



SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

Report No.: SUCR250400032308
Rev.: 01
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TEST REPORT

Application No.: SUCR2504000323WM
Applicant: COOSEA GROUP (HK) COMPANY LIMITED
Address of Applicant: UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL
Manufacturer: COOSEA GROUP (HK) COMPANY LIMITED
Address of Manufacturer: UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL
EUT Description: Smart Phone
Model No.: SN512A, SN512C -----♣
♣ Please refer to section 2.4 of this report which indicates which model was actually tested and which were electrically identical.
FCC ID: 2A28USN512
Standards: FCC 47 CFR Part 2, Subpart J
FCC 47 CFR Part 15, Subpart E
Date of Receipt: April 15, 2025
Date of Test: April 18, 2025 to May 5, 2025
Date of Issue: June 13, 2025

Test Result :	PASS *
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* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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Version

Revision Record			
Version	Description	Date	Remark
01	Original	June 13, 2025	/

Authorized for issue by:				
Tested By				
		Nature Shen / Project Manager		
Approved By				
		Cloud Peng/Technical Manager		



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1 Test Summary

Test Item	Band ^[1]	FCC rules No.	Test Requirements	Test Result	Result
Antenna Requirement	--	15.203/15.407(a)	--	Clause 5.1	PASS
26dB Emission Bandwidth	Band I	15.407(a)(1)	No limit.	Clause 5.5	For Report Purpose
	Band II-A	15.407(a)(2)			
	Band II-C	15.407(a)(2)			
6dB Emission Bandwidth	Band III	15.407(e)	≥ 500 kHz.	Clause 5.6	PASS
99% Occupied Bandwidth	Band I	KDB 789033 D02§ D	No limit.	Clause 5.7	For Report Purpose
	Band II-A				
	Band II-C				
	Band III				
Duty Cycle	Band I Band II-A Band II-C Band III	--	No limit.	Clause 5.3	For Report Purpose
Maximum Conducted Output Power	Band I	15.407(a)(iv)	< 250mW	Clause 5.4	PASS
	Band II-A	15.407(a)(2)	<MIN{250mW,11dBm+10*Ig(EBW)}		
	Band II-C				
	Band III	15.407(a)(3)	< 1W		
Maximum Power Spectral Density	Band I	15.407(a)(iv)	<11dBm/MHz	Clause 5.8	PASS
	Band II-A	15.407(a)(2)	<11dBm/MHz		
	Band II-C				
	Band III	15.407(a)(3)	<30dBm/500KHz		
Radiated Spurious Emissions	Band I	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.15-5.35 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).	Clause 5.9	PASS
	Band II-A	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.25-5.35 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).		PASS
	Band II-C	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.47-5.725 GHz).		PASS



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Test Item	Band ^[1]	FCC rules No.	Test Requirements	Test Result	Result
			F≥1GHz & in-restricted: §15.209 limit (AV&PK).		
	Band III	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP) F≥1GHz & out-restricted: (PK) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. F≥1GHz & in-restricted: §15.209 limit (AV&PK).		PASS
Restricted bands around fundamental frequency	Band I Band II-A Band II-C Band III	15.407(b) 15.205/15.209	---	Clause 5.10	PASS
AC Power Line Conducted Emissions	Band I Band II-A Band II-C Band III	15.207	---	Clause 5.2	PASS
Dynamic Frequency Selection	Band II-A Band II-C	15.407	Channel Move Time:10 Seconds	Clause 5.11	PASS
Frequency Stability	Band I Band II-A Band II-C Band III	15.407(g)	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual	N/A	N/A
Note 1: Band I: 5150-5250MHz Band II-A: 5250-5350MHz Band II-C: 5470-5725MHz Band III: 5725-5850MHz					



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2 General Information

2.1 Details of Client

Applicant:	COOSEA GROUP (HK) COMPANY LIMITED
Address of Applicant:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL
Manufacturer:	COOSEA GROUP (HK) COMPANY LIMITED
Address of Manufacturer:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL

2.2 Test Location

Company:	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.
Address:	South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
Post code:	215000
Test engineer:	Tizzy Song, Ives Cheng

2.3 Test Facility

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

- **A2LA (Certificate No. 6336.01)**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

- **FCC –Designation Number: CN1312**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 717327



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2.4 General Description of EUT

EUT Description:	Smart Phone	
Model No.:	SN512A, SN512C	
Hardware Version:	1.0	
Software Version:	SN512AA10008	
IMEI:	RF Conducted	357772740003739
	RSE & AC power line	357772740003739
WLAN Mode Supported:	802.11a:	20 MHz channel bandwidth
	802.11n:	20 MHz / 40 MHz channel bandwidth
	802.11ac:	20 MHz / 40 MHz / 80 MHz channel bandwidth
Operation Frequency:	5150MHz to 5250MHz 5250MHz to 5350MHz 5470MHz to 5725MHz 5725MHz to 5850MHz	
Modulation Type:	802.11a:	OFDM (BPSK, QPSK, 16QAM, 64QAM)
	802.11n:	OFDM (BPSK, QPSK, 16QAM, 64QAM)
	802.11ac:	OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Spacing:	20MHz:	802.11a/n(HT20)/ac(VHT20)
	40MHz:	802.11n(HT40)/ac(VHT40)
	80MHz:	802.11ac(VHT80)
Antenna Type:	☐ External, ☒ Integrated	
Antenna Gain:	5150MHz to 5250MHz: -1.2dBi(Ant5); 5250MHz to 5350MHz: -0.9dBi(Ant5); 5470MHz to 5725MHz: -2.7dBi(Ant5); 5725MHz to 5850MHz: -3.1dBi(Ant5);	
	Note: The antenna gain are derived from the gain information report provided by the manufacturer.	
Smart System:	☒ SISO	802.11a/n/ac
	☐ MIMO	802.11a/n/ac/ax: 2Tx & 2Rx
	☐ Diversity	802.11a: Tx & Rx
TPC Function:	☐ Support, ☒ Not Support	
DFS Function:	☐ Master	
	☐ Slave with radar detection	☒ Slave without radar detection
RF Cable*:	1dB	

Note:

- 1.Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information , SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
- 2.The two models named SN512A, SN512C are the same product except that their model names are different for different market segments.



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Remark:

In FCC 15.31, for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table, and the selected channel to perform the test as below:

Frequency range over which device operates	Number of Measurement Frequencies Required	Location of Measurement Frequency in Band of Operation
1 MHz or less	1	centre
1 MHz to 10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near centre

For UNII Band I:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5180
	The Middle channel	5200
	The Highest channel	5240
IEEE 802.11n/ac 40MHz	The Lowest channel	5190
	The Highest channel	5230
IEEE 802.11ac 80MHz	The Middle channel	5210

For UNII Band II-A:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5260
	The Middle channel	5280
	The Highest channel	5320
IEEE 802.11n/ac 40MHz	The Lowest channel	5270
	The Highest channel	5310
IEEE 802.11ac 80MHz	The Middle channel	5290



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For UNII Band II-C:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5500
	The Middle channel	5580
	The Highest channel	5700
IEEE 802.11n/ac 40MHz	The Lowest channel	5510
	The Middle channel	5550
	The Highest channel	5670
IEEE 802.11ac 80MHz	The Middle channel	5530

For UNII Band III:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5745
	The Middle channel	5785
	The Highest channel	5825
IEEE 802.11n/ac 40MHz	The Lowest channel	5755
	The Highest channel	5795
IEEE 802.11ac 80MHz	The Middle channel	5775



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2.5 Test Environment and Mode

Environment Parameter	101 kPa Selected Values During Tests	
Relative Humidity	44-46 % RH Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	22~23	3.8
Remark: NV: Normal Voltage NT: Normal Temperature		

2.6 Description of Support Units

The EUT has been tested as an independent unit.

2.7 Worst-case configuration and mode

Low data rate was used to test on antenna port conducted tests and radiated spurious emissions since it has the highest maximum power. Following are the worst-case data rates set for test:

Modulation Type	SISO - Data Rate	MIMO - Data Rate
802.11a	6 Mbps	/
802.11n (HT 20)	MCS0 (6.5 Mbps)	/
802.11n (HT 40)	MCS0 (13.5 Mbps)	/
802.11ac (VHT 20)	MCS0 (6.5 Mbps)	/
802.11ac (VHT 40)	MCS0 (13.5 Mbps)	/
802.11ac (VHT 80)	MCS0 (29.3 Mbps)	/



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3 Equipment List

RF Test Equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	Brilliant-emc	N/A	SUWI-04-08-01	11/9/2022	11/8/2025
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2/13/2025	2/12/2026
Measurement Software	Tonscend	TST272 V2.0	SUWI-03-55-03	NCR	NCR
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	1/20/2025	1/19/2026
Temperature Chamber	ESPEC	SU-242	SUWI-01-13-02	5/9/2024	5/8/2025
Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-05	1/21/2025	1/20/2026
DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	1/15/2025	1/14/2026
Power meter	Anritsu	ML2495A	SUWI-01-31-01	11/19/2024	11/18/2025
Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	11/19/2024	11/18/2025
MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	1/15/2025	1/14/2026
Router	ASUS	GT-AXE11000(FCC ID MSQ-RTAXJF00)	SUWI-03-14-02	NCR	NCR
Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-07	11/19/2024	11/18/2025



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CE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	1/15/2025	1/14/2026
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-06	2/13/2025	2/12/2026
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-03	5/6/2024	5/5/2025
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-04	5/6/2024	5/5/2025
Measurement Software	Tonscend	JS32-CE 4.0.0.2	SUWI-02-09-05	NCR	NCR

RSE Test Equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	6/3/2023	6/2/2026
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-05	2/13/2025	2/12/2026
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	1/20/2025	1/19/2026
Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-07	11/21/2024	11/20/2025
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	1/15/2025	1/14/2026
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9163	SUWI-01-11-01	5/13/2023	5/12/2025
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-02	5/13/2023	5/12/2025
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	5/12/2023	5/11/2025
Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	5/13/2023	5/12/2025
Amplifier	Tonscend	TAP9K3G32	SUWI-01-14-06	11/19/2024	11/24/2025
Amplifier	Tonscend	TAP01018050	SUWI-01-14-04	11/19/2024	11/24/2025
Amplifier	Tonscend	TAP30M7G30	SUWI-01-14-05	11/19/2024	11/24/2025
Measurement Software	Tonscend	JS32-RE V4.0.0.0	SUWI-02-09-04	NCR	NCR

Remark: NCR=No Calibration Requirement.



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4 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	$\pm 0.54\text{dB}$
2	RF power density, conducted	$\pm 1.03\text{dB}$
3	Spurious emissions, conducted	$\pm 0.54\text{dB}$
4	Radio Frequency	1%
5	Duty Cycle	$\pm 0.37\%$
6	Occupied Bandwidth	1%
7	Conduction Emission	$\pm 2.90\text{dB}$ (150kHz to 30MHz)
8	Radiated Emission	$\pm 3.13\text{dB}$ (9k -30MHz)
		$\pm 4.88\text{dB}$ (30M -1GHz)
		$\pm 4.75\text{dB}$ (1GHz to 18GHz)
		$\pm 4.77\text{dB}$ (Above 18GHz)

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{\text{CISPR/ETSI}}$ (CISPR/ETSI Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.



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5 Test results and Measurement Data

5.1 Antenna Requirement

Standard requirement:	47 CFR Part 15 Section 15.203
The antenna is Integrated Antenna and no consideration of replacement. The best case gain of the antenna is 5150MHz to 5250MHz: -1.2dBi(Ant5); 5250MHz to 5350MHz: -0.9dBi(Ant5); 5470MHz to 5725MHz: -2.7dBi(Ant5); 5725MHz to 5850MHz: -3.1dBi(Ant5);	
<i>Note:</i> The antenna gain are derived from the gain information report provided by the manufacturer.	
<i>Remark:</i> As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.	



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5.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15 Section 15.207		
Test Method:	ANSI C63.10: 2013 Section 6.2		
Test Frequency Range:	150kHz to 30MHz		
Receiver Setup:	RBW = 9kHz, VBW = 30kHz		
Limit:	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
* Decreases with the logarithm of the frequency.			
Test Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) 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: 2013 on conducted measurement.		

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Test Setup:	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.
Final Test Mode:	Refer to section 2.7 for details. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 3 for details.
Test Results:	Pass



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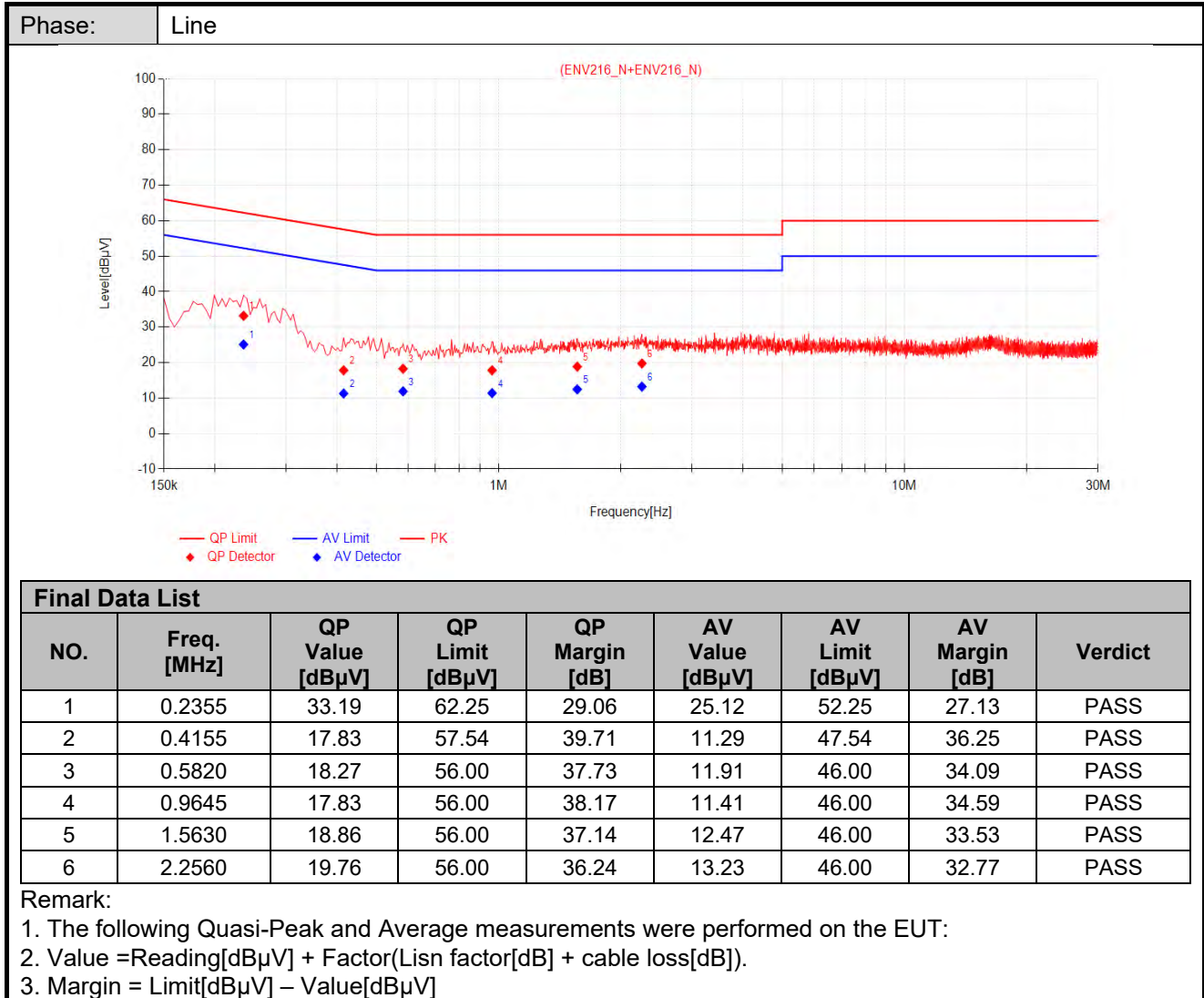
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Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.



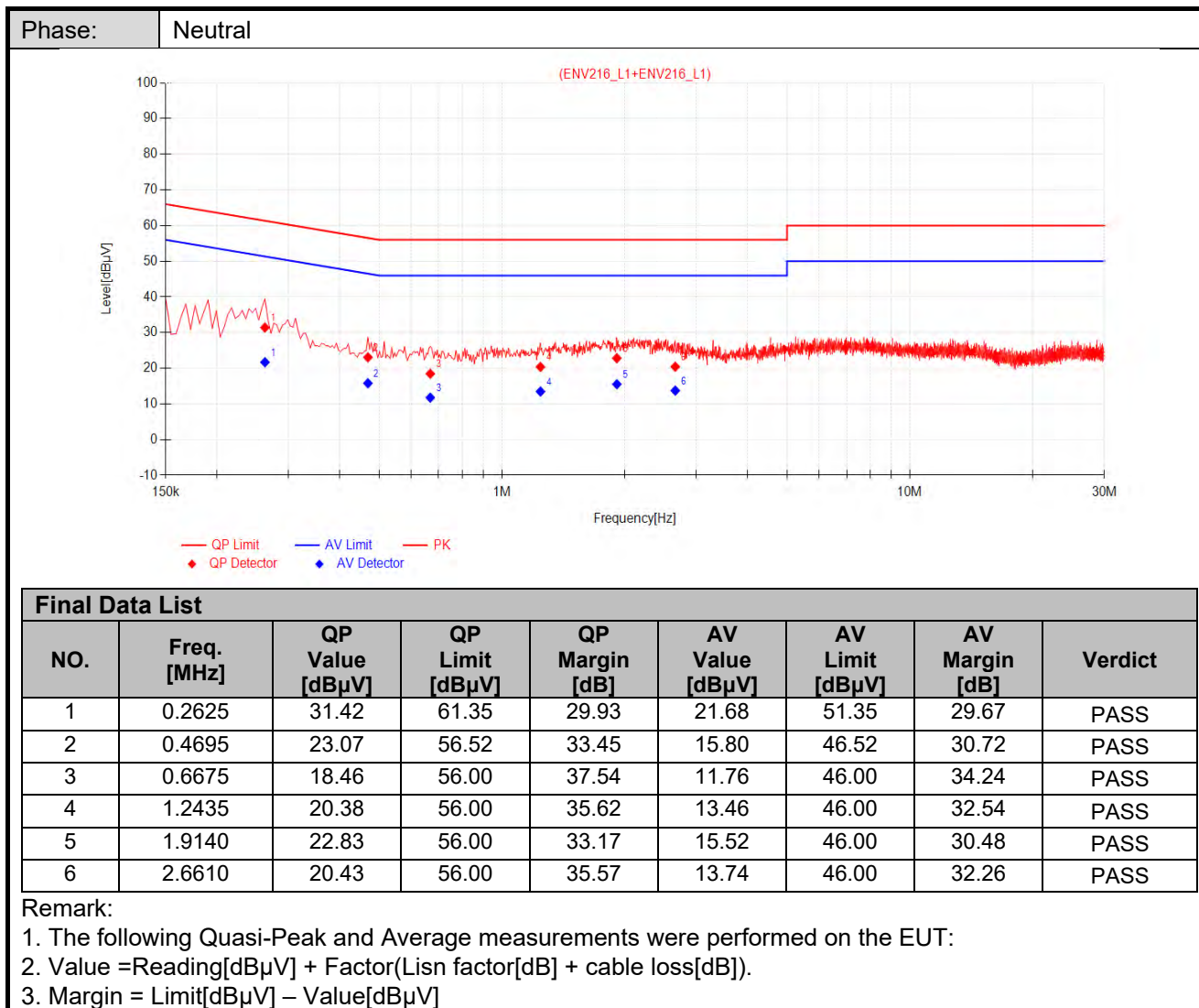


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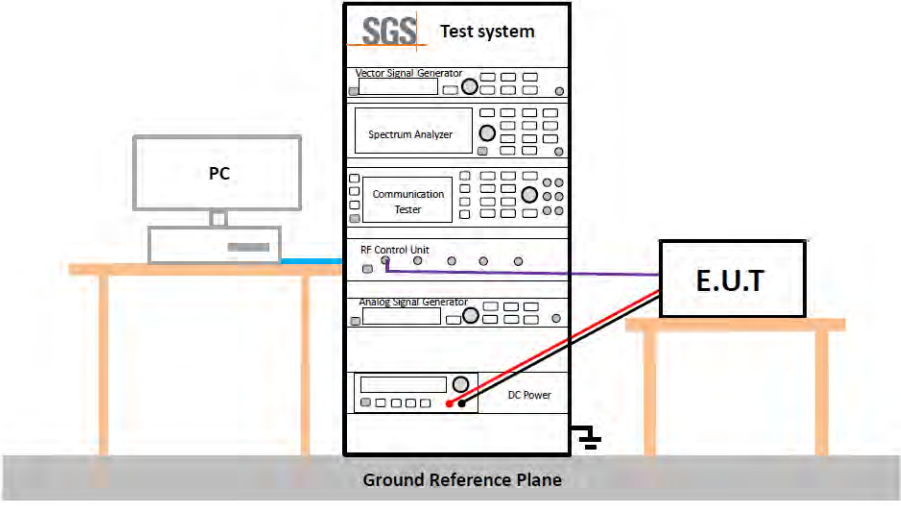
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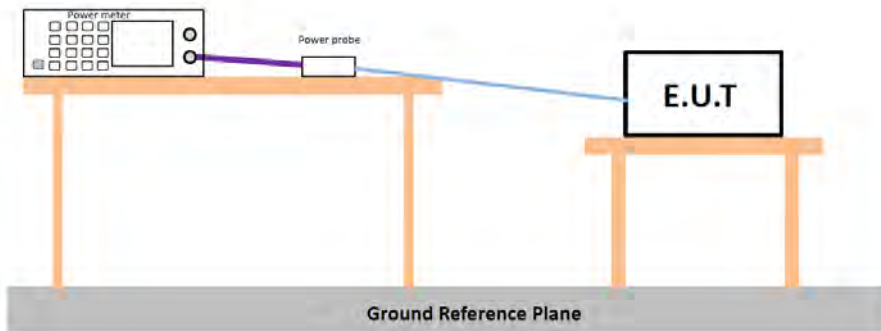
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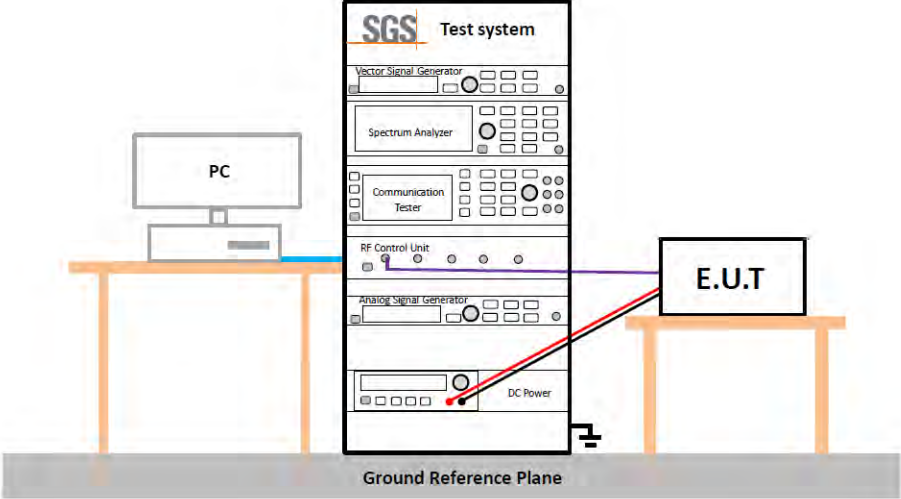
5.3 Duty Cycle

Test Requirement:	ANSI C63.10 :2013 Section 12.2
Test Method:	ANSI C63.10 :2013 Section 12.2
Test Setup:	
Instruments Used:	Refer to section 3 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	No restriction limits
Test Results:	For report purpose
The detailed test data see: Appendix	

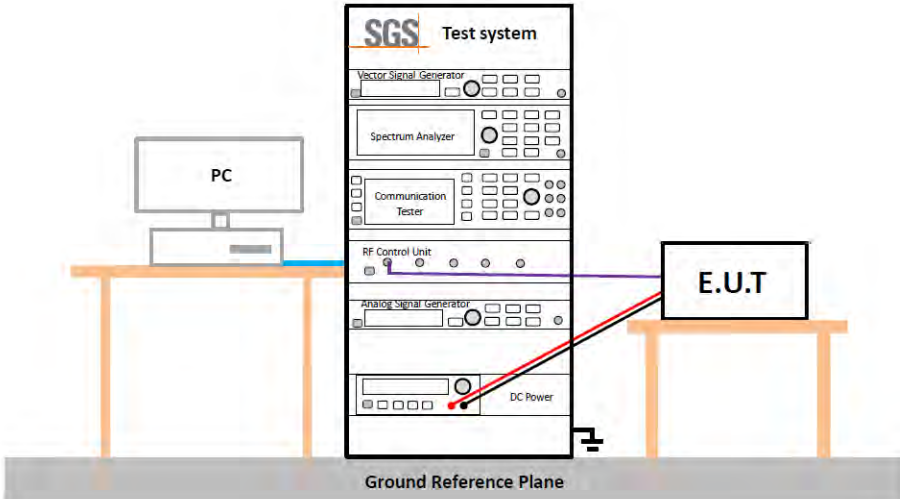
5.4 Conducted Output Power

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10 :2013 Section 12.3.3.2	
Test Setup:	 * Test with power meter (Detector function: Average) Method PM-G is measurement using a gated RF average power meter. Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.	
Test Instruments:	Refer to section 3 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Refer to section 2.7 for details.	
Limit:	Frequency Band	Limit
	5150-5250MHz	Not exceed 250mW(23.98dBm)
	5250-5350MHz	The lesser of 250mW(23.98dBm) or 11+ 10logB
	5470-5725MHz	The lesser of 250mW(23.98dBm) or 11+ 10logB
	5725-5850MHz	Not exceed 1W(30dBm)
	*Where B is the 26dB emission bandwidth in MHz	
Test Results:	Pass	
The detailed test data see: Appendix		

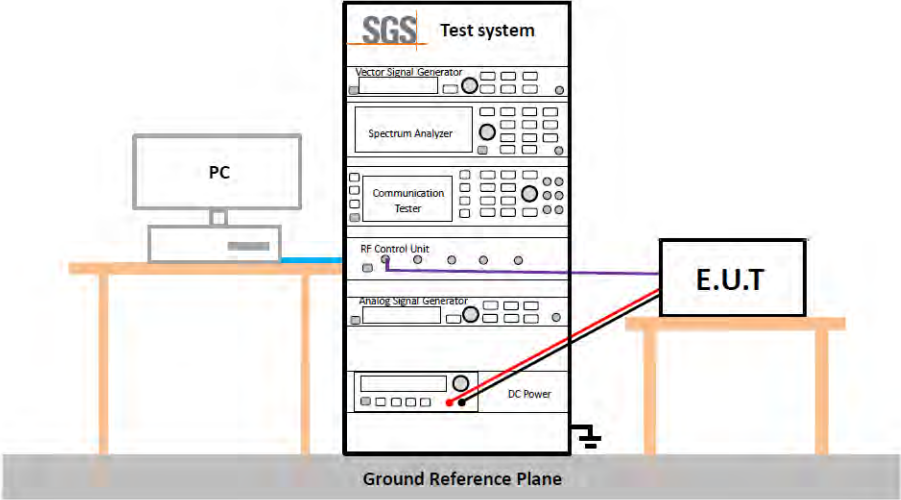
5.5 26dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(a), KDB 789033 D02& C
Test Method:	ANSI C63.10: 2013 Section 12.4.1
Test Setup:	
Instruments Used:	Refer to section 3 for details.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	No restriction limits
Test Results:	For Report Purpose
The detailed test data see: Appendix	

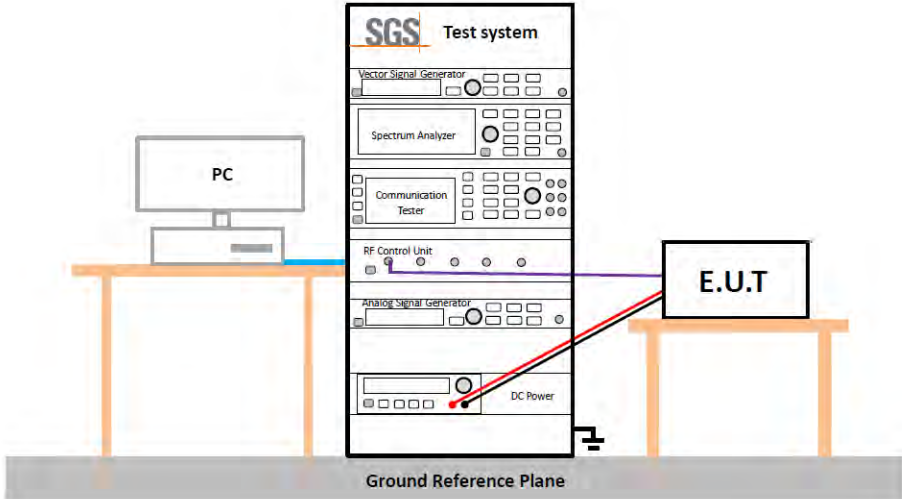
5.6 6dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(e)		
Test Method:	ANSI C63.10: 2013 Section 12.4.1		
Test Setup:			
Test Instruments:	Refer to section 3 for details.		
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Refer to section 2.7 for details.		
Limit:	Frequency Band	Limit	
	5725-5850MHz	At least 500kHz	
Test Results:	Pass		
The detailed test data see: Appendix			

5.7 99% Occupied Bandwidth

Test Requirement:	KDB 789033 D02§ D
Test Method:	ANSI C63.10: 2013 Section 12.4.2
Test Setup:	
Instruments Used:	Refer to section 3 for details.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	No restriction limits
Test Results:	For Report Purpose
The detailed test data see: Appendix	

5.8 Power Spectral Density

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10: 2013 Section 12.5 KDB 789033 D02 v02r01, Section F.	
Test Setup:		
Instruments Used:	Refer to section 3 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Refer to section 2.7 for details.	
Limit:	Frequency Band	Limit
	5150-5250MHz	The power spectral density less than 11dBm/1MHz
	5250-5350MHz	The power spectral density less than 11dBm/1MHz
	5470-5725MHz	The power spectral density less than 11dBm/1MHz
	5725-5850MHz	The power spectral density less than <30dBm/500KHz
Test Results:	Pass	
The detailed test data see: Appendix		

5.9 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15 Section 15.205 and 15.209
Test Method:	ANSI C63.10: 2013 Section 6.4 / 6.5 / 6.6
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)
Test frequency:	9kHz ~ 40GHz(or 10 Harmonic)

Test Setup:

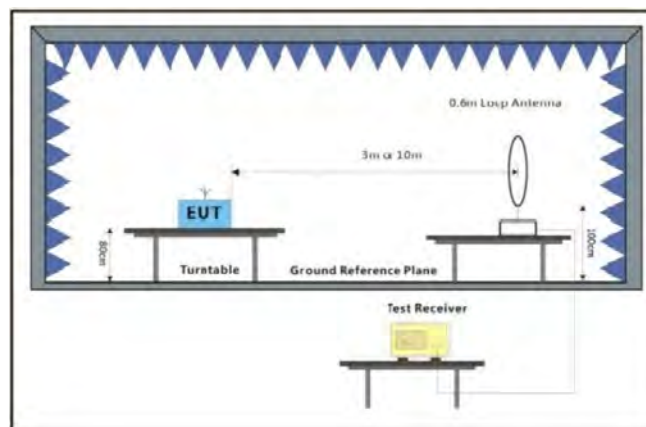


Figure 1. 9kHz to 30MHz

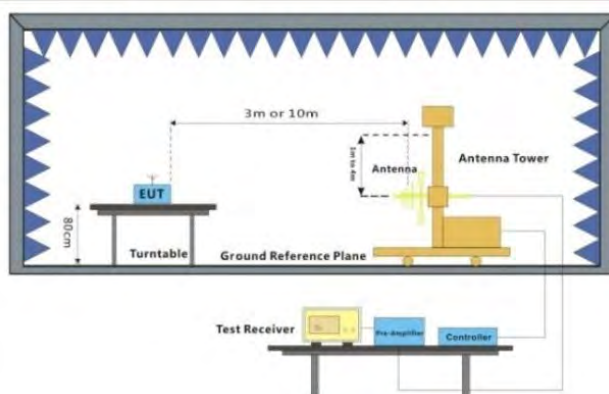


Figure 1. 30MHz to 1GHz

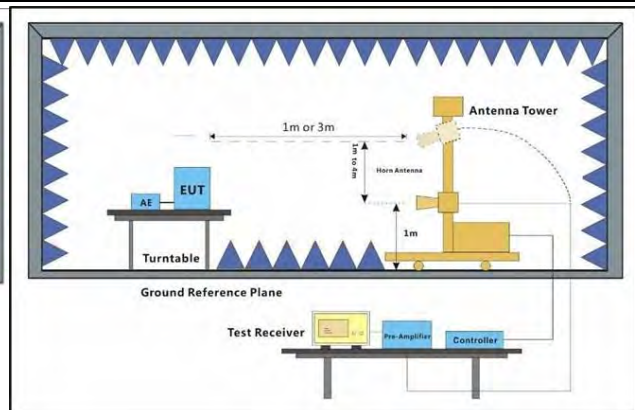


Figure 2. Above 1 GHz

Test Procedure:

- For below 1GHz test, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz test, the EUT was placed on the top of a rotating table 1.5 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. (Distance from antenna to EUT is 1m for measurements >18GHz).
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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



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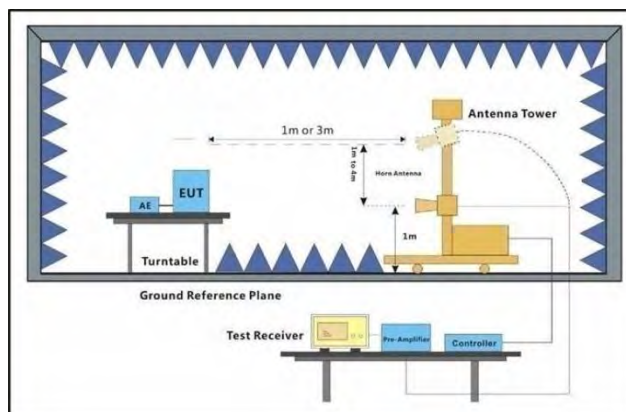
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	rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Test the EUT in the outermost channels. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. i. Repeat above procedures until all frequencies measured was complete. j. The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported k. The disturbance above 18GHz was very low, and the harmonics were the highest point could be found when testing, so only the harmonics had been displayed. l. At a measurement distance of 1 meter the limit line was increased by $20 \times \text{LOG}(3/1) = 9.54 \text{ dB}$.
Test Configuration:	Measurements below 30MHz • RBW = 10 kHz • VBW = 30 kHz • Detector = Peak & Average & Quasi-peak • Trace mode = max hold Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Quasi-peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW $\geq 3 \text{ MHz}$ • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10Hz, when duty cycle is no less than 98 percent. • VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 2.7 for details. For below 1GHz part, through pre-scan all channels, but only the worst case is recorded in the report.
Instruments Used:	Refer to section 3 for details.
Test Results:	Pass
The detailed test data see: Appendix	

5.10 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2013 Section 12.7		
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m)	Remark
	30MHz-88MHz	40.0	Quasi-peak
	88MHz-216MHz	43.5	Quasi-peak
	216MHz-960MHz	46.0	Quasi-peak
	960MHz-1GHz	54.0	Quasi-peak
	Above 1GHz	54.0	Average Value
		74.0	Peak Value

Test Setup:



Test Procedure:

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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 table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel.
- Test the EUT in the outermost channels.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
- Repeat above procedures until all frequencies measured was complete.



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Test Configuration:	Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Quasi-peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW $\geq$ 3 MHz • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10Hz, when duty cycle is no less than 98 percent. • VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 2.7 for details.
Instruments Used:	Refer to section 3 for details.
Test Results:	Pass
The detailed test data see: Appendix	

5.11 Dynamic Frequency Selection

5.11.1 DFS Overview

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>DFS Detection Threshold</i>	Yes	Not required
<i>Channel Closing Transmission Time</i>	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required
Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>U-NII Detection Bandwidth and Statistical Performance Check</i>	All BW modes must be tested	Not required
<i>Channel Move Time and Channel Closing Transmission Time</i>	Test using widest BW mode available	Test using the widest BW mode available for the link
<i>All other tests</i>	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		



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5.11.2 DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP $<$ 200 milliwatt and power spectral density $<$ 10 dBm/MHz	-62 dBm
EIRP $<$ 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

5.11.3 RADAR TEST WAVEFORMS

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μ sec)	PRI (μ sec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 μ sec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

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Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

Radar Type	Number of Trials	Number of Successful Detections	Minimum Percentage of Successful Detection
1	35	29	82.9%
2	30	18	60%
3	30	27	90%
4	50	44	88%
Aggregate $(82.9\% + 60\% + 90\% + 88\%)/4 = 80.2\%$			

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Table 6 – Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

5.11.4 Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel move</i> (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 <i>U-NII Detection Bandwidth</i> 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.	

The detailed test data see: **Appendix**



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6 Photographs - Setup Photos

Refer to Appendix A.2 BT&WLAN&NFC Setup Photos.



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7 Appendix

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	1.394	1.428	97.62	0.10	0.06
		5200	1.394	1.427	97.69	0.10	0.03
		5240	1.393	1.428	97.55	0.11	0.03
		5260	1.394	1.428	97.62	0.10	0.03
		5300	1.393	1.428	97.55	0.11	0.10
		5320	1.393	1.427	97.62	0.10	0.00
		5500	1.394	1.428	97.62	0.10	0.06
		5580	1.394	1.427	97.69	0.10	0.03
		5700	1.394	1.428	97.62	0.10	0.03
		5745	1.394	1.428	97.62	0.10	0.03
		5785	1.394	1.428	97.62	0.10	0.06
802.11ac (VHT20)	SISO	5825	1.394	1.428	97.62	0.10	0.03
		5180	1.312	1.348	97.33	0.12	0.03
		5200	1.313	1.348	97.40	0.11	0.07
		5240	1.314	1.349	97.41	0.11	0.14
		5260	1.314	1.348	97.48	0.11	0.07
		5300	1.312	1.348	97.33	0.12	0.03
		5320	1.312	1.347	97.40	0.11	0.03
		5500	1.313	1.348	97.40	0.11	0.07
		5580	1.312	1.347	97.40	0.11	0.03
		5700	1.312	1.347	97.40	0.11	0.07
		5745	1.313	1.348	97.40	0.11	0.07
802.11ac (VHT40)	SISO	5785	1.312	1.347	97.40	0.11	0.03
		5825	1.314	1.349	97.41	0.11	0.07
		5190	0.653	0.687	95.05	0.22	0.13
		5230	0.653	0.687	95.05	0.22	0.10
		5270	0.653	0.687	95.05	0.22	0.03
		5310	0.652	0.687	94.91	0.23	0.07
		5510	0.652	0.687	94.91	0.23	0.07
		5550	0.652	0.687	94.91	0.23	0.07
		5670	0.652	0.687	94.91	0.23	0.07
802.11ac (VHT80)	SISO	5755	0.653	0.687	95.05	0.22	0.03
		5795	0.652	0.686	95.04	0.22	0.04
		5210	0.325	0.359	90.53	0.43	0.04
		5290	0.324	0.358	90.50	0.43	0.04
		5530	0.325	0.358	90.78	0.42	0.11
		5610	0.325	0.358	90.78	0.42	0.04
		5775	0.324	0.358	90.50	0.43	0.10

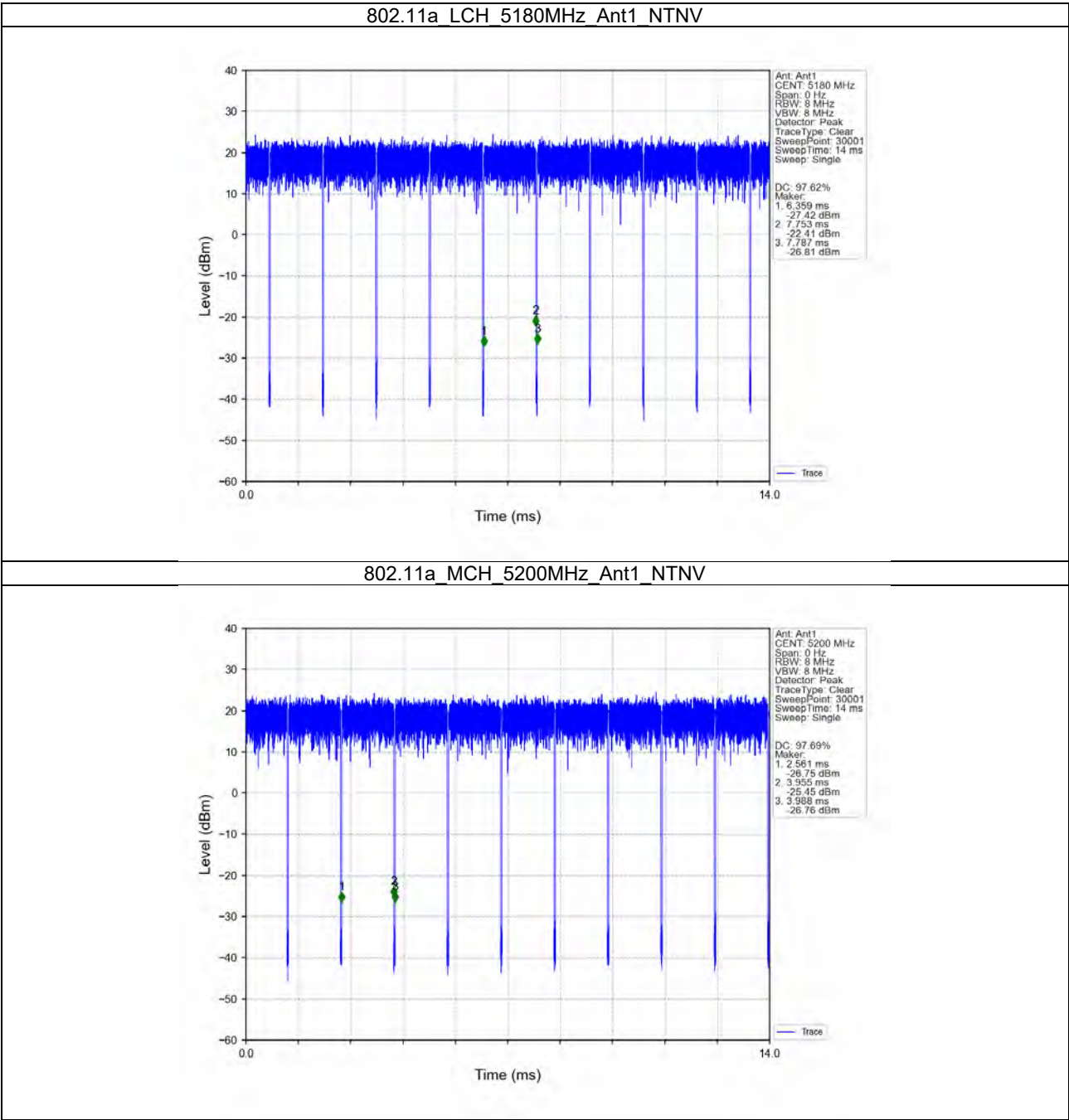


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1.2 Test Graph

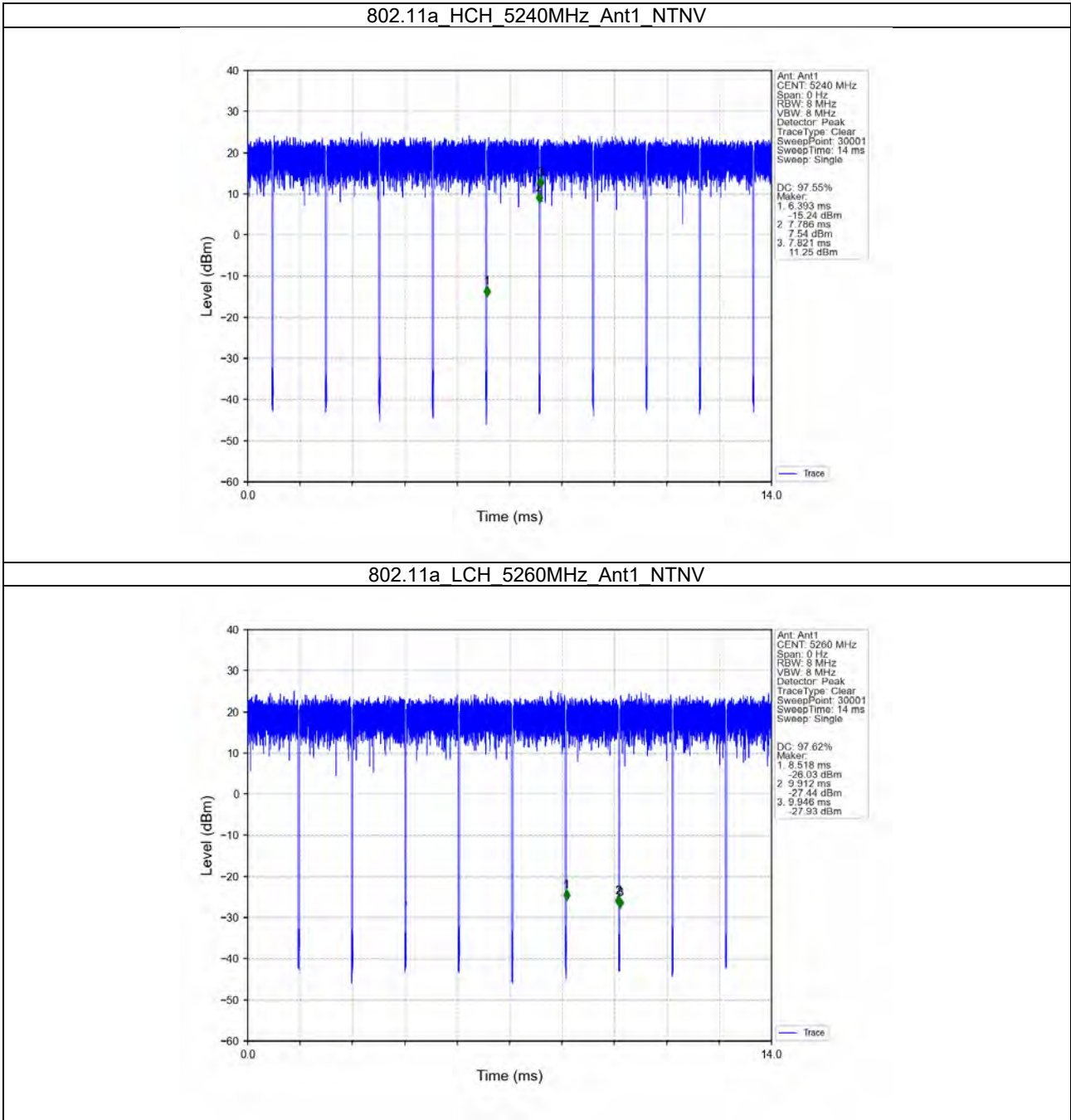
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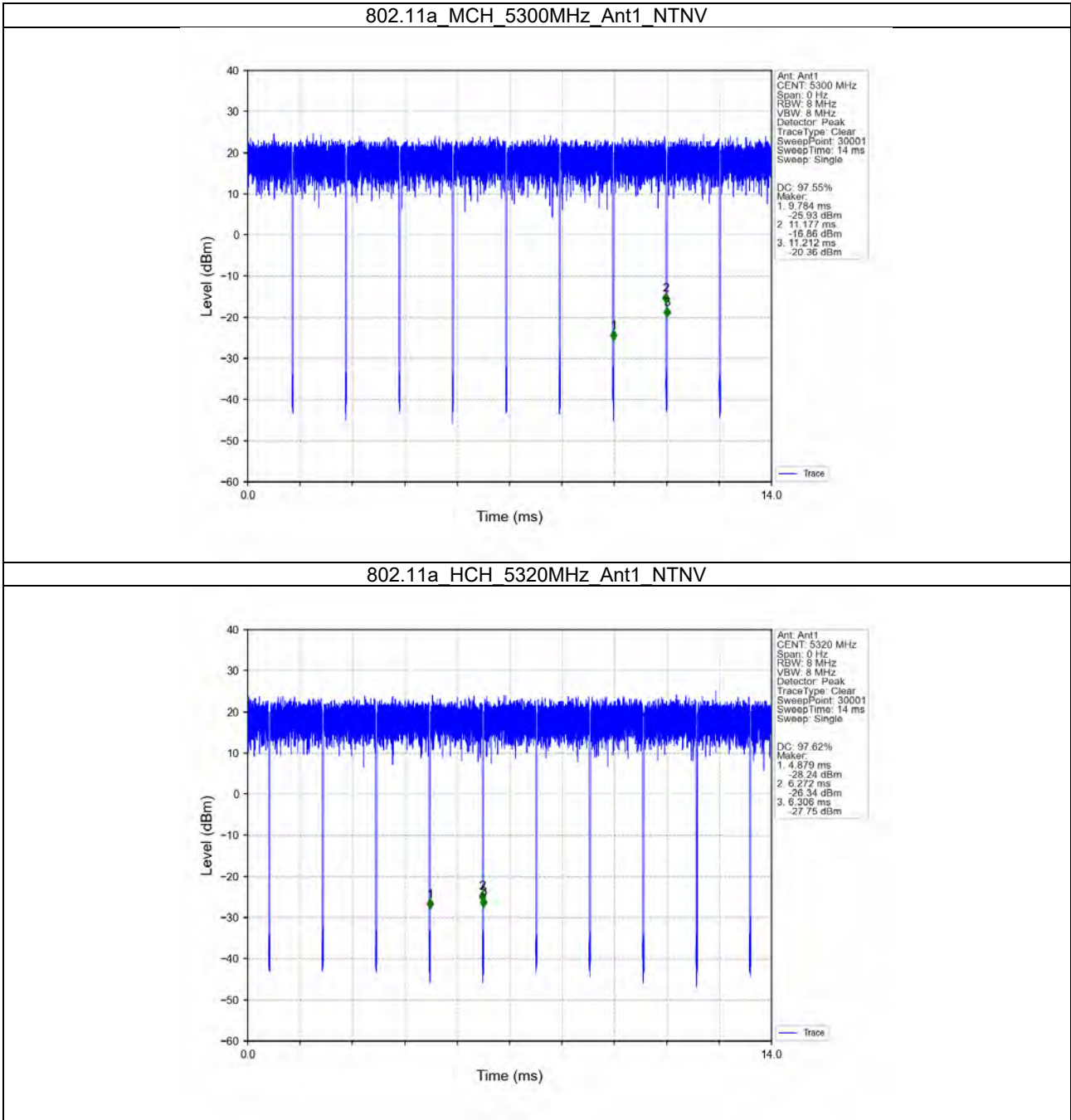
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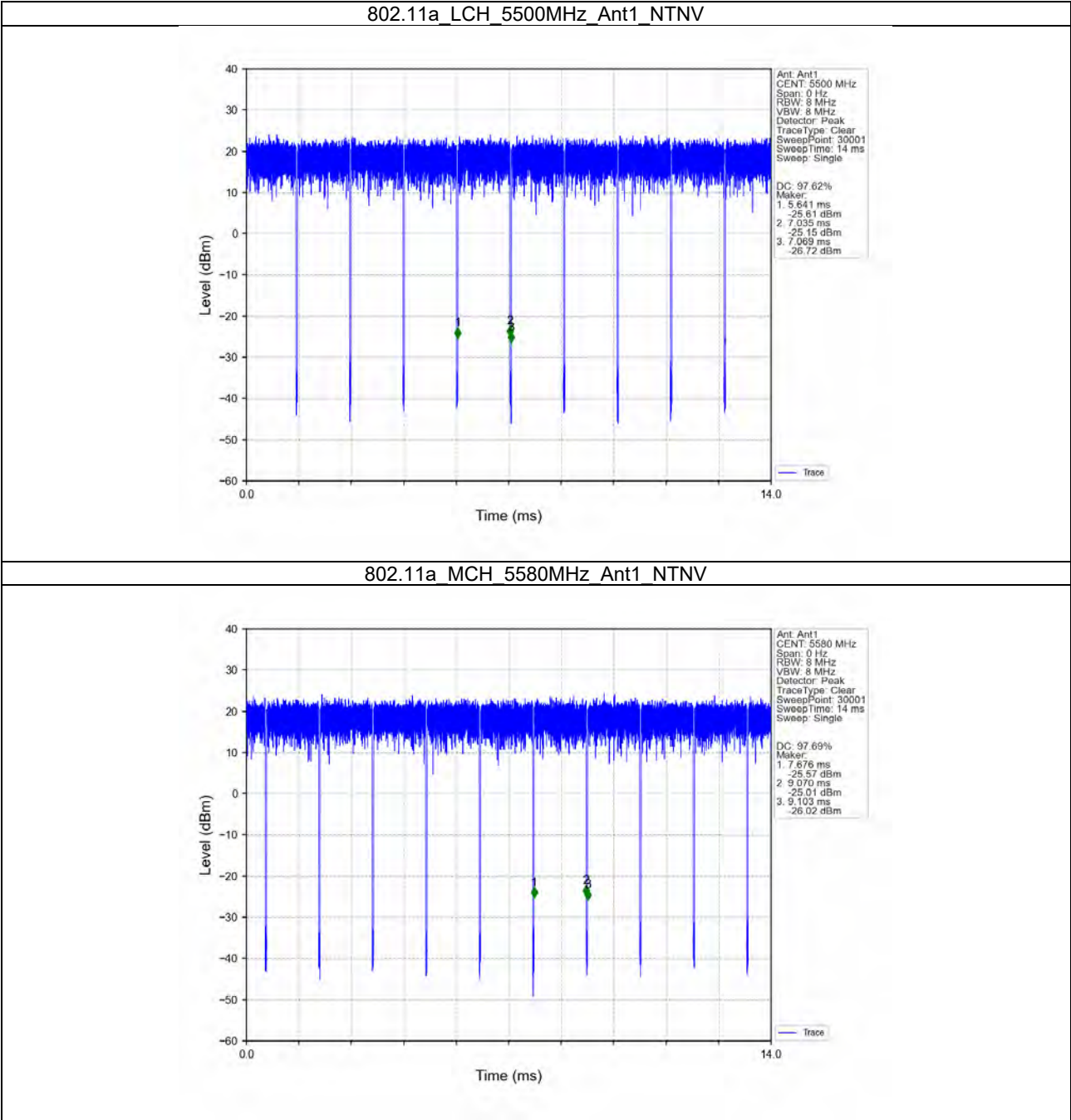
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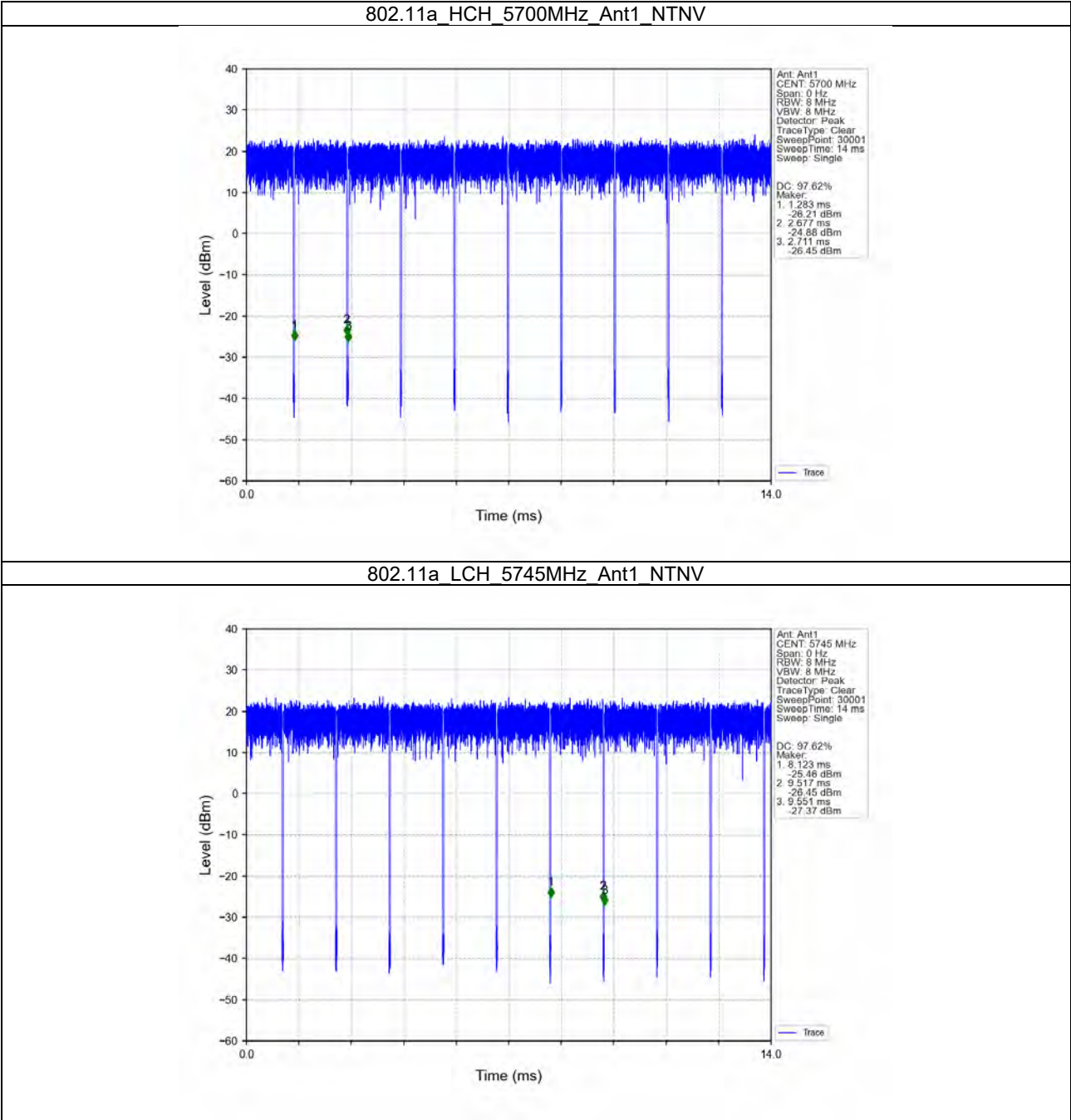
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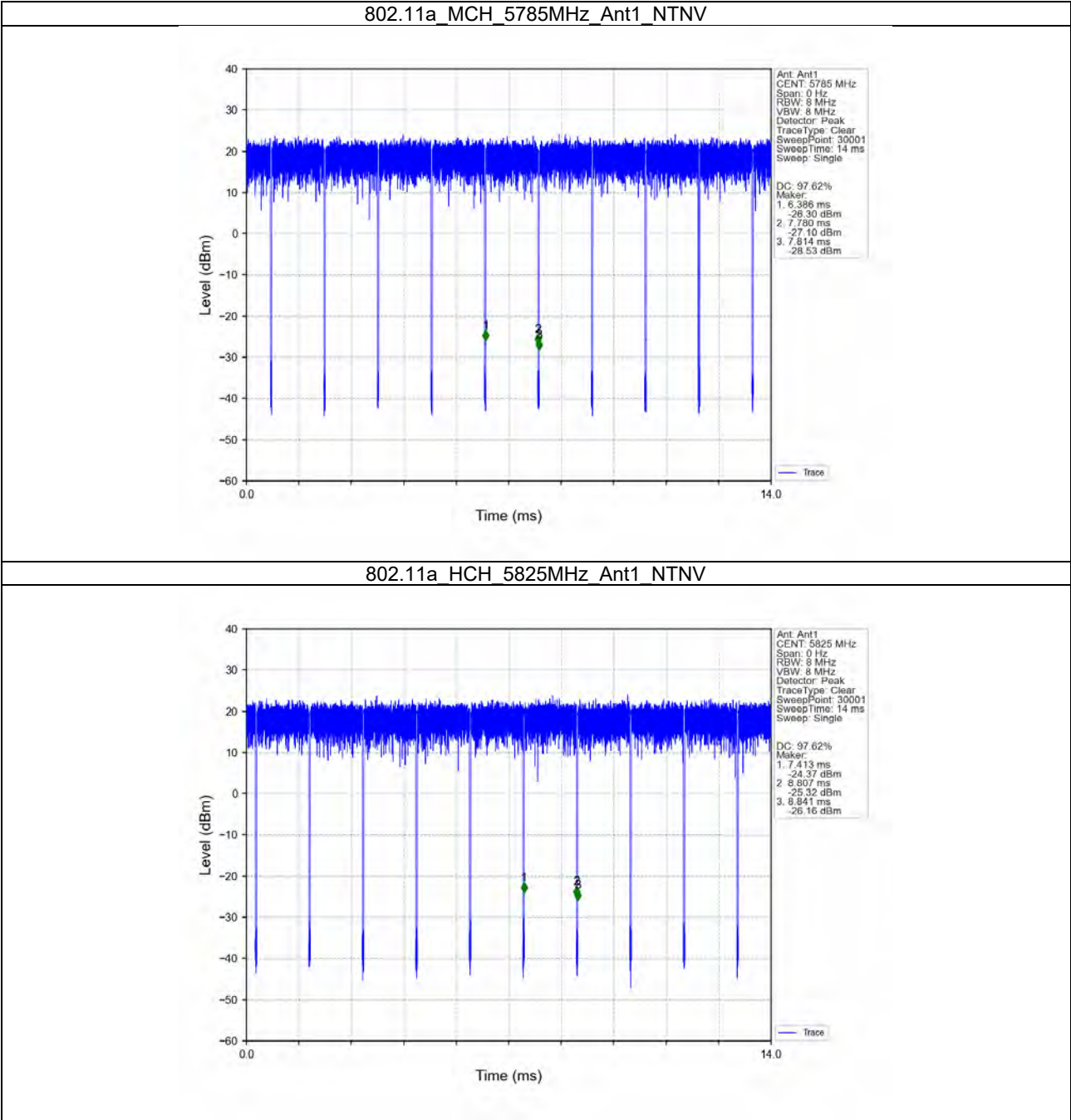
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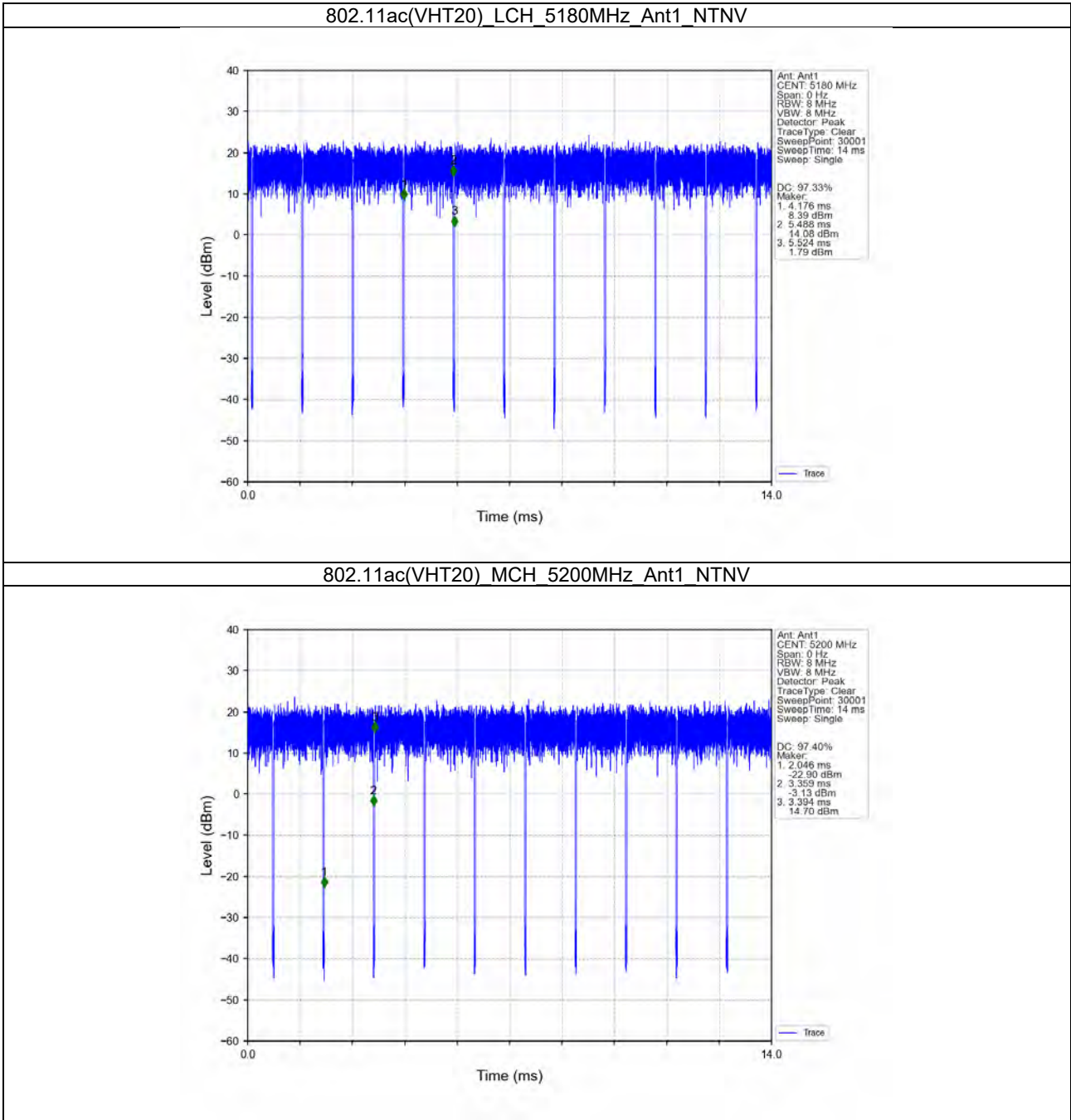
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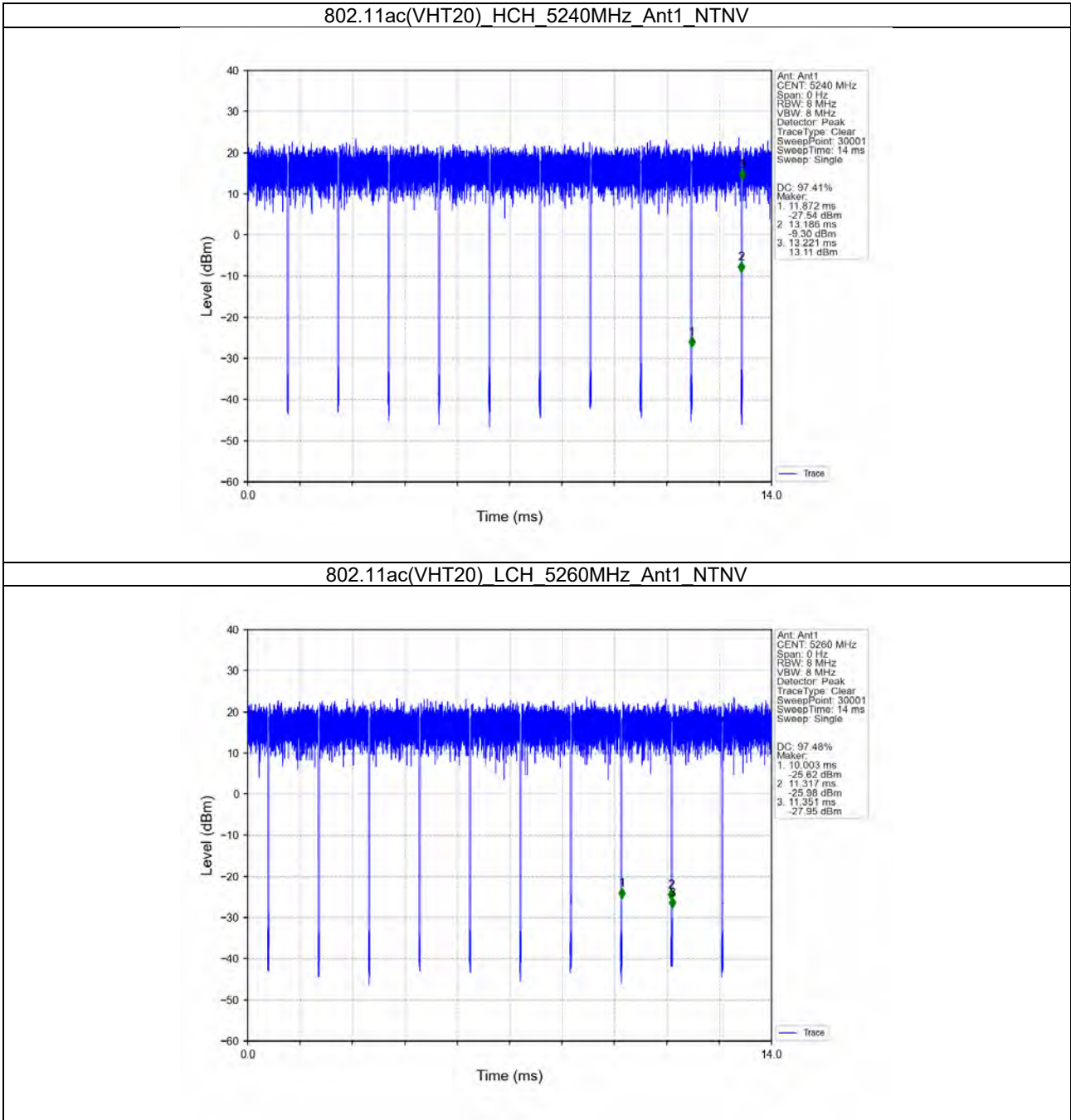
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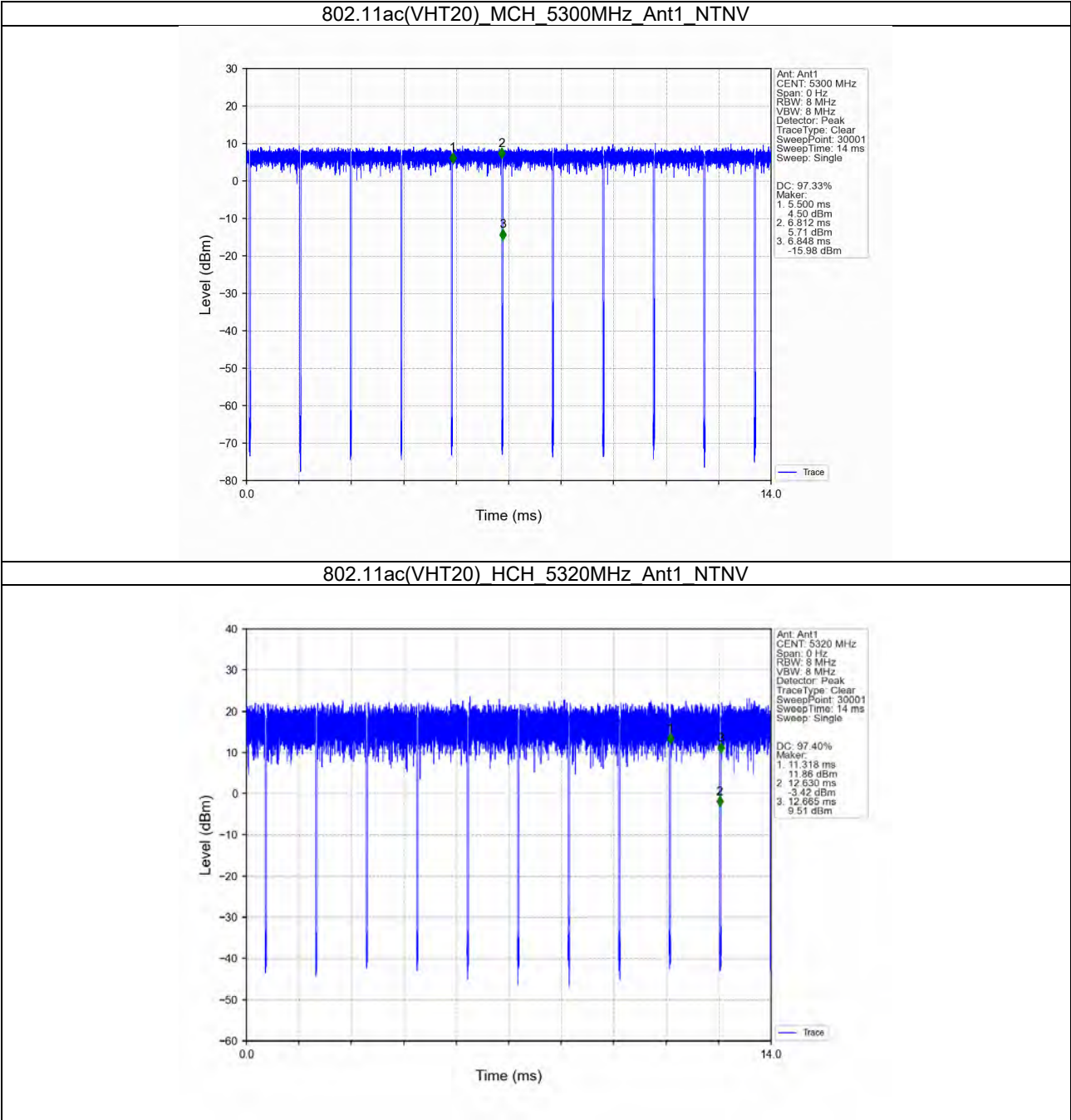
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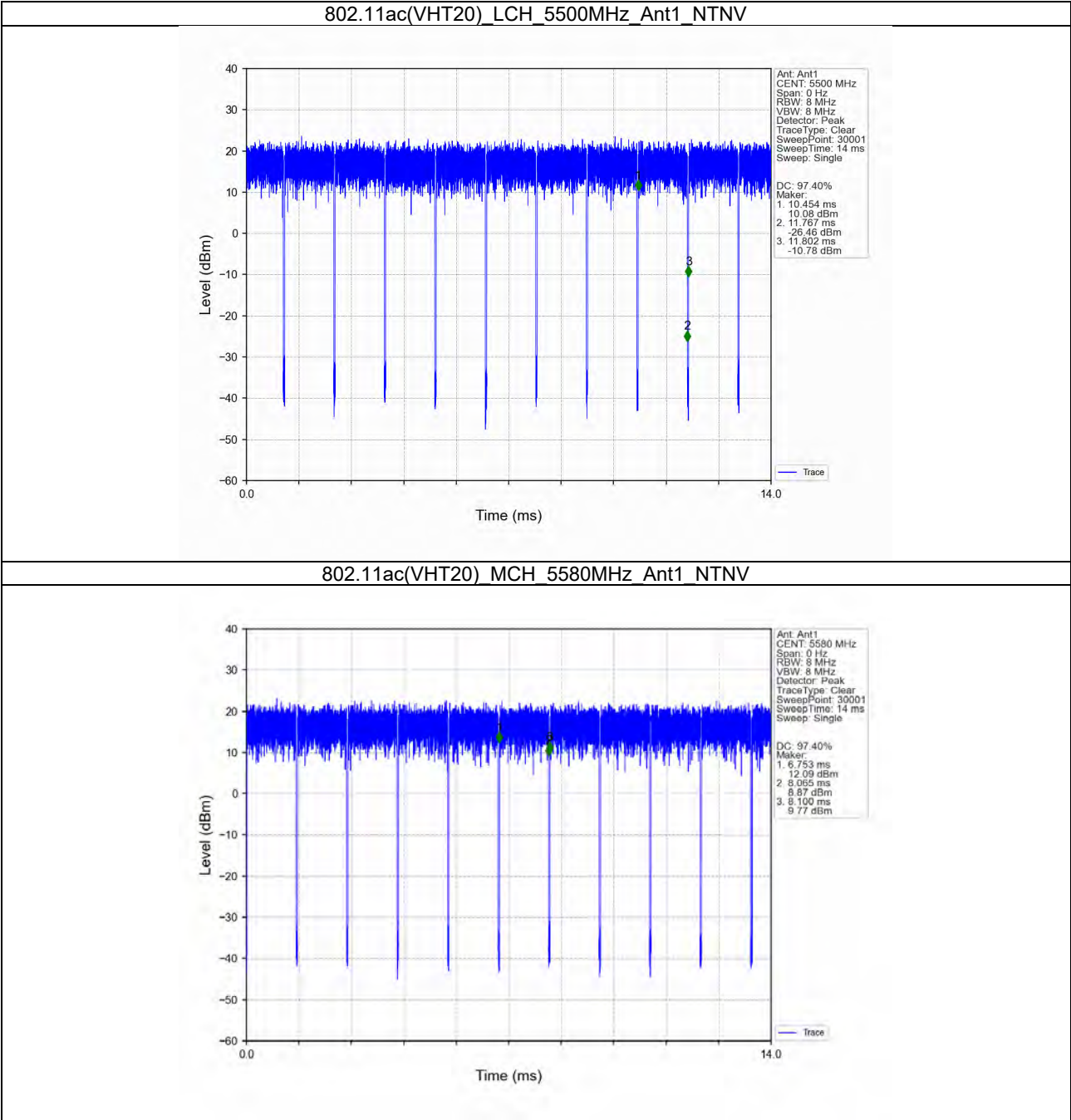
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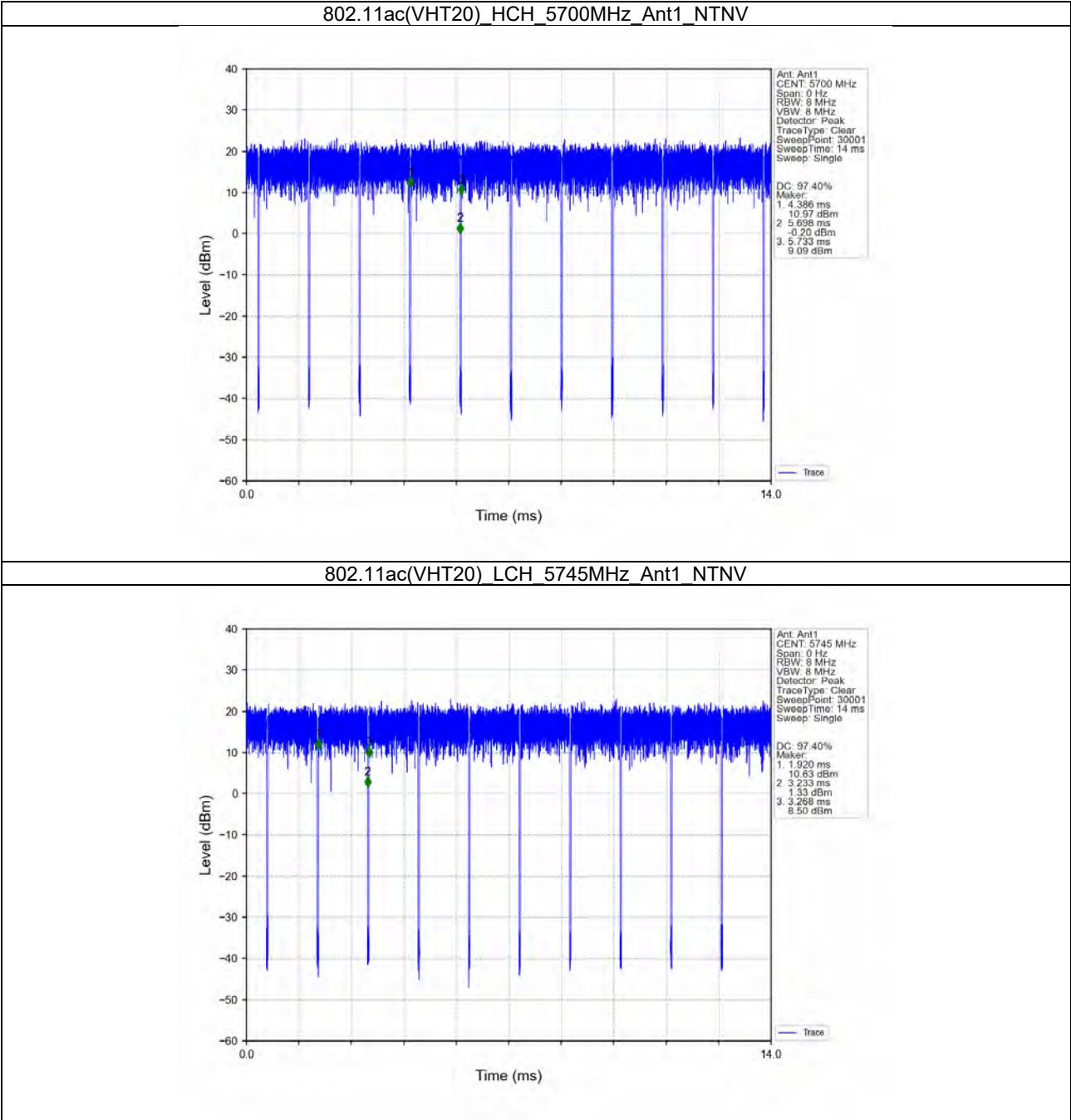
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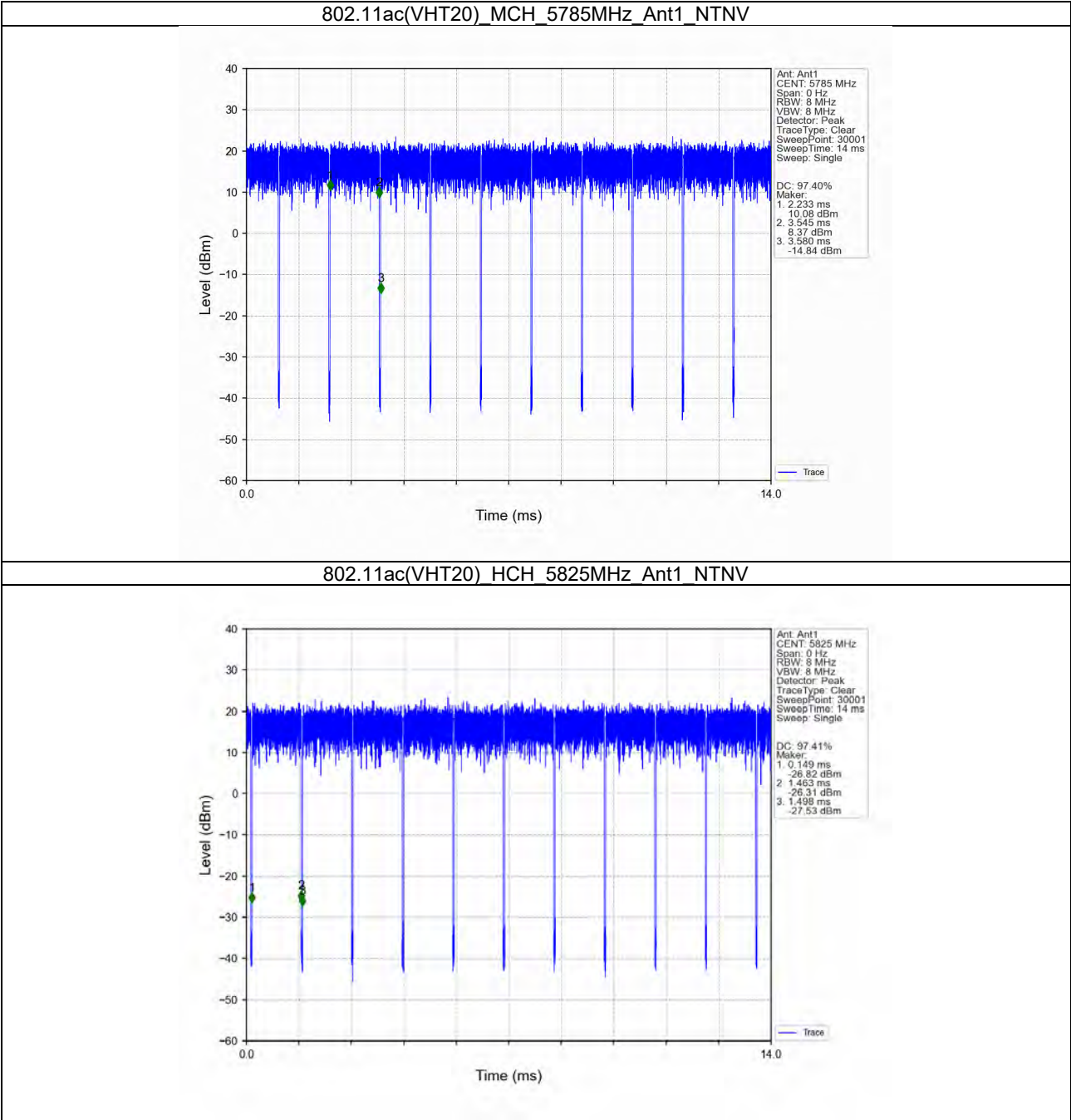
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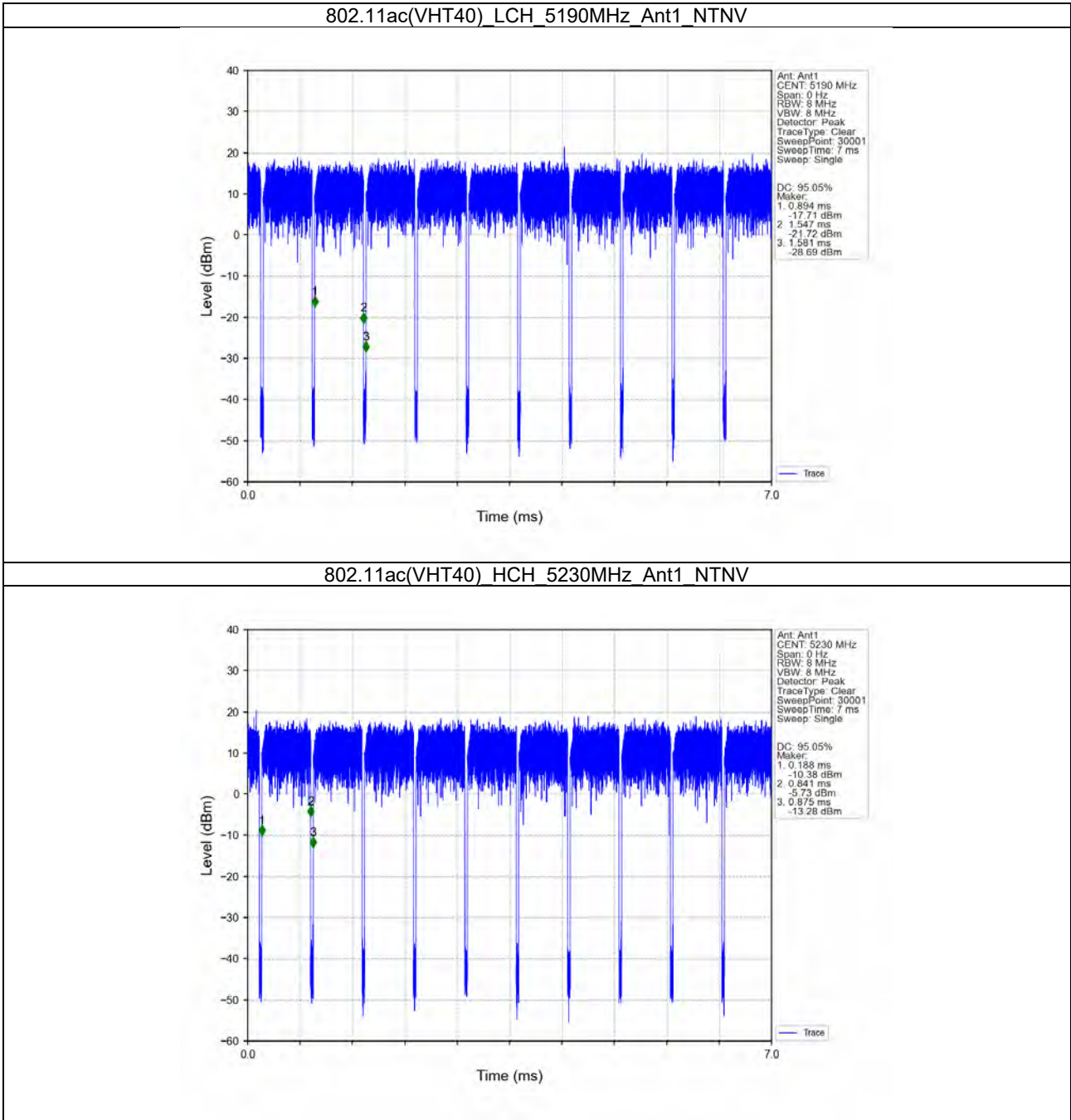
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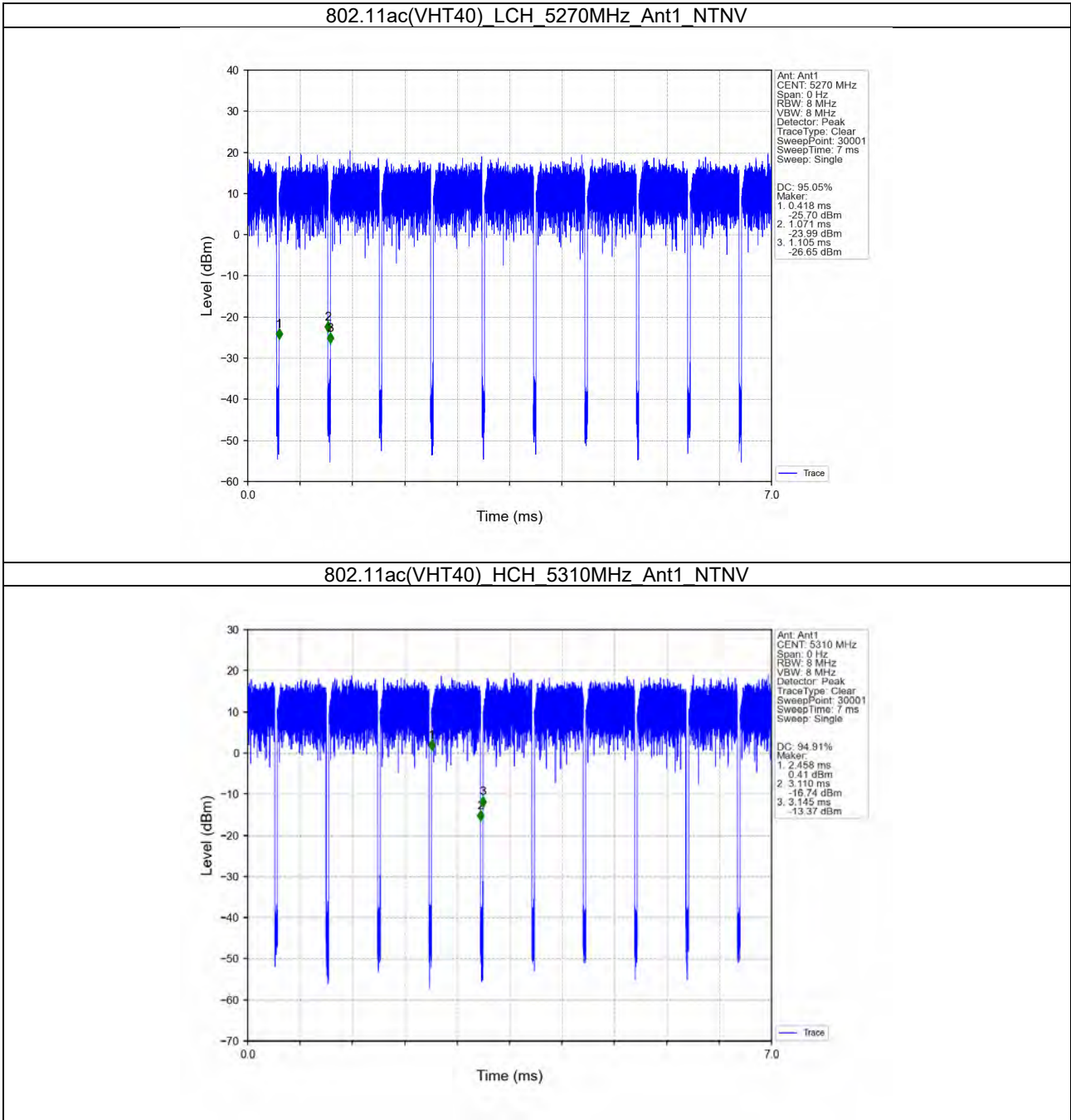
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

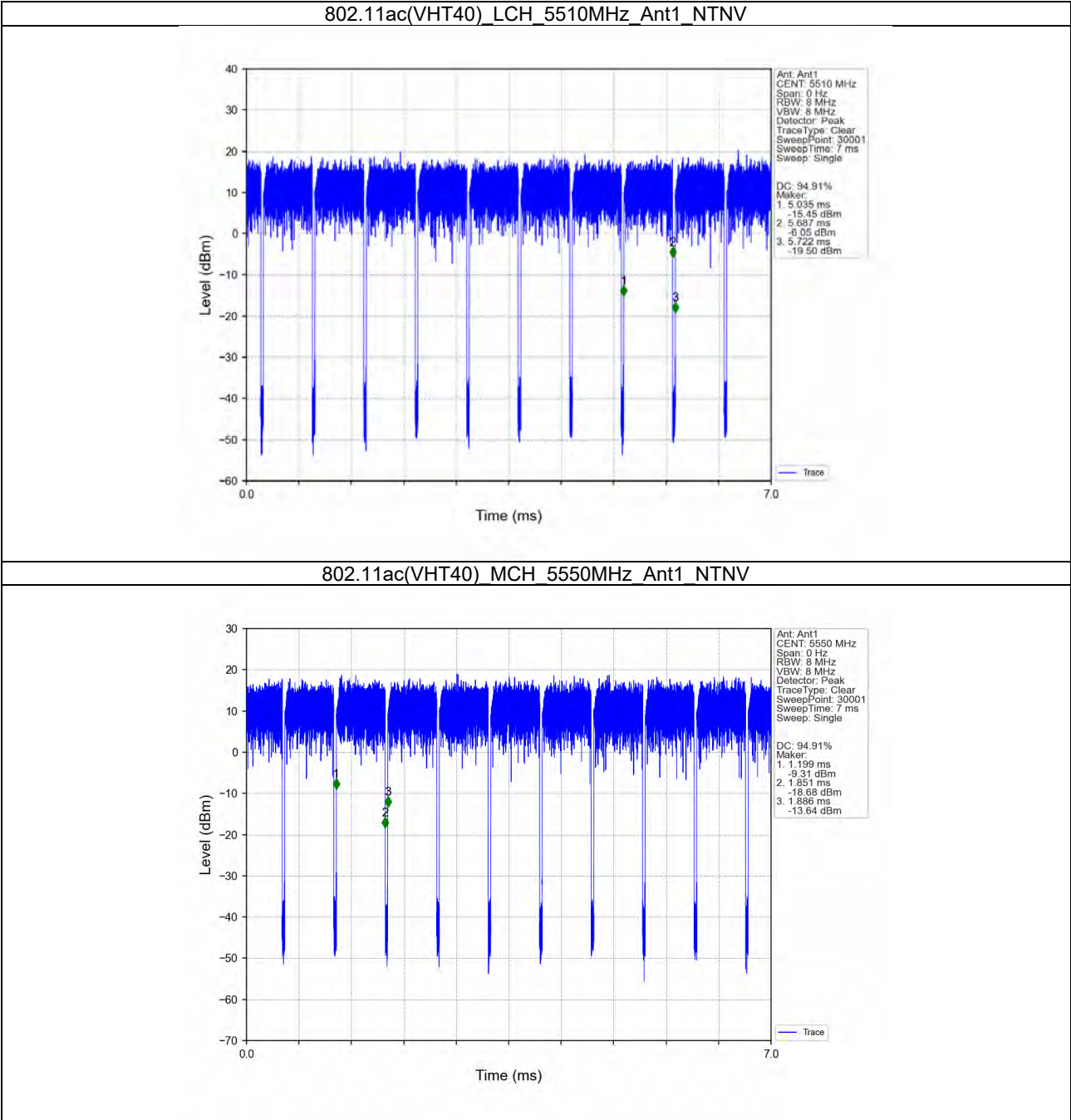
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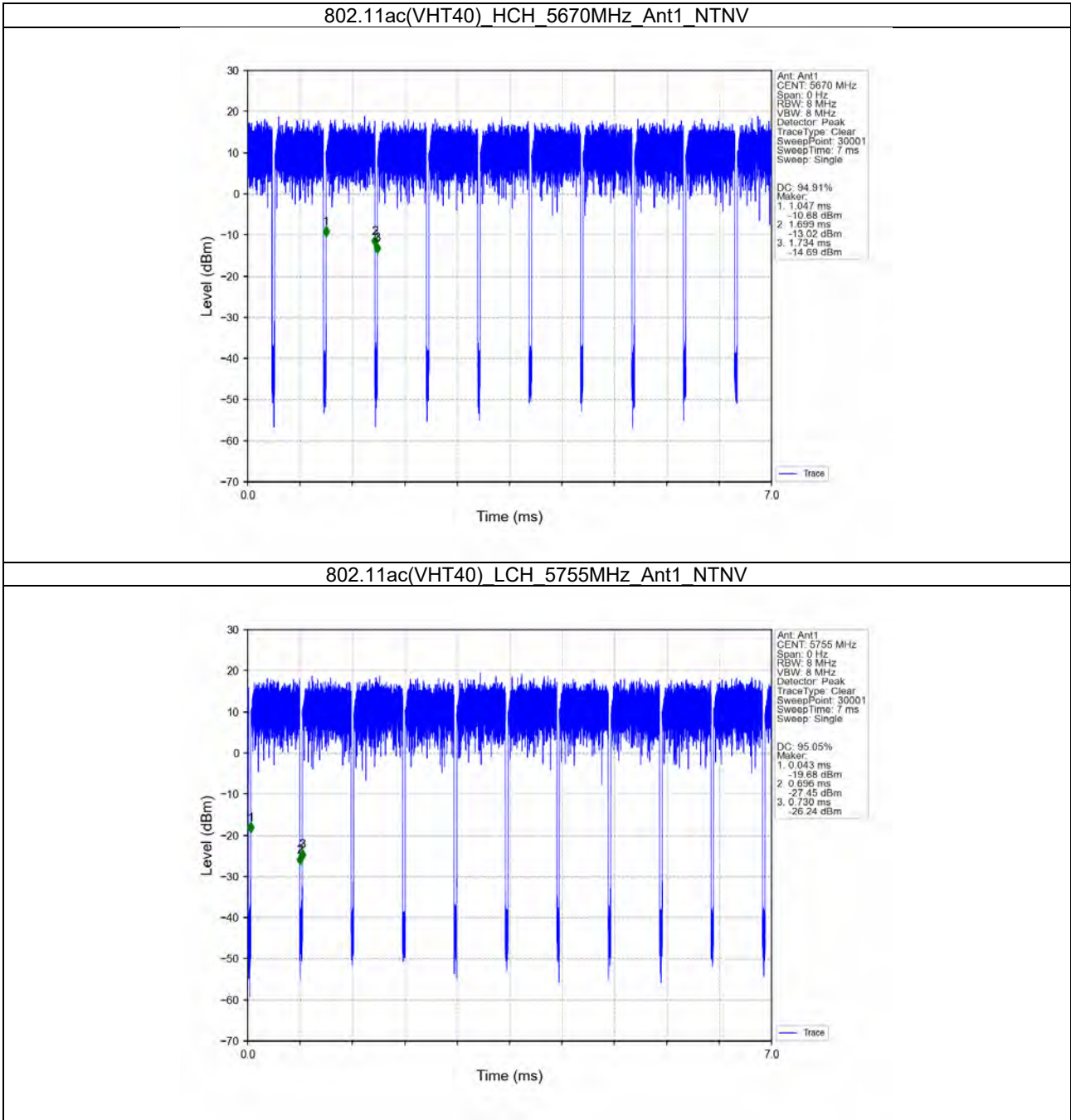
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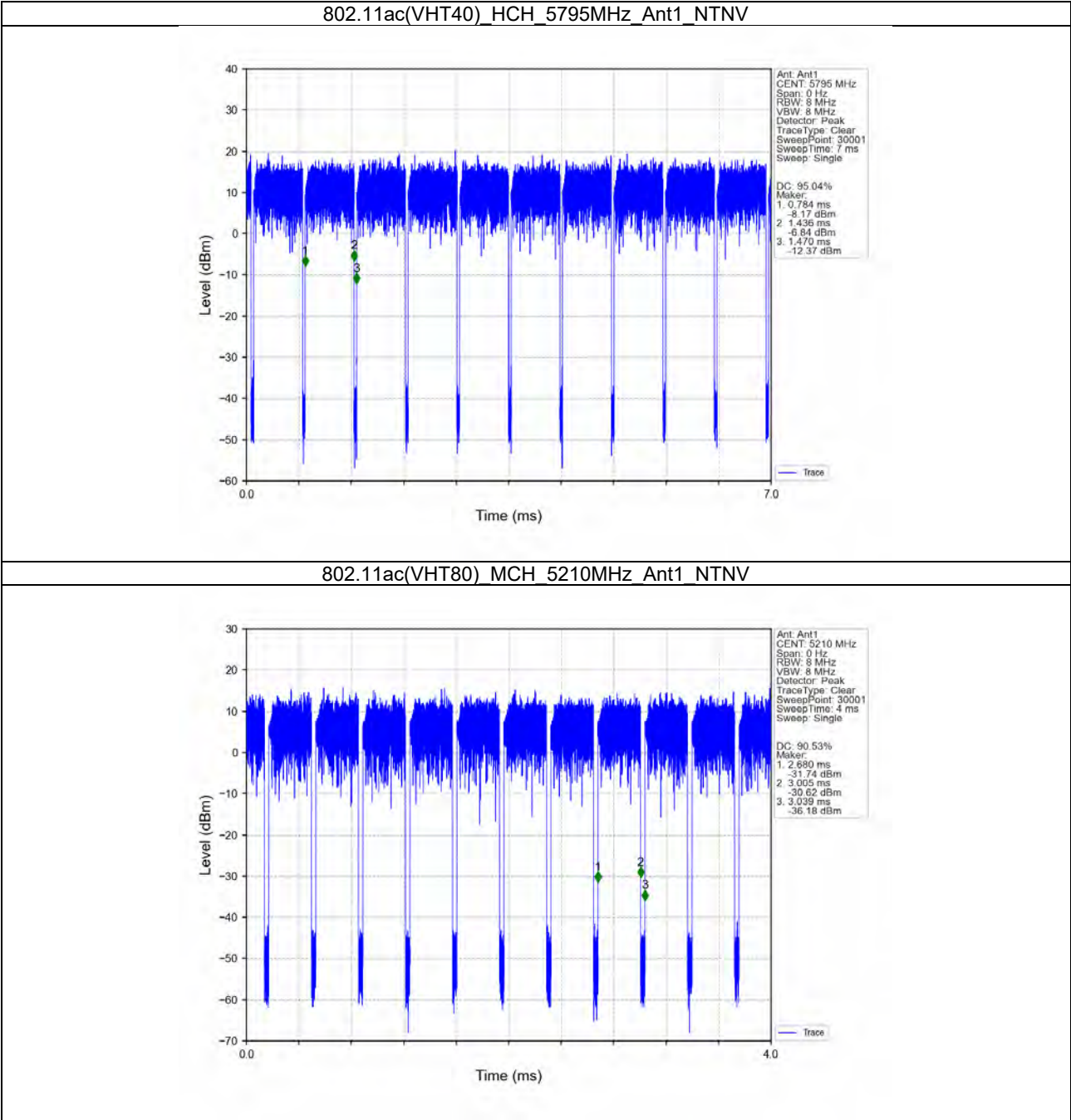
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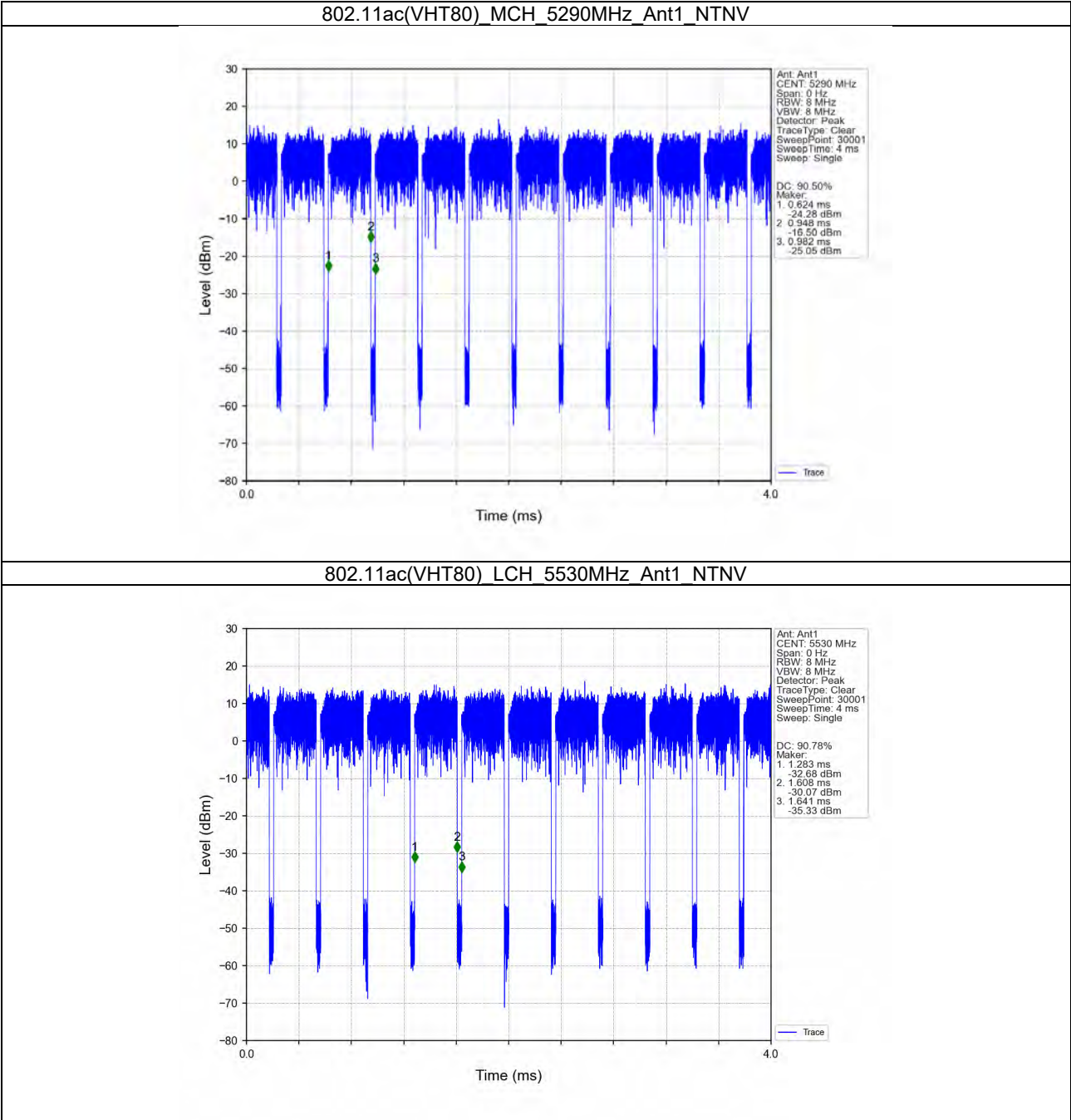
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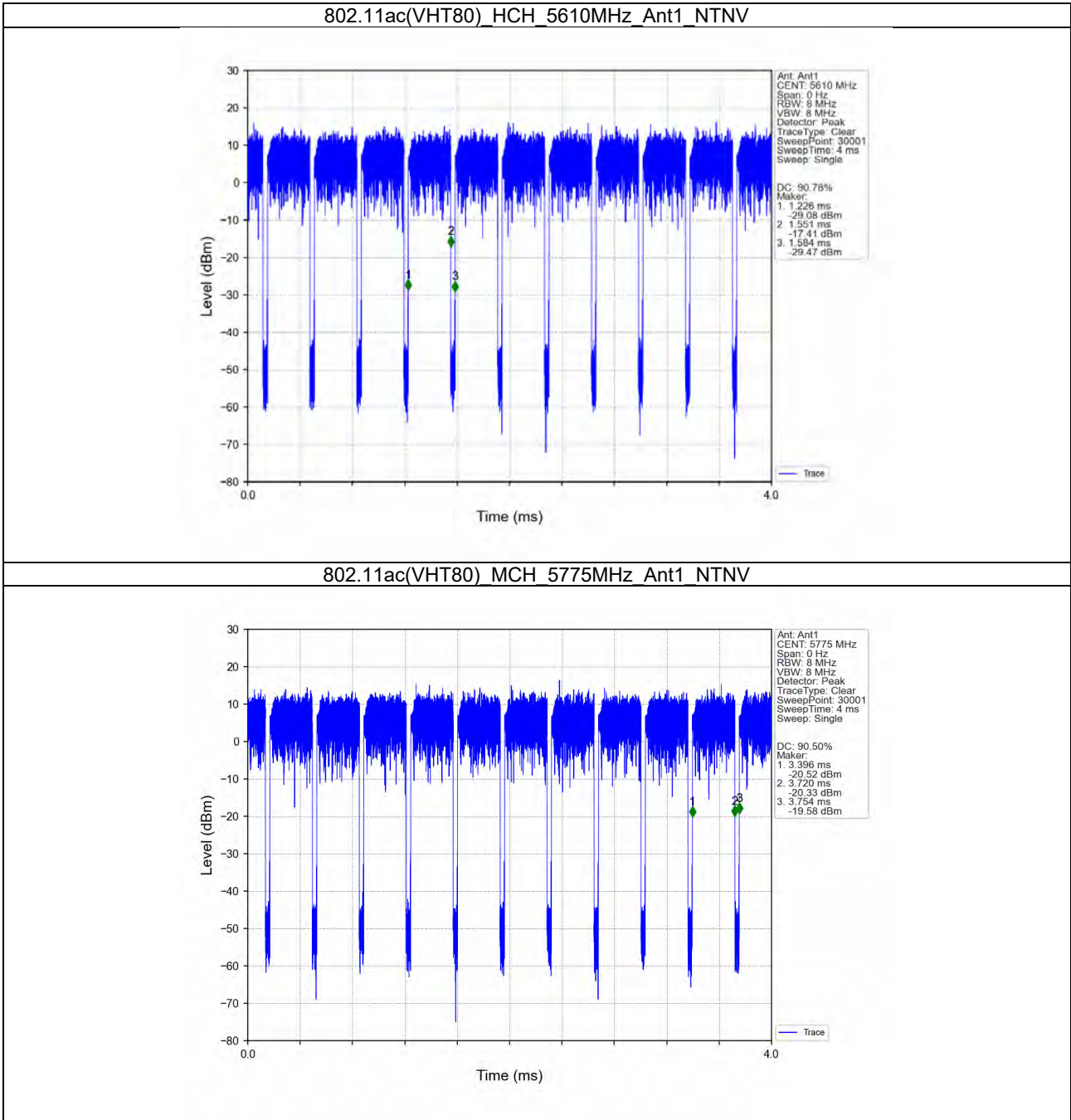
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2. Bandwidth

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	17.581	/	Pass
		5200	1	17.765	/	Pass
		5240	1	17.668	/	Pass
		5260	1	17.625	/	Pass
		5300	1	17.543	/	Pass
		5320	1	17.537	/	Pass
		5500	1	17.788	/	Pass
		5580	1	17.628	/	Pass
		5700	1	17.637	/	Pass
		5745	1	18.074	/	Pass
		5785	1	18.052	/	Pass
		5825	1	18.105	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.085	/	Pass
		5200	1	18.147	/	Pass
		5240	1	18.097	/	Pass
		5260	1	18.117	/	Pass
		5300	1	18.155	/	Pass
		5320	1	18.189	/	Pass
		5500	1	18.077	/	Pass
		5580	1	18.207	/	Pass
		5700	1	18.317	/	Pass
		5745	1	18.315	/	Pass
		5785	1	18.252	/	Pass
		5825	1	18.236	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.198	/	Pass
		5230	1	36.151	/	Pass
		5270	1	36.244	/	Pass
		5310	1	36.251	/	Pass
		5510	1	36.284	/	Pass
		5550	1	36.296	/	Pass
		5670	1	36.235	/	Pass
		5755	1	36.457	/	Pass
		5795	1	36.162	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.680	/	Pass
		5290	1	75.758	/	Pass
		5530	1	75.843	/	Pass
		5610	1	75.839	/	Pass
		5775	1	75.856	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	22.781	/	Pass
		5200	1	25.690	/	Pass
		5240	1	25.821	/	Pass



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		5260	1	26.882	/	Pass
		5300	1	24.202	/	Pass
		5320	1	23.436	/	Pass
		5500	1	29.010	/	Pass
		5580	1	24.430	/	Pass
		5700	1	28.491	/	Pass
802.11ac (VHT20)	SISO	5180	1	20.442	/	Pass
		5200	1	20.268	/	Pass
		5240	1	20.126	/	Pass
		5260	1	20.050	/	Pass
		5300	1	20.355	/	Pass
		5320	1	21.699	/	Pass
		5500	1	21.782	/	Pass
		5580	1	21.837	/	Pass
802.11ac (VHT40)	SISO	5700	1	26.234	/	Pass
		5190	1	40.458	/	Pass
		5230	1	40.190	/	Pass
		5270	1	40.523	/	Pass
		5310	1	39.842	/	Pass
		5510	1	40.527	/	Pass
		5550	1	40.202	/	Pass
802.11ac (VHT80)	SISO	5670	1	40.311	/	Pass
		5210	1	80.252	/	Pass
		5290	1	80.849	/	Pass
		5530	1	80.381	/	Pass
		5610	1	80.822	/	Pass

2.1.3 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.346	≥ 0.5	Pass
		5785	1	14.720	≥ 0.5	Pass
		5825	1	14.091	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.058	≥ 0.5	Pass
		5785	1	13.885	≥ 0.5	Pass
		5825	1	13.925	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.085	≥ 0.5	Pass
		5795	1	33.722	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.143	≥ 0.5	Pass

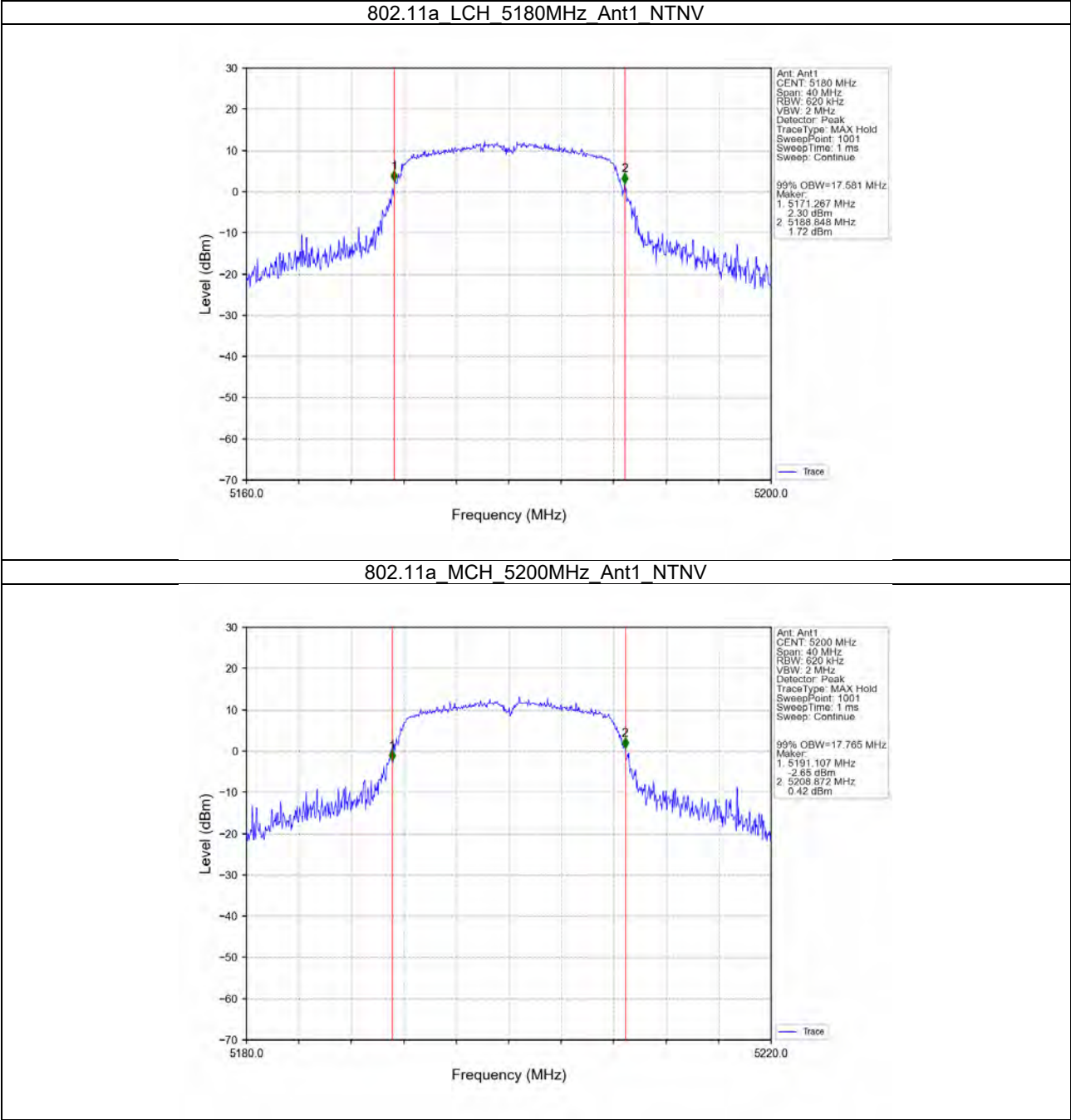


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2.2 Test Graph

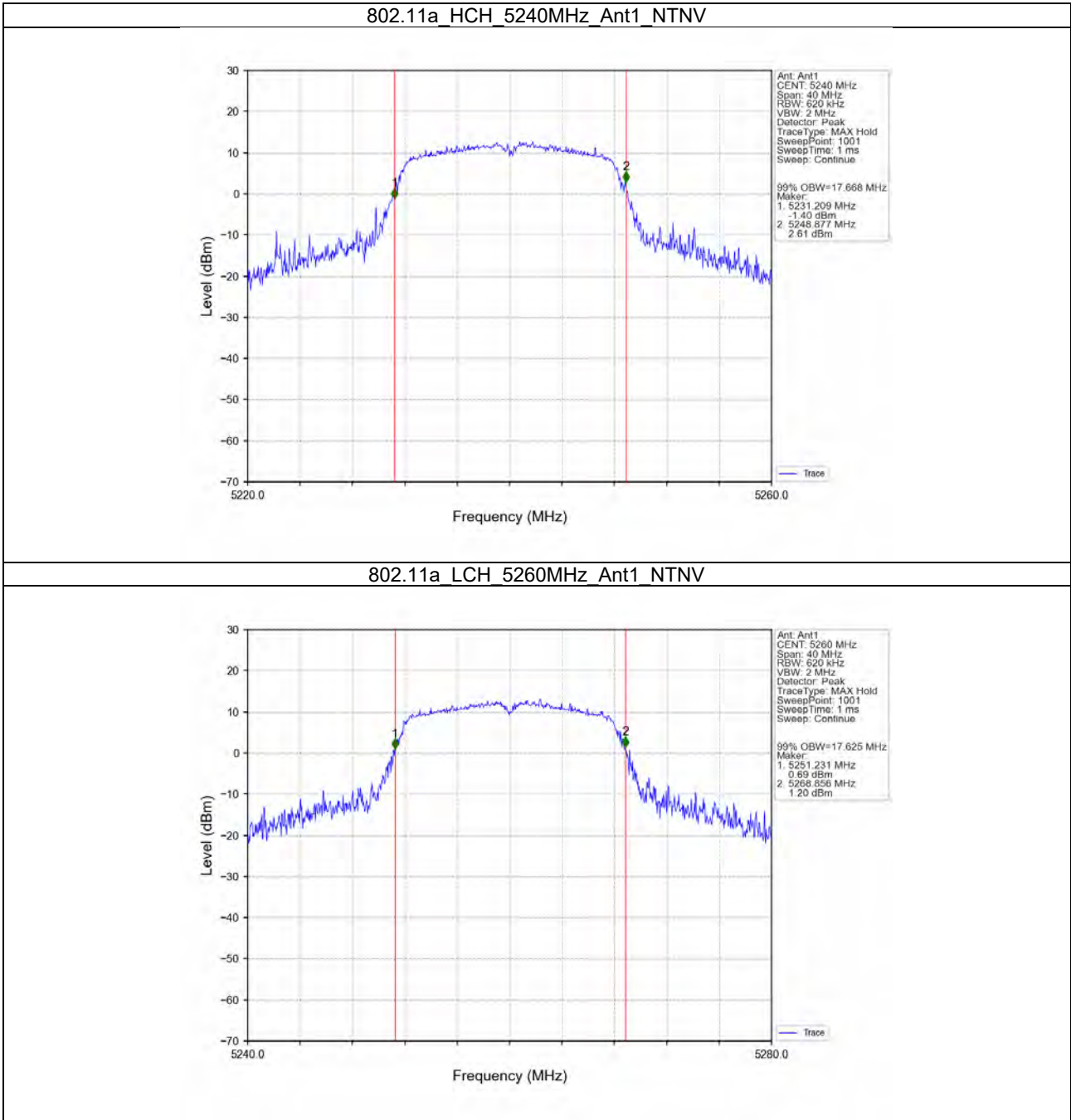
2.2.1 OBW





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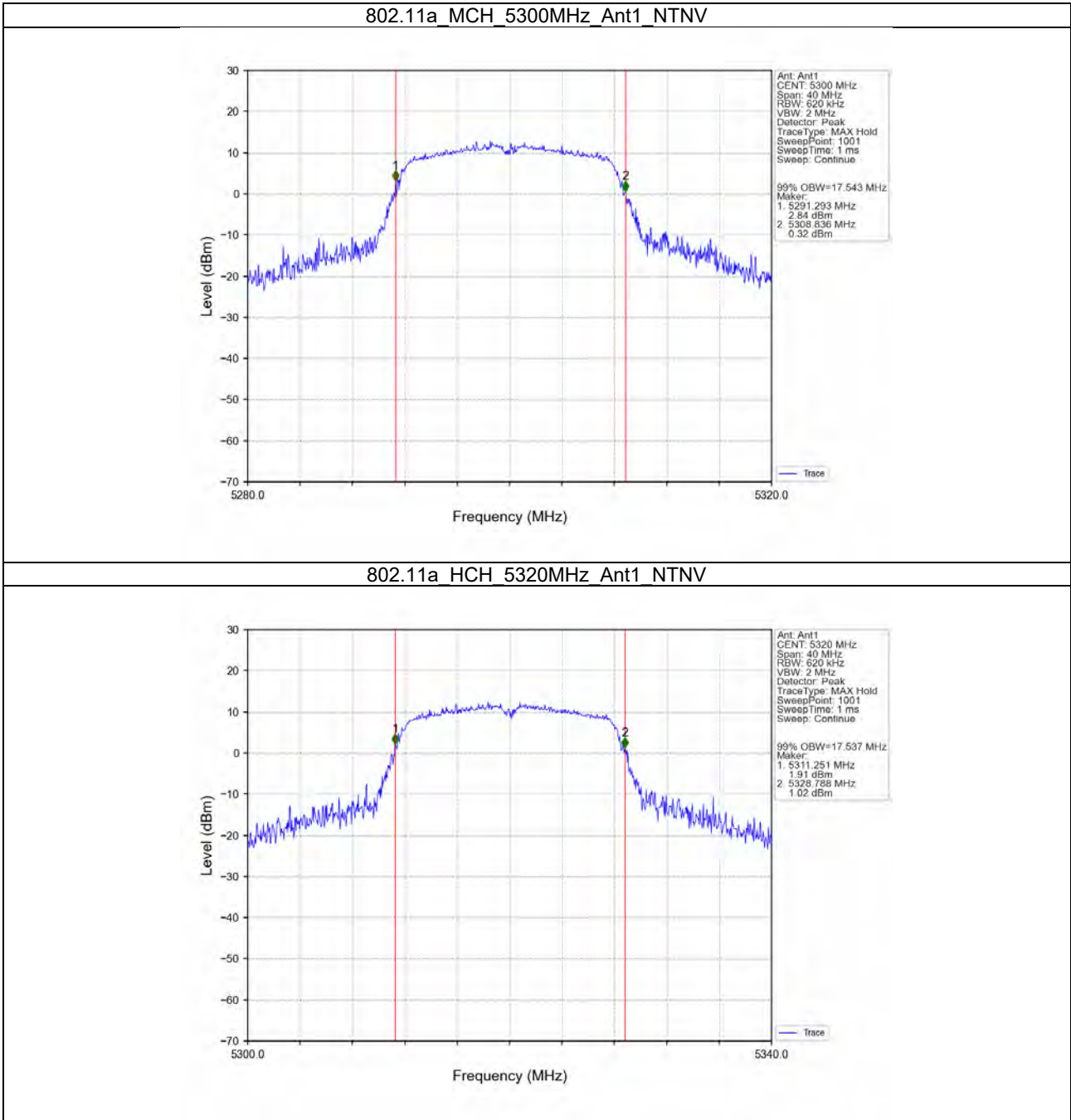
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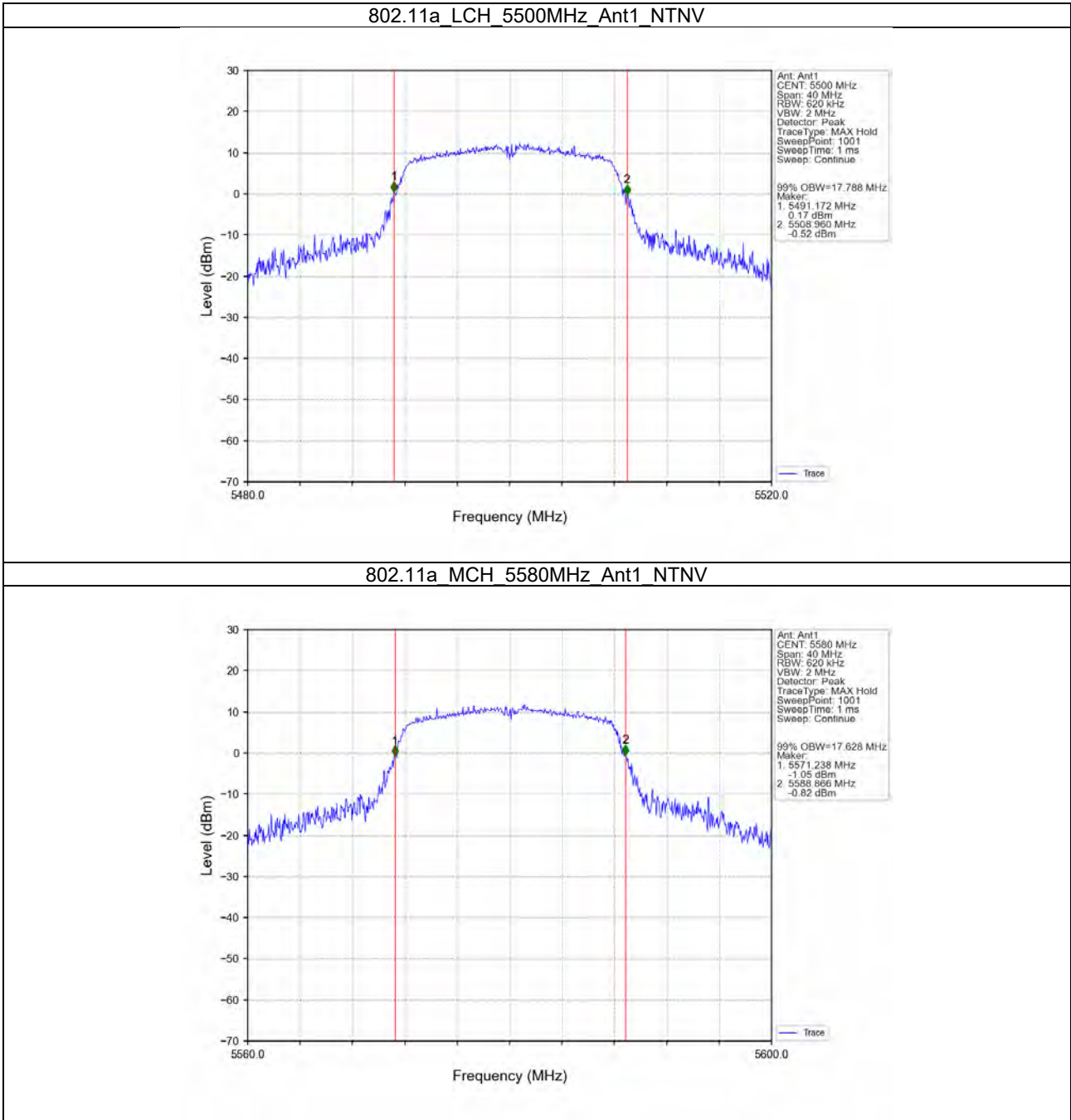
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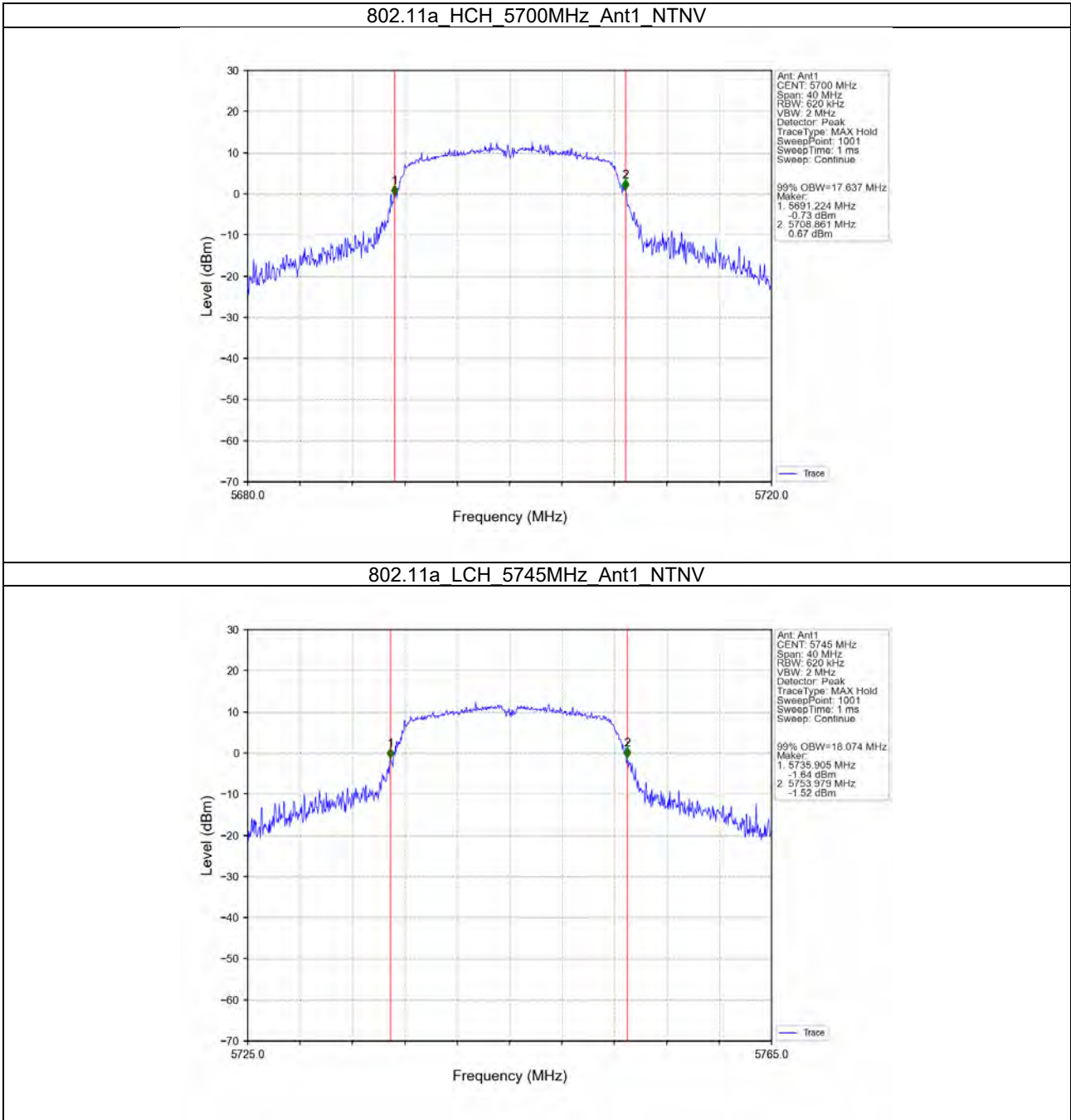
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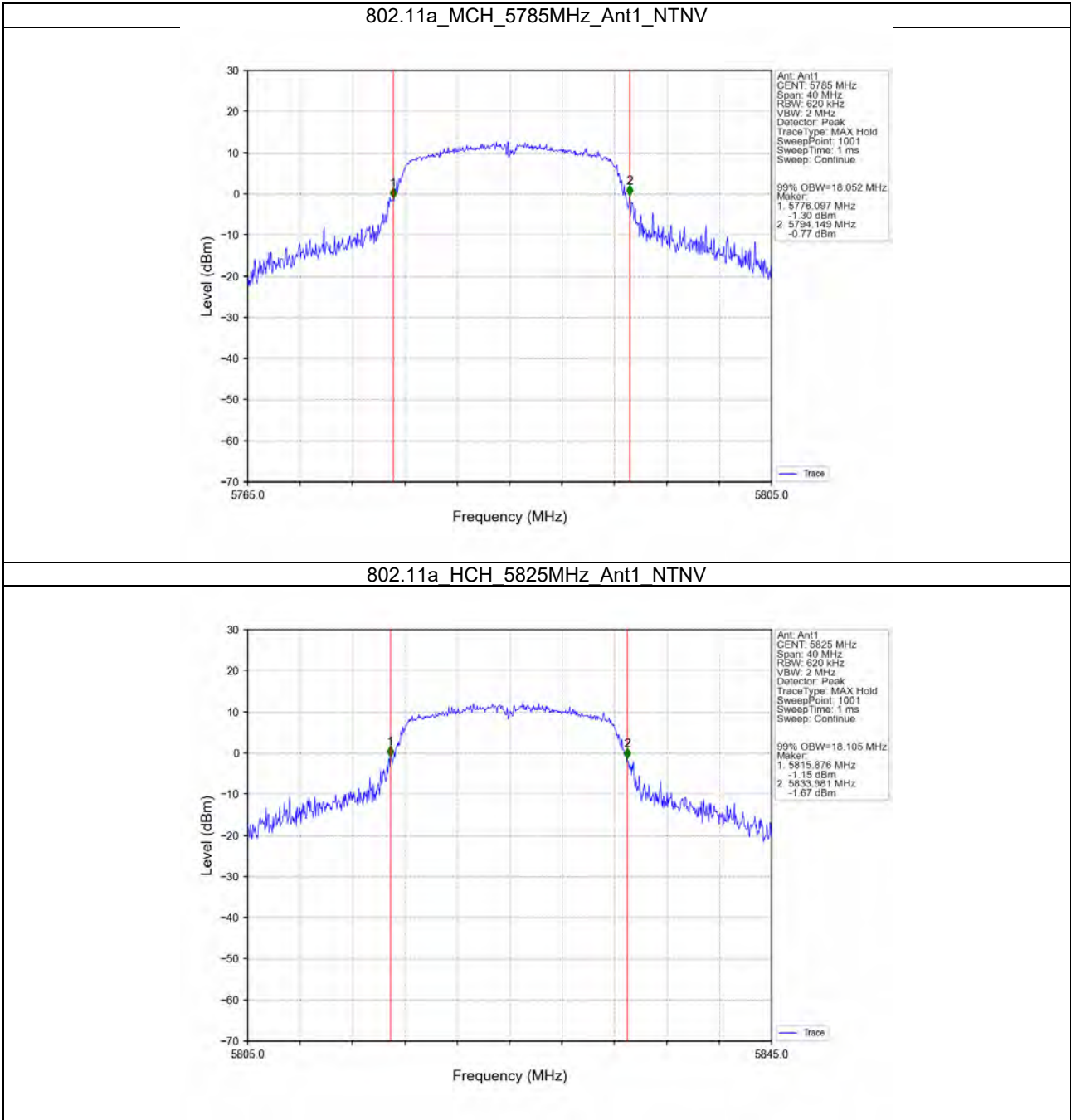
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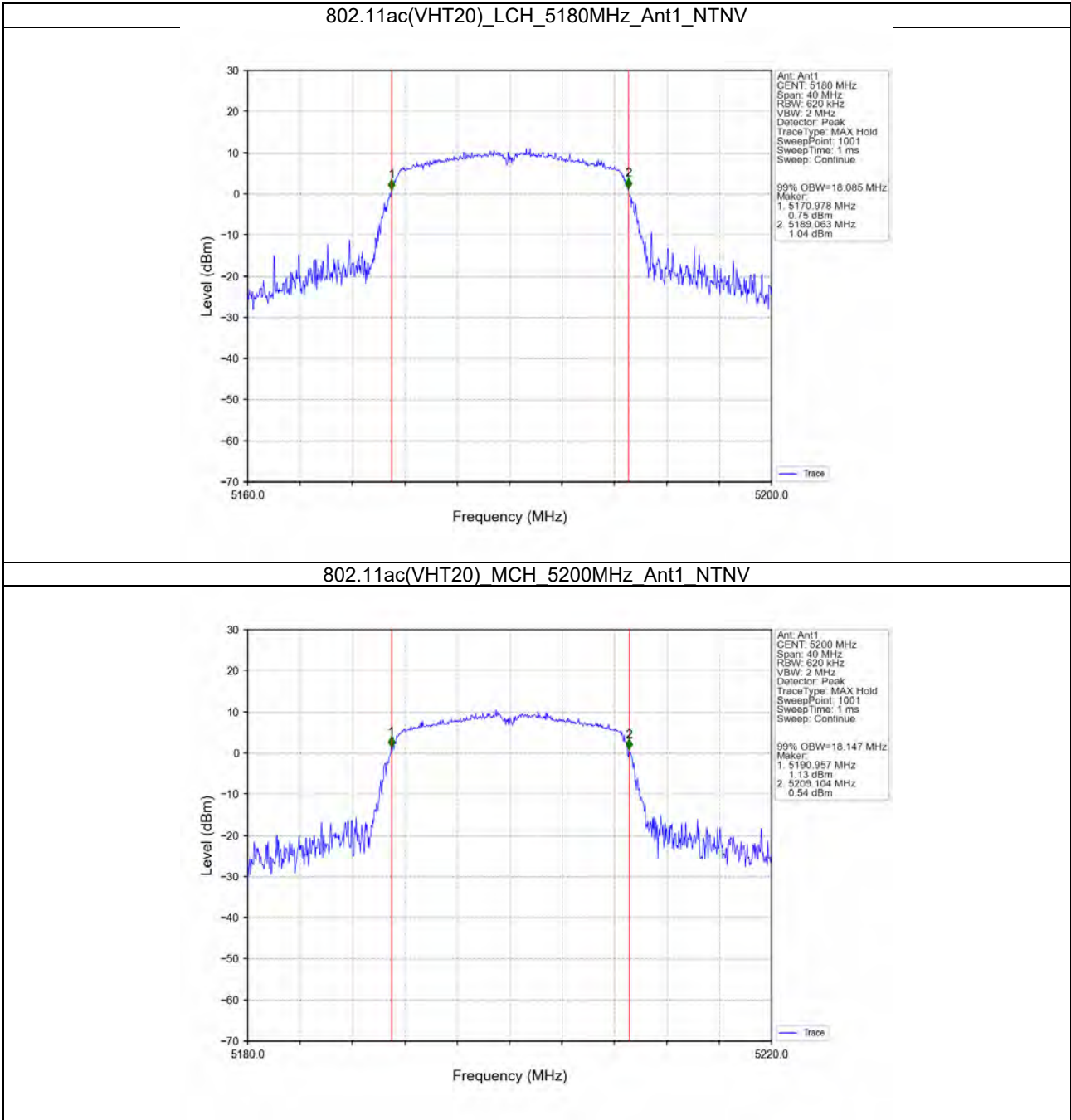
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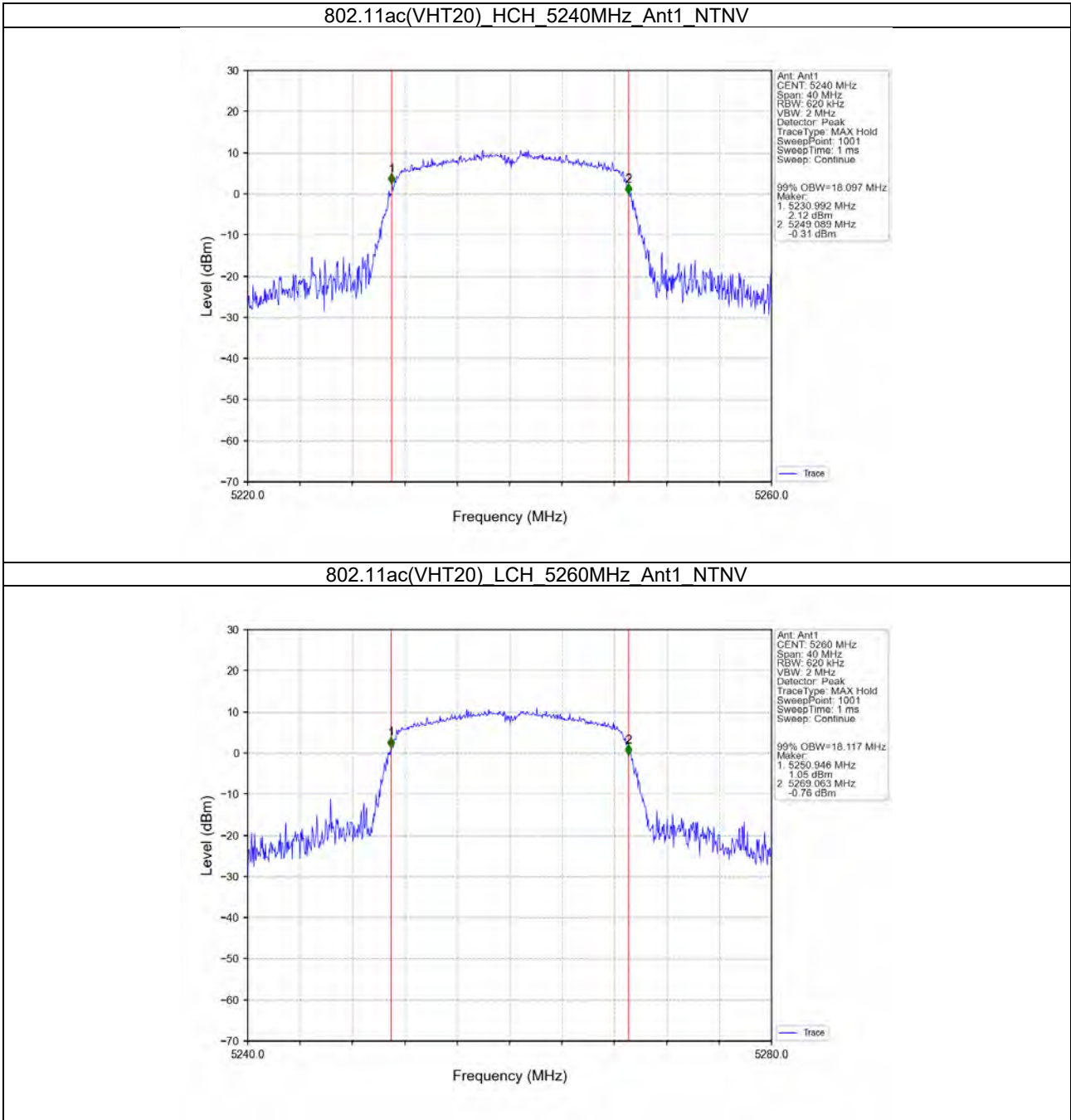
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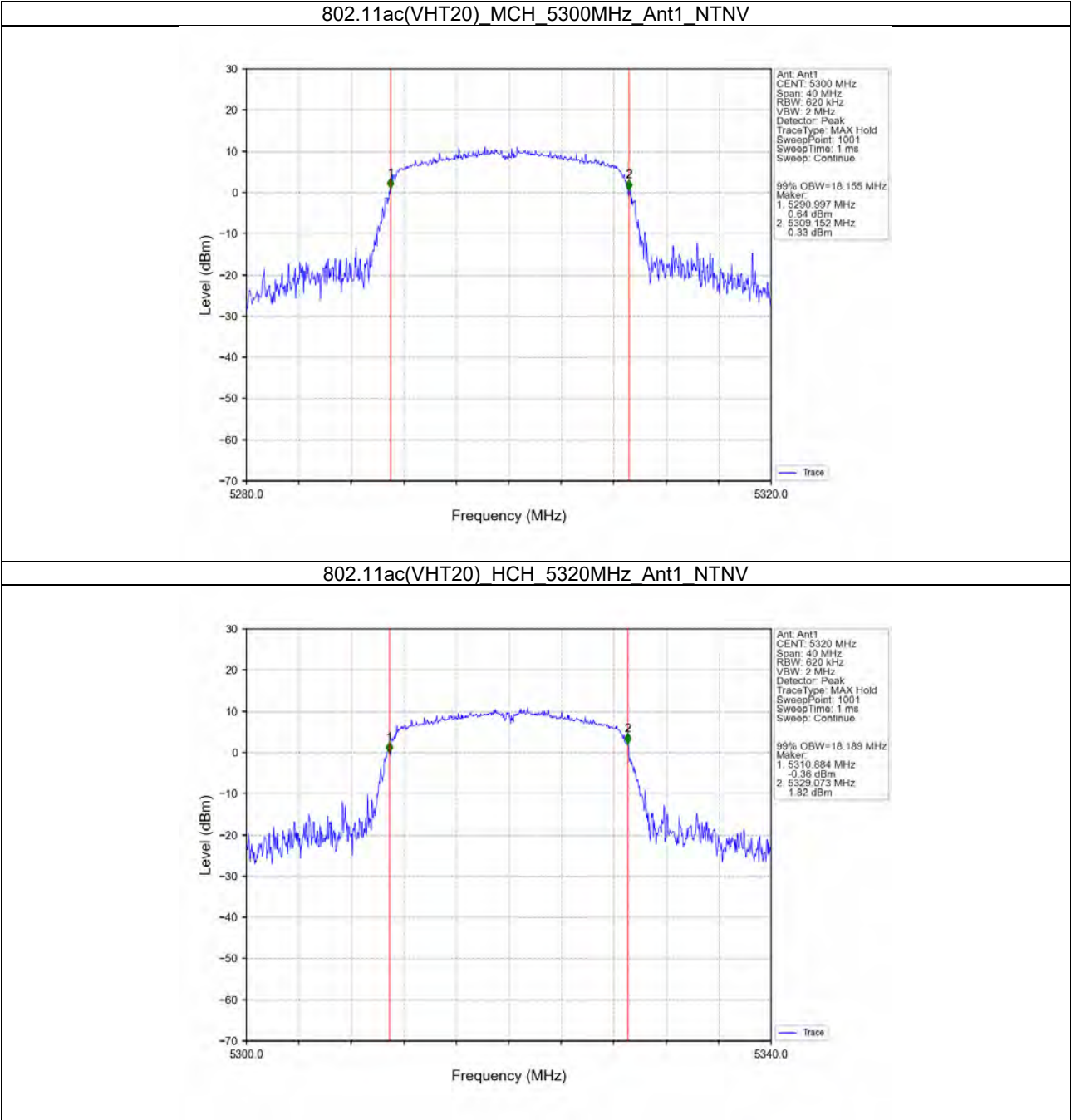
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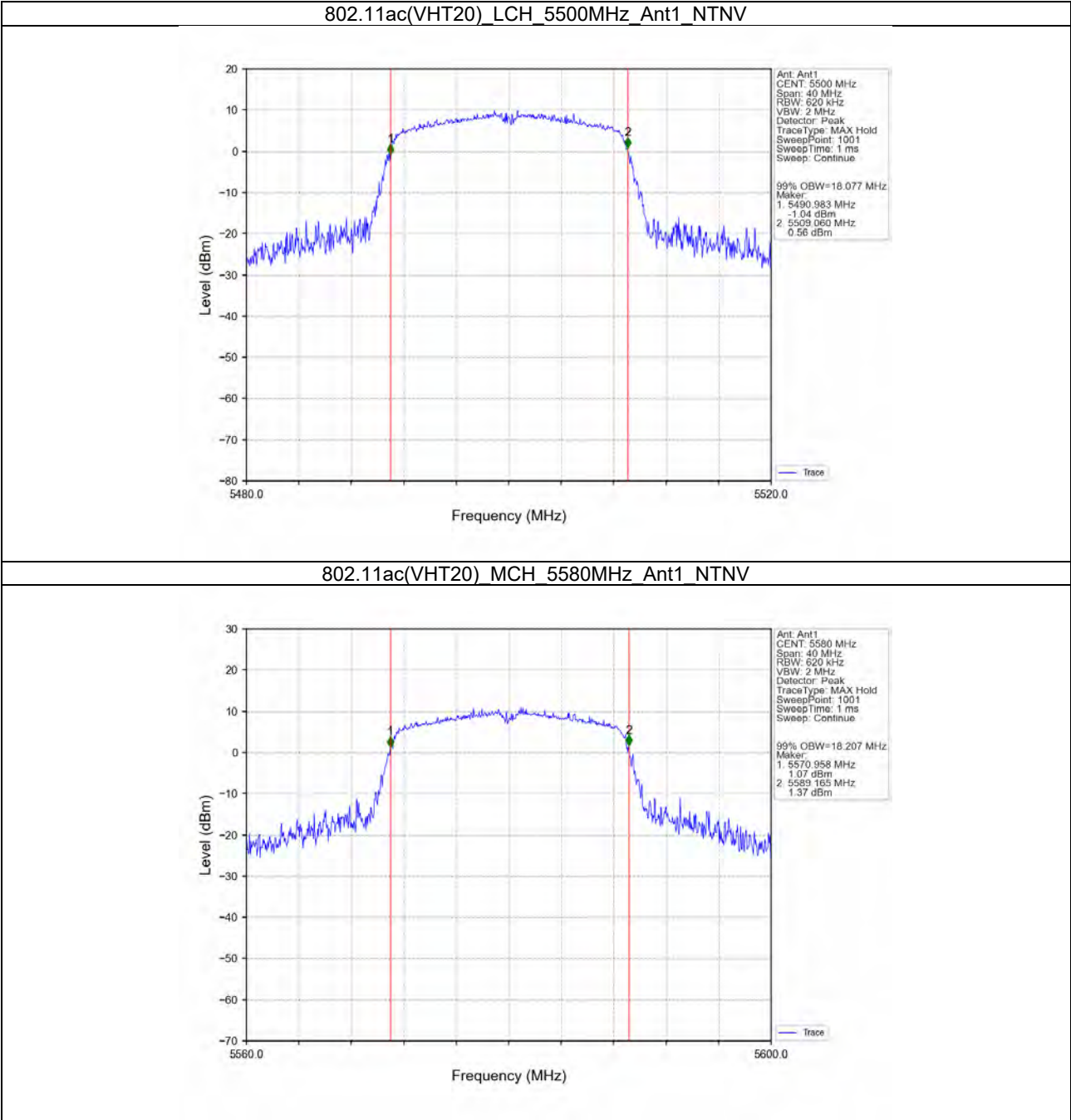
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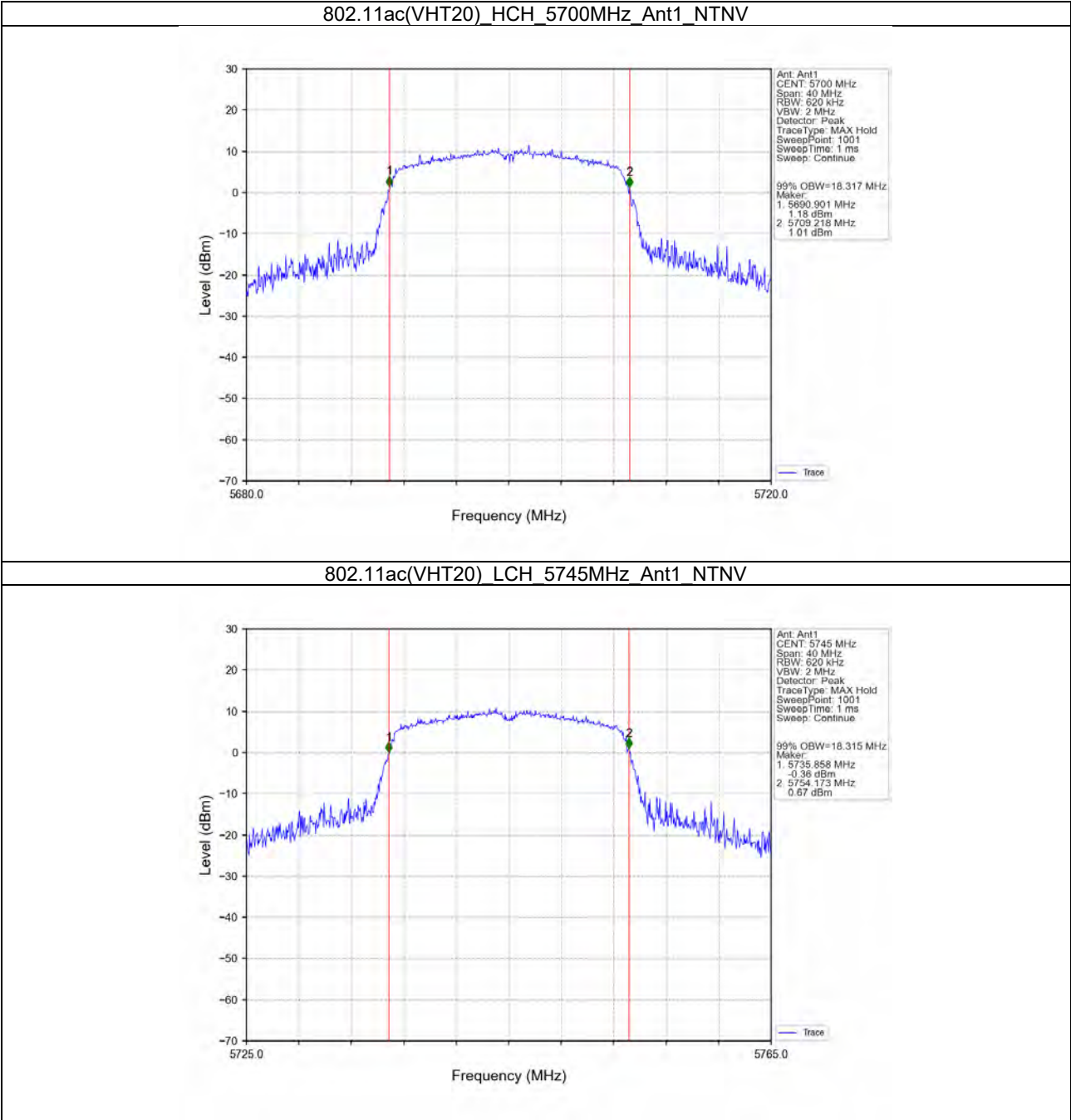
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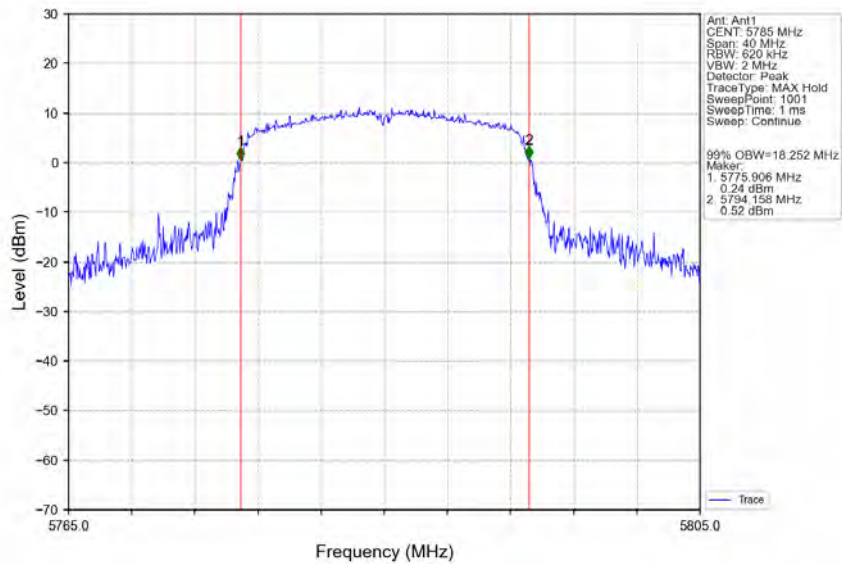
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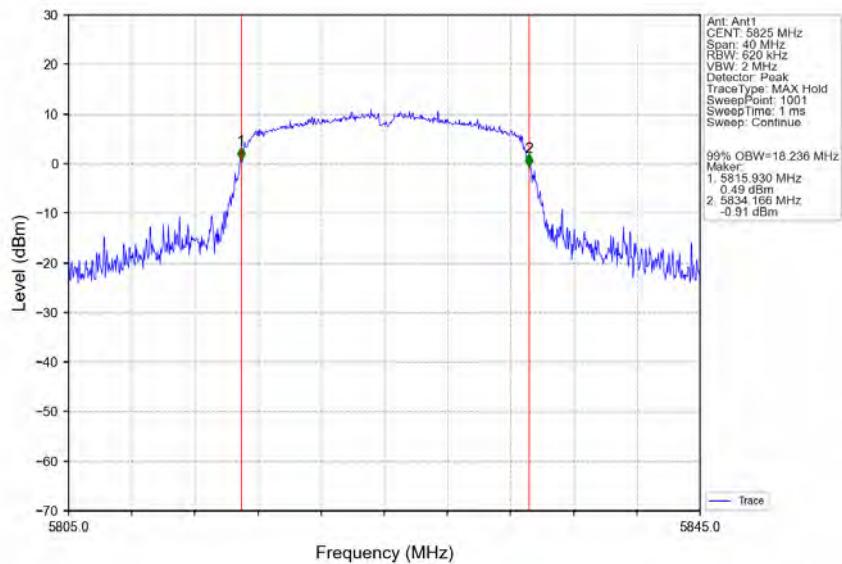
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802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



