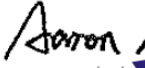
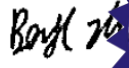


TEST REPORT

FCC ID. :	2AQRM-A67M	
Test Report No..... :	TCT241101E032	
Date of issue..... :	Dec. 11, 2024	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name..... :	FOXX Development Inc.	
Address..... :	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA	
Manufacturer's name ... :	FOXX Development Inc.	
Address..... :	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA	
Standard(s)	FCC CFR Title 47 Part 15 Subpart E Section 15.407 KDB 662911 D01 Multiple Transmitter Output v02r01 KDB 789033 D02 General U-NII Test Procedures New Rules v02r01	
Product Name..... :	Smart Phone	
Trade Mark	FOXXD, FOXX, MIRO	
Model/Type reference..... :	A67M	
Rating(s)..... :	Adapter Information: Model: A67M Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5.0V, 1.5A, 7.5W Rechargeable Li-ion Battery DC 3.85V 4000mAh 15.4Wh	
Date of receipt of test item	Nov. 01, 2024	
Date (s) of performance of test..... :	Nov. 02, 2024 ~ Dec. 10, 2024	
Tested by (+signature) ... :	Aaron MO	
Check by (+signature).... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

General disclaimer:

This report shall not be reproduced except in full, without the written approval of SHENZHEN TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

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Appendix A: Test Result of Conducted Test

Appendix B: Photographs of Test Setup

Appendix C: Photographs of EUT

1. General Product Information

1.1. EUT description

Product Name.....:	Smart Phone
Model/Type reference.....:	A67M
Sample Number.....:	TCT241101E029-0101
Operation Frequency	Band 1: 5180 MHz~5240 MHz Band 2A: 5260 MHz~5320 MHz Band 3: 5745 MHz~5825 MHz
Channel Bandwidth.....:	802.11a: 20MHz 802.11n: 20MHz, 40MHz 802.11ac: 20MHz, 40MHz, 80MHz
Modulation Technology	Orthogonal Frequency Division Multiplexing (OFDM)
Modulation Type.....:	256QAM, 64QAM, 16QAM, BPSK, QPSK
Antenna Type.....:	FPC Antenna
Antenna Gain.....:	Band 1: -0.49dBi Band 2A: -0.49dBi Band 3: -0.49dBi
Rating(s).....:	Adapter Information: Model: A67M Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5.0V, 1.5A, 7.5W Rechargeable Li-ion Battery DC 3.85V 4000mAh 15.4Wh

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

None.

1.3. Test Frequency

Band 1

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180	38	5190	42	5210
40	5200	46	5230		
48	5240				

Band 2A

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
52	5260	54	5270	58	5290
60	5300	62	5310		
64	5320				

Band 3

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745	151	5755	155	5775
157	5785	159	5795		
165	5825				

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Maximum Conducted Output Power	§15.407(a)	PASS
6dB Emission Bandwidth	§15.407(a)	PASS
26dB Emission Bandwidth& 99% Occupied Bandwidth	§15.407(a)	PASS
Power Spectral Density	§15.407(a)	PASS
Restricted Bands around fundamental frequency	§15.407(b)	PASS
Radiated Emission	§15.407(b)	PASS
Frequency Stability	§15.407(g)	PASS

Note:

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.
5. For the band 5.15-5.25GHz, EUT meet the requirements of 15.407(a)(ii).

3. General Information

3.1. Test environment and mode

Operating Environment:	
Temperature:	24.1 °C
Humidity:	53 % RH
Atmospheric Pressure:	1010 mbar
Test Software:	
Software Information:	Engineering test tool
Power Level:	default
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel and modulations with max. duty cycle.
The sample was placed 0.8m/1.5m for blow/above 1GHz above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.	

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11a(SISO)	6 Mbps
802.11n(HT20) (SISO)	6.5 Mbps
802.11n(HT40) (SISO)	13.5 Mbps
802.11ac(VHT20) (SISO)	6.5 Mbps
802.11ac(VHT40) (SISO)	13.5 Mbps
802.11ac(VHT80) (MIMO)	29.3 Mbps

Final Test Mode:

Operation mode:	Keep the EUT in continuous transmitting with modulation
-----------------	---

3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

4. Facilities and Accreditations

4.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Innovation, Science and Economic Development Canada for radio equipment testing.

4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4.3. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.10 dB
2	RF power, conducted	± 0.12 dB
3	Spurious emissions, conducted	± 0.11 dB
4	All emissions, radiated(<1 GHz)	± 4.56 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.22 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB

5. Test Results and Measurement Data

5.1. Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna:	
The EUT antenna is FPC antenna which permanently attached, and the best case gain of the antenna is -0.49dBi.	
 WIFI Antenna	

5.2. Conducted Emission

5.2.1. Test Specification

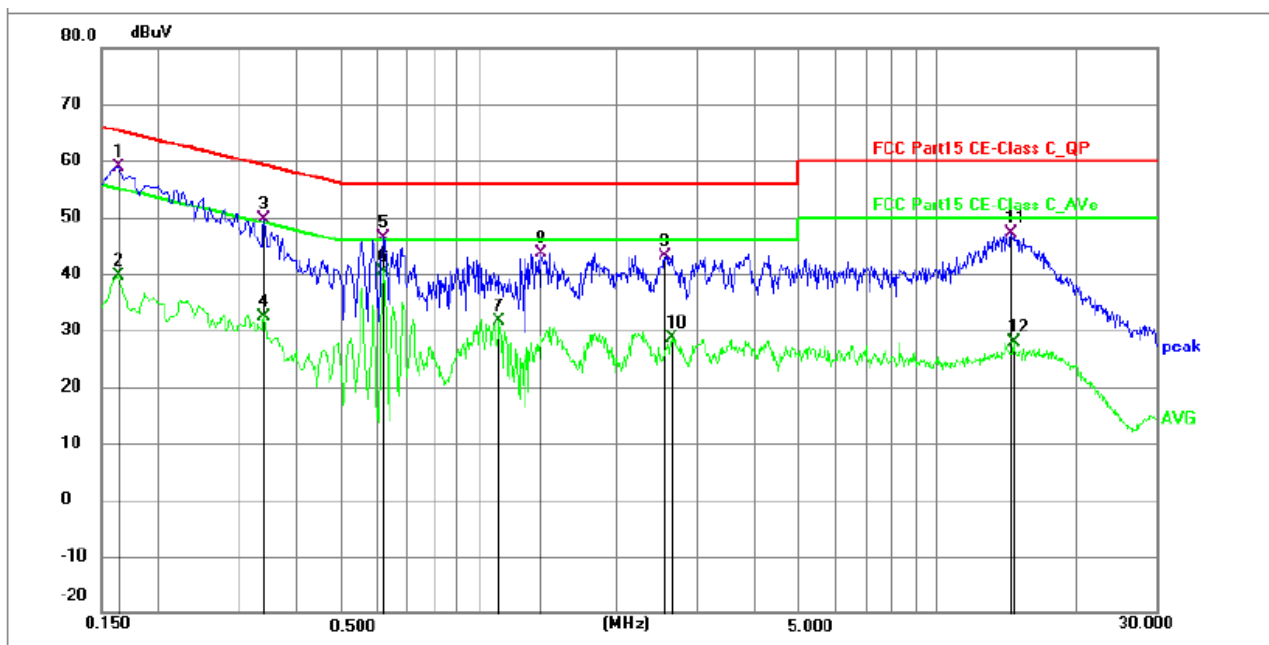
Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.10:2020														
Frequency Range:	150 kHz to 30 MHz														
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
Limits:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBuV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr><tr><td>0.5-5</td><td>56</td><td>46</td></tr><tr><td>5-30</td><td>60</td><td>50</td></tr></table>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test Setup:	Reference Plane 40cm 80cm E.U.T. AC power LISN Filter AC power EMI Receiver Test table/Insulation plane Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m														
Test Mode:	Charging + Transmitting Mode														
Test Procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2020 on conducted measurement.														
Test Result:	PASS														

5.2.2. Test Instruments

Conducted Emission Shielding Room Test Site (843)				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESCI3	100898	Jun. 26, 2025
LISN	Schwarzbeck	NSLK 8126	8126453	Jan. 31, 2025
Attenuator	N/A	10dB	164080	Jun. 26, 2025
Line-5	TCT	CE-05	/	Jun. 26, 2025
EMI Test Software	EZ EMC	EMEC-3A1	1.1.4.2	/

5.2.3. Test data

Please refer to following diagram for individual
Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV)	Limit (dBμV)	Margin (dB)	Detector	P/F	Remark
1	0.1635	48.52	10.48	59.00	65.28	-6.28	QP	P	
2	0.1635	29.07	10.48	39.55	55.28	-15.73	AVG	P	
3	0.3390	39.00	10.57	49.57	59.23	-9.66	QP	P	
4	0.3390	21.90	10.57	32.47	49.23	-16.76	AVG	P	
5	0.6180	35.84	10.64	46.48	56.00	-9.52	QP	P	
6 *	0.6180	29.68	10.64	40.32	46.00	-5.68	AVG	P	
7	1.1085	20.99	10.66	31.65	46.00	-14.35	AVG	P	
8	1.3605	33.03	10.66	43.69	56.00	-12.31	QP	P	
9	2.5574	32.57	10.67	43.24	56.00	-12.76	QP	P	
10	2.6250	18.06	10.67	28.73	46.00	-17.27	AVG	P	
11	14.5050	36.18	10.88	47.06	60.00	-12.94	QP	P	
12	14.6670	17.03	10.87	27.90	50.00	-22.10	AVG	P	

Note:

Freq. = Emission frequency in MHz

Reading level (dBμV) = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement (dBμV) = Reading level (dBμV) + Corr. Factor (dB)

Limit (dBμV) = Limit stated in standard

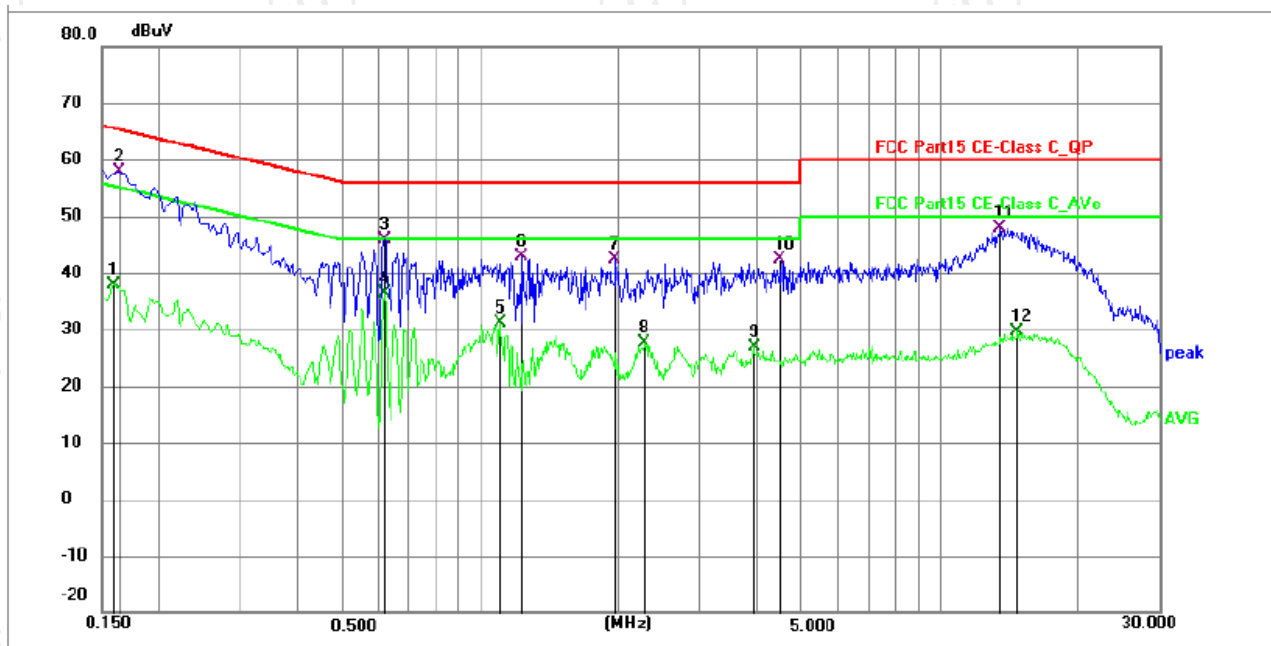
Margin (dB) = Measurement (dBμV) – Limits (dBμV)

Q.P. =Quasi-Peak

AVG =average

* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1590	27.48	10.47	37.95	55.52	-17.57	AVG	P	
2 *	0.1632	47.43	10.48	57.91	65.30	-7.39	QP	P	
3	0.6180	35.28	10.64	45.92	56.00	-10.08	QP	P	
4	0.6180	25.73	10.64	36.37	46.00	-9.63	AVG	P	
5	1.1040	20.58	10.66	31.24	46.00	-14.76	AVG	P	
6	1.2340	32.17	10.66	42.83	56.00	-13.17	QP	P	
7	1.9680	31.58	10.68	42.26	56.00	-13.74	QP	P	
8	2.2830	17.06	10.67	27.73	46.00	-18.27	AVG	P	
9	3.9344	16.28	10.67	26.95	46.00	-19.05	AVG	P	
10	4.5104	31.75	10.70	42.45	56.00	-13.55	QP	P	
11	13.4923	37.10	10.83	47.93	60.00	-12.07	QP	P	
12	14.6940	18.90	10.78	29.68	50.00	-20.32	AVG	P	

Note: 1. Freq. = Emission frequency in MHz

Reading level (dBuV) = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)

Limit (dBuV) = Limit stated in standard

Margin (dB) = Measurement (dBuV) – Limits (dBuV)

Q.P. =Quasi-Peak

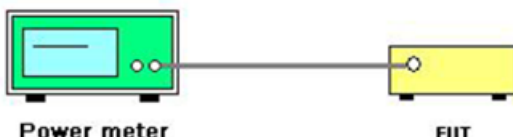
AVG =average

* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

2. Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80)) and the worst case Mode (Channel 155 and 802.11ac(VHT80)) was submitted only.

5.3. Maximum Conducted Output Power

5.3.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407(a)& Part 2 J Section 2.1046	
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E	
Limit:	Frequency Band (MHz)	Limit
	5180 - 5240	24dBm(250mW) for client device
	5260 - 5320	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz
	5470 - 5725	24dBm(250mW) or 11 dBm + 10 log B, B is the 26 dB emission bandwidth in megahertz
	5745 - 5825	30dBm(1W)
Test Setup:	 The diagram illustrates the test setup. On the left is a green rectangular device labeled 'Power meter'. A black line representing an RF cable connects it to a yellow rectangular device on the right labeled 'EUT'.	
Test Mode:	Transmitting mode with modulation	
Test Procedure:	1. The testing follows the Measurement Procedure of KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E, 3, a 2. The RF output of EUT was connected to the power meter by RF cable. The path loss was compensated to the results for each measurement. 3. Set to the maximum power setting and enable the EUT transmit continuously. 5. Measure the conducted output power and record the results in the test report.	
Test Result:	PASS	

5.3.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025
Power Meter	Agilent	E4418B	MY45100357	Jun. 26, 2025
Power Sensor	Agilent	8184A	MY41096530	Jun. 26, 2025
Test Software	TST Pass	/	/	/

5.4. 6dB Emission Bandwidth

5.4.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
Limit:	>500kHz
Test Setup:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz. 4. Measure and record the results in the test report.
Test Result:	PASS

5.4.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025
Test Software	TST Pass	/	/	/

5.5. 26dB Bandwidth and 99% Occupied Bandwidth

5.5.1. Test Specification

Test Requirement:	47 CFR Part 15C Section 15.407 (a)& Part 2 J Section 2.1049
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D
Limit:	No restriction limits
Test Setup:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 1% to 5% of the OBW. Set the Video bandwidth (VBW) = 3 *RBW. In order to make an accurate measurement. 4. Measure and record the results in the test report.
Test Result:	PASS

5.5.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025
Test Software	TST Pass	/	/	/

5.6. Power Spectral Density

5.6.1. Test Specification

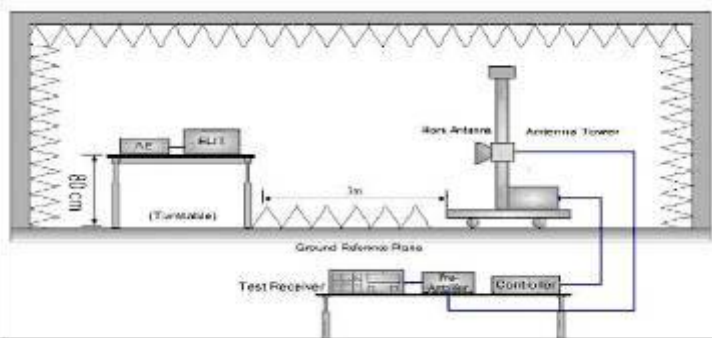
Test Requirement:	FCC Part15 E Section 15.407 (a)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F
Limit:	$\leq 11.00\text{dBm/MHz}$ for Band 1 5150MHz-5250MHz(client device) $\leq 11.00\text{dBm/MHz}$ for Band 2A&2C 5250-5350&5470-5725 $\leq 30.00\text{dBm/500KHz}$ for Band 3 5725MHz-5850MHz The e.i.r.p spectral density for Band 1 5150MHz – 5250 MHz should not exceed 10dBm/MHz
Test Setup:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth. 1. Set RBW = 510 kHz/1 MHz, VBW $\geq 3 \times$ RBW, Sweep time = Auto, Detector = RMS. 2. Allow the sweeps to continue until the trace stabilizes. 3. Use the peak marker function to determine the maximum amplitude level. 4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.
Test Result:	PASS

5.6.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025
Test Software	TST Pass	/	/	/

5.7. Band edge

5.7.1. Test Specification

Test Requirement:	FCC CFR47 Part 15E Section 15.407																				
Test Method:	ANSI C63.10:2020																				
Limit:	In un-restricted band: For Band 1&2A&2C: -27dBm/MHz For Band 3:																				
	<table><tr><th>Frequency (MHz)</th><th>Limit (dBm/MHz)</th><th>Frequency (MHz)</th><th>Limit (dBm/MHz)</th></tr><tr><td>< 650</td><td>-27</td><td>5850~5855</td><td>27~15.6</td></tr><tr><td>5650~5700</td><td>-27~10</td><td>5855~5875</td><td>15.6~10</td></tr><tr><td>5700~5720</td><td>10~15.6</td><td>5875~5925</td><td>10~-27</td></tr><tr><td>5720~5725</td><td>15.6~27</td><td>> 5925</td><td>-27</td></tr></table>	Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)	< 650	-27	5850~5855	27~15.6	5650~5700	-27~10	5855~5875	15.6~10	5700~5720	10~15.6	5875~5925	10~-27	5720~5725	15.6~27	> 5925	-27
	Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)																	
	< 650	-27	5850~5855	27~15.6																	
	5650~5700	-27~10	5855~5875	15.6~10																	
	5700~5720	10~15.6	5875~5925	10~-27																	
5720~5725	15.6~27	> 5925	-27																		
E[dBμV/m] = EIRP[dBm] + 95.2 @3m																					
In restricted band:																					
<table><tr><th>Detector</th><th>Limit@3m</th></tr><tr><td>Peak</td><td>74dBμV/m</td></tr><tr><td>AVG</td><td>54dBμV/m</td></tr></table>	Detector	Limit@3m	Peak	74dBμV/m	AVG	54dBμV/m															
Detector	Limit@3m																				
Peak	74dBμV/m																				
AVG	54dBμV/m																				
Test Setup:																					
Test Mode:	Transmitting mode with modulation																				
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. 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. 4. 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 and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold																				

	Mode. 6. 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 peak, quasipeak or average method as specified and then reported in a data sheet.
Test Result:	PASS

5.7.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESCI7	100529	Jan. 31, 2025
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 26, 2025
Spectrum Analyzer	Agilent	N9020A	MY50101018	Jun. 26, 2025
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Jan. 31, 2025
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Jan. 31, 2025
Pre-amplifier	HP	8447D	2727A05017	Jun. 26, 2025
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jun. 26, 2025
Broadband Antenna	Schwarzbeck	VULB9163	340	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jun. 28, 2025
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Feb. 02, 2025
Coaxial cable	SKET	RE-03-D	/	Jun. 26, 2025
Coaxial cable	SKET	RE-03-M	/	Jun. 26, 2025
Coaxial cable	SKET	RE-03-L	/	Jun. 26, 2025
Coaxial cable	SKET	RE-04-D	/	Jun. 26, 2025
Coaxial cable	SKET	RE-04-M	/	Jun. 26, 2025
Coaxial cable	SKET	RE-04-L	/	Jun. 26, 2025
Antenna Mast	Keleto	RE-AM	/	/
EMI Test Software	EZ EMC	FA-03A2 RE+	1.1.4.2	/

5.7.3. Test Data

Band 1&2A: 5180 MHz - 5320 MHz, Test Mode: 802.11a

Test Channel: Lowest channel, Test Polarization: Vertical

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5097.23	42.34	5.28	47.62	74	-26.38	Peak	Pass
2	5150.00	43.86	5.33	49.19	74	-24.81	Peak	Pass

Test Channel: Lowest channel, Test Polarization: Horizontal

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5072.36	43.64	5.35	48.99	74	-25.01	Peak	Pass
2	5150.00	44.96	5.33	50.29	74	-23.71	Peak	Pass

Test Channel: Highest channel, Test Polarization: Vertical

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5350.00	44.97	5.45	50.42	74	-23.58	Peak	Pass
2	5460.00	46.09	5.52	51.61	74	-22.39	Peak	Pass

Test Channel: Highest channel, Test Polarization: Horizontal

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5350.00	45.62	5.45	51.07	74	-22.93	Peak	Pass
2	5460.00	46.85	5.52	52.37	74	-21.63	Peak	Pass

Remark: Test frequency up to 40GHz and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Band 3: 5745 MHz - 5825 MHz, Test Mode: 802.11a

Test Channel: Lowest channel, Test Polarization: Vertical

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5650.00	42.85	5.63	48.48	68.2	-19.72	Peak	Pass
2	5700.00	45.63	5.70	51.33	105.2	-53.87	Peak	Pass
3	5720.00	47.15	5.66	52.81	110.8	-57.99	Peak	Pass
3	5725.00	50.06	5.66	55.72	122.2	-66.48	Peak	Pass

Test Channel: Lowest channel, Test Polarization: Horizontal

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5650.00	43.52	5.63	49.15	68.2	-19.05	Peak	Pass
2	5700.00	46.71	5.70	52.41	105.2	-52.79	Peak	Pass
3	5720.00	47.26	5.66	52.92	110.8	-57.88	Peak	Pass
3	5725.00	50.03	5.66	55.69	122.2	-66.51	Peak	Pass

Test Channel: Highest channel, Test Polarization: Vertical

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5850.00	49.51	5.73	55.24	122.2	-66.96	Peak	Pass
2	5855.00	47.84	5.72	53.56	110.8	-57.24	Peak	Pass
3	5875.00	47.19	5.70	52.89	105.2	-52.31	Peak	Pass
4	5925.00	43.56	5.66	49.22	68.2	-18.98	Peak	Pass

Test Channel: Highest channel, Test Polarization: Horizontal

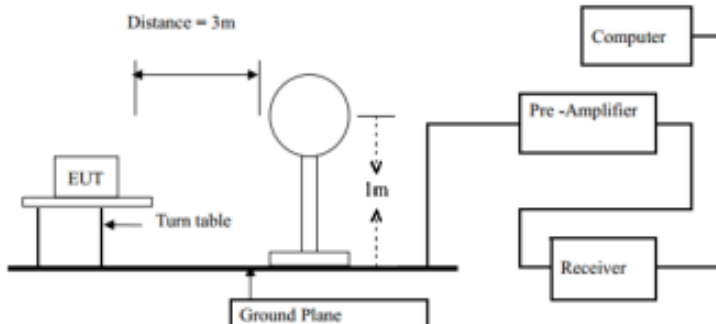
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5850.00	50.68	5.73	56.41	122.2	-65.79	Peak	Pass
2	5855.00	49.17	5.72	54.89	110.8	-55.91	Peak	Pass
3	5875.00	46.54	5.7	52.24	105.2	-52.96	Peak	Pass
4	5925.00	44.83	5.66	50.49	68.2	-17.71	Peak	Pass

Remark: Test frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

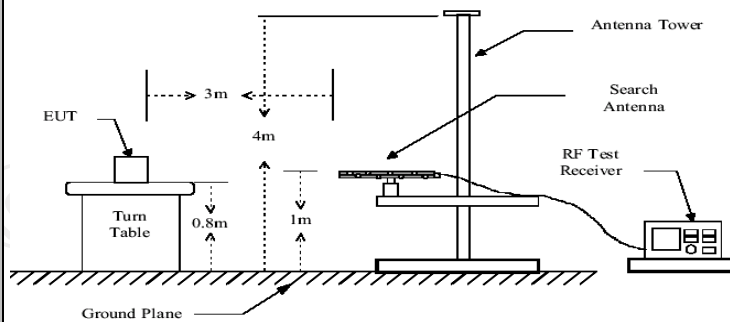
Note: All modulation (802.11a, 802.11n, 802.11ac,) have been tested, only the worst case in 802.11a be reported.

5.8. Unwanted Emissions

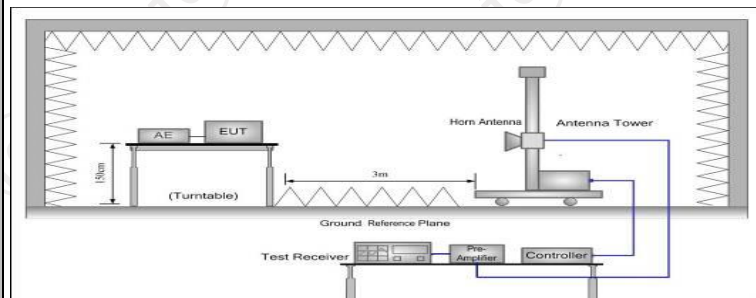
5.8.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205				
Test Method:	KDB 789033 D02 v02r01				
Frequency Range:	9kHz to 40GHz				
Measurement Distance:	3 m				
Antenna Polarization:	Horizontal & Vertical				
Operation mode:	Transmitting mode with modulation				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		Peak	1MHz	10Hz	Average Value
Limit:	Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table, In restricted bands:				
	Frequency		Detector		Limit@3m
	Above 1G		Peak		74dBµV/m
			AVG		54dBµV/m
	Frequency		Field Strength (microvolts/meter)	Measurement Distance (meters)	
	0.009-0.490		2400/F(KHz)	300	
	0.490-1.705		24000/F(KHz)	3	
	1.705-30		30	30	
	30-88		100	3	
	88-216		150	3	
216-960		200	3		
Above 960		500	3		
	In un-restricted bands: 68.2dBuV/m				
Test setup:	For radiated emissions below 30MHz				
					

30MHz to 1GHz



Above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. 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.
4. 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 and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. 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 peak, quasi-peak or average method as specified and then reported in a data sheet.

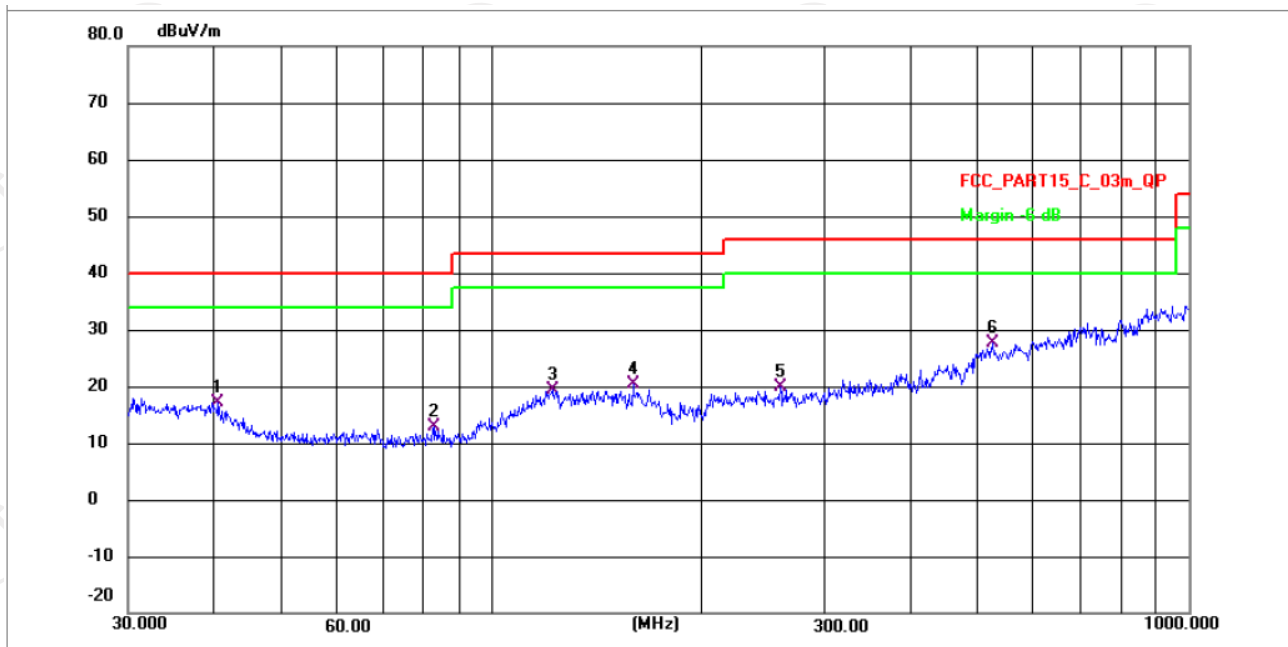
Test results:

PASS

5.8.2. Test Data

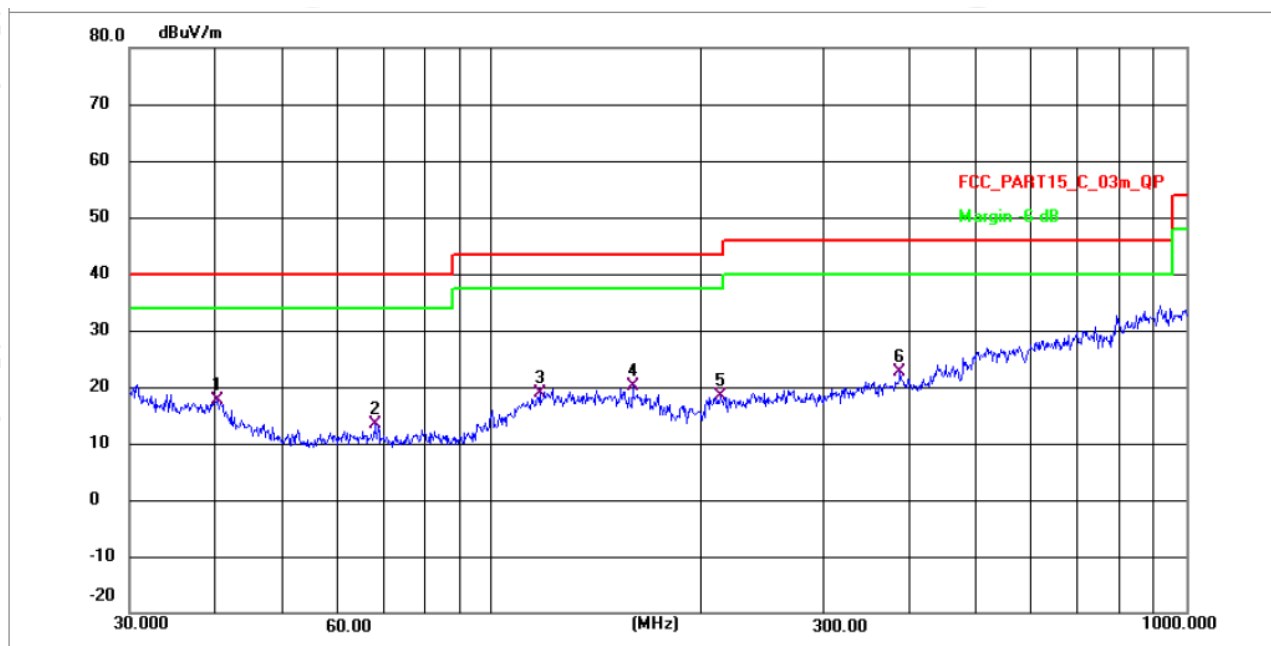
Please refer to following diagram for individual
Below 1GHz

Horizontal:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	40.4881	26.88	-9.63	17.25	40.00	-22.75	QP	P
2	82.5034	35.73	-22.74	12.99	40.00	-27.01	QP	P
3	122.4040	41.56	-22.26	19.30	43.50	-24.20	QP	P
4	159.2251	42.30	-21.93	20.37	43.50	-23.13	QP	P
5	259.2338	40.85	-20.98	19.87	46.00	-26.13	QP	P
6 *	523.6352	46.49	-18.83	27.66	46.00	-18.34	QP	P

Vertical:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	40.1347	27.36	-9.63	17.73	40.00	-22.27	QP	P
2	67.7939	22.71	-9.38	13.33	40.00	-26.67	QP	P
3	117.3603	41.16	-22.32	18.84	43.50	-24.66	QP	P
4	159.2251	42.05	-21.93	20.12	43.50	-23.38	QP	P
5	213.7634	39.73	-21.39	18.34	43.50	-25.16	QP	P
6	387.9920	42.47	-19.92	22.55	46.00	-23.45	QP	P

- Note:** 1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported
2. Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80)) and the worst case Mode (Channel 155 and 802.11ac(VHT80)) was submitted only.
3. Measurement (dBμV) = Reading level + Correction Factor, correction Factor= Antenna Factor + Cable loss – Pre-amplifier.

Above 1GHz

Modulation Type: Band 1									
802.11a CH36:5180MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10360	H	41.04	---	1.78	42.82	---	68.2	---	-25.38
15540	H	39.67	---	5.21	44.88	---	74	54	-9.12
---	H	---	---	---	---	---	---	---	---
10360	V	42.00	---	1.78	43.78	---	68.2	---	-24.42
15540	V	40.74	---	5.21	45.95	---	74	54	-8.05
---	V	---	---	---	---	---	---	---	---

802.11a CH40:5200MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10400	H	40.88	---	1.83	42.71	---	68.2	---	-25.49
15600	H	39.64	---	5.23	44.87	---	74	54	-9.13
---	H	---	---	---	---	---	---	---	---
10400	V	41.23	---	1.83	43.06	---	74	---	-30.94
15600	V	40.18	---	5.23	45.41	---	74	54	-8.59
---	V	---	---	---	---	---	---	---	---

802.11a CH48:5240MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10480	H	40.76	---	1.85	42.61	---	68.2	---	-25.59
15720	H	40.21	---	5.25	45.46	---	74	54	-8.54
---	H	---	---	---	---	---	---	---	---
10480	V	43.75	---	1.85	45.60	---	68.2	---	-22.60
15720	V	40.24	---	5.25	45.49	---	74	54	-8.51
---	V	---	---	---	---	---	---	---	---

Note:

- Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
- Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
- The emission levels of other frequencies are very lower than the limit and not show in test report.
- Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
- Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
- All modulation (802.11a, 802.11n, 802.11ac,) have been tested, only the worst case in 802.11a be reported.

Modulation Type: Band 2A									
802.11a CH52:5260MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10520	H	40.80	---	1.87	42.67	---	68.2	---	-25.53
15780	H	40.27	---	5.01	45.28	---	74	54	-8.72
---	H	---	---	---	---	---	---	---	---
10520	V	43.18	---	1.87	45.05	---	68.2	---	-23.15
15780	V	41.26	---	5.01	46.27	---	74	54	-7.73
---	V	---	---	---	---	---	---	---	---

802.11a CH60:5300MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10600	H	40.87	---	1.89	42.76	---	74	---	-31.24
15900	H	39.80	---	4.93	44.73	---	74	54	-9.27
---	H	---	---	---	---	---	---	---	---
10600	V	42.22	---	1.89	44.11	---	74	---	-29.89
15900	V	40.80	---	4.93	45.73	---	74	54	-8.27
---	V	---	---	---	---	---	---	---	---

802.11a CH64:5320MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
10640	H	41.87	---	1.94	43.81	---	74	---	-30.19
15960	H	39.10	---	4.83	43.93	---	74	54	-10.07
---	H	---	---	---	---	---	---	---	---
10640	V	42.82	---	1.94	44.76	---	74	---	-29.24
15960	V	40.23	---	4.83	45.06	---	74	54	-8.94
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
5. Data of measurement shown “---“in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. All modulation (802.11a, 802.11n, 802.11ac,) have been tested, only the worst case in 802.11a be reported.

Modulation Type: Band 3									
802.11a CH149:5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11490	H	43.40	---	2.48	45.88	---	74	54	-8.12
17235	H	41.37	---	6.50	47.87	---	68.2	---	-20.33
---	H	---	---	---	---	---	---	---	---
11490	V	42.96	---	2.48	45.44	---	74	54	-8.56
17235	V	40.87	---	6.50	47.37	---	68.2	---	-20.83
---	V	---	---	---	---	---	---	---	---

802.11a CH157:5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11570	H	42.02	---	2.42	44.44	---	74	54	-9.56
17355	H	39.93	---	7.03	46.96	---	68.2	---	-21.24
---	H	---	---	---	---	---	---	---	---
11570	V	42.38	---	2.42	44.80	---	74	54	-9.20
17355	V	40.37	---	7.03	47.40	---	68.2	---	-20.80
---	V	---	---	---	---	---	---	---	---

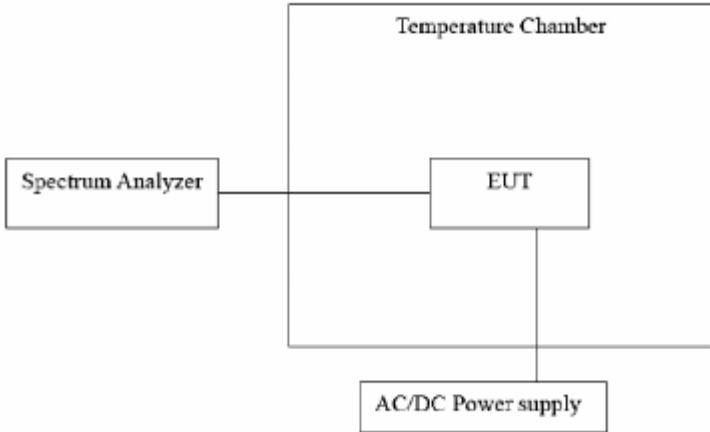
802.11a CH165:5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBuV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
11650	H	43.40	---	2.41	45.81	---	74	54	-8.19
17475	H	42.03	---	7.41	49.44	---	68.2	---	-18.76
---	H	---	---	---	---	---	---	---	---
11650	V	44.39	---	2.41	46.80	---	74	54	-7.20
17475	V	42.08	---	7.41	49.49	---	68.2	---	-18.71
---	V	---	---	---	---	---	---	---	---

Note:

- Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
- Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
- The emission levels of other frequencies are very lower than the limit and not show in test report.
- Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
- Data of measurement shown “---“in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
- All modulation (802.11a, 802.11n, 802.11ac,) have been tested, only the worst case in 802.11a be reported.

5.9. Frequency Stability Measurement

5.9.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
Test Method:	ANSI C63.10: 2020
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 45 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	 <pre> graph LR SA[Spectrum Analyzer] --- EUT[EUT] subgraph TC [Temperature Chamber] EUT end EUT --- P[AC/DC Power supply] </pre>
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS

Appendix A: Test Result of Conducted Test

1. Duty Cycle

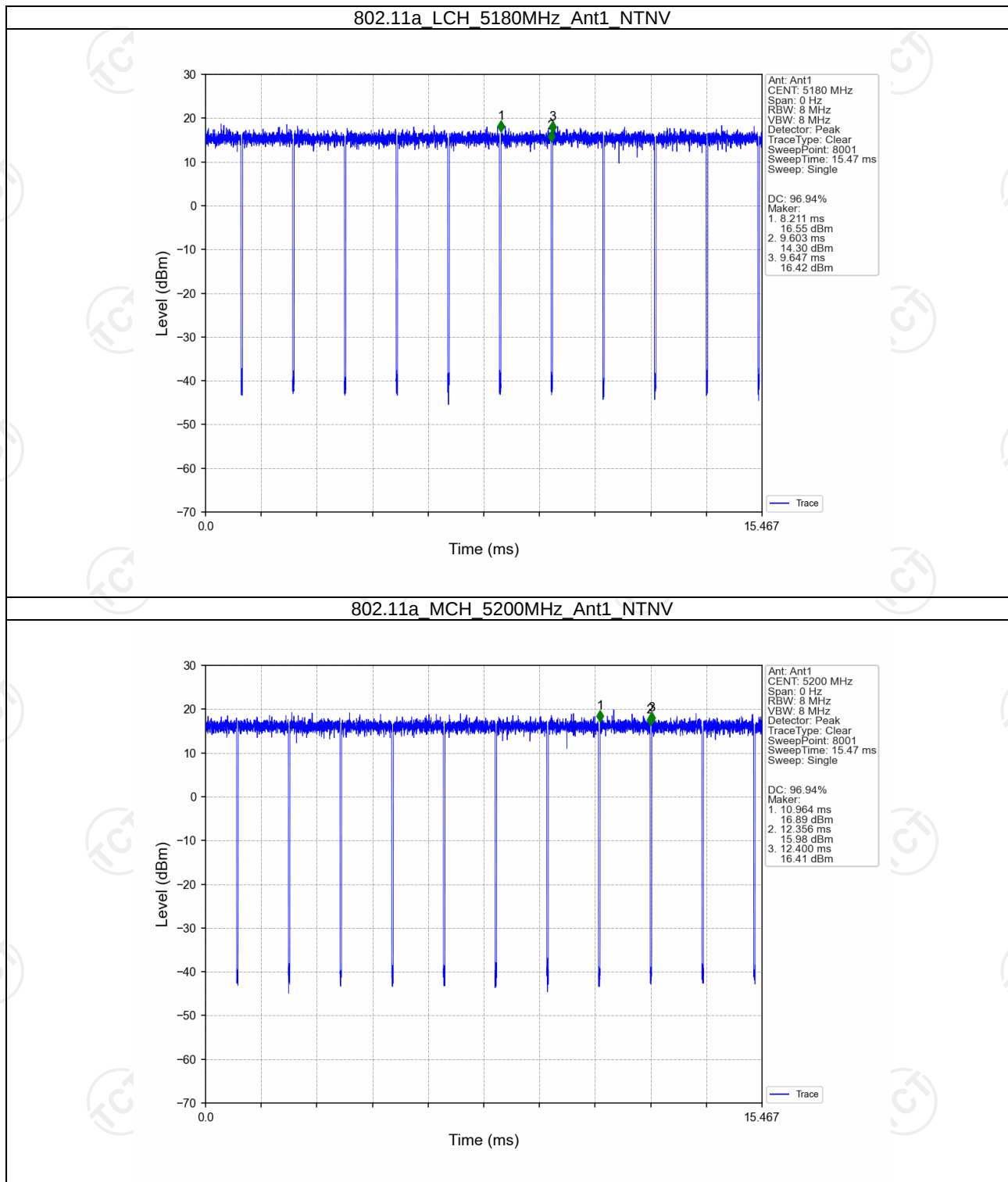
1.1 Test Result

1.1.1 Ant1

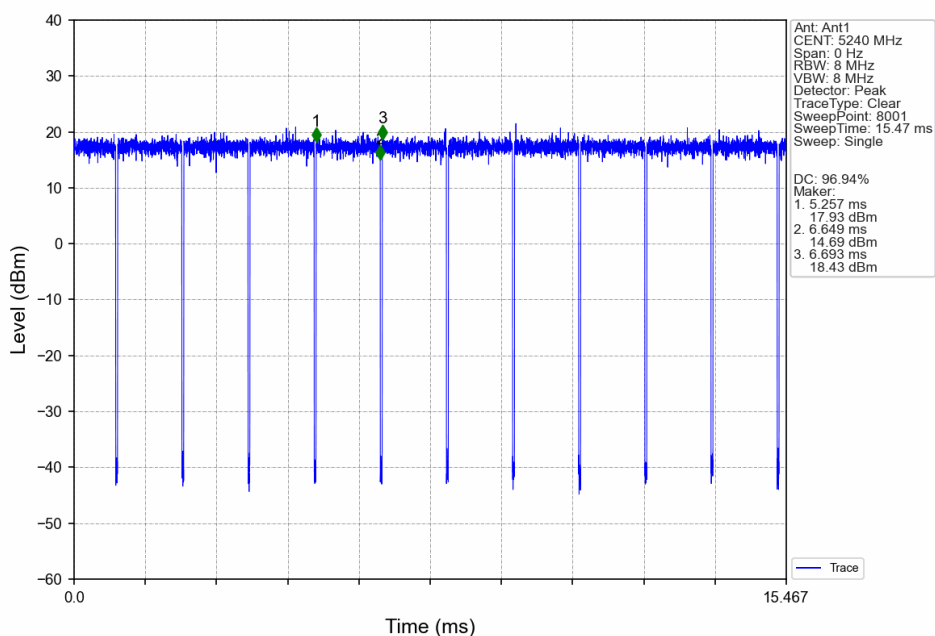
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.392	1.436	96.94	0.14	0.13
		5200	1.392	1.436	96.94	0.14	0.13
		5240	1.392	1.436	96.94	0.14	0.13
		5260	1.392	1.436	96.94	0.14	0.13
		5300	1.394	1.439	96.87	0.14	0.13
		5320	1.394	1.437	97.01	0.13	0.00
		5745	1.392	1.437	96.87	0.14	0.13
		5785	1.392	1.437	96.87	0.14	0.13
802.11n (HT20)	SISO	5825	1.392	1.436	96.94	0.14	0.13
		5180	1.300	1.345	96.65	0.15	0.13
		5200	1.301	1.344	96.80	0.14	0.00
		5240	1.300	1.345	96.65	0.15	0.13
		5260	1.302	1.345	96.80	0.14	0.13
		5300	1.302	1.345	96.80	0.14	0.13
		5320	1.302	1.345	96.80	0.14	0.00
		5745	1.299	1.344	96.65	0.15	0.13
802.11n (HT40)	SISO	5785	1.302	1.345	96.80	0.14	0.00
		5825	1.299	1.344	96.65	0.15	0.13
		5190	0.649	0.693	93.65	0.28	0.26
		5230	0.649	0.693	93.65	0.28	0.13
		5270	0.650	0.693	93.80	0.28	0.13
		5310	0.649	0.692	93.79	0.28	0.13
802.11ac (VHT20)	SISO	5755	0.649	0.692	93.79	0.28	0.13
		5795	0.648	0.692	93.64	0.29	0.13
		5180	1.312	1.357	96.68	0.15	0.13
		5200	1.312	1.357	96.68	0.15	0.13
		5240	1.313	1.356	96.83	0.14	0.13
		5260	1.314	1.357	96.83	0.14	0.13
		5300	1.314	1.357	96.83	0.14	0.13
		5320	1.314	1.357	96.83	0.14	0.13
802.11ac (VHT40)	SISO	5745	1.313	1.358	96.69	0.15	0.13
		5785	1.312	1.357	96.68	0.15	0.13
		5825	1.312	1.357	96.68	0.15	0.13
		5190	0.654	0.697	93.83	0.28	0.13
		5230	0.653	0.696	93.82	0.28	0.01
		5270	0.653	0.696	93.82	0.28	0.13
802.11ac (VHT80)	SISO	5310	0.653	0.696	93.82	0.28	0.13
		5755	0.654	0.697	93.83	0.28	0.25
		5795	0.653	0.697	93.69	0.28	0.13
		5210	0.326	0.370	88.11	0.55	0.36
		5290	0.326	0.368	88.59	0.53	0.02
		5775	0.326	0.369	88.35	0.54	0.14

