



FCC LISTED, REGISTRATION
NUMBER: 2764.01

ISED LISTED REGISTRATION
NUMBER: 23595-1

Test Report No:

3669ERM.007A2

Test report

USA FCC Part 15.407 (U-NII), 15.209; & CANADA RSS-247, RSS-Gen
Unlicensed National Information Infrastructure Devices. General technical requirements.
License-Exempt Radio Apparatus (All Frequency Bands): Category I Equipment.
General Requirements and Information for the Certification of Radio Apparatus.

(*) Identification of item tested	Infotainment Head Unit
(*) Trademark	BMW
(*) Model and /or type reference	IDC23H
Other identification of the product	FCC ID: T8GIDC23H IC: 6434A-IDC23H
(*) Features	Bluetooth classic; BLE; Wi-Fi 2.4GHz; Wi-Fi 5GHz; GNSS
Manufacturer	HARMAN BECKER AUTOMOTIVE SYSTEMS GMBH BECKER-GOERING-STR. 16; 76307 KARLSBAD GERMANY
Test method requested, standard	USA FCC Part 15.407 10-1-20 Edition : Unlicensed National Information Infrastructure Devices. General technical requirements. USA FCC Part 15.209 10-1-20 Edition: Radiated emission limits; general requirements. CANADA RSS-247 Issue 2 (February 2017). CANADA RSS-Gen Issue 5 (April 2018). 789033 D02 General UNII Test Procedures New Rules v02r01 Guidance for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager
Date of issue	02-11-2023
Report template No	FDT08_23 (*) "Data provided by the client"

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Acronyms

Acronym ID	Acronym Description
	Emission Bandwidth
# of Tx Chains	Number of Transmission Chains
Avg Power	Maximum Average Conducted Output Power
DC	Duty Cycle
Freq	Frequency
Max EIRP	Maximum Burst EIRP
Mod	Modulation
Mode	Mode
Occ Ch BW	Occupied Channel Bandwidth
Operation Band	Operation Band
PSD	Power Spectrum Density
Port	Active Port
TPC	TPC

Competences and guarantees

DEKRA Certification Inc. is a testing laboratory accredited by A2LA (The American Association for Laboratory Accreditation), to perform the tests indicated in the Certificate 2764.01

DEKRA Certification Inc. is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA Certification Inc. has a calibration and maintenance program for its measurement equipment.

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4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Certification Inc. and the Accreditation Bodies.

Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Certification internal document PODT000.

Test case	Frequency (MHz)	U ($k=2$)	Units
RF Power and PSD	5150-5850	0.88	dB
Occupied Bandwidth		1.87	%
Band Edge		0.64	dB
Radiated Spurious Emission	30-180	4.27	dB
	180-1000	3.14	dB
	1000-18000	3.30	dB
	18000-40000	3.49	dB

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").
2. The sample consists of a The main functionalities are: Navigation, USB, voice recognition and several interfaces to the vehicle and Bluetooth / WLAN. The Head-unit provides different interfaces like: AR-CAM input, Video-out APIX3 (for the connection of an external Display), 3 USB interfaces..

DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples used for testing have been selected by: The client.

Sample S/01 is composed of the following elements:

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/01	3669/03	Infotainment Head Unit Beamforming	IDC23H High 8155	B44439N035900012	04/07/2022	Element Under Test
S/01	3669/01	Infotainment Head Unit No Beamforming	IDC23H High 8155	B44439N035900012	04/07/2022	Element Under Test

Sample S/01 is composed of the following accessories:

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/01	3669/05	Harness	-	-	04/07/2022	Accessory
S/01	3669/09	Quad mate AXZ - High speed Fakra to SMA (male)	MGU22 RF	-	04/07/2022	Accessory
S/01	3669/37	BR-Adapter	Harman	-	04/07/2022	Accessory
S/01	3669/44	Ethernet to USB Adapter	UE300	220B191005905	04/07/2022	Accessory

1. Sample S/01 was used for the test(s): All Conducted tests indicated in appendix A, B AND C.

Sample S/02 is composed of the following elements:

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/01	3669/01	Infotainment Head Unit No Beamforming	IDC23H High 8155	B44439N035900012	04/07/2022	Element Under Test
S/01	3669/11	BT/WLAN Antenna with SMA (male) connector	$\lambda/4$ coax cable antenna BM	-	04/07/2022	Element Under Test

Sample S/02 is composed of the following accessories:

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/01	3669/05	Harness	-	-	04/07/2022	Accessory
S/01	3669/08	Quad mate AXZ - High speed Fakra to SMA (male)	MGU22 RF	-	04/07/2022	Accessory
S/01	3669/35	BR-Adapter	Harman	-	04/07/2022	Accessory
S/01	3669/39	Plug cable for BR-Adapter	Harman	-	04/07/2022	Accessory
S/01	3669/41	HSD (male) to OABR cable	Harman	-	04/07/2022	Accessory
S/01	3669/44	Ethernet to USB Adapter	UE300	220B191005905	04/07/2022	Accessory

2. Sample S/02 was used for the test(s): All Radiated tests indicated in appendix A, B and C.

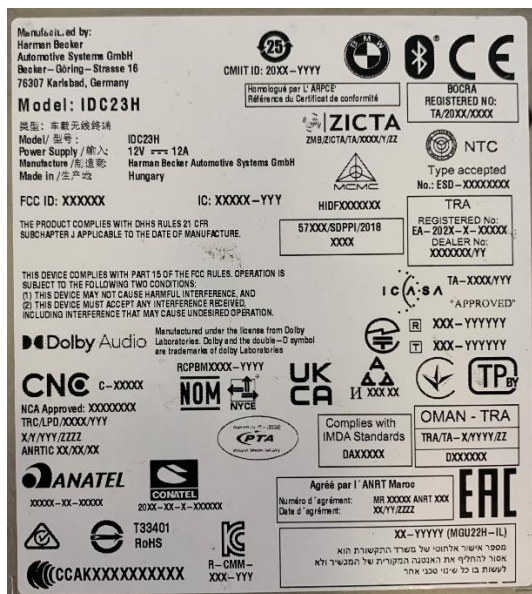
Test sample description

Test Sample description (compulsory information for EMC and RF testing services)

Ports..... :	Port name and description	Cable											
		Specified length [m]	Attached during test	Shielded	Coupled to patient								
	BT/Wi-Fi Antenna	2	☒	☐	☐								
	USB1/2	2	☒	☐	☐								
	Power	2	☒	☐	☐								
	CID	2	☒	☐	☐								
	AR-Cam	2	☒	☐	☐								
Supplementary information to the ports..... :	100 Base T1/1G Base T1/GPS/DCS/HUD/DFE												
	2	☒	☐	☐									
Rated power supply	Voltage and Frequency		Reference poles										
			L1	L2	L3	N	PE						
	☐	AC:	☐	☐	☐	☐	☐						
	☐	AC:	☐	☐	☐	☐	☐						
	☒	DC: 8 - 16 Vdc											
	☐	DC:											
Rated Power	No Data Provided												
Clock frequencies.....	No Data Provided												
Other parameters	No Data Provided												
Software version	22w05.3-1-21												
Hardware version	5.1.5												
Dimensions in cm (W x H x D)	No Data Provided												
Mounting position	☐	Table top equipment											
	☐	Wall/Ceiling mounted equipment											
	☐	Floor standing equipment											
	☐	Hand-held equipment											
	☒	Other: Automotive											

Modules/parts.....:	Module/parts of test item	Type	Manufacturer
	N/A		
Accessories (not part of the test item):	Description	Type	Manufacturer
	N/A		
Documents as provided by the applicant.....:	Description	File name	Issue date
	Declaration Equipment Data	FDT30_18 Declaration Equipment Data IDC23_8155_20220318	04/01/2022

Copy of marking plate:



Identification of the client

HARMAN BECKER AUTOMOTIVE SYSTEMS GMBH
BECKER-GOERING-STR. 16; 76307 KARLSBAD
GERMANY

Testing period and place

Test Location	DEKRA Certification Inc.
Date (start)	06-27-2022
Date (finish)	07-15-2022

Document history

Report number	Date	Description
3669ERM.007	08-05-2022	First release.
3669ERM.007A1	01-04-2023	Second release. Added AX mode Partial RU test results in Appendix B. This modification test report cancels and replaces the test report 3669ERM.007.
3669ERM.007A2	02-11-2023	Third release. Typo in the title of RS247 (cover page). This modification test report cancels and replaces the test report 3669ERM.007A1.

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 20 % Max. = 75 %

In the semi anechoic chamber, the following limits were not exceeded during the test.

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 20 % Max. = 75 %

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 20 % Max. = 75 %

Remarks and comments

The tests have been performed by the technical personnel: Lakshmi Gollamudi, Juliana Cherry, Yuri Barone, Nasir Khan and Koji Nishimoto.

List of equipment used during the test

Conducted Measurements

CONTROL NUMBER	DESCRIPTION	Serial No	LAST CALIBRATION	NEXT CALIBRATION
101	Espec Chamber Unit	19248	2022-02-28	2023-02-28
1039	Fsv40 Signal Analyzer 40GHz	101627	2020-09-24	2022-09-24
1107	Ethernet SNMP Thermometer	60038026952	2020-08-16	2022-08-16
1313	Wireless Measurement Software R&S WMS32	-	N/A	N/A

Radiated Measurements

CONTROL NUMBER	DESCRIPTION	Serial No	LAST CALIBRATION	NEXT CALIBRATION
981	Low Noise Preamplifier	1711156B	2020-11-10	2022-11-10
1012	ESR26 EMI Test Receiver	101478	2022-04-12	2024-04-12
1014	FSV40 Signal Analyzer 40GHz	101626	2021-05-19	2023-05-19
1056	3116C Double-Ridged Waveguide Horn Antennas	213179	2020-01-10	2023-01-10
1057	3115 Double-Ridged Waveguide Horn Antennas	211373	2020-06-03	2023-06-03
1065	3142E Biconilog Antenna	208587	2020-08-13	2023-08-13
1111	Ethernet SNMP Thermometer	60038026577	2020-08-16	2022-08-16
1179	Semi-Anechoic Chamber	F169021	N/A	N/A
1314	Wireless Measurement Software R&S WMS32	1040-OT102236	N/A	N/A

Testing verdicts

Fail	F
Not applicable	N/A
Not measured	N/M
Pass	P

Summary

FCC PART 15 PARAGRAPH / RSS-247			
Requirement	Test case	Verdict	Remark
FCC 15.407 (a) / RSS-247 6.2	Power Limits. Maximum Output Power	P	
FCC 15.407 (a) / RSS-247 6.2	Maximum Power Spectral Density	P	
FCC 2.1049 / RSS-Gen 6.7	99% Occupied Bandwidth	P	
FCC 15.403 / RSS-Gen 6.7	26 dB Emission Bandwidth	P	
FCC 15.407 (b) / RSS-247 6.2	Band-edge Conducted Emissions	P	
FCC 15.407 (e) / RSS 247 6.2.4.1	6 dB Emission Bandwidth	P	Refer 1
FCC 15.407 (b), 15.205 & 15.209 / RSS-Gen 8.9 & 8.10	Undesirable radiated emissions	P	
FCC 15.407 (g) / RSS-Gen 6.11 & 8.11	Frequency Stability	N/M	Refer 2
<u>Supplementary information and remarks:</u> - Only applicable to sub-band U-NII-3: 5.725 - 5.85 GHz. - The compliance is checked through a description of how this requirement is met that is provided by the applicant. Appendix B.1: SISO Appendix B.2: MIMO			

Appendix A: DUT Description

DUT Description

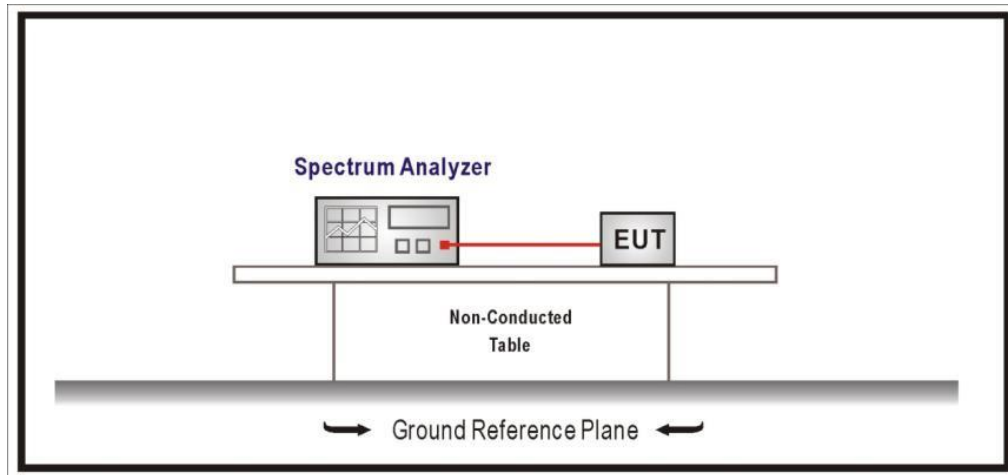
(*): The following information is provided by the client

Information	Description
Equipment type	Wi-Fi 5GHz
DFS Operating Mode	---
TPC Function	Yes
Antenna Specification	Equipment with two antennas (1/4 wave coax)
Operating Frequency Range	5150 - 5250 MHz 5250 – 5350 MHz 5470 – 5725 MHz 5725 – 5825 MHz
Nominal Channel Bandwidth	20/ 40/ 80 MHz
Antenna type	SISO: Radio A SISO Radio B MIMO Radio A+ Radio B
RF Output Power	14 dBm
Antenna gain	-2.8 dBi
Supply Voltage	12 Vdc
Modulation:	OFDM (QPSK, BPSK,16QAM,64QAM,256QAM,1024QAM)
Communication Mode:	IP Based (Load Based)
Transmit Data Rate:	802 .11 a/n/ac/ax Rates: IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps IEEE 802.11n: MCS0-7 IEEE 802.11ac: VHT SS1 MCS 0-9 VHT SS2 MCS 0-9 IEEE 802.11ax: HE SS1 MCS8 HE SS1 MCS9 HE SS1 MCS11
Geo-location capability	No

Appendix B: Tests results. Wi-Fi 5GHz

TEST CONDITIONS

CONDUCTED MEASUREMENTS:



RADIATED MEASUREMENTS:

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna is situated at 3 m for the frequency range 30-1000 MHz (Bilog antenna) and 1-18 GHz Double ridge horn antennas, and 1m for the frequency range 18 GHz- 26 GHz Double ridge horn antenna.

For radiated emissions in the range 18 - 26 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

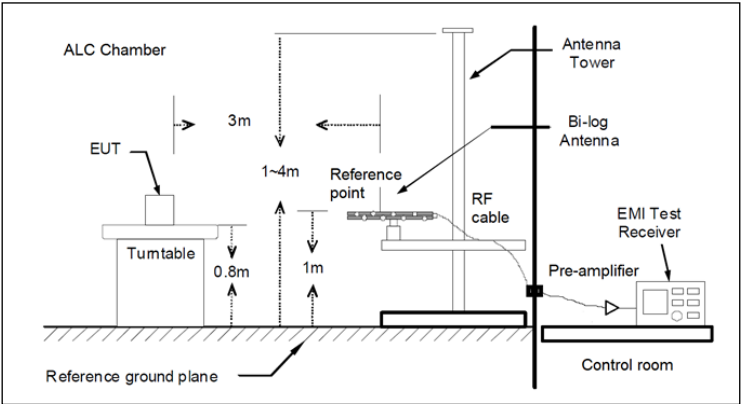


Fig A1: Radiated measurements Setup $f < 1$ GHz

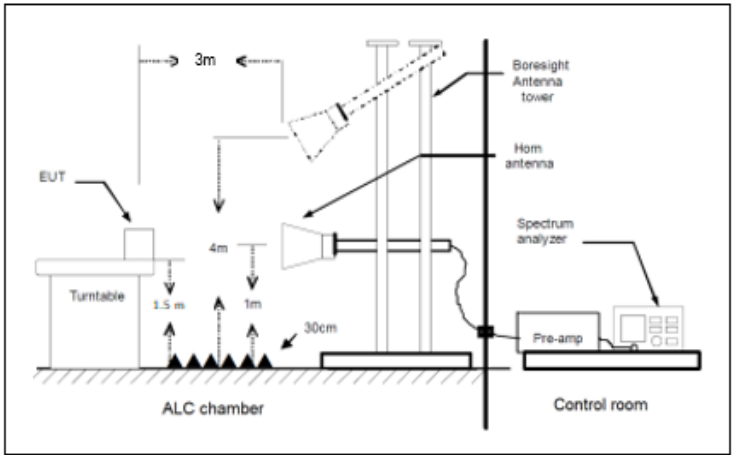


Fig A2: Radiated measurements setup $f > 1-18$ GHz

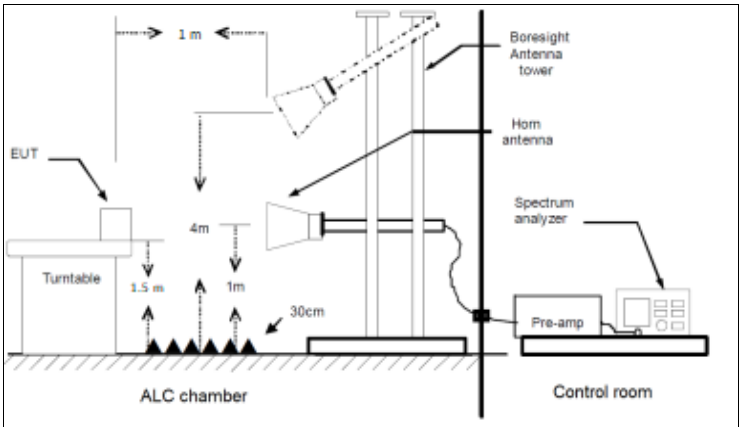


Fig A3: Radiated measurements setup $f > 18$ GHz

Appendix B.1: SISO

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TEST CONDITIONS

(*): Data provided by the client.

TEST CONDITIONS	DESCRIPTION
TC#01 ⁽¹⁾ (a mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 12 \text{ Vdc}$ <u>Channel Bandwidth:</u> 20 MHz <u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u> <u>UNII-1:</u> Lowest channel: 5180 MHz Middle channel: 5200 MHz Highest channel: 5240 MHz <u>UNII-2A:</u> Lowest channel: 5260 MHz Middle channel: 5280 MHz Highest channel: 5320 MHz <u>UNII-2C:</u> Lowest channel: 5500 MHz Middle channel: 5580 MHz Highest channel: 5700 MHz <u>UNII-3:</u> Lowest channel: 5745 MHz Middle channel: 5785 MHz Highest channel: 5825 MHz

TEST CONDITIONS	DESCRIPTION
TC#02 ⁽¹⁾ (n mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 12 \text{ Vdc}$ <u>Channel Bandwidth:</u> 20 MHz <u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u> <u>UNII-1:</u> Lowest channel: 5180 MHz Middle channel: 5200 MHz Highest channel: 5240 MHz <u>UNII-2A:</u> Lowest channel: 5260 MHz Middle channel: 5280 MHz Highest channel: 5320 MHz <u>UNII-2C:</u> Lowest channel: 5500 MHz Middle channel: 5580 MHz Highest channel: 5700 MHz <u>UNII-3:</u> Lowest channel: 5745 MHz Middle channel: 5785 MHz Highest channel: 5825 MHz <u>Channel Bandwidth:</u> 40 MHz <u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u> <u>UNII-1:</u> Lowest channel: 5190 MHz Highest channel: 5230 MHz <u>UNII-2A:</u> Lowest channel: 5270 MHz Highest channel: 5310 MHz <u>UNII-2C:</u> Lowest channel: 5510 MHz Middle channel: 5550 MHz Highest channel: 5670 MHz <u>UNII-3:</u> Lowest channel: 5755 MHz Highest channel: 5795 MHz

TEST CONDITIONS	DESCRIPTION
TC#03 ⁽¹⁾ (ac mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 12 \text{ Vdc}$
	<u>Channel Bandwidth:</u> 20 MHz
	<u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u>
	<u>UNII-1:</u> Lowest channel: 5180 MHz Middle channel: 5200 MHz Highest channel: 5240 MHz
	<u>UNII-2A:</u> Lowest channel: 5260 MHz Middle channel: 5280 MHz Highest channel: 5320 MHz
	<u>UNII-2C:</u> Lowest channel: 5500 MHz Middle channel: 5580 MHz Highest channel: 5700 MHz
	<u>UNII-3:</u> Lowest channel: 5745 MHz Middle channel: 5785 MHz Highest channel: 5825 MHz
	<u>Channel Bandwidth:</u> 40 MHz
	<u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u>
	<u>UNII-1:</u> Lowest channel: 5190 MHz Highest channel: 5230 MHz
	<u>UNII-2A:</u> Lowest channel: 5270 MHz Highest channel: 5310 MHz
	<u>UNII-2C:</u> Lowest channel: 5510 MHz Middle channel: 5550 MHz Highest channel: 5670 MHz
	<u>UNII-3:</u> Lowest channel: 5755 MHz Highest channel: 5795 MHz
	<u>Channel Bandwidth:</u> 80 MHz
	<u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u>
	<u>UNII-1:</u> Lowest channel: 5210 MHz
	<u>UNII-2A:</u> Lowest channel: 5290 MHz
	<u>UNII-2C:</u> Lowest channel: 5530 MHz Highest channel: 5610 MHz
	<u>UNII-3:</u> Lowest channel: 5775 MHz

TEST CONDITIONS	DESCRIPTION
TC#04 ⁽¹⁾⁽²⁾ (ax mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 12 \text{ Vdc}$ <u>Channel Bandwidth:</u> 20 MHz <u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u> <u>UNII-1:</u> Lowest channel: 5180 MHz Middle channel: 5200 MHz Highest channel: 5240 MHz <u>UNII-2A:</u> Lowest channel: 5260 MHz Middle channel: 5280 MHz Highest channel: 5320 MHz <u>UNII-2C:</u> Lowest channel: 5500 MHz Middle channel: 5580 MHz Highest channel: 5700 MHz <u>UNII-3:</u> Lowest channel: 5745 MHz Middle channel: 5785 MHz Highest channel: 5825 MHz
	<u>Channel Bandwidth:</u> 40 MHz <u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u> <u>UNII-1:</u> Lowest channel: 5190 MHz Highest channel: 5230 MHz <u>UNII-2A:</u> Lowest channel: 5270 MHz Highest channel: 5310 MHz <u>UNII-2C:</u> Lowest channel: 5510 MHz Middle channel: 5550 MHz Highest channel: 5670 MHz <u>UNII-3:</u> Lowest channel: 5755 MHz Highest channel: 5795 MHz
	<u>Channel Bandwidth:</u> 80 MHz <u>Test Frequencies for Conducted/Radiated tests: (Radio A)</u> <u>UNII-1:</u> Lowest channel: 5210 MHz <u>UNII-2A:</u> Lowest channel: 5290 MHz <u>UNII-2C:</u> Lowest channel: 5530 MHz Highest channel: 5610 MHz <u>UNII-3:</u> Lowest channel: 5775 MHz

Note (1): The test set-up was made in accordance to the general provisions of FCC Unlicensed National Information Infrastructure (U-NII) Devices 789033 D02 General U-NII Test Procedures New Rules v02r01 dated Dec 14, 2017.

The EUT was tested in the following operating mode:

- Continuously transmitting with a modulated carrier at maximum power in all required channels using the supported data rates/modulation types.
- Preliminary tests for 26 dB and Occupied bandwidth determined the SISO worst case: Port A.
- For spurious emissions for OFDM modes 802.11a, 802.11n20/40, 802.11ac20/40/80, and 11ax20/40/80 a preliminary scan was performed to determine the worst case. The following tables and plots show the results for the worst case in 802.11ac mode.
- The data rates of 54Mb/s for 802.11a, MCS 7 for 802.11n, MCS8 for 802.11ac20 and MCS9 for 802.11ac40/80, MCS8 for ax20, MCS 9 for ax40 and MCS11 for ax80 were selected based on preliminary testing that identified those rates corresponding to the worst cases.
- For all modes, the EUT was configured in test mode using a software application. The application was used to enable a continuous transmission and to select the test channels as required. The client supplied instructions to configure the EUT. The customer supplied a document containing the setup instructions.
- Beamforming mode is only supported with OFDMA Full RU according to manufacturer specifications (see annex B.2).

Note (2): Preliminary measurements determined the PSD levels of partial RU is higher than the full RU in ax mode. RU 26 tone was identified as the worst-case RU (Resource Unit) carrier allocation for all non-beamforming ax mode testing.

The worst-case RU combinations used in the ax mode SISO/MIMO measurement (all test cases except Band Edge testing) are indicated as follows:

- 20 MHz BW - RU26 offset 0
- 40 MHz BW - RU26 offset 8
- 80 MHz BW - RU26 offset 0

The worst-case RU combinations used in the ax mode SISO/MIMO measurement (Band Edge testing) are indicated as follows:

- 20 MHz BW - RU26 offset 0 & 8
- 40 MHz BW - RU26 offset 0 & 17
- 80 MHz BW - RU26 offset 0 & 36

TEST CASES DETAILS

FCC 15.407 (a) / RSS-247 6.2 Power Limits. Maximum Output Power

Limits

FCC 15.407:

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

RSS-247:

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10} B$, dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For devices other than devices installed in vehicles:

For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW (23 dBm) or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

For the 5.25-5.35 GHz, 5.470-5.6 GHz, and 5.650-5.725 GHz bands, the maximum conducted output power shall not exceed 250 mW (24 dBm) or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less.

For the band 5.725-5.850 GHz, the maximum conducted output power shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Modulation: 802.11a (OFDM 54 Mbit/s)

Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5180.00000	9.4	6.6
5200.00000	9.4	6.6
5240.00000	9.4	6.6
5260.00000	10.4	7.6
5280.00000	10.2	7.4
5320.00000	10.2	7.4
5500.00000	7.1	4.3
5580.00000	10.3	7.5
5700.00000	10.1	7.3
5745.00000	5.5	2.7
5785.00000	5.8	3.0
5825.00000	5.8	3.0

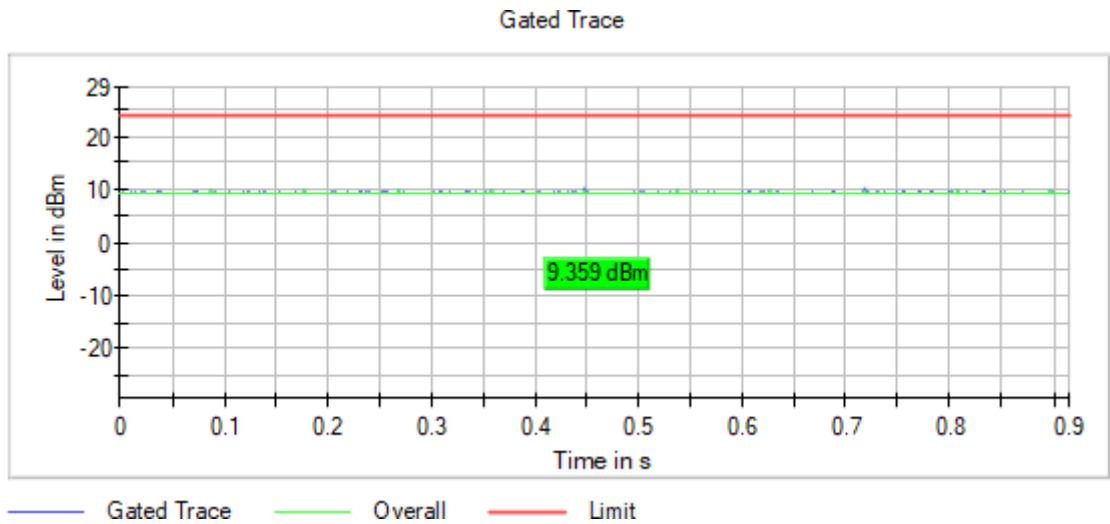
Verdict

Pass

Attachments

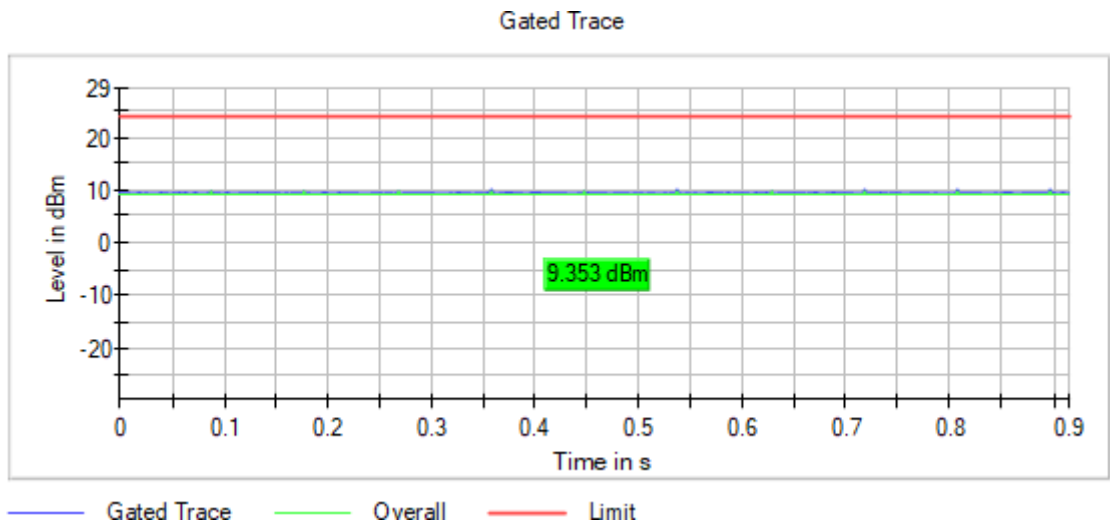
Frequency MHz = 5180.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



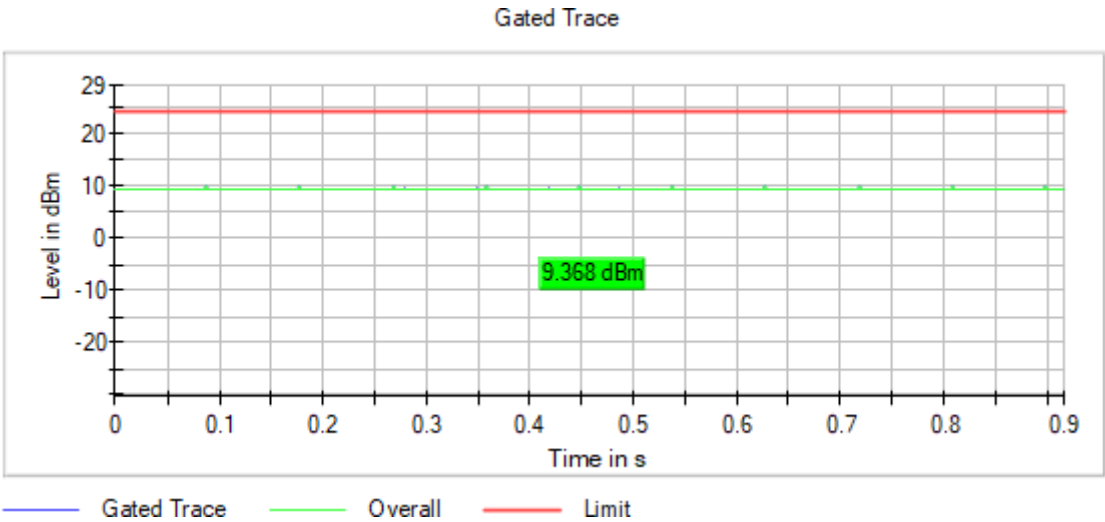
Frequency MHz = 5200.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



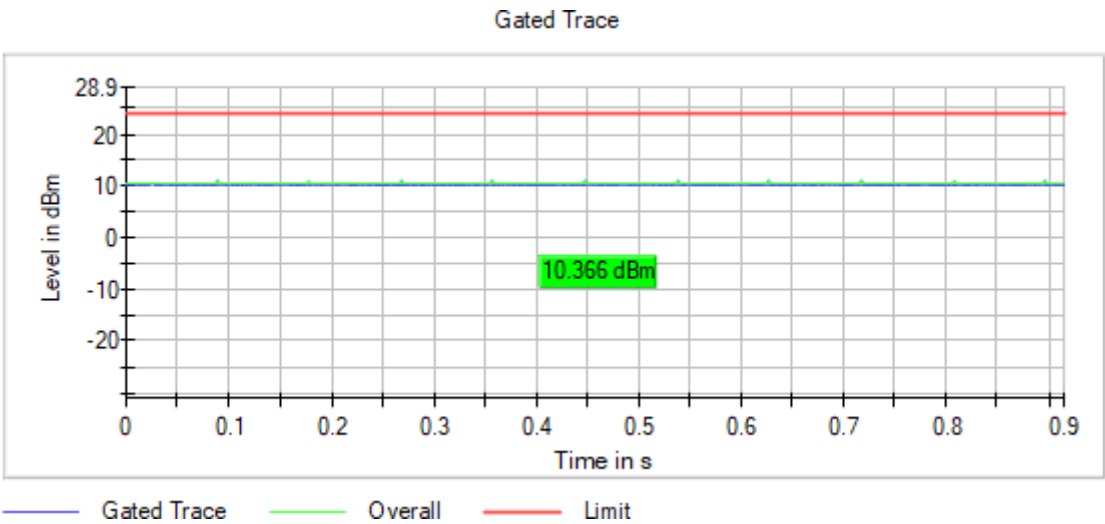
Frequency MHz = 5240.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



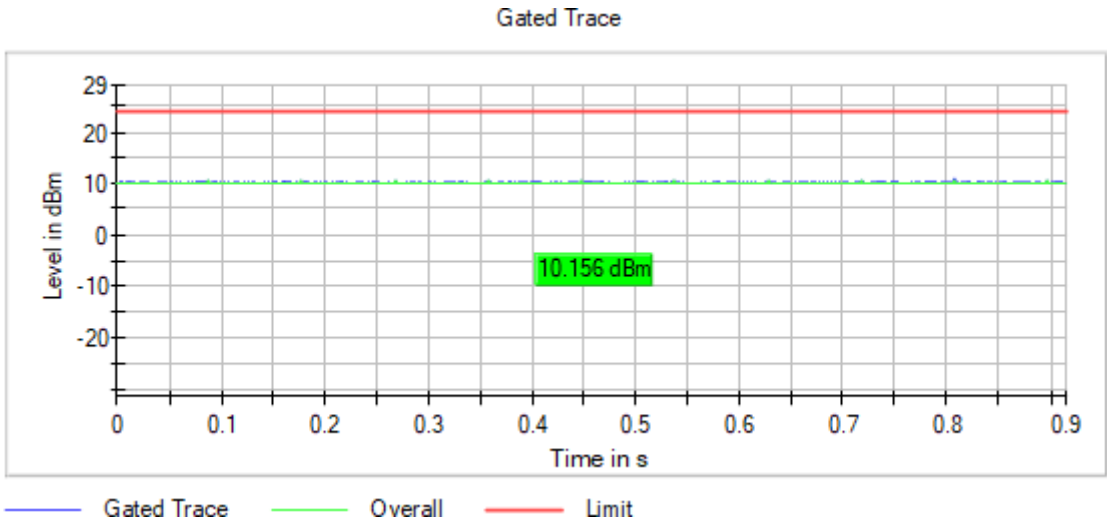
Frequency MHz = 5260.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



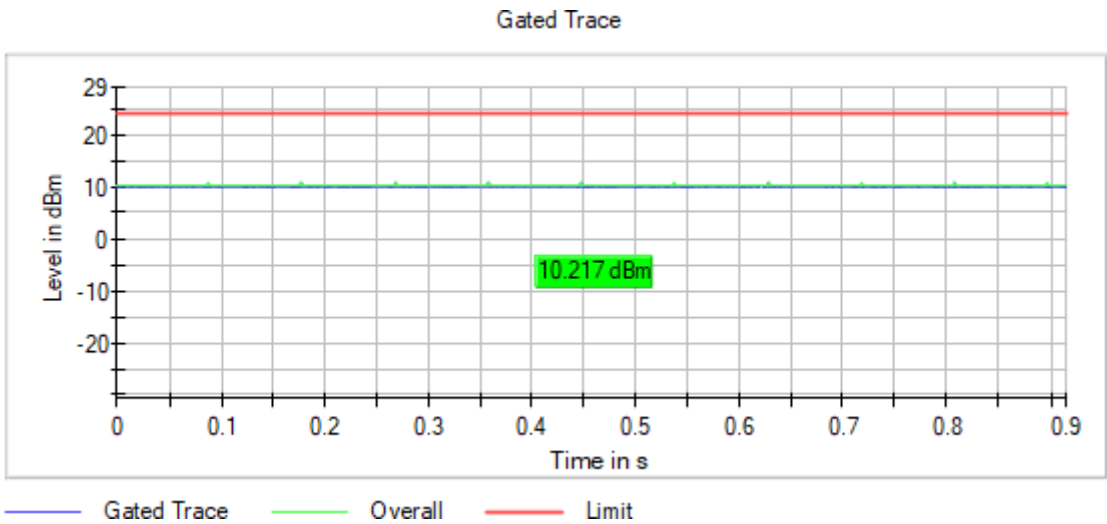
Frequency MHz = 5280.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



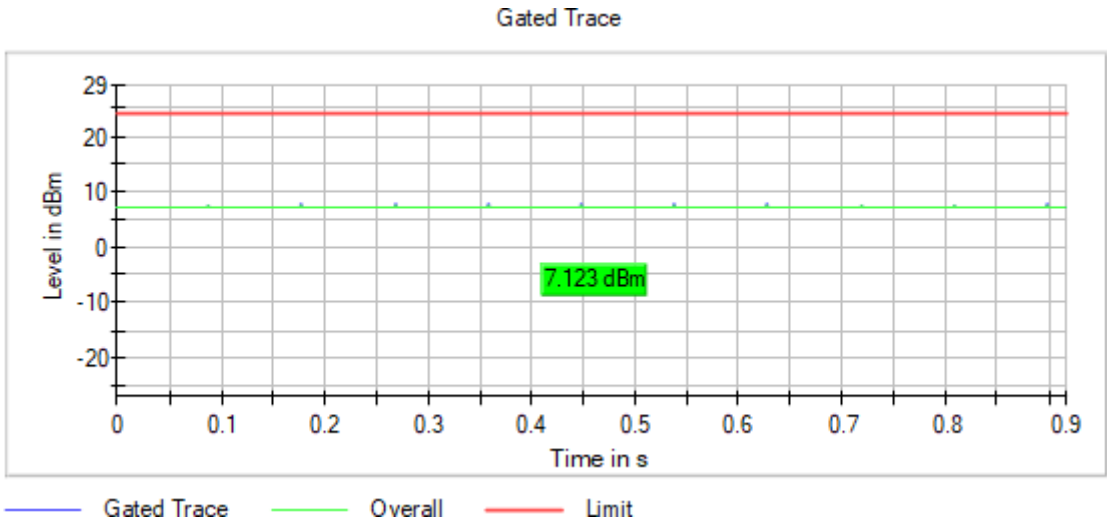
Frequency MHz = 5320.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



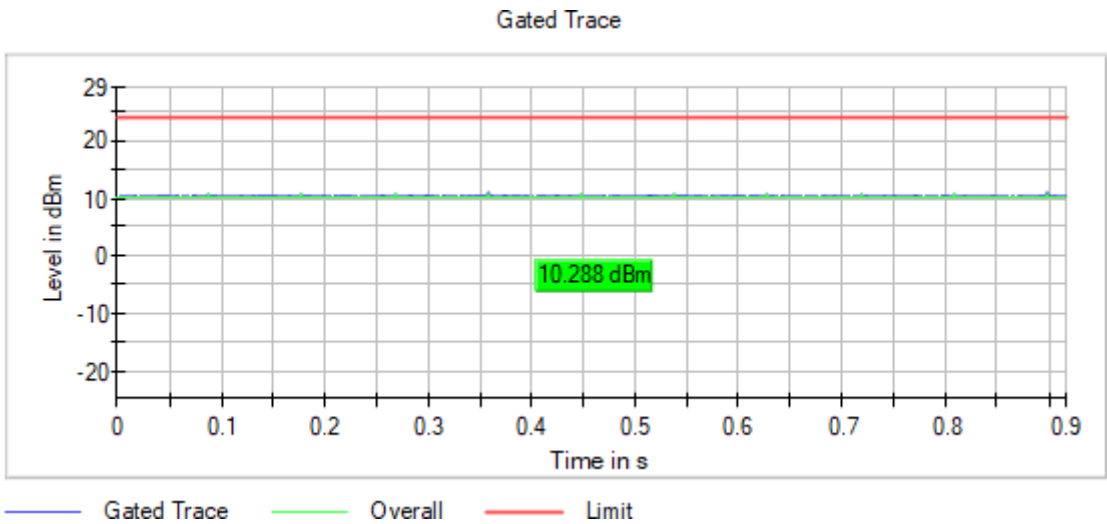
Frequency MHz = 5500.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



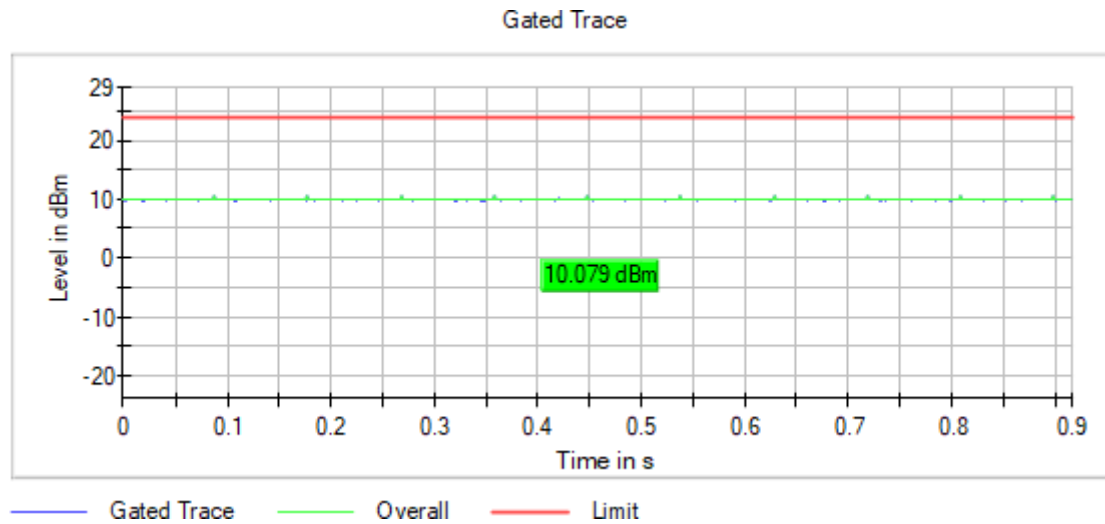
Frequency MHz = 5580.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



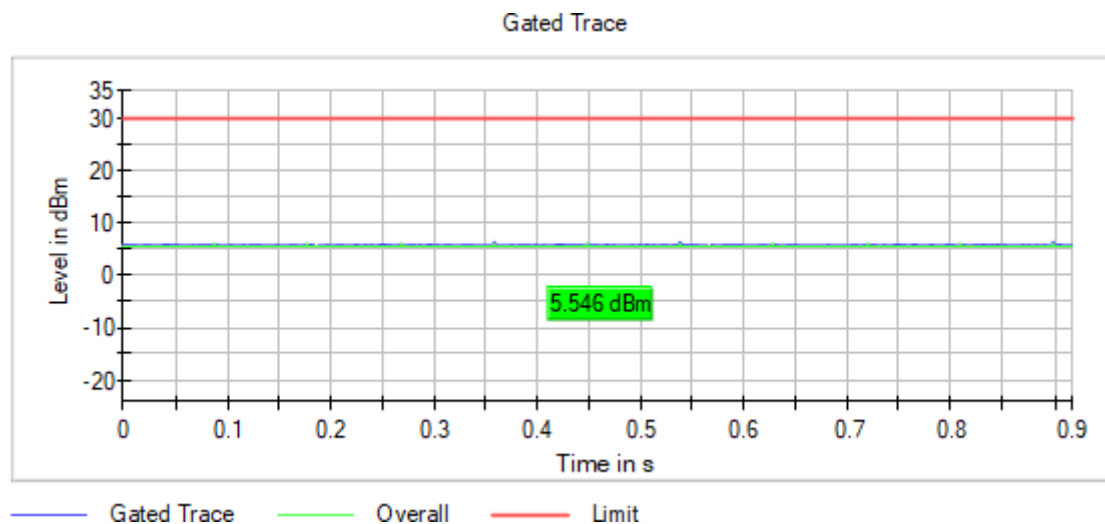
Frequency MHz = 5700.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



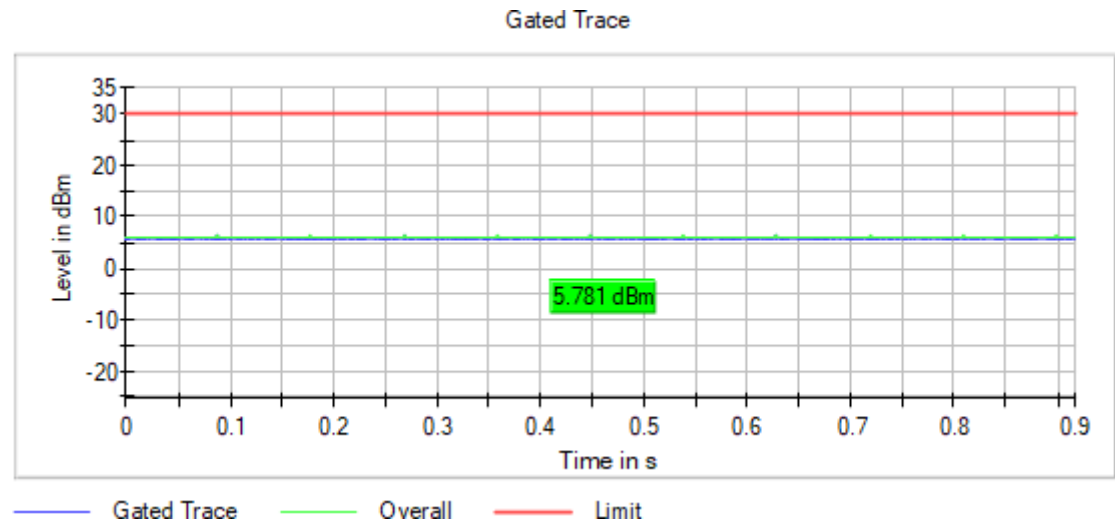
Frequency MHz = 5745.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



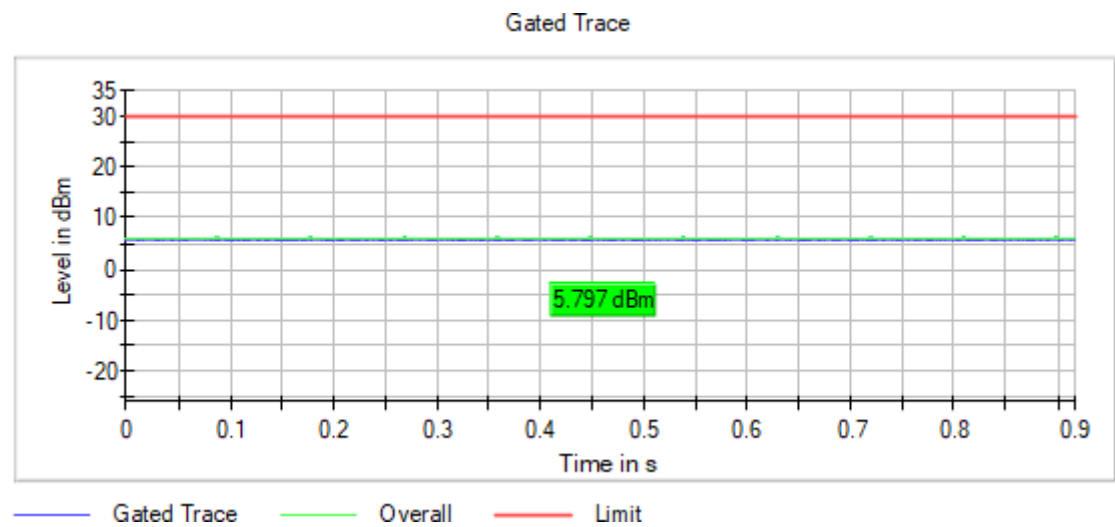
Frequency MHz = 5785.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Modulation: 802.11n HT20 (OFDM MCS7)
Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5180.00000	10.3	7.5
5200.00000	9.8	7.0
5240.00000	10.1	7.3
5260.00000	10.1	7.3
5280.00000	10.5	7.7
5320.00000	10.2	7.4
5500.00000	6.0	3.2
5580.00000	9.3	6.5
5700.00000	8.0	5.2
5745.00000	5.5	2.7
5785.00000	6.2	3.4
5825.00000	6.2	3.4

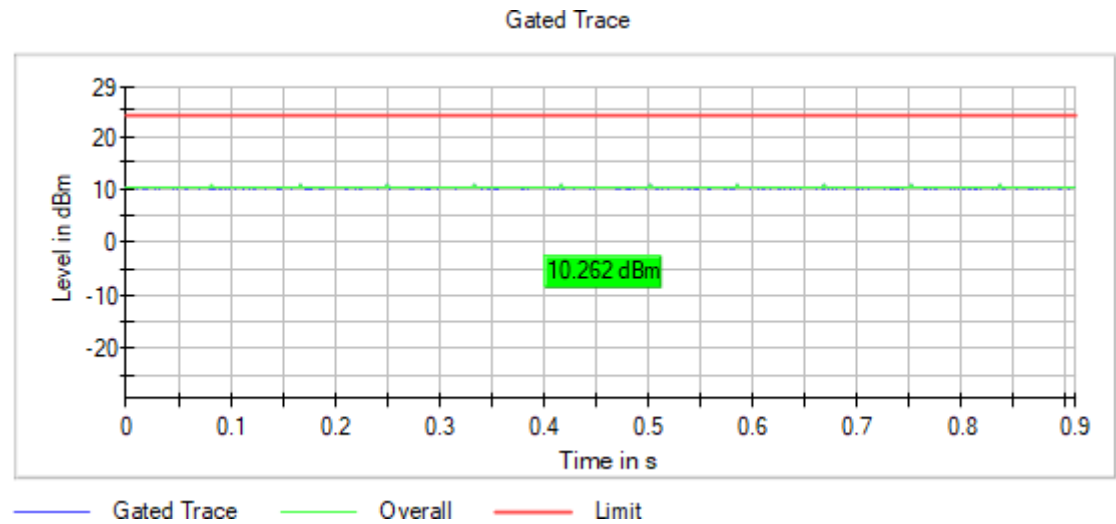
Verdict

Pass

Attachments

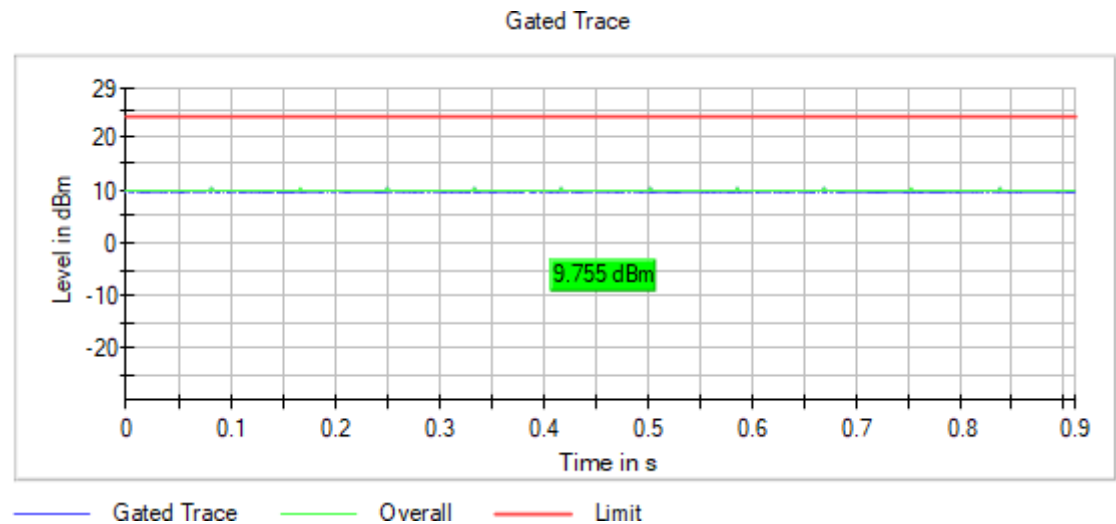
Frequency MHz = 5180.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



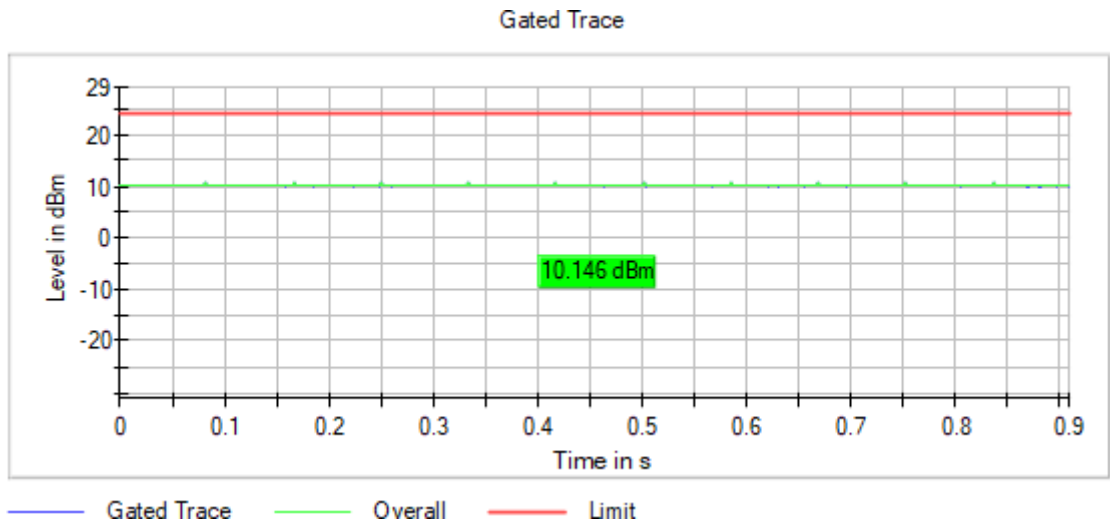
Frequency MHz = 5200.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



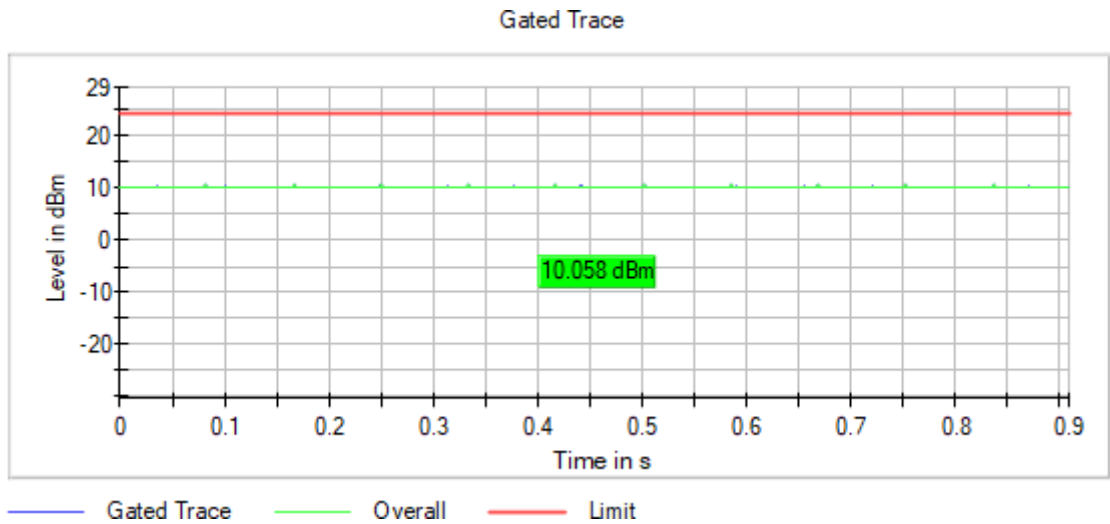
Frequency MHz = 5240.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



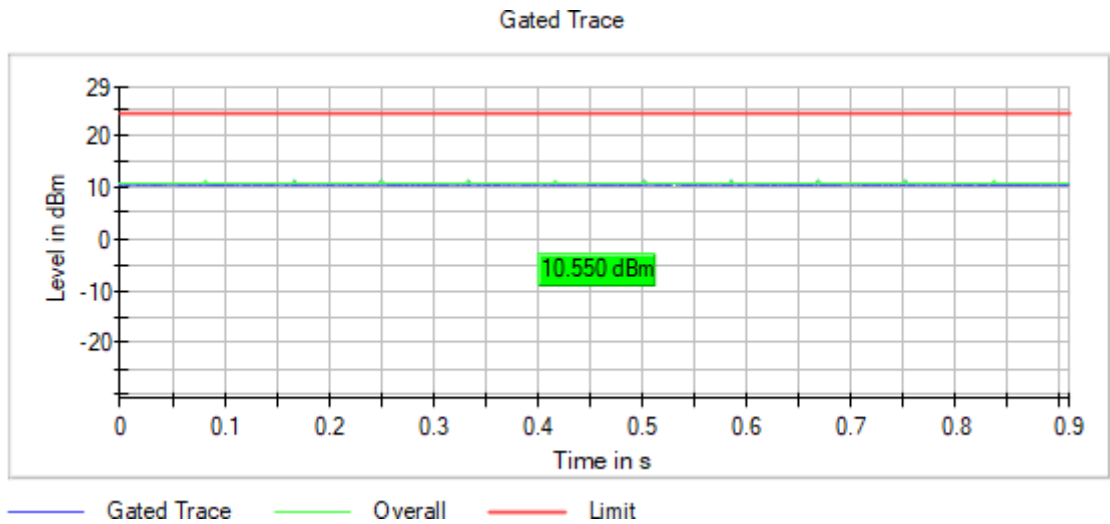
Frequency MHz = 5260.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



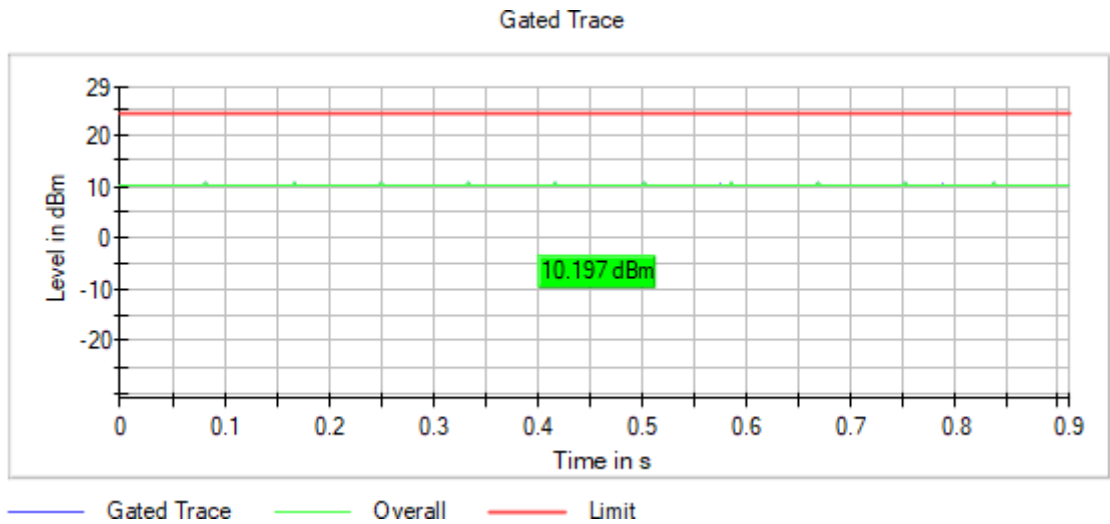
Frequency MHz = 5280.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



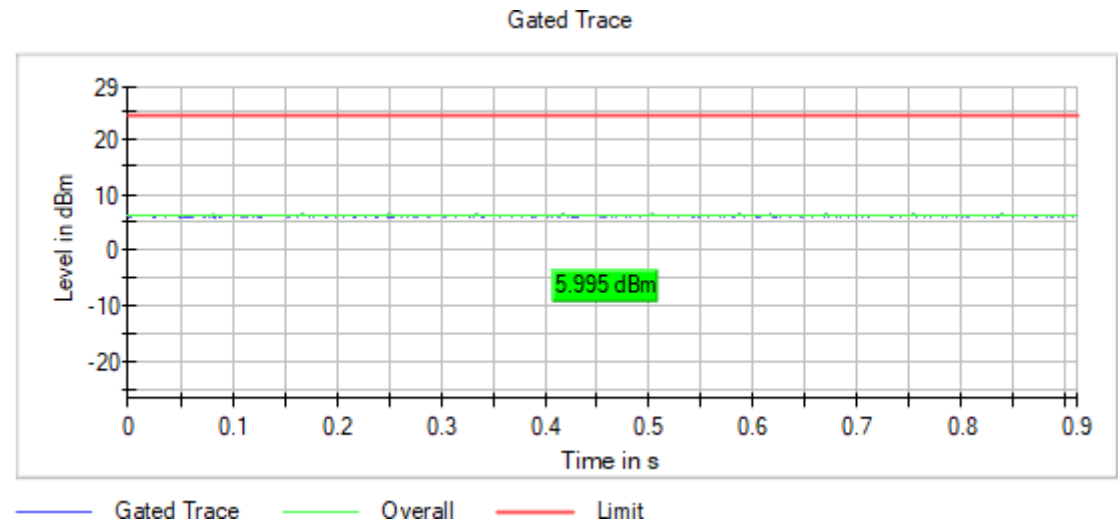
Frequency MHz = 5320.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



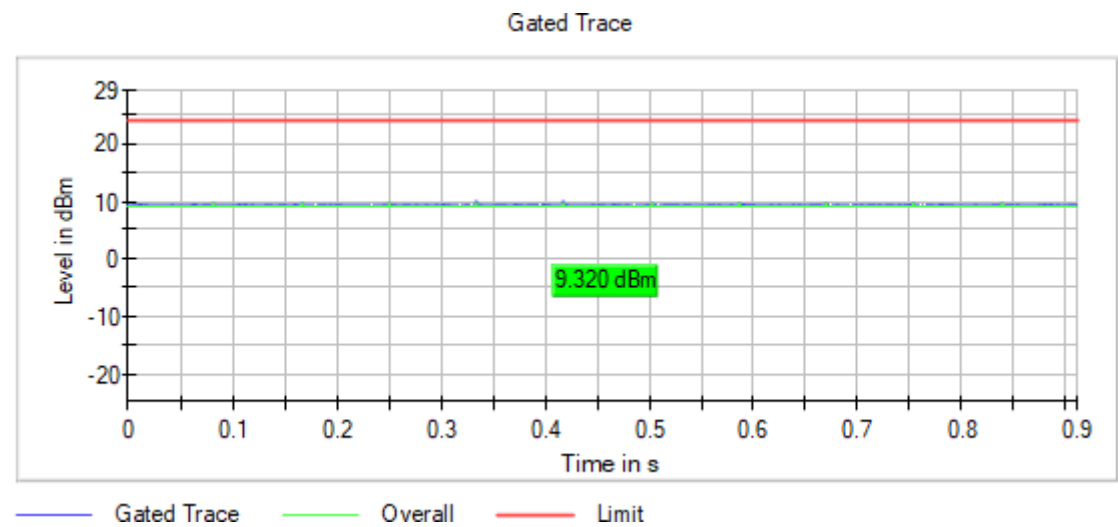
Frequency MHz = 5500.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5580.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



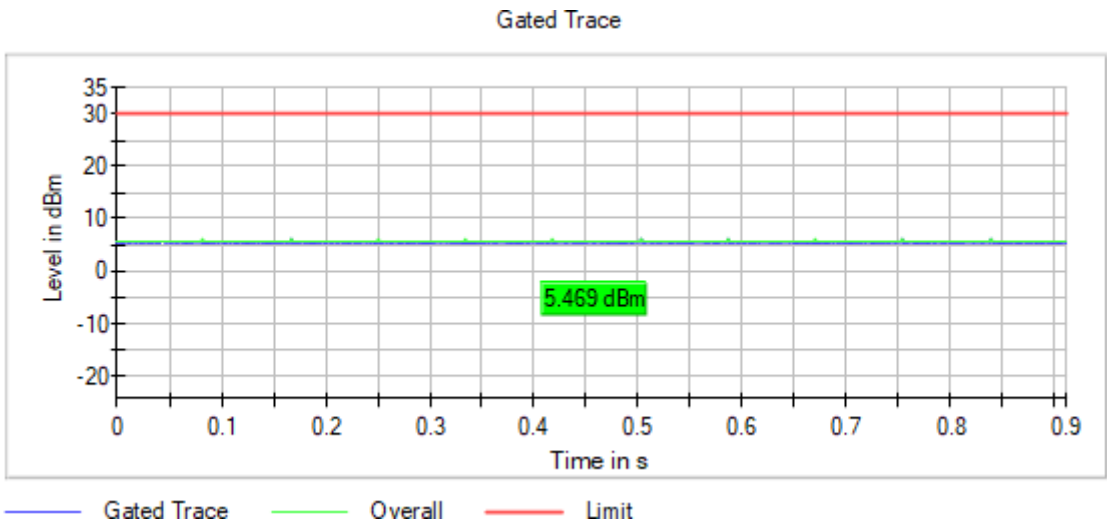
Frequency MHz = 5700.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



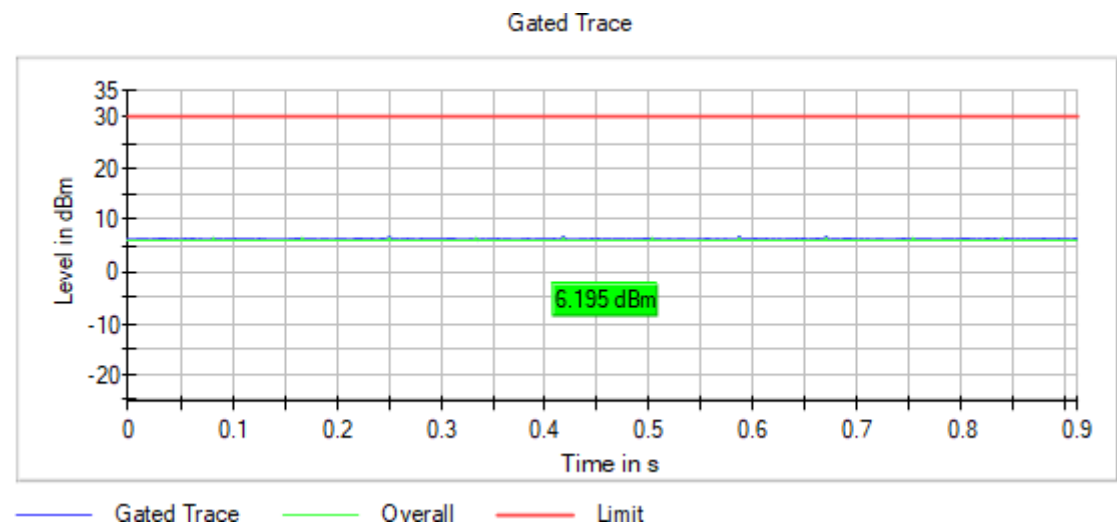
Frequency MHz = 5745.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



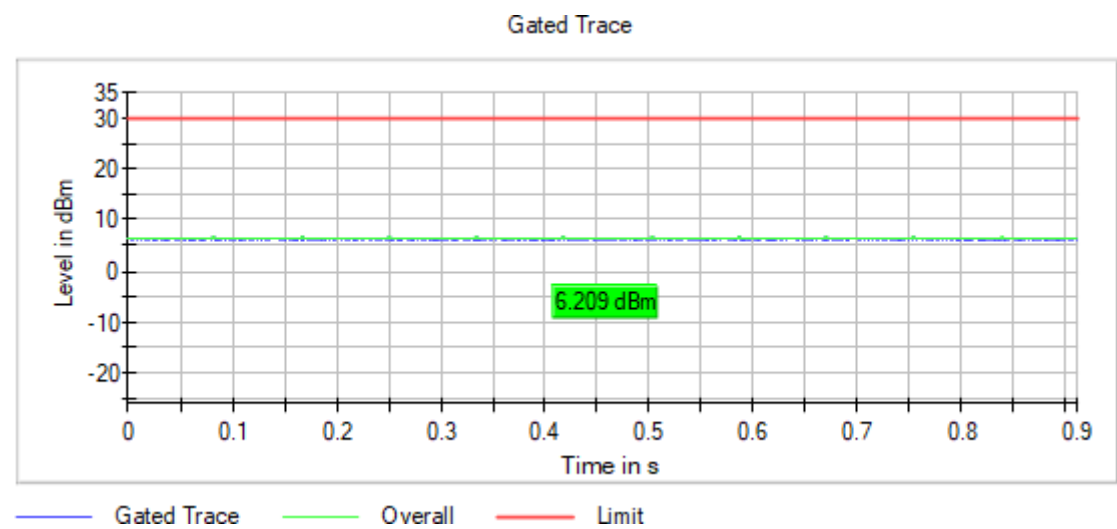
Frequency MHz = 5785.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Modulation: 802.11n HT40 (OFDM MCS7)
Results

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5190.00000	9.0	6.2
5230.00000	9.2	6.4
5270.00000	7.4	4.6
5310.00000	7.4	4.6
5510.00000	6.5	3.7
5550.00000	7.6	4.8
5670.00000	7.9	5.1
5755.00000	8.0	5.2
5795.00000	8.1	5.3

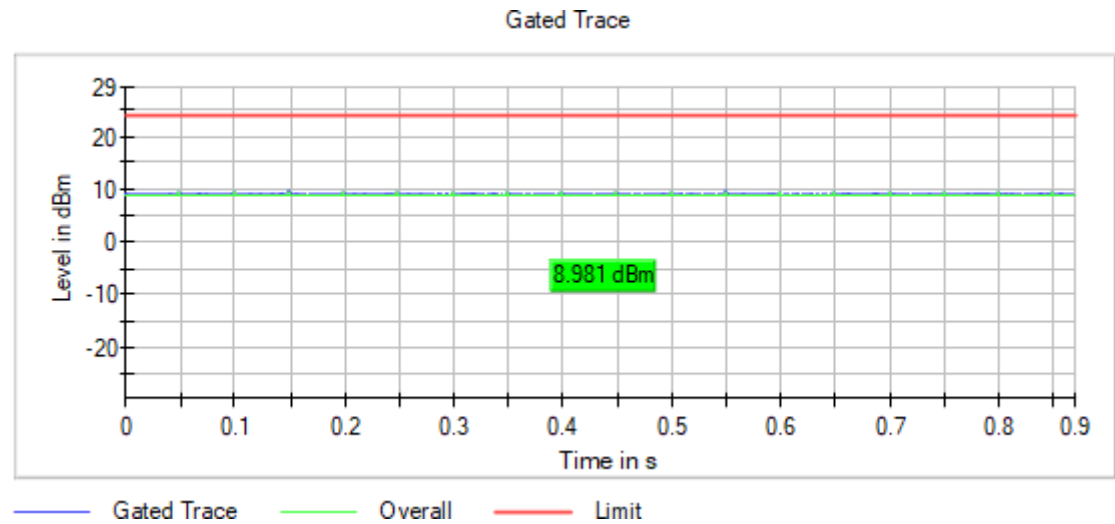
Verdict

Pass

Attachments

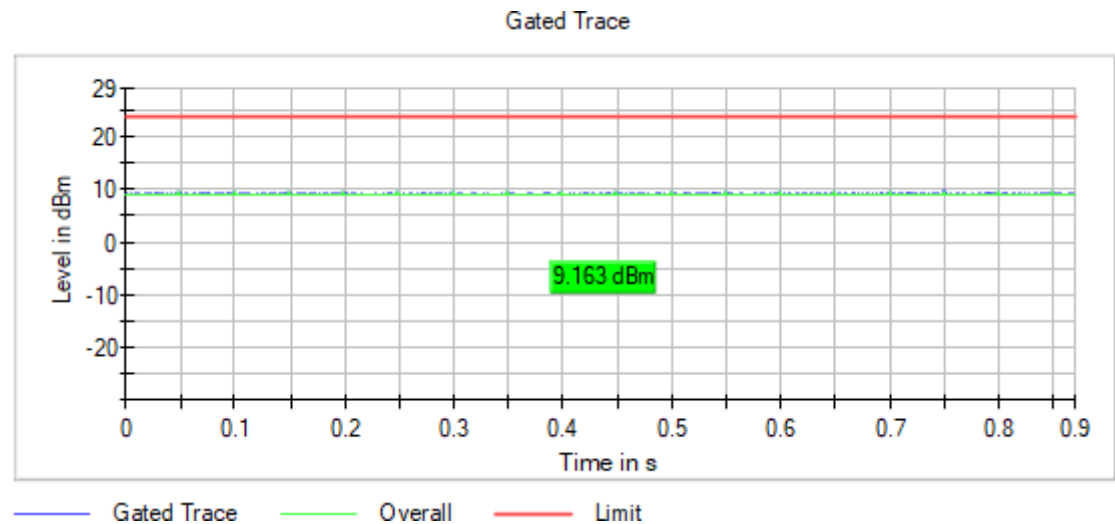
Frequency MHz = 5190.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



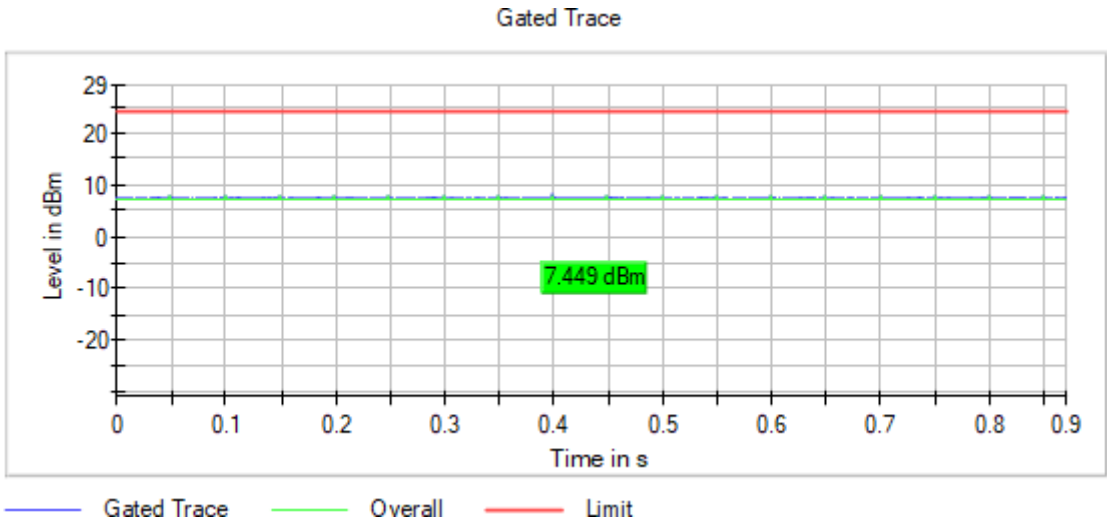
Frequency MHz = 5230.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



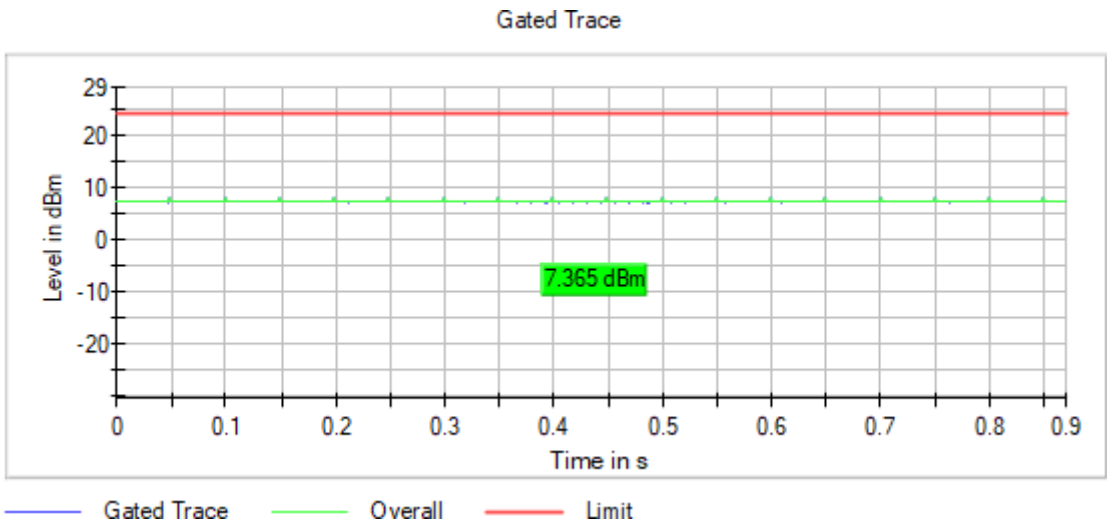
Frequency MHz = 5270.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



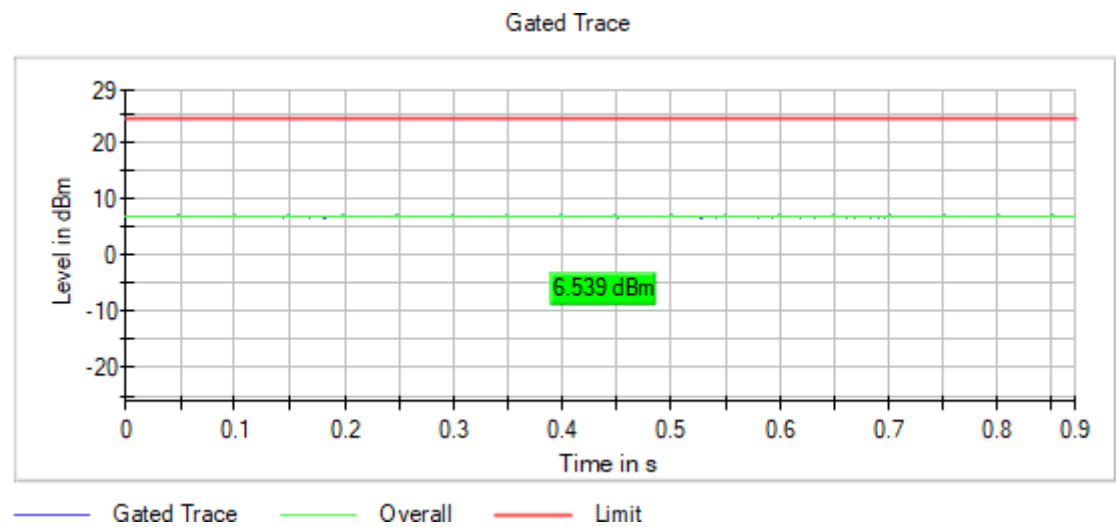
Frequency MHz = 5310.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



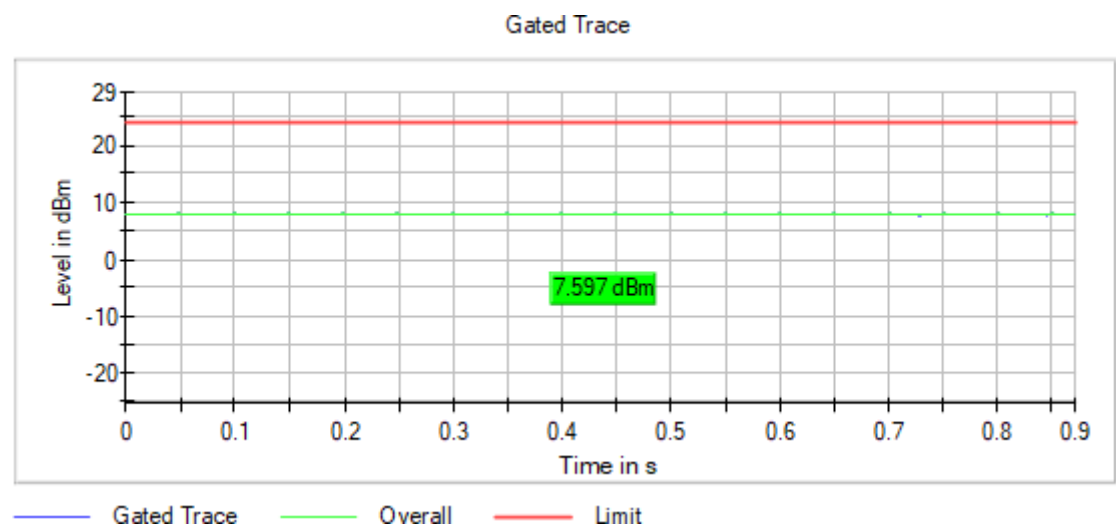
Frequency MHz = 5510.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



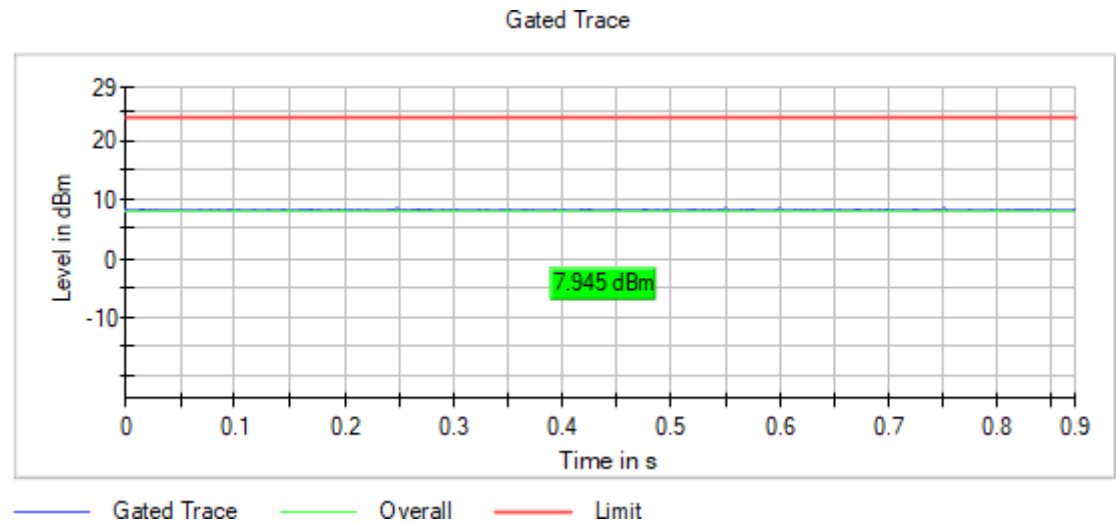
Frequency MHz = 5550.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



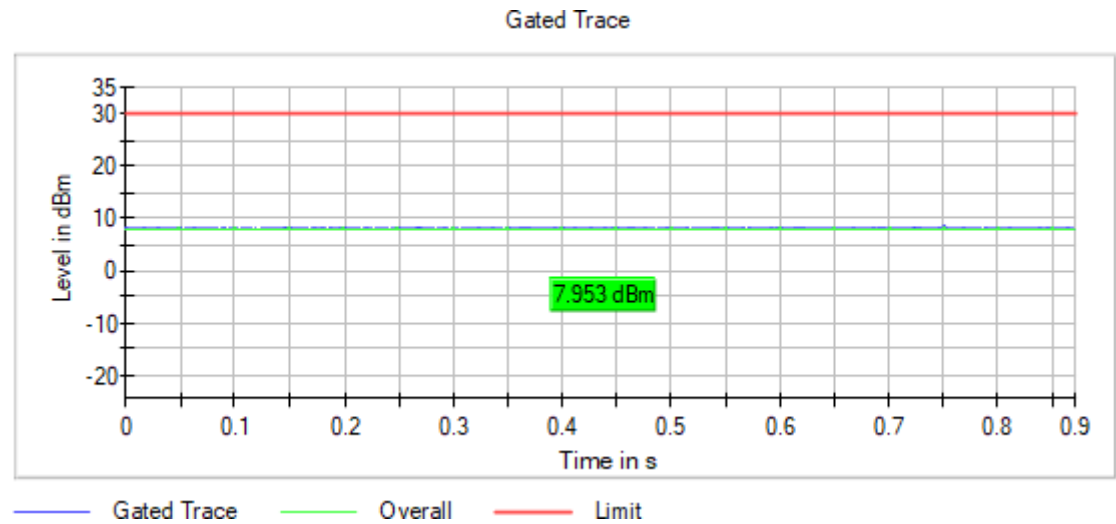
Frequency MHz = 5670.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



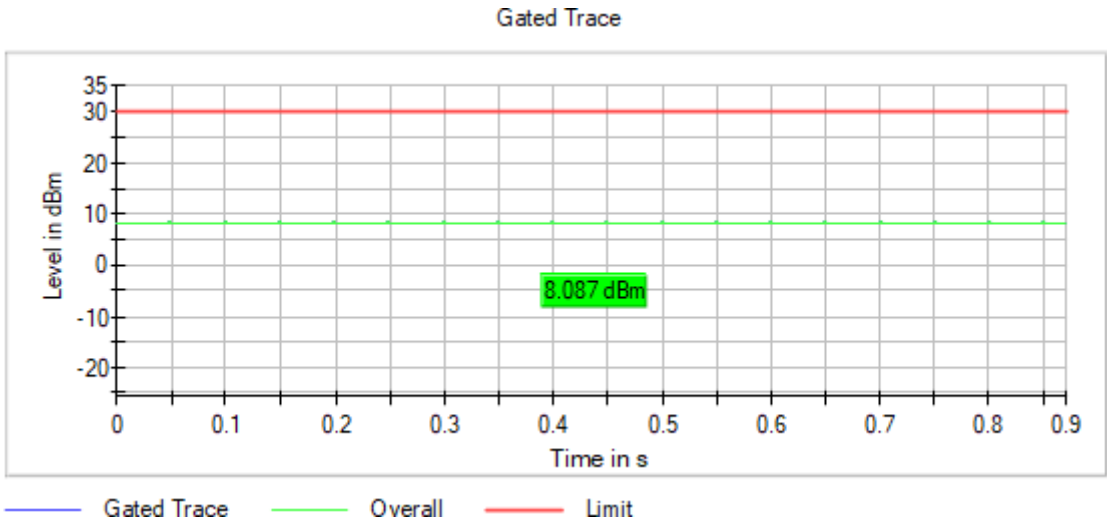
Frequency MHz = 5755.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT20 SS1 (OFDM MCS8)

Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5180.00000	10.3	7.5
5200.00000	9.8	7.0
5240.00000	10.1	7.3
5260.00000	11.1	8.3
5280.00000	11.6	8.8
5320.00000	11.2	8.4
5500.00000	7.0	4.2
5580.00000	10.3	7.5
5700.00000	8.7	5.9
5745.00000	5.4	2.6
5785.00000	6.1	3.3
5825.00000	6.2	3.4

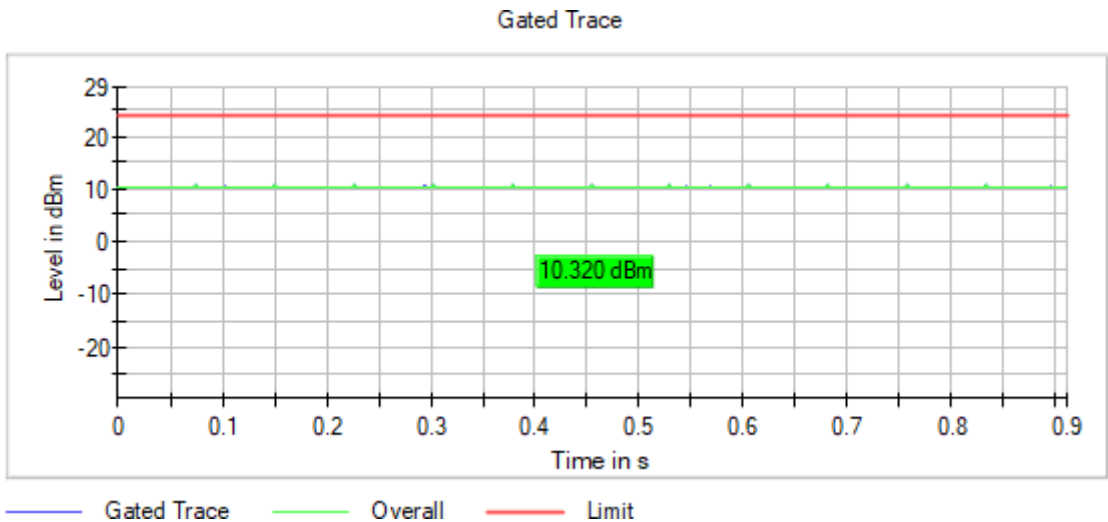
Verdict

Pass

Attachments

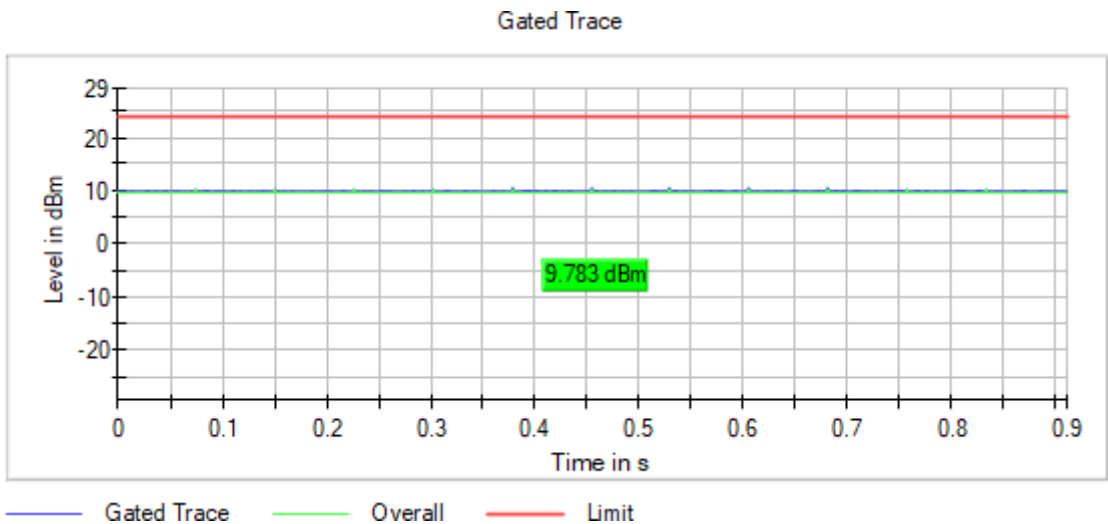
Frequency MHz = 5180.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



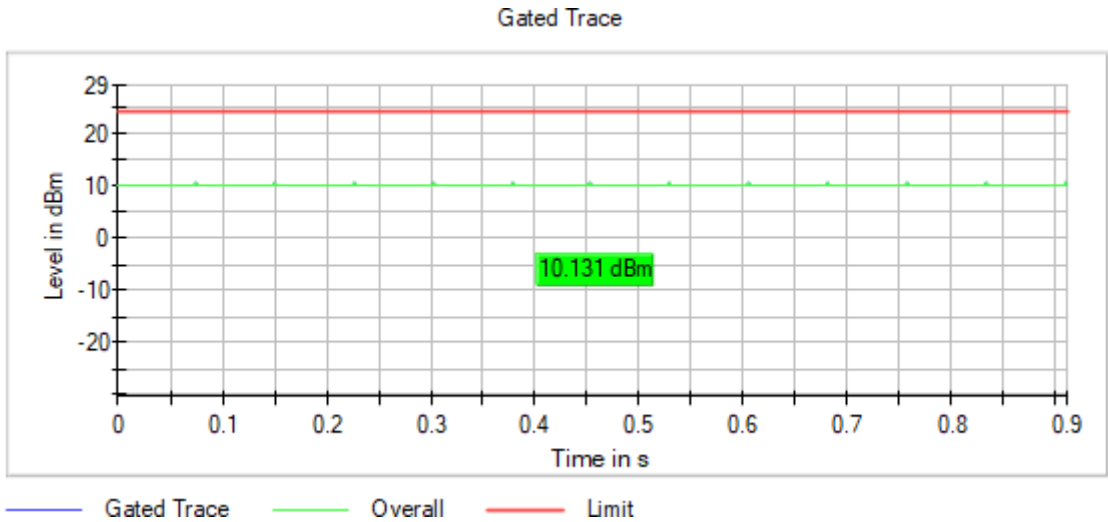
Frequency MHz = 5200.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



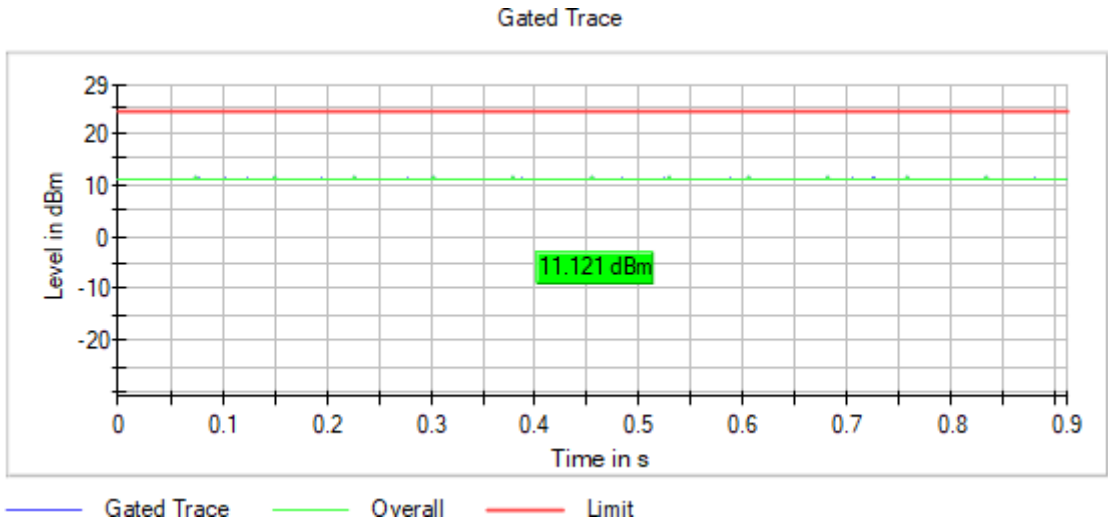
Frequency MHz = 5240.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



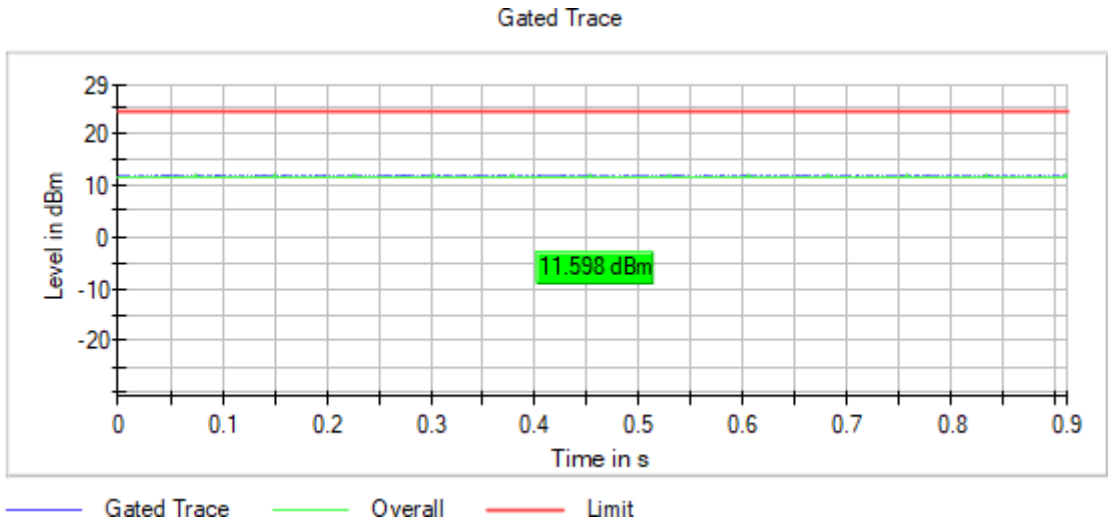
Frequency MHz = 5260.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



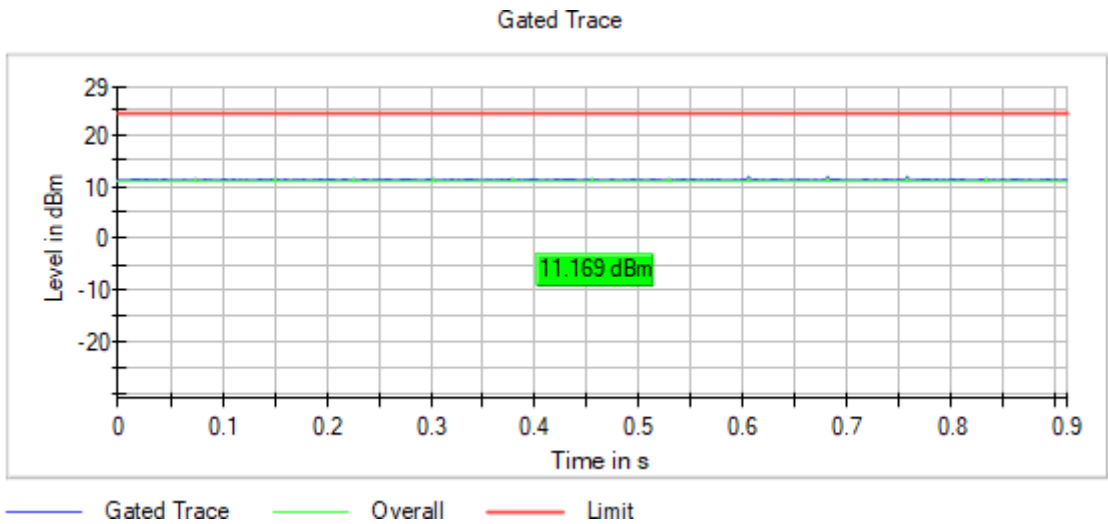
Frequency MHz = 5280.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



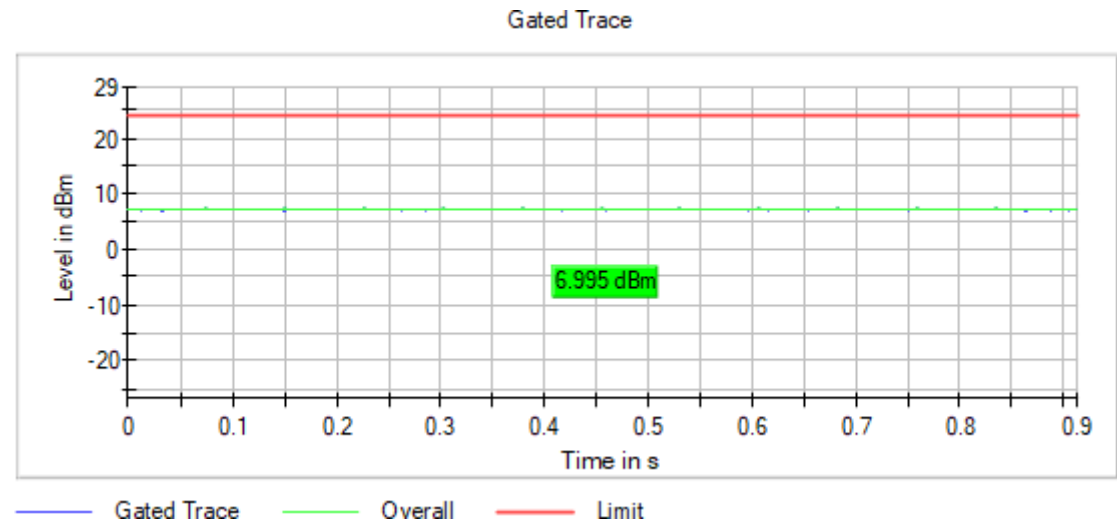
Frequency MHz = 5320.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



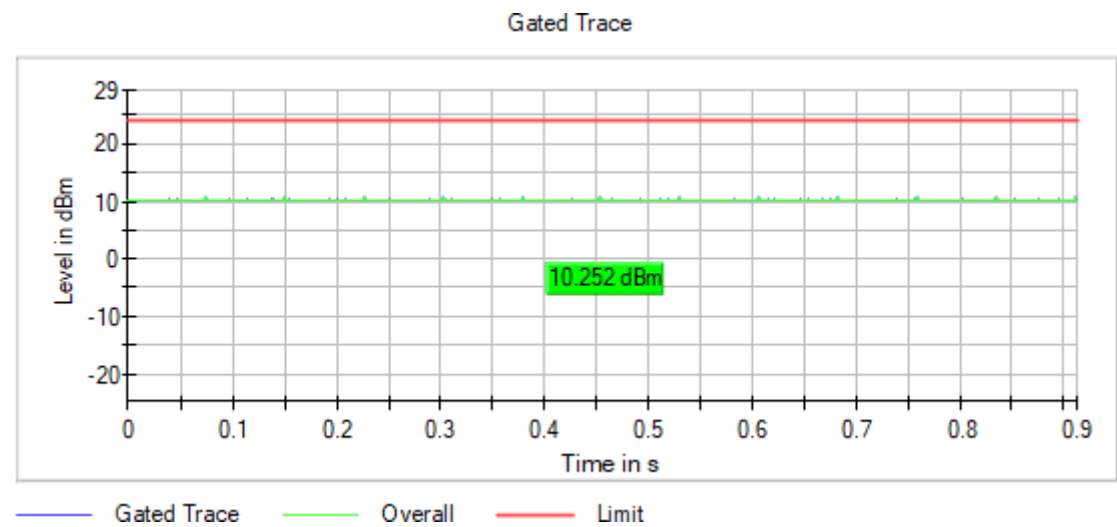
Frequency MHz = 5500.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



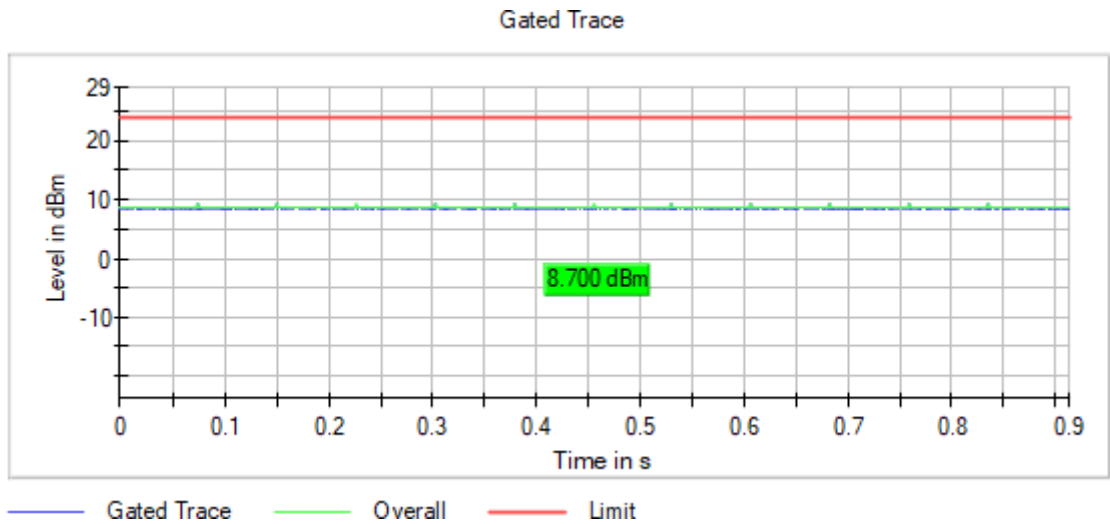
Frequency MHz = 5580.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



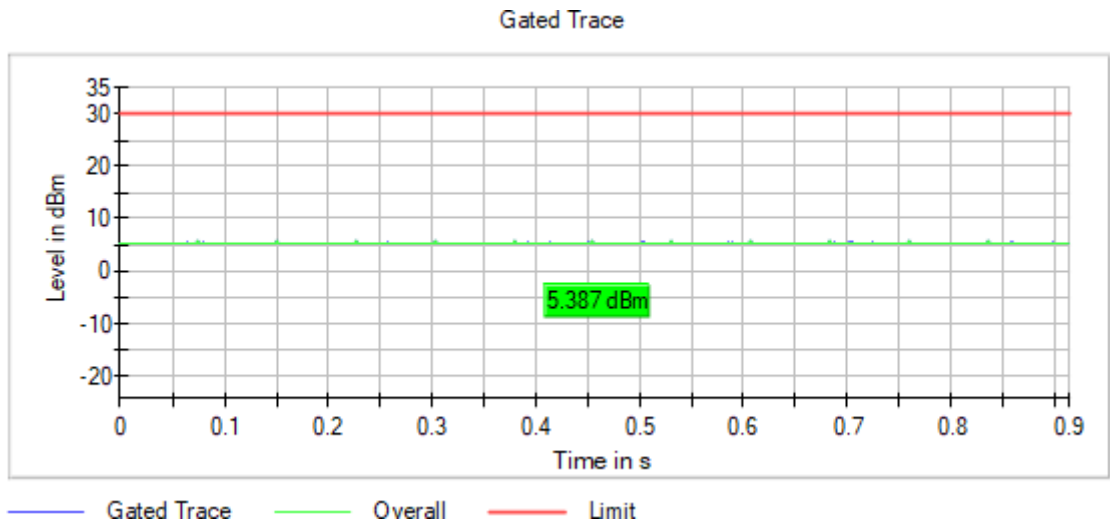
Frequency MHz = 5700.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



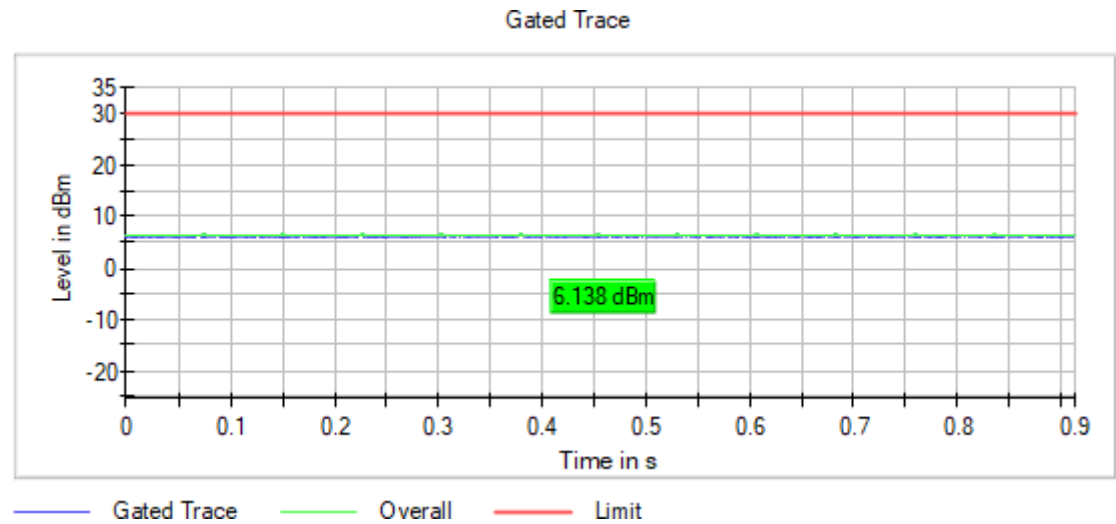
Frequency MHz = 5745.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



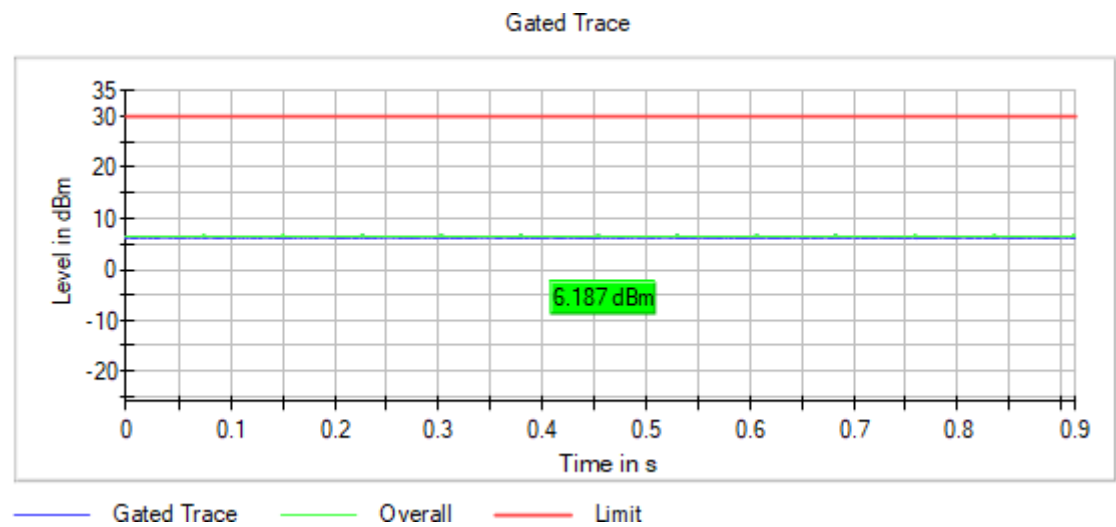
Frequency MHz = 5785.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT40 SS1 (OFDM MCS9)

Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5190.00000	8.7	5.9
5230.00000	9.0	6.2
5270.00000	8.3	5.5
5310.00000	8.1	5.3
5510.00000	6.5	3.7
5550.00000	7.5	4.7
5670.00000	7.9	5.1
5755.00000	7.7	4.9
5795.00000	7.8	5.0

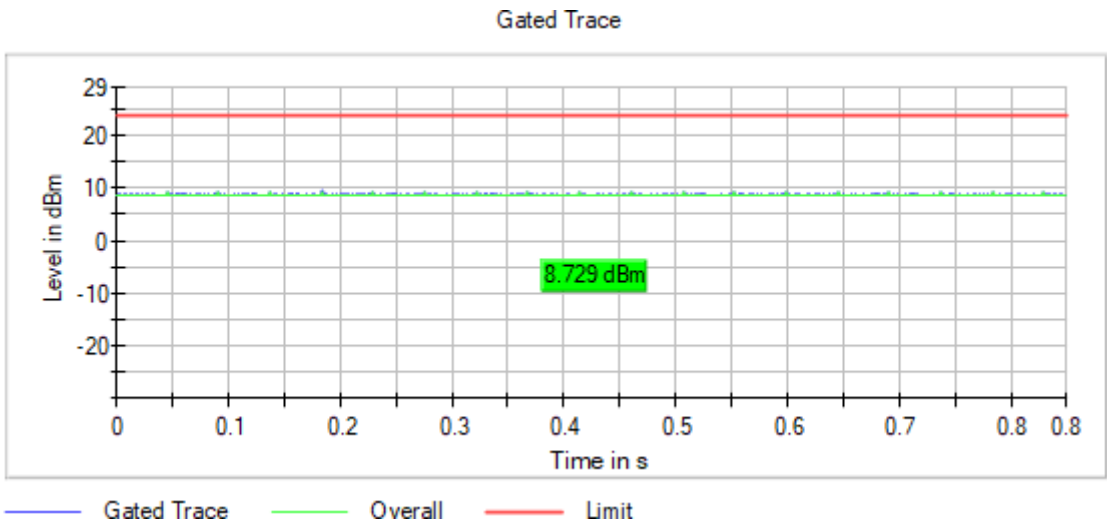
Verdict

Pass

Attachments

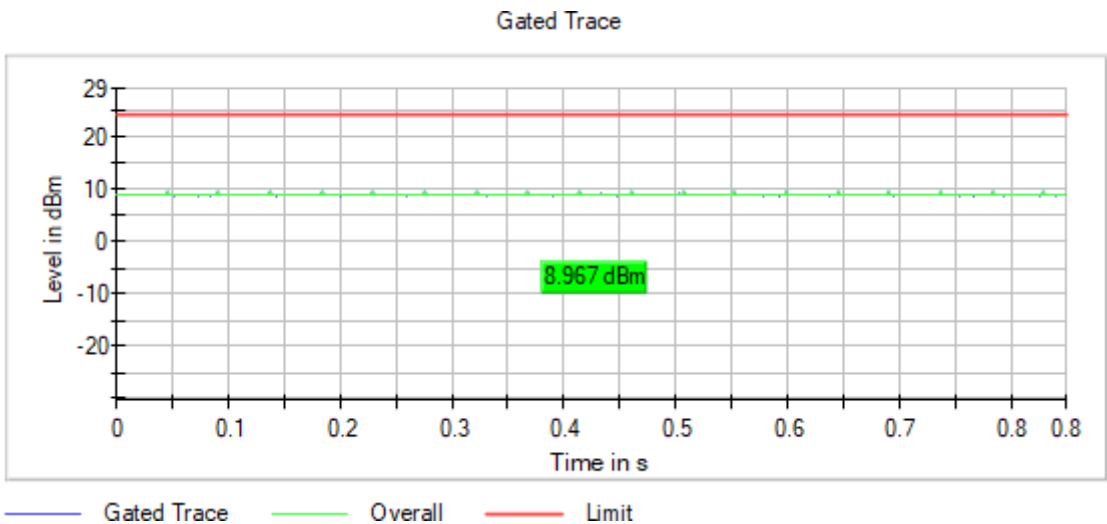
Frequency MHz = 5190.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



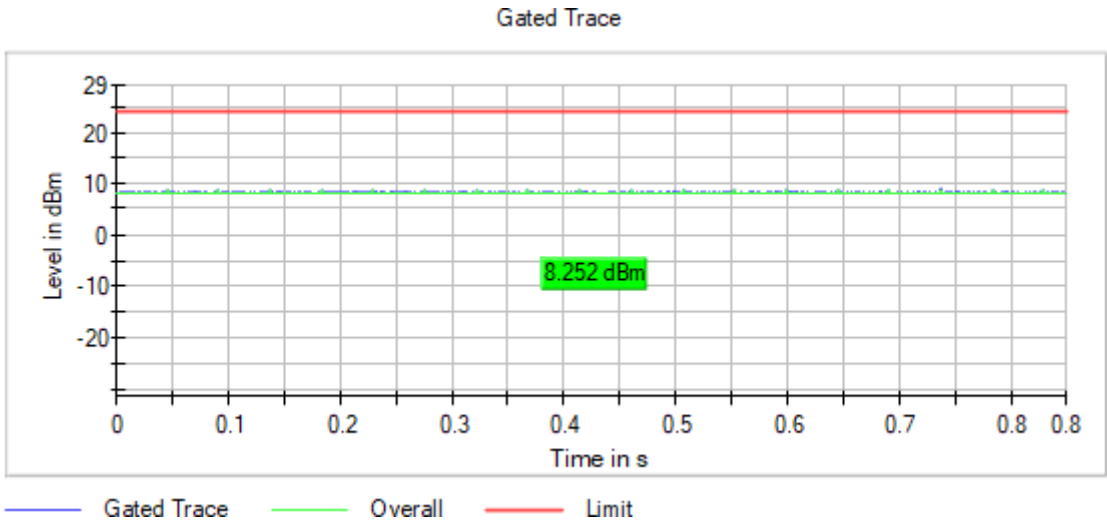
Frequency MHz = 5230.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



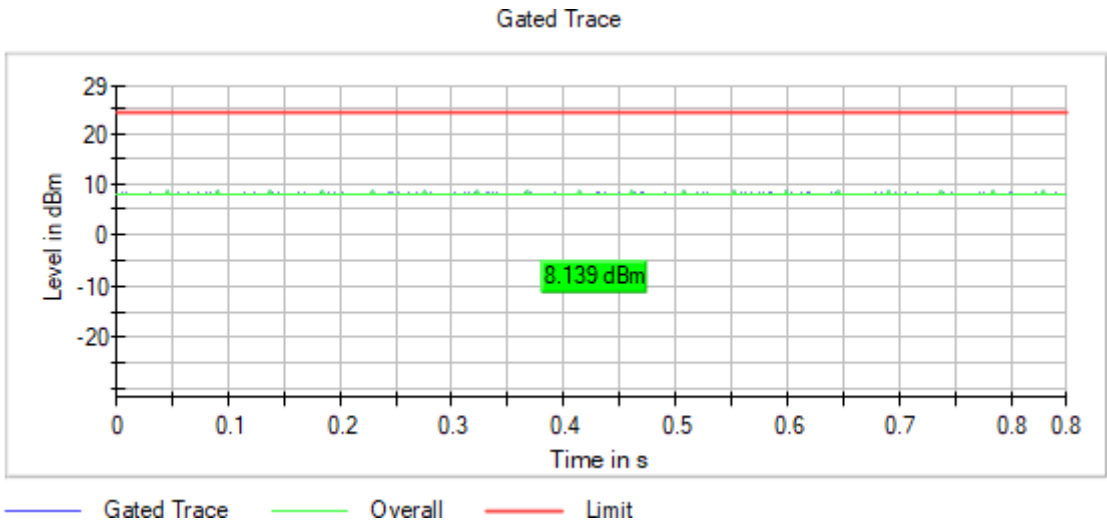
Frequency MHz = 5270.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



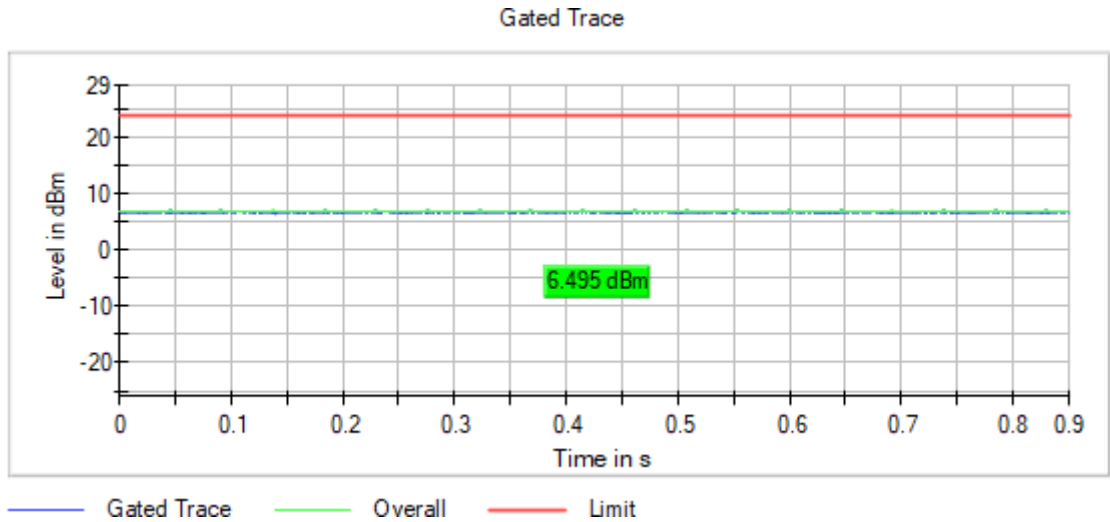
Frequency MHz = 5310.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



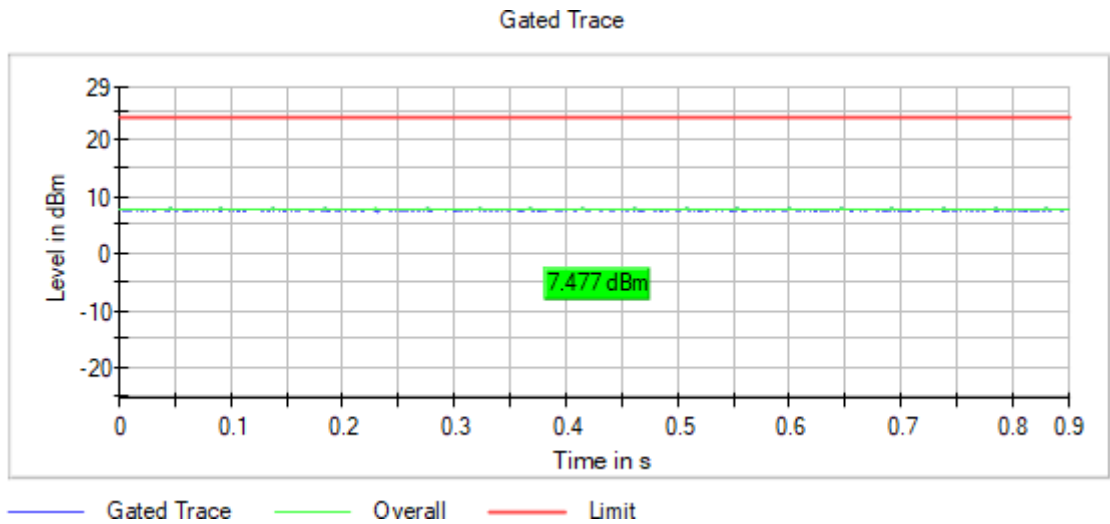
Frequency MHz = 5510.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



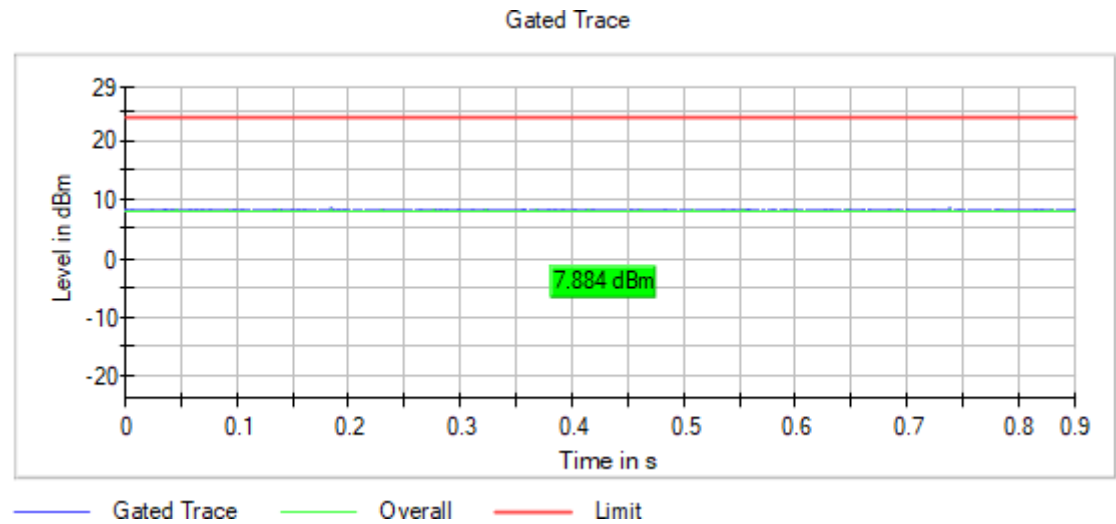
Frequency MHz = 5550.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



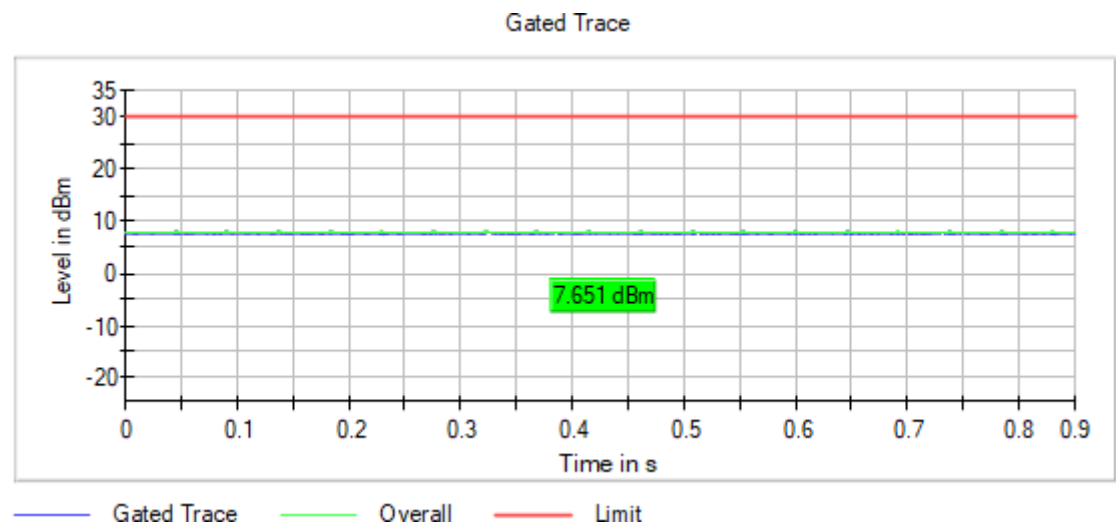
Frequency MHz = 5670.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



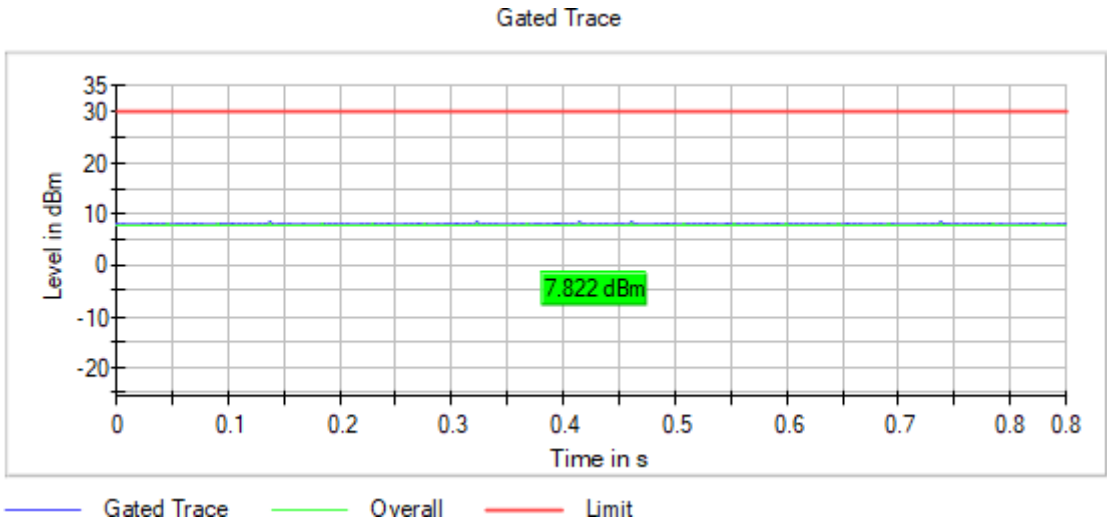
Frequency MHz = 5755.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT80 SS1 (OFDM MCS9)

Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5210.00000	7.4	4.6
5290.00000	6.6	3.8
5530.00000	6.2	3.4
5610.00000	8.4	5.6
5775.00000	9.2	6.4

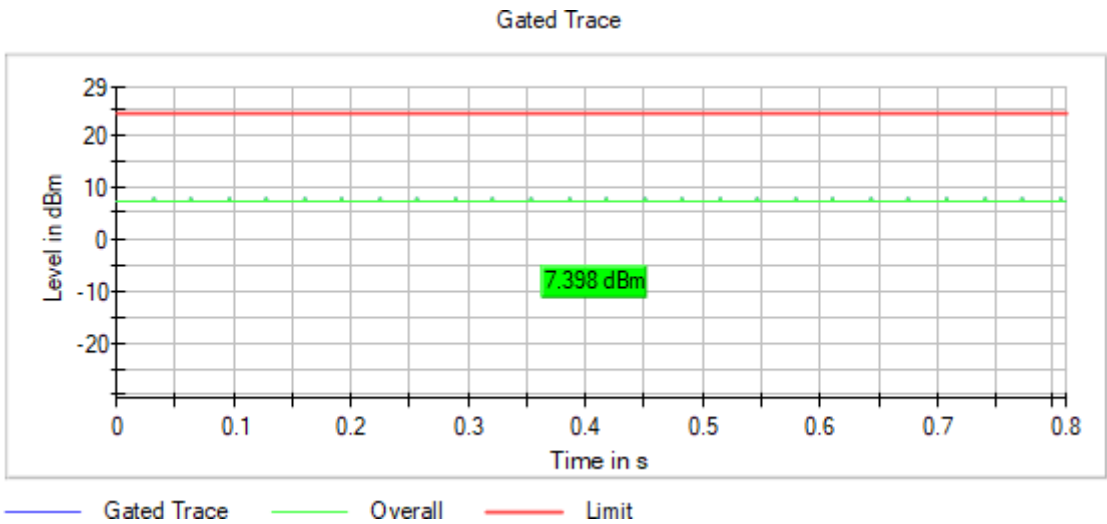
Verdict

Pass

Attachments

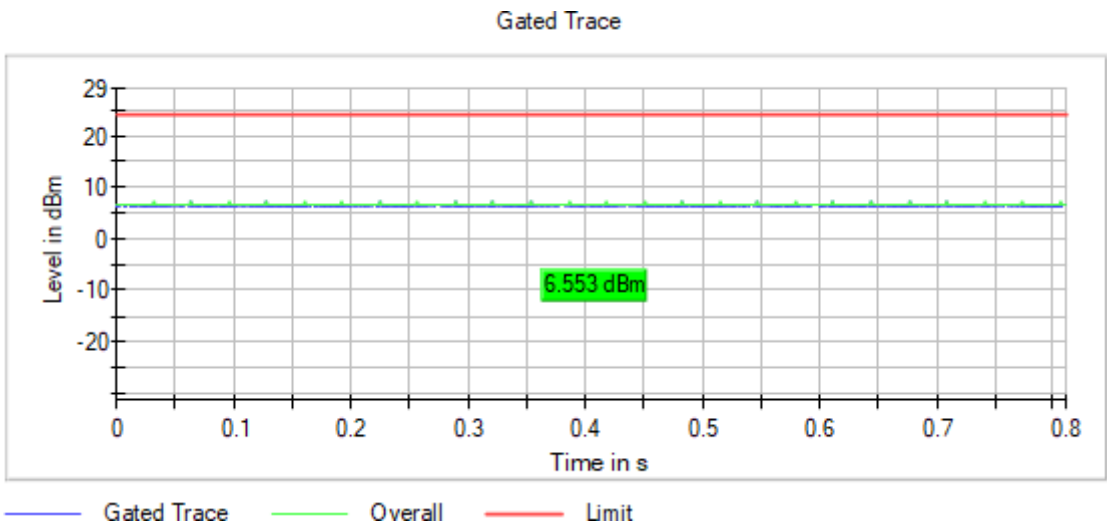
Frequency MHz = 5210.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



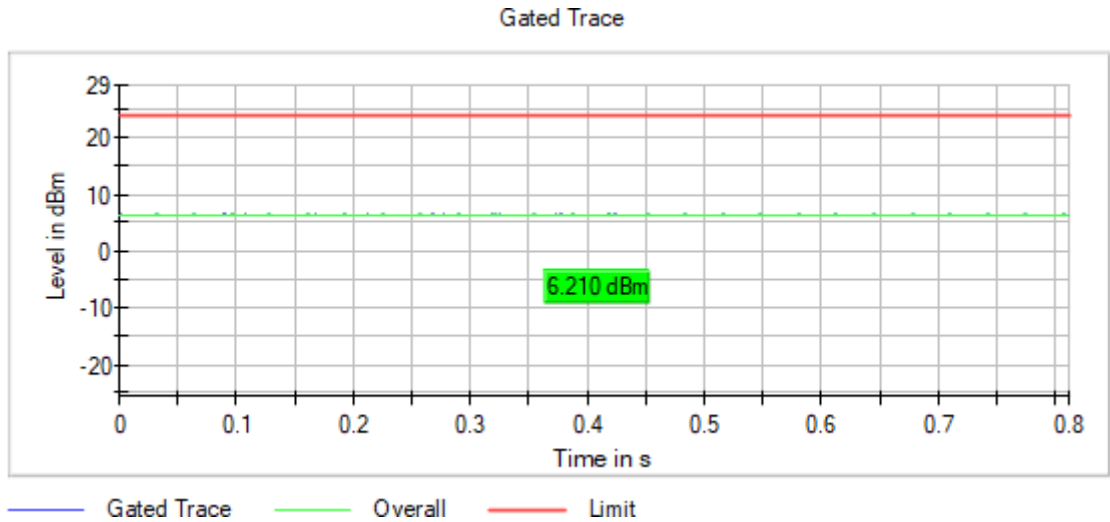
Frequency MHz = 5290.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



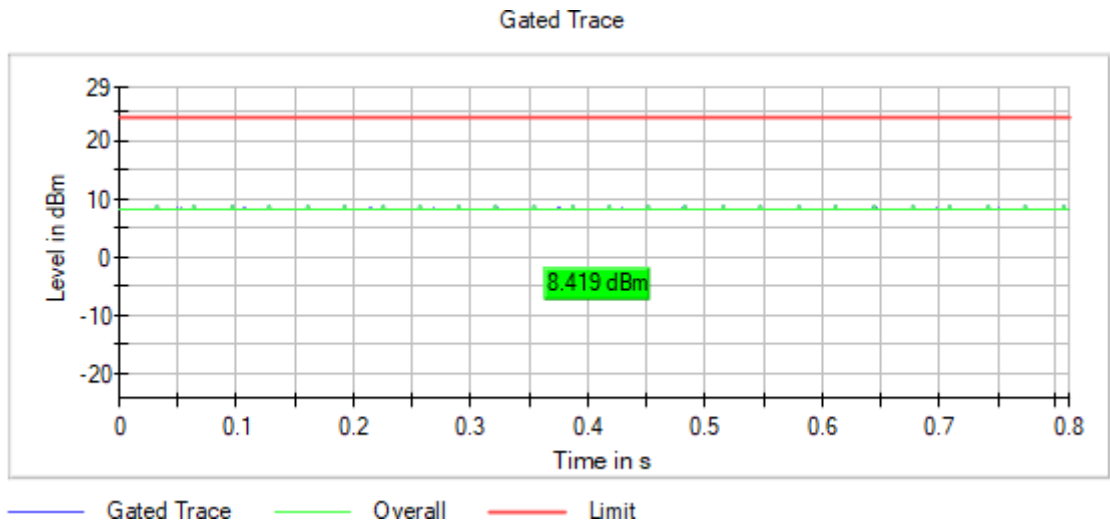
Frequency MHz = 5530.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



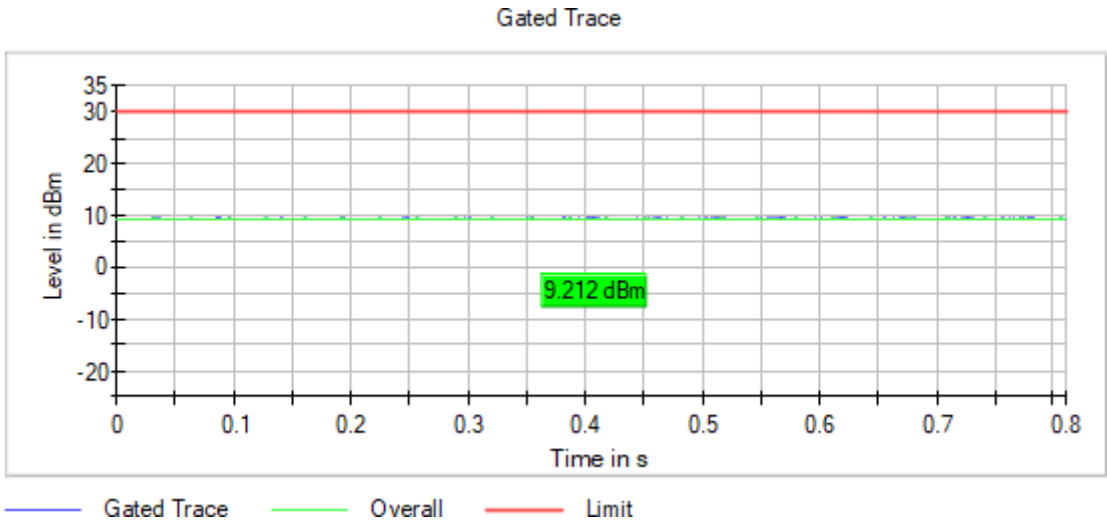
Frequency MHz = 5610.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5775.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE20 SS1 MCS 8 (OFDM MCS8) - Full RU
Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5180.00000	6.0	3.2
5200.00000	6.7	3.9
5240.00000	6.4	3.6
5260.00000	7.0	4.2
5280.00000	7.5	4.7
5320.00000	6.3	3.5
5500.00000	6.4	3.6
5580.00000	9.4	6.6
5700.00000	7.4	4.6
5745.00000	7.0	4.2
5785.00000	6.3	3.5
5825.00000	7.0	4.2

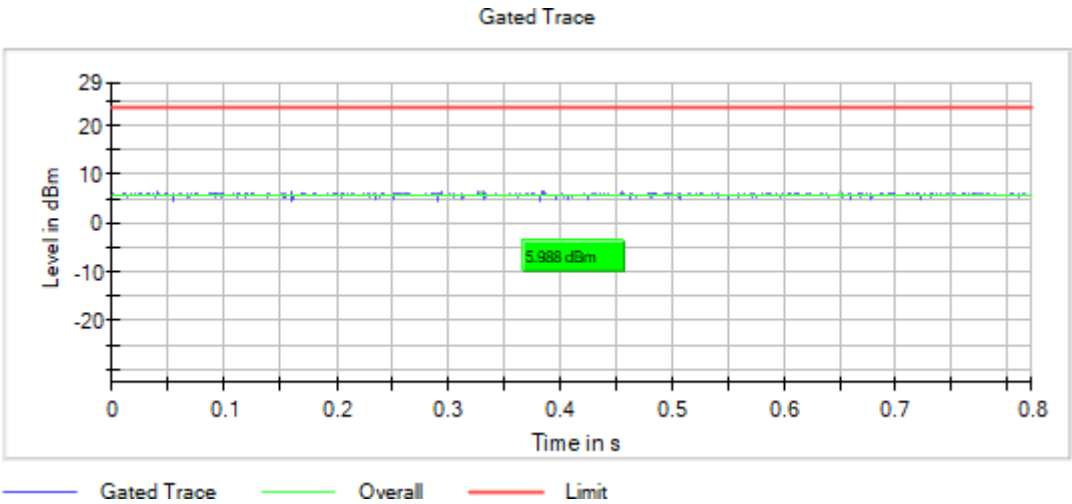
Verdict

Pass

Attachments

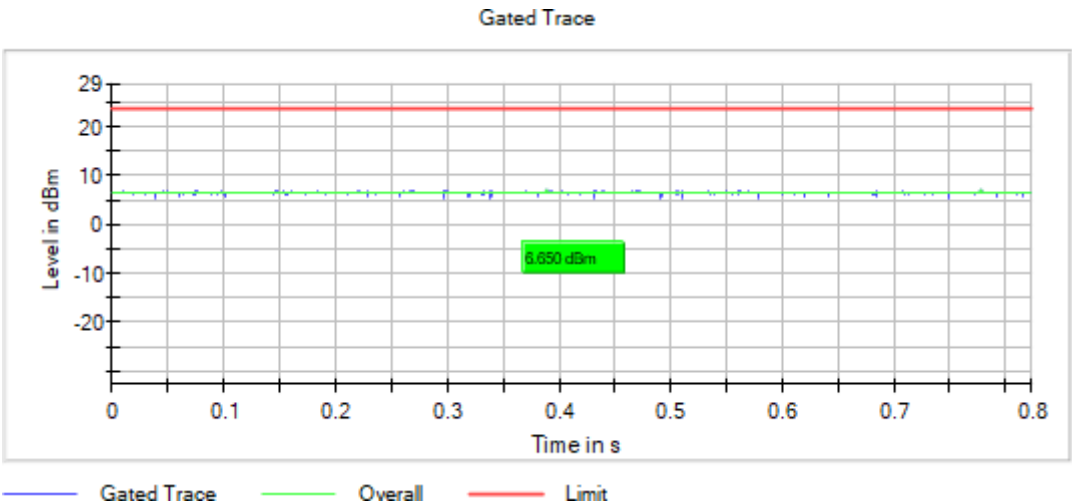
Frequency MHz = 5180.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



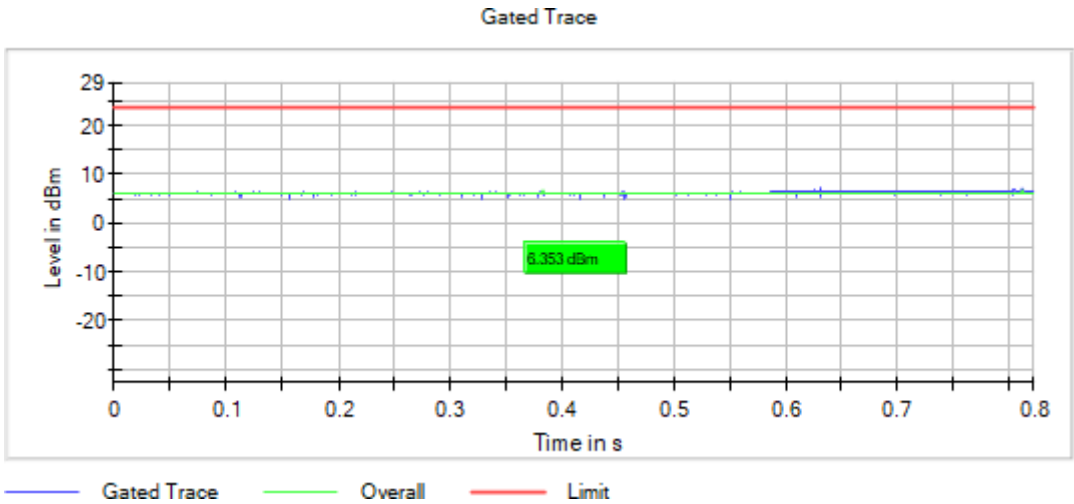
Frequency MHz = 5200.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



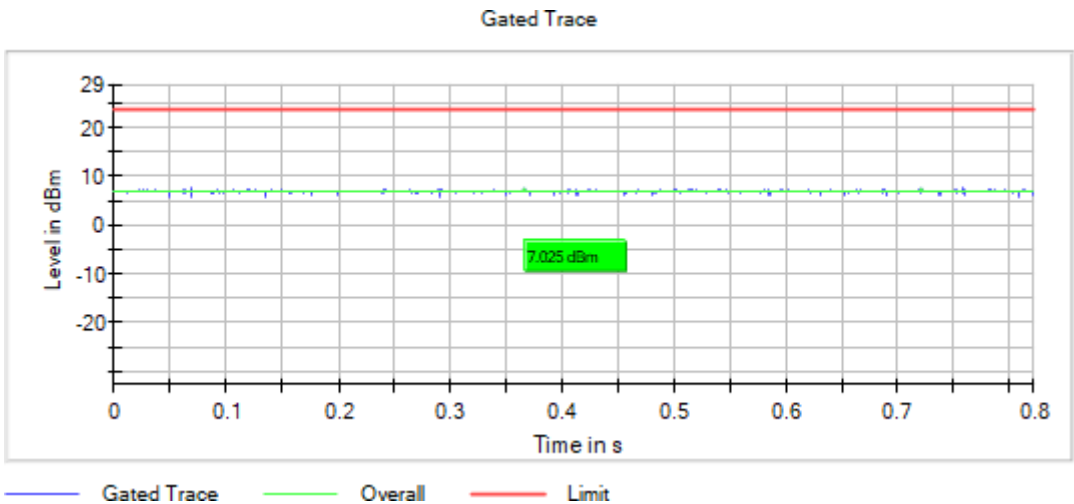
Frequency MHz = 5240.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



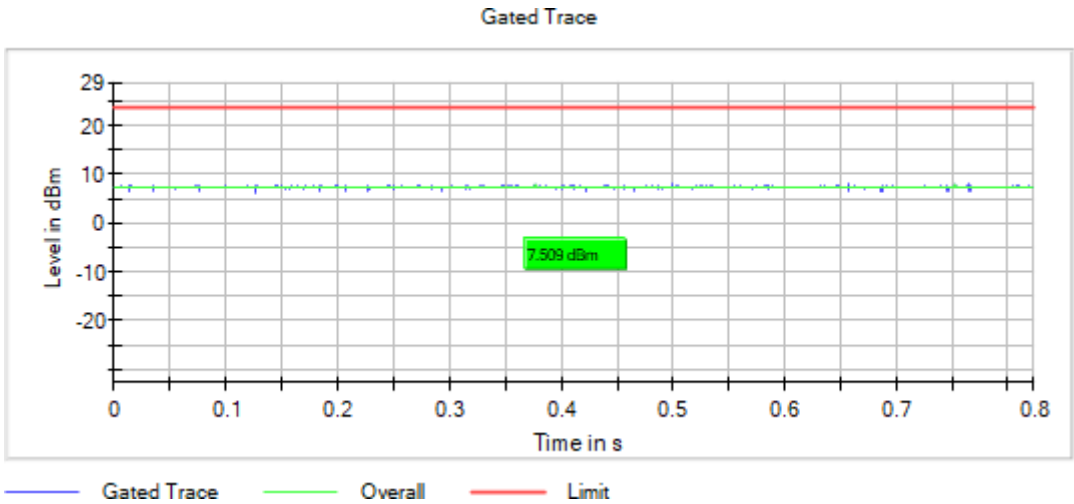
Frequency MHz = 5260.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



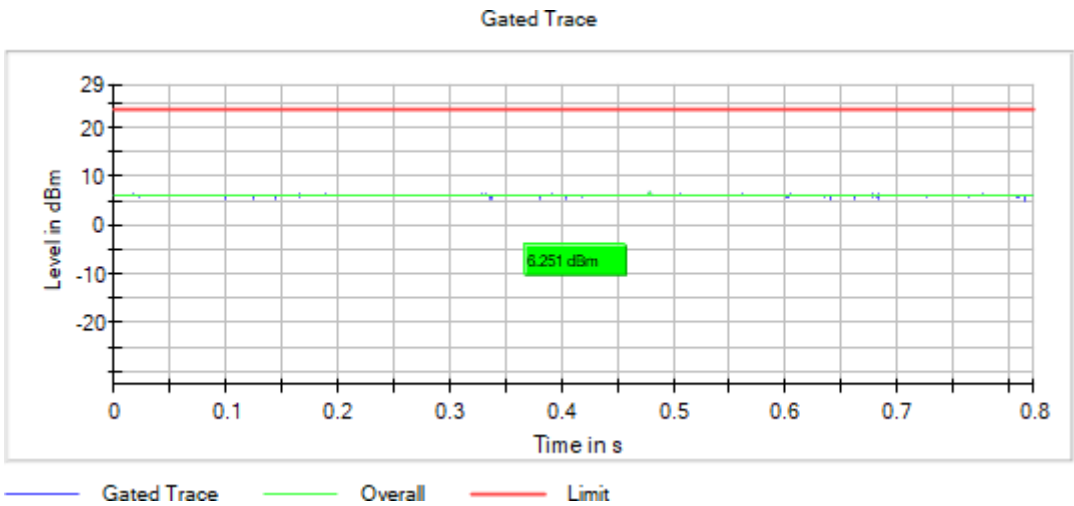
Frequency MHz = 5280.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



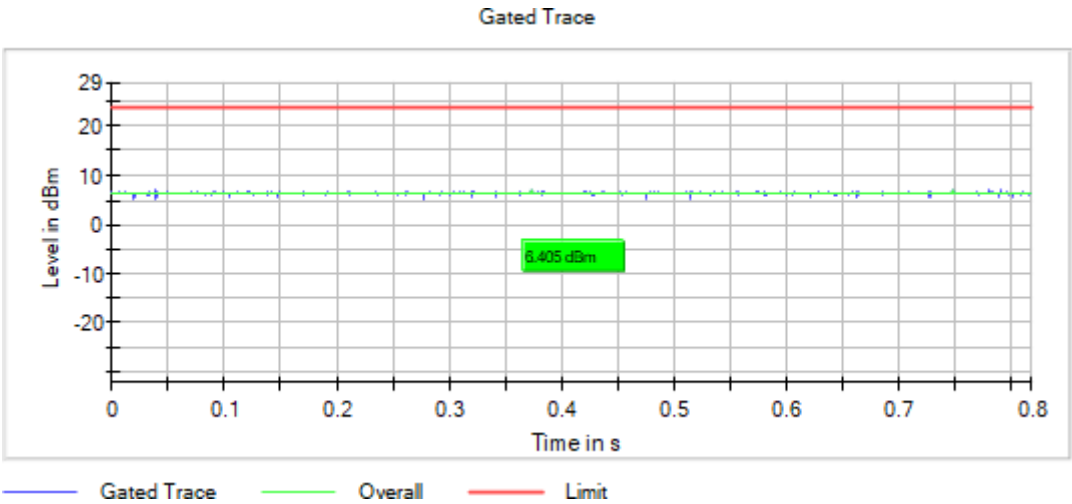
Frequency MHz = 5320.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



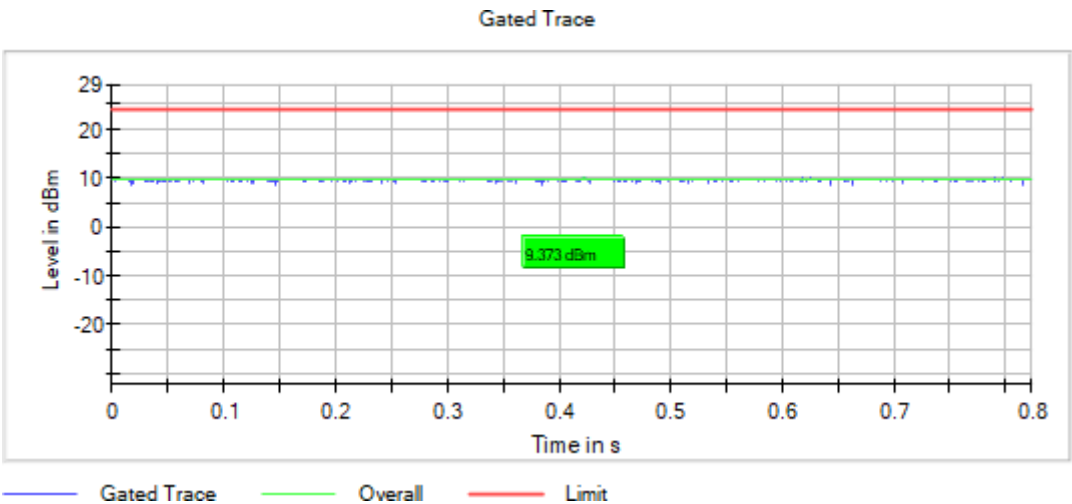
Frequency MHz = 5500.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



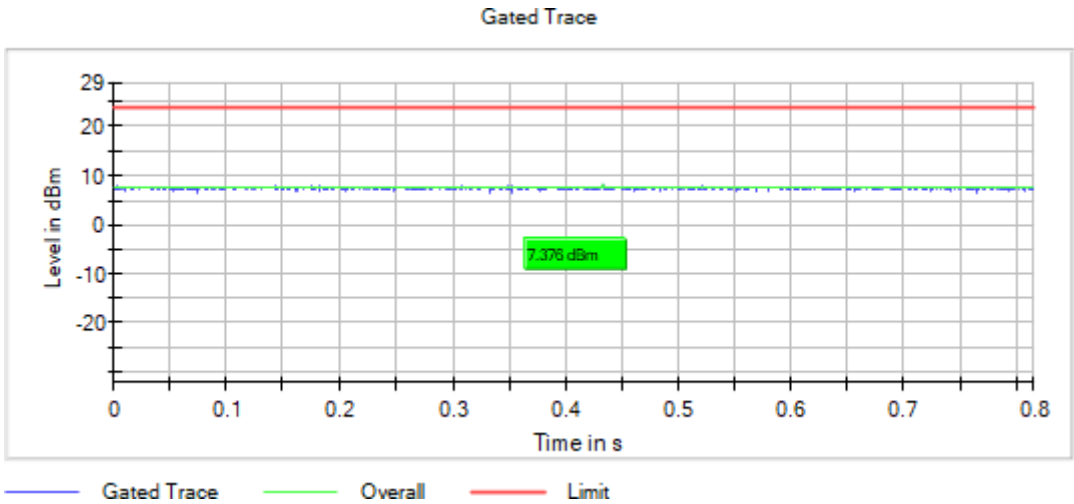
Frequency MHz = 5580.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



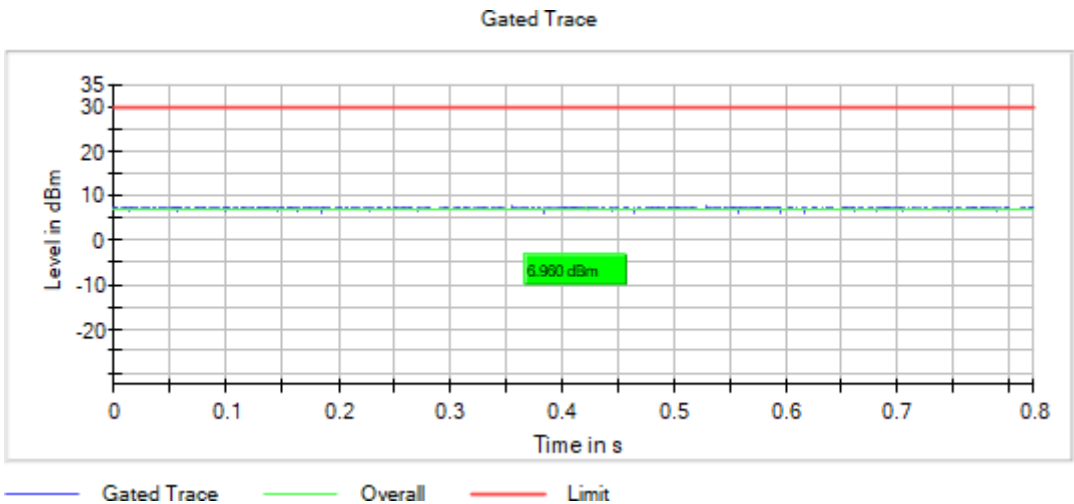
Frequency MHz = 5700.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



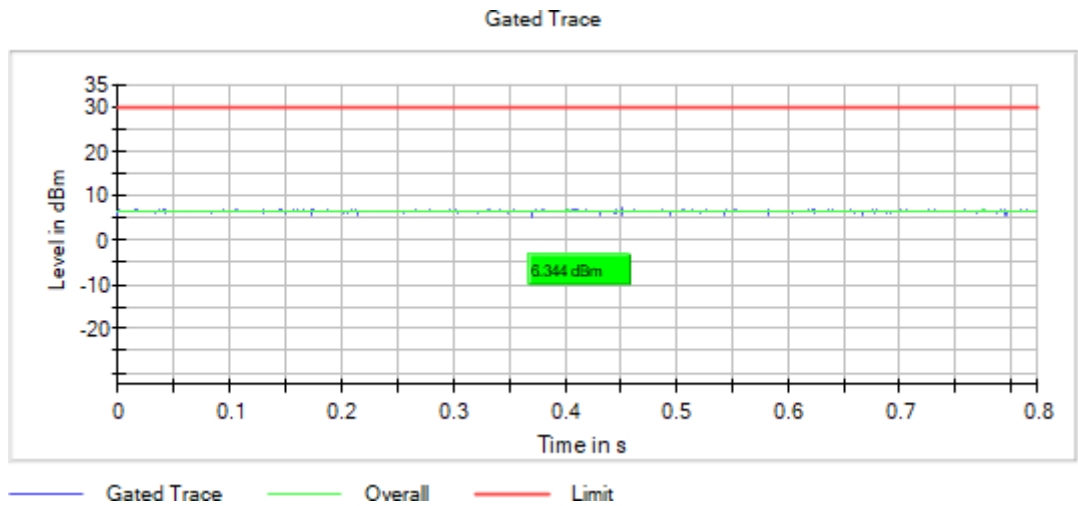
Frequency MHz = 5745.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



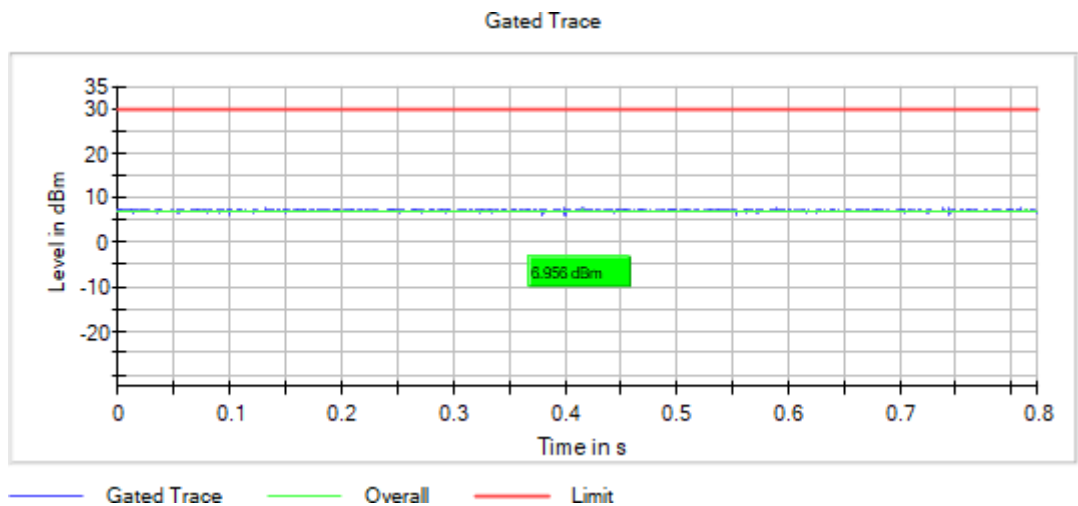
Frequency MHz = 5785.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE20 SS1 (OFDMA MCS8) – Partial RU

Antenna Gain: -2.8

Results

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5180.00000	7.8	5.0
5240.00000	8.3	5.5
5260.00000	8.6	5.8
5320.00000	8.6	5.8
5500.00000	7.3	4.5
5700.00000	9	6.2
5745.00000	8.1	5.3
5825.00000	7.7	4.9

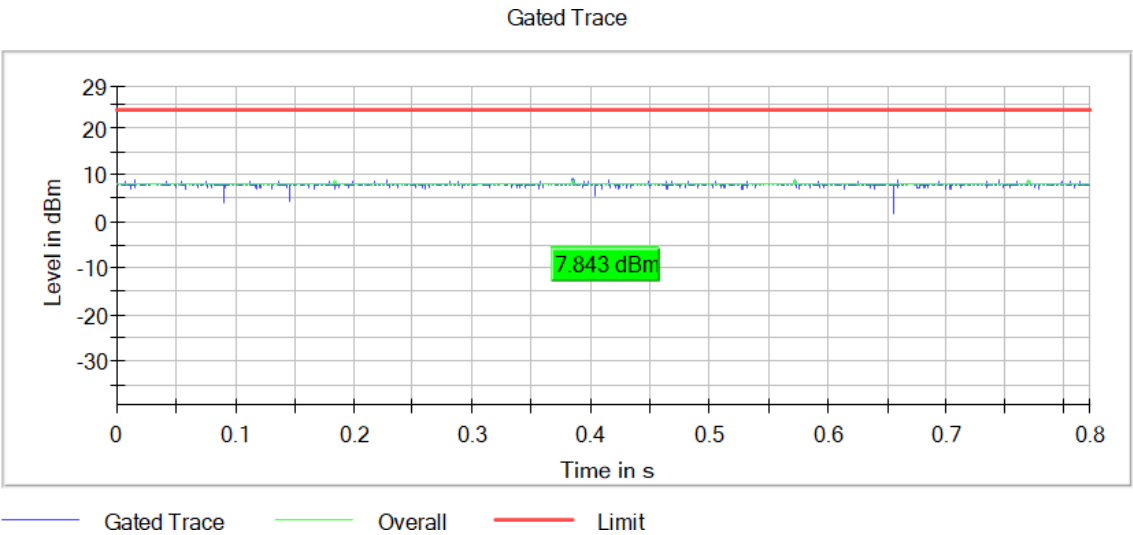
Verdict

Pass

Attachments

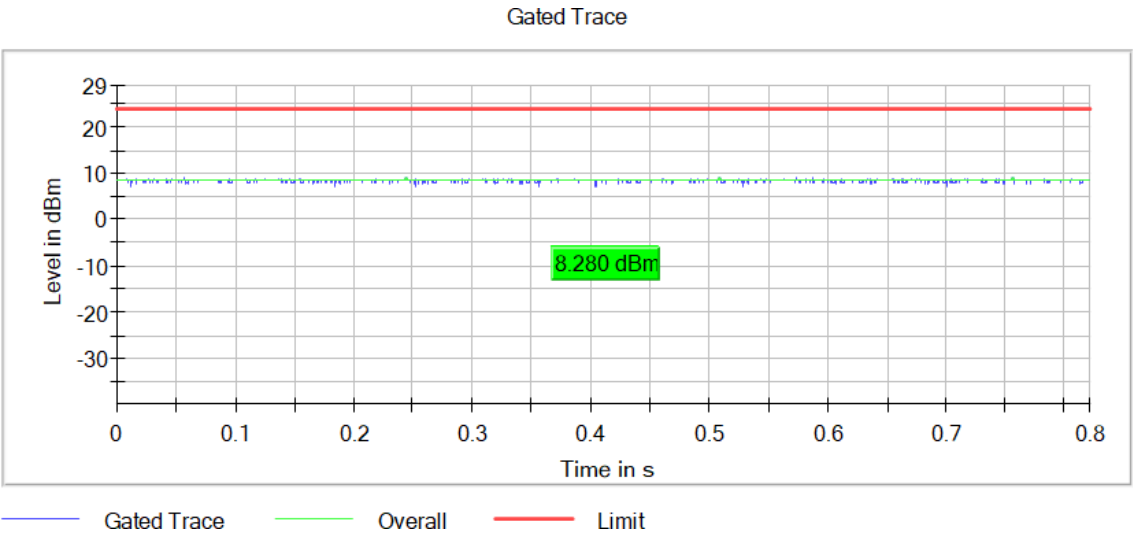
Frequency MHz = 5180.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5240.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:

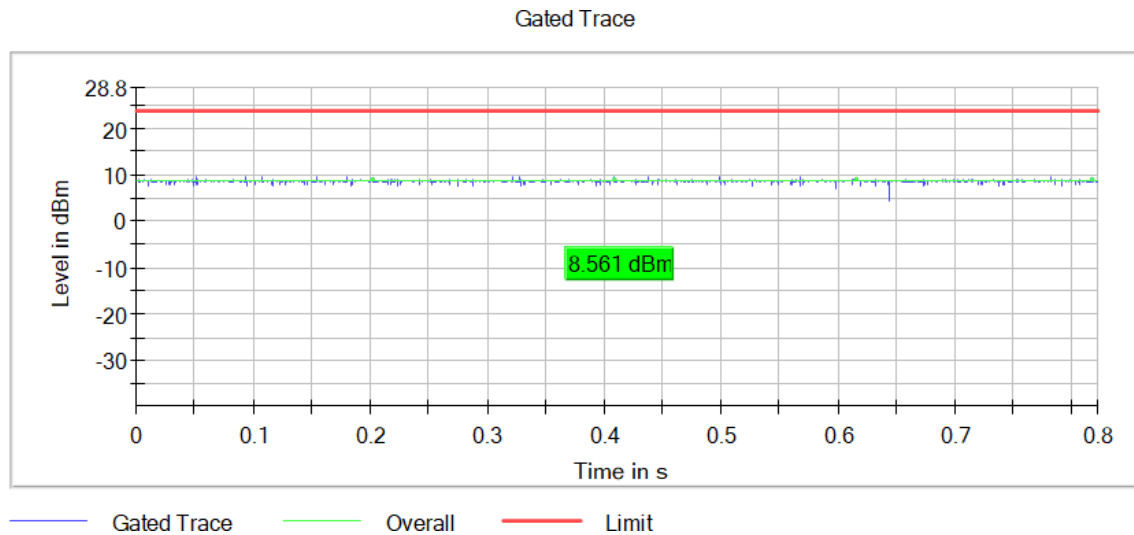


Frequency MHz = 5260.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

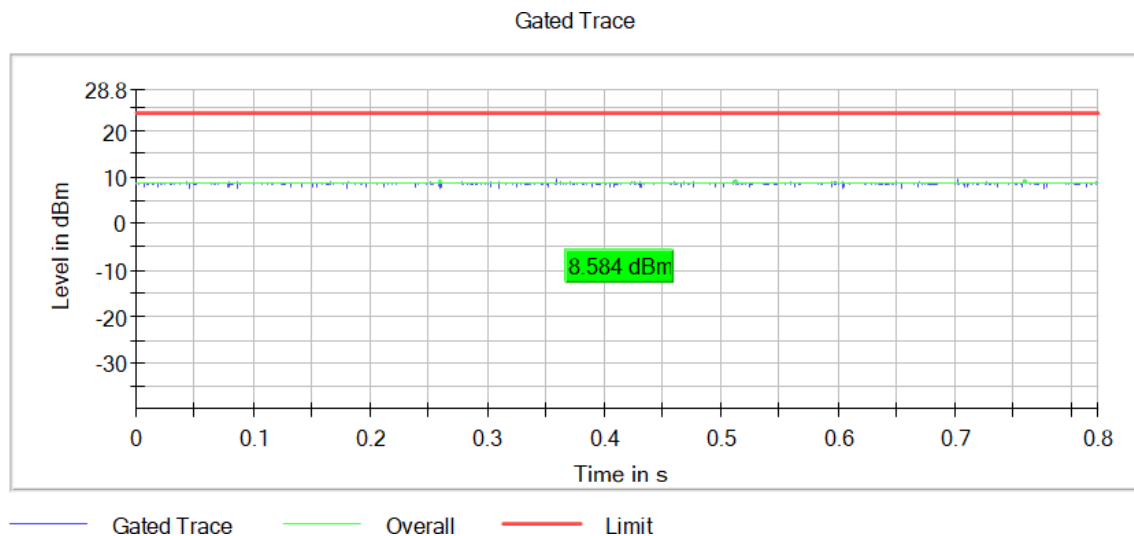


Frequency MHz = 5320.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

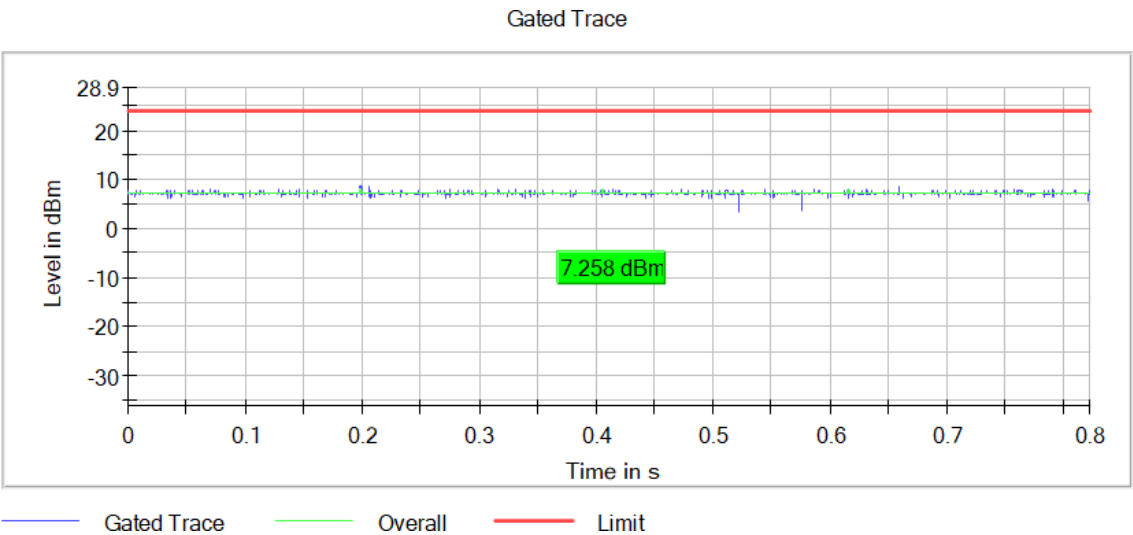
Number of Transmission Chains = 1

Images:



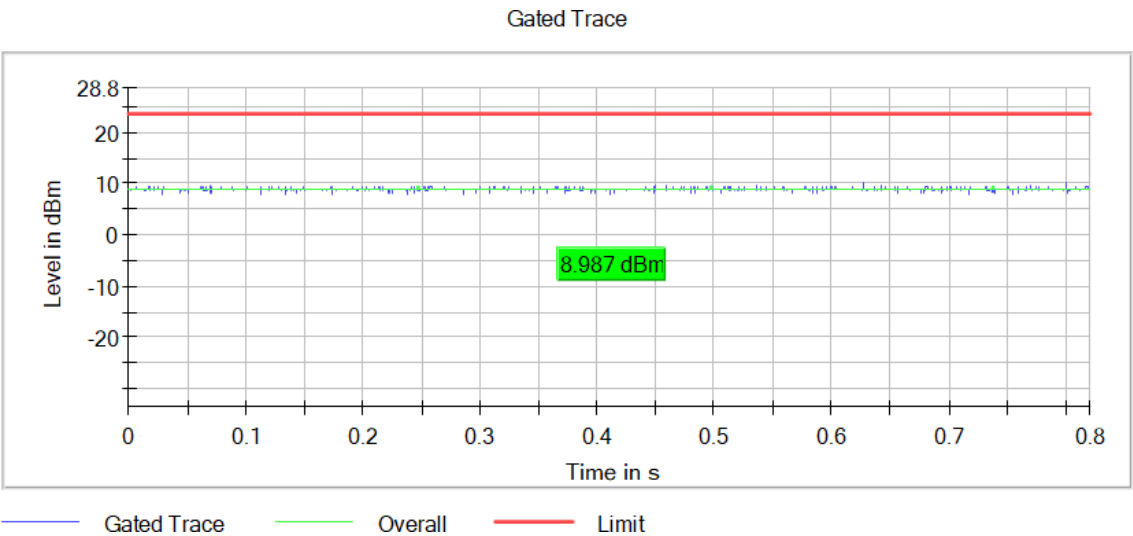
Frequency MHz = 5500.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



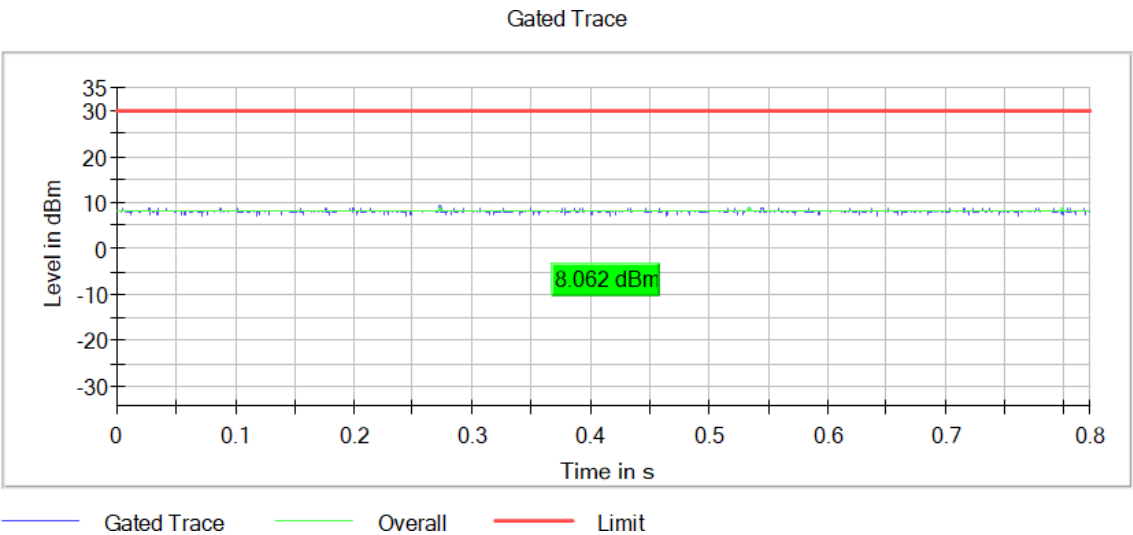
Frequency MHz = 5700.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



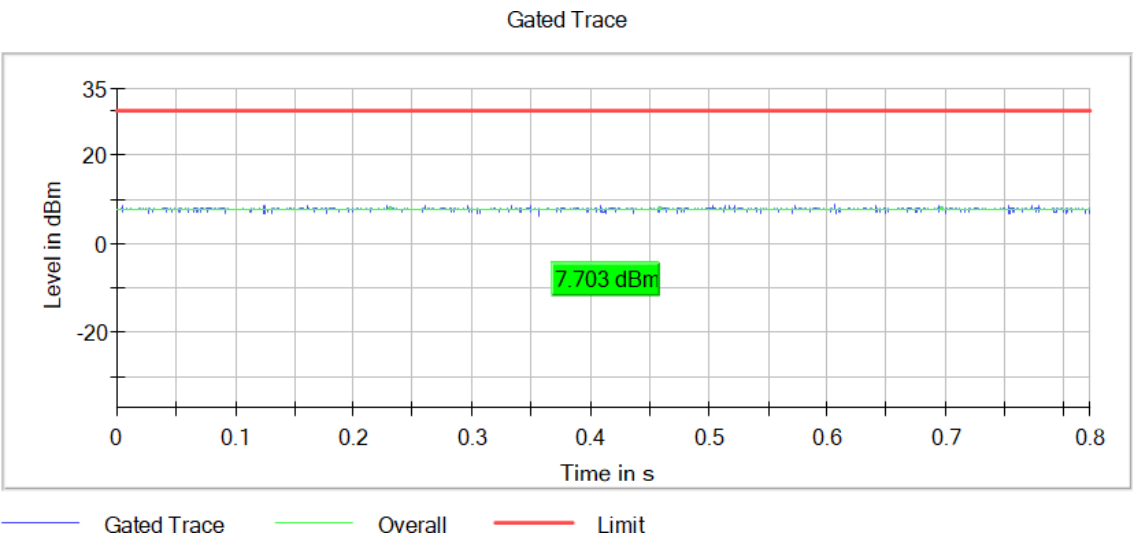
Frequency MHz = 5745.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE40 SS1 (OFDMA MCS9) - Full RU
Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5190.00000	6.6	3.8
5230.00000	6.8	4.0
5270.00000	7.8	5.0
5310.00000	6.7	3.9
5510.00000	7.1	4.3
5550.00000	7.4	4.6
5670.00000	7.5	4.7
5755.00000	6.5	3.7
5795.00000	6.9	4.1

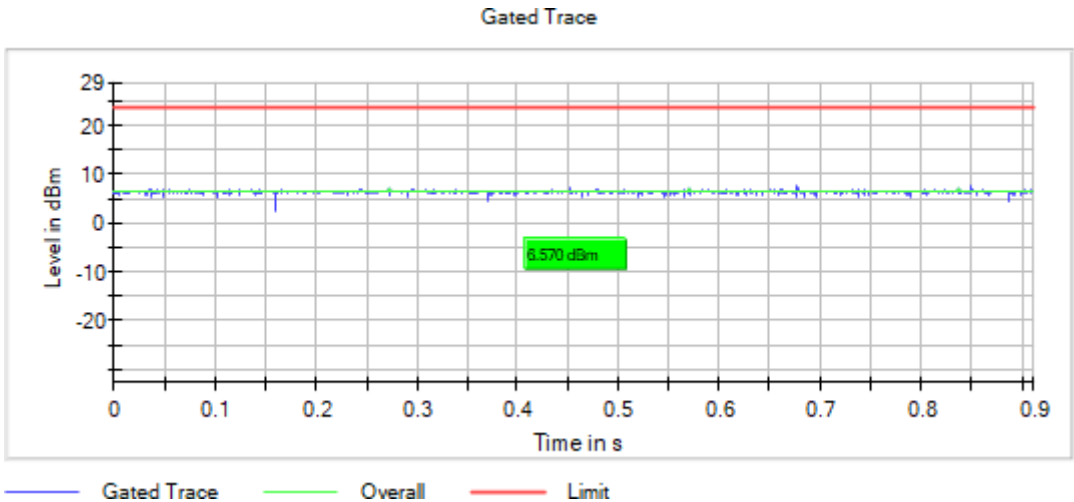
Verdict

Pass

Attachments

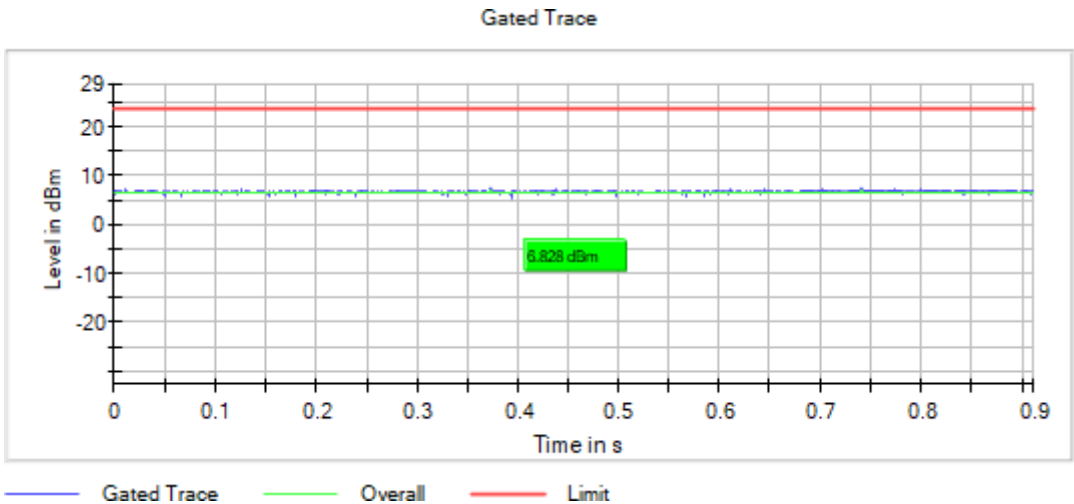
Frequency MHz = 5190.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



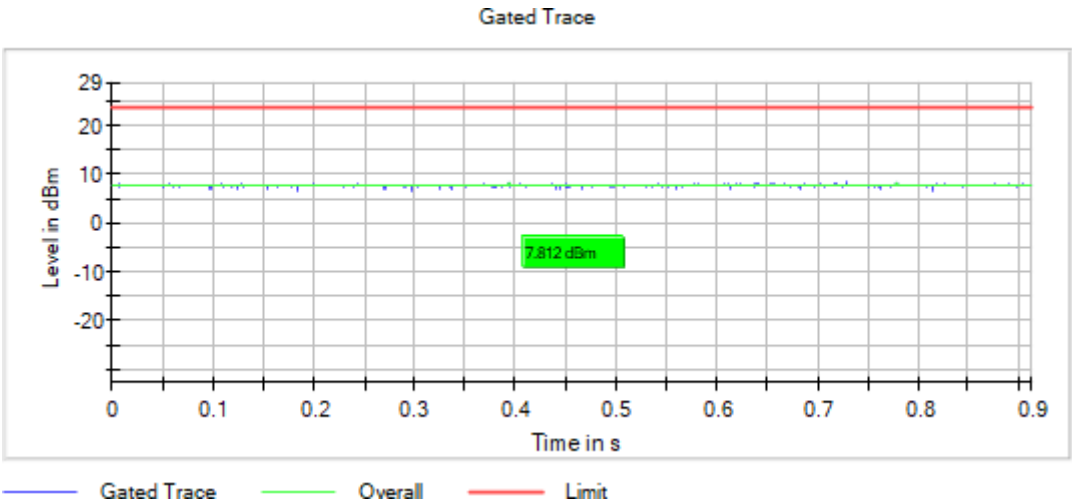
Frequency MHz = 5230.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



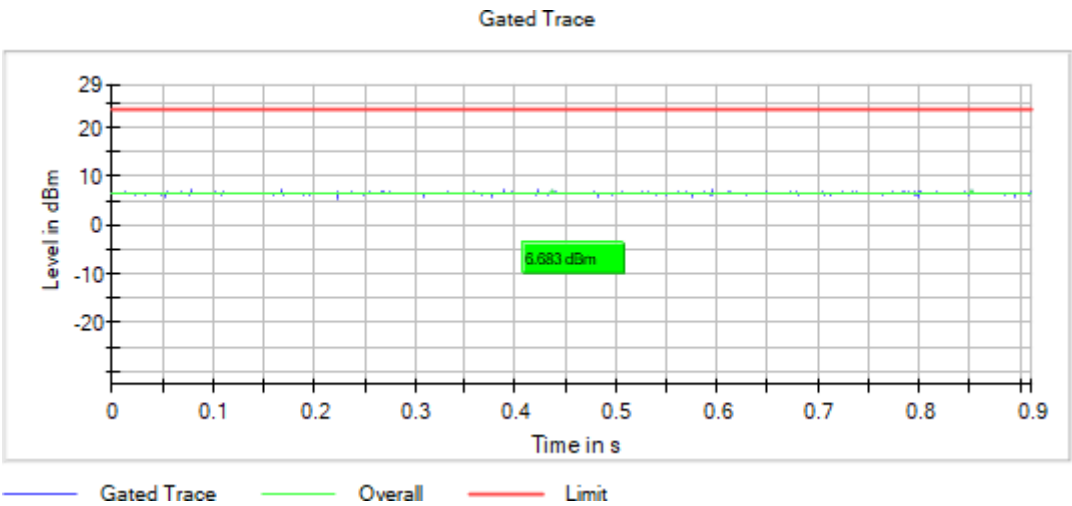
Frequency MHz = 5270.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



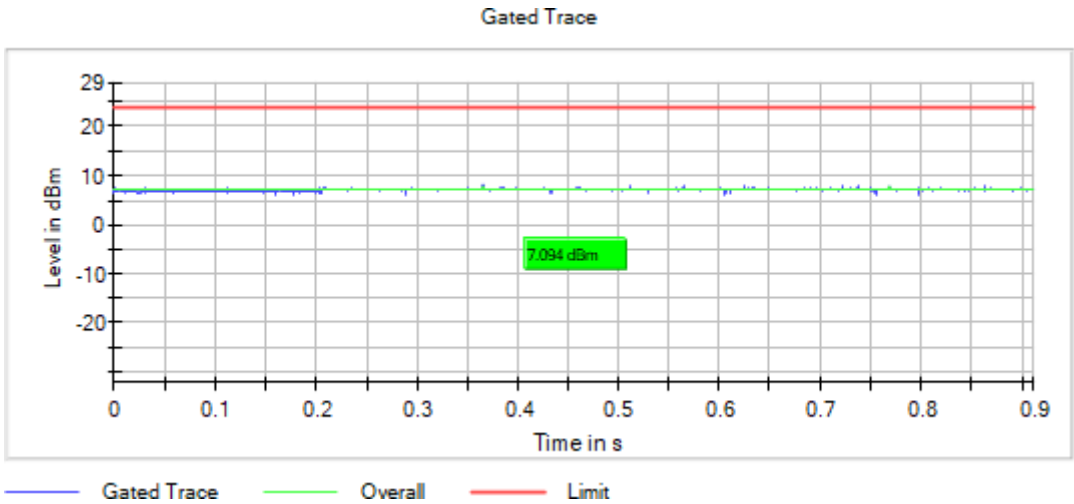
Frequency MHz = 5310.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



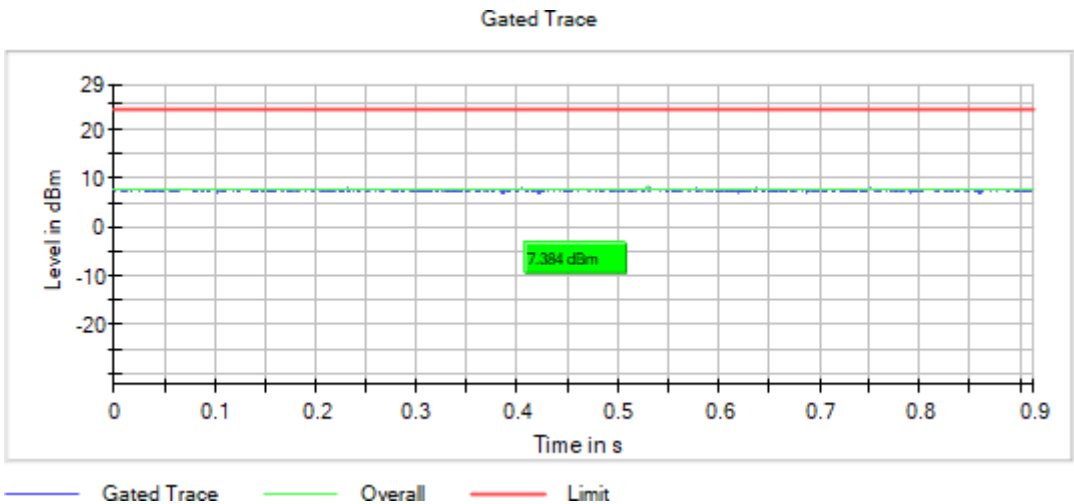
Frequency MHz = 5510.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



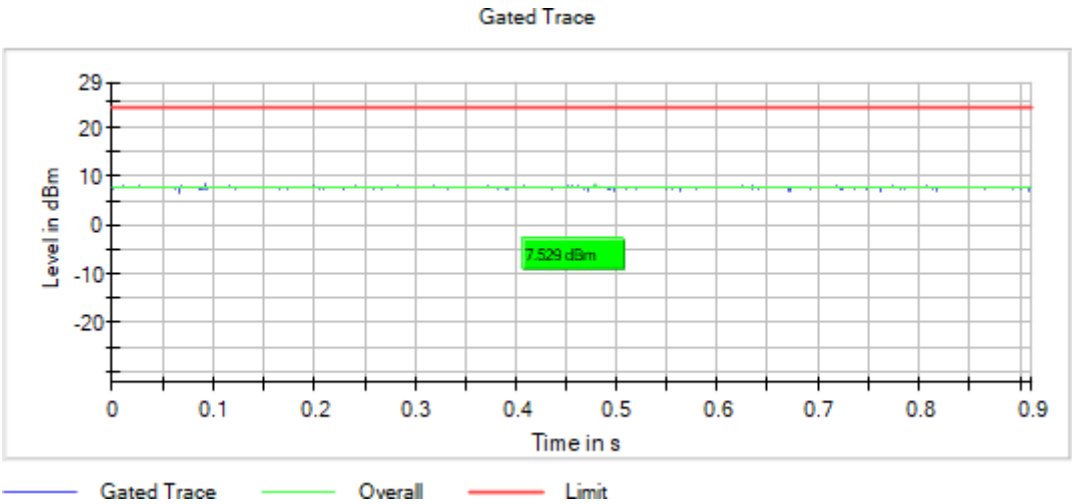
Frequency MHz = 5550.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



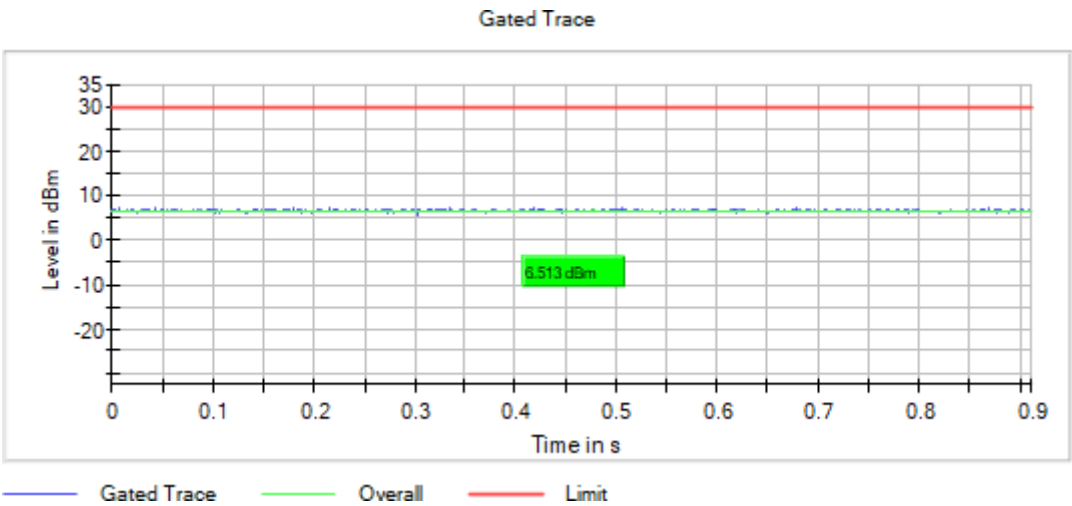
Frequency MHz = 5670.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



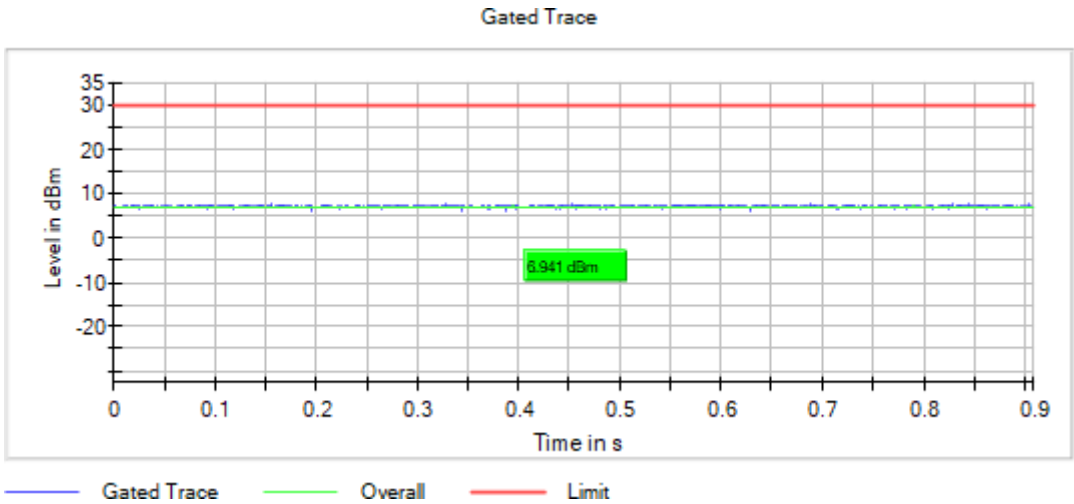
Frequency MHz = 5755.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE40 SS1 (OFDMA MCS9) – Partial RU

Antenna Gain: -2.8

Results

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5190.00000	7.6	4.8
5230.00000	8.6	5.8
5270.00000	8.8	6.0
5310.00000	8.9	6.1
5510.00000	8.4	5.6
5670.00000	8.2	5.4
5755.00000	8.4	5.6
5795.00000	8.7	5.9

Verdict

Pass

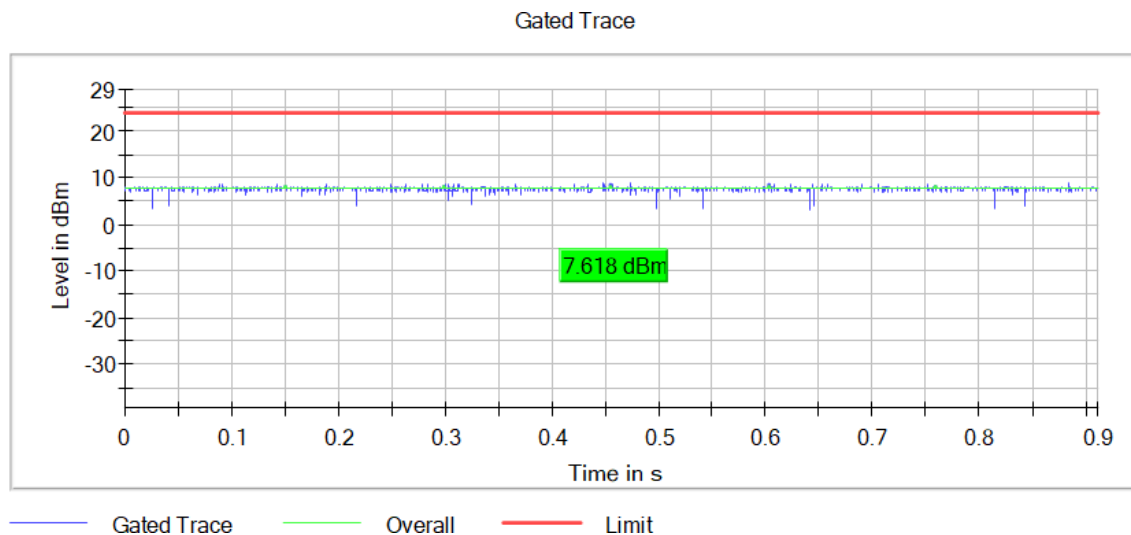
Attachments

Frequency MHz = 5190.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

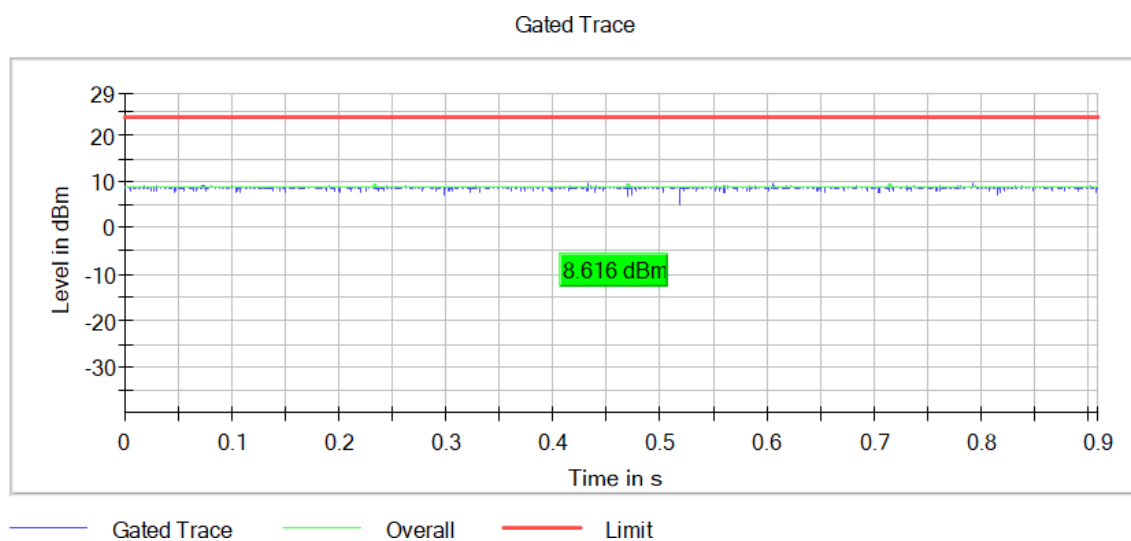


Frequency MHz = 5230.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

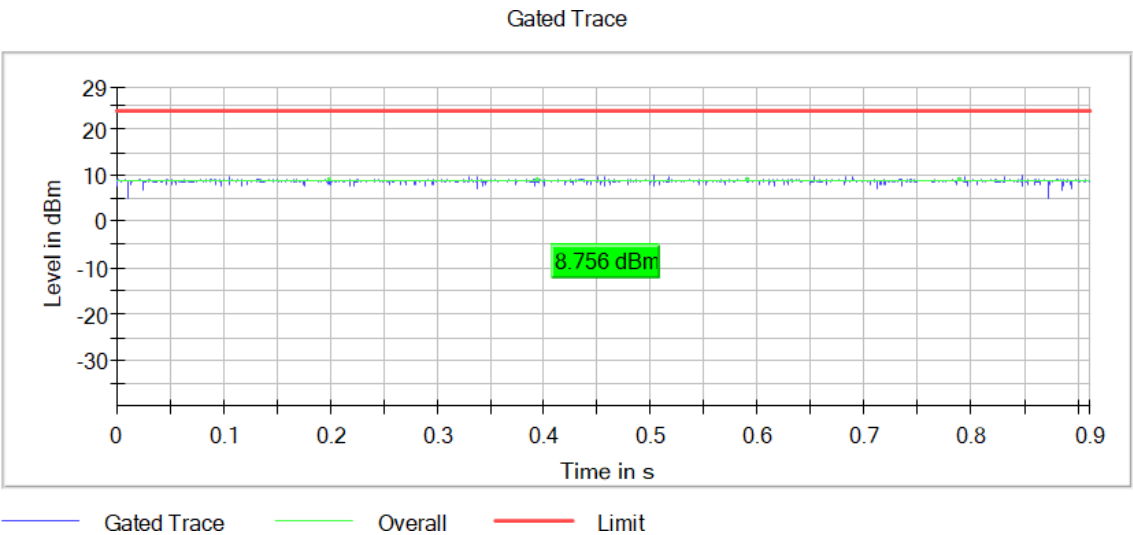
Number of Transmission Chains = 1

Images:



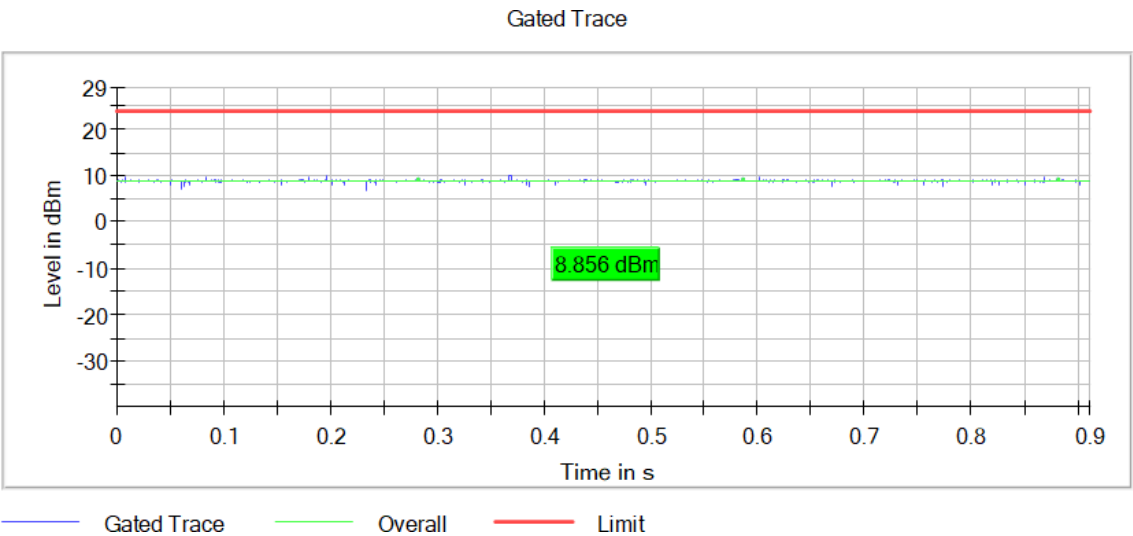
Frequency MHz = 5270.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5310.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:

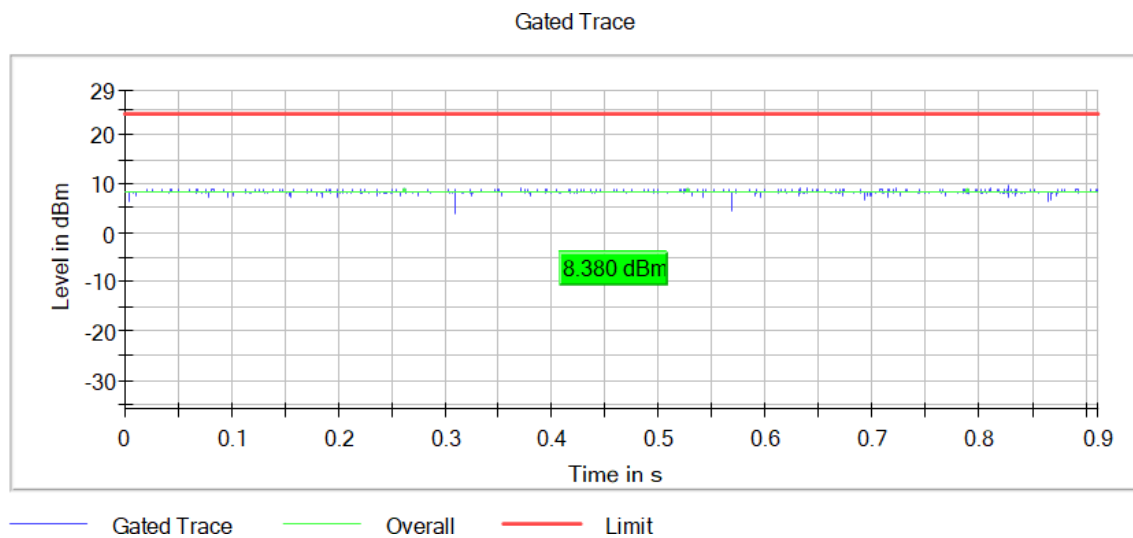


Frequency MHz = 5510.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

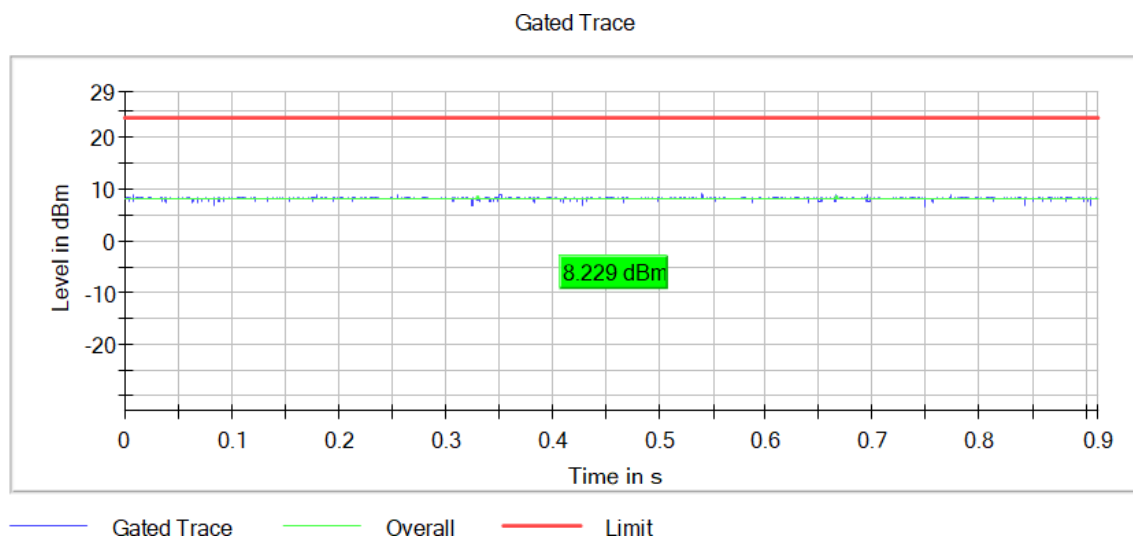


Frequency MHz = 5670.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

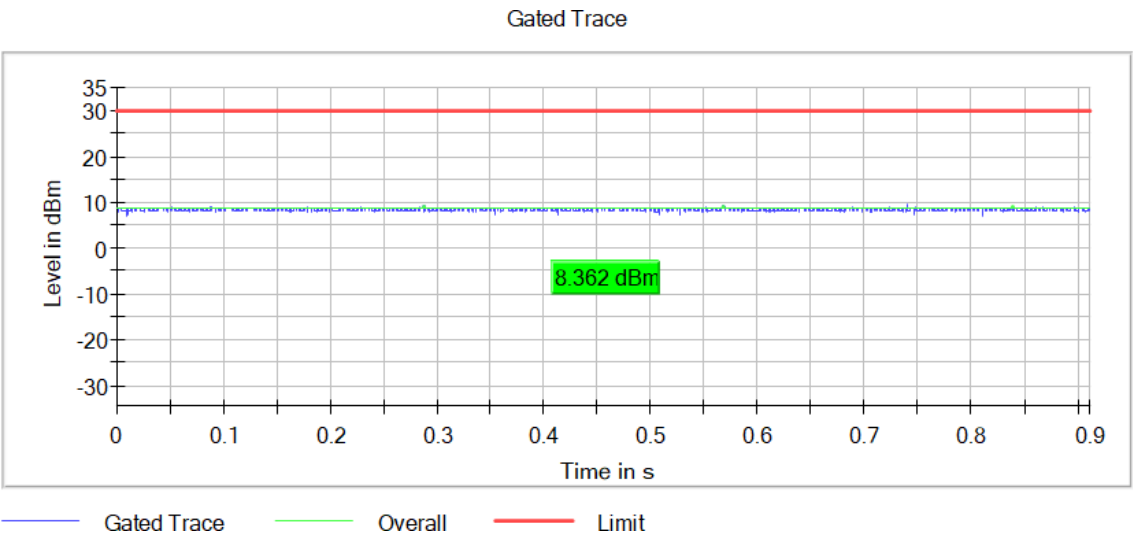
Number of Transmission Chains = 1

Images:



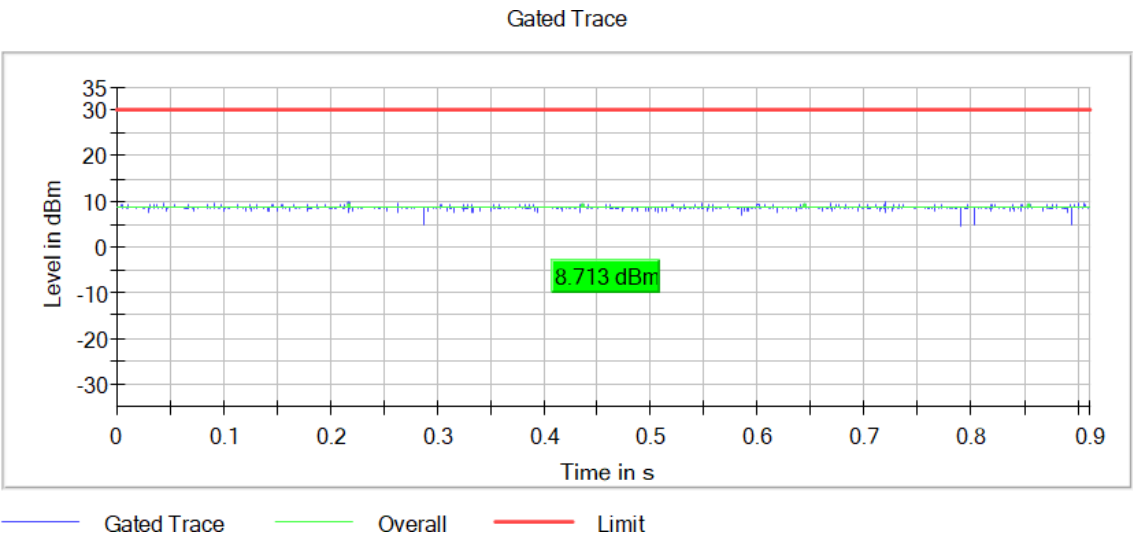
Frequency MHz = 5755.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE80 SS1 (OFDMA MCS11) – Full RU
Results

Antenna Gain: -2.8

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5210.00000	6.7	3.9
5290.00000	7.8	5.0
5530.00000	7.3	4.5
5610.00000	10.1	7.3
5775.00000	7.4	4.6

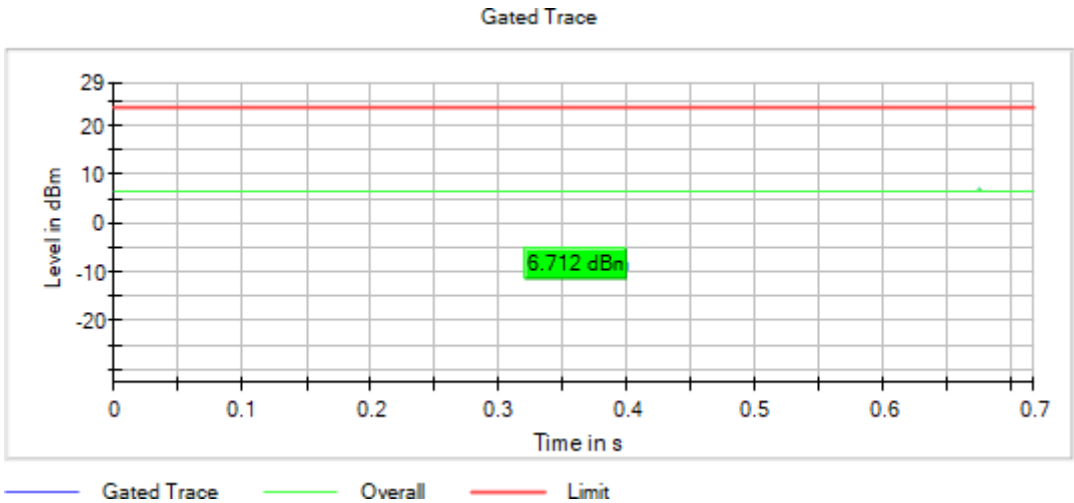
Verdict

Pass

Attachments

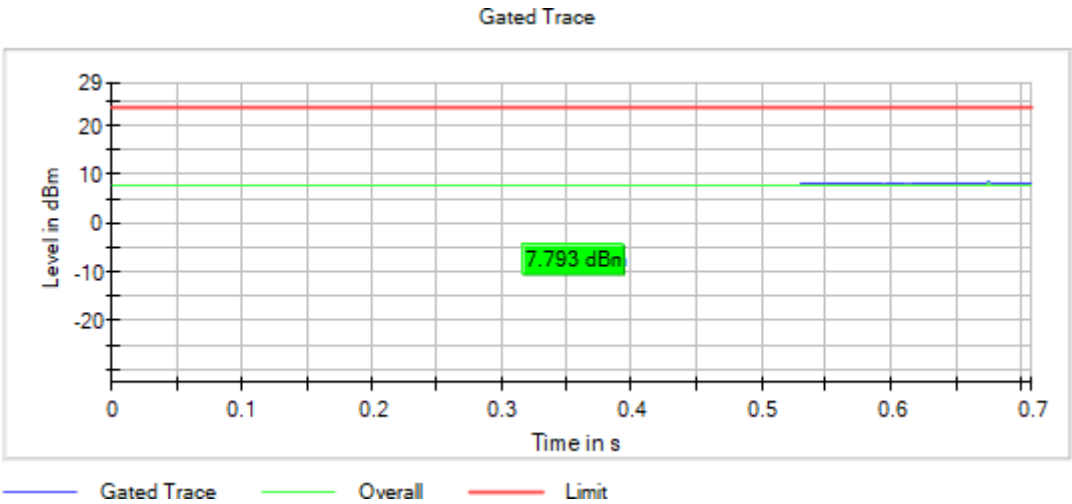
Frequency MHz = 5210.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



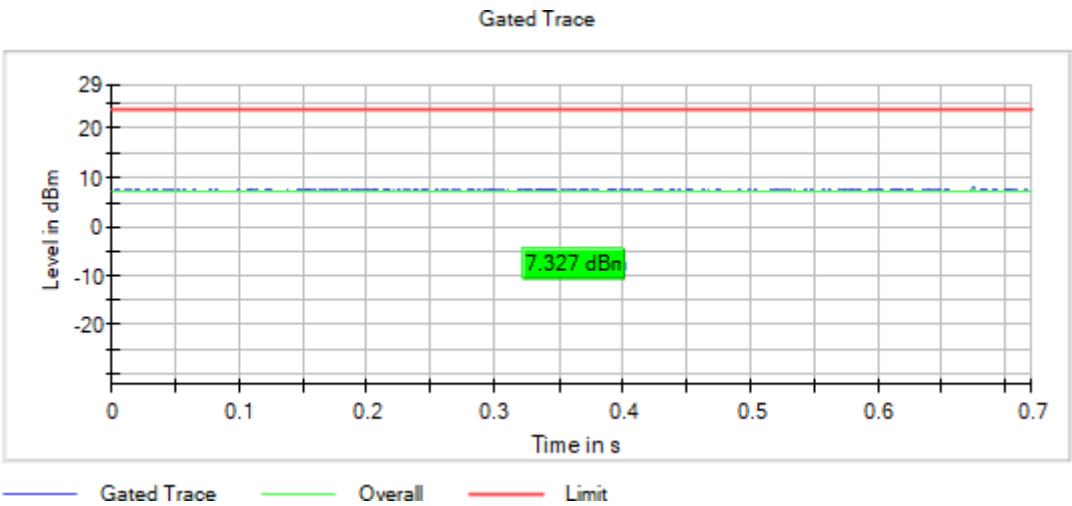
Frequency MHz = 5290.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



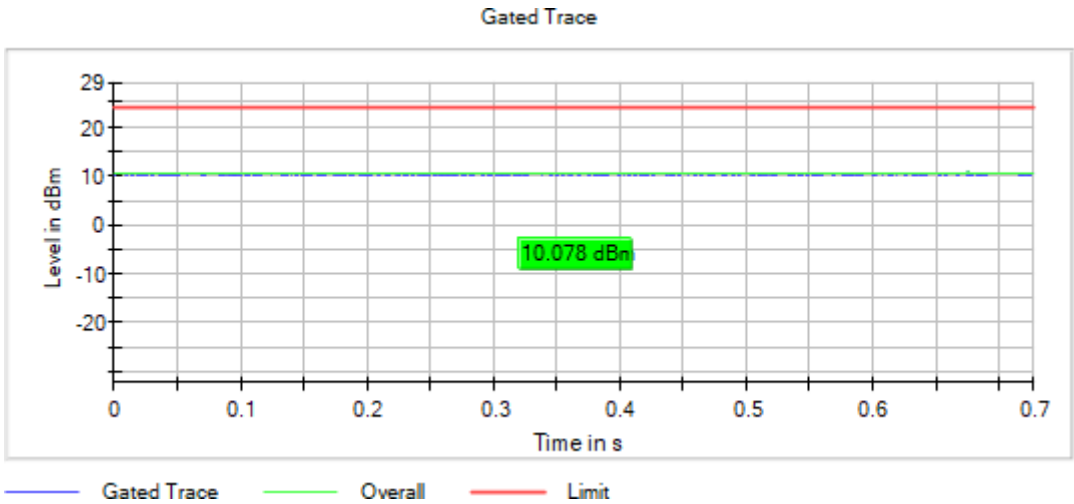
Frequency MHz = 5530.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



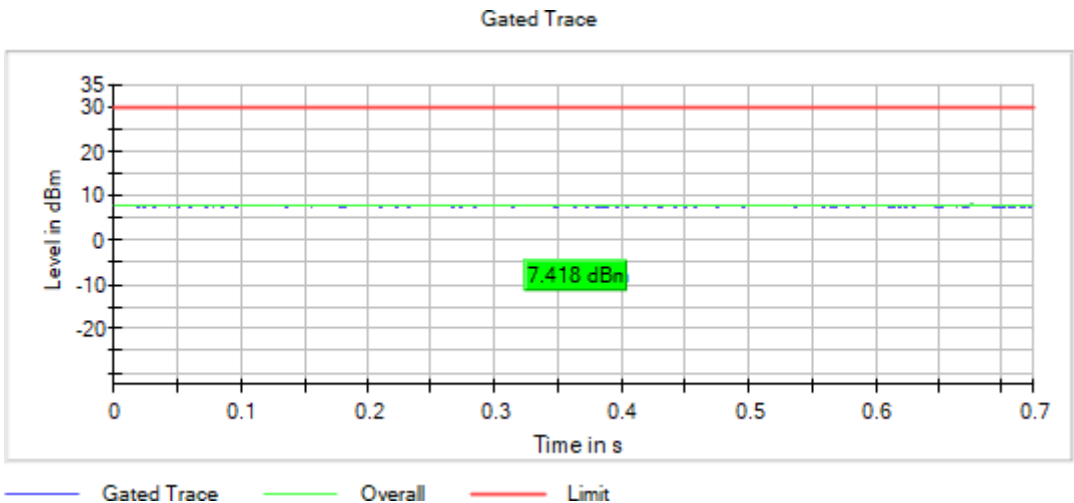
Frequency MHz = 5610.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



Frequency MHz = 5775.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE80 SS1 (OFDMA MCS11) – Partial RU

Antenna Gain: -2.8

Results

Freq (MHz)	Avg Power (dBm)	Max EIRP (dBm)
5210.00000	7.1	4.3
5290.00000	8.1	5.3
5530.00000	6.0	3.2
5610.00000	7.4	4.6
5775.00000	8.6	5.8

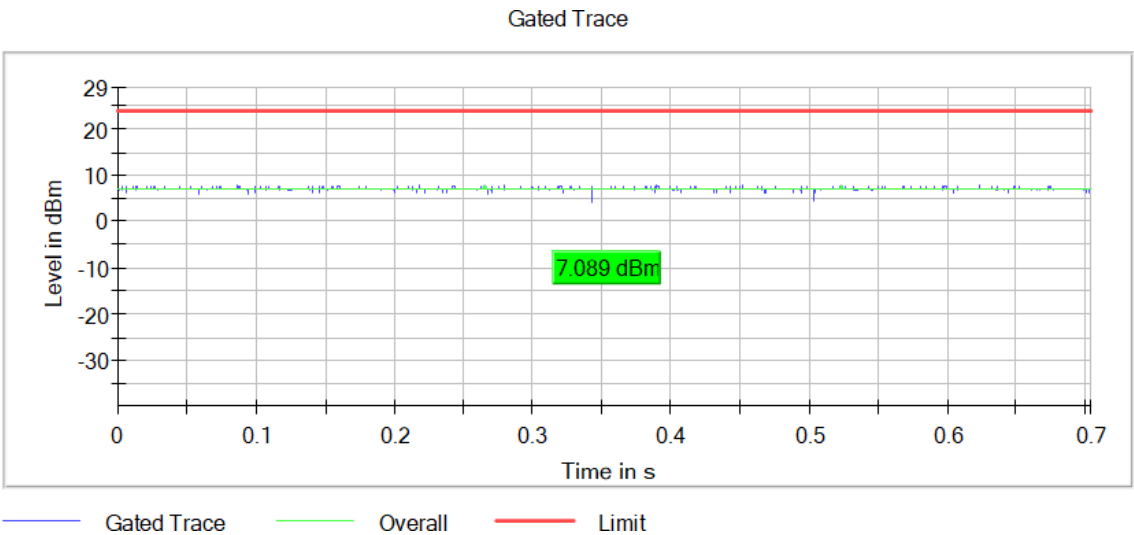
Verdict

Pass

Attachments

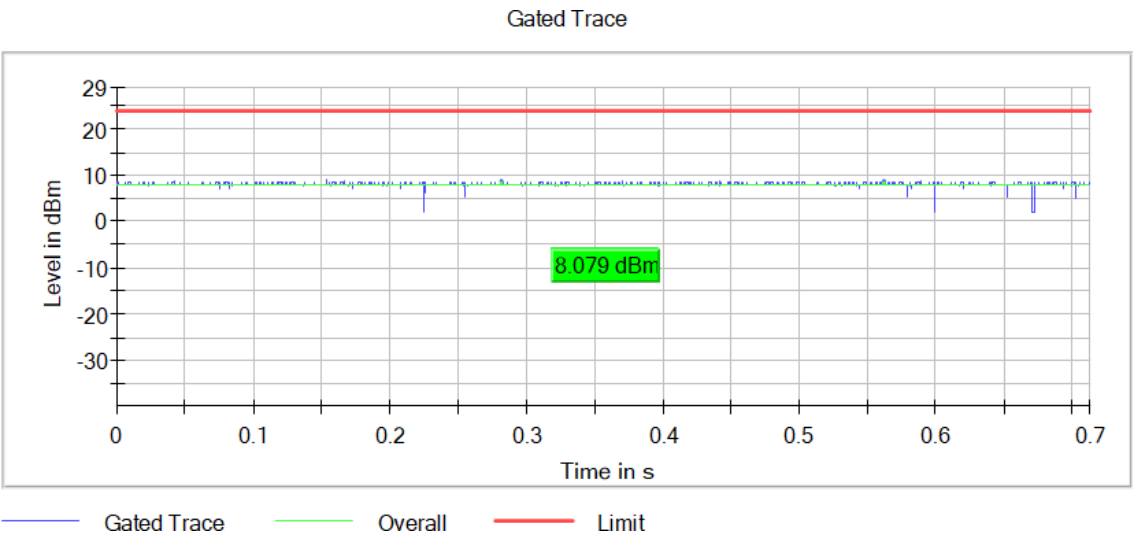
Frequency MHz = 5210.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



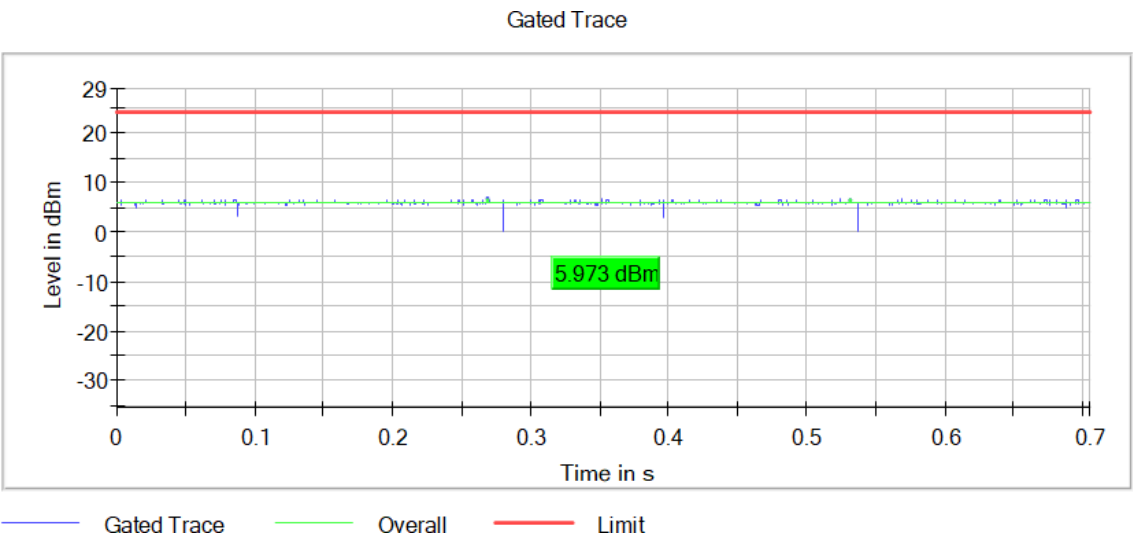
Frequency MHz = 5290.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5530.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:

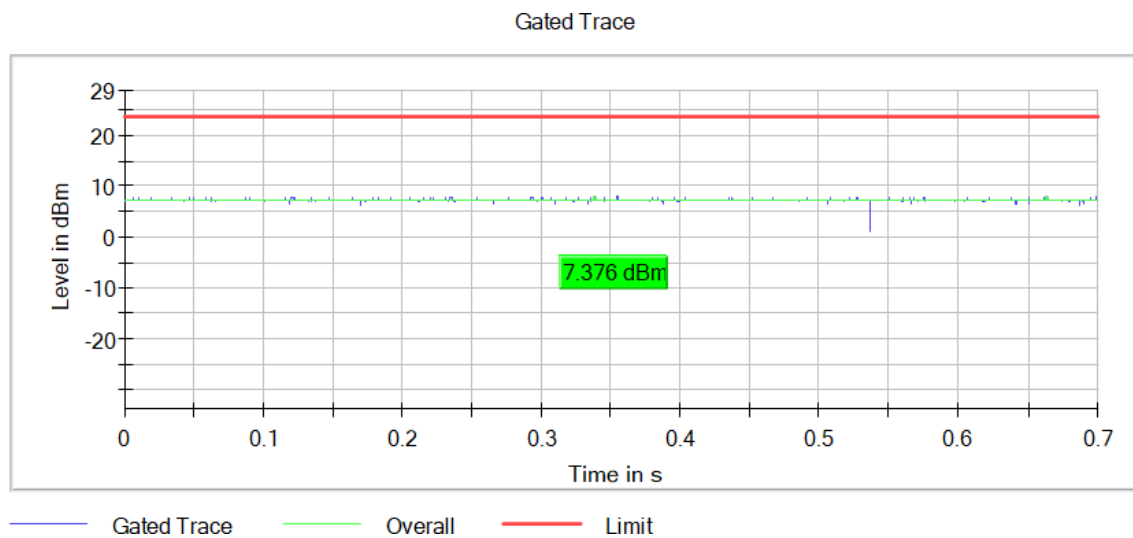


Frequency MHz = 5610.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

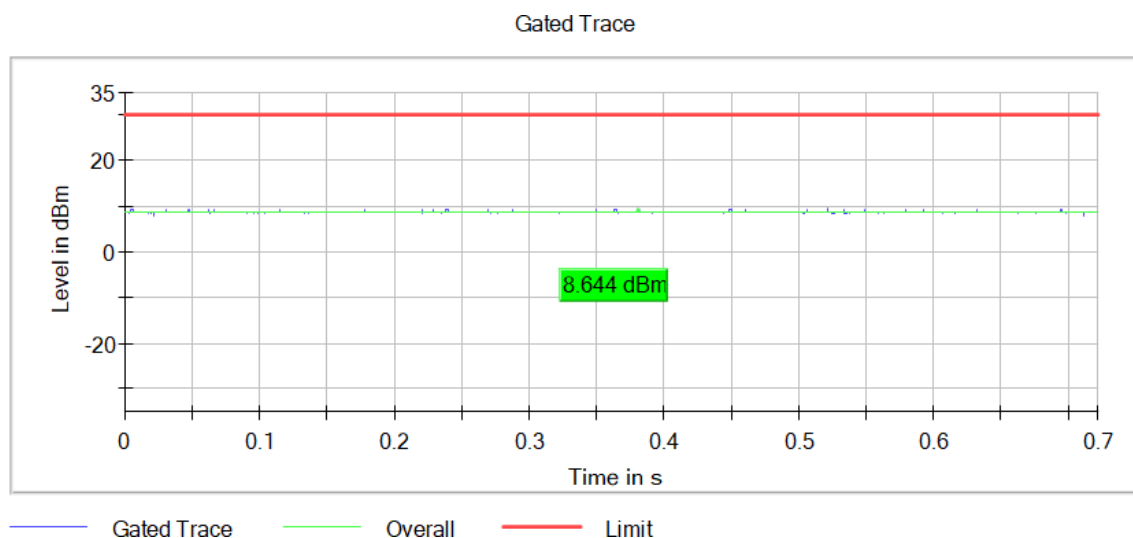


Frequency MHz = 5775.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:



Tables:
Spectrum Analyzer Parameters

Setting	Instrument Value	Target Value
Measurement Time	1.000 s	1.000 s
Points	1000000	1000000
Time resolution	1.000 µs	1.000 µs

FCC 15.407 (a) / RSS-247 6.2 Maximum Power Spectral Density

Limits

FCC 15.407:

The maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

RSS-247: For the 5.25-5.35 GHz, 5.470-5.6 GHz, and 5.650-5.725 GHz bands, the power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For the band 5.725-5.850 GHz, the output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Modulation: 802.11a (OFDM 54 Mbit/s)

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5180.00000	5183.366337	-0.35
5200.00000	5207.326733	-0.07
5240.00000	5243.366337	-0.20
5260.00000	5263.366337	0.85
5280.00000	5277.029703	0.36
5320.00000	5317.029703	0.48
5500.00000	5507.326733	-1.96
5580.00000	5583.366337	0.93
5700.00000	5703.366337	0.67
5745.00000	5748.366337	-6.03
5785.00000	5788.366337	-5.77
5825.00000	5828.366337	-5.79

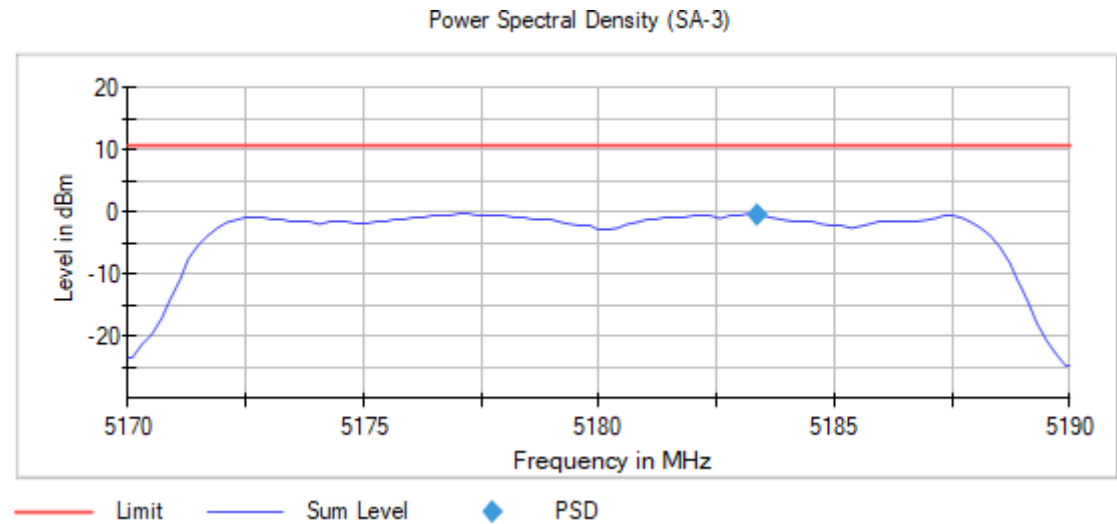
Verdict

Pass

Attachments

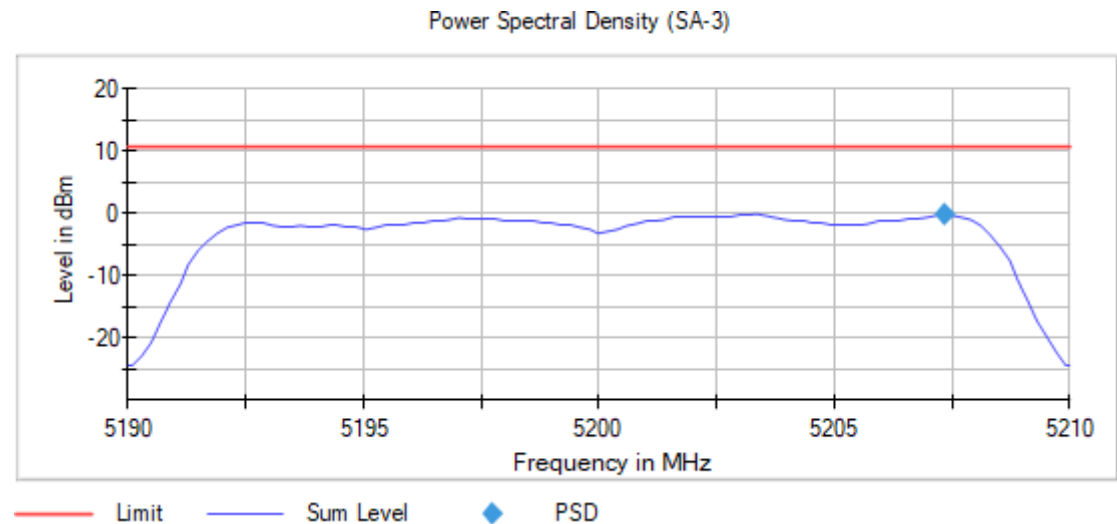
Frequency MHz = 5180.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



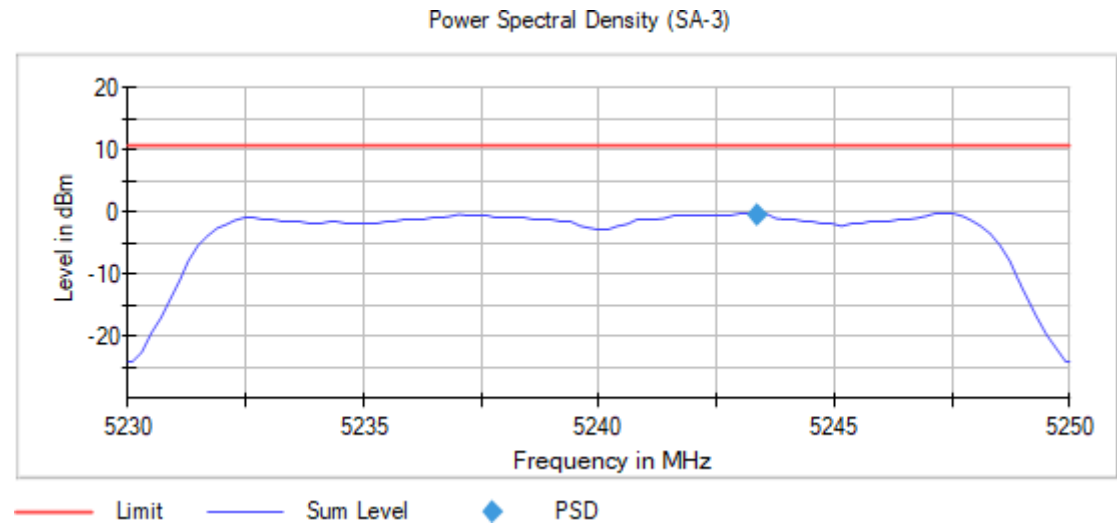
Frequency MHz = 5200.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



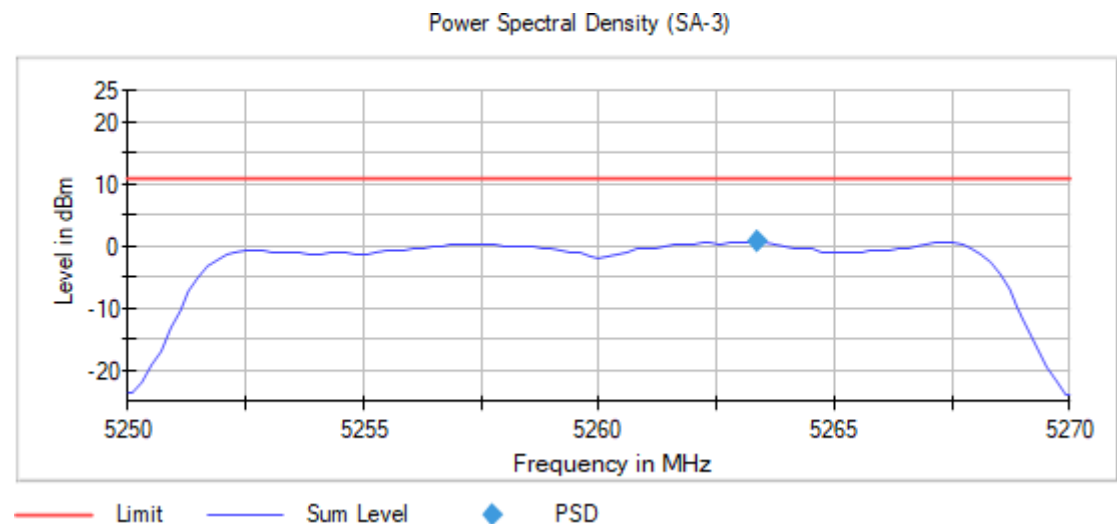
Frequency MHz = 5240.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



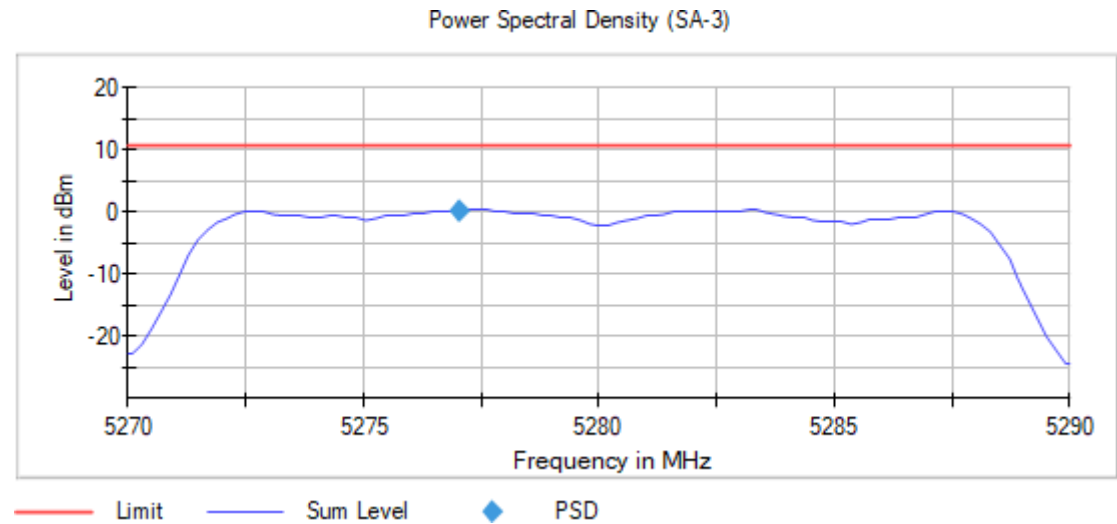
Frequency MHz = 5260.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



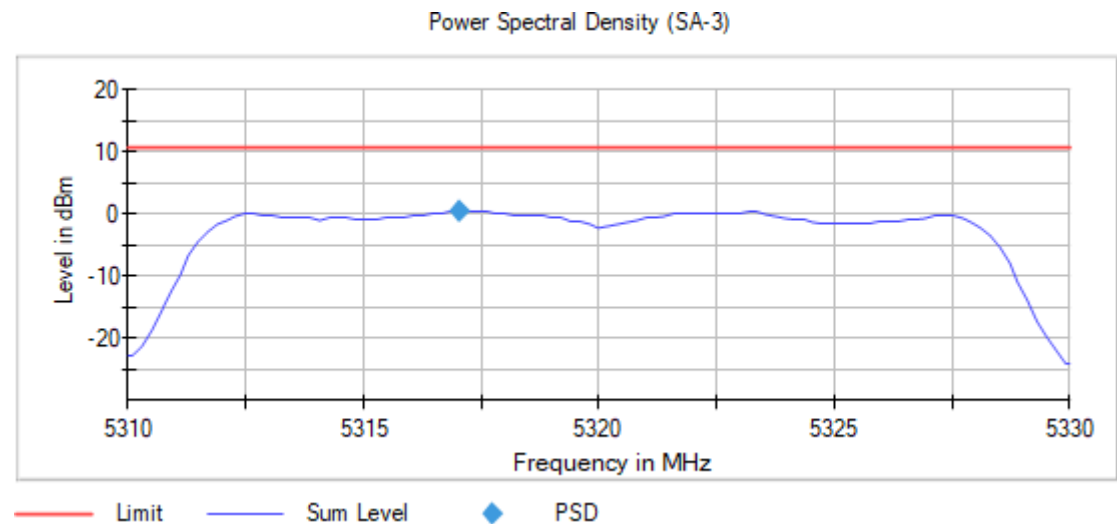
Frequency MHz = 5280.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



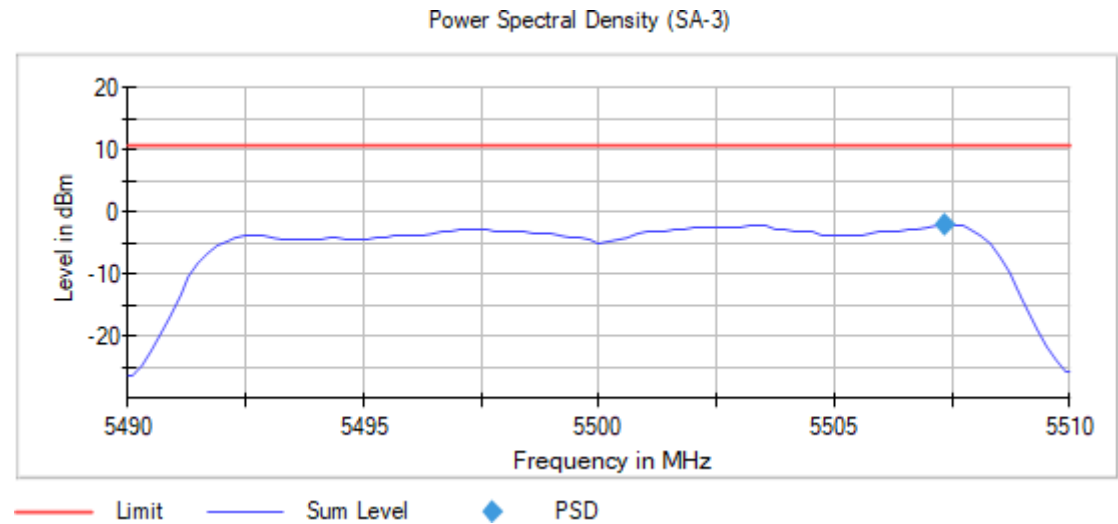
Frequency MHz = 5320.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



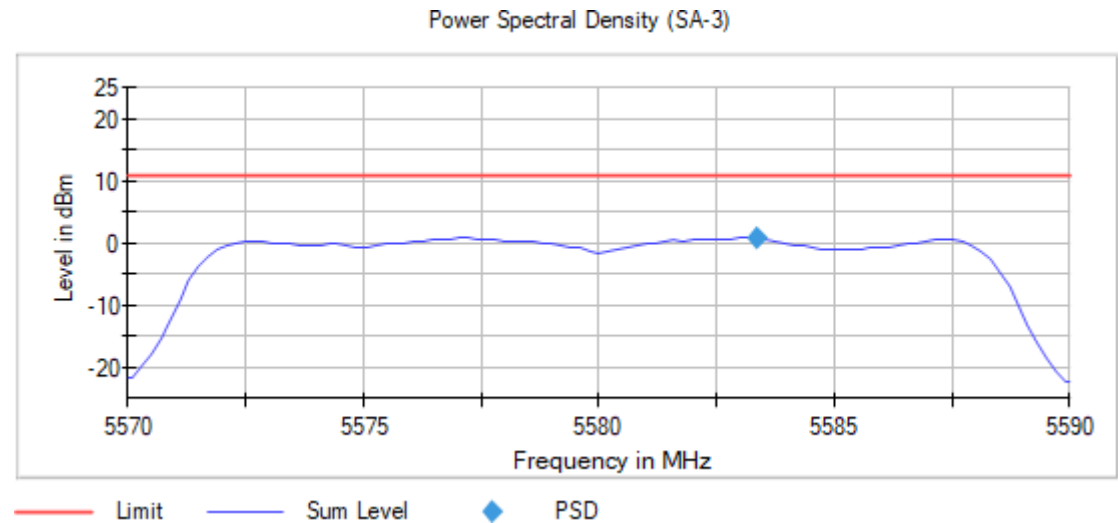
Frequency MHz = 5500.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



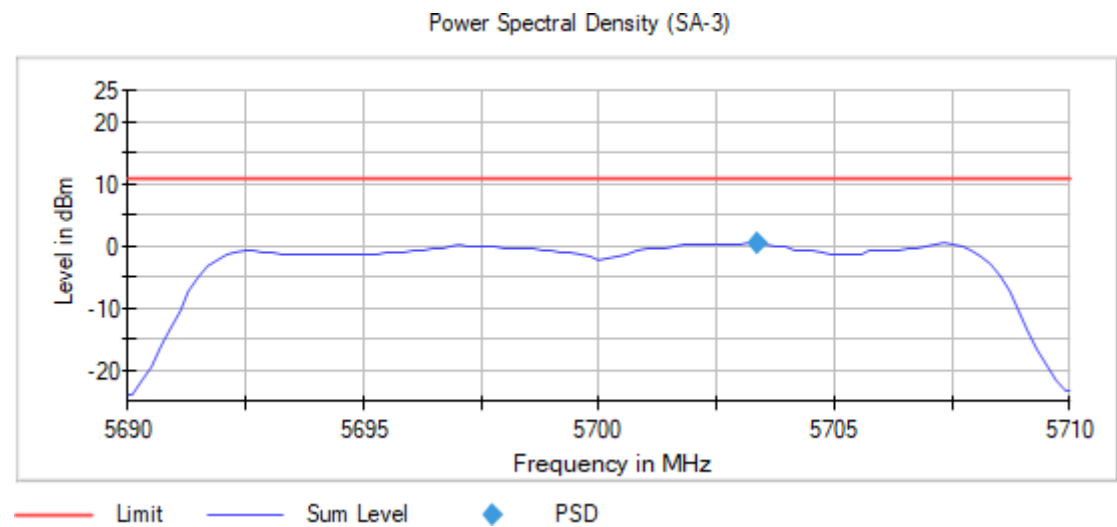
Frequency MHz = 5580.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



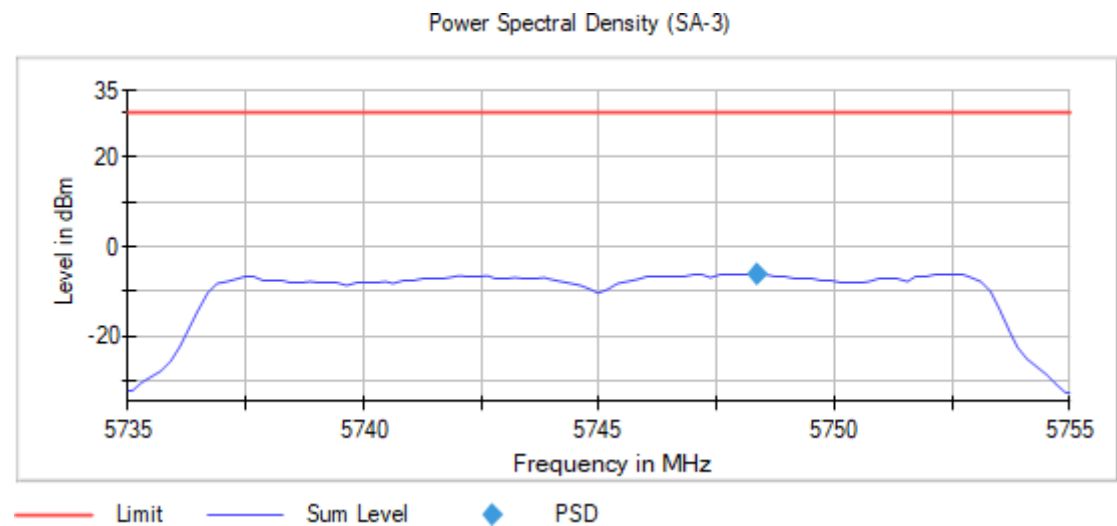
Frequency MHz = 5700.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



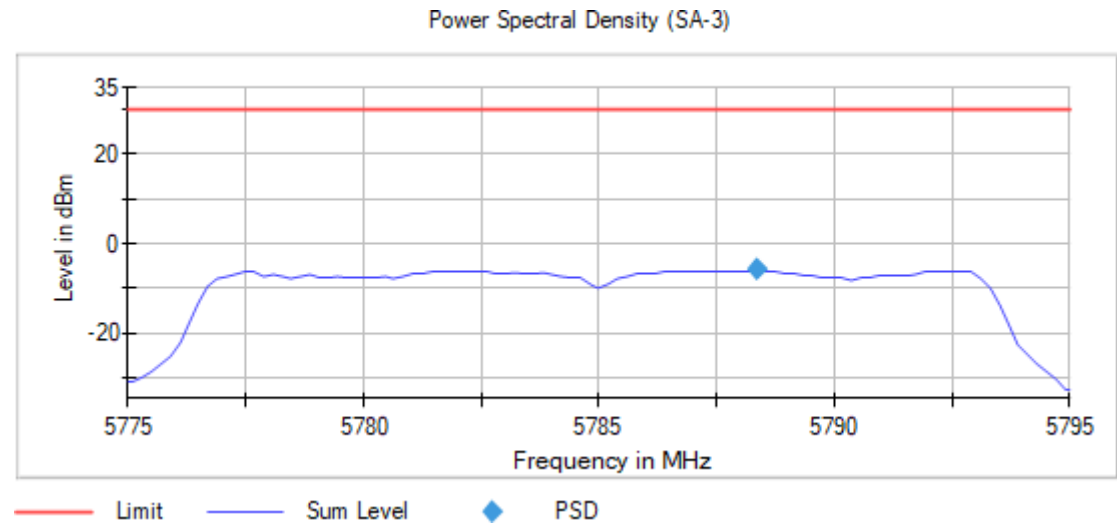
Frequency MHz = 5745.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



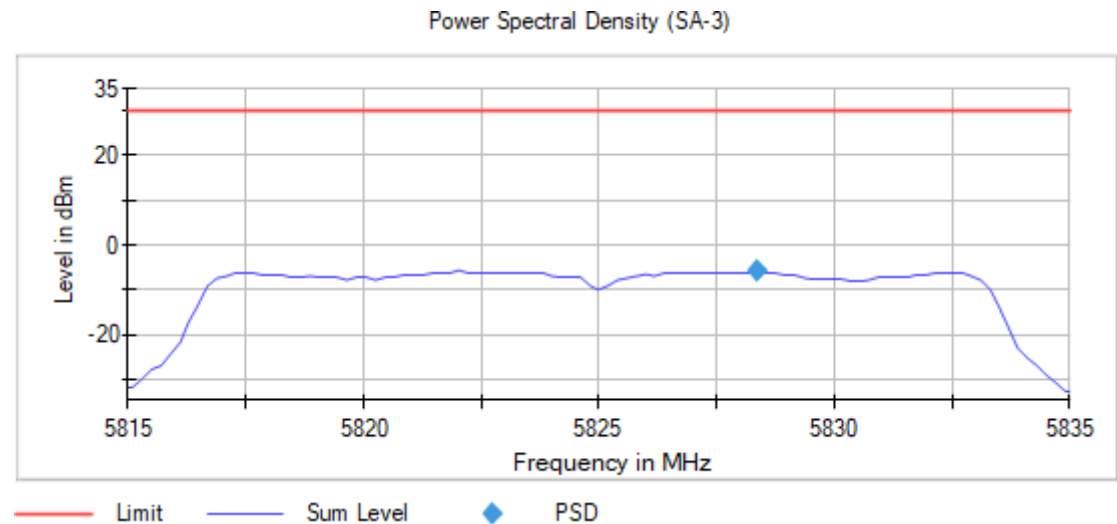
Frequency MHz = 5785.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Modulation: 802.11n HT20 (OFDM MCS7)
Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5180.00000	5177.425743	0.52
5200.00000	5197.425743	0.22
5240.00000	5237.227723	0.79
5260.00000	5257.227723	0.40
5280.00000	5277.227723	1.06
5320.00000	5317.227723	0.55
5500.00000	5497.623762	-3.50
5580.00000	5577.425743	-0.09
5700.00000	5697.425743	-1.52
5745.00000	5742.425743	-6.38
5785.00000	5782.425743	-5.62
5825.00000	5822.425743	-6.18

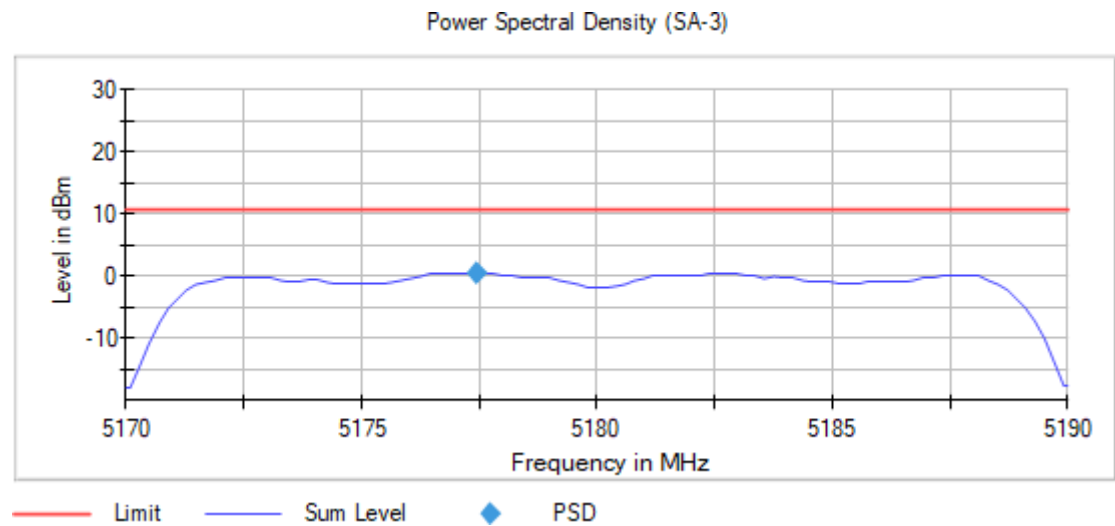
Verdict

Pass

Attachments

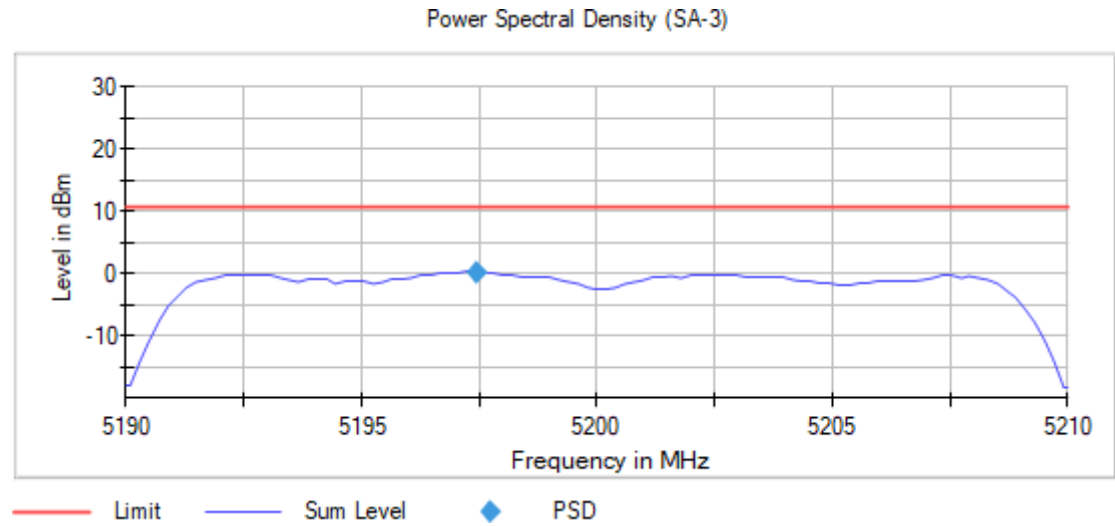
Frequency MHz = 5180.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



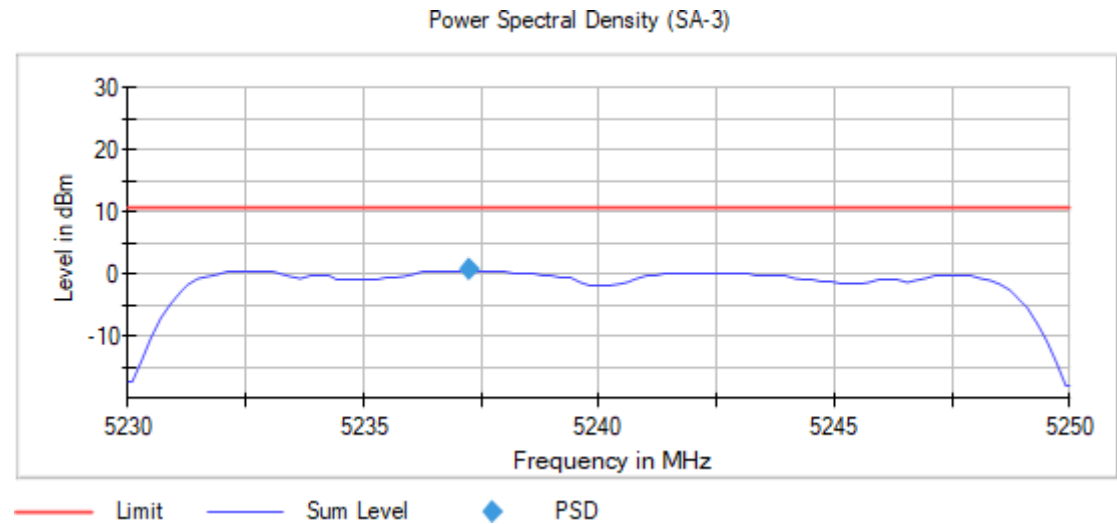
Frequency MHz = 5200.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



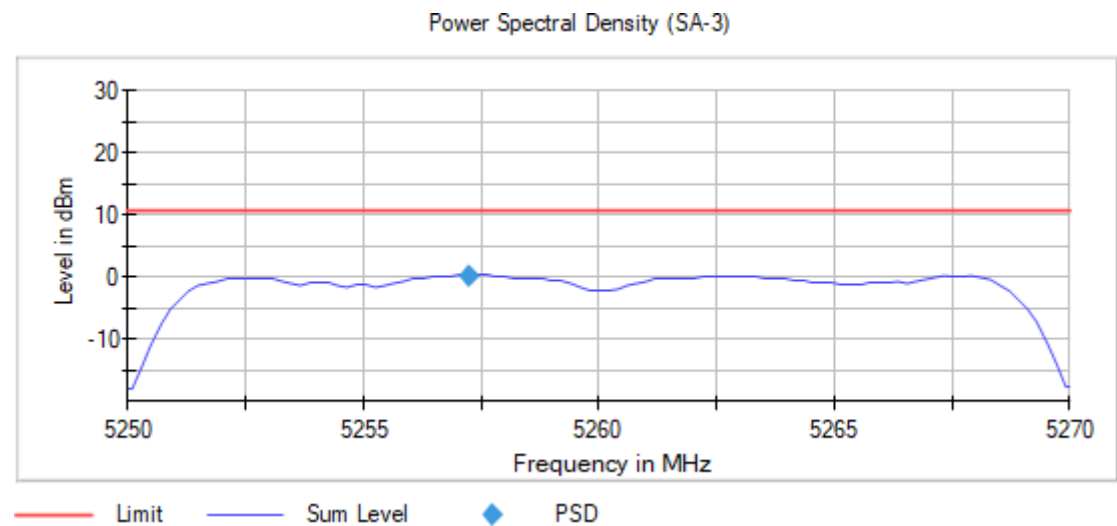
Frequency MHz = 5240.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



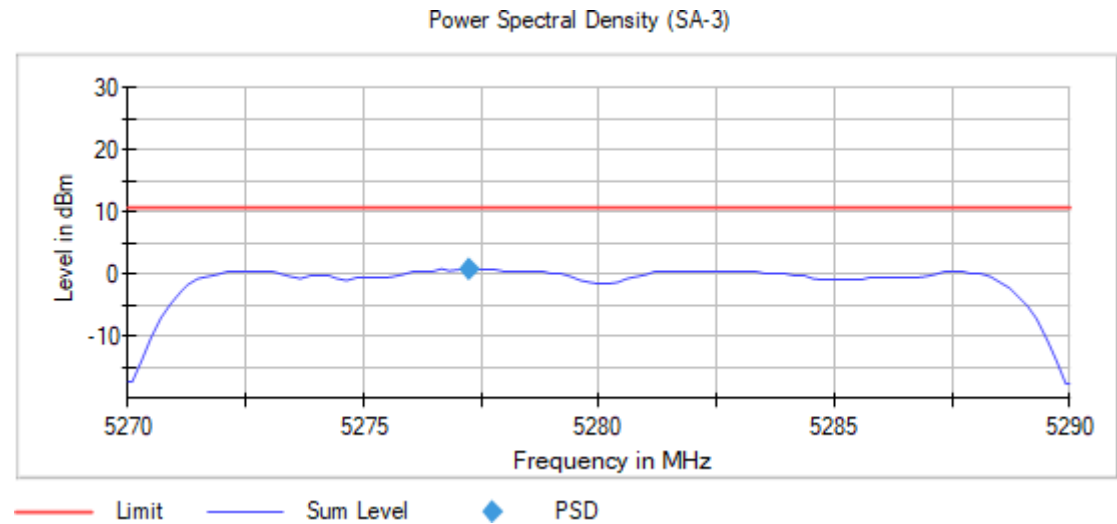
Frequency MHz = 5260.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



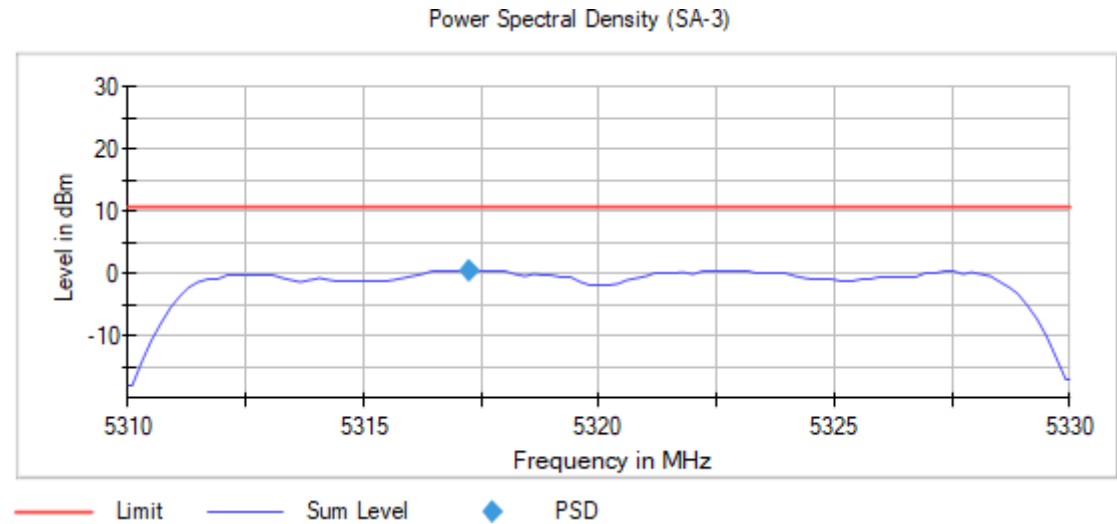
Frequency MHz = 5280.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



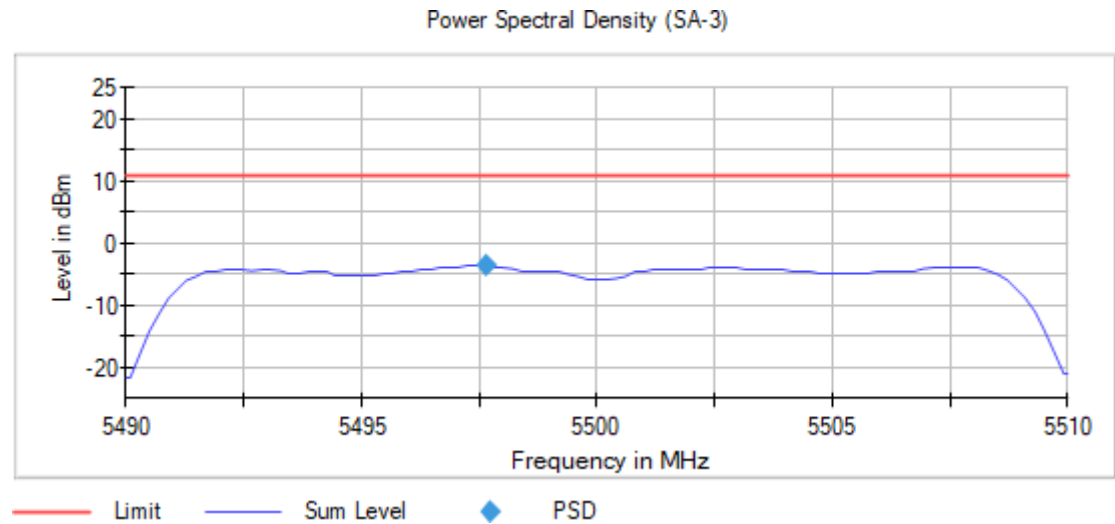
Frequency MHz = 5320.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



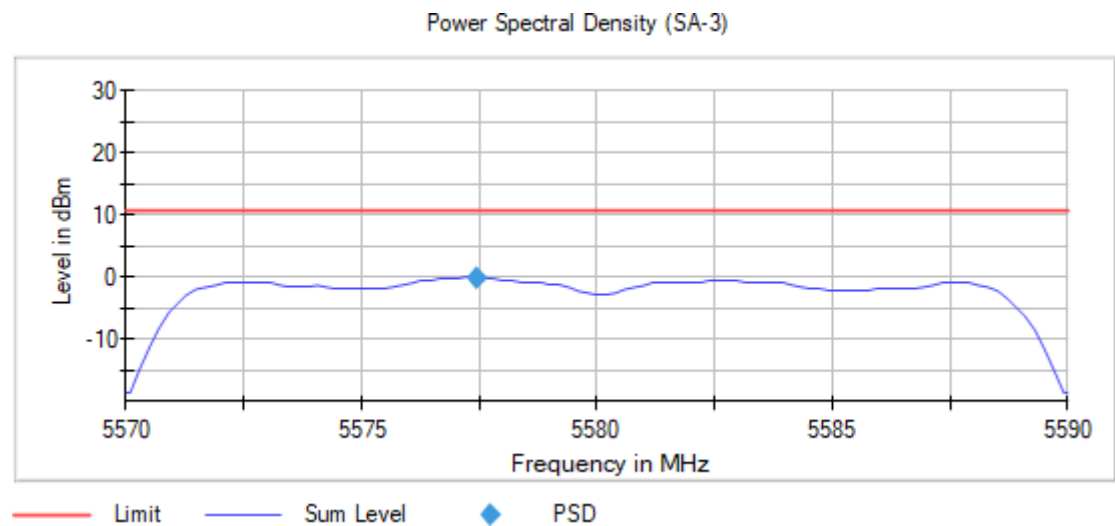
Frequency MHz = 5500.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



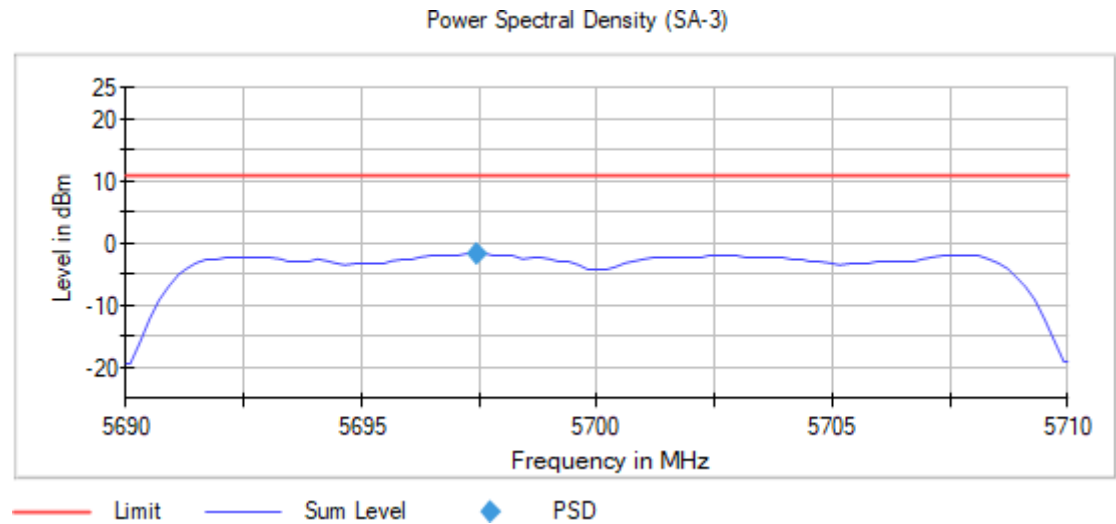
Frequency MHz = 5580.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



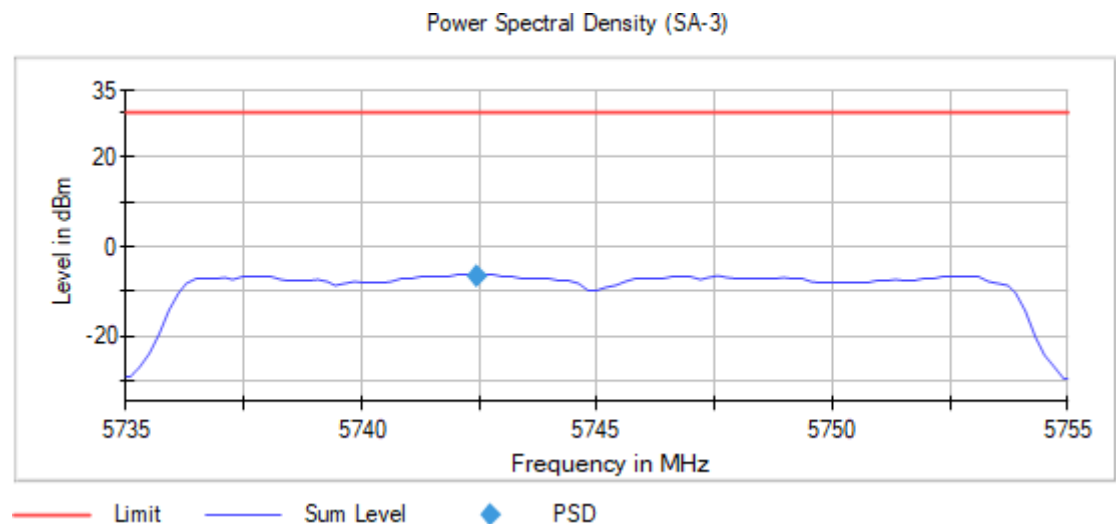
Frequency MHz = 5700.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



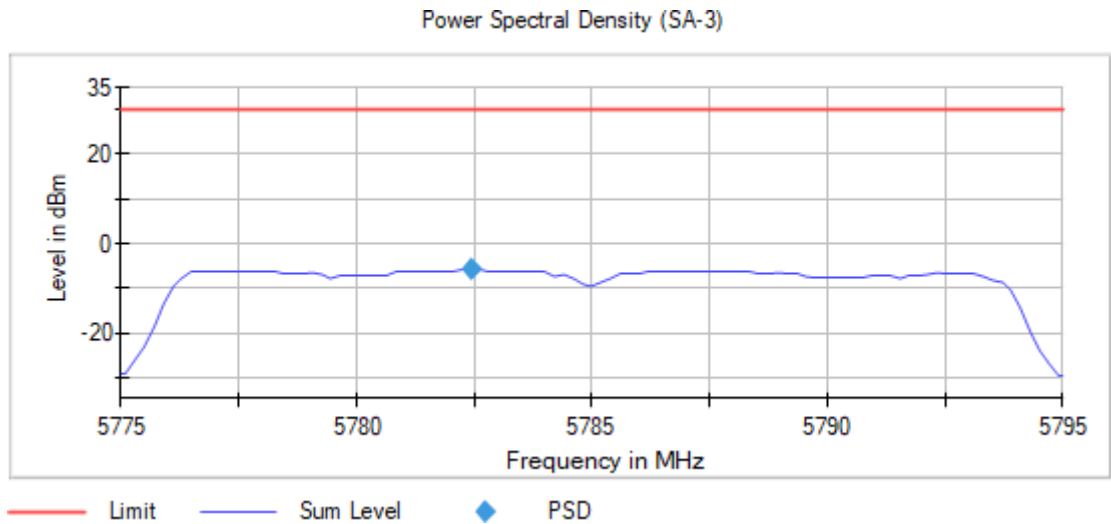
Frequency MHz = 5745.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



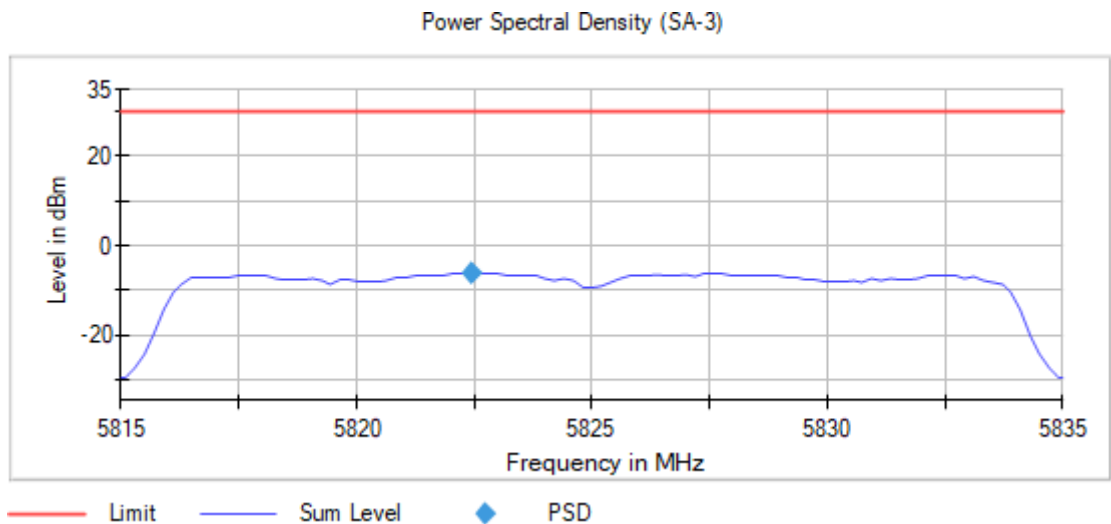
Frequency MHz = 5785.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Modulation: 802.11n HT40 (OFDM MCS7)
Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5190.00000	5186.435644	-3.70
5230.00000	5226.435644	-3.60
5270.00000	5275.148515	-5.63
5310.00000	5315.148515	-5.71
5510.00000	5525.841584	-5.69
5550.00000	5565.841584	-4.71
5670.00000	5666.435644	-4.66
5755.00000	5759.875000	-6.49
5795.00000	5791.375000	-6.50

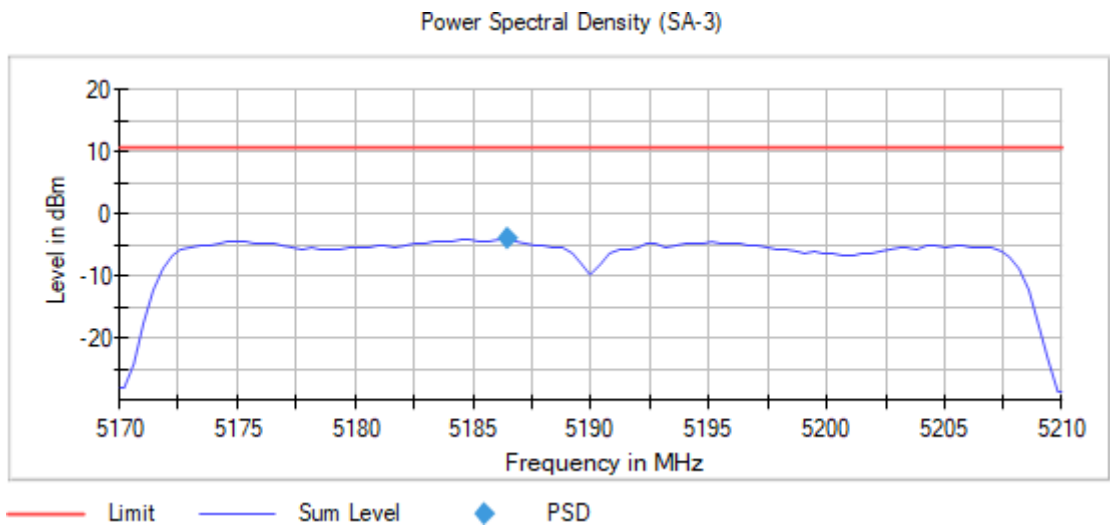
Verdict

Pass

Attachments

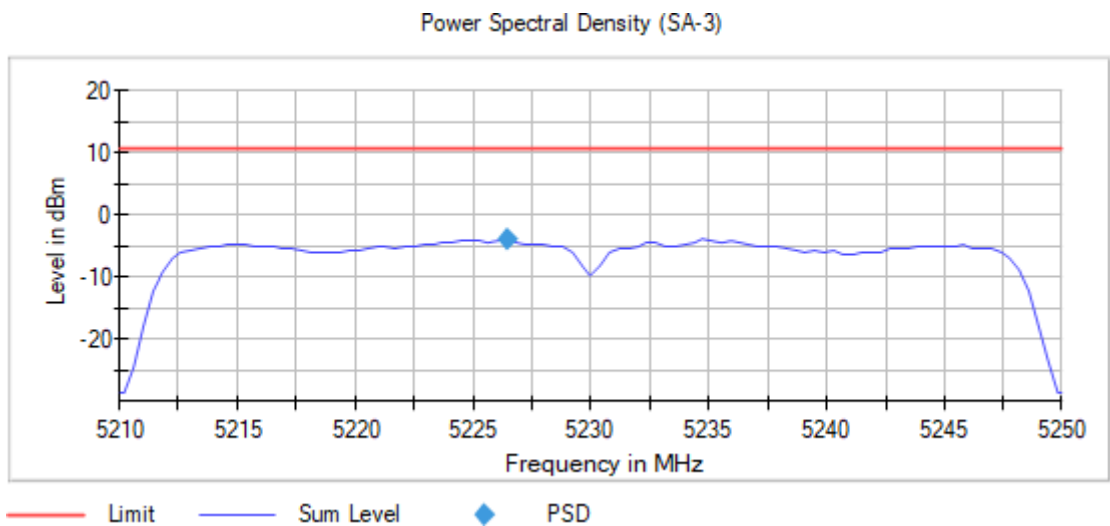
Frequency MHz = 5190.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



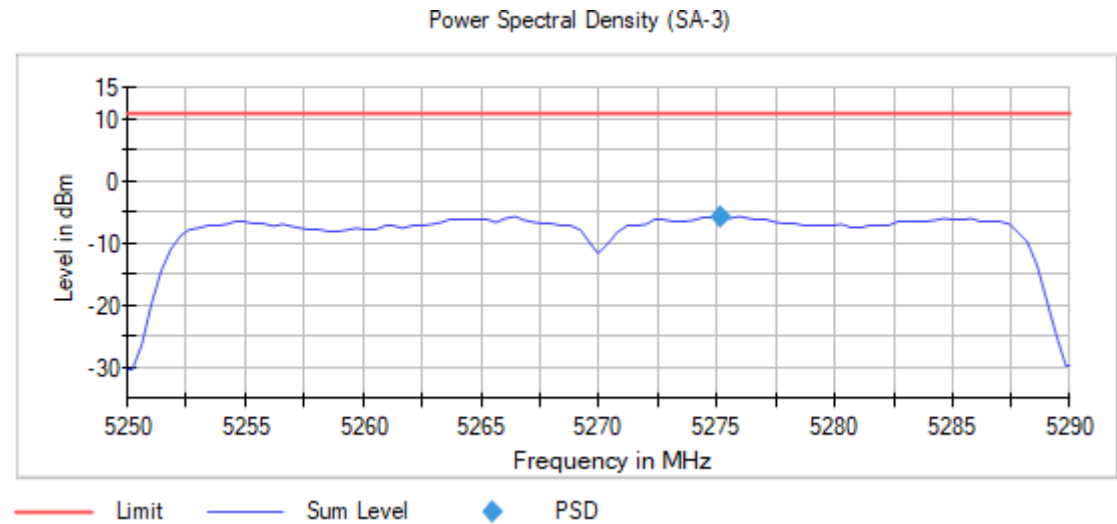
Frequency MHz = 5230.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



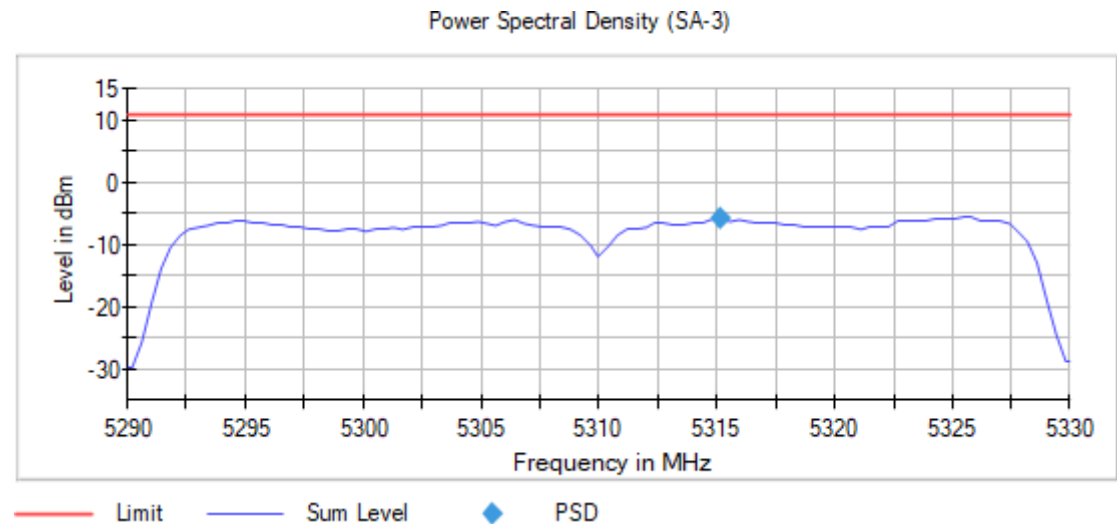
Frequency MHz = 5270.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



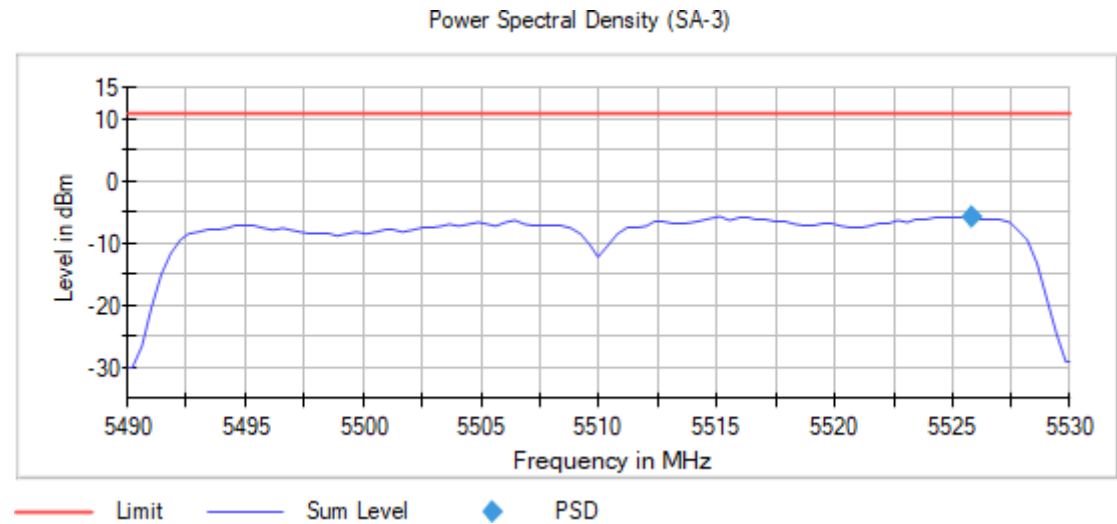
Frequency MHz = 5310.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



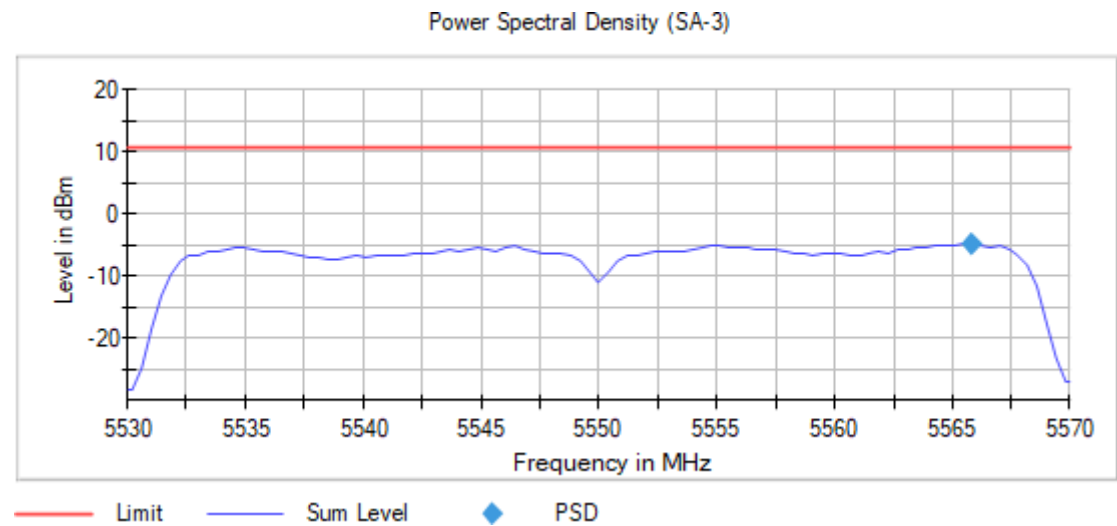
Frequency MHz = 5510.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



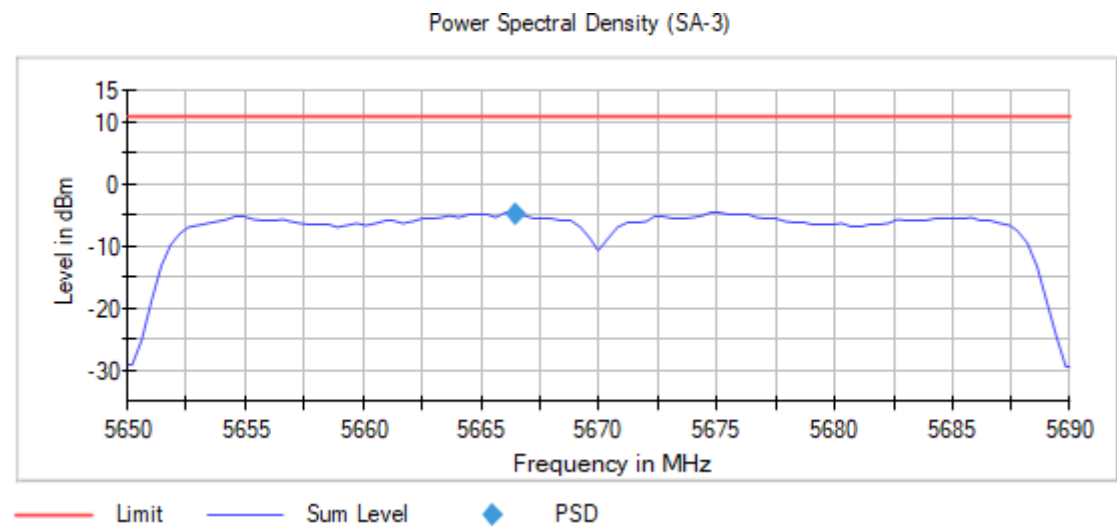
Frequency MHz = 5550.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



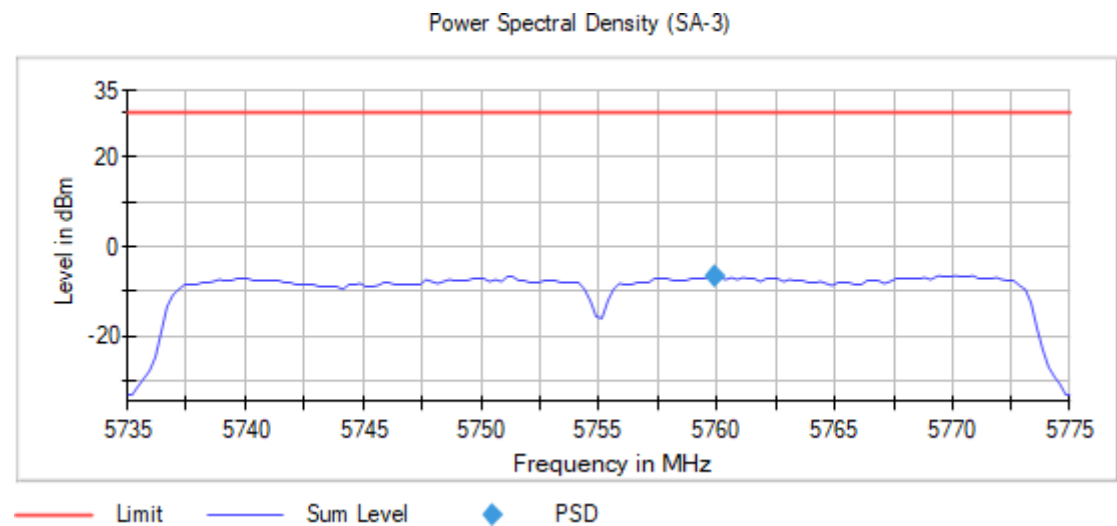
Frequency MHz = 5670.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



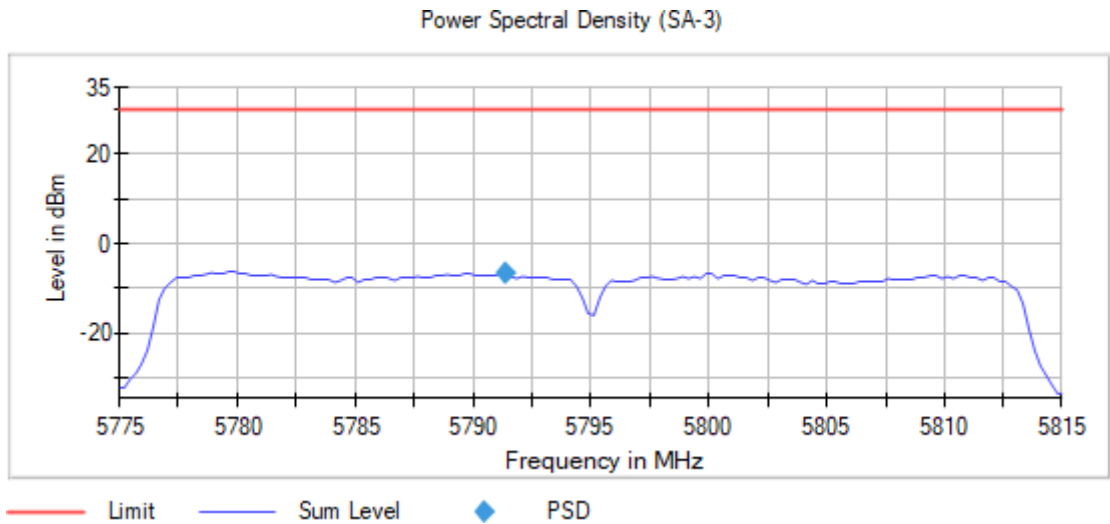
Frequency MHz = 5755.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT20 SS1 (OFDM MCS8)
Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5180.00000	5176.831683	0.01
5200.00000	5196.831683	-0.42
5240.00000	5237.029703	-0.04
5260.00000	5257.029703	0.66
5280.00000	5276.831683	1.21
5320.00000	5322.574257	0.89
5500.00000	5497.029703	-2.94
5580.00000	5577.029703	0.42
5700.00000	5697.029703	-1.54
5745.00000	5747.574257	-6.72
5785.00000	5777.277228	-6.07
5825.00000	5827.574257	-6.35

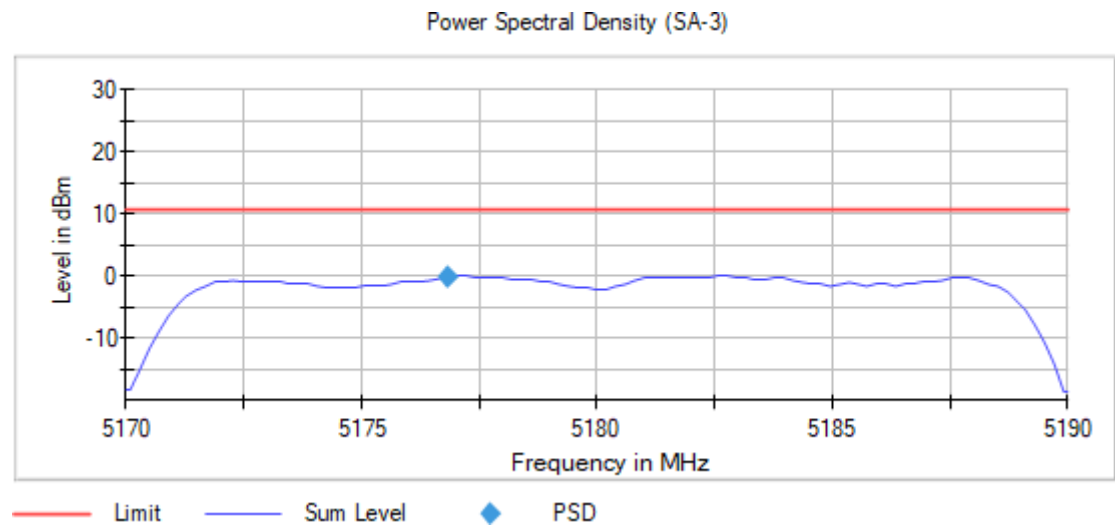
Verdict

Pass

Attachments

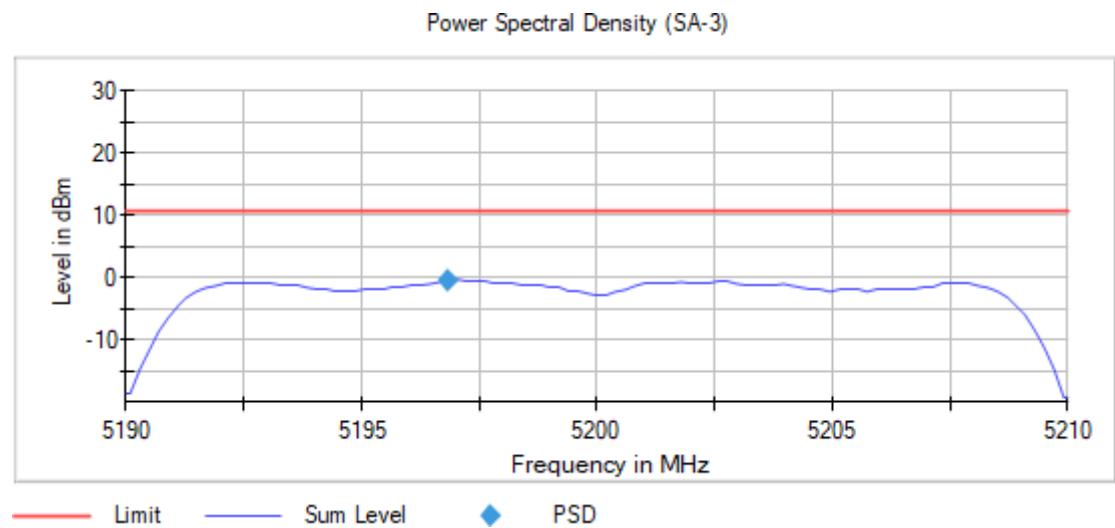
Frequency MHz = 5180.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



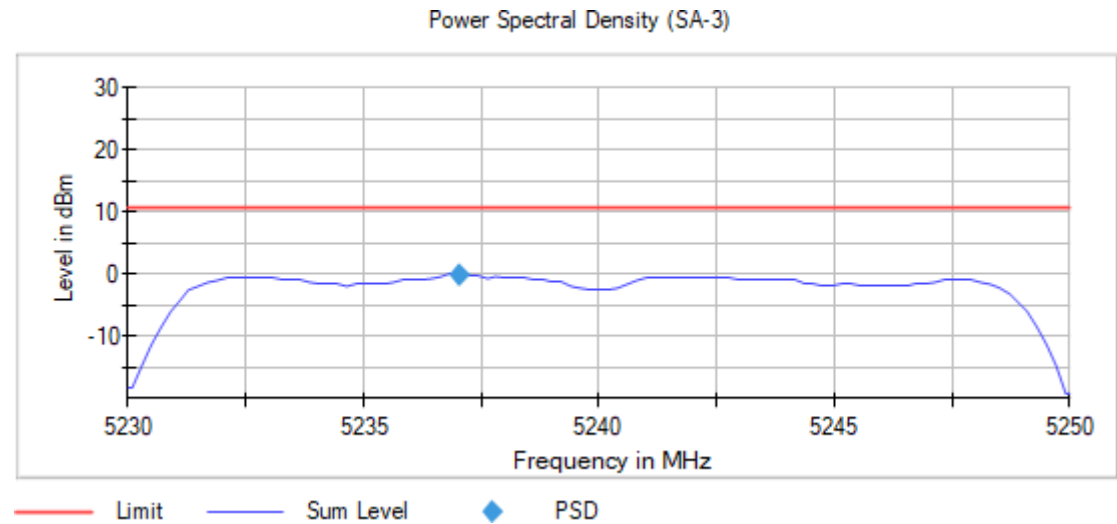
Frequency MHz = 5200.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



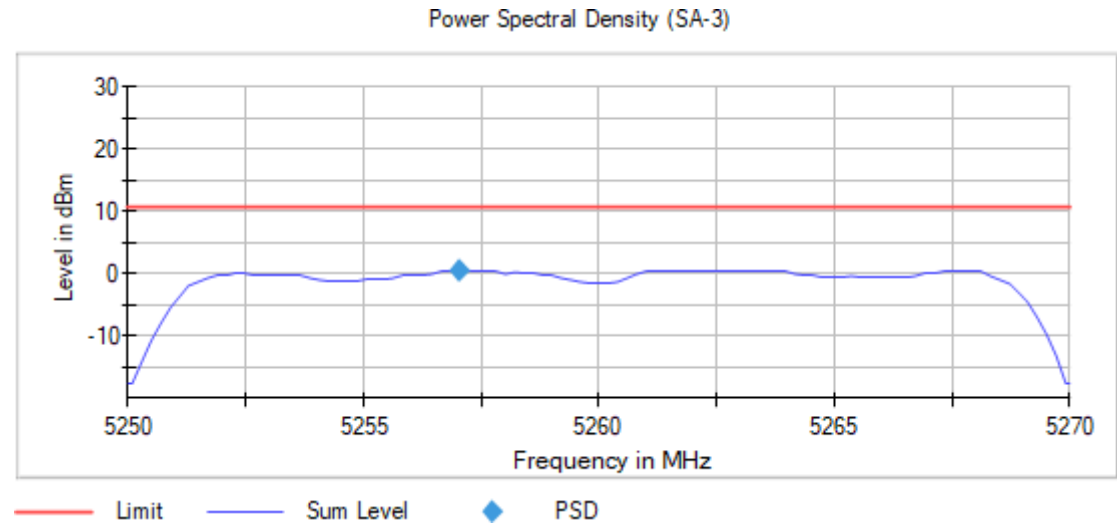
Frequency MHz = 5240.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



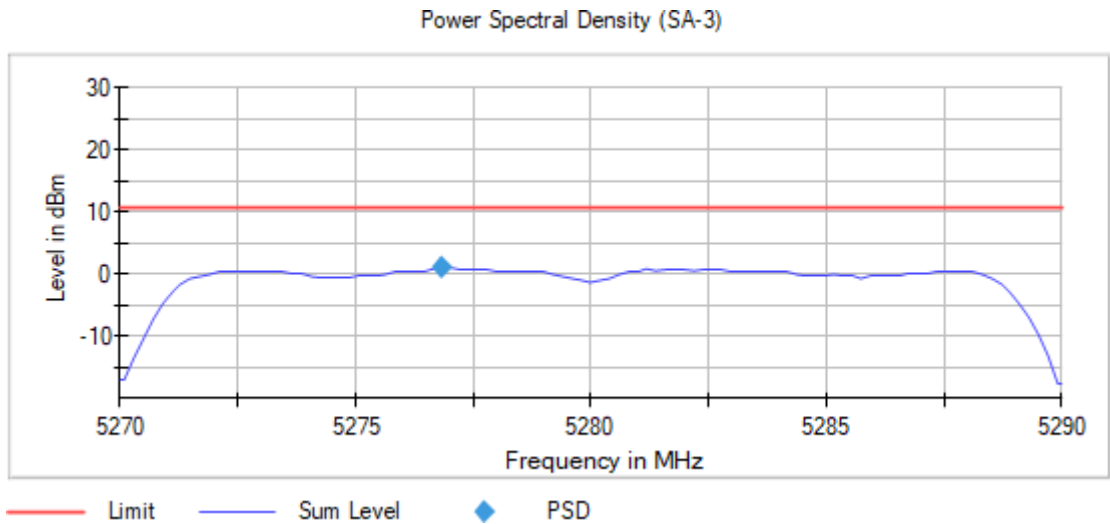
Frequency MHz = 5260.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



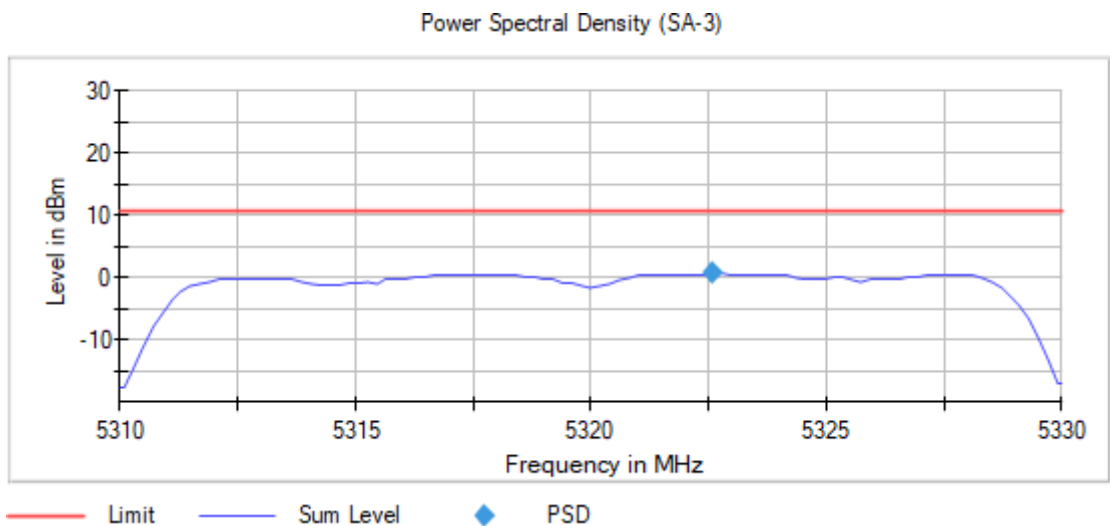
Frequency MHz = 5280.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



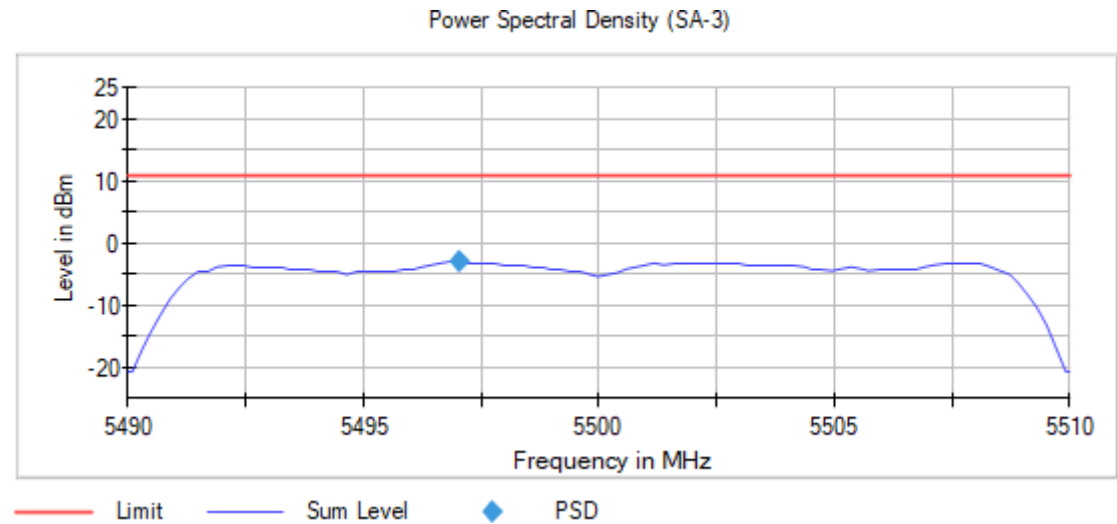
Frequency MHz = 5320.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



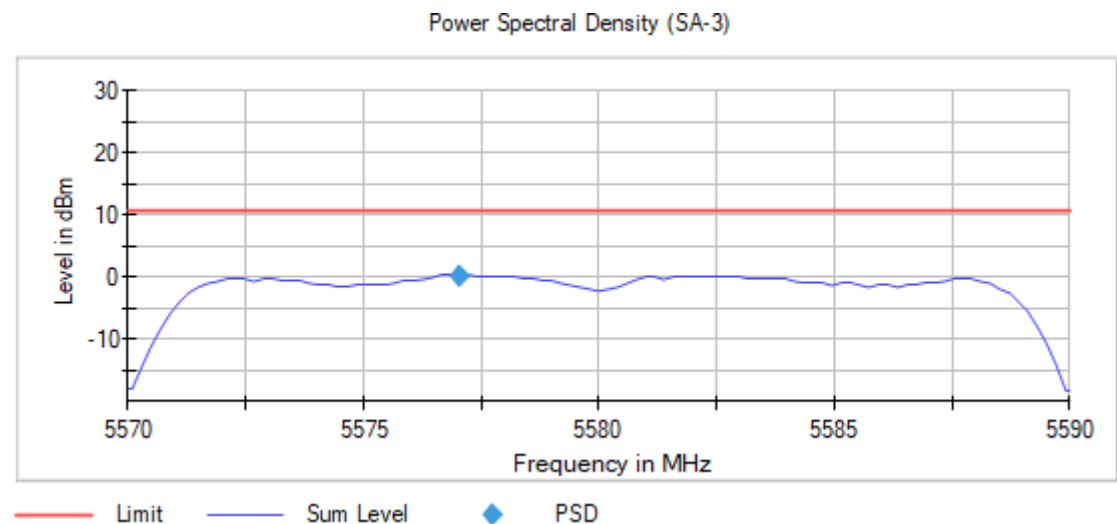
Frequency MHz = 5500.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



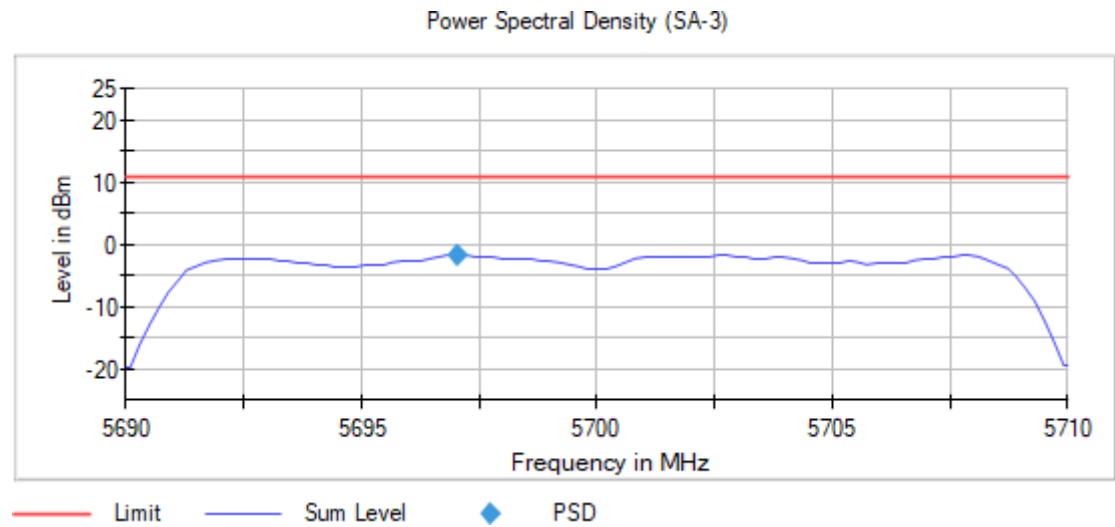
Frequency MHz = 5580.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



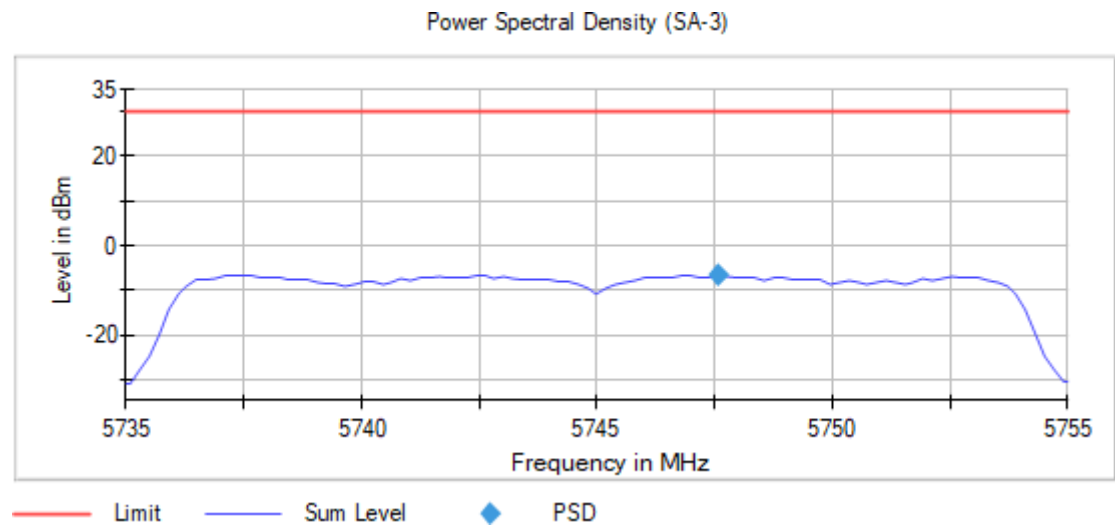
Frequency MHz = 5700.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



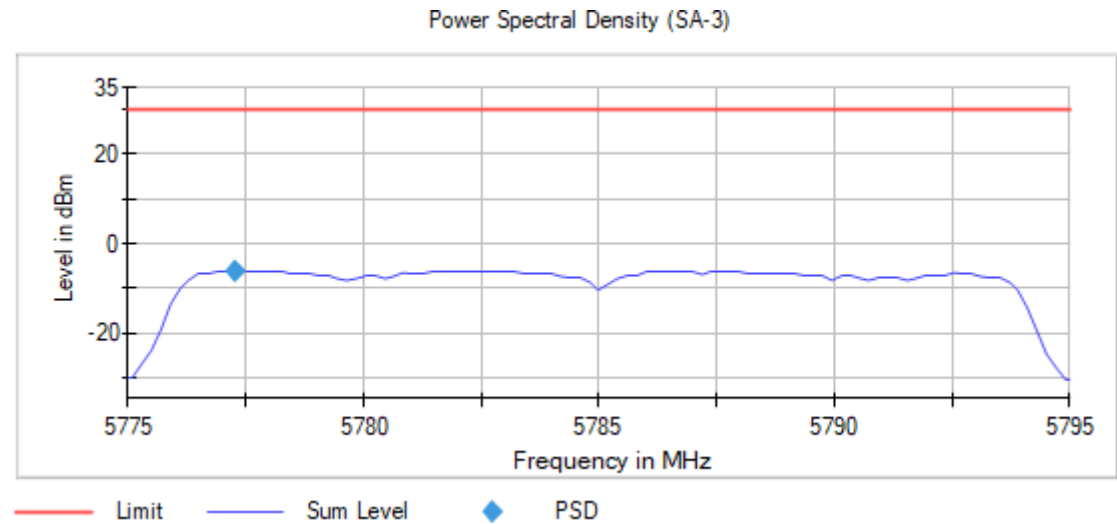
Frequency MHz = 5745.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



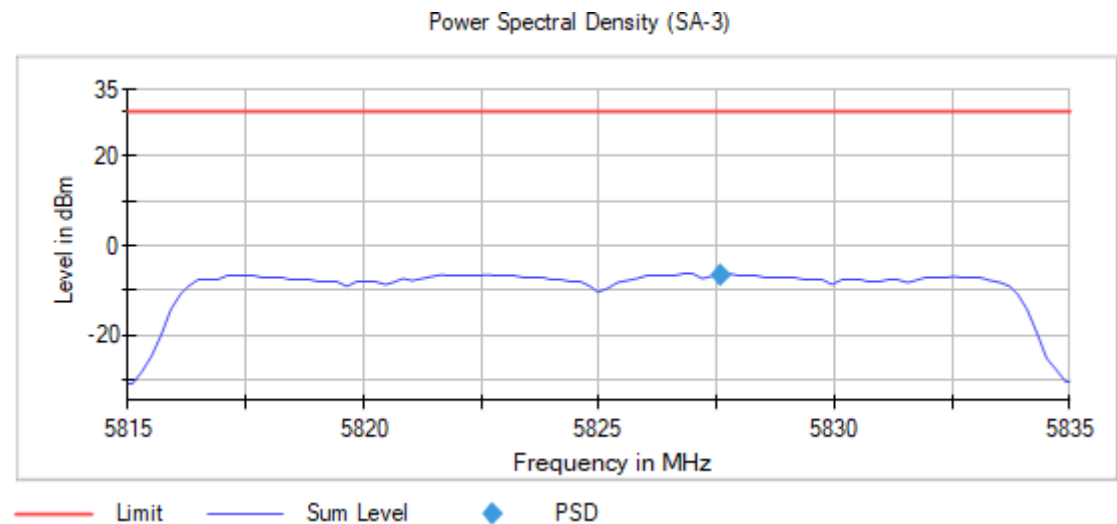
Frequency MHz = 5785.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT40 SS1 (OFDM MCS9)
Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5190.00000	5184.059406	-3.98
5230.00000	5234.752475	-3.99
5270.00000	5274.752475	-4.74
5310.00000	5326.237624	-4.68
5510.00000	5525.841584	-5.57
5550.00000	5565.841584	-4.83
5670.00000	5664.059406	-4.95
5755.00000	5761.375000	-7.01
5795.00000	5779.125000	-6.73

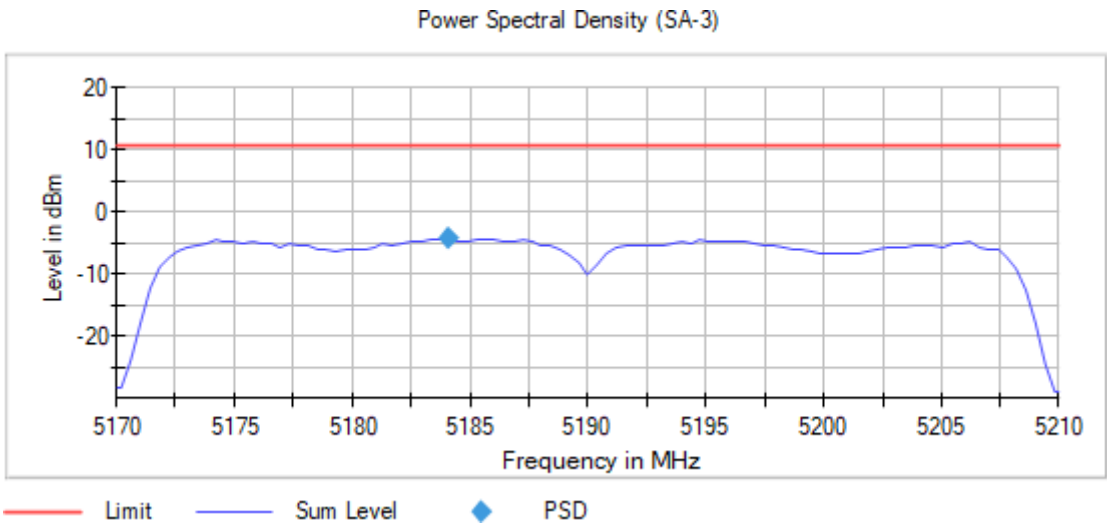
Verdict

Pass

Attachments

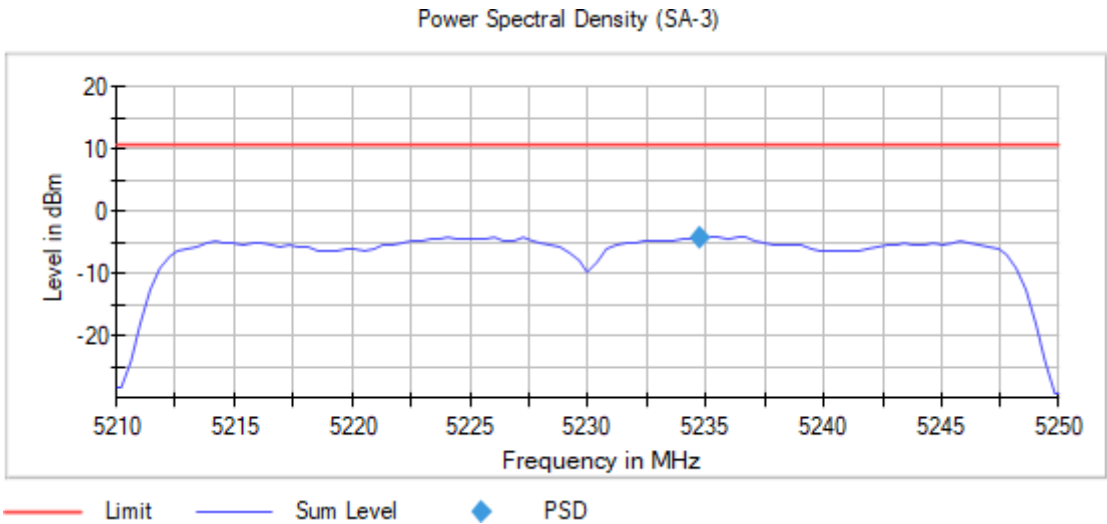
Frequency MHz = 5190.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



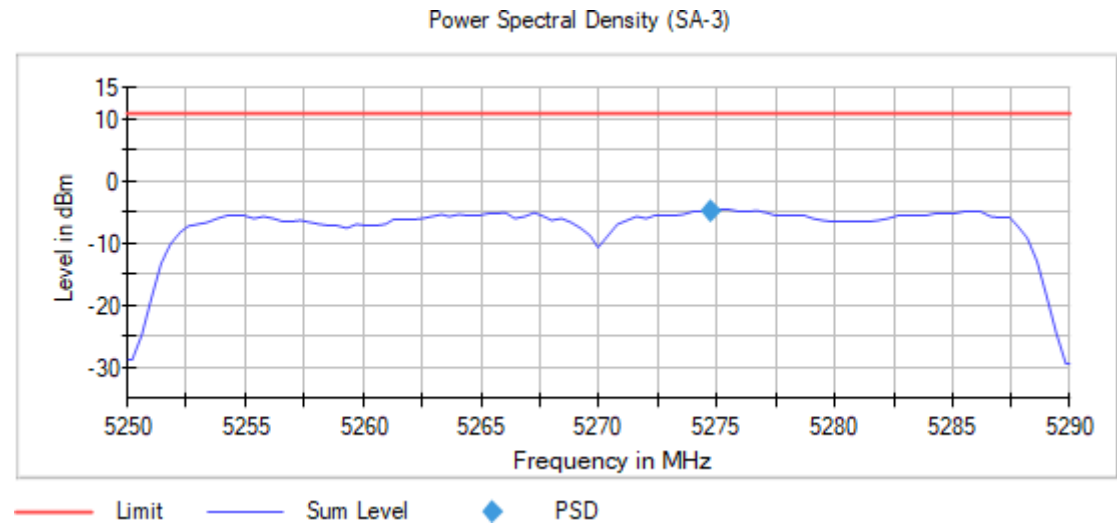
Frequency MHz = 5230.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



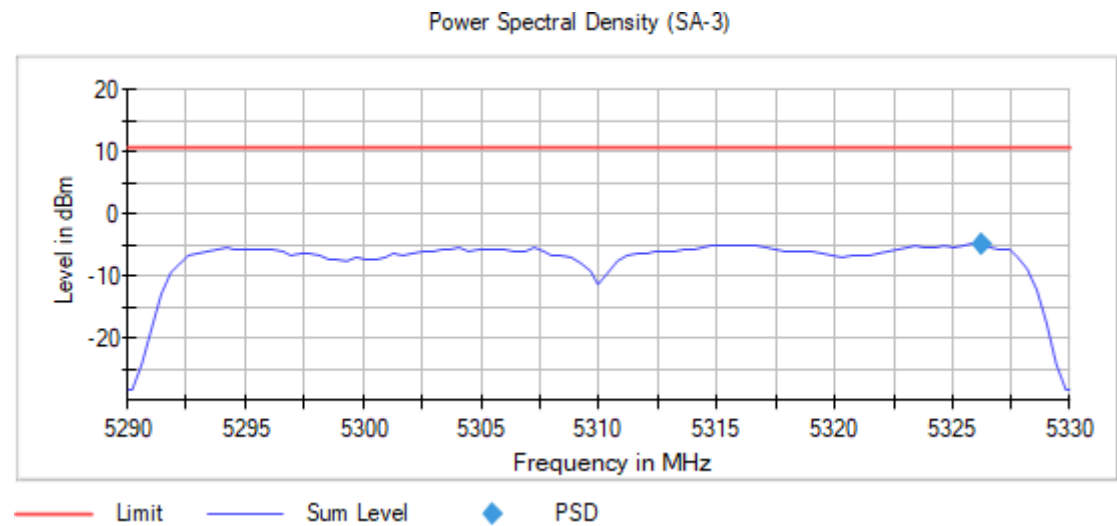
Frequency MHz = 5270.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



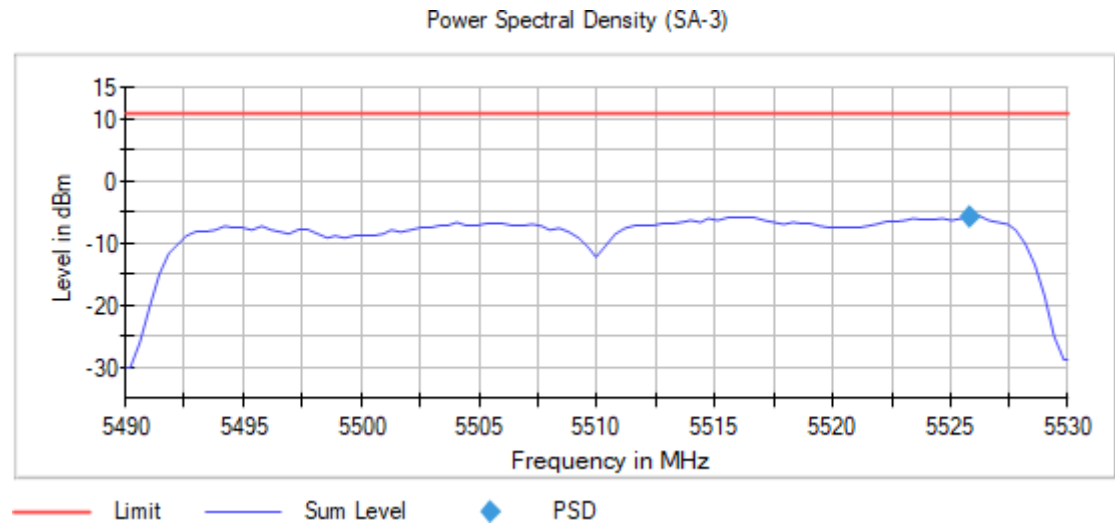
Frequency MHz = 5310.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



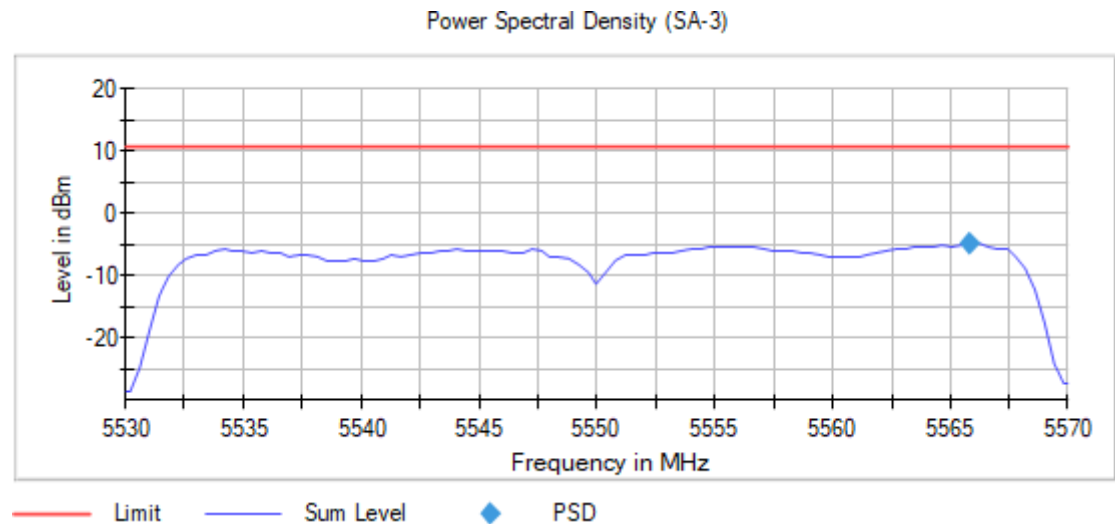
Frequency MHz = 5510.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



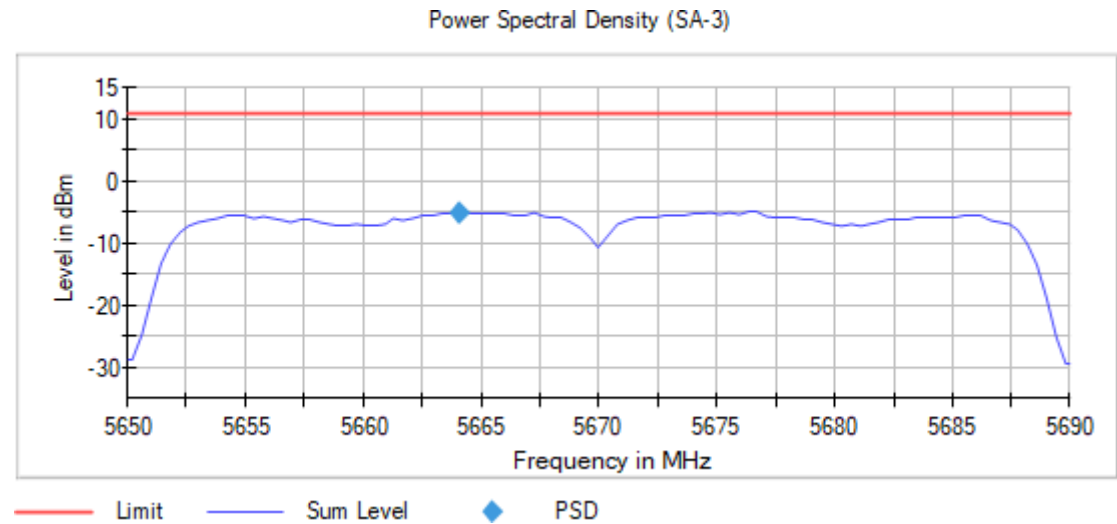
Frequency MHz = 5550.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



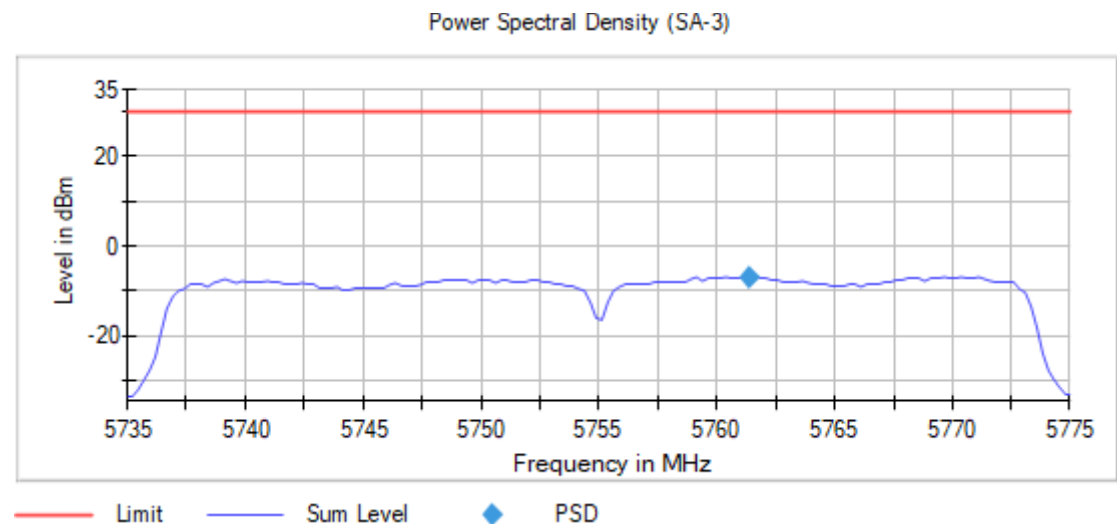
Frequency MHz = 5670.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



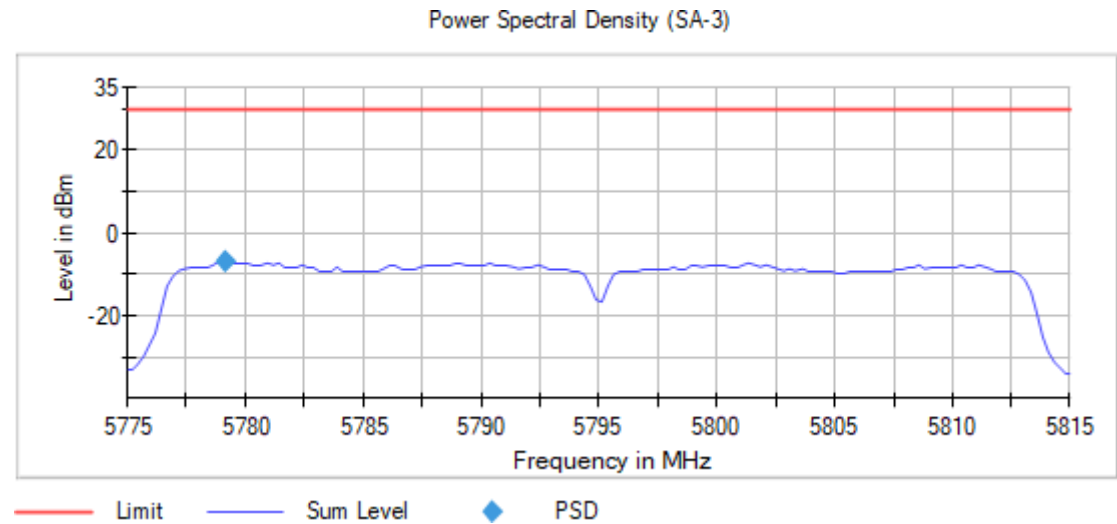
Frequency MHz = 5755.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT80 SS1 (OFDM MCS9)

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5210.00000	5224.750000	-9.31
5290.00000	5321.750000	-10.09
5530.00000	5561.750000	-9.38
5610.00000	5622.250000	-7.50
5775.00000	5766.375000	-8.87

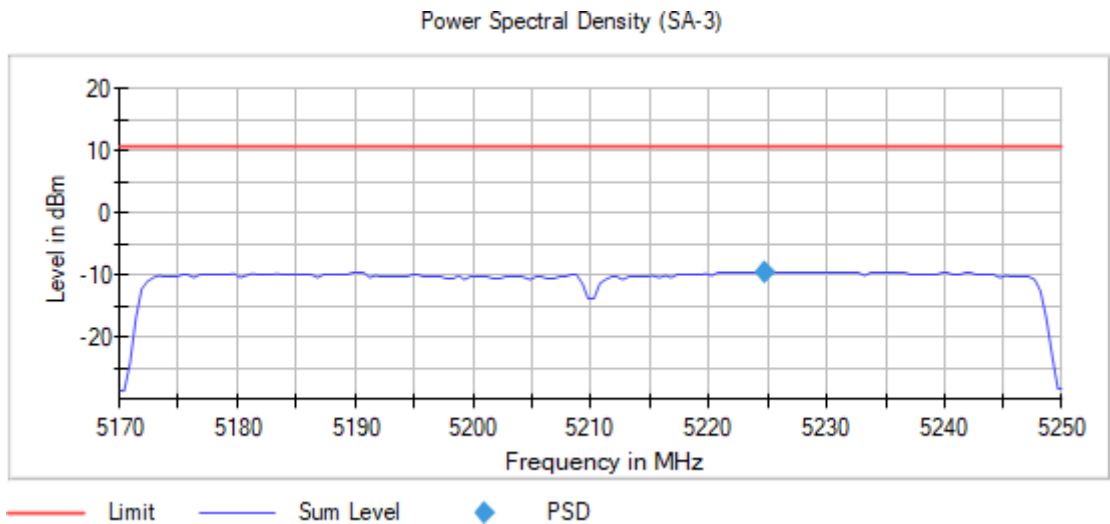
Verdict

Pass

Attachments

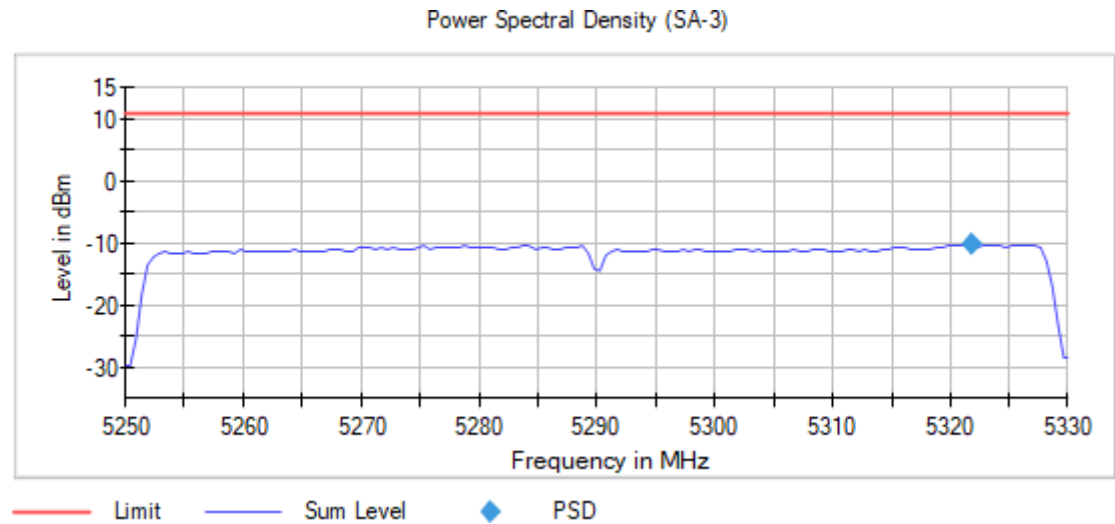
Frequency MHz = 5210.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



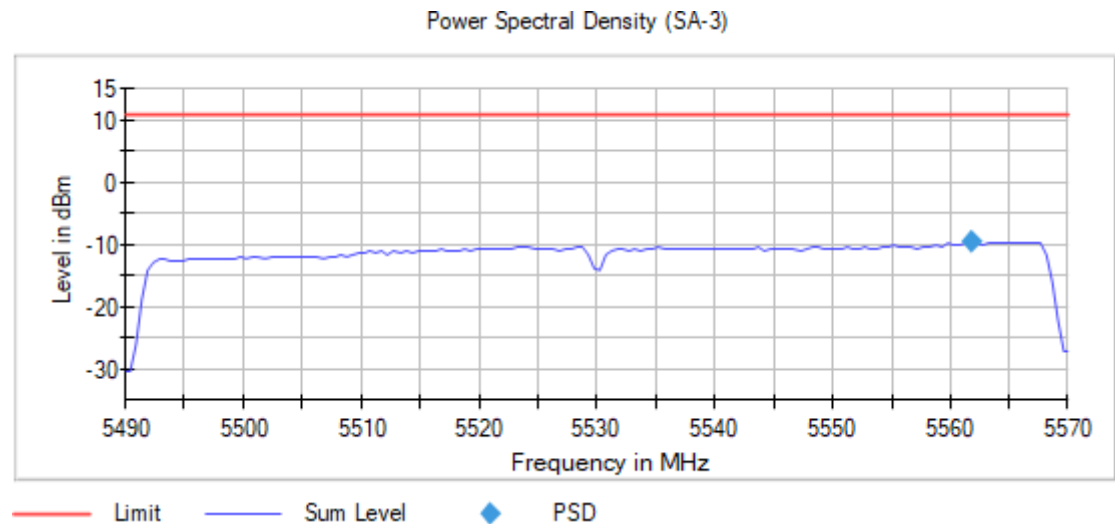
Frequency MHz = 5290.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



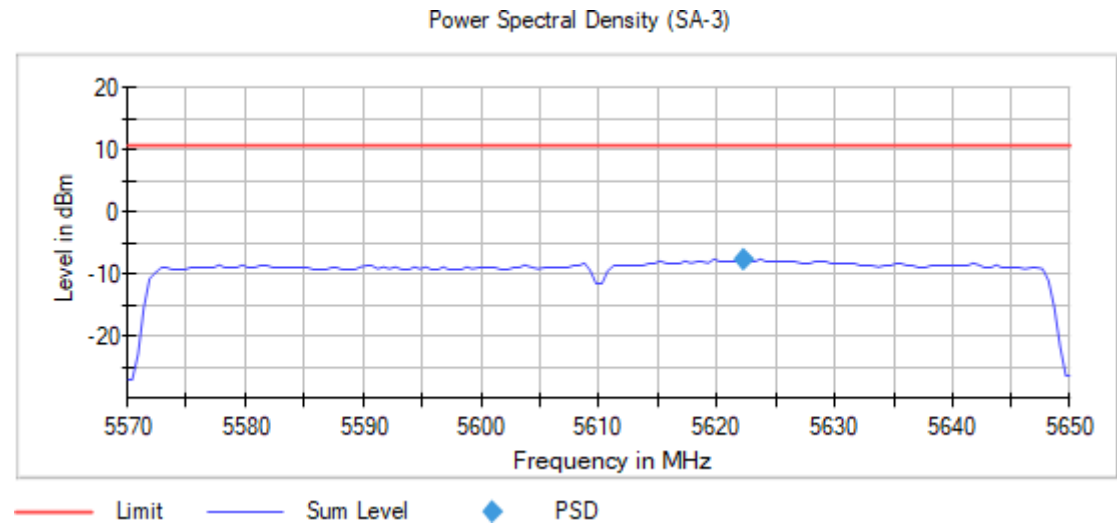
Frequency MHz = 5530.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



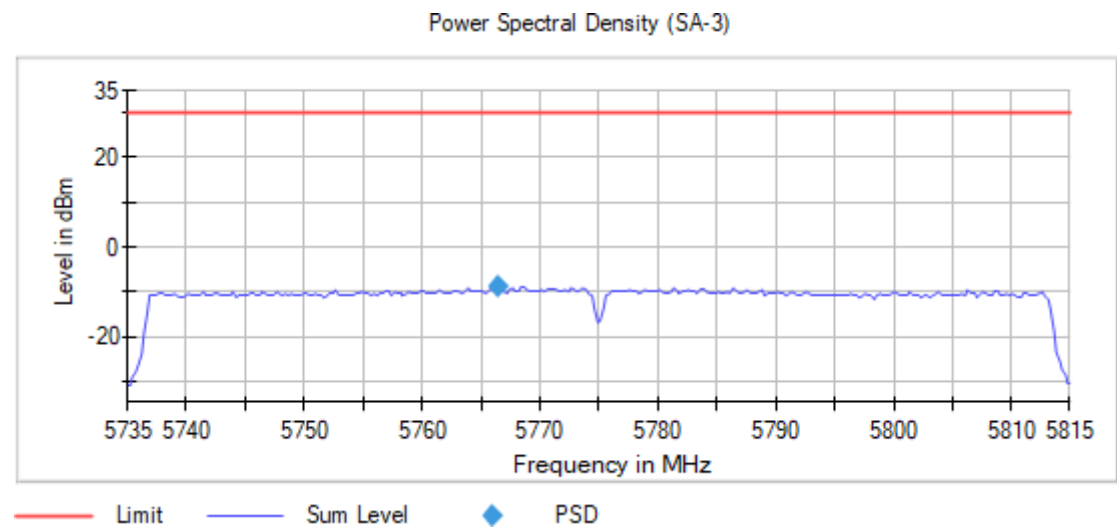
Frequency MHz = 5610.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5775.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE20 SS1 (OFDMA MCS8) - Full RU

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5180.00000	5182.376238	-0.02
5200.00000	5202.376238	-0.56
5240.00000	5232.475248	0.08
5260.00000	5262.376238	-0.41
5280.00000	5277.623762	0.05
5320.00000	5322.376238	0.12
5500.00000	5507.920792	-1.48
5580.00000	5572.475248	1.10
5700.00000	5702.376238	-0.24
5745.00000	5742.623762	-3.38
5785.00000	5782.623762	-2.70
5825.00000	5827.376238	-2.67

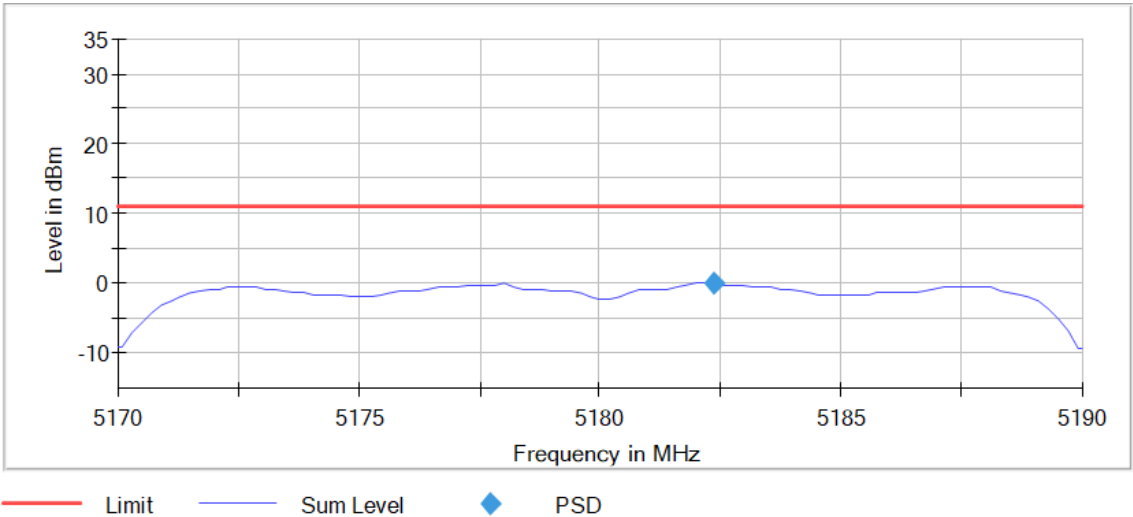
Verdict

Pass

Attachments

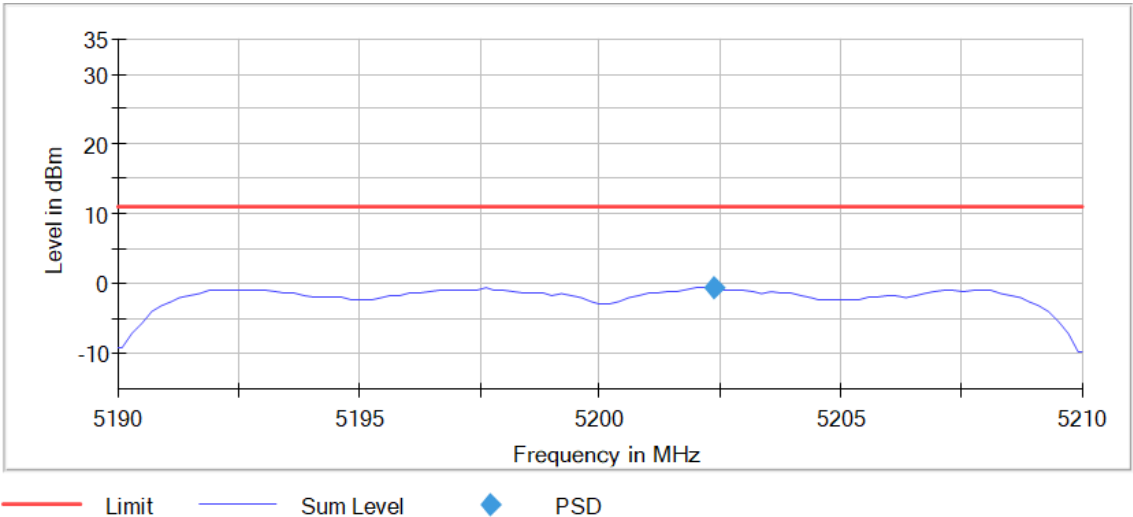
Frequency MHz = 5180.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5200.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:

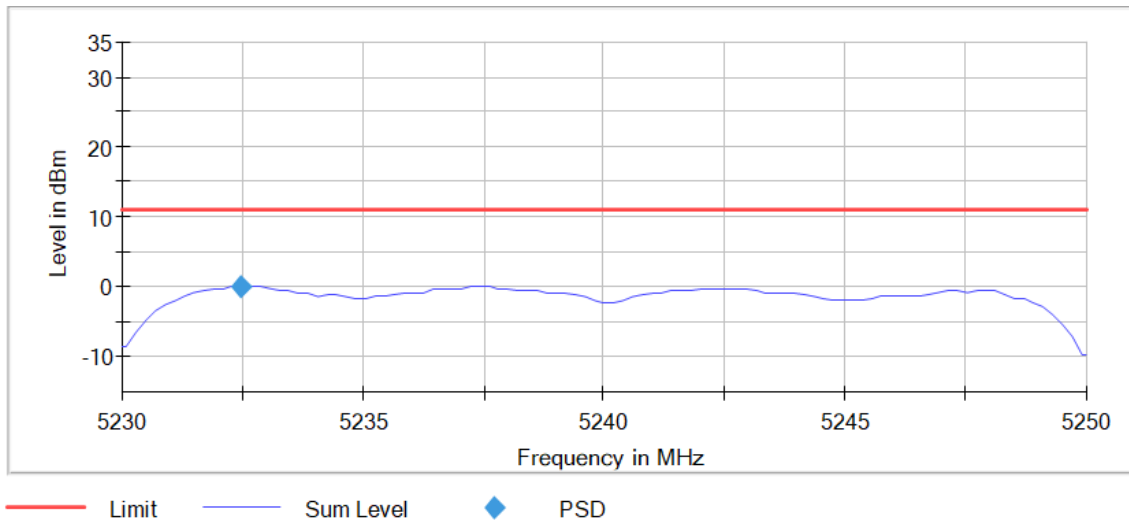


Frequency MHz = 5240.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

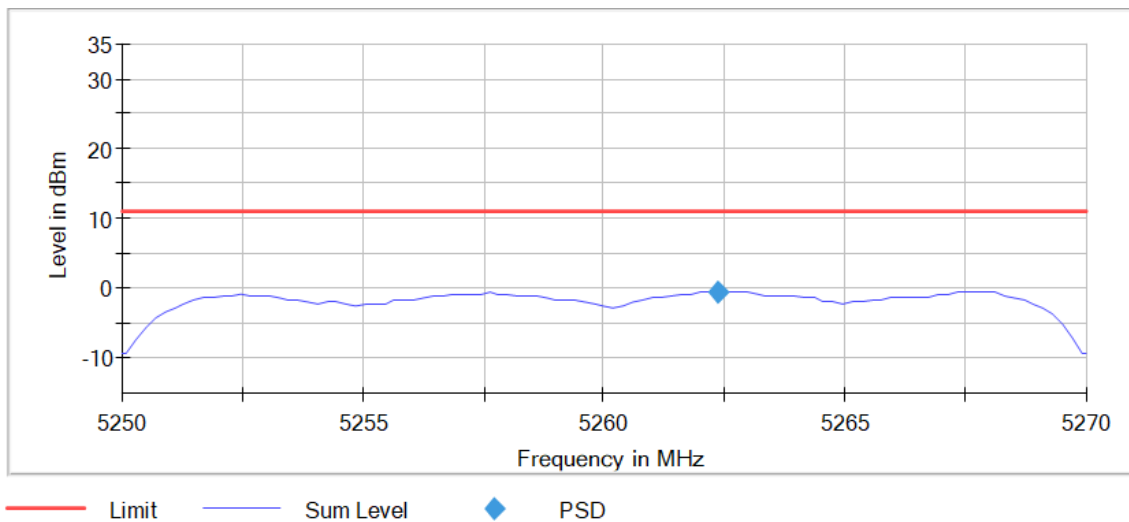


Frequency MHz = 5260.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

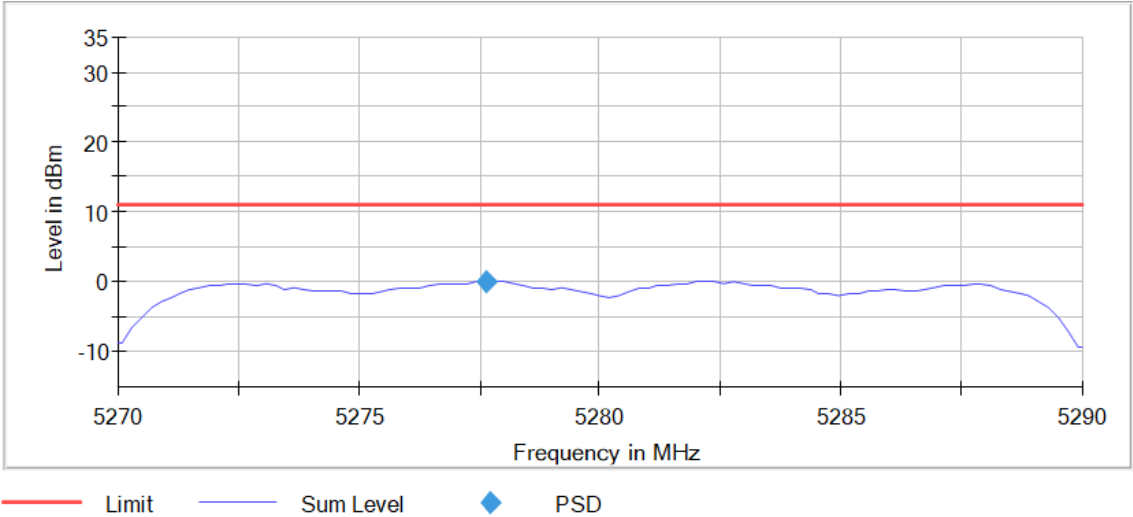
Number of Transmission Chains = 1

Images:



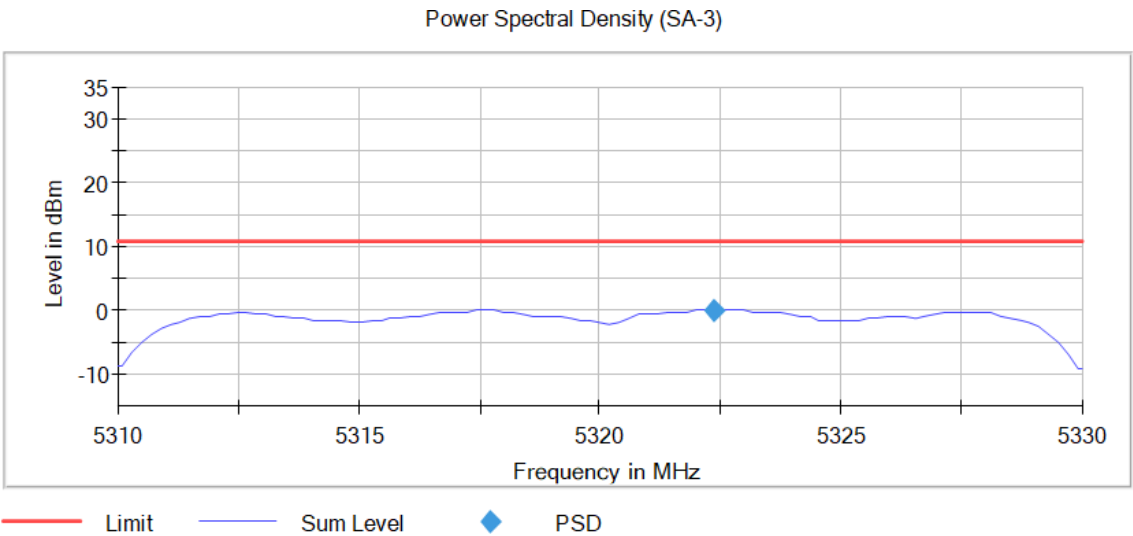
Frequency MHz = 5280.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5320.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:

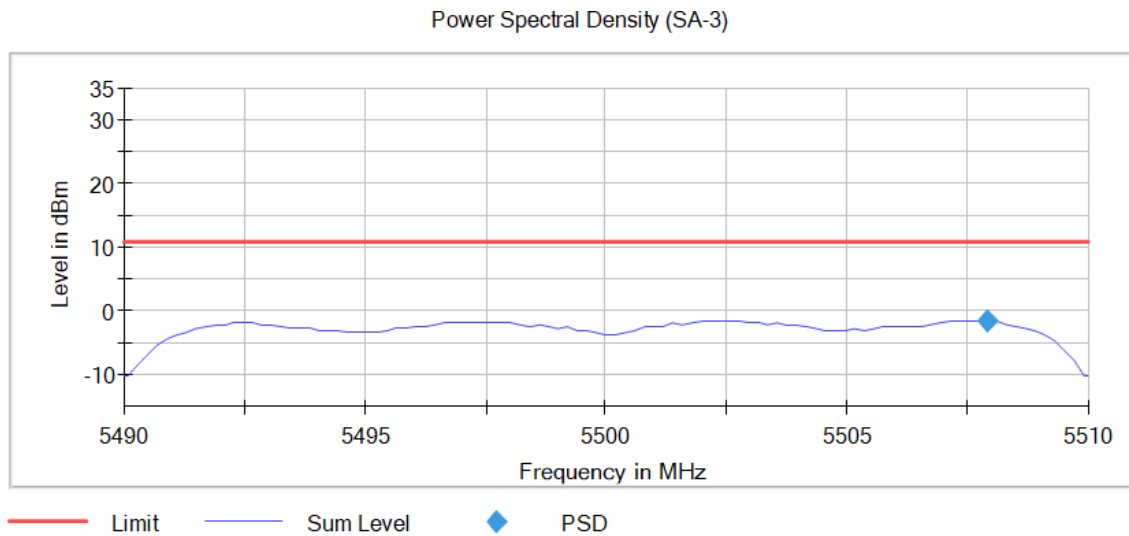


Frequency MHz = 5500.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

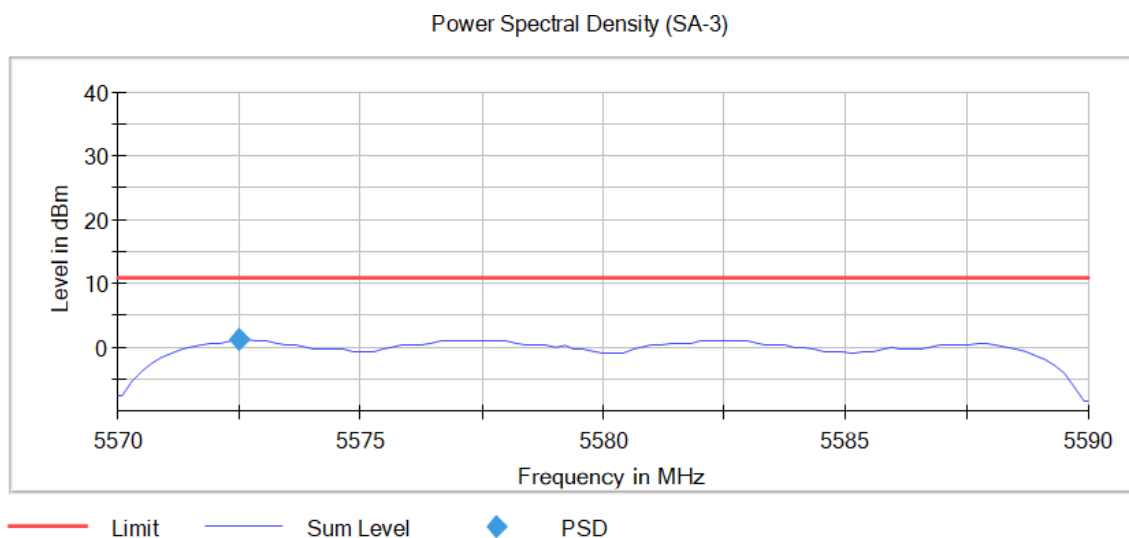


Frequency MHz = 5580.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

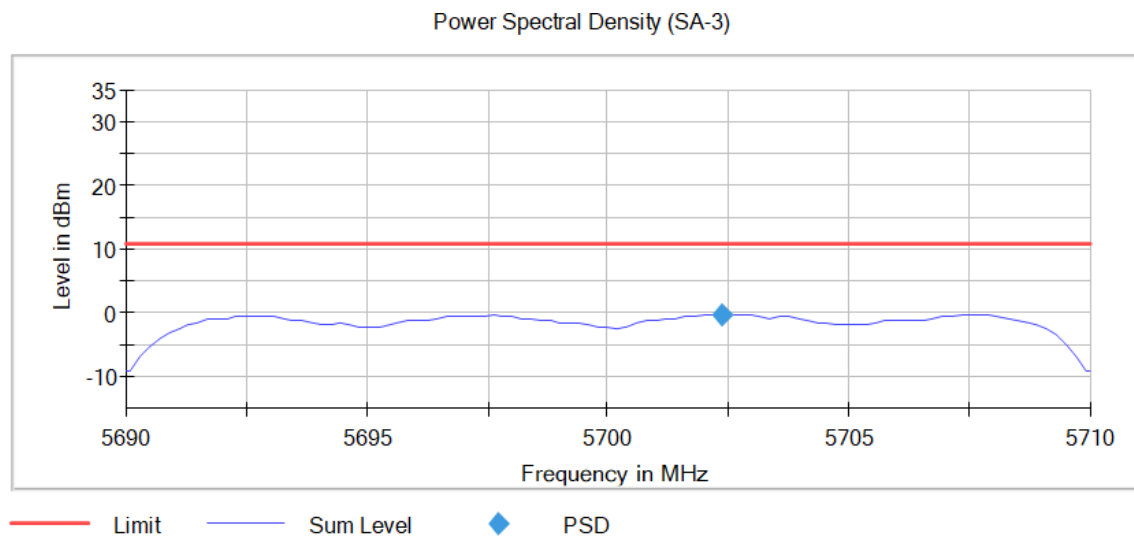


Frequency MHz = 5700.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

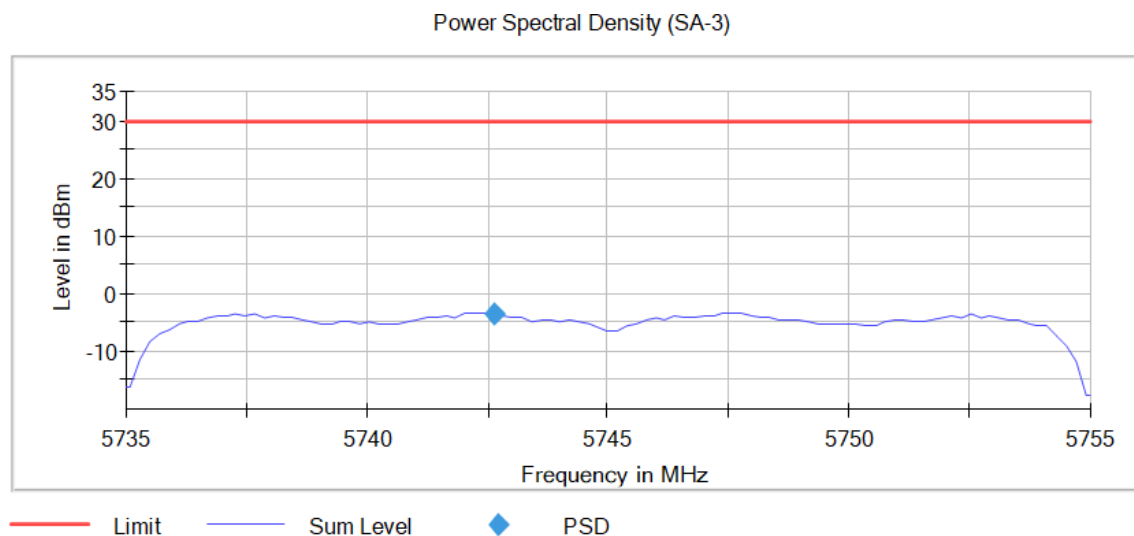


Frequency MHz = 5745.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

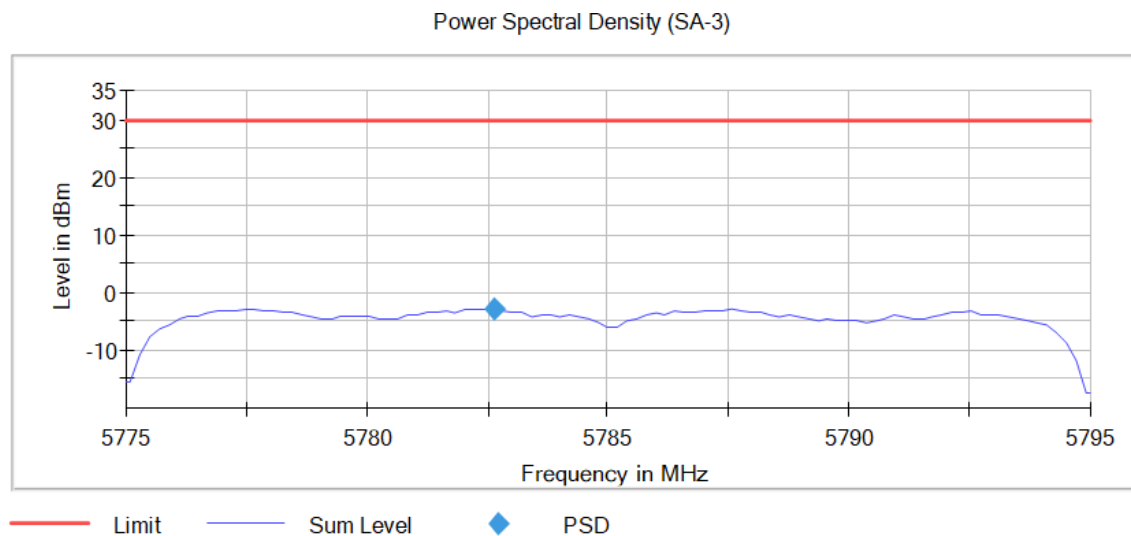


Frequency MHz = 5785.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

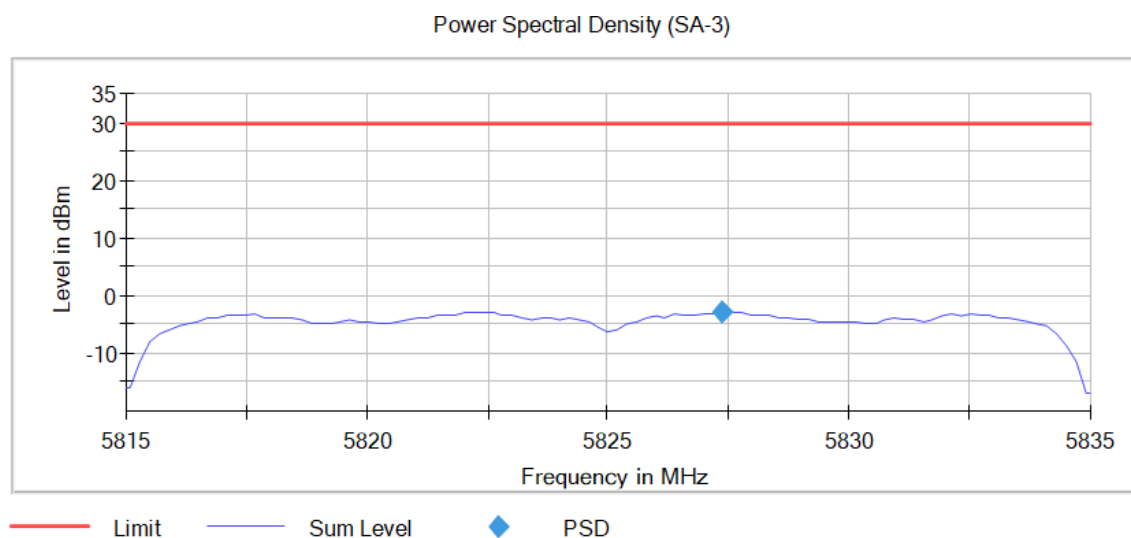


Frequency MHz = 5825.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:



Modulation: 802.11ax20 HE SS1 MCS 8 (OFDM MCS8) – Partial RU

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5180.00000	5173.267327	5.65
5200.00000	5193.267327	6.30
5240.00000	5233.465347	6.03
5260.00000	5253.267327	6.52
5280.00000	5273.267327	7.03
5320.00000	5313.267327	5.41
5500.00000	5493.069307	6.70
5580.00000	5573.267327	9.33
5700.00000	5693.267327	6.97
5745.00000	5738.267327	4.33
5785.00000	5778.069307	3.78
5825.00000	5818.069307	4.43

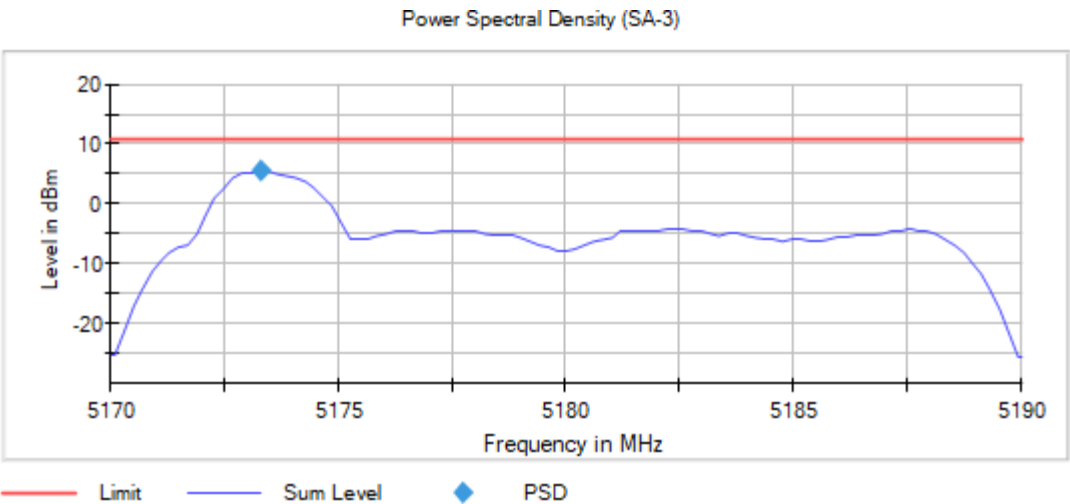
Verdict

Pass

Attachments

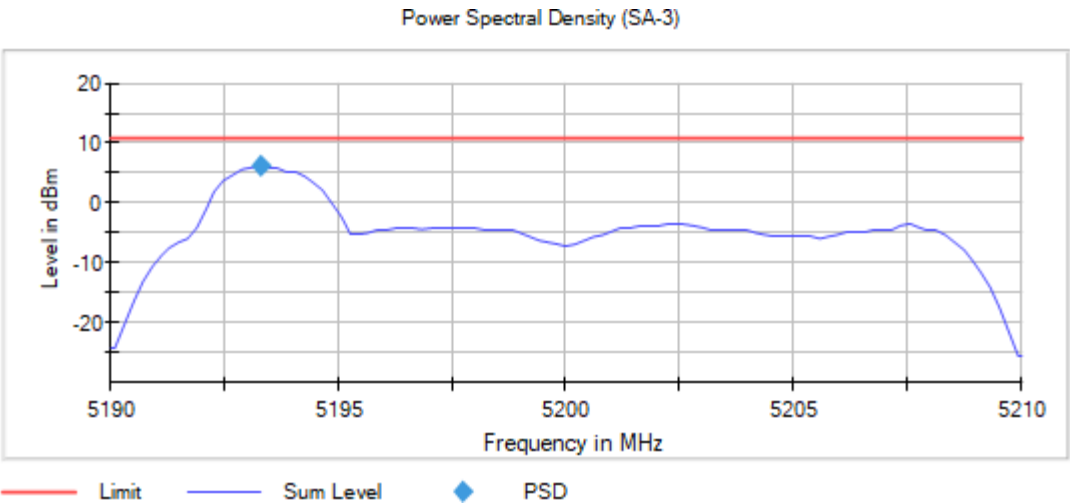
Frequency MHz = 5180.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



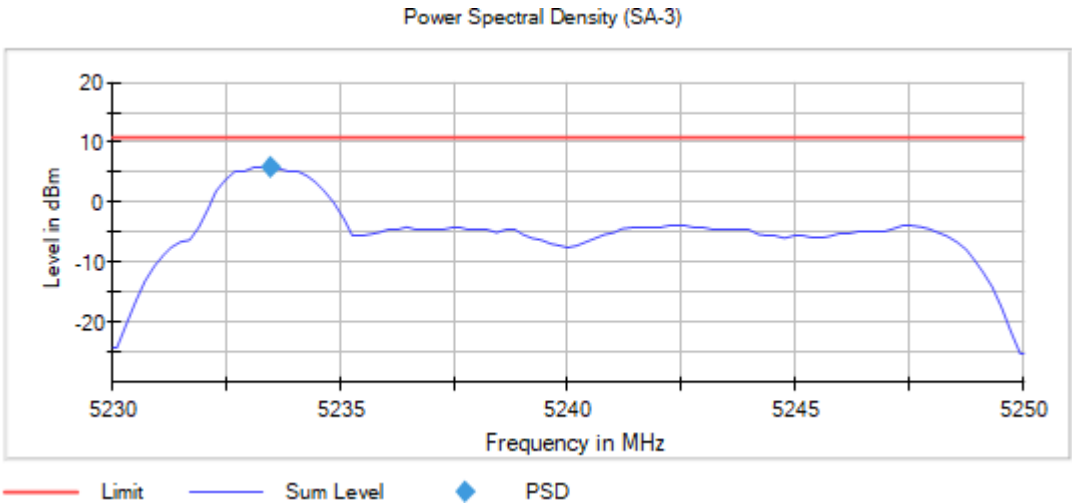
Frequency MHz = 5200.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



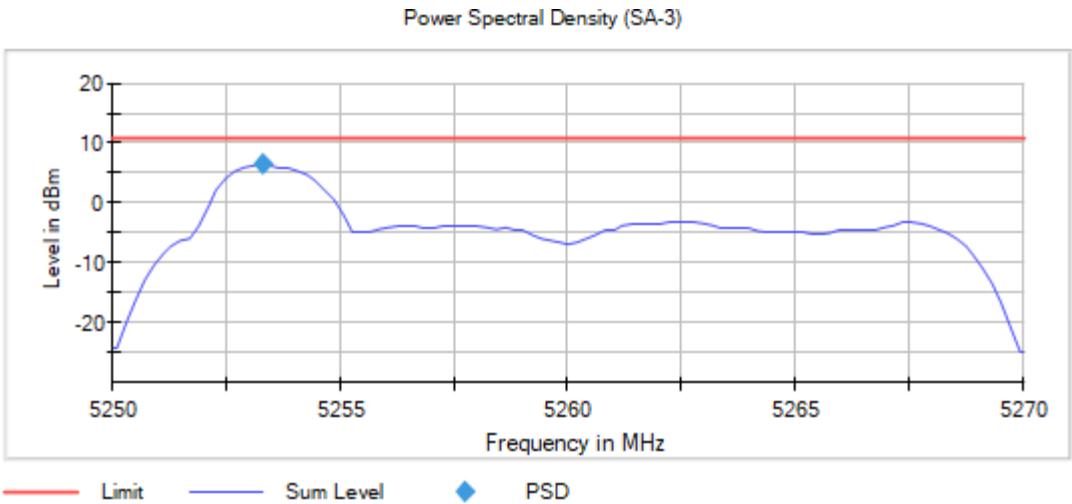
Frequency MHz = 5240.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



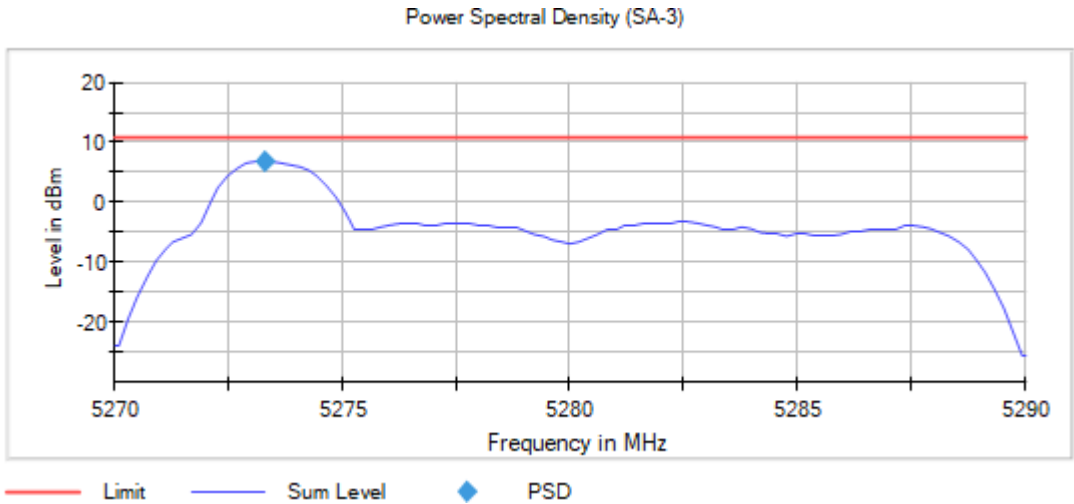
Frequency MHz = 5260.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



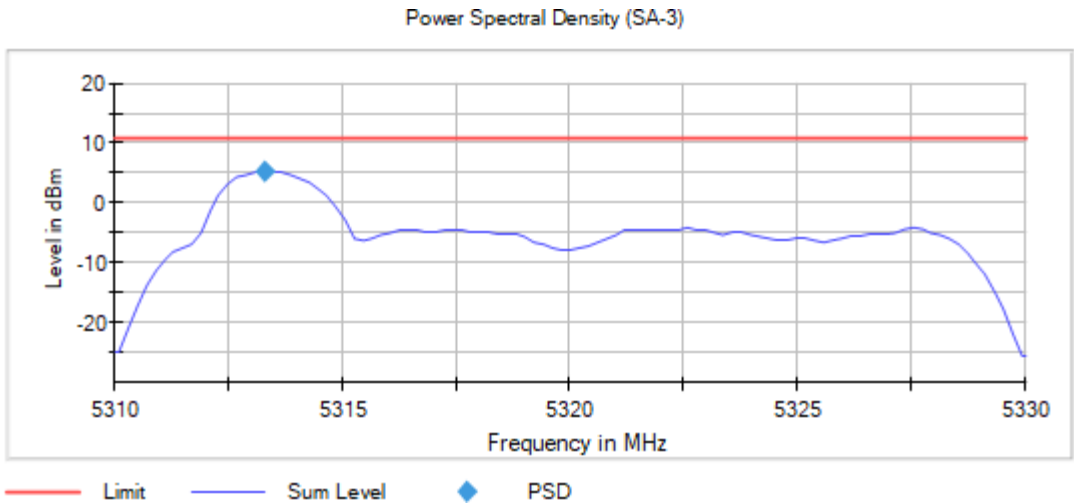
Frequency MHz = 5280.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



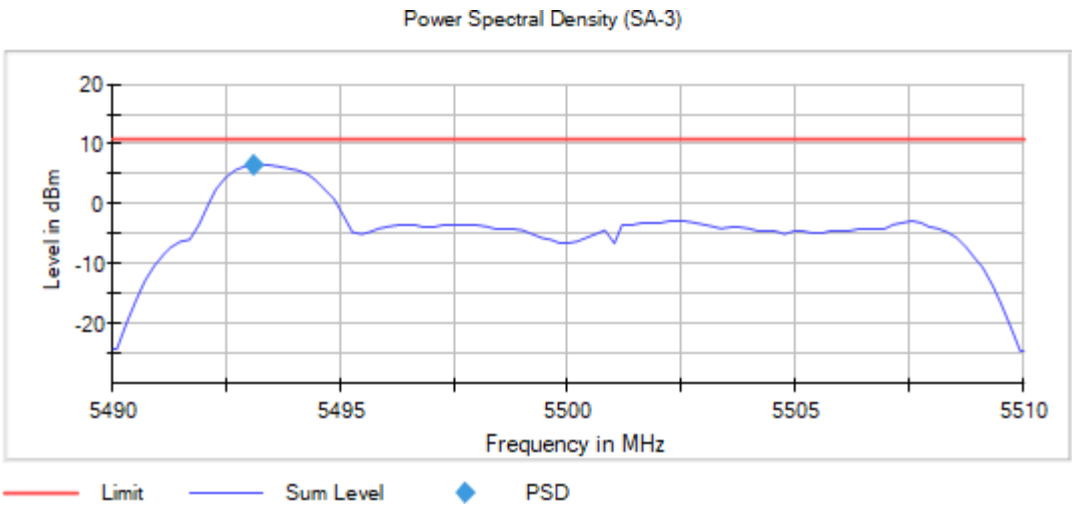
Frequency MHz = 5320.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



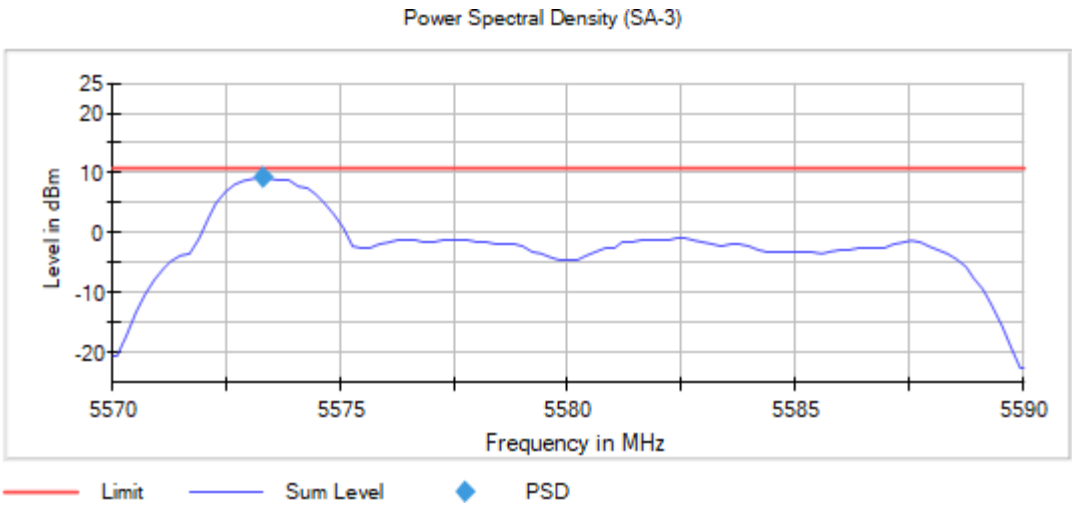
Frequency MHz = 5500.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



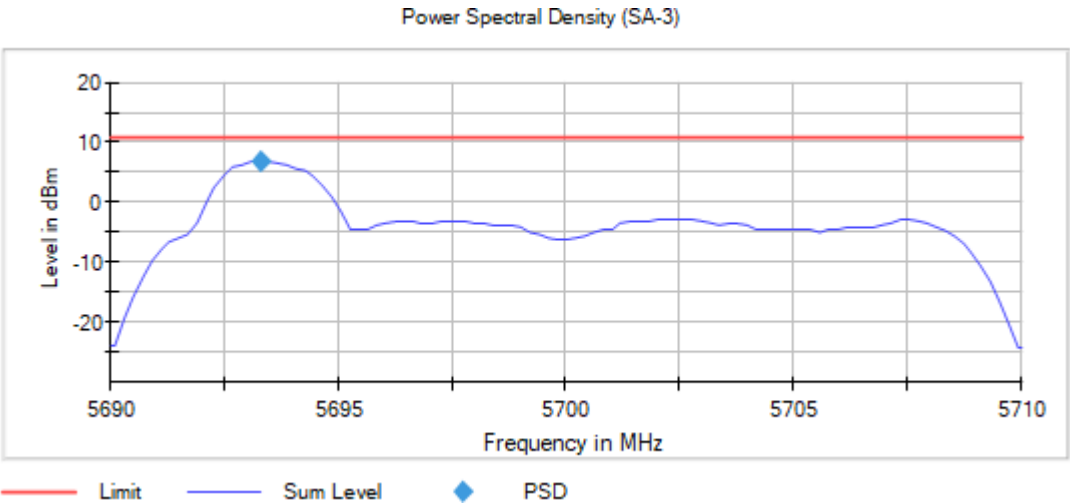
Frequency MHz = 5580.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



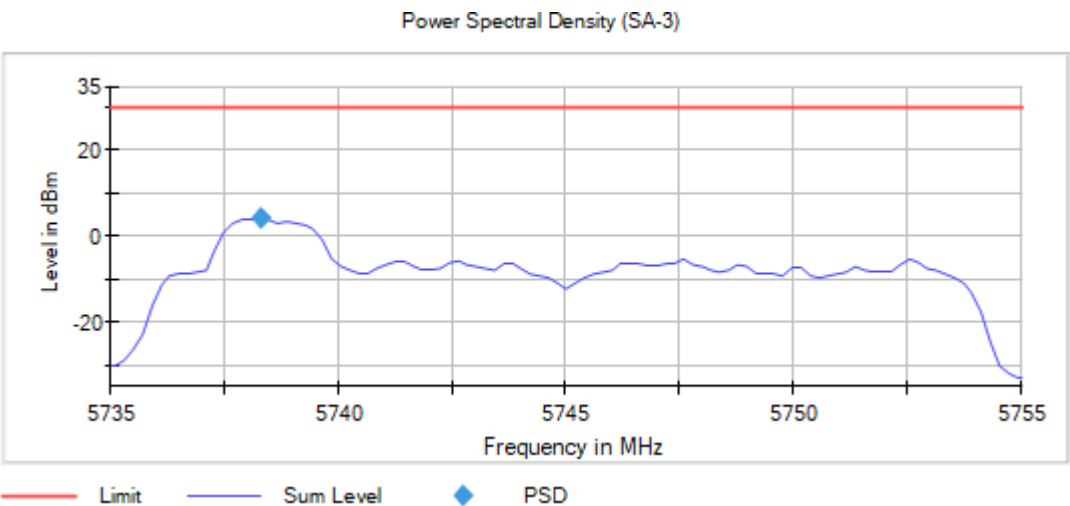
Frequency MHz = 5700.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



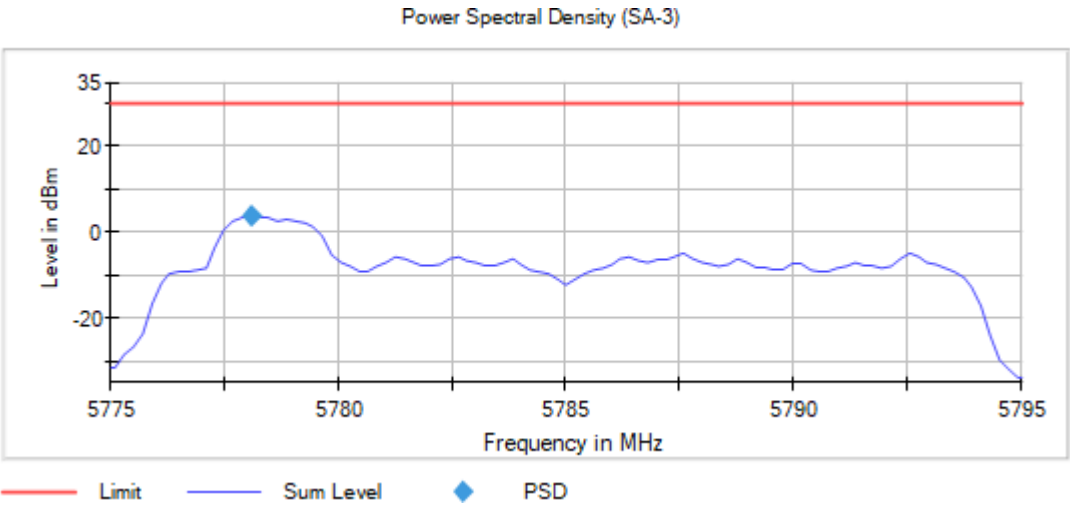
Frequency MHz = 5745.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



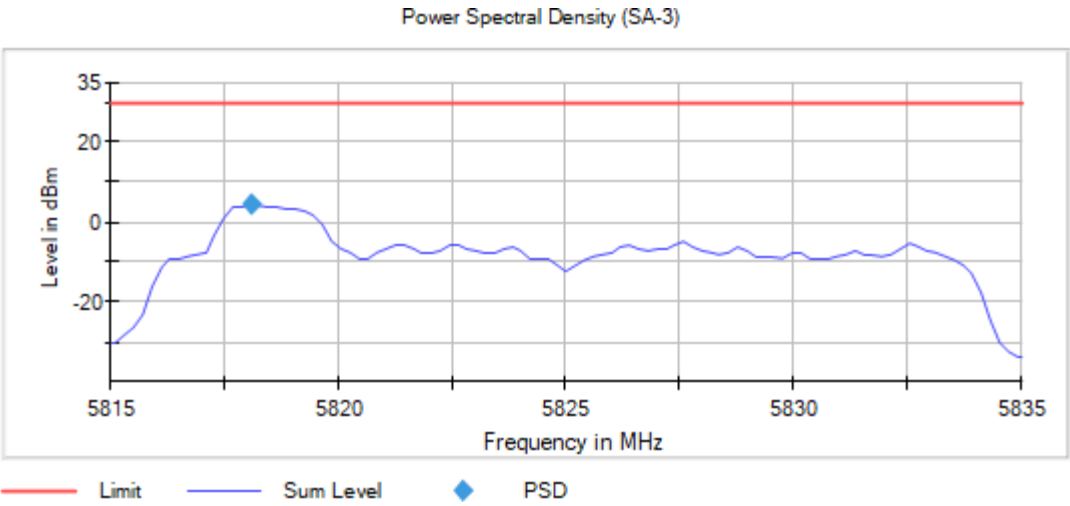
Frequency MHz = 5785.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Mode: SISO
Modulation: 802.11ax HE40 SS1 (OFDMA MCS0) - Full RU

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5190.00000	5174.950495	-3.56
5230.00000	5235.148515	-3.12
5270.00000	5275.544554	-2.99
5310.00000	5315.544554	-2.98
5510.00000	5515.148515	-3.58
5550.00000	5555.148515	-2.98
5670.00000	5675.148515	-2.67
5755.00000	5768.875000	-5.42
5795.00000	5778.625000	-5.27

Verdict

Pass

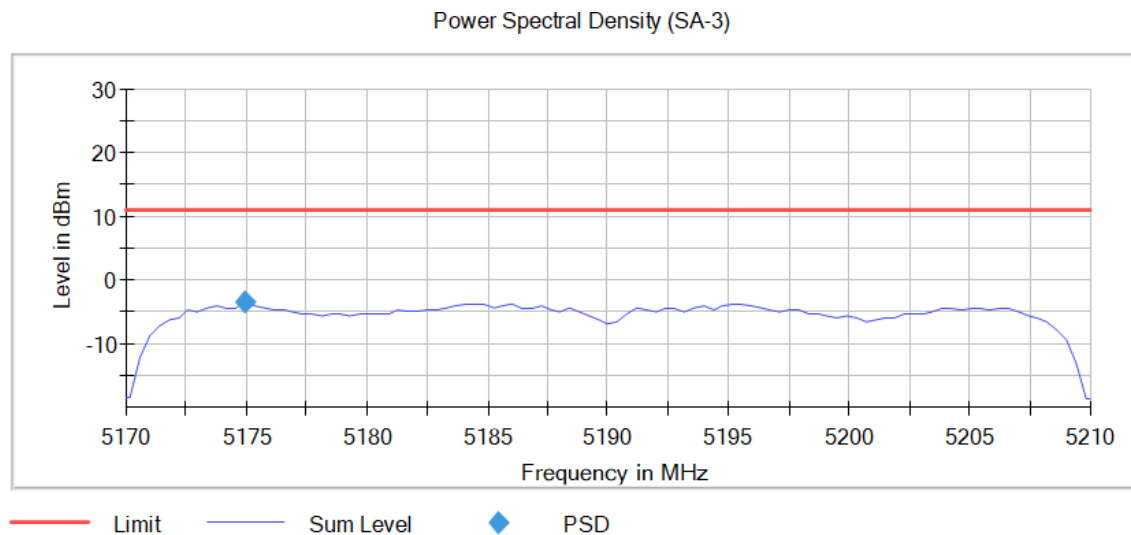
Attachments

Frequency MHz = 5190.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

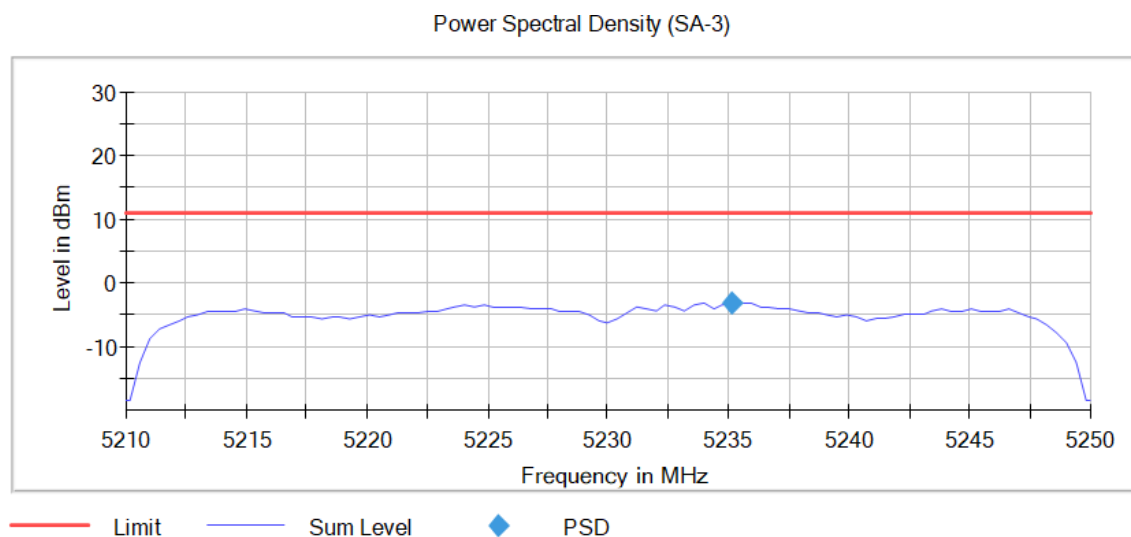


Frequency MHz = 5230.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

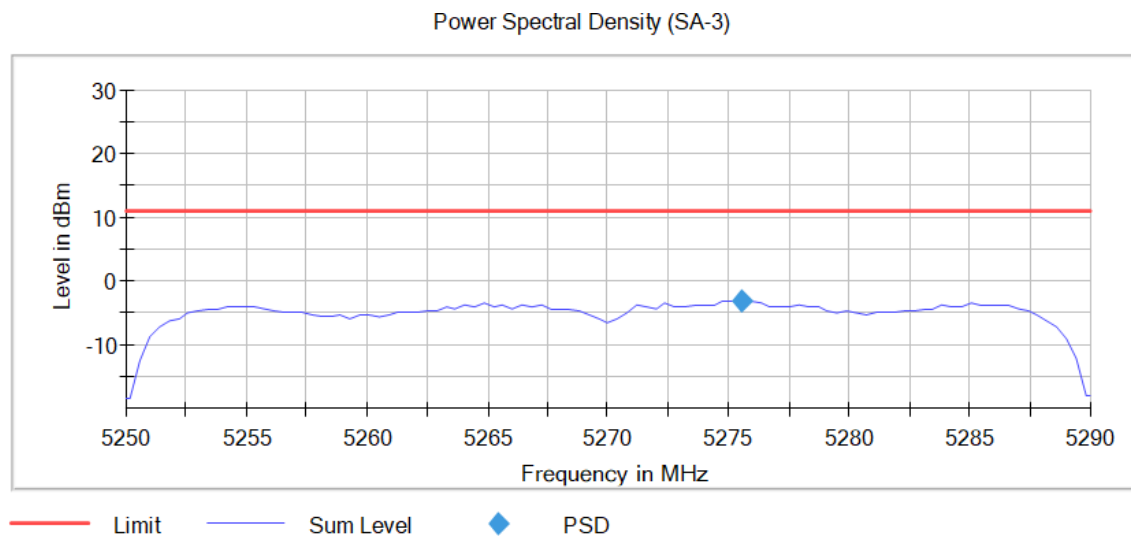


Frequency MHz = 5270.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

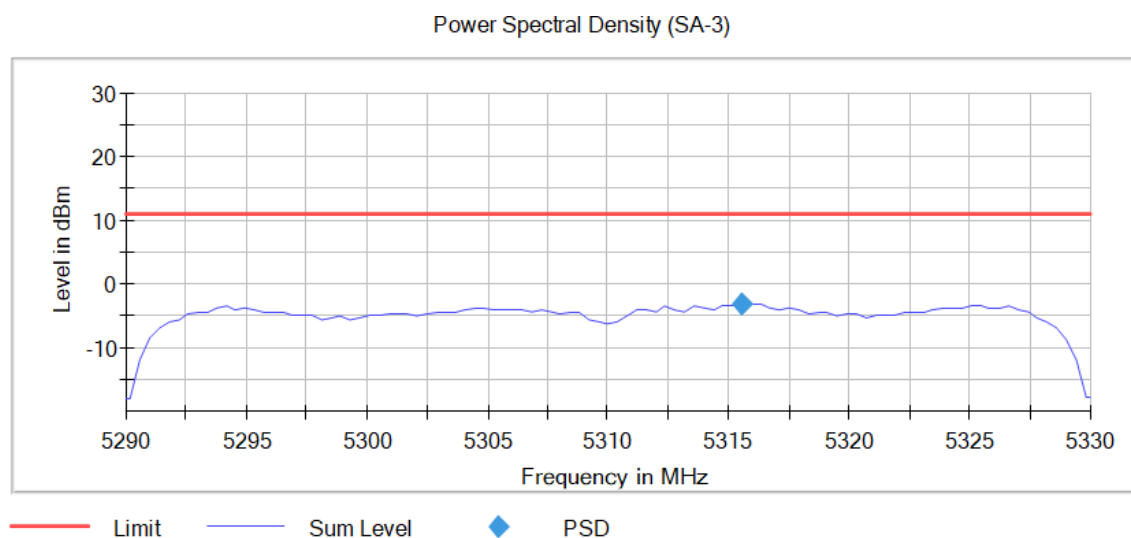


Frequency MHz = 5310.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

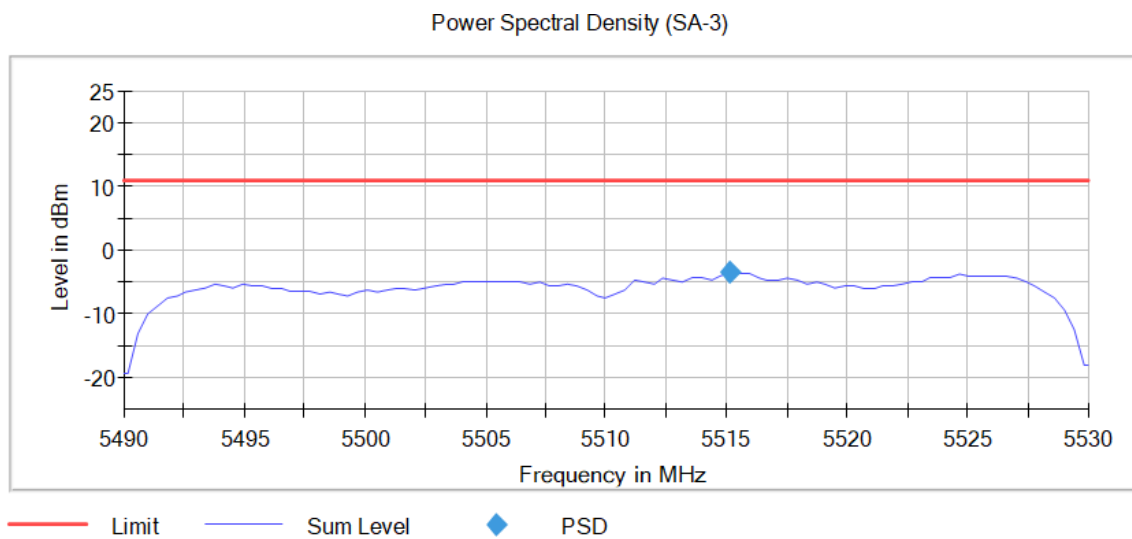


Frequency MHz = 5510.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

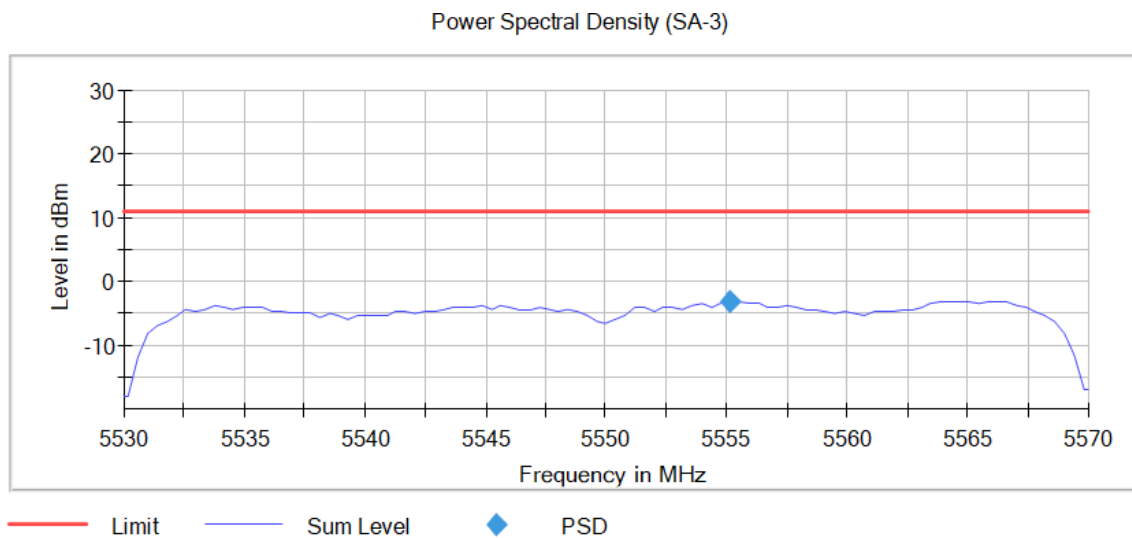


Frequency MHz = 5550.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)

TPC = No Mode = SISO

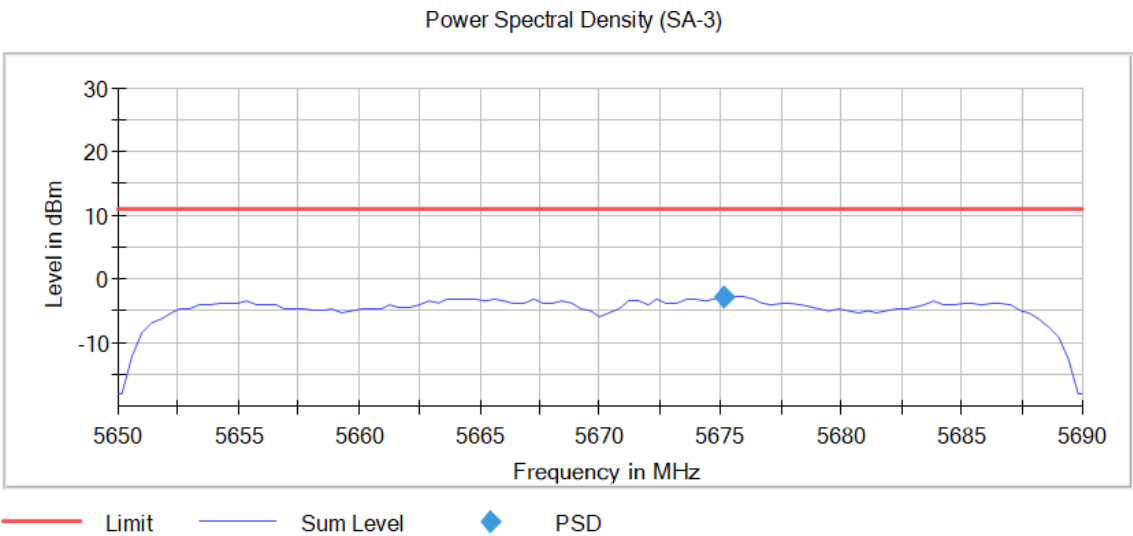
Number of Transmission Chains = 1

Images:



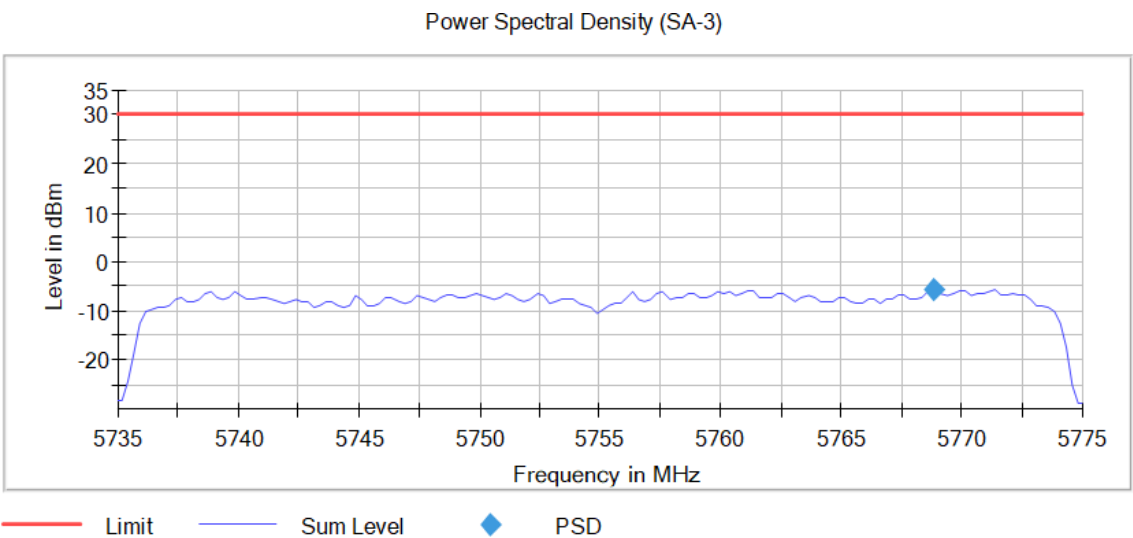
Frequency MHz = 5670.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:



Frequency MHz = 5755.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:

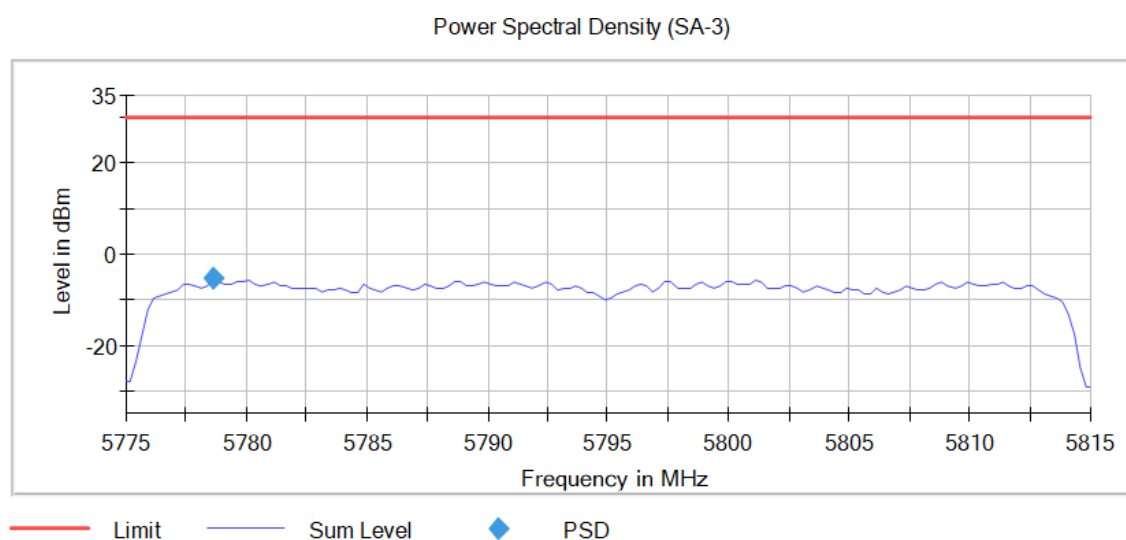


Frequency MHz = 5795.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS0)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE40 SS1 (OFDMA MCS9) – Partial RU

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5190.00000	5188.415842	5.64
5230.00000	5228.415842	5.95
5270.00000	5268.415842	6.91
5310.00000	5308.415842	5.45
5510.00000	5508.415842	7.03
5550.00000	5548.415842	7.10
5670.00000	5668.415842	6.63
5755.00000	5753.125000	3.46
5795.00000	5792.875000	4.16

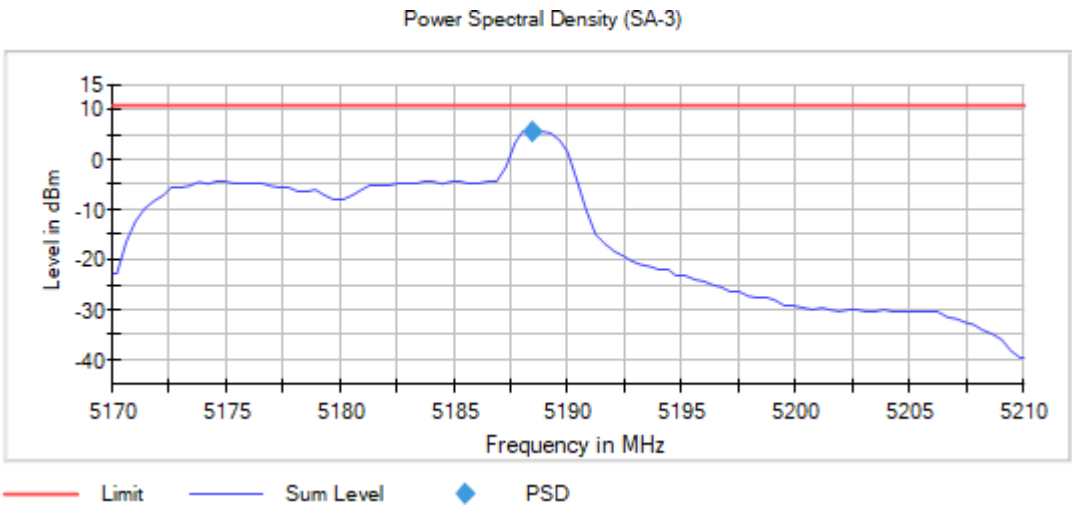
Verdict

Pass

Attachments

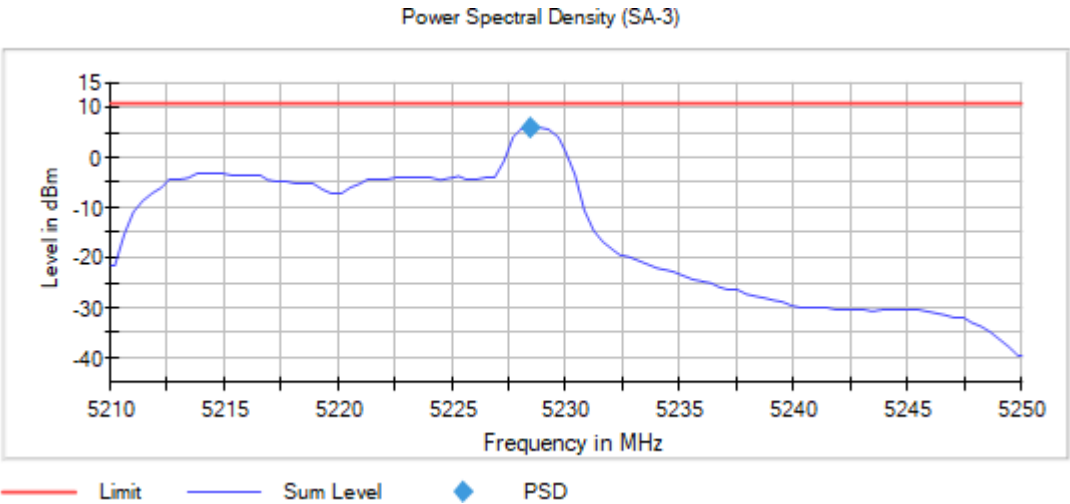
Frequency MHz = 5190.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



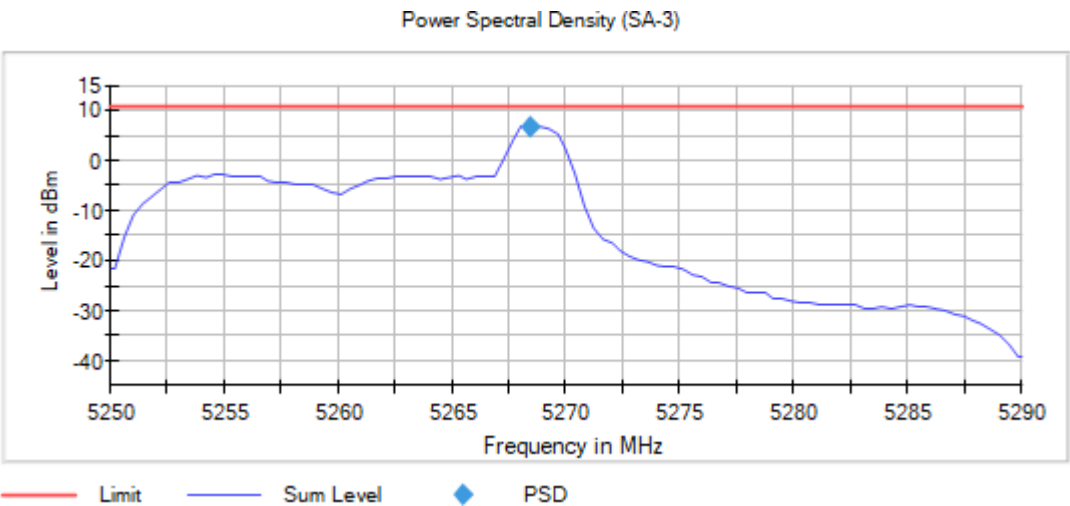
Frequency MHz = 5230.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



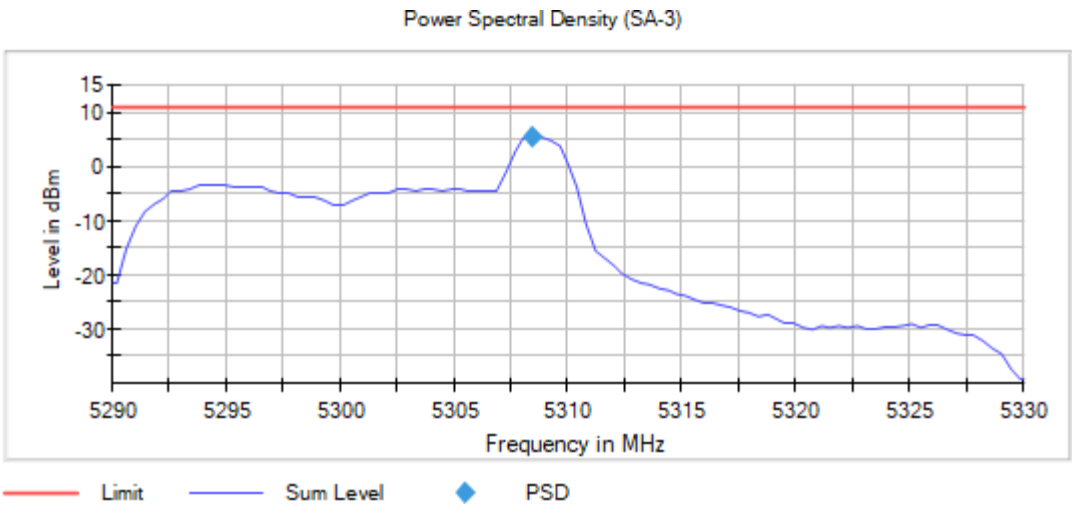
Frequency MHz = 5270.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



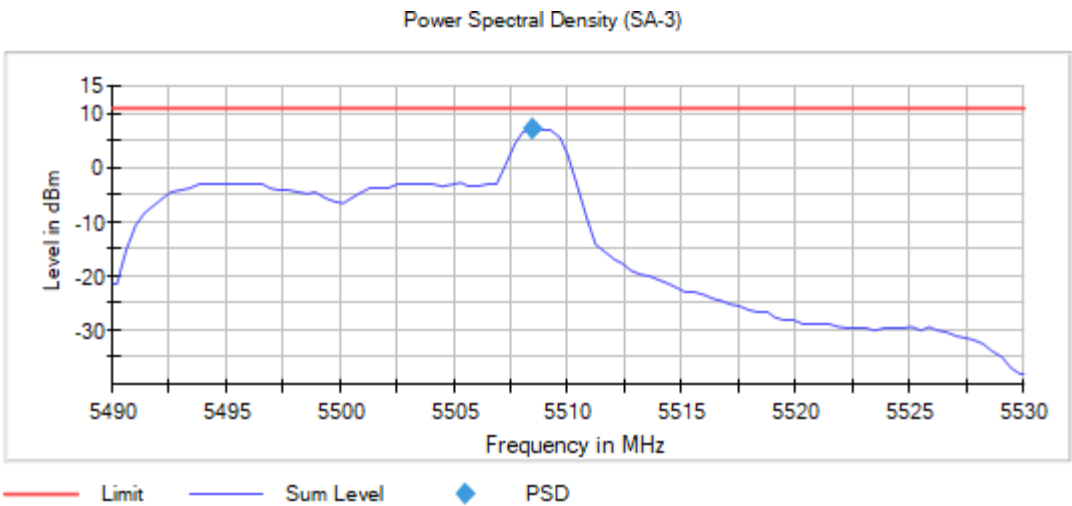
Frequency MHz = 5310.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



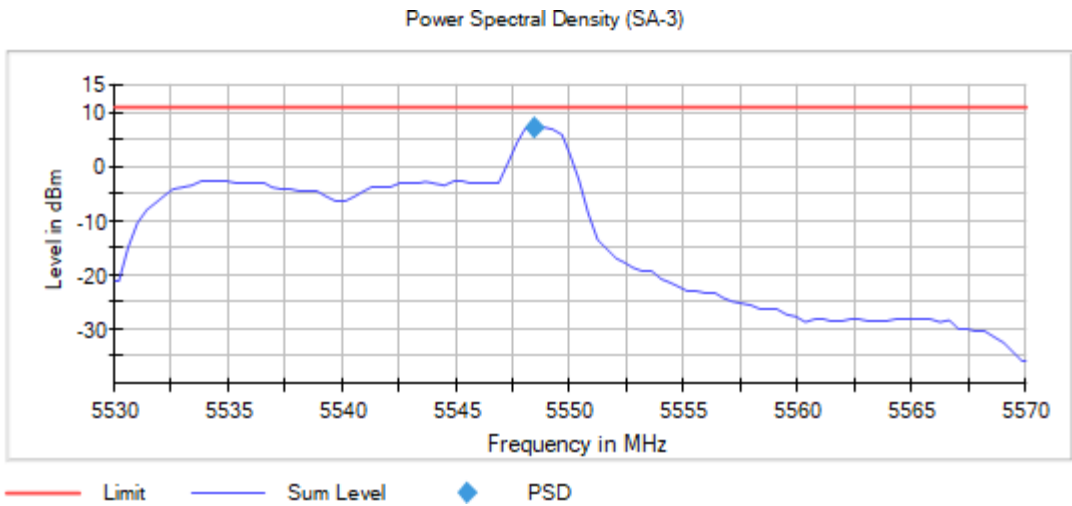
Frequency MHz = 5510.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



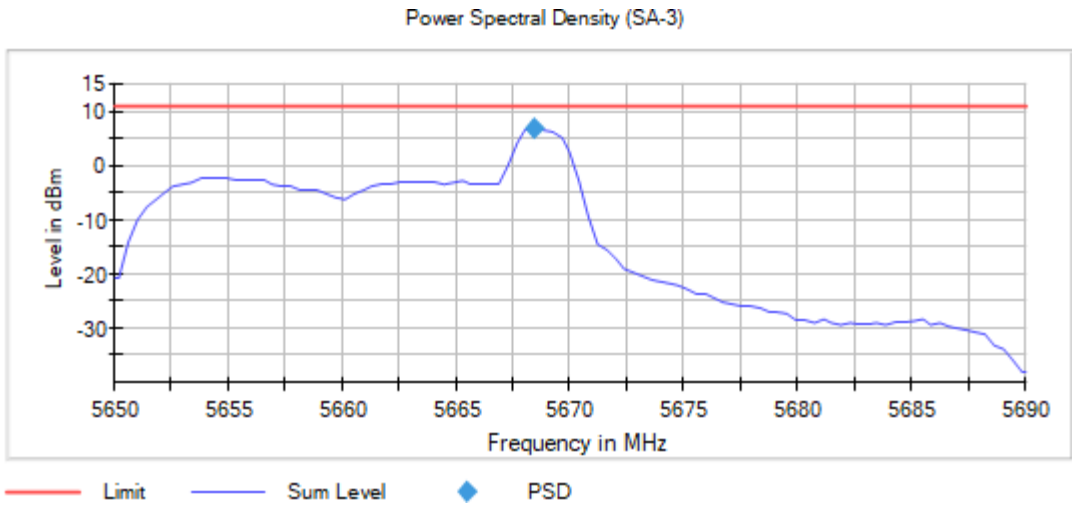
Frequency MHz = 5550.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



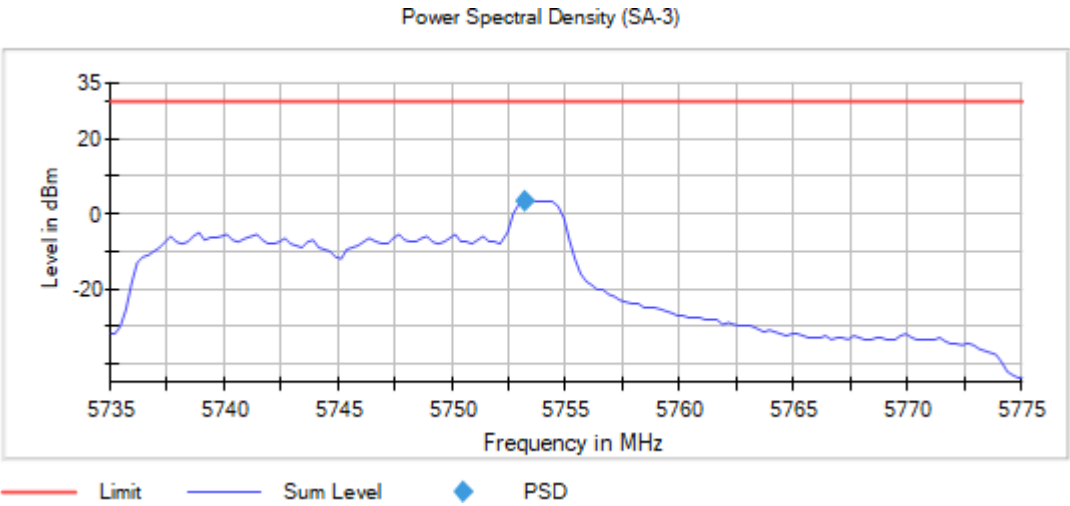
Frequency MHz = 5670.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



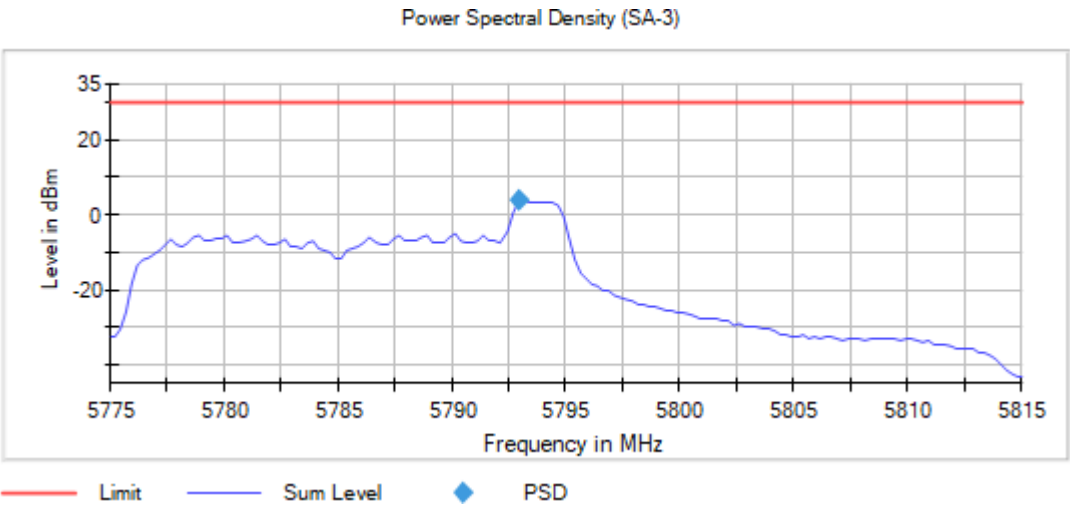
Frequency MHz = 5755.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



Mode: SISO
Modulation: 802.11ax HE80 SS1 (OFDMA MCS11) - Full RU

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5210.00000	5228.750000	-6.74
5290.00000	5277.750000	-6.75
5530.00000	5565.250000	-6.74
5610.00000	5628.750000	-5.01
5775.00000	5769.875000	-9.10

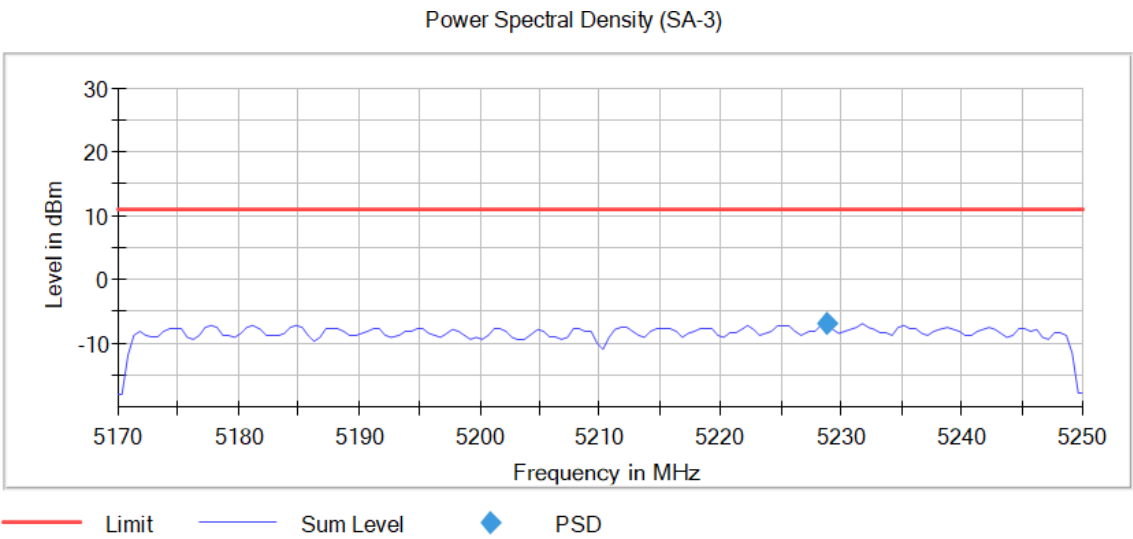
Verdict

Pass

Attachments

Frequency MHz = 5210.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS9)
TPC = No Mode = SISO
Number of Transmission Chains = 1

Images:

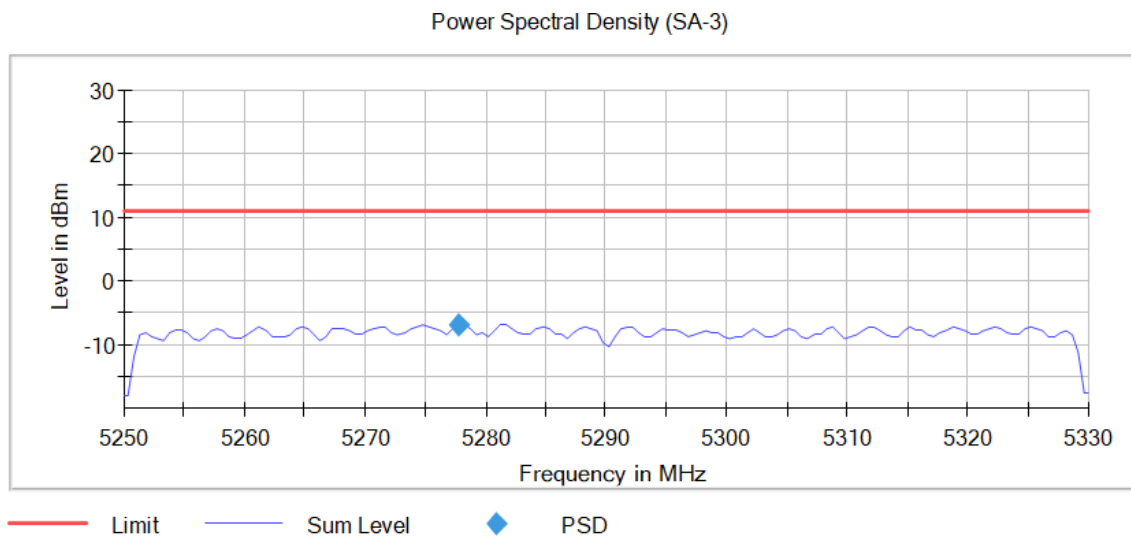


Frequency MHz = 5290.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

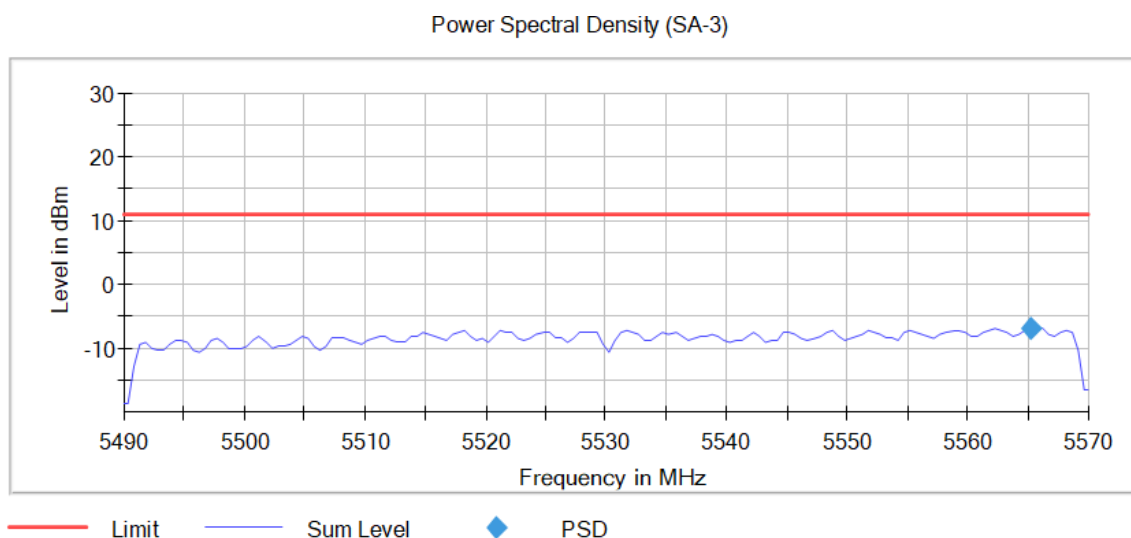


Frequency MHz = 5530.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

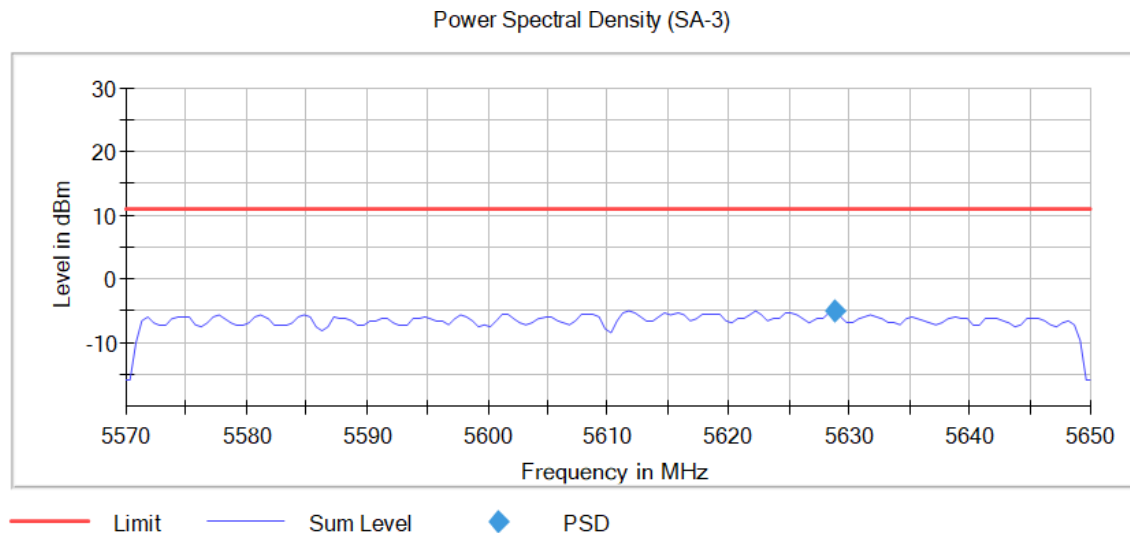


Frequency MHz = 5610.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:

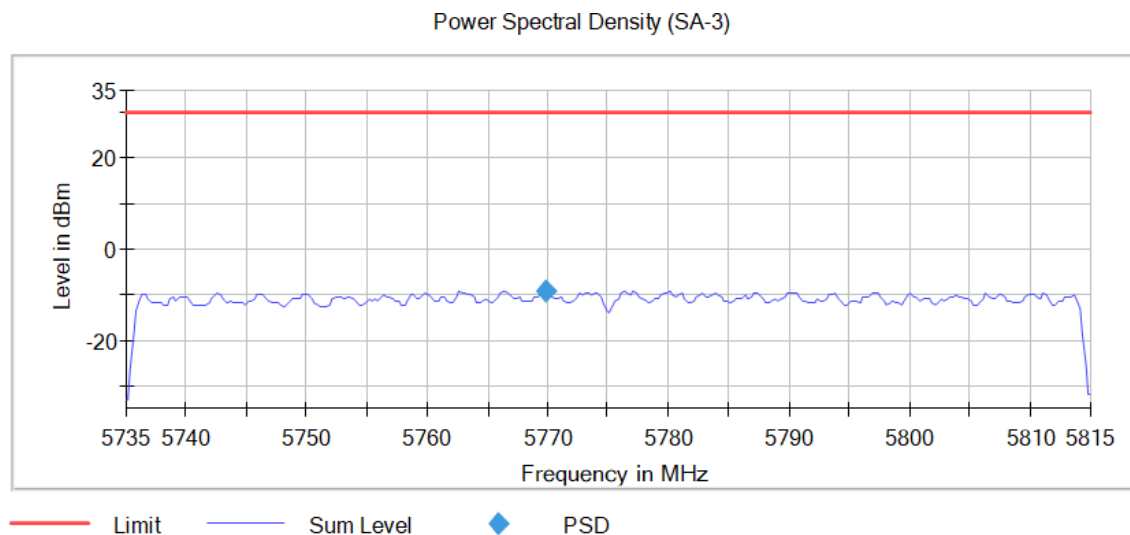


Frequency MHz = 5775.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS9)

TPC = No Mode = SISO

Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE80 SS1 (OFDMA MCS11) – Partial RU

Results

Test Freq (MHz)	Marker Freq (MHz)	PSD (dBm)
5210.00000	5177.750000	0.56
5290.00000	5257.750000	1.69
5530.00000	5498.250000	1.51
5610.00000	5571.750000	3.65
5775.00000	5736.625000	-1.25

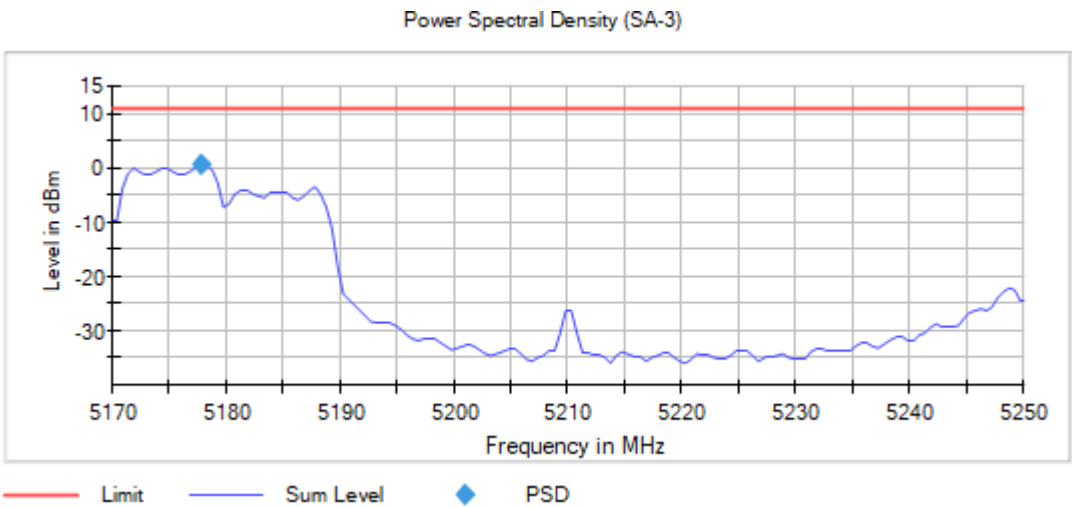
Verdict

Pass

Attachments

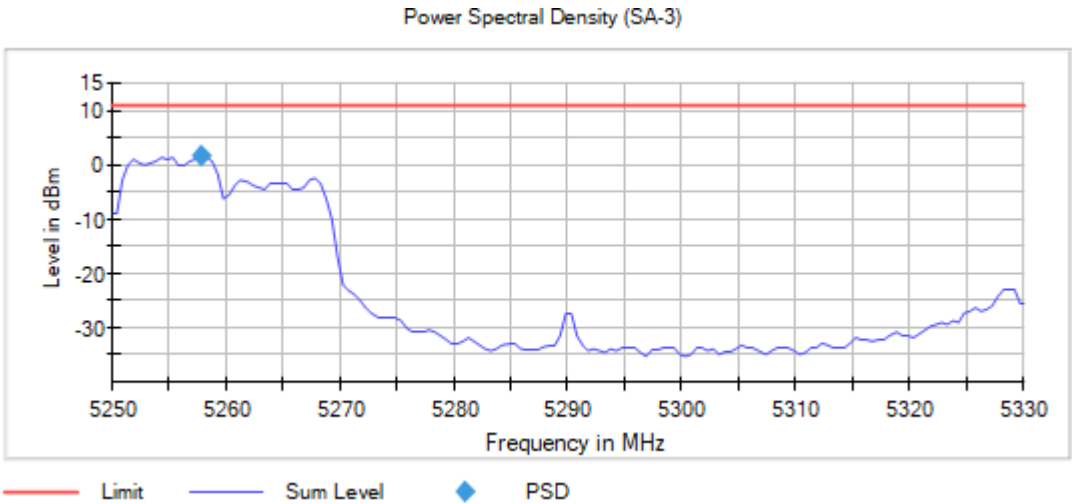
Frequency MHz = 5210.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



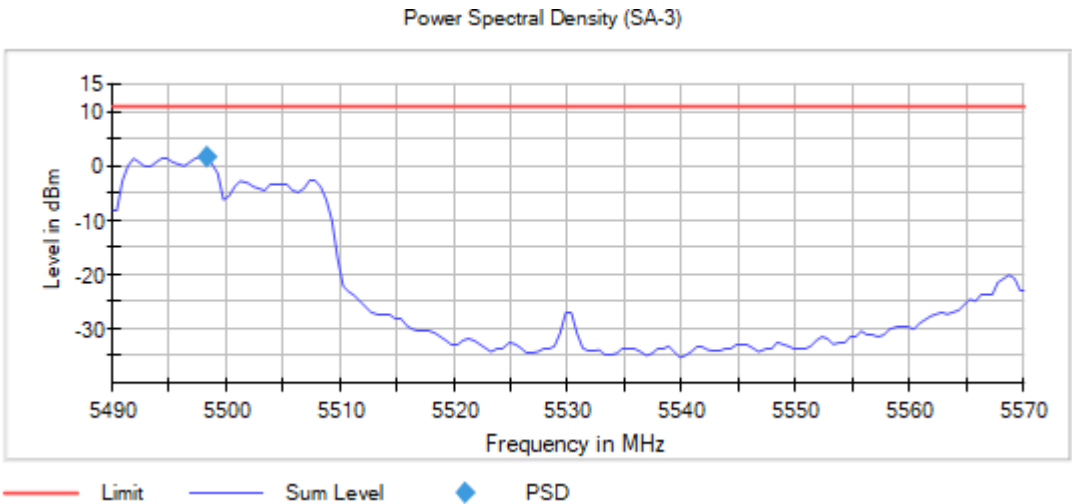
Frequency MHz = 5290.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



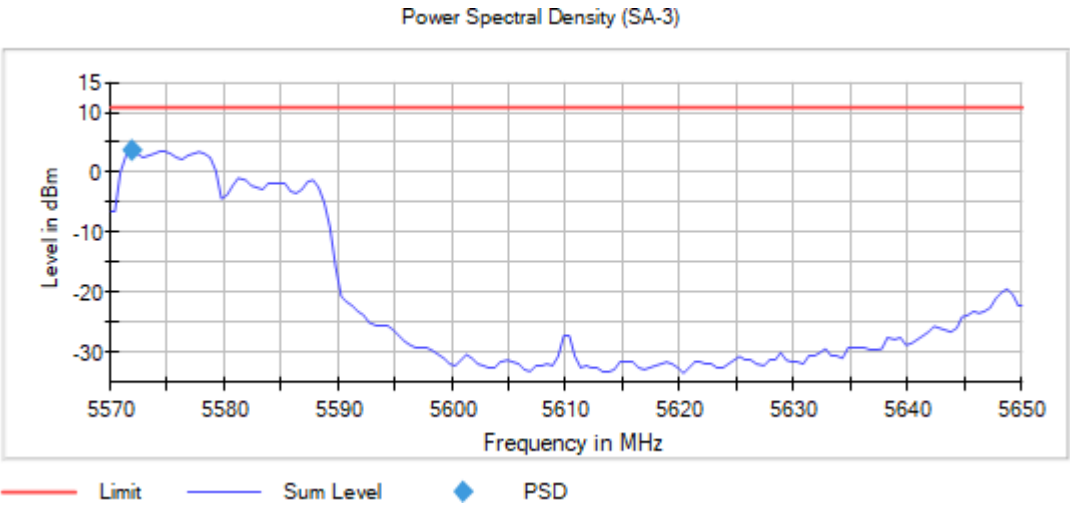
Frequency MHz = 5530.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



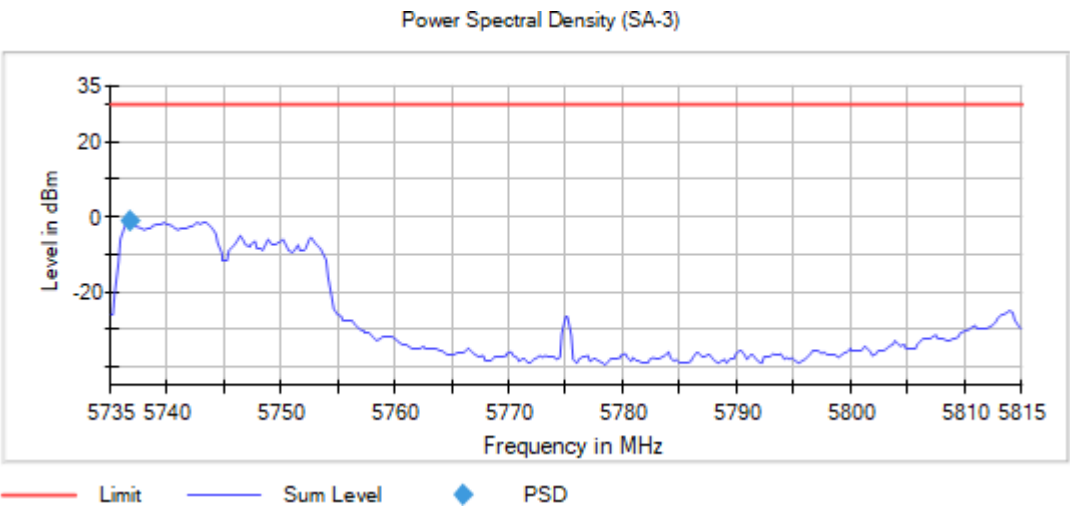
Frequency MHz = 5610.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



Frequency MHz = 5775.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



FCC 2.1049 / RSS-Gen 6.7 99% Occupied Bandwidth

Limits

No Limit has been set to this test case

Modulation: 802.11a (OFDM 54 Mbit/s)

Results

Freq (MHz)	Occ Ch BW (MHz)
5180.00000	16.600
5200.00000	16.600
5240.00000	16.500
5260.00000	16.500
5280.00000	16.700
5320.00000	16.700
5500.00000	16.700
5580.00000	16.700
5700.00000	16.600
5745.00000	16.500
5785.00000	16.600
5825.00000	16.600

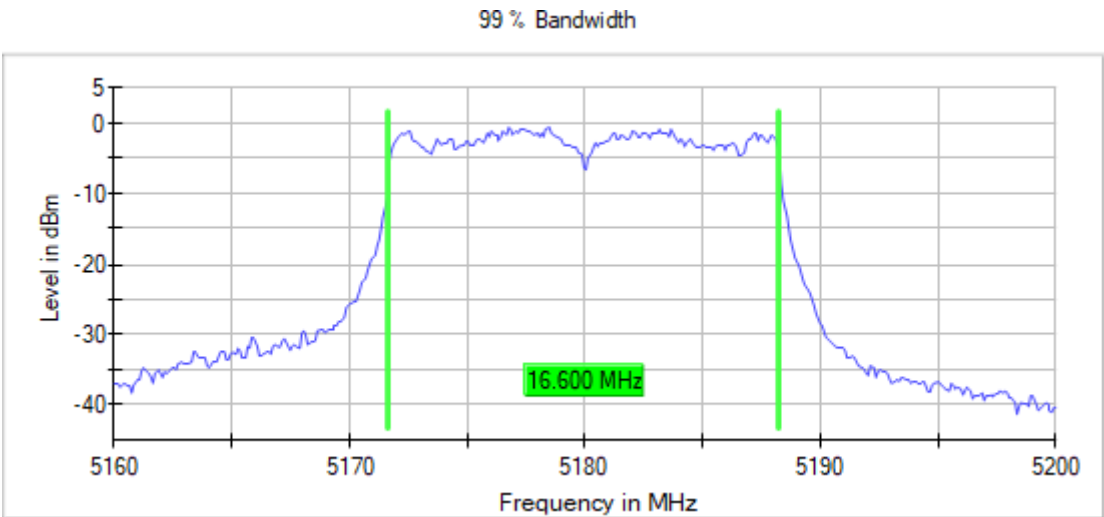
Verdict

Pass

Attachments

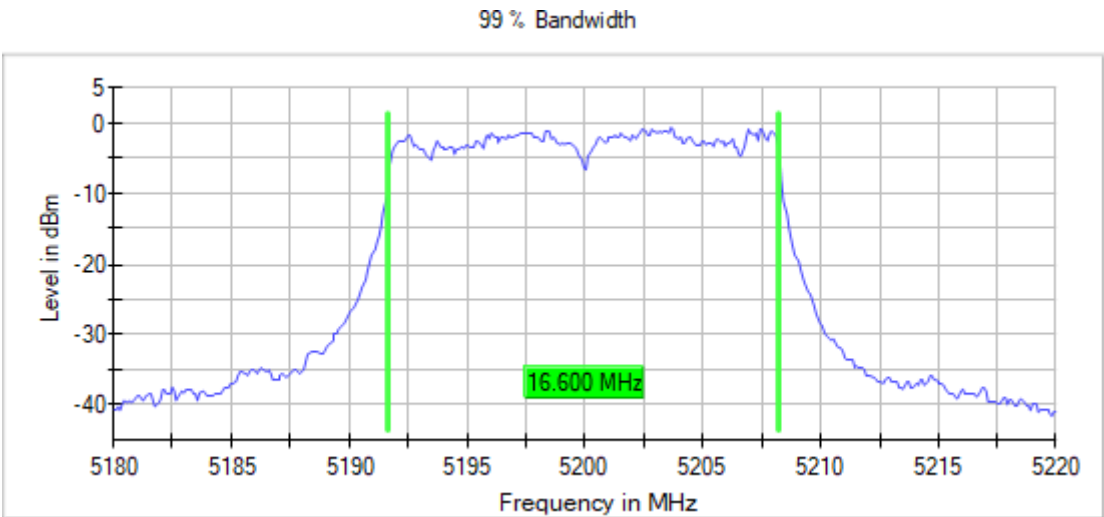
Frequency MHz = 5180.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



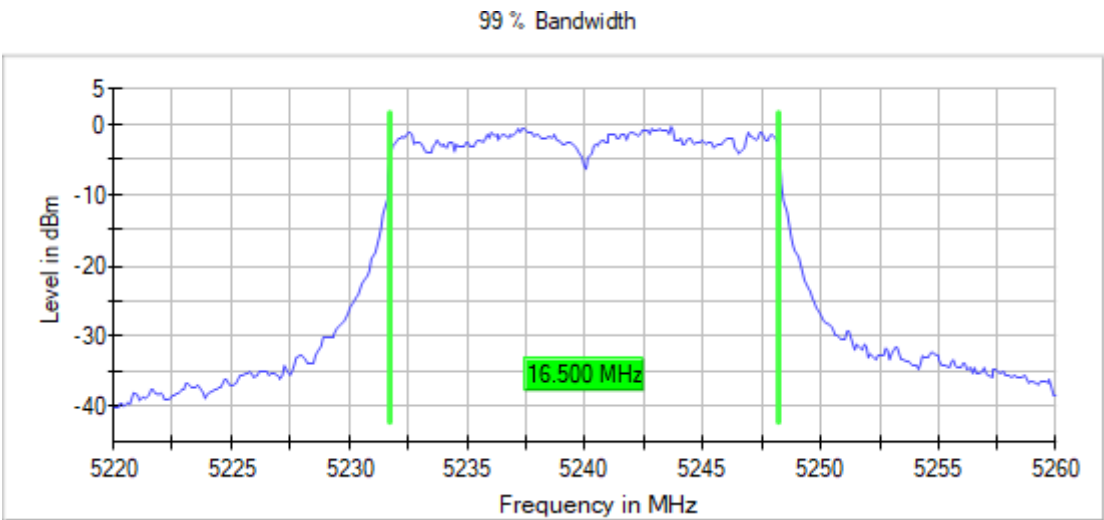
Frequency MHz = 5200.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



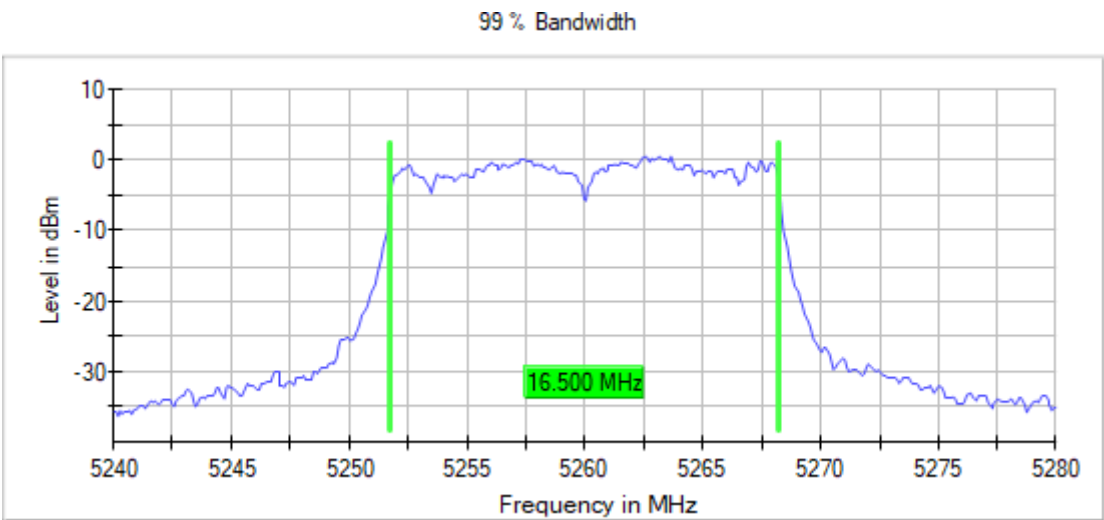
Frequency MHz = 5240.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



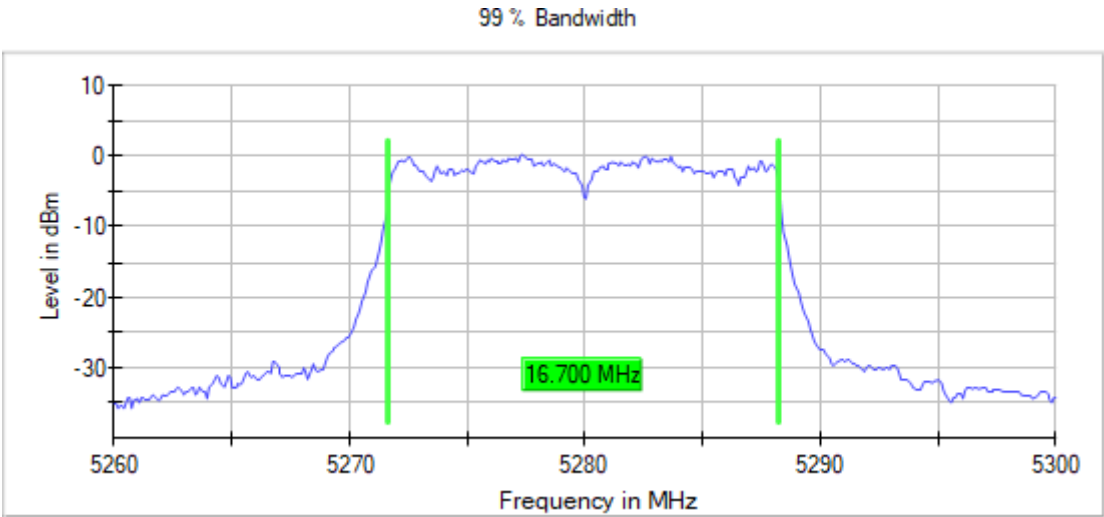
Frequency MHz = 5260.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



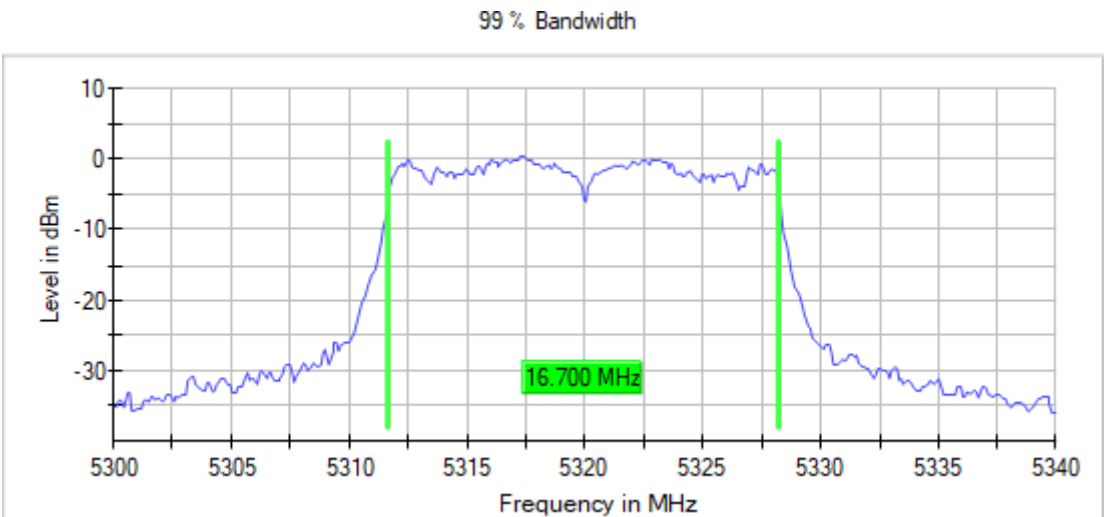
Frequency MHz = 5280.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



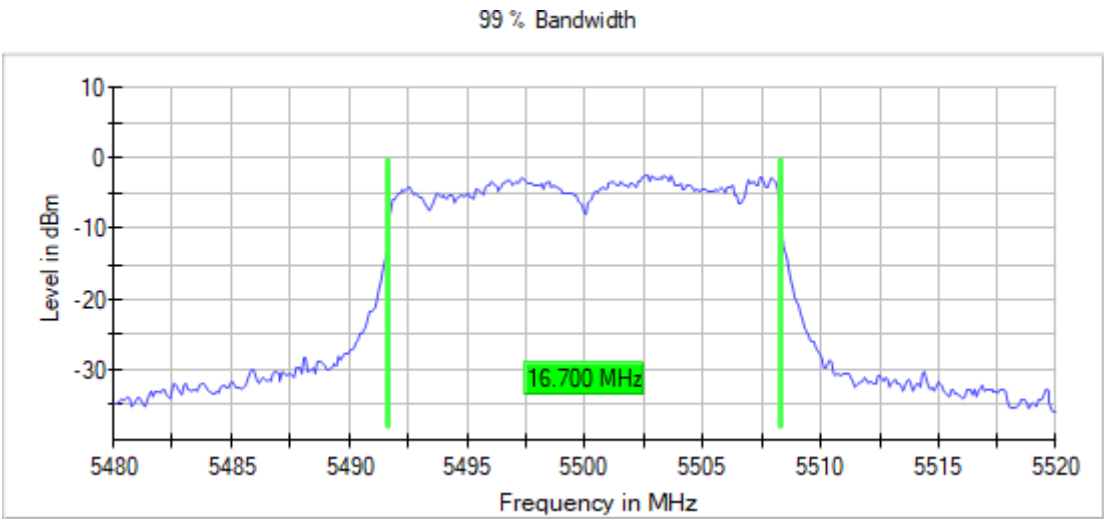
Frequency MHz = 5320.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



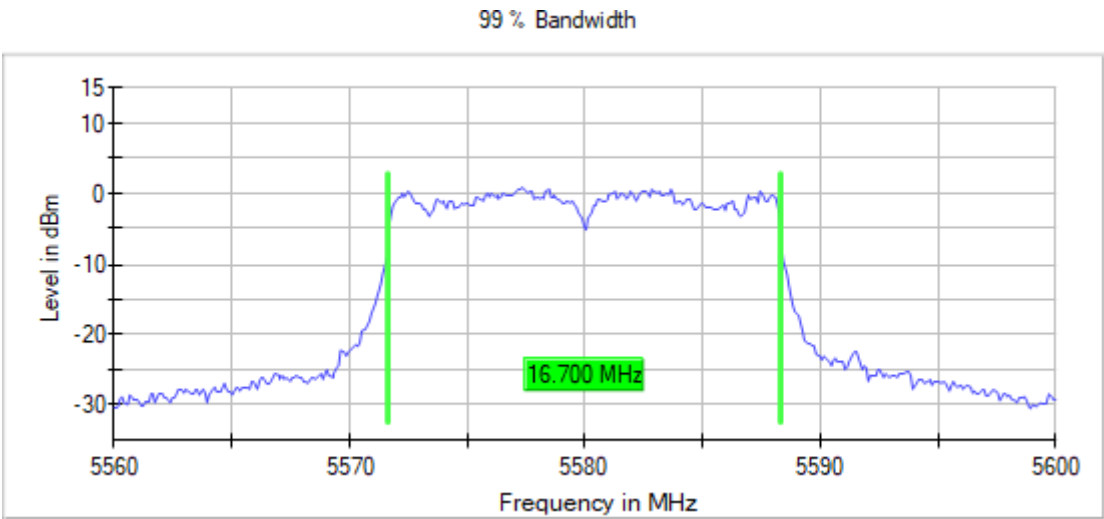
Frequency MHz = 5500.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



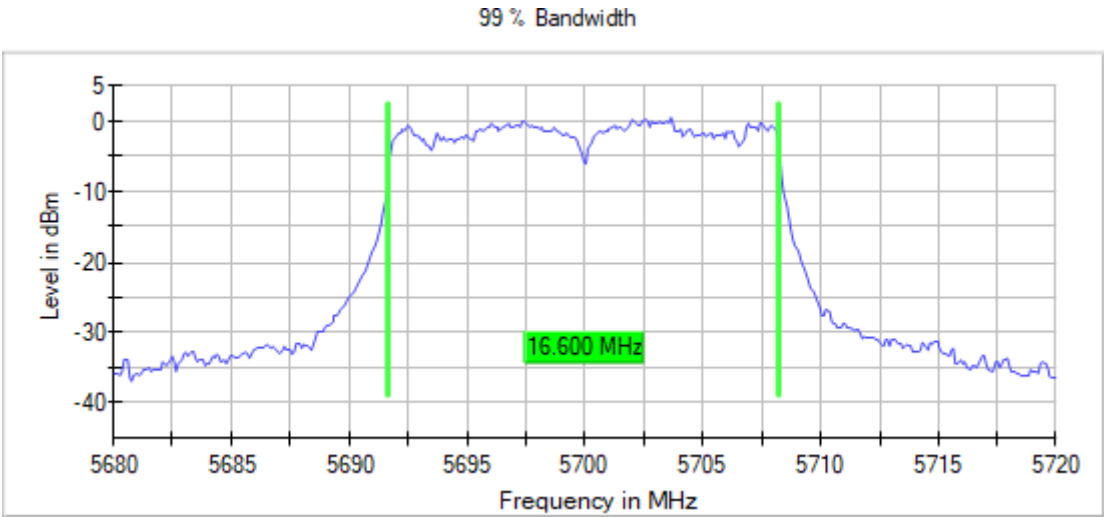
Frequency MHz = 5580.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



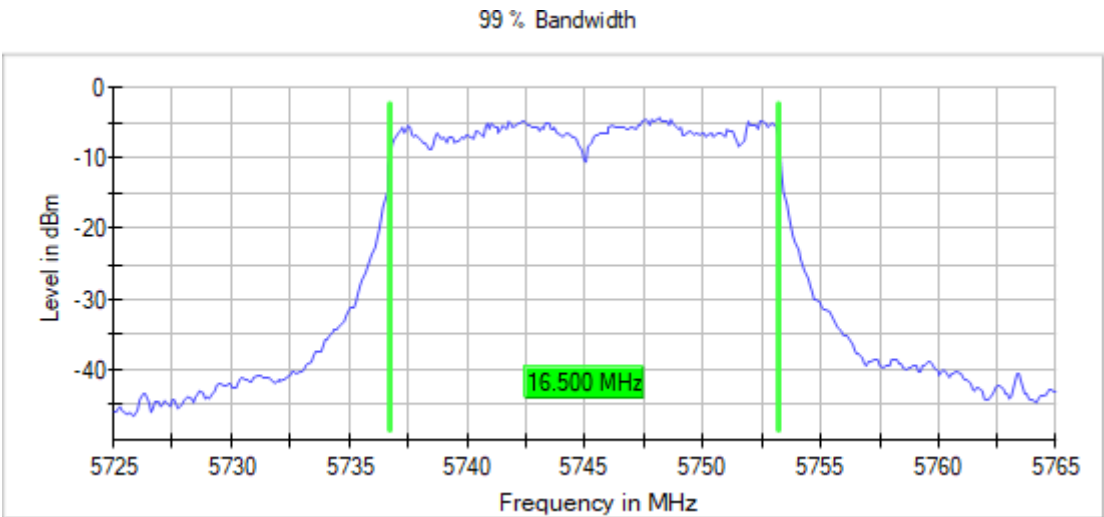
Frequency MHz = 5700.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



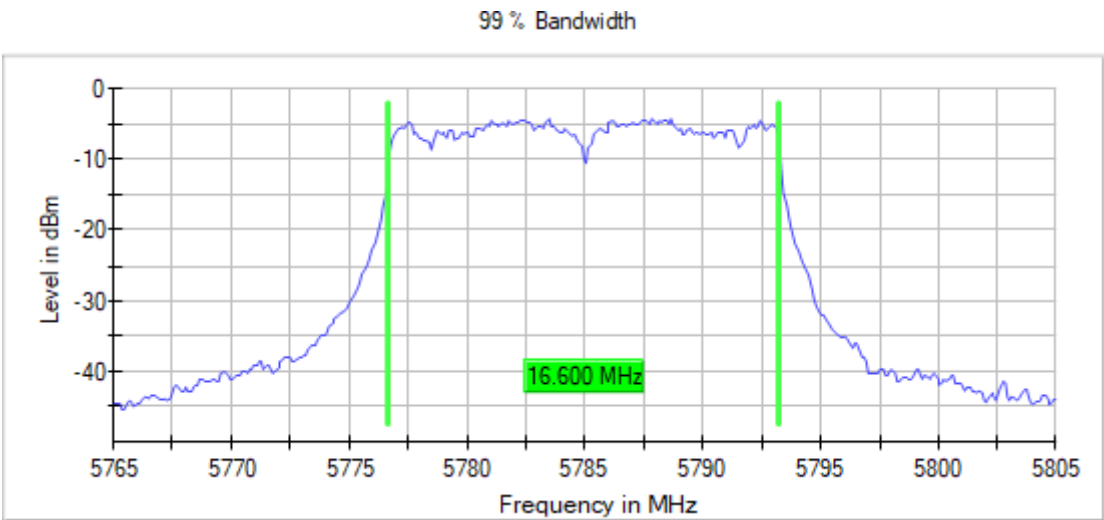
Frequency MHz = 5745.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



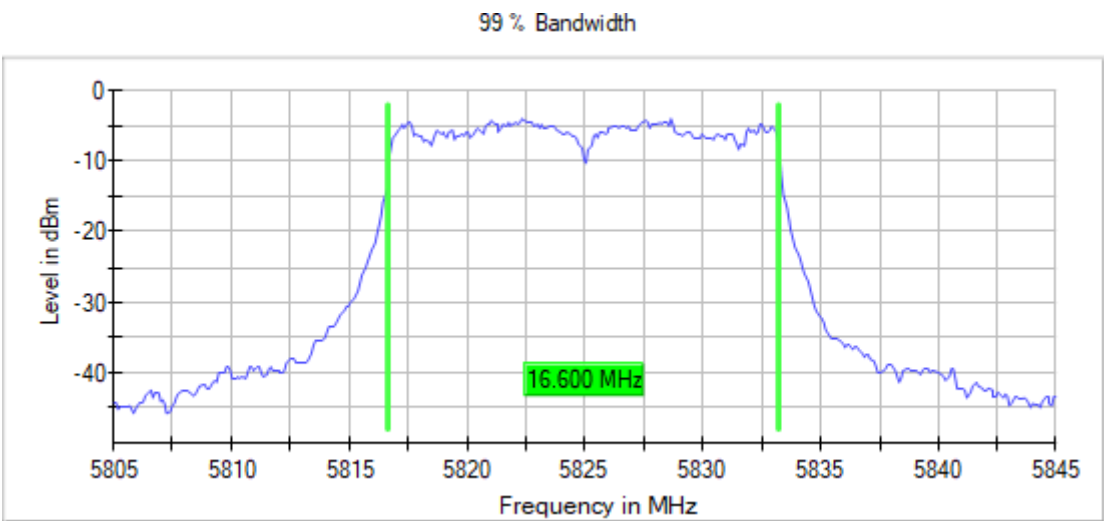
Frequency MHz = 5785.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Modulation: 802.11n HT20 (OFDM MCS7)

Results

Freq (MHz)	Occ Ch BW (MHz)
5180.00000	17.700
5200.00000	17.700
5240.00000	17.700
5260.00000	17.700
5280.00000	17.700
5320.00000	17.700
5500.00000	17.700
5580.00000	17.700
5700.00000	17.700
5745.00000	17.700
5785.00000	17.700
5825.00000	17.700

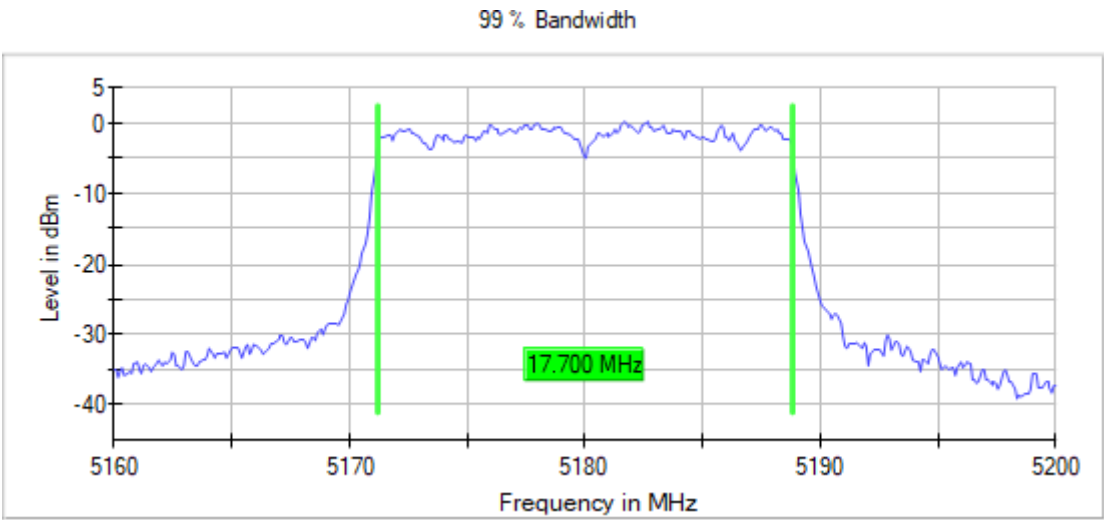
Verdict

Pass

Attachments

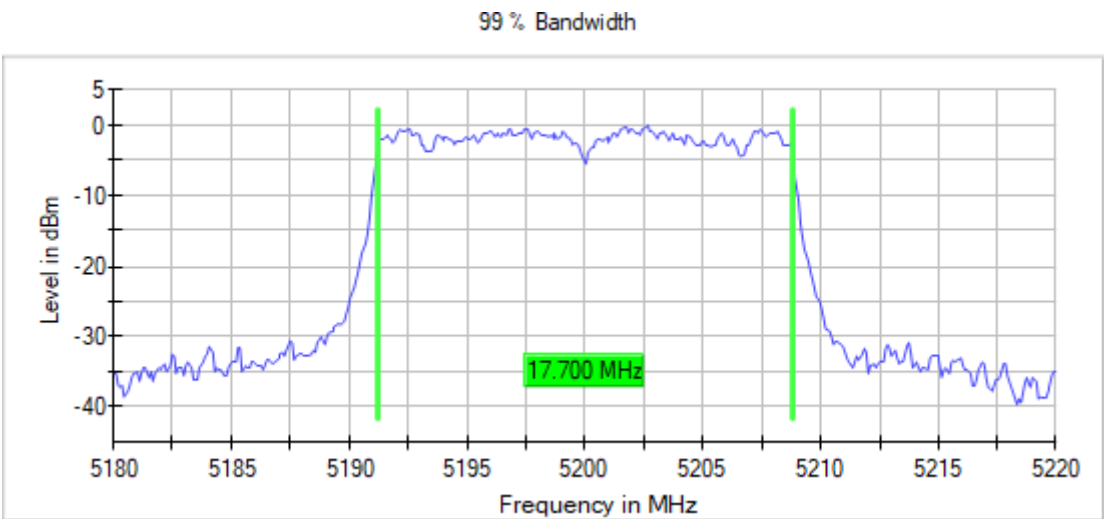
Frequency MHz = 5180.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



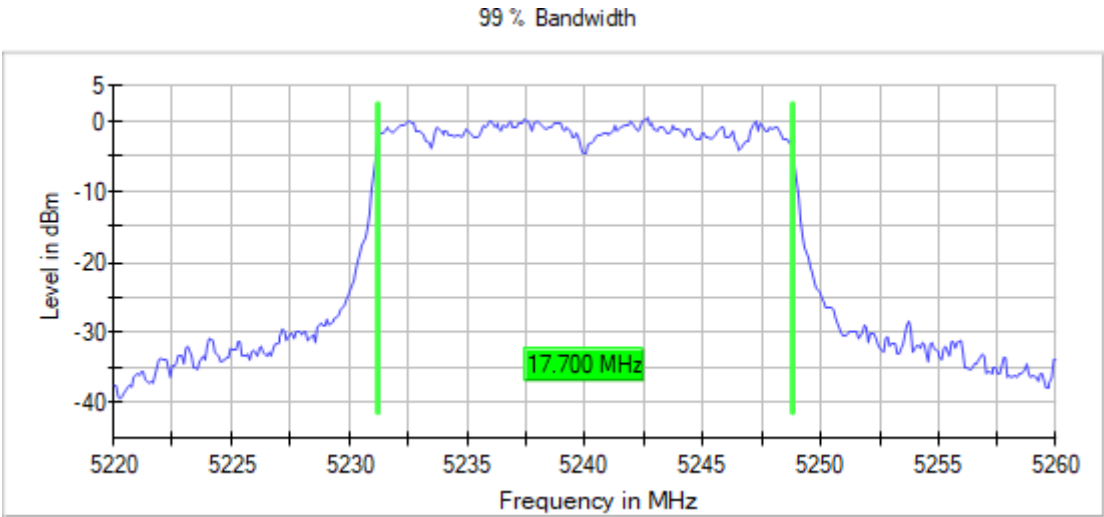
Frequency MHz = 5200.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



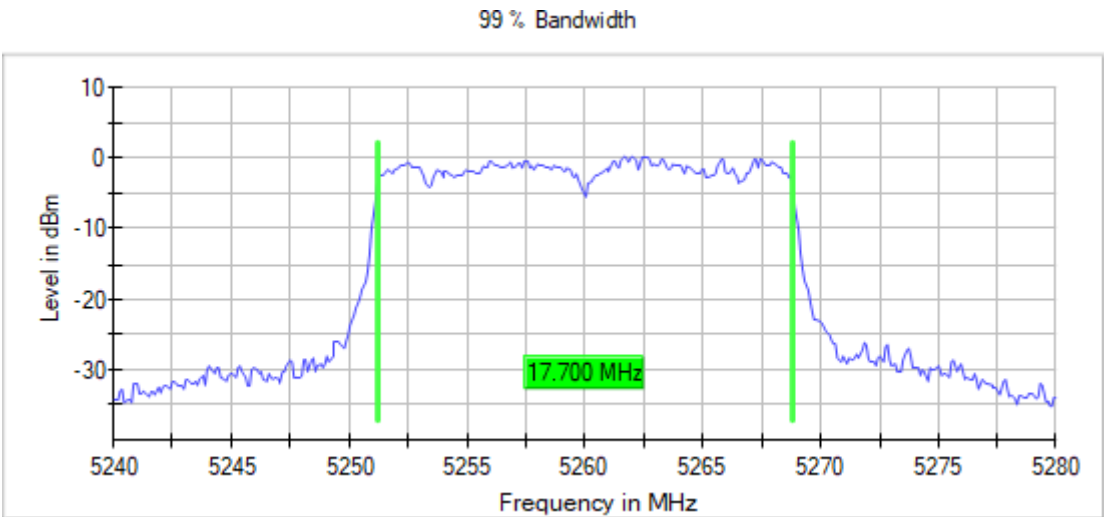
Frequency MHz = 5240.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



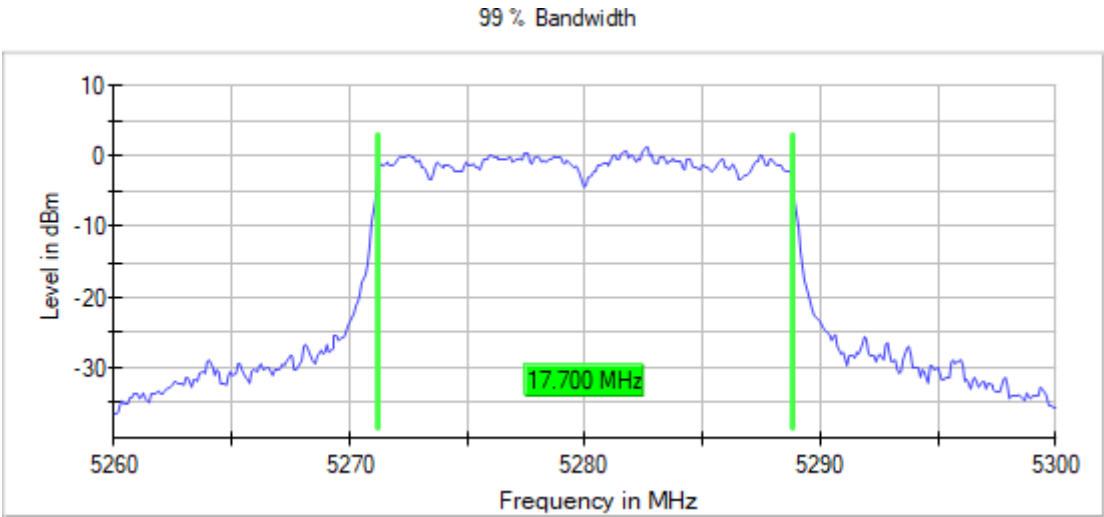
Frequency MHz = 5260.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



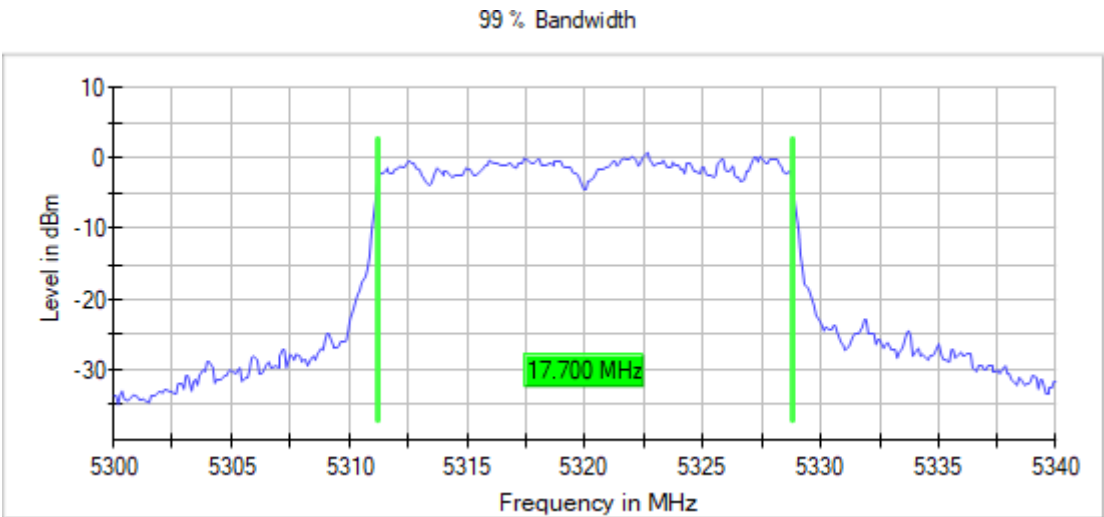
Frequency MHz = 5280.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



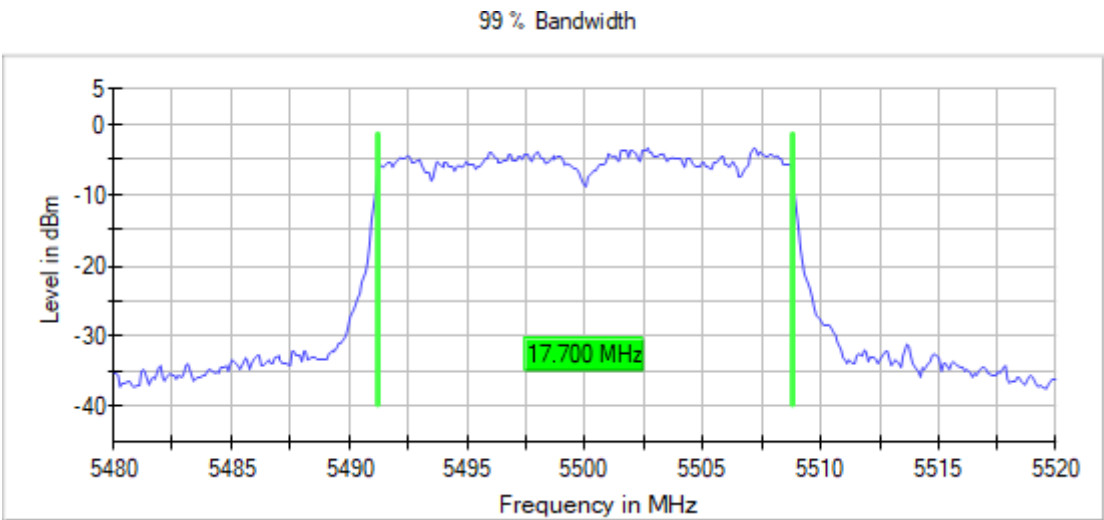
Frequency MHz = 5320.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



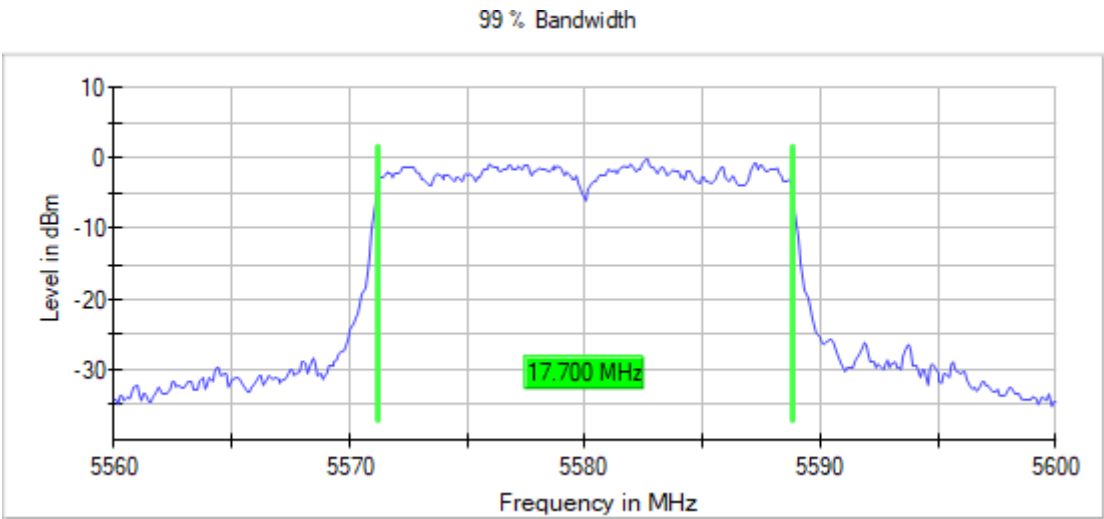
Frequency MHz = 5500.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



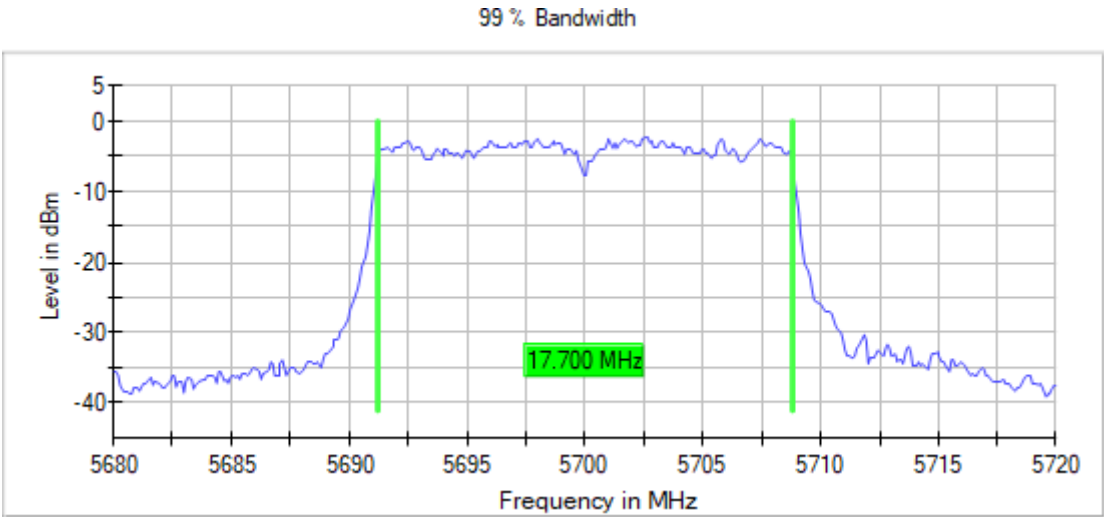
Frequency MHz = 5580.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



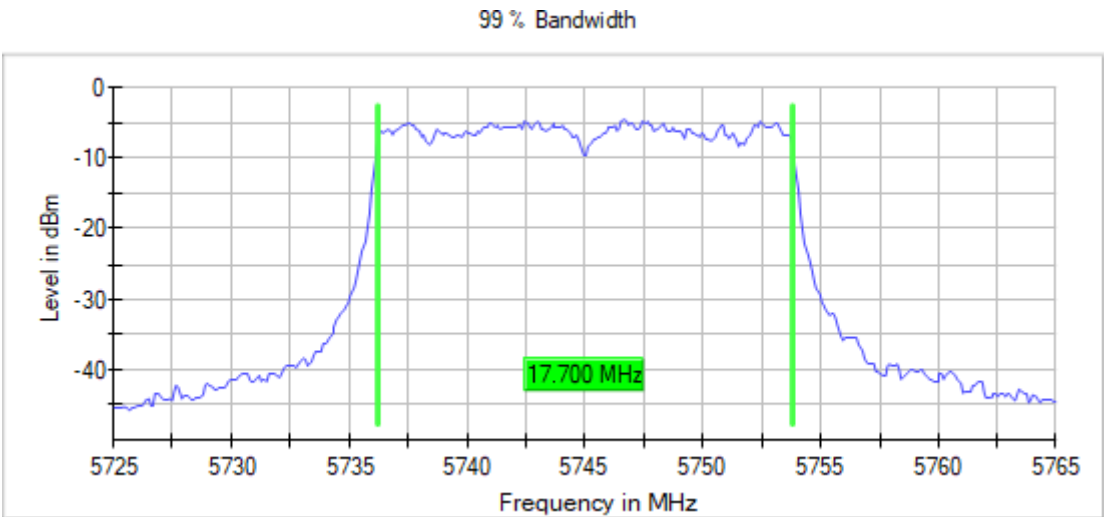
Frequency MHz = 5700.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



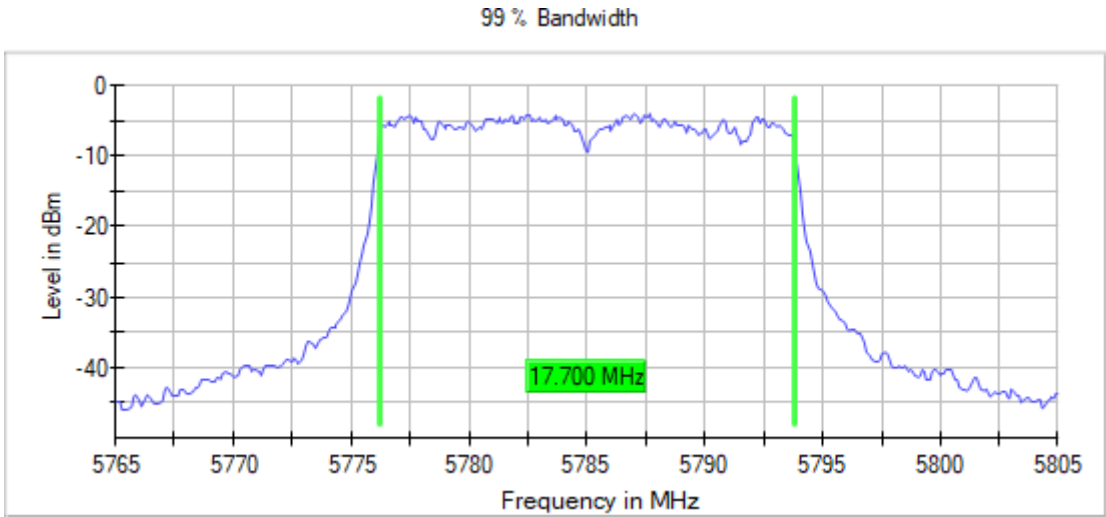
Frequency MHz = 5745.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



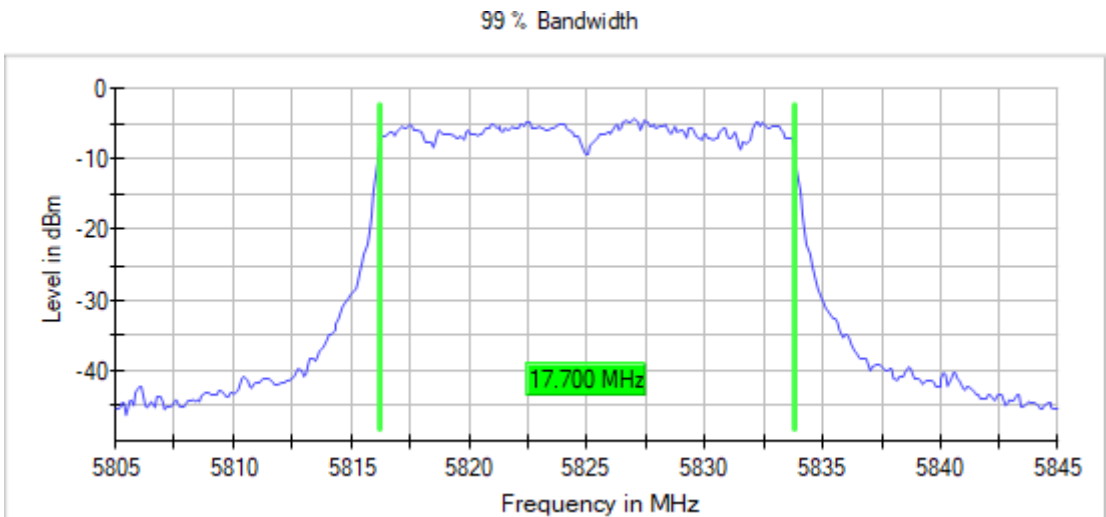
Frequency MHz = 5785.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Modulation: 802.11n HT40 (OFDM MCS7)

Results

Freq (MHz)	Occ Ch BW (MHz)
5190.00000	36.250
5230.00000	36.250
5270.00000	36.250
5310.00000	36.250
5510.00000	36.500
5550.00000	36.500
5670.00000	36.250
5755.00000	36.250
5795.00000	36.250

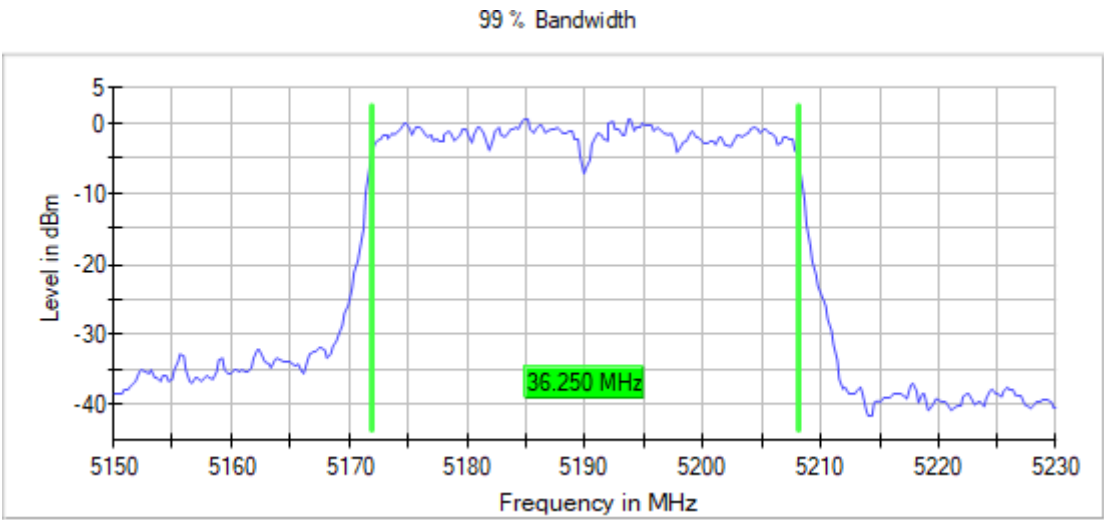
Verdict

Pass

Attachments

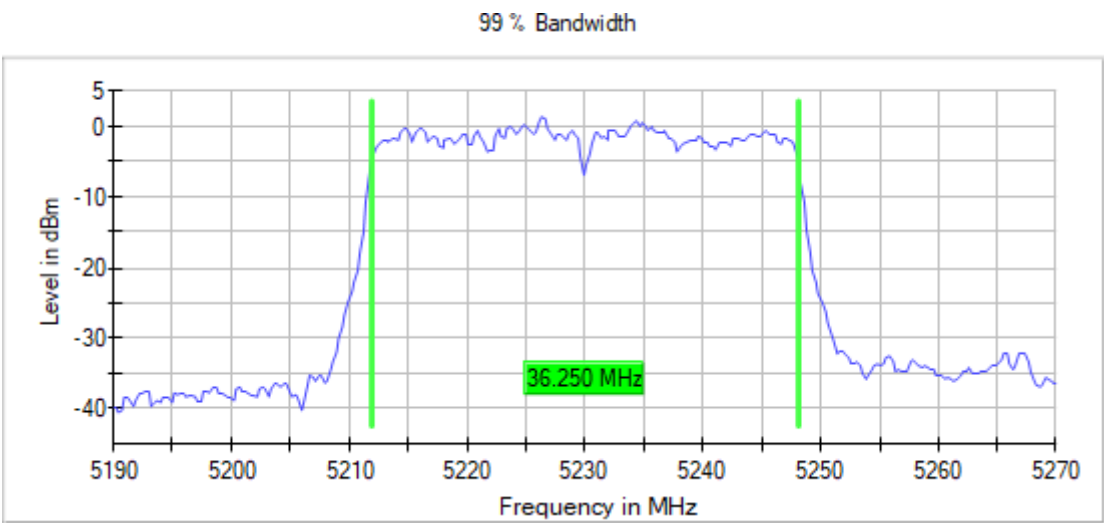
Frequency MHz = 5190.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



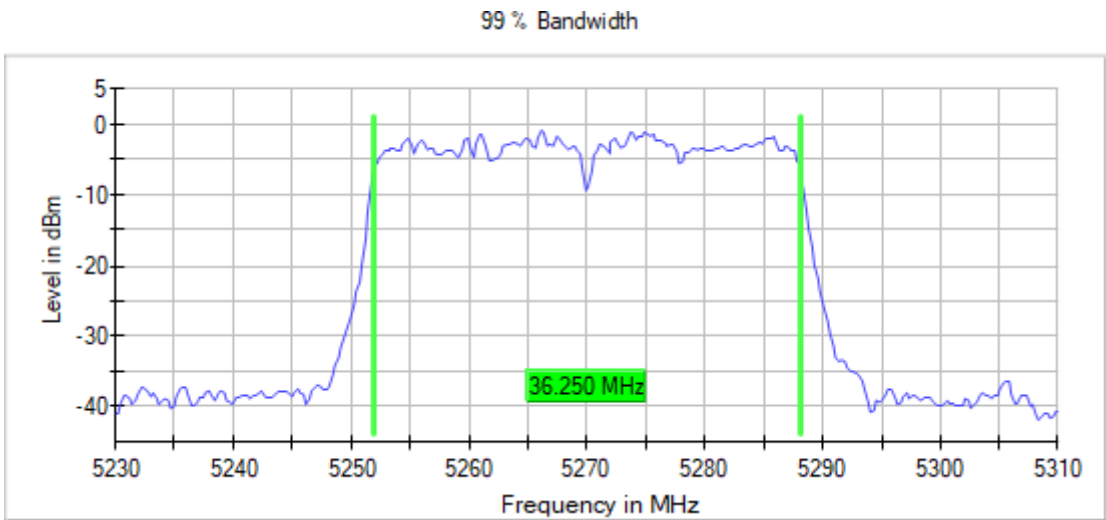
Frequency MHz = 5230.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



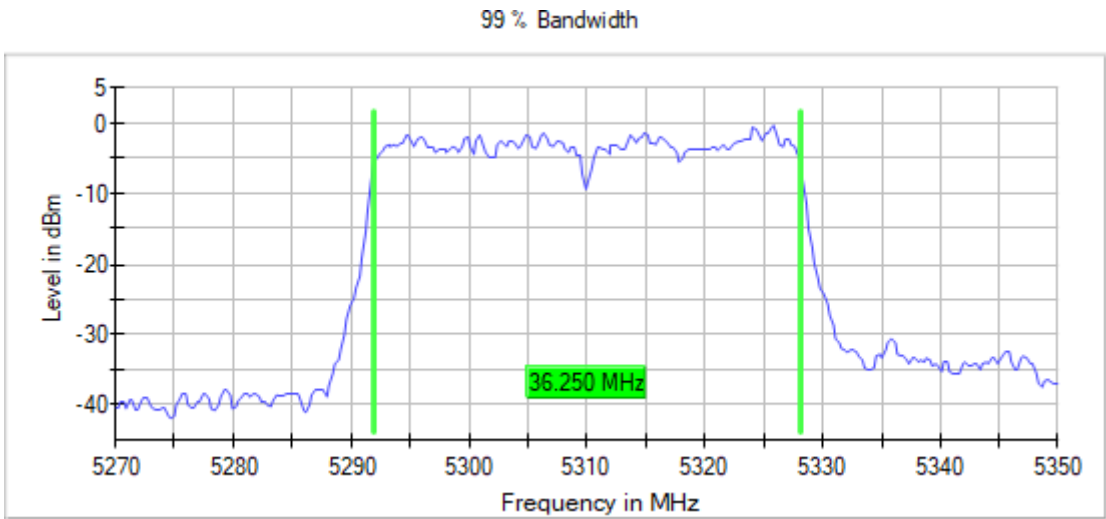
Frequency MHz = 5270.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



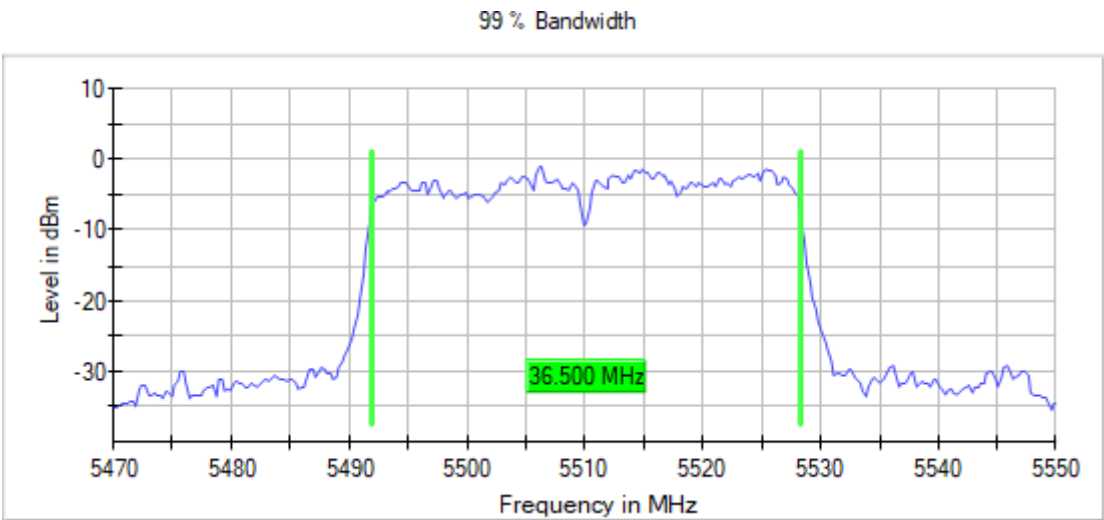
Frequency MHz = 5310.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



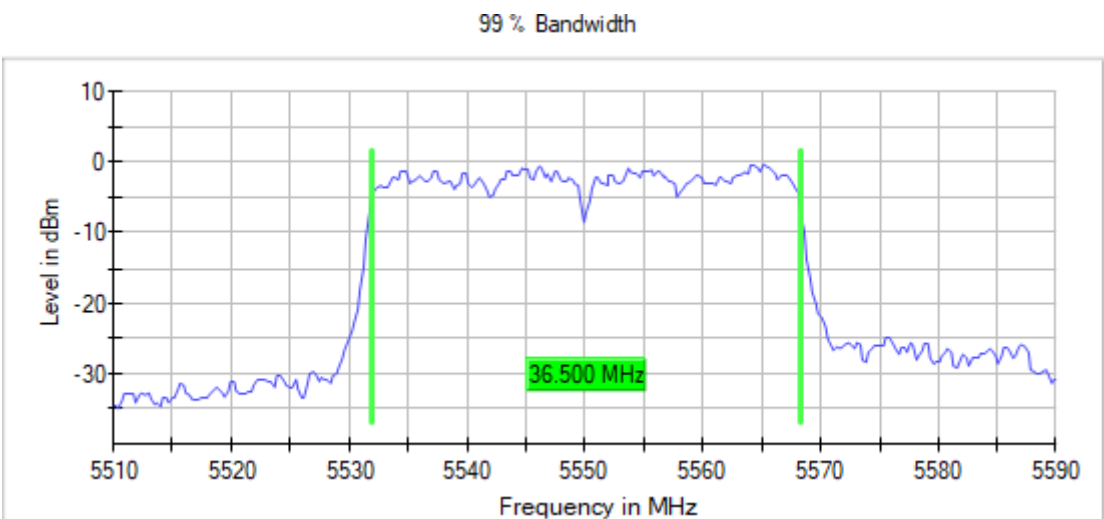
Frequency MHz = 5510.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



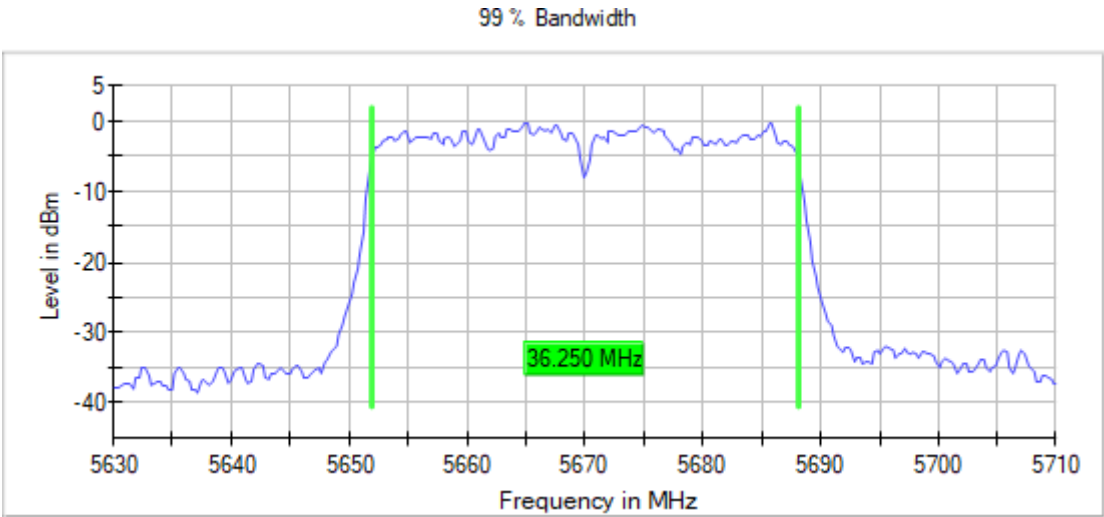
Frequency MHz = 5550.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



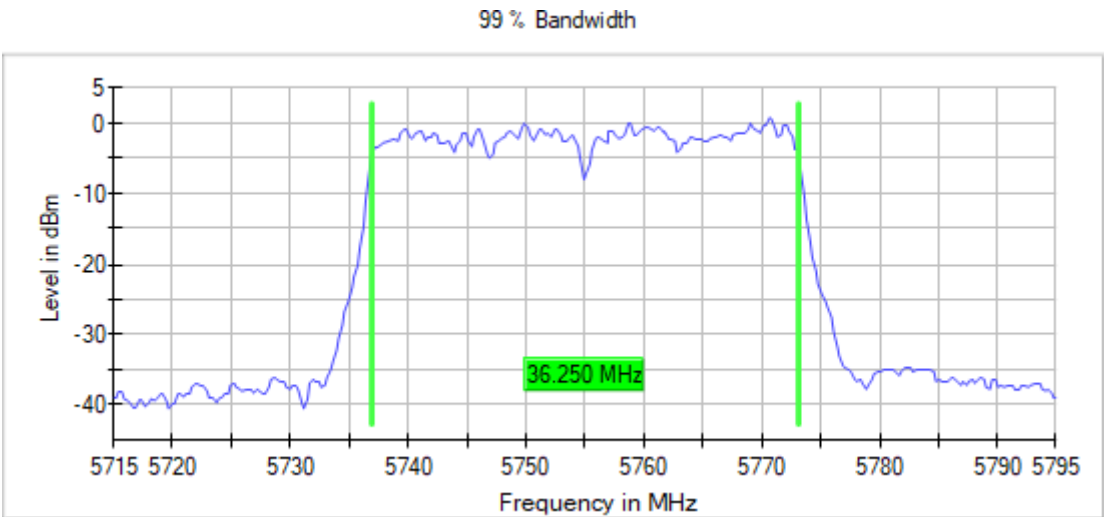
Frequency MHz = 5670.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



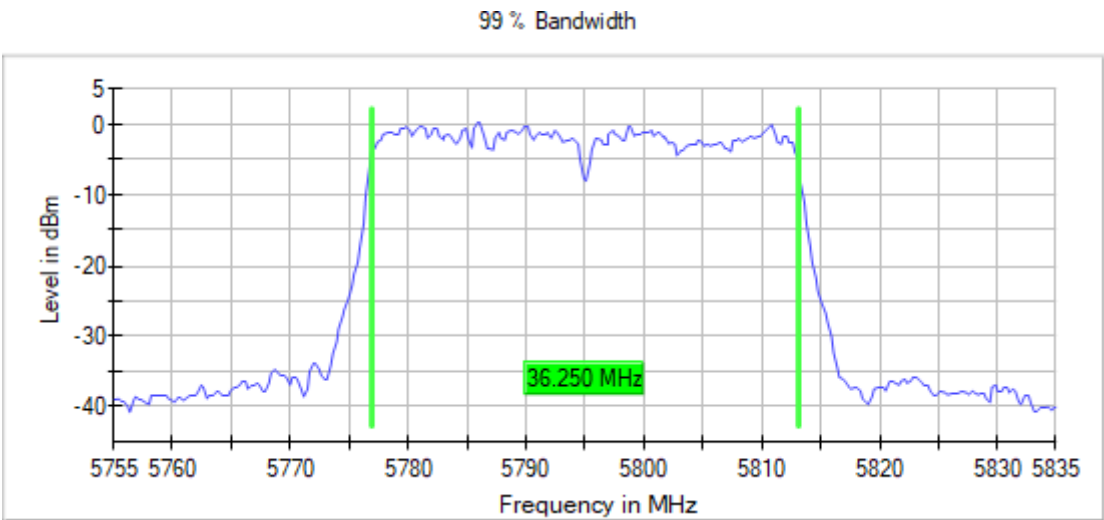
Frequency MHz = 5755.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11n HT40 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT20 SS1 (OFDM MCS8)

Results

Freq (MHz)	# of Tx Chains	Port	Occ Ch BW (MHz)
5180.00000	1	1	17.700
5200.00000			17.700
5240.00000			17.700
5260.00000			17.700
5280.00000			17.700
5320.00000			17.800
5500.00000			17.700
5580.00000			17.700
5700.00000			17.700
5745.00000			17.700
5785.00000			17.700
5825.00000			17.700

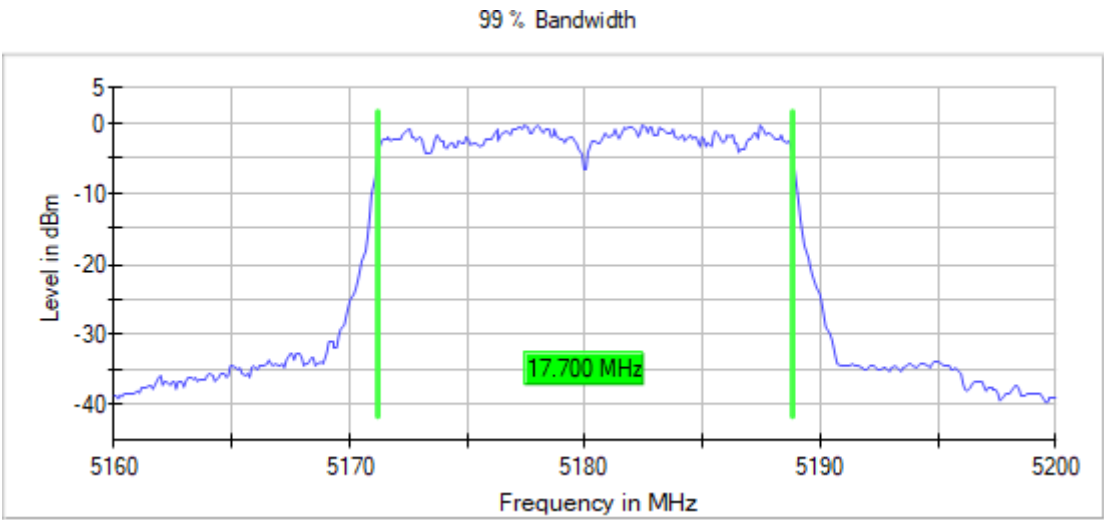
Verdict

Pass

Attachments

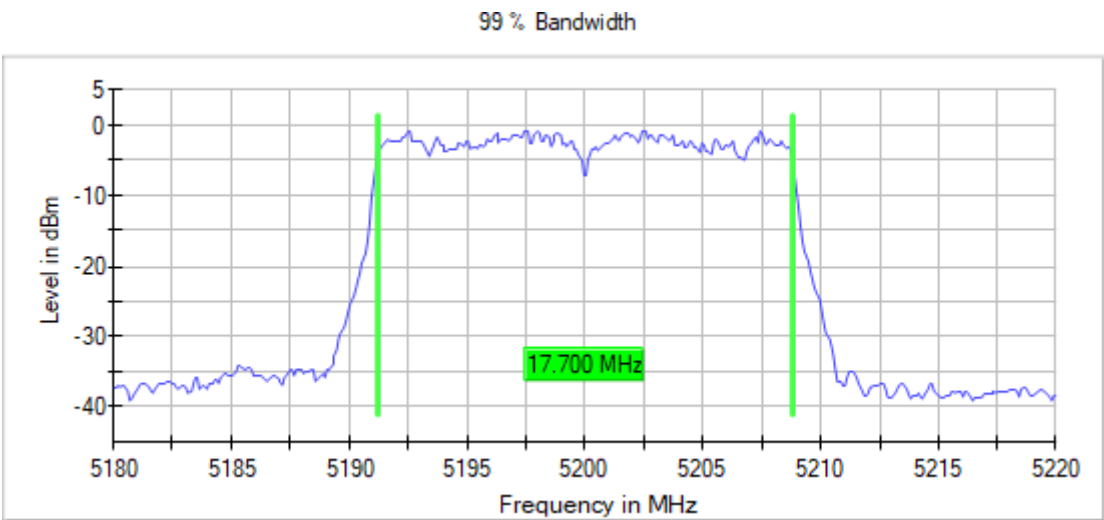
Frequency MHz = 5180.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



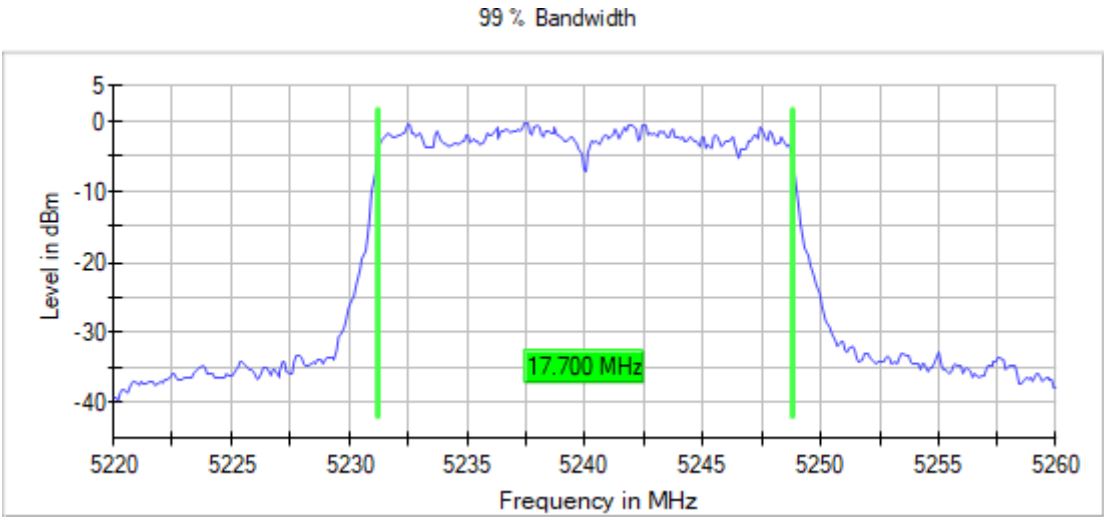
Frequency MHz = 5200.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



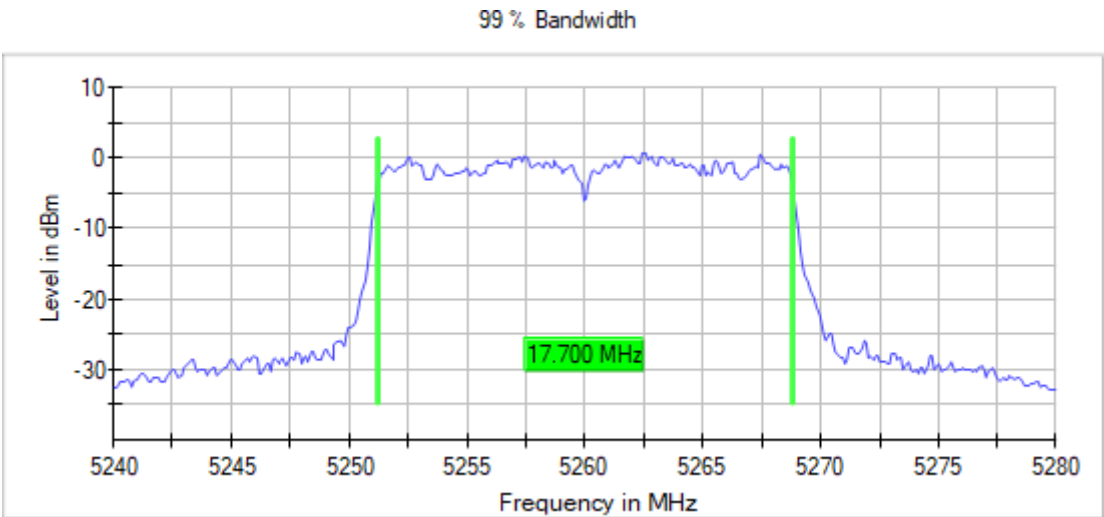
Frequency MHz = 5240.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



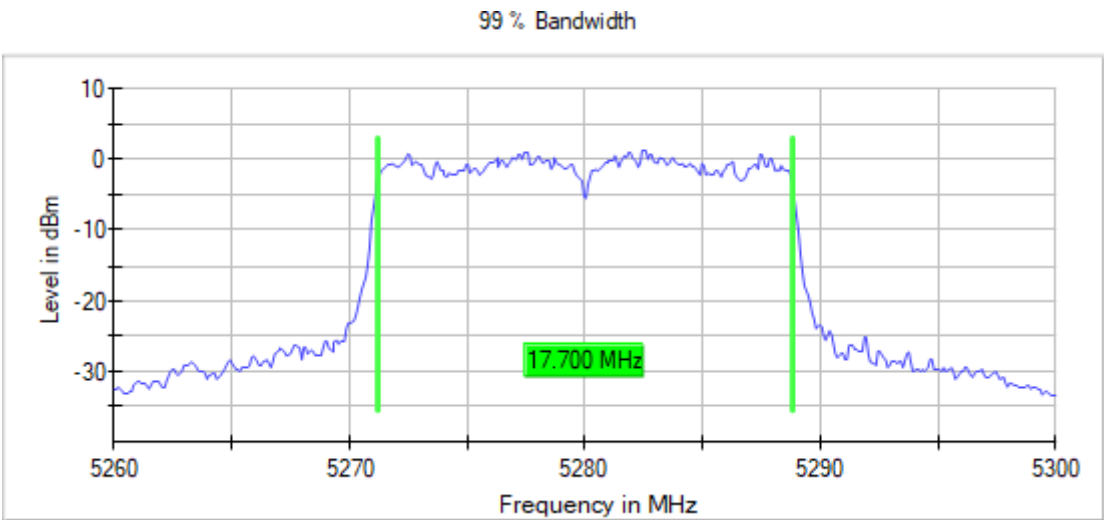
Frequency MHz = 5260.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



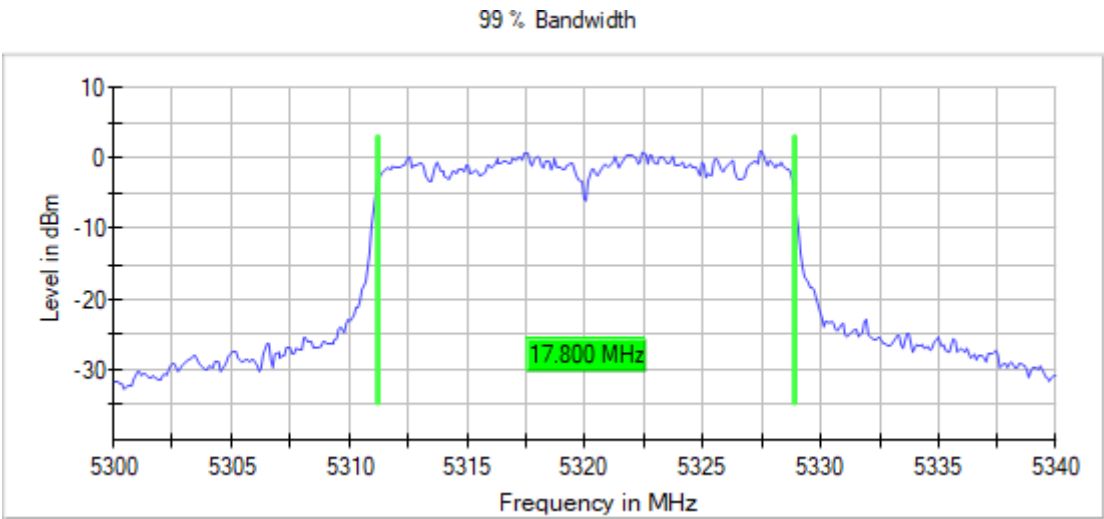
Frequency MHz = 5280.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



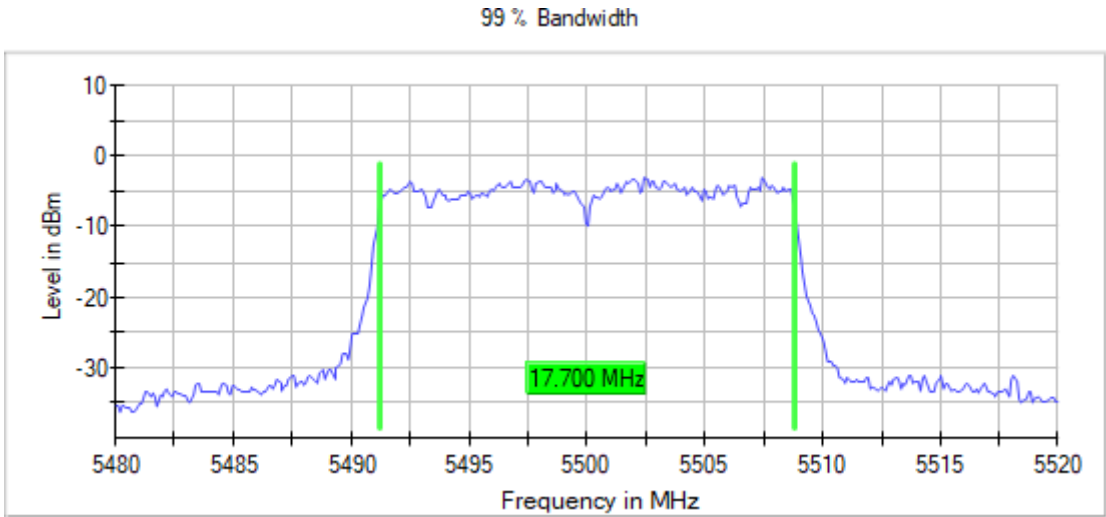
Frequency MHz = 5320.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



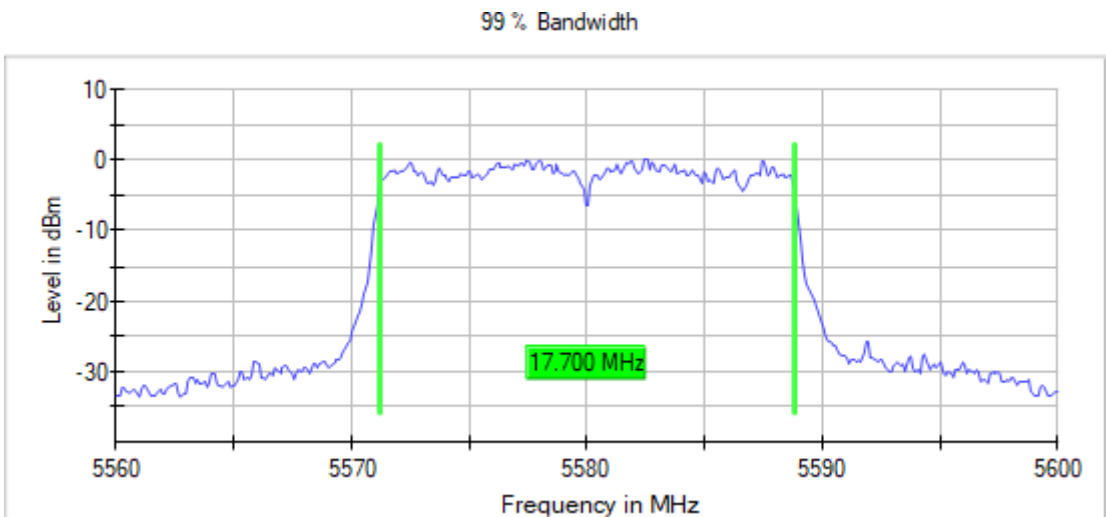
Frequency MHz = 5500.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



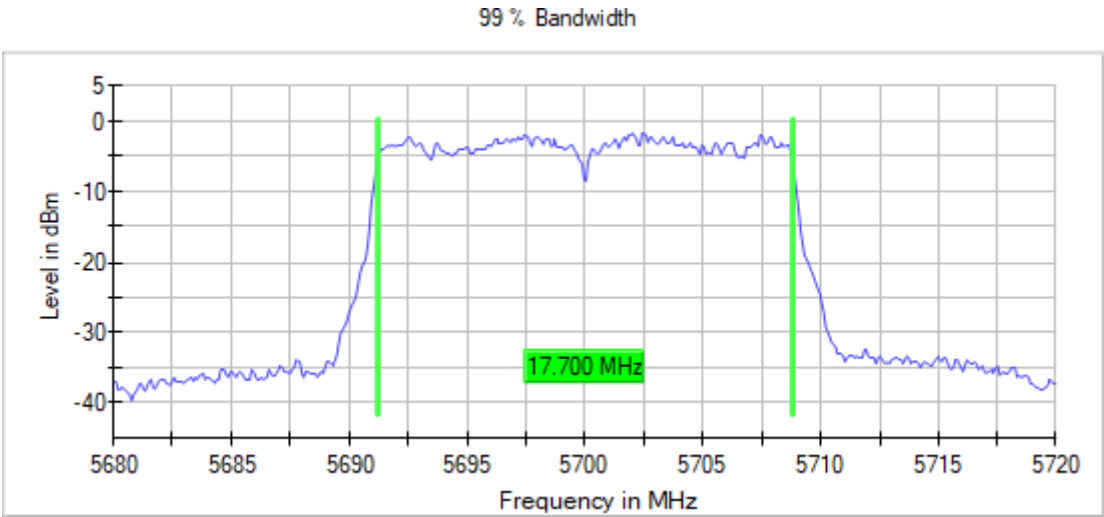
Frequency MHz = 5580.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



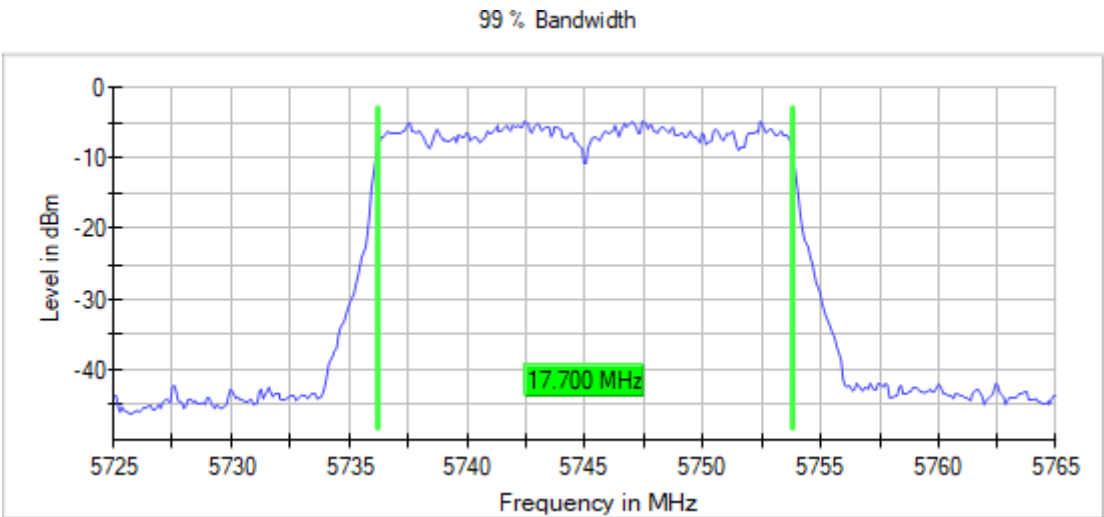
Frequency MHz = 5700.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



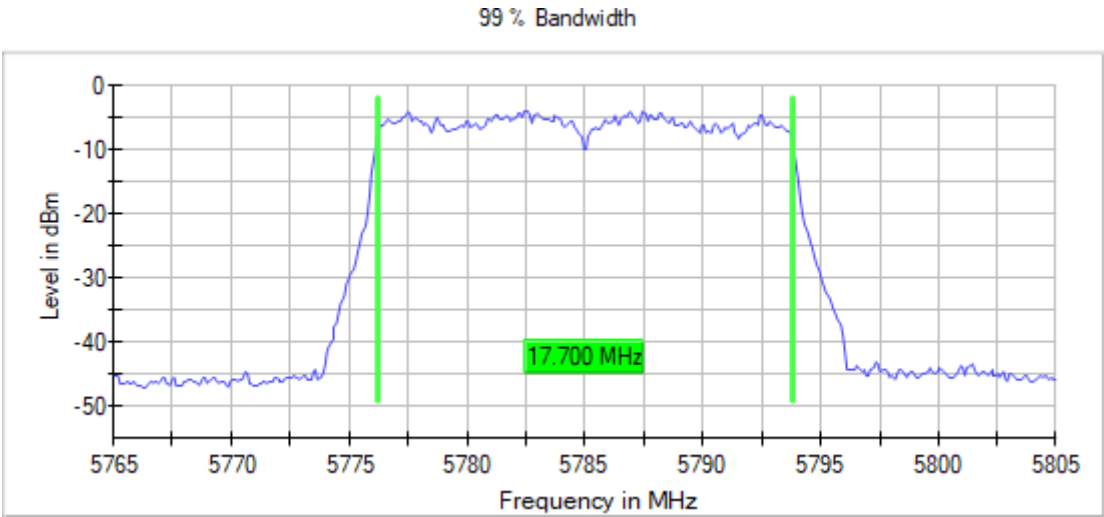
Frequency MHz = 5745.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



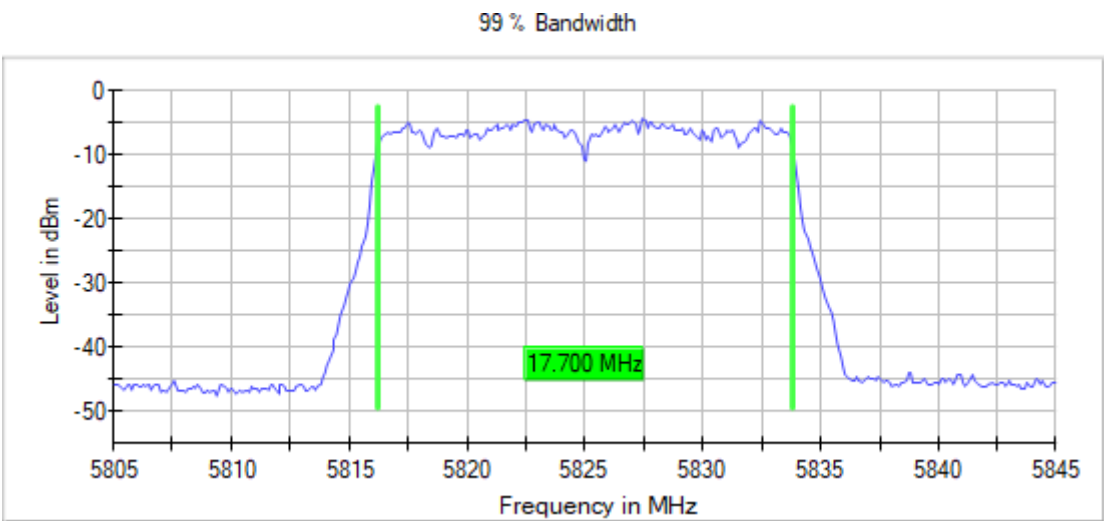
Frequency MHz = 5785.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11ac VHT20 SS1 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT40 SS1 (OFDM MCS9)
Results

Freq (MHz)	Occ Ch BW (MHz)
5190.00000	36.250
5230.00000	36.250
5270.00000	36.250
5310.00000	36.500
5510.00000	36.500
5550.00000	36.500
5670.00000	36.250
5755.00000	36.250
5795.00000	36.500

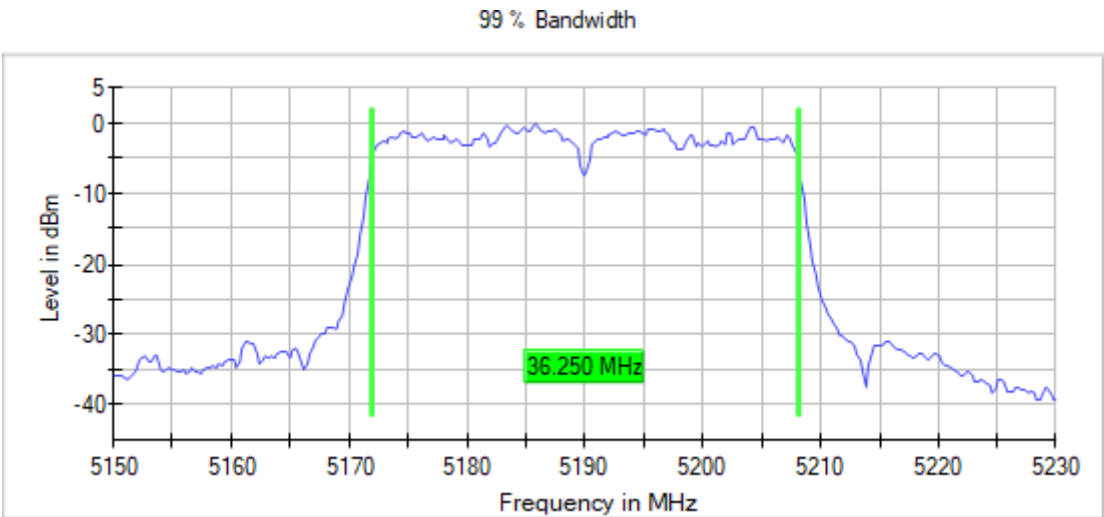
Verdict

Pass

Attachments

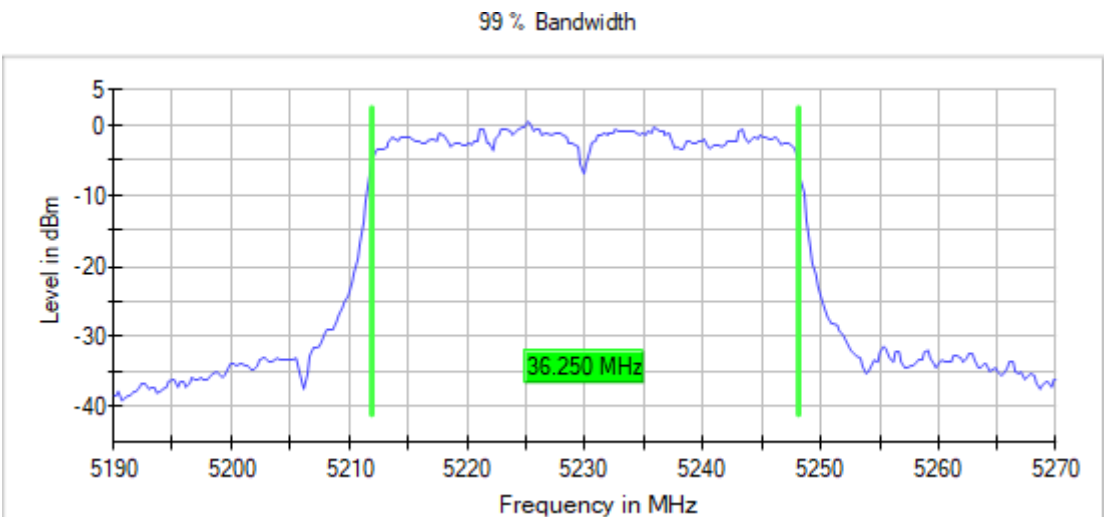
Frequency MHz = 5190.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



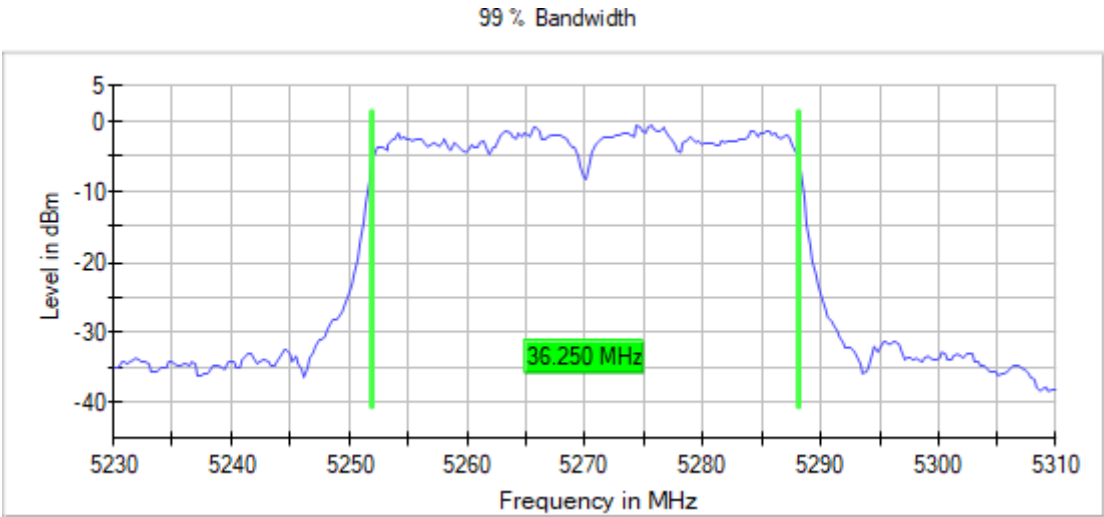
Frequency MHz = 5230.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



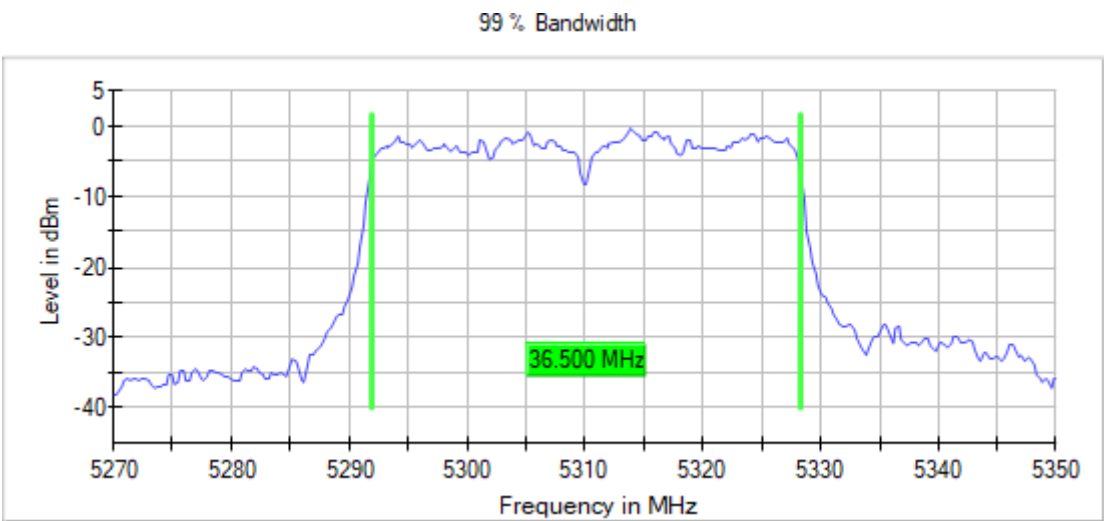
Frequency MHz = 5270.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



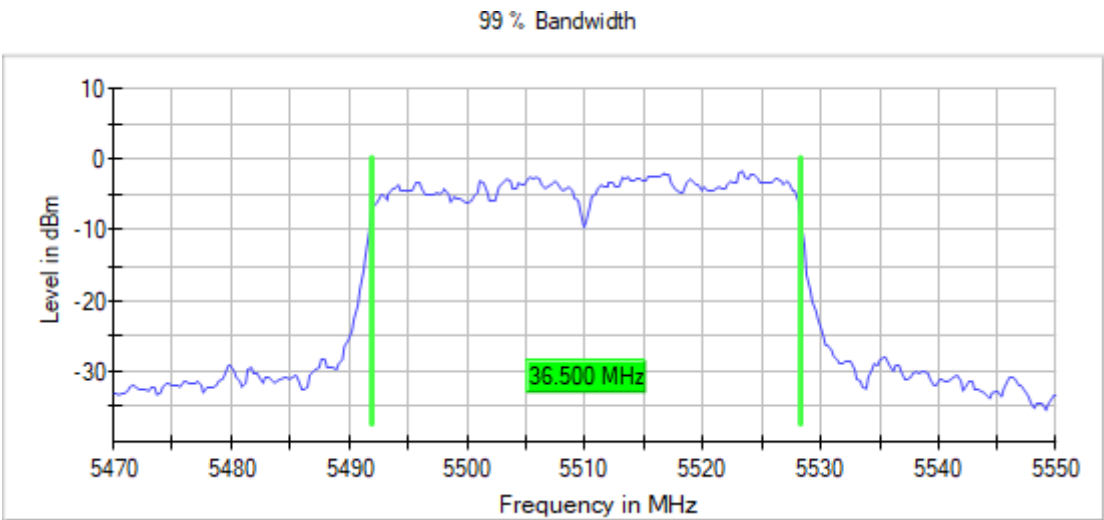
Frequency MHz = 5310.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



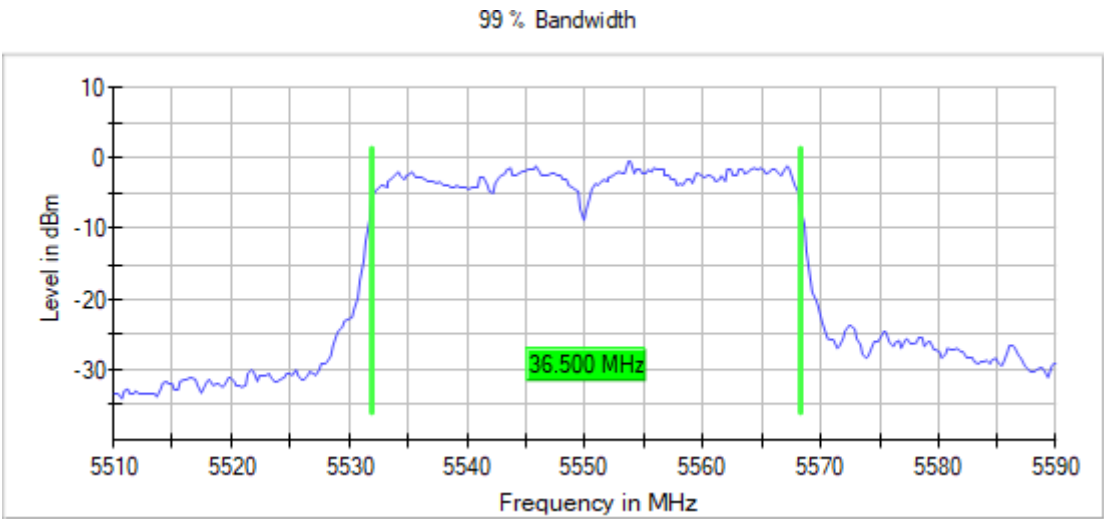
Frequency MHz = 5510.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



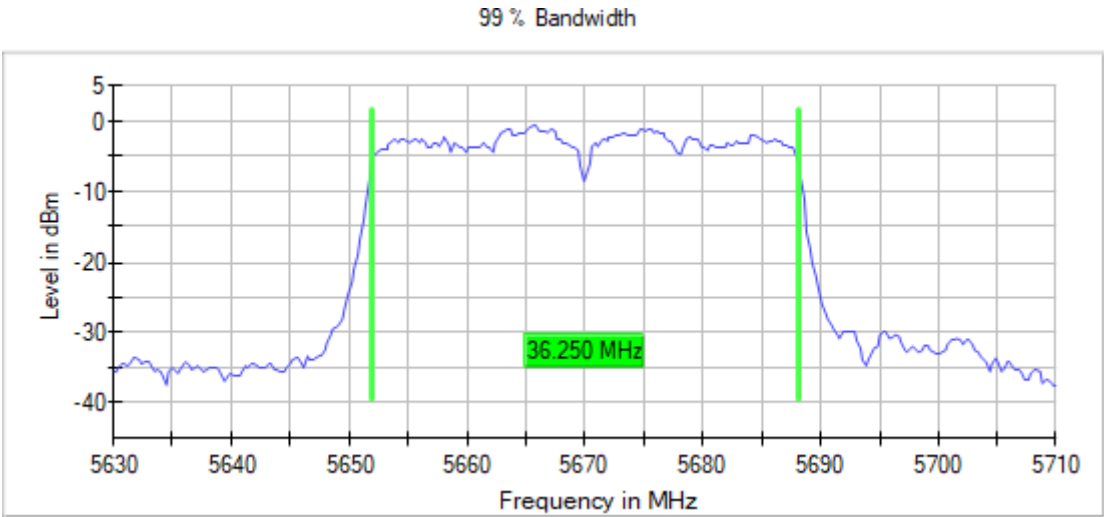
Frequency MHz = 5550.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



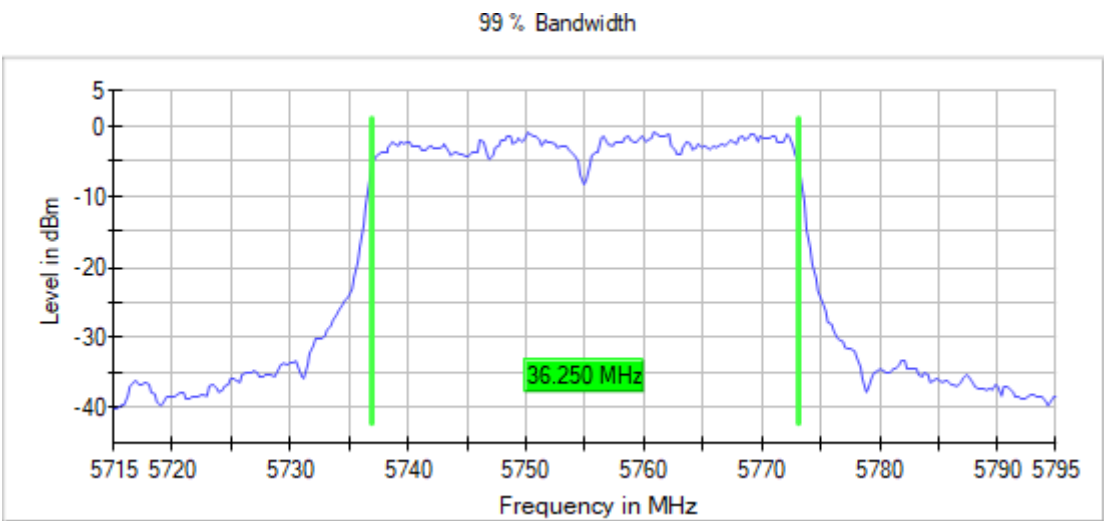
Frequency MHz = 5670.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



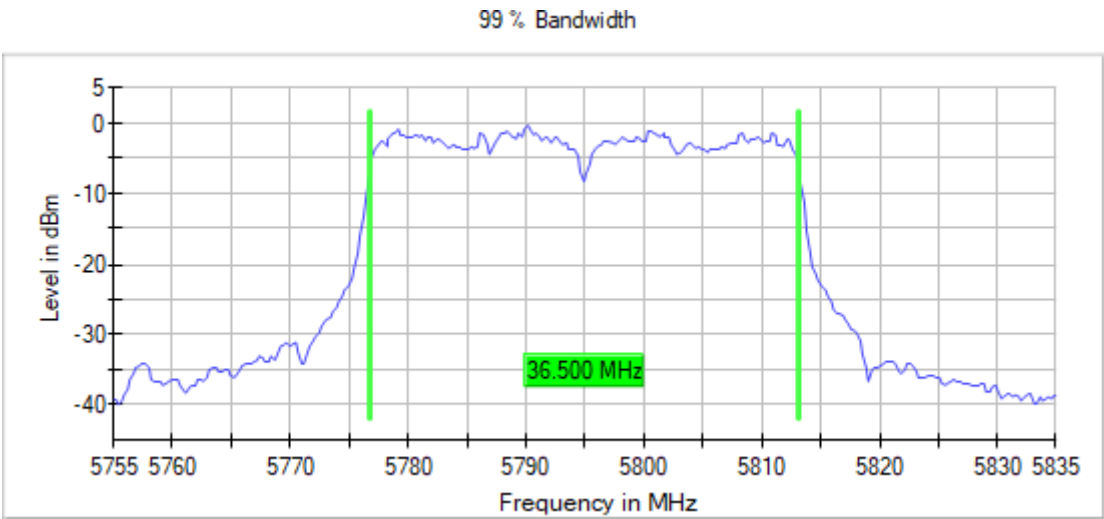
Frequency MHz = 5755.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11ac VHT40 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ac VHT80 SS1 (OFDM MCS9)

Results

Freq (MHz)	Occ Ch BW (MHz)
5210.00000	76.500
5290.00000	77.000
5530.00000	77.000
5610.00000	76.500
5775.00000	76.500

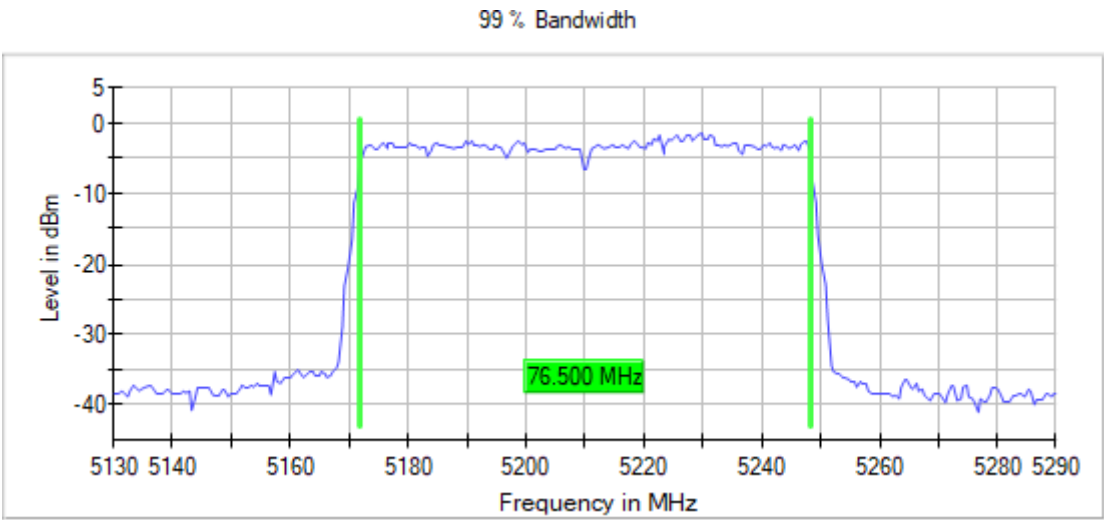
Verdict

Pass

Attachments

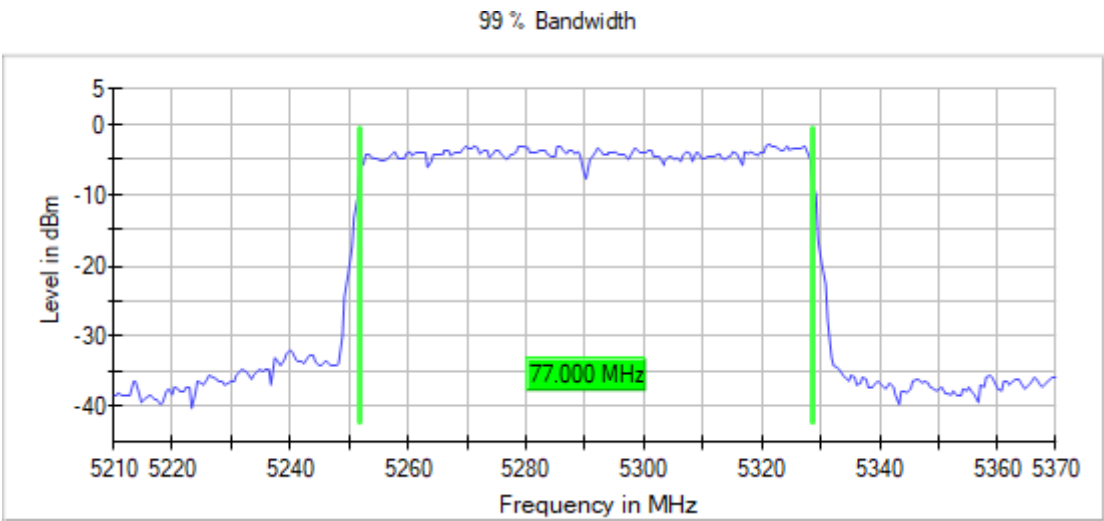
Frequency MHz = 5210.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



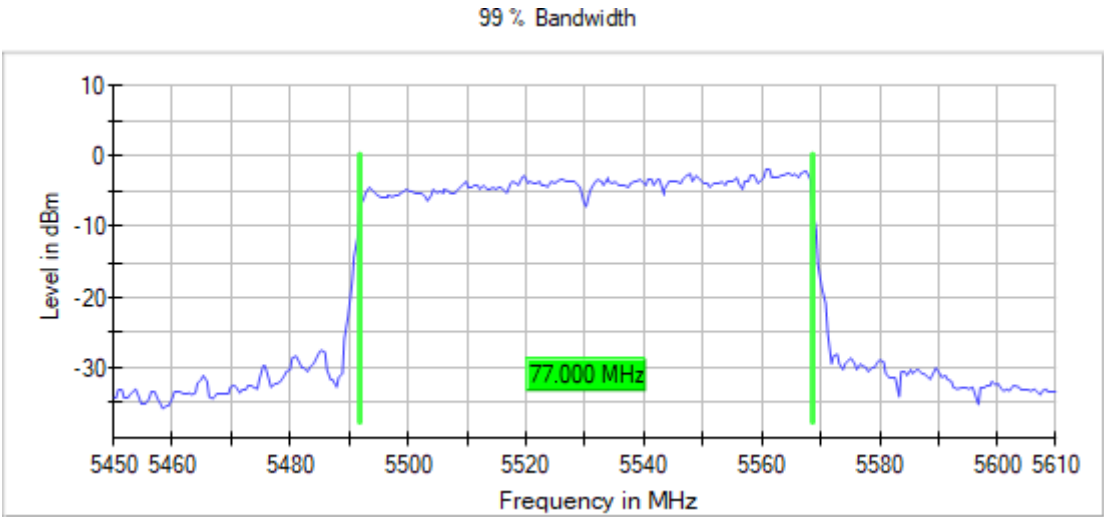
Frequency MHz = 5290.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



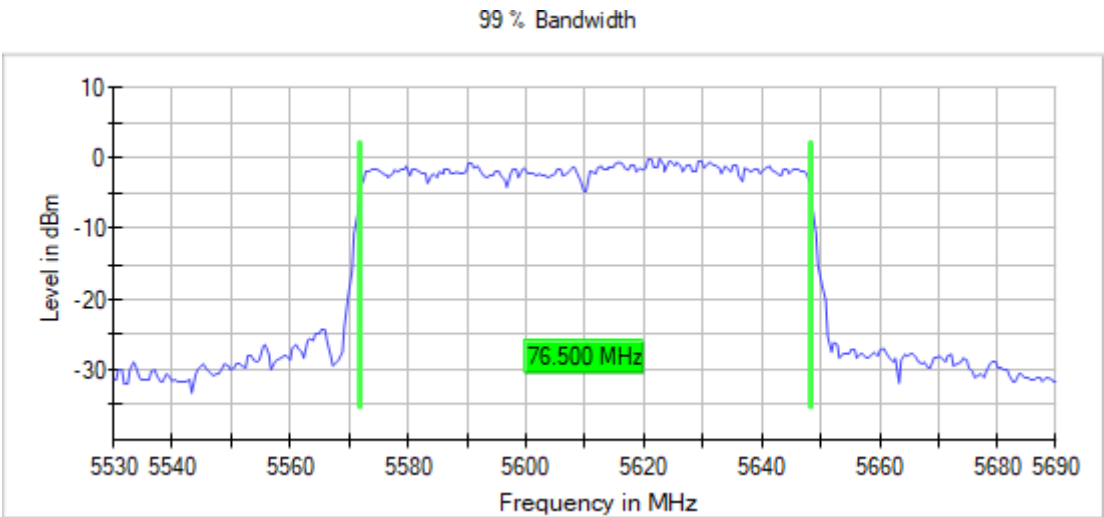
Frequency MHz = 5530.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



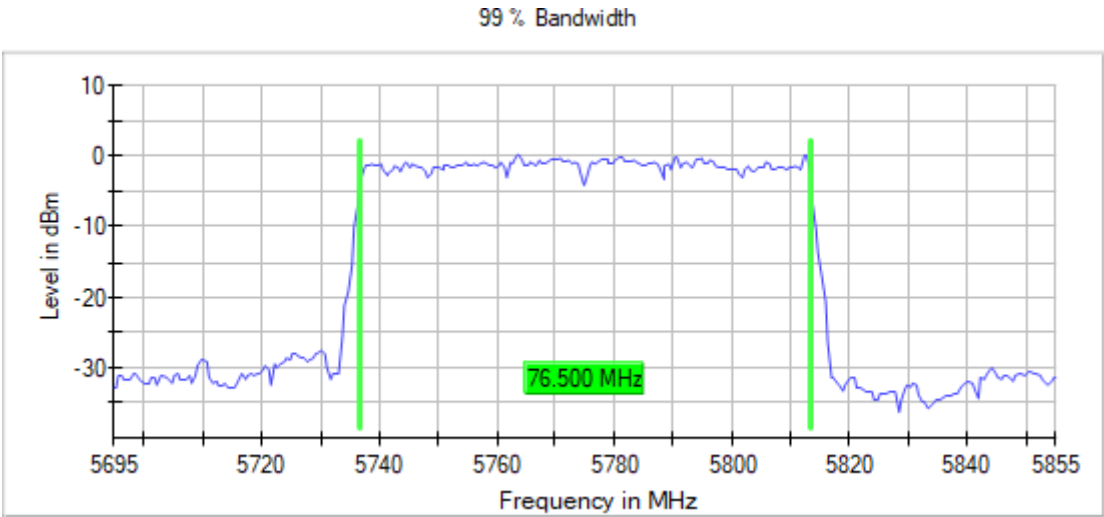
Frequency MHz = 5610.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5775.00000, Modulation = 802.11ac VHT80 SS1 (OFDM MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE20 SS1 MCS 8 (OFDM MCS8) - Full RU
Results

Freq (MHz)	Occ Ch BW (MHz)
5180.00000	18.900
5200.00000	18.900
5240.00000	18.900
5260.00000	18.900
5280.00000	18.900
5320.00000	18.900
5500.00000	18.900
5580.00000	18.900
5700.00000	18.900
5745.00000	18.900
5785.00000	18.900
5825.00000	18.900

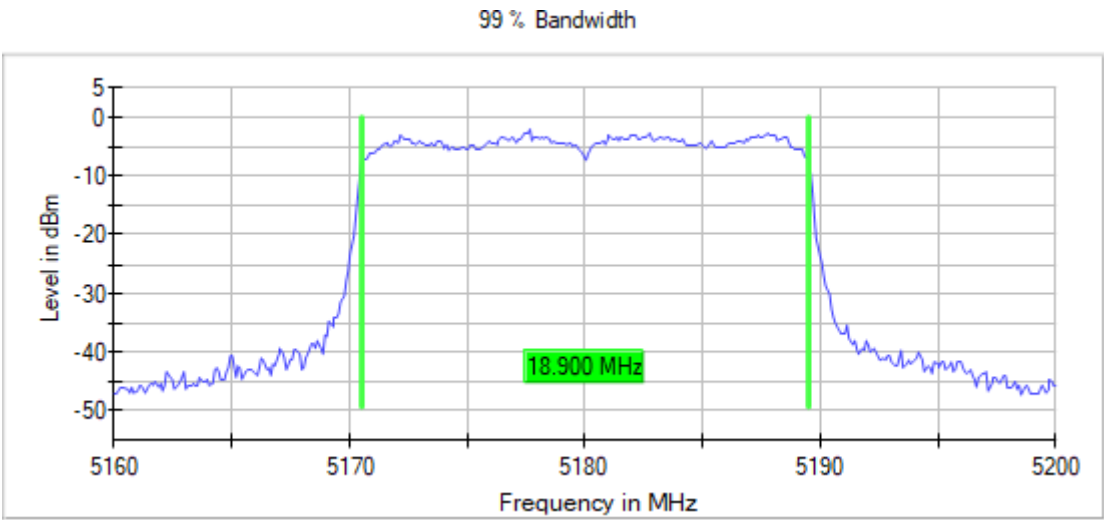
Verdict

Pass

Attachments

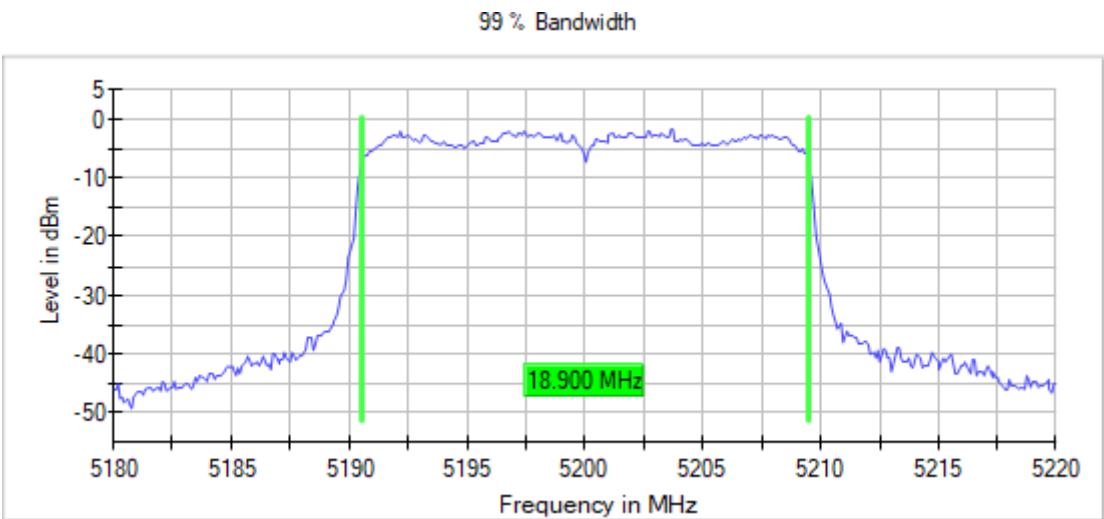
Frequency MHz = 5180.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



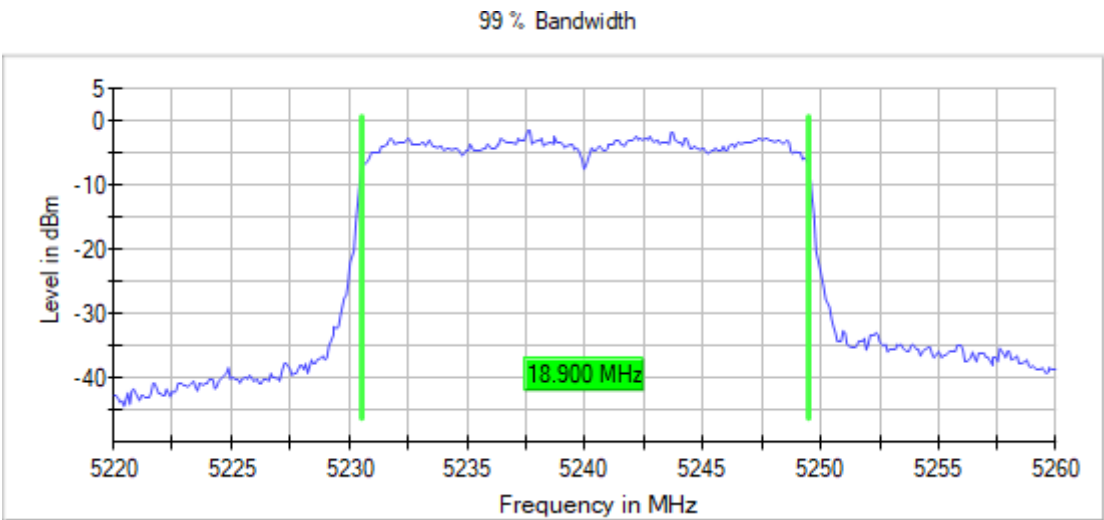
Frequency MHz = 5200.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



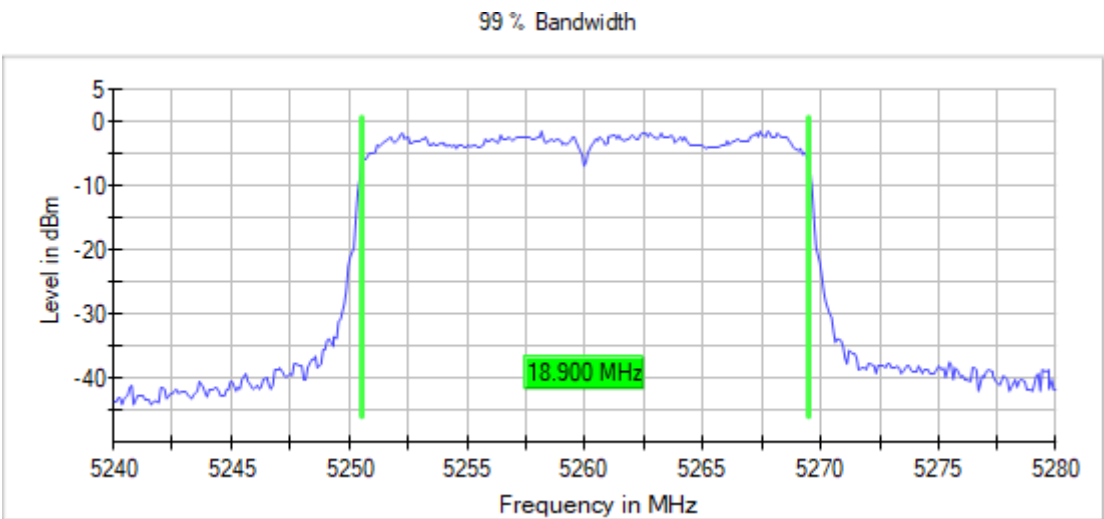
Frequency MHz = 5240.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



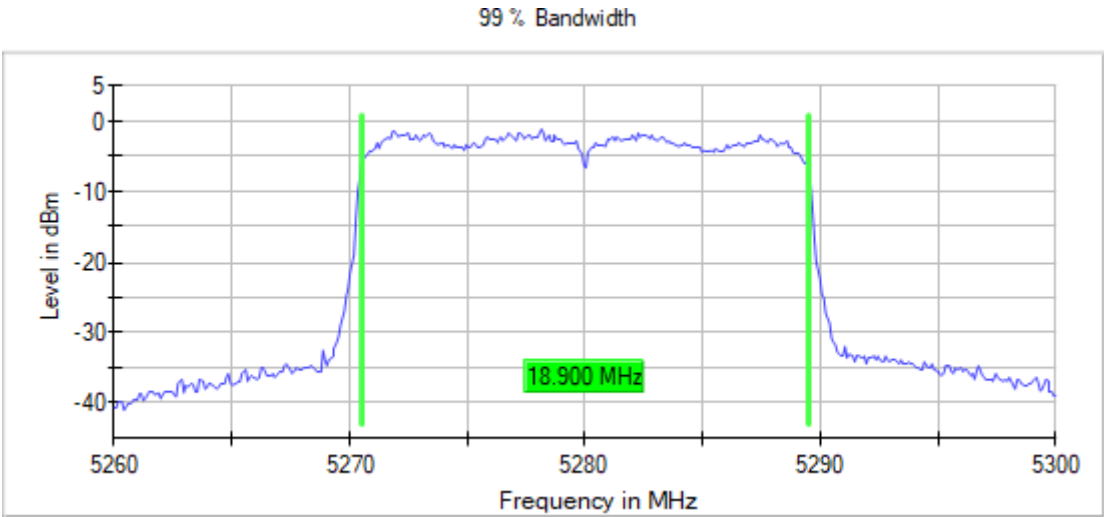
Frequency MHz = 5260.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



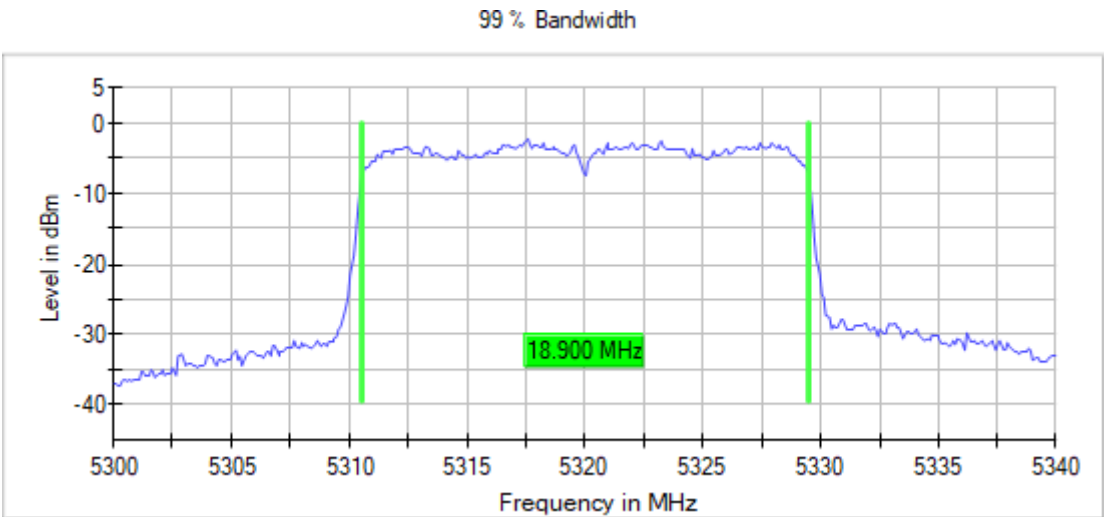
Frequency MHz = 5280.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



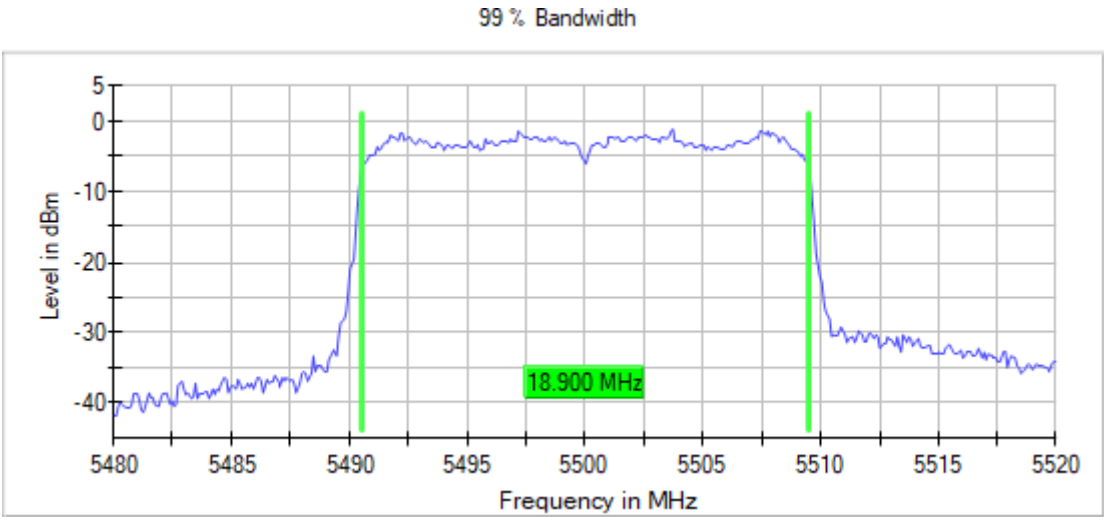
Frequency MHz = 5320.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



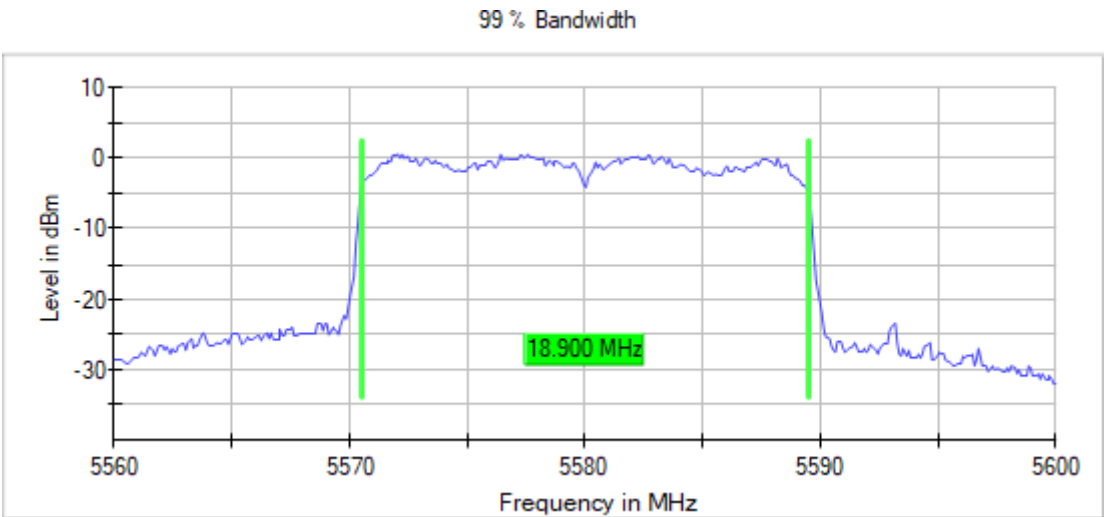
Frequency MHz = 5500.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



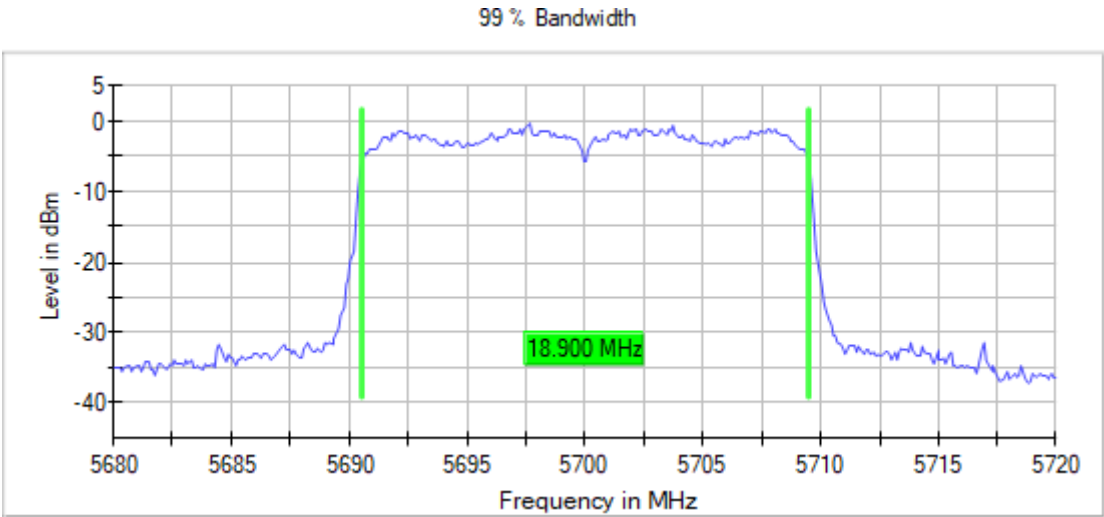
Frequency MHz = 5580.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



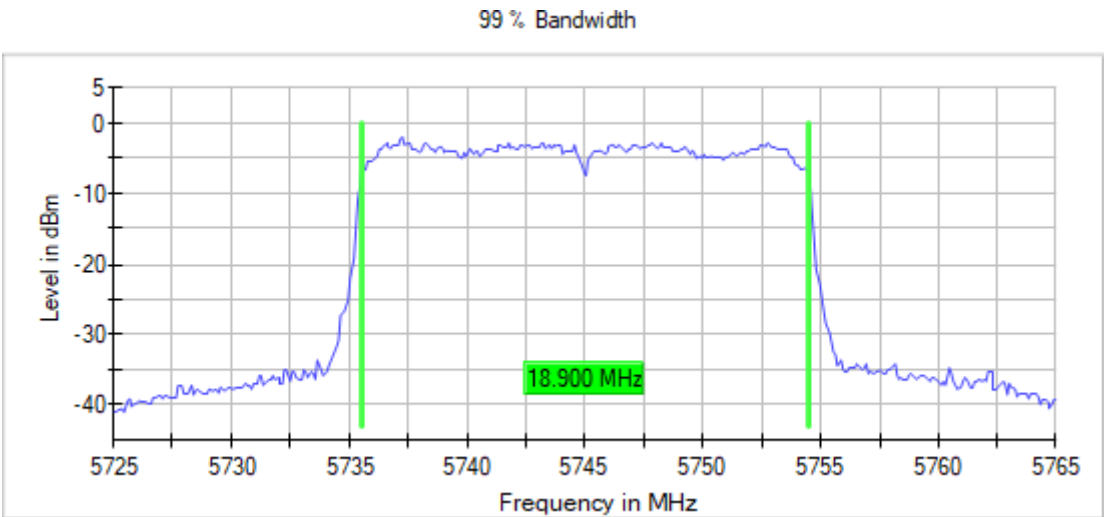
Frequency MHz = 5700.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



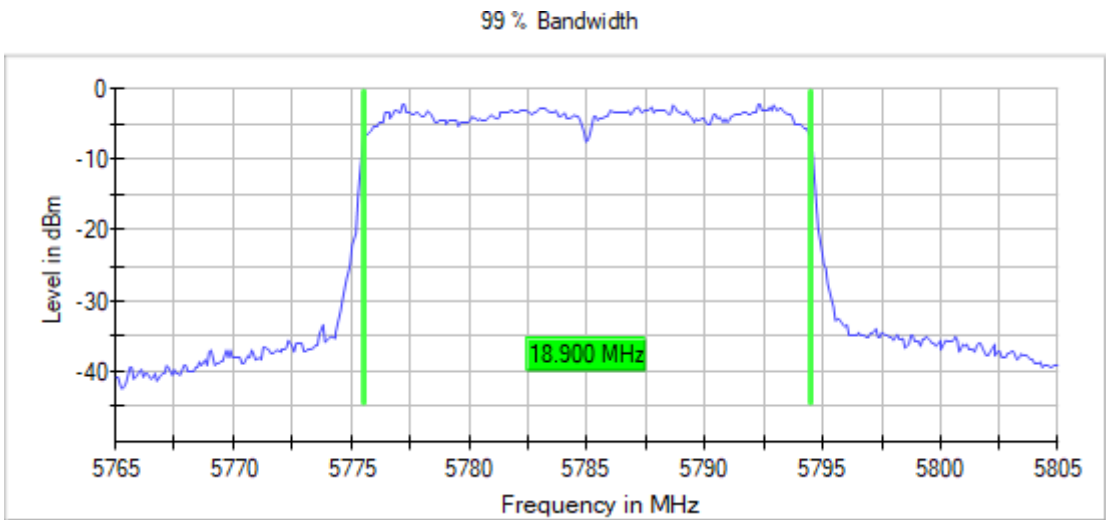
Frequency MHz = 5745.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



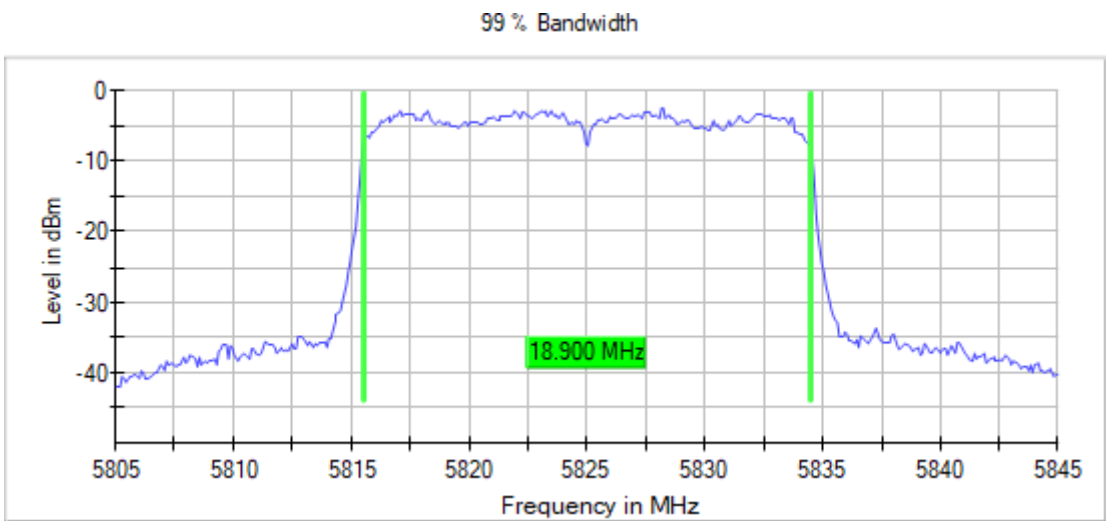
Frequency MHz = 5785.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11ax HE SS1 MCS 8 (OFDM MCS8), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE20 SS1 (OFDMA MCS8) – Partial RU

Results

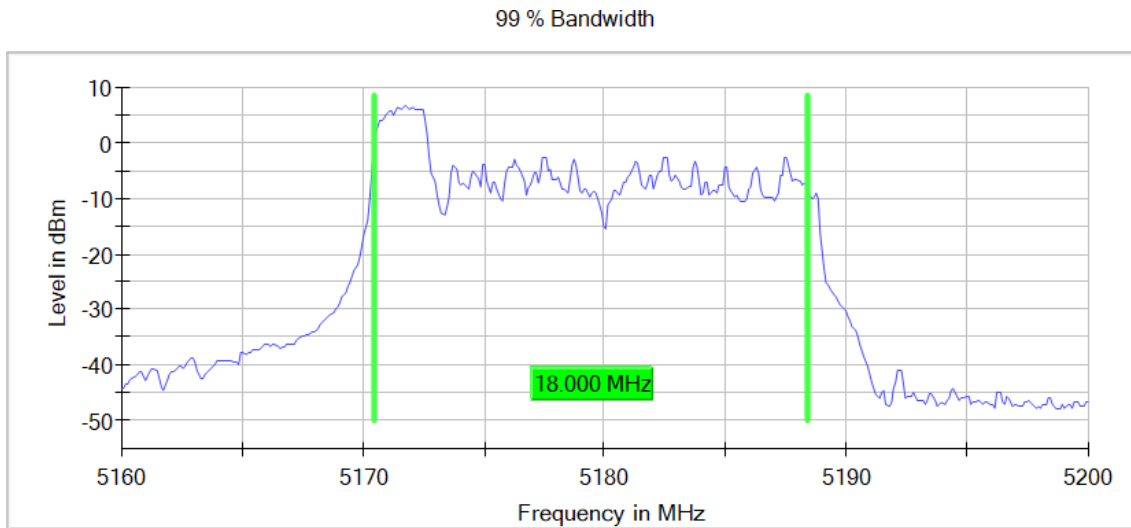
Freq (MHz)	Occ Ch BW (MHz)
5180.00000	18.000
5200.00000	18.100
5240.00000	18.100
5260.00000	18.000
5280.00000	18.100
5320.00000	18.000
5500.00000	18.200
5580.00000	18.100
5700.00000	18.100
5745.00000	18.000
5785.00000	18.000
5825.00000	18.100

Verdict

Pass

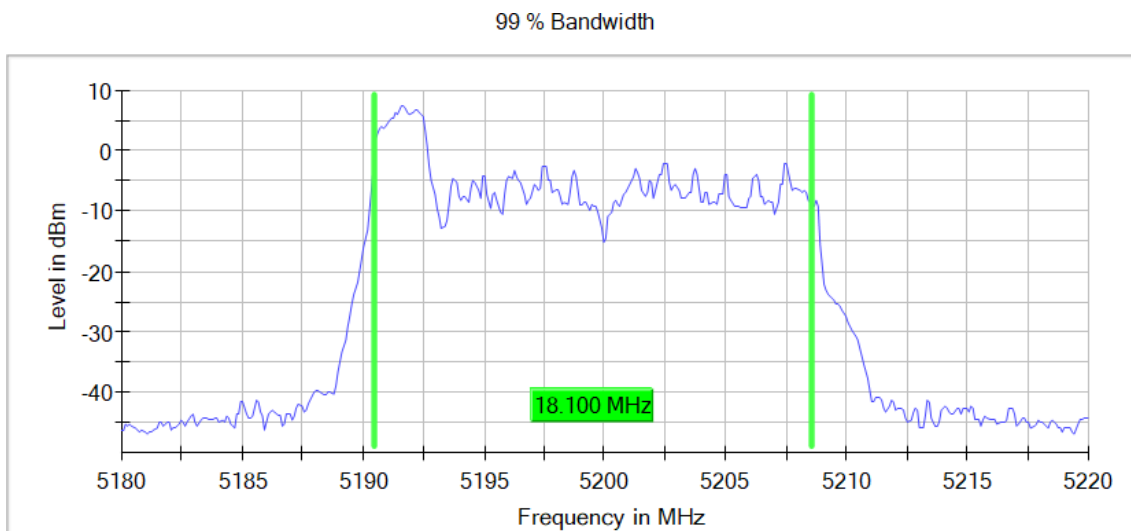
Attachments

Frequency MHz = 5180.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
Mode = SISO Number of Transmission Chains = 1



Frequency MHz = 5200.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)
Mode = SISO Number of Transmission Chains = 1

Images:

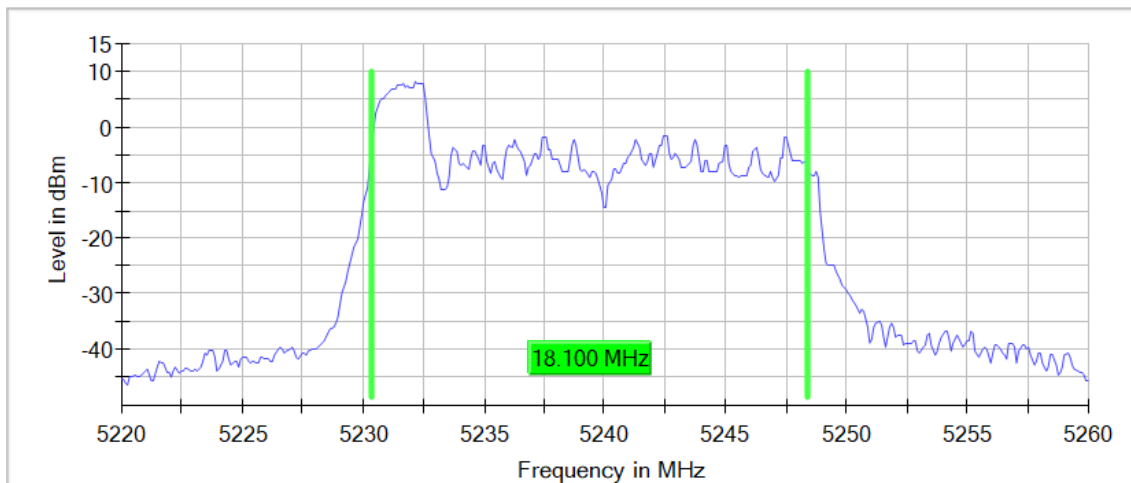


Frequency MHz = 5240.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

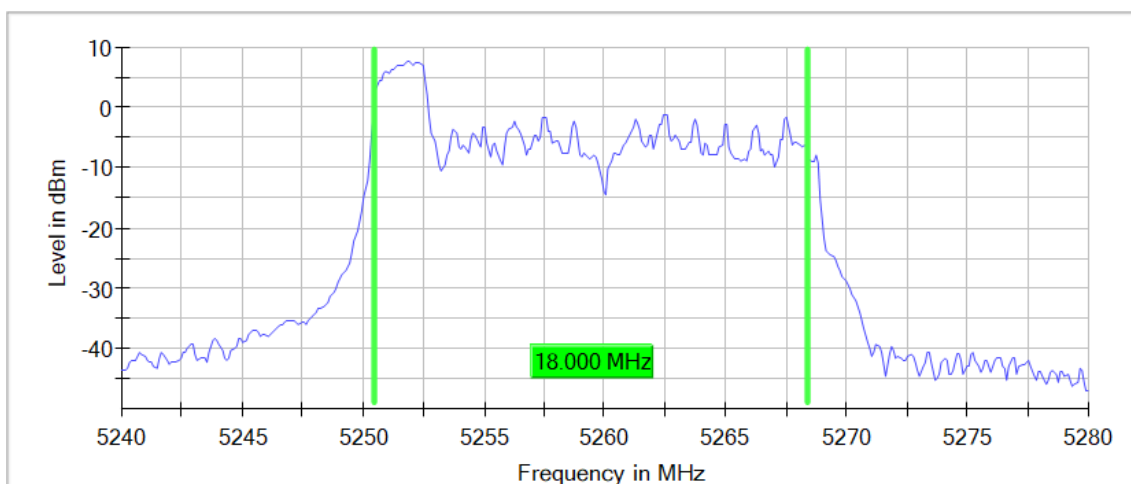


Frequency MHz = 5260.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

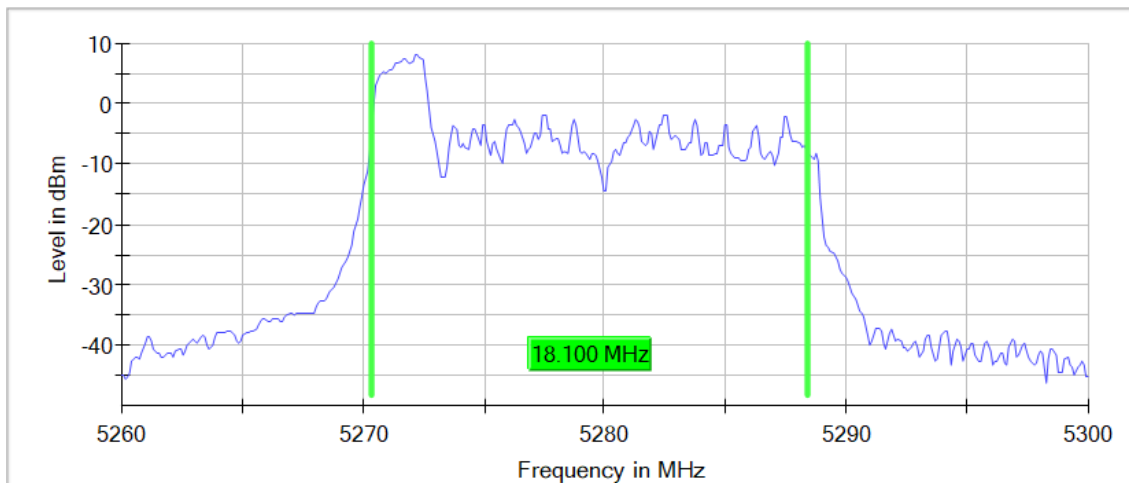


Frequency MHz = 5280.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

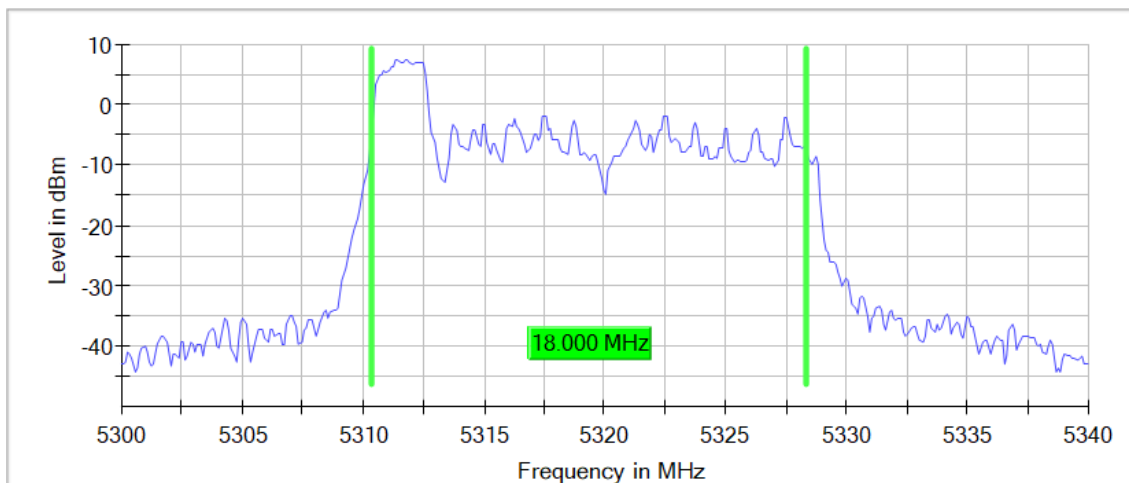


Frequency MHz = 5320.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

Images:

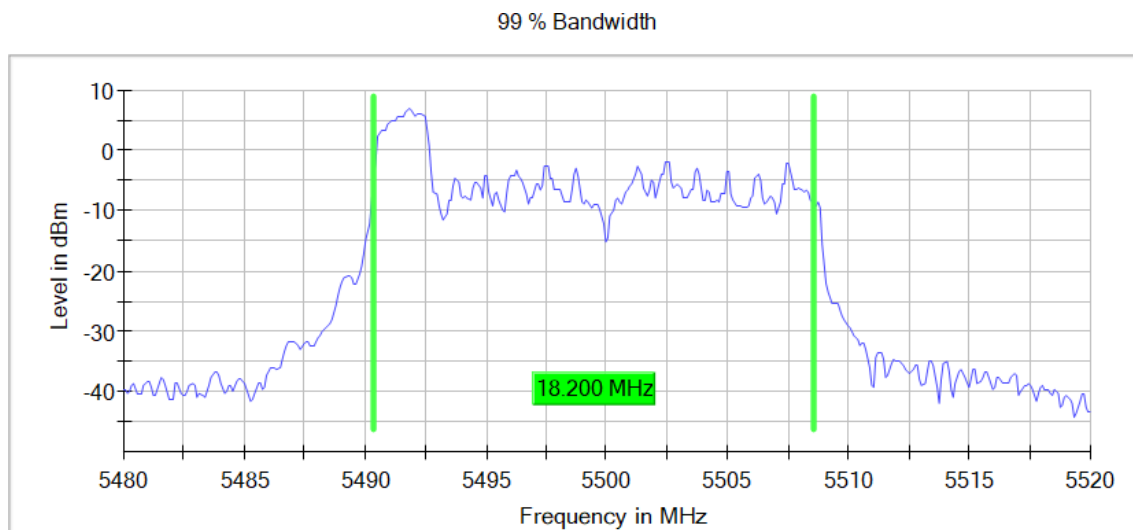
99 % Bandwidth



Frequency MHz = 5500.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

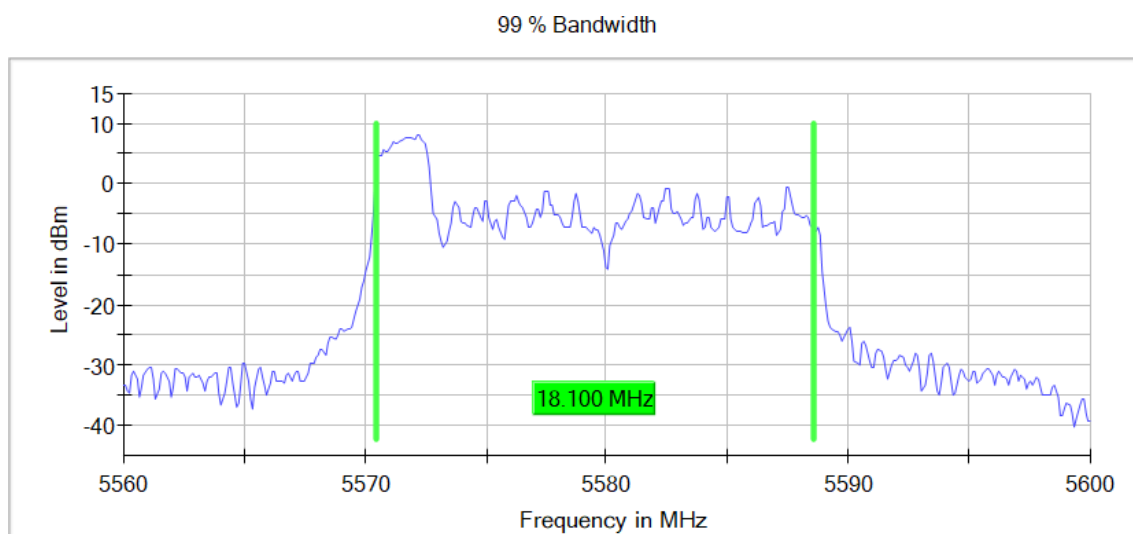
Images:



Frequency MHz = 5580.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

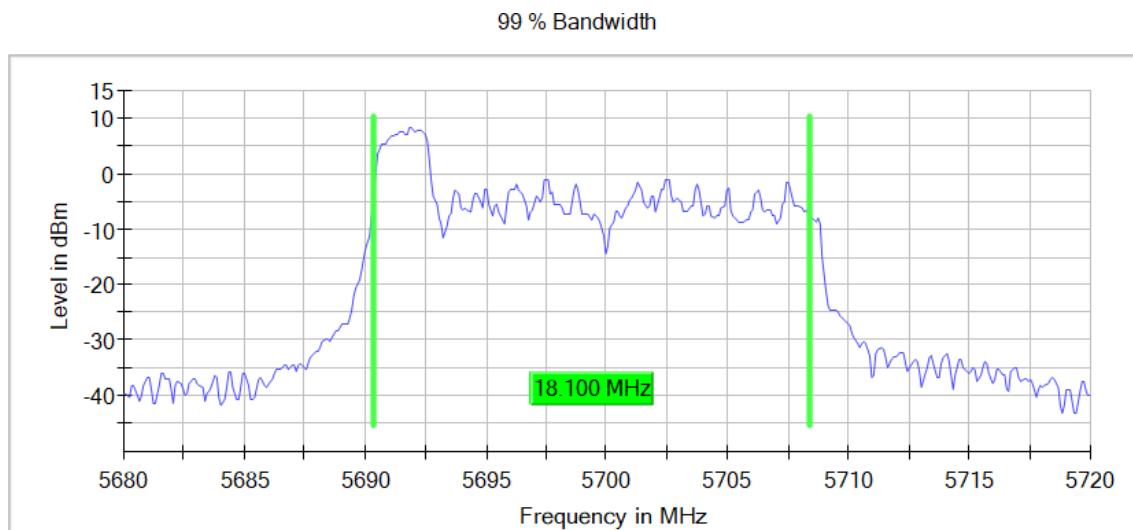
Images:



Frequency MHz = 5700.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

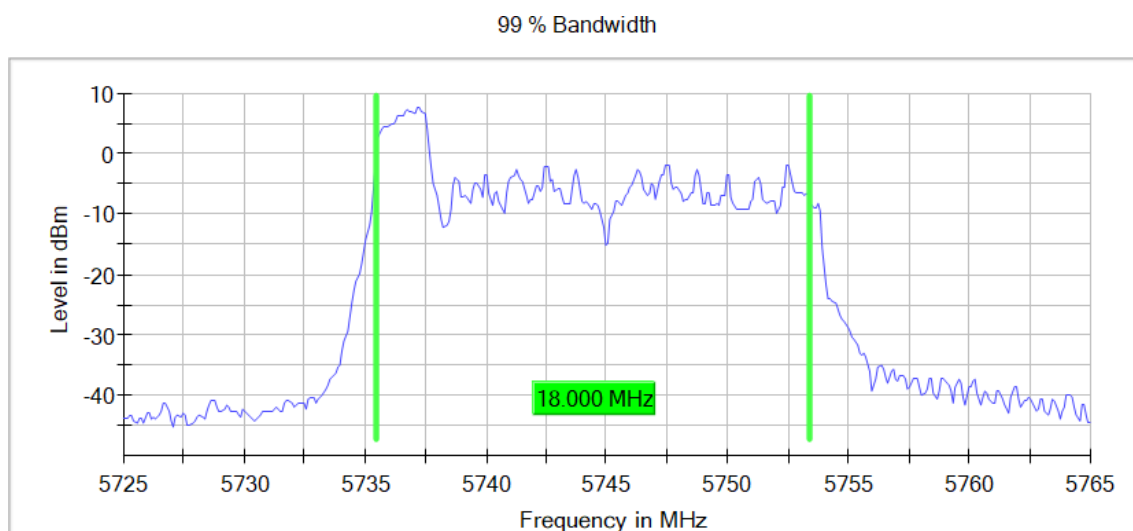
Images:



Frequency MHz = 5745.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

Images:

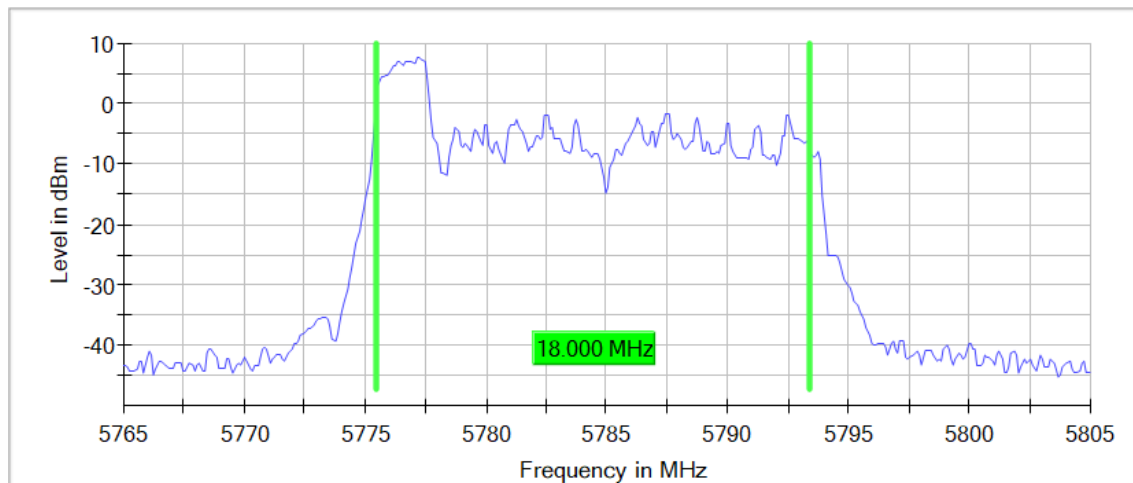


Frequency MHz = 5785.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

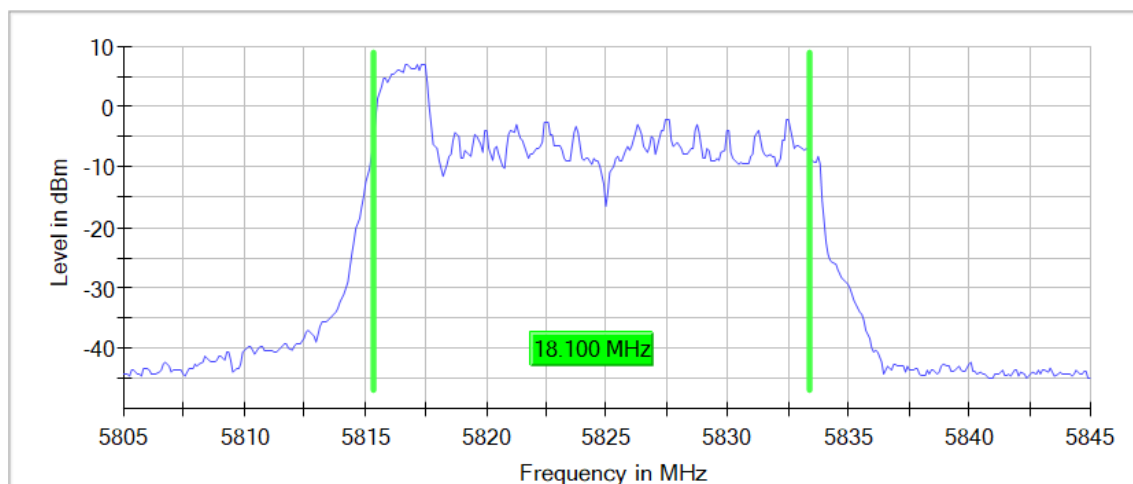


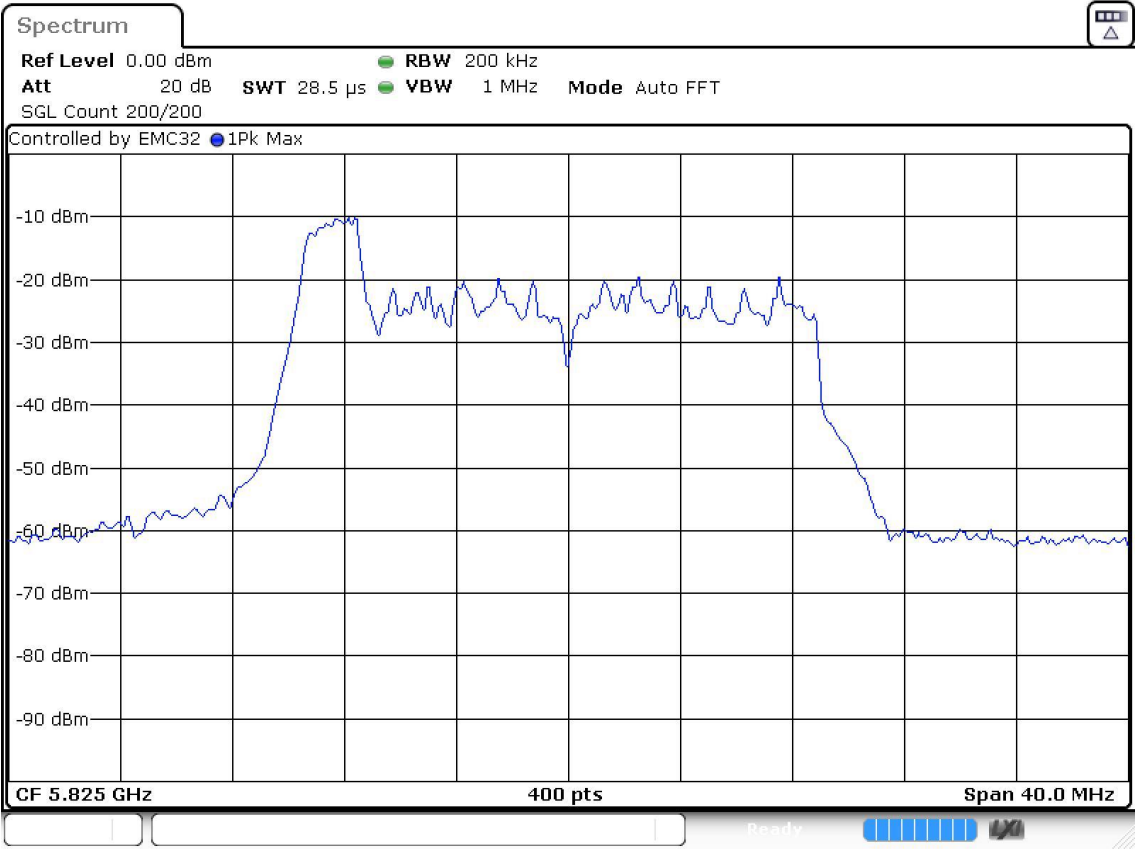
Frequency MHz = 5825.00000 Modulation = 802.11ax HE20 SS1 (OFDMA MCS8)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth





Date: 20.DEC.2022 17:43:33

Modulation: 802.11ax HE40 SS1 (OFDMA MCS9) - Full RU
Results

Freq (MHz)	Occ Ch BW (MHz)
5190.00000	37.250
5230.00000	37.500
5270.00000	37.250
5310.00000	37.750
5510.00000	37.250
5550.00000	37.750
5670.00000	37.500
5755.00000	37.500
5795.00000	37.250

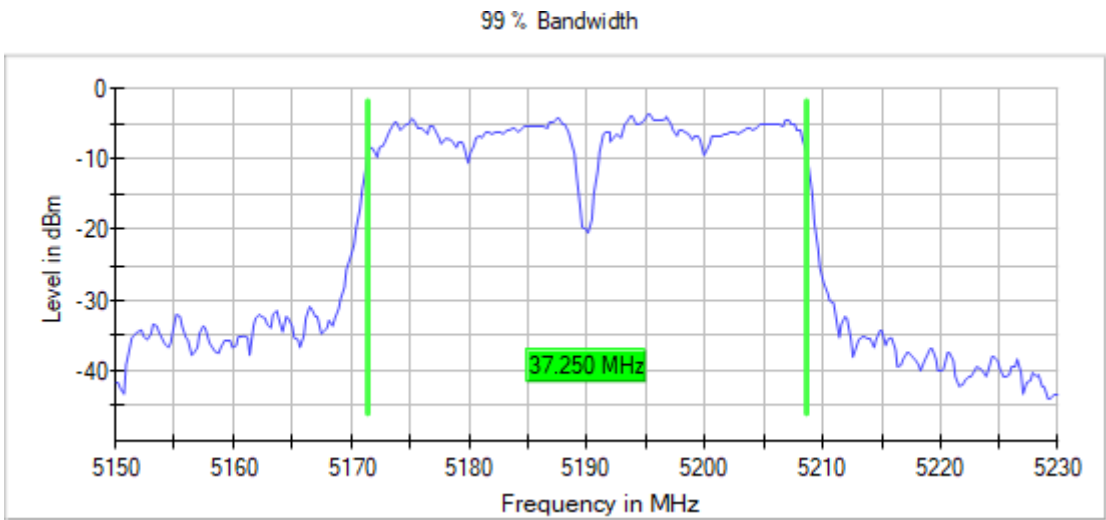
Verdict

Pass

Attachments

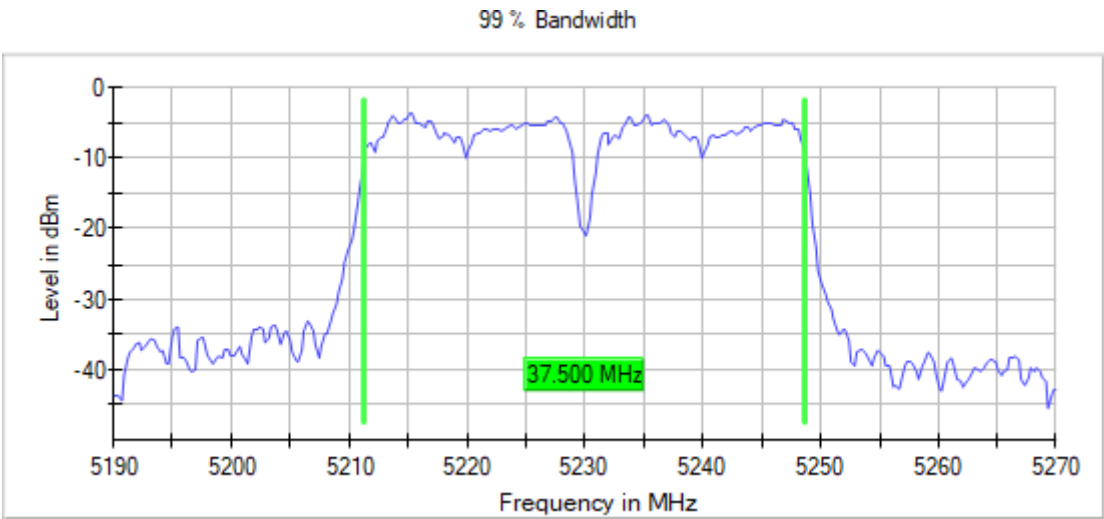
Frequency MHz = 5190.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



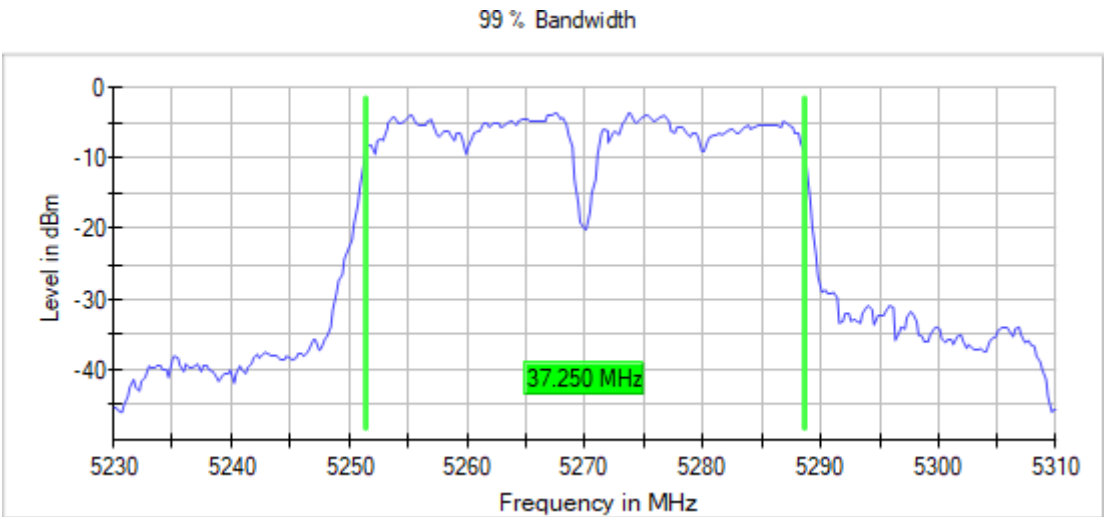
Frequency MHz = 5230.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



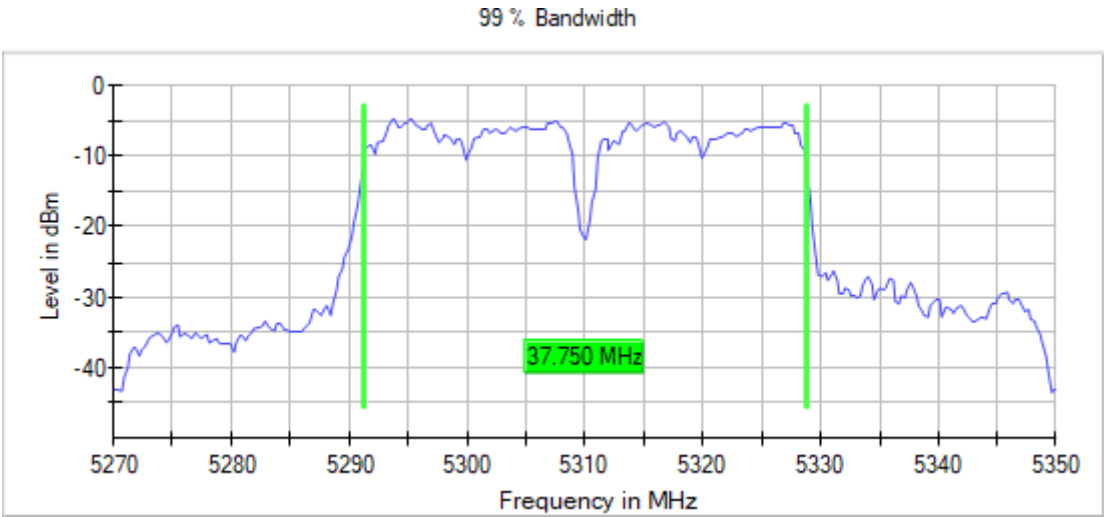
Frequency MHz = 5270.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



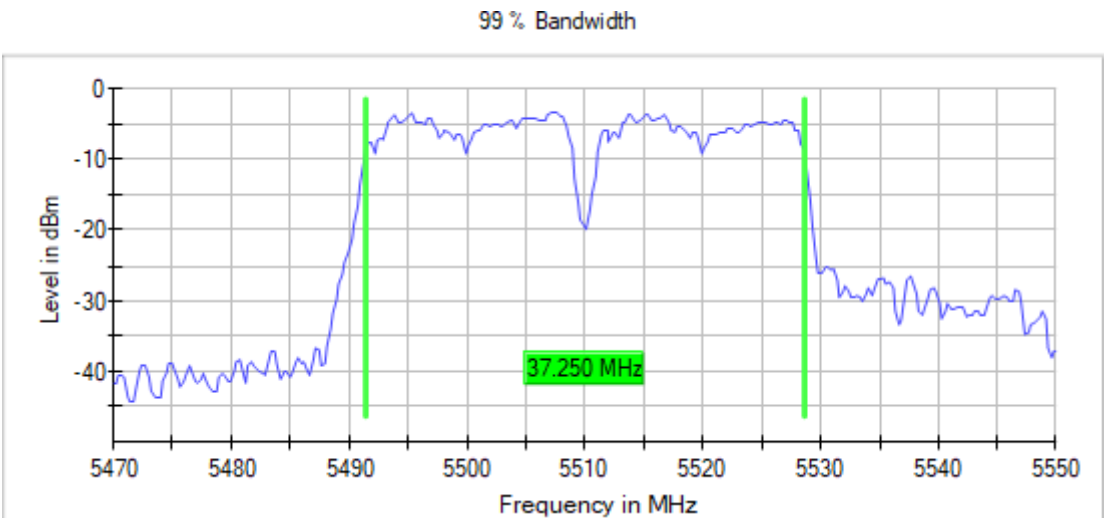
Frequency MHz = 5310.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



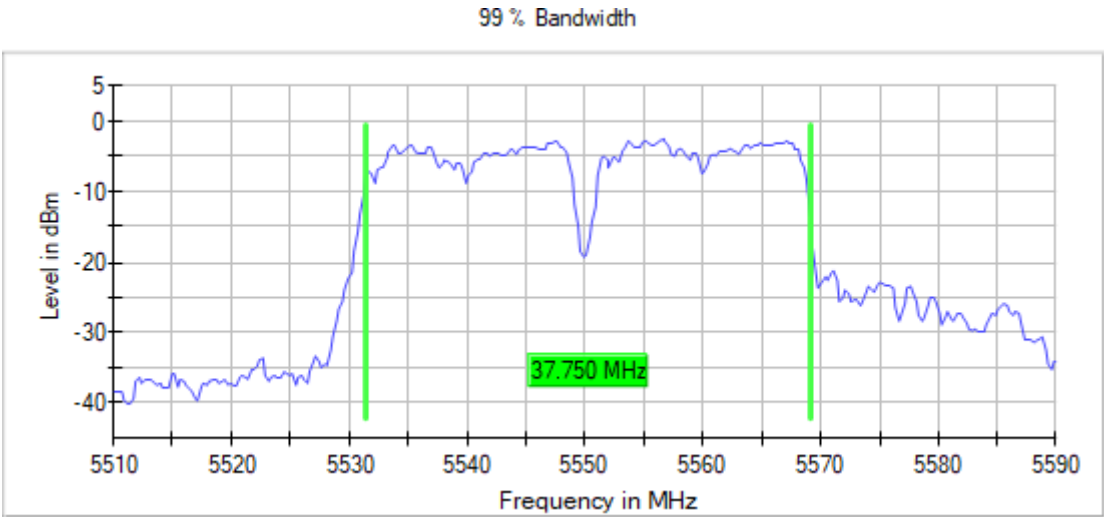
Frequency MHz = 5510.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



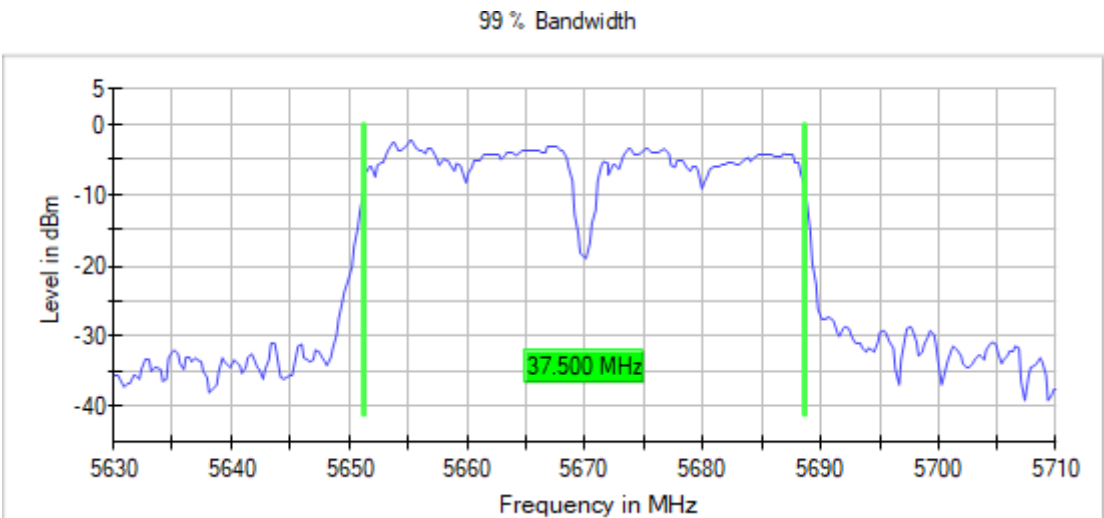
Frequency MHz = 5550.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



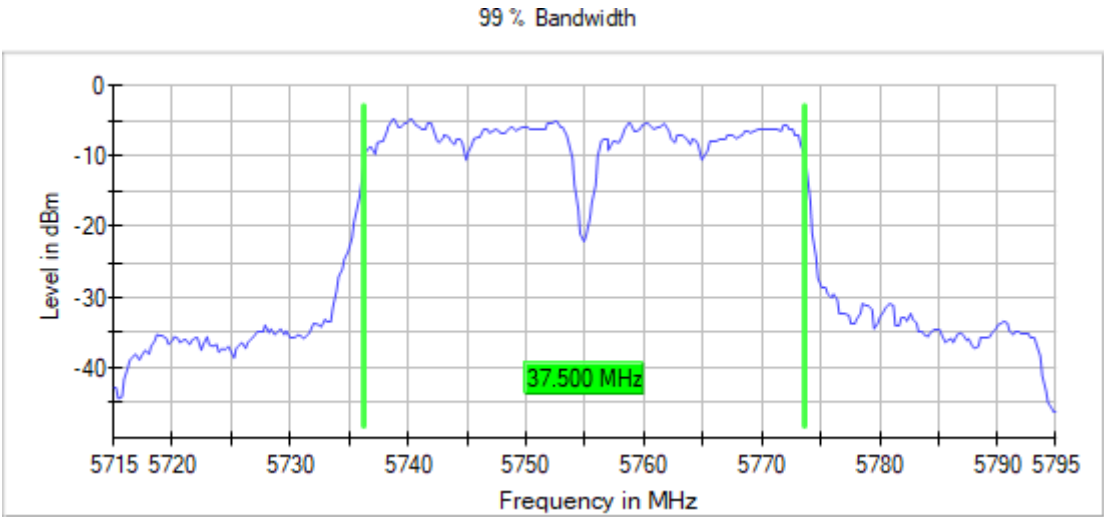
Frequency MHz = 5670.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



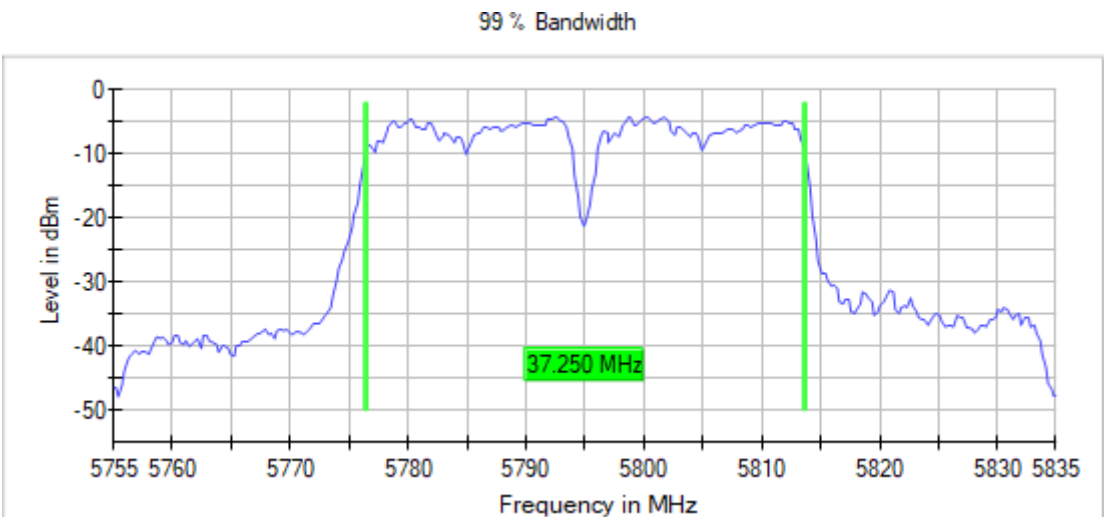
Frequency MHz = 5755.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



Frequency MHz = 5795.00000, Modulation = 802.11ax HE40 SS1 (OFDMA MCS9), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE40 SS1 (OFDMA MCS9) – Partial RU

Results

Freq (MHz)	Occ Ch BW (MHz)
5190.00000	21.500
5230.00000	21.250
5270.00000	21.000
5310.00000	21.000
5510.00000	21.750
5550.00000	20.500
5670.00000	22.250
5755.00000	20.750
5795.00000	21.000

Verdict

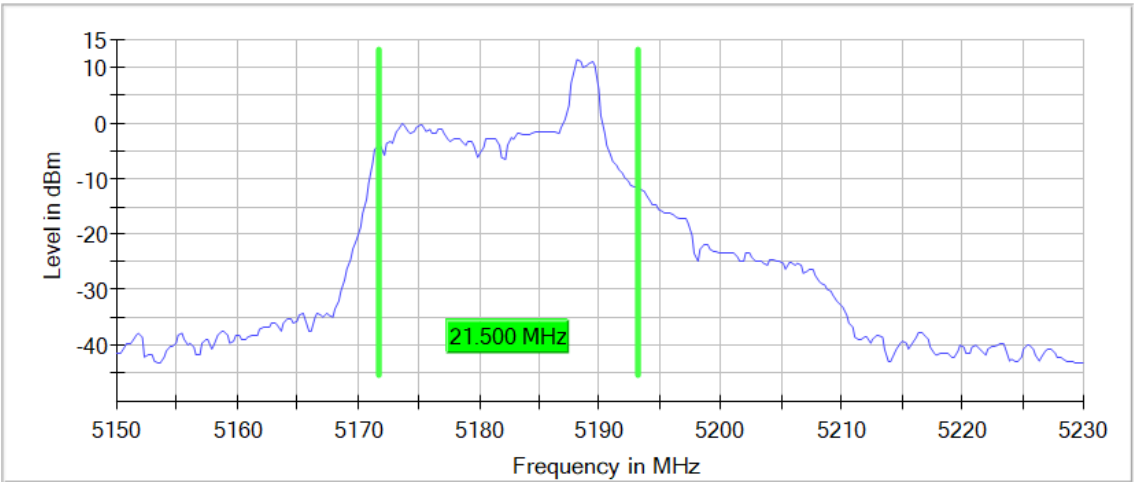
Pass

Attachments

Frequency MHz = 5190.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)
Mode = SISO Number of Transmission Chains = 1

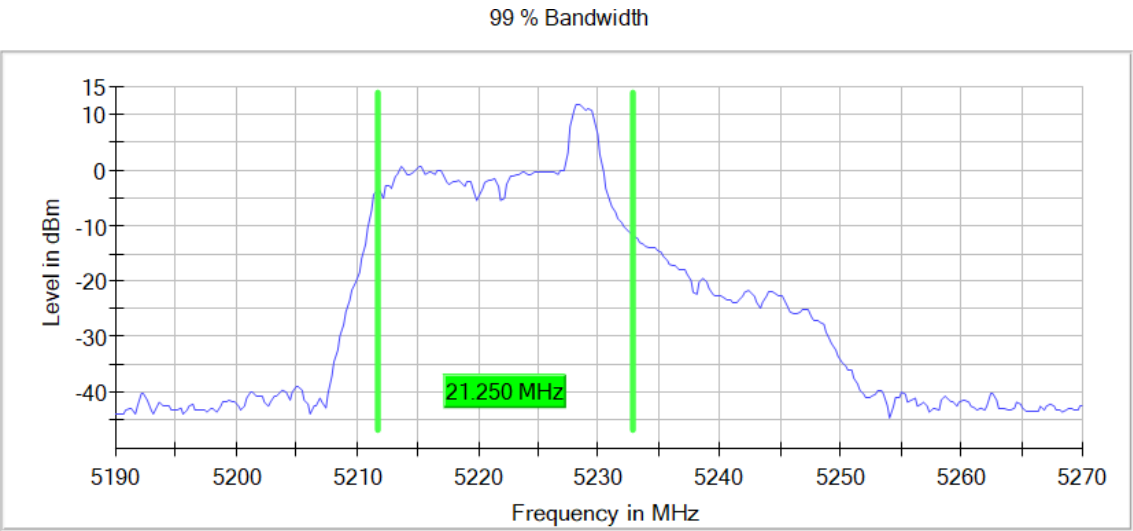
Images:

99 % Bandwidth



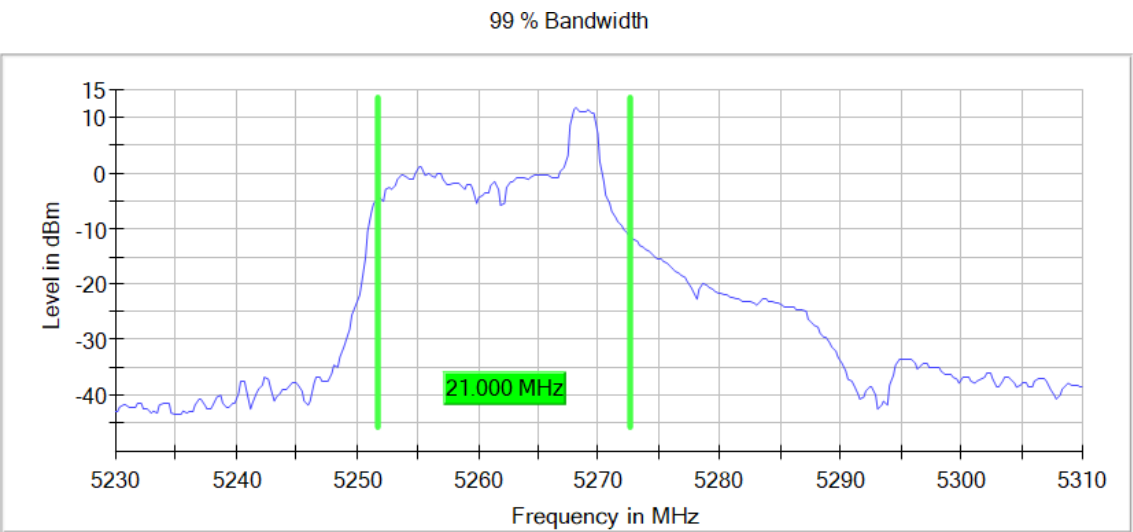
Frequency MHz = 5230.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)
Mode = SISO Number of Transmission Chains = 1

Images:



Frequency MHz = 5270.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)
Mode = SISO Number of Transmission Chains = 1

Images:

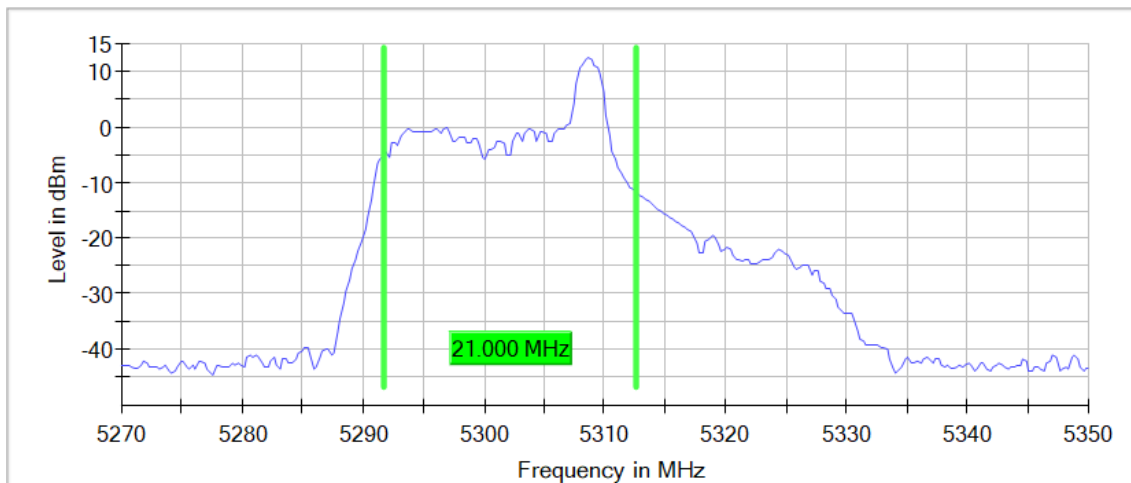


Frequency MHz = 5310.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

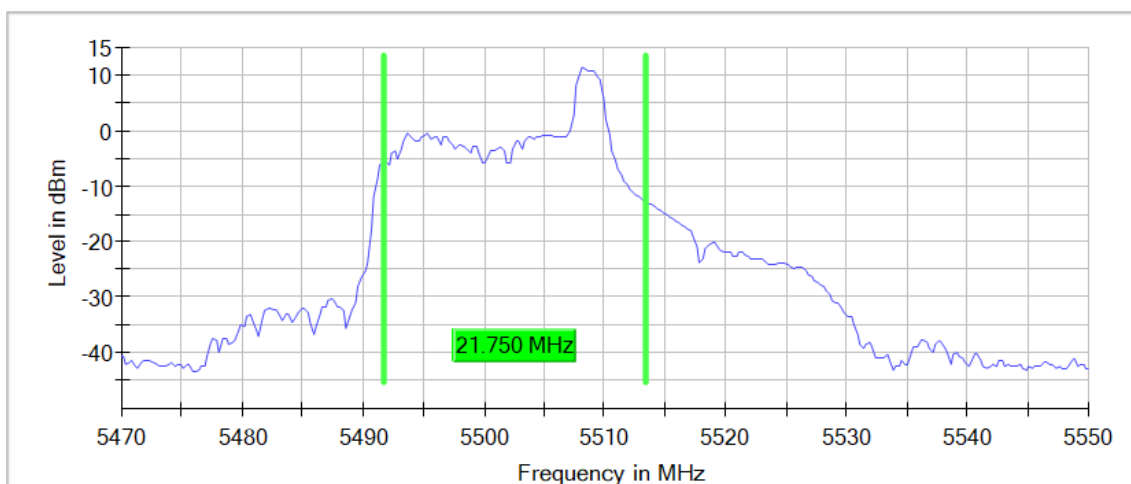


Frequency MHz = 5510.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

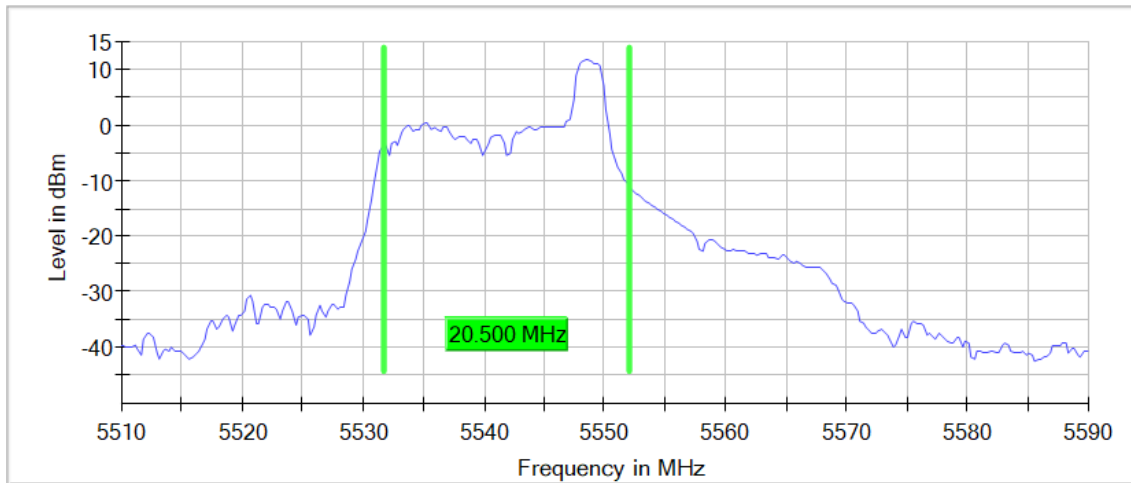


Frequency MHz = 5550.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

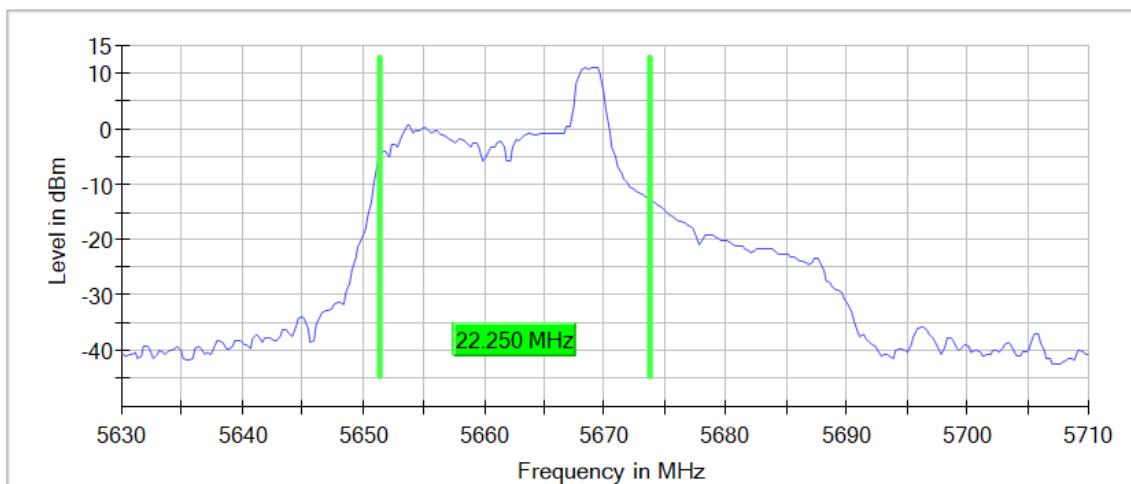


Frequency MHz = 5670.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

Mode = SISO Number of Transmission Chains = 1

Images:

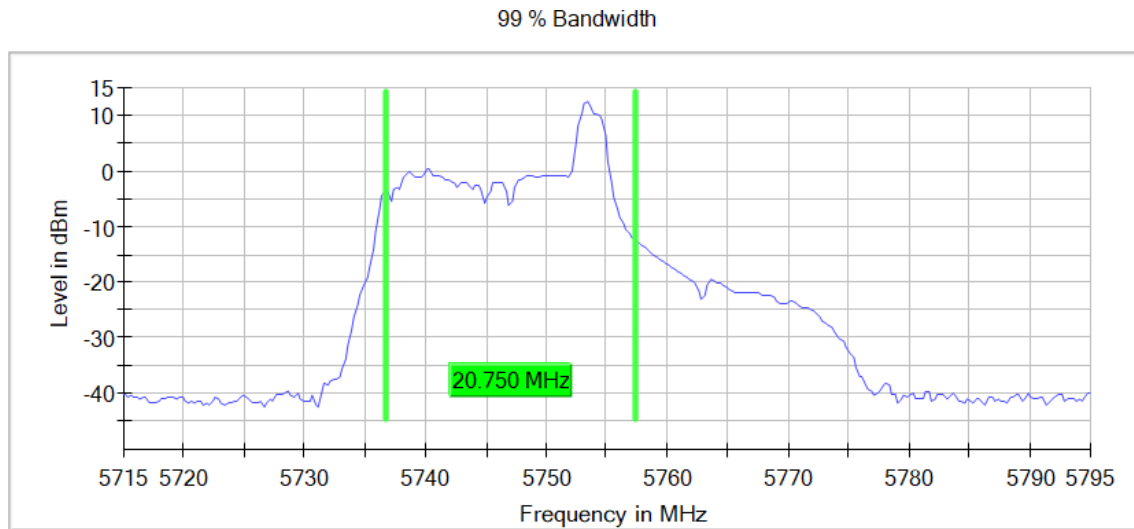
99 % Bandwidth



Frequency MHz = 5755.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

Mode = SISO Number of Transmission Chains = 1

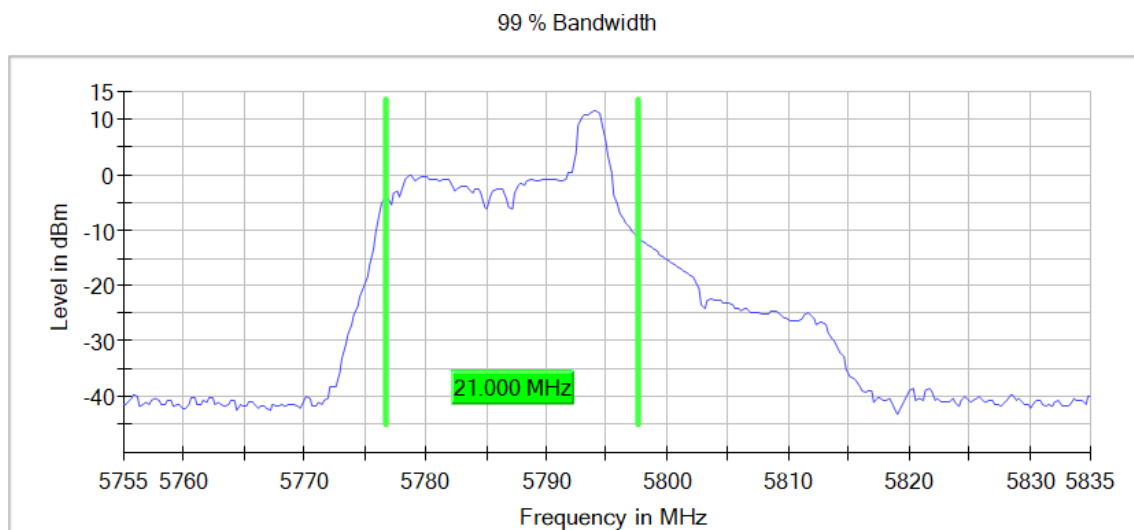
Images:

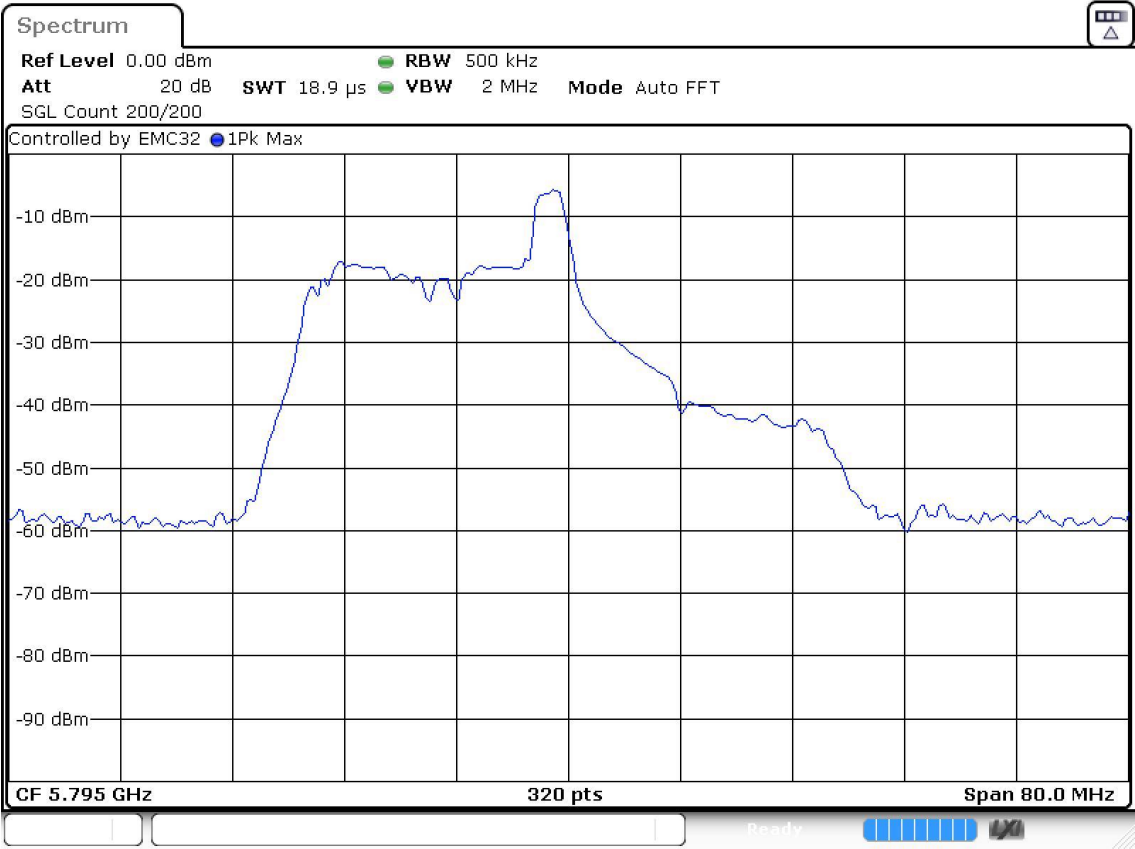


Frequency MHz = 5795.00000 Modulation = 802.11ax HE40 SS1 (OFDMA MCS9)

Mode = SISO Number of Transmission Chains = 1

Images:





Date: 20.DEC.2022 20:10:33

Modulation: 802.11ax HE80 SS1 (OFDMA MCS11) - Full RU
Results

Freq (MHz)	Occ Ch BW (MHz)
5210.00000	78.000
5290.00000	78.500
5530.00000	78.000
5610.00000	78.500
5775.00000	78.500

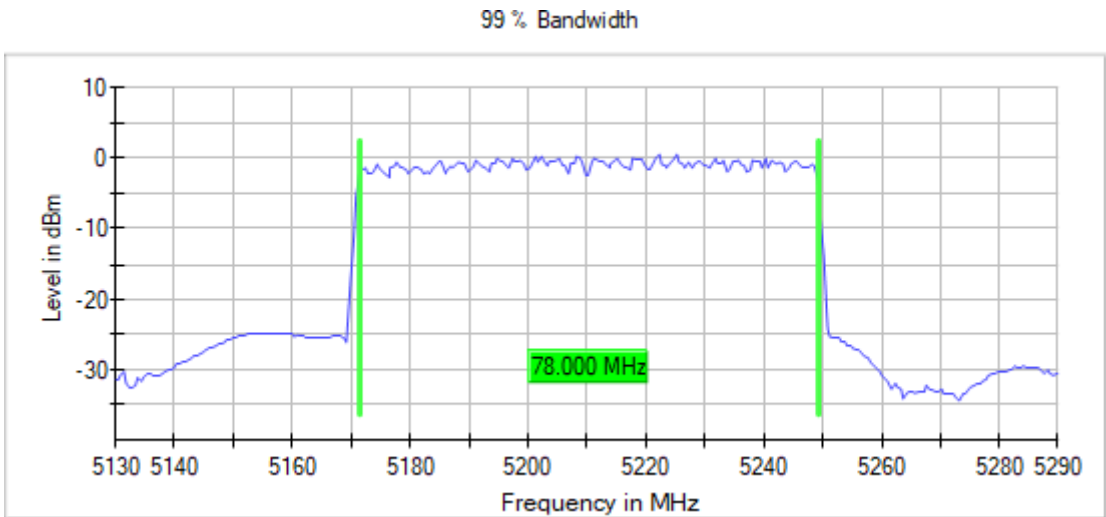
Verdict

Pass

Attachments

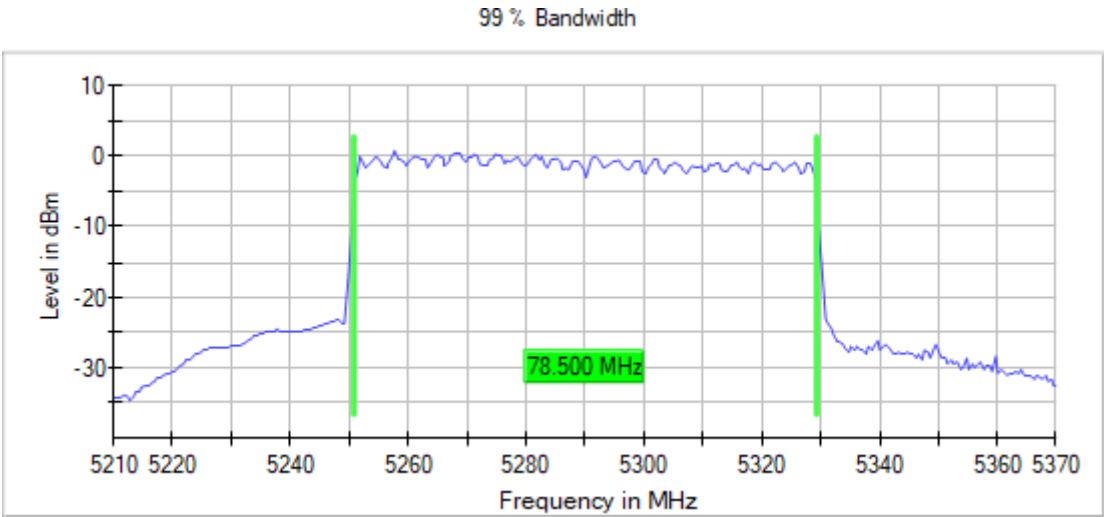
Frequency MHz = 5210.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



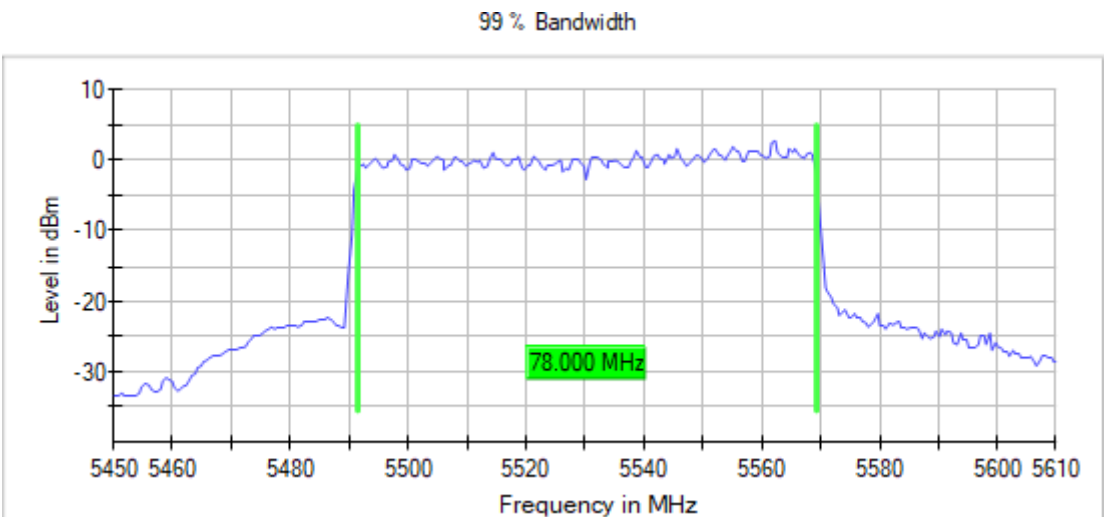
Frequency MHz = 5290.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



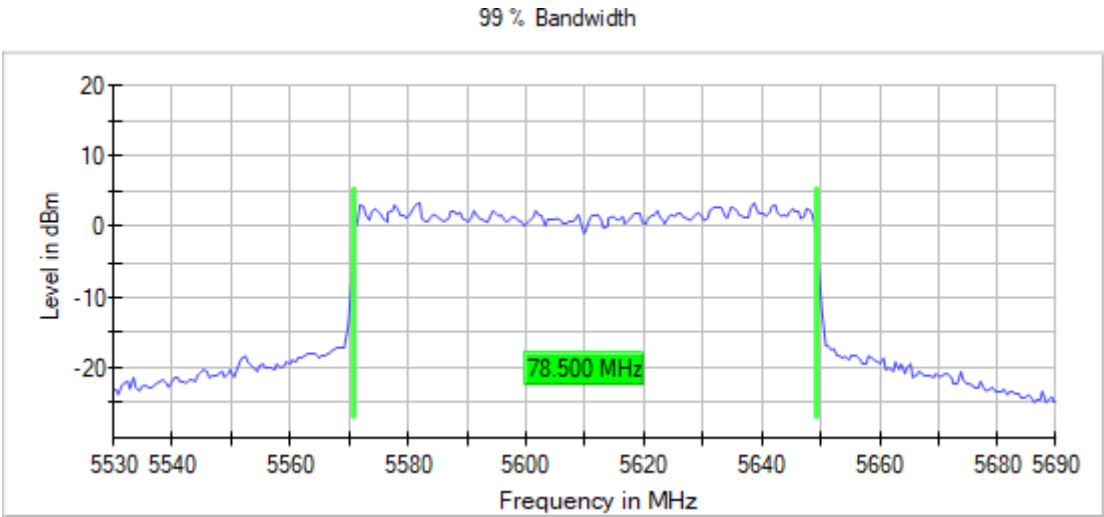
Frequency MHz = 5530.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



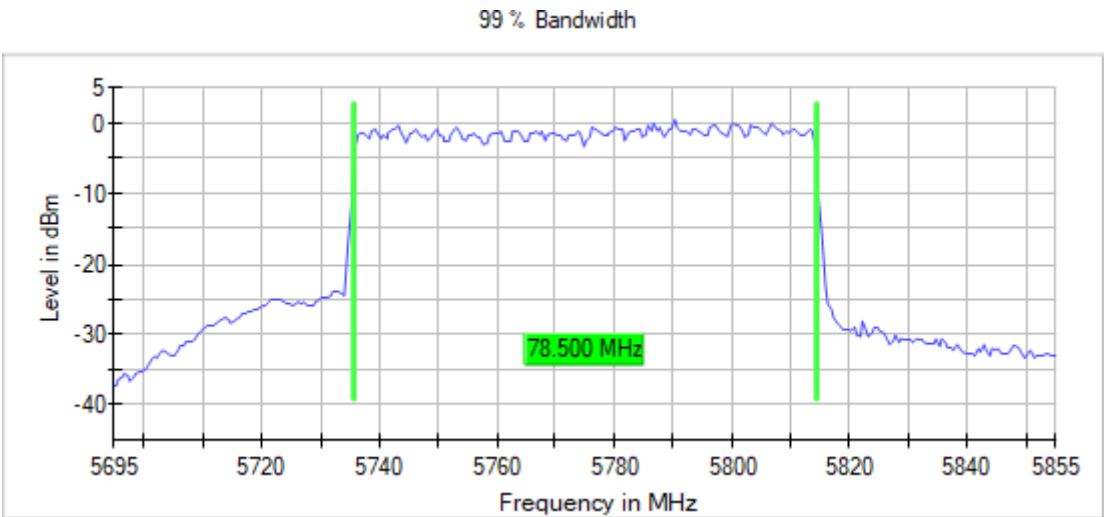
Frequency MHz = 5610.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



Frequency MHz = 5775.00000, Modulation = 802.11ax HE80 SS1 (OFDMA MCS11), Number of Transmission Chains = 1

Images:



Modulation: 802.11ax HE80 SS1 (OFDMA MCS11) – Partial RU

Results

Freq (MHz)	Occ Ch BW (MHz)
5210.00000	78.000
5290.00000	77.500
5530.00000	78.000
5610.00000	78.500
5775.00000	78.000

Verdict

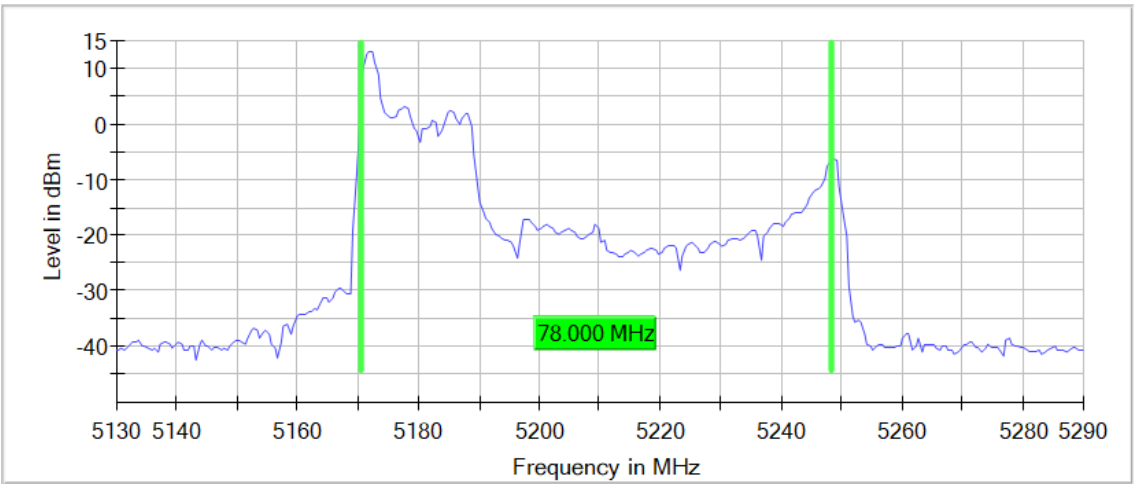
Pass

Attachments

Frequency MHz = 5210.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)
Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

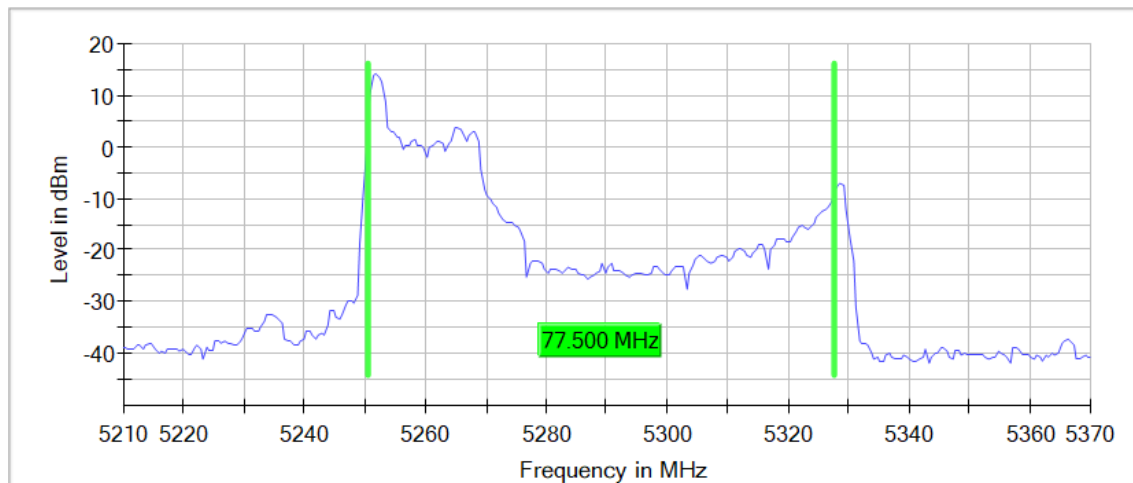


Frequency MHz = 5290.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

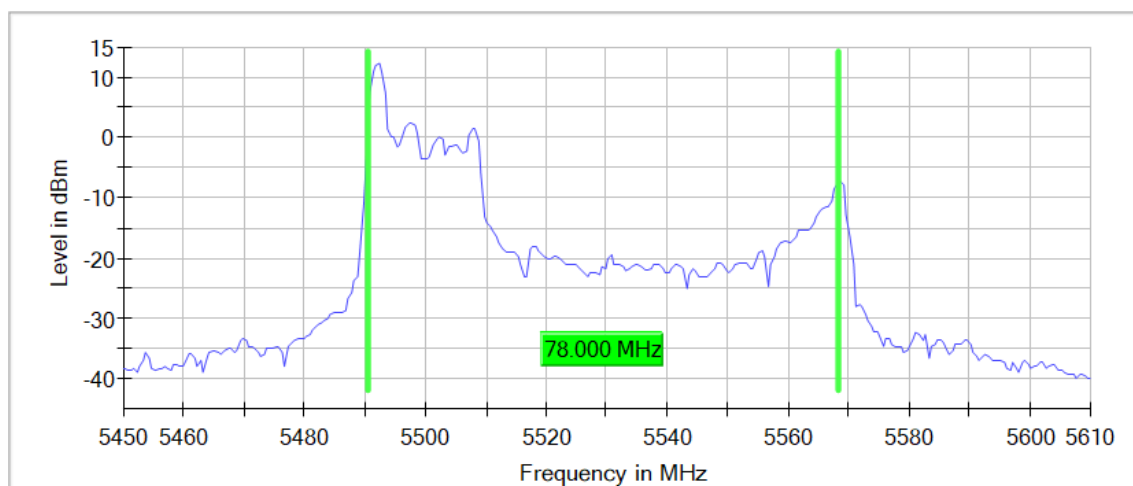


Frequency MHz = 5530.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

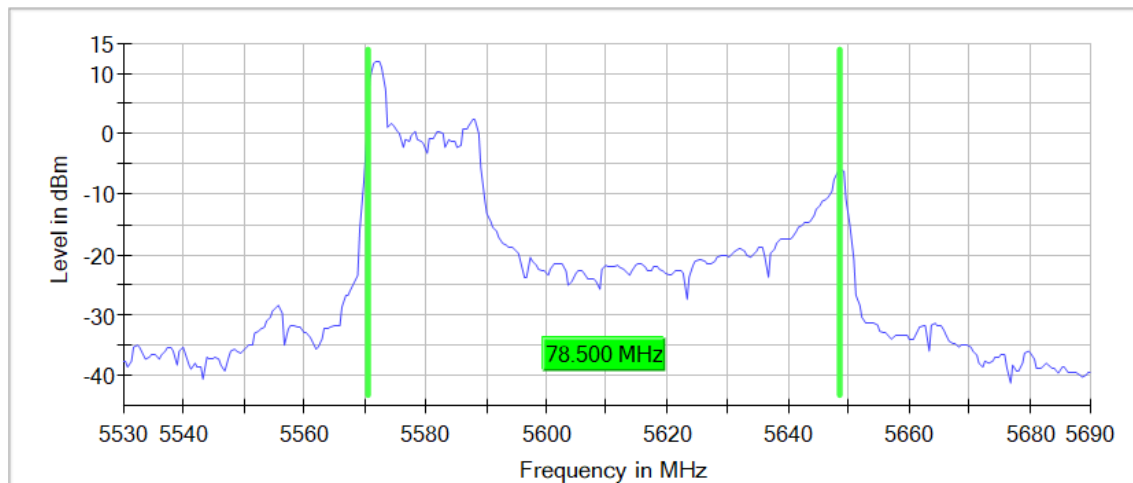


Frequency MHz = 5610.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth

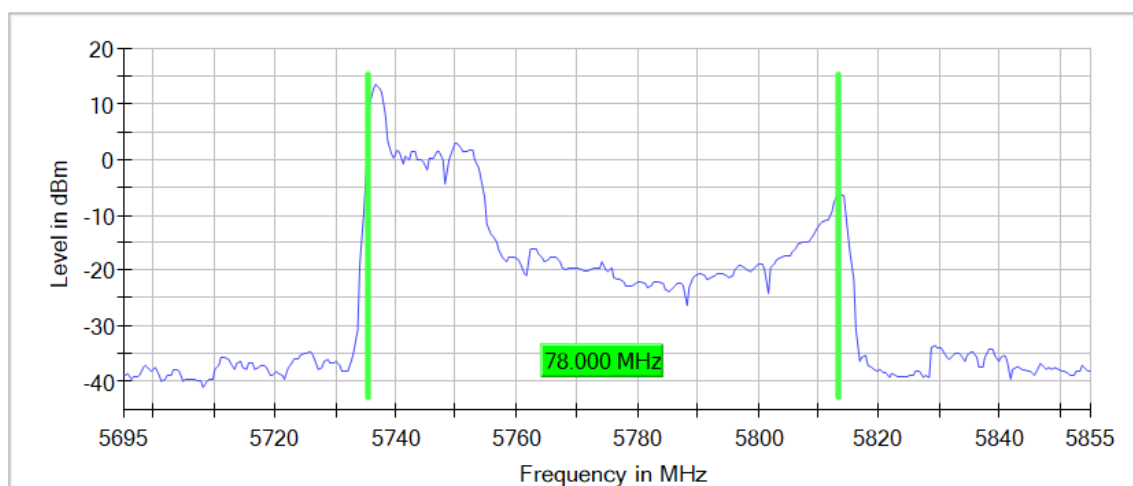


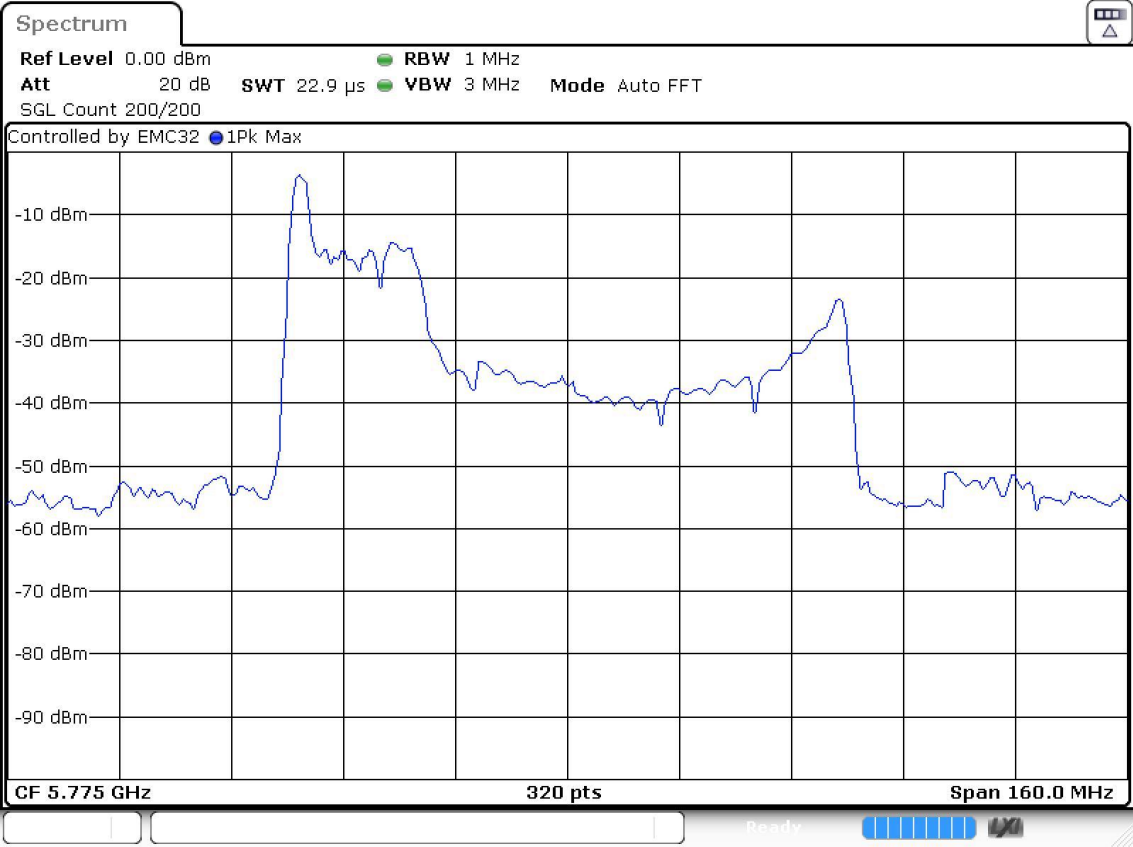
Frequency MHz = 5775.00000 Modulation = 802.11ax HE80 SS1 (OFDMA MCS11)

Mode = SISO Number of Transmission Chains = 1

Images:

99 % Bandwidth





Date: 21.DEC.2022 15:50:54

FCC 15.403 / RSS-Gen 6.7 26 dB Emission Bandwidth

Limits

No Limit has been set to this test case

Modulation: 802.11a (OFDM 54 Mbit/s)

Results

Freq (MHz)	Emission Bandwidth (MHz)
5180.00000	20.100
5200.00000	19.700
5240.00000	20.000
5260.00000	19.700
5280.00000	19.800
5320.00000	19.900
5500.00000	21.800
5580.00000	24.900
5700.00000	20.000
5745.00000	19.700
5785.00000	20.200
5825.00000	19.900

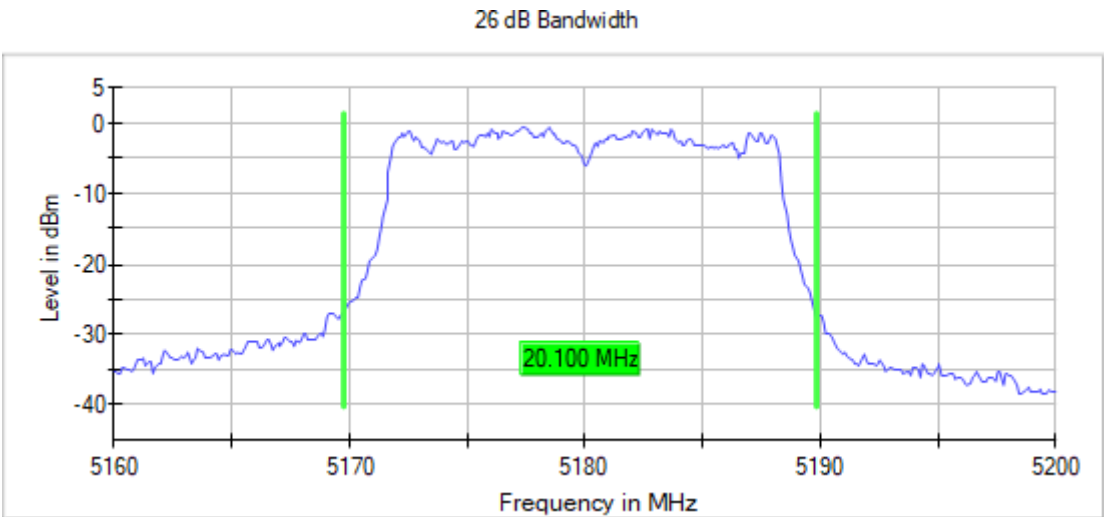
Verdict

Pass

Attachments

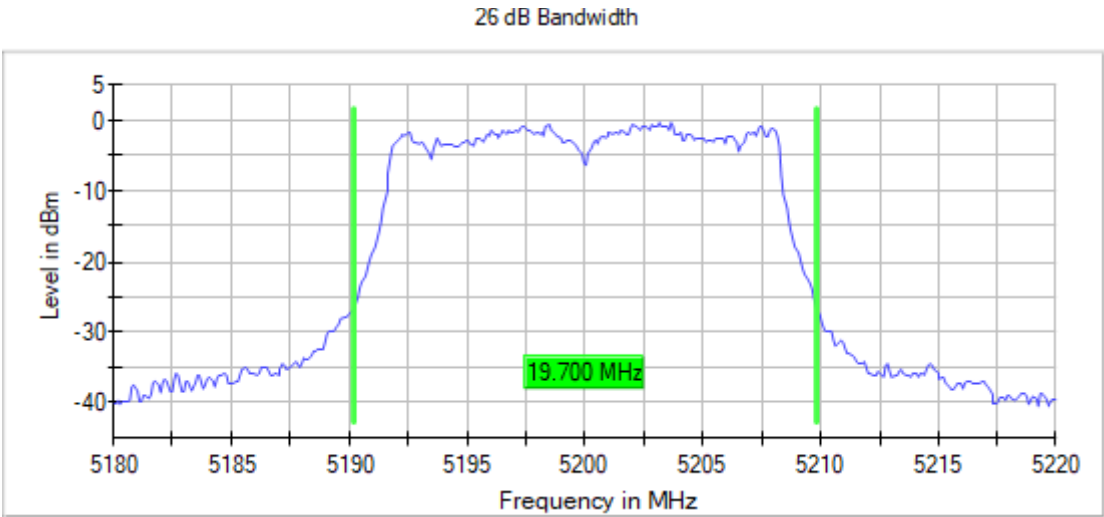
Frequency MHz = 5180.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



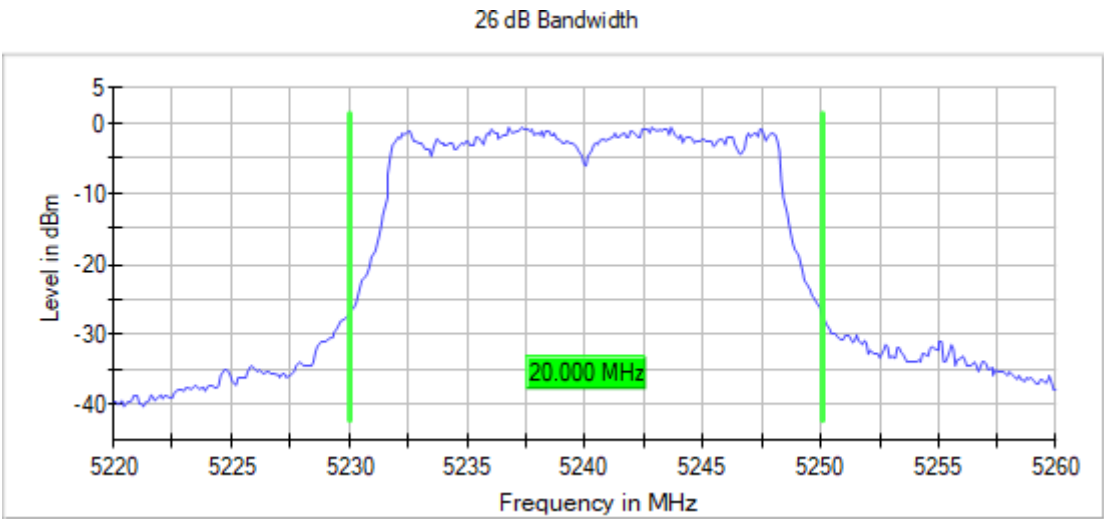
Frequency MHz = 5200.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



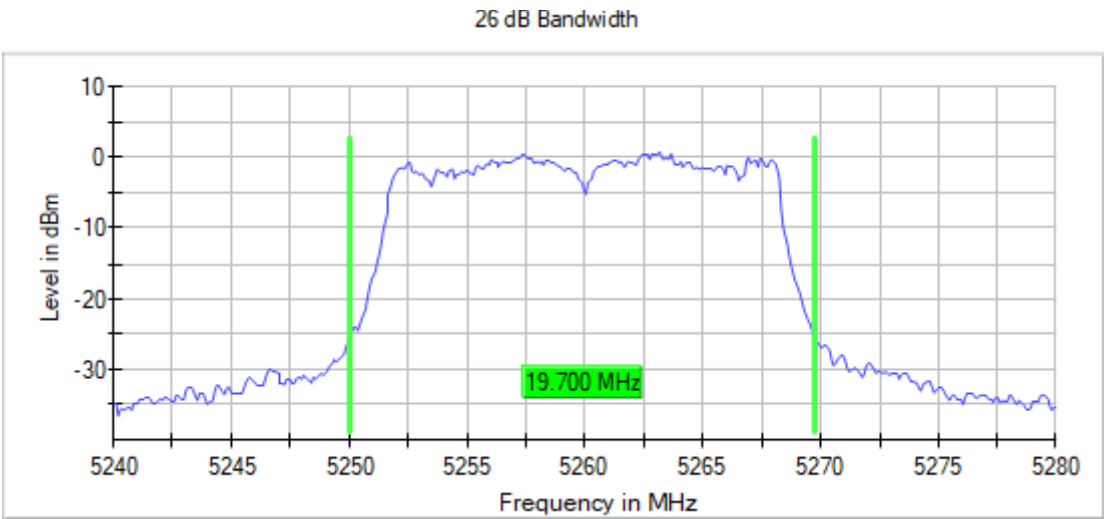
Frequency MHz = 5240.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



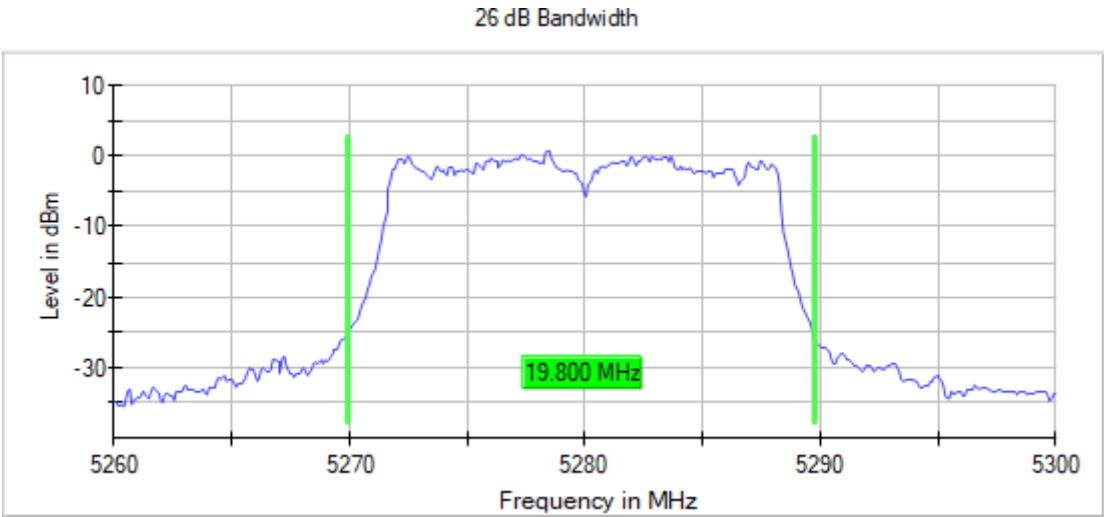
Frequency MHz = 5260.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



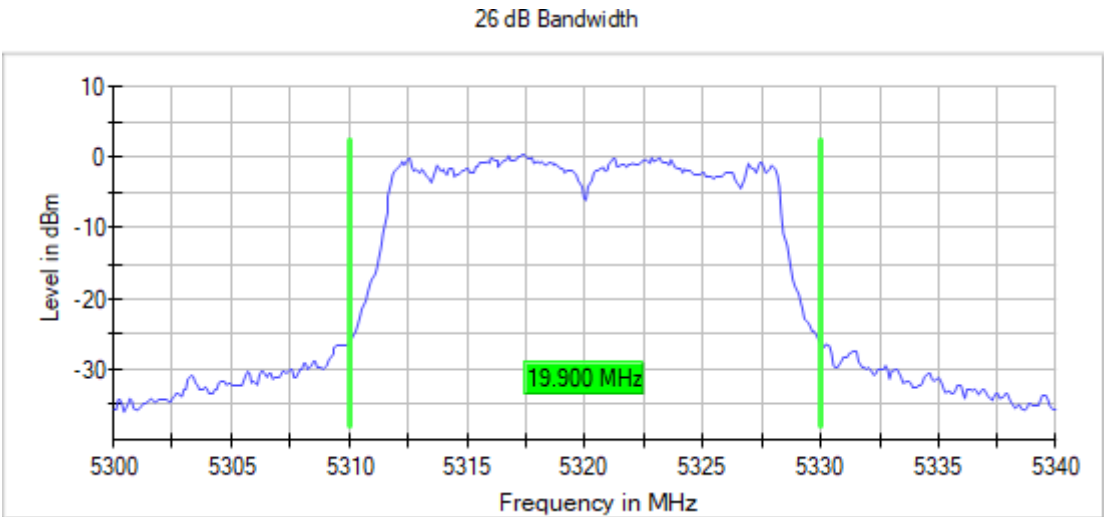
Frequency MHz = 5280.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



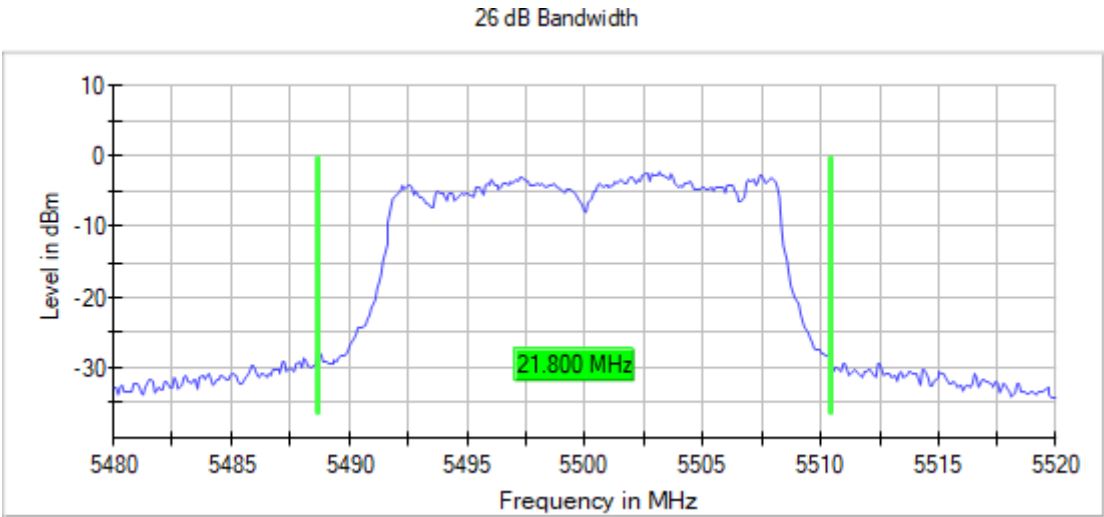
Frequency MHz = 5320.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



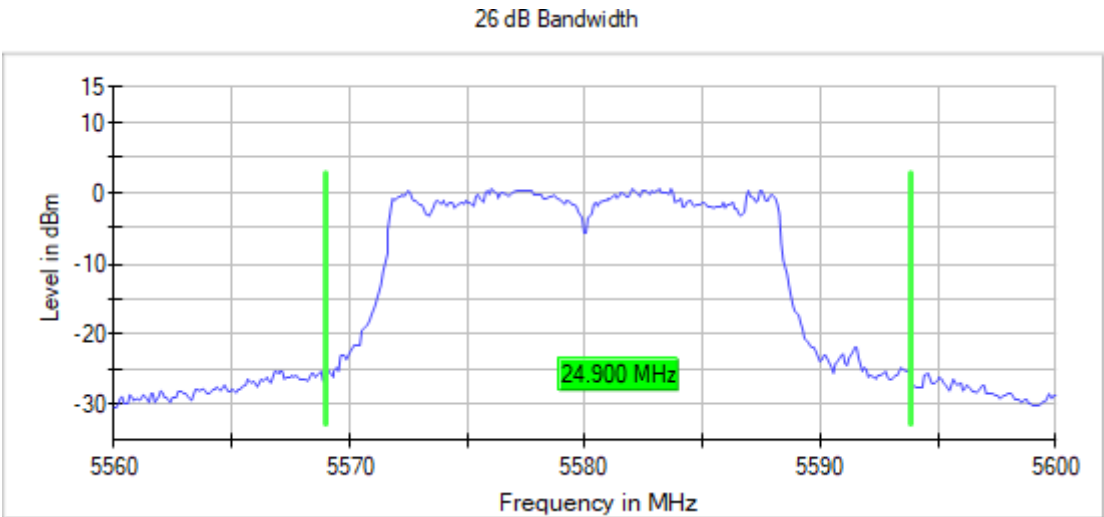
Frequency MHz = 5500.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



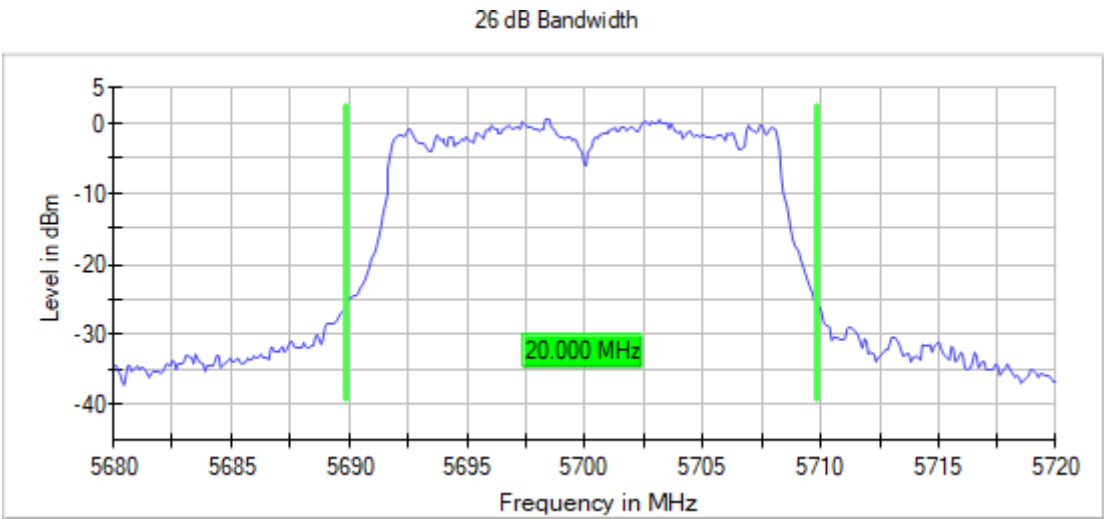
Frequency MHz = 5580.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



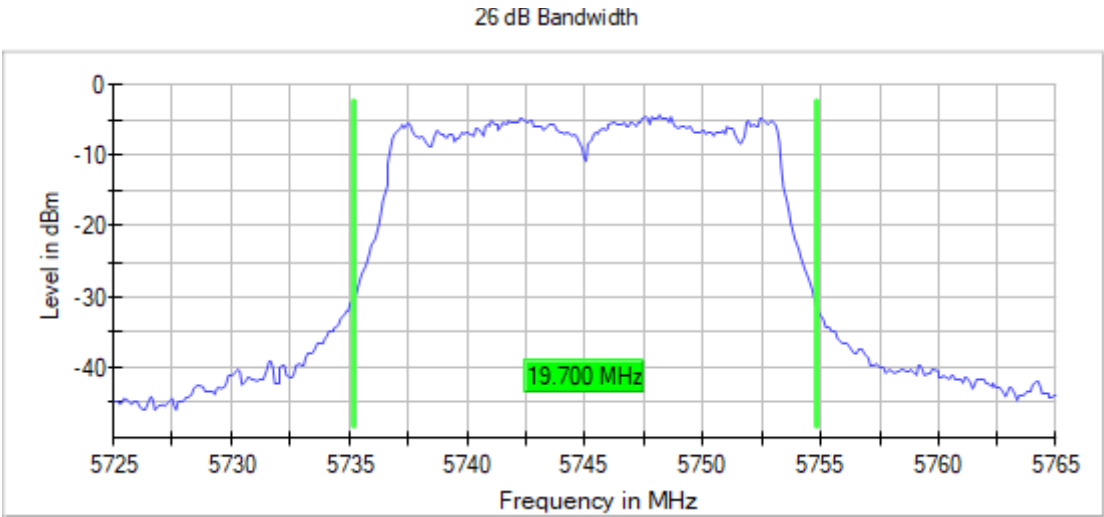
Frequency MHz = 5700.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



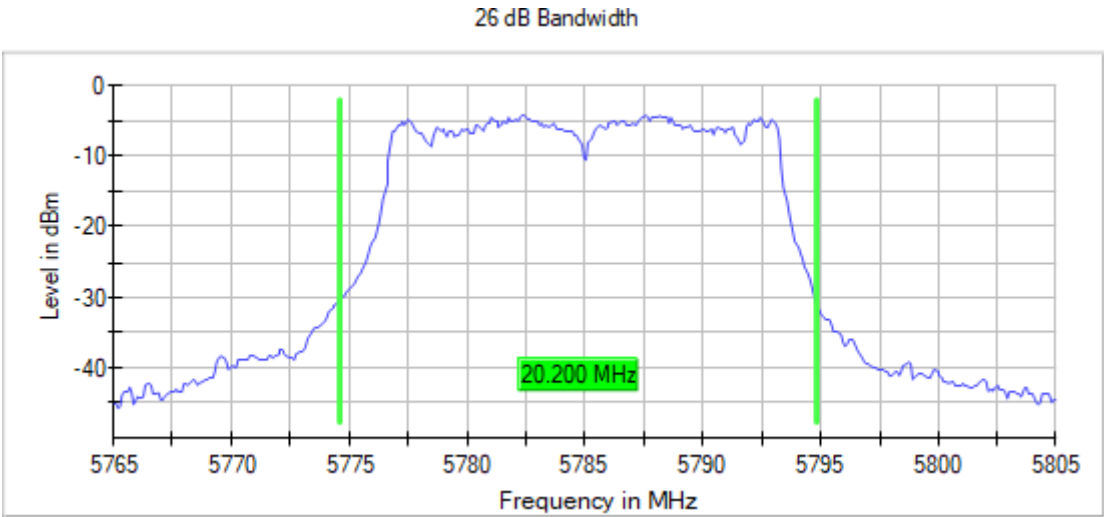
Frequency MHz = 5745.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



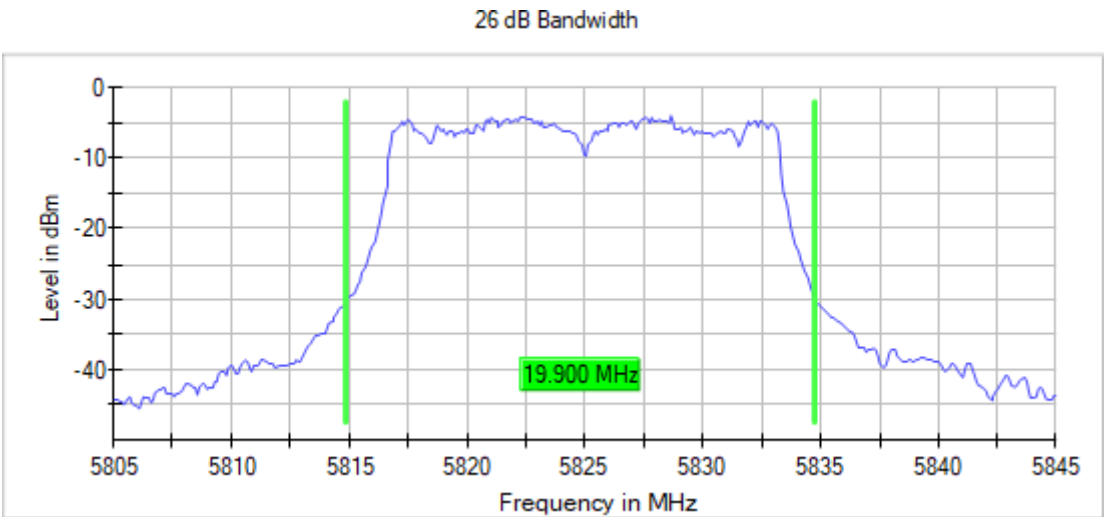
Frequency MHz = 5785.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Frequency MHz = 5825.00000, Modulation = 802.11a (OFDM 54 Mbit/s), Number of Transmission Chains = 1

Images:



Modulation: 802.11n HT20 (OFDM MCS7)
Results

Freq (MHz)	Emission Bandwidth (MHz)
5180.00000	20.300
5200.00000	20.500
5240.00000	20.400
5260.00000	20.400
5280.00000	20.600
5320.00000	25.000
5500.00000	20.700
5580.00000	20.400
5700.00000	20.300
5745.00000	20.200
5785.00000	20.100
5825.00000	20.400

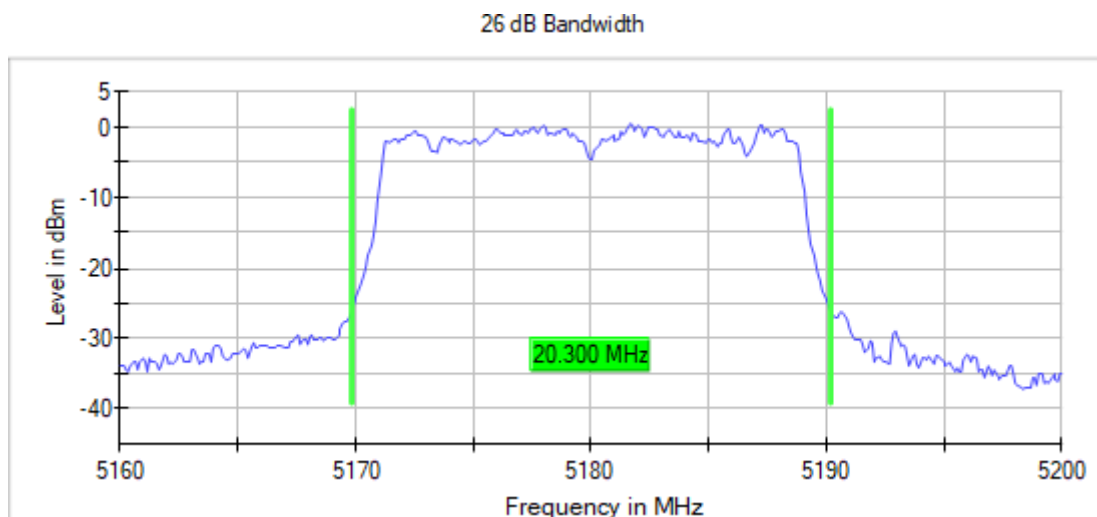
Verdict

Pass

Attachments

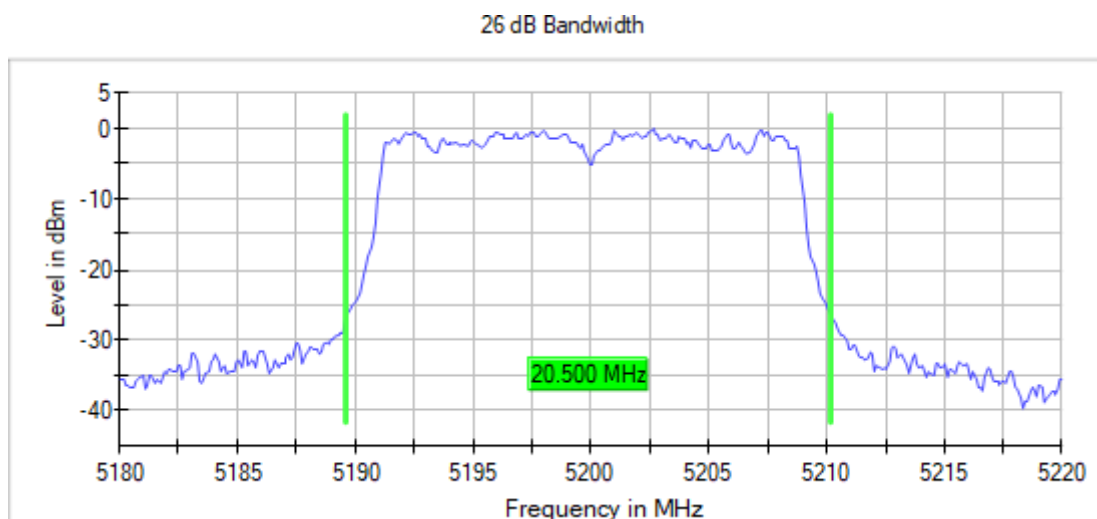
Frequency MHz = 5180.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



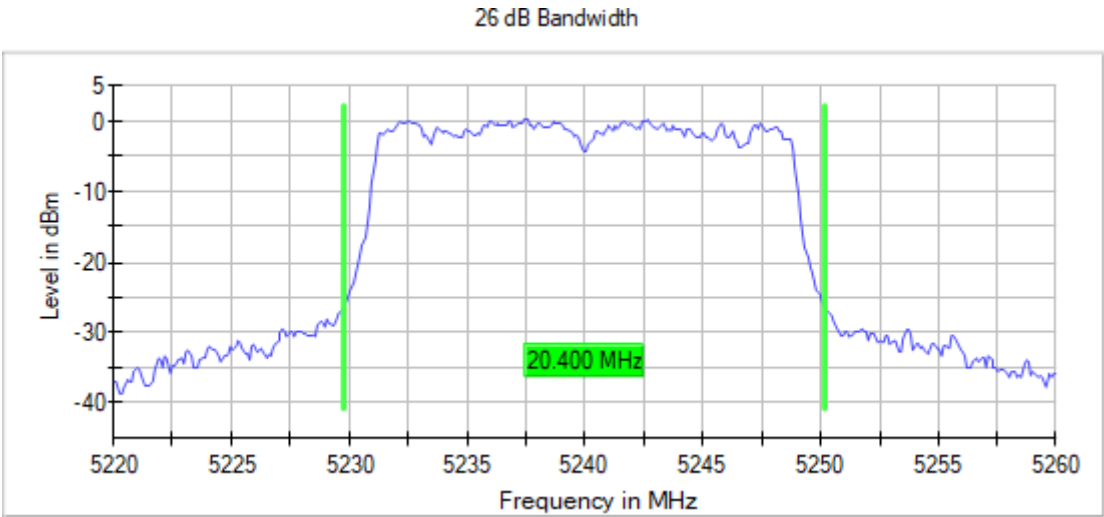
Frequency MHz = 5200.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



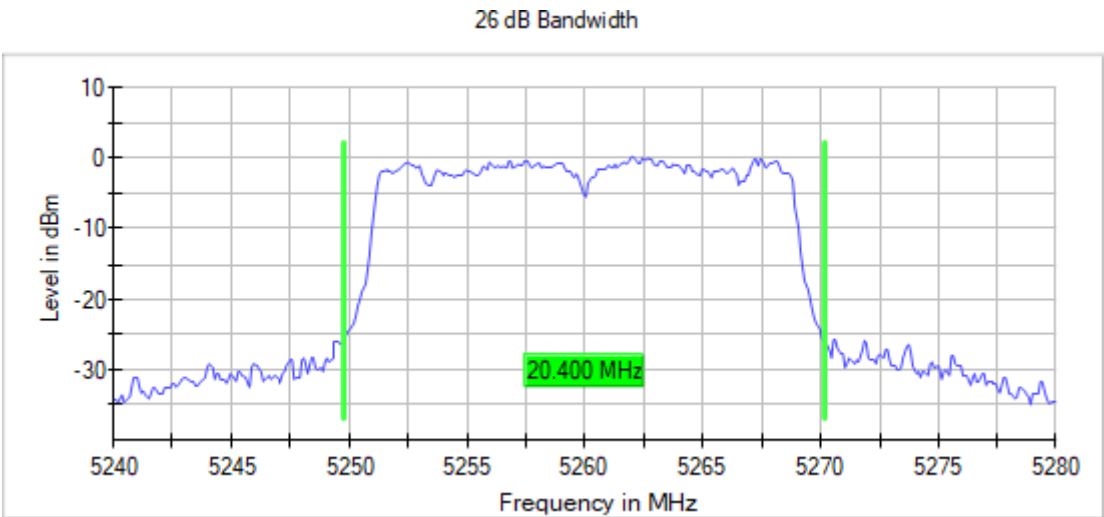
Frequency MHz = 5240.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



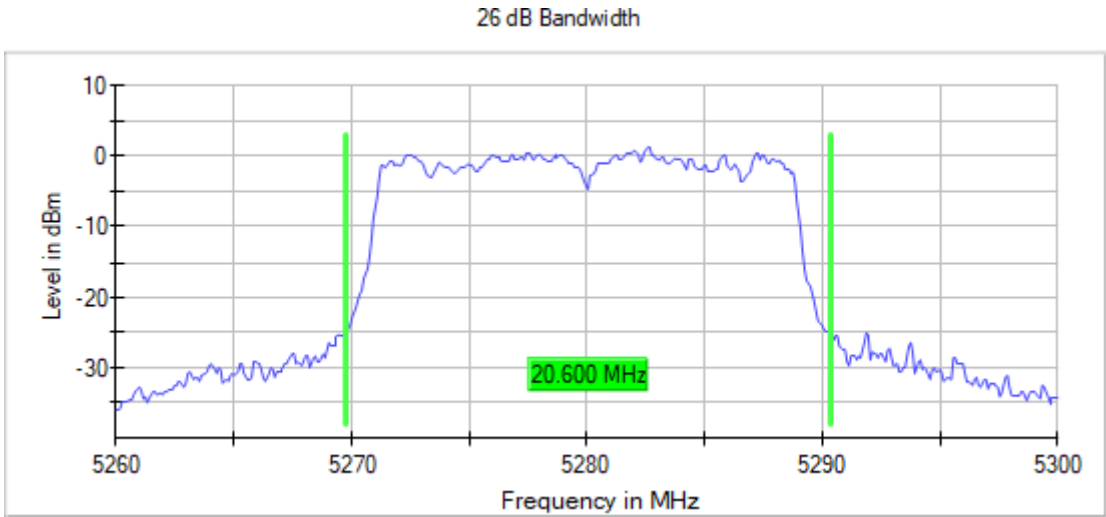
Frequency MHz = 5260.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



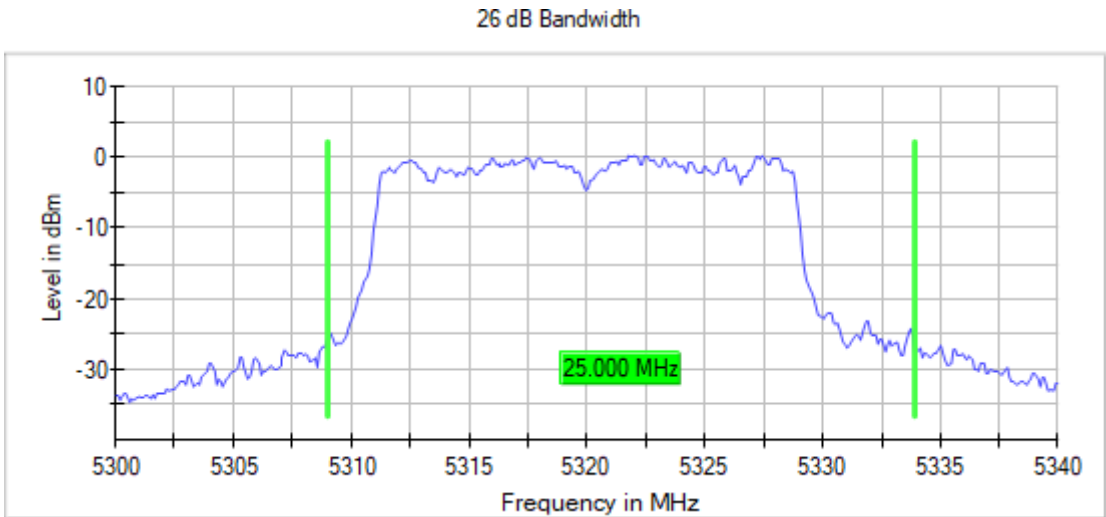
Frequency MHz = 5280.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



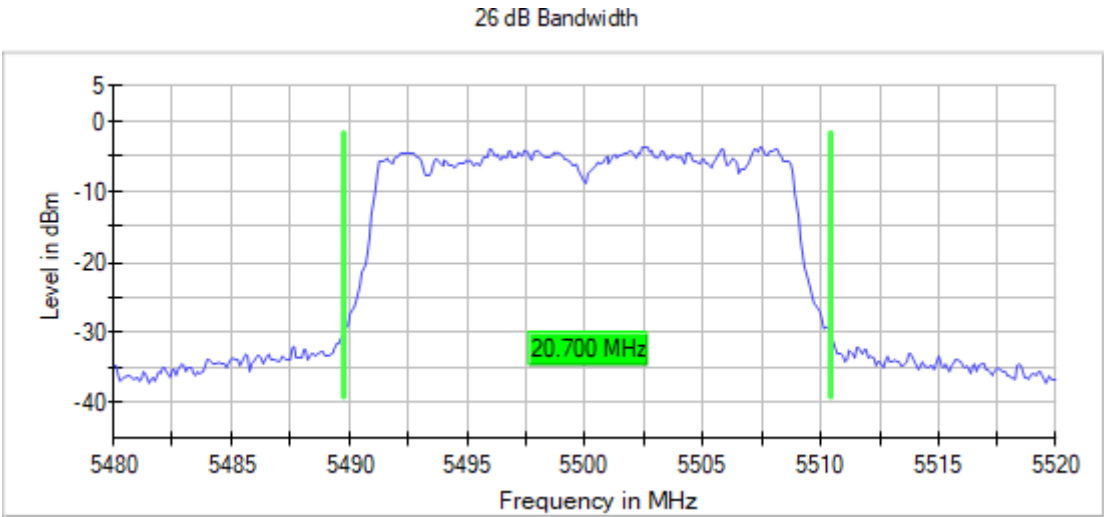
Frequency MHz = 5320.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5500.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:



Frequency MHz = 5580.00000, Modulation = 802.11n HT20 (OFDM MCS7), Number of Transmission Chains = 1

Images:

