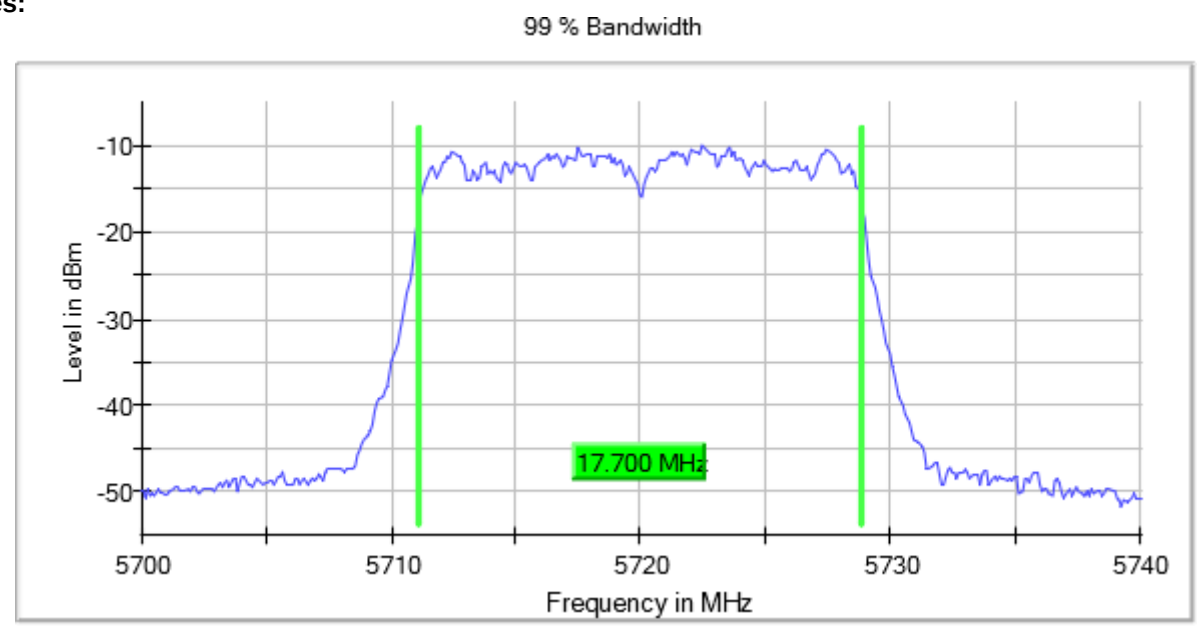
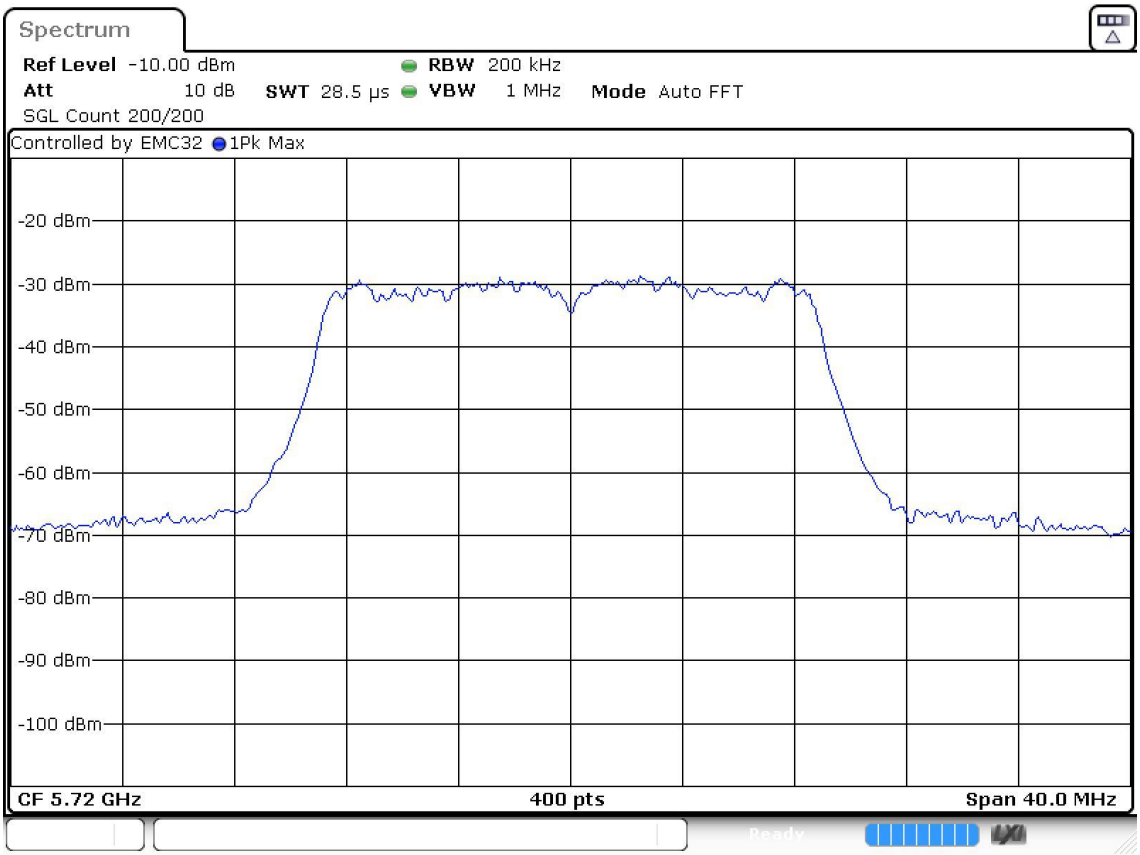
Active Port = 1 Frequency MHz = 5720.00000

Modulation = 802.11ac VHT20 (OFDM MCS0) MIMO Mode = SISO

Images:





Firmado digitalmente por 53680346W JOSE MANUEL GOMEZ (C:A29507456)

Modulation: 802.11ac VHT40 (OFDM MCS0)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Occ Ch BW (MHz)
1	5510.00000	36.250
	5550.00000	36.250
	5710.00000	36.250

Verdict

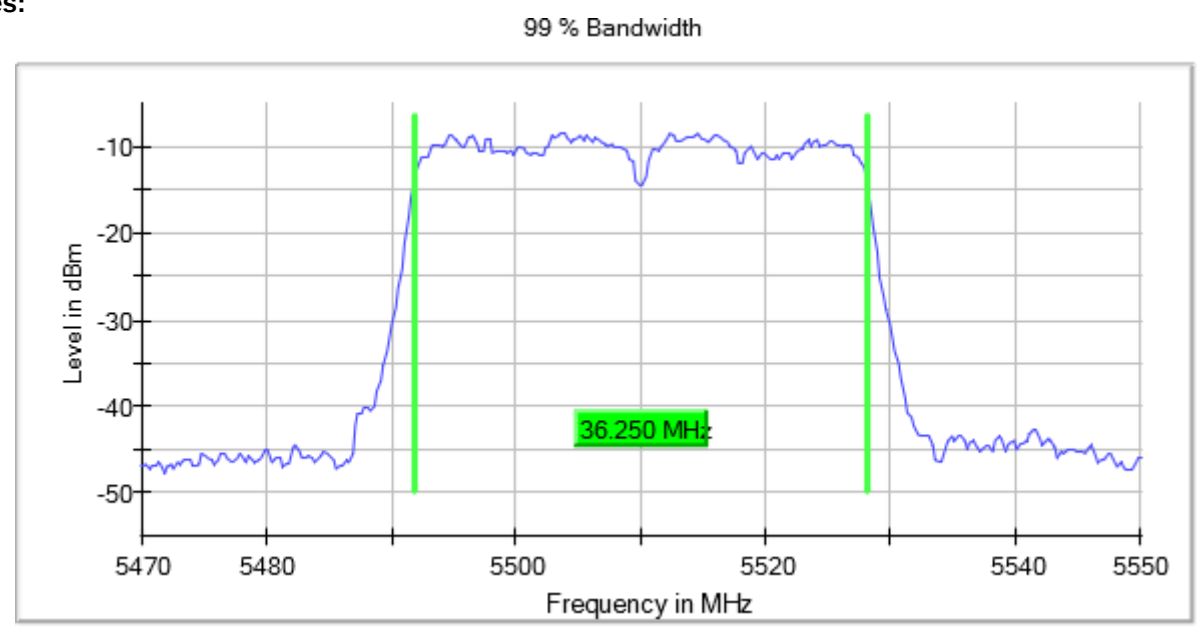
Pass

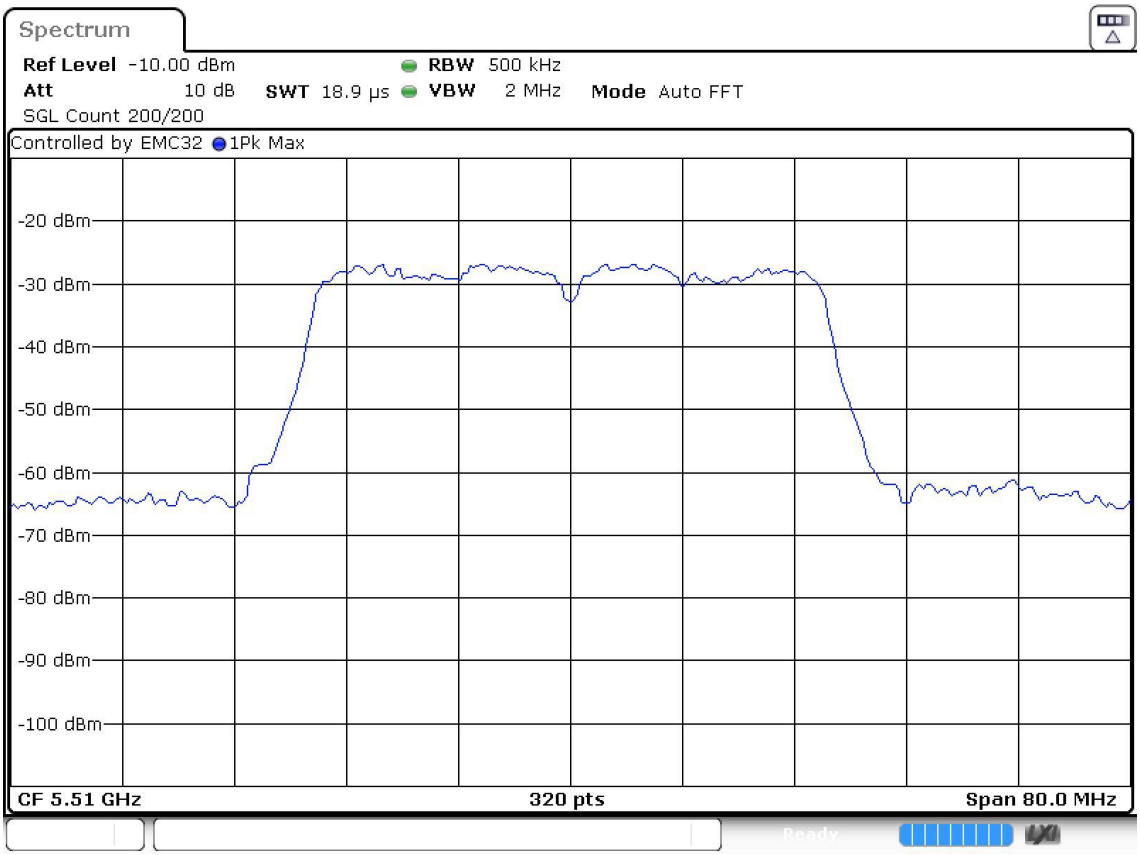
Attachments

Active Port = 1 Frequency MHz = 5510.00000

Modulation = 802.11ac VHT40 (OFDM MCS0) MIMO Mode = SISO

Images:

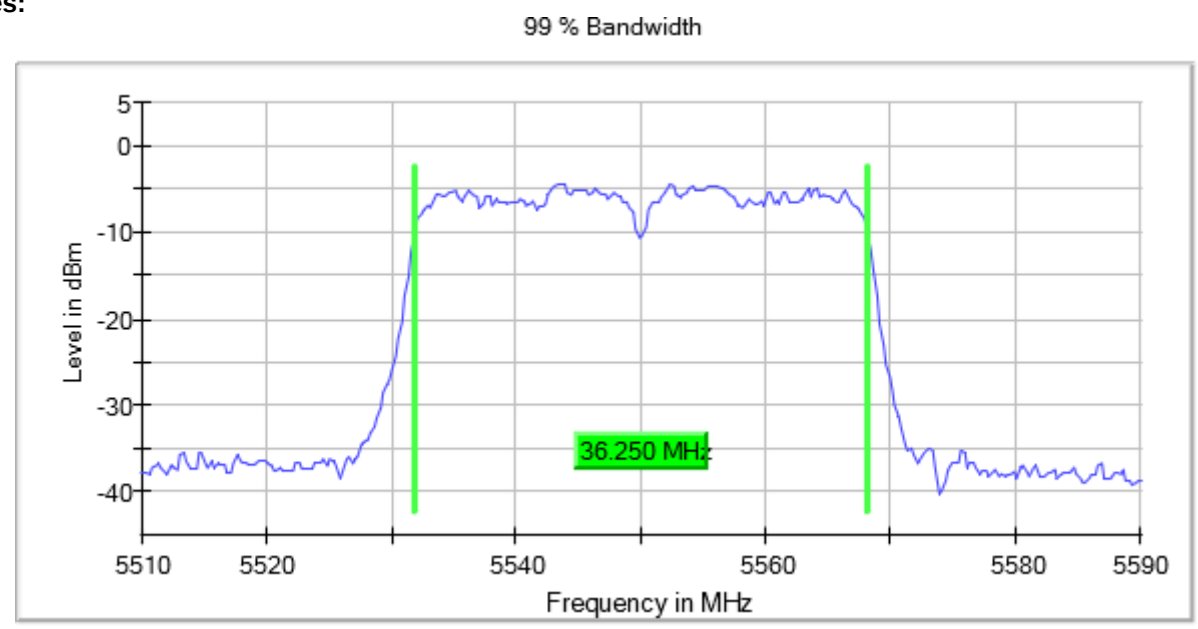


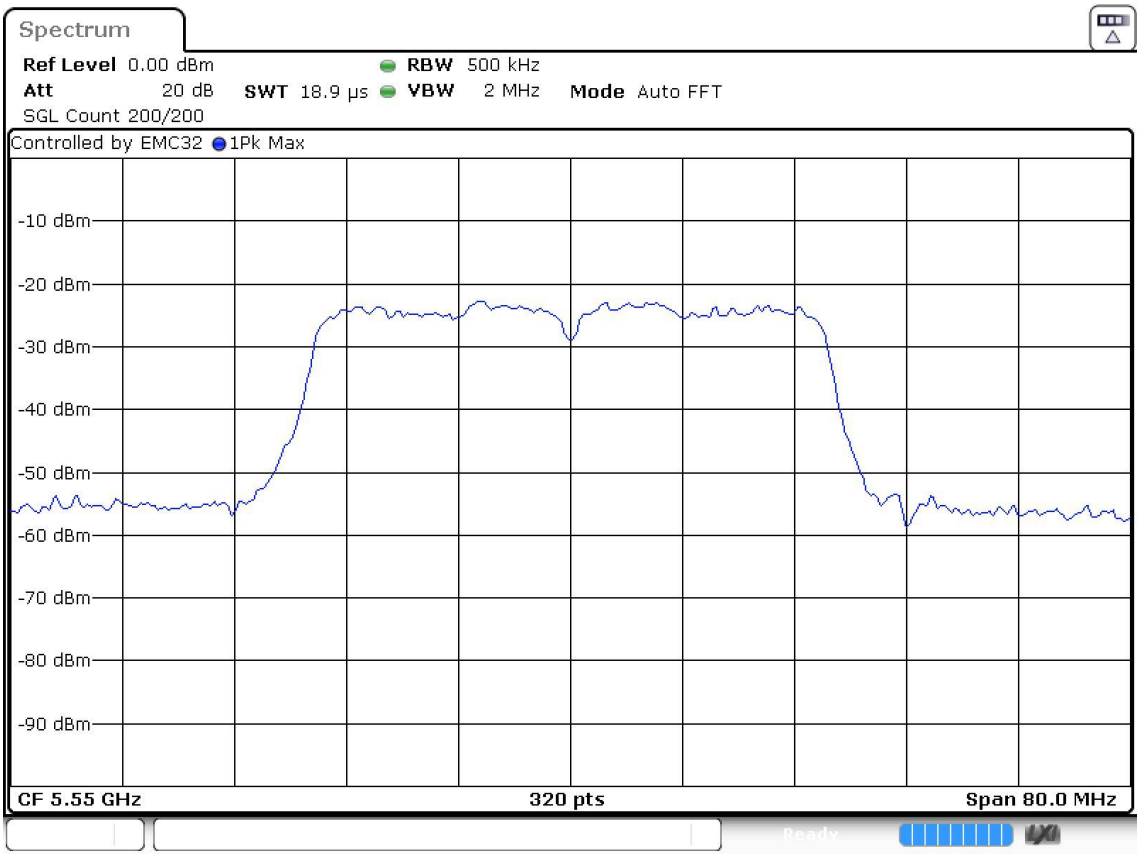


Active Port = 1 Frequency MHz = 5550.00000

Modulation = 802.11ac VHT40 (OFDM MCS0) MIMO Mode = SISO

Images:

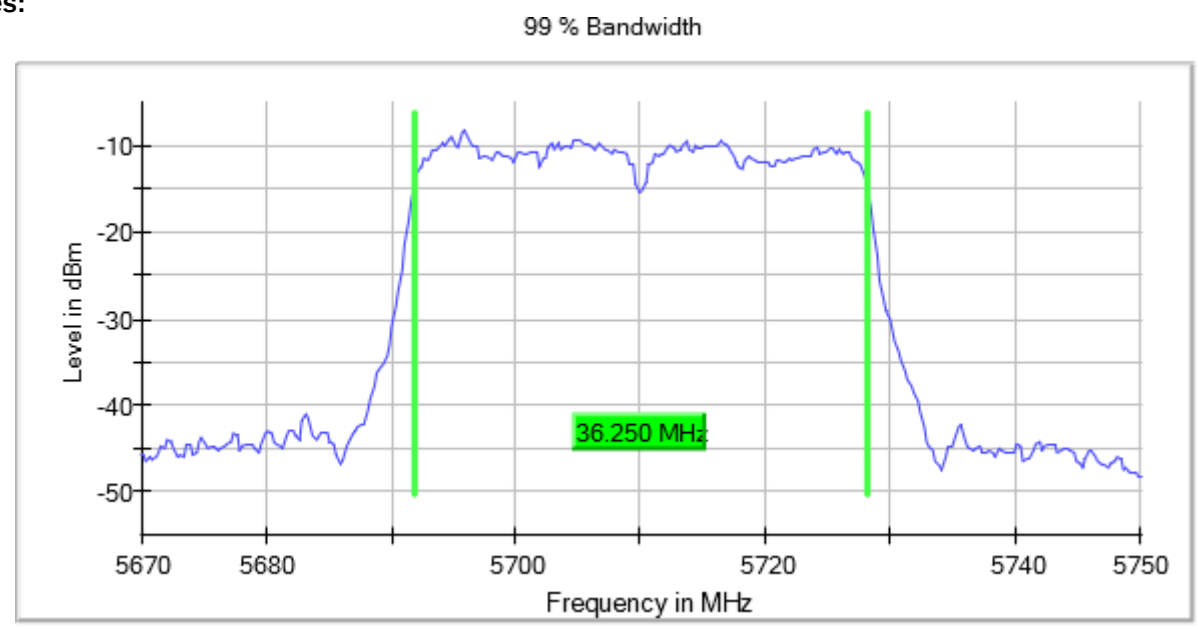


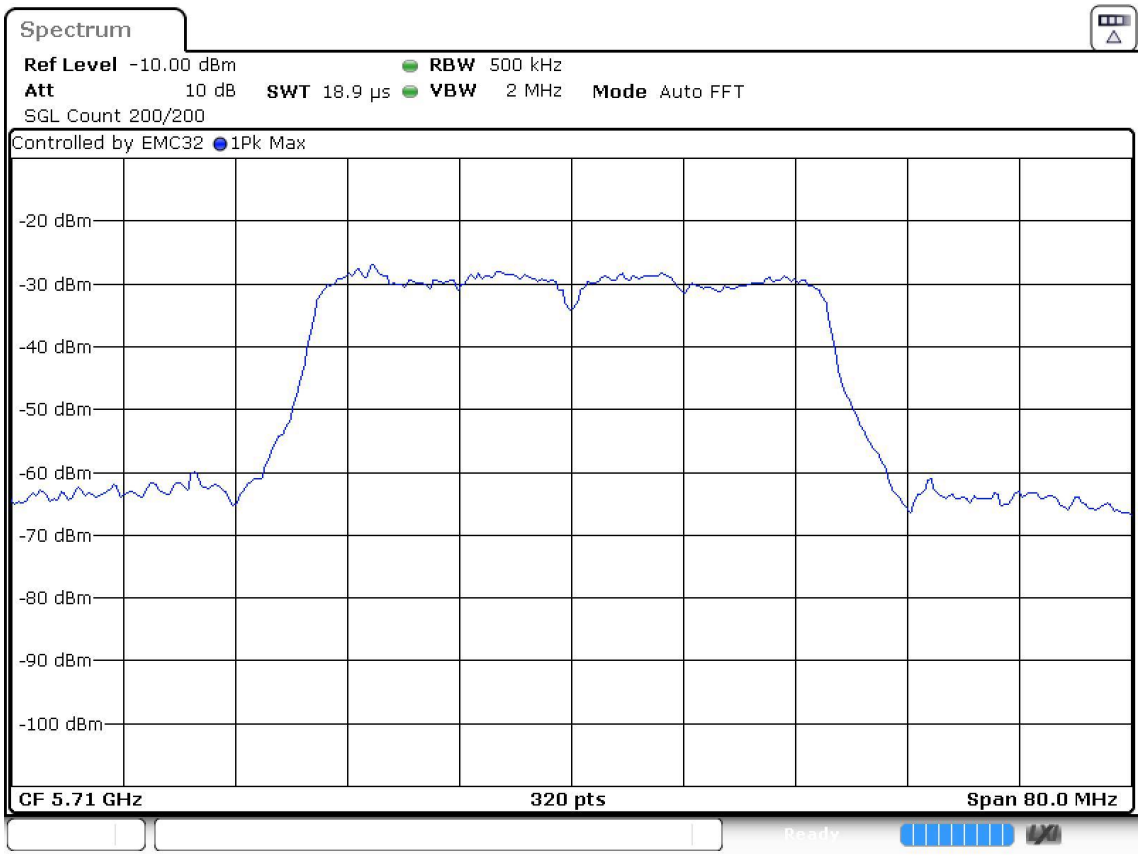


Active Port = 1 Frequency MHz = 5710.00000

Modulation = 802.11ac VHT40 (OFDM MCS0) MIMO Mode = SISO

Images:





Modulation: 802.11ac VHT80 (OFDM MCS0)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Occ Ch BW (MHz)
1	5530.00000	76.500
	5690.00000	76.500

Verdict

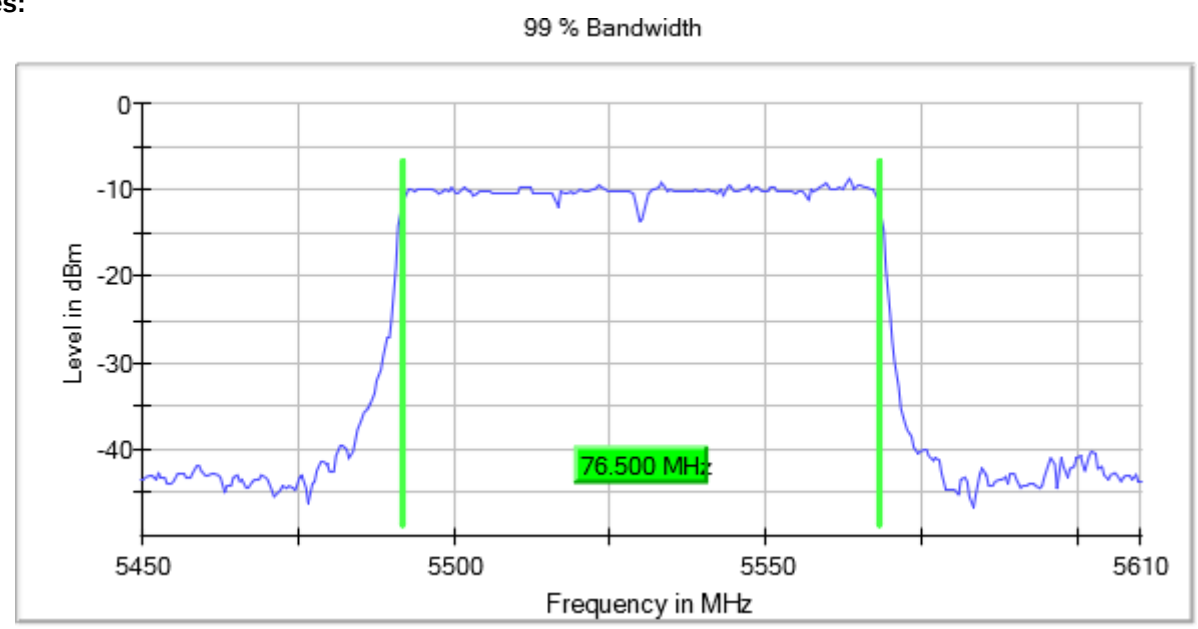
Pass

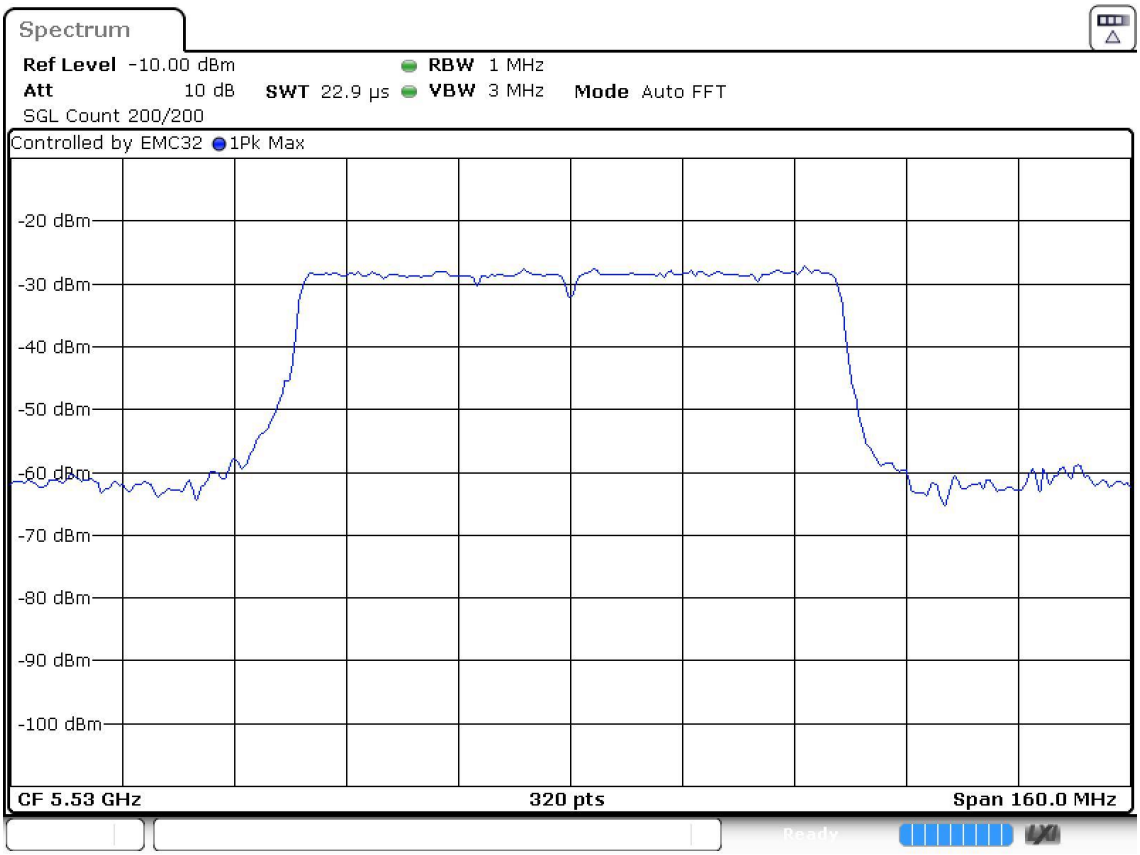
Attachments

Active Port = 1 Frequency MHz = 5530.00000

Modulation = 802.11ac VHT80 (OFDM MCS0) MIMO Mode = SISO

Images:

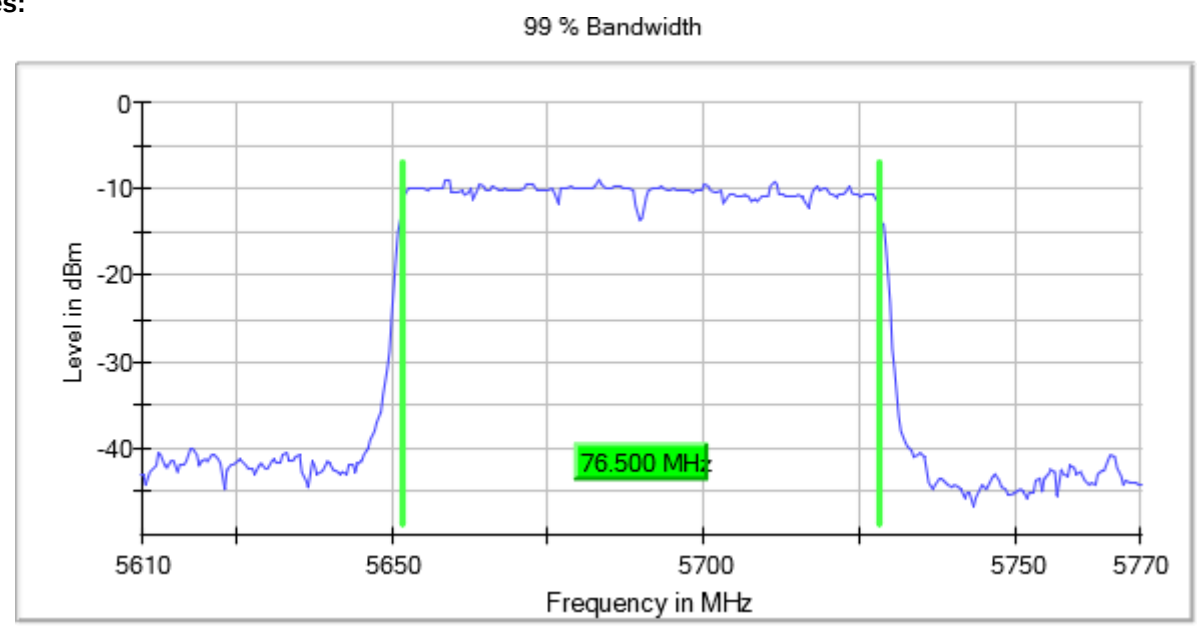


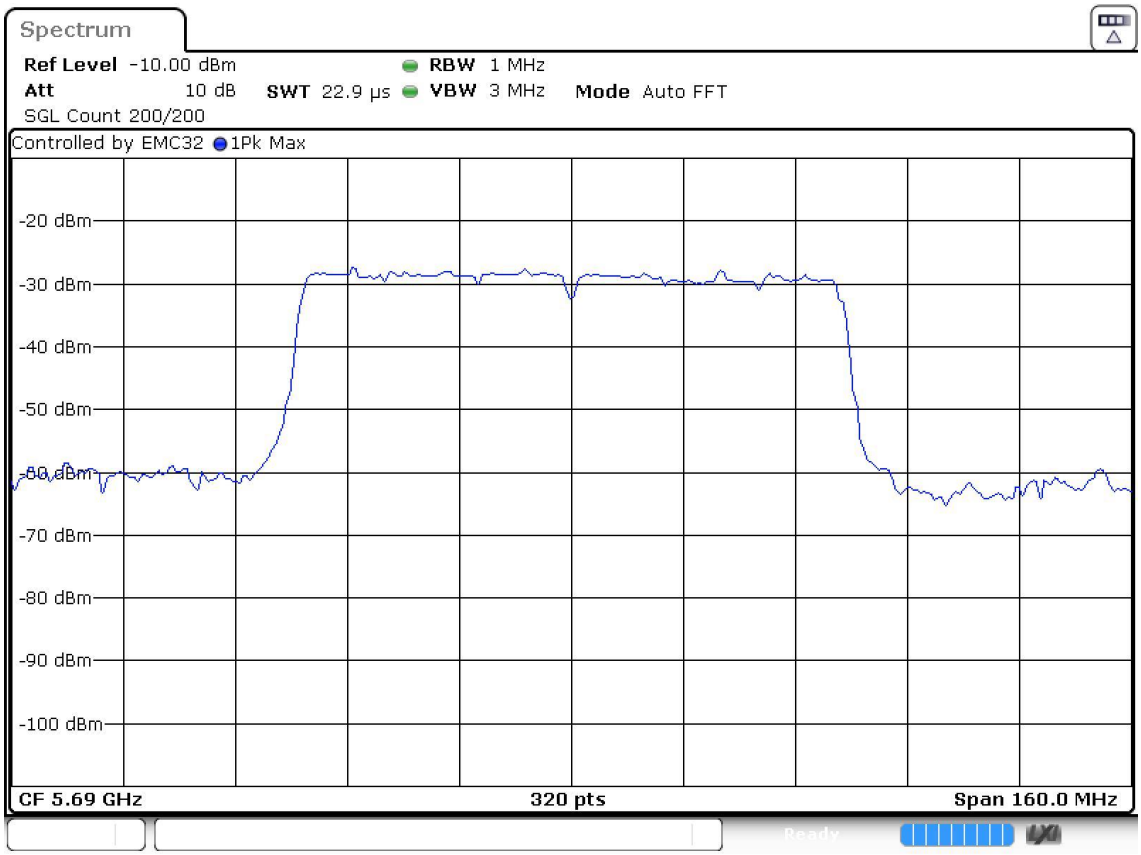


Active Port = 1 Frequency MHz = 5690.00000

Modulation = 802.11ac VHT80 (OFDM MCS0) MIMO Mode = SISO

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: 802.11a (OFDM 6 Mbit/s)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Ebw (MHz)
1	5500.00000	20.500
	5580.00000	20.400
	5720.00000	20.300

Verdict

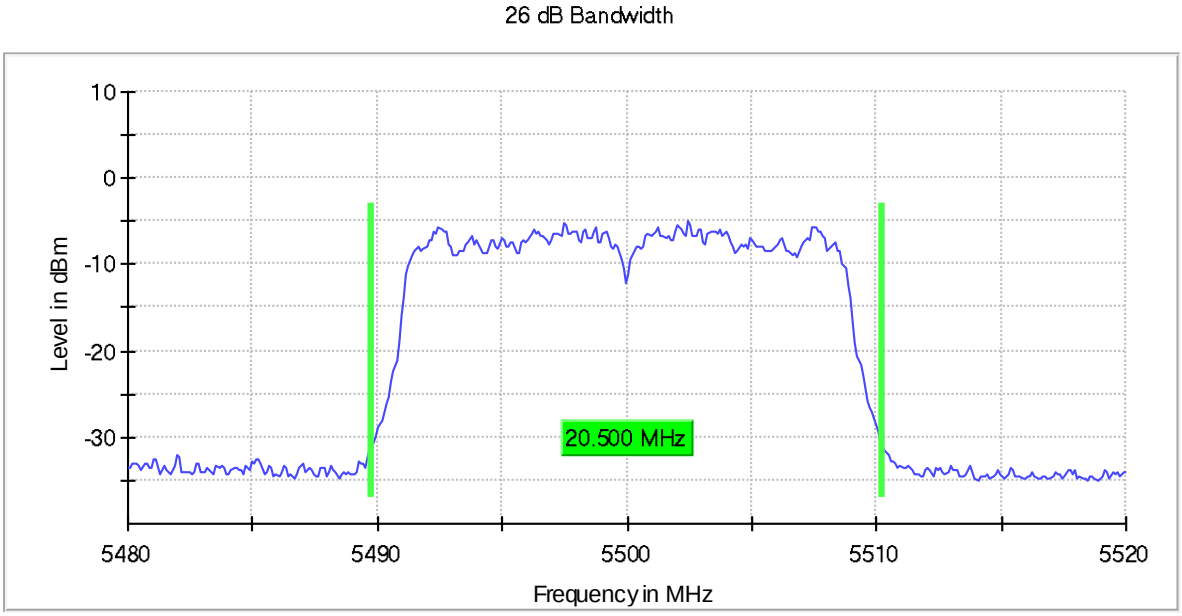
Pass

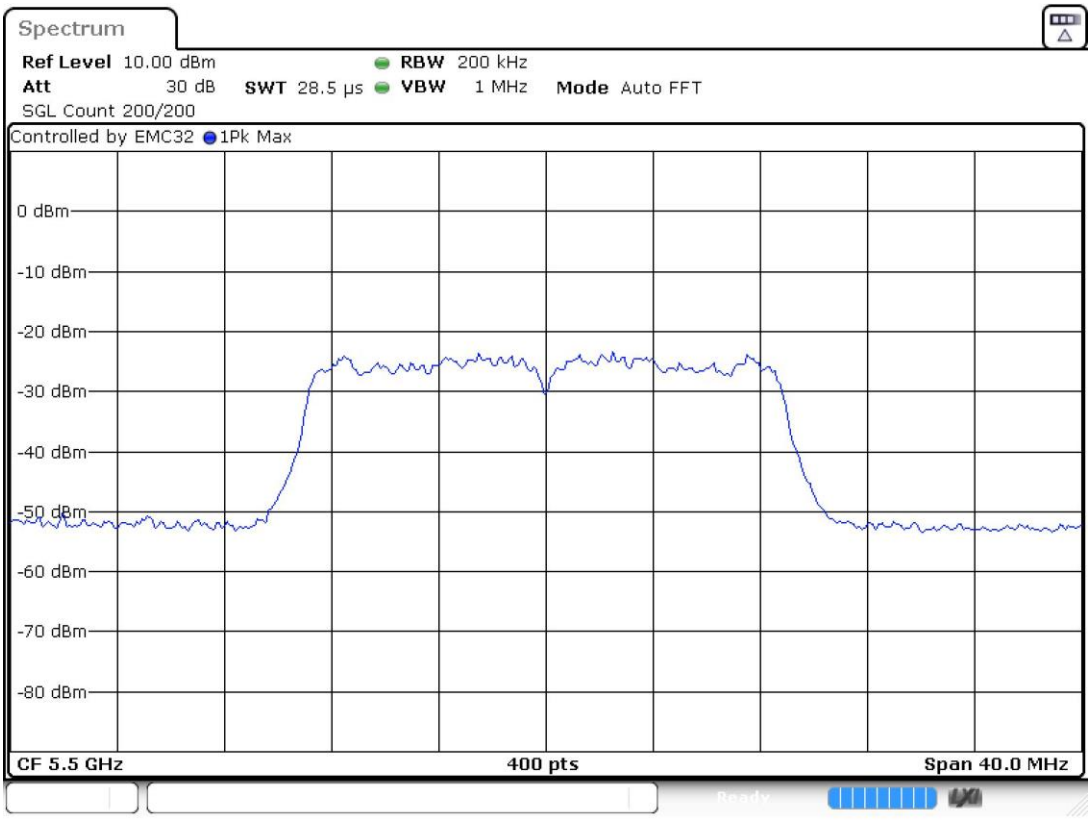
Attachments

Active Port = 1 Frequency MHz = 5500.00000

Modulation = 802.11n HT20 (OFDM MCS0) MIMO Mode = SISO

Images:

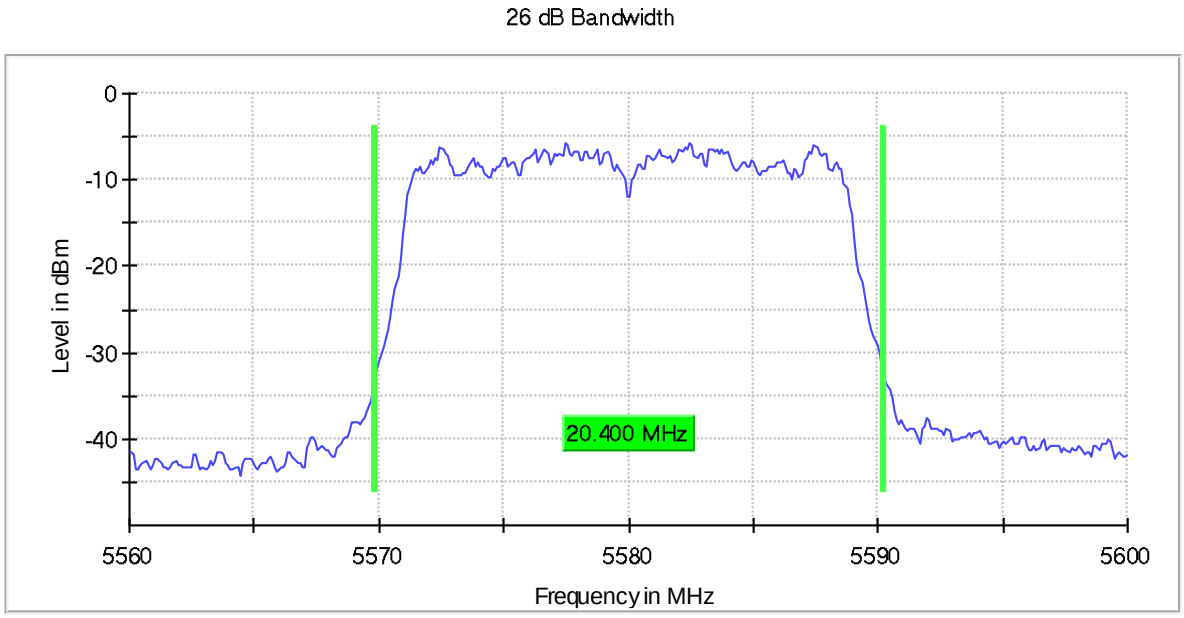


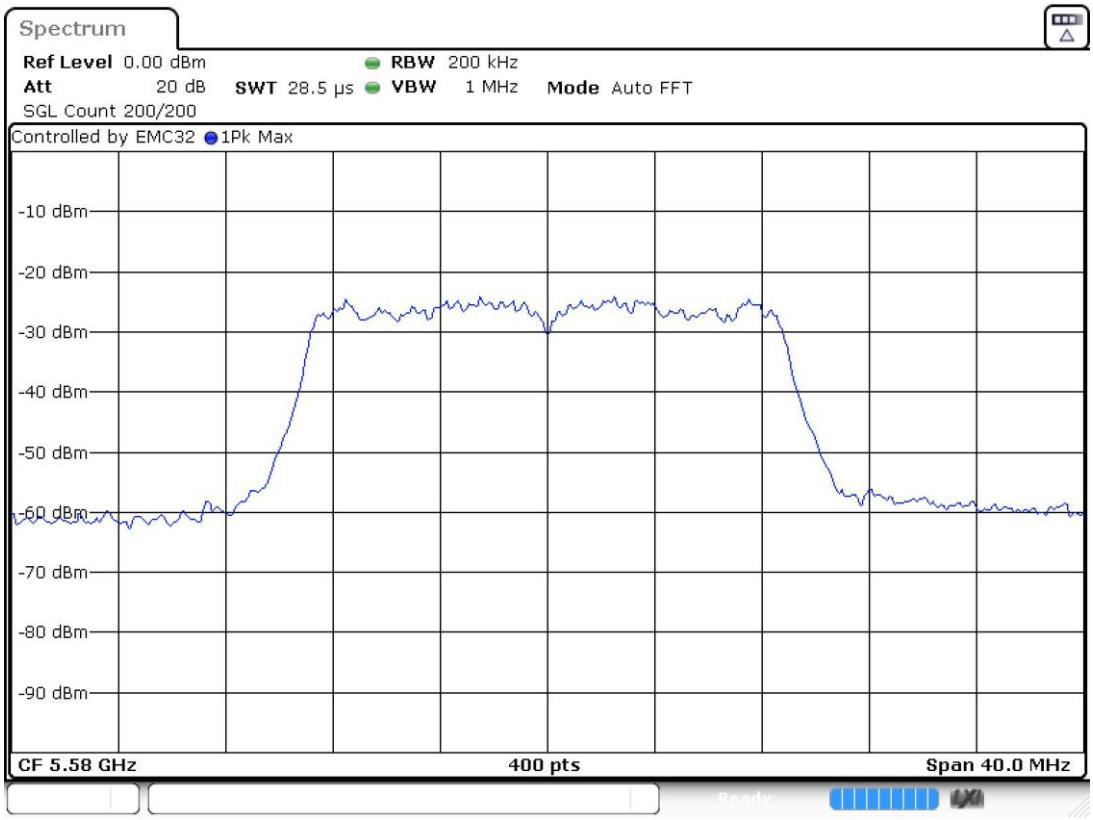


Active Port = 1 Frequency MHz = 5580.00000

Modulation = 802.11n HT20 (OFDM MCS0) MIMO Mode = SISO

Images:

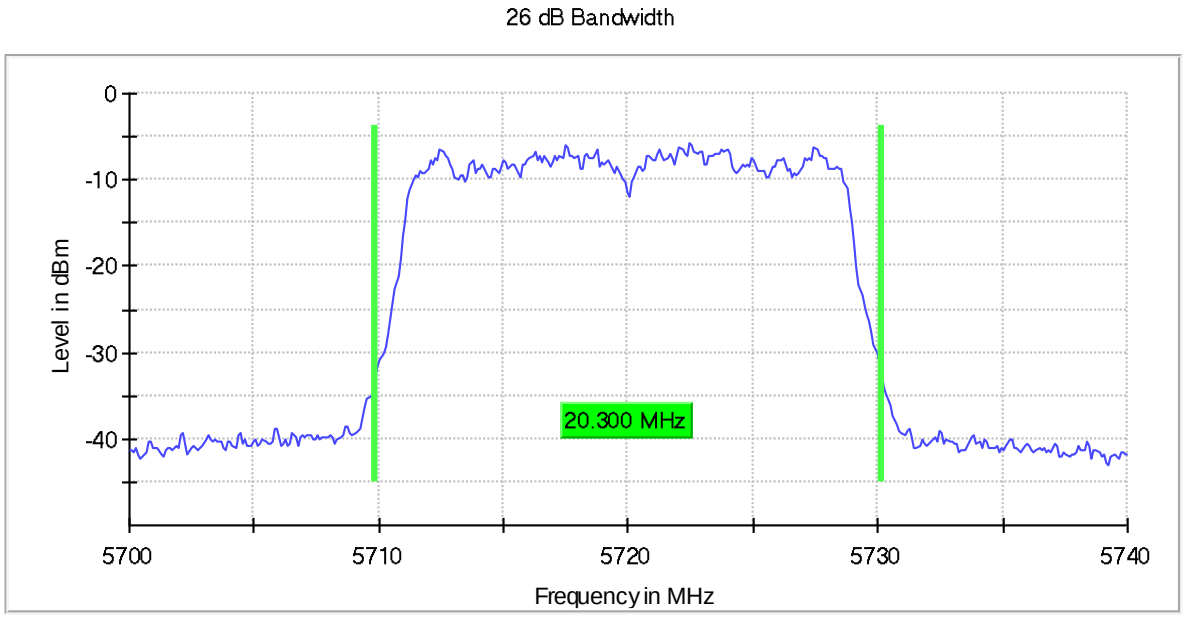


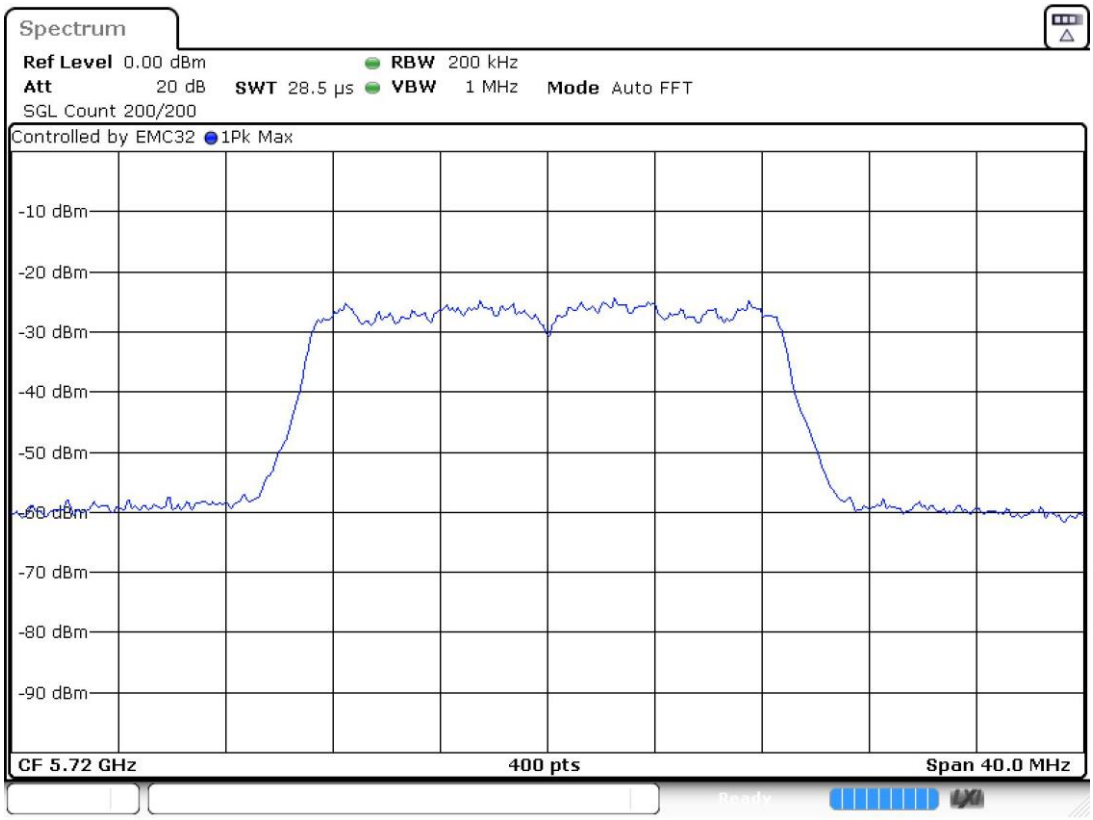


Active Port = 1 Frequency MHz = 5720.00000

Modulation = 802.11n HT20 (OFDM MCS0) MIMO Mode = SISO

Images:





Modulation: 802.11n HT40 (OFDM MCS0)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Ebw (MHz)
1	5510.00000	39.92
	5550.00000	40.525
	5710.00000	40.675

