

ISED CABid: ES1909

Lab. Company Number: 4621A

Test Report No:

85235RRF.002

Test Report

USA FCC Part 15.407, 15.209

CANADA RSS-247, RSS-Gen

(*) Identification of item tested	Instrumentation cluster with connectivity features for motorcycles.
(*) Trademark	BOSCH
(*) Model and /or type reference	TFTc7inch
Other identification of the product	FCC ID: 2AUXS-TFTC7INCH IC: 25847-TFTC7INCH
(*) Features	CAN, LIN, USB, WLAN, BT, GPS, Galileo, BeiDou, SBAS. HW version: 111 SW version: STICC-5.1.1.SWP14.0-0-22_RTA
(*) Manufacturer	Robert Bosch GmbH Robert-Bosch-Platz 1, 70839 Gerlingen, Germany
Test method requested, standard	USA FCC Part 15.407 (10-1-24) Edition: Unlicensed National Information Infrastructure (U-NII) Devices. General technical requirements. USA FCC Part 15.209 (10-1-24) Edition: Radiated emission limits; general requirements. CANADA RSS-247 Issue 4 (July 2025). CANADA RSS-Gen Issue 5 Amendment 2 (February 2021). Guidance for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices 789033 D02 General U-NII Test Procedures New Rules v02r01 dated Dec 14, 2017. ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024: American National Standard for Testing Unlicensed Wireless Devices.
Summary	IN COMPLIANCE
Approved by (name / position & signature)	José Manuel Gómez Galván EMC Consumer & RF Lab. Manager  Firmado digitalmente por 53680346W JOSE MANUEL GOMEZ (C:A29507456) Fecha: 2026.06.30 07:36:00 +02'00'
Date of issue	2026-06-30
Report template No	FDT08_27 (*) "Data provided by the client"

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Acronyms

Acronym ID	Acronym Description
Avg Power	Maximum Average Conducted Output Power
DC	Duty Cycle
Detector	Detector used
Ebw	Emission Bandwidth
Freq	Frequency
Freq Rng	Frequency Range
MP	Measurement Point
Max EIRP	Maximum Burst EIRP
Mod	Modulation
Occ Ch BW	Occupied Channel Bandwidth
Operation Band	Operation Band
PSD	Power Spectral Density
Pol	Polarization
Port	Active Port
RU	Resource Unit
TPC	TPC
Unwanted Freq	Unwanted Emissions Frequency
Unwanted Lvl	Unwanted Emissions Level

Competences and guarantees

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DEKRA Testing and Certification S.A.U. is an FCC-recognized accredited testing laboratory with appropriate scope of accreditation that covers the performed tests in this report.

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Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Testing and Certification S.A.U. internal document PODT000.

The total uncertainty of the measurement system for the radiated emissions of EUT from 30 MHz to 1 GHz is:
Measurement uncertainty $\leq \pm 5,35$ dB with factor ($k = 2$).

The total uncertainty of the measurement system for the radiated emissions of EUT from 1 GHz to 17 GHz is:
Measurement uncertainty $\leq \pm 4,32$ dB with factor ($k = 2$).

The total uncertainty of the measurement system for the radiated emissions of EUT from 17 GHz to 40 GHz is:
Measurement uncertainty $\leq \pm 5,55$ dB with factor ($k = 2$).

The total uncertainty of the measurement system for the conducted testing of EUT is:

RF Average Output Power: Measurement uncertainty $\leq \pm 2,01$ dB

Duty Cycle: Measurement uncertainty $\leq \pm 0,84$ ms

Power Spectral Density: Measurement uncertainty $\leq \pm 2,01$ dB

Occupied/26 dBc Bandwidth: Measurement uncertainty

$\leq \pm 57,76$ kHz for BW 20MHz;

$\leq \pm 115,53$ kHz for BW 40MHz; and

$\leq \pm 231,06$ kHz for BW 80MHz.

6 dB Bandwidth: Measurement uncertainty

$\leq \pm 34,67$ kHz for BW 20MHz;

$\leq \pm 46,22$ kHz for BW 40MHz; and

$\leq \pm 80,90$ kHz for BW 80MHz.

Conducted Band-edge spurious emissions: Measurement uncertainty $\leq \pm 2,57$ dB

DFS Channel closing & Move time: Measurement uncertainty $\leq \pm 0,84$ ms

DFS Detection Threshold Level: Measurement uncertainty $\leq \pm 1,81$ 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", "Manufacturer").
2. The sample consists of a Instrumentation cluster with connectivity features for motorcycles. The instrumentation cluster is a device for motorcycle vehicles that performs speed-ometer and odometer functions, and has integrated connectivity and navigation functions. Only for use on motorcycles. • Unit with display functions HMI and hard tell-tales (LEDs). • Linux-based Software for Connectivity and Autosar Based Software for Vehicle Domain. • Connectivity with vehicle through o CAN, LIN • Connectivity with user through o USB, WLAN, BT • Smartphone integration • Navigation and localization system (GPS, Galileo, BeiDou, SBAS, ...) • Switched digital output loads • Analog voltage inputs.

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results. The laboratory is not responsible for such information and it is not covered by accreditation.

Usage of samples

Samples undergoing test have been selected by: The client.

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/01	85235_31.1	Instrumentation cluster with connectivity features for motorcycles	TFTc7inch	25420005176	2026-05-06	Element Under Test
S/01	85235_10.1	EMC USB-Adapter	-	2500108-007	2026-01-29	Auxiliary Element
S/01	85235_11.1	USB-USB Adapter	-	-	2026-01-29	Auxiliary Element
S/01	85235_12.1	Powercord	-	-	-	Auxiliary Element
S/01	85235_13.1	USB Cable	-	-	2026-01-29	Auxiliary Element
S/01	85235_14.1	Ethernet Cable	-	-	2026-01-29	Auxiliary Element
S/01	85235_15.1	Ethernet Cable	-	-	2026-01-29	Auxiliary Element
S/01	85235_16.1	D-Link	-	-	2026-01-29	Auxiliary Element
S/01	85235_17.1	D-Link	-	-	2026-01-29	Auxiliary Element
S/01	85235_18.1	USB - SMA Adapter	-	-	2026-01-29	Auxiliary Element
S/01	85235_19.1	Antenna	-	-	2026-01-29	Auxiliary Element
S/01	85235_20.1	USB - SMA Adapter	-	-	2026-01-29	Auxiliary Element

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/01	85235_21.1	Antenna	-	-	2026-01-29	Auxiliary Element
S/01	85235_22.1	USB - SMA Adapter	-	-	2026-01-29	Auxiliary Element
S/01	85235_23.1	Antenna	-	-	2026-01-29	Auxiliary Element
S/01	85235_24.1	VGA -USB Adaotor	-	-	2026-01-29	Auxiliary Element
S/01	85235_25.1	Bag with SMA Adapter (6)	-	-	2026-01-29	Auxiliary Element
S/01	85235_3.1	AC/DC	-	-	2026-01-29	Auxiliary Element
S/01	85235_4.1	AC/DC	-	-	2026-01-29	Auxiliary Element
S/01	85235_5.1	Harness	-	-	2026-01-29	Auxiliary Element
S/01	85235_6.1	VGA - VGA Cable	-	-	2026-01-29	Auxiliary Element
S/01	85235_7.1	HUB 10 Ports	-	-	2026-01-29	Auxiliary Element
S/01	85235_8.1	Kvaser	-	012674	2026-01-29	Auxiliary Element
S/01	85235_9.1	Raspberry JOY-it	-	-	2026-01-29	Auxiliary Element
S/02	85235_32.1	Instrumentation cluster with connectivity features for motorcycles	TFTc7inch	-	2026-05-06	Element Under Test
S/02	85235_10.1	EMC USB-Adapter	-	2500108-007	2026-01-29	Auxiliary Element
S/02	85235_11.1	USB-USB Adapter	-	-	2026-01-29	Auxiliary Element
S/02	85235_12.1	Powercord	-	-	2026-01-29	Auxiliary Element
S/02	85235_13.1	USB Cable	-	-	2026-01-29	Auxiliary Element
S/02	85235_14.1	Ethernet Cable	-	-	2026-01-29	Auxiliary Element
S/02	85235_15.1	Ethernet Cable	-	-	2026-01-29	Auxiliary Element
S/02	85235_16.1	D-Link	-	-	2026-01-29	Auxiliary Element
S/02	85235_17.1	D-Link	-	-	2026-01-29	Auxiliary Element
S/02	85235_18.1	USB - SMA Adapter	-	-	2026-01-29	Auxiliary Element
S/02	85235_19.1	Antenna	-	-	2026-01-29	Auxiliary Element

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/02	85235_20.1	USB - SMA Adapter	-	-	2026-01-29	Auxiliary Element
S/02	85235_21.1	Antenna	-	-	2026-01-29	Auxiliary Element
S/02	85235_22.1	USB - SMA Adapter	-	-	2026-01-29	Auxiliary Element
S/02	85235_23.1	Antenna	-	-	2026-01-29	Auxiliary Element
S/02	85235_24.1	VGA -USB Adaptor	-	-	2026-01-29	Auxiliary Element
S/02	85235_25.1	Bag with SMA Adapter (6)	-	-	2026-01-29	Auxiliary Element
S/02	85235_3.1	AC/DC	-	-	2026-01-29	Auxiliary Element
S/02	85235_4.1	AC/DC	-	-	2026-01-29	Auxiliary Element
S/02	85235_5.1	Harness	-	-	2026-01-29	Auxiliary Element
S/02	85235_6.1	VGA - VGA Cable	-	-	2026-01-29	Auxiliary Element
S/02	85235_7.1	HUB 10 Ports	-	-	2026-01-29	Auxiliary Element
S/02	85235_8.1	Kvaser	-	012674	2026-01-29	Auxiliary Element
S/02	85235_9.1	Raspberry JOY-it	-	-	2026-01-29	Auxiliary Element

Notes referenced to samples during the project:

Id	Type
S/01	Radiated tests.
S/02	Conducted tests.

Test sample description

Ports..... :	Port name and description	Cable					
		Specified max length [m]	Attached during test	Shielded			
	Wifi	0,1	[X]	[]			
	BT Smartphone	0,1	[X]	[]			
	BT Headset	0,1	[X]	[]			
	GNSS	0,1	[X]	[]			
	Main connector	2	[X]	[]			
.....			[]			[]	
Supplementary information to the ports..... :							
Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	[]	AC:	[]	[]	[]	[]	[]
	[]	AC:	[]	[]	[]	[]	[]
	[X]	DC: 12 V					
	[]	DC:					
Rated Power							
Clock frequencies..... :							
Other parameters							
Software version	STICC-5.1.1.SWP14.0-0-22_RTA						
Hardware version	111						
Dimensions in cm (W x H x D)							
Mounting position	[]	Table top equipment					
	[]	Wall/Ceiling mounted equipment					
	[]	Floor standing equipment					
	[]	Hand-held equipment					
	[]	Other:					
Modules/parts..... :	Module/parts of test item		Type		Manufacturer		

			
			
			
			
Accessories (not part of the test item)	Description	Type	Manufacturer
			
			
			
			
			
			
Documents as provided by the applicant	Description	File name	Issue date
			
			
			
			

Identification of the client

Robert Bosch GmbH
Robert-Bosch-Platz 1, 70839 Gerlingen, Germany

Testing period and place

Test Location	DEKRA TESTING AND CERTIFICATION S.A.U. C/ Margarita Salas Boulevard, 26 - Parque Tecnológico de Andalucía; 29590 Campanillas (Málaga) (Location D)
Date (start)	2026-05-13
Date (finish)	2026-05-19

Document history

Report number	Date	Description
85235RRF.002	2026-06-30	First release.

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 semianechoic 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: Victoria Olmedo Villalba and Álvaro Borrego Robles.

Used instrumentation:

Control No.	Equipment	Model	Manufacturer	Next Calibration
07700	ATTENUATOR 10DB, 2W, DC-26.5GHZ	TWTSMAG2	TECHNIWAVE	2020-12-16
10304	EMI TEST RECEIVER 2Hz-44GHZ	ESW44	ROHDE AND SCHWARZ	2026-10-01
07040	EXTENSION FOR OPEN SWITCH UNIT UP TO 40GHZ	OSP-B157Wx	ROHDE AND SCHWARZ	2027-08-26
07763	HORN ANTENNA 1-18GHZ	BBHA 9120D	SCHWARZBECK MESS-ELEKTRONIK	2029-03-11
06495	HORN ANTENNA 18-40GHZ	BBHA 9170	SCHWARZBECK	2027-07-11
07862	PRE-AMPLIFIER G>30dB 18-40GHZ	BLMA 1840-3G	BONN ELEKTRONIK	2026-07-09
10574	PRE-AMPLIFIER G>50dB 1-18 GHz	BLMA 0118-M	BONN ELEKTRONIK	2027-04-09
07039	Rohde&Schwarz	OSP-B157W8	ROHDE AND SCHWARZ	2027-08-14
08130	SEMIANECHOIC ABSORBER LINED CHAMBER	P29419	ALBATROSS	--
08134	SHIELDED ROOM	P29419	ALBATROSS PROJECTS GMBH	--
08661	SHIELDED ROOM	-	SIEPEL	--
07794	SIGNAL AND SPECTRUM ANALYZER 10Hz-40GHZ	FSV40	ROHDE AND SCHWARZ	2027-06-10
04848	SOFTWARE FOR EMC/RF TESTING	EMC32	ROHDE AND SCHWARZ	--
07550	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2027-05-05
07549	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2027-05-05
07552	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2027-05-05
07798	WMS32	WMS32	ROHDE AND SCHWARZ	--

Testing verdicts

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

Summary

U-NII-3 Band: 5.725 - 5.85 GHz

FCC PART 15 PARAGRAPH / RSS-247			
Requirement – Test case		Verdict	Remark
FCC 15.407 (a)(3) / RSS-247 7.3.4.3	Transmitter Maximum conducted Output Power	P	
FCC 15.407 (e) / RSS-247 7.3.4.2	6 dB bandwidth.	P	
FCC 15.407 (a)(3) / RSS-247 7.3.4.3	Transmitter Maximum Power Spectral Density	P	
FCC 15.407 (b)(4) / RSS-247 7.3.4.4	Transmitter Band Edge Radiated Emissions	P	
FCC 15.407 (b)(4)(6) / RSS-247 7.3.4.4	Transmitter Out of Band Radiated Emissions	P	
Duty Cycle		P	
99% Occupied Bandwidth		P	
26 dB Emission Bandwidth (EBW)		P	
Supplementary information and remarks: g			
(1) Test not requested.			

Appendix A: Test results for the U-NII-3 Band 5.725 - 5.85 GHz

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<i>RSS-247 7.3.4.2 / FCC 15.407 (e) [6dBw] 6 dB Emission Bandwidth</i>	<i>43</i>
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TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

Vnominal: 12 Vdc
Type of Power Supply: External DC

ANTENNA (*):

Type of Antenna: PCB integrated slot antenna
Maximum Declared Antenna Gain: -1.19 dBi

TEST FREQUENCIES (*):

Technology Tested:	WLAN (IEEE 802.11 a,n,ac,ax) 2x2 / U-NII-3	
	802.11a OFDM 6 Mbit/s SISO	
	802.11 n HT20: MCS0 to MCS23 SISO	
	802.11 n HT40: MCS0 to MCS23 SISO	
	802.11 ac VHT20: MCS0 to MCS9 SISO	
	802.11 ac VHT40: MCS0 to MCS9 SISO	
	802.11 ac VHT80: MCS0 to MCS9 SISO	
Setting of cores / ports:	1	
Beamforming:	No.	
	5725 MHz to 5850 MHz	
Operating Channel Bandwidth:	20 MHz	
Transmission Channels:	Channel	Channel Frequency (MHz)
	Low (149)	5745
	Middle (157)	5785
	High (165)	5825
Operating Channel Bandwidth:	40 MHz	
Transmission Channels:	Channel	Channel Frequency (MHz)
	Low (151)	5755
	High (159)	5795
Operating Channel Bandwidth:	80 MHz	
Transmission Channels:	Single (155)	5775

POWER SETTING (*):

UNII-3:

Channel	Frequency	11a	11n	11ac
149	5745 MHz	11	10	9
157	5785 MHz	11	10	9
165	5825 MHz	11	10	9
151	5755 MHz	11	10	9
159	5795 MHz		10	9
155	5775 MHz		10	9

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/modulations types.

The field strength at the band edges was evaluated for each mode on the lowest and highest channels at the rated power for the channel under test.

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.

The worst cases for testing were identified for output power and spurious levels at the band edges which were selected based on preliminary testing that correspond to next data rates:

- 802.11a OFDM 6 Mbit/s
- 802.11 n HT20: MCS0
- 802.11 n HT40: MCS0
- 802.11 ac VHT20: MCS0
- 802.11 ac VHT40: MCS0
- 802.11 ac VHT80: MCS0

CONDUCTED MEASUREMENTS:

The equipment under test was set up in a shielded room and it is connected to the TS8997 using a low loss RF cable. The reading of the spectrum analyser is corrected taking into account the cable loss.



RADIATED MEASUREMENTS:

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna (Bilog antenna for the range between 30 MHz to 1000 MHz and 1 GHz-17 GHz Double ridge horn antenna) is situated at a distance of 3 m and at a distance of 1.5 m for the frequency range 17 GHz-26 GHz (17 GHz-40 GHz horn antenna).

For radiated emissions in the range 17 GHz-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.

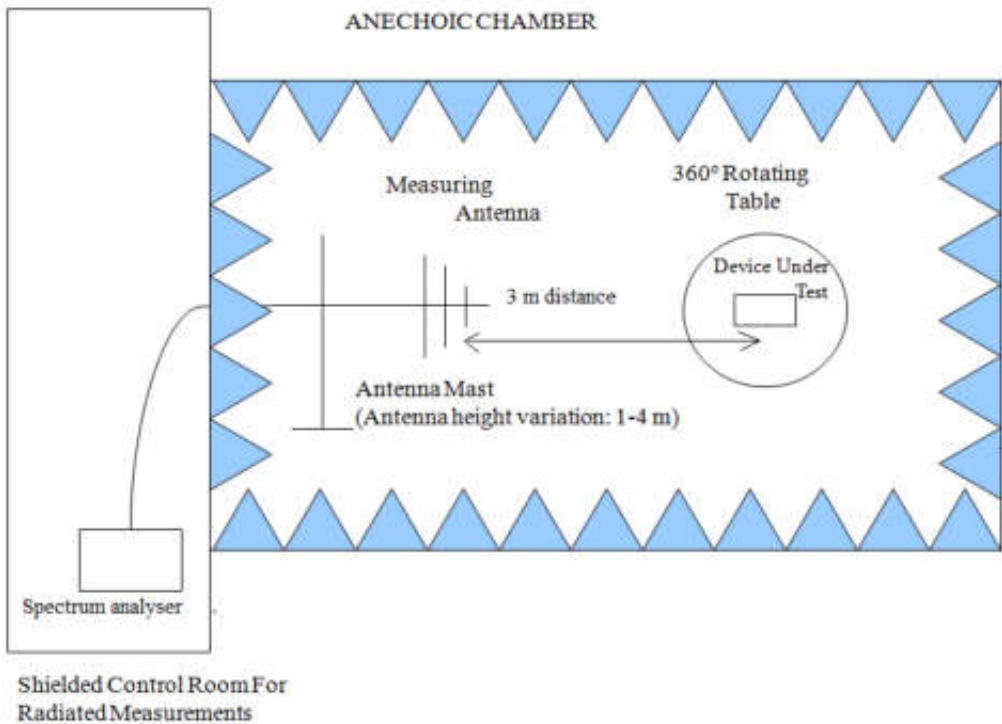
The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height (Bilog antenna and Double ridge horn antenna) was varied from 1 to 4 meters to find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

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

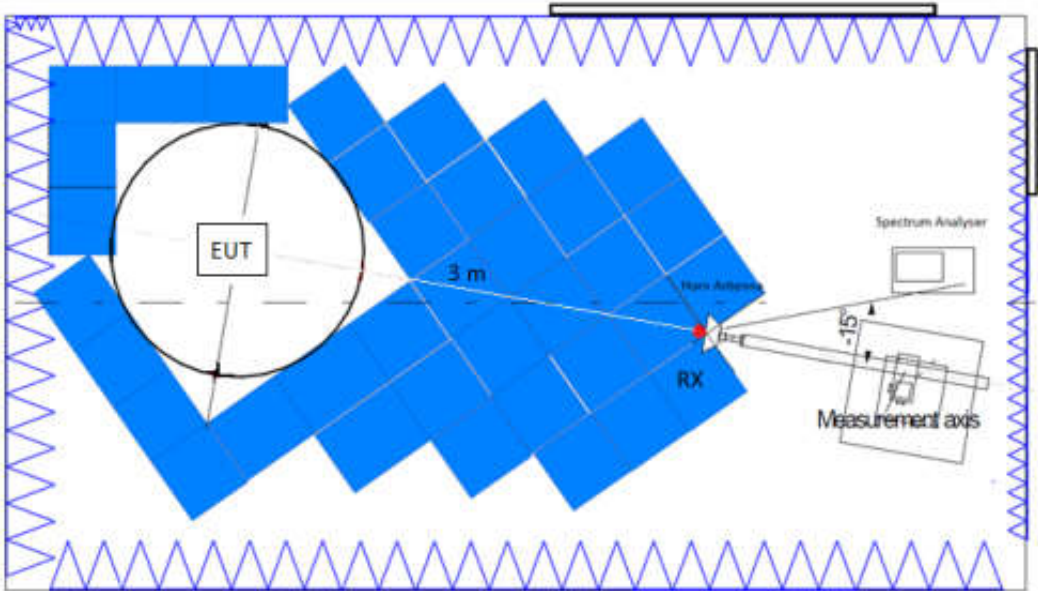
The final measured value, for the given emission, in the tables below incorporates the calibrated antenna factor and cable loss.

A resolution bandwidth/video bandwidth of 100 kHz / 300 kHz was used for frequencies below 1 GHz and 1 MHz / 3 MHz for frequencies above 1 GHz.

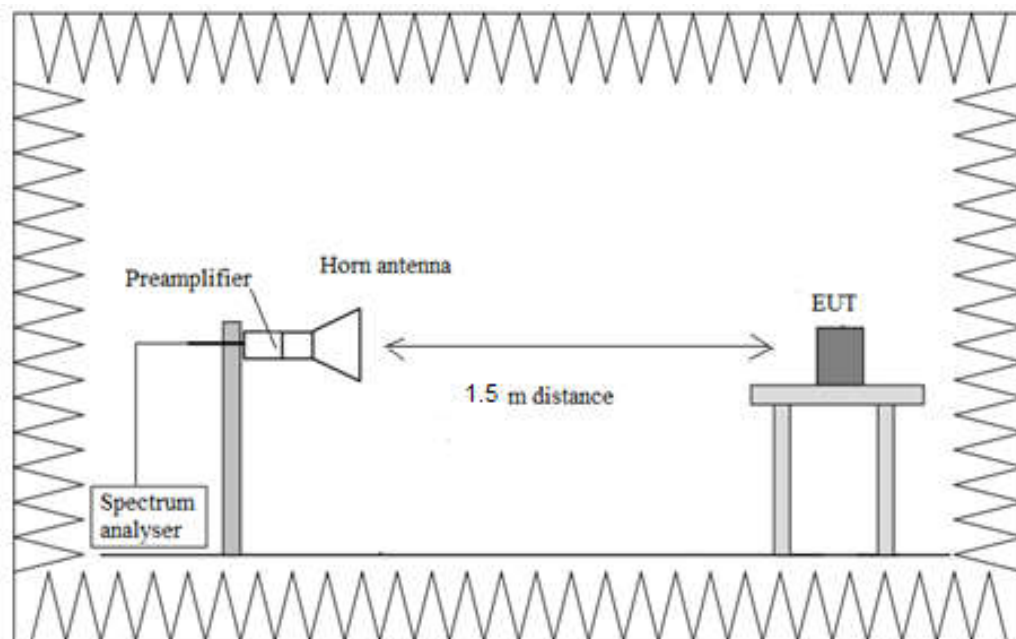
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup $f > 17$ GHz:



SAMPLE CALCULATION

For radiated measurements:

Values measures by the test receiver / analyzer are converted to field strength, in dBuV/m, at the regulatory distance using the following calculation:

$$\text{Unwanted Lvl (dBuV/m)} = \text{Raw Rec (dBuV)} + \text{Preamp (dB)} + \text{Trd Corre. (dB/m)} + \text{SigPath (dB)}$$

Where,

Raw Rec (dBuV): Measured voltage in the receiver / spectrum analyzer in dBuV

Preamp (dB): Path loses due to preamplifier

Trd Corr. (dB/m): Antenna factor in dB/m

SigPath (dB) = Cable loss (dB) – External Gain amplifier (dB) – Distance factor (dB)

Cable loss (dB): Cable loss

External Gain amplifier (dB): Gain from external amplifier (when used)

Distance factor (dB): Distance factor in dB. When measurement distance is different to limit distance

The field strength, calculated by this way is compared with the regulatory limit.

TEST CASES DETAILS

FCC 47 CFR Part 15.407 / RSS-247 / RSS-248

RSS-247 7.3.4.3 / FCC 15.407 (a) (3) [Avcp] Maximum Conducted output power UNII-3

Limits

* **FCC 15.407:** For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

* **RSS-247:** Equipment operating in the band 5725-5850 shall comply with the following power limits: the maximum conducted output power shall not exceed 1 W.

When using transmitting antennas with a directional gain exceeding 6 dBi, 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: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5725, 5850]	1	5745.00000	No	9.35	10.54
		5785.00000		9.14	10.33
		5825.00000		9.18	10.37

Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5725, 5850]	1	5755.00000	No	9.58	10.77
		5795.00000		9.25	10.44

Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5725, 5850]	1	5745.00000	No	9.49	10.68
		5785.00000		9.10	10.29
		5825.00000		9.66	10.85

Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5725, 5850]	1	5745.00000	No	9.43	10.62
		5785.00000		9.13	10.32
		5825.00000		9.48	10.67

Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5725, 5850]	1	5755.00000	No	9.50	10.69
		5795.00000		9.48	10.67

Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5725, 5850]	1	5775.00000	No	9.08	10.27

Verdict

Pass

RSS-247 7.3.4.3 / FCC 15.407 (a) (3) [Psd] Transmitter Maximum Power Spectral Density UNII-3

Limits

* FCC 15.407: For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

* RSS-247: Equipment operating in the band 5725-5850 shall comply with the following power limits: the maximum output power spectral density shall not exceed 30 dBm/500 kHz.

When using transmitting antennas with a directional gain exceeding 6 dBi, 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: 802.11n HT20 (OFDM MCS0)

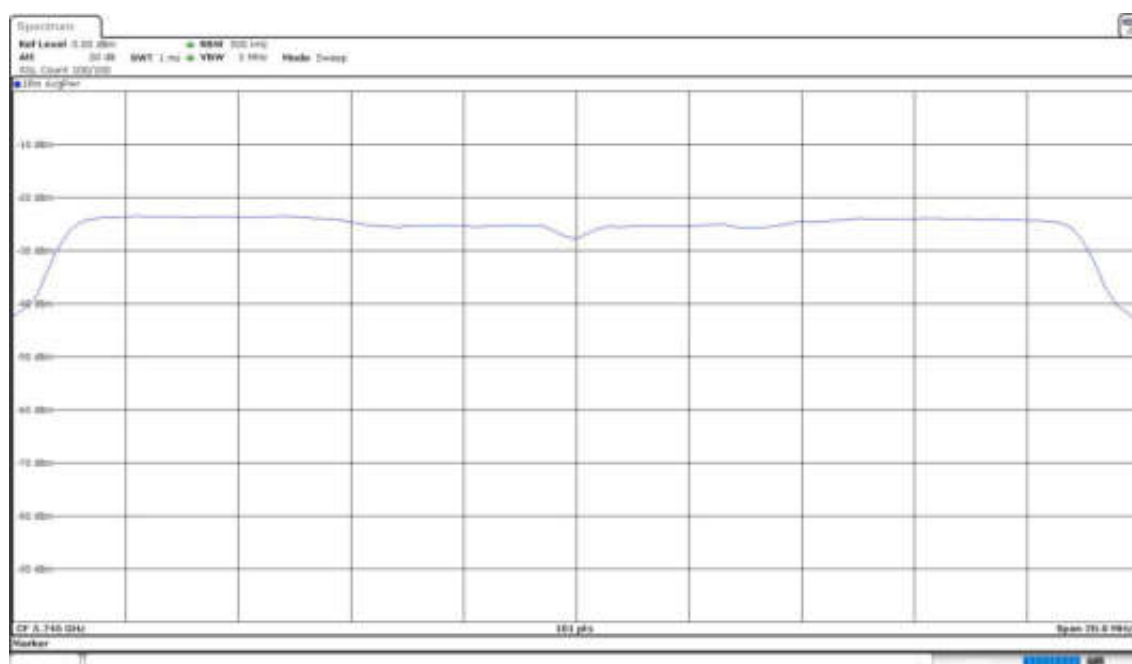
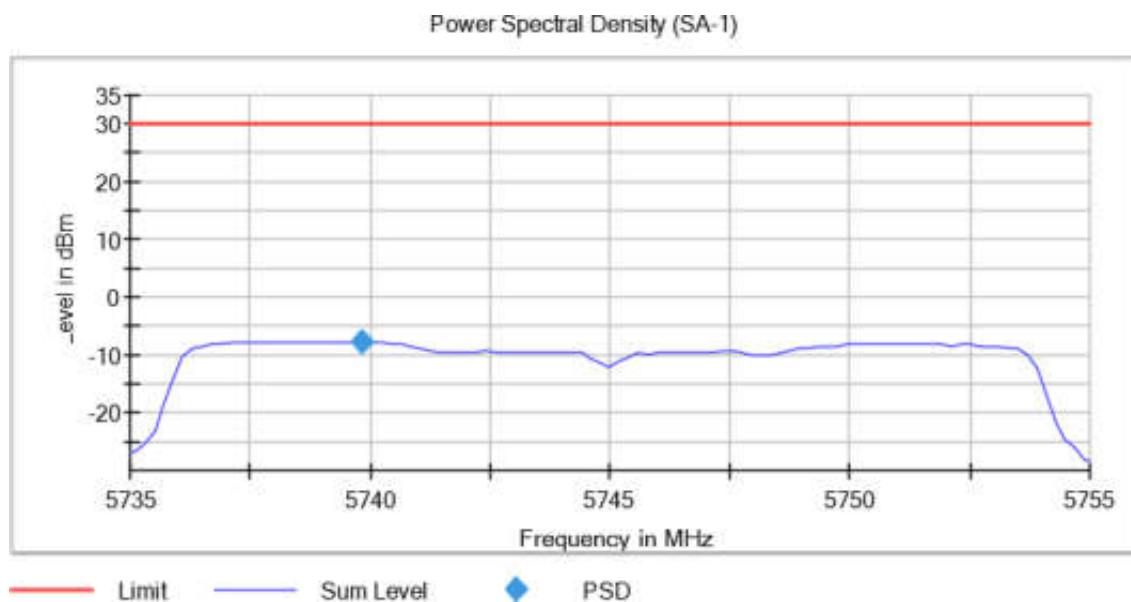
Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5725, 5850]	1	5745.00000	No	5739.851485	-7.79
		5785.00000		5791.336634	-7.92
		5825.00000		5817.475248	-7.84

Verdict

Pass

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5745.00000 Modulation = 802.11n HT20 (OFDM MCS0)
TPC = No

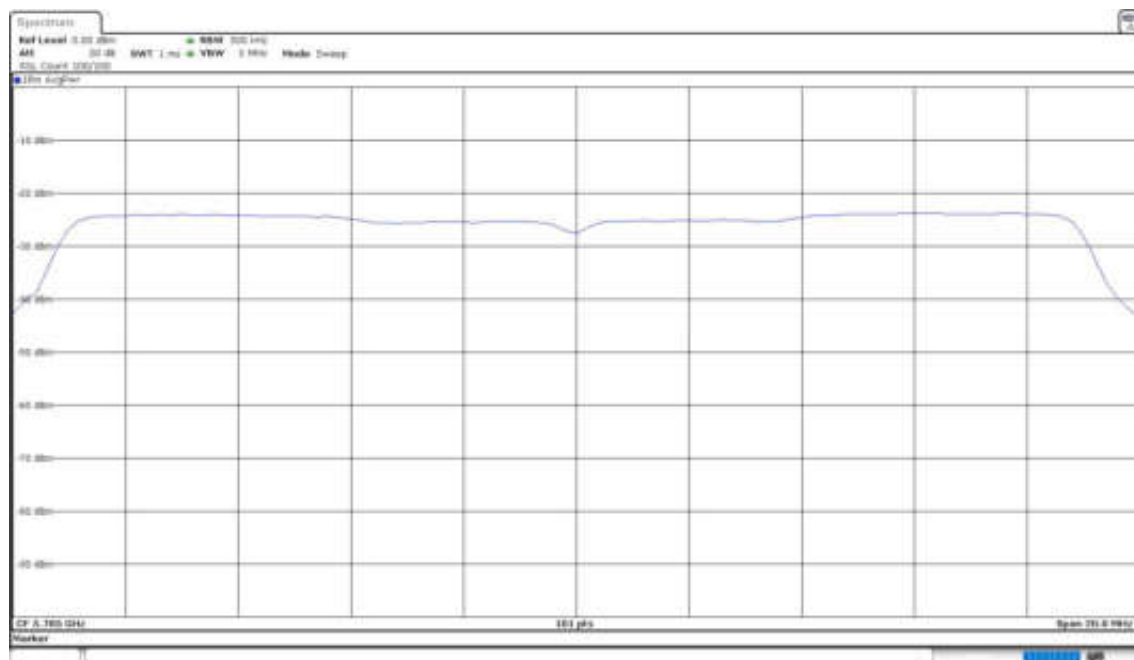
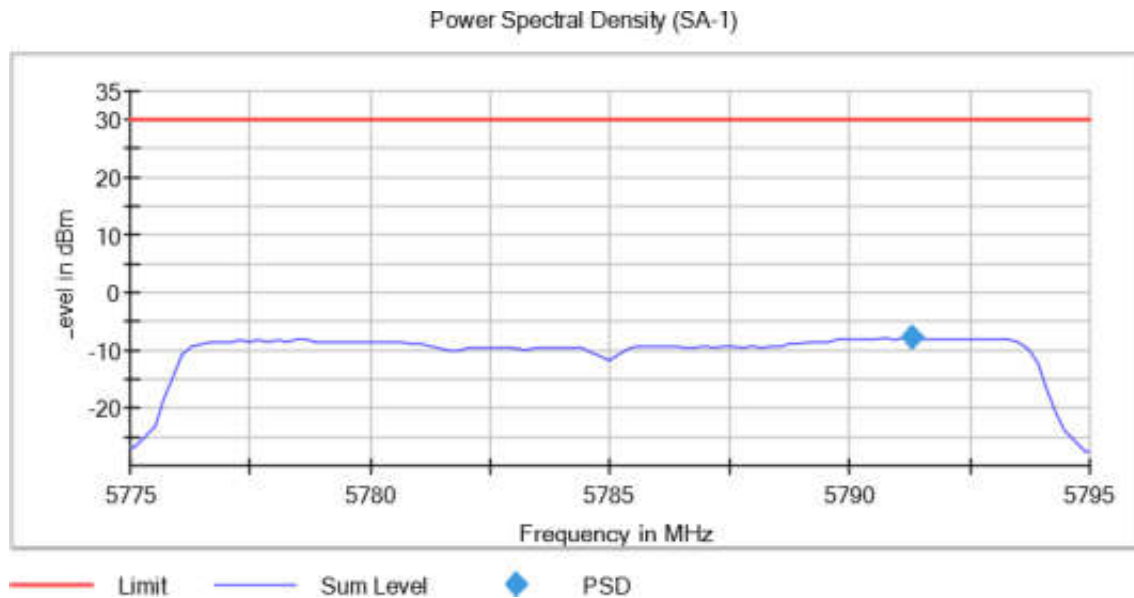


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5785.00000 Modulation = 802.11n HT20 (OFDM MCS0)

TPC = No

Images:

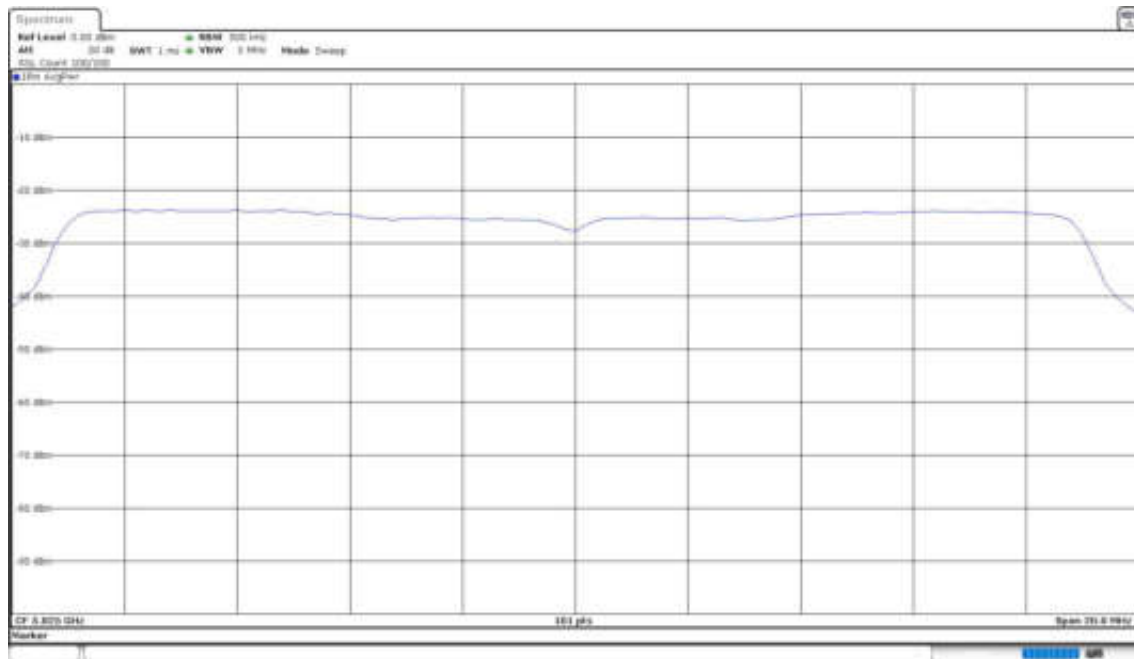
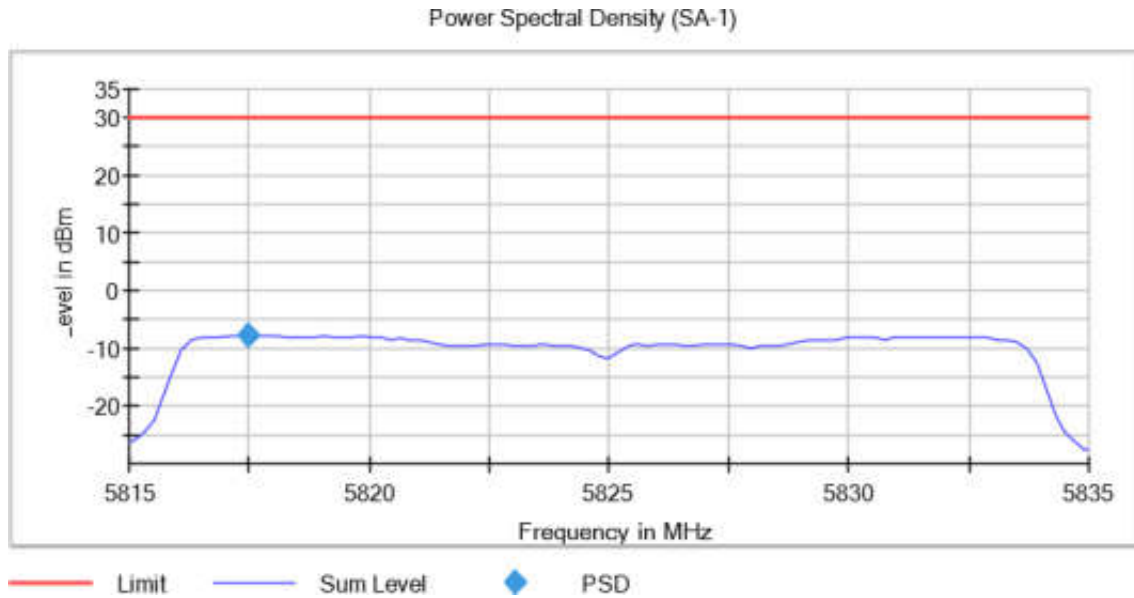


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5825.00000 Modulation = 802.11n HT20 (OFDM MCS0)

TPC = No

Images:



Modulation: 802.11n HT40 (OFDM MCS0)

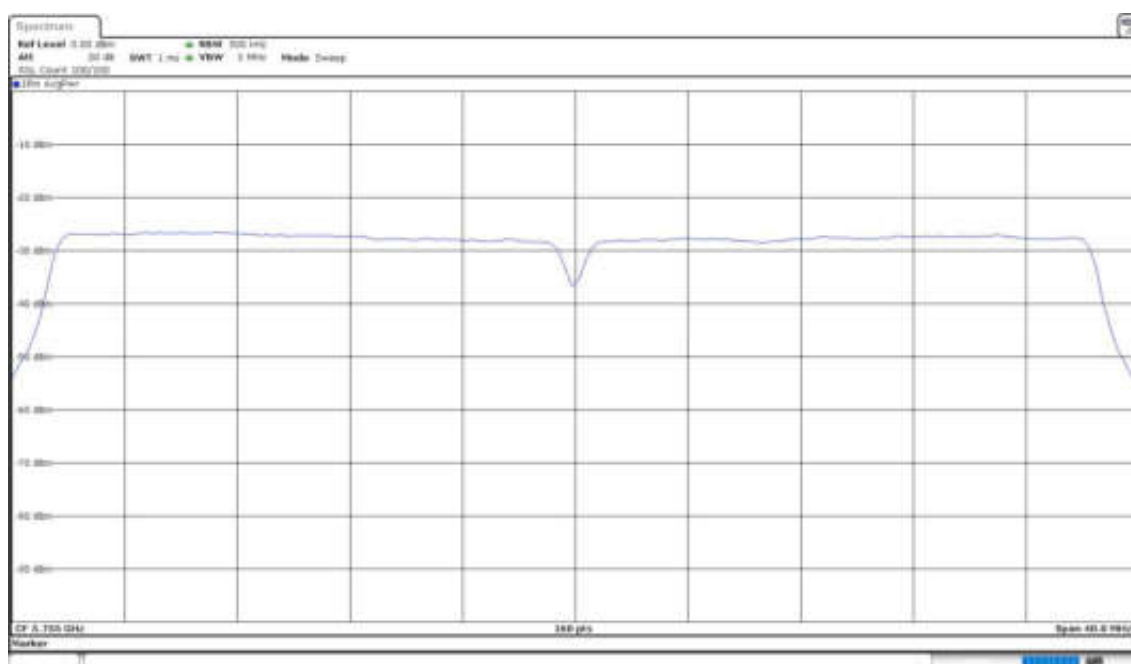
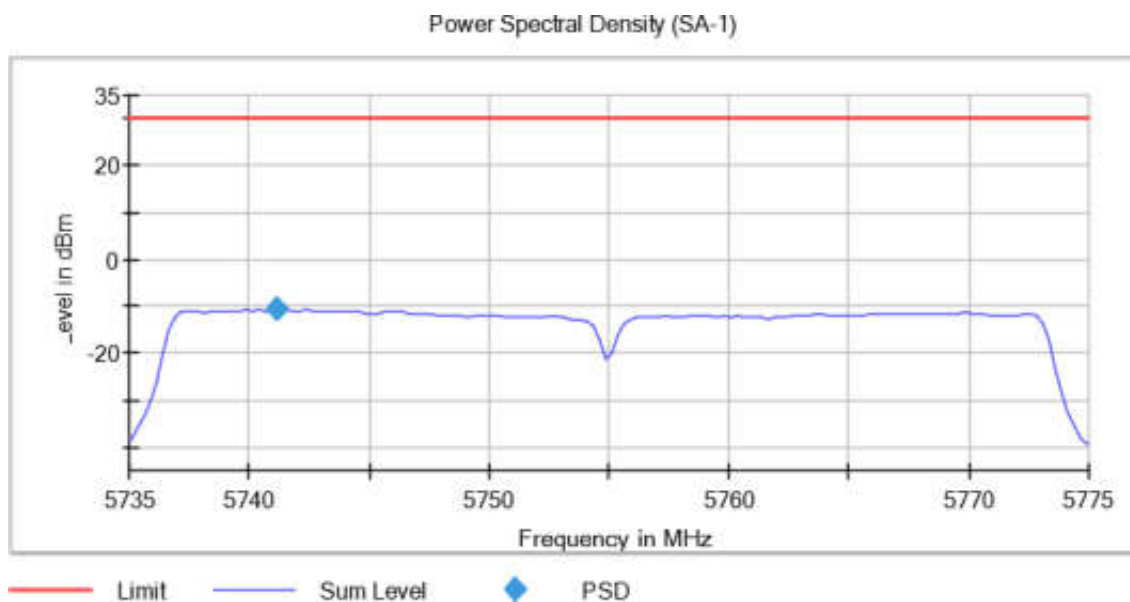
Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5725, 5850]	1	5755.00000	No	5741.125000	-10.75
		5795.00000		5806.125000	-11.31

Verdict

Pass

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5755.00000 Modulation = 802.11n HT40 (OFDM MCS0)
TPC = No

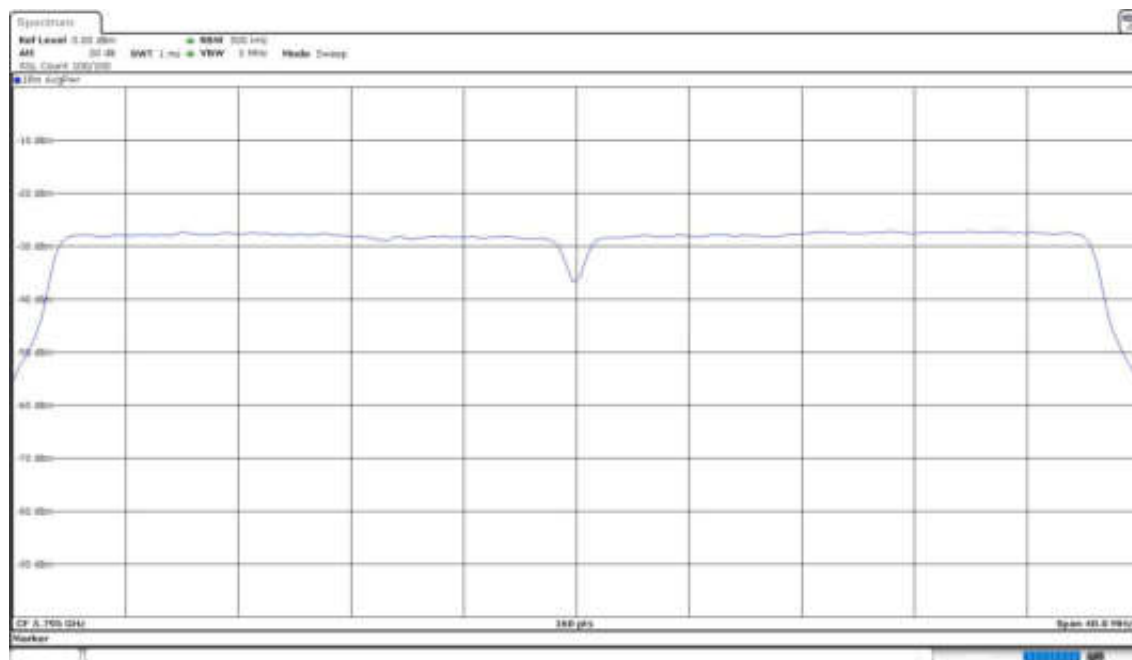
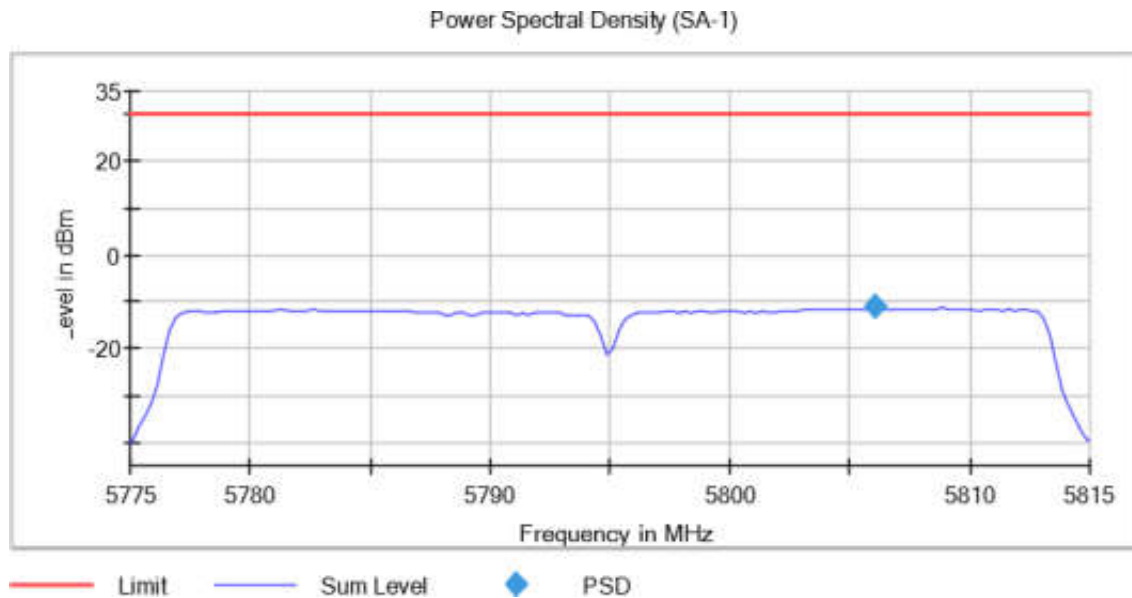


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5795.00000 Modulation = 802.11n HT40 (OFDM MCS0)

TPC = No

Images:



Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5725, 5850]	1	5745.00000	No	5737.277228	-7.62
		5785.00000		5791.336634	-7.67
		5825.00000		5817.475248	-7.51

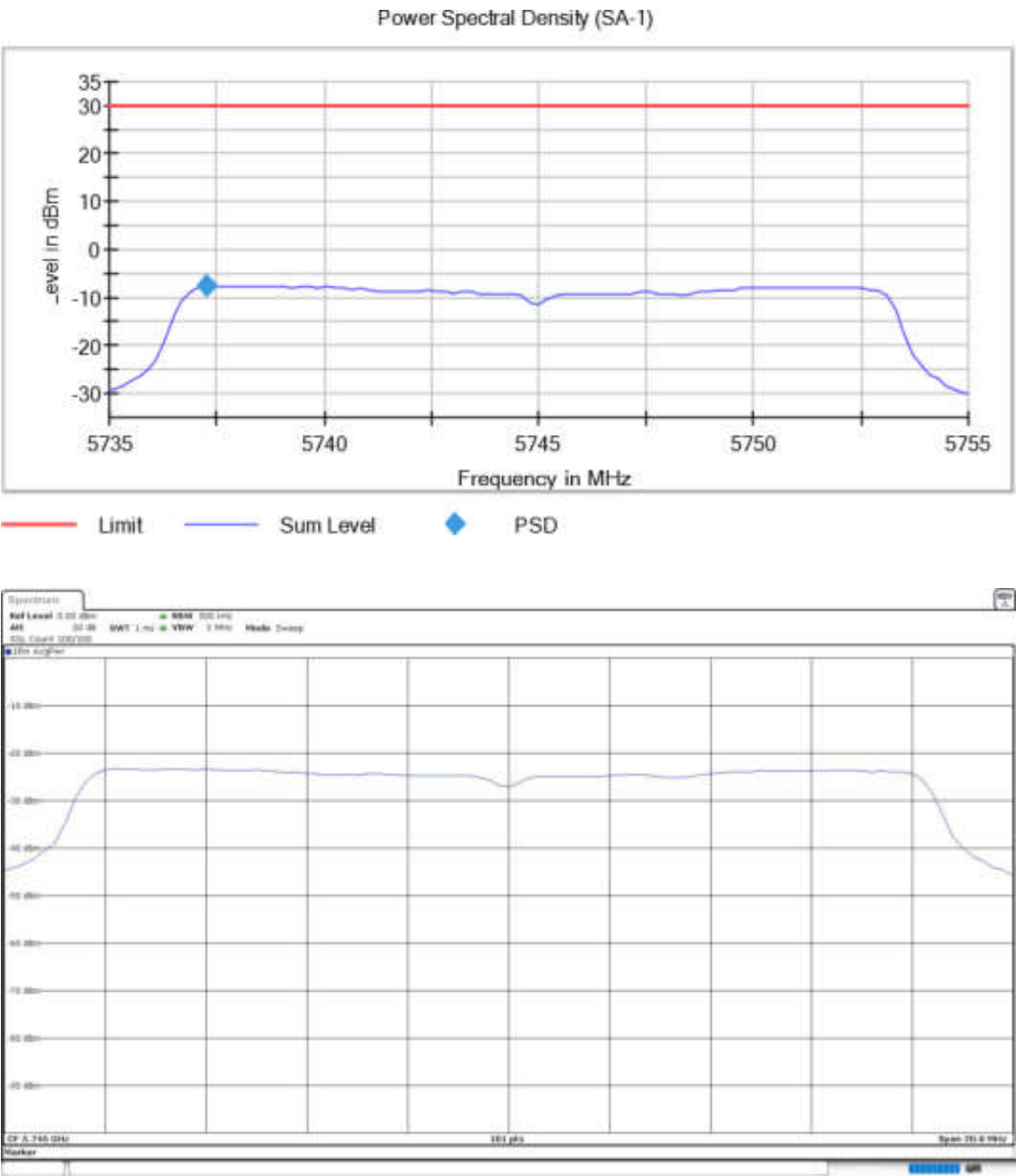
Verdict

Pass

Attachments

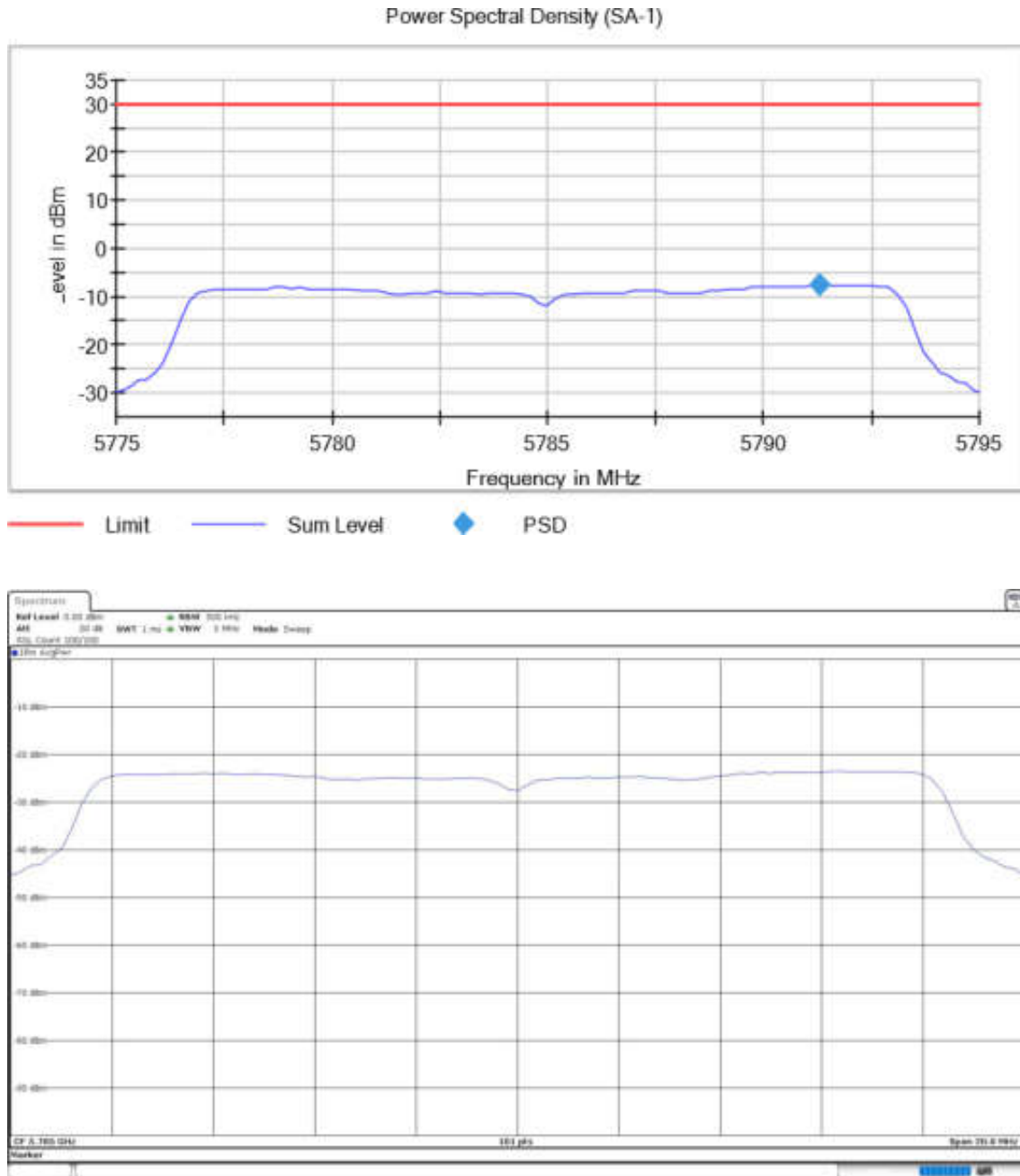
Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5745.00000 Modulation = 802.11a (OFDM 6 Mbit/s)
TPC = No

