

## 7.11.4 Measurement Procedure and Data

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

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## 7.12 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.

### 7.12.1 E.U.T. Operation

Operating Environment:

Temperature: 27.1 °C

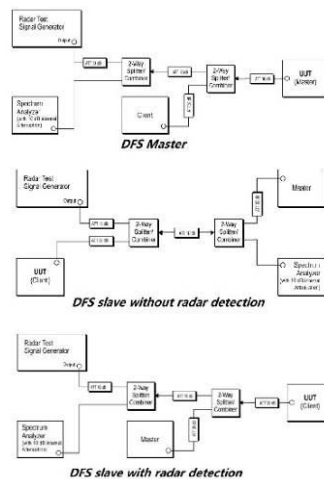
Humidity: 50.3 % RH

Atmospheric Pressure: 1015 mbar

### 7.12.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	09	Normal operating_Keep the EUT communication with the companion device.

### 7.12.3 Test Setup Diagram



## 7.12.4 Measurement Procedure and Data

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

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## 7.13 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.

### 7.13.1 E.U.T. Operation

Operating Environment:

Temperature: 27.1 °C

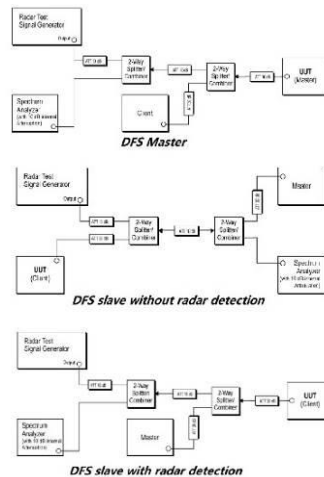
Humidity: 50.3 % RH

Atmospheric Pressure: 1015 mbar

### 7.13.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	09	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:  $C (ms) = N \times Dwell (0.3ms)$ ; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

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## 7.14 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

### 7.14.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C

Humidity: 53.1 % RH

Atmospheric Pressure: 1015 mbar

### 7.14.2 Test Mode Description

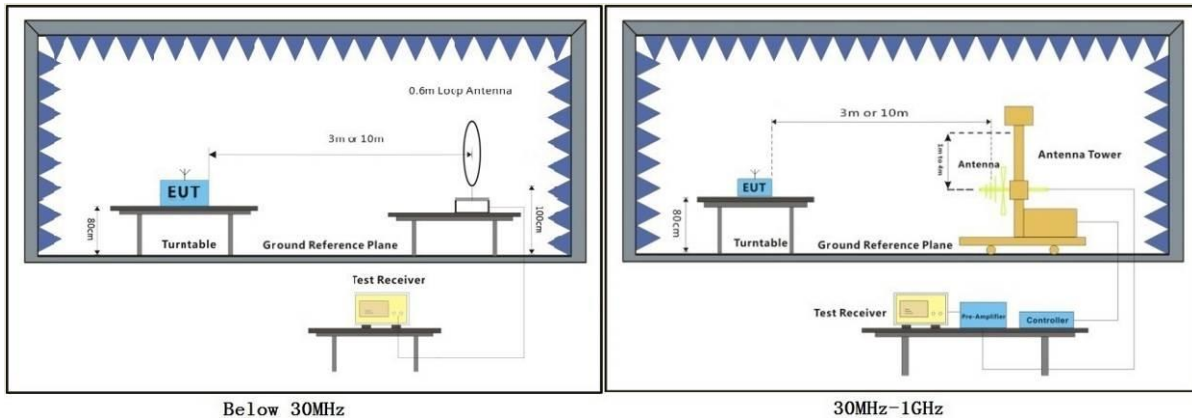
Pre-scan / Final test	Mode Code	Description
Final test	05	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(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), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.
Pre-scan	06	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), final test modes are considering the modulation and worse data rates. Only the data of worst case is





		recorded in the report.
Pre-scan	07	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), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.
Pre-scan	08	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(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), final test modes are considering the modulation and worse data rates. Only the data of worst case is recorded in the report.

### 7.14.3 Test Setup Diagram



## 7.14.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.
3. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
4. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



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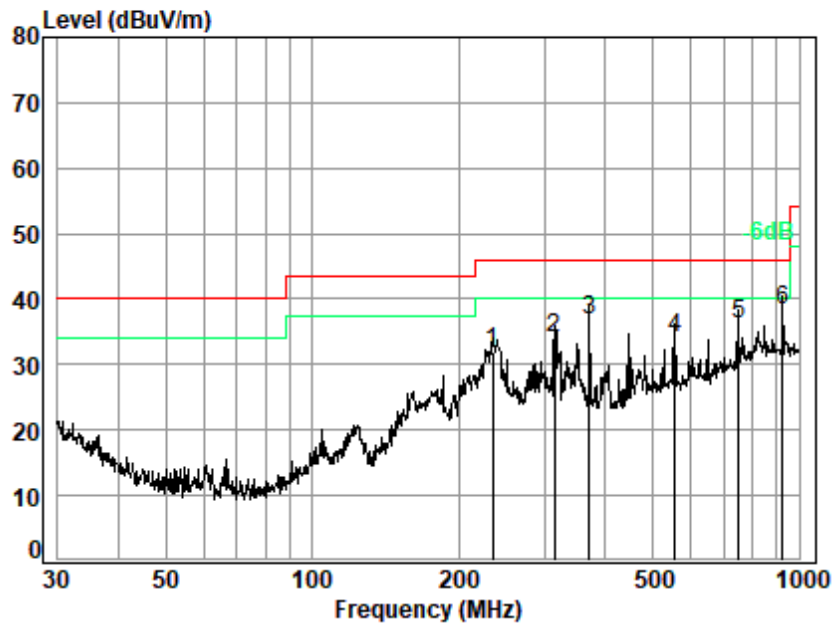
## SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230400113905

Page: 320 of 527

Test Mode: 05; Polarity: Horizontal



Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : 01139AT  
Test Mode: 05

		Ant	Cable	Preamp	Read		Limit	Over	
	Freq	Factor	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1	234.99	17.54	1.84	26.46	39.11	32.03	46.00	-13.97	QP
2	314.38	18.79	2.17	26.24	39.28	34.00	46.00	-12.00	QP
3	370.70	21.25	2.37	26.41	39.66	36.87	46.00	-9.13	QP
4	556.77	23.84	2.99	26.97	34.25	34.11	46.00	-11.89	QP
5	750.11	26.69	3.55	26.50	32.44	36.18	46.00	-9.82	QP
6 q	925.76	28.43	4.09	25.80	31.75	38.47	46.00	-7.53	QP



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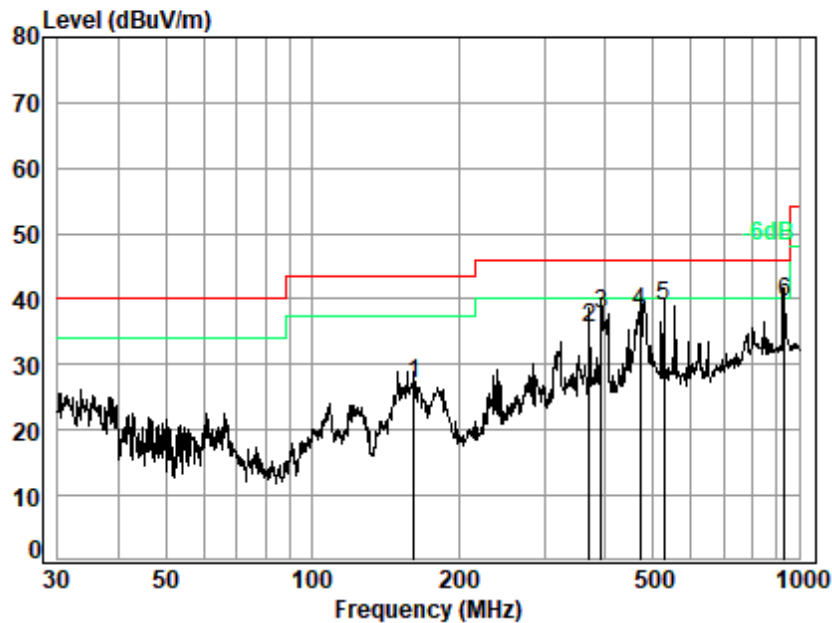
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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230400113905

Page: 321 of 527

Test Mode: 05; Polarity: Vertical



Site : chamber  
Condition: 3m VERTICAL  
Job No. : 01139AT  
Test Mode: 05

		Ant	Cable	Preamp	Read		Limit	Over	
	Freq	Factor	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1	162.04	13.73	1.48	26.75	38.51	26.97	43.50	-16.53	QP
2	370.70	21.25	2.37	26.41	38.49	35.70	46.00	-10.30	QP
3	392.10	21.51	2.45	26.48	40.35	37.83	46.00	-8.17	QP
4	472.18	22.93	2.72	26.72	38.98	37.91	46.00	-8.09	QP
5	528.25	24.18	2.90	26.88	38.76	38.96	46.00	-7.04	QP
6 q	935.55	28.55	4.11	25.76	32.76	39.66	46.00	-6.34	QP



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## 8 Test Setup Photo

Refer to Setup Photos for SZCR2304001139AT

## 9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for SZCR2304001139AT



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## 10 Appendix

### 1. Duty Cycle

#### 1.1 Ant1

##### 1.1.1 Test Result

Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.067	2.295	90.07	0.45	5.21
		5200	2.065	2.294	90.02	0.46	5.22
		5240	2.065	2.295	89.98	0.46	5.25
		5260	2.066	2.277	90.73	0.42	4.94
		5300	2.066	2.295	90.02	0.46	5.64
		5320	2.066	2.287	90.34	0.44	4.14
		5500	2.066	2.295	90.02	0.46	5.60
		5580	2.066	2.241	92.19	0.35	3.49
		5700	2.066	2.277	90.73	0.42	4.94
		5745	2.065	2.295	89.98	0.46	5.64
		5785	2.067	2.287	90.38	0.44	4.83
		5825	2.065	2.295	89.98	0.46	5.25
802.11n (HT20)	MIMO	5180	1.922	2.142	89.73	0.47	3.12
		5200	1.921	2.151	89.31	0.49	6.02
		5240	1.922	2.125	90.45	0.44	4.01
		5260	1.923	2.143	89.73	0.47	5.58
		5300	1.922	2.133	90.11	0.45	4.83
		5320	1.922	2.142	89.73	0.47	4.35
		5500	1.922	2.124	90.49	0.43	3.98
		5580	1.922	2.142	89.73	0.47	3.95
		5700	1.921	2.141	89.72	0.47	5.17
		5745	1.922	2.125	90.45	0.44	2.77
		5785	1.921	2.150	89.35	0.49	4.31
		5825	1.922	2.152	89.31	0.49	5.98
802.11n (HT40)	MIMO	5190	0.946	1.157	81.76	0.87	9.20
		5230	0.945	1.156	81.75	0.88	6.92

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		5270	0.946	1.167	81.06	0.91	8.32
		5310	0.946	1.176	80.44	0.95	6.69
		5510	0.946	1.175	80.51	0.94	4.54
		5550	0.945	1.166	81.05	0.91	7.53
		5670	0.946	1.148	82.40	0.84	7.78
		5755	0.947	1.166	81.22	0.90	9.05
		5795	0.648	0.683	94.88	0.23	0.04
802.11ac (VHT20)	MIMO	5180	1.933	2.186	88.43	0.53	5.41
		5200	1.934	2.178	88.80	0.52	3.84
		5240	1.934	2.187	88.43	0.53	5.41
		5260	1.934	2.187	88.43	0.53	4.98
		5300	1.934	2.178	88.80	0.52	4.63
		5320	1.934	2.178	88.80	0.52	5.46
		5500	1.935	2.143	90.29	0.44	3.53
		5580	1.934	2.187	88.43	0.53	3.01
		5700	1.933	2.160	89.49	0.48	4.74
		5745	1.934	2.178	88.80	0.52	5.46
		5785	1.934	2.169	89.17	0.50	5.10
		5825	1.934	2.187	88.43	0.53	3.84
802.11ac (VHT40)	MIMO	5190	0.954	1.180	80.85	0.92	7.39
		5230	0.953	1.197	79.62	0.99	9.38
		5270	0.954	1.198	79.63	0.99	8.61
		5310	0.953	1.207	78.96	1.03	9.98
		5510	0.954	1.198	79.63	0.99	7.89
		5550	0.954	1.198	79.63	0.99	9.35
		5670	0.954	1.207	79.04	1.02	9.98
		5755	0.954	1.207	79.04	1.02	9.22
		5795	0.954	1.172	81.40	0.89	7.54
802.11ac (VHT80)	MIMO	5210	0.462	0.715	64.62	1.90	12.68
		5290	0.462	0.715	64.62	1.90	15.05
		5530	0.462	0.715	64.62	1.90	15.05
		5610	0.462	0.697	66.28	1.79	13.38
		5775	0.462	0.746	61.93	2.08	15.24



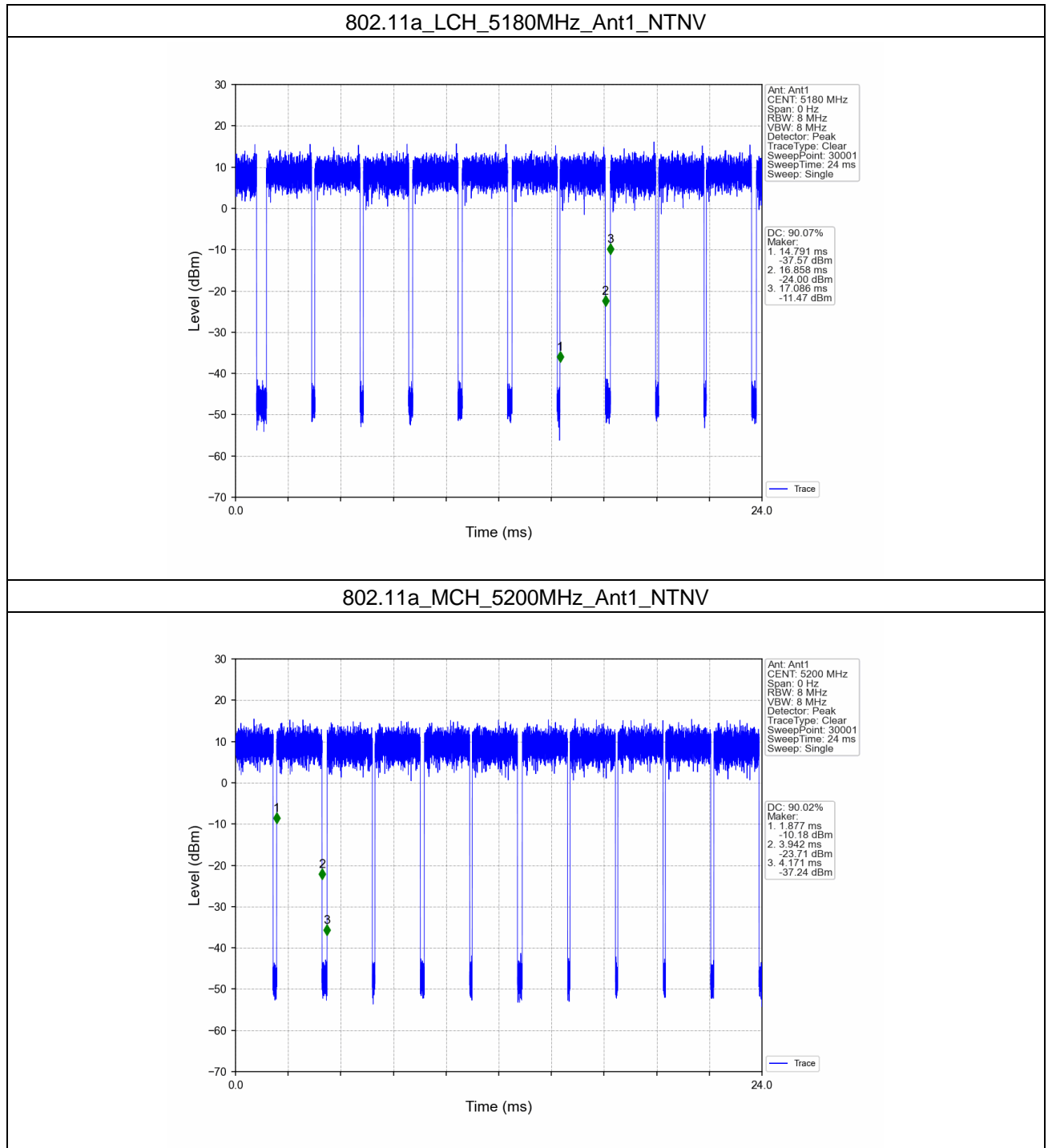
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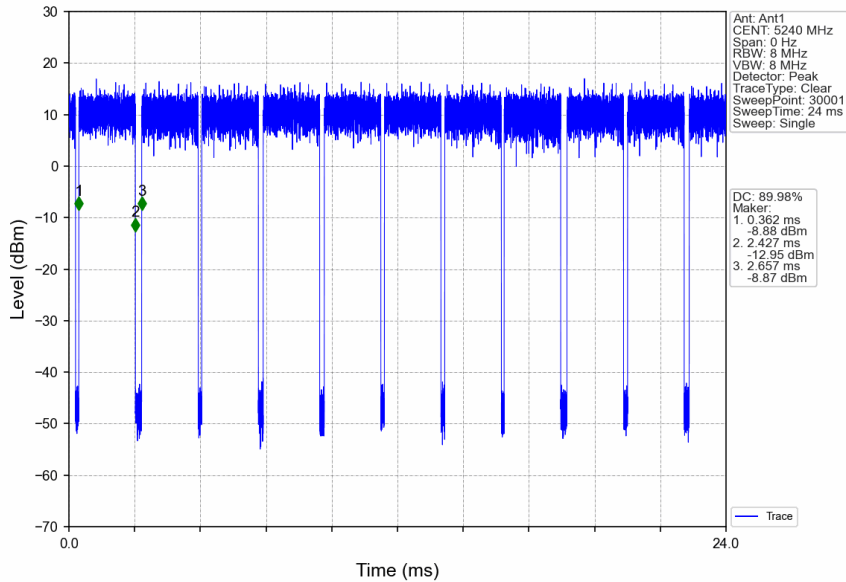
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### 1.1.2 Test Graph

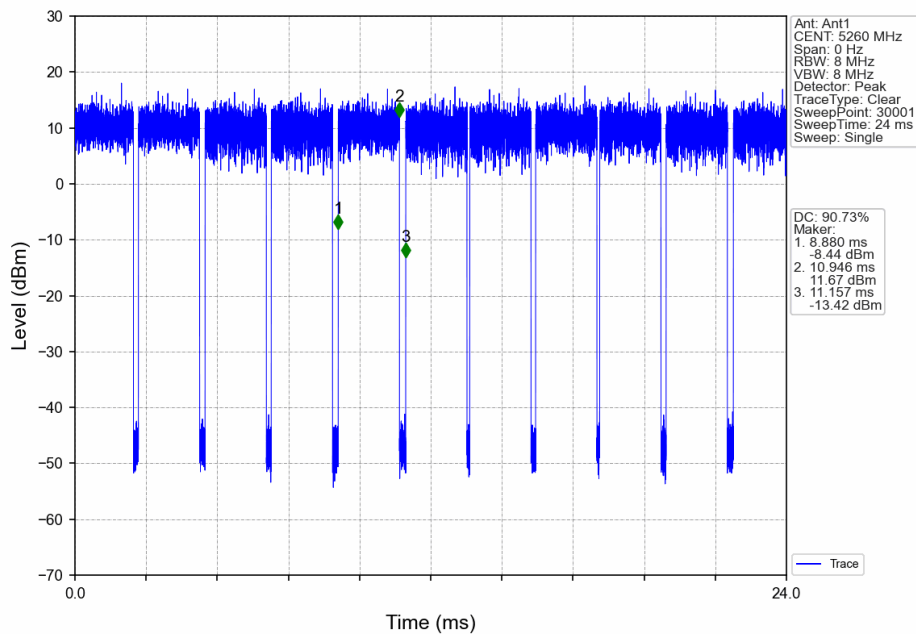




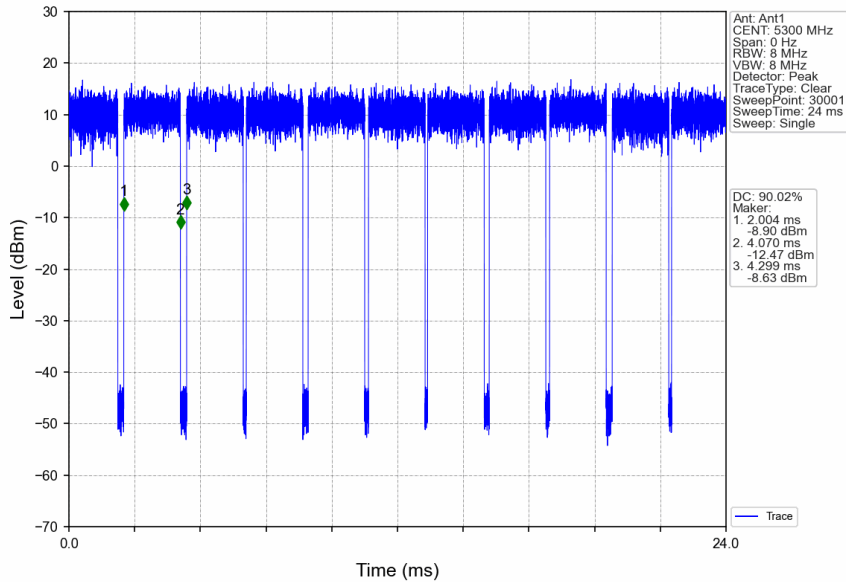
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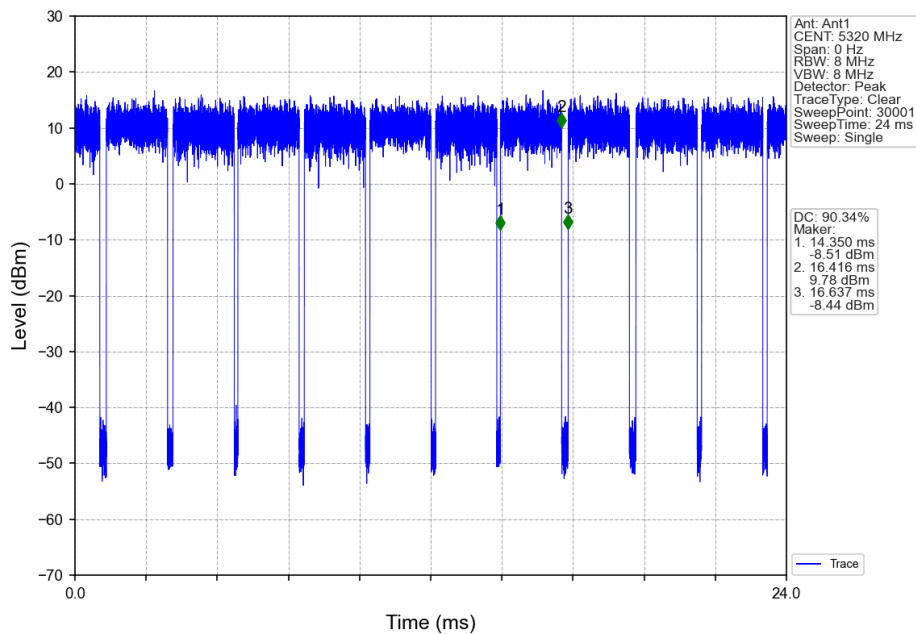
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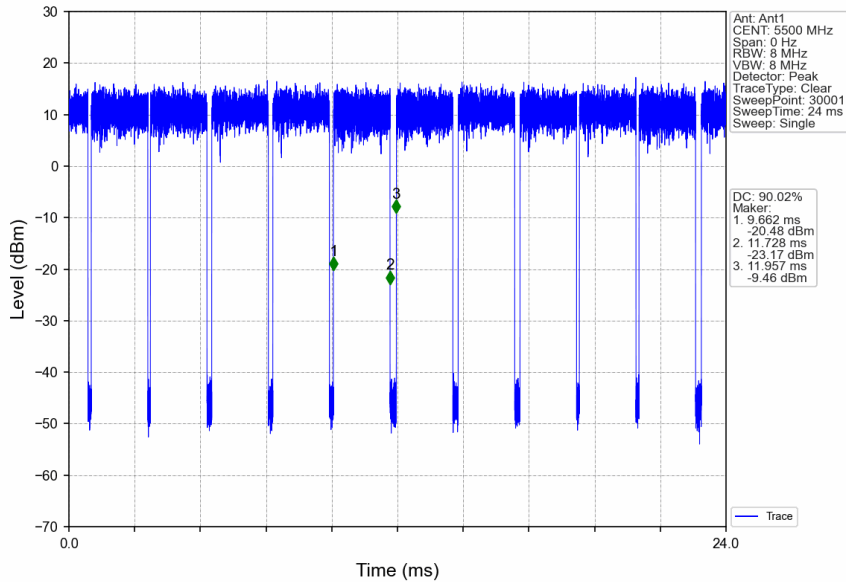
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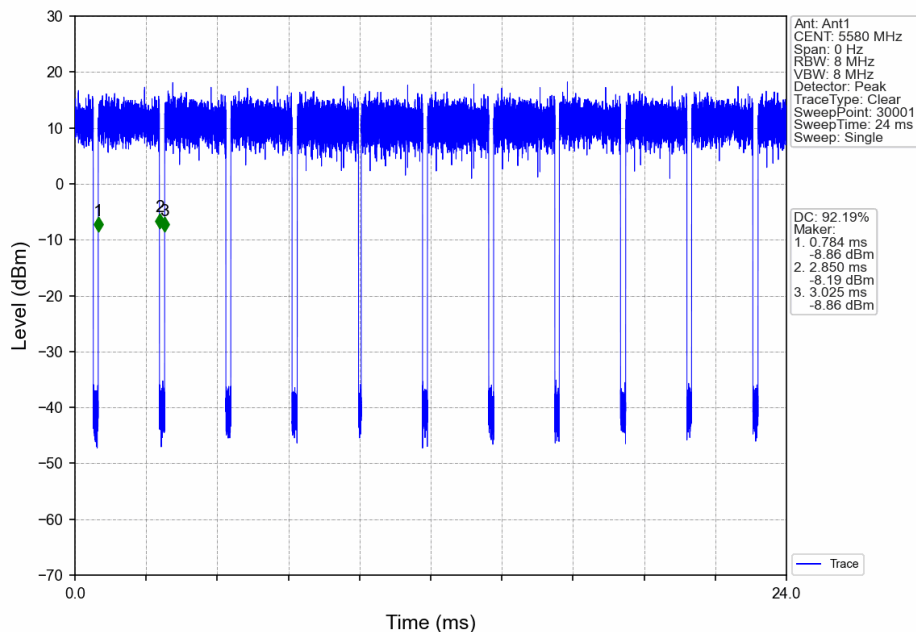
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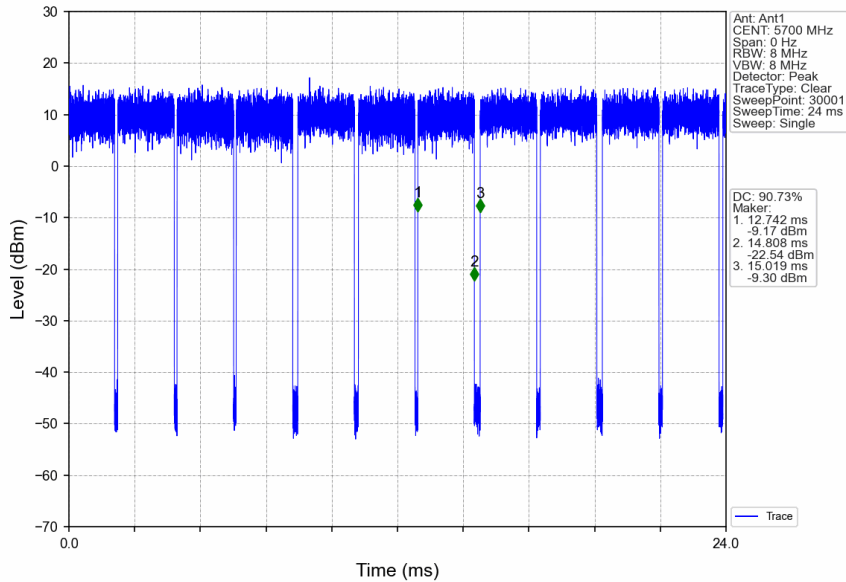
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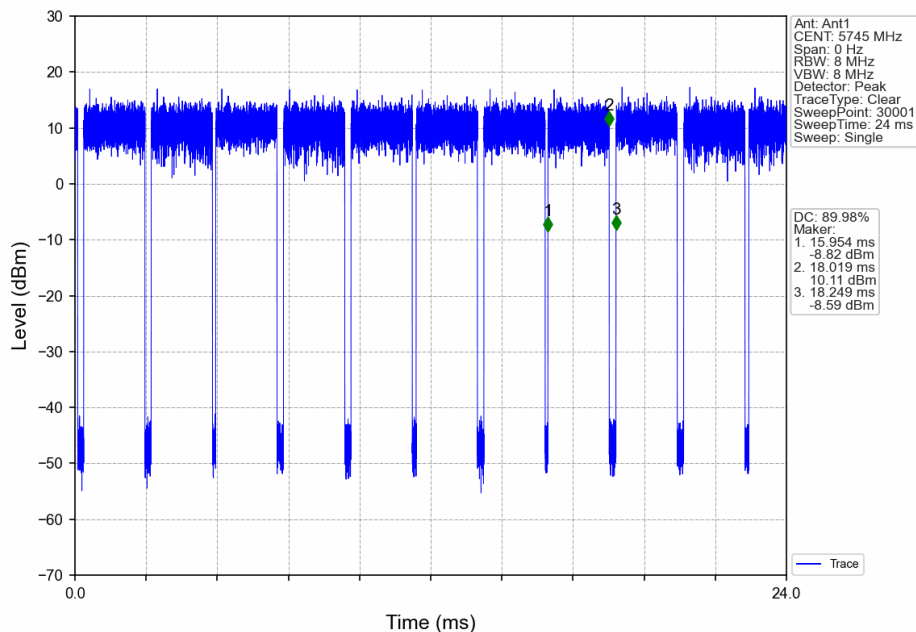
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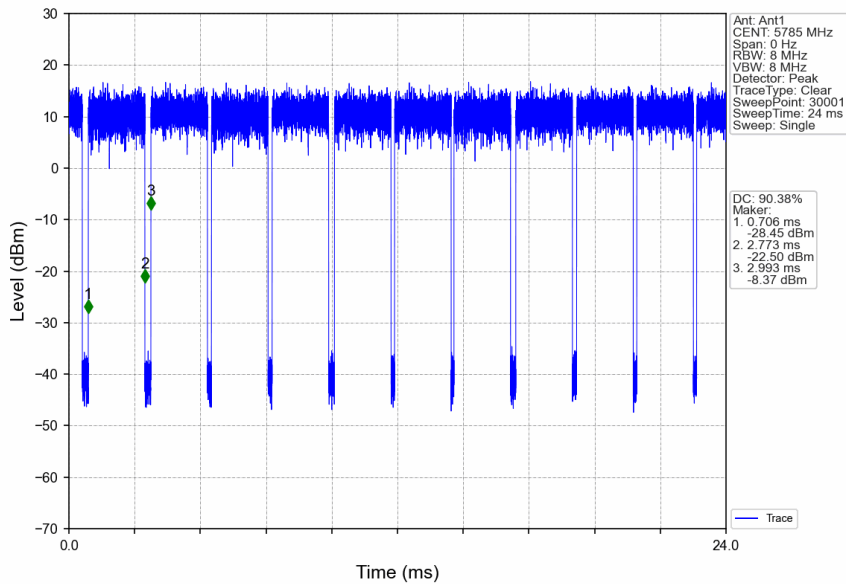


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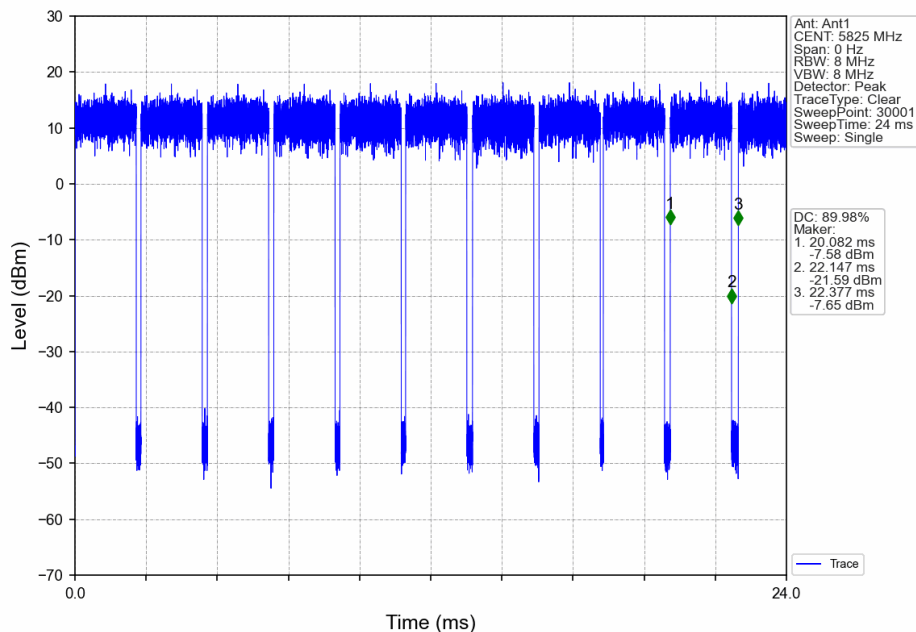