Verdict

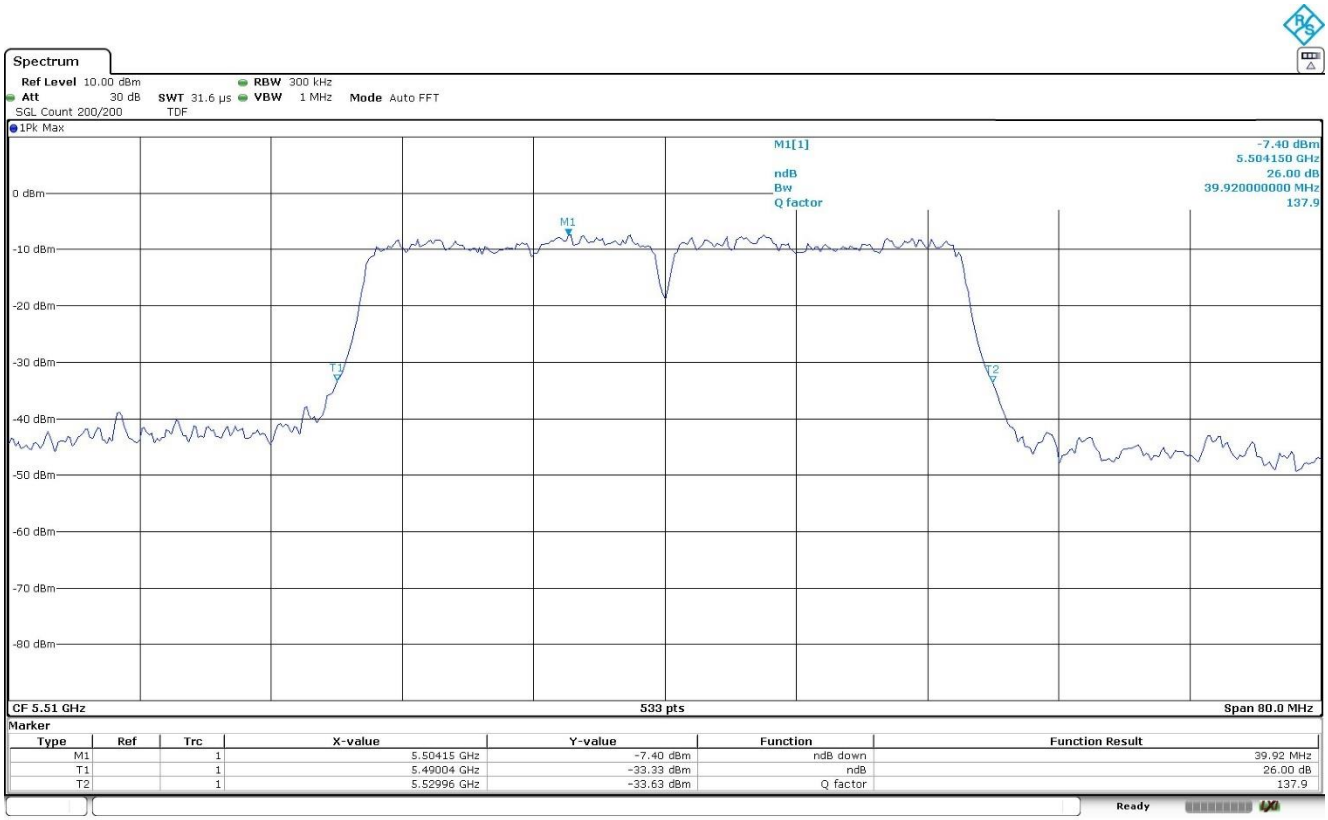
Pass

Attachments

Active Port = 1 Frequency MHz = 5510.00000

Modulation = 802.11n HT40 (OFDM MCS0) MIMO Mode = SISO

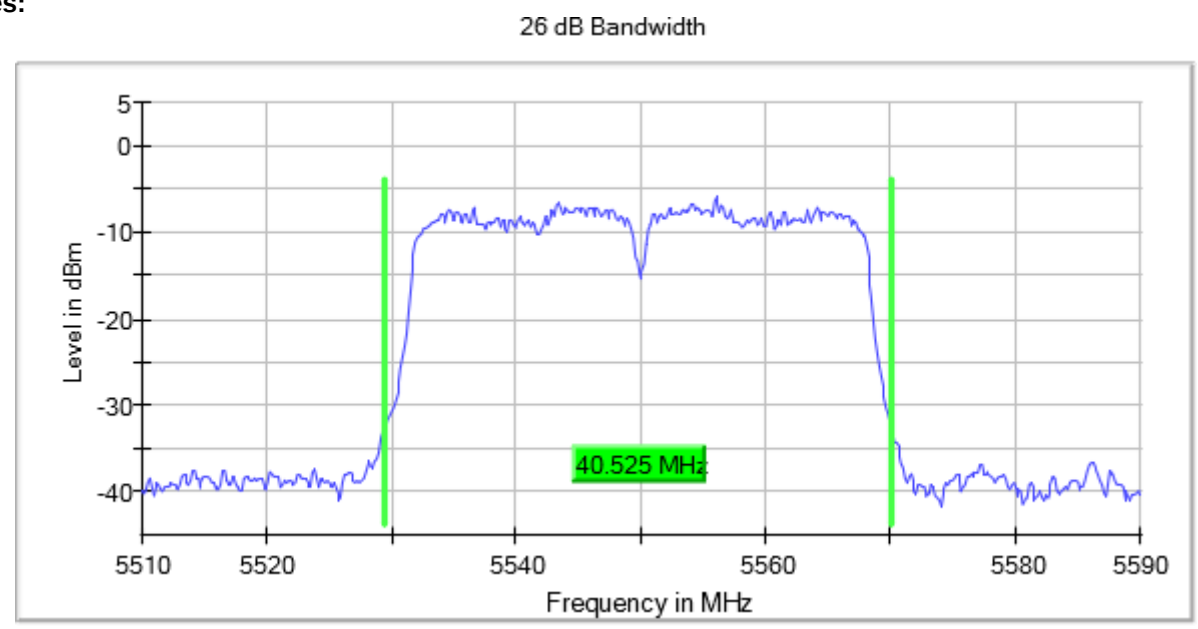
Images:

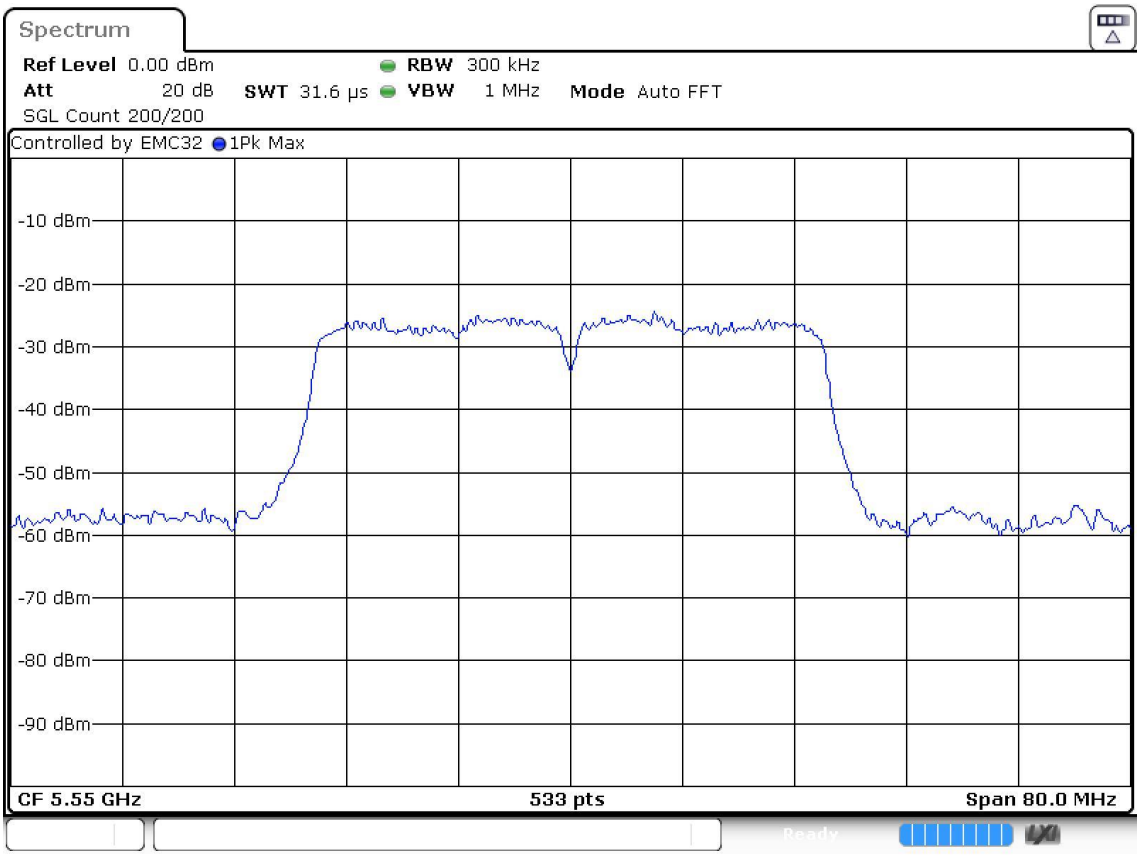


Active Port = 1 Frequency MHz = 5550.00000

Modulation = 802.11n HT40 (OFDM MCS0) MIMO Mode = SISO

Images:

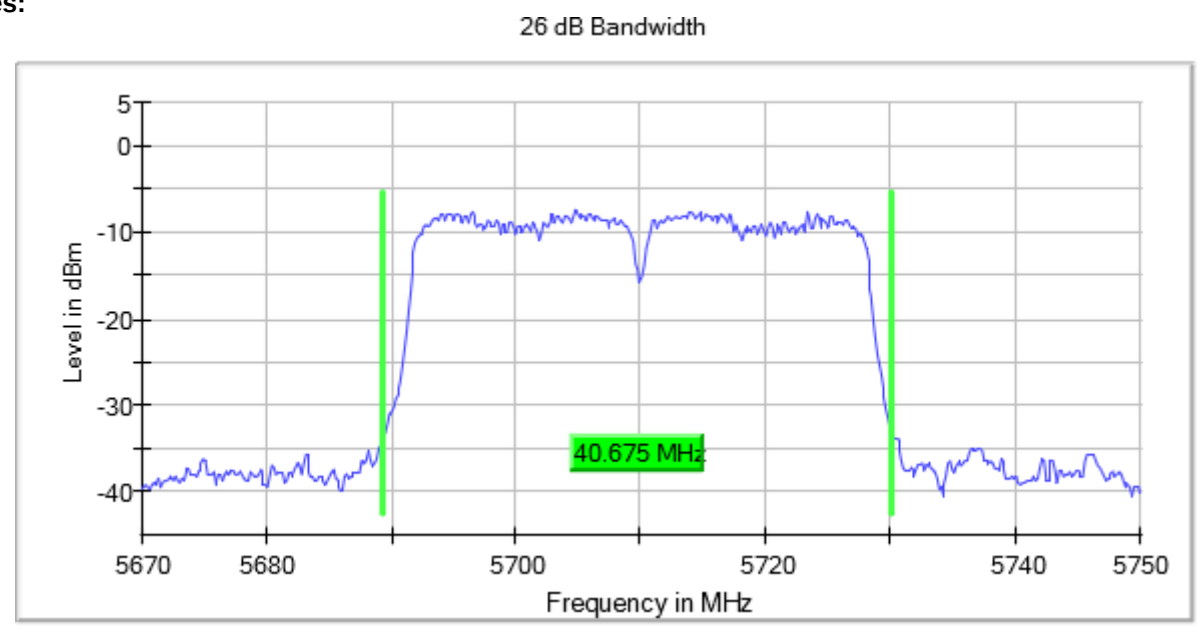


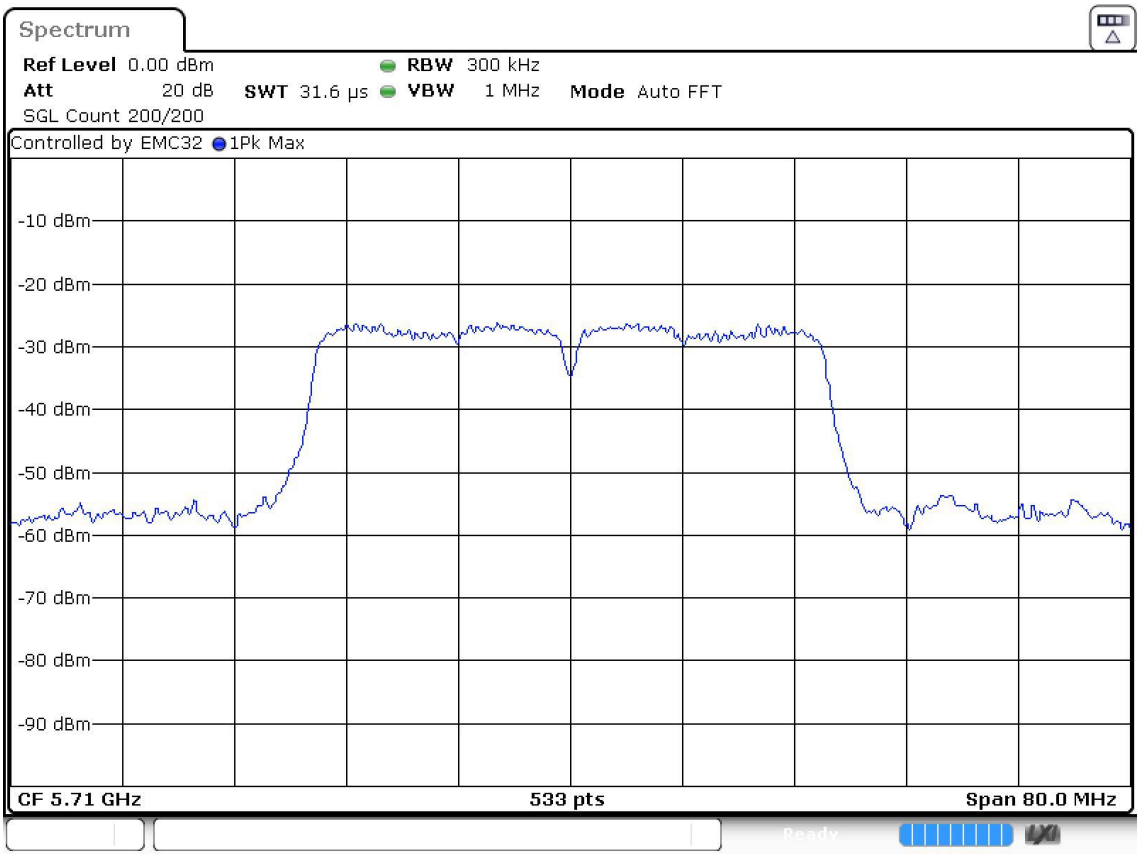


Active Port = 1 Frequency MHz = 5710.00000

Modulation = 802.11n HT40 (OFDM MCS0) MIMO Mode = SISO

Images:





Modulation: 802.11a (OFDM 6 Mbit/s)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Ebw (MHz)
1	5500.00000	20.000
	5580.00000	19.800
	5720.00000	19.900

Verdict

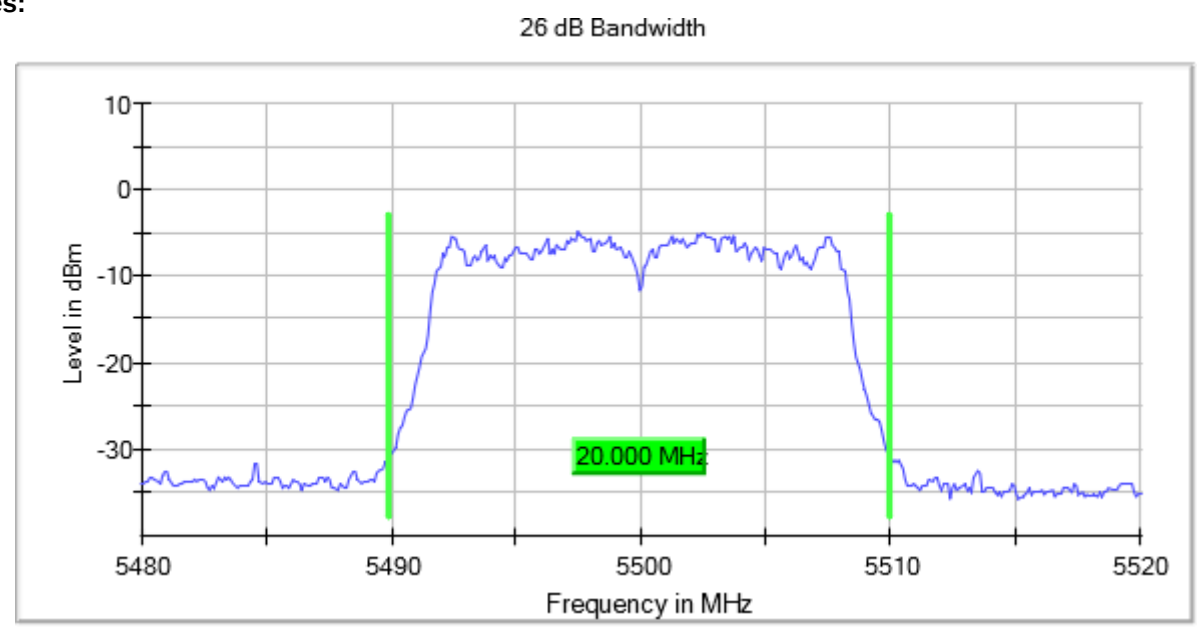
Pass

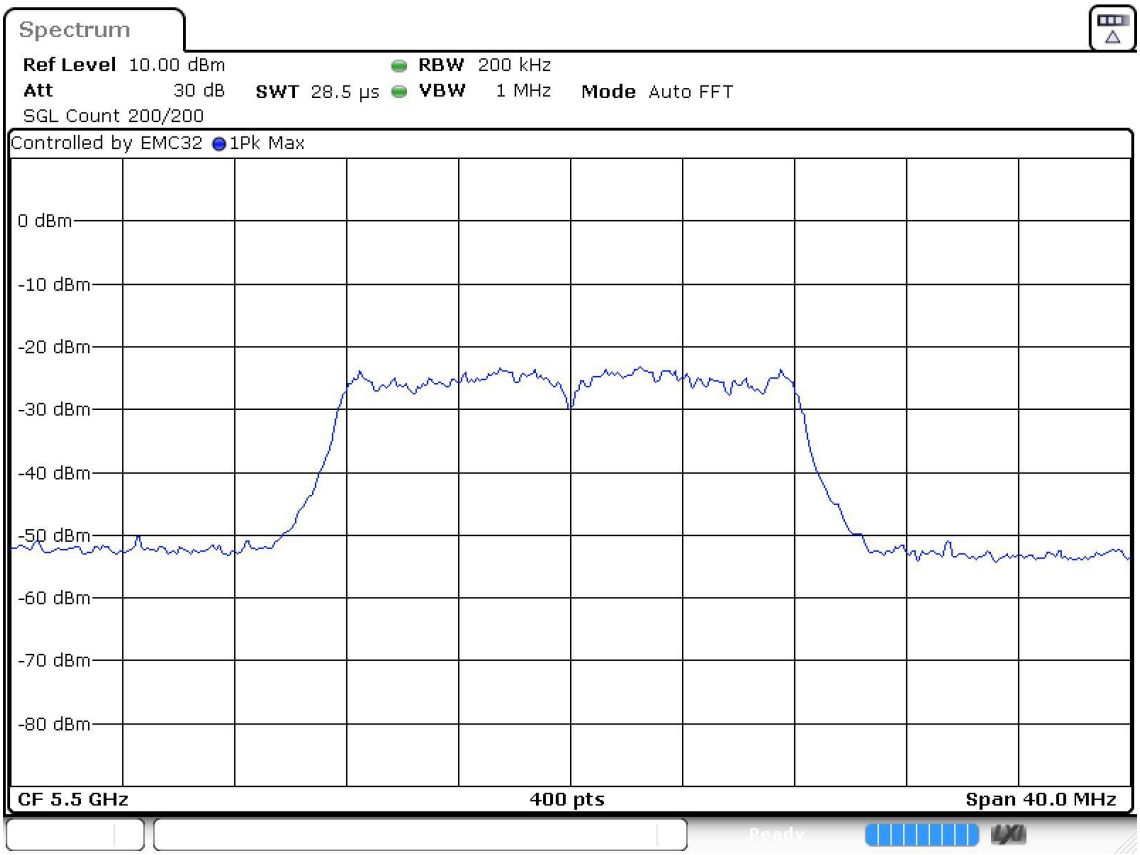
Attachments

Active Port = 1 Frequency MHz = 5500.00000

Modulation = 802.11a (OFDM 6 Mbit/s) MIMO Mode = SISO

Images:

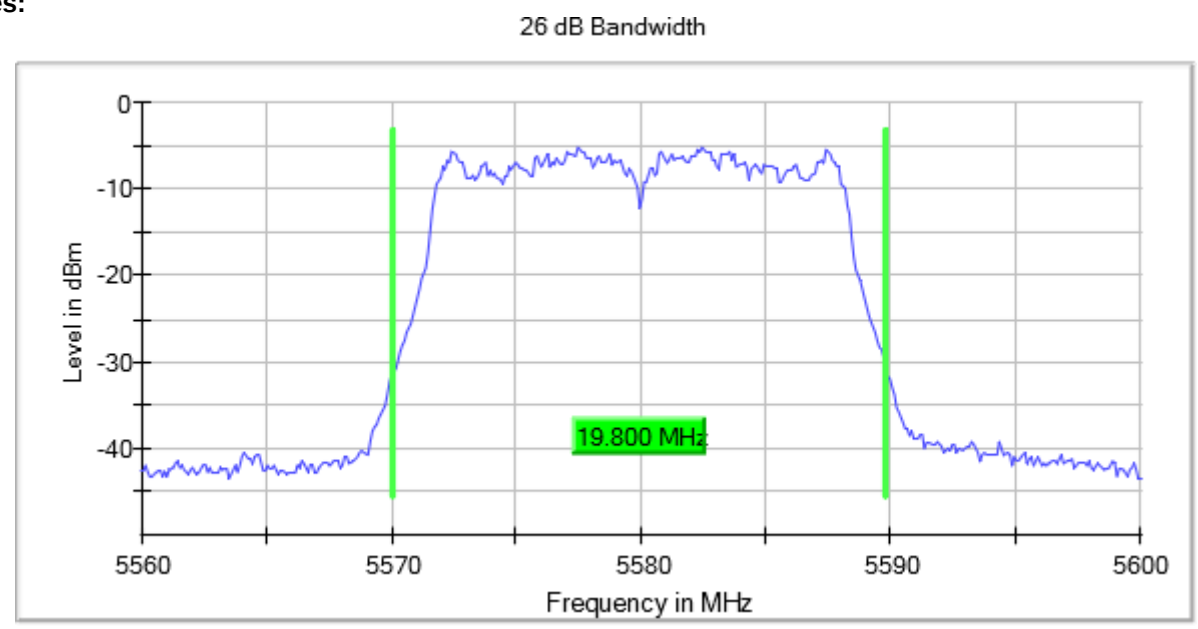


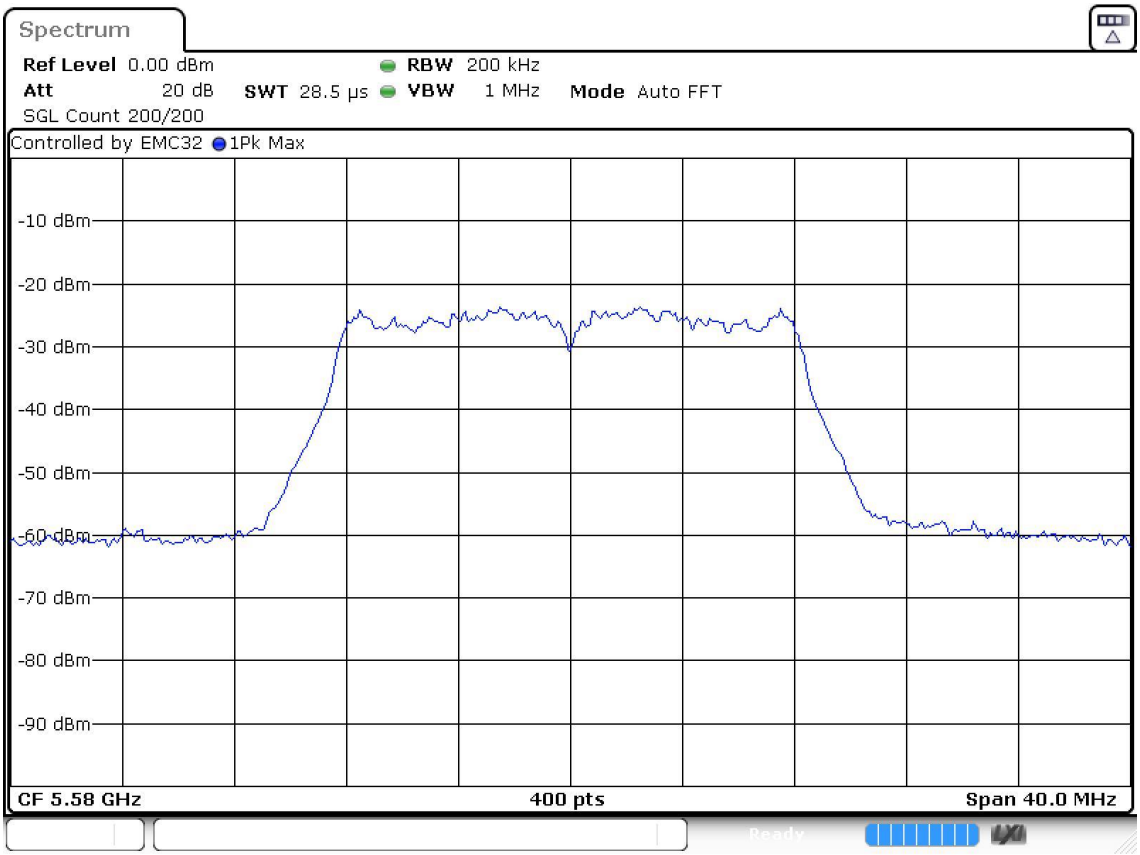


Active Port = 1 Frequency MHz = 5580.00000

Modulation = 802.11a (OFDM 6 Mbit/s) MIMO Mode = SISO

Images:

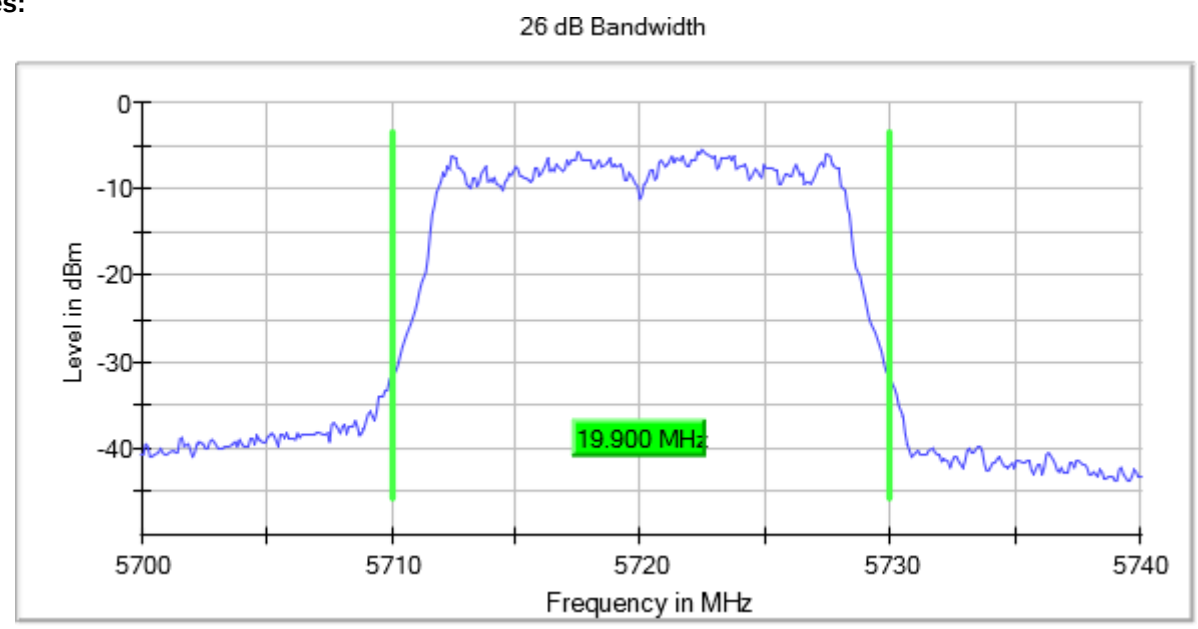


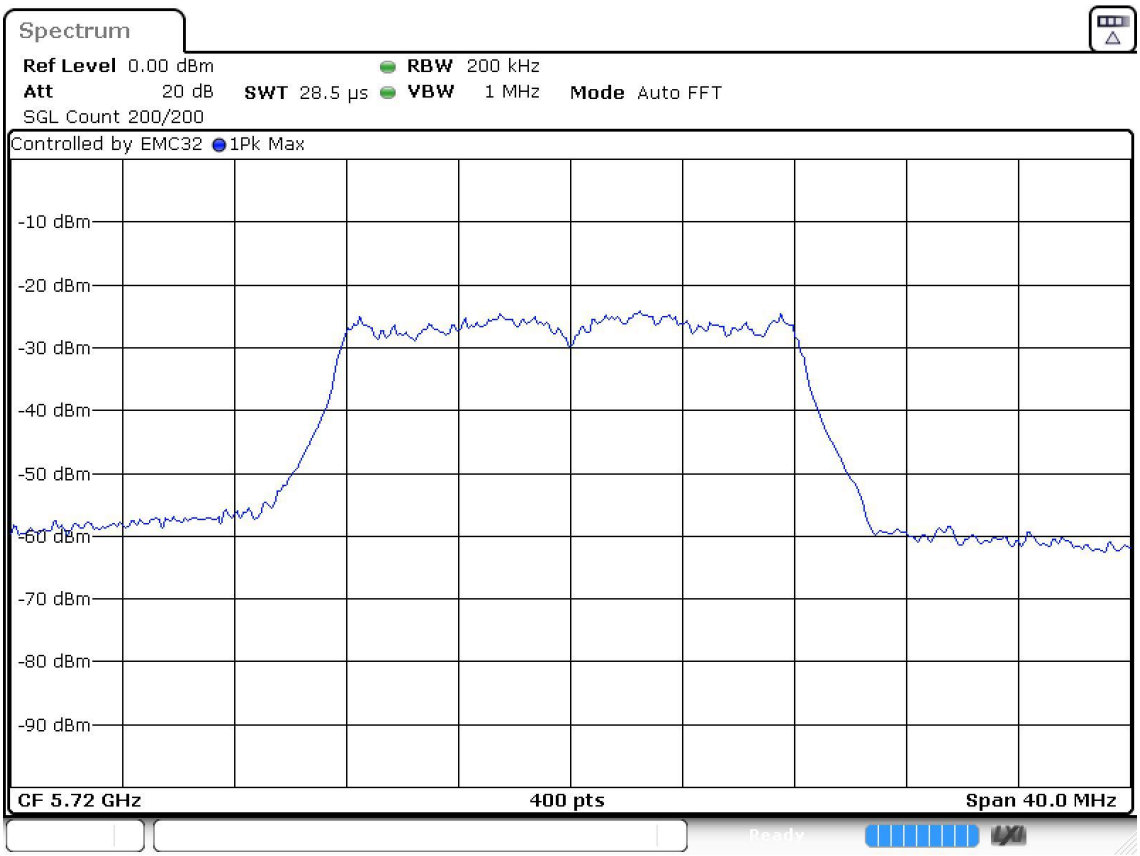


Active Port = 1 Frequency MHz = 5720.00000

Modulation = 802.11a (OFDM 6 Mbit/s) MIMO Mode = SISO

Images:





Modulation: 802.11ac VHT20 (OFDM MCS0)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Ebw (MHz)
1	5500.00000	20.000
	5580.00000	20.400
	5720.00000	20.300

Verdict

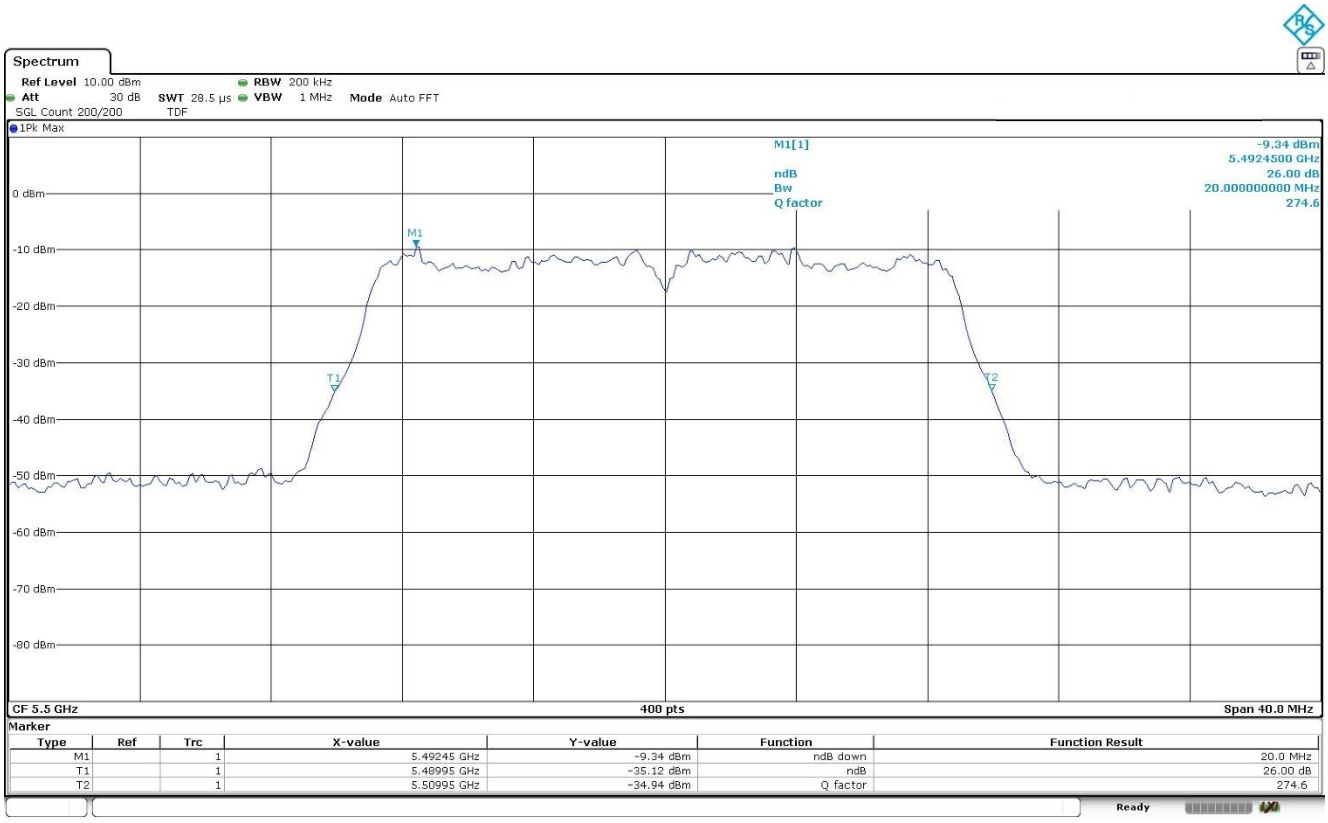
Pass

Attachments

Active Port = 1 Frequency MHz = 5500.00000

Modulation = 802.11ac VHT20 (OFDM MCS0) MIMO Mode = SISO

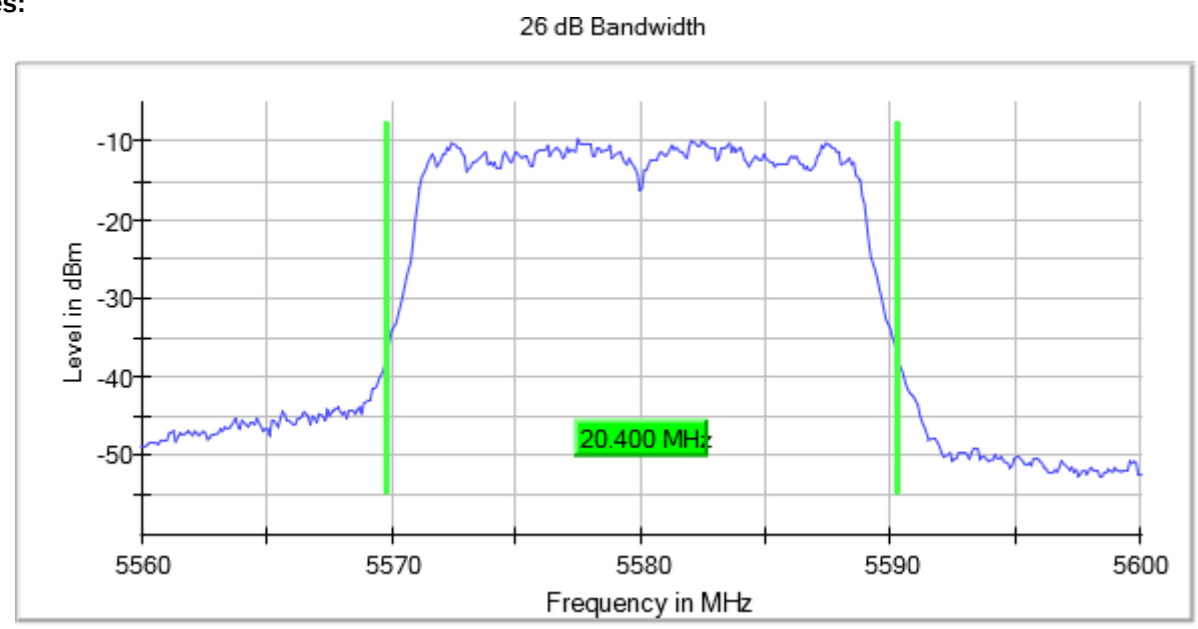
Images:

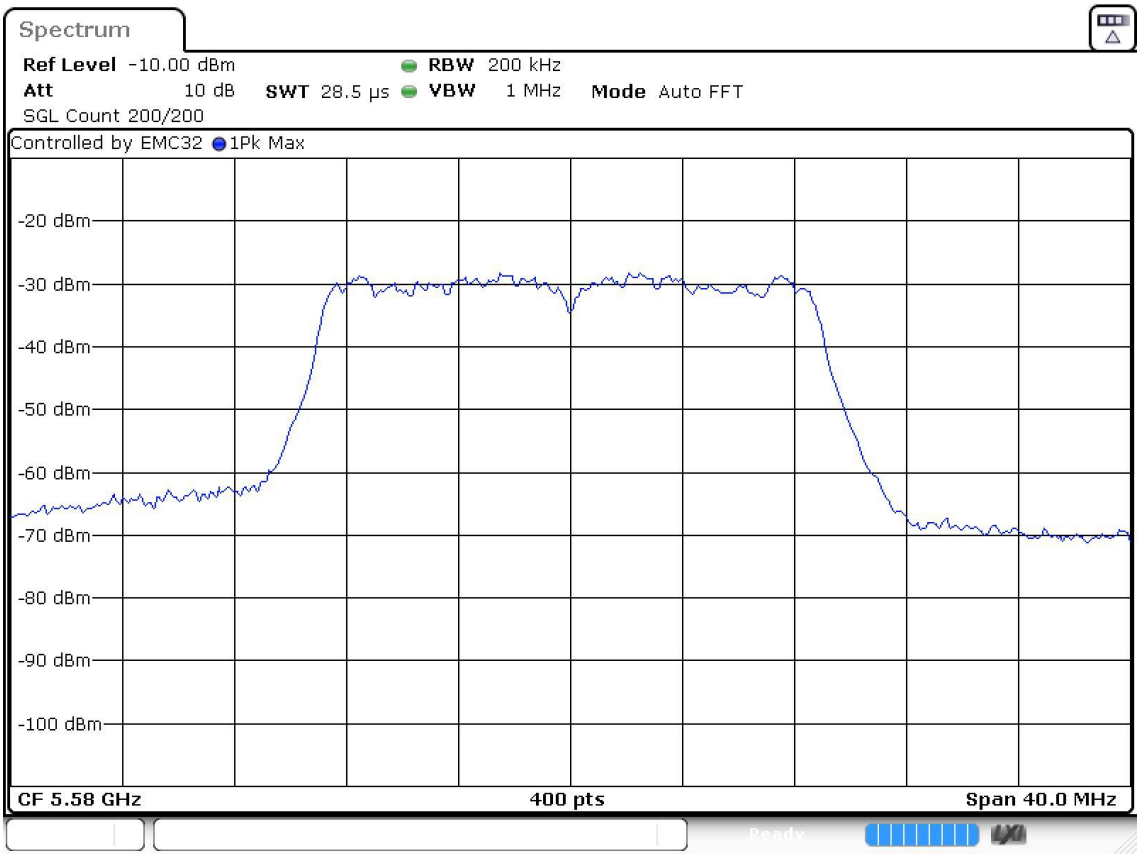


Active Port = 1 Frequency MHz = 5580.00000

Modulation = 802.11ac VHT20 (OFDM MCS0) MIMO Mode = SISO

Images:

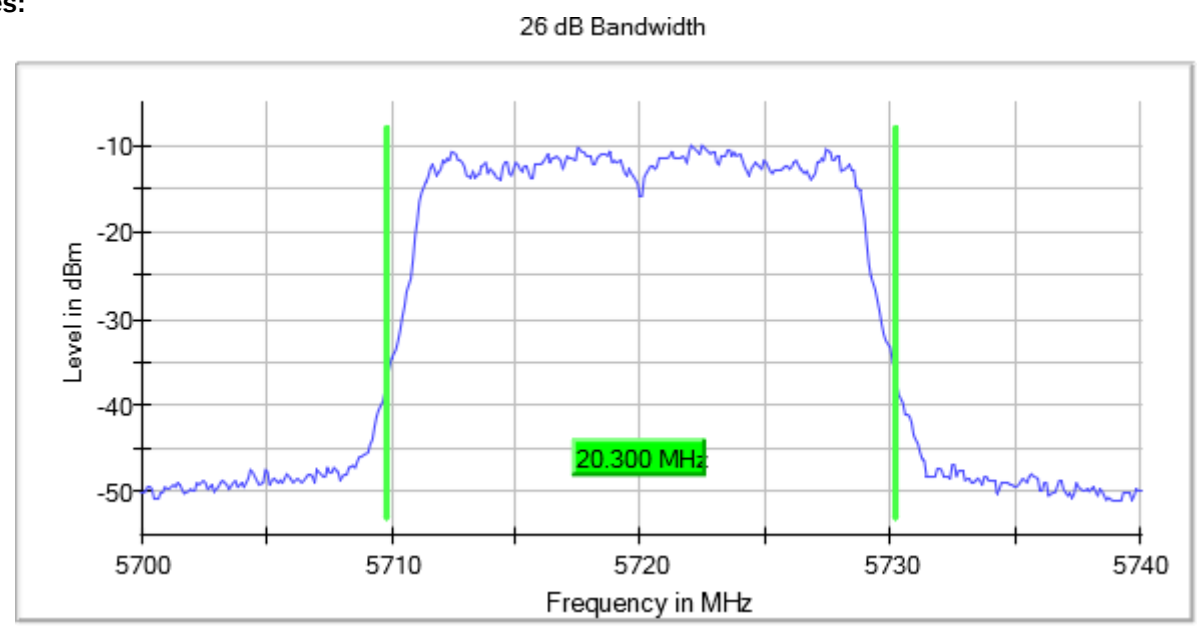


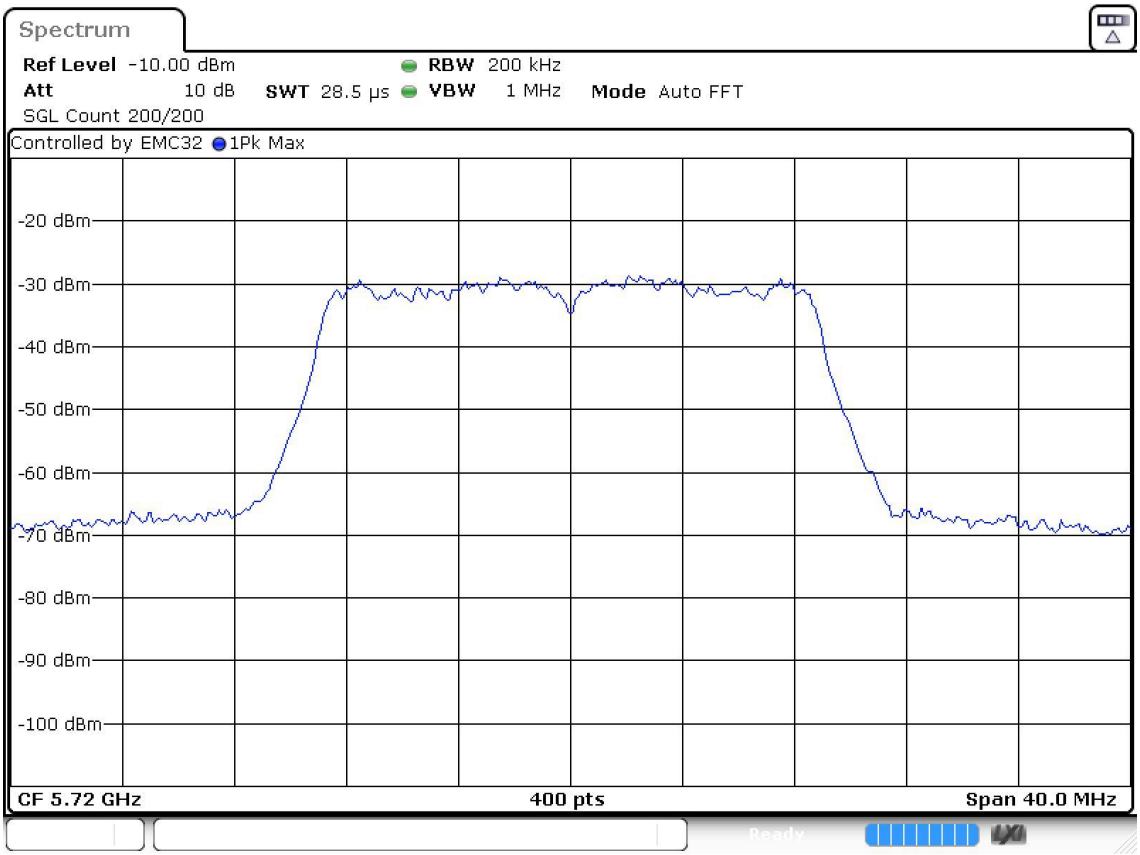


Active Port = 1 Frequency MHz = 5720.00000

Modulation = 802.11ac VHT20 (OFDM MCS0) MIMO Mode = SISO

Images:





Modulation: 802.11ac VHT40 (OFDM MCS0)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Ebw (MHz)
1	5510.00000	39.170
	5550.00000	40.375
	5710.00000	40.375

Verdict

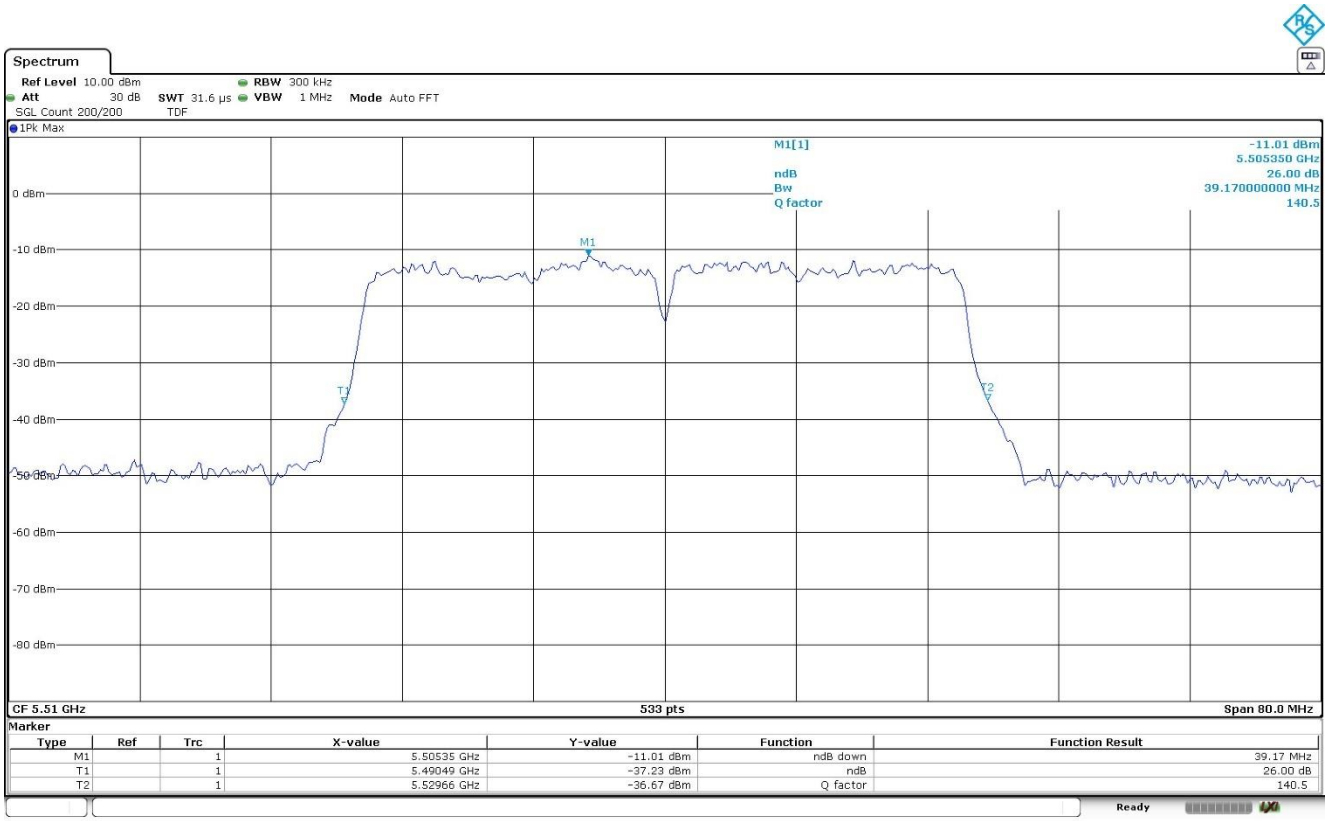
Pass

Attachments

Active Port = 1 Frequency MHz = 5510.00000

Modulation = 802.11ac VHT40 (OFDM MCS0) MIMO Mode = SISO

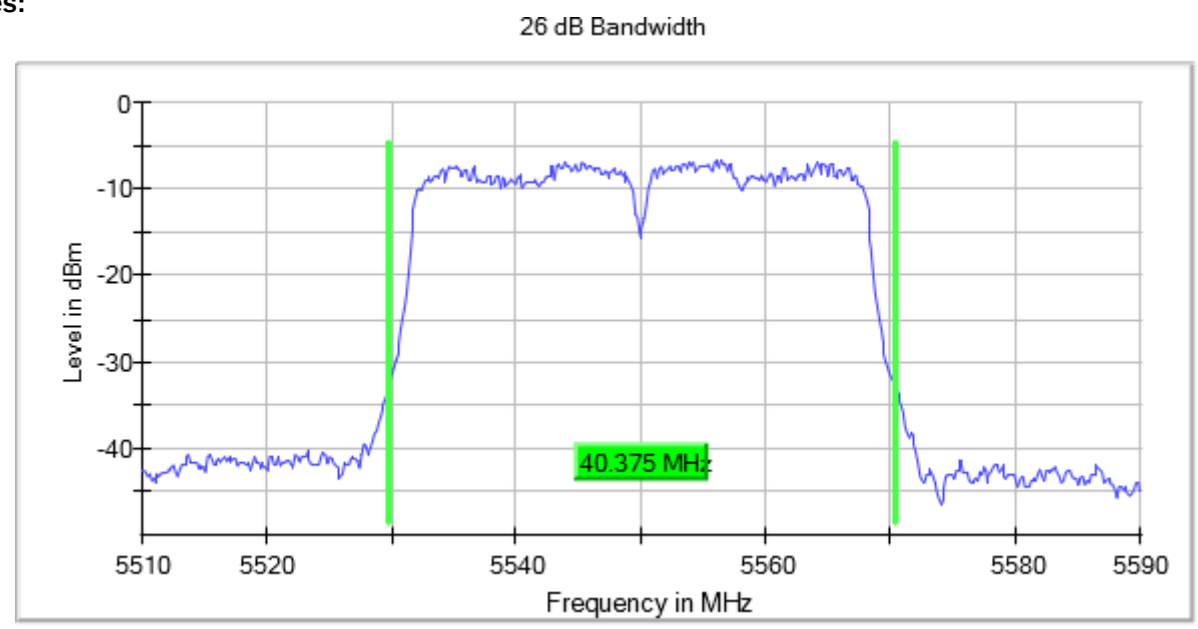
Images:

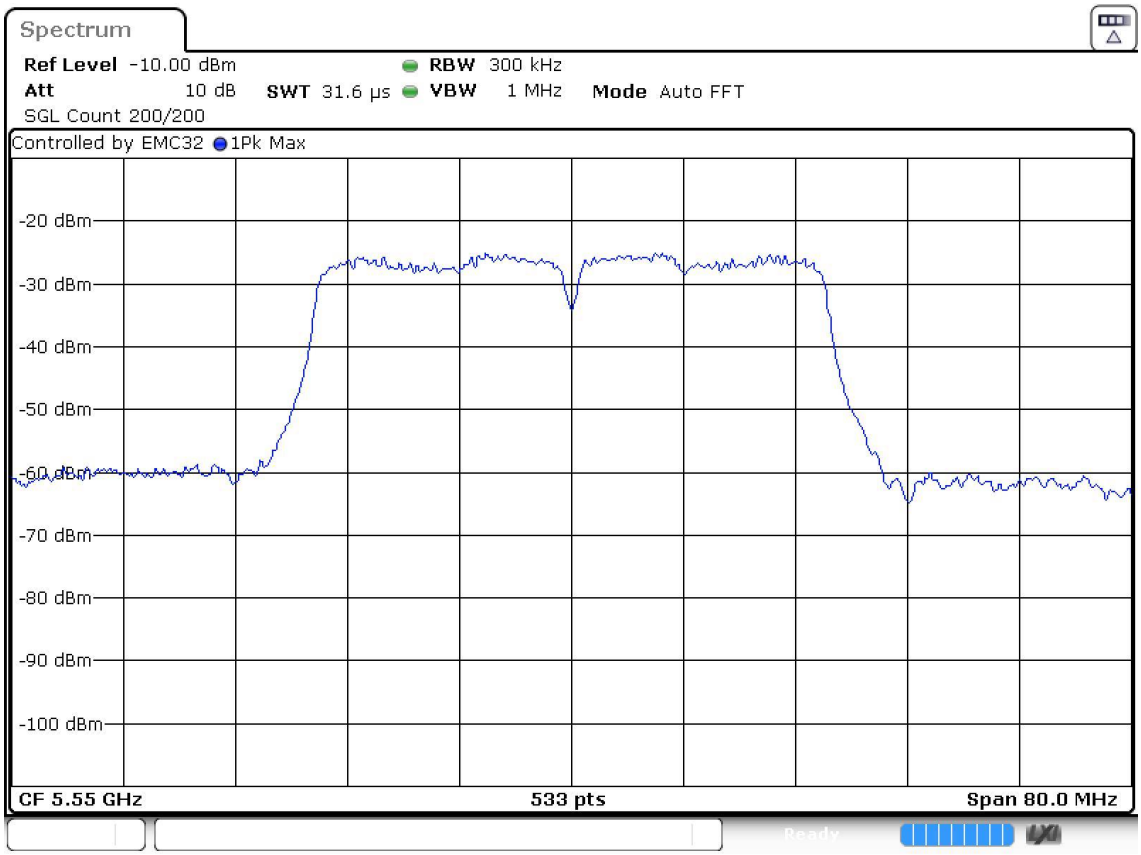


Active Port = 1 Frequency MHz = 5550.00000

Modulation = 802.11ac VHT40 (OFDM MCS0) MIMO Mode = SISO

Images:

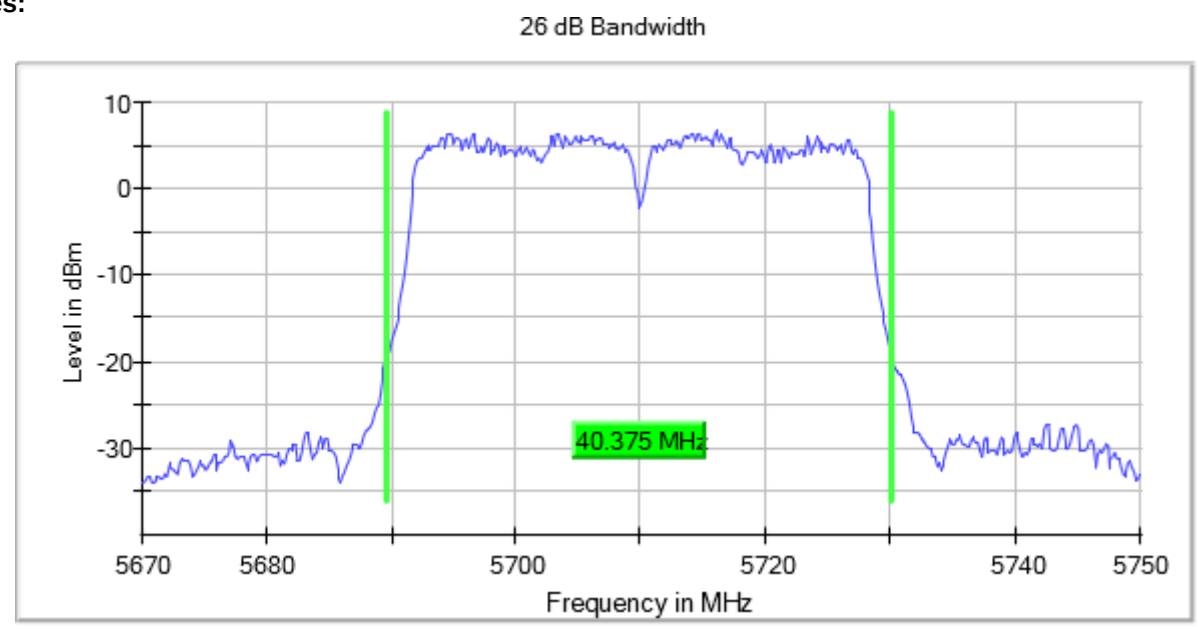


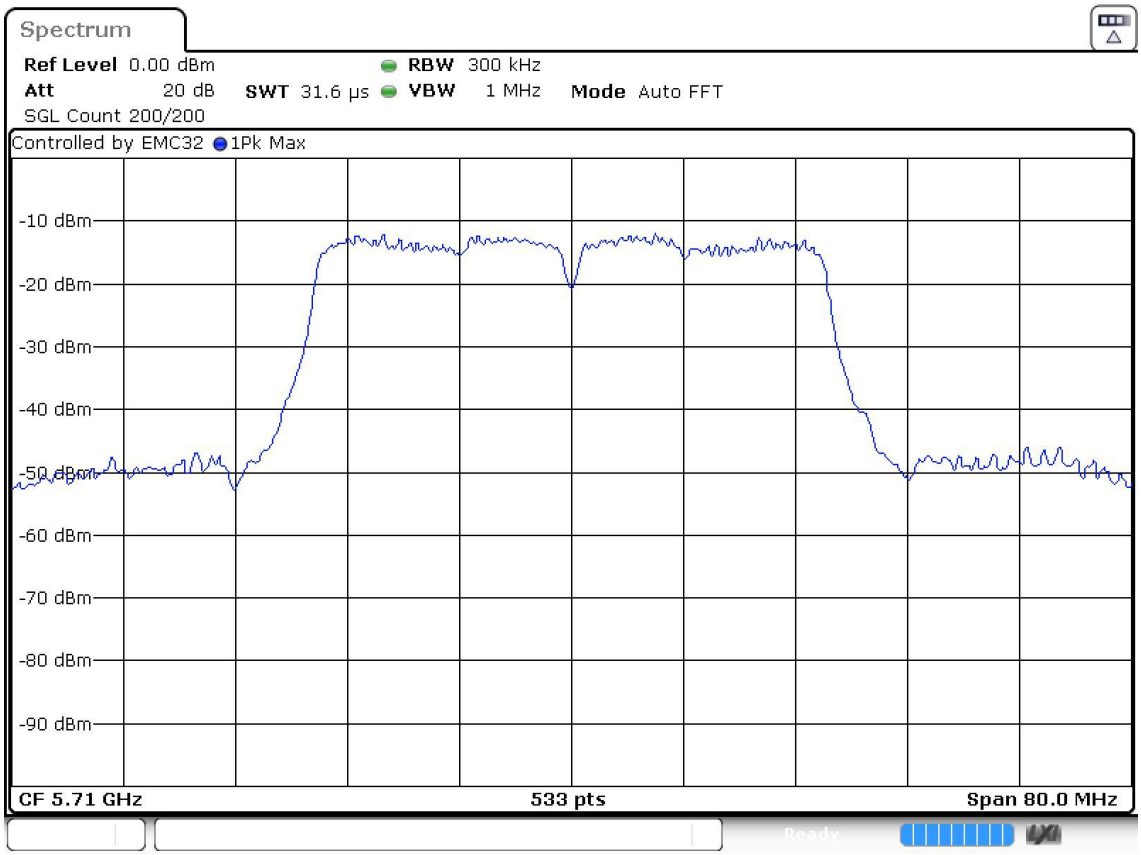


Active Port = 1 Frequency MHz = 5710.00000

Modulation = 802.11ac VHT40 (OFDM MCS0) MIMO Mode = SISO

Images:





Modulation: 802.11ac VHT80 (OFDM MCS0)

MIMO Mode: SISO

Results

Port	Freq (MHz)	Ebw (MHz)
1	5530.00000	81.500
	5690.00000	85.000

Verdict

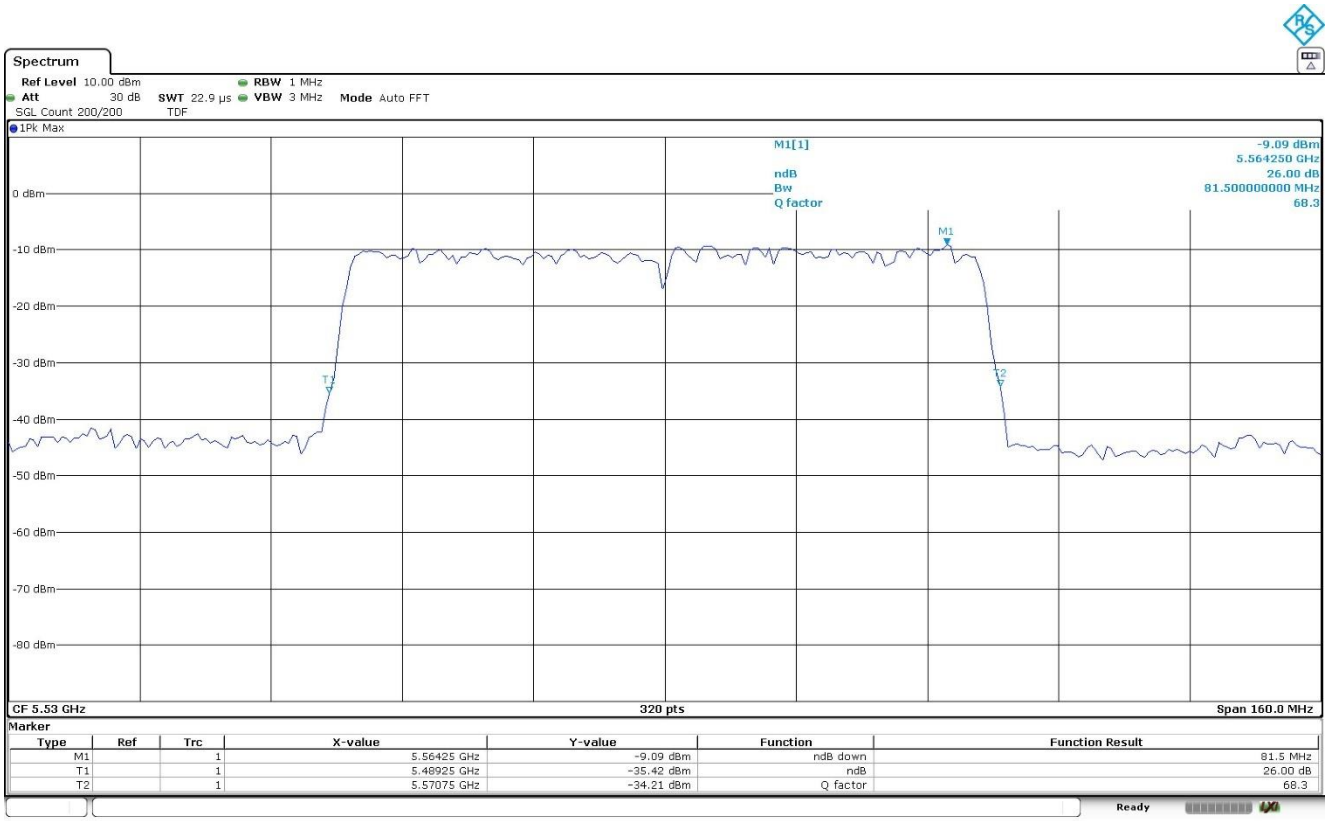
Pass

Attachments

Active Port = 1 Frequency MHz = 5530.00000

Modulation = 802.11ac VHT80 (OFDM MCS0) MIMO Mode = SISO

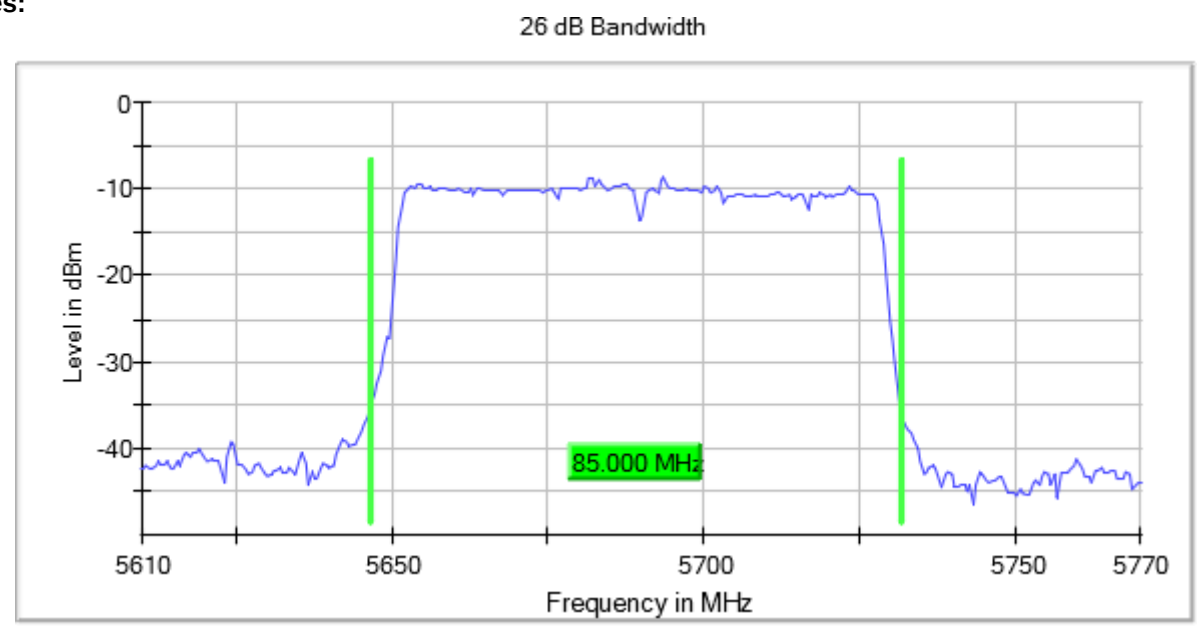
Images:

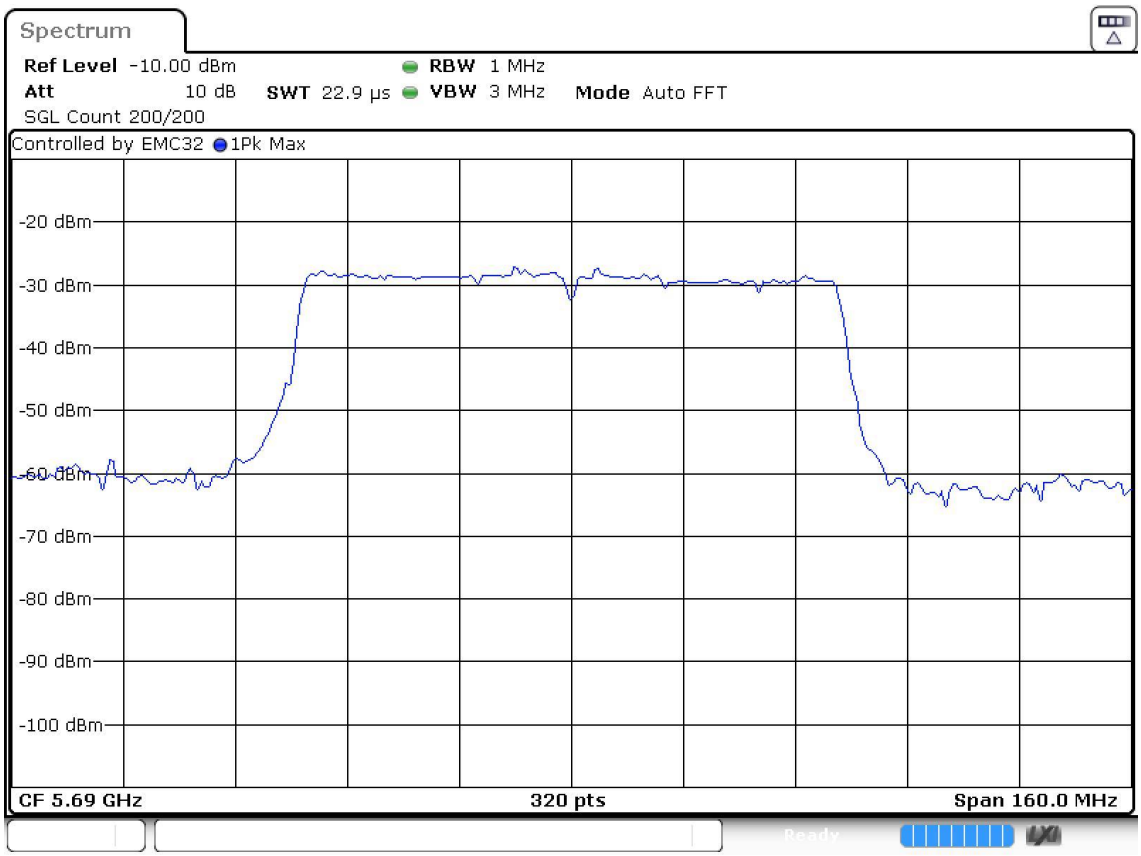


Active Port = 1 Frequency MHz = 5690.00000

Modulation = 802.11ac VHT80 (OFDM MCS0) MIMO Mode = SISO

Images:





RSS-247 6.2.3.2 / FCC 15.407 (b) (3) (6) [Rse] Transmitter Out of Band Radiated Emissions For transmitters operating in the 5.47-5.725 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.

MIMO Mode: SISO

Tests results for worst-case 20MHz Modulation: 802.11n HT20 (OFDM MCS0)

Tests results for worst-case 40MHz Modulation: 802.11n HT40 (OFDM MCS0)

Tests results for worst-case 80MHz Modulation: 802.11ac VHT80 (OFDM MCS0)

Duty Cycle correction for 20MHz: 0dB

Duty Cycle correction for 40MHz: +0.39dB

Duty Cycle correction for 80MHz: +0.92dB

Frequency Range GHz = [0.03, 1]

The spurious frequencies detected do not depend on the channel neither the modulation

Results

Port	Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Unwanted Lvl Corrected (dBµV/m)	Pol	Detector
1	[0.03, 1]	43.793	30.50	30.50	H	QP
		43.793	32.59	32.59	H	PK
		54.910	31.59	31.59	H	PK
		54.910	27.70	27.70	H	QP
		58.663	32.68	32.68	H	PK
		58.663	28.99	28.99	H	QP
		59.294	30.12	30.12	H	PK
		59.294	26.61	26.61	H	QP
		60.235	30.52	30.52	H	QP
		60.235	32.42	32.42	H	PK
		66.288	32.41	32.41	H	PK
		66.288	30.49	30.49	H	QP

Verdict

Pass

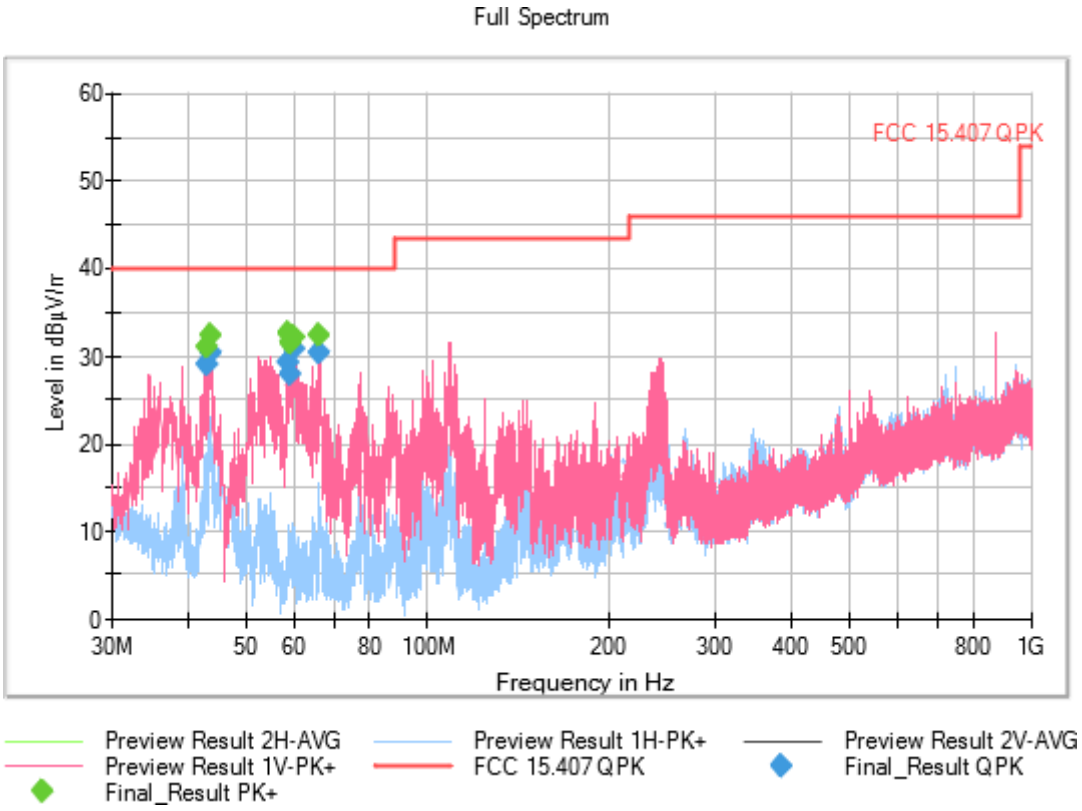
Attachments

Active Port = 1 Frequency Range GHz = [0.03, 1]

The spurious frequencies detected do not depend on the transmission Band or the Modulation

MIMO Mode = SISO

Images:



Frequency Range GHz = [1, 17]

Modulation: 802.11a (OFDM 6 Mbit/s)

Results

No spurious frequencies detected at less than 20 dB below the limit.

