



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240400056201

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TEST REPORT

Application No.: KSCR2404000562AT
FCC ID: 2BFQD-JUEYINGLITE3
Applicant: Hangzhou Yunshenchu Technology Co.,Ltd.
Address of Applicant: Building 3, Zijin Dream Plaza, No.36 Xinran Street, Sandun Town, Xihu District, Hangzhou, Zhejiang, China
Manufacturer: Hangzhou Yunshenchu Technology Co.,Ltd.
Address of Manufacturer: Building 3, Zijin Dream Plaza, No.36 Xinran Street, Sandun Town, Xihu District, Hangzhou, Zhejiang, China
Factory: Huzhou Yunshenchu Robotics Co., Ltd.
Address of Factory: Room 110-23, Building 1, No. 611 Yunxiu South Road, Wuyang Street, Deqing, Huzhou, Zhejiang, China
Equipment Under Test (EUT):
EUT Name: Quadruped Robot
Model No.: Jueying Lite3 LiDAR, Jueying Lite3 Basic, Jueying Lite3 Pro, Jueying Lite3 Venture ♣
♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark: 
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2024-04-03
Date of Test: 2024-04-07 to 2024-05-29
Date of Issue: 2024-05-30

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Revision Record			
Version	Description	Date	Remark
00	Original	2024-05-30	/

Authorized for issue by:			
Tested By		Damon Zhou	
		Damon_Zhou/Project Engineer	
Approved By		Terry Hou	
		Terry Hou /Reviewer	

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data		N/A	47 CFR Part 15, Subpart E 15.407 (c)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)	Pass
Duty Cycle		KDB 789033 II B 1	KDB 789033 D02 II B 1	Pass
99% Bandwidth		KDB 789033 II D	N/A	Pass
26dB Emission bandwidth		KDB 789033 D02 II C 1	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Minimum 6 dB bandwidth (5.725-5.85 GHz band)		KDB 789033 D02 II C 2	47 CFR Part 15, Subpart E 15.407 (e)	Pass
Maximum Conducted output power		KDB 789033 D02 II E	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Peak Power spectrum density		KDB 789033 D02 II F	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Radiated Emissions (Below 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions (Above 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Frequency Stability		ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	Pass

Note: There are series models mentioned in this report, and they are the identical in electrical and electronic characters. Only the model Jueying Lite3 LiDAR was tested since their differences are the model number, hardware interfaces and payloads. Jueying Lite3 Basic reduces a laser radar, an NVIDIA Jetson Xavier NX, a depth camera, and external hardware interfaces compared to Jueying Lite3 LiDAR. Jueying Lite3 Venture reduces a laser radar, an NVIDIA Jetson Xavier NX and a depth camera compared to Jueying Lite3 LiDAR. Jueying Lite3 Pro reduces a laser radar compared to Jueying Lite3 LiDAR.

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4 General Information

4.1 Details of E.U.T.

Power supply:	Powered by Li-ion Rechargeable Battery Battery model: N009-8S2P Charging Limited Voltage: 32.8V Nominal capacity: 5000mAh Rated Capacity:4400mAh,28.8V126.72Wh Adapter model: SOY-3360500-454 INPUT: 100-240V,50/60Hz,2.5A Max OUTPUT: DC 33.6V,5.0A,168.0W
Operation Frequency/Number of channels (20MHz):	U-NII-1:5180-5240MHz (4 Channels); U-NII-3: 5745-5825MHz (5 Channels)
Operation Frequency/Number of channels/(40MHz):	U-NII-1:5190-5230MHz (2 Channels); U-NII-3: 5755-5795MHz (2 Channels)
Operation Frequency/Number of channels (80MHz):	U-NII-1:5210MHz (1 Channel); U-NII-3: 5775MHz (1 Channel)
Modulation Type:	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Spacing:	802.11a/n/ac20: 20MHz; 802.11n/ac 40: 40MHz; 802.11ac 80: 80MHz
Antenna Type:	PIFA Antenna
Antenna Gain:	Ant1: 3.33dBi; (Provided by the manufacturer) Ant2: 3.68dBi. (Provided by the manufacturer)

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4.2 Power level setting using in test:

Channel	802.11a		802.11n(HT20)	
	Ant 1	Ant 2	Ant 2	Ant 2
36	78	78	68	68
40	78	78	68	68
48	78	78	65	65
149	78	90	65	77
157	78	90	65	77
165	74	82	58	66
Channel	802.11n(HT40)			
	Ant 1	Ant 2		
38	65	65		
46	63	63		
151	61	71		
159	57	67		
Channel	802.11ac(VHT80)			
	Ant 1	Ant 2		
42	61	61		
155	58	67		

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	Lenovo	/	/

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4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz)
		5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz)
		4.5dB (30MHz-1GHz)
		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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4.5 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.6 Test Facility

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

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None



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5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	EMI Test Receive	R&S	ESCI	KS301101	01/15/2024	01/14/2025
2	LISN	R&S	ENV216	KS301197	01/15/2024	01/14/2025
3	LISN	Schwarzbeck	NNLK 8129	KS301091	01/15/2024	01/14/2025
4	Pulse Limiter	R&S	ESH3-Z2	KUS1902E001	01/15/2024	01/14/2025
5	CE test Cable	Thermax	/	CZ301102	01/15/2024	01/14/2025
6	Test Software	Farad	EZ-EMC	/	N.C.R	N.C.R
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/24/2023	08/23/2024
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/24/2023	08/23/2024
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/15/2024	01/14/2025
4	Signal Generator	R&S	SMBV100B	KSEM032	03/19/2024	03/18/2025
5	Signal Generator	R&S	SMW200A	KSEM020-1	08/24/2023	08/23/2024
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/24/2023	08/23/2024
7	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/24/2023	08/23/2024
8	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/19/2024	03/18/2025
9	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/24/2023	08/23/2024
10	Switcher	TST	FY562	KUS2001M001-4	01/15/2024	01/14/2025
11	AC Power Source	EXTECH	6605	KS301178	N.C.R	N.C.R
12	DC Power Supply	Aglient	E3632A	KS301180	N.C.R	N.C.R
13	Conducted Test Cable	Thermax	RF01-RF04	CZ301111- CZ301120	01/15/2024	01/14/2025
14	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/24/2023	08/23/2024
15	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/19/2024	03/18/2025
16	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	08/24/2023	08/23/2024
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	03/19/2024	03/18/2025
3	Signal Generator	Agilent	E8257C	KS301066	08/24/2023	08/23/2024
4	Loop Antenna	COM-POWER	AL-130R	KUS1806E001	03/18/2023	03/17/2025
5	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E005	06/29/2023	06/28/2025
6	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E006	03/19/2024	03/18/2025
7	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	08/24/2023	08/23/2024
8	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	KS301186	04/07/2023	04/06/2025
9	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/07/2024	01/06/2026
10	Amplifier(30MHz~18GHz)	PANSHAN TECHNOLOGY	LNA:1~18G	KSEM010-1	01/15/2024	01/14/2025
11	Amplifier(18~40GHz)	PANSHAN TECHNOLOGY	LNA180400G40	KSEM038	08/24/2023	08/23/2024
12	RE Test Cable	REBES MICROWAVE	/	CZ301097	08/24/2023	08/23/2024
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	03/19/2024	03/18/2025
14	Software	Faratronic	EZ_EMG-v 3A1	/	NCR	NCR
15	Software	ESE	E3_V 6.111221a	/	NCR	NCR

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard 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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is PIFA Antenna and no consideration of replacement. The best case gain of the antenna 1 is 3.33dBi and antenna 2 is 3.68 dBi.

Antenna location: Refer to internal photo.



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6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	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.

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

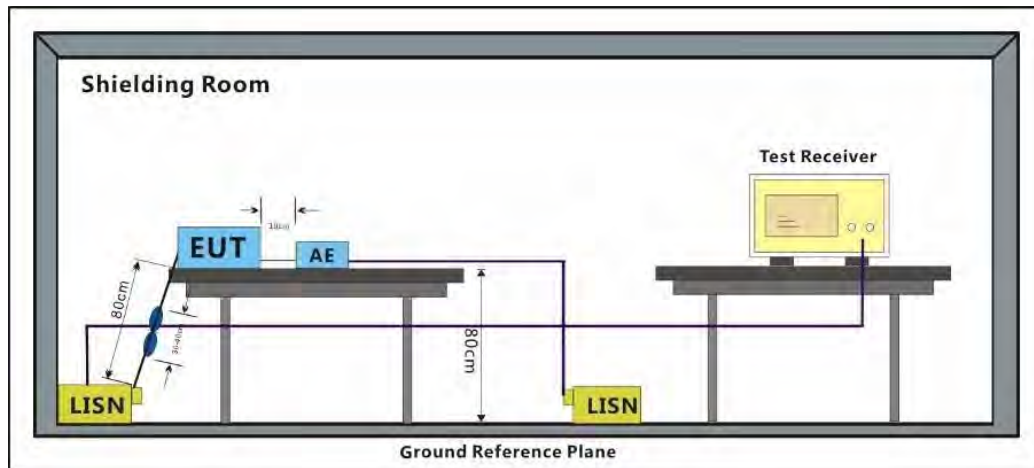
Humidity: 45.0 % RH

Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

- 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 50ohm/50μH + 5ohm 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 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor

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Test Mode: 00; Line: Live line



No.	Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.2114	23.04	12.23	20.02	43.06	32.25	63.15	53.15	-20.09	-20.90	Pass
2	0.3341	22.44	11.39	20.03	42.47	31.42	59.35	49.35	-16.88	-17.93	Pass
3	0.5290	17.77	4.00	20.04	37.81	24.04	56.00	46.00	-18.19	-21.96	Pass
4	3.6332	19.73	8.23	19.97	39.70	28.20	56.00	46.00	-16.30	-17.80	Pass
5	4.3792	17.10	6.39	19.96	37.06	26.35	56.00	46.00	-18.94	-19.65	Pass
6*	14.2869	28.53	22.60	19.95	48.48	42.55	60.00	50.00	-11.52	-7.45	Pass

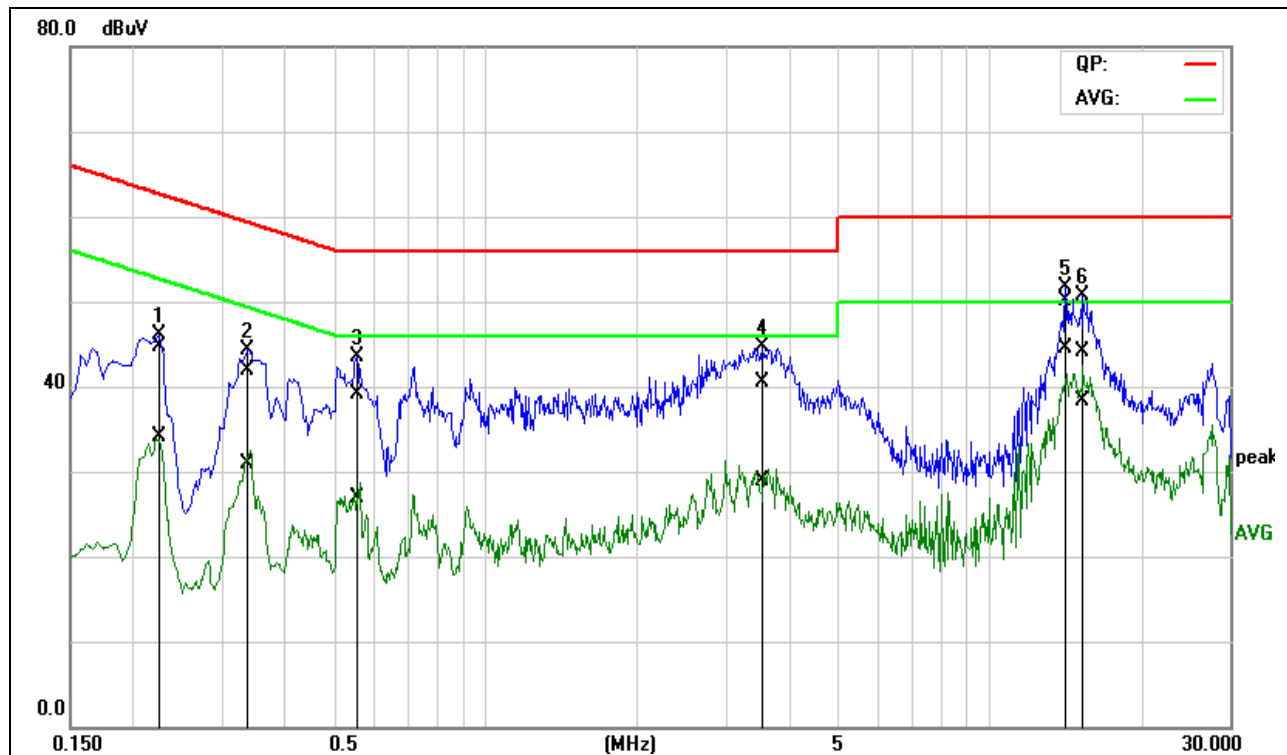
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Test Mode: 00; Line: Neutral Line



No.	Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.2222	24.53	13.90	20.14	44.67	34.04	62.74	52.74	-18.07	-18.70	Pass
2	0.3364	21.84	10.79	20.14	41.98	30.93	59.29	49.29	-17.31	-18.36	Pass
3	0.5510	19.18	6.91	20.02	39.20	26.93	56.00	46.00	-16.80	-19.07	Pass
4	3.5757	20.48	8.85	19.96	40.44	28.81	56.00	46.00	-15.56	-17.19	Pass
5*	14.2065	30.20	24.49	20.00	50.20	44.49	60.00	50.00	-9.80	-5.51	Pass
6	15.3278	24.16	18.36	20.00	44.16	38.36	60.00	50.00	-15.84	-11.64	Pass

7.2 Duty Cycle

Test Requirement KDB 789033 D02 II B 1

Test Method: KDB 789033 II B 1

7.2.1 E.U.T. Operation

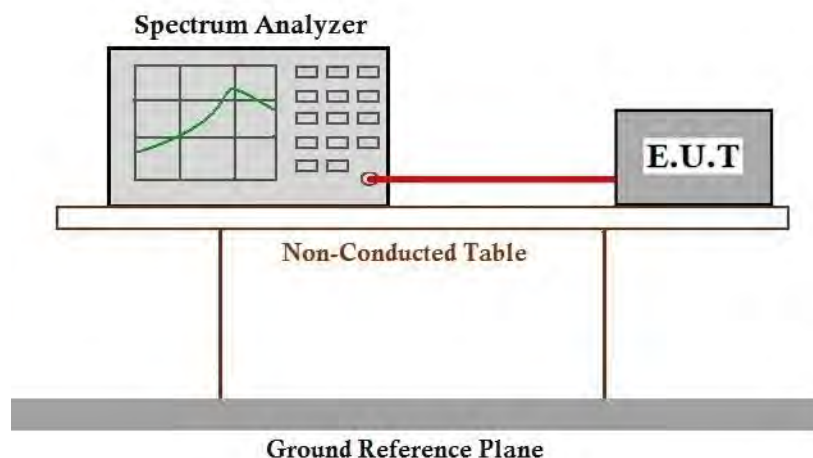
Operating Environment:

Temperature: 23.5 °C Humidity: 45.1 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.3 99% Bandwidth

Test Requirement N/A
Test Method: KDB 789033 II D

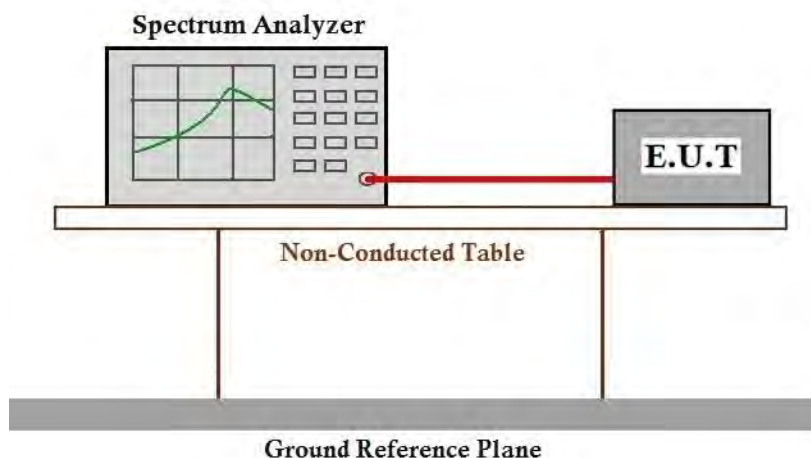
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 23.5 °C Humidity: 45.1 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.4 26dB Emission bandwidth

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II C 1

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

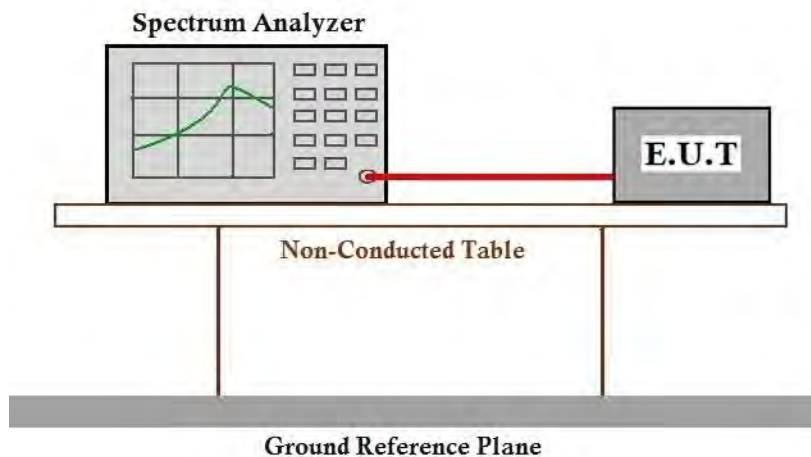
Humidity: 45.2 % RH

Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

Please Refer to Appendix for Details

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

Test Requirement 47 CFR Part 15, Subpart E 15.407 (e)

Test Method: KDB 789033 D02 II C 2

Limit:

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

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

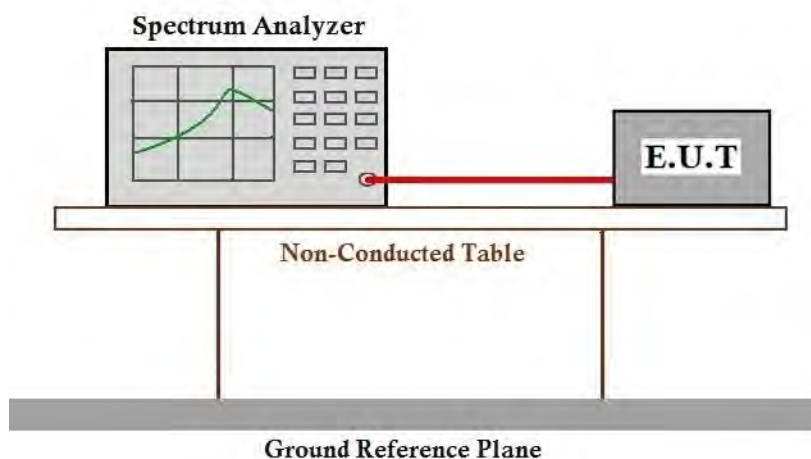
Humidity: 45.2 % RH

Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

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7.6 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) or 11dBm+10logB*
5470-5725	≤250mW(24dBm) or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

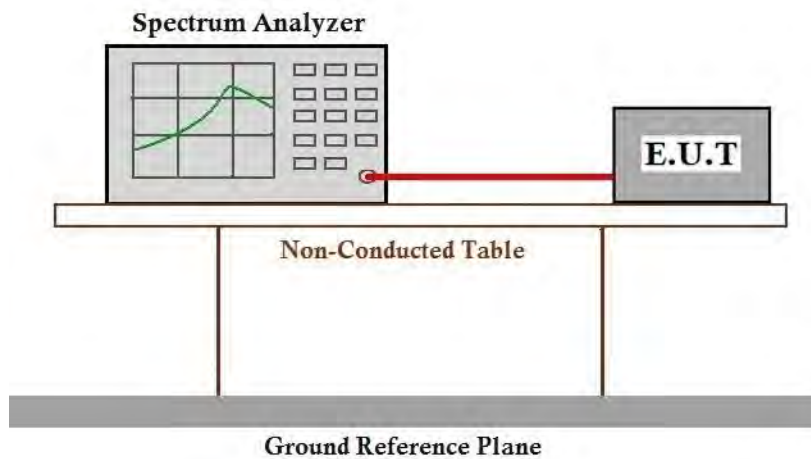
Humidity: 45.3 % RH

Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

Please Refer to Appendix for Details

7.7 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II F

Limit:

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

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

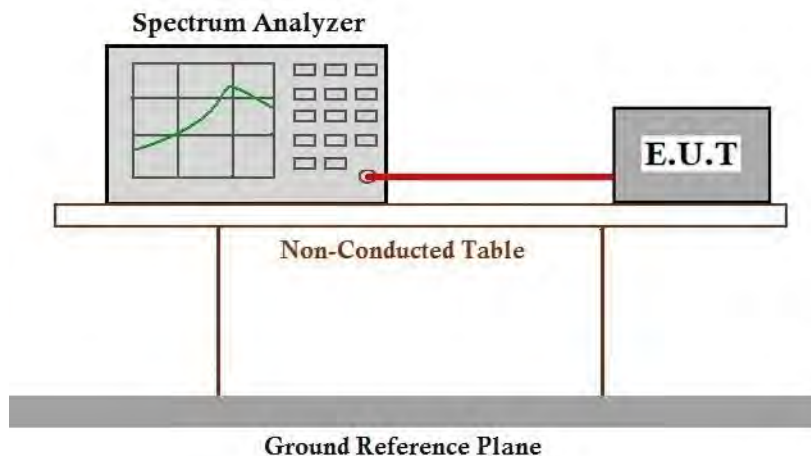
Humidity: 45.3 % RH

Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.7.3 Test Setup Diagram





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7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Radiated Emissions (Below 1GHz)

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

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

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

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 20.5 °C

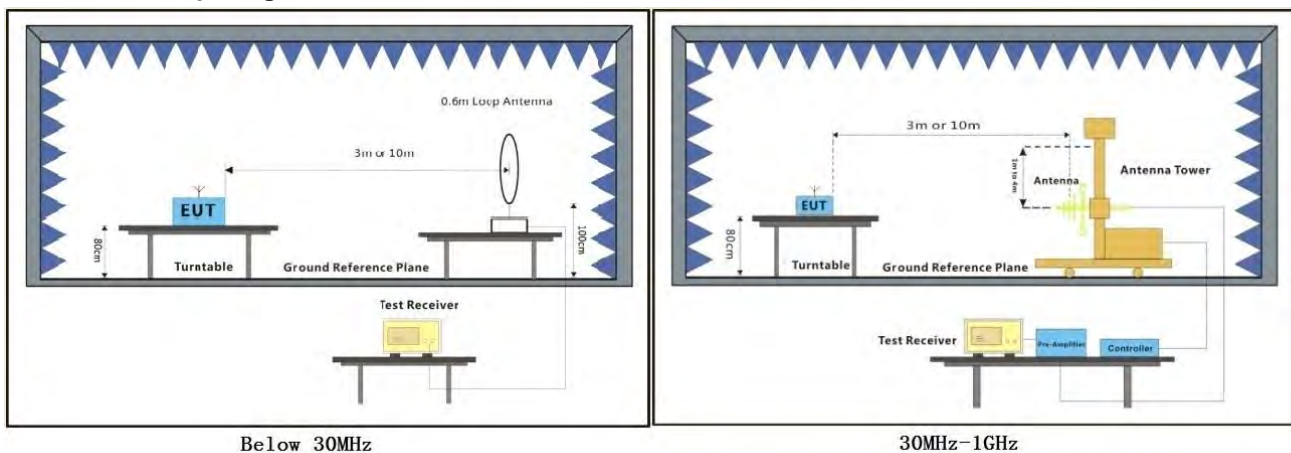
Humidity: 50.5 % RH

Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

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

Remark:

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

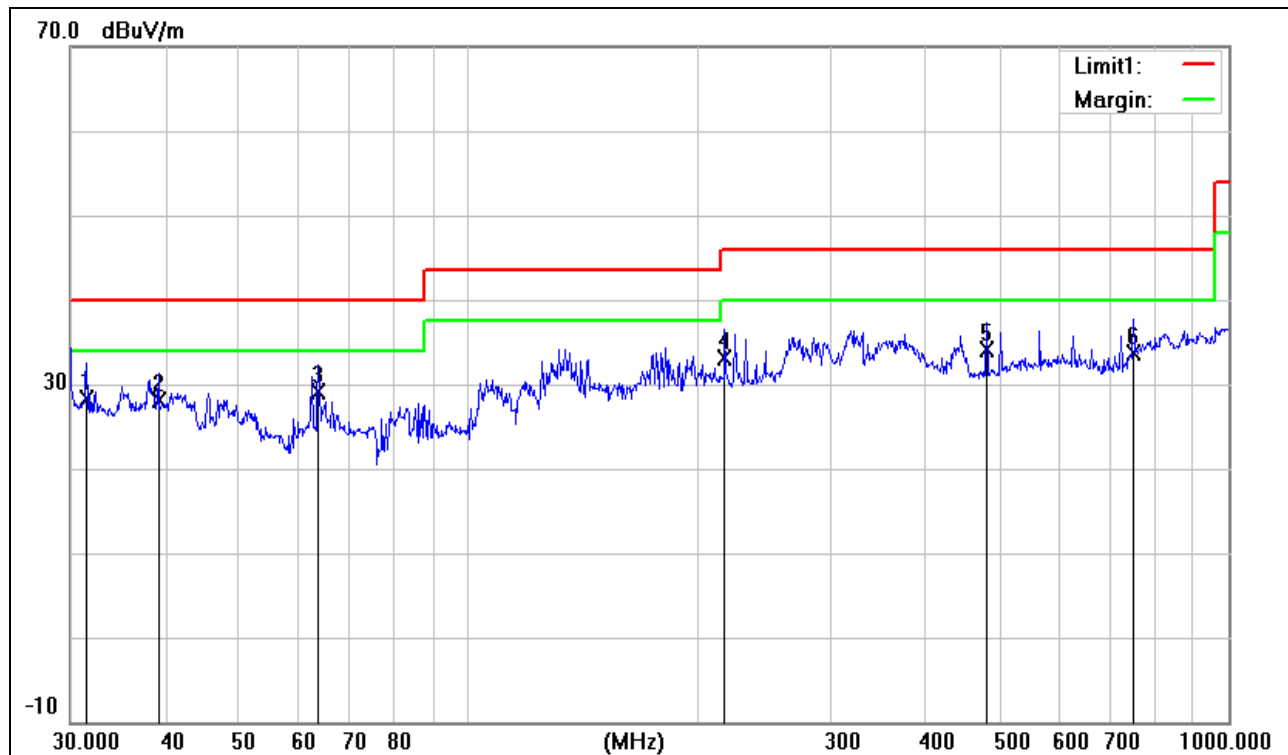
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Test Mode: 00; Polarity: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	31.5092	3.05	25.20	28.25	40.00	-11.75	100	193	QP
2	39.1613	5.55	22.60	28.15	40.00	-11.85	100	104	QP
3	63.5356	14.32	14.79	29.11	40.00	-10.89	100	48	QP
4	217.5440	16.45	16.60	33.05	46.00	-12.95	100	30	QP
5	480.5276	8.83	25.22	34.05	46.00	-11.95	200	265	QP
6	750.1082	31.21	2.41	33.62	46.00	-12.38	100	221	QP

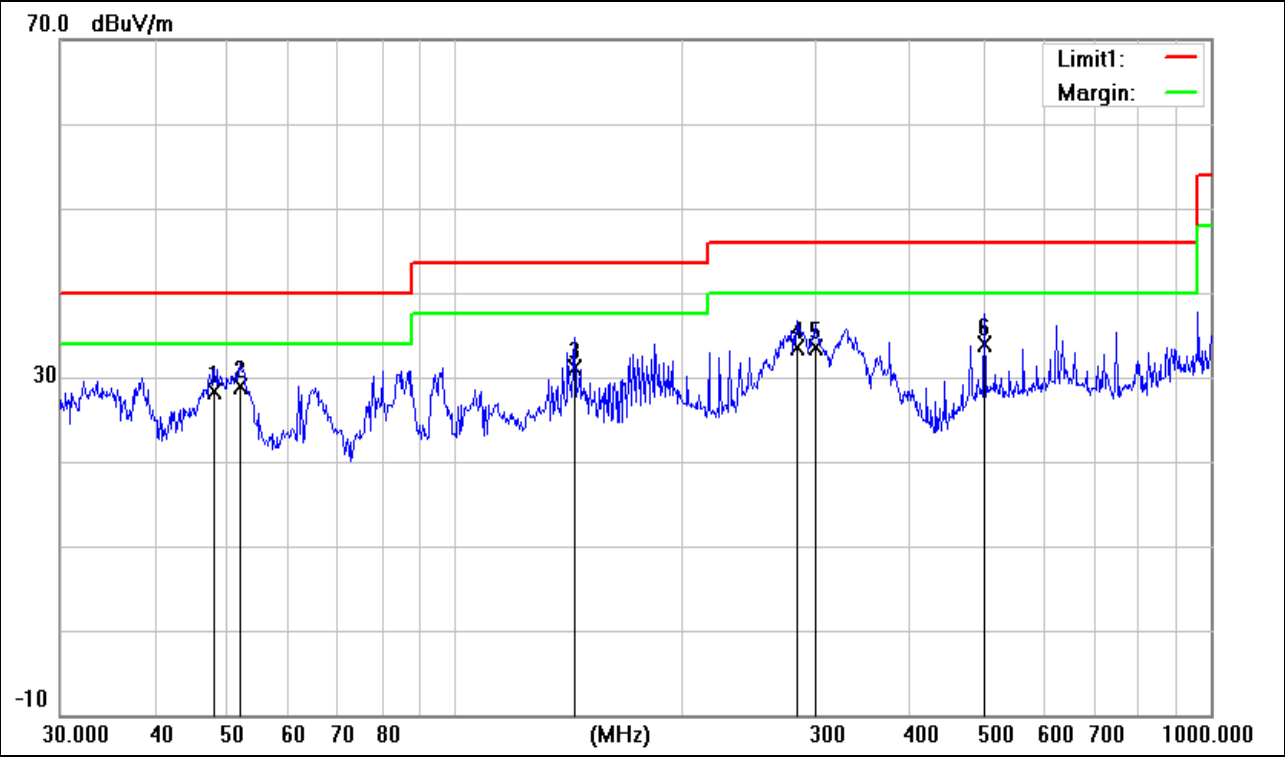
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Test Mode: 00; Polarity: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	47.9940	9.76	18.57	28.33	40.00	-11.67	100	143	QP
2	51.8430	11.67	17.15	28.82	40.00	-11.18	200	224	QP
3	143.8292	12.85	18.20	31.05	43.50	-12.45	100	63	QP
4	282.9852	13.14	20.38	33.52	46.00	-12.48	100	118	QP
5	299.3158	12.74	20.67	33.41	46.00	-12.59	100	143	QP
6	501.1790	8.13	25.83	33.96	46.00	-12.04	200	163	QP

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7.9 Radiated Emissions (Above 1GHz)

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

Test Method: KDB 789033 D02 II G

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1GHz	500	3
*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (4) For transmitters operating in the 5.725-5.85 GHz band: (i) 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. Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.		

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 20.5 °C

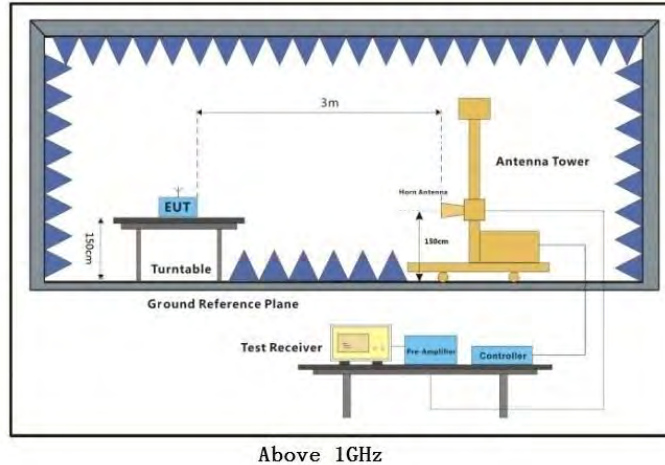
Humidity: 50.5 % RH

Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamplifier Factor}$
2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
5. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.

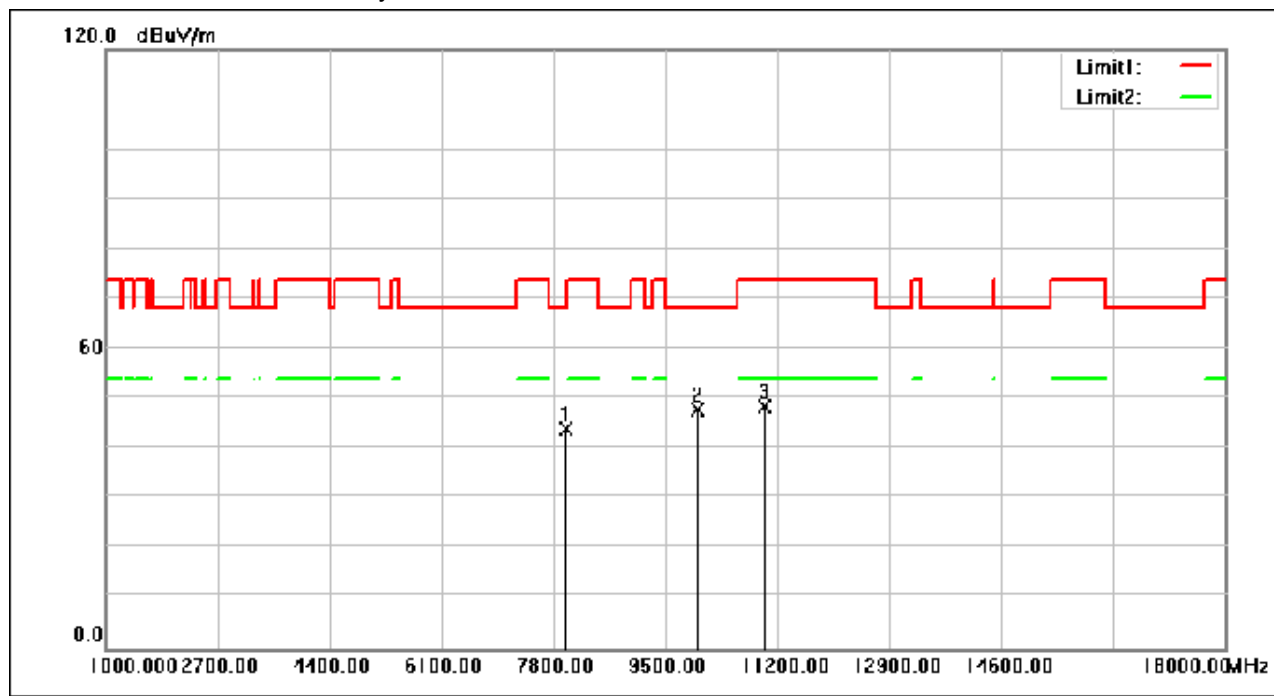
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8000.200	55.29	-11.47	43.82	68.30	-24.48	peak
2	10000.160	56.83	-8.94	47.89	68.30	-20.41	peak
3	11000.480	55.88	-7.48	48.40	74.00	-25.60	peak

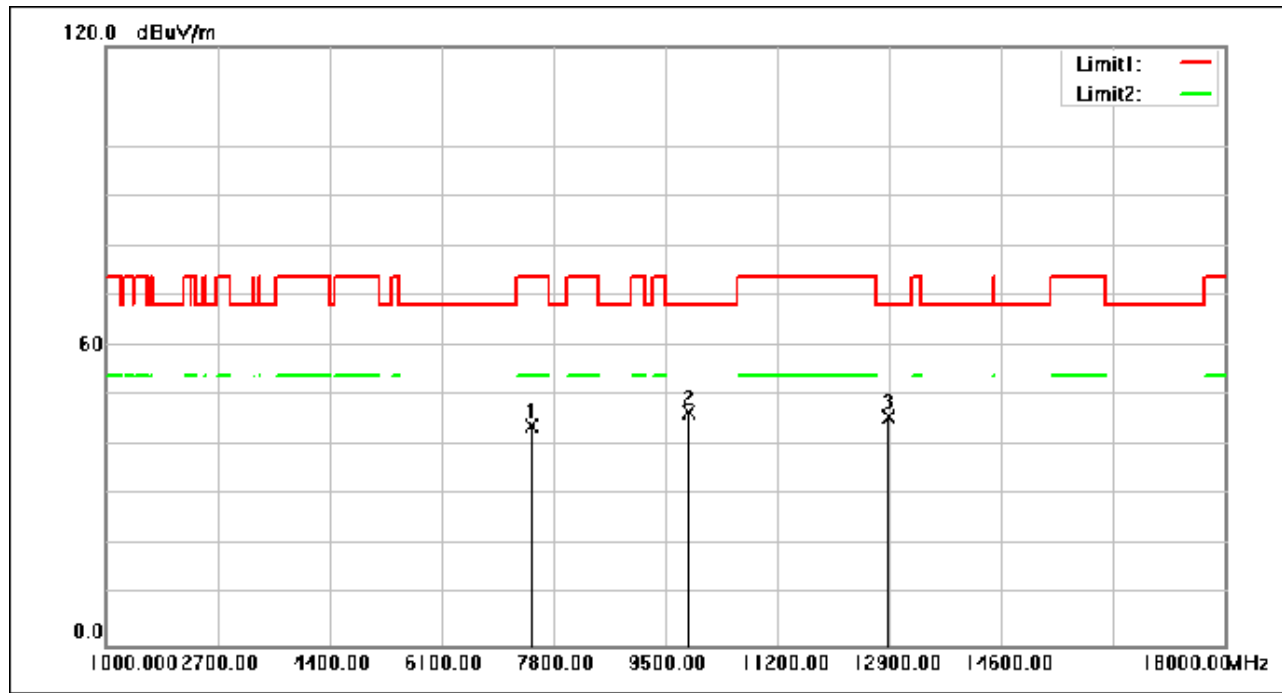
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Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7460.938	54.90	-10.87	44.03	74.00	-29.97	peak
2	9847.154	55.90	-9.16	46.74	68.30	-21.56	peak
3	12895.036	53.31	-7.47	45.84	68.30	-22.46	peak

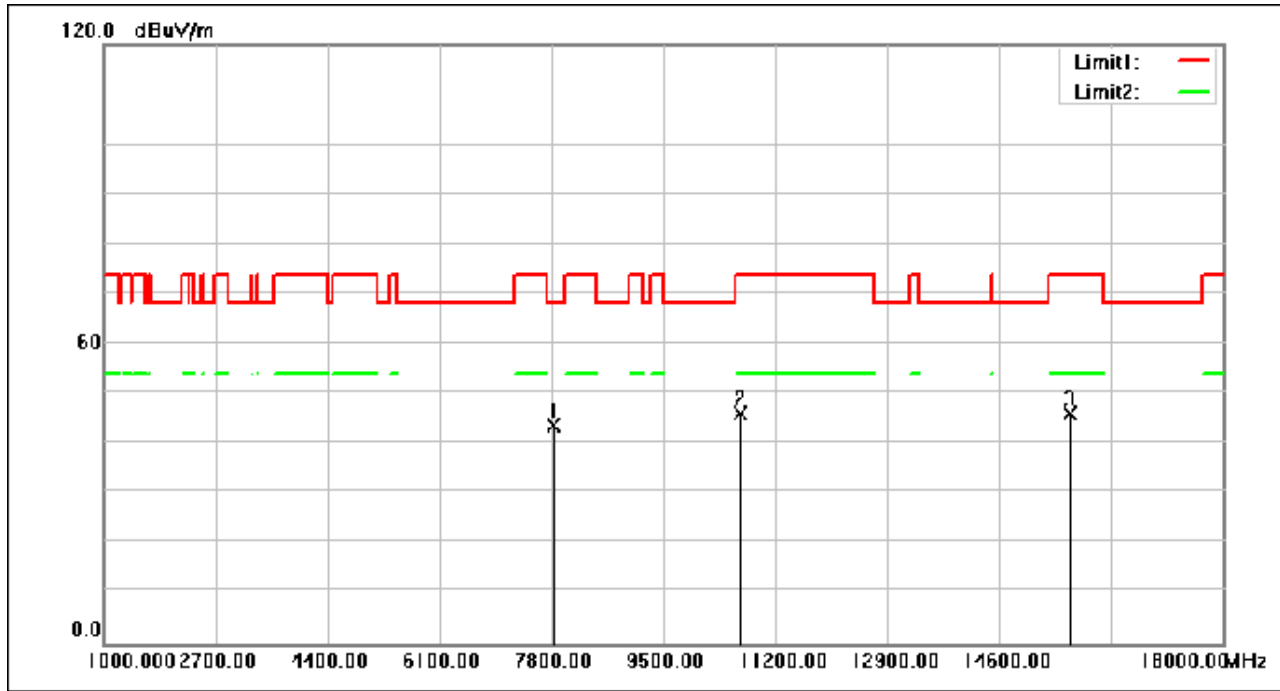
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7838.354	54.85	-11.27	43.58	68.30	-24.72	peak
2	10668.627	53.75	-7.79	45.96	74.00	-28.04	peak
3	15686.547	53.40	-7.35	46.05	74.00	-27.95	peak

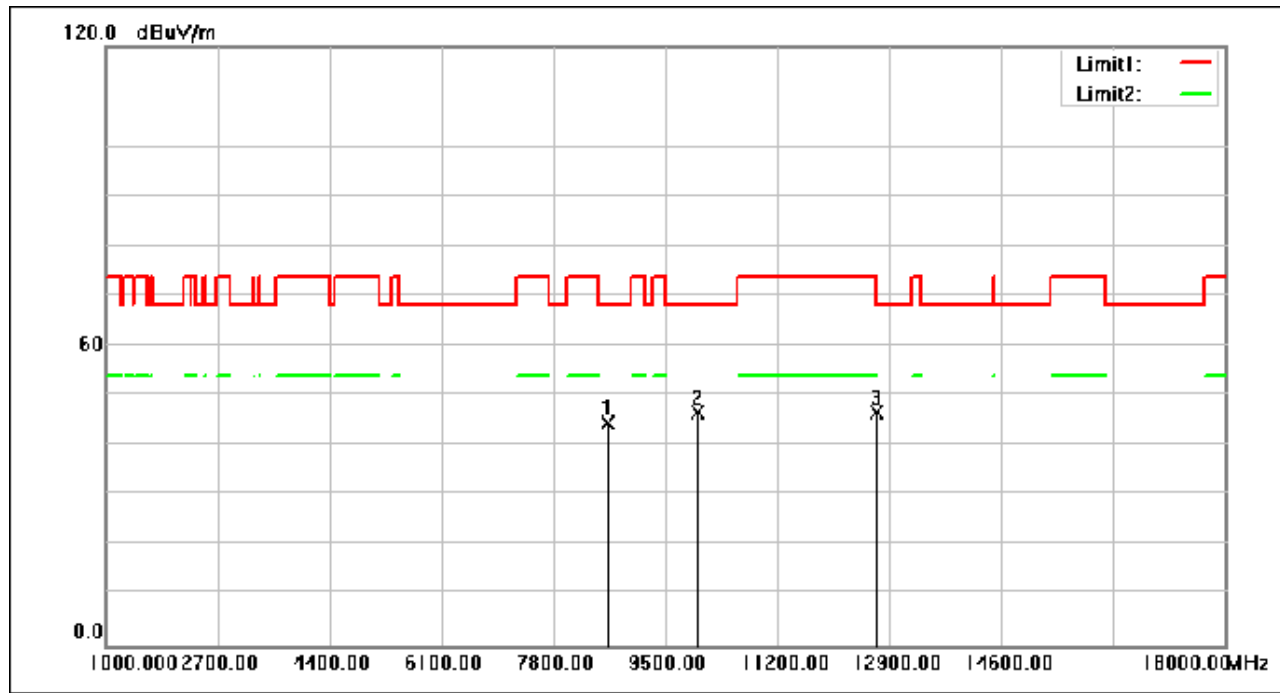
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Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8623.785	55.16	-10.73	44.43	68.30	-23.87	peak
2	9999.480	55.47	-8.94	46.53	68.30	-21.77	peak
3	12698.508	54.10	-7.51	46.59	74.00	-27.41	peak

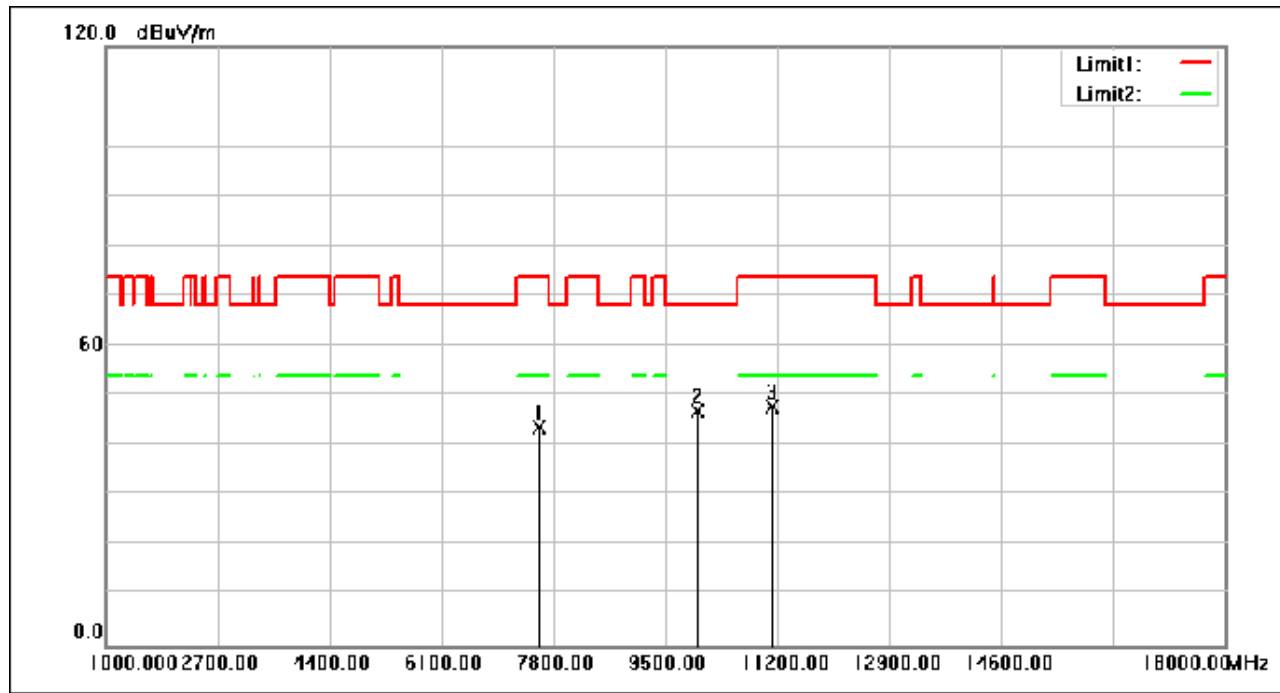
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No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7592.184	54.52	-10.96	43.56	74.00	-30.44	peak
2	9999.480	55.85	-8.94	46.91	68.30	-21.39	peak
3	11124.245	55.21	-7.41	47.80	74.00	-26.20	peak

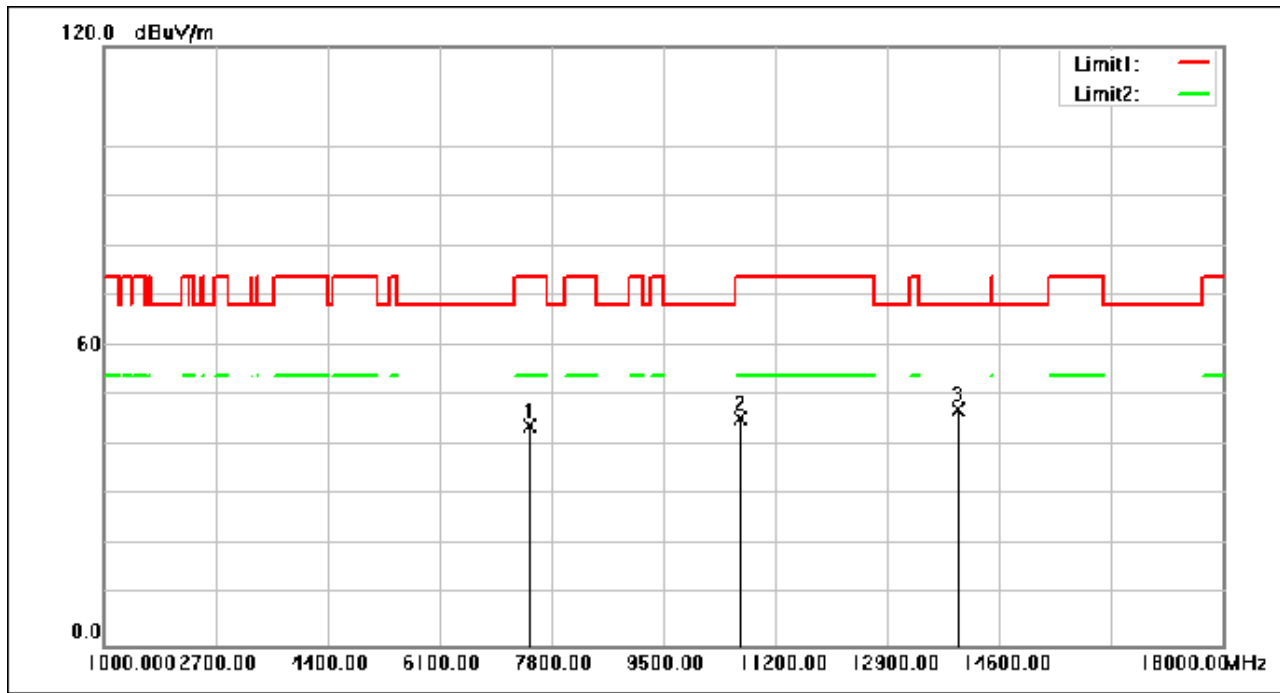
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Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7467.059	54.74	-10.87	43.87	74.00	-30.13	peak
2	10665.227	53.28	-7.79	45.49	74.00	-28.51	peak
3	13976.959	55.37	-8.11	47.26	68.30	-21.04	peak

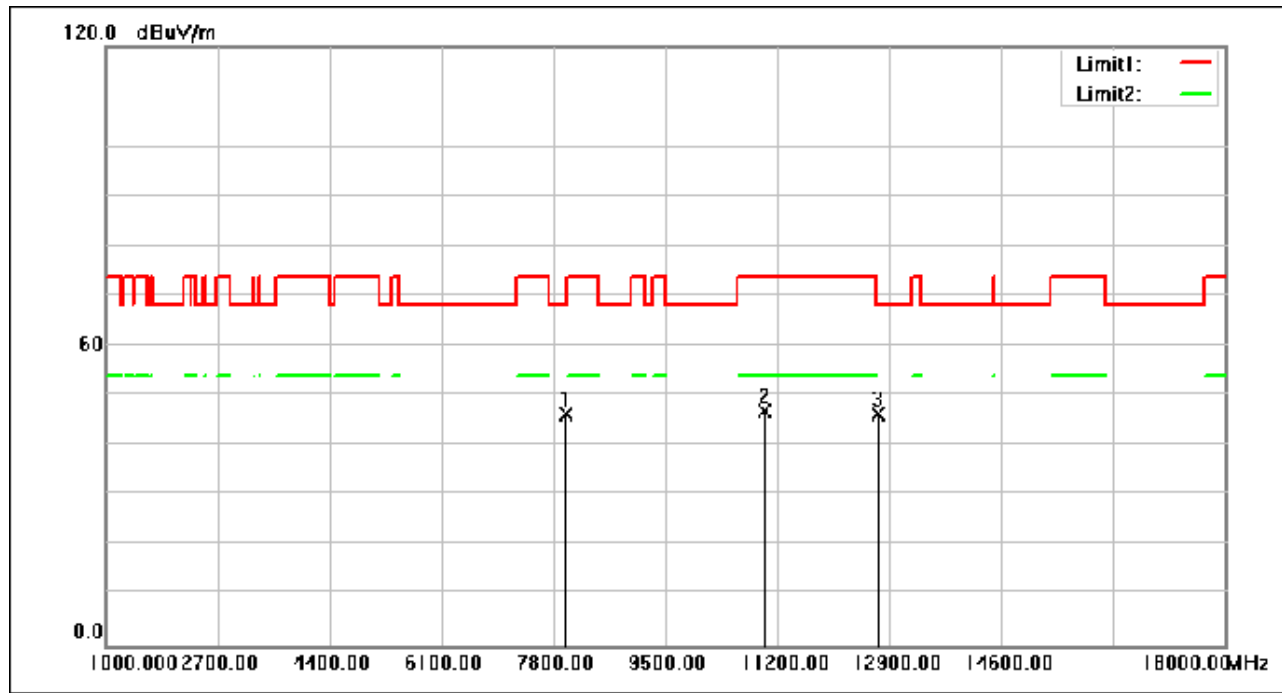
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8000.200	57.69	-11.47	46.22	68.30	-22.08	peak
2	11000.480	54.30	-7.48	46.82	74.00	-27.18	peak
3	12722.309	53.83	-7.51	46.32	68.30	-21.98	peak

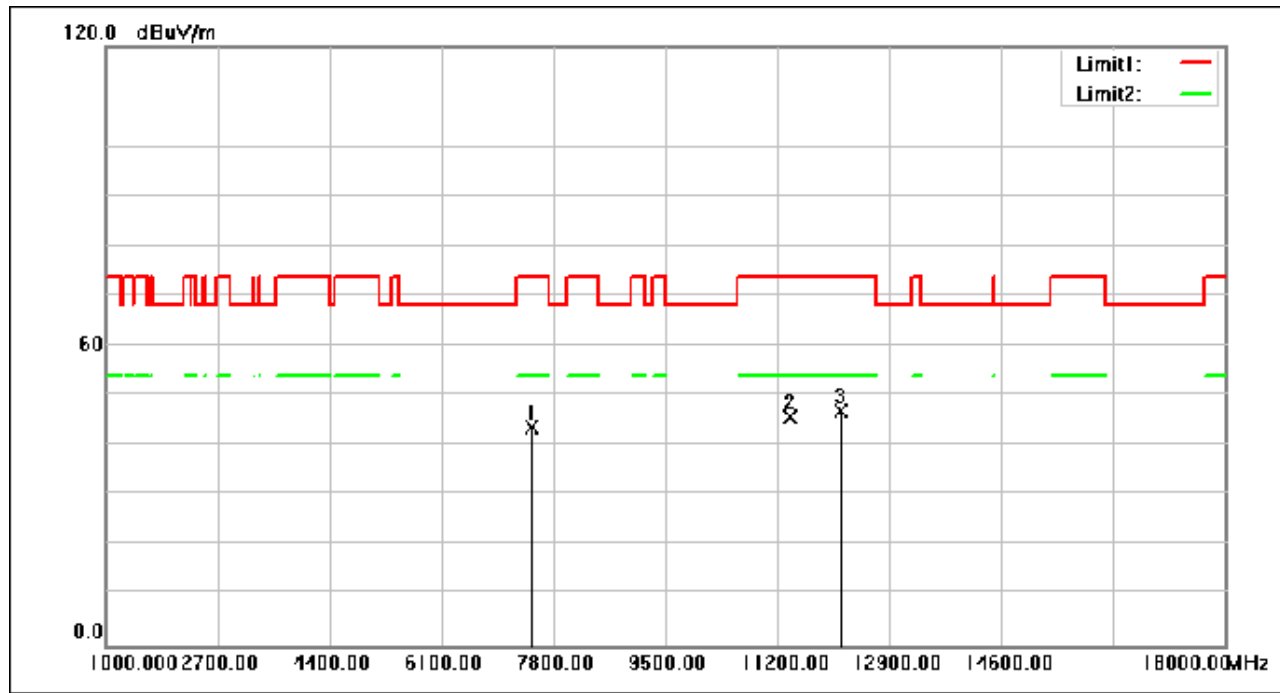
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Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7462.979	54.56	-10.87	43.69	74.00	-30.31	peak
2	11403.056	53.06	-7.27	45.79	74.00	-28.21	peak
3	12176.247	54.54	-7.59	46.95	74.00	-27.05	peak

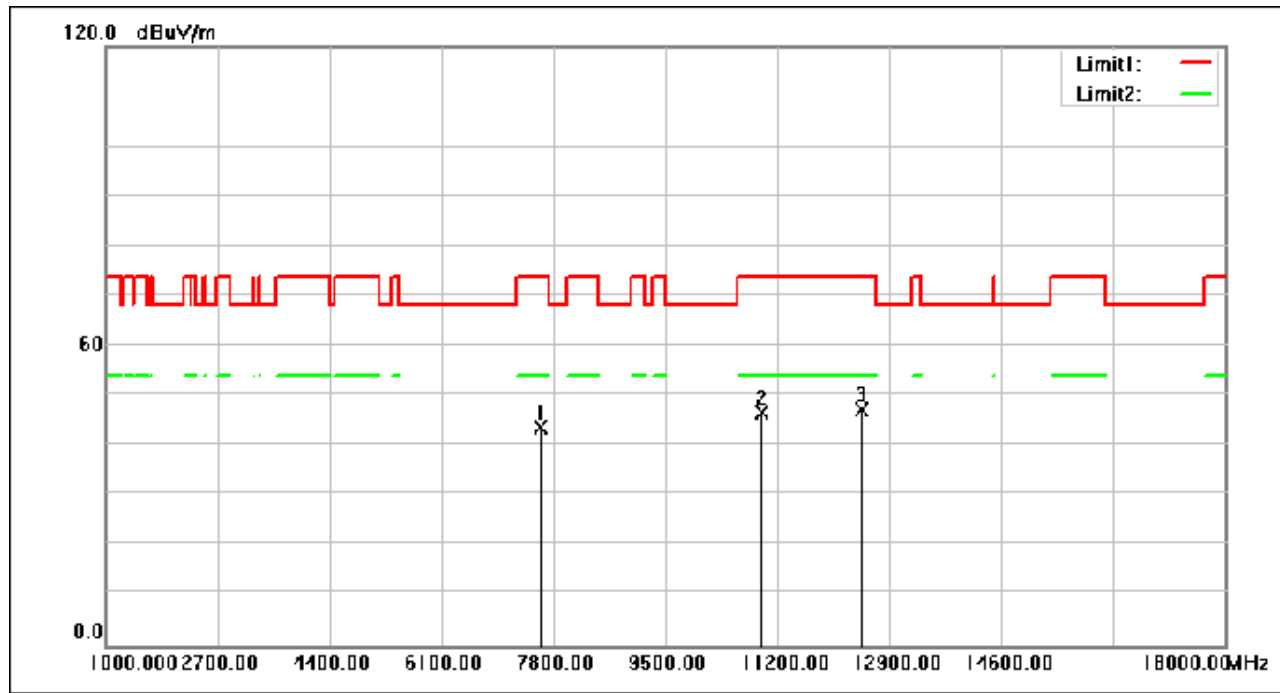
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7616.665	54.68	-10.99	43.69	74.00	-30.31	peak
2	10978.039	54.11	-7.48	46.63	74.00	-27.37	peak
3	12476.139	54.81	-7.54	47.27	74.00	-26.73	peak

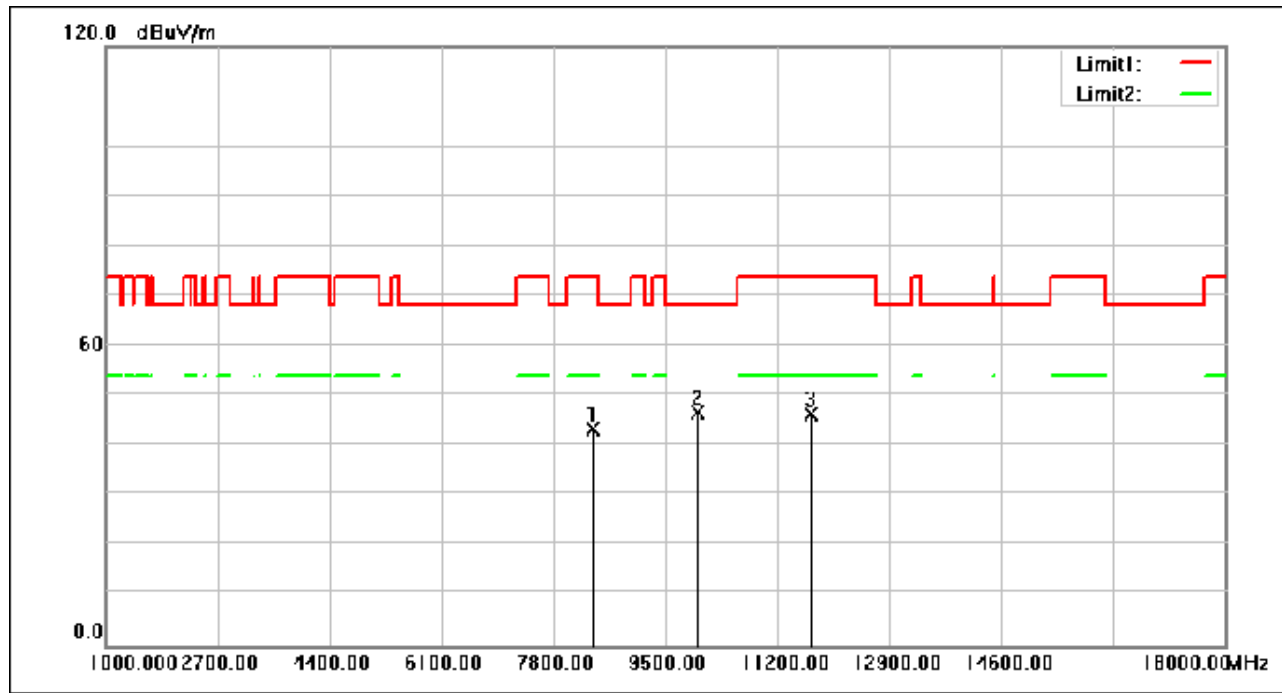
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Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8394.616	54.32	-11.11	43.21	74.00	-30.79	peak
2	10000.160	55.58	-8.94	46.64	68.30	-21.66	peak
3	11719.269	53.85	-7.40	46.45	74.00	-27.55	peak

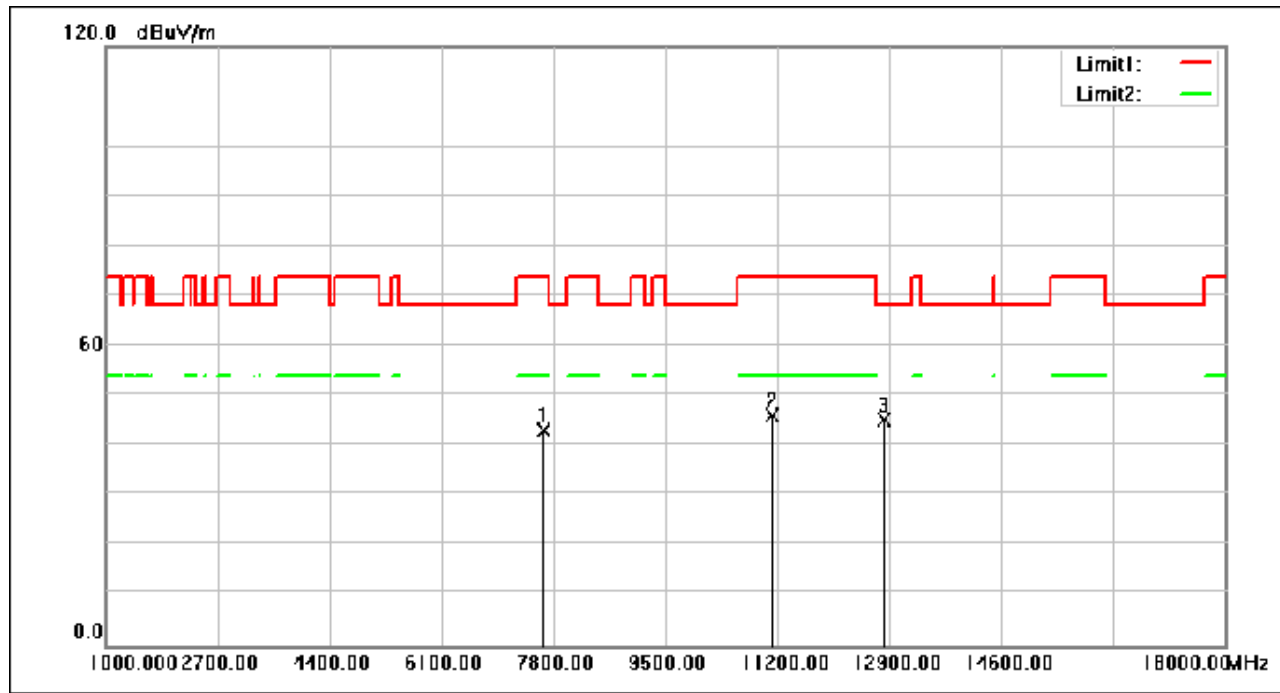
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Test Mode: 00; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7655.426	54.06	-11.04	43.02	74.00	-30.98	peak
2	11131.045	53.38	-7.42	45.96	74.00	-28.04	peak
3	12820.913	52.54	-7.49	45.05	68.30	-23.25	peak

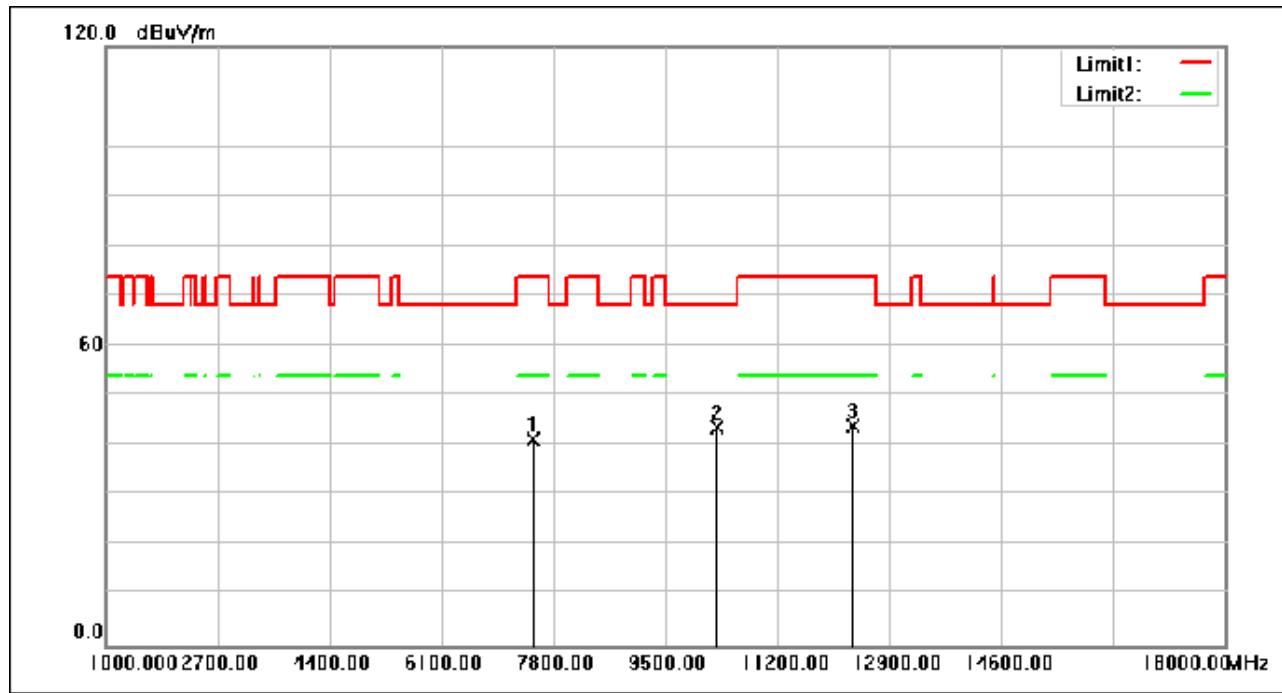
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 00; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7499.020	52.04	-10.85	41.19	74.00	-32.81	peak
2	10291.212	52.05	-8.45	43.60	68.30	-24.70	peak
3	12351.694	51.54	-7.56	43.98	74.00	-30.02	peak

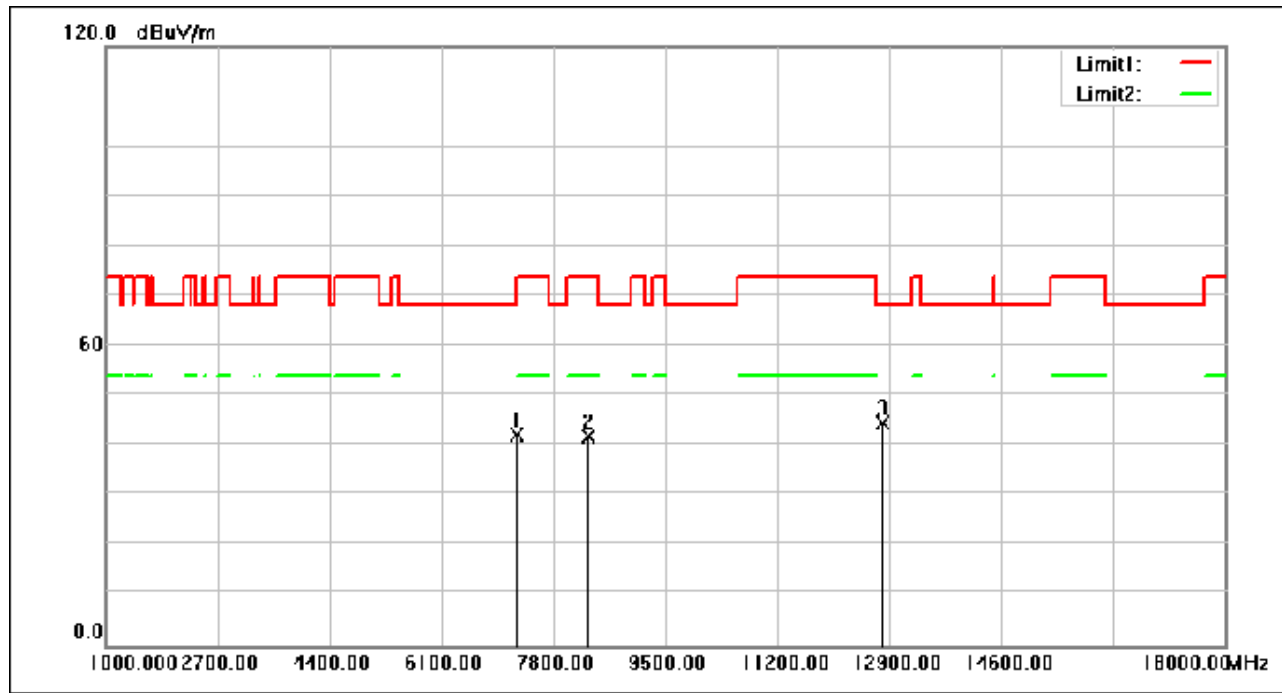
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7254.890	53.54	-11.49	42.05	74.00	-31.95	peak
2	8330.693	52.93	-11.19	41.74	74.00	-32.26	peak
3	12787.592	52.05	-7.49	44.56	68.30	-23.74	peak

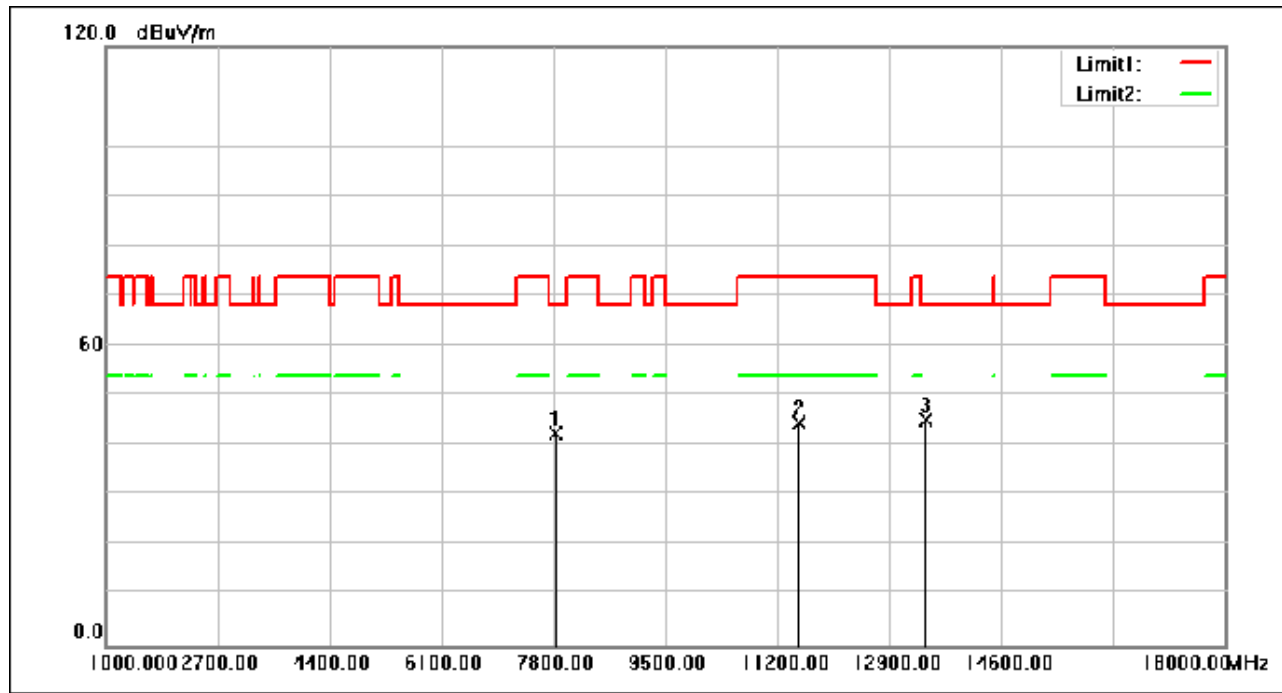
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7832.233	53.81	-11.26	42.55	68.30	-25.75	peak
2	11528.181	51.90	-7.24	44.66	74.00	-29.34	peak
3	13464.898	52.70	-7.64	45.06	68.30	-23.24	peak

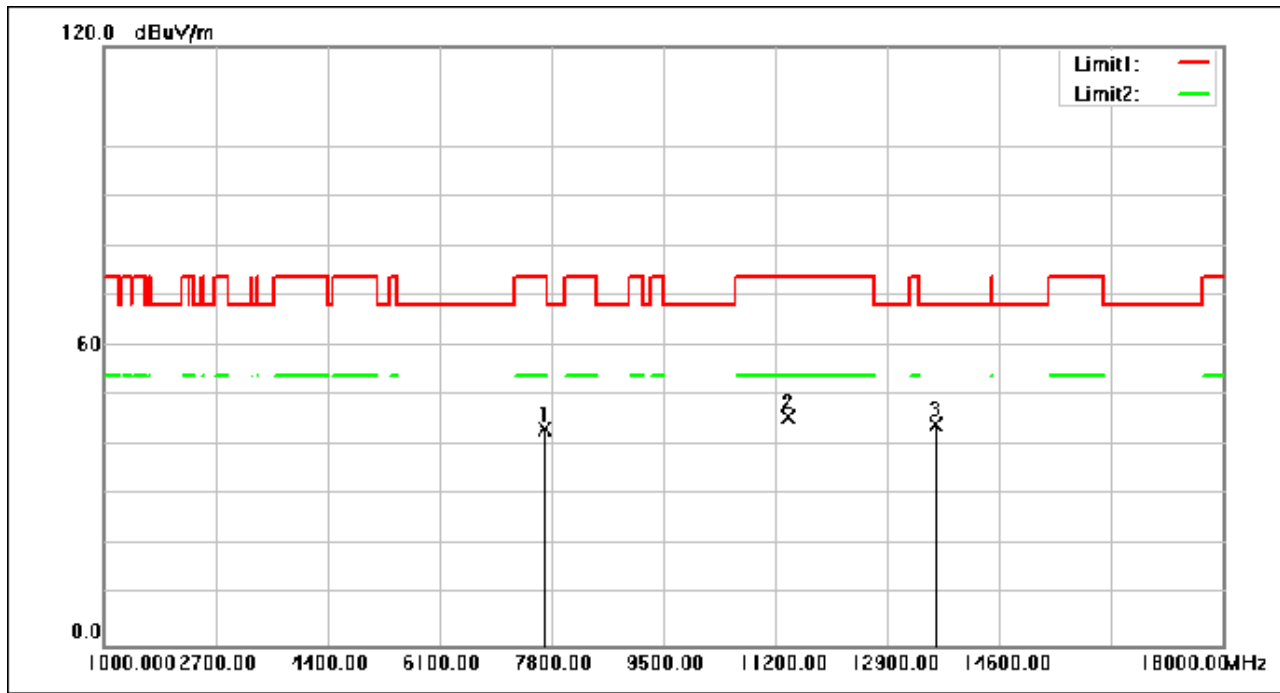
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 00; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7694.188	54.59	-11.09	43.50	74.00	-30.50	peak
2	11402.376	52.99	-7.27	45.72	74.00	-28.28	peak
3	13639.665	51.98	-7.78	44.20	68.30	-24.10	peak

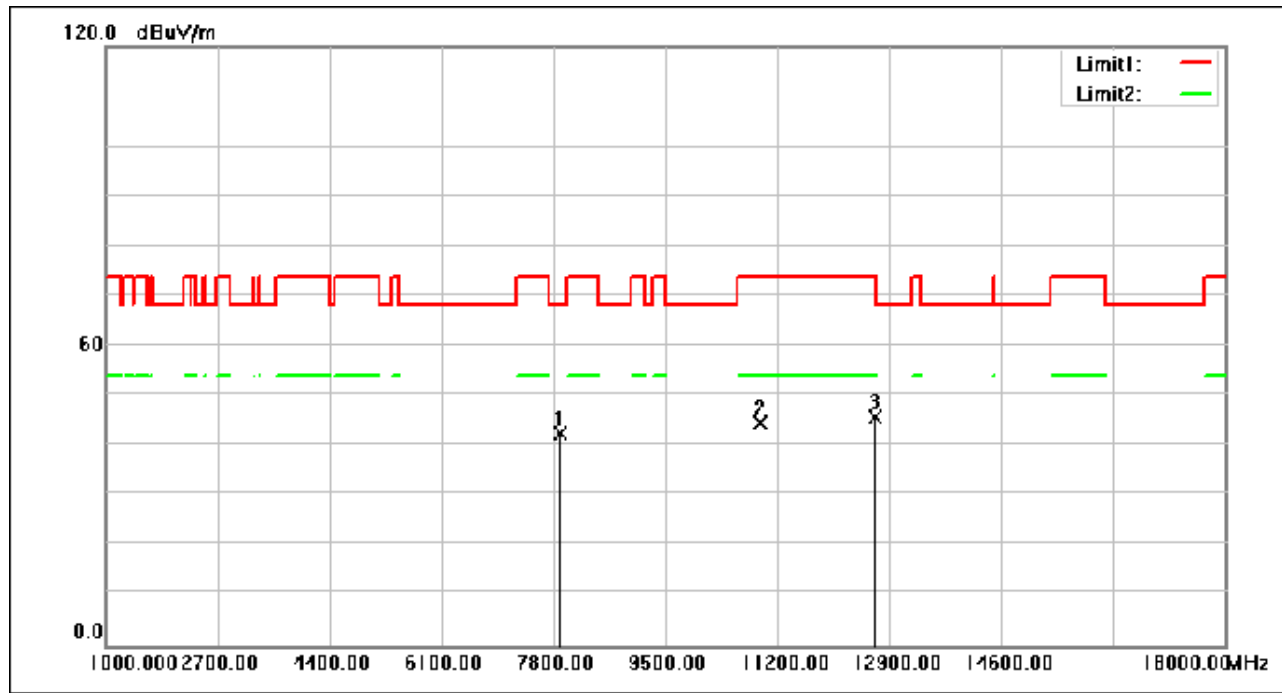
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7893.436	53.85	-11.34	42.51	68.30	-25.79	peak
2	10948.798	52.10	-7.48	44.62	74.00	-29.38	peak
3	12686.267	53.23	-7.51	45.72	74.00	-28.28	peak

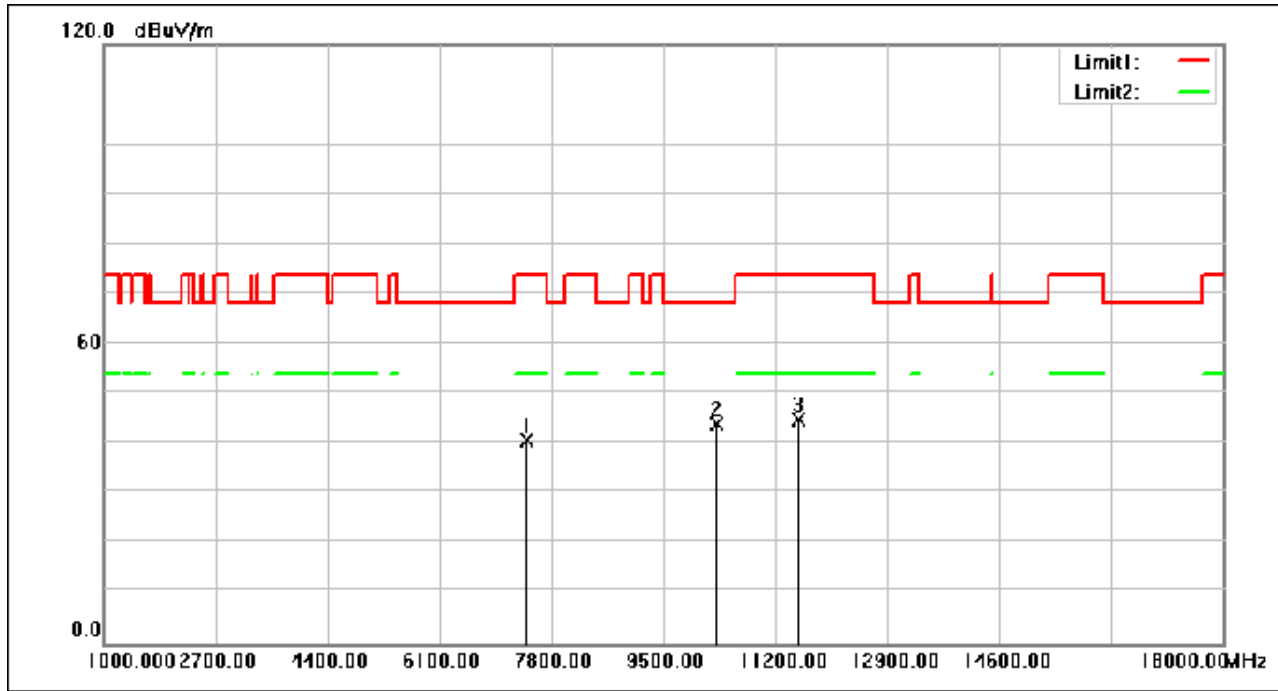
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 00; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7415.377	51.58	-10.89	40.69	74.00	-33.31	peak
2	10295.972	52.33	-8.44	43.89	68.30	-24.41	peak
3	11561.502	52.07	-7.27	44.80	74.00	-29.20	peak

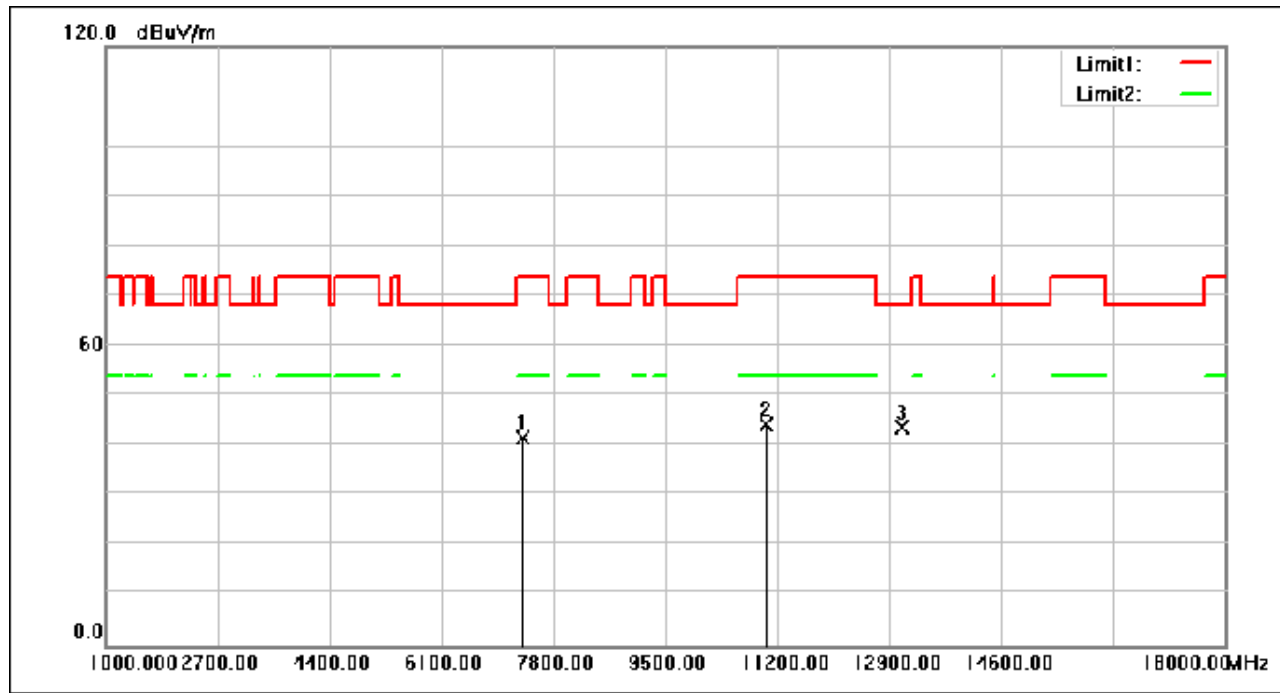
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7352.134	52.60	-11.09	41.51	74.00	-32.49	peak
2	11041.282	51.63	-7.46	44.17	74.00	-29.83	peak
3	13101.764	51.21	-7.50	43.71	68.30	-24.59	peak

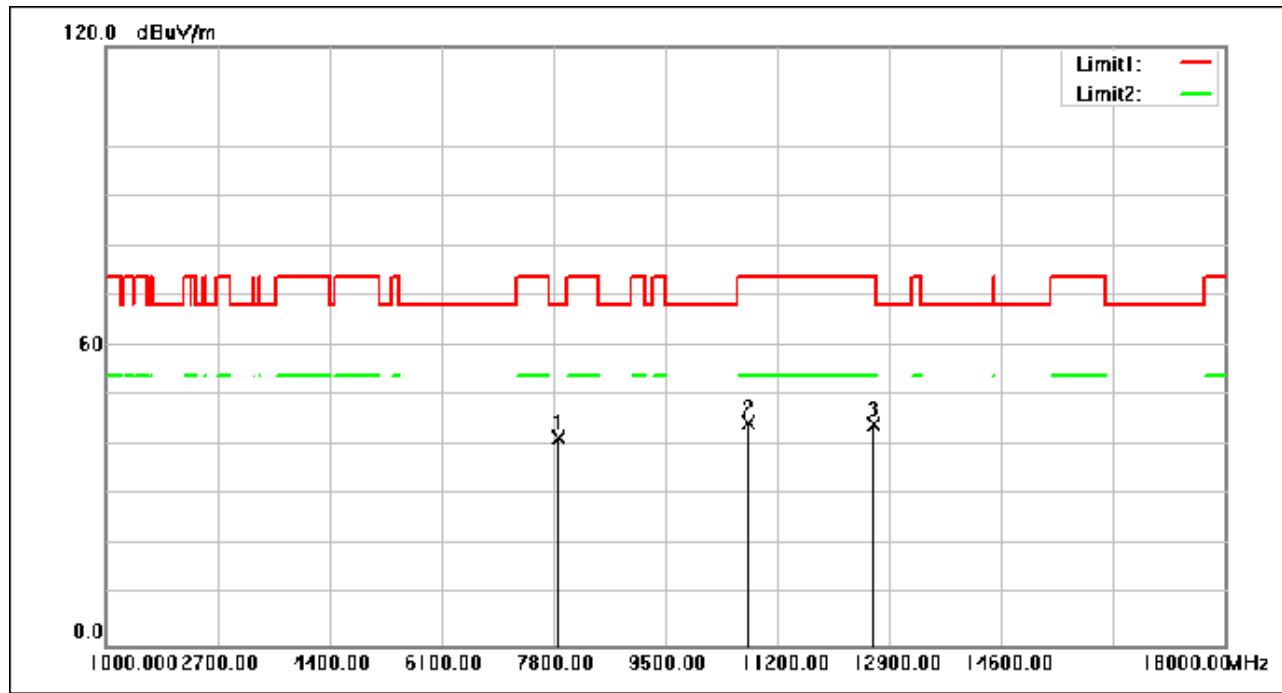
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7886.635	52.87	-11.33	41.54	68.30	-26.76	peak
2	10757.030	52.07	-7.62	44.45	74.00	-29.55	peak
3	12661.786	51.85	-7.51	44.34	74.00	-29.66	peak

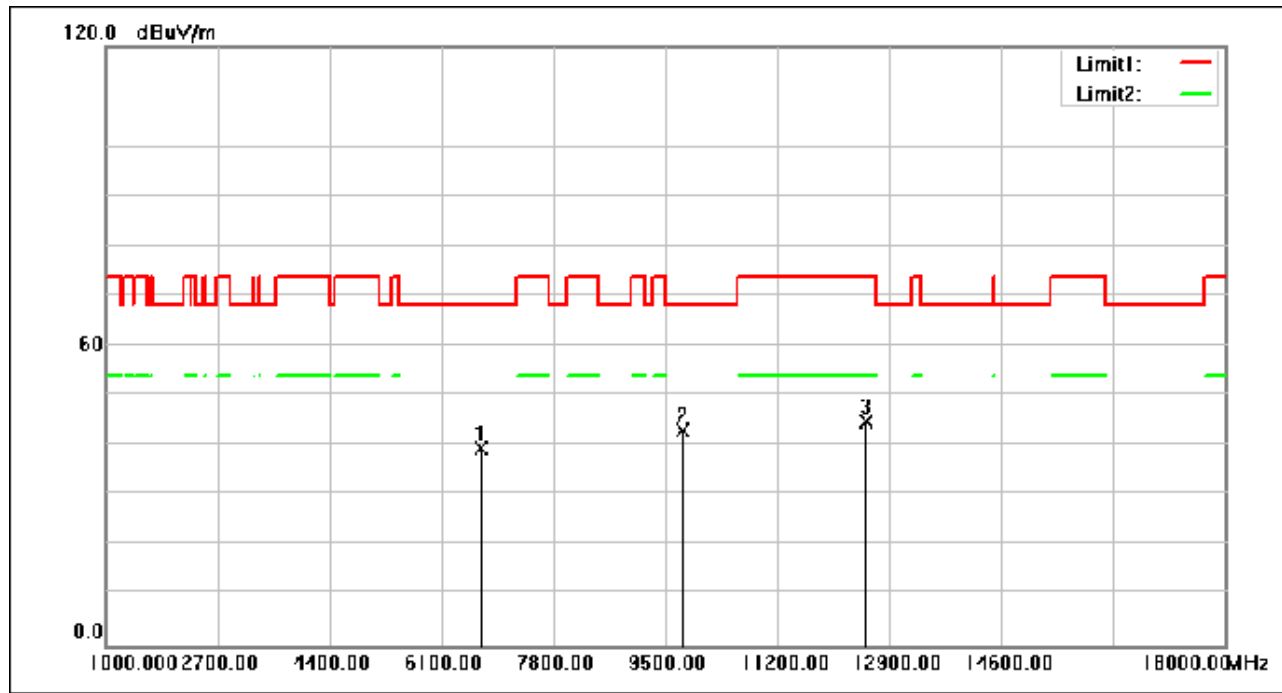
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6701.348	53.20	-13.66	39.54	68.30	-28.76	peak
2	9768.951	52.18	-9.24	42.94	68.30	-25.36	peak
3	12548.902	52.27	-7.53	44.74	74.00	-29.26	peak

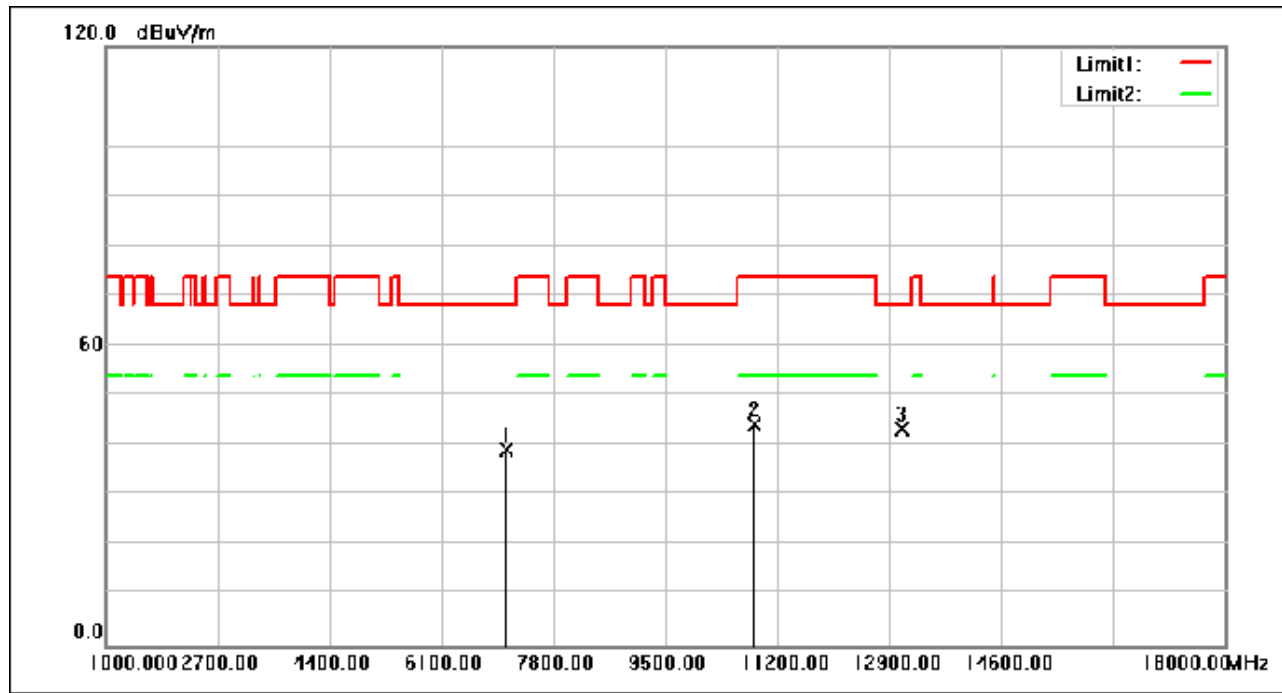
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7084.203	51.37	-12.18	39.19	68.30	-29.11	peak
2	10859.034	51.67	-7.48	44.19	74.00	-29.81	peak
3	13082.043	50.91	-7.49	43.42	68.30	-24.88	peak

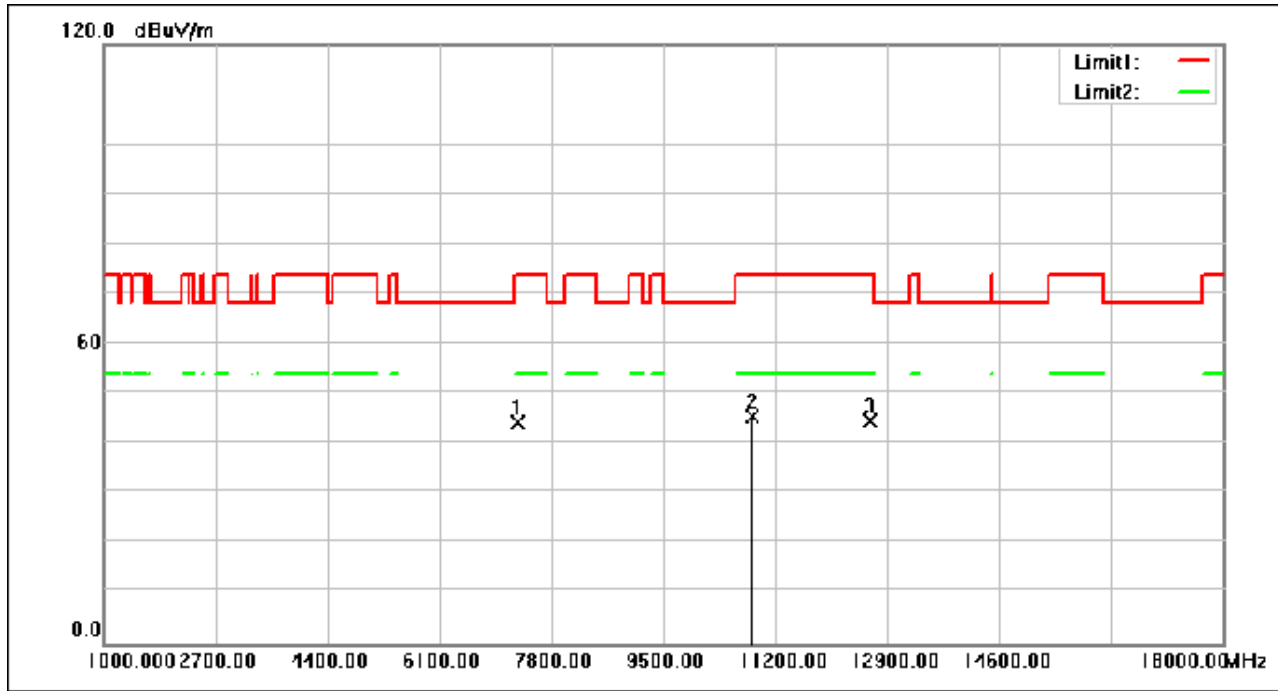
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7301.132	55.67	-11.30	44.37	74.00	-29.63	peak
2	10838.633	52.92	-7.47	45.45	74.00	-28.55	peak
3	12652.946	52.08	-7.51	44.57	74.00	-29.43	peak

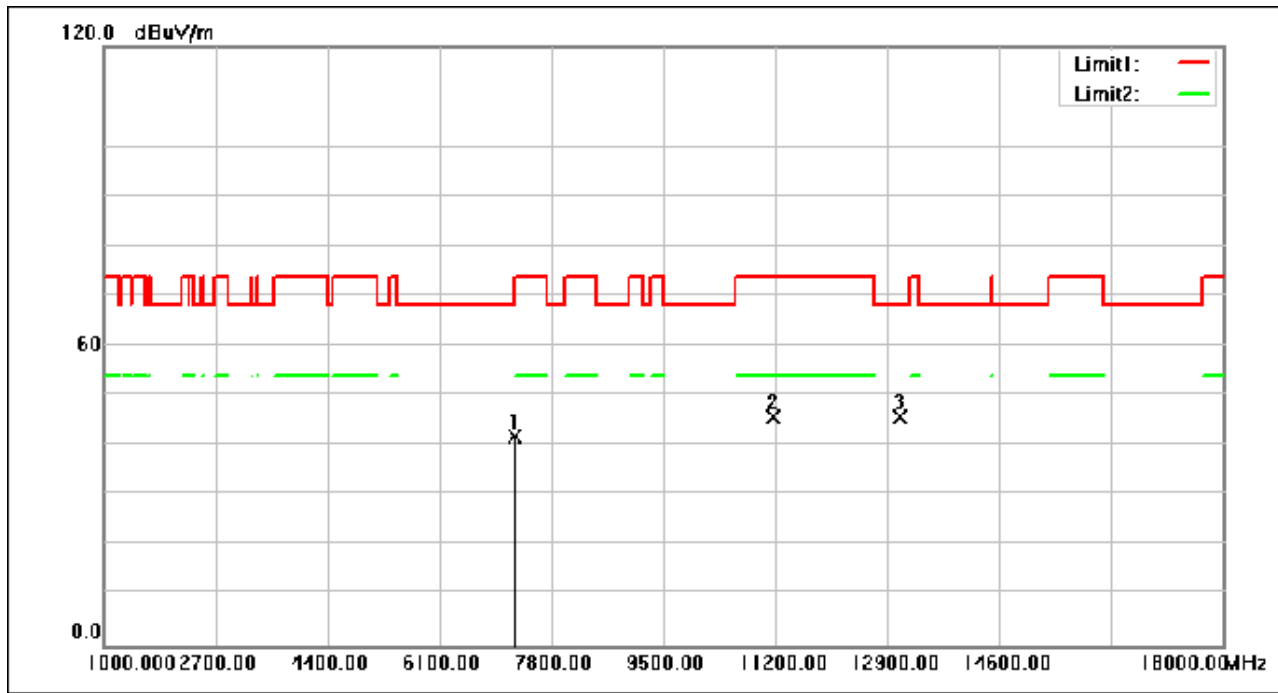
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7248.090	53.28	-11.52	41.76	68.30	-26.54	peak
2	11160.286	53.17	-7.39	45.78	74.00	-28.22	peak
3	13099.724	53.18	-7.50	45.68	68.30	-22.62	peak

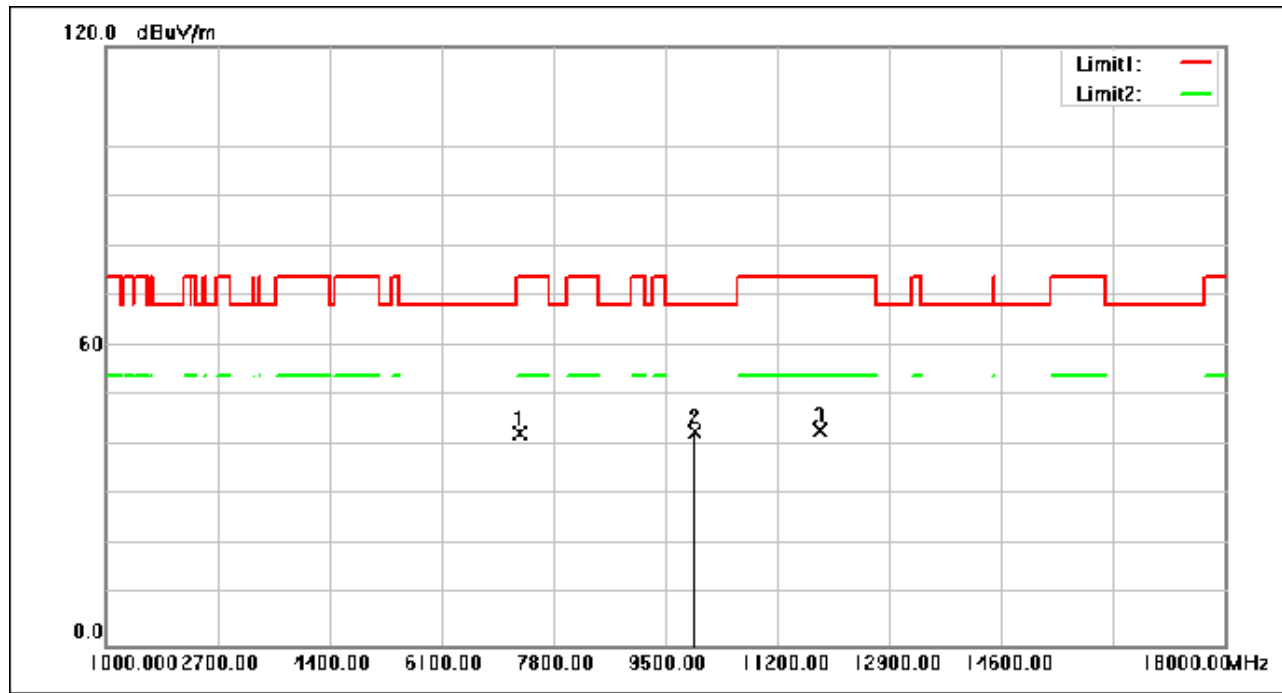
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7279.371	53.81	-11.39	42.42	74.00	-31.58	peak
2	9950.518	51.88	-9.01	42.87	68.30	-25.43	peak
3	11851.194	50.63	-7.51	43.12	74.00	-30.88	peak

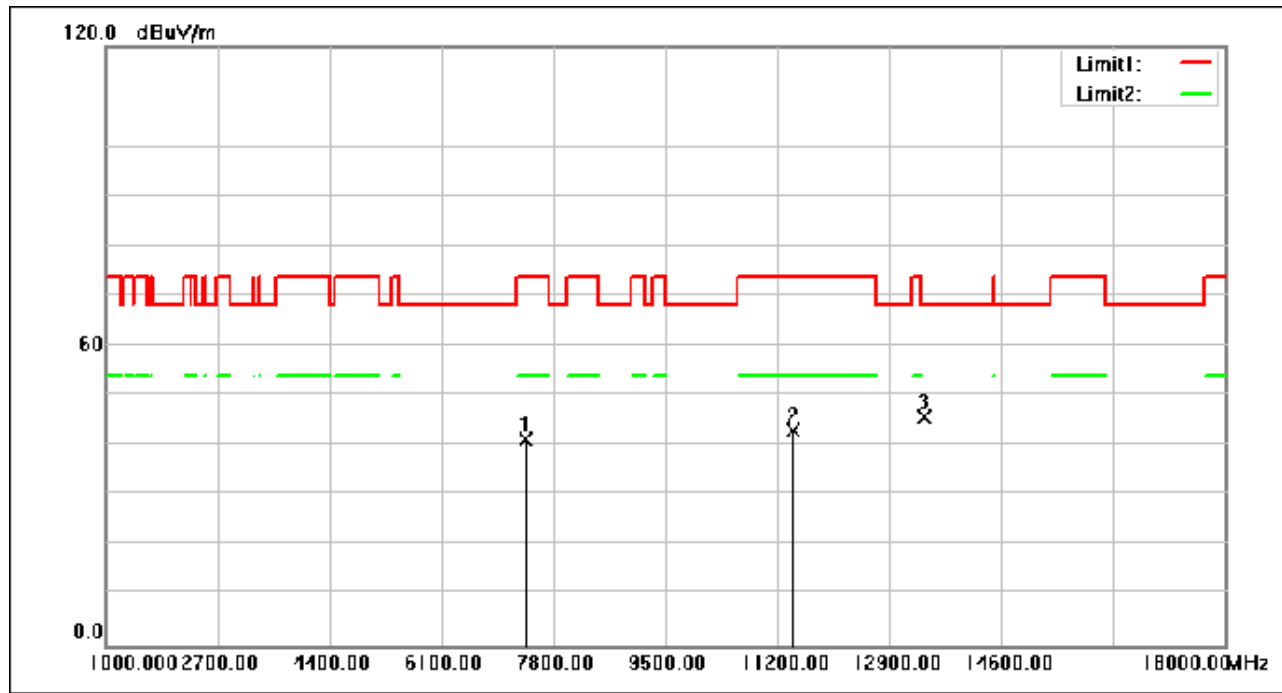
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7380.695	52.11	-10.97	41.14	74.00	-32.86	peak
2	11445.218	50.16	-7.24	42.92	74.00	-31.08	peak
3	13427.497	53.34	-7.62	45.72	68.30	-22.58	peak

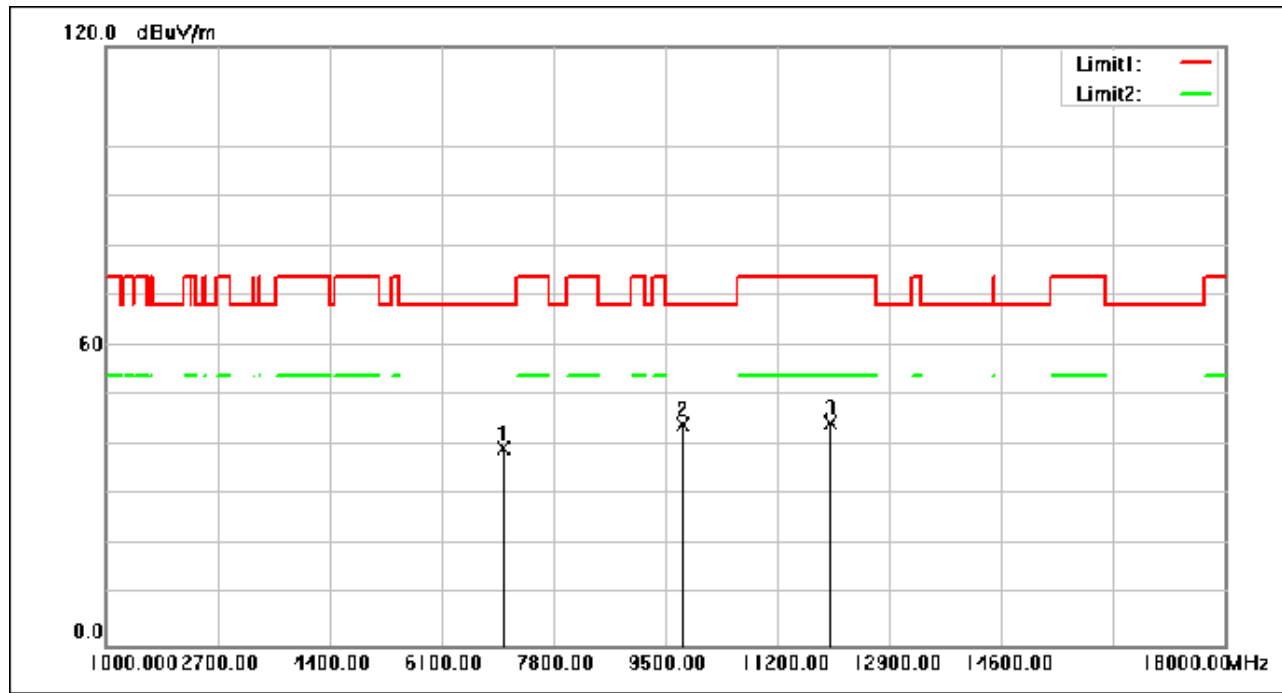
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7048.842	51.93	-12.33	39.60	68.30	-28.70	peak
2	9759.430	53.60	-9.25	44.35	68.30	-23.95	peak
3	12005.560	52.17	-7.62	44.55	74.00	-29.45	peak

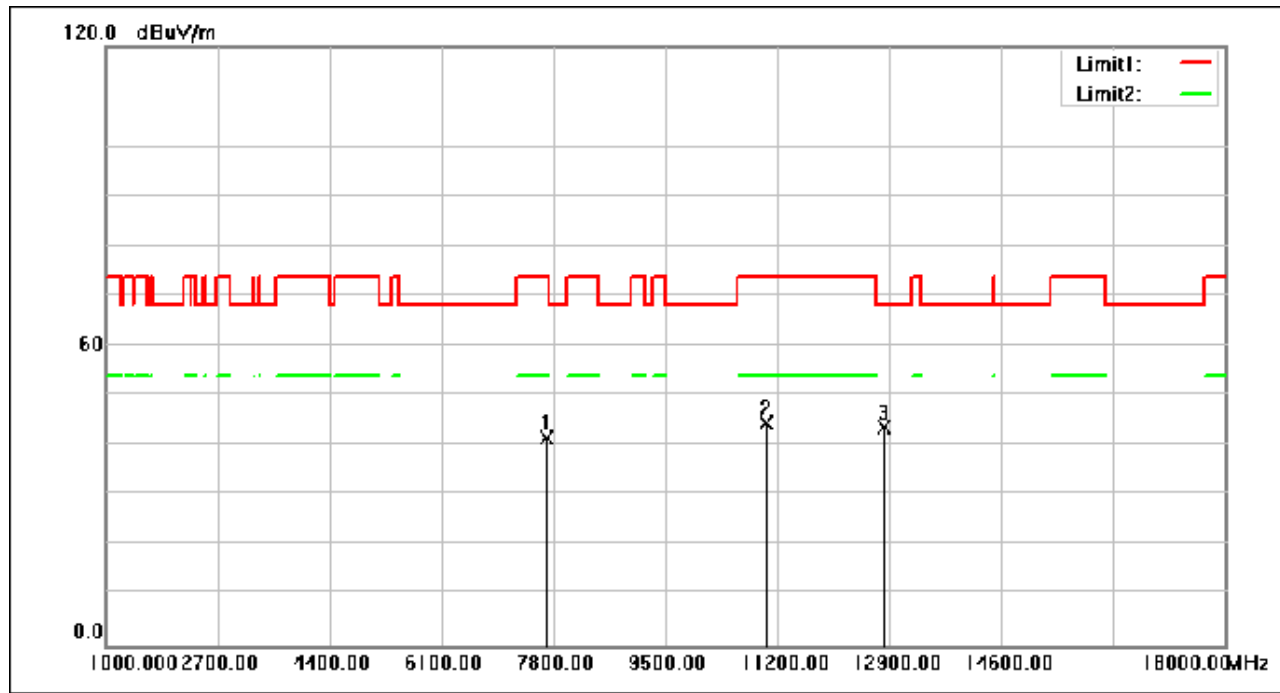
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7691.468	52.67	-11.09	41.58	74.00	-32.42	peak
2	11034.481	52.08	-7.46	44.62	74.00	-29.38	peak
3	12822.273	51.24	-7.49	43.75	68.30	-24.55	peak

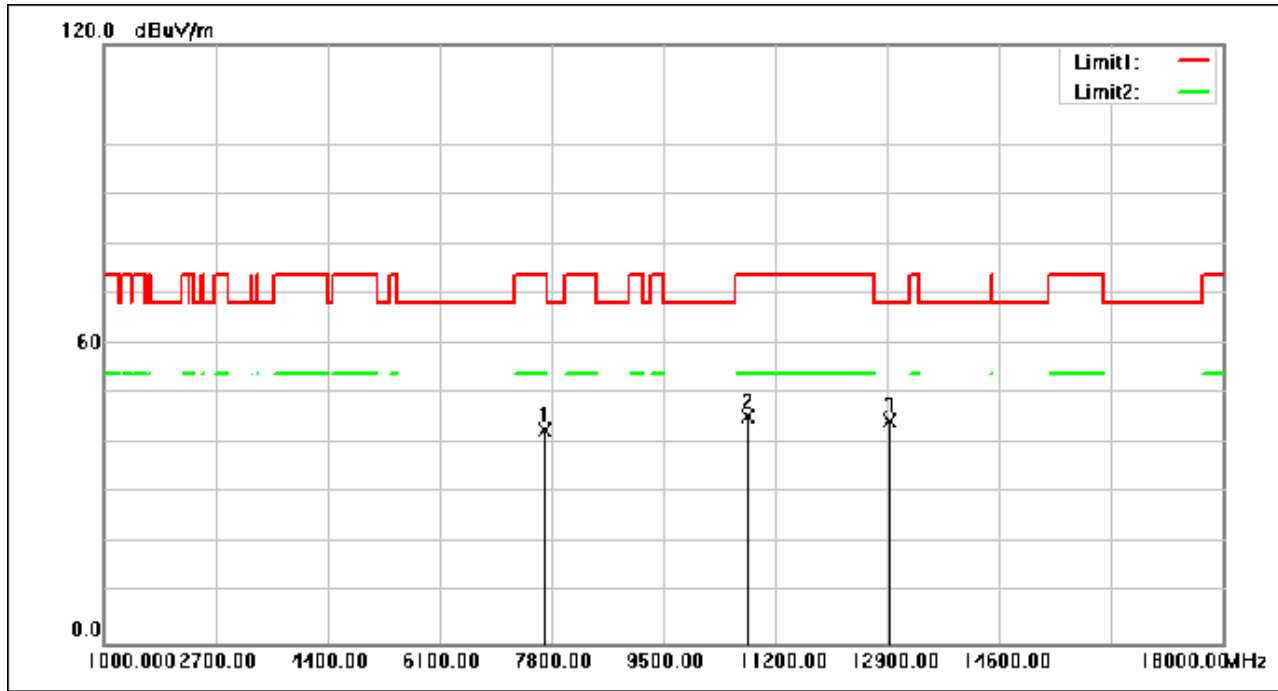
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7694.188	53.70	-11.09	42.61	74.00	-31.39	peak
2	10784.231	52.96	-7.56	45.40	74.00	-28.60	peak
3	12950.118	51.96	-7.46	44.50	68.30	-23.80	peak

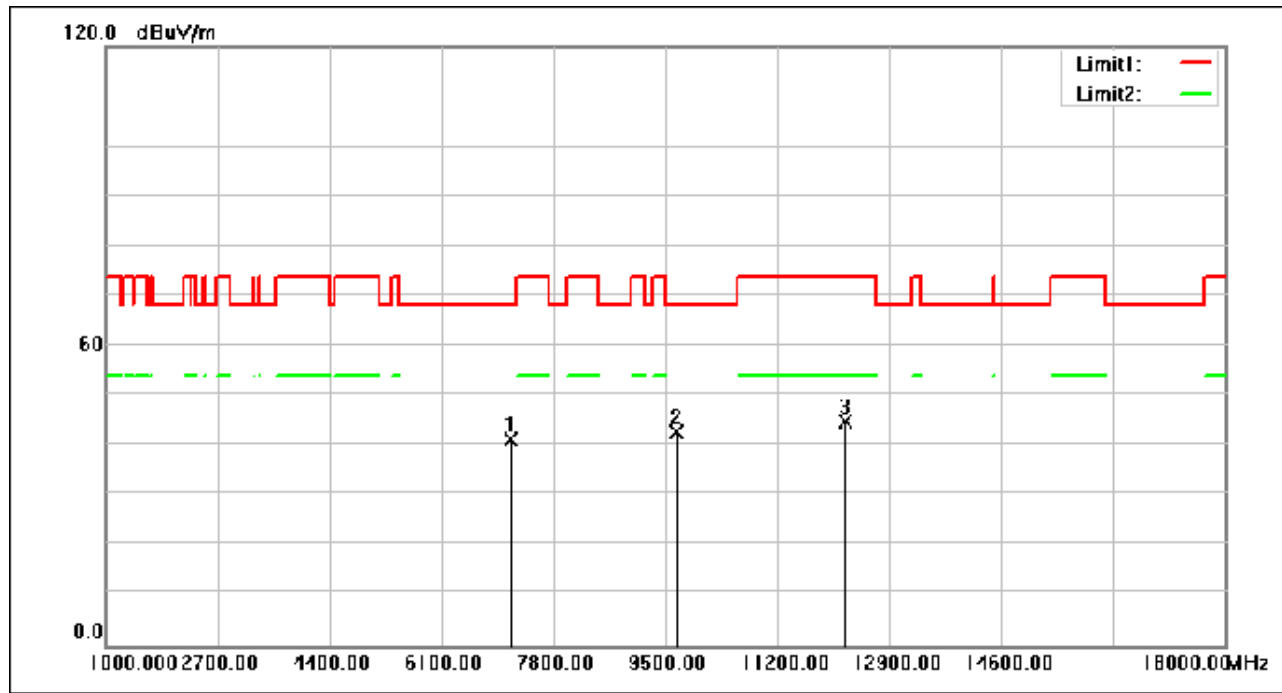
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7147.446	53.25	-11.93	41.32	68.30	-26.98	peak
2	9664.227	52.10	-9.36	42.74	68.30	-25.56	peak
3	12248.330	52.37	-7.58	44.79	74.00	-29.21	peak

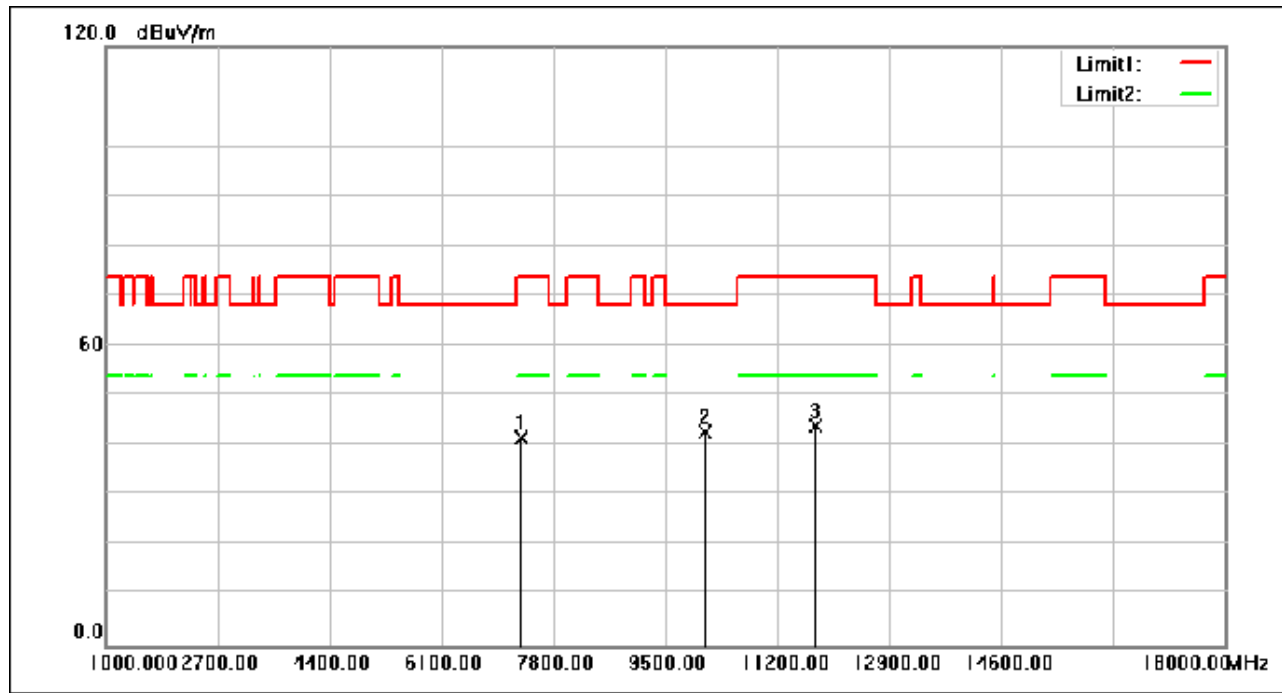
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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7318.133	52.90	-11.24	41.66	74.00	-32.34	peak
2	10094.004	51.63	-8.78	42.85	68.30	-25.45	peak
3	11768.911	51.33	-7.44	43.89	74.00	-30.11	peak

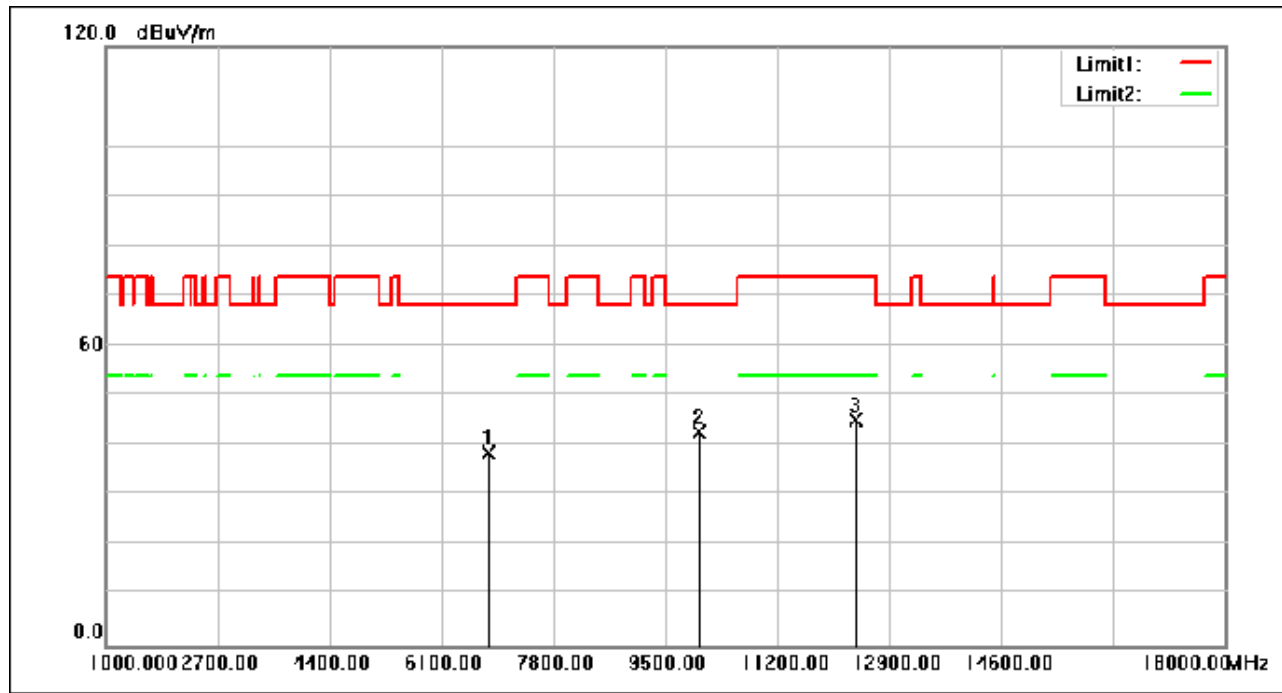
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6825.113	51.61	-13.20	38.41	68.30	-29.89	peak
2	10011.720	51.76	-8.92	42.84	68.30	-25.46	peak
3	12382.975	52.65	-7.56	45.09	74.00	-28.91	peak

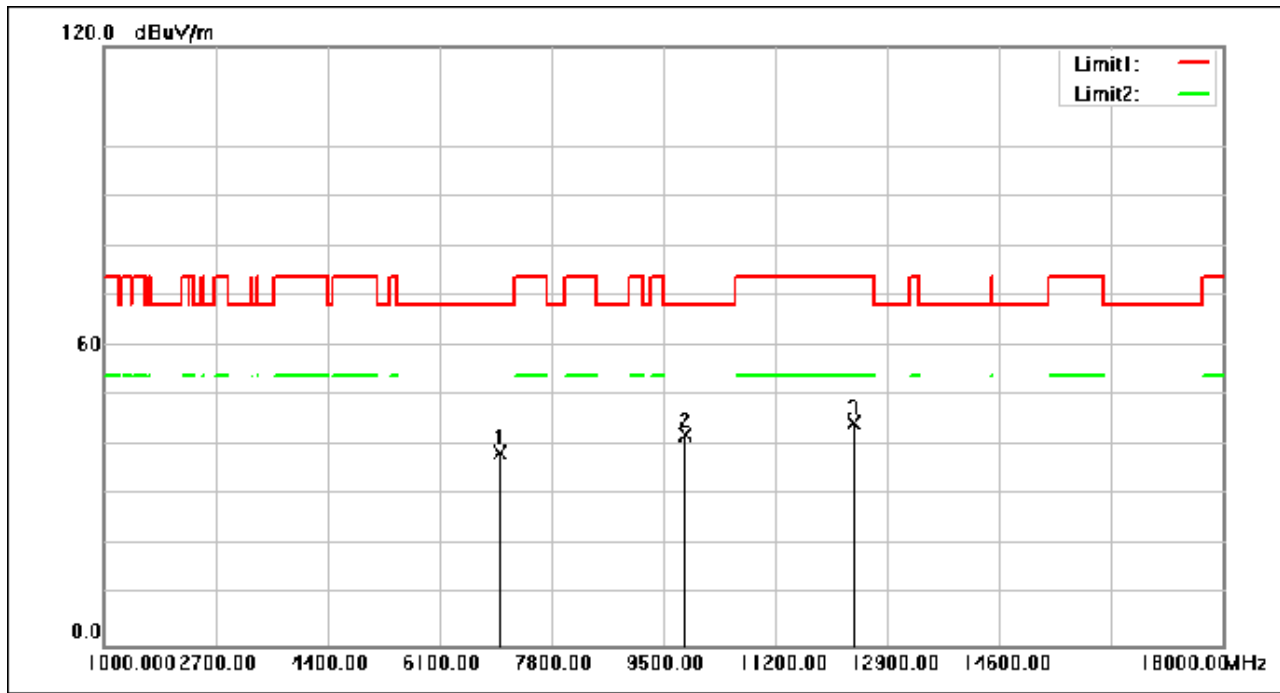
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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7025.721	51.10	-12.42	38.68	68.30	-29.62	peak
2	9834.913	51.33	-9.18	42.15	68.30	-26.15	peak
3	12389.775	52.15	-7.56	44.59	74.00	-29.41	peak

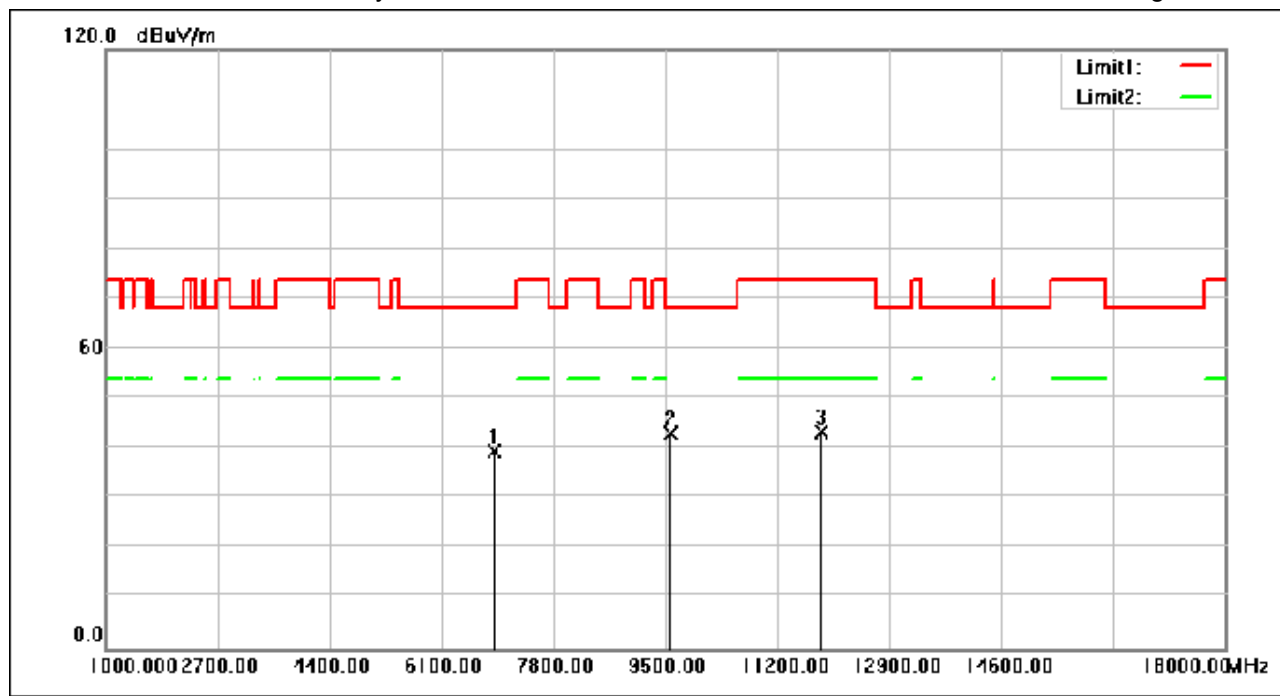
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6903.996	52.22	-12.90	39.32	68.30	-28.98	peak
2	9585.343	52.50	-9.45	43.05	68.30	-25.25	peak
3	11877.715	50.96	-7.54	43.42	74.00	-30.58	peak

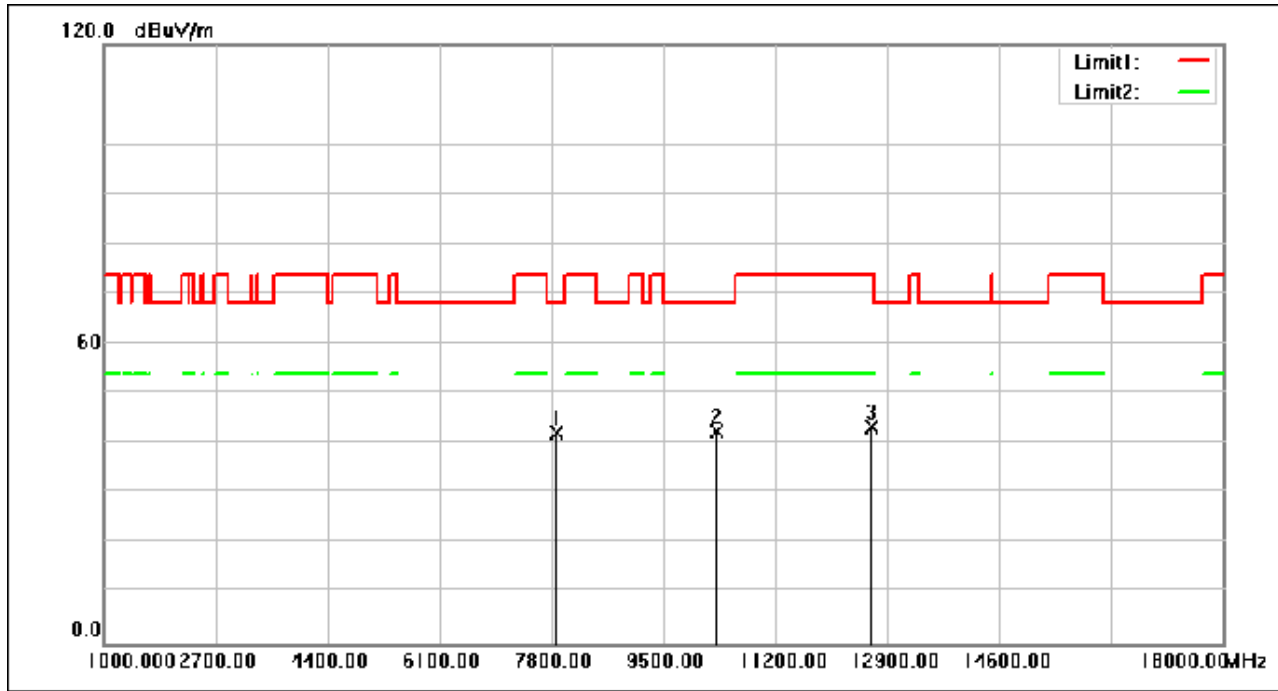
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7885.275	53.44	-11.33	42.11	68.30	-26.19	peak
2	10294.612	50.83	-8.44	42.39	68.30	-25.91	peak
3	12665.187	50.79	-7.52	43.27	74.00	-30.73	peak

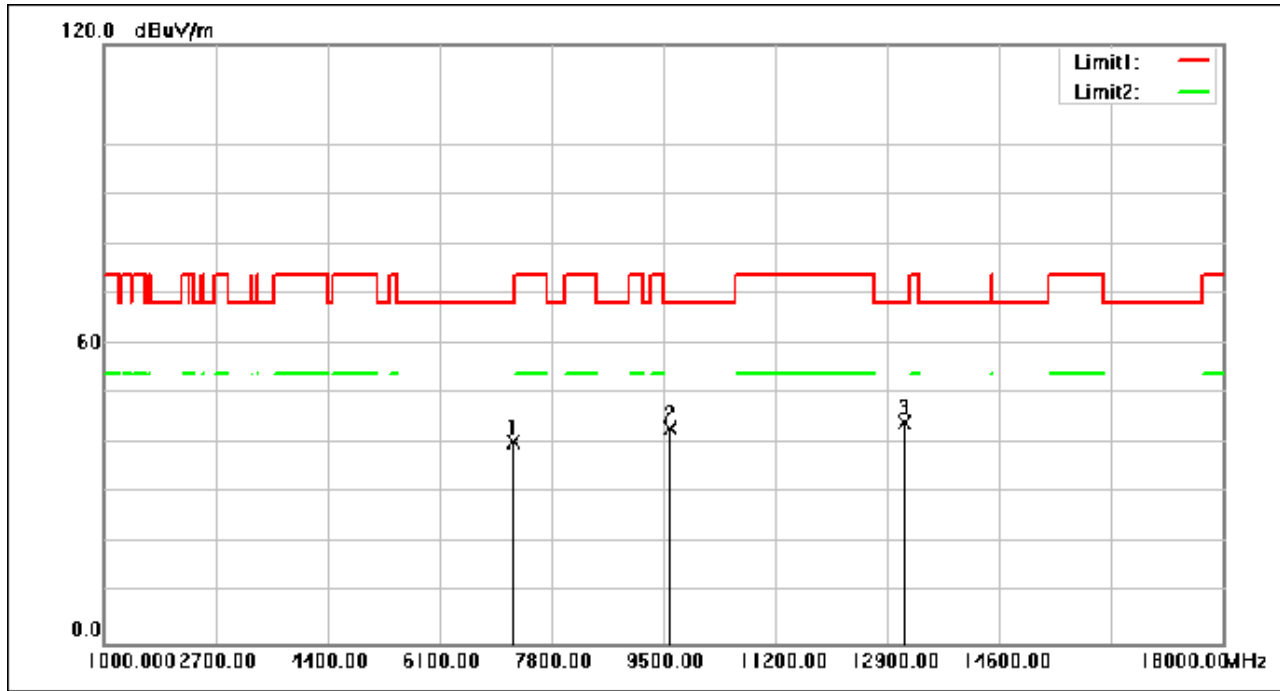
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7221.569	52.04	-11.63	40.41	68.30	-27.89	peak
2	9596.224	52.50	-9.43	43.07	68.30	-25.23	peak
3	13152.766	51.71	-7.52	44.19	68.30	-24.11	peak

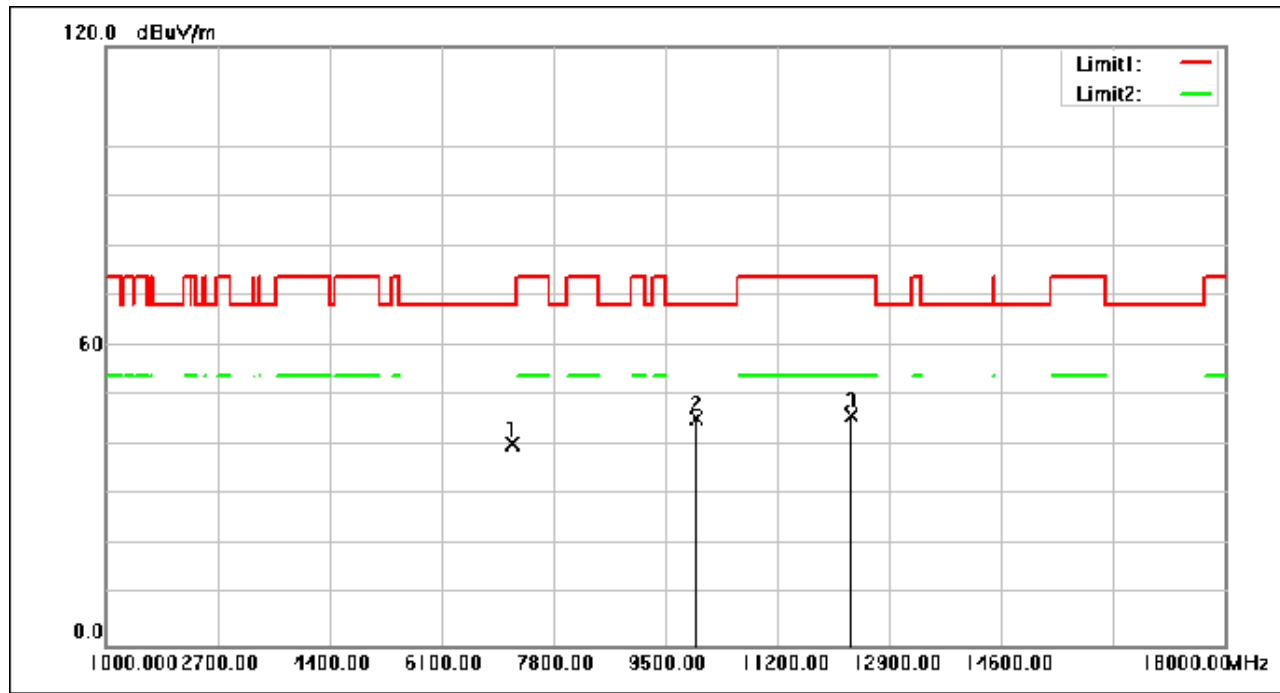
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Test Mode: 01; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7184.167	52.00	-11.77	40.23	68.30	-28.07	peak
2	9964.799	54.40	-8.99	45.41	68.30	-22.89	peak
3	12319.733	53.76	-7.57	46.19	74.00	-27.81	peak

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7.10 Radiated Emissions which fall in the restricted bands

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

Test Method: KDB 789033 D02 II G

Limit:

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

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (4) For transmitters operating in the 5.725-5.85 GHz band:
 (i) 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.
 Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 20.5 °C

Humidity: 50.5 % RH

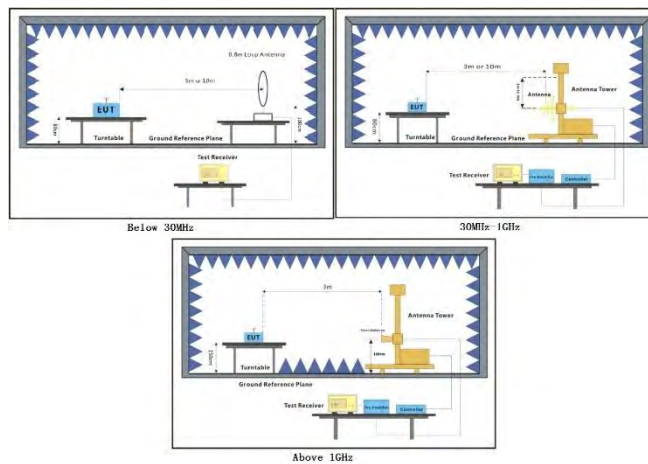
Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all

		modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



7.10.4 Measurement Procedure and Data

- For below 1GHz, 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, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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 (for the frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 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 the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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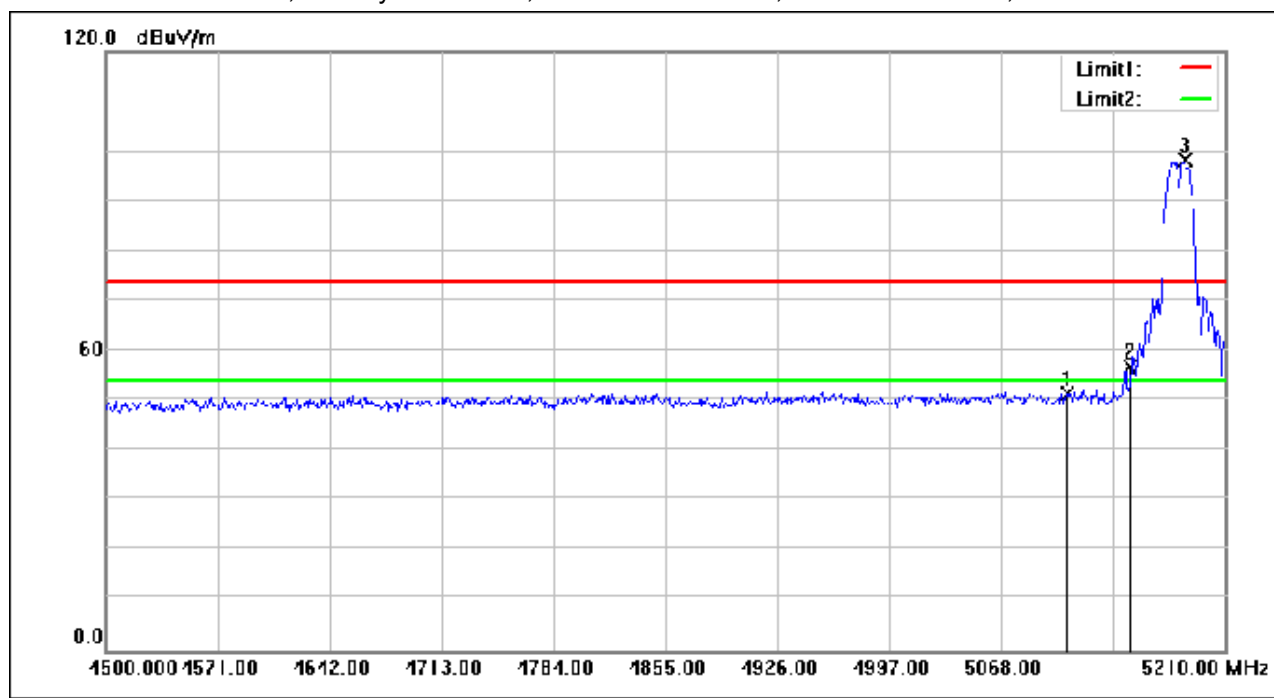
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5109.890	68.65	-17.16	51.49	74.00	-22.51	peak
2	5150.000	74.04	-17.07	56.97	74.00	-17.03	peak
3	5184.440	115.17	-17.04	98.13	74.00	24.13	peak

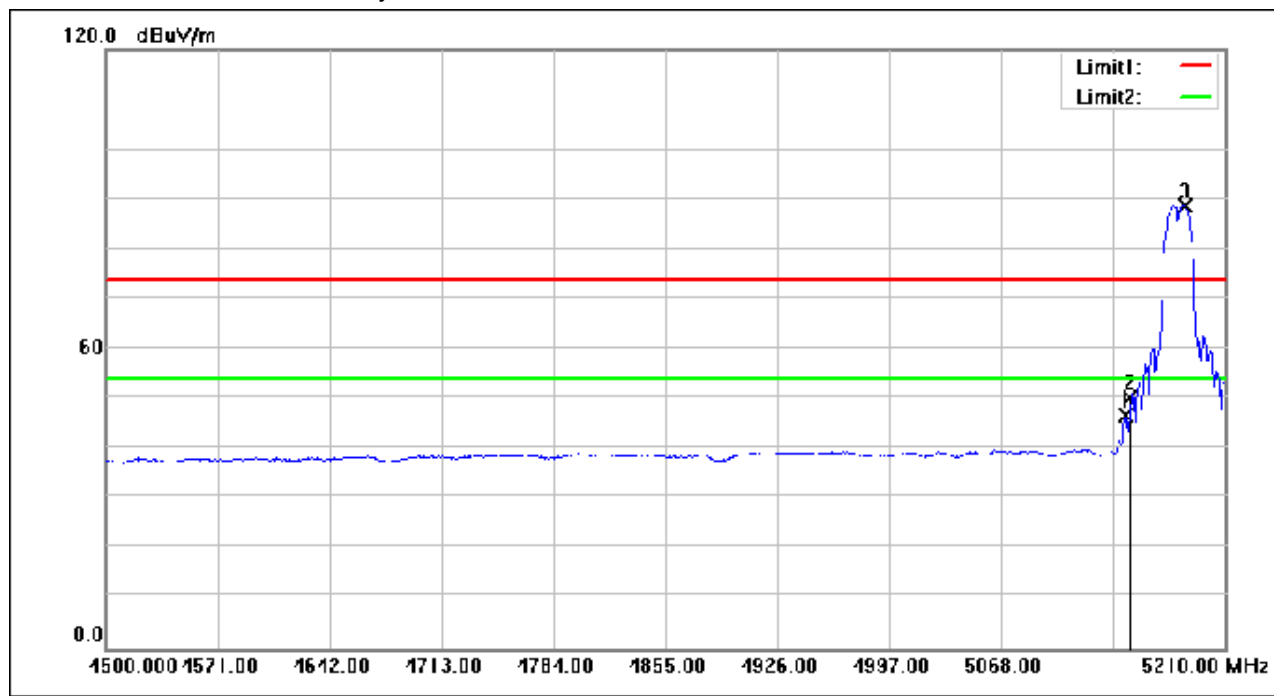
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5146.810	63.81	-17.07	46.74	54.00	-7.26	AVG
2	5150.000	67.20	-17.07	50.13	54.00	-3.87	AVG
3	5184.440	105.71	-17.04	88.67	54.00	34.67	AVG

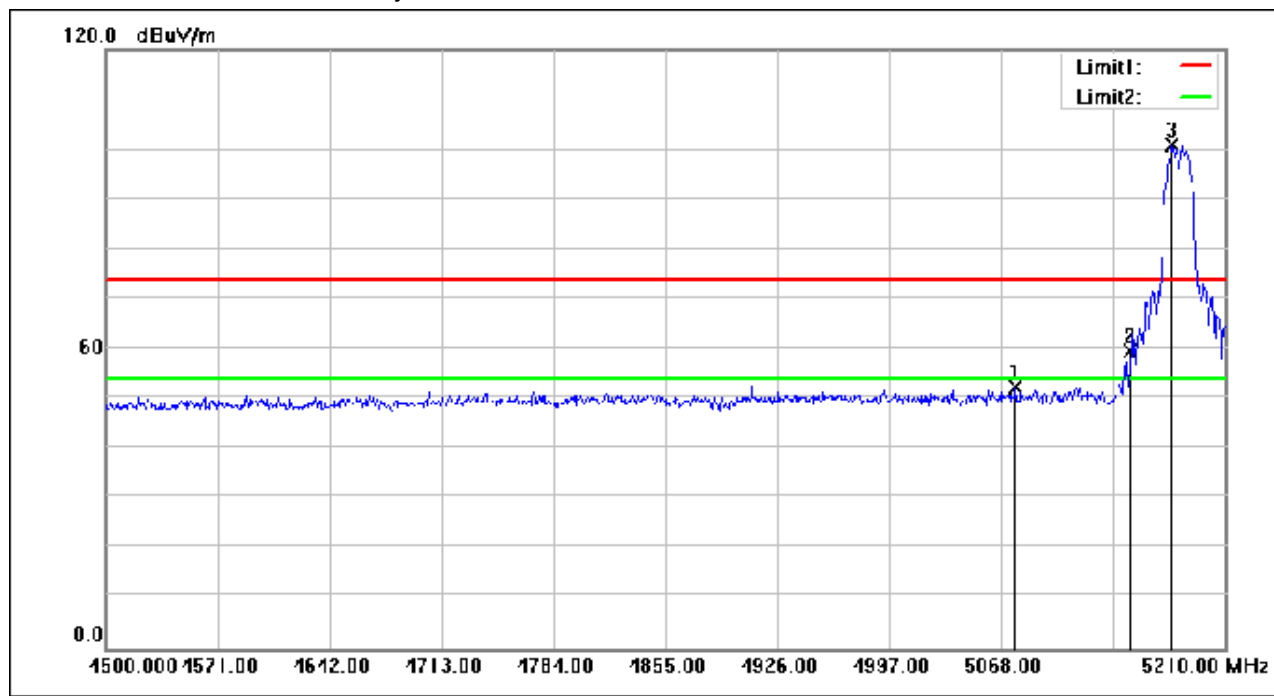
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Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5077.230	69.47	-17.25	52.22	74.00	-21.78	peak
2	5150.000	76.55	-17.07	59.48	74.00	-14.52	peak
3	5176.630	118.00	-17.04	100.96	74.00	26.96	peak

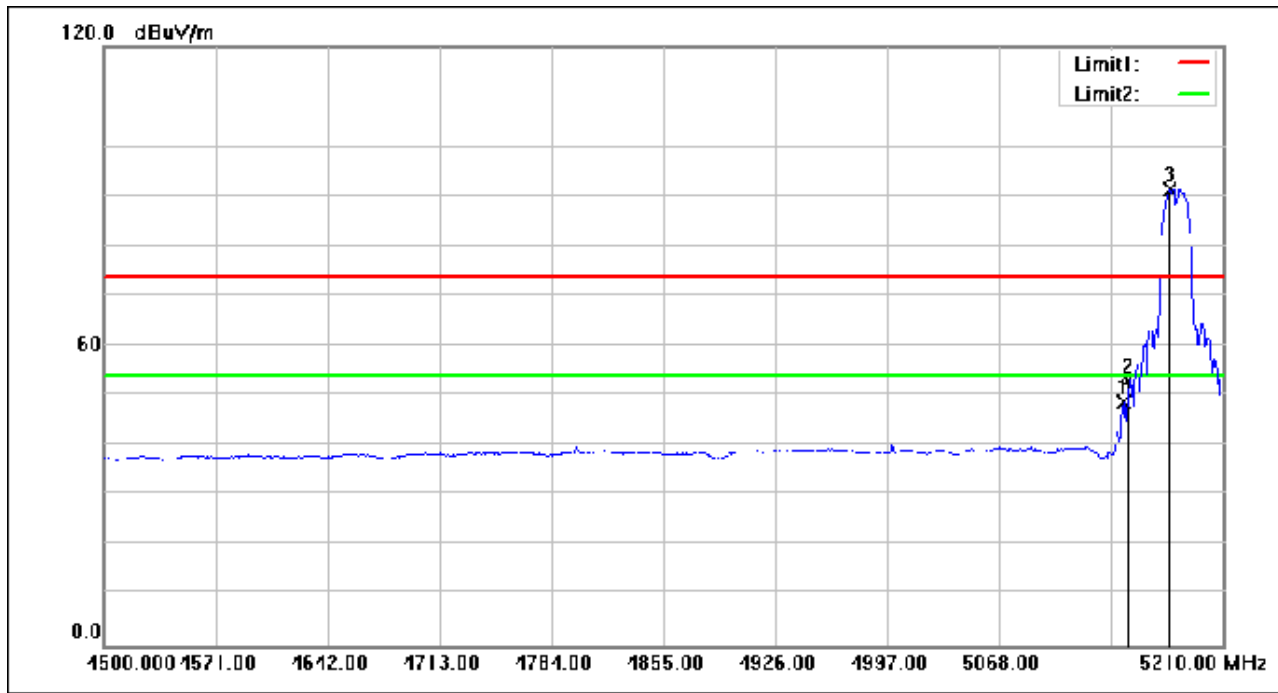
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Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5146.810	65.68	-17.07	48.61	54.00	-5.39	AVG
2	5150.000	70.02	-17.07	52.95	54.00	-1.05	AVG
3	5175.920	108.41	-17.04	91.37	54.00	37.37	AVG

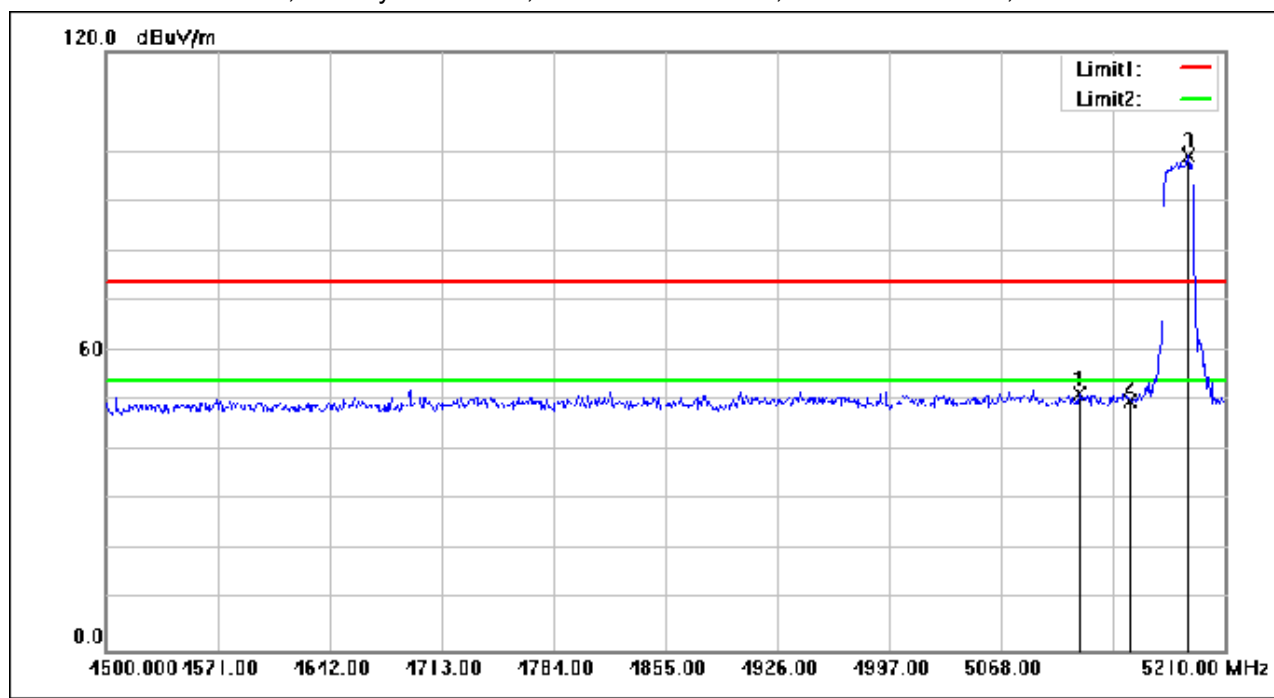
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5117.700	68.60	-17.14	51.46	74.00	-22.54	peak
2	5150.000	66.95	-17.07	49.88	74.00	-24.12	peak
3	5186.570	116.05	-17.03	99.02	74.00	25.02	peak

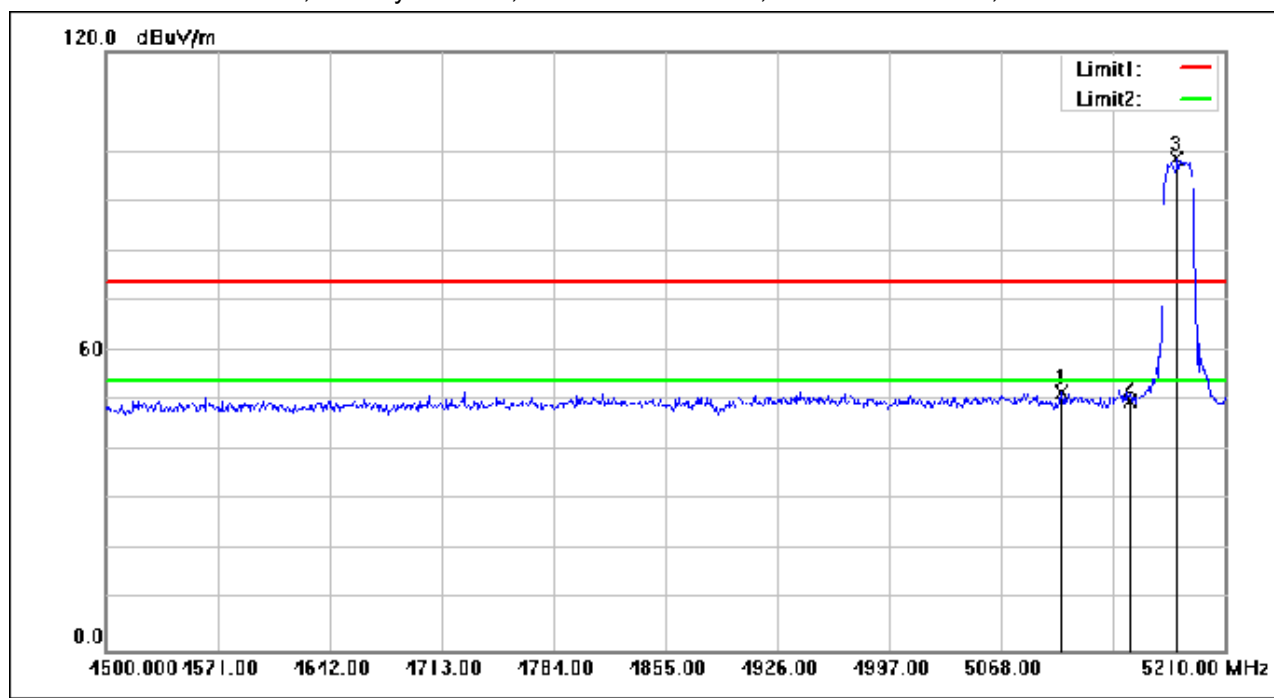
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Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5106.340	68.84	-17.18	51.66	74.00	-22.34	peak
2	5150.000	66.88	-17.07	49.81	74.00	-24.19	peak
3	5179.470	115.65	-17.04	98.61	74.00	24.61	peak

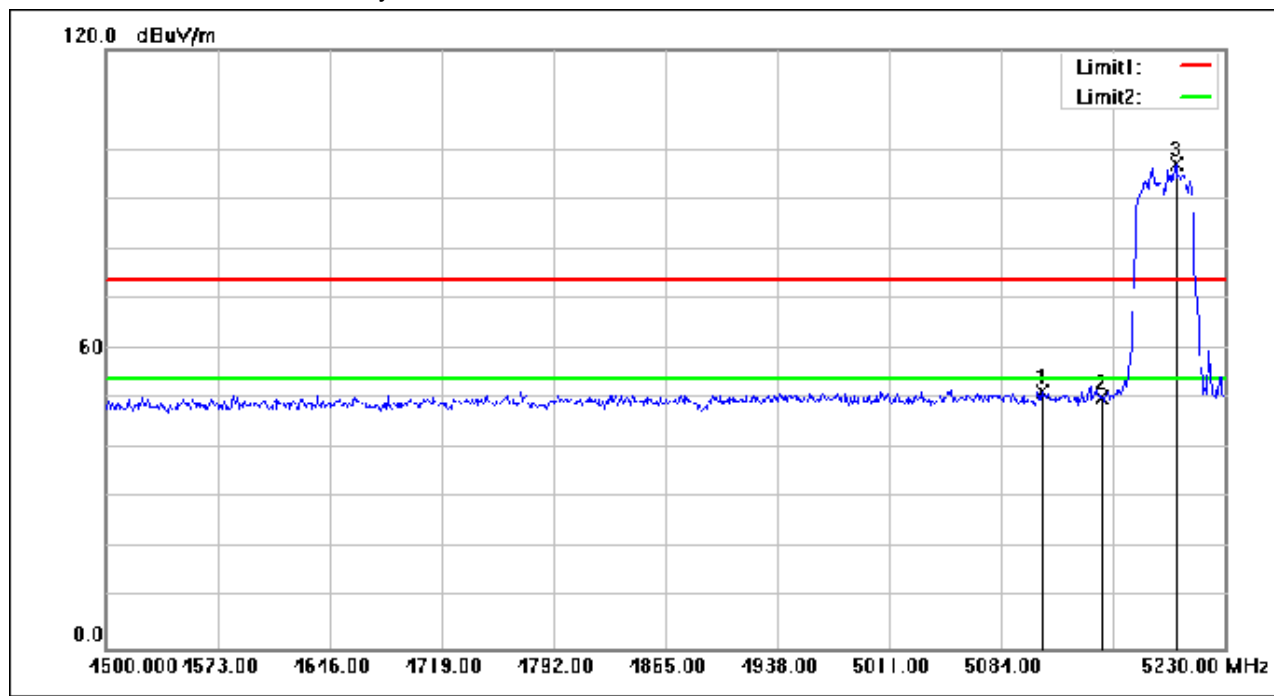
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5110.280	68.67	-17.16	51.51	74.00	-22.49	peak
2	5150.000	67.27	-17.07	50.20	74.00	-23.80	peak
3	5197.880	114.20	-17.02	97.18	74.00	23.18	peak

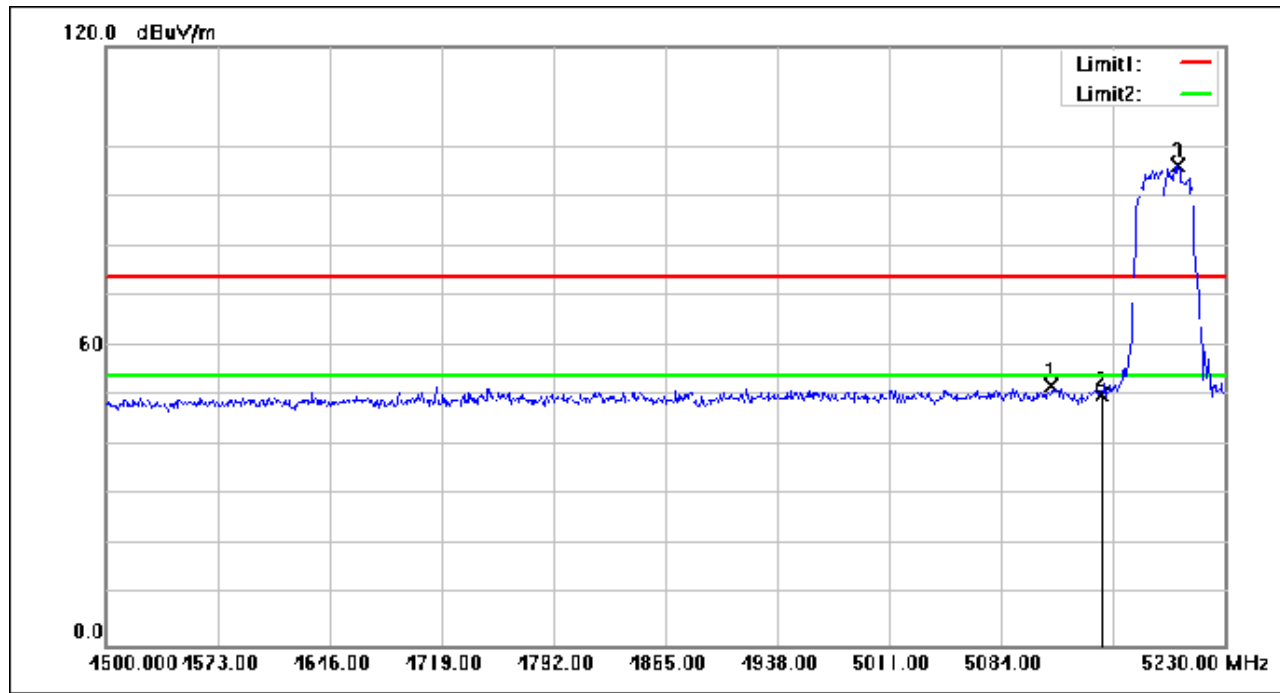
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Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5116.850	69.14	-17.15	51.99	74.00	-22.01	peak
2	5150.000	67.38	-17.07	50.31	74.00	-23.69	peak
3	5199.340	113.19	-17.02	96.17	74.00	22.17	peak

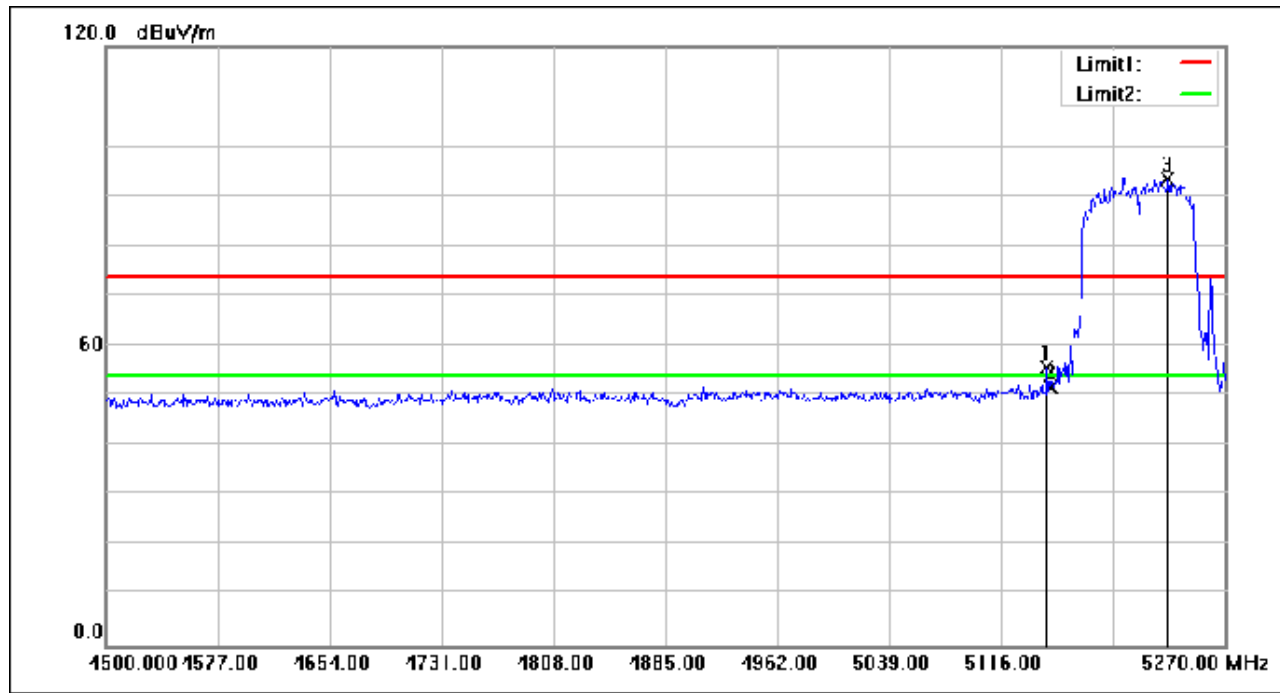
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5147.570	72.66	-17.07	55.59	74.00	-18.41	peak
2	5150.000	68.91	-17.07	51.84	74.00	-22.16	peak
3	5230.730	110.45	-16.99	93.46	74.00	19.46	peak

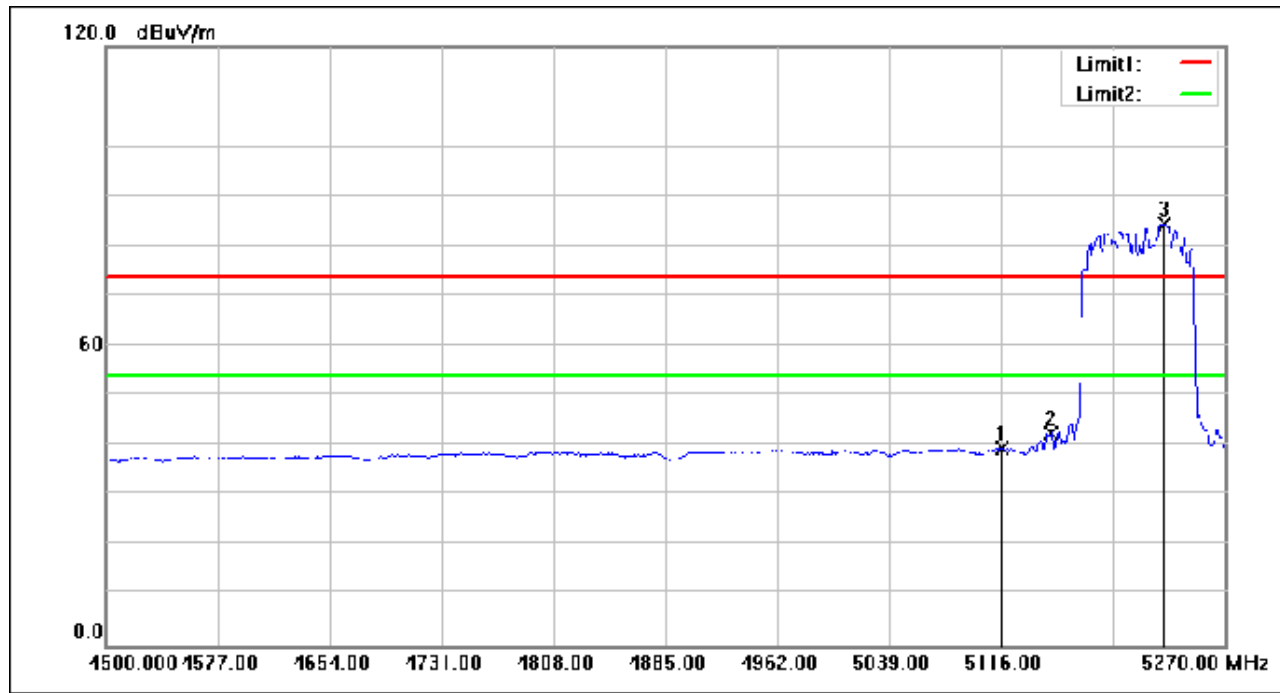
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Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5116.000	56.58	-17.16	39.42	54.00	-14.58	AVG
2	5150.000	59.49	-17.07	42.42	54.00	-11.58	AVG
3	5228.420	101.55	-16.99	84.56	54.00	30.56	AVG

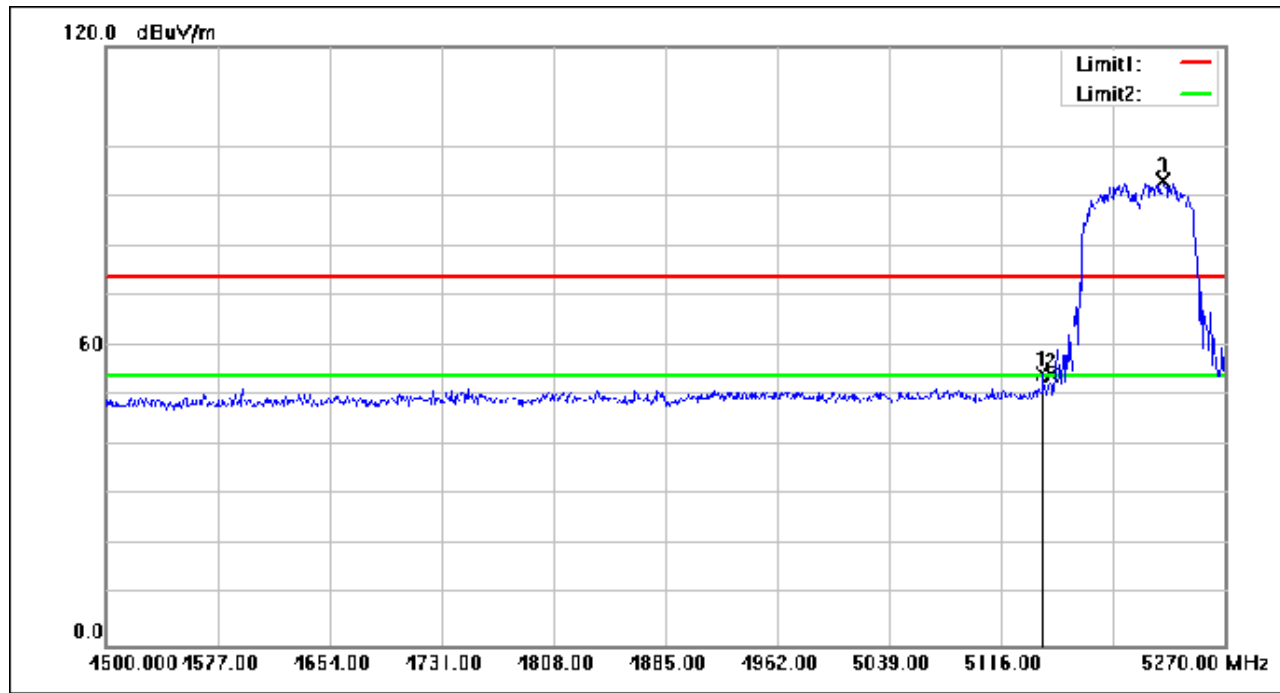
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Test Mode: 00; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5144.490	71.68	-17.09	54.59	74.00	-19.41	peak
2	5150.000	71.14	-17.07	54.07	74.00	-19.93	peak
3	5227.650	110.18	-16.99	93.19	74.00	19.19	peak

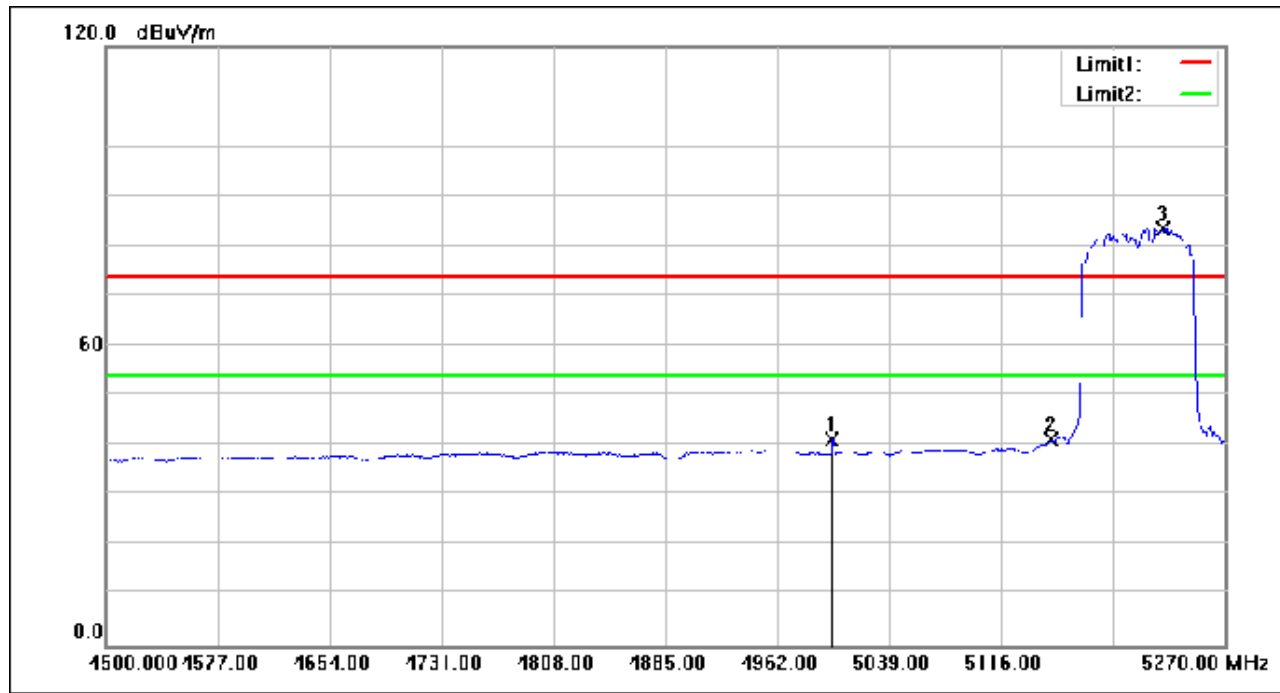
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Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4999.730	58.88	-17.51	41.37	54.00	-12.63	AVG
2	5150.000	58.41	-17.07	41.34	54.00	-12.66	AVG
3	5226.880	100.66	-16.99	83.67	54.00	29.67	AVG

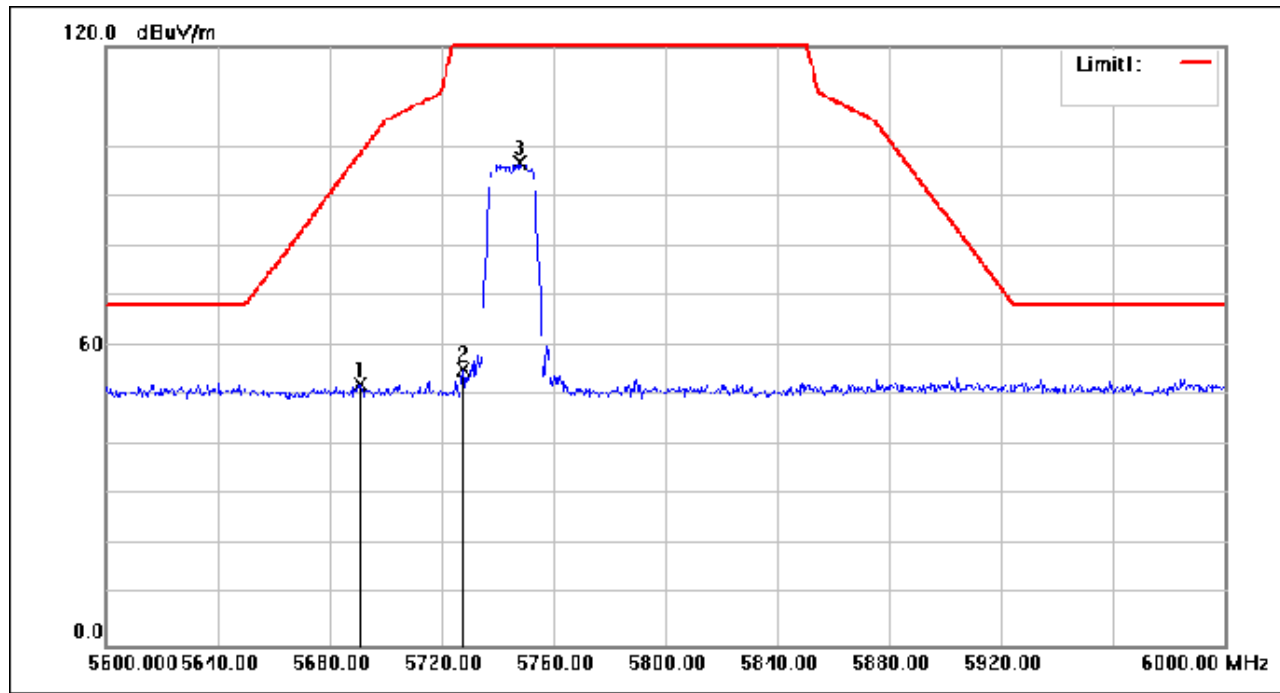
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5690.800	68.98	-16.57	52.41	98.39	-45.98	peak
2	5727.600	71.93	-16.52	55.41	135.00	-79.59	peak
3	5748.000	113.28	-16.48	96.80	135.00	-38.20	peak

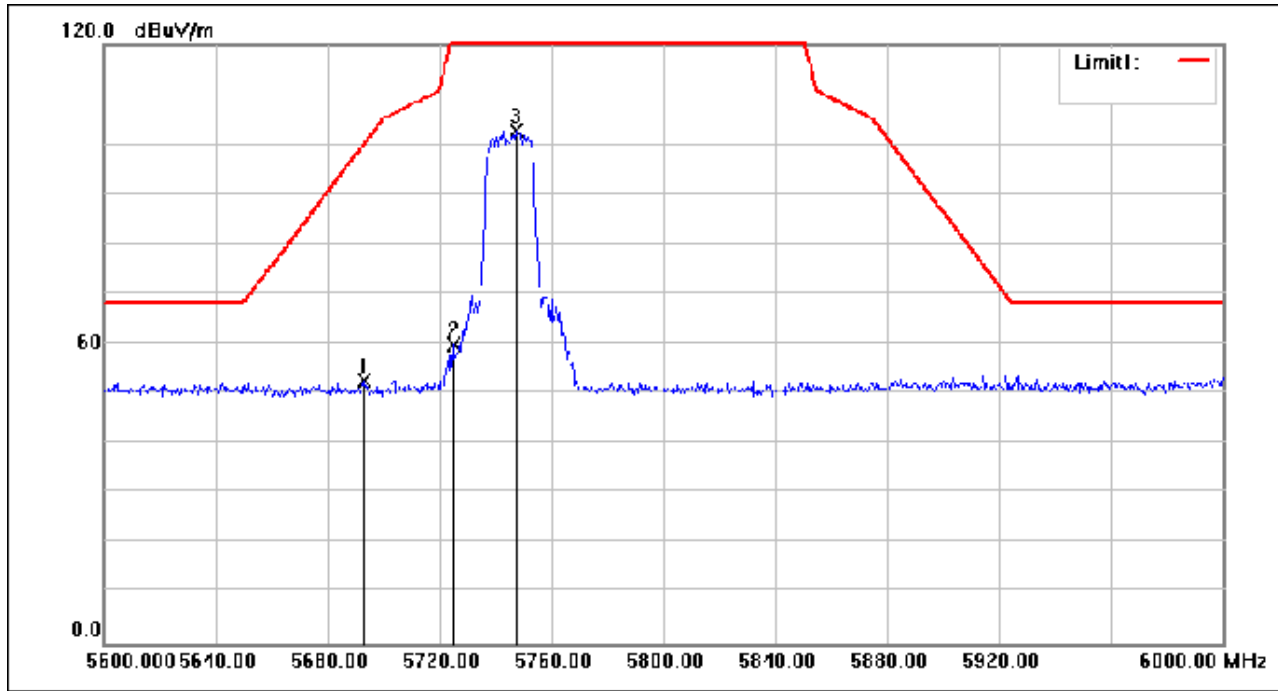
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Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5693.200	69.37	-16.57	52.80	100.17	-47.37	peak
2	5724.800	76.46	-16.53	59.93	121.74	-61.81	peak
3	5747.200	119.19	-16.48	102.71	135.00	-32.29	peak

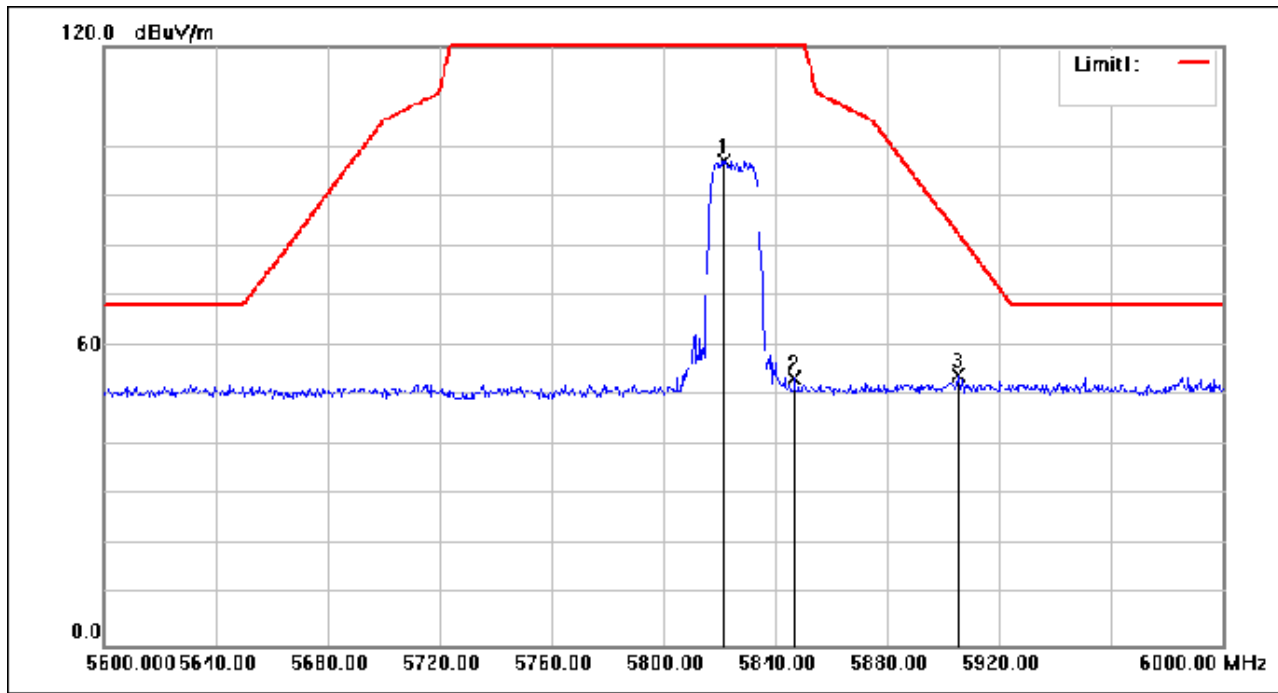
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Test Mode: 01; Polarity: Horizontal; Modulation: 802.11a; Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5821.600	113.35	-16.32	97.03	135.00	-37.97	peak
2	5846.800	69.83	-16.26	53.57	135.00	-81.43	peak
3	5905.200	70.08	-16.03	54.05	82.85	-28.80	peak

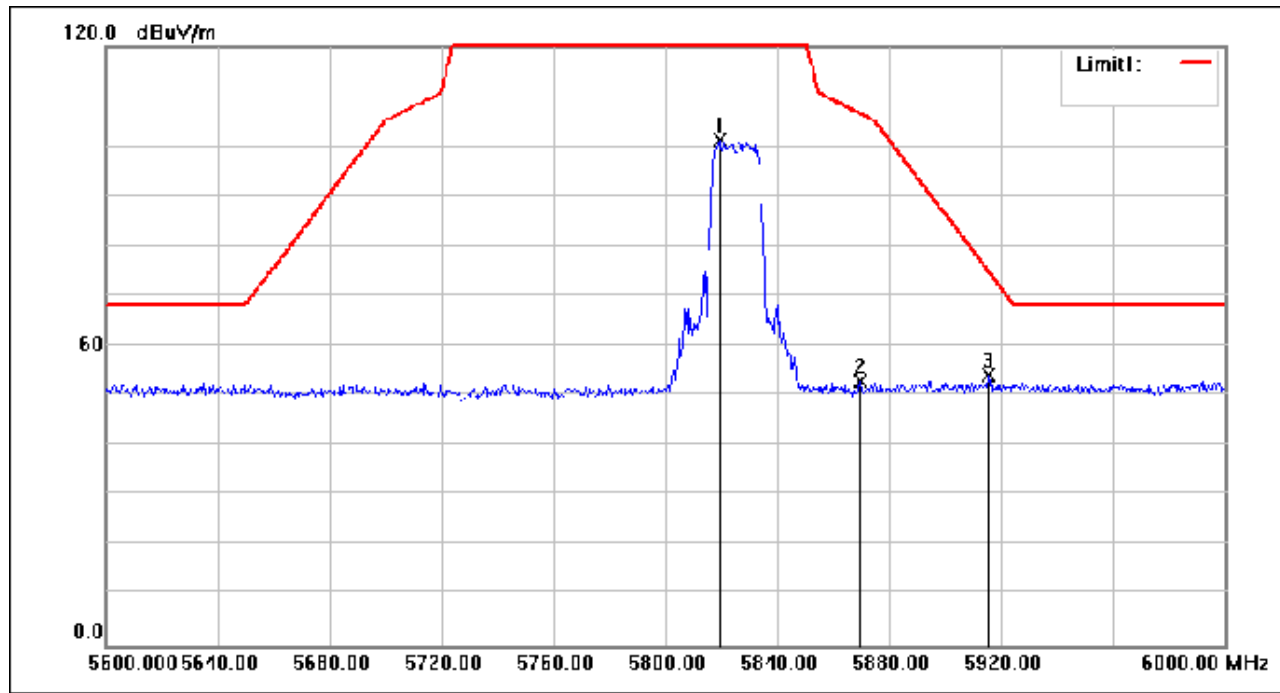
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Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5819.200	117.52	-16.32	101.20	135.00	-33.80	peak
2	5869.600	69.07	-16.18	52.89	106.71	-53.82	peak
3	5915.600	70.13	-16.00	54.13	75.16	-21.03	peak

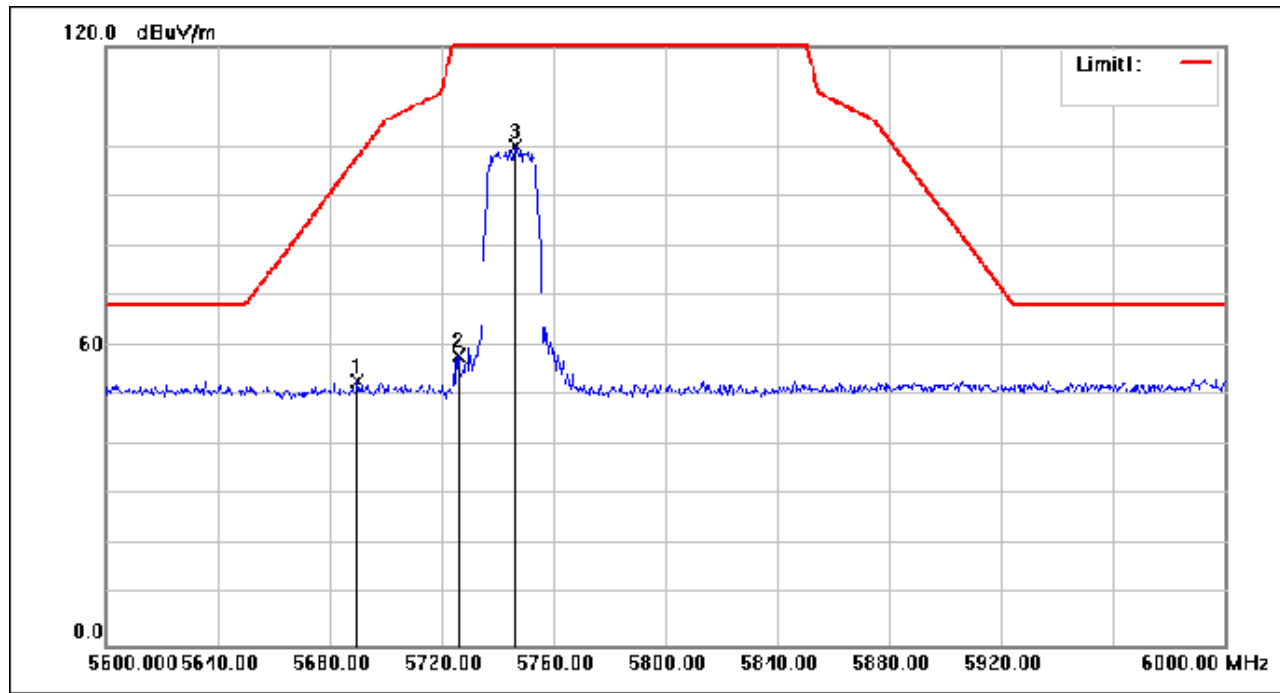
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5690.000	69.62	-16.57	53.05	97.80	-44.75	peak
2	5726.000	74.48	-16.52	57.96	135.00	-77.04	peak
3	5746.400	116.59	-16.48	100.11	135.00	-34.89	peak

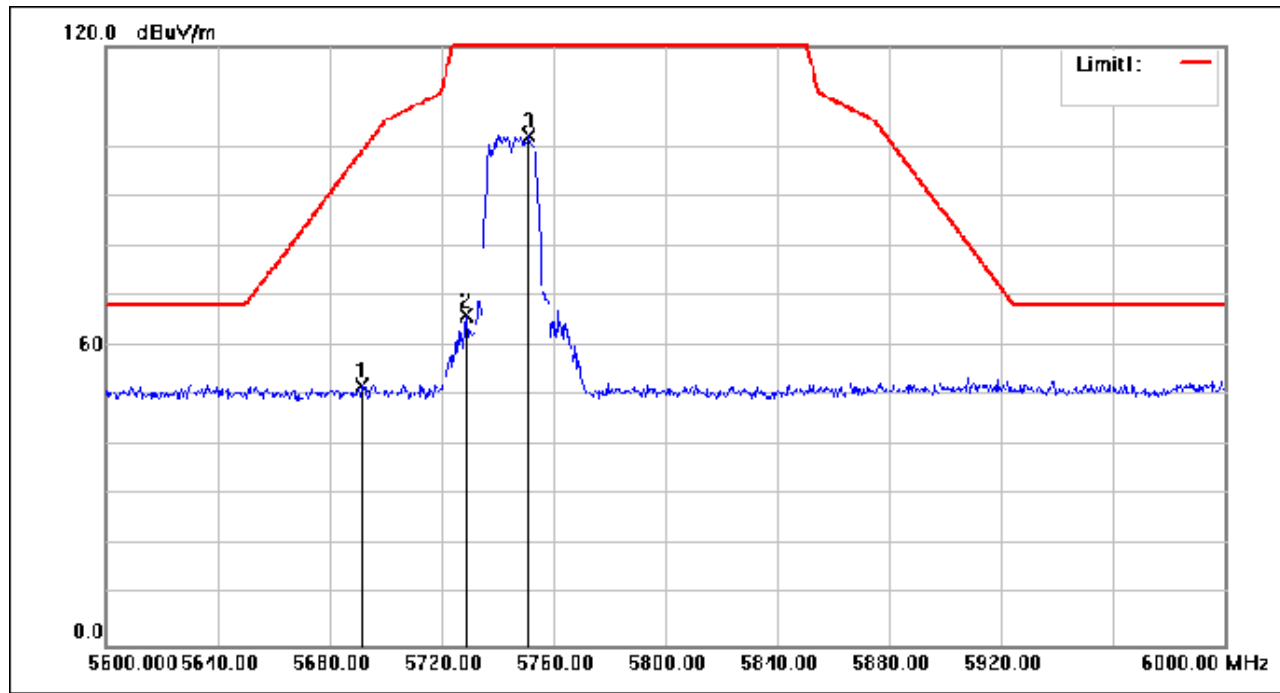
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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5691.200	68.52	-16.57	51.95	98.69	-46.74	peak
2	5728.800	82.55	-16.52	66.03	135.00	-68.97	peak
3	5751.200	118.74	-16.47	102.27	135.00	-32.73	peak

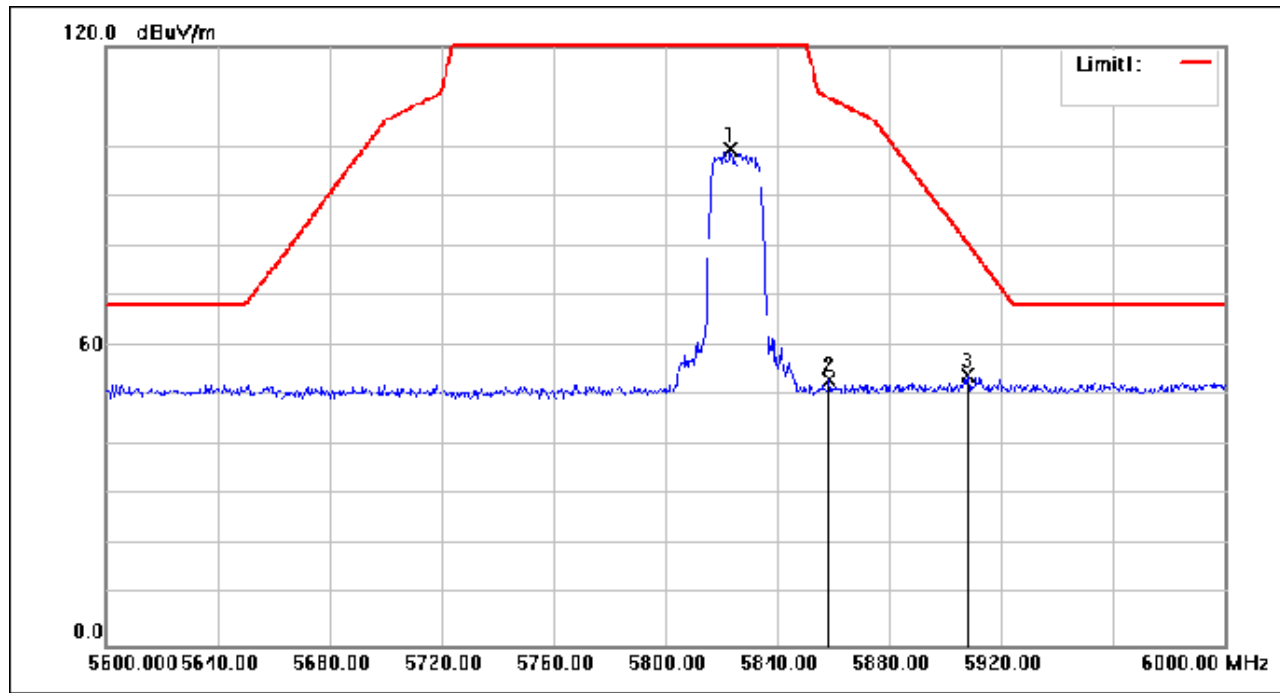
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Test Mode: 01; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5823.200	115.64	-16.31	99.33	135.00	-35.67	peak
2	5858.400	69.55	-16.23	53.32	109.85	-56.53	peak
3	5908.000	70.10	-16.03	54.07	80.78	-26.71	peak

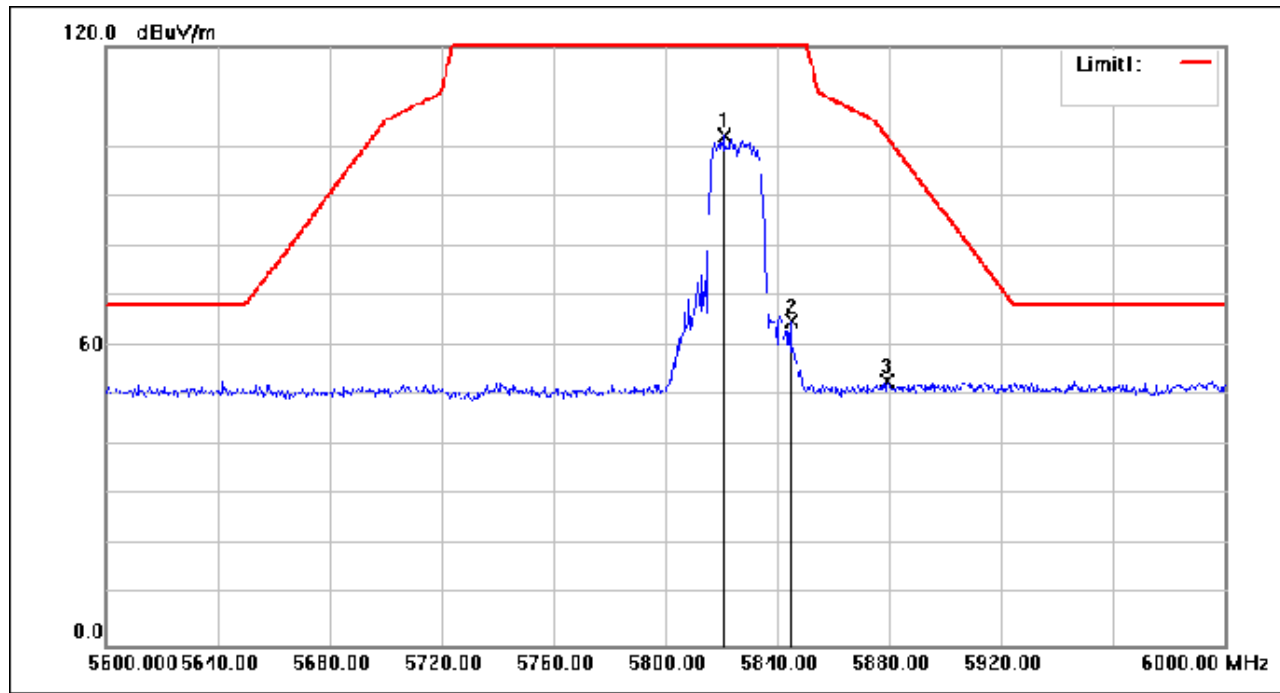
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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5820.800	118.56	-16.32	102.24	135.00	-32.76	peak
2	5844.800	81.35	-16.26	65.09	135.00	-69.91	peak
3	5879.200	68.95	-16.14	52.81	102.09	-49.28	peak

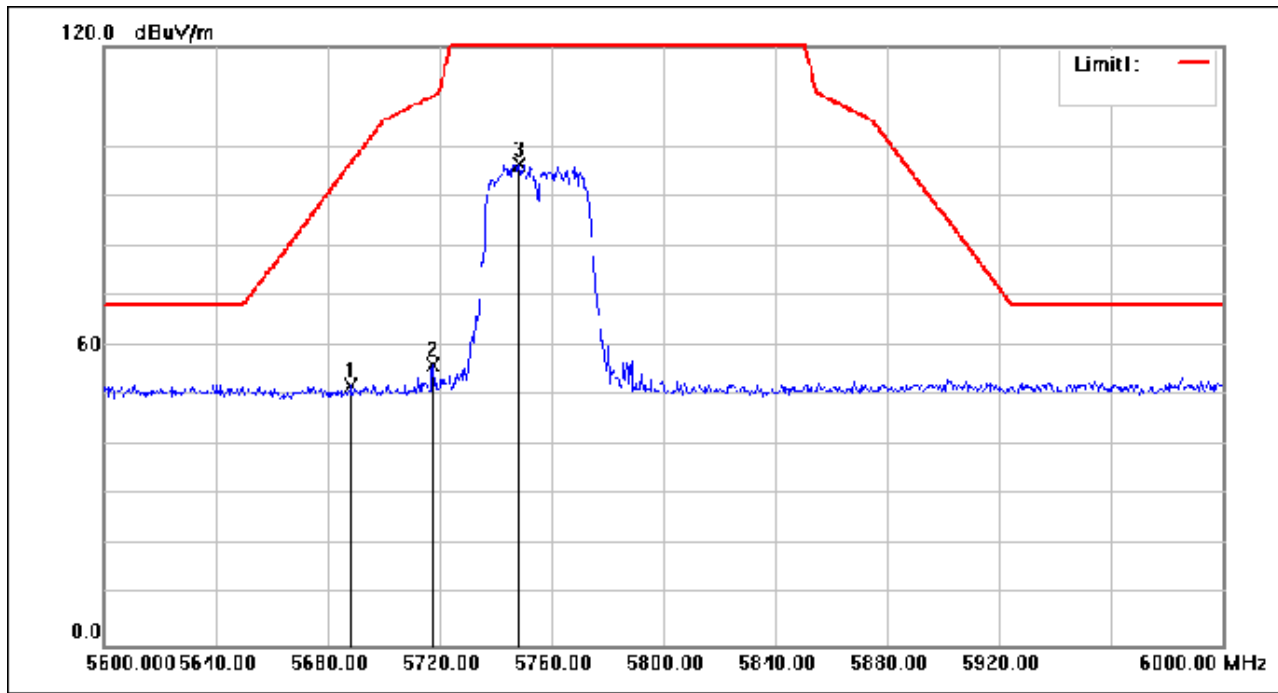
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5688.400	68.60	-16.58	52.02	96.62	-44.60	peak
2	5717.600	72.75	-16.54	56.21	110.13	-53.92	peak
3	5748.400	113.05	-16.47	96.58	135.00	-38.42	peak

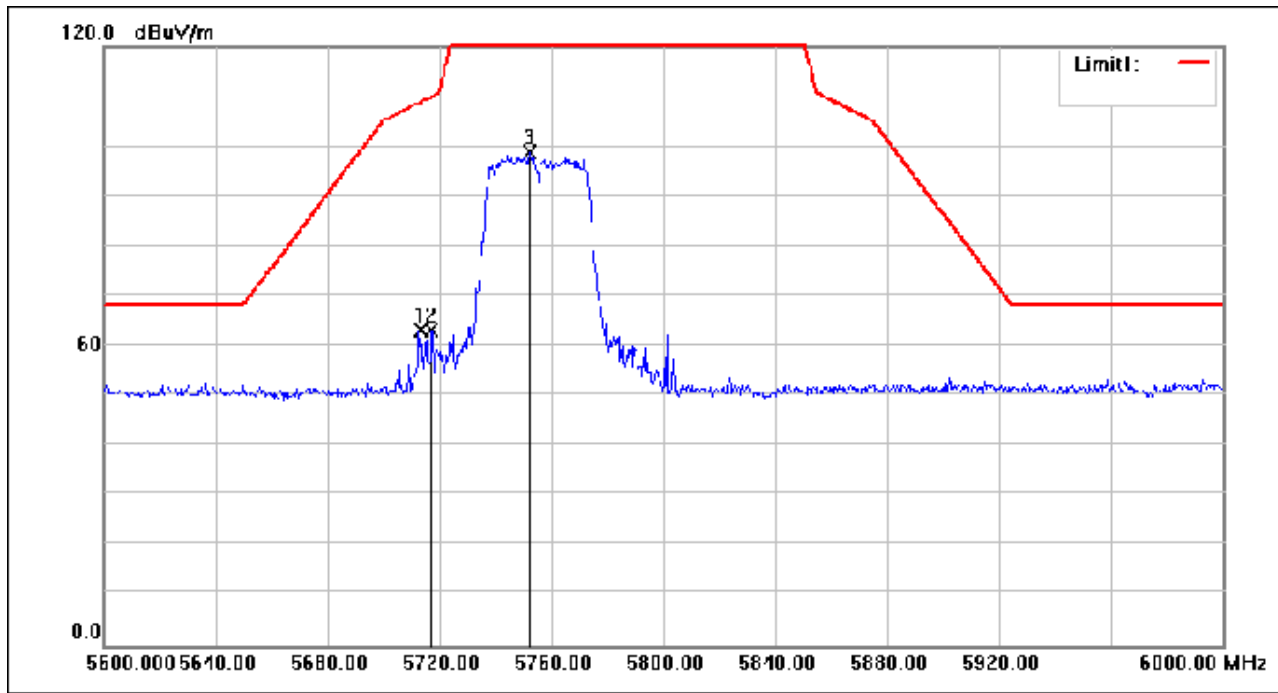
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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5713.200	79.56	-16.54	63.02	108.90	-45.88	peak
2	5717.200	79.78	-16.54	63.24	110.02	-46.78	peak
3	5752.000	115.23	-16.47	98.76	135.00	-36.24	peak

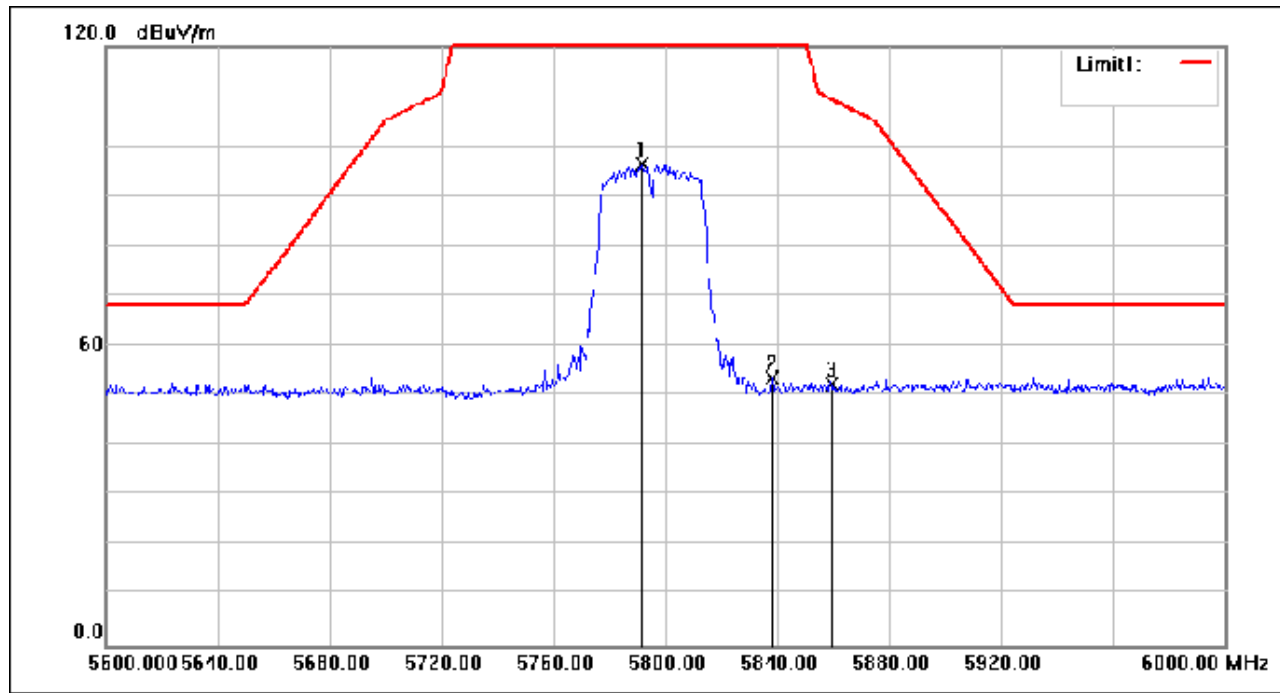
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Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5791.600	112.87	-16.39	96.48	135.00	-38.52	peak
2	5838.000	69.97	-16.28	53.69	135.00	-81.31	peak
3	5859.600	68.46	-16.21	52.25	109.51	-57.26	peak

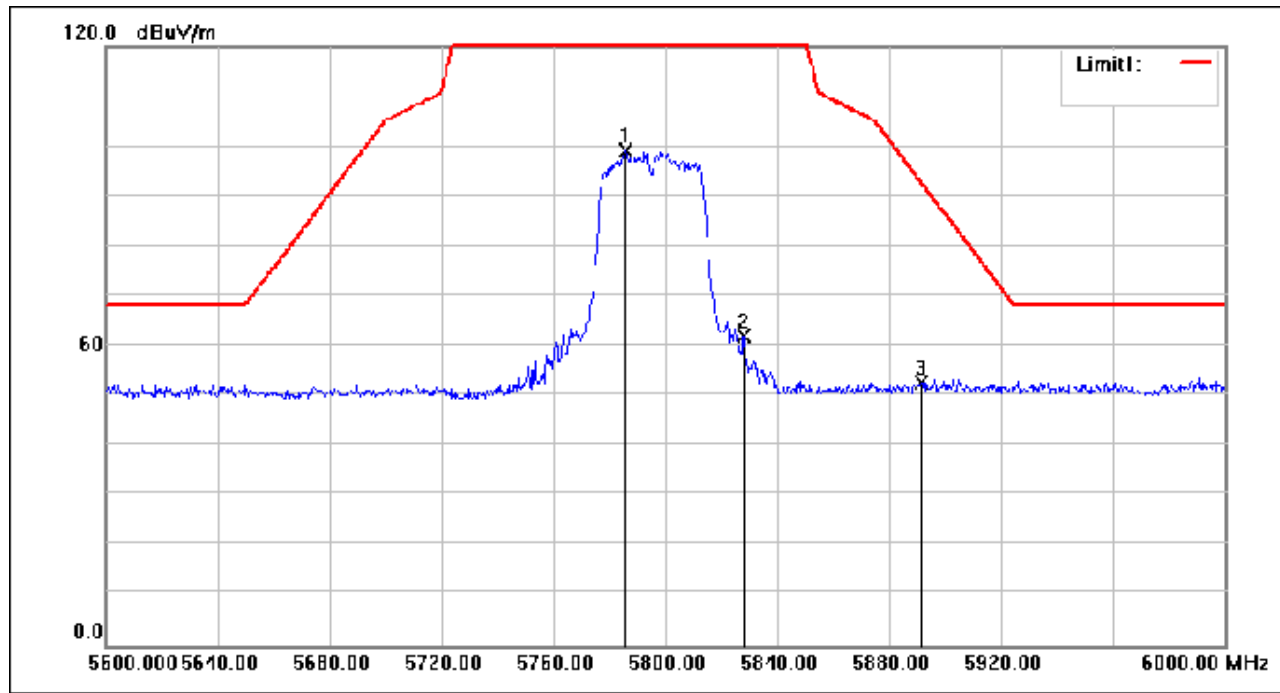
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5786.000	115.64	-16.39	99.25	135.00	-35.75	peak
2	5828.000	78.29	-16.31	61.98	135.00	-73.02	peak
3	5891.600	68.65	-16.09	52.56	92.92	-40.36	peak

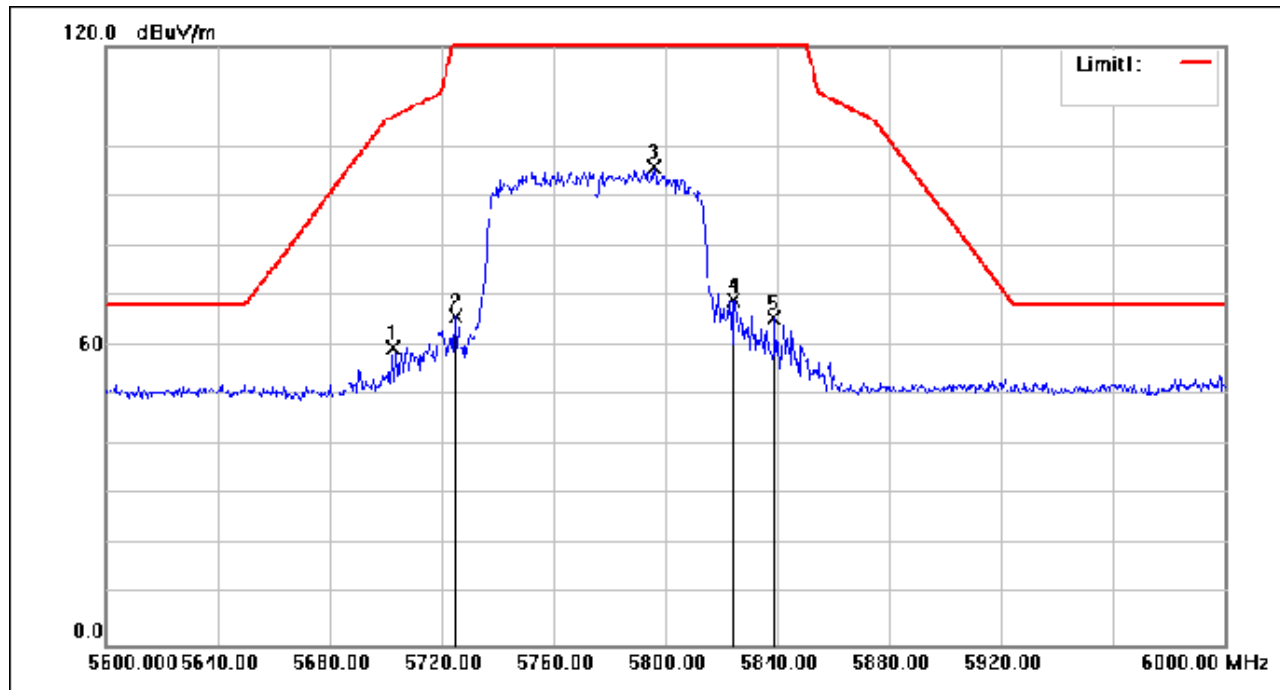
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5702.400	76.20	-16.56	59.64	105.87	-46.23	peak
2	5724.800	82.36	-16.53	65.83	121.74	-55.91	peak
3	5796.000	112.08	-16.37	95.71	135.00	-39.29	peak
4	5824.400	85.52	-16.31	69.21	135.00	-65.79	peak
5	5838.800	81.72	-16.28	65.44	135.00	-69.56	peak

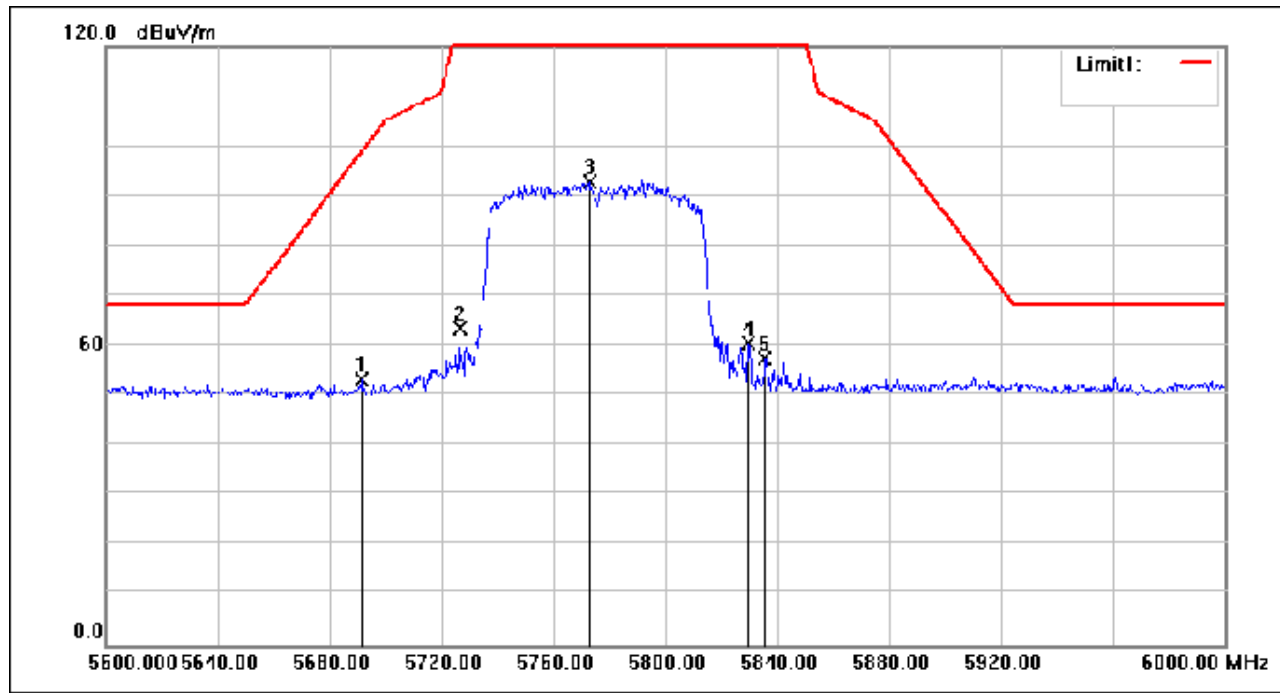
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 01; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5691.600	69.72	-16.57	53.15	98.98	-45.83	peak
2	5726.400	80.06	-16.52	63.54	135.00	-71.46	peak
3	5772.800	109.26	-16.42	92.84	135.00	-42.16	peak
4	5829.600	76.90	-16.30	60.60	135.00	-74.40	peak
5	5835.600	73.78	-16.29	57.49	135.00	-77.51	peak



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7.11 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)

Test Method: ANSI C63.10 (2013) Section 6.8

7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

Humidity: 45.3 % RH

Atmospheric Pressure: 1010 mbar

7.11.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.11.3 Test Setup Diagram

7.11.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2404000562AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2404000562AT

10 Appendix

1. Duty Cycle

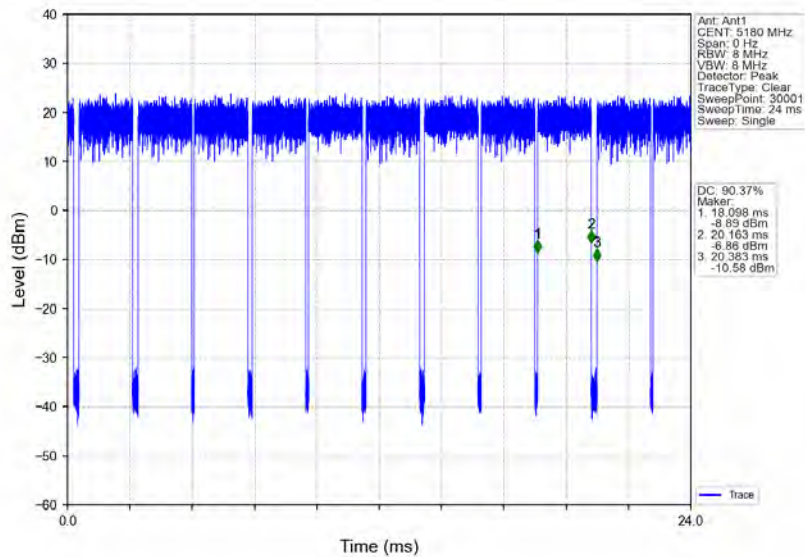
1.1 Ant1

1.1.1 Test Result

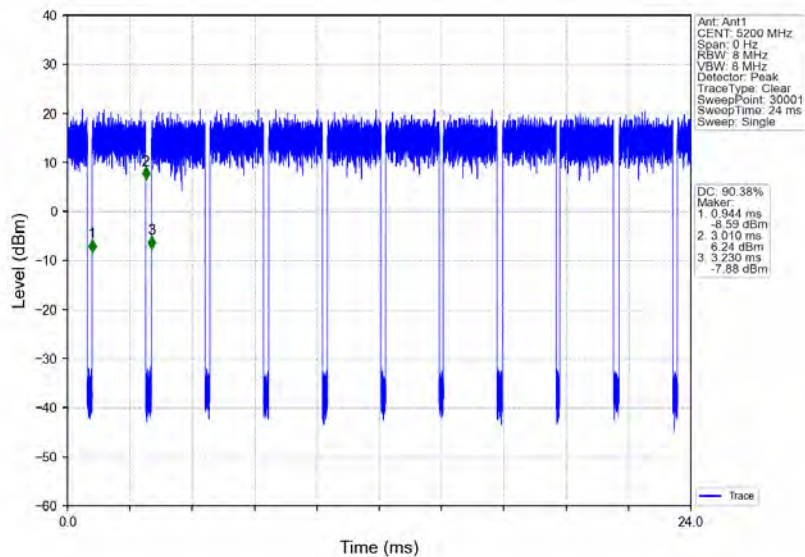
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.065	2.285	90.37	0.44	5.26
		5200	2.066	2.286	90.38	0.44	3.34
		5240	2.066	2.295	90.02	0.46	5.64
		5745	2.066	2.295	90.02	0.46	5.18
		5785	2.065	2.295	89.98	0.46	3.69
		5825	2.065	2.295	89.98	0.46	5.64
802.11n (HT20)	MIMO	5180	1.923	2.134	90.11	0.45	3.18
		5200	1.922	2.151	89.35	0.49	4.71
		5240	1.921	2.142	89.68	0.47	3.58
		5745	1.921	2.151	89.31	0.49	4.72
		5785	1.921	2.150	89.35	0.49	6.02
		5825	1.922	2.151	89.35	0.49	5.98
802.11n (HT40)	MIMO	5190	0.946	1.166	81.13	0.91	9.05
		5230	0.945	1.148	82.32	0.85	8.57
		5755	0.945	1.175	80.43	0.95	9.71
		5795	0.946	1.166	81.13	0.91	9.84
802.11ac (VHT80)	MIMO	5210	0.462	0.706	65.44	1.84	10.69
		5775	0.462	0.715	64.62	1.90	13.82

1.1.2 Test Graph

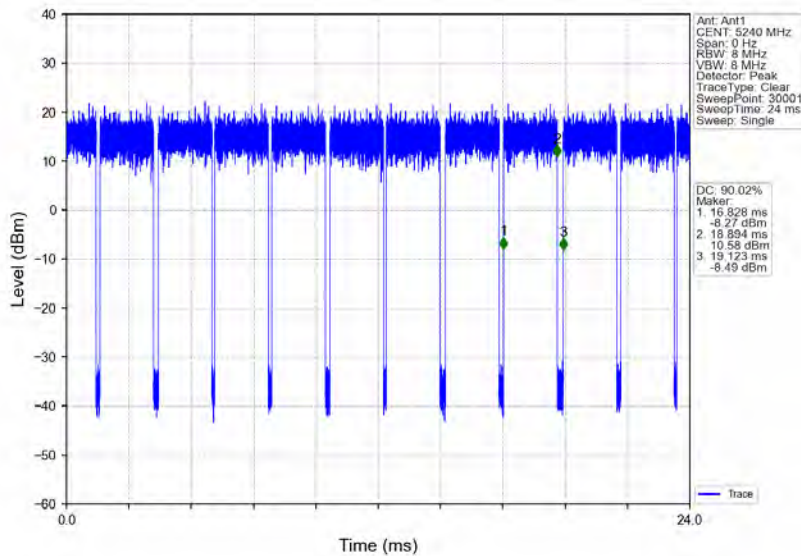
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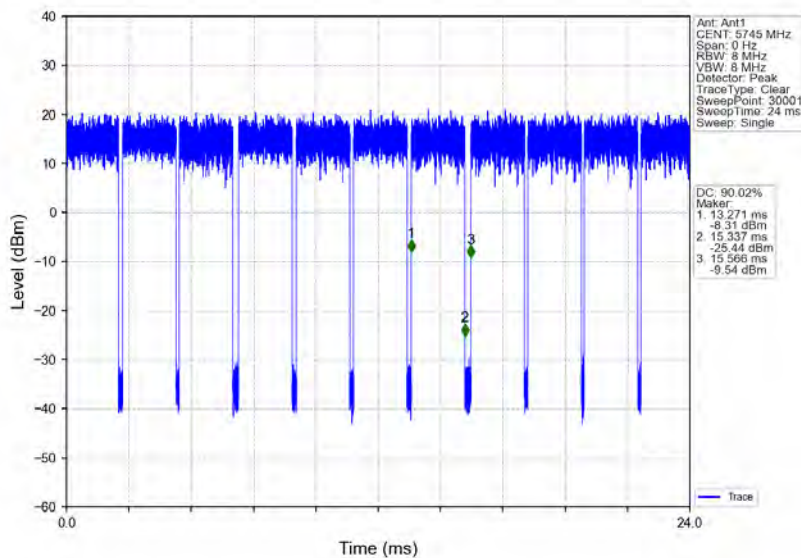
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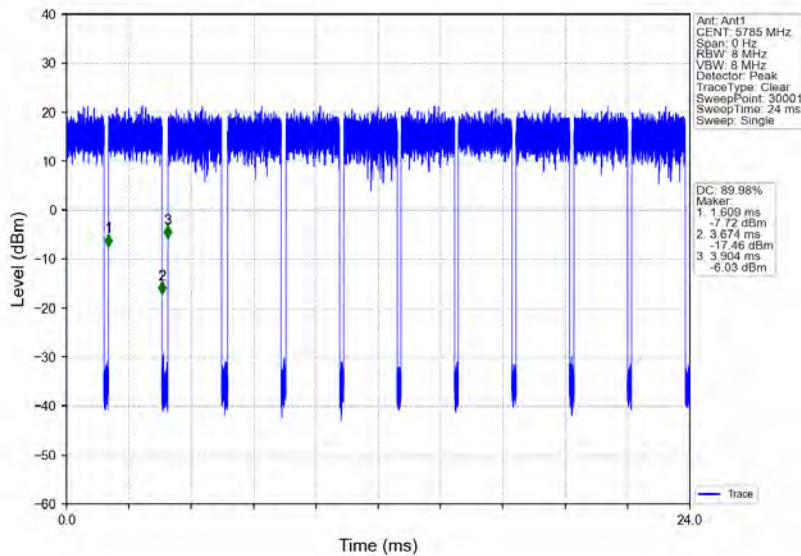
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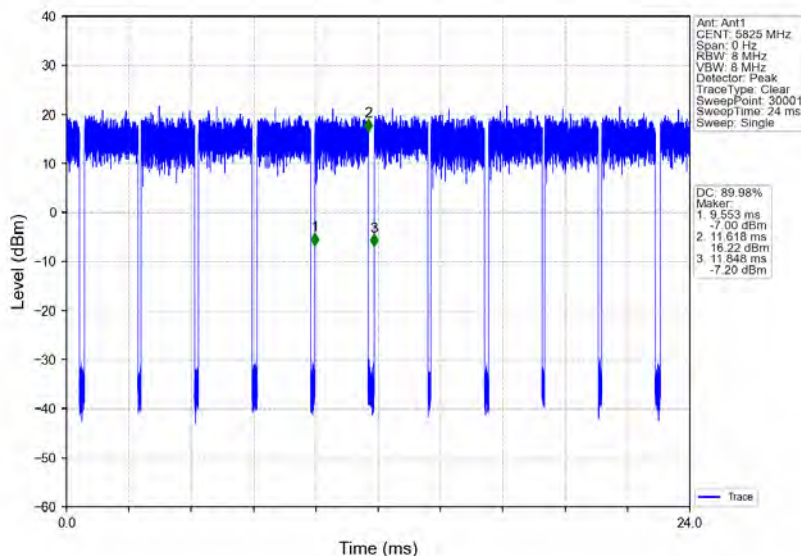
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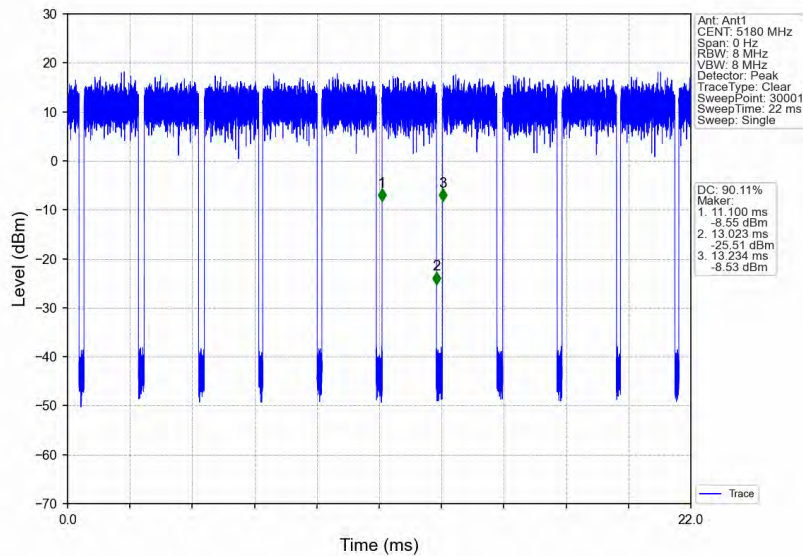
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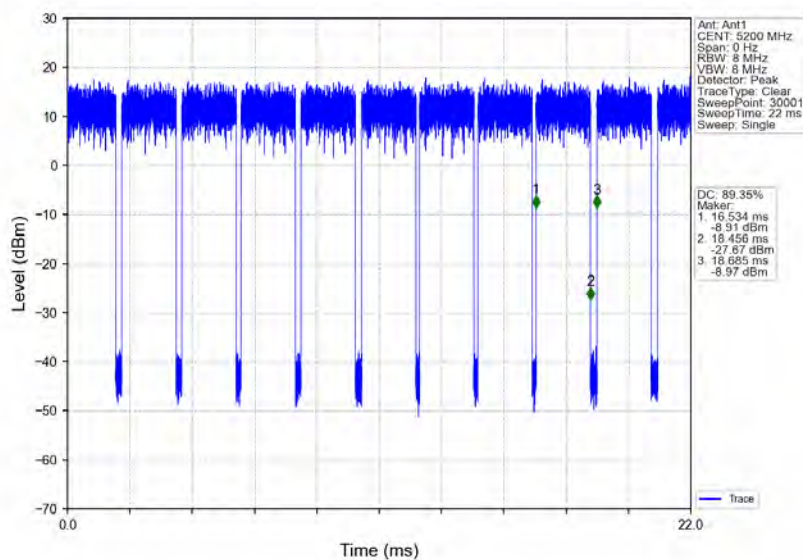
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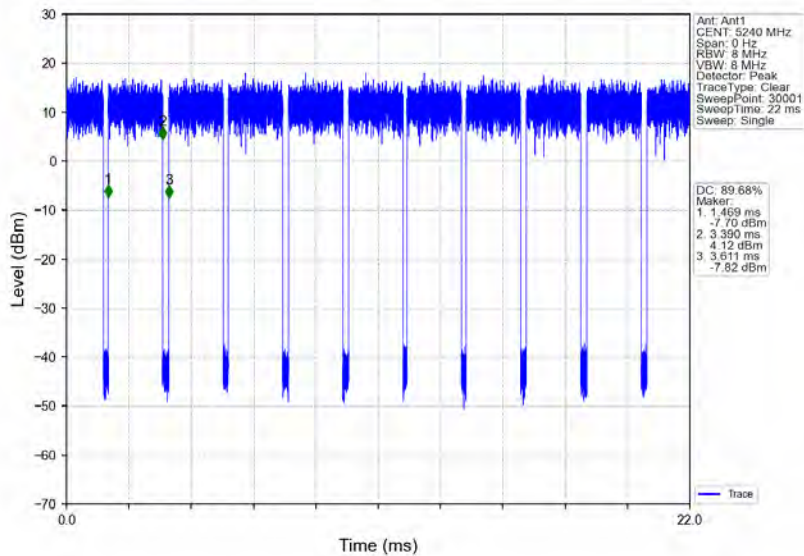
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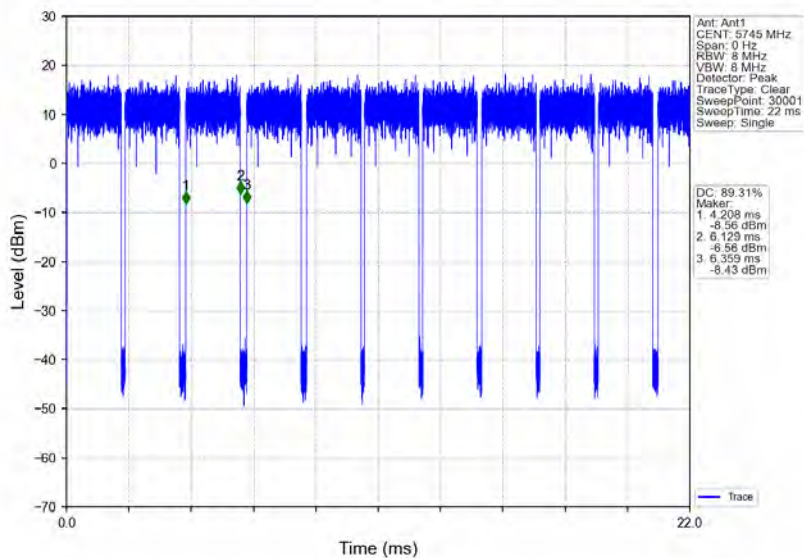
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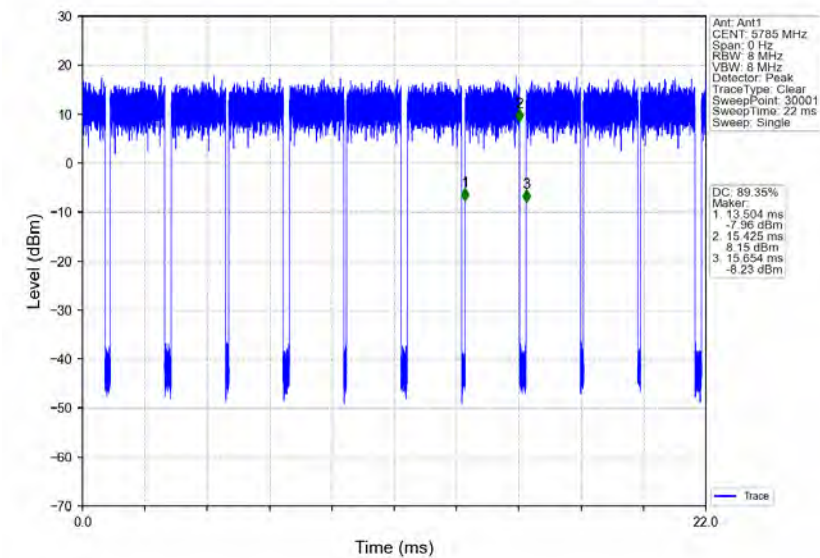
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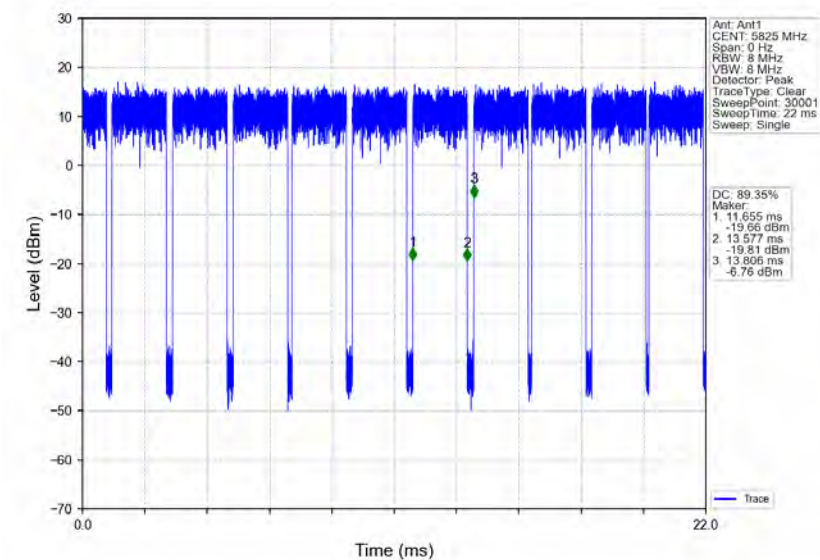
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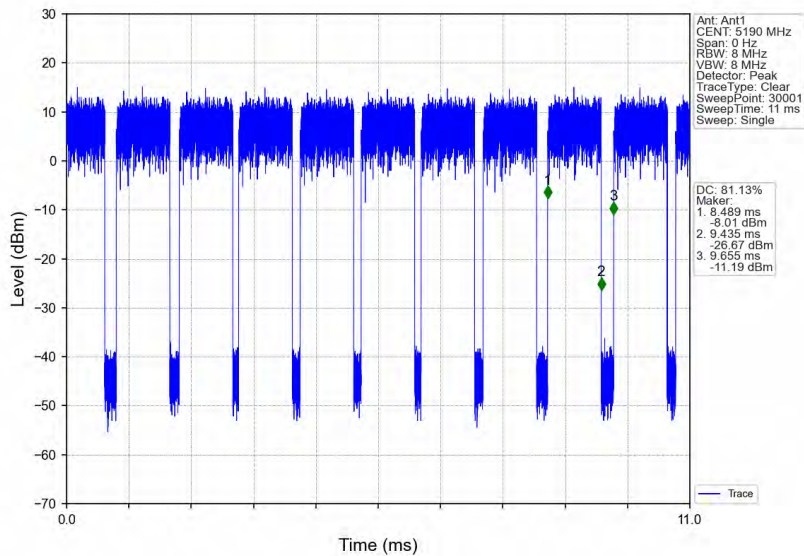
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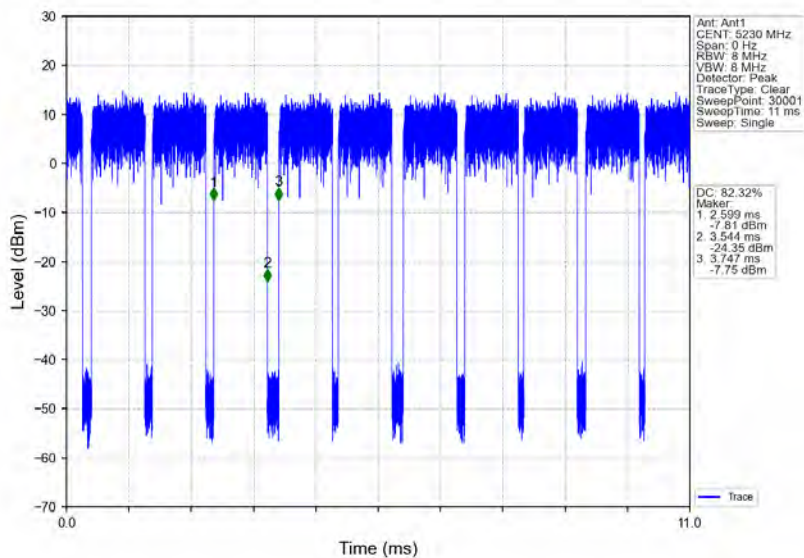
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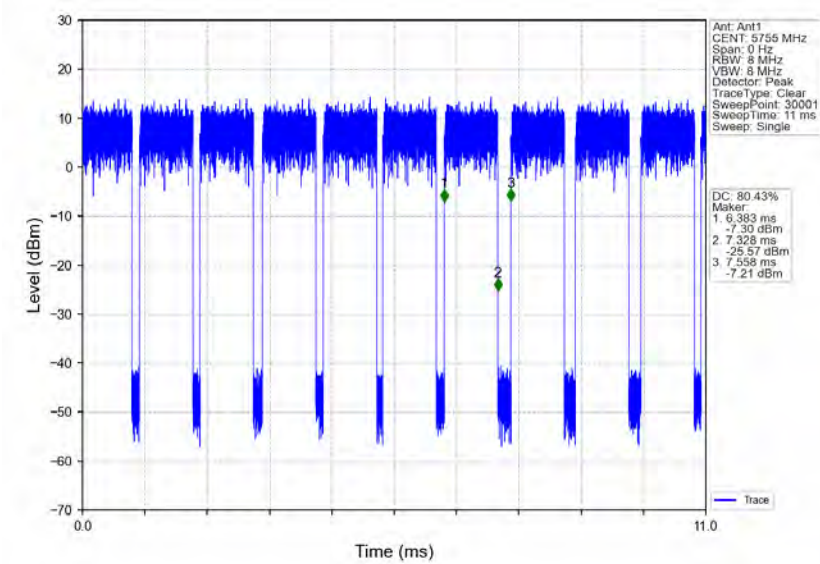
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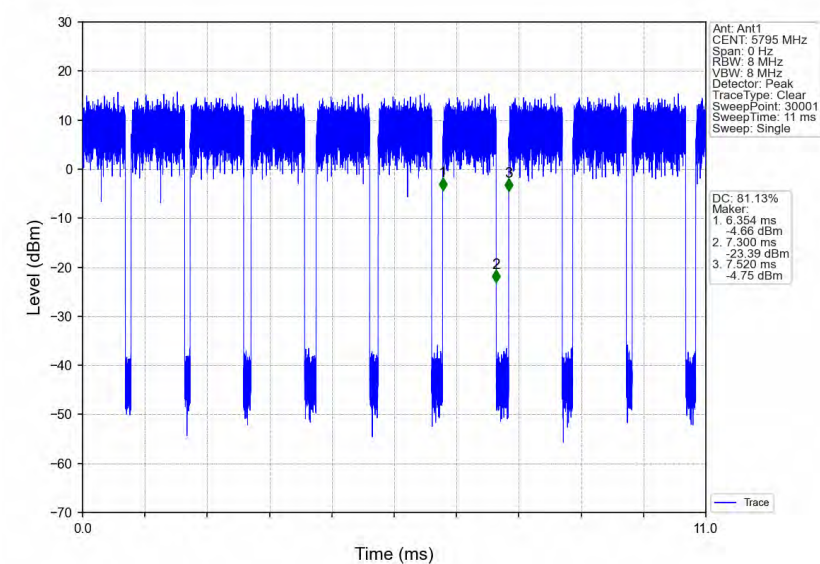
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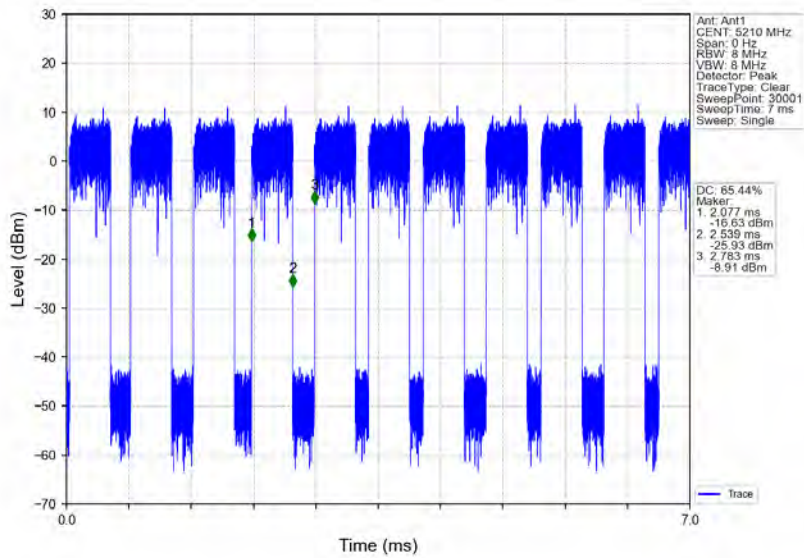
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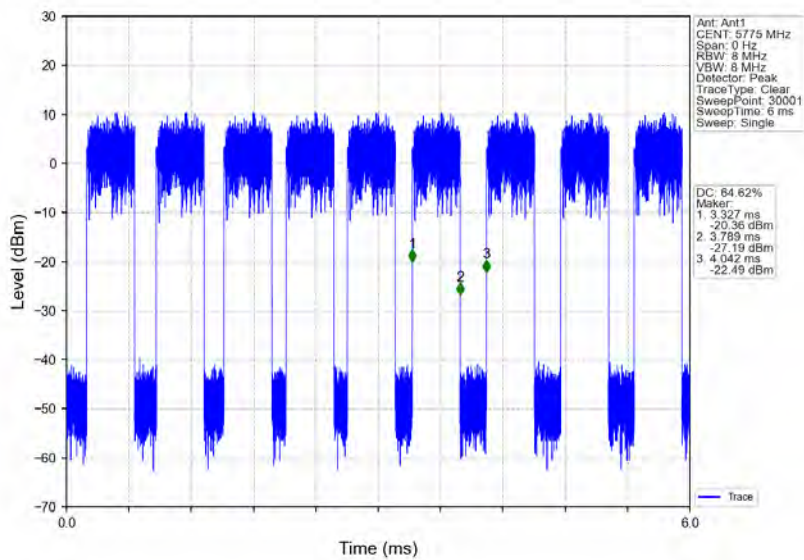
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



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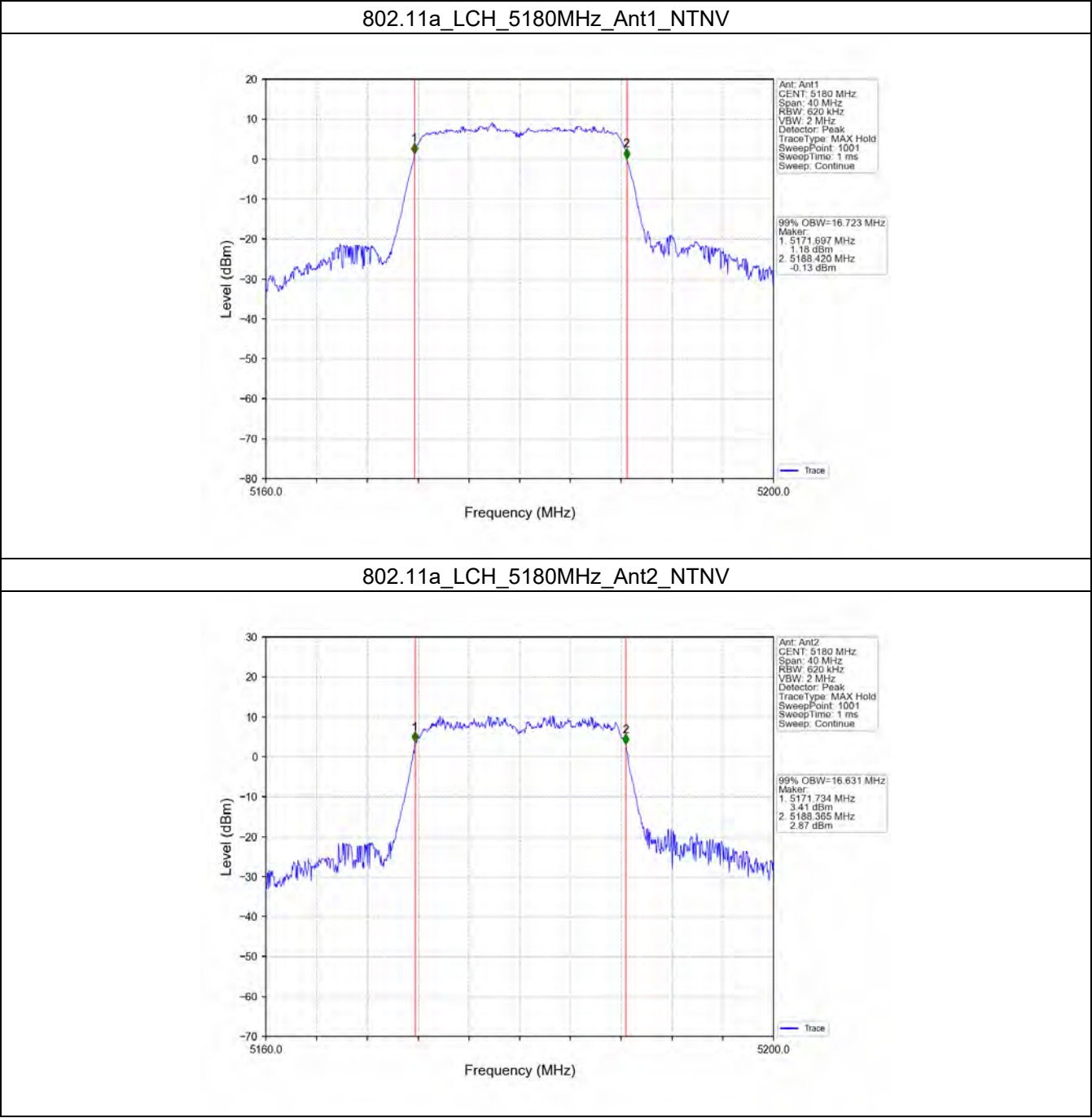
2. Bandwidth

2.1 OBW

2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	16.723	/	Pass
			2	16.631	/	Pass
		5200	1	16.684	/	Pass
			2	16.622	/	Pass
		5240	1	16.698	/	Pass
			2	16.621	/	Pass
		5745	1	16.689	/	Pass
			2	16.603	/	Pass
		5785	1	16.669	/	Pass
			2	16.659	/	Pass
		5825	1	16.751	/	Pass
			2	16.668	/	Pass
802.11n (HT20)	MIMO	5180	1	17.806	/	Pass
			2	17.772	/	Pass
		5200	1	17.771	/	Pass
			2	17.753	/	Pass
		5240	1	17.764	/	Pass
			2	17.759	/	Pass
		5745	1	17.782	/	Pass
			2	17.750	/	Pass
		5785	1	17.813	/	Pass
			2	17.806	/	Pass
		5825	1	17.760	/	Pass
			2	17.731	/	Pass
802.11n (HT40)	MIMO	5190	1	36.454	/	Pass
			2	36.514	/	Pass
		5230	1	36.550	/	Pass
			2	36.696	/	Pass
		5755	1	36.550	/	Pass
			2	36.630	/	Pass
		5795	1	36.489	/	Pass
			2	36.612	/	Pass
802.11ac (VHT80)	MIMO	5210	1	74.922	/	Pass
			2	74.705	/	Pass
		5775	1	74.882	/	Pass
			2	74.678	/	Pass

2.1.2 Test Graph



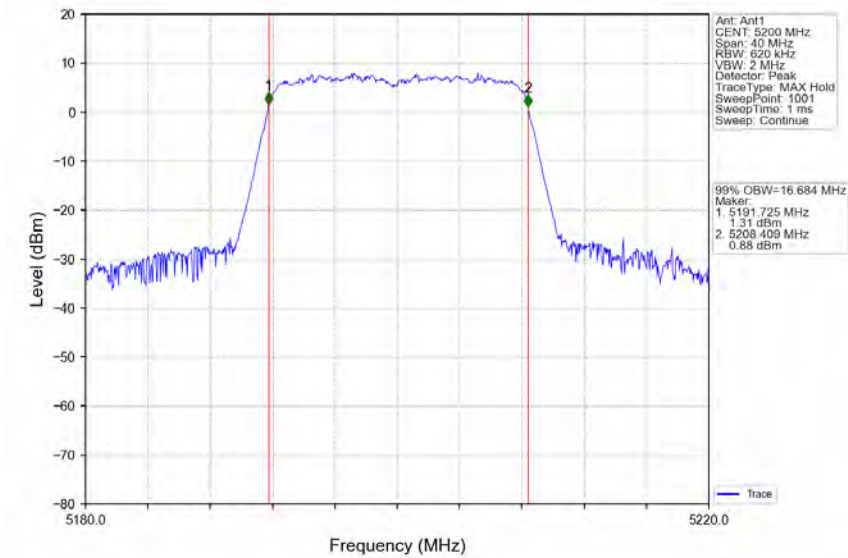
Compliance Certification Services (Kunshan) Inc.

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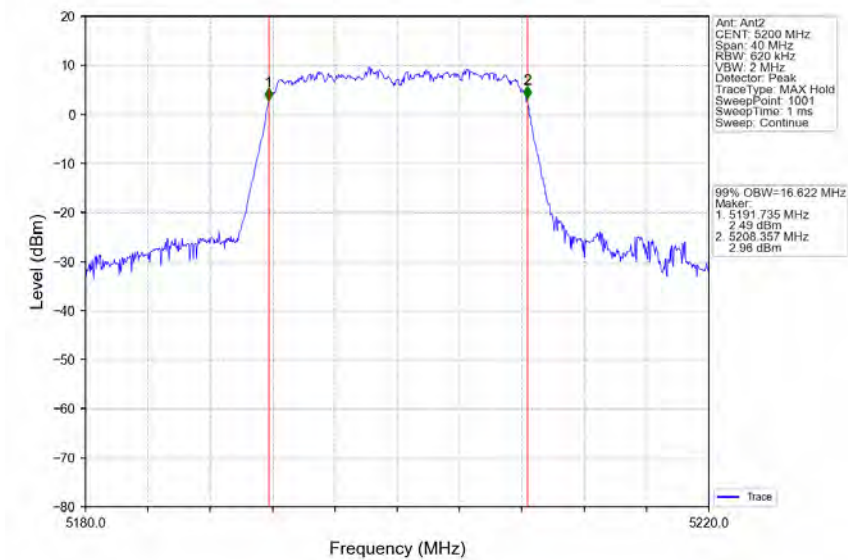
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802.11a_MCH_5200MHz_Ant1_NTNV



802.11a_MCH_5200MHz_Ant2_NTNV



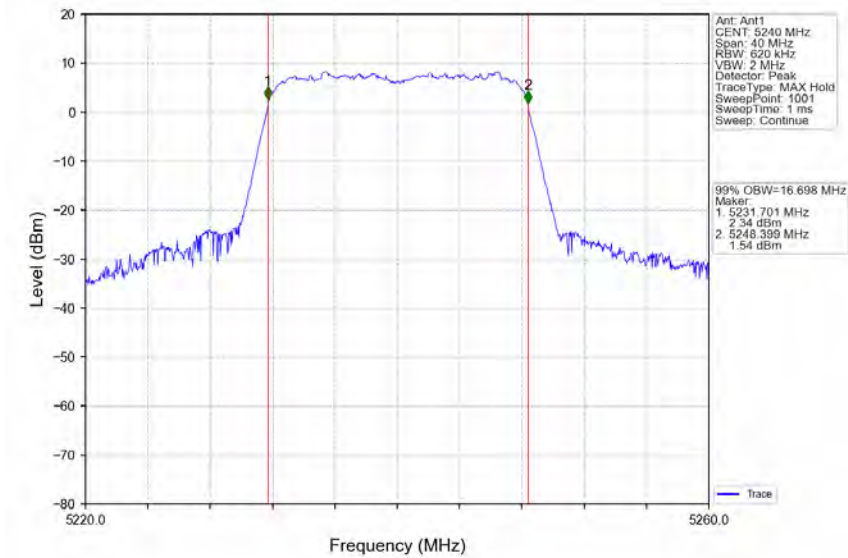
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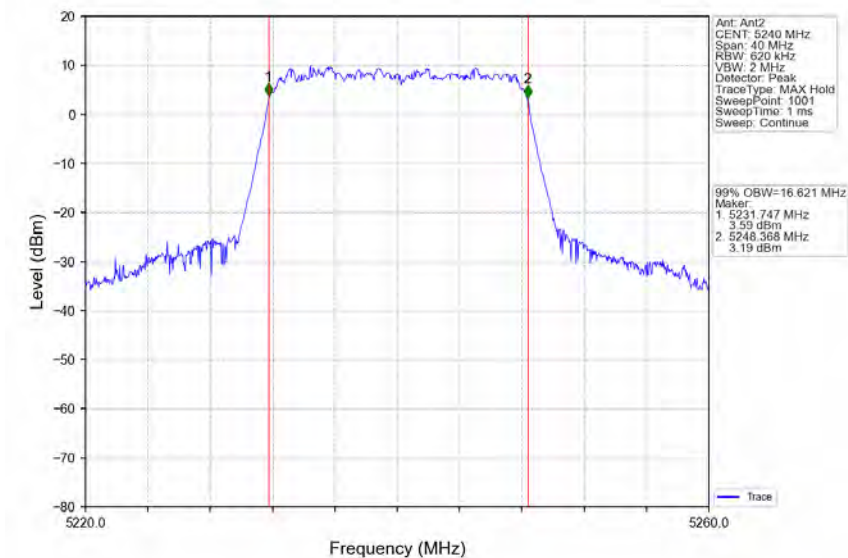
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802.11a_HCH_5240MHz_Ant1_NTNV



802.11a_HCH_5240MHz_Ant2_NTNV



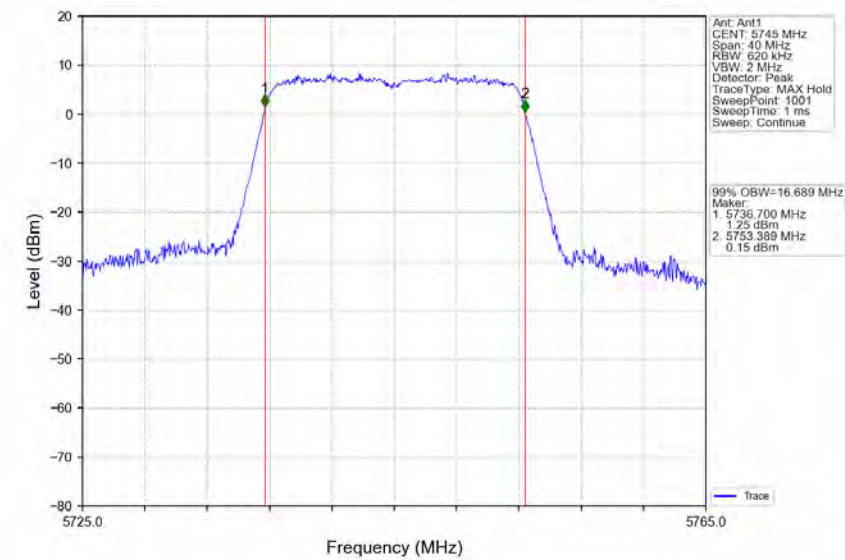
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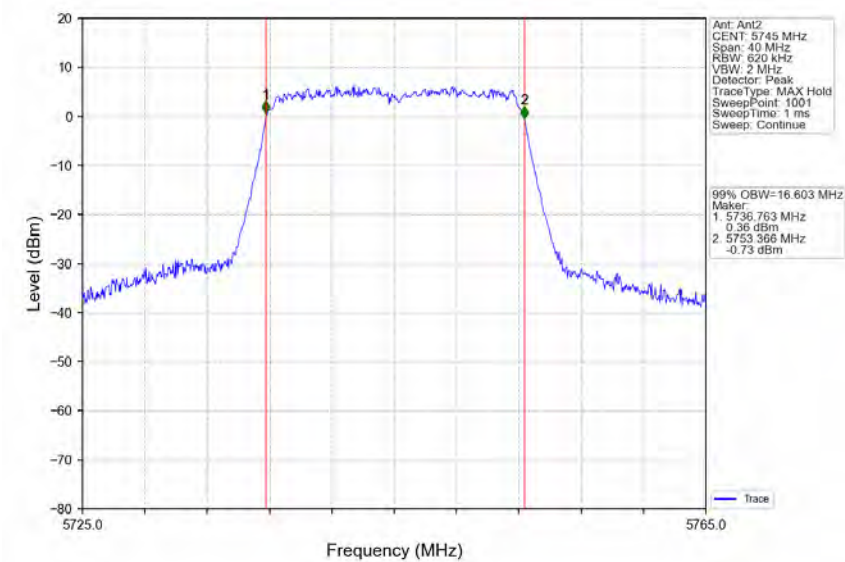
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802.11a_LCH_5745MHz_Ant1_NTNV



802.11a_LCH_5745MHz_Ant2_NTNV



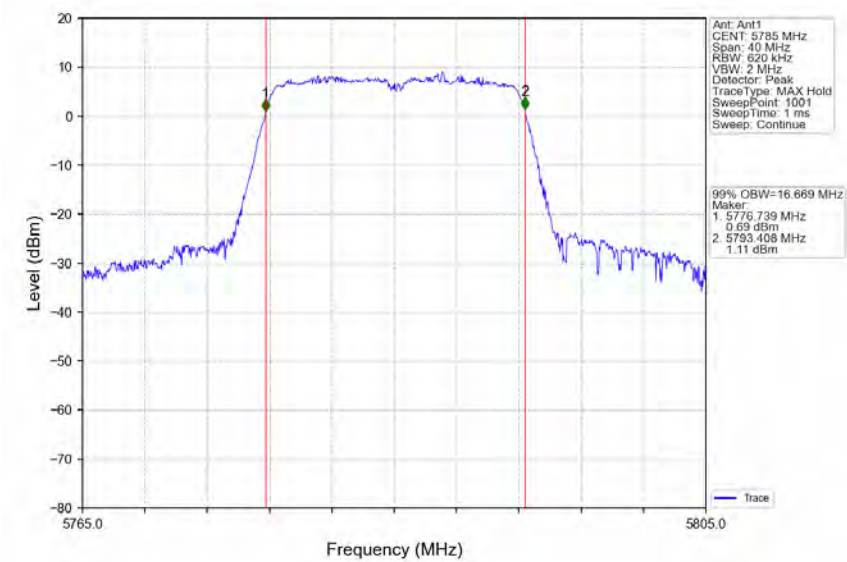
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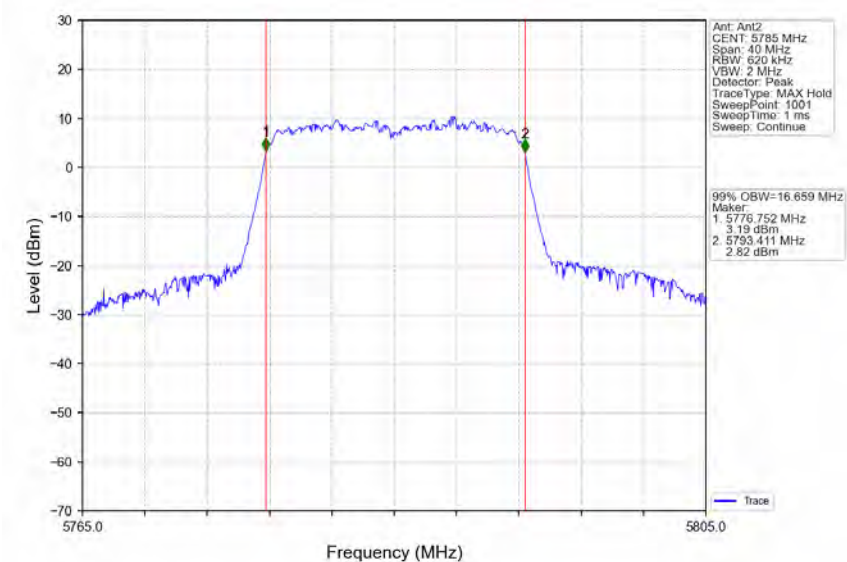
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802.11a_MCH_5785MHz_Ant1_NTNV



802.11a_MCH_5785MHz_Ant2_NTNV



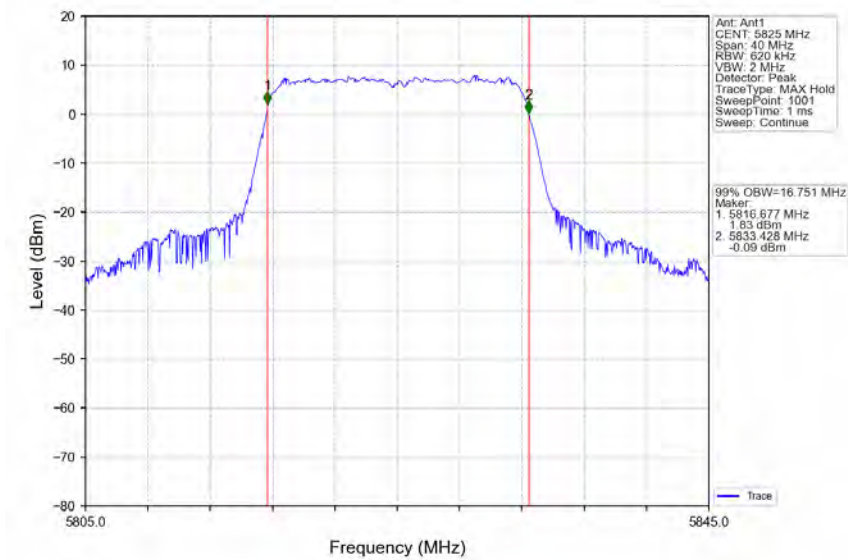
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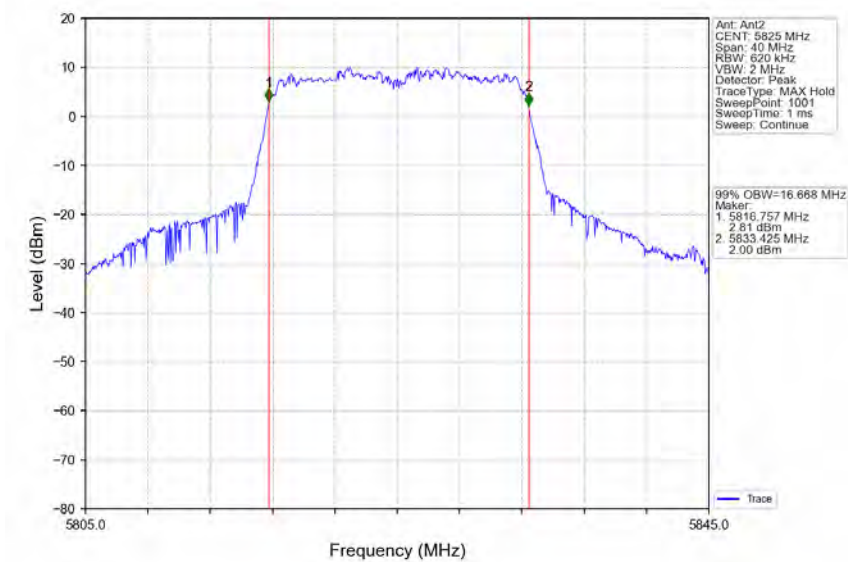
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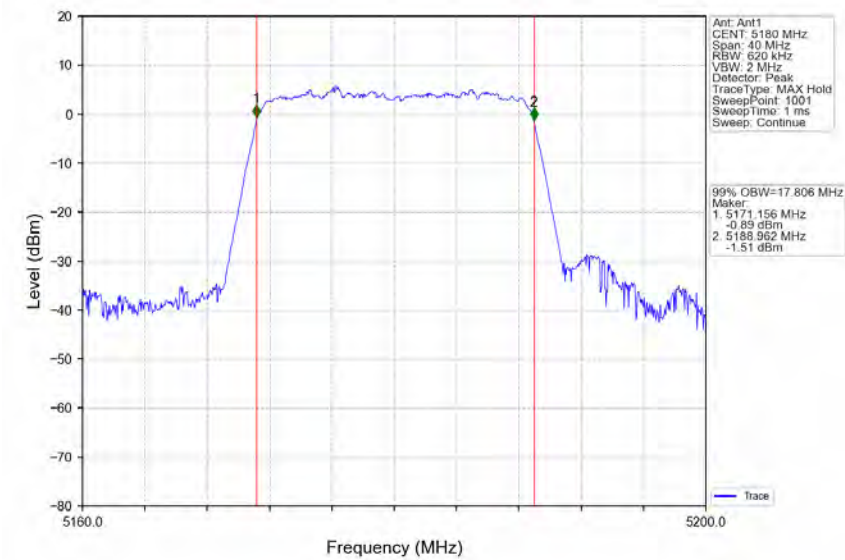
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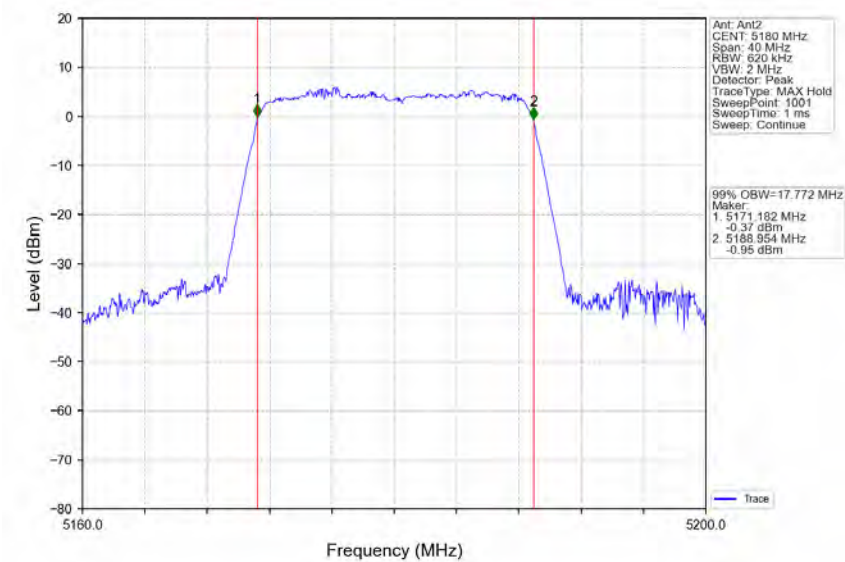
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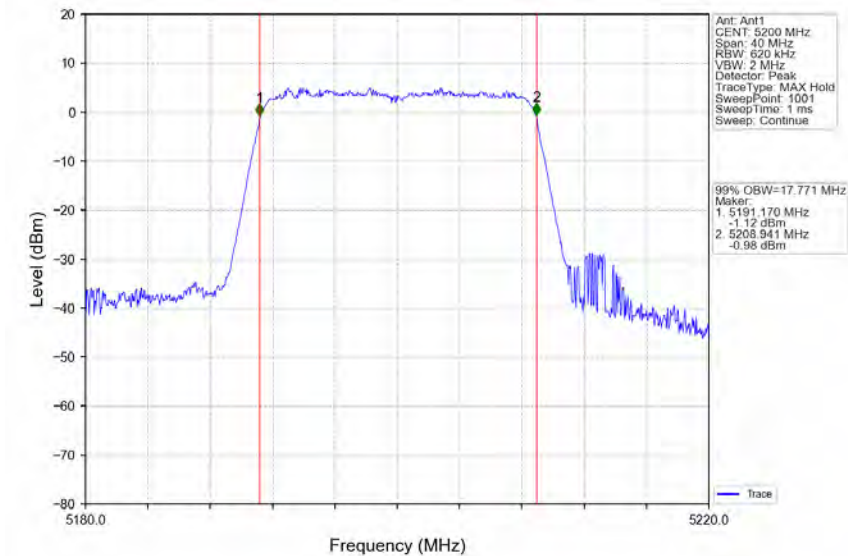
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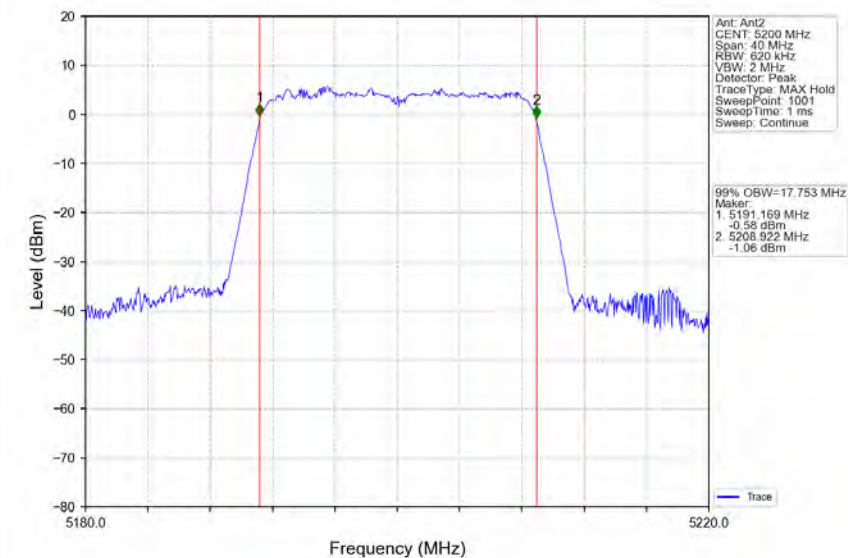
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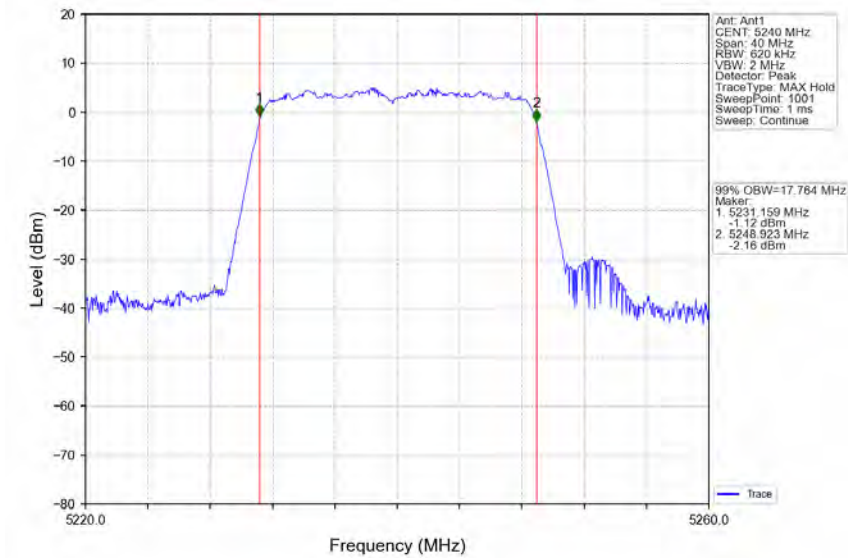
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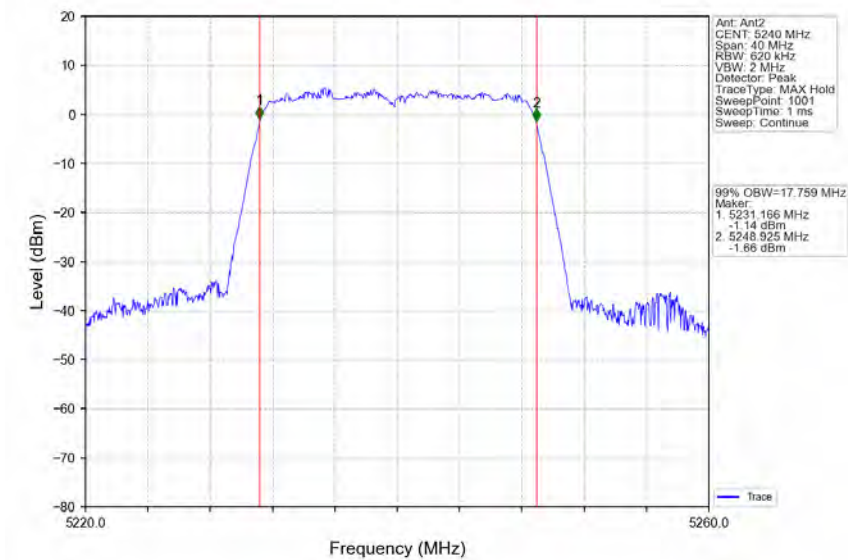
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802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT20)_HCH_5240MHz_Ant2_NTNV



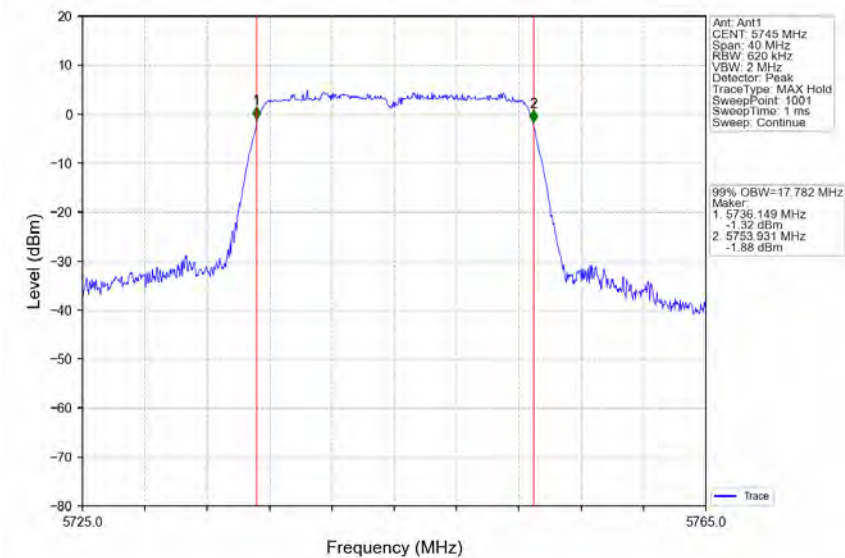
Compliance Certification Services (Kunshan) Inc.

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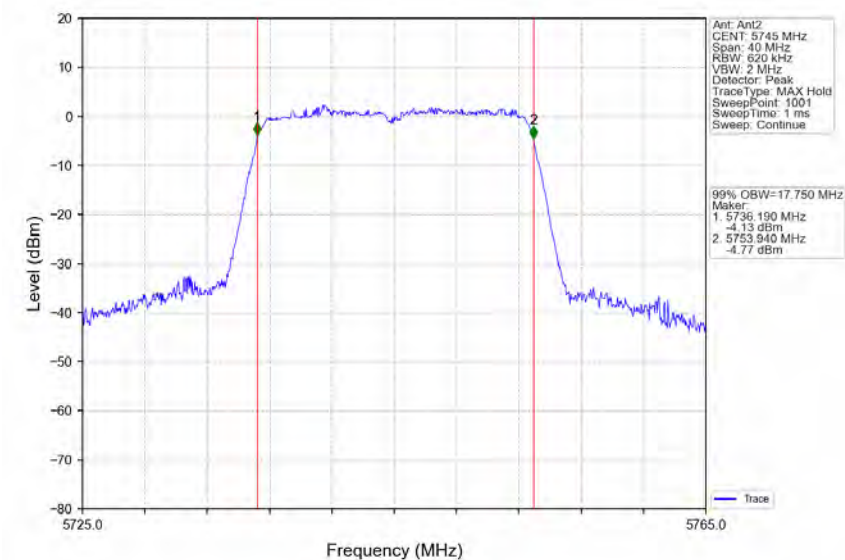
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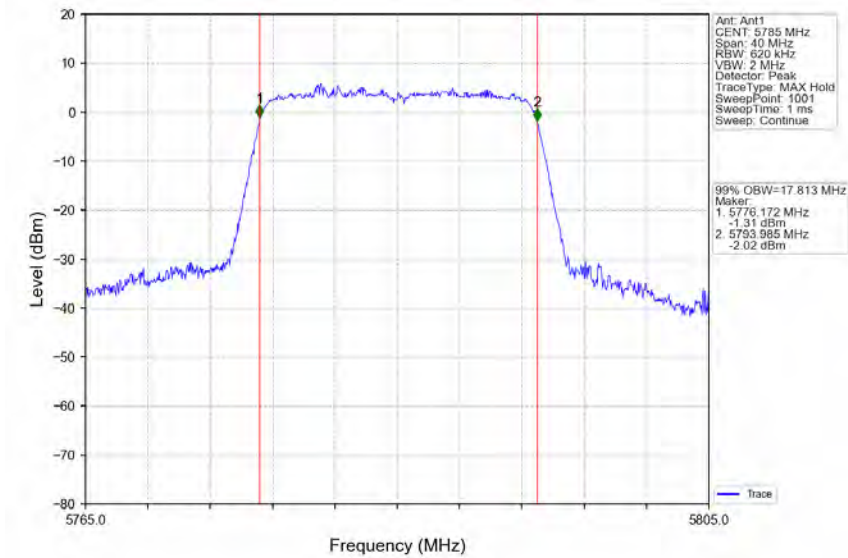
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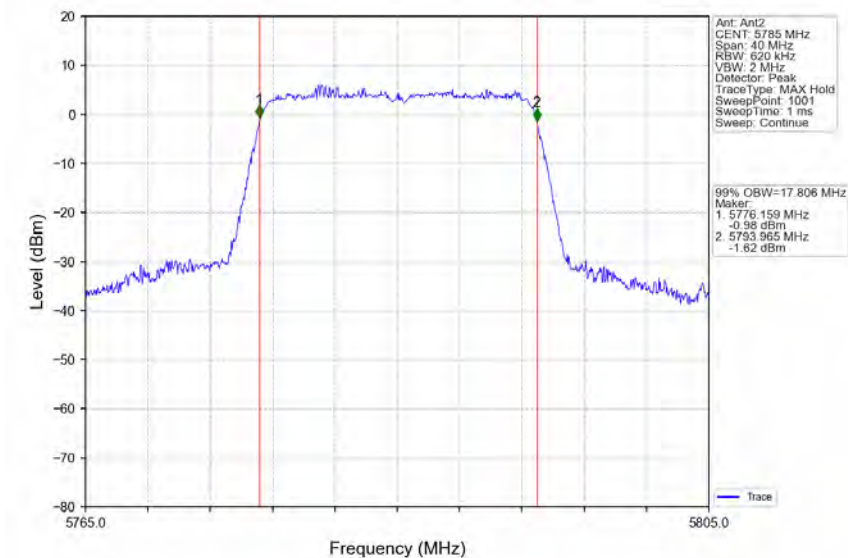
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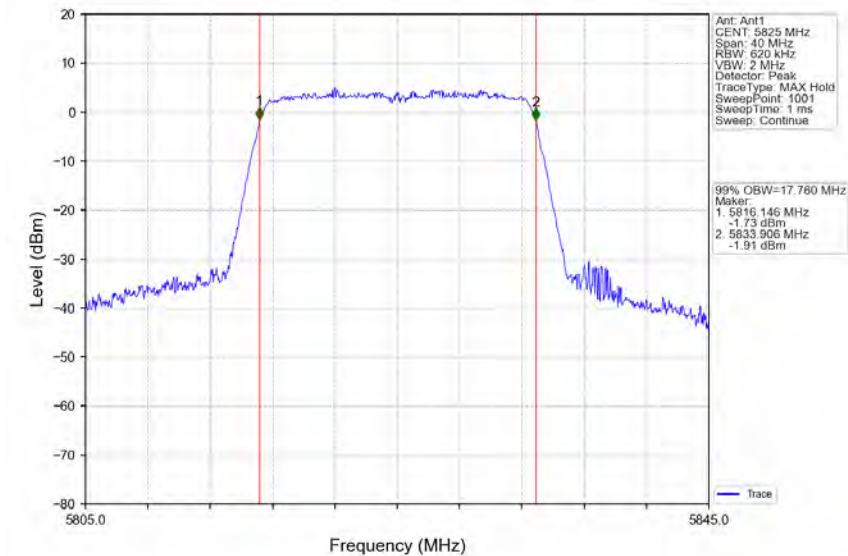
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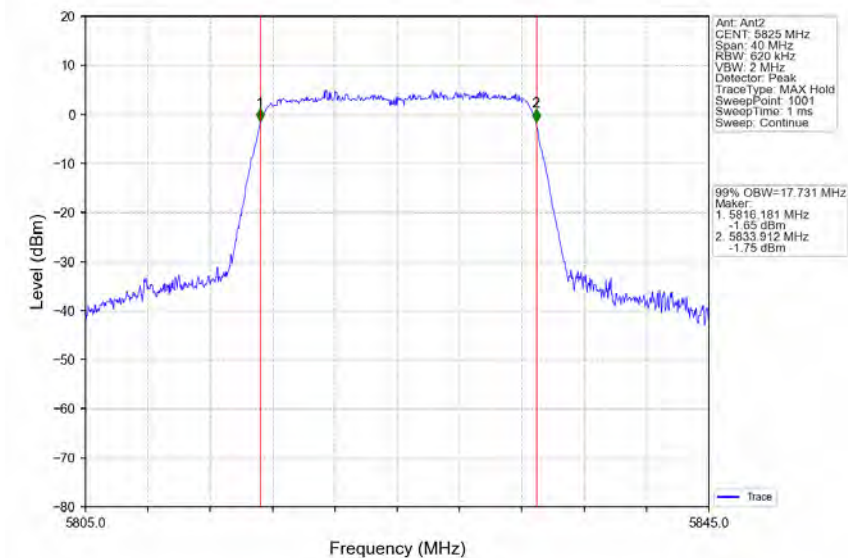
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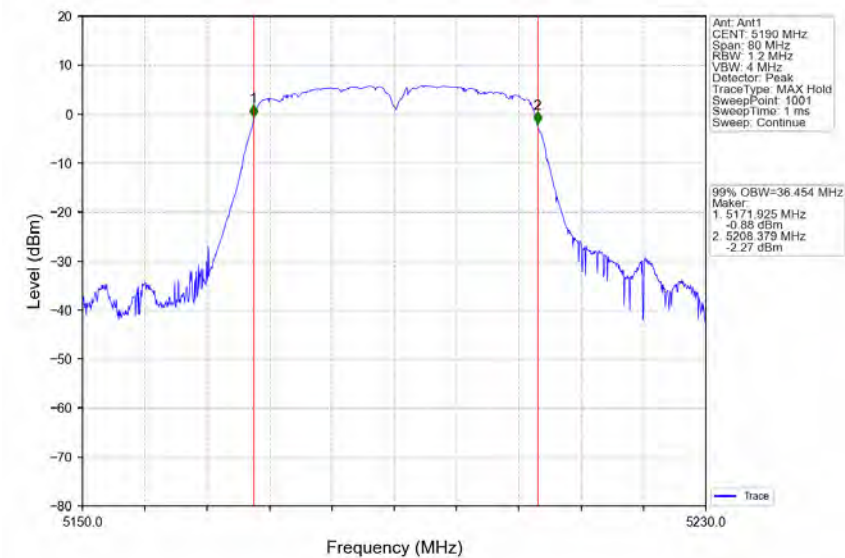
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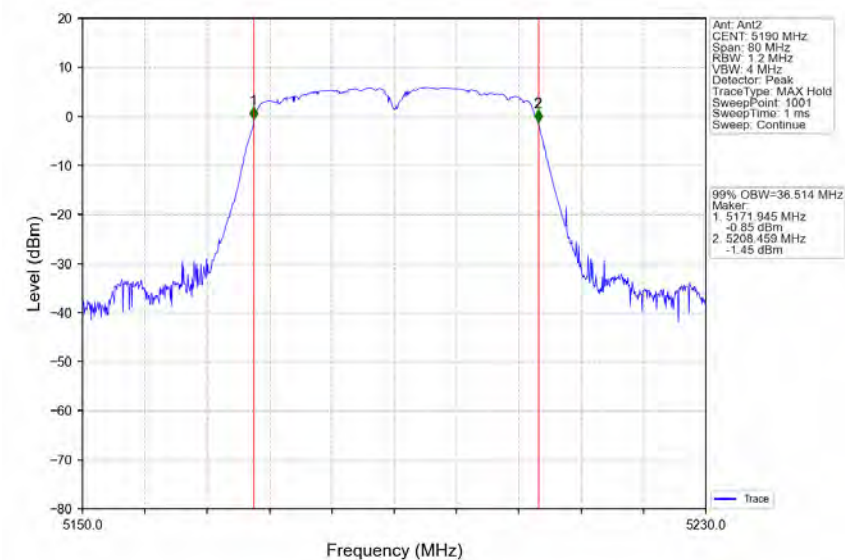
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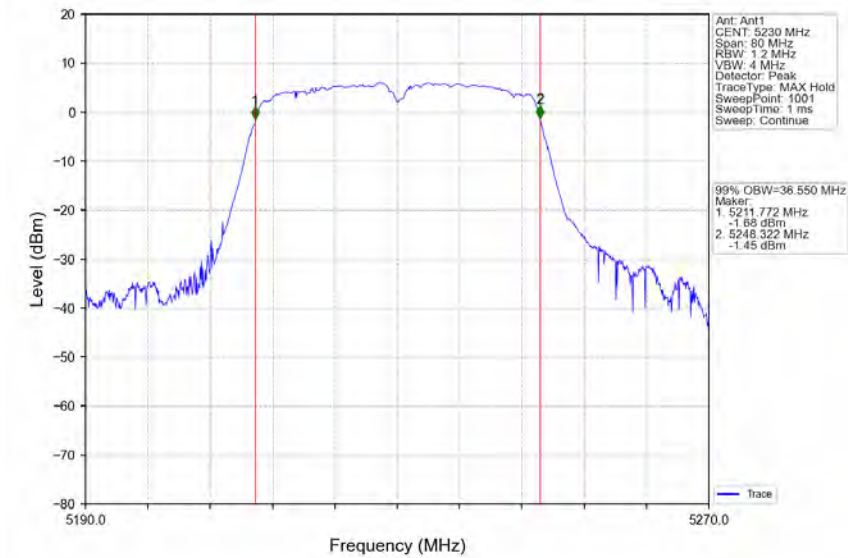
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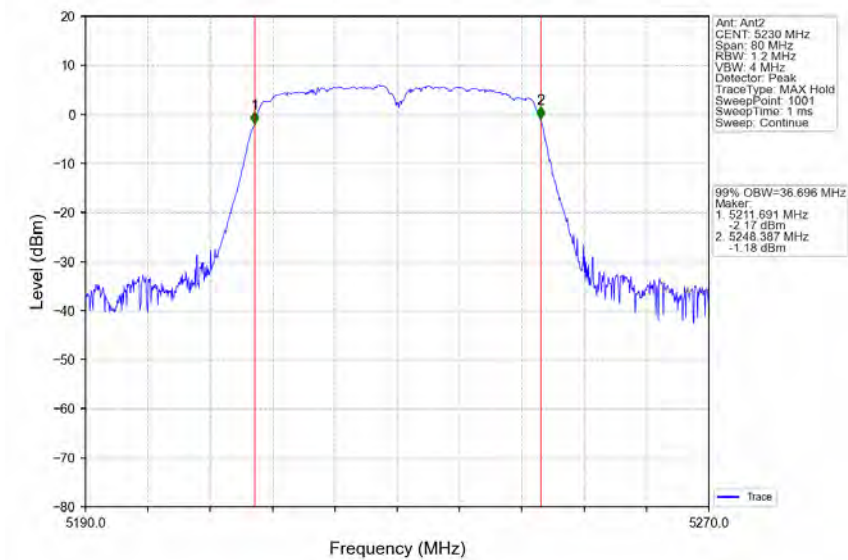
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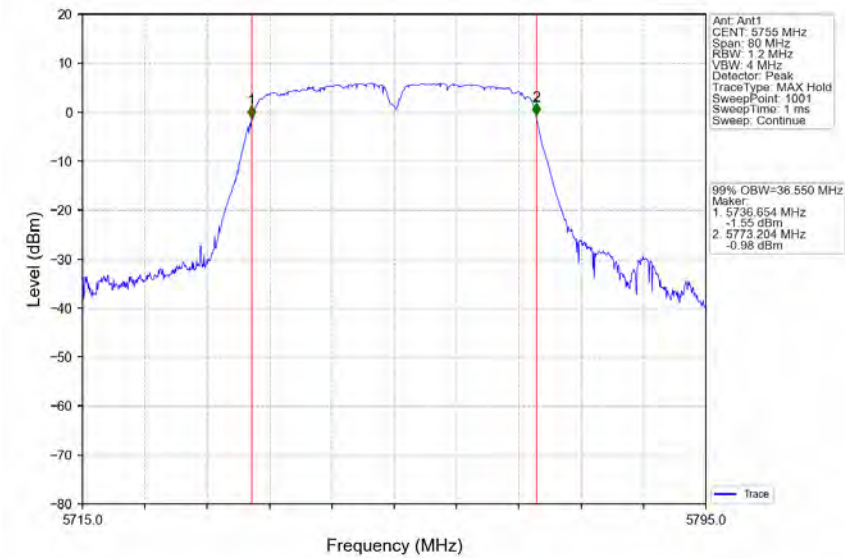
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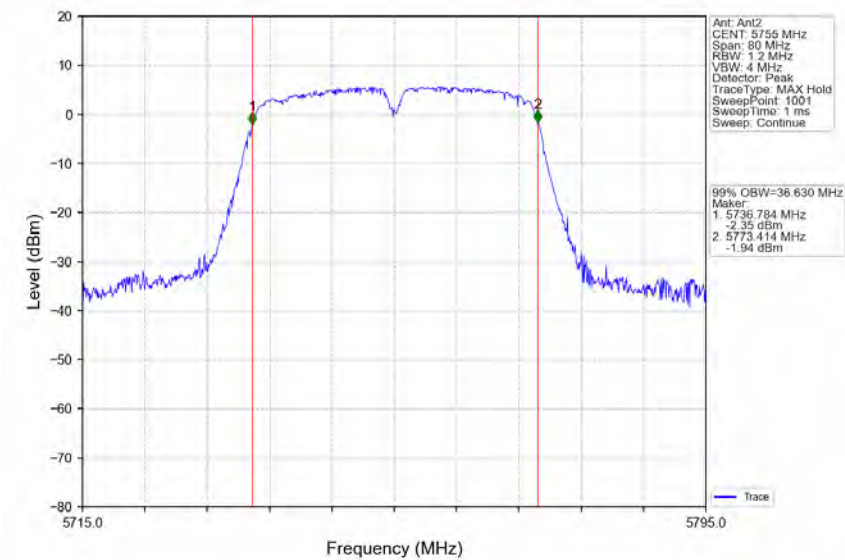
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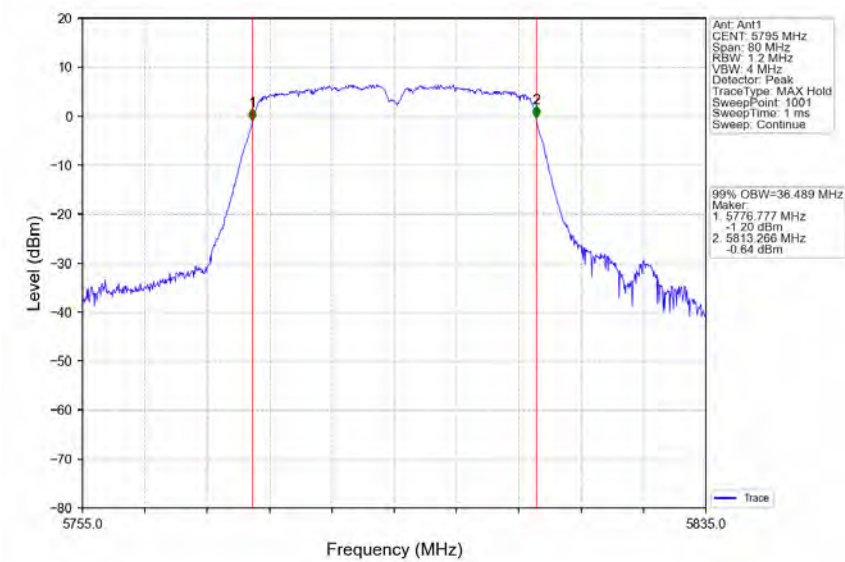
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



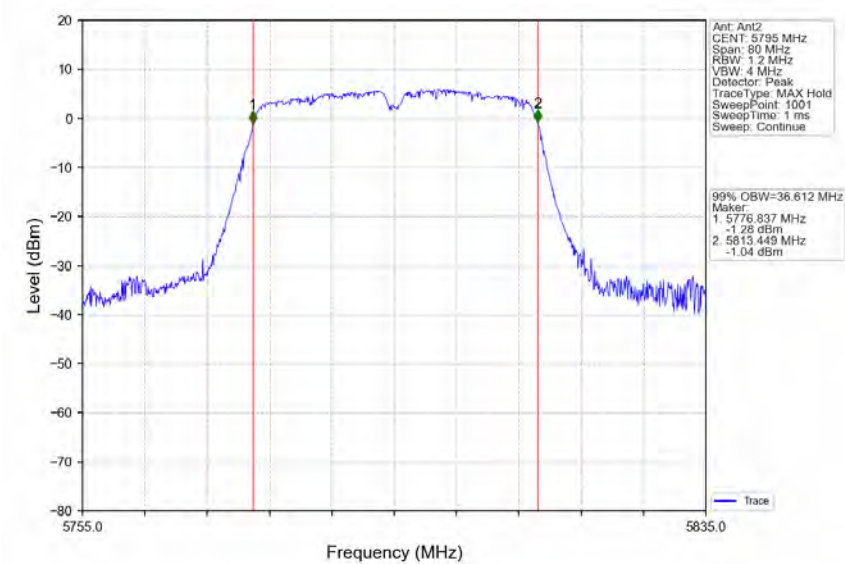
802.11n(HT40)_LCH_5755MHz_Ant2_NTNV



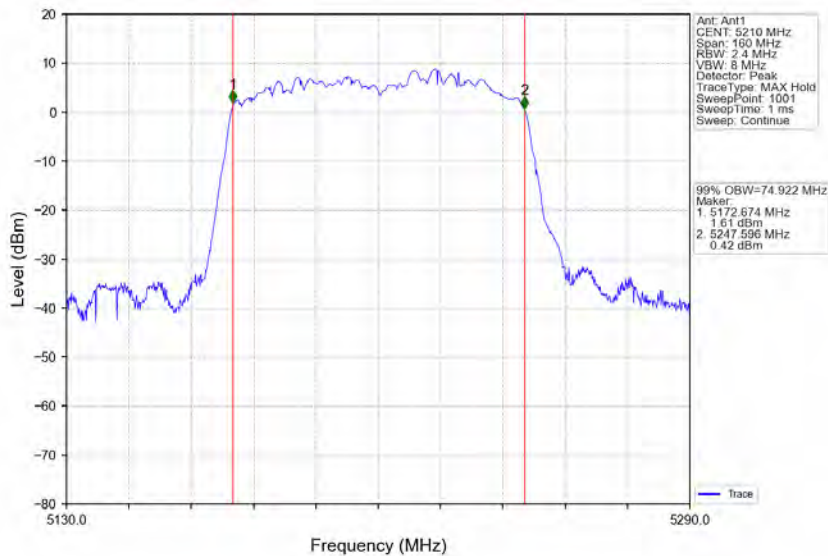
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



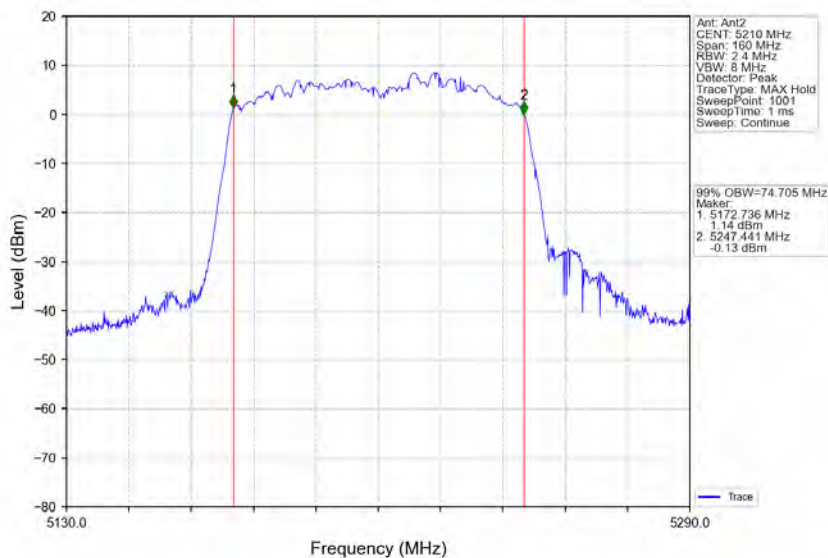
802.11n(HT40)_HCH_5795MHz_Ant2_NTNV



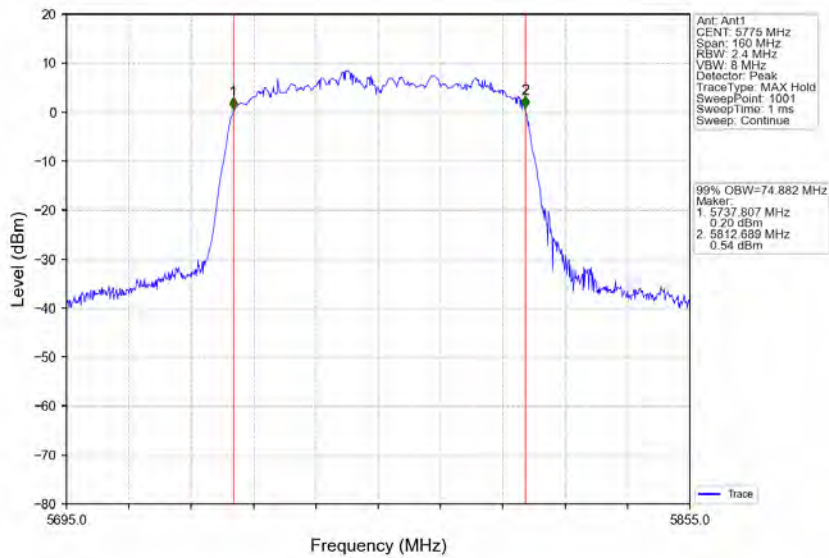
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



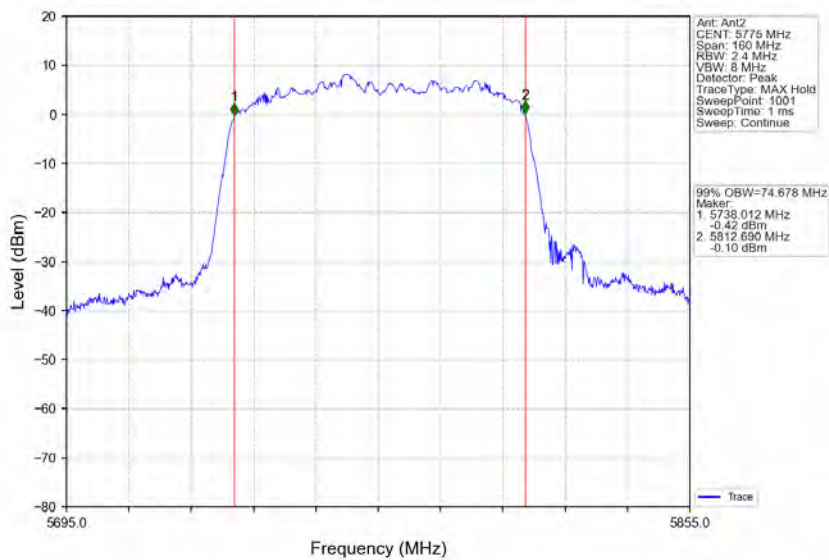
802.11ac(VHT80)_MCH_5210MHz_Ant2_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant2_NTNV



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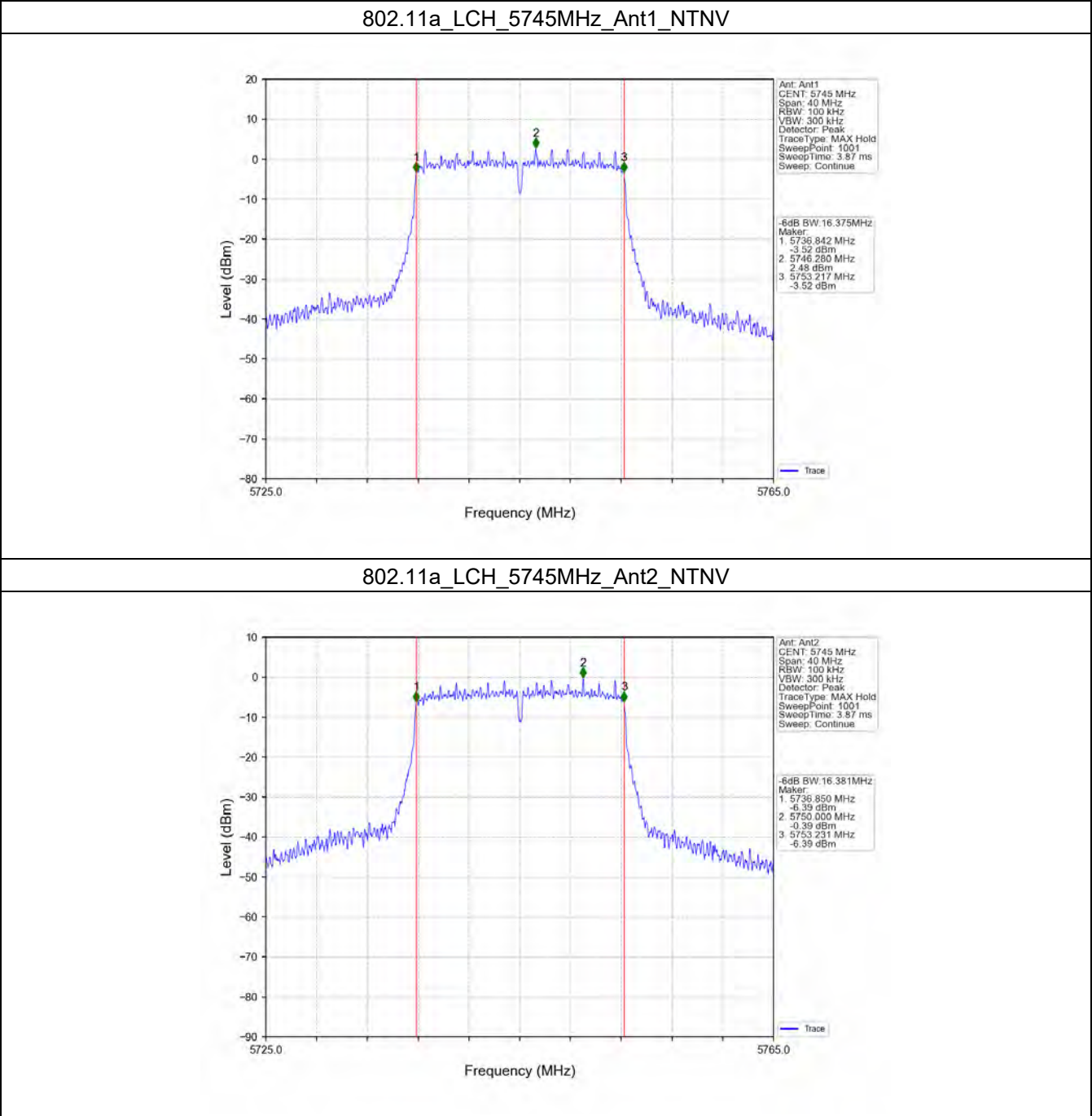
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2.2 6dB BW

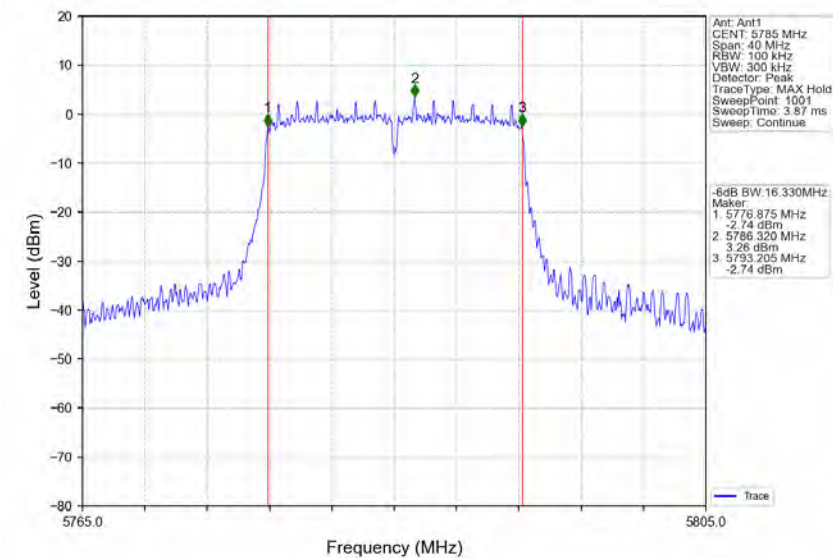
2.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.375	≥ 0.5	Pass
			2	16.381	≥ 0.5	Pass
		5785	1	16.330	≥ 0.5	Pass
			2	16.361	≥ 0.5	Pass
		5825	1	16.352	≥ 0.5	Pass
			2	16.356	≥ 0.5	Pass
802.11n (HT20)	MIMO	5745	1	17.587	≥ 0.5	Pass
			2	17.297	≥ 0.5	Pass
		5785	1	17.002	≥ 0.5	Pass
			2	17.562	≥ 0.5	Pass
		5825	1	16.988	≥ 0.5	Pass
			2	17.345	≥ 0.5	Pass
802.11n (HT40)	MIMO	5755	1	35.337	≥ 0.5	Pass
			2	35.168	≥ 0.5	Pass
		5795	1	35.196	≥ 0.5	Pass
			2	35.169	≥ 0.5	Pass
802.11ac (VHT80)	MIMO	5775	1	75.100	≥ 0.5	Pass
			2	75.088	≥ 0.5	Pass

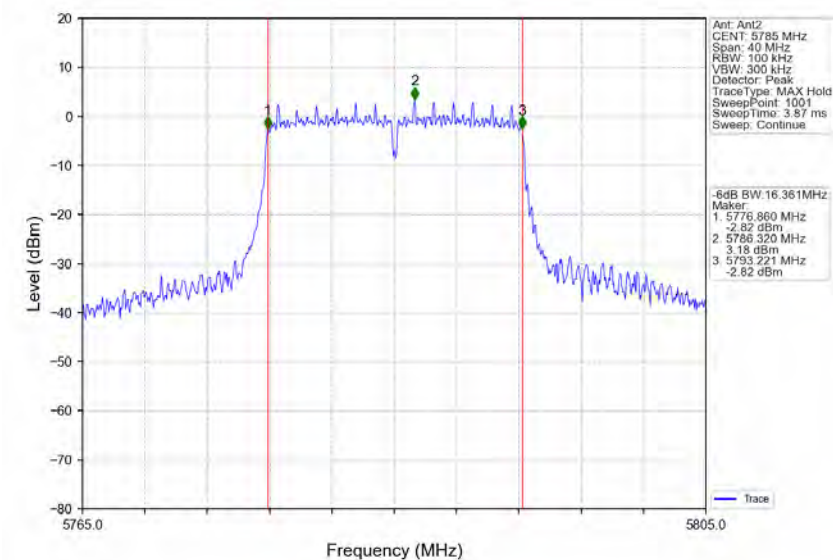
2.2.2 Test Graph



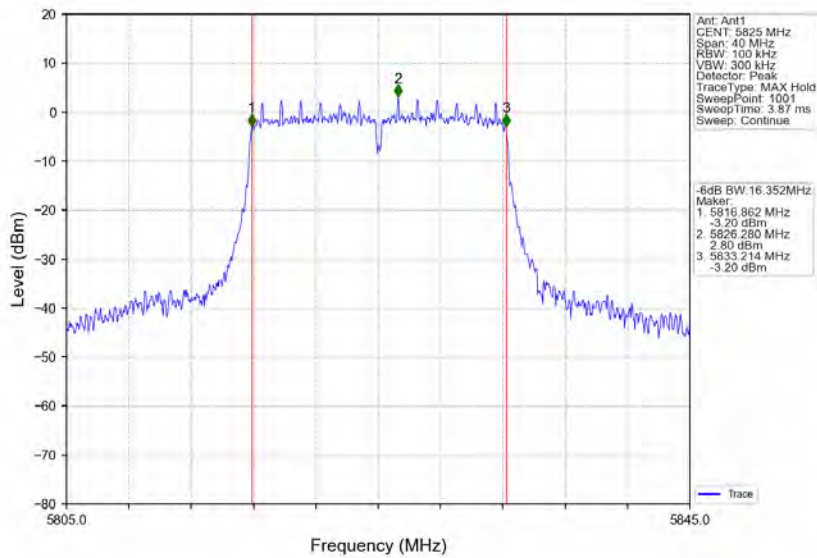
802.11a_MCH_5785MHz_Ant1_NTNV



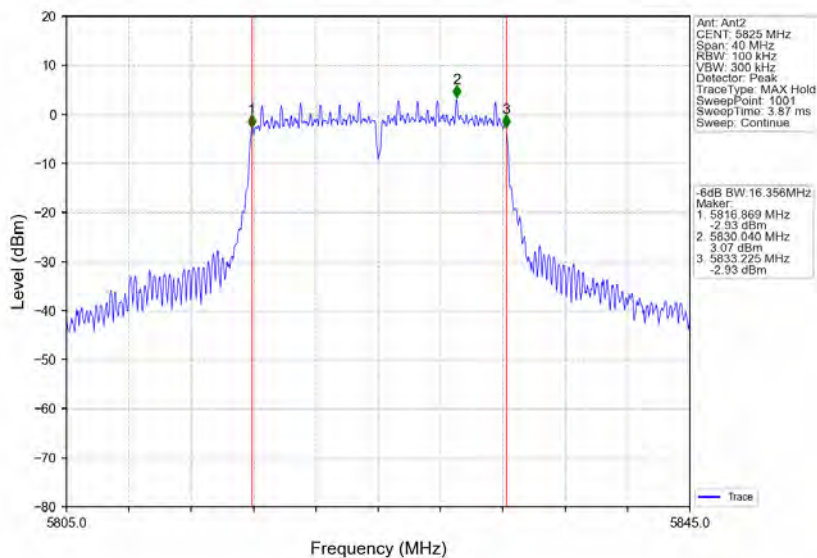
802.11a_MCH_5785MHz_Ant2_NTNV



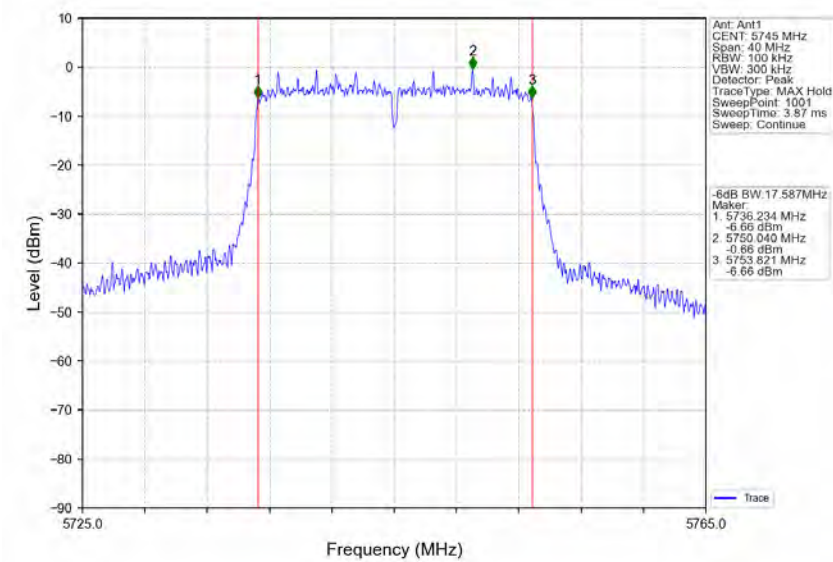
802.11a_HCH_5825MHz_Ant1_NTNV



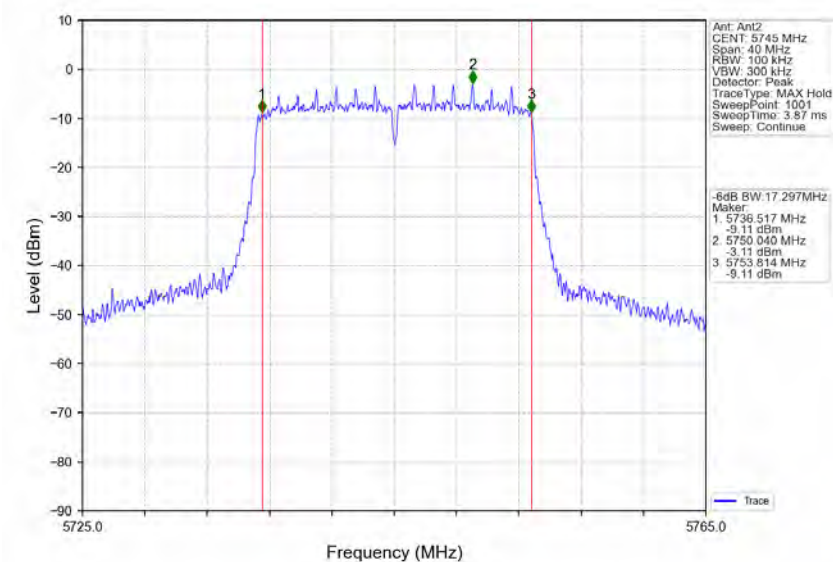
802.11a_HCH_5825MHz_Ant2_NTNV



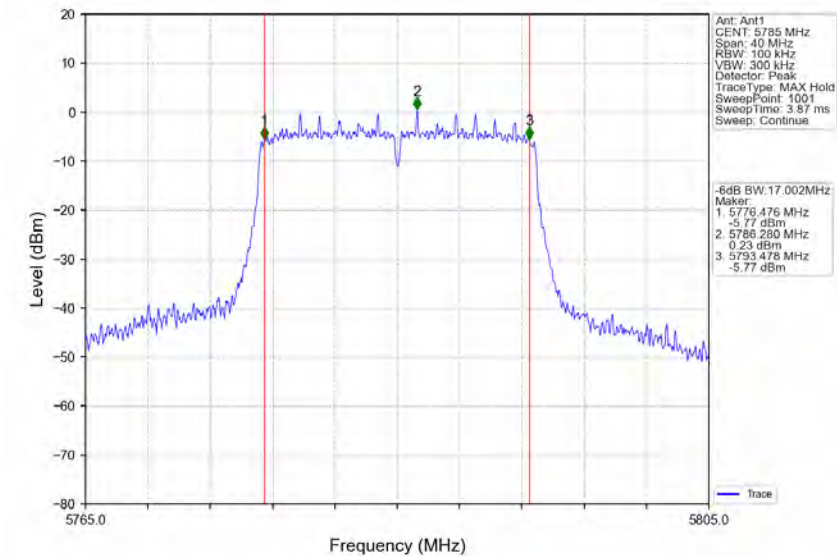
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



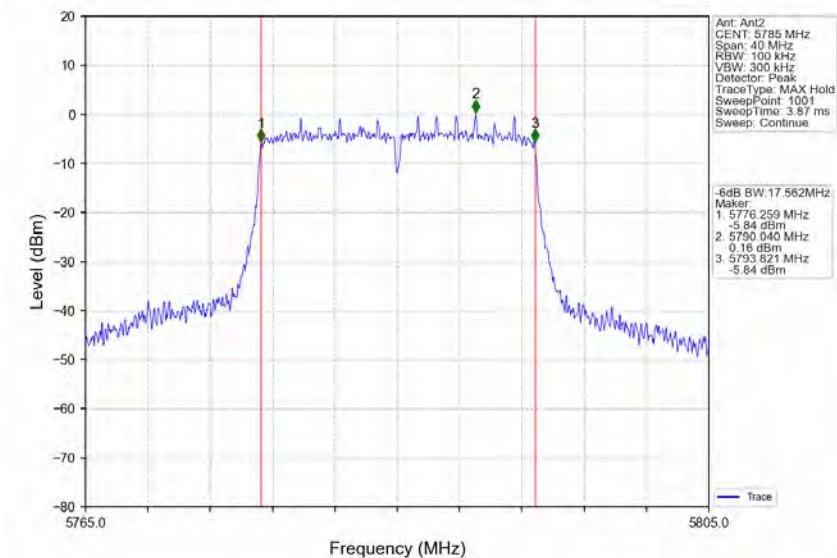
802.11n(HT20)_LCH_5745MHz_Ant2_NTNV



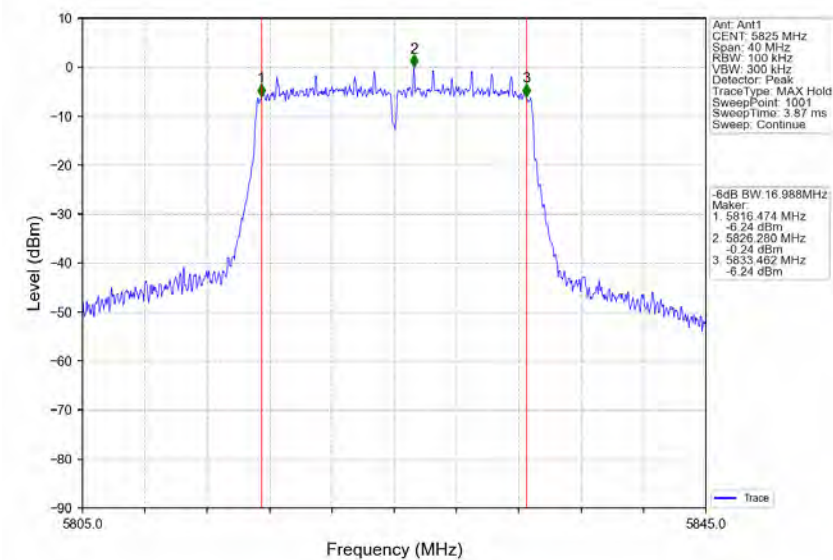
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



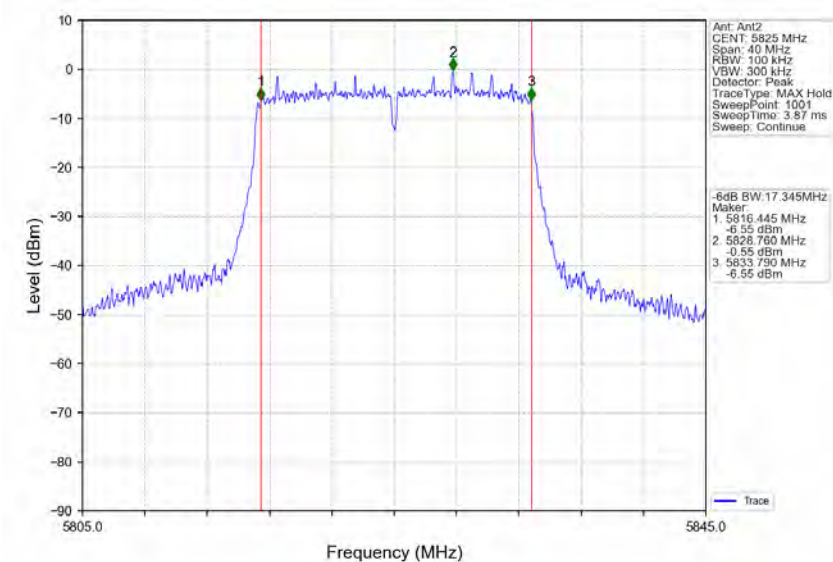
802.11n(HT20)_MCH_5785MHz_Ant2_NTNV



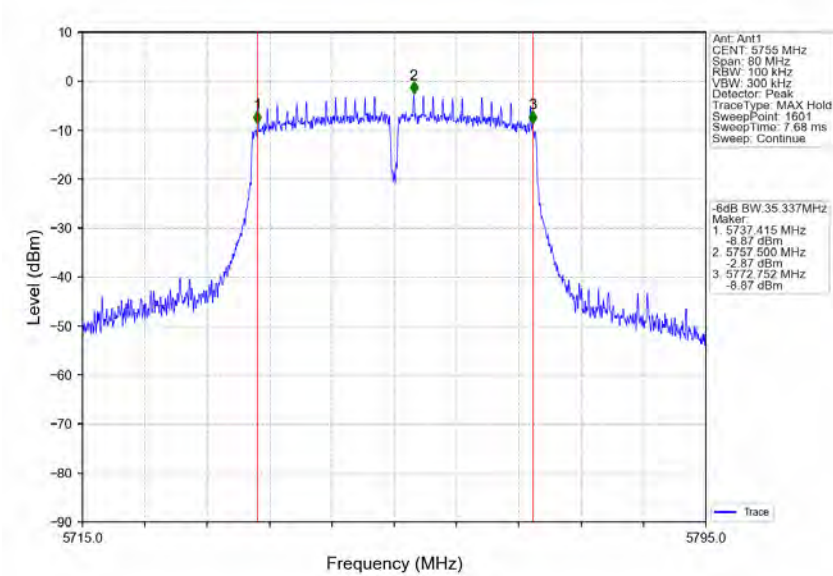
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



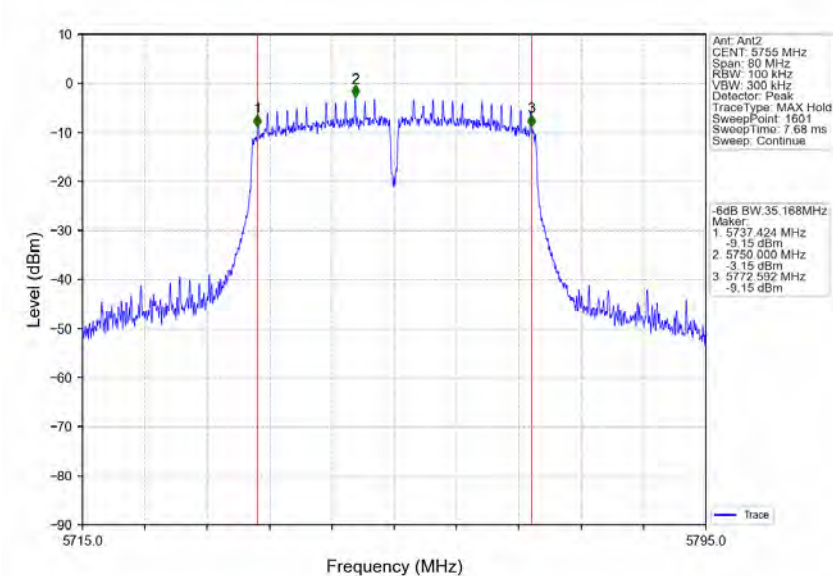
802.11n(HT20)_HCH_5825MHz_Ant2_NTNV



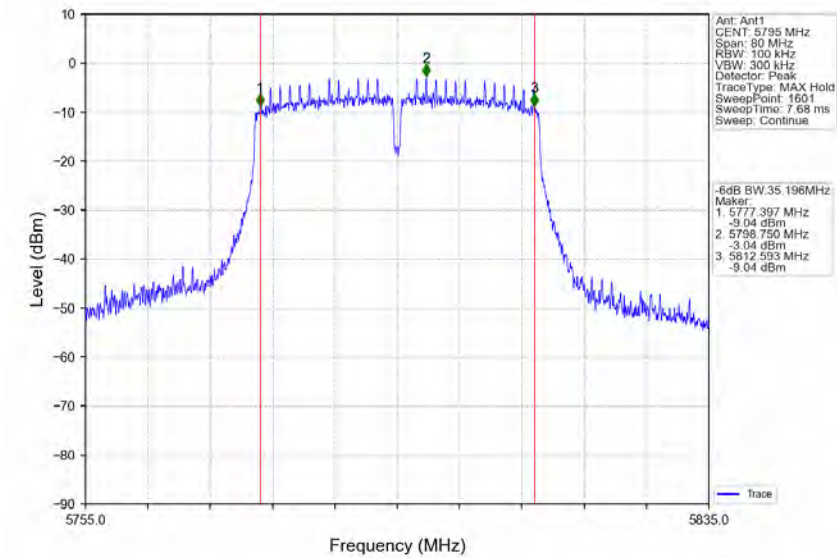
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



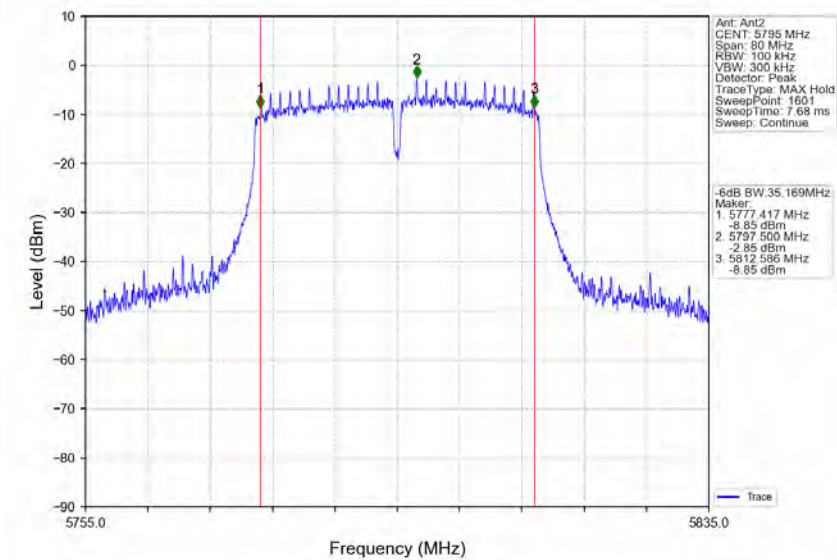
802.11n(HT40)_LCH_5755MHz_Ant2_NTNV



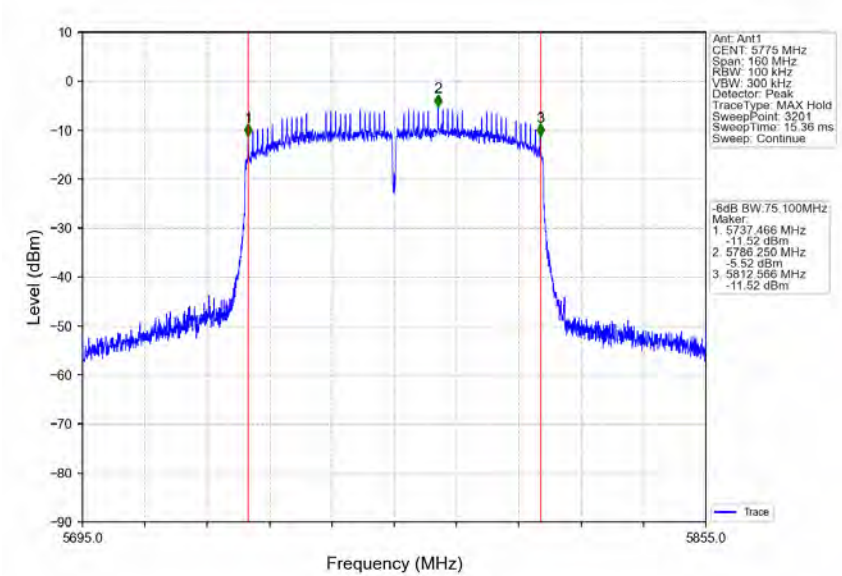
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



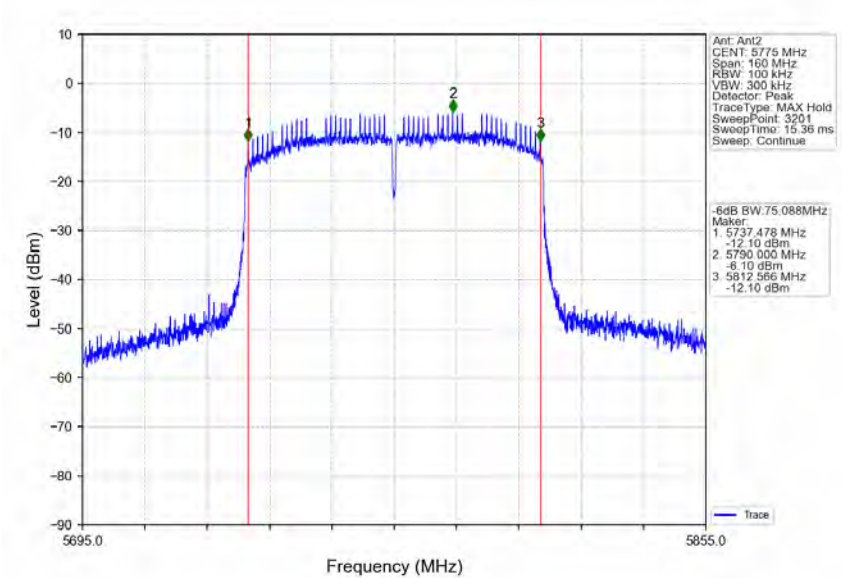
802.11n(HT40)_HCH_5795MHz_Ant2_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant2_NTNV



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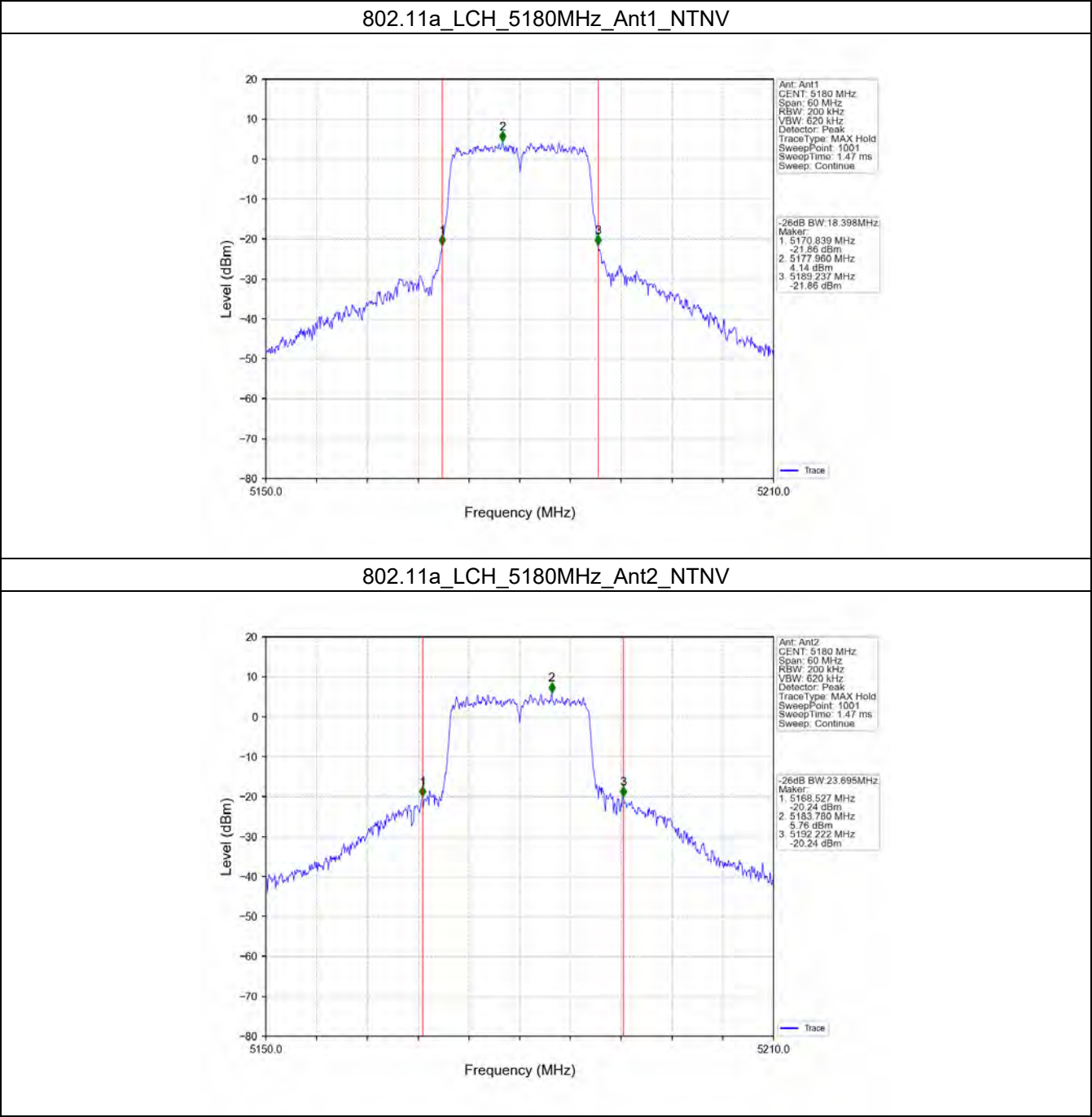
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2.3 26dB BW

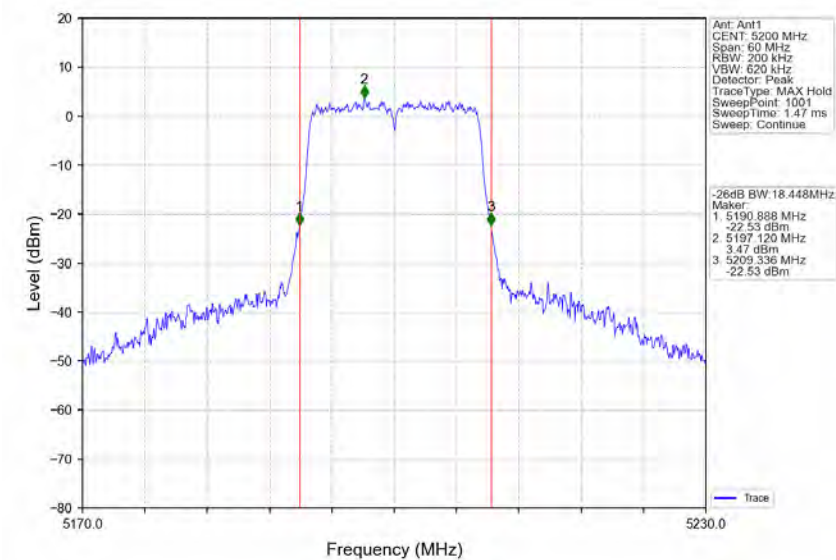
2.3.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	18.398	/	Pass
			2	23.695	/	Pass
		5200	1	18.448	/	Pass
			2	18.375	/	Pass
		5240	1	18.487	/	Pass
			2	18.479	/	Pass
802.11n (HT20)	MIMO	5180	1	19.468	/	Pass
			2	19.470	/	Pass
		5200	1	19.304	/	Pass
			2	19.291	/	Pass
		5240	1	19.404	/	Pass
			2	19.315	/	Pass
802.11n (HT40)	MIMO	5190	1	41.095	/	Pass
			2	40.827	/	Pass
		5230	1	41.063	/	Pass
			2	41.101	/	Pass
802.11ac (VHT80)	MIMO	5210	1	81.268	/	Pass
			2	80.970	/	Pass

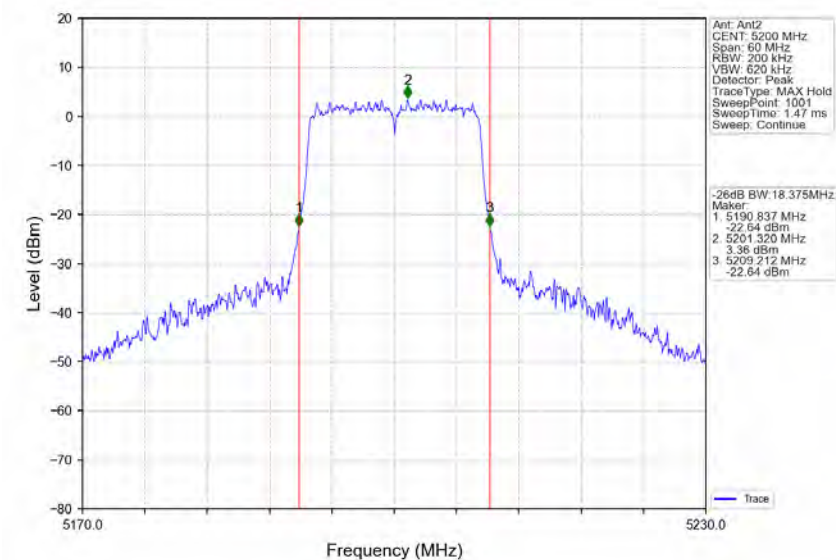
2.3.2 Test Graph



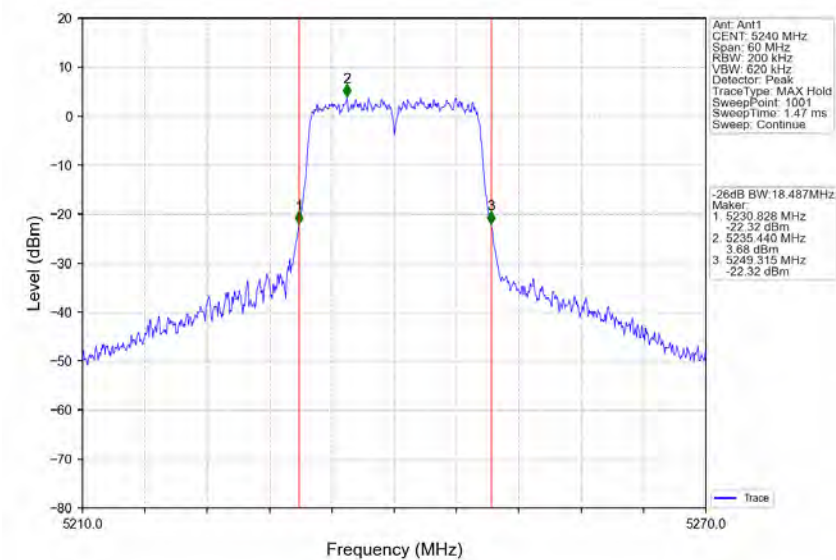
802.11a_MCH_5200MHz_Ant1_NTNV



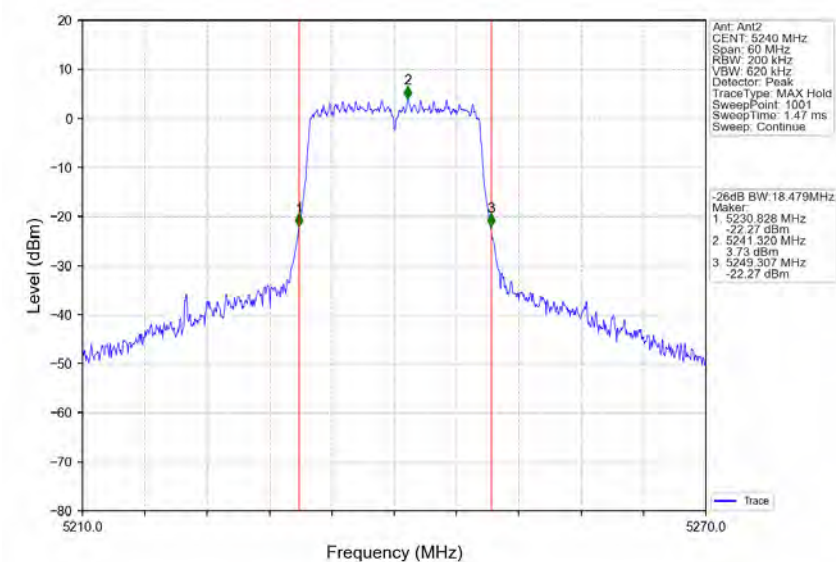
802.11a_MCH_5200MHz_Ant2_NTNV



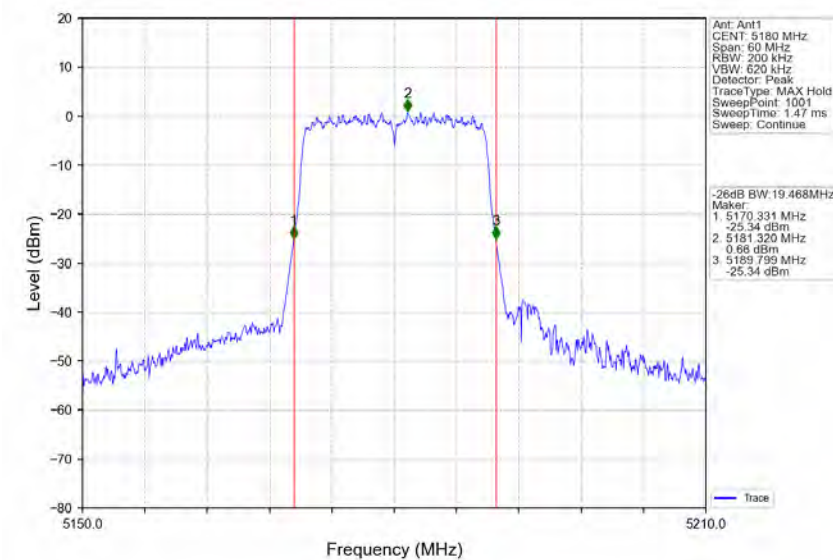
802.11a_HCH_5240MHz_Ant1_NTNV



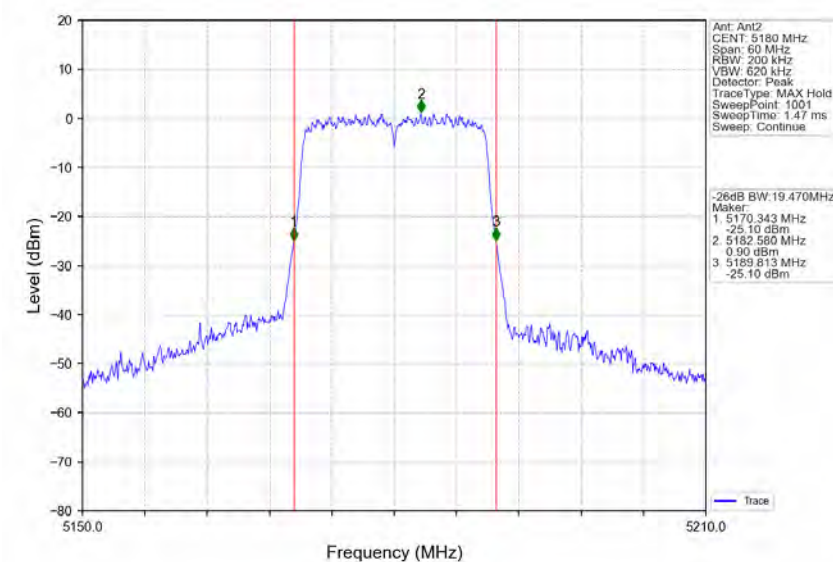
802.11a_HCH_5240MHz_Ant2_NTNV



802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



802.11n(HT20)_LCH_5180MHz_Ant2_NTNV



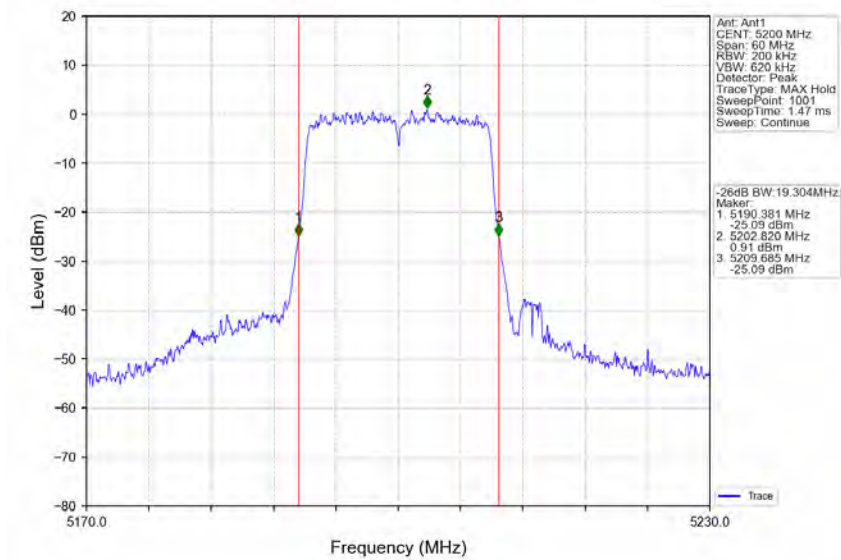
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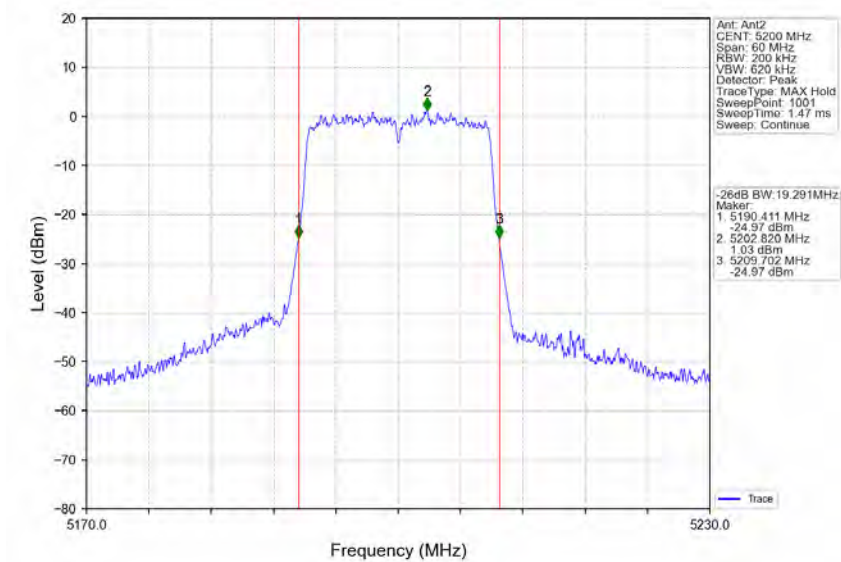
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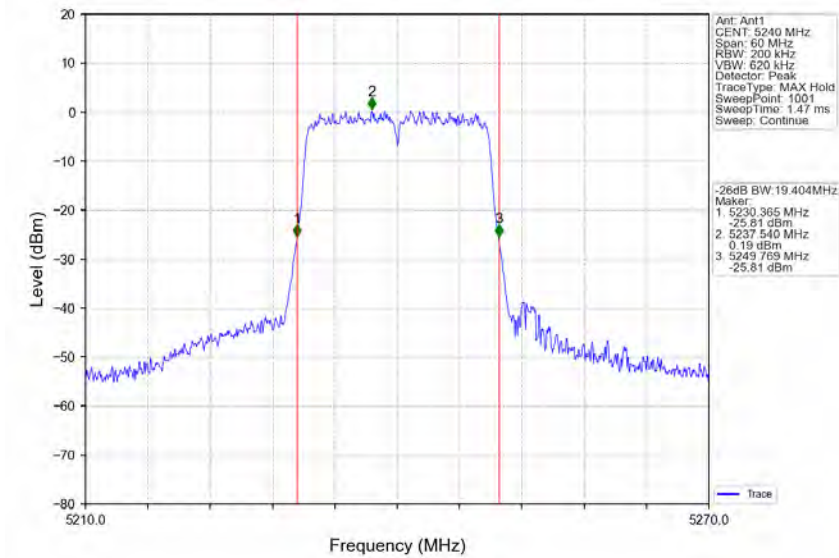
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



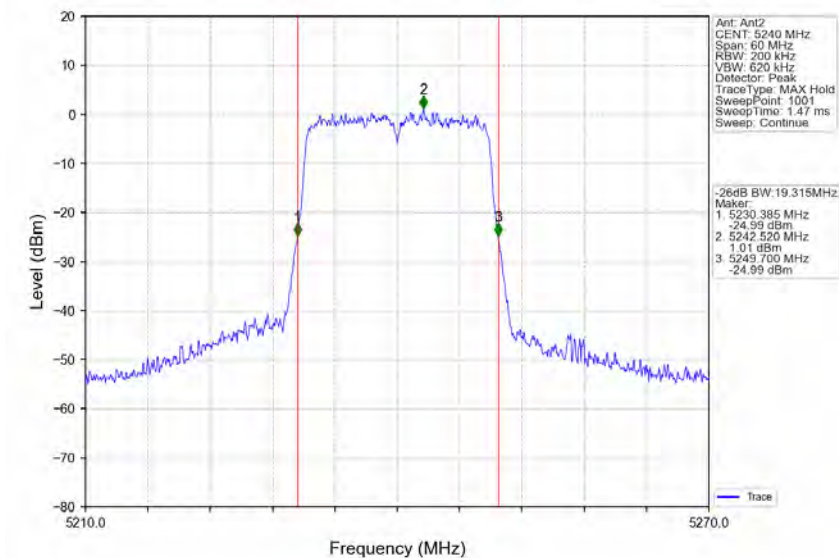
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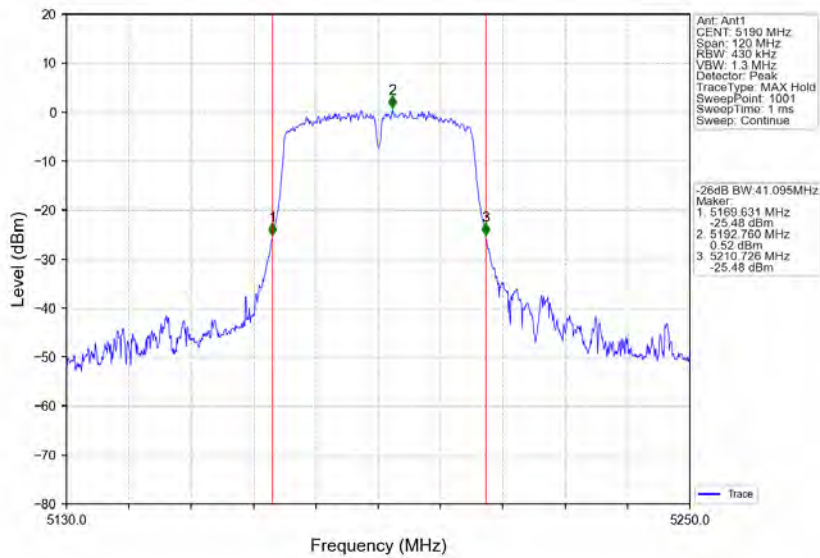
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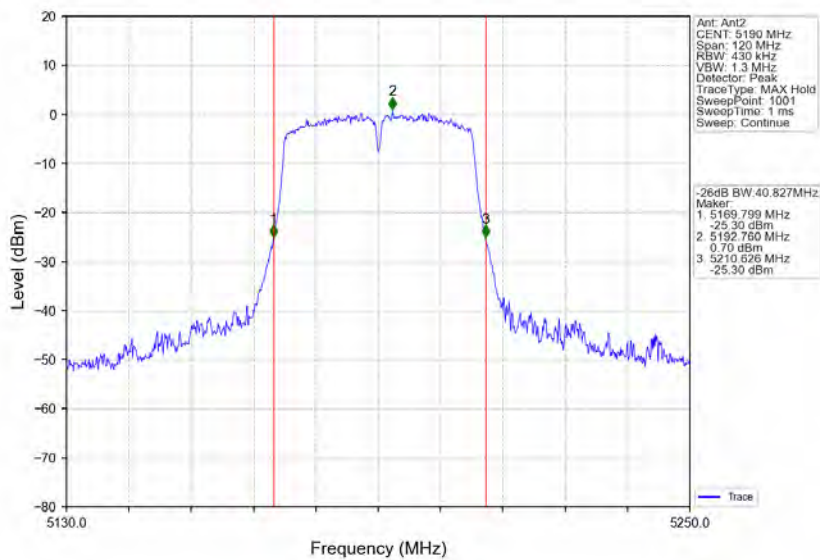
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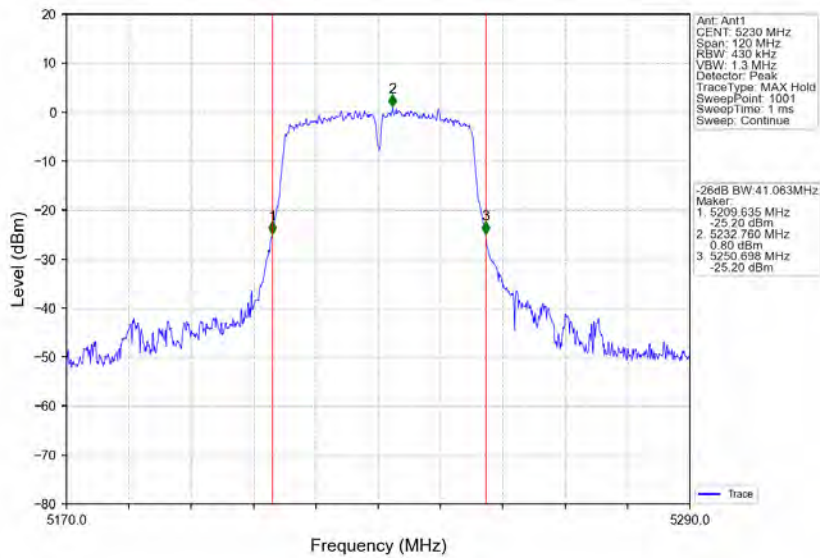
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



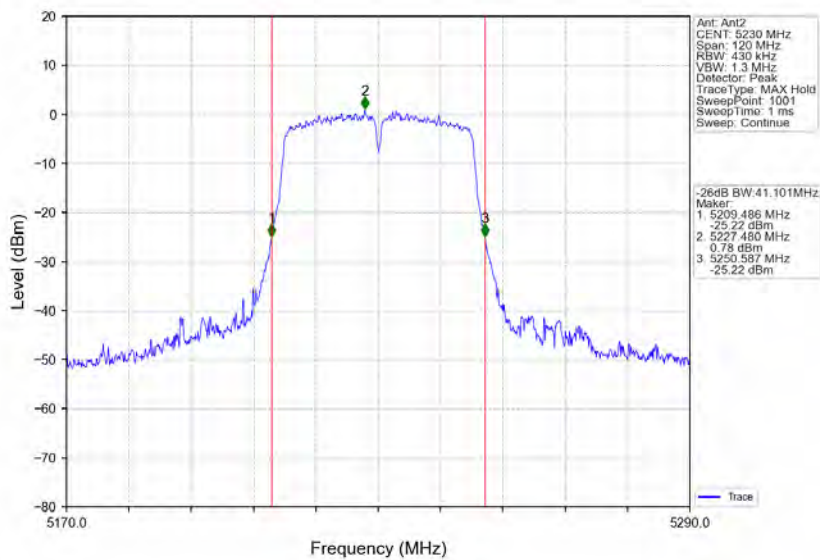
802.11n(HT40)_LCH_5190MHz_Ant2_NTNV



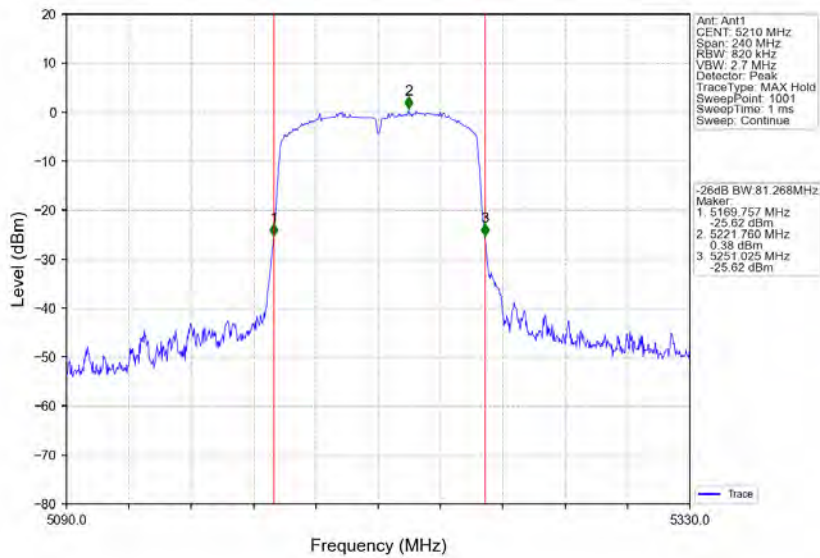
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



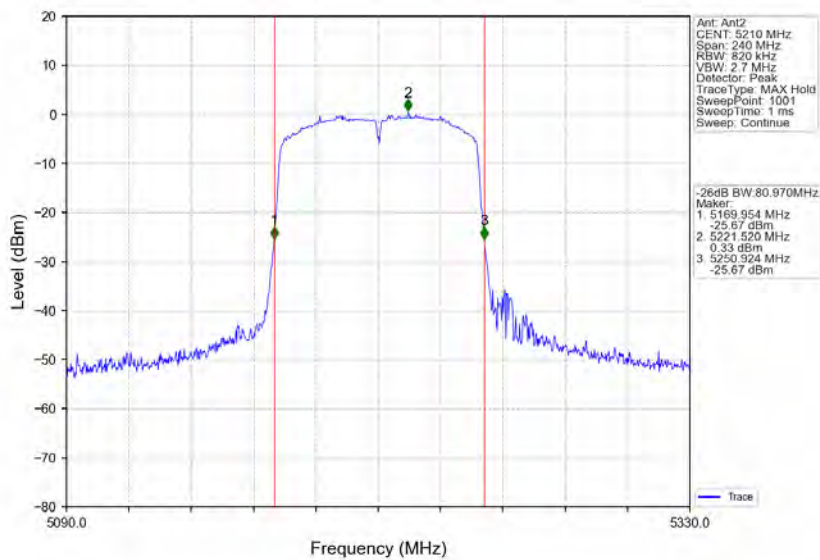
802.11n(HT40)_HCH_5230MHz_Ant2_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

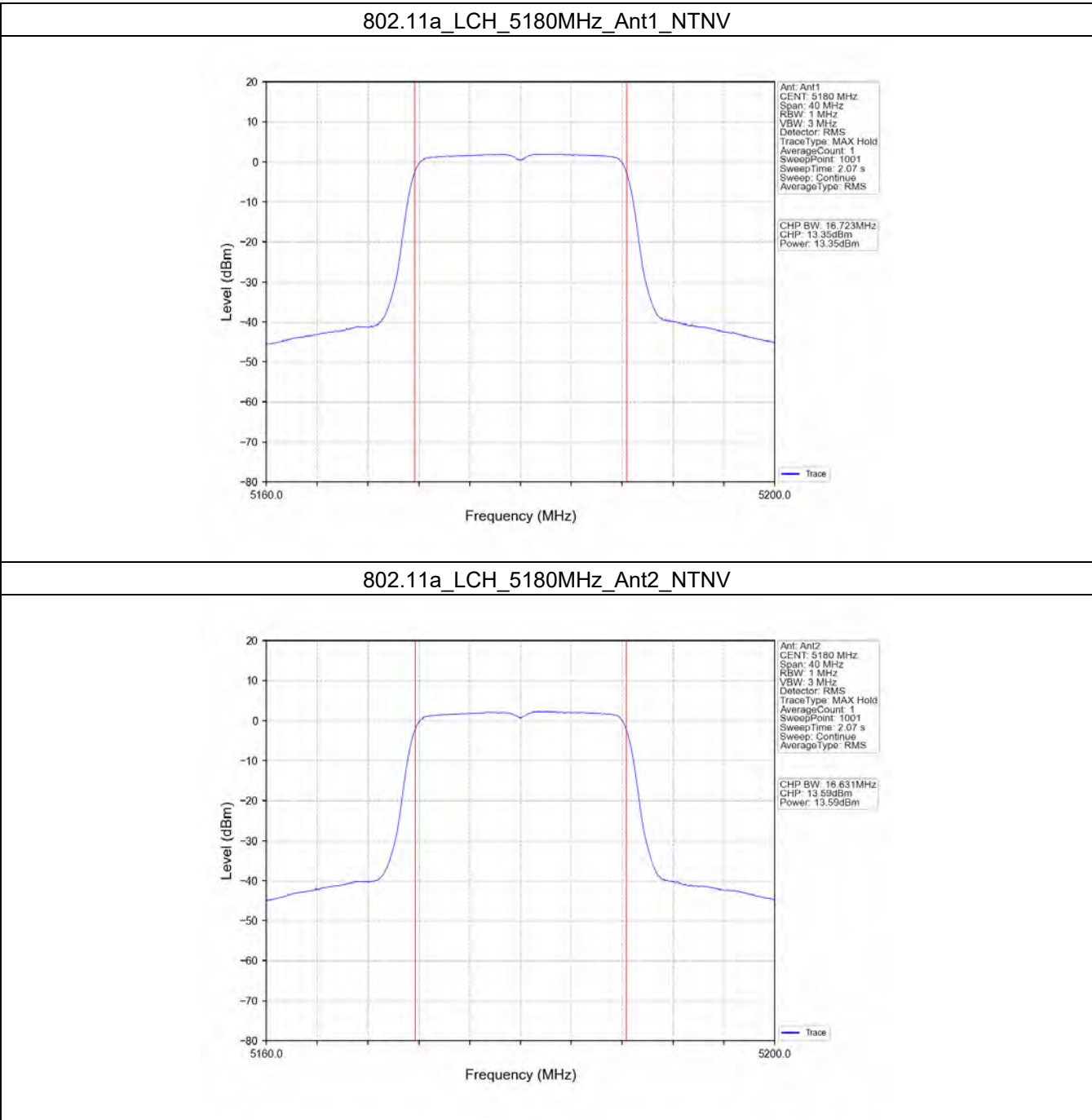


802.11ac(VHT80)_MCH_5210MHz_Ant2_NTNV

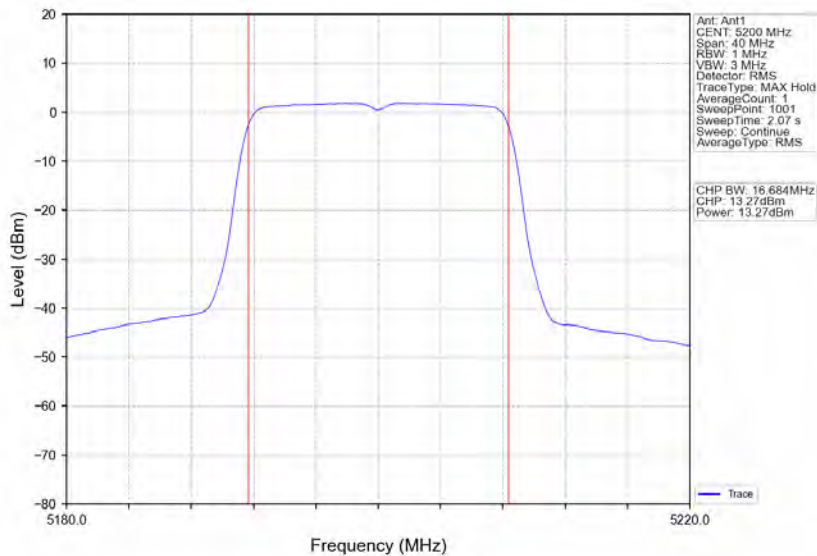


Note1: Antenna Gain: Ant1: 3.33dBi; Ant2: 3.68dBi;
Note2: E.I.R.P = Measured Power + Antenna Gain

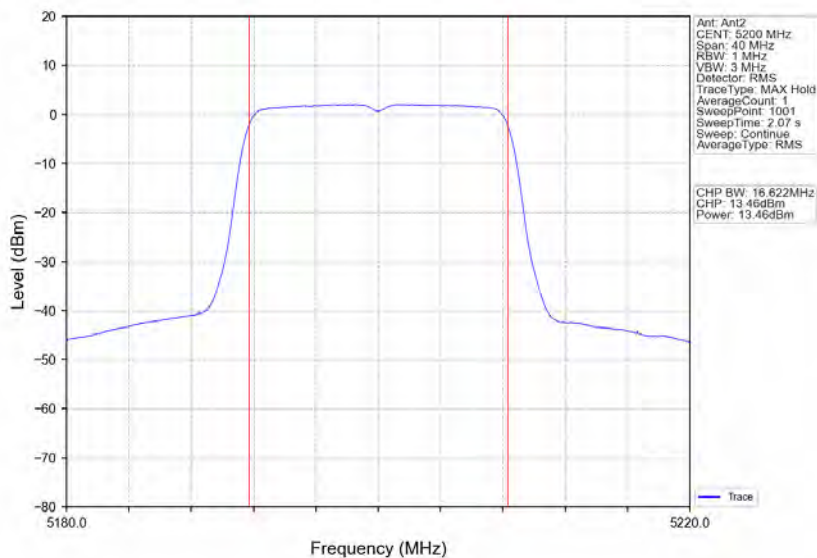
3.1.2 Test Graph



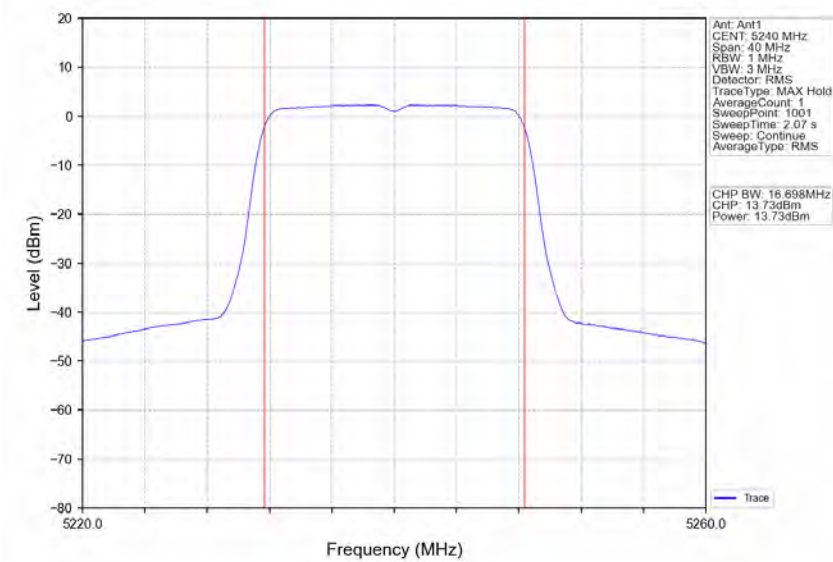
802.11a_MCH_5200MHz_Ant1_NTNV



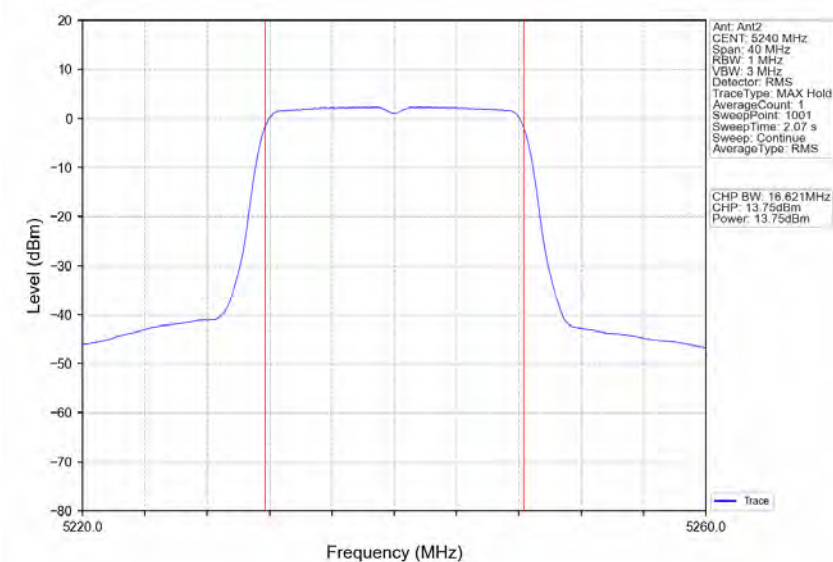
802.11a_MCH_5200MHz_Ant2_NTNV



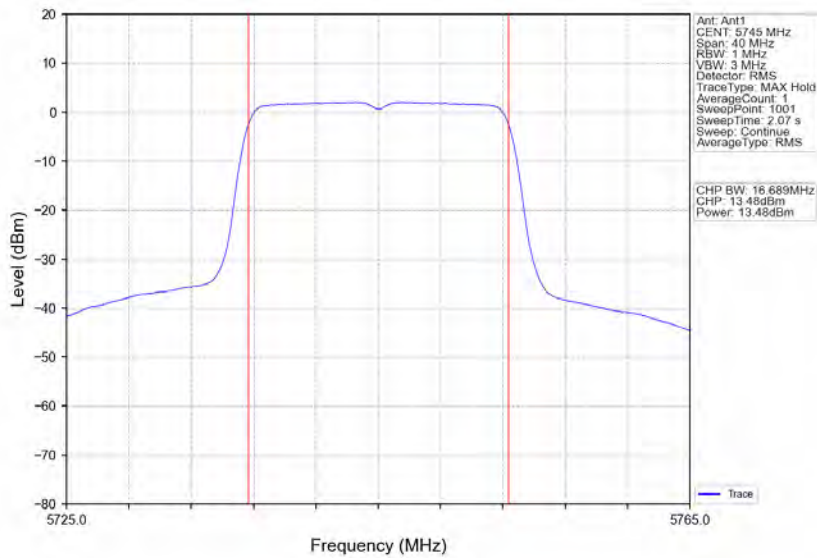
802.11a_HCH_5240MHz_Ant1_NTNV



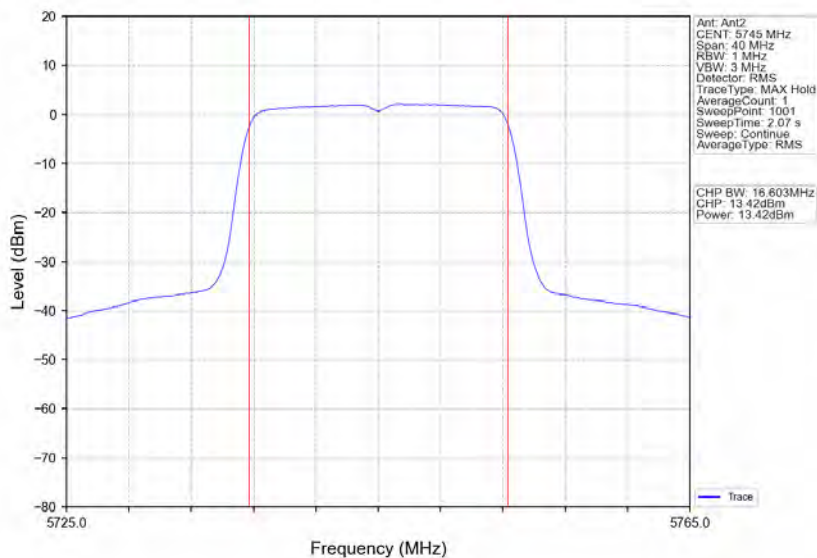
802.11a_HCH_5240MHz_Ant2_NTNV



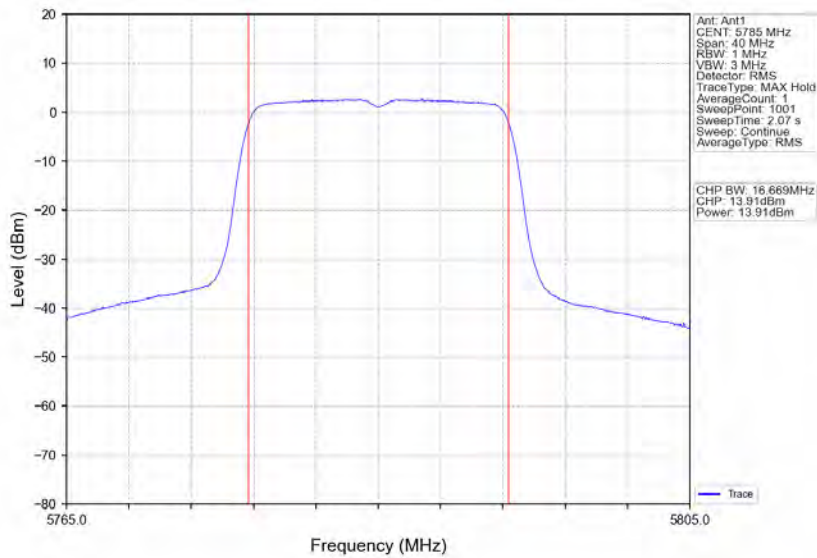
802.11a_LCH_5745MHz_Ant1_NTNV



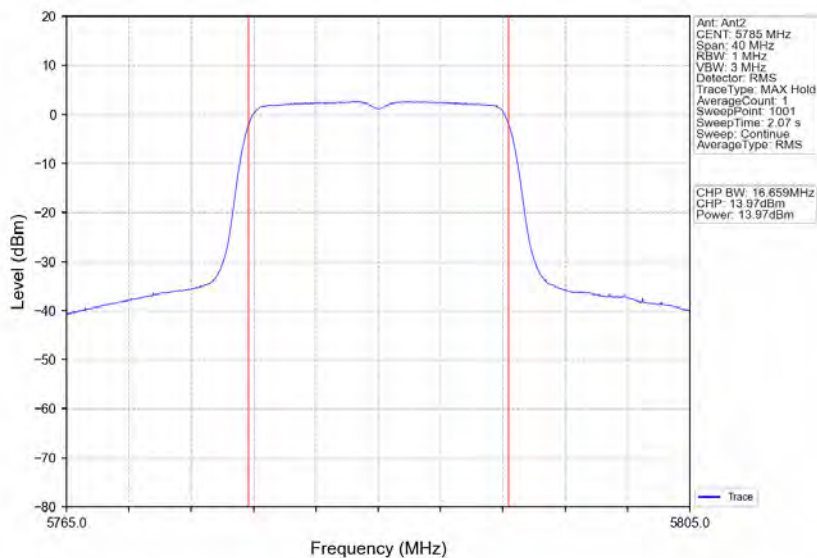
802.11a_LCH_5745MHz_Ant2_NTNV



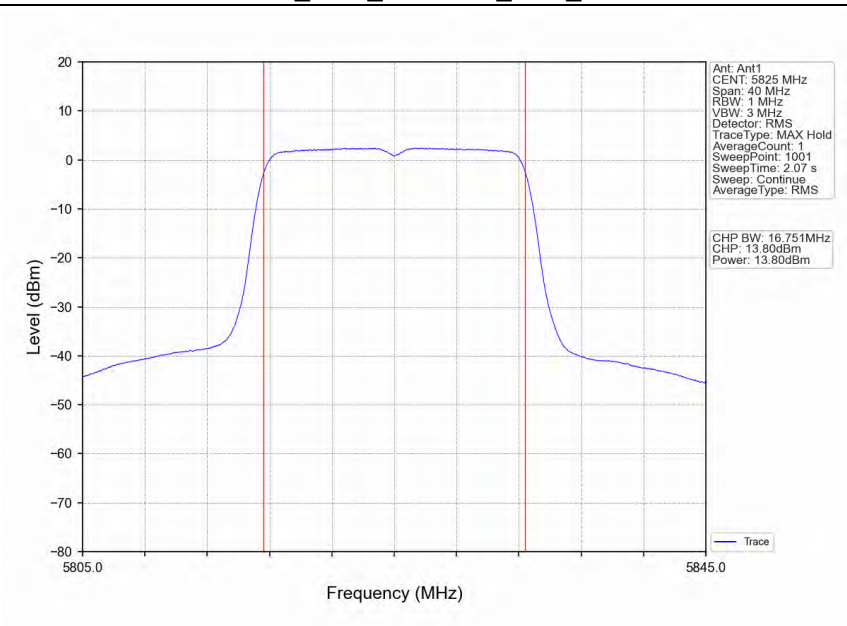
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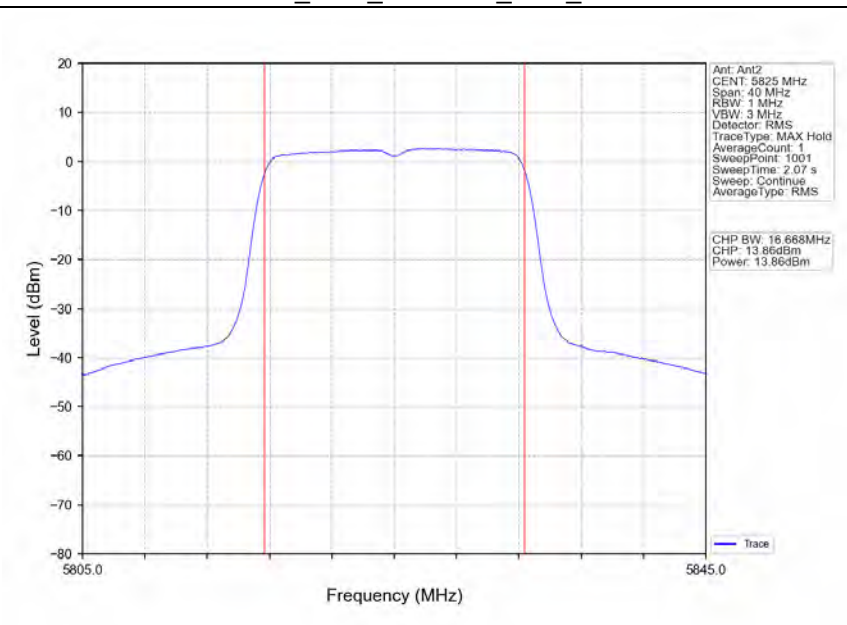
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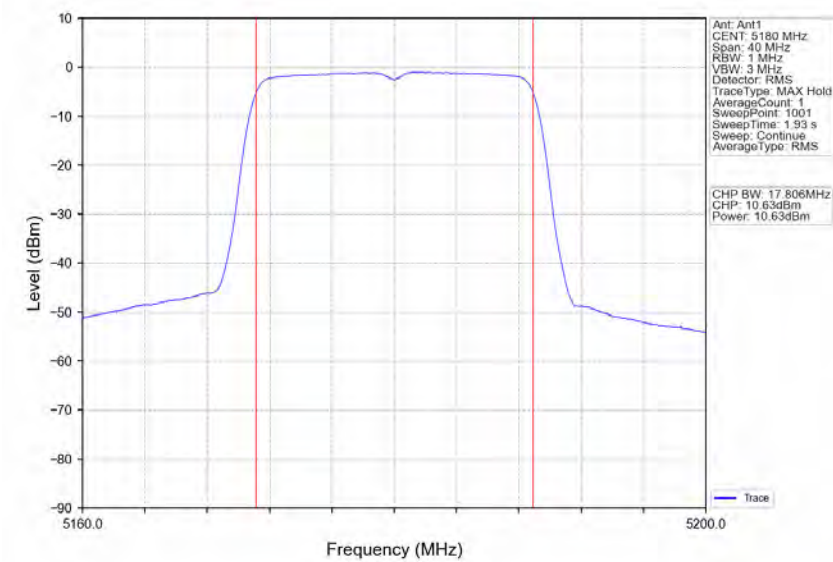
802.11a_HCH_5825MHz_Ant1_NTNV



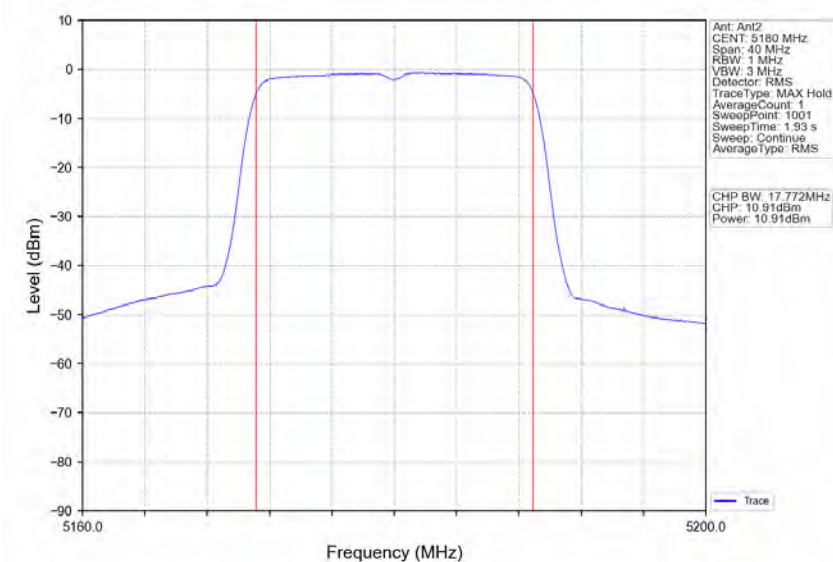
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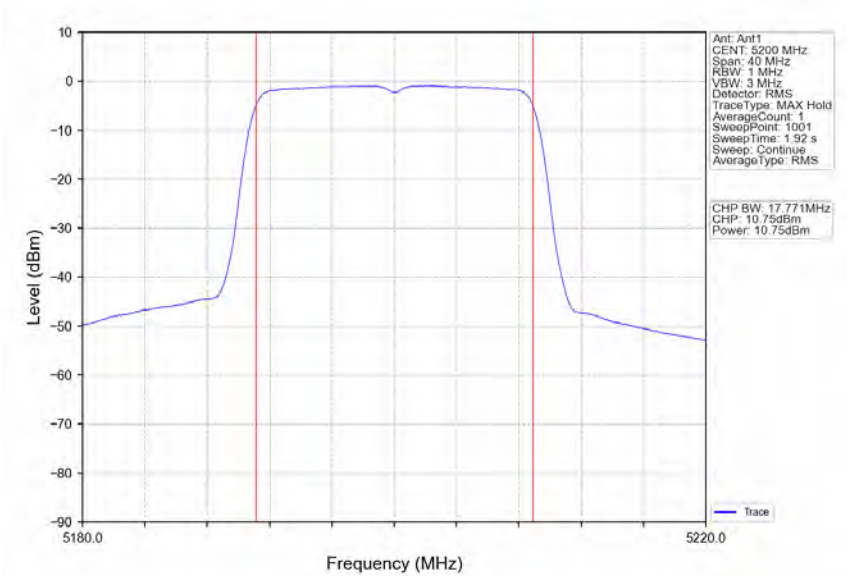
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



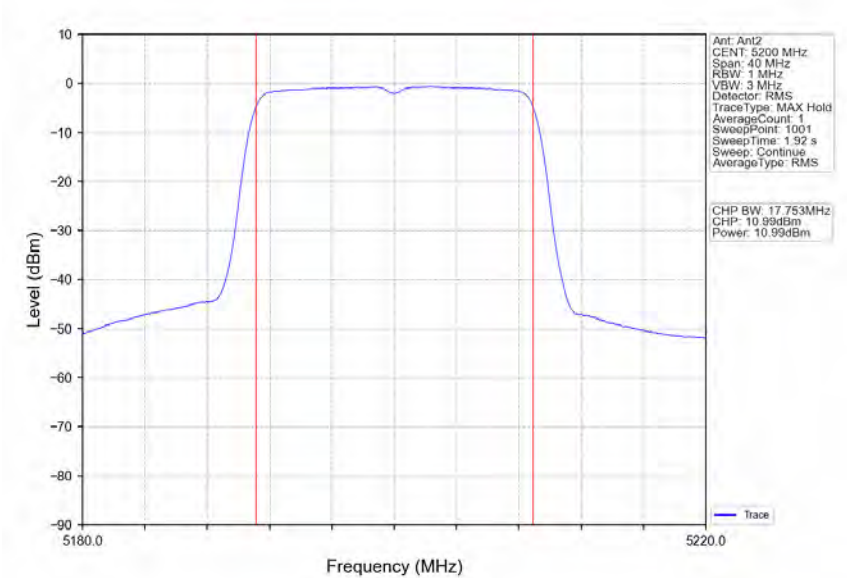
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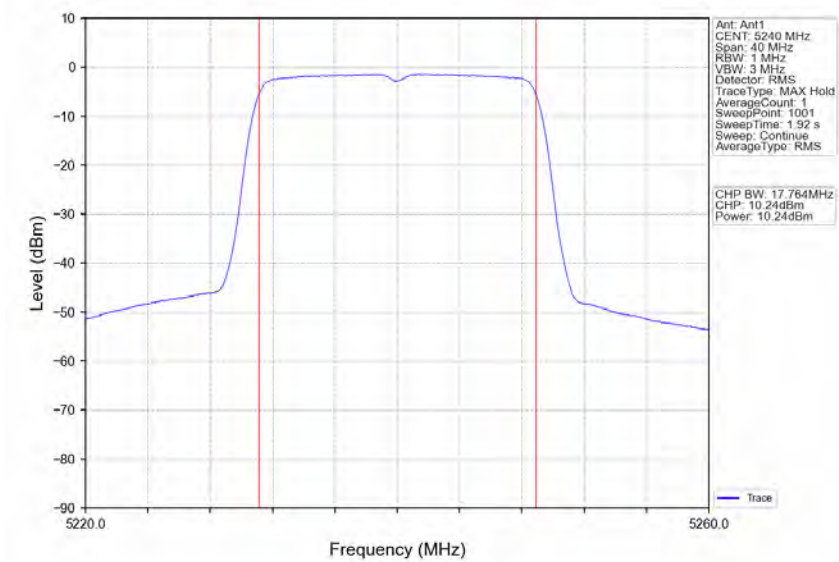
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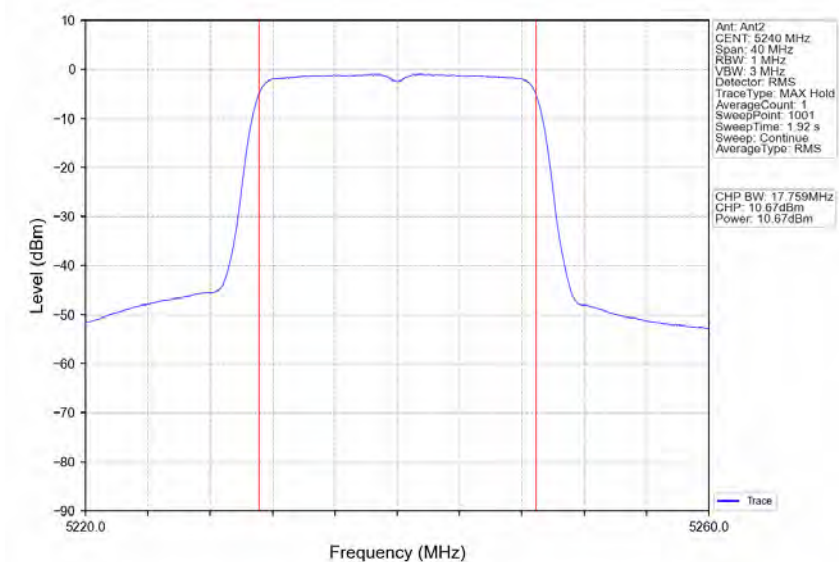
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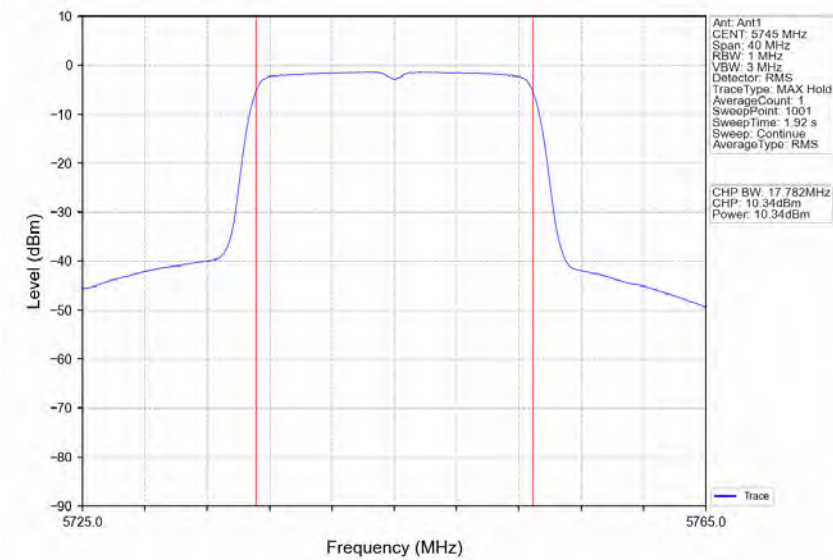
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



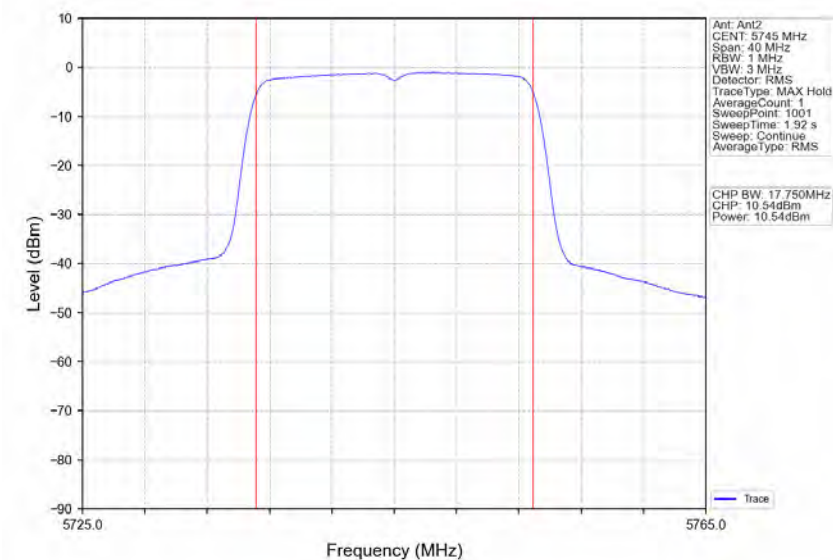
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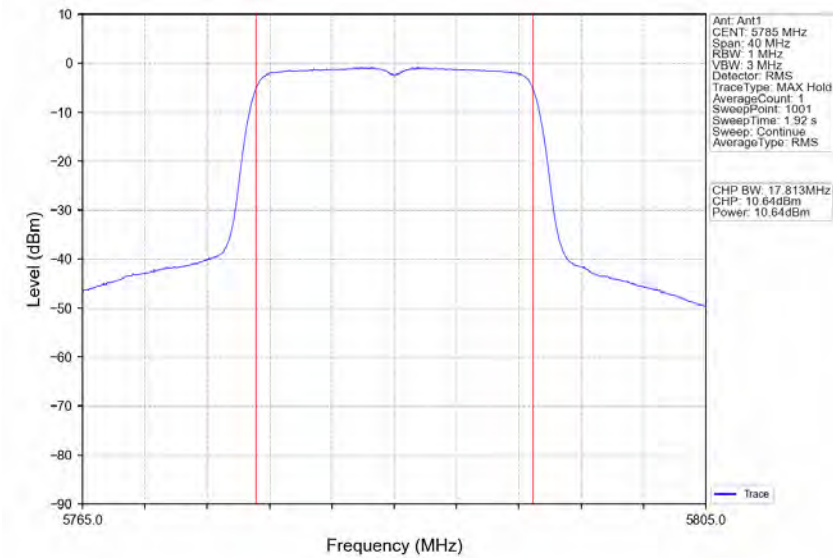
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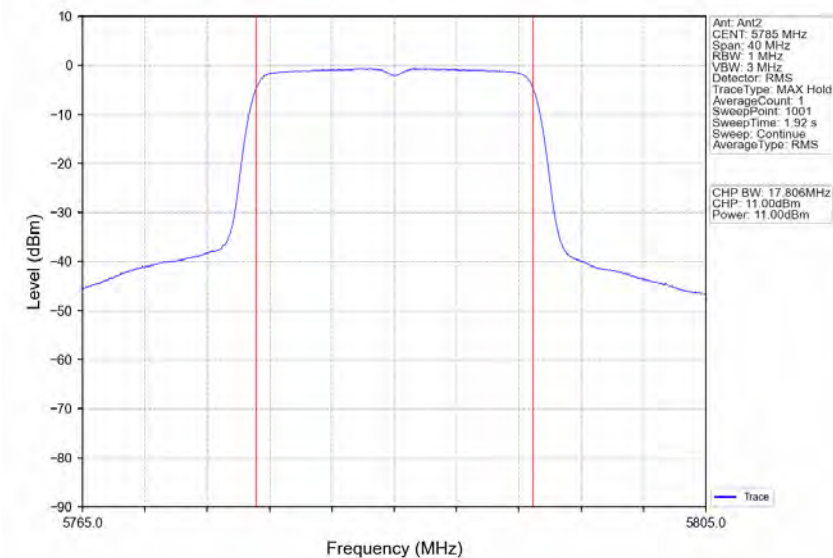
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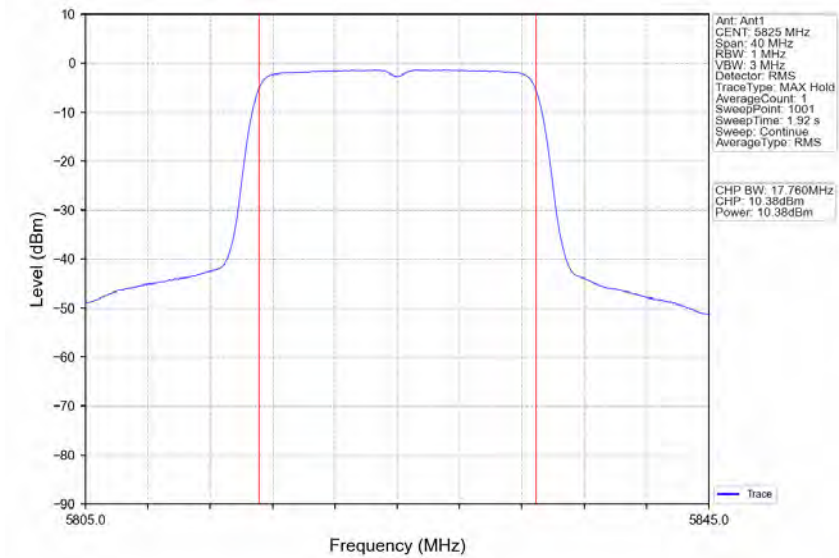
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



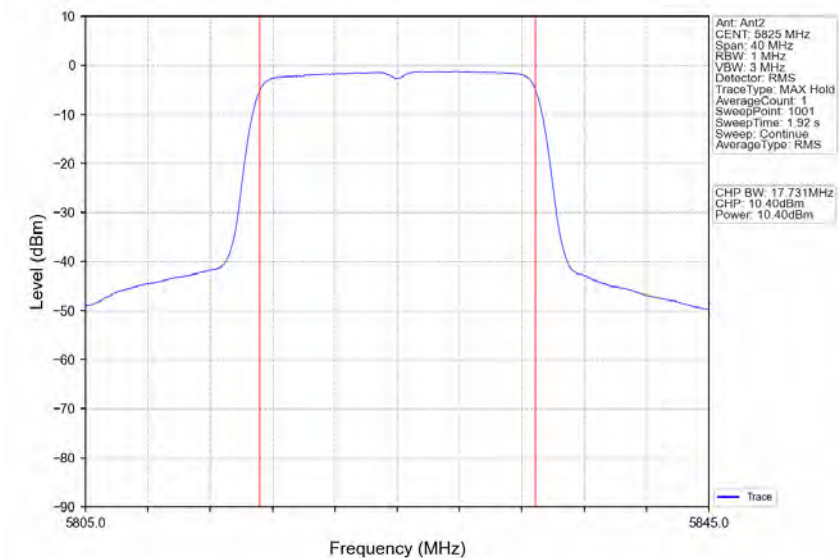
802.11n(HT20)_MCH_5785MHz_Ant2_NTNV



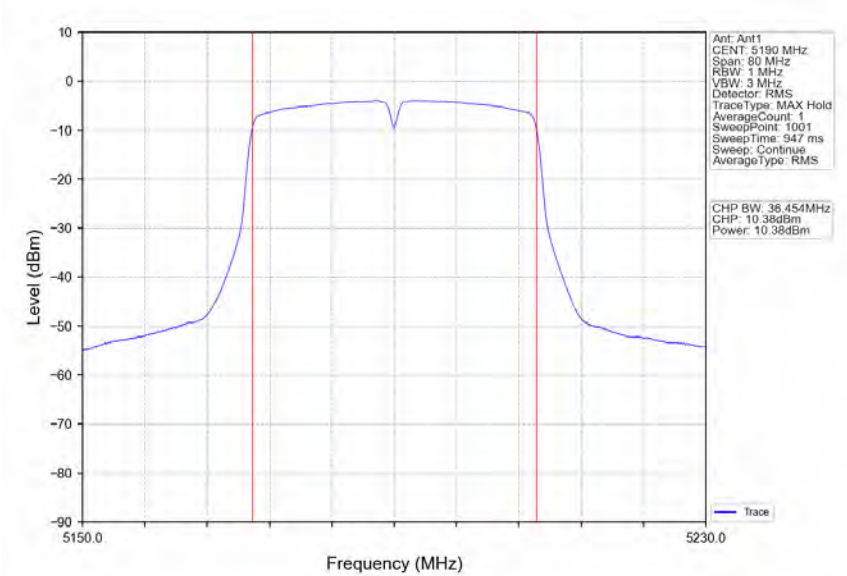
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



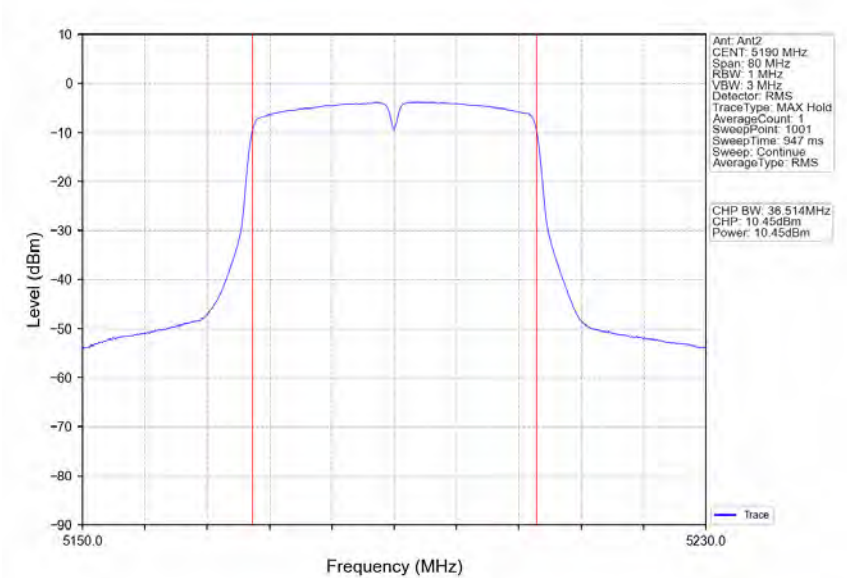
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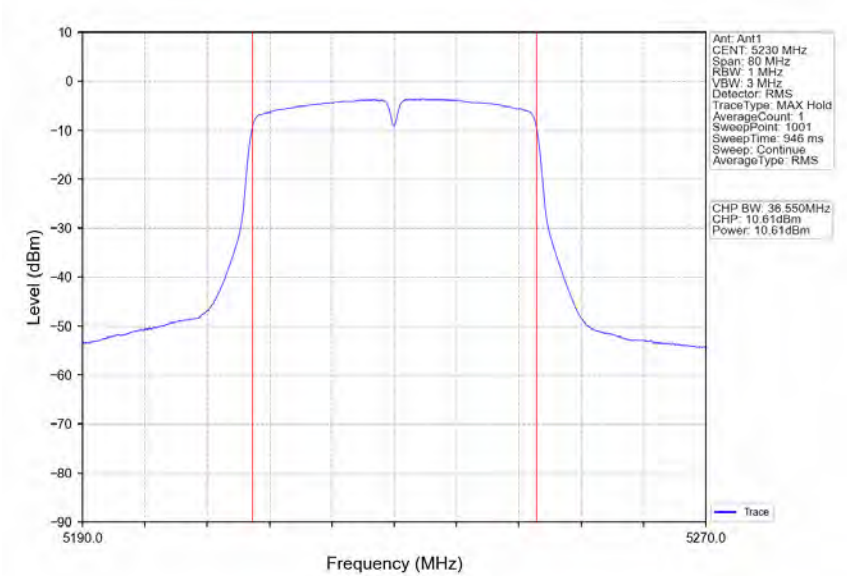
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



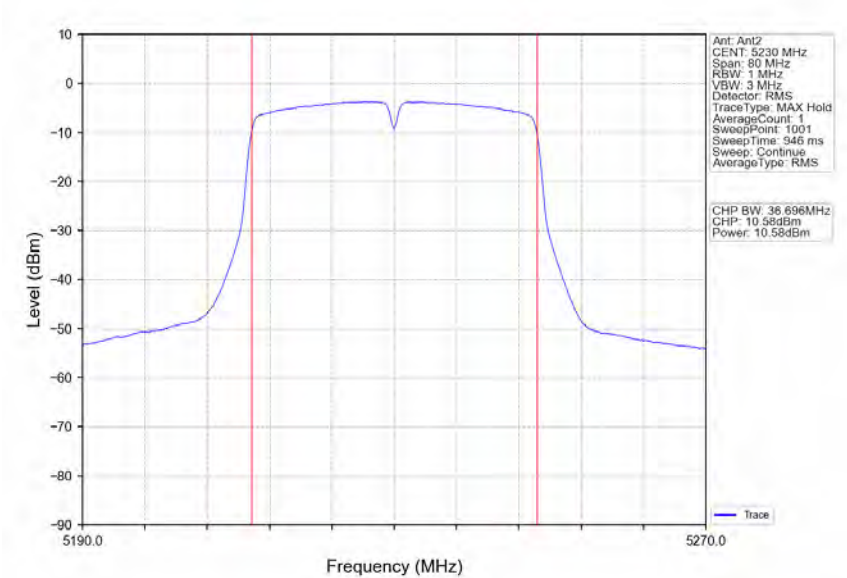
802.11n(HT40)_LCH_5190MHz_Ant2_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant2_NTNV



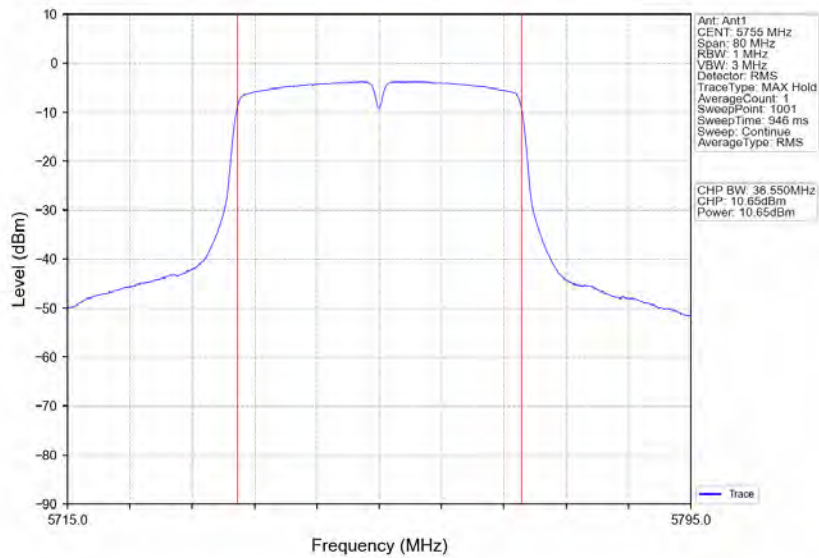
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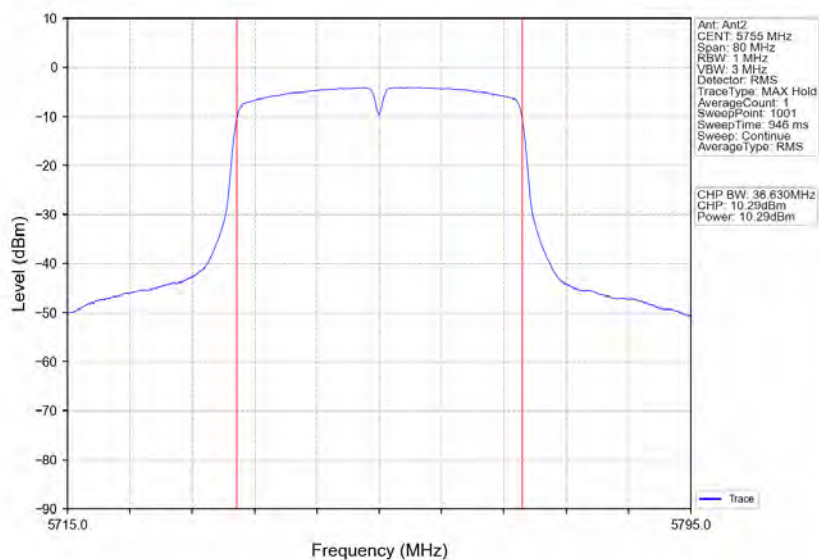
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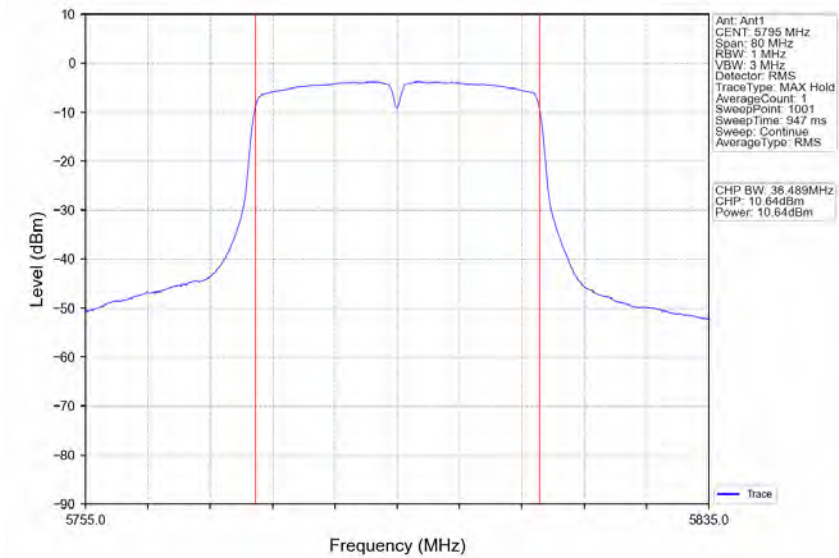
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



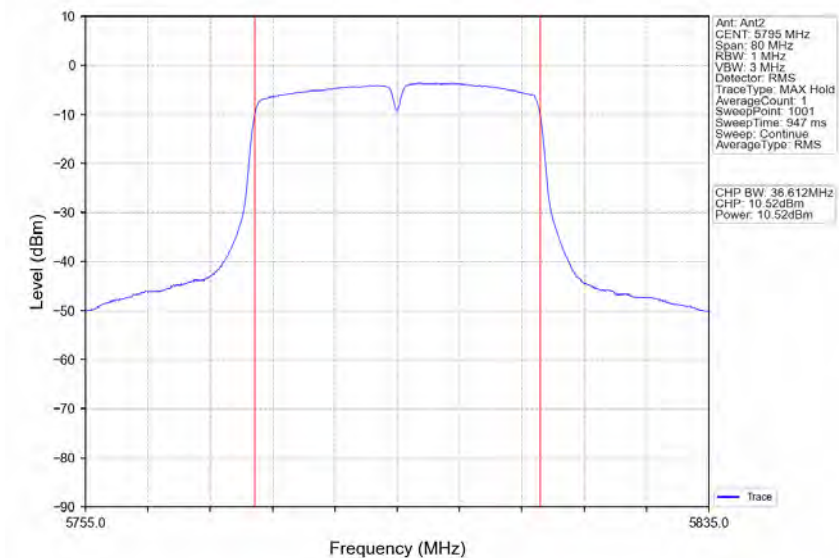
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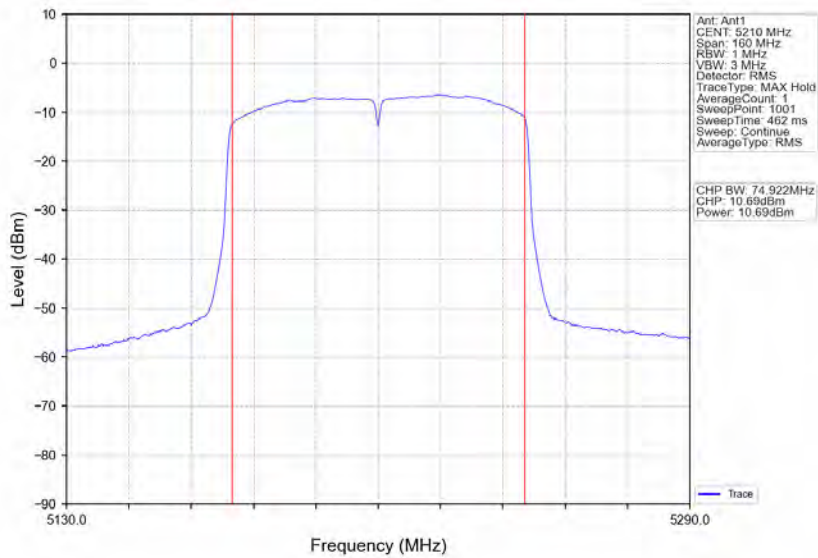
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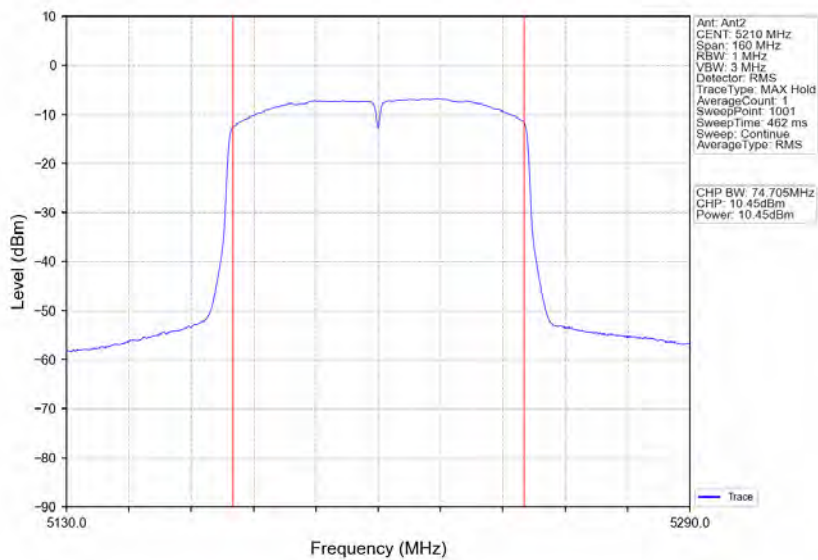
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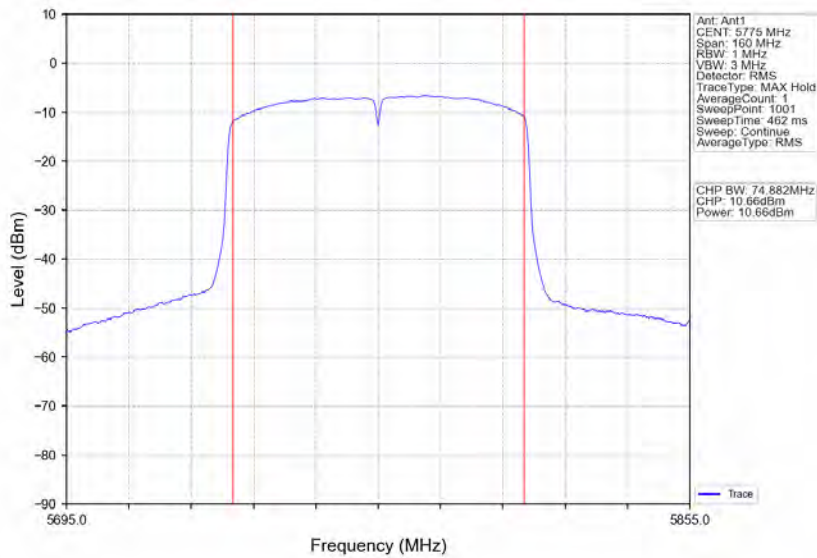
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



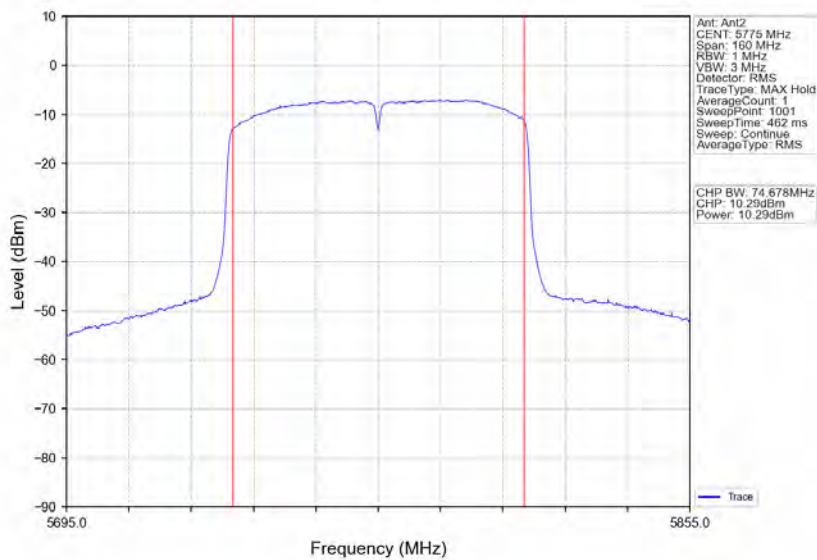
802.11ac(VHT80)_MCH_5210MHz_Ant2_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV

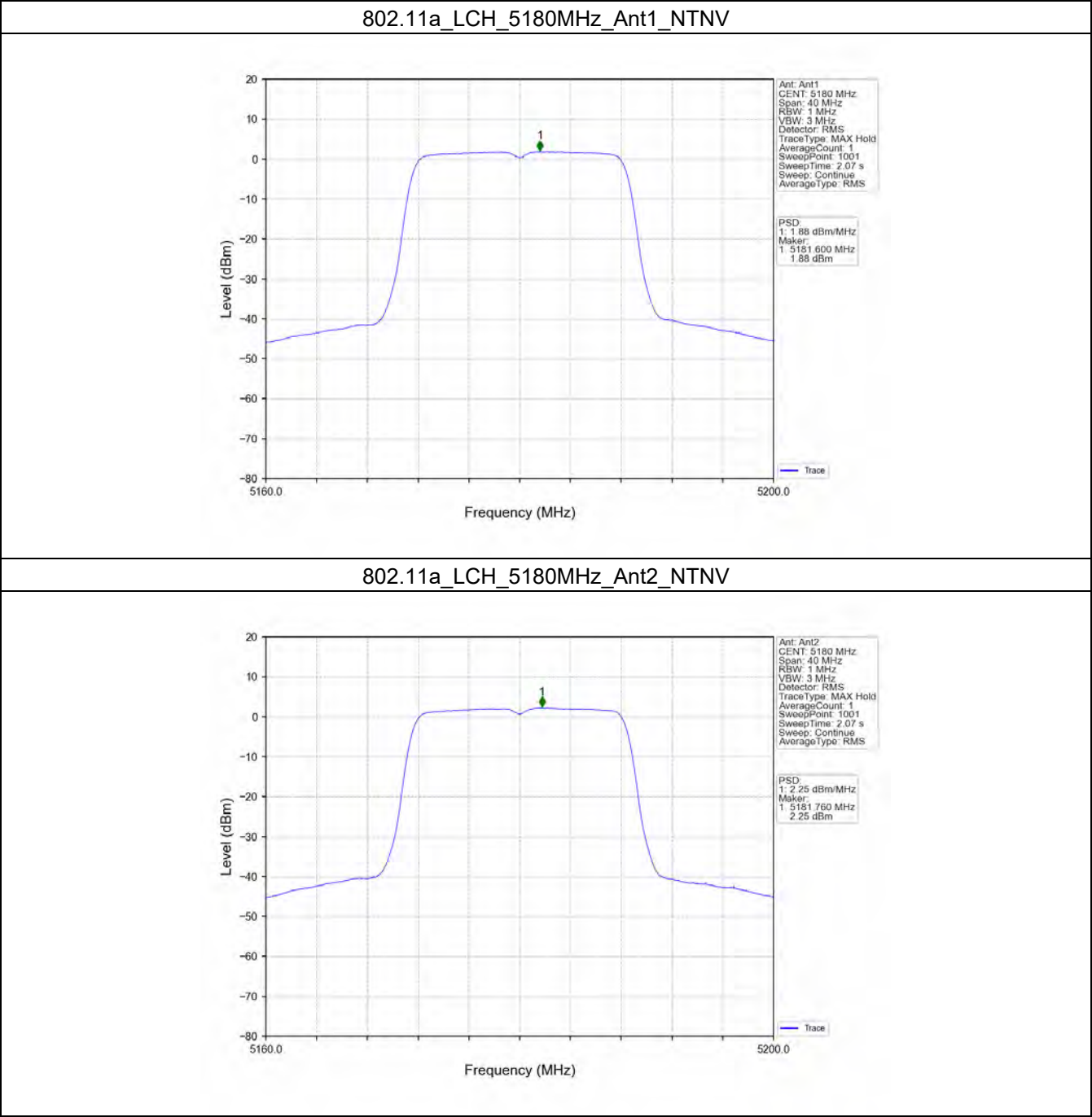


802.11ac(VHT80)_MCH_5775MHz_Ant2_NTNV

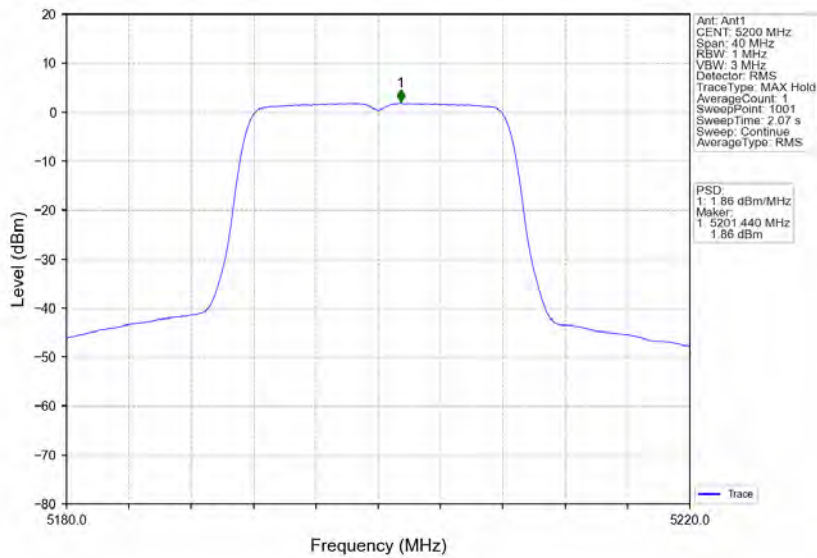


Note2: E.I.R.PSD = Measured PSD + Antenna Gain

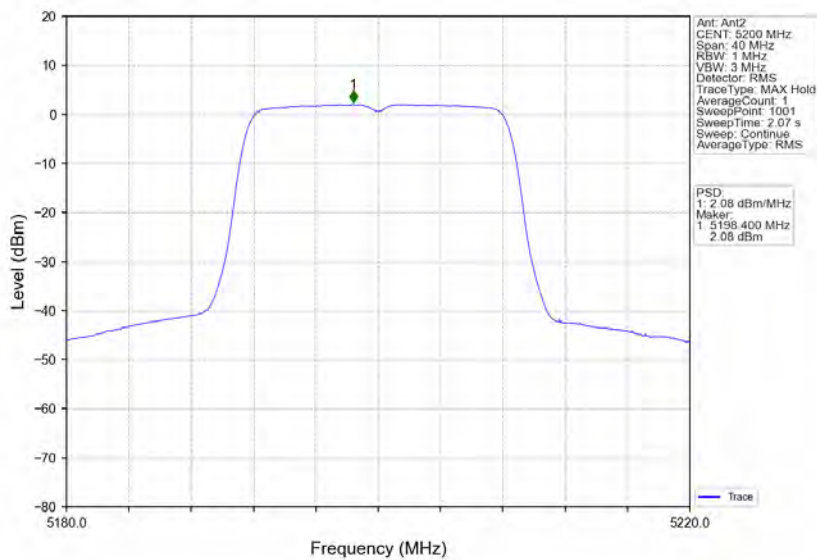
4.1.2 Test Graph



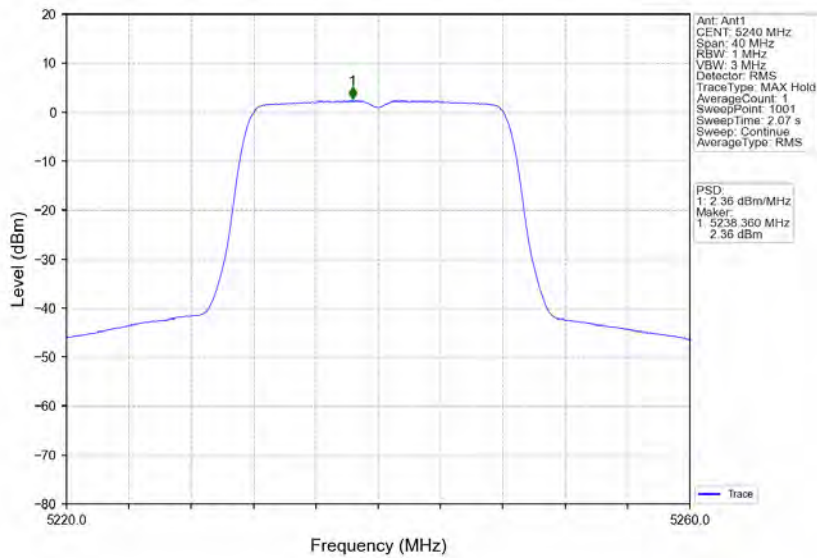
802.11a_MCH_5200MHz_Ant1_NTNV



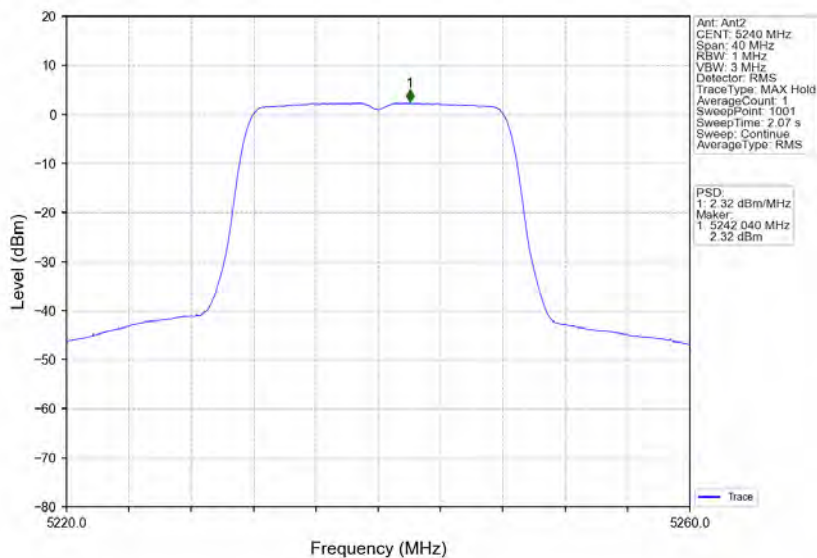
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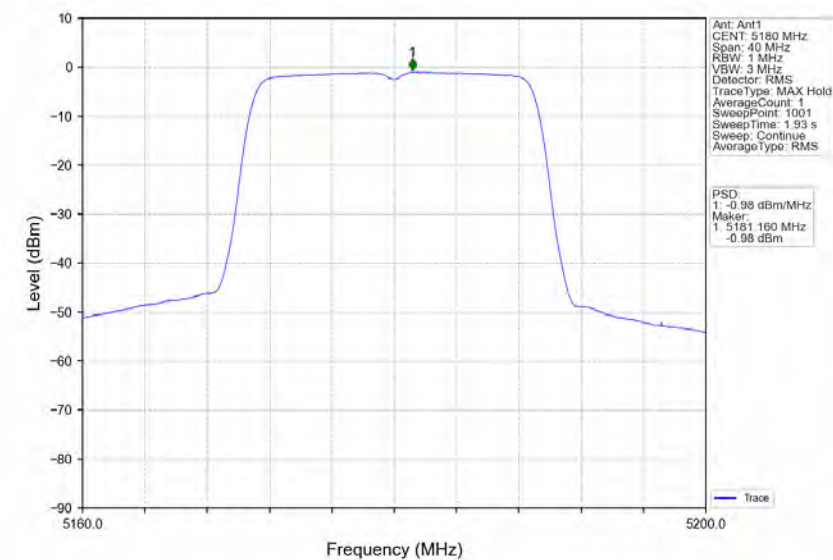
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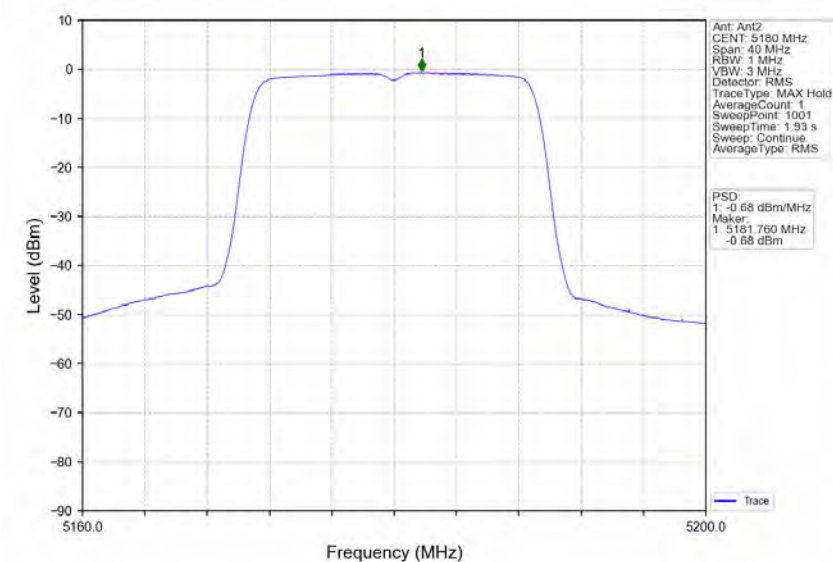
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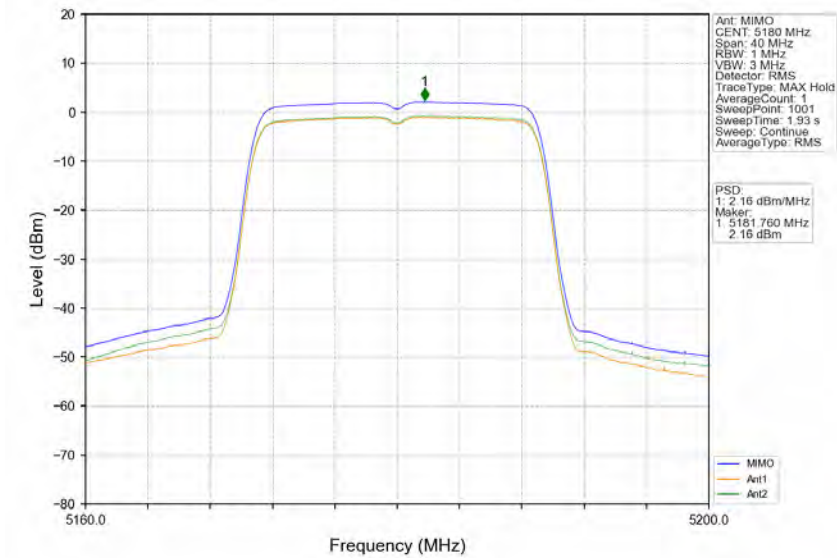
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



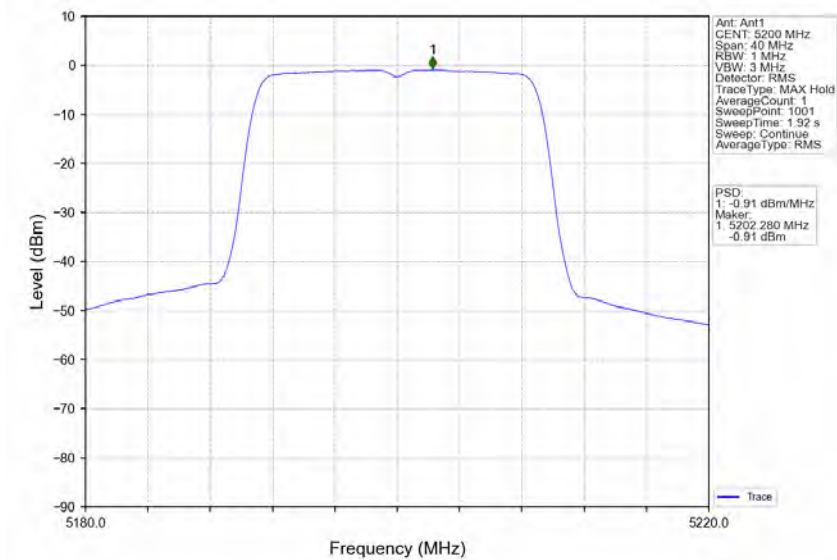
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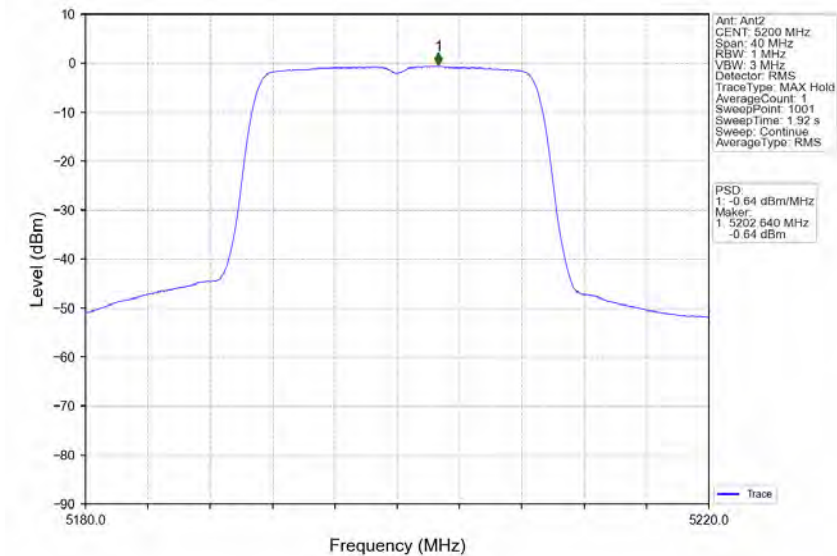
802.11n(HT20)_LCH_5180MHz_MIMO_NTNV



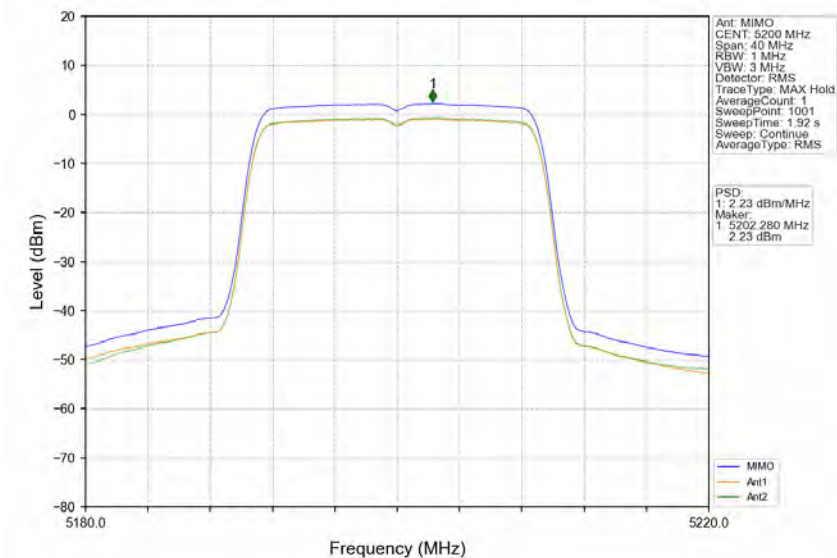
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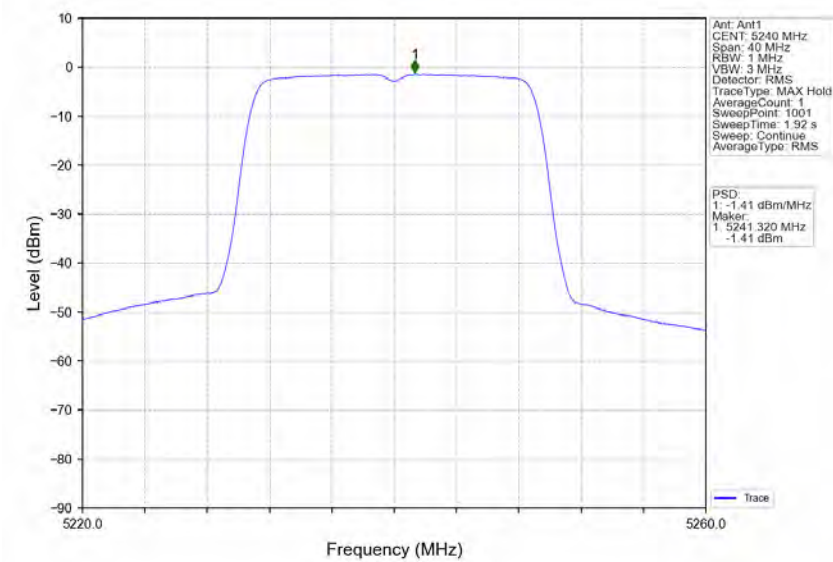
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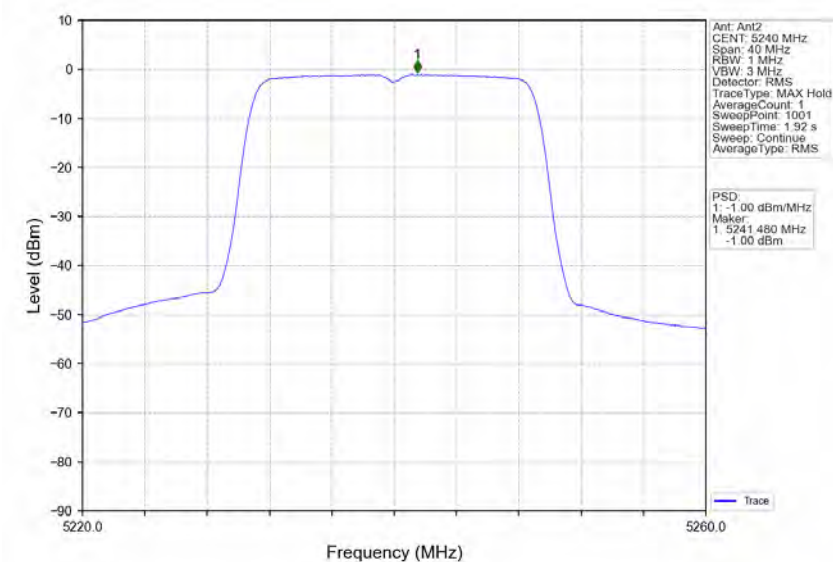
802.11n(HT20)_MCH_5200MHz_MIMO_NTNV



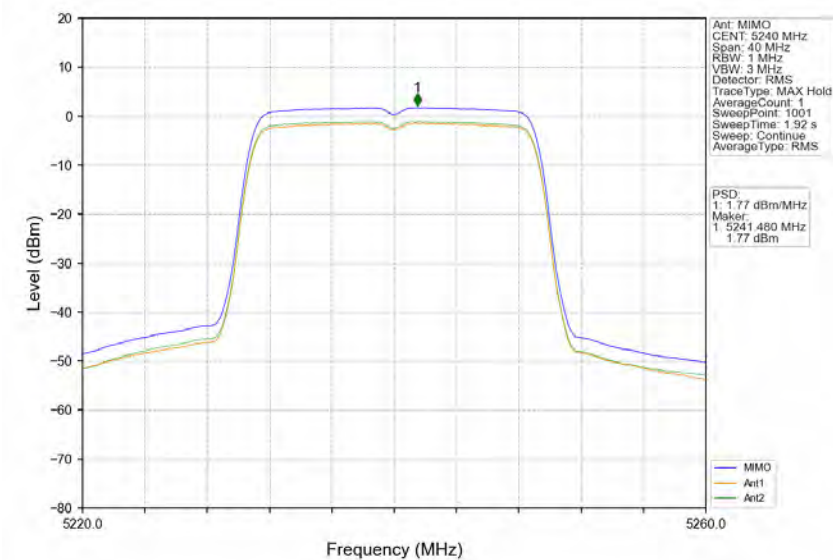
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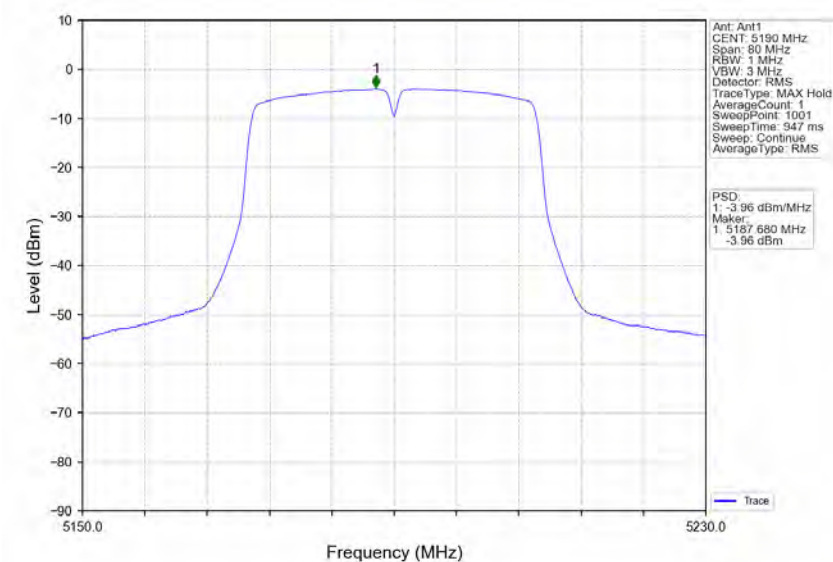
802.11n(HT20)_HCH_5240MHz_Ant2_NTNV



802.11n(HT20)_HCH_5240MHz_MIMO_NTNV



802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



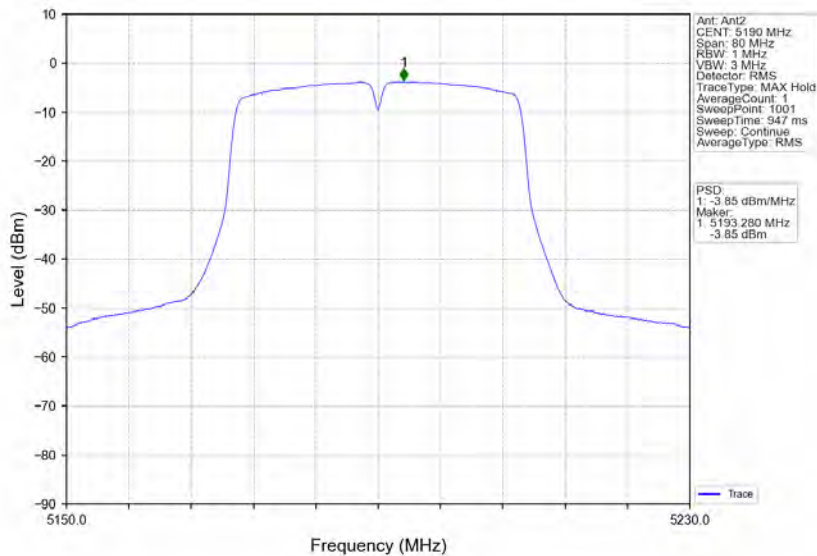
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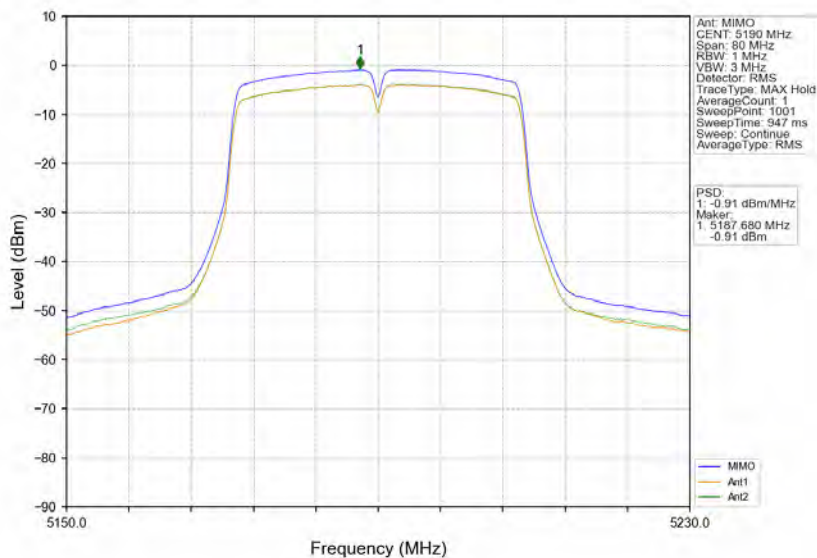
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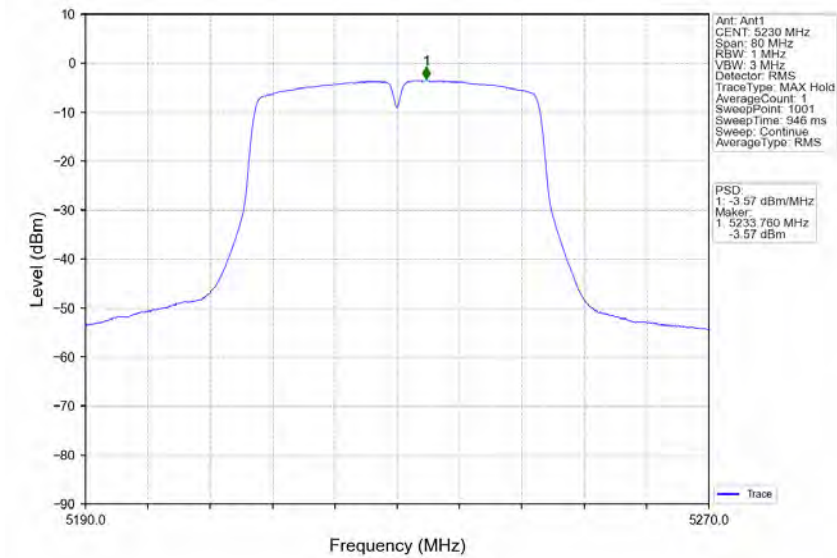
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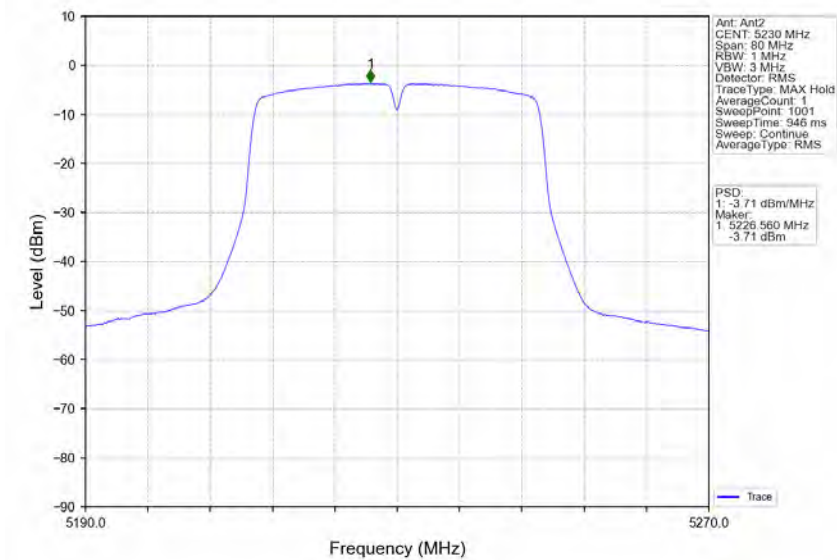
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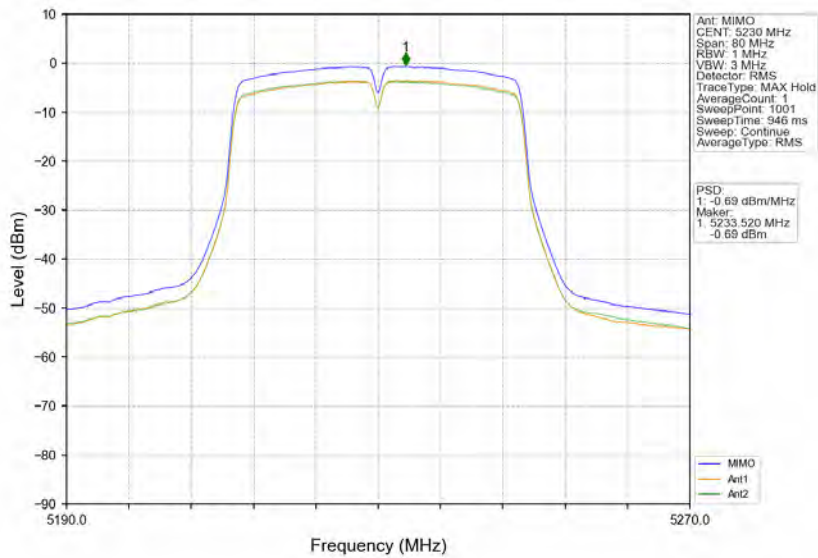
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



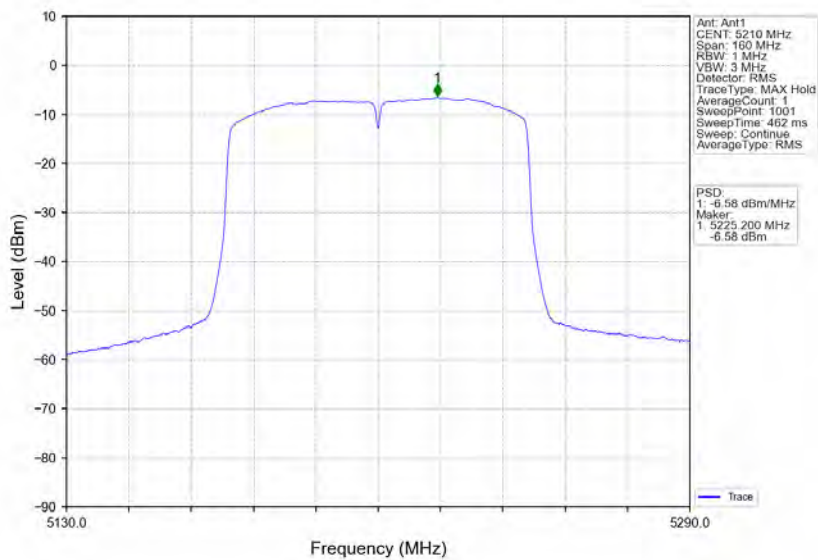
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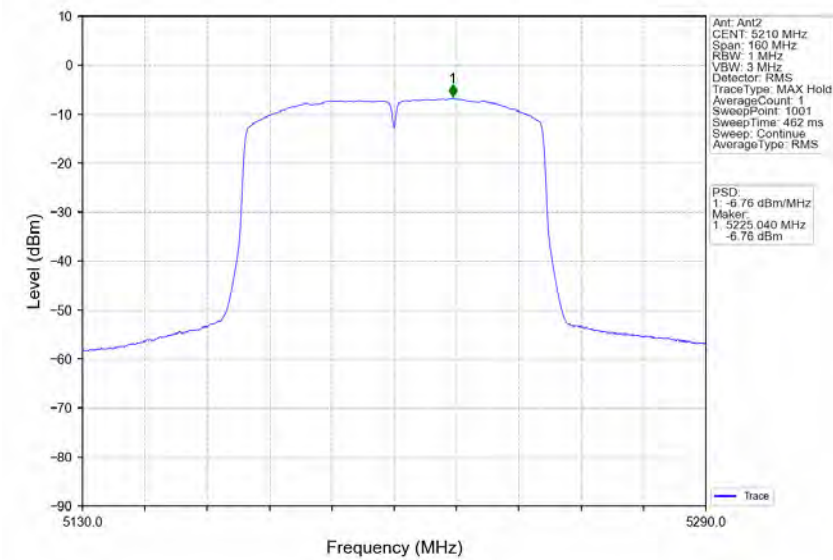
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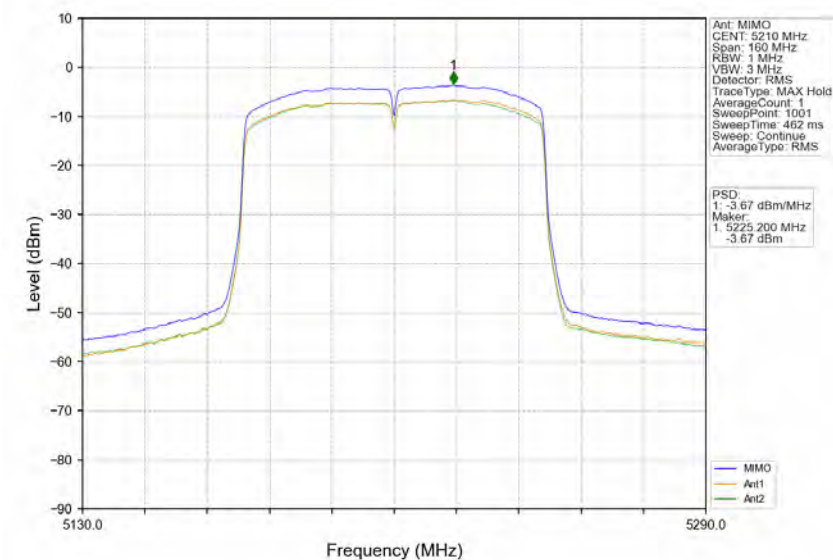
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant2_NTNV

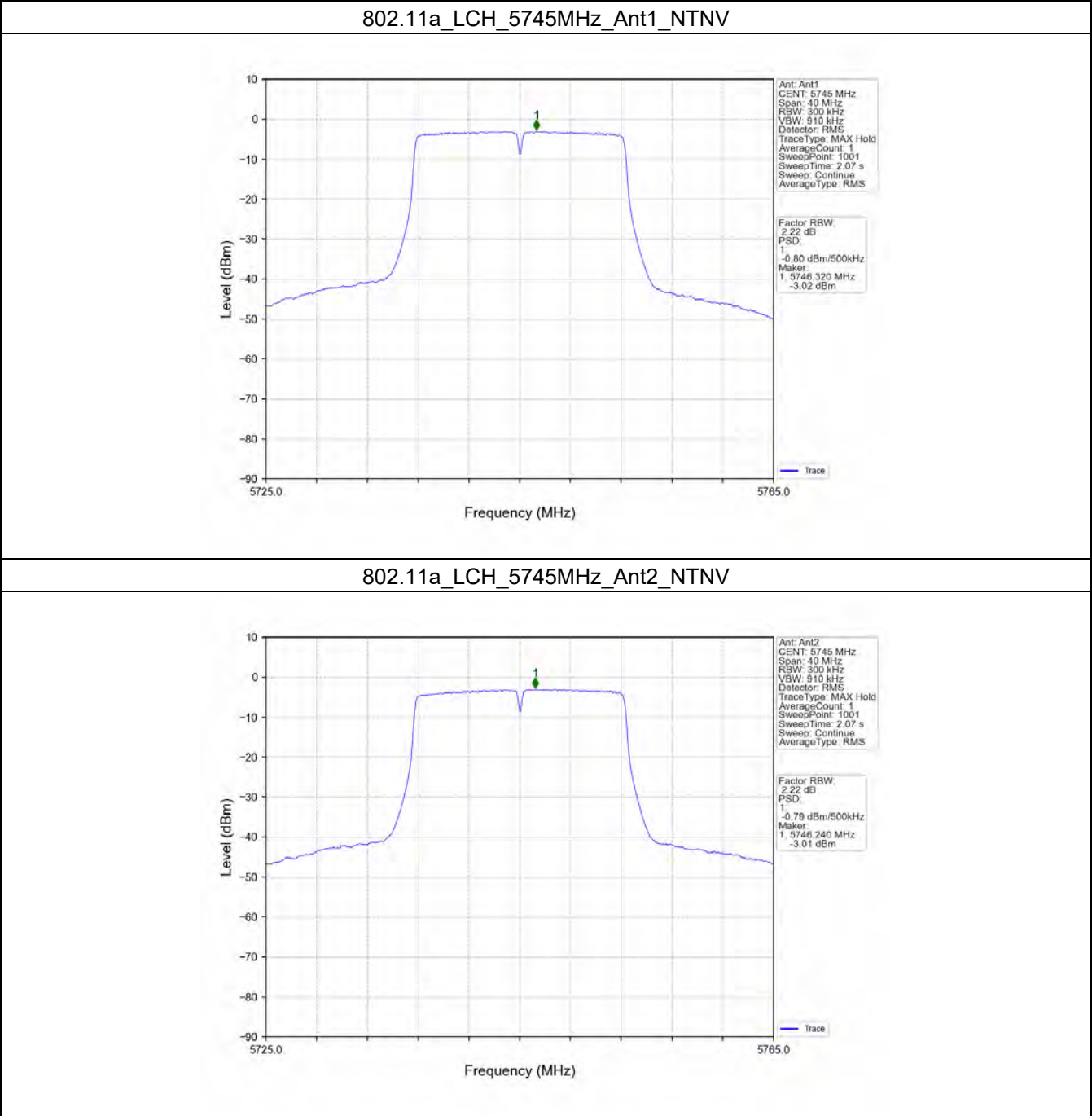


802.11ac(VHT80)_MCH_5210MHz_MIMO_NTNV



Note1: Antenna Gain: Ant1: 3.03dBi; Ant2: 3.03dBi;
Note2: Directional Gain: Uncorrelated(Directional Gain = Ant Gain)

4.2.2 Test Graph



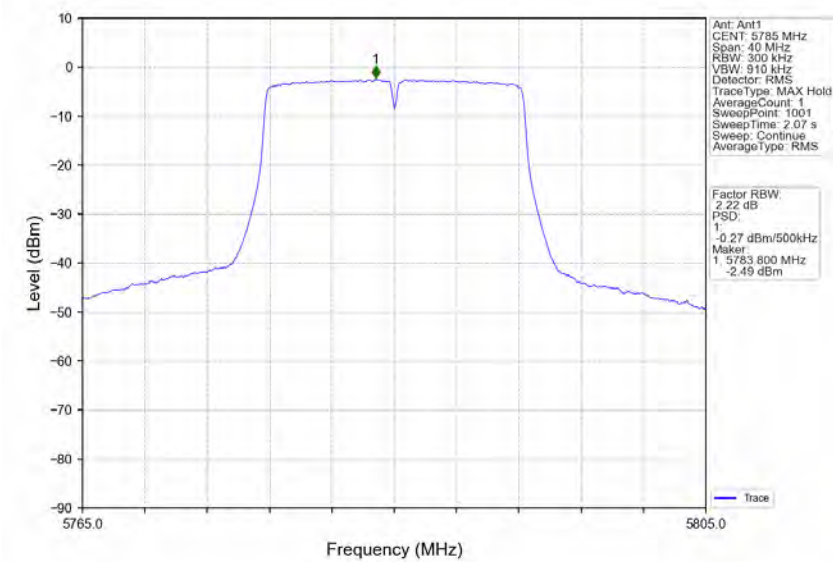
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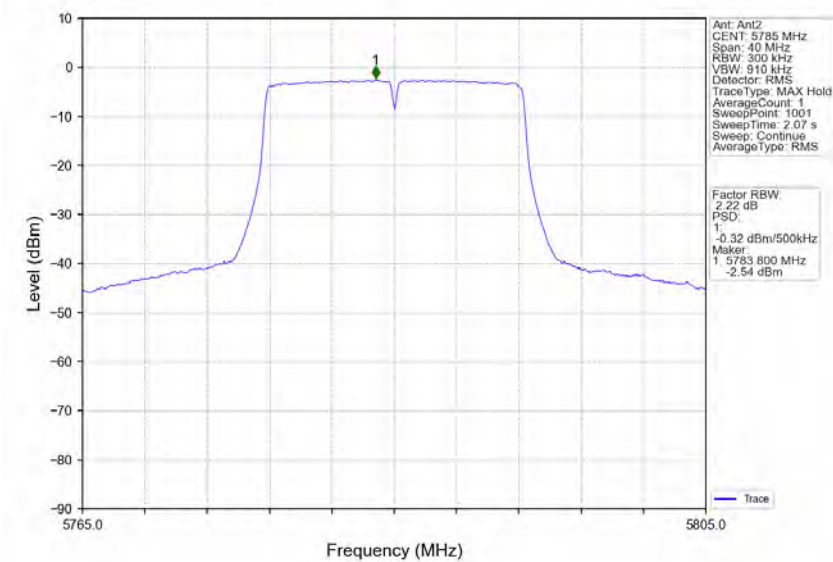
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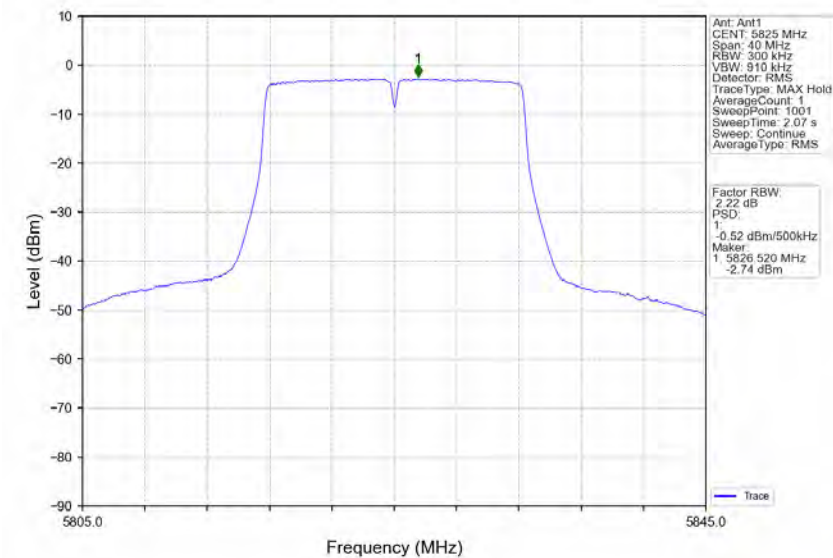
802.11a_MCH_5785MHz_Ant1_NTNV



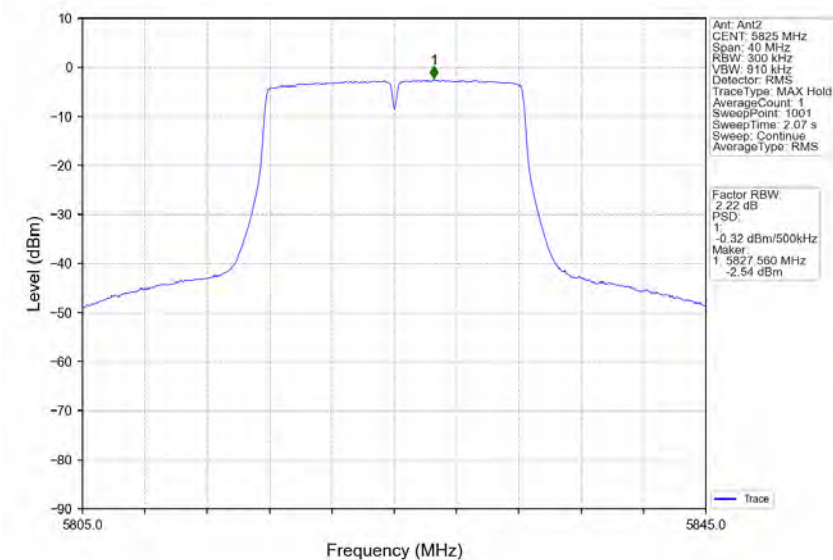
802.11a_MCH_5785MHz_Ant2_NTNV



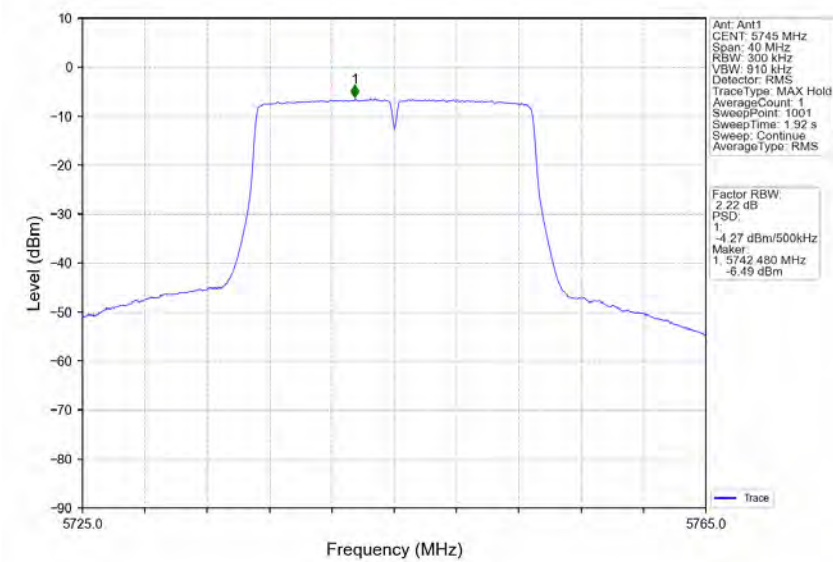
802.11a_HCH_5825MHz_Ant1_NTNV



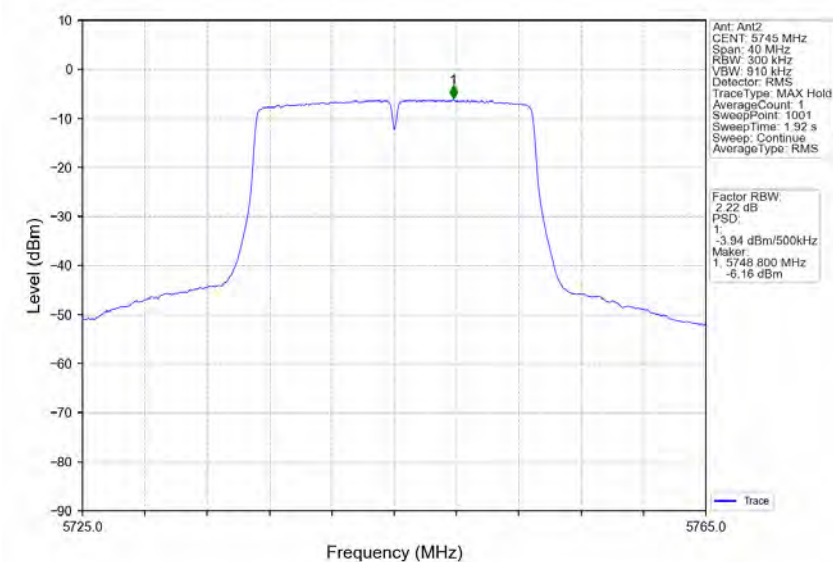
802.11a_HCH_5825MHz_Ant2_NTNV



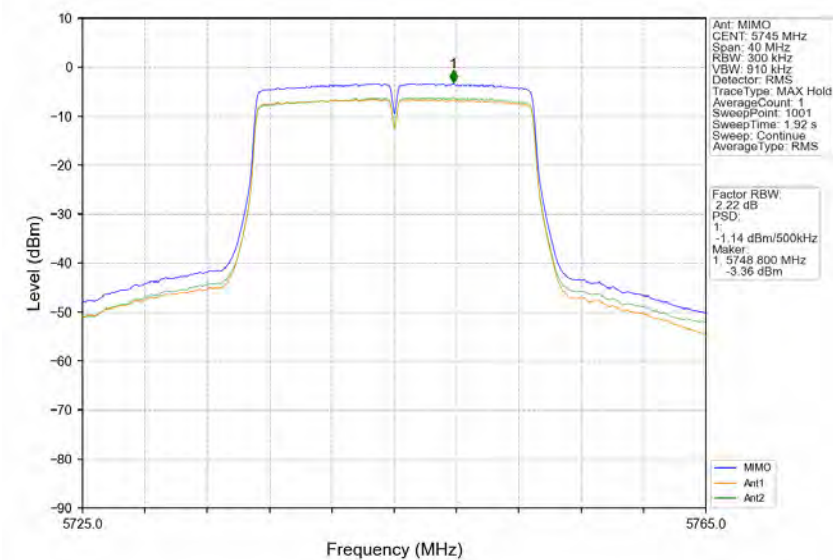
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



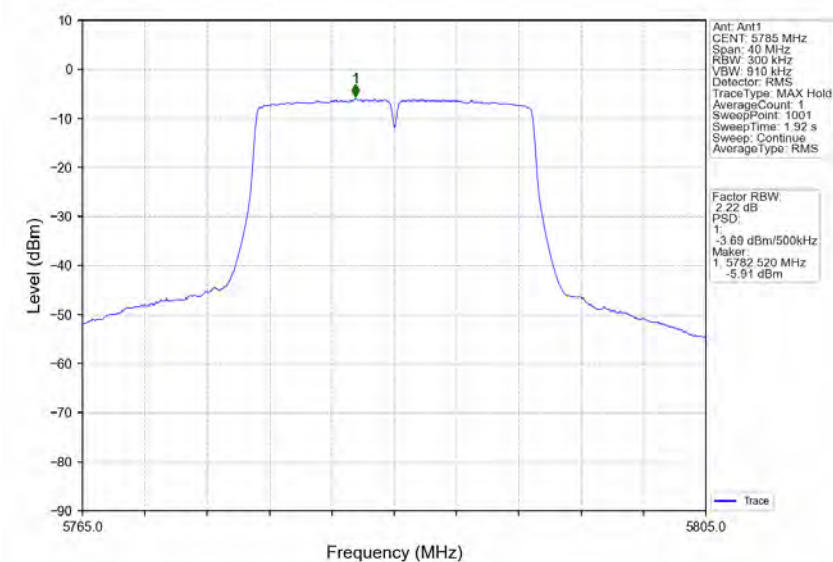
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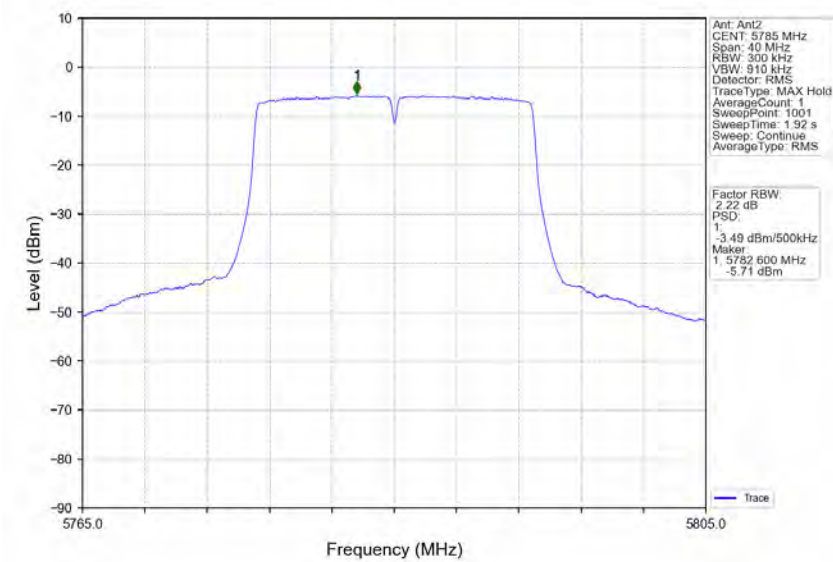
802.11n(HT20)_LCH_5745MHz_MIMO_NTNV



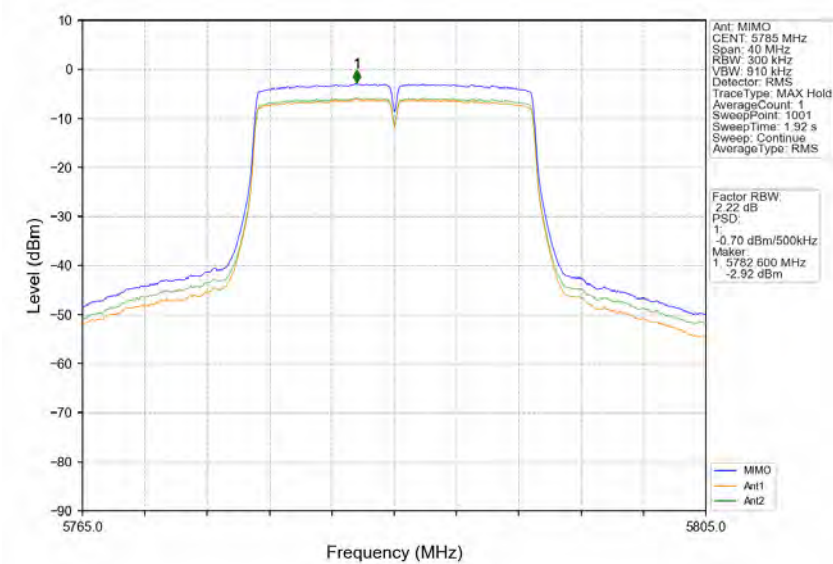
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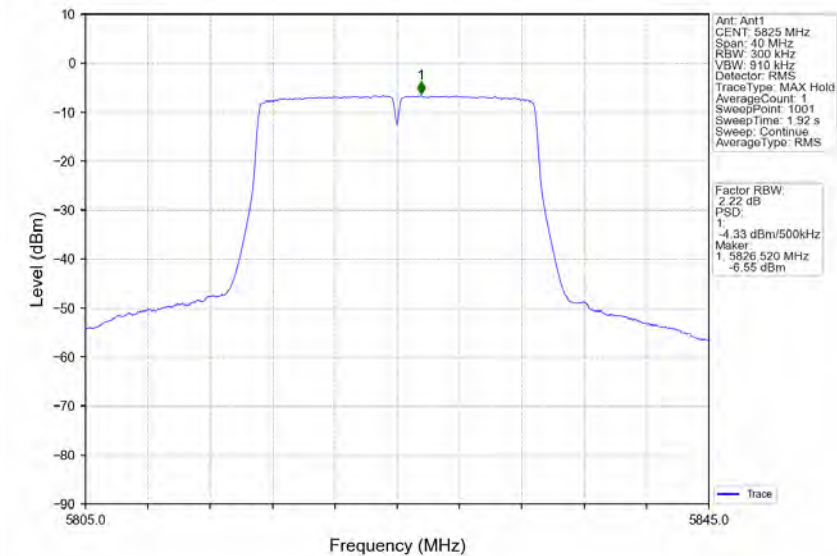
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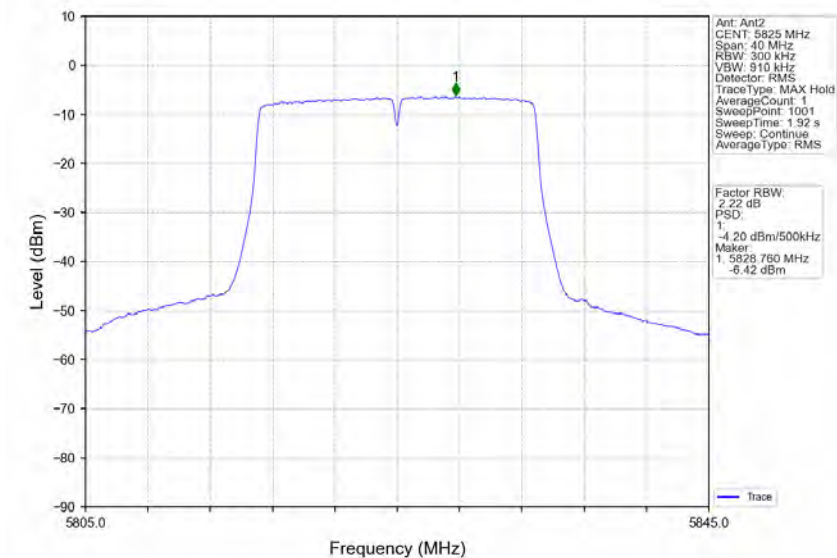
802.11n(HT20)_MCH_5785MHz_MIMO_NTNV



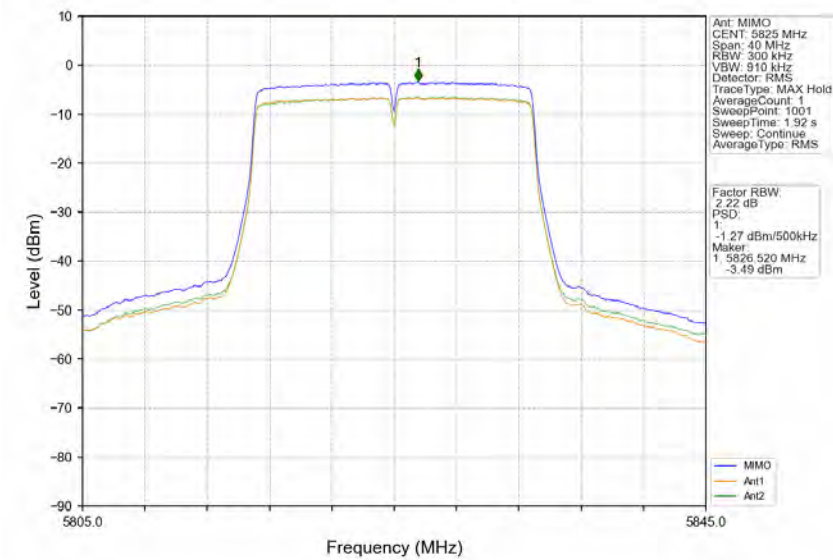
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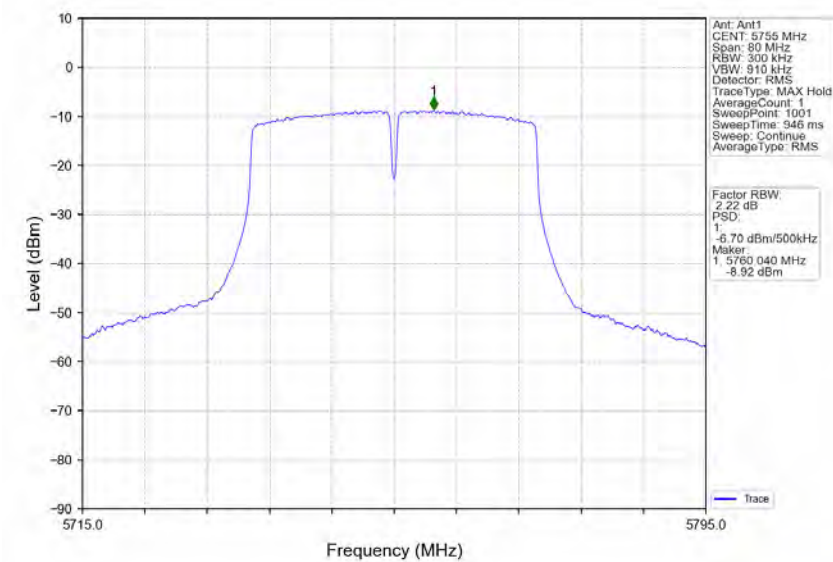
802.11n(HT20)_HCH_5825MHz_Ant2_NTNV



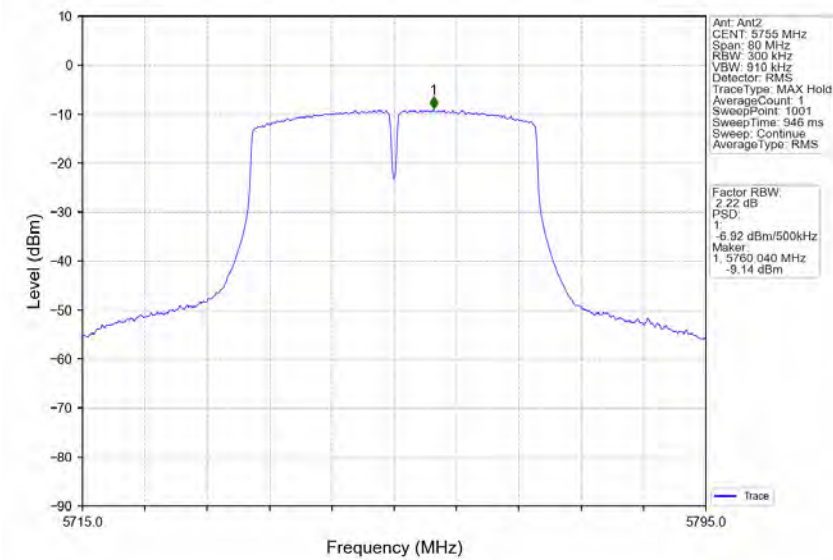
802.11n(HT20)_HCH_5825MHz_MIMO_NTNV



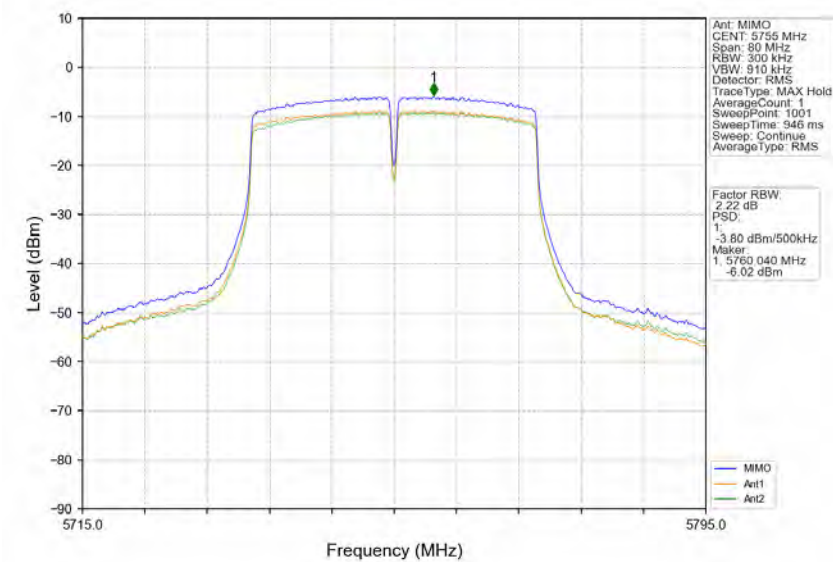
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



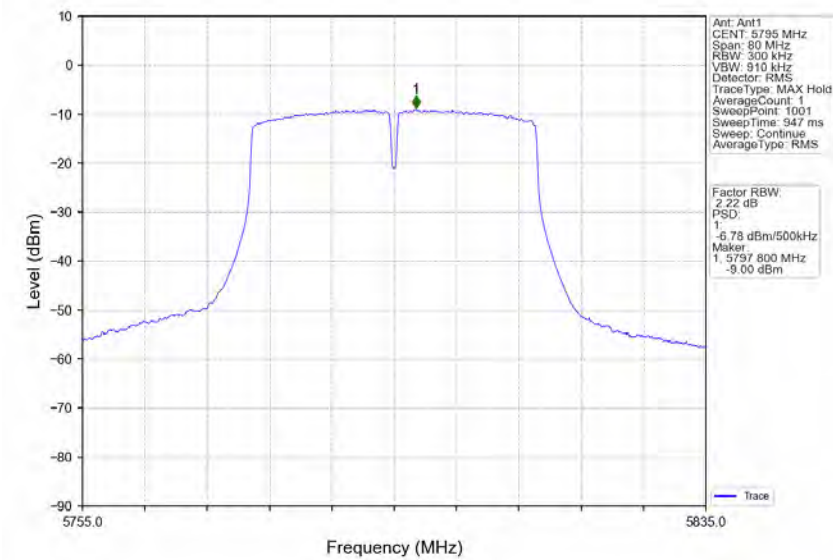
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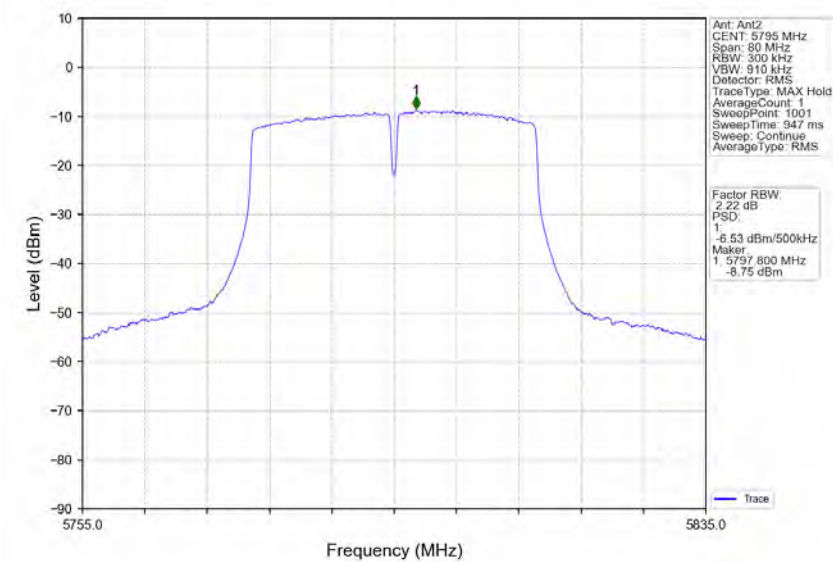
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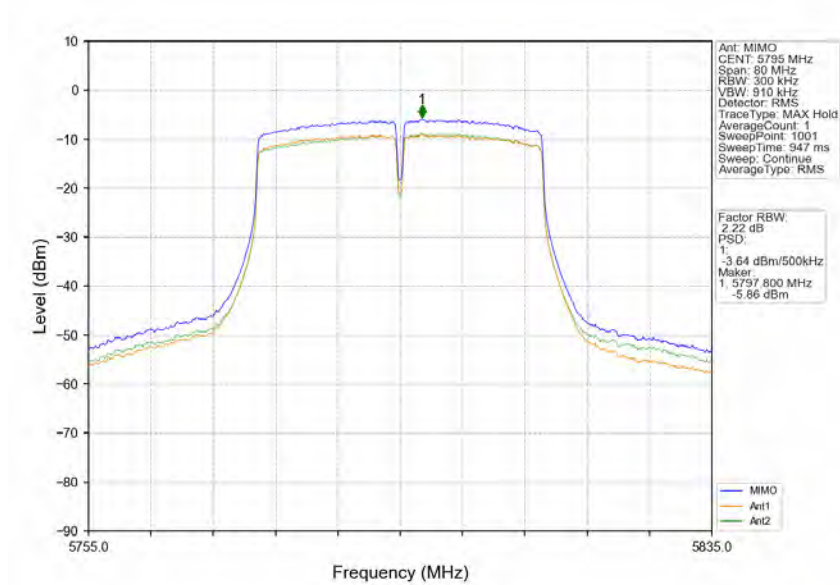
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



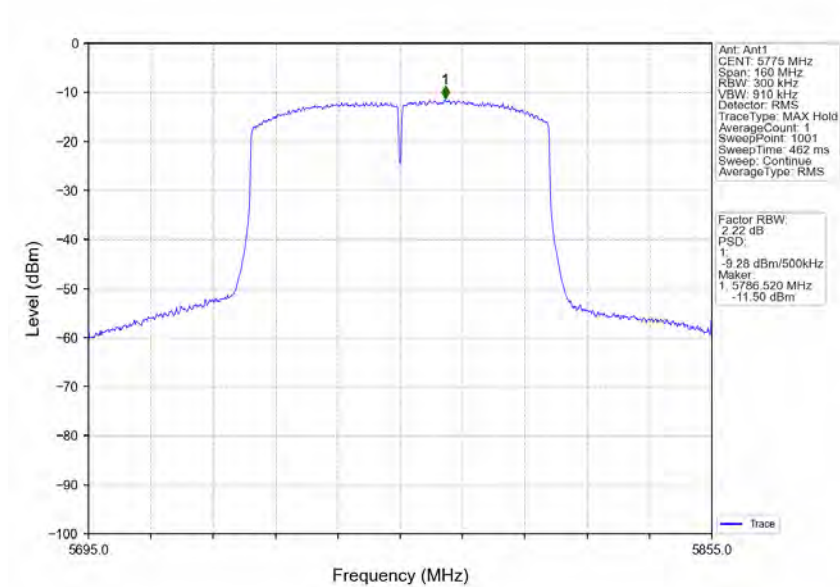
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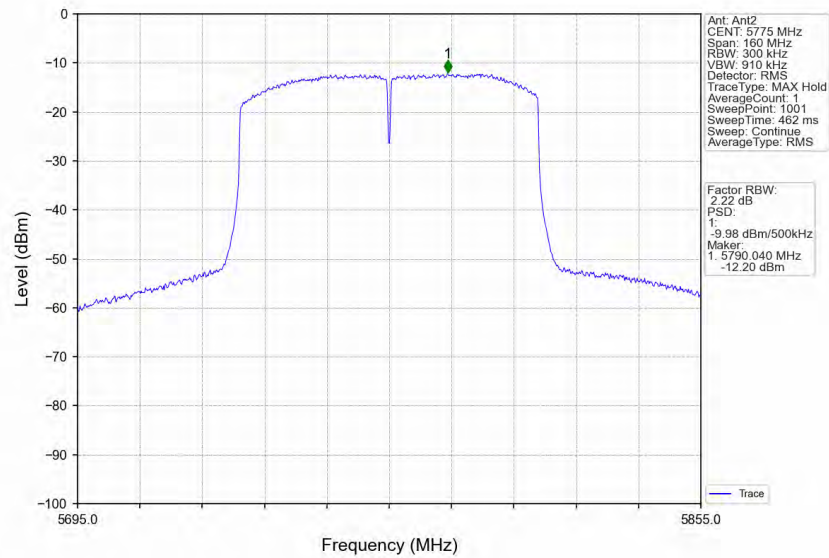
802.11n(HT40)_HCH_5795MHz_MIMO_NTNV



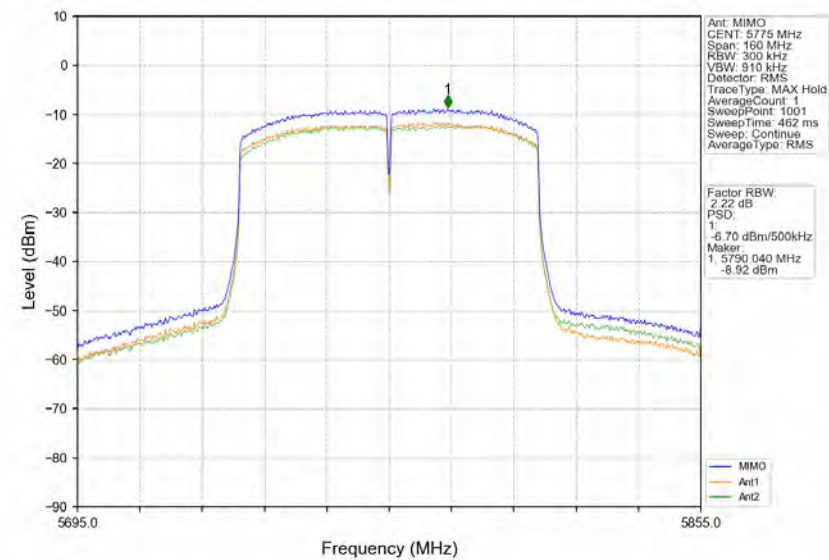
802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant2_NTNV



802.11ac(VHT80)_MCH_5775MHz_MIMO_NTNV



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5. Frequency Stability

5.1 Ant1

5.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5180	20	102	5179.987	5150 to 5250	Pass
				120	5179.987	5150 to 5250	Pass
				138	5179.988	5150 to 5250	Pass
			-30	120	5179.988	5150 to 5250	Pass
			-20	120	5179.989	5150 to 5250	Pass
			-10	120	5179.989	5150 to 5250	Pass
			0	120	5179.989	5150 to 5250	Pass
			10	120	5179.990	5150 to 5250	Pass
			30	120	5179.990	5150 to 5250	Pass
			40	120	5179.990	5150 to 5250	Pass
			50	120	5179.990	5150 to 5250	Pass
		5200	20	102	5199.992	5150 to 5250	Pass
				120	5199.992	5150 to 5250	Pass
				138	5199.992	5150 to 5250	Pass
			-30	120	5199.992	5150 to 5250	Pass
			-20	120	5199.991	5150 to 5250	Pass
			-10	120	5199.991	5150 to 5250	Pass
			0	120	5199.991	5150 to 5250	Pass
			10	120	5199.991	5150 to 5250	Pass
			30	120	5199.991	5150 to 5250	Pass
			40	120	5199.991	5150 to 5250	Pass
			50	120	5199.991	5150 to 5250	Pass
		5240	20	102	5239.992	5150 to 5250	Pass
				120	5239.992	5150 to 5250	Pass
				138	5239.992	5150 to 5250	Pass
			-30	120	5239.992	5150 to 5250	Pass
			-20	120	5239.992	5150 to 5250	Pass
			-10	120	5239.992	5150 to 5250	Pass
			0	120	5239.992	5150 to 5250	Pass
			10	120	5239.992	5150 to 5250	Pass
			30	120	5239.992	5150 to 5250	Pass
			40	120	5239.992	5150 to 5250	Pass
			50	120	5239.992	5150 to 5250	Pass
		5745	20	102	5744.990	5725 to 5850	Pass
				120	5744.990	5725 to 5850	Pass

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				138	5744.990	5725 to 5850	Pass
			-30	120	5744.990	5725 to 5850	Pass
			-20	120	5744.990	5725 to 5850	Pass
			-10	120	5744.991	5725 to 5850	Pass
			0	120	5744.991	5725 to 5850	Pass
			10	120	5744.991	5725 to 5850	Pass
			30	120	5744.991	5725 to 5850	Pass
			40	120	5744.991	5725 to 5850	Pass
			50	120	5744.991	5725 to 5850	Pass
		5785	20	102	5784.990	5725 to 5850	Pass
				120	5784.990	5725 to 5850	Pass
				138	5784.990	5725 to 5850	Pass
			-30	120	5784.991	5725 to 5850	Pass
			-20	120	5784.991	5725 to 5850	Pass
			-10	120	5784.991	5725 to 5850	Pass
			0	120	5784.991	5725 to 5850	Pass
			10	120	5784.991	5725 to 5850	Pass
			30	120	5784.991	5725 to 5850	Pass
			40	120	5784.991	5725 to 5850	Pass
			50	120	5784.991	5725 to 5850	Pass
		5825	20	102	5824.991	5725 to 5850	Pass
				120	5824.991	5725 to 5850	Pass
				138	5824.991	5725 to 5850	Pass
			-30	120	5824.991	5725 to 5850	Pass
			-20	120	5824.991	5725 to 5850	Pass
			-10	120	5824.991	5725 to 5850	Pass
			0	120	5824.991	5725 to 5850	Pass
			10	120	5824.991	5725 to 5850	Pass
			30	120	5824.991	5725 to 5850	Pass
			40	120	5824.991	5725 to 5850	Pass
			50	120	5824.991	5725 to 5850	Pass
	MIMO	5190	20	102	5189.992	5150 to 5250	Pass
				120	5189.992	5150 to 5250	Pass
				138	5189.992	5150 to 5250	Pass
			-30	120	5189.992	5150 to 5250	Pass
			-20	120	5189.992	5150 to 5250	Pass
			-10	120	5189.992	5150 to 5250	Pass
			0	120	5189.992	5150 to 5250	Pass
			10	120	5189.992	5150 to 5250	Pass
			30	120	5189.992	5150 to 5250	Pass
			40	120	5189.992	5150 to 5250	Pass
			50	120	5189.992	5150 to 5250	Pass
		5230	20	102	5229.993	5150 to 5250	Pass
				120	5229.992	5150 to 5250	Pass



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				138	5229.992	5150 to 5250	Pass
			-30	120	5229.992	5150 to 5250	Pass
			-20	120	5229.992	5150 to 5250	Pass
			-10	120	5229.992	5150 to 5250	Pass
			0	120	5229.992	5150 to 5250	Pass
			10	120	5229.992	5150 to 5250	Pass
			30	120	5229.992	5150 to 5250	Pass
			40	120	5229.992	5150 to 5250	Pass
			50	120	5229.992	5150 to 5250	Pass
		5755	20	102	5754.991	5725 to 5850	Pass
				120	5754.991	5725 to 5850	Pass
				138	5754.991	5725 to 5850	Pass
			-30	120	5754.991	5725 to 5850	Pass
			-20	120	5754.992	5725 to 5850	Pass
			-10	120	5754.992	5725 to 5850	Pass
			0	120	5754.992	5725 to 5850	Pass
			10	120	5754.992	5725 to 5850	Pass
			30	120	5754.992	5725 to 5850	Pass
			40	120	5754.992	5725 to 5850	Pass
			50	120	5754.992	5725 to 5850	Pass
		5795	20	102	5794.991	5725 to 5850	Pass
				120	5794.991	5725 to 5850	Pass
				138	5794.991	5725 to 5850	Pass
			-30	120	5794.991	5725 to 5850	Pass
			-20	120	5794.991	5725 to 5850	Pass
			-10	120	5794.991	5725 to 5850	Pass
			0	120	5794.991	5725 to 5850	Pass
			10	120	5794.991	5725 to 5850	Pass
			30	120	5794.992	5725 to 5850	Pass
			40	120	5794.992	5725 to 5850	Pass
			50	120	5794.992	5725 to 5850	Pass
		5210	20	102	5209.992	5150 to 5250	Pass
				120	5209.992	5150 to 5250	Pass
				138	5209.992	5150 to 5250	Pass
			-30	120	5209.992	5150 to 5250	Pass
			-20	120	5209.992	5150 to 5250	Pass
			-10	120	5209.992	5150 to 5250	Pass
			0	120	5209.992	5150 to 5250	Pass
			10	120	5209.992	5150 to 5250	Pass
			30	120	5209.992	5150 to 5250	Pass
			40	120	5209.992	5150 to 5250	Pass
			50	120	5209.992	5150 to 5250	Pass
		5775	20	102	5774.991	5725 to 5850	Pass
				120	5774.991	5725 to 5850	Pass

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				138	5774.991	5725 to 5850	Pass
			-30	120	5774.992	5725 to 5850	Pass
			-20	120	5774.992	5725 to 5850	Pass
			-10	120	5774.992	5725 to 5850	Pass
			0	120	5774.992	5725 to 5850	Pass
			10	120	5774.992	5725 to 5850	Pass
			30	120	5774.992	5725 to 5850	Pass
			40	120	5774.992	5725 to 5850	Pass
			50	120	5774.992	5725 to 5850	Pass

5.2 Ant2

5.2.1 Test Result

Ant2							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5180	20	102	5179.991	5150 to 5250	Pass
				120	5179.991	5150 to 5250	Pass
				138	5179.991	5150 to 5250	Pass
			-30	120	5179.991	5150 to 5250	Pass
			-20	120	5179.991	5150 to 5250	Pass
			-10	120	5179.991	5150 to 5250	Pass
			0	120	5179.991	5150 to 5250	Pass
			10	120	5179.991	5150 to 5250	Pass
			30	120	5179.991	5150 to 5250	Pass
			40	120	5179.991	5150 to 5250	Pass
			50	120	5179.991	5150 to 5250	Pass
		5200	20	102	5199.991	5150 to 5250	Pass
				120	5199.991	5150 to 5250	Pass
				138	5199.991	5150 to 5250	Pass
			-30	120	5199.991	5150 to 5250	Pass
			-20	120	5199.991	5150 to 5250	Pass
			-10	120	5199.991	5150 to 5250	Pass
			0	120	5199.991	5150 to 5250	Pass
			10	120	5199.991	5150 to 5250	Pass
			30	120	5199.991	5150 to 5250	Pass
			40	120	5199.991	5150 to 5250	Pass
			50	120	5199.991	5150 to 5250	Pass
		5240	20	102	5239.992	5150 to 5250	Pass
				120	5239.992	5150 to 5250	Pass
				138	5239.992	5150 to 5250	Pass
			-30	120	5239.992	5150 to 5250	Pass
			-20	120	5239.992	5150 to 5250	Pass
			-10	120	5239.992	5150 to 5250	Pass

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			0	120	5239.992	5150 to 5250	Pass
			10	120	5239.992	5150 to 5250	Pass
			30	120	5239.992	5150 to 5250	Pass
			40	120	5239.992	5150 to 5250	Pass
			50	120	5239.992	5150 to 5250	Pass
		5745	20	102	5744.992	5725 to 5850	Pass
				120	5744.992	5725 to 5850	Pass
				138	5744.992	5725 to 5850	Pass
			-30	120	5744.992	5725 to 5850	Pass
			-20	120	5744.992	5725 to 5850	Pass
			-10	120	5744.992	5725 to 5850	Pass
			0	120	5744.992	5725 to 5850	Pass
			10	120	5744.992	5725 to 5850	Pass
			30	120	5744.992	5725 to 5850	Pass
			40	120	5744.992	5725 to 5850	Pass
			50	120	5744.992	5725 to 5850	Pass
		5785	20	102	5784.991	5725 to 5850	Pass
				120	5784.991	5725 to 5850	Pass
				138	5784.991	5725 to 5850	Pass
			-30	120	5784.991	5725 to 5850	Pass
			-20	120	5784.991	5725 to 5850	Pass
			-10	120	5784.991	5725 to 5850	Pass
			0	120	5784.991	5725 to 5850	Pass
			10	120	5784.991	5725 to 5850	Pass
			30	120	5784.991	5725 to 5850	Pass
			40	120	5784.991	5725 to 5850	Pass
			50	120	5784.991	5725 to 5850	Pass
		5825	20	102	5824.991	5725 to 5850	Pass
				120	5824.991	5725 to 5850	Pass
				138	5824.991	5725 to 5850	Pass
			-30	120	5824.991	5725 to 5850	Pass
			-20	120	5824.991	5725 to 5850	Pass
			-10	120	5824.991	5725 to 5850	Pass
			0	120	5824.991	5725 to 5850	Pass
			10	120	5824.991	5725 to 5850	Pass
			30	120	5824.991	5725 to 5850	Pass
			40	120	5824.991	5725 to 5850	Pass
			50	120	5824.991	5725 to 5850	Pass
	MIMO	5190	20	102	5189.992	5150 to 5250	Pass
				120	5189.992	5150 to 5250	Pass
				138	5189.992	5150 to 5250	Pass
			-30	120	5189.992	5150 to 5250	Pass
			-20	120	5189.992	5150 to 5250	Pass
			-10	120	5189.992	5150 to 5250	Pass

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			0	120	5189.992	5150 to 5250	Pass
			10	120	5189.992	5150 to 5250	Pass
			30	120	5189.992	5150 to 5250	Pass
			40	120	5189.992	5150 to 5250	Pass
			50	120	5189.992	5150 to 5250	Pass
		5230	20	102	5229.992	5150 to 5250	Pass
				120	5229.992	5150 to 5250	Pass
				138	5229.992	5150 to 5250	Pass
			-30	120	5229.992	5150 to 5250	Pass
			-20	120	5229.992	5150 to 5250	Pass
			-10	120	5229.992	5150 to 5250	Pass
			0	120	5229.992	5150 to 5250	Pass
			10	120	5229.992	5150 to 5250	Pass
			30	120	5229.992	5150 to 5250	Pass
			40	120	5229.992	5150 to 5250	Pass
			50	120	5229.992	5150 to 5250	Pass
		5755	20	102	5754.992	5725 to 5850	Pass
				120	5754.992	5725 to 5850	Pass
				138	5754.992	5725 to 5850	Pass
			-30	120	5754.992	5725 to 5850	Pass
			-20	120	5754.992	5725 to 5850	Pass
			-10	120	5754.992	5725 to 5850	Pass
			0	120	5754.992	5725 to 5850	Pass
			10	120	5754.992	5725 to 5850	Pass
			30	120	5754.992	5725 to 5850	Pass
			40	120	5754.992	5725 to 5850	Pass
			50	120	5754.992	5725 to 5850	Pass
		5795	20	102	5794.992	5725 to 5850	Pass
				120	5794.992	5725 to 5850	Pass
				138	5794.992	5725 to 5850	Pass
			-30	120	5794.992	5725 to 5850	Pass
			-20	120	5794.992	5725 to 5850	Pass
			-10	120	5794.992	5725 to 5850	Pass
			0	120	5794.992	5725 to 5850	Pass
			10	120	5794.992	5725 to 5850	Pass
			30	120	5794.992	5725 to 5850	Pass
			40	120	5794.992	5725 to 5850	Pass
			50	120	5794.992	5725 to 5850	Pass
		5210	20	102	5209.992	5150 to 5250	Pass
				120	5209.992	5150 to 5250	Pass
				138	5209.992	5150 to 5250	Pass
			-30	120	5209.992	5150 to 5250	Pass
			-20	120	5209.992	5150 to 5250	Pass
			-10	120	5209.992	5150 to 5250	Pass



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			0	120	5209.992	5150 to 5250	Pass
			10	120	5209.992	5150 to 5250	Pass
			30	120	5209.992	5150 to 5250	Pass
			40	120	5209.992	5150 to 5250	Pass
			50	120	5209.992	5150 to 5250	Pass
		5775	20	102	5774.992	5725 to 5850	Pass
				120	5774.992	5725 to 5850	Pass
				138	5774.992	5725 to 5850	Pass
			-30	120	5774.992	5725 to 5850	Pass
			-20	120	5774.992	5725 to 5850	Pass
			-10	120	5774.992	5725 to 5850	Pass
			0	120	5774.992	5725 to 5850	Pass
			10	120	5774.992	5725 to 5850	Pass
			30	120	5774.992	5725 to 5850	Pass
			40	120	5774.992	5725 to 5850	Pass
			50	120	5774.992	5725 to 5850	Pass

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