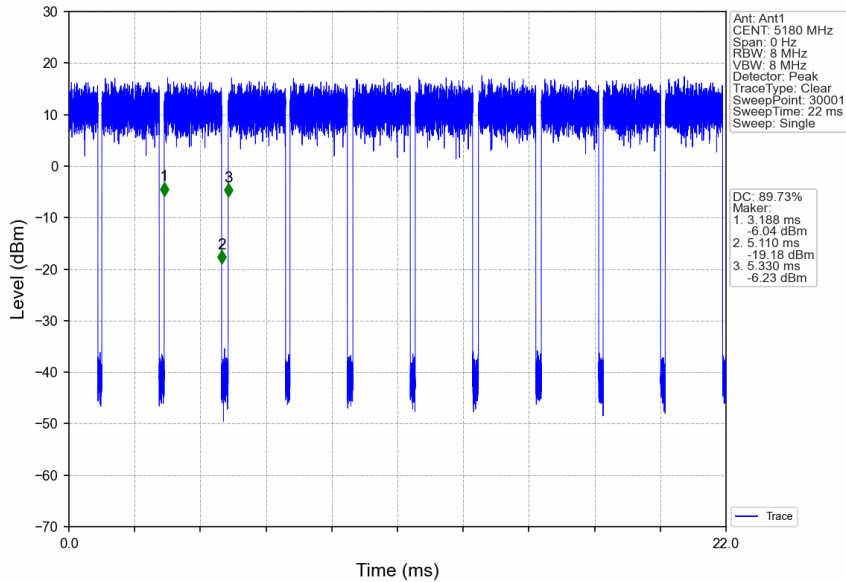
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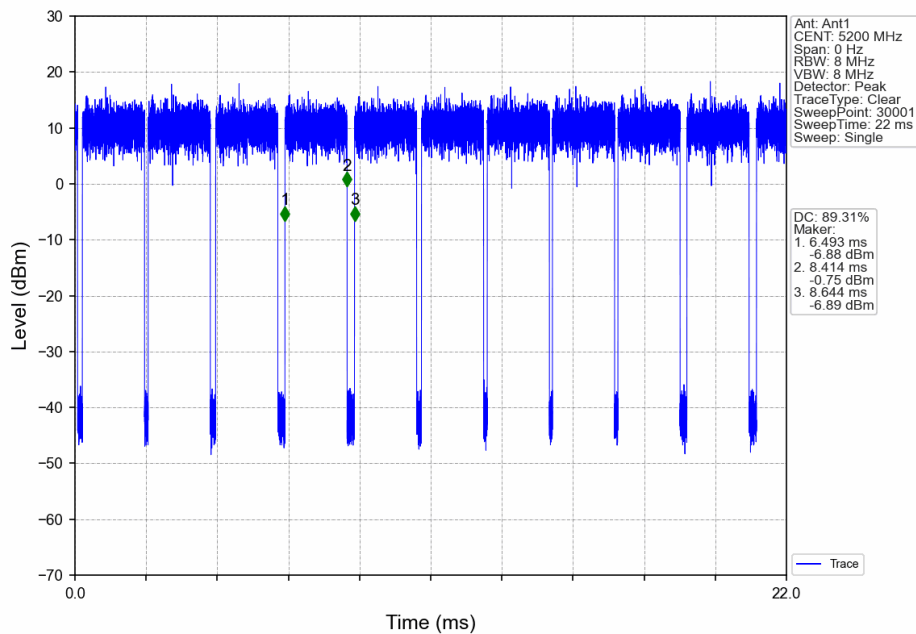
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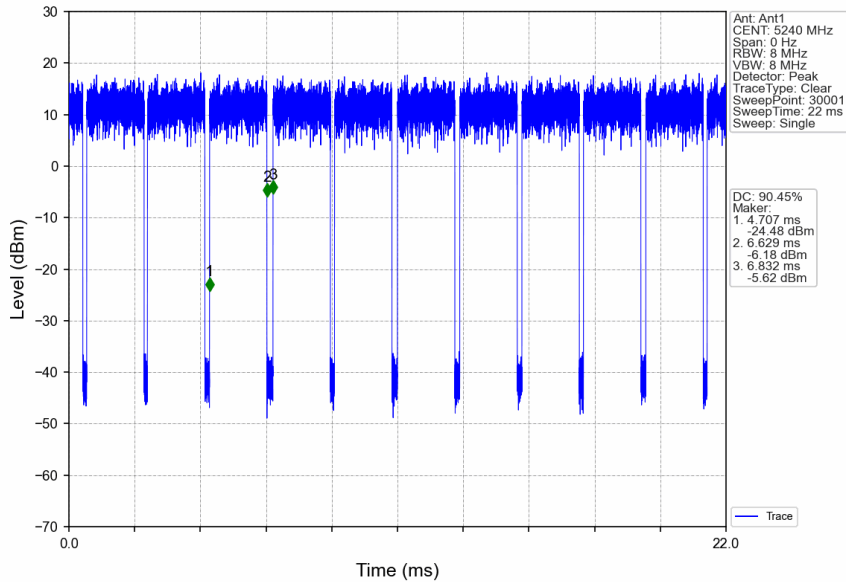
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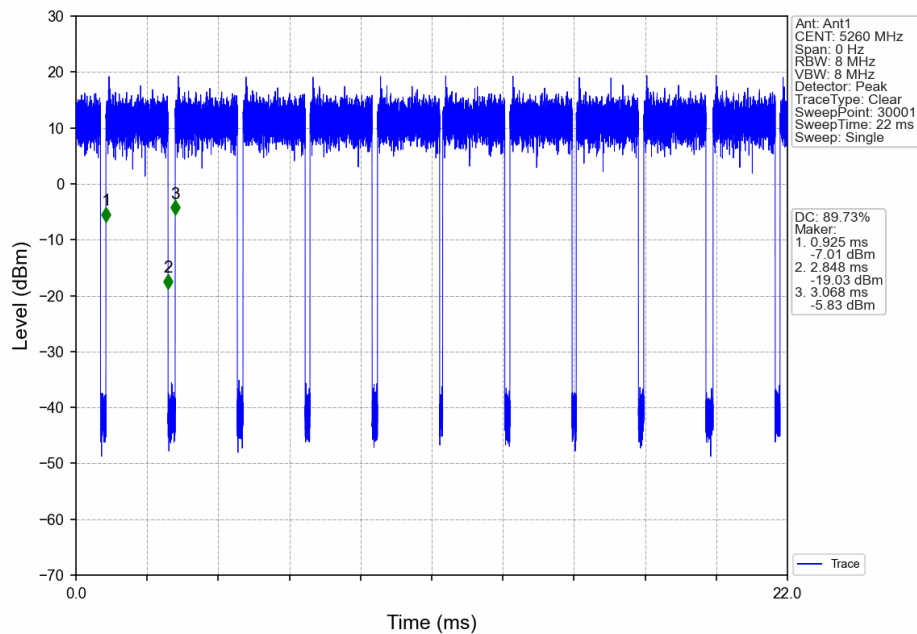
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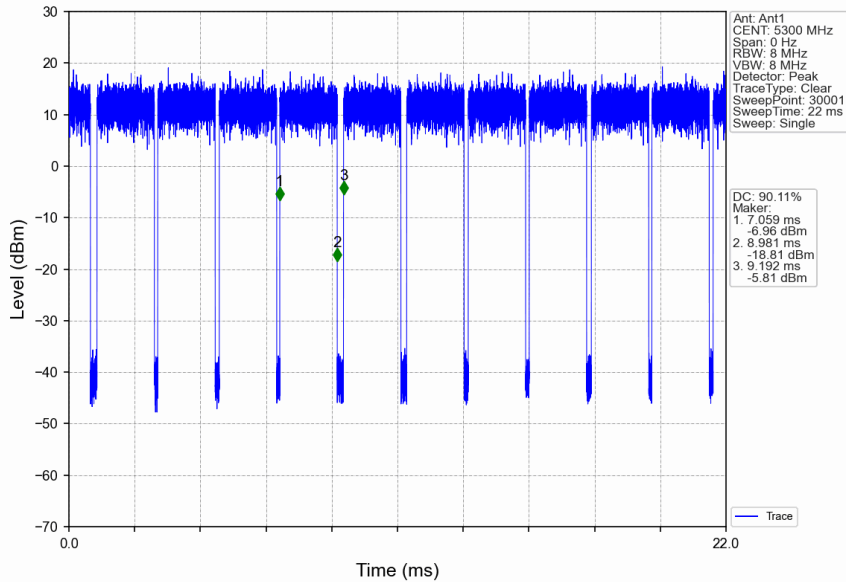
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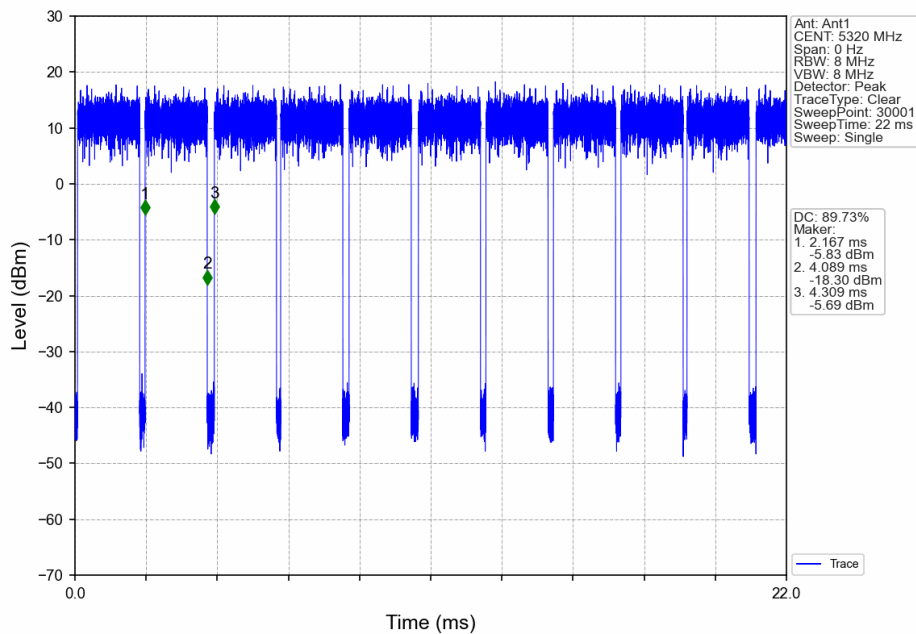
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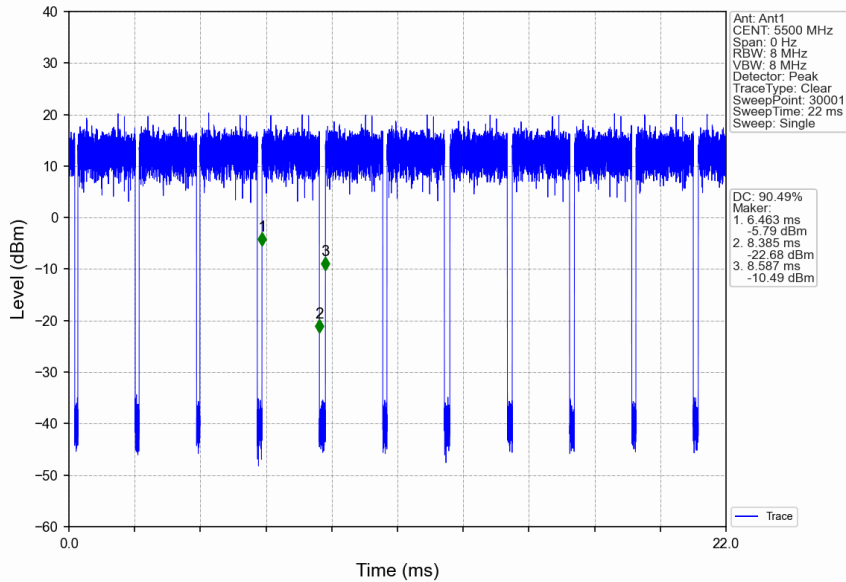


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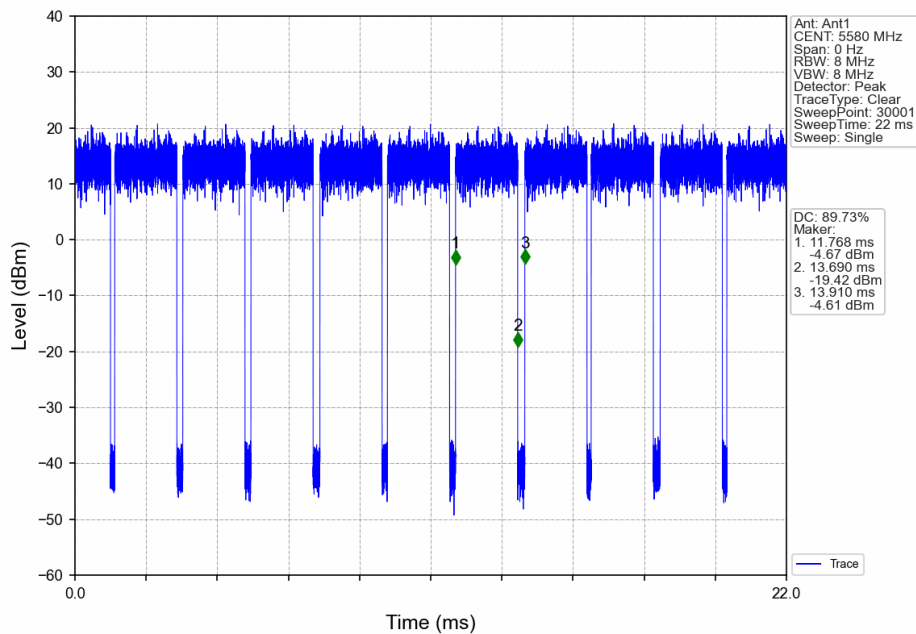




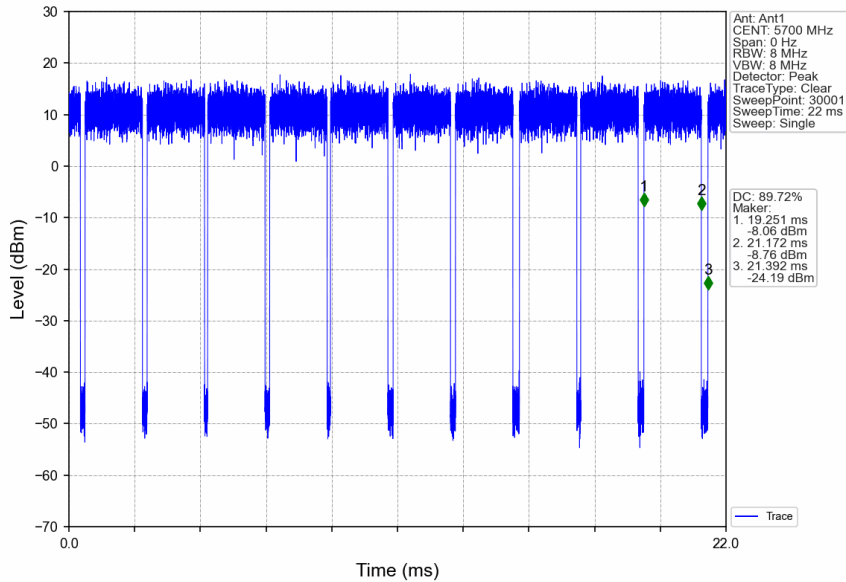
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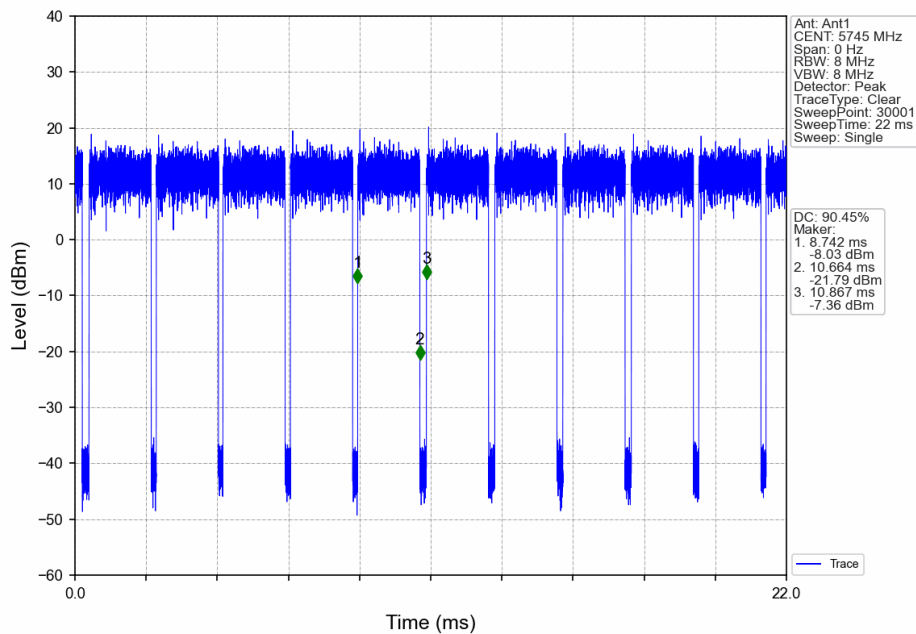
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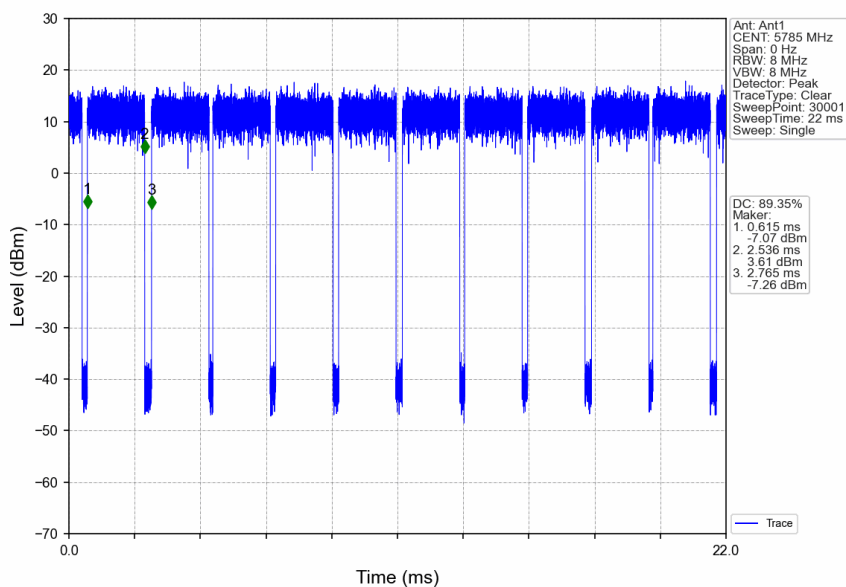
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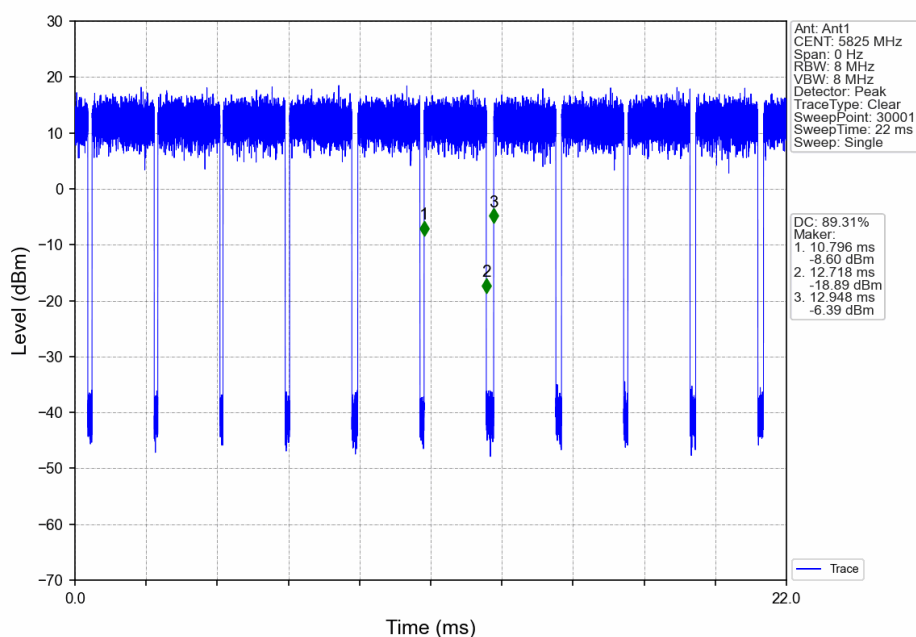
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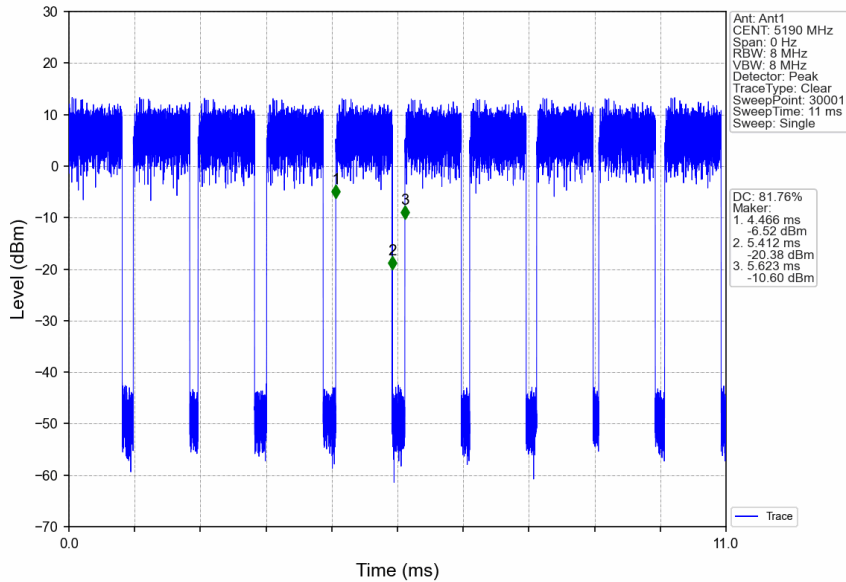
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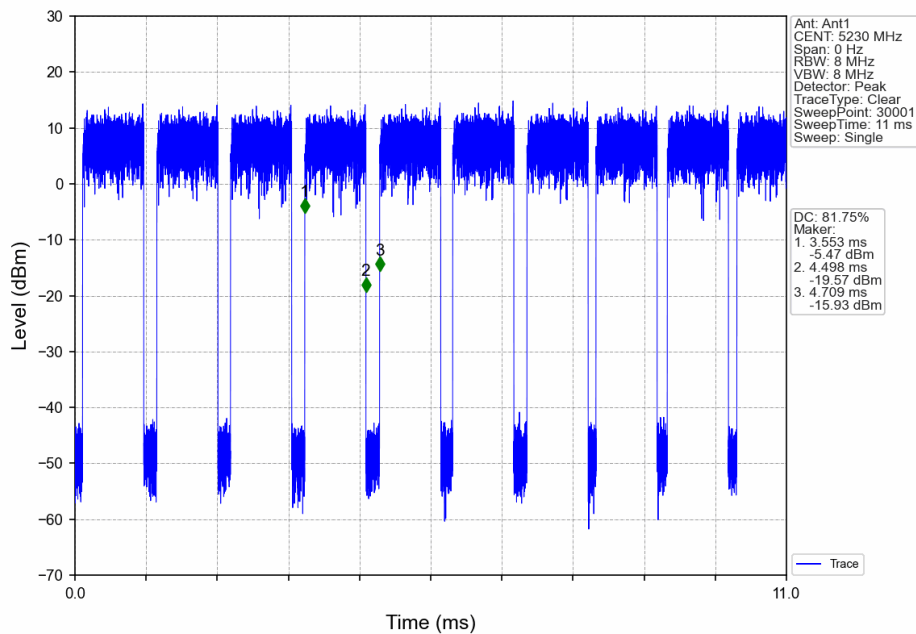
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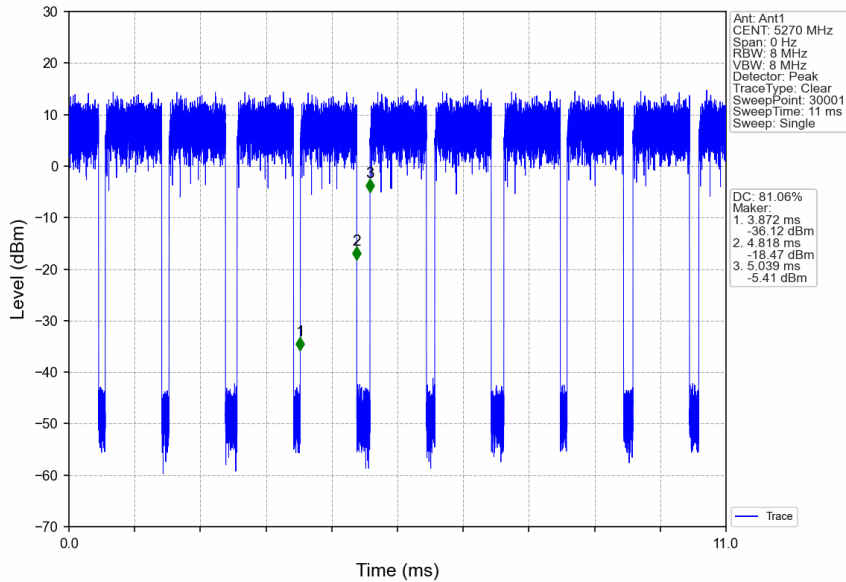


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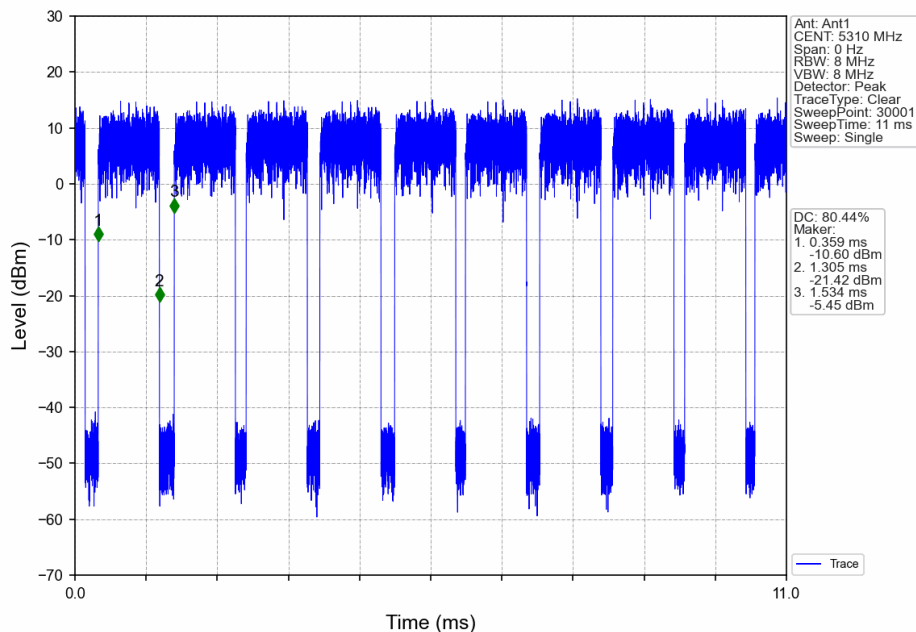




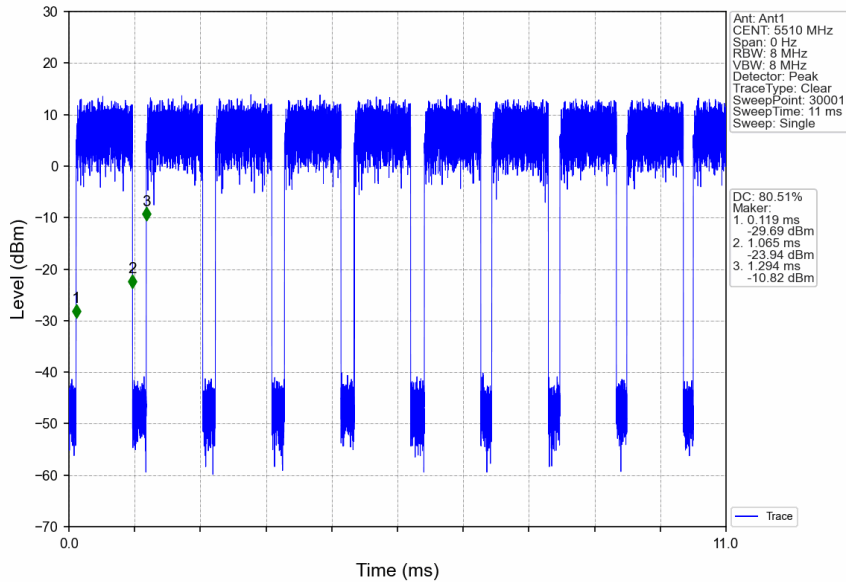
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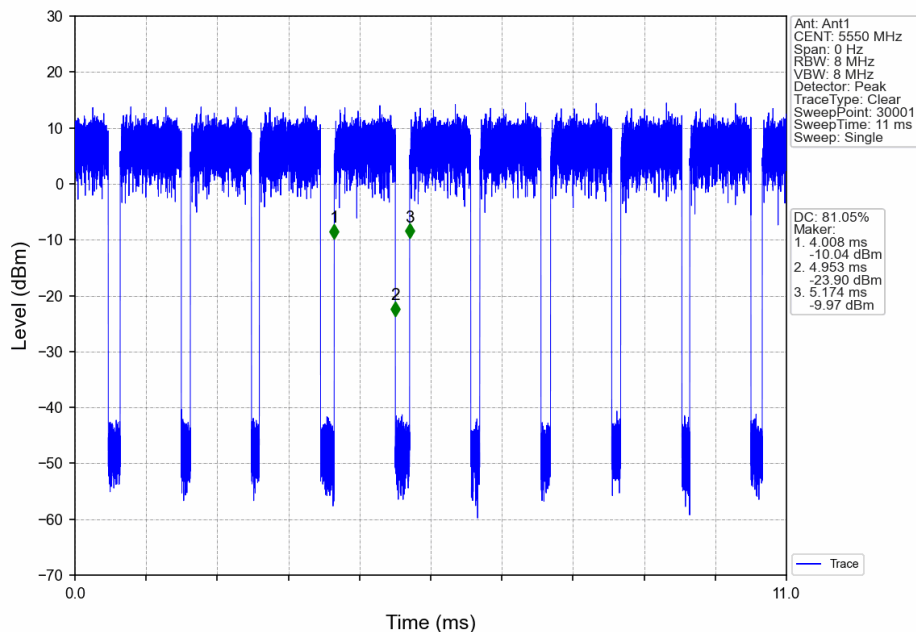
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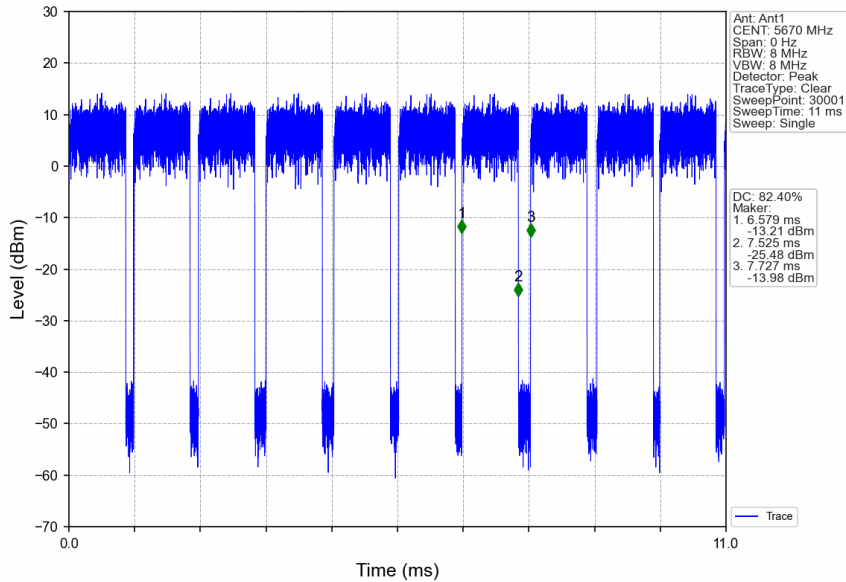
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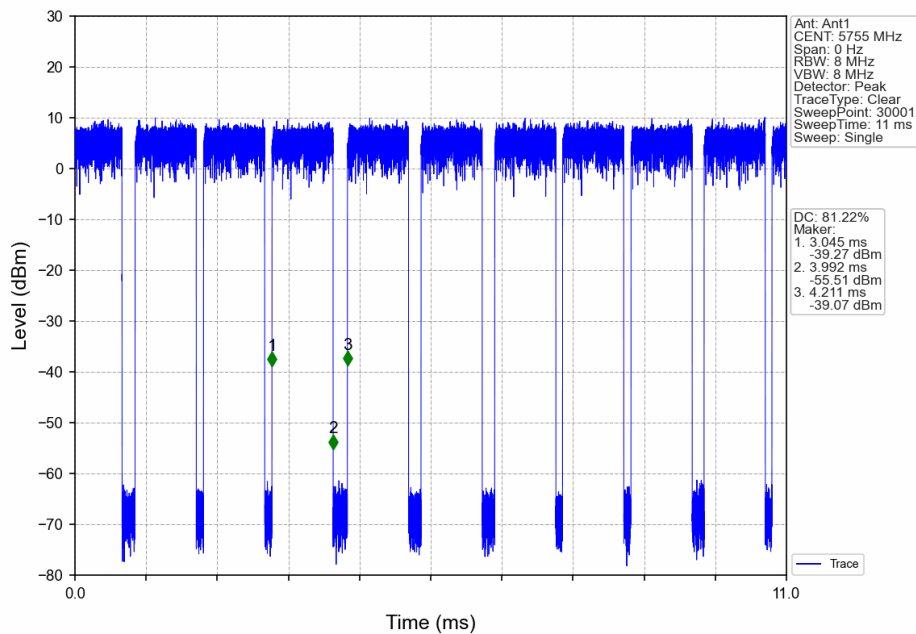
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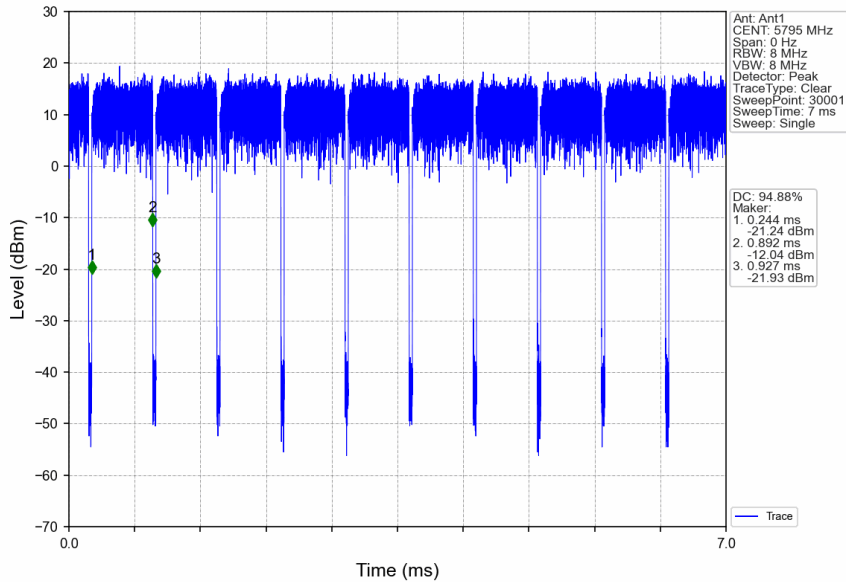
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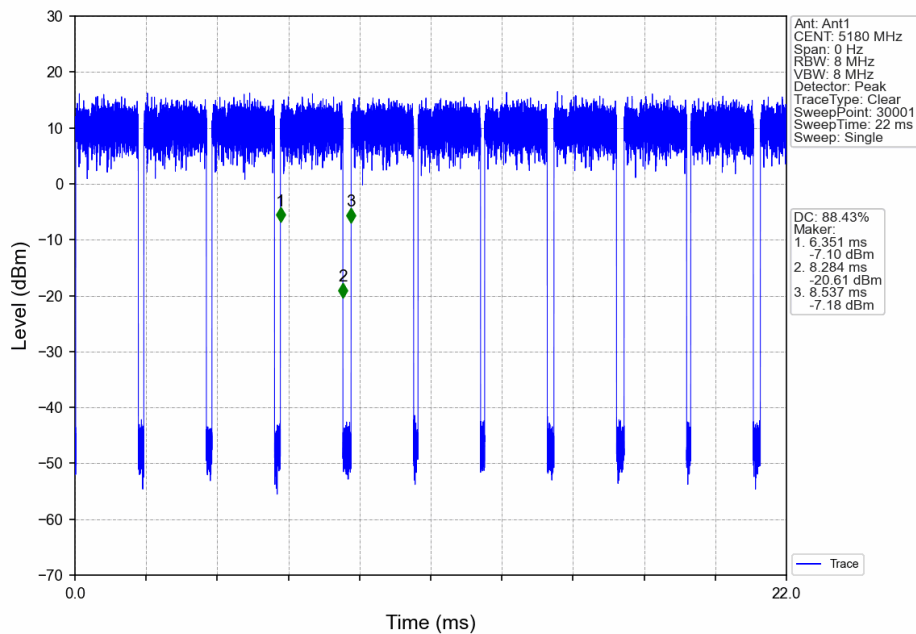
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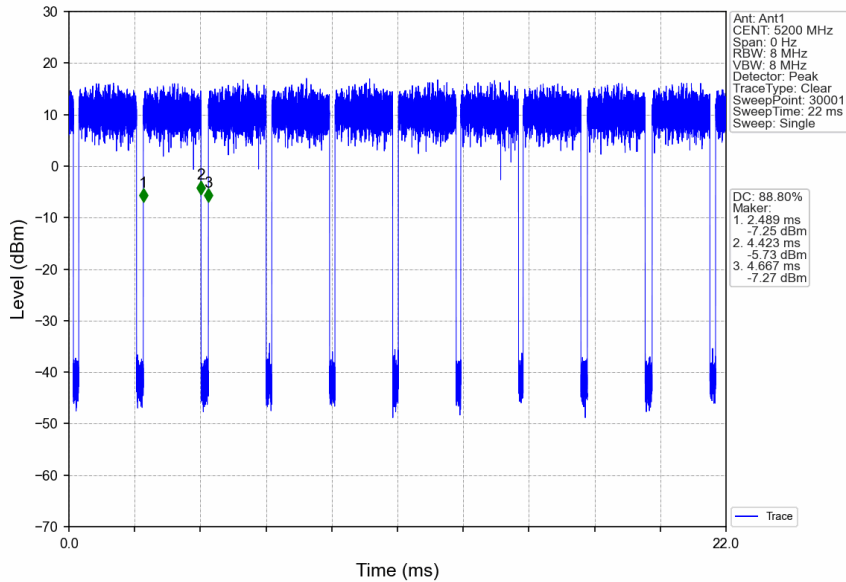


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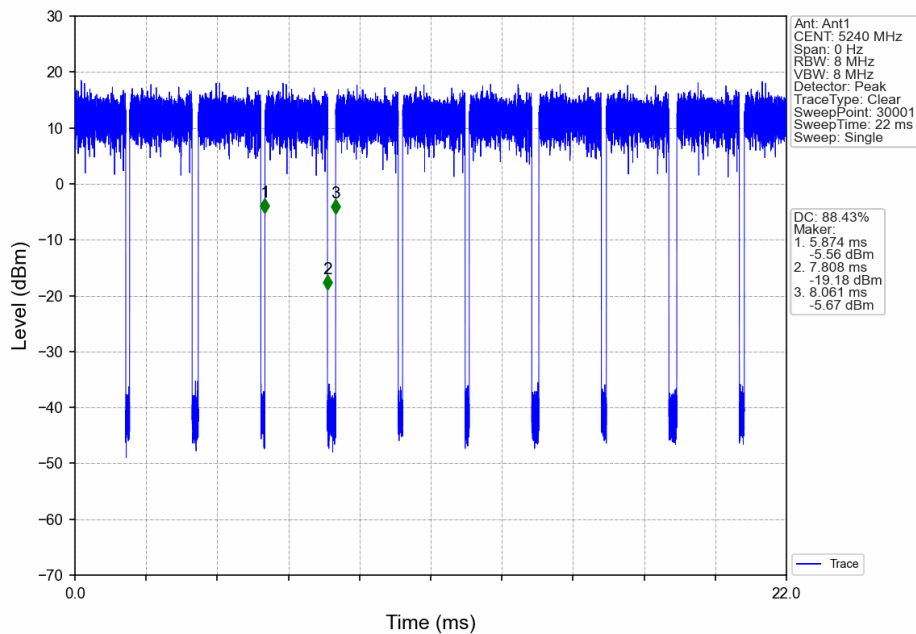




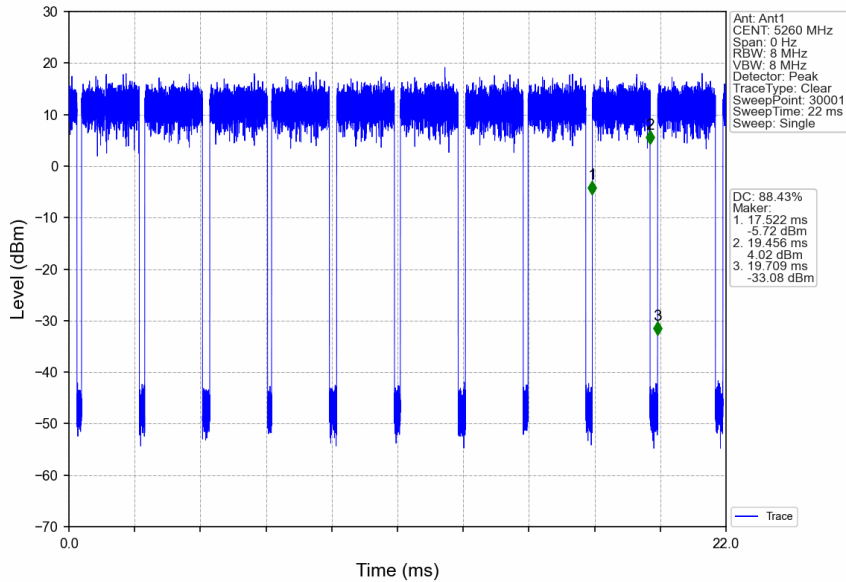
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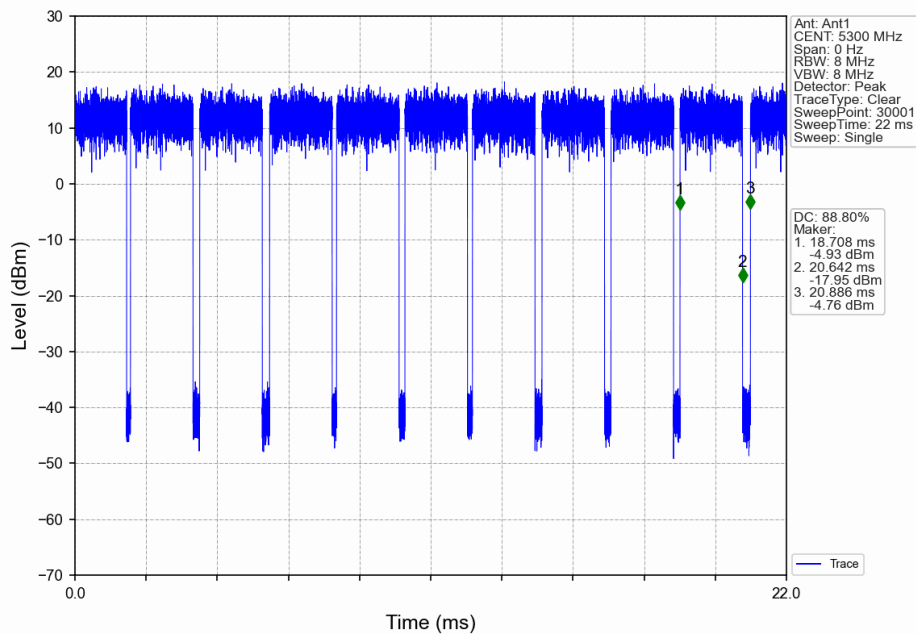
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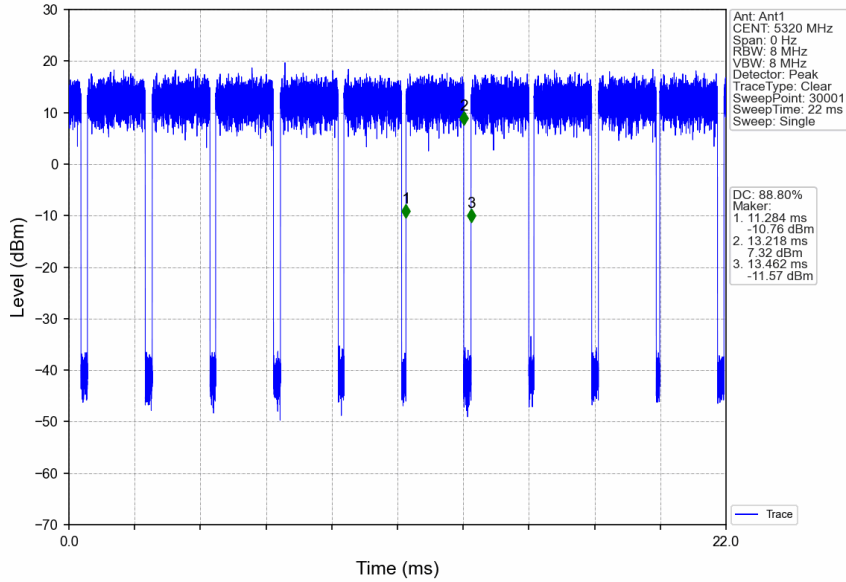
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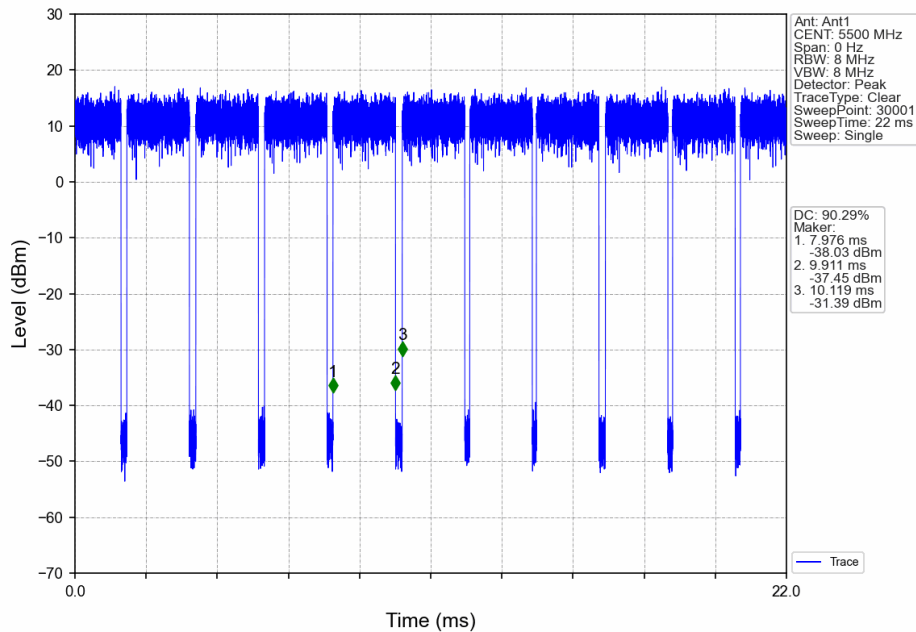
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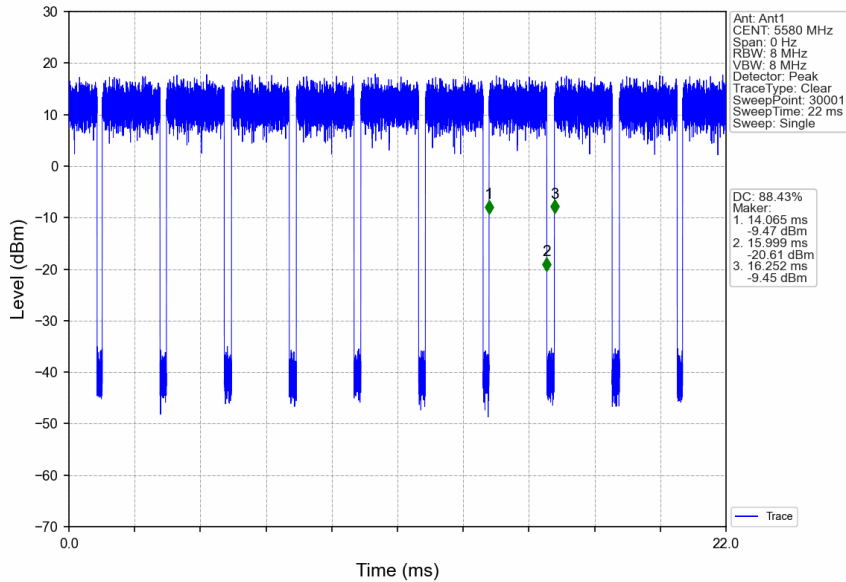
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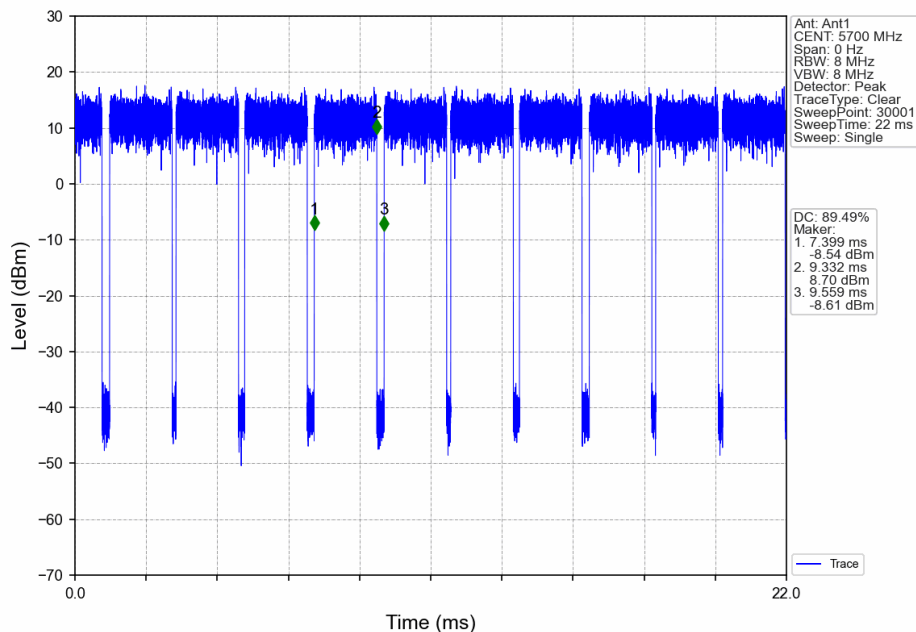
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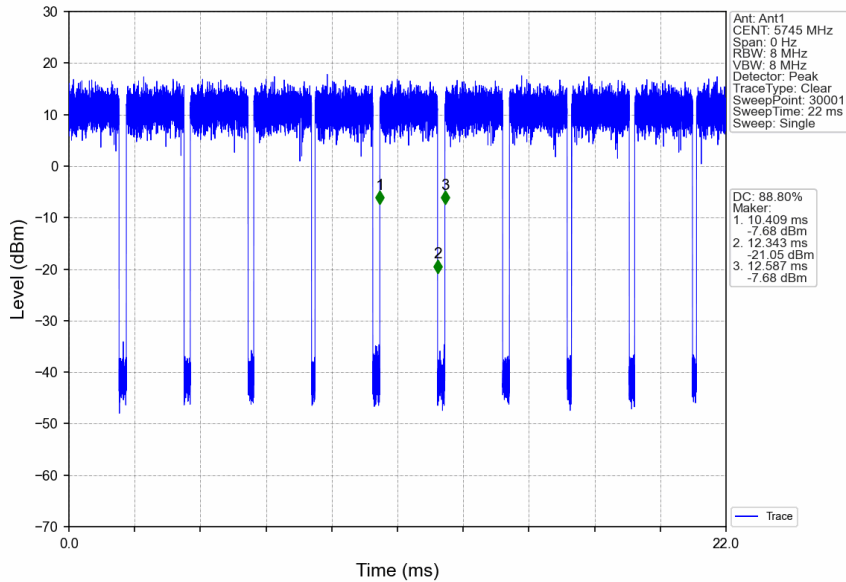


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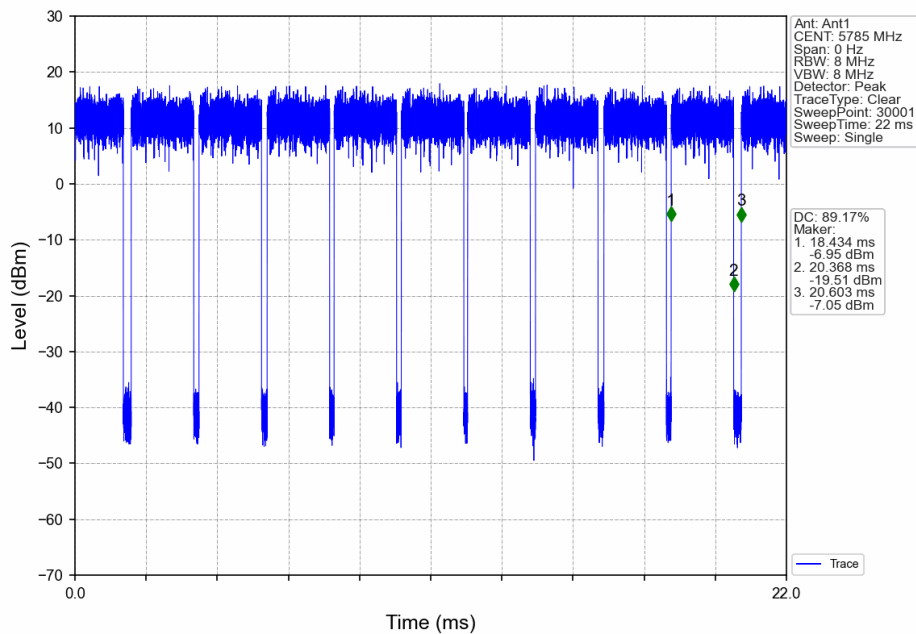




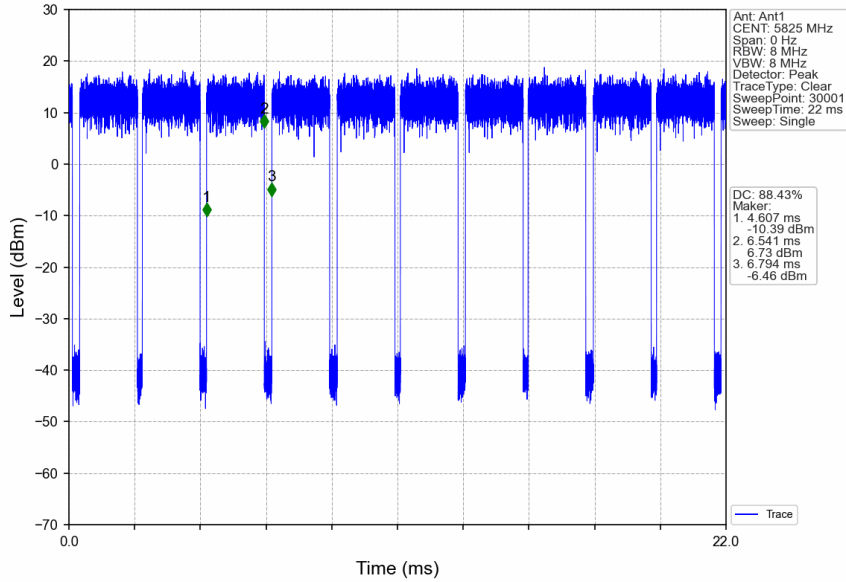
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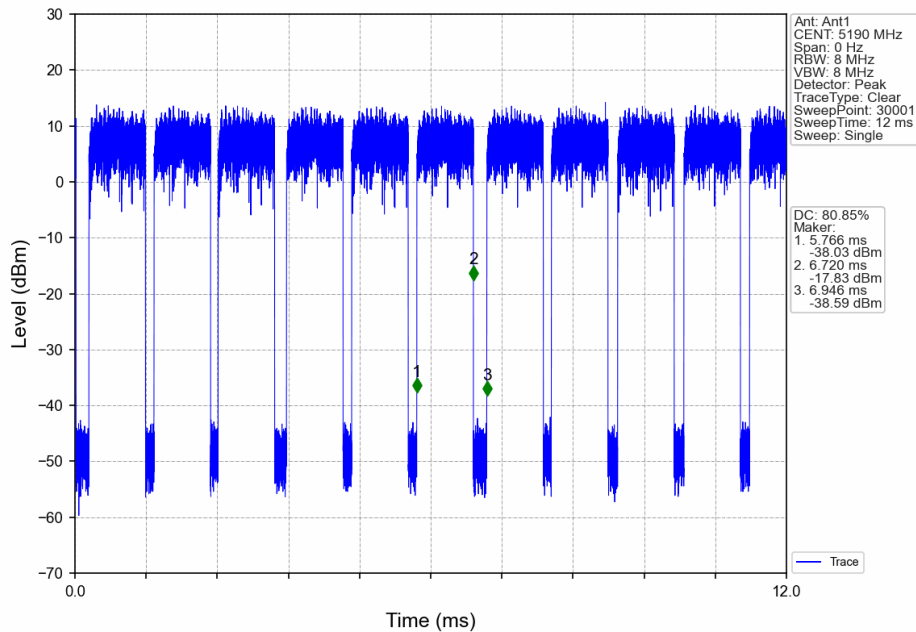
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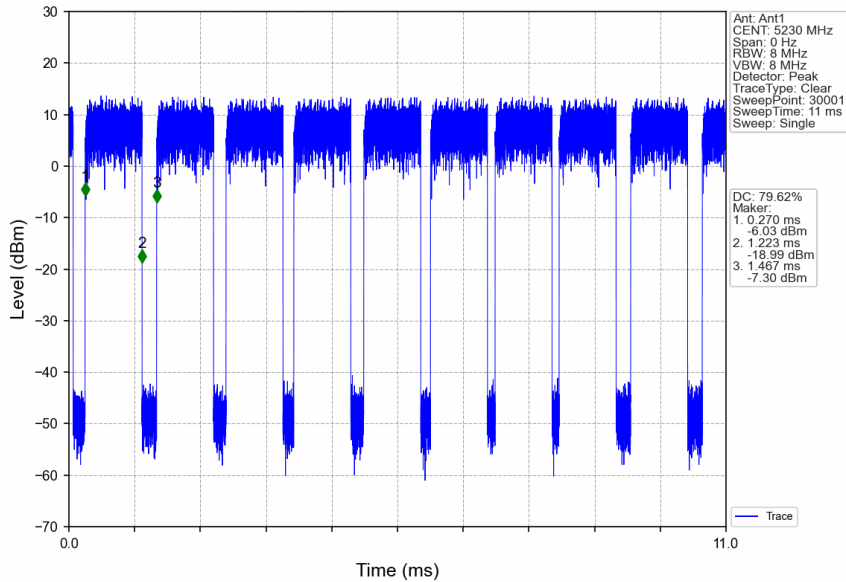
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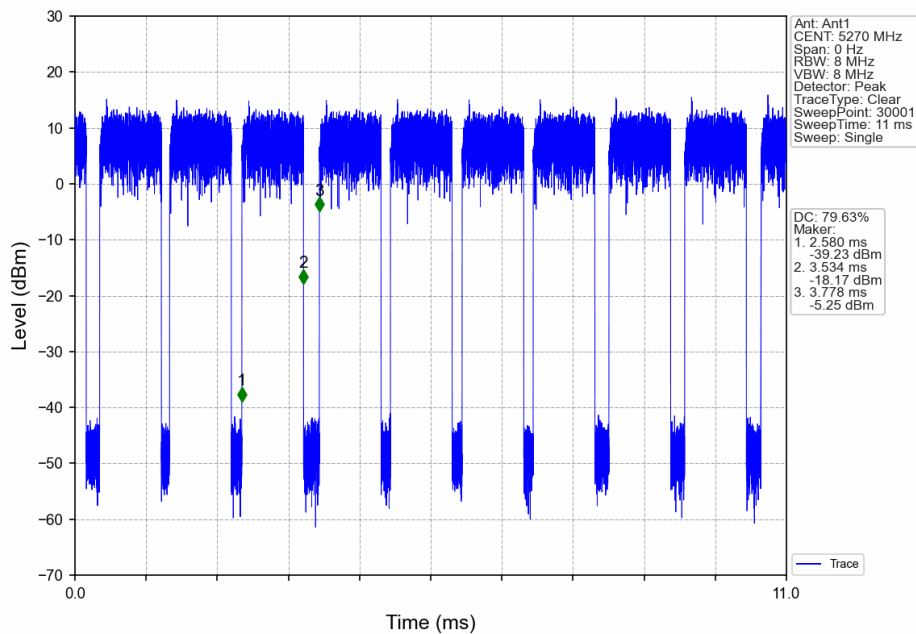
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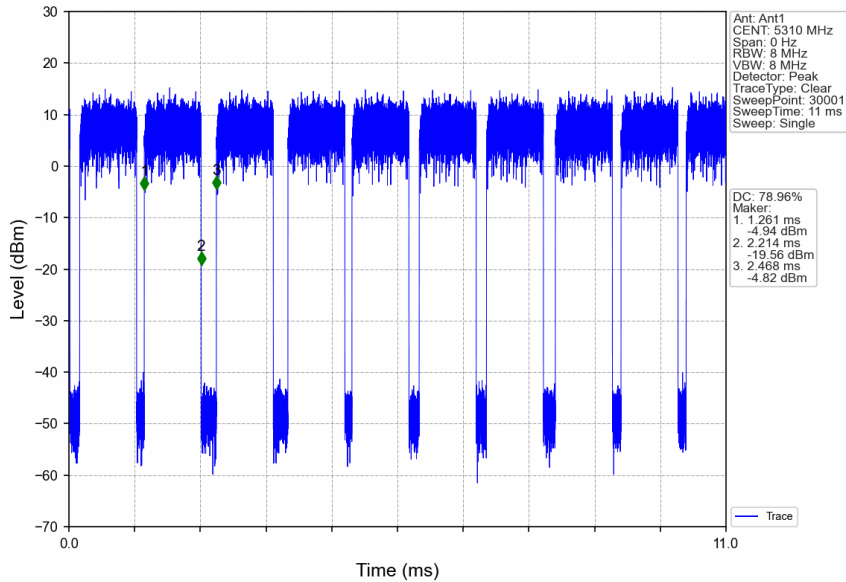
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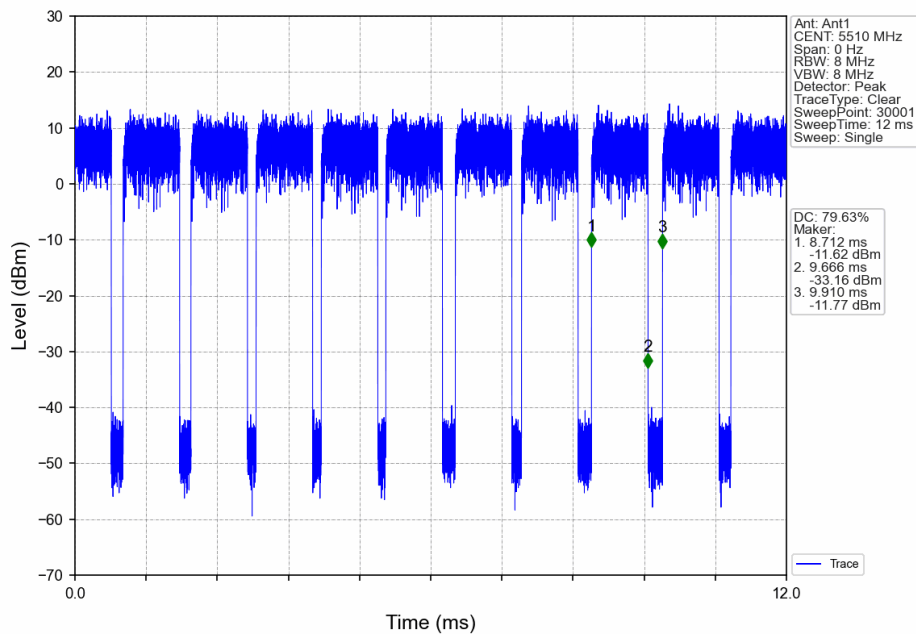
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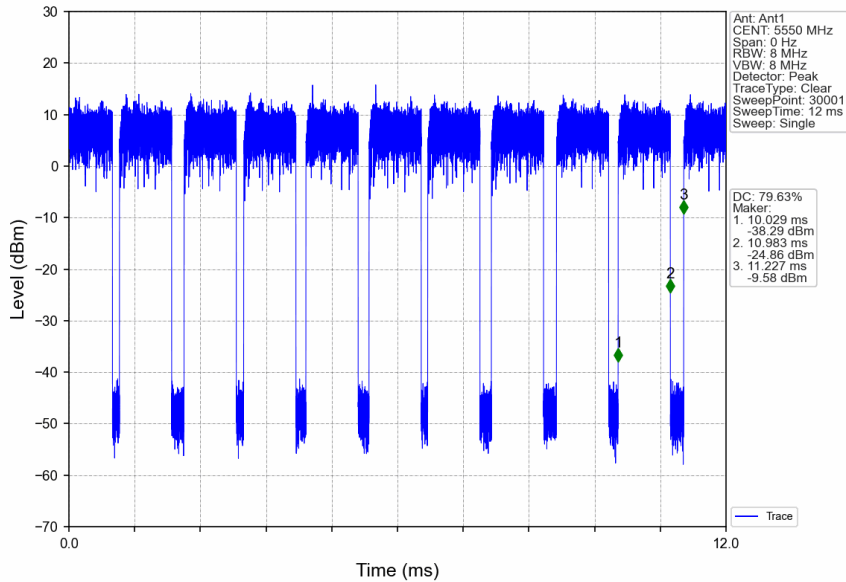


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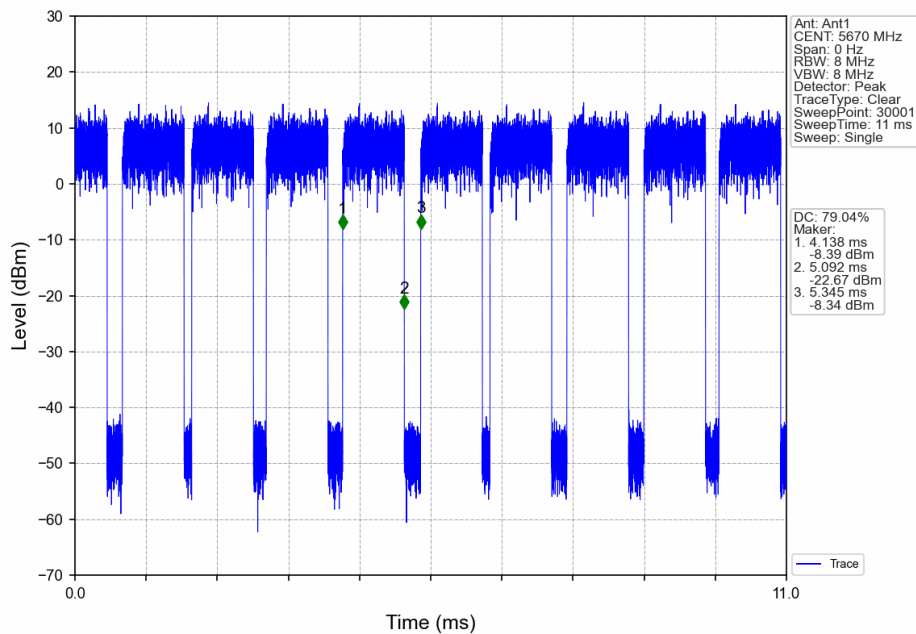




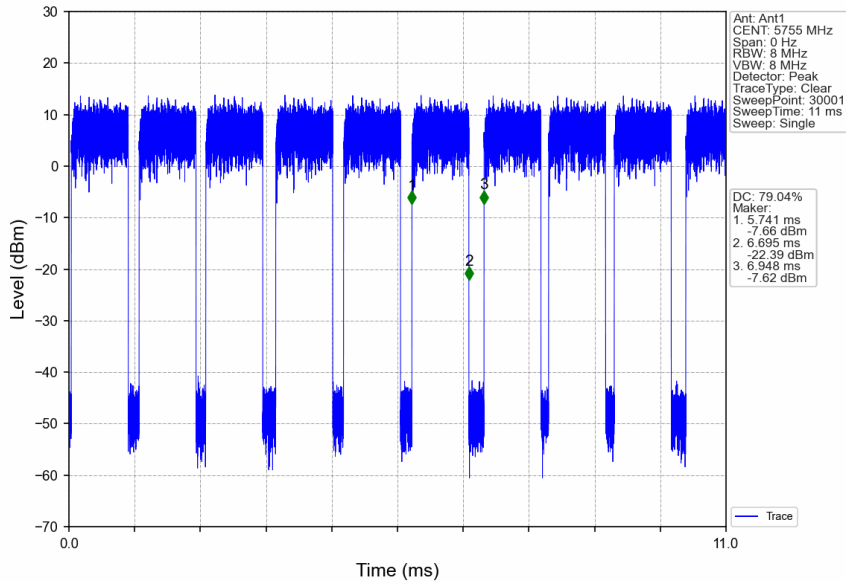
### 802.11ac(VHT40)\_MCH\_5550MHz\_Ant1\_NTNV



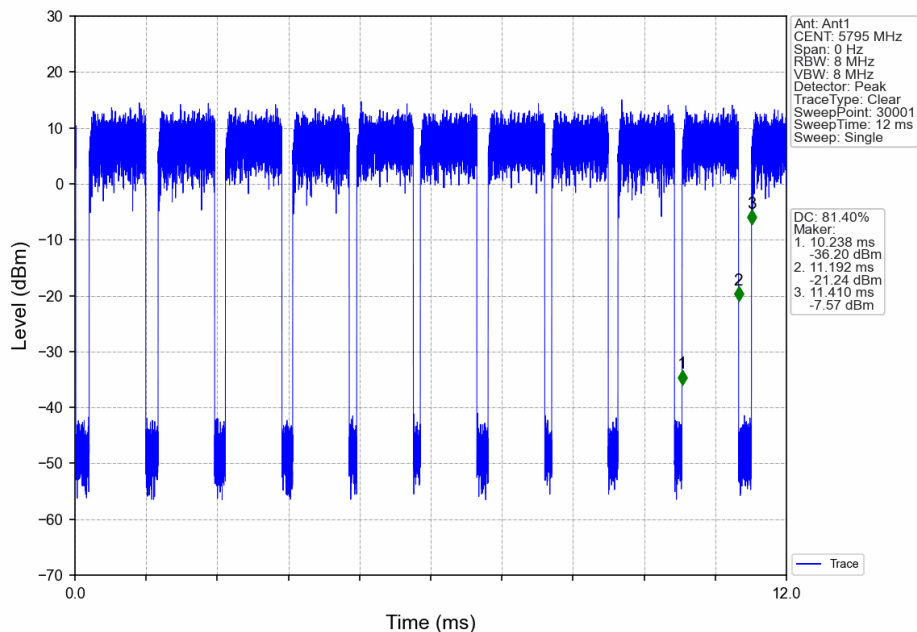
### 802.11ac(VHT40)\_HCH\_5670MHz\_Ant1\_NTNV



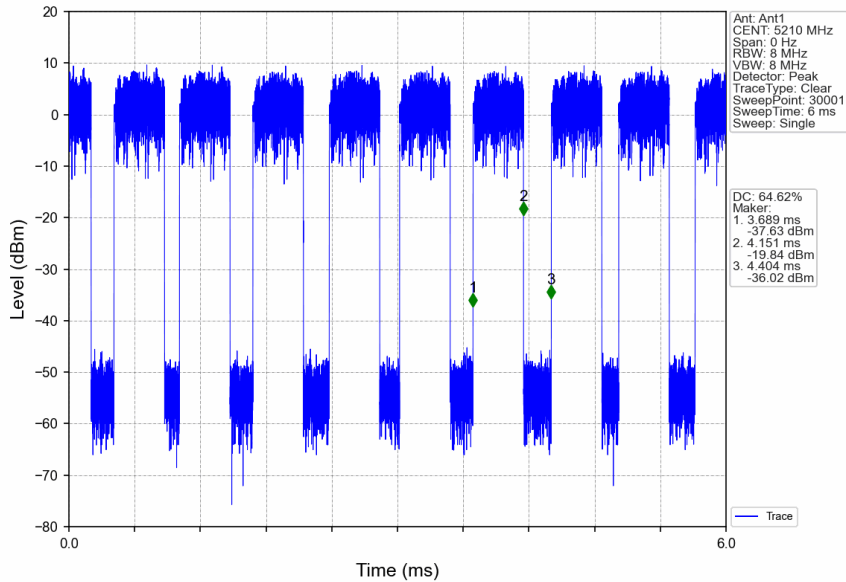
### 802.11ac(VHT40)\_LCH\_5755MHz\_Ant1\_NTNV



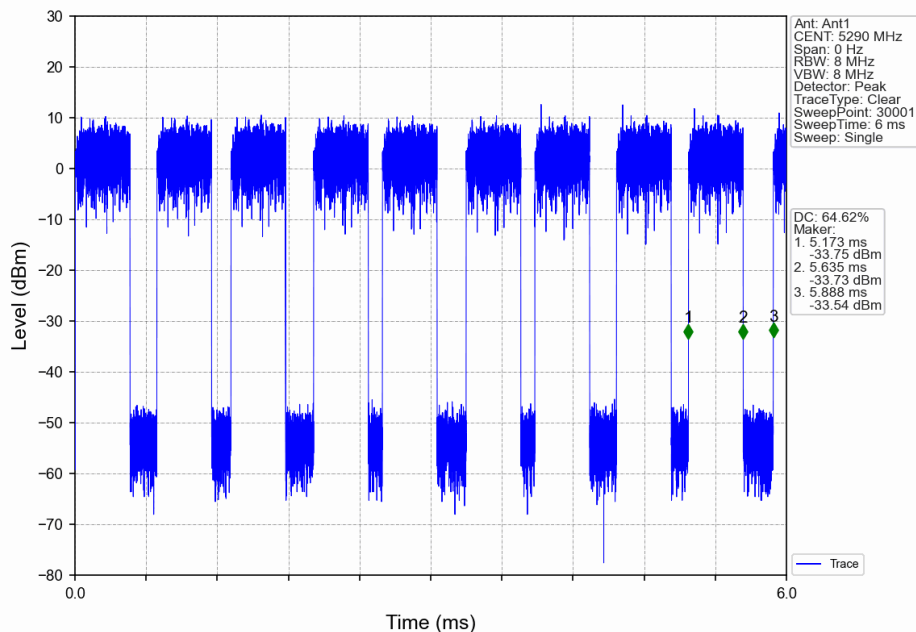
### 802.11ac(VHT40)\_HCH\_5795MHz\_Ant1\_NTNV



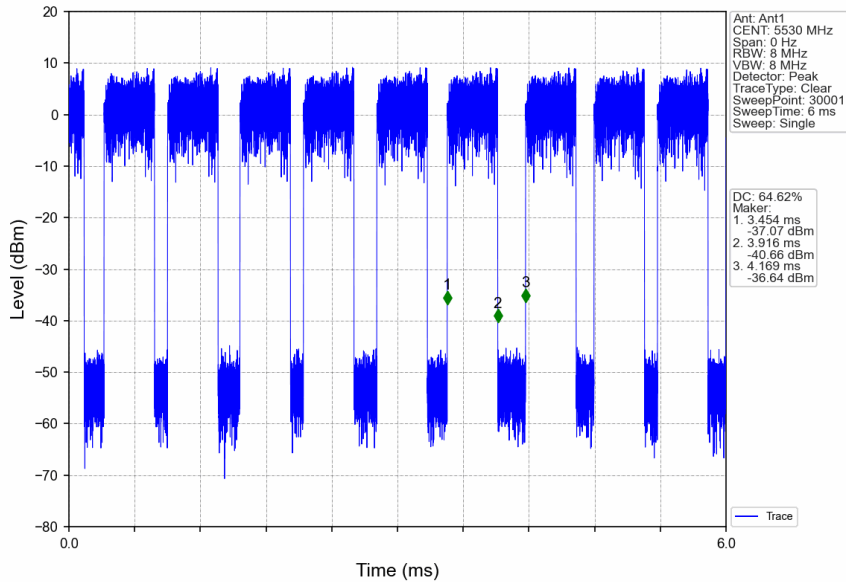
### 802.11ac(VHT80)\_MCH\_5210MHz\_Ant1\_NTNV



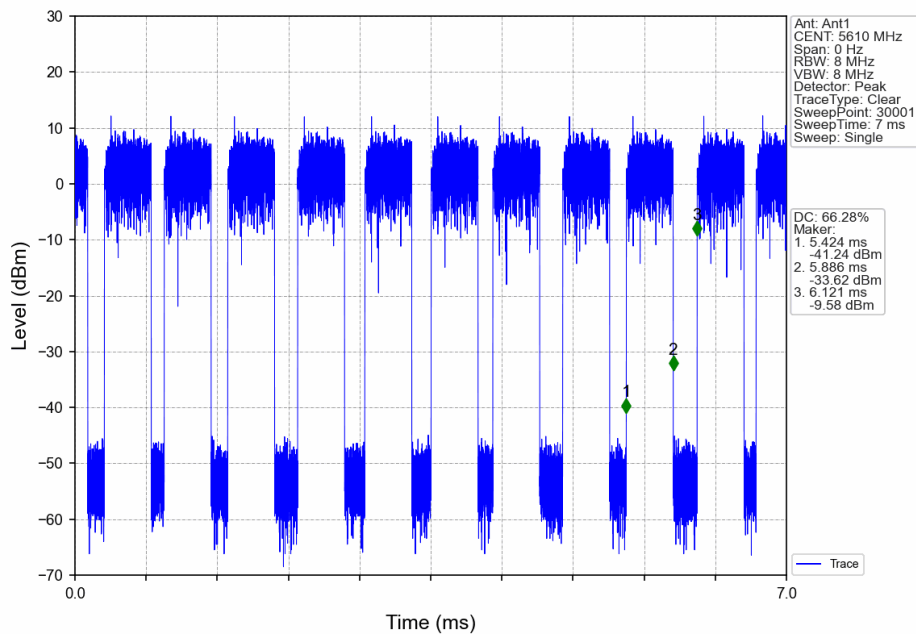
### 802.11ac(VHT80)\_MCH\_5290MHz\_Ant1\_NTNV



### 802.11ac(VHT80)\_LCH\_5530MHz\_Ant1\_NTNV

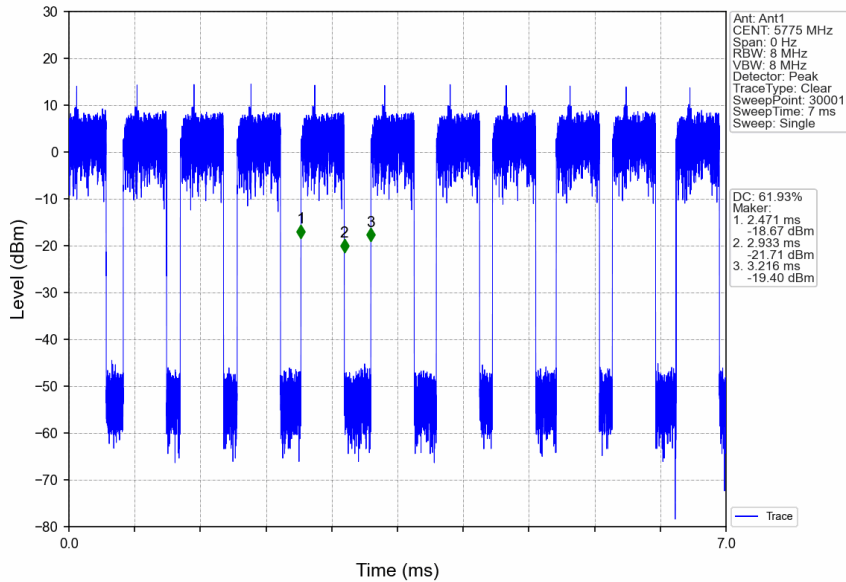


### 802.11ac(VHT80)\_HCH\_5610MHz\_Ant1\_NTNV





### 802.11ac(VHT80)\_MCH\_5775MHz\_Ant1\_NTNV



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## 2. Bandwidth

### 2.1 OBW

#### 2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	16.752	Pass
		5200	1	16.714	Pass
		5240	1	16.653	Pass
		5260	1	16.690	Pass
		5300	1	16.714	Pass
		5320	1	16.706	Pass
		5500	1	16.699	Pass
		5580	1	16.677	Pass
		5700	1	16.713	Pass
		5745	1	16.727	Pass
		5785	1	16.689	Pass
		5825	1	16.661	Pass
802.11n (HT20)	MIMO	5180	1	17.757	Pass
		5200	1	17.770	Pass
		5240	1	17.767	Pass
		5260	1	17.811	Pass
		5300	1	17.766	Pass
		5320	1	17.764	Pass
		5500	1	17.768	Pass
		5580	1	17.807	Pass
		5700	1	17.762	Pass
		5745	1	17.797	Pass
		5785	1	17.773	Pass
		5825	1	17.762	Pass
802.11n (HT40)	MIMO	5190	1	36.448	Pass
		5230	1	36.438	Pass
		5270	1	36.519	Pass
		5310	1	36.390	Pass
		5510	1	36.292	Pass



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		5550	1	36.507	Pass
		5670	1	36.386	Pass
		5755	1	36.648	Pass
		5795	1	36.277	Pass
802.11ac (VHT20)	MIMO	5180	1	17.818	Pass
		5200	1	17.763	Pass
		5240	1	17.745	Pass
		5260	1	17.806	Pass
		5300	1	17.778	Pass
		5320	1	17.775	Pass
		5500	1	17.800	Pass
		5580	1	17.765	Pass
		5700	1	17.788	Pass
		5745	1	17.804	Pass
		5785	1	17.848	Pass
		5825	1	17.815	Pass
802.11ac (VHT40)	MIMO	5190	1	36.749	Pass
		5230	1	36.567	Pass
		5270	1	36.451	Pass
		5310	1	36.568	Pass
		5510	1	36.440	Pass
		5550	1	36.414	Pass
		5670	1	36.537	Pass
		5755	1	36.390	Pass
802.11ac (VHT80)	MIMO	5795	1	36.373	Pass
		5210	1	75.126	Pass
		5290	1	74.452	Pass
		5530	1	75.071	Pass
		5610	1	74.739	Pass
		5775	1	75.031	Pass

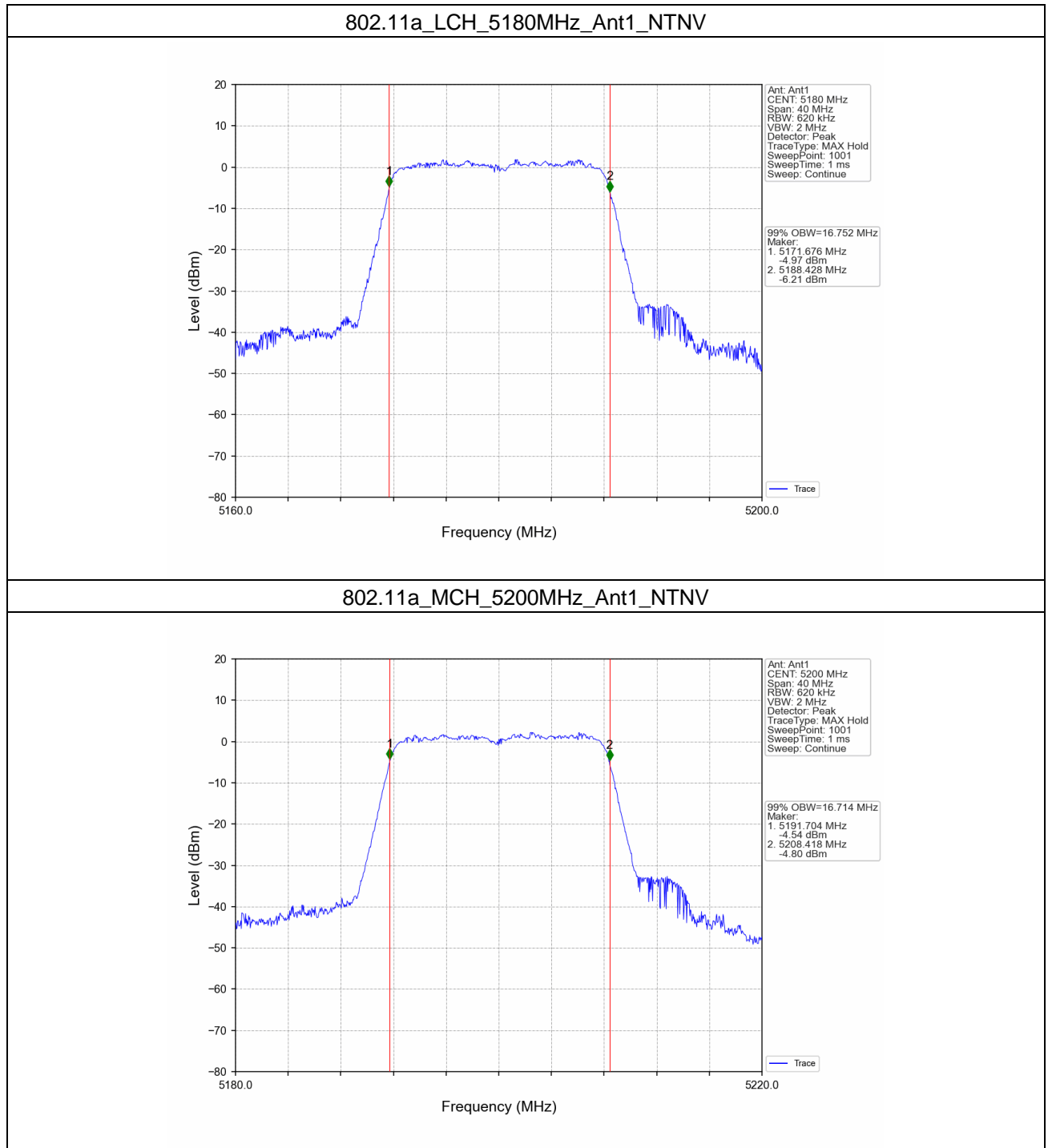


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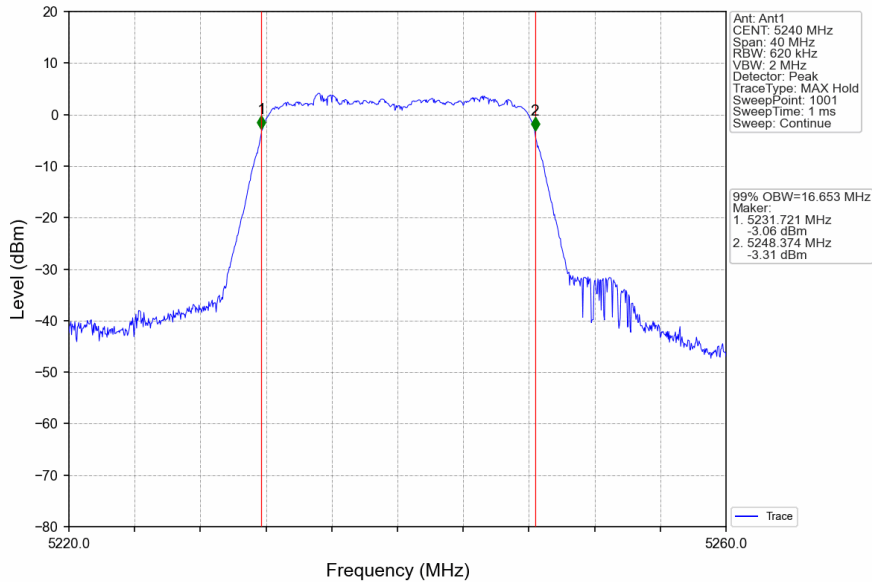
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### 2.1.2 Test Graph

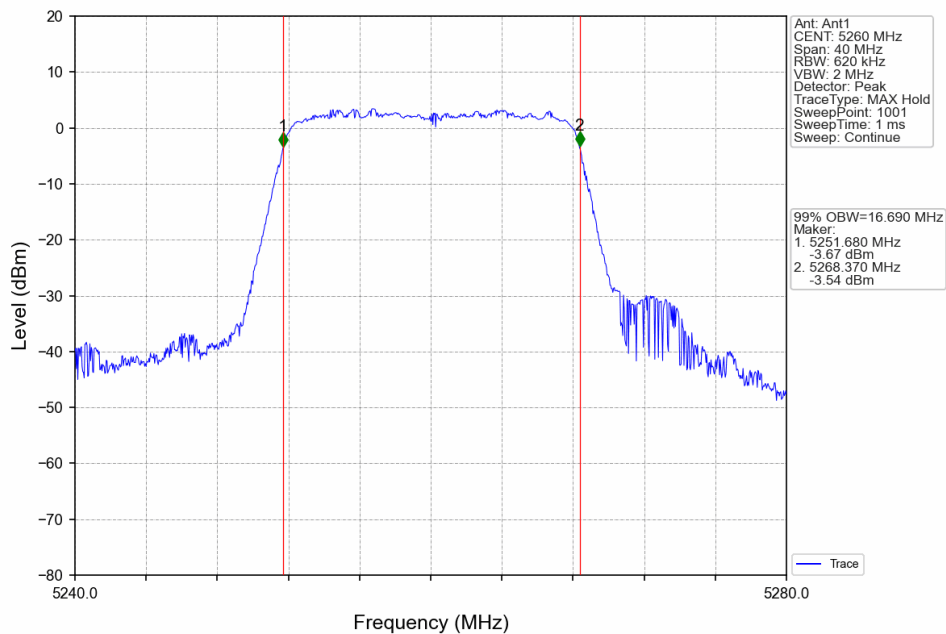




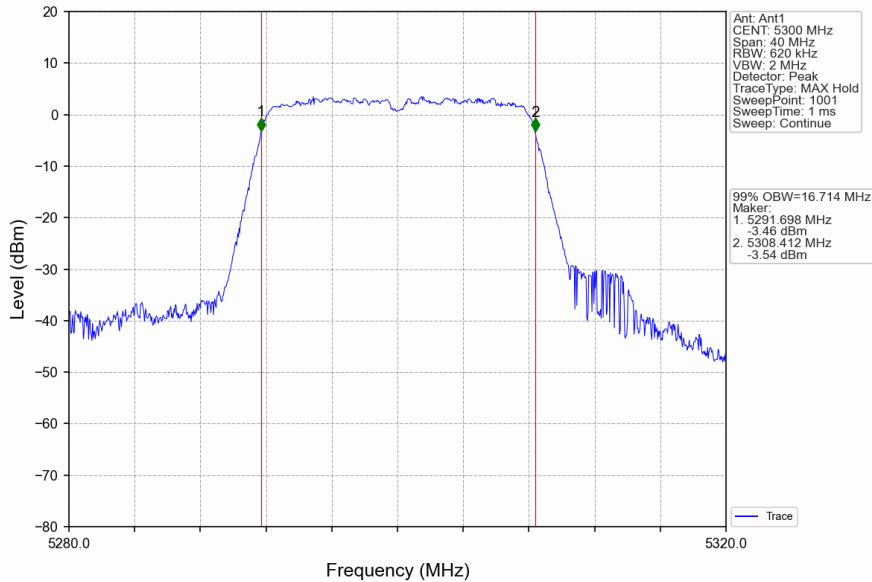
### 802.11a\_HCH\_5240MHz\_Ant1\_NTNV



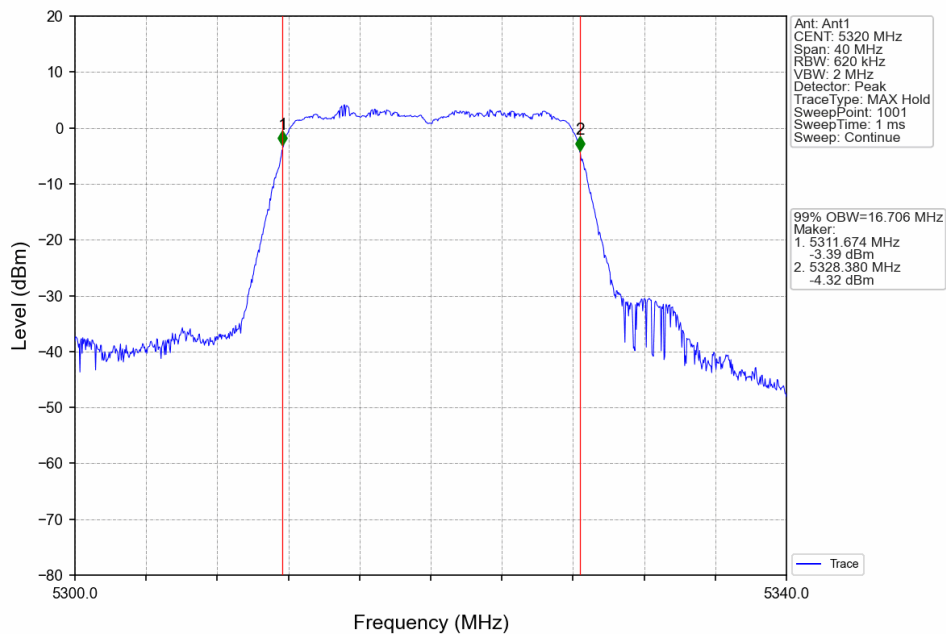
### 802.11a\_LCH\_5260MHz\_Ant1\_NTNV



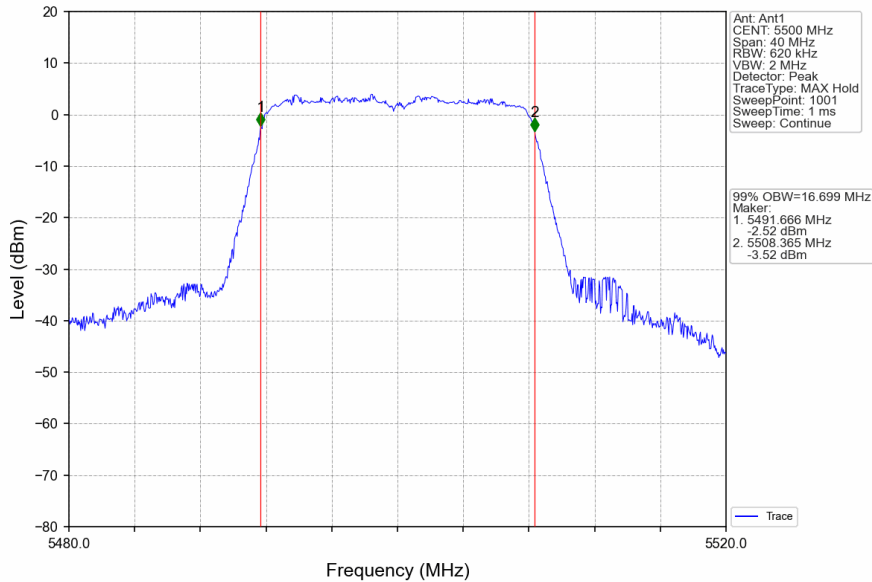
### 802.11a\_MCH\_5300MHz\_Ant1\_NTNV



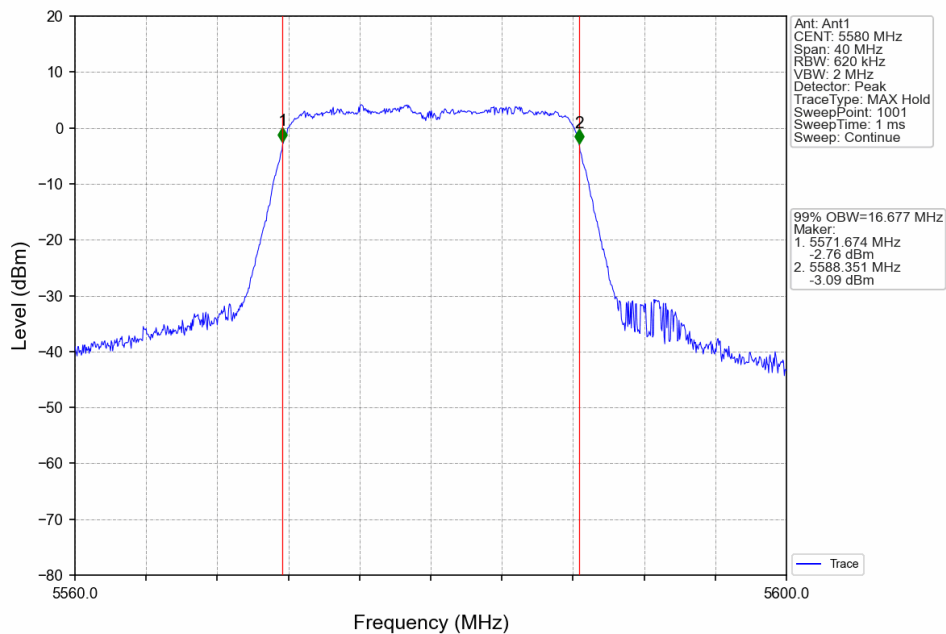
### 802.11a\_HCH\_5320MHz\_Ant1\_NTNV



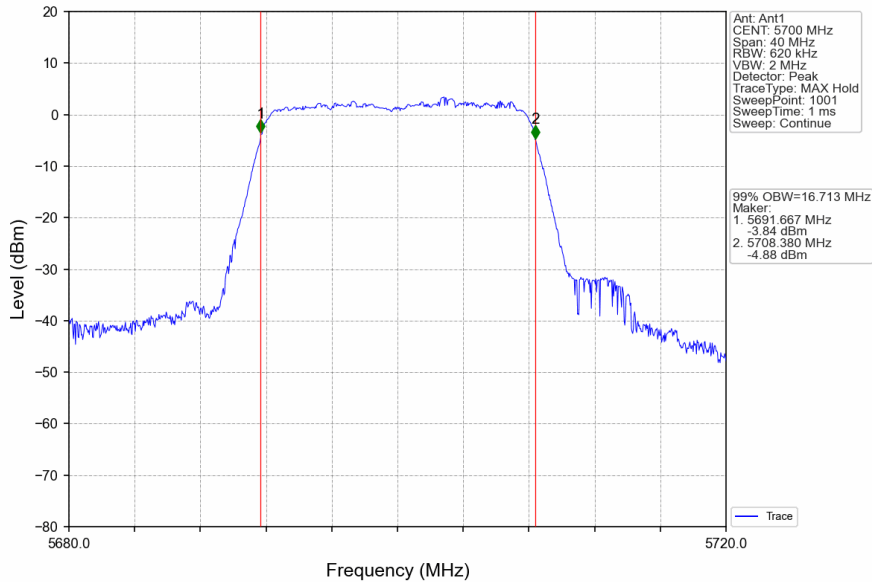
### 802.11a\_LCH\_5500MHz\_Ant1\_NTNV



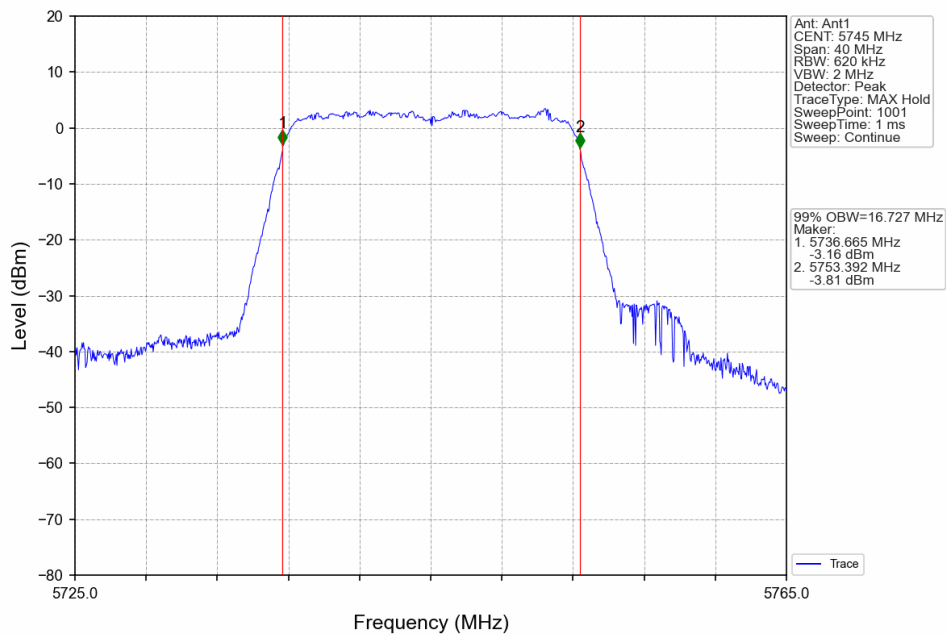
### 802.11a\_MCH\_5580MHz\_Ant1\_NTNV



### 802.11a\_HCH\_5700MHz\_Ant1\_NTNV

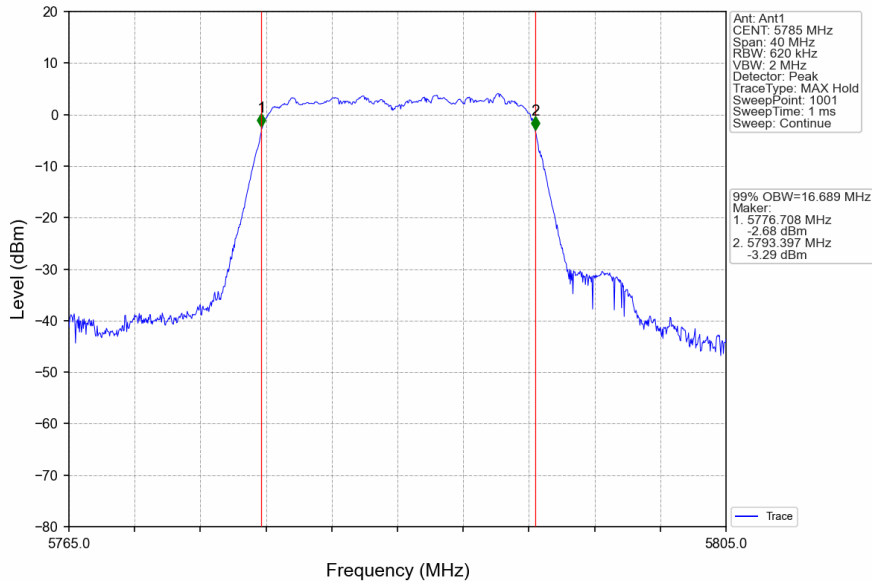


### 802.11a\_LCH\_5745MHz\_Ant1\_NTNV

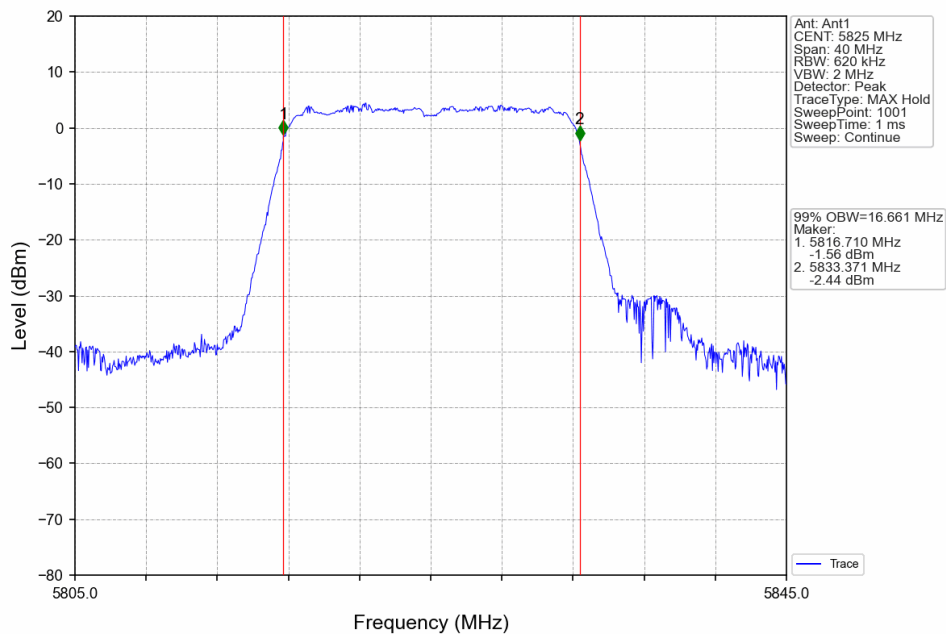




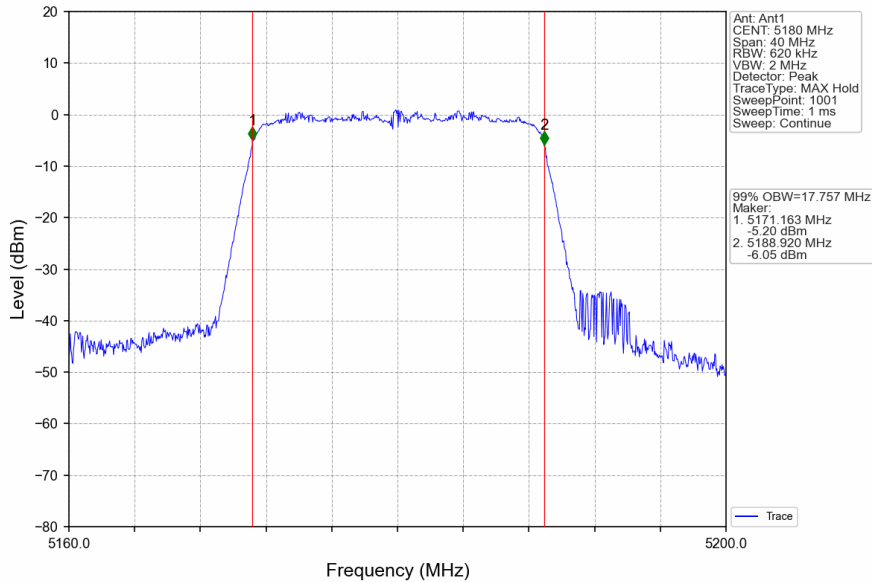
### 802.11a\_MCH\_5785MHz\_Ant1\_NTNV



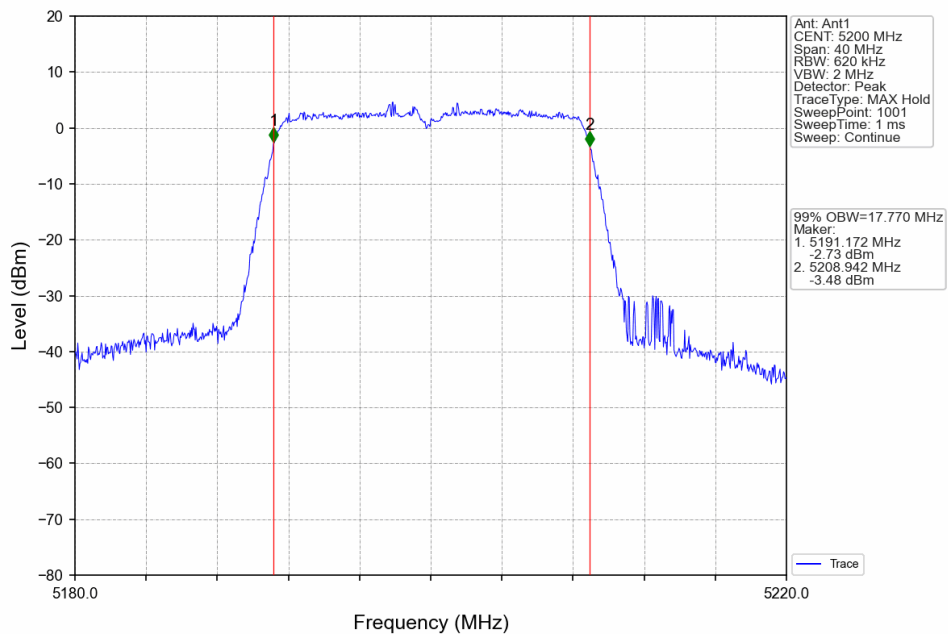
### 802.11a\_HCH\_5825MHz\_Ant1\_NTNV



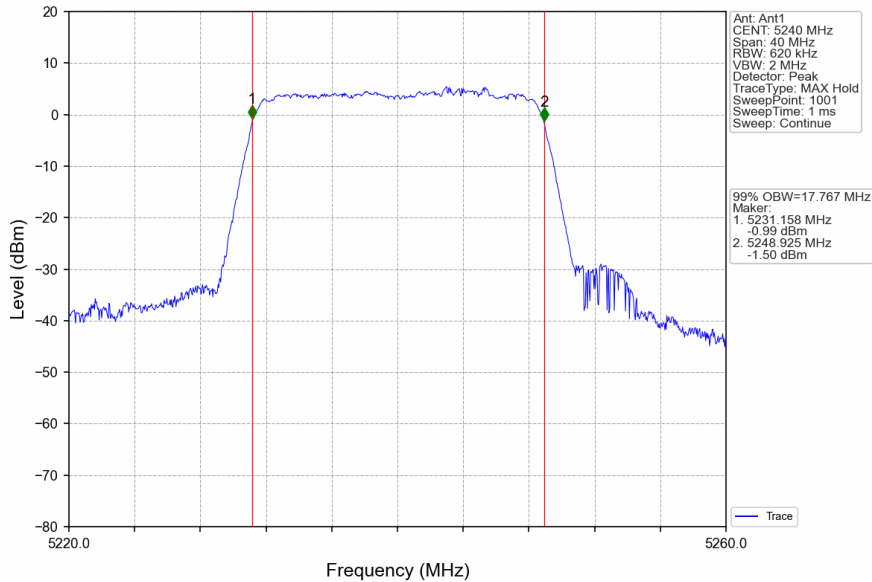
### 802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



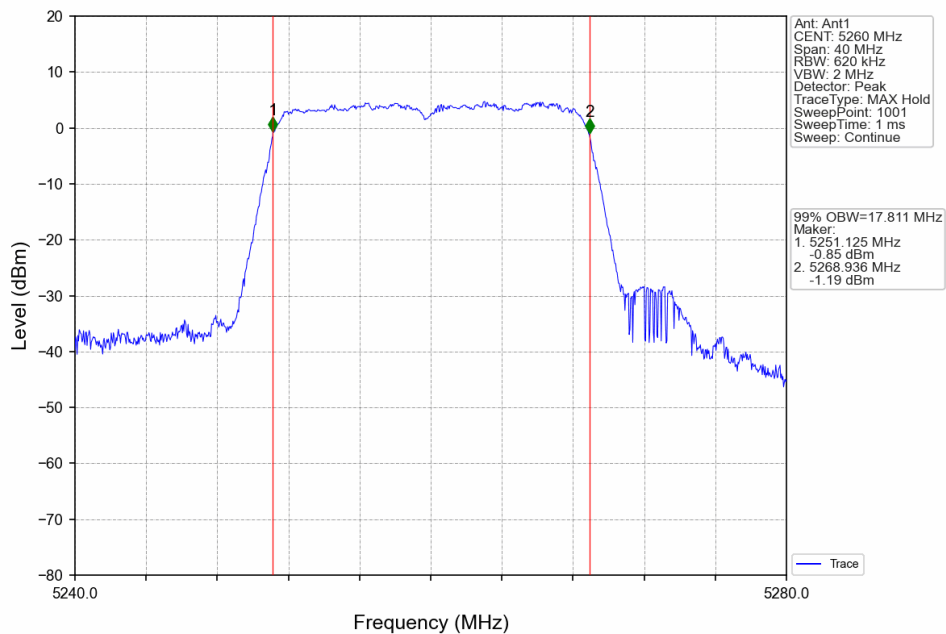
### 802.11n(HT20)\_MCH\_5200MHz\_Ant1\_NTNV



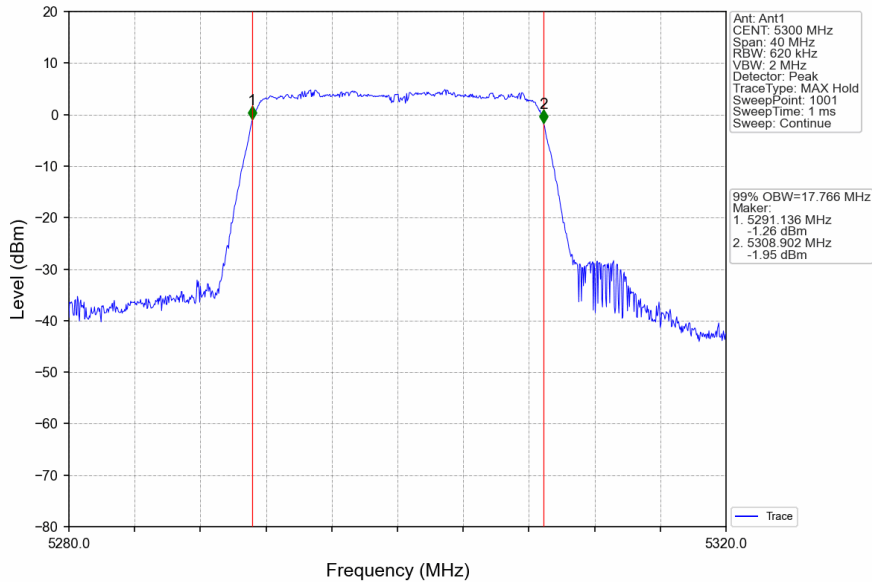
### 802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV



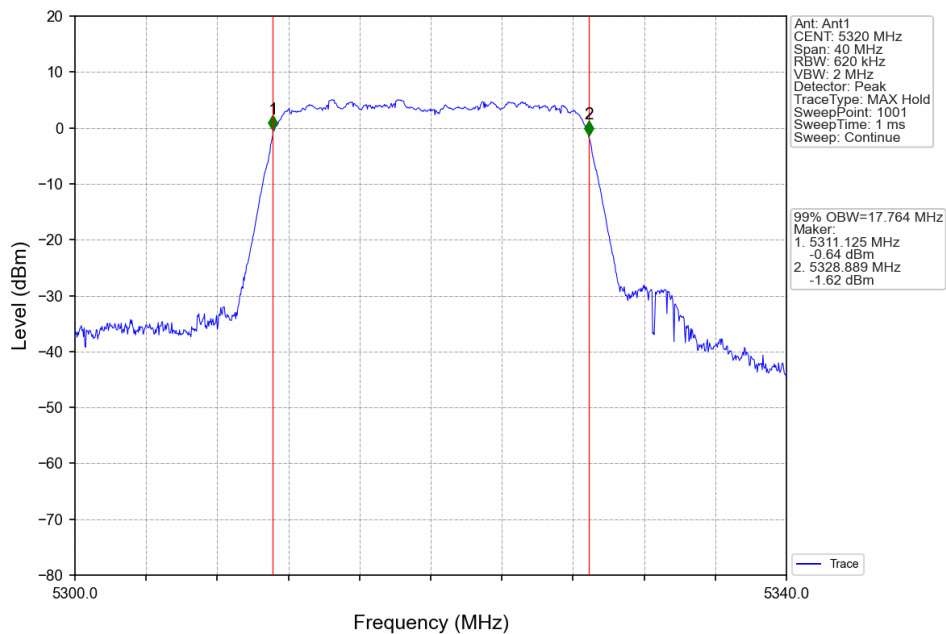
### 802.11n(HT20)\_LCH\_5260MHz\_Ant1\_NTNV



### 802.11n(HT20)\_MCH\_5300MHz\_Ant1\_NTNV

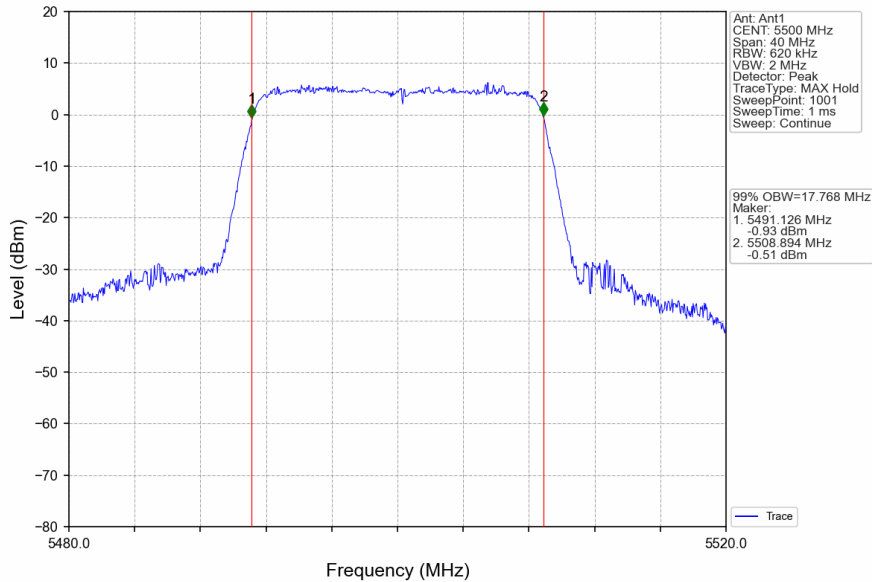


### 802.11n(HT20)\_HCH\_5320MHz\_Ant1\_NTNV





### 802.11n(HT20)\_LCH\_5500MHz\_Ant1\_NTNV



### 802.11n(HT20)\_MCH\_5580MHz\_Ant1\_NTNV

