

Attachments

Operation Band MHz = [5725, 5850]

Active Port = 2+3

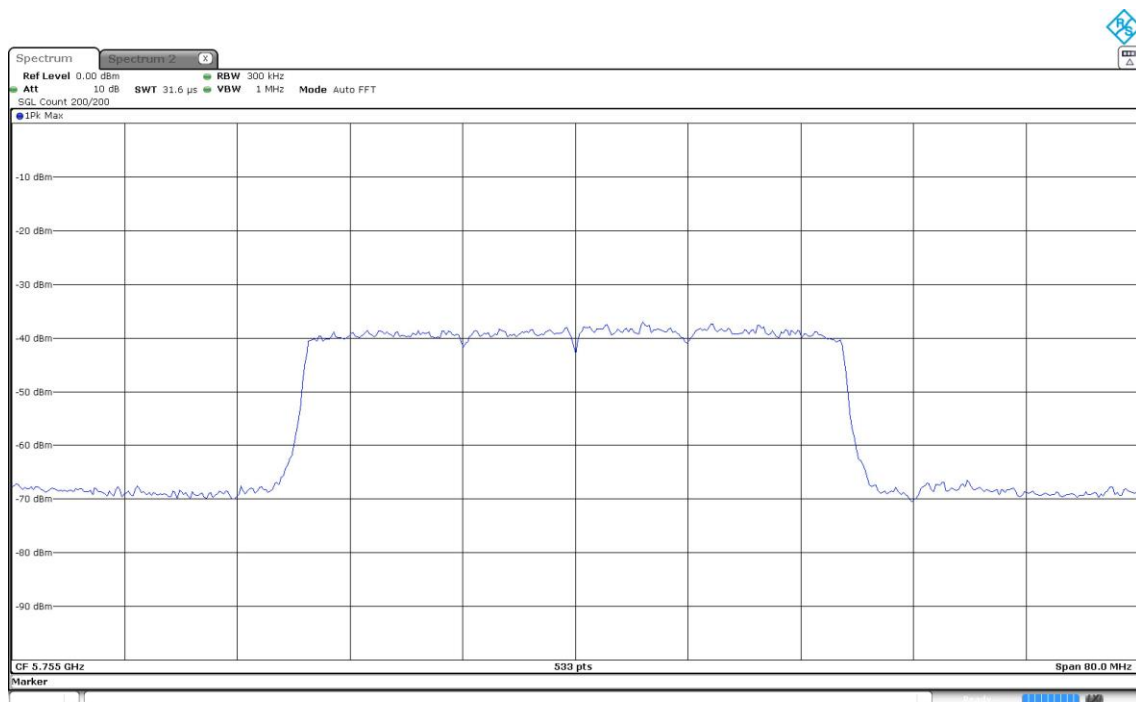
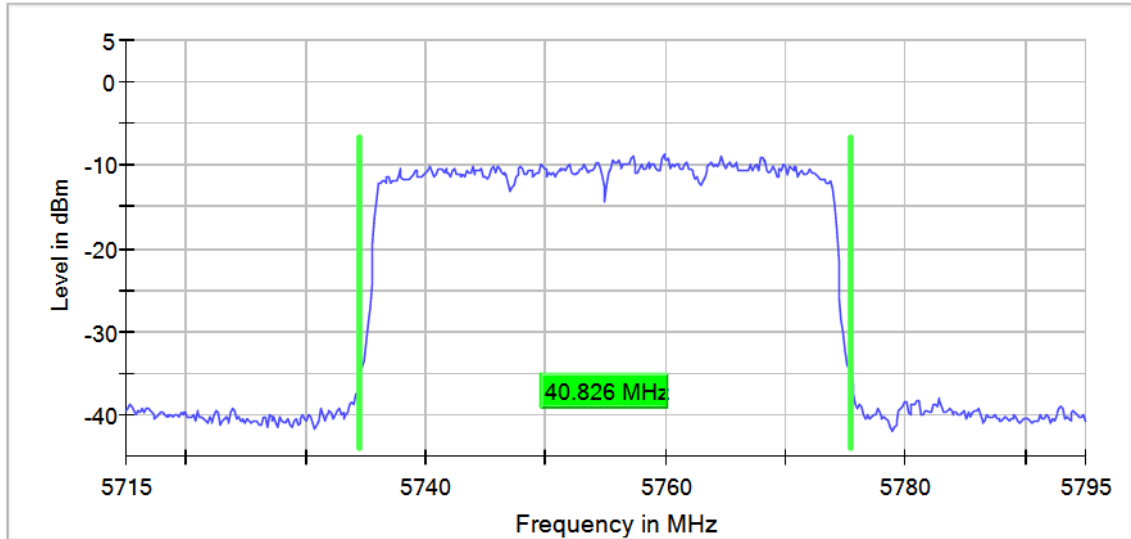
Frequency MHz = 5755.00000

Modulation = 802.11ax HE40 (OFDMA MCS0)

Antenna configuration = MIMO CDD Mode 2x2 Subcarrier Mode = SU

Images:

26 dB Bandwidth



Operation Band MHz = [5725, 5850]

Active Port = 2+3

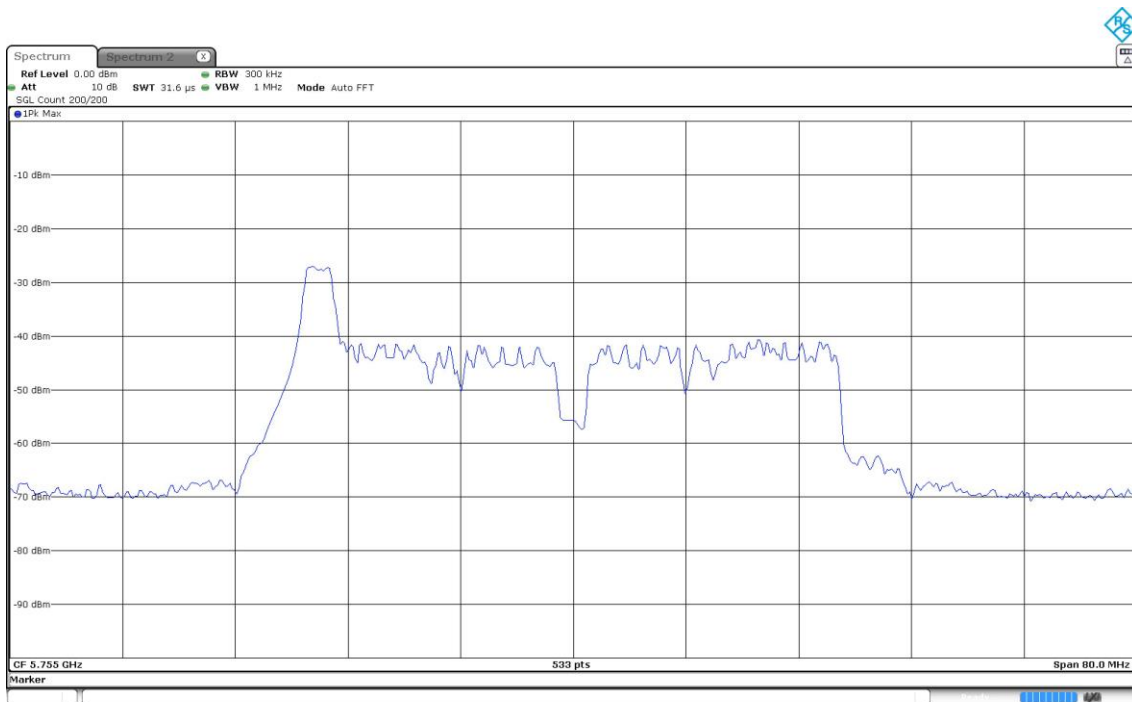
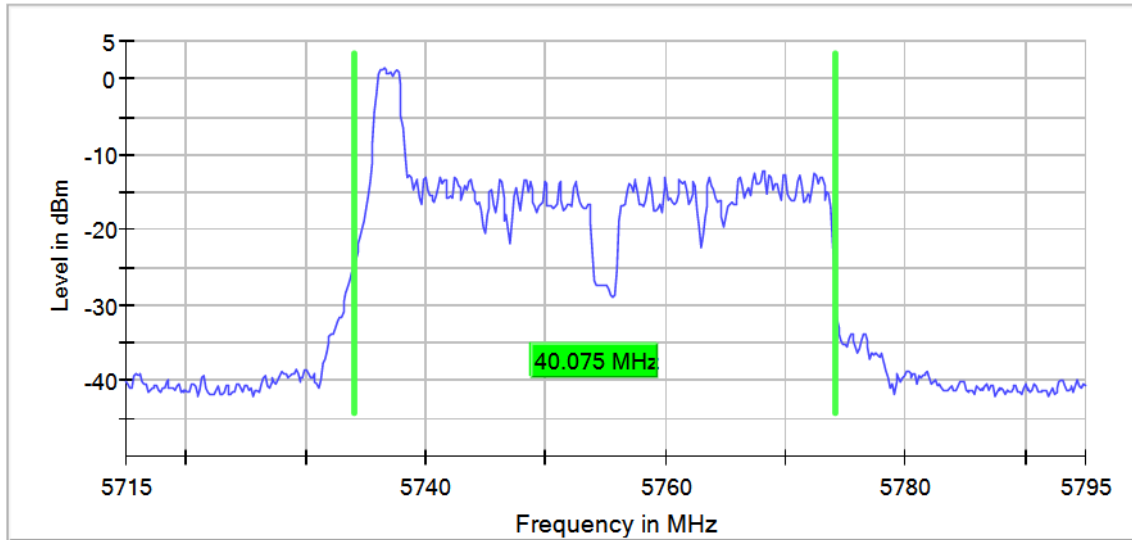
Frequency MHz = 5755.00000

Modulation = 802.11ax HE40 (OFDMA MCS0)

Antenna configuration = MIMO CDD Mode 2x2 Subcarrier Mode = RU

Images:

26 dB Bandwidth



Operation Band MHz = [5725, 5850]

Active Port = 2+3

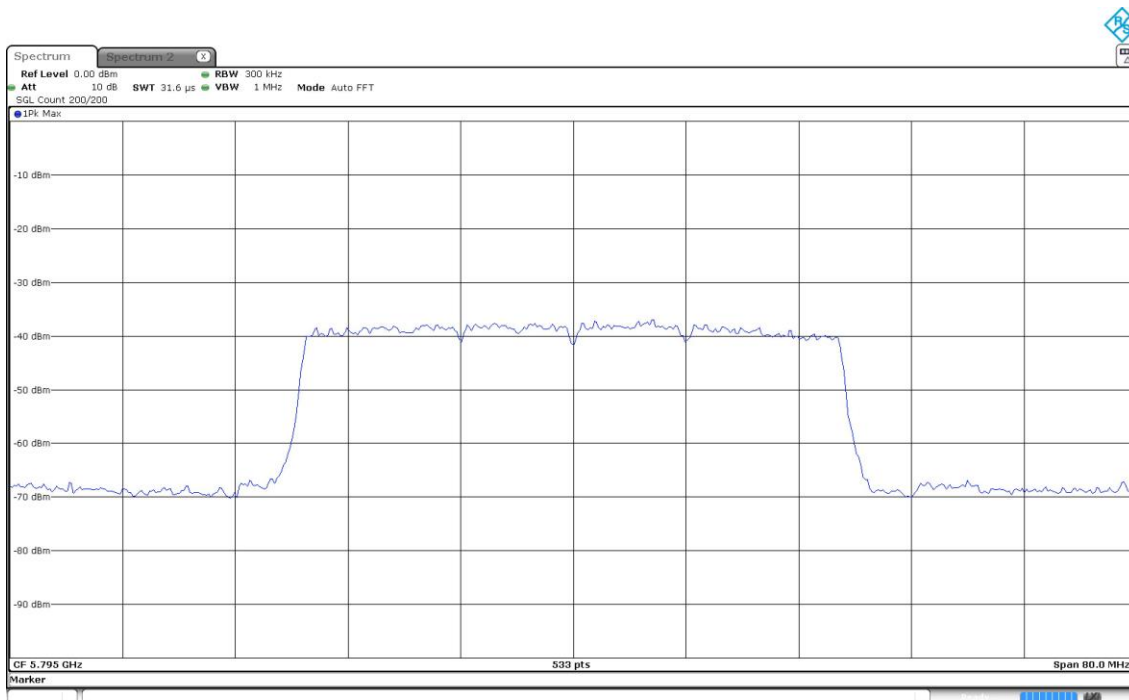
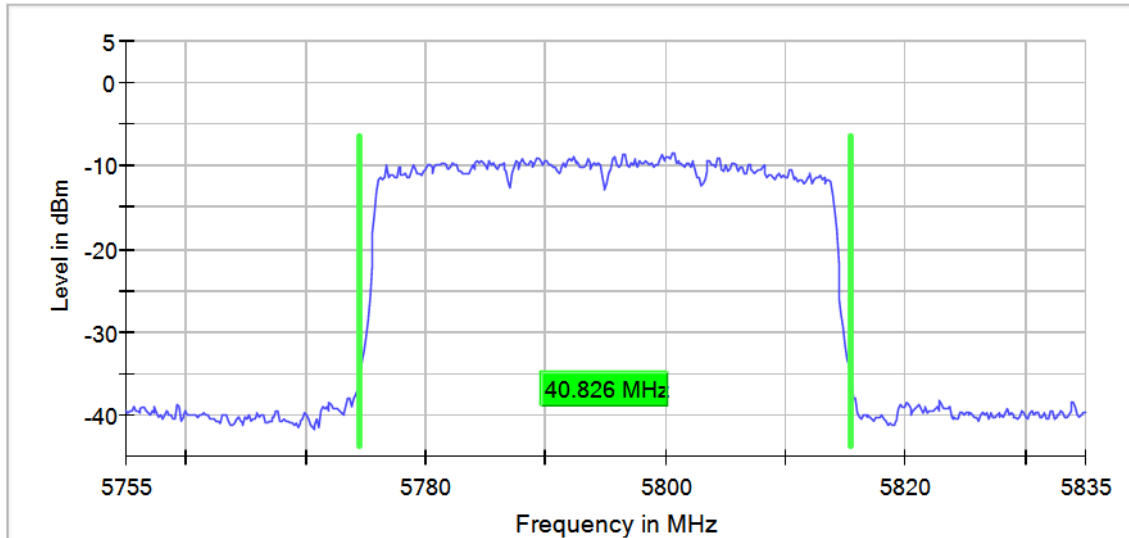
Frequency MHz = 5795.00000

Modulation = 802.11ax HE40 (OFDMA MCS0)

Antenna configuration = MIMO CDD Mode 2x2 Subcarrier Mode = SU

Images:

26 dB Bandwidth



Operation Band MHz = [5725, 5850]

Active Port = 2+3

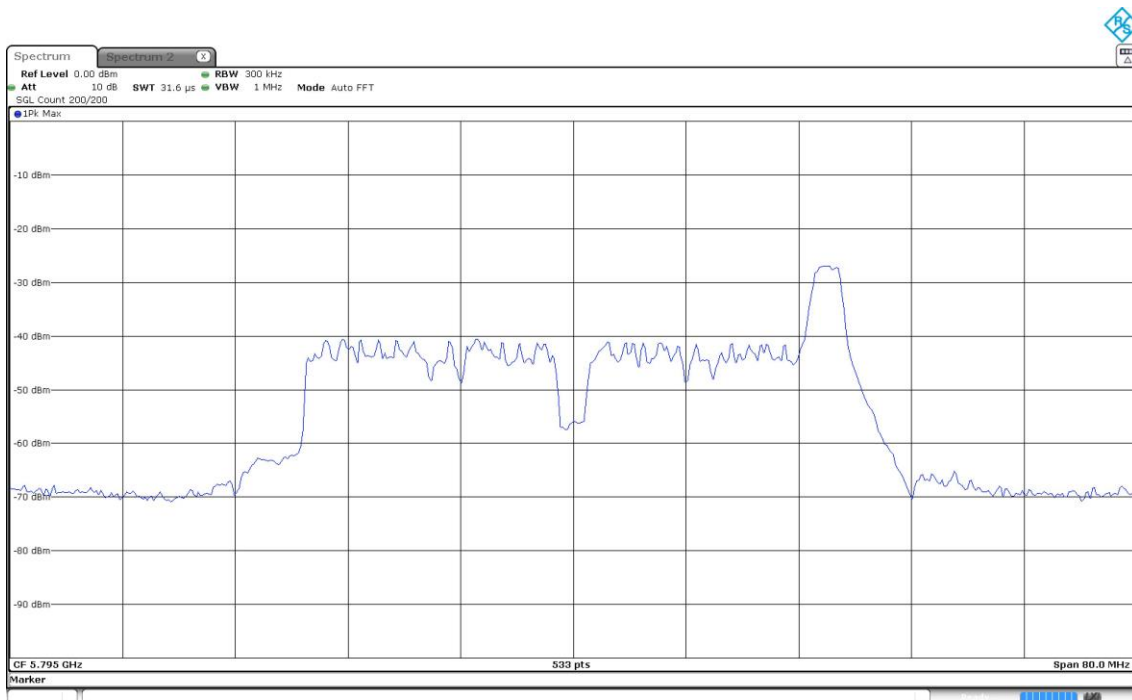
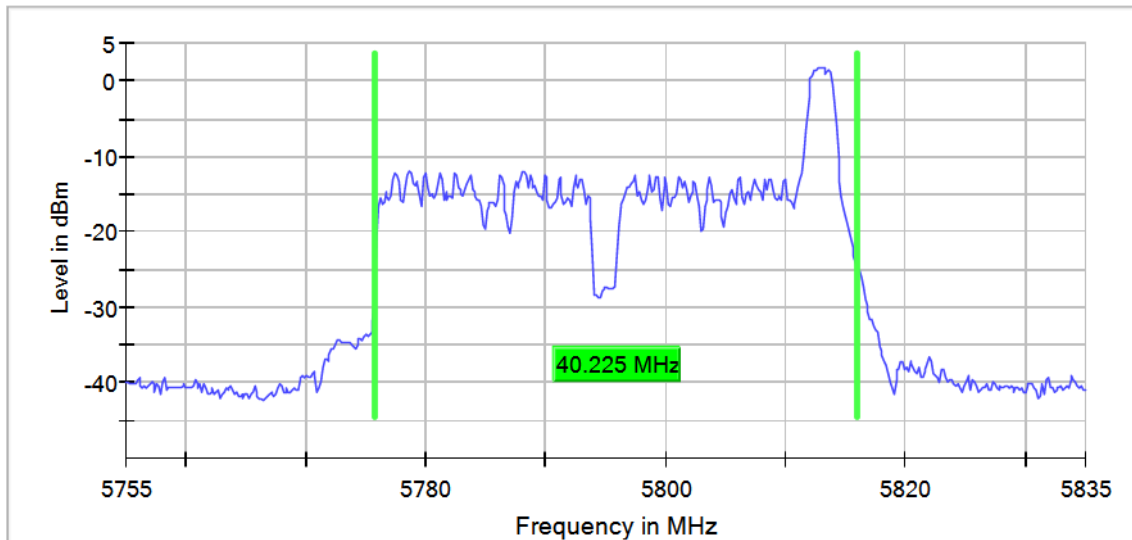
Frequency MHz = 5795.00000

Modulation = 802.11ax HE40 (OFDMA MCS0)

Antenna configuration = MIMO CDD Mode 2x2 Subcarrier Mode = RU

Images:

26 dB Bandwidth



Modulation: 802.11ax HE80 (OFDMA MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Antenna configuration	Subcarrier Mode	Ebw (MHz)
[5725, 5850]	2+3	5775.00000	MIMO CDD Mode 2x2	SU	84.000
				RU	84.000

Verdict

Pass

Attachments

Operation Band MHz = [5725, 5850]

Active Port = 2+3

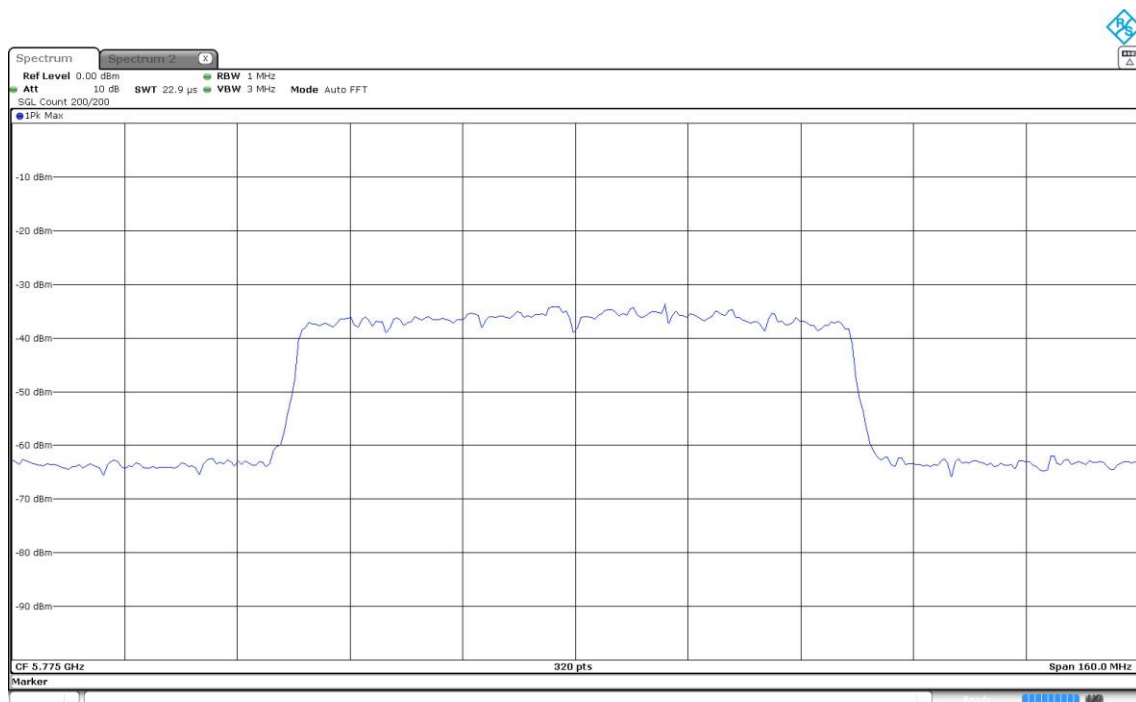
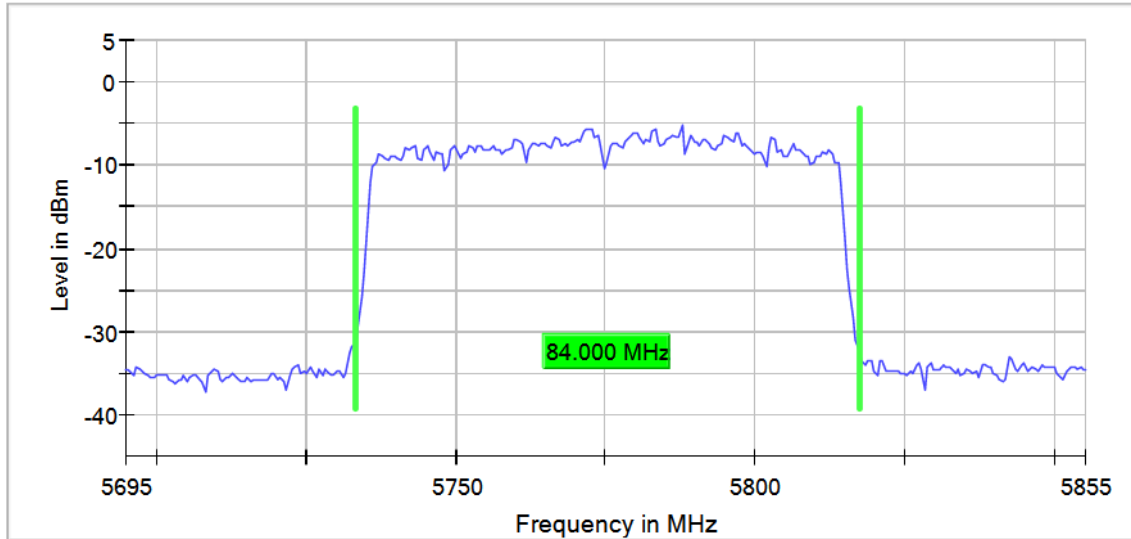
Frequency MHz = 5775.00000

Modulation = 802.11ax HE80 (OFDMA MCS0)

Antenna configuration = MIMO CDD Mode 2x2 Subcarrier Mode = SU

Images:

26 dB Bandwidth



Operation Band MHz = [5725, 5850]

Active Port = 2+3

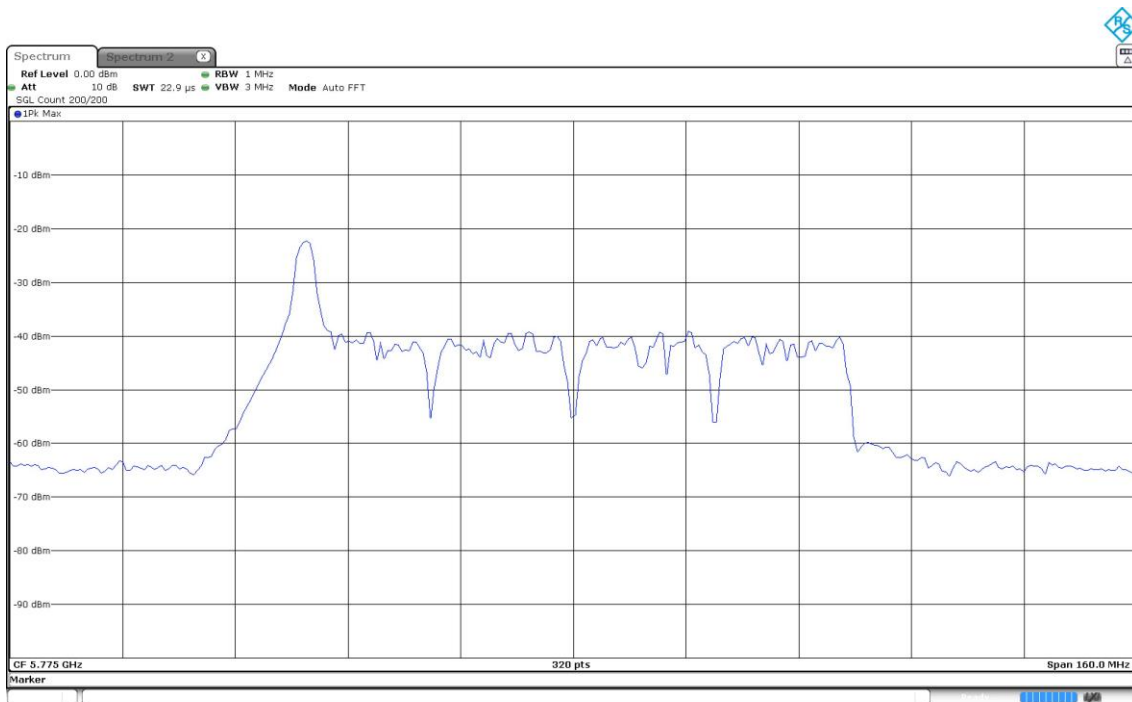
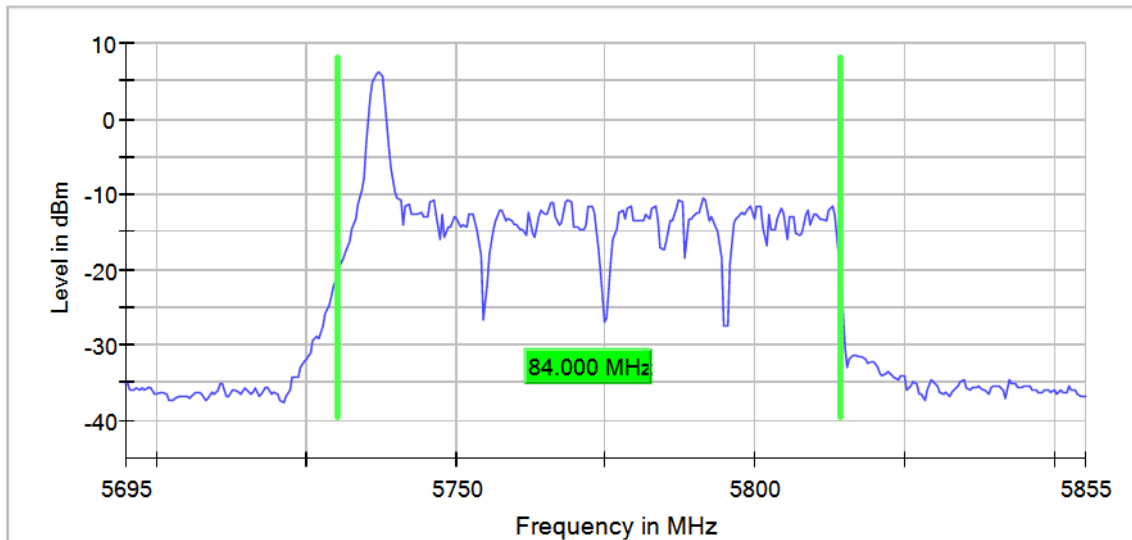
Frequency MHz = 5775.00000

Modulation = 802.11ax HE80 (OFDMA MCS0)

Antenna configuration = MIMO CDD Mode 2x2 Subcarrier Mode = RU

Images:

26 dB Bandwidth



Appendix B: Tests results for the U-NII-1 Band 5.15–5.25 GHz

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TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

Vnominal: 12 Vdc
Type of Power Supply: Vehicle battery

ANTENNA (*):

Type of Antenna: External

Directional Antenna Gain Calculations for CDD MIMO In-Band Measurements:

For 2Tx CDD MIMO modes, in accordance with KDB 662911 D01 v02r01 Section F)2)f)(ii) y F)2)e)ii), directional gain, directional gain was calculated as follows:

$$\begin{aligned}
 N_{SS} &= 1, N_{ANT} = 2, G_{ANT0} = 5.1, G_{ANT1} = 5.1 \\
 \text{Directional Gain} &= 10 \log \left[\frac{\sum_{j=1}^{N_{SS}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right] = 10 \log \left[\frac{\sum_{j=1}^1 \left(\sum_{k=1}^2 g_{j,k} \right)^2}{2} \right] \\
 &= 10 \log \left[\frac{(g_{1,1} + g_{1,2})^2}{2} \right] = 10 \log \left[\frac{(10^{\frac{G_1}{20}} + 10^{\frac{G_2}{20}})^2}{2} \right] = 10 \log \left[\frac{(10^{\frac{5.1}{20}} + 10^{\frac{5.1}{20}})^2}{2} \right] = 8.11 \text{ dBi}
 \end{aligned}$$

POWER ADJUSTMENT (*): 9 dBm

TEST FREQUENCIES (*):

Technology Tested:	WLAN (IEEE 802.11 a,n,ac,ax) 2x2 / U-NII-1	
	802.11a OFDM 6 Mbit/s (MIMO 2x2)	
	802.11 n HT20: MCS0 to MCS23 (MIMO 2x2)	
	802.11 n HT40: MCS0 to MCS23 (MIMO 2x2)	
	802.11 ac VHT20: MCS0 to MCS9 (MIMO 2x2)	
	802.11 ac VHT40: MCS0 to MCS9 (MIMO 2x2)	
	802.11 ac VHT80: MCS0 to MCS9 (MIMO 2x2)	
	802.11 ax HE20: MCS0 to MCS11 (MIMO 2x2) – SU/RU	
	802.11 ax HE40: MCS0 to MCS11 (MIMO 2x2) – SU/RU	
	802.11 ax HE80: MCS0 to MCS11 (MIMO 2x2) – SU/RU	
Setting of cores / ports:	2+3	
Beamforming:	No.	
Frequency Range:	5150 MHz to 5250 MHz	
Channel Spacing:	20 MHz	
Transmit Channels	Channel	Channel Frequency (MHz)
	Low: 36	5180
	Middle: 40	5200
	High: 48	5240
Channel Spacing:	40 MHz	
Transmit Channels	Channel	Channel Frequency (MHz)
	Low: 38	5190
	High: 46	5230
Channel Spacing:	80 MHz	
Transmit Channels	Middle: 42	5210

* The EUT does not support the Middle Channel of 802.11ax HE20 (OFDMA MCS0) SU modulation.