1.2 Test Graph

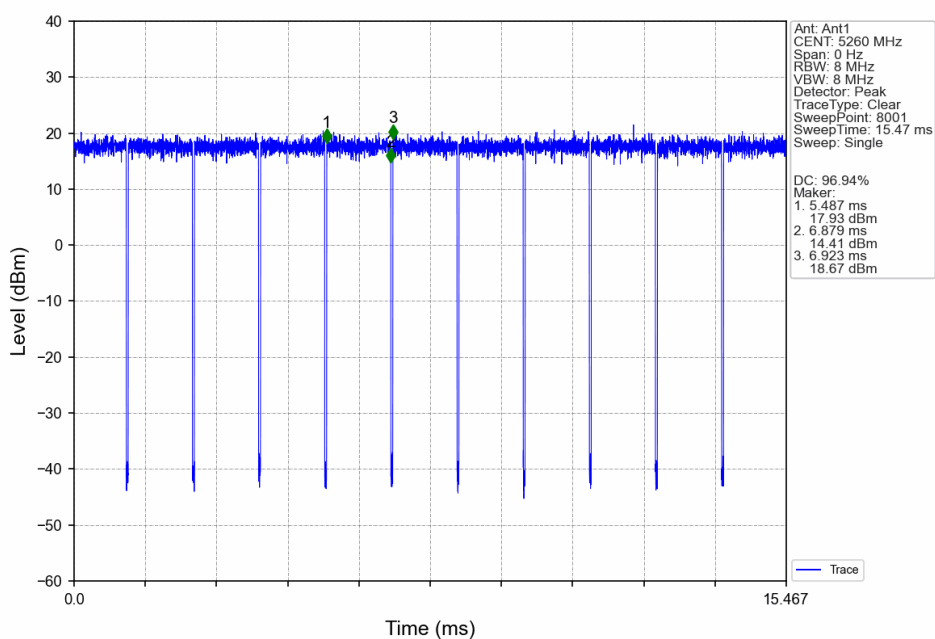
1.2.1 Ant1



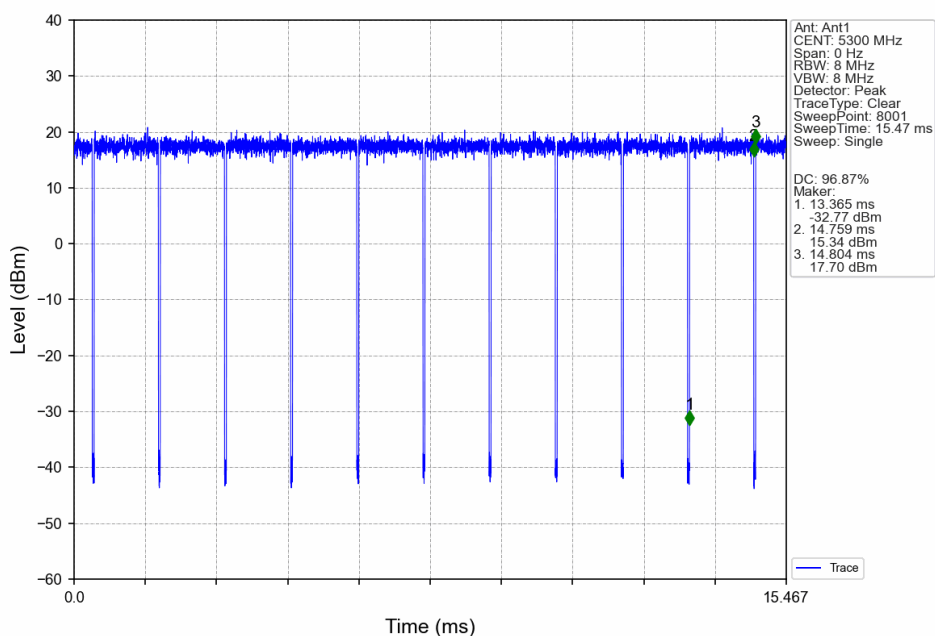
802.11a HCH 5240MHz Ant1 NTN



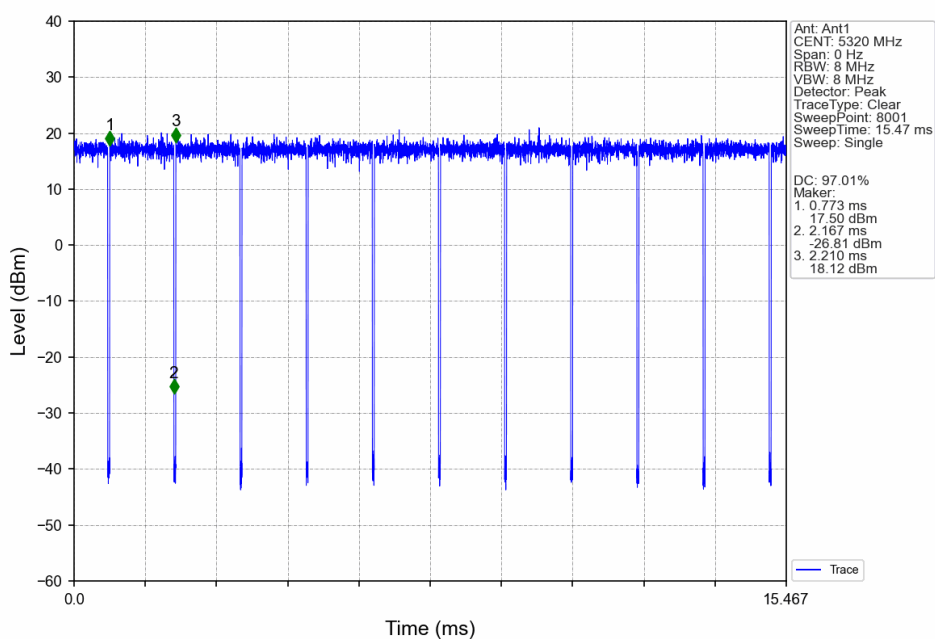
802.11a LCH 5260MHz Ant1 NTN



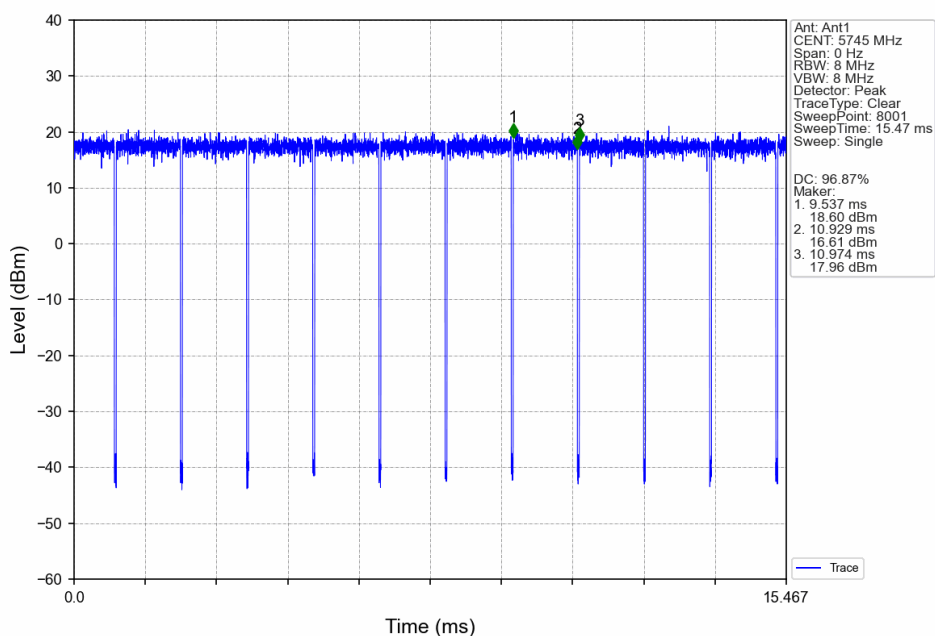
802.11a MCH 5300MHz Ant1 NTN



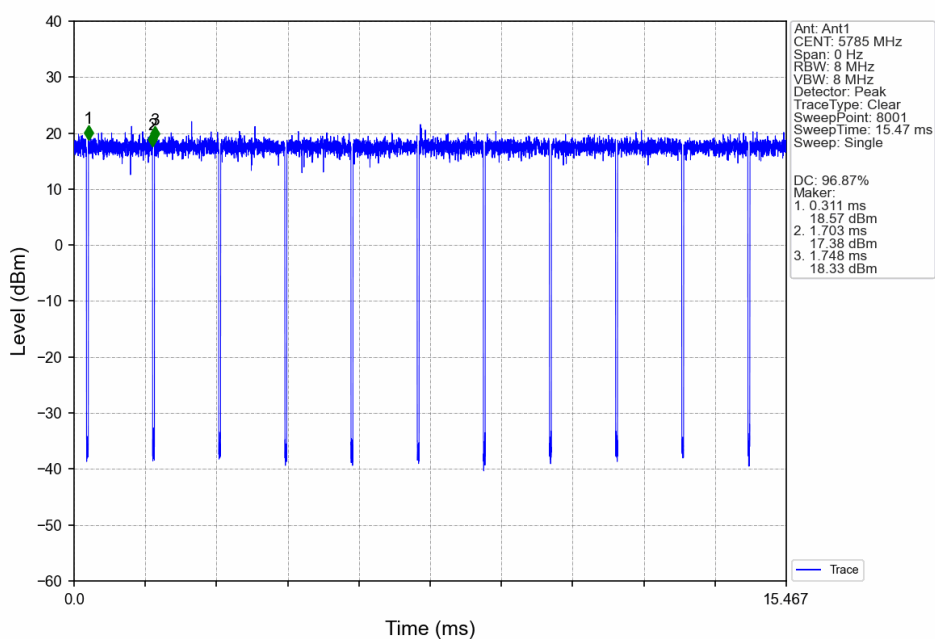
802.11a HCH 5320MHz Ant1 NTN



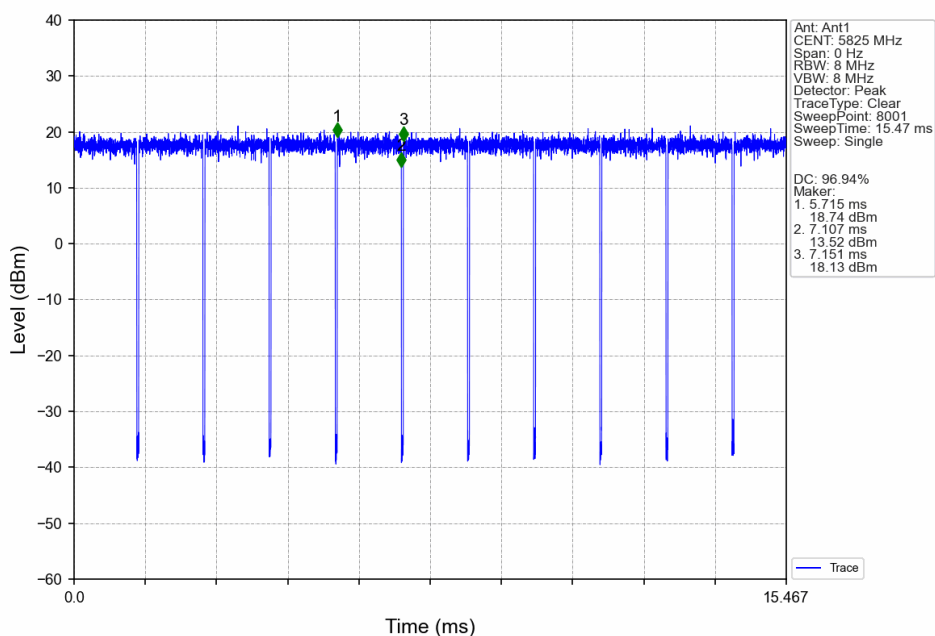
802.11a LCH 5745MHz Ant1 NTNV



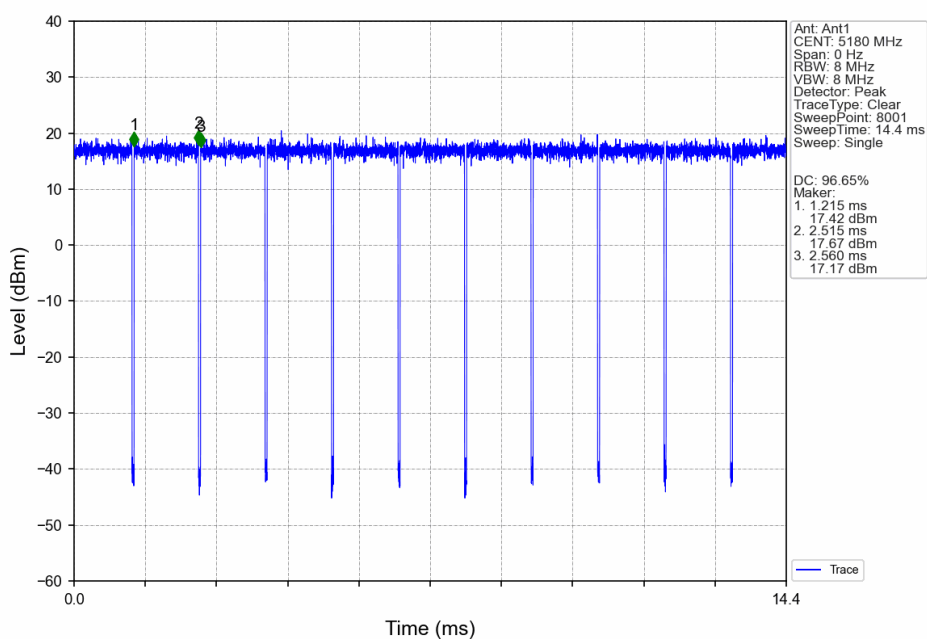
802.11a MCH 5785MHz Ant1 NTNV



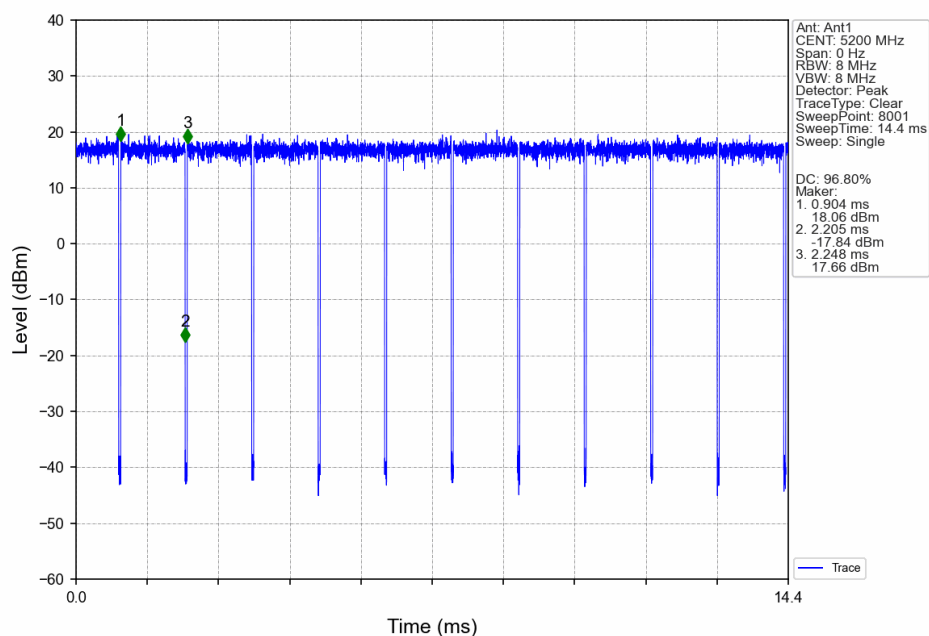
802.11a HCH 5825MHz Ant1 NTN



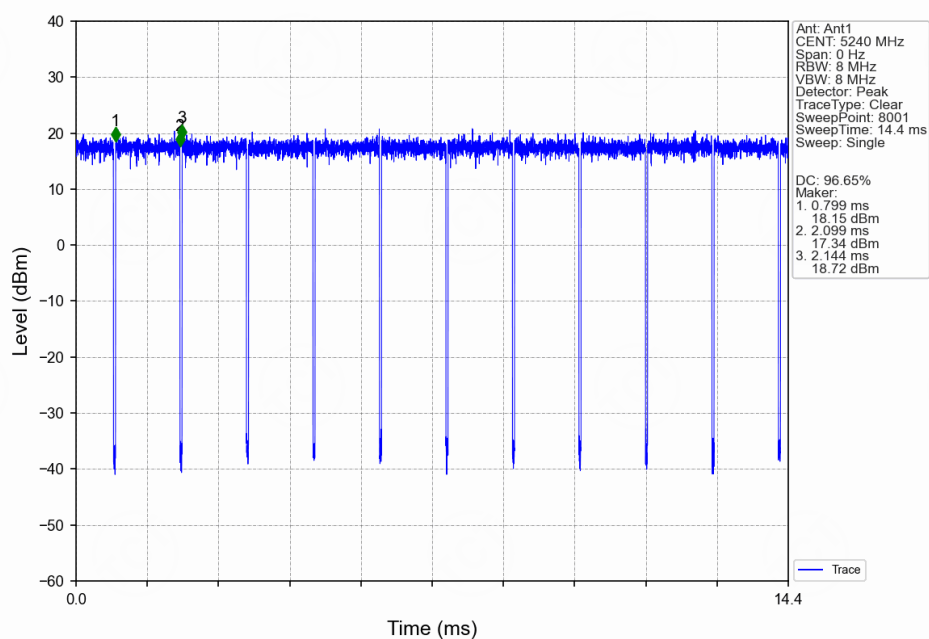
802.11n(HT20) LCH 5180MHz Ant1 NTN



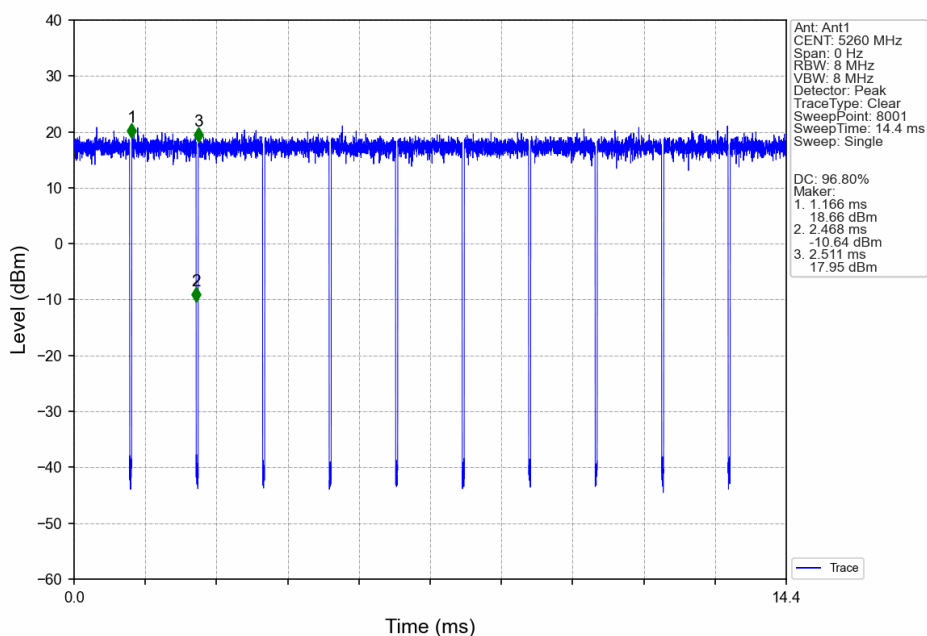
802.11n(HT20) MCH 5200MHz Ant1 NTN



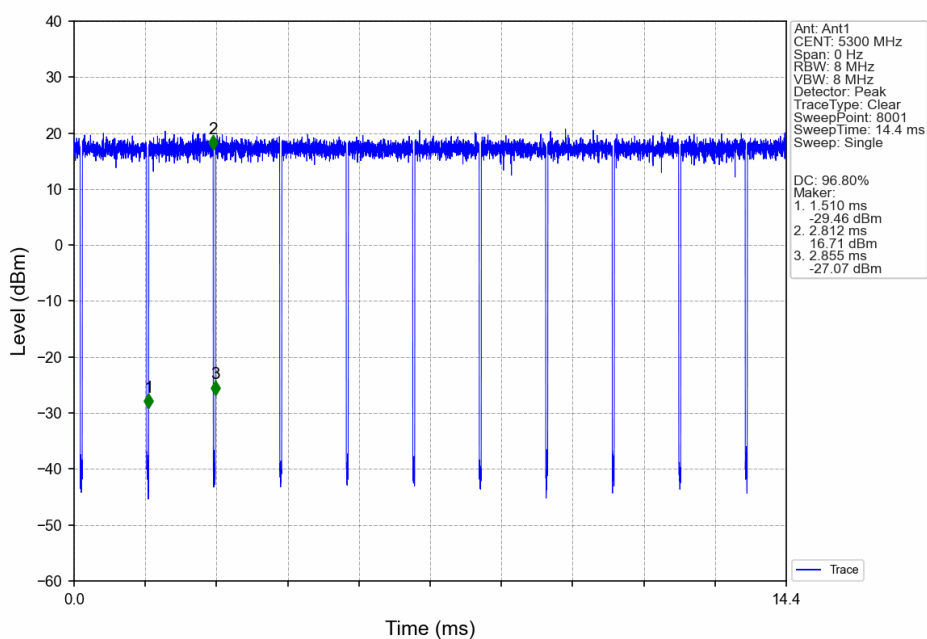
802.11n(HT20) HCH 5240MHz Ant1 NTN



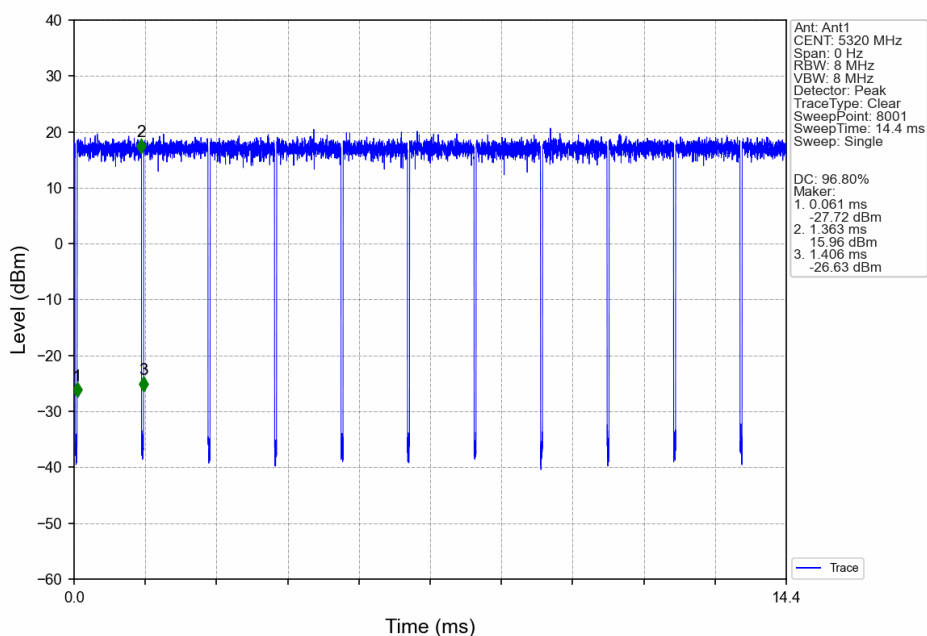
802.11n(HT20) LCH 5260MHz_Ant1_NTNV



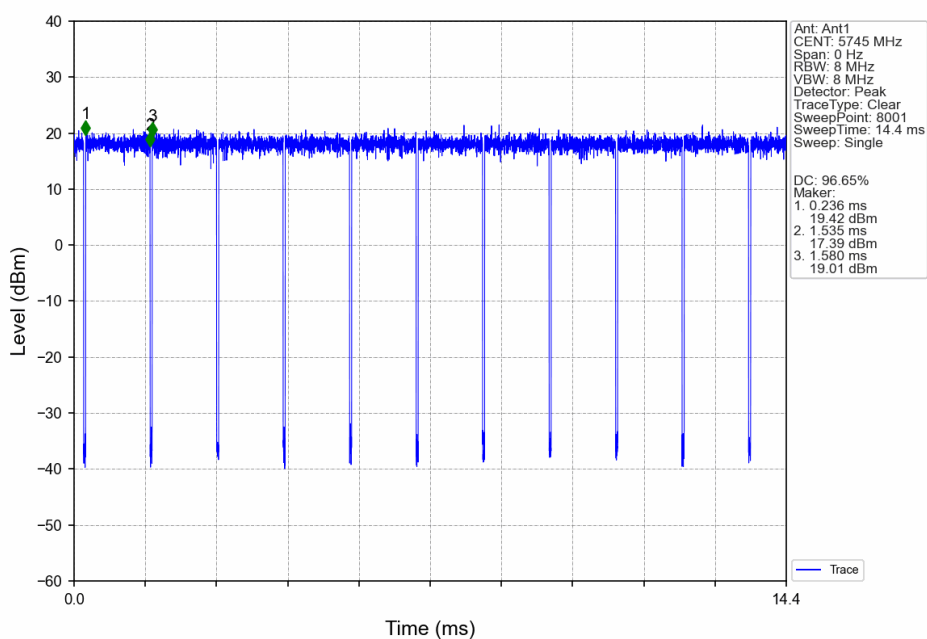
802.11n(HT20) MCH 5300MHz_Ant1_NTNV



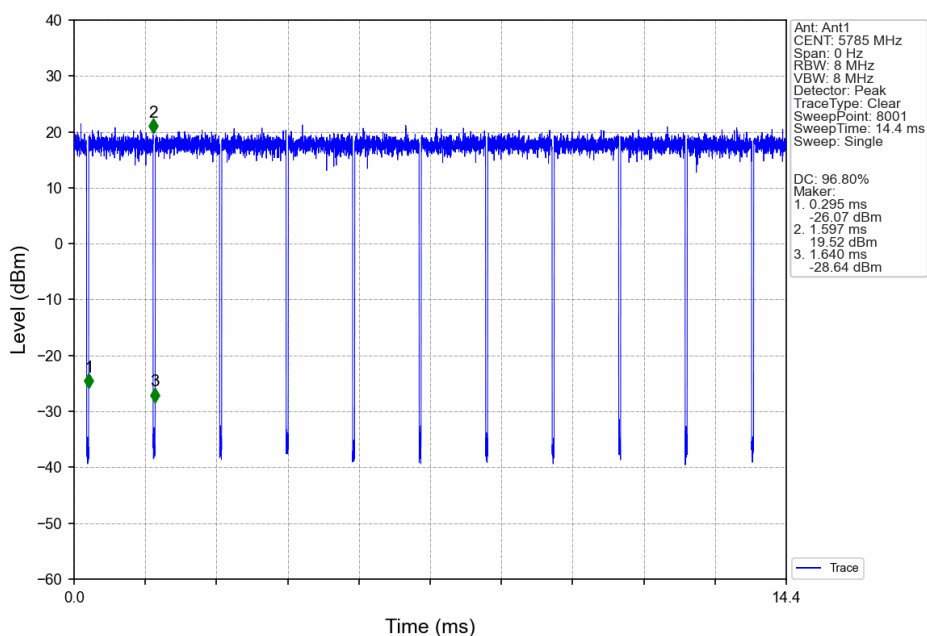
802.11n(HT20) HCH 5320MHz Ant1 NTN



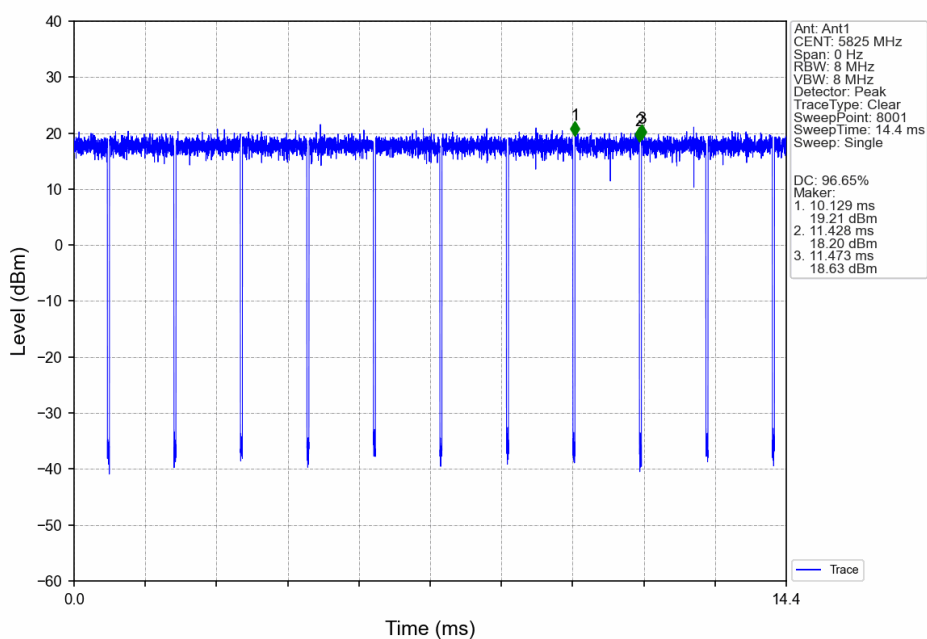
802.11n(HT20) LCH 5745MHz Ant1 NTN



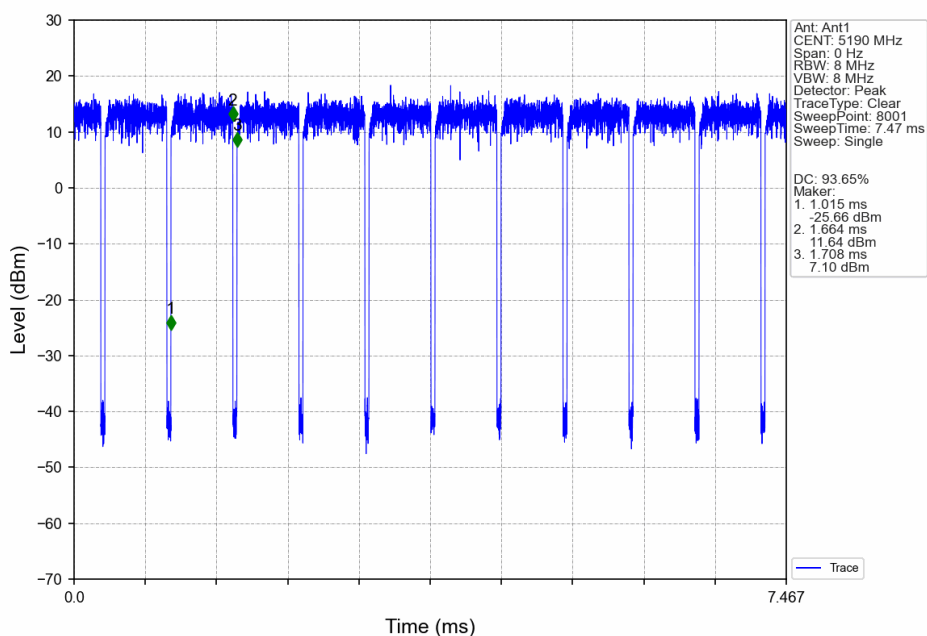
802.11n(HT20) MCH 5785MHz Ant1 NTN



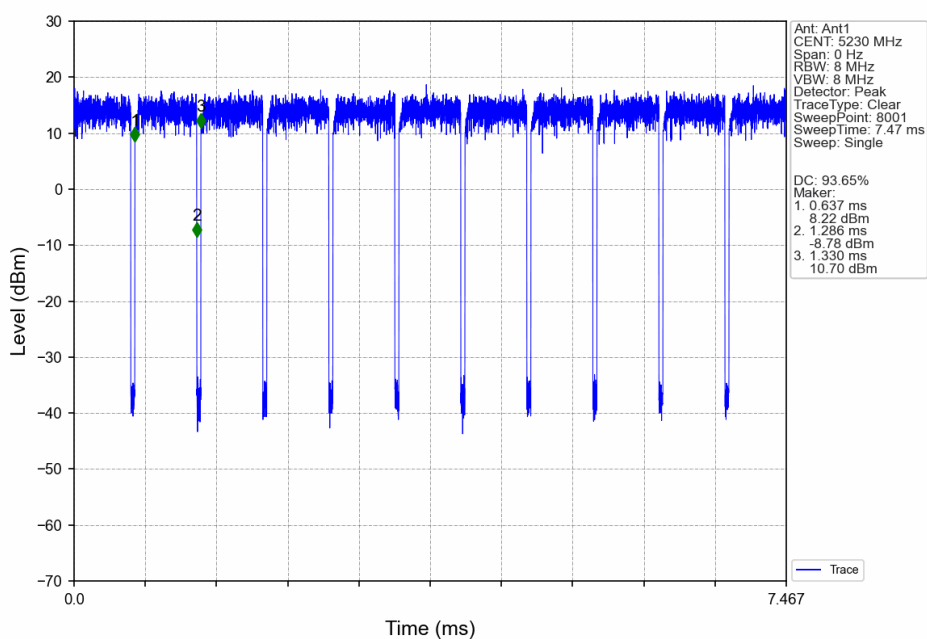
802.11n(HT20) HCH 5825MHz Ant1 NTN



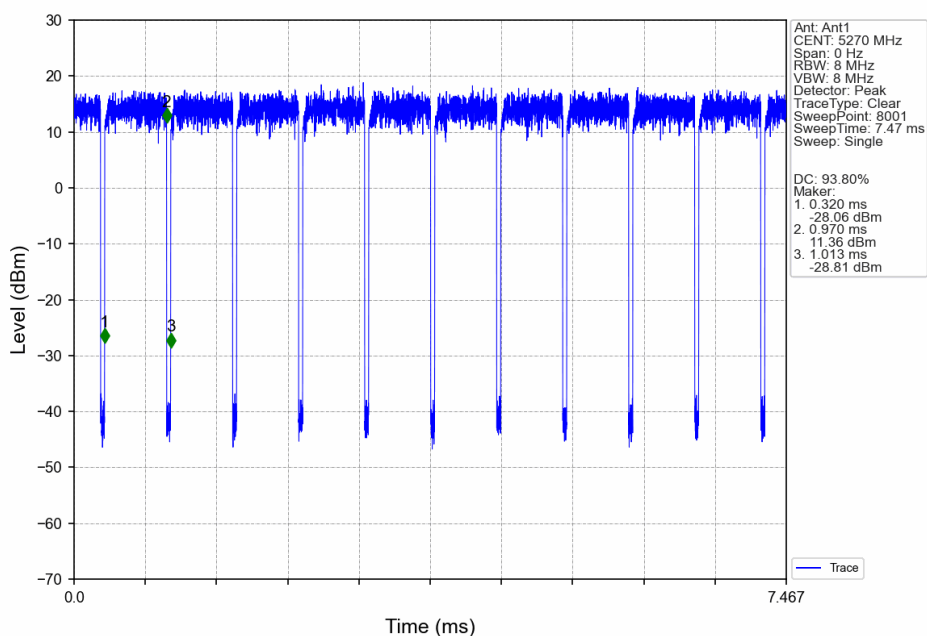
802.11n(HT40) LCH 5190MHz_Ant1_NTNV



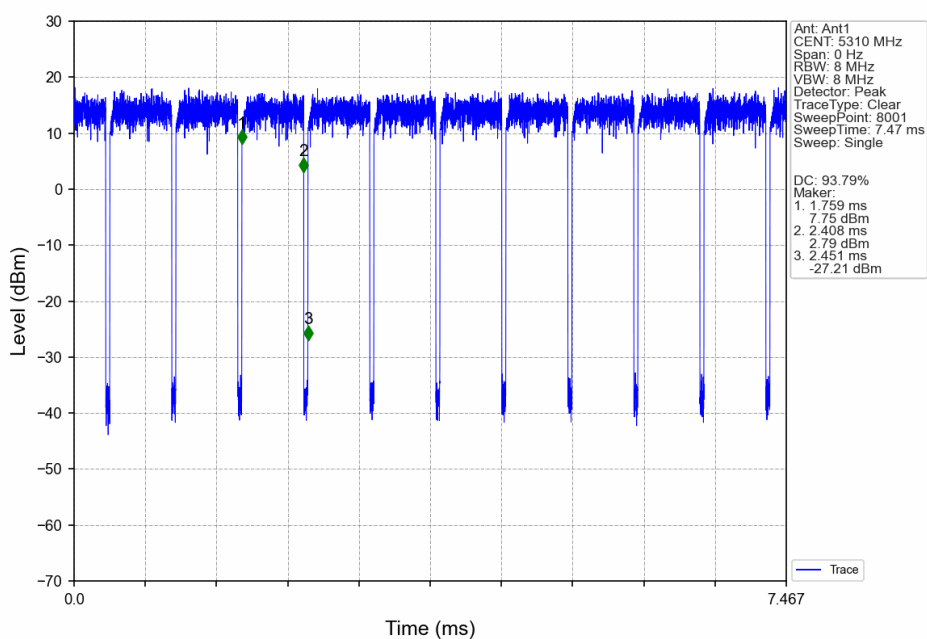
802.11n(HT40) HCH 5230MHz_Ant1_NTNV



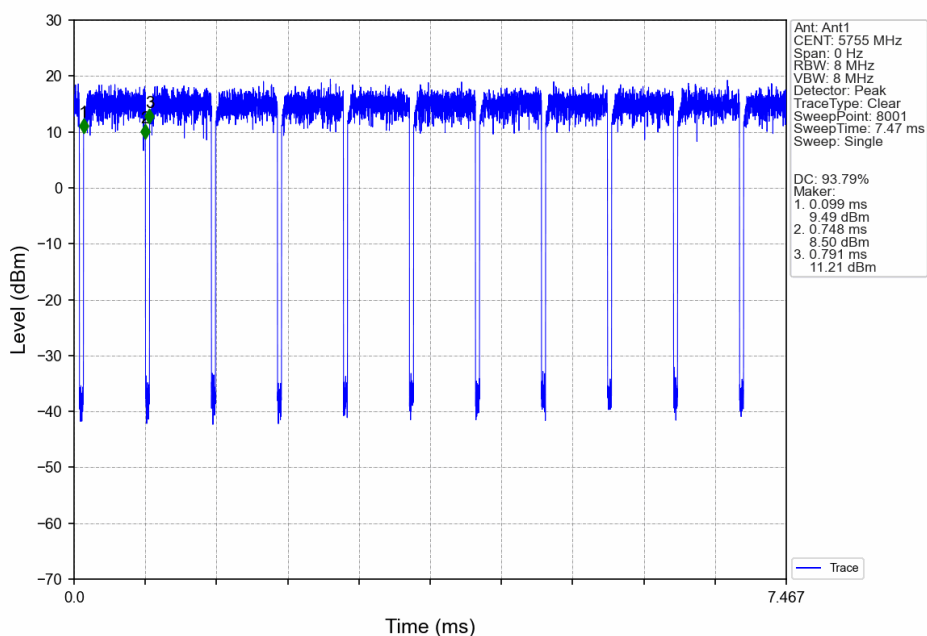
802.11n(HT40) LCH 5270MHz_Ant1_NTNV



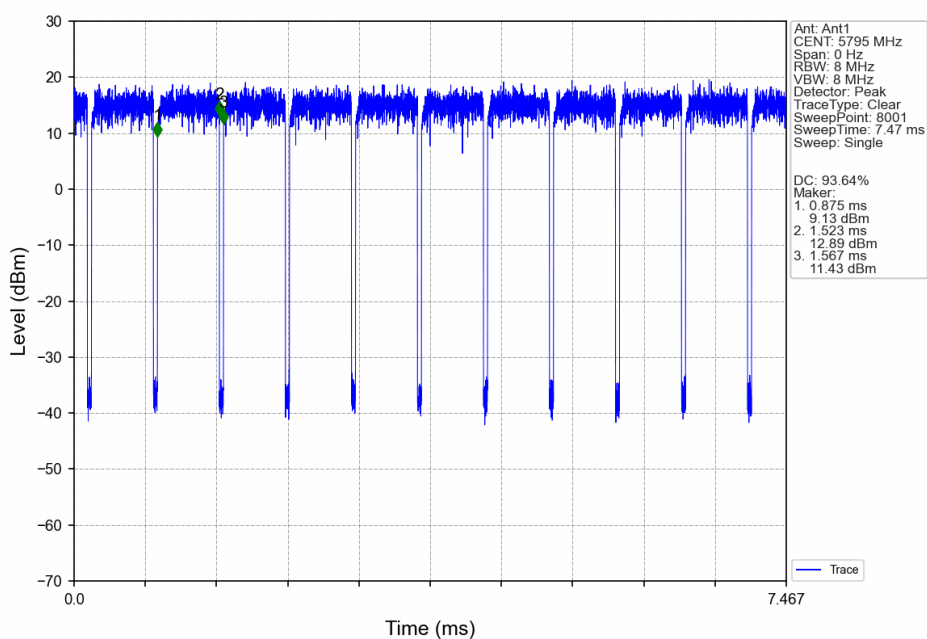
802.11n(HT40) HCH 5310MHz_Ant1_NTNV



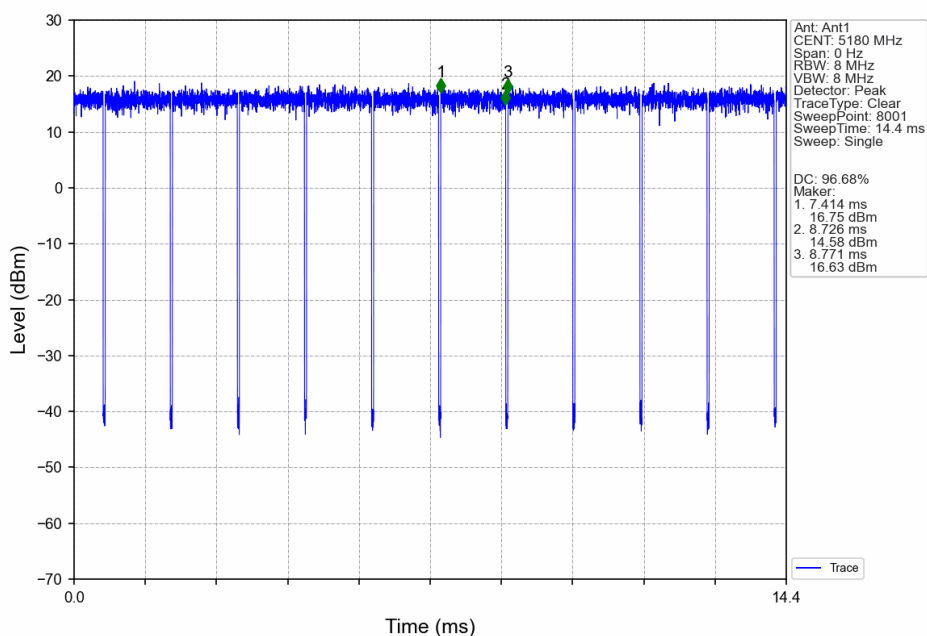
802.11n(HT40) LCH 5755MHz_Ant1_NTNV



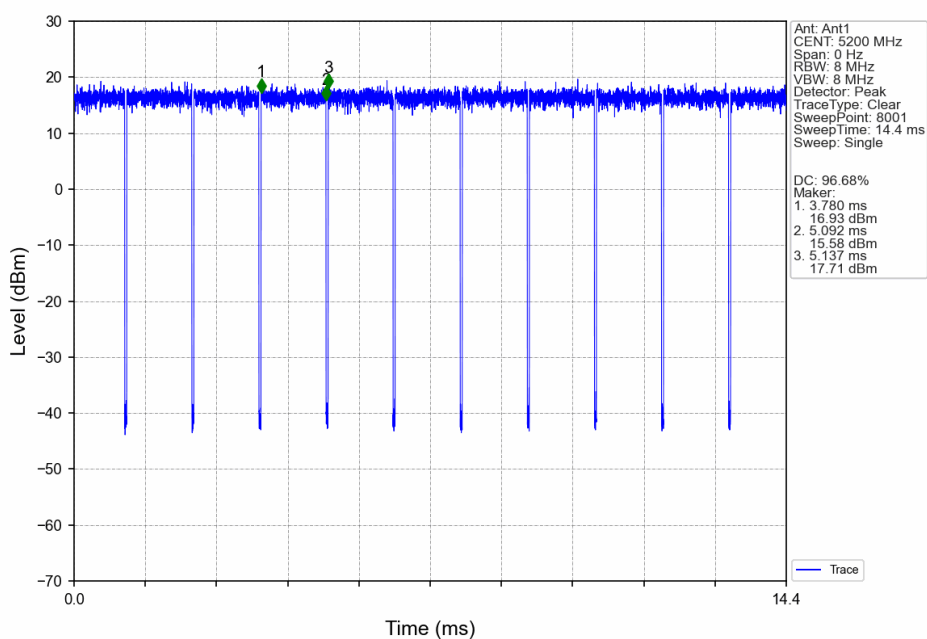
802.11n(HT40) HCH 5795MHz_Ant1_NTNV



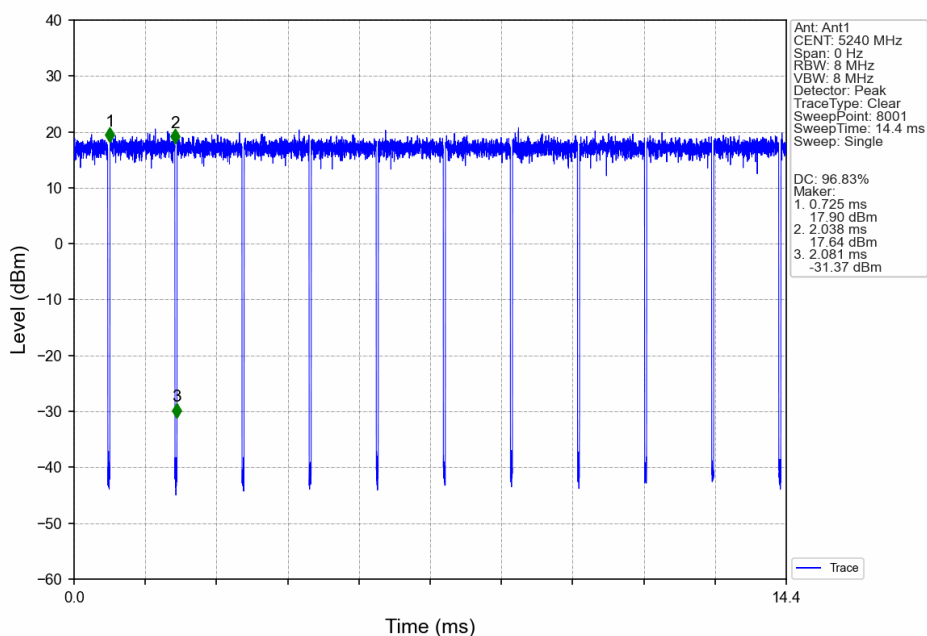
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



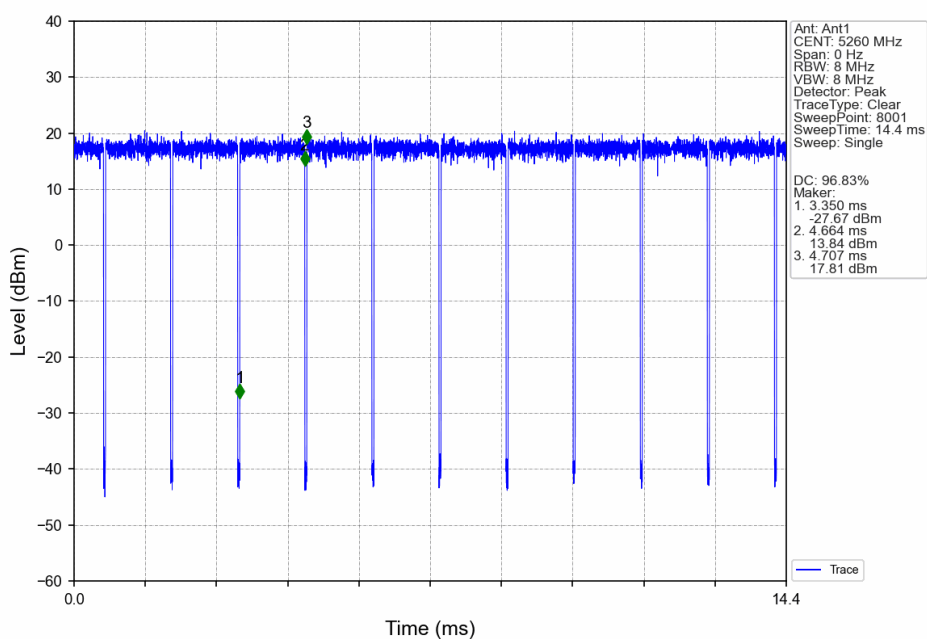
802.11ac(VHT20) MCH 5200MHz Ant1 NTN



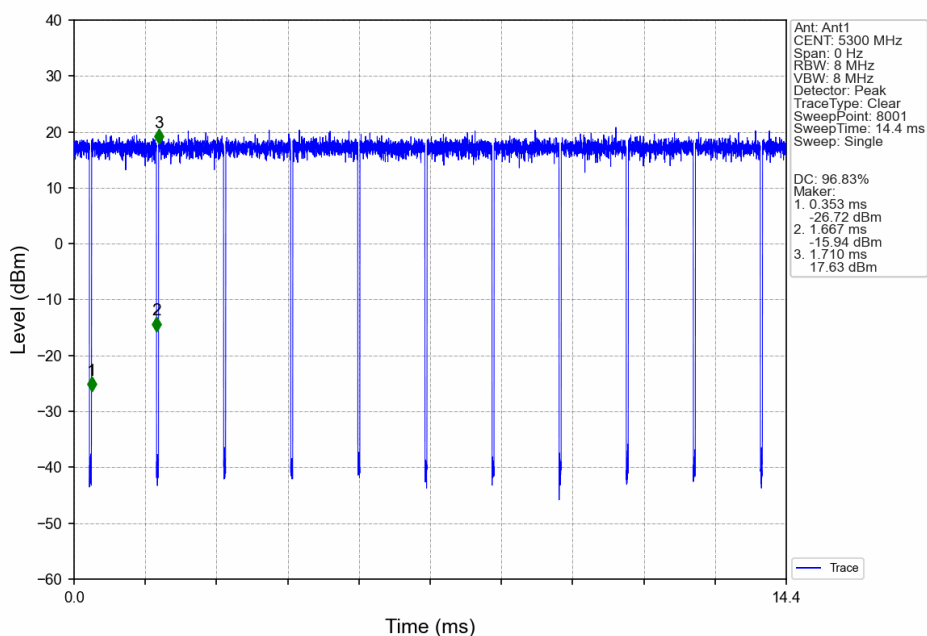
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



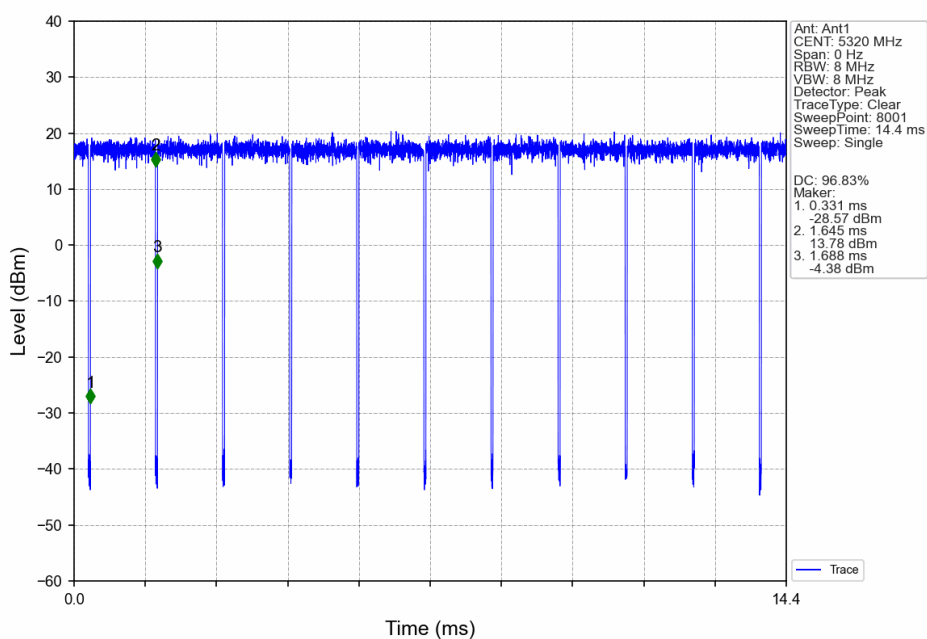
802.11ac(VHT20) LCH 5260MHz Ant1 NTN



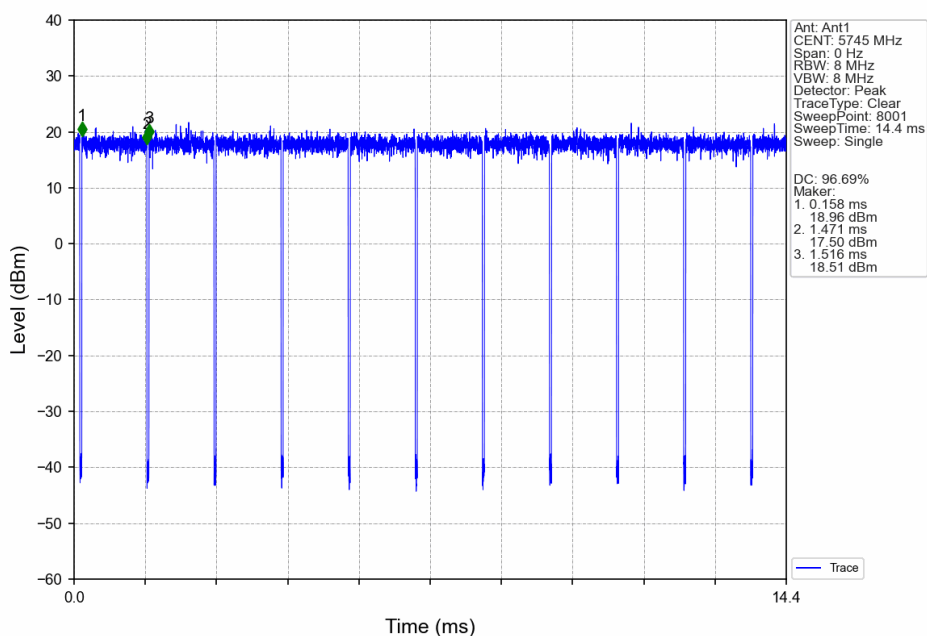
802.11ac(VHT20) MCH 5300MHz_Ant1_NTNV



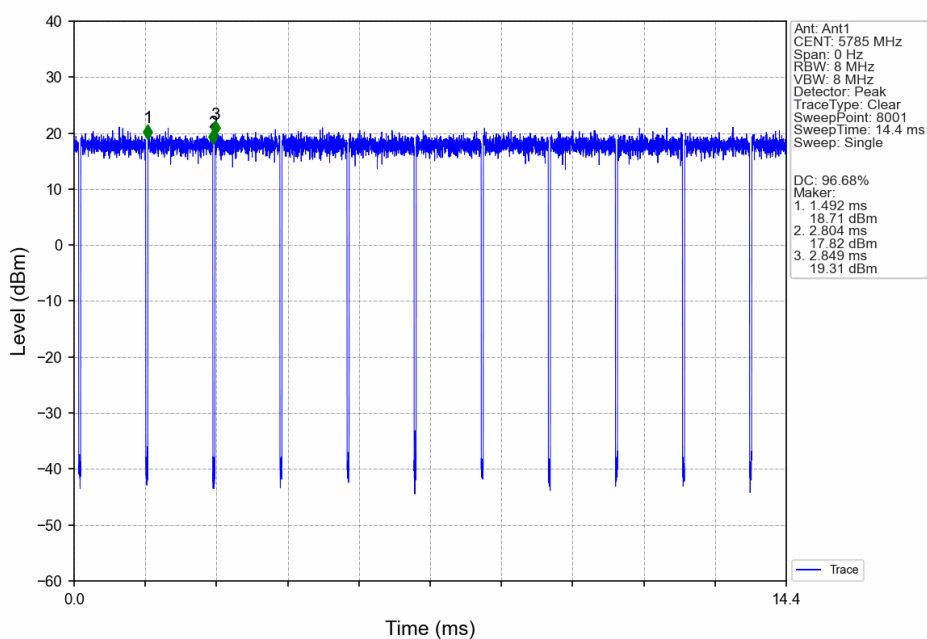
802.11ac(VHT20) HCH 5320MHz_Ant1_NTNV



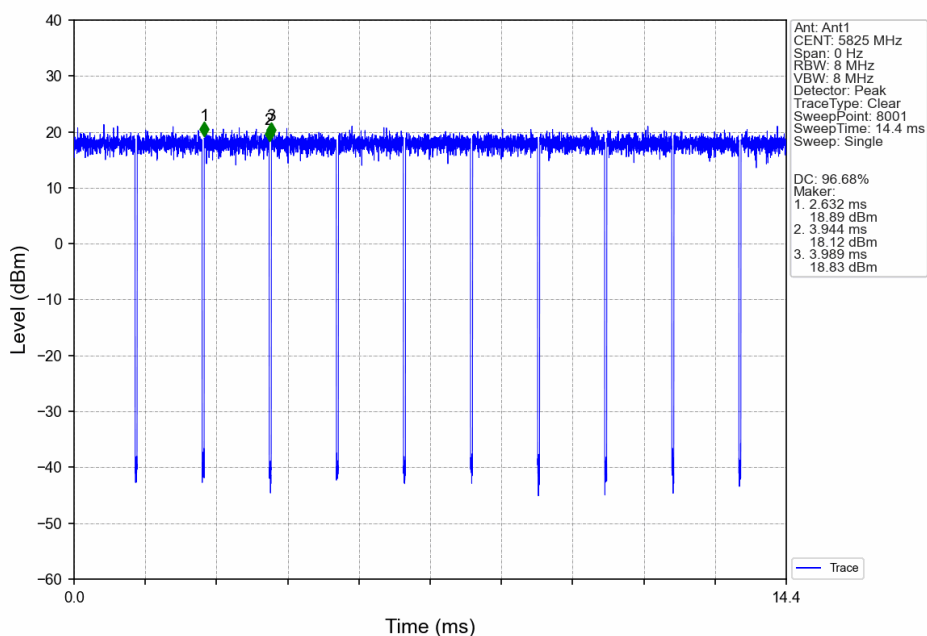
802.11ac(VHT20) LCH 5745MHz_Ant1_NTNV



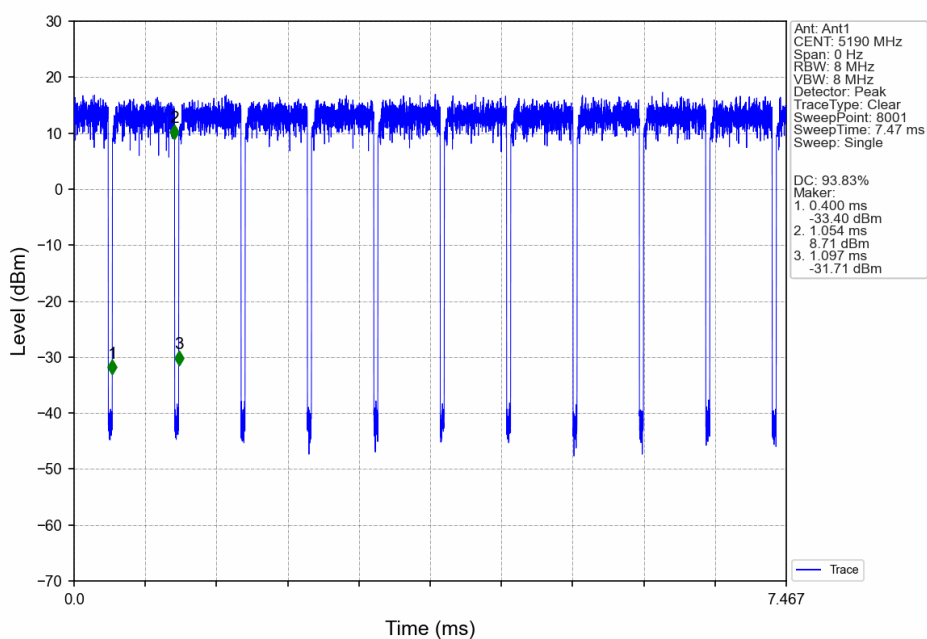
802.11ac(VHT20) MCH 5785MHz_Ant1_NTNV



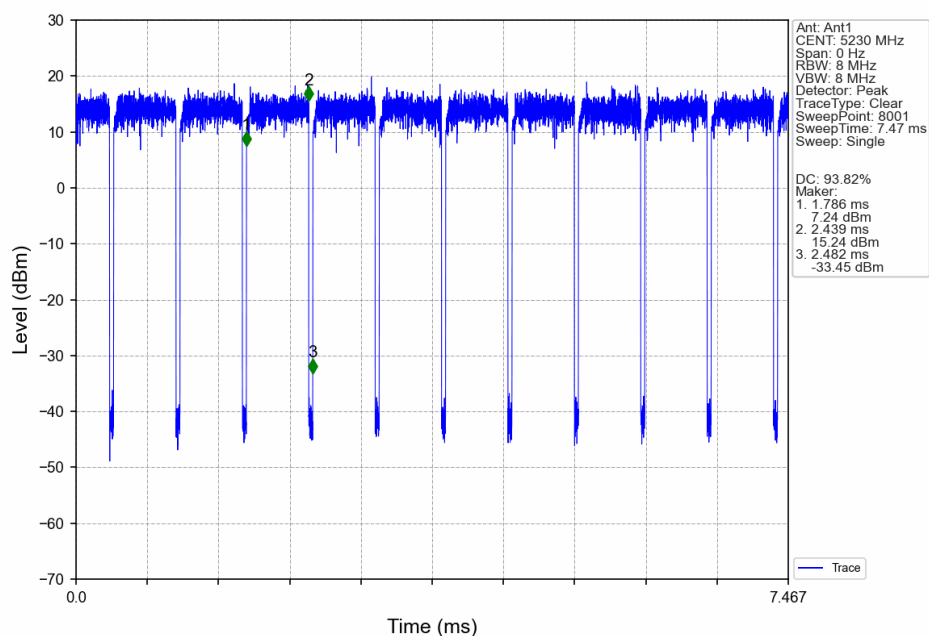
802.11ac(VHT20) HCH 5825MHz_Ant1_NTNV



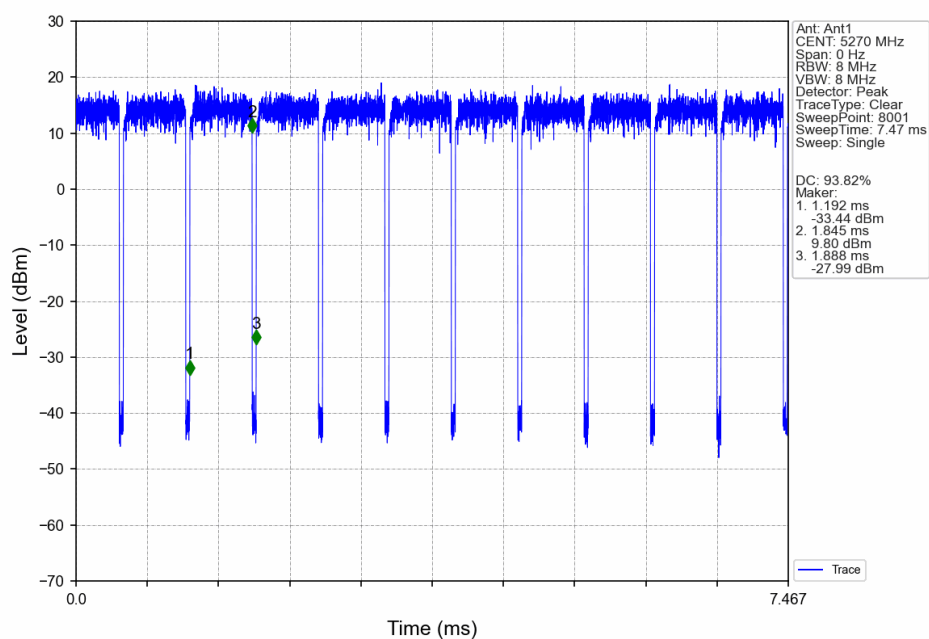
802.11ac(VHT40) LCH 5190MHz_Ant1_NTNV



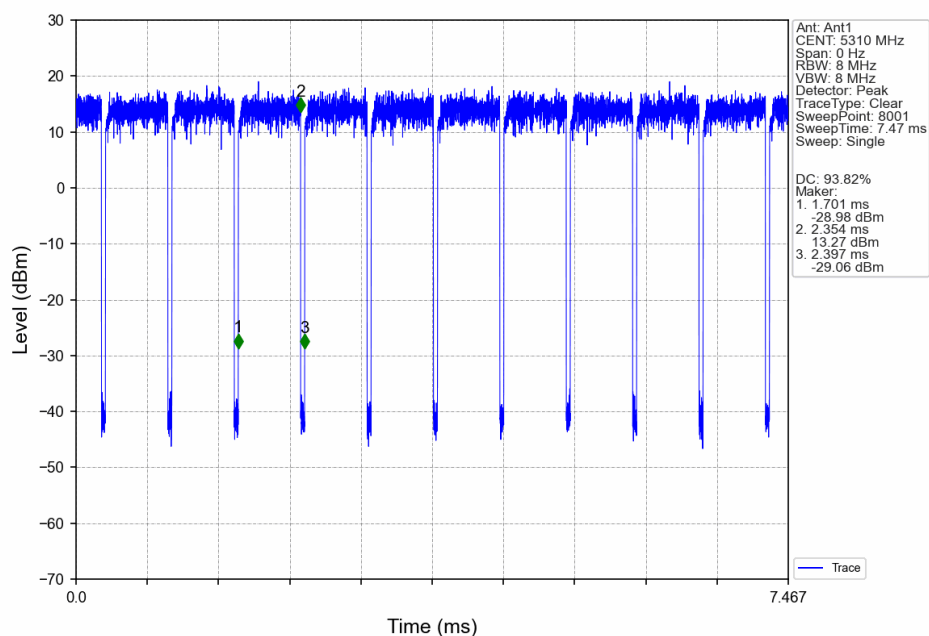
802.11ac(VHT40) HCH 5230MHz Ant1 NTN



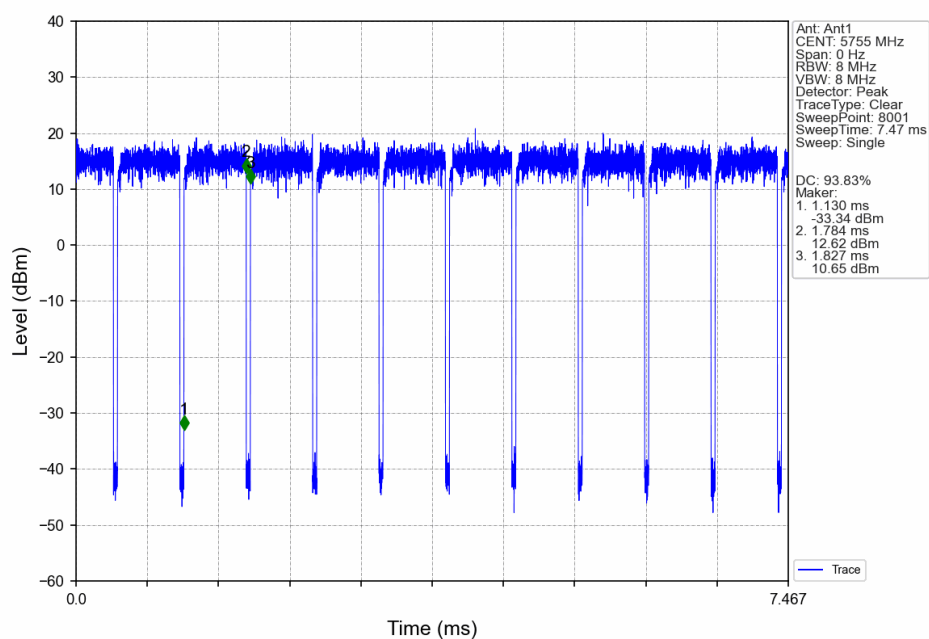
802.11ac(VHT40) LCH 5270MHz Ant1 NTN



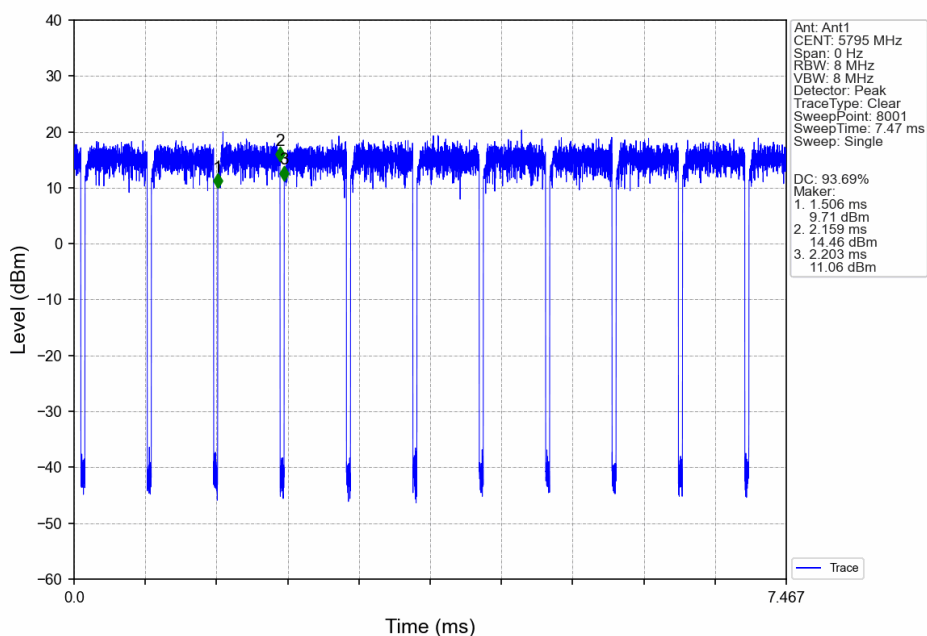
802.11ac(VHT40) HCH 5310MHz_Ant1_NTNV



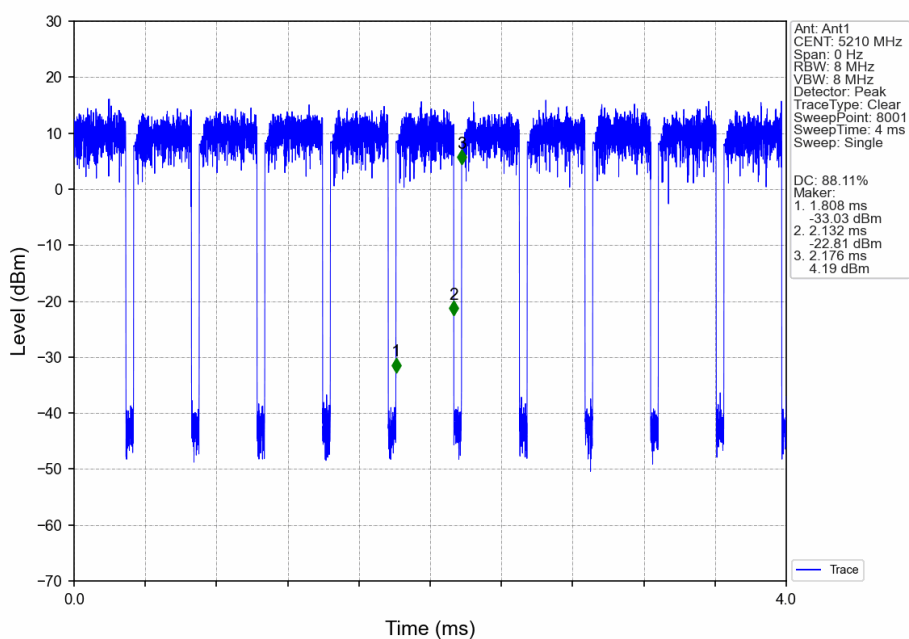
802.11ac(VHT40) LCH 5755MHz_Ant1_NTNV



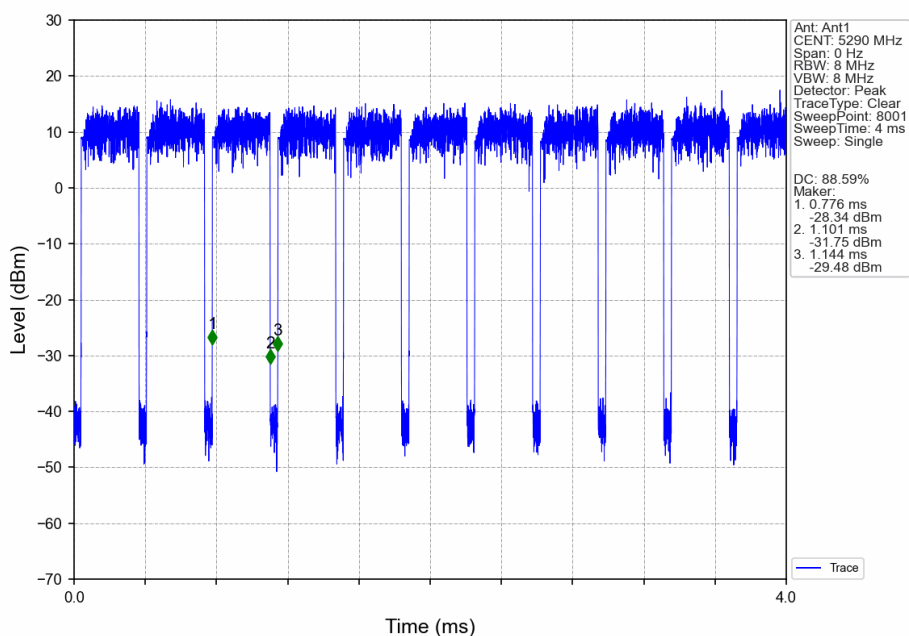
802.11ac(VHT40) HCH 5795MHz_Ant1_NTNV



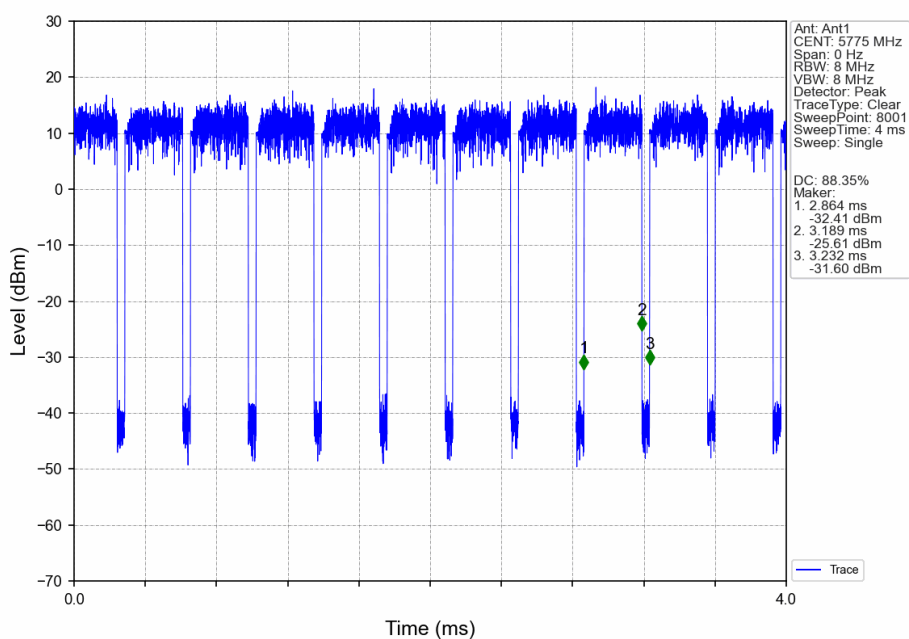
802.11ac(VHT80) MCH 5210MHz_Ant1_NTNV



802.11ac(VHT80) MCH 5290MHz_Ant1_NTNV



802.11ac(VHT80) MCH 5775MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	26.133	/	Pass
		5200	1	26.253	/	Pass
		5240	1	25.946	/	Pass
		5260	1	25.975	/	Pass
		5300	1	26.190	/	Pass
		5320	1	26.724	/	Pass
		5745	1	25.905	/	Pass
		5785	1	26.094	/	Pass
		5825	1	25.913	/	Pass
802.11n (HT20)	SISO	5180	1	31.395	/	Pass
		5200	1	28.593	/	Pass
		5240	1	27.964	/	Pass
		5260	1	26.790	/	Pass
		5300	1	27.169	/	Pass
		5320	1	27.291	/	Pass
		5745	1	27.842	/	Pass
		5785	1	26.198	/	Pass
		5825	1	26.536	/	Pass
802.11n (HT40)	SISO	5190	1	50.009	/	Pass
		5230	1	49.311	/	Pass
		5270	1	49.815	/	Pass
		5310	1	51.732	/	Pass
		5755	1	51.295	/	Pass
		5795	1	52.563	/	Pass
802.11ac (VHT20)	SISO	5180	1	27.050	/	Pass
		5200	1	26.744	/	Pass
		5240	1	27.199	/	Pass
		5260	1	26.463	/	Pass
		5300	1	27.028	/	Pass
		5320	1	27.452	/	Pass
		5745	1	26.336	/	Pass
		5785	1	26.271	/	Pass
802.11ac (VHT40)	SISO	5825	1	26.444	/	Pass
		5190	1	49.452	/	Pass
		5230	1	50.520	/	Pass
		5270	1	49.779	/	Pass
		5310	1	51.531	/	Pass
		5755	1	51.914	/	Pass
802.11ac (VHT80)	SISO	5795	1	52.189	/	Pass
		5210	1	104.437	/	Pass
		5290	1	106.699	/	Pass
		5775	1	108.967	/	Pass