Modulation: 802.11n HT20 (OFDM MCS0)

Results

Port	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Unwanted Lvl (dBµV/m) Corrected	Pol	Detector
1	5580.00000	1334.565	42.47	42.47	V	AVG
1	5580.00000	1334.565	56.84	56.84	V	PK
1	5720.00000	1334.730	42.21	42.21	V	AVG
1	5720.00000	1334.730	56.69	56.69	V	PK

Modulation: 802.11n HT40 (OFDM MCS0)

Results

Port	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Unwanted Lvl (dBµV/m) Corrected	Pol	Detector
1	5510.00000	1008.800	55.78	56.17	V	PK
1	5510.00000	1008.800	41.82	42.21	V	AVG
1	5510.00000	1343.420	57.16	57.52	V	PK
1	5510.00000	1343.420	42.71	43.10	V	AVG
1	5550.00000	1000.110	57.04	57.43	V	PK
1	5550.00000	1000.110	39.67	40.06	V	AVG
1	5710.00000	1004.070	56.93	57.32	V	PK
1	5710.00000	1004.070	39.13	39.52	V	AVG

Modulation: 802.11ac VHT20 (OFDM MCS0)

Results

No spurious frequencies detected at less than 20 dB below the limit.

Modulation: 802.11ac VHT40 (OFDM MCS0)

Results

No spurious frequencies detected at less than 20 dB below the limit.

Modulation: 802.11ac VHT80 (OFDM MCS0)

Results

Port	Freq (MHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Unwanted Lvl (dBµV/m) Corrected	Pol	Detector
1	5530.00000	1010.450	47.77	48.69	V	PK
1	5530.00000	1010.450	39.64	40.56	V	AVG
1	5530.00000	1357.280	50.22	51.14	V	PK
1	5530.00000	1357.280	40.99	41.91	V	AVG
1	5690.00000	1004.675	57.67	58.59	V	PK
1	5690.00000	1004.675	39.02	39.94	V	AVG

Verdict

Pass

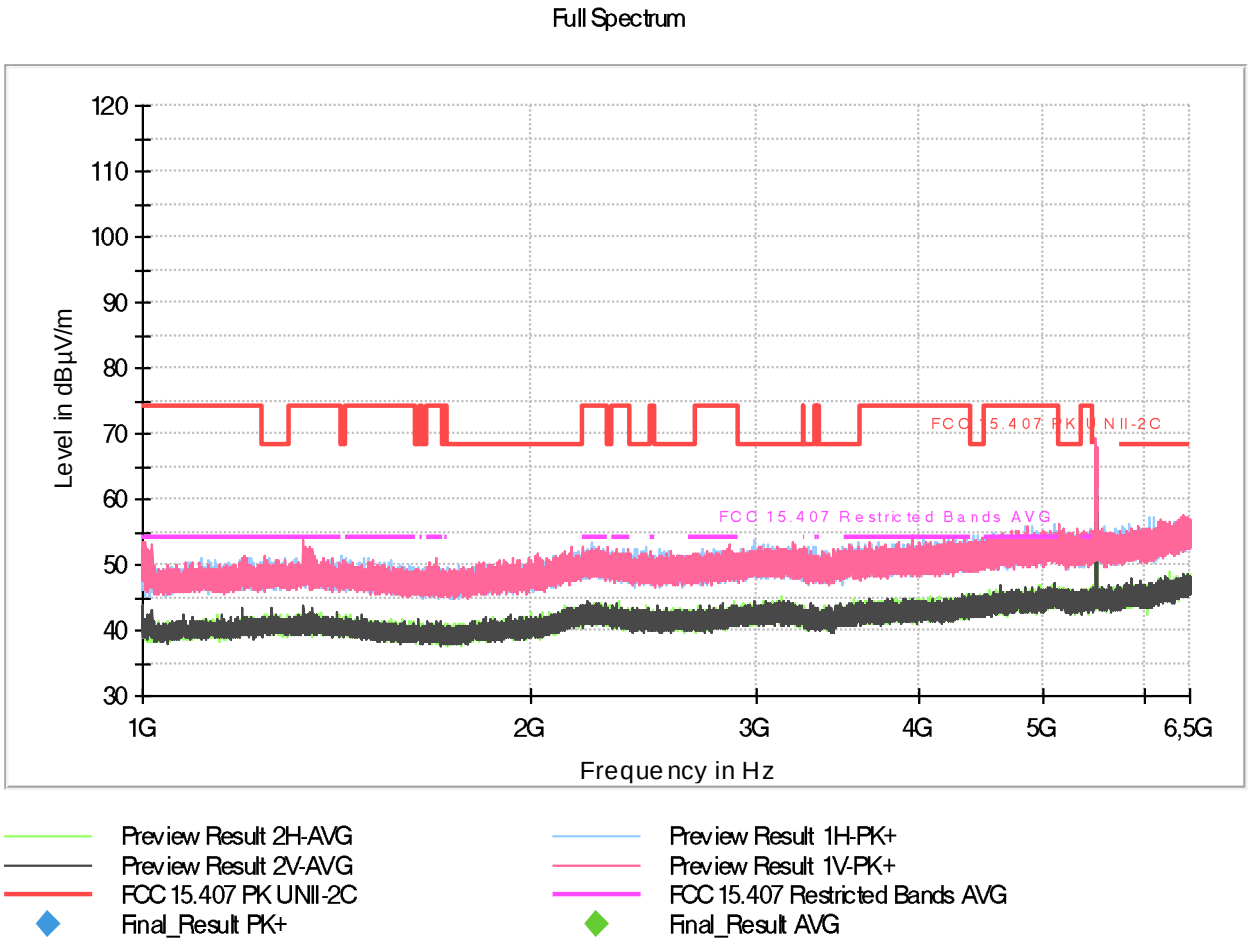
Attachments

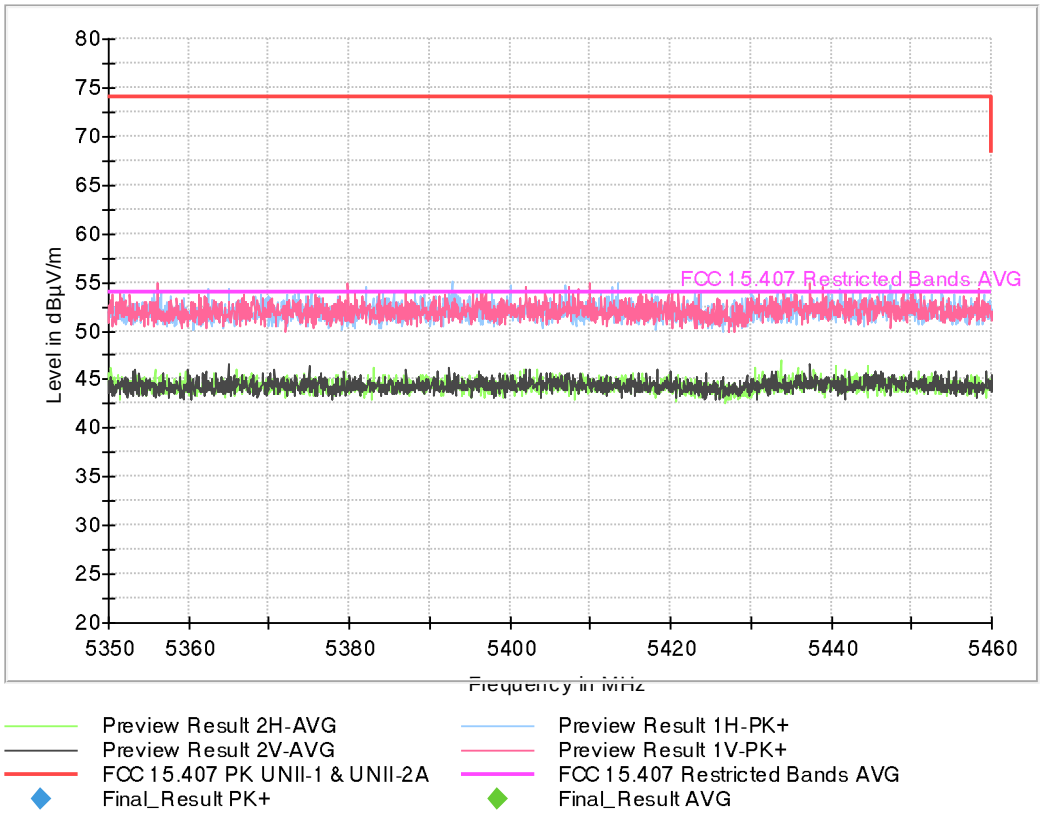
Active Port = 1 Frequency Range GHz = [1, 6.5]

Frequency MHz = 5500.00000 Modulation = 802.11n HT20 (OFDM MCS0)

MIMO Mode = SISO

Images:



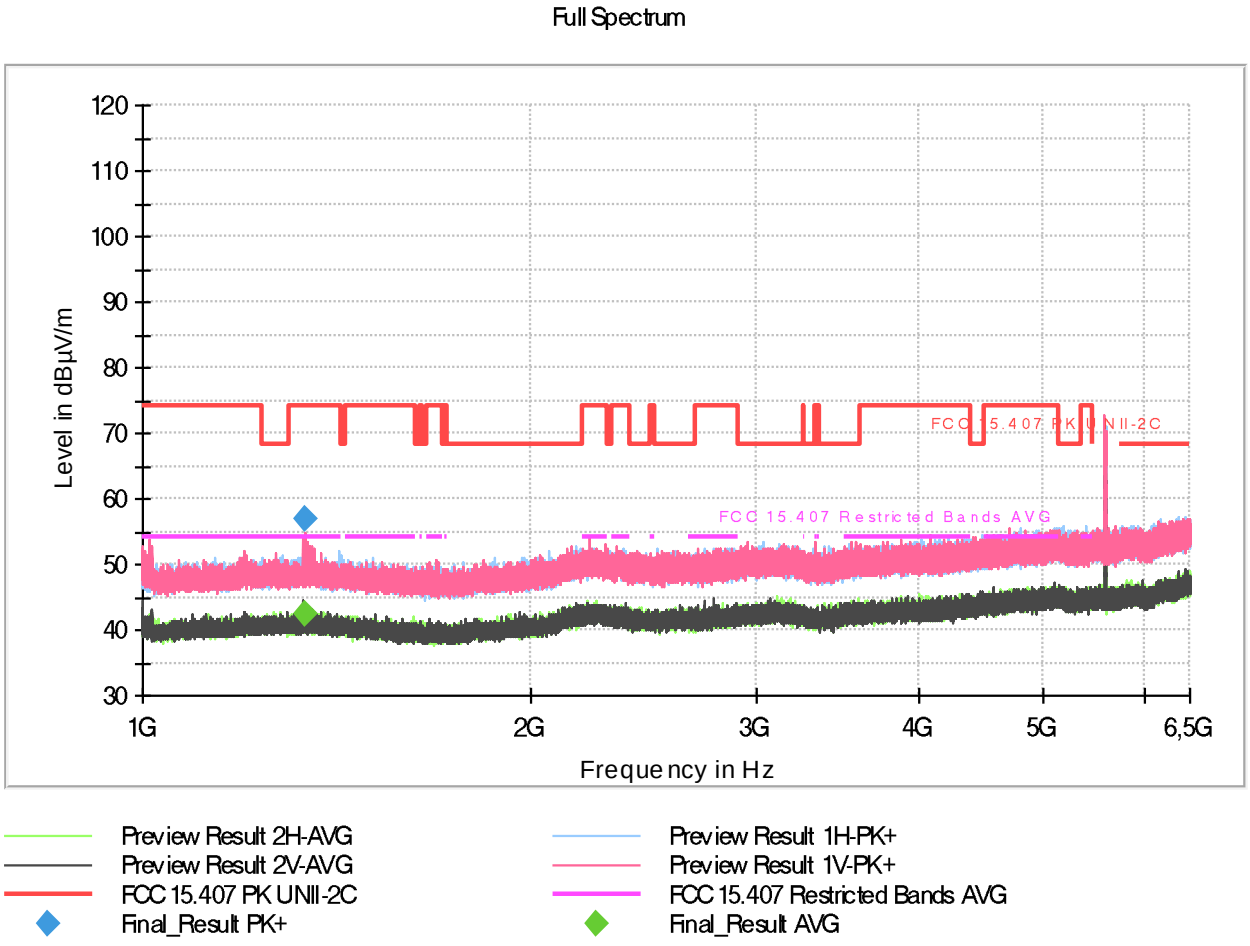

80
75
70
65
60
55
50
45
40
35
30
25
20
Level in dBµV/m
FCC 15.407 Restricted Bands AVG
5350
5360
5380
5400
5420
5440
5460
Frequency in MHz
Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 PK UNII-1 & UNII-2A
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG

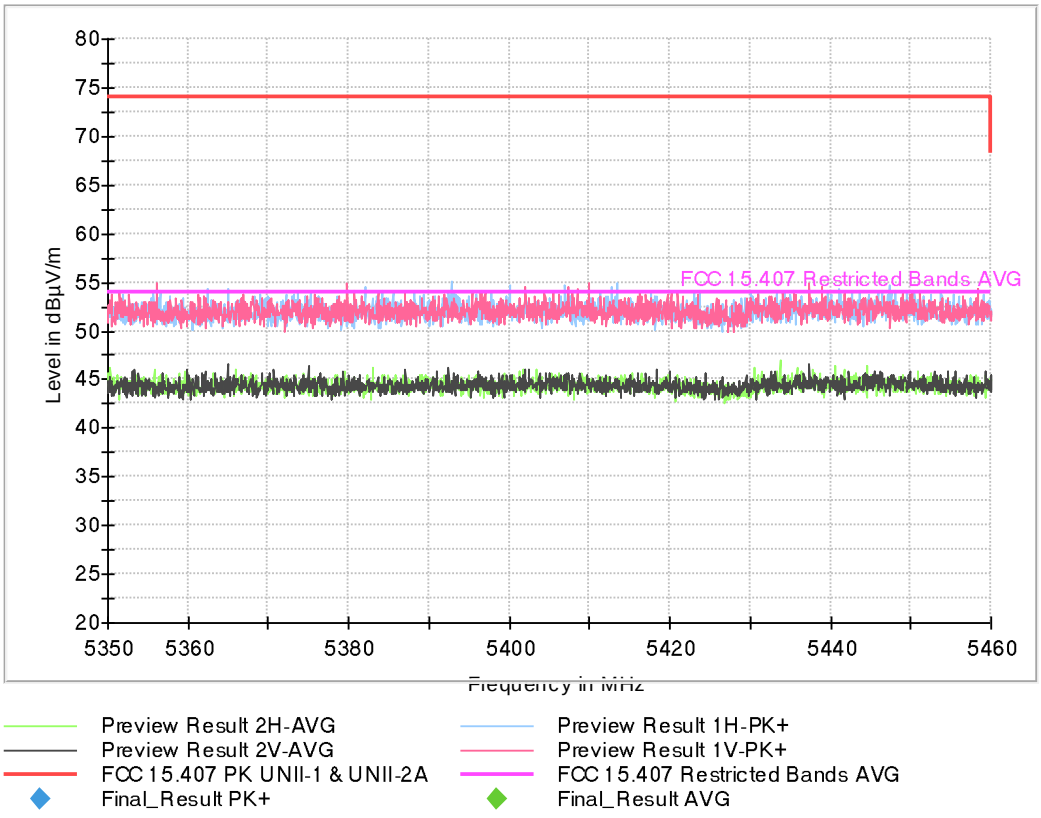
Active Port = 1 Frequency Range GHz = [1, 6.5]

Frequency MHz = 5580.00000 Modulation = 802.11n HT20 (OFDM MCS0)

MIMO Mode = SISO

Images:




80
75
70
65
60
55
50
45
40
35
30
25
20
Level in dBµV/m
FCC 15.407 Restricted Bands AVG
5350
5360
5380
5400
5420
5440
5460
Preview Result 2H-AVG
Preview Result 2V-AVG
FCC 15.407 PK UNII-1 & UNII-2A
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
FCC 15.407 Restricted Bands AVG
Final_Result AVG