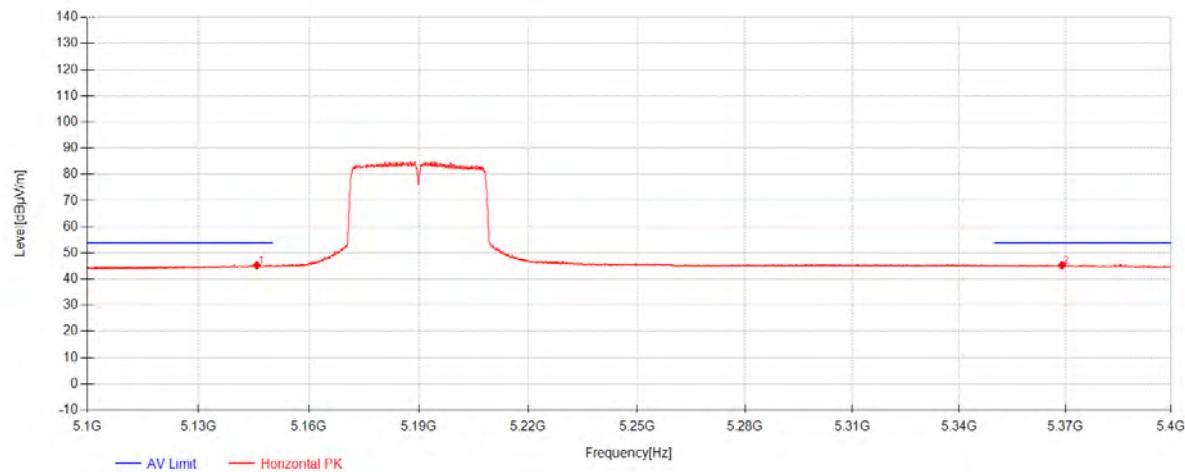
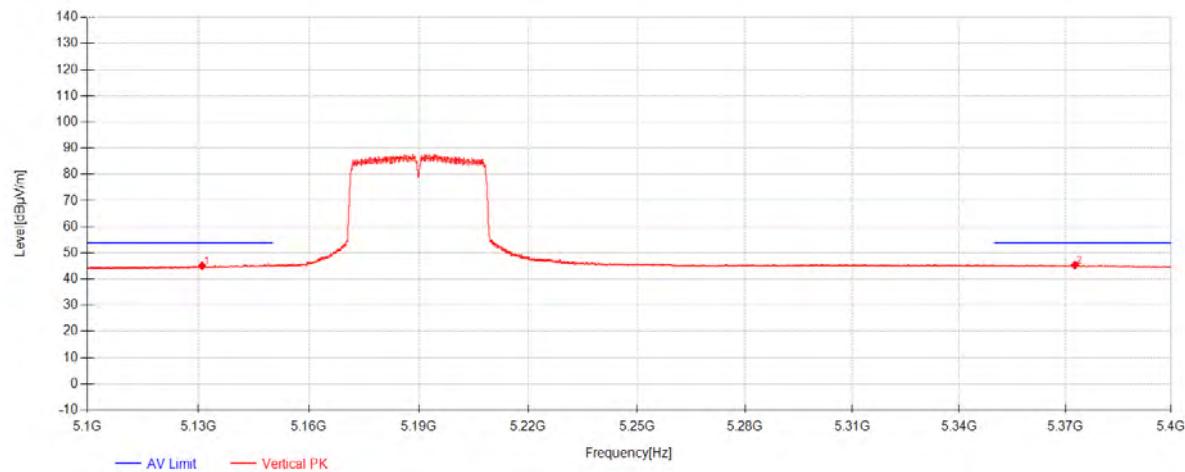


802.11n40_Channel 38



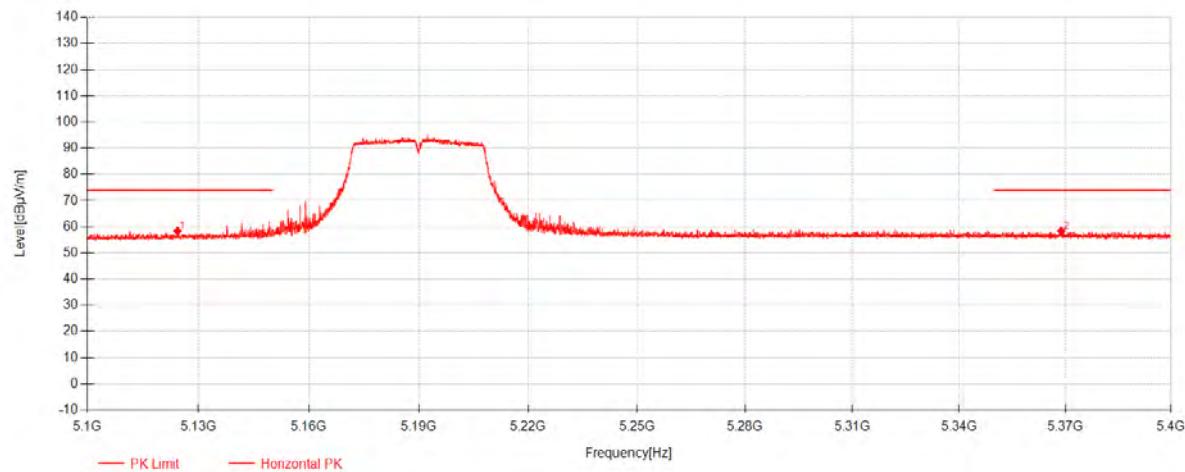
Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5145.84	27.00	33.17	-14.81	45.36	54.00	8.64	Horizontal
2	5369.025	26.34	33.13	-14.13	45.33	54.00	8.67	Horizontal

802.11n40_Channel 38

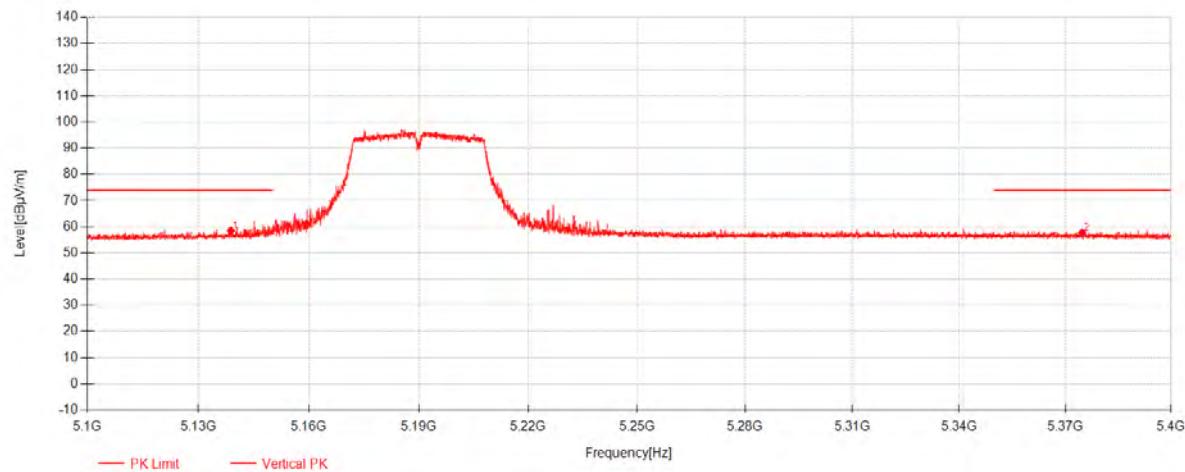


Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5131	26.84	33.17	-14.87	45.14	54.00	8.86	Vertical
2	5372.7	26.42	33.13	-14.14	45.40	54.00	8.60	Vertical

802.11n40_Channel 38

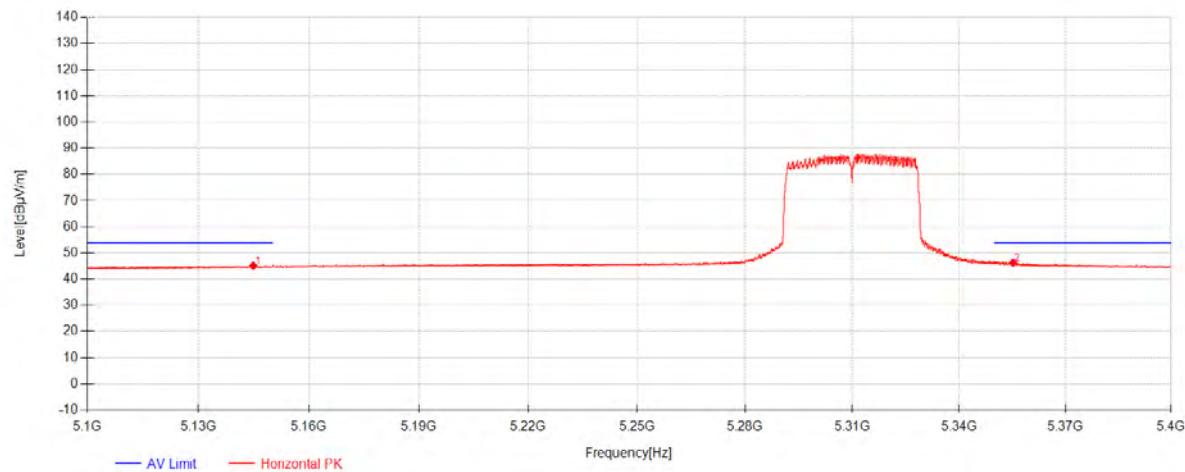


Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5124.36	40.09	33.18	-14.90	58.36	74.00	15.64	Horizontal
2	5368.815	39.35	33.13	-14.13	58.34	74.00	15.66	Horizontal

802.11n40_Channel 38

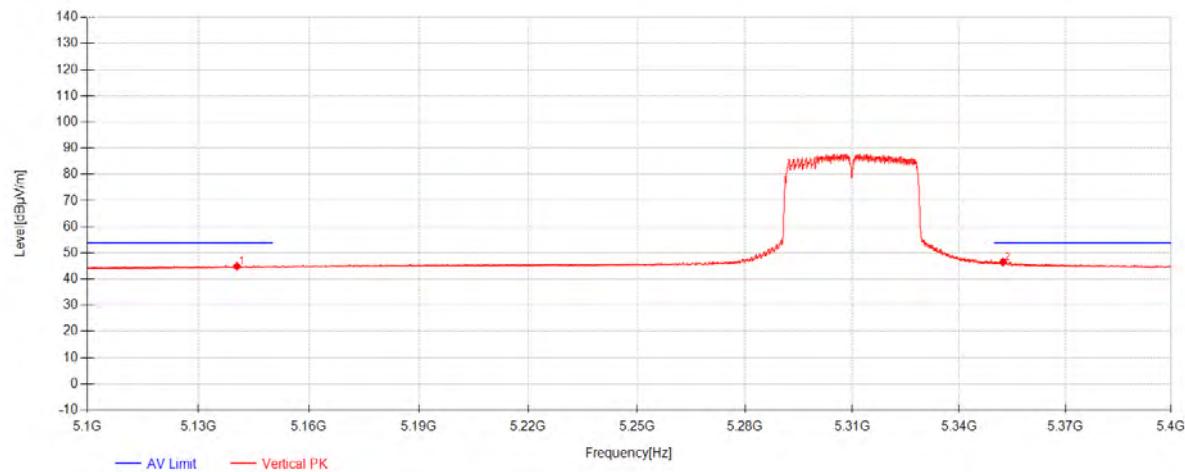
Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5138.84	40.18	33.17	-14.84	58.51	74.00	15.49	Vertical
2	5374.73	38.78	33.13	-14.15	57.76	74.00	16.24	Vertical

802.11n40_Channel 62

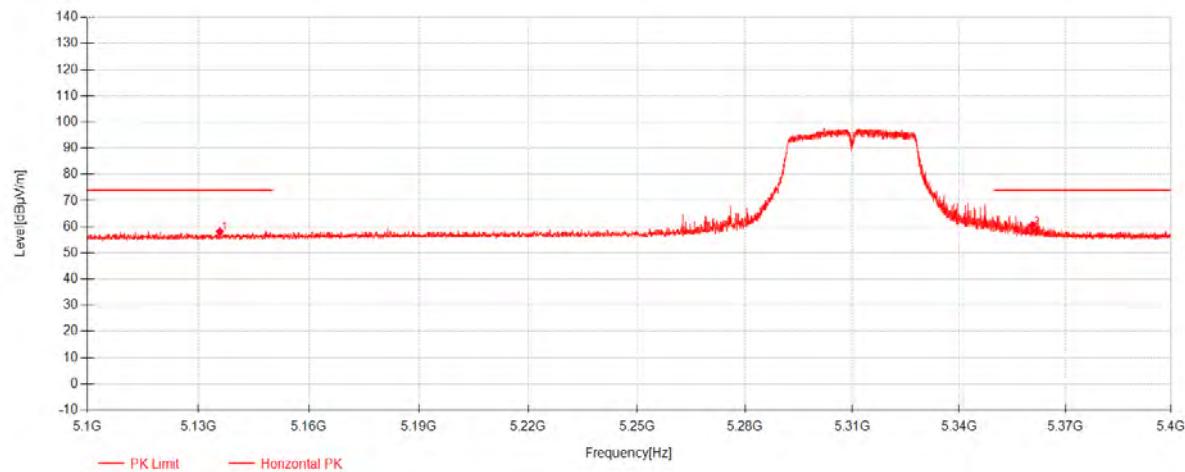


Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5144.9	26.82	33.17	-14.81	45.18	54.00	8.82	Horizontal
2	5355.175	27.24	33.13	-14.11	46.26	54.00	7.74	Horizontal

802.11n40_Channel 62

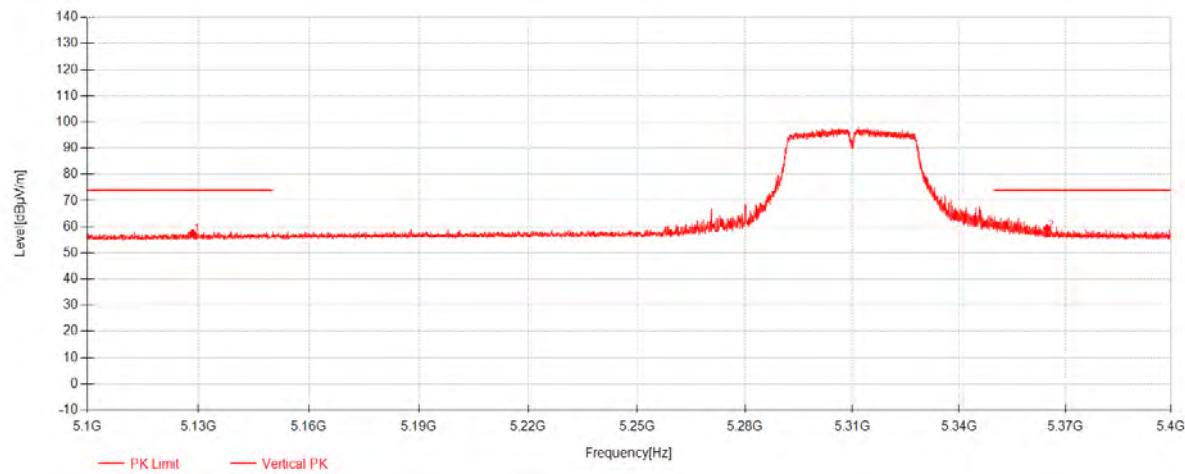


Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5140.45	26.60	33.17	-14.83	44.94	54.00	9.06	Vertical
2	5352.325	27.57	33.13	-14.10	46.60	54.00	7.40	Vertical

802.11n40_Channel 62

Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5135.8	39.81	33.17	-14.85	58.13	74.00	15.87	Horizontal
2	5360.625	41.53	33.13	-14.12	60.54	74.00	13.46	Horizontal

802.11n40_Channel 62



Data List								
NO.	Frequency [MHz]	Reading [dB μ V]	AF [dB/m]	Factor [dB]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Polarity
1	5128.45	39.27	33.17	-14.88	57.56	74.00	16.44	Vertical
2	5364.775	40.29	33.13	-14.13	59.29	74.00	14.71	Vertical

7.6 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.			

7.6.1 E.U.T. Operation

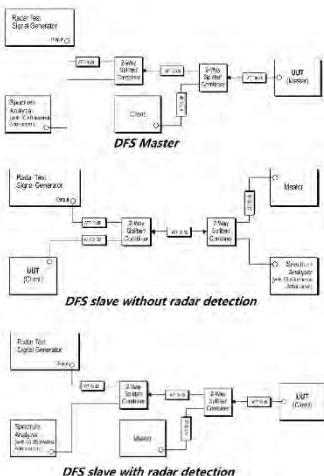
Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	Normal operating_Keep the EUT communication with the companion device.

7.6.3 Test Setup Diagram



7.6.4 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

7.7 Duty Cycle

Test Requirement ANSI C63.10 (2013) Section 12.2
Test Method: ANSI C63.10 (2013) Section 12.2

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.
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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.7.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 99% Bandwidth

Test Requirement ANSI C63.10 (2013) Section 12.4.2
Test Method: ANSI C63.10 (2013) Section 12.4.2

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.
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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.8.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.9 26dB Emission bandwidth

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)
Test Method: ANSI C63.10 (2013) Section 12.4.1

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.
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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.9.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.10 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart E 15.407 (e)
Test Method: ANSI C63.10 (2013) Section 6.9.2

Limit:

Frequency band(MHz)	Limit
5725-5850	≥500 kHz

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX mode (U-NII-3) 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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.10.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.11 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)
 Test Method: ANSI C63.10 (2013) Section 12.5

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.11.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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/ac/ax 20/40, Only the data of worst case is recorded in the report.
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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.11.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.12 Frequency Stability

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

7.12.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.12.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.
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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.12.3 Measurement Procedure and Data

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

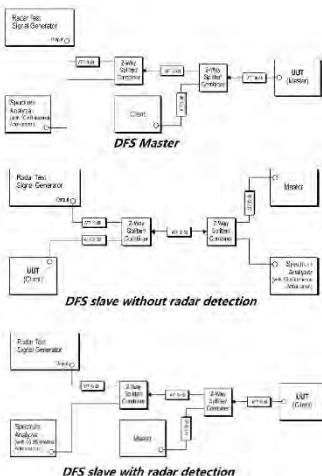
Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.13.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	Normal operating_Keep the EUT communication with the companion device.

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 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

7.14 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.			

7.14.1 E.U.T. Operation

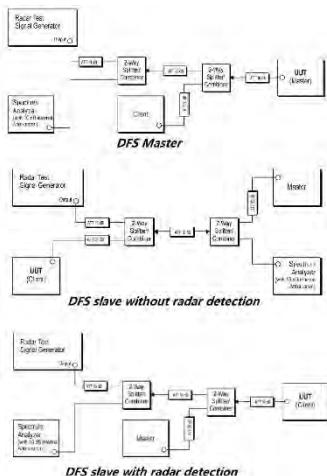
Operating Environment:

Temperature: 20.4 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar

7.14.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	Normal operating_Keep the EUT communication with the companion device.

7.14.3 Test Setup Diagram



7.14.4 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

Refer to Appendix - Test Setup Photo for KSCR2412002626AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix_Photos of EUT Constructional Details for KSCR2412002626AT

10 Appendix

1. Duty Cycle

1.1 Test Result

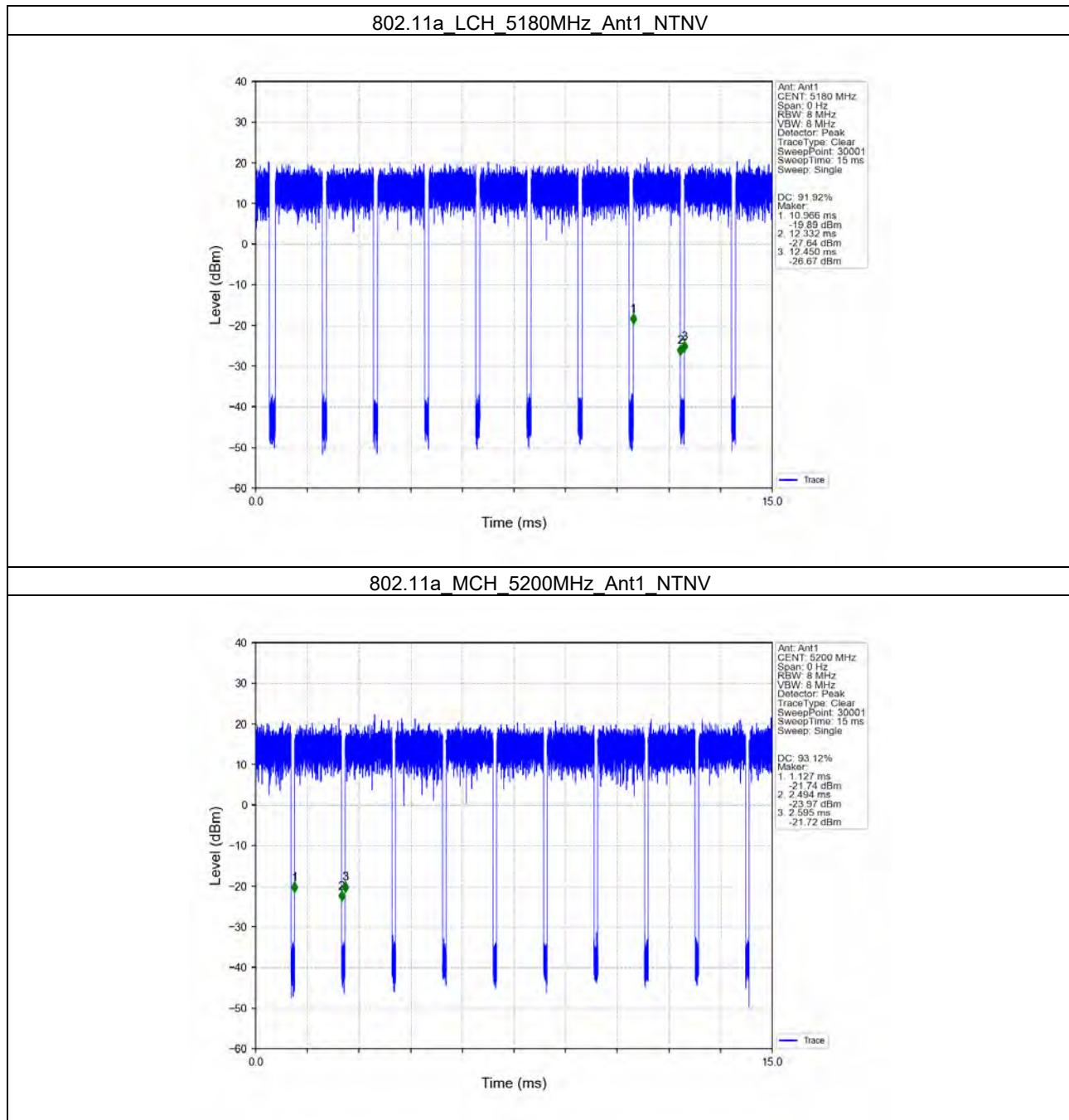
1.1.1 Ant1

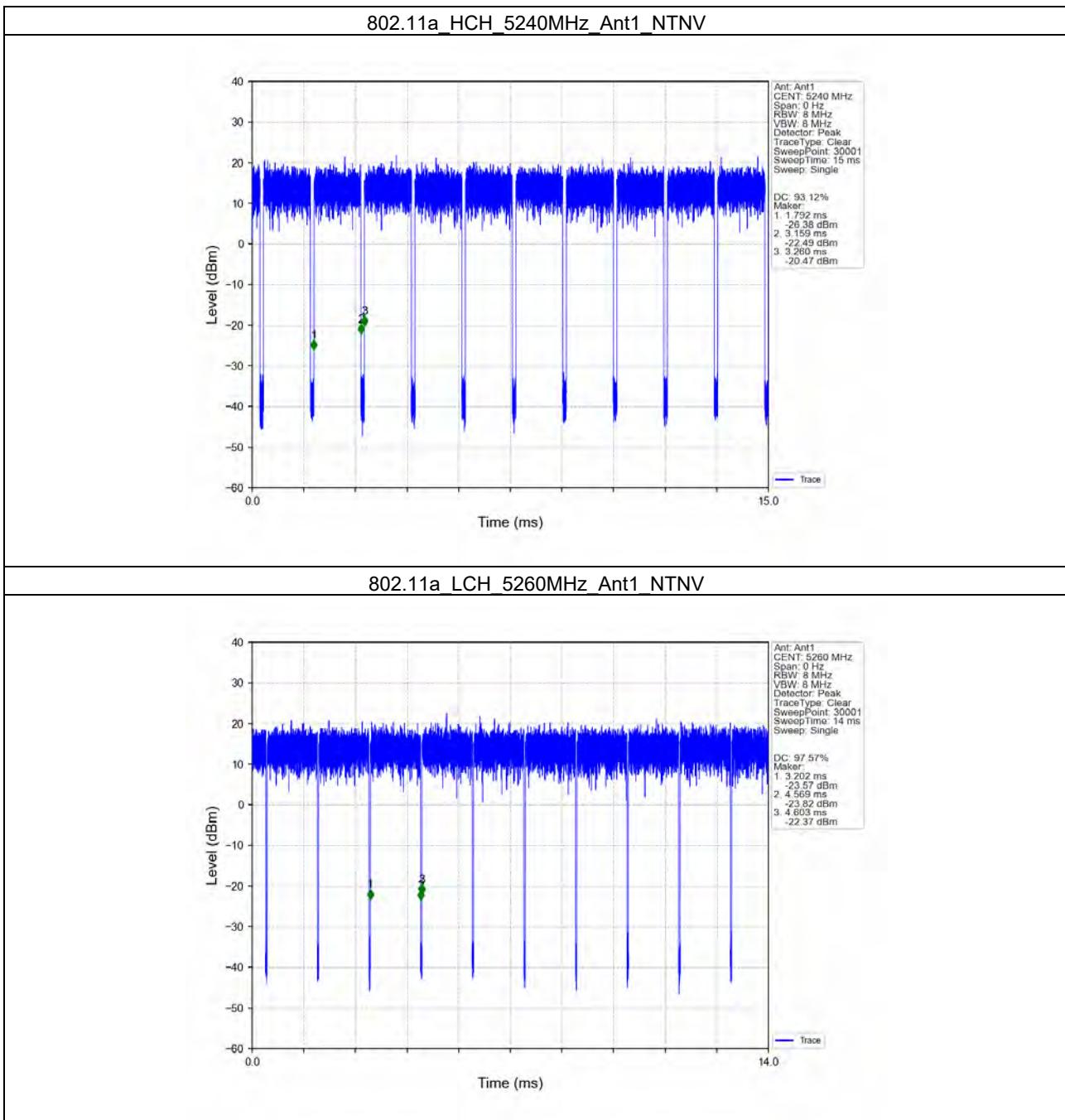
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	1.365	1.485	91.92	0.37	0.03
		5200	/	/	1.366	1.467	93.12	0.31	0.03
		5240	/	/	1.367	1.468	93.12	0.31	0.03
		5260	/	/	1.367	1.401	97.57	0.11	0.03
		5300	/	/	1.366	1.467	93.12	0.31	0.03
		5320	/	/	1.367	1.468	93.12	0.31	0.03
		5500	/	/	1.367	1.468	93.12	0.31	0.03
		5580	/	/	1.366	1.400	97.57	0.11	0.00
		5700	/	/	1.366	1.467	93.12	0.31	0.03
		5745	/	/	1.366	1.400	97.57	0.11	0.00
		5785	/	/	1.366	1.400	97.57	0.11	0.03
		5825	/	/	1.367	1.468	93.12	0.31	0.03
802.11n (HT20)	SISO	5180	/	/	1.278	1.312	97.41	0.11	0.03
		5200	/	/	1.278	1.379	92.68	0.33	0.03
		5240	/	/	1.279	1.379	92.75	0.33	0.03
		5260	/	/	1.278	1.312	97.41	0.11	0.03
		5300	/	/	1.278	1.379	92.68	0.33	0.03
		5320	/	/	1.278	1.379	92.68	0.33	0.03
		5500	/	/	1.278	1.379	92.68	0.33	0.03
		5580	/	/	1.278	1.379	92.68	0.33	0.03
		5700	/	/	1.279	1.379	92.75	0.33	0.03
		5745	/	/	1.279	1.312	97.48	0.11	0.03
		5785	/	/	1.278	1.312	97.41	0.11	0.03
		5825	/	/	1.279	1.312	97.48	0.11	0.03
802.11n (HT40)	SISO	5190	/	/	0.637	0.738	86.31	0.64	0.03
		5230	/	/	0.638	0.738	86.45	0.63	0.03
		5270	/	/	0.638	0.672	94.94	0.23	0.03
		5310	/	/	0.637	0.738	86.31	0.64	0.03
		5510	/	/	0.638	0.739	86.33	0.64	0.03
		5550	/	/	0.638	0.739	86.33	0.64	0.05
		5670	/	/	0.638	0.739	86.33	0.64	0.03
		5755	/	/	0.637	0.774	82.30	0.85	4.05
		5795	/	/	0.638	0.739	86.33	0.64	0.03
802.11ax (HE20)	SISO	5180	RU242	Left	1.001	1.102	90.83	0.42	0.03
		5200	RU242	Left	1.002	1.160	86.38	0.64	4.51
		5240	RU242	Left	1.001	1.102	90.83	0.42	0.03

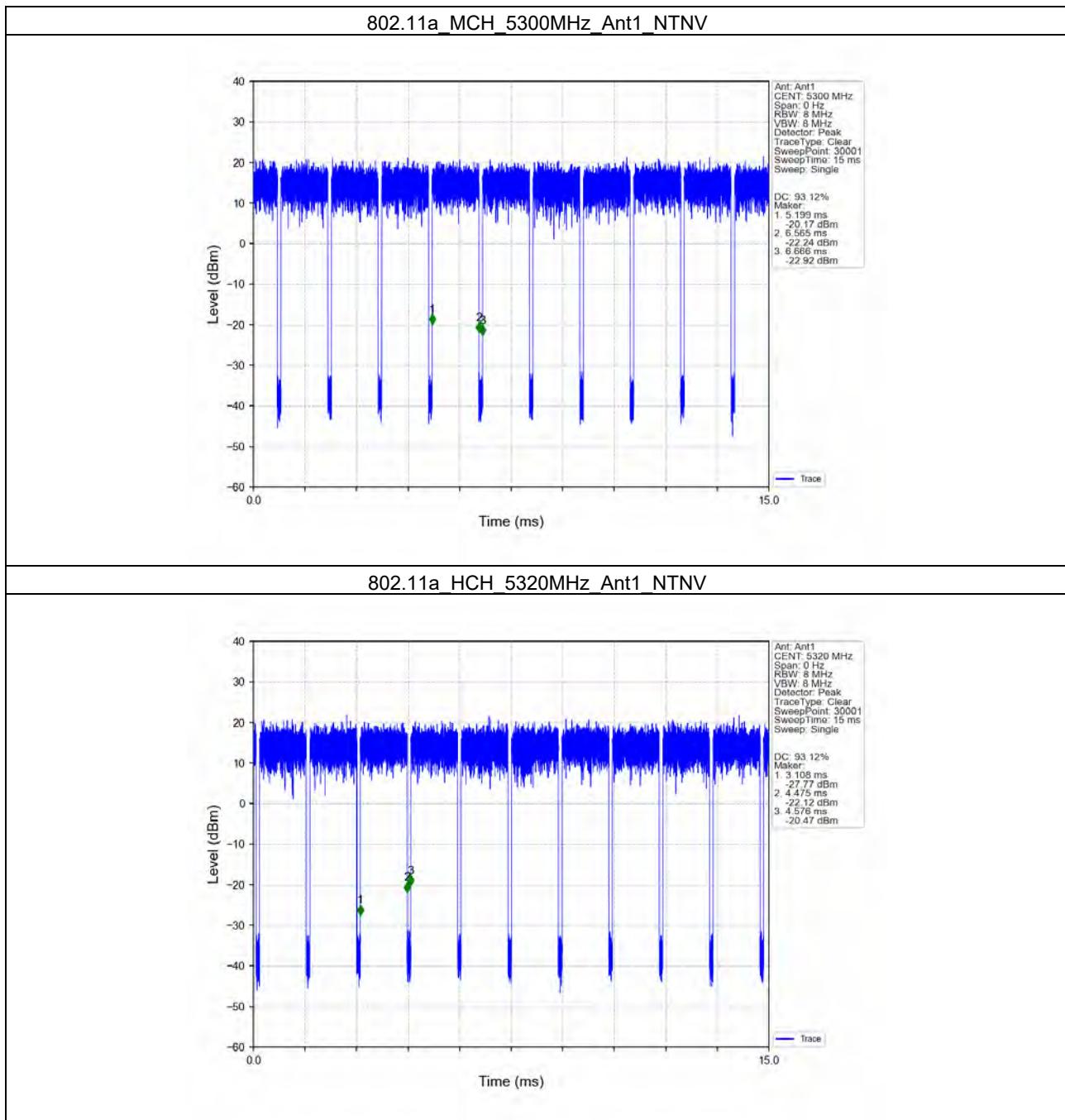
		5260	RU242	Left	52.620	53.017	99.25	0.03	0.00
		5300	RU242	Left	1.002	1.102	90.93	0.41	0.03
		5320	RU242	Left	1.001	1.102	90.83	0.42	0.03
		5500	RU242	Left	1.001	1.035	96.71	0.15	0.00
		5580	RU242	Left	1.001	1.120	89.38	0.49	0.03
		5700	RU242	Left	1.002	1.103	90.84	0.42	0.03
		5745	RU242	Left	1.002	1.035	96.81	0.14	0.04
		5785	RU242	Left	1.001	1.035	96.71	0.15	0.04
		5825	RU242	Left	1.002	1.035	96.81	0.14	0.03
802.11ax (HE40)	SISO	5190	RU484	Left	0.533	0.567	94.00	0.27	0.04
		5230	RU484	Left	0.533	0.634	84.07	0.75	0.01
		5270	RU484	Left	0.533	0.633	84.20	0.75	0.03
		5310	RU484	Left	0.533	0.634	84.07	0.75	0.04
		5510	RU484	Left	0.531	0.633	83.89	0.76	0.03
		5550	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5670	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5755	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5795	RU484	Left	0.533	0.566	94.17	0.26	0.04

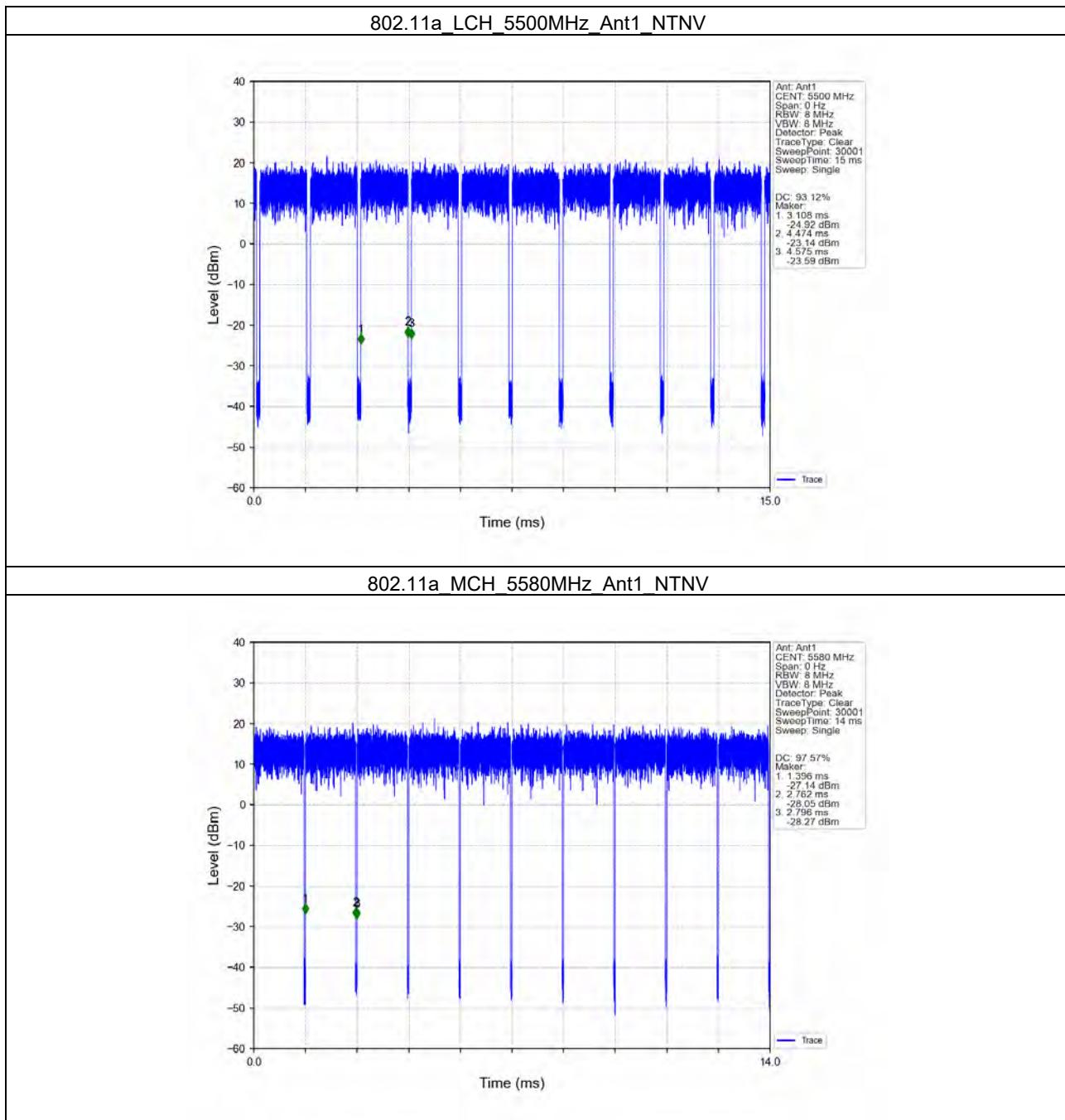
1.2 Test Graph

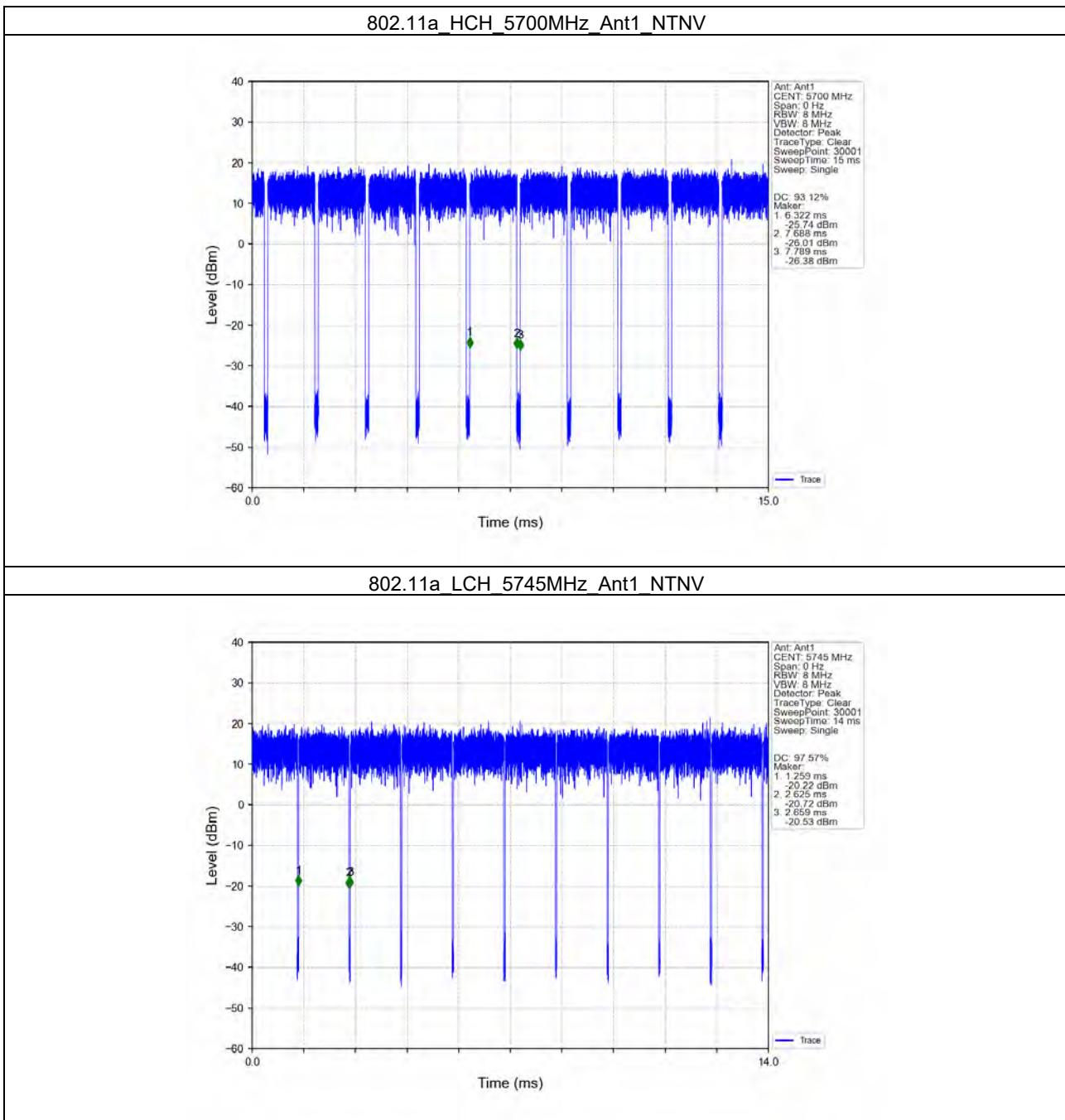
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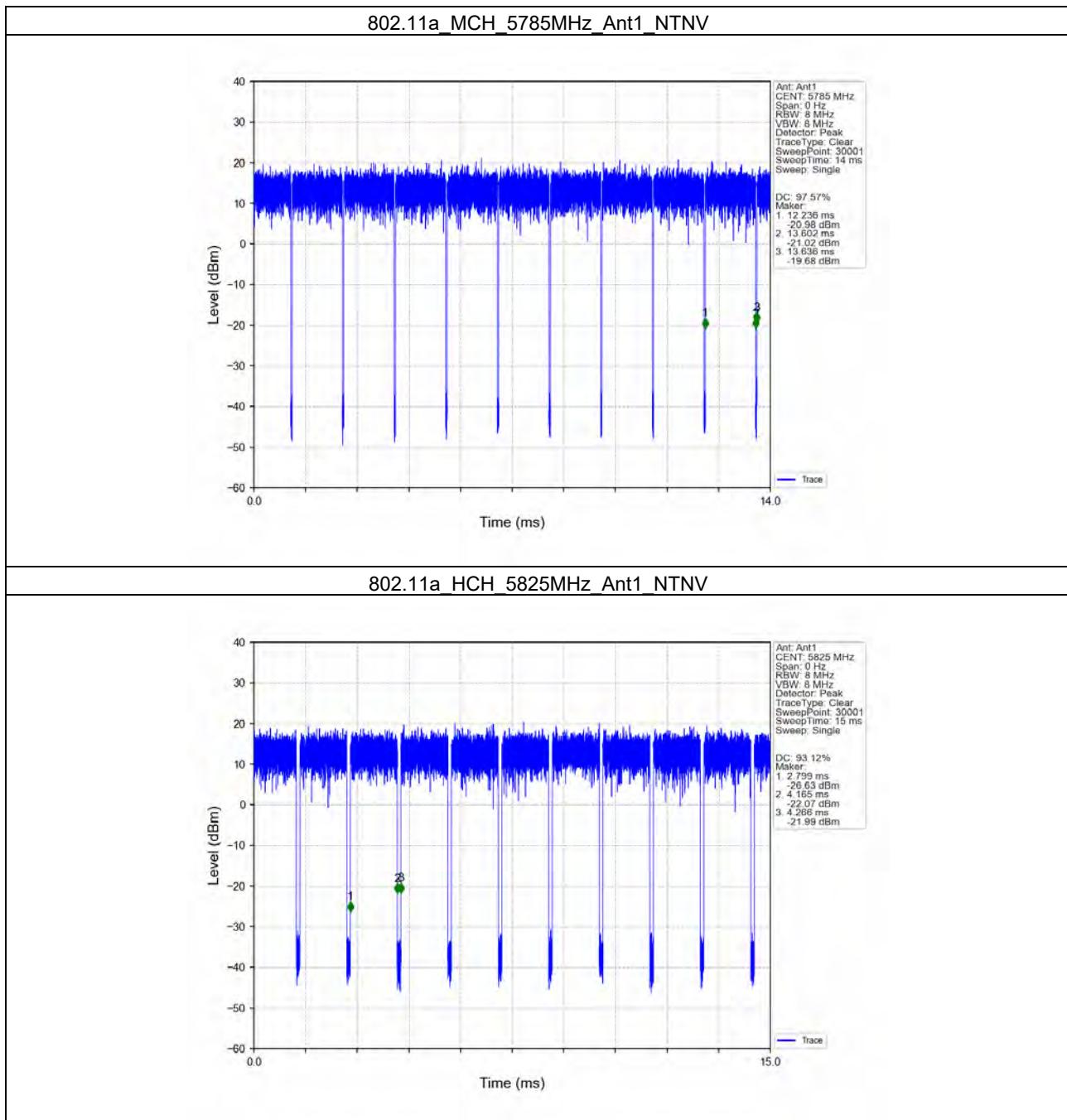


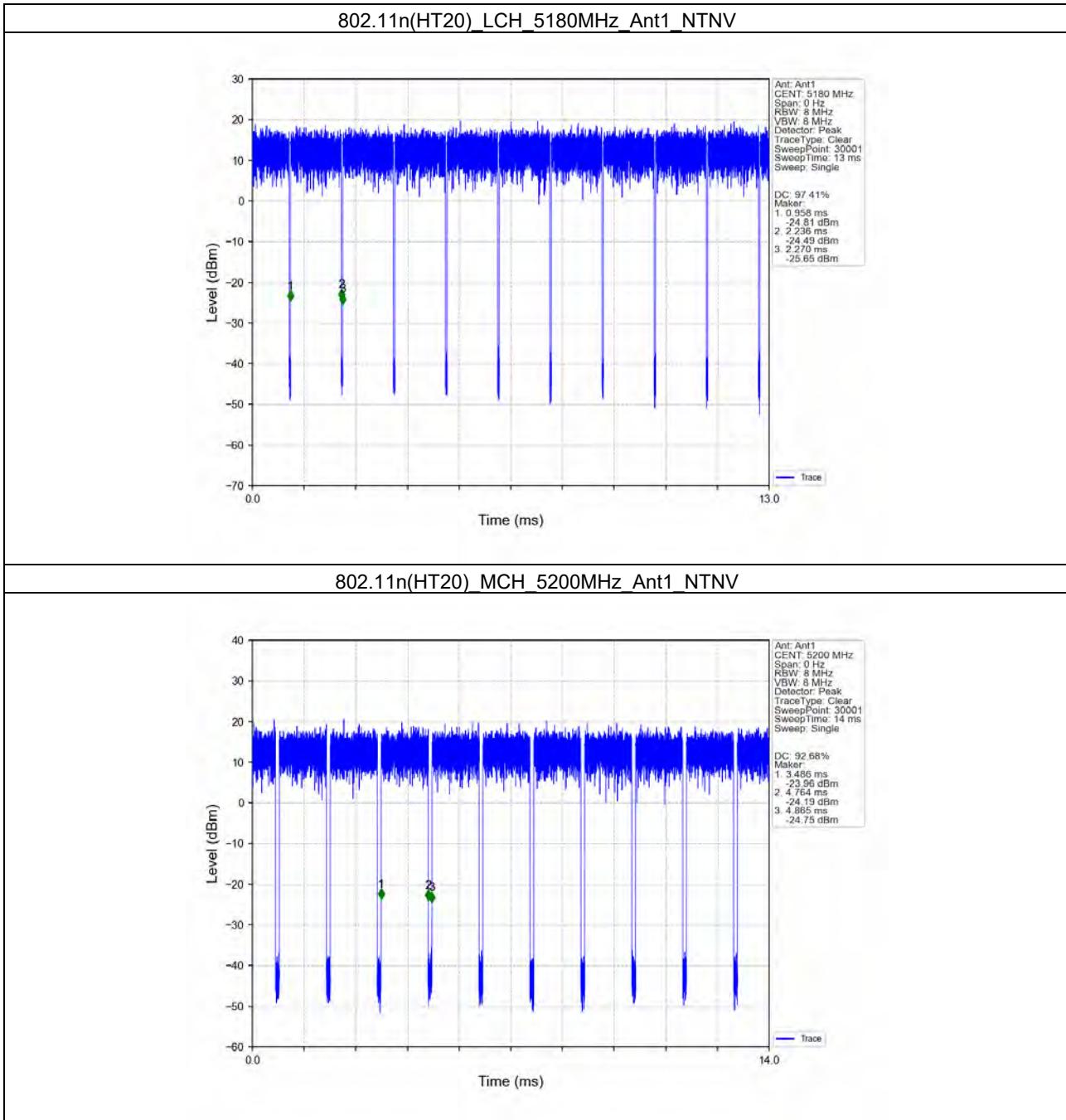


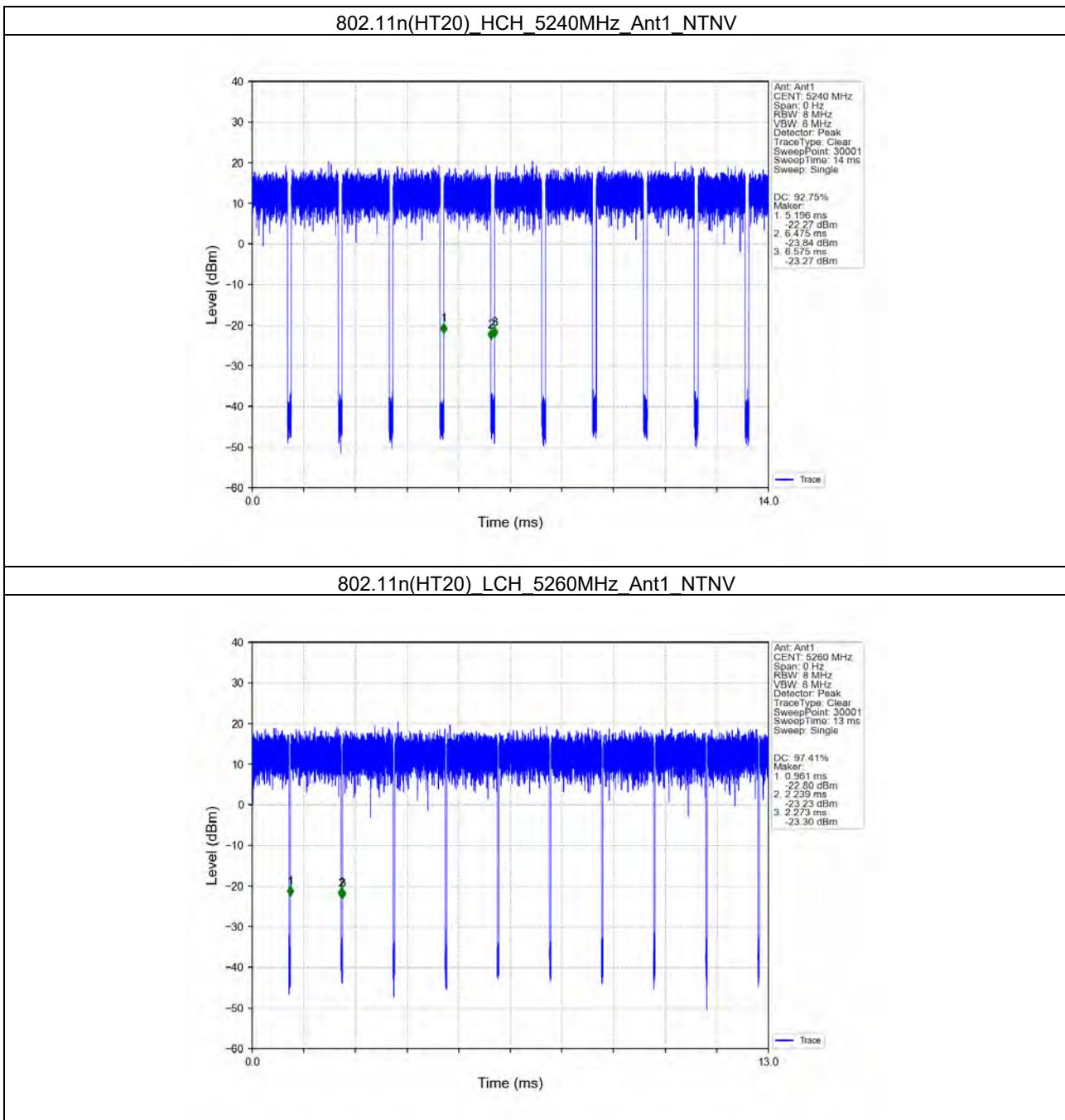


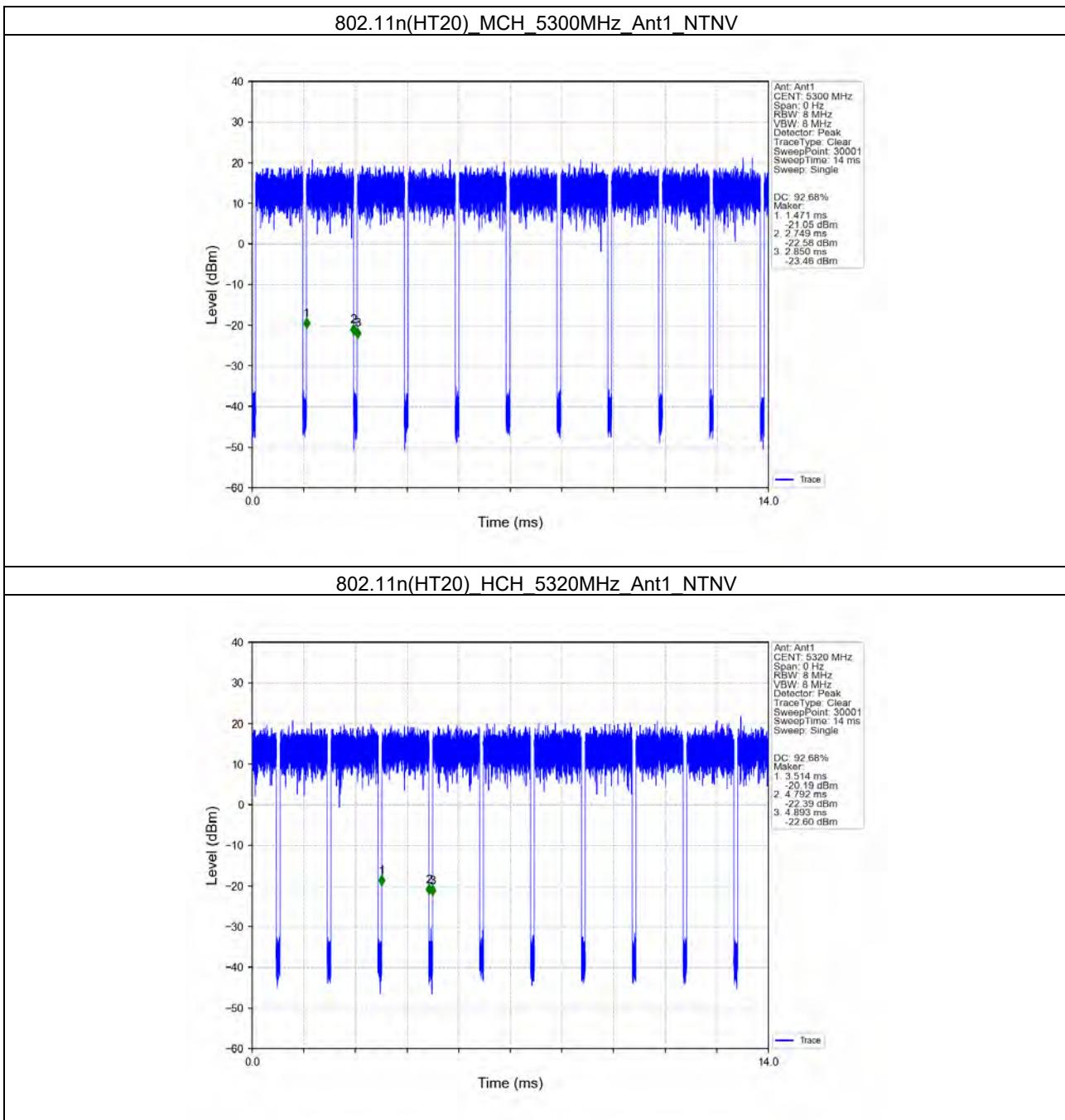


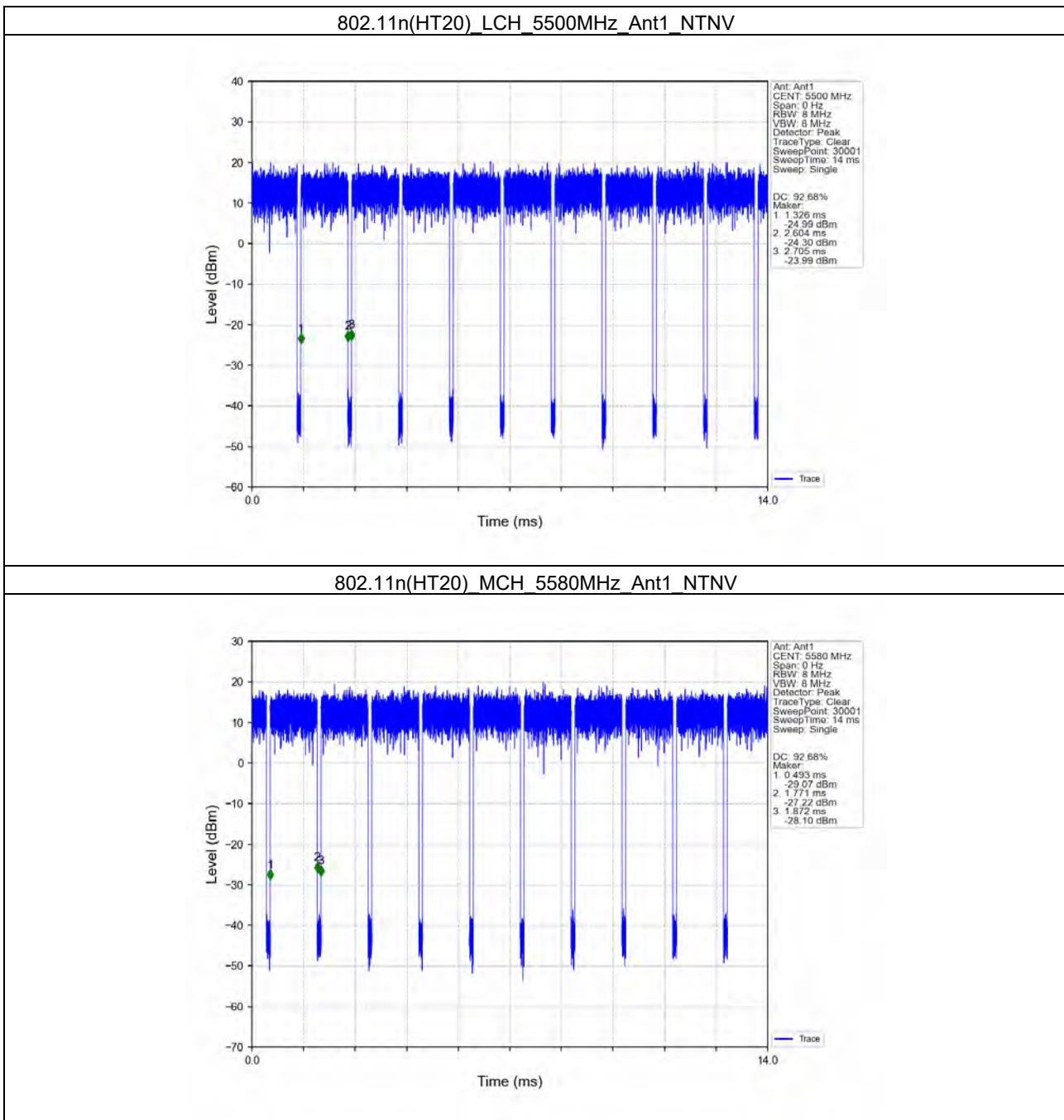


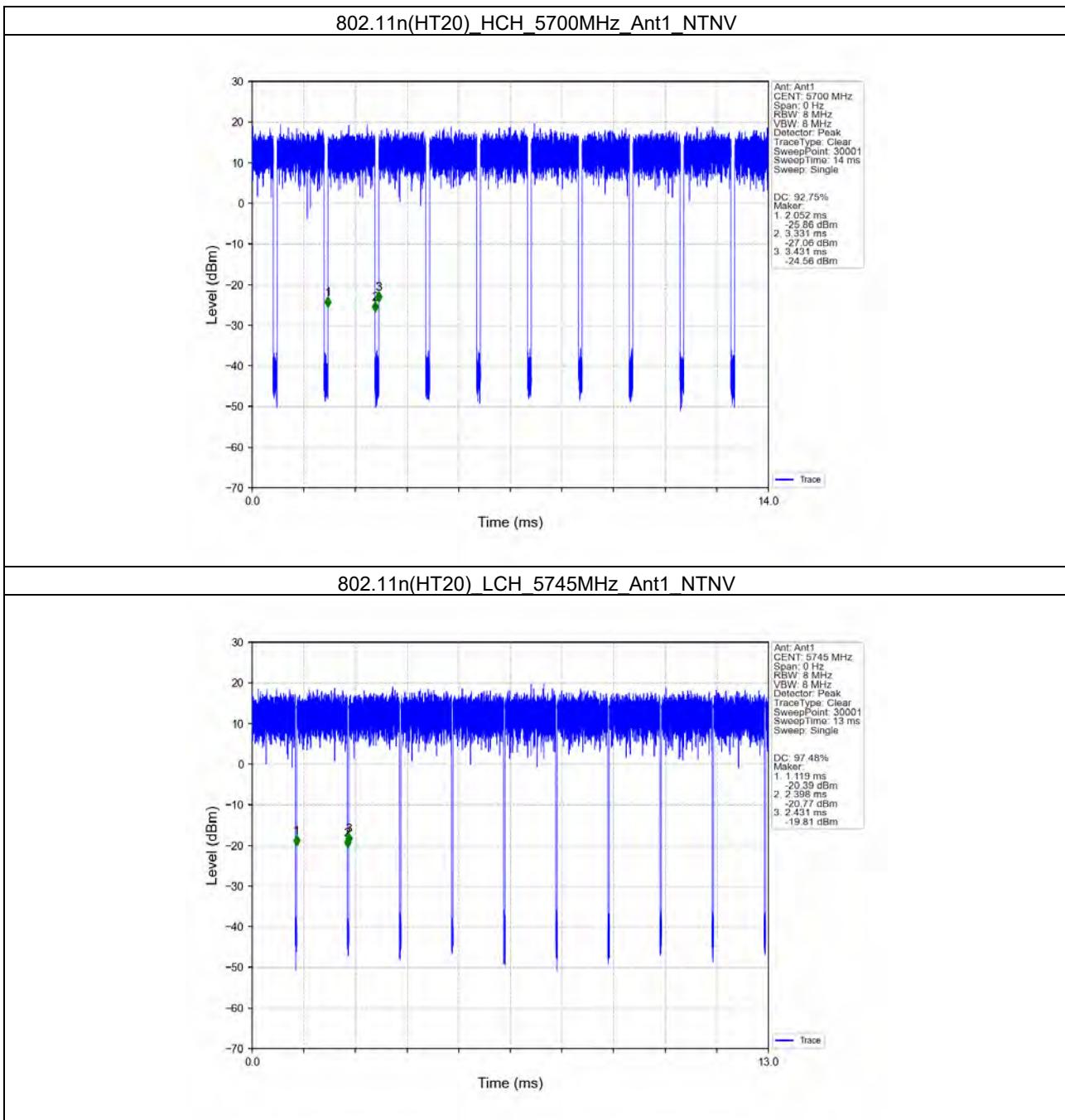


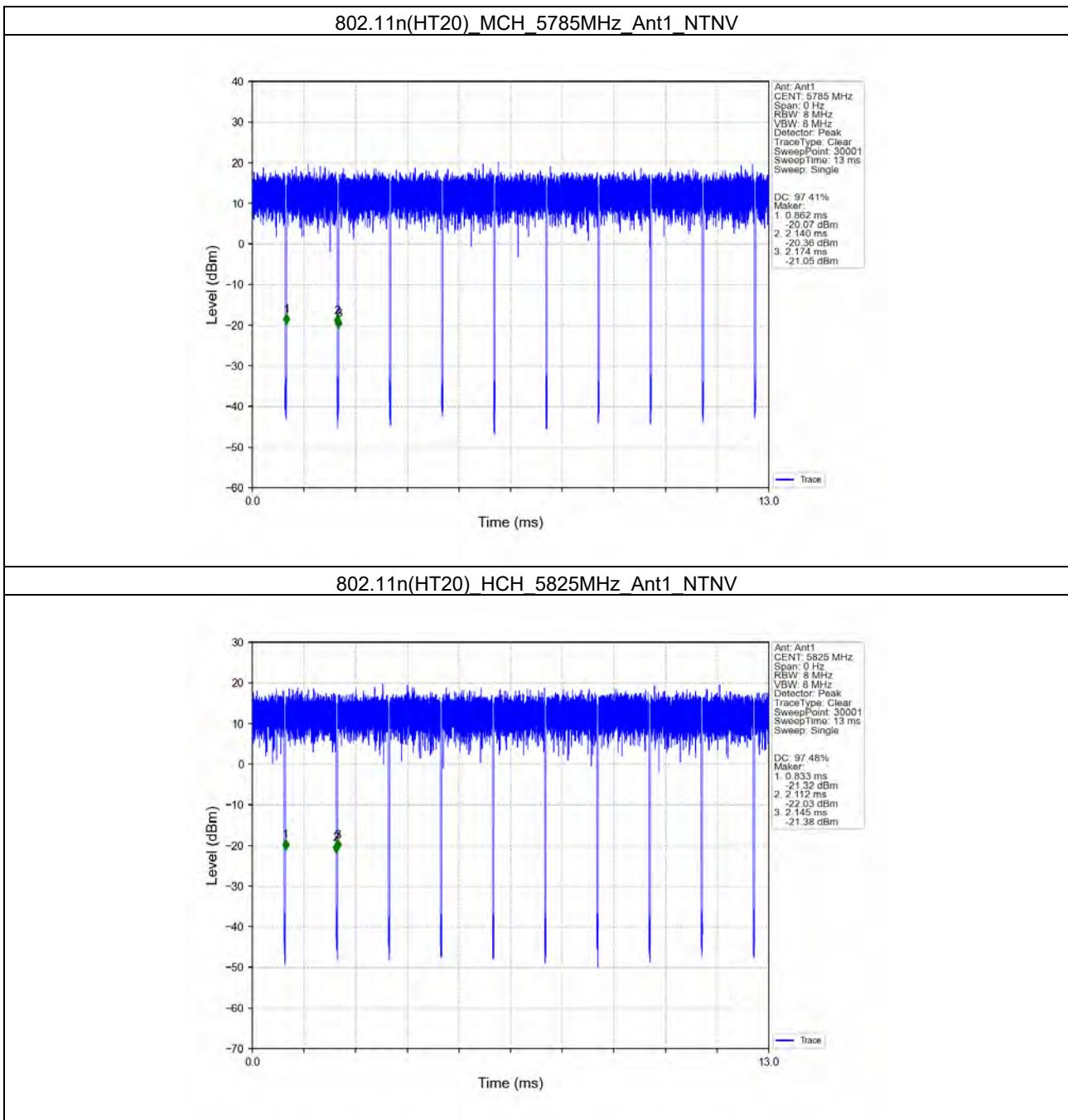


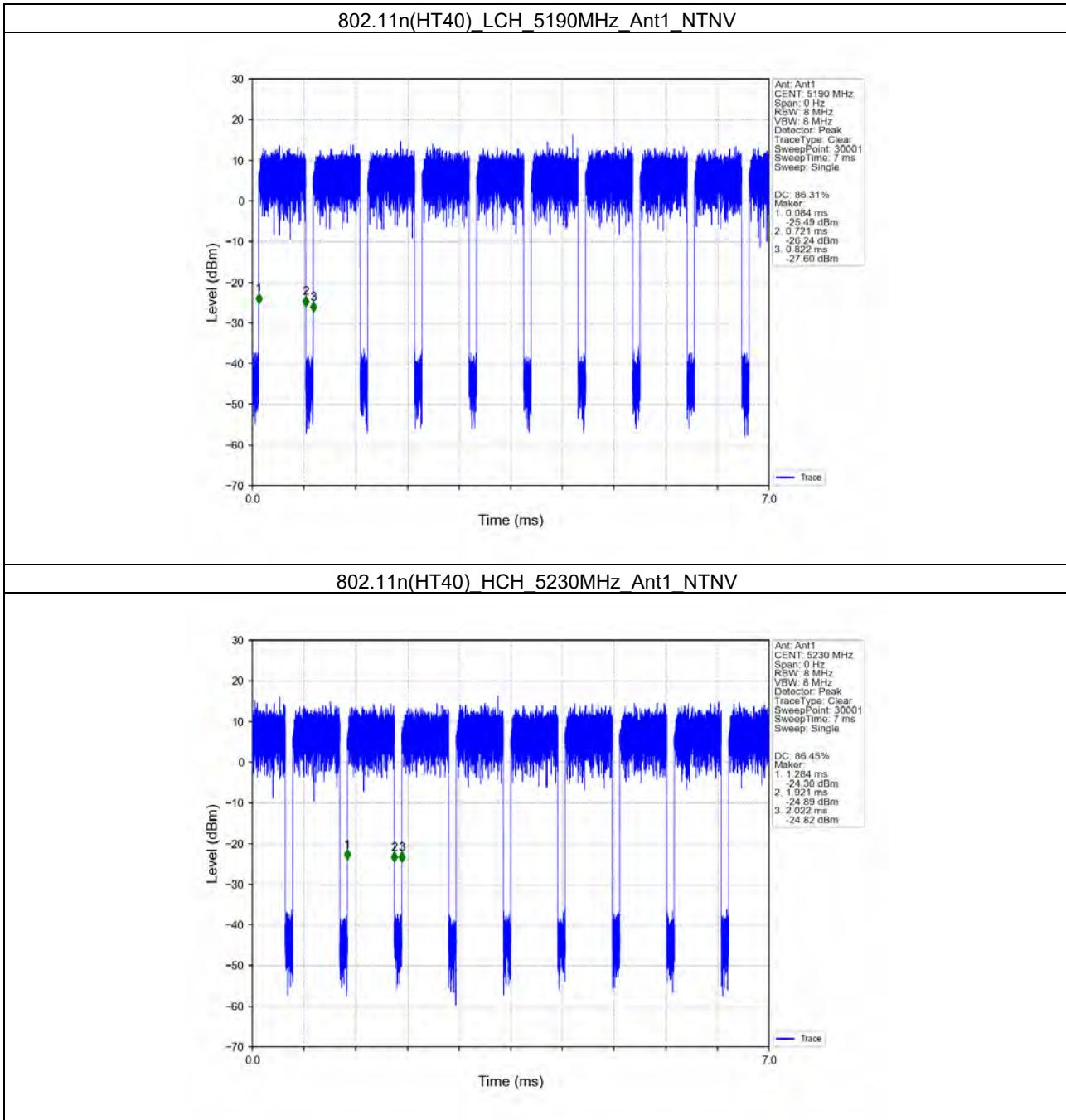


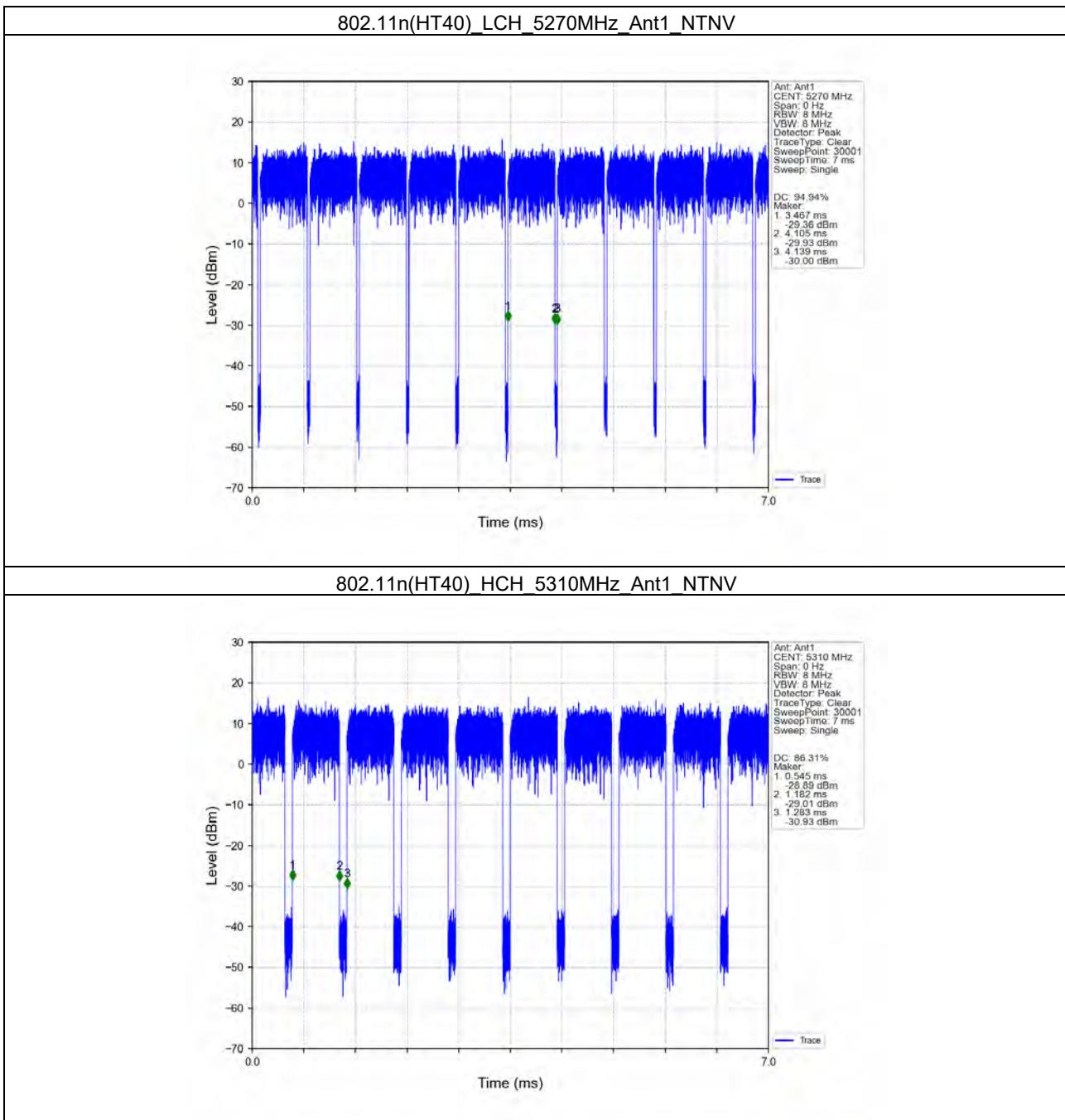


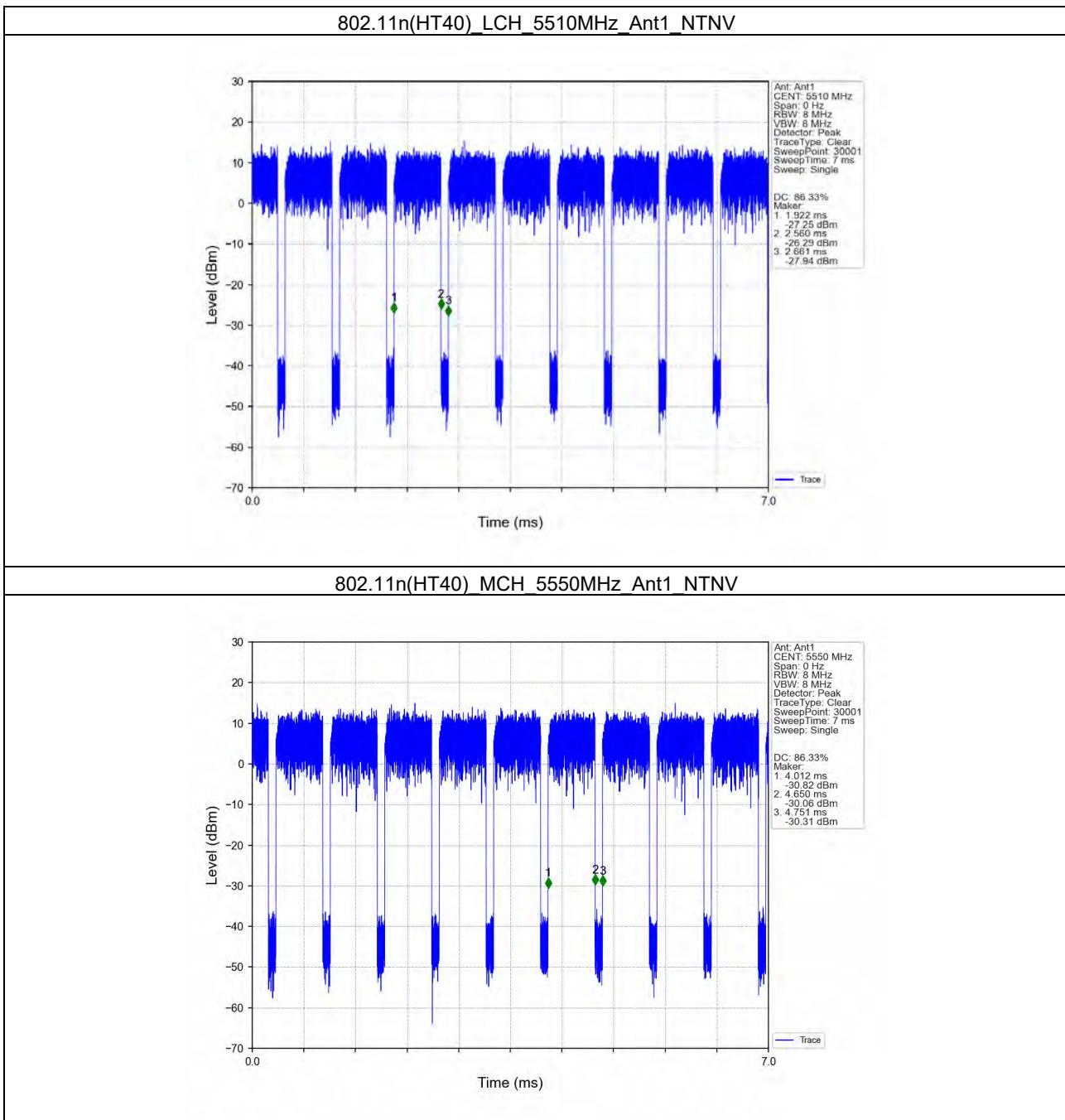


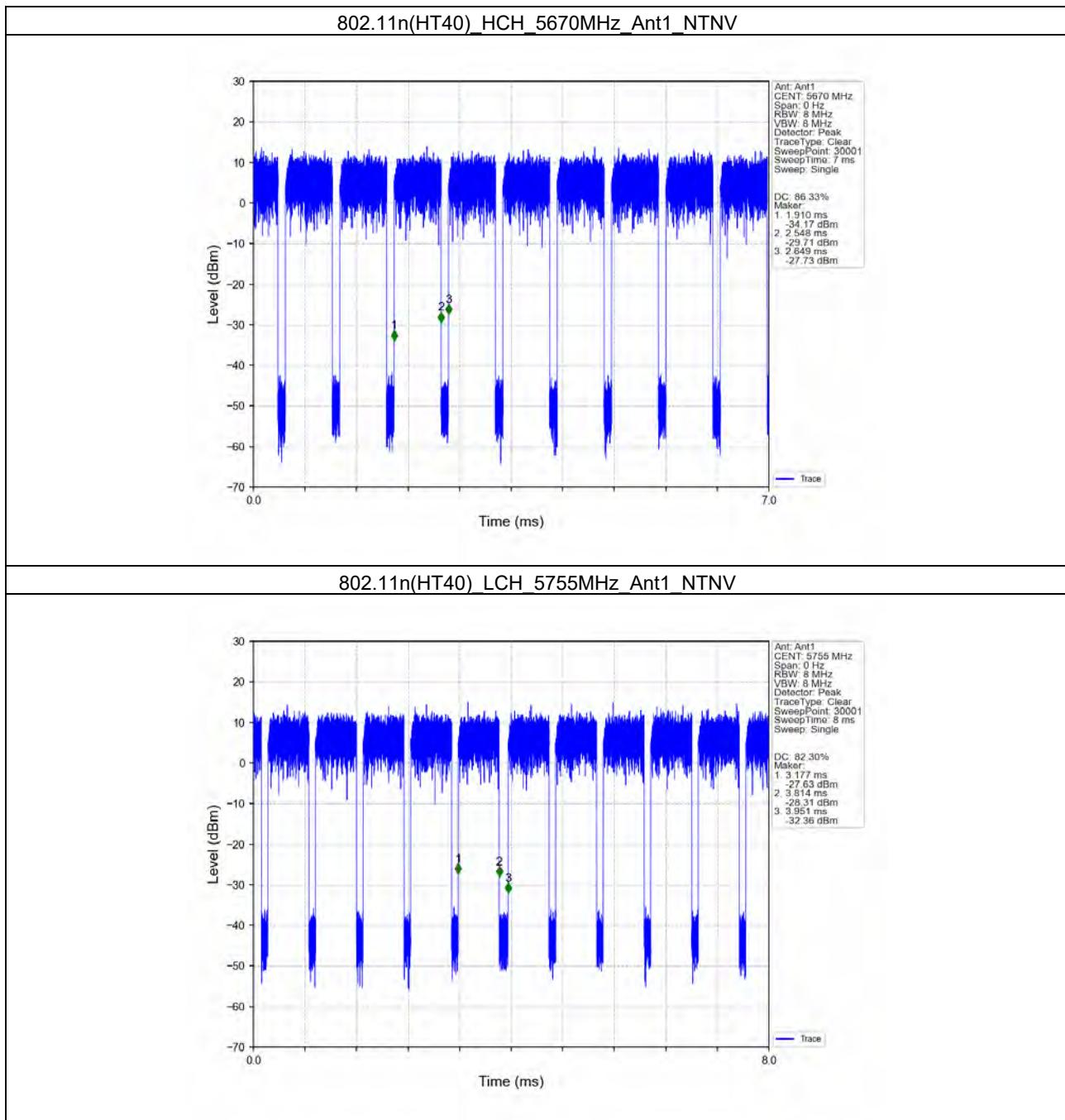


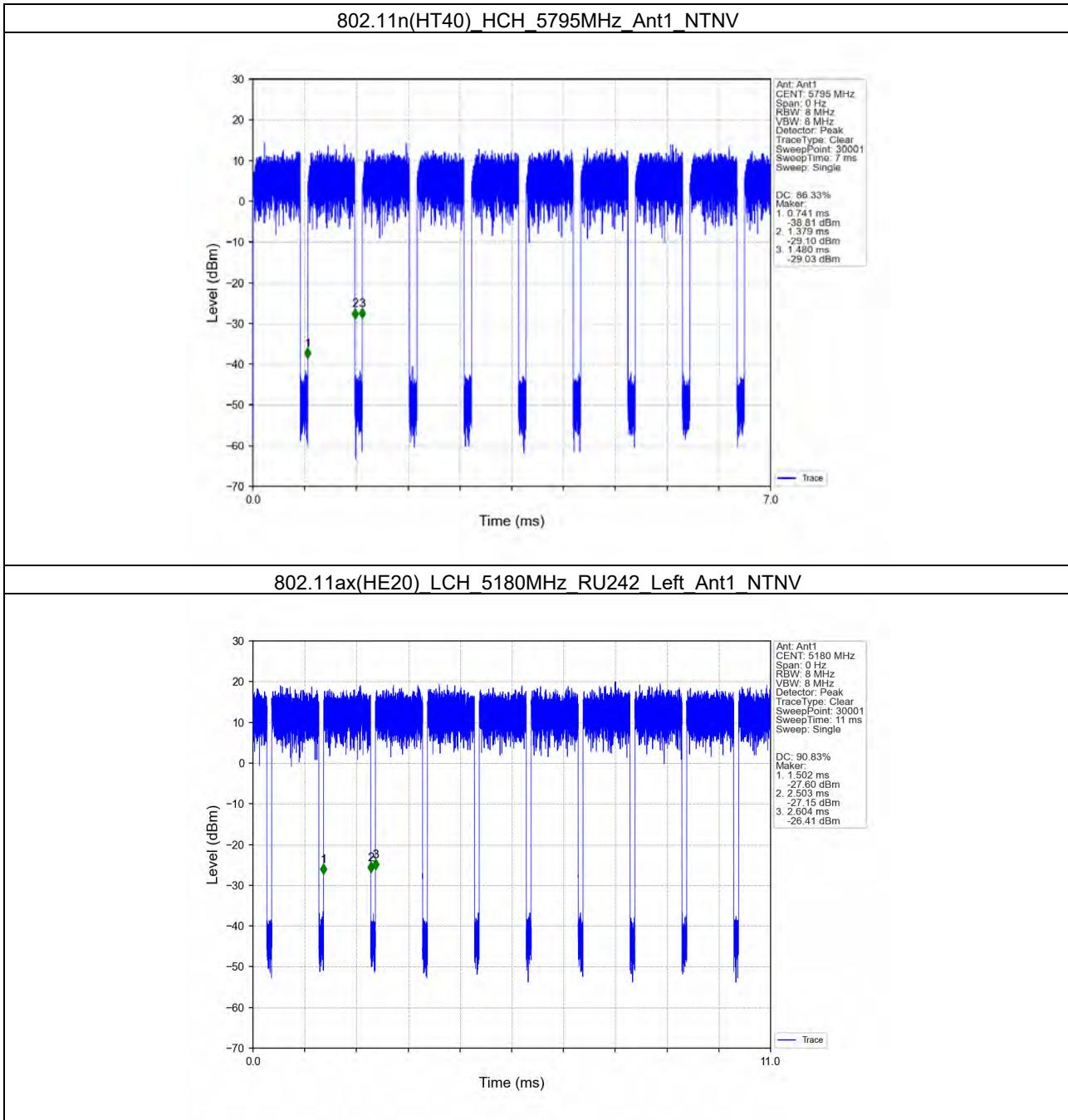


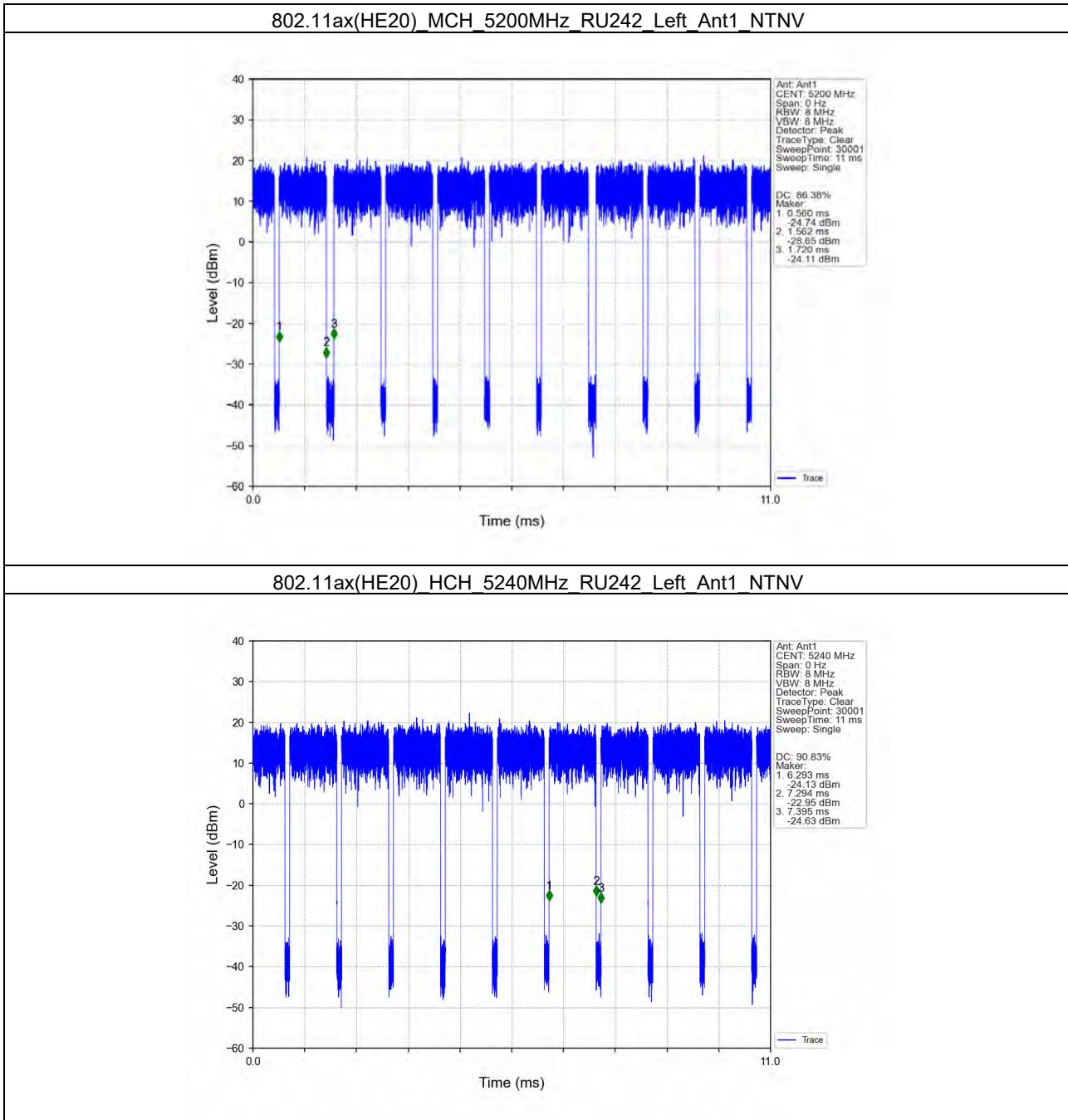


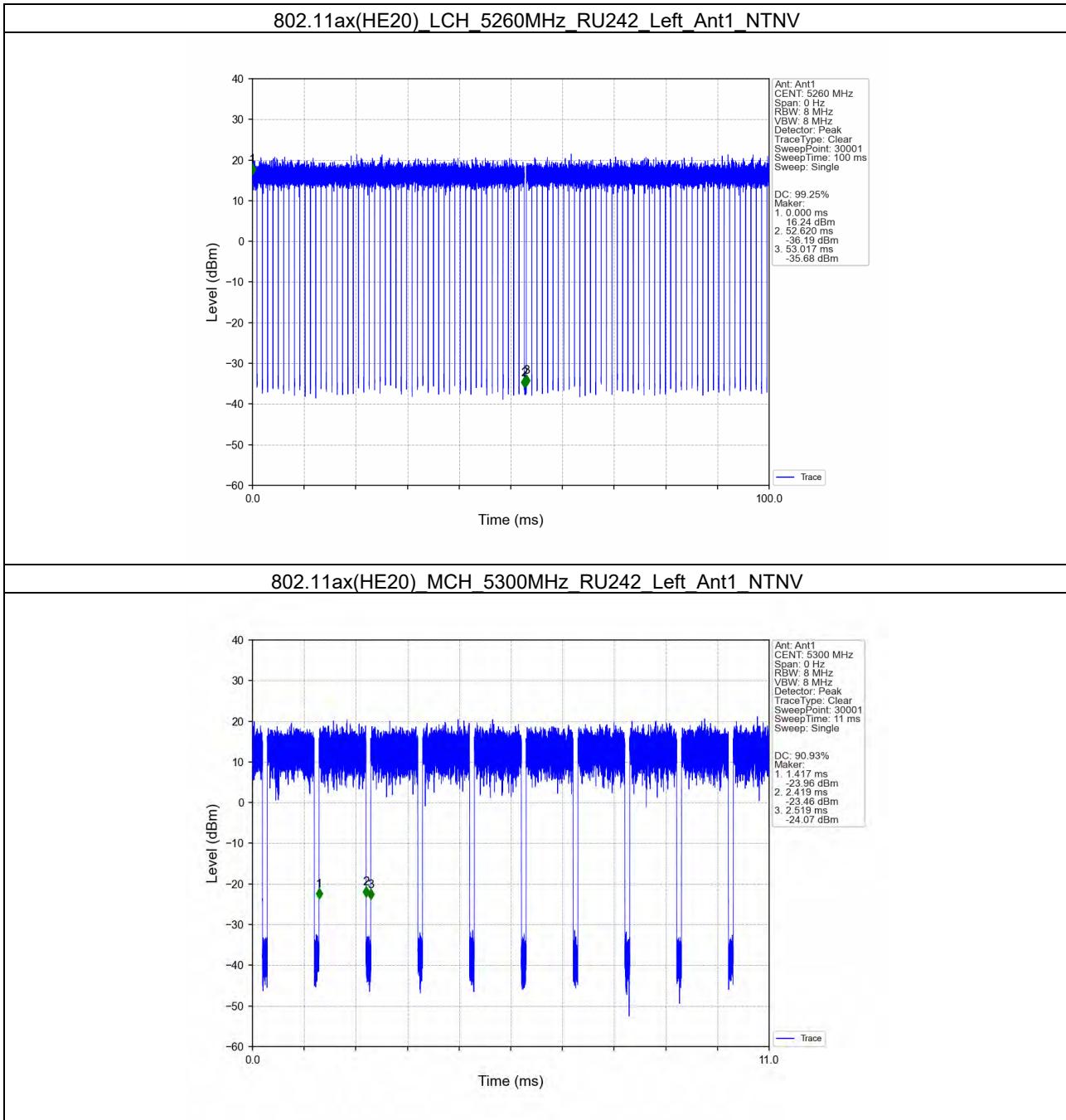


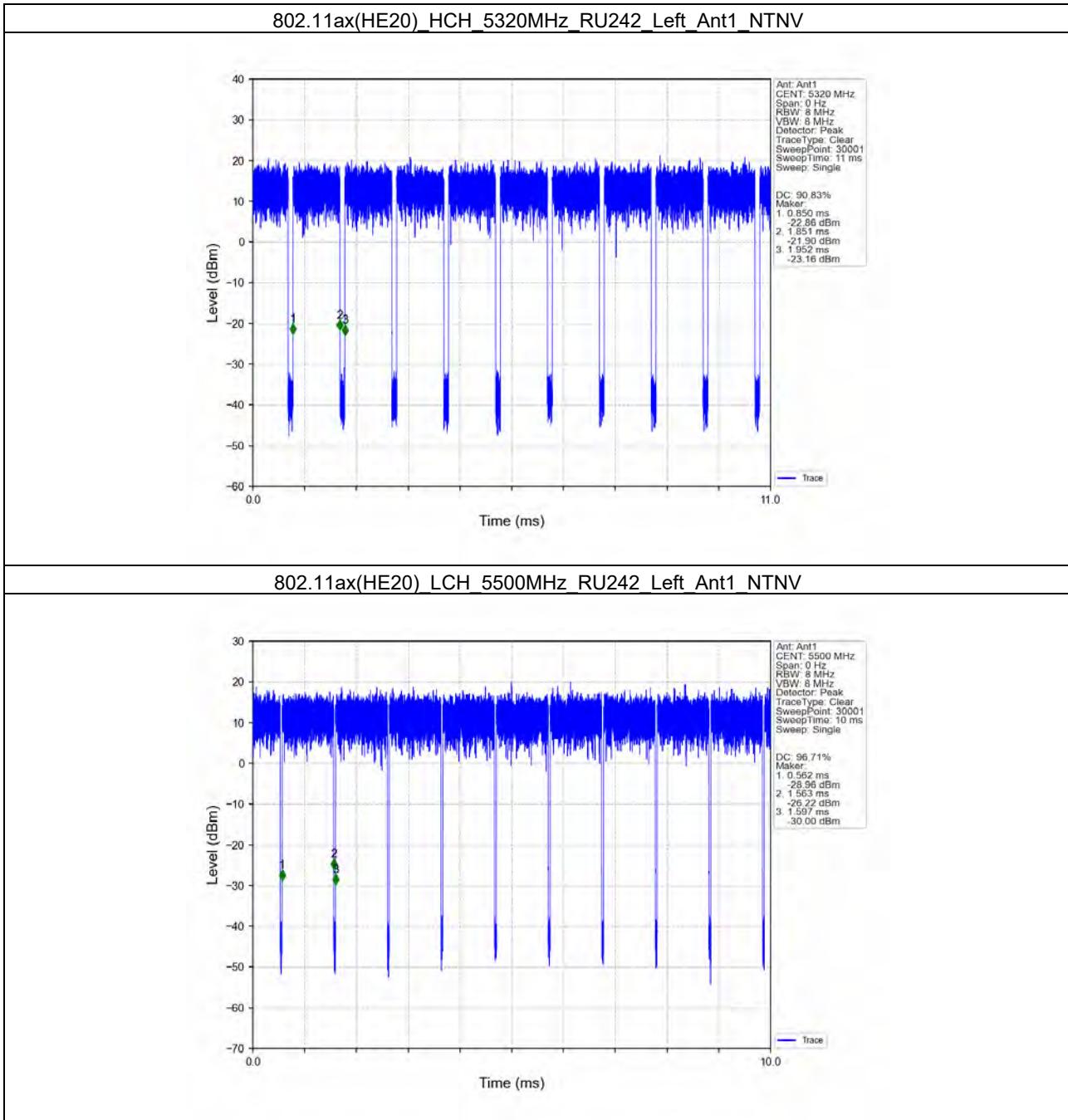


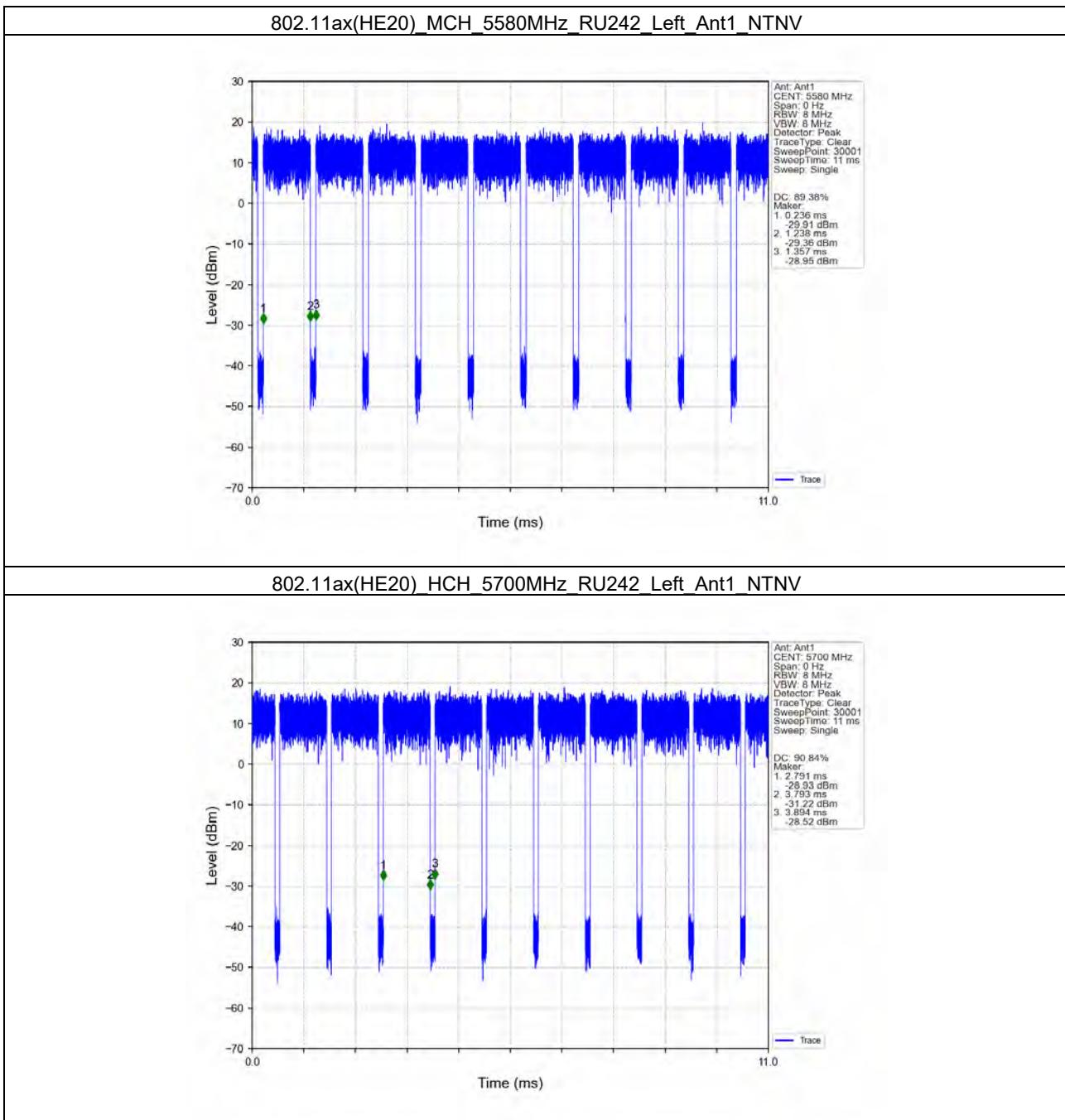


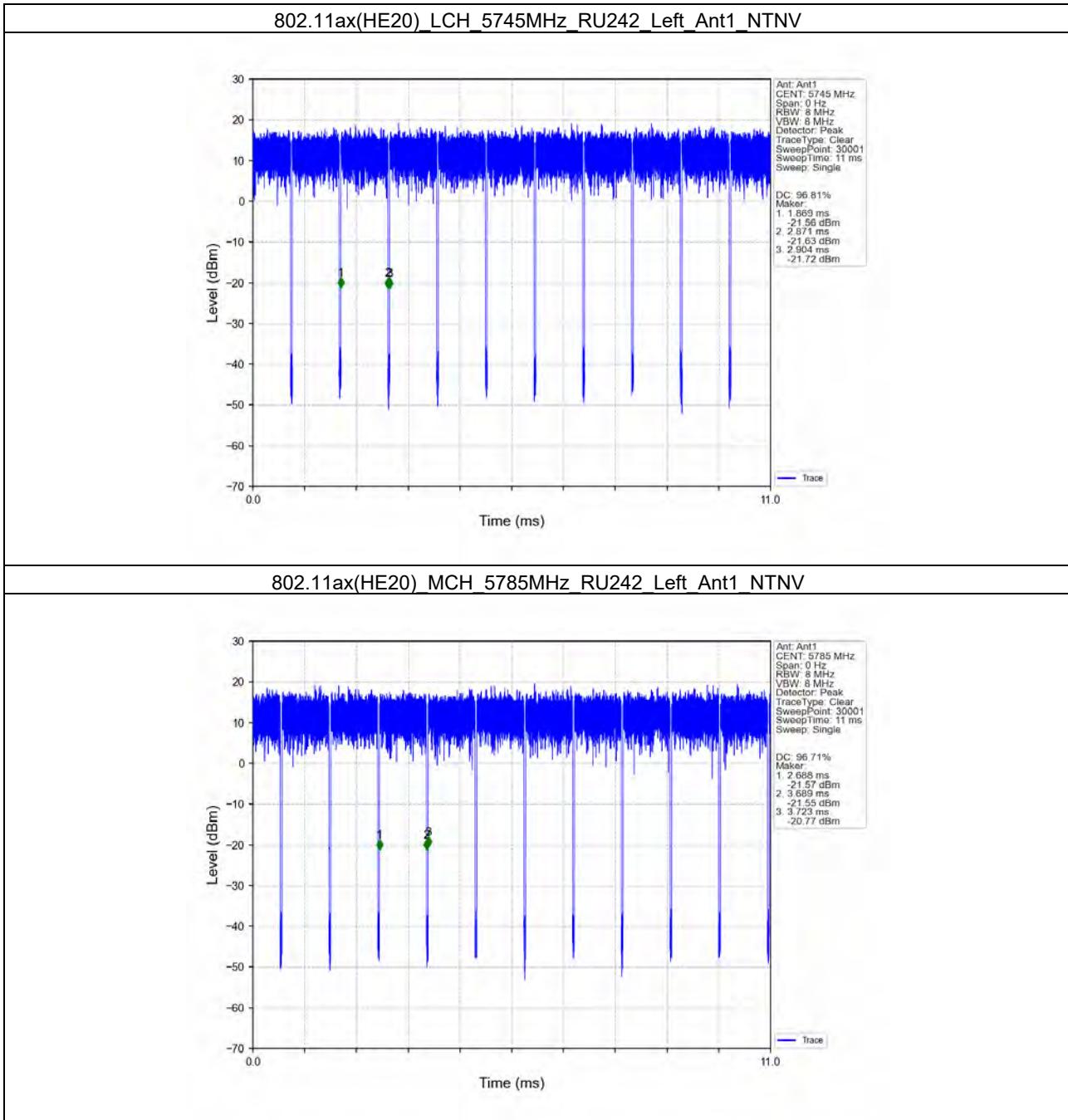


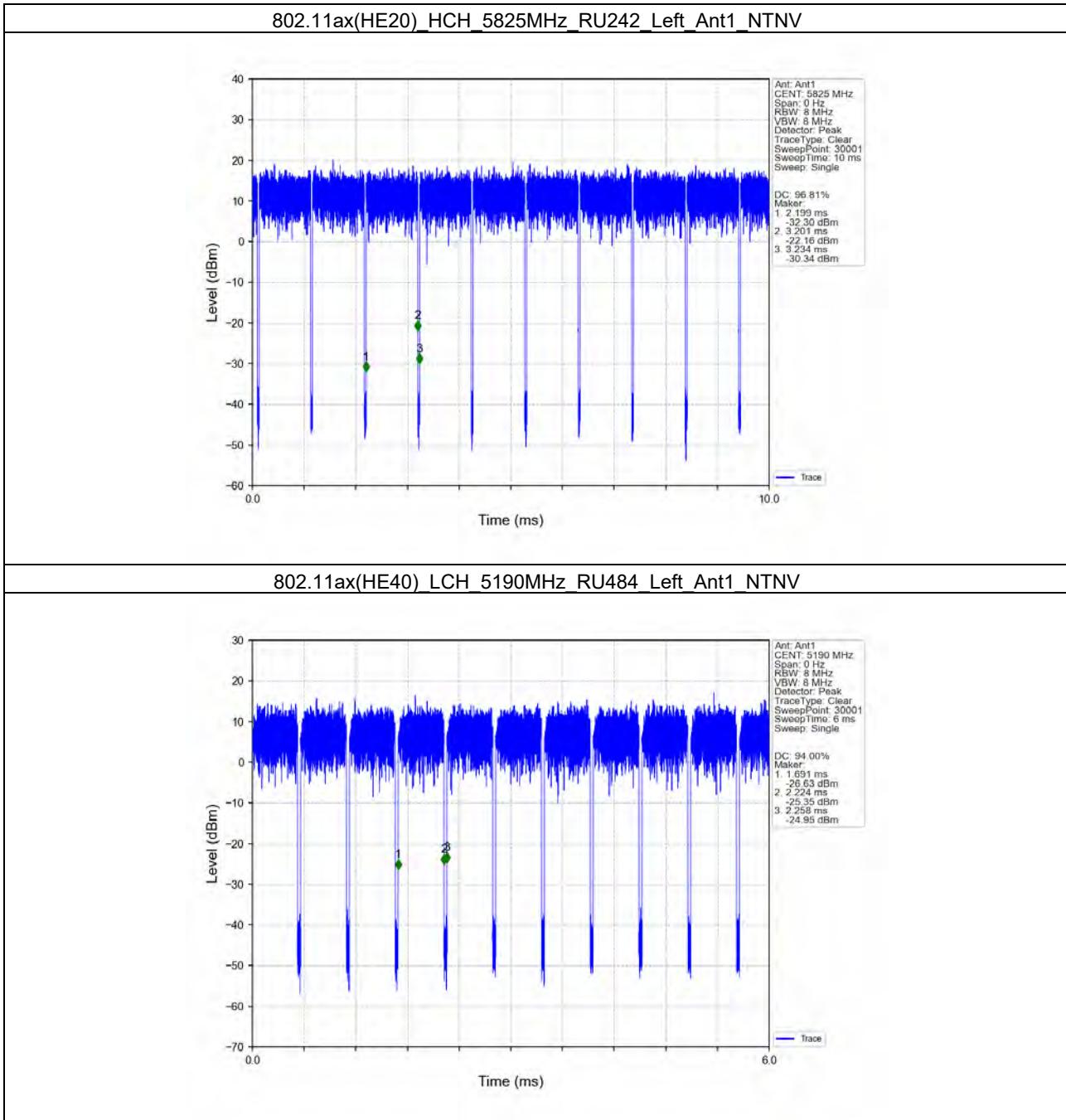


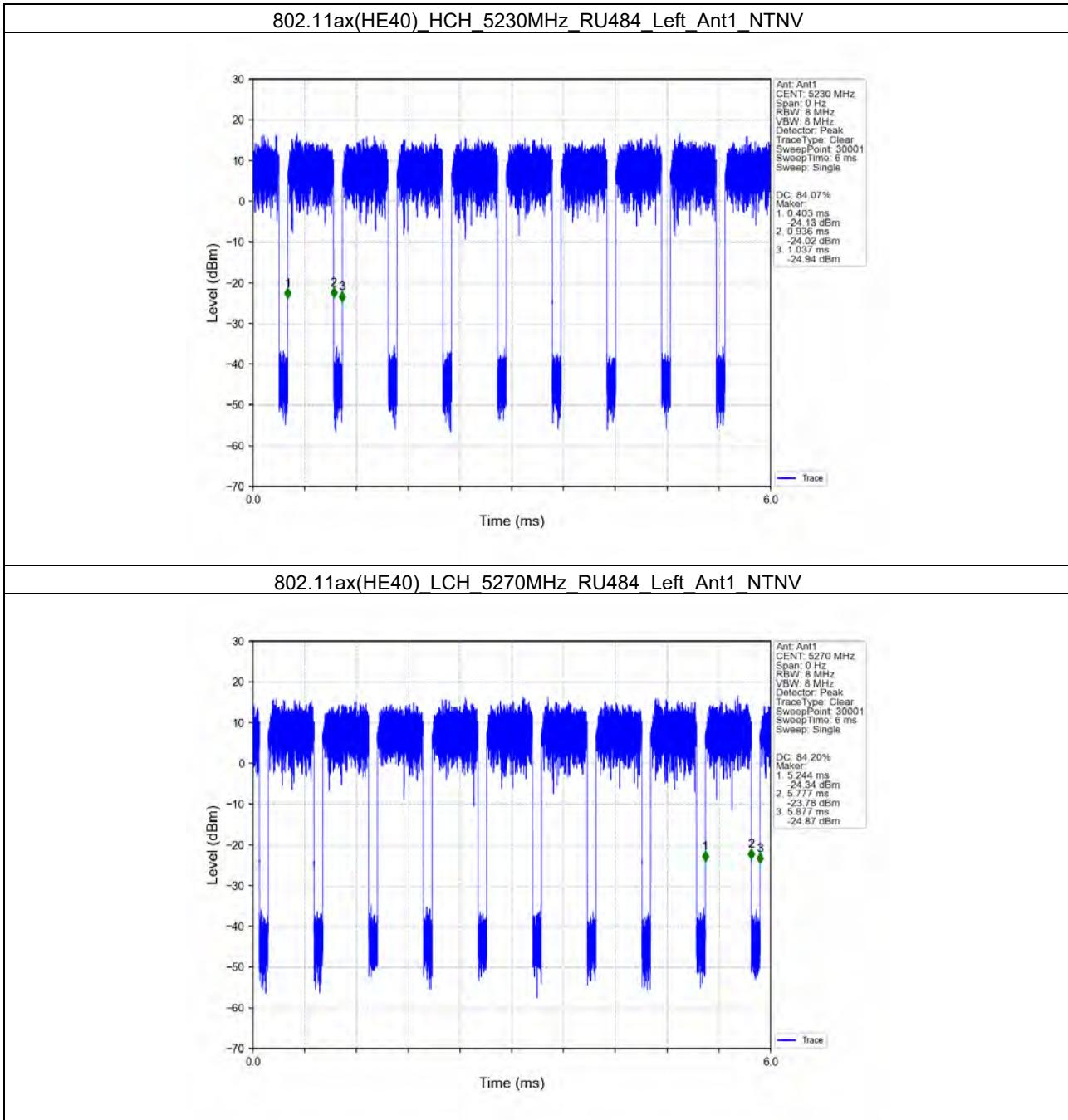


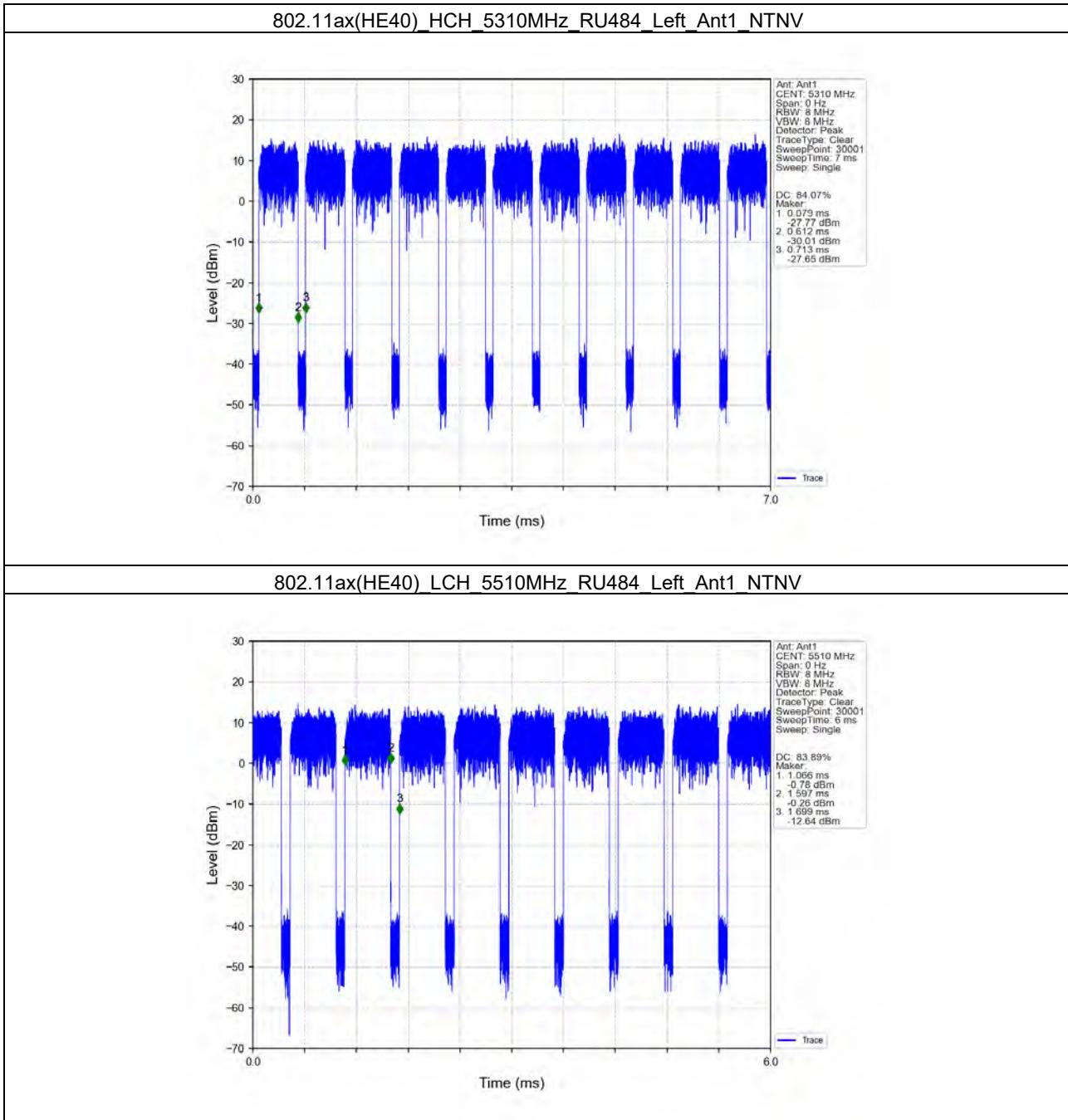


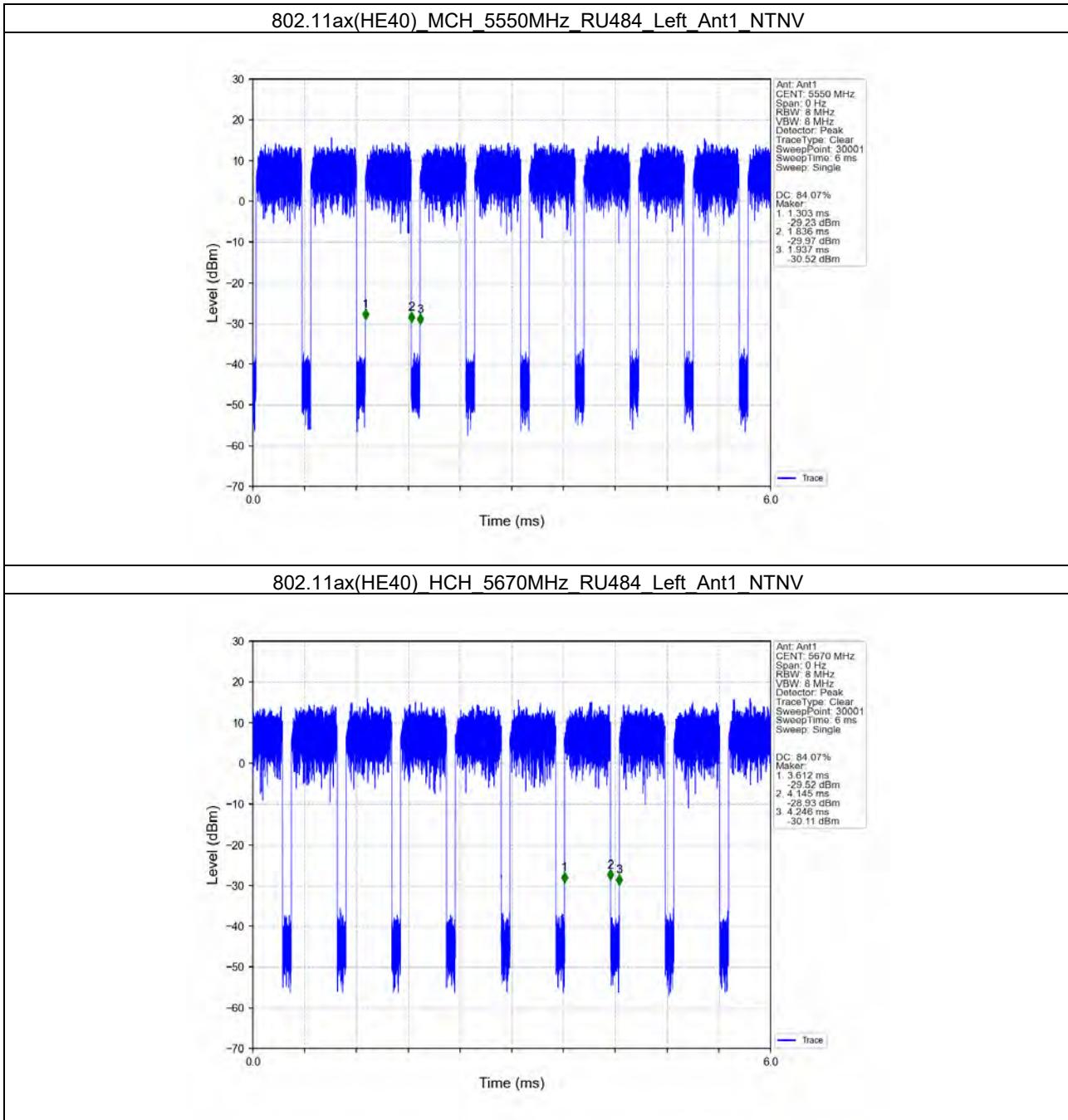


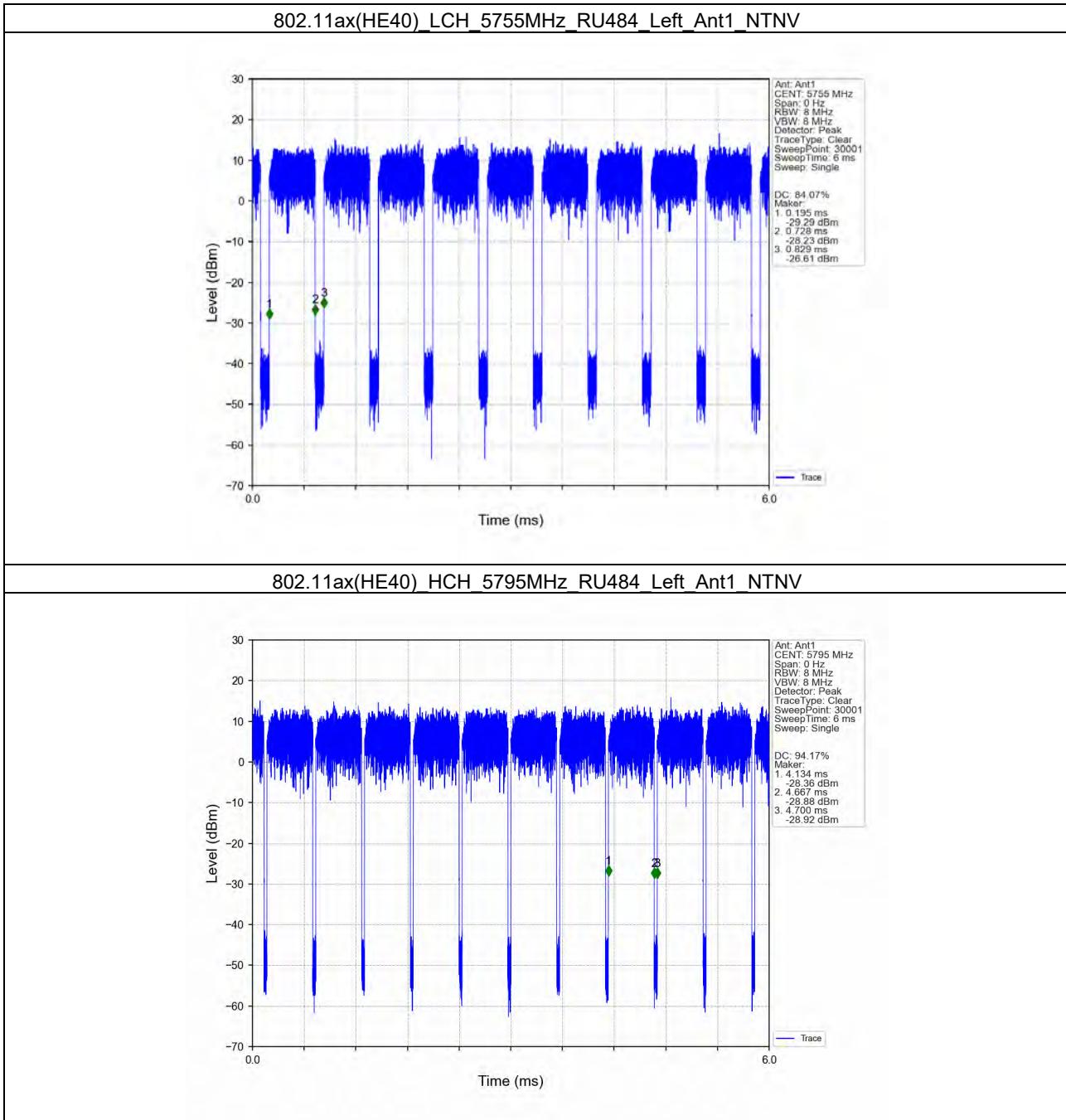












2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	18.777	/	Pass
		5200	/	/	1	18.858	/	Pass
		5240	/	/	1	18.690	/	Pass
		5260	/	/	1	18.799	/	Pass
		5300	/	/	1	18.712	/	Pass
		5320	/	/	1	18.751	/	Pass
		5500	/	/	1	19.273	/	Pass
		5580	/	/	1	19.197	/	Pass
		5700	/	/	1	19.710	/	Pass
		5745	/	/	1	19.331	/	Pass
		5785	/	/	1	19.381	/	Pass
		5825	/	/	1	19.014	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	19.711	/	Pass
		5200	/	/	1	19.712	/	Pass
		5240	/	/	1	19.675	/	Pass
		5260	/	/	1	19.590	/	Pass
		5300	/	/	1	19.665	/	Pass
		5320	/	/	1	19.694	/	Pass
		5500	/	/	1	20.336	/	Pass
		5580	/	/	1	20.111	/	Pass
		5700	/	/	1	20.450	/	Pass
		5745	/	/	1	20.239	/	Pass
		5785	/	/	1	20.141	/	Pass
		5825	/	/	1	20.162	/	Pass
802.11n (HT40)	SISO	5190	/	/	1	37.728	/	Pass
		5230	/	/	1	37.860	/	Pass
		5270	/	/	1	37.929	/	Pass
		5310	/	/	1	37.863	/	Pass
		5510	/	/	1	38.360	/	Pass
		5550	/	/	1	38.249	/	Pass
		5670	/	/	1	38.144	/	Pass
		5755	/	/	1	38.148	/	Pass
		5795	/	/	1	38.181	/	Pass
		5180	RU242	Left	1	20.163	/	Pass
802.11ax (HE20)	SISO	5200	RU242	Left	1	20.057	/	Pass
		5240	RU242	Left	1	20.077	/	Pass
		5260	RU242	Left	1	20.076	/	Pass
		5300	RU242	Left	1	20.133	/	Pass
		5320	RU242	Left	1	20.068	/	Pass
		5500	RU242	Left	1	20.422	/	Pass

		5580	RU242	Left	1	20.431	/	Pass
		5700	RU242	Left	1	20.338	/	Pass
		5745	RU242	Left	1	20.317	/	Pass
		5785	RU242	Left	1	20.339	/	Pass
		5825	RU242	Left	1	20.282	/	Pass
802.11ax (HE40)	SISO	5190	RU484	Left	1	38.770	/	Pass
		5230	RU484	Left	1	38.686	/	Pass
		5270	RU484	Left	1	38.870	/	Pass
		5310	RU484	Left	1	38.745	/	Pass
		5510	RU484	Left	1	39.296	/	Pass
		5550	RU484	Left	1	39.066	/	Pass
		5670	RU484	Left	1	39.352	/	Pass
		5755	RU484	Left	1	39.146	/	Pass
		5795	RU484	Left	1	39.232	/	Pass

2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5745	/	/	1	16.436	>=0.5	Pass
		5785	/	/	1	16.445	>=0.5	Pass
		5825	/	/	1	16.421	>=0.5	Pass
802.11n (HT20)	SISO	5745	/	/	1	17.665	>=0.5	Pass
		5785	/	/	1	17.649	>=0.5	Pass
		5825	/	/	1	17.647	>=0.5	Pass
802.11n (HT40)	SISO	5755	/	/	1	36.417	>=0.5	Pass
		5795	/	/	1	36.394	>=0.5	Pass
802.11ax (HE20)	SISO	5745	RU242	Left	1	19.064	>=0.5	Pass
		5785	RU242	Left	1	19.066	>=0.5	Pass
		5825	RU242	Left	1	19.096	>=0.5	Pass
802.11ax (HE40)	SISO	5755	RU484	Left	1	38.156	>=0.5	Pass
		5795	RU484	Left	1	38.124	>=0.5	Pass

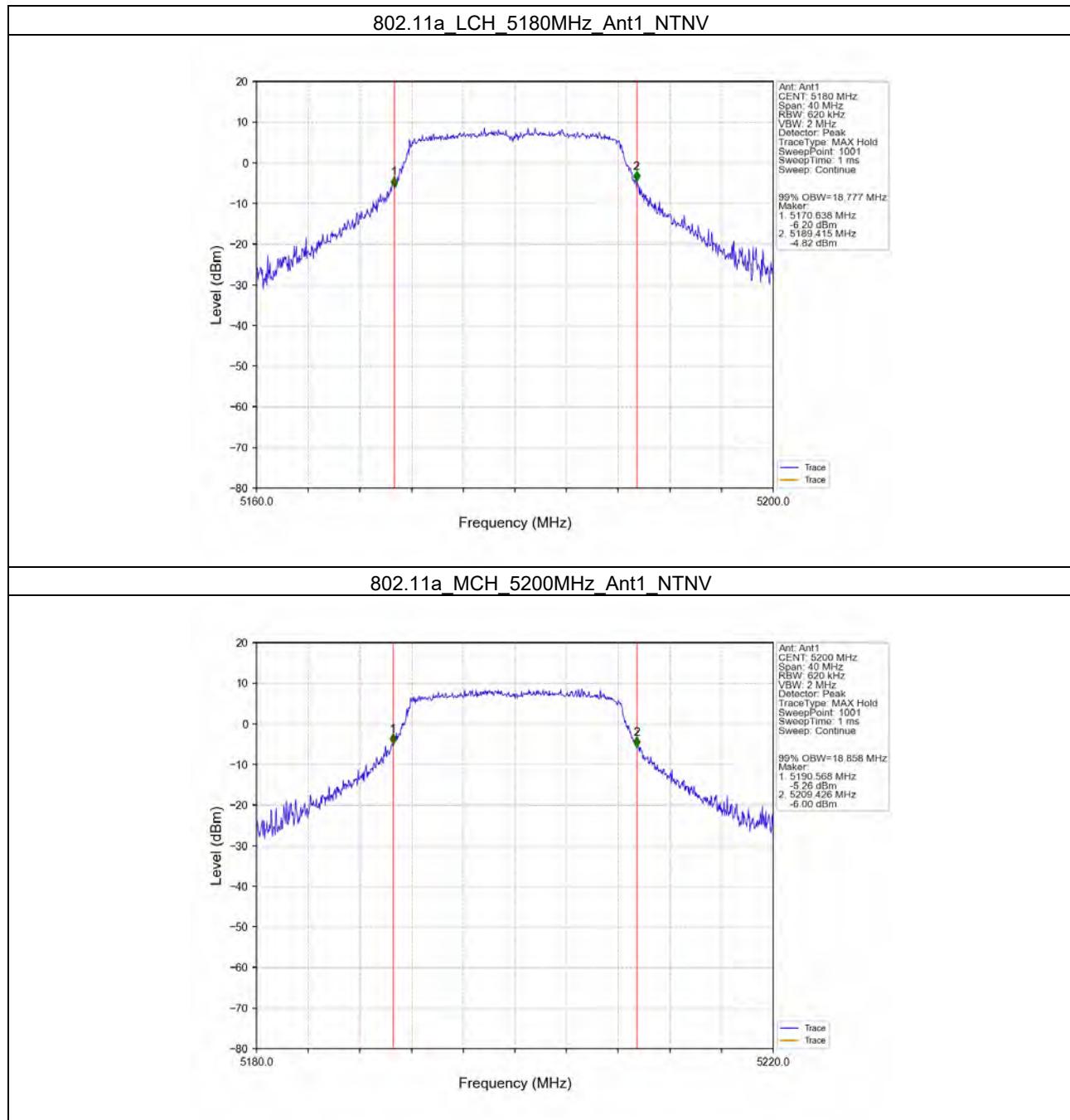
2.1.3 26dB BW

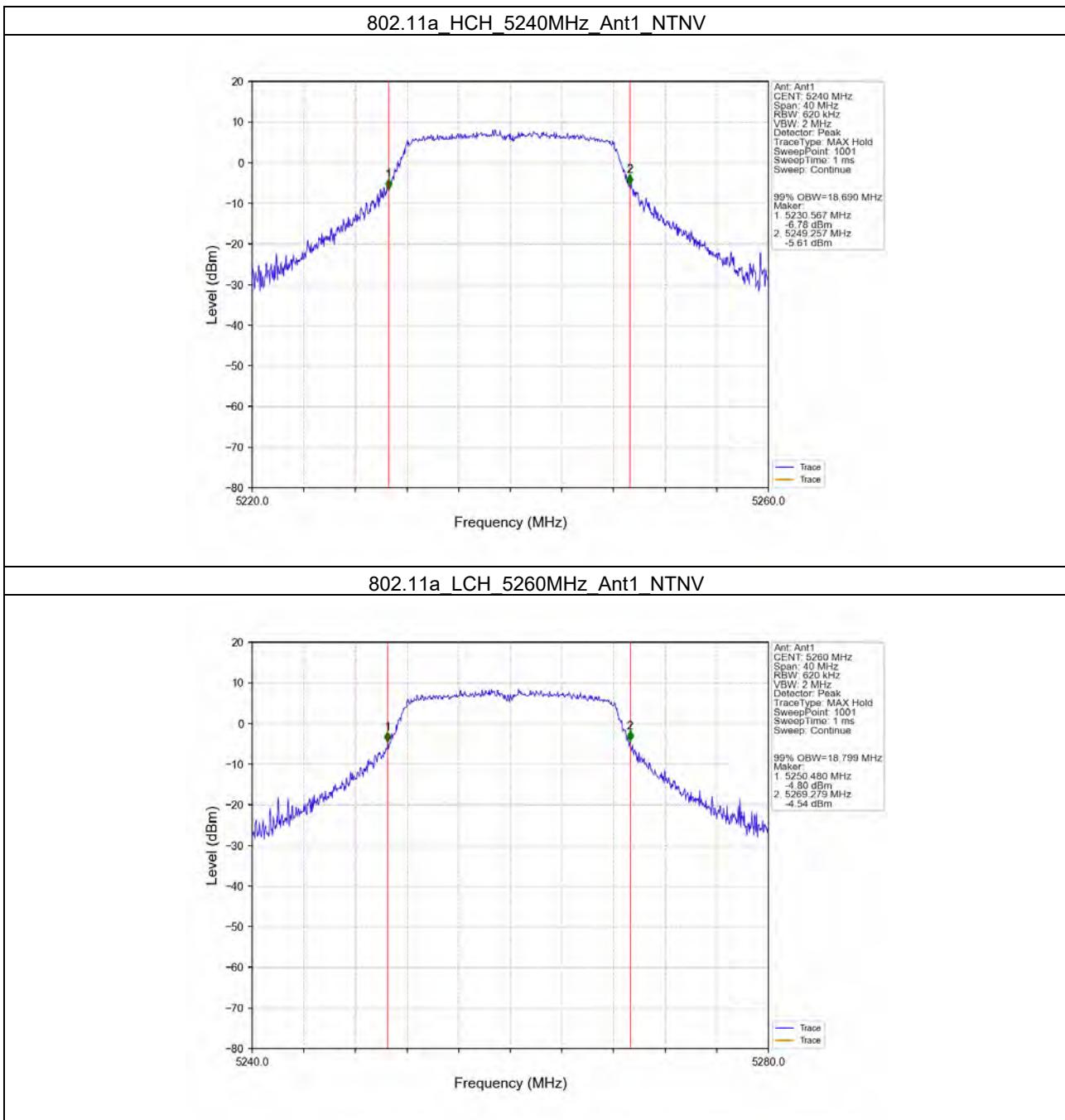
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	24.121	/	Pass
		5200	/	/	1	25.461	/	Pass
		5240	/	/	1	24.985	/	Pass
		5260	/	/	1	25.501	/	Pass
		5300	/	/	1	25.051	/	Pass
		5320	/	/	1	24.512	/	Pass
		5500	/	/	1	25.244	/	Pass
		5580	/	/	1	27.261	/	Pass
		5700	/	/	1	27.700	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	25.291	/	Pass
		5200	/	/	1	26.198	/	Pass
		5240	/	/	1	25.753	/	Pass
		5260	/	/	1	25.098	/	Pass

		5300	/	/	1	25.123	/	Pass
		5320	/	/	1	25.122	/	Pass
		5500	/	/	1	25.934	/	Pass
		5580	/	/	1	26.005	/	Pass
		5700	/	/	1	27.037	/	Pass
802.11n (HT40)	SISO	5190	/	/	1	44.995	/	Pass
		5230	/	/	1	46.077	/	Pass
		5270	/	/	1	45.651	/	Pass
		5310	/	/	1	45.527	/	Pass
		5510	/	/	1	47.009	/	Pass
		5550	/	/	1	46.595	/	Pass
		5670	/	/	1	46.844	/	Pass
		5180	RU242	Left	1	25.306	/	Pass
802.11ax (HE20)	SISO	5200	RU242	Left	1	24.978	/	Pass
		5240	RU242	Left	1	24.194	/	Pass
		5260	RU242	Left	1	24.831	/	Pass
		5300	RU242	Left	1	25.505	/	Pass
		5320	RU242	Left	1	25.407	/	Pass
		5500	RU242	Left	1	26.813	/	Pass
		5580	RU242	Left	1	26.008	/	Pass
		5700	RU242	Left	1	26.437	/	Pass
		5190	RU484	Left	1	44.958	/	Pass
802.11ax (HE40)	SISO	5230	RU484	Left	1	45.244	/	Pass
		5270	RU484	Left	1	44.942	/	Pass
		5310	RU484	Left	1	45.376	/	Pass
		5510	RU484	Left	1	45.890	/	Pass
		5550	RU484	Left	1	48.297	/	Pass
		5670	RU484	Left	1	45.601	/	Pass

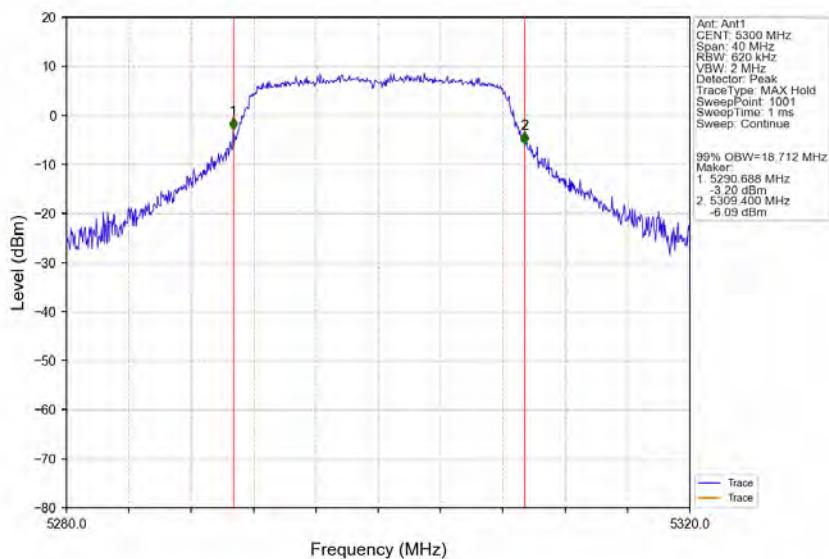
2.2 Test Graph

2.2.1 OBW

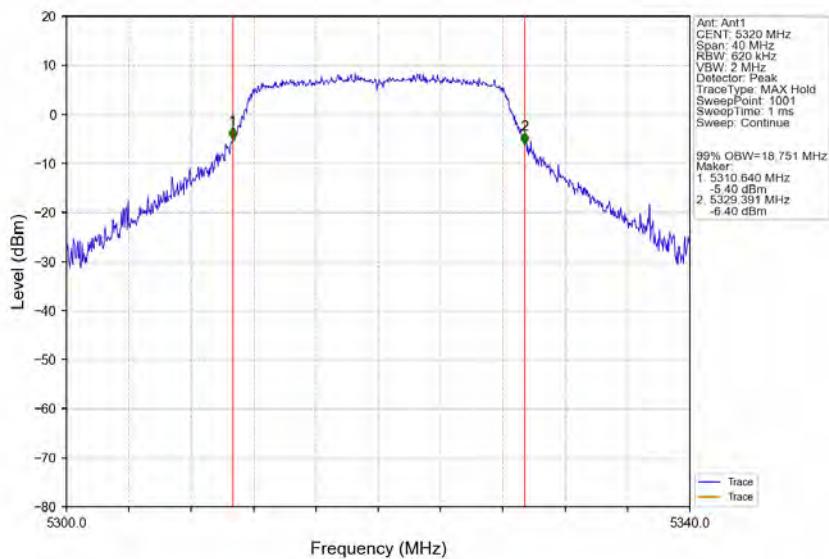


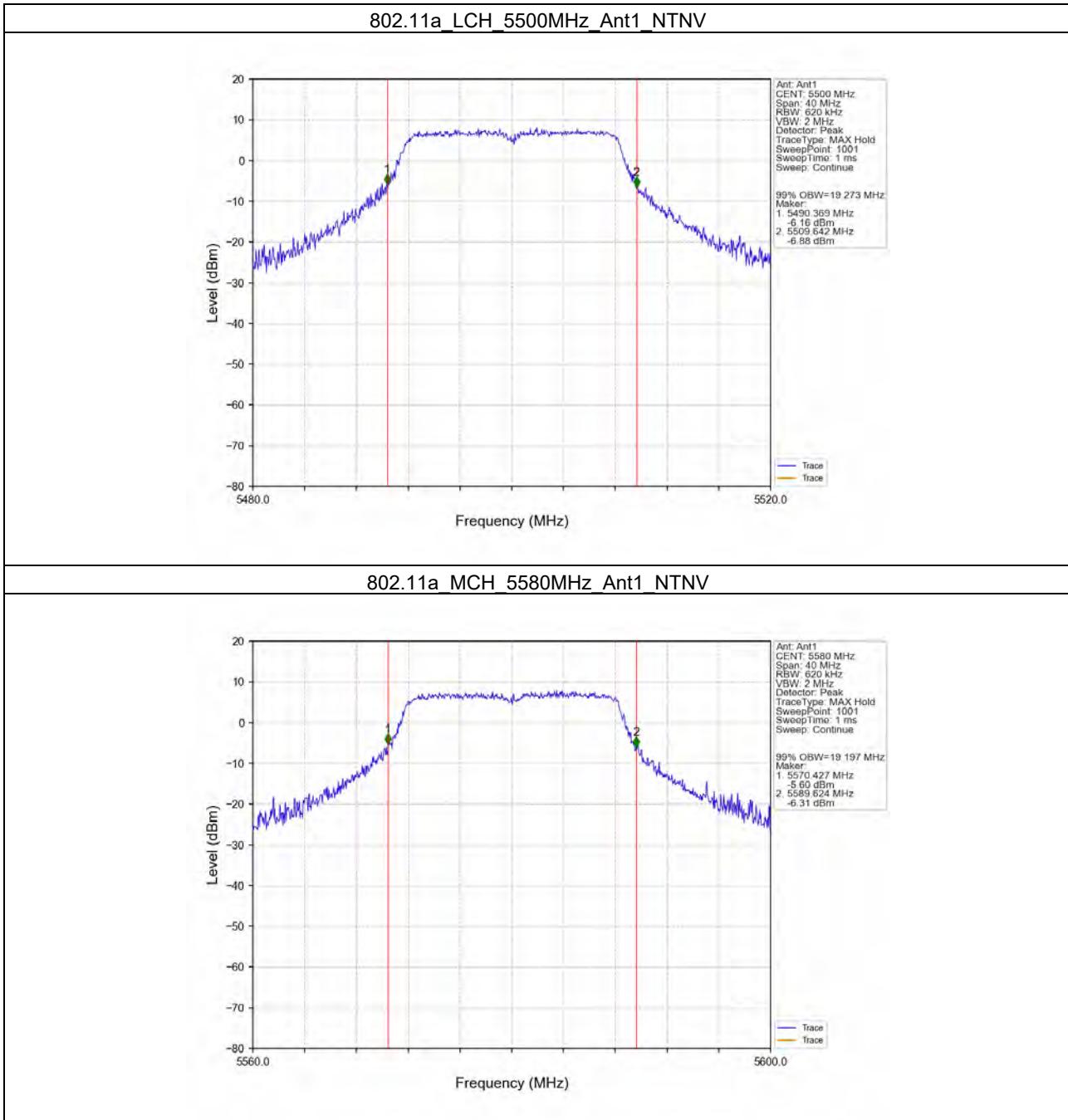


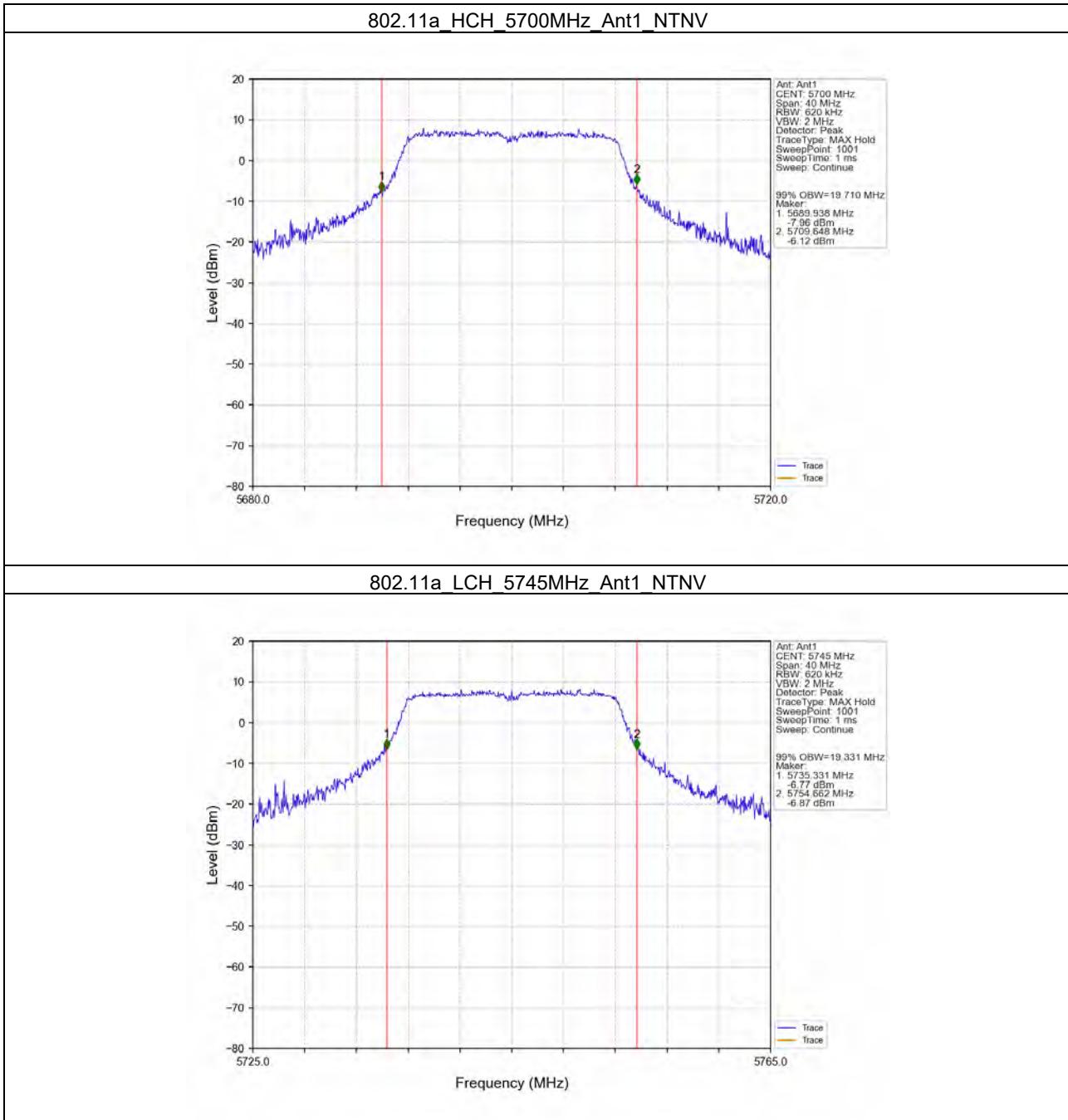
802.11a MCH 5300MHz Ant1 NTVN

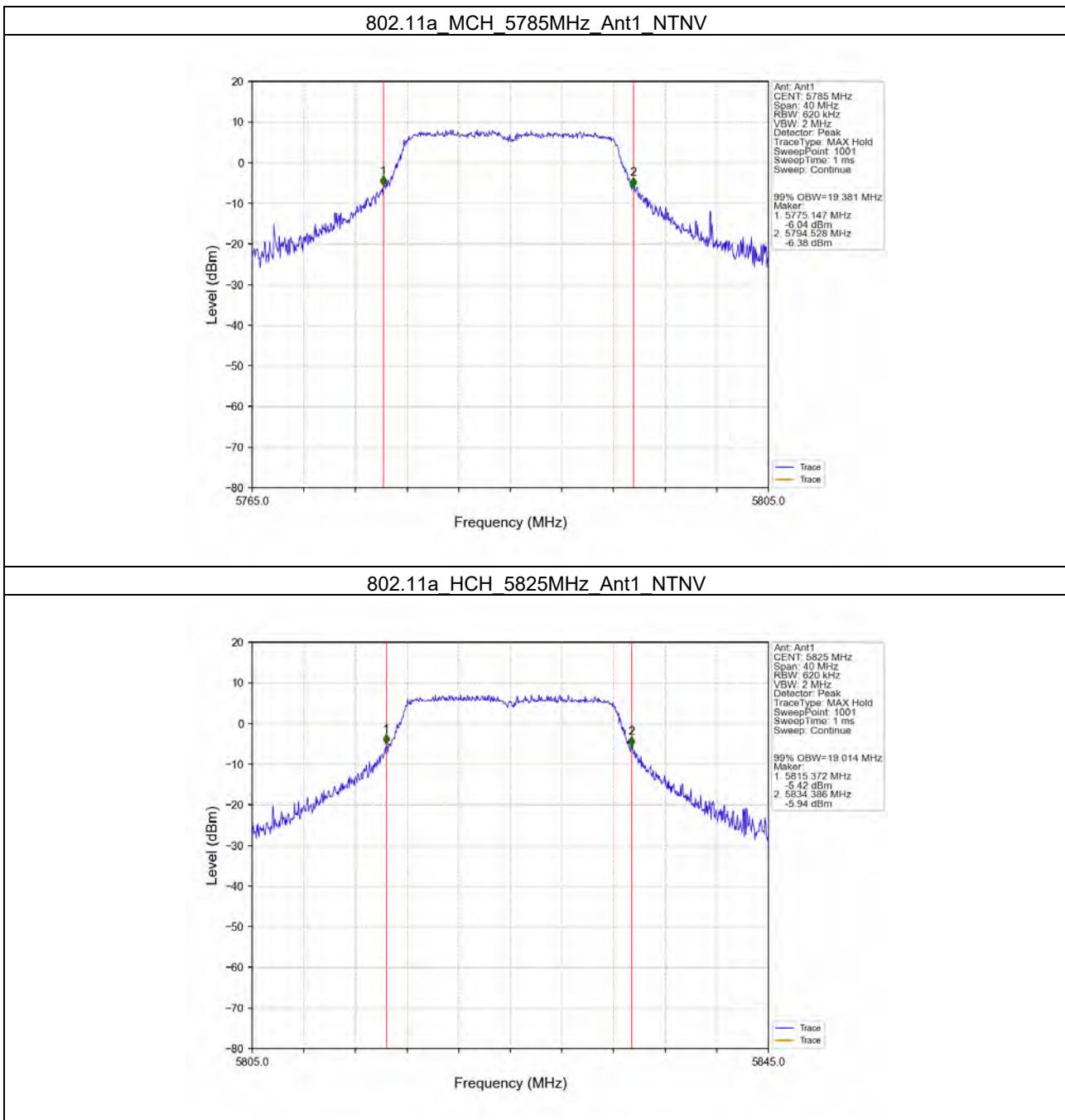


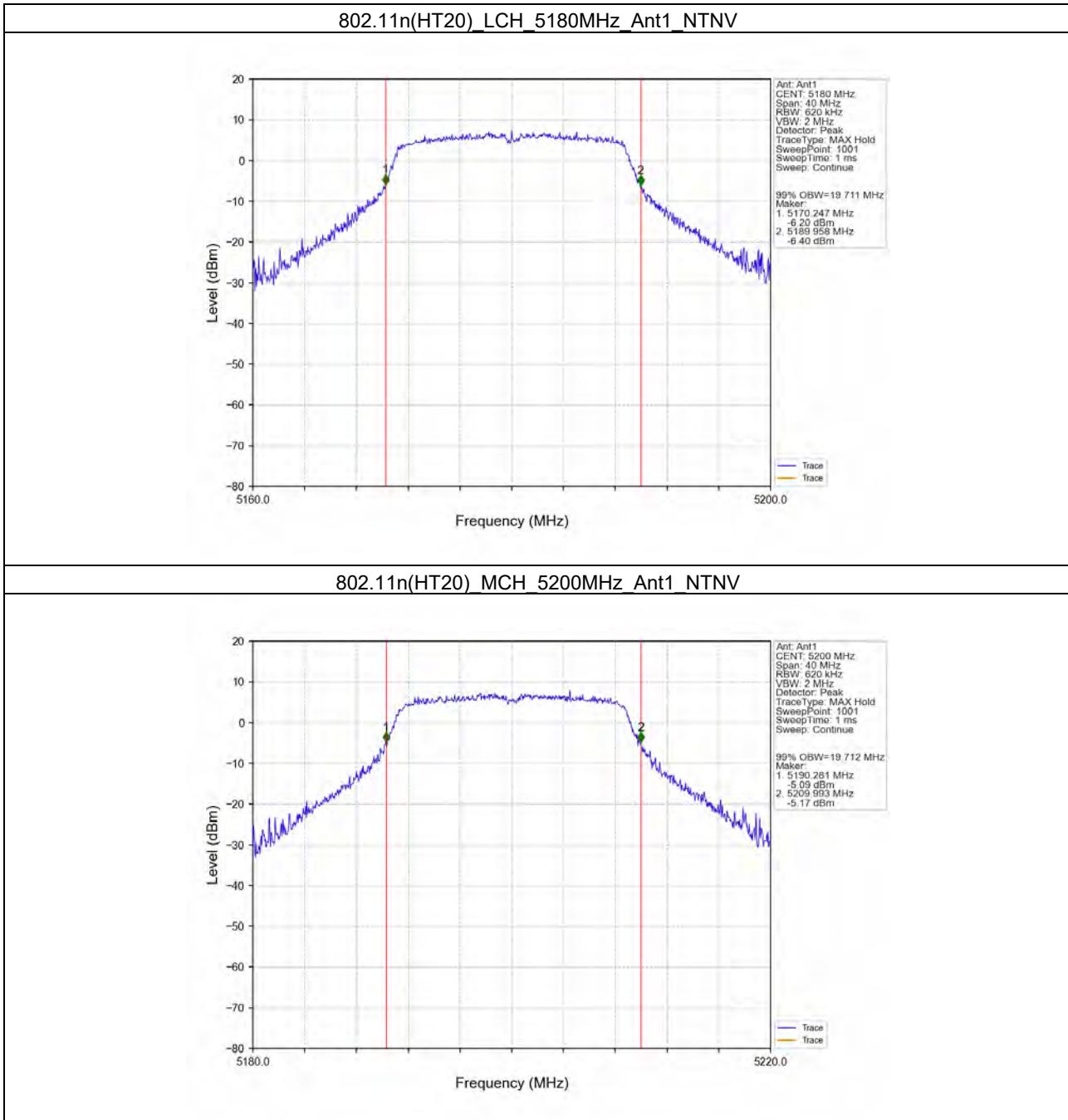
802.11a HCH 5320MHz Ant1 NTVN

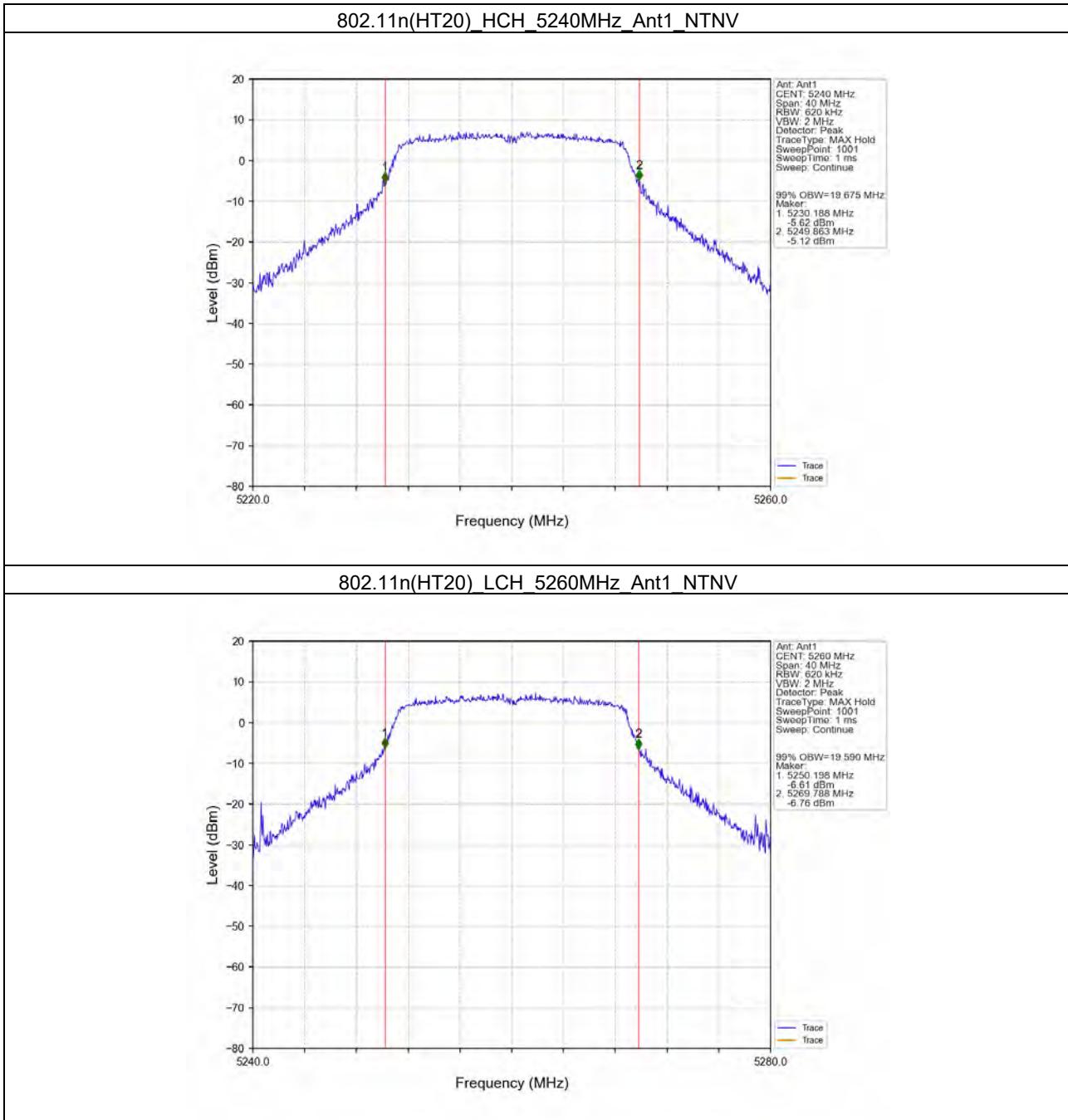


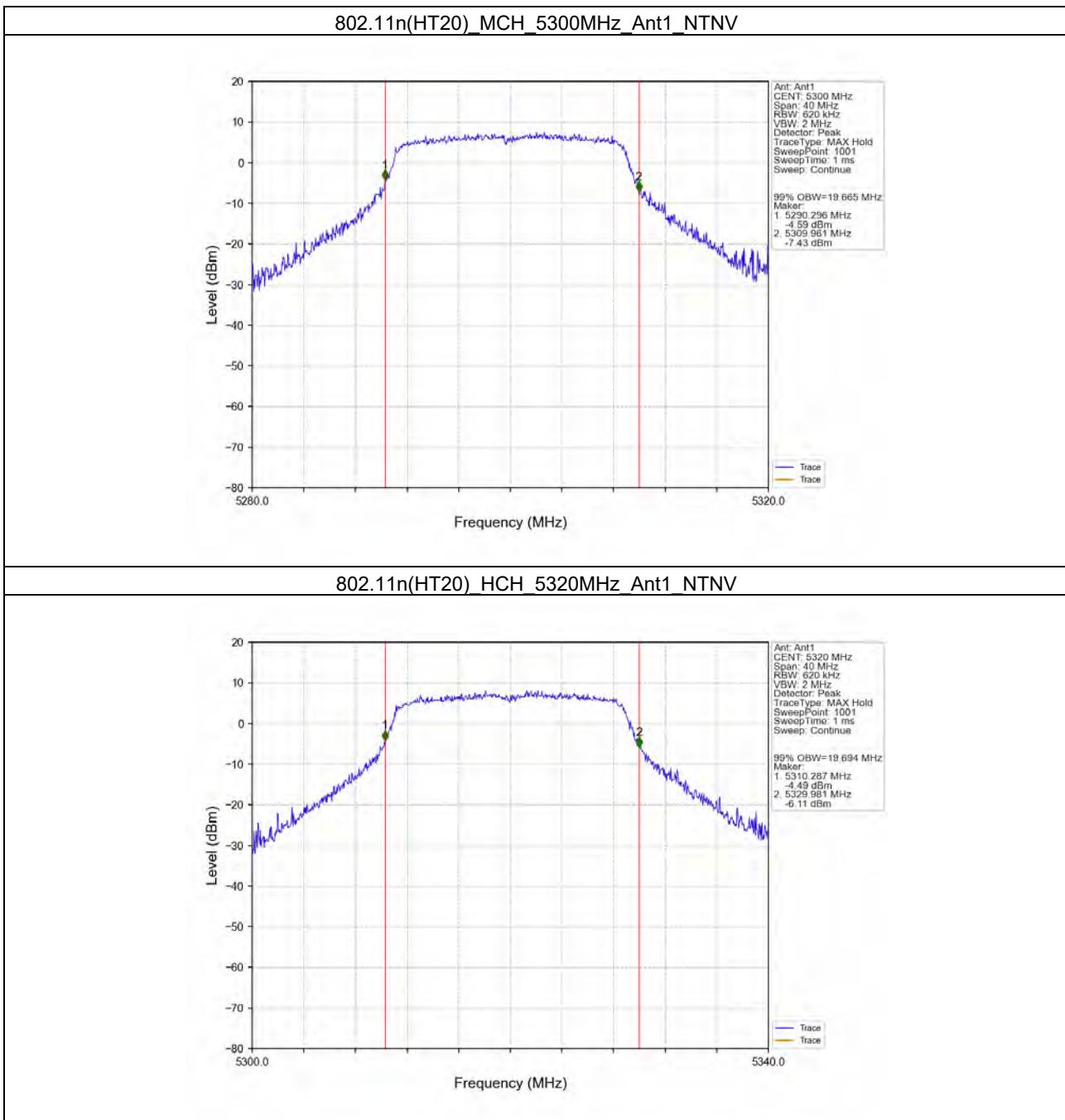


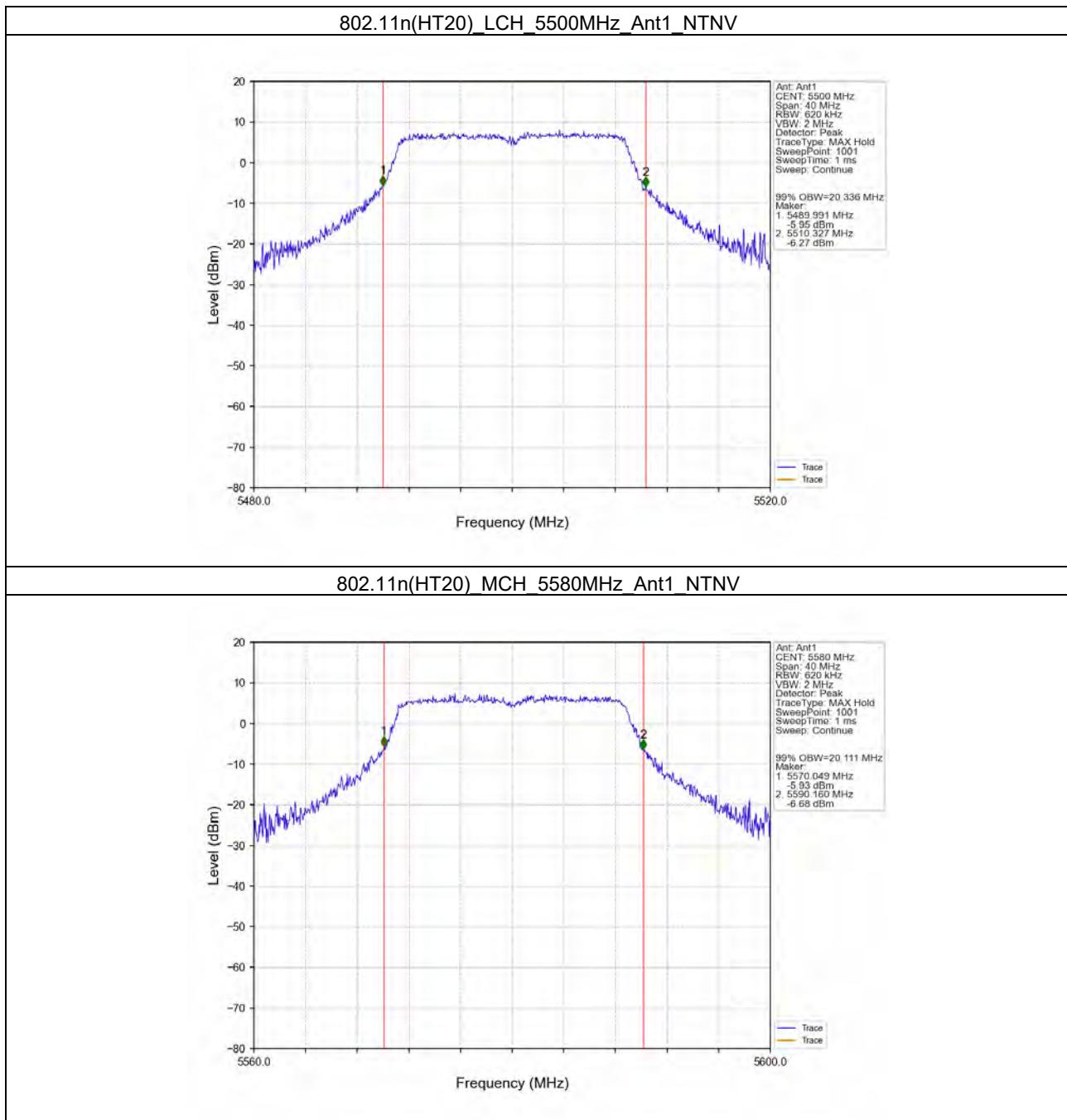


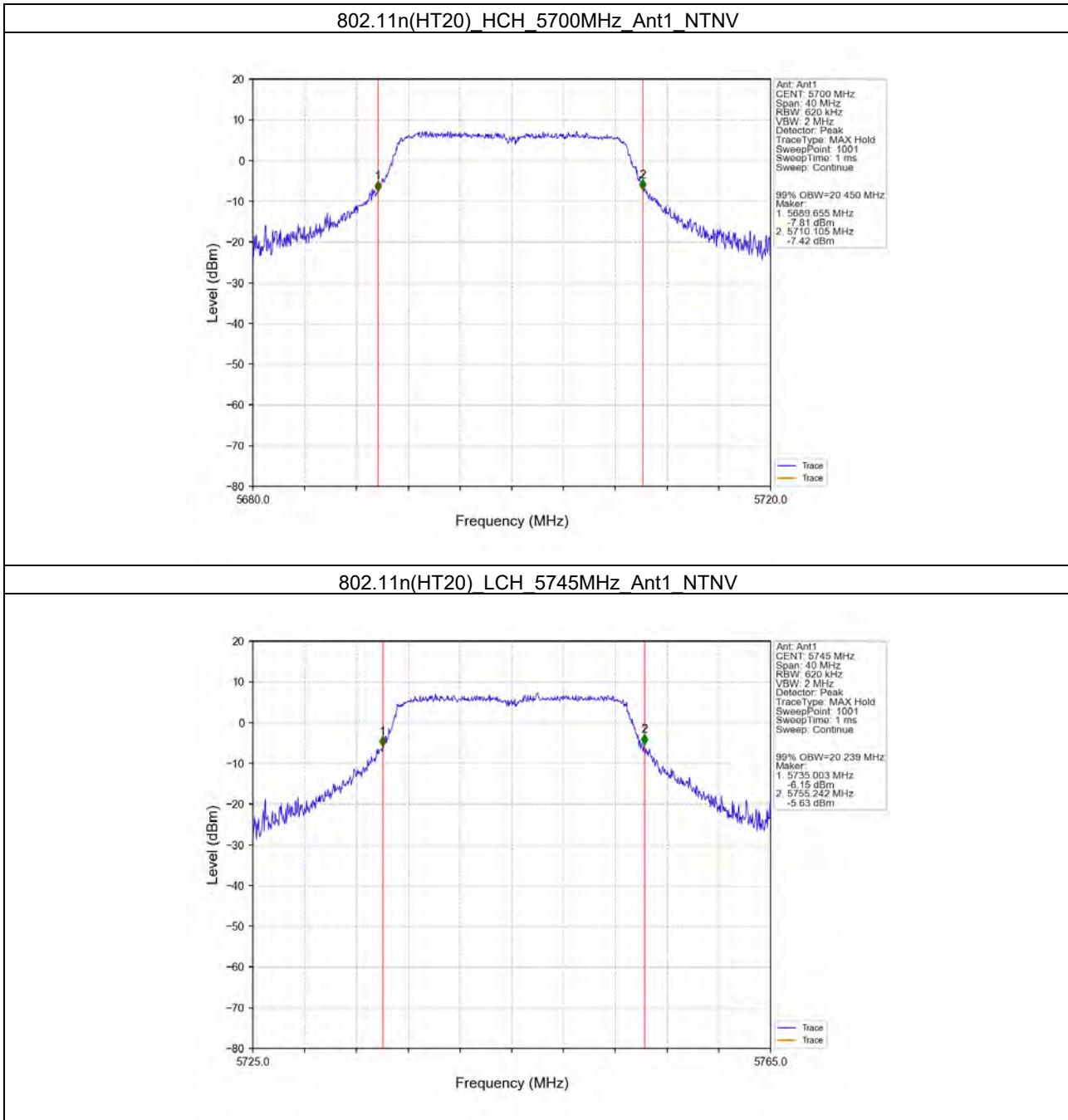


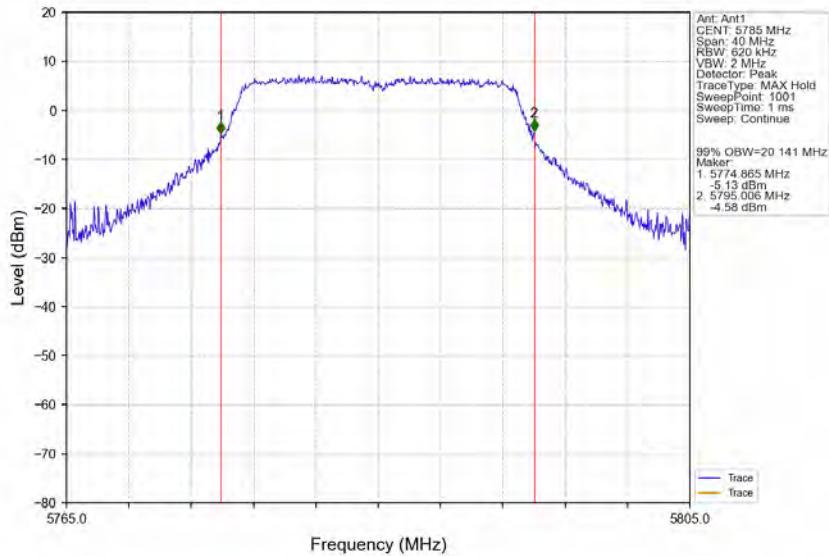
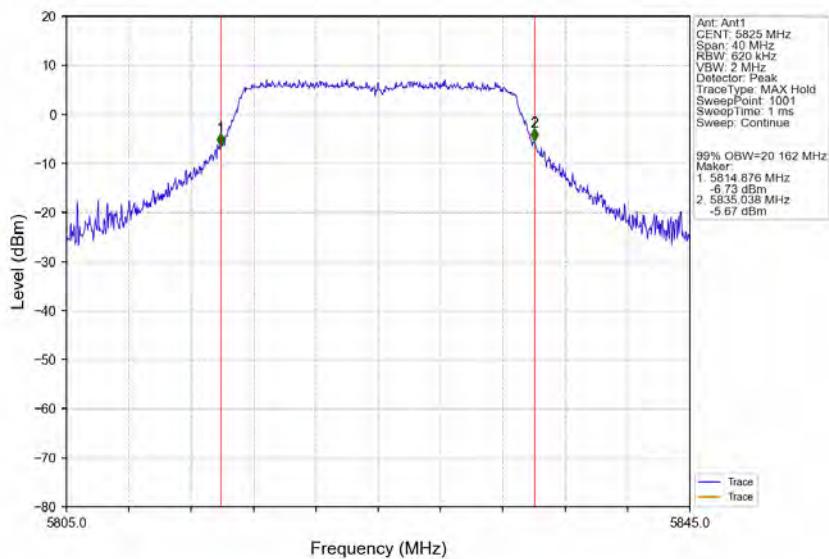


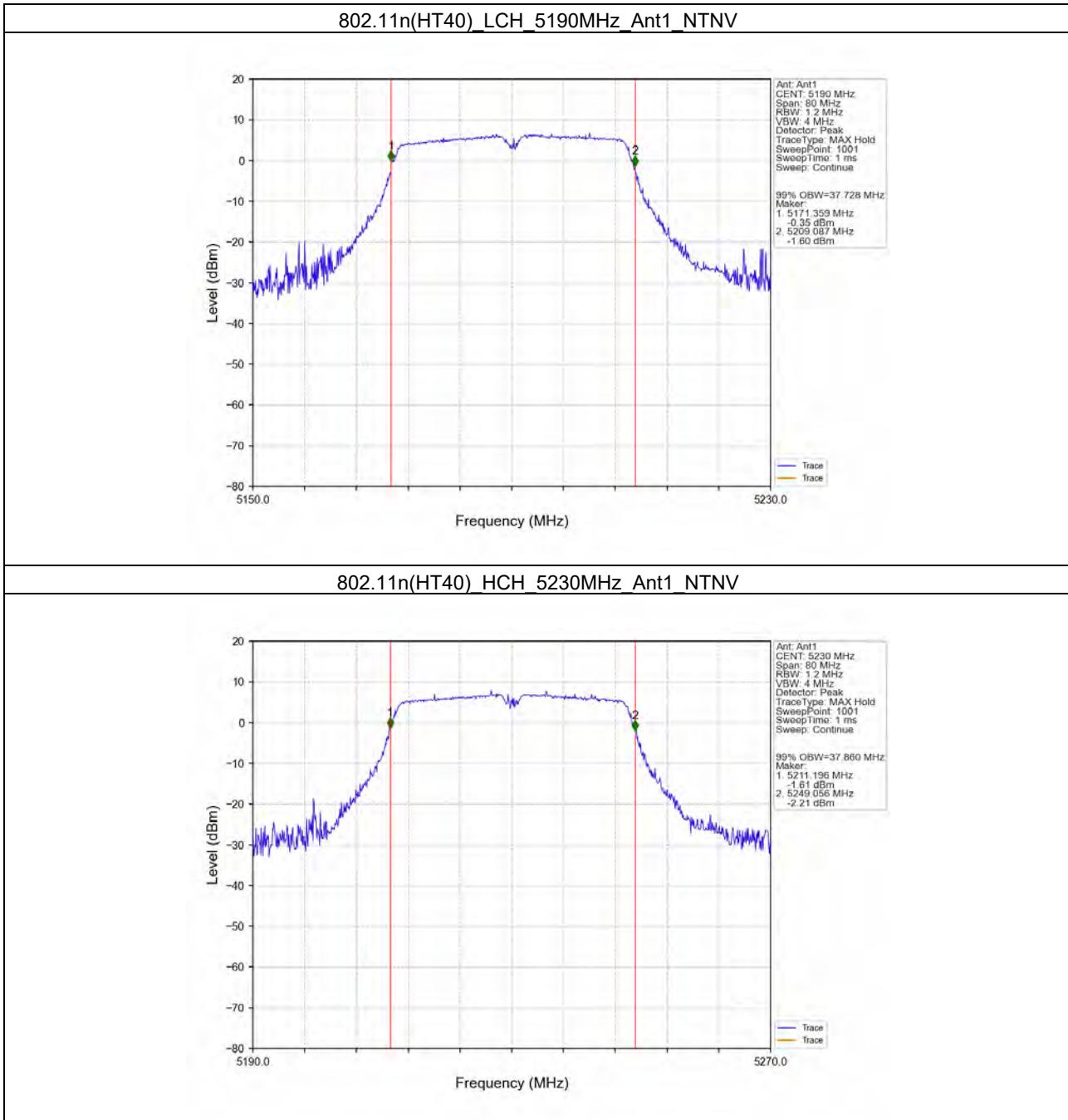


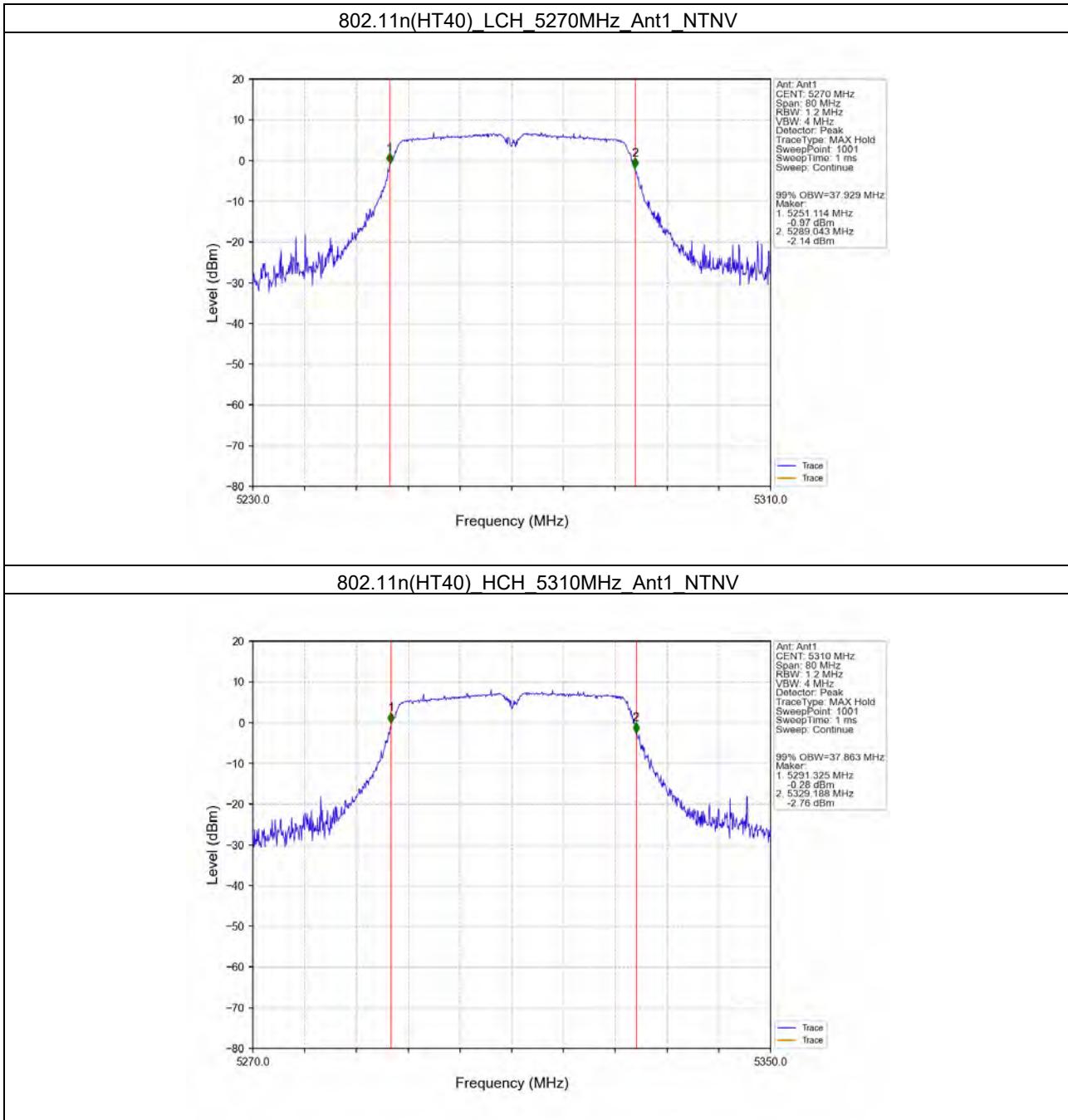


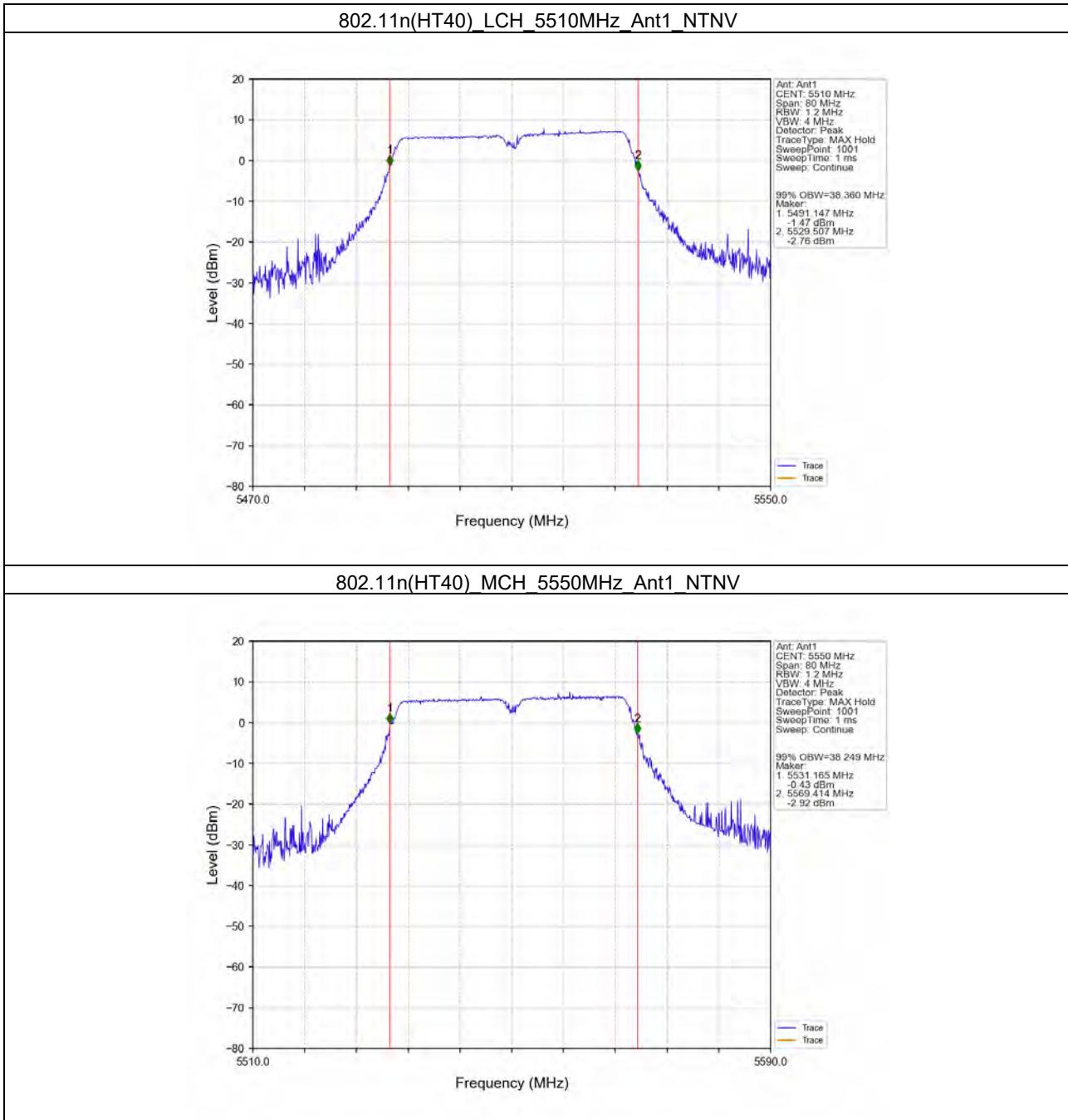


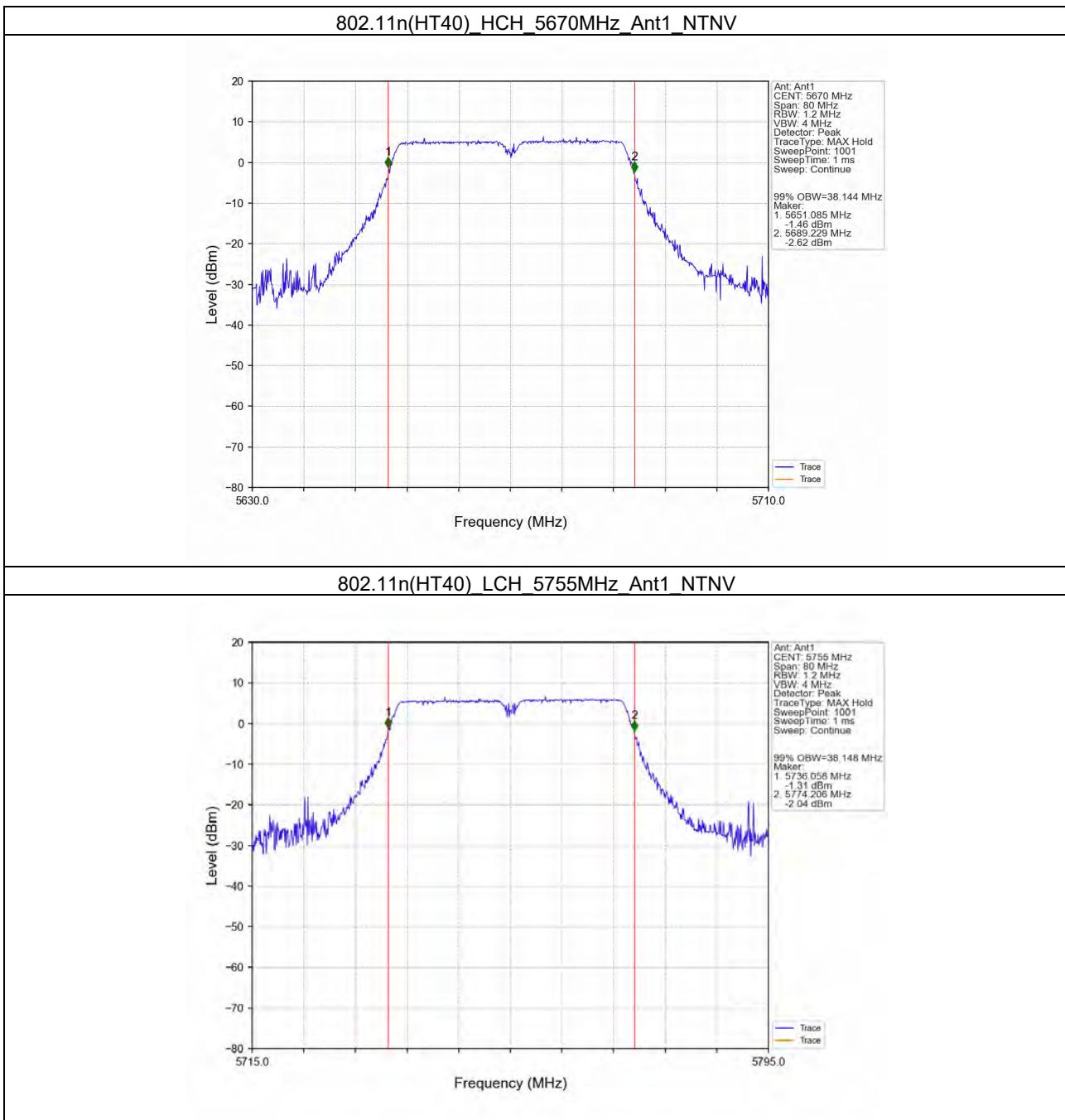


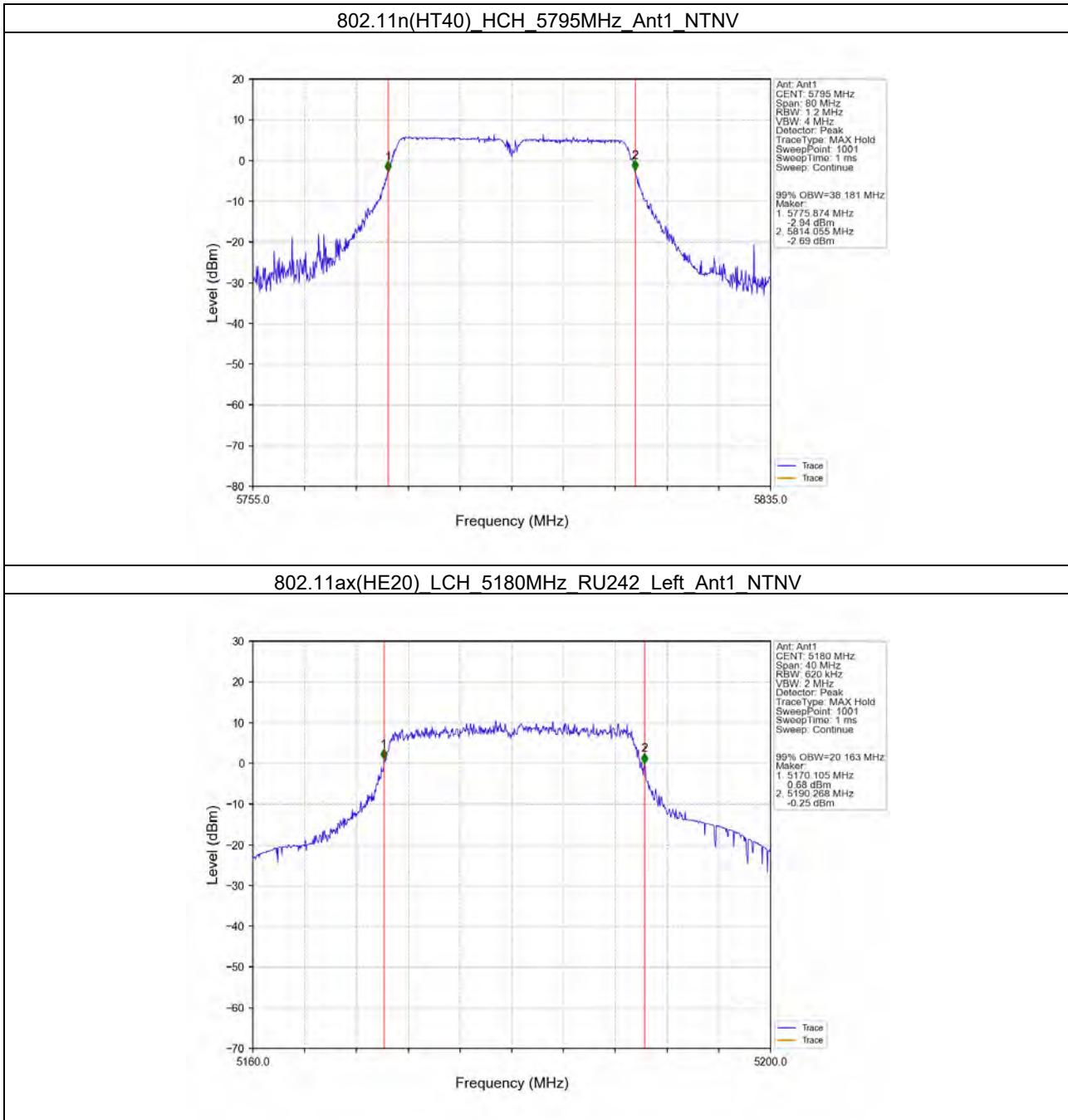
802.11n(HT20) MCH 5785MHz Ant1 NTV**802.11n(HT20) HCH 5825MHz Ant1 NTV**

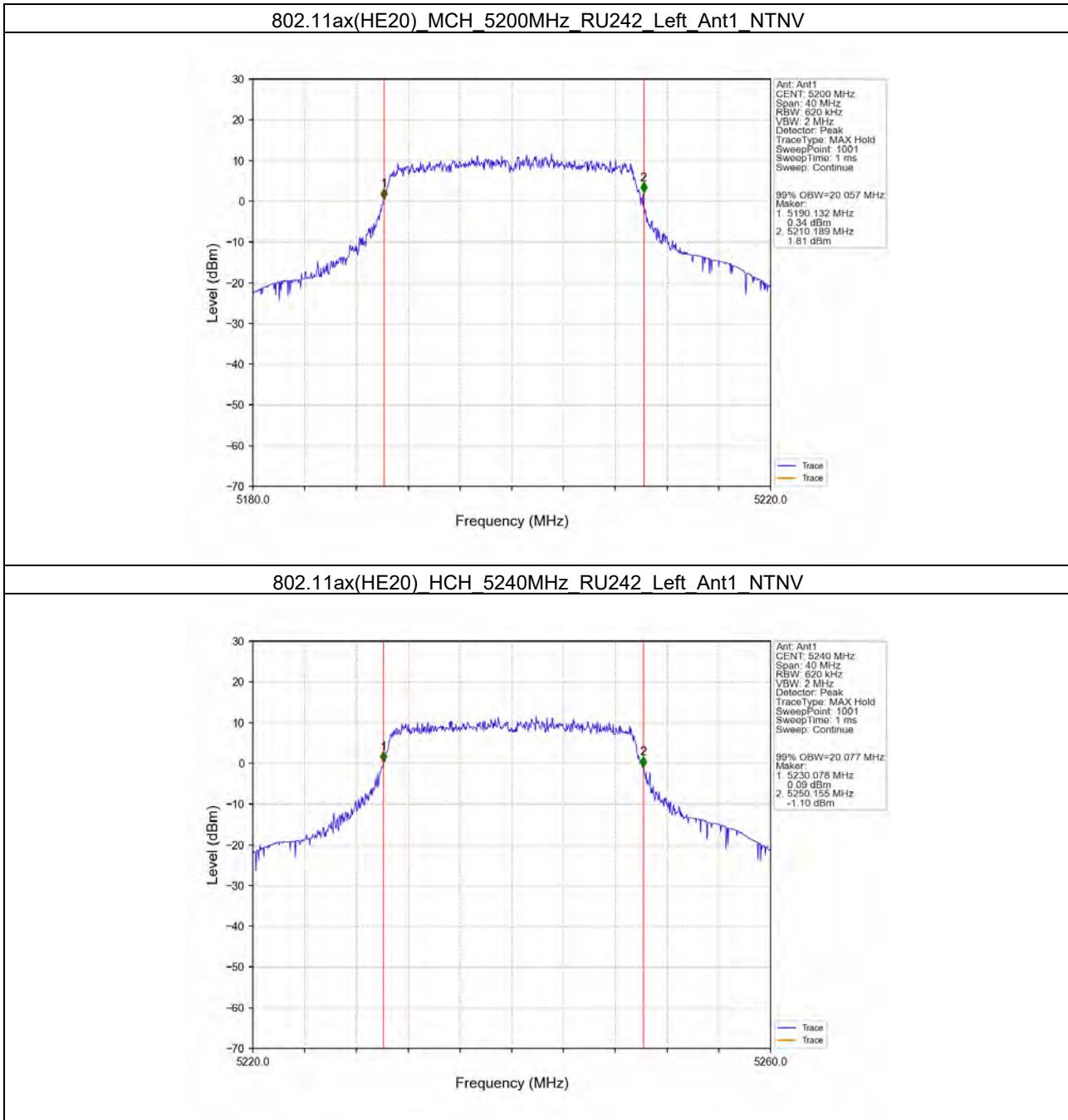


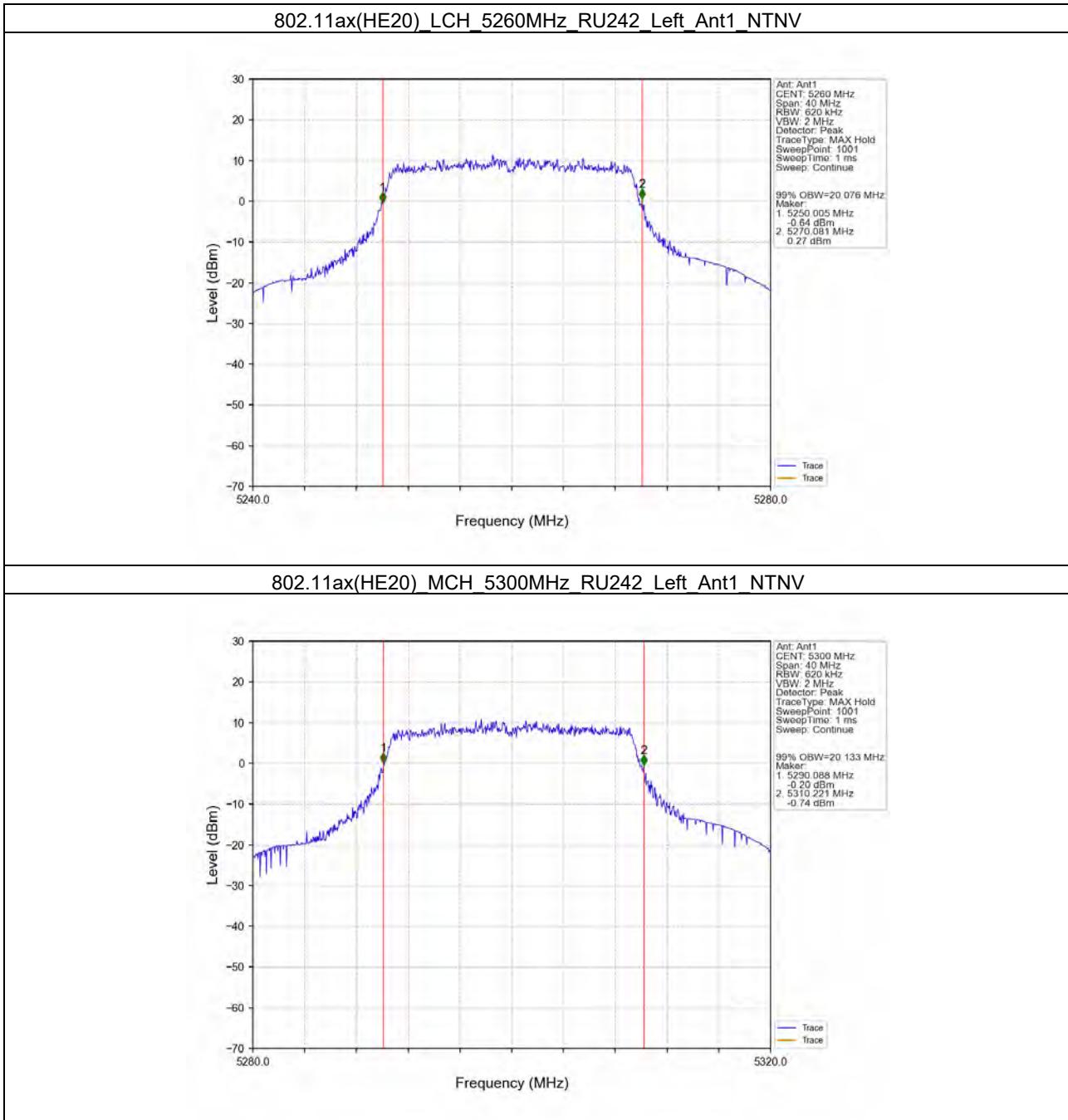


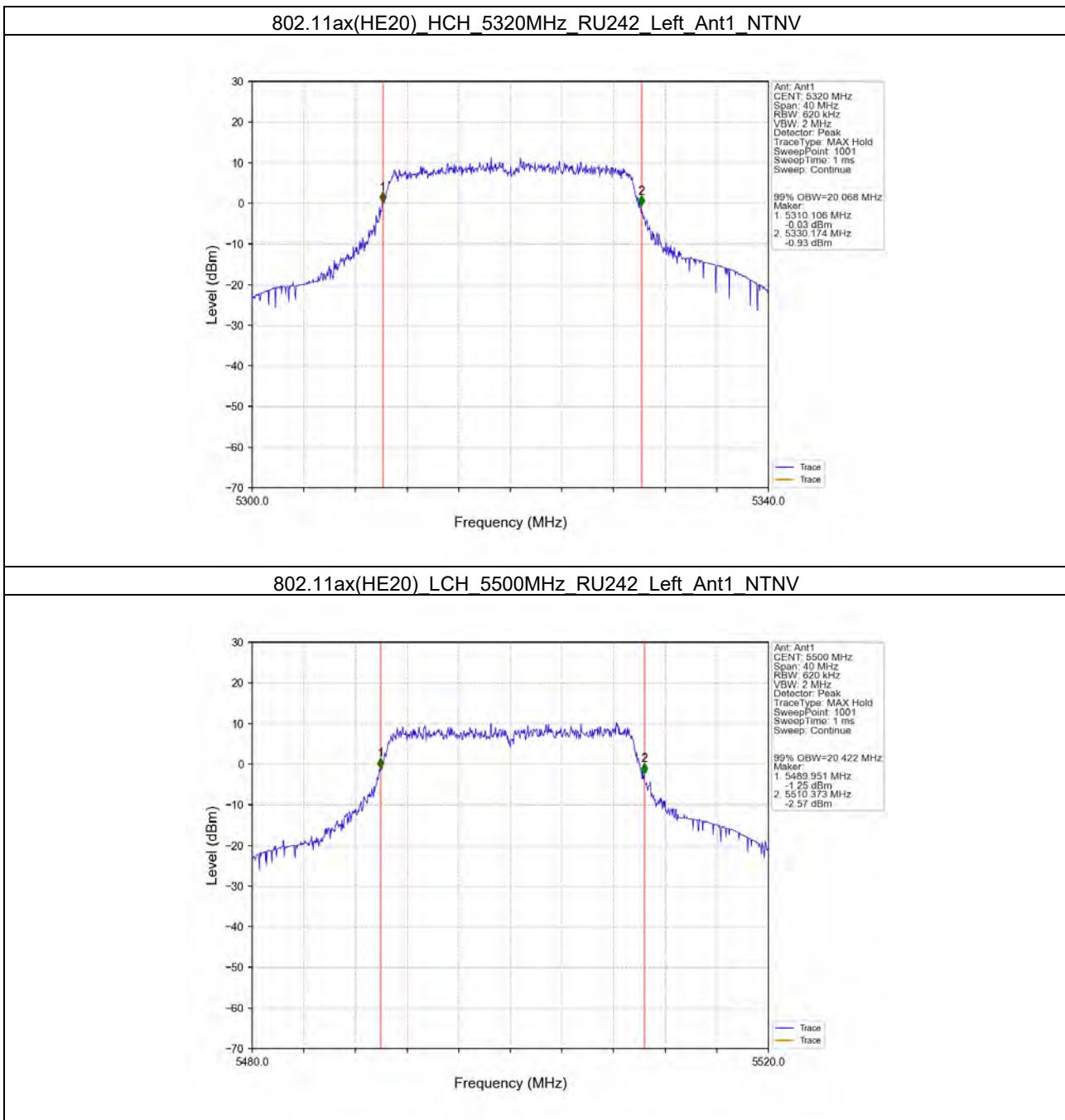


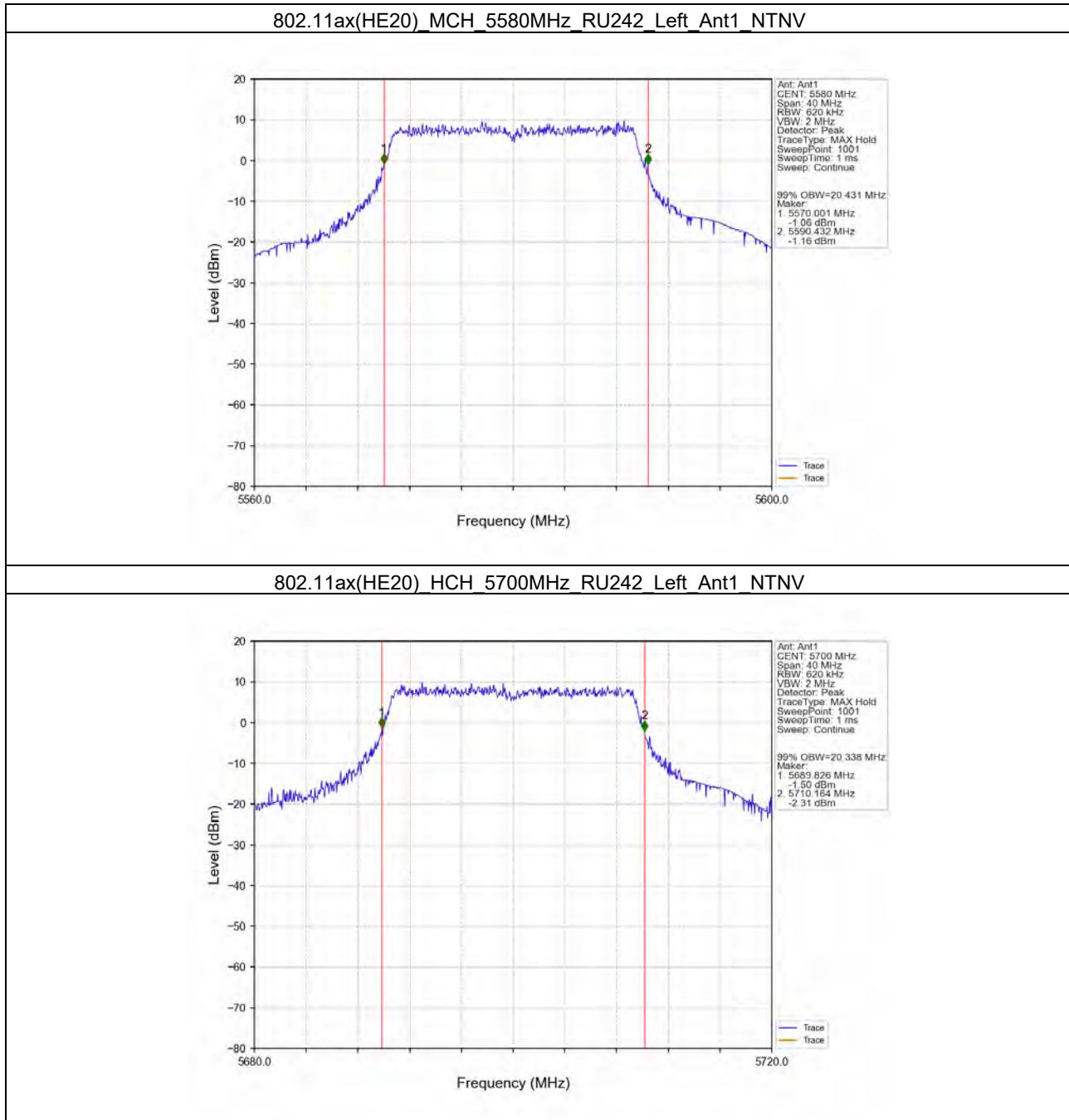


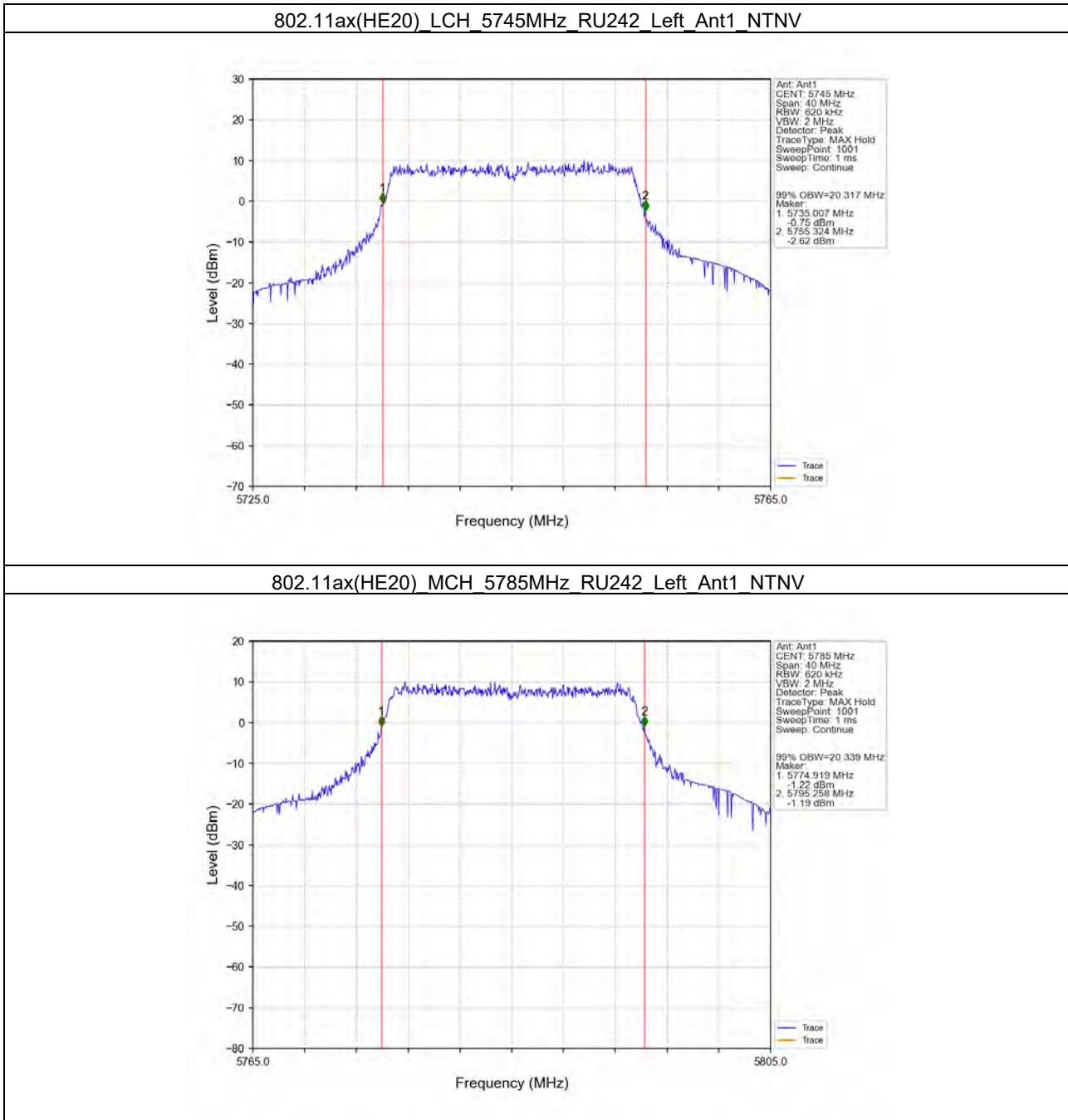


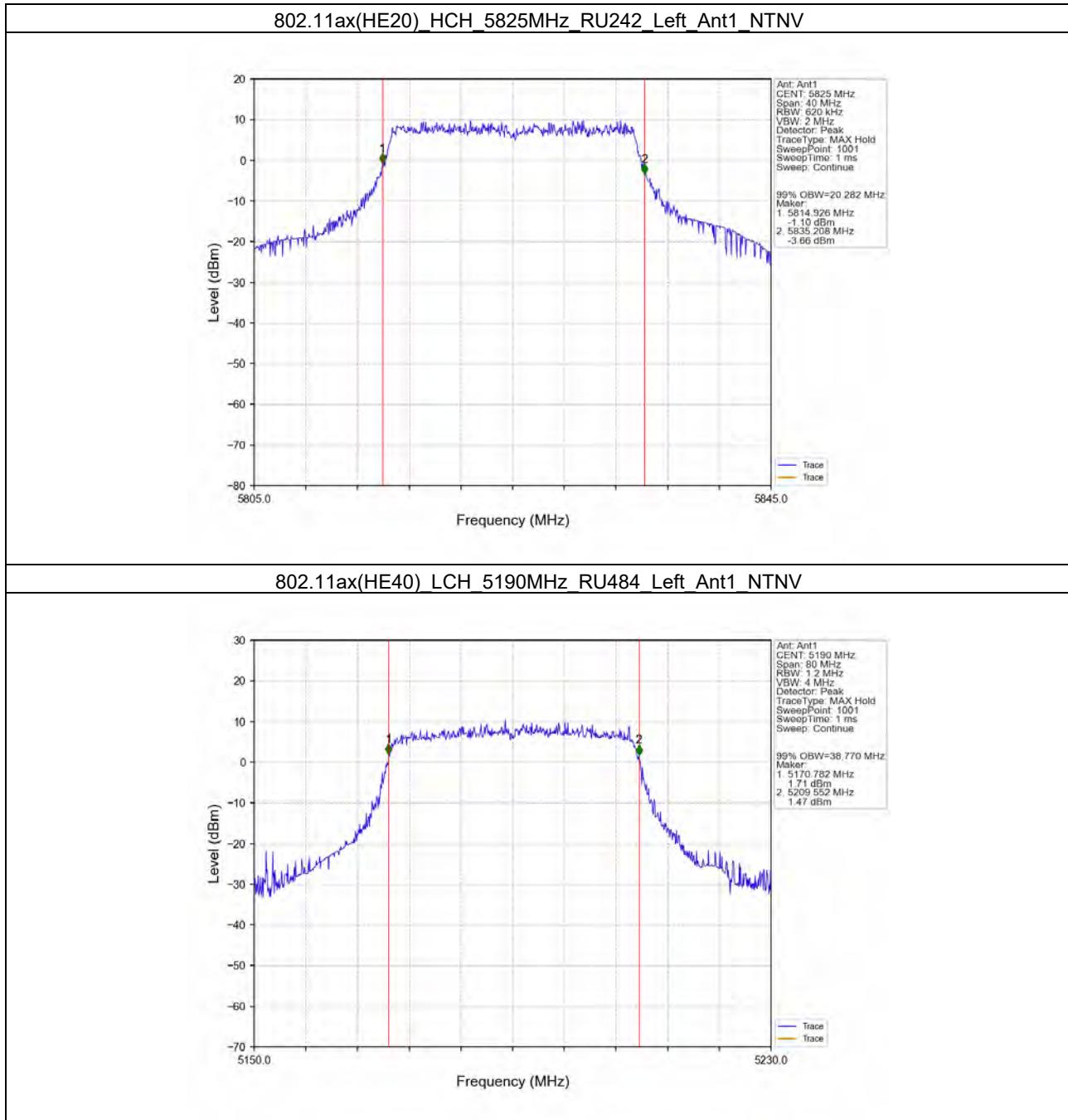


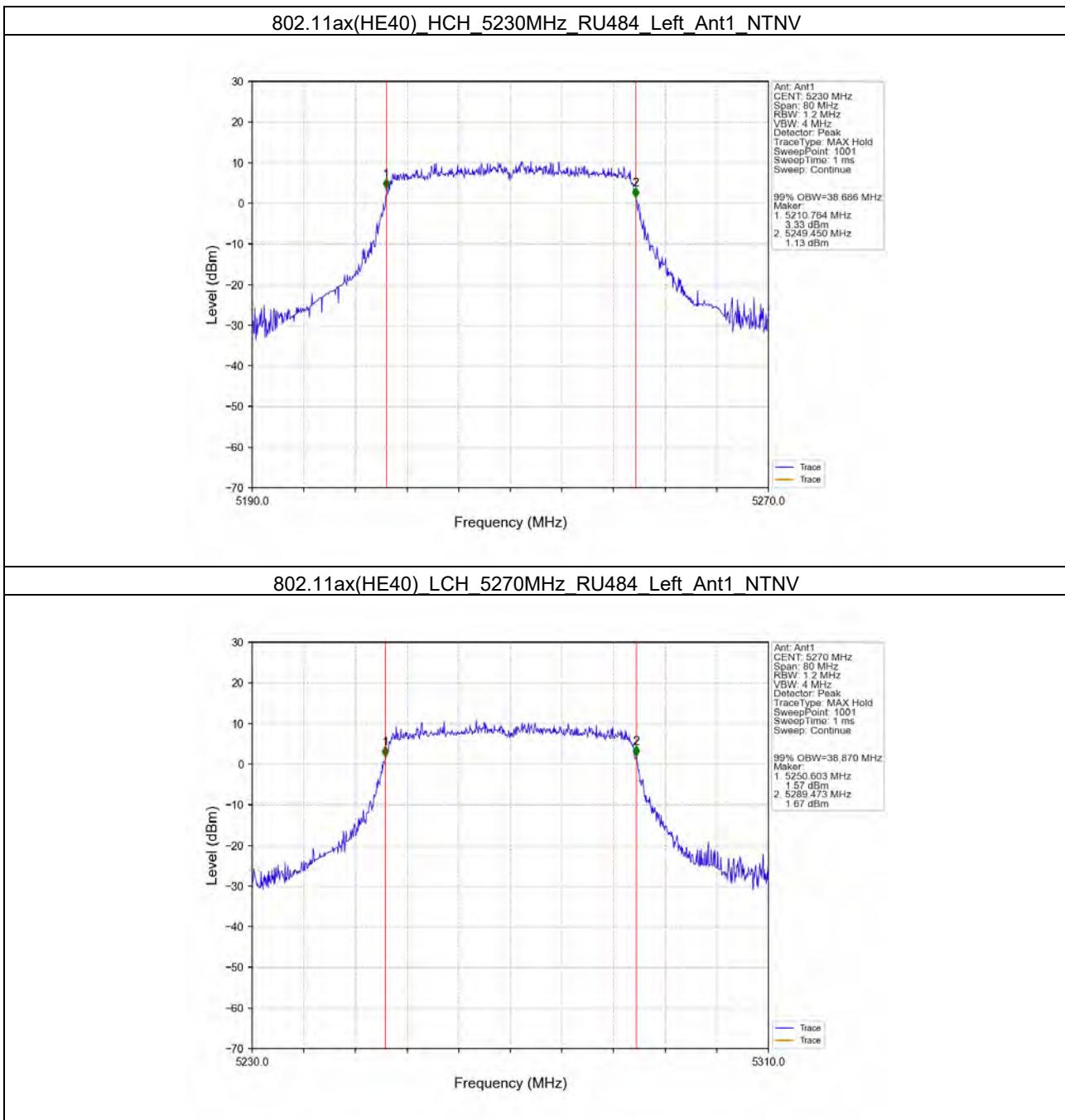


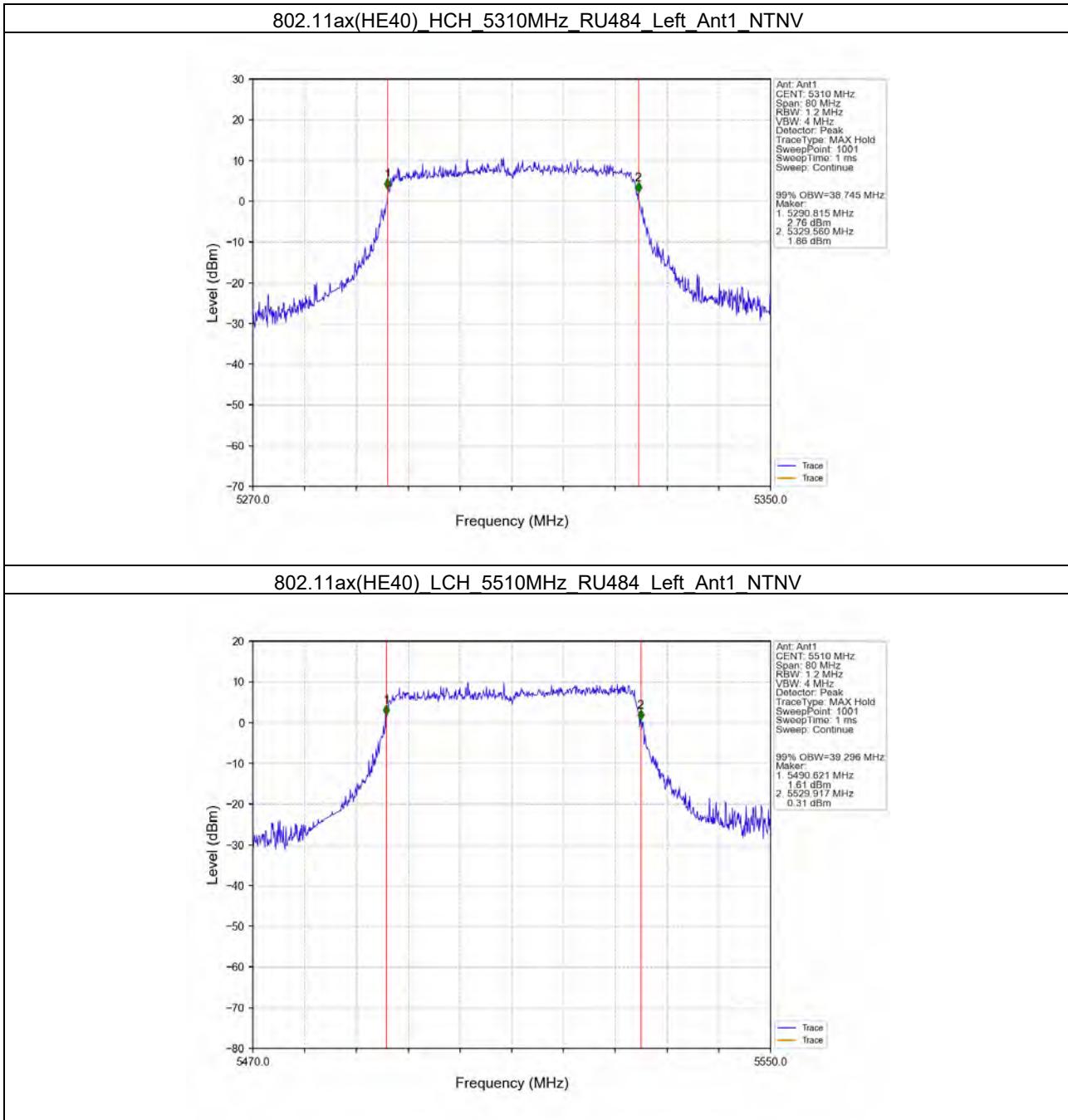


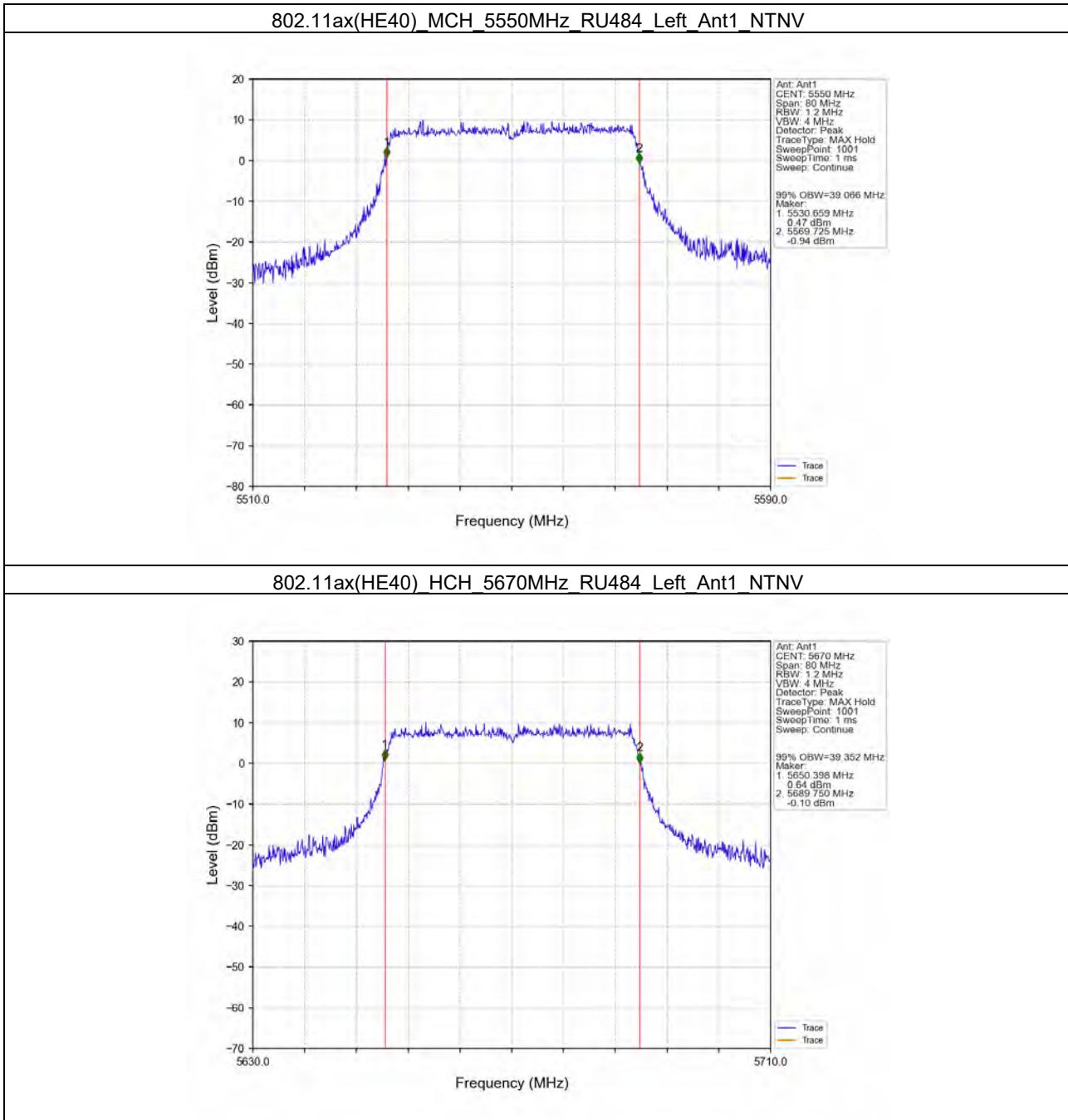


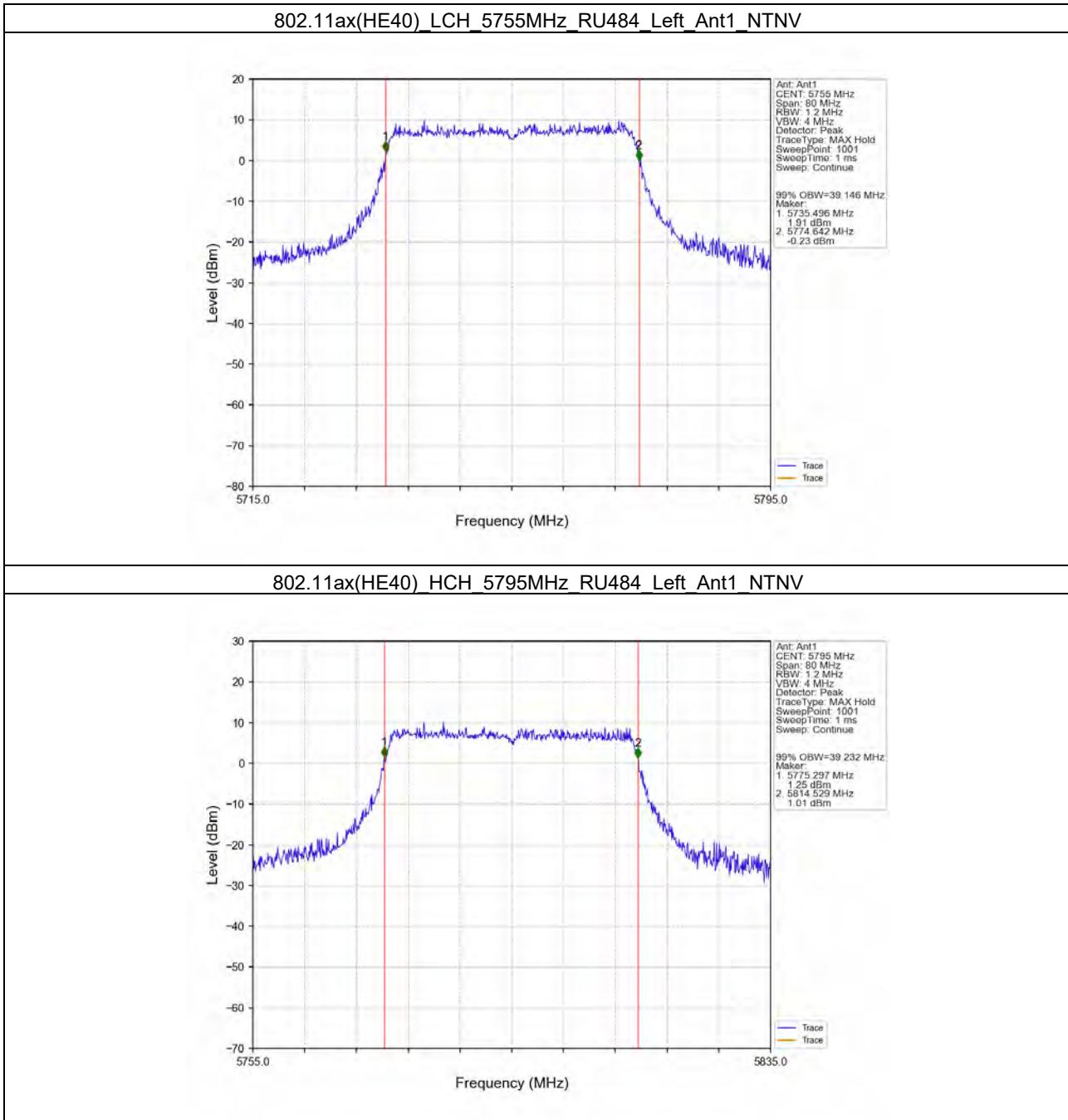




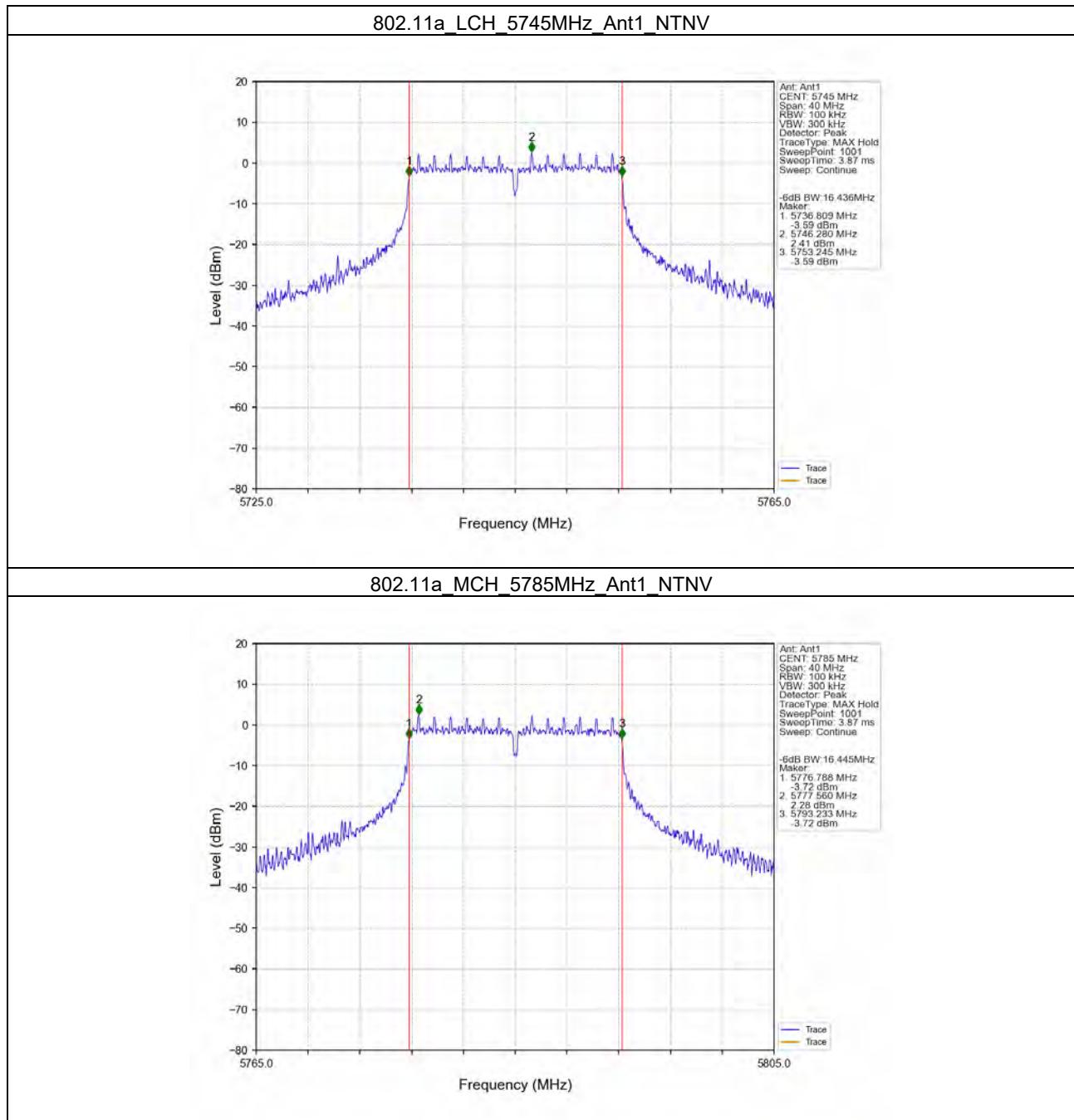




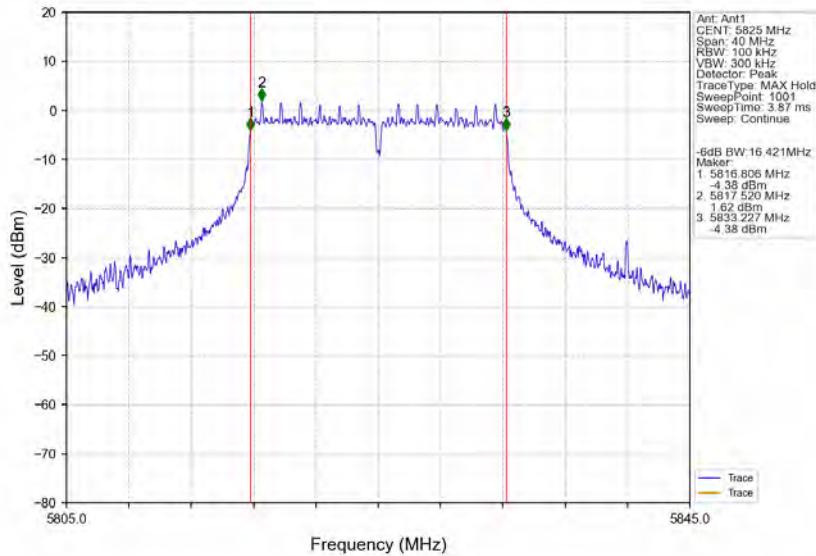




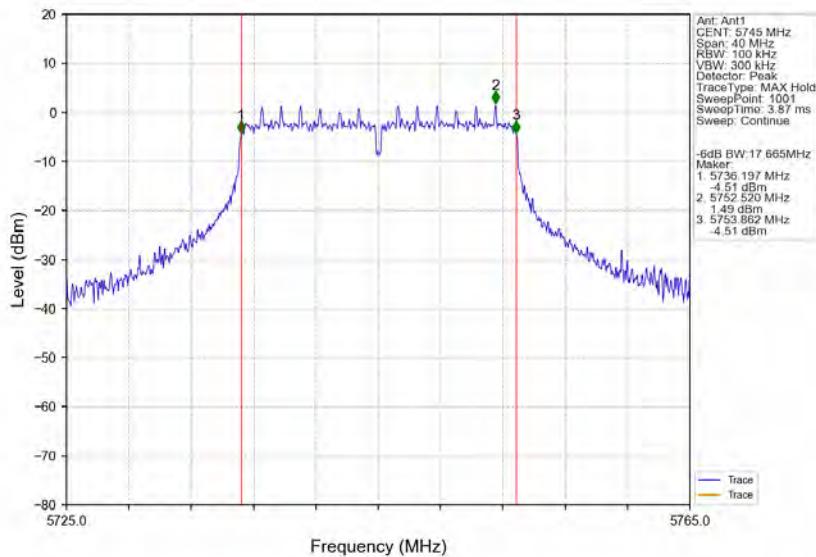
2.2.2 6dB BW

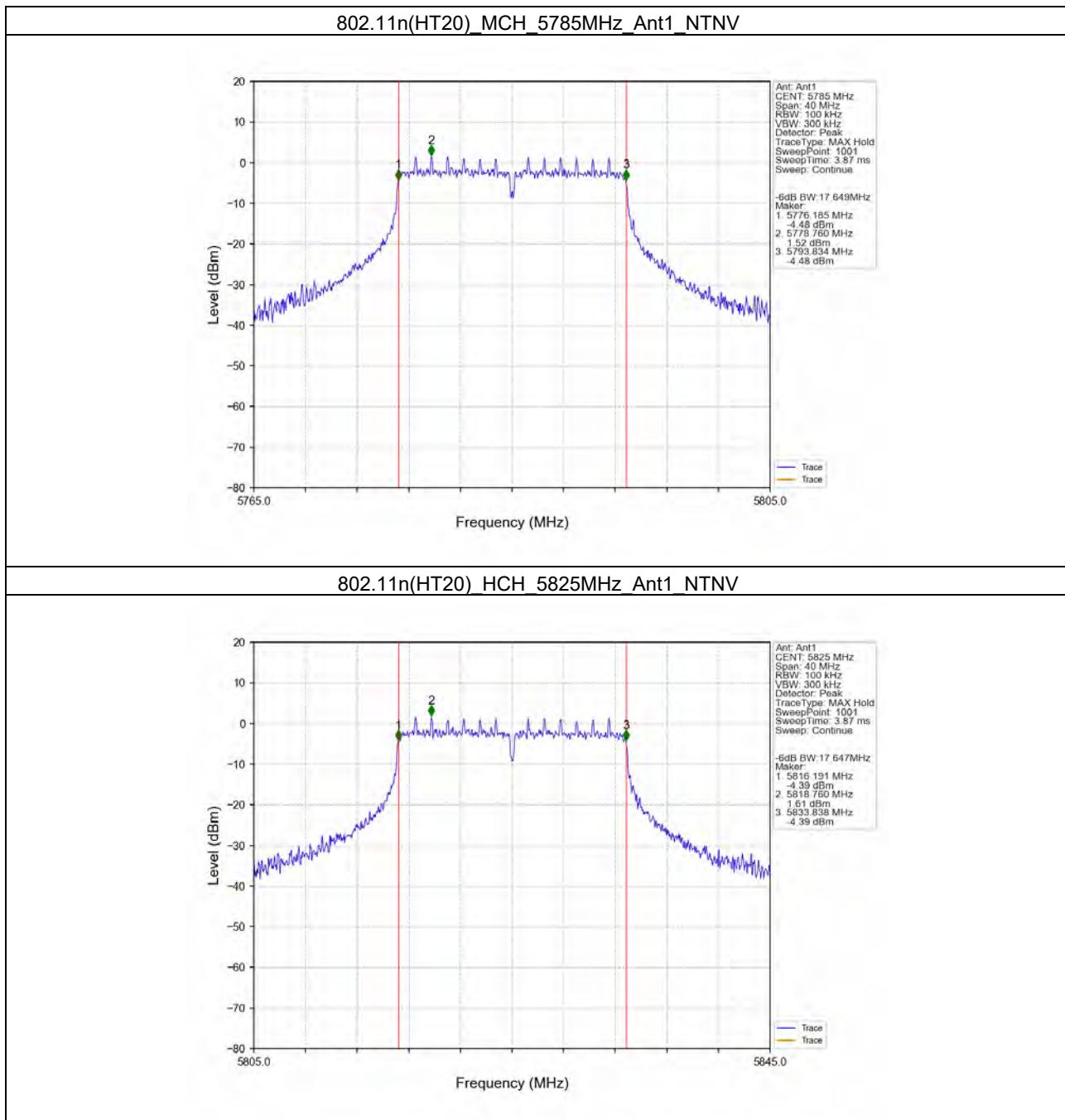


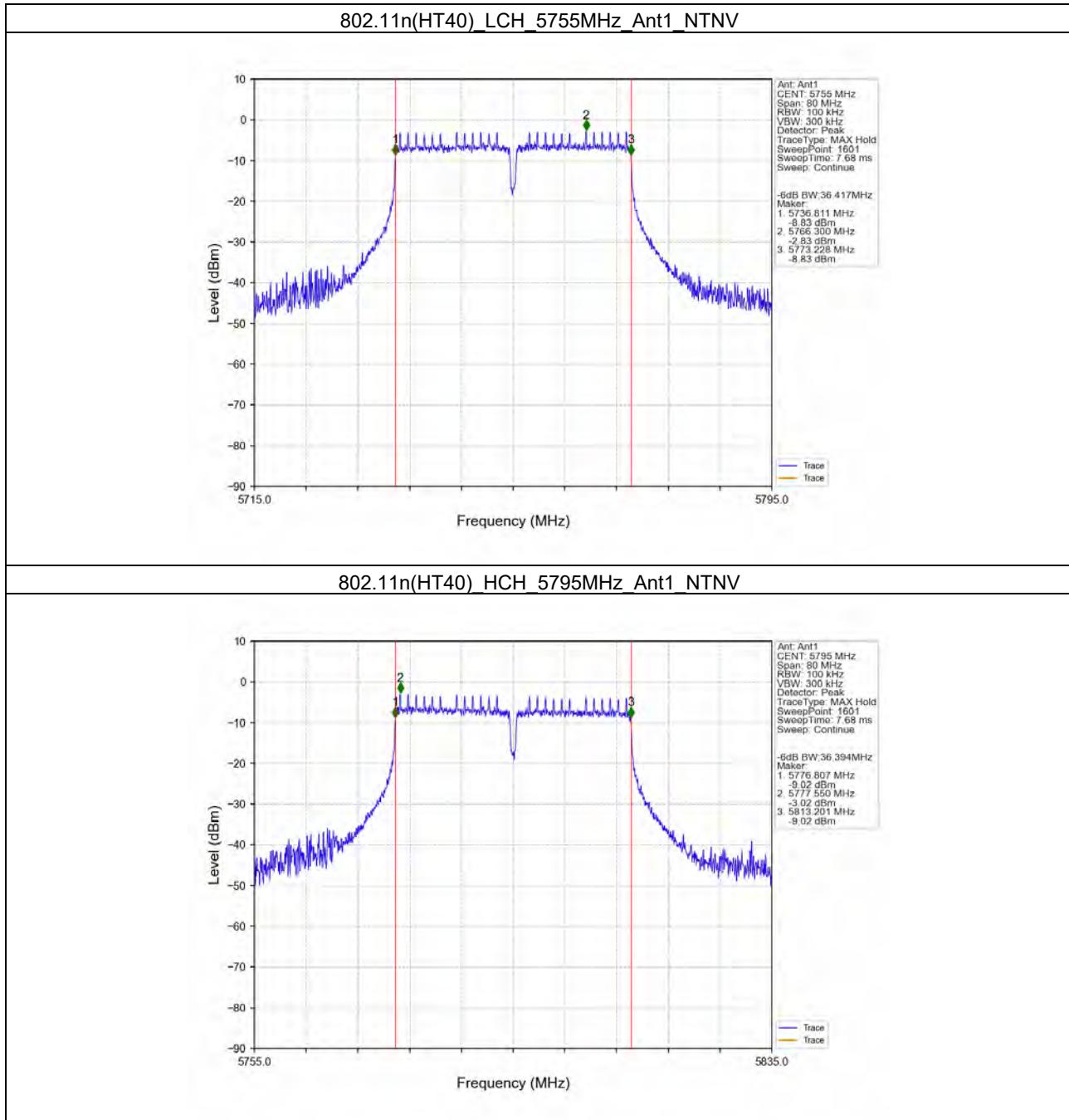
802.11a HCH 5825MHz Ant1 NTVN

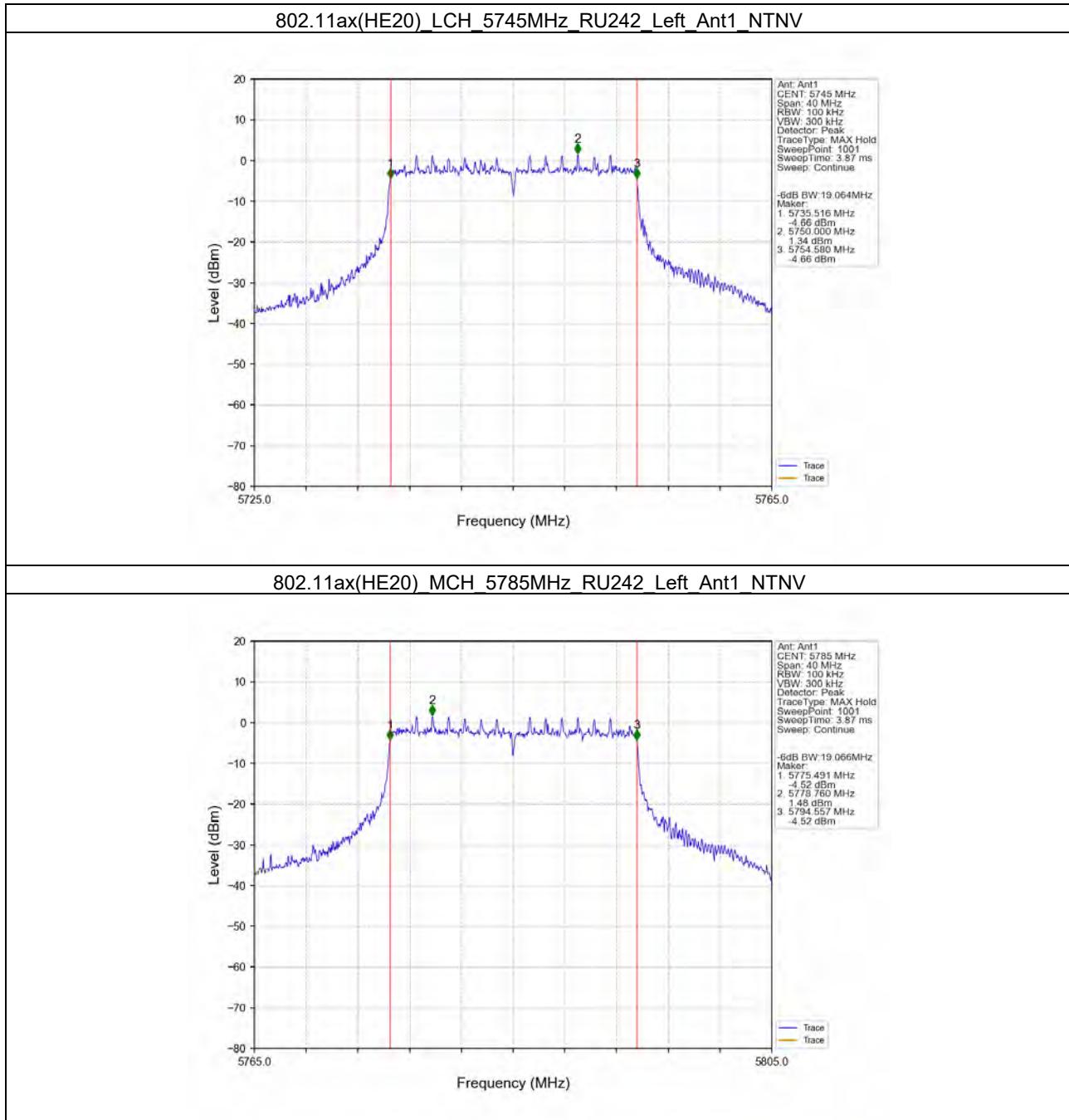


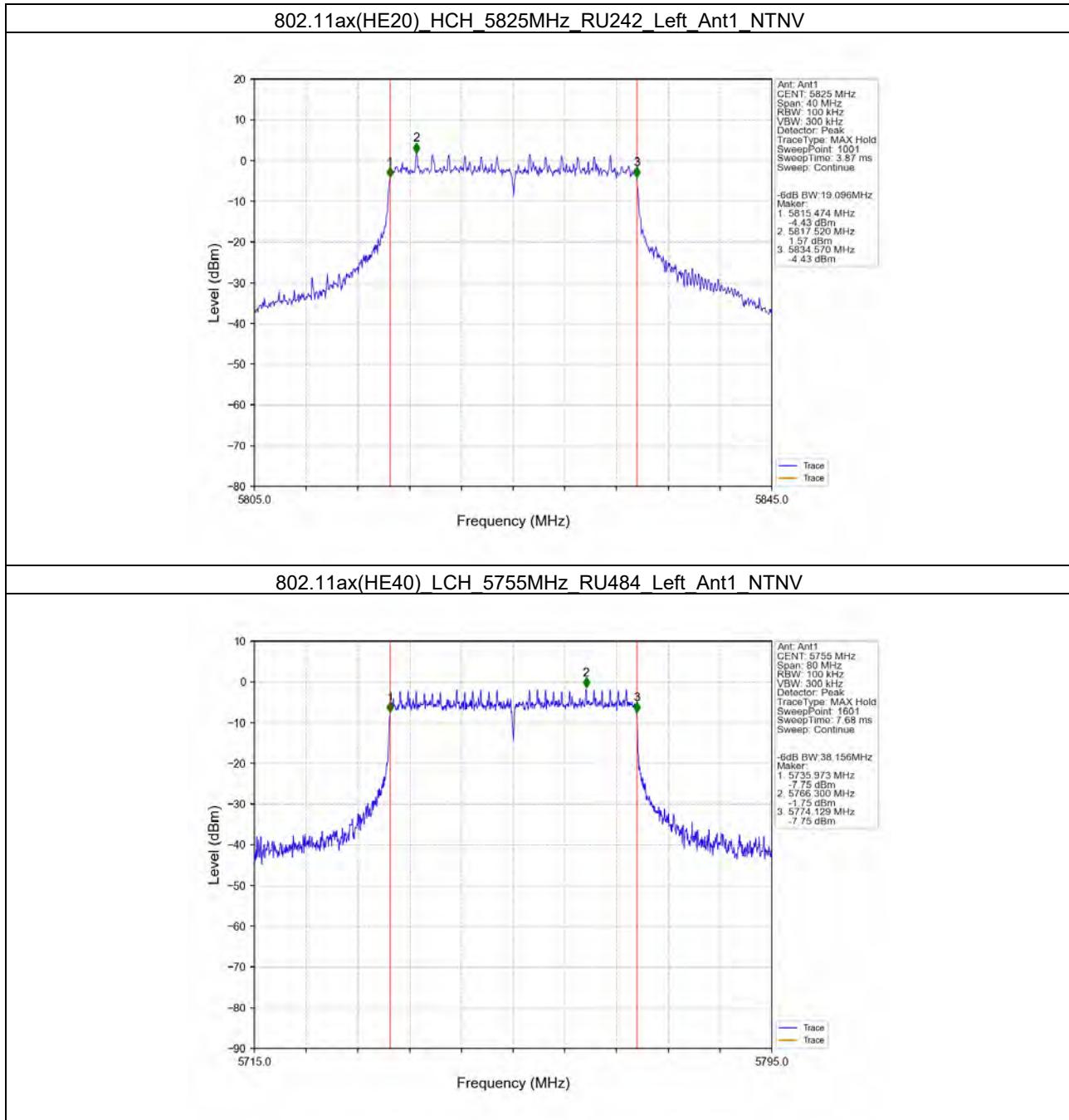
802.11n(HT20) LCH 5745MHz Ant1 NTVN

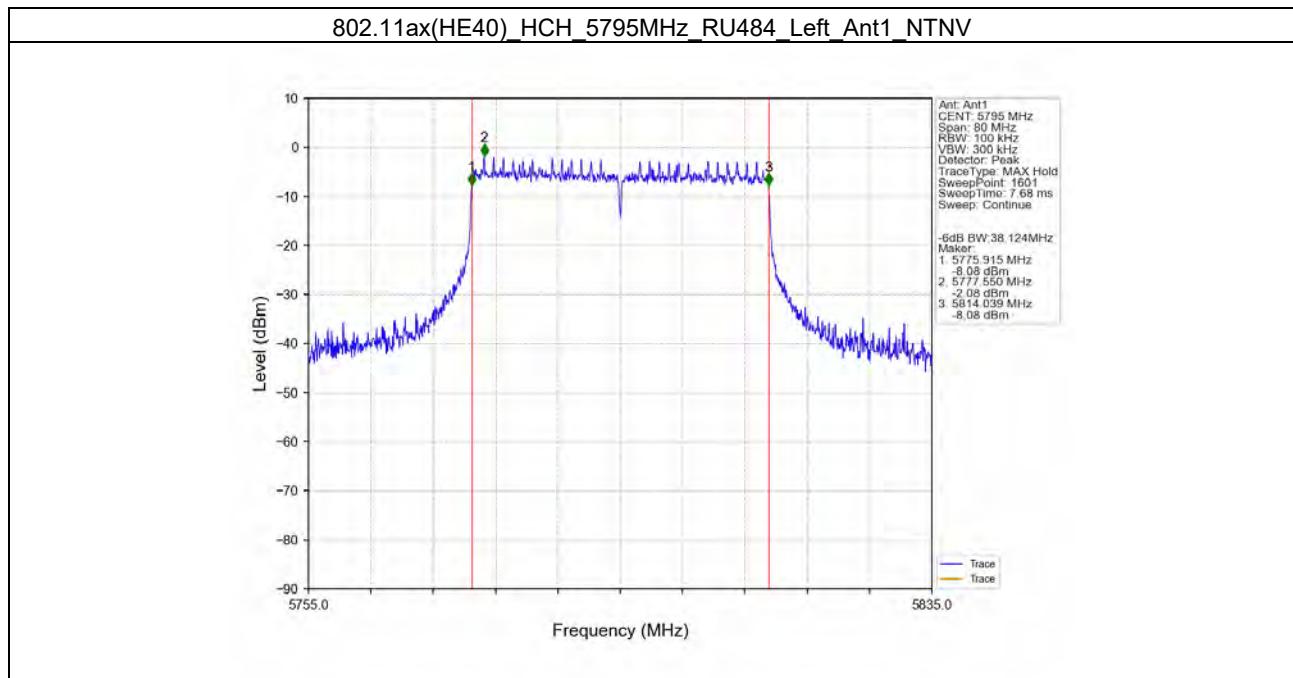




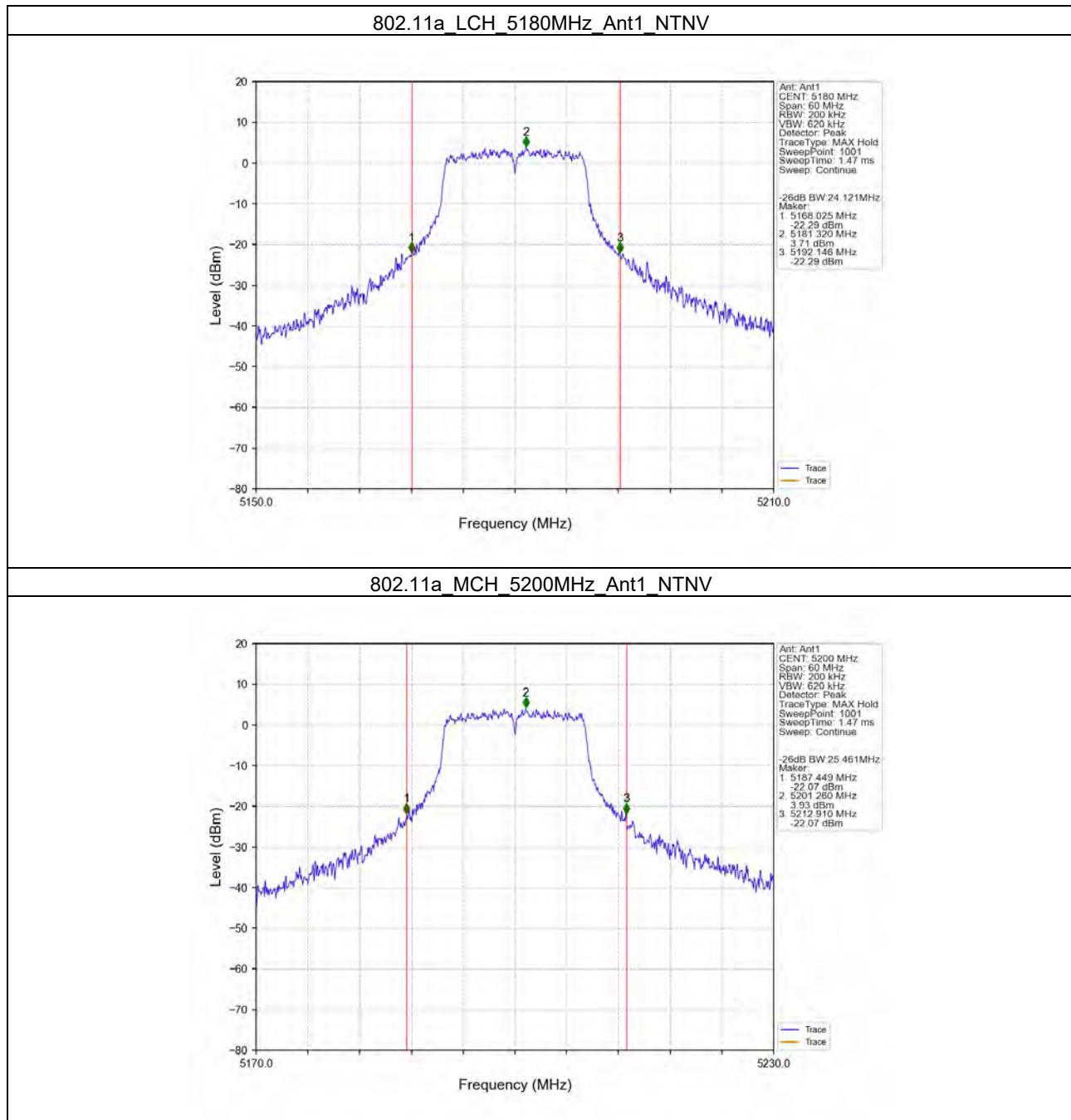


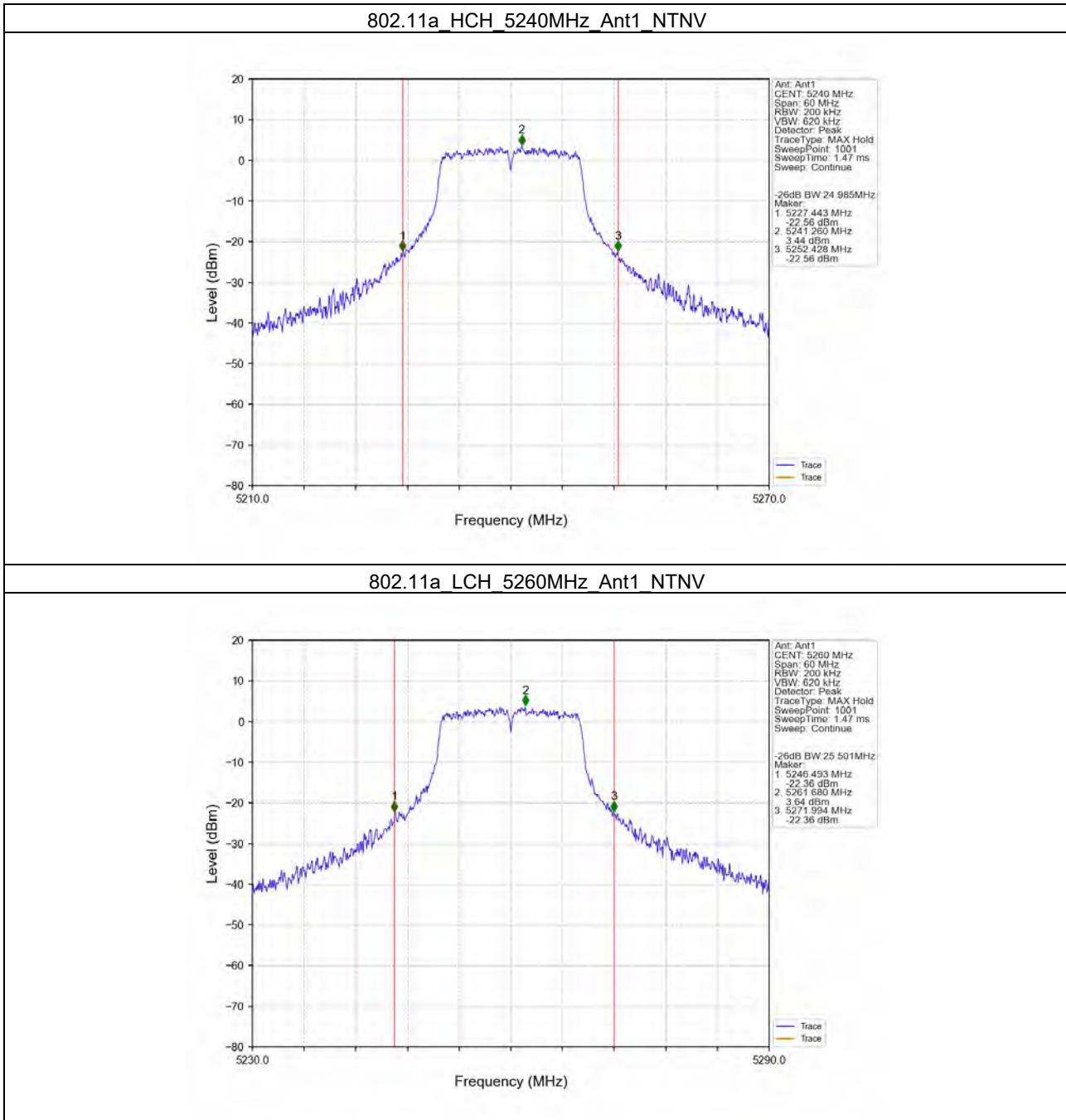


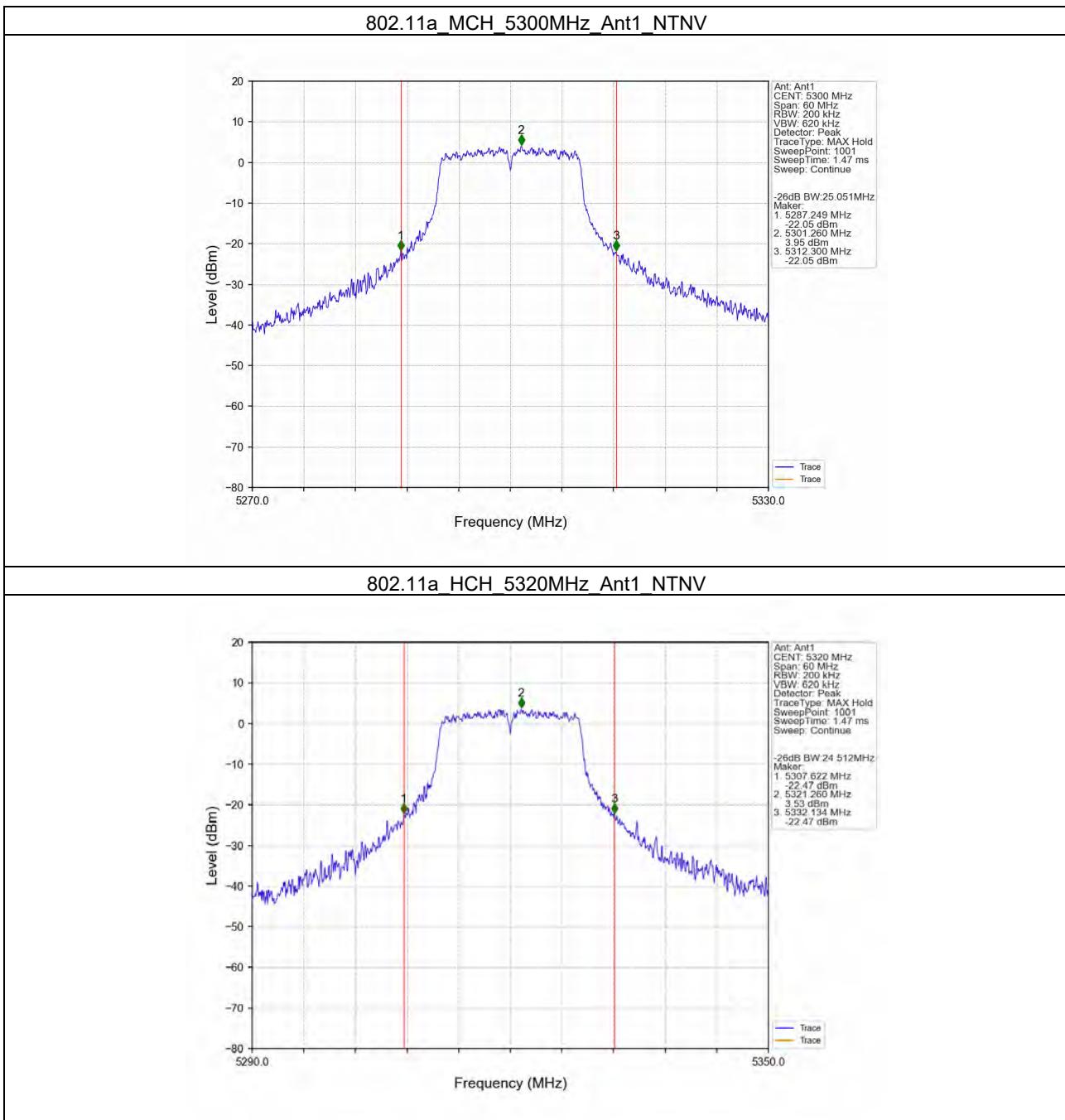


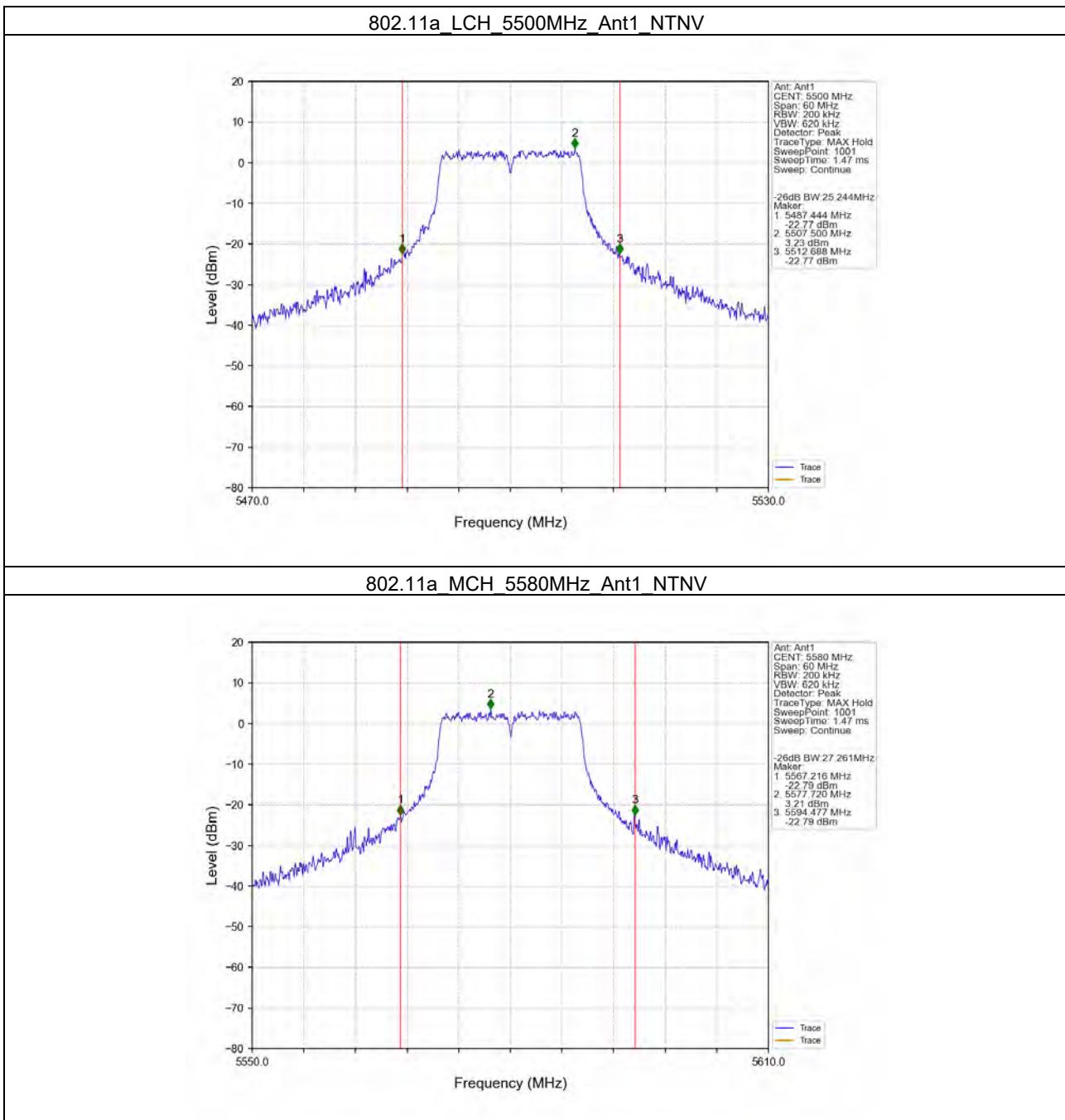


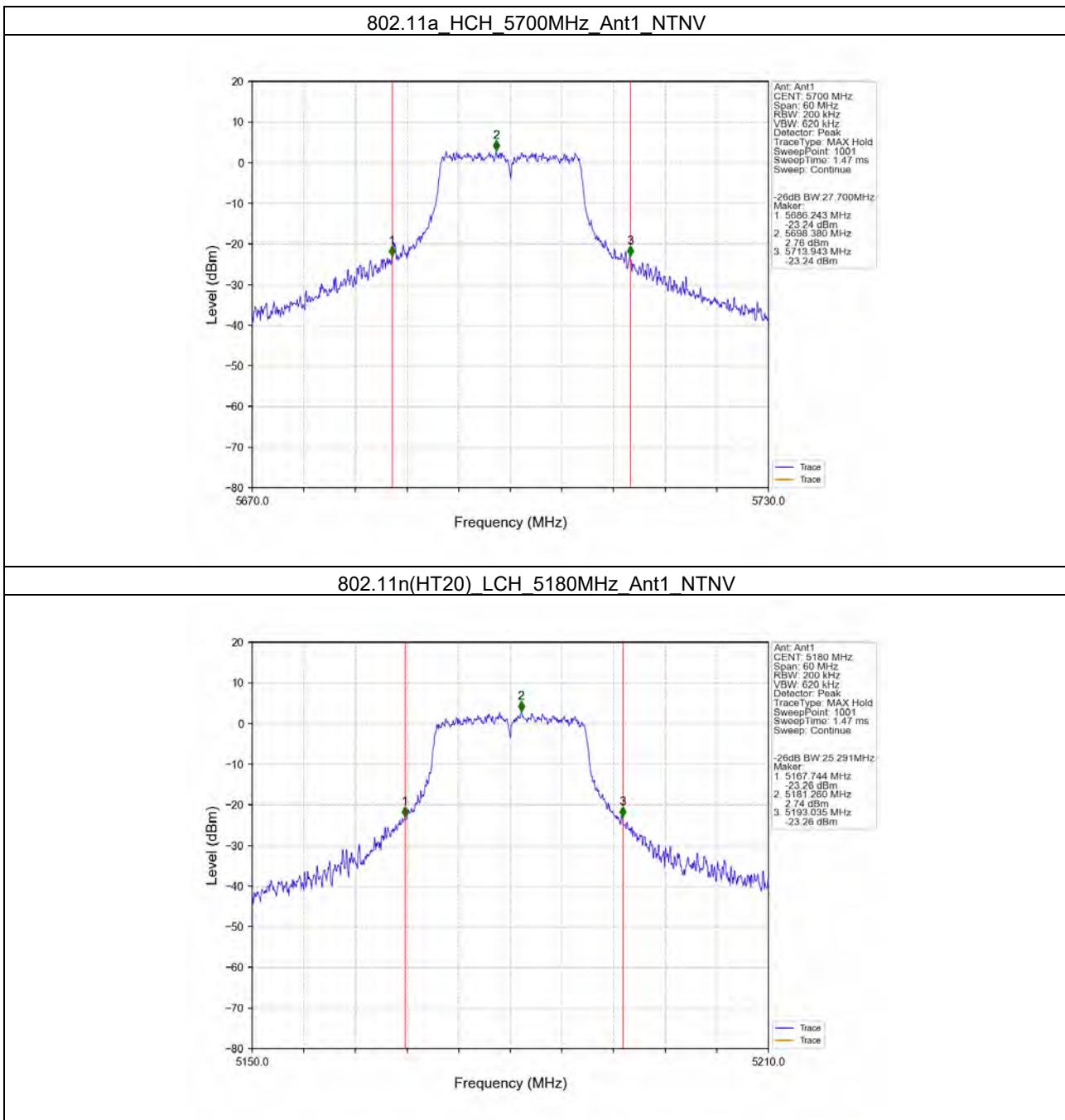
2.2.3 26dB BW

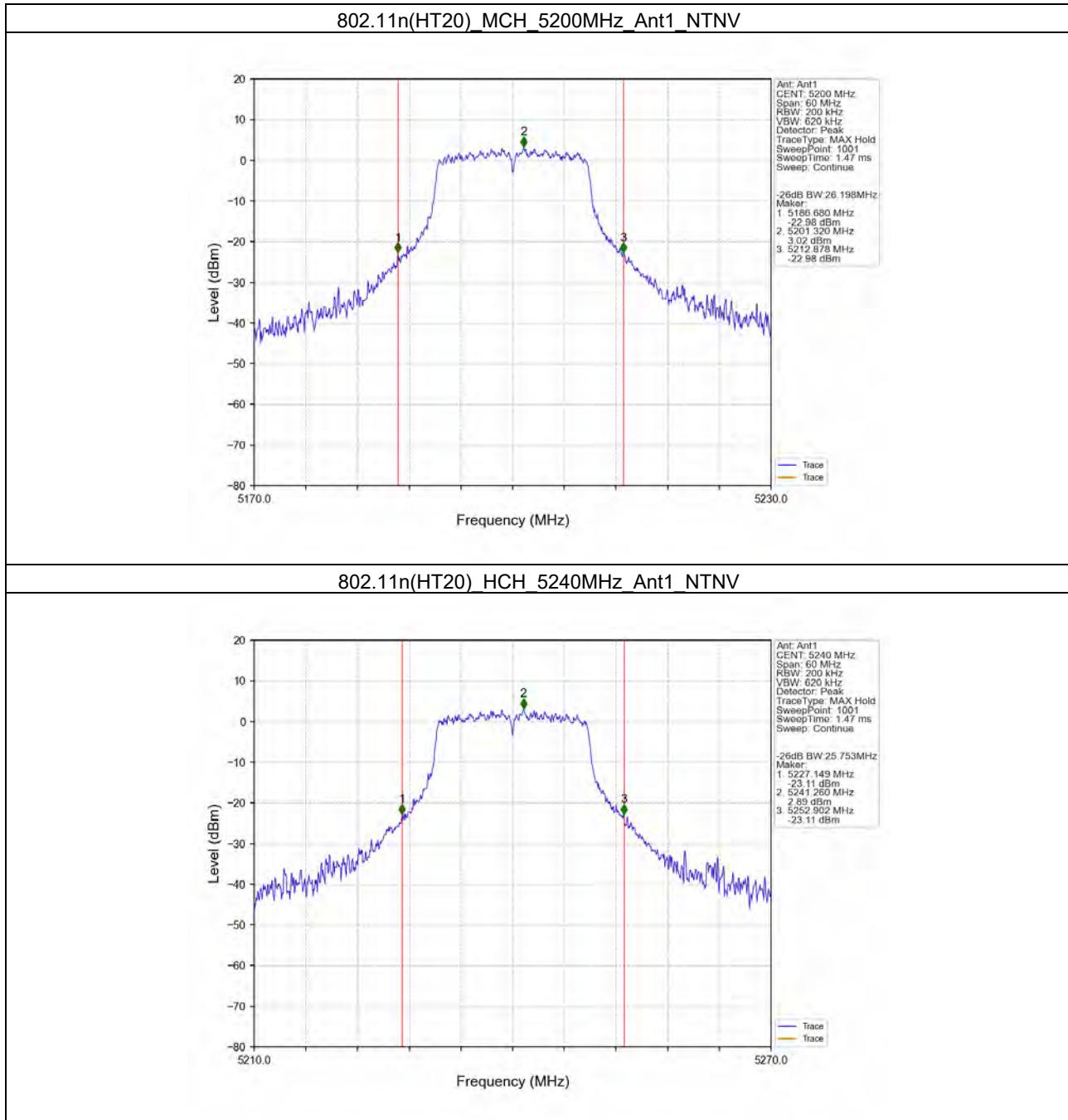


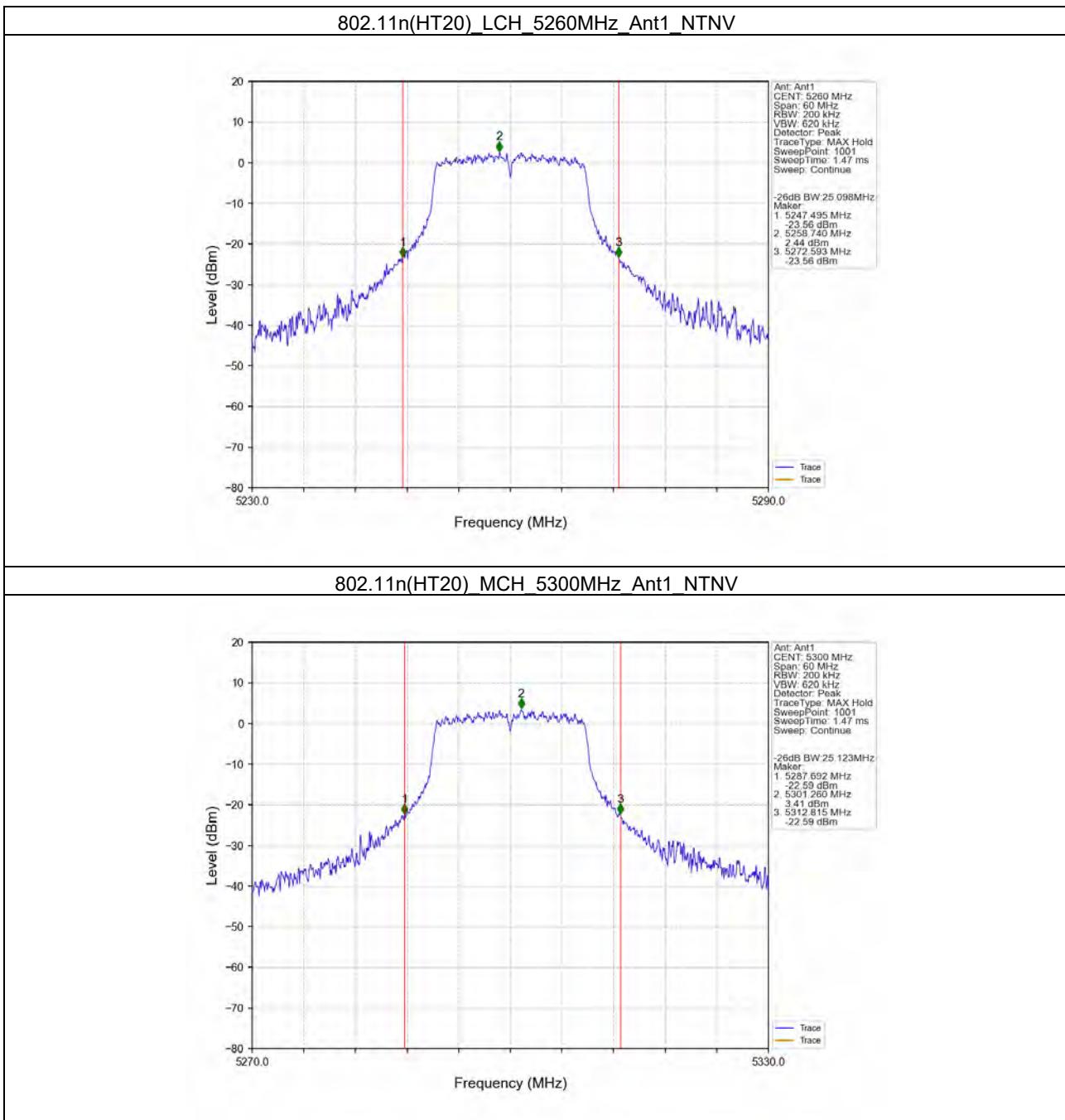


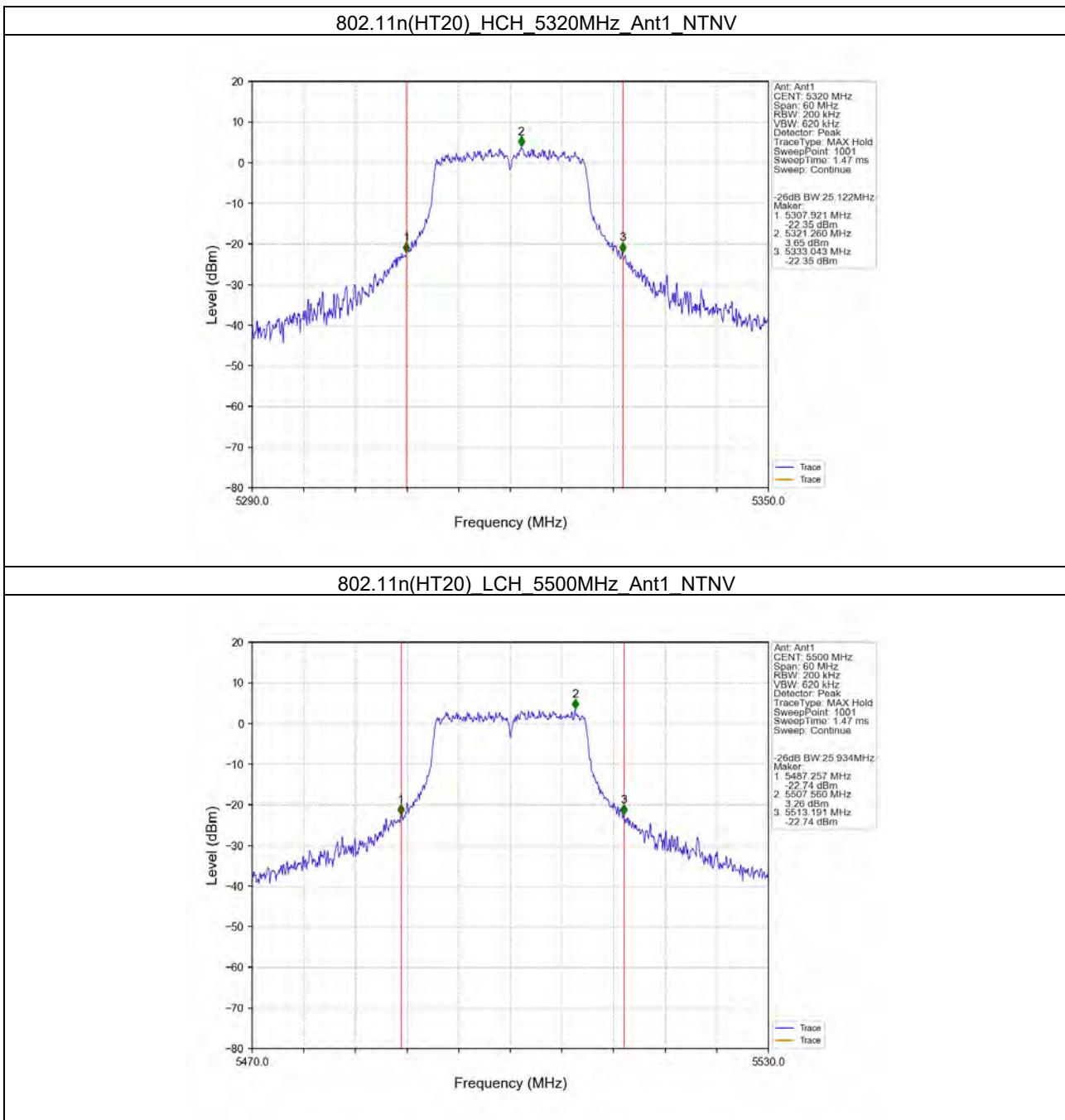


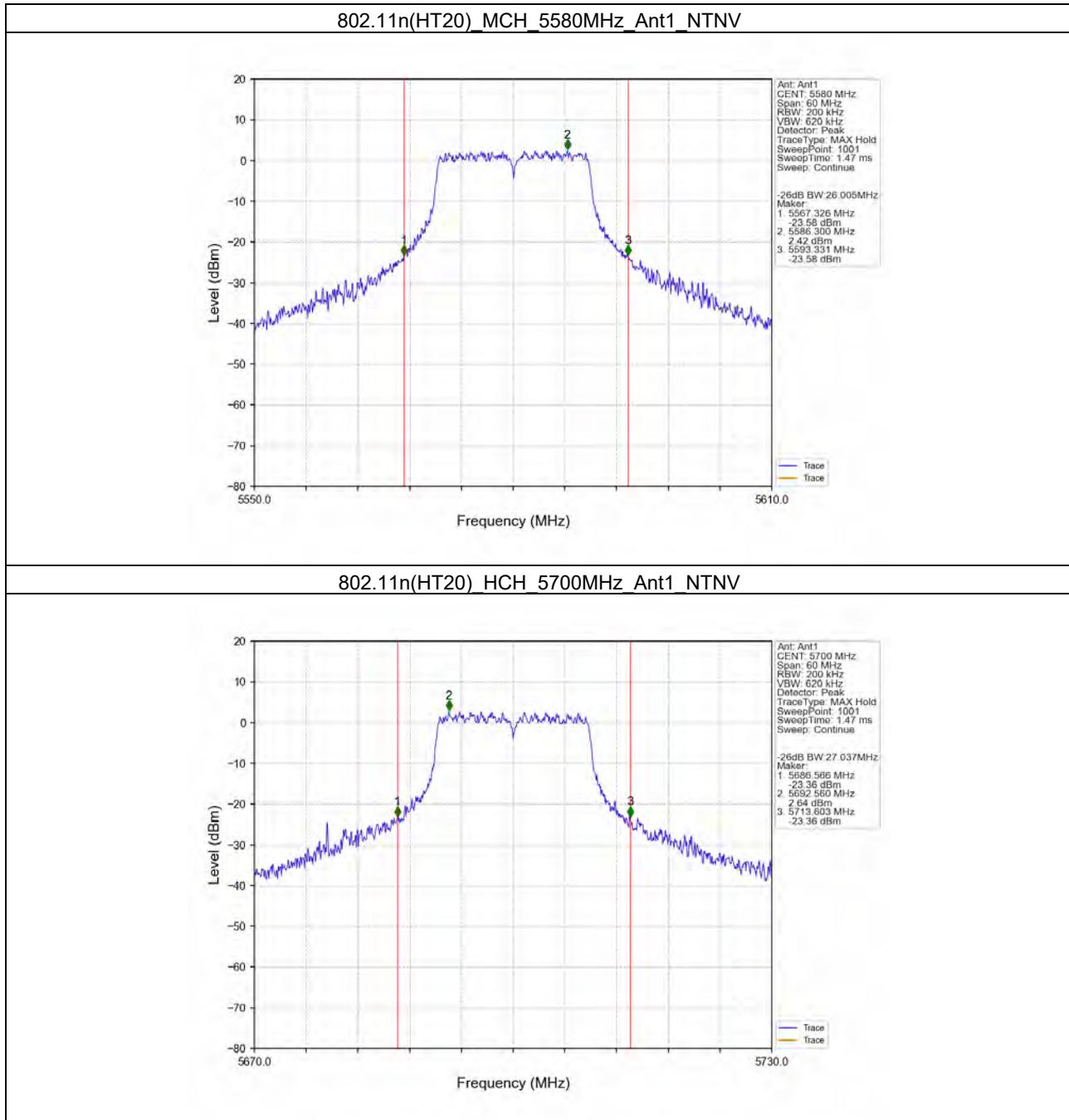


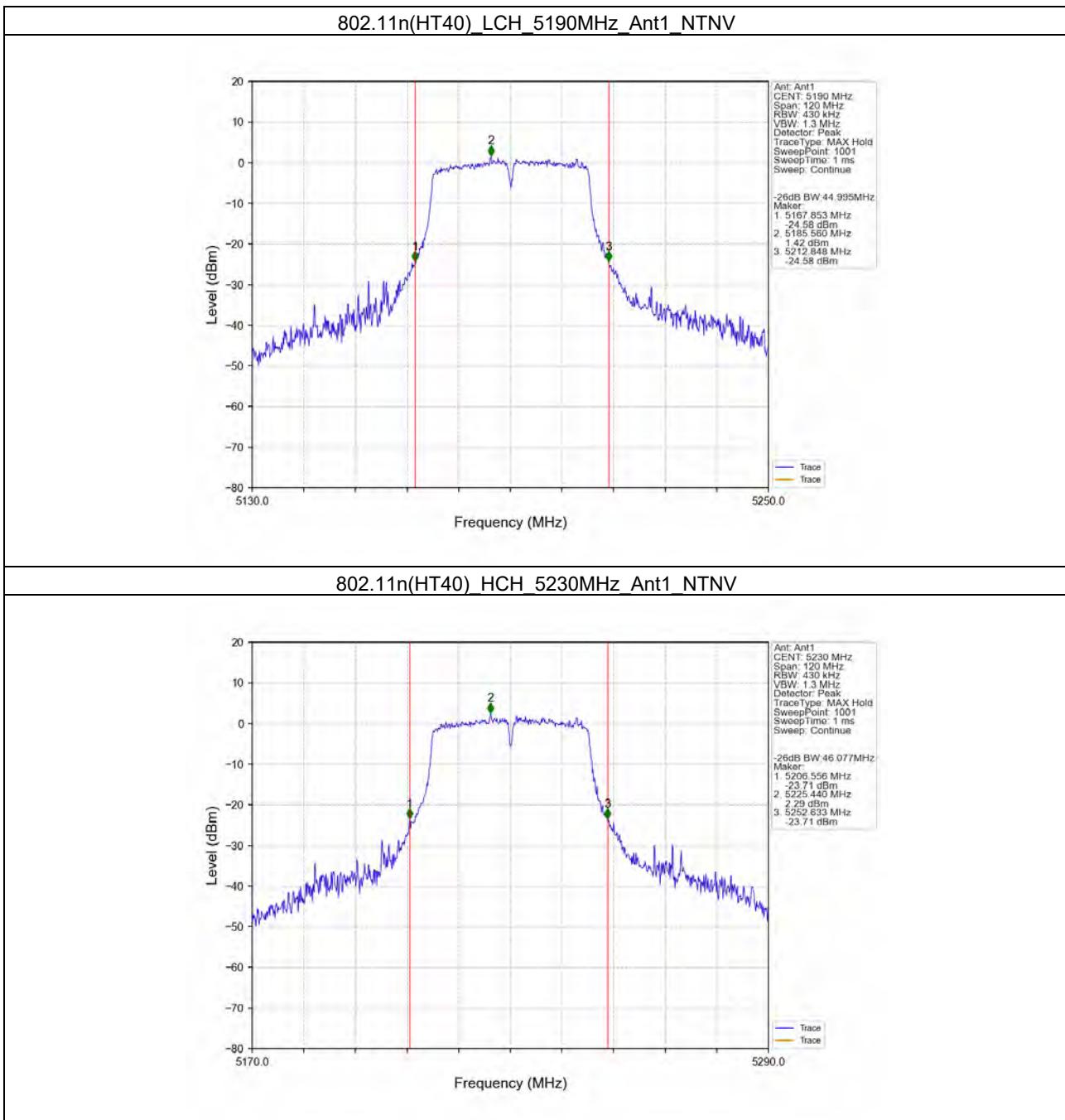


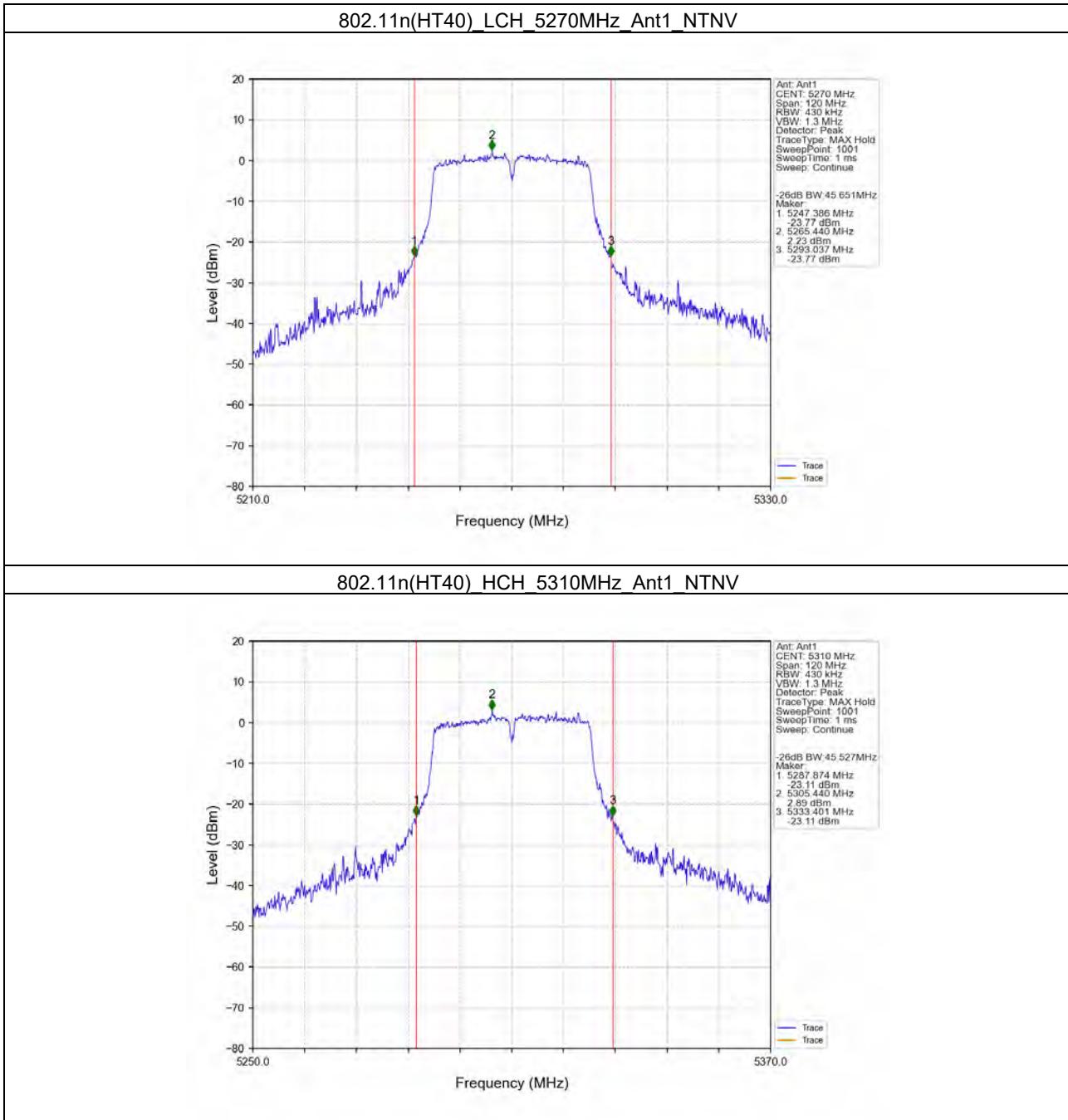


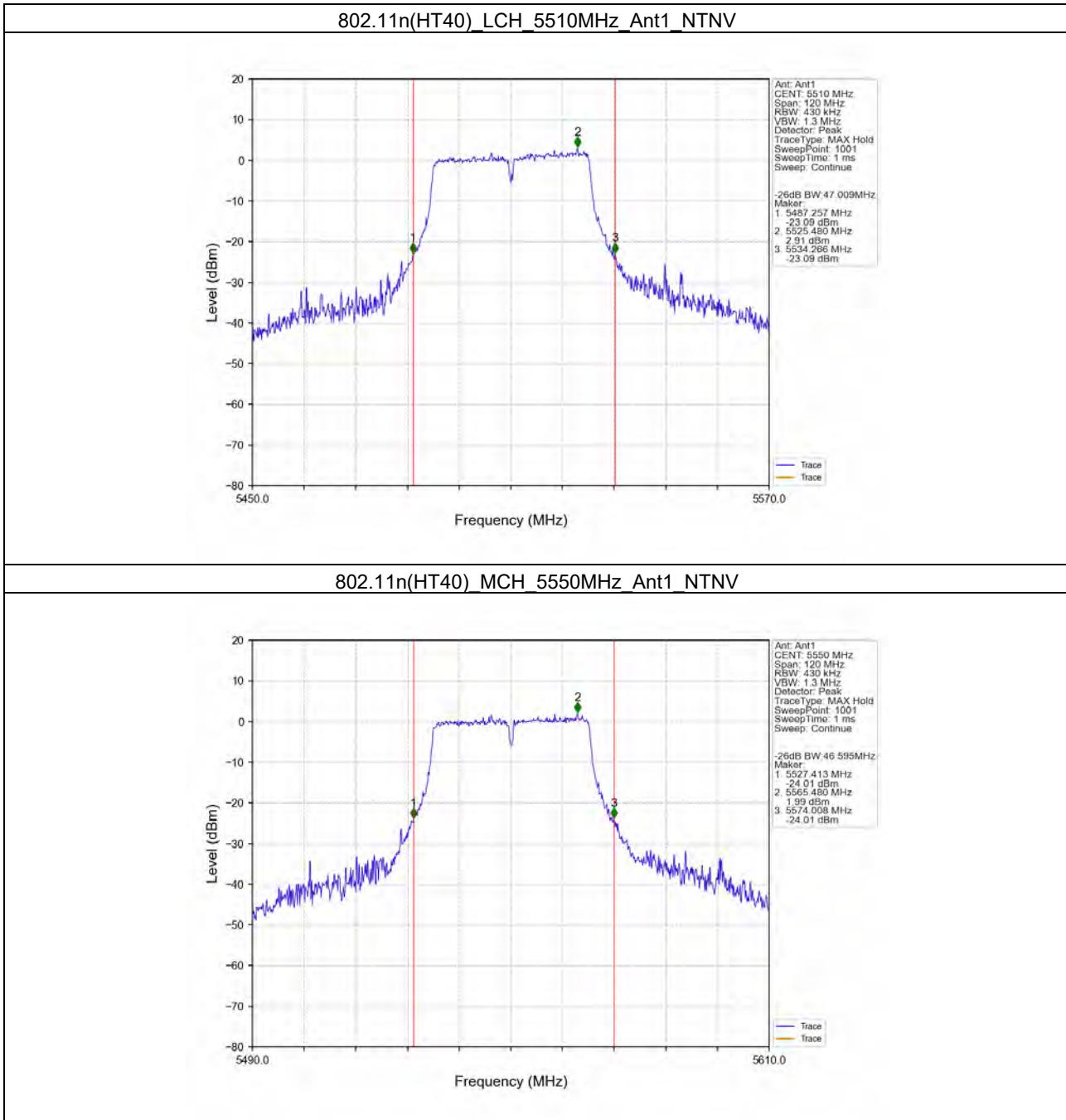


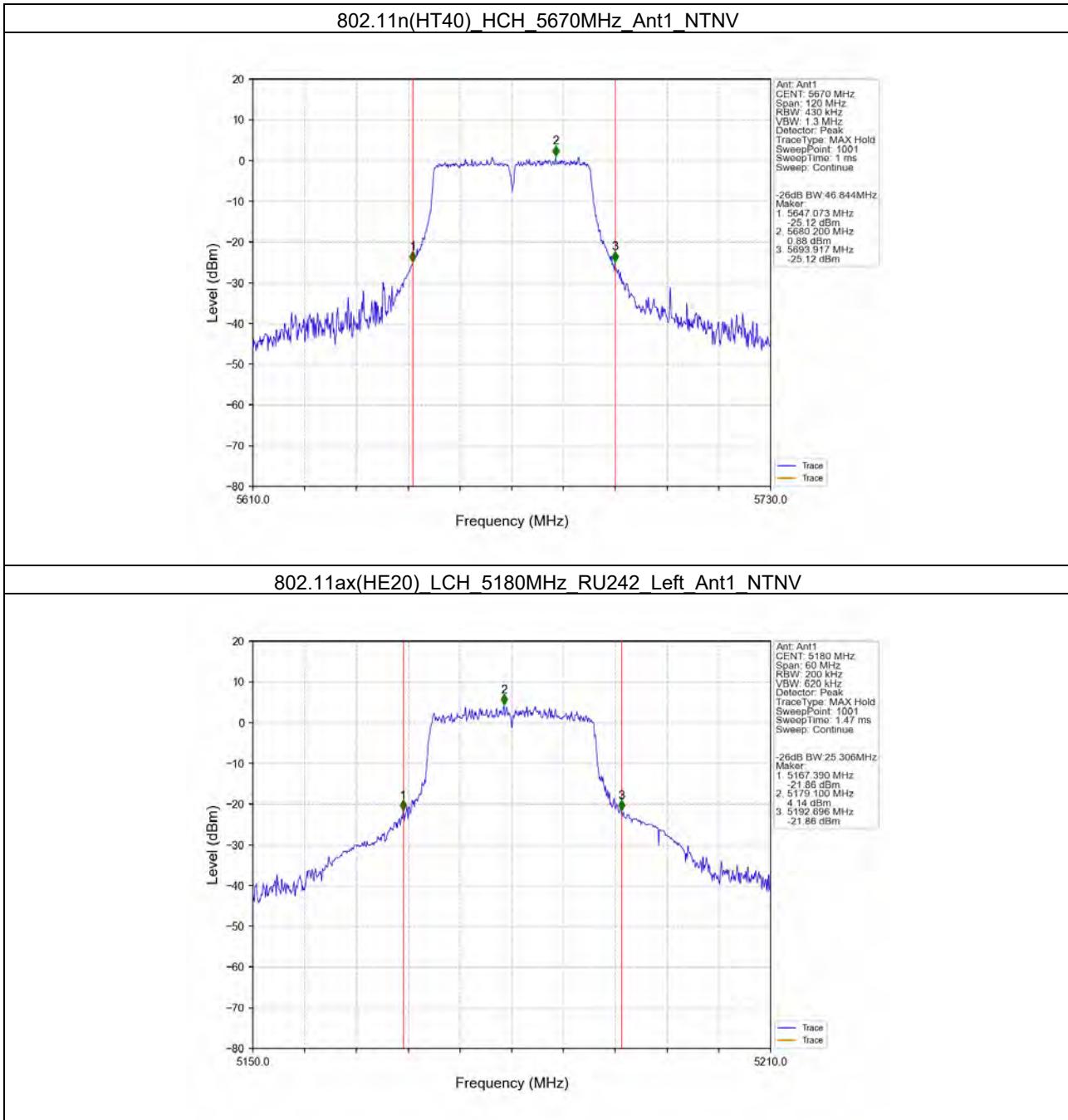


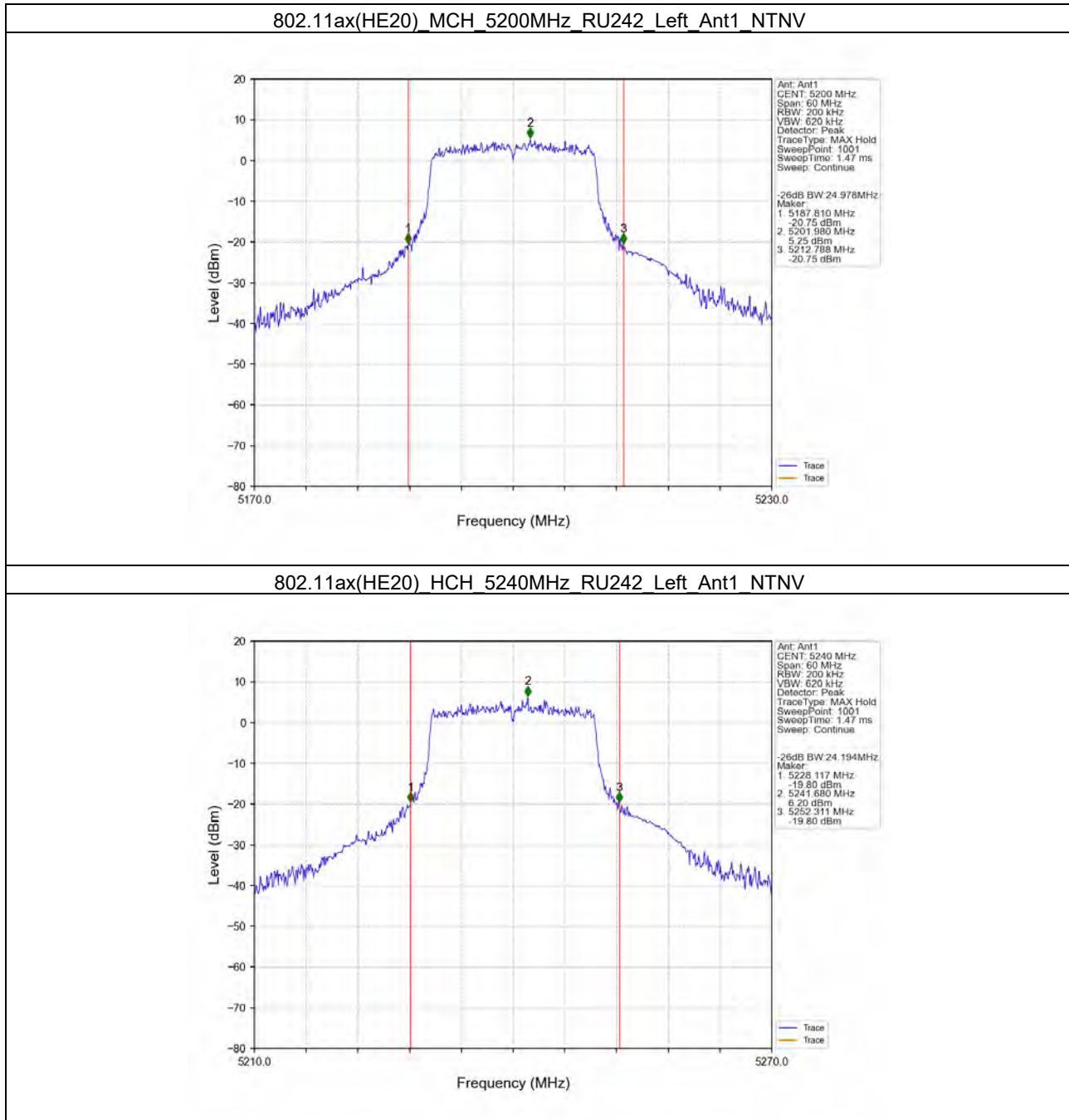


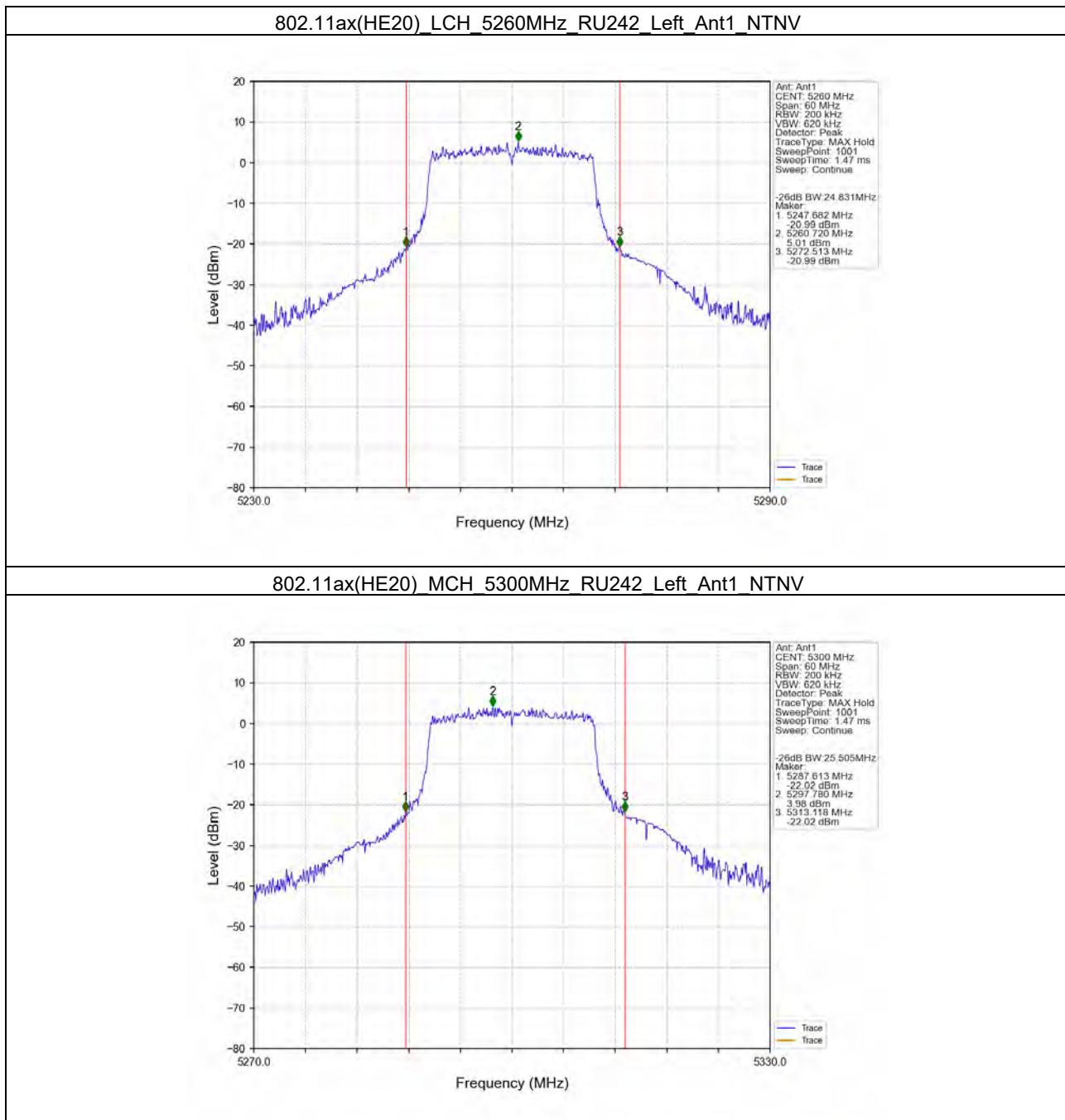


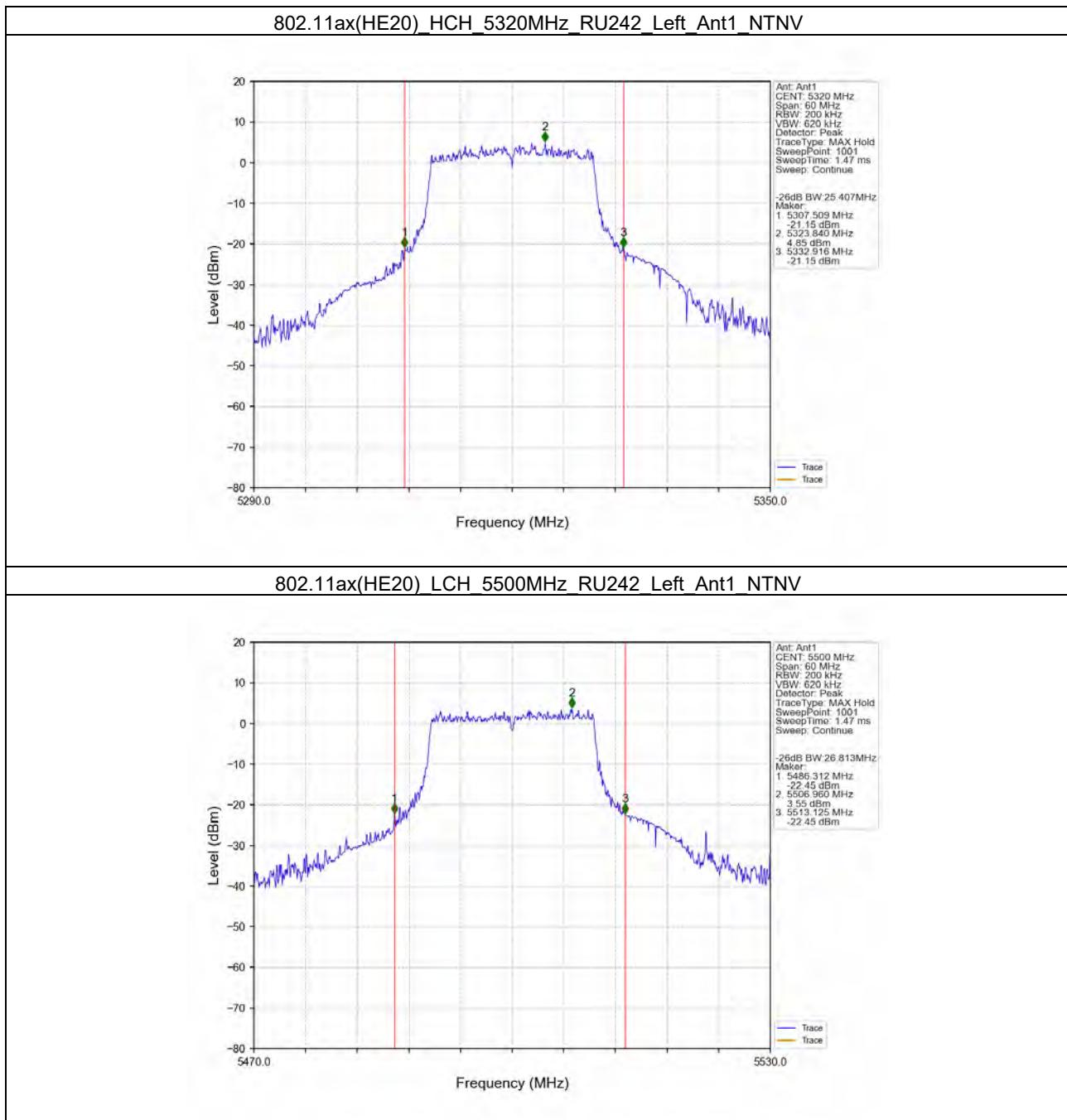


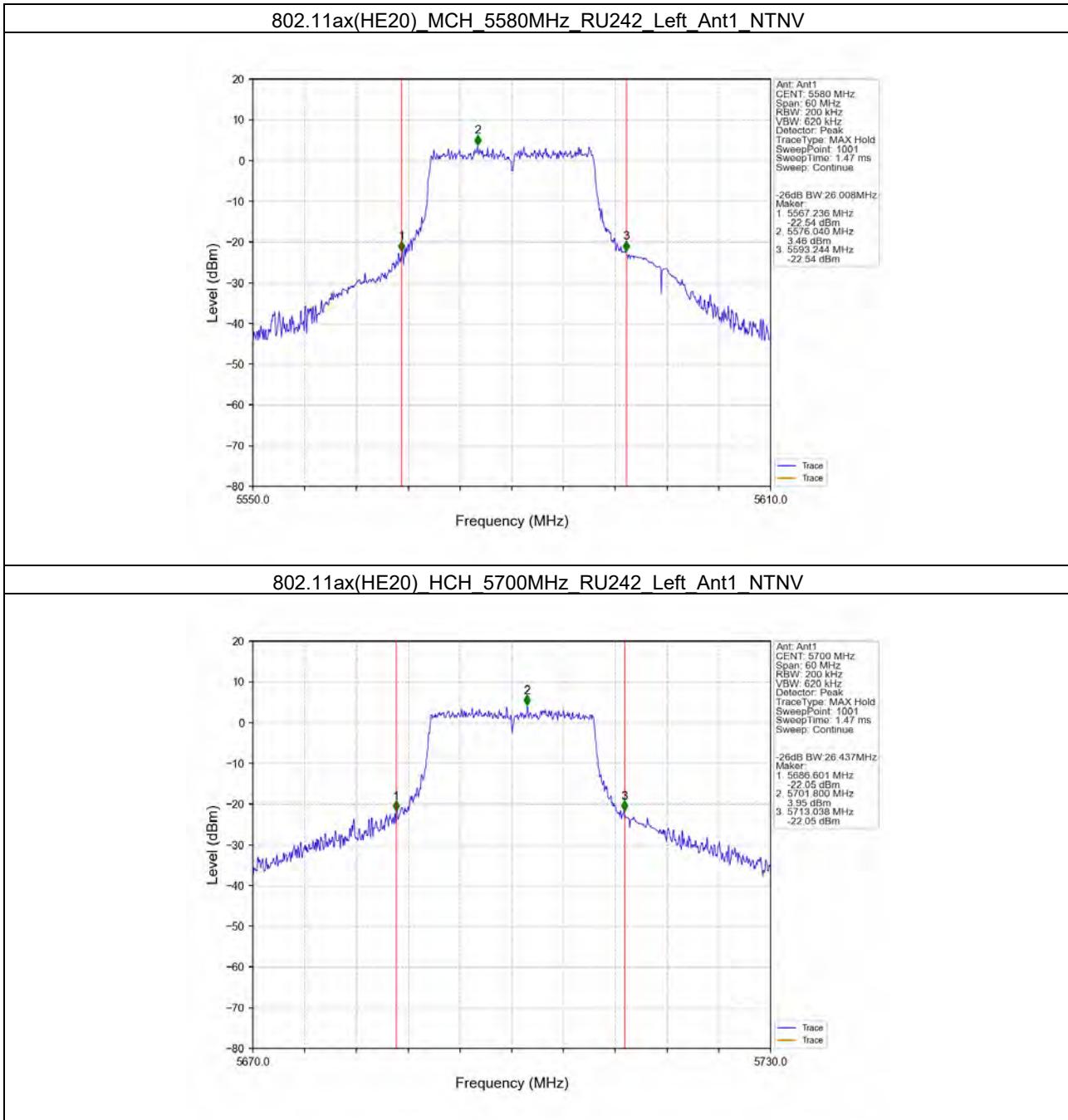


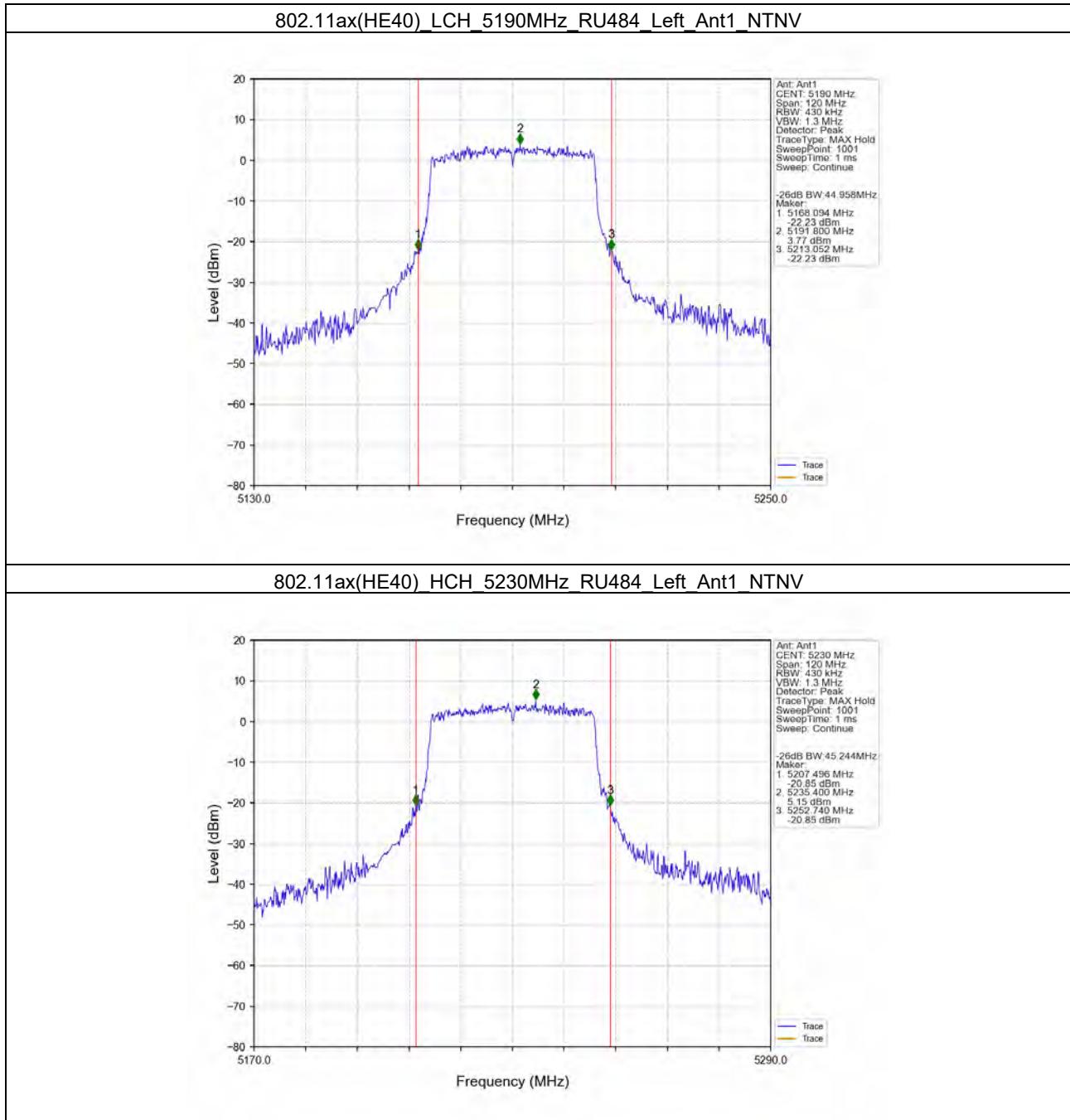


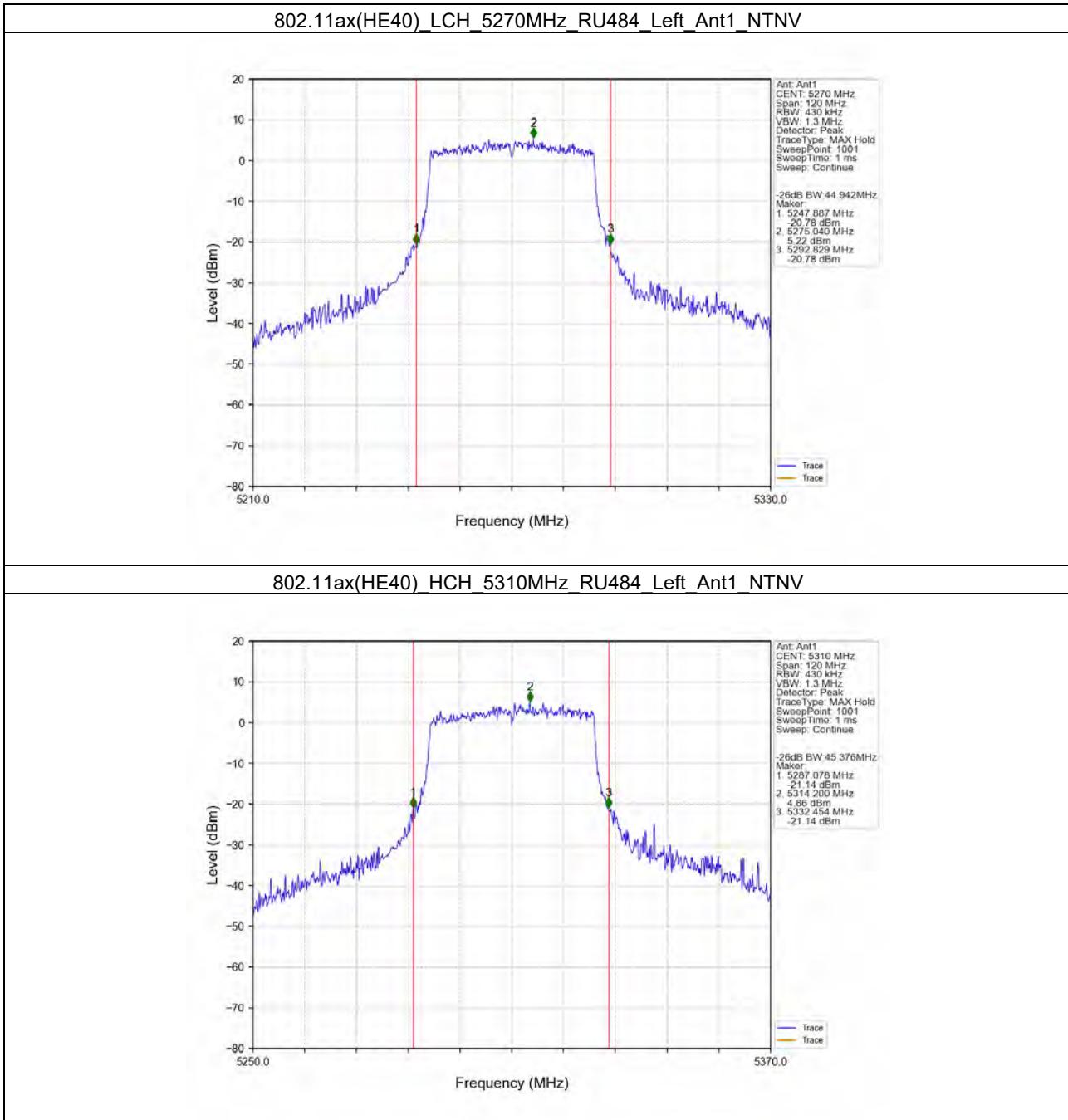


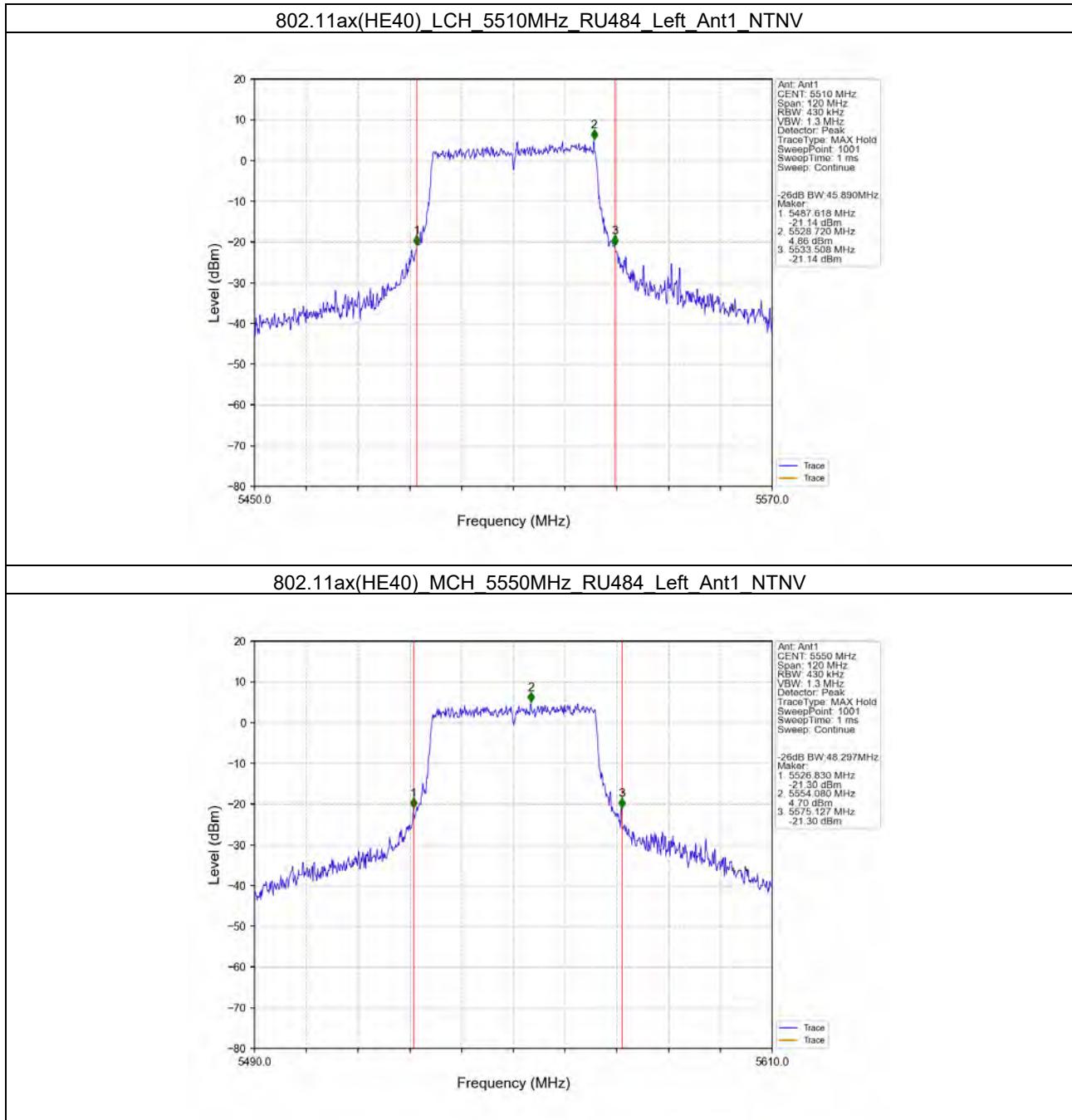


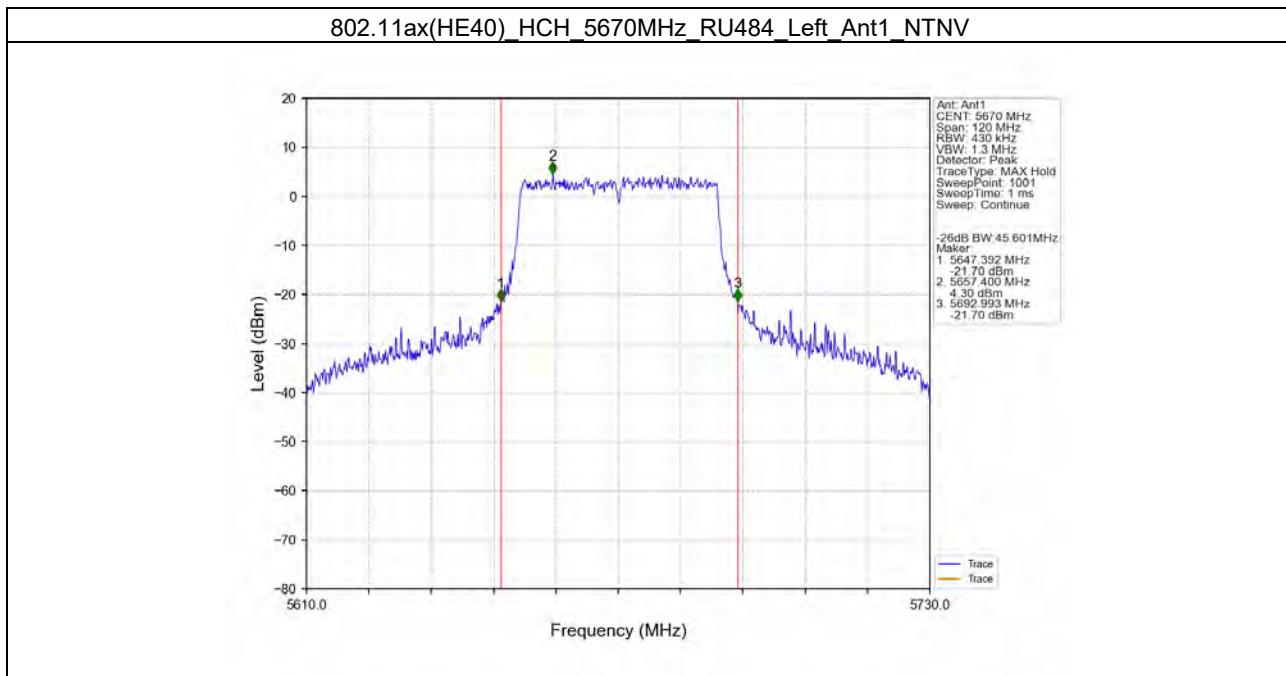












3. Maximum Conducted Output Power

3.1 Test Result

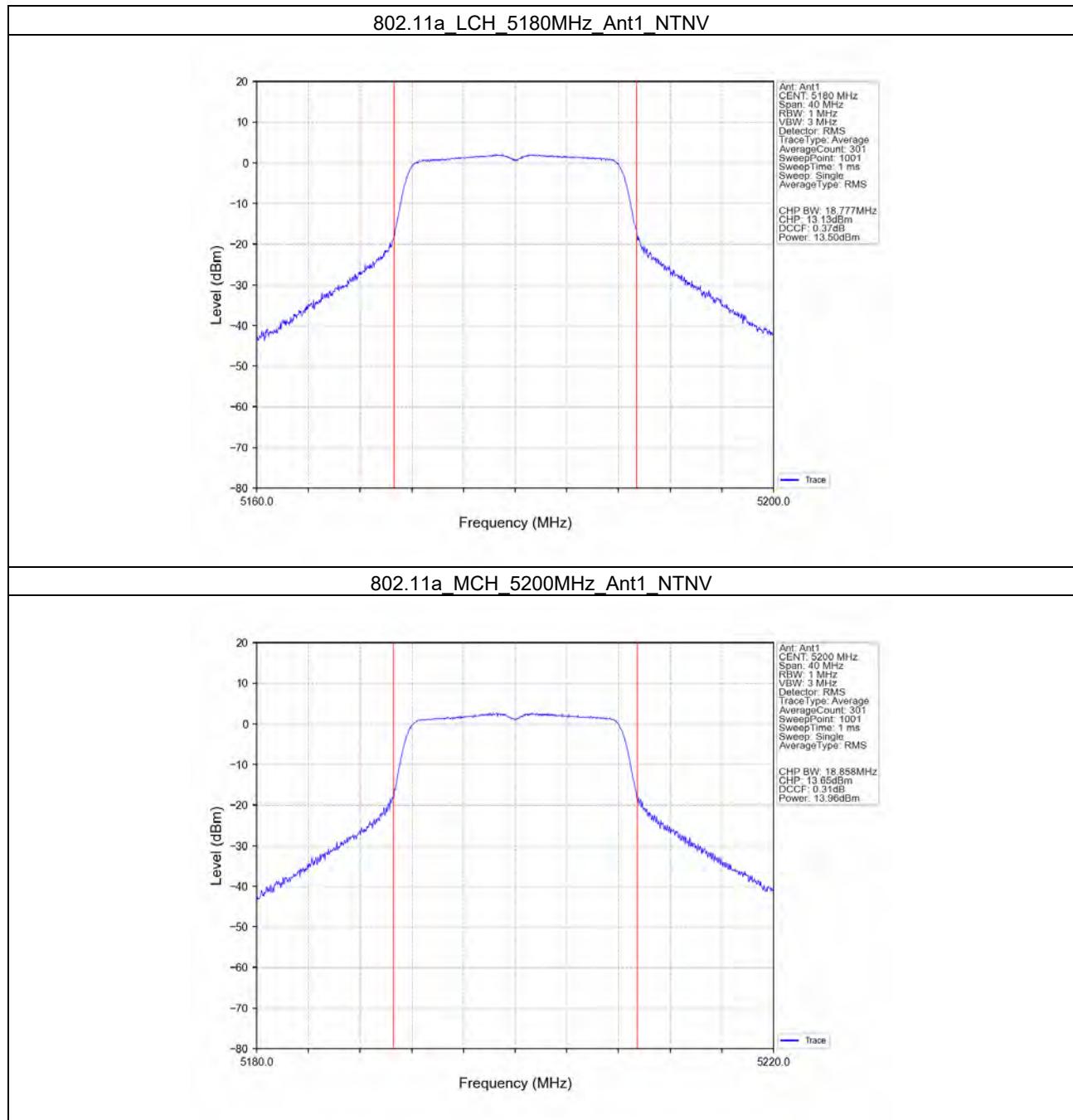
3.1.1 Power

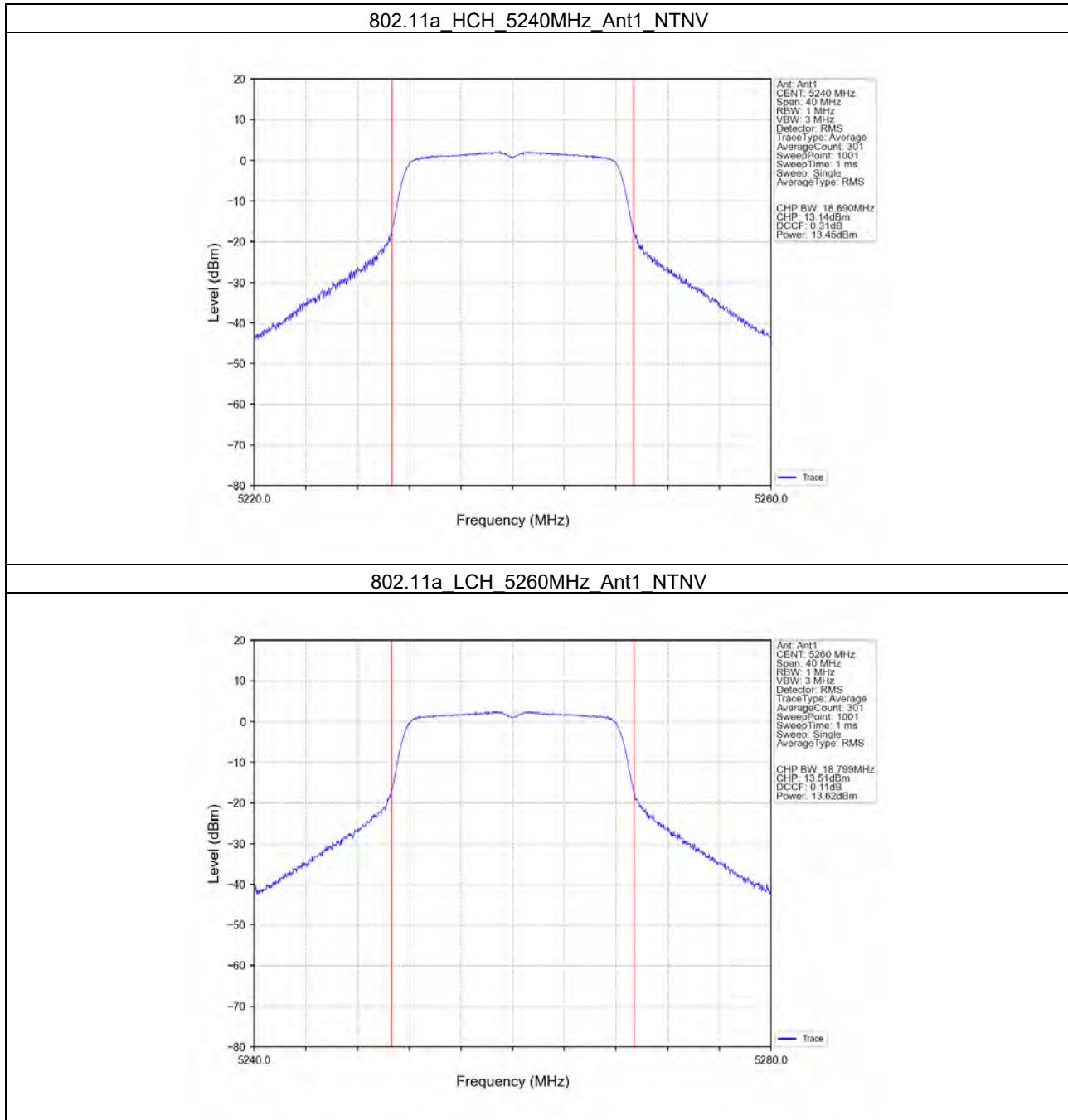
Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11a	SISO	5180	/	/	13.50	<=23.98	Pass
		5200	/	/	13.96	<=23.98	Pass
		5240	/	/	13.45	<=23.98	Pass
		5260	/	/	13.62	<=23.98	Pass
		5300	/	/	13.82	<=23.98	Pass
		5320	/	/	13.67	<=23.98	Pass
		5500	/	/	13.84	<=23.98	Pass
		5580	/	/	13.46	<=23.98	Pass
		5700	/	/	13.12	<=23.98	Pass
		5745	/	/	13.72	<=30	Pass
		5785	/	/	13.63	<=30	Pass
		5825	/	/	12.83	<=30	Pass
802.11n (HT20)	SISO	5180	/	/	12.63	<=23.98	Pass
		5200	/	/	12.96	<=23.98	Pass
		5240	/	/	12.82	<=23.98	Pass
		5260	/	/	12.55	<=23.98	Pass
		5300	/	/	13.23	<=23.98	Pass
		5320	/	/	13.49	<=23.98	Pass
		5500	/	/	13.62	<=23.98	Pass
		5580	/	/	12.97	<=23.98	Pass
		5700	/	/	13.09	<=23.98	Pass
		5745	/	/	12.84	<=30	Pass
		5785	/	/	12.79	<=30	Pass
		5825	/	/	12.87	<=30	Pass
802.11n (HT40)	SISO	5190	/	/	11.11	<=23.98	Pass
		5230	/	/	11.64	<=23.98	Pass
		5270	/	/	10.99	<=23.98	Pass
		5310	/	/	12.13	<=23.98	Pass
		5510	/	/	11.59	<=23.98	Pass
		5550	/	/	11.49	<=23.98	Pass
		5670	/	/	10.70	<=23.98	Pass
		5755	/	/	11.22	<=30	Pass
		5795	/	/	10.81	<=30	Pass
		5180	RU242	Left	12.98	<=23.98	Pass
802.11ax (HE20)	SISO	5200	RU242	Left	13.53	<=23.98	Pass
		5240	RU242	Left	13.91	<=23.98	Pass
		5260	RU242	Left	13.37	<=23.98	Pass
		5300	RU242	Left	13.31	<=23.98	Pass
		5320	RU242	Left	13.48	<=23.98	Pass

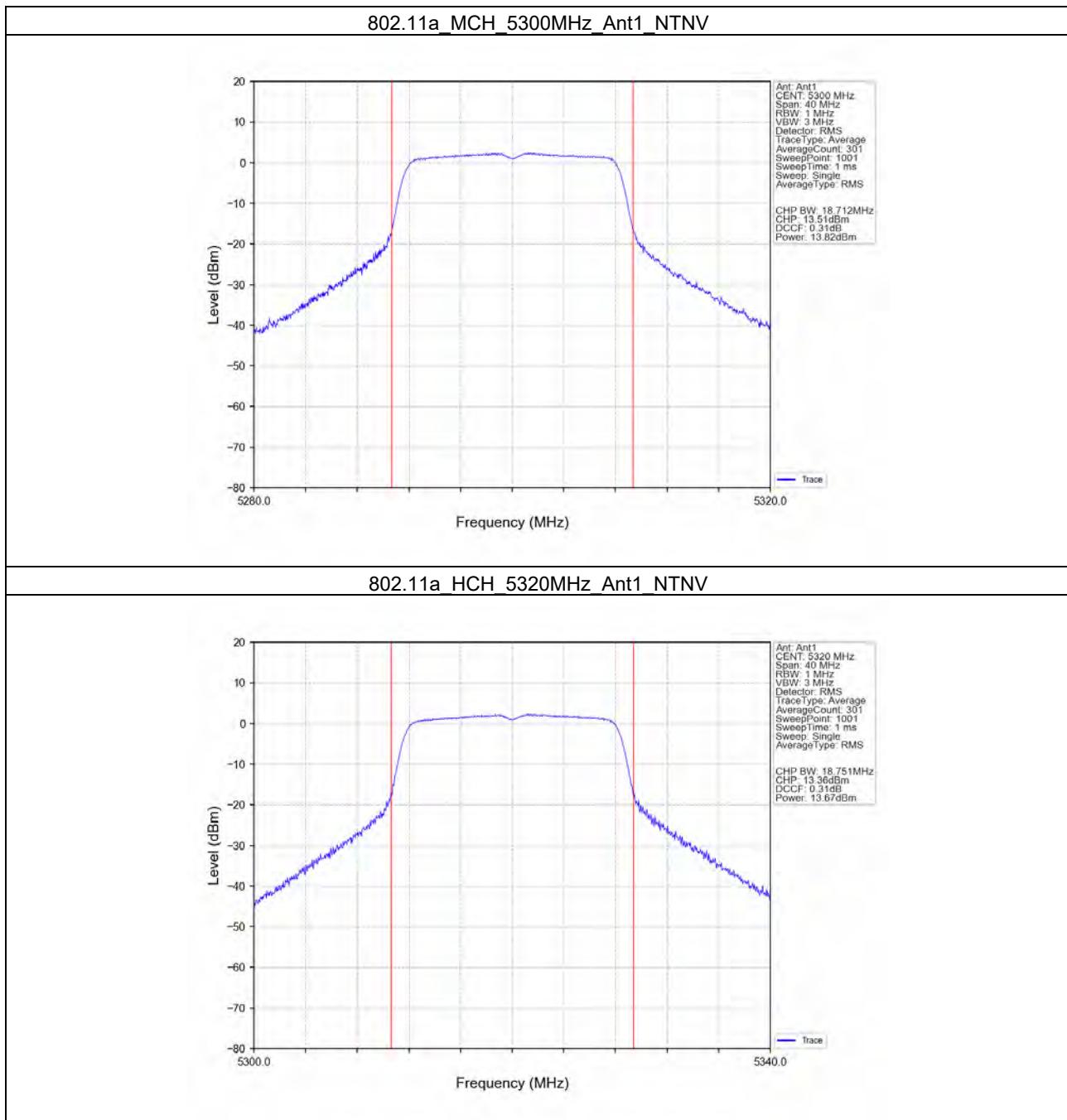
		5500	RU242	Left	12.52	<=23.98	Pass
		5580	RU242	Left	12.52	<=23.98	Pass
		5700	RU242	Left	12.96	<=23.98	Pass
		5745	RU242	Left	12.69	<=30	Pass
		5785	RU242	Left	12.77	<=30	Pass
		5825	RU242	Left	12.88	<=30	Pass
802.11ax (HE40)	SISO	5190	RU484	Left	11.74	<=23.98	Pass
		5230	RU484	Left	12.81	<=23.98	Pass
		5270	RU484	Left	12.90	<=23.98	Pass
		5310	RU484	Left	12.49	<=23.98	Pass
		5510	RU484	Left	12.24	<=23.98	Pass
		5550	RU484	Left	12.74	<=23.98	Pass
		5670	RU484	Left	12.66	<=23.98	Pass
		5755	RU484	Left	12.40	<=30	Pass
		5795	RU484	Left	11.68	<=30	Pass
		Note1: Antenna Gain: Ant1: 0.80dBi;					

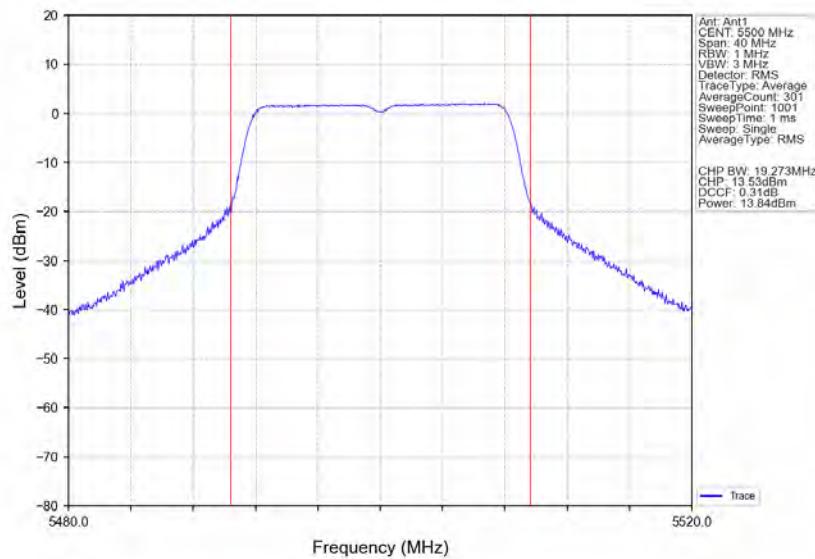
3.2 Test Graph

3.2.1 Power







802.11a_LCH_5500MHz_Ant1_NTNV**802.11a_MCH_5580MHz_Ant1_NTNV**