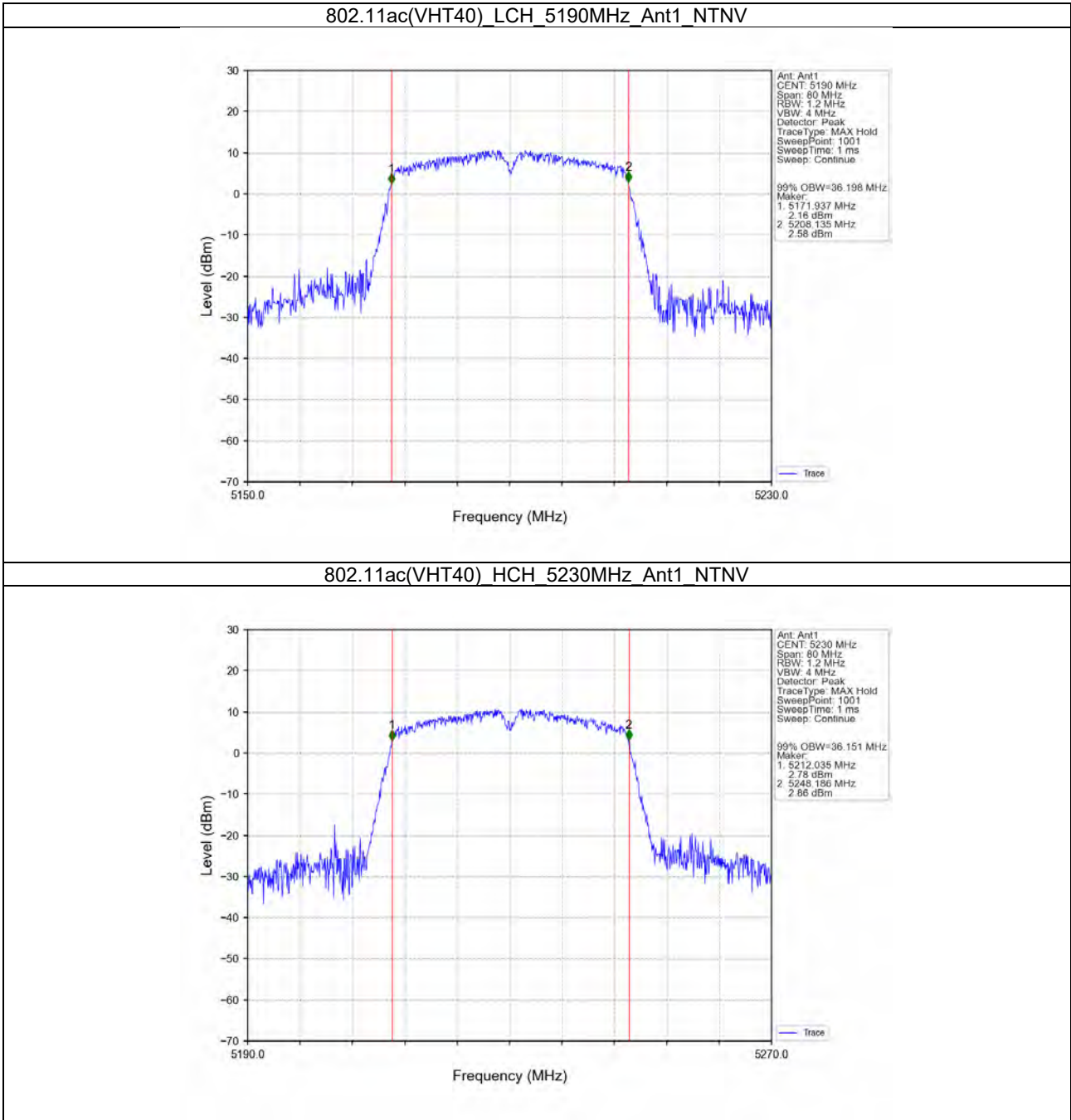
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV





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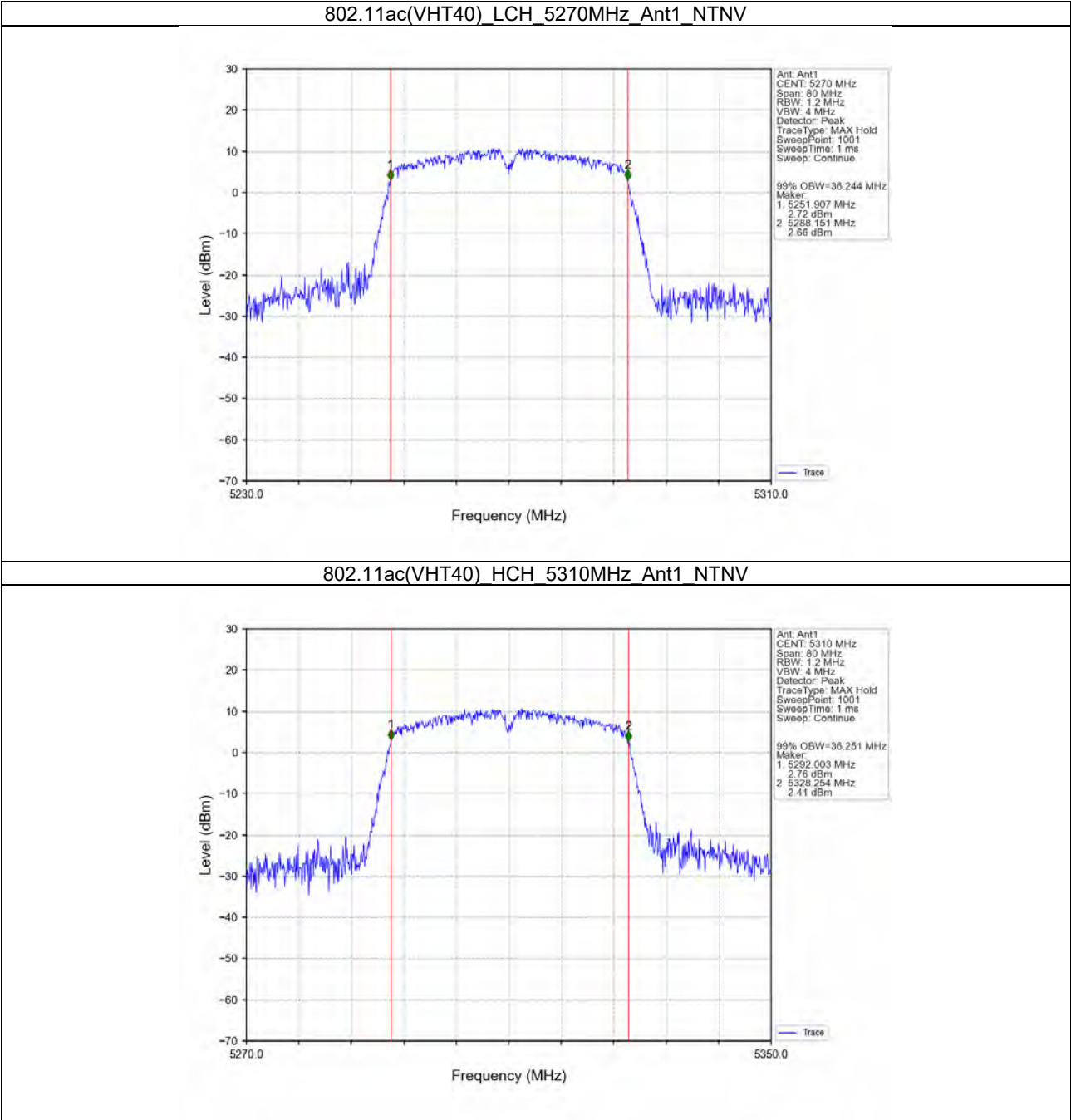
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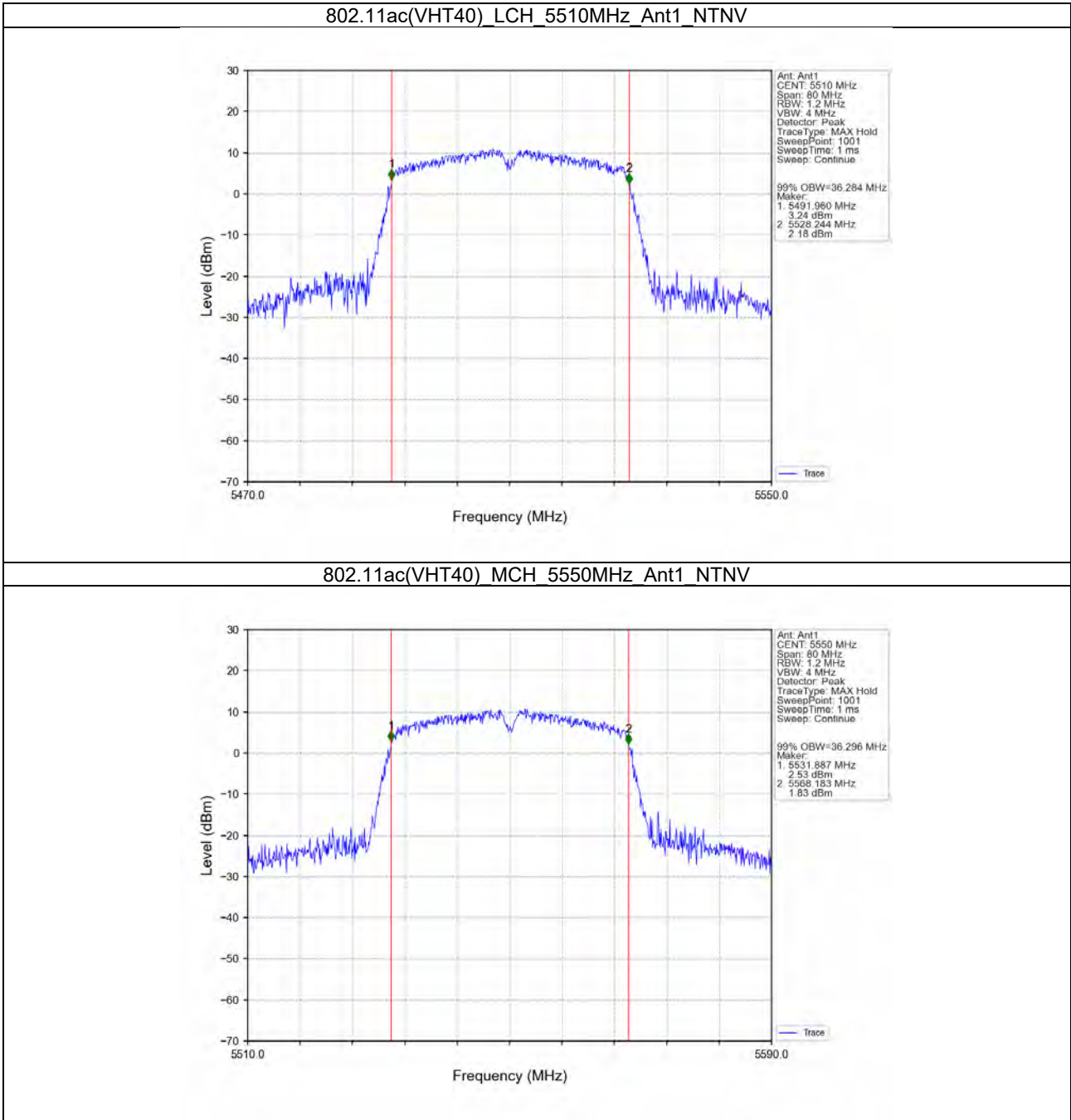
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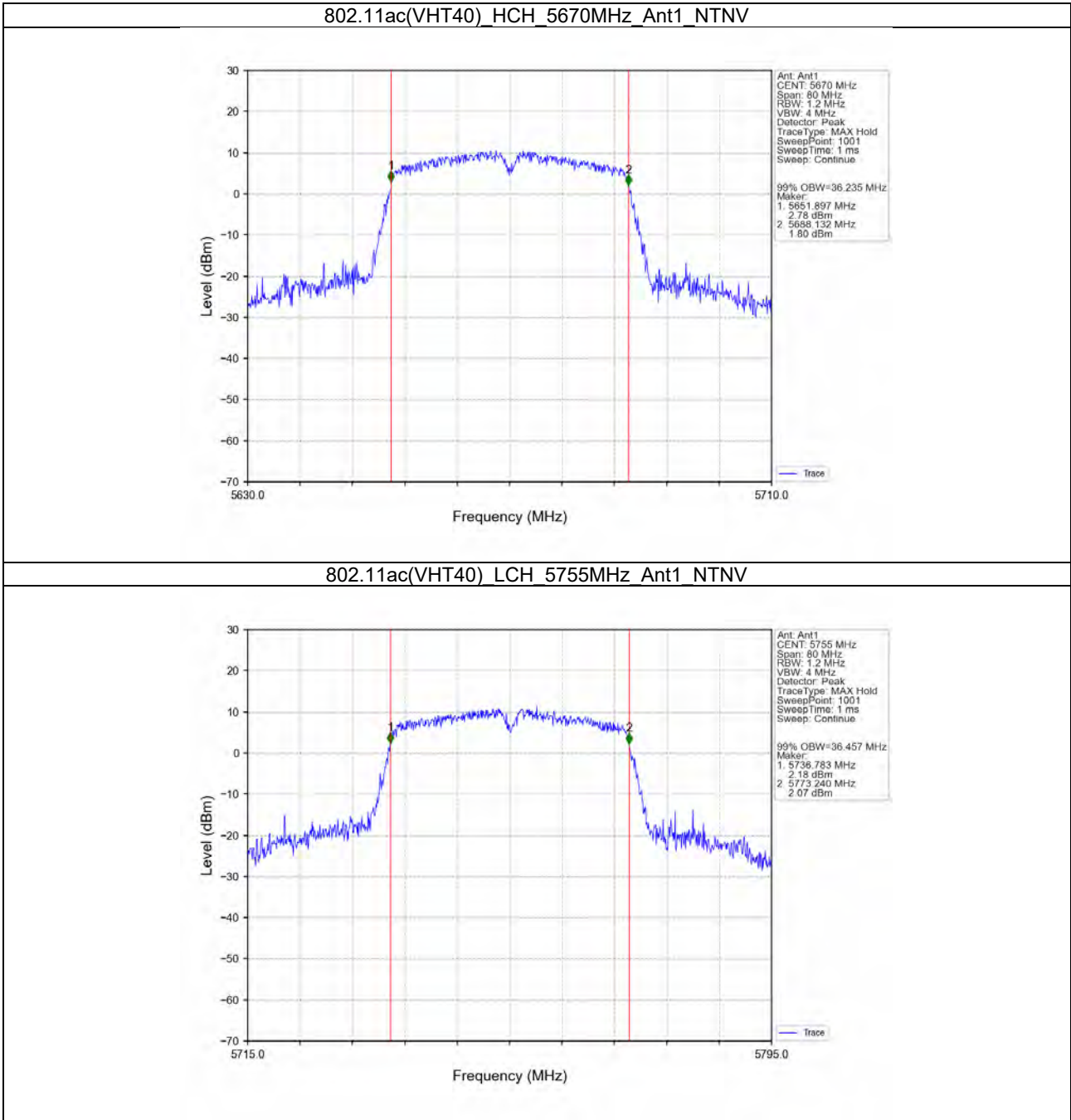
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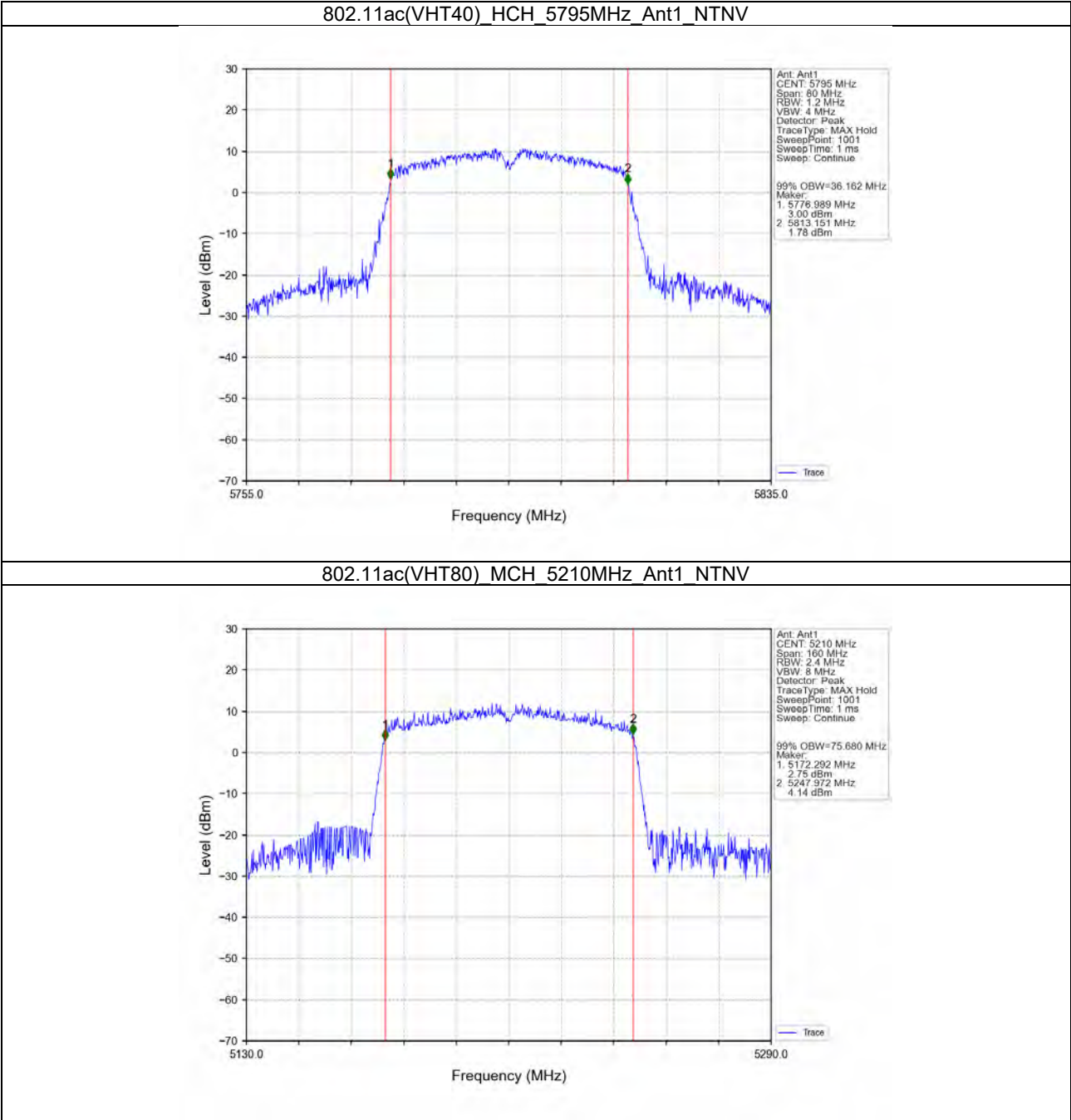
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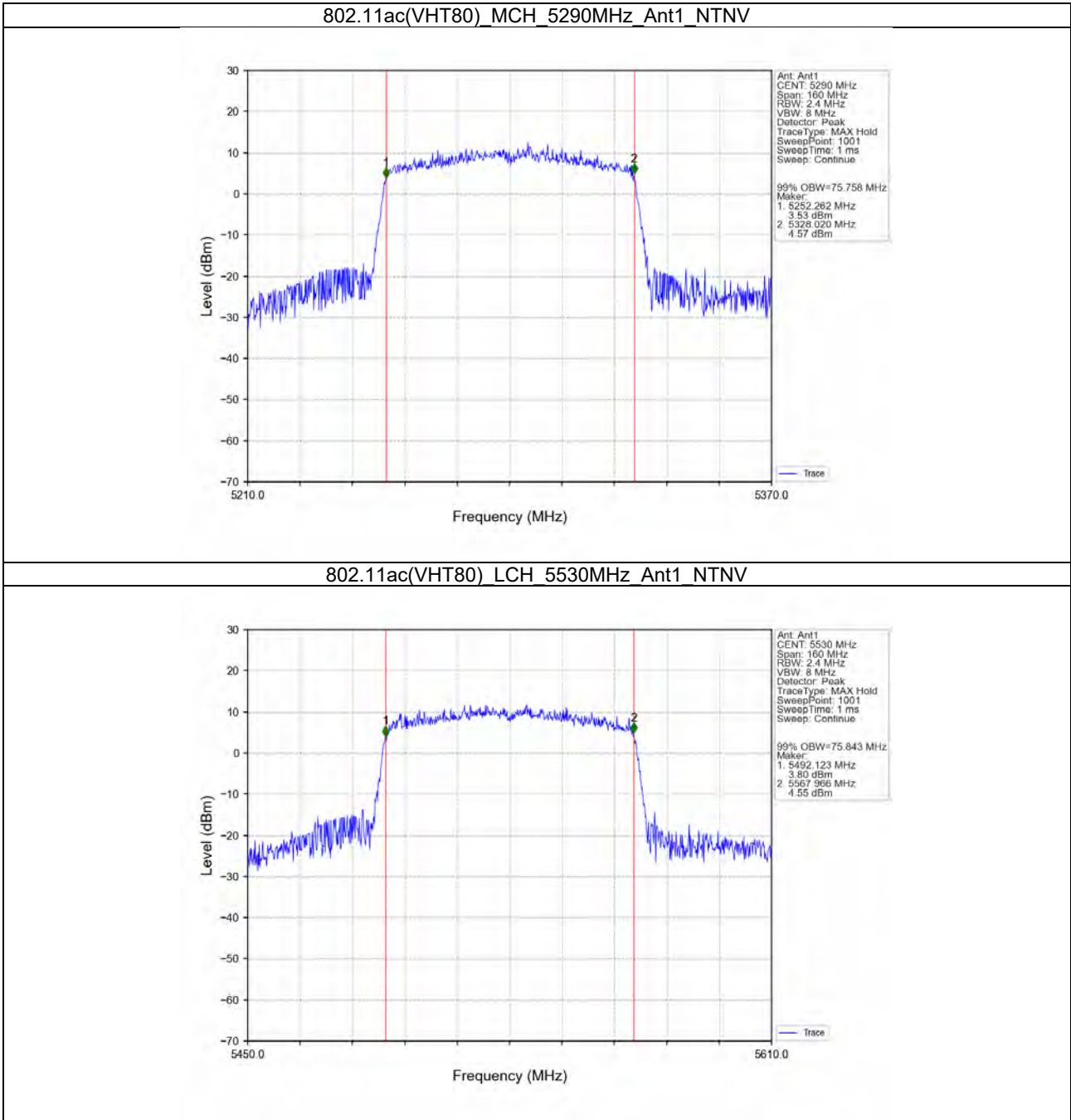
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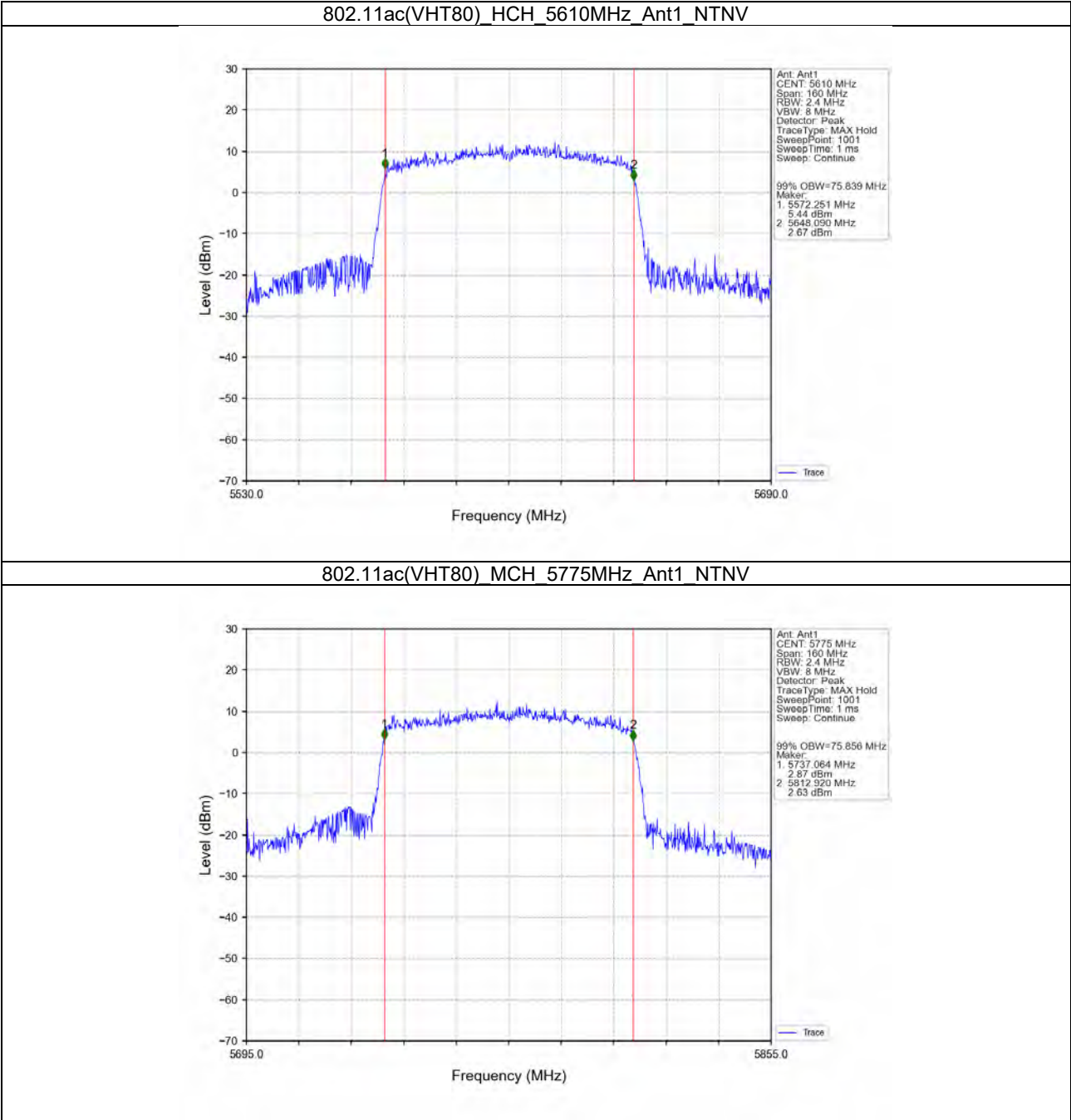
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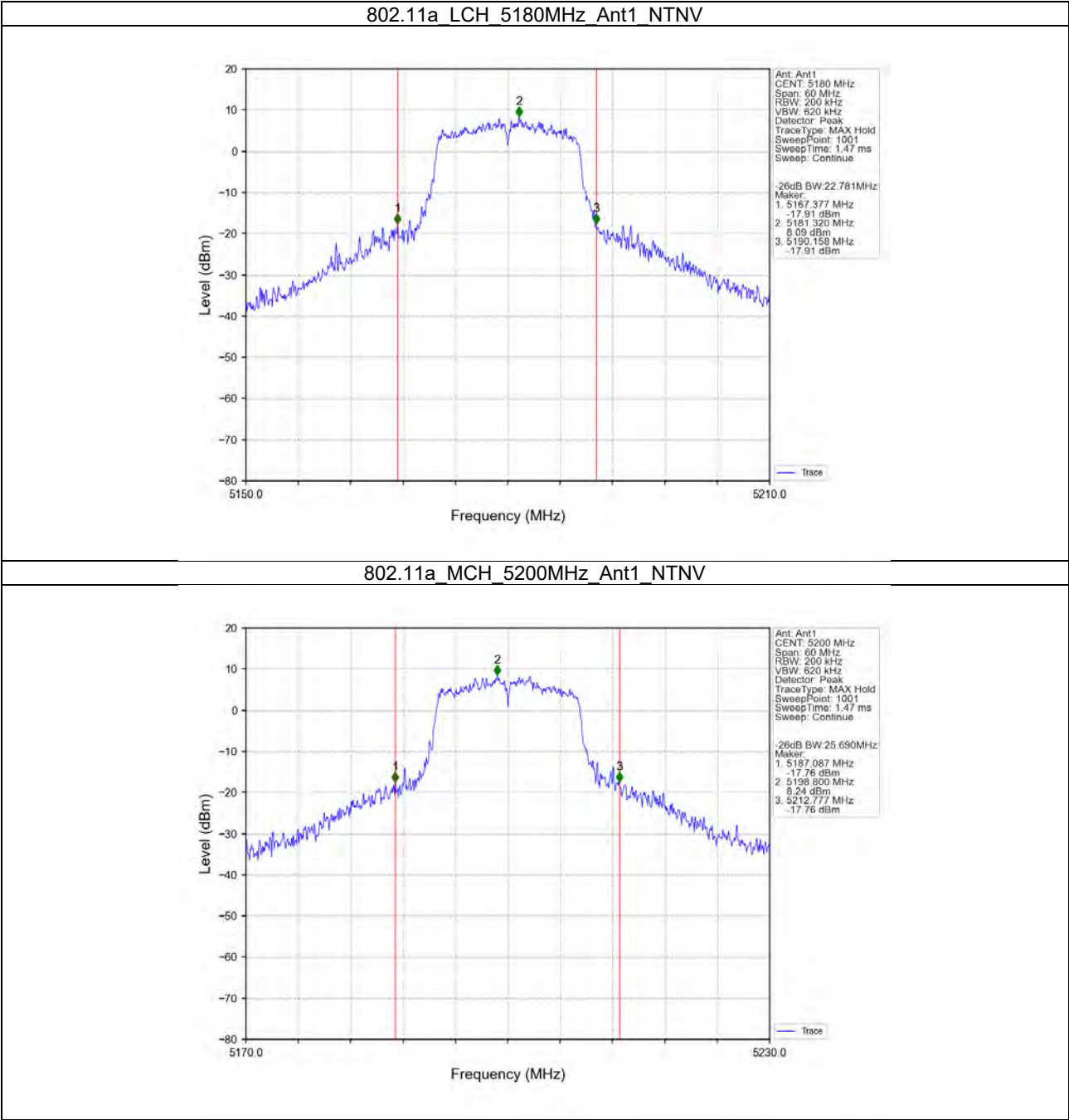




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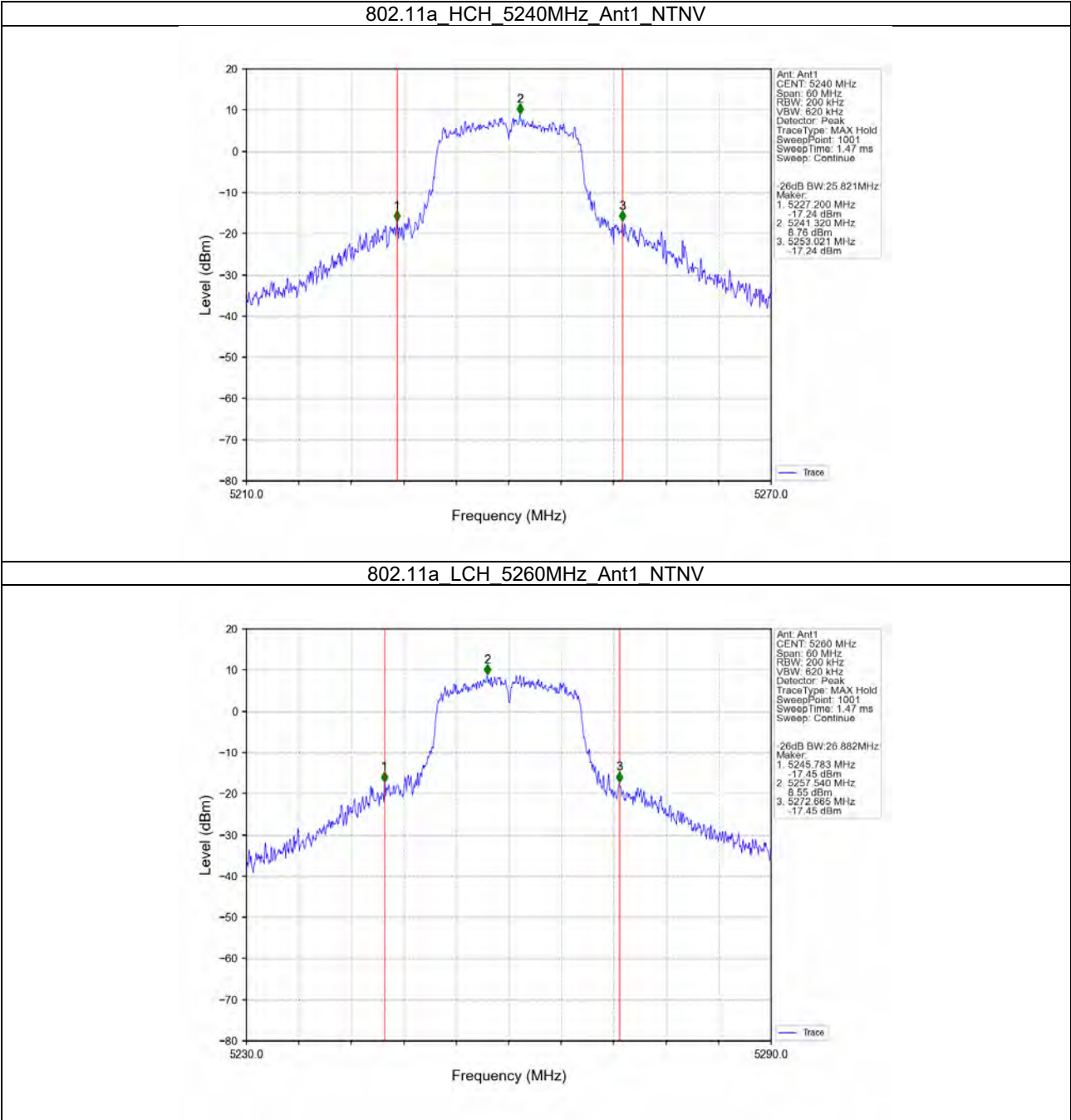
2.2.2 26dB BW



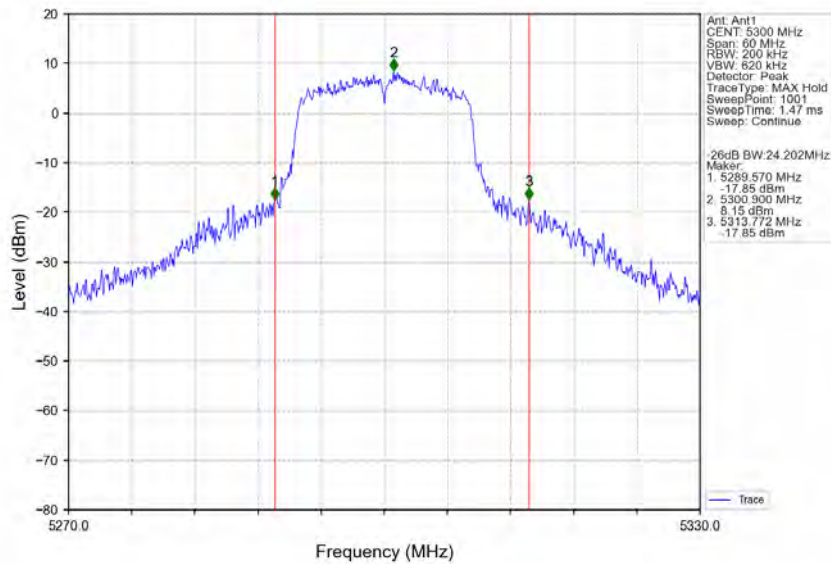


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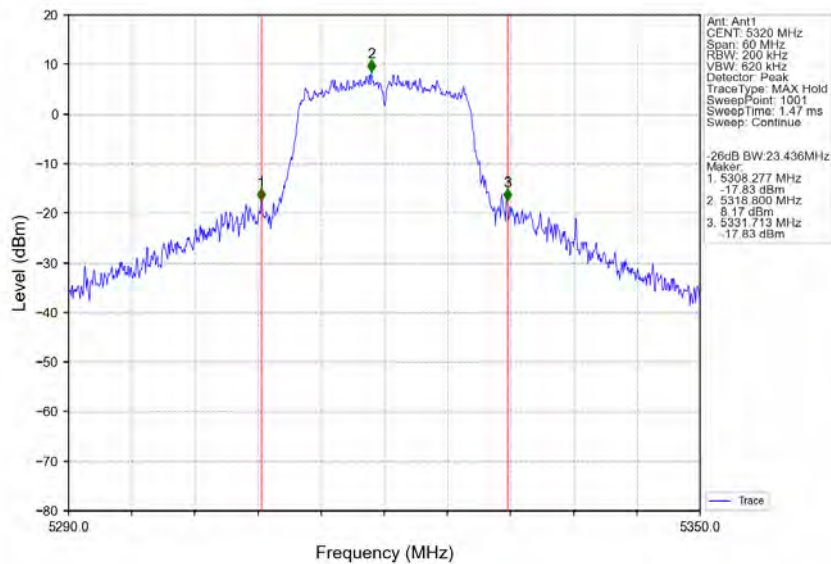
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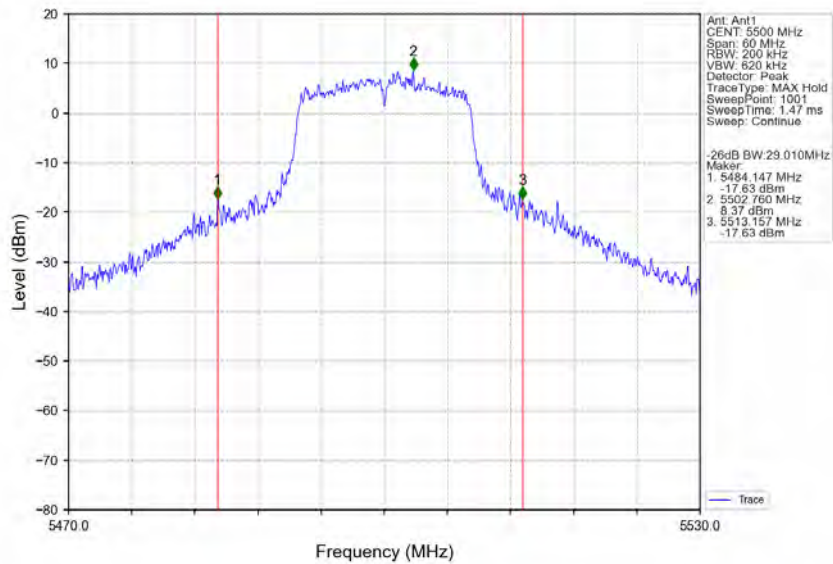
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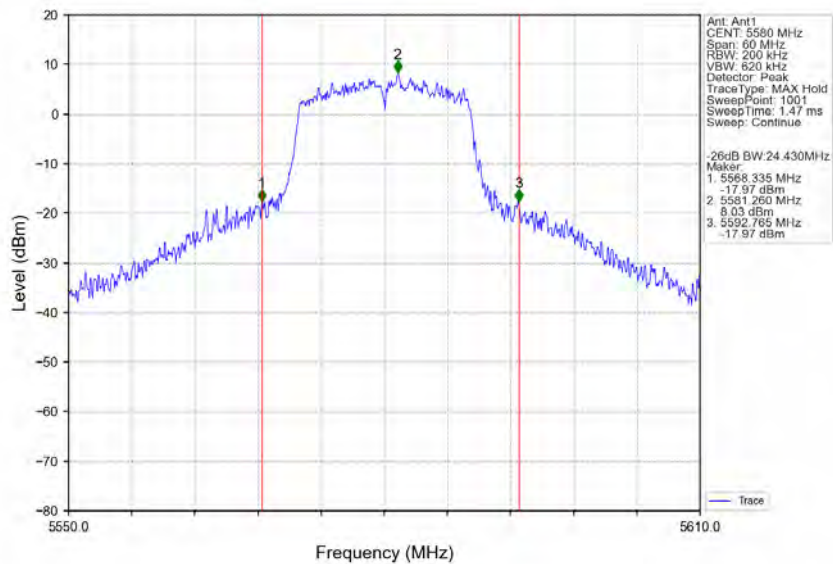
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802.11a_LCH_5500MHz_Ant1_NTNV



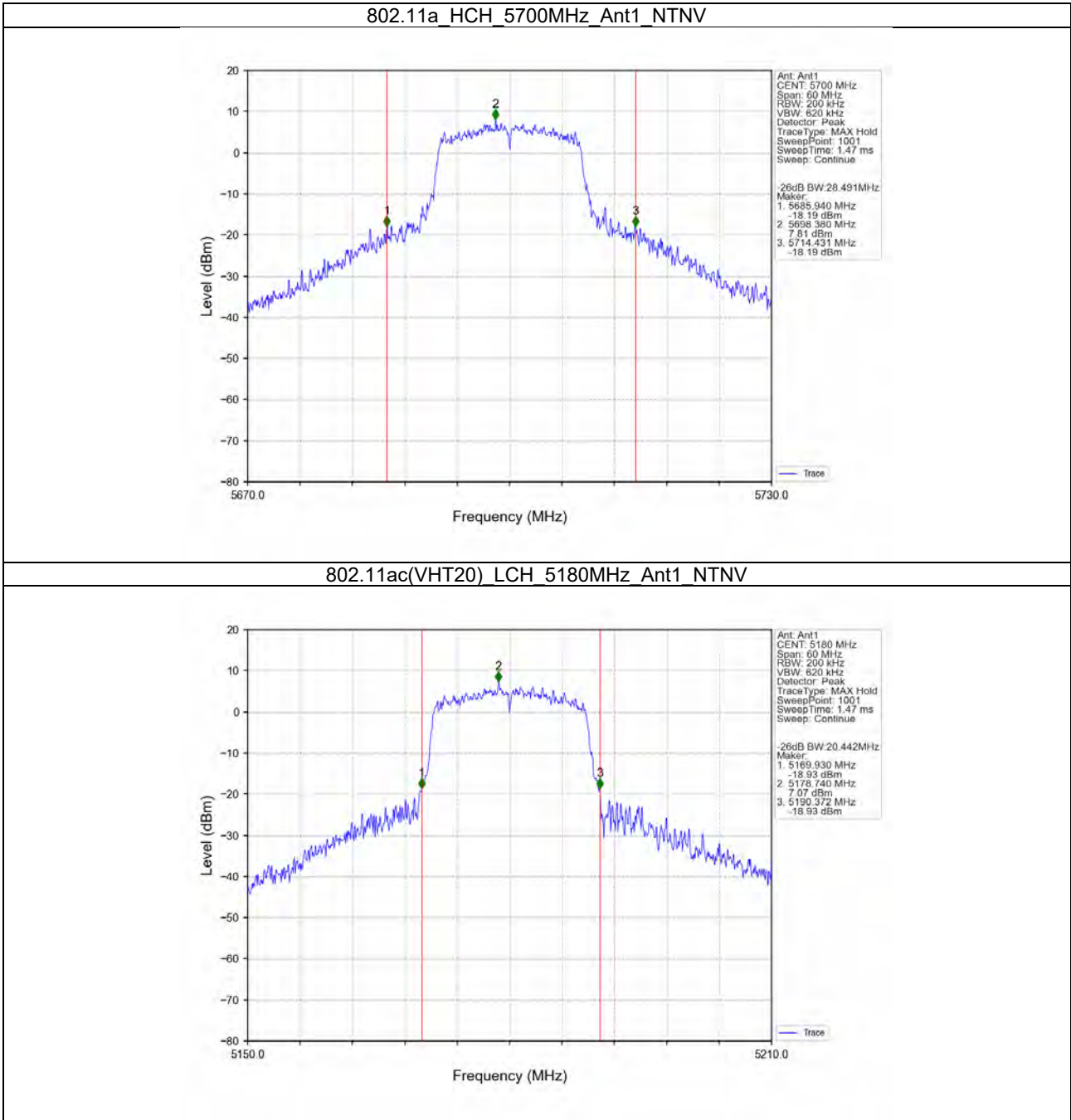
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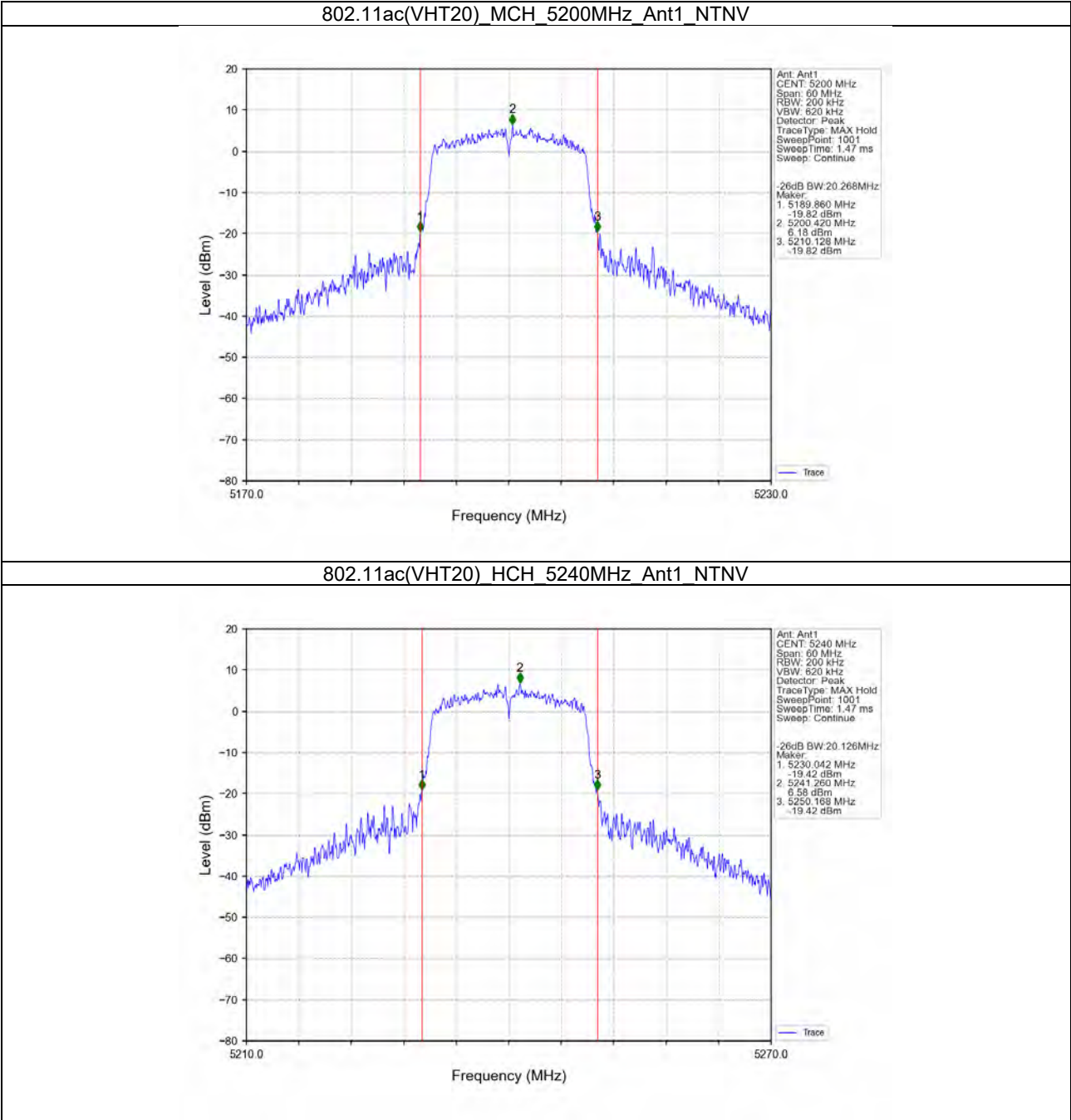
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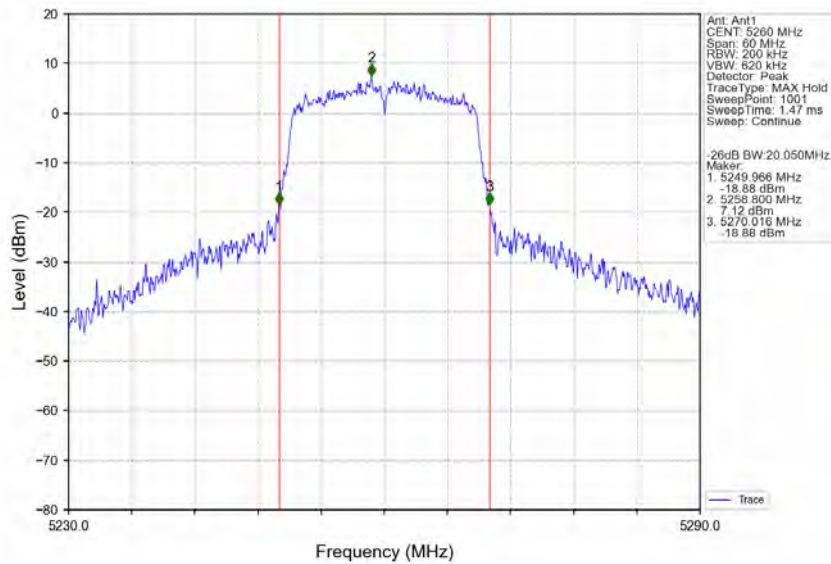


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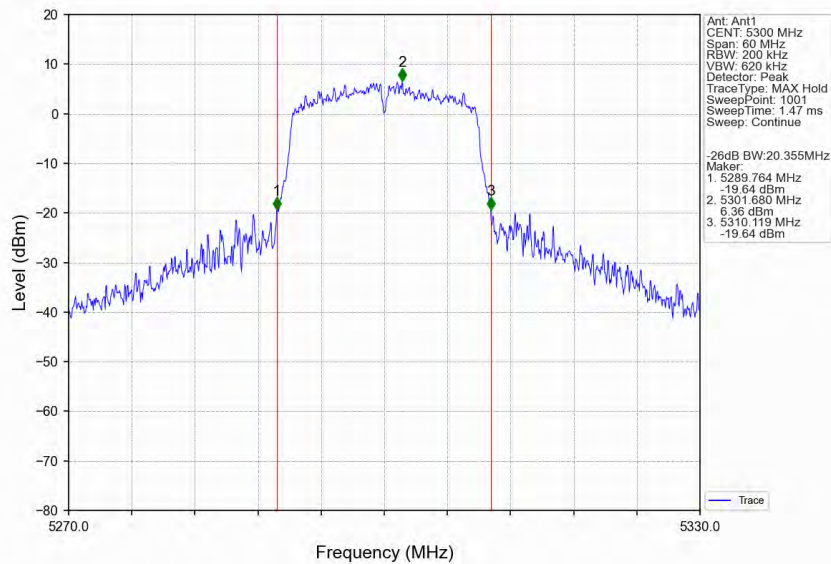
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802.11ac(VHT20)_LCH_5260MHz_Ant1_NTNV



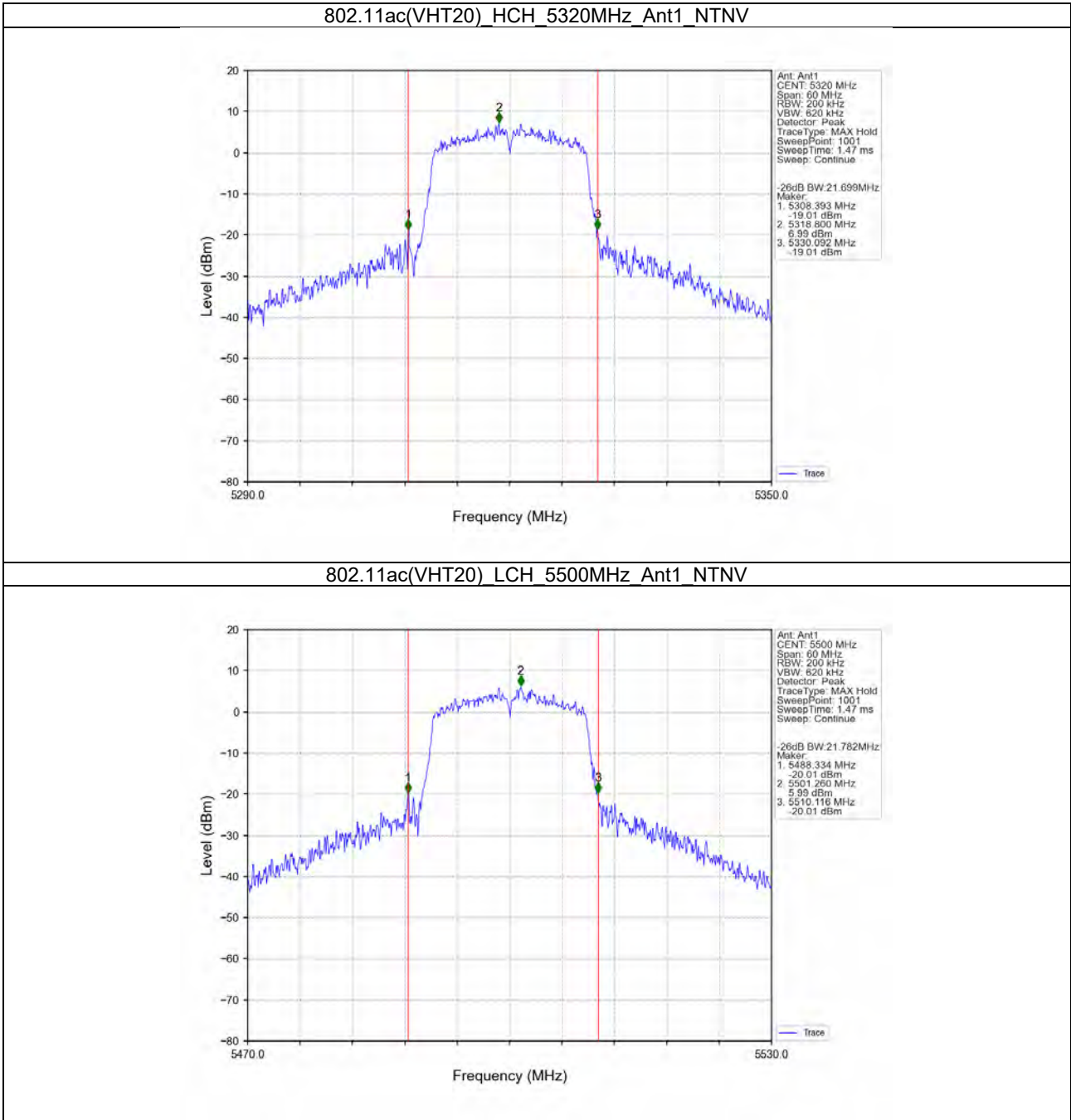
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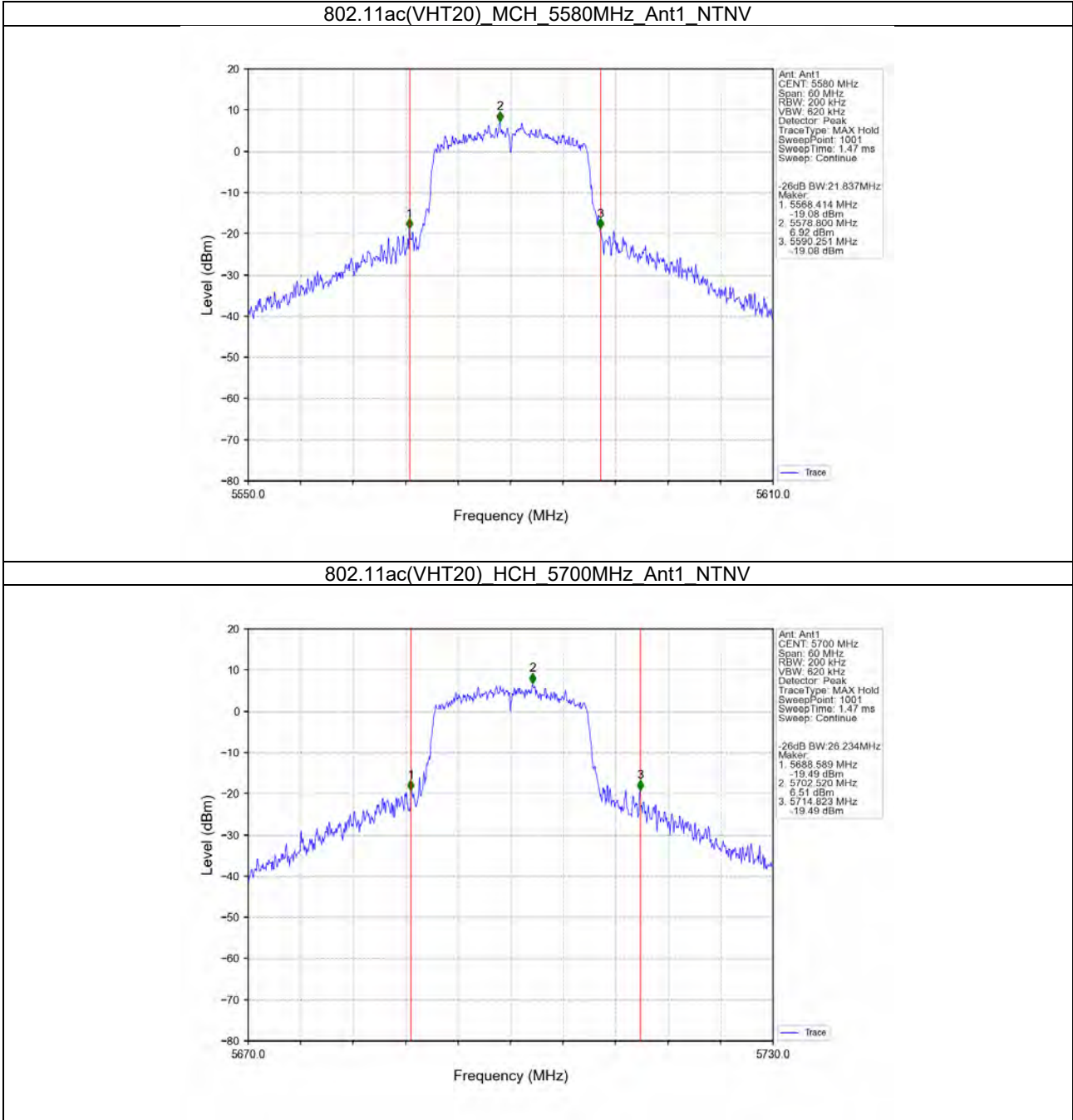
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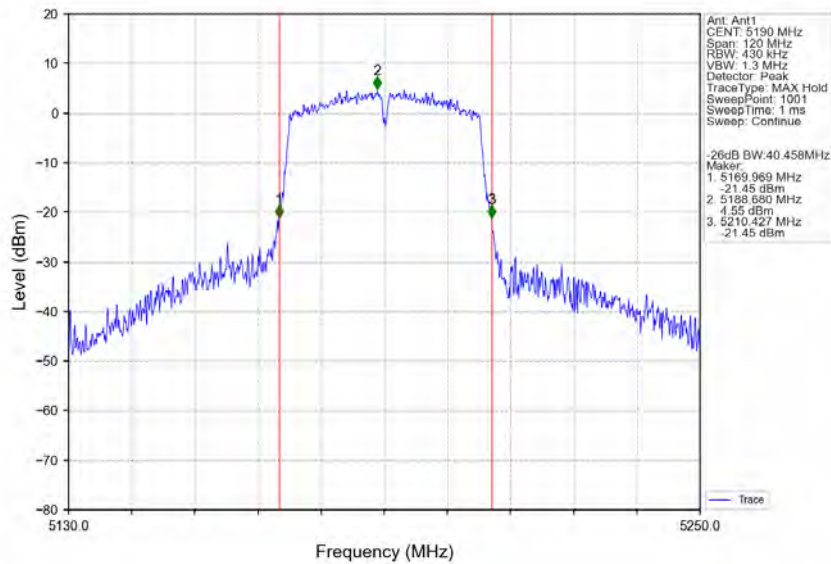
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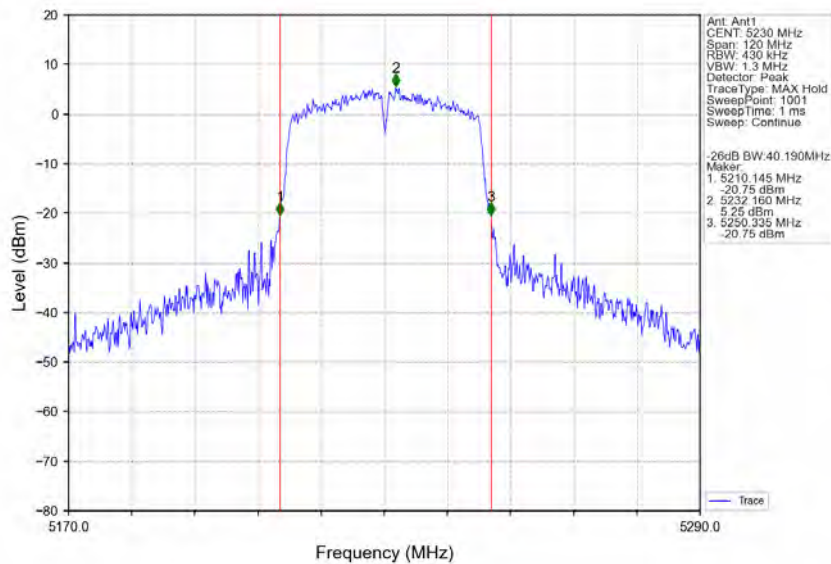
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802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



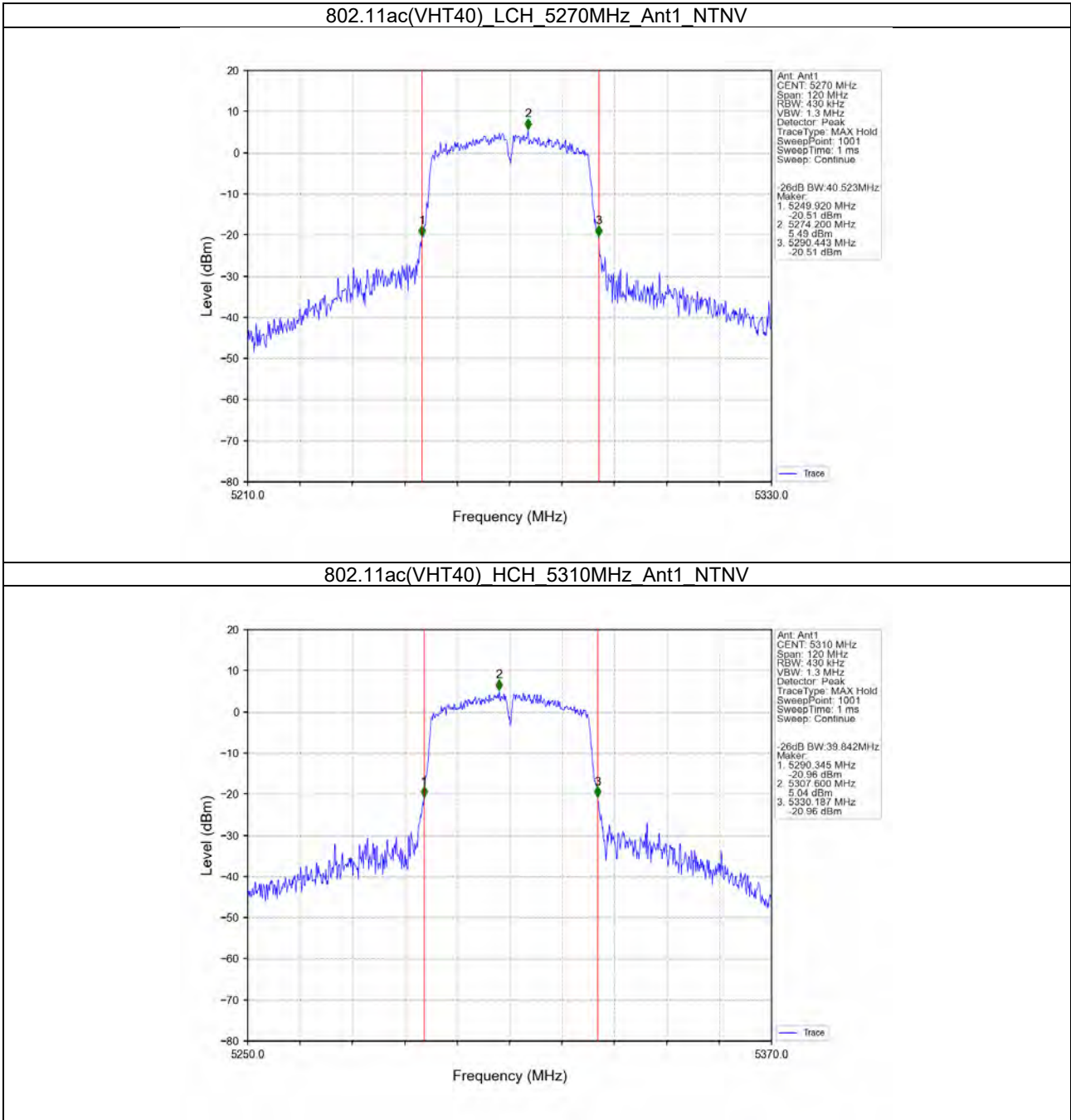
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV





SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

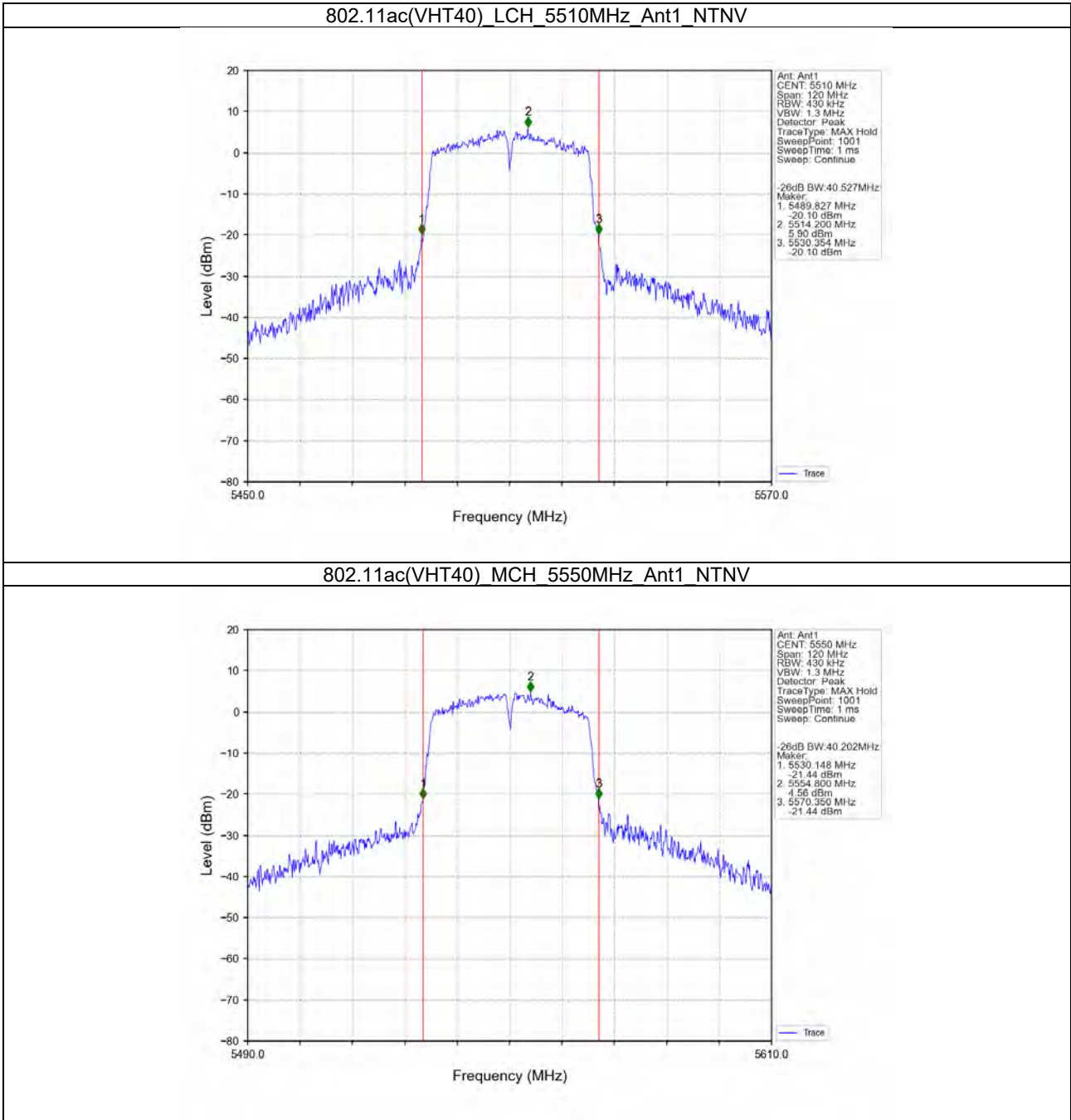
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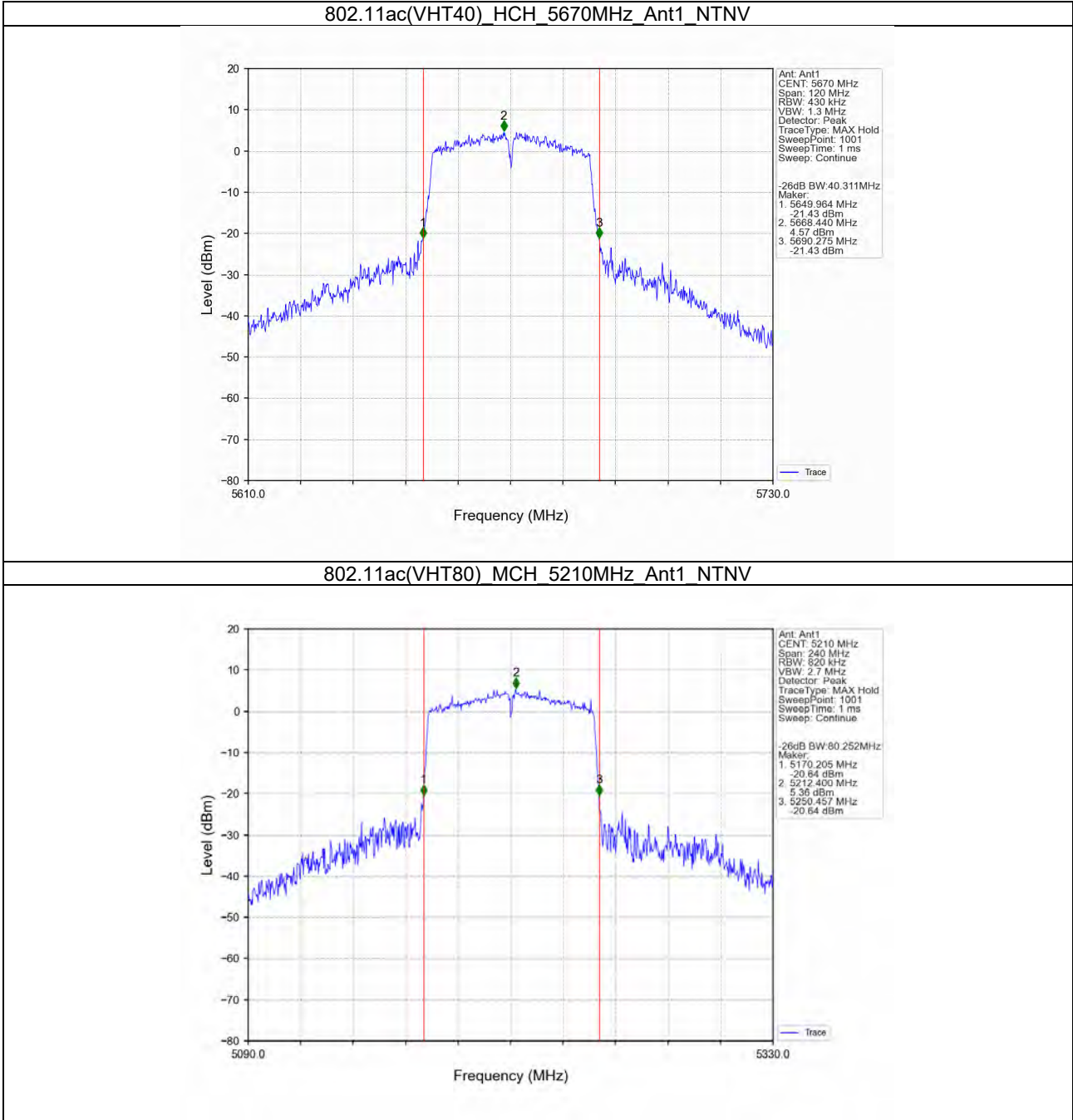
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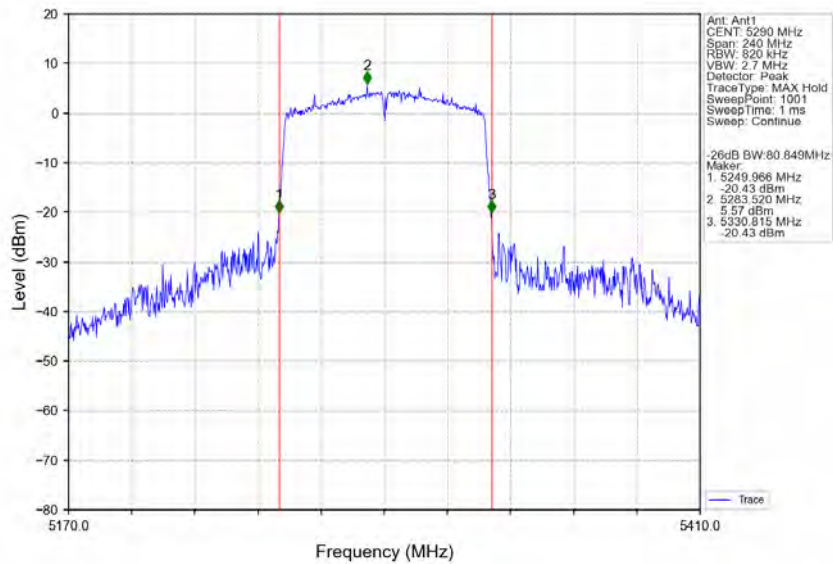


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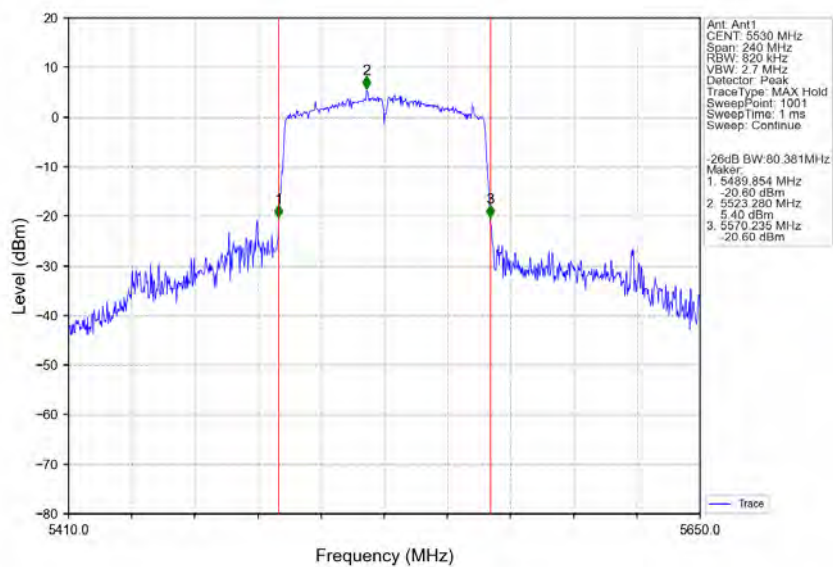
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802.11ac(VHT80)_MCH_5290MHz_Ant1_NTNV



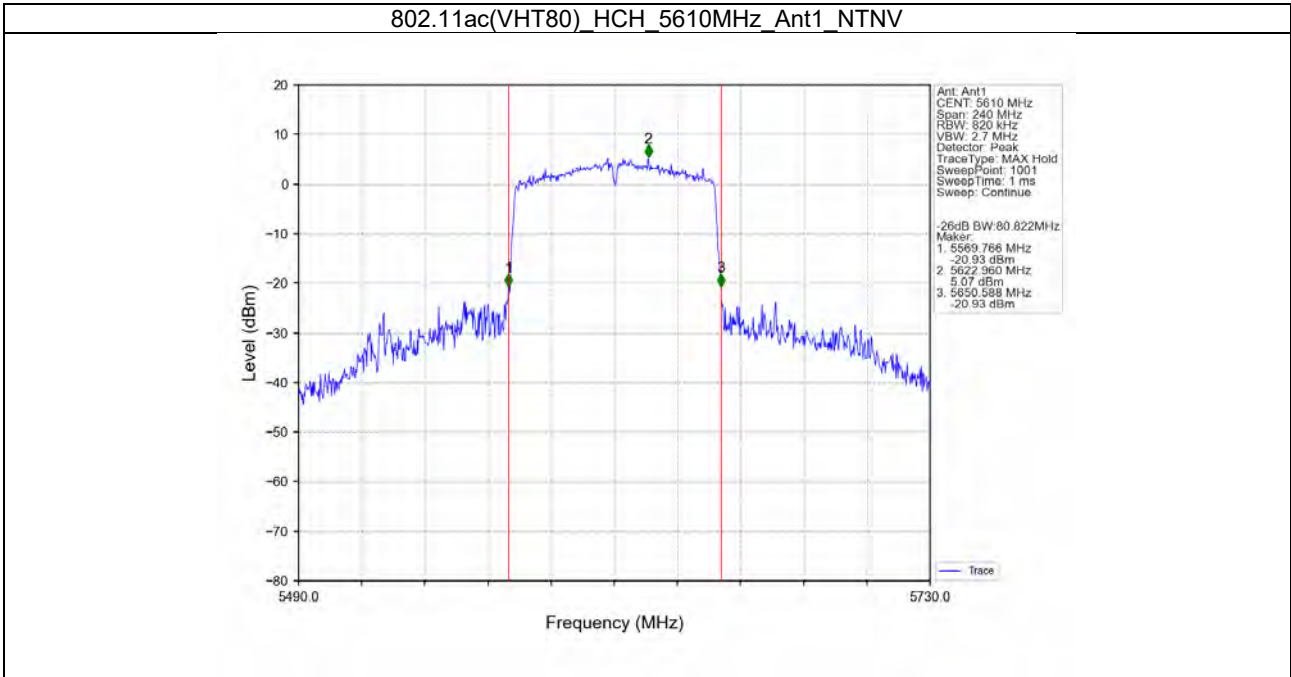
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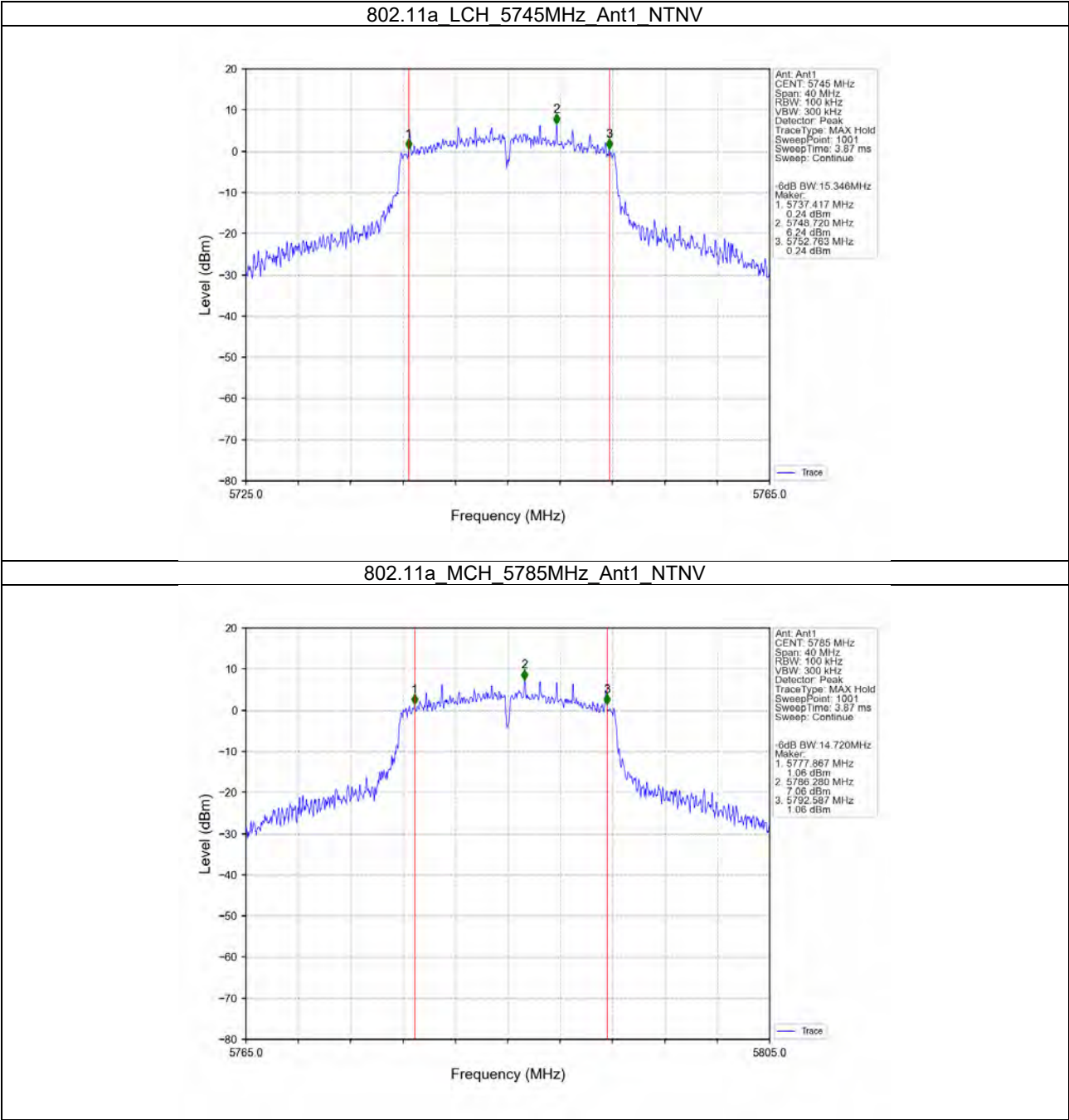




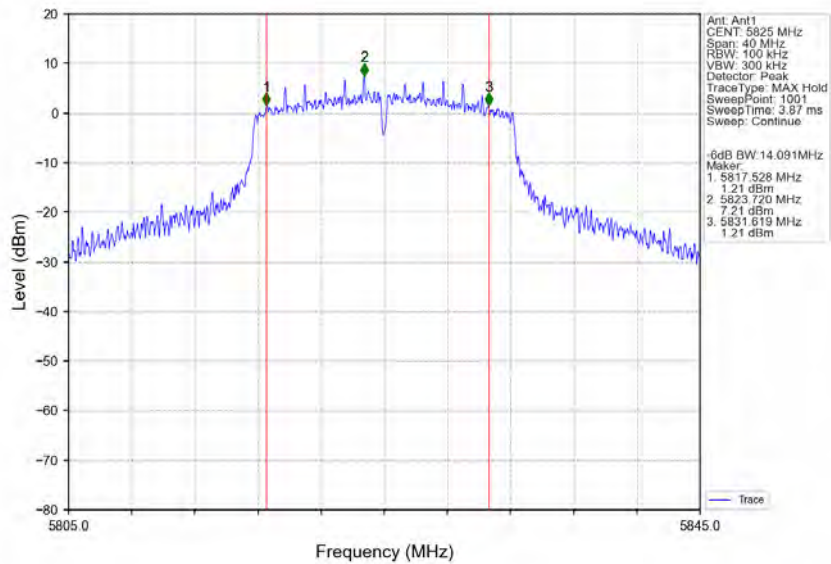
SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

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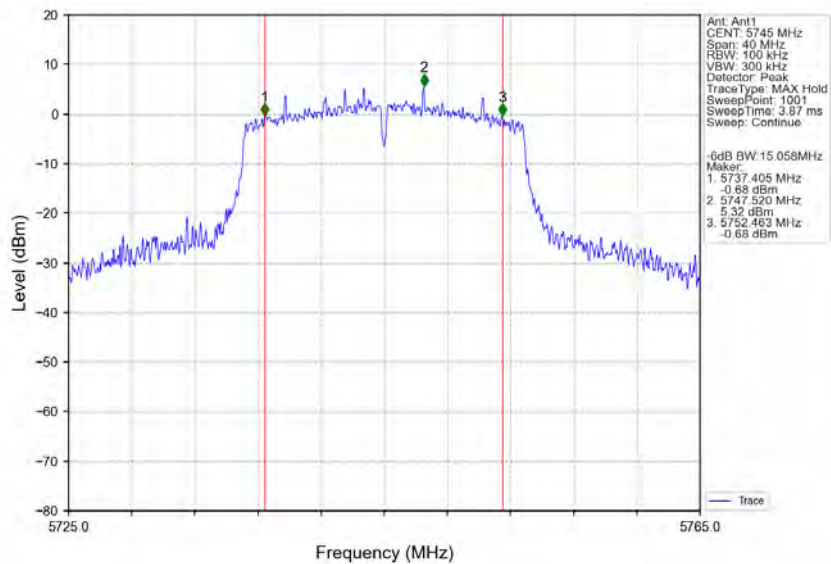
2.2.3 6dB BW



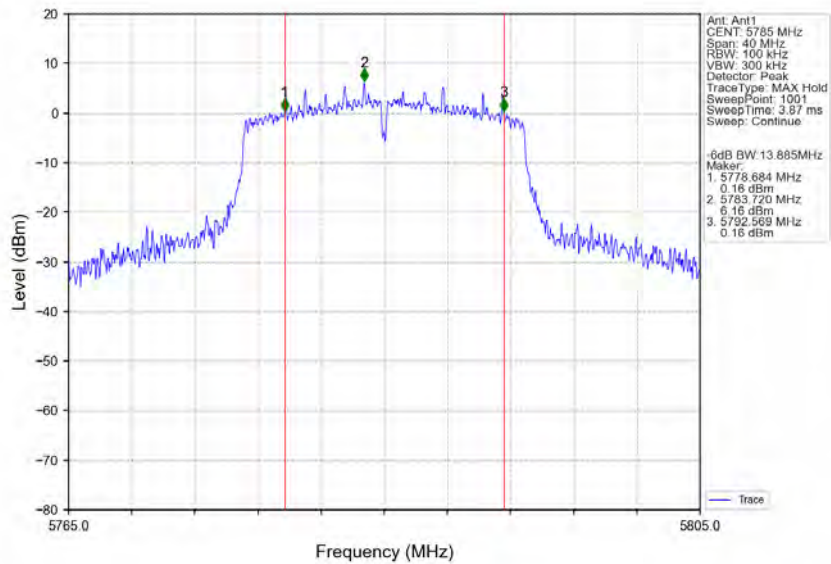
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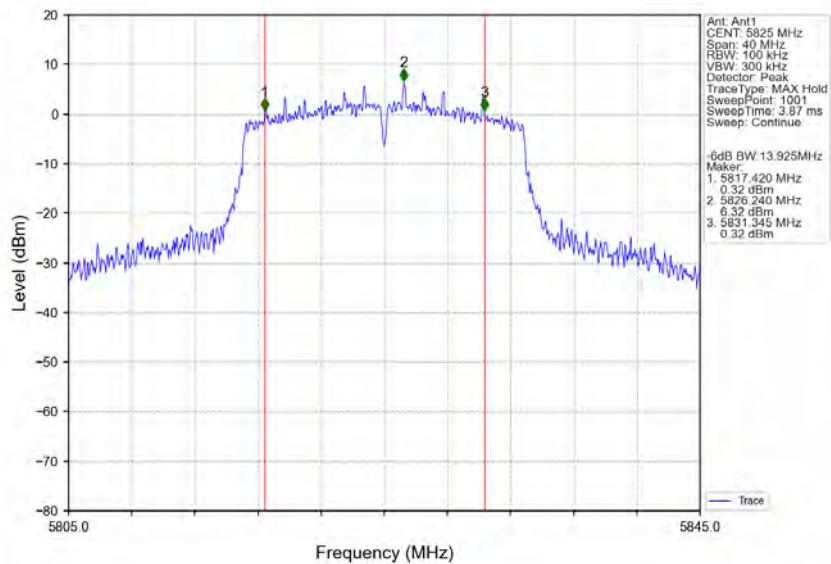
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802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



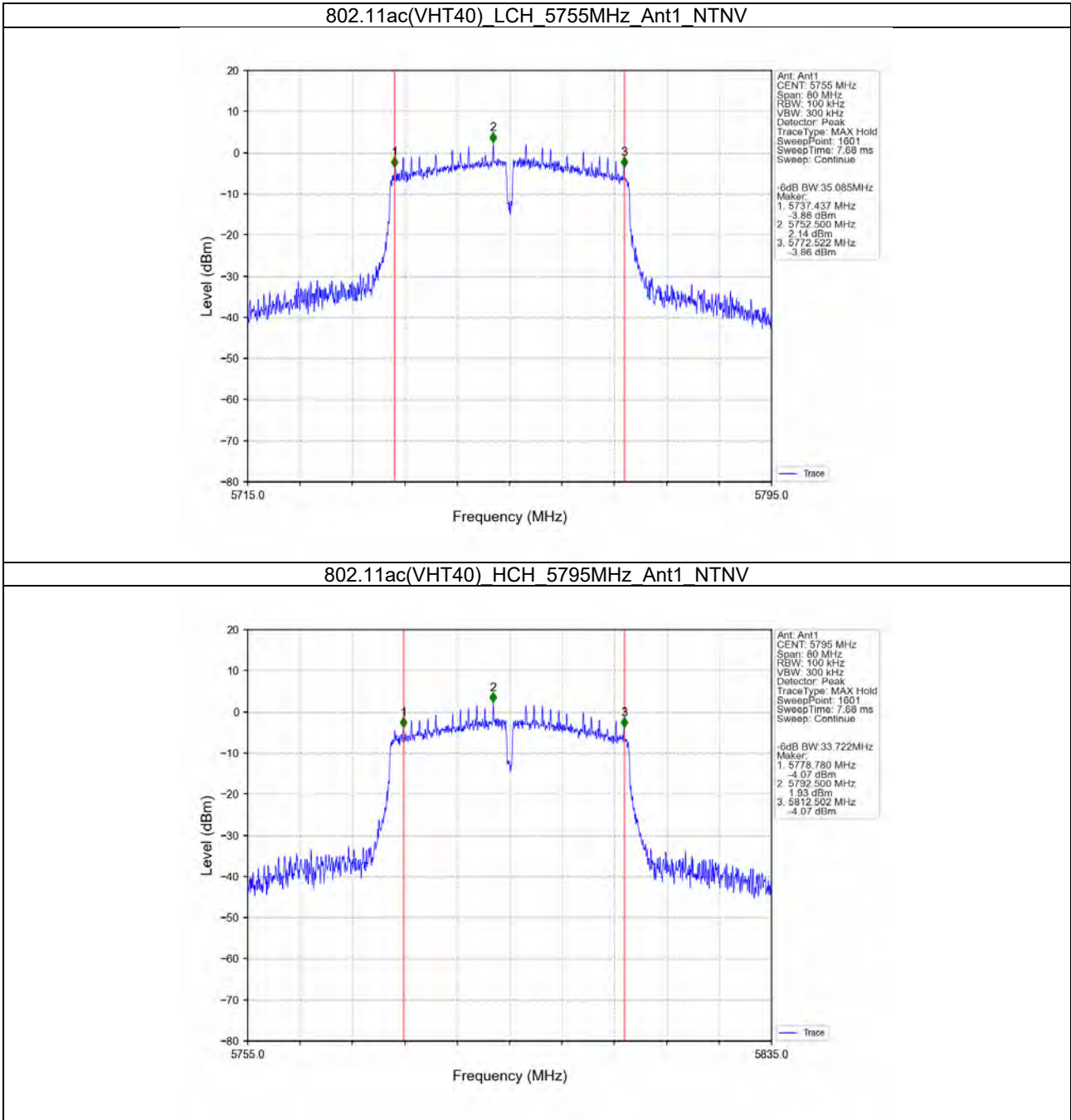
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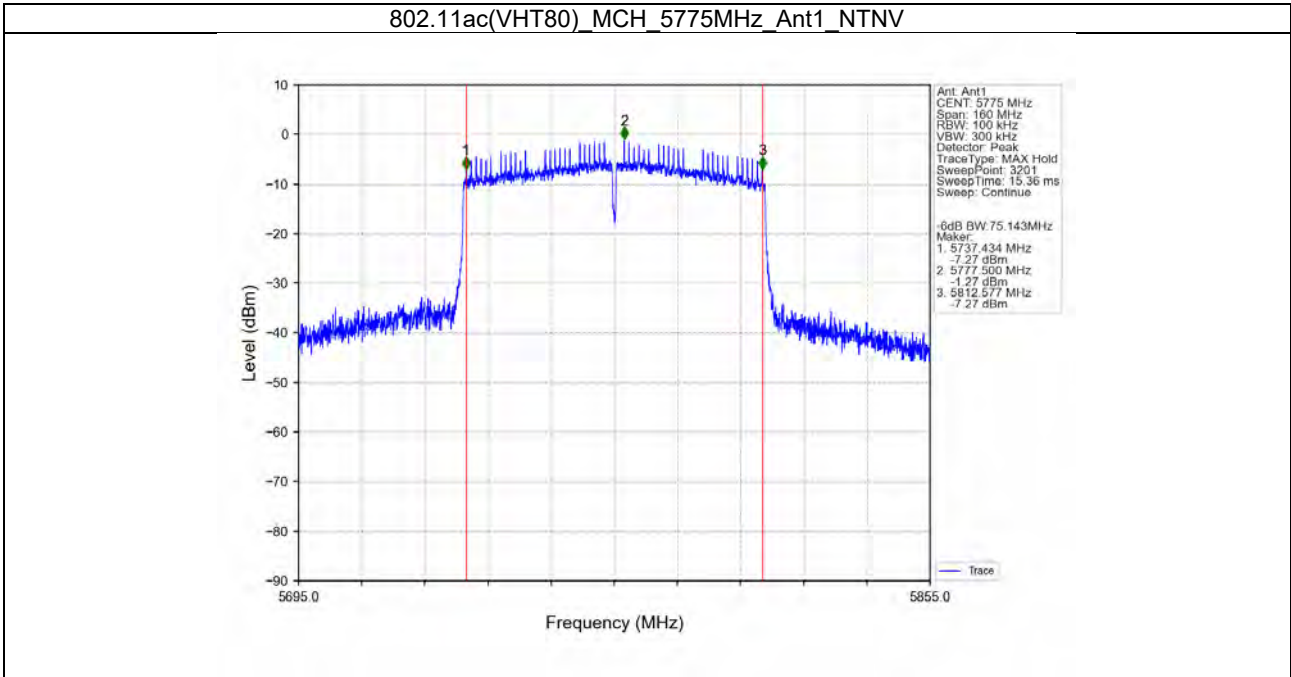
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3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	17.63	<=23.98	Pass
		5200	17.96	<=23.98	Pass
		5240	18.18	<=23.98	Pass
		5260	18.29	<=23.98	Pass
		5300	17.71	<=23.98	Pass
		5320	17.60	<=23.98	Pass
		5500	17.46	<=23.98	Pass
		5580	17.79	<=23.98	Pass
		5700	17.22	<=23.98	Pass
		5745	17.39	<=30	Pass
		5785	17.84	<=30	Pass
		5825	17.42	<=30	Pass
802.11ac (VHT20)	SISO	5180	16.19	<=23.98	Pass
		5200	15.55	<=23.98	Pass
		5240	15.65	<=23.98	Pass
		5260	16.20	<=23.98	Pass
		5300	16.21	<=23.98	Pass
		5320	16.16	<=23.98	Pass
		5500	16.09	<=23.98	Pass
		5580	16.02	<=23.98	Pass
		5700	16.33	<=23.98	Pass
		5745	16.07	<=30	Pass
		5785	16.55	<=30	Pass
		5825	16.21	<=30	Pass
802.11ac (VHT40)	SISO	5190	14.80	<=23.98	Pass
		5230	14.70	<=23.98	Pass
		5270	14.79	<=23.98	Pass
		5310	14.69	<=23.98	Pass
		5510	14.96	<=23.98	Pass
		5550	14.55	<=23.98	Pass
		5670	14.54	<=23.98	Pass
		5755	14.95	<=30	Pass
802.11ac (VHT80)	SISO	5795	14.58	<=30	Pass
		5210	14.62	<=23.98	Pass
		5290	14.42	<=23.98	Pass
		5530	14.78	<=23.98	Pass
		5610	14.83	<=23.98	Pass
		5775	14.40	<=30	Pass
Note1: Antenna Gain: - Band: 1 Ant1: -1.20dBi; - Band: 3 Ant1: -3.10dBi; - Band: 2A Ant1: -0.90dBi; - Band: 2C Ant1: -2.70dBi;					

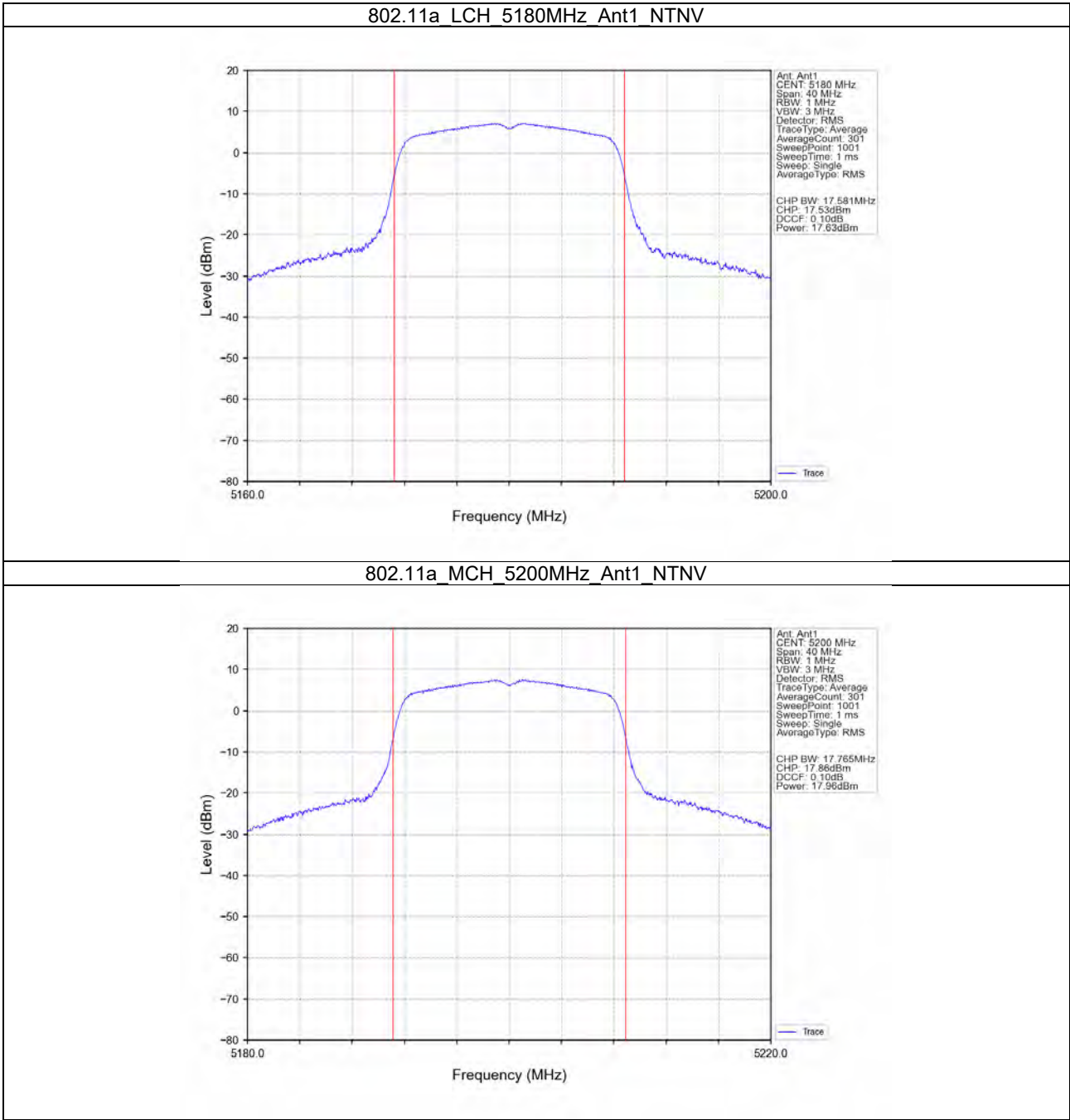


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3.2 Test Graph

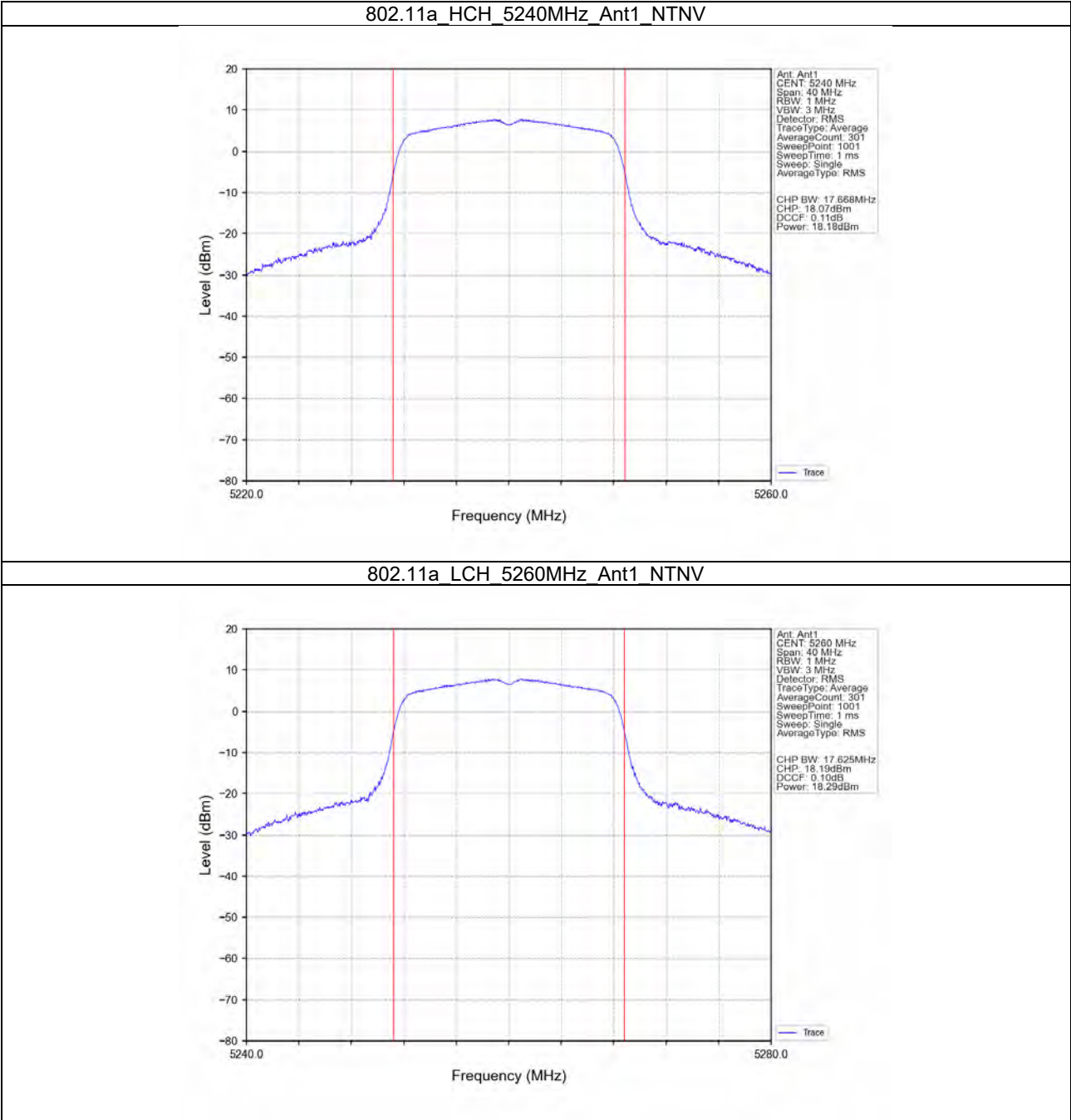
3.2.1 Power





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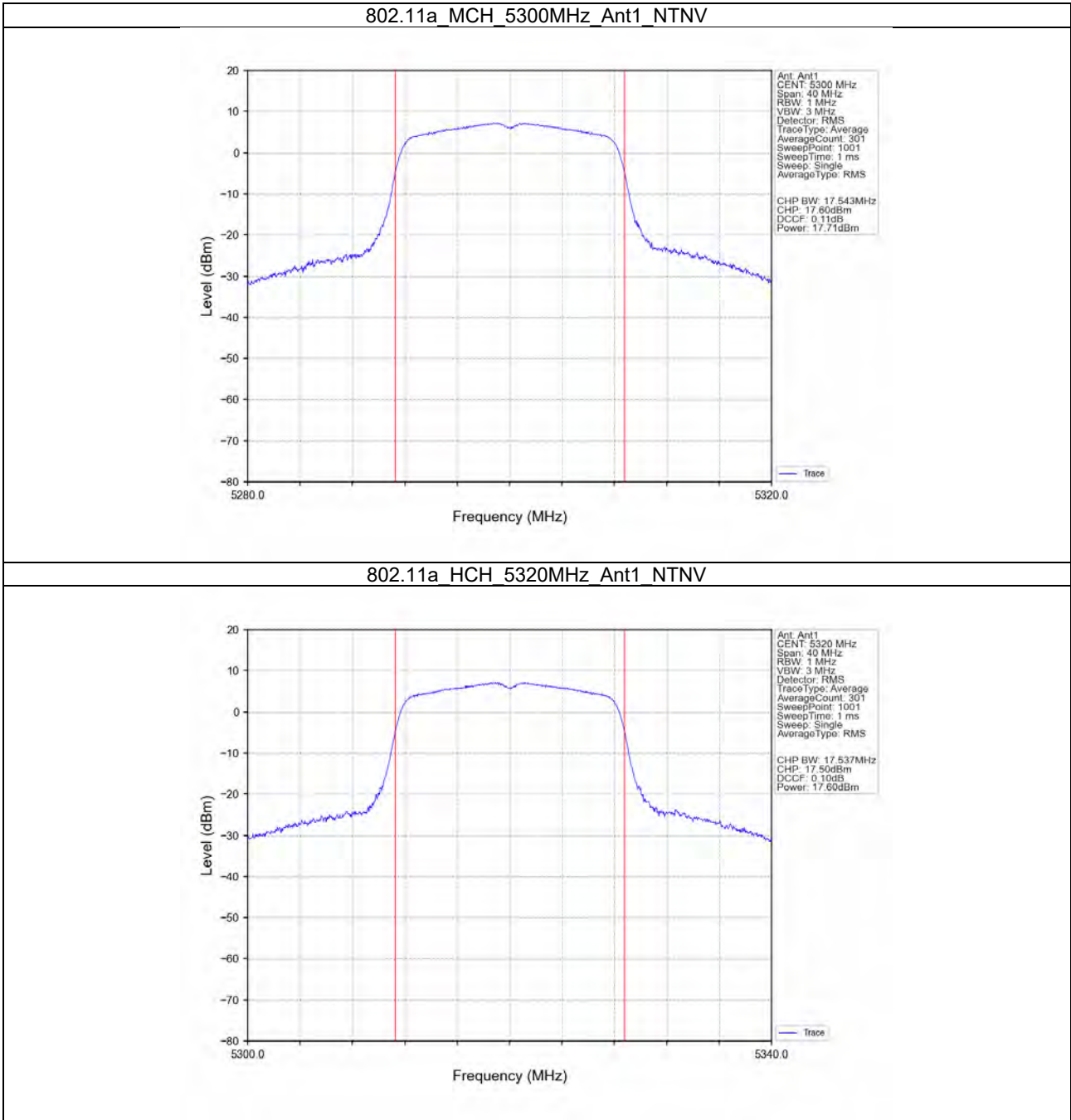
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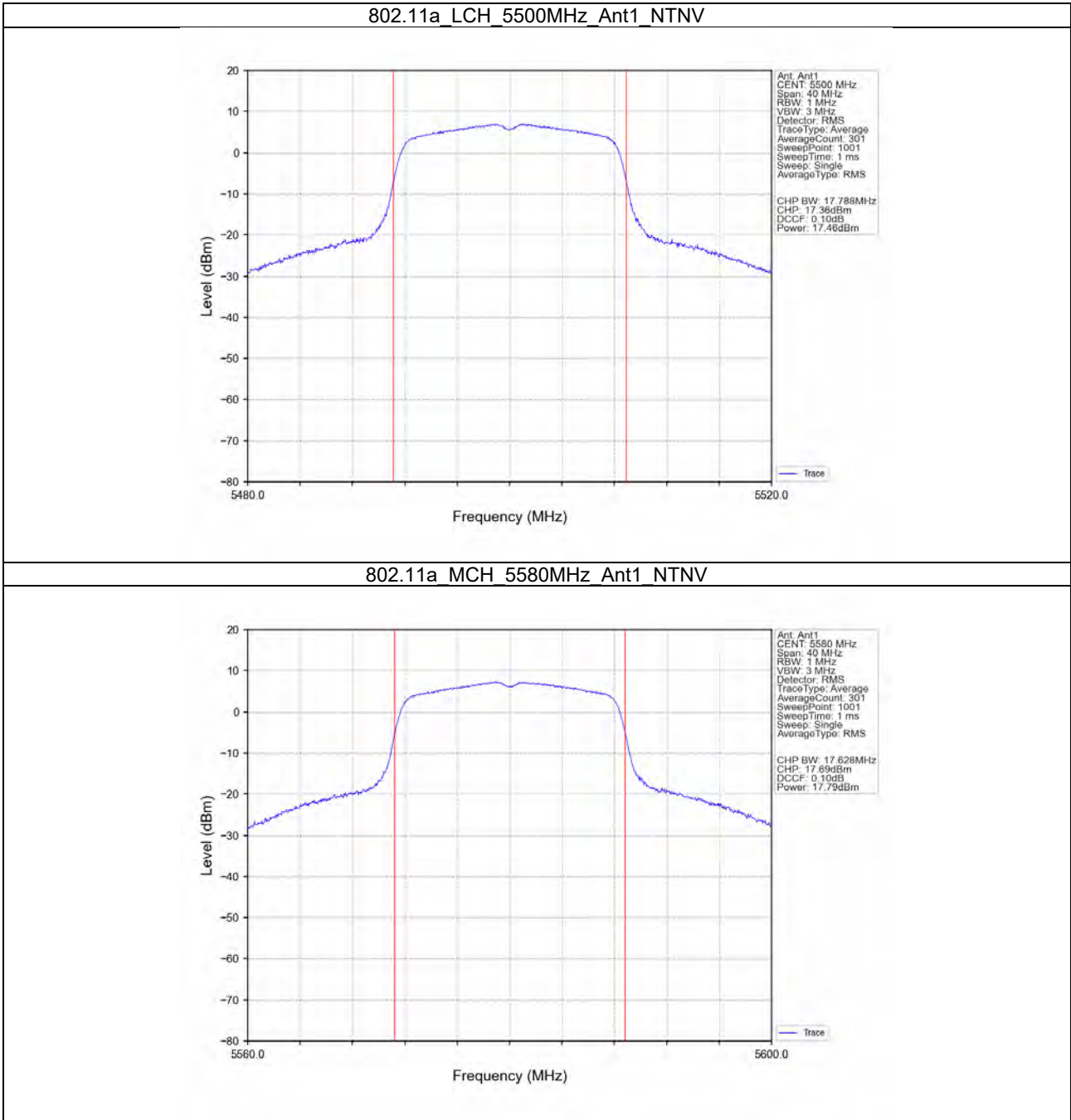
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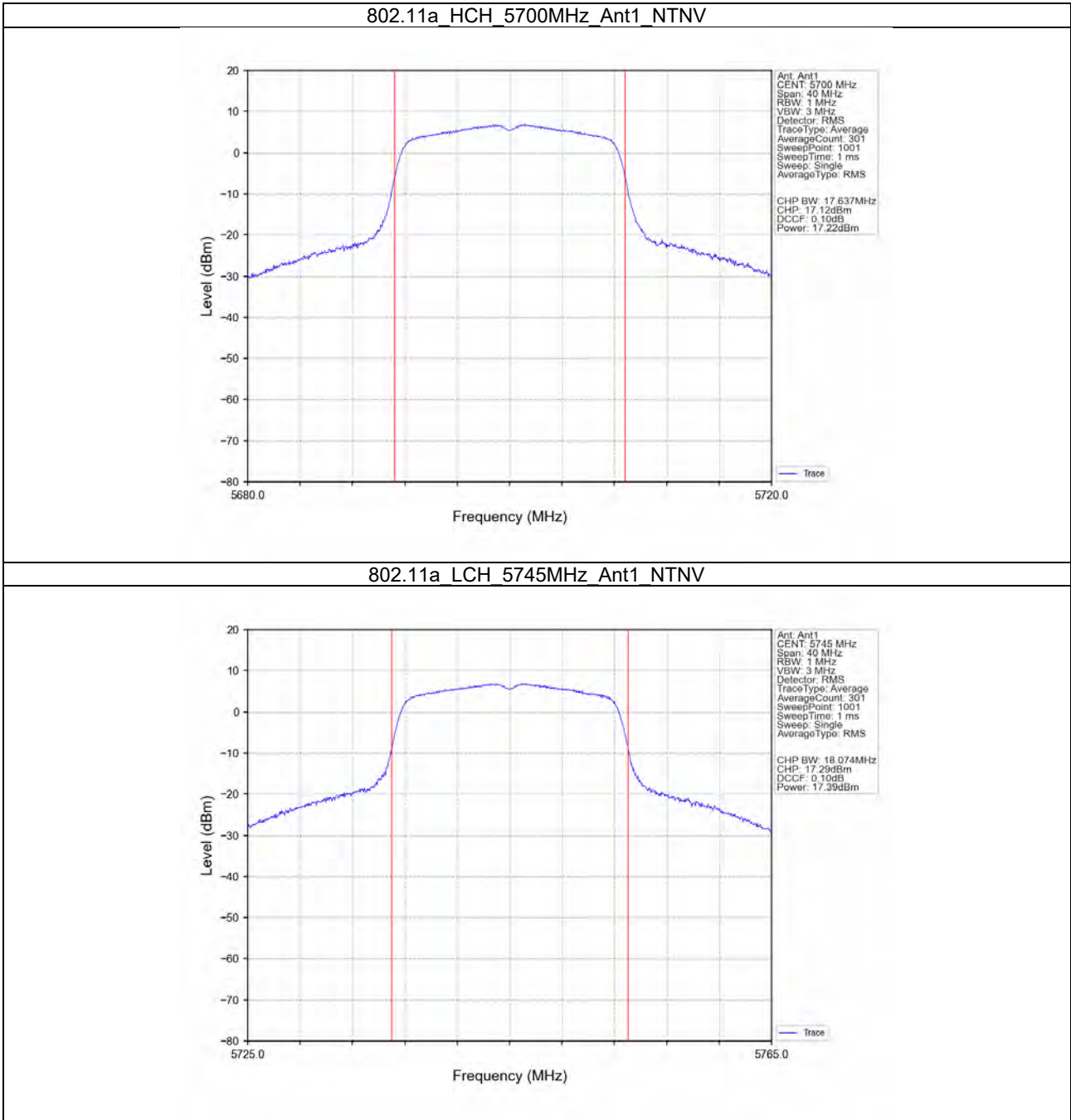
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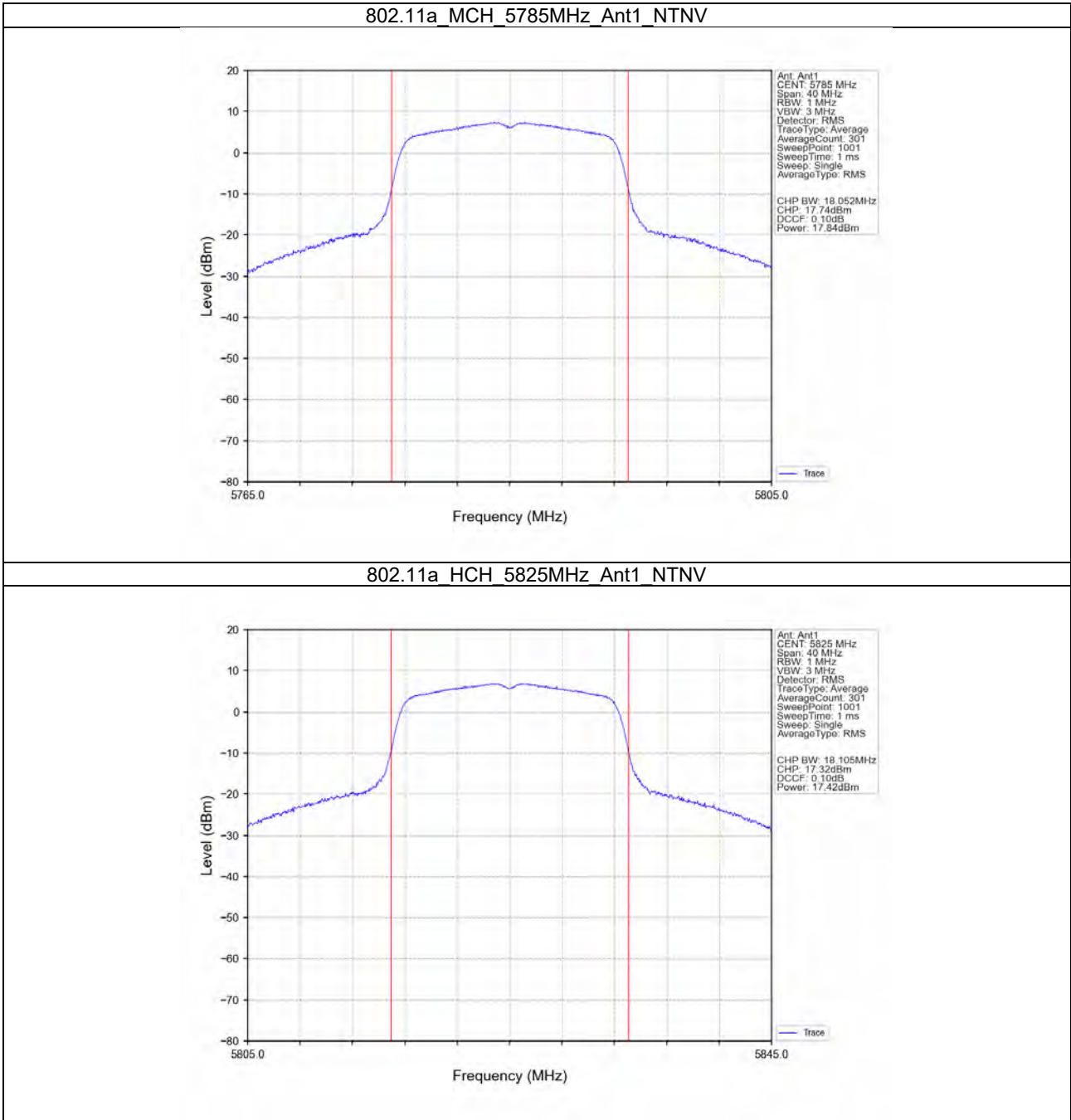


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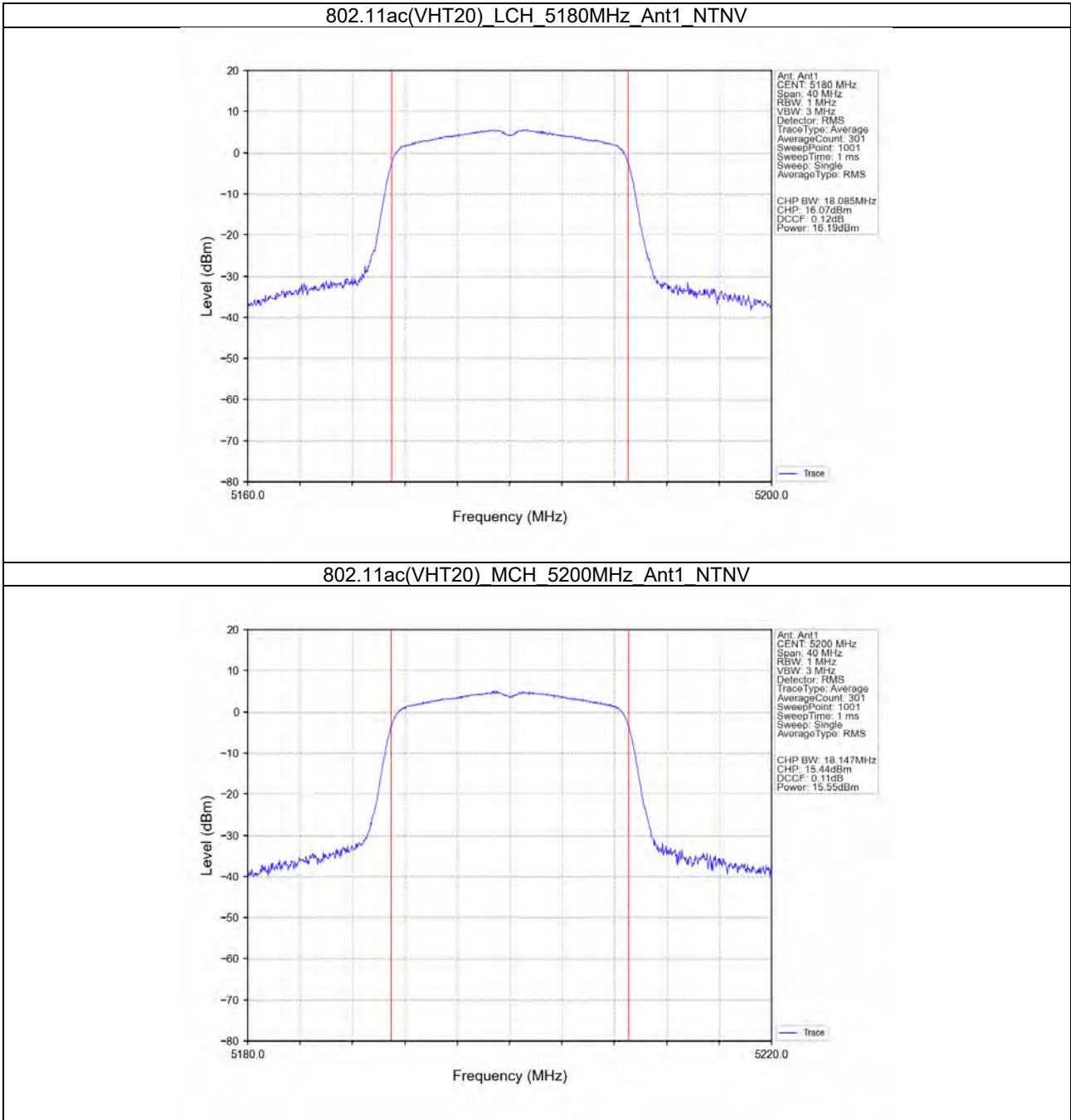
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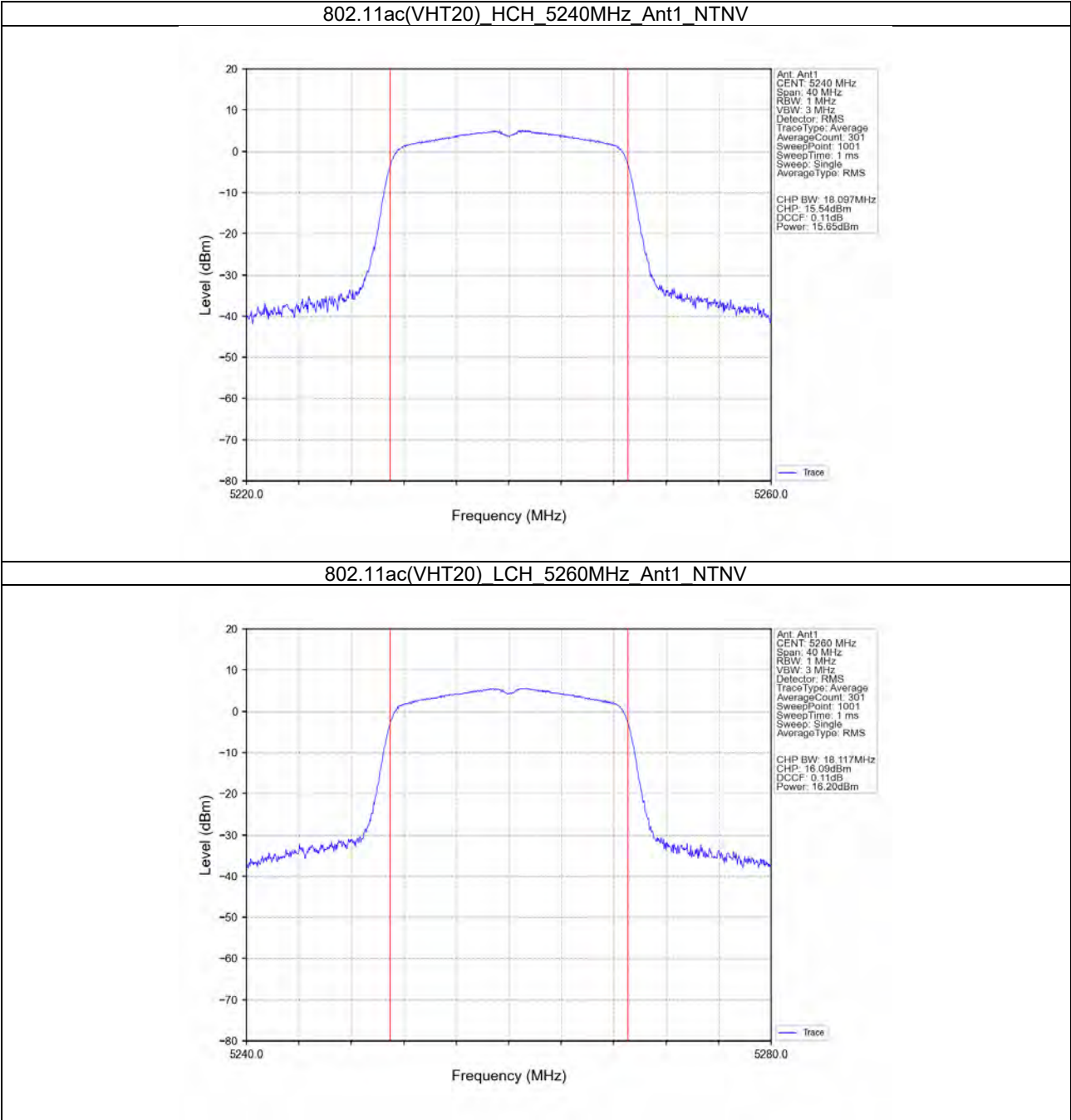
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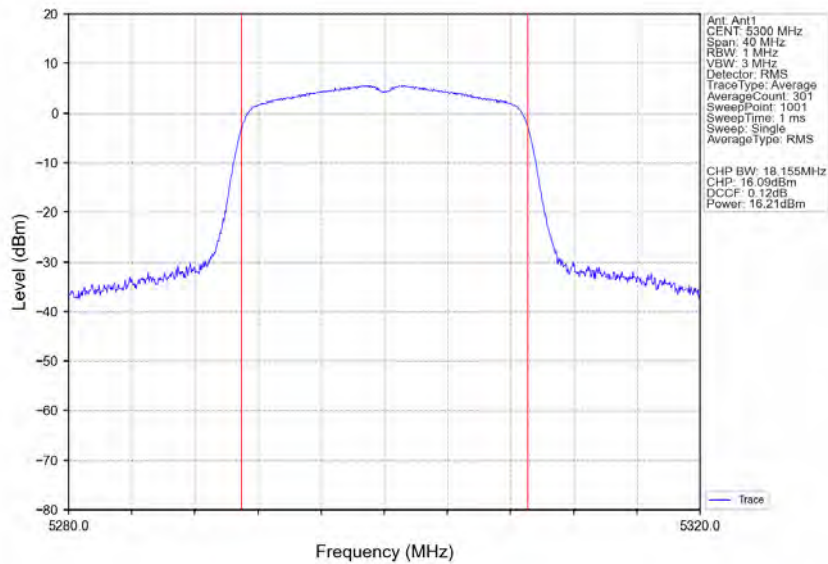
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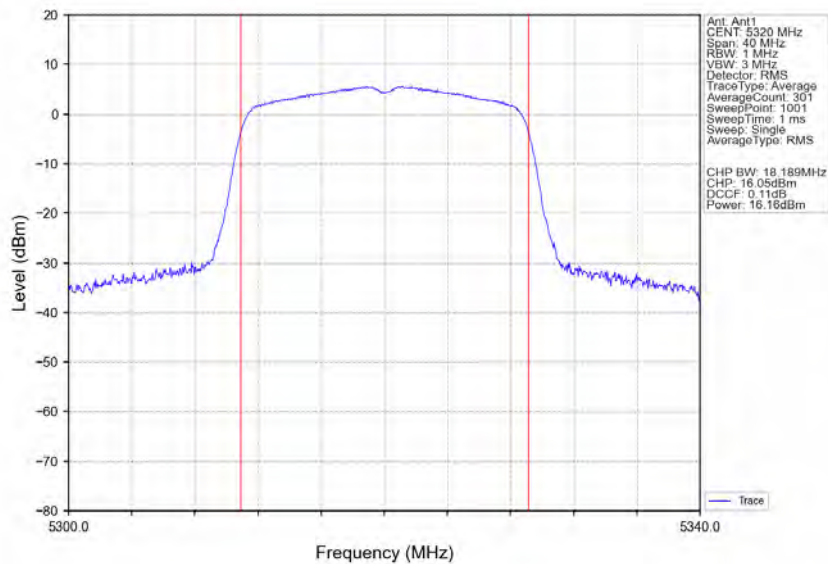
SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

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802.11ac(VHT20)_MCH_5300MHz_Ant1_NTNV



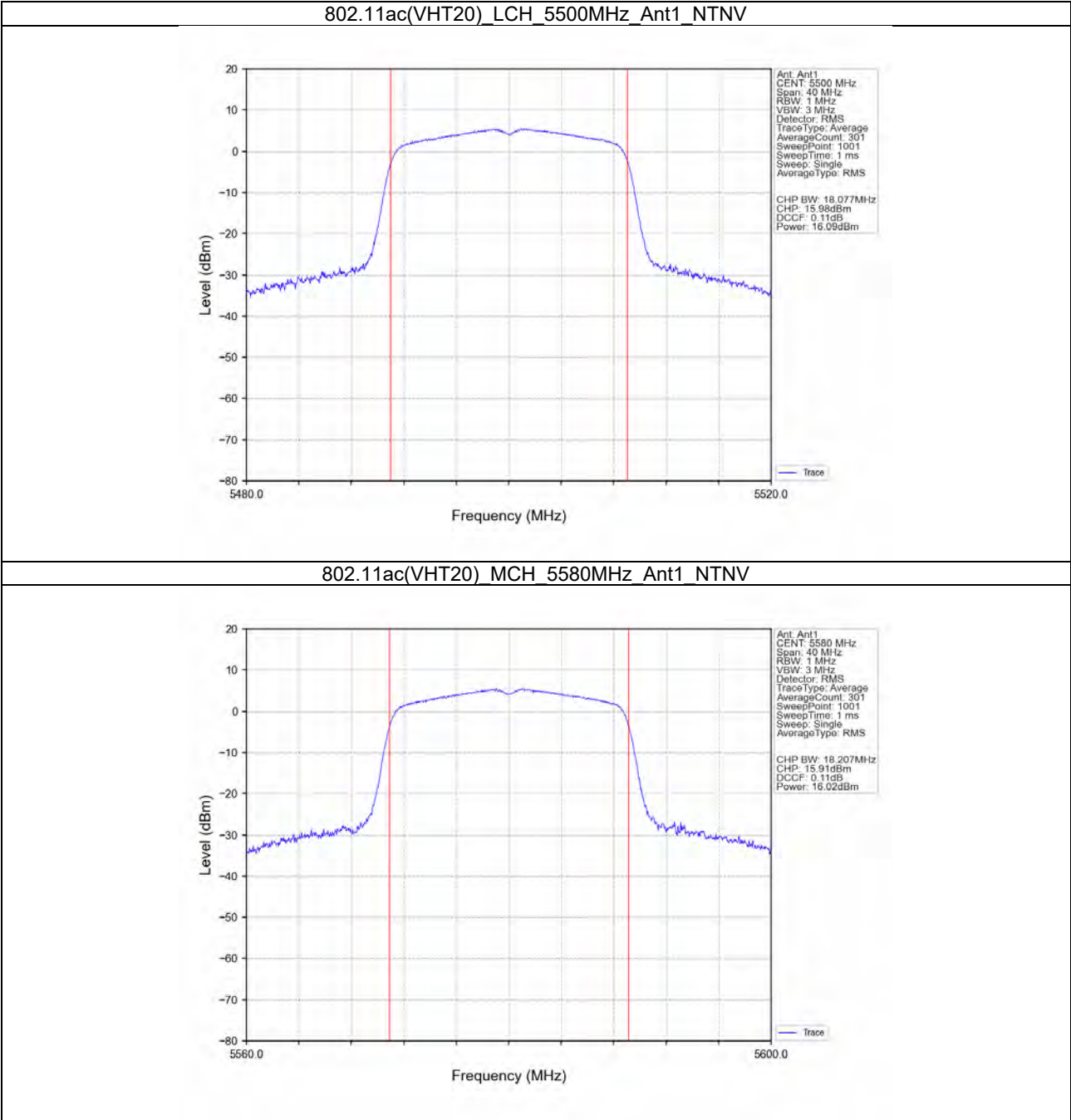
802.11ac(VHT20)_HCH_5320MHz_Ant1_NTNV





SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

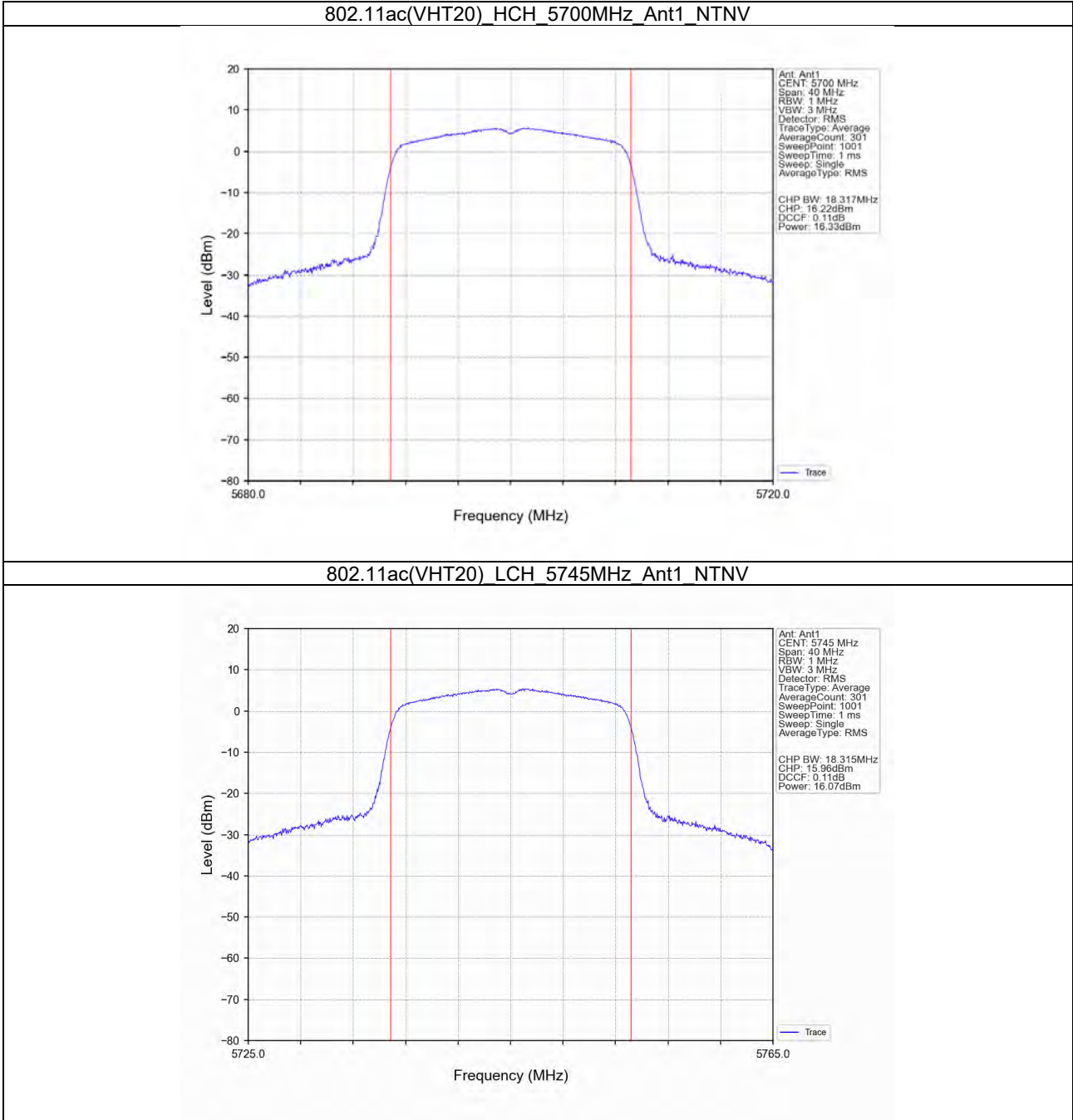
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

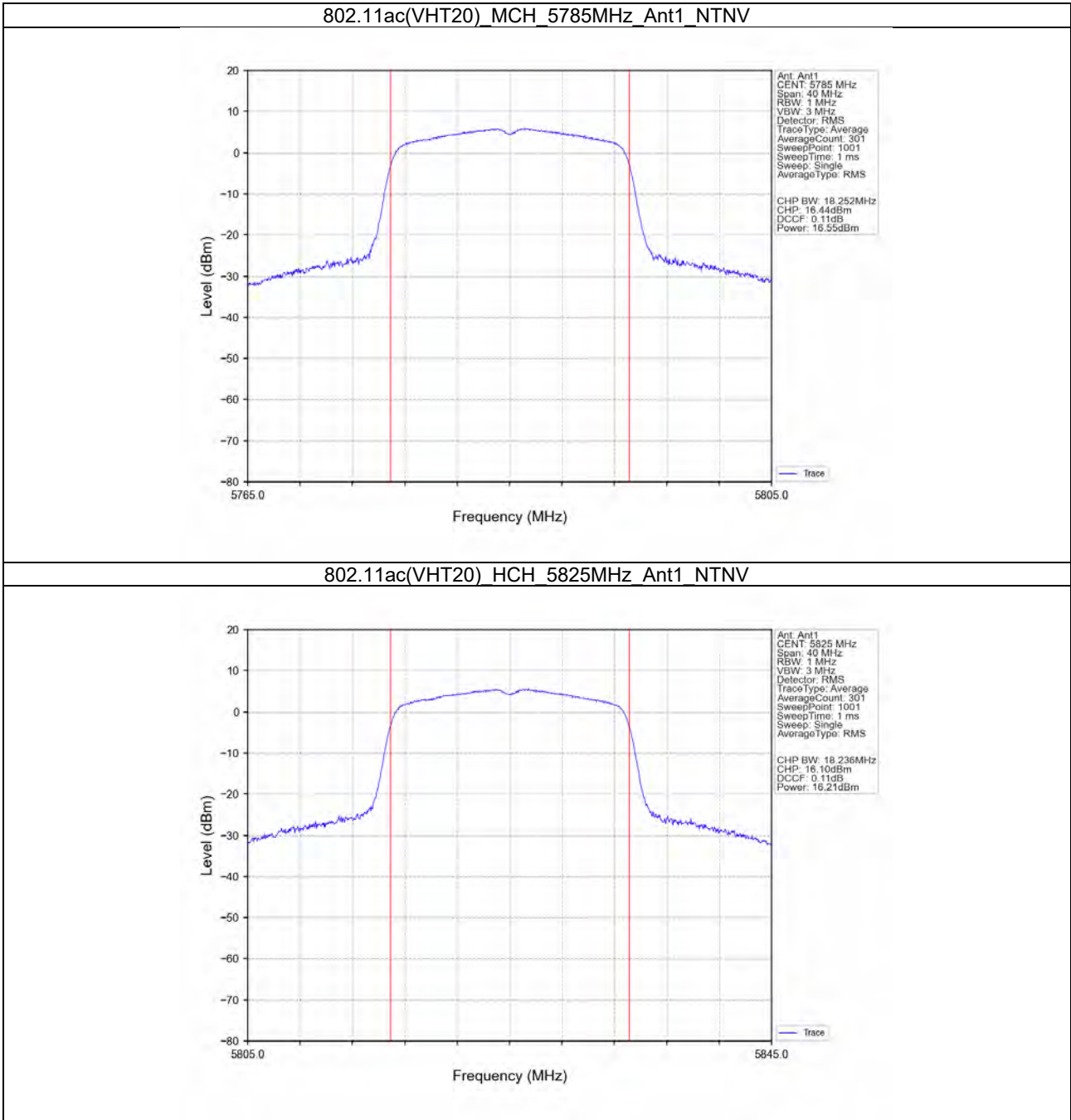
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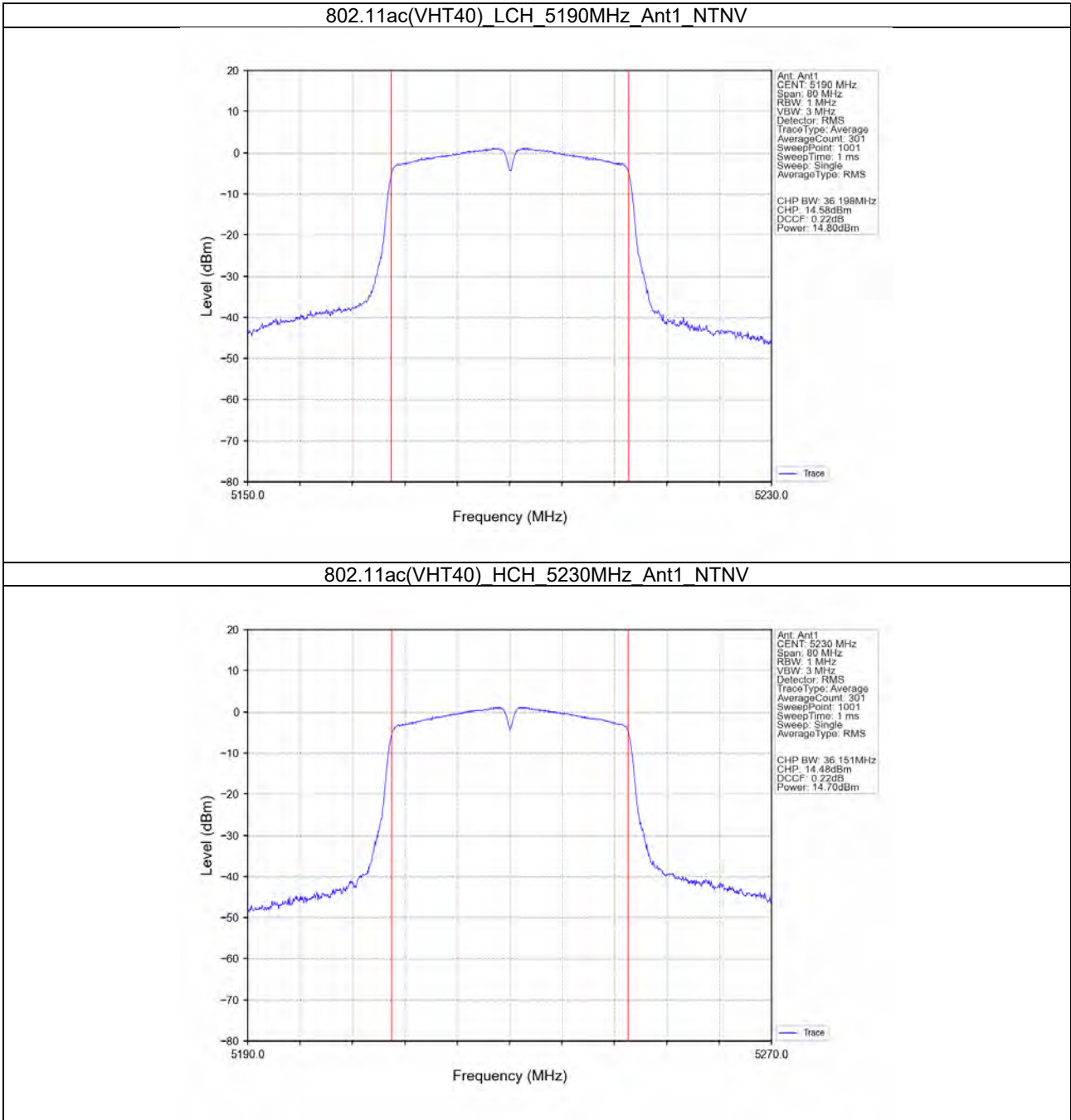
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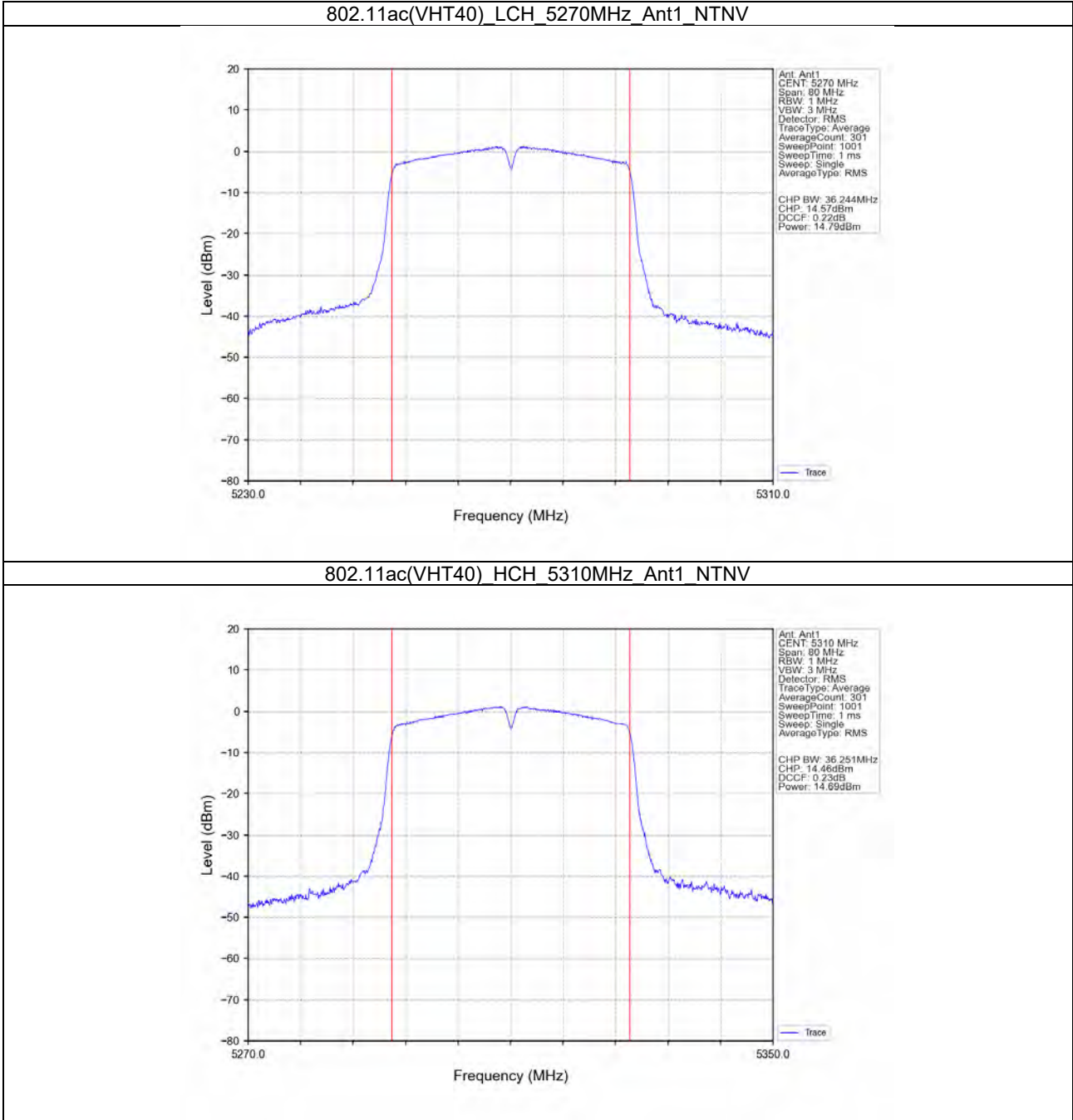
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

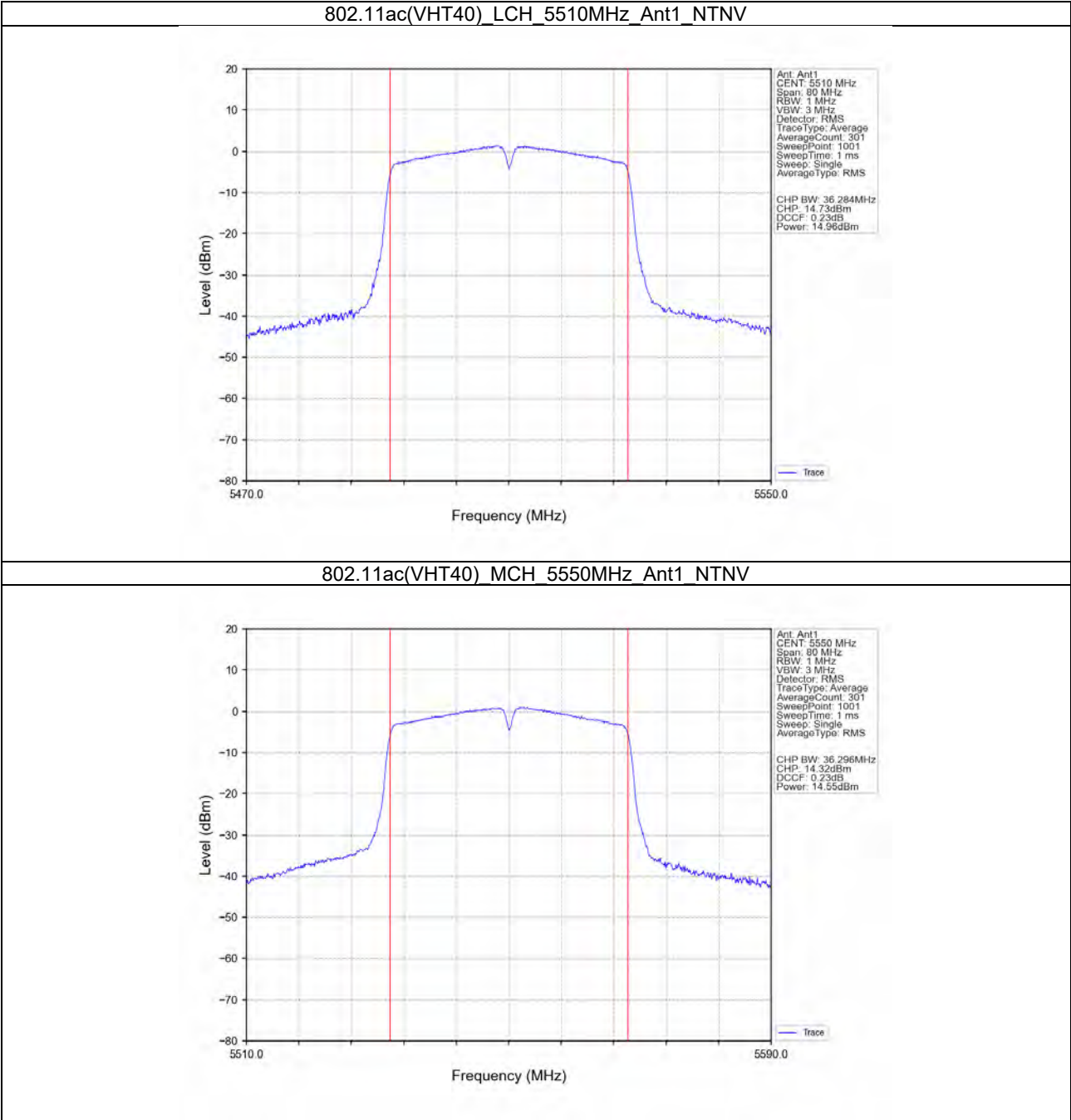
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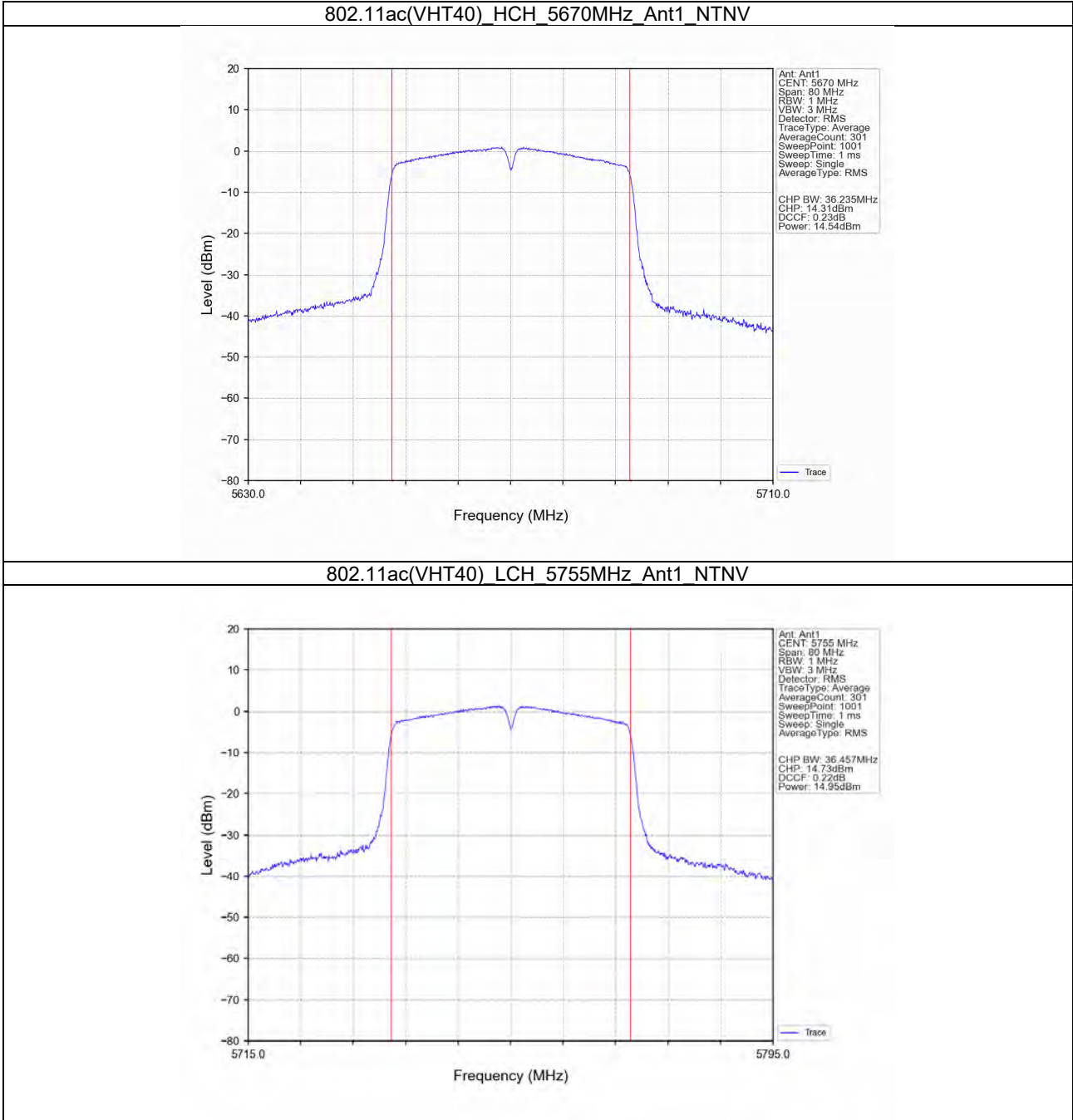
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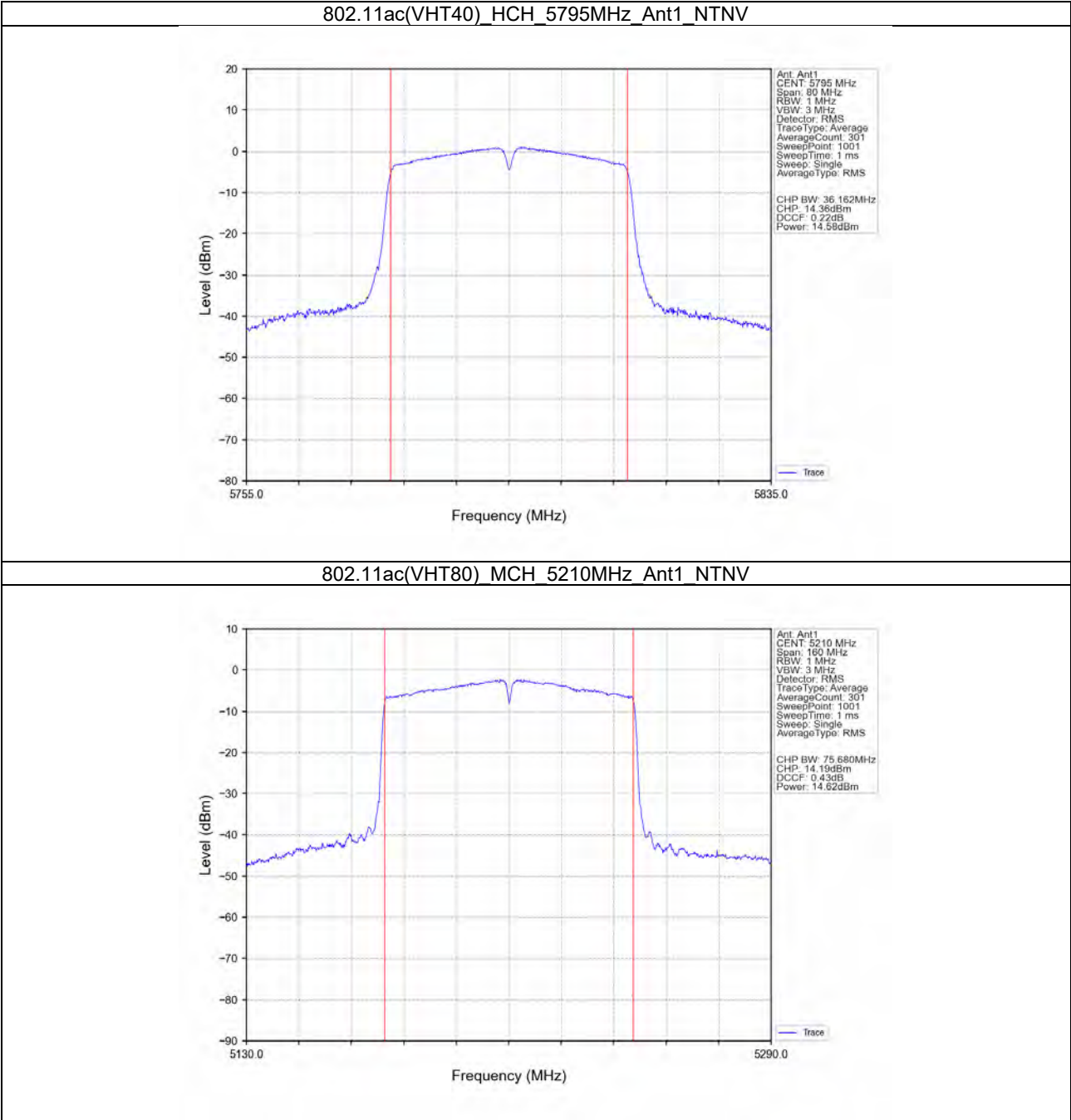
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

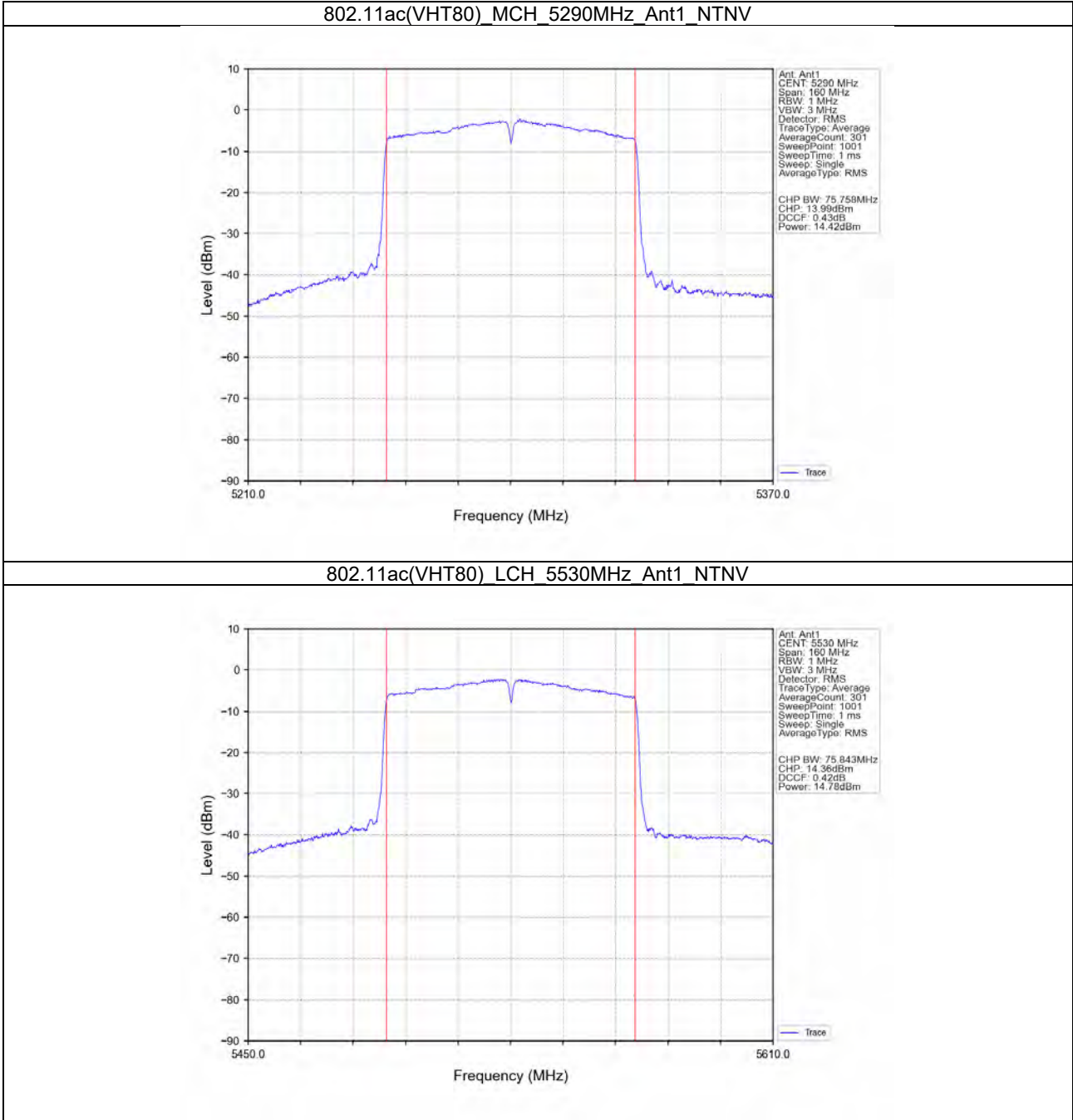
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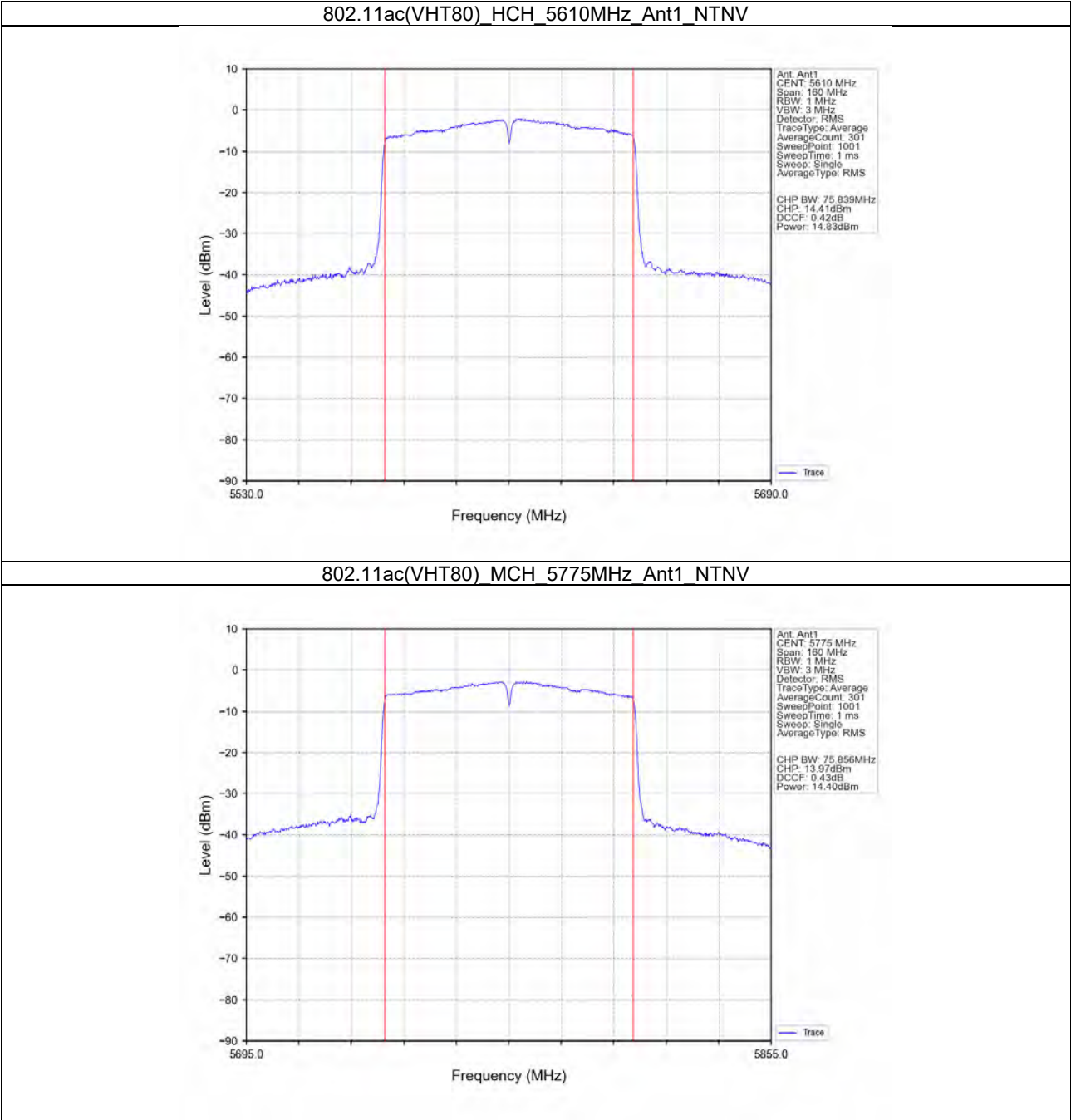
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4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	7.36	<=11	Pass
		5200	7.40	<=11	Pass
		5240	8.05	<=11	Pass
		5260	7.96	<=11	Pass
		5300	7.43	<=11	Pass
		5320	7.28	<=11	Pass
		5500	7.12	<=11	Pass
		5580	7.49	<=11	Pass
802.11ac (VHT20)	SISO	5700	6.87	<=11	Pass
		5180	5.78	<=11	Pass
		5200	5.08	<=11	Pass
		5240	5.15	<=11	Pass
		5260	5.84	<=11	Pass
		5300	5.79	<=11	Pass
		5320	5.78	<=11	Pass
		5500	5.59	<=11	Pass
802.11ac (VHT40)	SISO	5580	5.71	<=11	Pass
		5700	5.76	<=11	Pass
		5190	1.46	<=11	Pass
		5230	1.39	<=11	Pass
		5270	1.35	<=11	Pass
		5310	1.41	<=11	Pass
802.11ac (VHT80)	SISO	5510	1.72	<=11	Pass
		5550	1.14	<=11	Pass
		5670	1.29	<=11	Pass
		5210	-1.88	<=11	Pass
		5290	-1.91	<=11	Pass
	SISO	5530	-1.71	<=11	Pass
		5610	-1.62	<=11	Pass

Note1: Antenna Gain:
 - Band: 1 Ant1: -1.20dBi;
 - Band: 3 Ant1: -3.10dBi;
 - Band: 2A Ant1: -0.90dBi;
 - Band: 2C Ant1: -2.70dBi;

4.1.2 PSD-Band3

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	4.31	<=30	Pass
		5785	4.97	<=30	Pass
		5825	4.52	<=30	Pass
802.11ac (VHT20)	SISO	5745	2.96	<=30	Pass
		5785	3.39	<=30	Pass
		5825	3.07	<=30	Pass
802.11ac (VHT40)	SISO	5755	-1.32	<=30	Pass
		5795	-1.53	<=30	Pass



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802.11ac (VHT80)	SISO	5775	-4.60	<=30	Pass
Note1: Antenna Gain: - Band: 1 Ant1: -1.20dBi; - Band: 3 Ant1: -3.10dBi; - Band: 2A Ant1: -0.90dBi; - Band: 2C Ant1: -2.70dBi;					

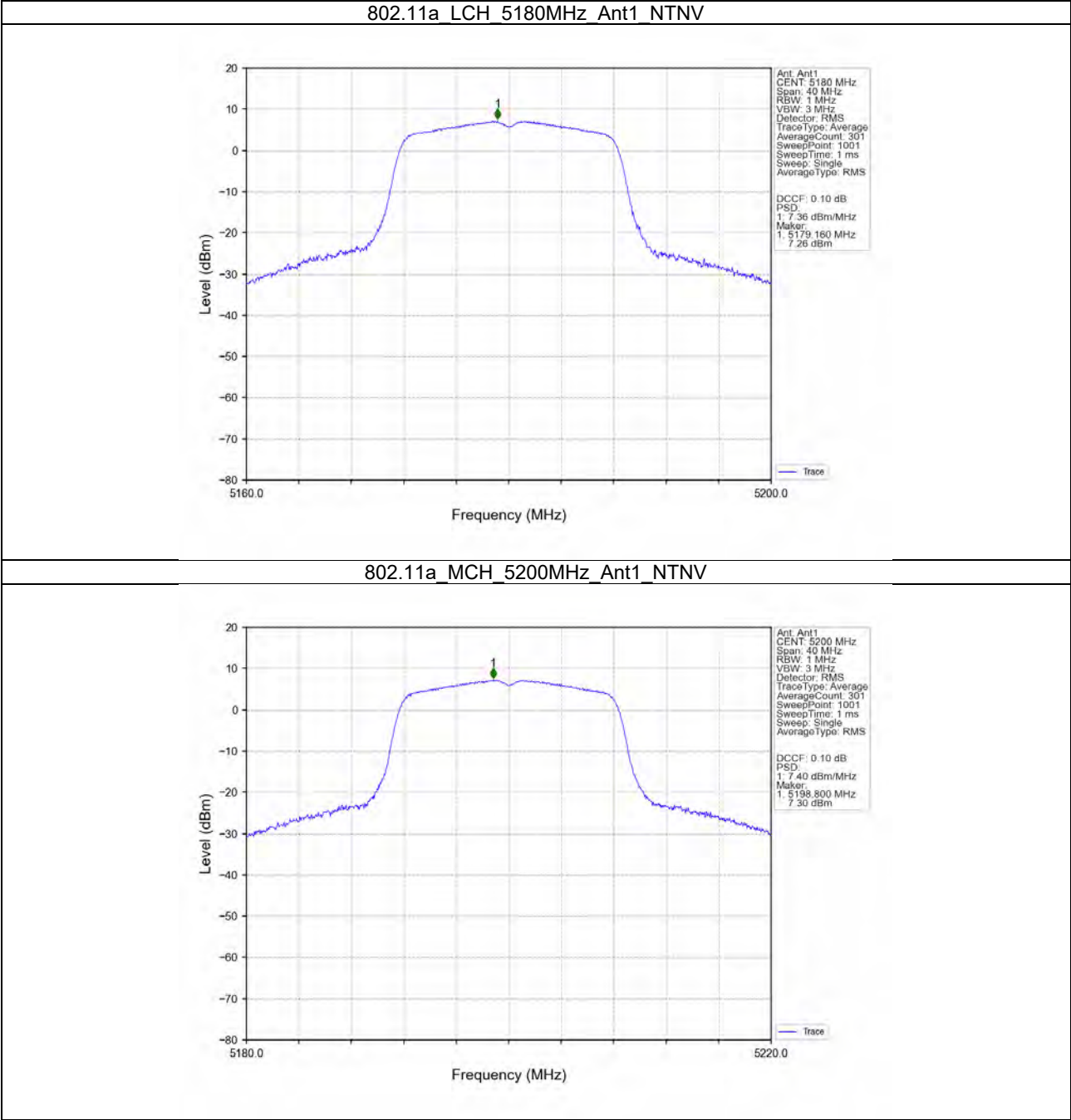


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4.2 Test Graph

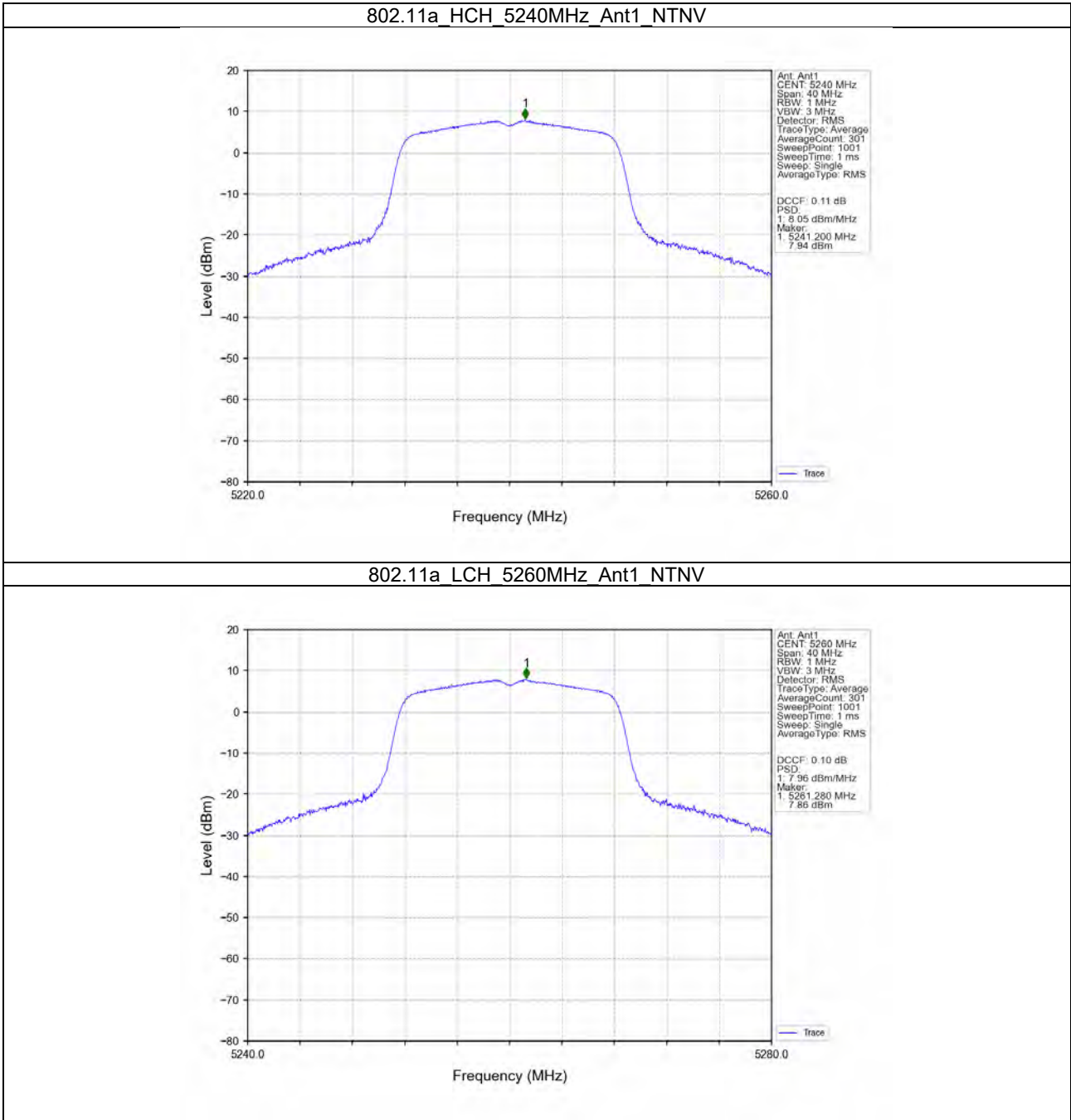
4.2.1 PSD





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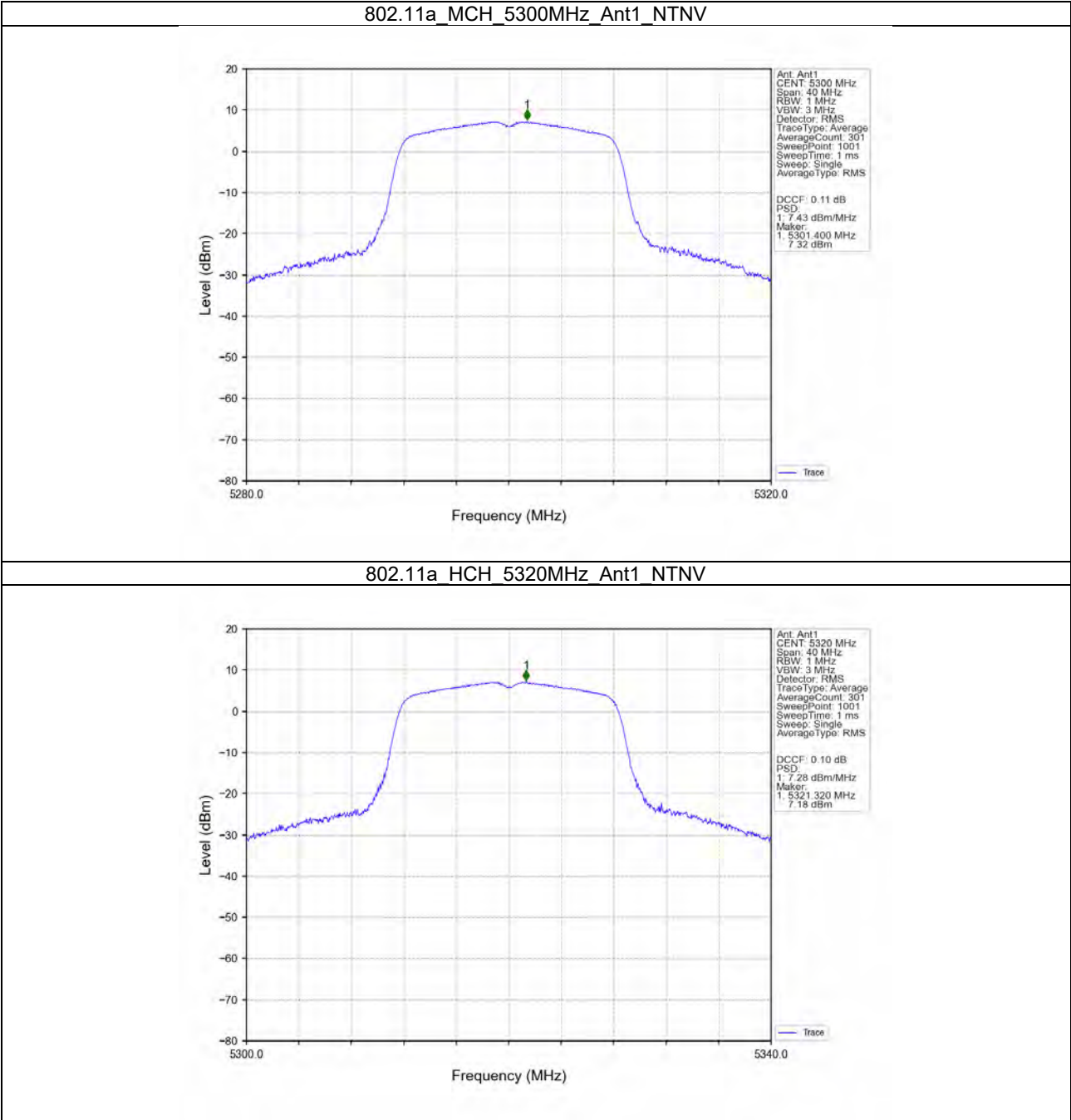
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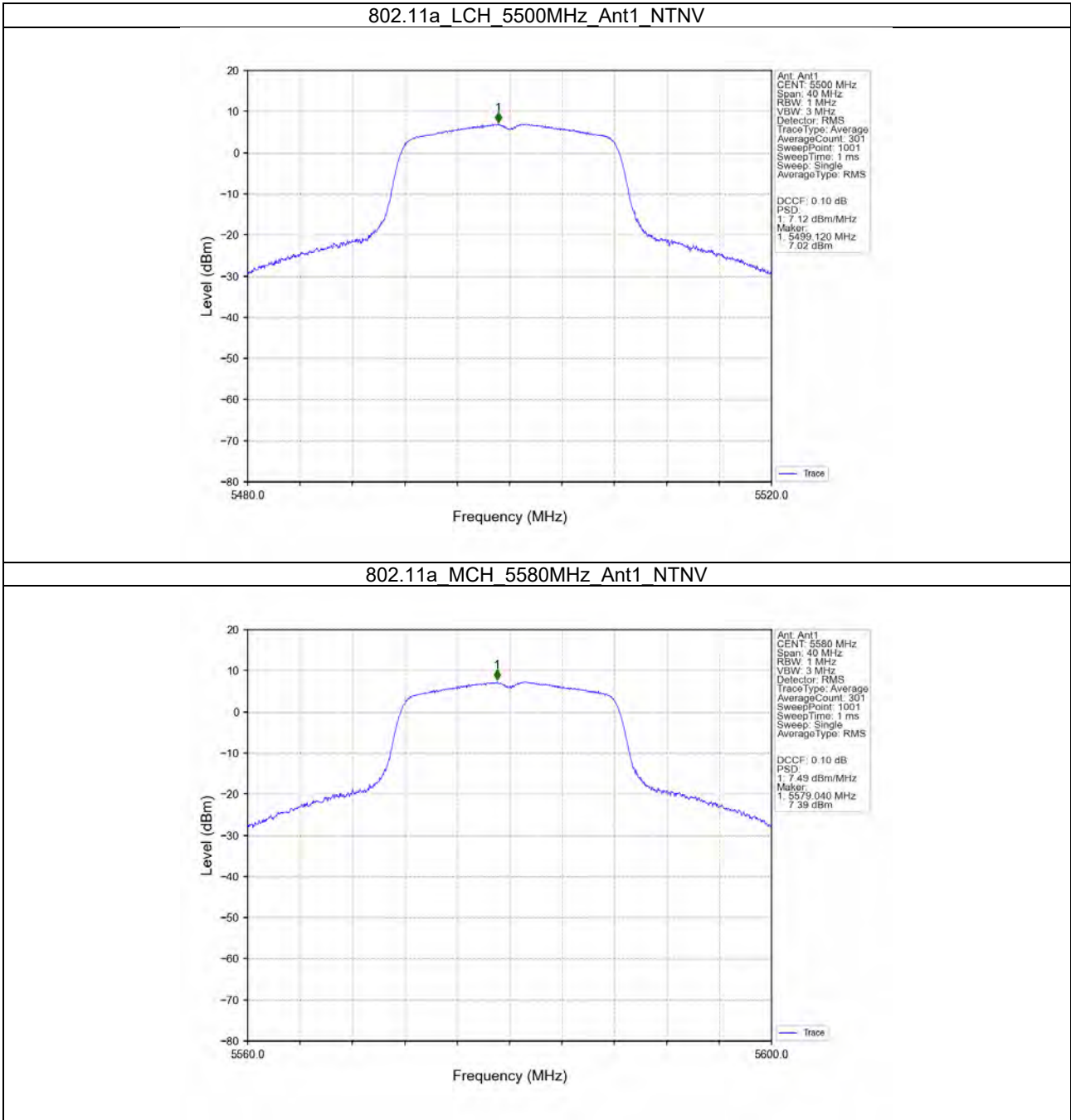
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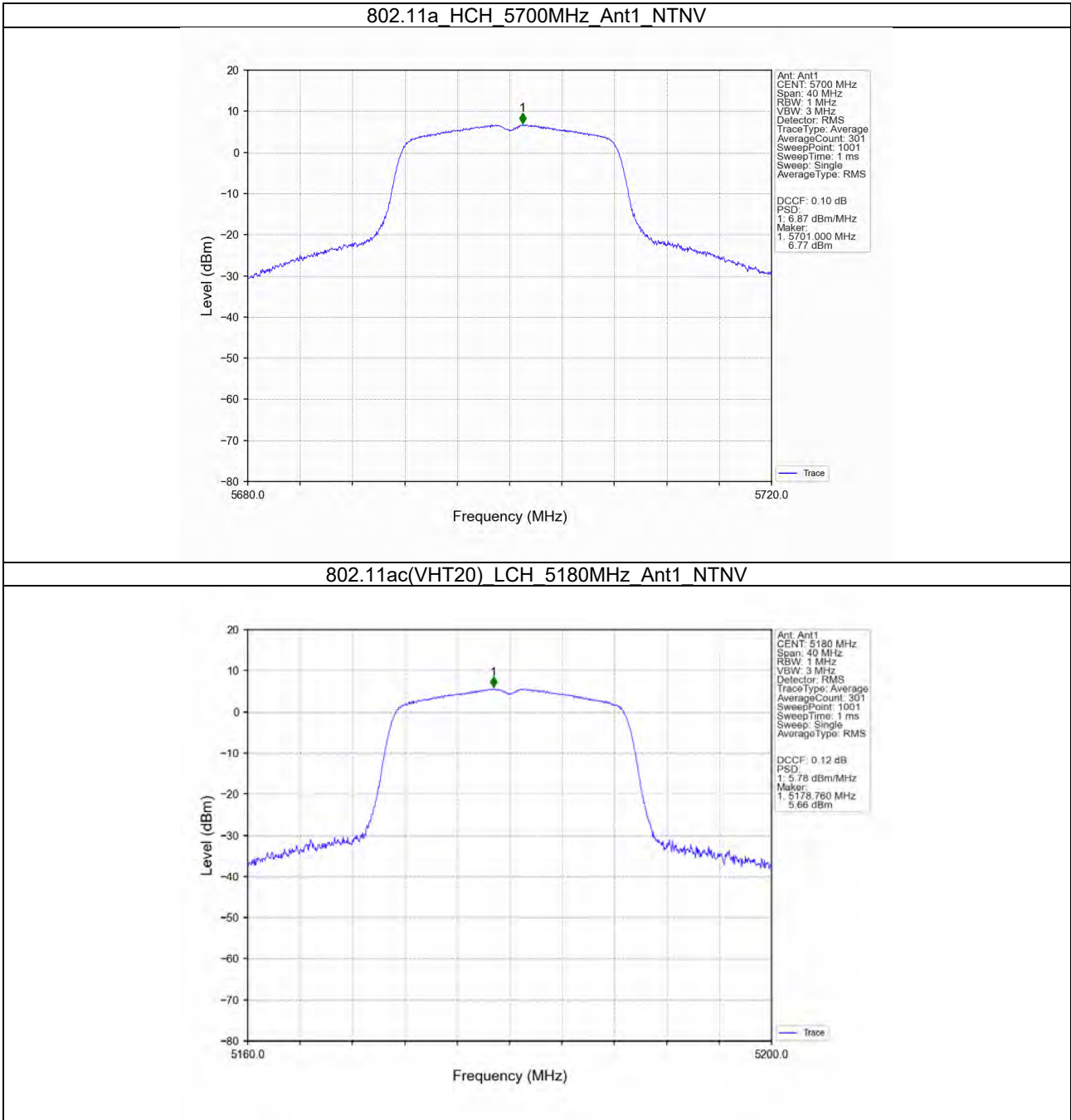
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

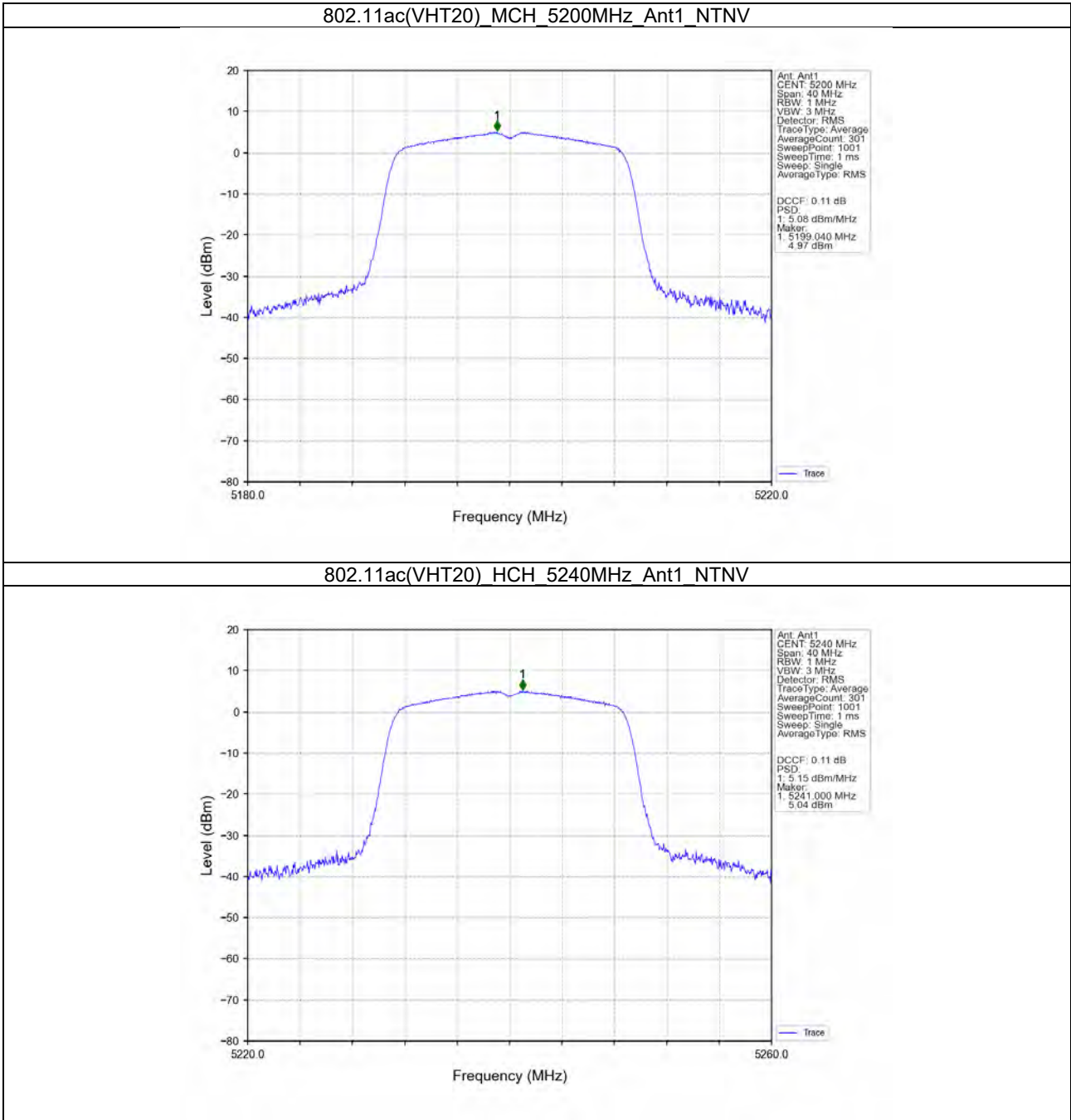
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

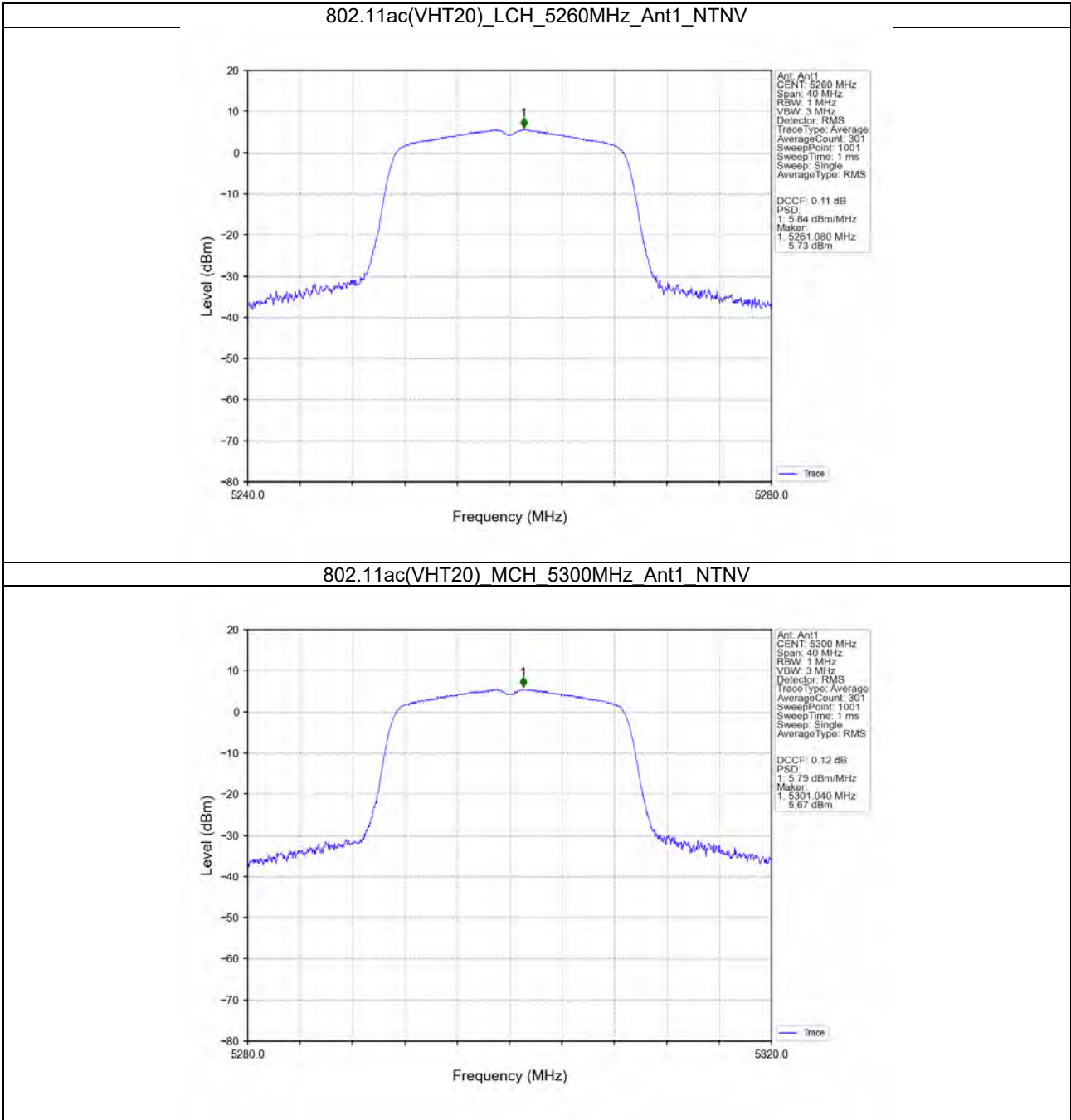
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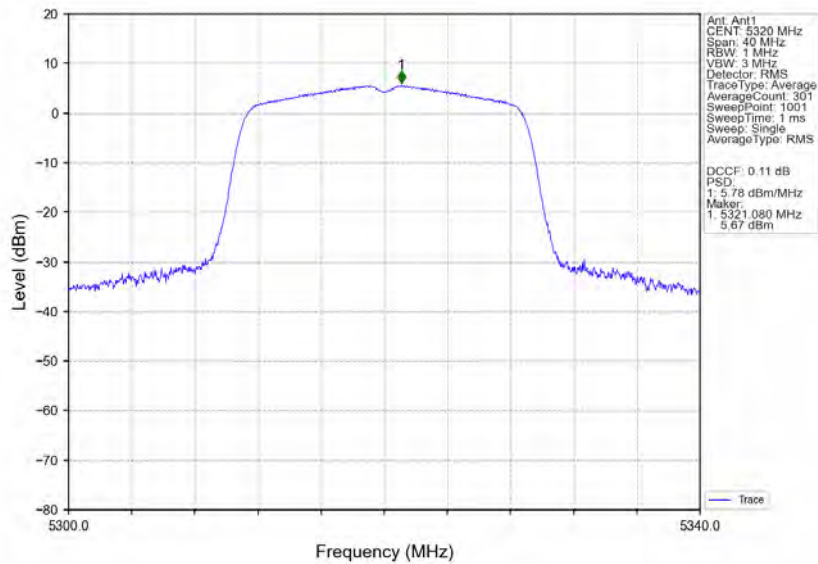


SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

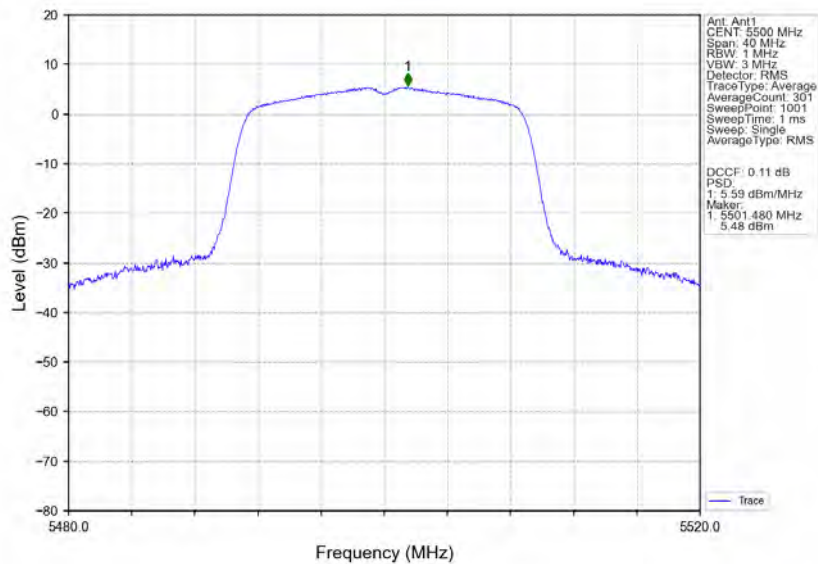
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802.11ac(VHT20)_HCH_5320MHz_Ant1_NTNV



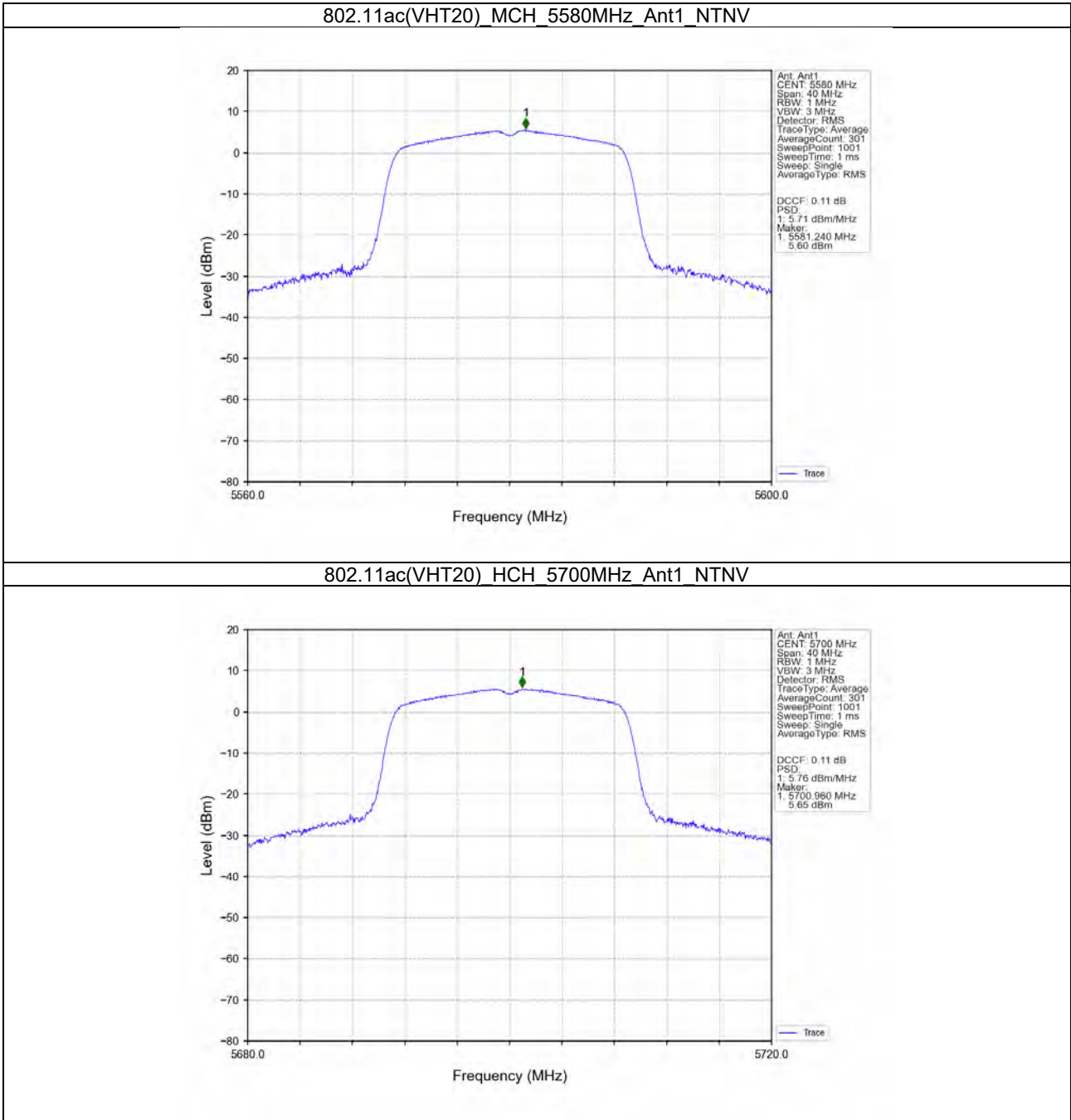
802.11ac(VHT20)_LCH_5500MHz_Ant1_NTNV





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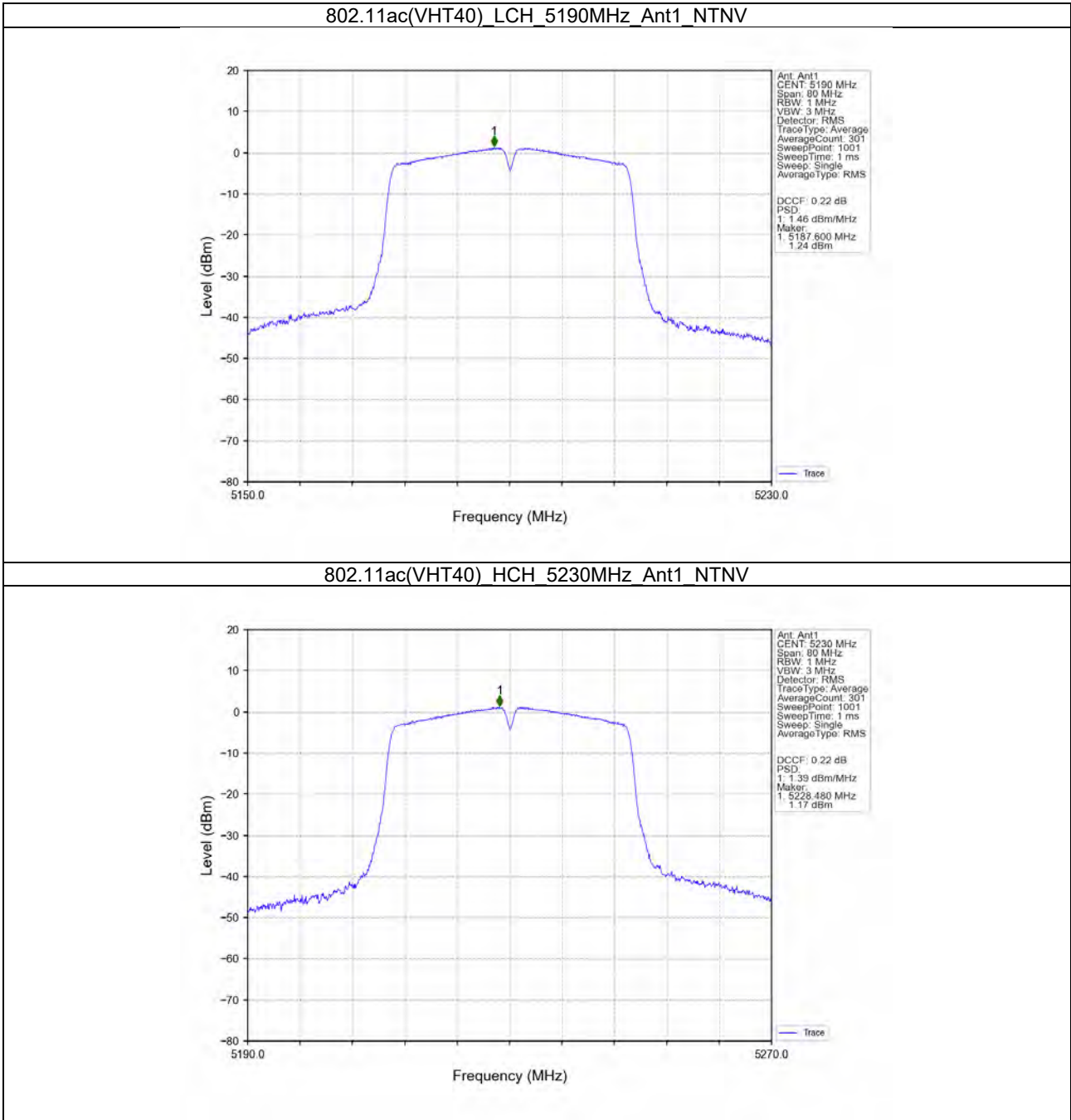
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

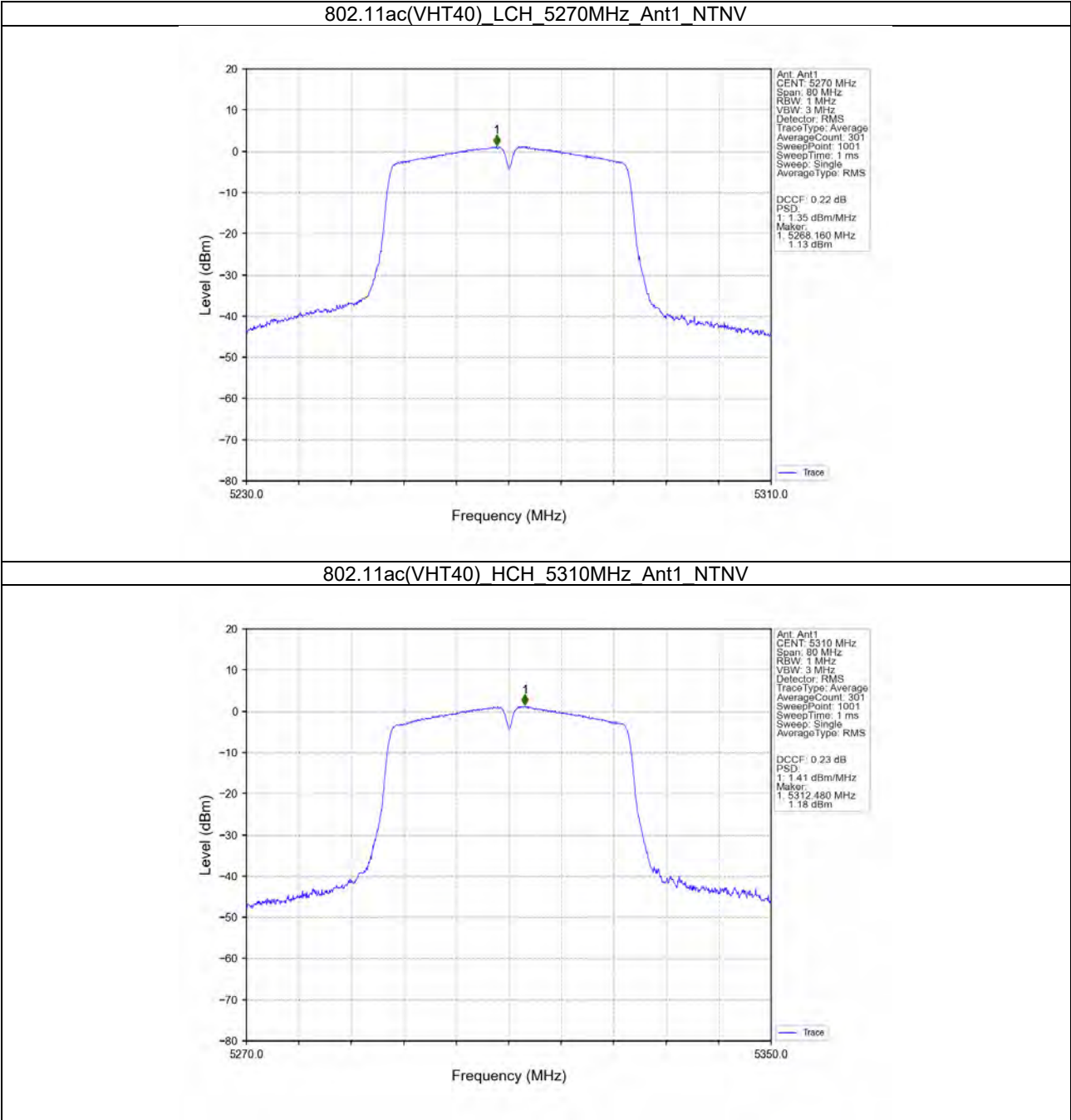
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SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

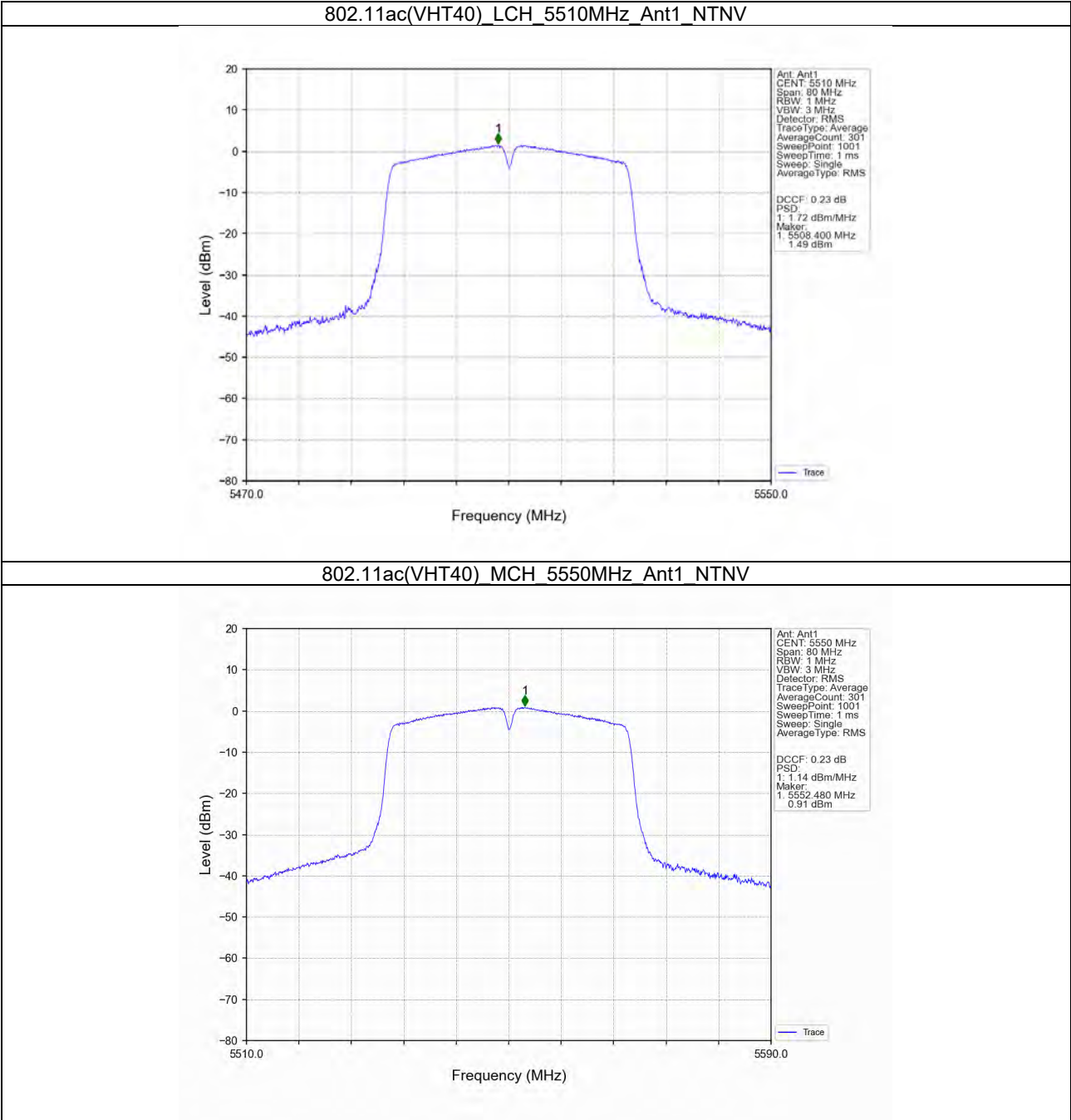
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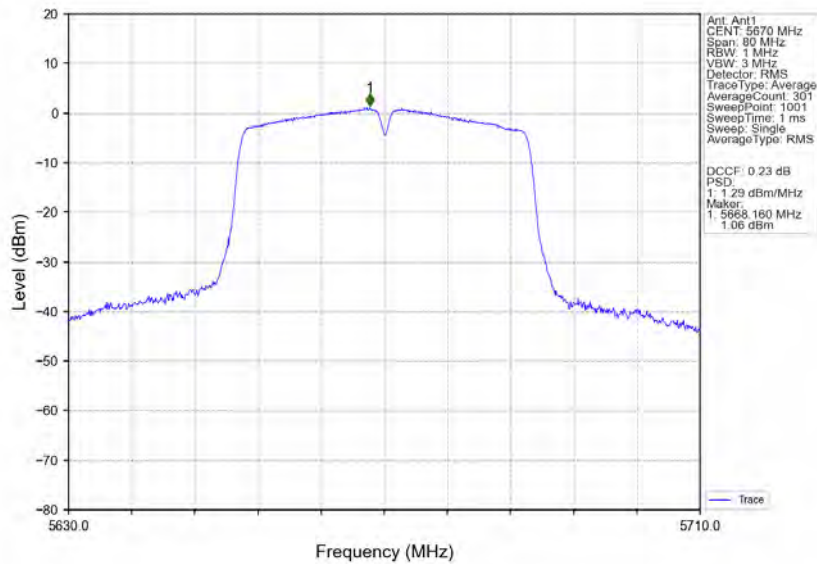




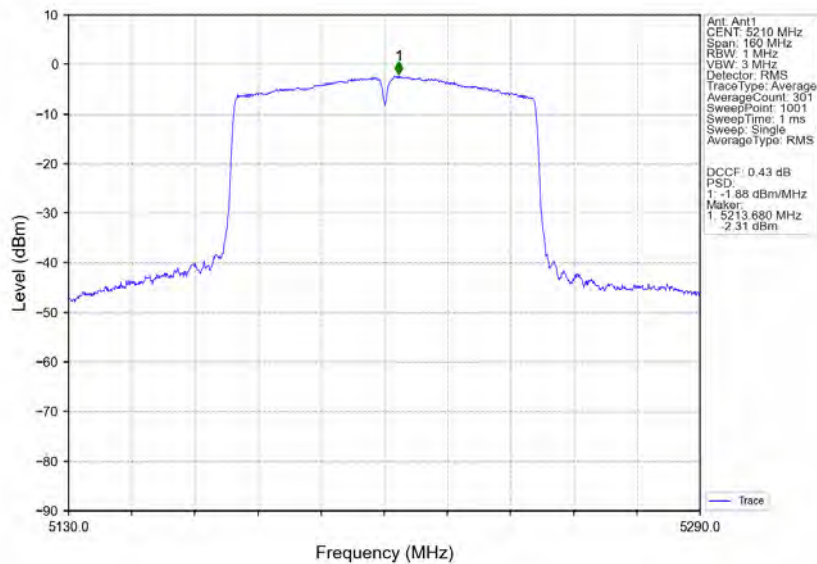
SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

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802.11ac(VHT40)_HCH_5670MHz_Ant1_NTNV



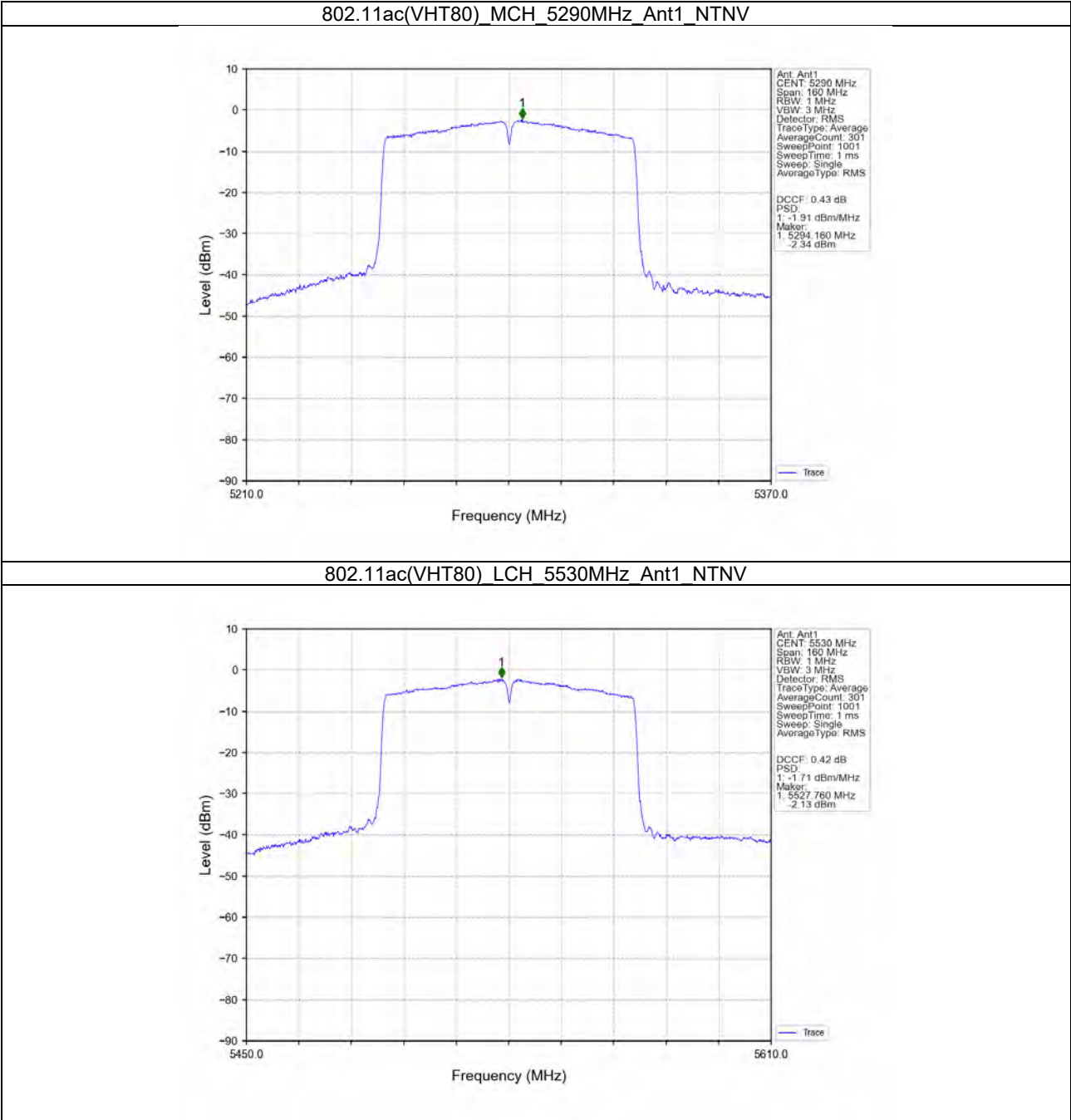
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV





SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

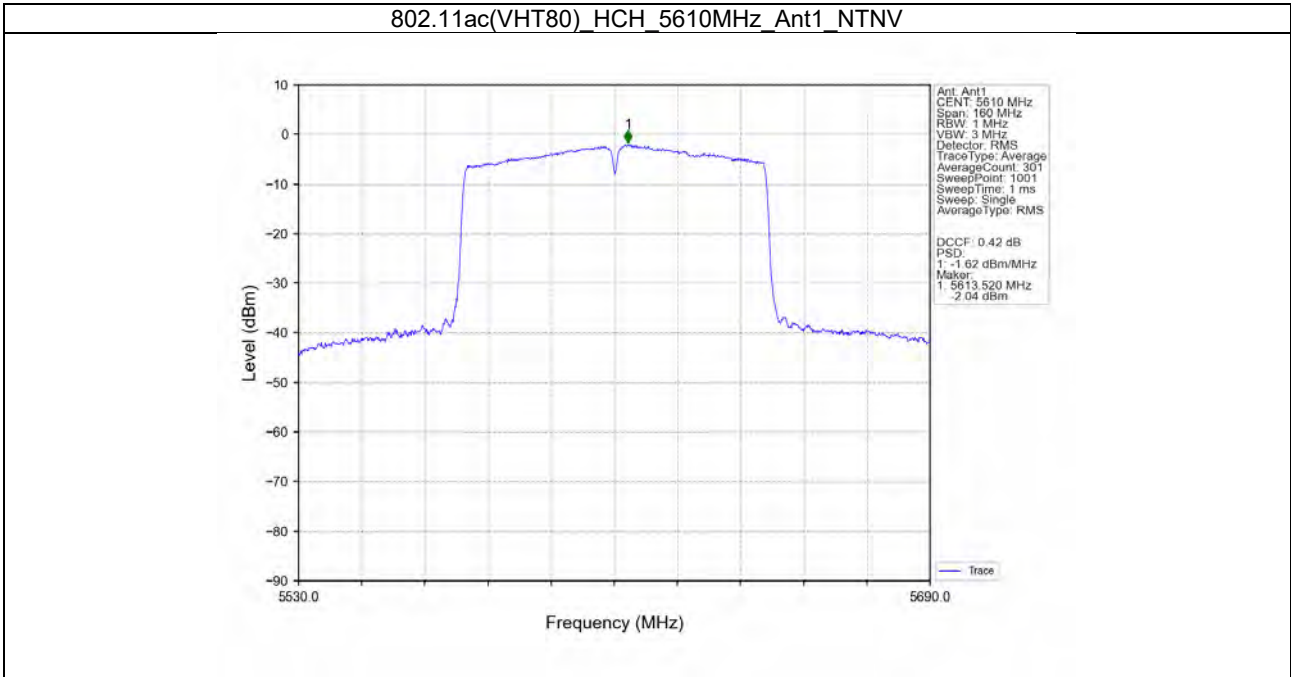
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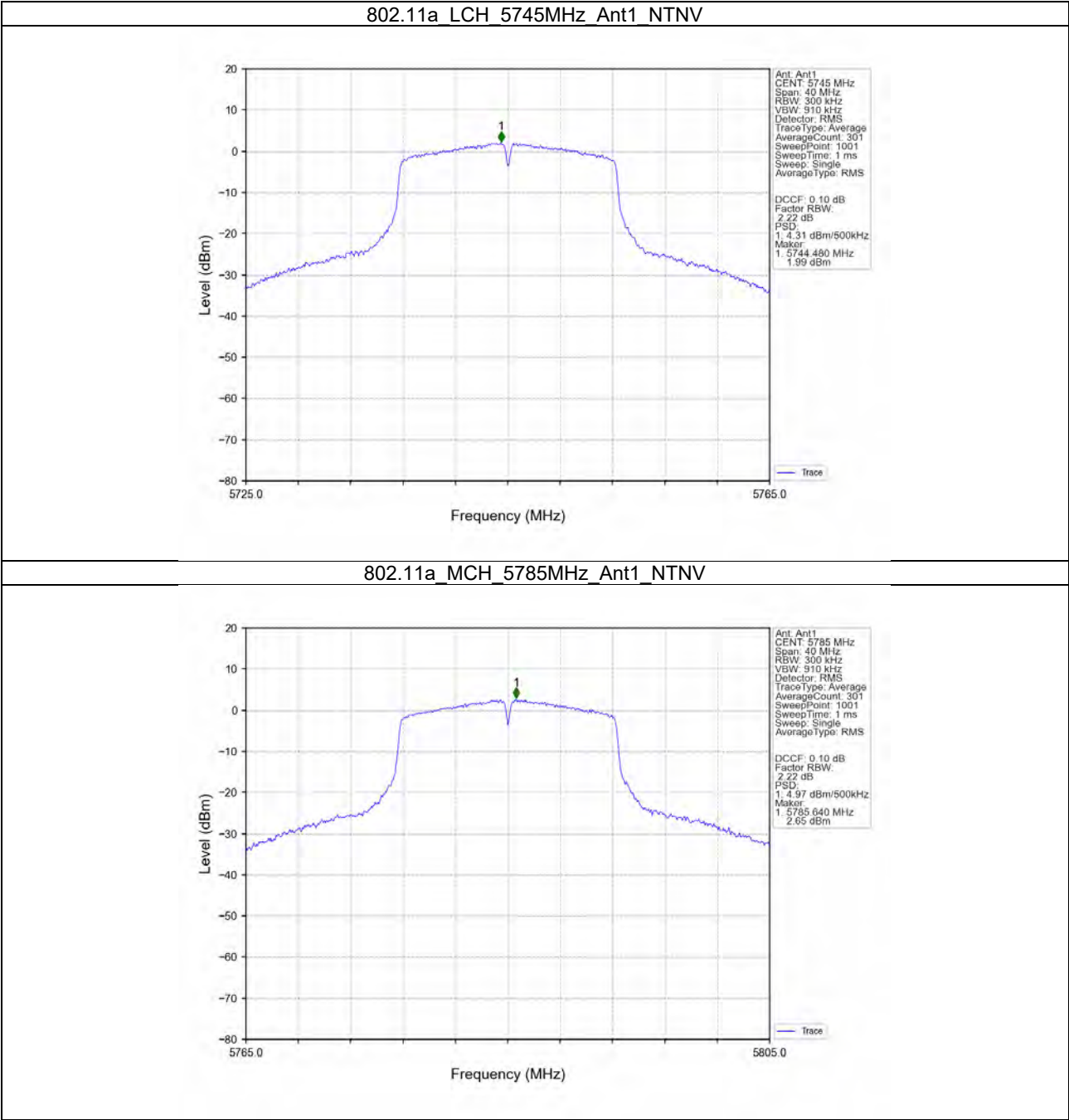




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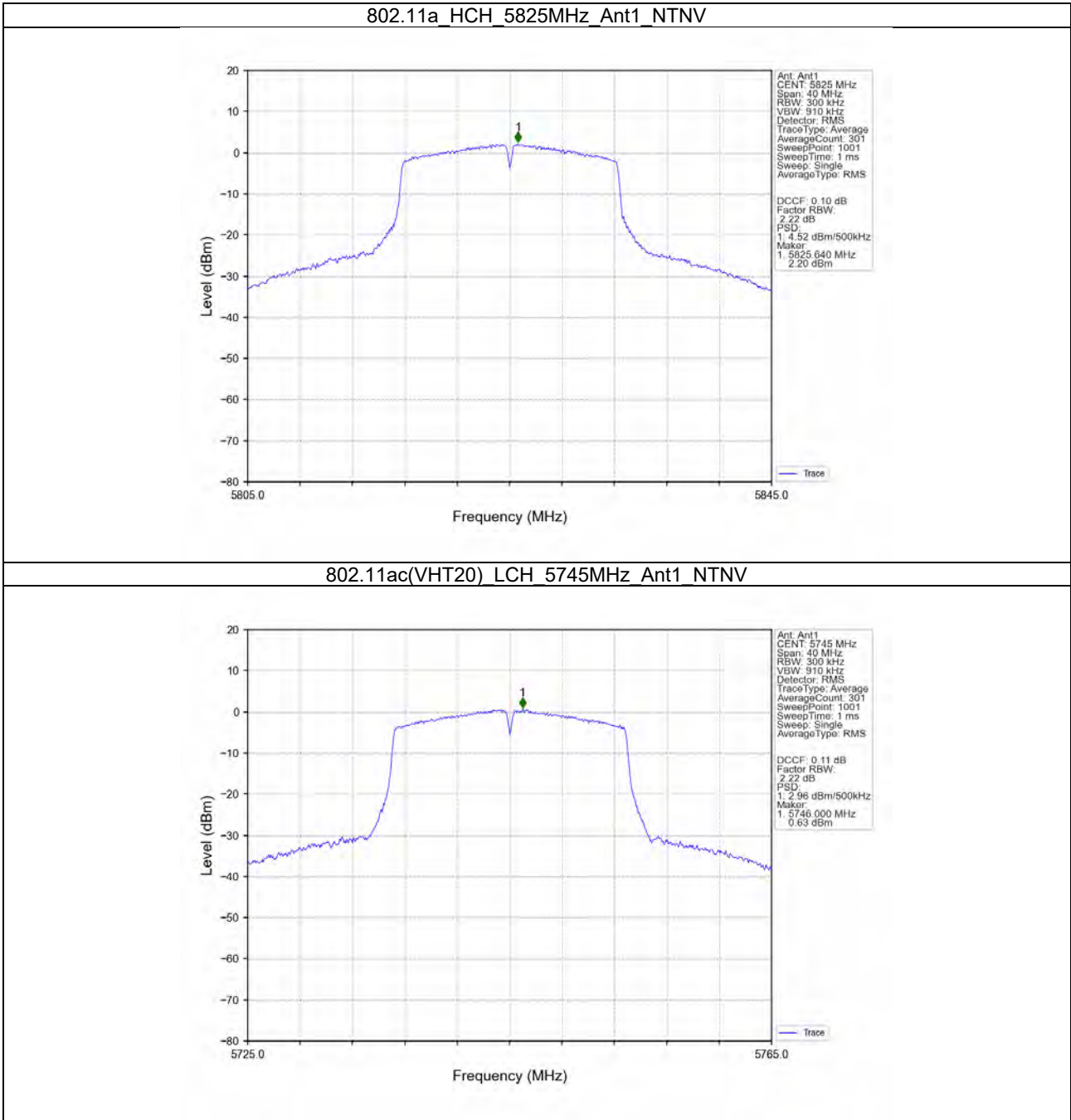
4.2.2 PSD-Band3





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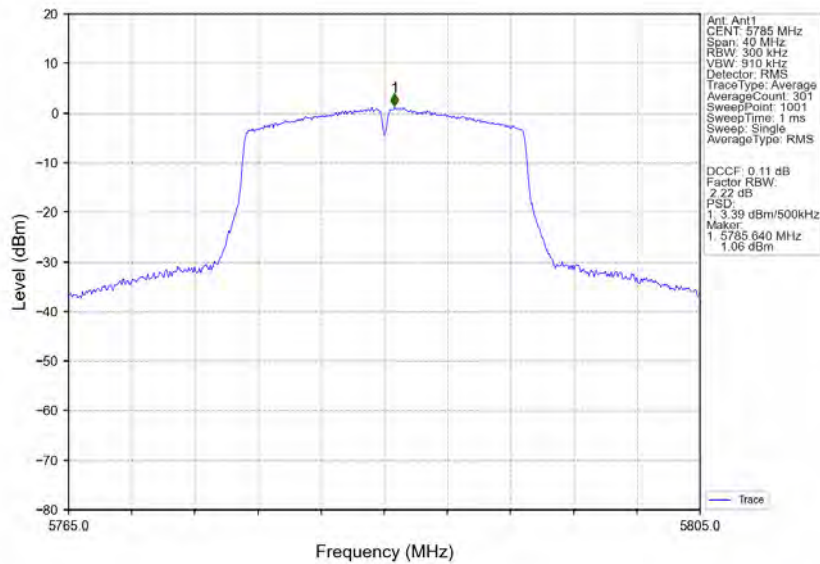




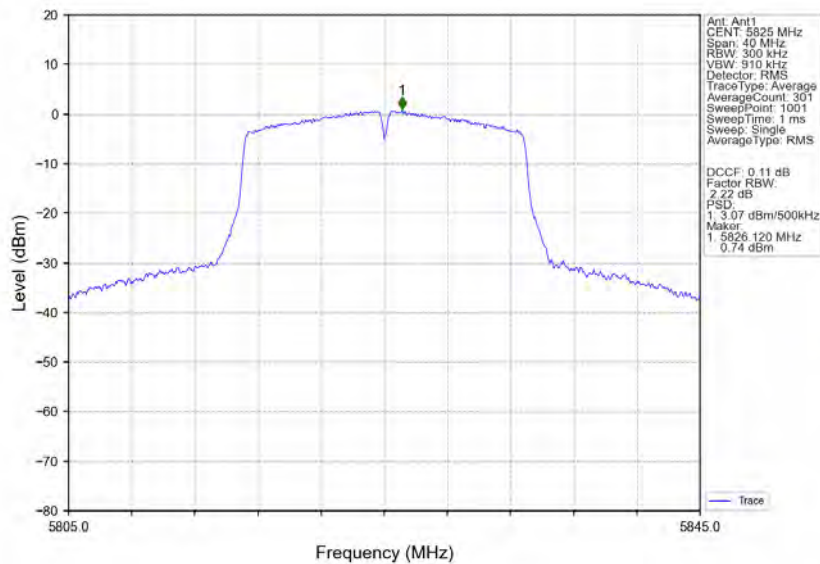
SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

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802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



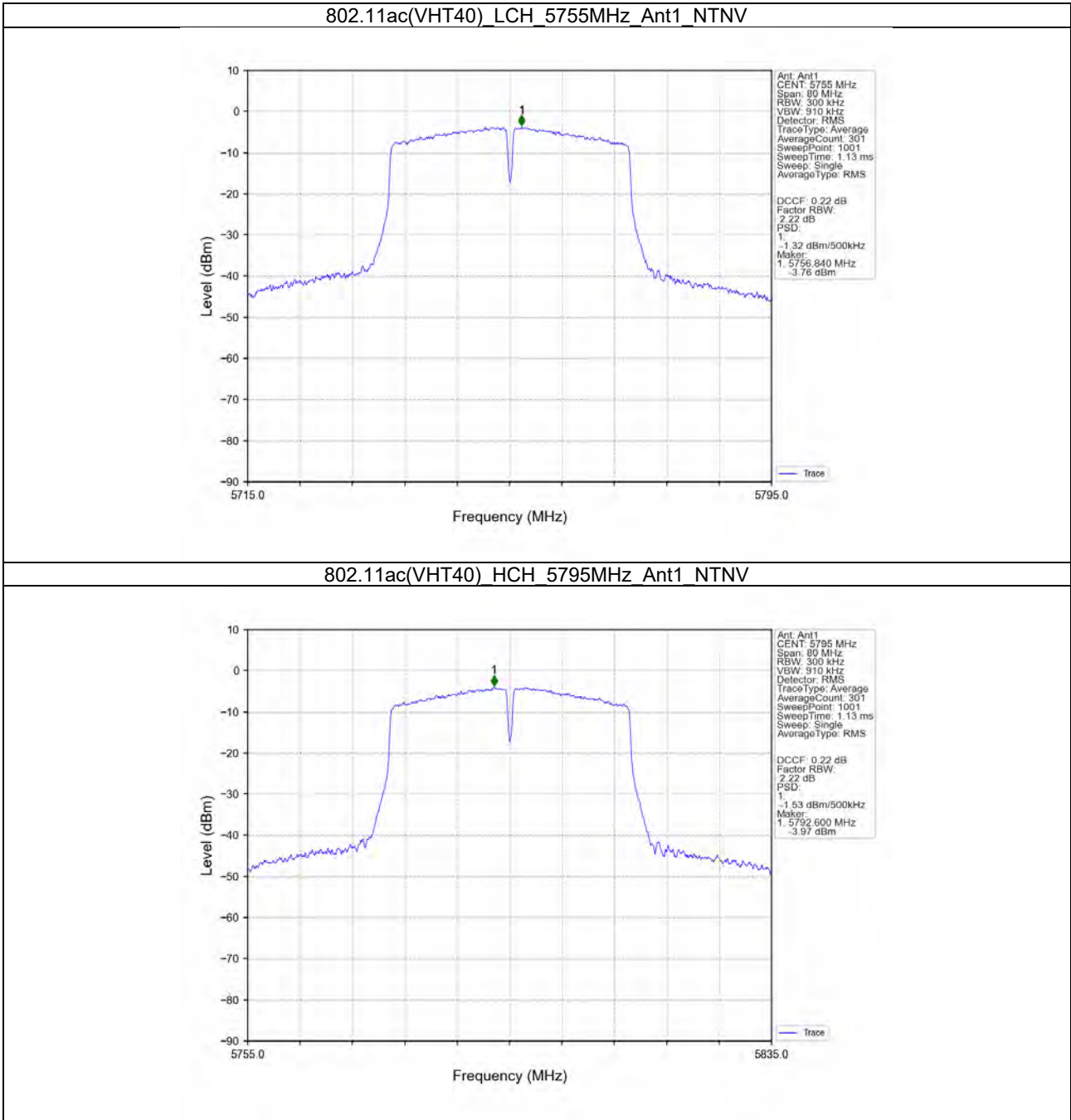
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV





SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

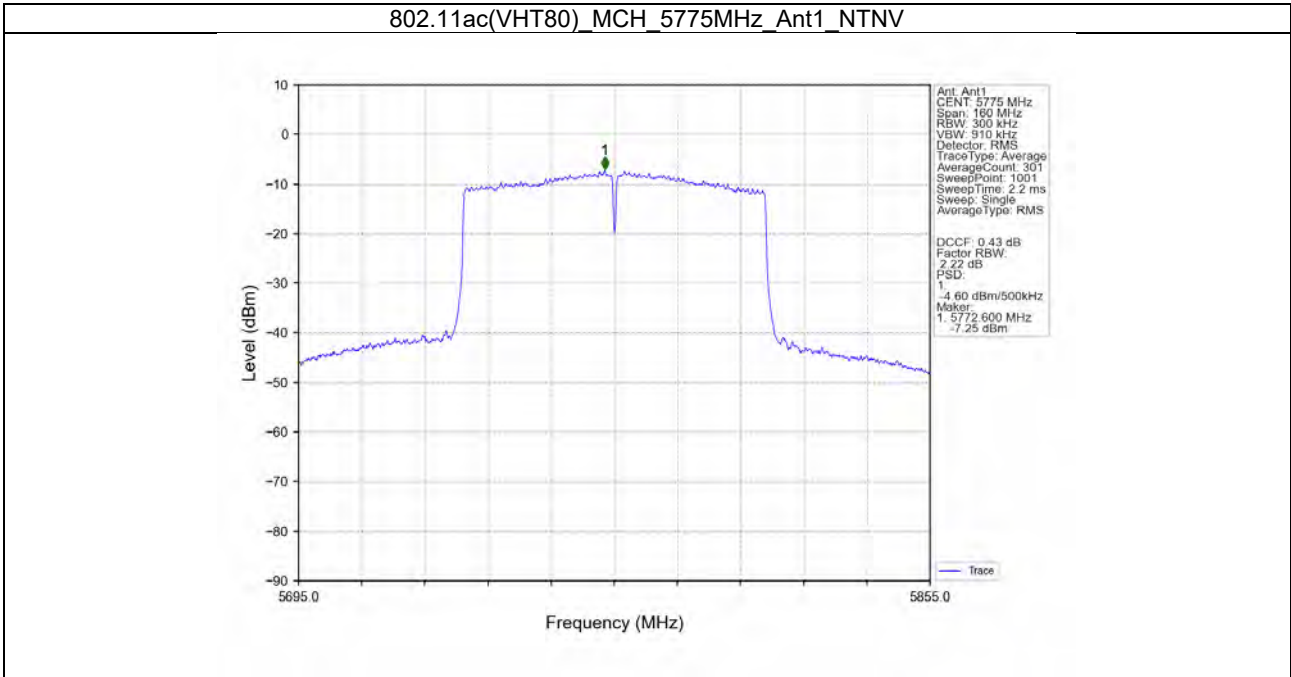
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5. Frequency Stability

5.1 Test Result

5.1.1 Ant1

Mode	TX Type	Frequency (MHz)	Temperature (°C)	Ant1		Limit (MHz)	Verdict
				Voltage (VAC)	Measured Frequency (MHz)		
802.11a	SISO	5180	20	102	5180.060	5150 to 5250	Pass
				120	5179.960	5150 to 5250	Pass
				138	5180.020	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.040	5150 to 5250	Pass
			-10	120	5180.040	5150 to 5250	Pass
			0	120	5180.020	5150 to 5250	Pass
			10	120	5179.980	5150 to 5250	Pass
			30	120	5180.020	5150 to 5250	Pass
			40	120	5180.020	5150 to 5250	Pass
			50	120	5180.120	5150 to 5250	Pass
		5200	20	102	5199.980	5150 to 5250	Pass
				120	5199.980	5150 to 5250	Pass
				138	5200.040	5150 to 5250	Pass
			-30	120	5200.000	5150 to 5250	Pass
			-20	120	5200.020	5150 to 5250	Pass
			-10	120	5200.040	5150 to 5250	Pass
			0	120	5200.100	5150 to 5250	Pass
			10	120	5200.040	5150 to 5250	Pass
			30	120	5200.020	5150 to 5250	Pass
			40	120	5200.080	5150 to 5250	Pass
			50	120	5199.940	5150 to 5250	Pass
		5240	20	102	5240.080	5150 to 5250	Pass
				120	5240.040	5150 to 5250	Pass
				138	5239.980	5150 to 5250	Pass
			-30	120	5240.060	5150 to 5250	Pass
			-20	120	5240.000	5150 to 5250	Pass
			-10	120	5240.000	5150 to 5250	Pass
			0	120	5240.040	5150 to 5250	Pass
			10	120	5240.000	5150 to 5250	Pass
			30	120	5240.060	5150 to 5250	Pass
			40	120	5240.020	5150 to 5250	Pass
			50	120	5240.020	5150 to 5250	Pass
		5260	20	102	5260.040	5250 to 5350	Pass
				120	5260.060	5250 to 5350	Pass
				138	5260.040	5250 to 5350	Pass
			-30	120	5259.980	5250 to 5350	Pass
			-20	120	5260.100	5250 to 5350	Pass
			-10	120	5260.100	5250 to 5350	Pass
			0	120	5260.040	5250 to 5350	Pass
			10	120	5260.000	5250 to 5350	Pass
			30	120	5260.020	5250 to 5350	Pass
			40	120	5259.980	5250 to 5350	Pass
			50	120	5259.980	5250 to 5350	Pass
		5300	20	102	5300.060	5250 to 5350	Pass
				120	5300.100	5250 to 5350	Pass
				138	5300.020	5250 to 5350	Pass



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			-30	120	5300.000	5250 to 5350	Pass
			-20	120	5300.020	5250 to 5350	Pass
			-10	120	5300.080	5250 to 5350	Pass
			0	120	5299.980	5250 to 5350	Pass
			10	120	5300.080	5250 to 5350	Pass
			30	120	5300.080	5250 to 5350	Pass
			40	120	5300.080	5250 to 5350	Pass
			50	120	5300.020	5250 to 5350	Pass
		5320	20	102	5320.040	5250 to 5350	Pass
				120	5320.000	5250 to 5350	Pass
				138	5320.020	5250 to 5350	Pass
			-30	120	5320.020	5250 to 5350	Pass
			-20	120	5320.020	5250 to 5350	Pass
			-10	120	5320.040	5250 to 5350	Pass
			0	120	5320.060	5250 to 5350	Pass
			10	120	5320.040	5250 to 5350	Pass
			30	120	5319.960	5250 to 5350	Pass
			40	120	5320.060	5250 to 5350	Pass
			50	120	5320.020	5250 to 5350	Pass
		5500	20	102	5500.080	5470 to 5725	Pass
				120	5500.040	5470 to 5725	Pass
				138	5500.020	5470 to 5725	Pass
			-30	120	5500.000	5470 to 5725	Pass
			-20	120	5500.100	5470 to 5725	Pass
			-10	120	5500.040	5470 to 5725	Pass
			0	120	5500.080	5470 to 5725	Pass
			10	120	5500.080	5470 to 5725	Pass
			30	120	5500.080	5470 to 5725	Pass
			40	120	5500.060	5470 to 5725	Pass
			50	120	5500.000	5470 to 5725	Pass
		5580	20	102	5580.020	5470 to 5725	Pass
				120	5579.980	5470 to 5725	Pass
				138	5580.100	5470 to 5725	Pass
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			-20	120	5580.060	5470 to 5725	Pass
			-10	120	5580.040	5470 to 5725	Pass
			0	120	5579.980	5470 to 5725	Pass
			10	120	5580.080	5470 to 5725	Pass
			30	120	5580.020	5470 to 5725	Pass
			40	120	5580.040	5470 to 5725	Pass
			50	120	5580.060	5470 to 5725	Pass
		5700	20	102	5700.000	5470 to 5725	Pass
				120	5700.000	5470 to 5725	Pass
				138	5700.080	5470 to 5725	Pass
			-30	120	5700.020	5470 to 5725	Pass
			-20	120	5699.980	5470 to 5725	Pass
			-10	120	5700.040	5470 to 5725	Pass
			0	120	5700.040	5470 to 5725	Pass
			10	120	5700.060	5470 to 5725	Pass
			30	120	5700.020	5470 to 5725	Pass
			40	120	5700.080	5470 to 5725	Pass
			50	120	5700.060	5470 to 5725	Pass
		5745	20	102	5745.000	5725 to 5850	Pass
				120	5745.060	5725 to 5850	Pass
				138	5745.000	5725 to 5850	Pass
			-30	120	5744.900	5725 to 5850	Pass
			-20	120	5745.000	5725 to 5850	Pass
			-10	120	5745.040	5725 to 5850	Pass
			0	120	5745.020	5725 to 5850	Pass
			10	120	5744.920	5725 to 5850	Pass



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			30	120	5744.960	5725 to 5850	Pass
			40	120	5745.000	5725 to 5850	Pass
			50	120	5745.080	5725 to 5850	Pass
		5785	20	102	5785.100	5725 to 5850	Pass
				120	5785.100	5725 to 5850	Pass
				138	5785.040	5725 to 5850	Pass
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			-20	120	5784.980	5725 to 5850	Pass
			-10	120	5785.040	5725 to 5850	Pass
			0	120	5785.020	5725 to 5850	Pass
			10	120	5784.960	5725 to 5850	Pass
			30	120	5785.020	5725 to 5850	Pass
			40	120	5785.040	5725 to 5850	Pass
			50	120	5785.120	5725 to 5850	Pass
		5825	20	102	5825.040	5725 to 5850	Pass
				120	5825.000	5725 to 5850	Pass
				138	5825.020	5725 to 5850	Pass
			-30	120	5825.000	5725 to 5850	Pass
			-20	120	5825.040	5725 to 5850	Pass
			-10	120	5825.080	5725 to 5850	Pass
			0	120	5825.080	5725 to 5850	Pass
			10	120	5825.080	5725 to 5850	Pass
			30	120	5825.000	5725 to 5850	Pass
			40	120	5825.020	5725 to 5850	Pass
			50	120	5825.000	5725 to 5850	Pass
802.11ac (VHT20)	SISO	5180	20	102	5180.040	5150 to 5250	Pass
				120	5180.020	5150 to 5250	Pass
				138	5180.000	5150 to 5250	Pass
			-30	120	5180.060	5150 to 5250	Pass
			-20	120	5180.040	5150 to 5250	Pass
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			0	120	5180.040	5150 to 5250	Pass
			10	120	5180.040	5150 to 5250	Pass
			30	120	5180.060	5150 to 5250	Pass
			40	120	5180.020	5150 to 5250	Pass
			50	120	5180.060	5150 to 5250	Pass
		5200	20	102	5200.020	5150 to 5250	Pass
				120	5200.080	5150 to 5250	Pass
				138	5200.060	5150 to 5250	Pass
			-30	120	5200.000	5150 to 5250	Pass
			-20	120	5200.060	5150 to 5250	Pass
			-10	120	5200.020	5150 to 5250	Pass
			0	120	5200.040	5150 to 5250	Pass
			10	120	5200.000	5150 to 5250	Pass
			30	120	5200.020	5150 to 5250	Pass
			40	120	5200.060	5150 to 5250	Pass
			50	120	5200.120	5150 to 5250	Pass
		5240	20	102	5240.100	5150 to 5250	Pass
				120	5239.980	5150 to 5250	Pass
				138	5240.040	5150 to 5250	Pass
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			-20	120	5239.960	5150 to 5250	Pass
			-10	120	5240.080	5150 to 5250	Pass
			0	120	5240.040	5150 to 5250	Pass
			10	120	5240.060	5150 to 5250	Pass
			30	120	5240.000	5150 to 5250	Pass
			40	120	5240.060	5150 to 5250	Pass
			50	120	5239.980	5150 to 5250	Pass
		5260	20	102	5260.020	5250 to 5350	Pass
				120	5260.100	5250 to 5350	Pass



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				138	5260.040	5250 to 5350	Pass
			-30	120	5260.020	5250 to 5350	Pass
			-20	120	5260.000	5250 to 5350	Pass
			-10	120	5260.040	5250 to 5350	Pass
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			10	120	5260.100	5250 to 5350	Pass
			30	120	5260.140	5250 to 5350	Pass
			40	120	5260.060	5250 to 5350	Pass
			50	120	5259.980	5250 to 5350	Pass
		5300	20	102	5300.060	5250 to 5350	Pass
				120	5300.040	5250 to 5350	Pass
				138	5300.020	5250 to 5350	Pass
			-30	120	5300.080	5250 to 5350	Pass
			-20	120	5300.040	5250 to 5350	Pass
			-10	120	5300.000	5250 to 5350	Pass
			0	120	5300.020	5250 to 5350	Pass
			10	120	5300.020	5250 to 5350	Pass
			30	120	5300.040	5250 to 5350	Pass
			40	120	5300.060	5250 to 5350	Pass
			50	120	5300.040	5250 to 5350	Pass
		5320	20	102	5320.000	5250 to 5350	Pass
				120	5320.040	5250 to 5350	Pass
				138	5319.940	5250 to 5350	Pass
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			-20	120	5320.060	5250 to 5350	Pass
			-10	120	5320.020	5250 to 5350	Pass
			0	120	5320.040	5250 to 5350	Pass
			10	120	5319.960	5250 to 5350	Pass
			30	120	5320.080	5250 to 5350	Pass
			40	120	5319.960	5250 to 5350	Pass
			50	120	5319.980	5250 to 5350	Pass
		5500	20	102	5499.980	5470 to 5725	Pass
				120	5500.060	5470 to 5725	Pass
				138	5500.040	5470 to 5725	Pass
			-30	120	5500.080	5470 to 5725	Pass
			-20	120	5499.980	5470 to 5725	Pass
			-10	120	5500.100	5470 to 5725	Pass
			0	120	5500.020	5470 to 5725	Pass
			10	120	5500.020	5470 to 5725	Pass
			30	120	5500.040	5470 to 5725	Pass
			40	120	5500.020	5470 to 5725	Pass
			50	120	5500.060	5470 to 5725	Pass
		5580	20	102	5580.040	5470 to 5725	Pass
				120	5579.980	5470 to 5725	Pass
				138	5580.020	5470 to 5725	Pass
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			-20	120	5580.020	5470 to 5725	Pass
			-10	120	5580.020	5470 to 5725	Pass
			0	120	5580.040	5470 to 5725	Pass
			10	120	5580.080	5470 to 5725	Pass
			30	120	5580.020	5470 to 5725	Pass
			40	120	5580.040	5470 to 5725	Pass
			50	120	5580.060	5470 to 5725	Pass
		5700	20	102	5700.040	5470 to 5725	Pass
				120	5700.040	5470 to 5725	Pass
				138	5700.080	5470 to 5725	Pass
			-30	120	5700.040	5470 to 5725	Pass
			-20	120	5700.100	5470 to 5725	Pass
			-10	120	5699.920	5470 to 5725	Pass
			0	120	5700.060	5470 to 5725	Pass



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			10	120	5700.020	5470 to 5725	Pass
			30	120	5700.100	5470 to 5725	Pass
			40	120	5699.960	5470 to 5725	Pass
			50	120	5700.060	5470 to 5725	Pass
		5745	20	102	5745.040	5725 to 5850	Pass
				120	5745.000	5725 to 5850	Pass
				138	5745.000	5725 to 5850	Pass
			-30	120	5744.960	5725 to 5850	Pass
			-20	120	5745.020	5725 to 5850	Pass
			-10	120	5745.000	5725 to 5850	Pass
			0	120	5745.040	5725 to 5850	Pass
			10	120	5745.020	5725 to 5850	Pass
			30	120	5744.980	5725 to 5850	Pass
			40	120	5744.980	5725 to 5850	Pass
			50	120	5745.020	5725 to 5850	Pass
		5785	20	102	5785.020	5725 to 5850	Pass
				120	5785.020	5725 to 5850	Pass
				138	5785.020	5725 to 5850	Pass
			-30	120	5785.020	5725 to 5850	Pass
			-20	120	5785.080	5725 to 5850	Pass
			-10	120	5785.060	5725 to 5850	Pass
			0	120	5785.080	5725 to 5850	Pass
			10	120	5785.000	5725 to 5850	Pass
			30	120	5785.100	5725 to 5850	Pass
			40	120	5785.000	5725 to 5850	Pass
			50	120	5785.040	5725 to 5850	Pass
		5825	20	102	5825.020	5725 to 5850	Pass
				120	5824.980	5725 to 5850	Pass
				138	5824.940	5725 to 5850	Pass
			-30	120	5824.980	5725 to 5850	Pass
			-20	120	5824.960	5725 to 5850	Pass
			-10	120	5825.000	5725 to 5850	Pass
			0	120	5825.040	5725 to 5850	Pass
			10	120	5824.980	5725 to 5850	Pass
			30	120	5824.980	5725 to 5850	Pass
			40	120	5825.020	5725 to 5850	Pass
			50	120	5825.040	5725 to 5850	Pass
802.11ac (VHT40)	SISO	5190	20	102	5190.120	5150 to 5250	Pass
				120	5190.080	5150 to 5250	Pass
				138	5190.080	5150 to 5250	Pass
			-30	120	5190.080	5150 to 5250	Pass
			-20	120	5190.080	5150 to 5250	Pass
			-10	120	5190.080	5150 to 5250	Pass
			0	120	5190.080	5150 to 5250	Pass
			10	120	5190.080	5150 to 5250	Pass
			30	120	5190.080	5150 to 5250	Pass
			40	120	5190.040	5150 to 5250	Pass
			50	120	5190.080	5150 to 5250	Pass
		5230	20	102	5230.080	5150 to 5250	Pass
				120	5230.080	5150 to 5250	Pass
				138	5230.080	5150 to 5250	Pass
			-30	120	5230.080	5150 to 5250	Pass
			-20	120	5230.080	5150 to 5250	Pass
			-10	120	5230.080	5150 to 5250	Pass
			0	120	5230.080	5150 to 5250	Pass
			10	120	5230.080	5150 to 5250	Pass
			30	120	5230.080	5150 to 5250	Pass
			40	120	5230.120	5150 to 5250	Pass
			50	120	5230.080	5150 to 5250	Pass
		5270	20	102	5270.040	5250 to 5350	Pass



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				120	5270.080	5250 to 5350	Pass
				138	5270.120	5250 to 5350	Pass
			-30	120	5270.080	5250 to 5350	Pass
			-20	120	5270.080	5250 to 5350	Pass
			-10	120	5270.120	5250 to 5350	Pass
			0	120	5270.080	5250 to 5350	Pass
			10	120	5270.120	5250 to 5350	Pass
			30	120	5270.080	5250 to 5350	Pass
			40	120	5270.040	5250 to 5350	Pass
			50	120	5270.120	5250 to 5350	Pass
		5310	20	102	5310.080	5250 to 5350	Pass
				120	5310.080	5250 to 5350	Pass
				138	5310.080	5250 to 5350	Pass
			-30	120	5310.080	5250 to 5350	Pass
			-20	120	5310.080	5250 to 5350	Pass
			-10	120	5310.080	5250 to 5350	Pass
			0	120	5310.040	5250 to 5350	Pass
			10	120	5310.160	5250 to 5350	Pass
			30	120	5310.040	5250 to 5350	Pass
			40	120	5310.080	5250 to 5350	Pass
			50	120	5310.080	5250 to 5350	Pass
		5510	20	102	5510.120	5470 to 5725	Pass
				120	5510.080	5470 to 5725	Pass
				138	5510.040	5470 to 5725	Pass
			-30	120	5510.080	5470 to 5725	Pass
			-20	120	5510.120	5470 to 5725	Pass
			-10	120	5510.040	5470 to 5725	Pass
			0	120	5510.120	5470 to 5725	Pass
			10	120	5510.080	5470 to 5725	Pass
			30	120	5510.080	5470 to 5725	Pass
			40	120	5510.080	5470 to 5725	Pass
			50	120	5510.080	5470 to 5725	Pass
		5550	20	102	5550.040	5470 to 5725	Pass
				120	5550.080	5470 to 5725	Pass
				138	5550.040	5470 to 5725	Pass
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			-20	120	5550.040	5470 to 5725	Pass
			-10	120	5550.080	5470 to 5725	Pass
			0	120	5550.080	5470 to 5725	Pass
			10	120	5550.080	5470 to 5725	Pass
			30	120	5550.080	5470 to 5725	Pass
			40	120	5550.040	5470 to 5725	Pass
			50	120	5550.040	5470 to 5725	Pass
		5670	20	102	5670.080	5470 to 5725	Pass
				120	5670.080	5470 to 5725	Pass
				138	5670.080	5470 to 5725	Pass
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			-20	120	5670.040	5470 to 5725	Pass
			-10	120	5670.080	5470 to 5725	Pass
			0	120	5670.040	5470 to 5725	Pass
			10	120	5670.040	5470 to 5725	Pass
			30	120	5670.040	5470 to 5725	Pass
			40	120	5670.080	5470 to 5725	Pass
			50	120	5670.040	5470 to 5725	Pass
		5755	20	102	5755.000	5725 to 5850	Pass
				120	5755.120	5725 to 5850	Pass
				138	5755.040	5725 to 5850	Pass
			-30	120	5755.000	5725 to 5850	Pass
			-20	120	5755.080	5725 to 5850	Pass
			-10	120	5755.080	5725 to 5850	Pass



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			0	120	5755.080	5725 to 5850	Pass
			10	120	5755.080	5725 to 5850	Pass
			30	120	5755.040	5725 to 5850	Pass
			40	120	5755.080	5725 to 5850	Pass
			50	120	5755.040	5725 to 5850	Pass
		5795	20	102	5795.120	5725 to 5850	Pass
				120	5795.120	5725 to 5850	Pass
				138	5795.080	5725 to 5850	Pass
			-30	120	5795.120	5725 to 5850	Pass
			-20	120	5795.120	5725 to 5850	Pass
			-10	120	5795.080	5725 to 5850	Pass
			0	120	5795.040	5725 to 5850	Pass
			10	120	5795.080	5725 to 5850	Pass
			30	120	5795.080	5725 to 5850	Pass
			40	120	5795.040	5725 to 5850	Pass
			50	120	5795.080	5725 to 5850	Pass
802.11ac (VHT80)	SISO	5210	20	102	5210.075	5150 to 5250	Pass
				120	5210.075	5150 to 5250	Pass
				138	5210.075	5150 to 5250	Pass
			-30	120	5210.075	5150 to 5250	Pass
			-20	120	5210.075	5150 to 5250	Pass
			-10	120	5210.075	5150 to 5250	Pass
			0	120	5210.075	5150 to 5250	Pass
			10	120	5210.150	5150 to 5250	Pass
			30	120	5210.075	5150 to 5250	Pass
			40	120	5210.075	5150 to 5250	Pass
			50	120	5210.075	5150 to 5250	Pass
		5290	20	102	5290.075	5250 to 5350	Pass
				120	5290.075	5250 to 5350	Pass
				138	5290.150	5250 to 5350	Pass
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			-20	120	5290.075	5250 to 5350	Pass
			-10	120	5290.075	5250 to 5350	Pass
			0	120	5290.150	5250 to 5350	Pass
			10	120	5290.150	5250 to 5350	Pass
			30	120	5290.150	5250 to 5350	Pass
			40	120	5290.075	5250 to 5350	Pass
			50	120	5290.075	5250 to 5350	Pass
		5530	20	102	5530.075	5470 to 5725	Pass
				120	5530.075	5470 to 5725	Pass
				138	5530.075	5470 to 5725	Pass
			-30	120	5530.075	5470 to 5725	Pass
			-20	120	5530.075	5470 to 5725	Pass
			-10	120	5530.075	5470 to 5725	Pass
			0	120	5530.075	5470 to 5725	Pass
			10	120	5530.075	5470 to 5725	Pass
			30	120	5530.075	5470 to 5725	Pass
			40	120	5530.075	5470 to 5725	Pass
			50	120	5530.075	5470 to 5725	Pass
		5610	20	102	5610.075	5470 to 5725	Pass
				120	5610.075	5470 to 5725	Pass
				138	5610.075	5470 to 5725	Pass
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			-20	120	5610.075	5470 to 5725	Pass
			-10	120	5610.075	5470 to 5725	Pass
			0	120	5610.150	5470 to 5725	Pass
			10	120	5610.075	5470 to 5725	Pass
			30	120	5610.150	5470 to 5725	Pass
			40	120	5610.075	5470 to 5725	Pass
			50	120	5610.075	5470 to 5725	Pass



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		5775	20	102	5775.075	5725 to 5850	Pass
				120	5775.000	5725 to 5850	Pass
				138	5775.075	5725 to 5850	Pass
			-30	120	5775.150	5725 to 5850	Pass
			-20	120	5775.150	5725 to 5850	Pass
			-10	120	5775.075	5725 to 5850	Pass
			0	120	5775.075	5725 to 5850	Pass
			10	120	5775.150	5725 to 5850	Pass
			30	120	5775.075	5725 to 5850	Pass
			40	120	5775.150	5725 to 5850	Pass
			50	120	5775.150	5725 to 5850	Pass