2.1.2 6dB BW

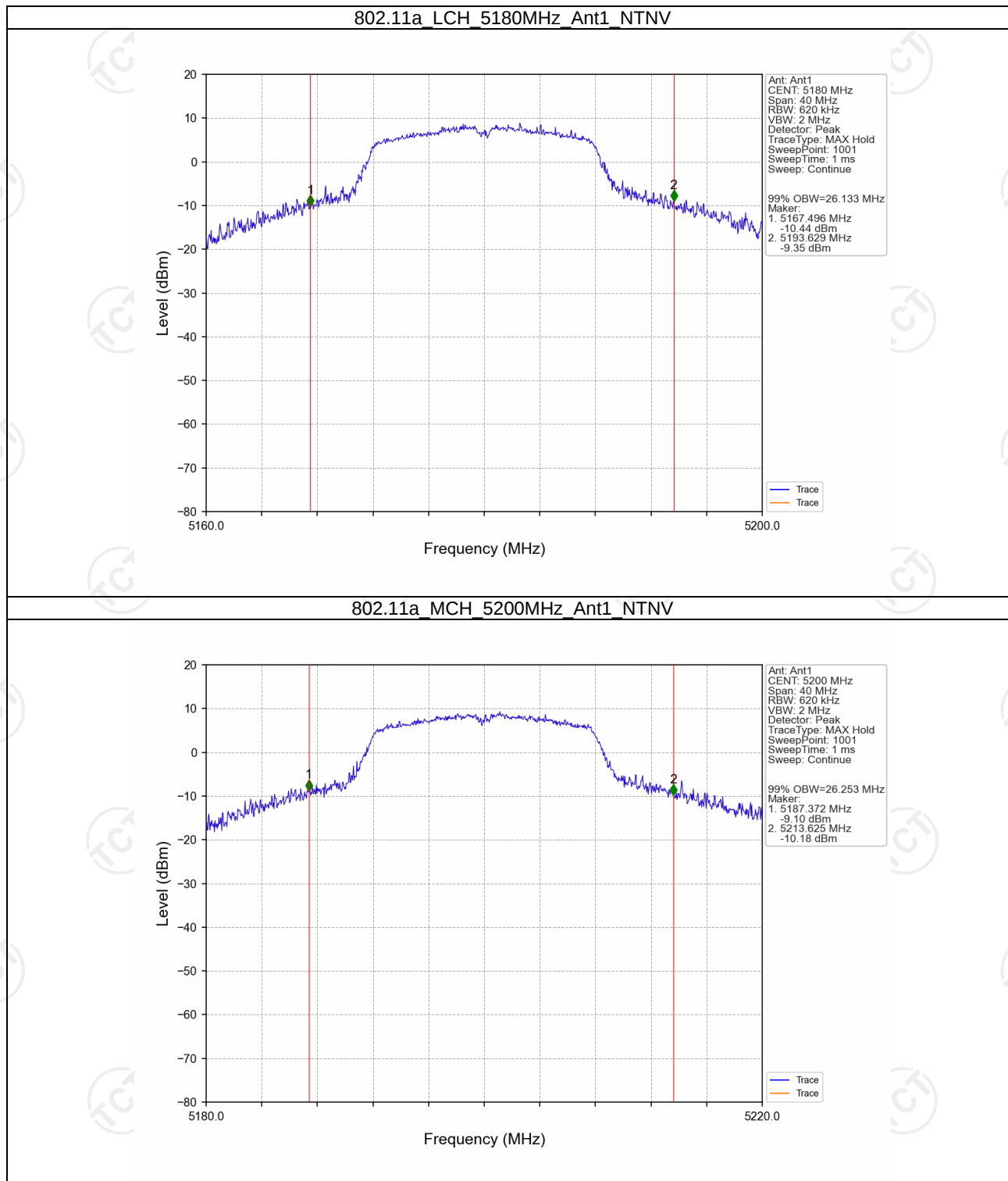
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.096	≥ 0.5	Pass
		5785	1	15.167	≥ 0.5	Pass
		5825	1	15.122	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.154	≥ 0.5	Pass
		5785	1	15.135	≥ 0.5	Pass
		5825	1	15.154	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	32.667	≥ 0.5	Pass
		5795	1	35.055	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.154	≥ 0.5	Pass
		5785	1	15.139	≥ 0.5	Pass
		5825	1	15.157	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	33.869	≥ 0.5	Pass
		5795	1	35.032	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	72.587	≥ 0.5	Pass

2.1.3 26dB BW

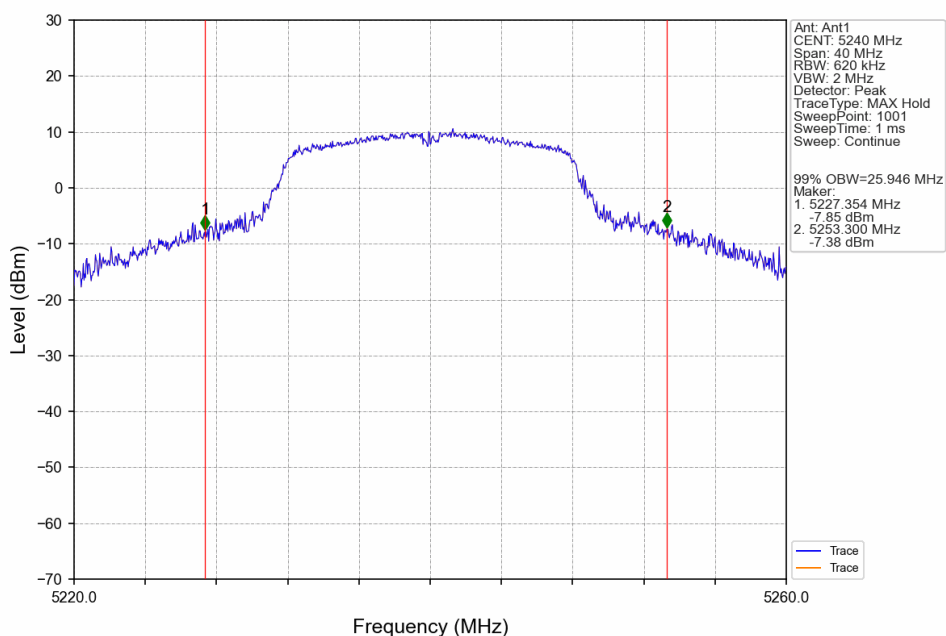
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	39.543	/	Pass
		5200	1	38.740	/	Pass
		5240	1	39.036	/	Pass
		5260	1	38.233	/	Pass
		5300	1	40.120	/	Pass
		5320	1	39.061	/	Pass
802.11n (HT20)	SISO	5180	1	50.492	/	Pass
		5200	1	42.698	/	Pass
		5240	1	42.032	/	Pass
		5260	1	43.488	/	Pass
		5300	1	40.870	/	Pass
		5320	1	40.509	/	Pass
802.11n (HT40)	SISO	5190	1	86.418	/	Pass
		5230	1	85.285	/	Pass
		5270	1	81.528	/	Pass
		5310	1	88.710	/	Pass
802.11ac (VHT20)	SISO	5180	1	39.254	/	Pass
		5200	1	40.943	/	Pass
		5240	1	39.853	/	Pass
		5260	1	42.824	/	Pass
		5300	1	41.858	/	Pass
		5320	1	40.020	/	Pass
802.11ac (VHT40)	SISO	5190	1	87.013	/	Pass
		5230	1	87.559	/	Pass
		5270	1	87.072	/	Pass
		5310	1	86.074	/	Pass
802.11ac (VHT80)	SISO	5210	1	209.212	/	Pass
		5290	1	193.267	/	Pass

2.2 Test Graph

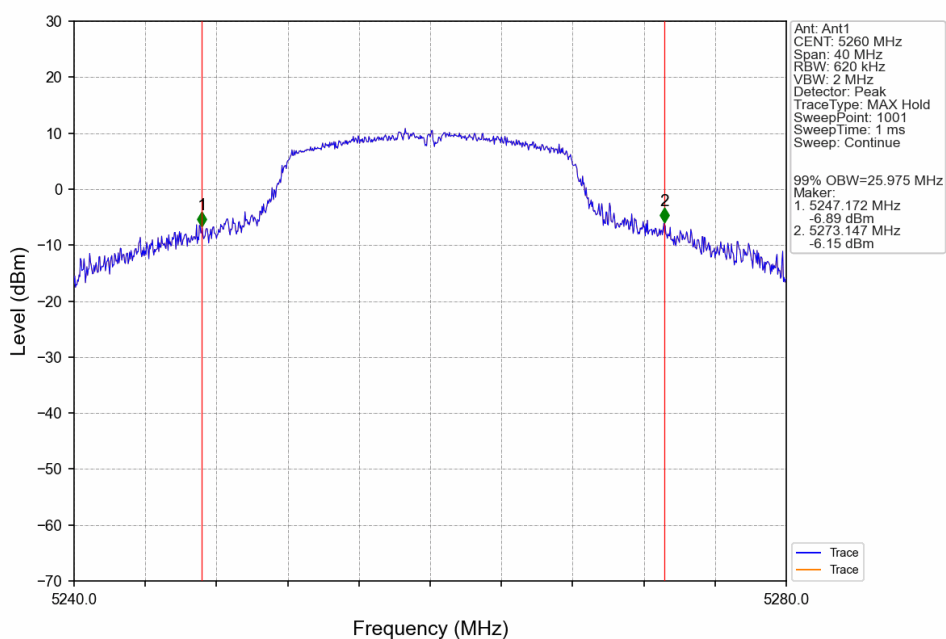
2.2.1 OBW



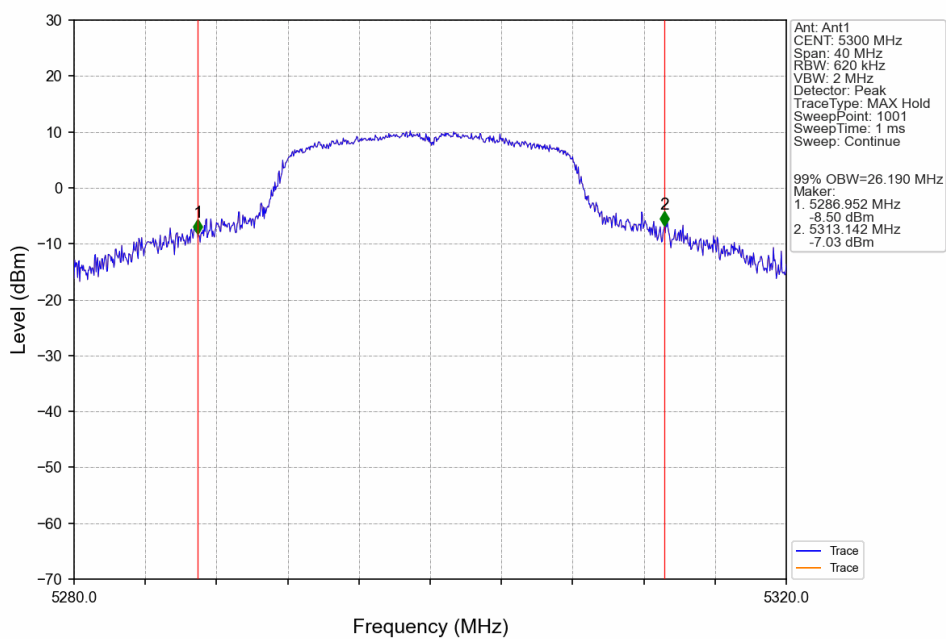
802.11a HCH 5240MHz Ant1 NTN



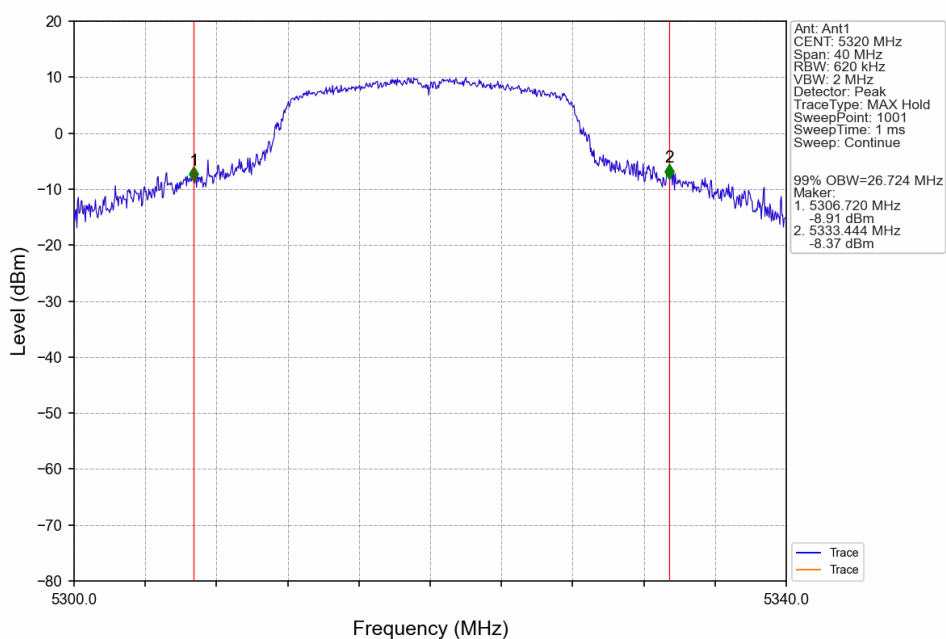
802.11a LCH 5260MHz Ant1 NTN



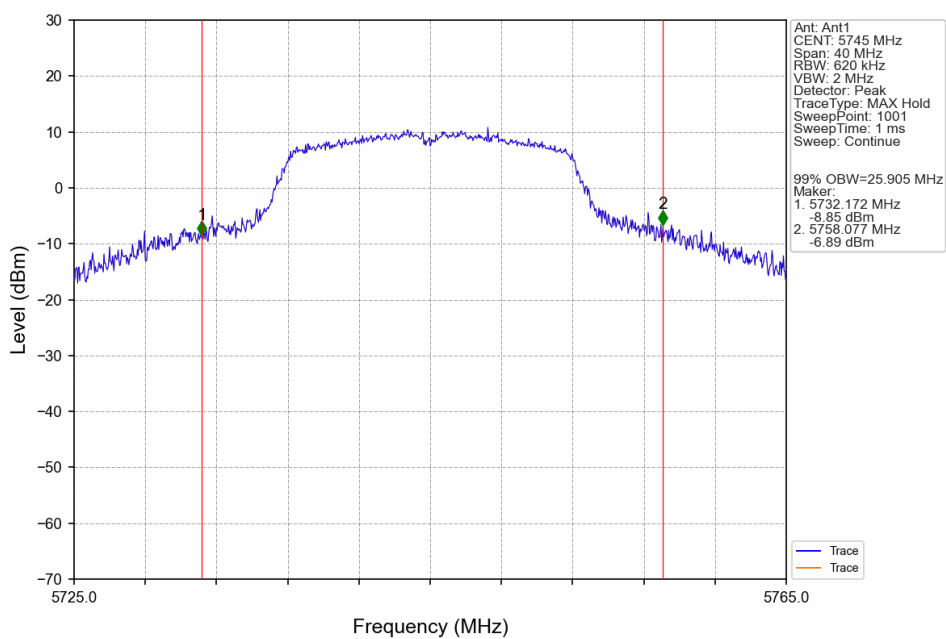
802.11a MCH 5300MHz Ant1 NTN



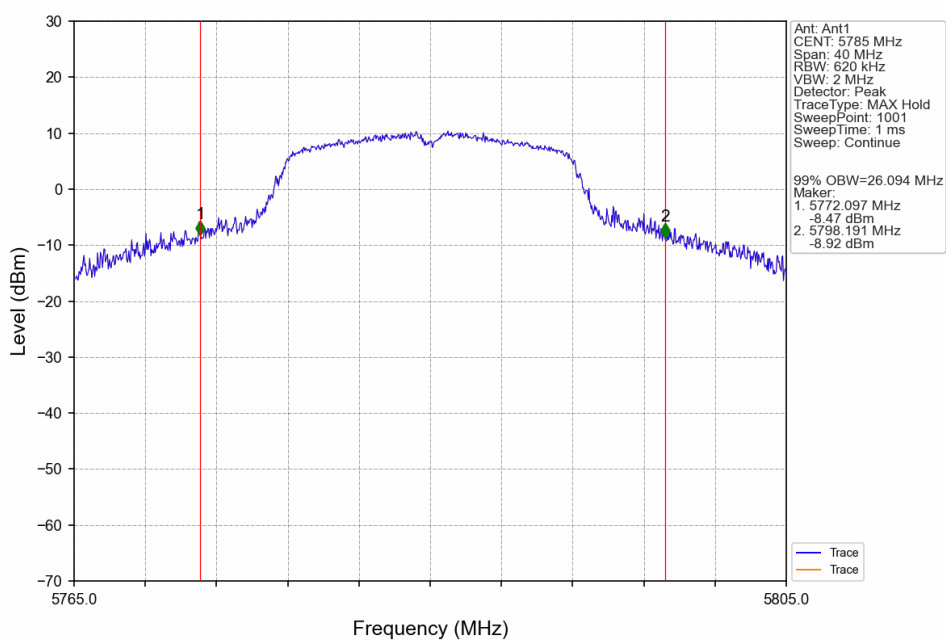
802.11a HCH 5320MHz Ant1 NTN



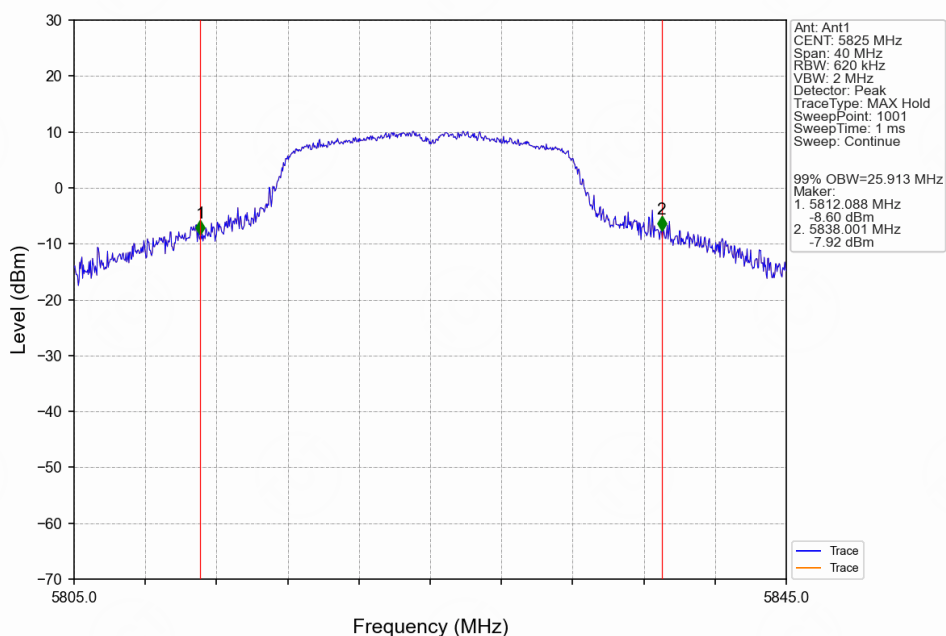
802.11a LCH 5745MHz Ant1 NTNV



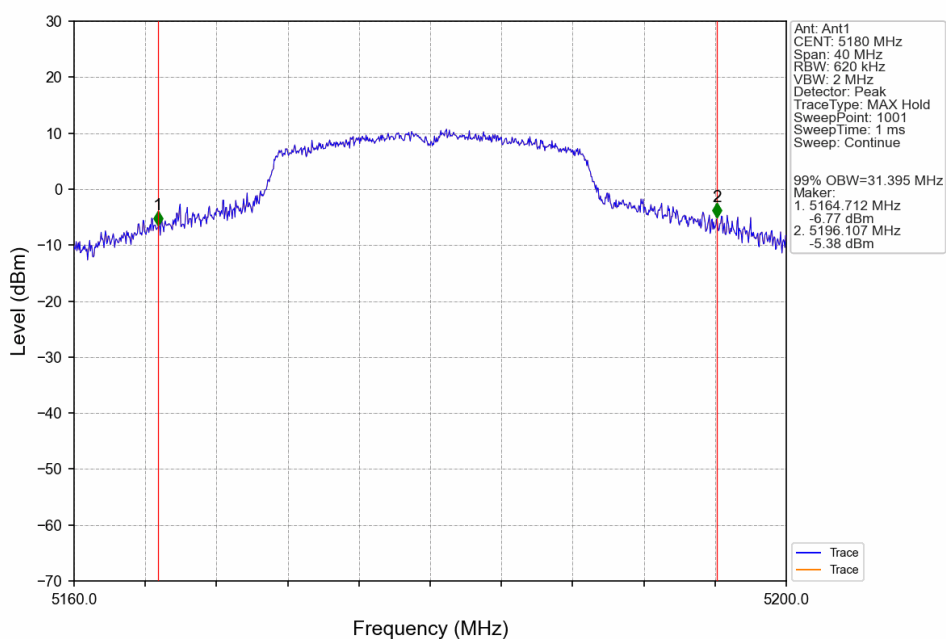
802.11a MCH 5785MHz Ant1 NTNV



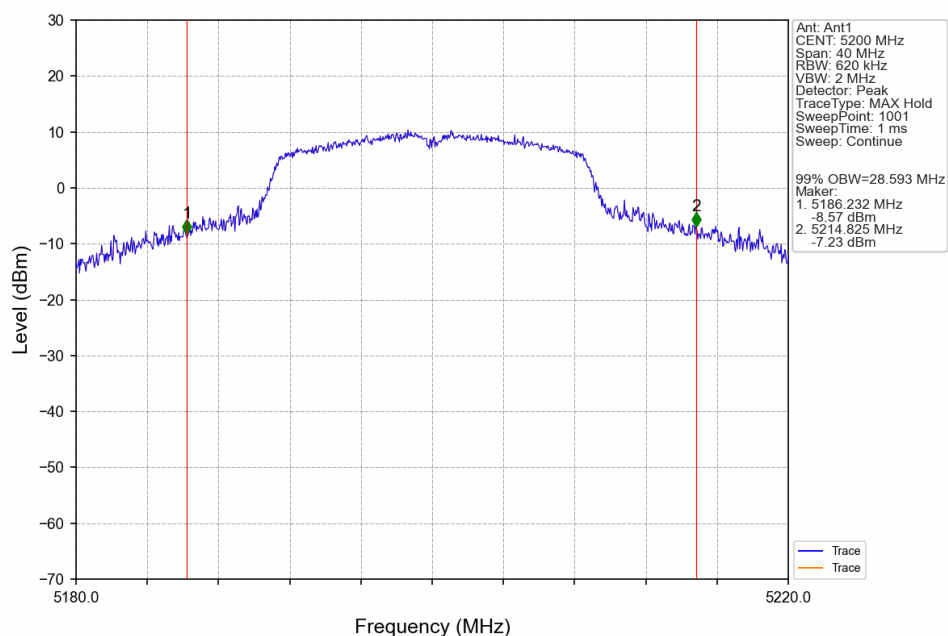
802.11a HCH 5825MHz Ant1 NTN



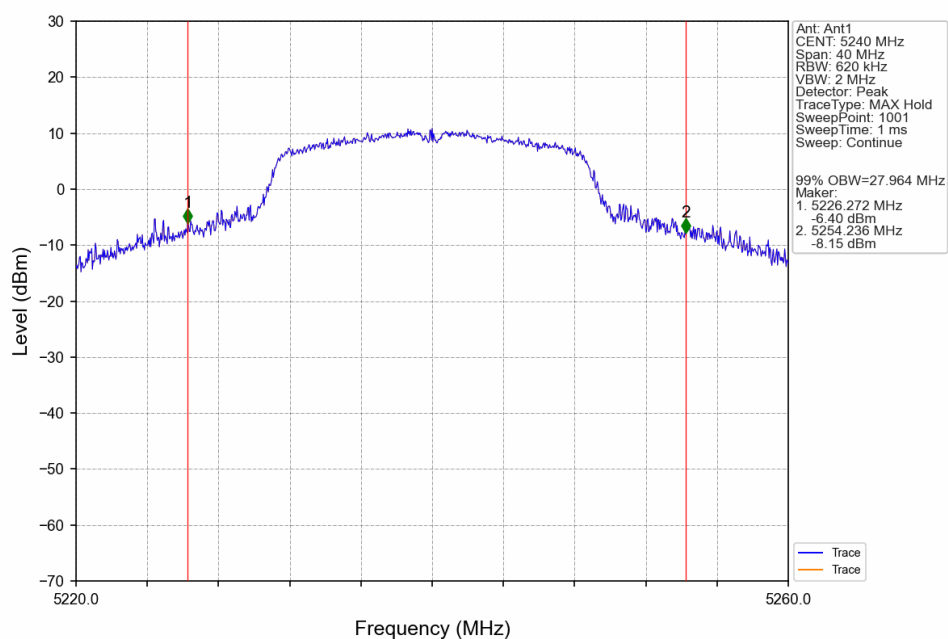
802.11n(HT20) LCH 5180MHz Ant1 NTN



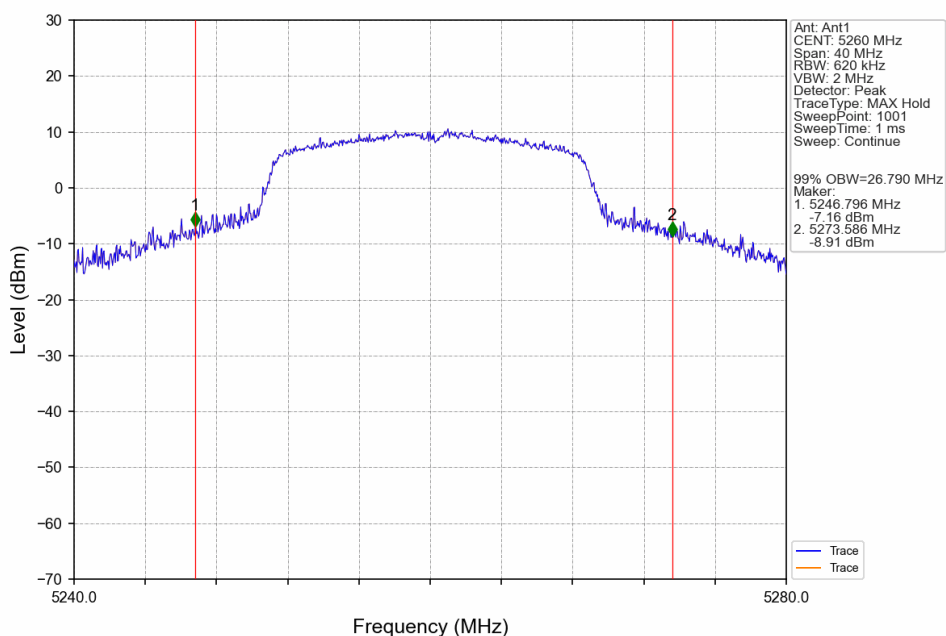
802.11n(HT20) MCH 5200MHz Ant1 NTN



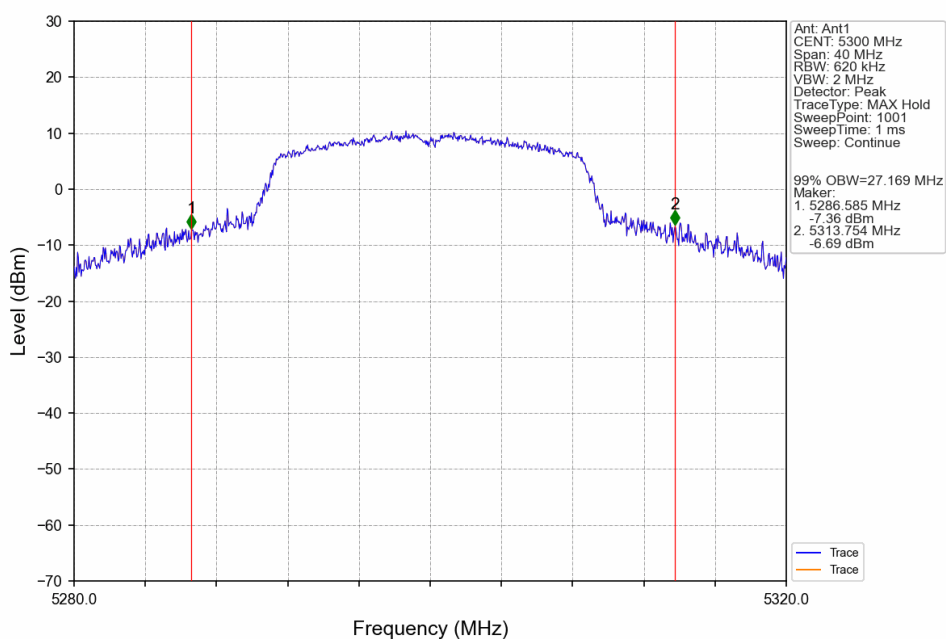
802.11n(HT20) HCH 5240MHz Ant1 NTN



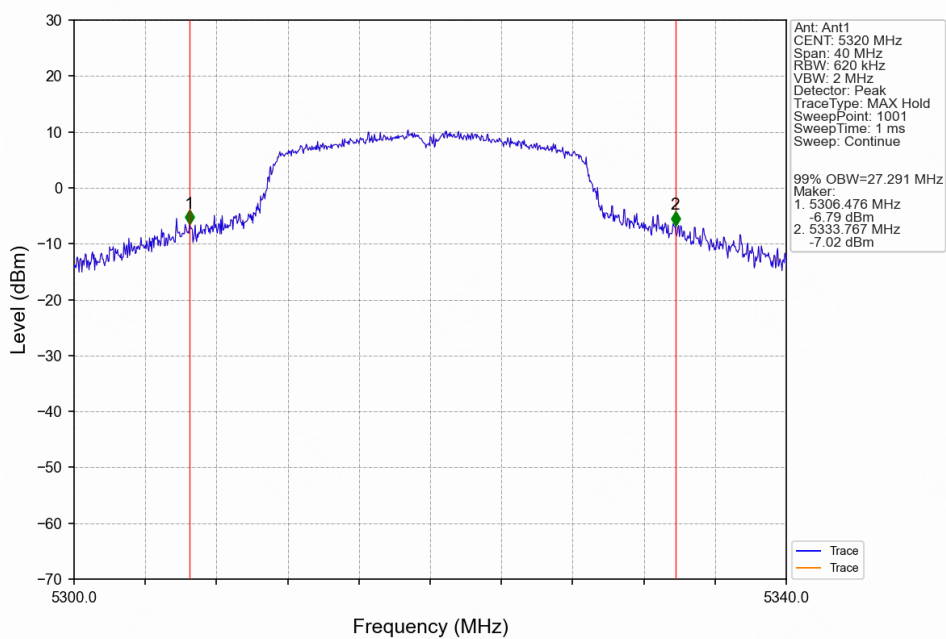
802.11n(HT20) LCH 5260MHz_Ant1_NTNV



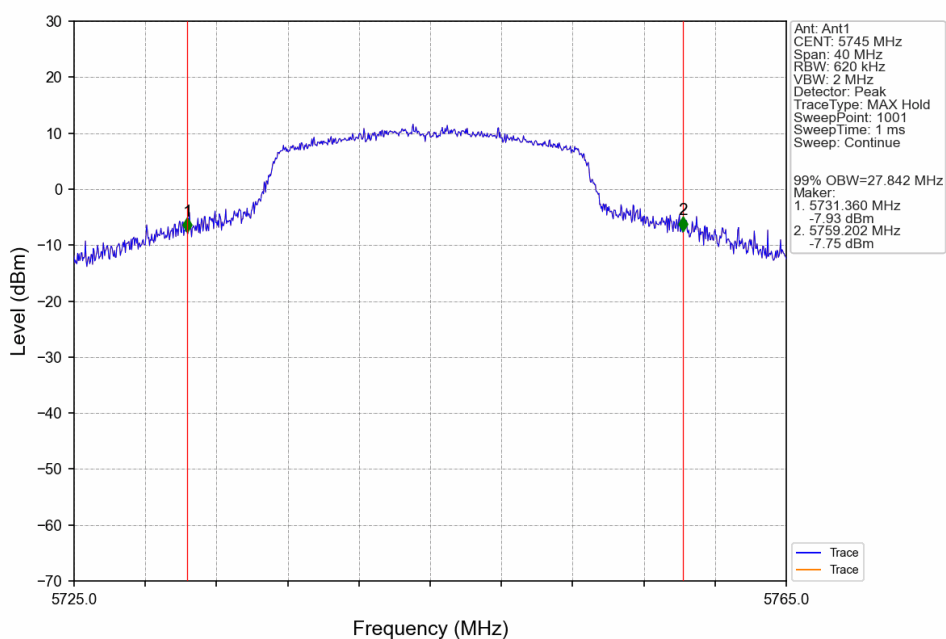
802.11n(HT20) MCH 5300MHz_Ant1_NTNV



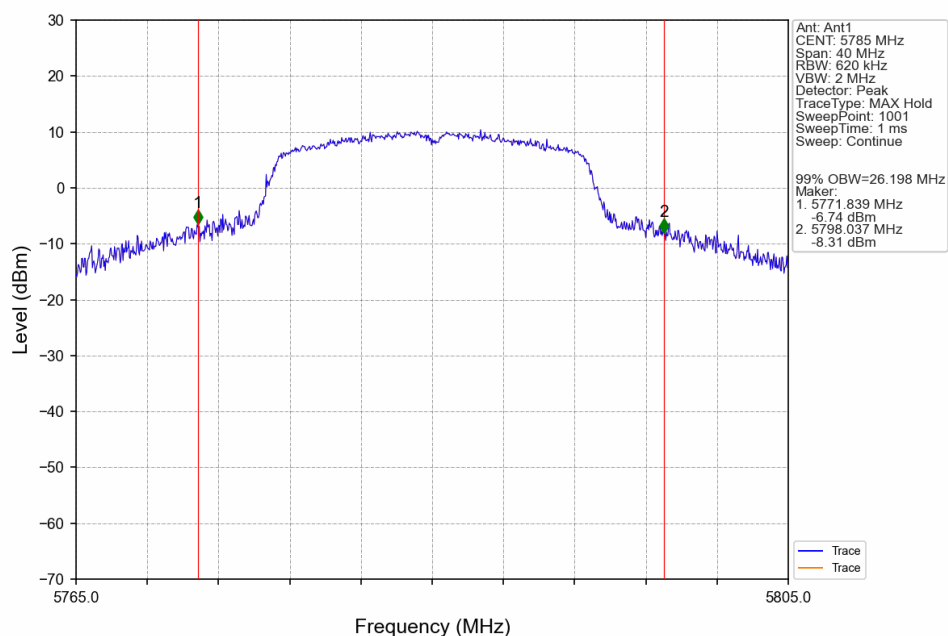
802.11n(HT20) HCH 5320MHz Ant1 NTN



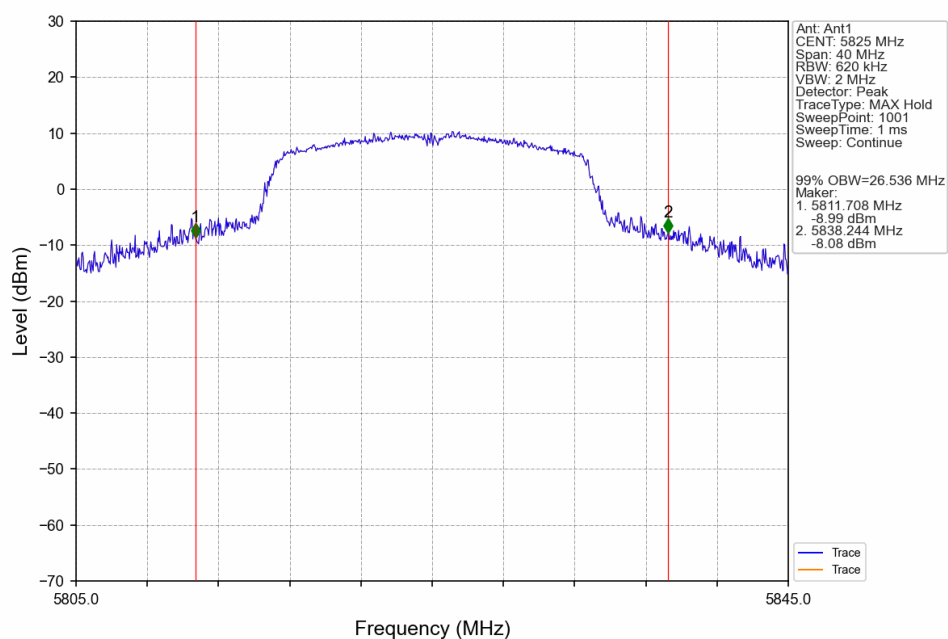
802.11n(HT20) LCH 5745MHz Ant1 NTN



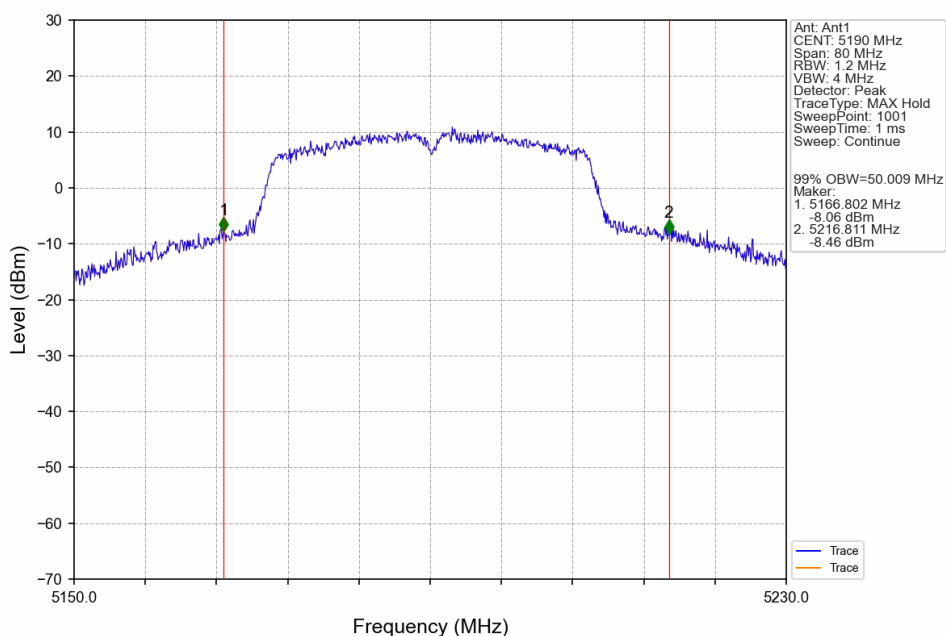
802.11n(HT20) MCH_5785MHz_Ant1_NTNV



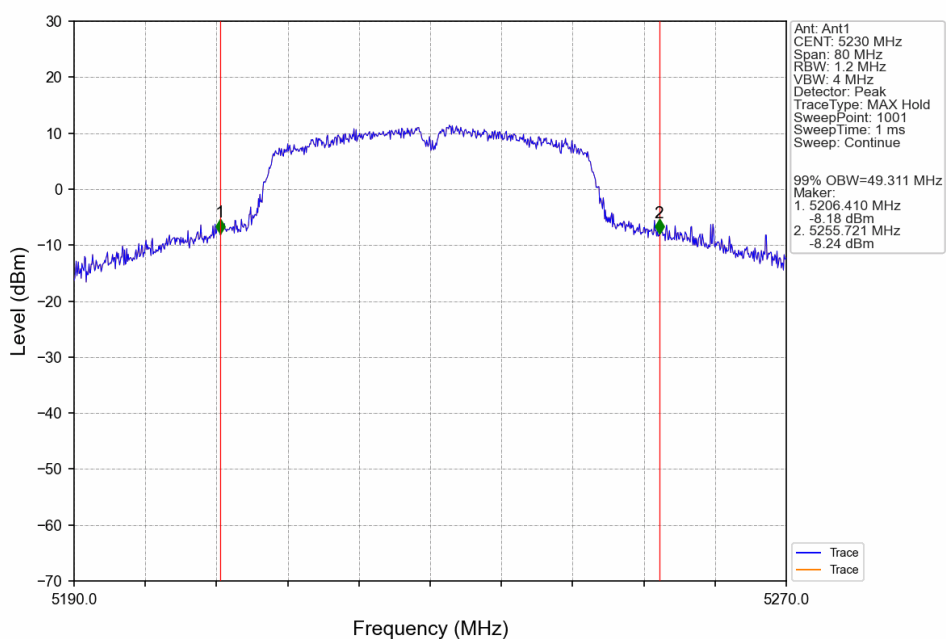
802.11n(HT20) HCH_5825MHz_Ant1_NTNV



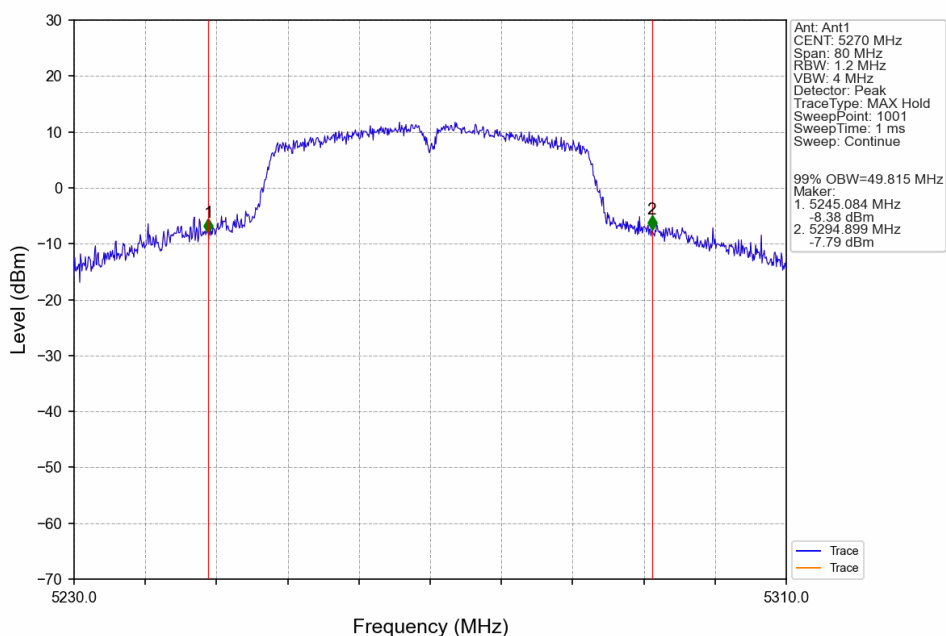
802.11n(HT40) LCH 5190MHz_Ant1_NTNV



802.11n(HT40) HCH 5230MHz_Ant1_NTNV



802.11n(HT40) LCH 5270MHz_Ant1_NTNV



802.11n(HT40) HCH 5310MHz_Ant1_NTNV

