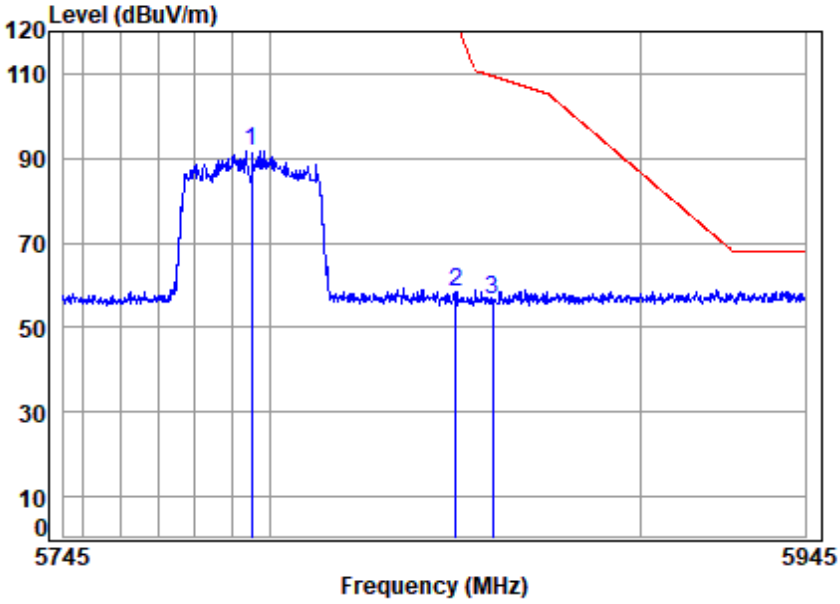
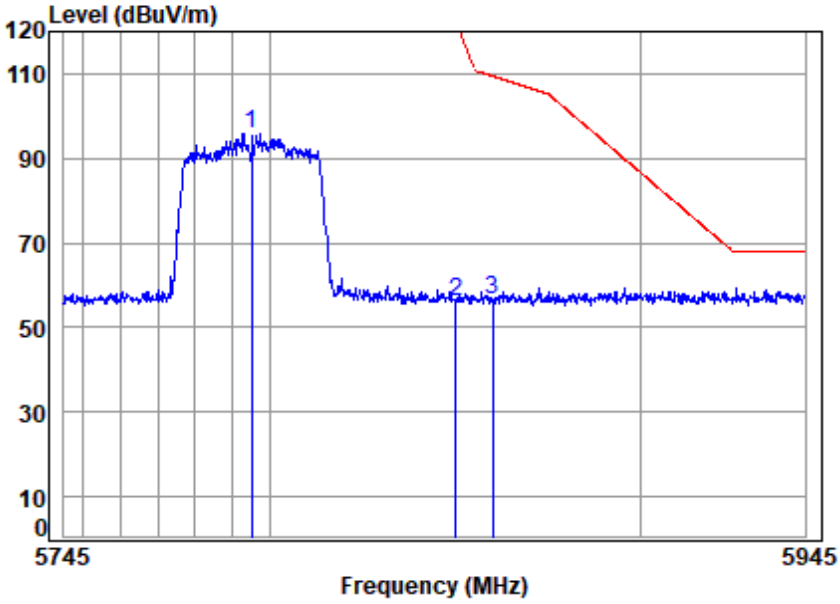
Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



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

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over 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

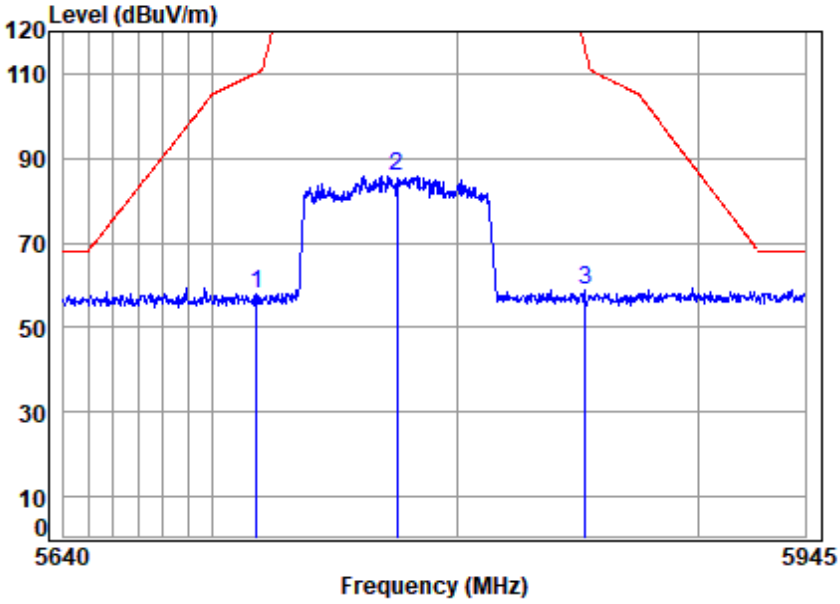
Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



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

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over 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

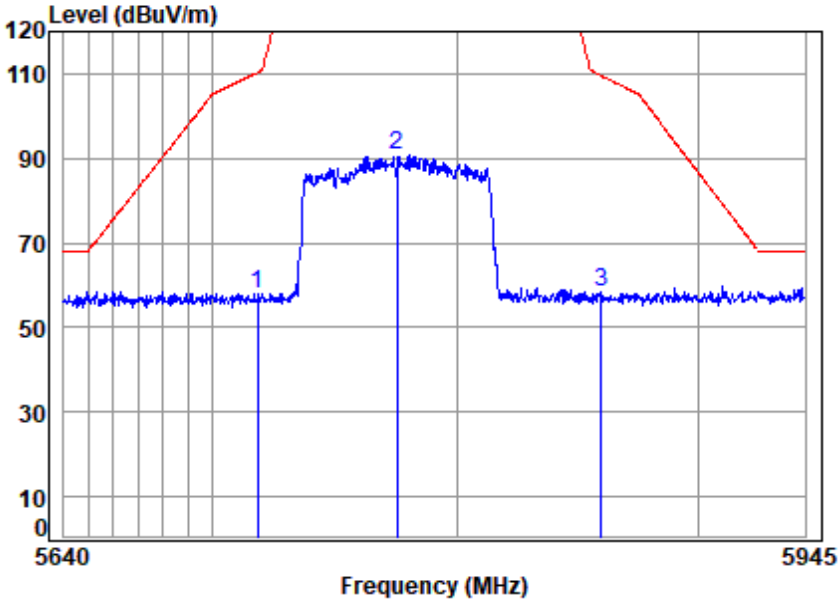
Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz



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

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over 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

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

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over 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

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.

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 See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. 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

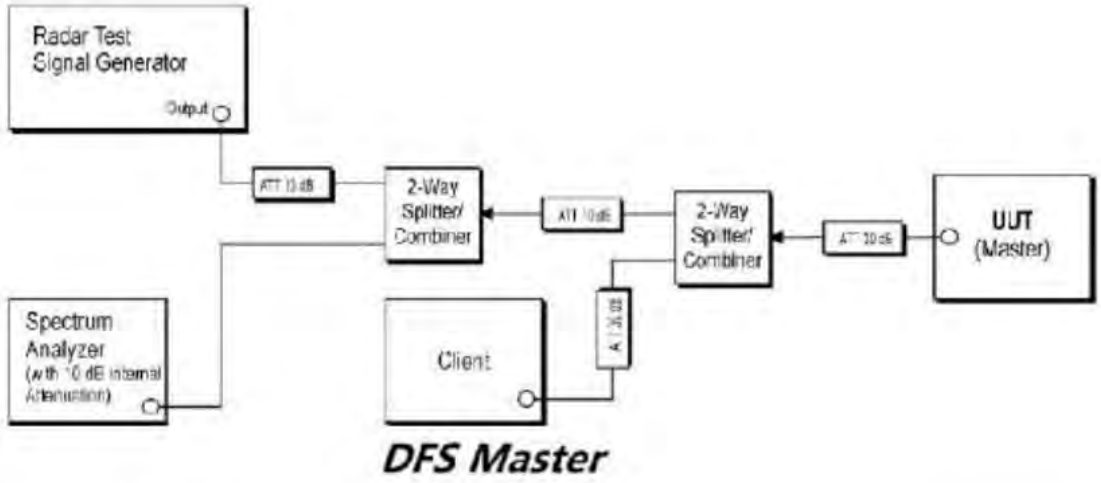
Operating Environment:

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

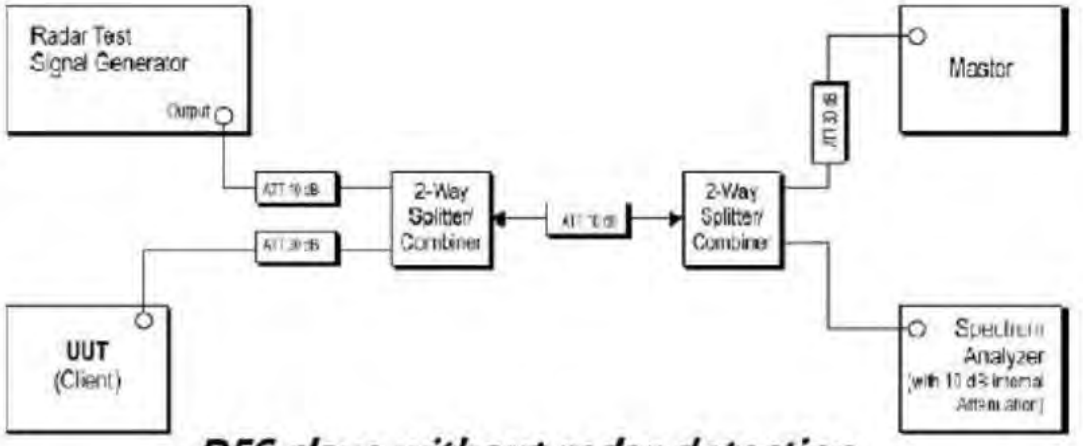
7.11.2 Test Mode Description

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.

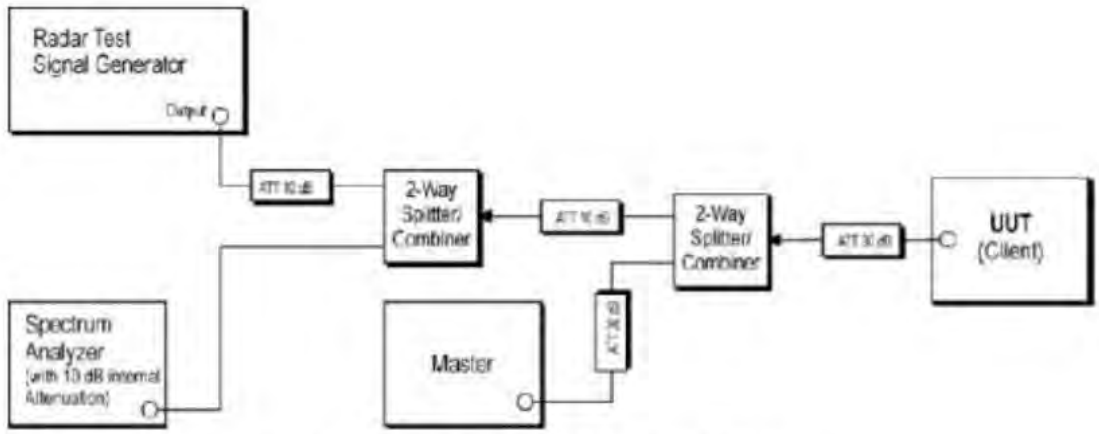
7.11.3 Test Setup Diagram



DFS Master



DFS slave without radar detection



DFS slave with radar detection

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 X 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 See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. 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

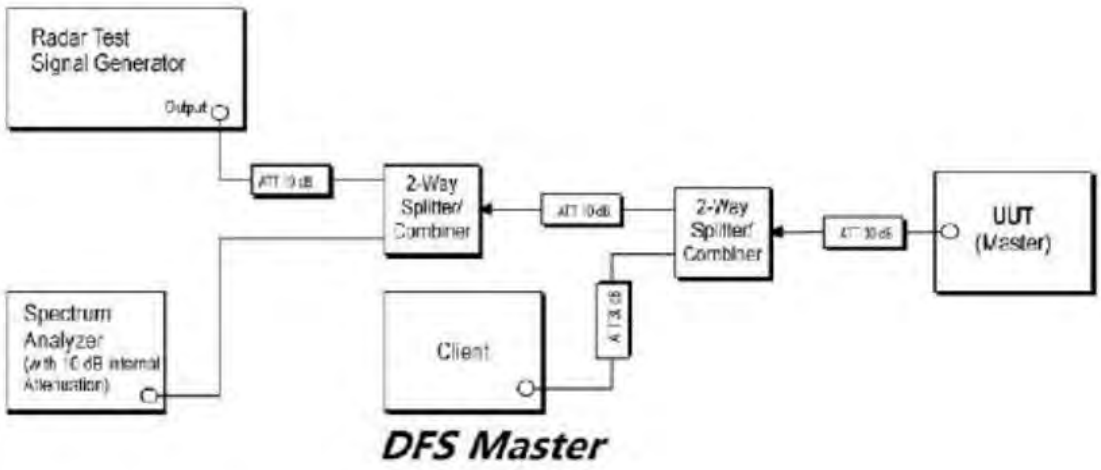
Operating Environment:

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

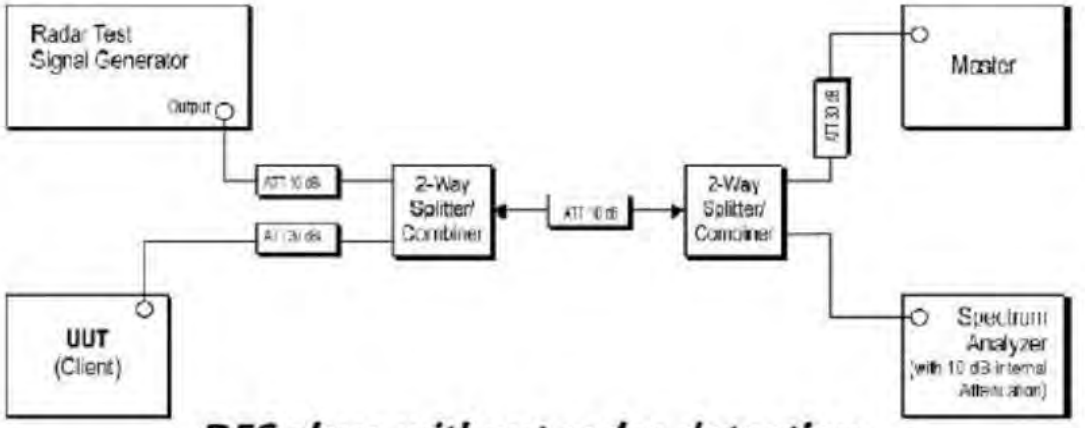
7.12.2 Test Mode Description

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.

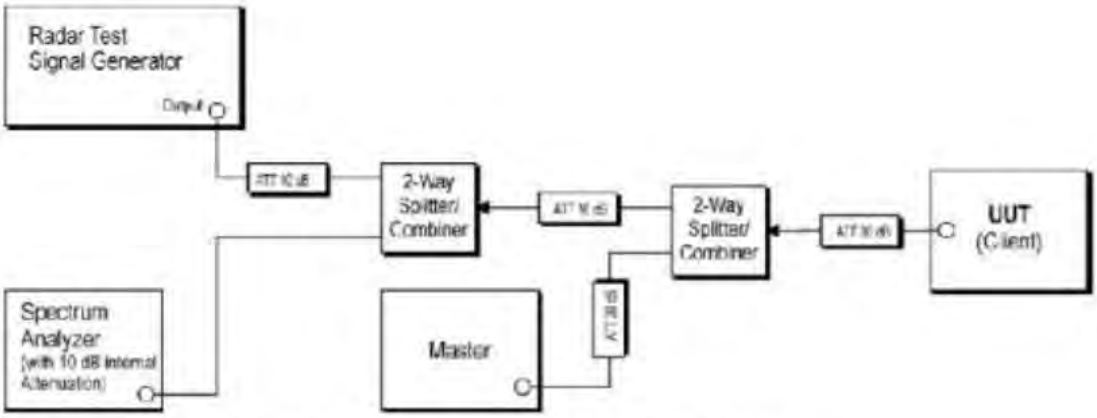
7.12.3 Test Setup Diagram



DFS Master



DFS slave without radar detection



DFS slave with radar detection

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 X 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 See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. 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

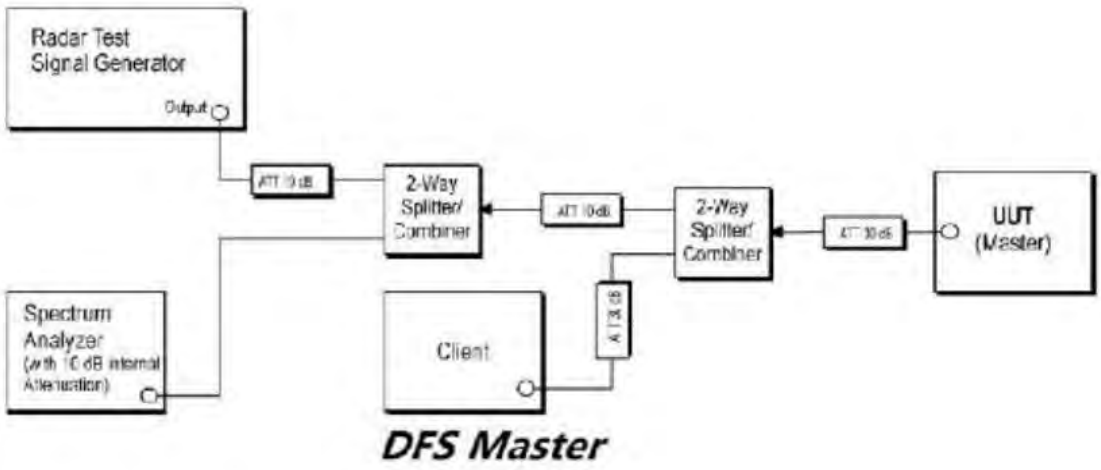
Operating Environment:

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

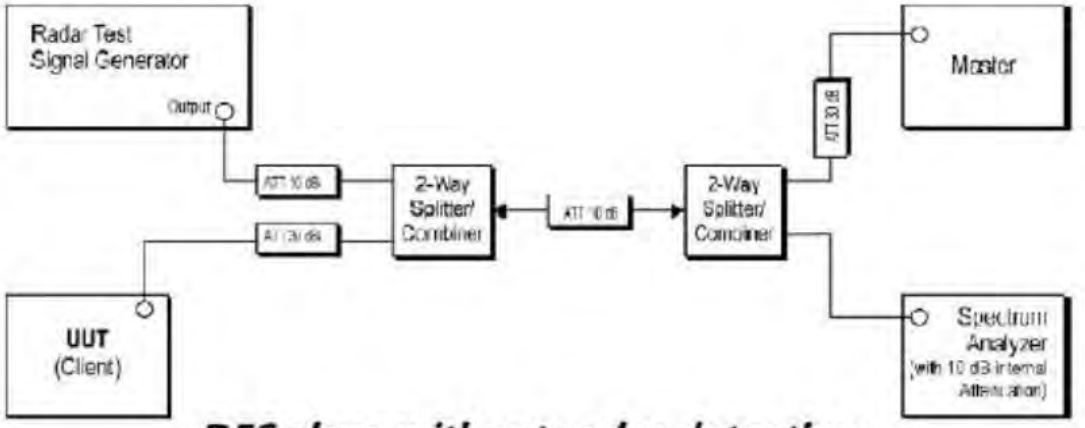
7.13.2 Test Mode Description

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.

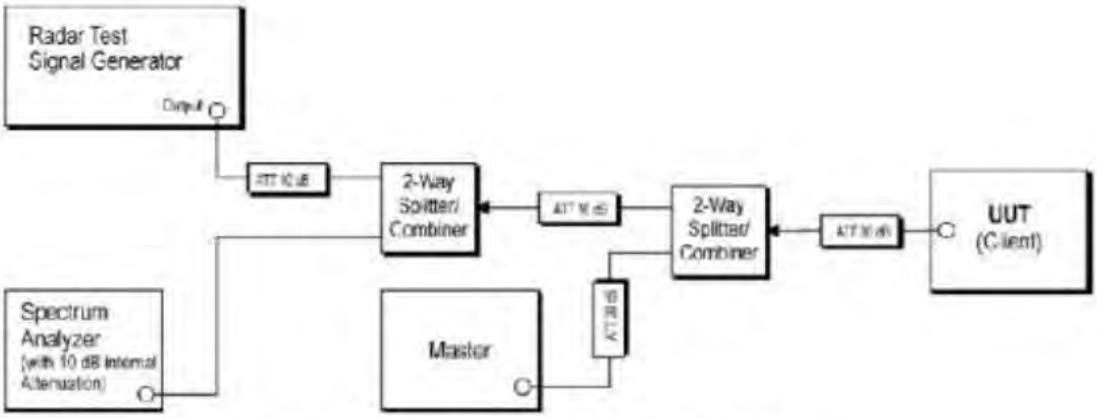
7.13.3 Test Setup Diagram



DFS Master



DFS slave without radar detection



DFS slave with radar detection

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 X 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.

10 Appendix

Appendix for 15.407

1. Duty Cycle

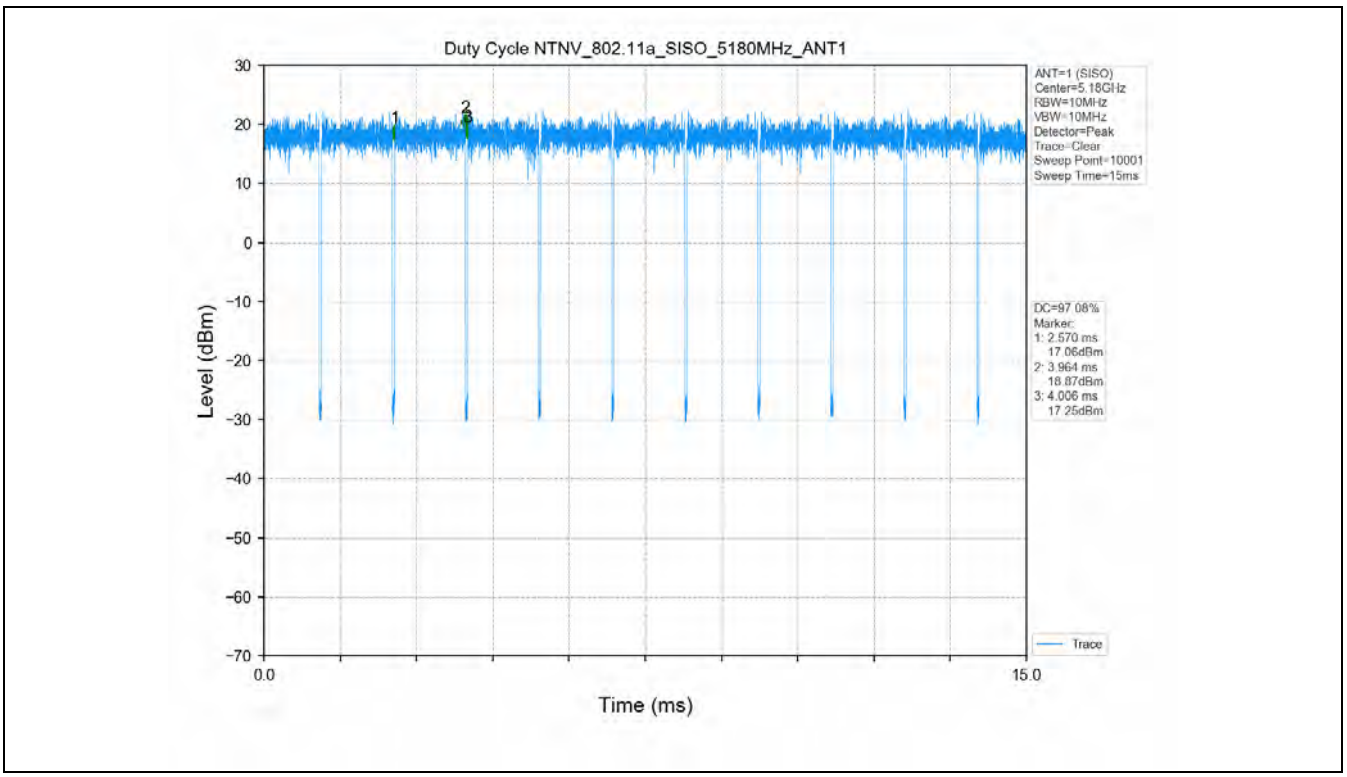
1.1 Test Result

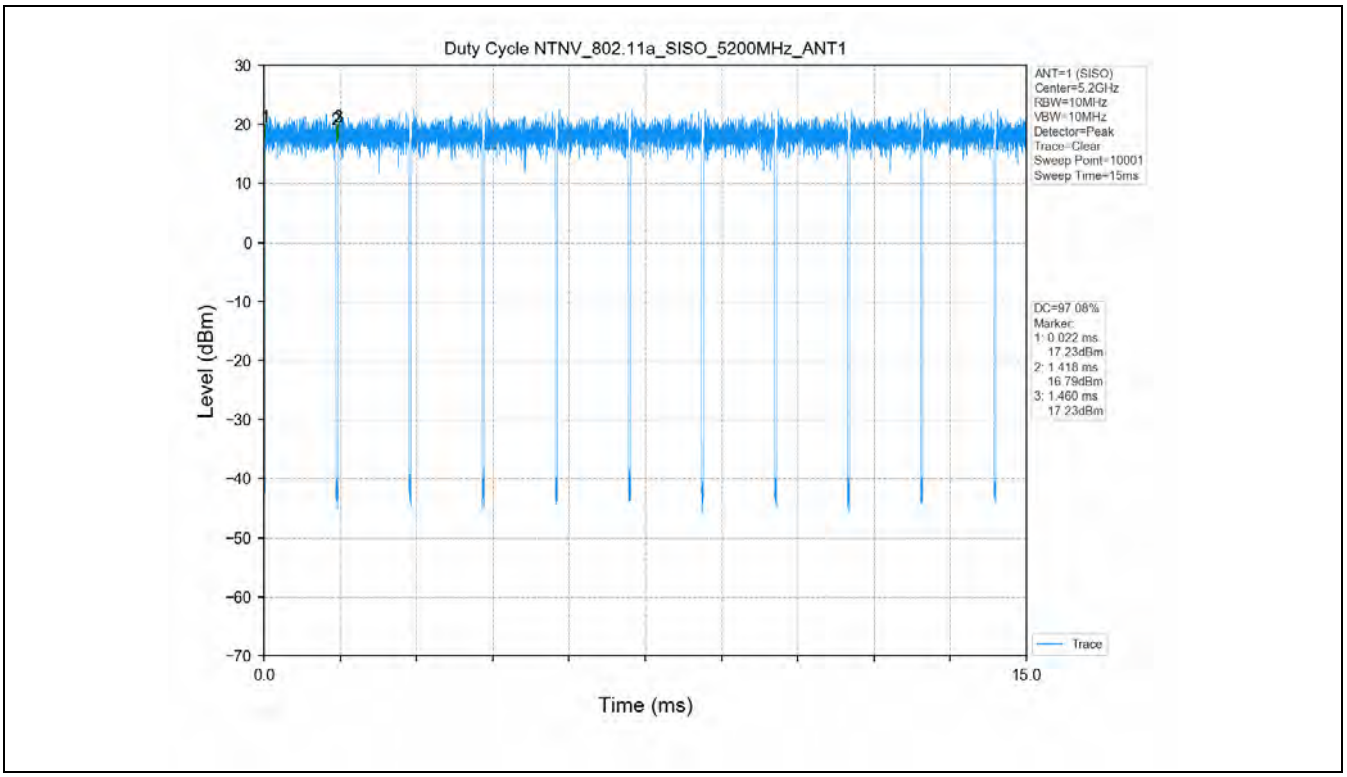
Test Mode	Channel Frequency (MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11a	5180	SISO	1	1.394	1.436	97.08	0.13
	5200	SISO	1	1.396	1.438	97.08	0.13
	5240	SISO	1	1.395	1.437	97.08	0.13
	5260	SISO	1	1.394	1.436	97.08	0.13
	5300	SISO	1	1.395	1.437	97.08	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

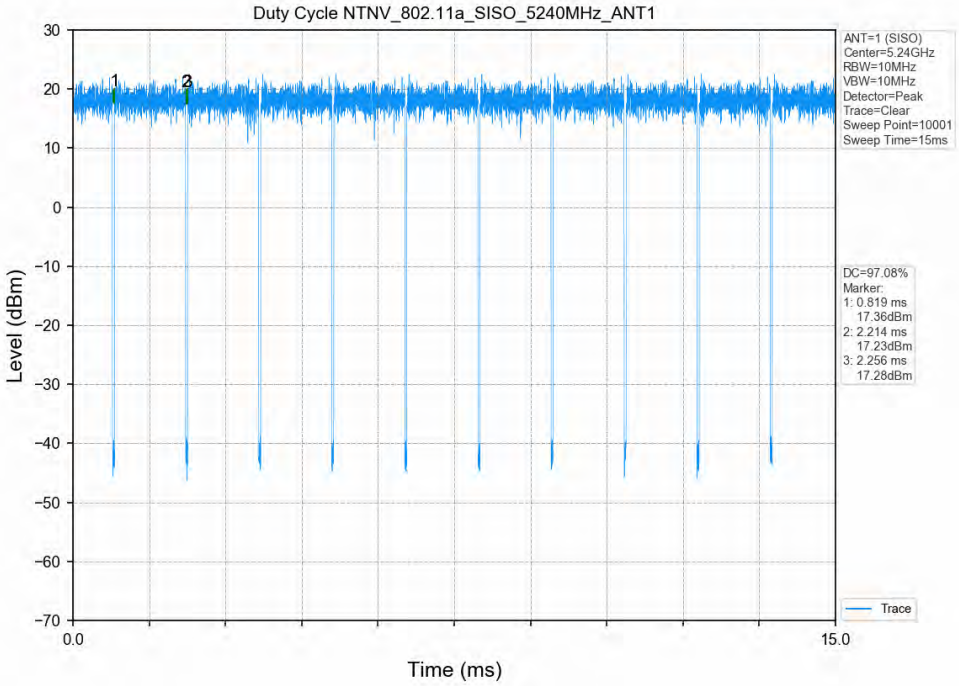
	5590	SISO	1	0.648	0.690	93.91	0.27
	5670	SISO	1	0.648	0.690	93.91	0.27
	5755	SISO	1	0.647	0.689	93.90	0.27
	5795	SISO	1	0.647	0.689	93.90	0.27
802.11ac(VHT20)	5180	SISO	1	1.316	1.359	96.84	0.14
	5200	SISO	1	1.316	1.360	96.76	0.14
	5240	SISO	1	1.316	1.358	96.91	0.14
	5260	SISO	1	1.316	1.359	96.84	0.14
	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

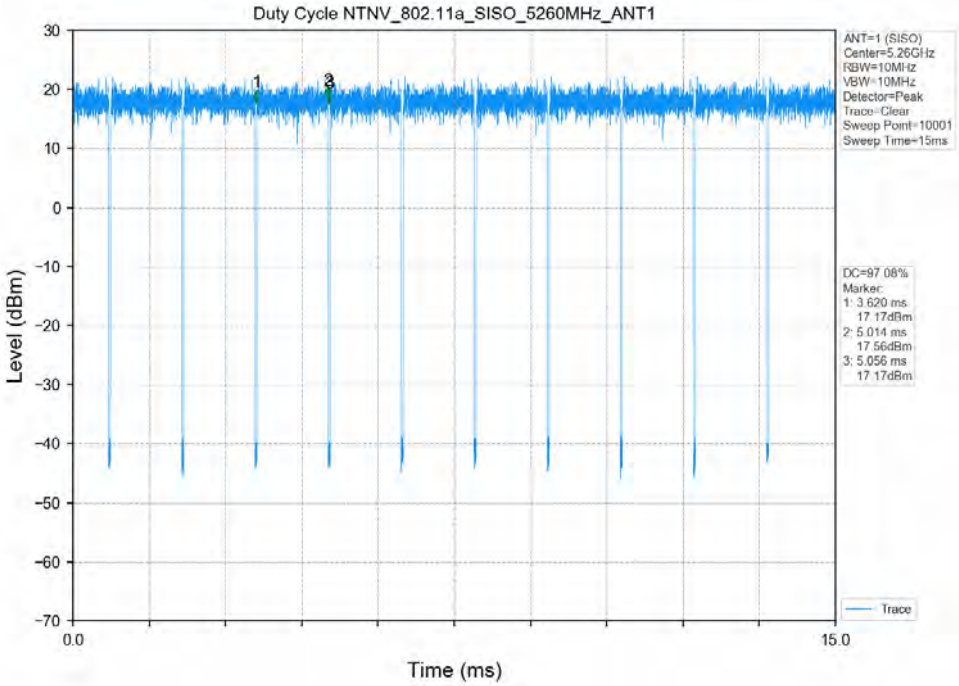
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

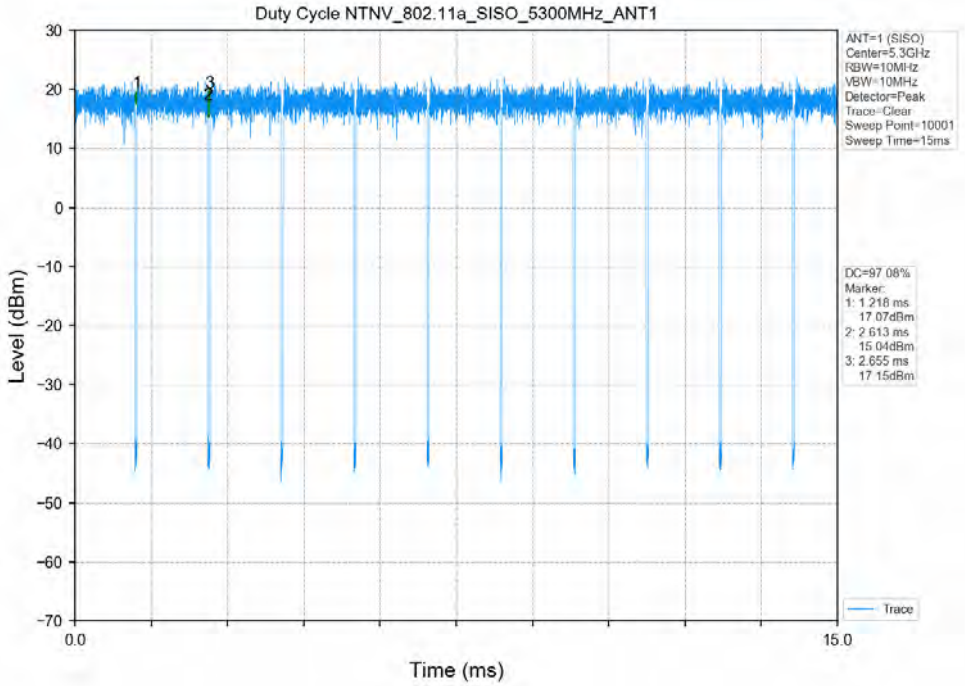
1.2 Test Graph

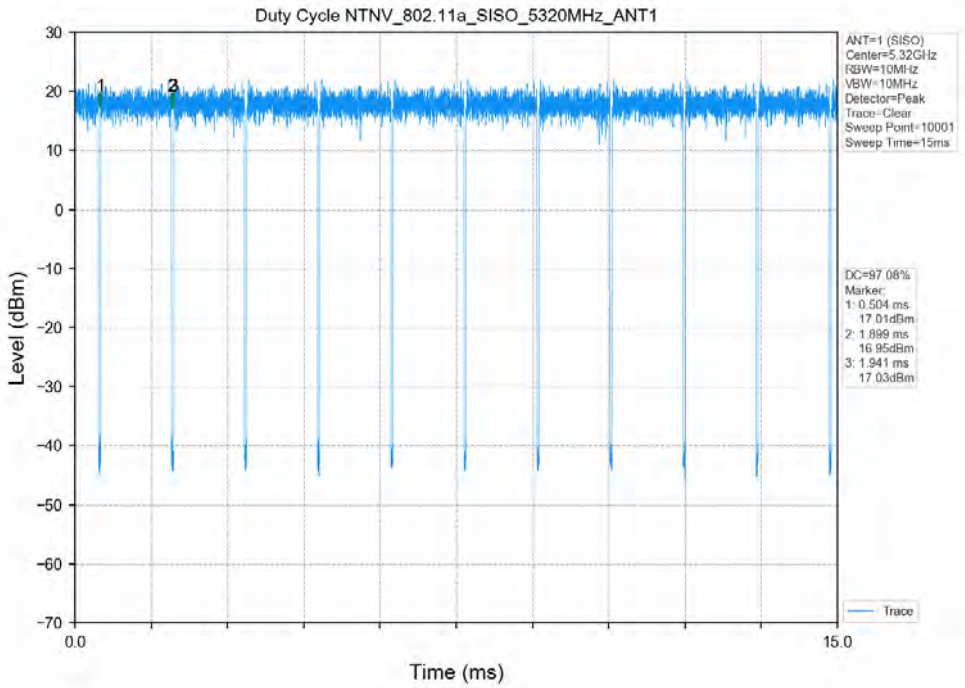


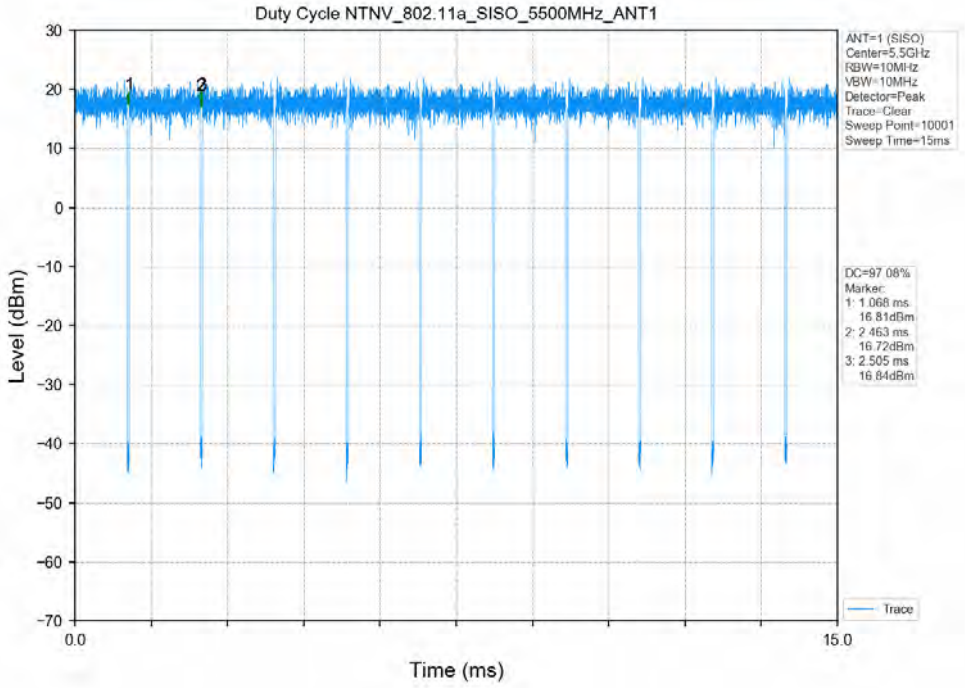


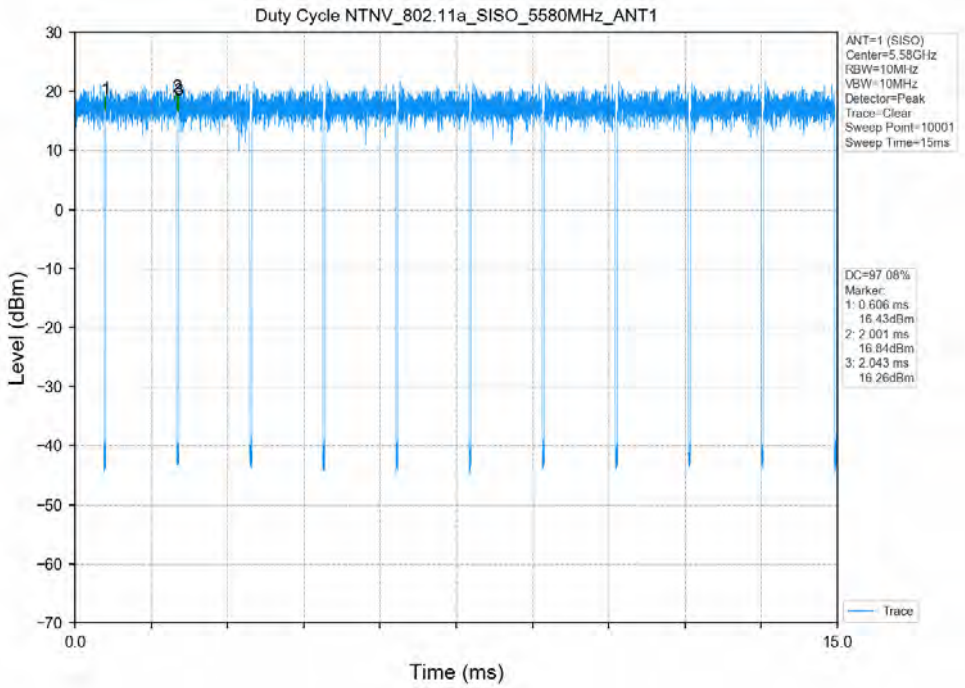


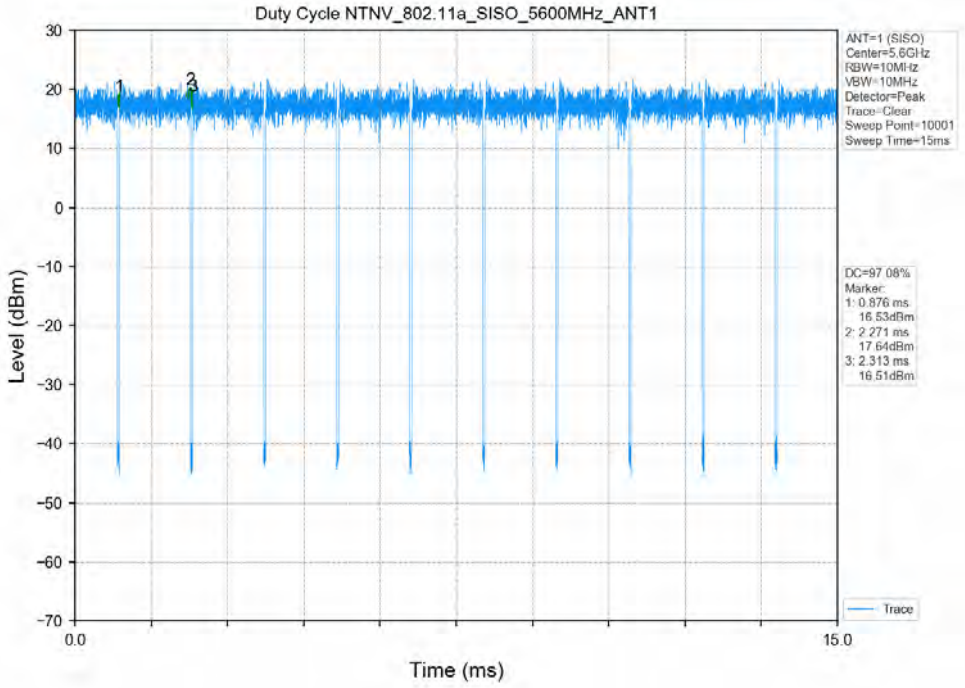


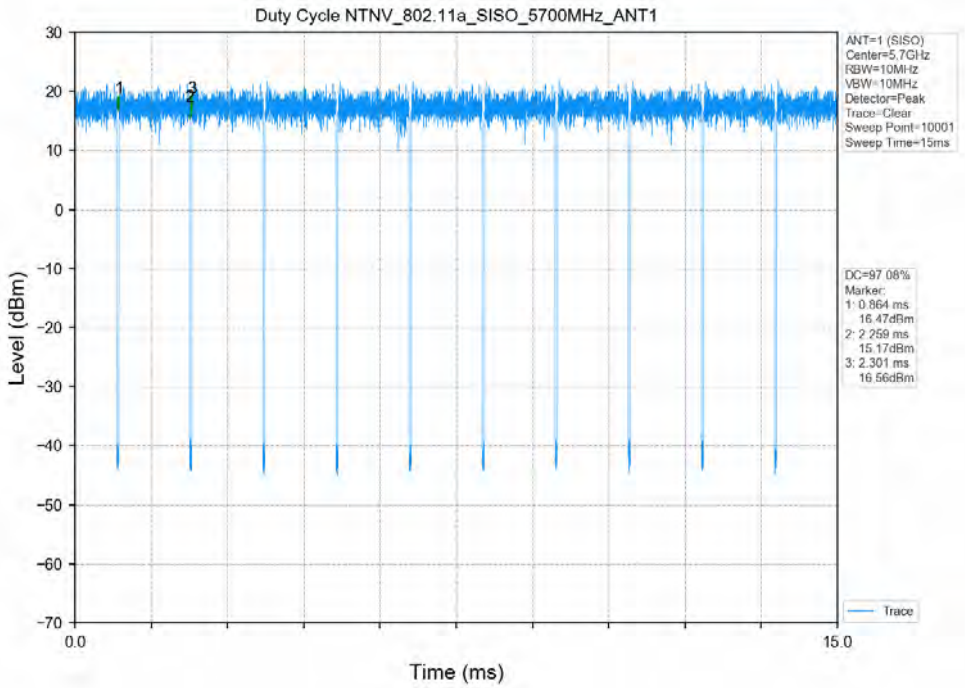


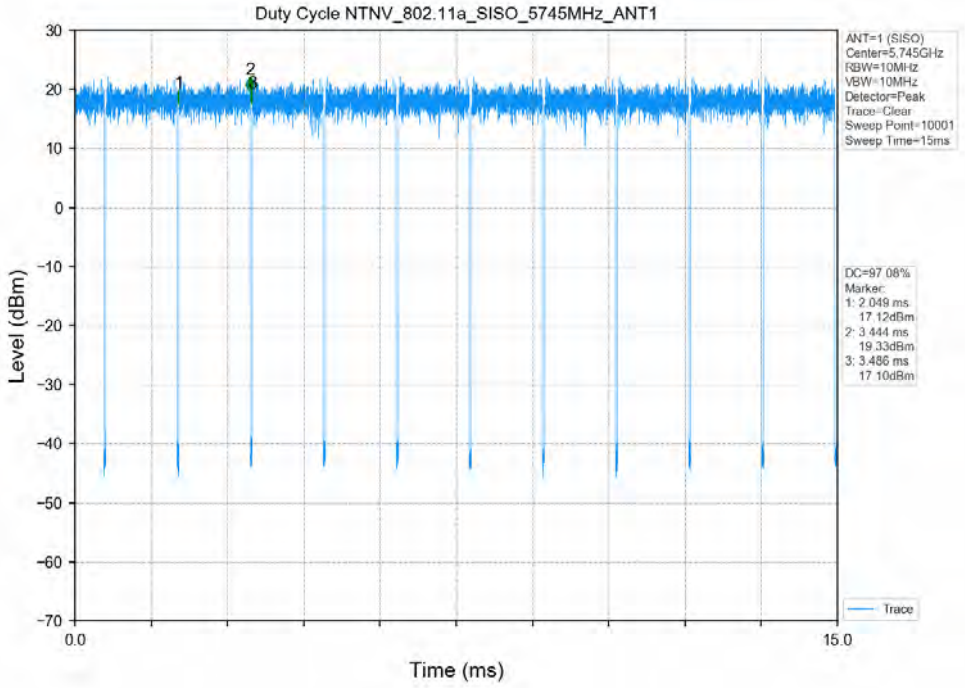


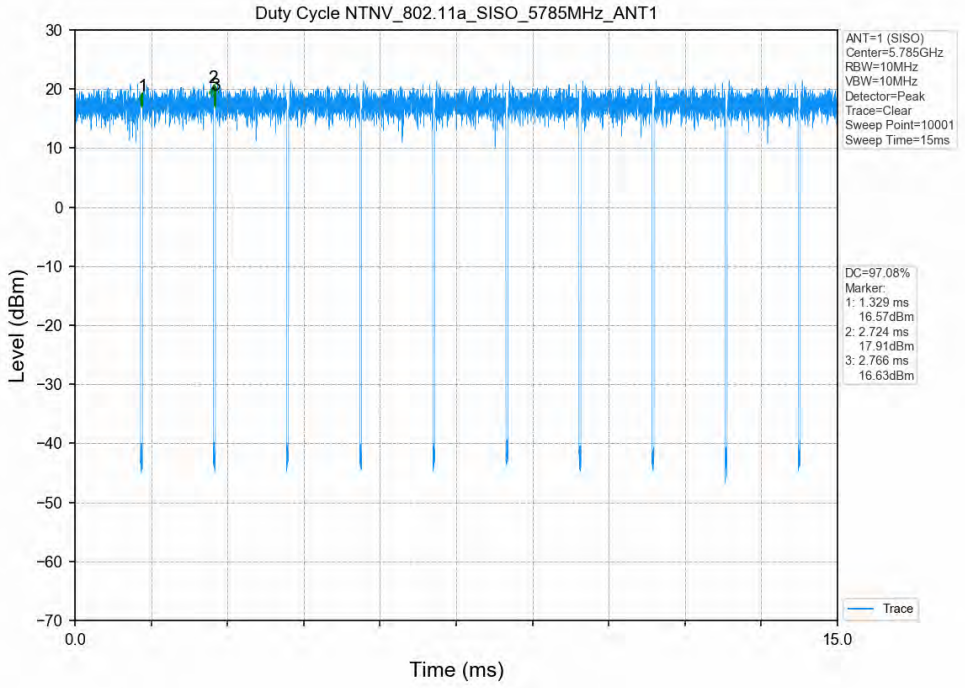


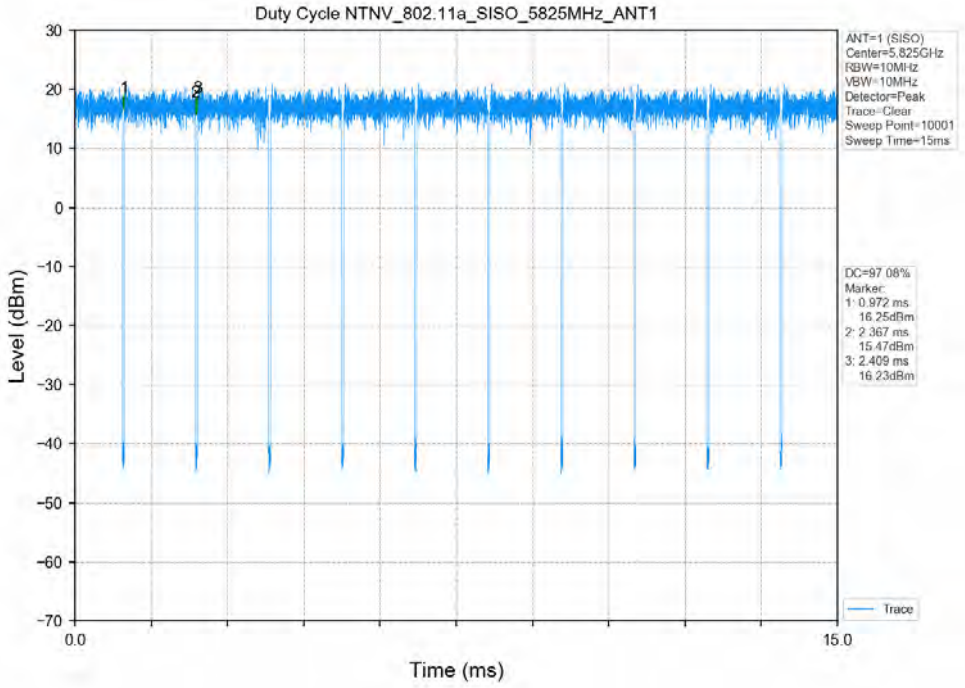


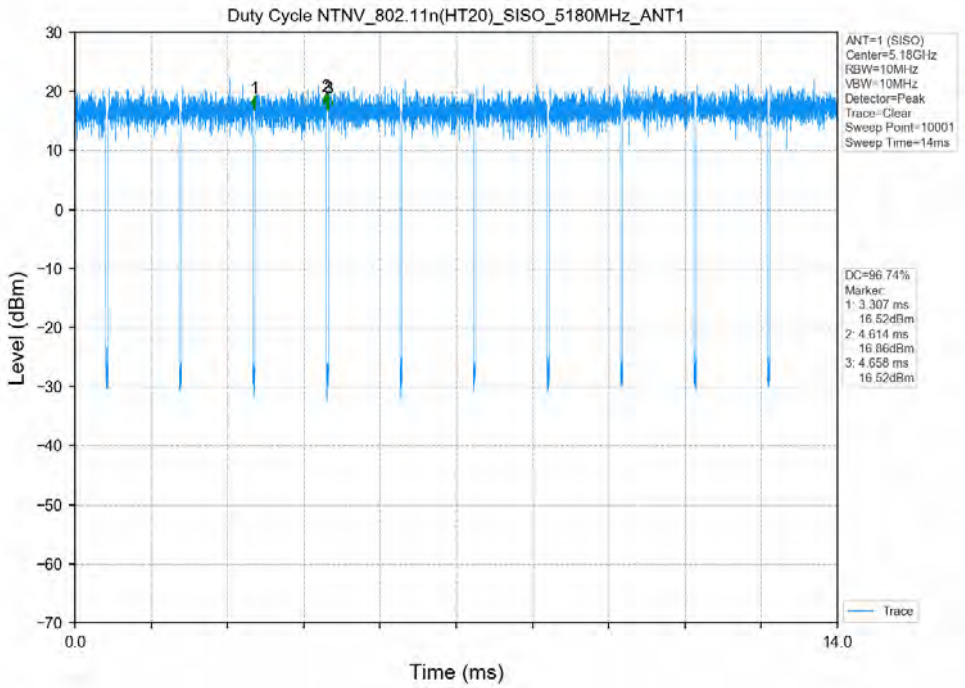


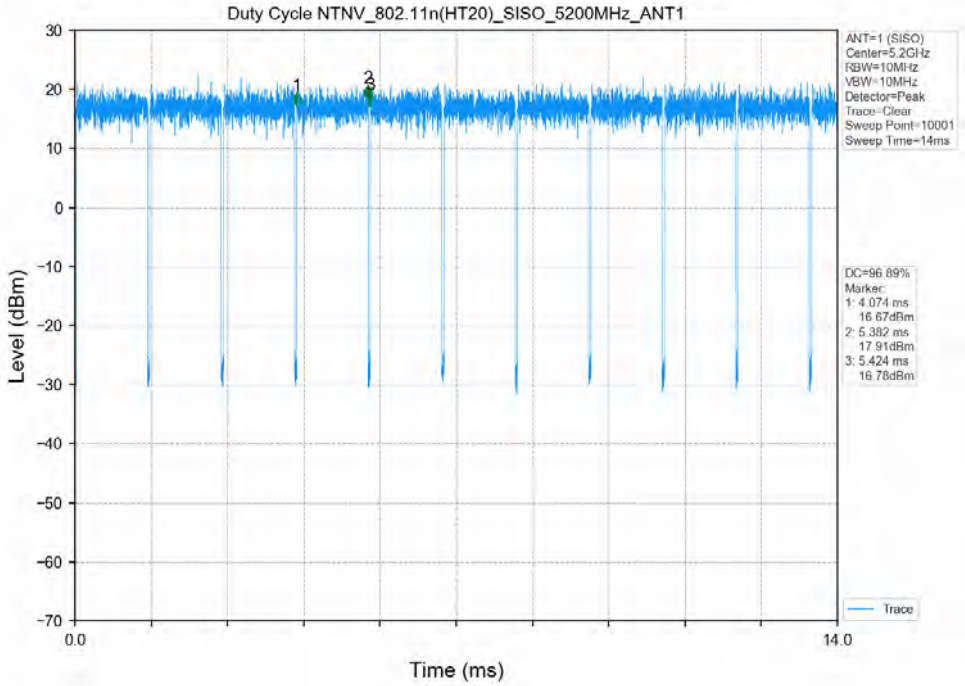


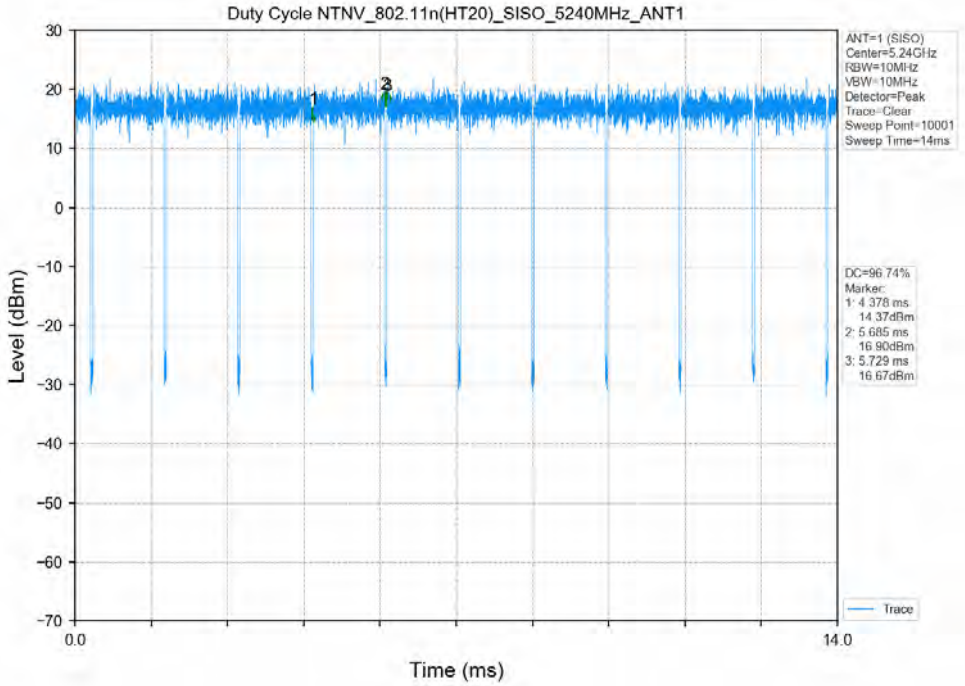


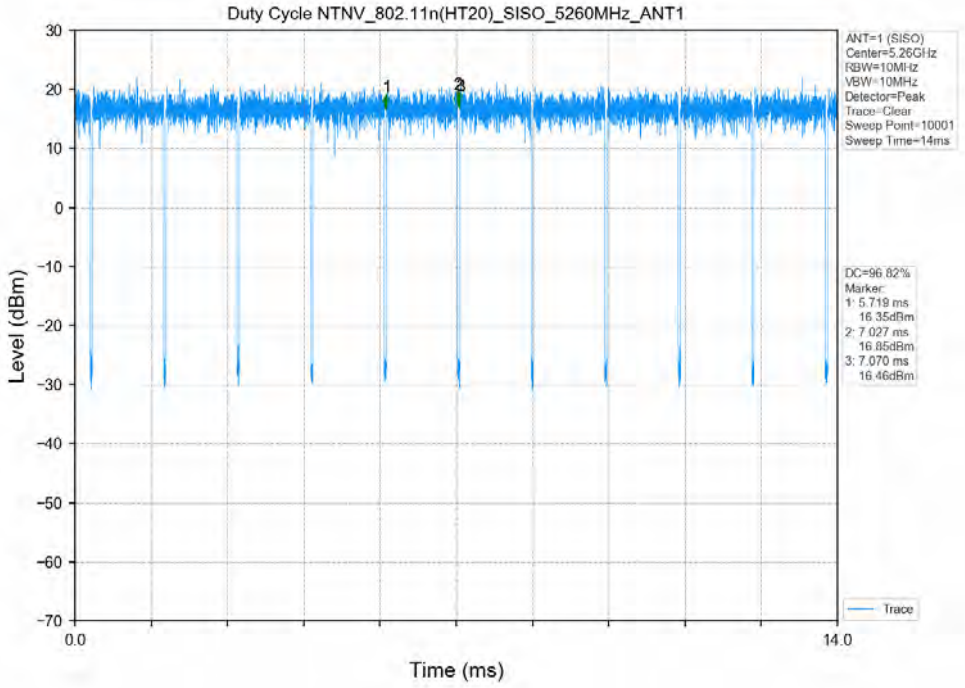


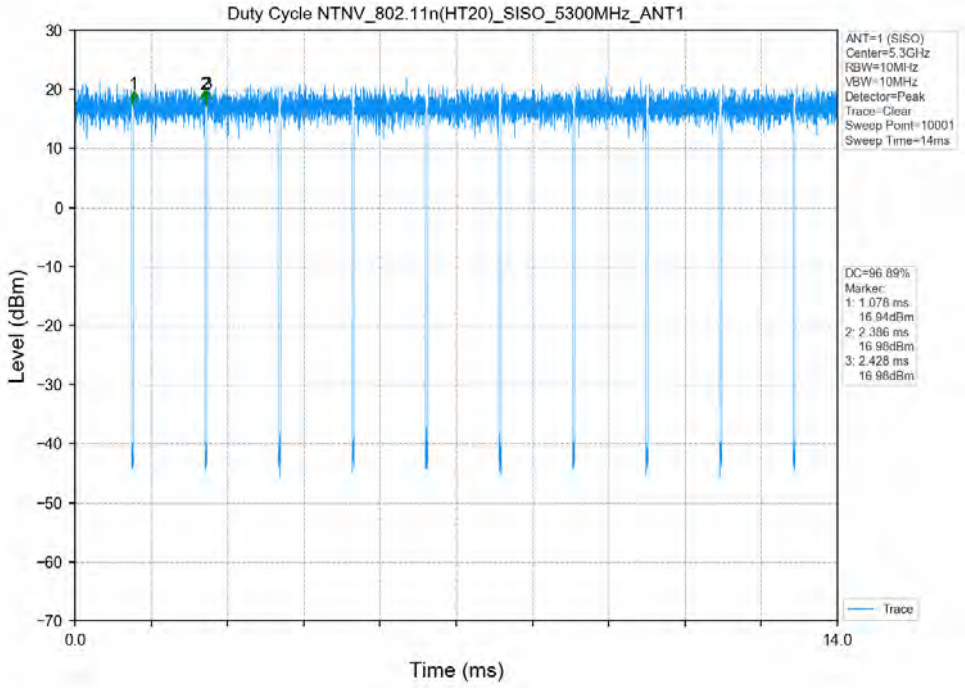


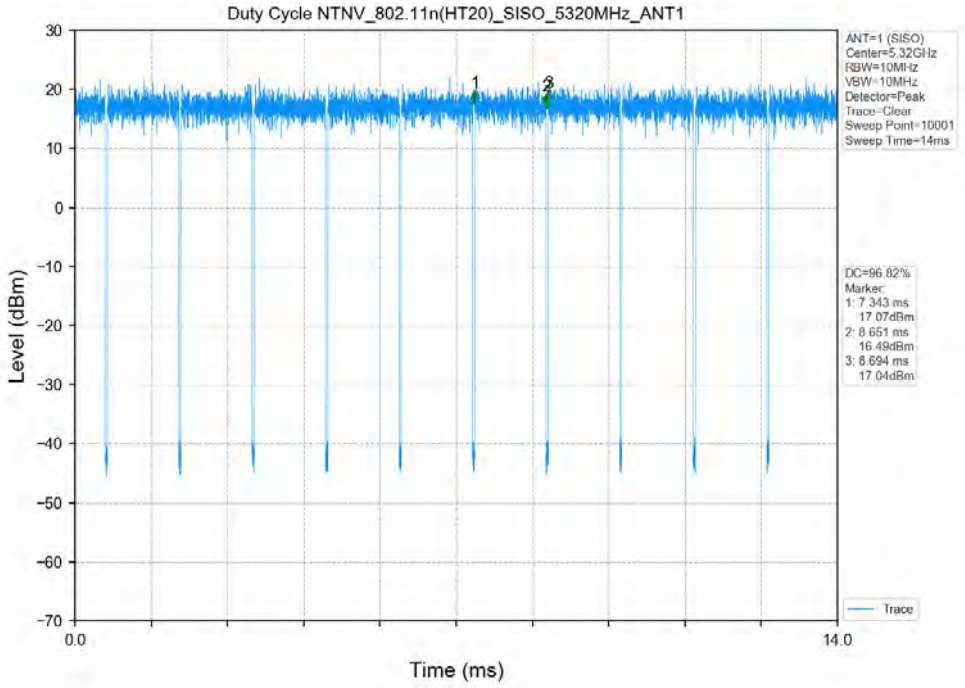


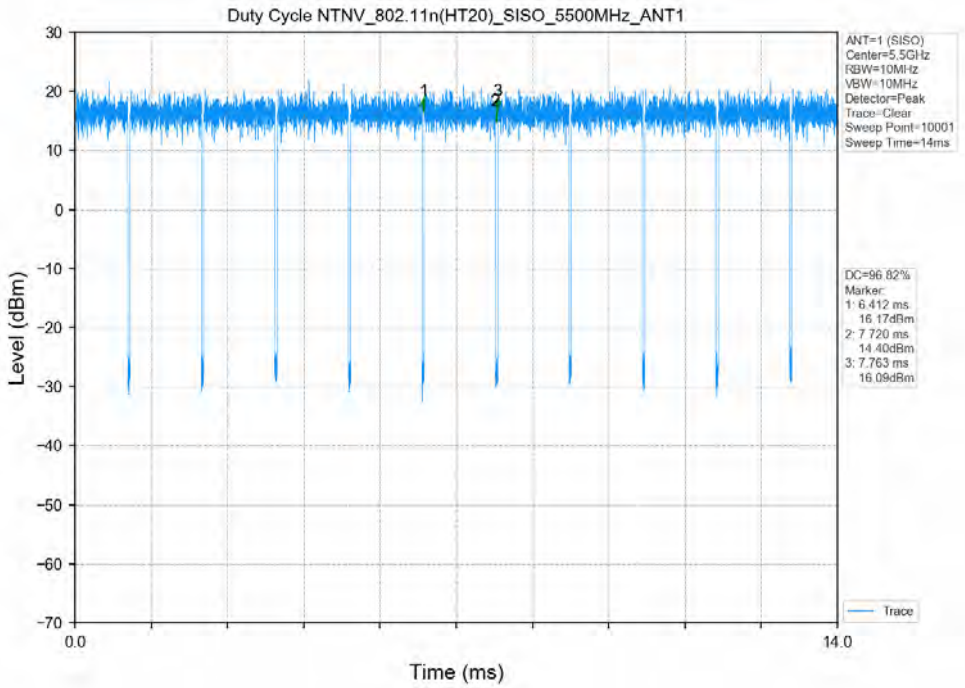


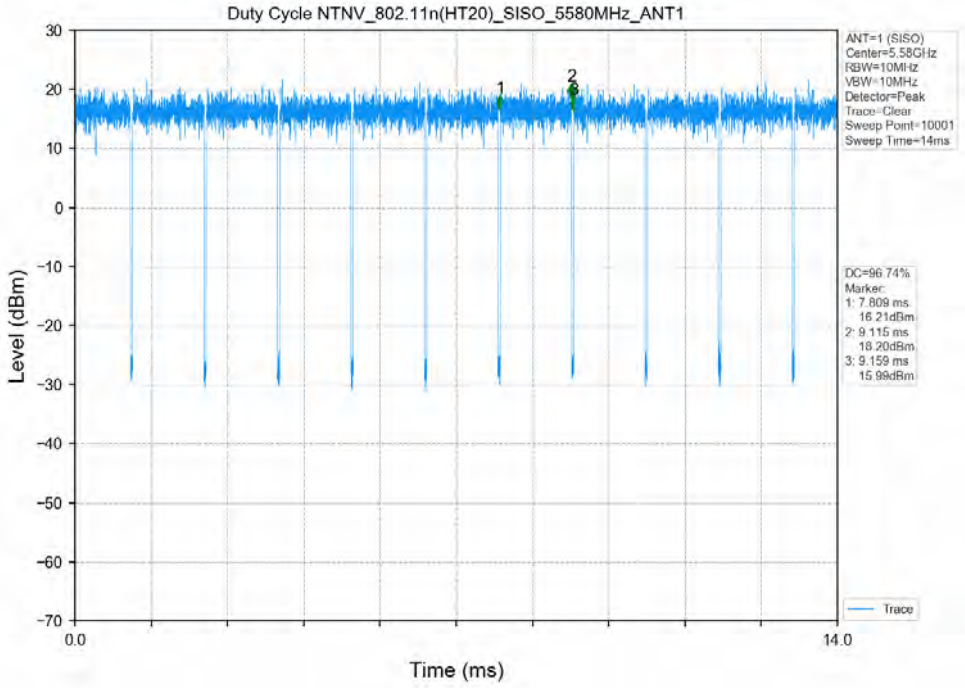


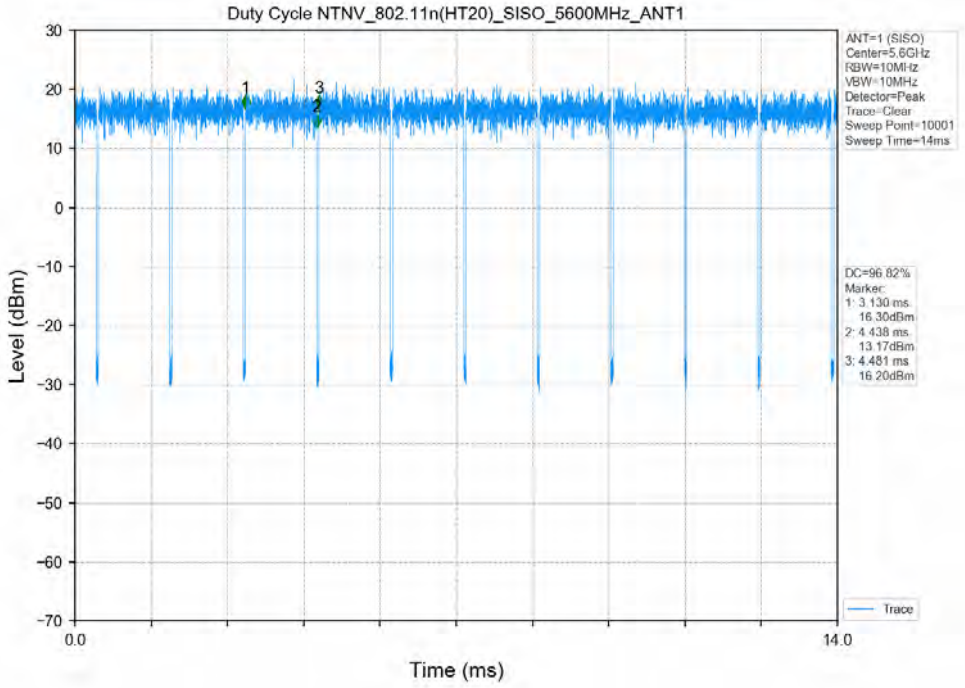


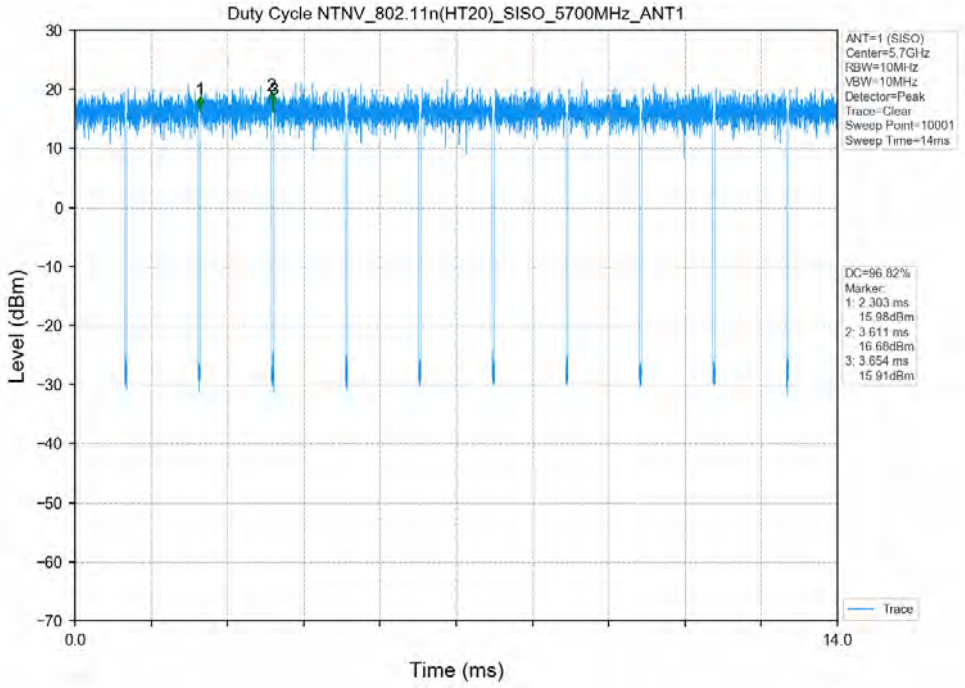


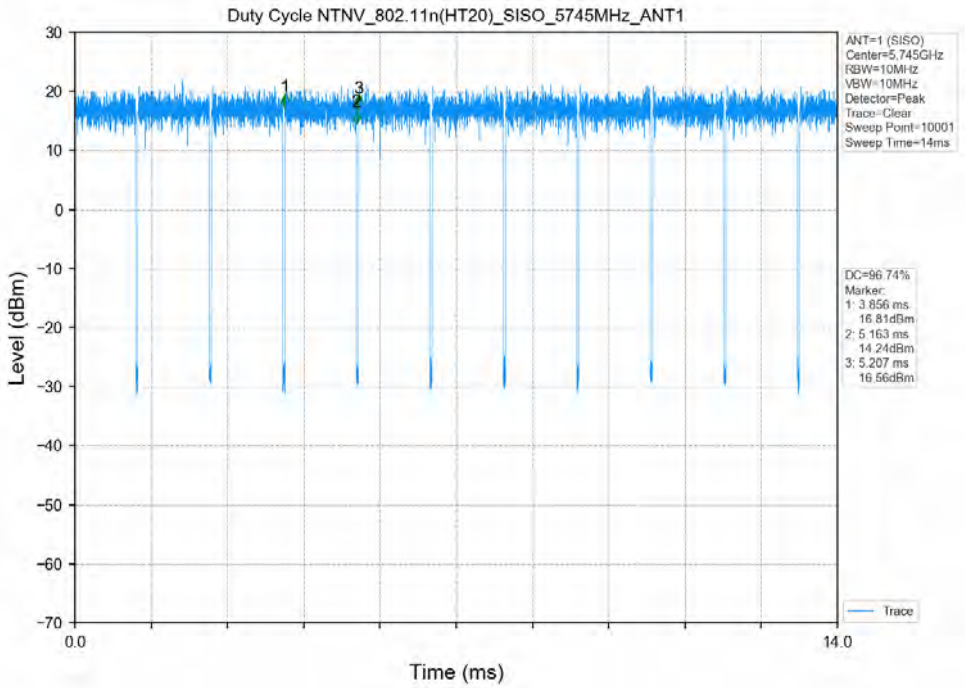


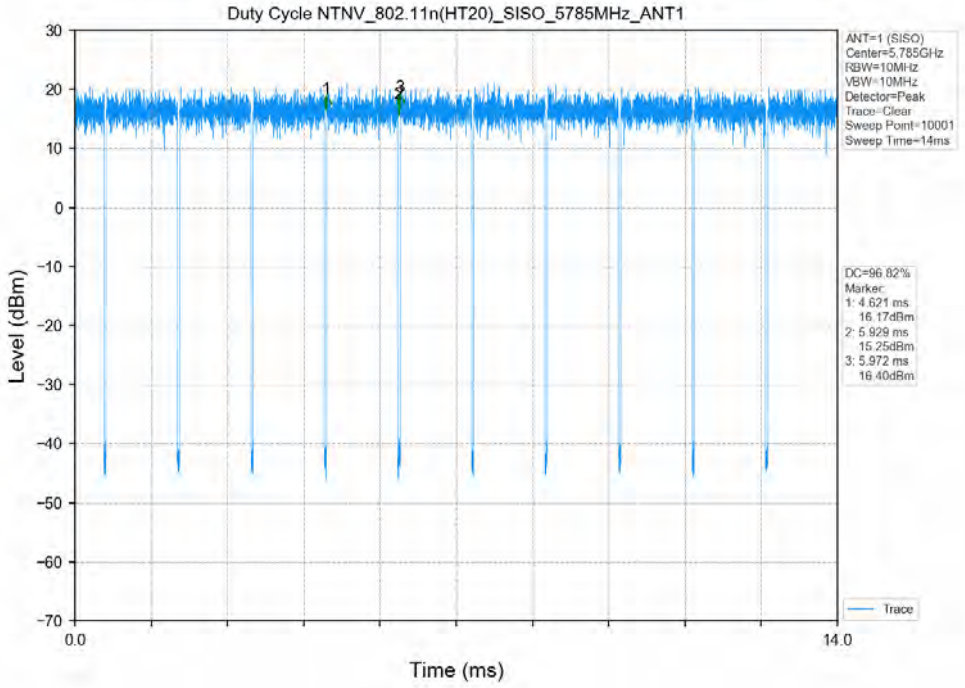


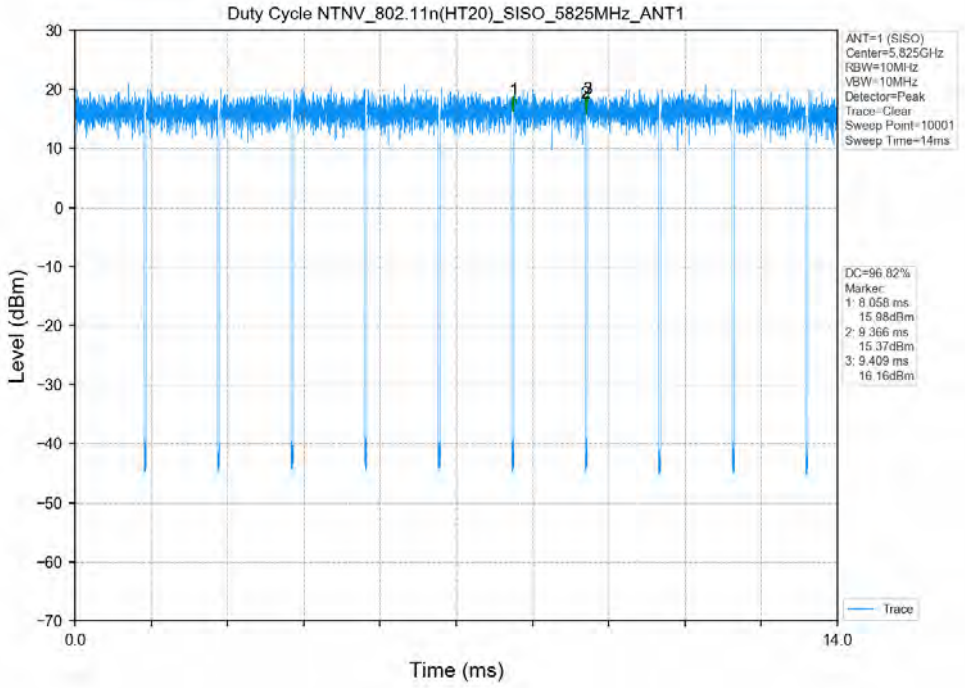


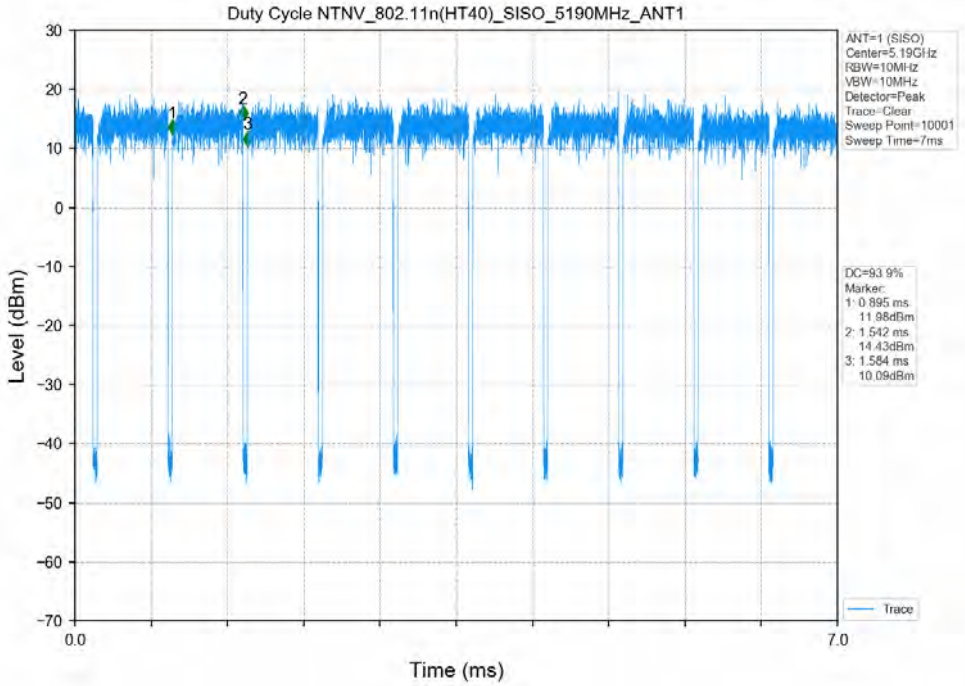


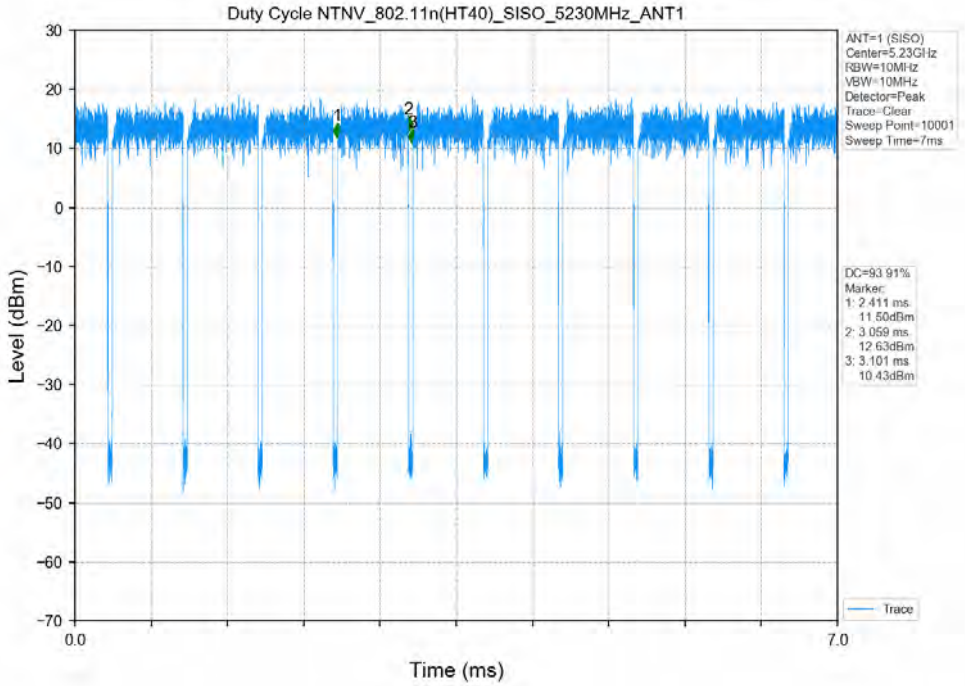


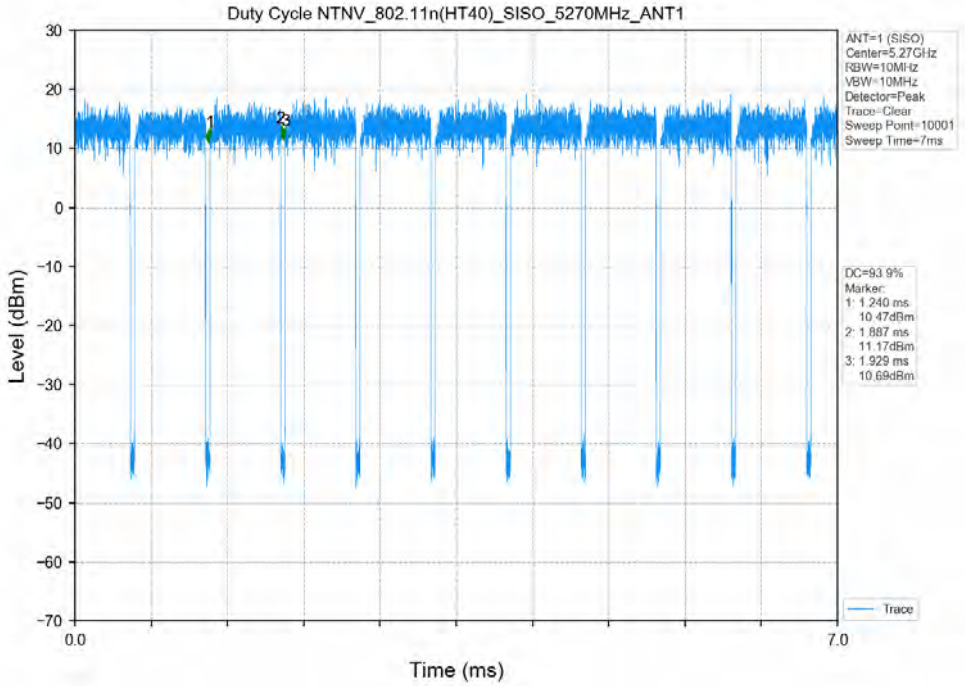


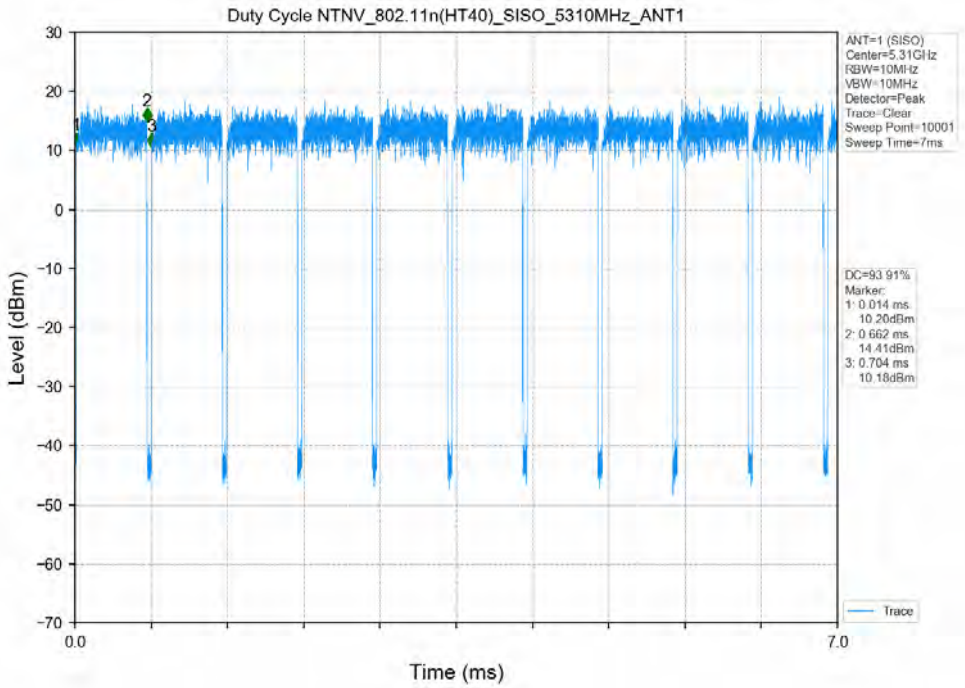


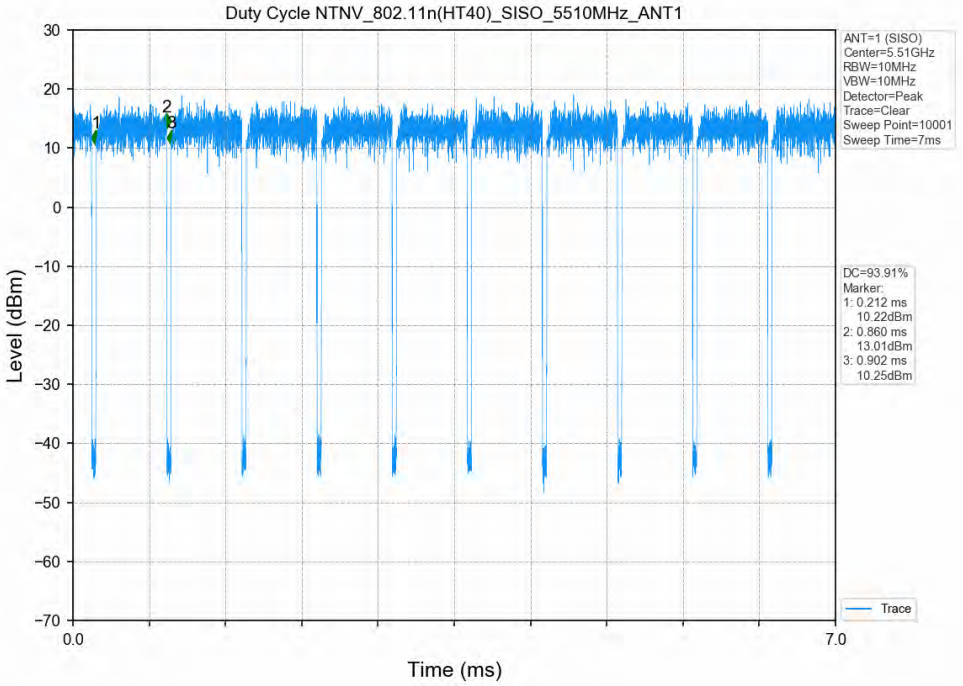


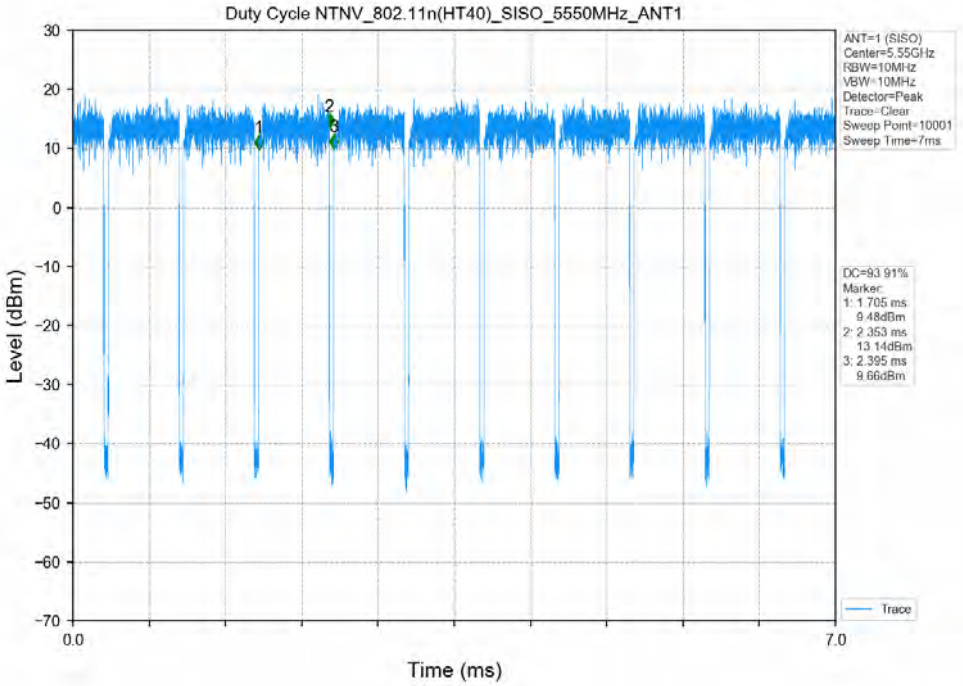


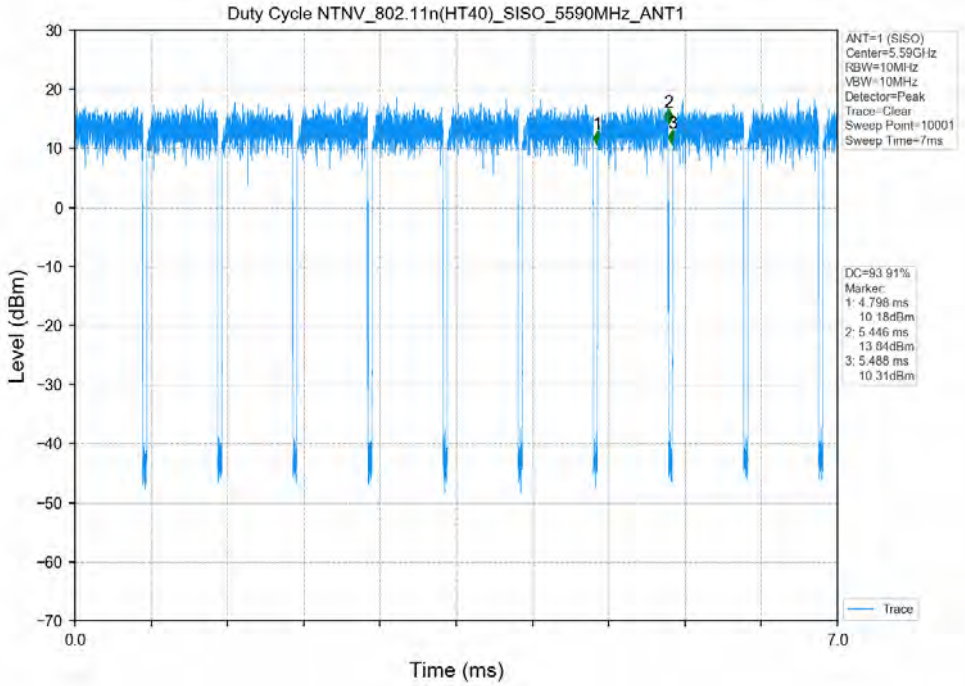


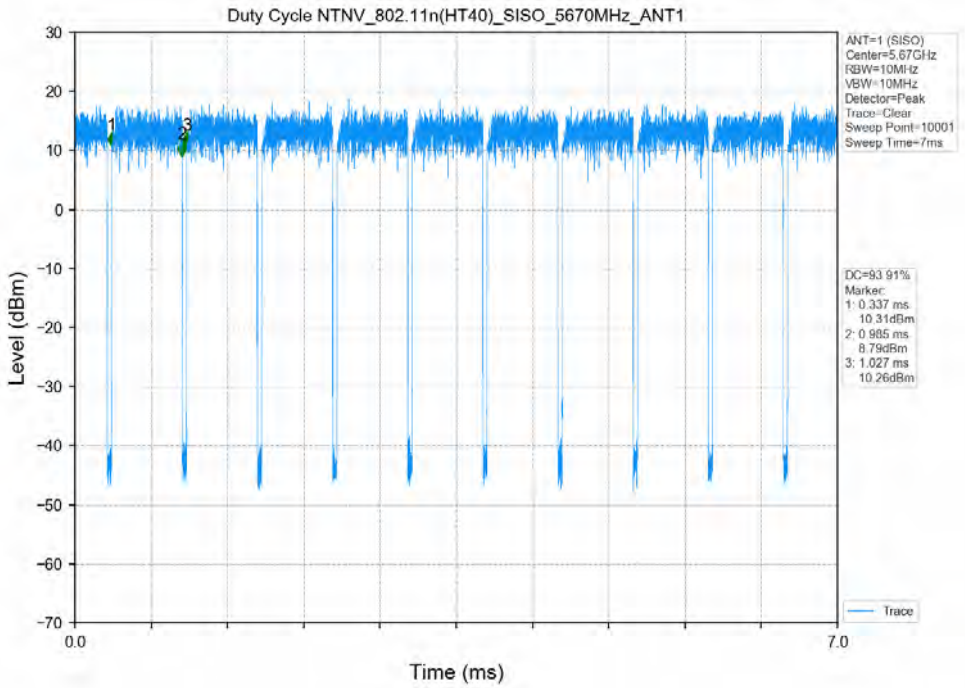


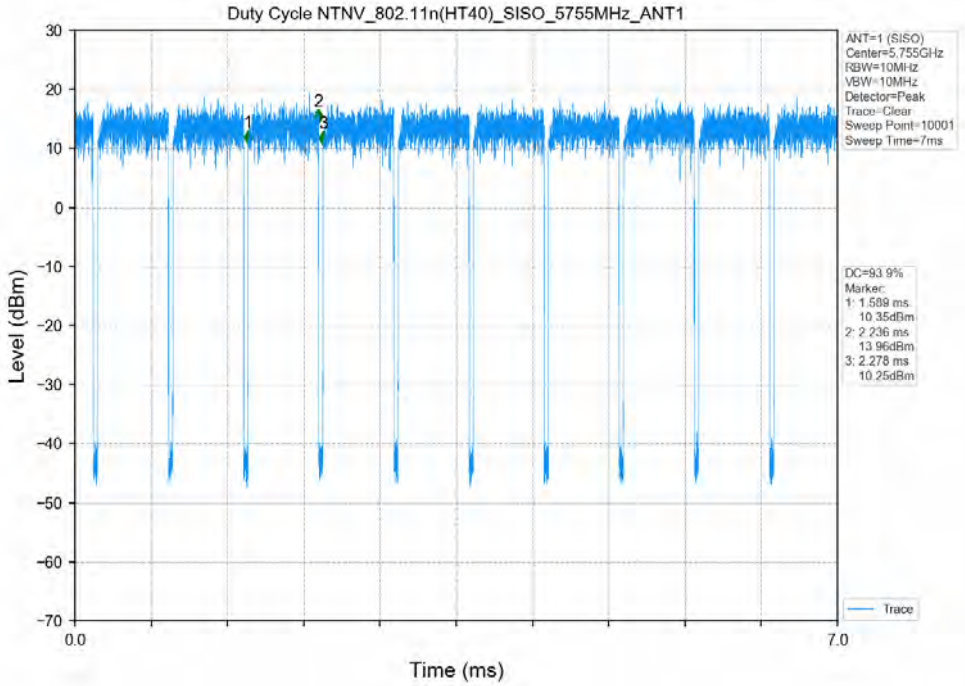


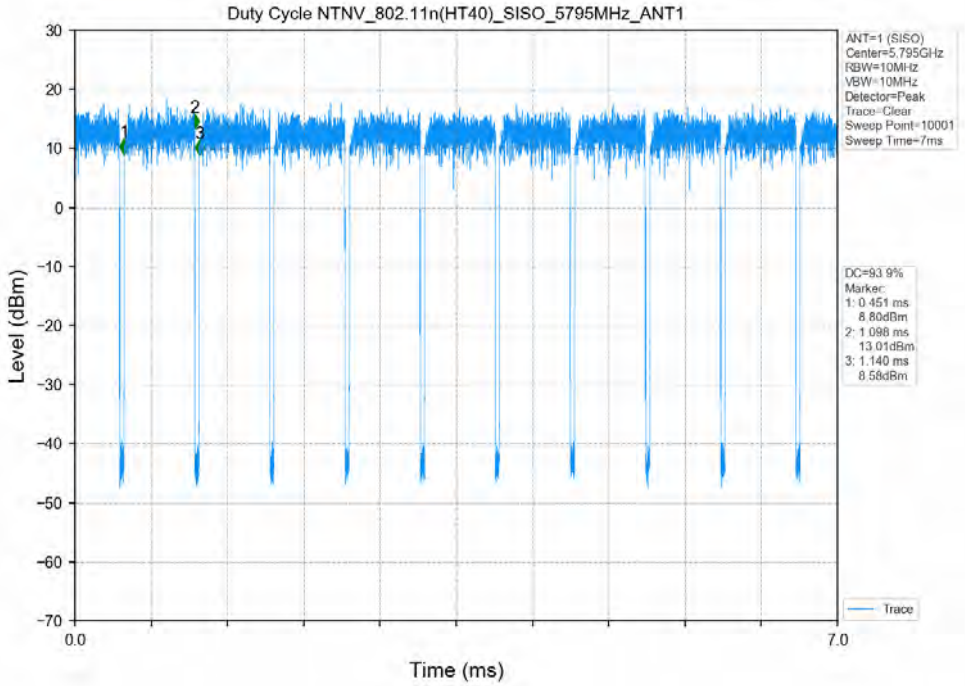


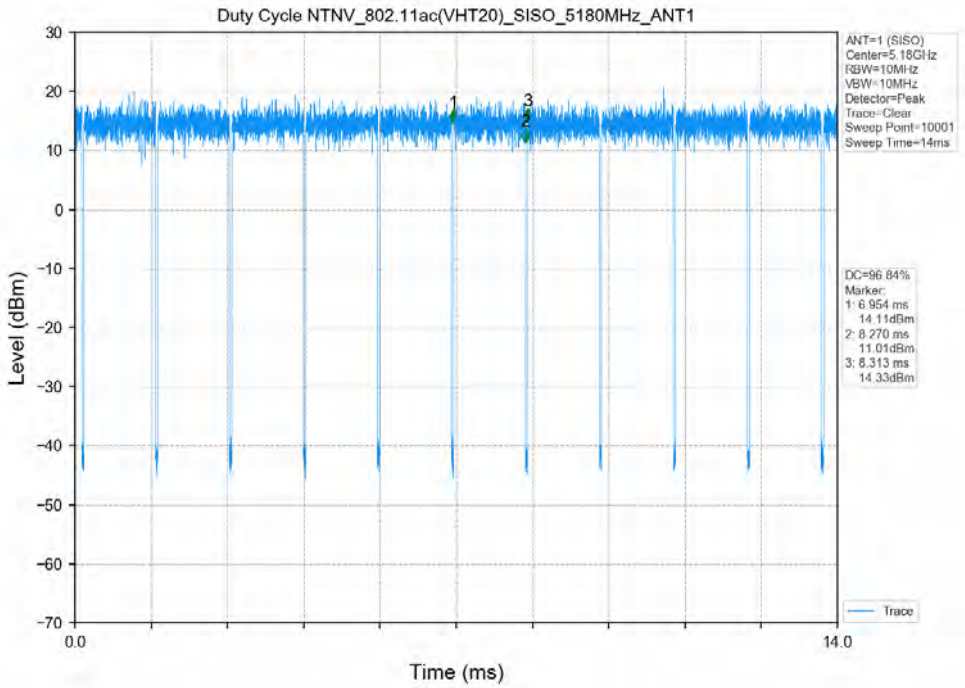


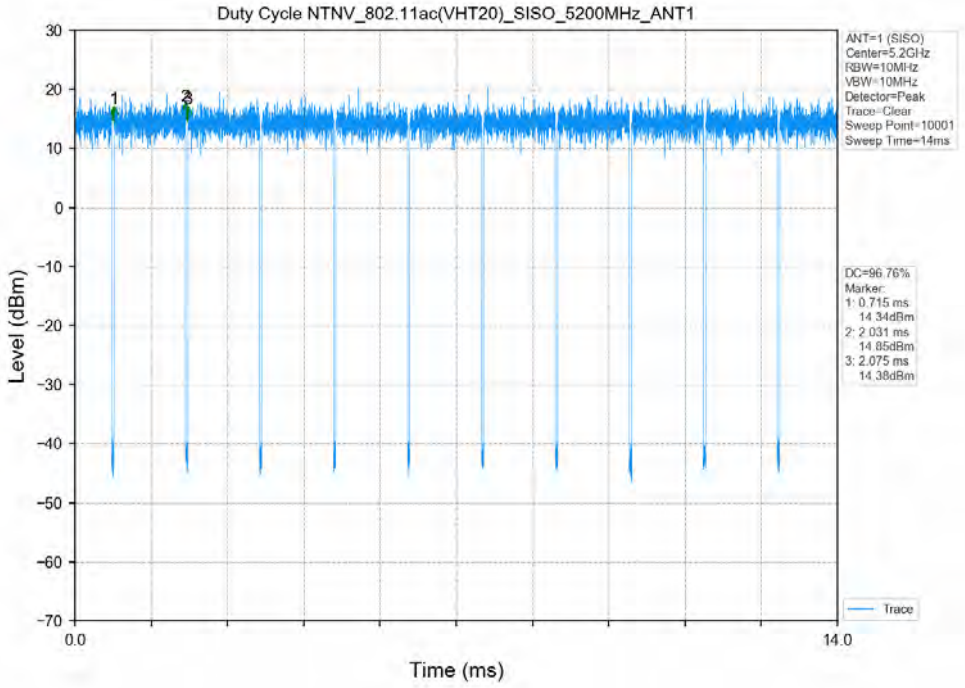


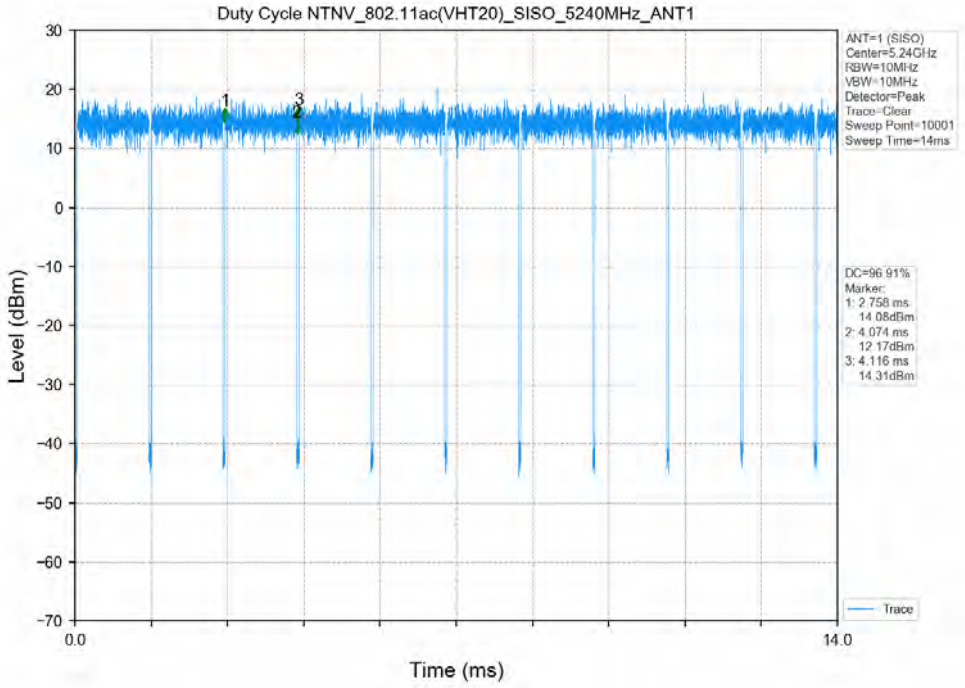


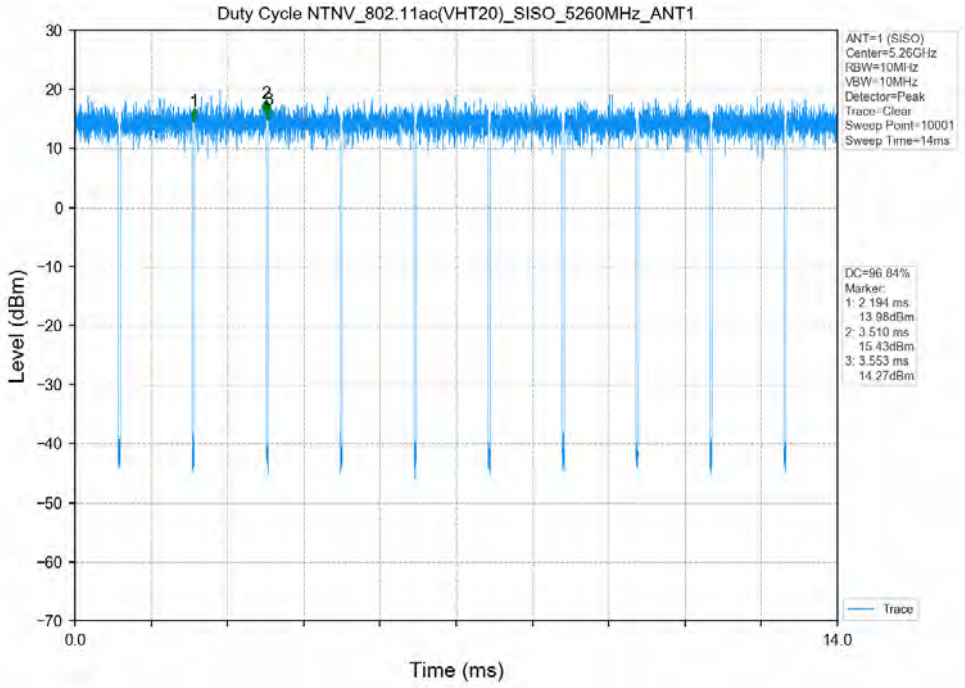


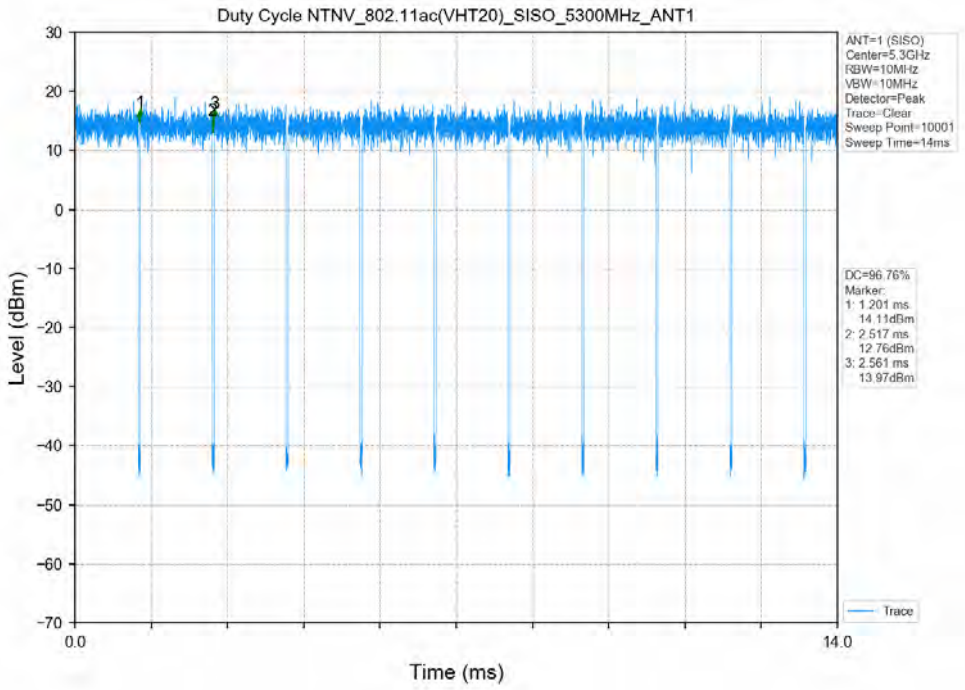


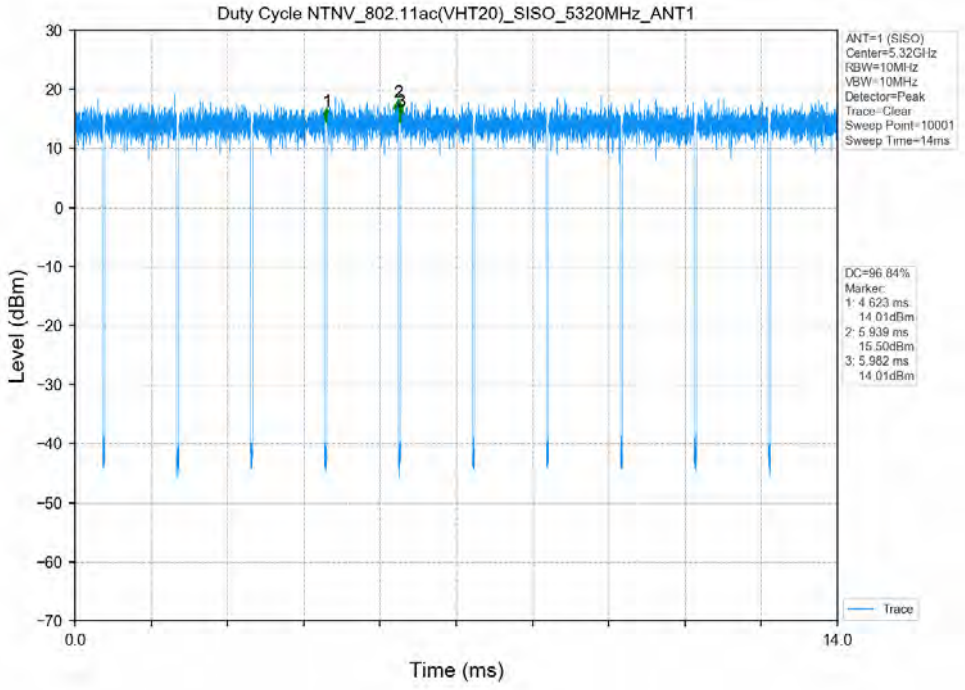


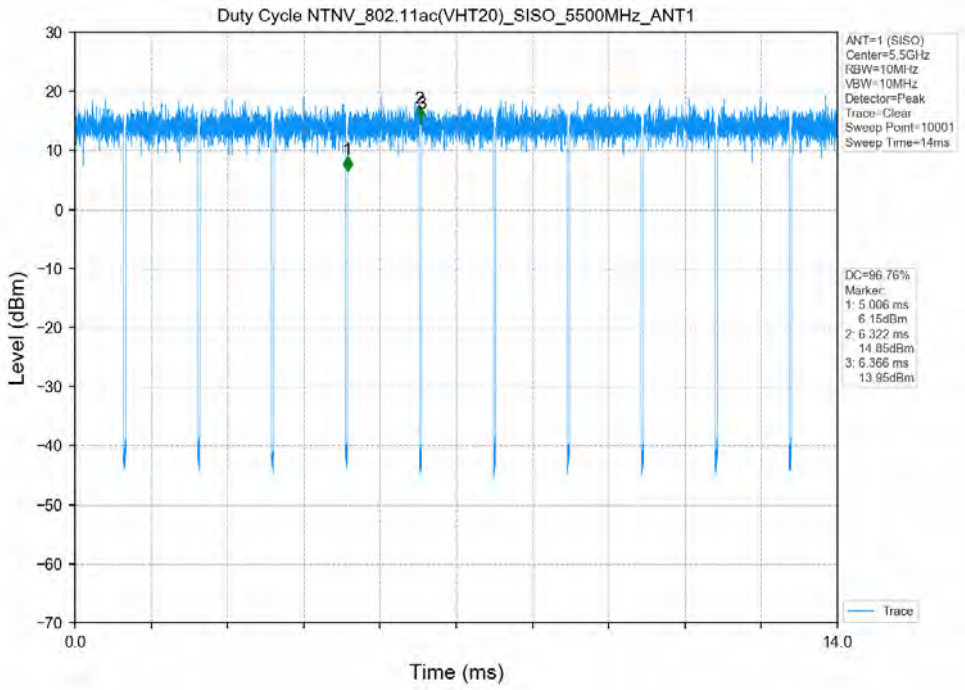


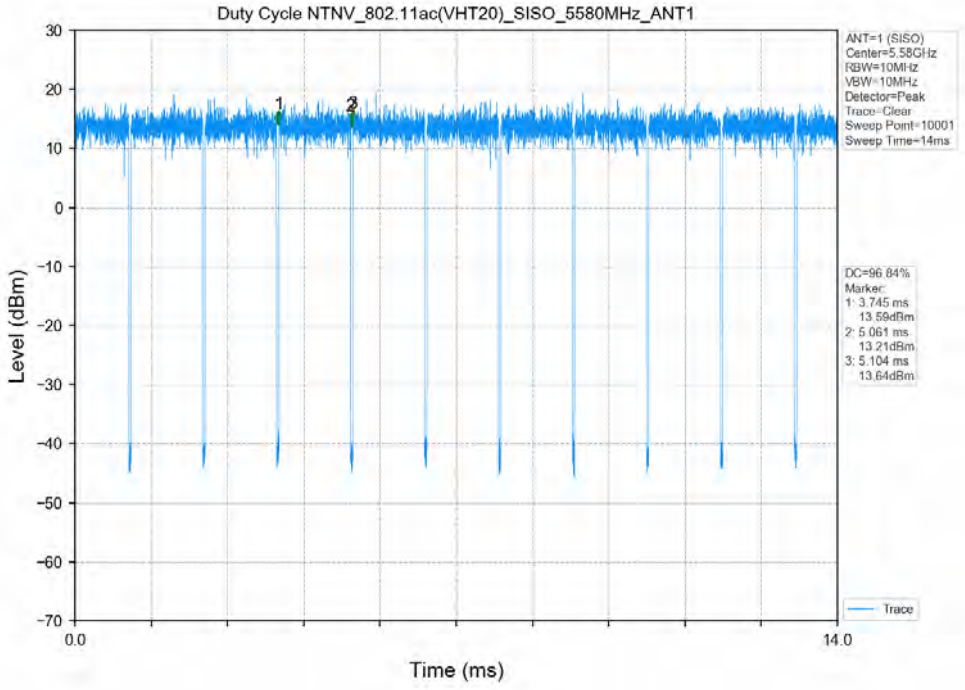


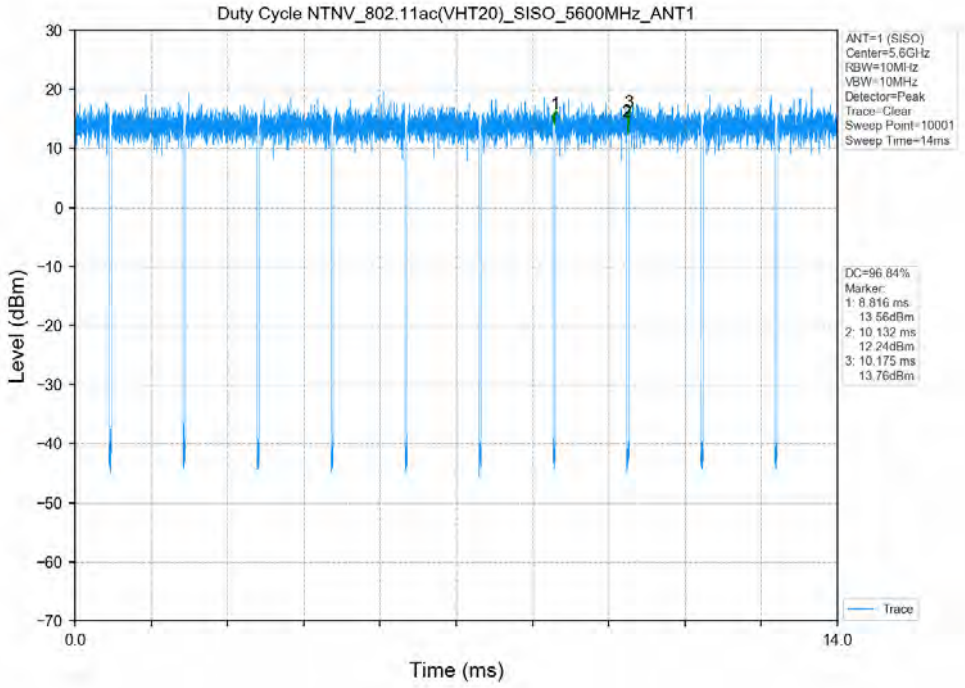


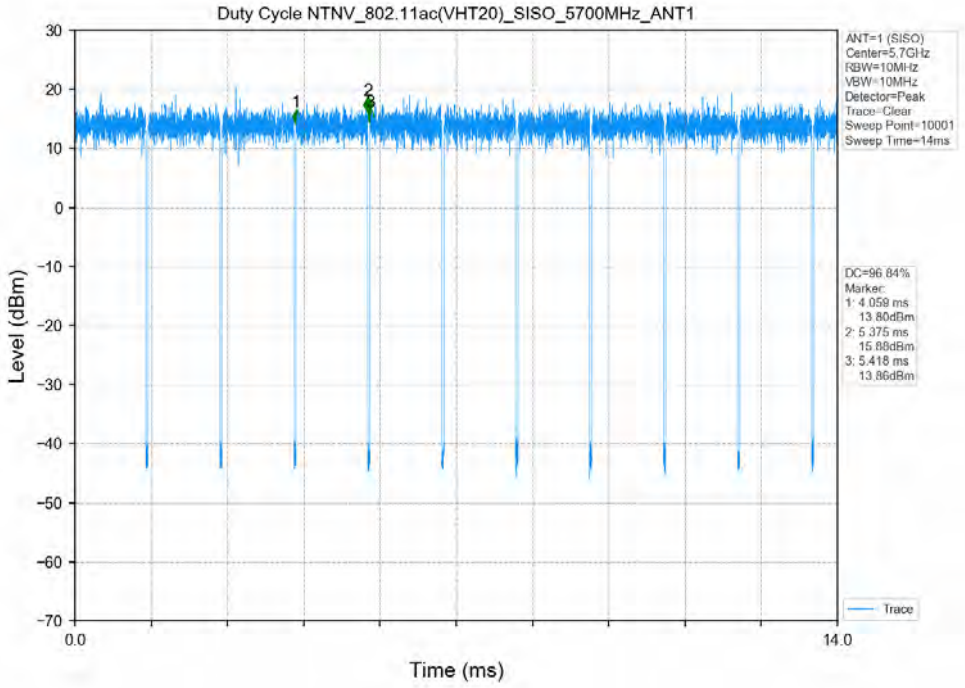


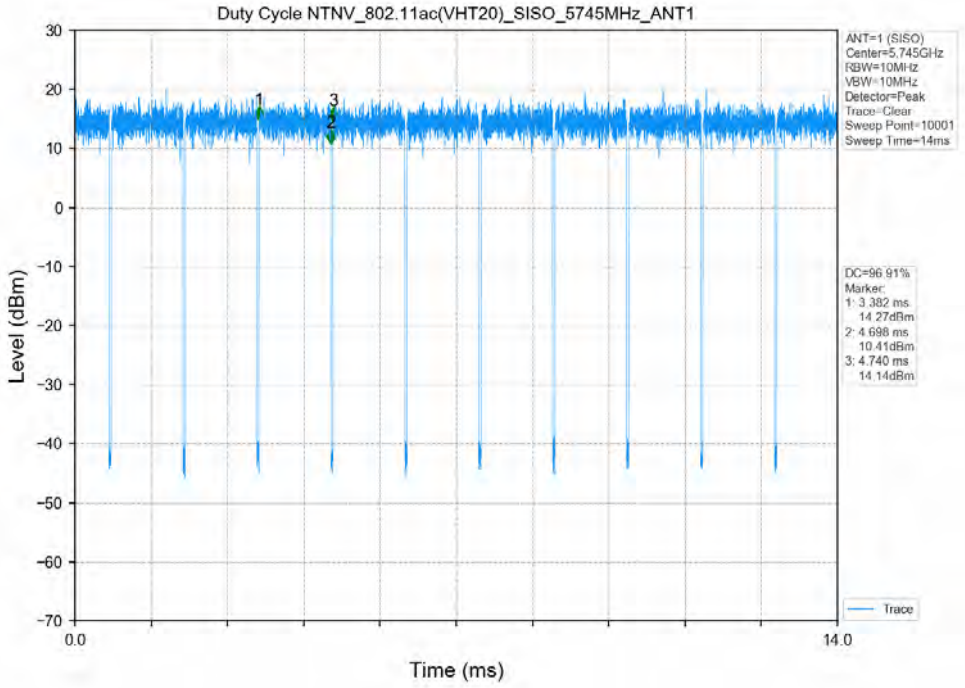


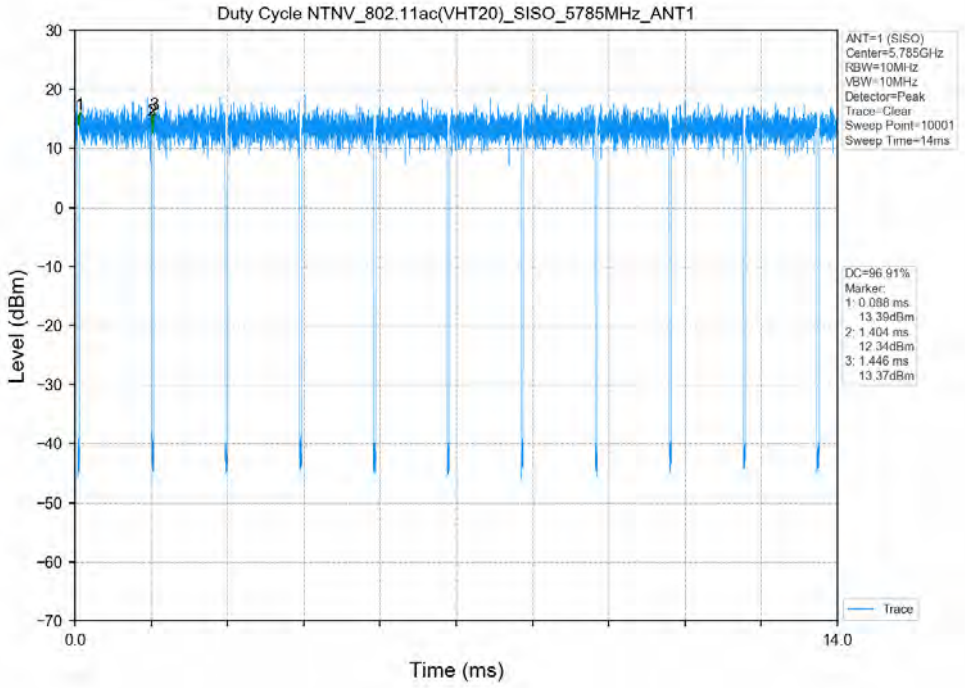


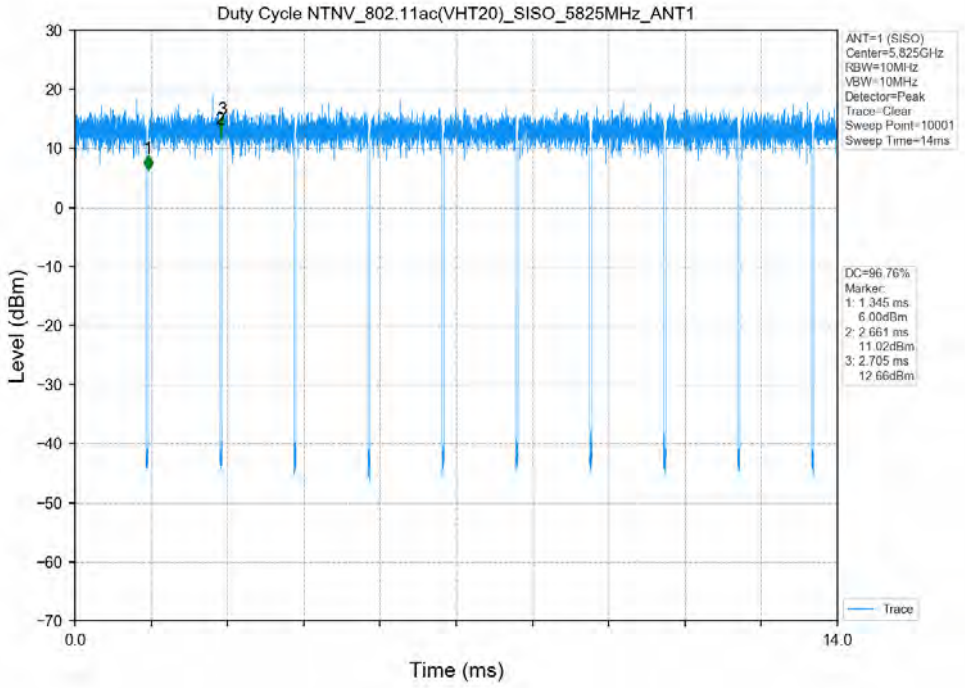


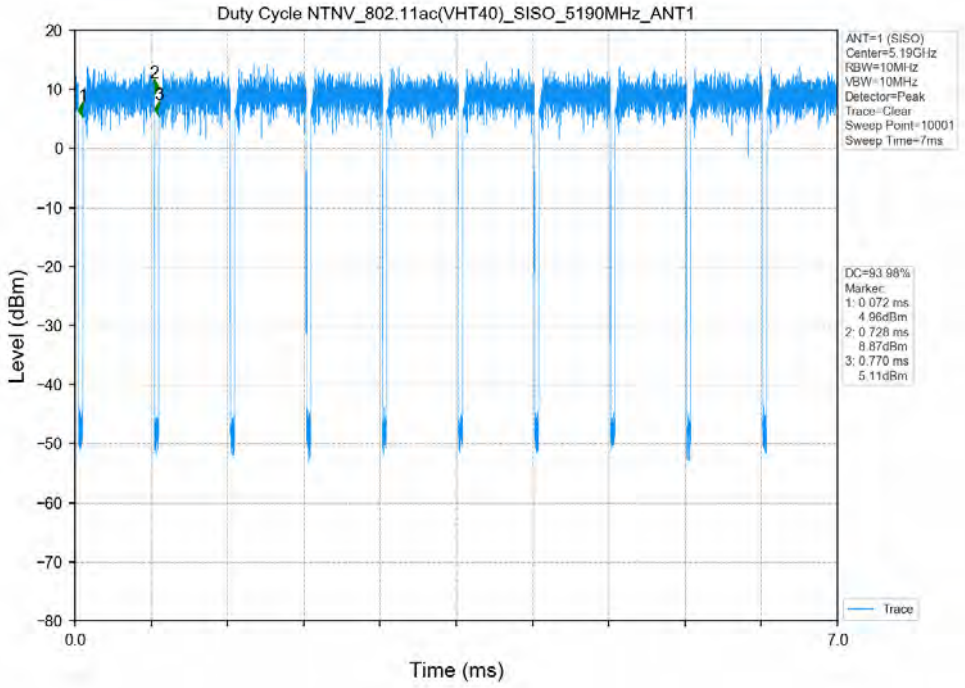


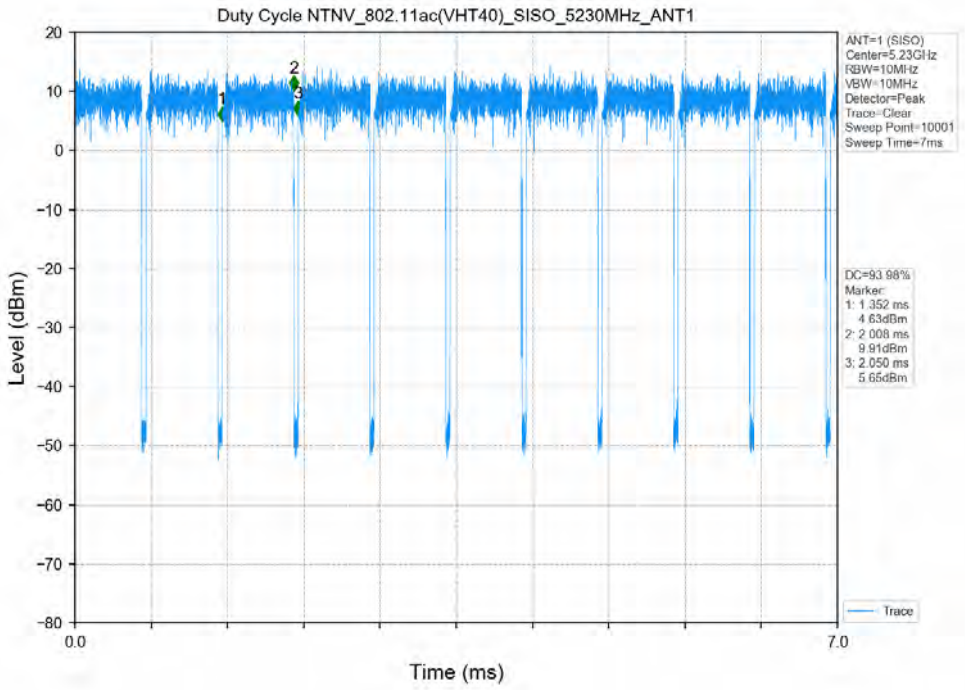


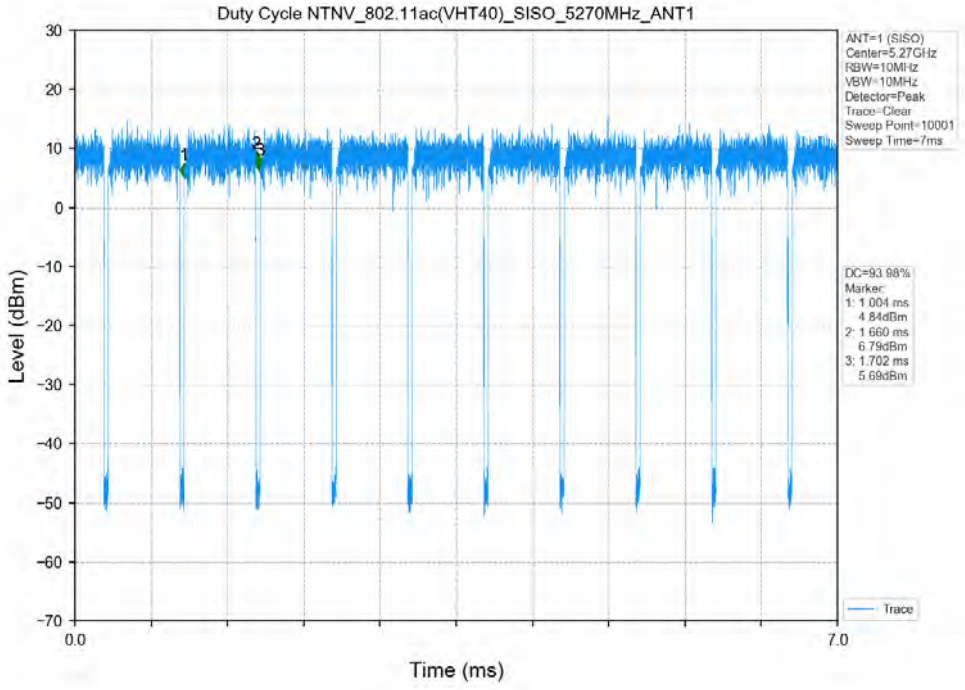


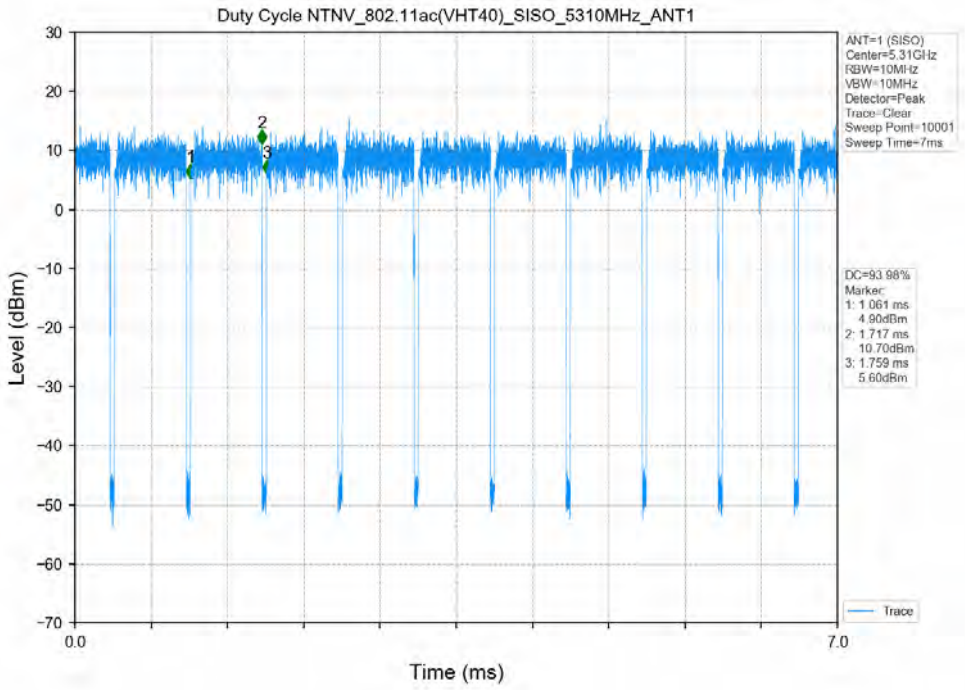


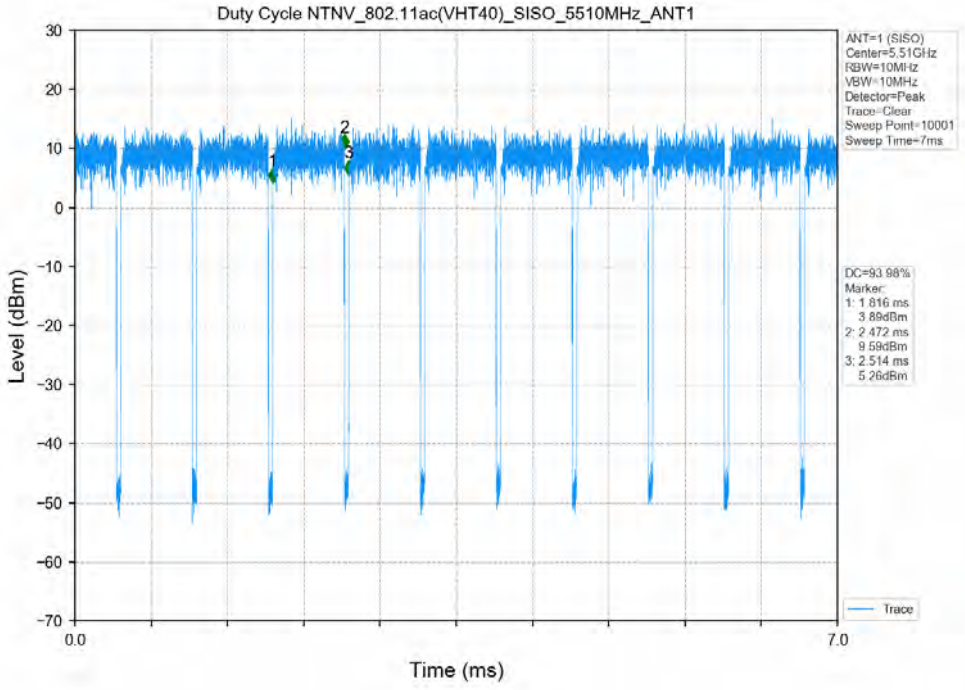


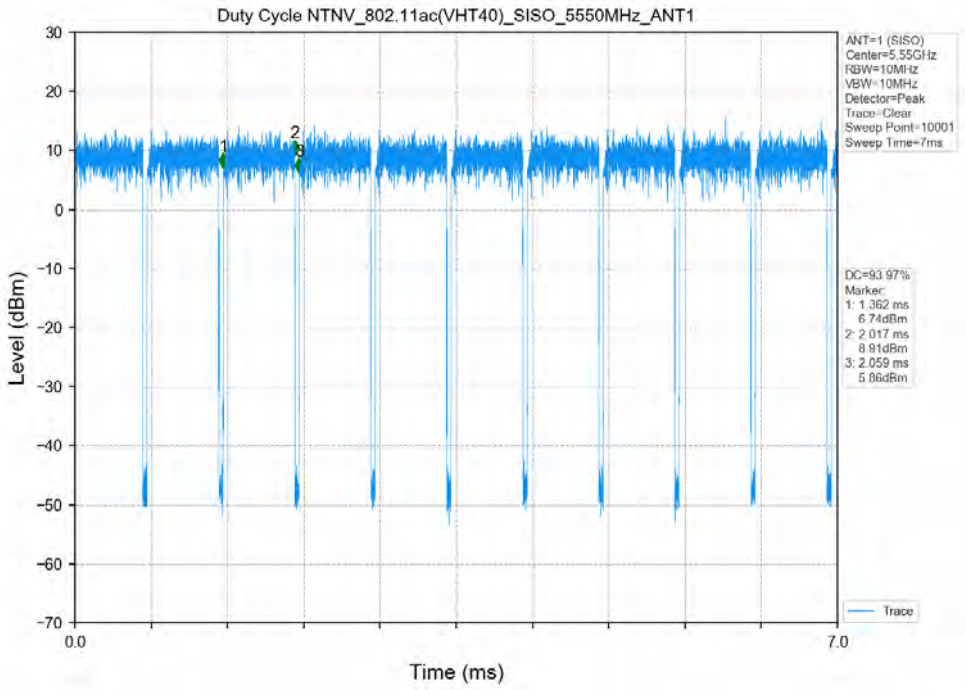


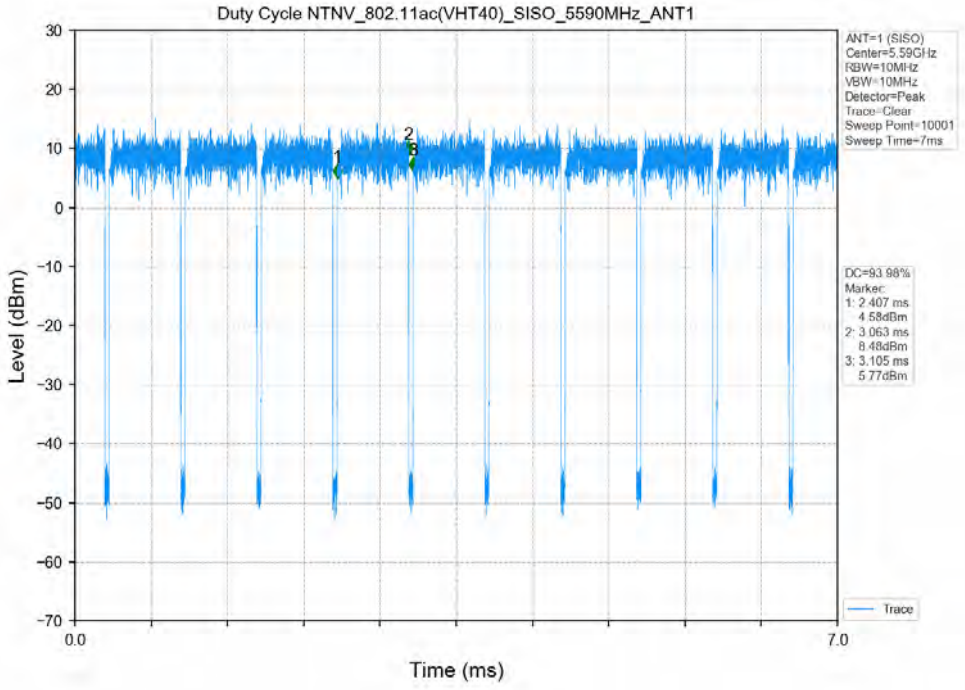


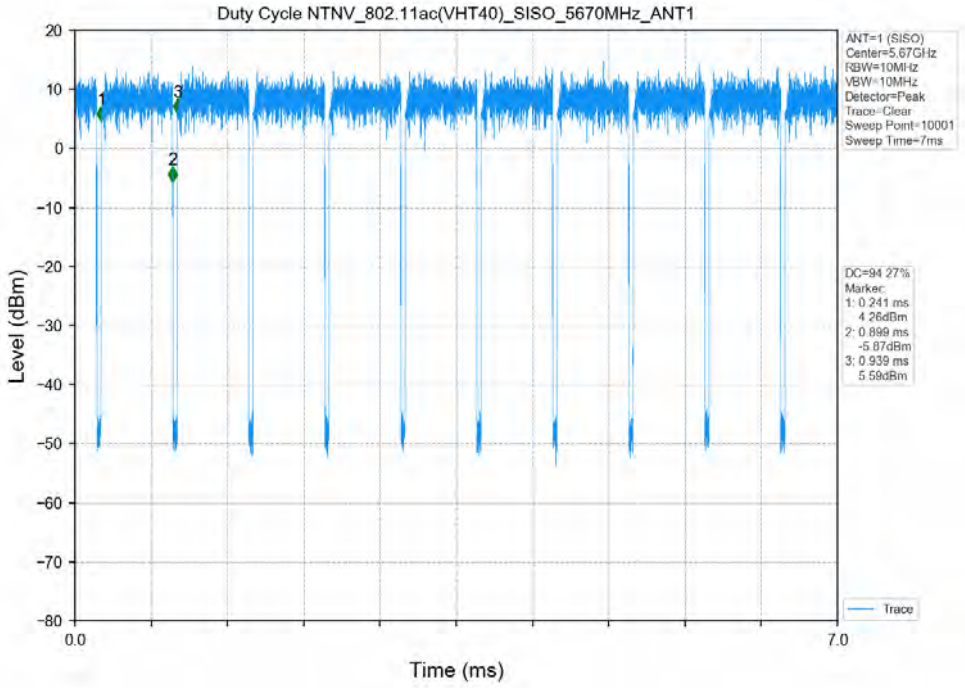


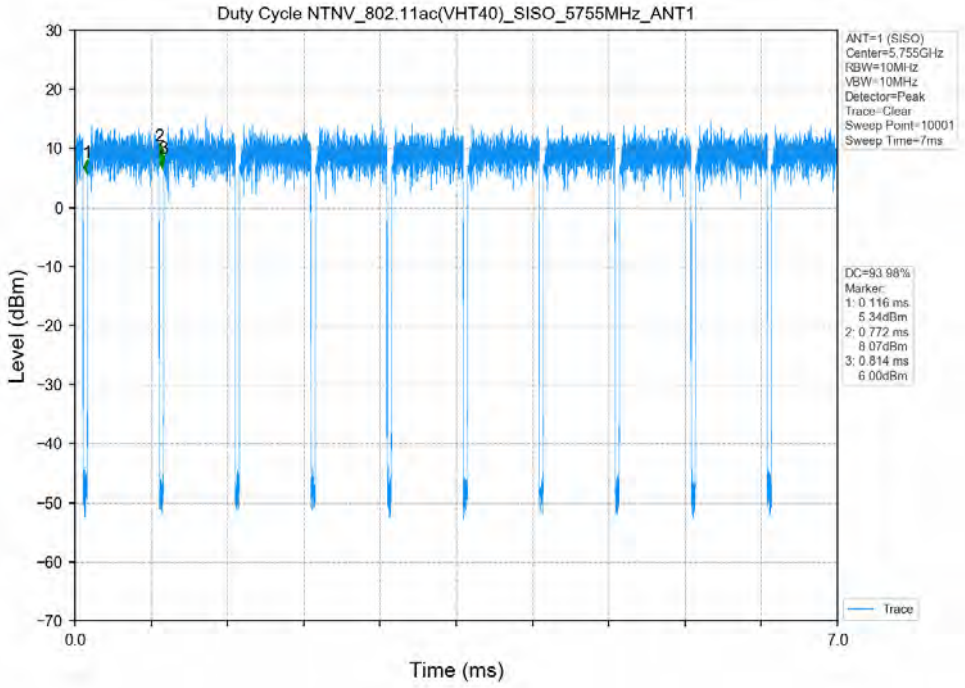


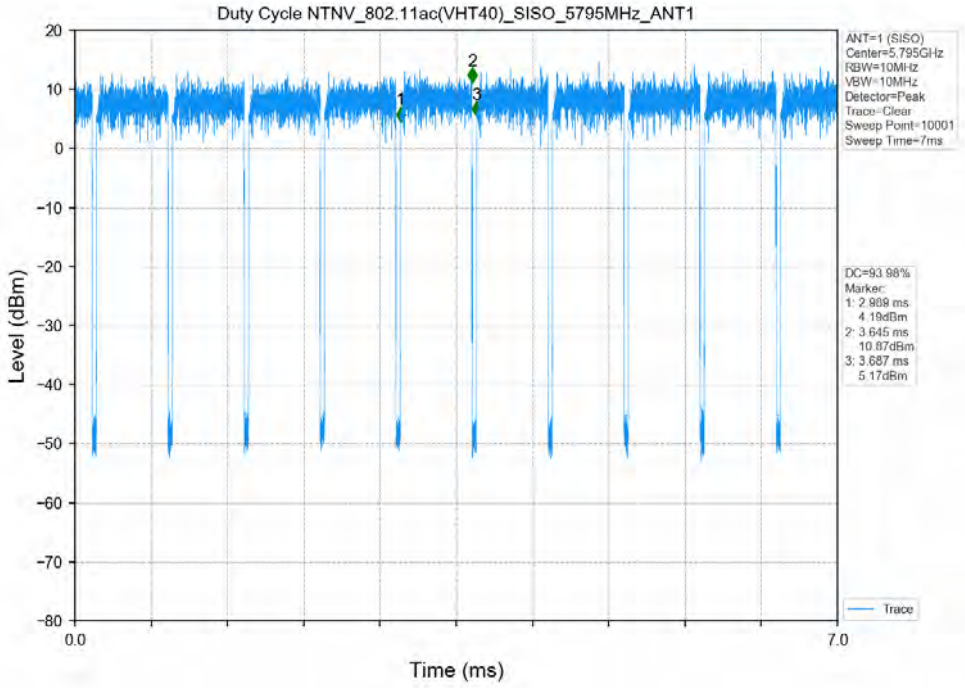


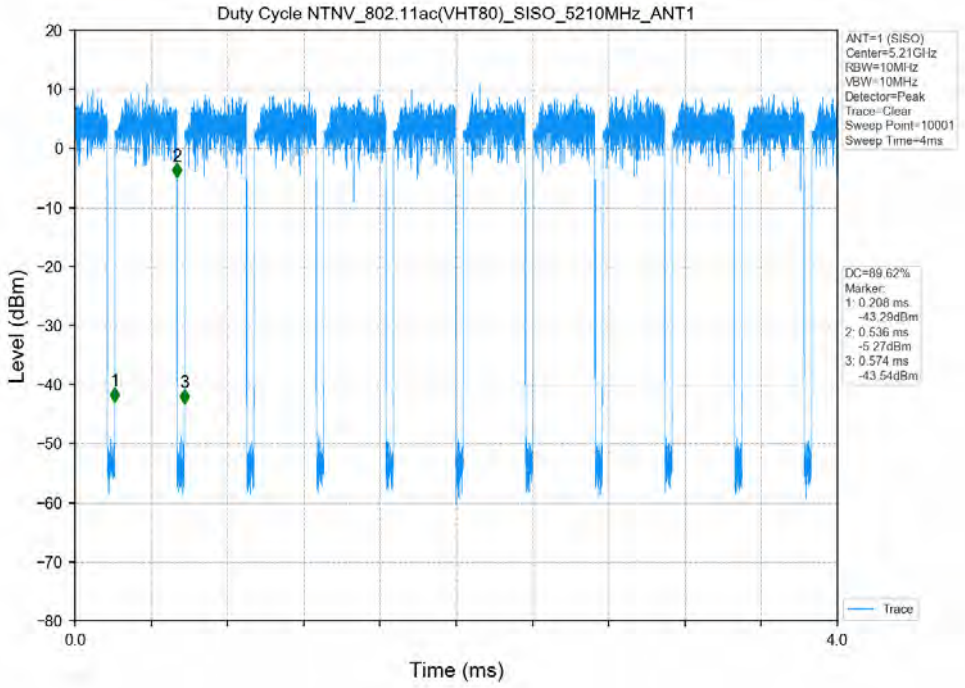


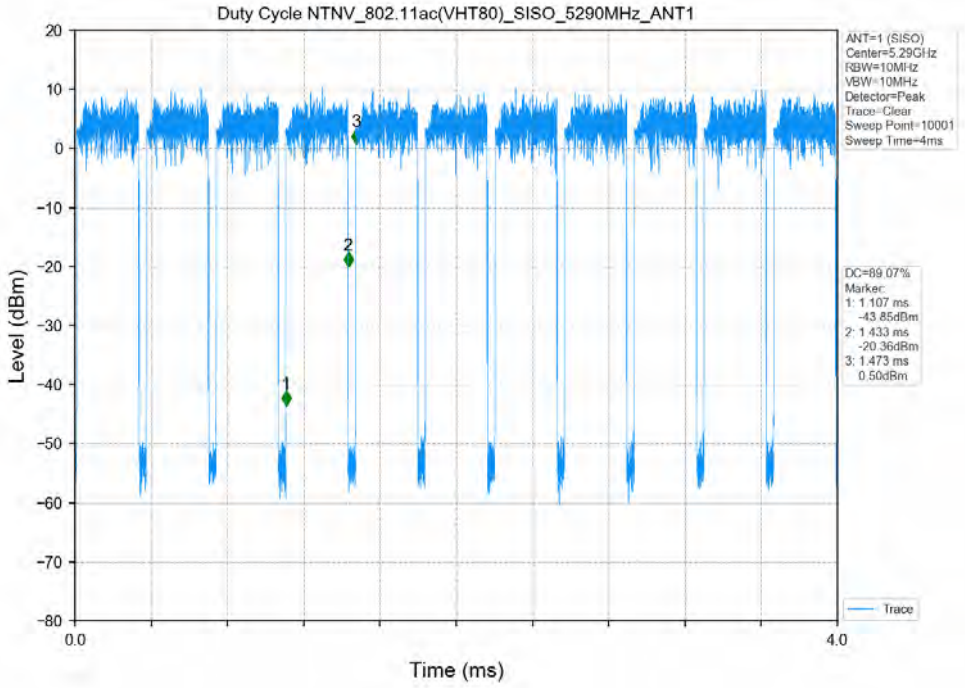


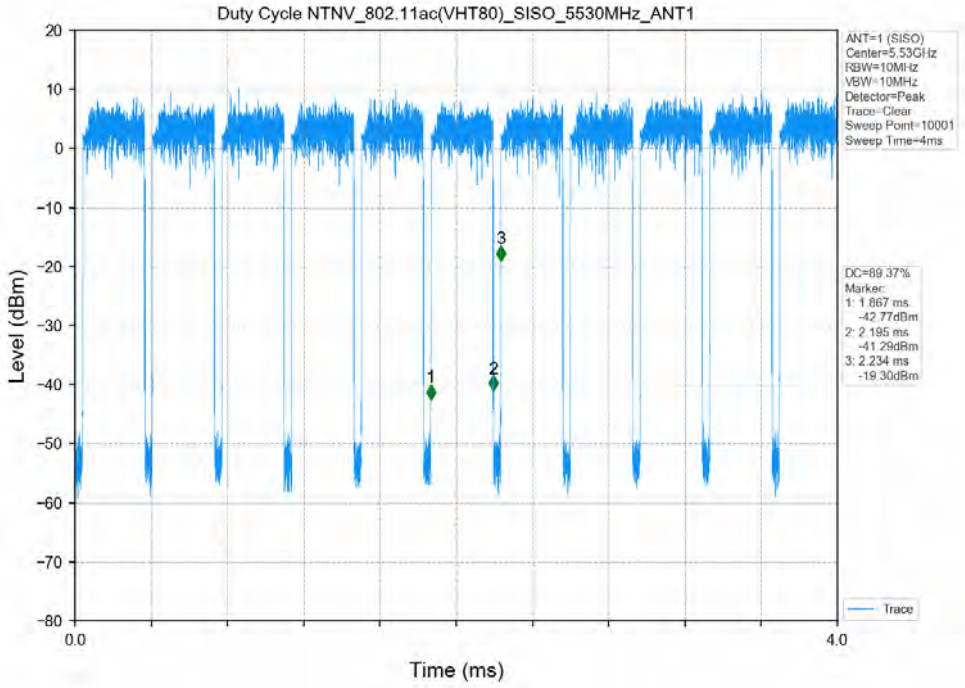


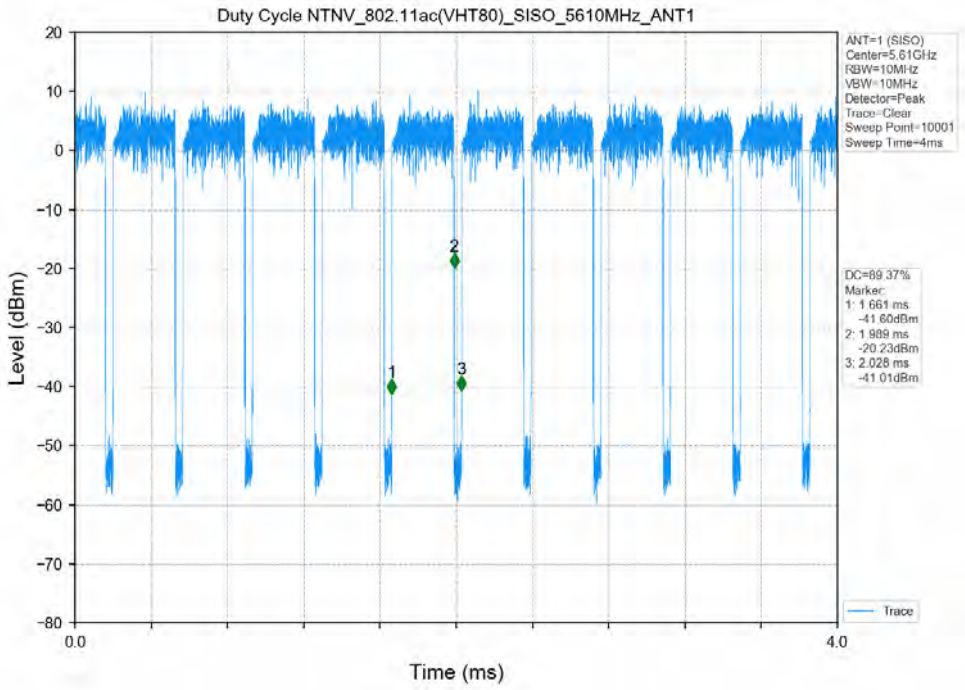


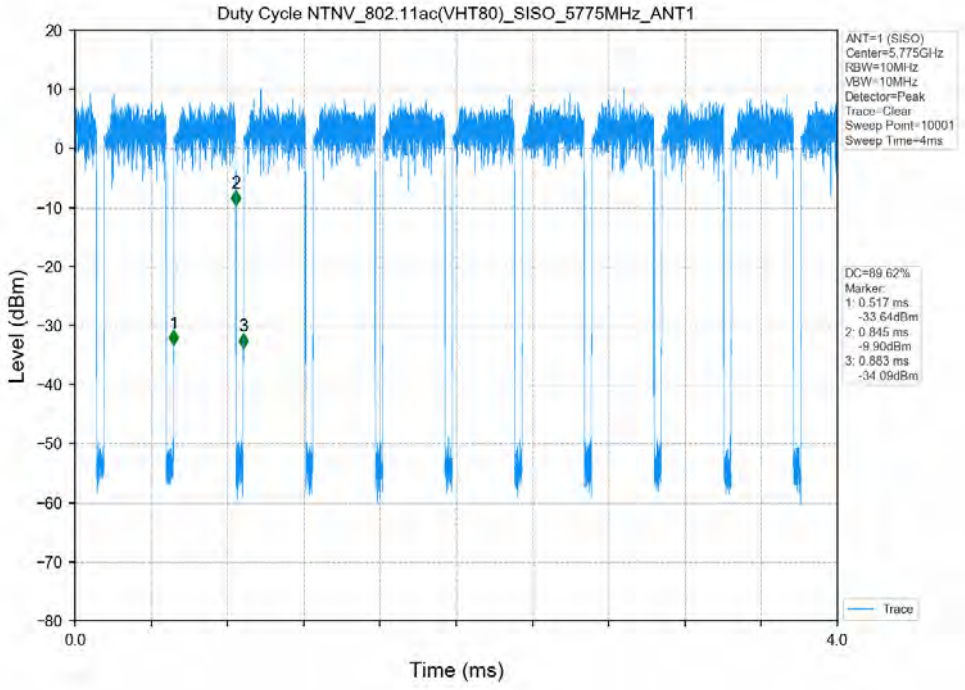












2. Emission Bandwidth, 6dB Bandwidth & 99% Occupied Bandwidth

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

	5600	SISO	1	21.698	Only for Report Use	PASS
	5700	SISO	1	21.640	Only for Report Use	PASS
802.11ac(VHT40)	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
	5670	SISO	1	40.204	Only for Report Use	PASS
802.11ac(VHT80)	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

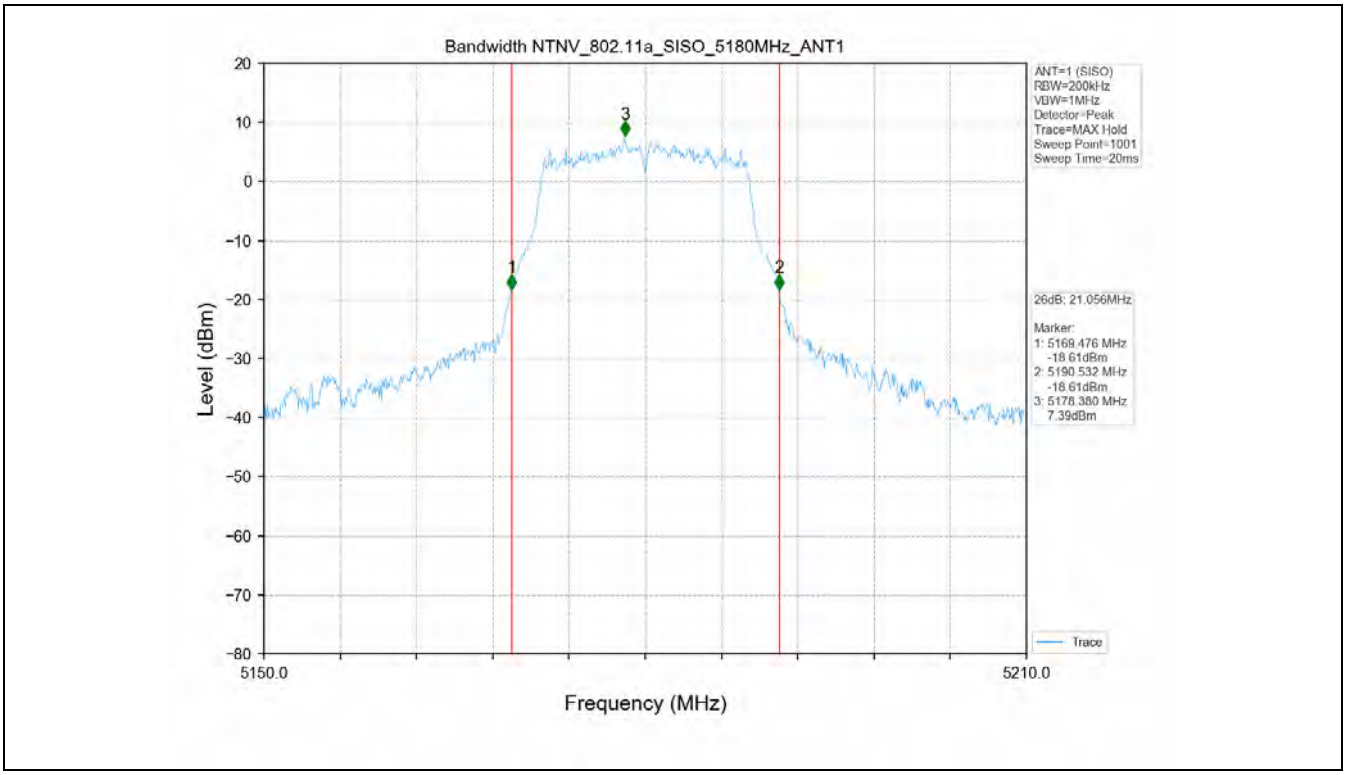
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

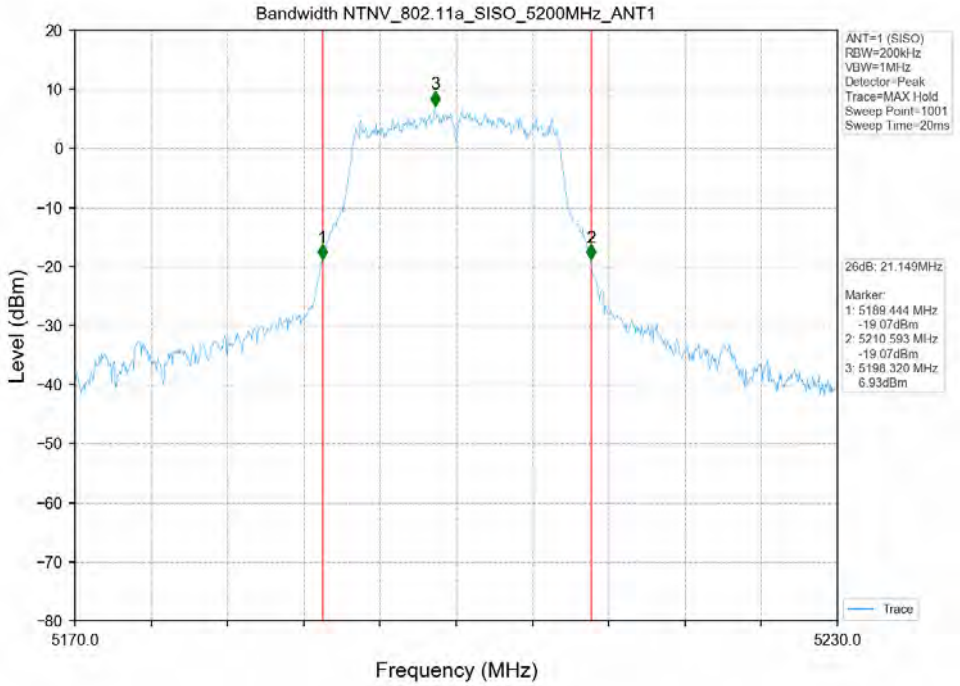
	5600	SISO	1	17.217	Only for Report Use
	5700	SISO	1	17.216	Only for Report Use
	5745	SISO	1	17.308	Only for Report Use
	5785	SISO	1	17.329	Only for Report Use
	5825	SISO	1	17.329	Only for Report Use
802.11n(HT20)	5180	SISO	1	18.252	Only for Report Use
	5200	SISO	1	18.252	Only for Report Use
	5240	SISO	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
	5795	SISO	1	37.006	Only for Report Use
802.11ac(VHT20)	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
	5825	SISO	1	18.231	Only for Report Use
802.11ac(VHT40)	5190	SISO	1	36.786	Only for Report Use

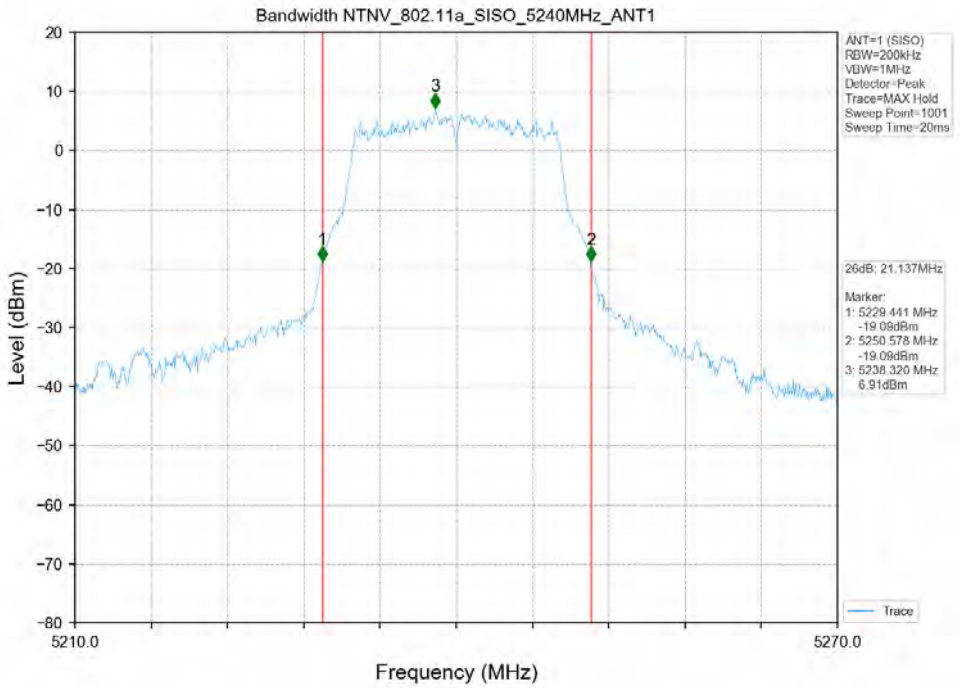
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

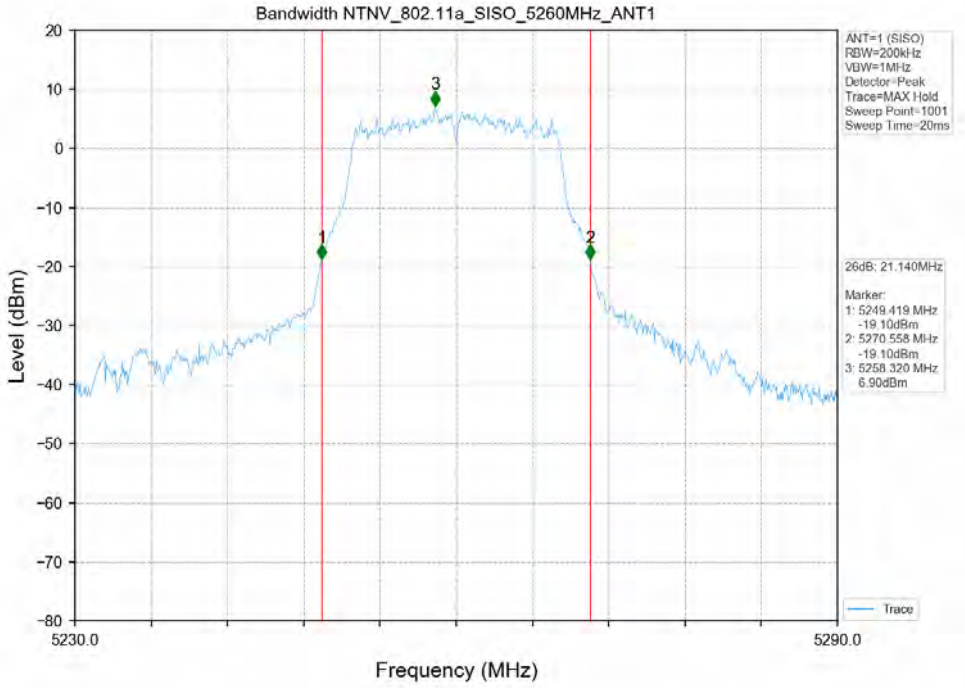
	5230	SISO	1	36.720	Only for Report Use
	5270	SISO	1	36.722	Only for Report Use
	5310	SISO	1	36.698	Only for Report Use
	5510	SISO	1	36.735	Only for Report Use
	5550	SISO	1	36.820	Only for Report Use
	5590	SISO	1	36.728	Only for Report Use
	5670	SISO	1	36.733	Only for Report Use
	5755	SISO	1	36.852	Only 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
	5610	SISO	1	75.622	Only for Report Use
	5775	SISO	1	75.647	Only for Report Use

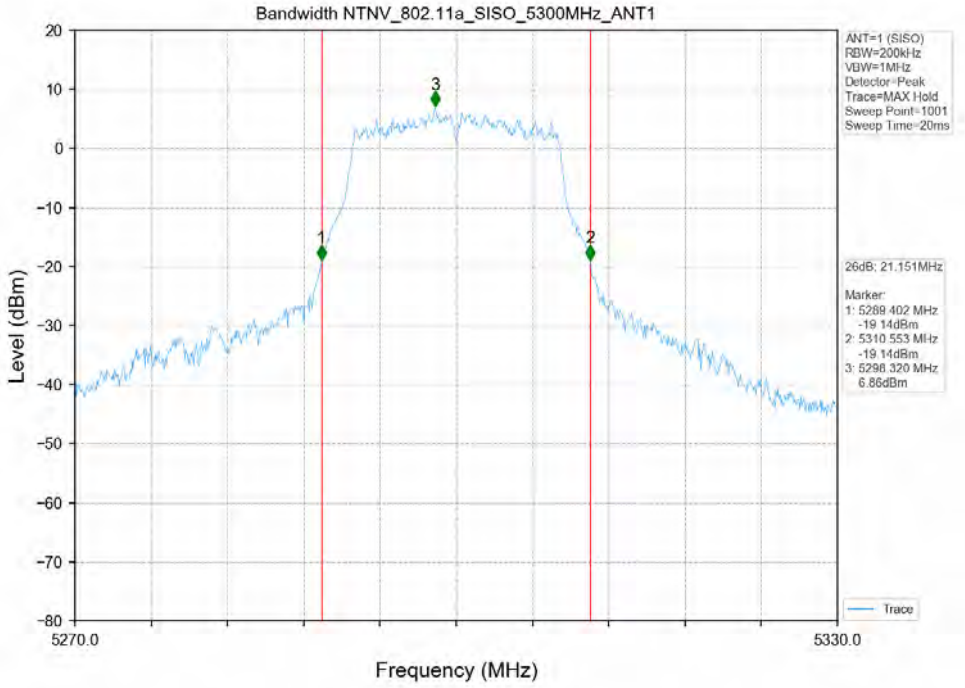
2.2 Test Graph - Emission Bandwidth

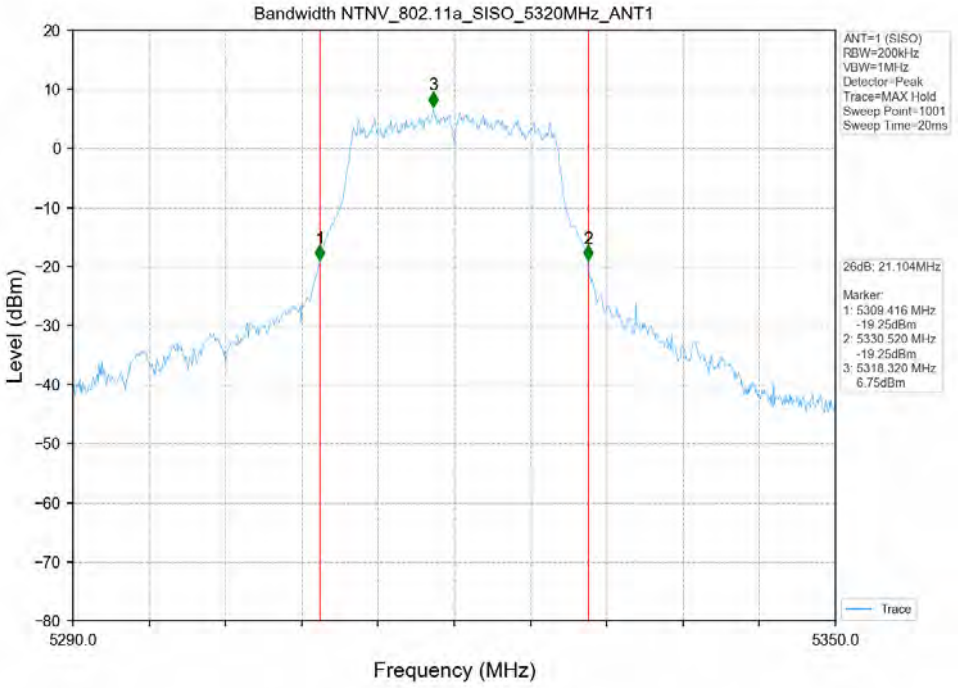


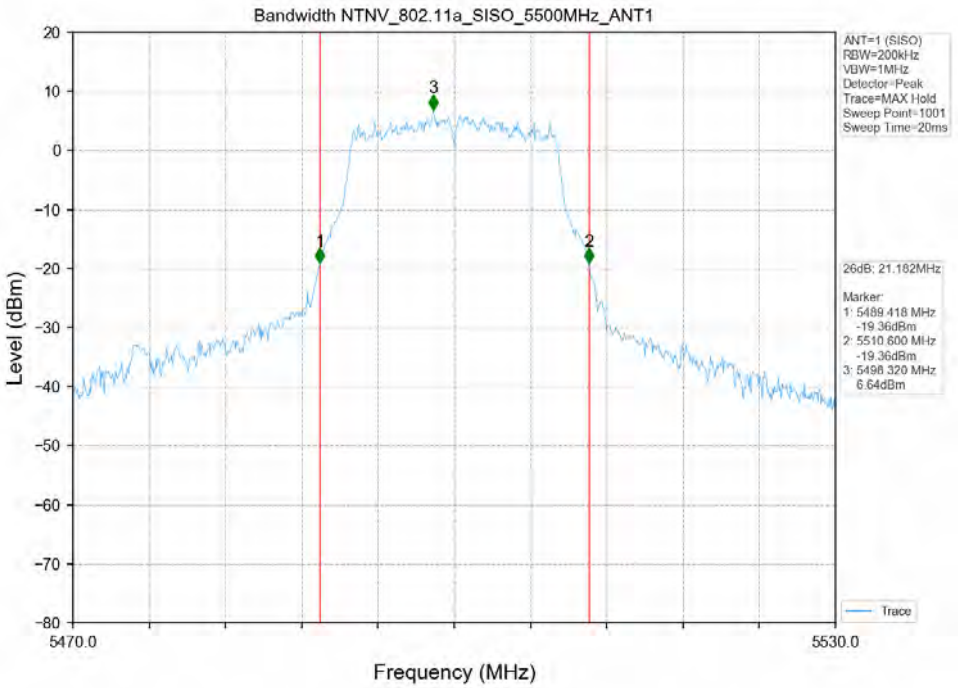


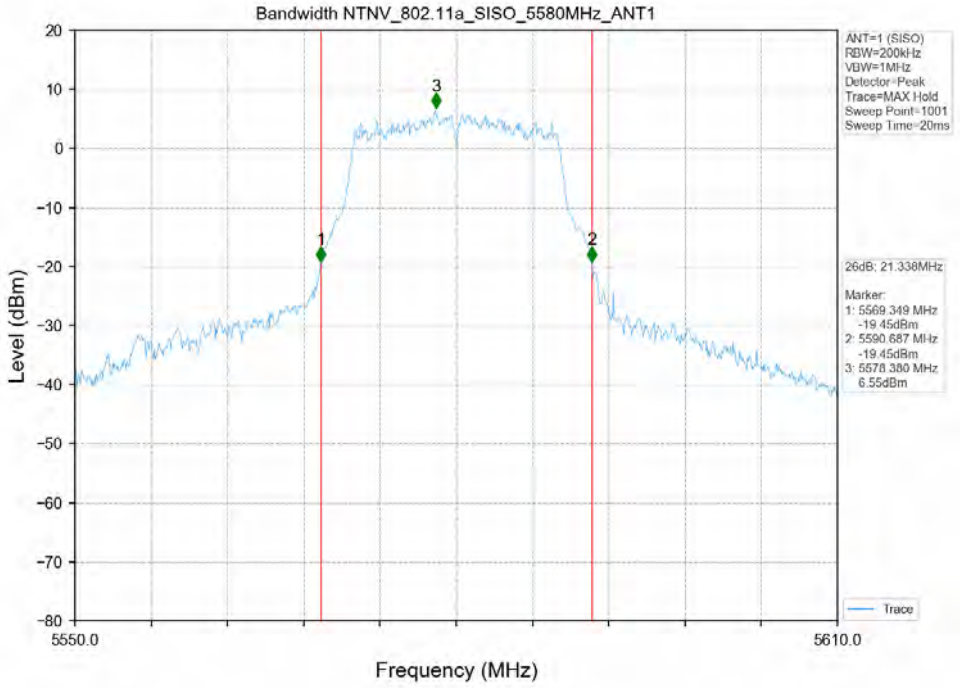


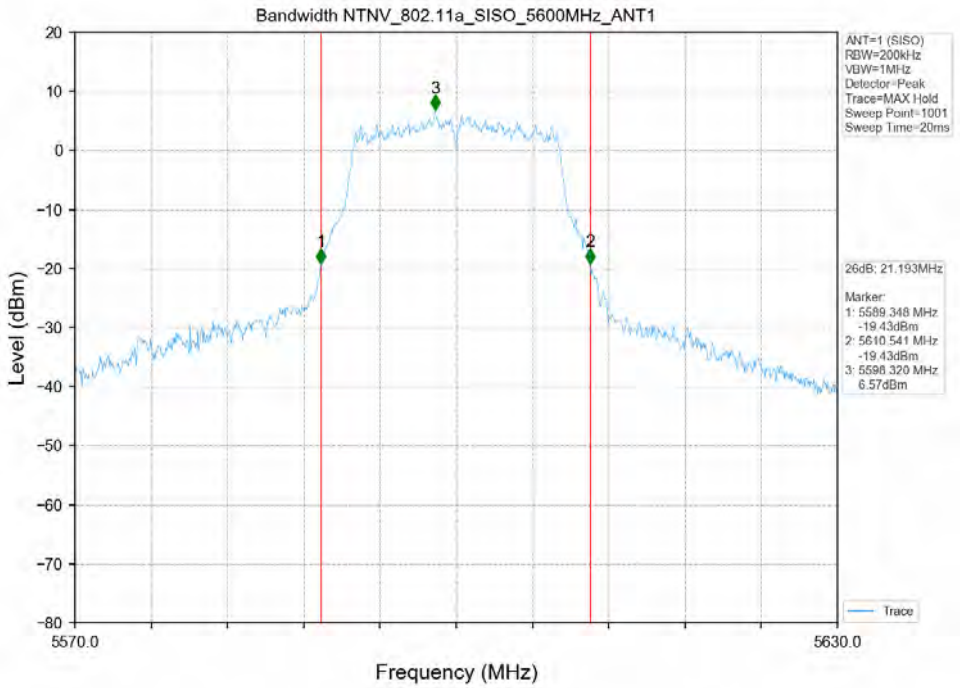


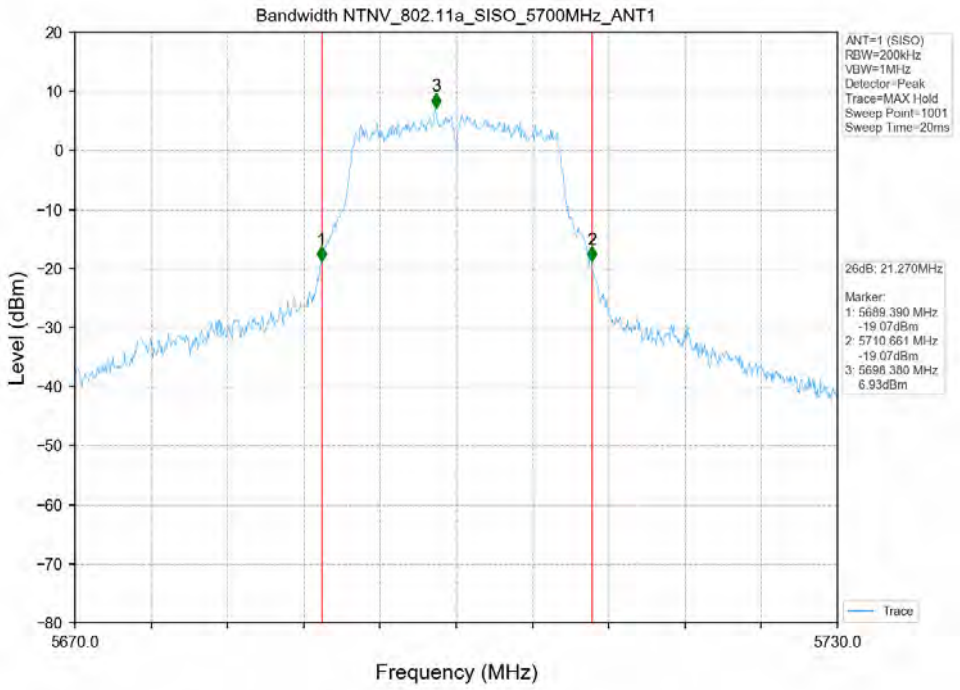


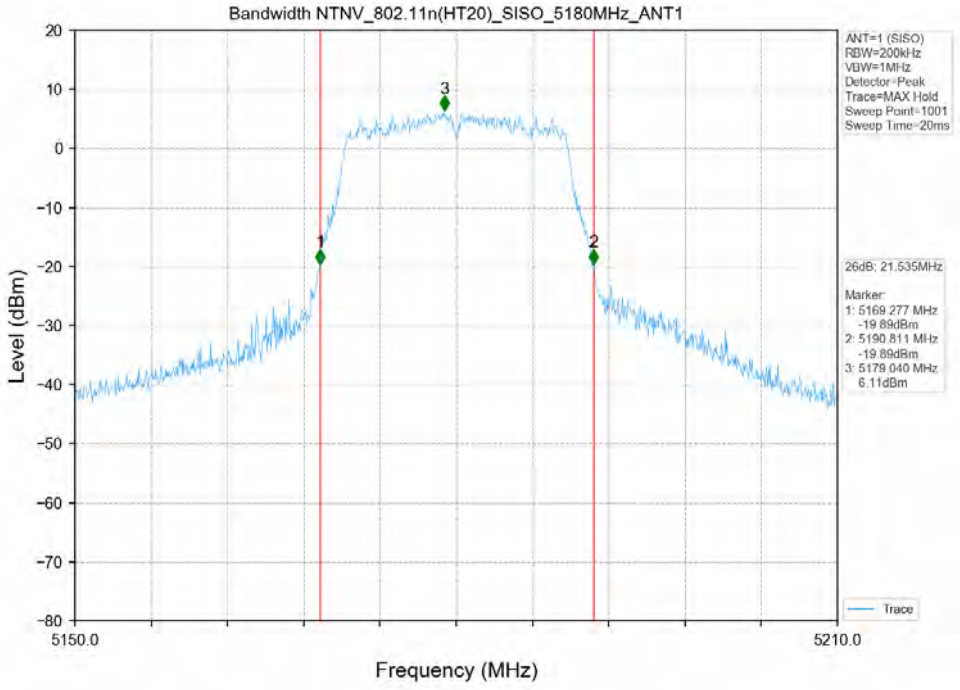


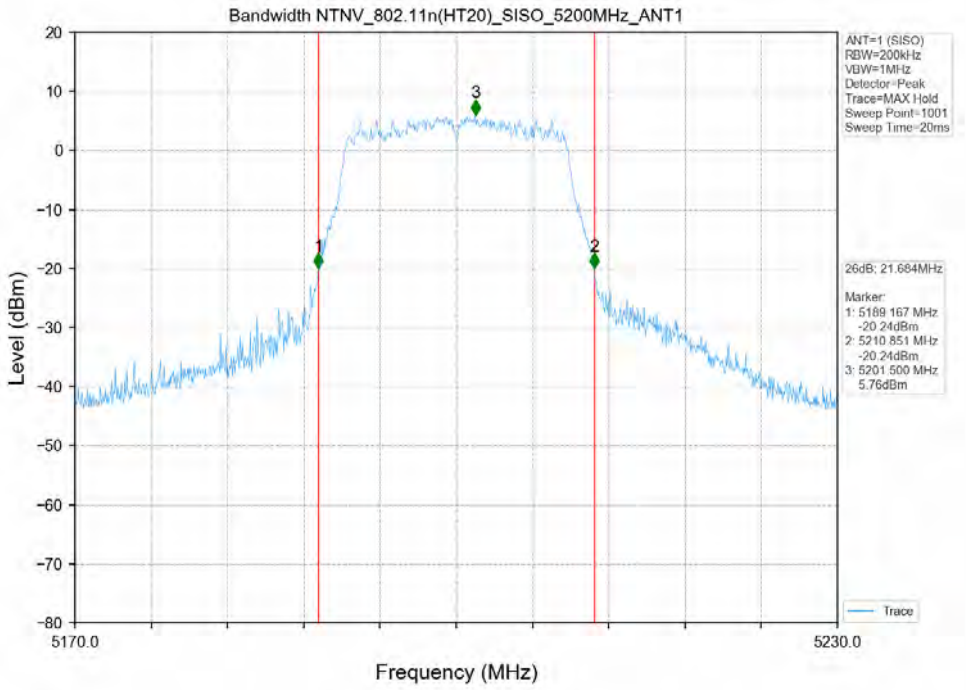


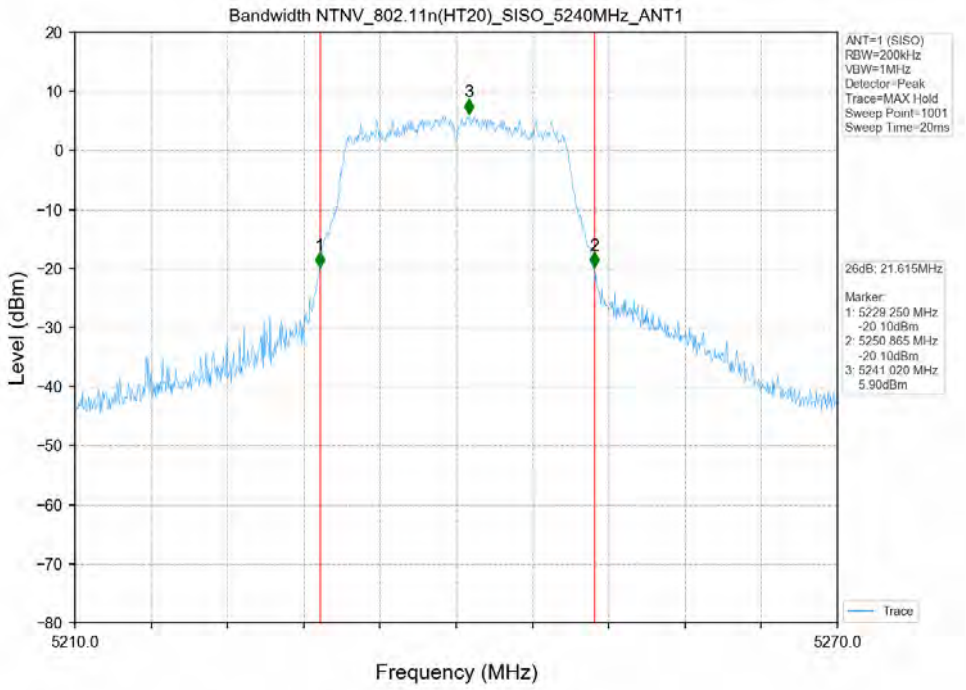


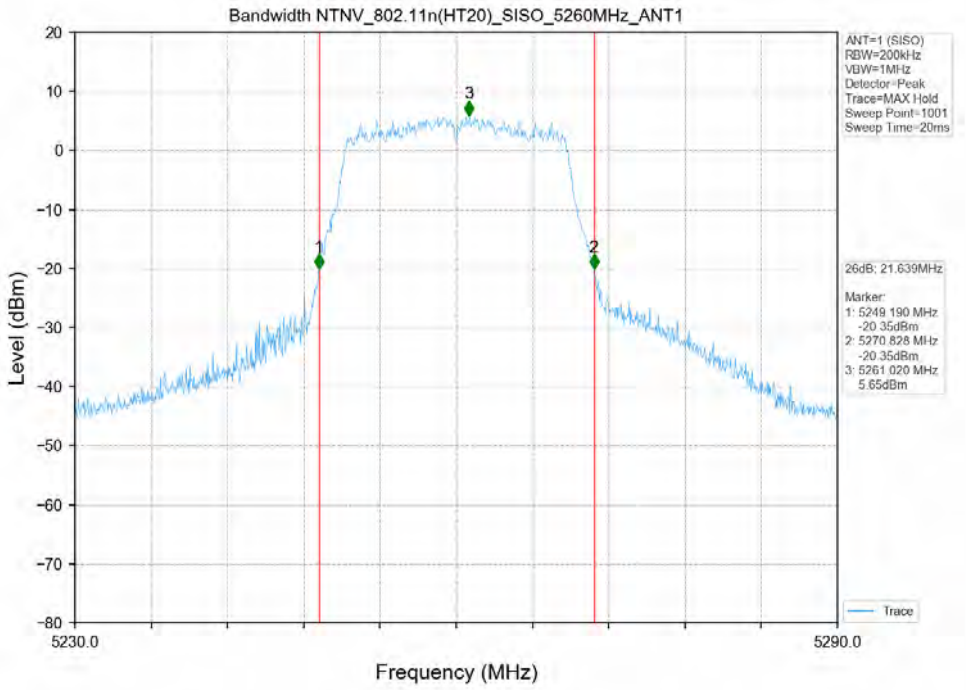


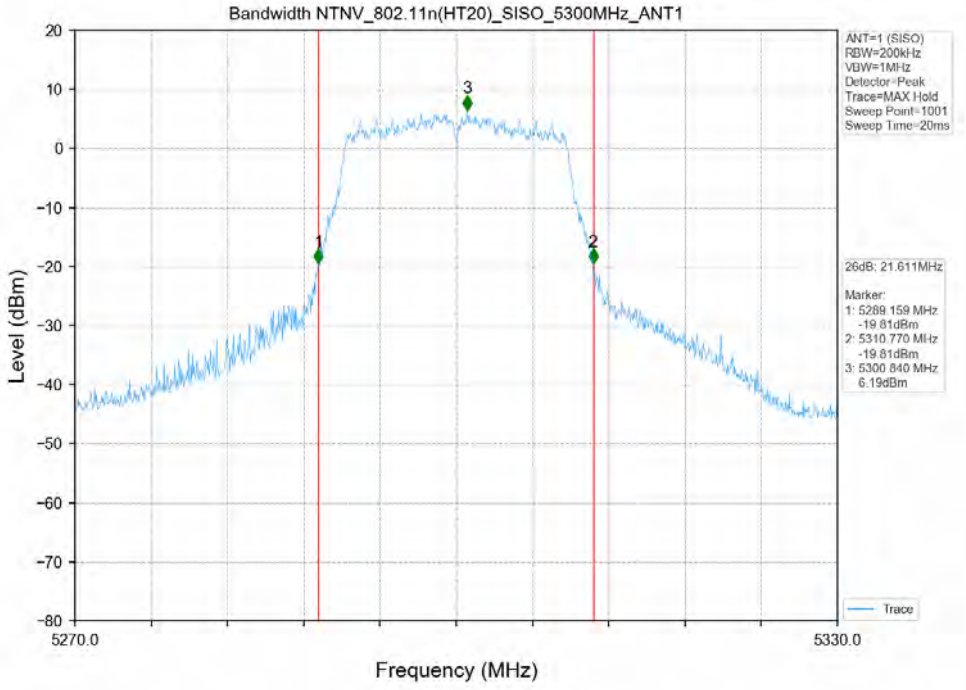


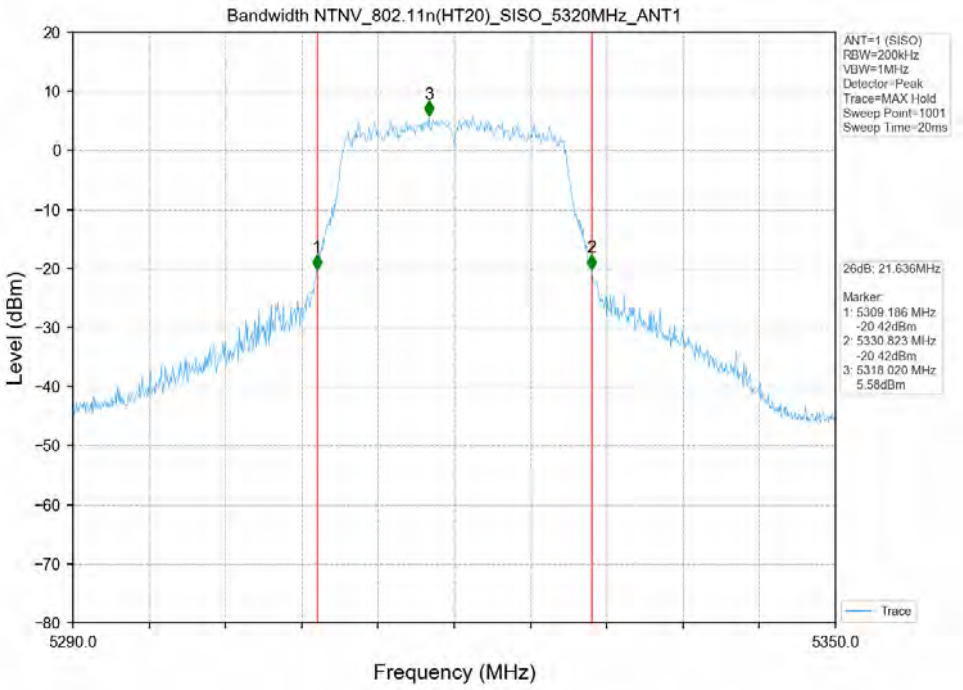


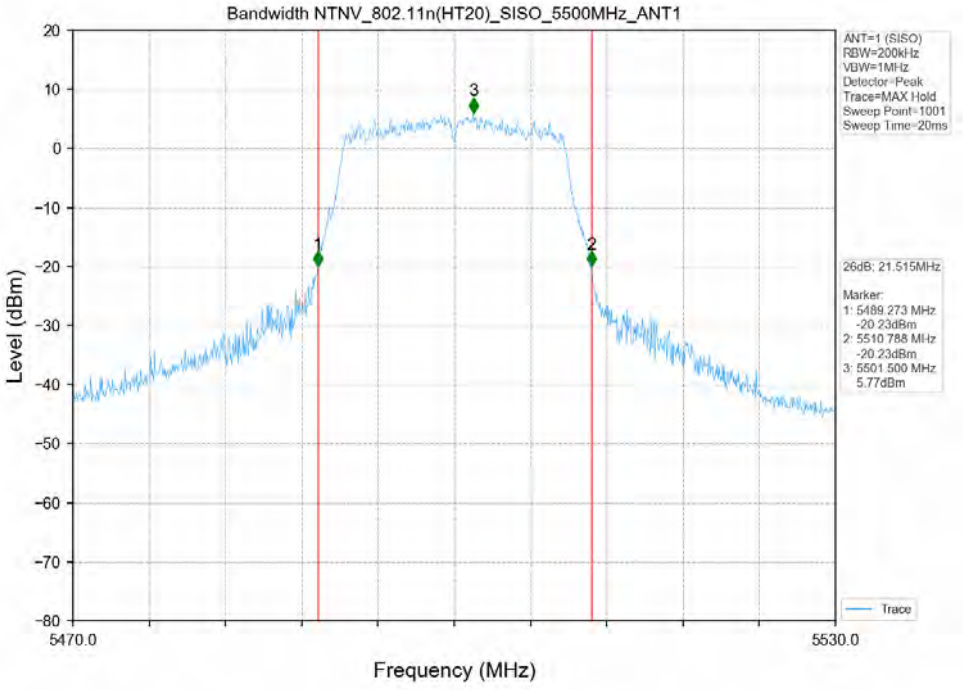


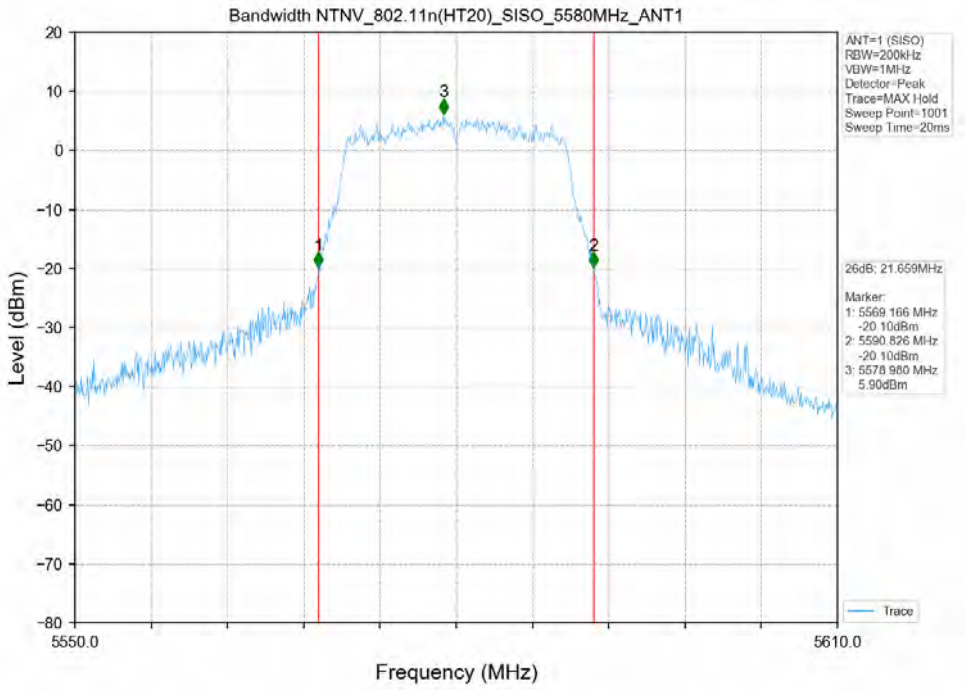


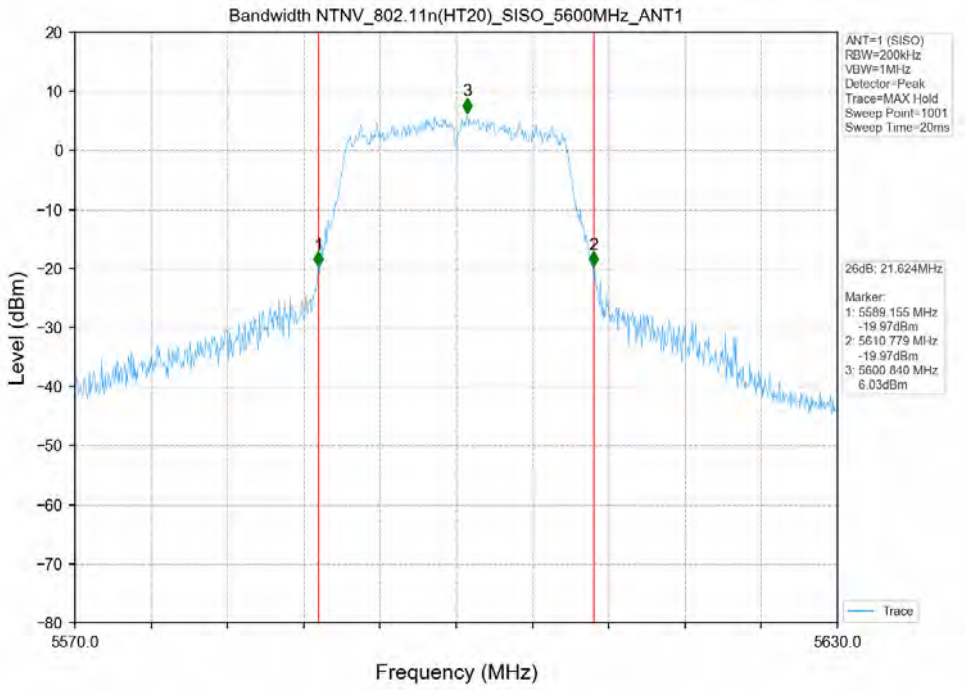


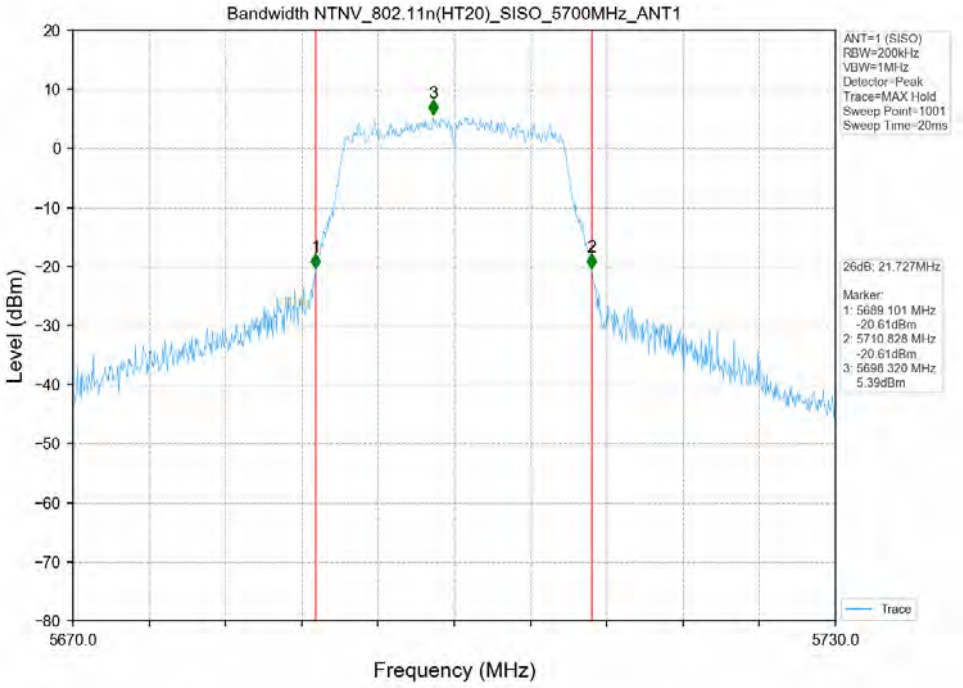


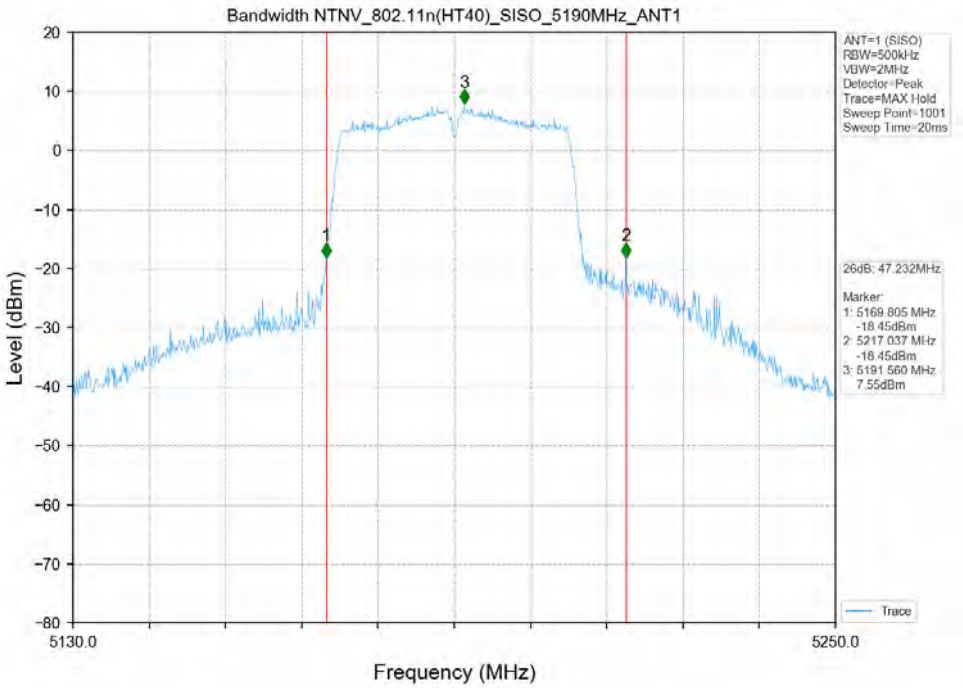


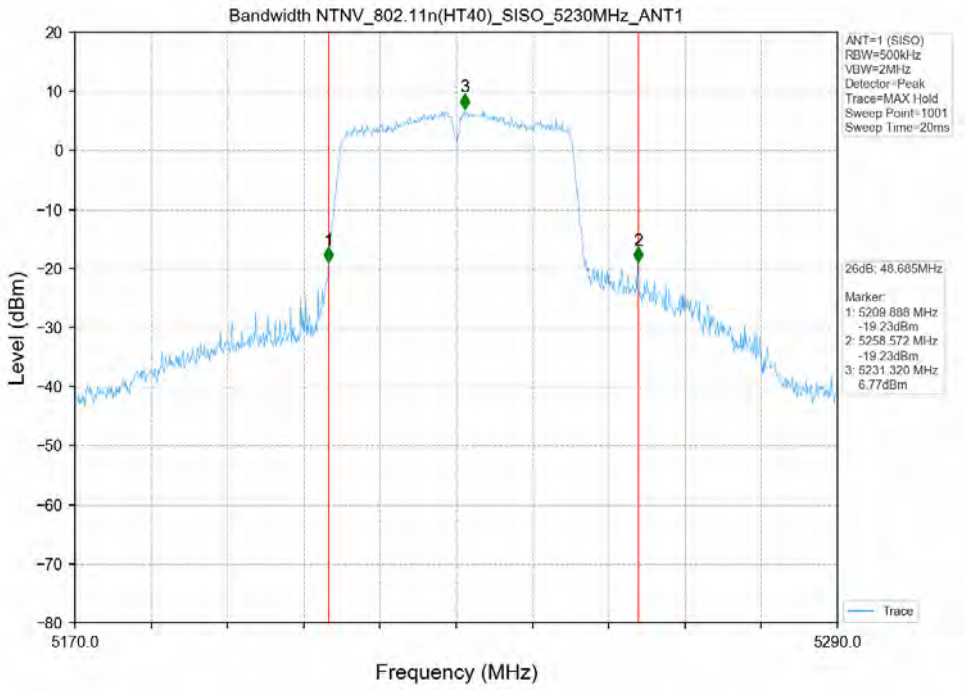


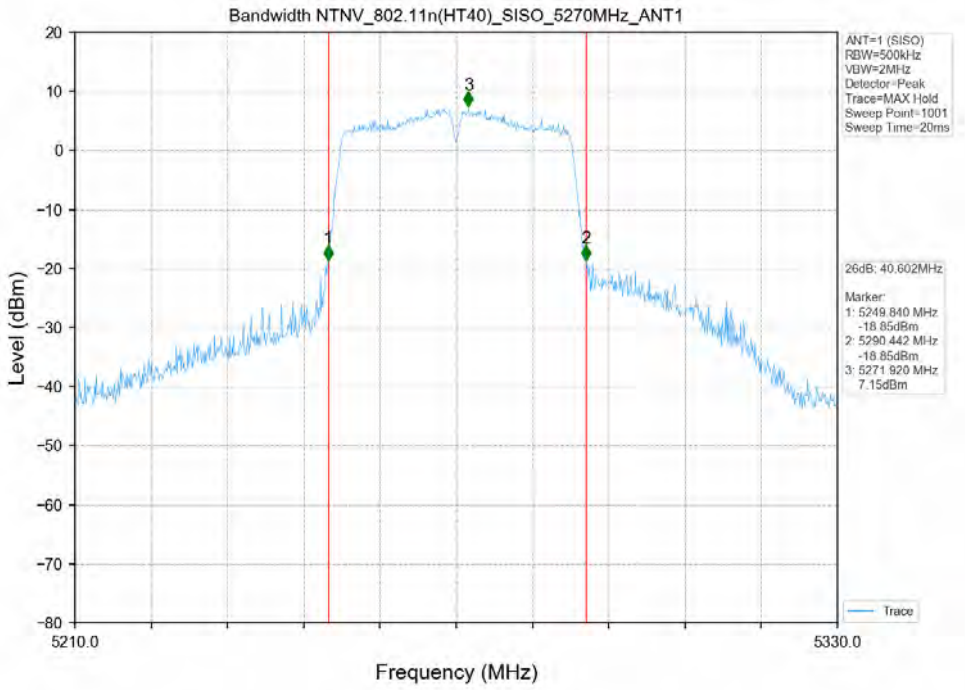


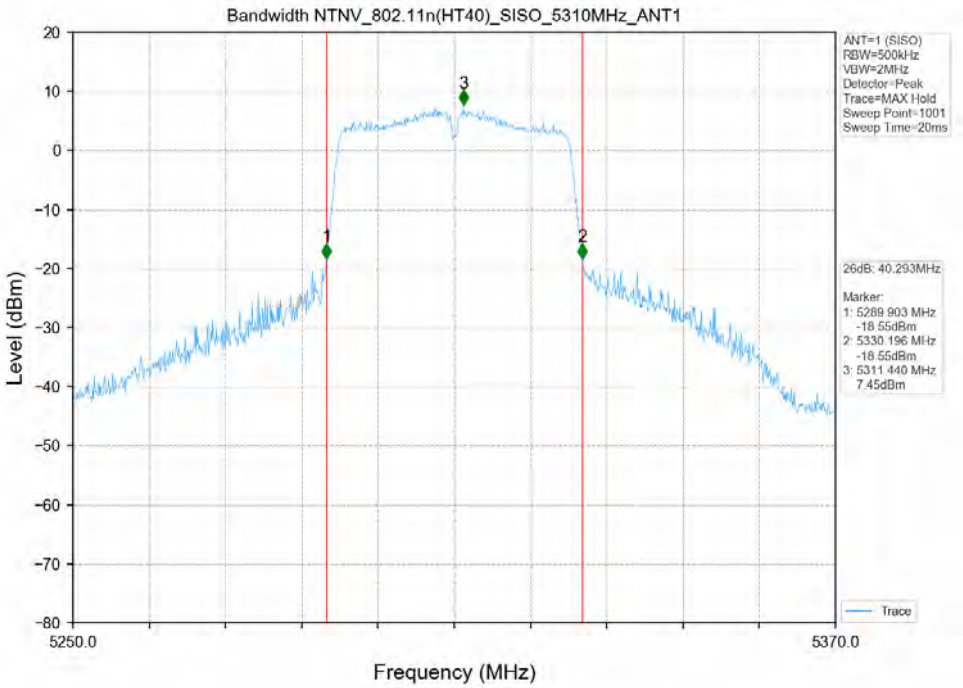


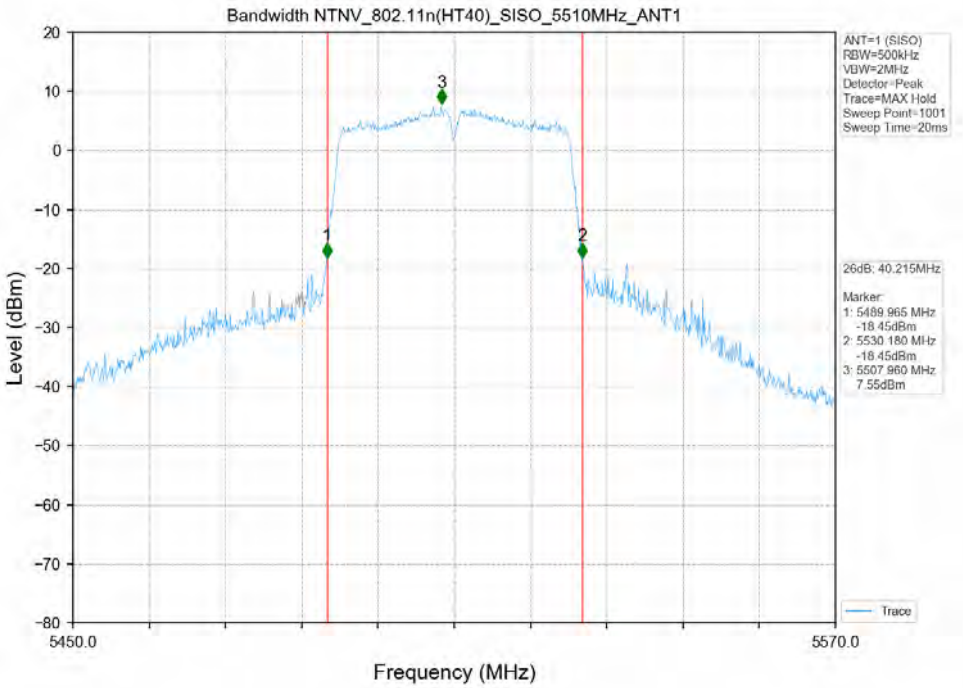


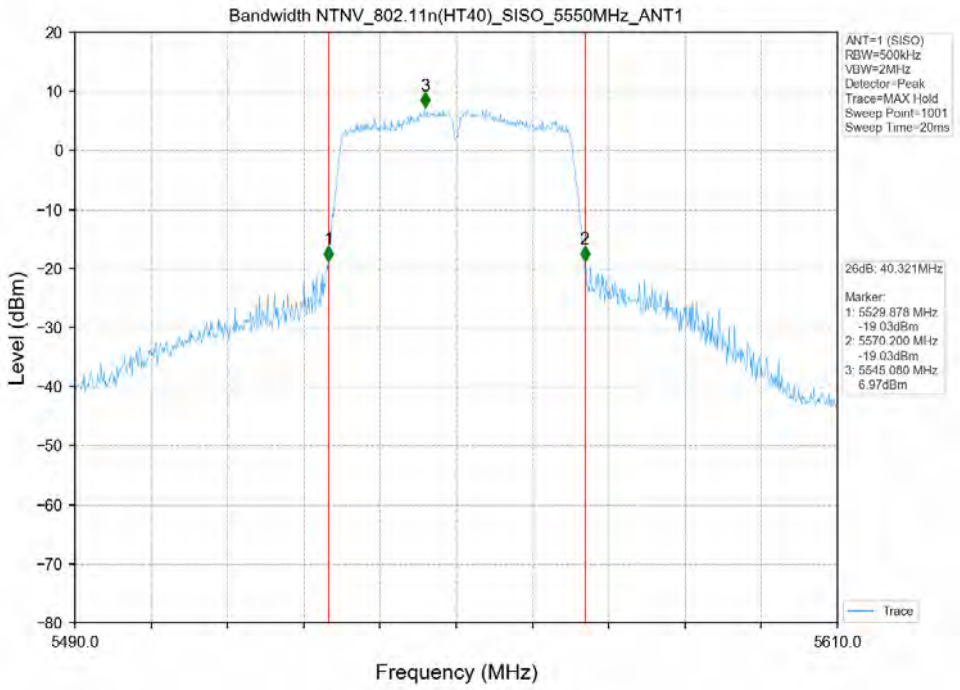


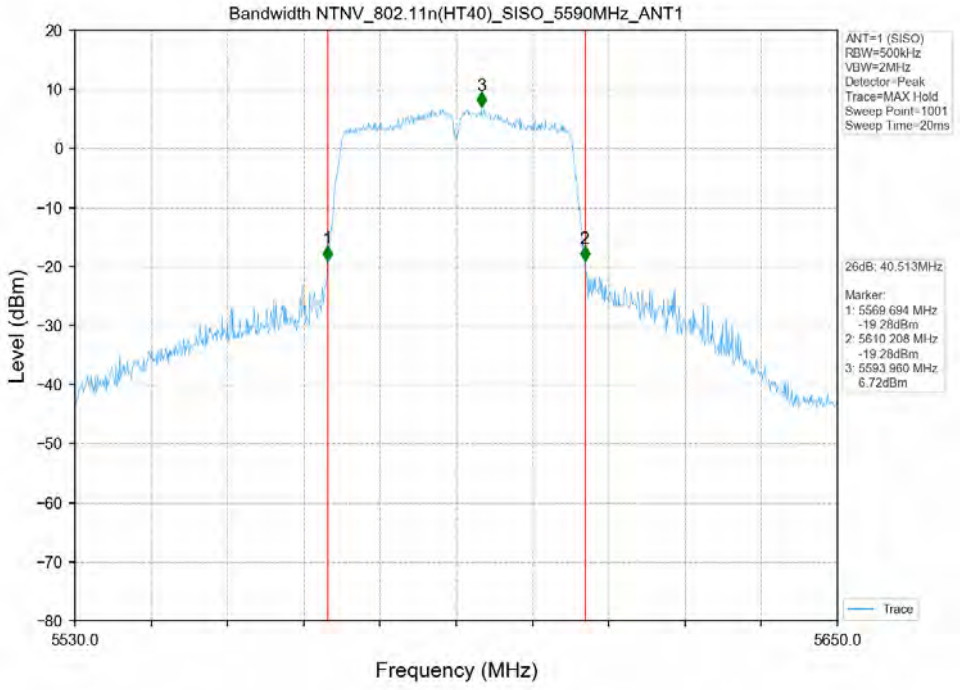


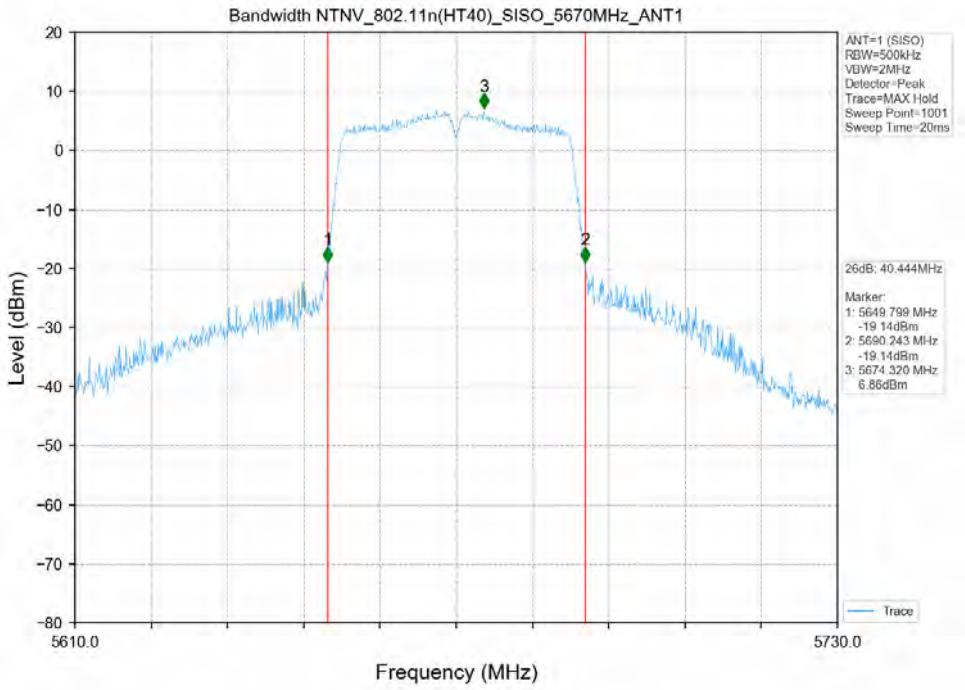


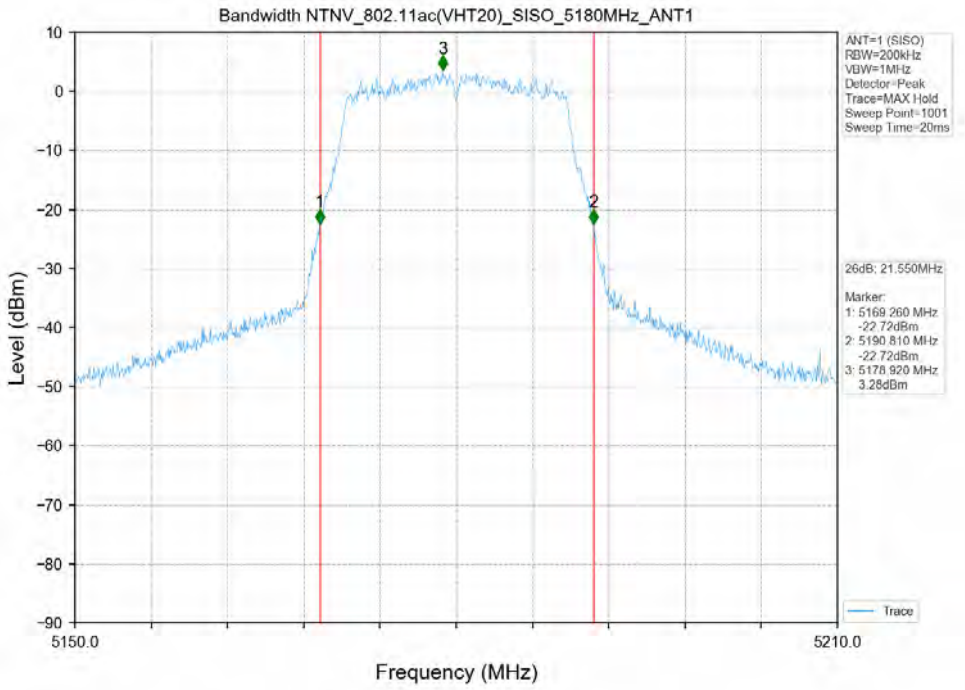


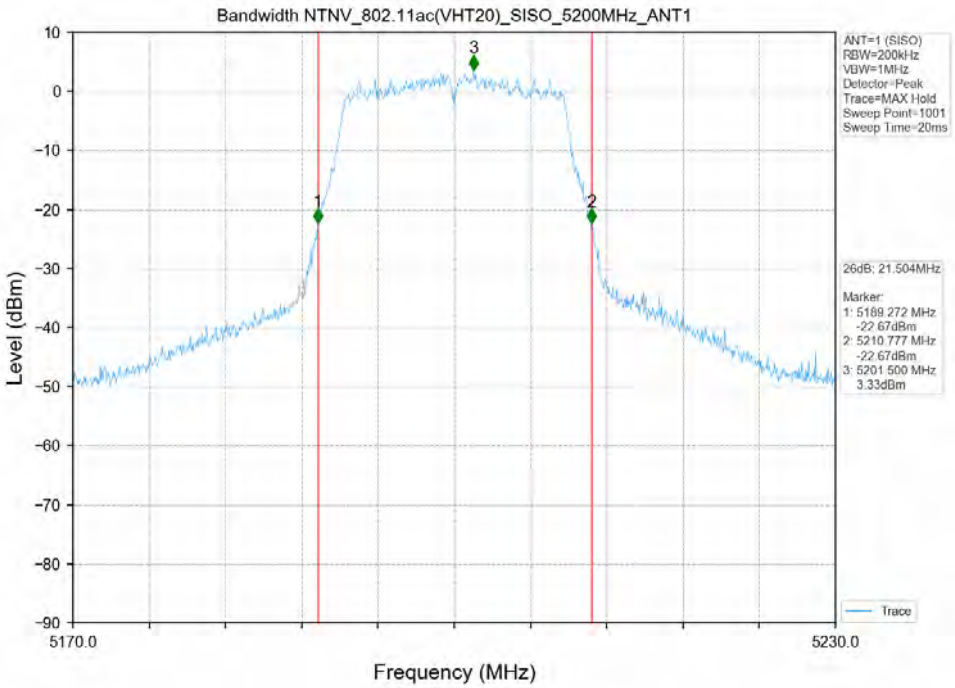


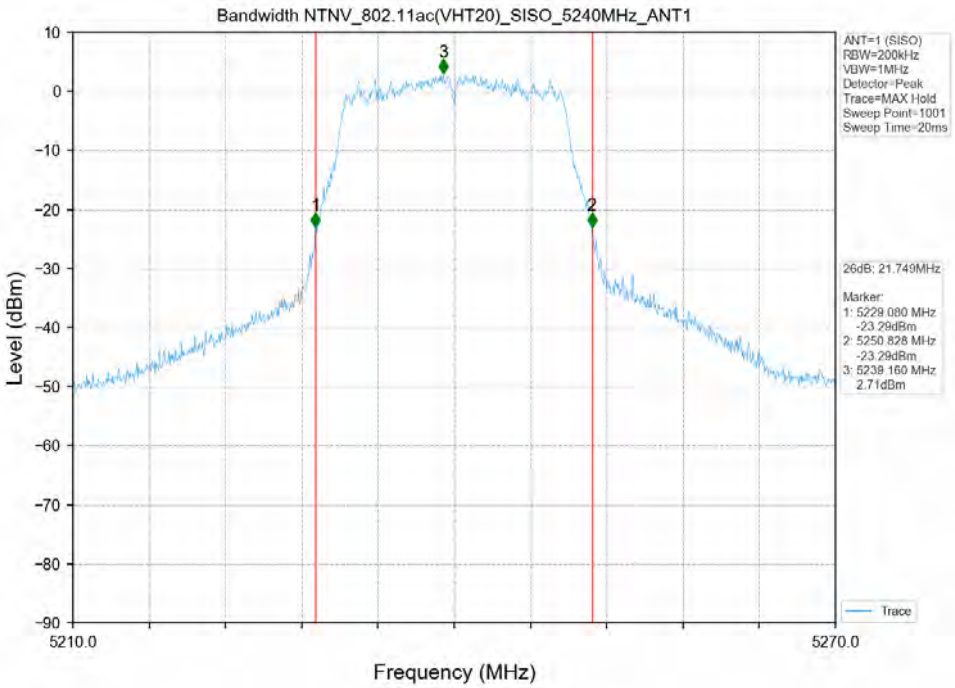


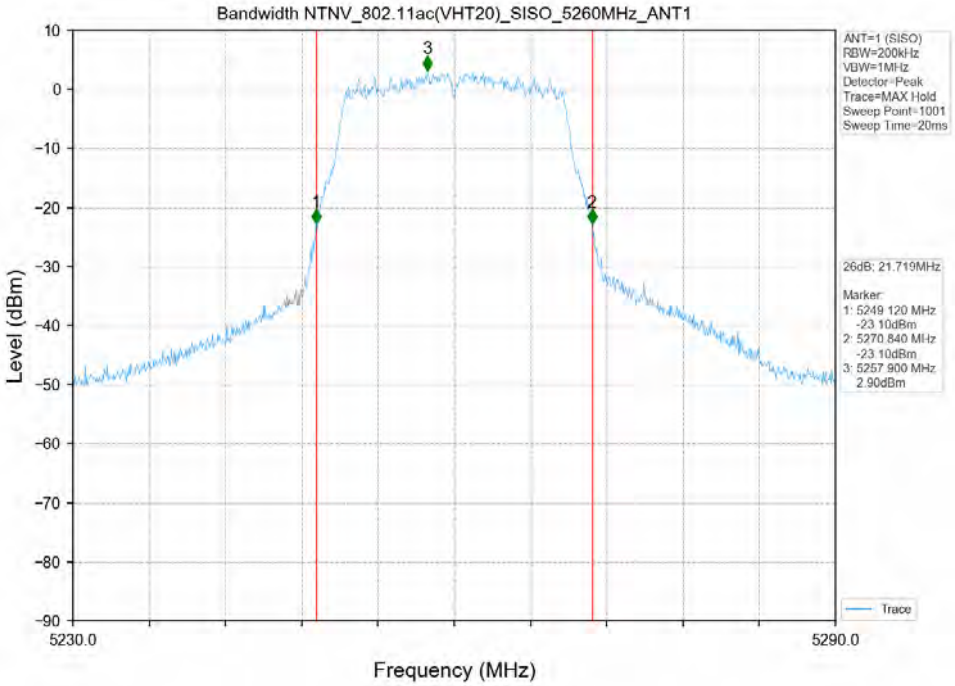


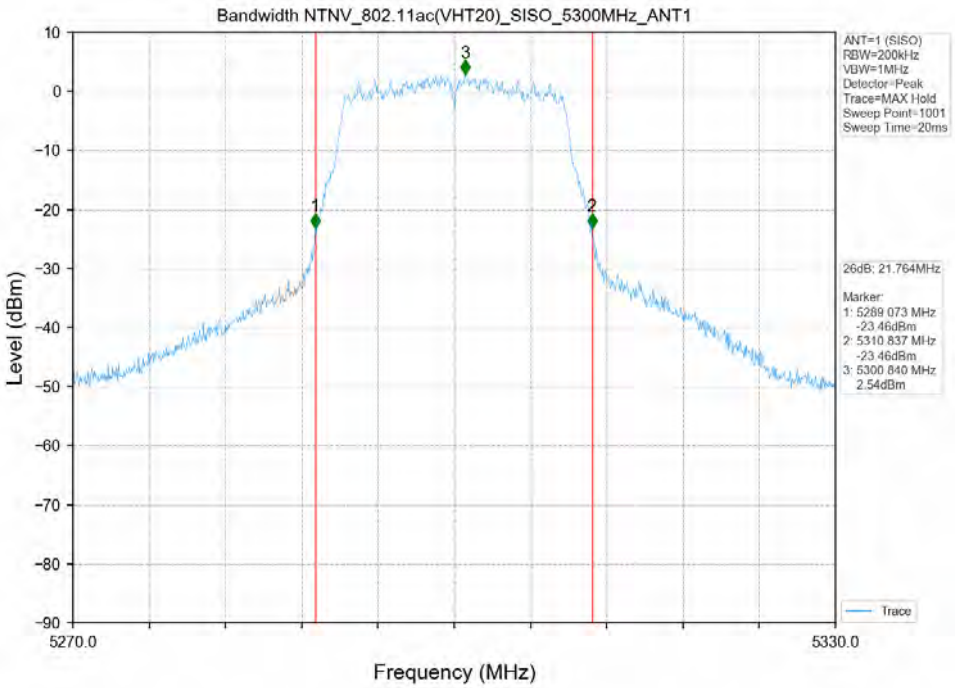


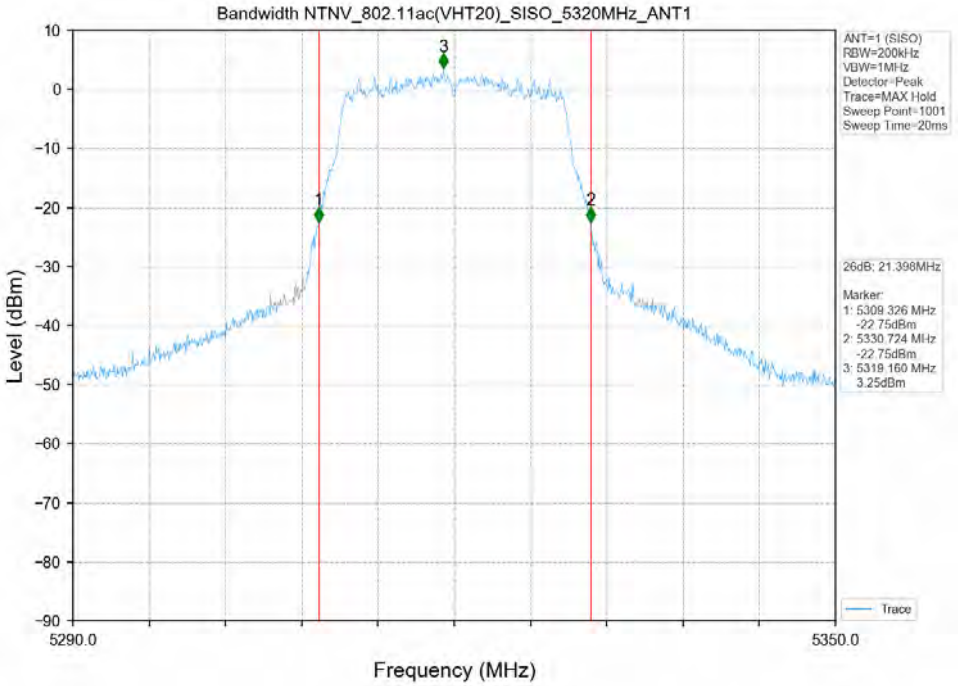


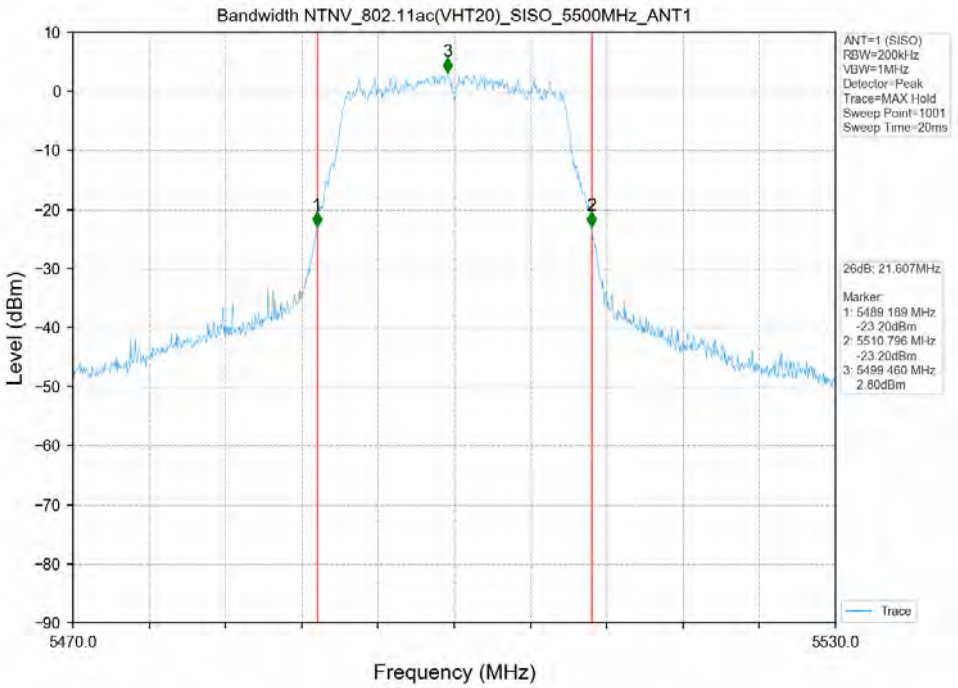


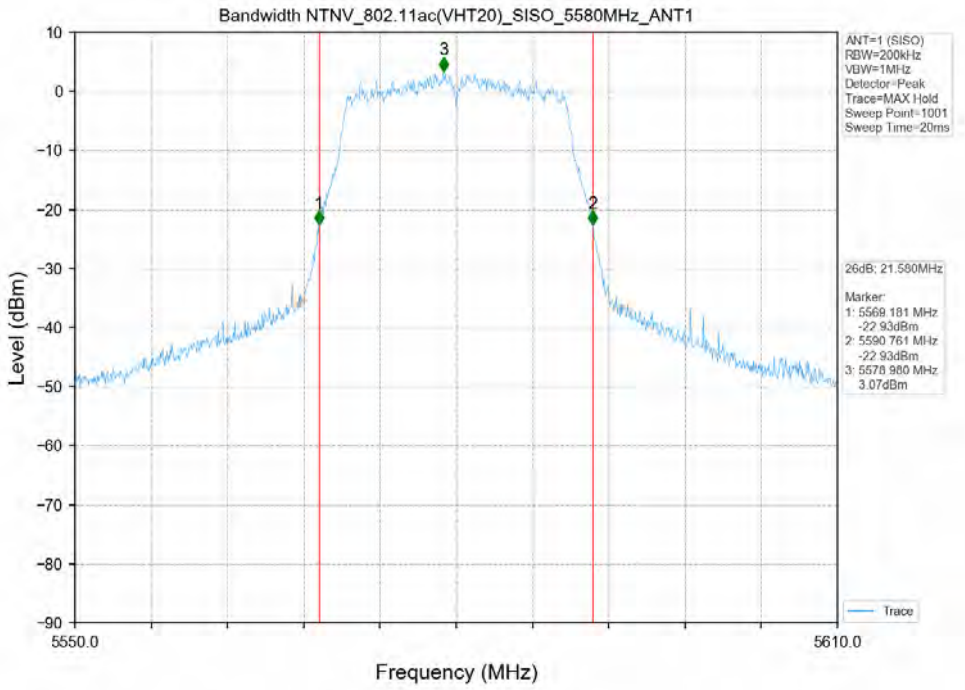


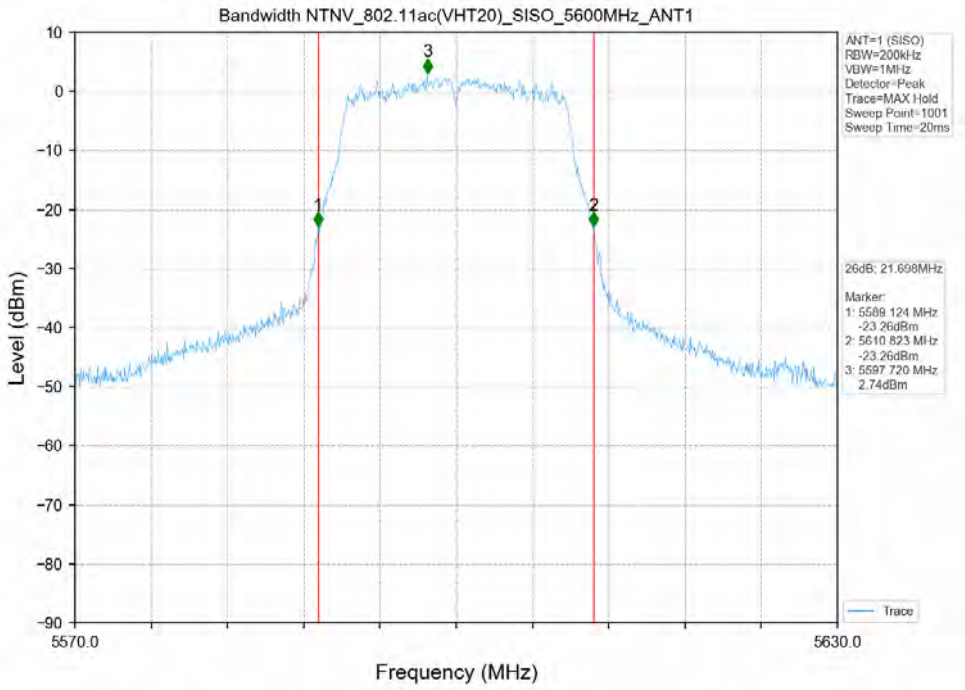


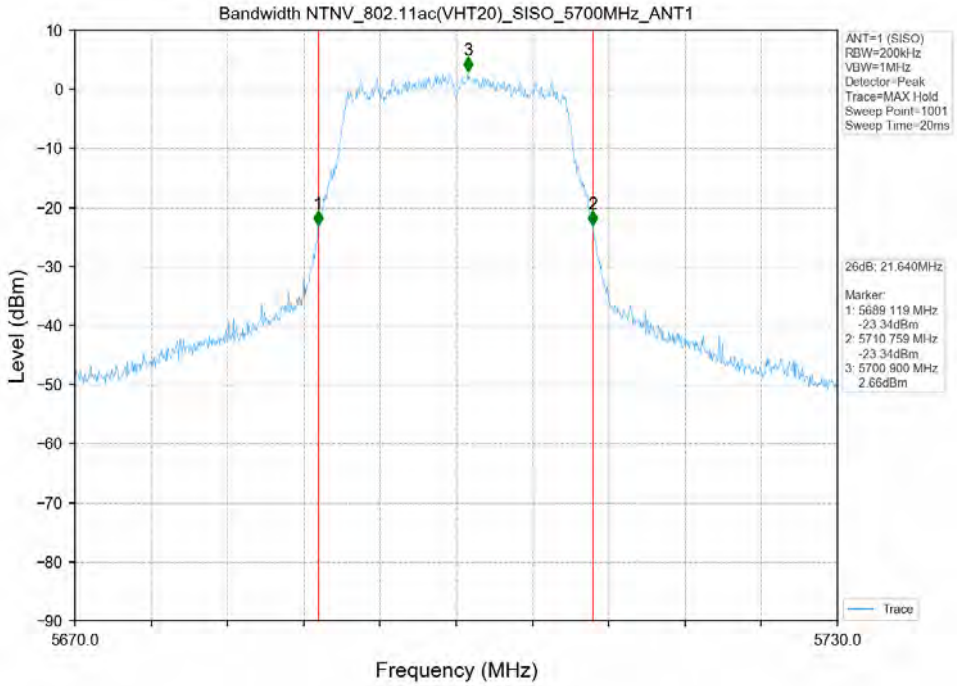


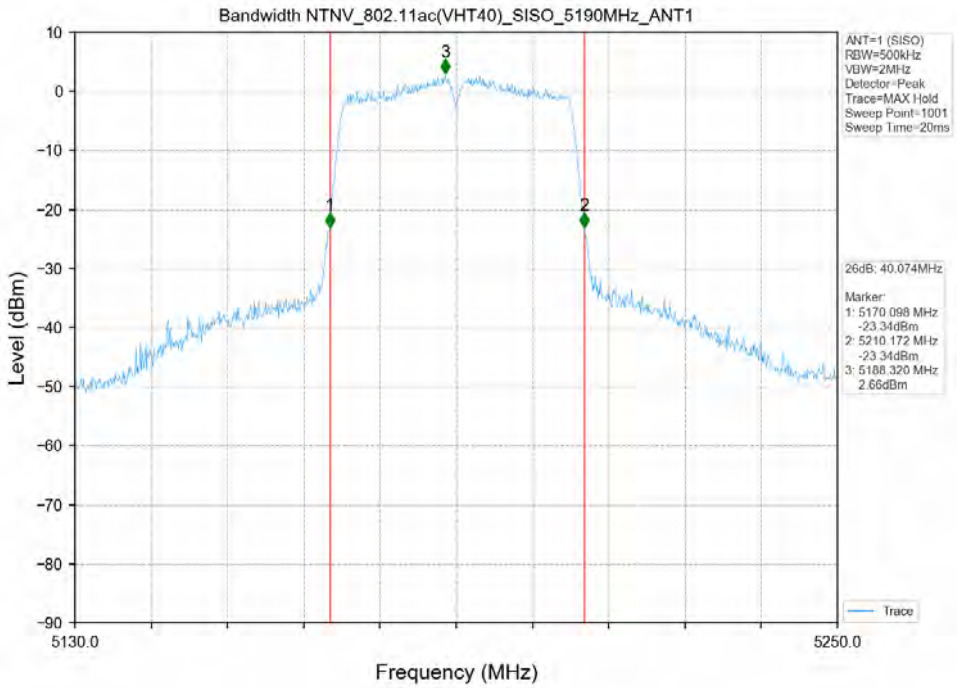


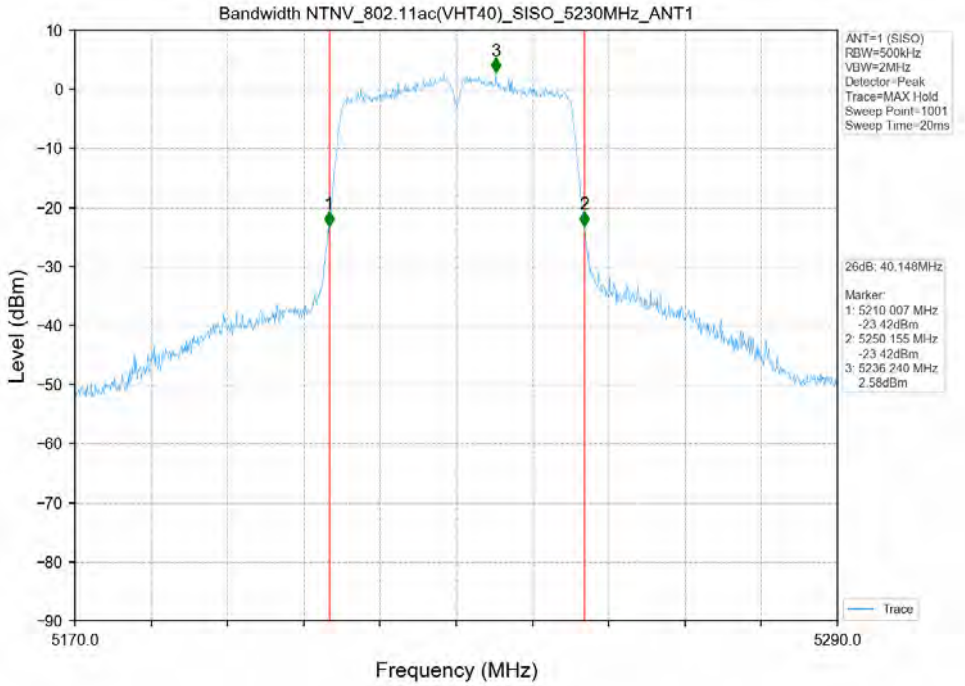


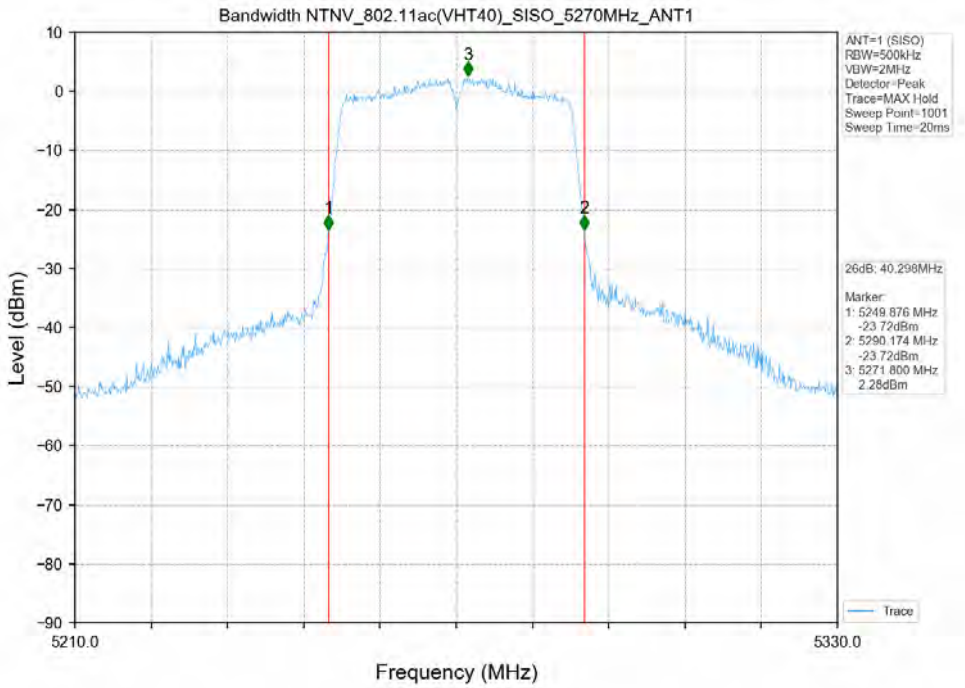


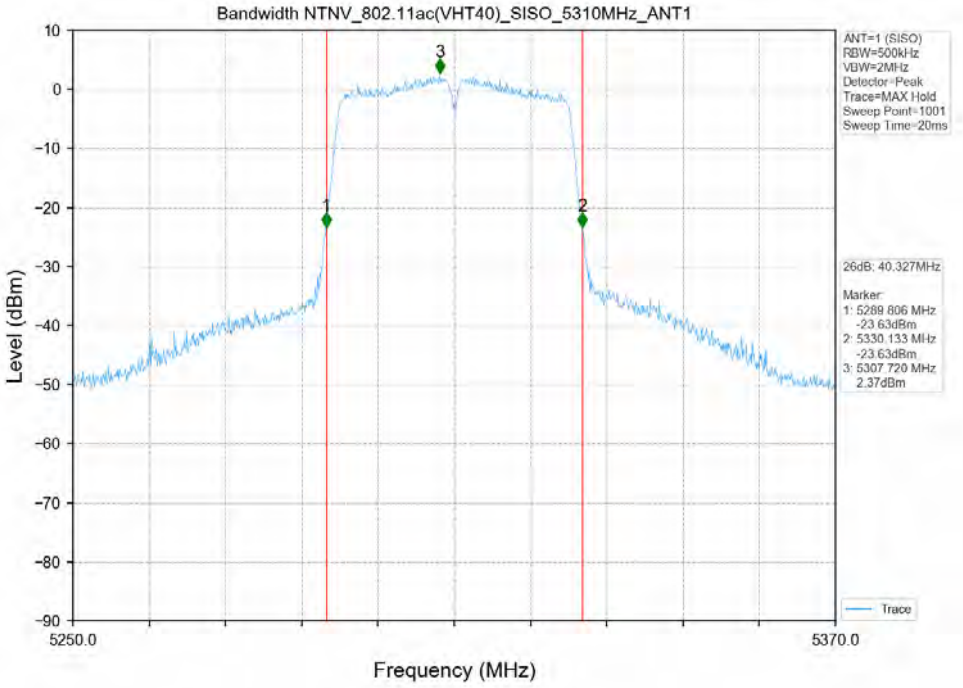


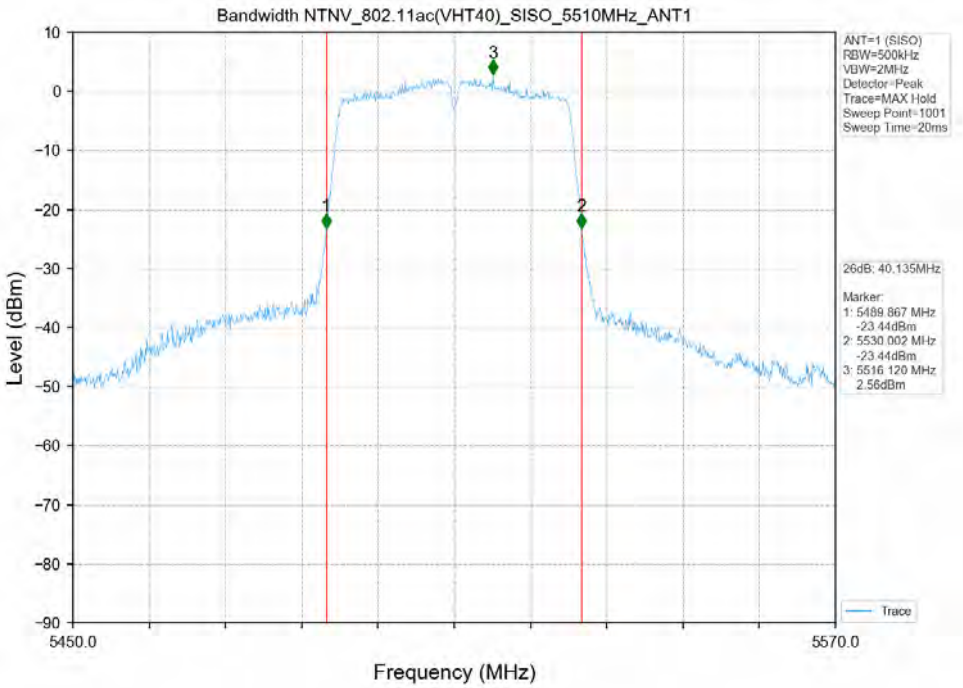


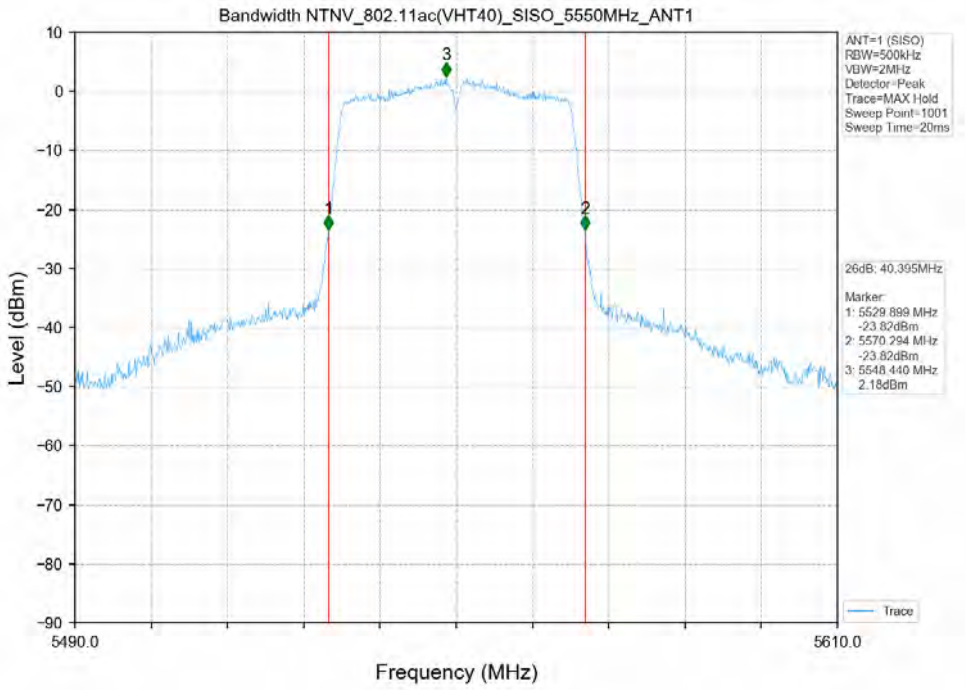


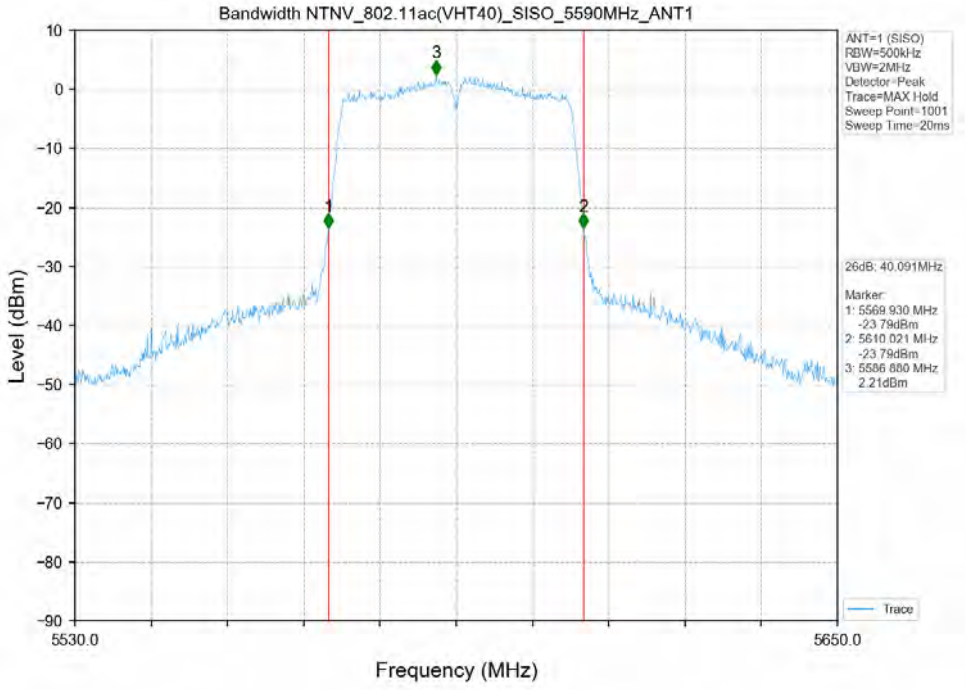


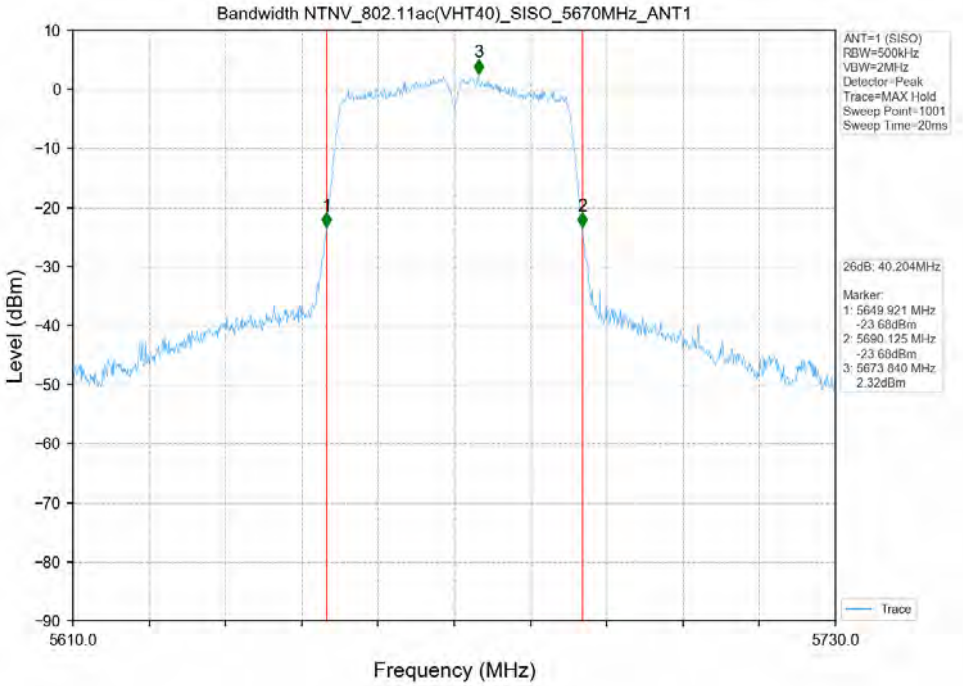


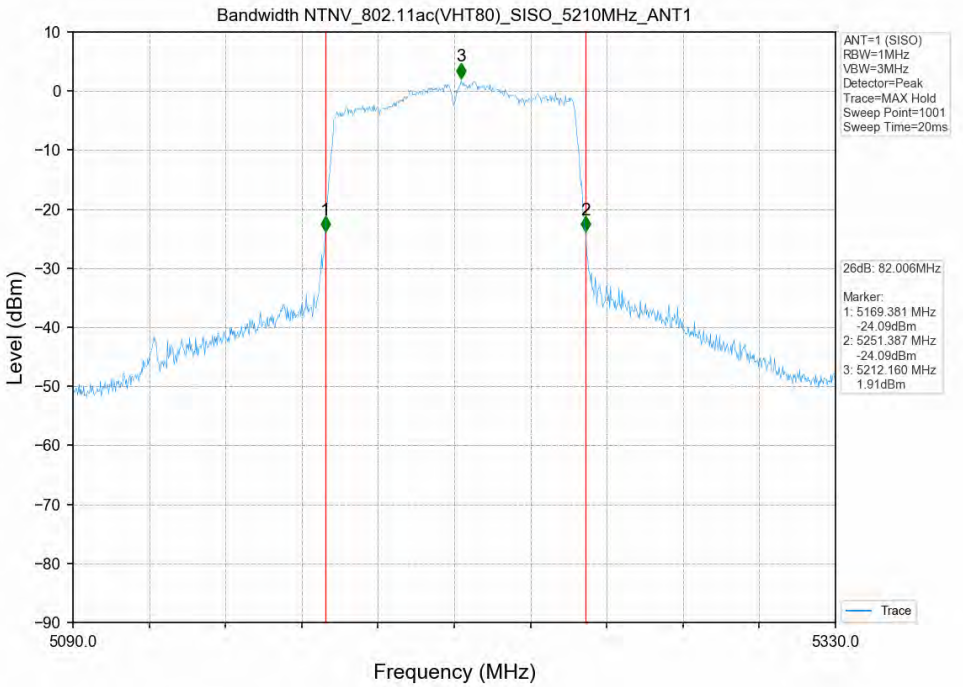


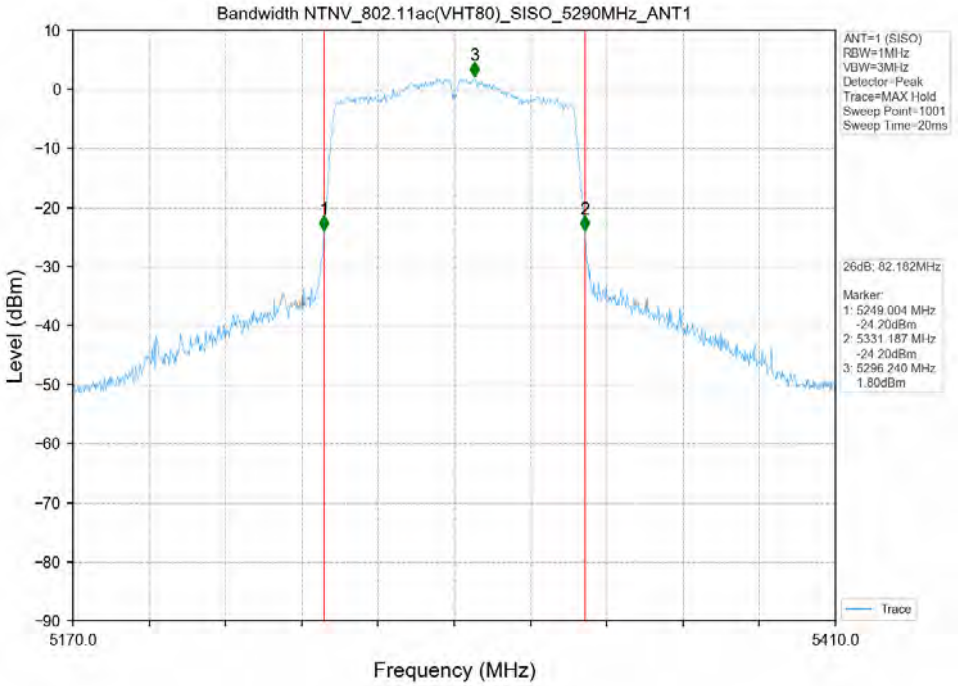


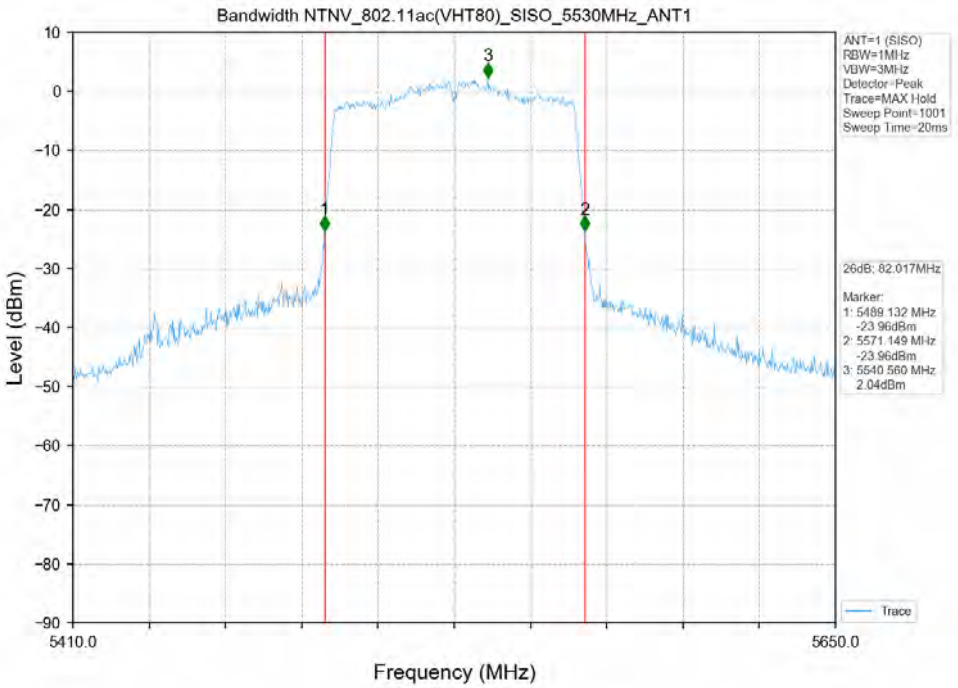


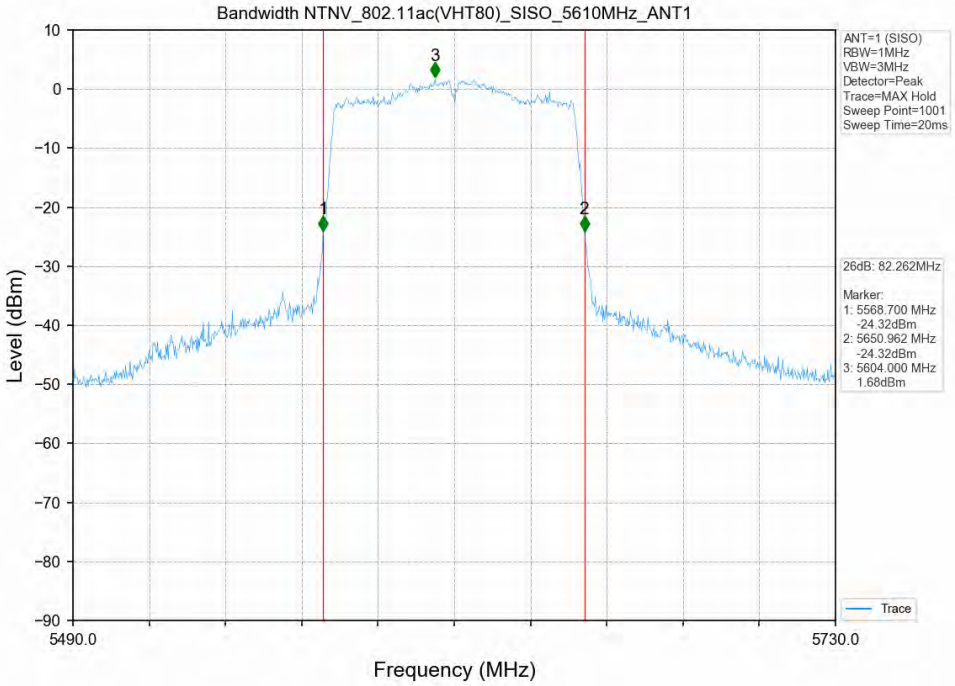


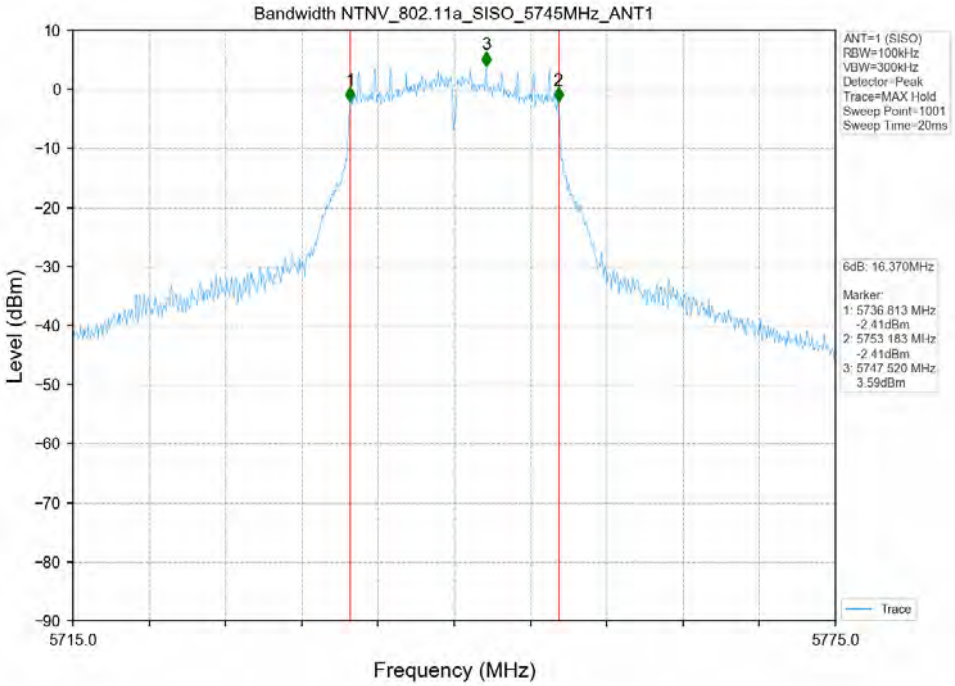


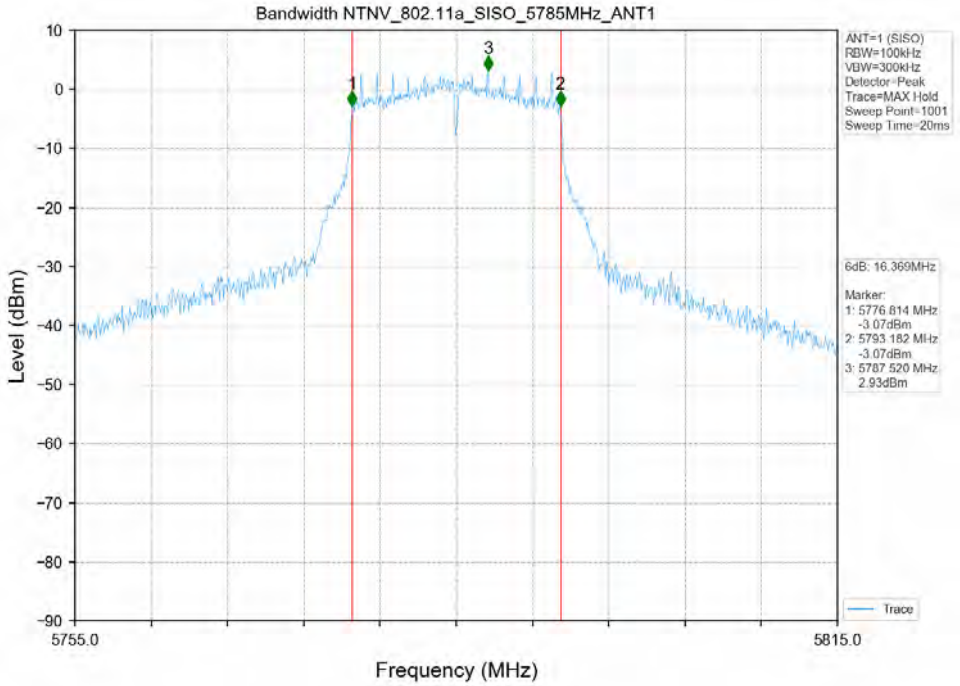


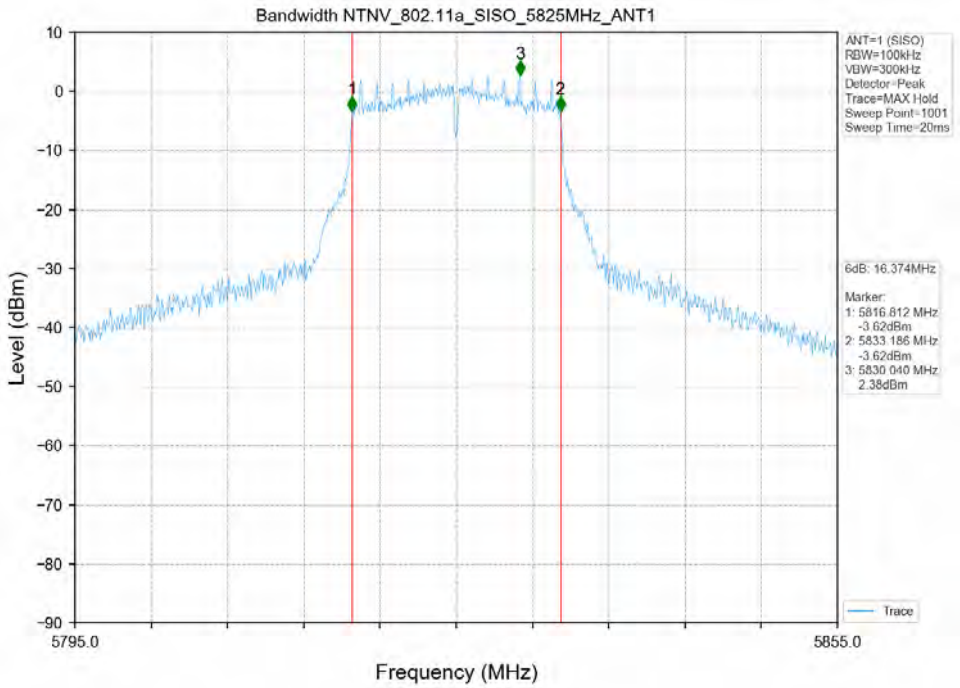


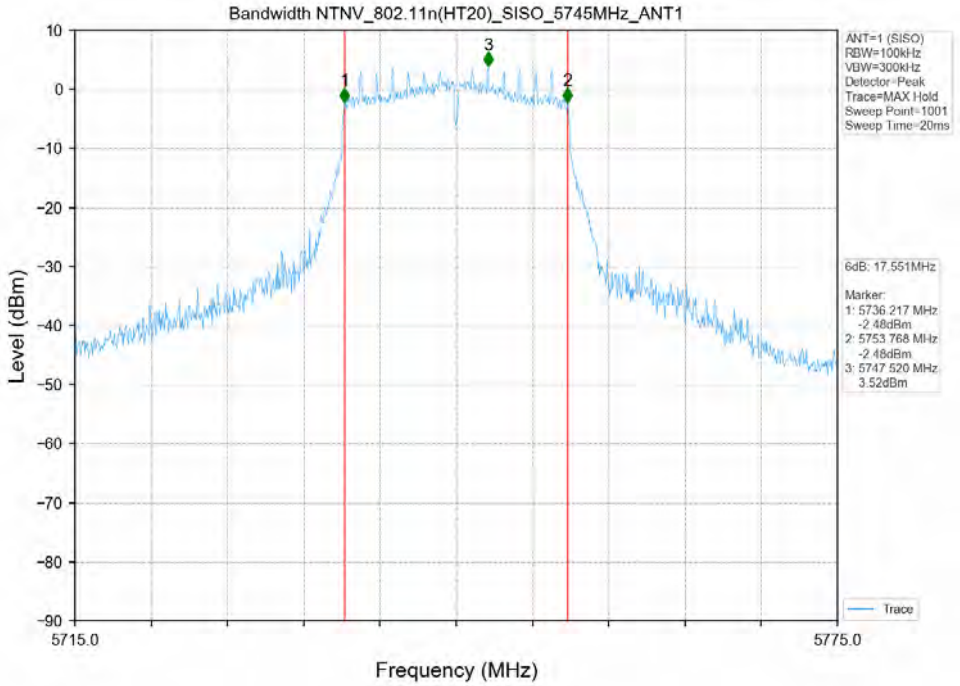


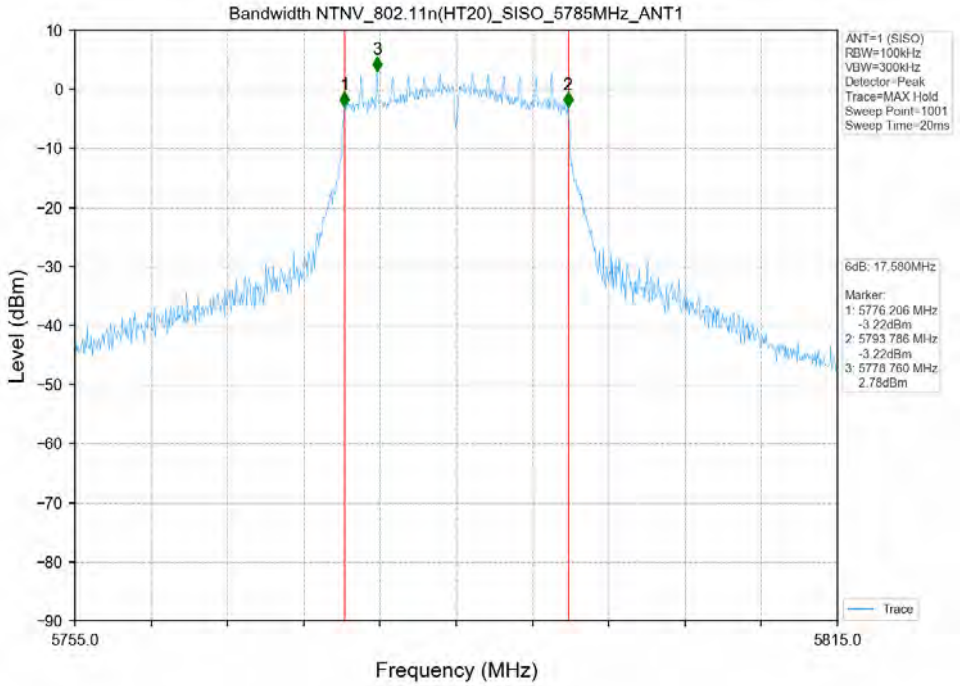


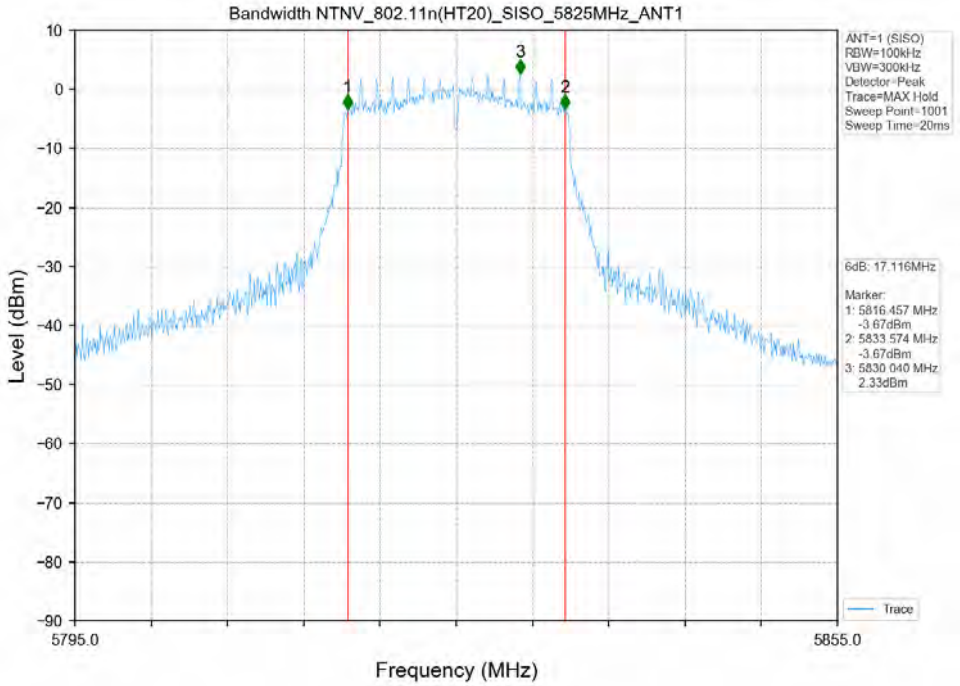


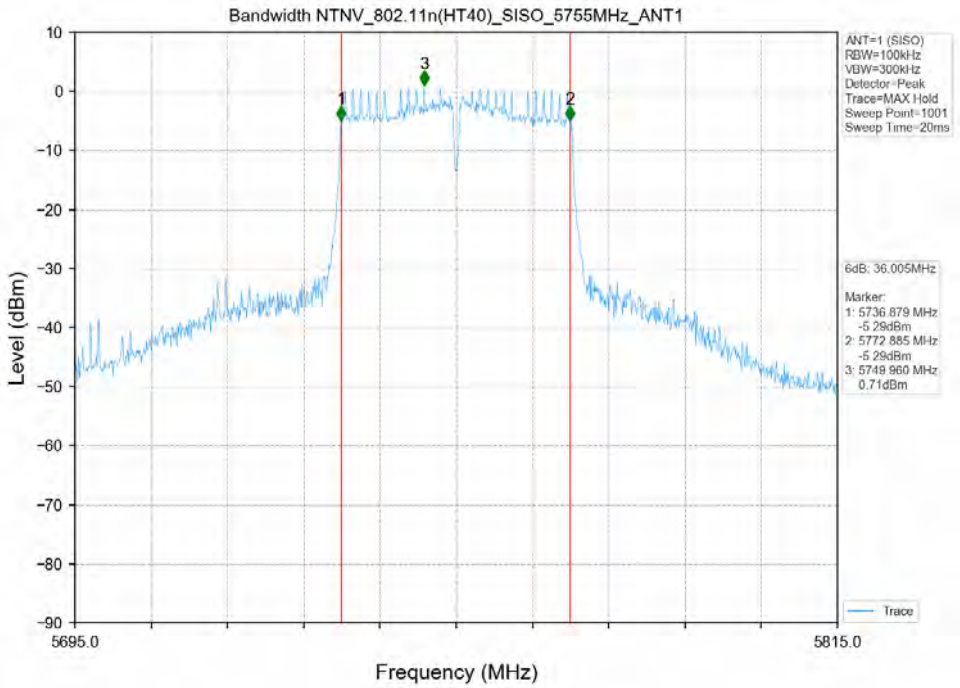


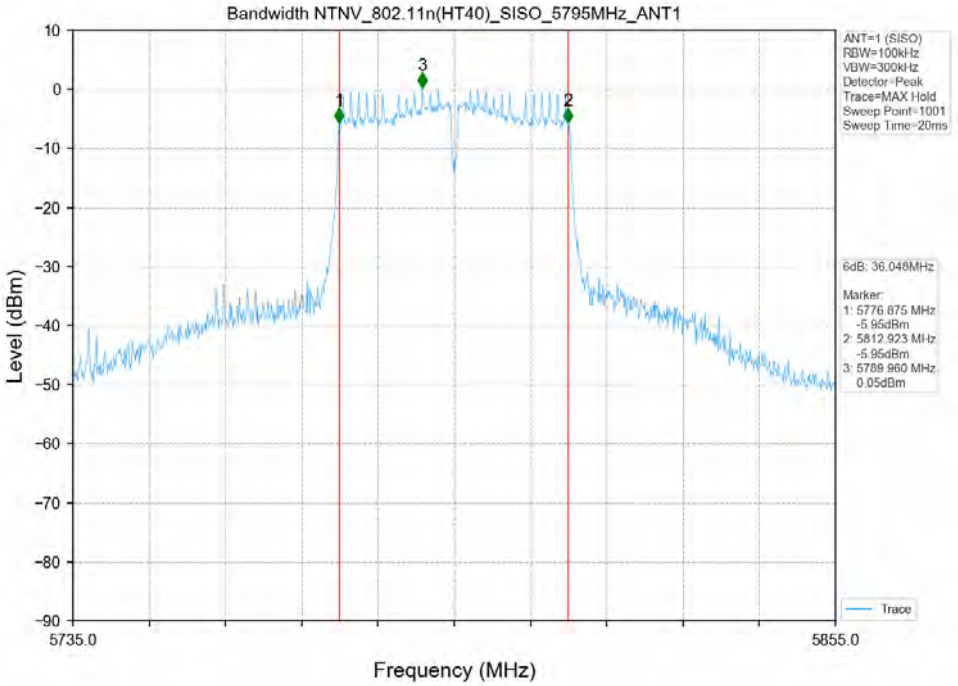


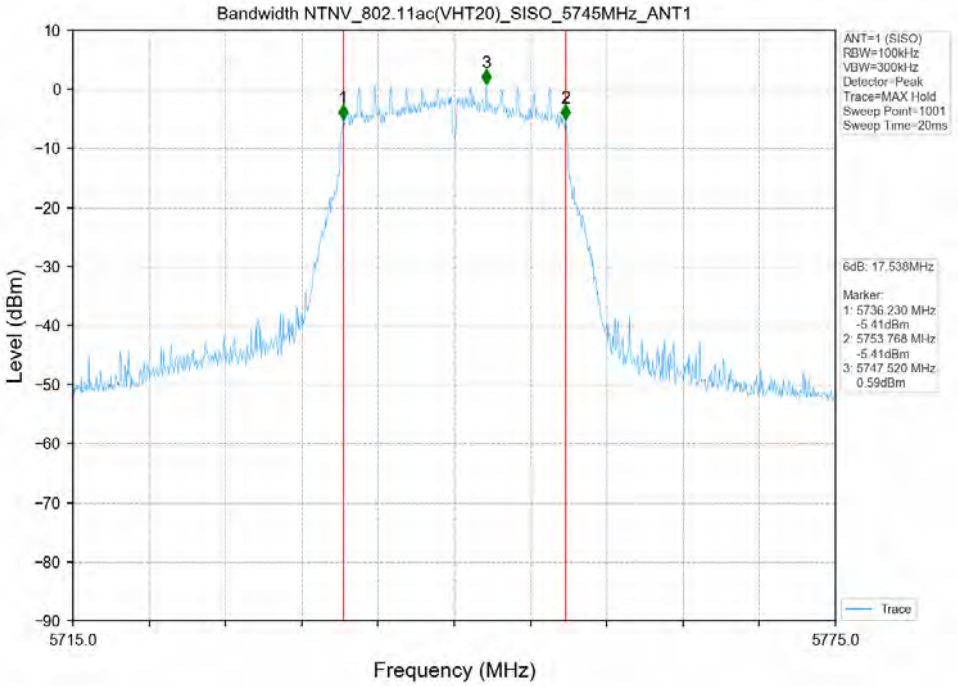


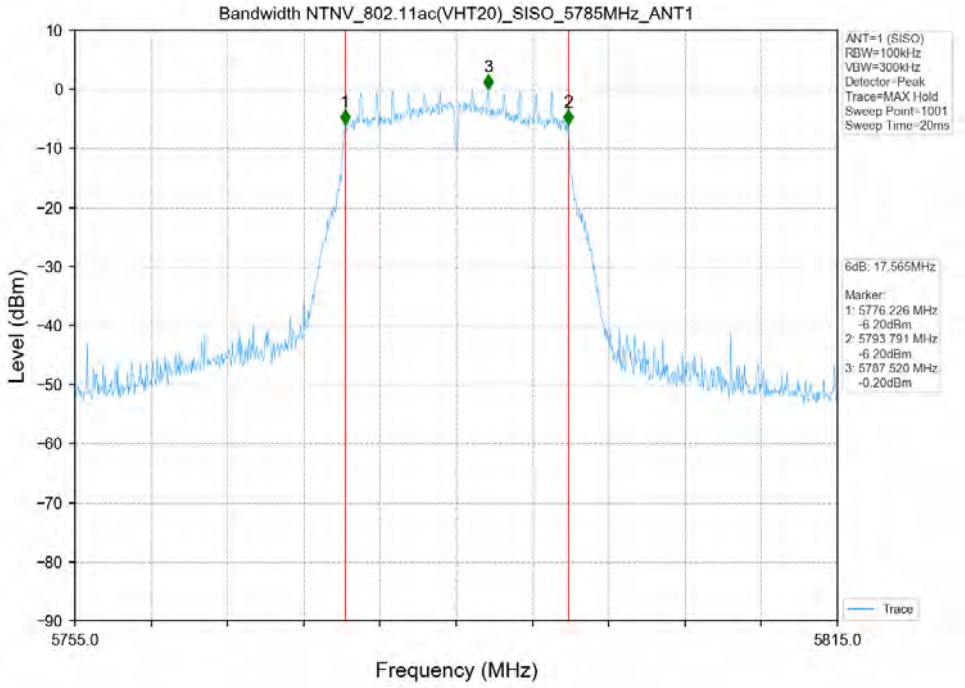


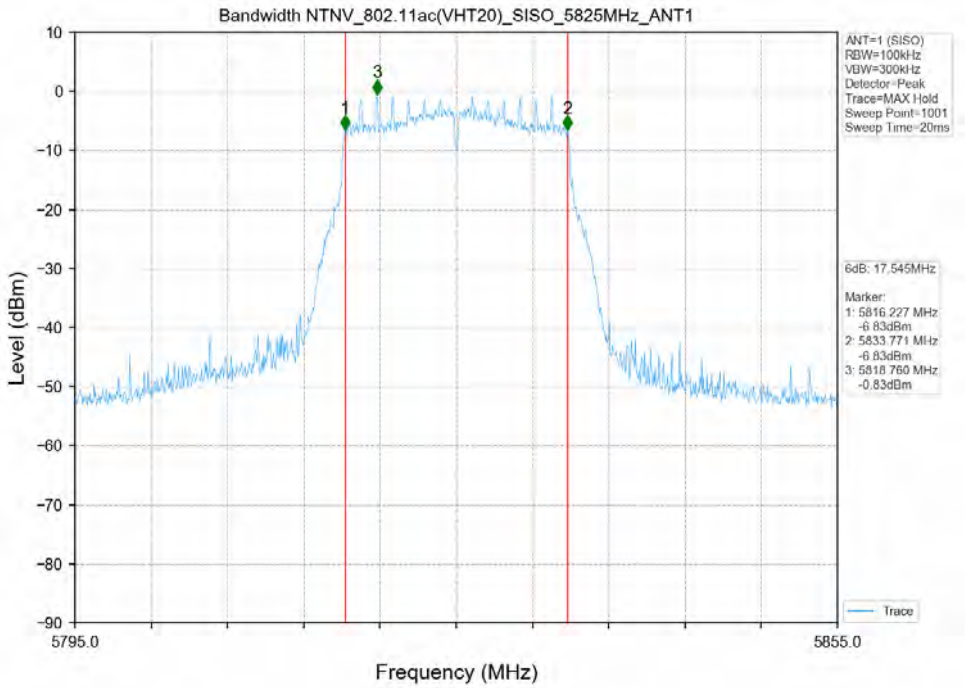


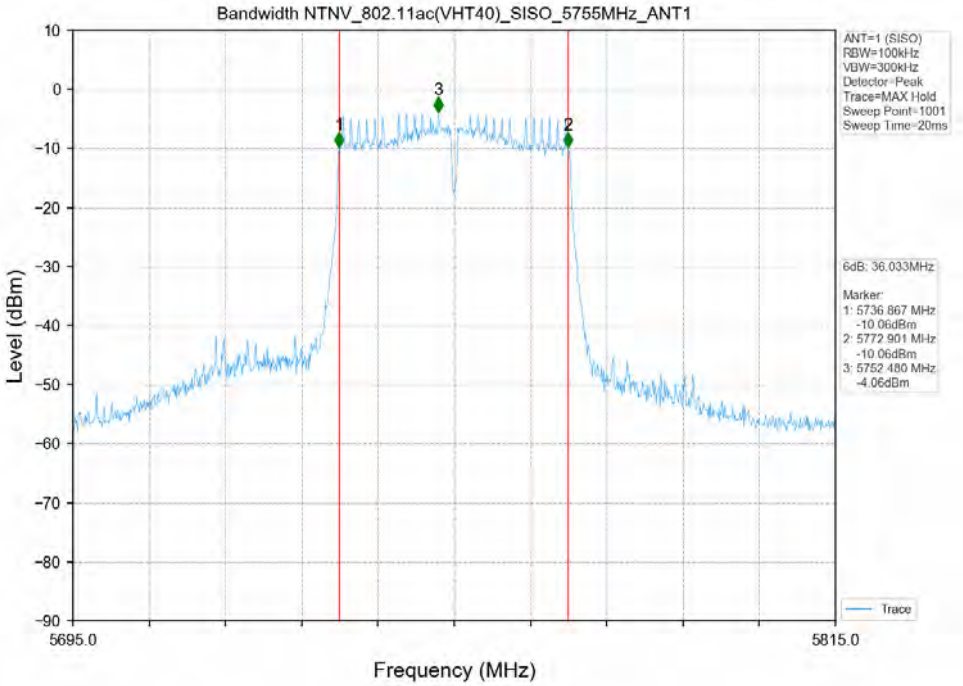


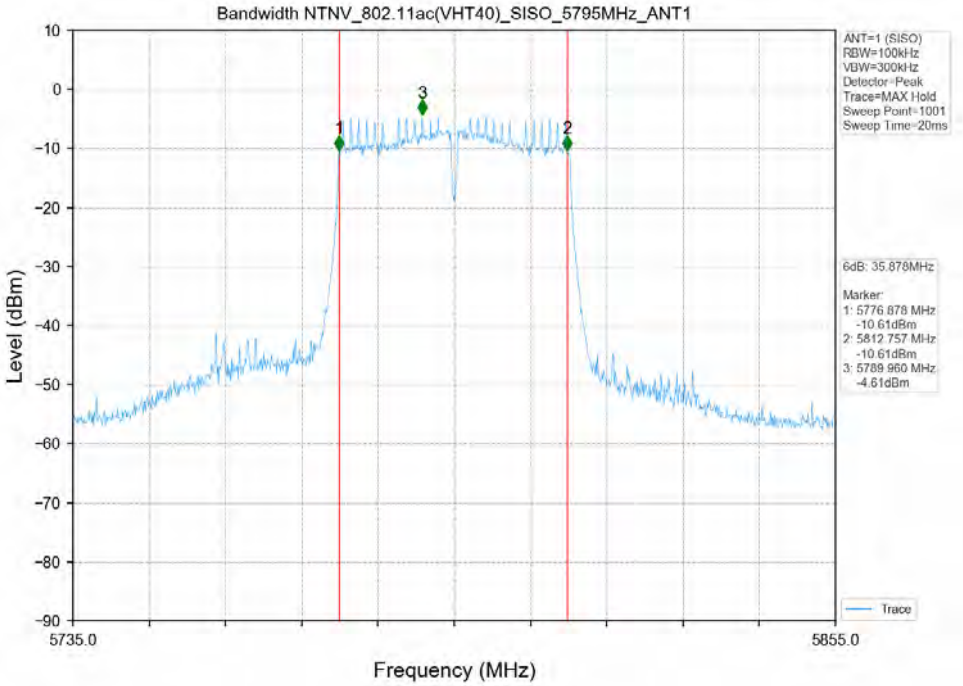


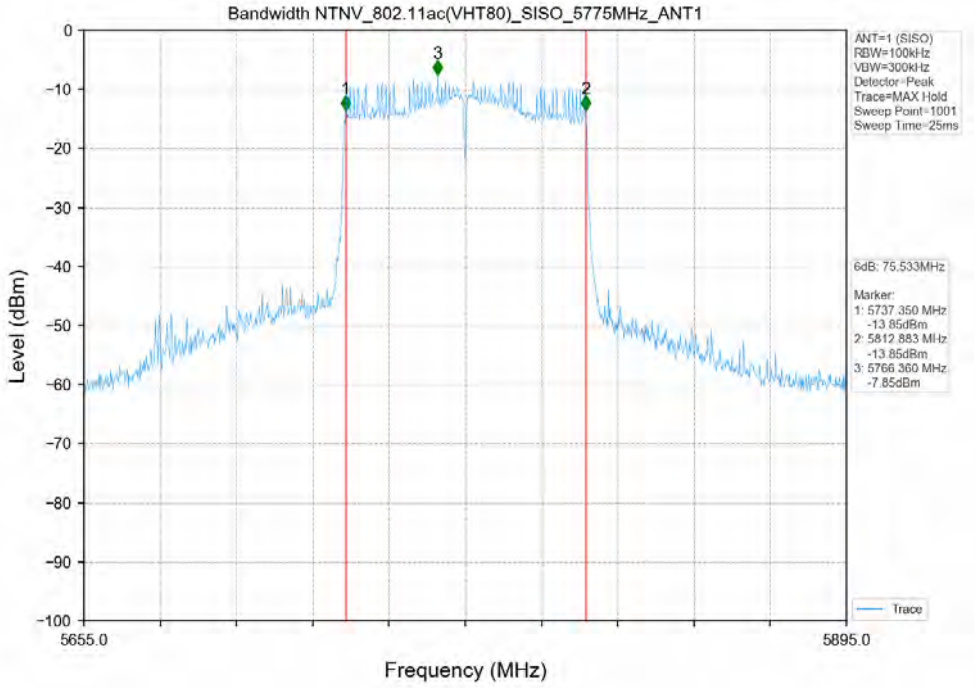












2.3 Test Graph - 99% Occupied Bandwidth