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
- 802.11 ax HE20: MCS0
- 802.11 ax HE40: MCS0
- 802.11 ax HE80: 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.

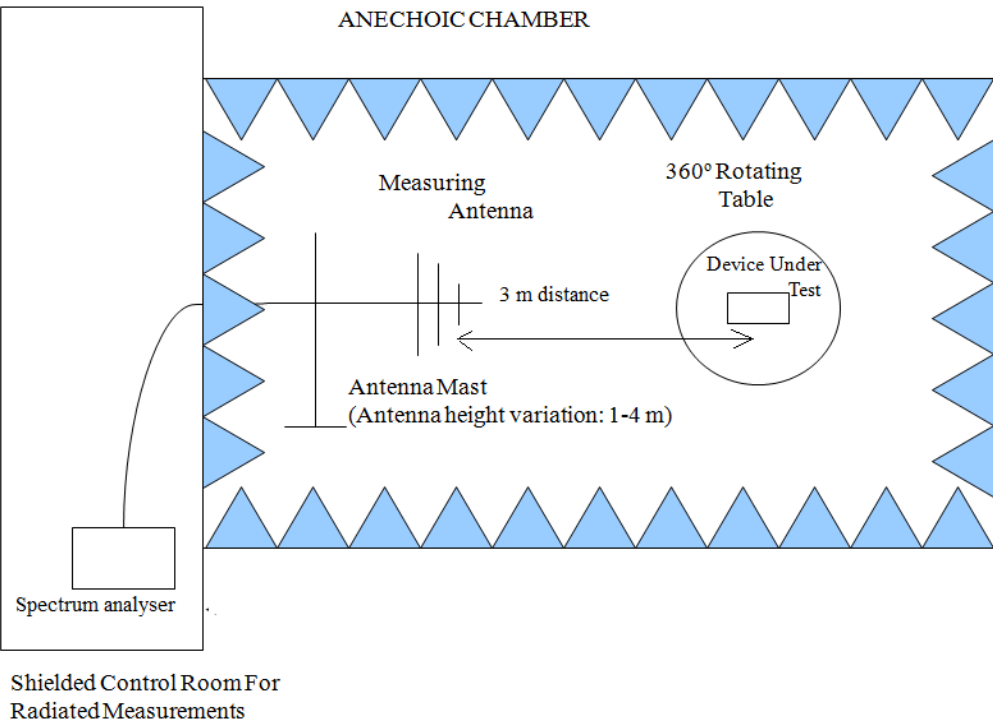
The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height (Bilog antenna and Double ridge horn antenna) was varied from 1 to 4 meters to find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

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

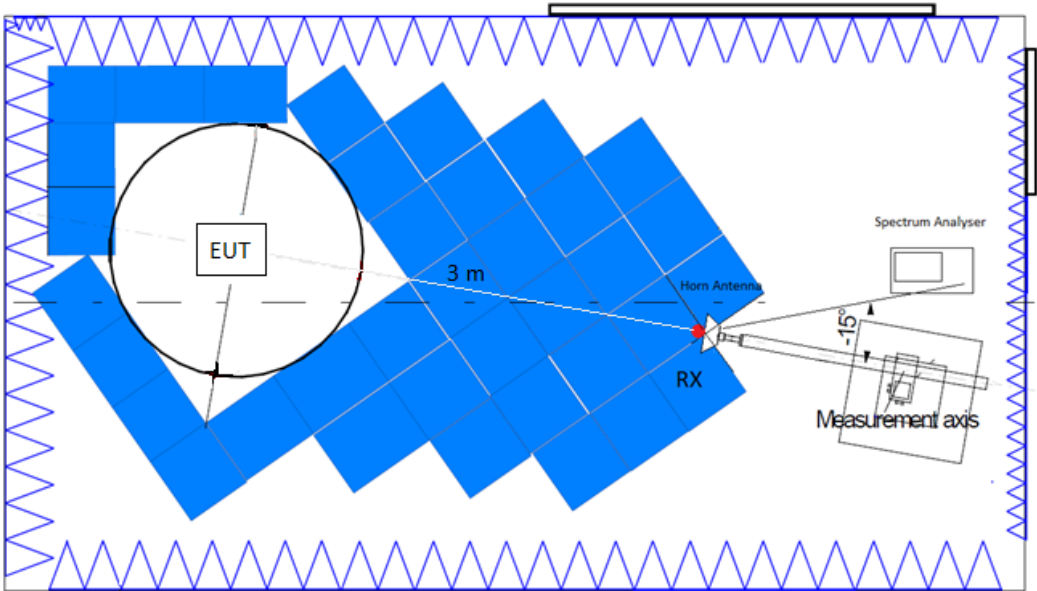
The final measured value, for the given emission, in the tables below incorporates the calibrated antenna factor and cable loss.

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.

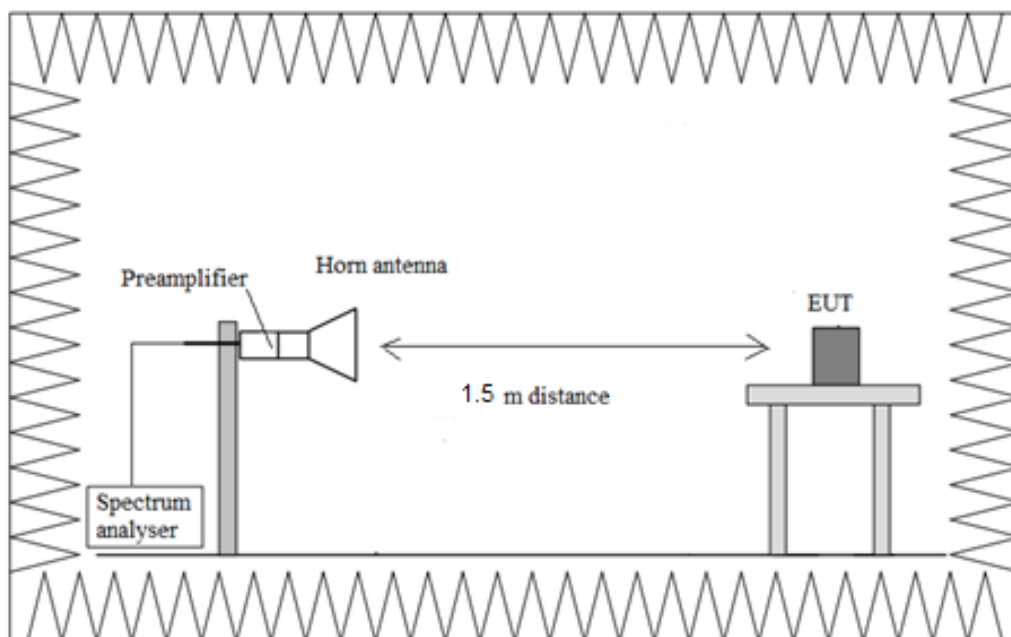
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup $f > 17$ GHz:



TEST CASES DETAILS

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

RSS-247 6.2.1.1 / FCC 15.407 (a) (1) [Avcp] Maximum Conducted
output power UNII-1

Limits

* **FCC 15.407:** For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

RSS-247:

The maximum e.i.r.p. shall not exceed 200 mW (23 dBm) or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log10B, dBm, whichever is less.

Modulation: 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Antenna configuration	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5180.00000	No	MIMO CDD Mode 2x2	10.83	5.73
		5220.00000			10.90	5.80
		5240.00000			10.92	5.82

Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Antenna configuration	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5190.00000	No	MIMO CDD Mode 2x2	11.60	6.50
	2+3	5230.00000	No	MIMO CDD Mode 2x2	11.59	6.49

Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Antenna configuration	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5180.00000	No	MIMO CDD Mode 2x2	11.03	5.93
		5220.00000			11.13	6.03
		5240.00000			11.09	5.99

Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5180.00000	No	10.52	5.42
		5220.00000		10.65	5.55
		5240.00000		10.64	5.54

Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5190.00000	No	11.71	6.61
		5230.00000		11.63	6.53

Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5210.00000	No	10.92	5.82

Modulation: 802.11ax HE20 (OFDMA MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Subcarrier Mode	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5180.00000	No	SU	10.04	4.94
[5150, 5250]	2+3	5180.00000	No	RU	10.68	5.58
[5150, 5250]	2+3	5200.00000	No	SU	10.06	4.96
[5150, 5250]	2+3	5200.00000	No	RU	10.08	4.98
[5150, 5250]	2+3	5240.00000	No	SU	10.32	5.22
[5150, 5250]	2+3	5240.00000	No	RU	10.03	4.93

Modulation: 802.11ax HE40 (OFDMA MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Subcarrier Mode	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5190.00000	No	SU	11.44	6.34
				RU	11.08	5.98
		5230.00000		SU	11.48	6.38
				RU	11.21	6.11

Modulation: 802.11ax HE80 (OFDMA MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Antenna configuration	Subcarrier Mode	Max EIRP (dBm)	Avg Power (dBm)
[5150, 5250]	2+3	5210.00000	No	MIMO CDD Mode 2x2	SU	10.98	5.88
[5150, 5250]	2+3	5210.00000	No	MIMO CDD Mode 2x2	RU	10.99	5.89

RSS-247 6.2.1.1 / FCC 15.407 (a) (1) [Psd] Transmitter Maximum Power Spectral Density UNII-1

Limits

FCC 15.407 (a)(2): For the 5.25-5.35 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Gain for MIMO PSD:

$$\begin{aligned} \text{Directional Gain} &= 10 \log \left[\frac{\sum_{j=1}^{N_{SS}} (\sum_{k=1}^{N_{ANT}} g_{j,k})^2}{N_{ANT}} \right] = 10 \log \left[\frac{\sum_{j=1}^1 (\sum_{k=1}^2 g_{j,k})^2}{2} \right] \\ &= 10 \log \left[\frac{(g_{1,1} + g_{1,2})^2}{2} \right] = 10 \log \left[\frac{(10^{\frac{G_1}{20}} + 10^{\frac{G_2}{20}})^2}{2} \right] = 10 \log \left[\frac{(10^{\frac{5.1}{20}} + 10^{\frac{5.1}{20}})^2}{2} \right] = 8.11 \text{ dBi} \end{aligned}$$

Limit for PSD in any 1Mhz: 11dBm-2.11dBi = 8.89 dBm

Modulation: 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5180.00000	No	5178.019802	-6.69
		5220.00000		5218.613861	-6.63
		5240.00000		5237.425743	-6.51

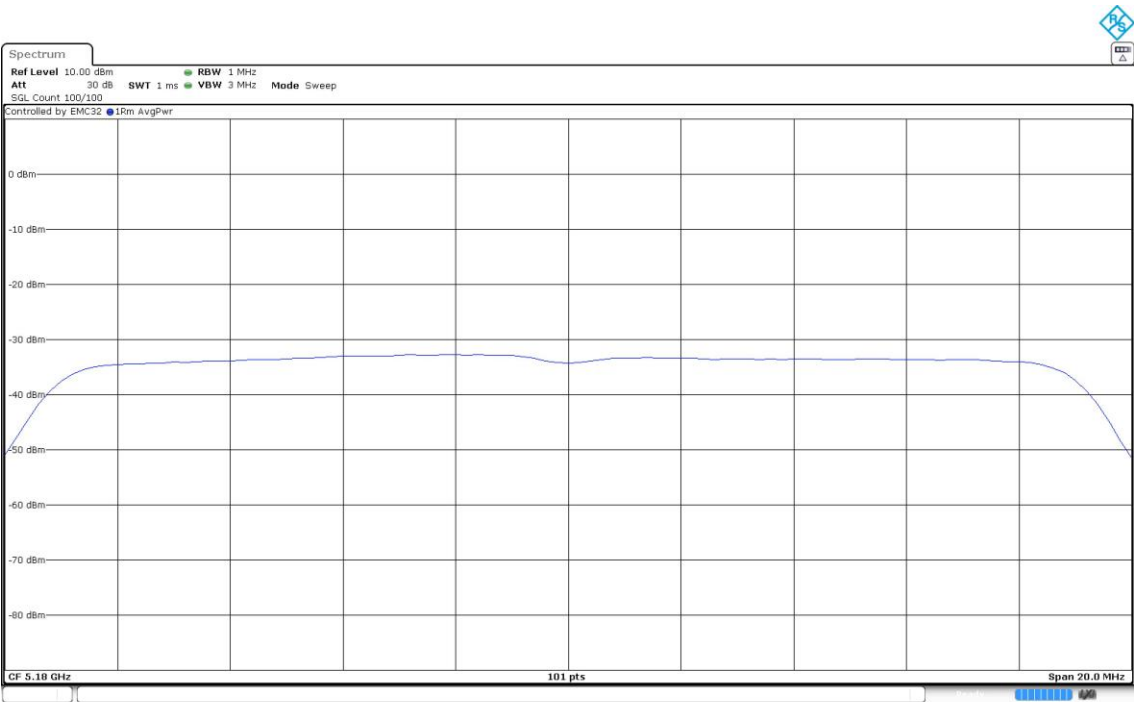
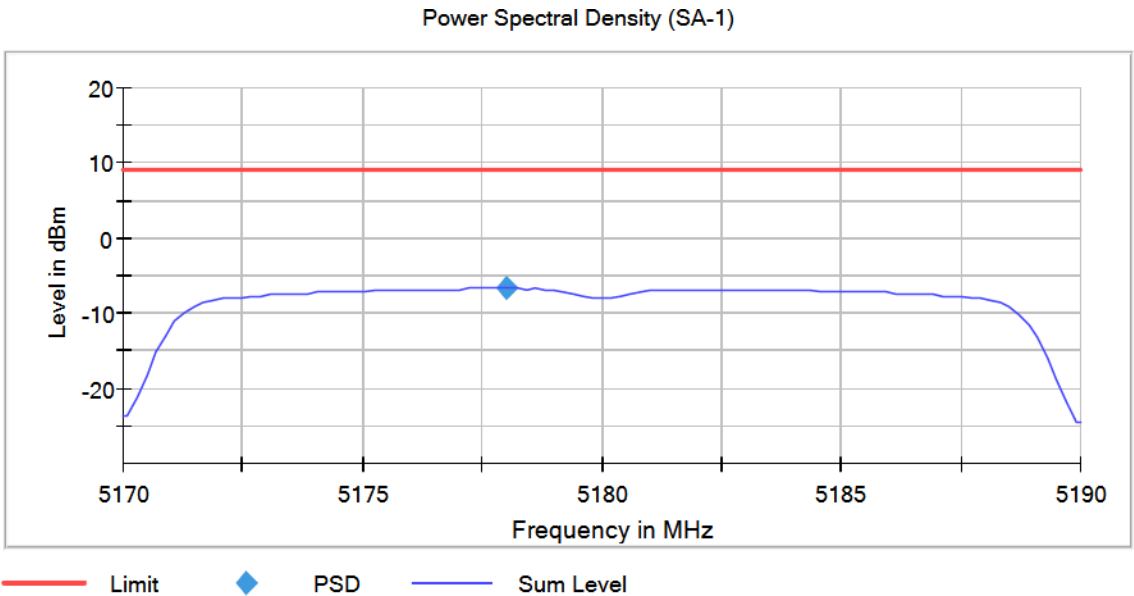
Verdict

Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5180.00000 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
TPC = No

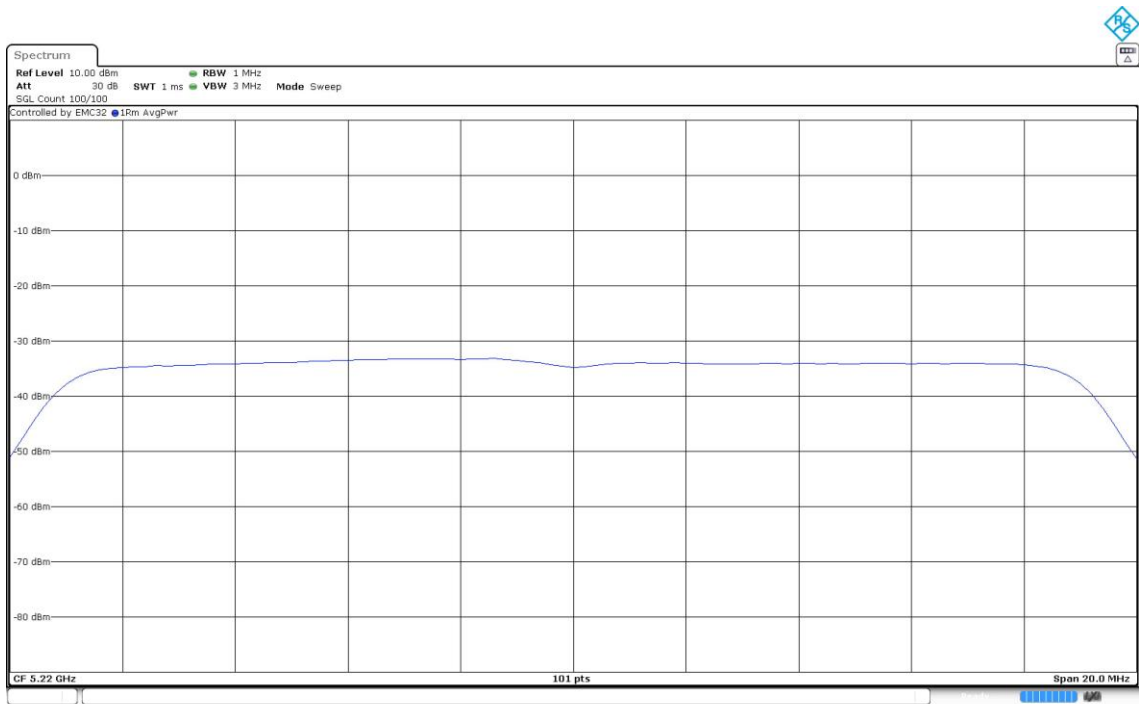
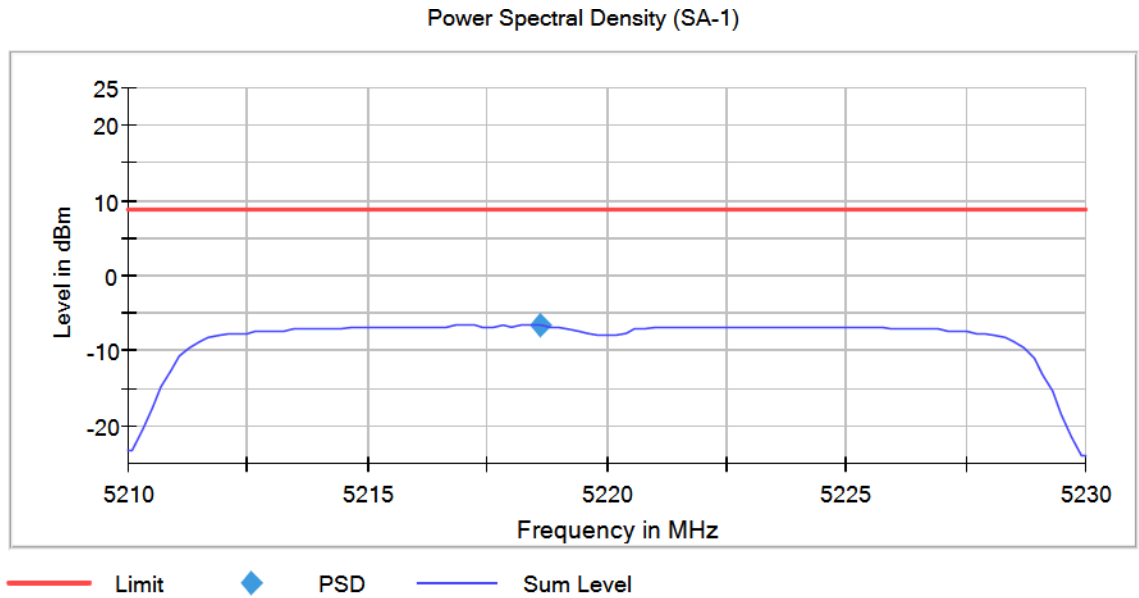
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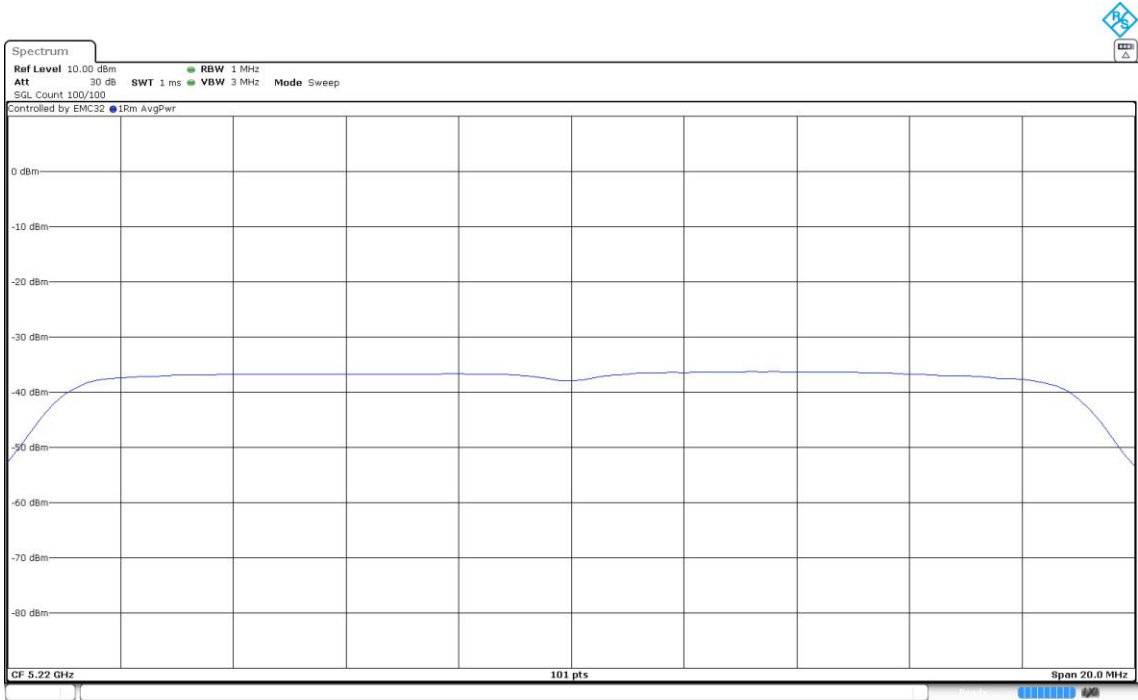




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5220.00000 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
TPC = No

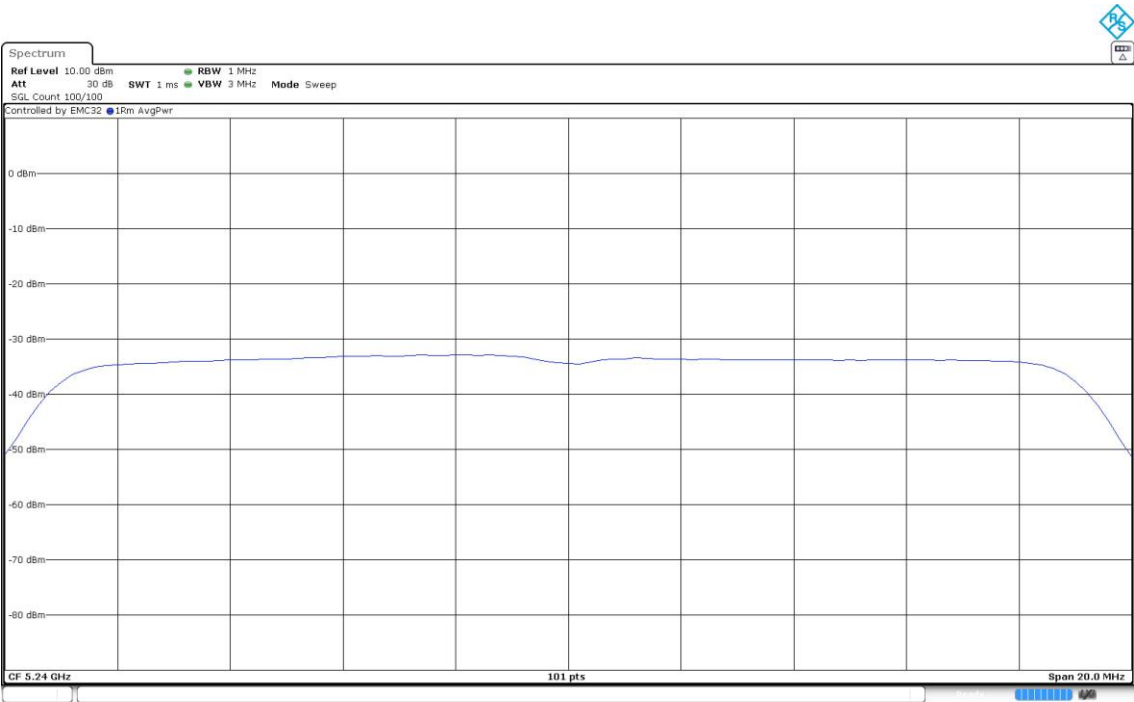
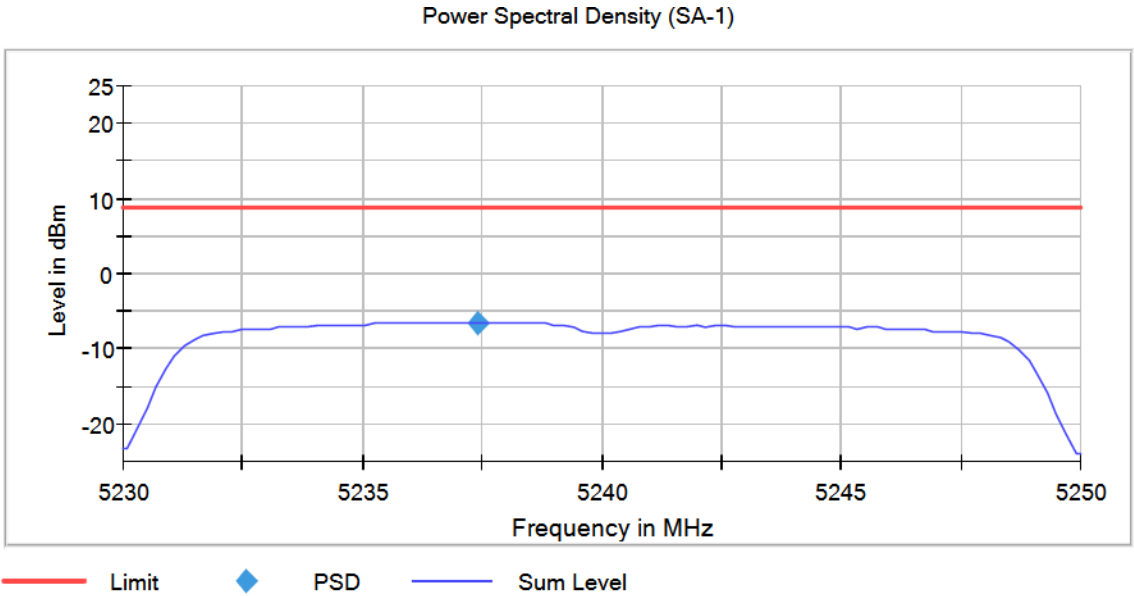
Images:

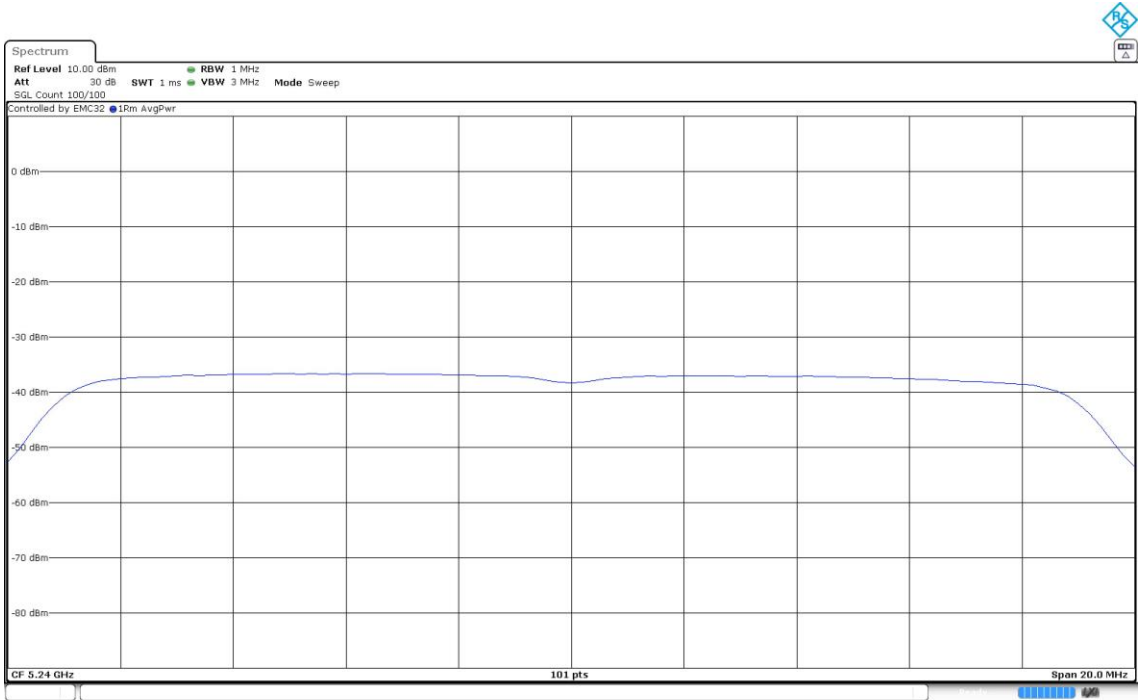




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5240.00000 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
TPC = No

Images:





Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5190.00000	No	5186.039604	-8.61
		5230.00000		5227.227723	-8.32

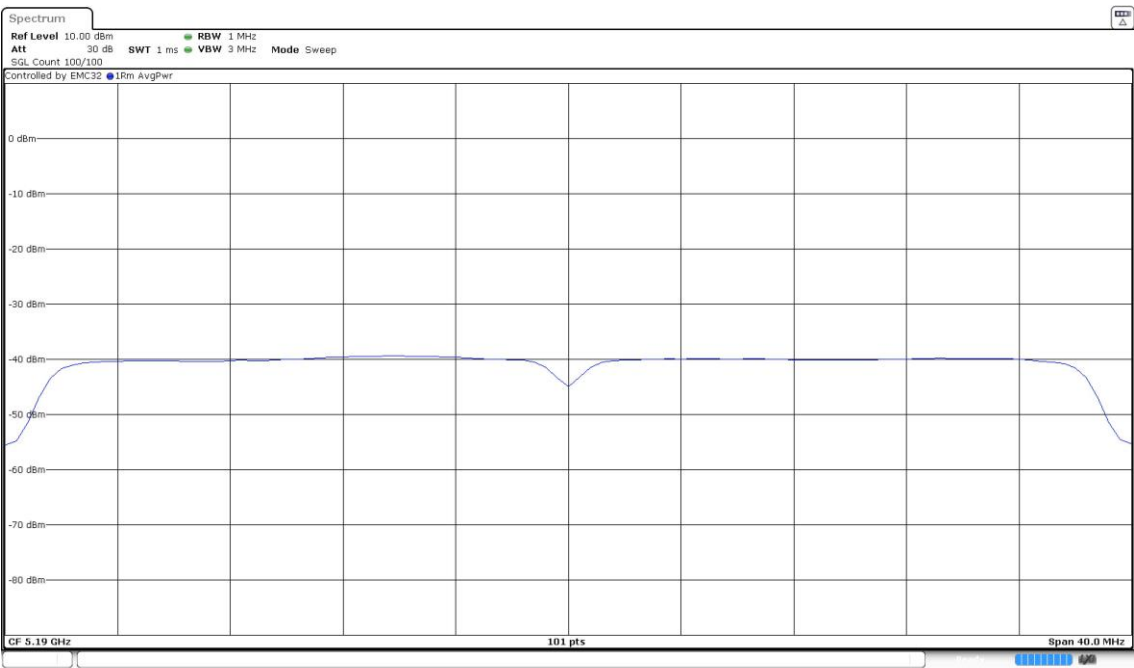
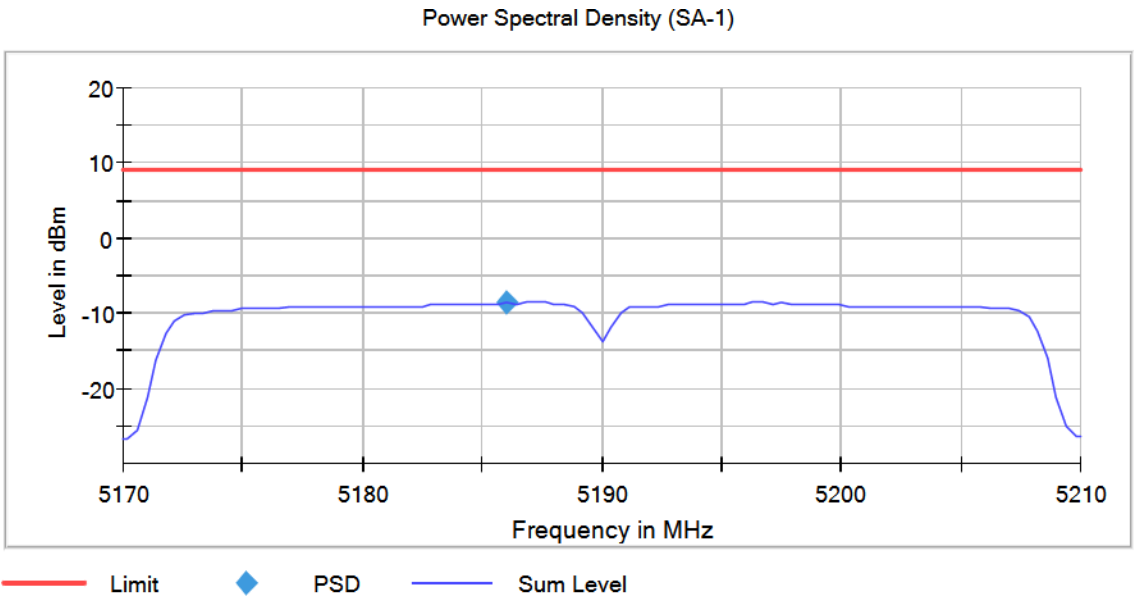
Verdict

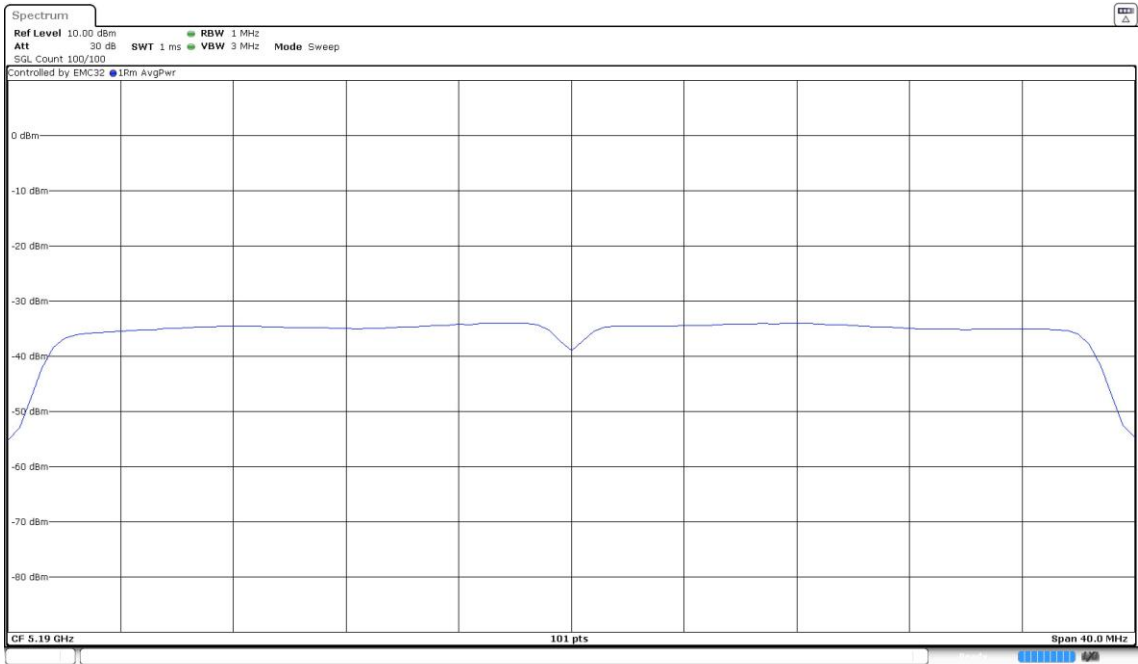
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5190.00000 Modulation = 802.11n HT40 (OFDM MCS0)
TPC = No

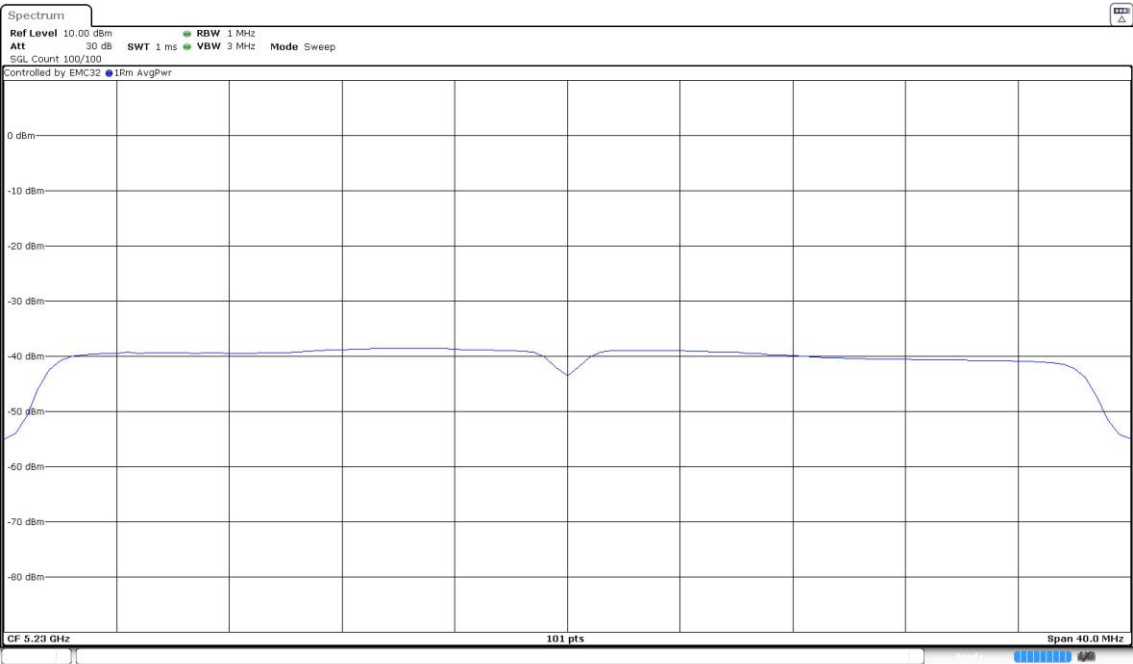
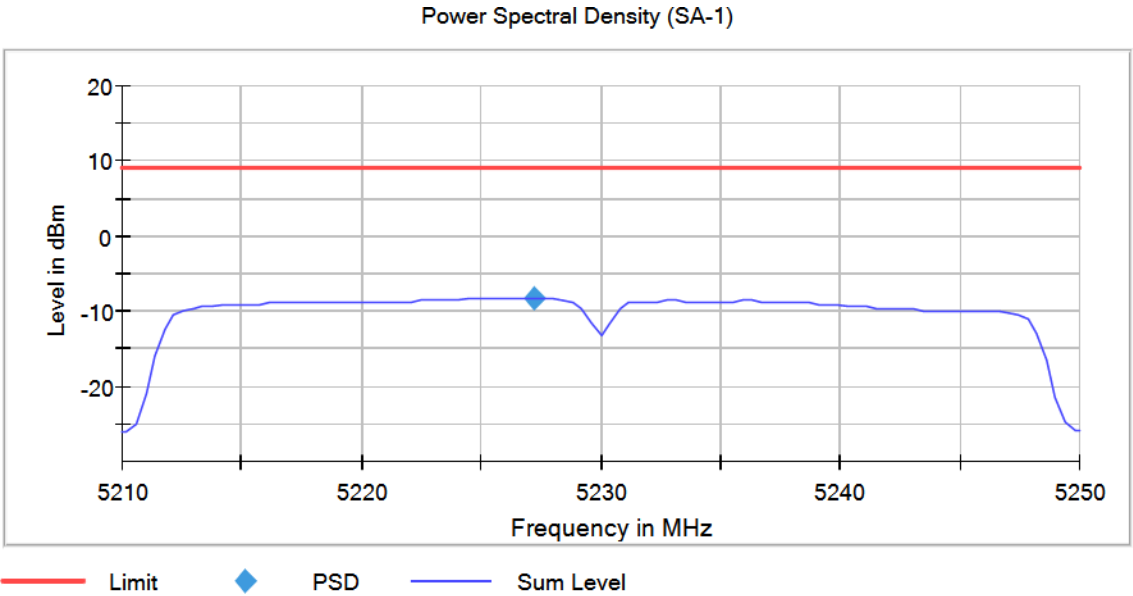
Images:

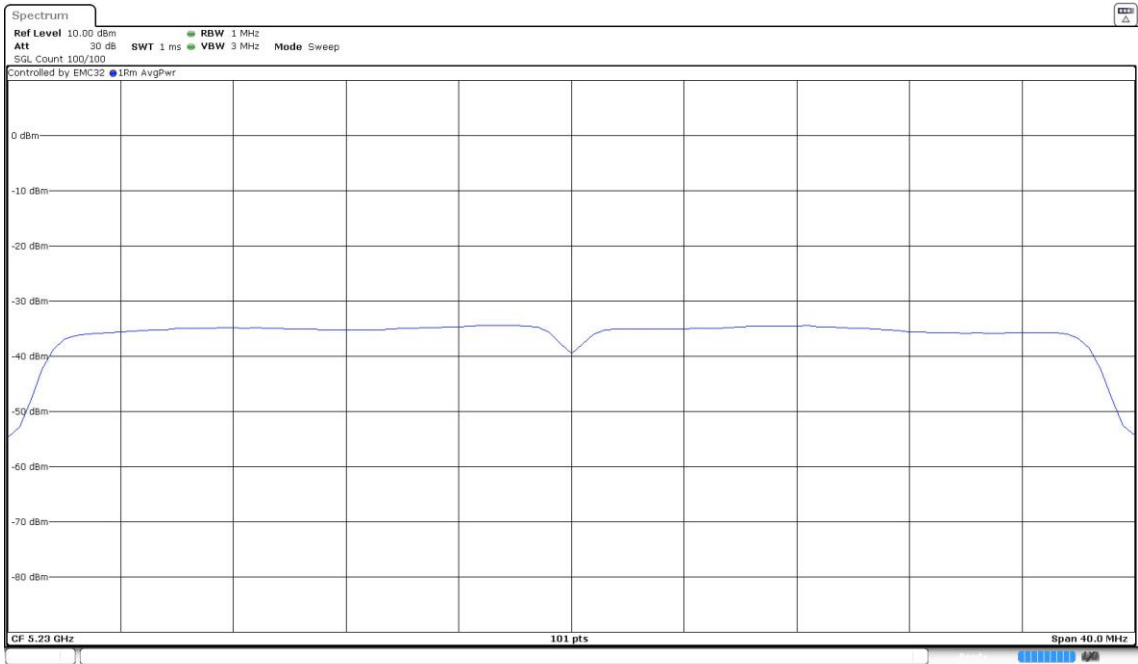




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5230.00000 Modulation = 802.11n HT40 (OFDM MCS0)
TPC = No

Images:





Modulation: 802.11a (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5180.00000	No	5182.574257	-6.25
		5220.00000		5222.772277	-6.15
		5240.00000		5237.623762	-6.18

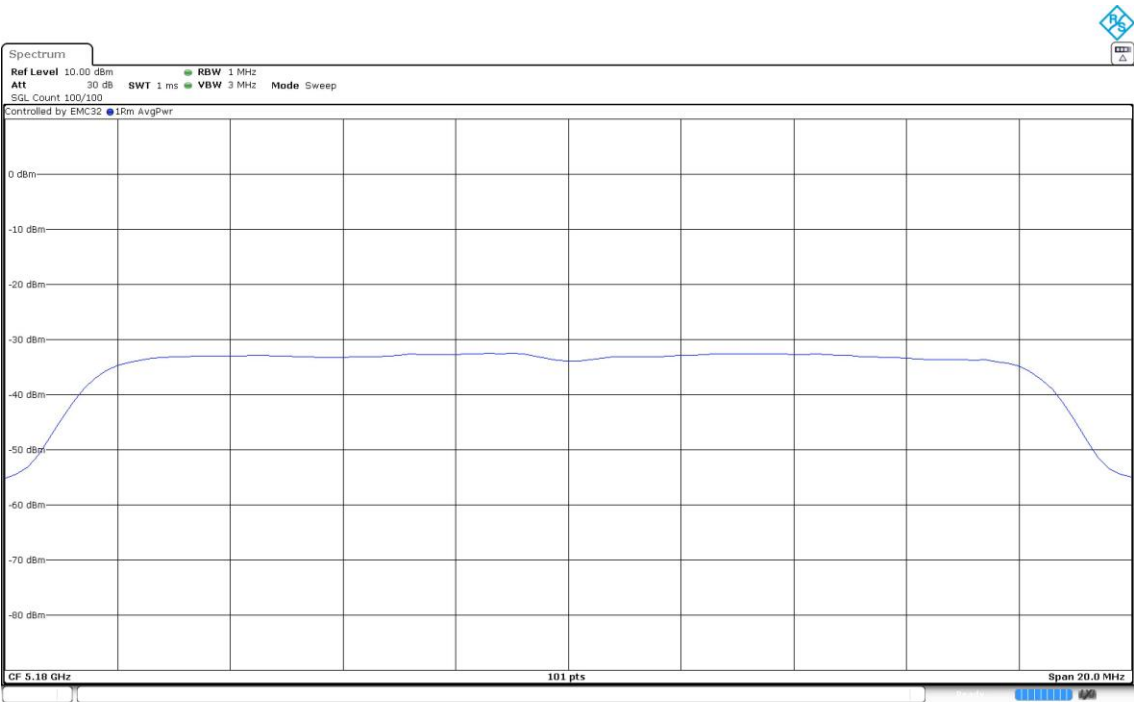
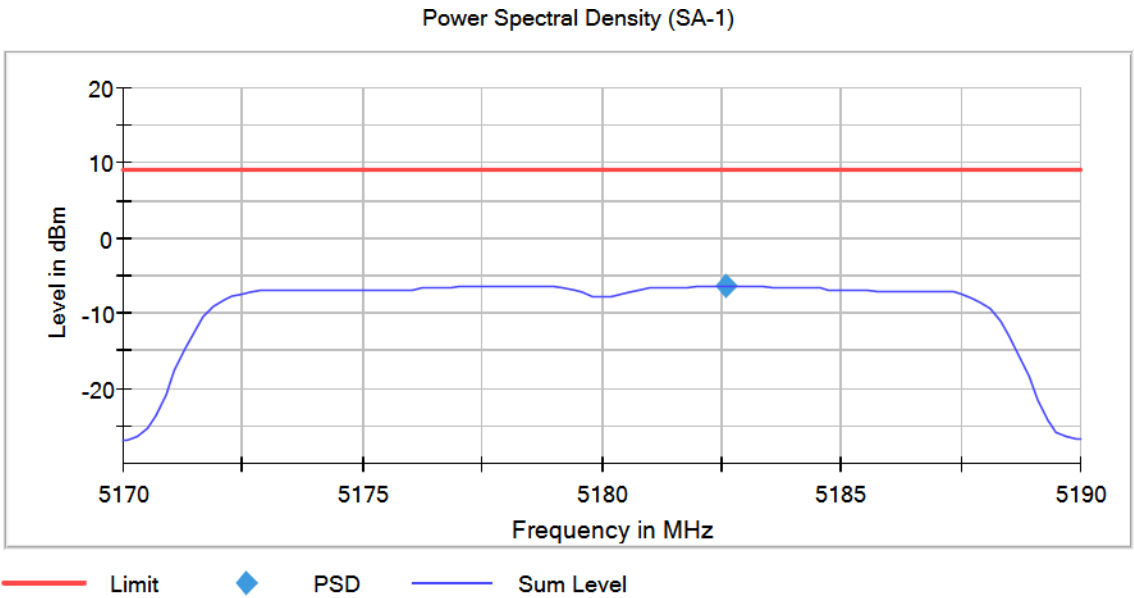
Verdict

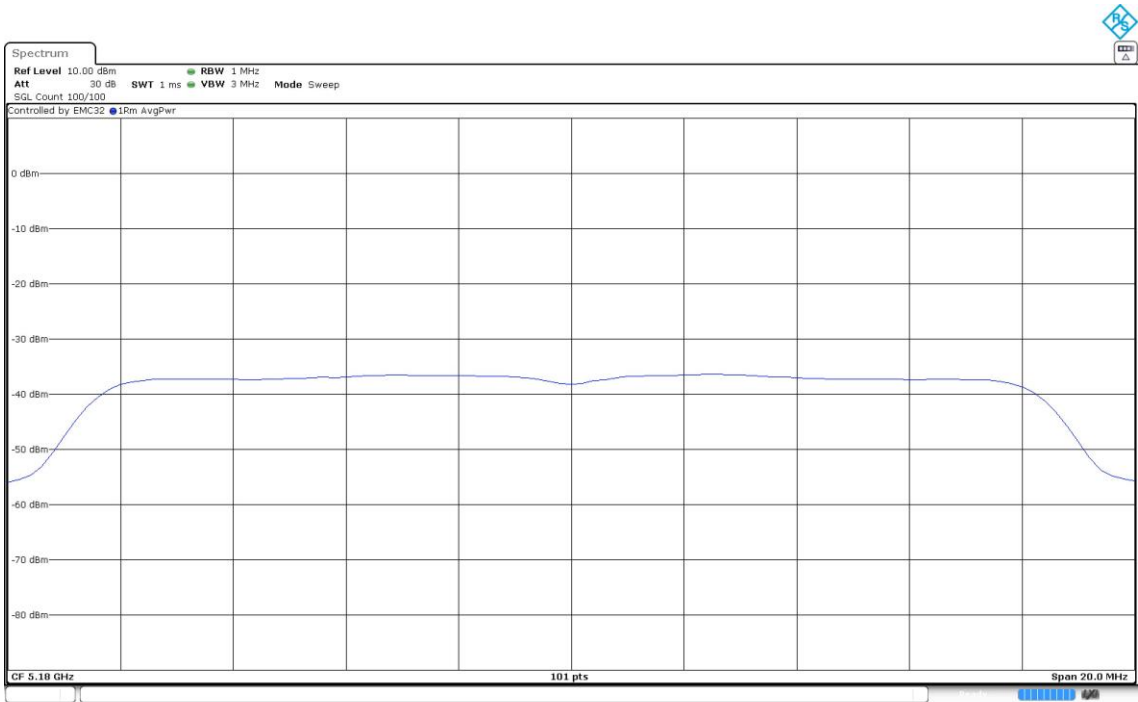
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5180.00000 Modulation = 802.11a (OFDM 6 Mbit/s)
TPC = No

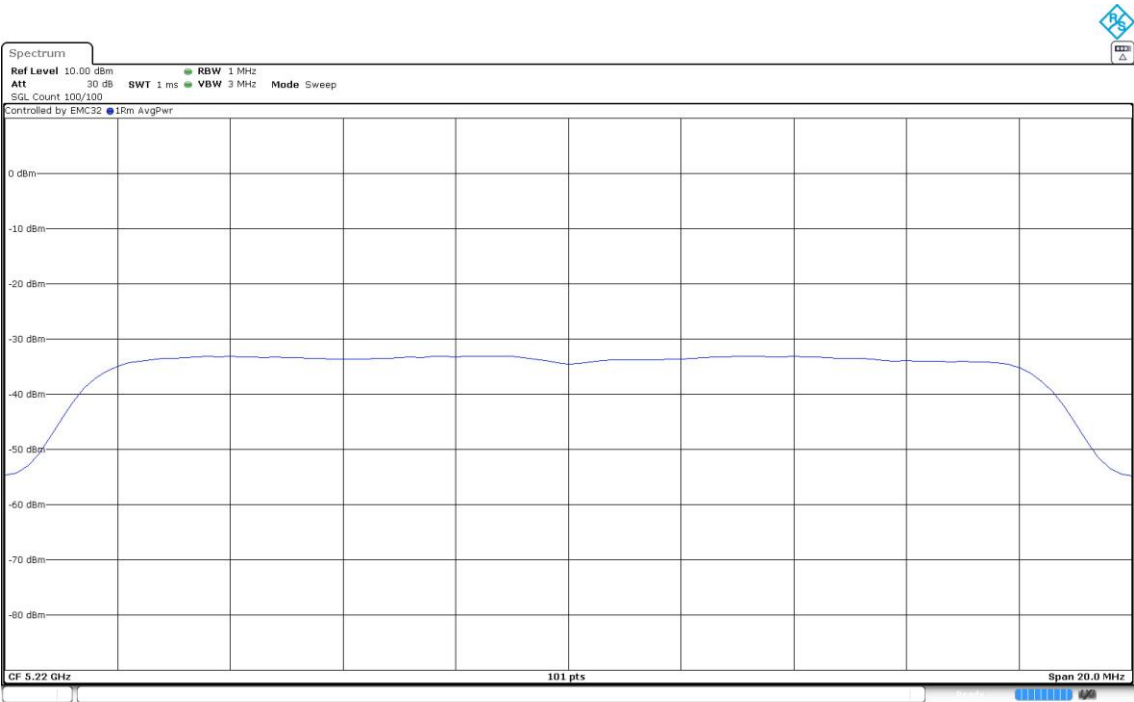
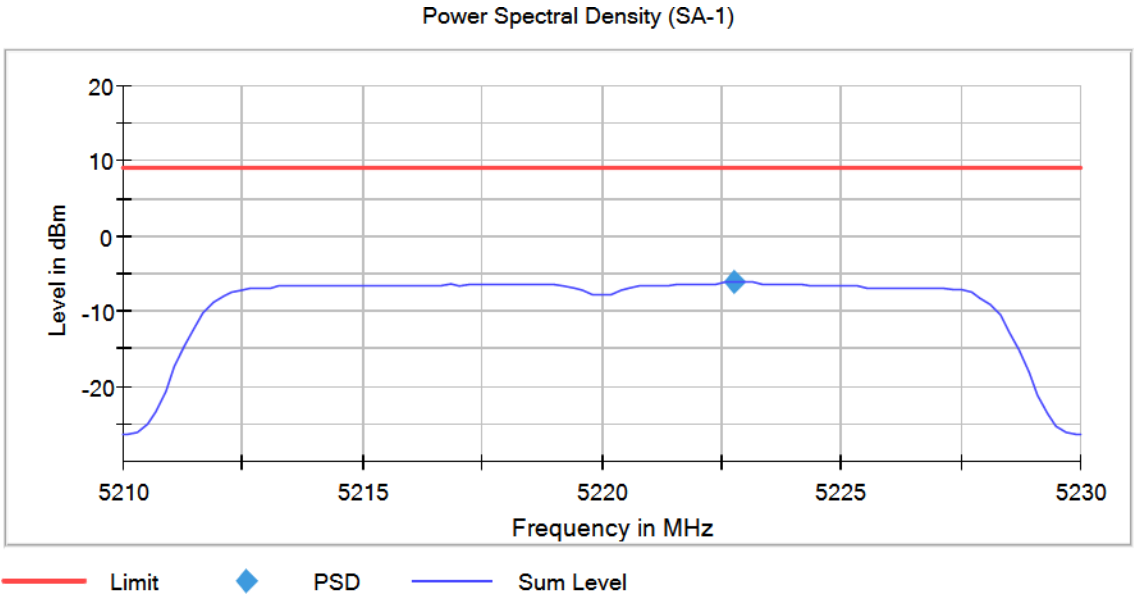
Images:

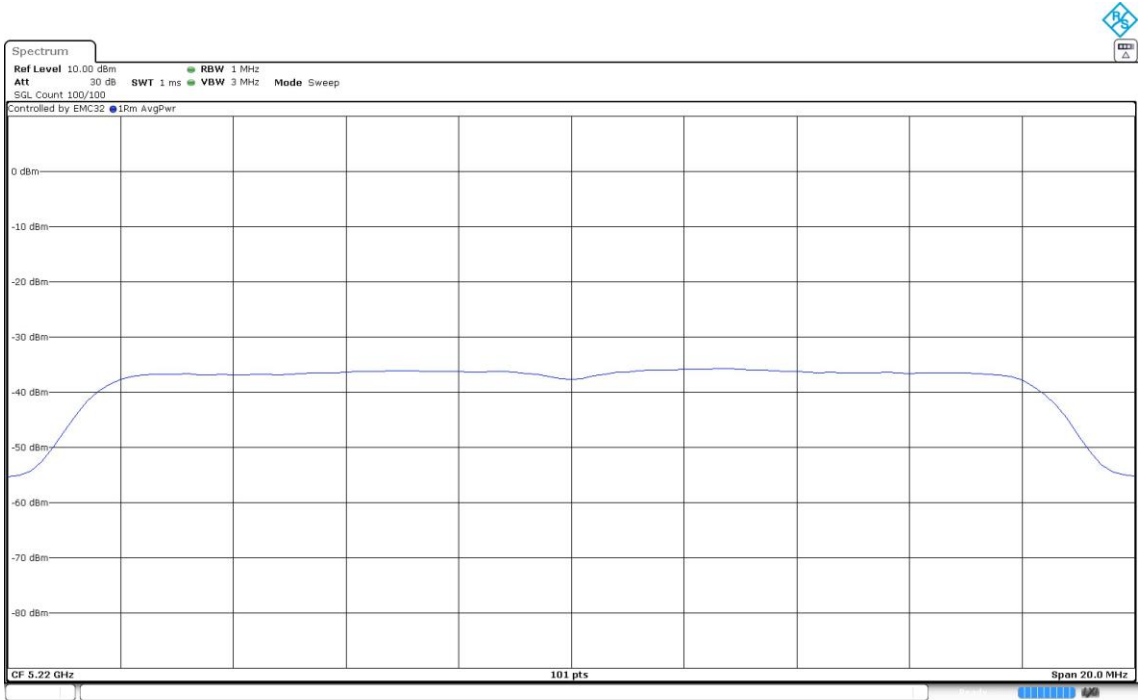




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5220.00000 Modulation = 802.11a (OFDM 6 Mbit/s)
TPC = No

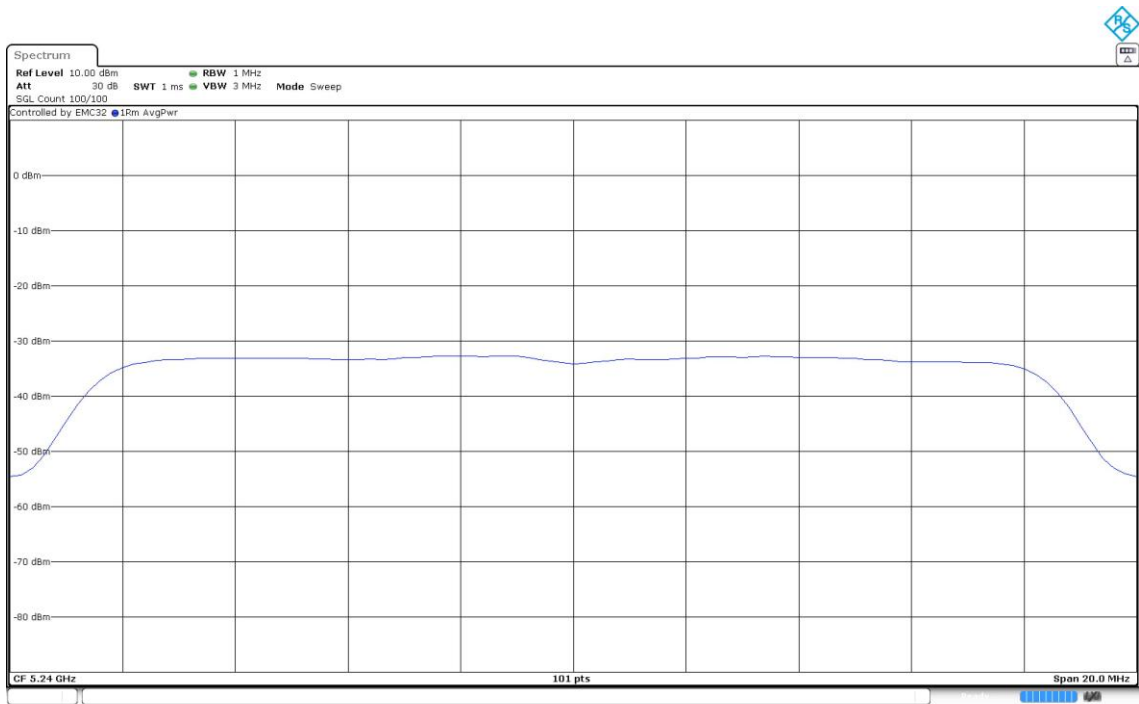
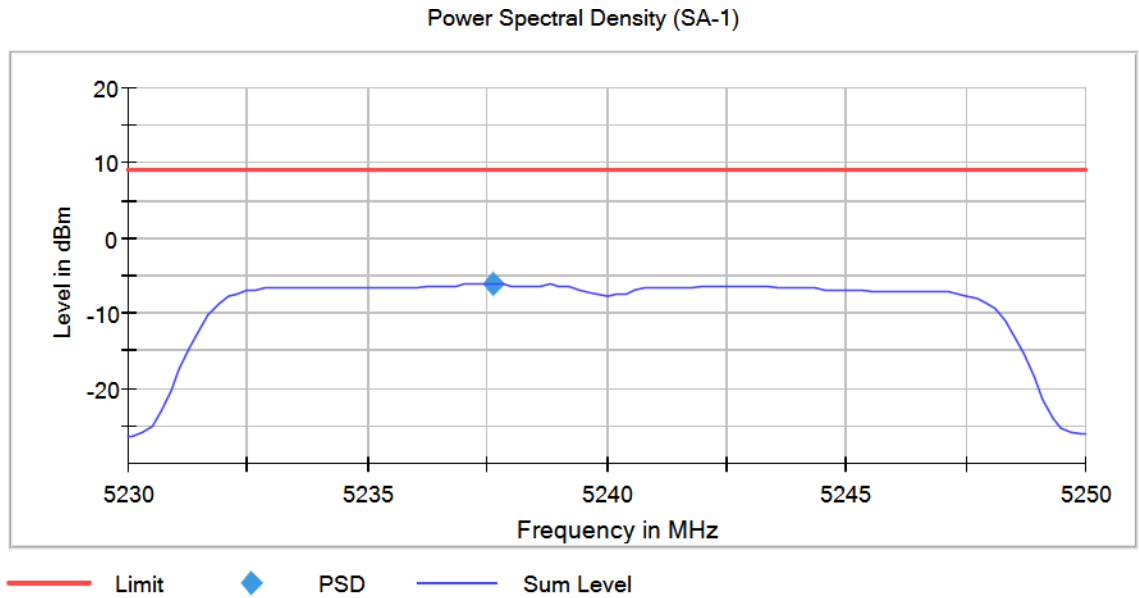
Images:

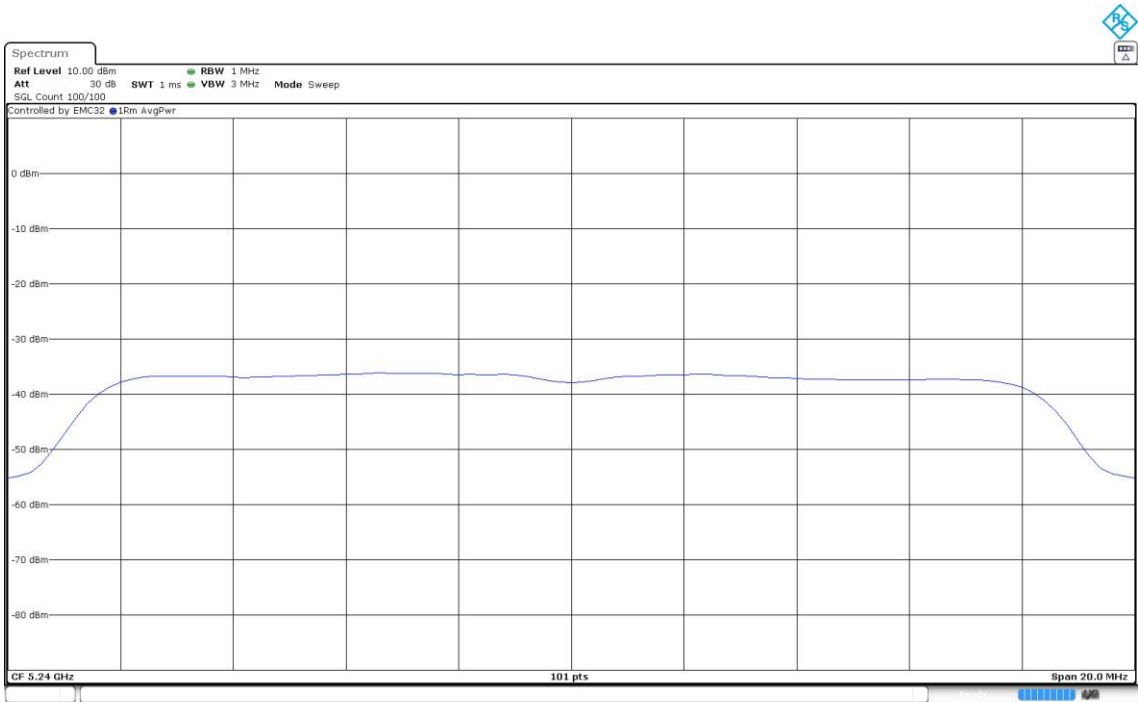




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5240.00000 Modulation = 802.11a (OFDM 6 Mbit/s)
TPC = No

Images:





Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5180.00000	No	5181.584158	-6.75
		5220.00000		5221.584158	-6.69
		5240.00000		5237.029703	-6.67

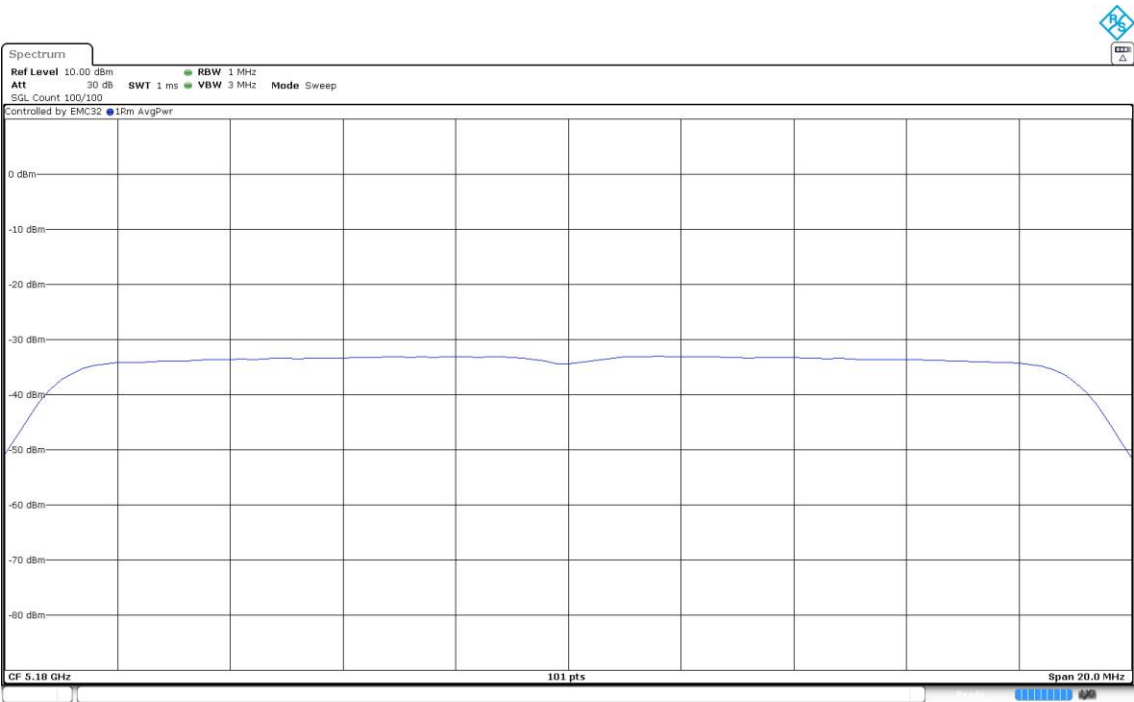
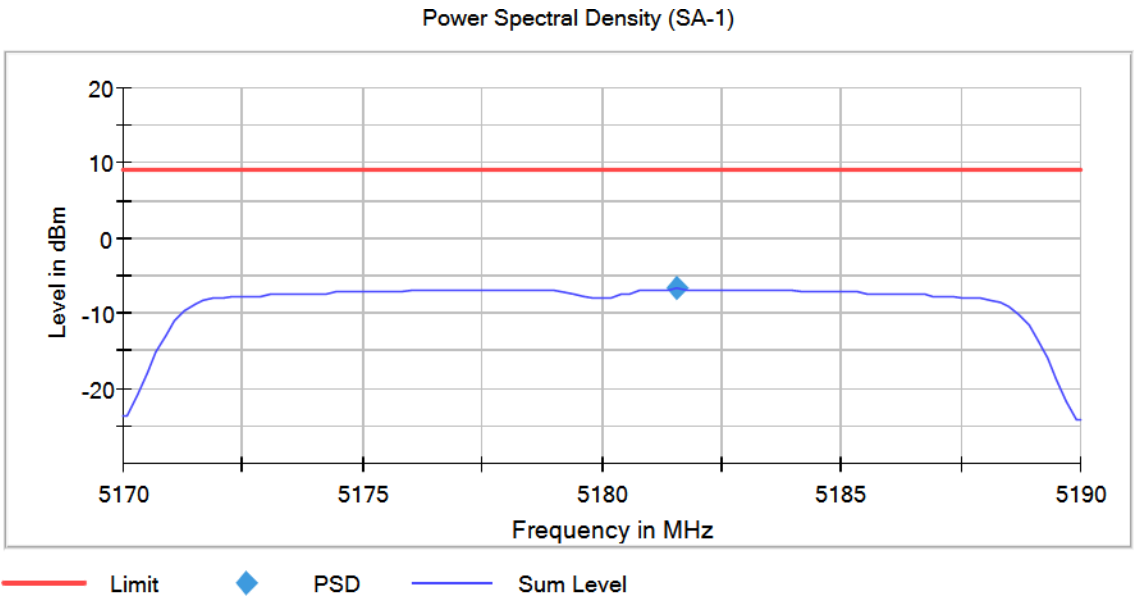
Verdict

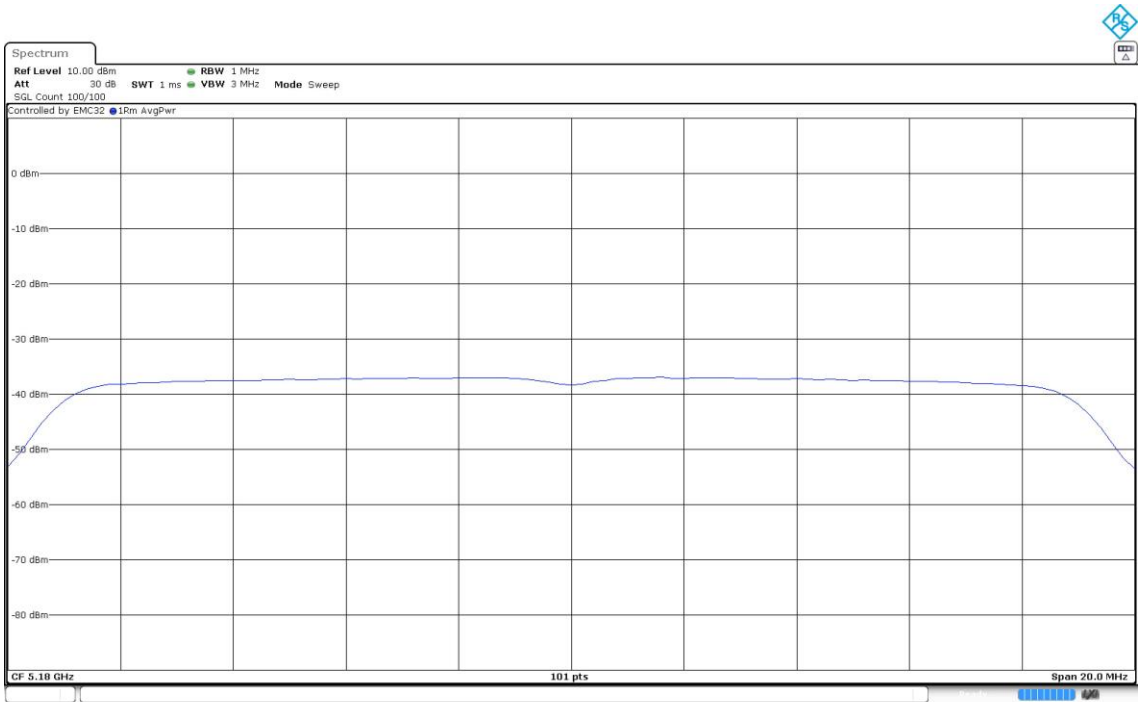
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5180.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)
TPC = No

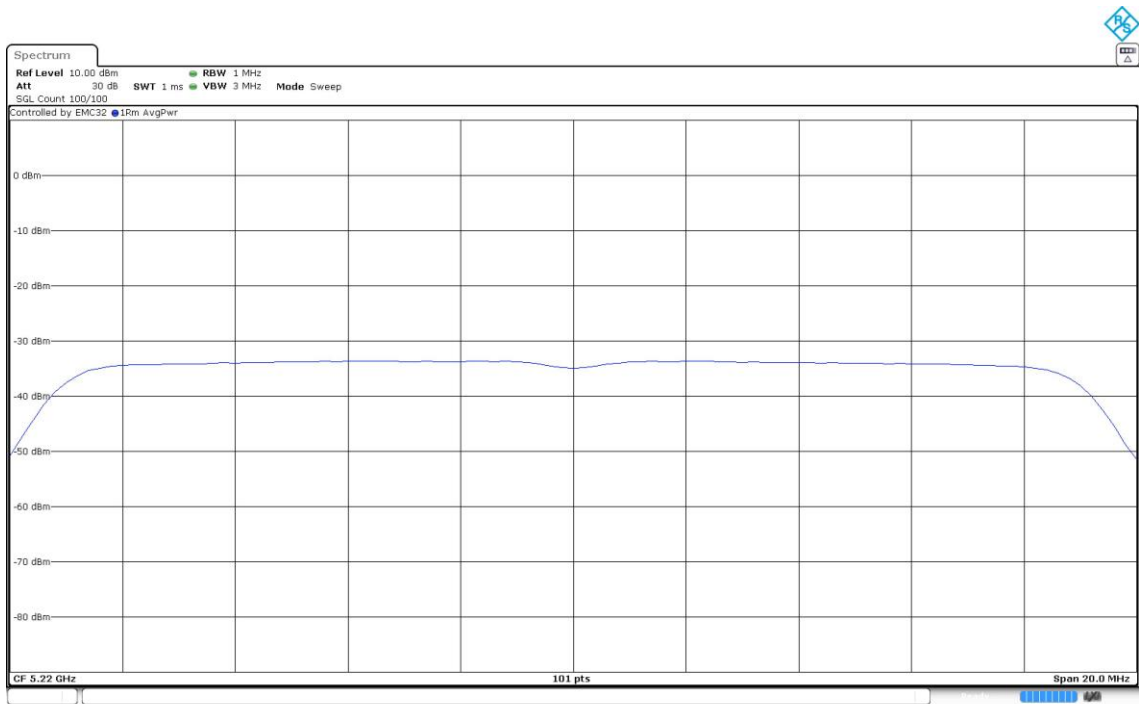
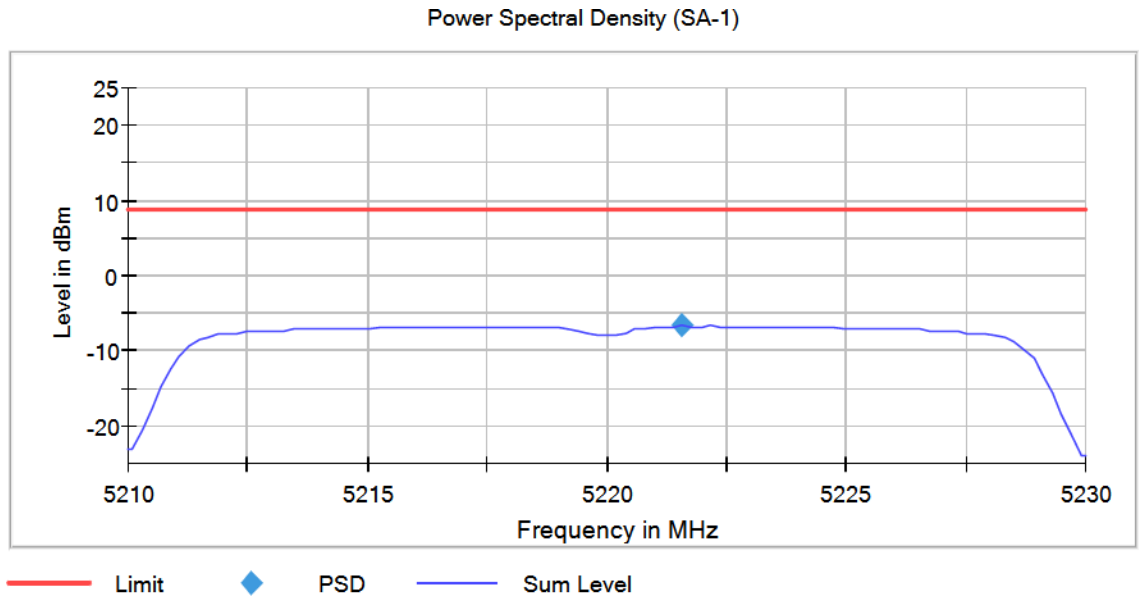
Images:

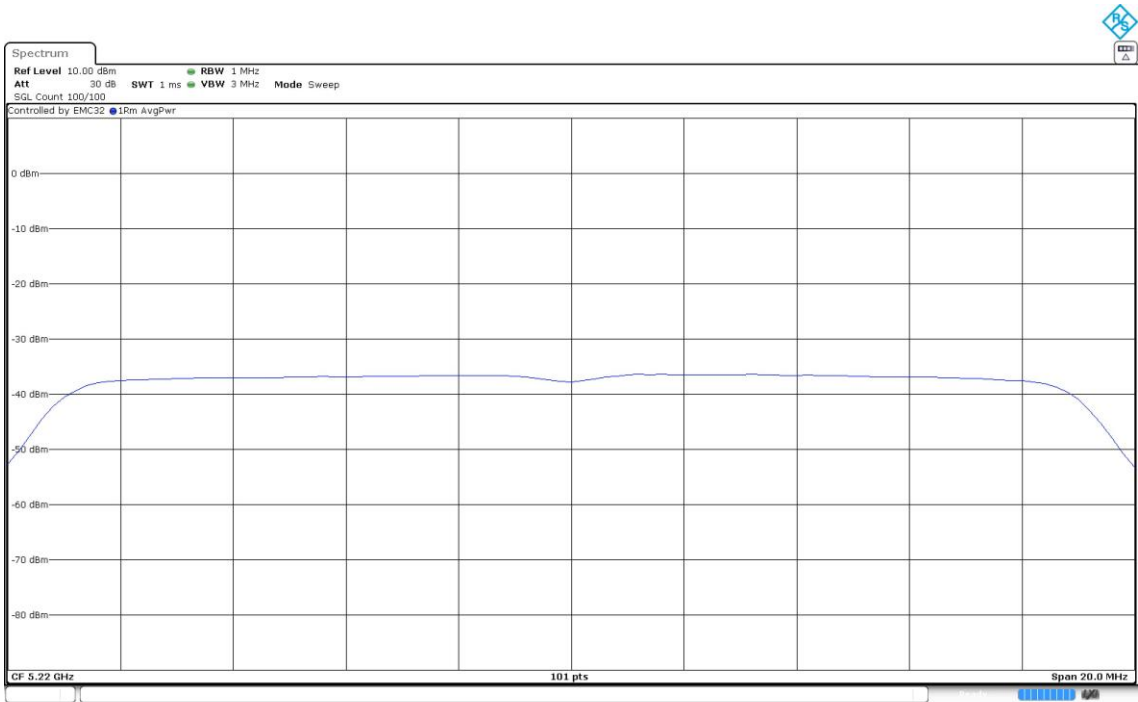




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5220.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)
TPC = No

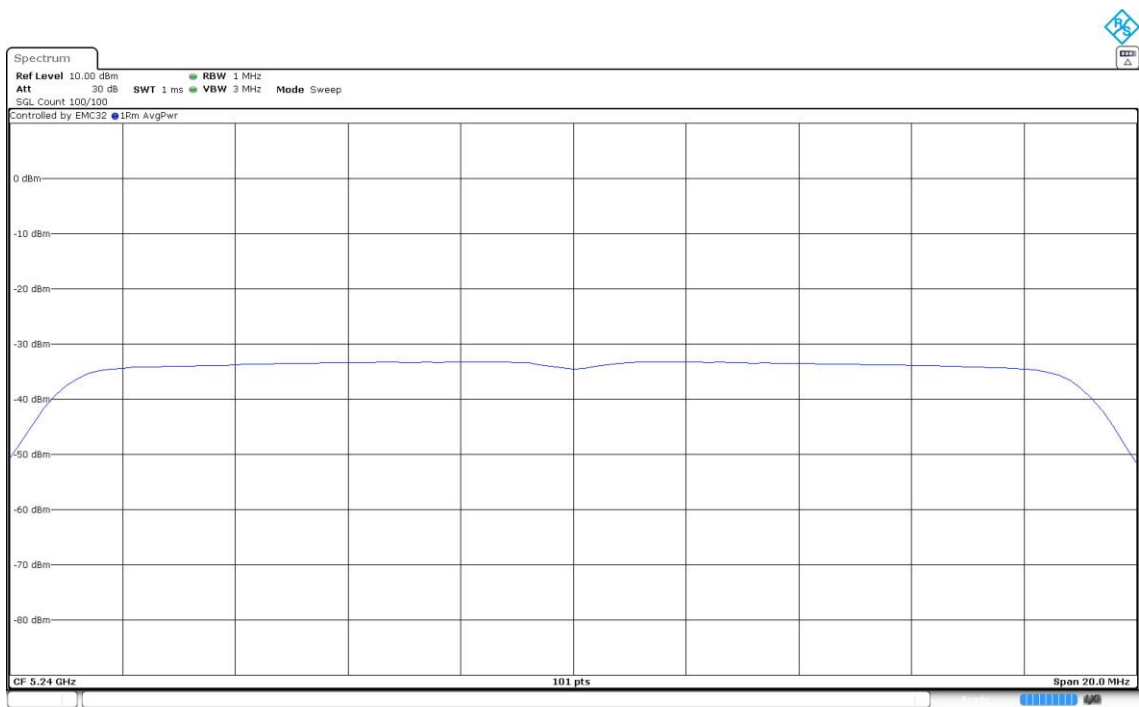
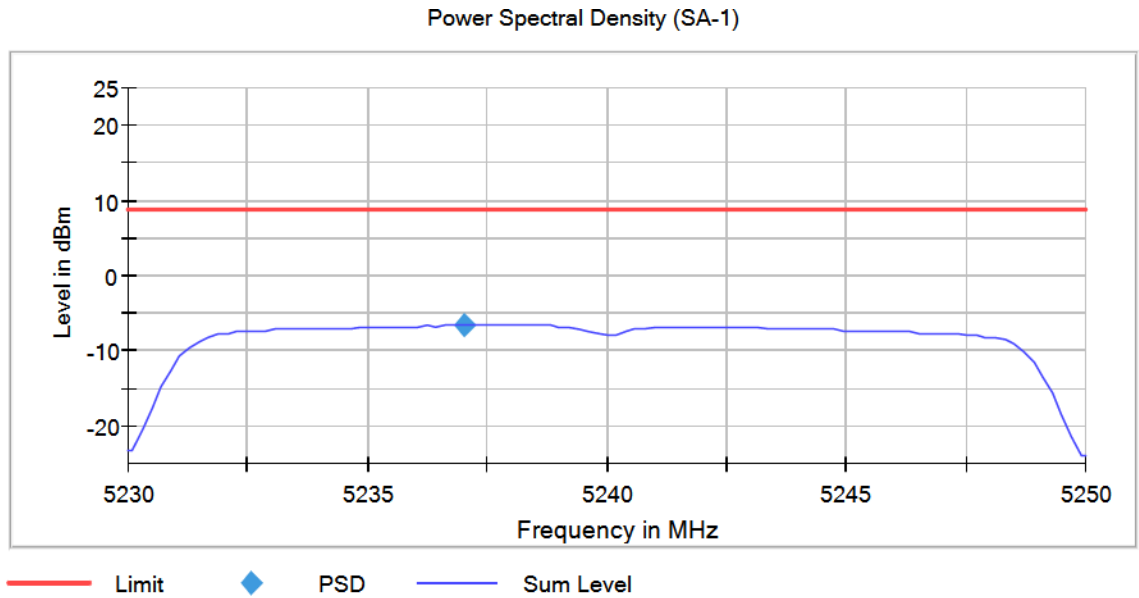
Images:

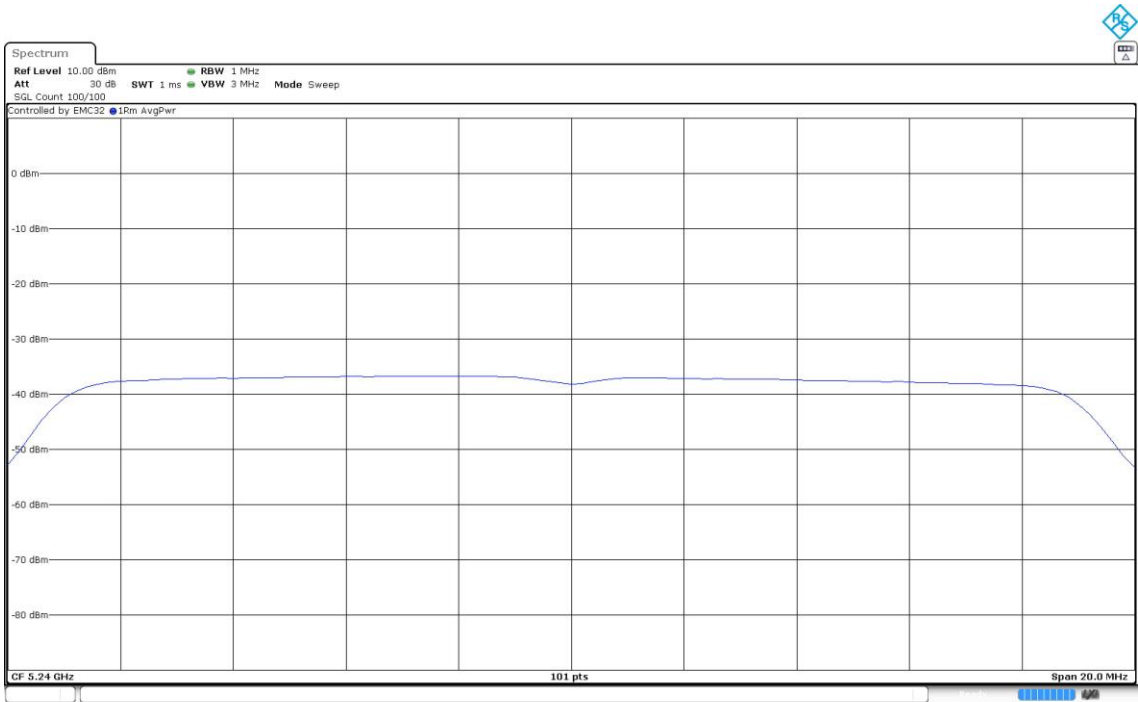




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5240.00000 Modulation = 802.11ac VHT20 (OFDM MCS0)
TPC = No

Images:





Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5190.00000	No	5186.039604	-8.61
		5230.00000		5227.227723	-8.32

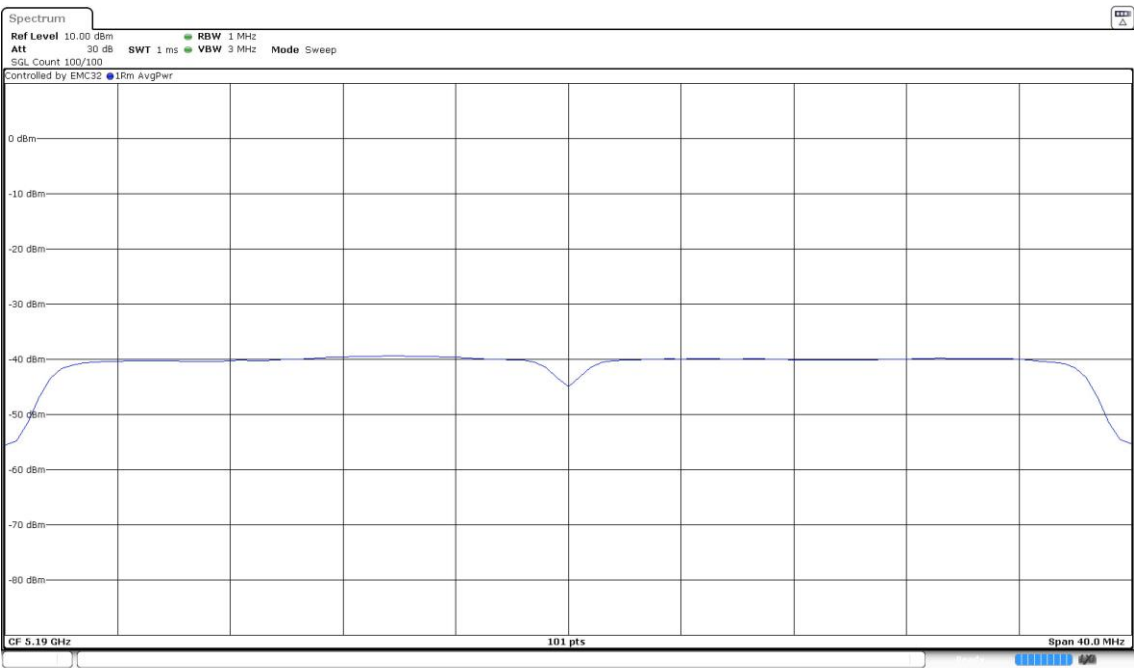
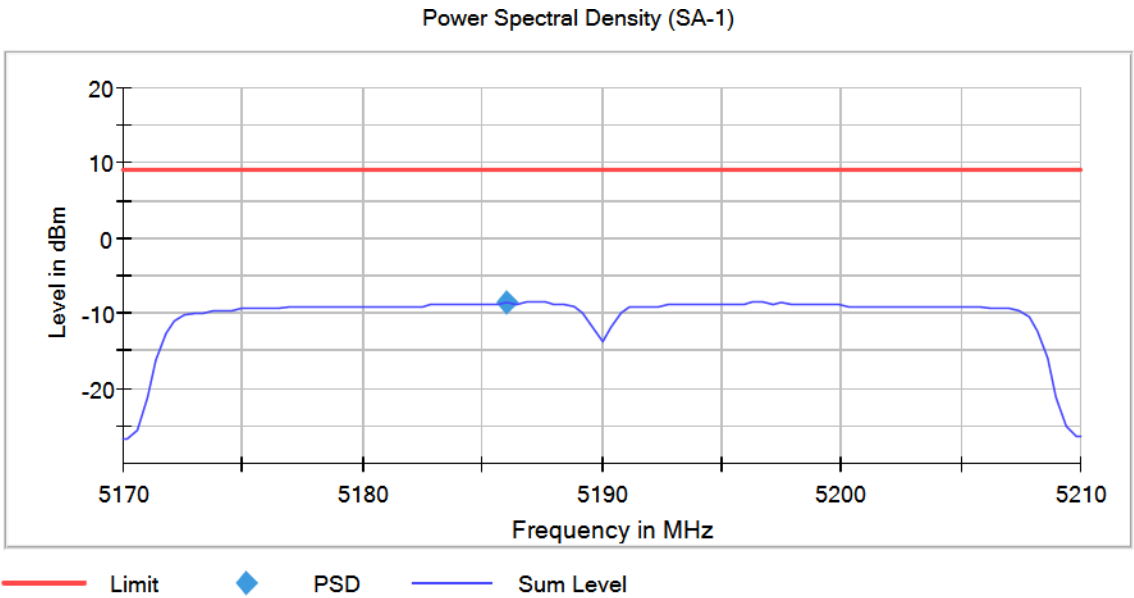
Verdict

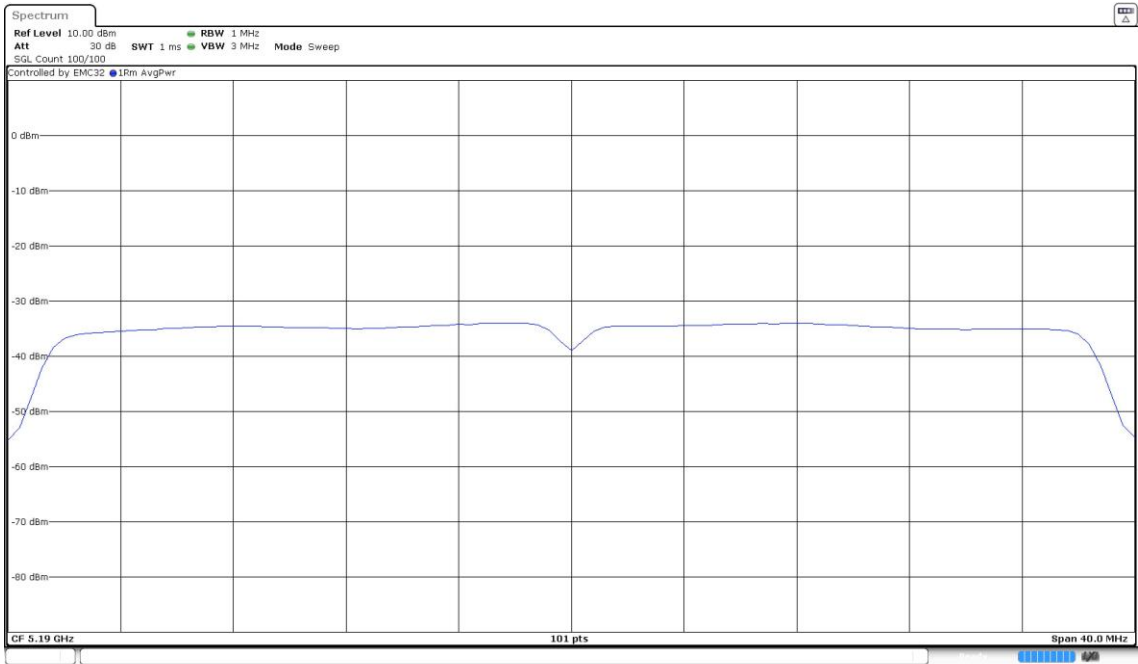
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5190.00000 Modulation = 802.11ac VHT40 (OFDM MCS0)
TPC = No

Images:





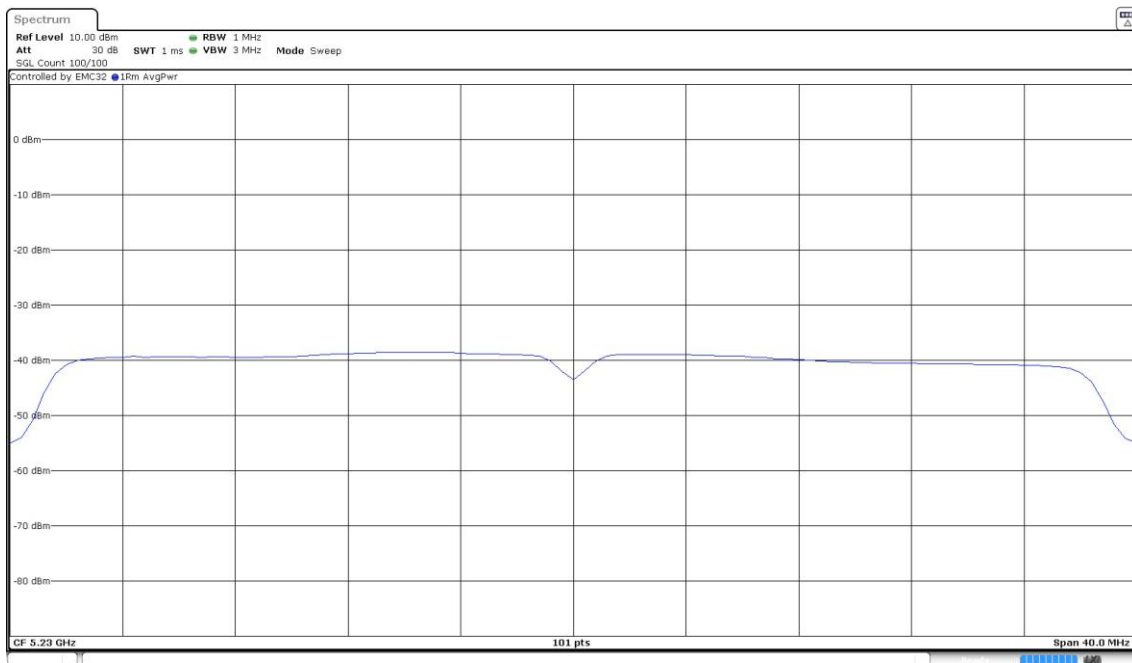
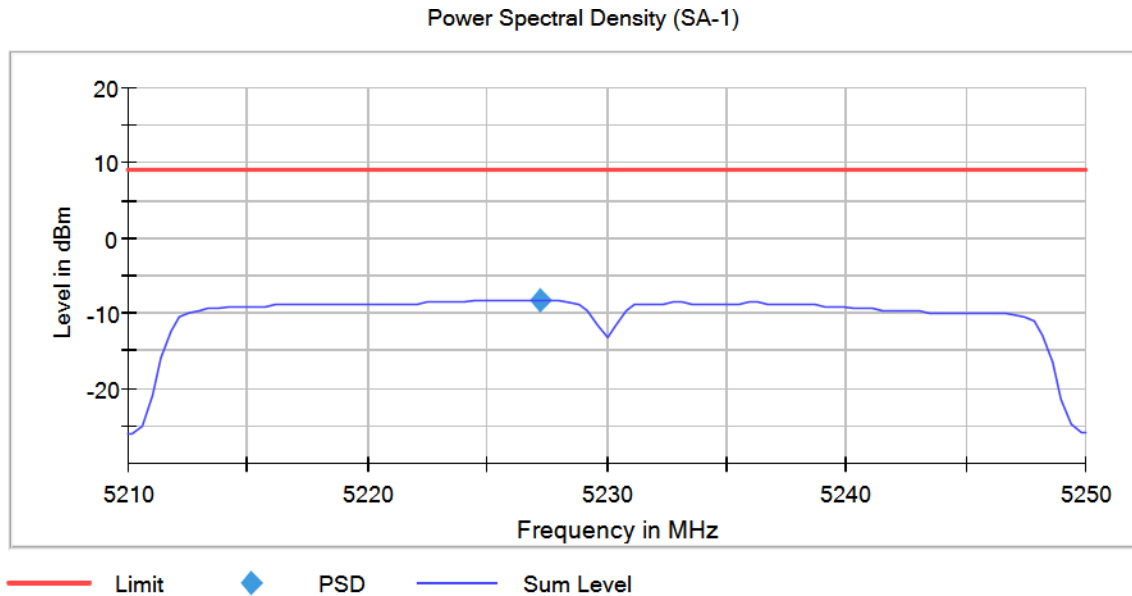
Operation Band MHz = [5150, 5250] Active Port = 2+3

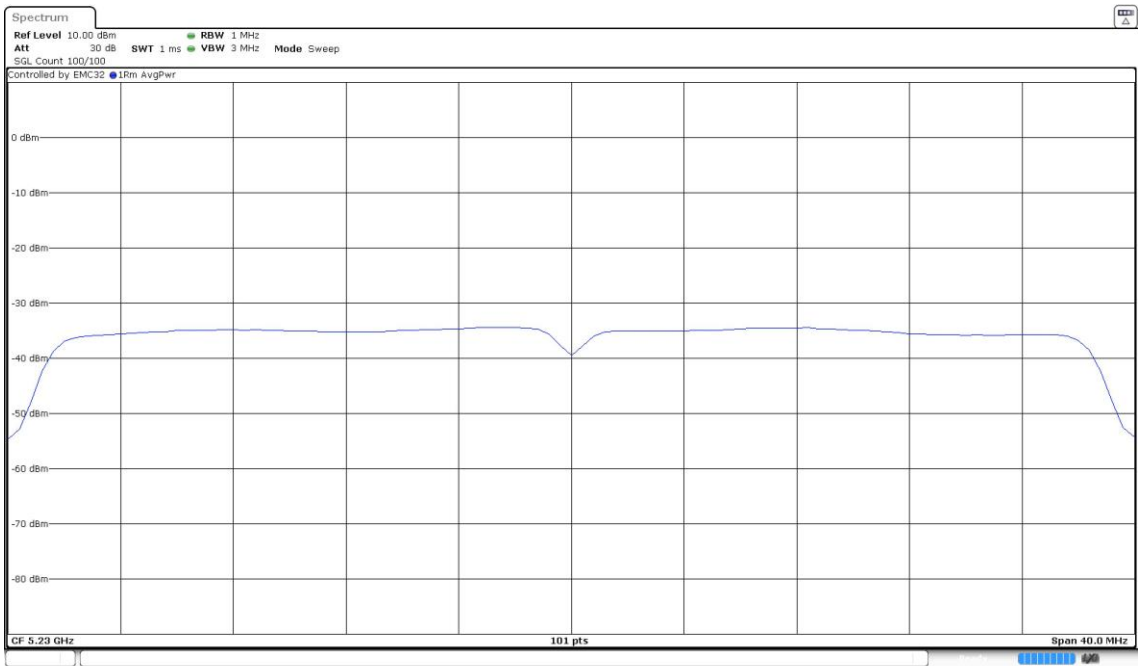
Frequency MHz = 5230.00000

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)
[5150, 5250]	2+3	5210.00000	No	5206.250000	-12.42

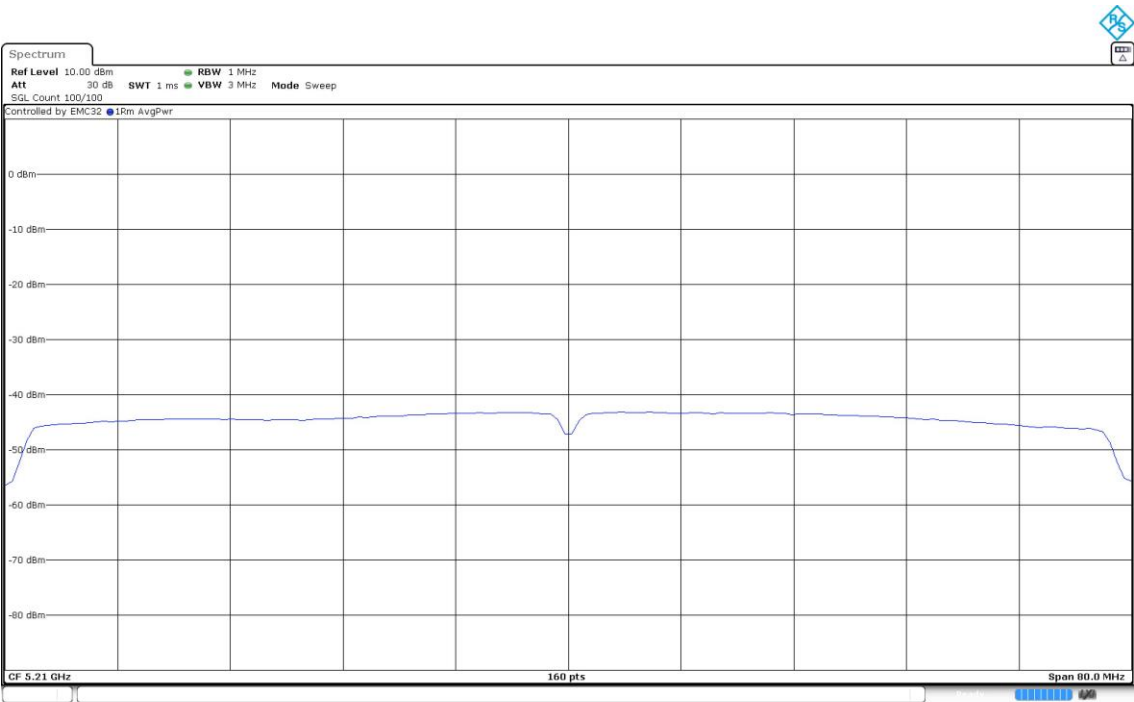
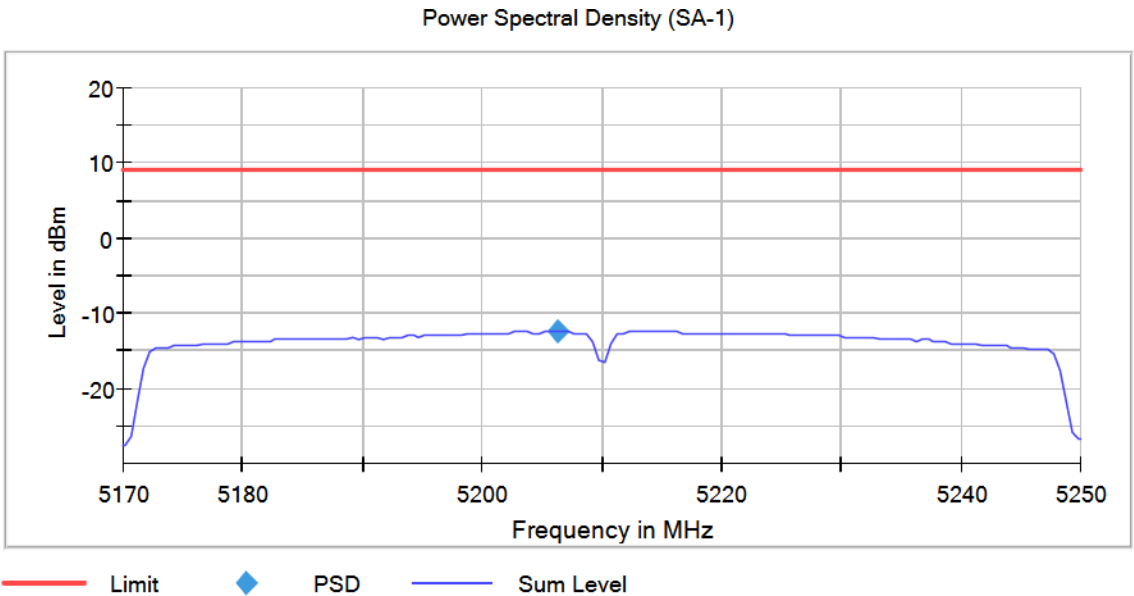
Verdict

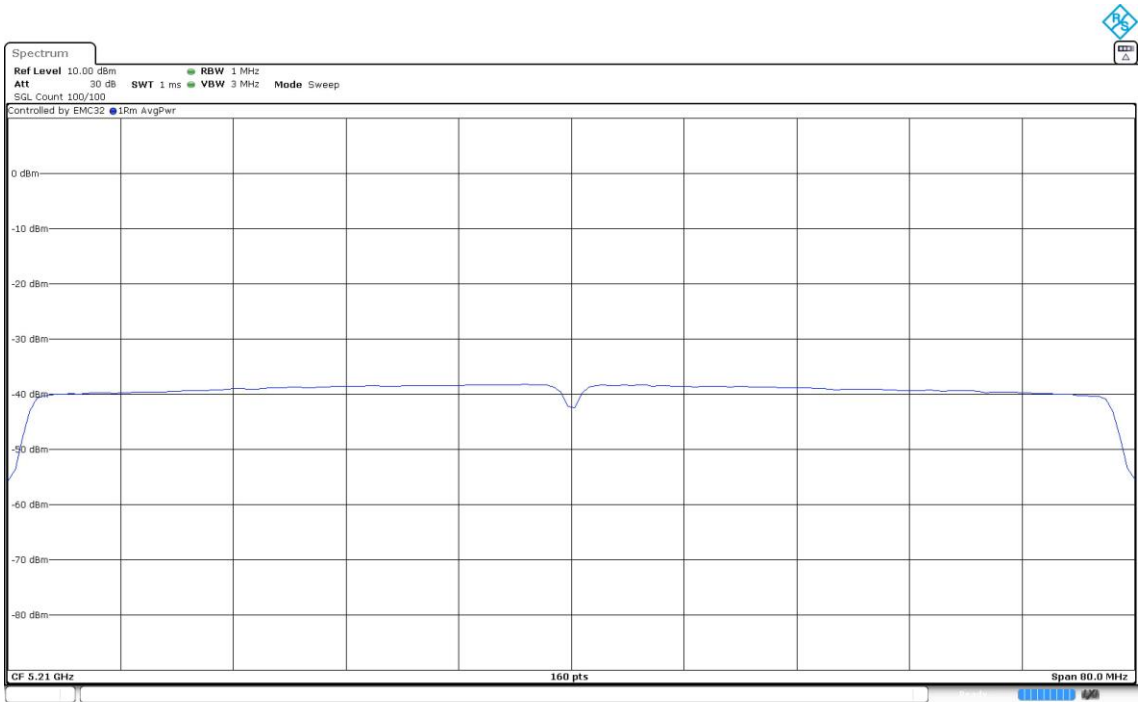
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5210.00000 Modulation = 802.11ac VHT80 (OFDM MCS0)
TPC = No

Images:





Modulation: 802.11ax HE20 (OFDMA MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Subcarrier Mode	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5180.00000	No	RU	5171.485149	1.61
		5180.00000		SU	5186.039604	-8.61
		5200.00000		RU	5191.485149	1.65
		5200.00000		SU	5189.485149	-8.32
		5240.00000		RU	5248.316832	1.46
		5240.00000		SU	5227.227723	-8.32

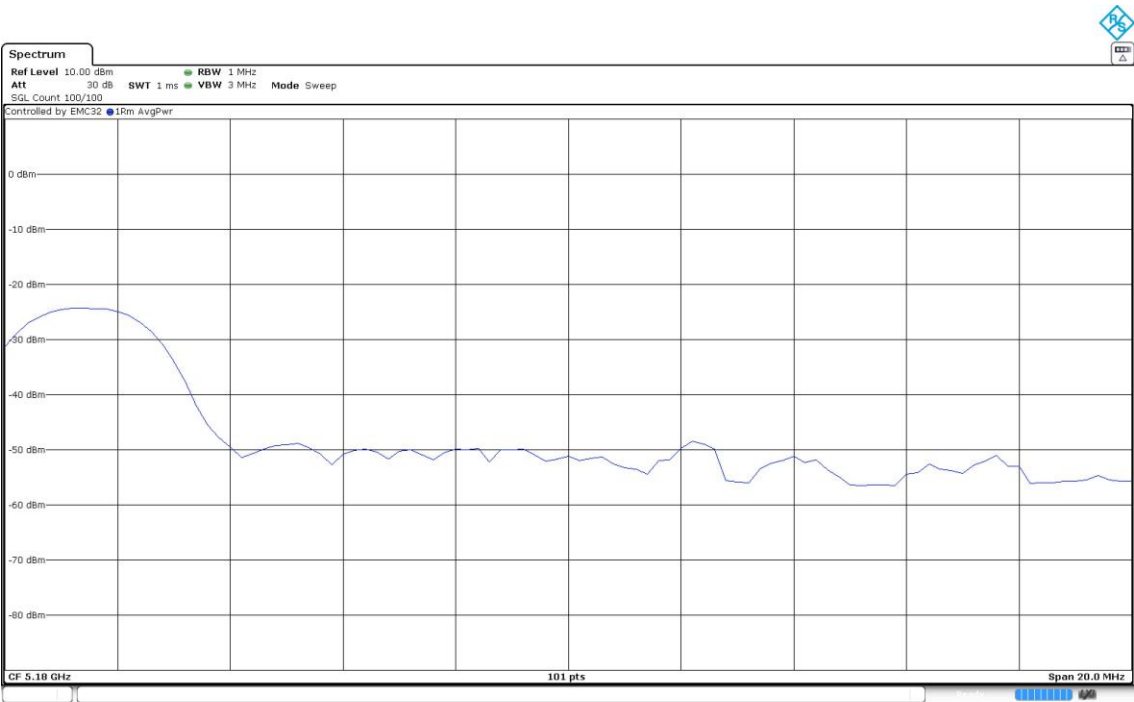
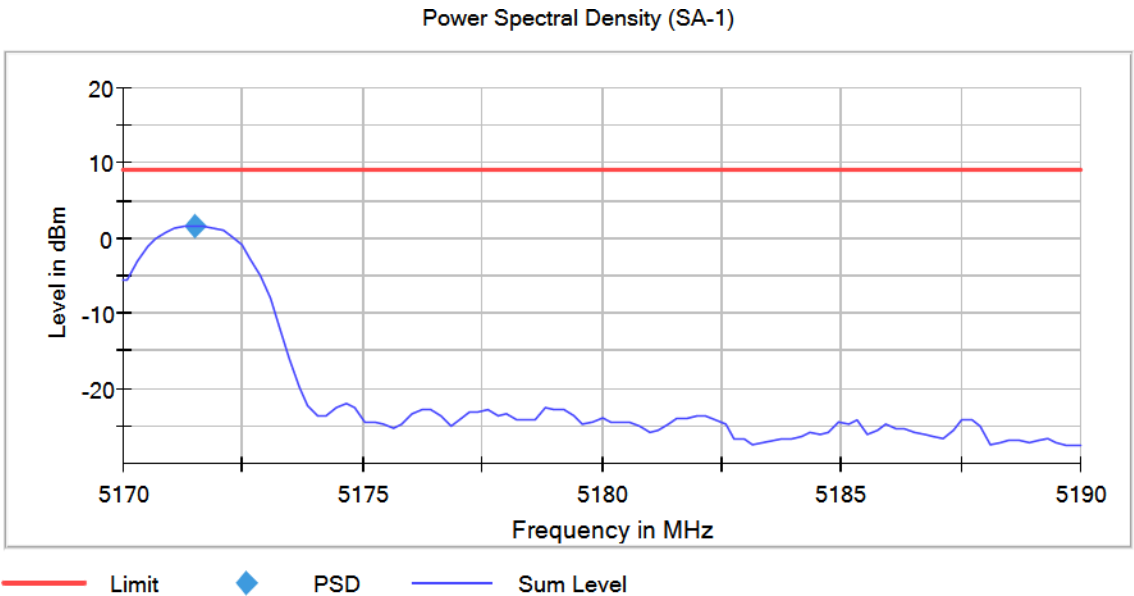
Verdict

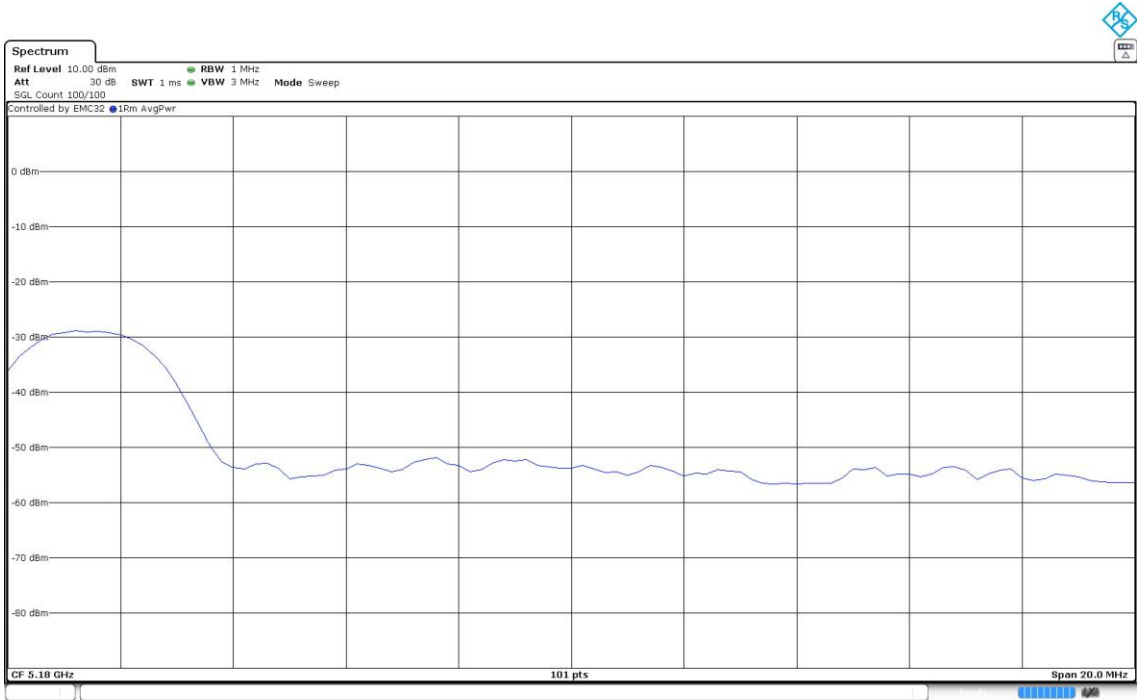
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5180.00000 Modulation = 802.11ax HE20 (OFDMA MCS0)
TPC = No Subcarrier Mode = RU

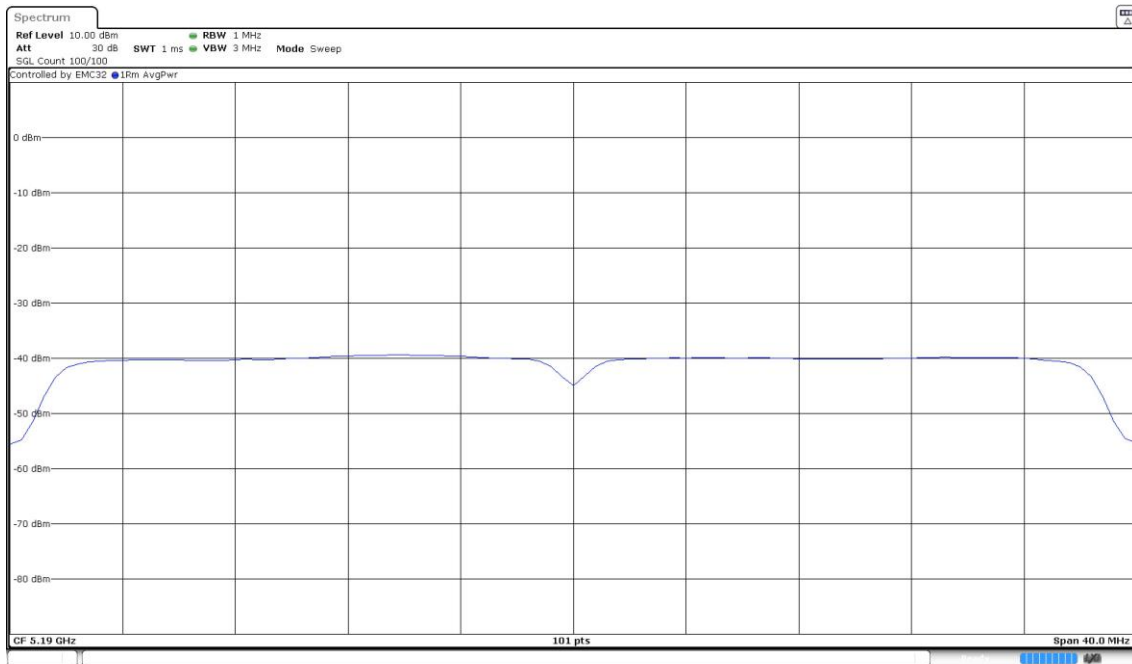
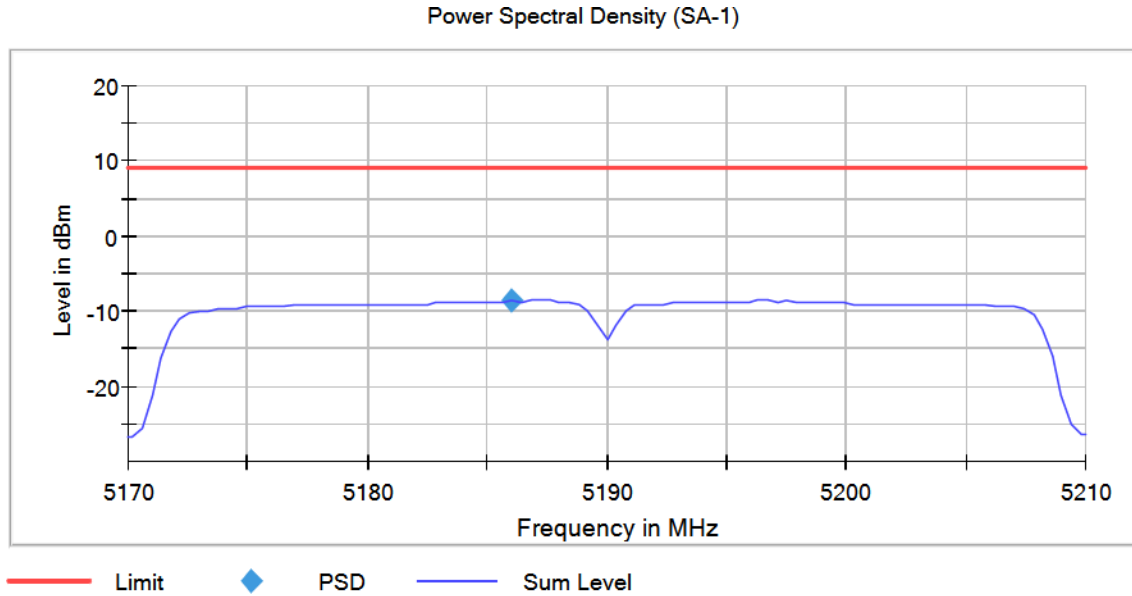
Images:

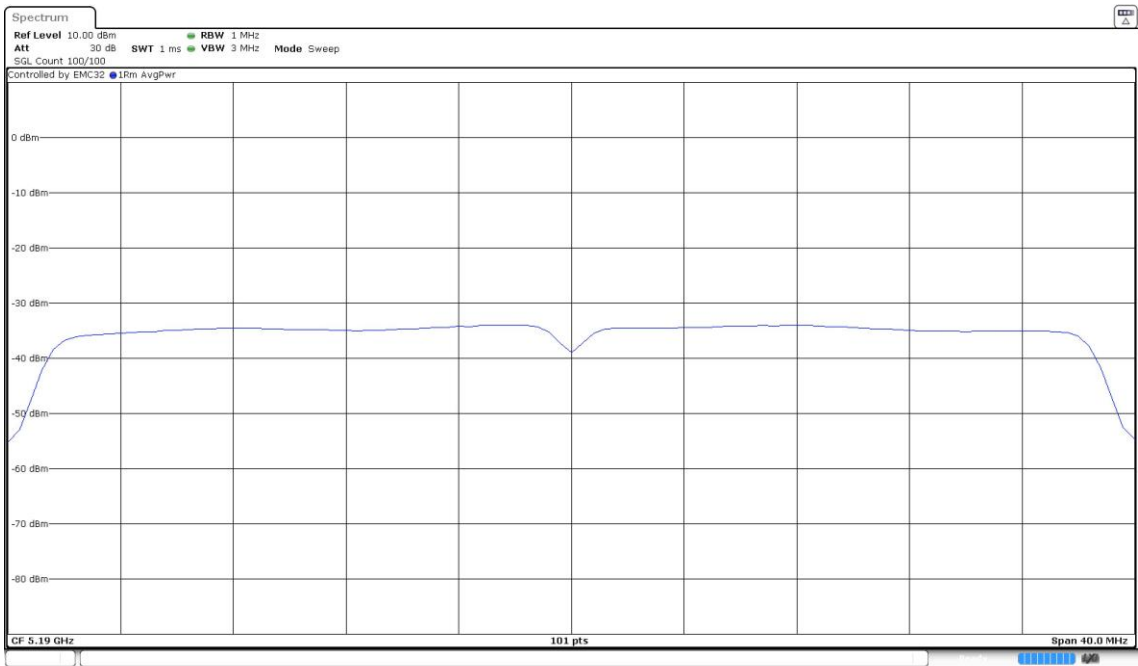




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5190.00000 Modulation = 802.11ax HE20 (OFDMA MCS0)
TPC = No Subcarrier Mode = SU

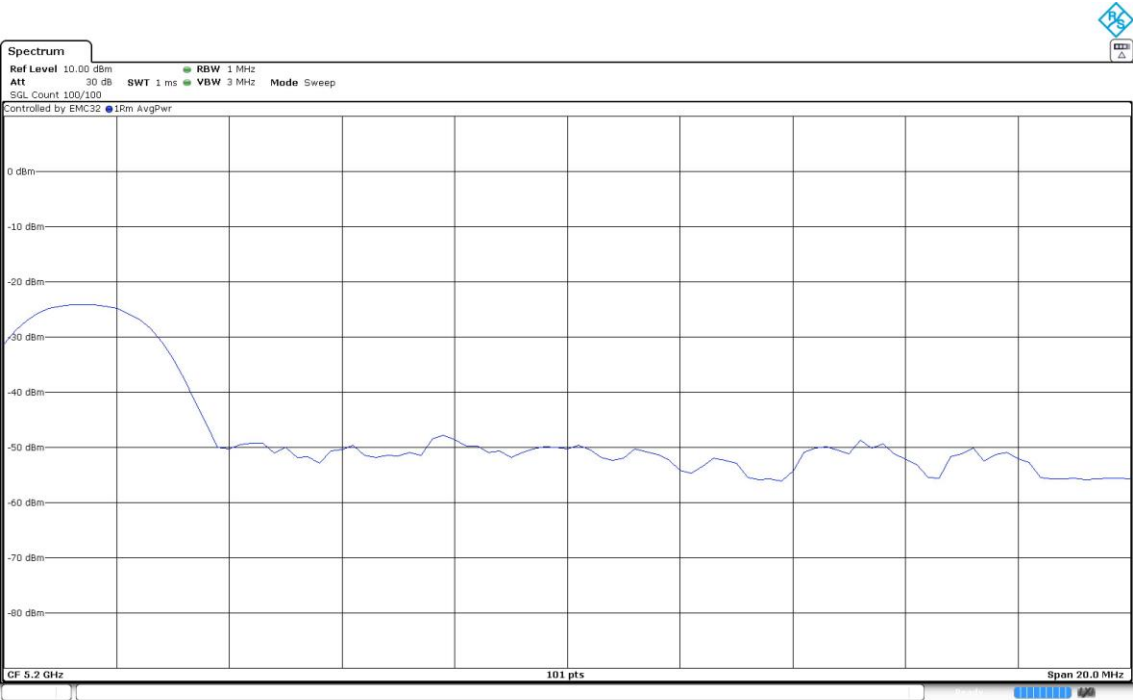
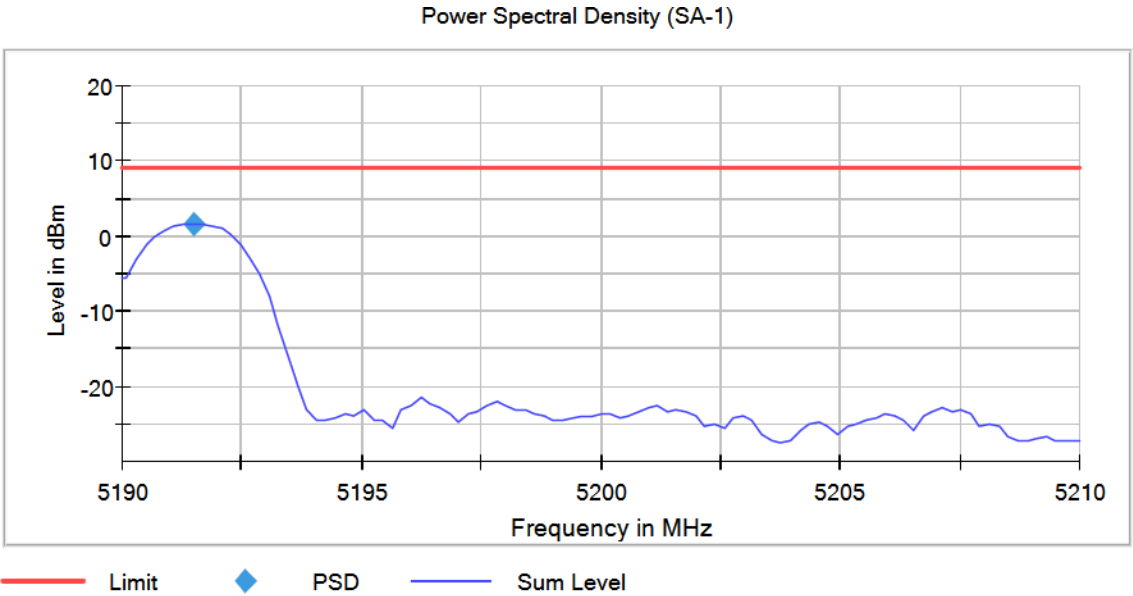
Images:

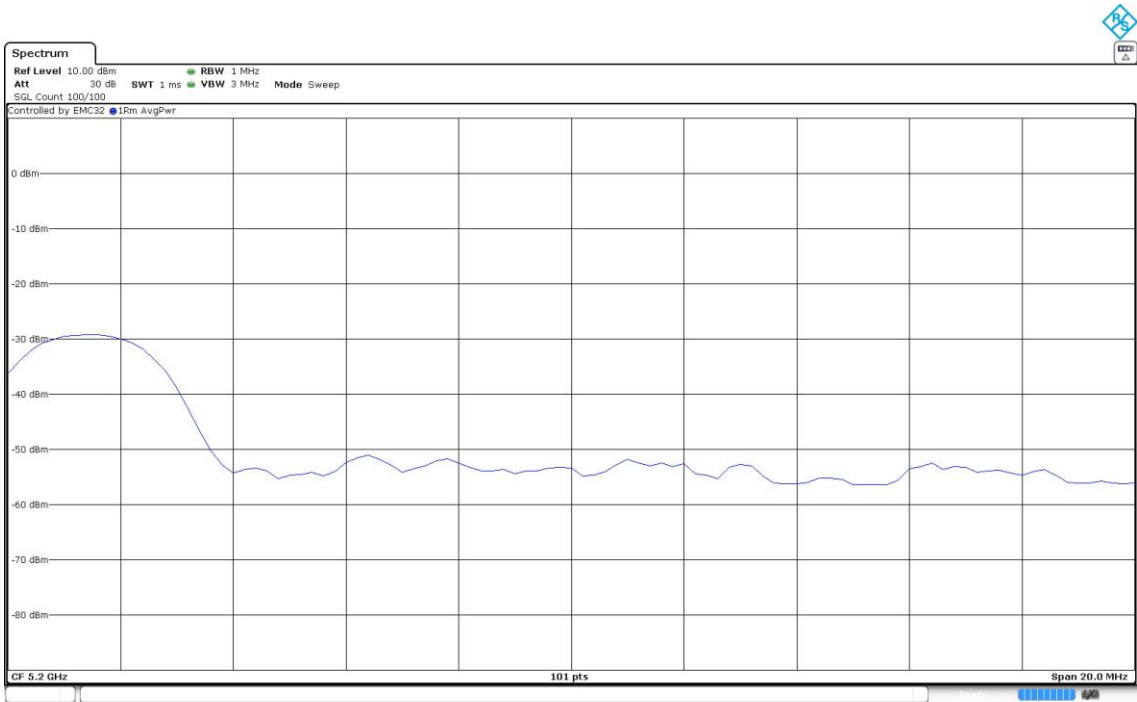


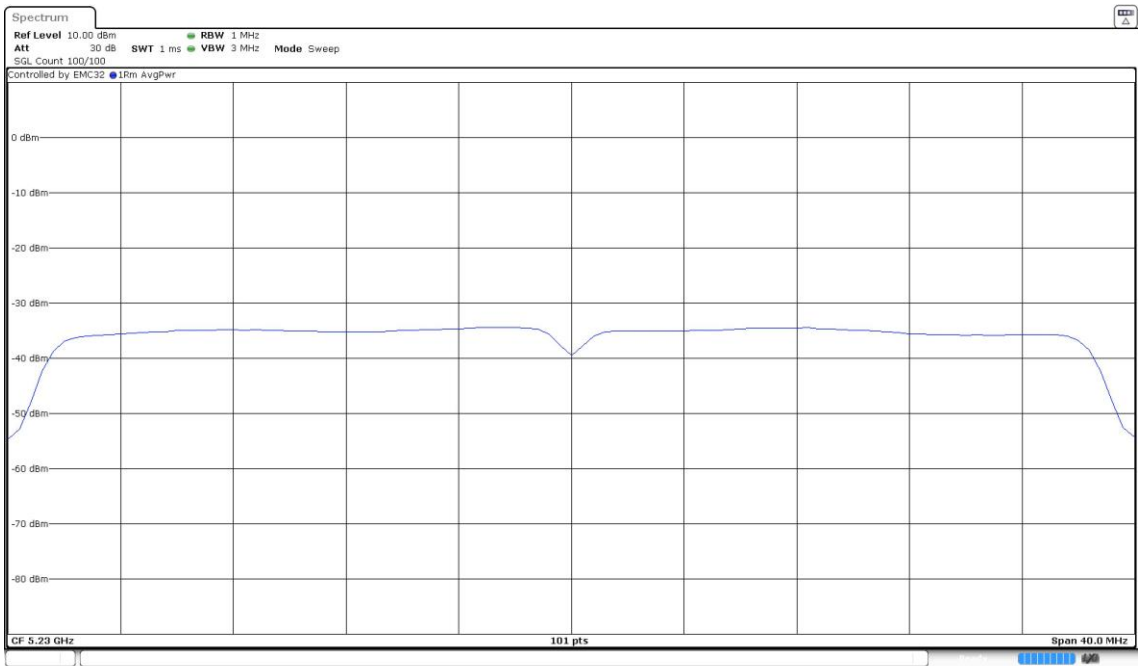


Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5200.00000 Modulation = 802.11ax HE20 (OFDMA MCS0)
TPC = No Subcarrier Mode = RU

Images:

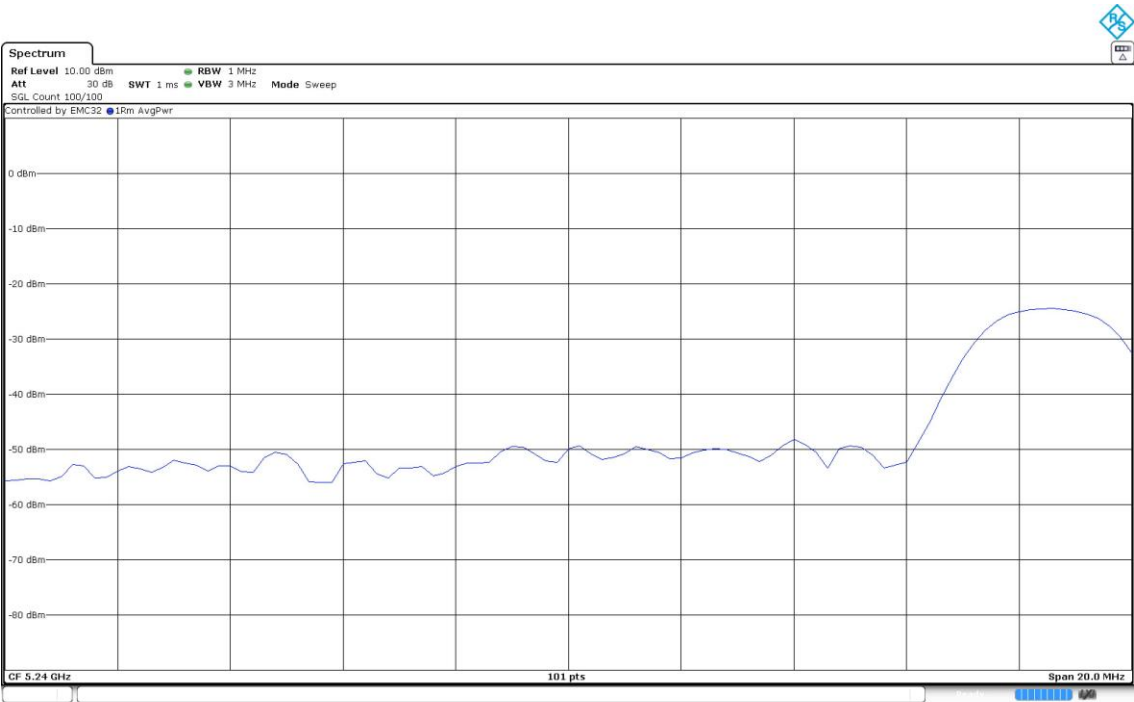
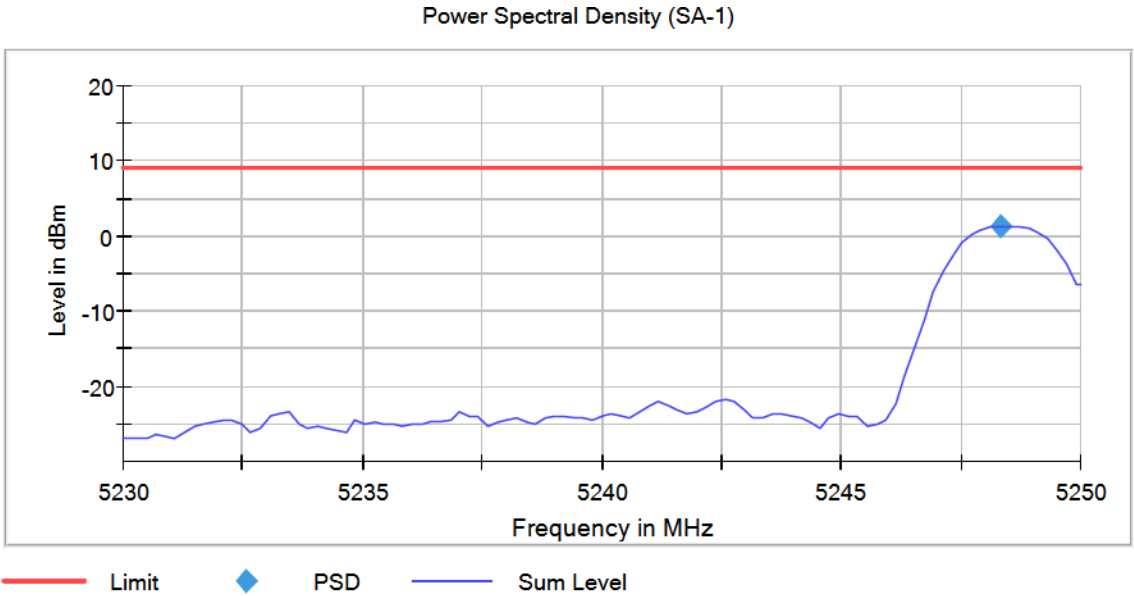


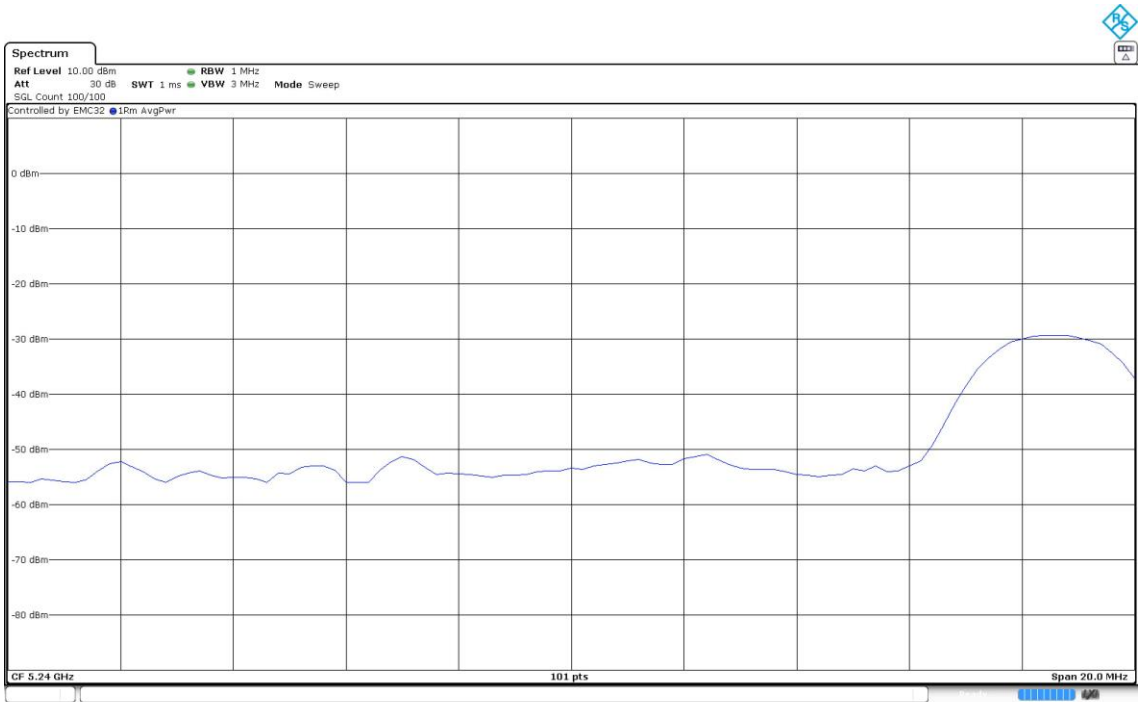




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5240.00000 Modulation = 802.11ax HE20 (OFDMA MCS0)
TPC = No Subcarrier Mode = RU

Images:





Modulation: 802.11ax HE40 (OFDMA MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Subcarrier Mode	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5190.00000	No	SU	5187.227723	-5.49
				RU	5188.811881	1.80
		5230.00000		SU	5225.643564	-5.32
				RU	5231.188119	2.45

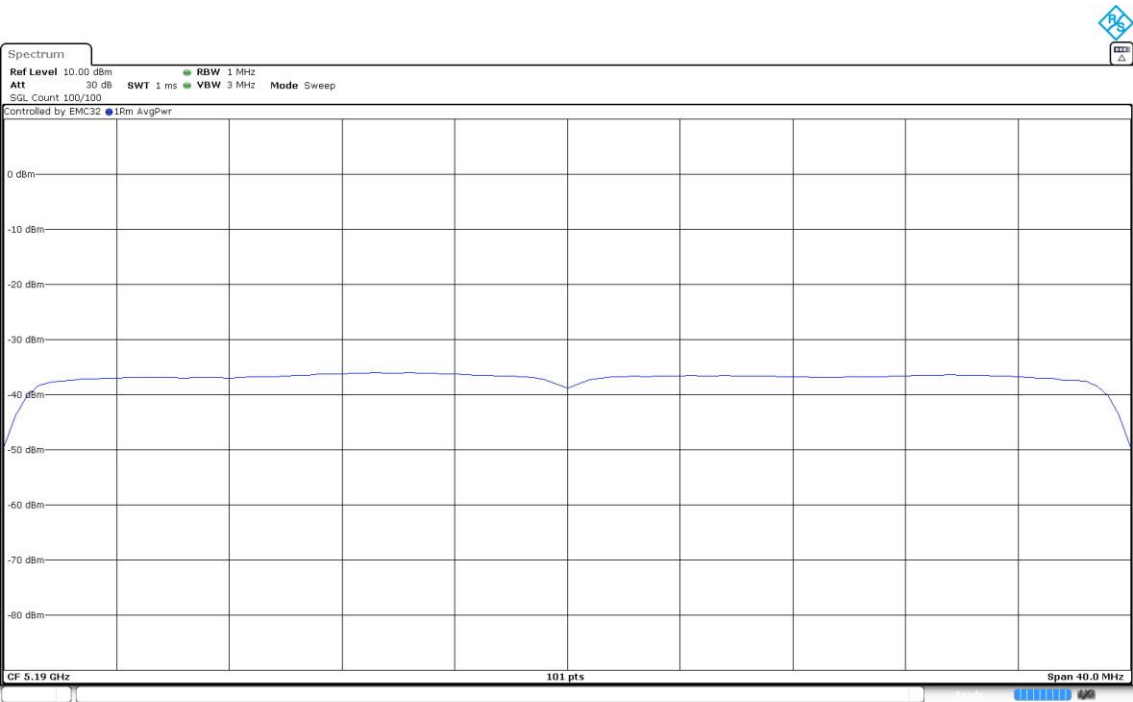
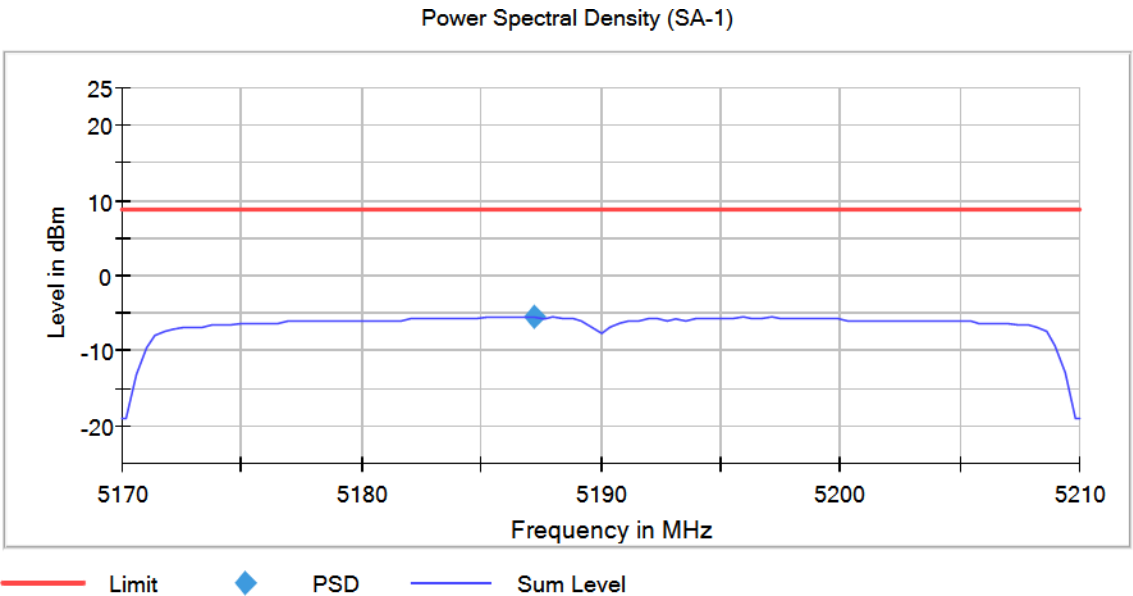
Verdict

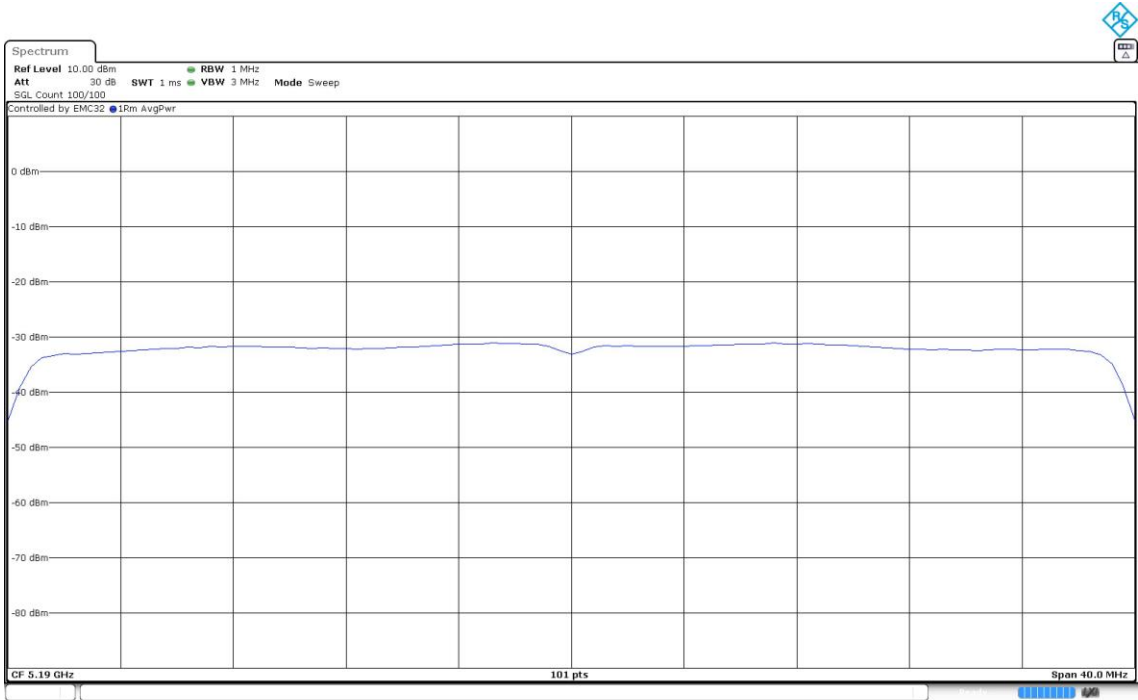
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5190.00000 Modulation = 802.11ax HE40 (OFDMA MCS0)
TPC = No Subcarrier Mode = SU

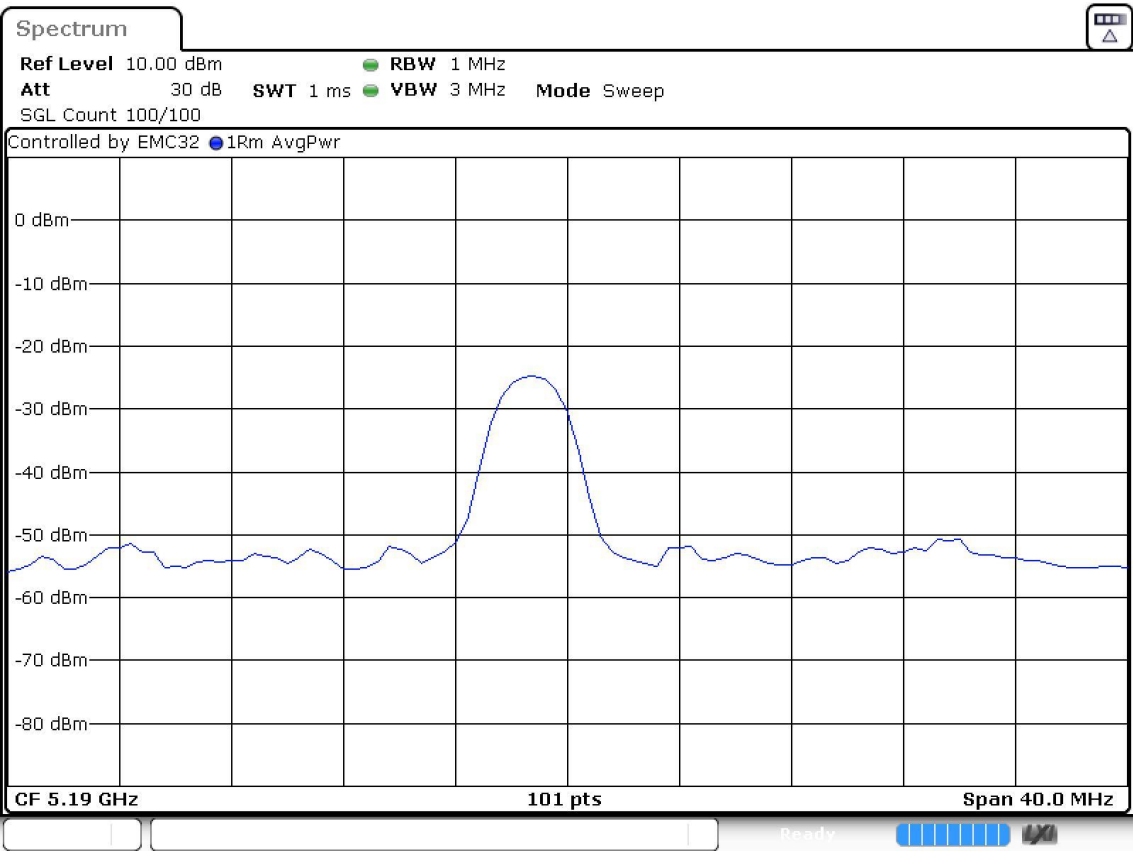
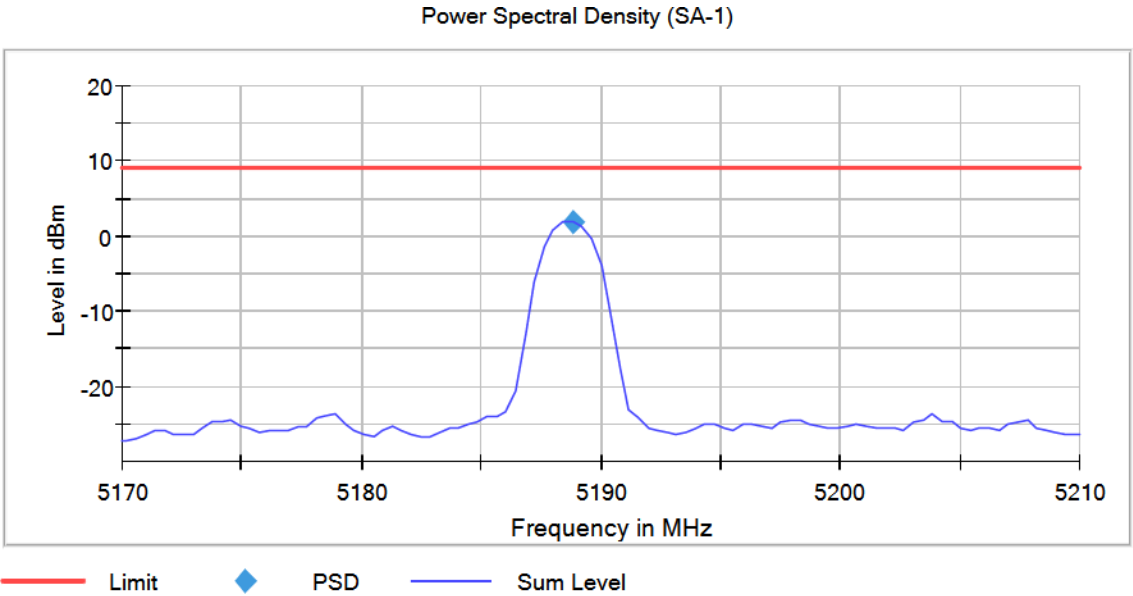
Images:

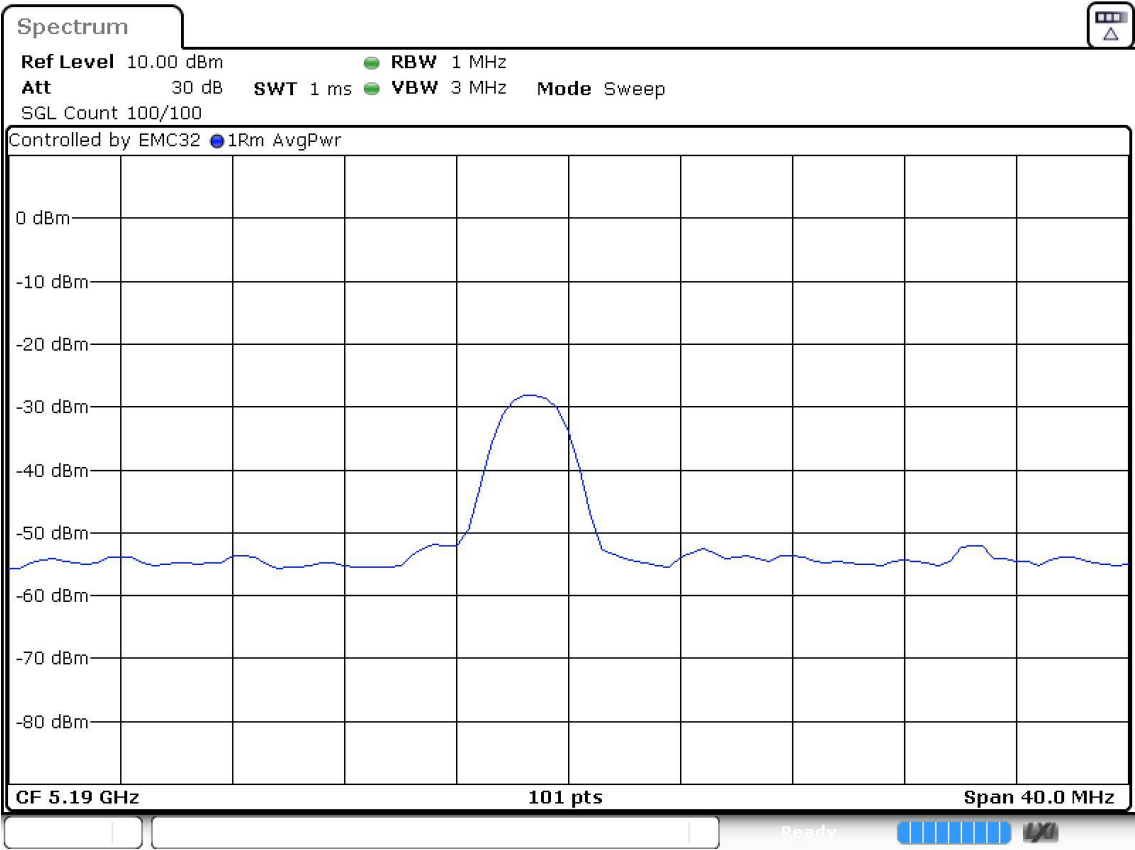




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5190.00000 Modulation = 802.11ax HE40 (OFDMA MCS0)
TPC = No Subcarrier Mode = RU

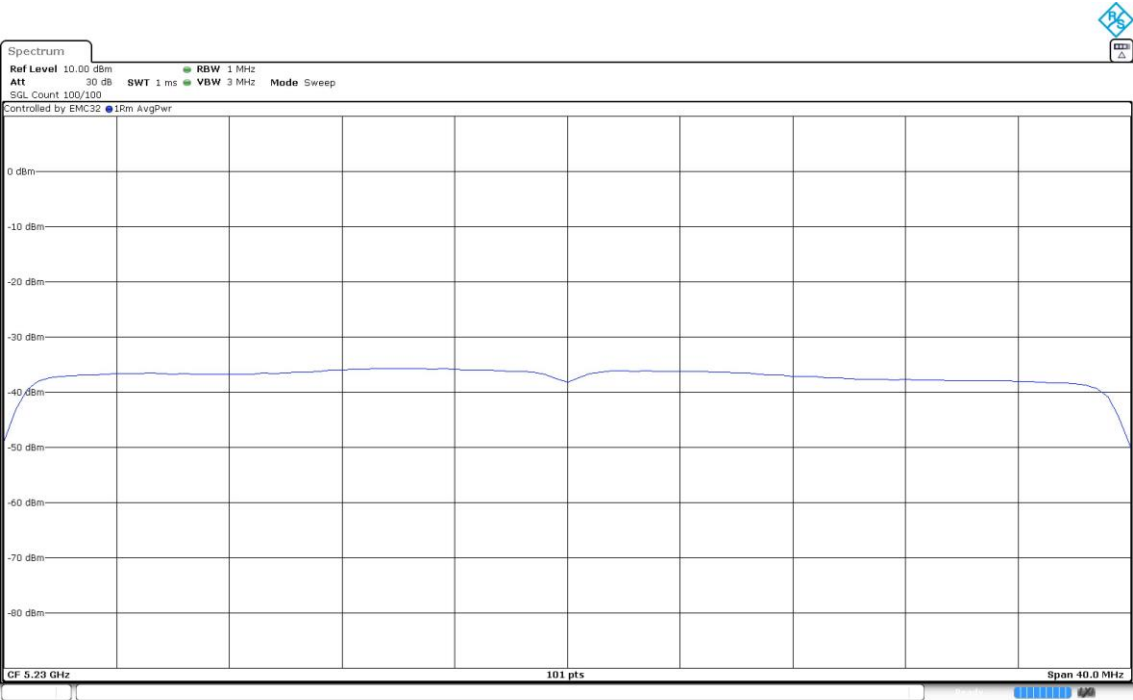
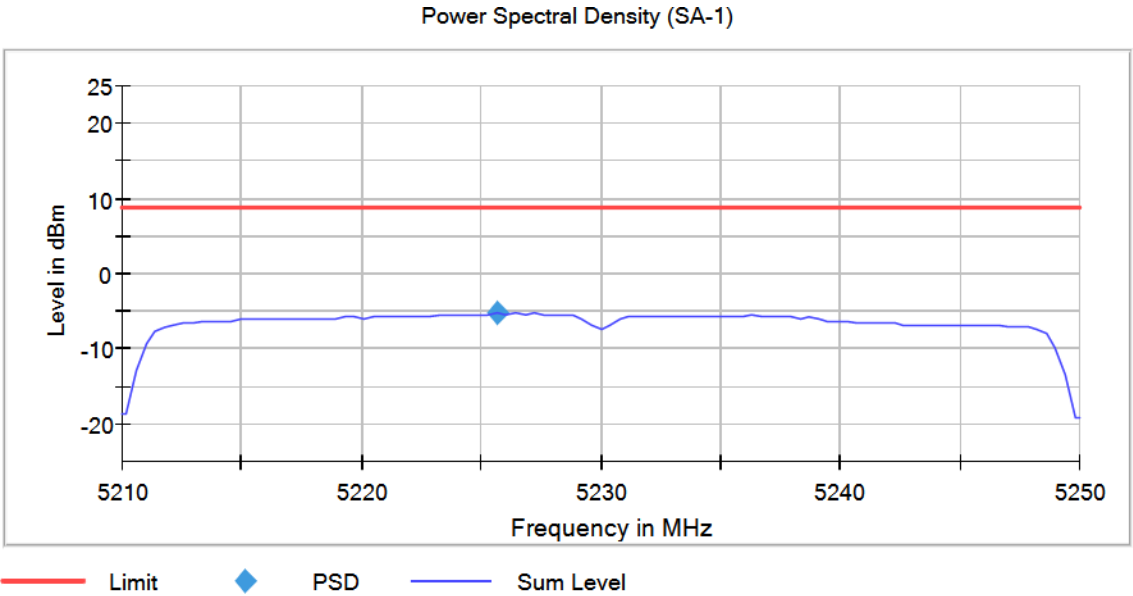
Images:

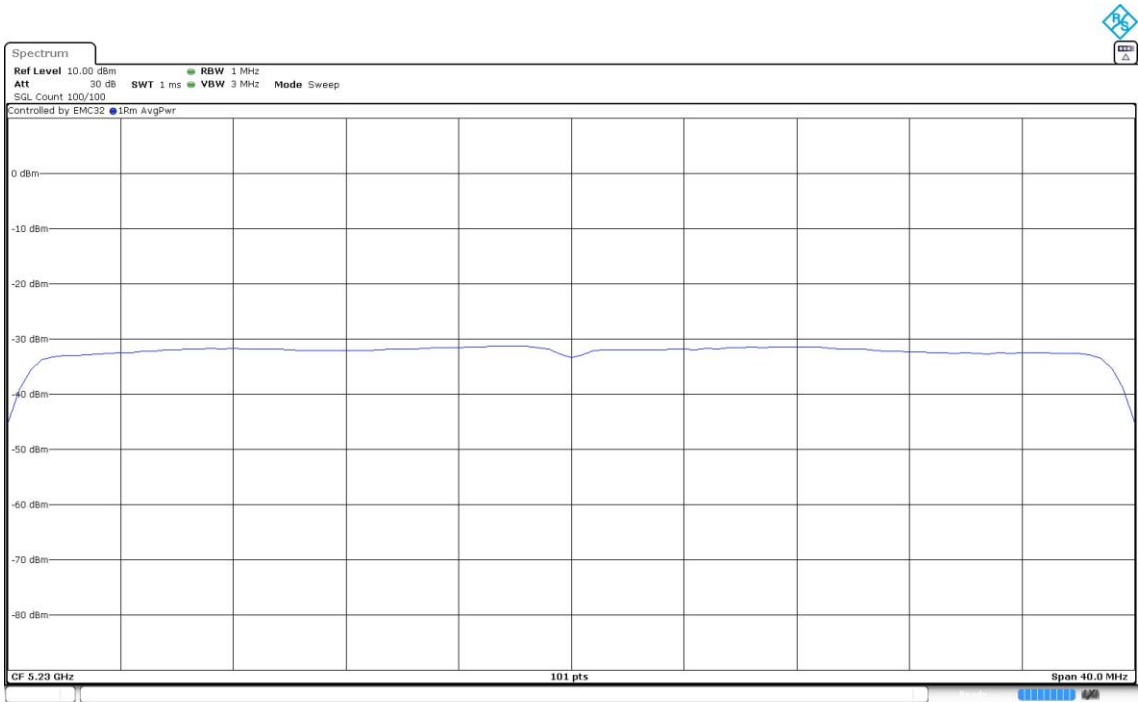




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5230.00000 Modulation = 802.11ax HE40 (OFDMA MCS0)
TPC = No Subcarrier Mode = SU

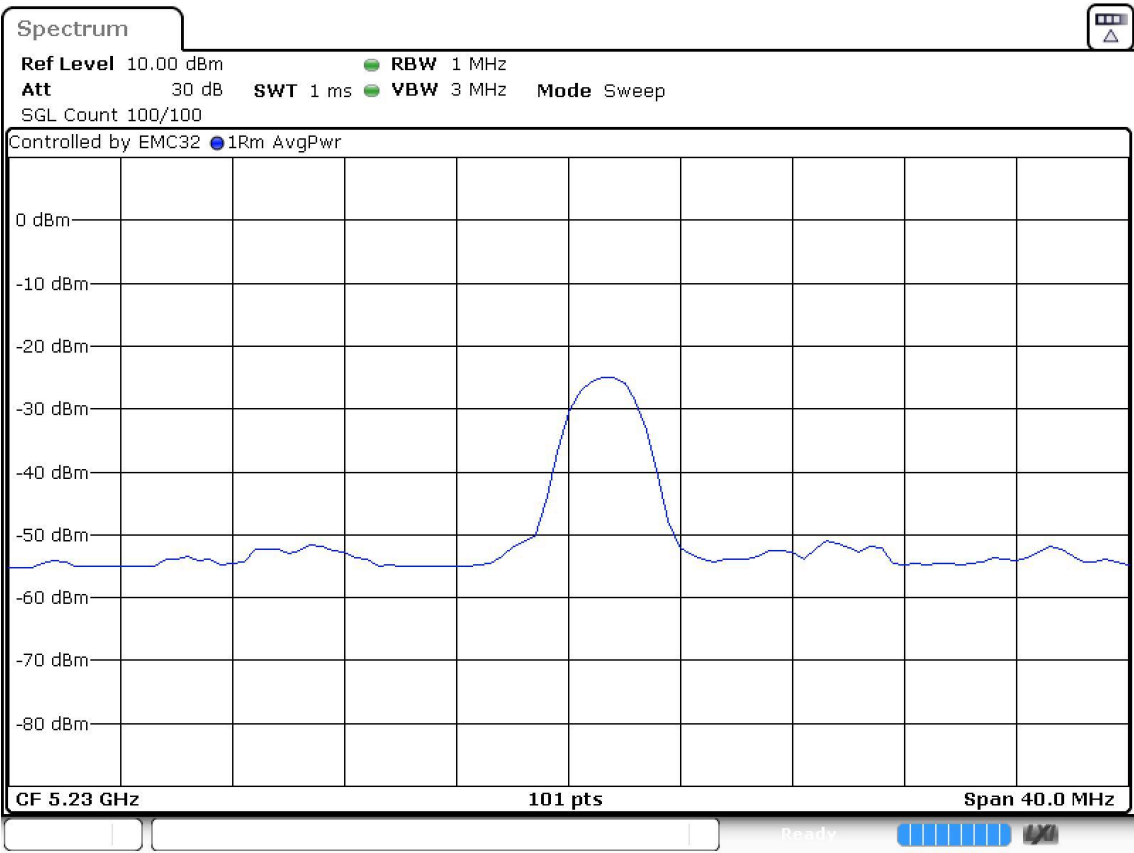
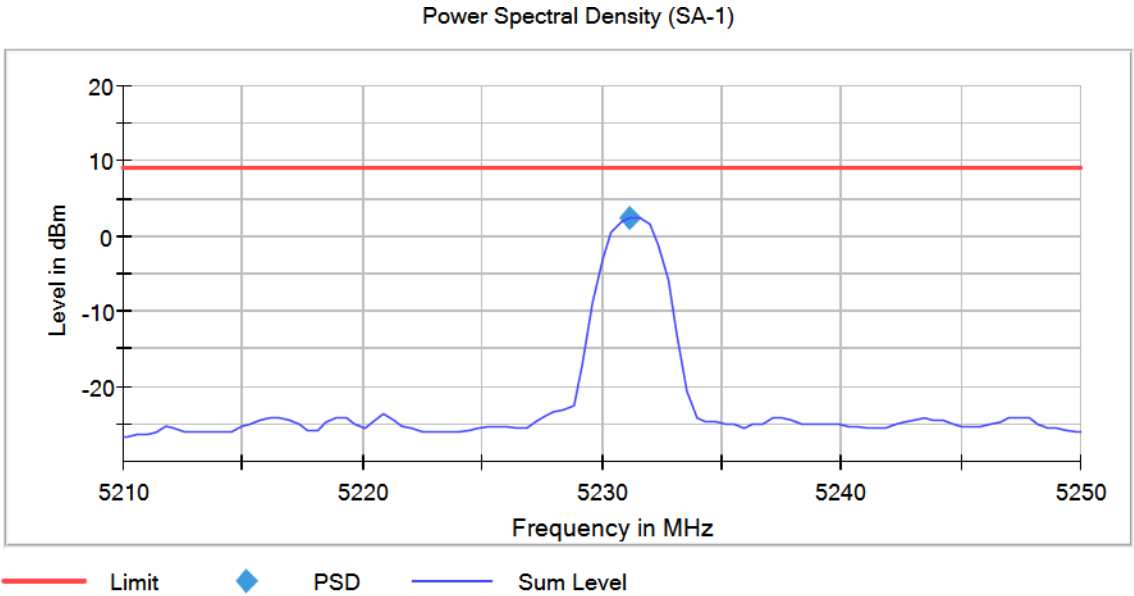
Images:

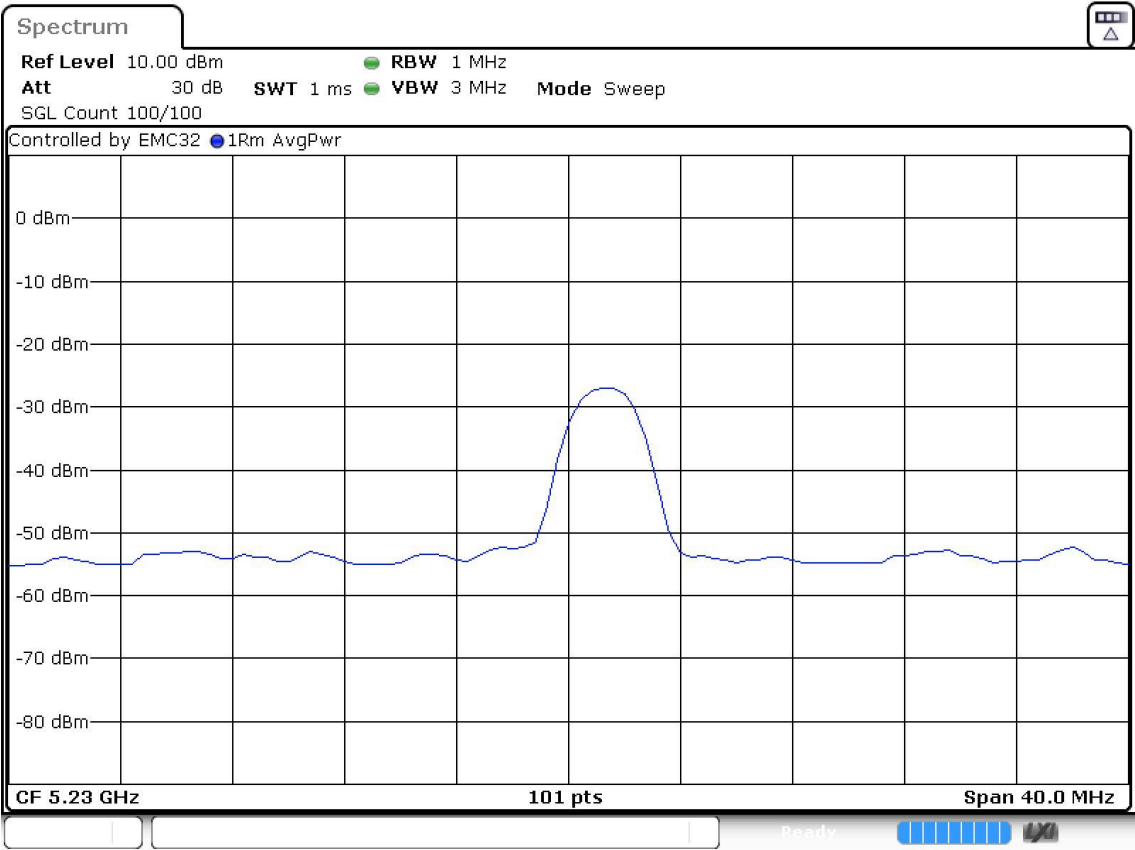




Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5230.00000 Modulation = 802.11ax HE40 (OFDMA MCS0)
TPC = No Subcarrier Mode = RU

Images:





Modulation: 802.11ax HE80 (OFDMA MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	TPC	Subcarrier Mode	Freq (MHz)	PSD (dBm)
[5150, 5250]	2+3	5210.00000	No	SU	5207.250000	-8.44
				RU	5225.250000	-6.06

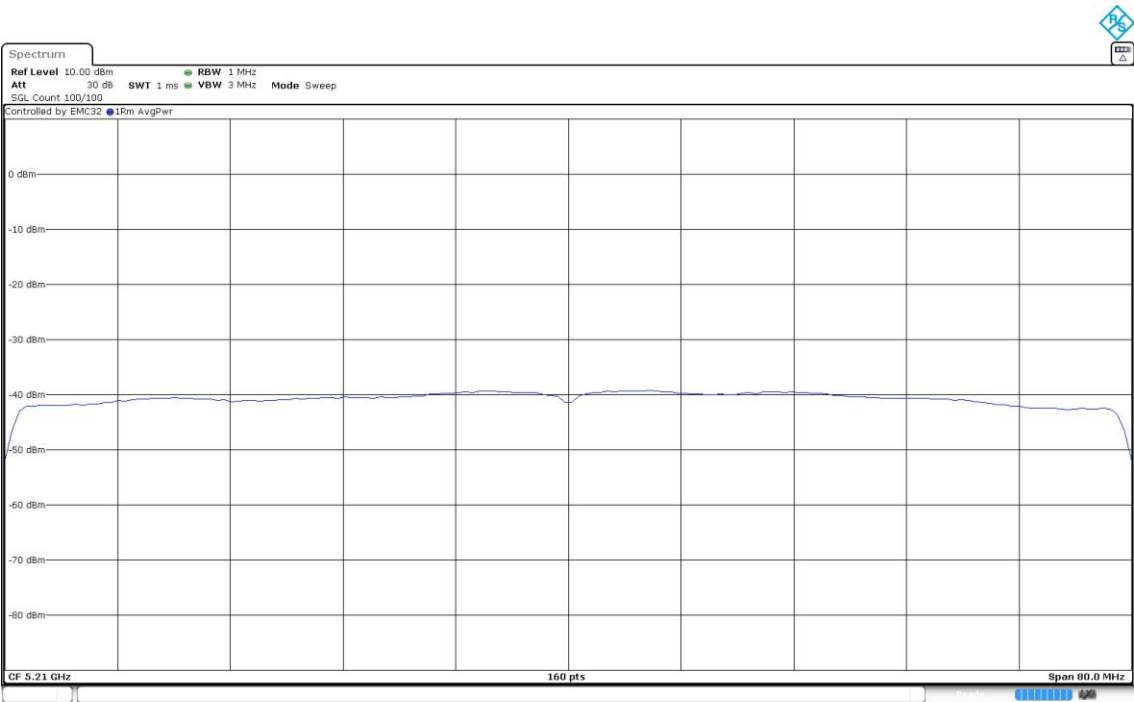
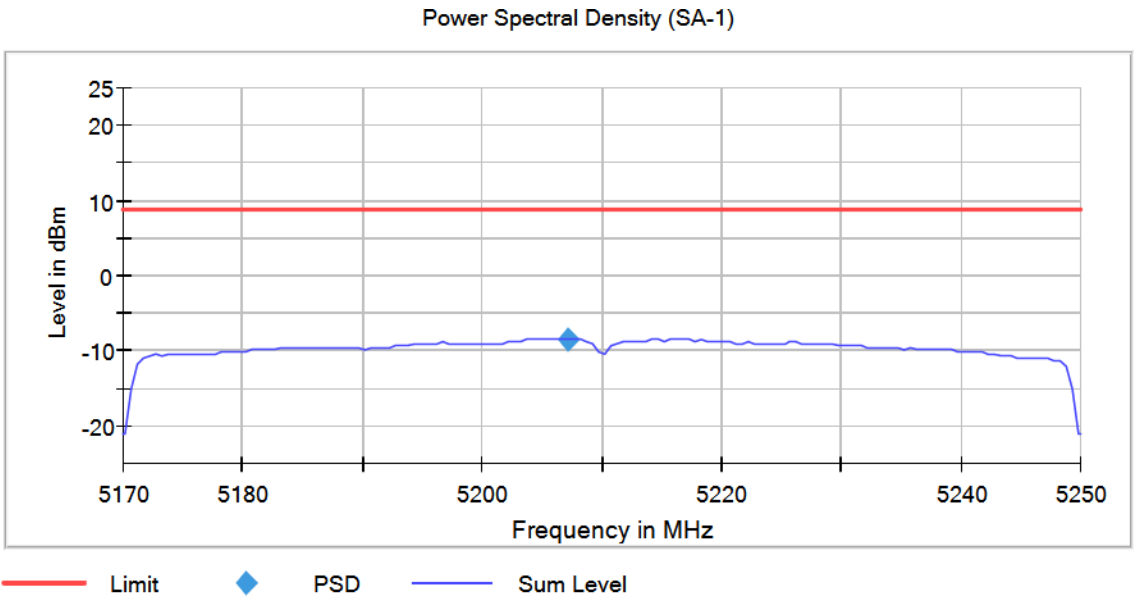
Verdict

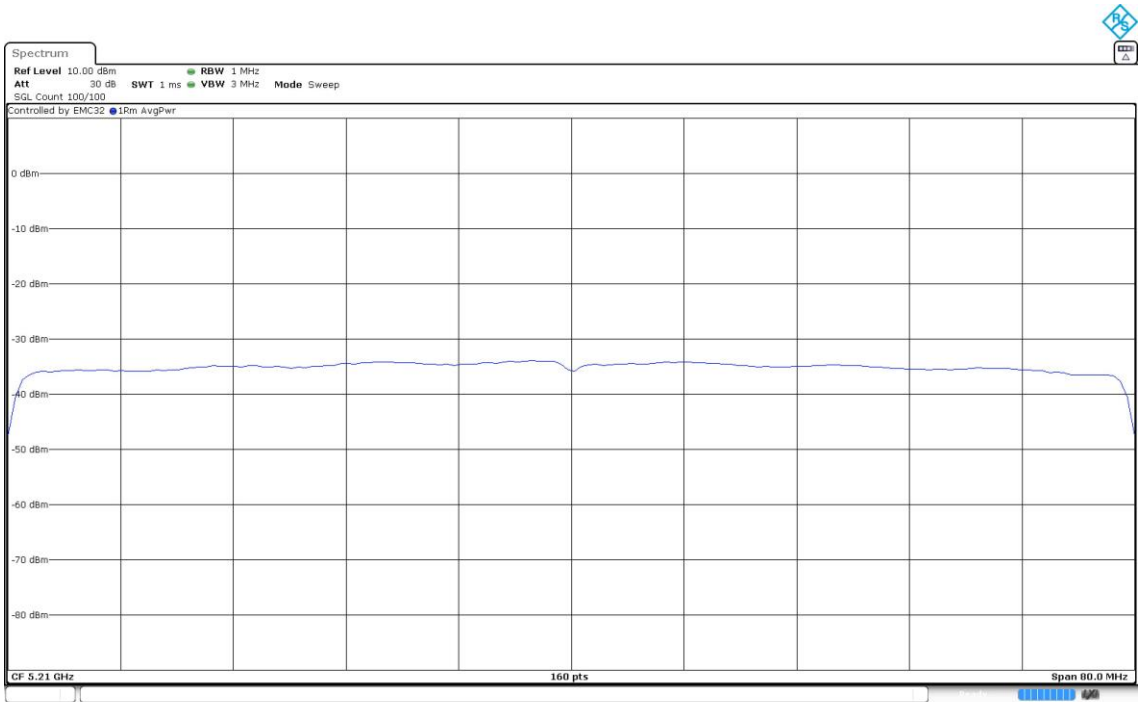
Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5210.00000 Modulation = 802.11ax HE80 (OFDMA MCS0)
TPC = No Subcarrier Mode = SU

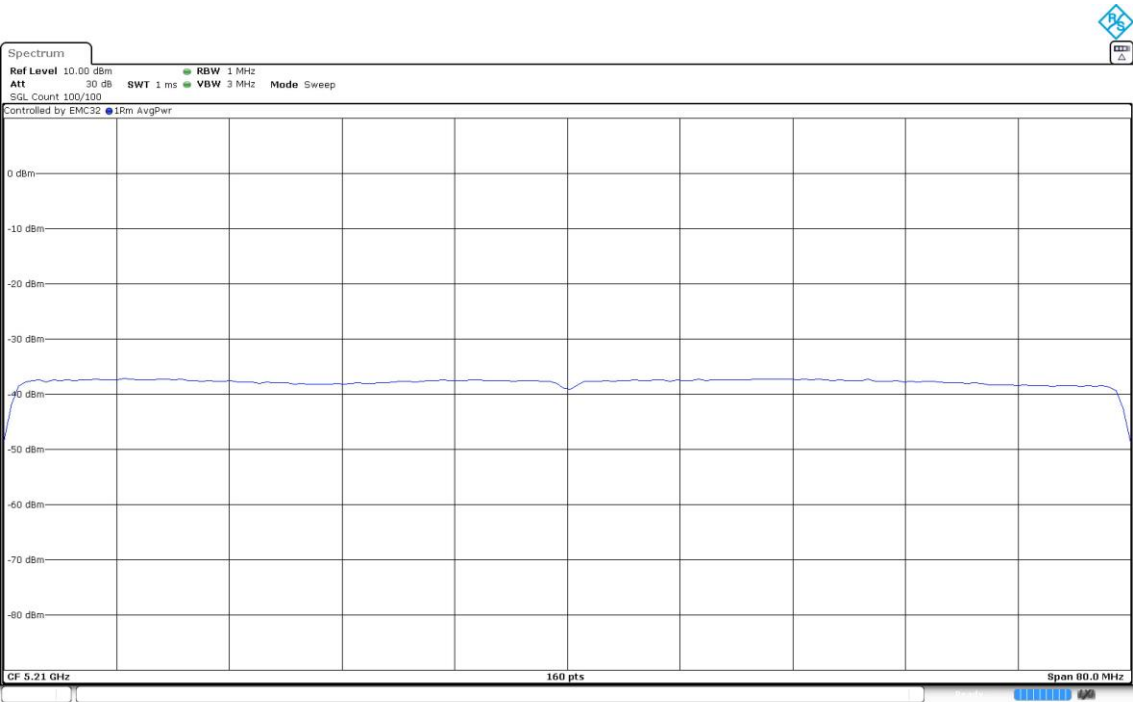
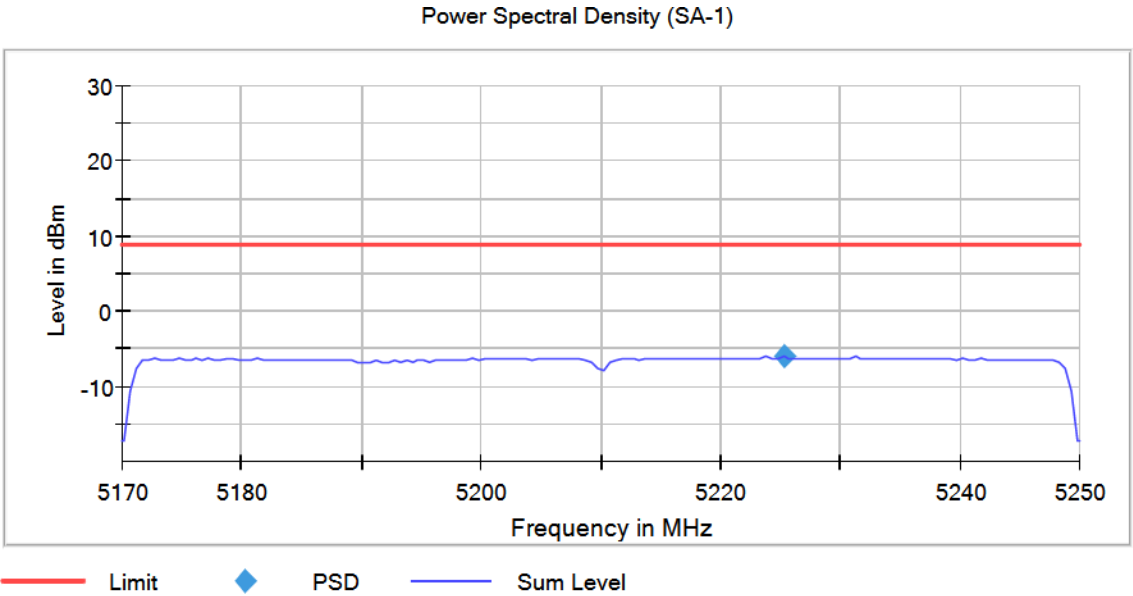
Images:





Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5210.00000 Modulation = 802.11ax HE80 (OFDMA MCS0)
TPC = No Subcarrier Mode = RU

Images:



RSS-247 6.2.4.1 / 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.

Modulation: 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Results

Operation Band (MHz)	Port	Freq (MHz)	Antenna configuration	Ebw (MHz)
[5150, 5250]	2+3	5180.00000	MIMO CDD Mode 2x2	17.450
		5220.00000		17.600
		5240.00000		17.350

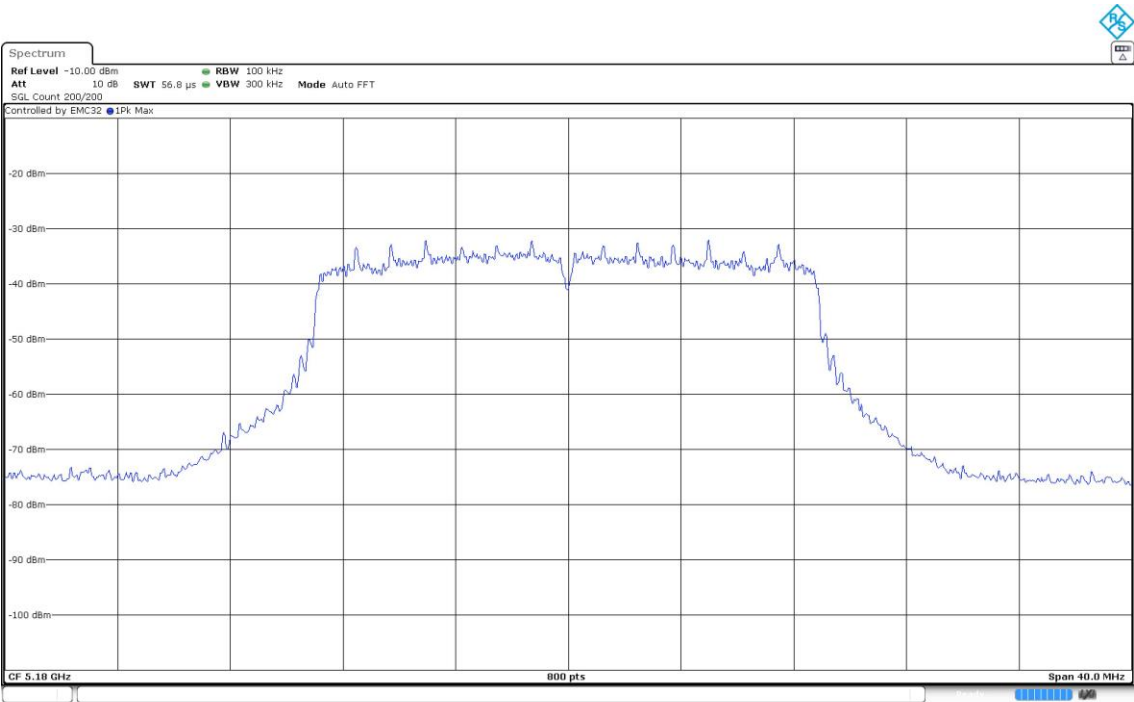
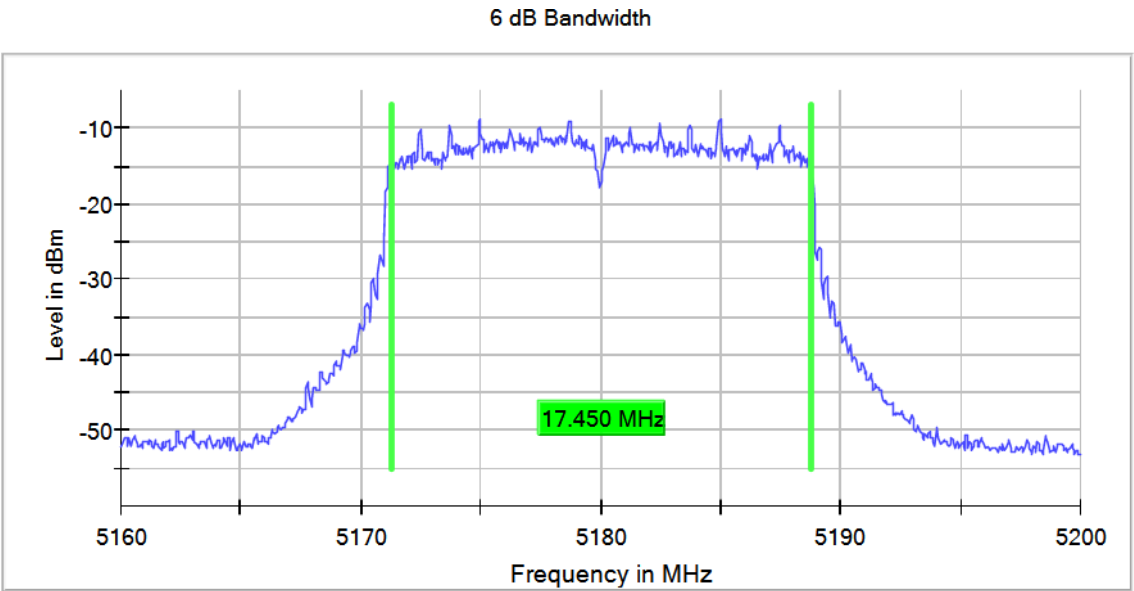
Verdict

Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5180.00000 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Antenna configuration = MIMO CDD Mode 2x2

Images:



Operation Band MHz = [5150, 5250]

Active Port = 2+3

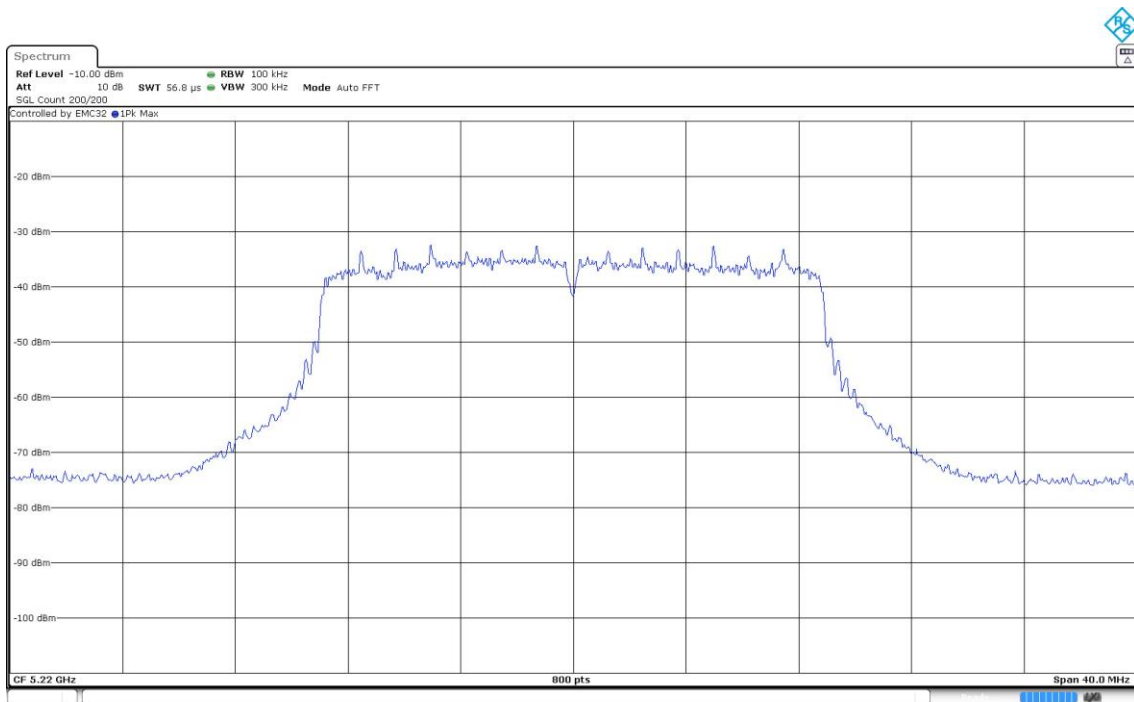
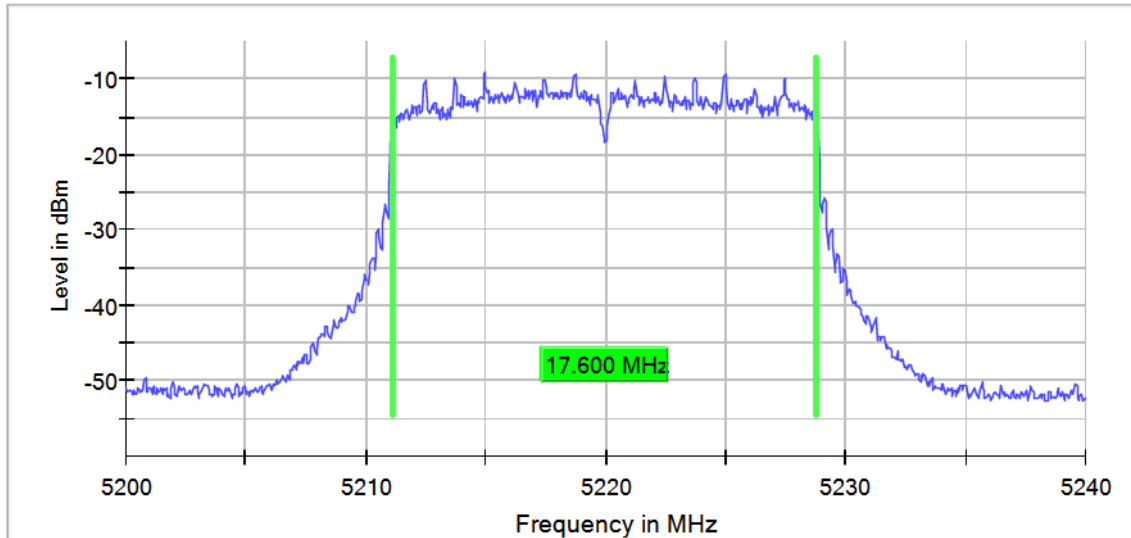
Frequency MHz = 5220.00000

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Antenna configuration = MIMO CDD Mode 2x2

Images:

6 dB Bandwidth



Operation Band MHz = [5150, 5250]

Active Port = 2+3

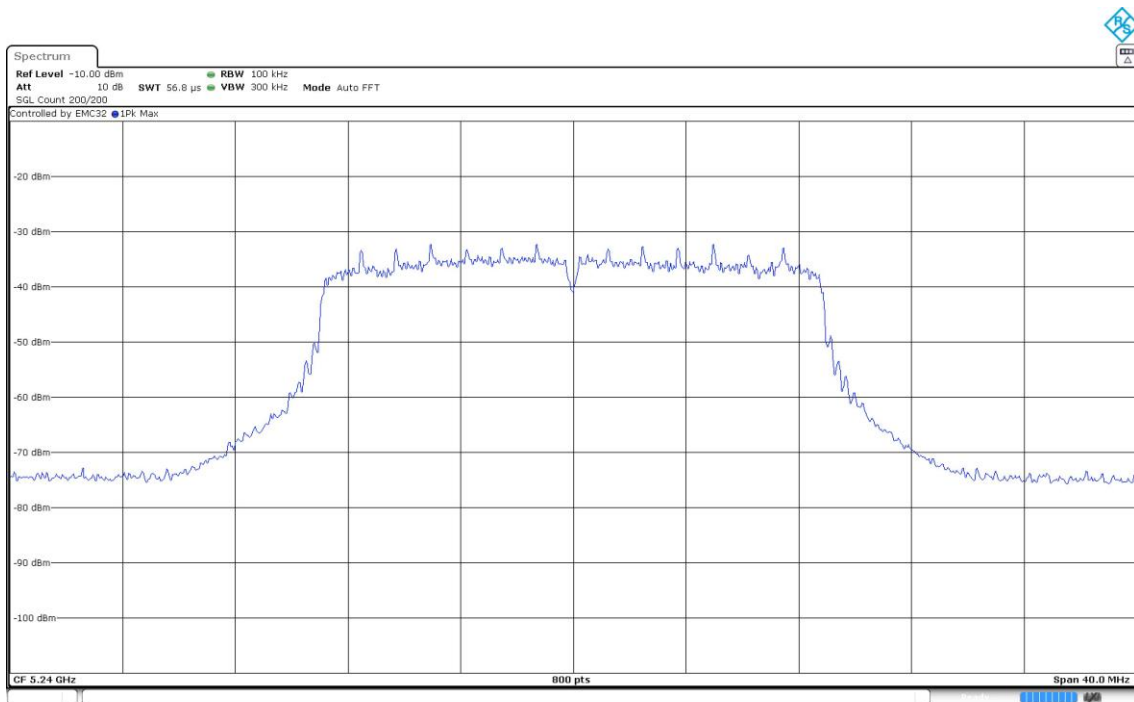
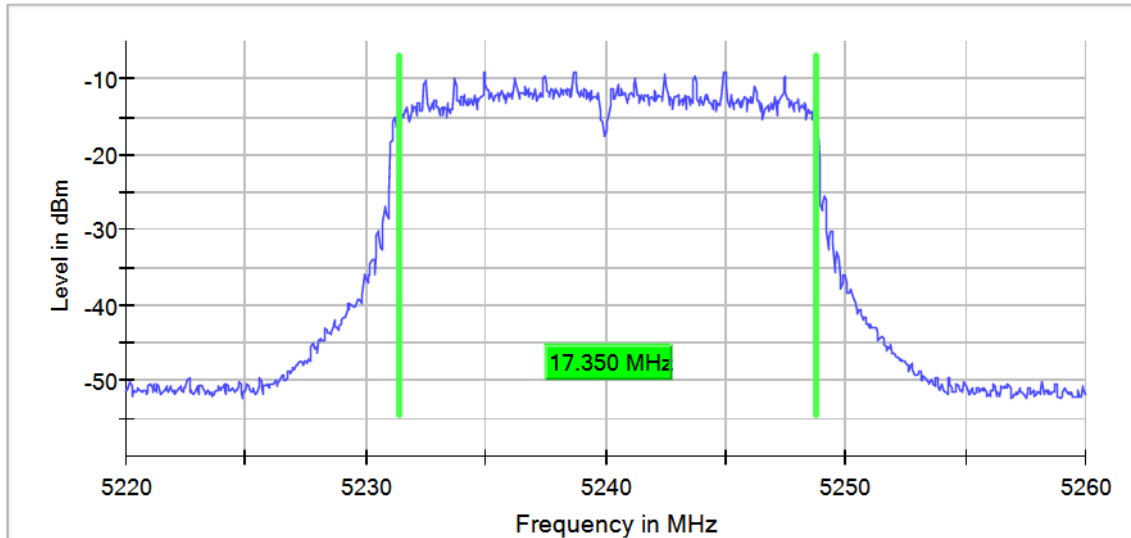
Frequency MHz = 5240.00000

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Antenna configuration = MIMO CDD Mode 2x2

Images:

6 dB Bandwidth



Modulation: 802.11n HT40 (OFDM MCS0)

Results

Operation Band (MHz)	Port	Freq (MHz)	Ebw (MHz)
[5150, 5250]	2+3	5190.00000	36.100
		5230.00000	35.700

Verdict

Pass

Attachments

Operation Band MHz = [5150, 5250] Active Port = 2+3
Frequency MHz = 5190.00000 Modulation = 802.11n HT40 (OFDM MCS0)

Images:

