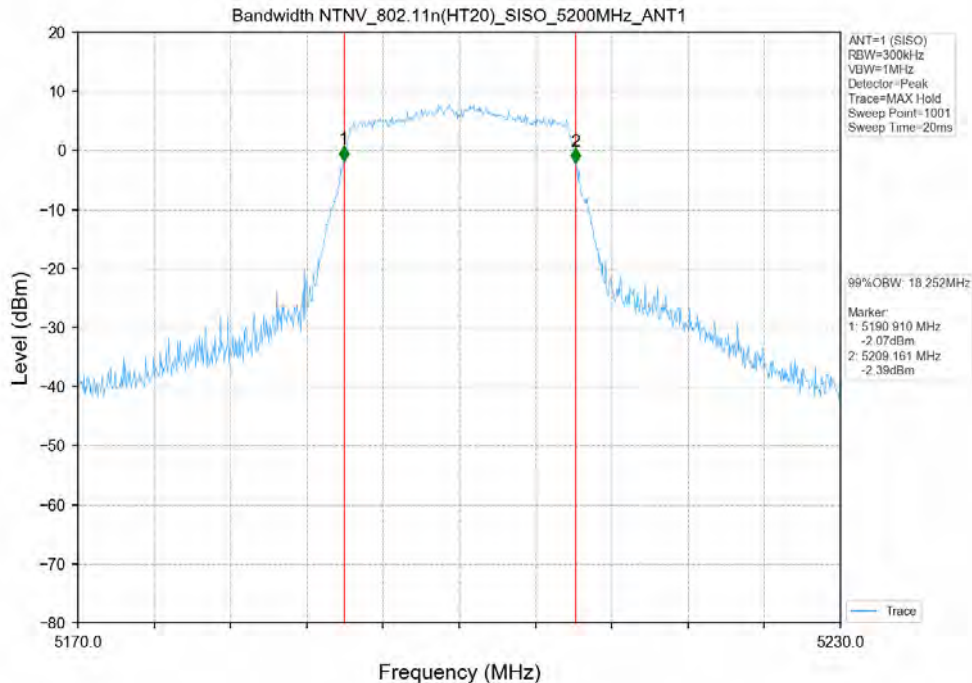
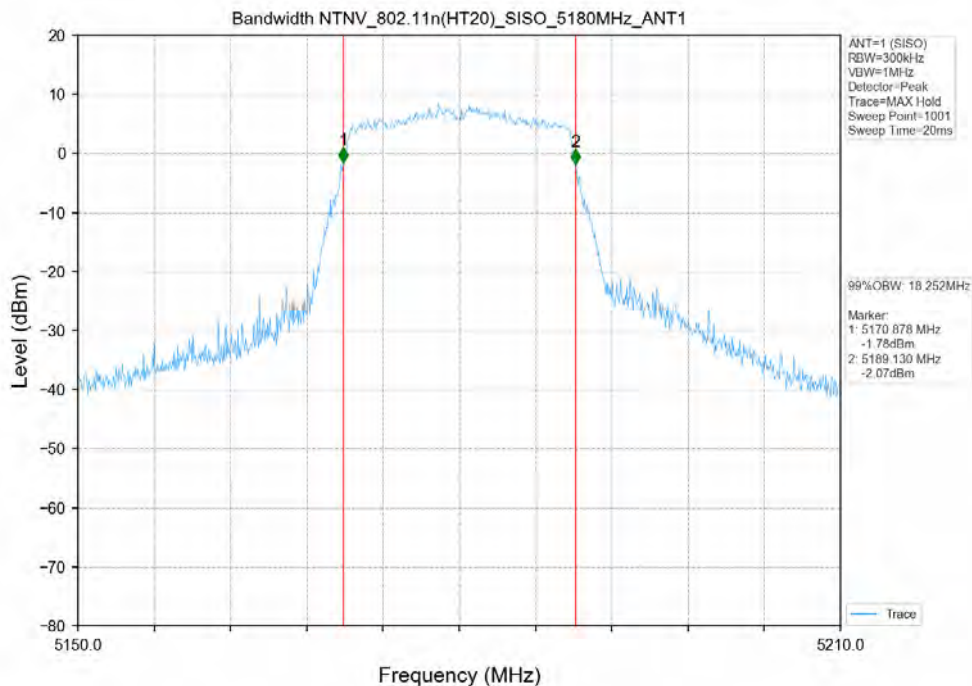


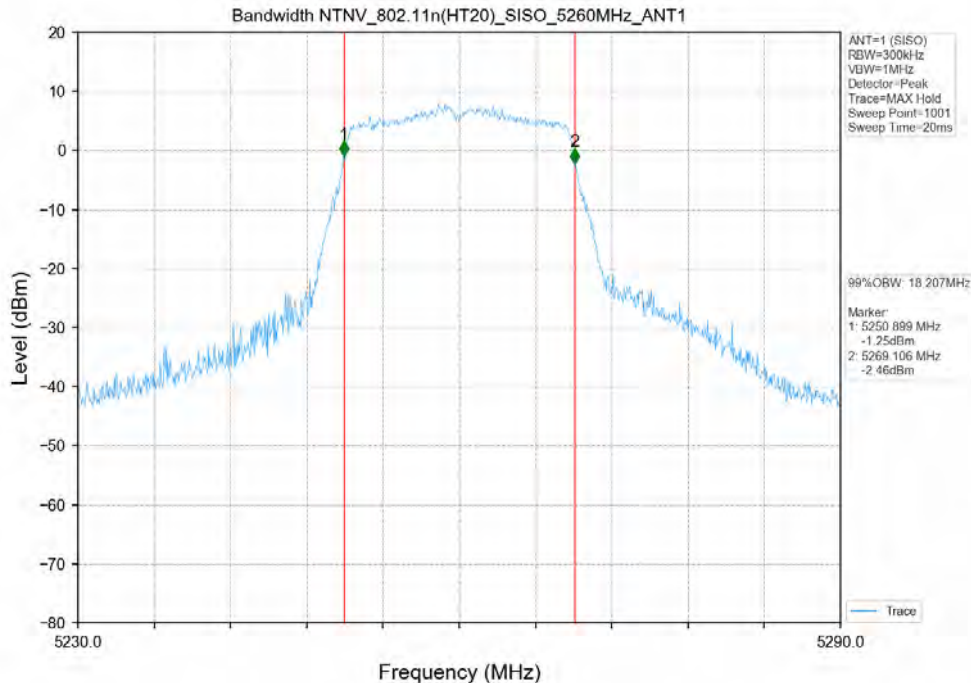
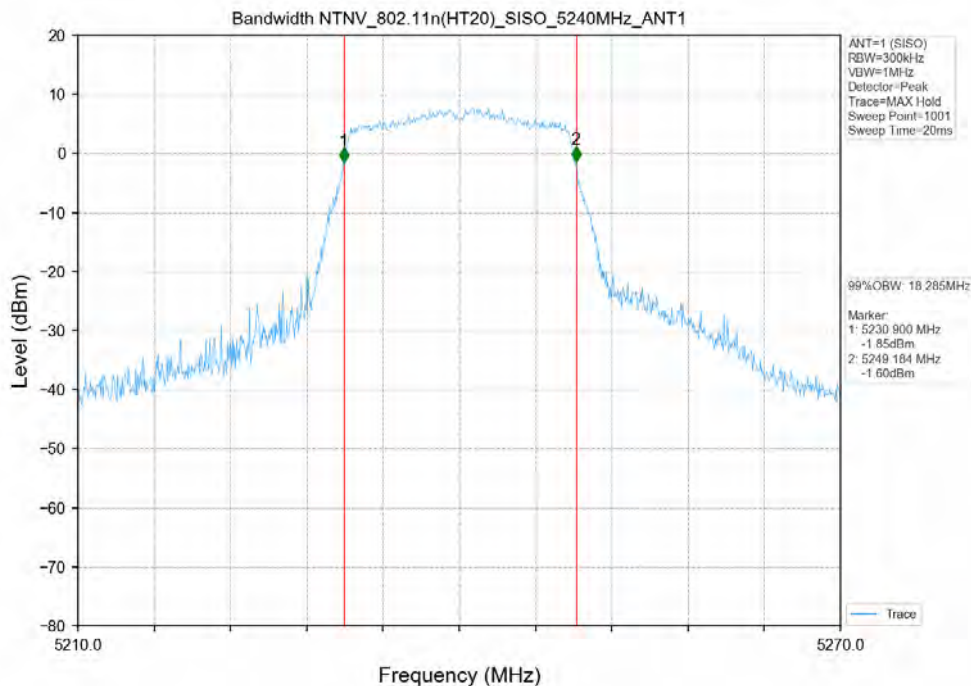


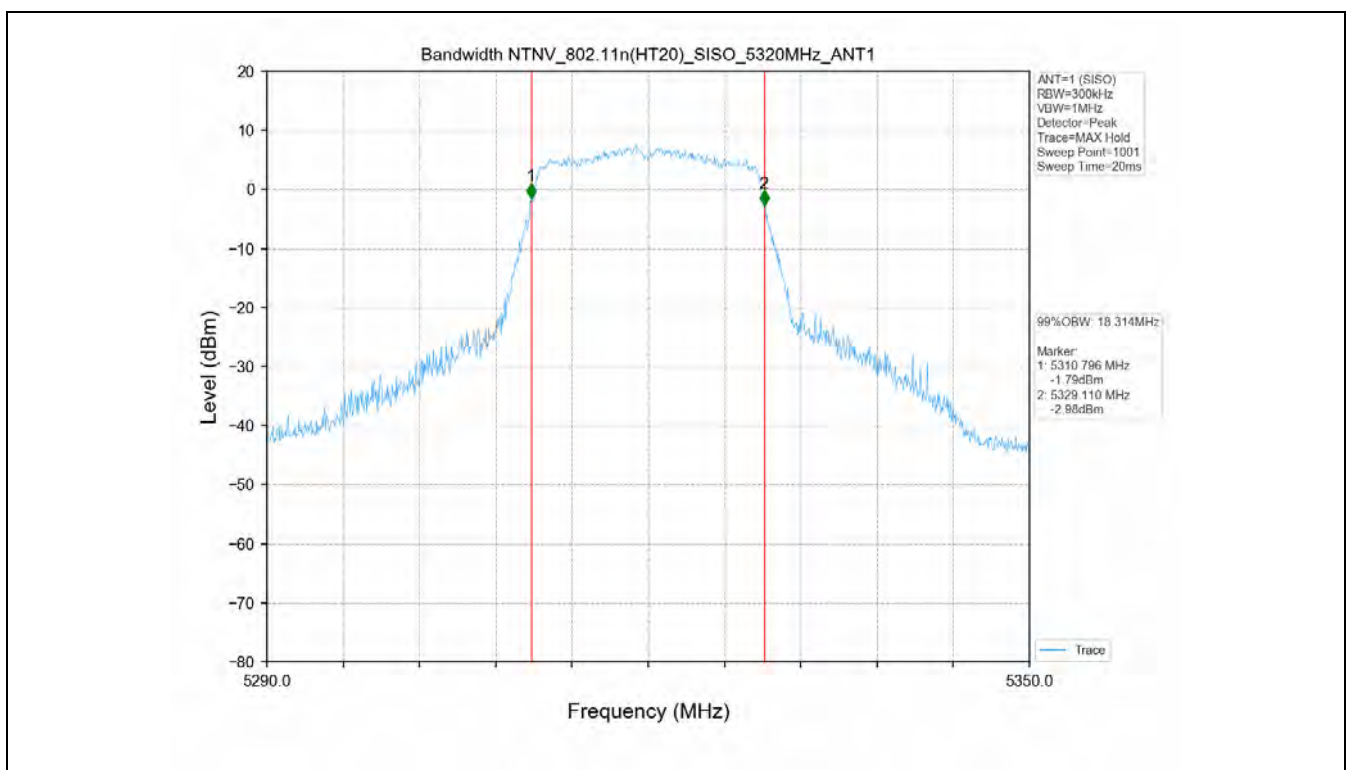
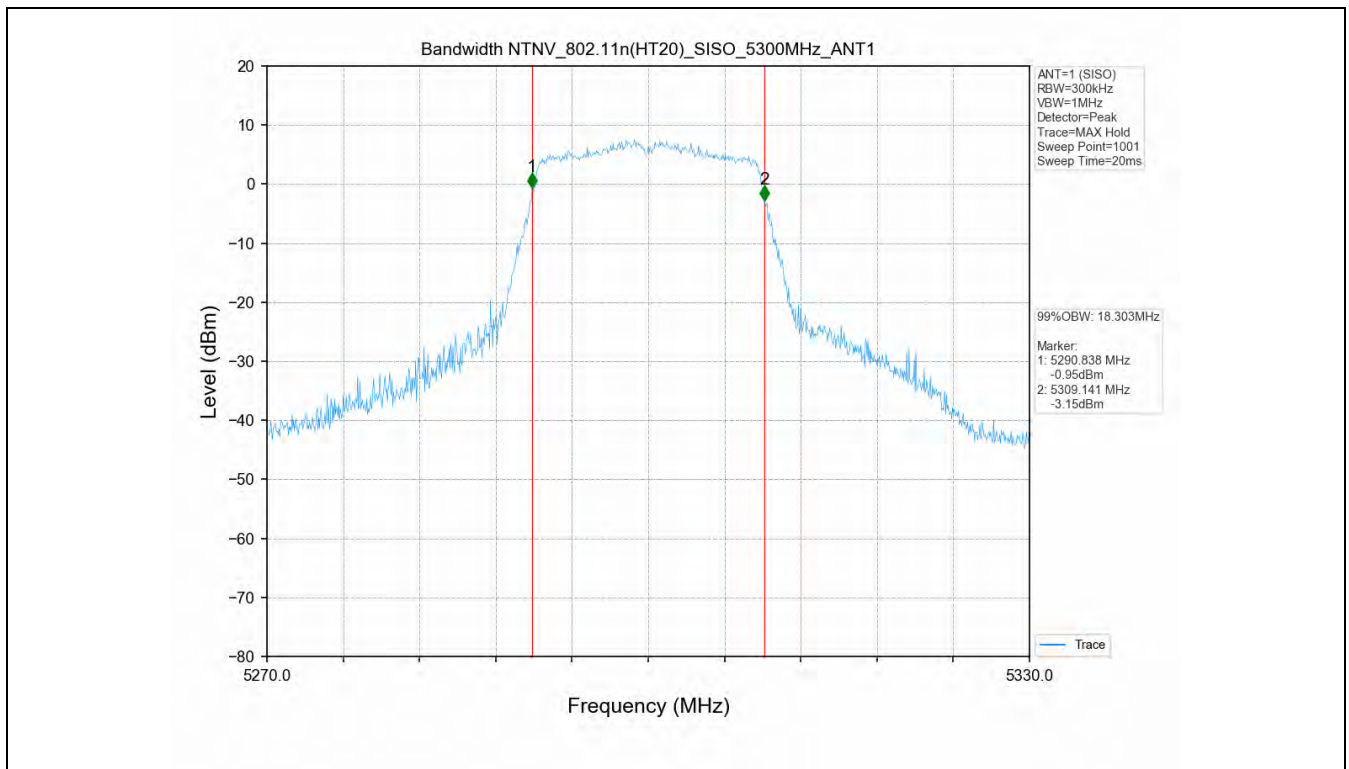












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