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
 Frequency MHz = 5785.00000 Modulation = 802.11a (OFDM 6 Mbit/s)
 TPC = No

Images:

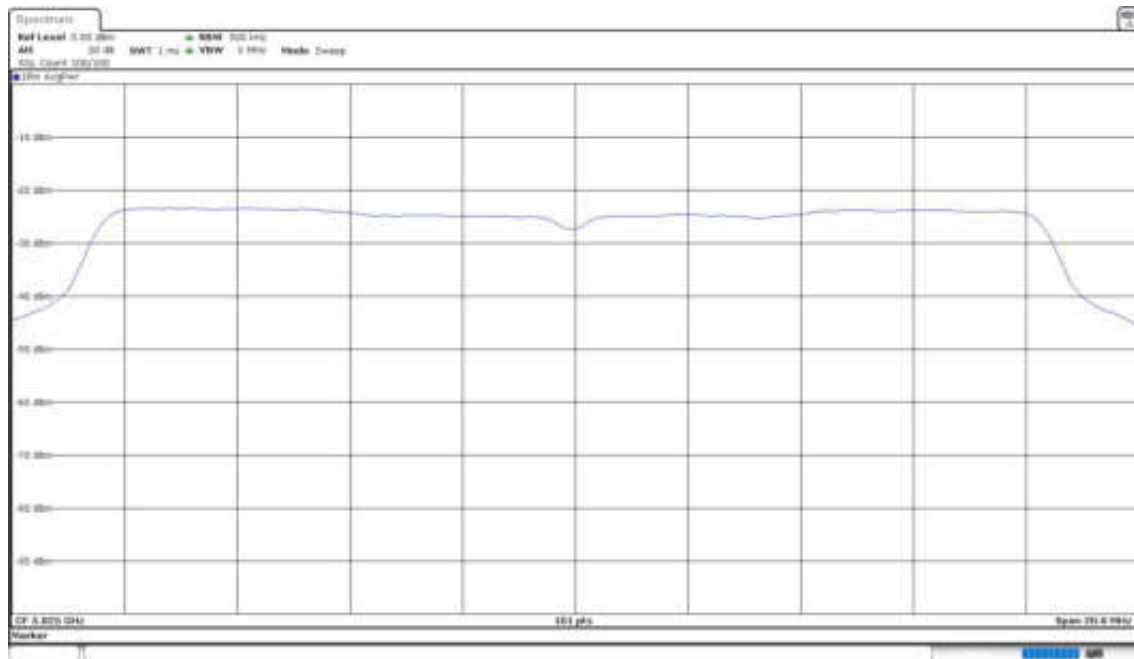
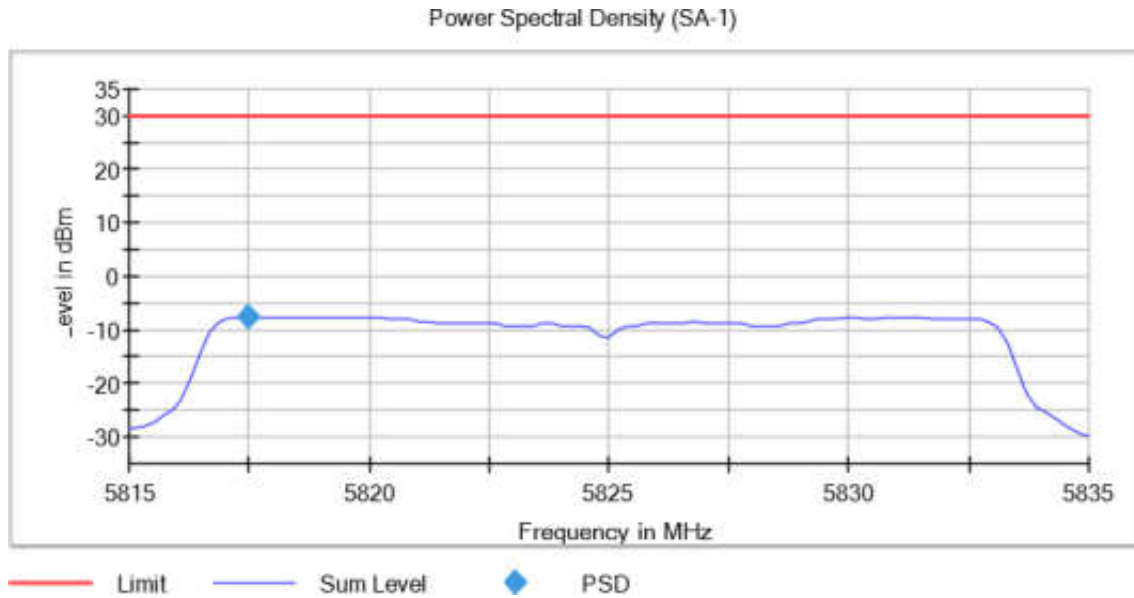


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5825.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

TPC = No

Images:



Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5725, 5850]	1	5745.00000	No	5738.861386	-7.70
		5785.00000		5792.524752	-7.89
		5825.00000		5818.663366	-7.87

Verdict

Pass

Attachments

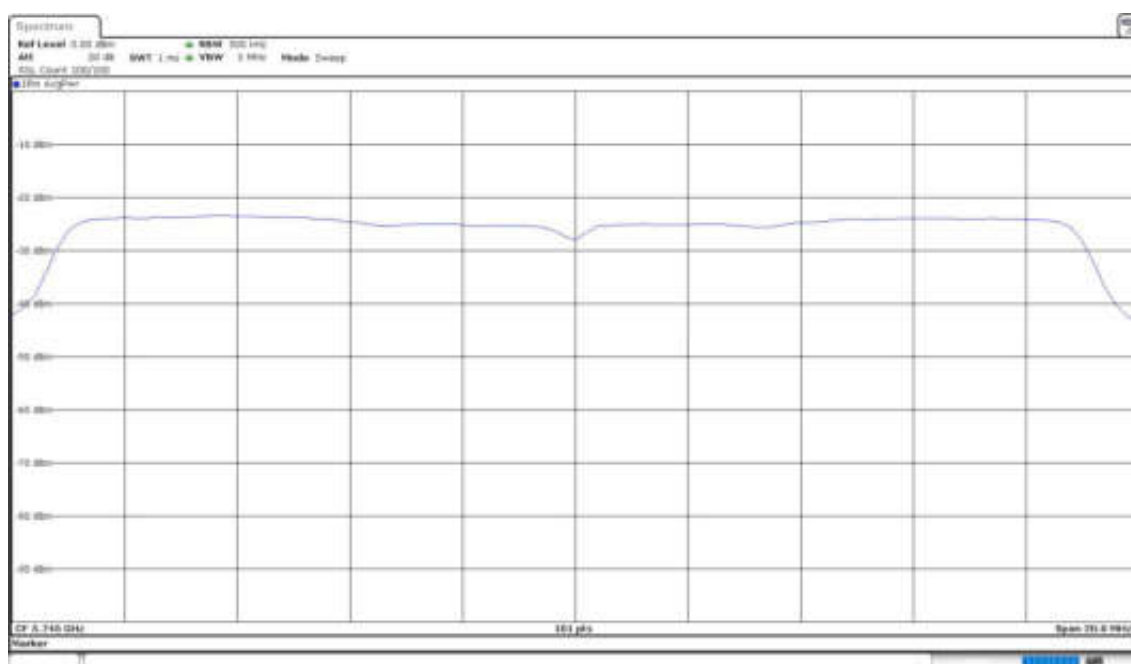
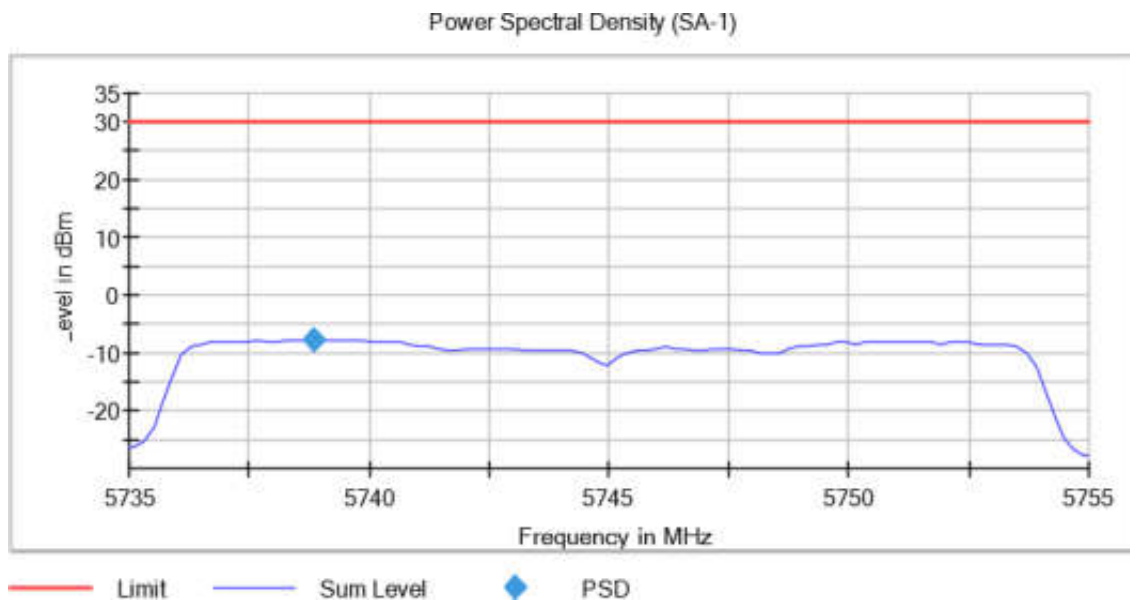
Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5745.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

TPC = No

Images:



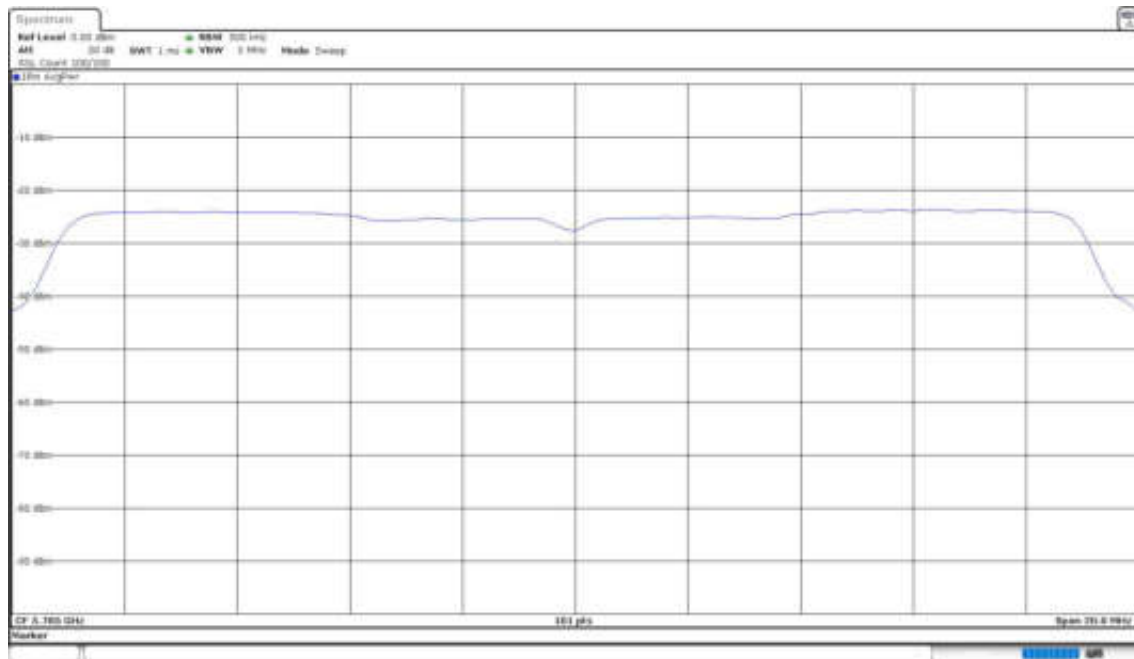
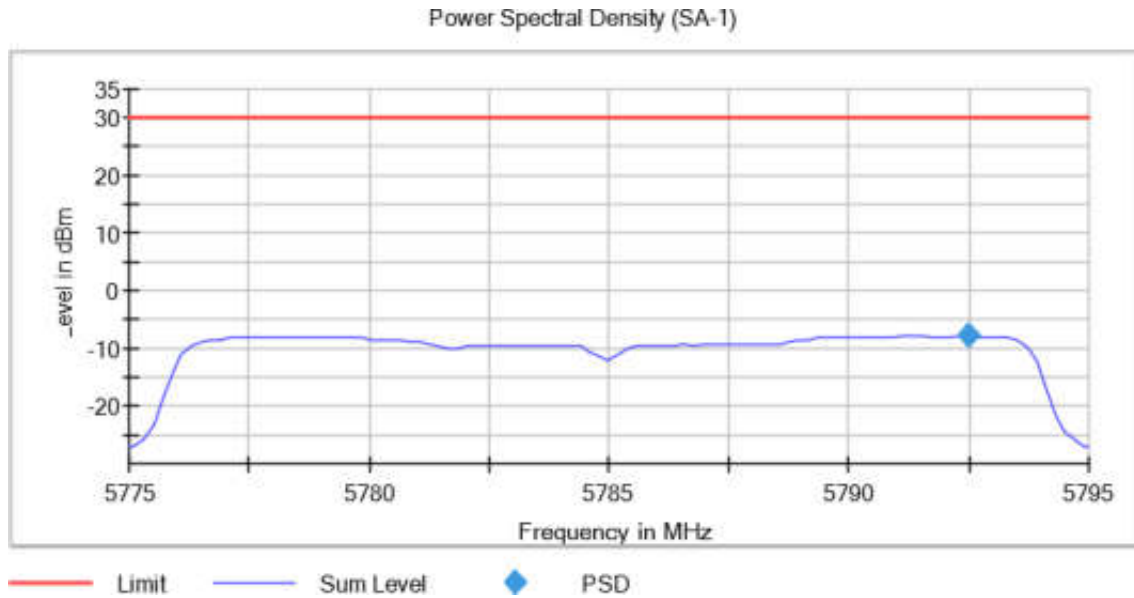
Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5785.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

TPC = No

Images:

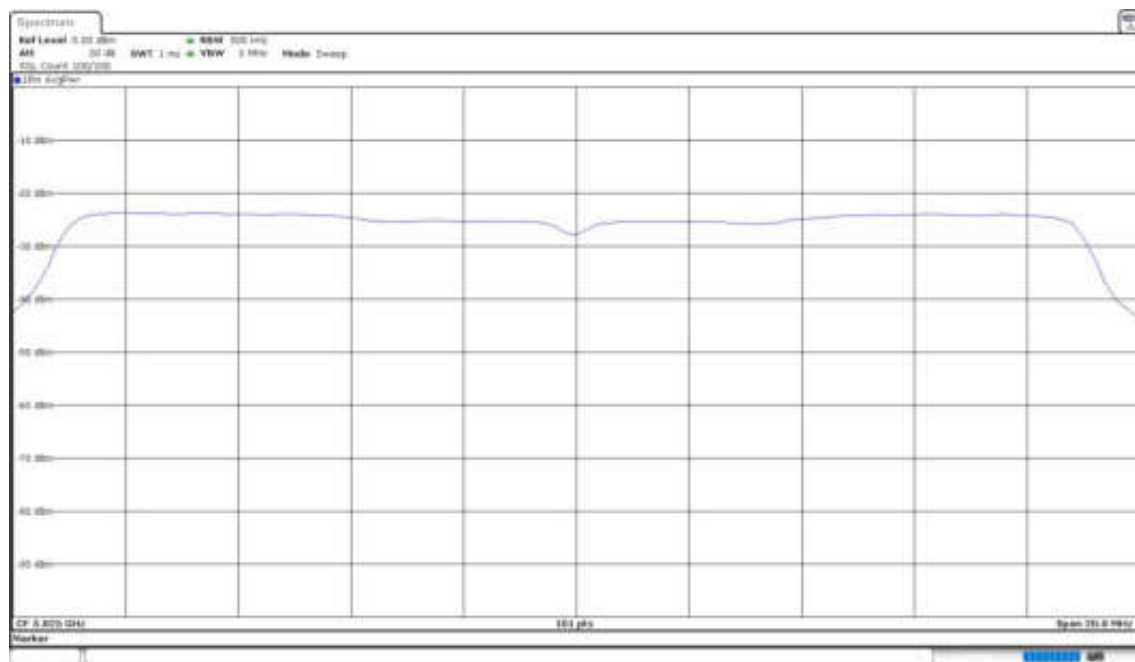
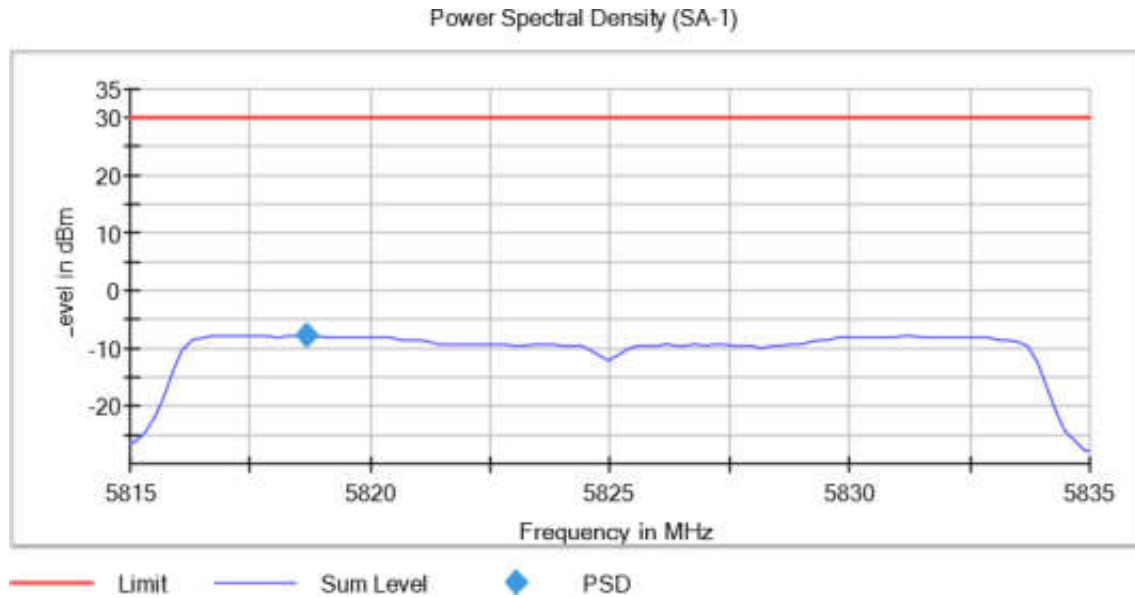


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5825.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

TPC = No

Images:



Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5725, 5850]	1	5755.00000	No	5741.125000	-10.82
		5795.00000		5805.875000	-11.05

Verdict

Pass

Attachments

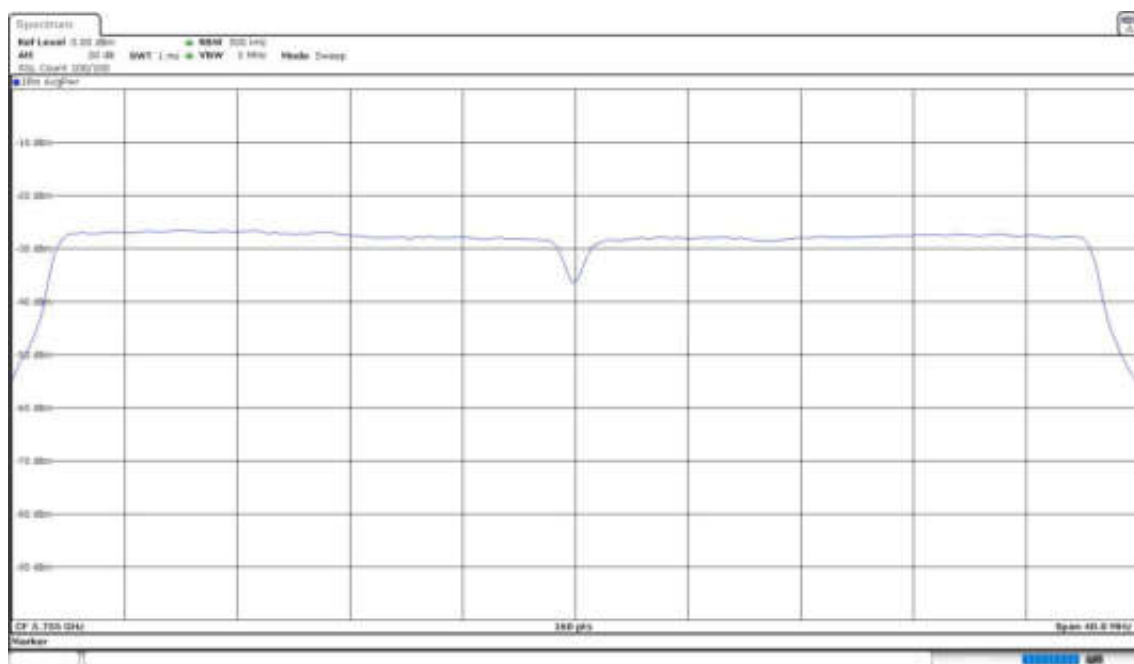
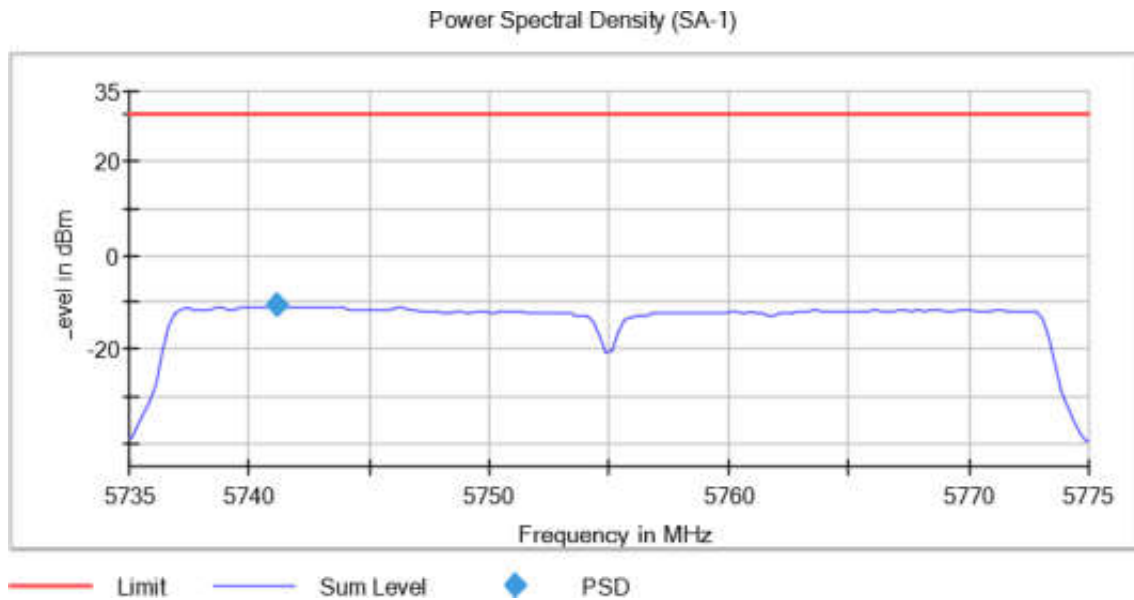
Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5755.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

TPC = No

Images:



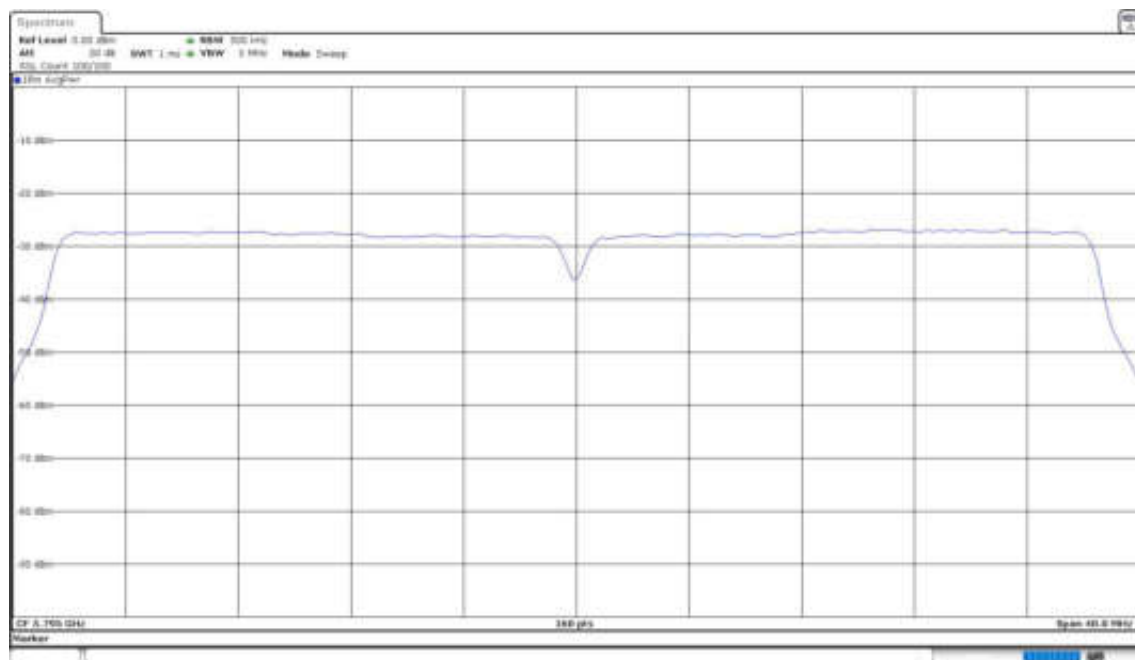
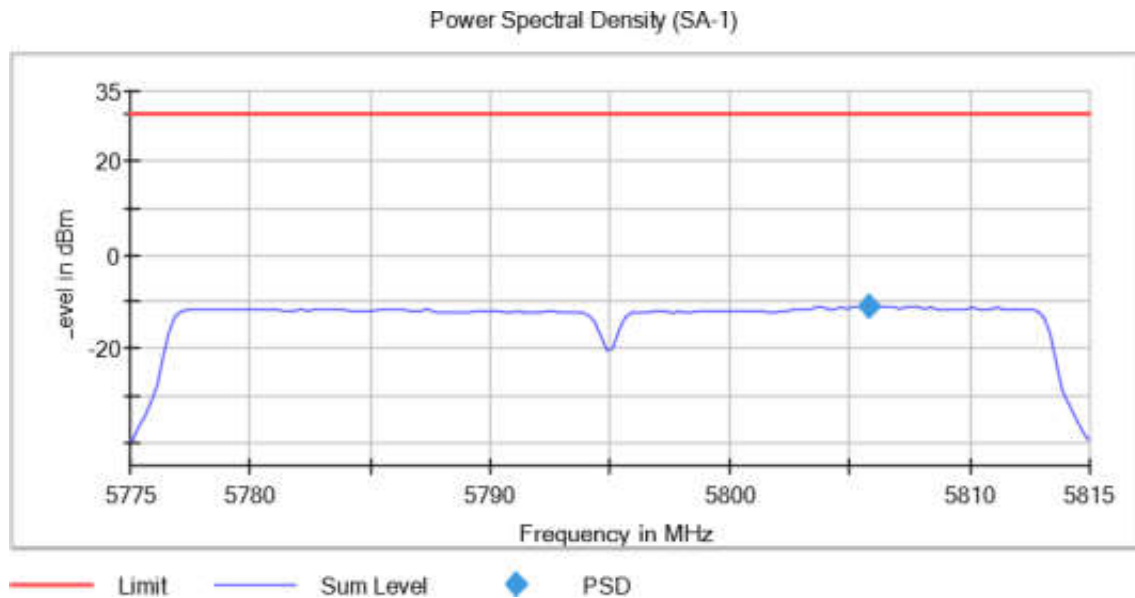
Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5795.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

TPC = No

Images:



Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5725, 5850]	1	5775.00000	No	5746.375000	-14.77

Verdict

Pass

Attachments

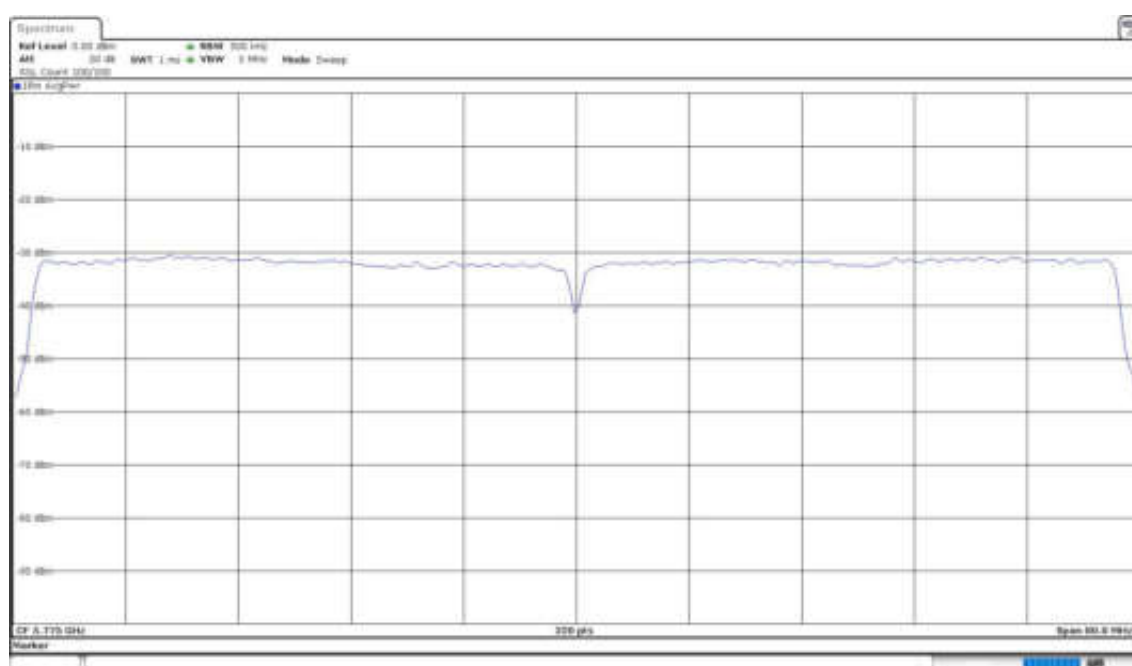
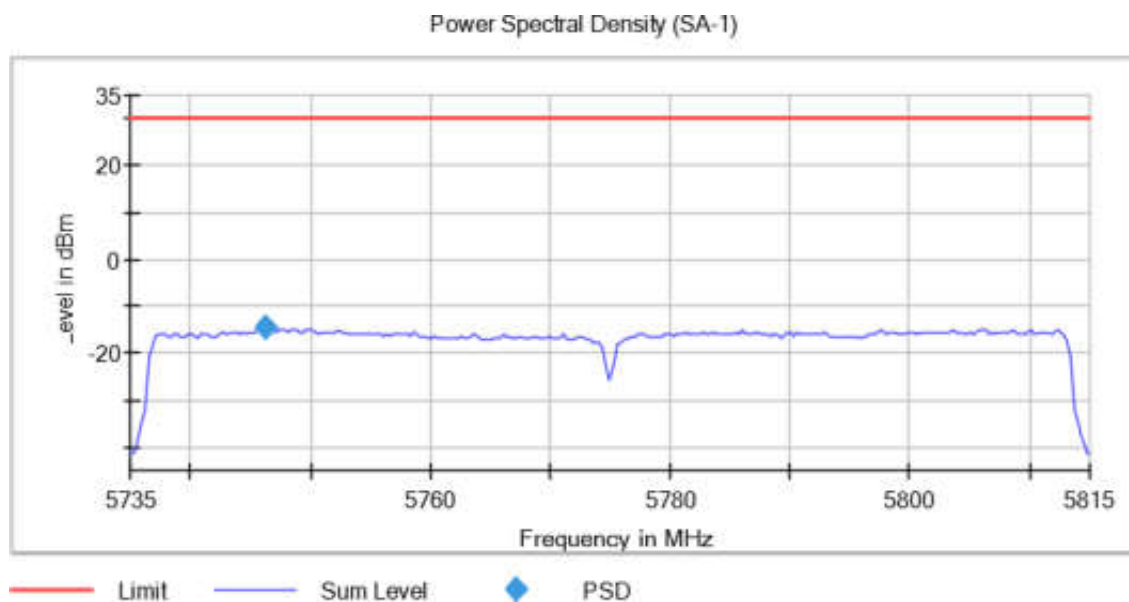
Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5775.00000

Modulation = 802.11ac VHT80 (OFDM MCS0)

TPC = No

Images:



RSS-247 7.3.4.2 / FCC 15.407 (e) [6dBw] 6 dB Emission Bandwidth

Limits

- * FCC 15.407: The minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
- * RSS-247: For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

Modulation: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5745.00000	17.700
		5785.00000	17.700
		5825.00000	17.700

Verdict

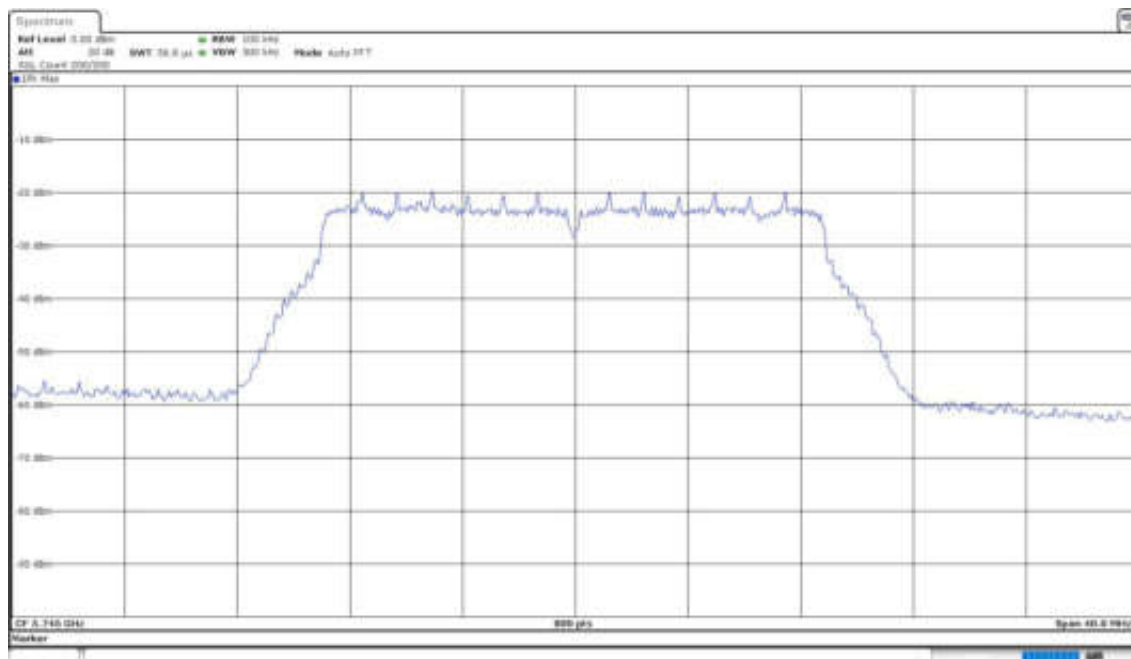
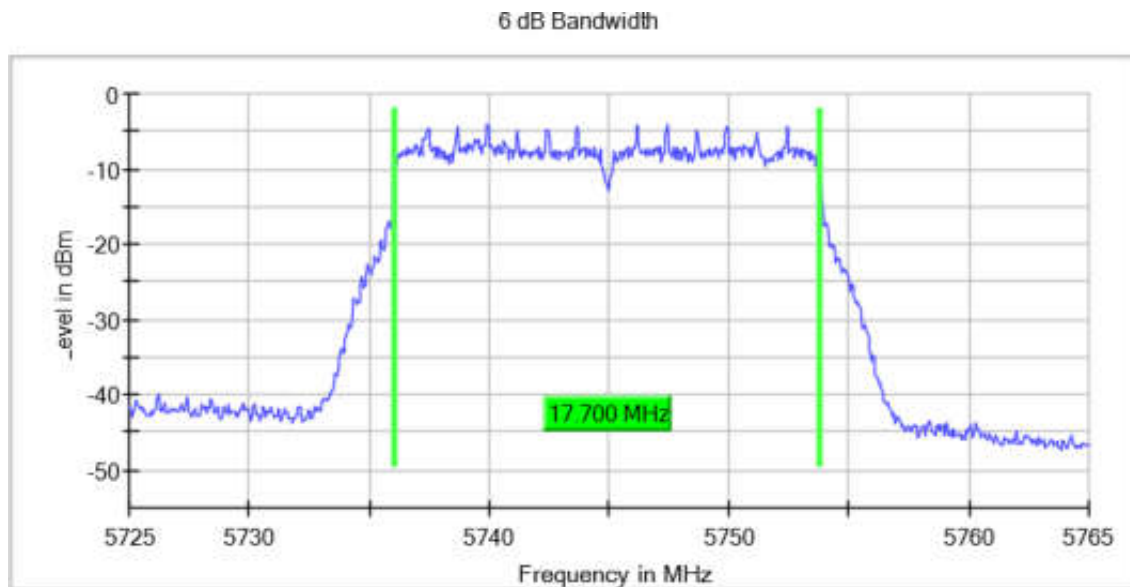
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5745.00000 Modulation = 802.11n HT20 (OFDM MCS0)

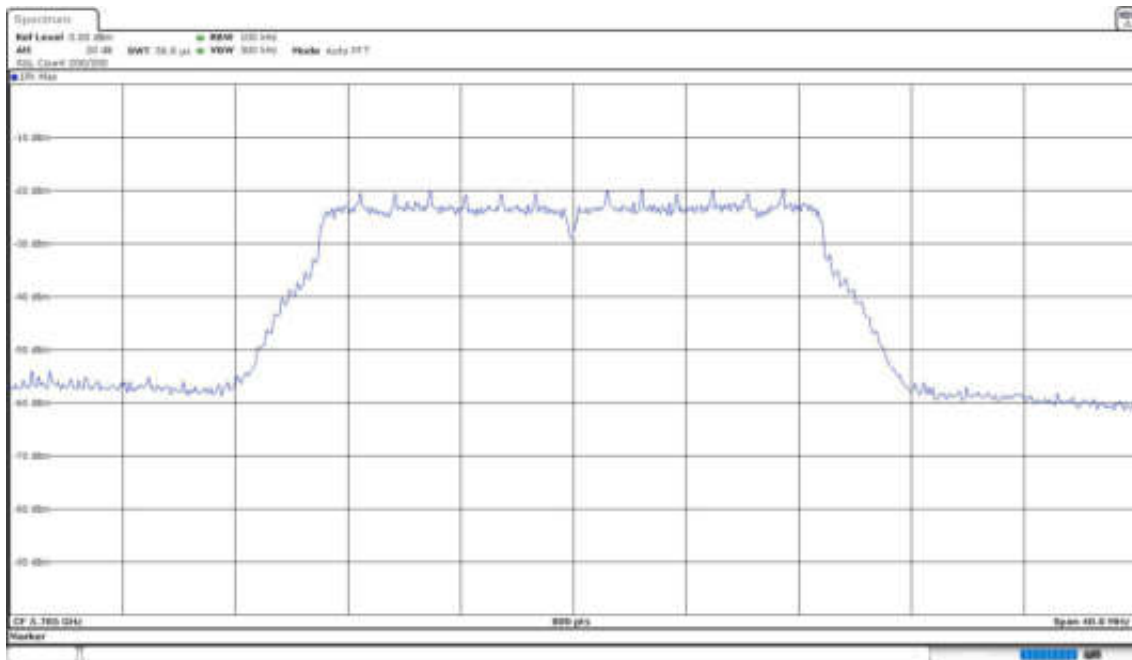
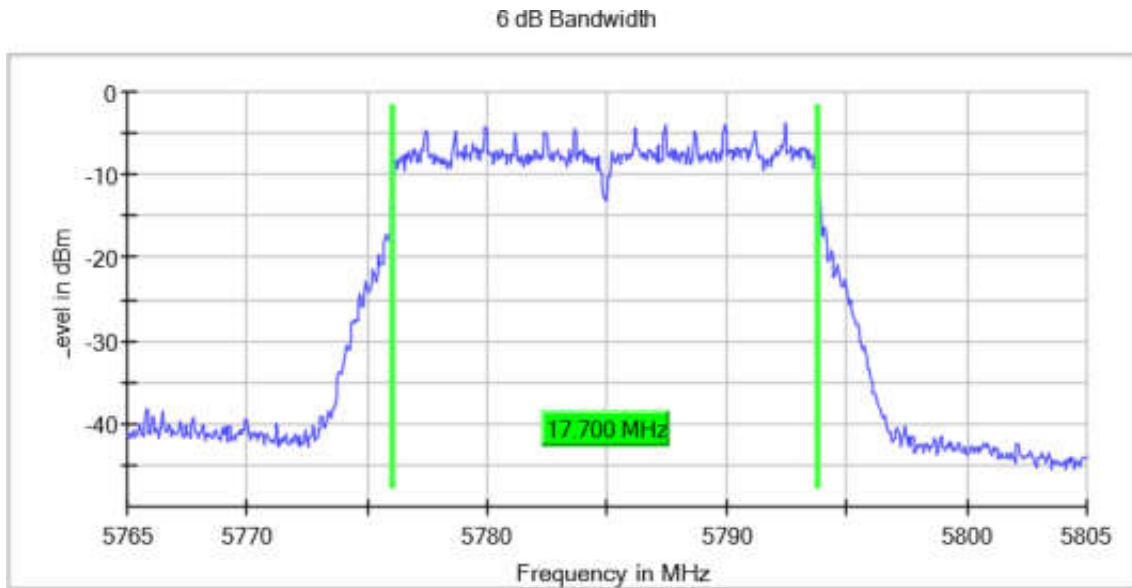
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5785.00000 Modulation = 802.11n HT20 (OFDM MCS0)

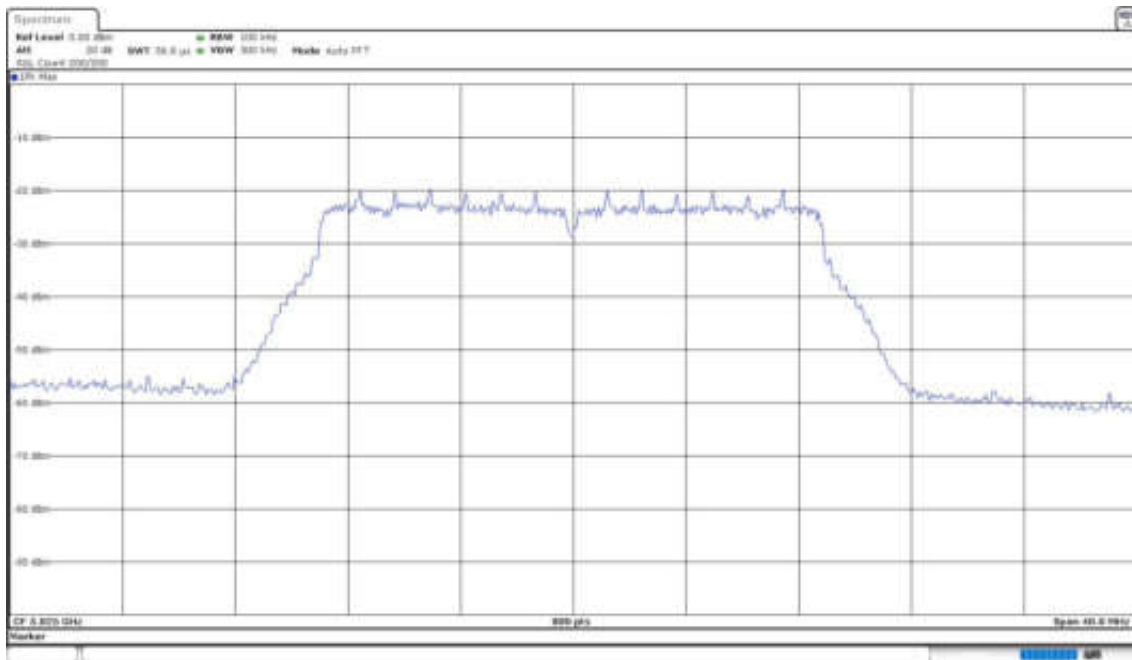
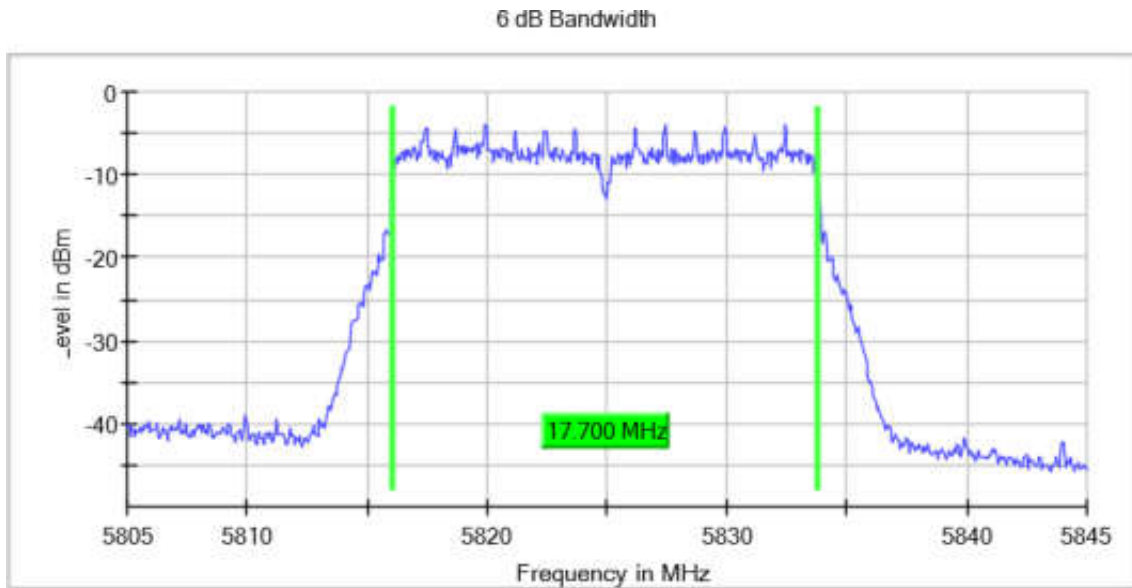
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5825.00000 Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5755.00000	36.550
		5795.00000	36.550

Verdict

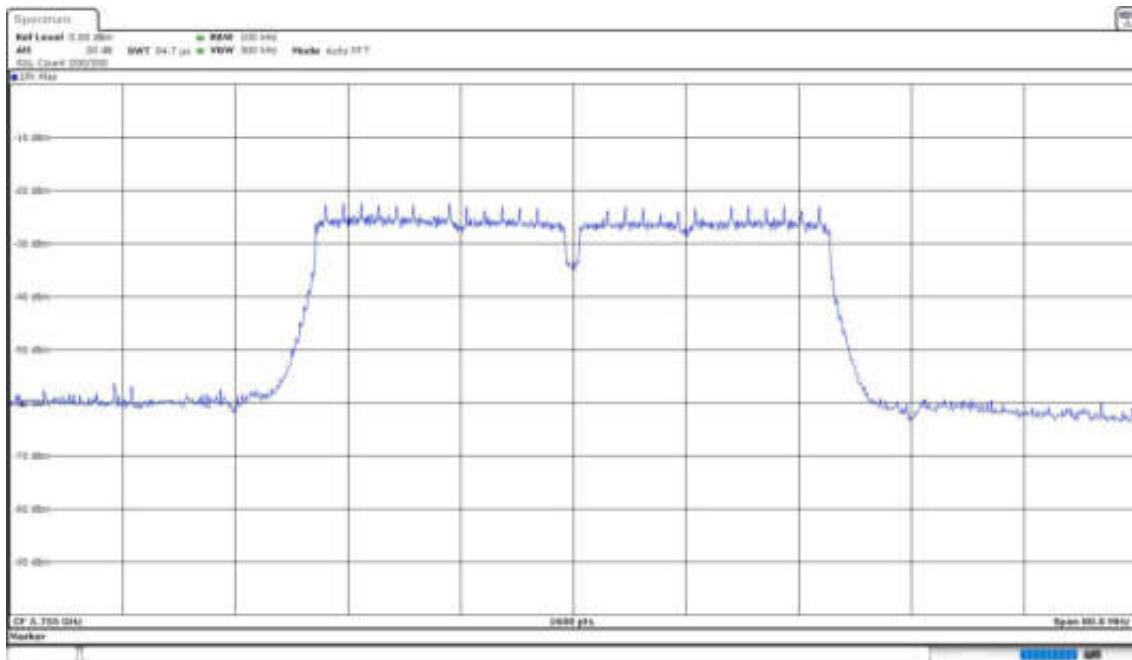
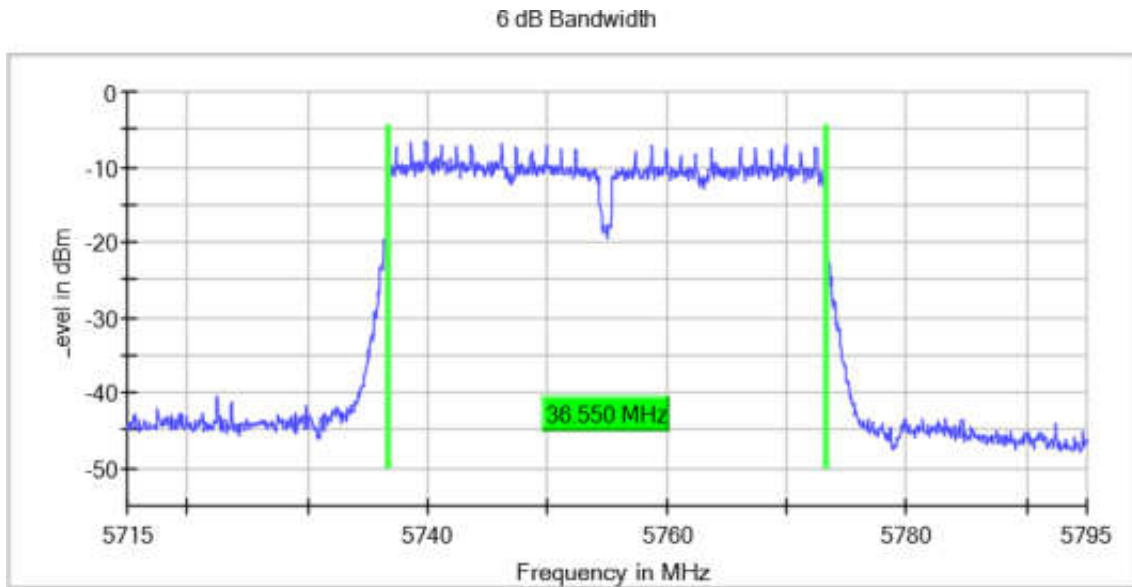
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5755.00000 Modulation = 802.11n HT40 (OFDM MCS0)

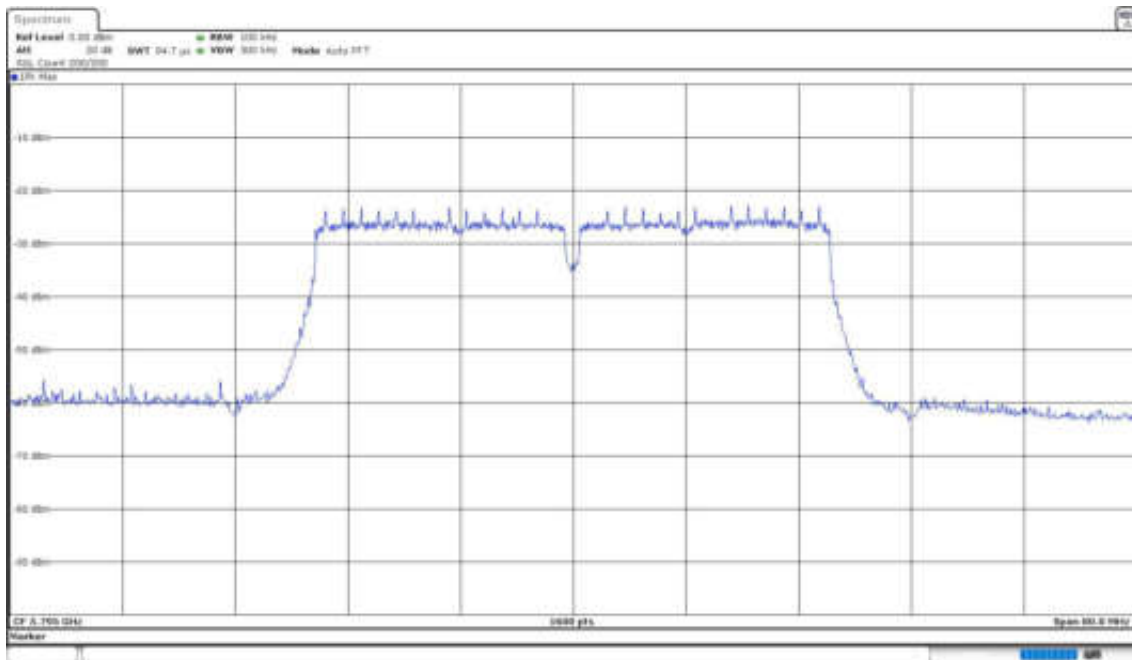
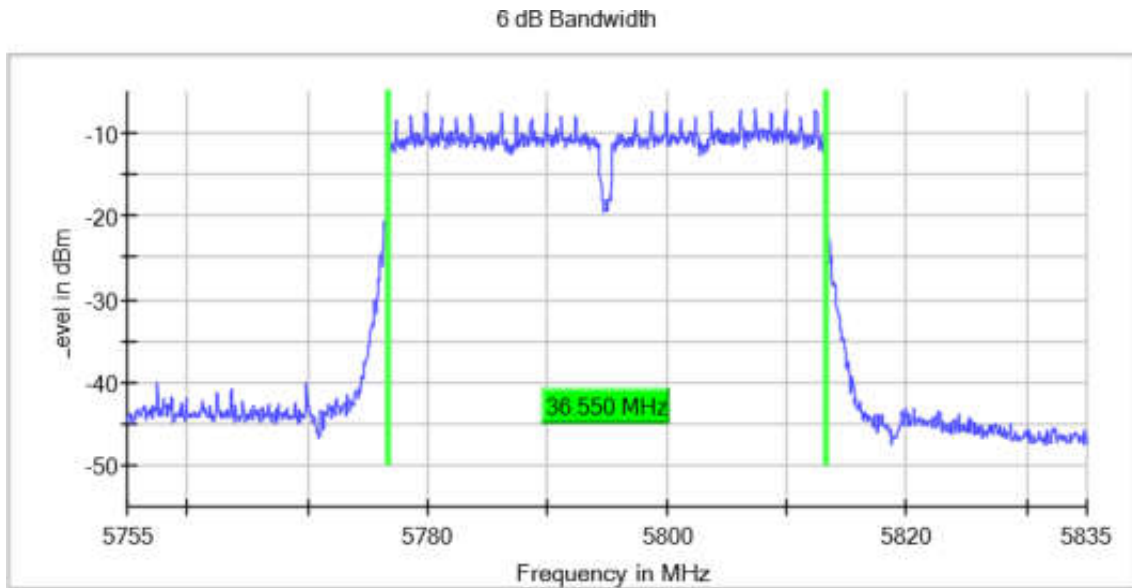
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5795.00000 Modulation = 802.11n HT40 (OFDM MCS0)

Images:



Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5745.00000	16.400
		5785.00000	16.450
		5825.00000	16.400

Verdict

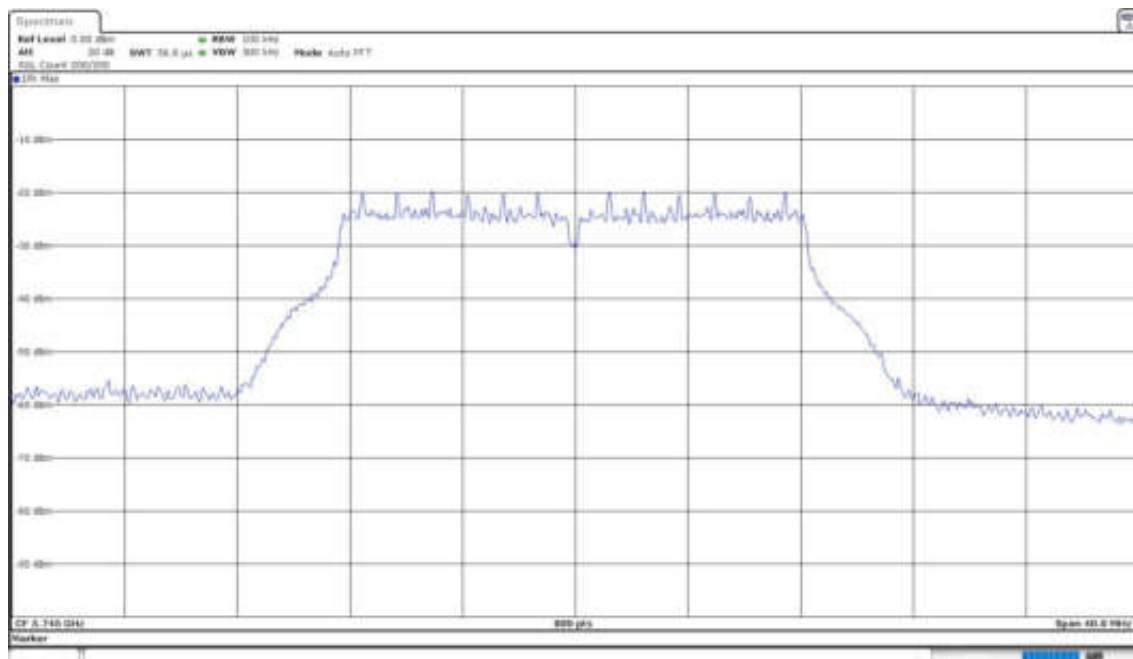
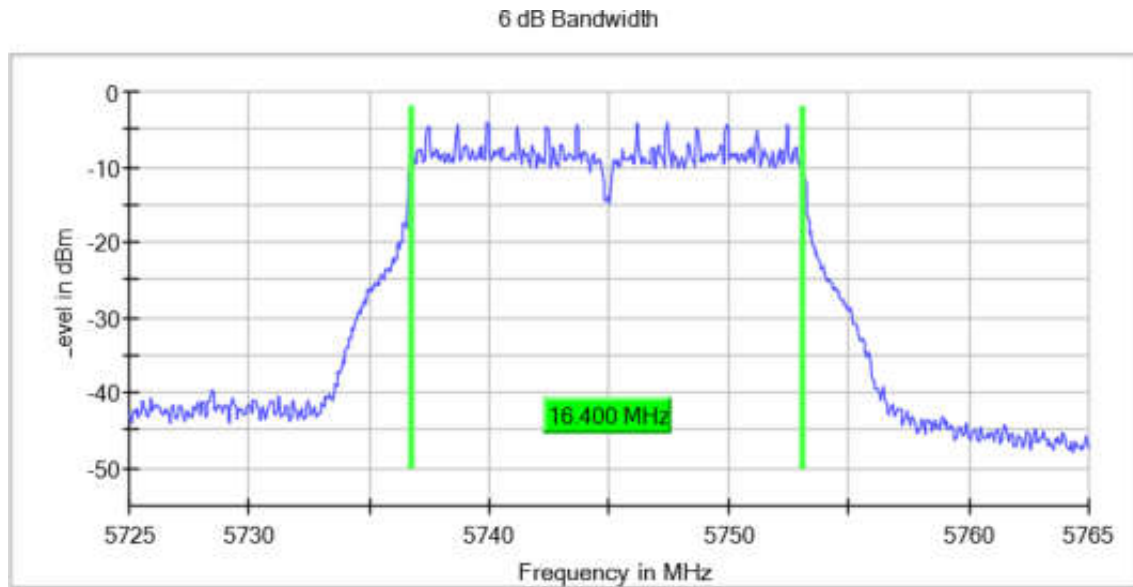
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5745.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

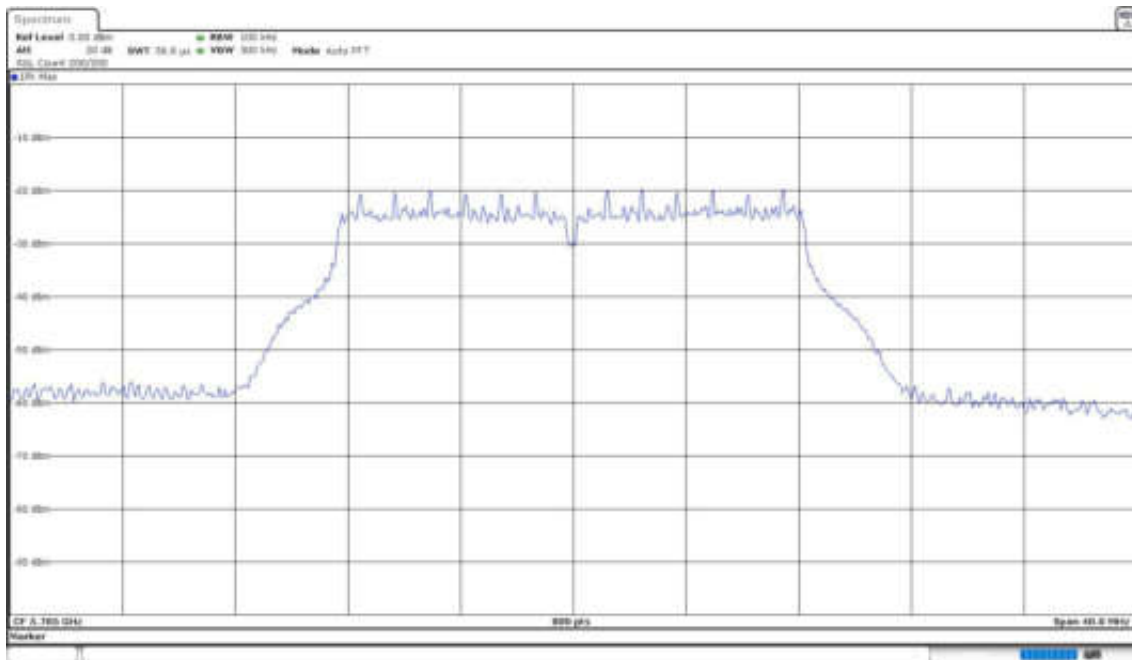
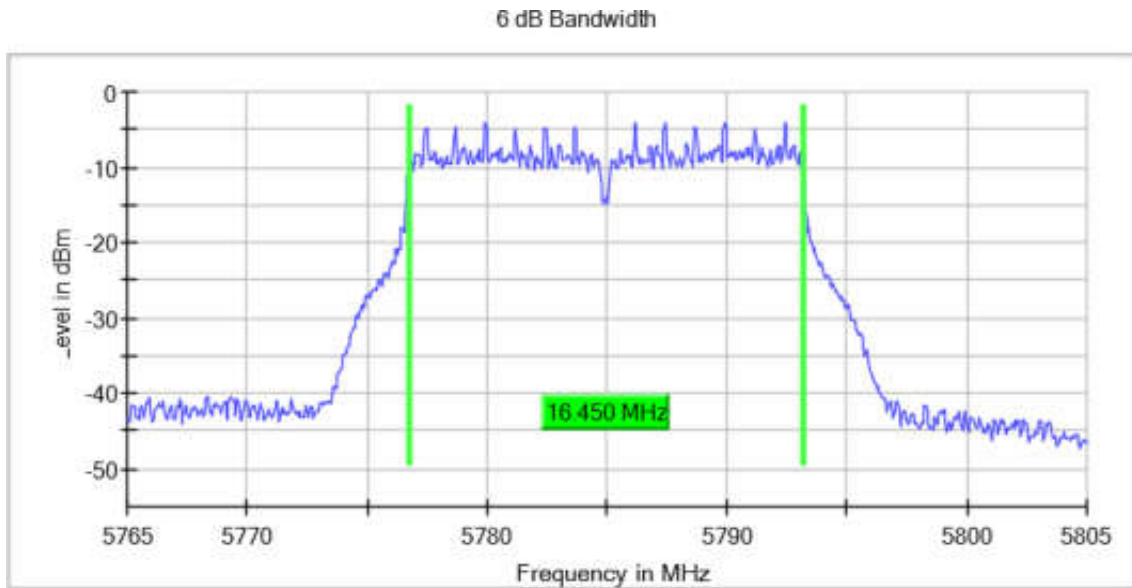
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5785.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

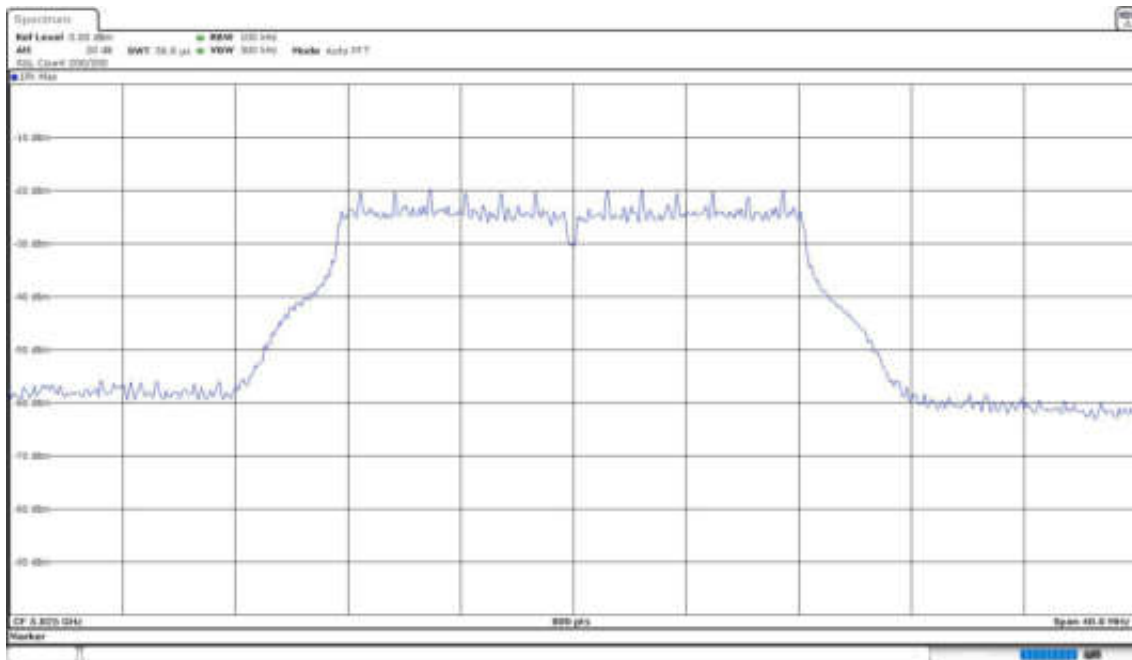
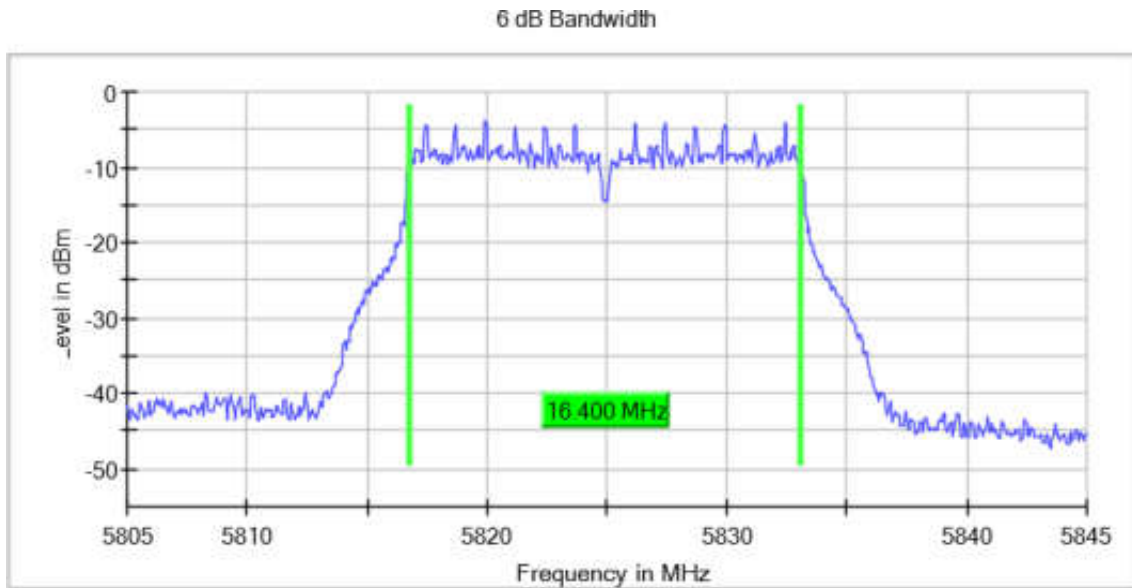
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5825.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5745.00000	17.700
		5785.00000	17.700
		5825.00000	17.700

Verdict

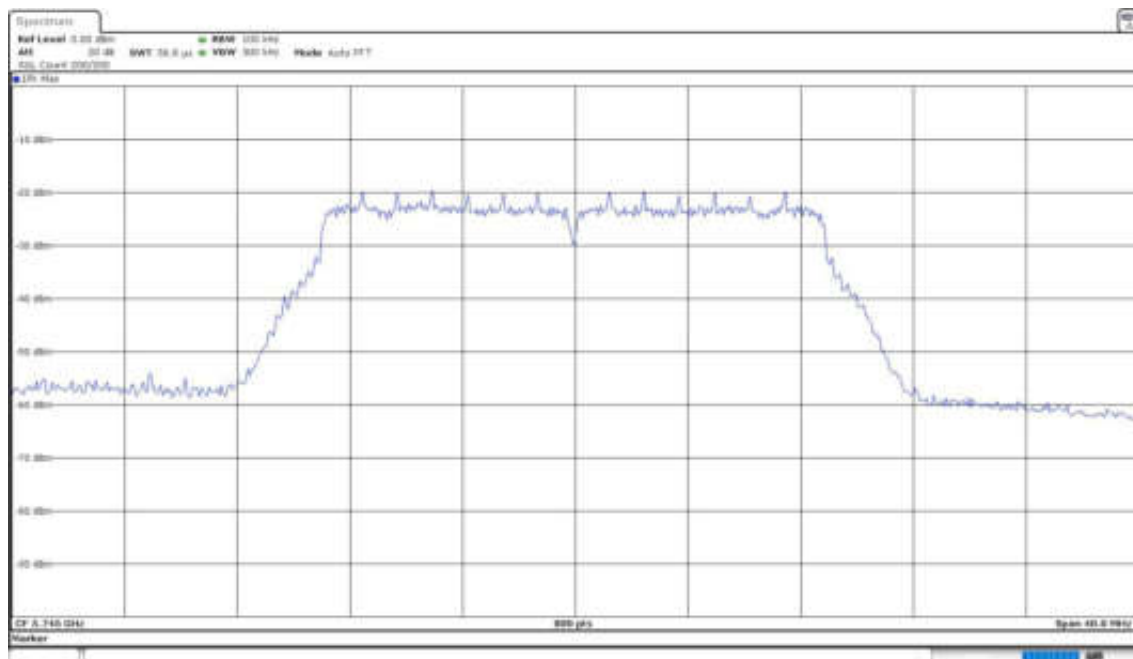
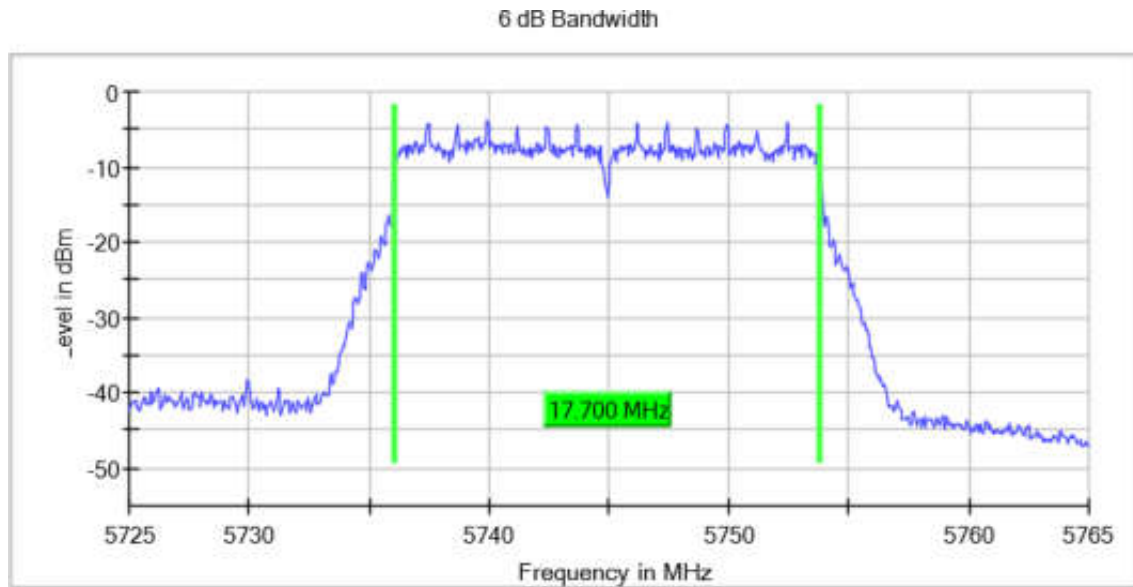
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5745.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:

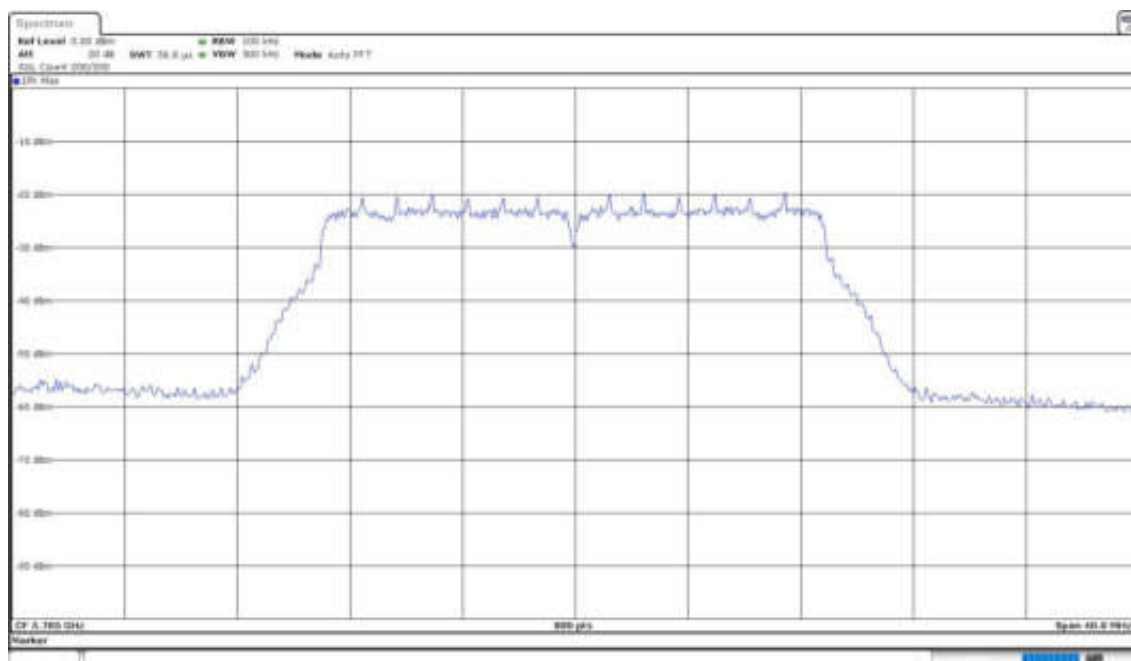
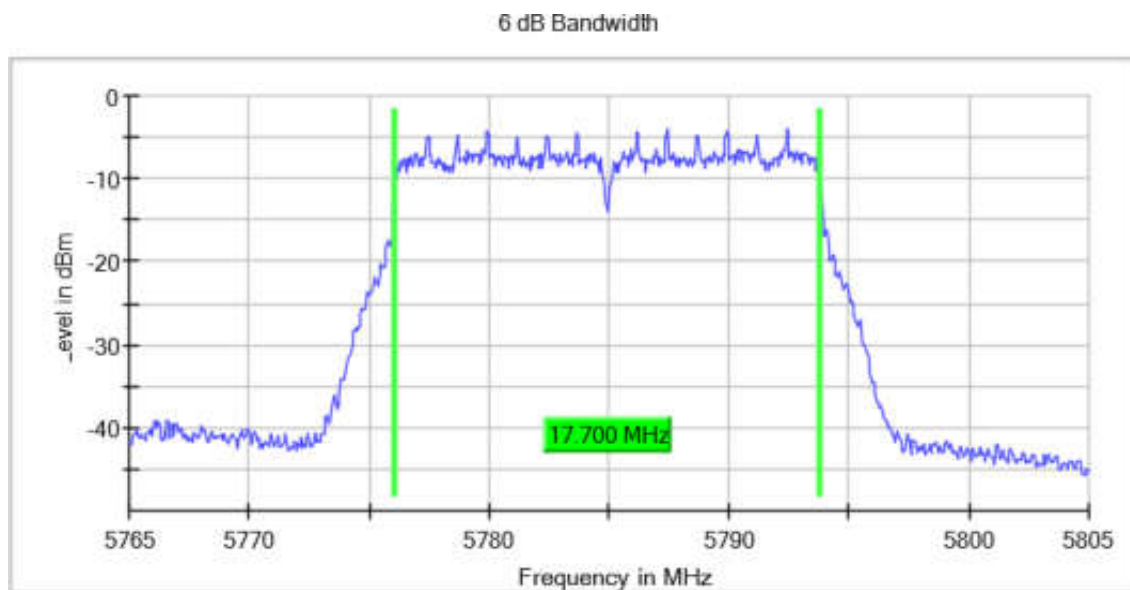


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5785.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:

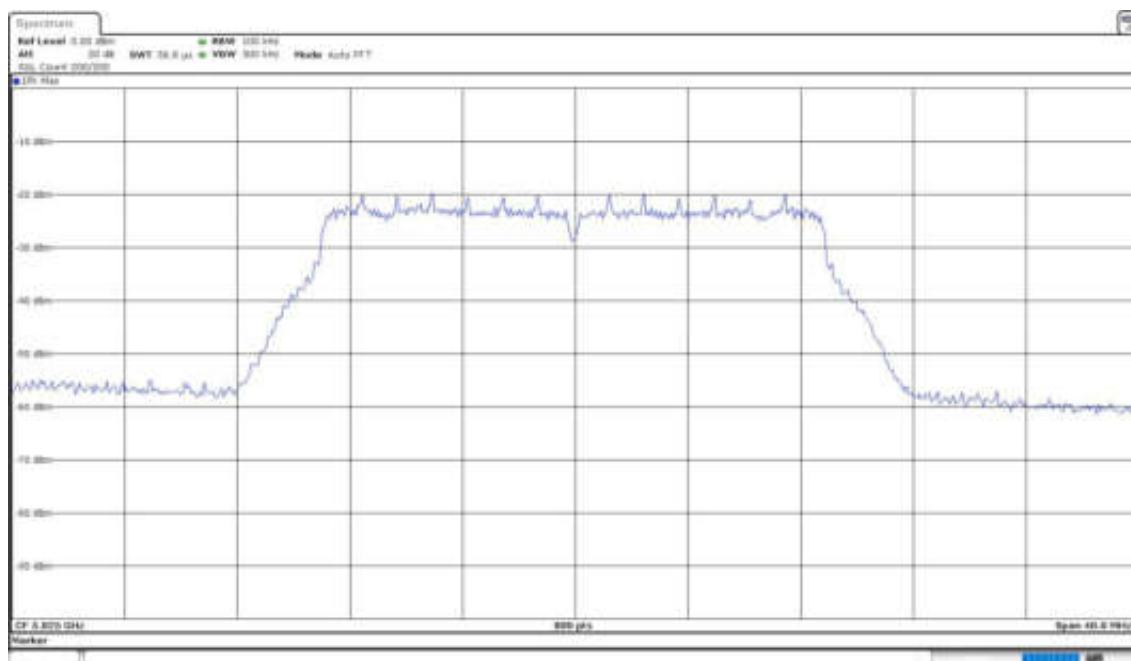
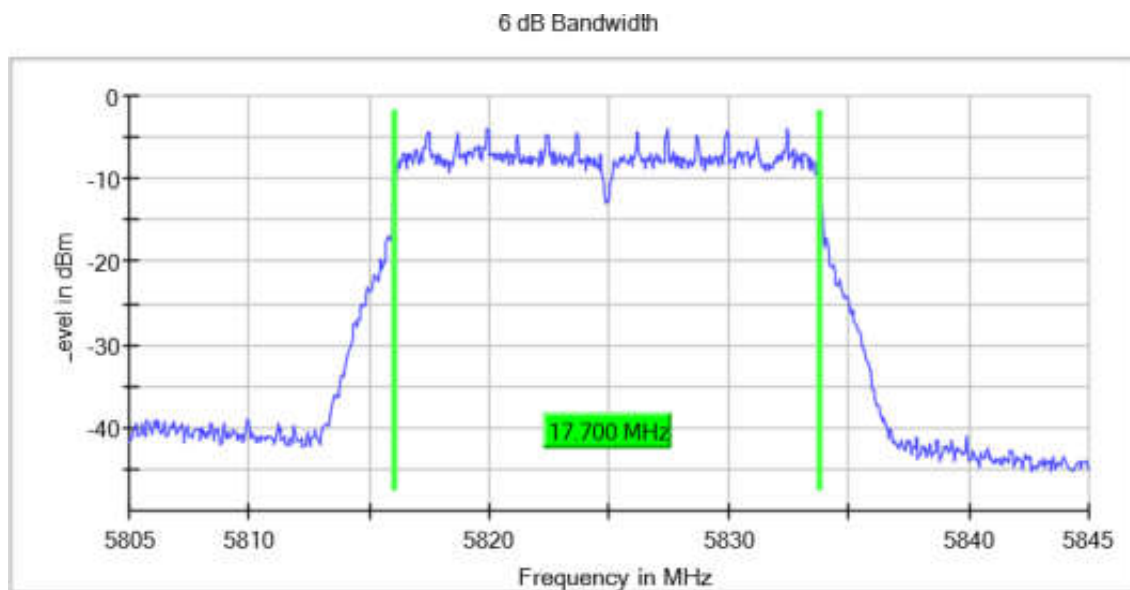


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5825.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5755.00000	36.550
		5795.00000	36.550

Verdict

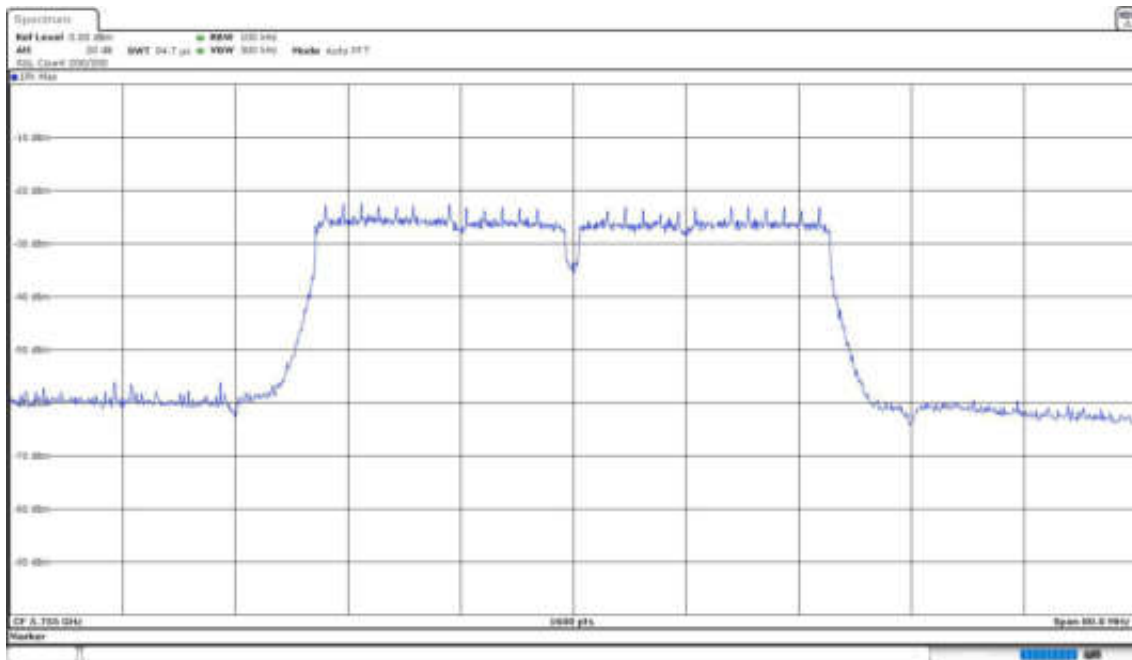
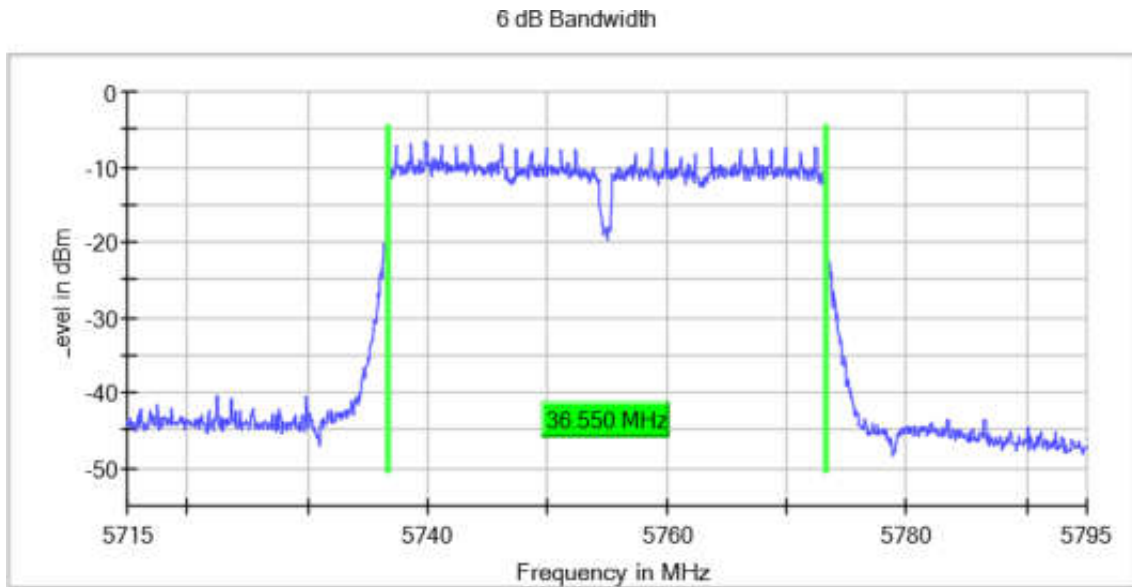
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5755.00000 Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:

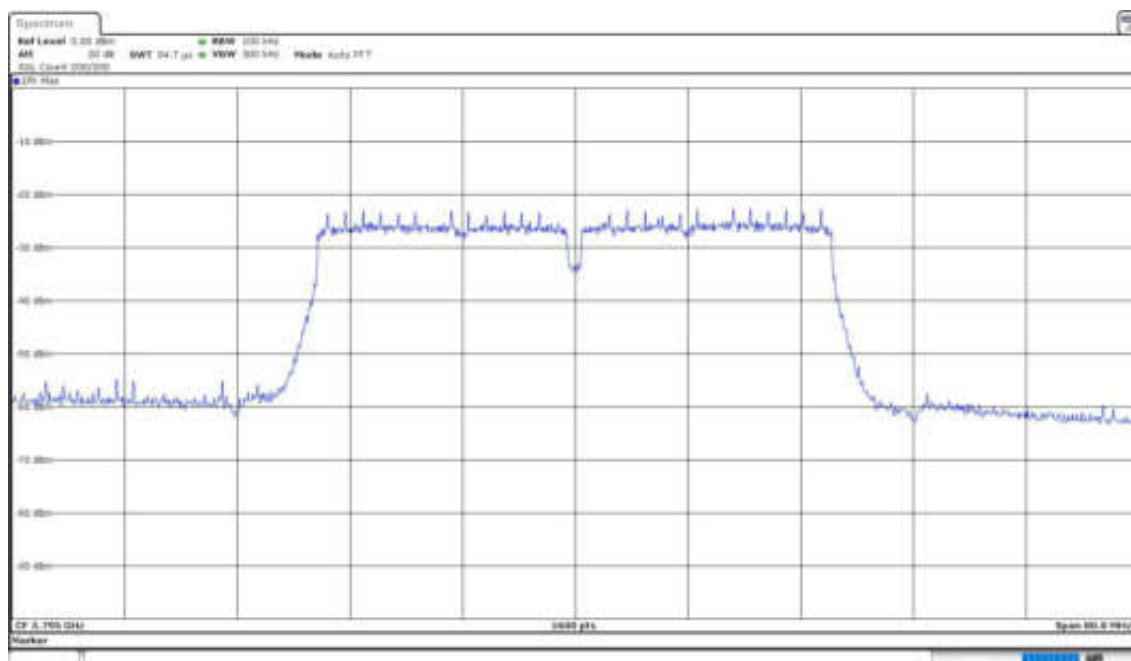
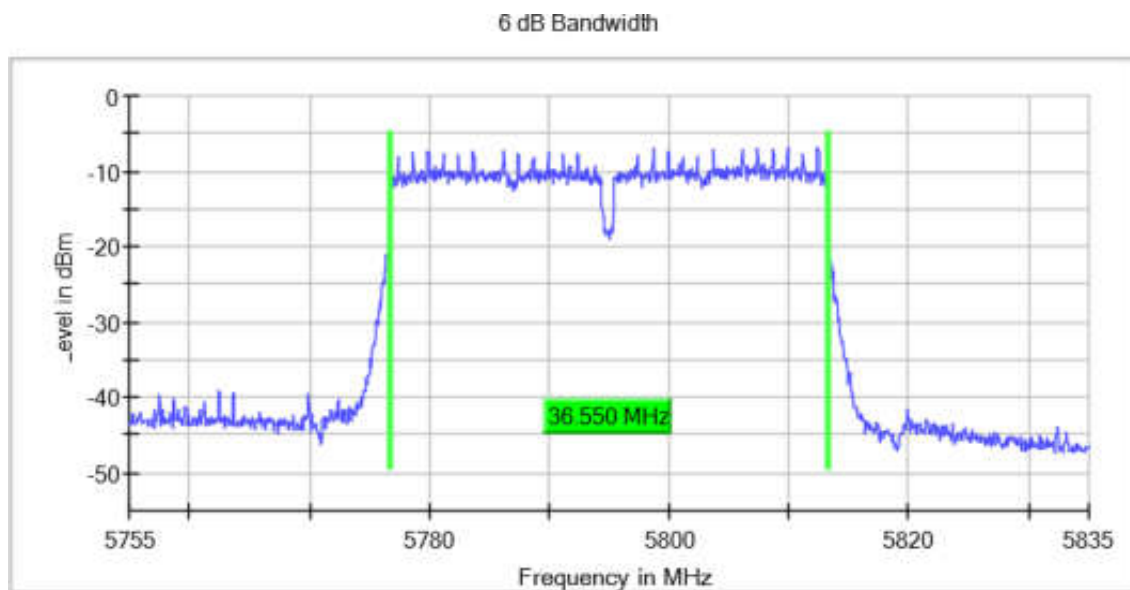


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5795.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5775.00000	76.500

Verdict

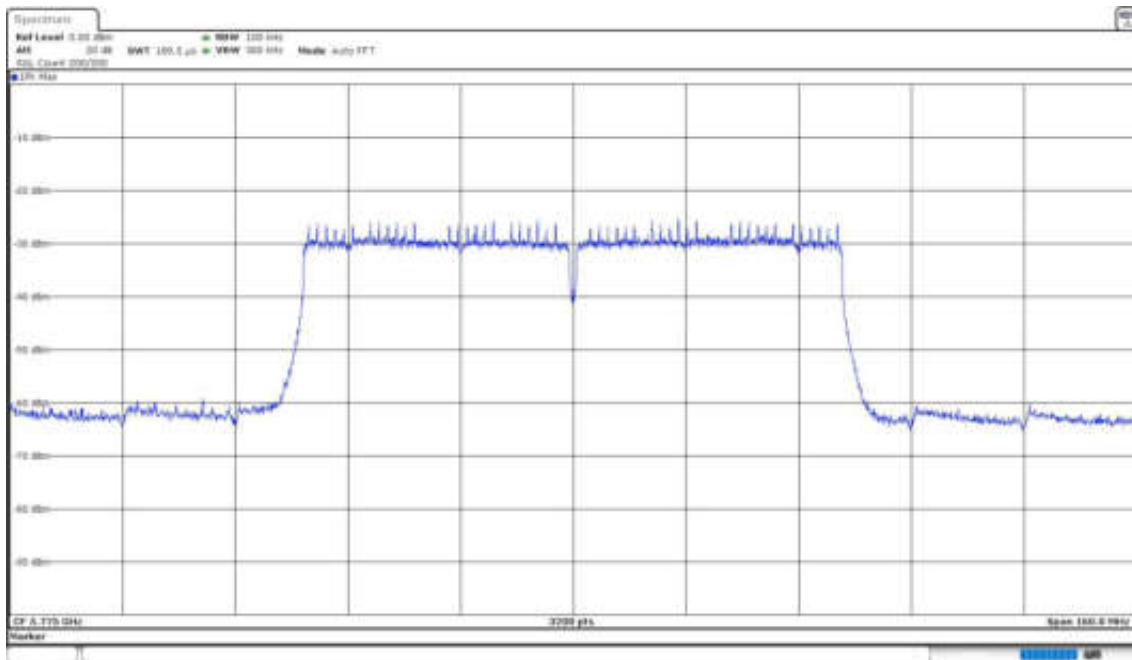
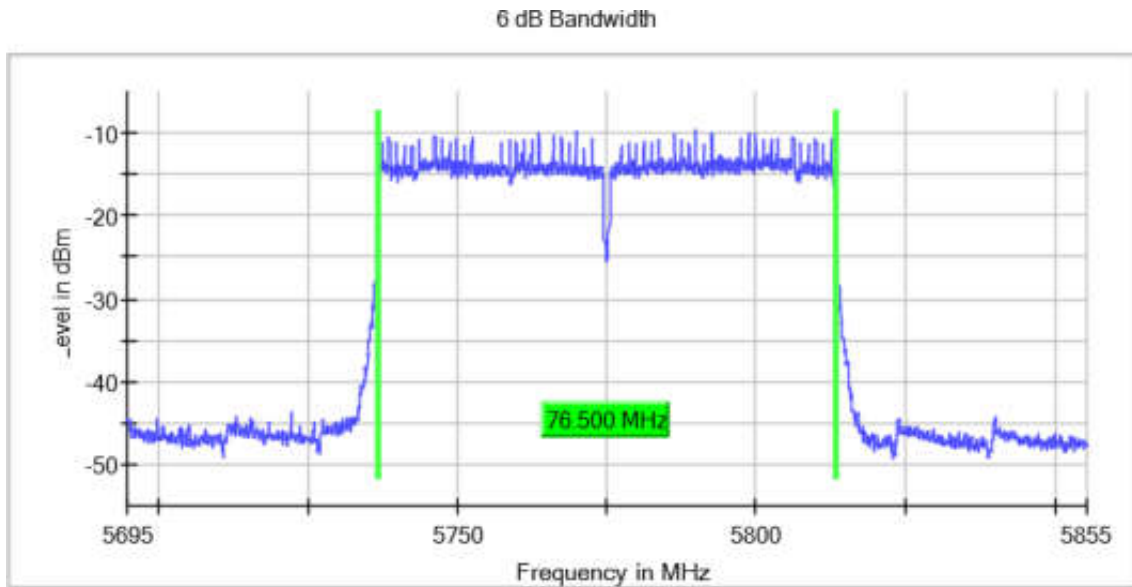
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5775.00000 Modulation = 802.11ac VHT80 (OFDM MCS0)

Images:



RSS-247 7.3.4.4 / FCC 15.407 (b) (4) (6) [Rse] Transmitter Out of Band Radiated Emissions For transmitters operating solely in the 5.725-5.850 GHz band

Limits

* FCC 15.407: For transmitters operating in the 5.725–5.85 GHz band: All emissions shall be limited to a level of –27 dBm/MHz (68.23 dBμV/m at 3 m distance) at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)):

Frequency Range (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance (m)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	30
1.705 - 30.0	30	-	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
960 - 40000	500	54	3

The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function.

* RSS-247:

Attenuation below the general field strength limits specified in RSS-Gen is not required.

Frequency range tested for Radiated emissions:

Start frequency: no radiofrequency signal generated in the device found below 10th sub-harmonic, no further investigation required.

Stop frequency: it has been performed the radiated spurious emissions until 10th harmonic.

The setting for each range of frequency is indicated in the following tables:

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	0 dB
1 GHz - 6,5 GHz	275 kHz	PK+ ; AVG	1 MHz	1 s	0 dB
6,5 GHz - 17 GHz	525 kHz	PK+ ; AVG	1 MHz	1 s	0 dB
17 GHz - 40 GHz	766,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	PoI	Detector
[5725, 5850]	1	[0.03, 1]	5745.00000	559.954	35.79	V	PK
				559.954	32.92	V	QP
				625.019	36.72	H	PK
				625.019	33.75	H	QP
				959.935	39.75	V	PK
				959.935	27.74	V	QP
			5785.00000	559.946	36.86	V	PK
				559.946	34.47	V	QP
				959.736	37.14	H	PK
				959.736	27.89	H	QP
				960.009	40.41	V	PK
				960.009	28.53	V	QP
			5825.00000	559.935	36.86	V	PK
				559.935	34.13	V	QP
				625.008	37.04	H	PK
				625.008	34.44	H	QP
				625.028	35.93	H	PK
				625.028	32.98	H	QP

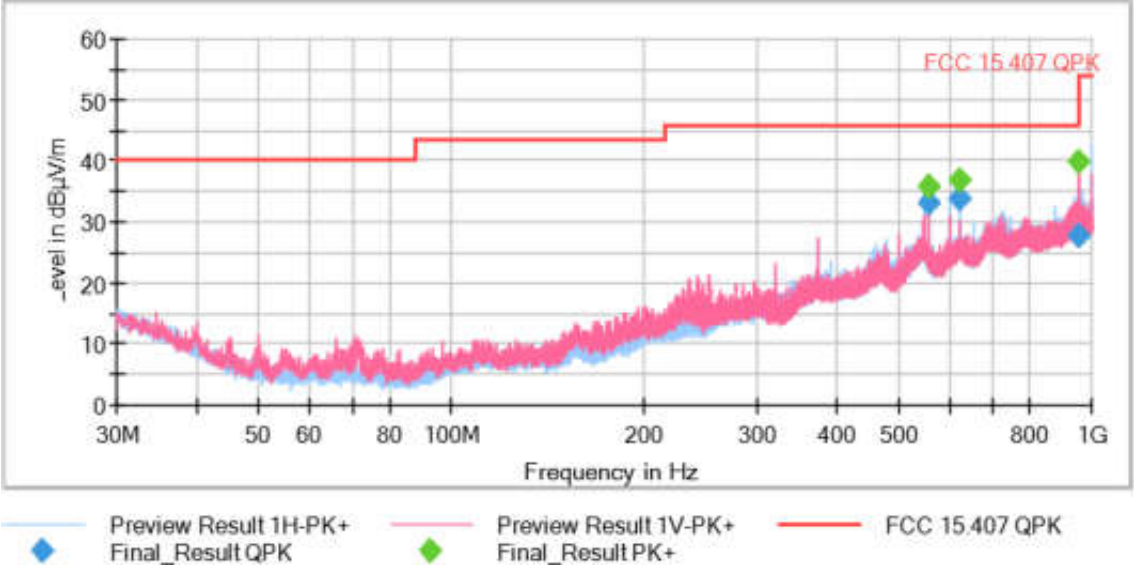
Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5745.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:



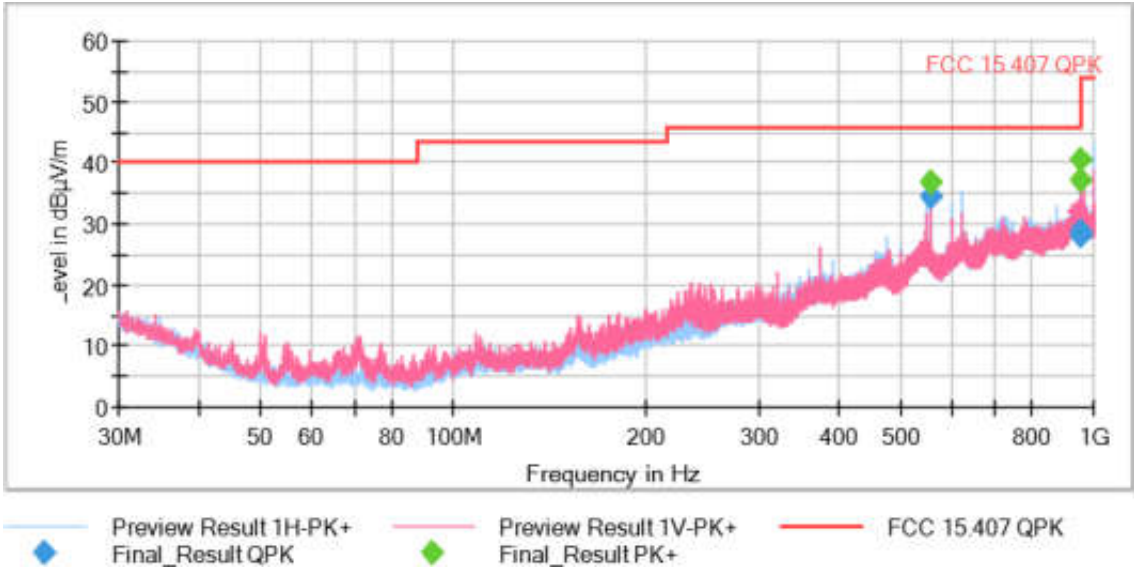
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5785.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:

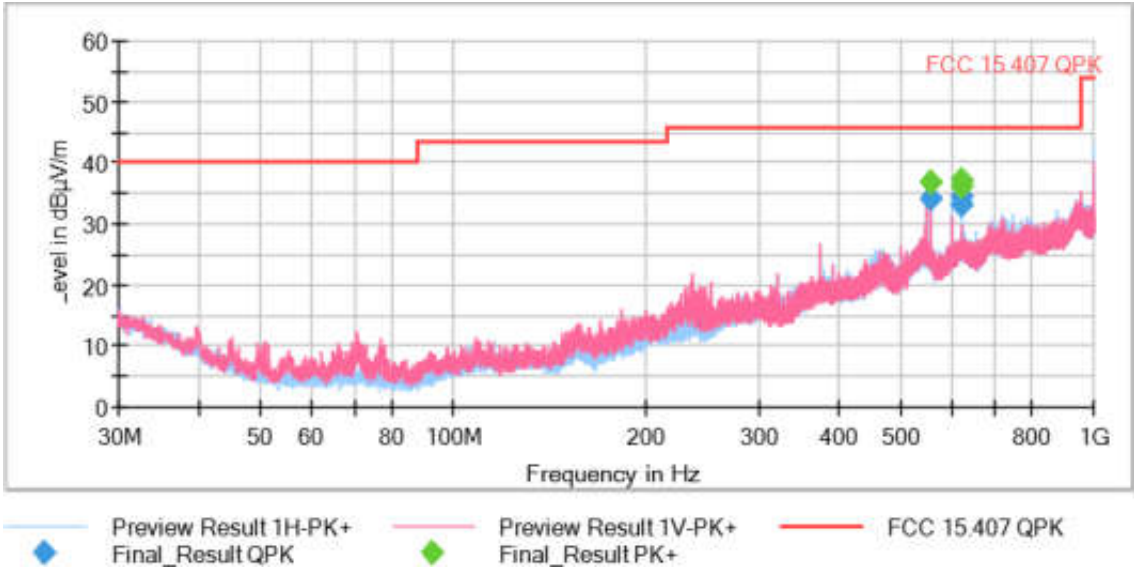


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5825.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850]

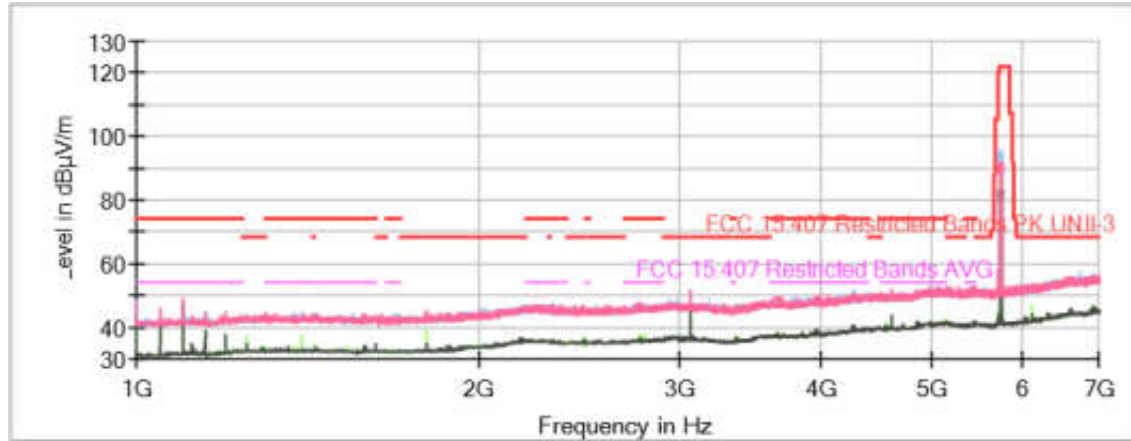
Active Port = 1

Frequency Range GHz = [1, 7]

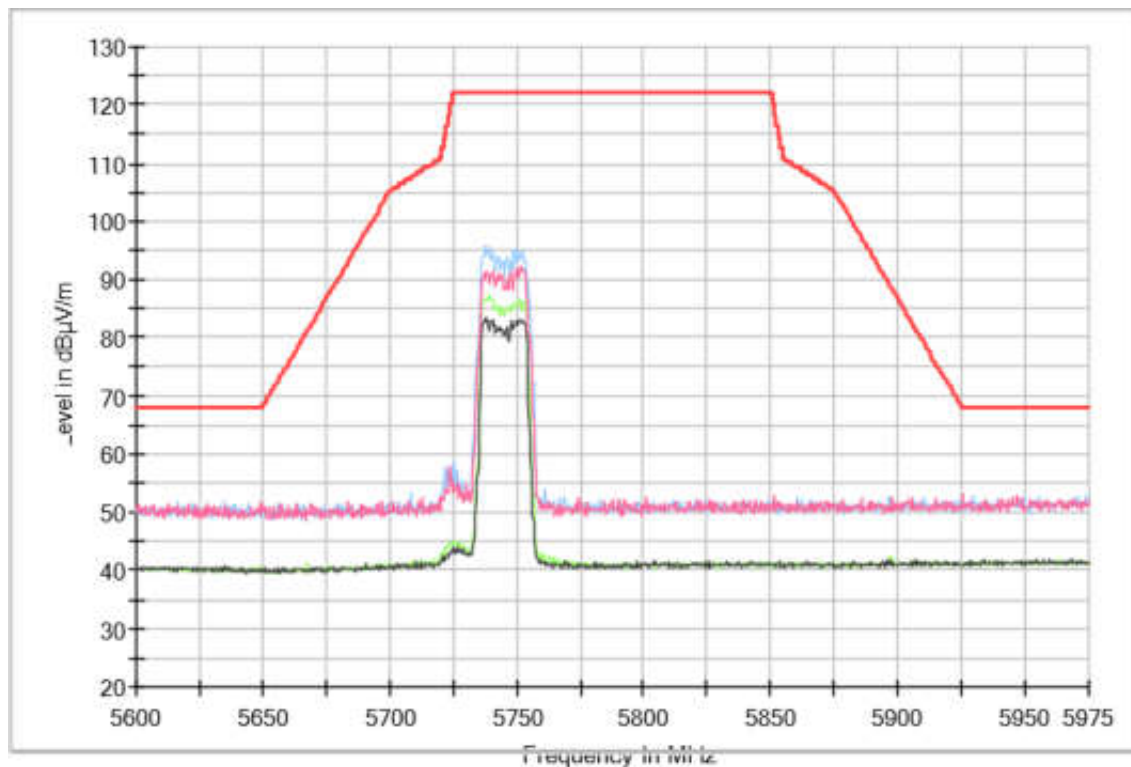
Frequency MHz = 5745.00000

Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG



Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG

Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

Active Port = 1

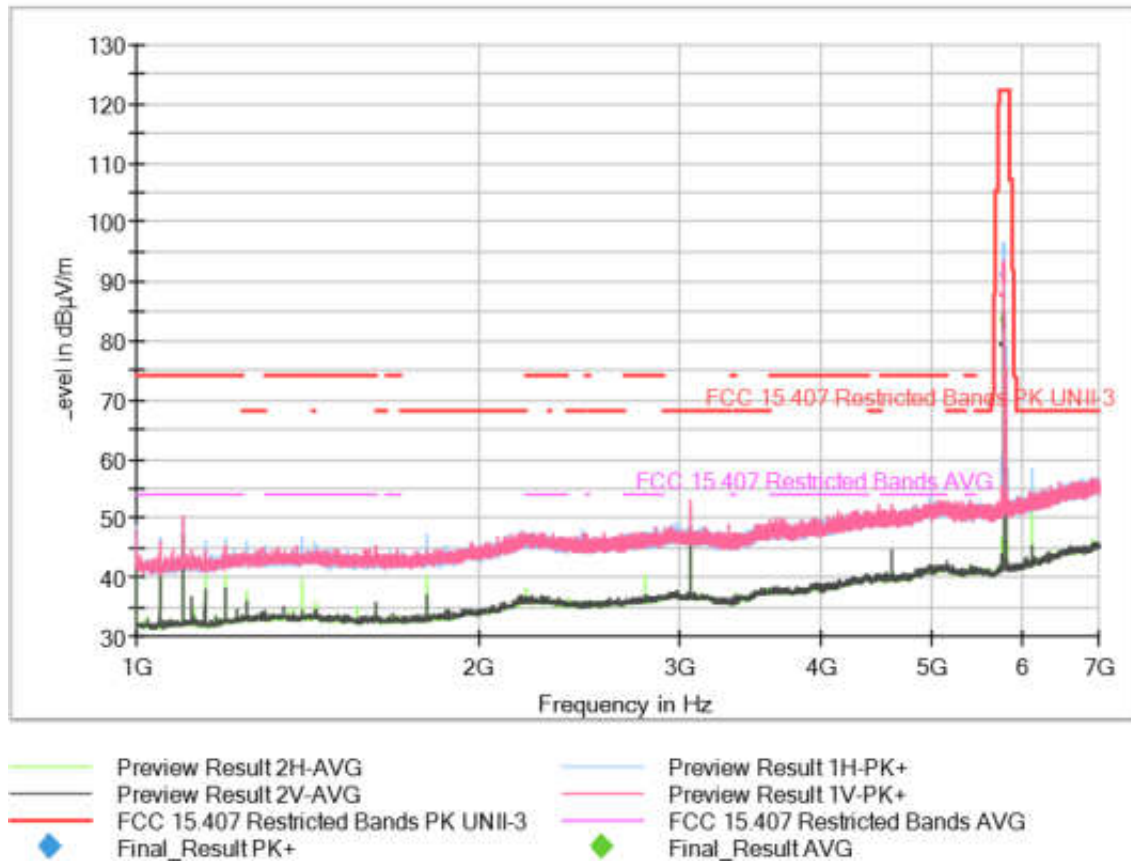
Frequency Range GHz = [1, 7]

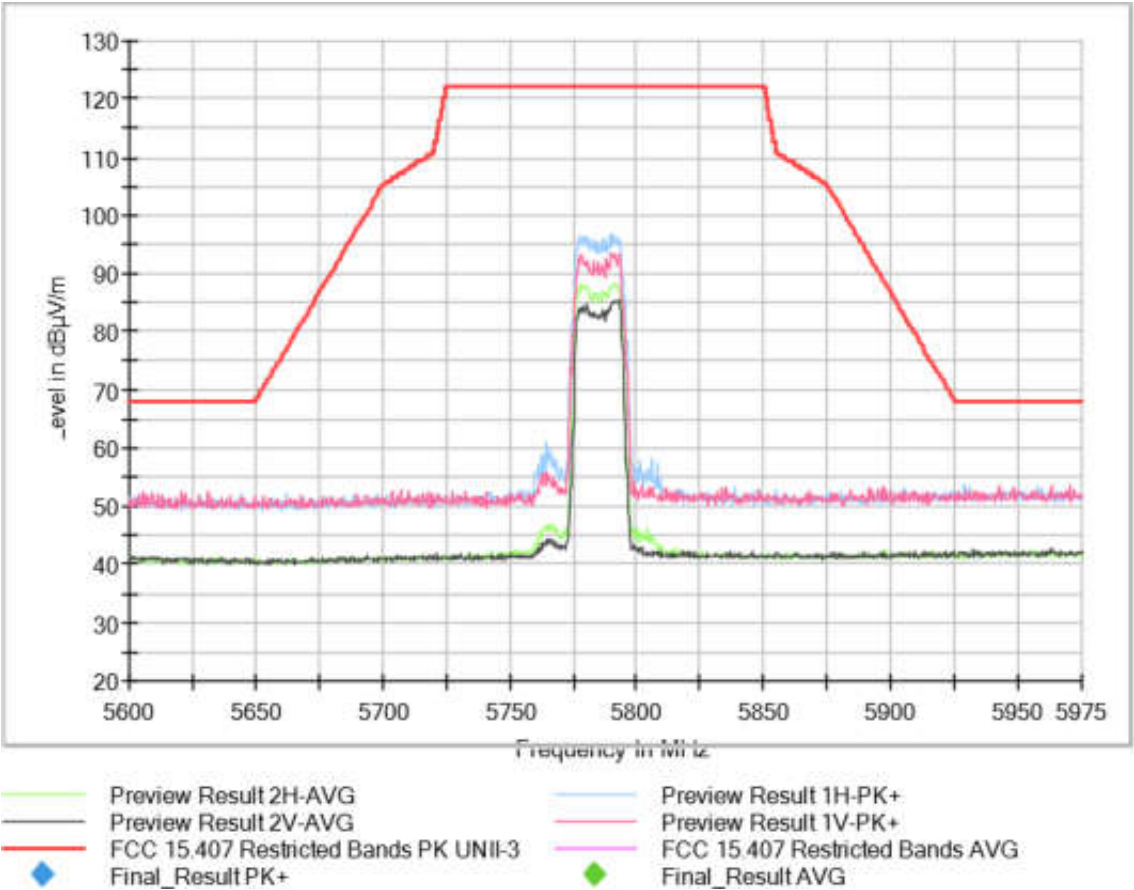
Frequency MHz = 5785.00000

Modulation = 802.11n HT20 (OFDM MCS0)

Images:

Full Spectrum





Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

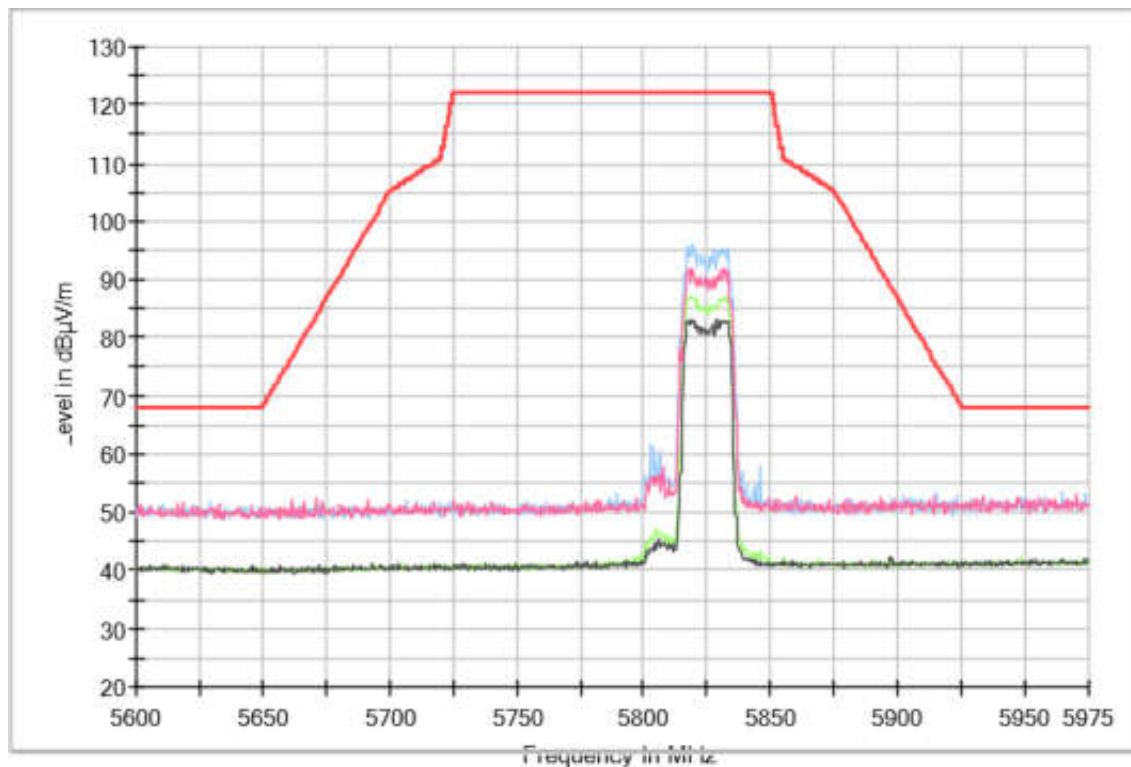
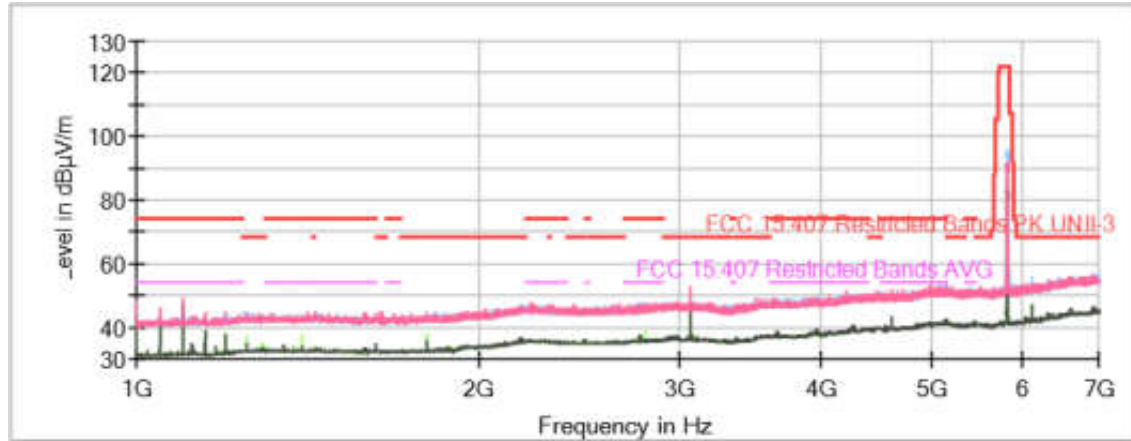
Active Port = 1

Frequency Range GHz = [1, 7]

Frequency MHz = 5825.00000

Modulation = 802.11n HT20 (OFDM MCS0)

Images:

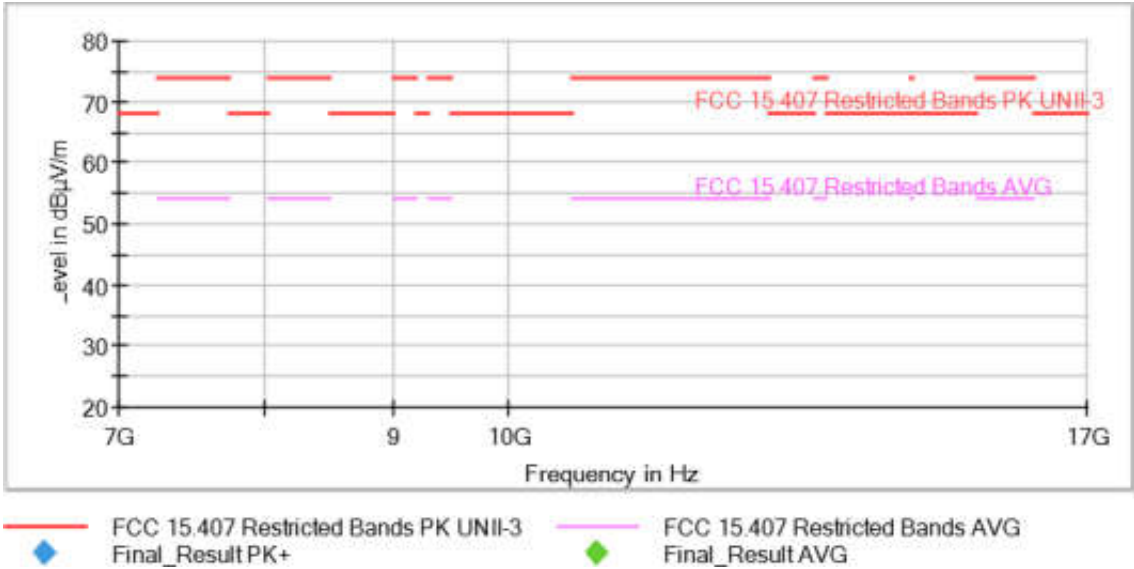


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5745.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:



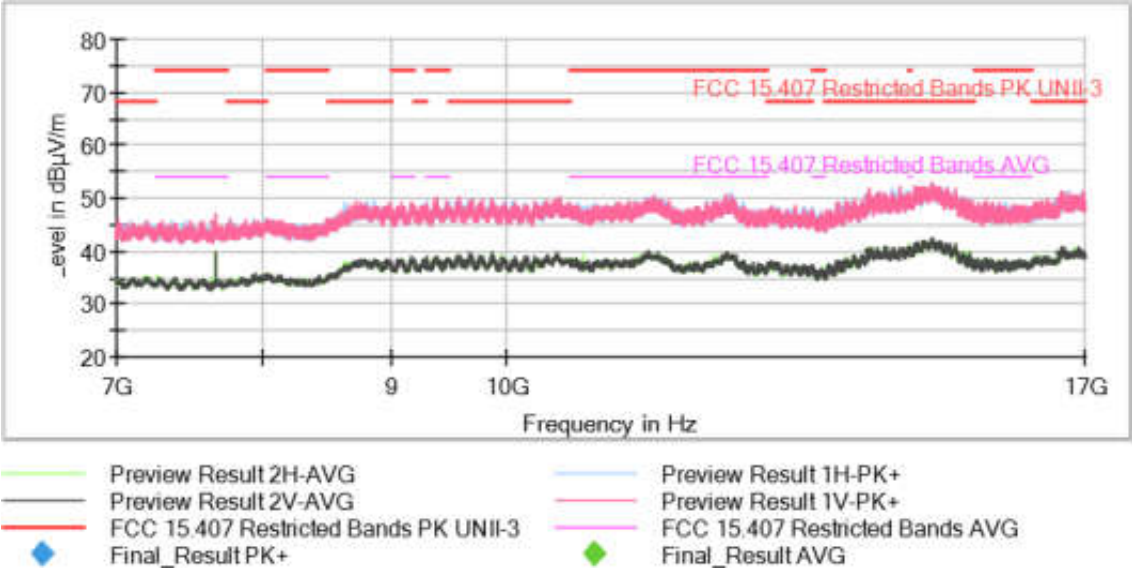
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5785.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

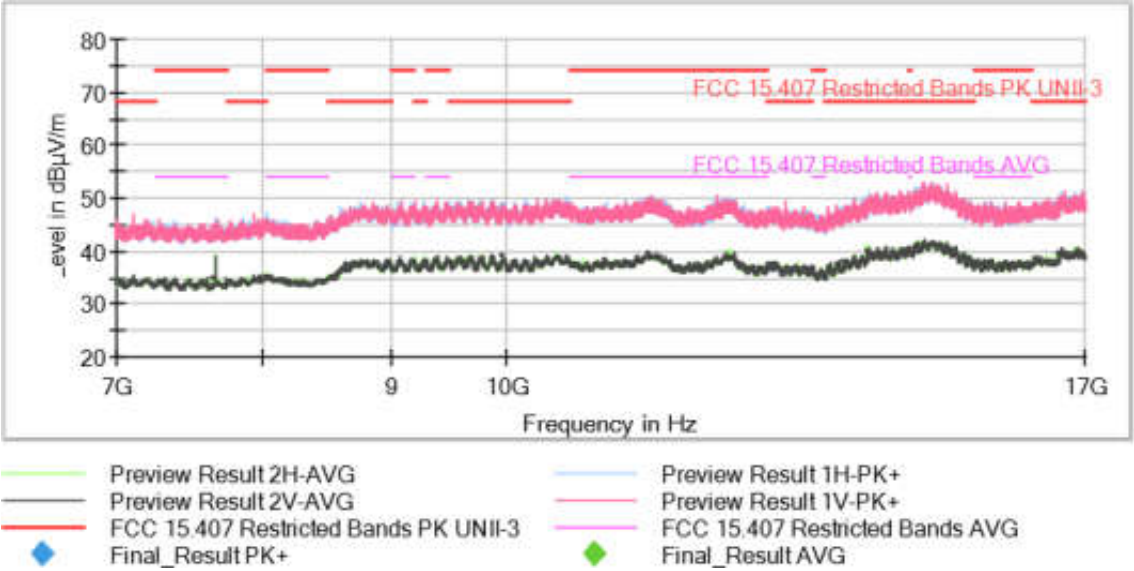
Active Port = 1

Frequency Range GHz = [7, 17]

Frequency MHz = 5825.00000

Modulation = 802.11n HT20 (OFDM MCS0)

Images:



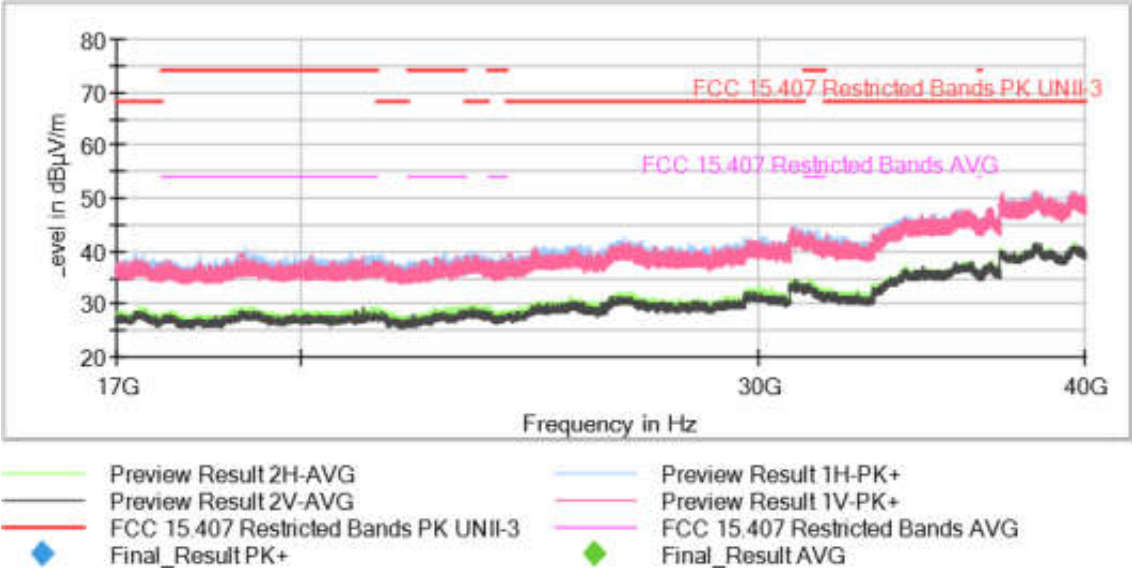
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [17, 40] Frequency MHz = 5745.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:



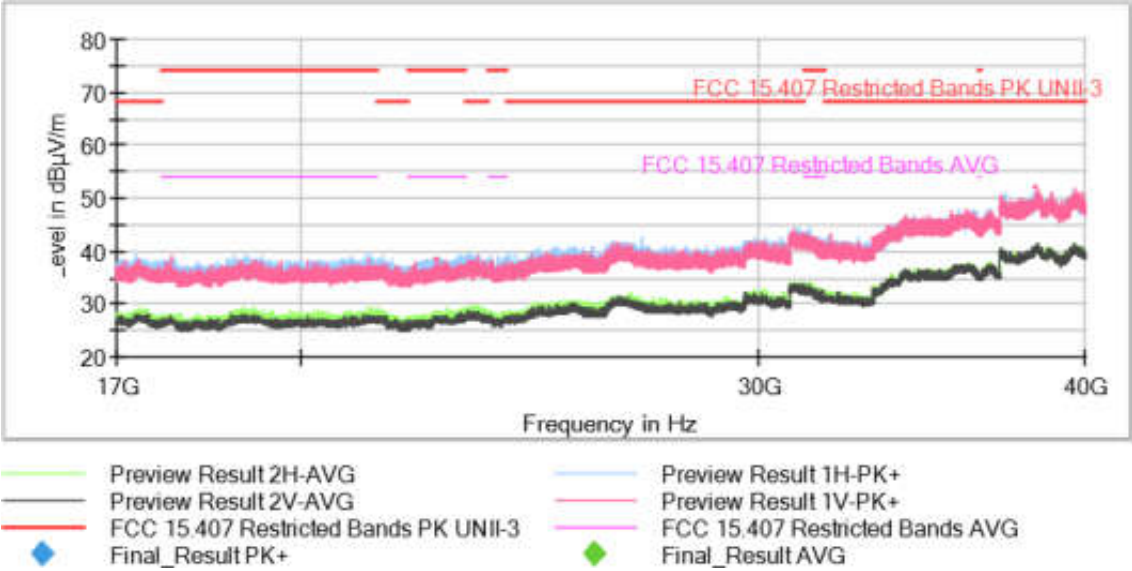
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [17, 40] Frequency MHz = 5785.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:

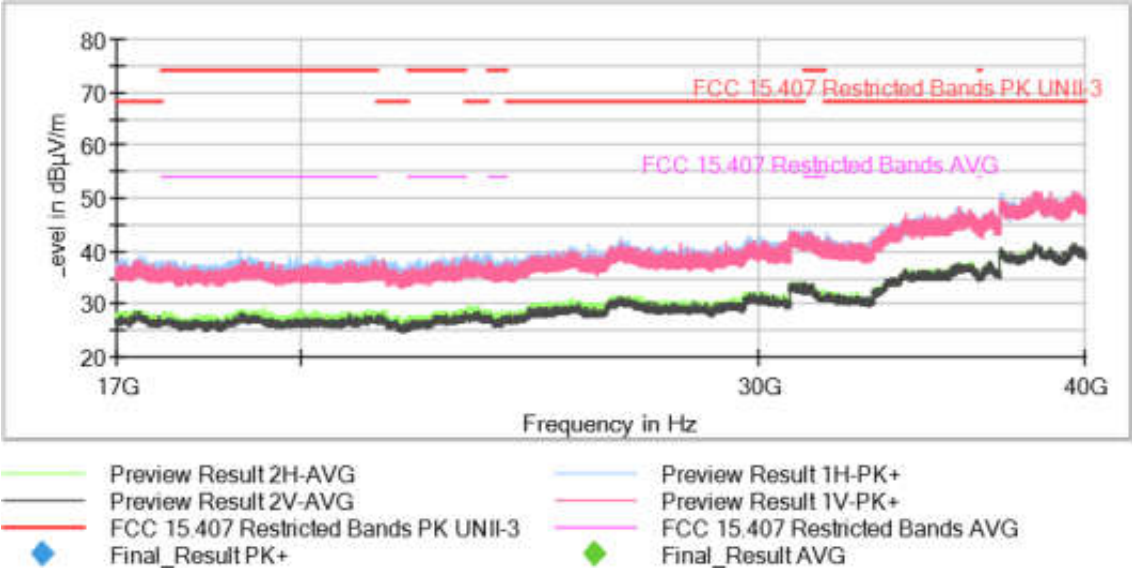


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [17, 40] Frequency MHz = 5825.00000
Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Results

Operation Band (MHz)	Port	Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
[5725, 5850]	1	[0.03, 1]	5755.00000	559.960	36.26	V	PK
				559.960	33.51	V	QP
				960.060	39.23	V	PK
				960.060	28.10	V	QP
			5795.00000	559.956	36.25	V	PK
				559.956	33.73	V	QP
				625.037	36.68	H	PK
				625.037	33.99	H	QP

Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850]

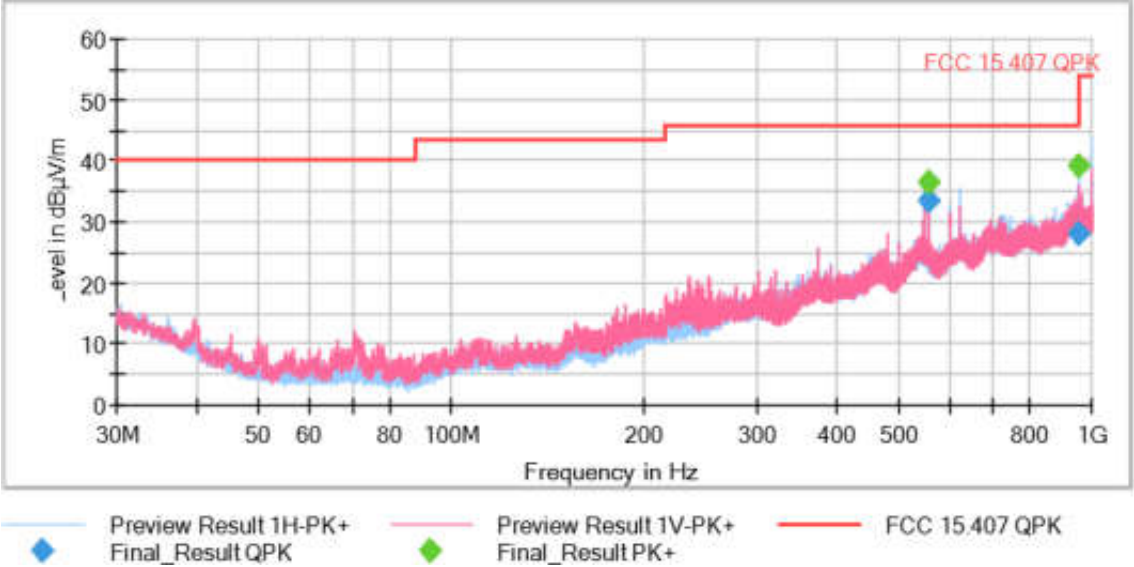
Active Port = 1

Frequency Range GHz = [0.03, 1]

Frequency MHz = 5755.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850]

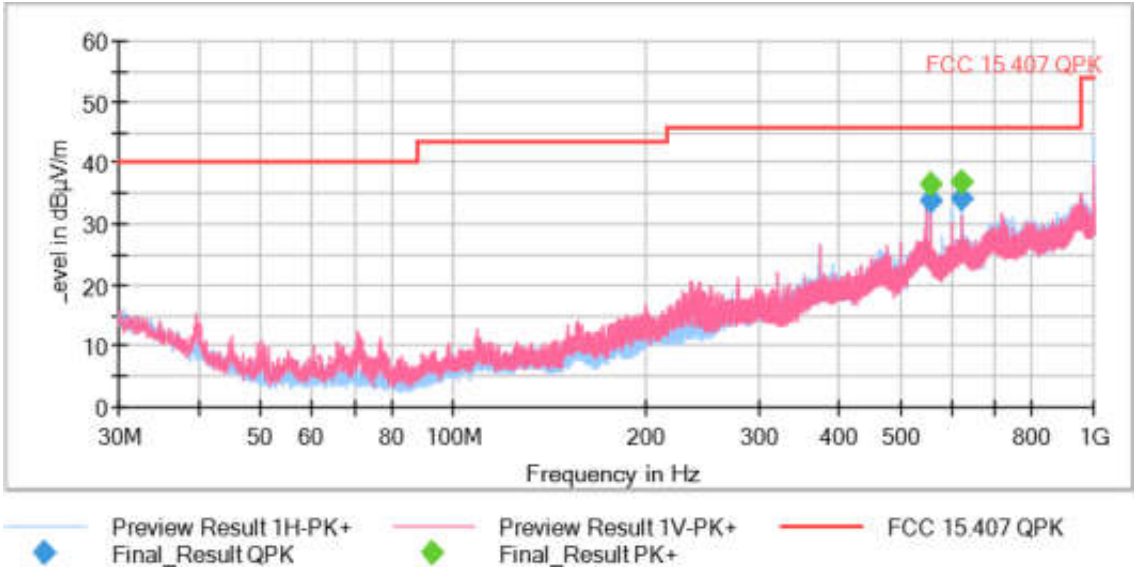
Active Port = 1

Frequency Range GHz = [0.03, 1]

Frequency MHz = 5795.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850]

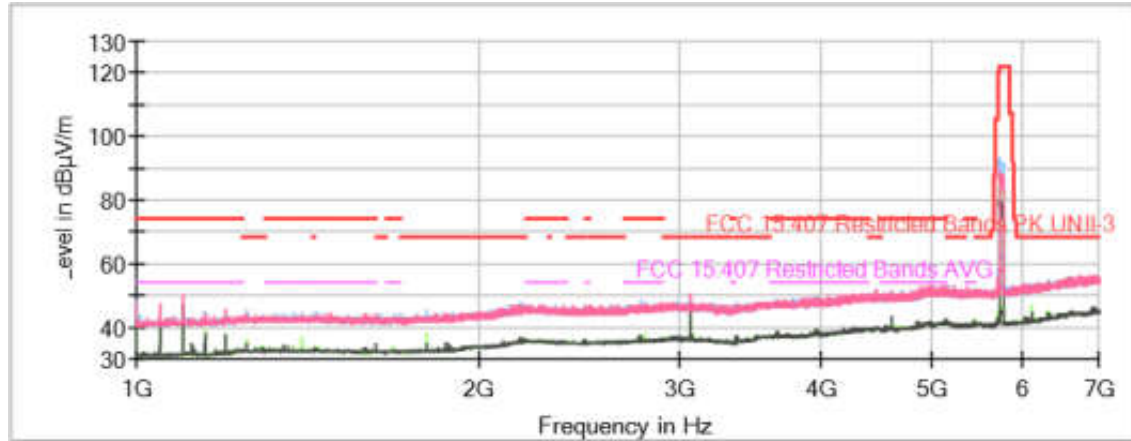
Active Port = 1

Frequency Range GHz = [1, 7]

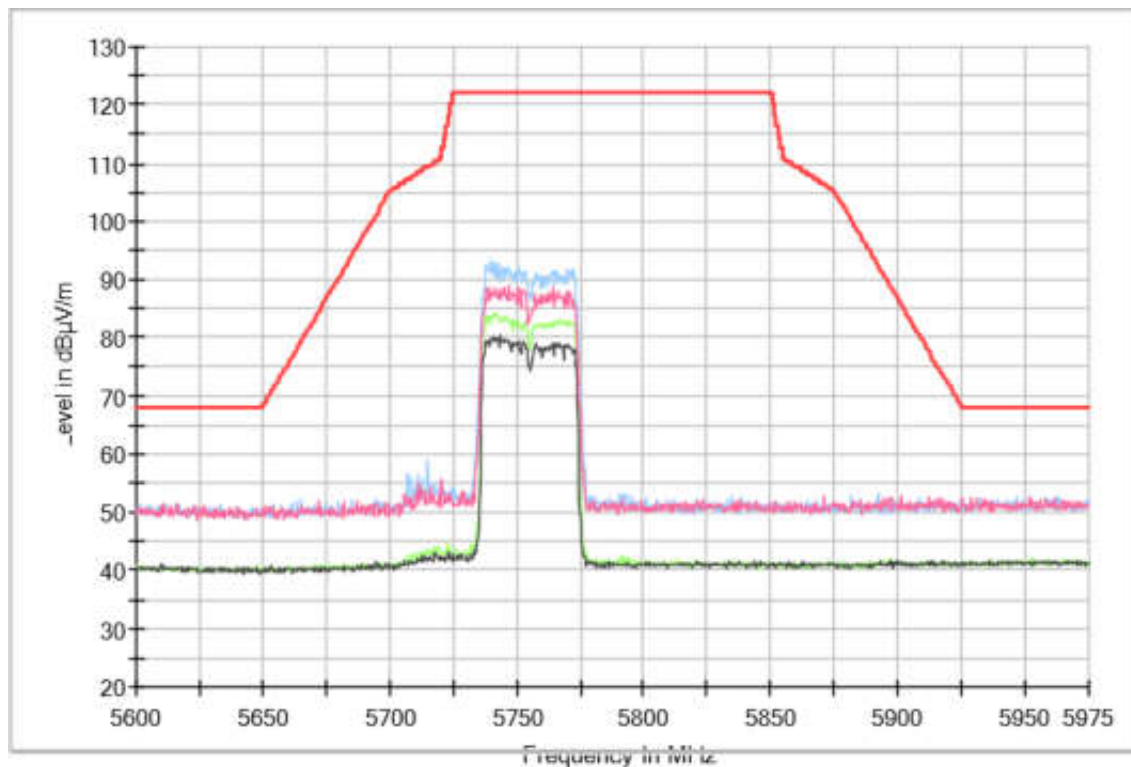
Frequency MHz = 5755.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG



Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG

Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

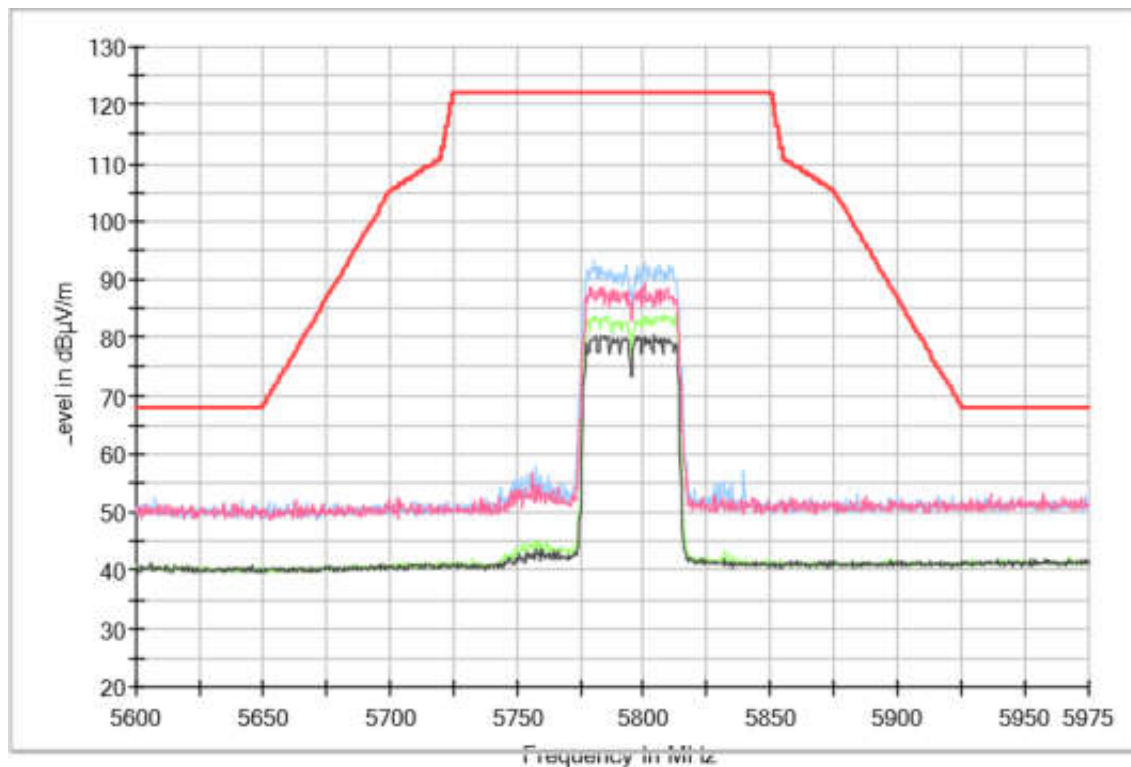
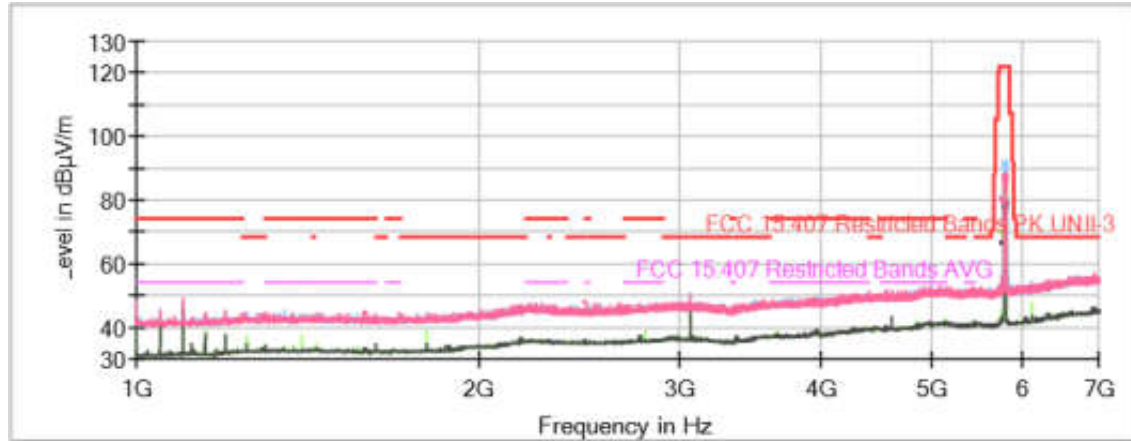
Active Port = 1

Frequency Range GHz = [1, 7]

Frequency MHz = 5795.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

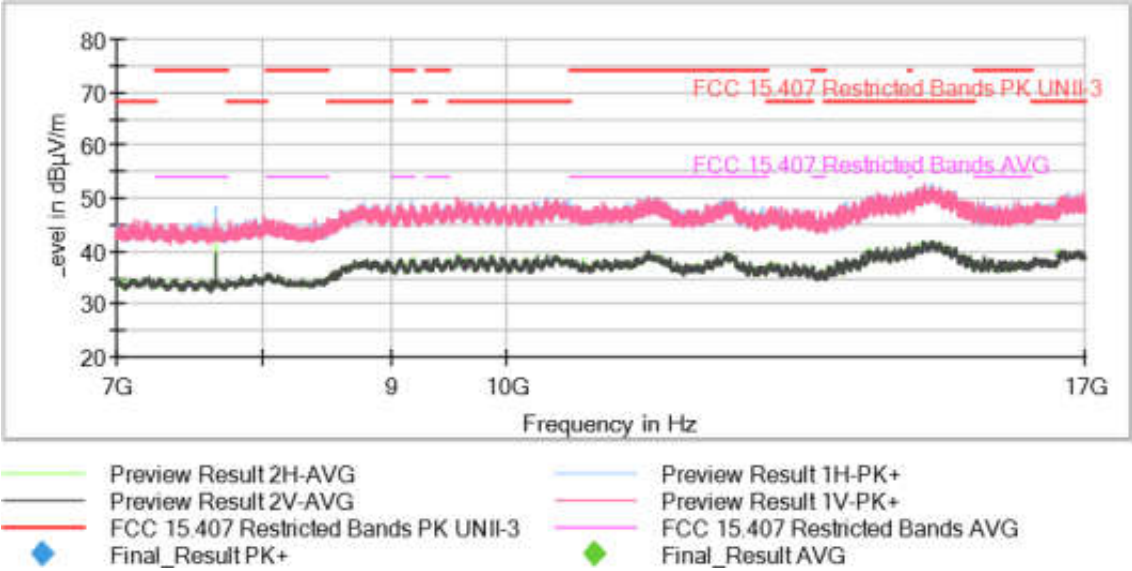
Active Port = 1

Frequency Range GHz = [7, 17]

Frequency MHz = 5755.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

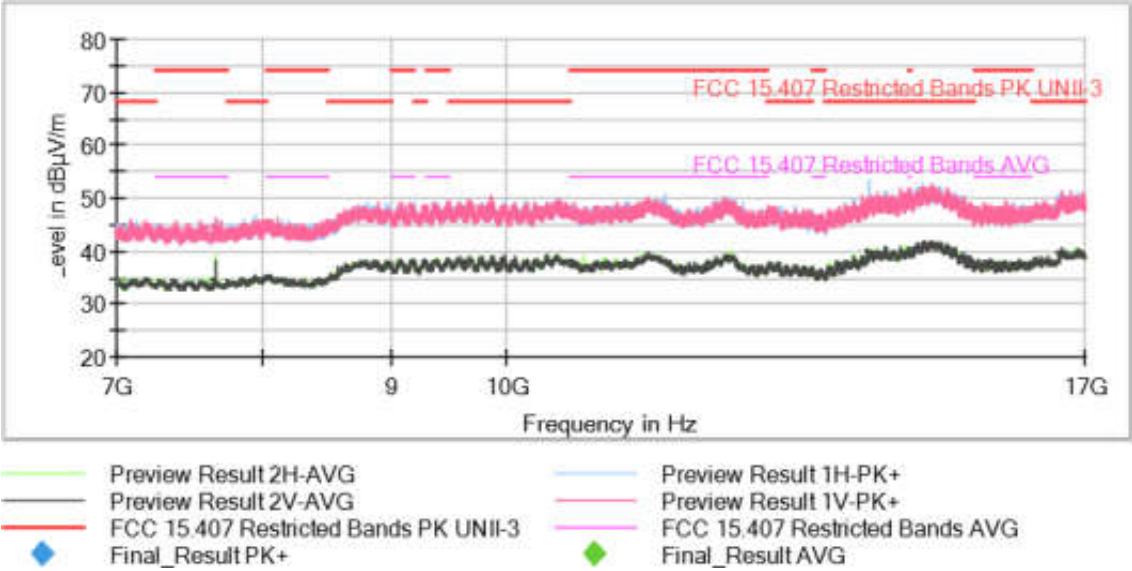
Active Port = 1

Frequency Range GHz = [7, 17]

Frequency MHz = 5795.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

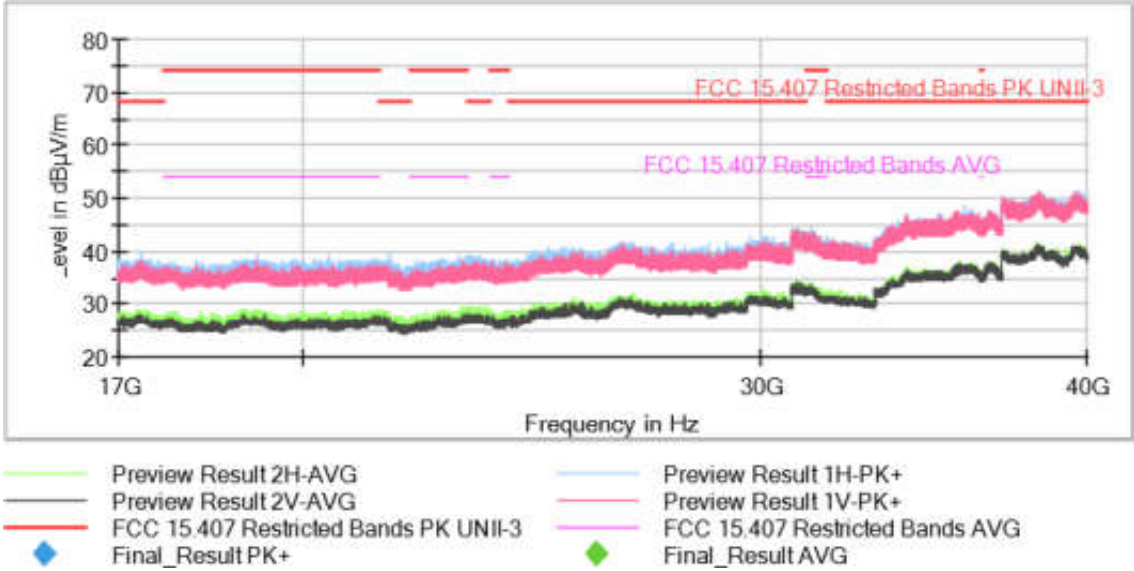
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5755.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

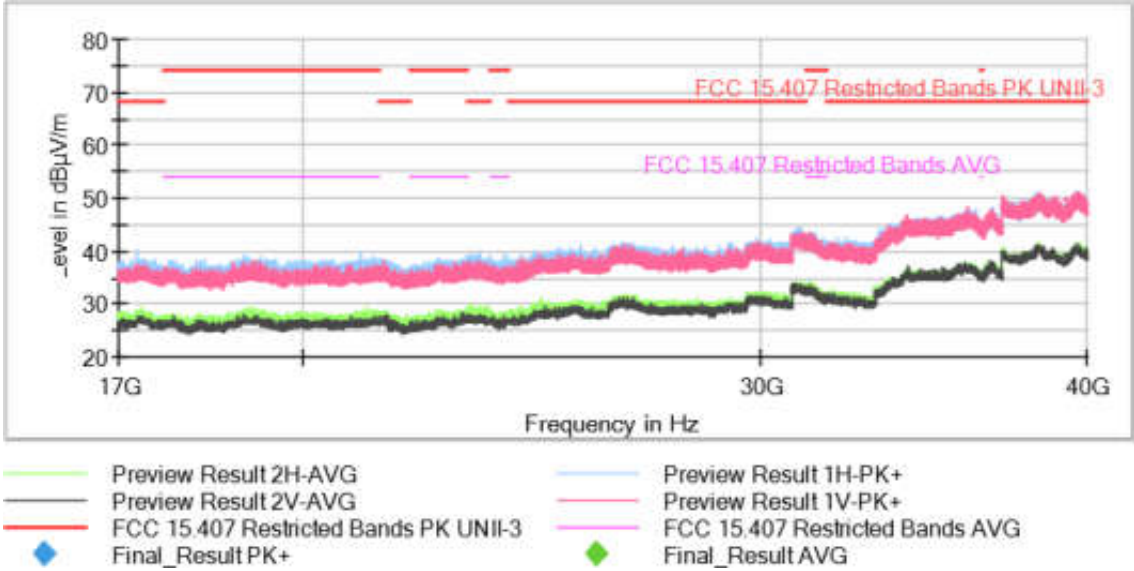
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5795.00000

Modulation = 802.11n HT40 (OFDM MCS0 13.5 Mbit/s)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
[5725, 5850]	1	[0.03, 1]	5745.00000	559.938	36.03	V	PK
				559.938	33.35	V	QP
				625.029	36.71	H	PK
				625.029	33.77	H	QP
				999.996	44.31	H	PK
				999.996	40.70	H	QP
			5785.00000	559.947	36.75	V	PK
				559.947	33.95	V	QP
				625.028	37.40	H	PK
				625.028	34.62	H	QP
				959.968	39.26	V	PK
				959.968	26.23	V	QP
			5825.00000	550.011	35.54	H	PK
				550.011	32.61	H	QP
				559.948	37.23	V	PK
				559.948	34.22	V	QP
				625.037	36.61	H	PK
				625.037	33.62	H	QP

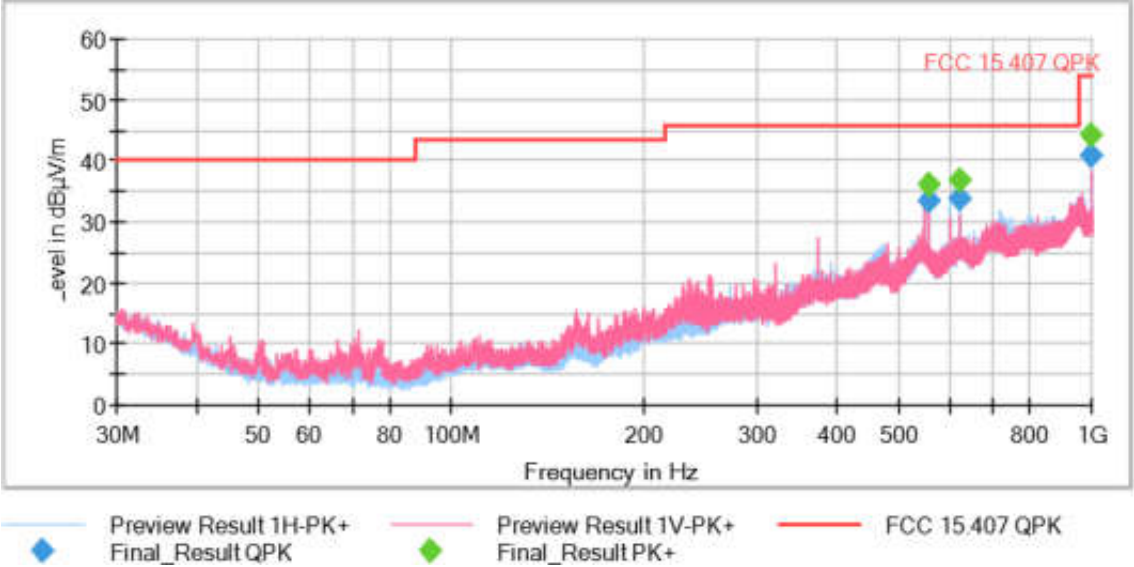
Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5745.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



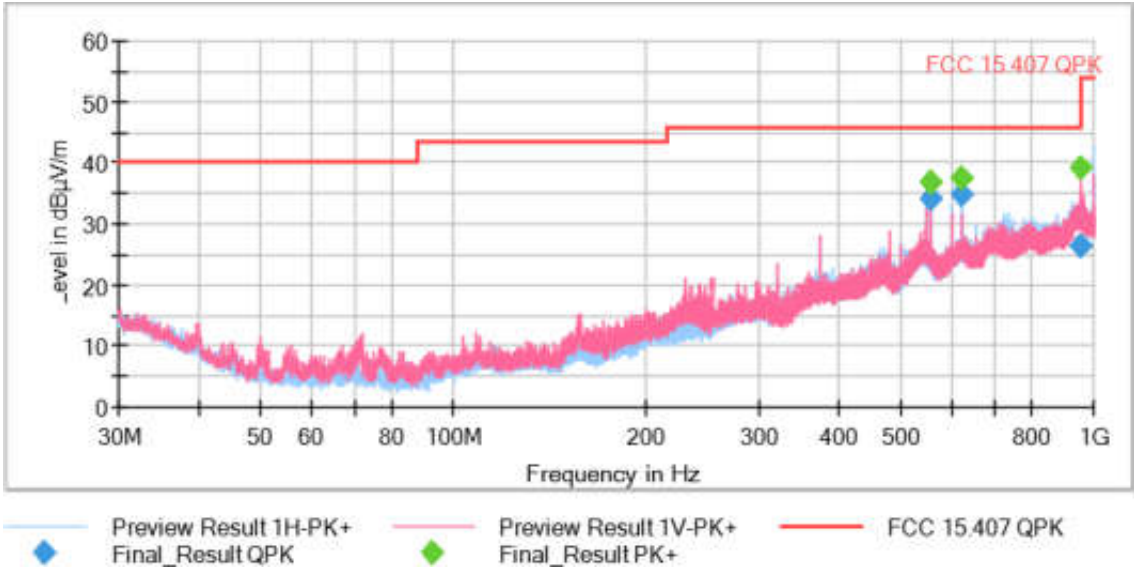
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5785.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:

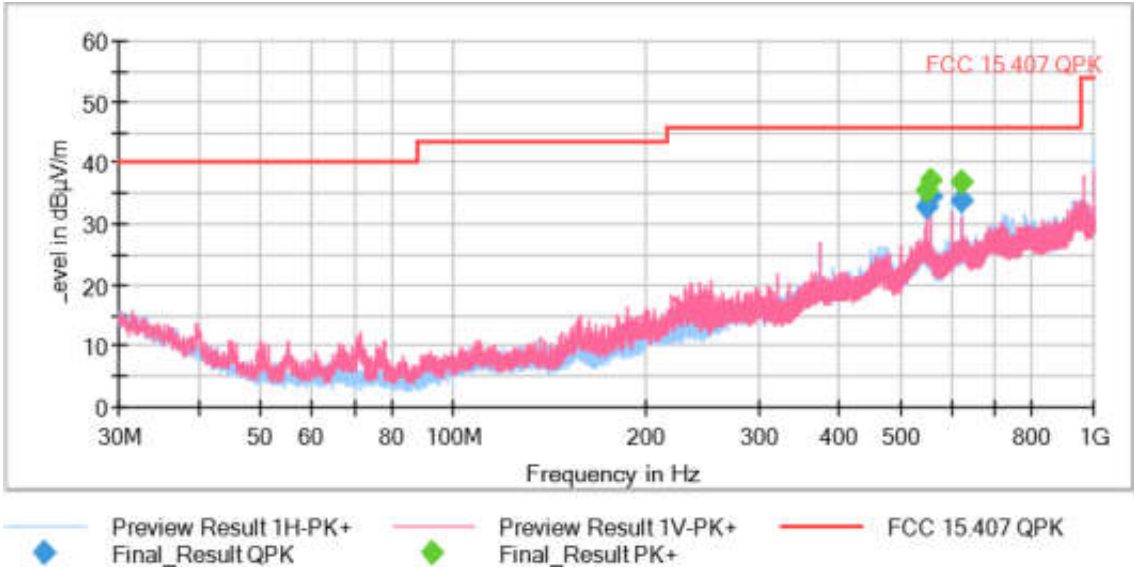


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5825.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:

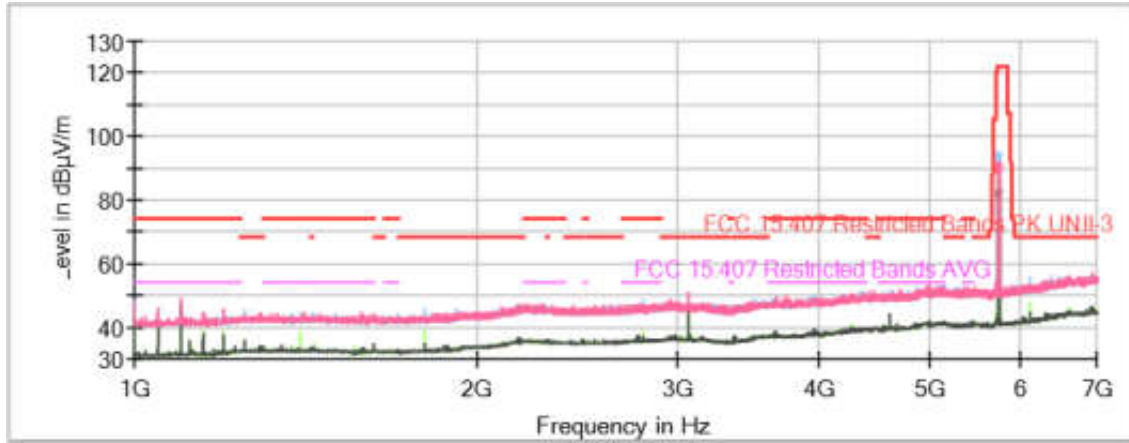


Tables:
Spectrum Analyzer Parameters

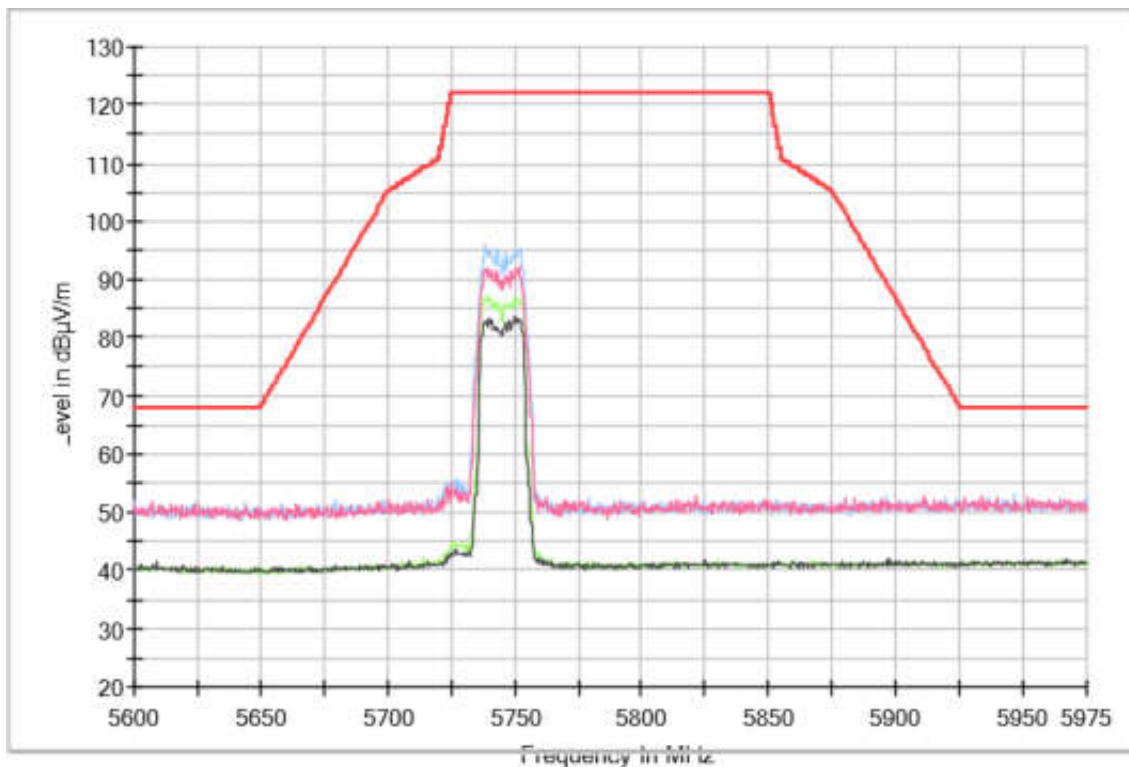
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [1, 7] Frequency MHz = 5745.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 Restricted Bands PK UNII-3
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG



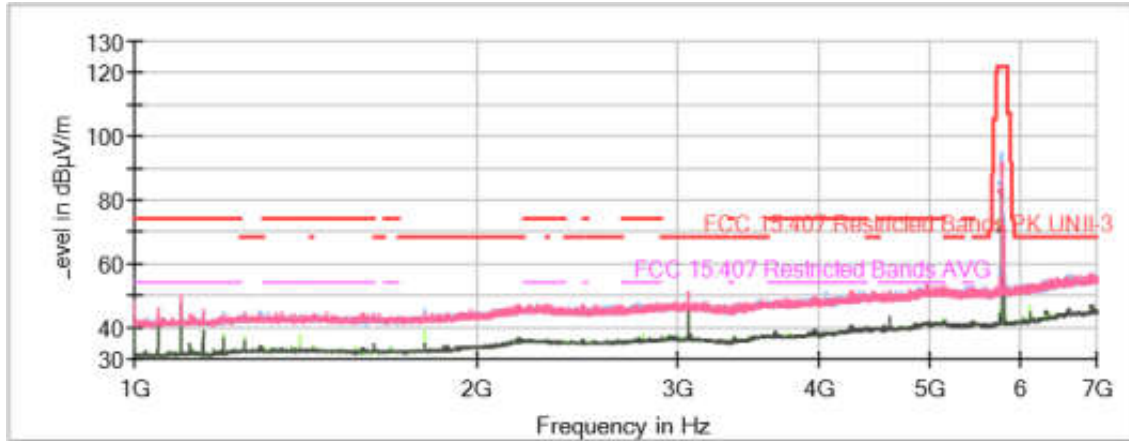
Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 Restricted Bands PK UNII-3
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG

Tables:
Spectrum Analyzer Parameters

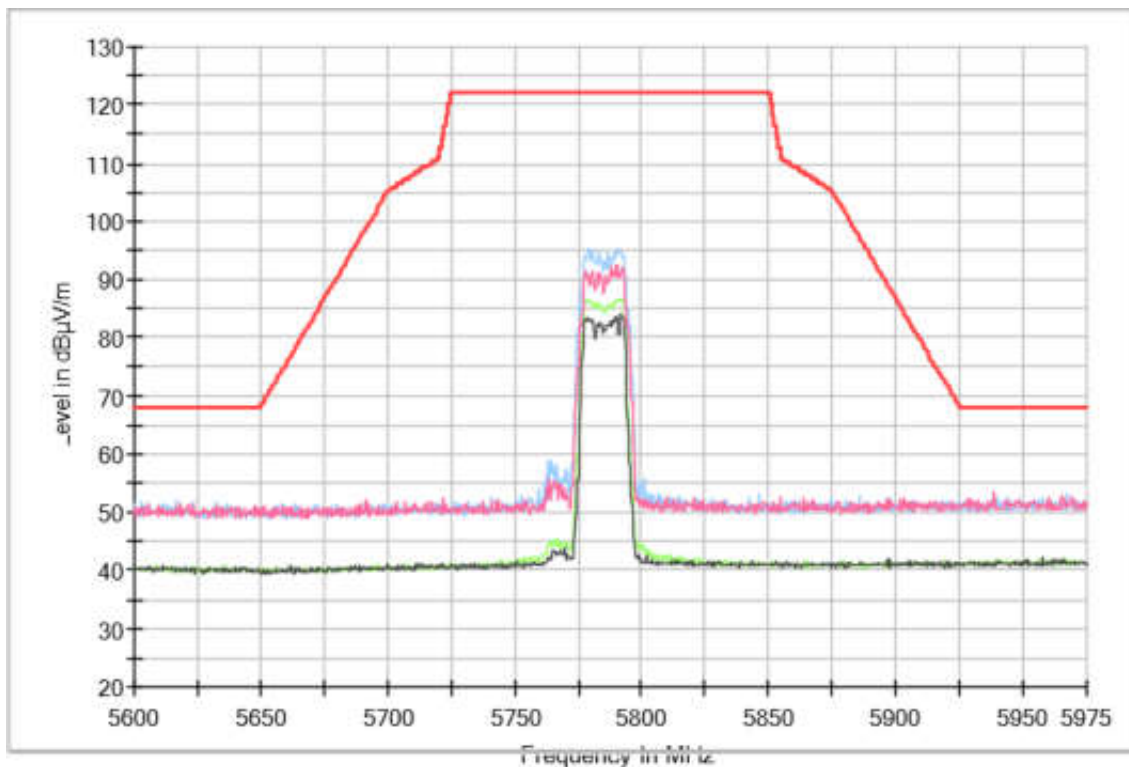
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [1, 7] Frequency MHz = 5785.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG



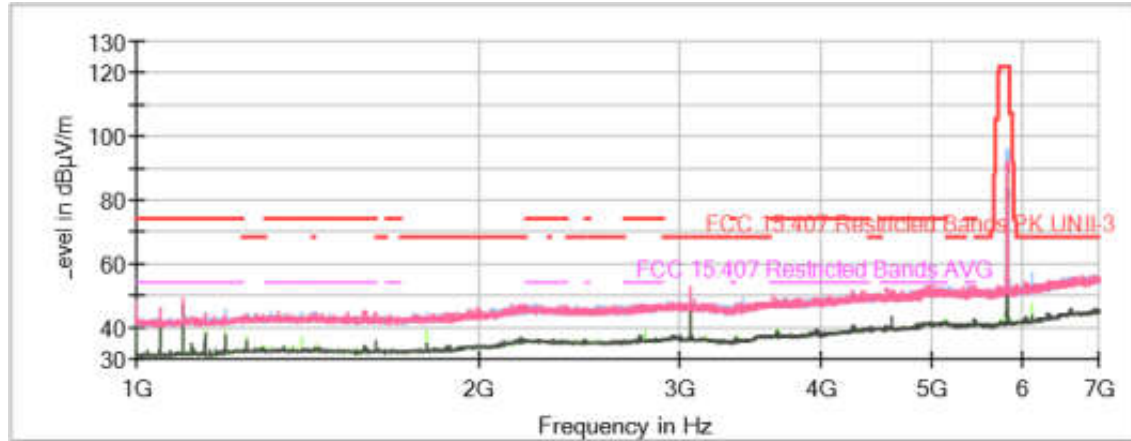
Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG

Tables:
Spectrum Analyzer Parameters

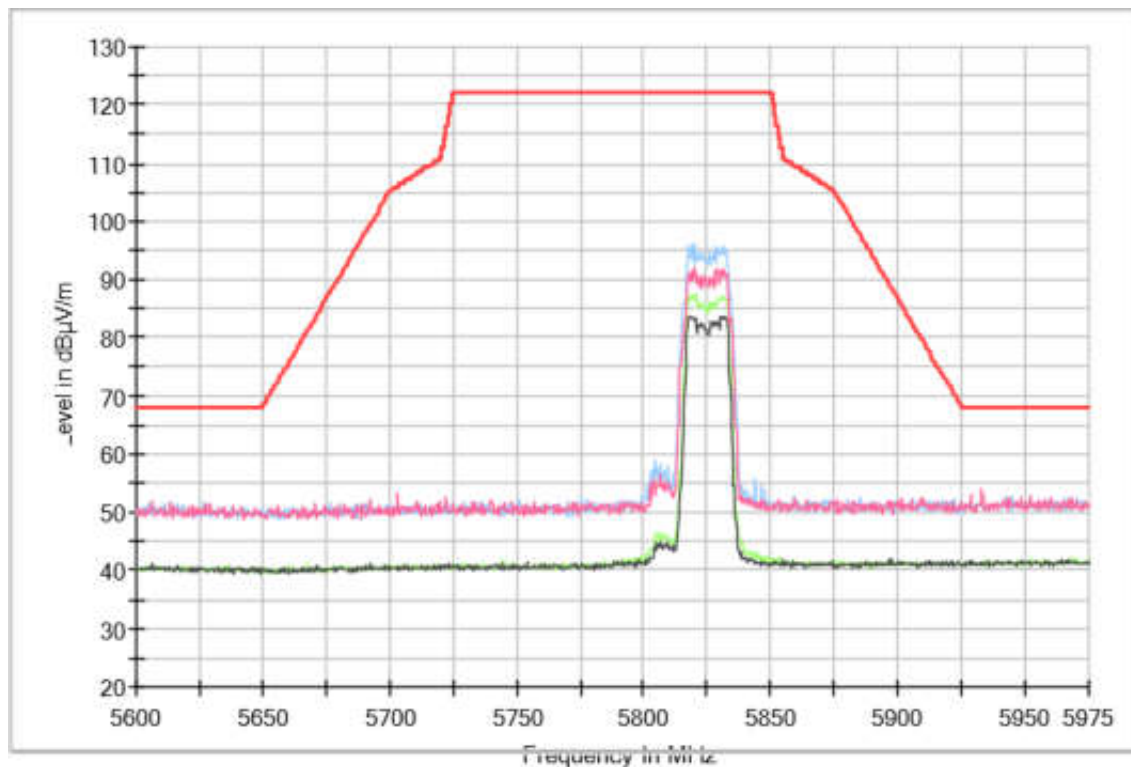
Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [1, 7] Frequency MHz = 5825.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 Restricted Bands PK UNII-3
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG



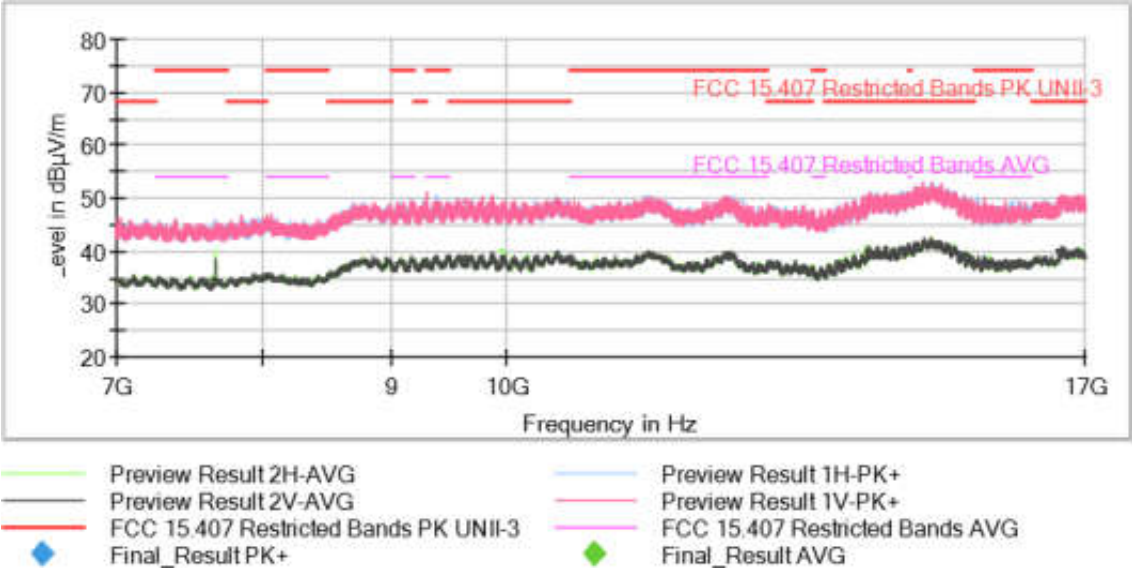
Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 Restricted Bands PK UNII-3
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG

Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5745.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



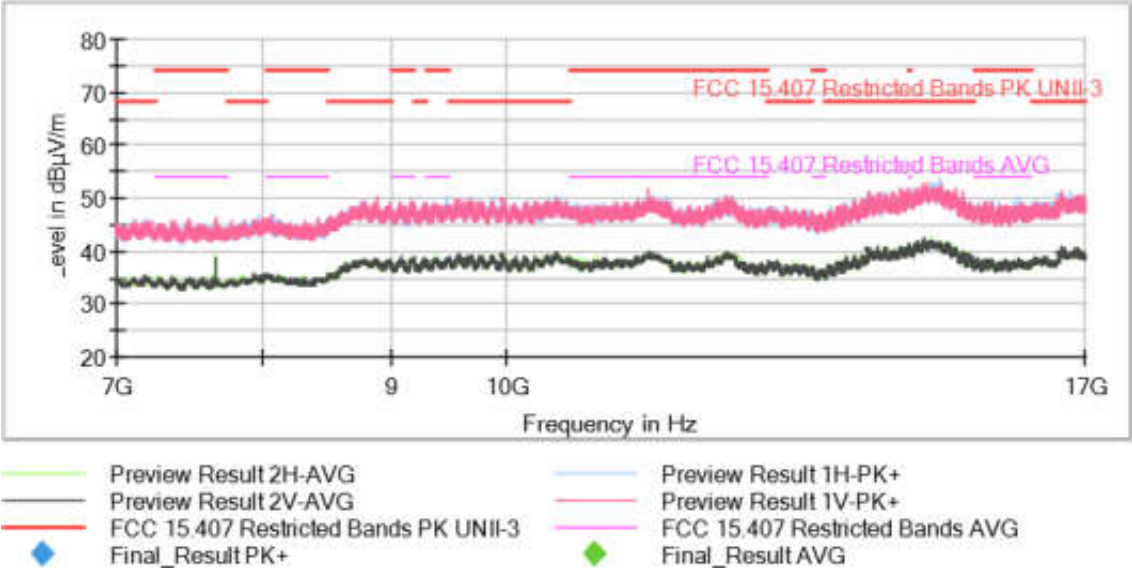
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5785.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



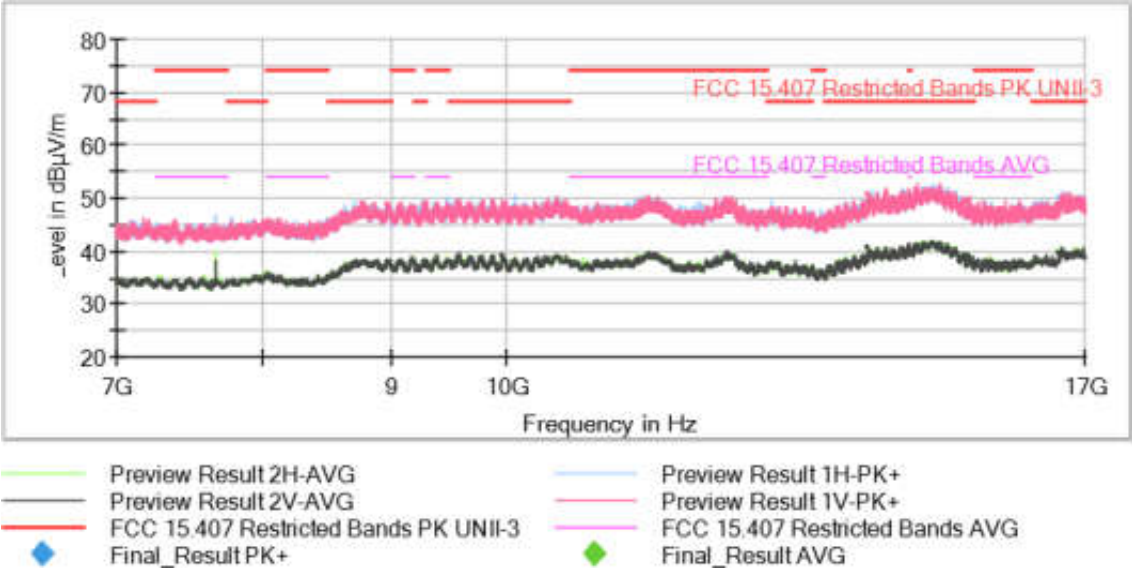
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5825.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



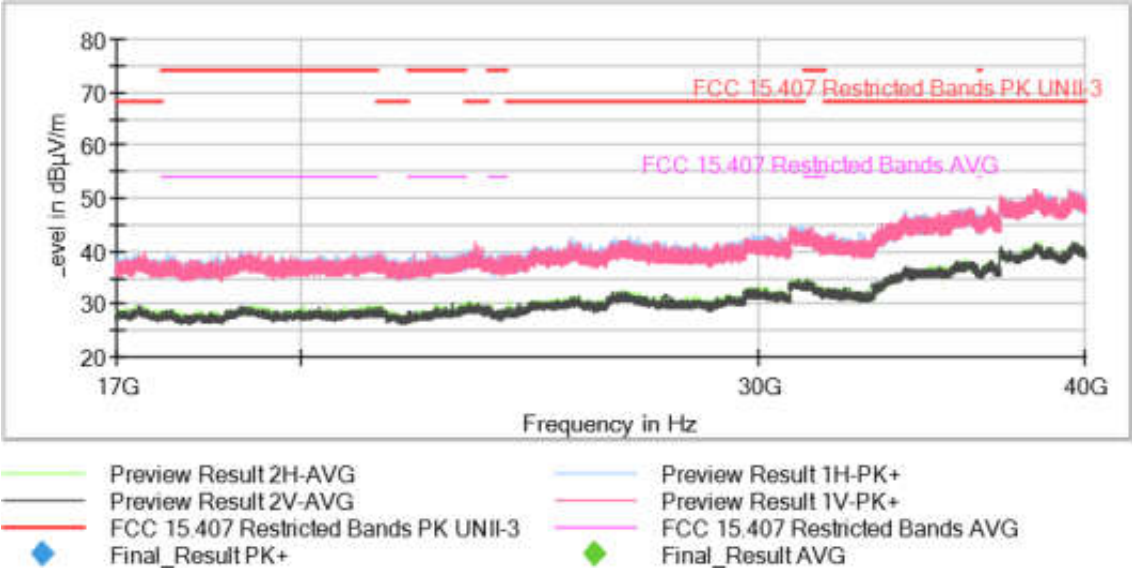
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [17, 40] Frequency MHz = 5745.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



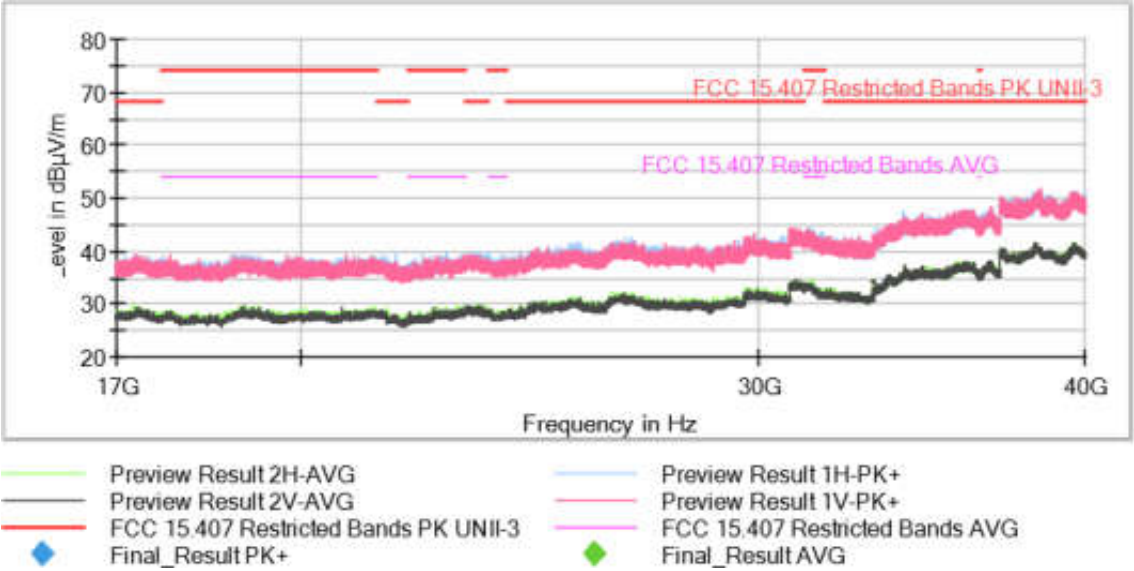
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [17, 40] Frequency MHz = 5785.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



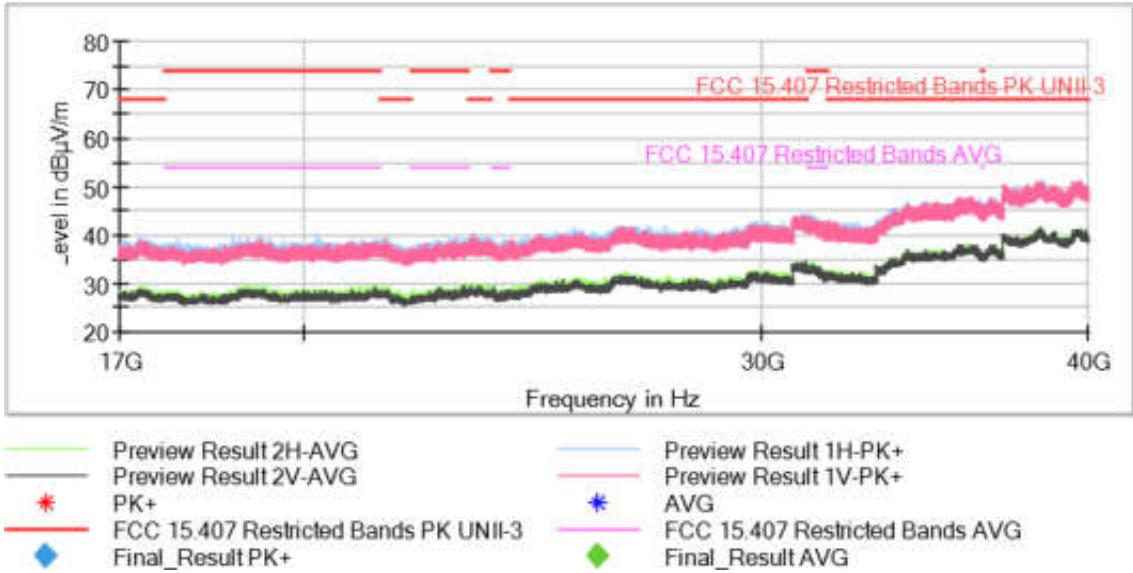
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [17, 40] Frequency MHz = 5825.00000
Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
[5725, 5850]	1	[0.03, 1]	5745.00000	559.955	37.20	V	PK
				559.955	34.31	V	QP
				625.038	37.00	H	PK
				625.038	34.33	H	QP
				960.182	37.17	H	PK
				960.182	23.83	H	QP
			5785.00000	559.958	35.74	V	PK
				559.958	32.61	V	QP
				625.024	37.21	H	PK
				625.024	34.58	H	QP
				960.067	37.61	H	PK
				960.067	29.06	H	QP
			5825.00000	559.949	37.20	V	PK
				559.949	34.76	V	QP
				960.057	39.29	V	PK
				960.057	27.20	V	QP

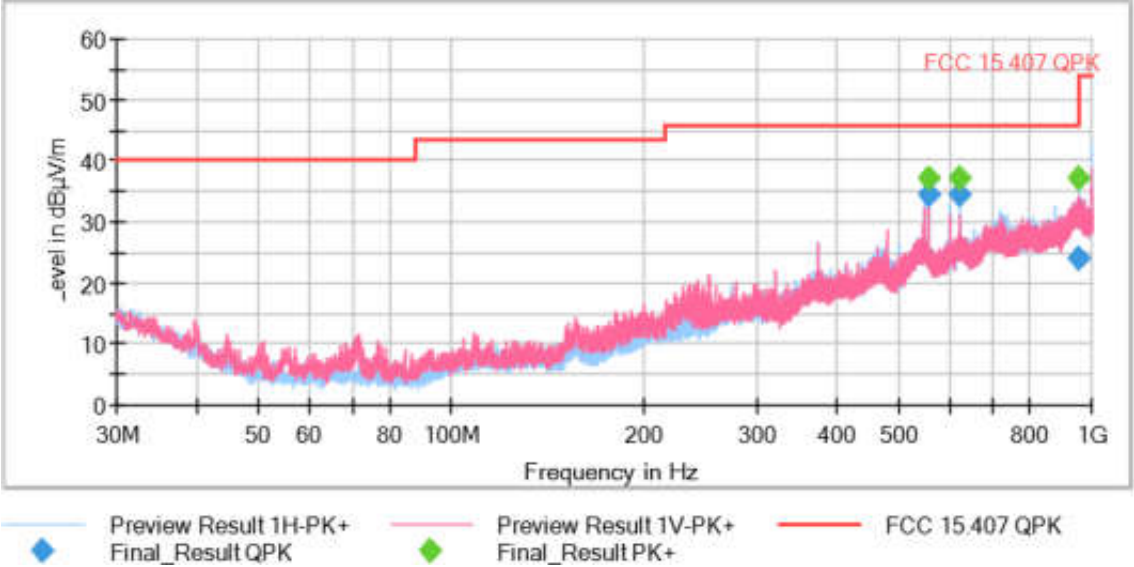
Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5745.00000
Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



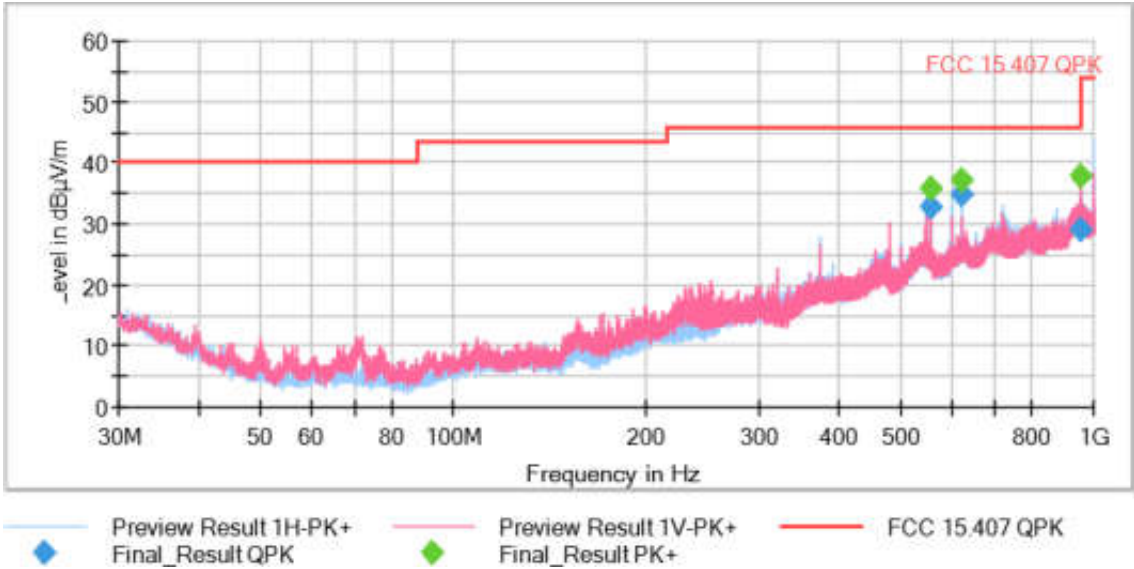
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5785.00000
Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:

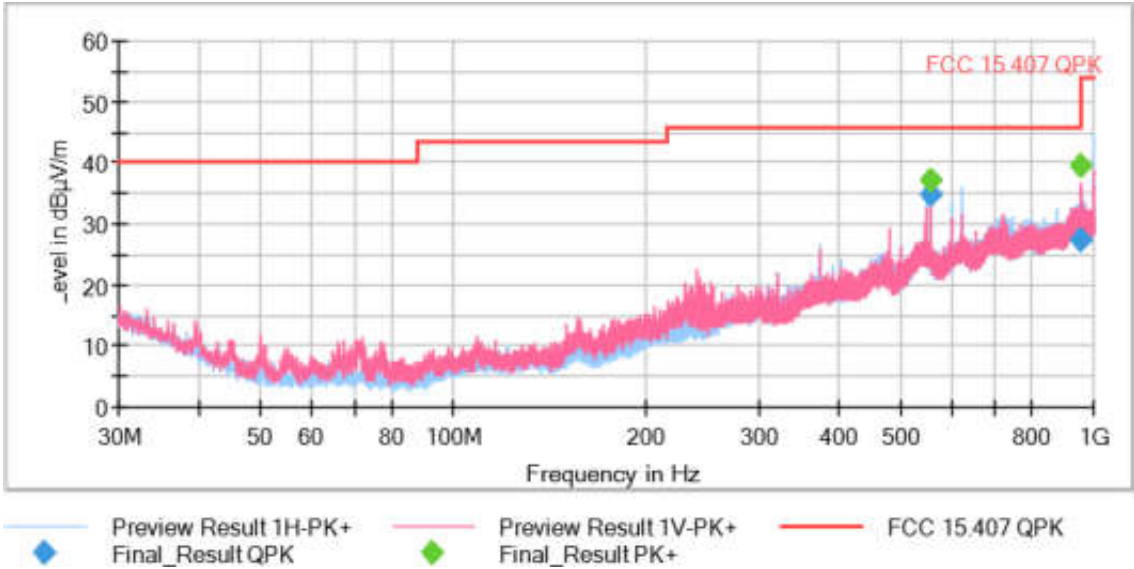


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5825.00000
Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850]

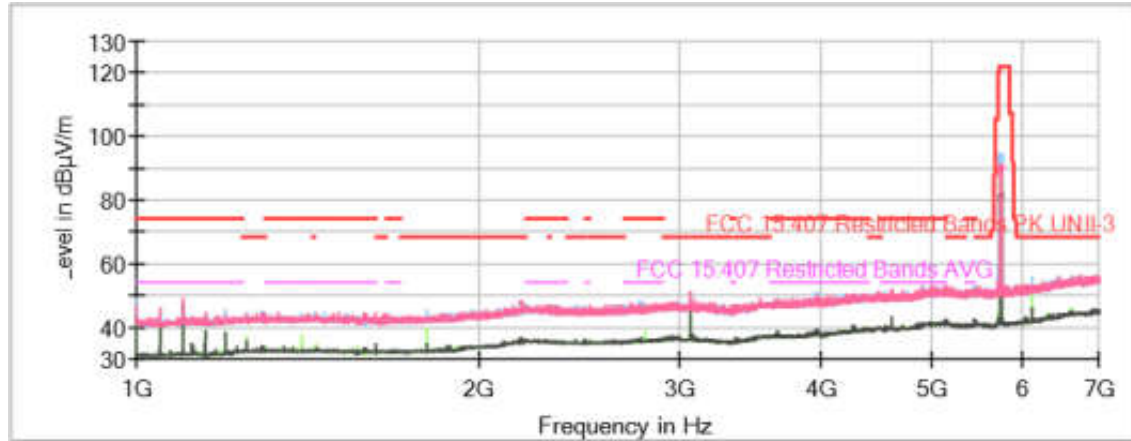
Active Port = 1

Frequency Range GHz = [1, 7]

Frequency MHz = 5745.00000

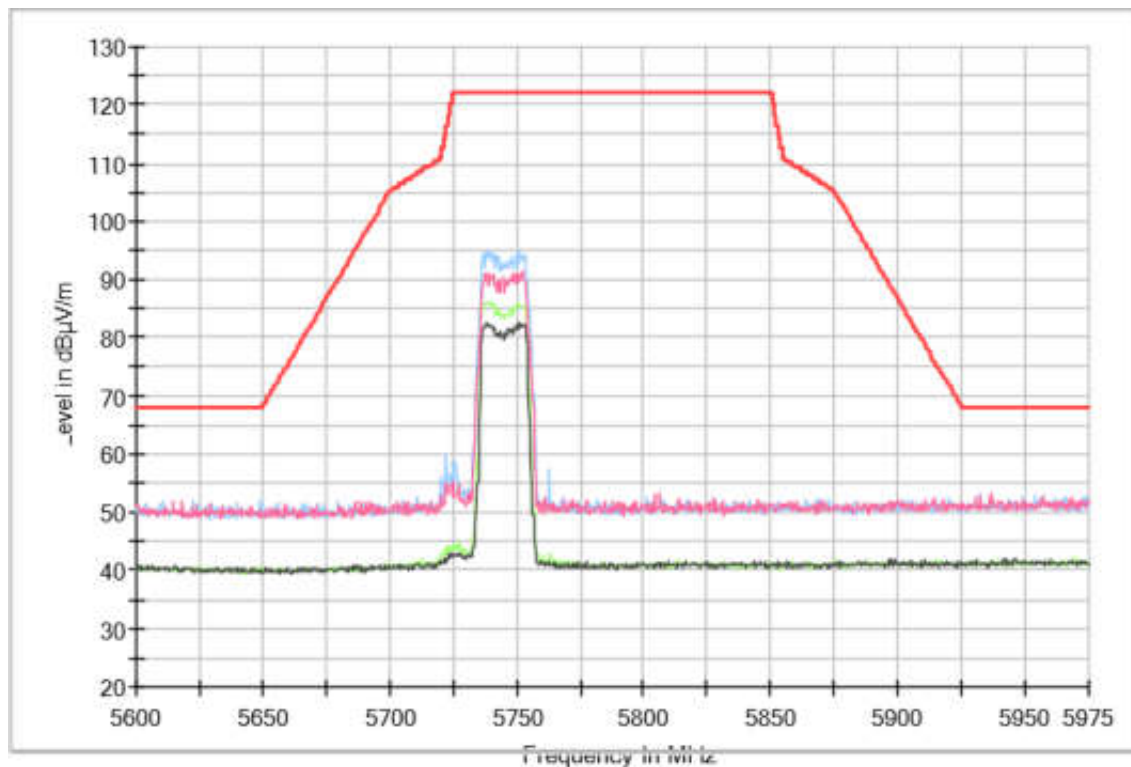
Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



— Preview Result 2H-AVG
— Preview Result 2V-AVG
— FCC 15.407 Restricted Bands PK UNII-3
◆ Final_Result PK+

— Preview Result 1H-PK+
— Preview Result 1V-PK+
— FCC 15.407 Restricted Bands AVG
◆ Final_Result AVG



— Preview Result 2H-AVG
— Preview Result 2V-AVG
— FCC 15.407 Restricted Bands PK UNII-3
◆ Final_Result PK+

— Preview Result 1H-PK+
— Preview Result 1V-PK+
— FCC 15.407 Restricted Bands AVG
◆ Final_Result AVG

Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

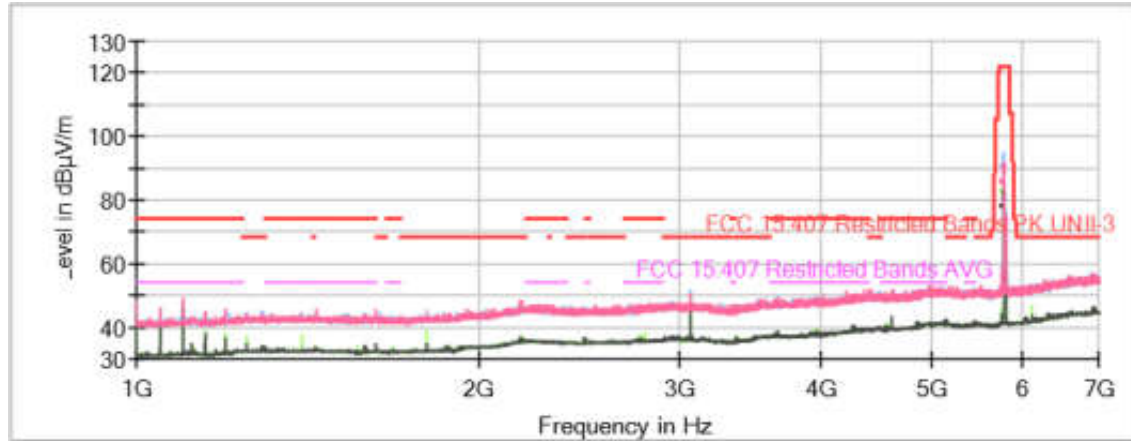
Active Port = 1

Frequency Range GHz = [1, 7]

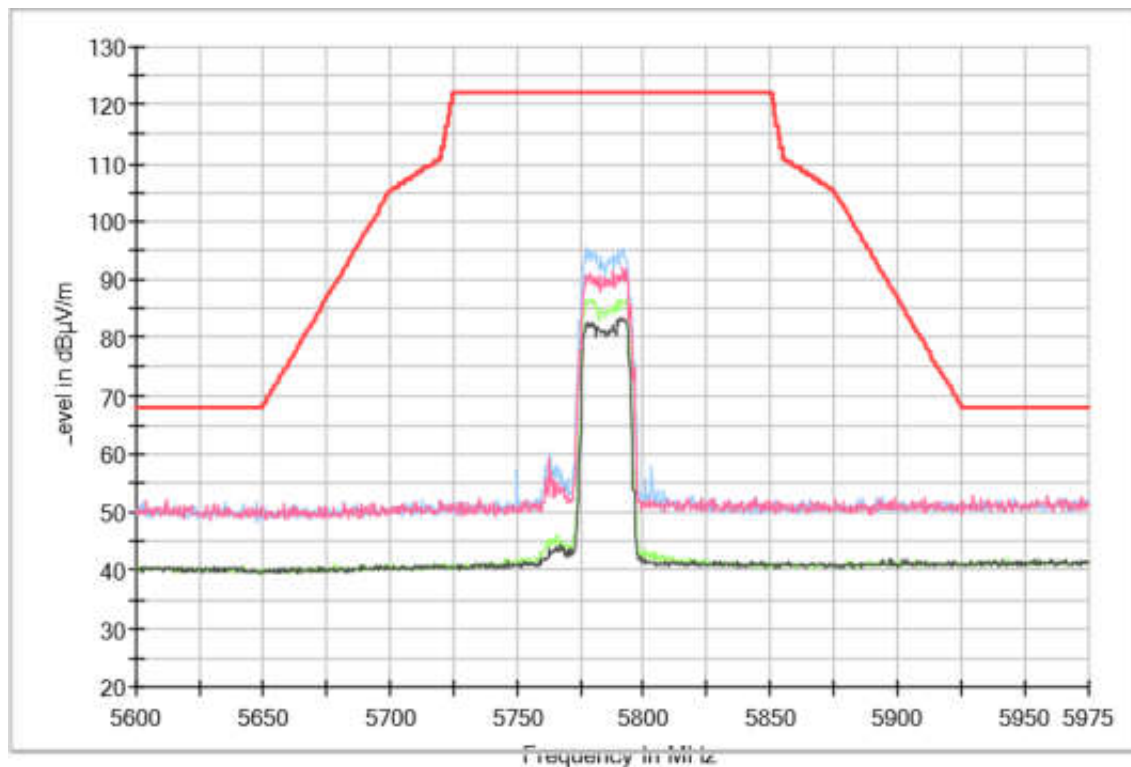
Frequency MHz = 5785.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 Restricted Bands PK UNII-3
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG



Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 Restricted Bands PK UNII-3
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG

Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

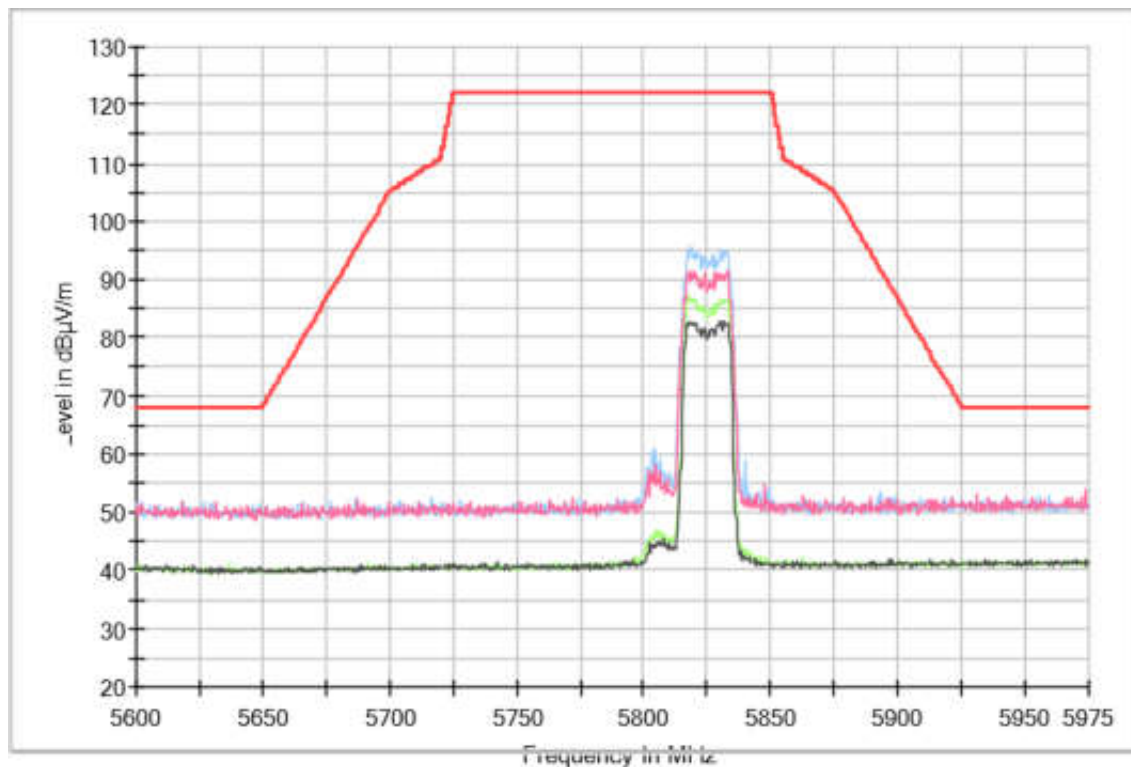
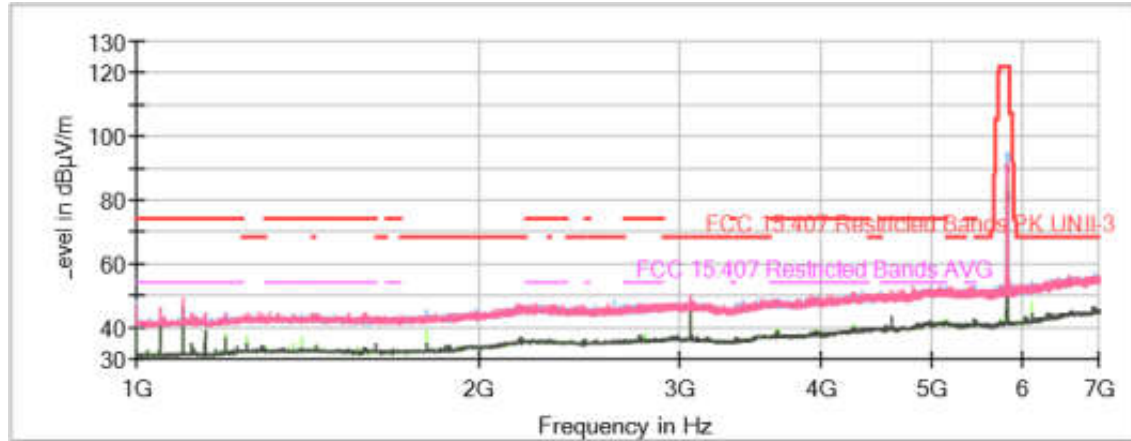
Active Port = 1

Frequency Range GHz = [1, 7]

Frequency MHz = 5825.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:

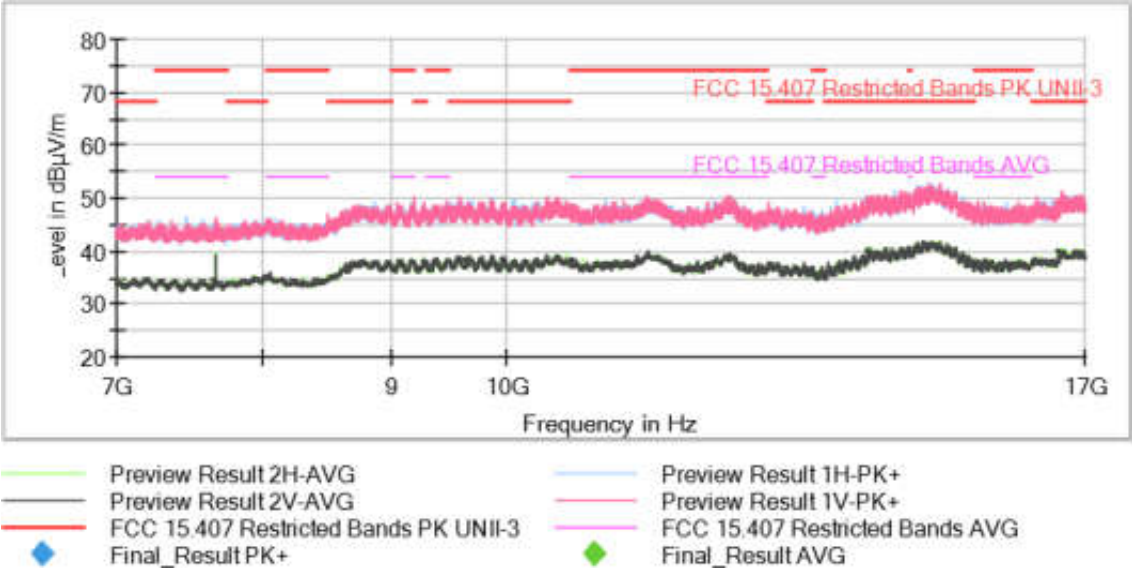


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5745.00000
Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

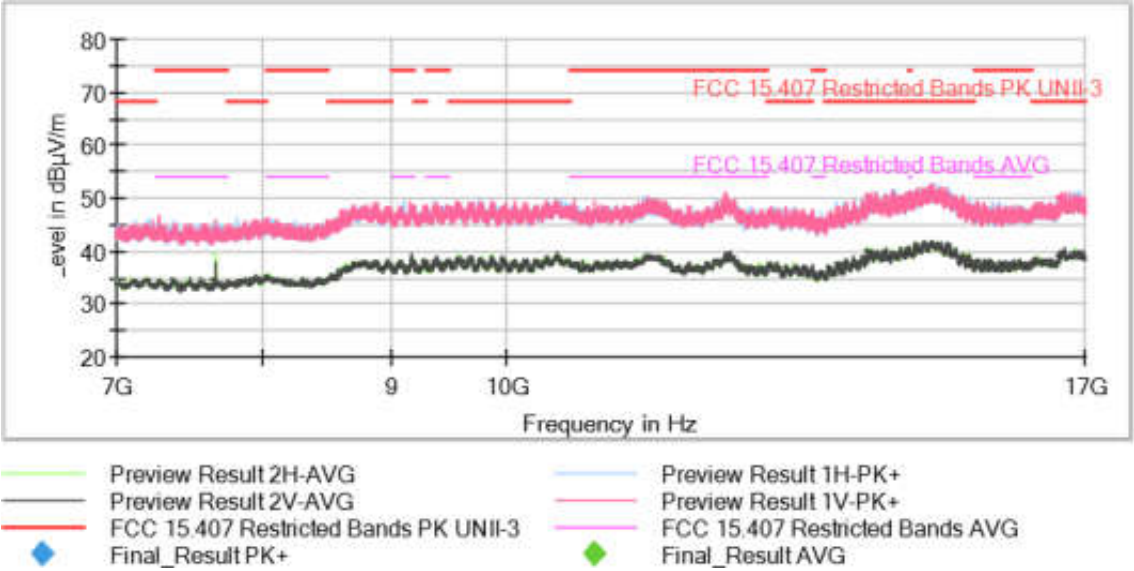
Active Port = 1

Frequency Range GHz = [7, 17]

Frequency MHz = 5785.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

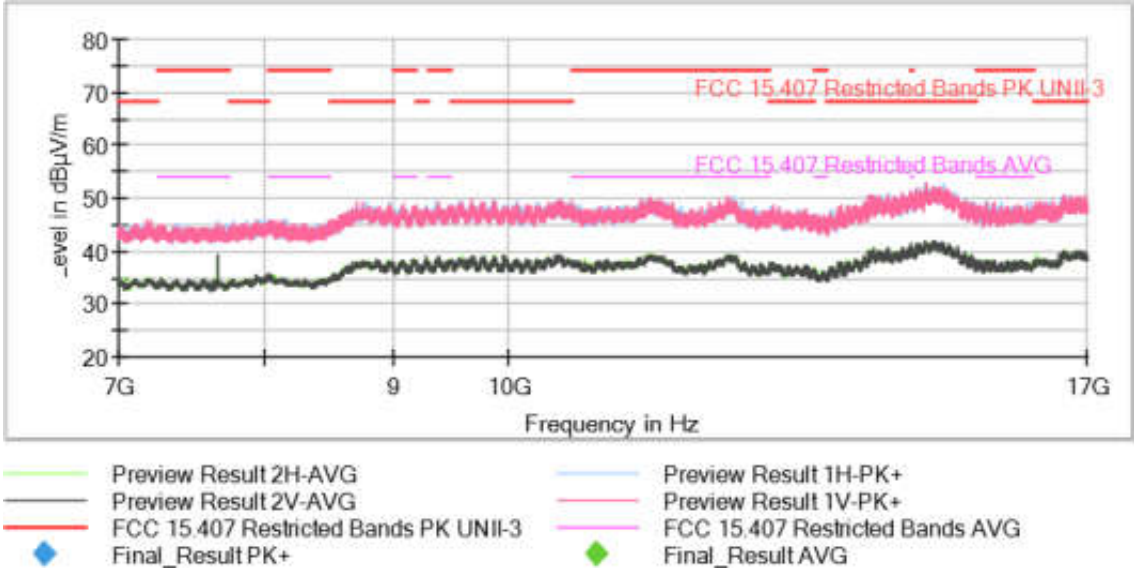
Active Port = 1

Frequency Range GHz = [7, 17]

Frequency MHz = 5825.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

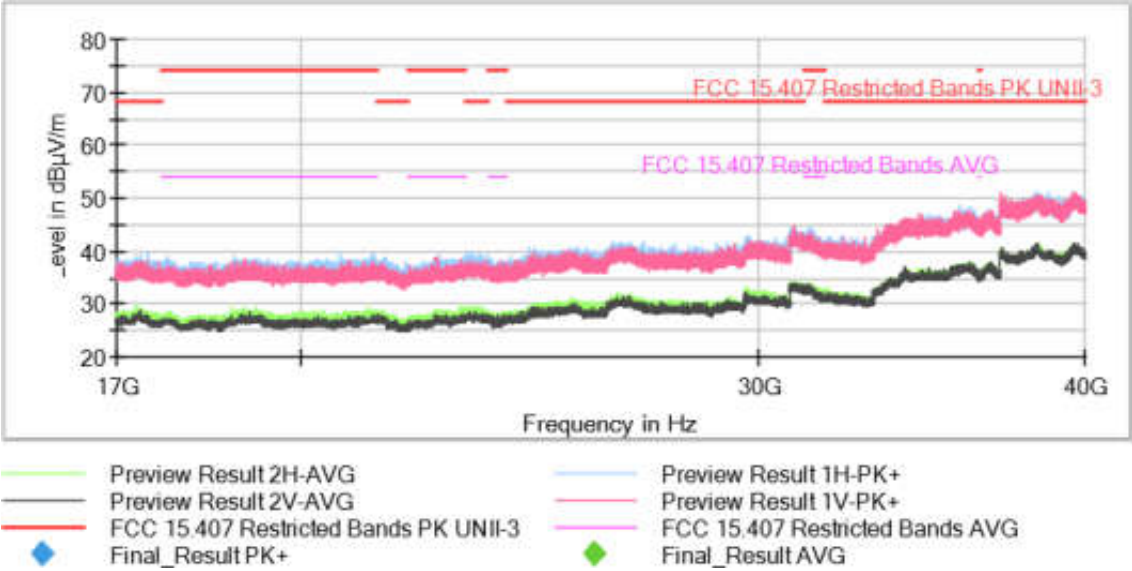
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5745.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

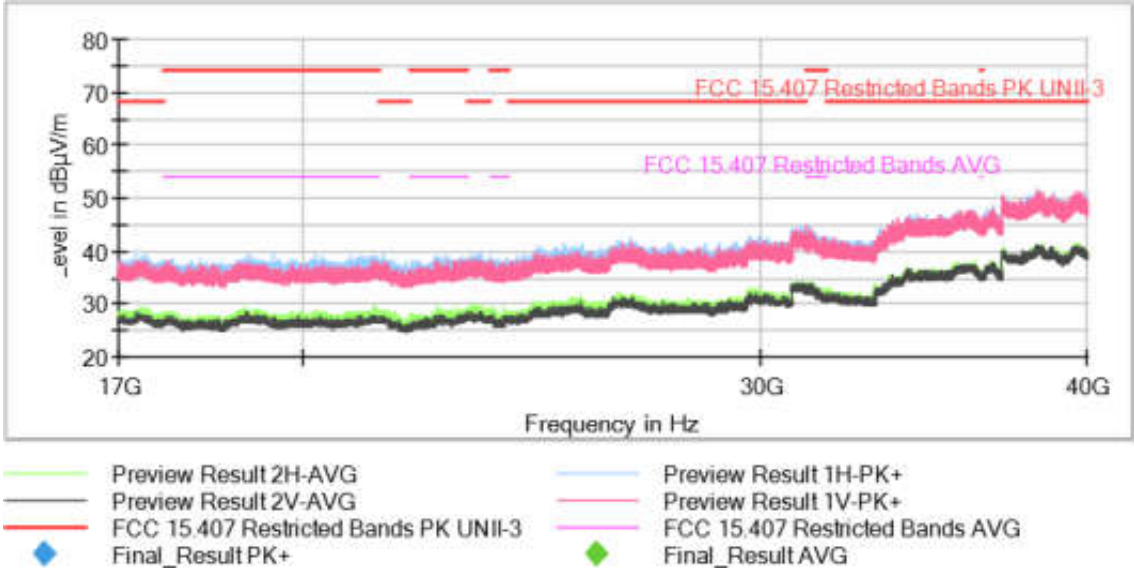
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5785.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

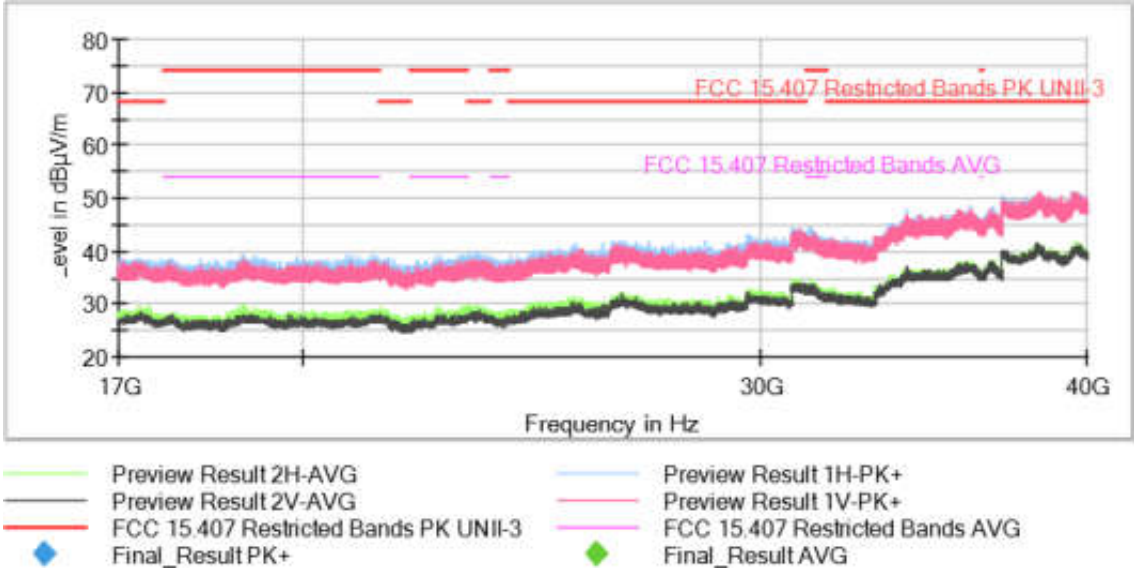
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5825.00000

Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	PoI	Detector
[5725, 5850]	1	[0.03, 1]	5755.00000	550.011	35.66	H	PK
				550.011	33.20	H	QP
				559.942	36.88	V	PK
				559.942	33.95	V	QP
				959.894	38.96	V	PK
				959.894	26.50	V	QP
			5795.00000	559.950	36.52	V	PK
				559.950	34.04	V	QP
				957.725	34.57	H	PK
				957.725	26.30	H	QP
				960.044	39.66	H	PK
				960.044	29.27	H	QP

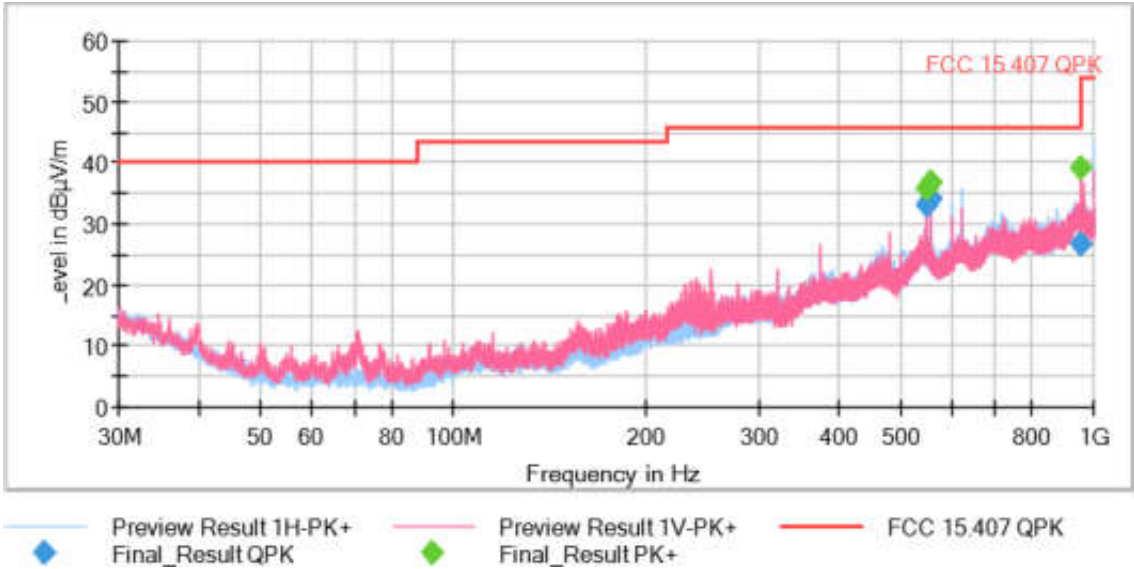
Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5755.00000
Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850]

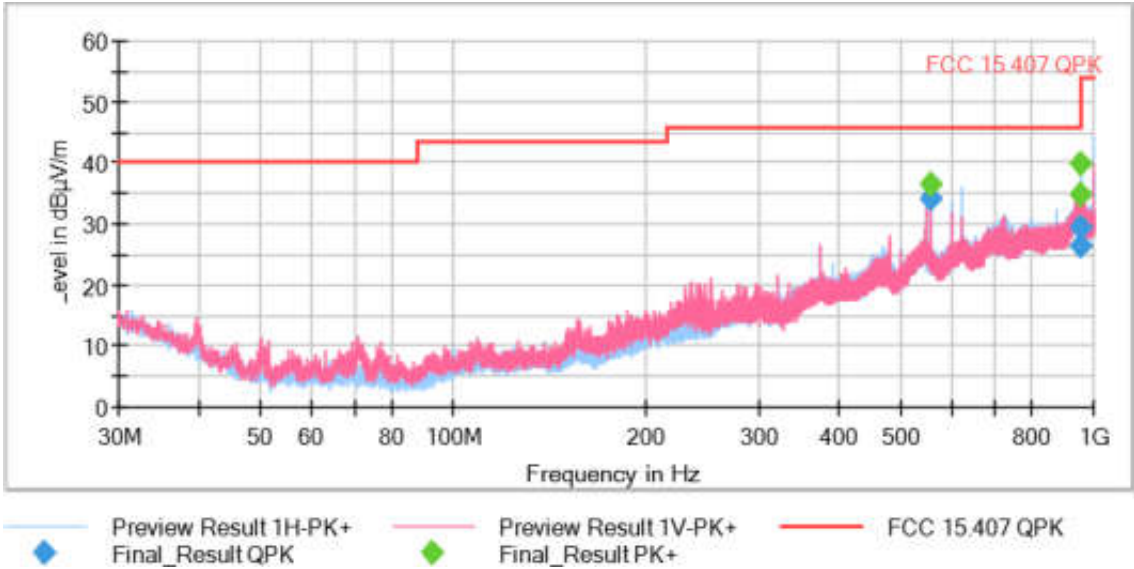
Active Port = 1

Frequency Range GHz = [0.03, 1]

Frequency MHz = 5795.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850]

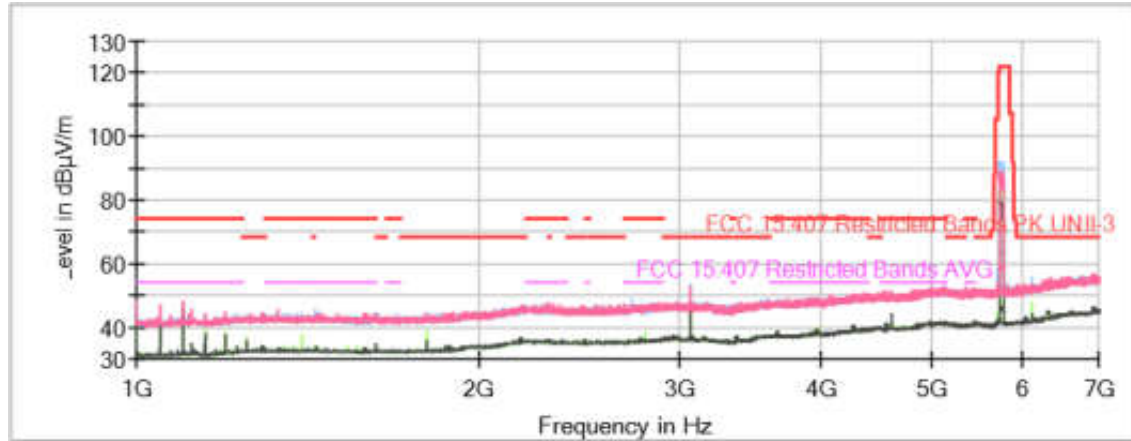
Active Port = 1

Frequency Range GHz = [1, 7]

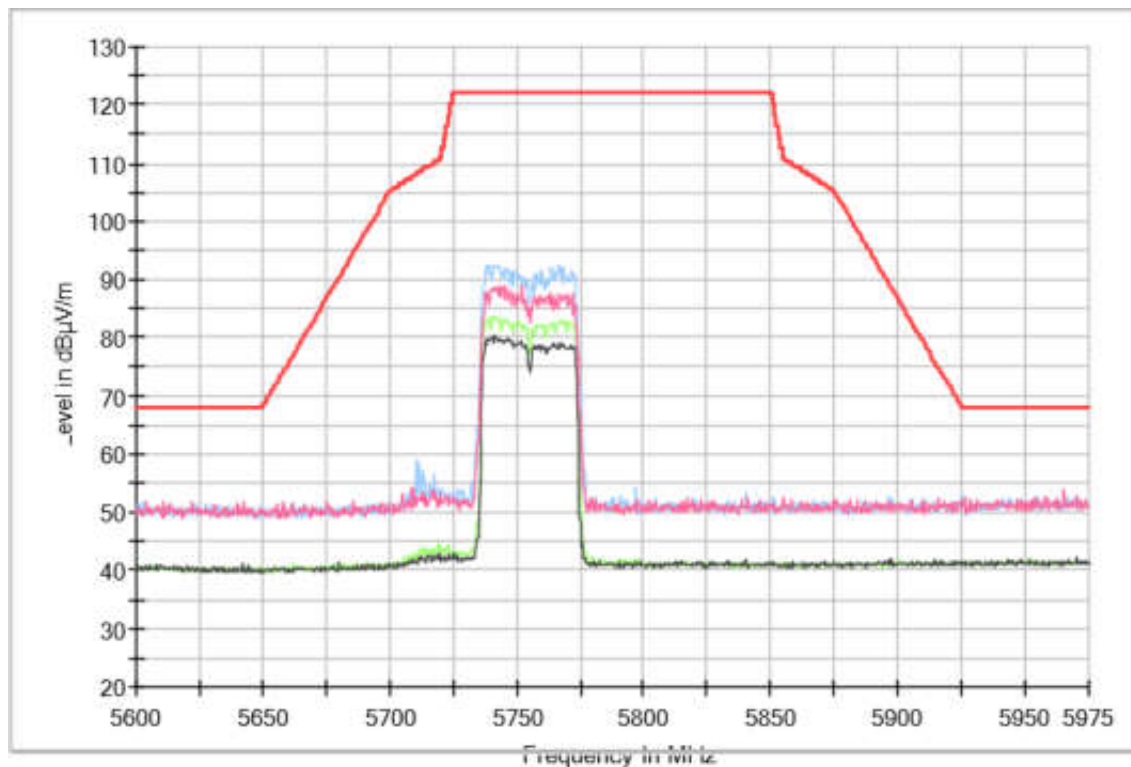
Frequency MHz = 5755.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG



Preview Result 2H-AVG
 Preview Result 2V-AVG
 FCC 15.407 Restricted Bands PK UNII-3
 Final_Result PK+
 Preview Result 1H-PK+
 Preview Result 1V-PK+
 FCC 15.407 Restricted Bands AVG
 Final_Result AVG

Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

Active Port = 1

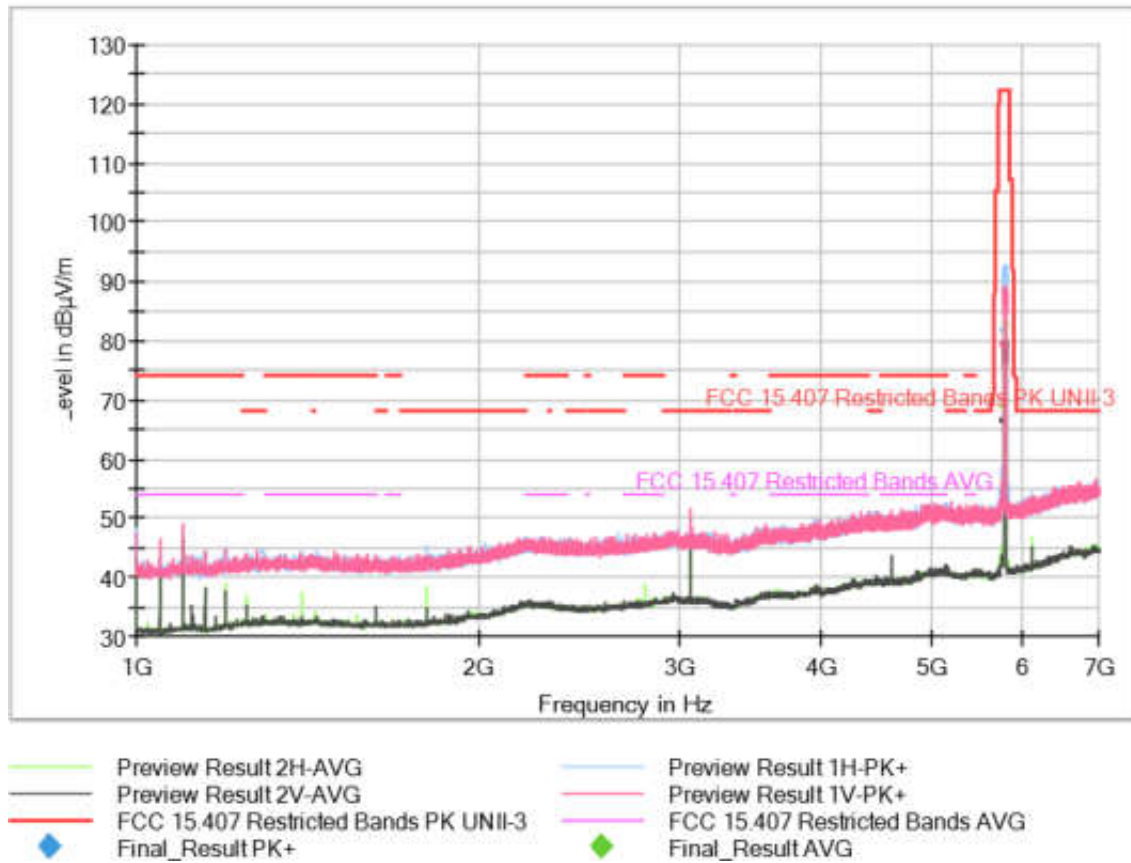
Frequency Range GHz = [1, 7]

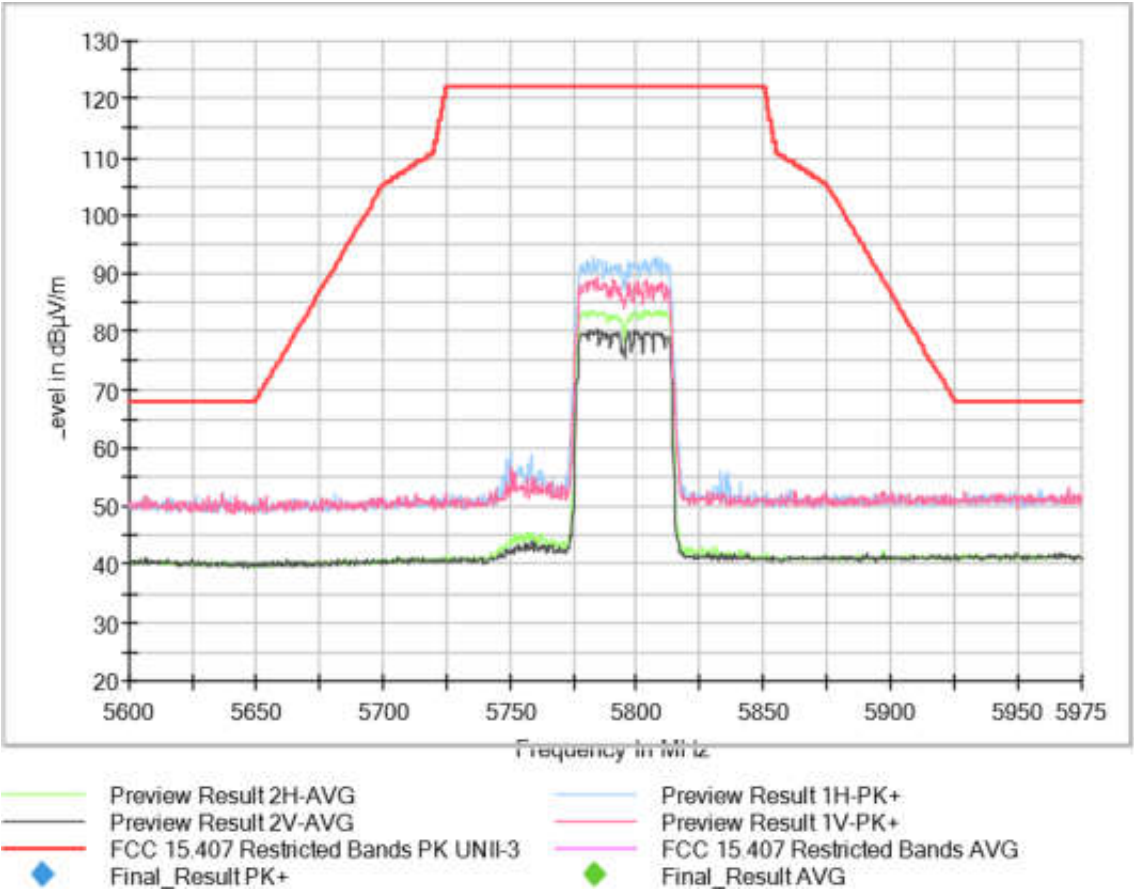
Frequency MHz = 5795.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:

Full Spectrum



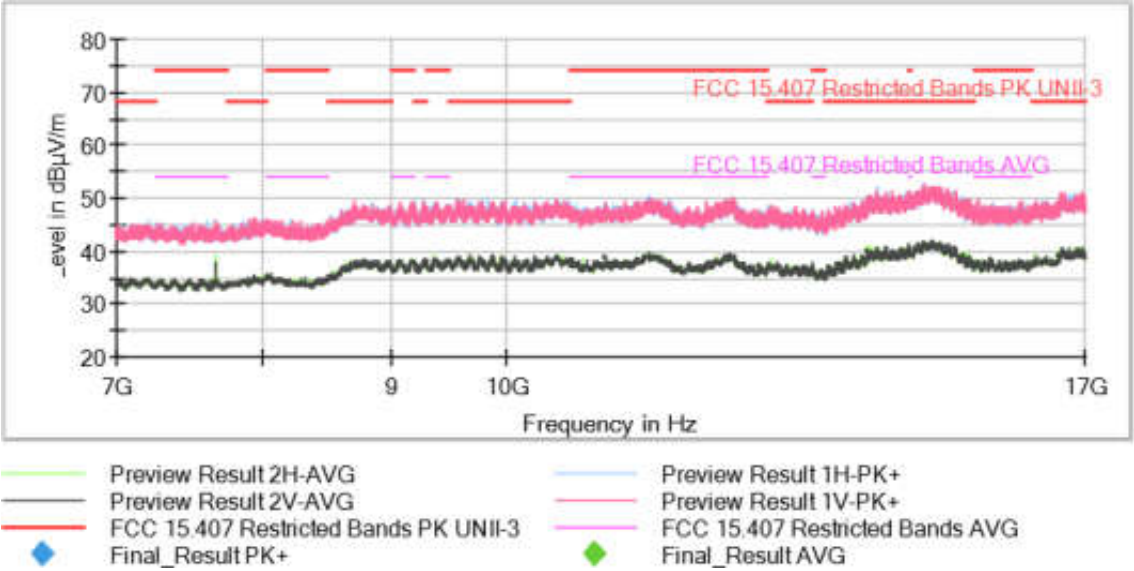


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5755.00000
Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:

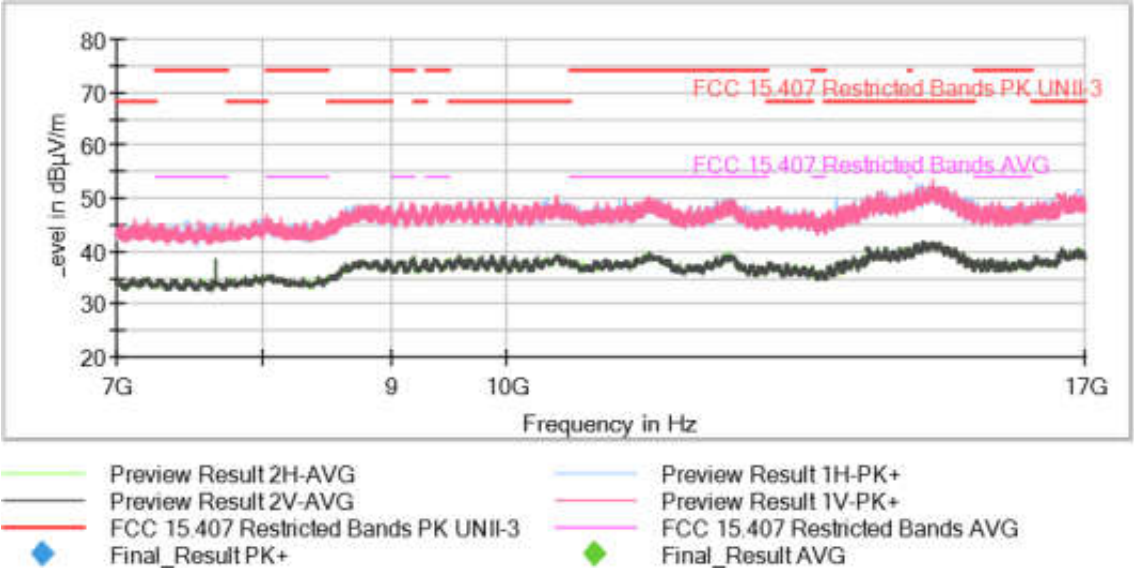


Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [7, 17] Frequency MHz = 5795.00000
Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

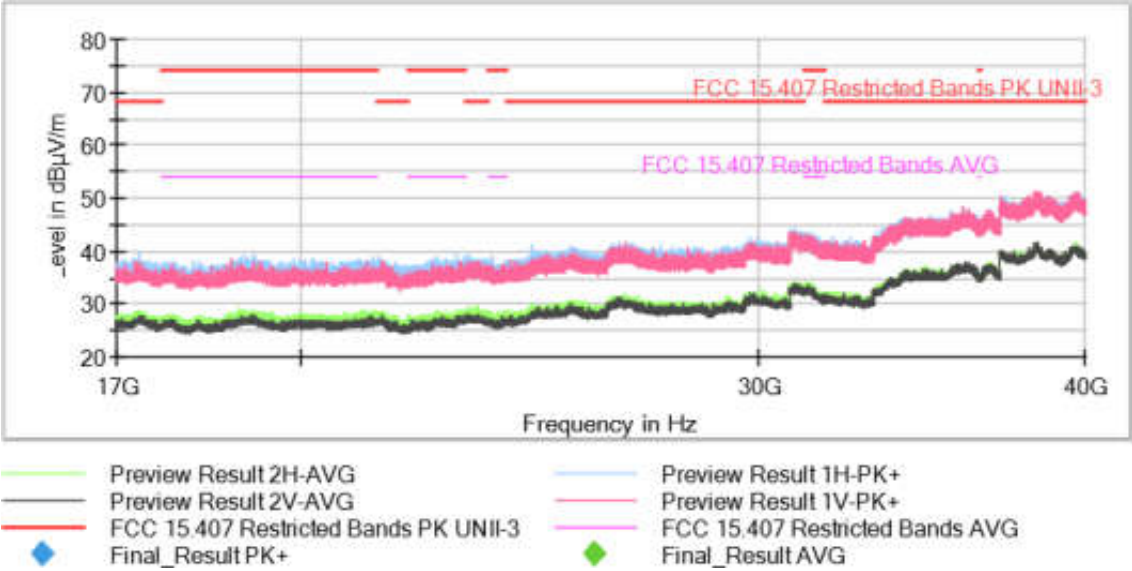
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5755.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

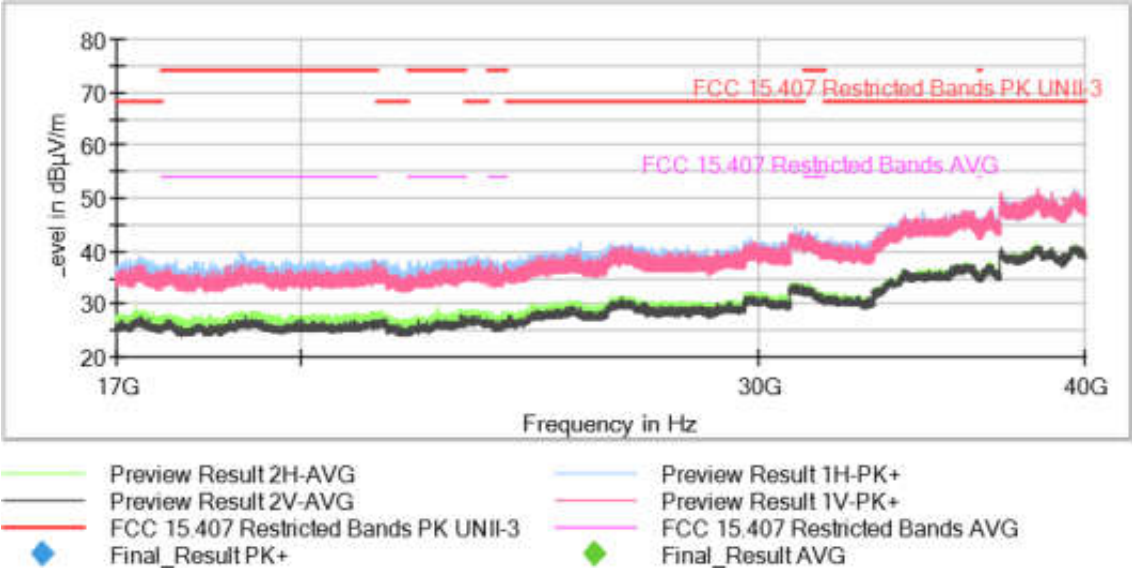
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5795.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq Rng (GHz)	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
[5725, 5850]	1	[0.03, 1]	5775.00000	559.945	36.98	V	PK
				559.945	34.42	V	QP
				625.023	37.31	H	PK
				625.023	34.72	H	QP

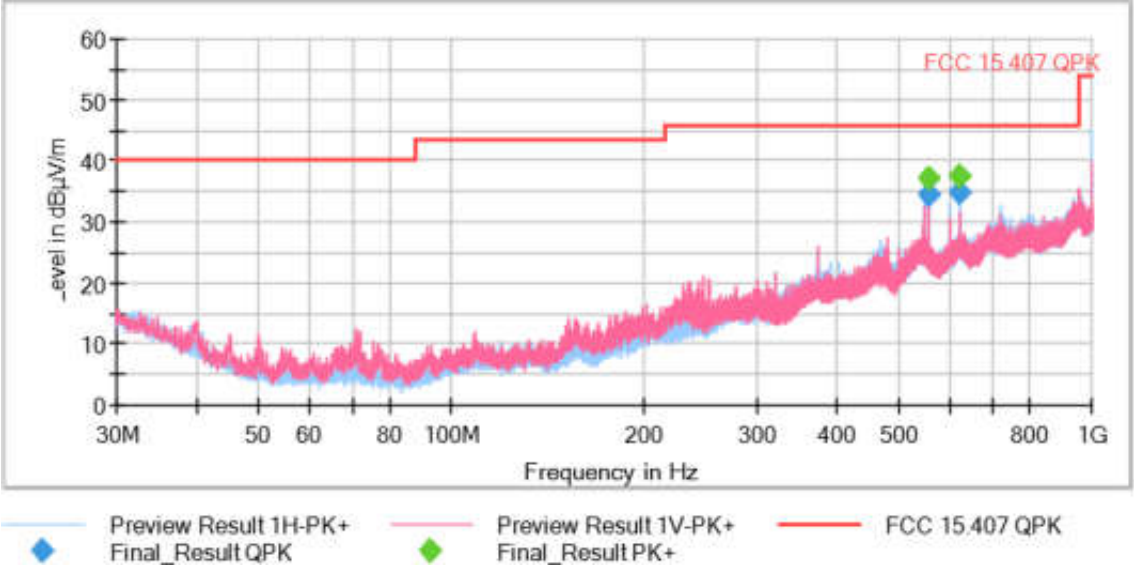
Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [0.03, 1] Frequency MHz = 5775.00000
Modulation = 802.11ac VHT80 (OFDM MCS0)

Images:



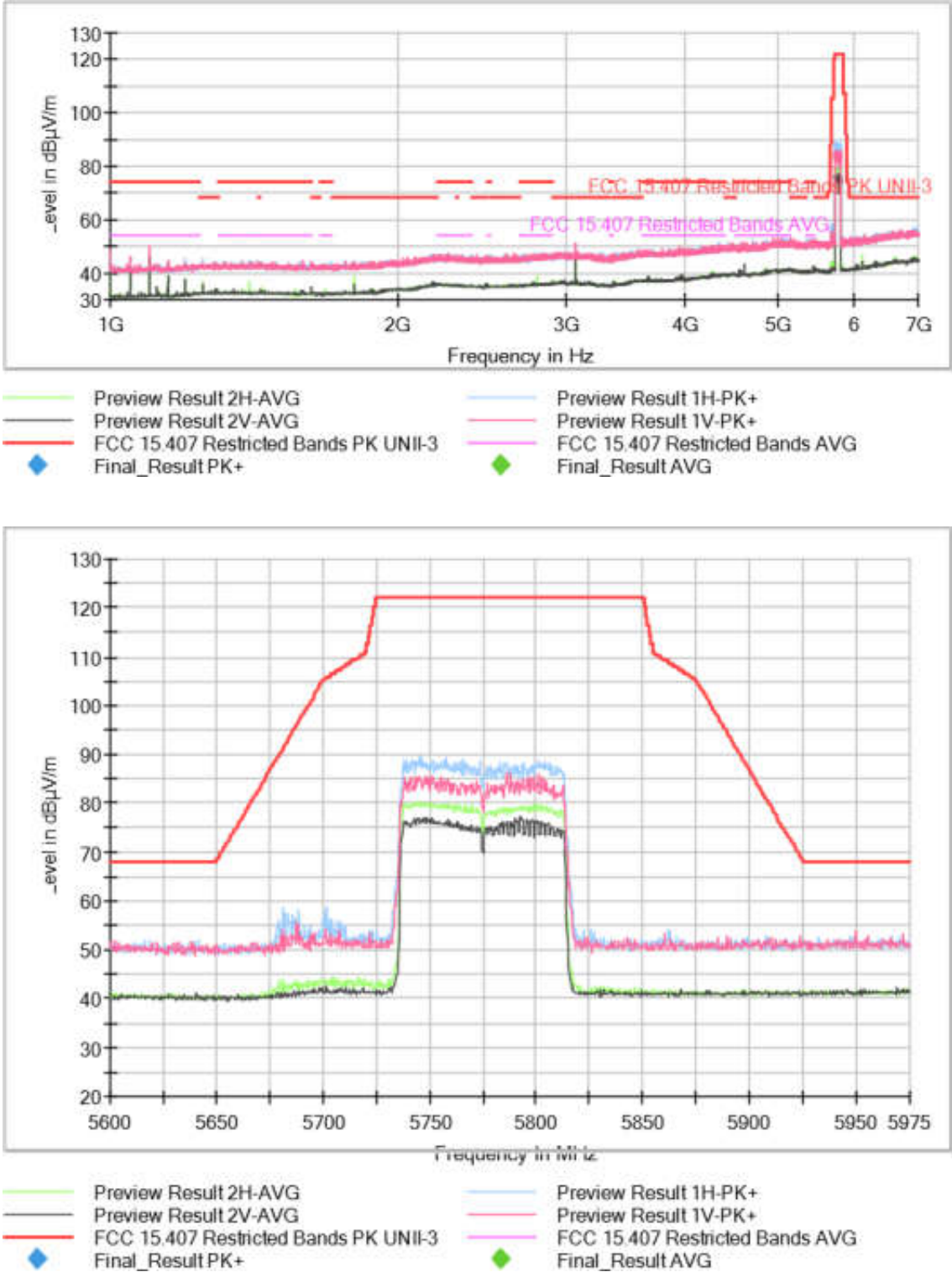
Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	32,333 kHz	PK+	100 kHz	1 s	30 dB

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency Range GHz = [1, 7] Frequency MHz = 5775.00000
Modulation = 802.11ac VHT80 (OFDM MCS0)

Images:



Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 7 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

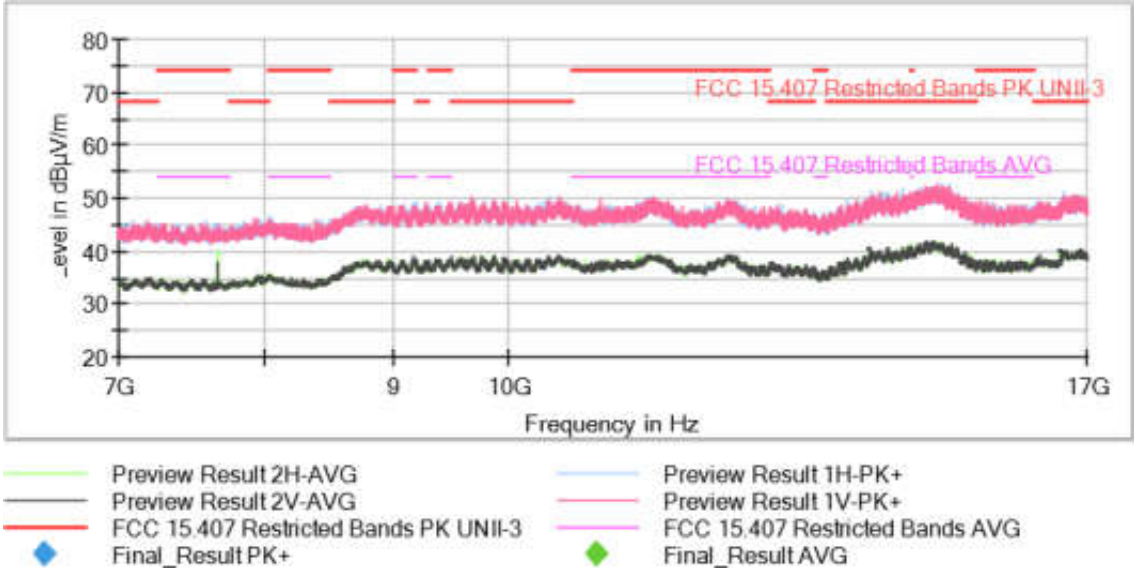
Active Port = 1

Frequency Range GHz = [7, 17]

Frequency MHz = 5775.00000

Modulation = 802.11ac VHT80 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
7 GHz - 17 GHz	333,333 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Operation Band MHz = [5725, 5850]

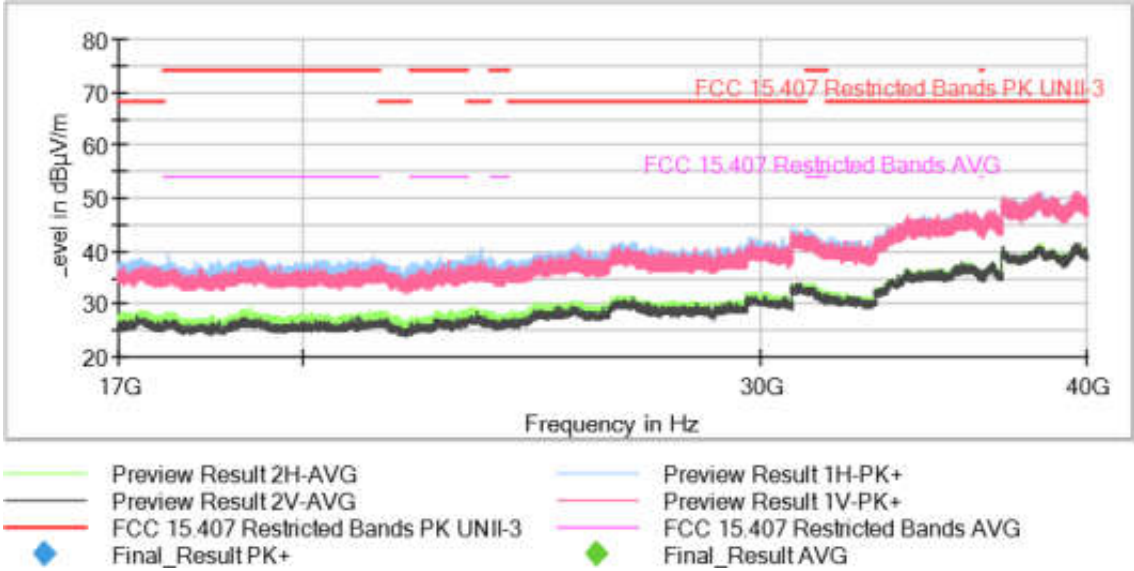
Active Port = 1

Frequency Range GHz = [17, 40]

Frequency MHz = 5775.00000

Modulation = 802.11ac VHT80 (OFDM MCS0)

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 40 GHz	511,111 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

RSS-Gen 6.10. / Section 15.35 Subclause (c) Duty Cycle

Limits

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

Modulation: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	DC (%)
[5725, 5850]	1	5745.00000	92.31
		5785.00000	92.31
		5825.00000	92.31

Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	DC (%)
[5725, 5850]	1	5755.00000	85.61
		5795.00000	85.60

Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	DC (%)
[5725, 5850]	1	5745.00000	93.55
		5785.00000	93.56
		5825.00000	93.55

Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	DC (%)
[5725, 5850]	1	5745.00000	92.32
		5785.00000	92.32
		5825.00000	92.33

Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	DC (%)
[5725, 5850]	1	5755.00000	85.69

Operation Band (MHz)	Port	Freq (MHz)	DC (%)
		5795.00000	85.69

Verdict

Pass

Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	DC (%)
[5725, 5850]	1	5775.00000	75.33

RSS-Gen 6.7 Transmitter 99% Occupied Bandwidth

Limits

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained.

The following conditions shall be observed for measuring the occupied bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to “Sample”. However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or “Max Hold”) may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).

Modulation: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Occ Ch BW (MHz)
[5725, 5850]	1	5745.00000	18.100
		5785.00000	18.100
		5825.00000	18.100

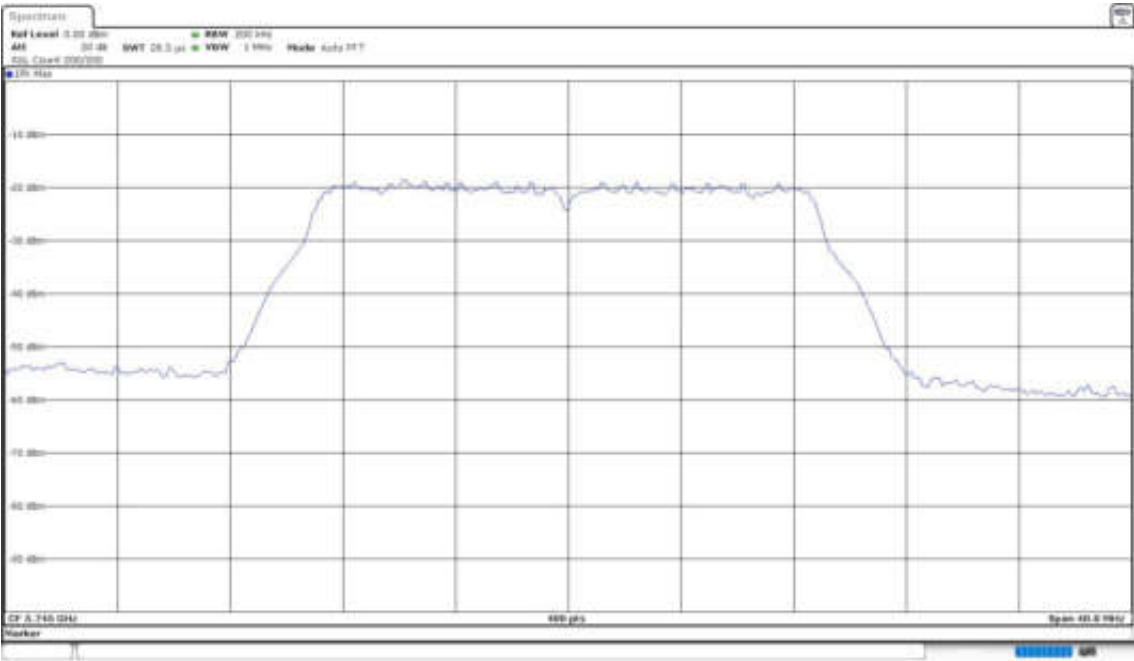
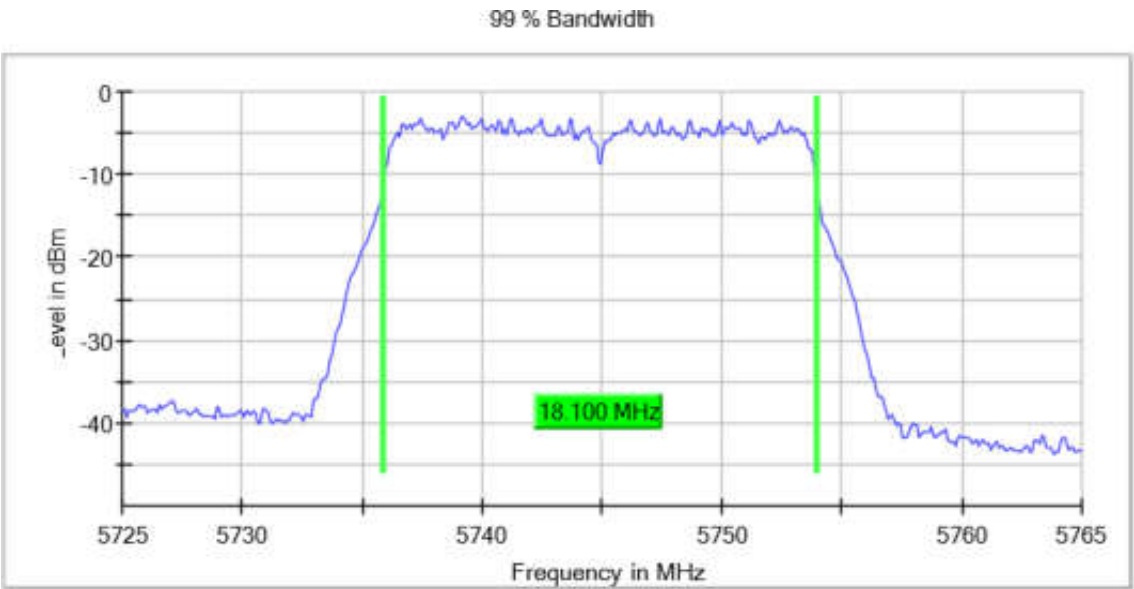
Verdict

Pass

Attachments

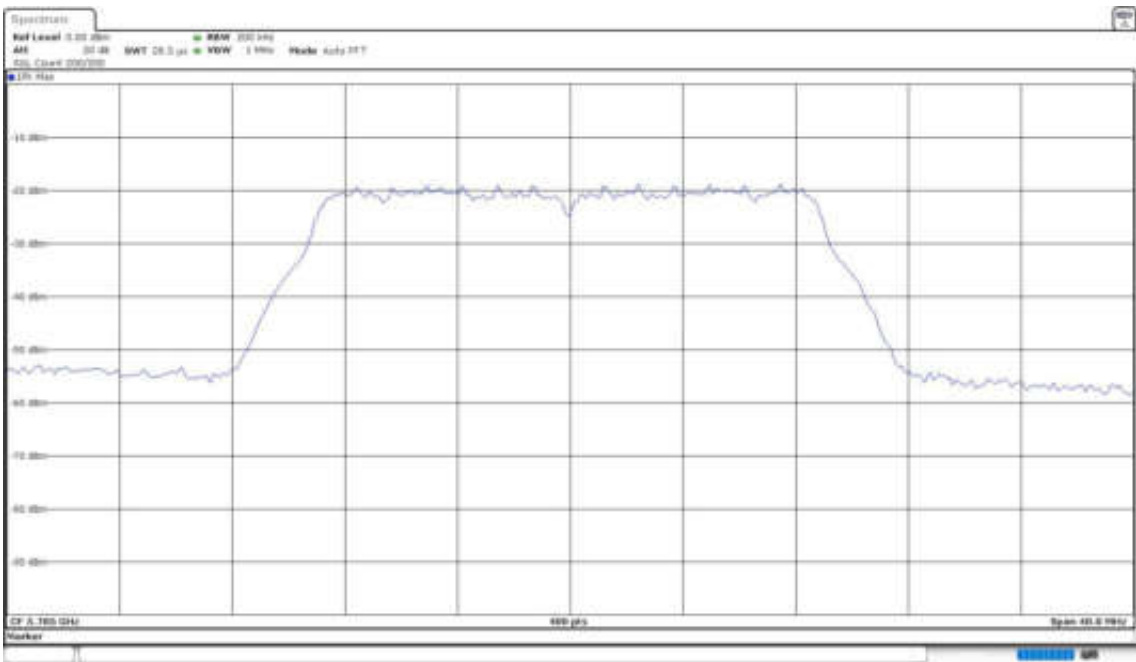
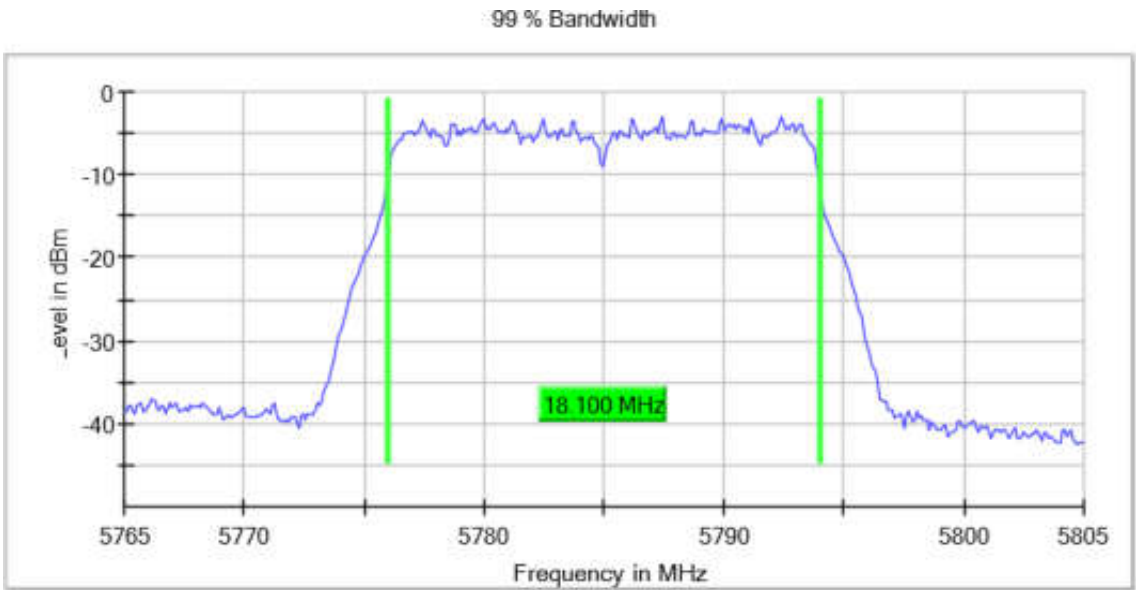
Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5745.00000 Modulation = 802.11n HT20 (OFDM MCS0)

Images:



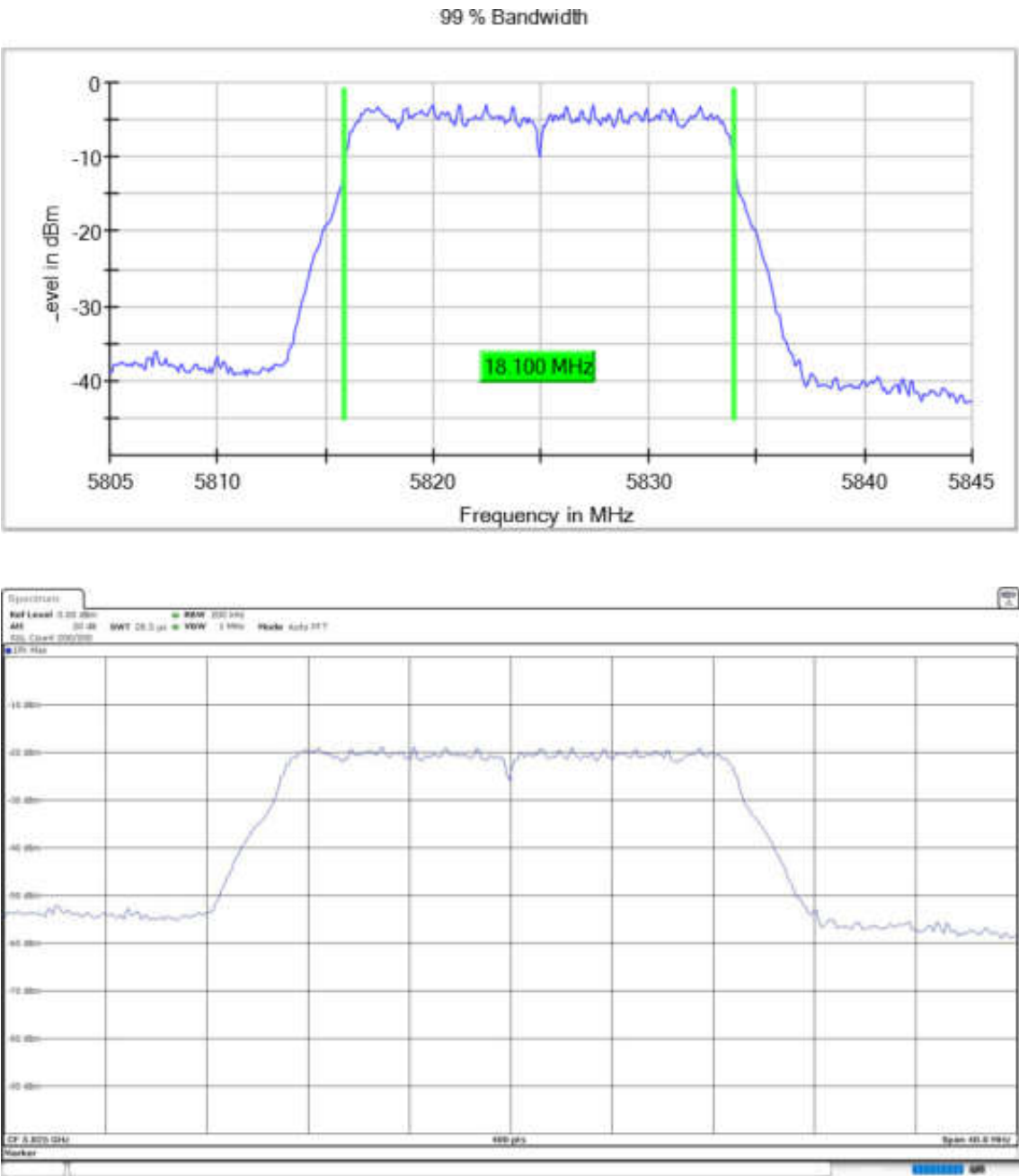
Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5785.00000 Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5825.00000 Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Occ Ch BW (MHz)
[5725, 5850]	1	5755.00000	36.750
		5795.00000	36.750

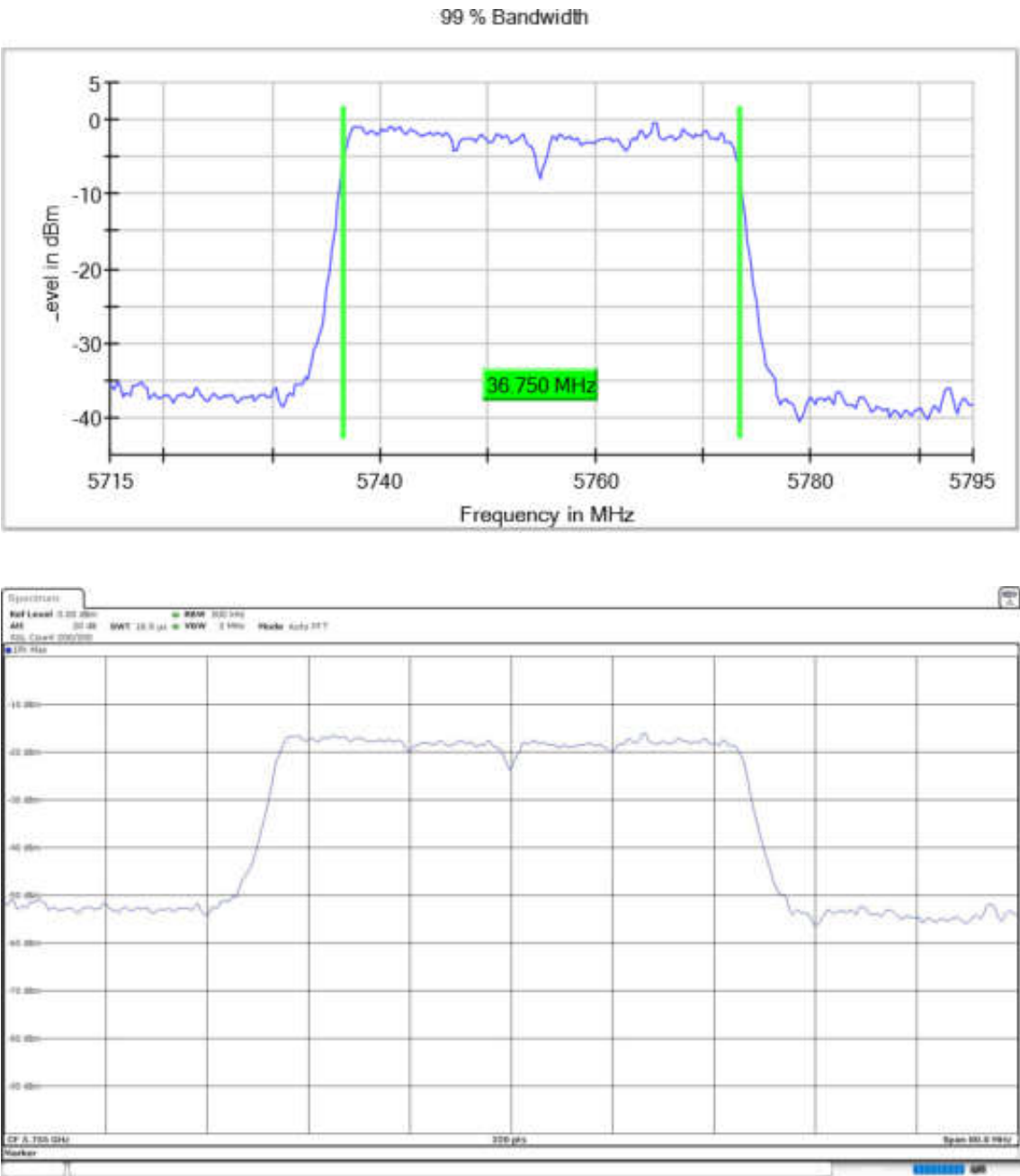
Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5755.00000 Modulation = 802.11n HT40 (OFDM MCS0)

Images:

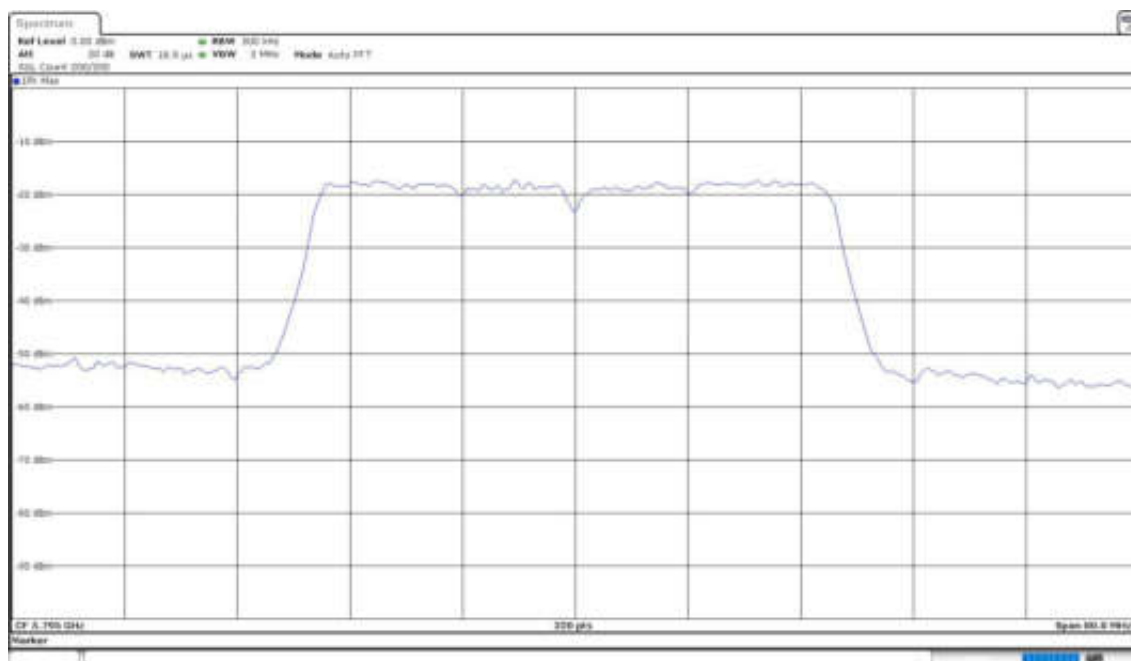
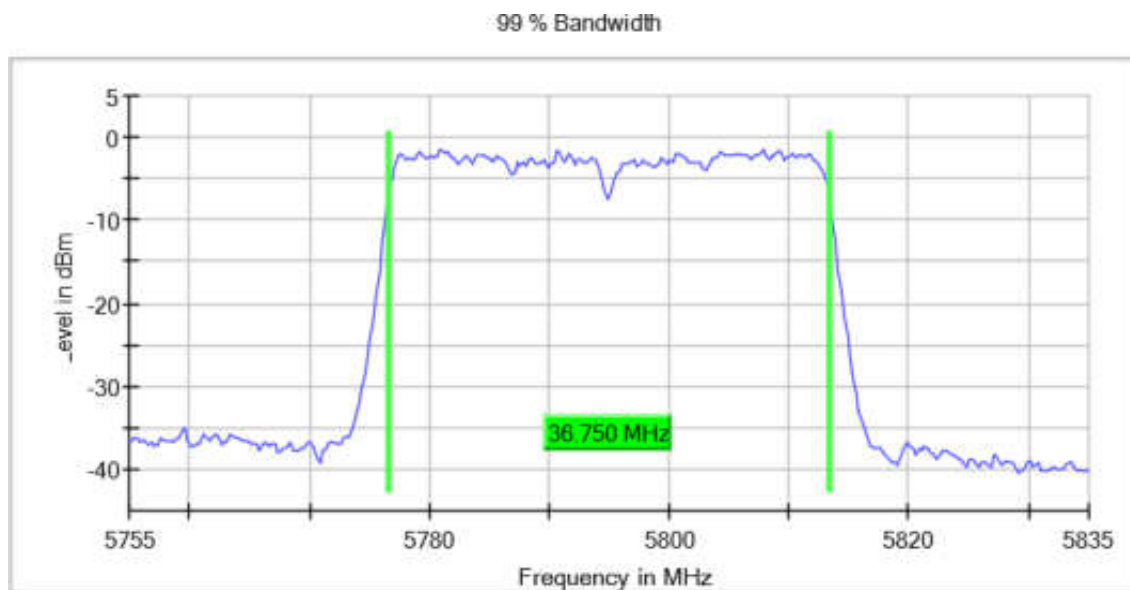


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5795.00000

Modulation = 802.11n HT40 (OFDM MCS0)

Images:



Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	Occ Ch BW (MHz)
[5725, 5850]	1	5745.00000	16.900
		5785.00000	16.900
		5825.00000	16.900

Verdict

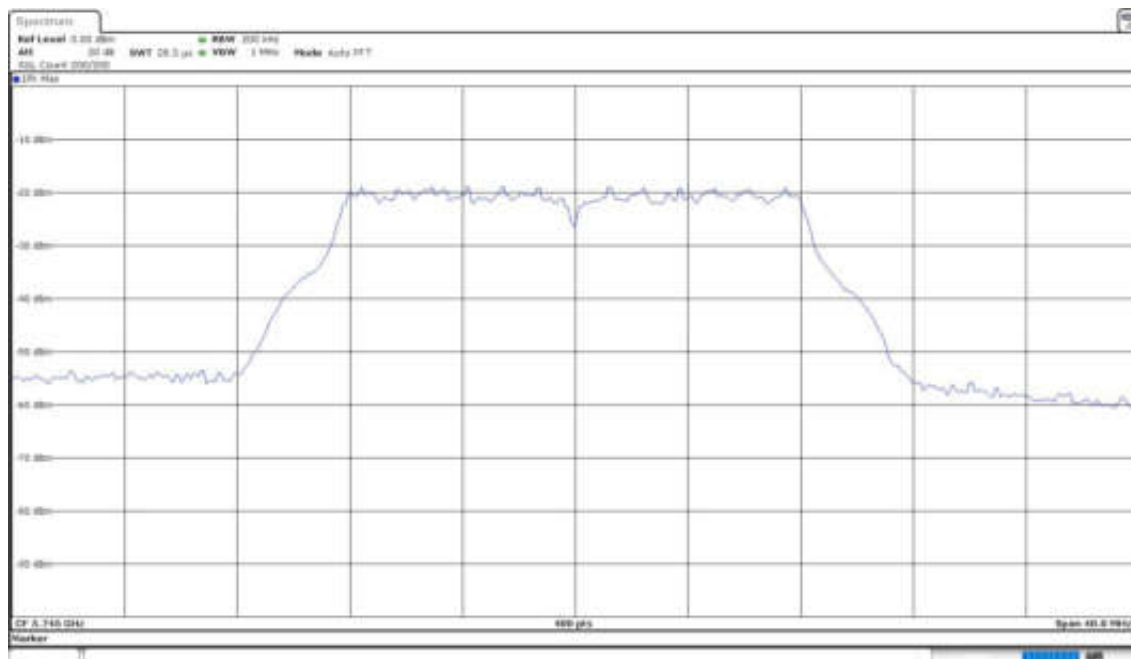
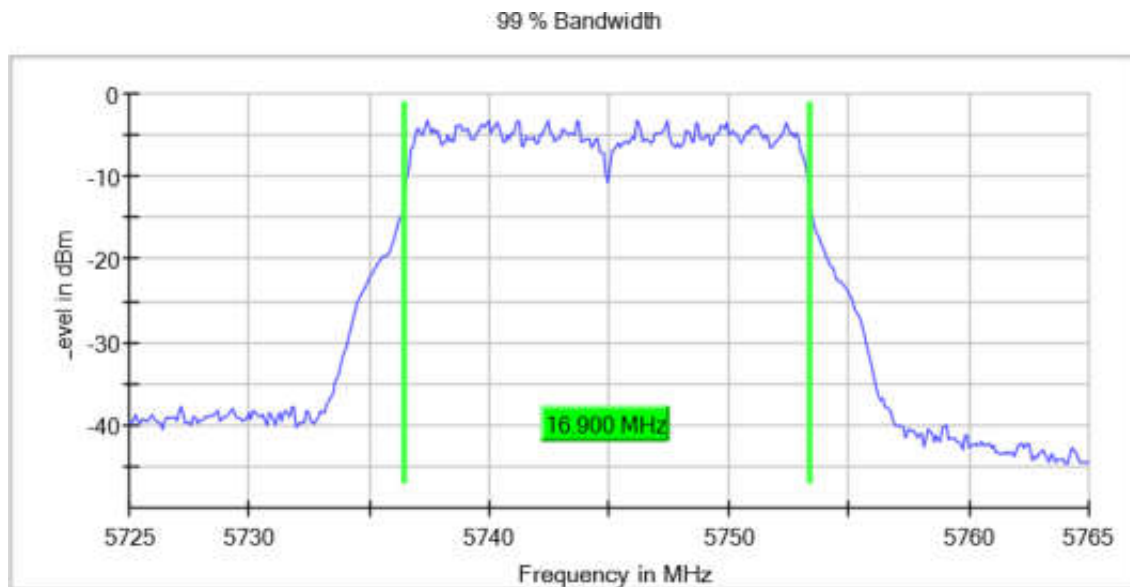
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

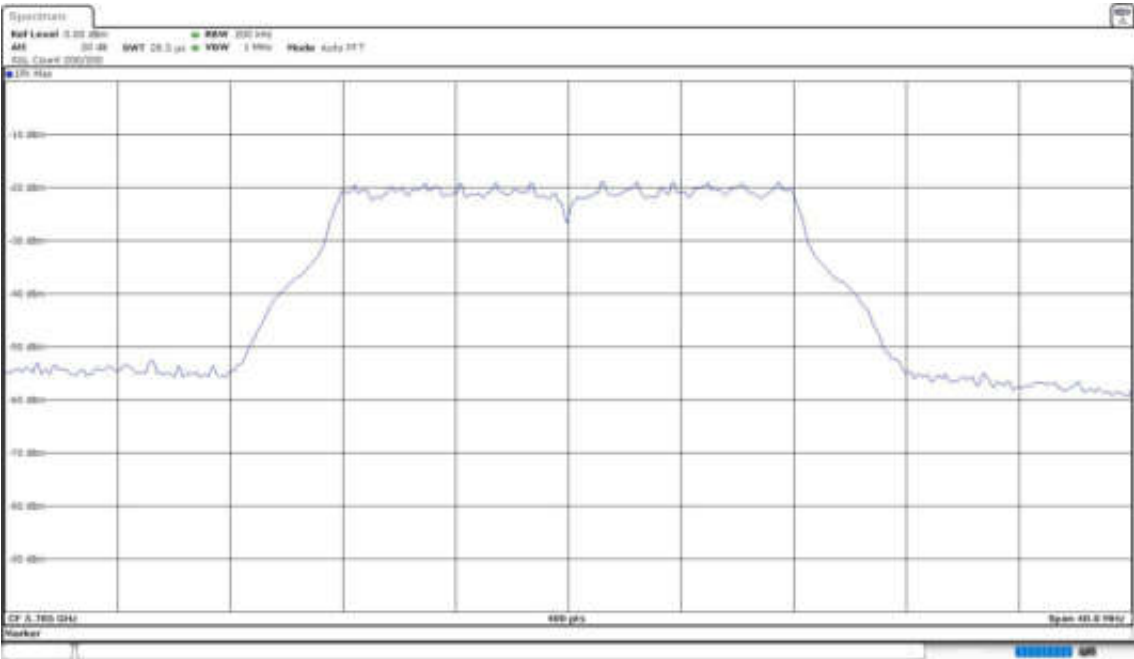
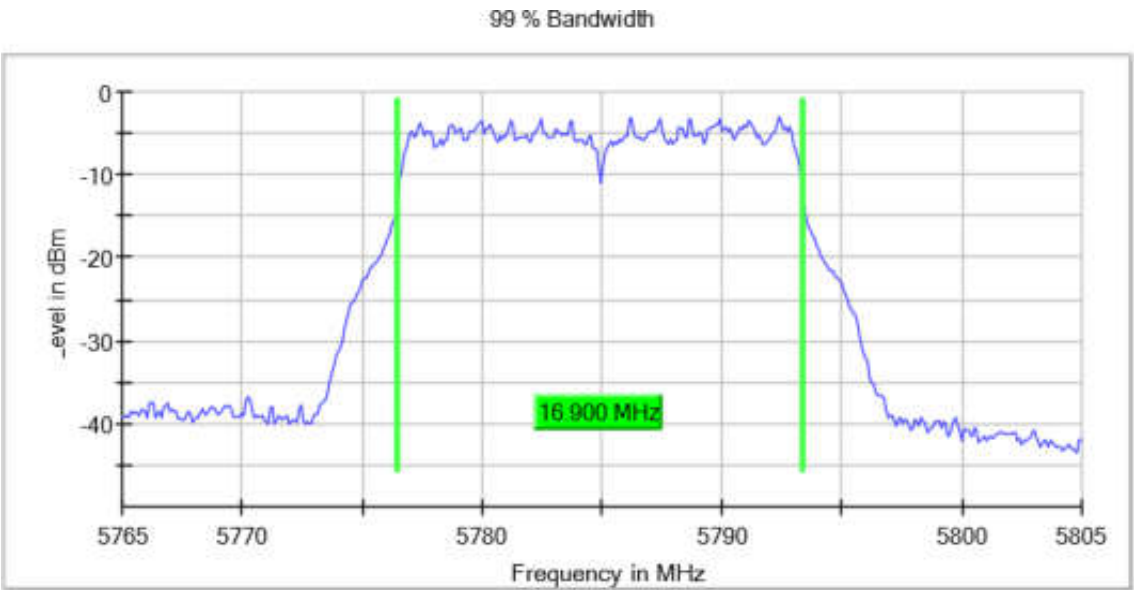
Frequency MHz = 5745.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



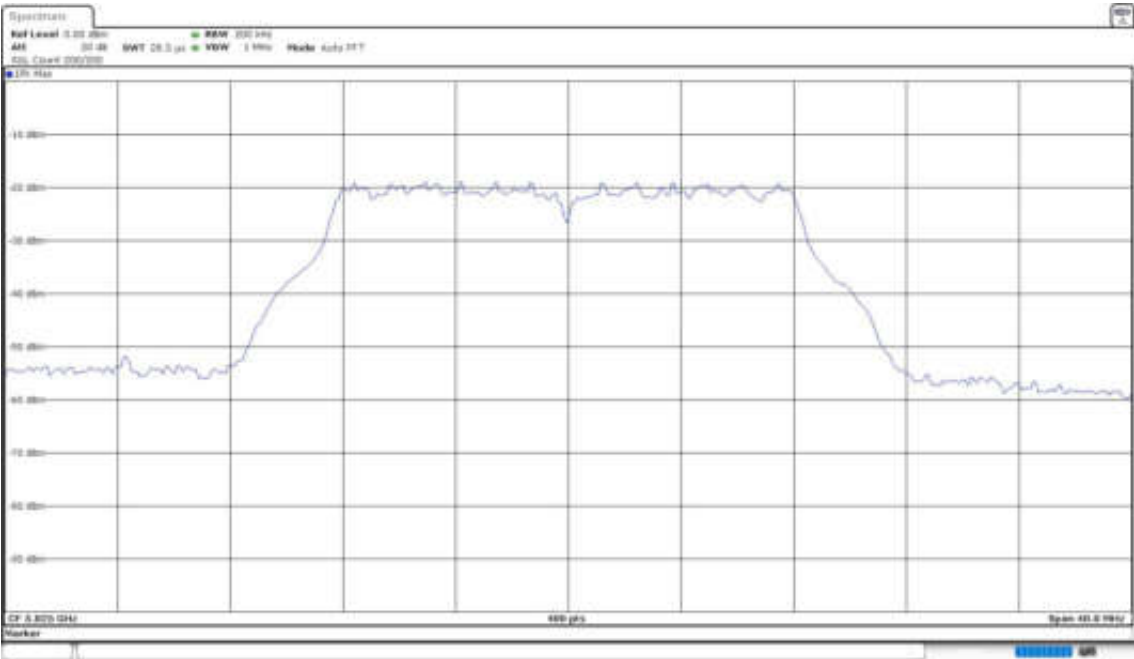
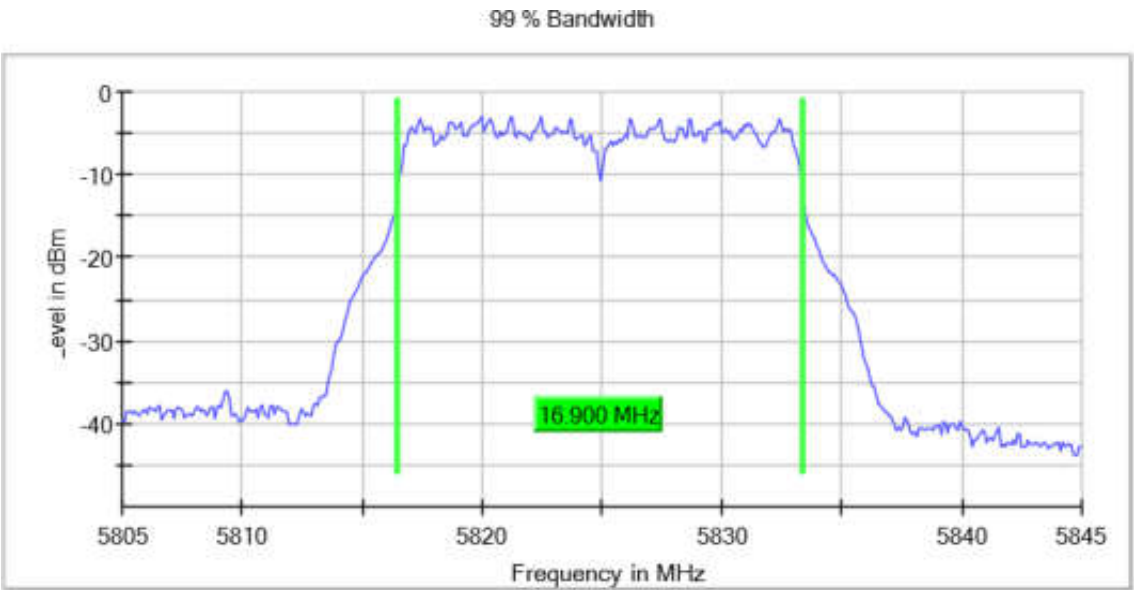
Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5785.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5825.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Occ Ch BW (MHz)
[5725, 5850]	1	5745.00000	18.100
		5785.00000	18.100
		5825.00000	18.200

Verdict

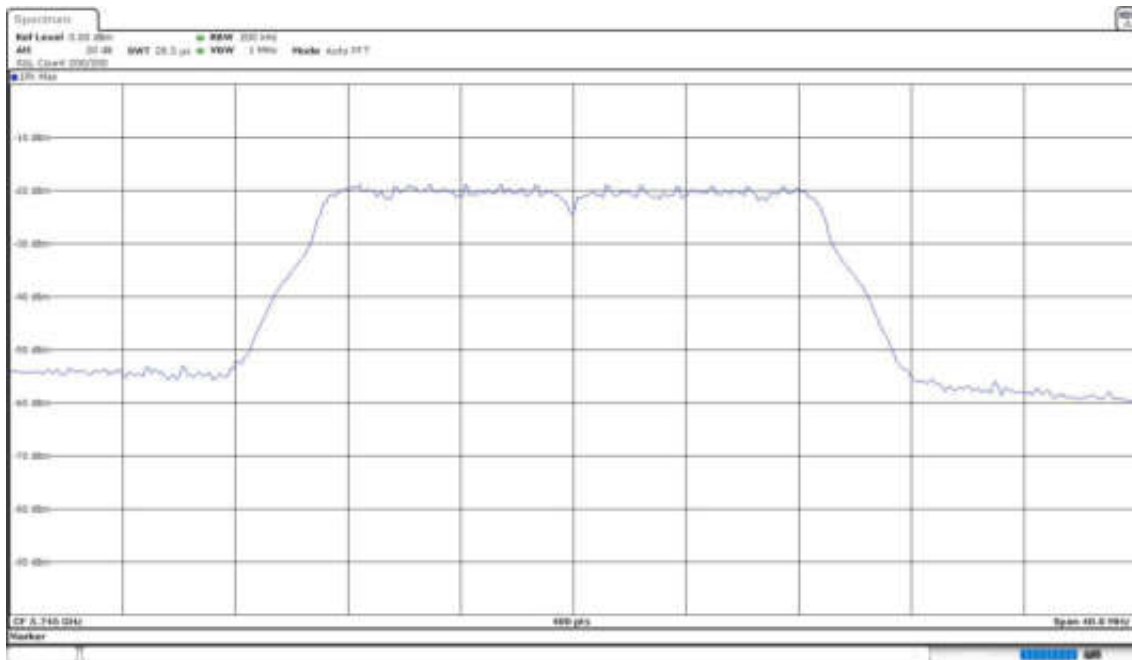
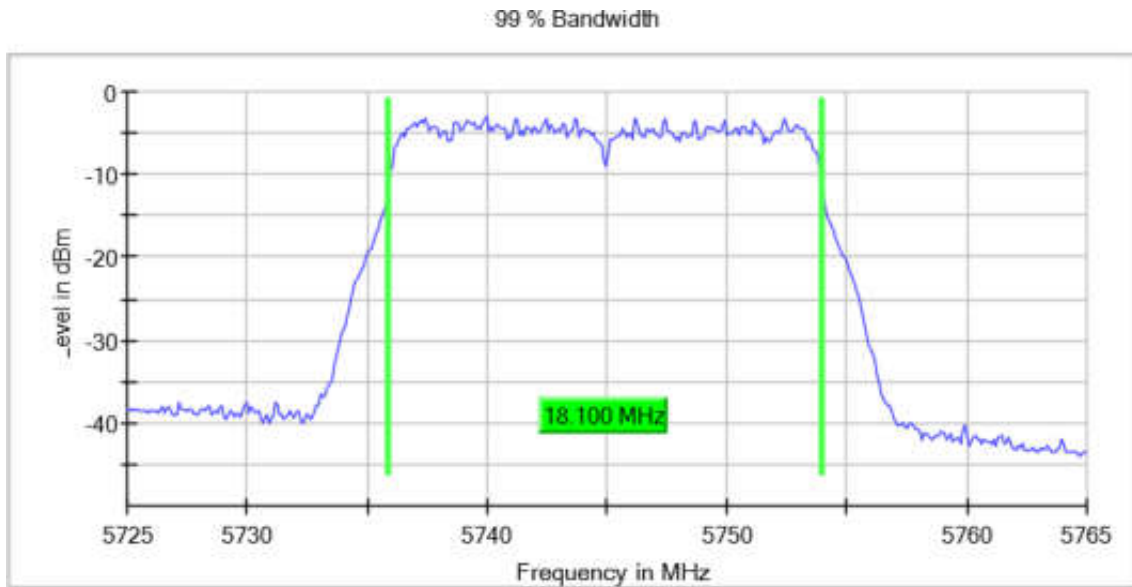
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

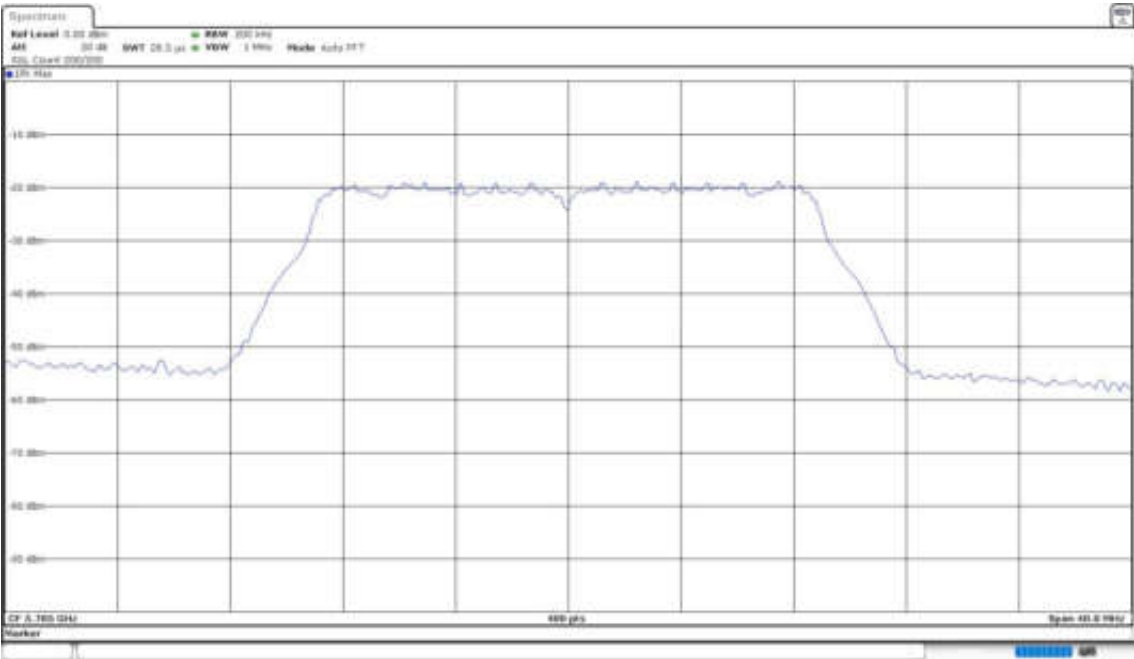
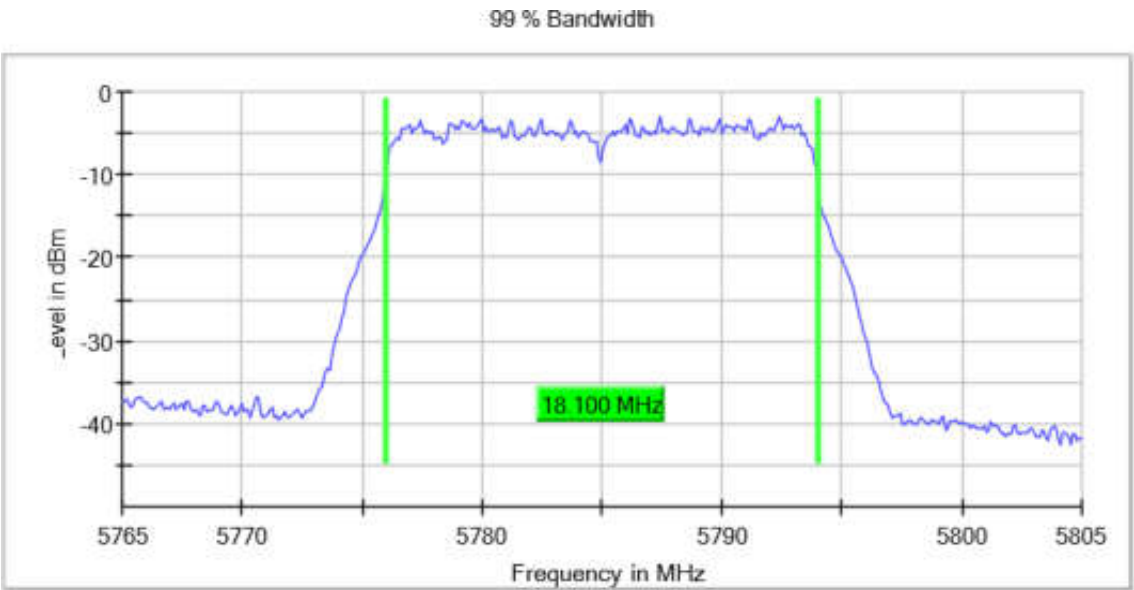
Frequency MHz = 5745.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



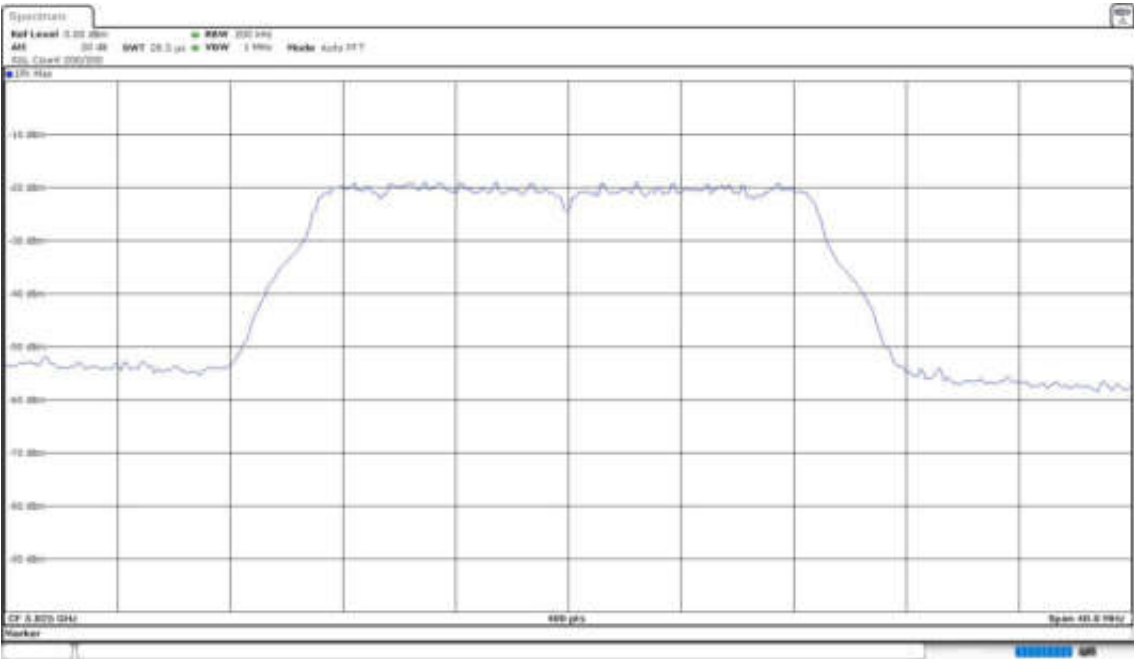
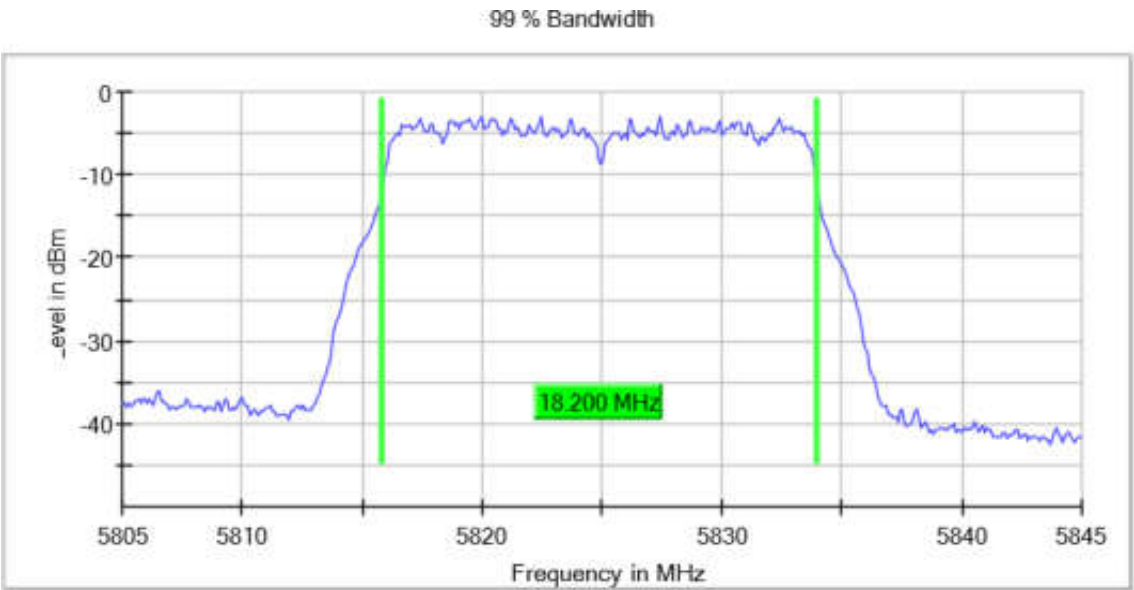
Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5785.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5825.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Occ Ch BW (MHz)
[5725, 5850]	1	5755.00000	36.750
		5795.00000	36.750

Verdict

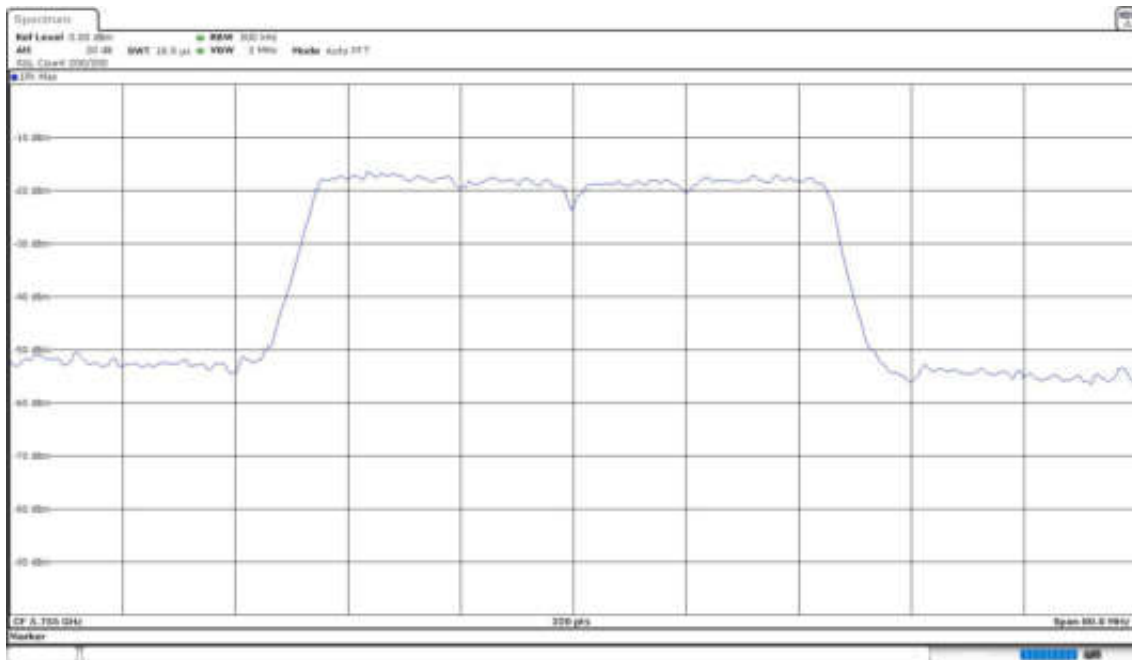
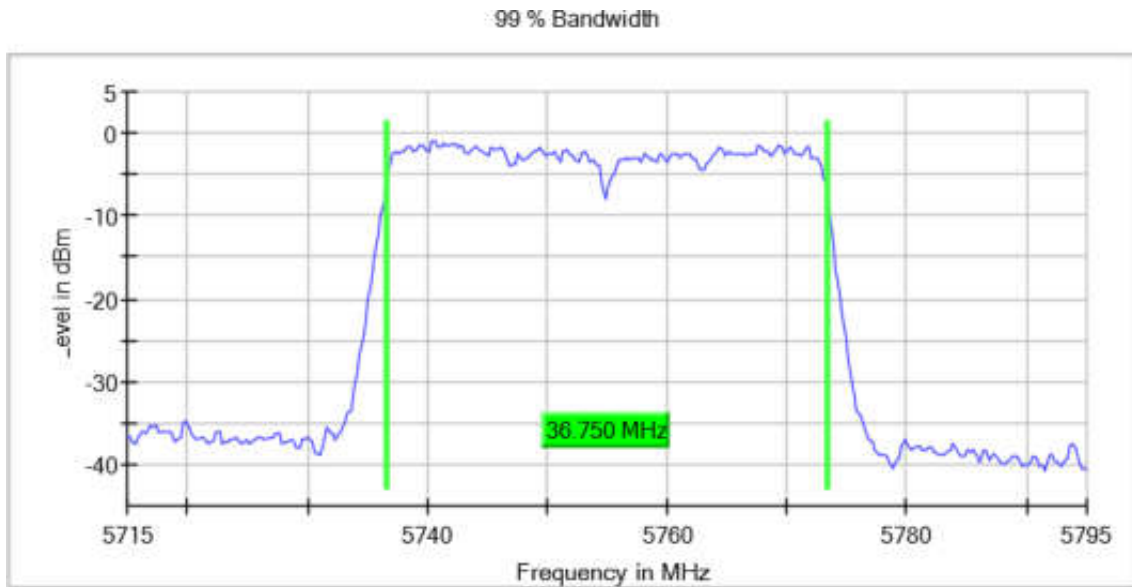
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

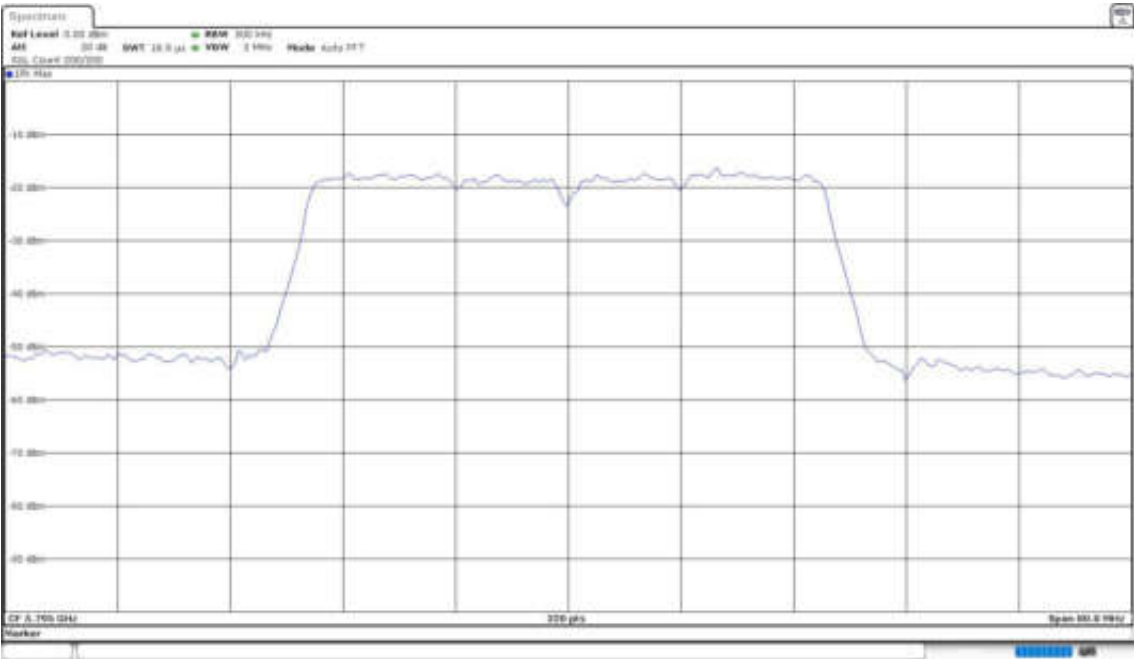
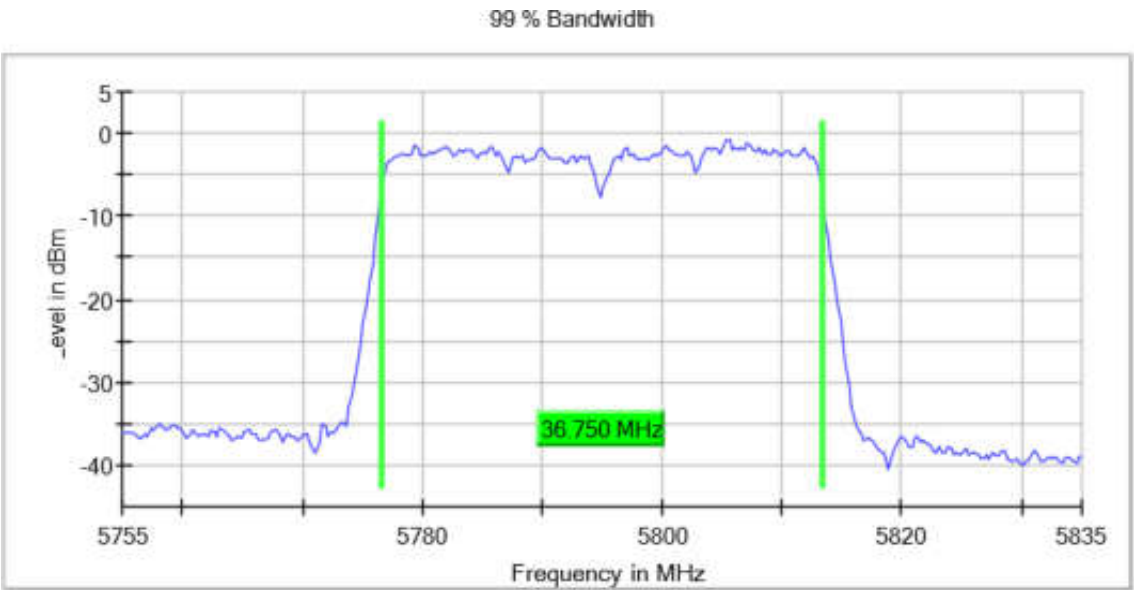
Frequency MHz = 5755.00000 Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5795.00000 Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Occ Ch BW (MHz)
[5725, 5850]	1	5775.00000	76.500

Verdict

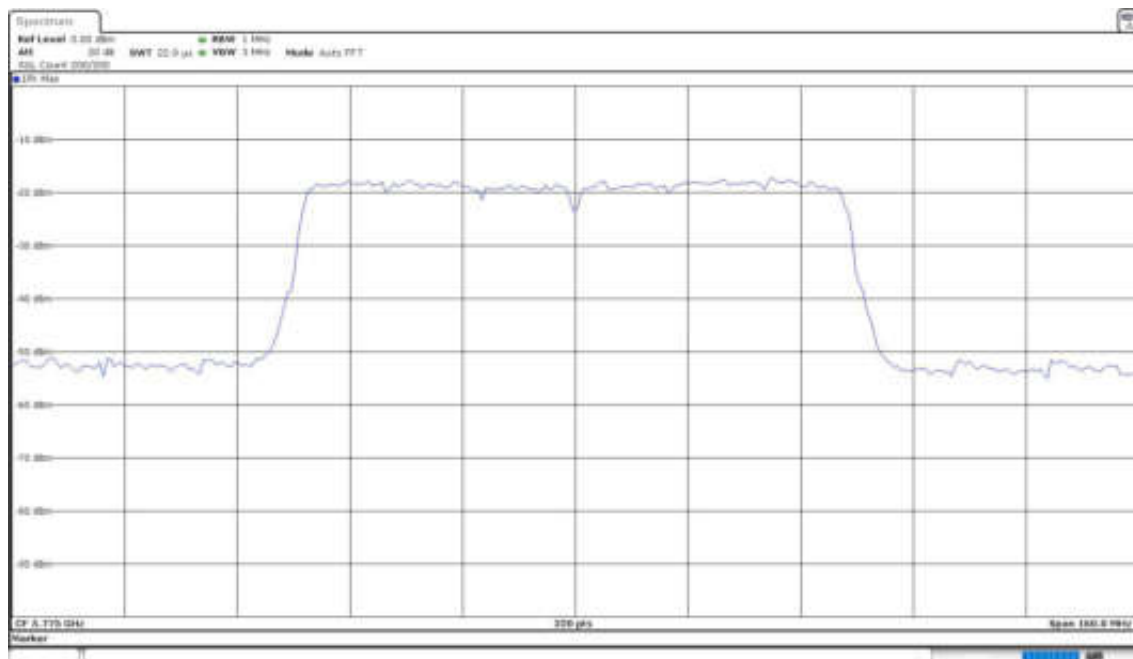
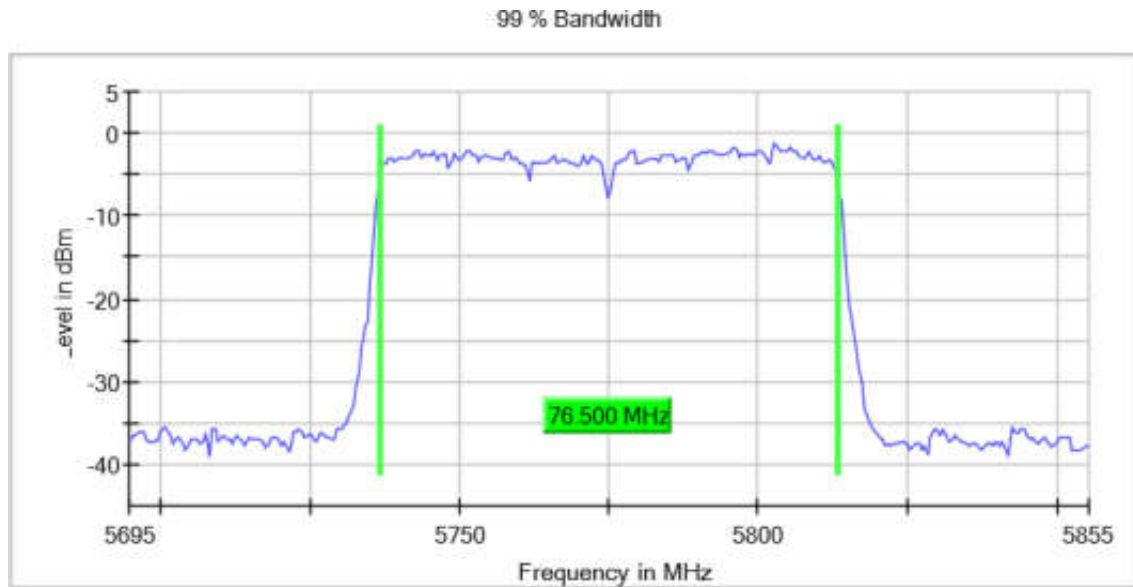
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5775.00000 Modulation = 802.11ac VHT80 (OFDM MCS0)

Images:



Section 15.407 Subclause 15.403(i) [Ebw] Transmitter 26 dB Emission Bandwidth (EBW)

Limits

The 26 dB Emission Bandwidth was measured using the method according to point C) 1) of 789033 D02 General UNII Test Procedures New Rules v02r01.

Modulation: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5745.00000	22.100
		5785.00000	22.200
		5825.00000	22.100

Verdict

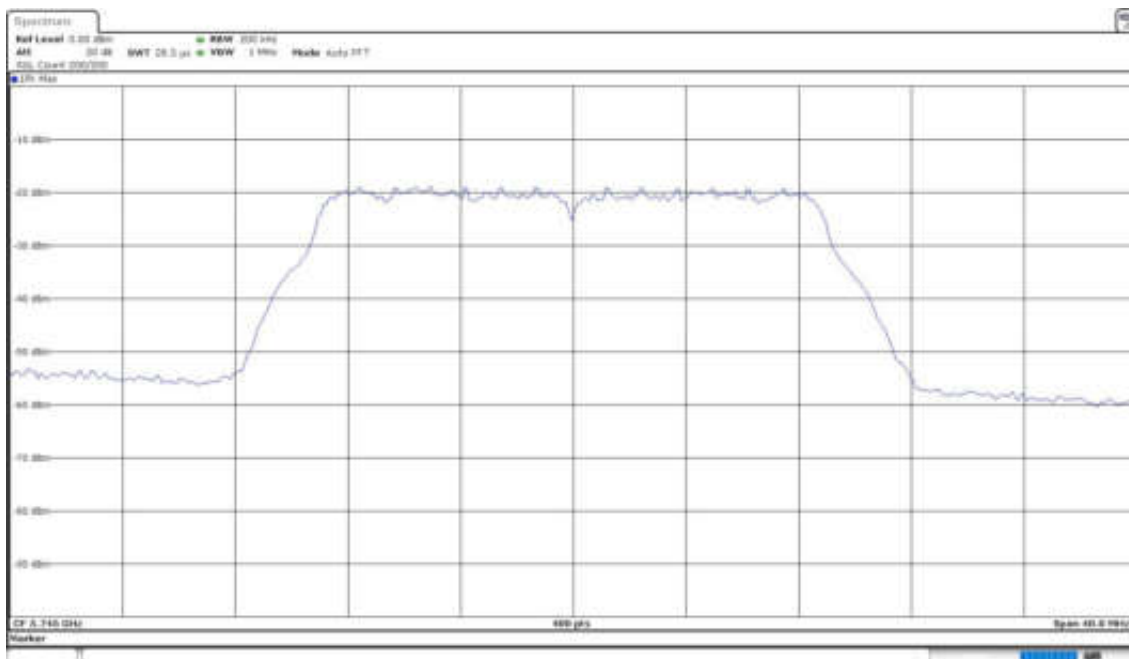
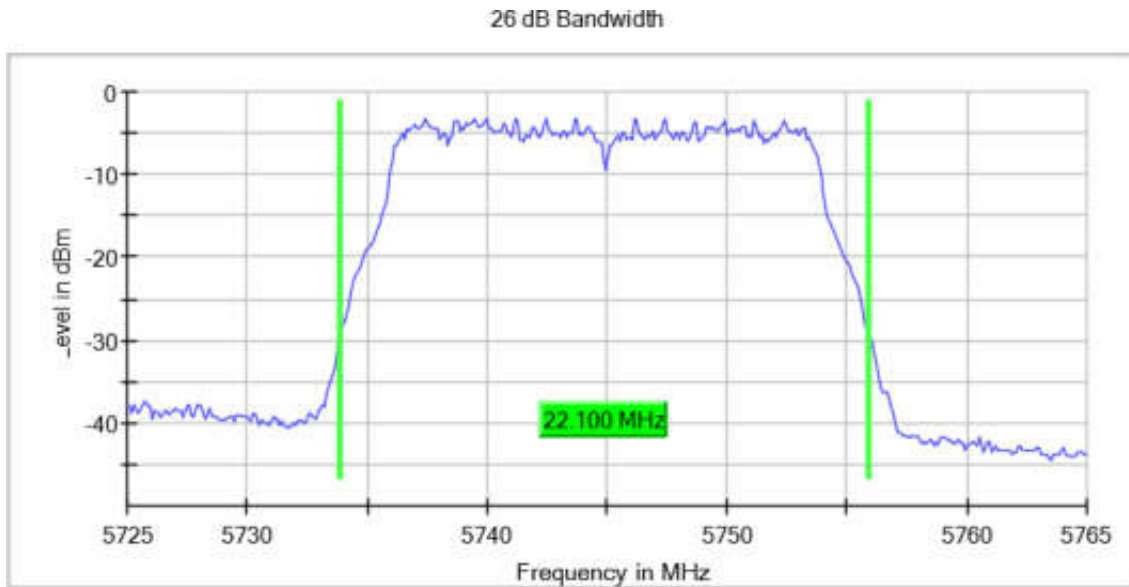
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5745.00000 Modulation = 802.11n HT20 (OFDM MCS0)

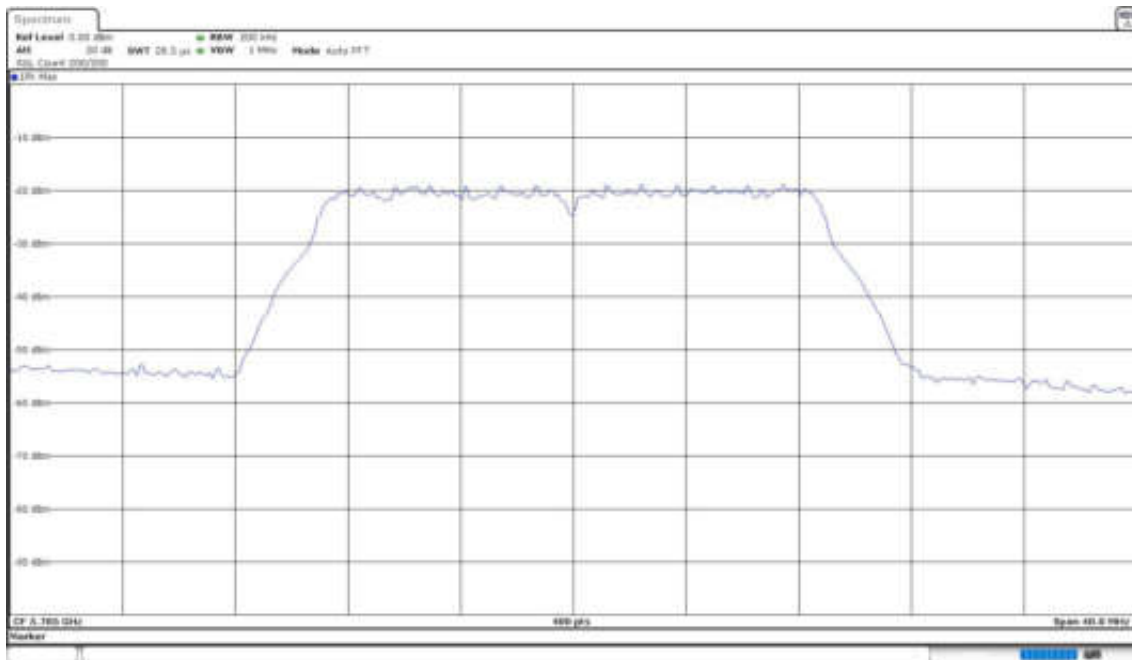
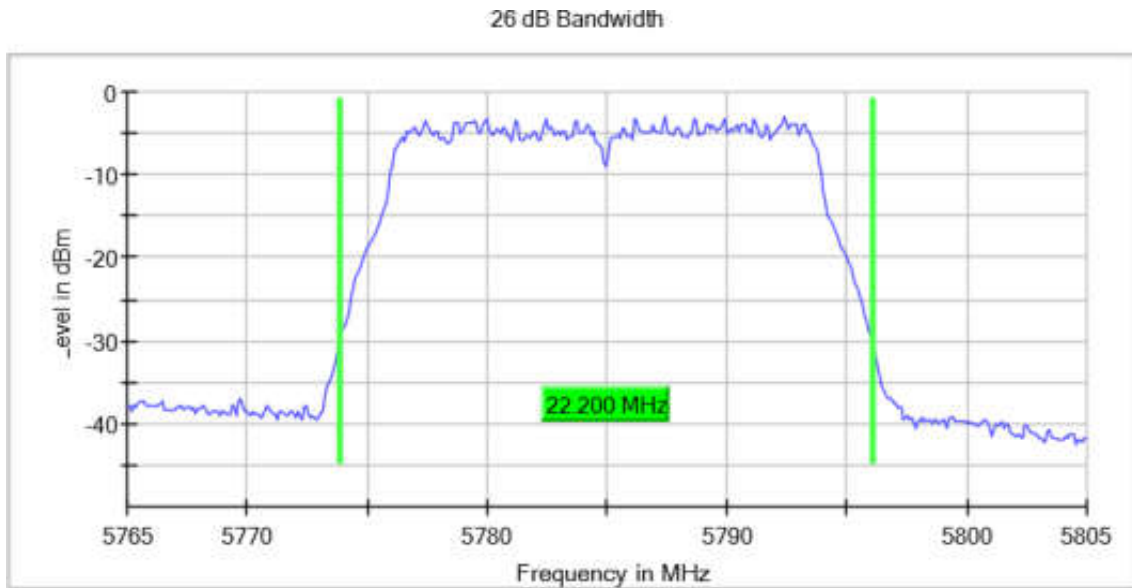
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

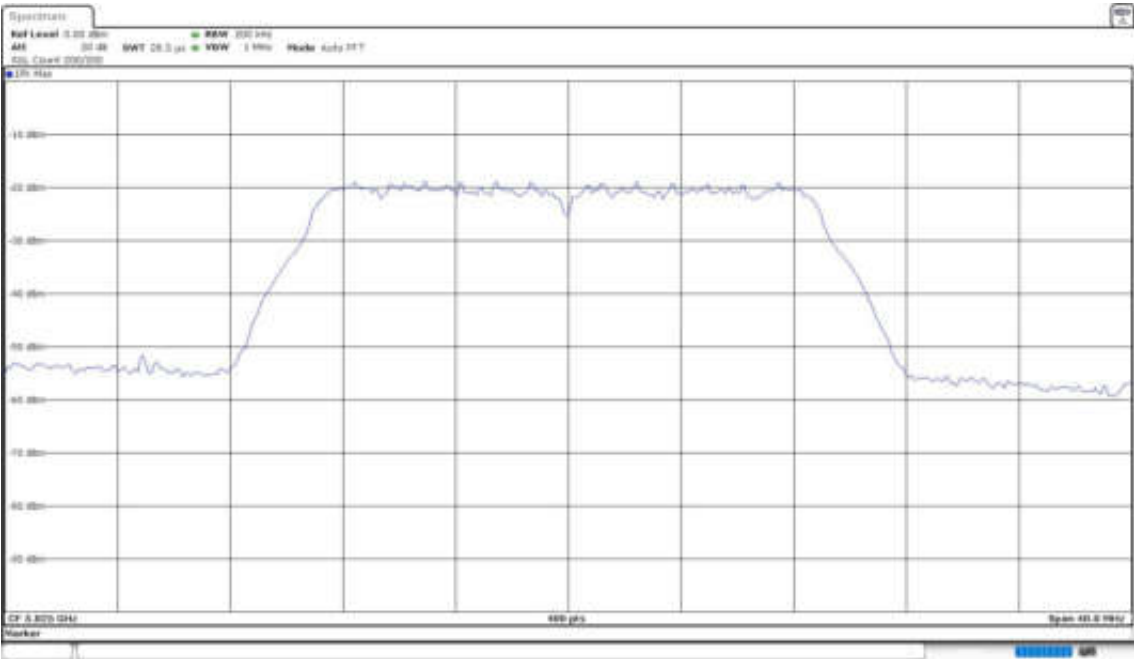
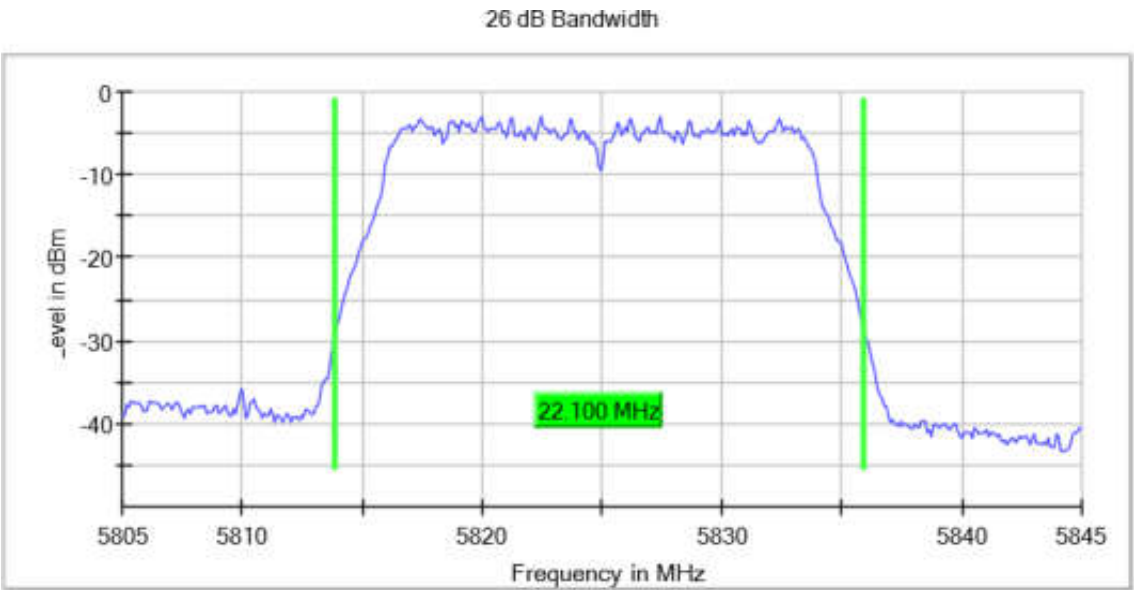
Frequency MHz = 5785.00000 Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5825.00000 Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5755.00000	40.225
		5795.00000	40.075

Verdict

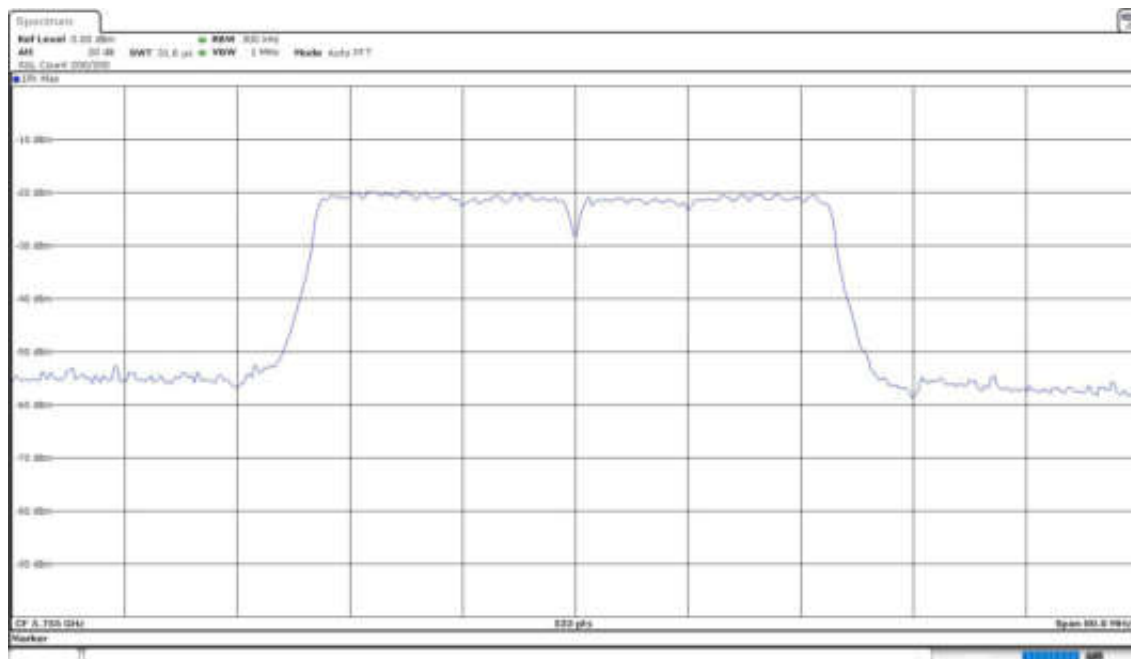
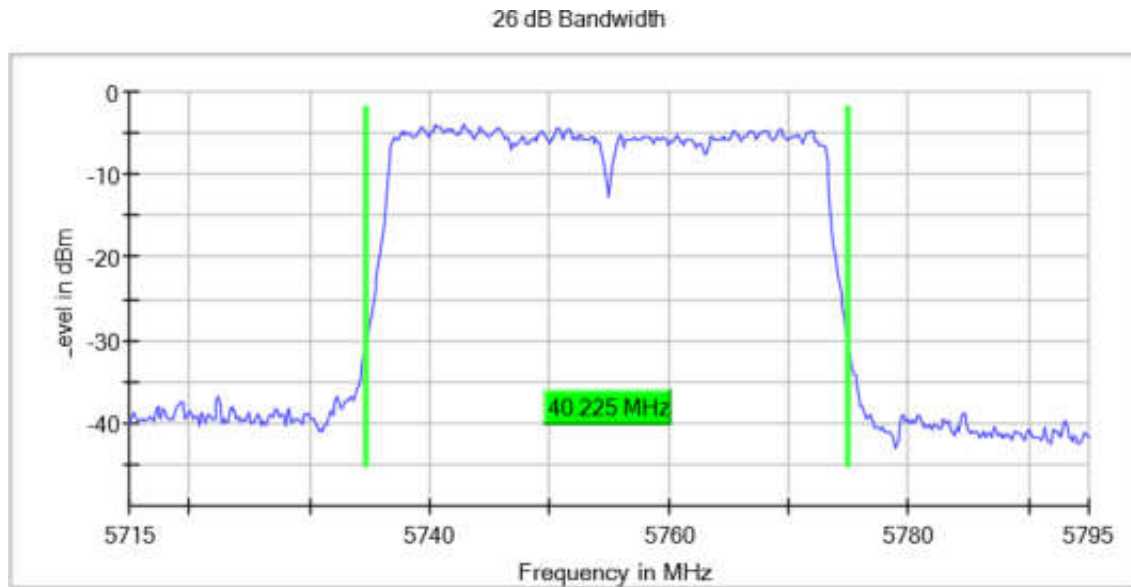
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5755.00000 Modulation = 802.11n HT40 (OFDM MCS0)

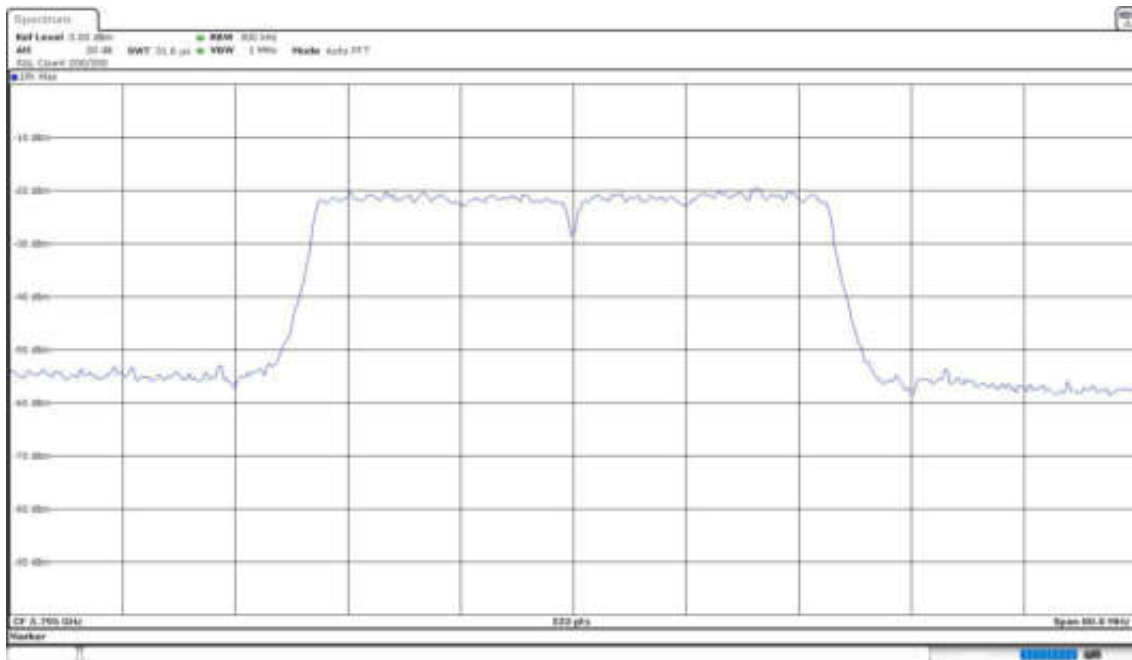
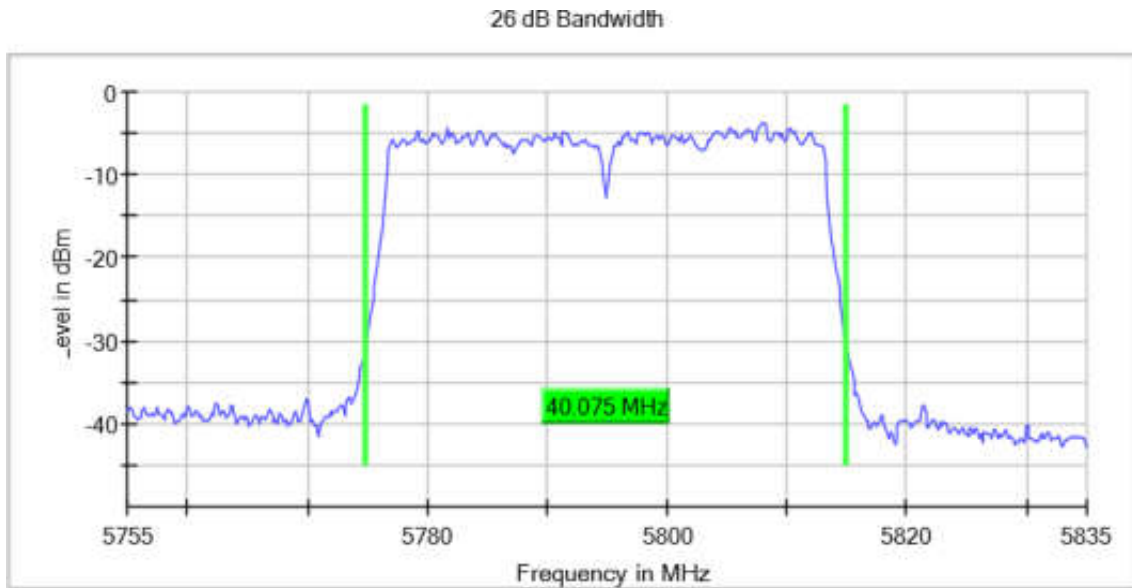
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5795.00000 Modulation = 802.11n HT40 (OFDM MCS0)

Images:



Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5745.00000	21.500
		5785.00000	21.600
		5825.00000	21.600

Verdict

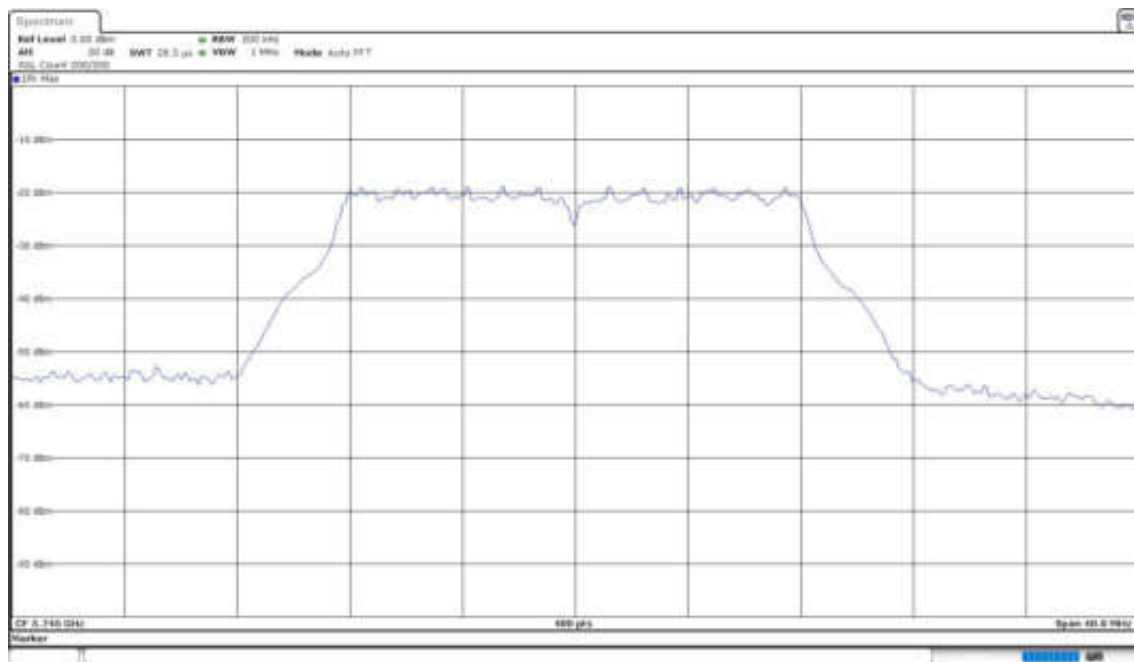
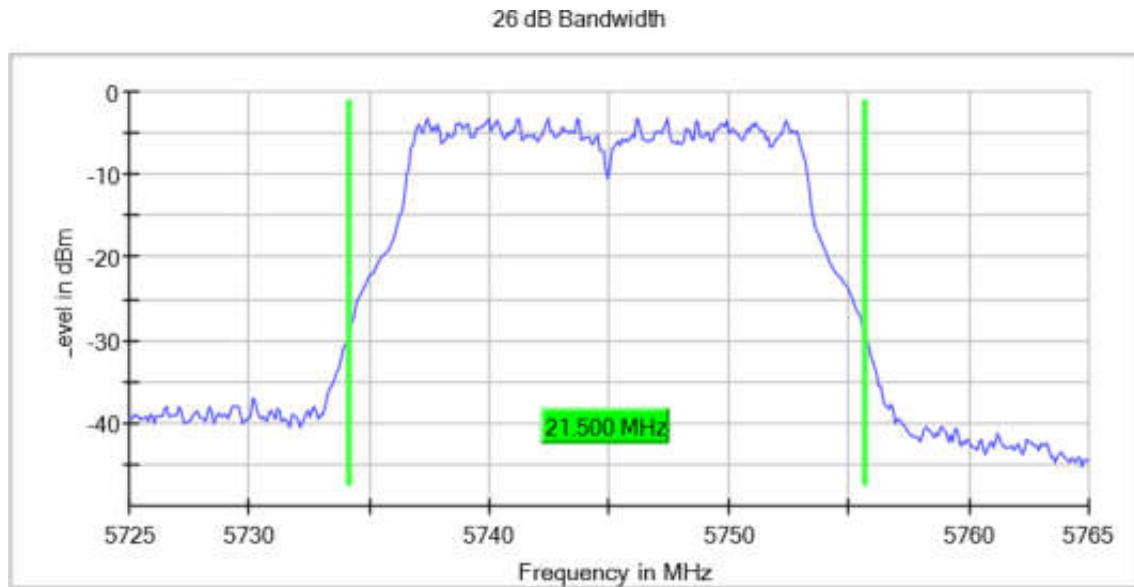
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

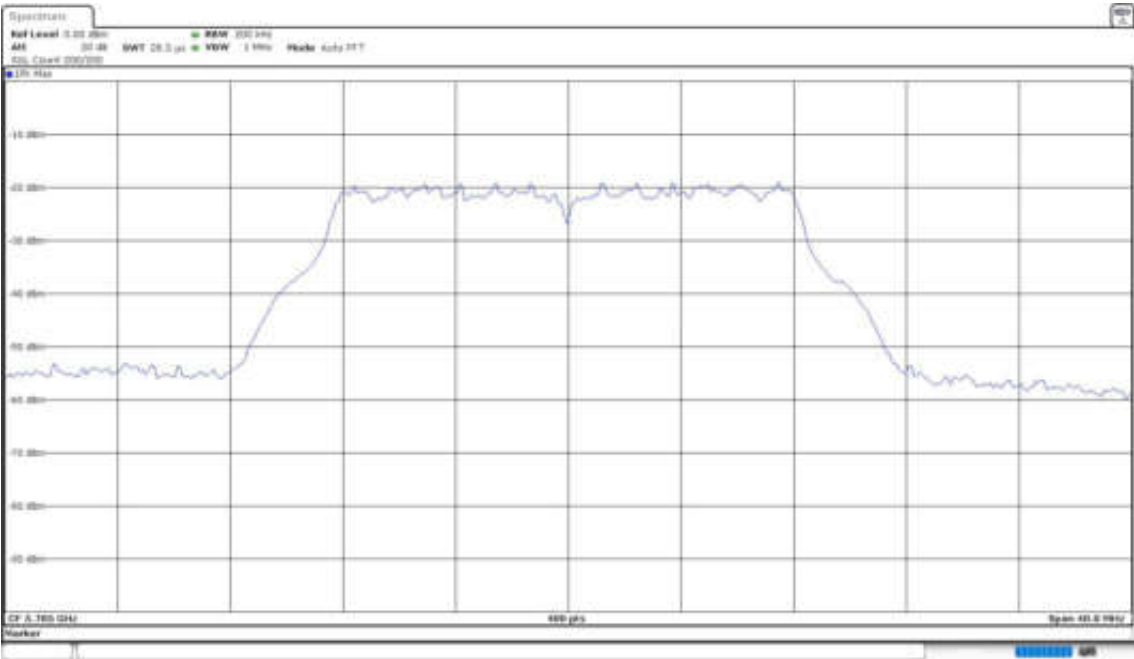
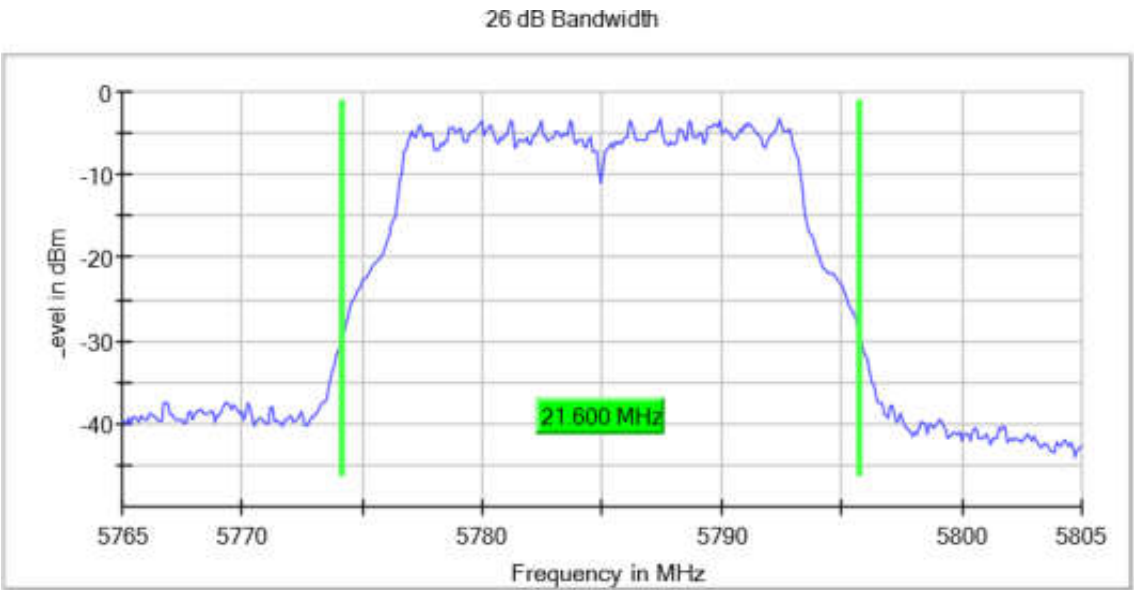
Frequency MHz = 5745.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5785.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

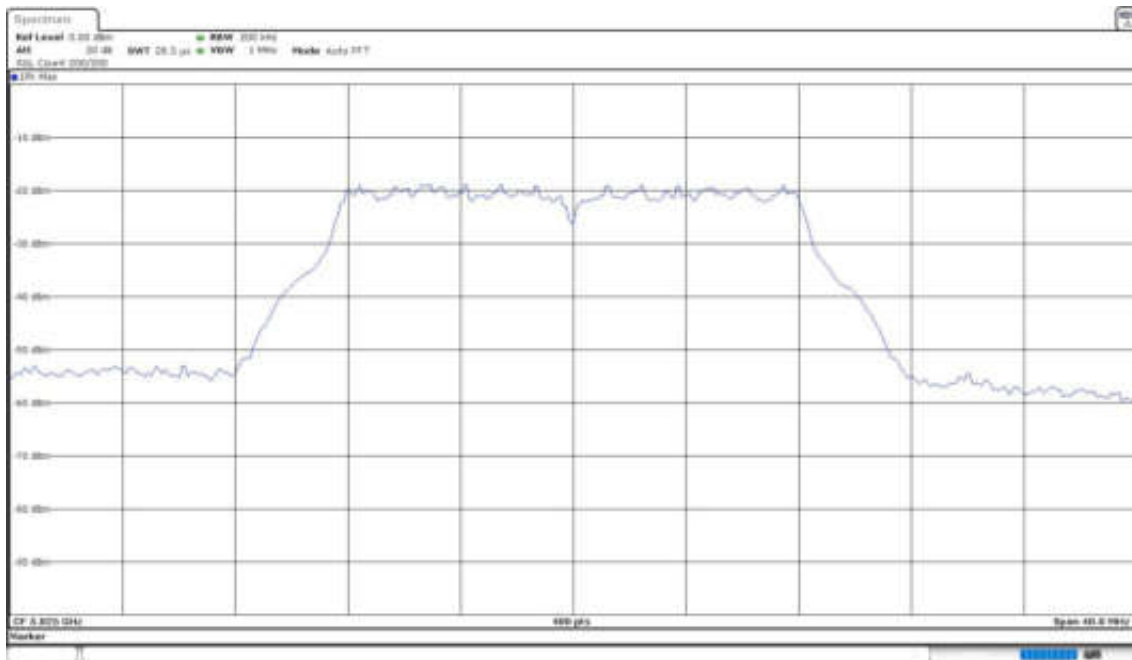
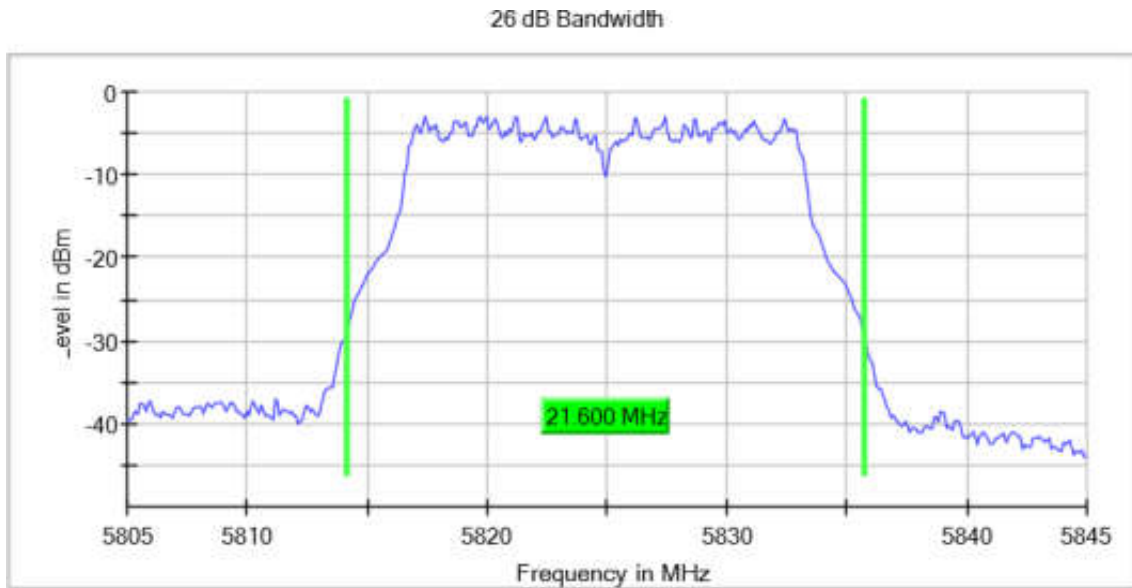
Images:



Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5825.00000 Modulation = 802.11a (OFDM 6 Mbit/s)

Images:



Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5745.00000	22.000
		5785.00000	22.100
		5825.00000	22.100

Verdict

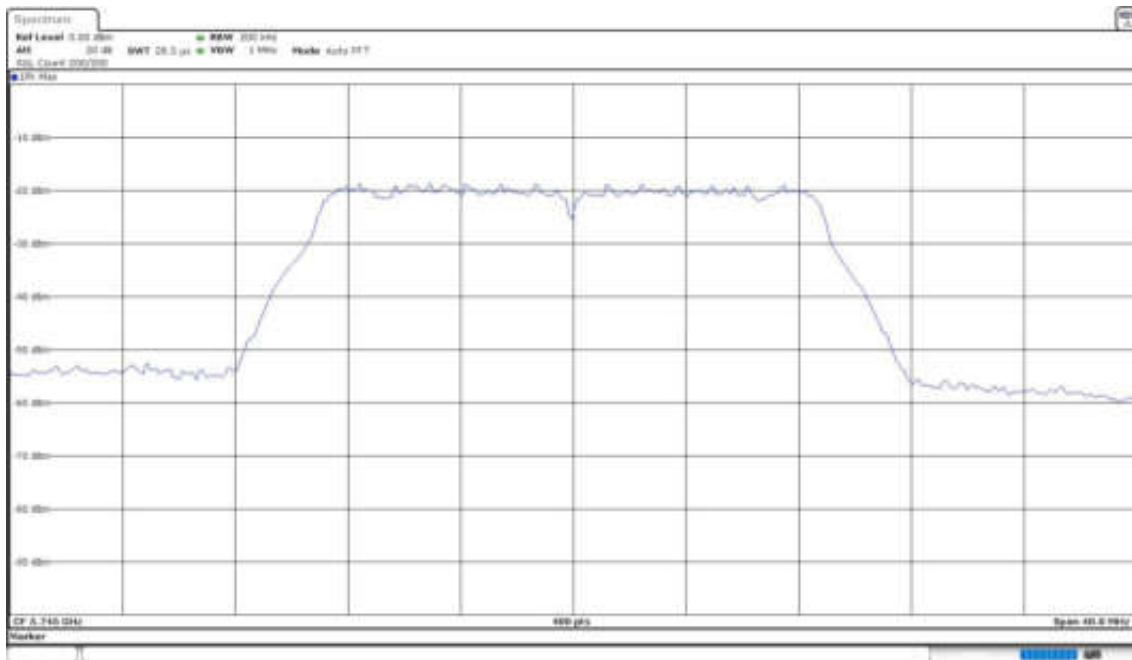
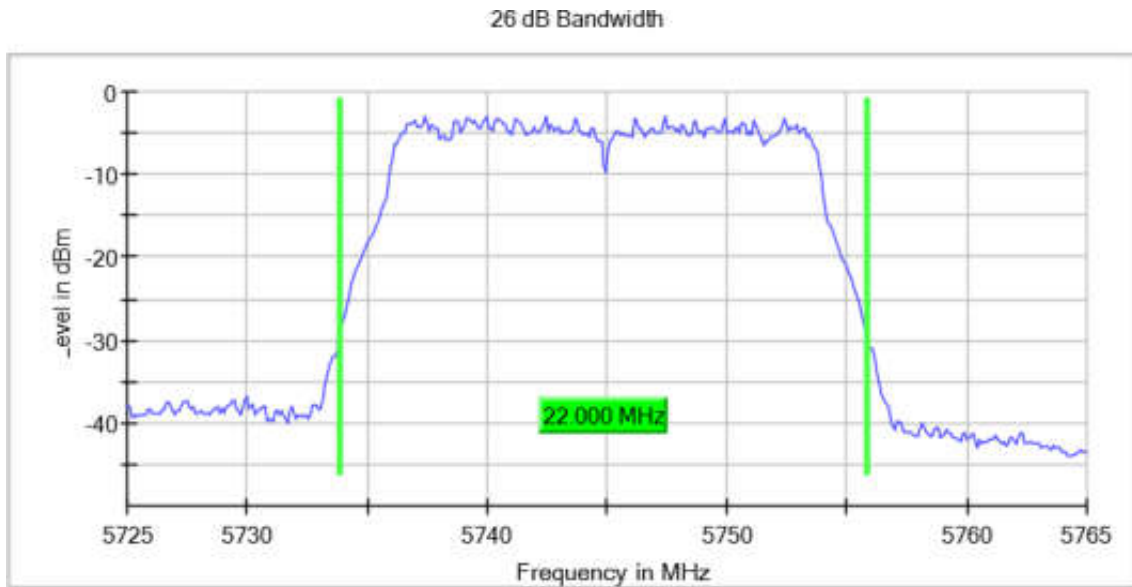
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

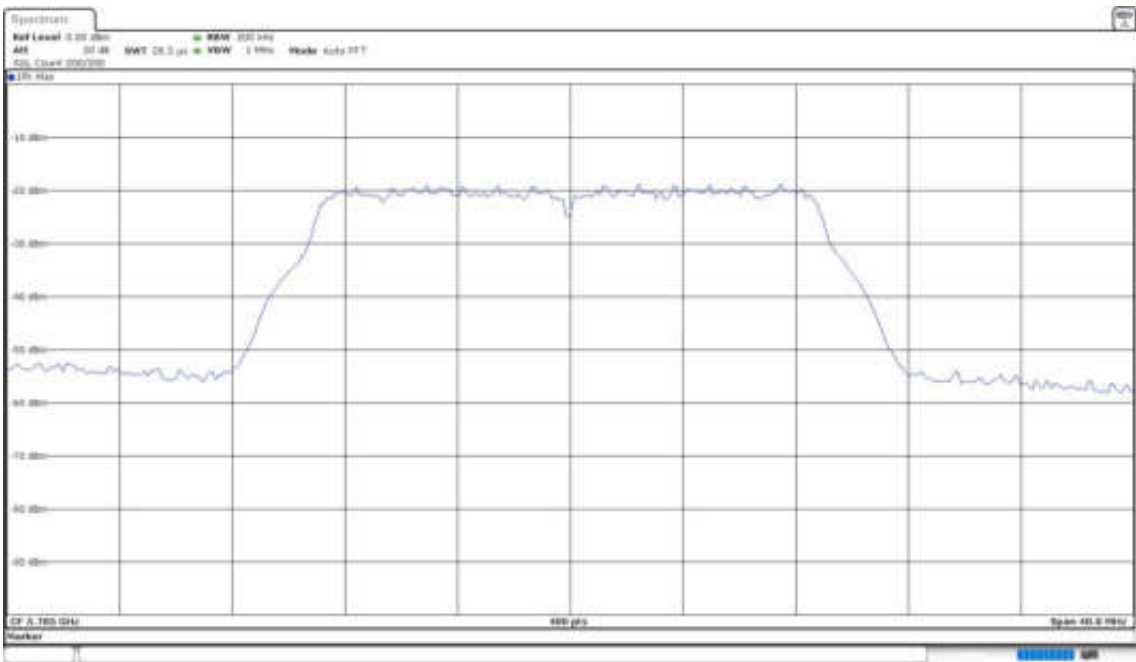
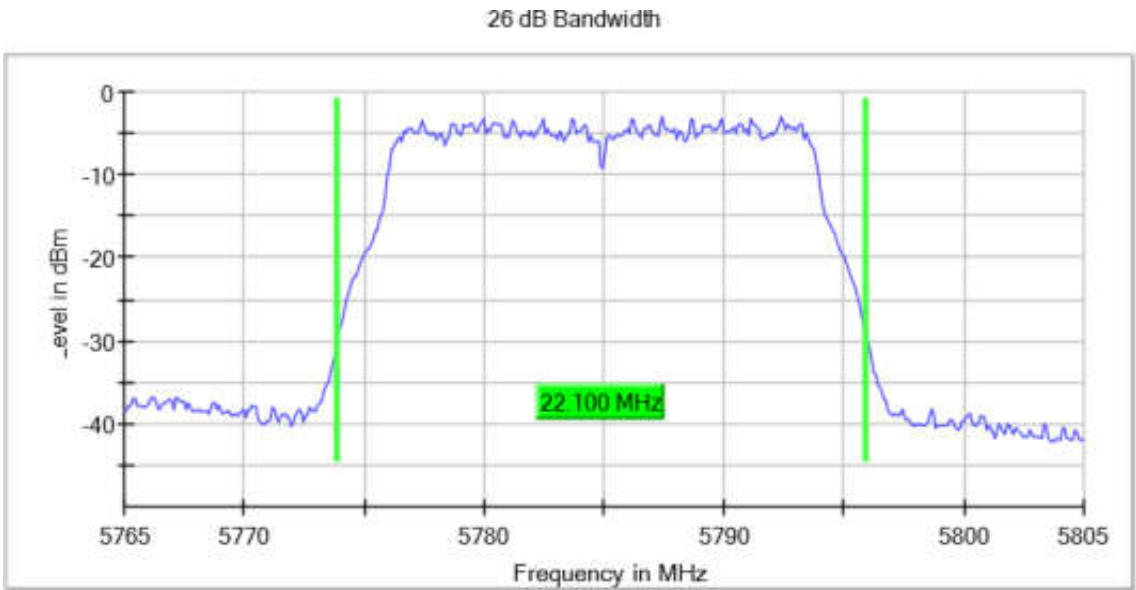
Frequency MHz = 5745.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



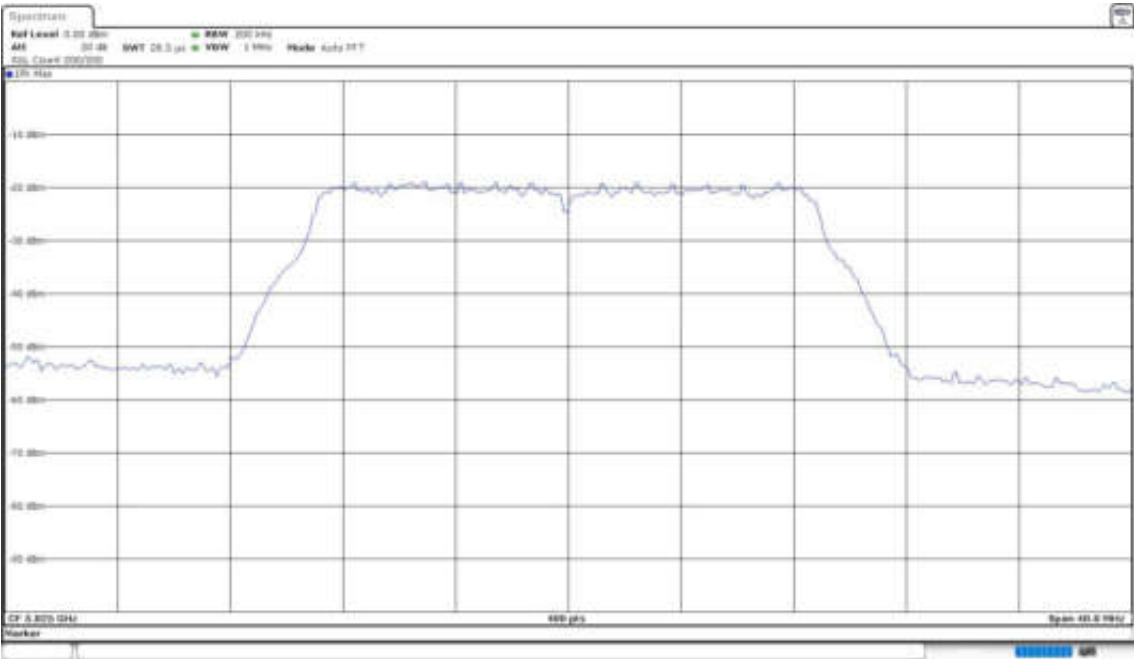
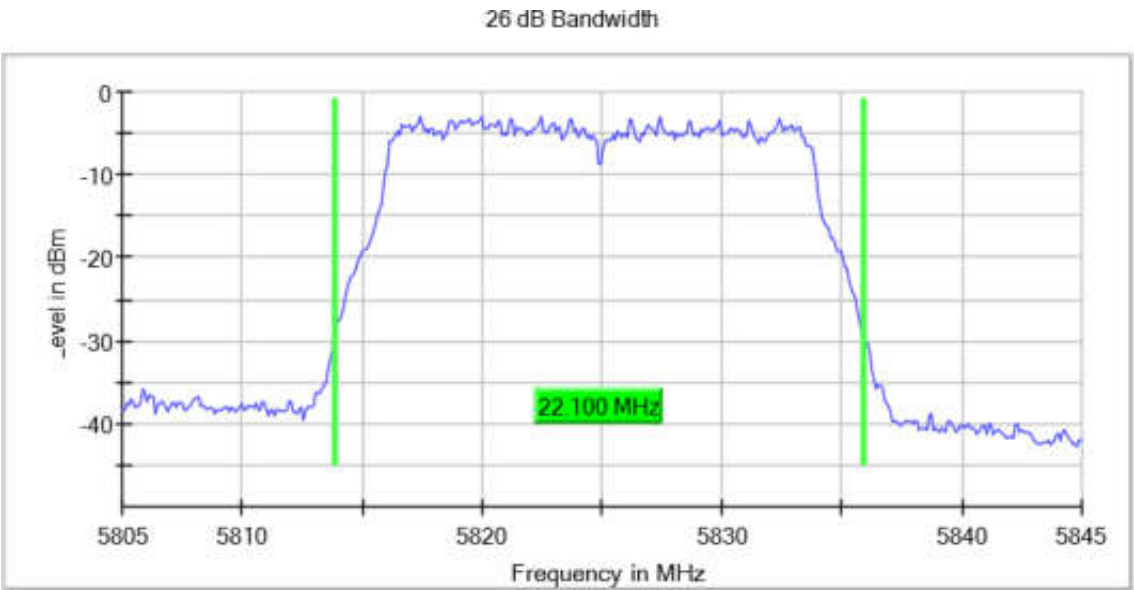
Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5785.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Operation Band MHz = [5725, 5850] Active Port = 1
Frequency MHz = 5825.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)

Images:



Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5755.00000	40.225
		5795.00000	40.225

Verdict

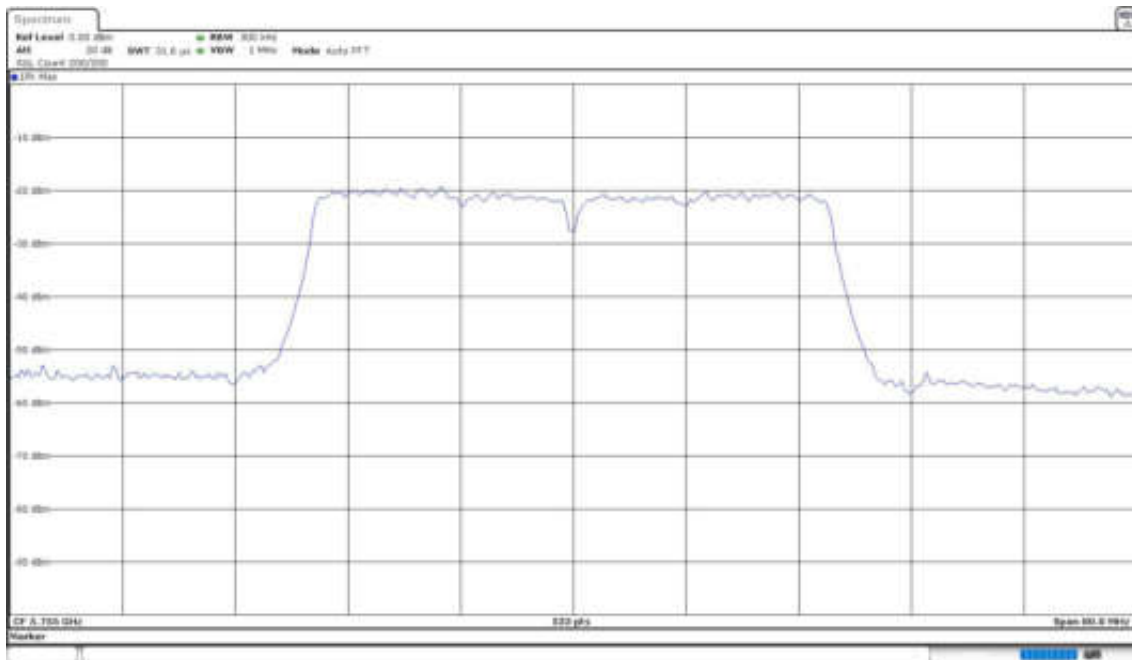
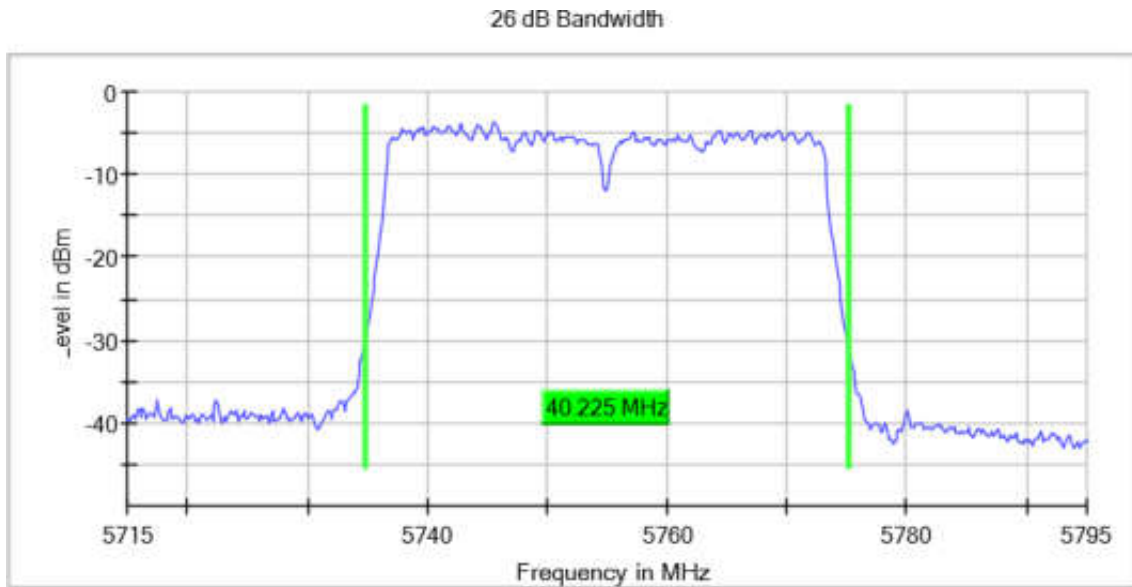
Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5755.00000 Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:

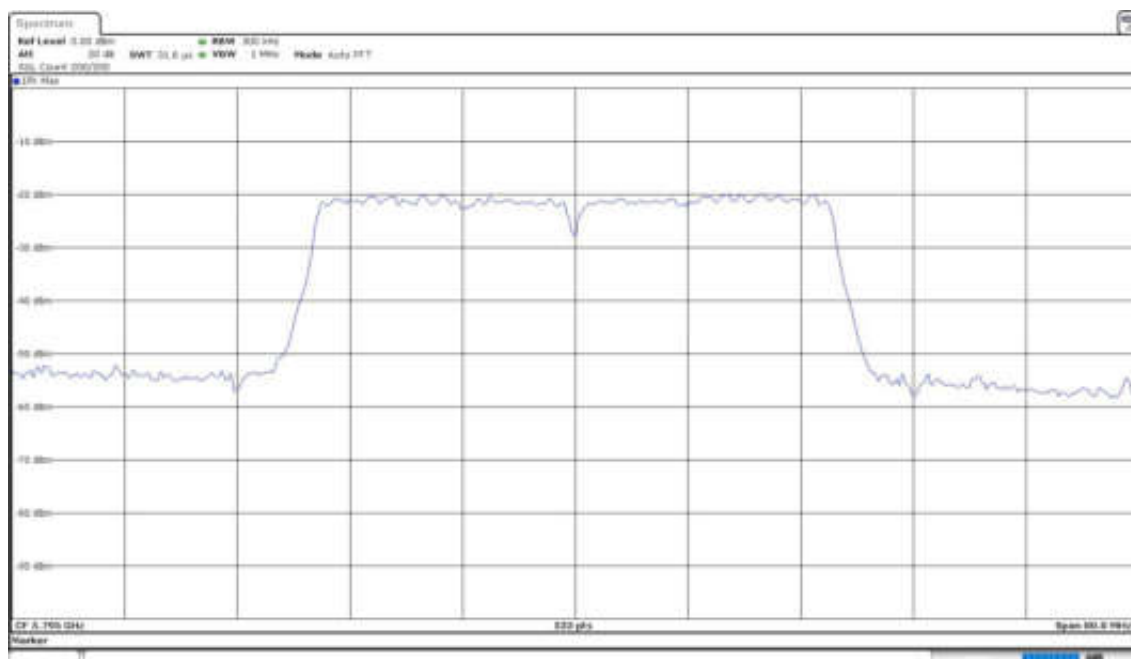
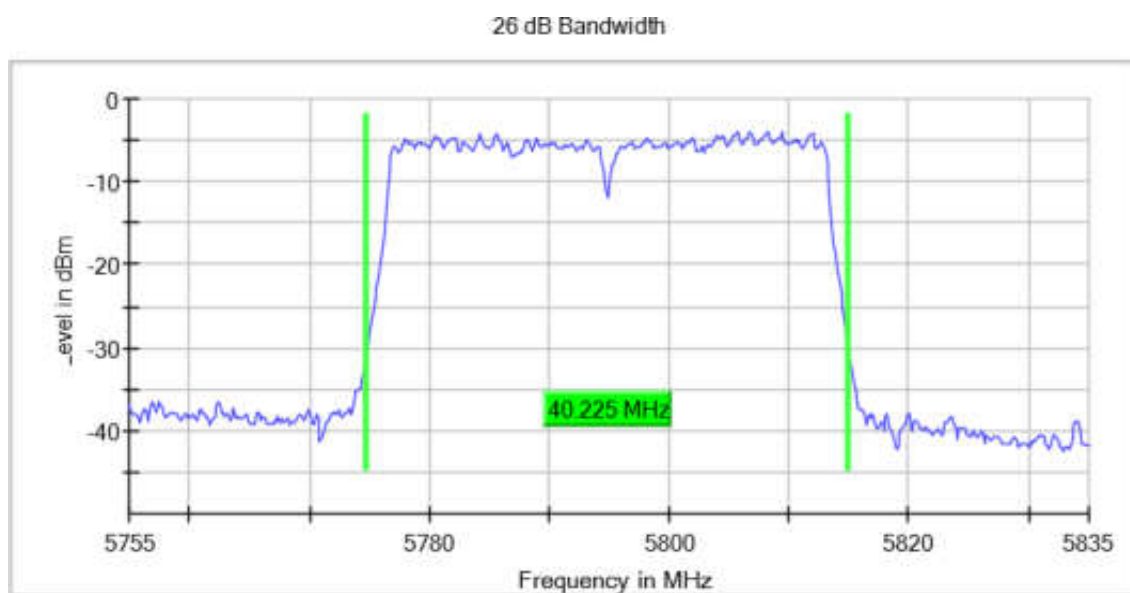


Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5795.00000

Modulation = 802.11ac VHT40 (OFDM MCS0)

Images:



Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5725, 5850]	1	5775.00000	83.500

Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850] Active Port = 1

Frequency MHz = 5775.00000 Modulation = 802.11ac VHT80 (OFDM MCS0)

Images:

