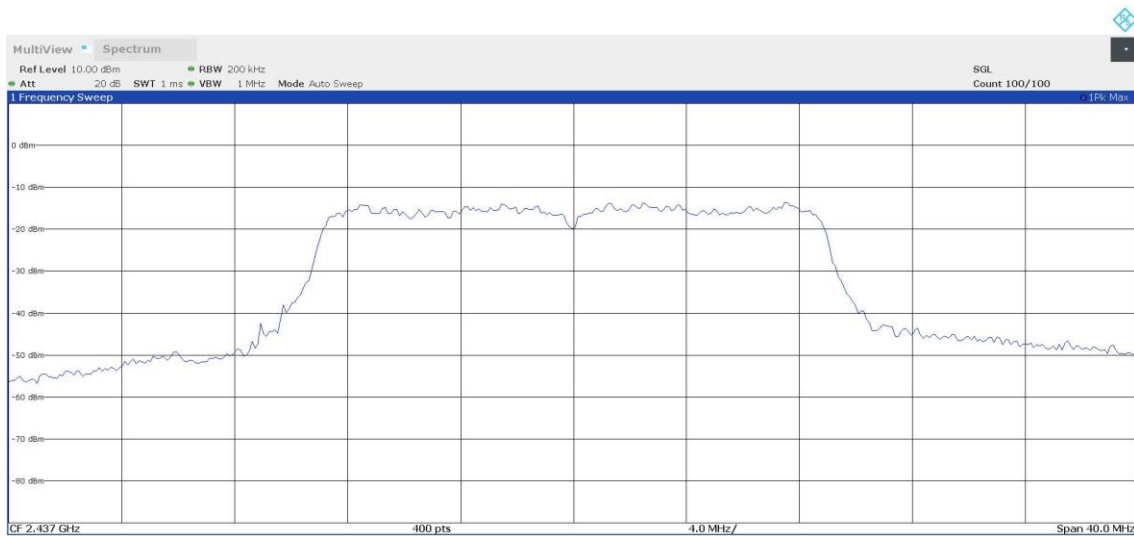
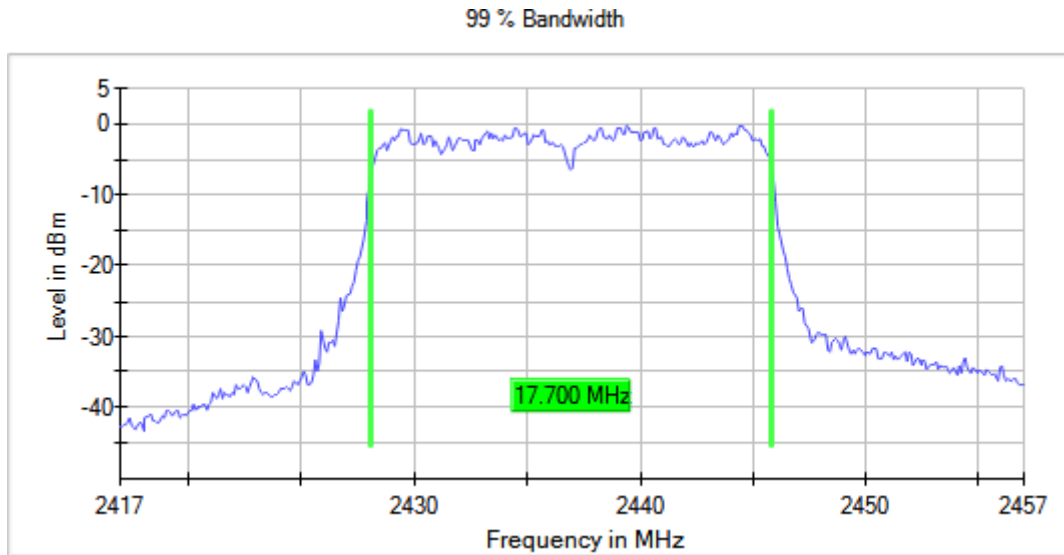


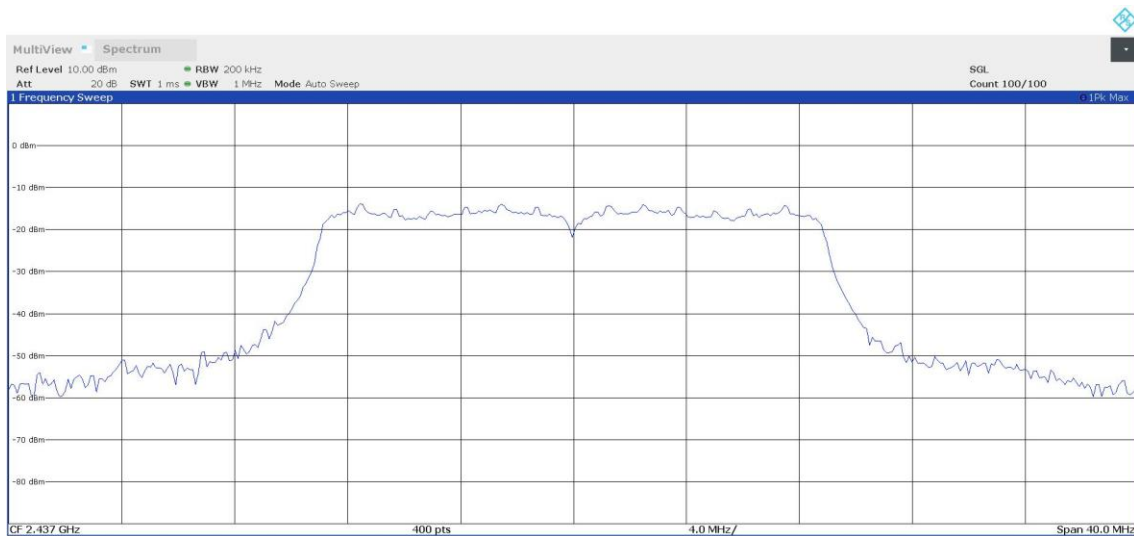
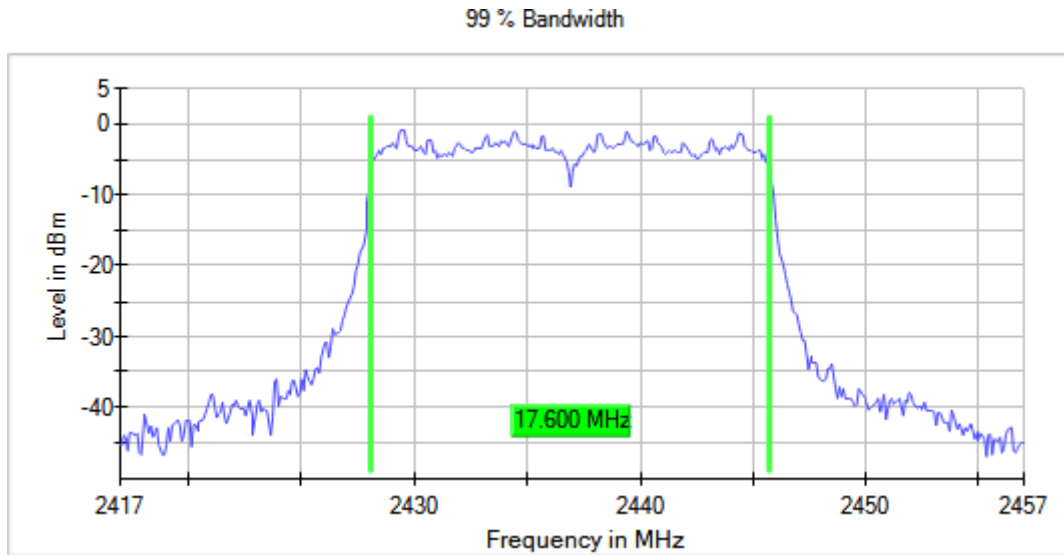
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency MHz = 2437.00000
Antenna configuration: SISO Active Port = 3

Images:



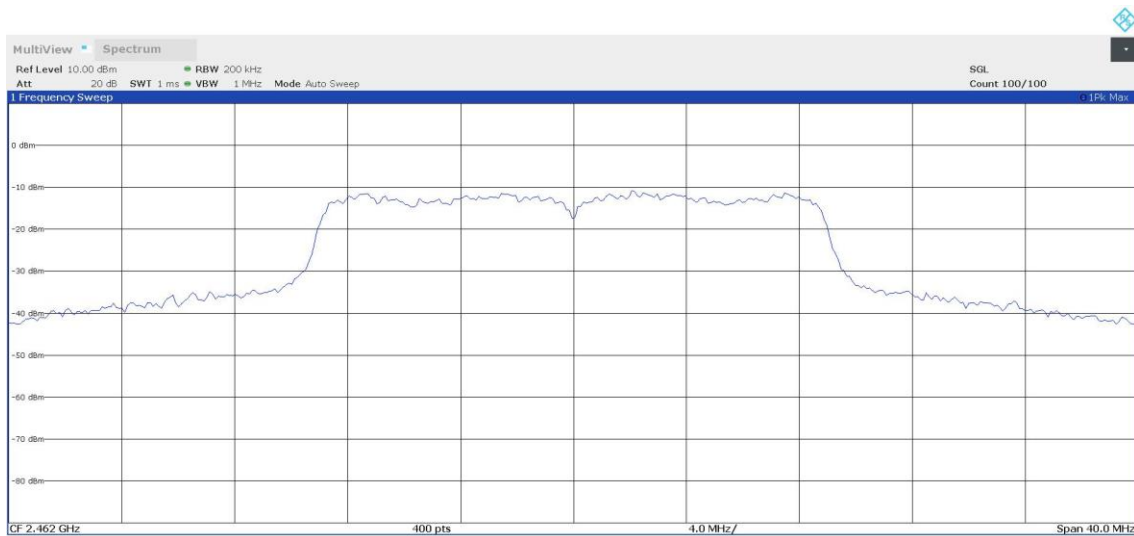
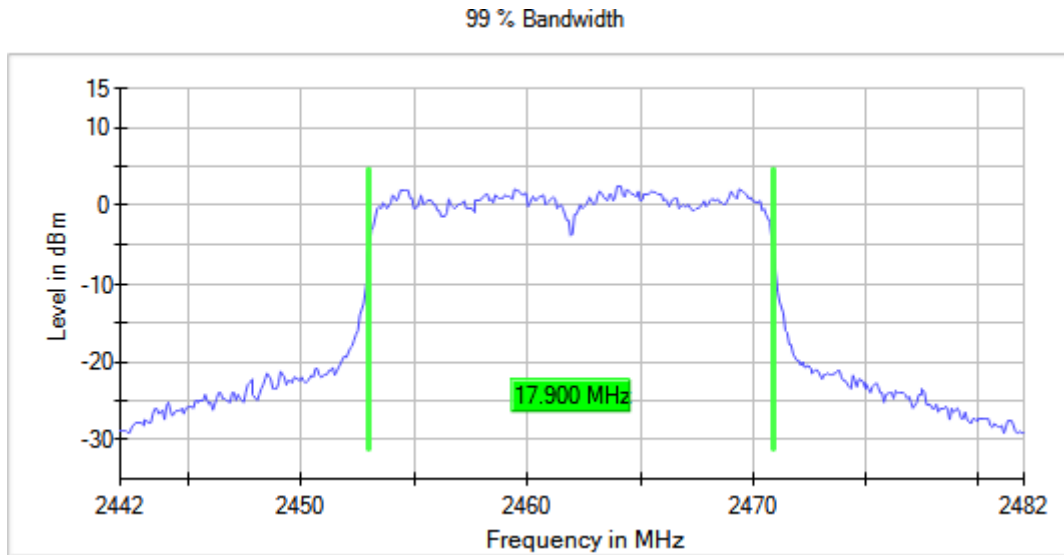
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency MHz = 2437.00000
 Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



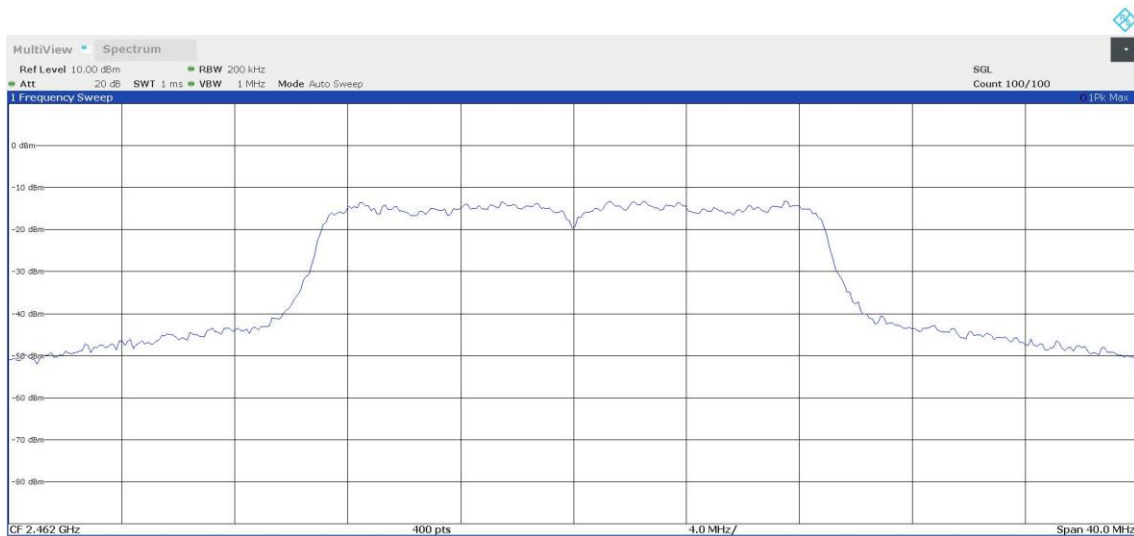
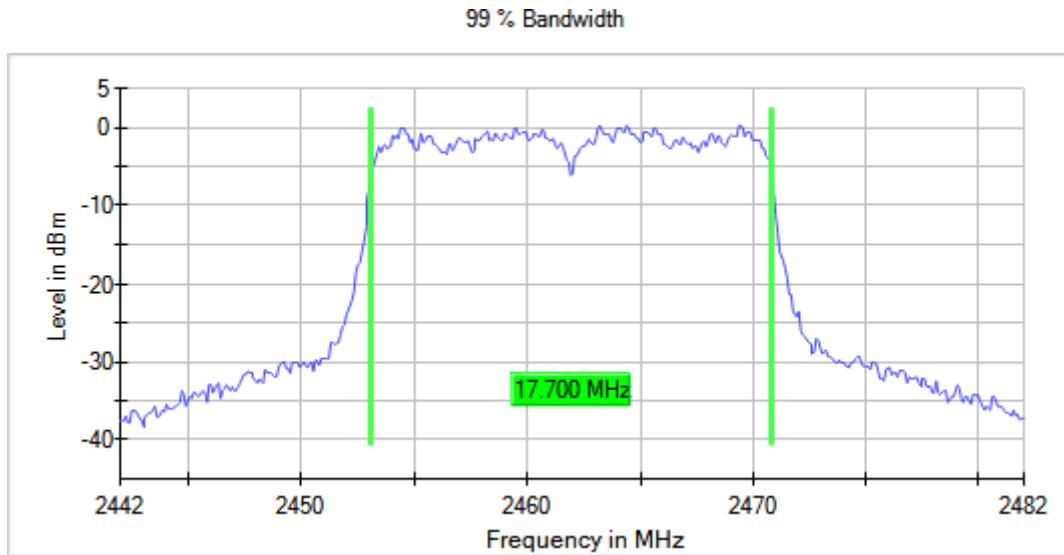
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency MHz = 2462.00000
 Antenna configuration: SISO Active Port = 1

Images:



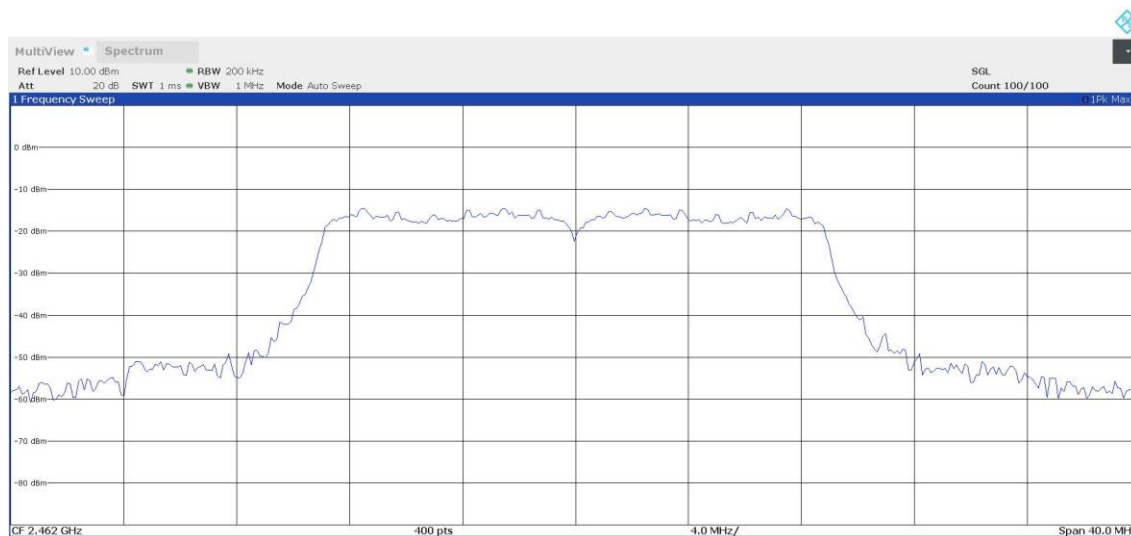
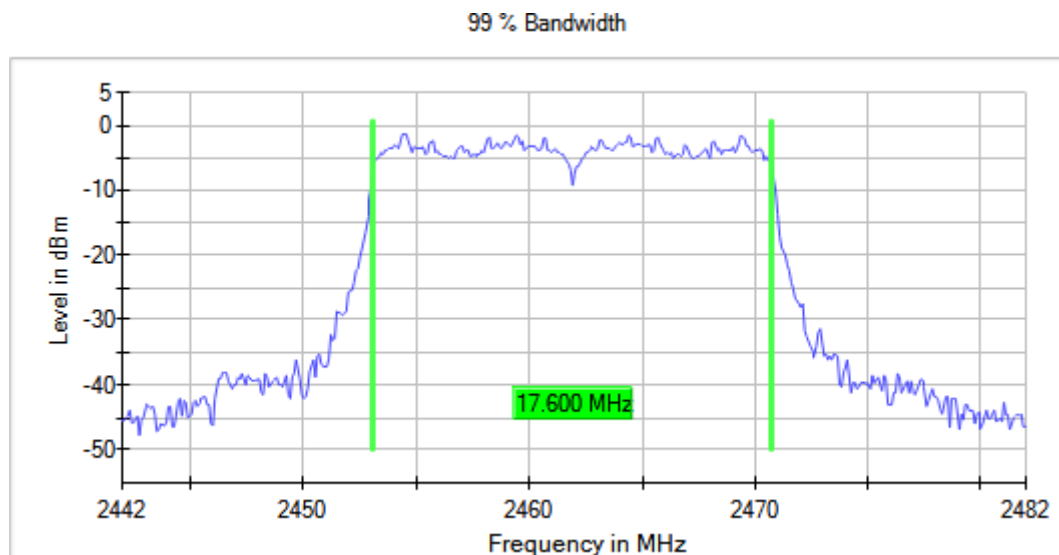
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency MHz = 2462.00000
 Antenna configuration: SISO Active Port = 3

Images:



Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency MHz = 2462.00000
Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



Results

Partial tests have confirmed that for the 99% occupied bandwidth test, the 802.11ax HE20 SU mode represents the worst case, it demonstrates that the various 802.11ax HE20 RU combinations have a narrower occupied bandwidth.

Modulation: 802.11ax HE20 (OFDMA MCS0) SU
Antenna configuration: SISO (port 1 and port 3) & MIMO (ports 1+3)

Equipment	BW (MHz)	Freq (MHz)	Port	Occ Ch BW (MHz)
Digital Transmission System (DTS)	20	2412.00000	1	18.800
			3	18.800
			1+3	18.900
		2437.00000	1	18.800
			3	18.700
			1+3	18.800
		2462.00000	1	18.800
			3	18.800
			1+3	18.800

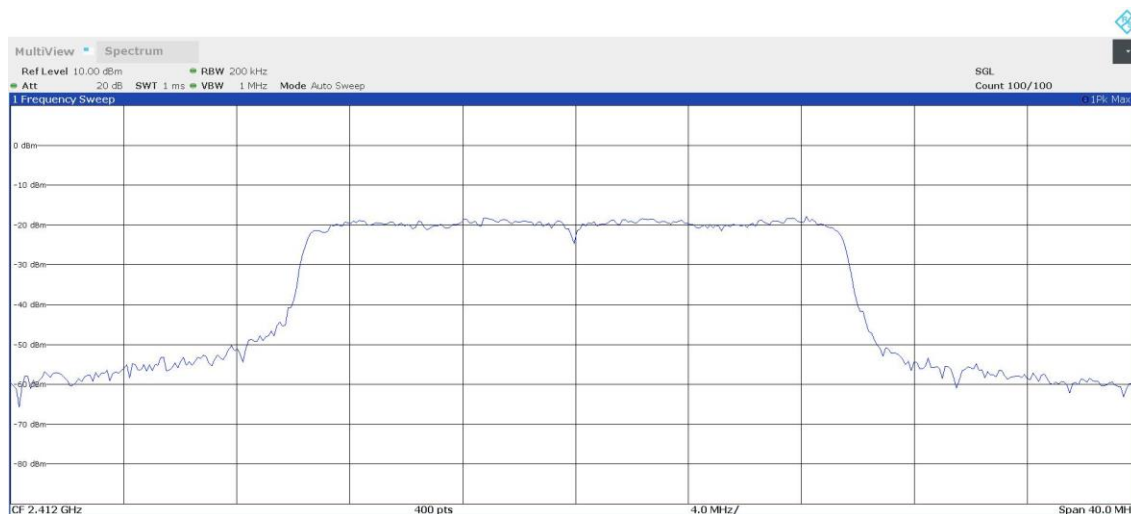
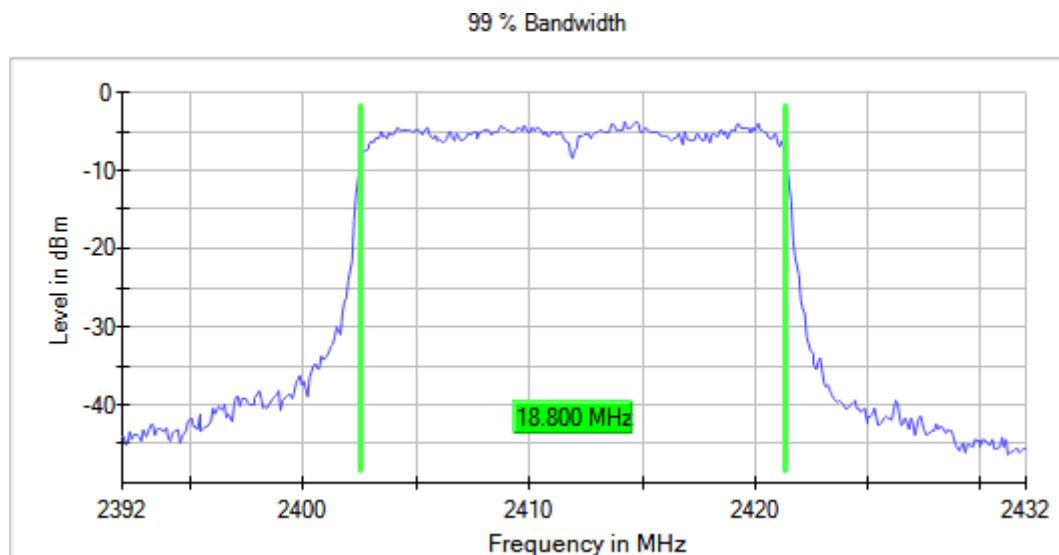
Verdict

Pass

Attachments

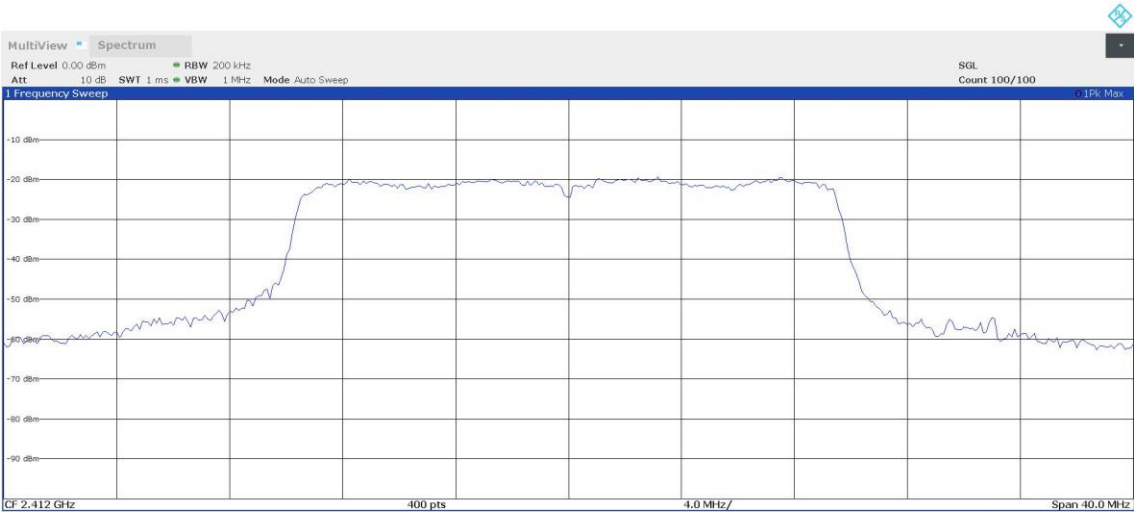
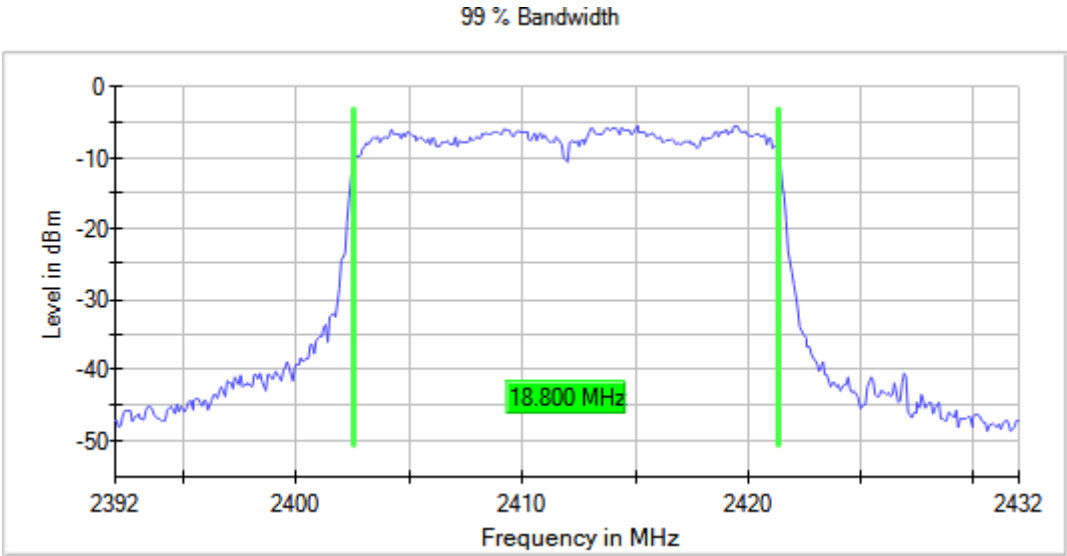
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2412.00000
Antenna configuration = SISO Active Port = 1

Images:



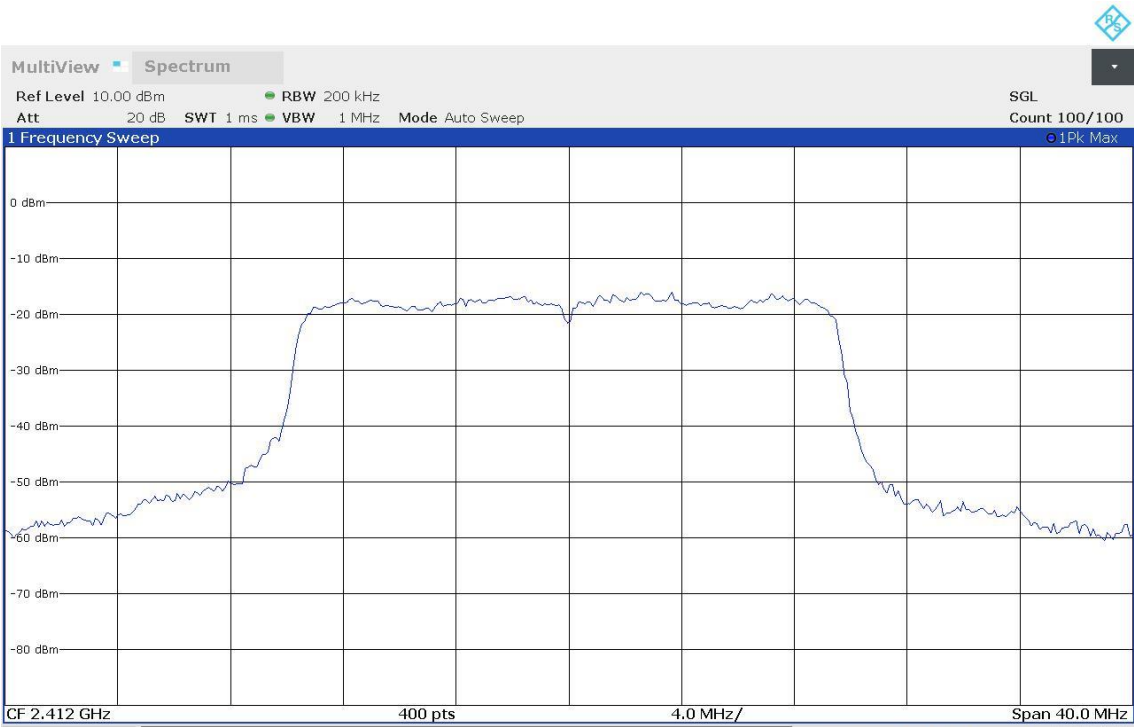
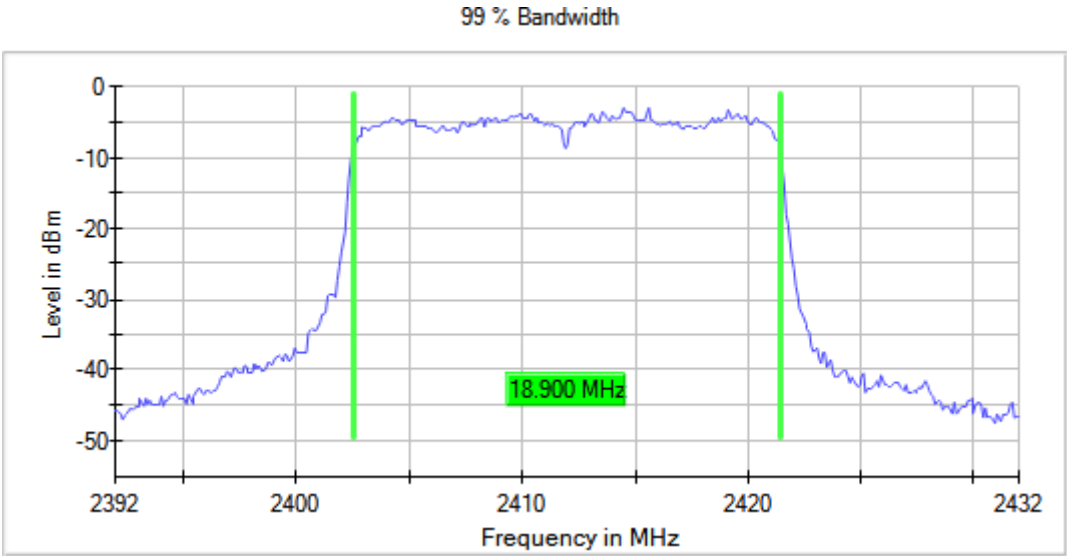
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2412.00000
Antenna configuration = SISO Active Port = 3

Images:



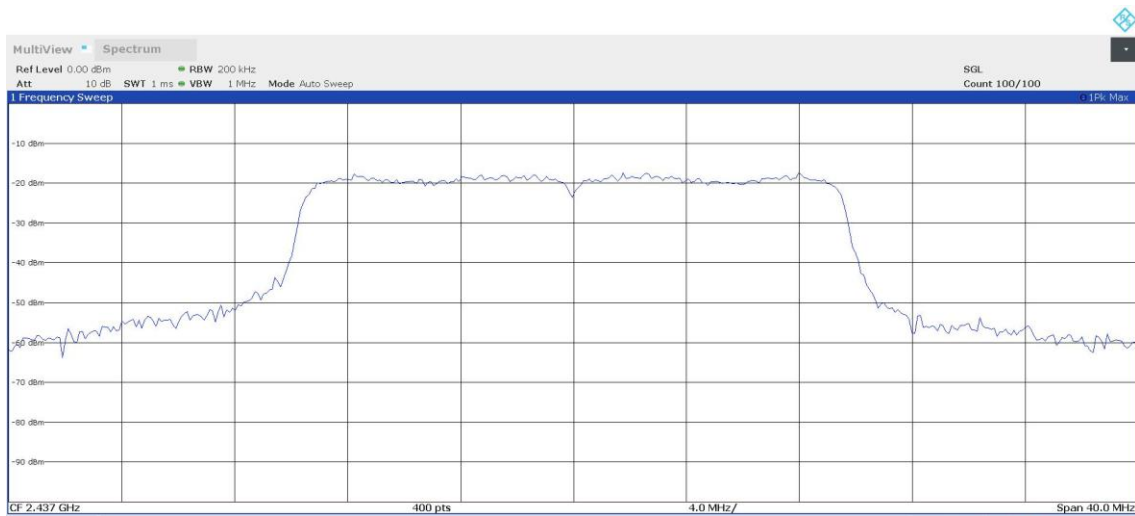
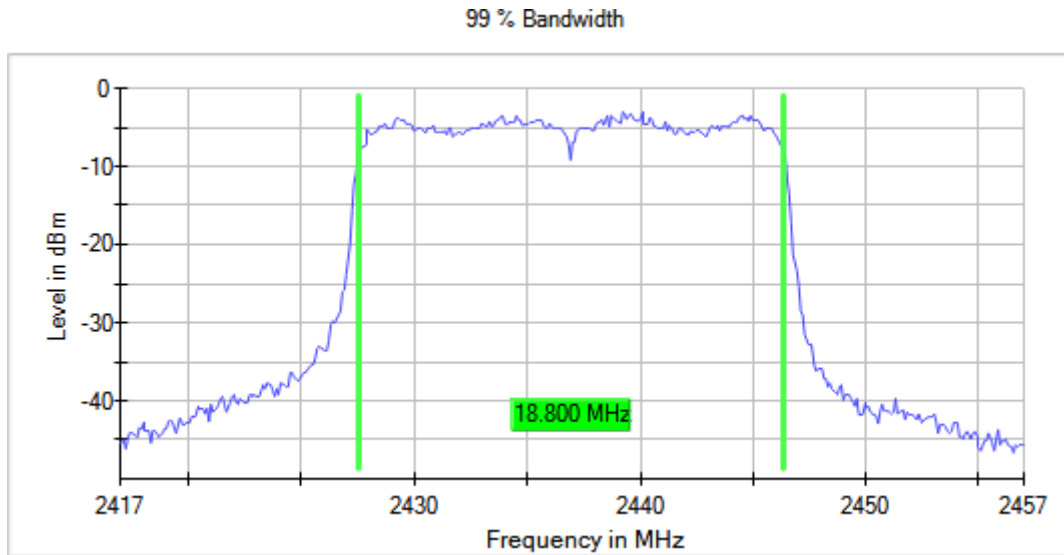
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2412.00000
Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



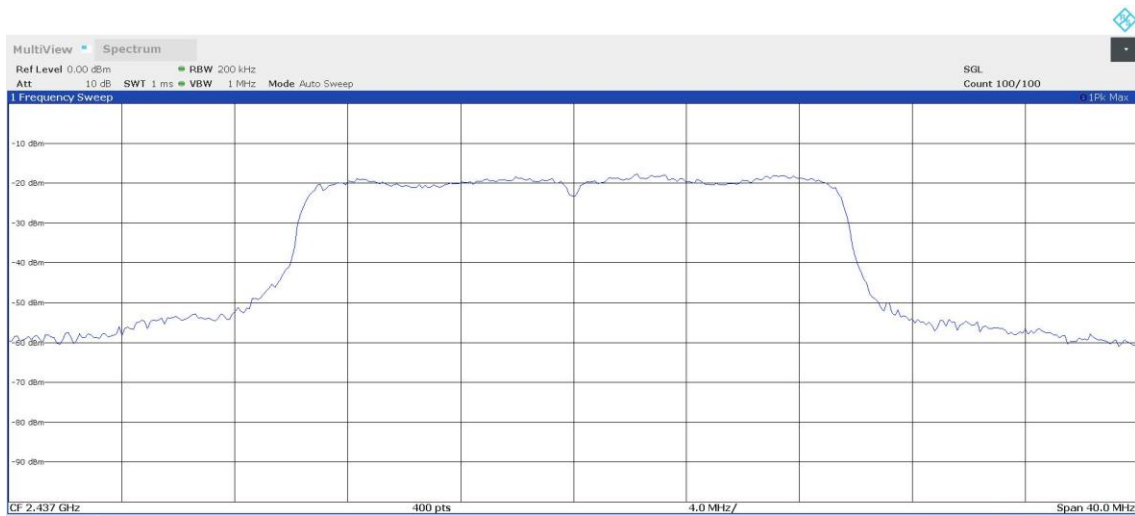
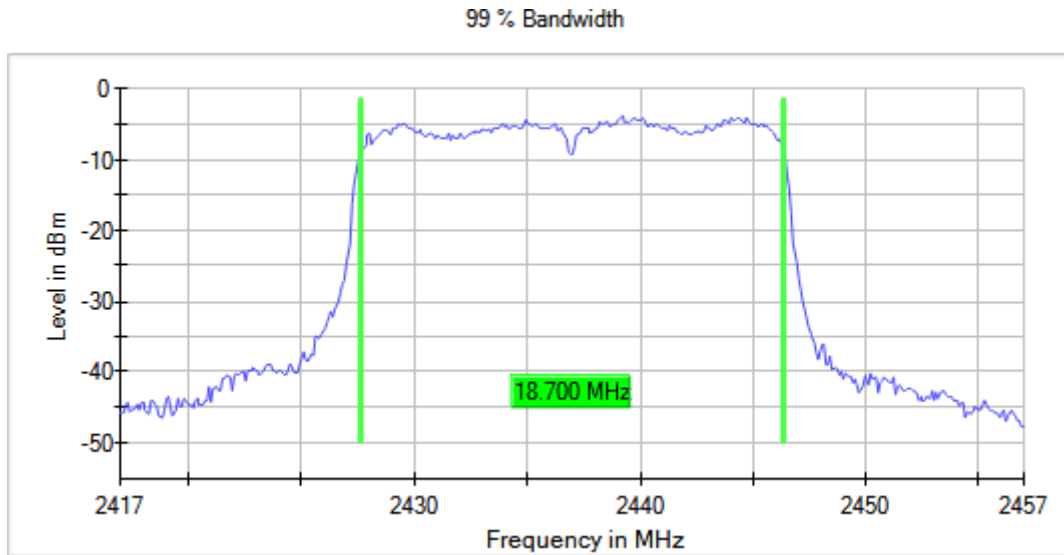
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2437.00000
Antenna configuration = SISO Active Port = 1

Images:



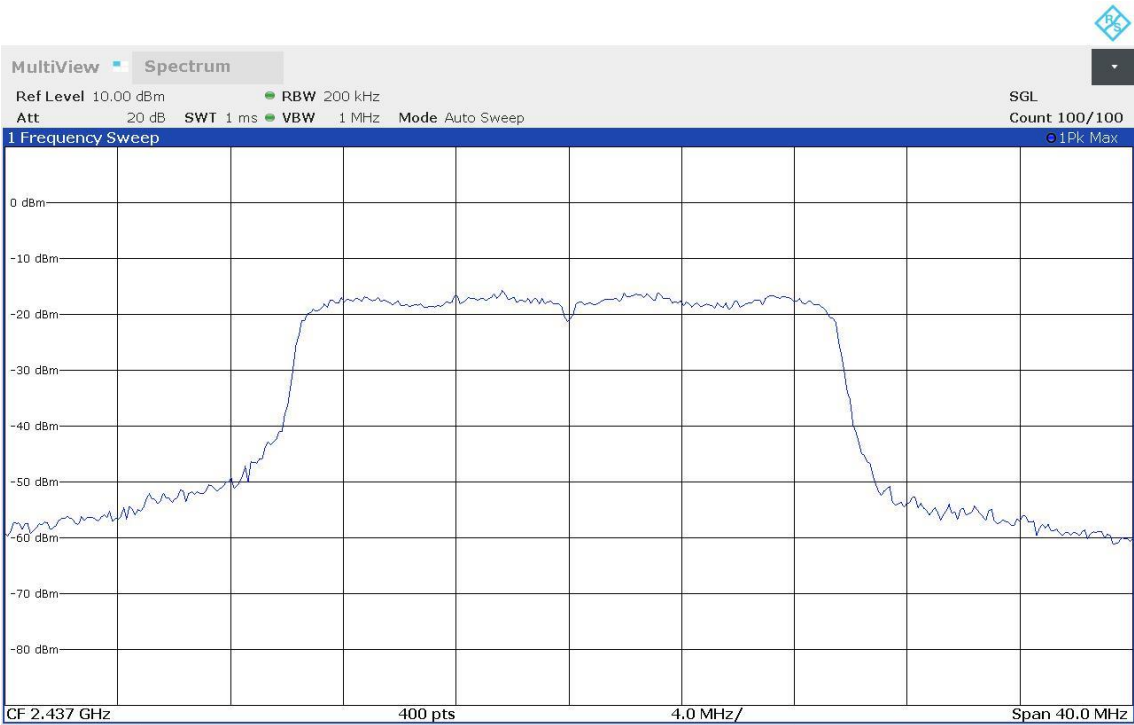
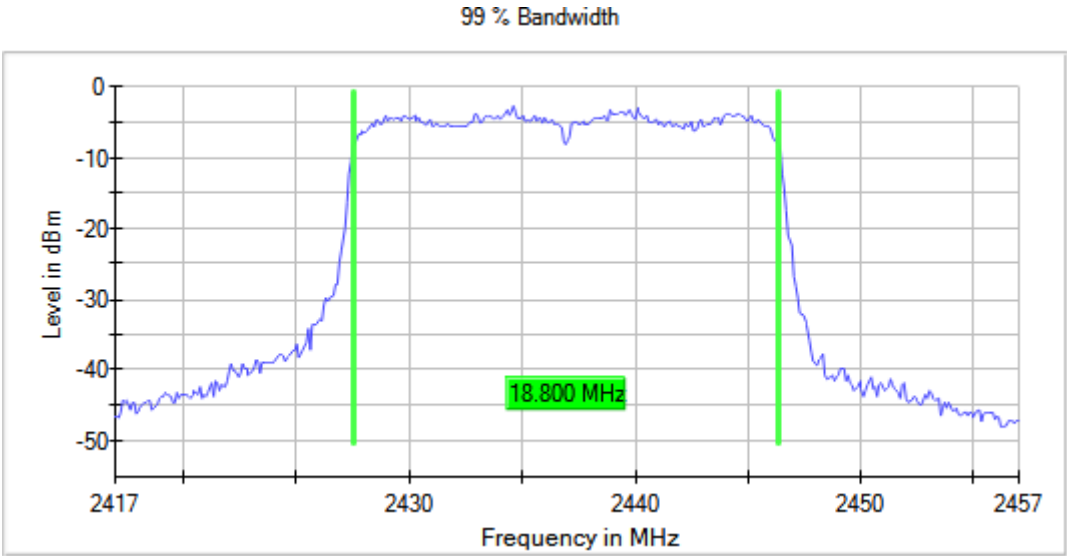
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2437.00000
Antenna configuration = SISO Active Port = 3

Images:



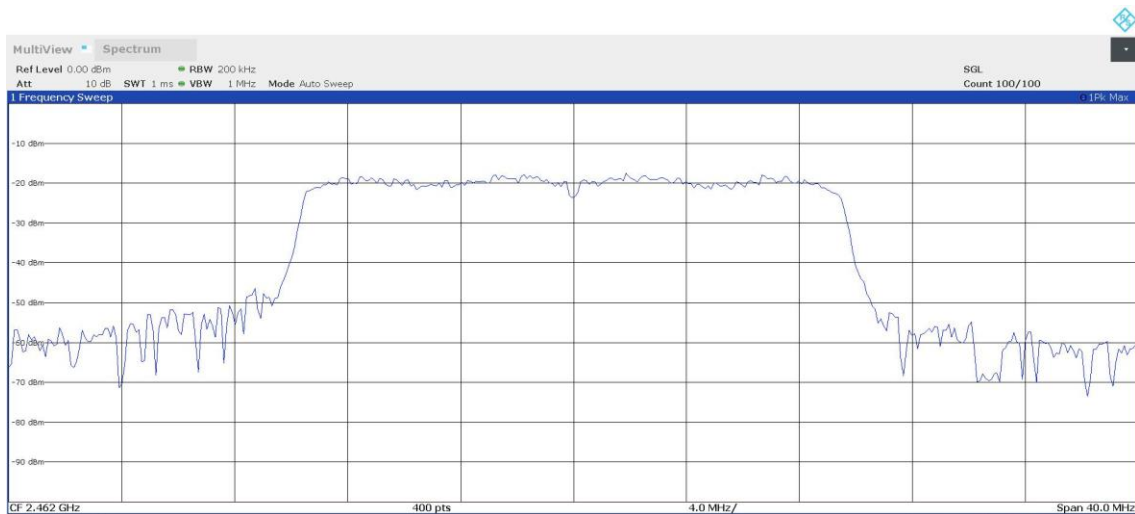
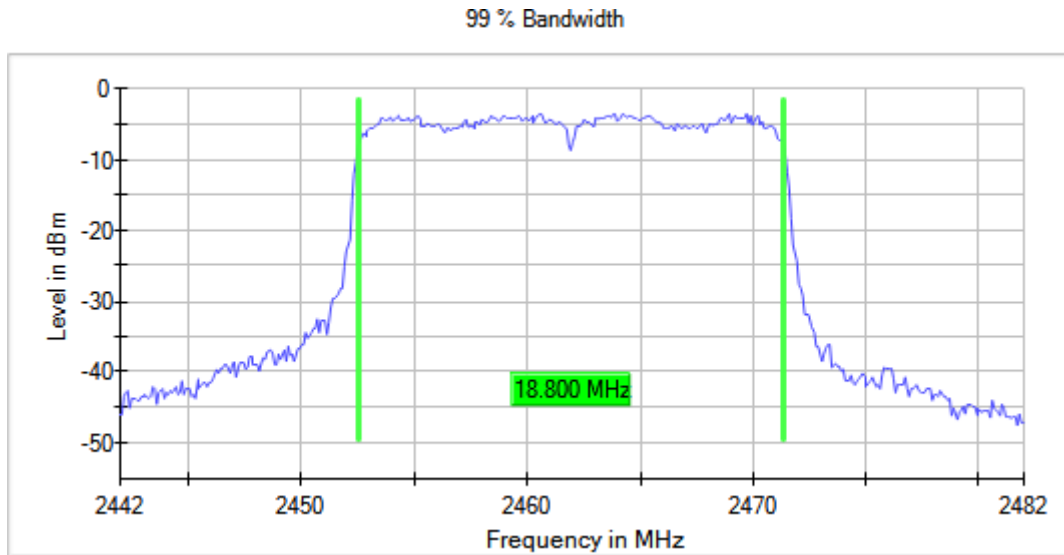
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2437.00000
Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



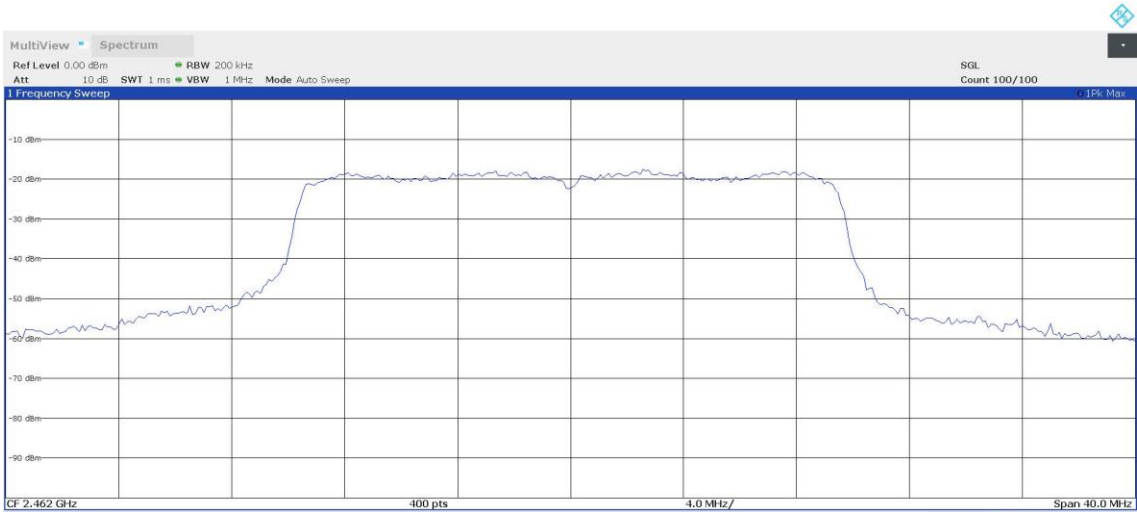
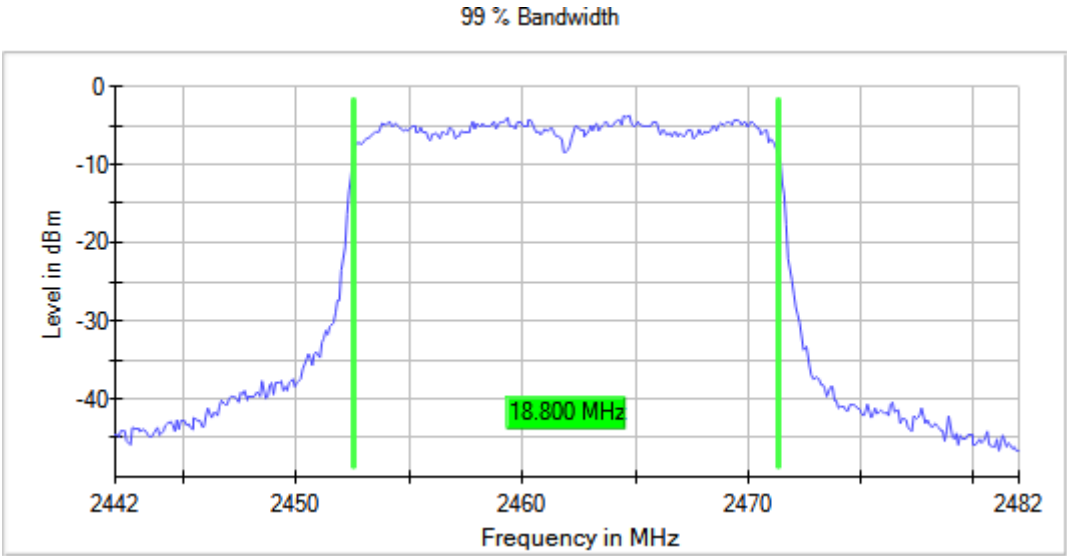
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2462.00000
Antenna configuration = SISO Active Port = 1

Images:



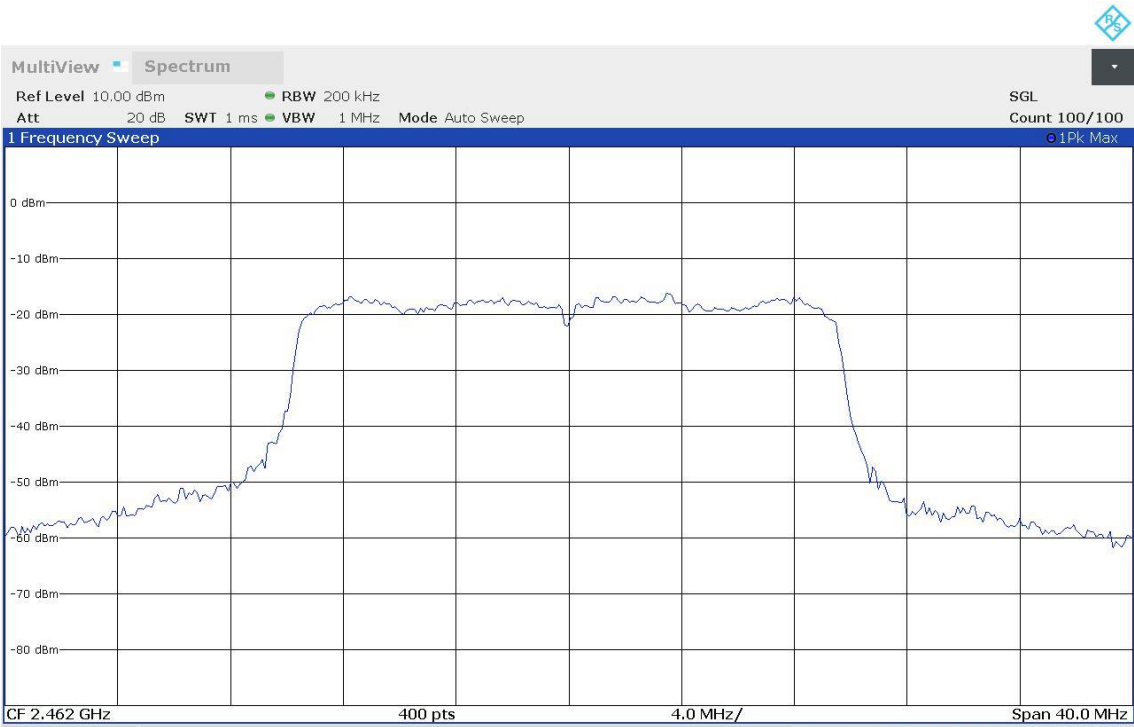
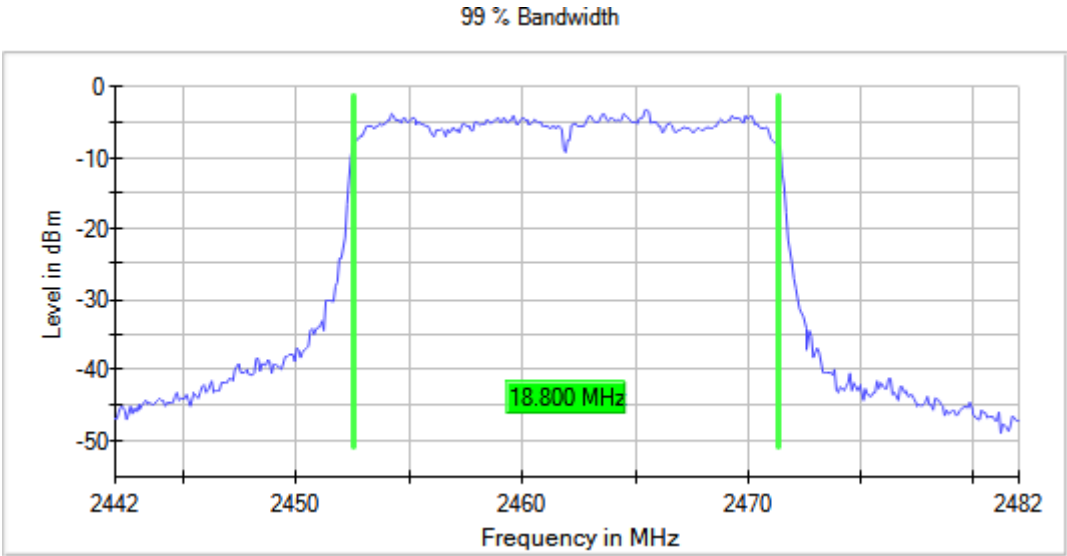
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2462.00000
Antenna configuration = SISO Active Port = 3

Images:



Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 20
Modulation = 802.11ax HE20 (OFDMA MCS0) SU Frequency MHz = 2462.00000
Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



Results

Partial tests have confirmed that for the 99% occupied bandwidth test, the 802.11ax HE20 SU mode represents the worst case, it demonstrates that the various 802.11ax HE40 RU combinations have a narrower occupied bandwidth.

Modulation: 802.11ax HE40 (OFDMA MCS0) SU
Antenna configuration: SISO (port 1 and port 3) & MIMO (ports 1+3)

Equipment	BW (MHz)	Freq (MHz)	Port	Occ Ch BW (MHz)
Digital Transmission System (DTS)	40	2422.00000	1	37.750
			3	37.750
			1+3	37.750
		2437.00000	1	37.750
			3	37.500
			1+3	37.750
		2452.00000	1	37.750
			3	37.750
			1+3	37.750

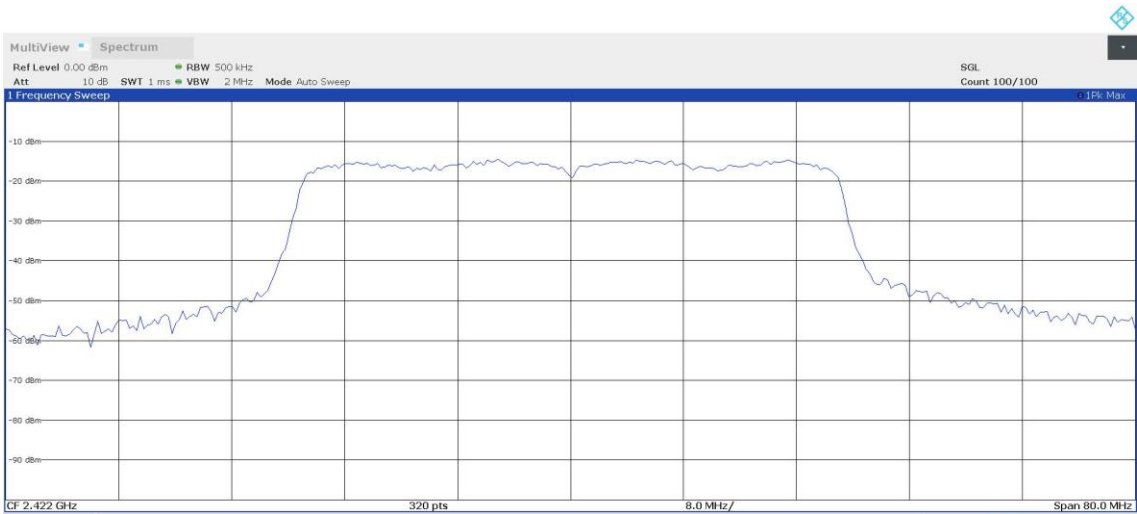
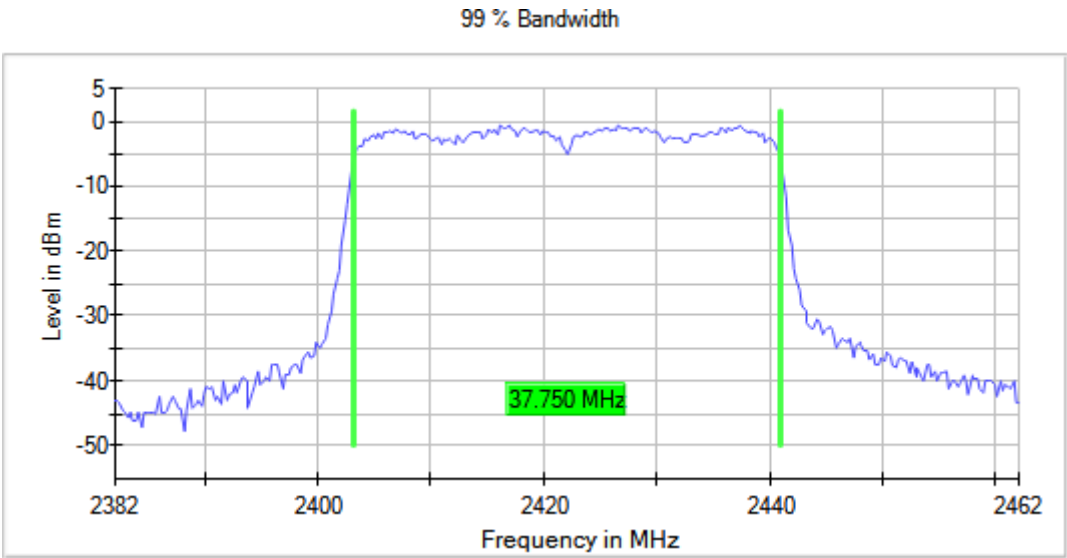
Verdict

Pass

Attachments

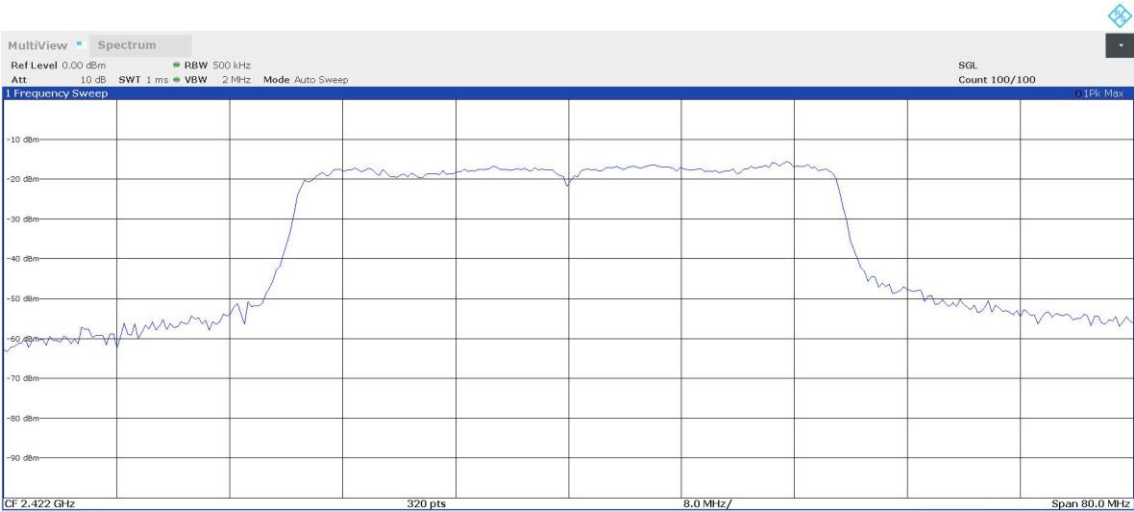
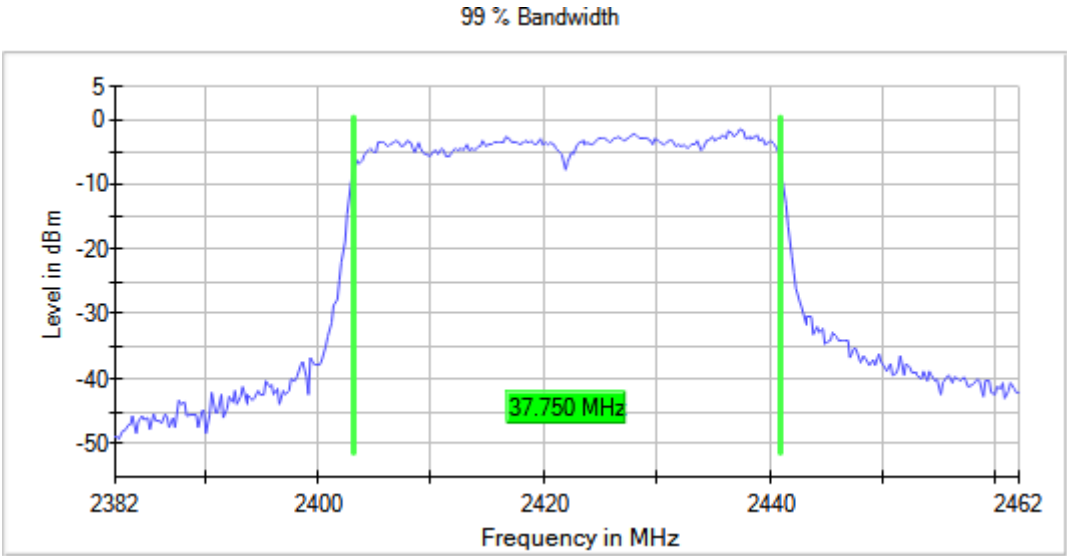
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2422.00000
Antenna configuration = SISO Active Port = 1

Images:



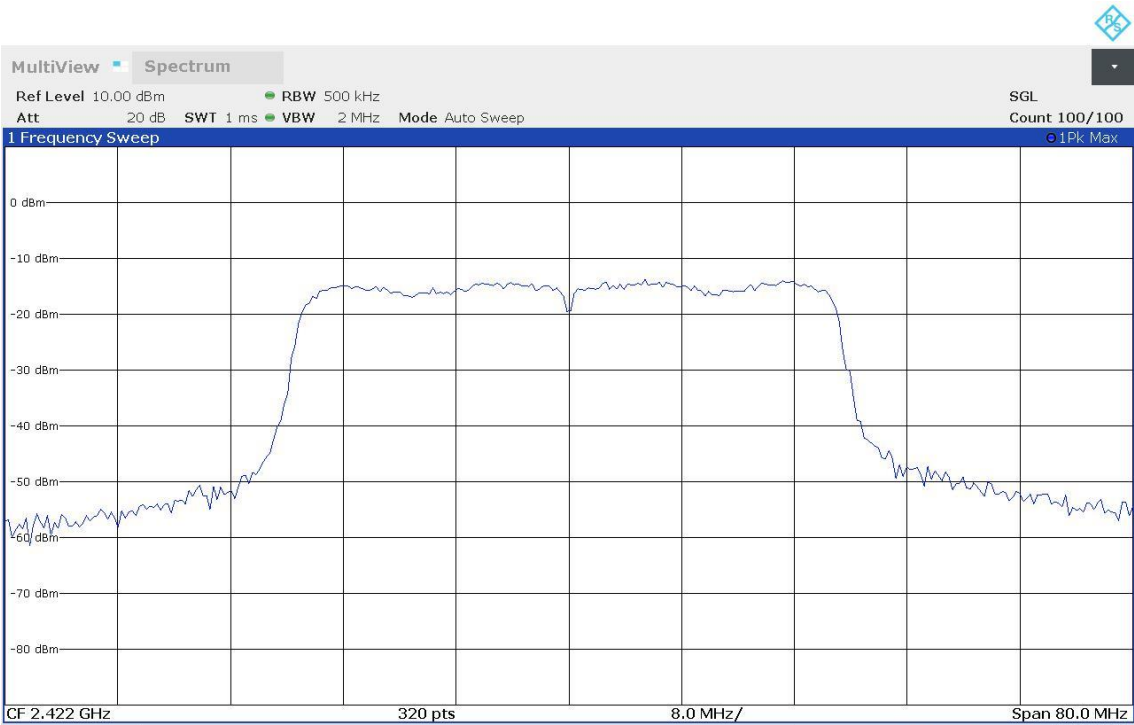
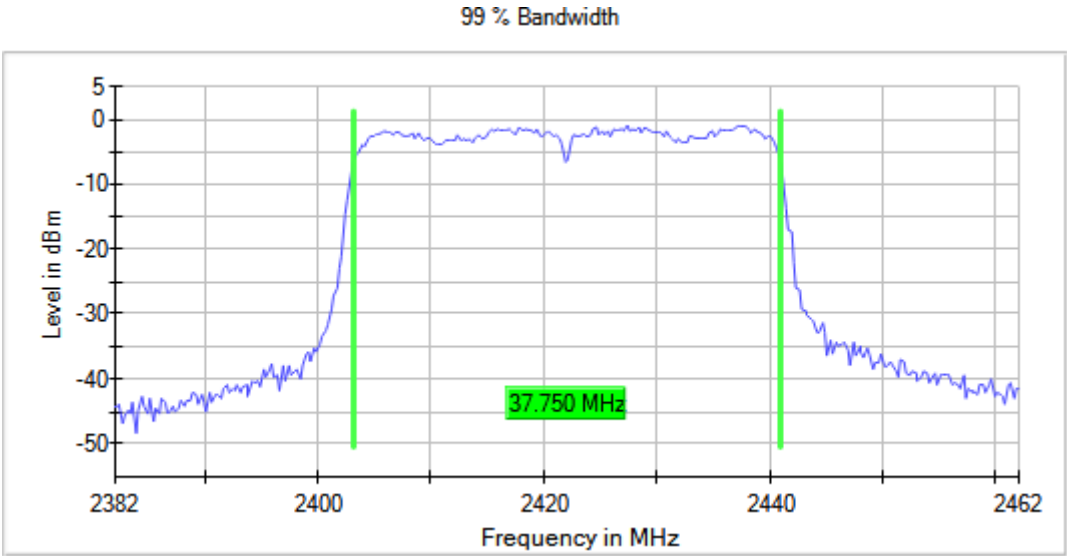
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2422.00000
Antenna configuration = SISO Active Port = 3

Images:



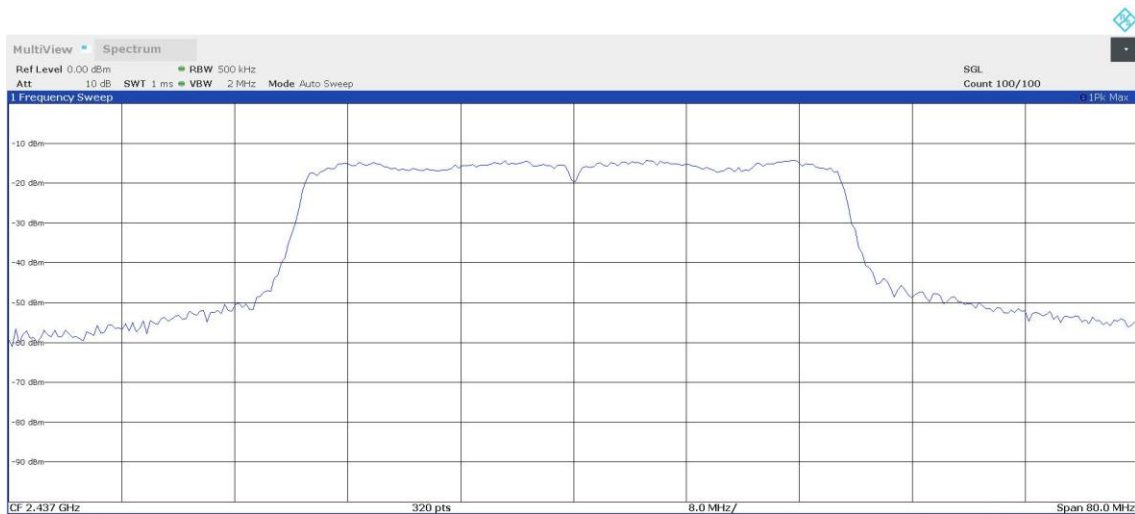
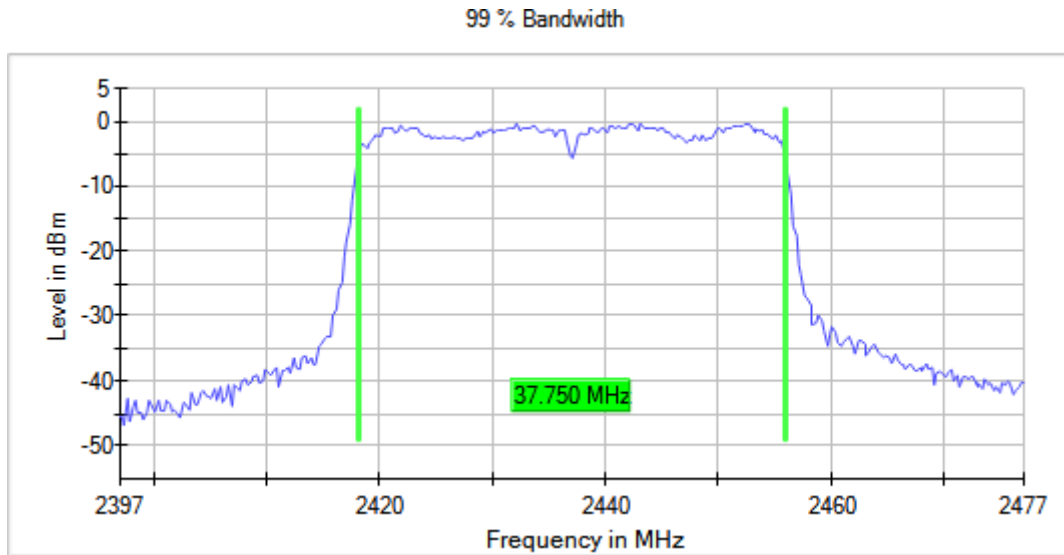
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2422.00000
Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



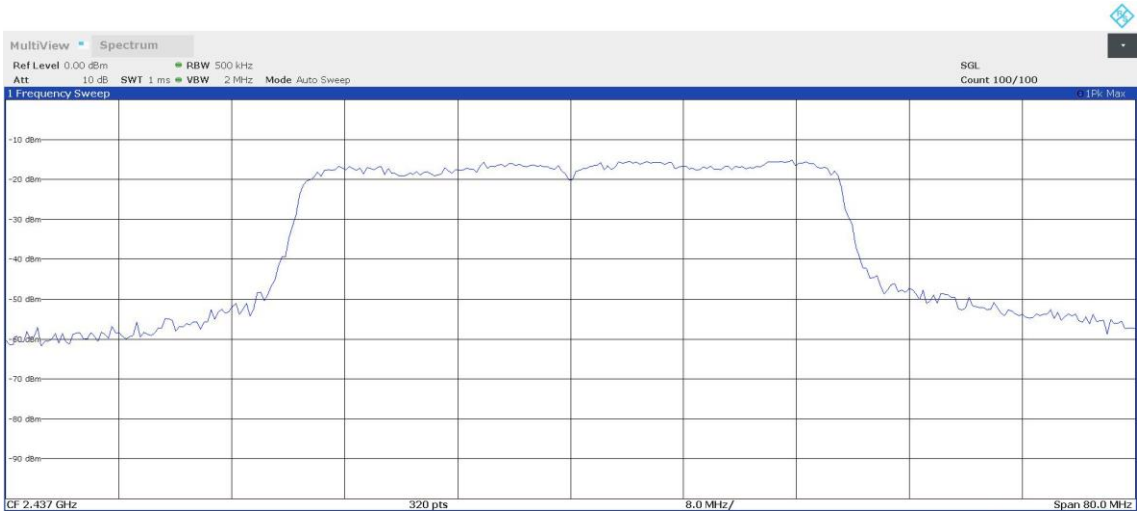
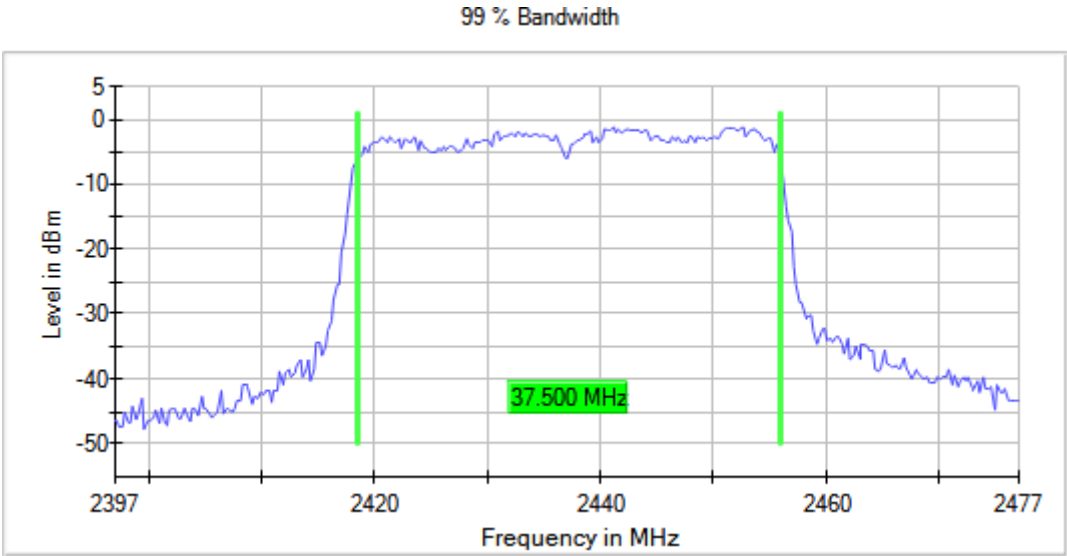
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2437.00000
Antenna configuration = SISO Active Port = 1

Images:



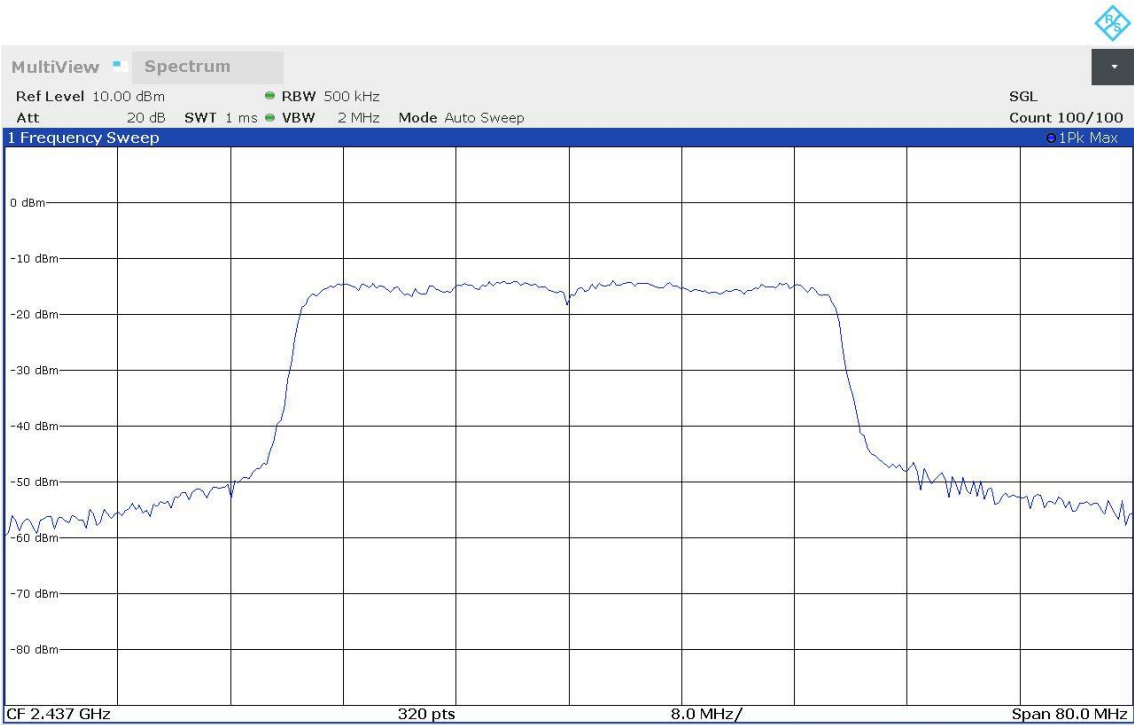
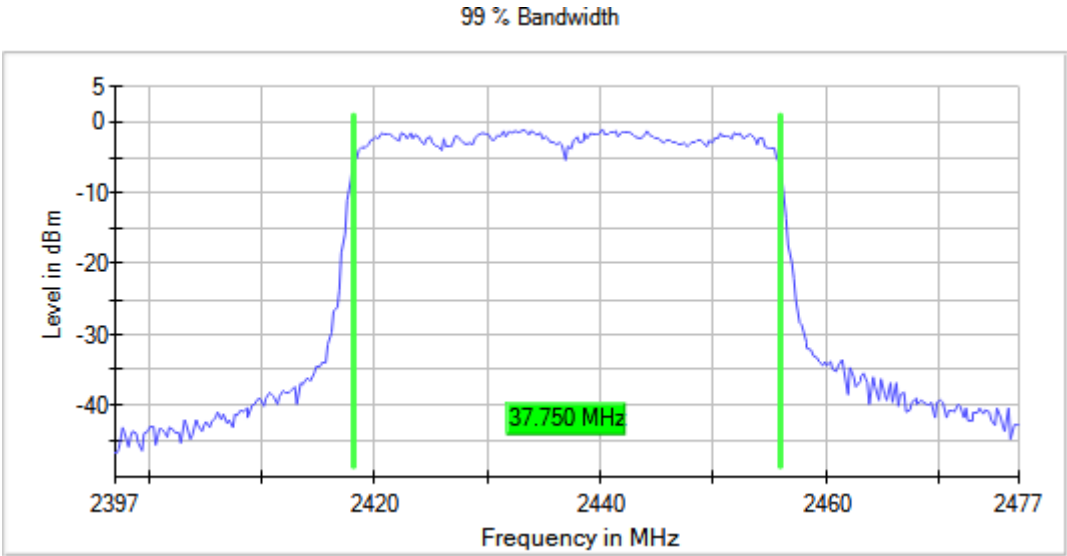
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2437.00000
Antenna configuration = SISO Active Port = 3

Images:



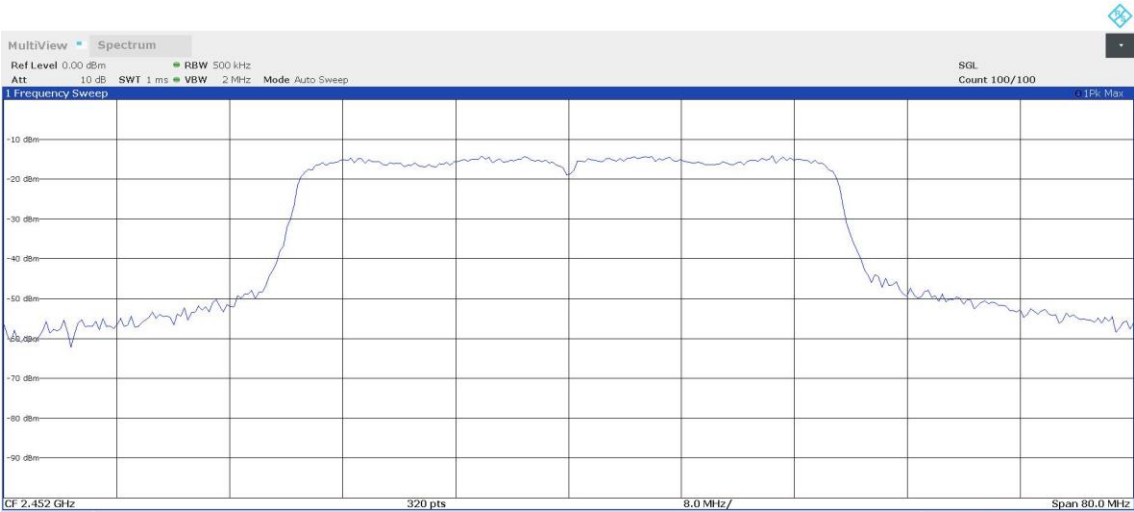
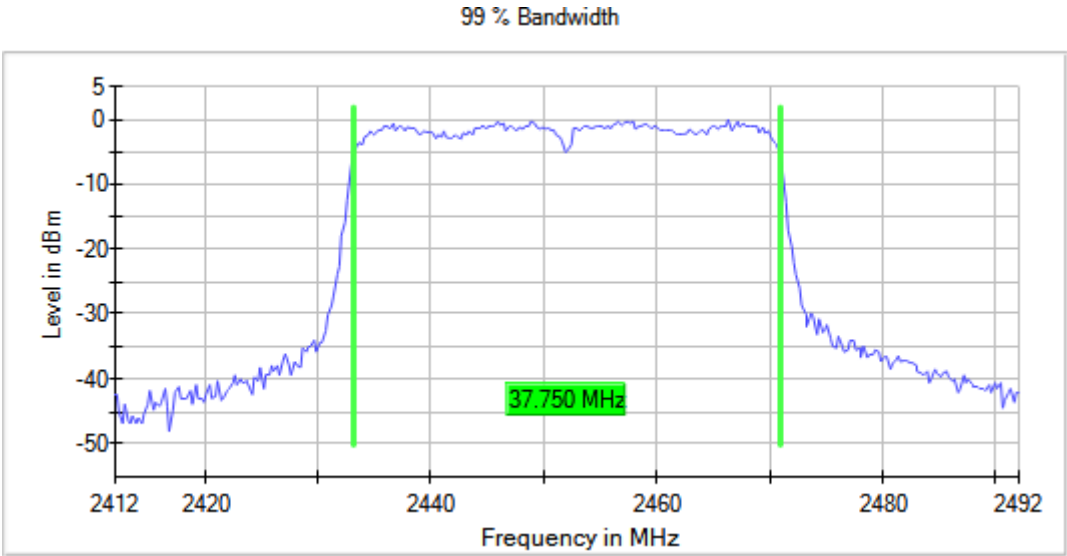
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2437.00000
Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



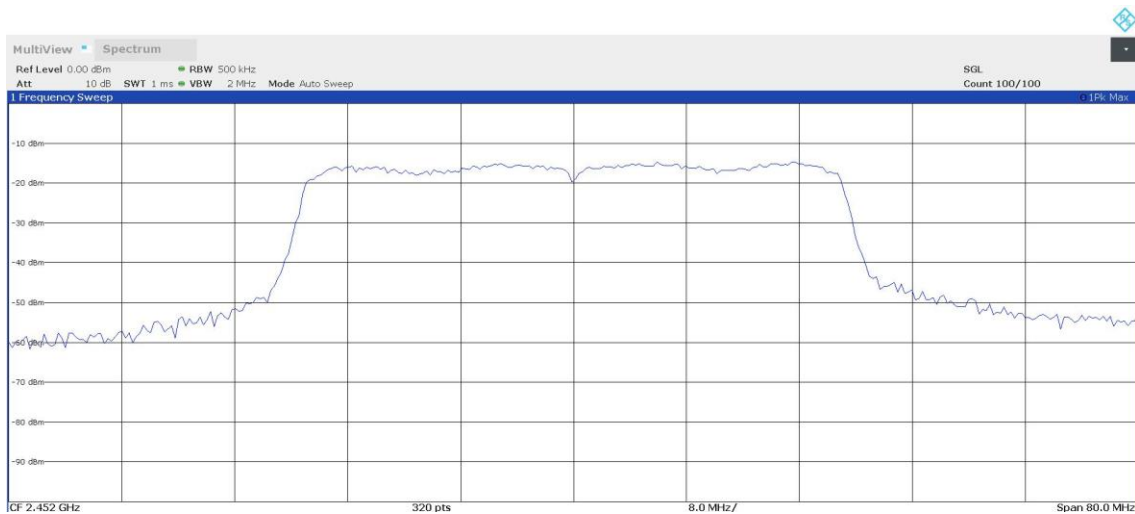
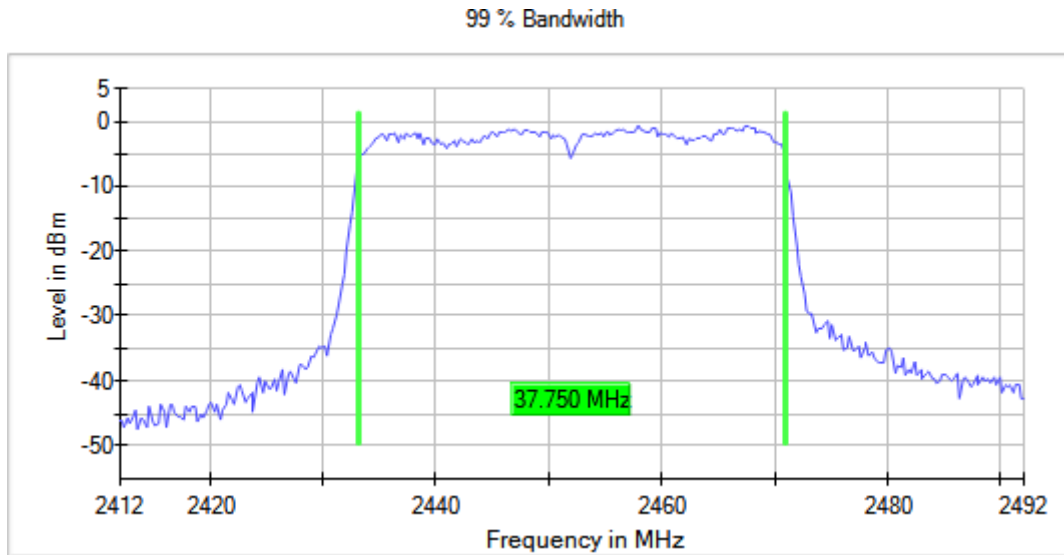
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2452.00000
Antenna configuration = SISO Active Port = 1

Images:



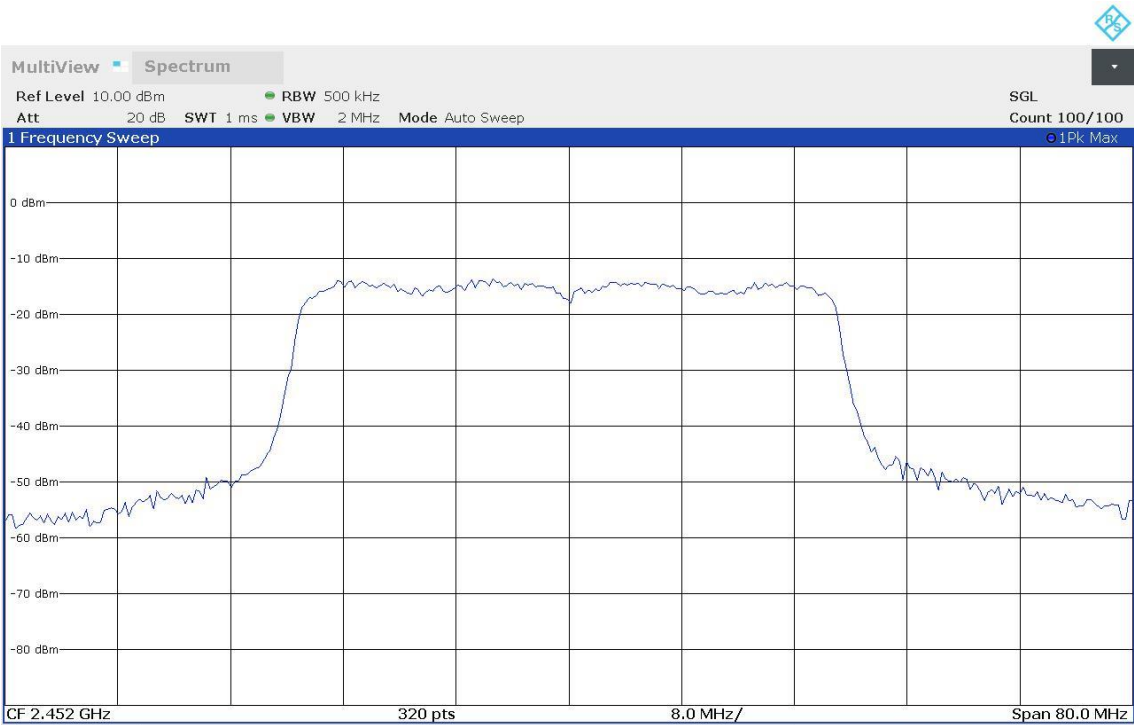
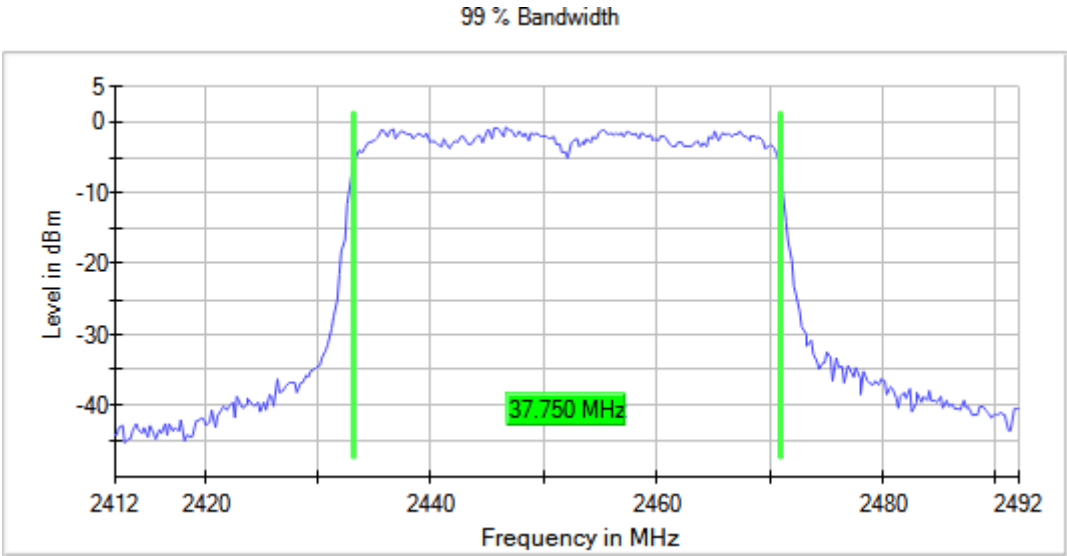
Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2452.00000
Antenna configuration = SISO Active Port = 3

Images:



Equipment Type = Digital Transmission System (DTS) Bandwidth MHz = 40
Modulation = 802.11ax HE40 (OFDMA MCS0) SU Frequency MHz = 2452.00000
Antenna configuration = MIMO CDD Mode 2x2 Active Port = 1+3

Images:



RSS-247 5.2 (a) / FCC 15.247 (a) (2) 6 dB Bandwidth

Limits

The minimum 6 dB bandwidth shall be at least 500 kHz.

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

Antenna configuration: SISO (port 1 and port 3) & MIMO (ports 1+3)

BW (MHz)	Freq (MHz)	Port	6dB Bandwidth (MHz)
20	2412.00000	1	10.200
		3	10.100
		1+3	10.150
	2437.00000	1	10.150
		3	10.200
		1+3	10.150
	2462.00000	1	10.100
		3	10.150
		1+3	10.100

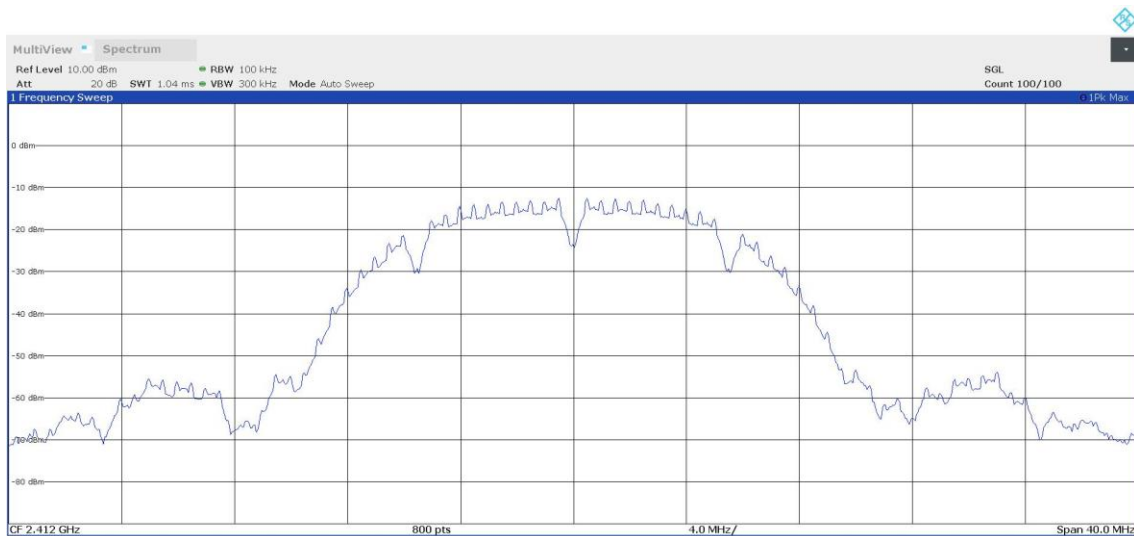
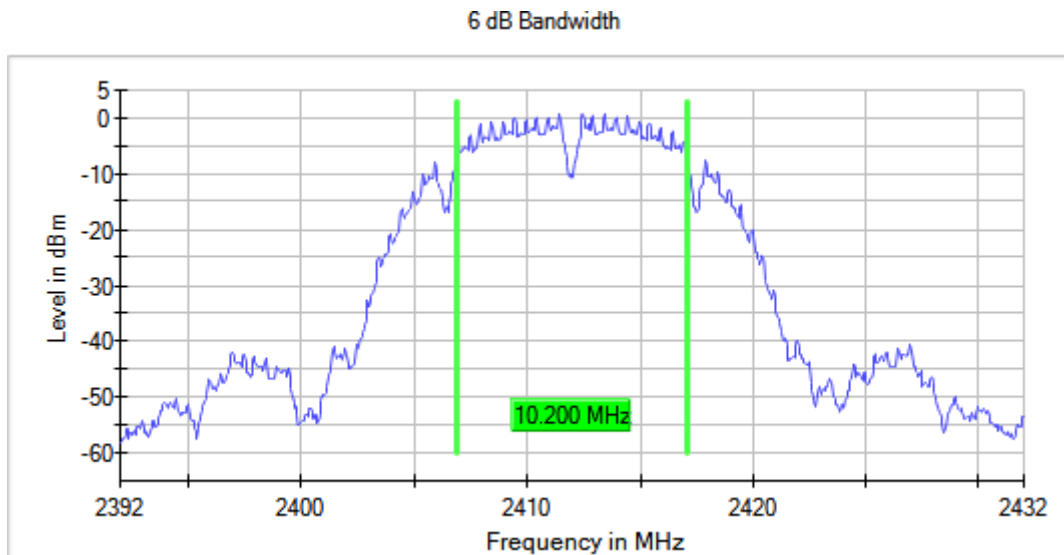
Verdict

Pass

Attachments

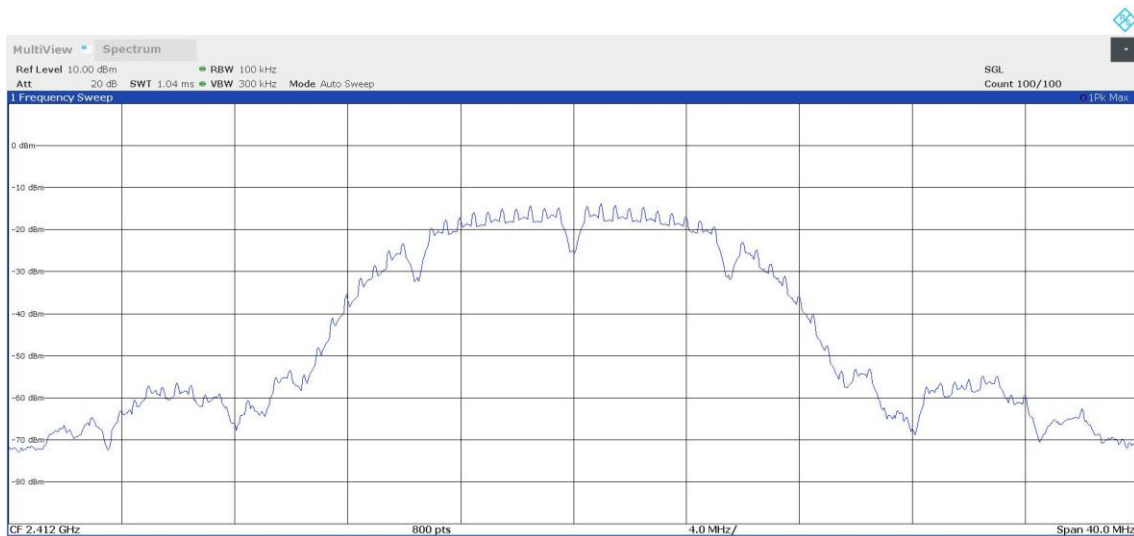
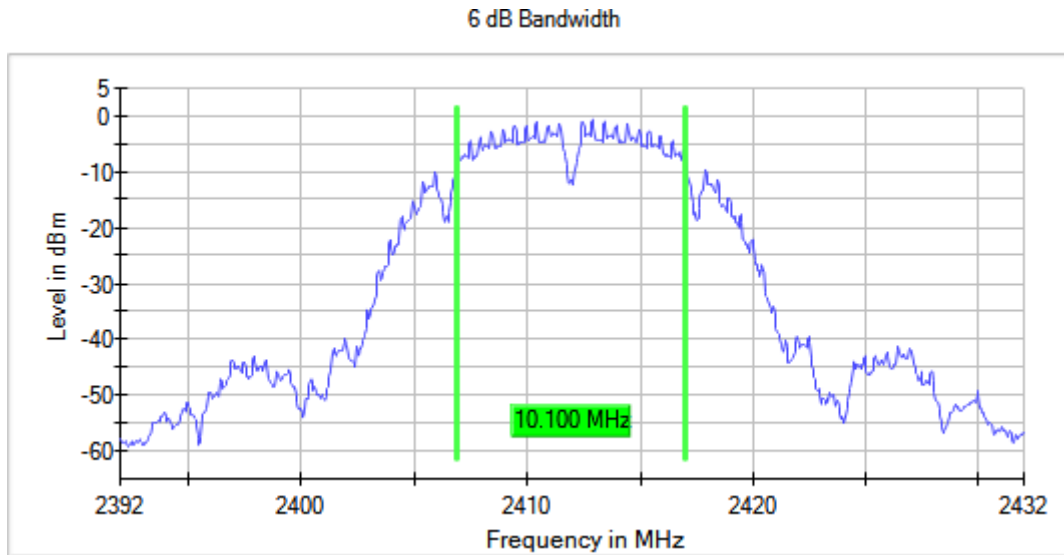
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Frequency MHz = 2412.00000 Antenna configuration: SISO
 Active Port = 1

Images:



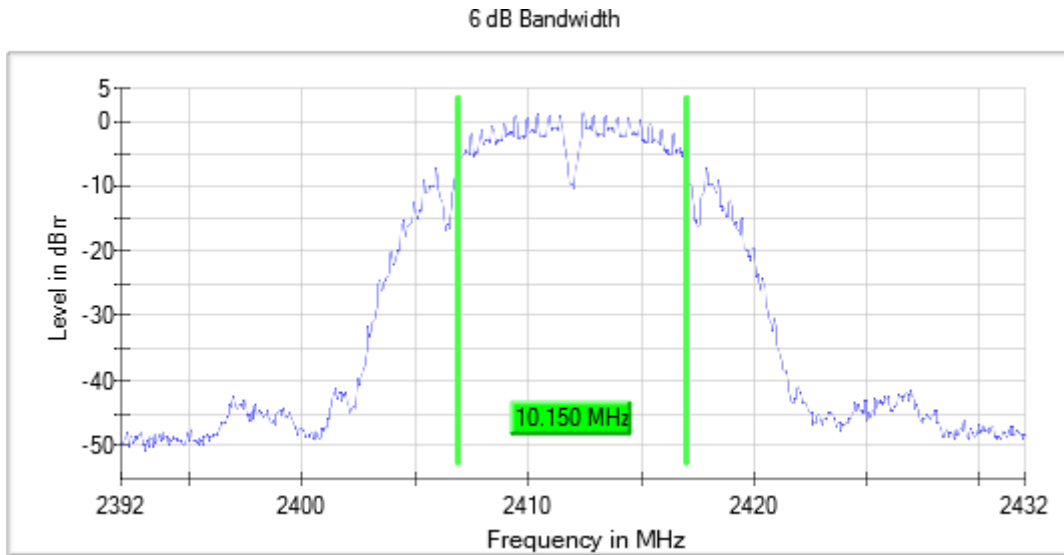
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Frequency MHz = 2412.00000 Antenna configuration: SISO
 Active Port = 3

Images:



Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
Frequency MHz = 2412.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:

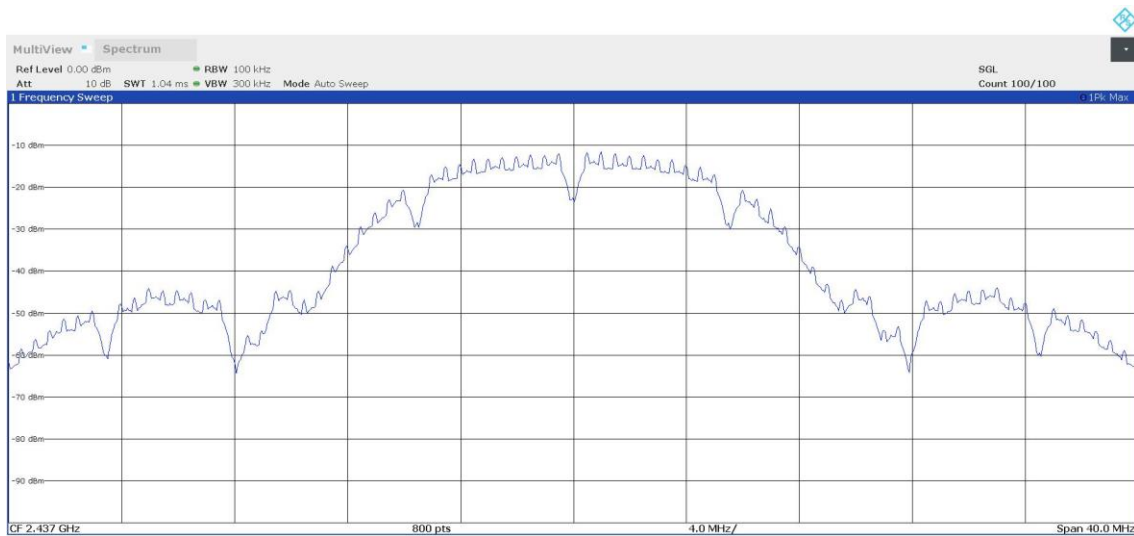
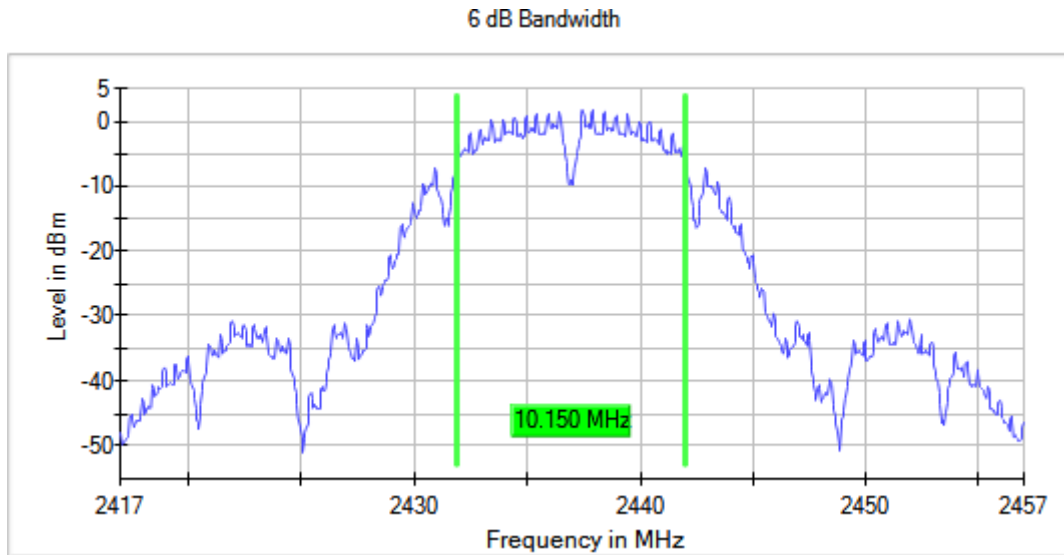


Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)

Frequency MHz = 2437.00000 Antenna configuration: SISO

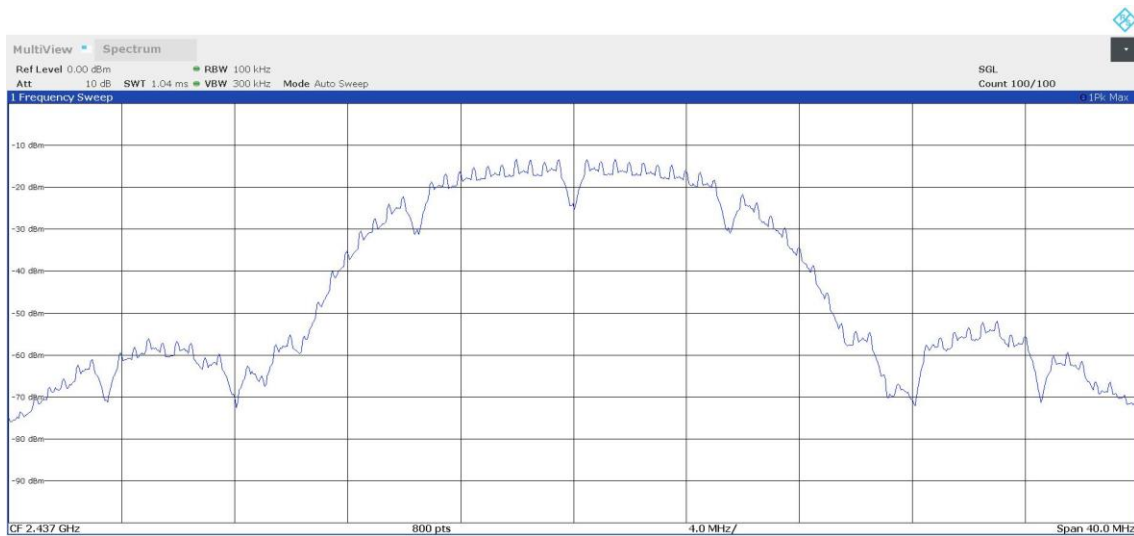
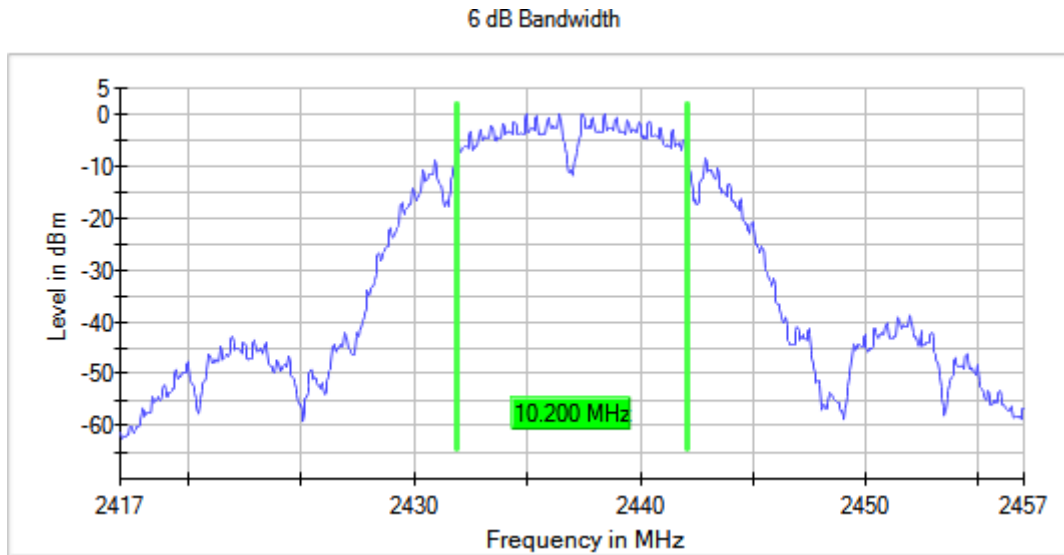
Active Port = 1

Images:



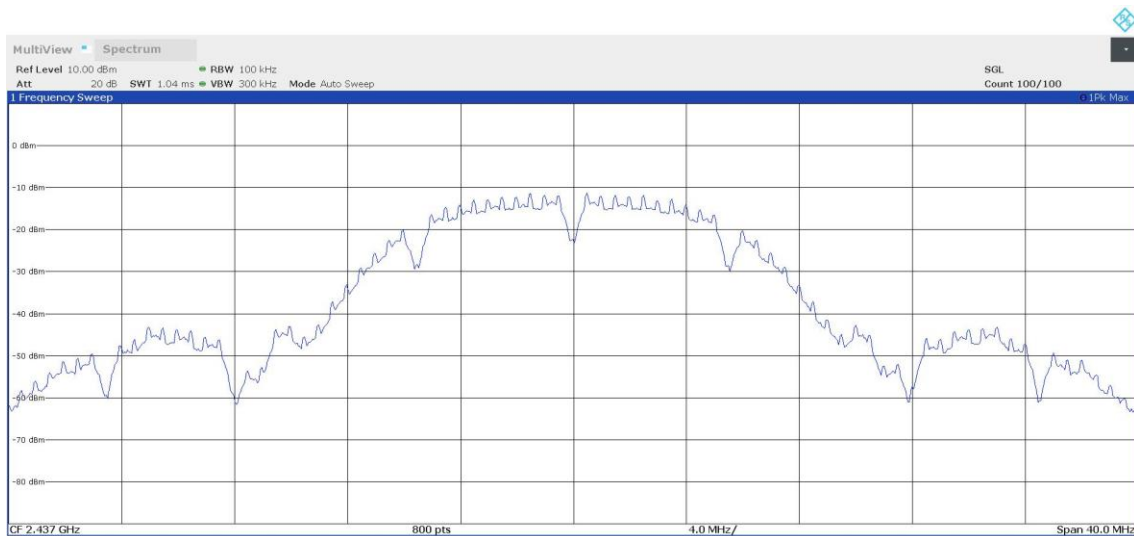
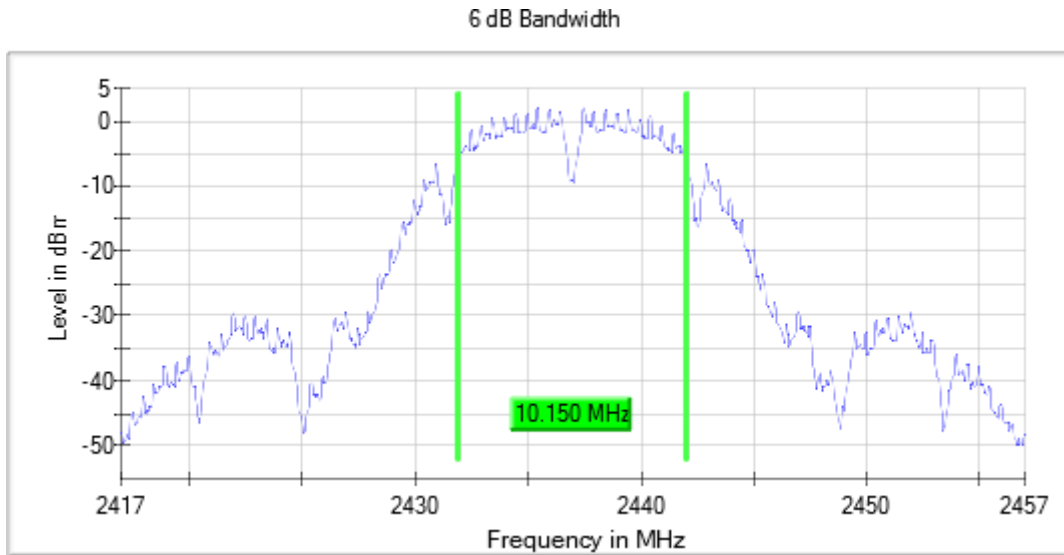
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
Frequency MHz = 2437.00000 Antenna configuration: SISO
Active Port = 3

Images:



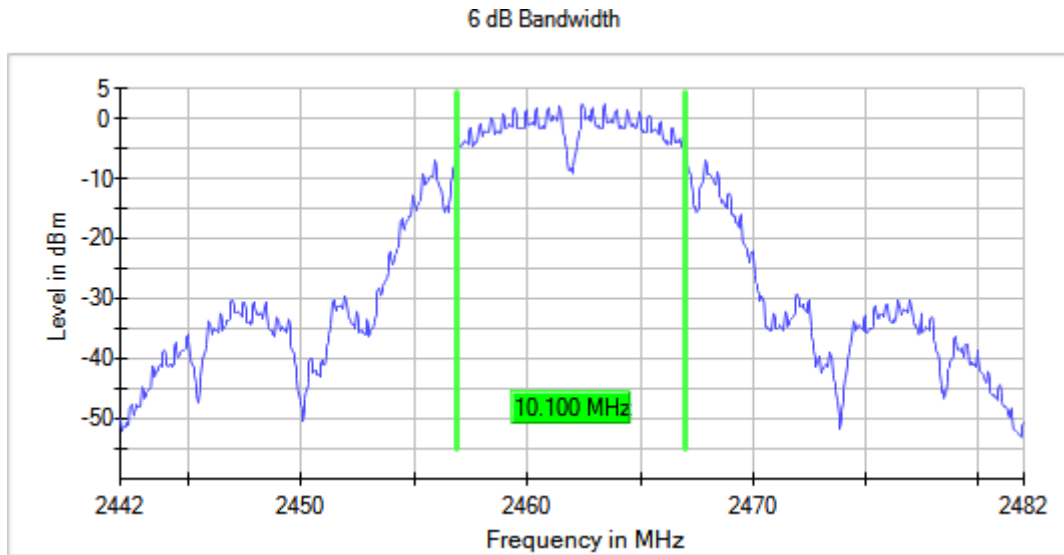
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Frequency MHz = 2437.00000 Antenna configuration = MIMO CDD Mode 2x2
 Active Port = 1+3

Images:



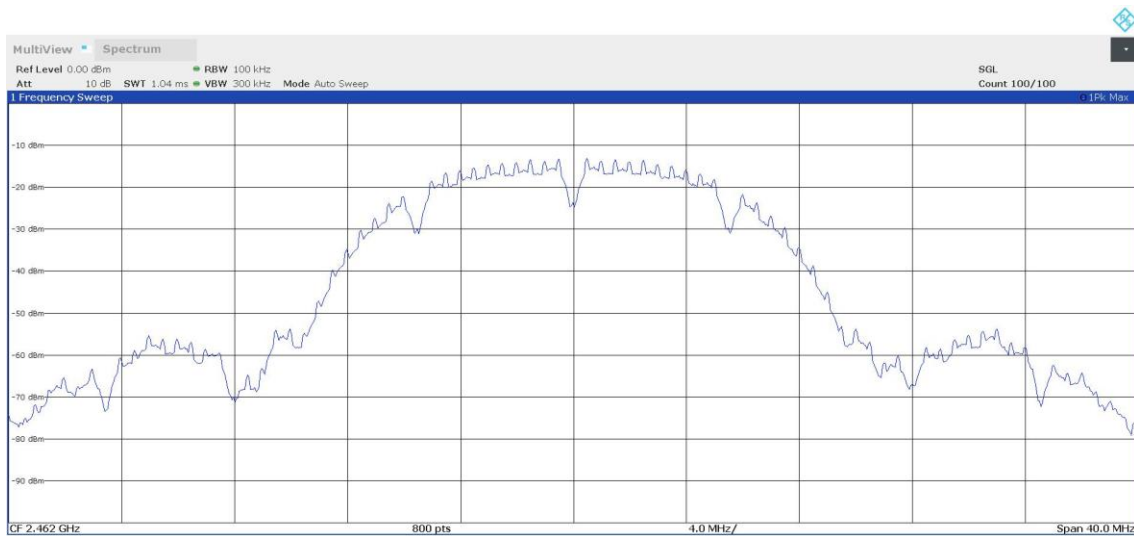
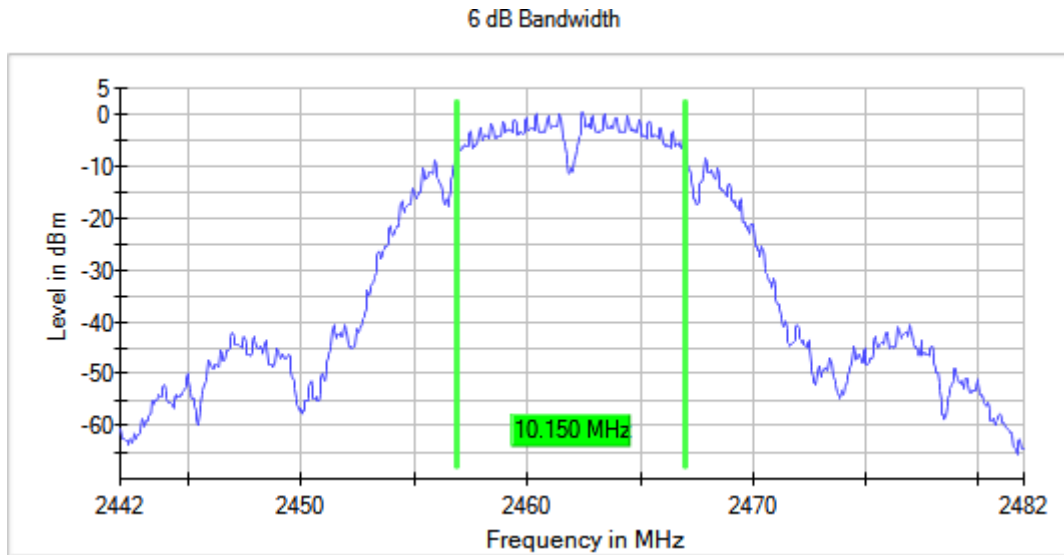
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Frequency MHz = 2462.00000 Antenna configuration: SISO
 Active Port = 1

Images:



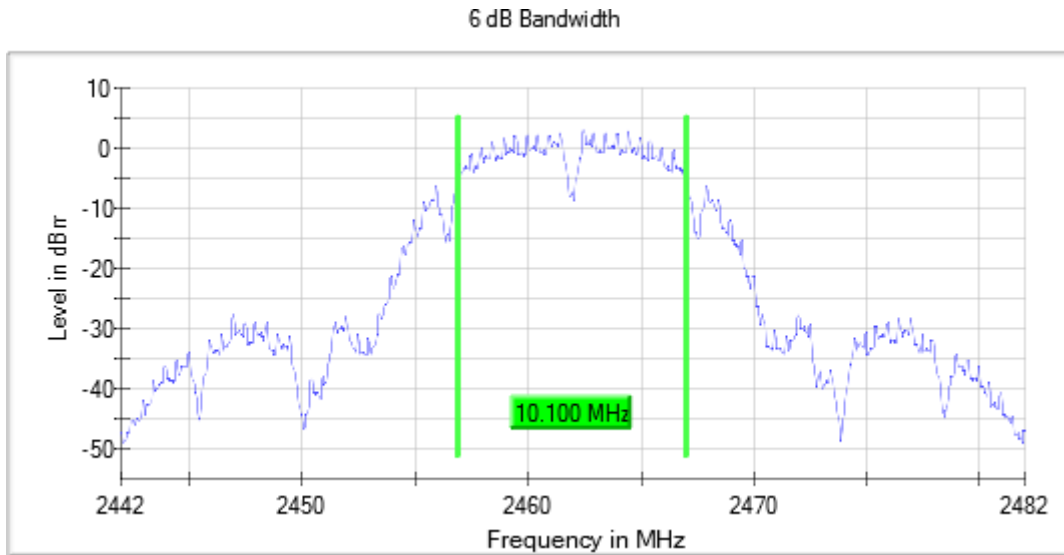
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
Frequency MHz = 2462.00000 Antenna configuration: SISO
Active Port = 3

Images:



Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Frequency MHz = 2462.00000 Antenna configuration = MIMO CDD Mode 2x2
 Active Port = 1+3

Images:



Results

Modulation: 802.11g (OFDM 6 Mbit/s)
Antenna configuration: SISO (port 1 and port 3) & MIMO (ports 1+3)

BW (MHz)	Freq (MHz)	Port	6dB Bandwidth (MHz)
20	2412.00000	1	16.400
		3	16.400
		1+3	16.400
	2437.00000	1	16.450
		3	16.400
		1+3	16.450
	2462.00000	1	16.400
		3	16.400
		1+3	16.400

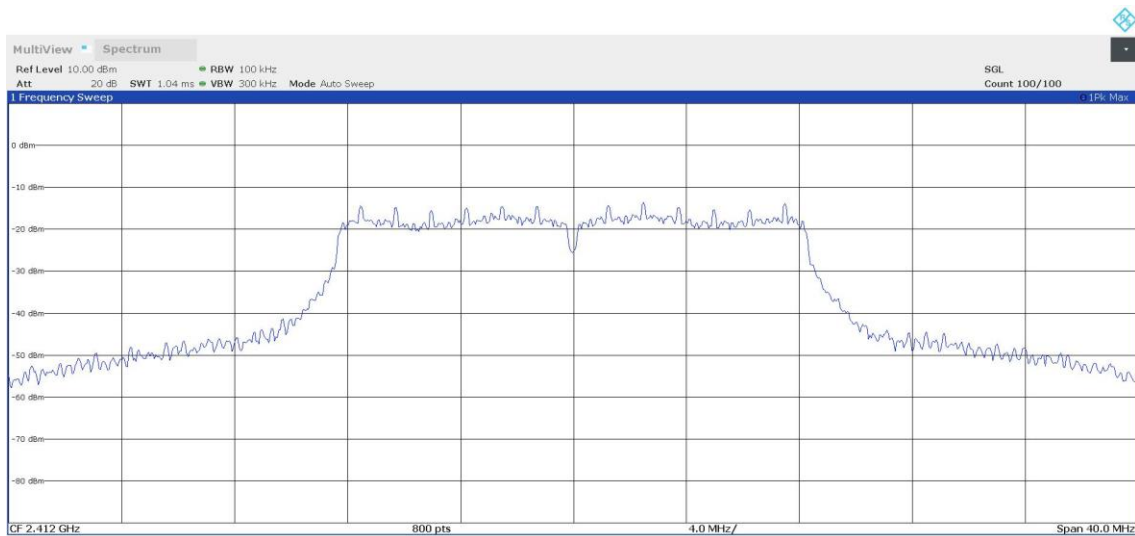
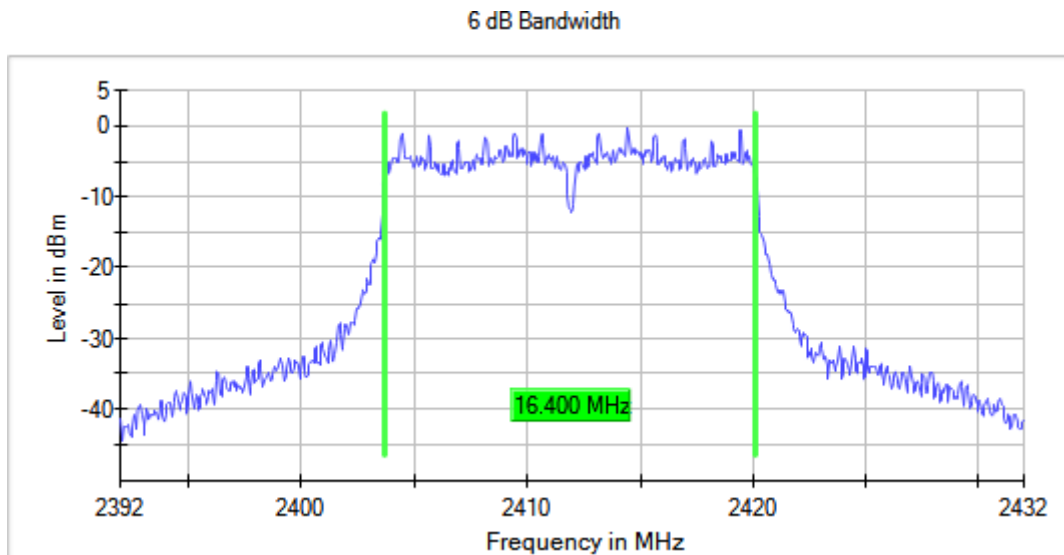
Verdict

Pass

Attachments

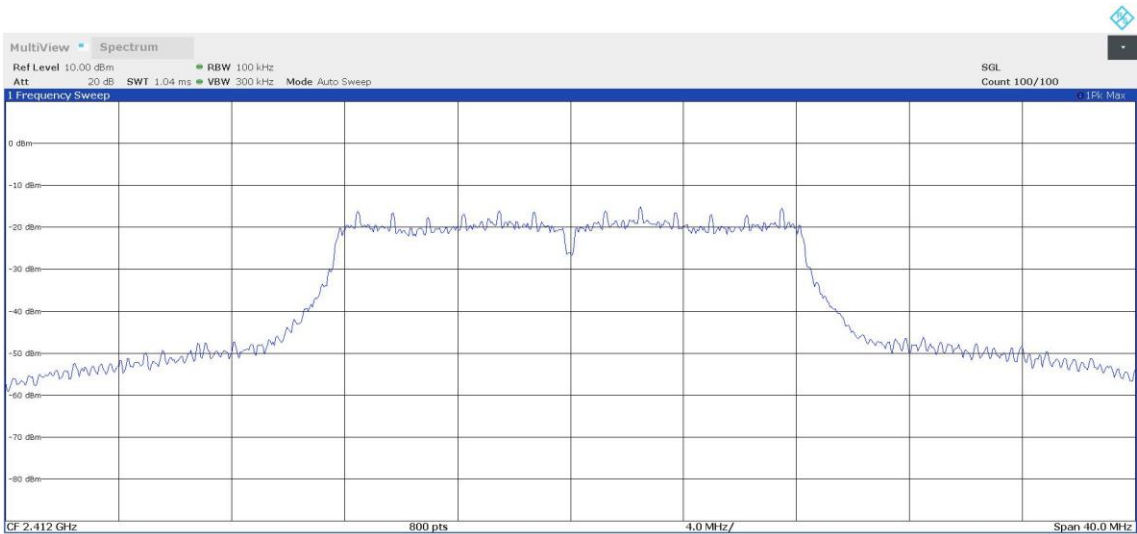
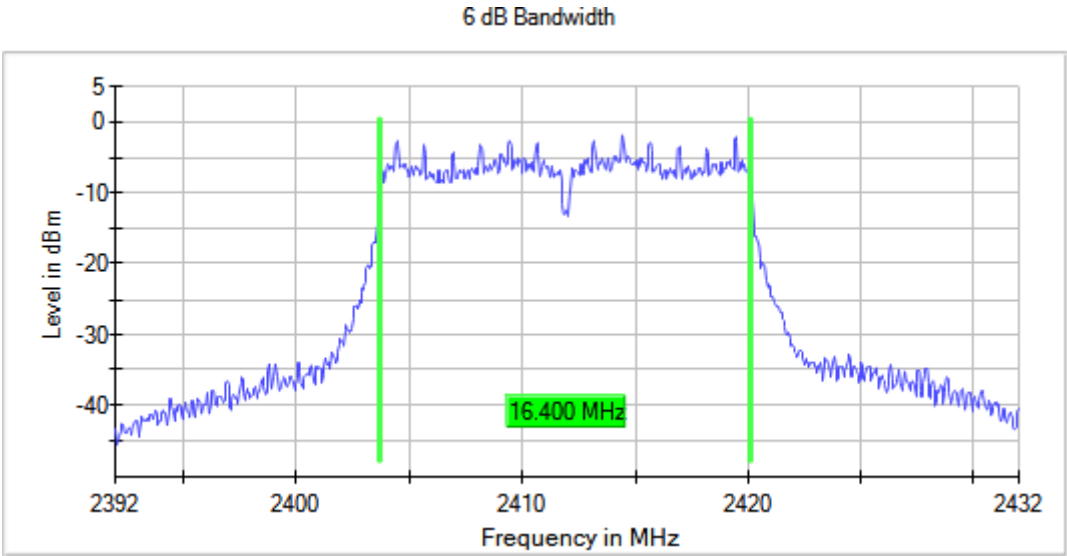
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2412.00000 Antenna configuration: SISO
Active Port = 1

Images:



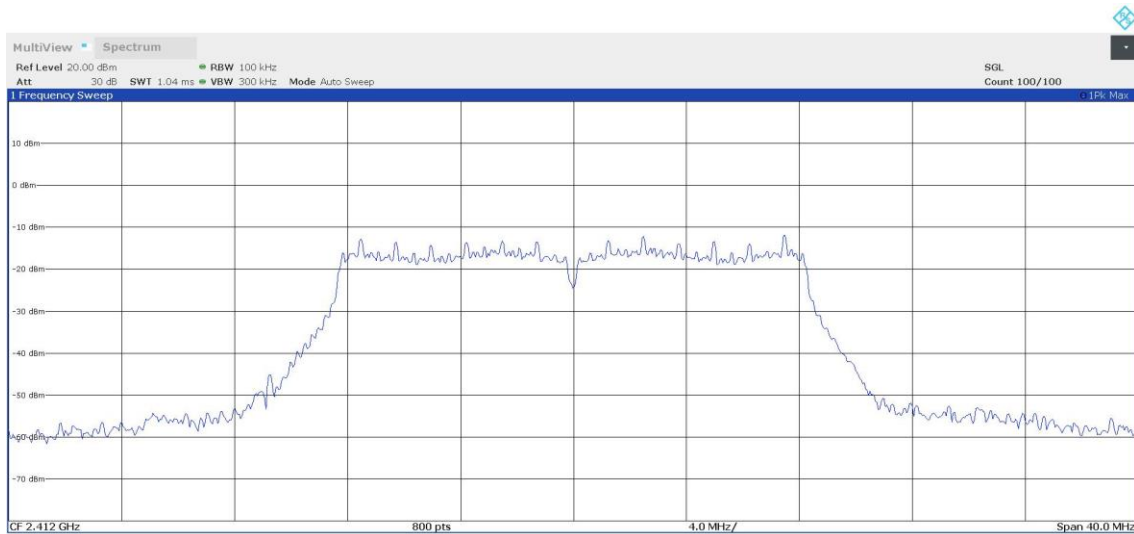
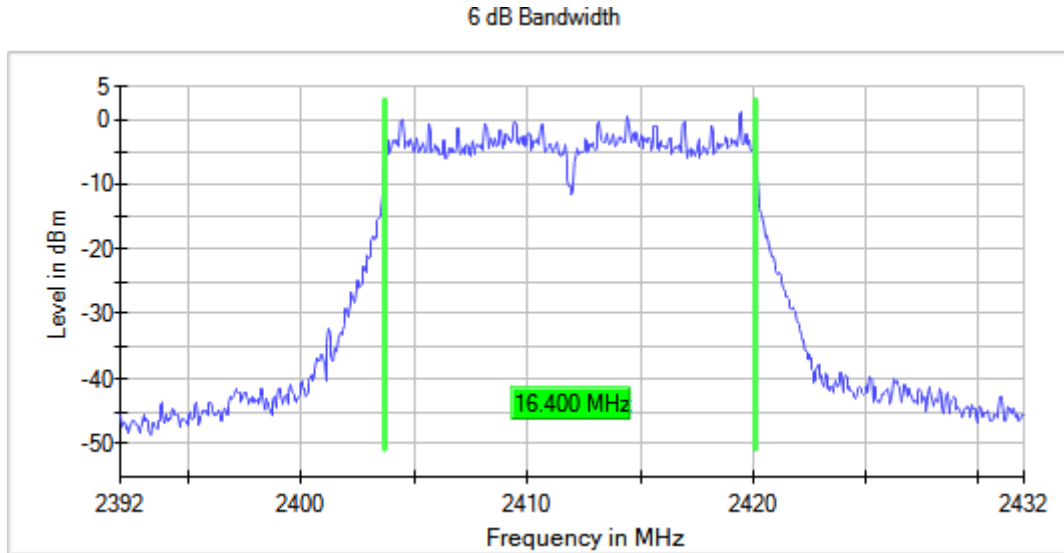
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2412.00000 Antenna configuration: SISO
Active Port = 3

Images:



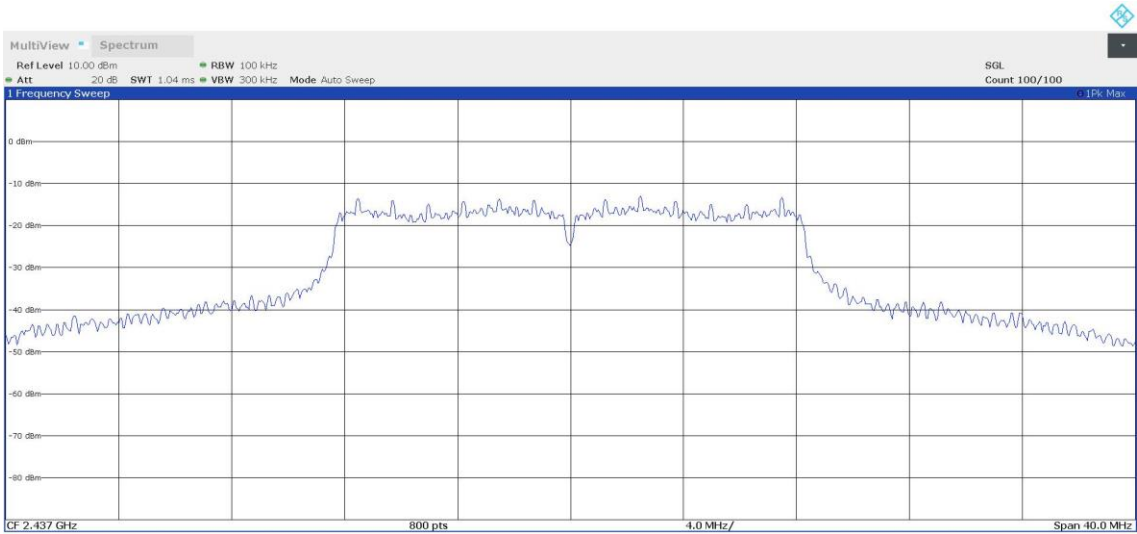
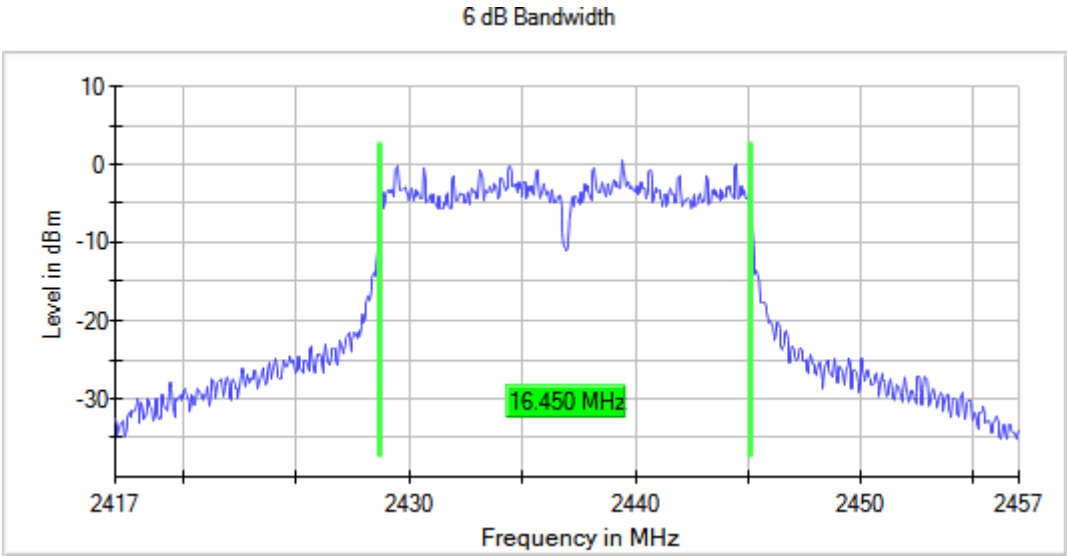
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2412.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



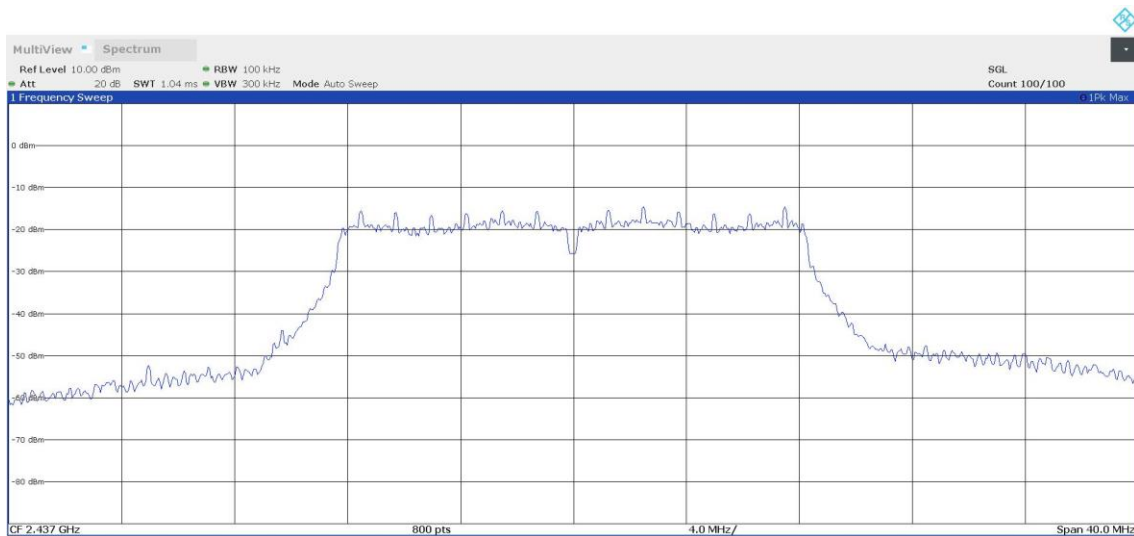
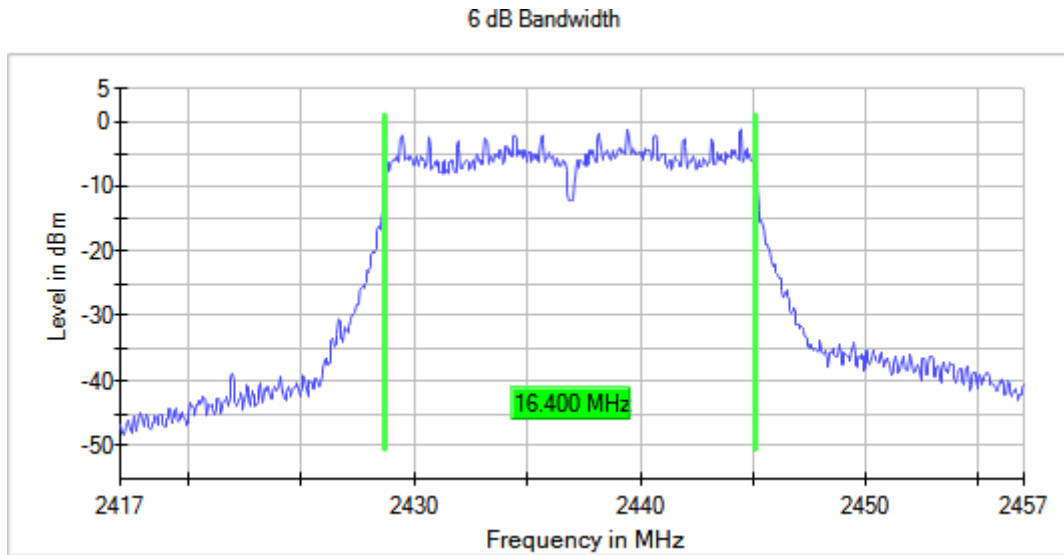
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2437.00000 Antenna configuration: SISO
Active Port = 1

Images:



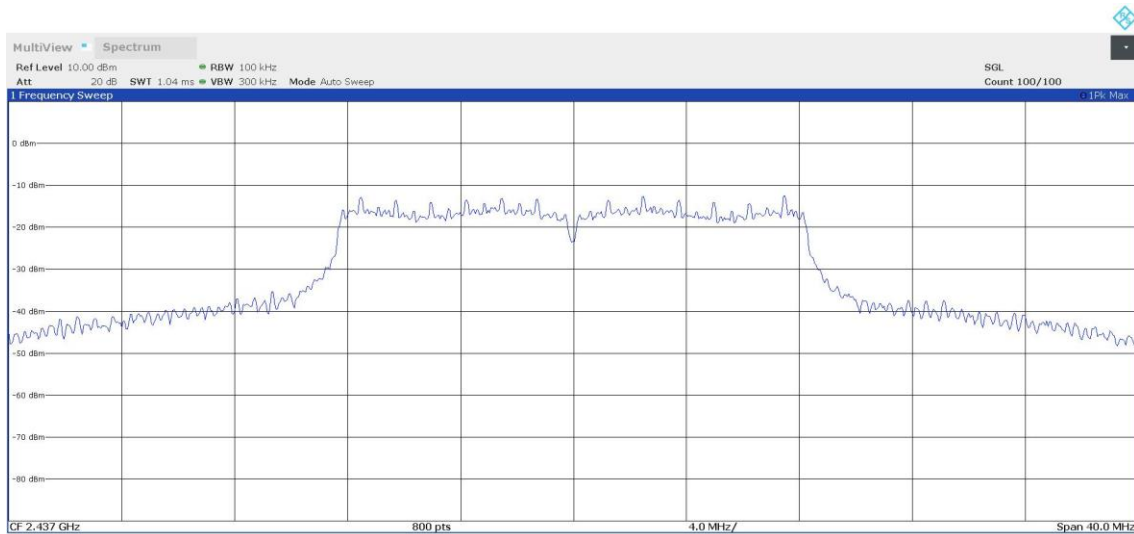
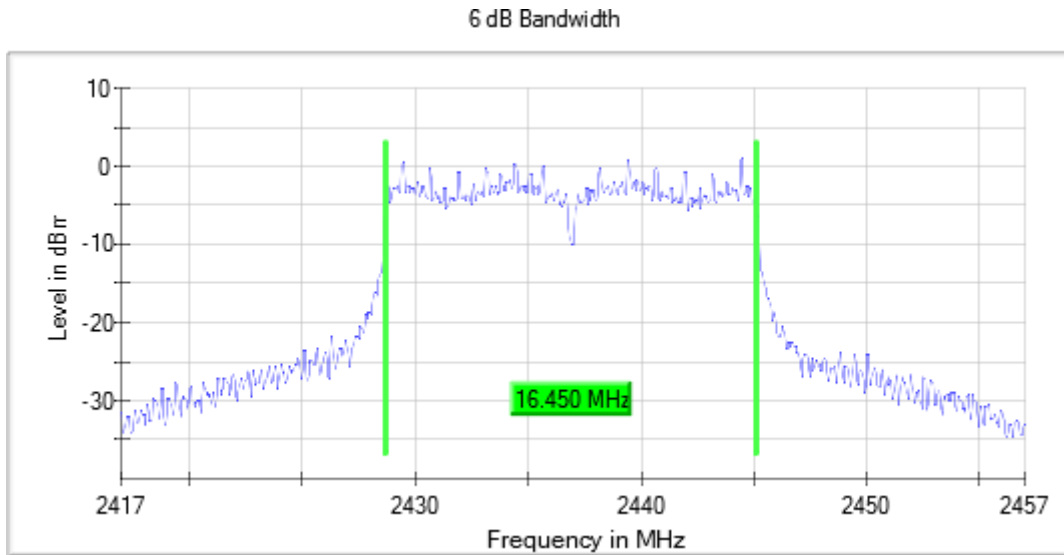
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2437.00000 Antenna configuration: SISO
Active Port = 3

Images:



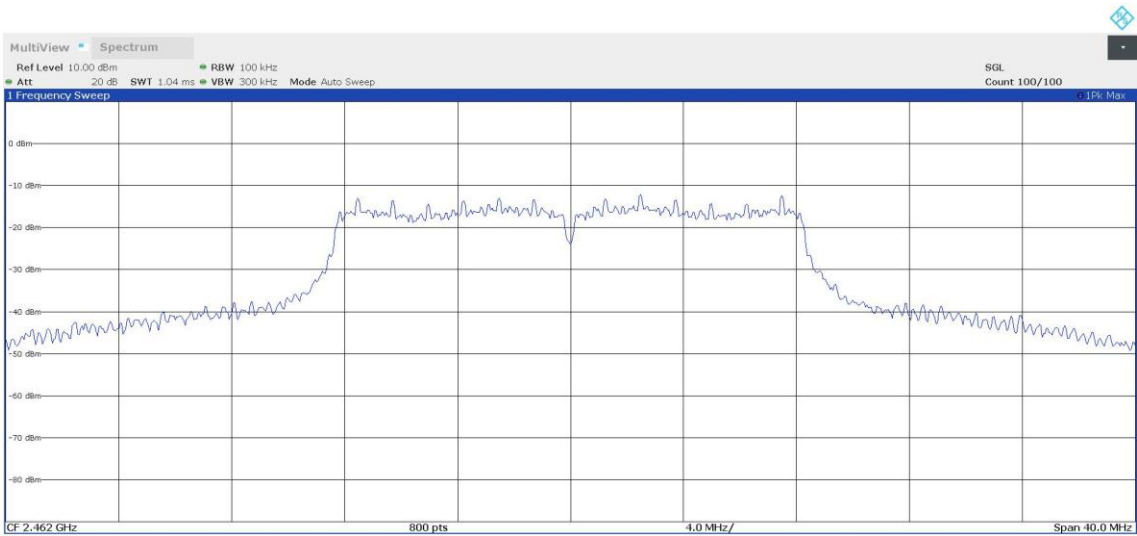
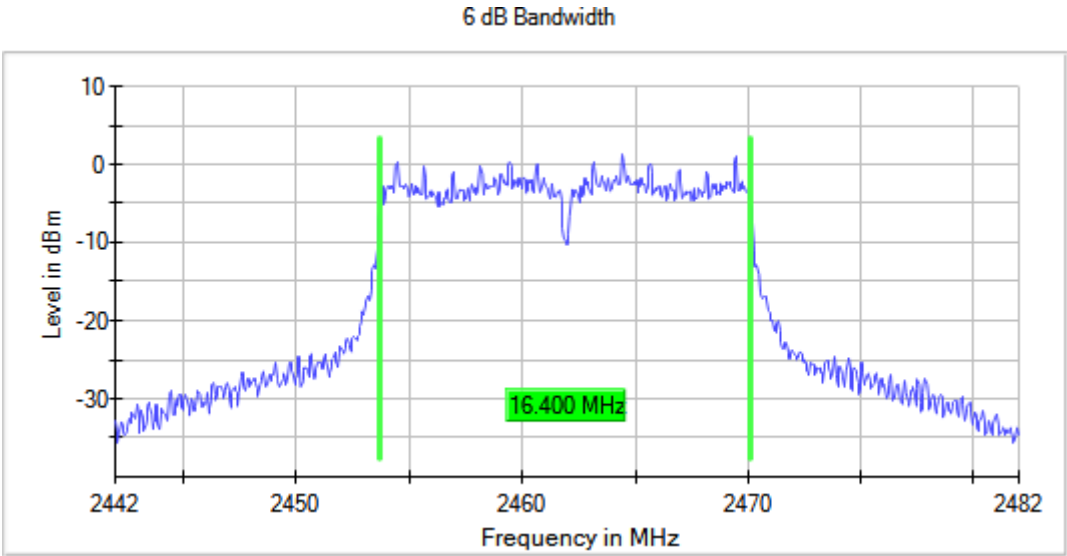
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2437.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



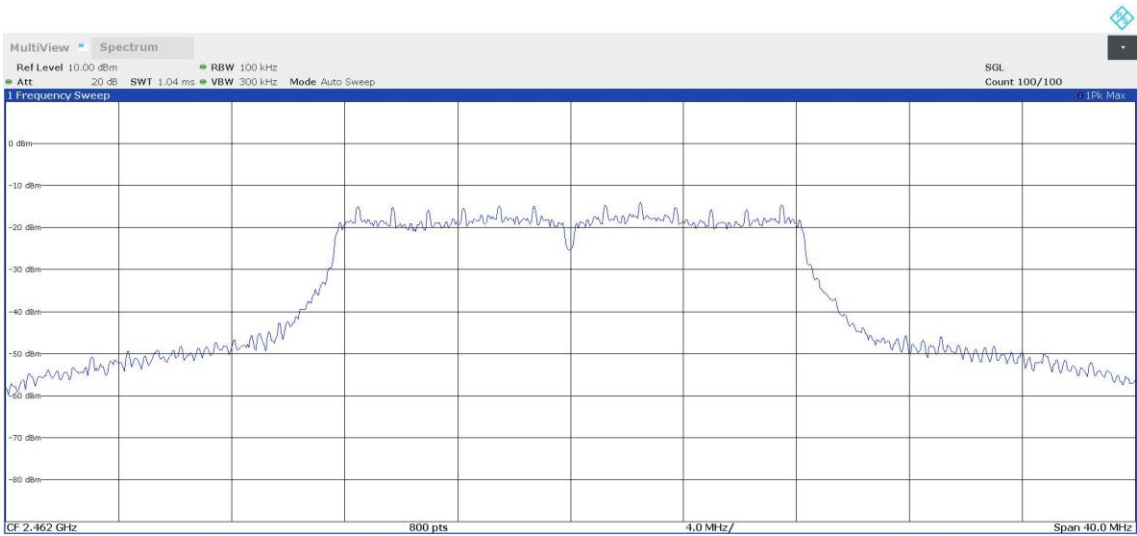
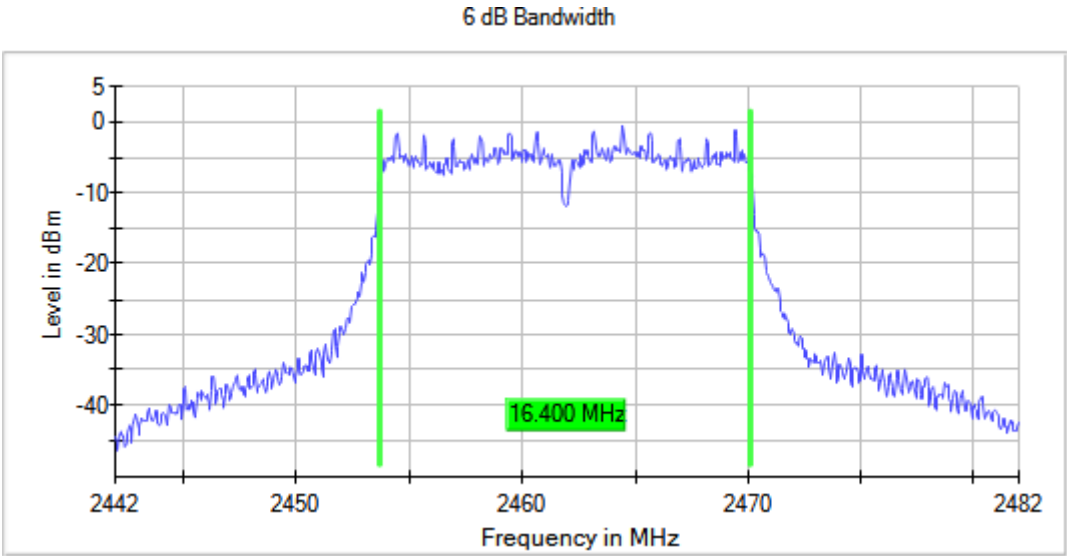
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2462.00000 Antenna configuration: SISO
Active Port = 1

Images:



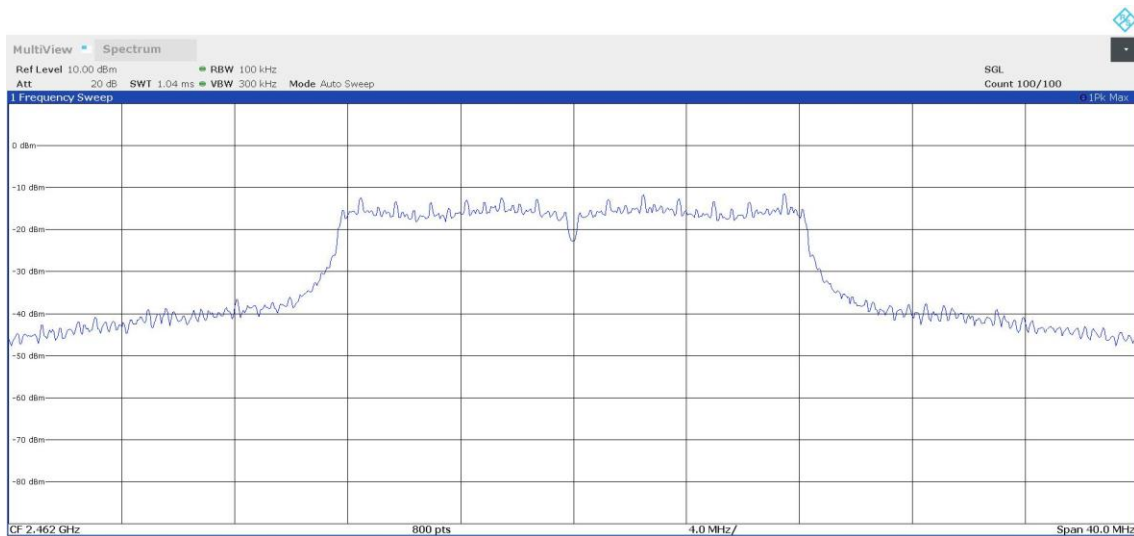
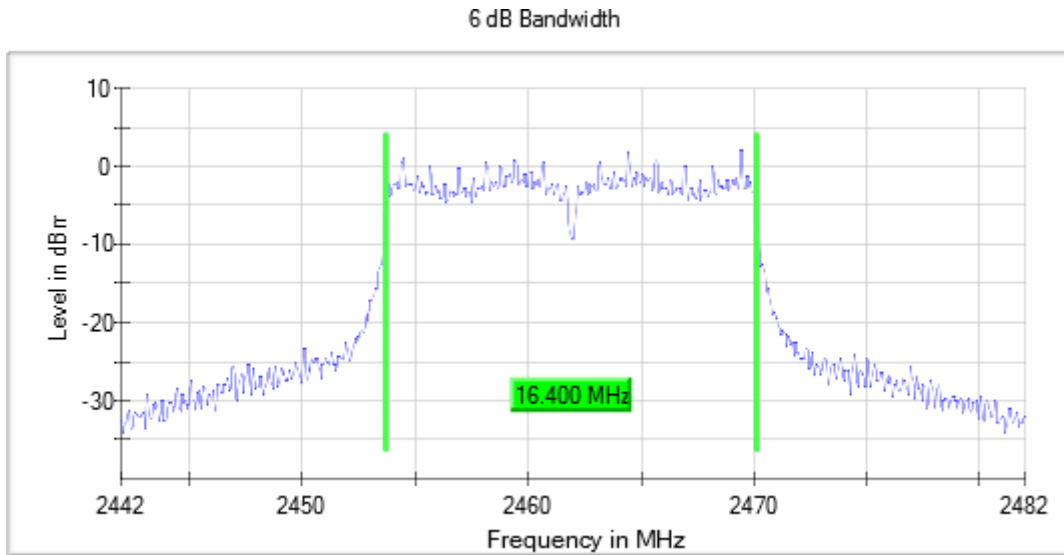
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2462.00000 Antenna configuration: SISO
Active Port = 3

Images:



Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Frequency MHz = 2462.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



Results

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

Antenna configuration: SISO (port 1 and port 3) & MIMO (ports 1+3)

BW (MHz)	Freq (MHz)	Port	6dB Bandwidth (MHz)
20	2412.00000	1	17.600
		3	16.400
		1+3	17.600
	2437.00000	1	17.650
		3	17.600
		1+3	17.650
	2462.00000	1	17.650
		3	17.600
		1+3	17.650

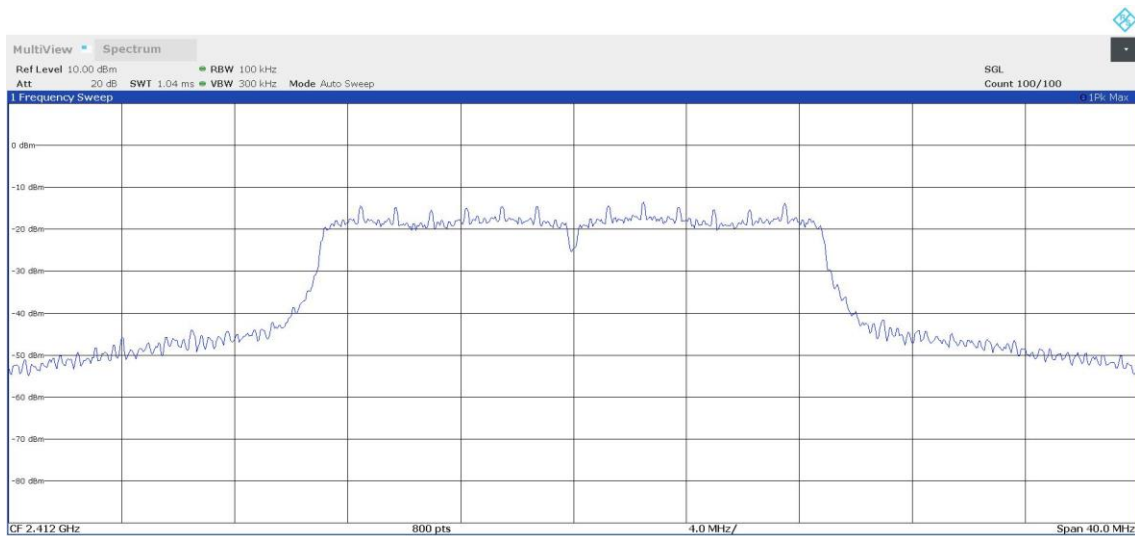
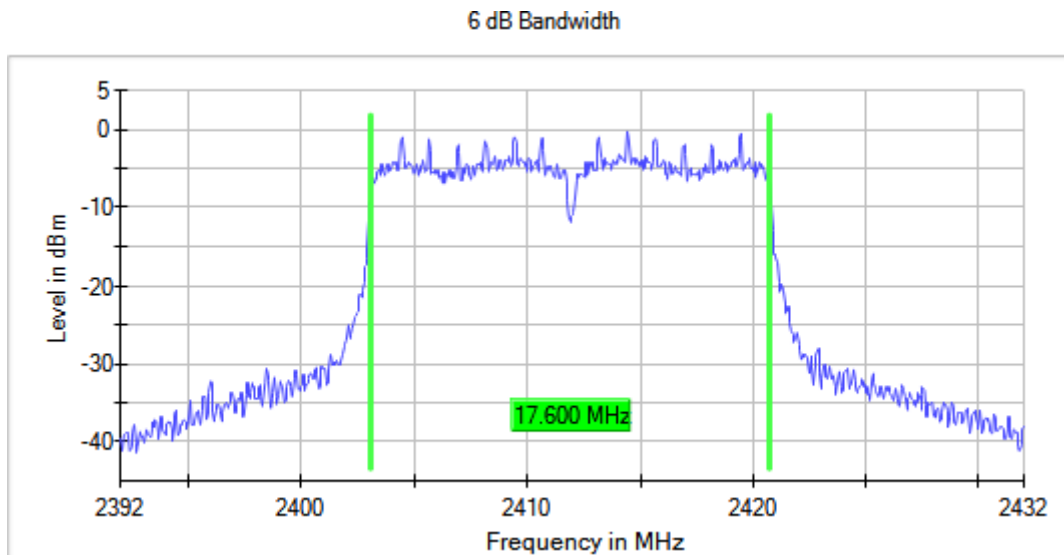
Verdict

Pass

Attachments

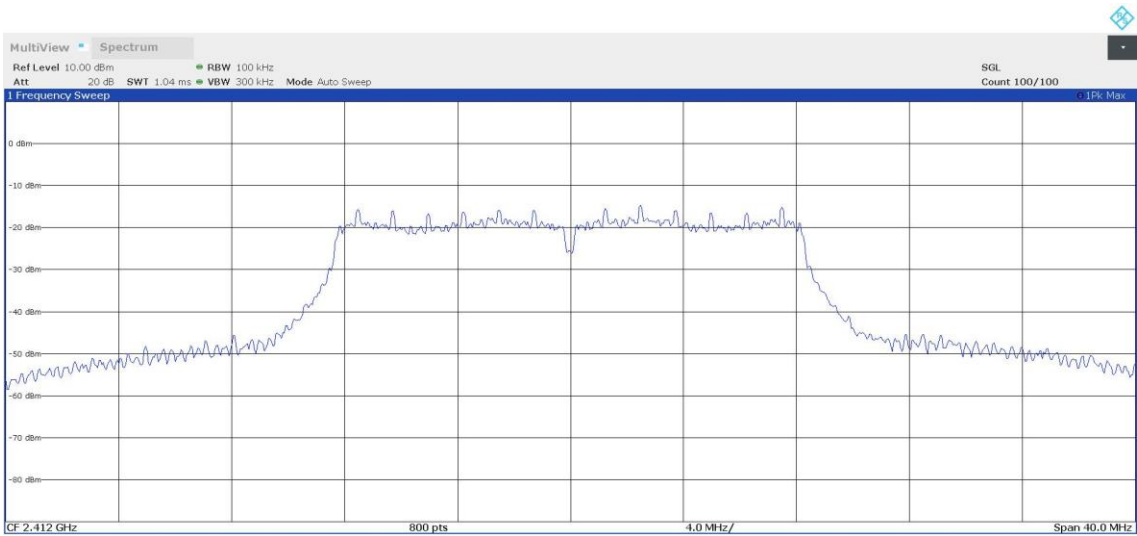
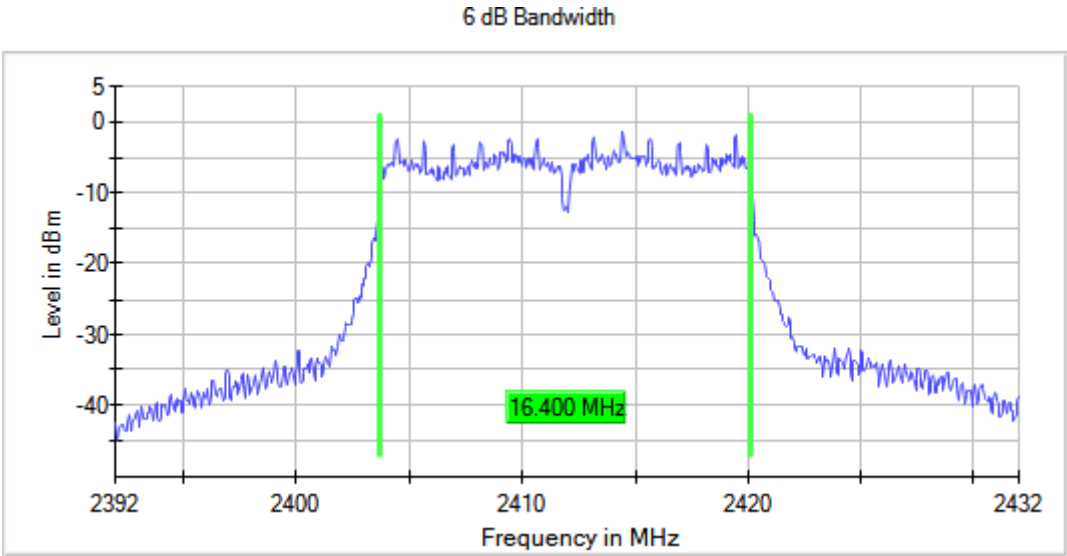
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
 Frequency MHz = 2412.00000 Antenna configuration: SISO
 Active Port = 1

Images:



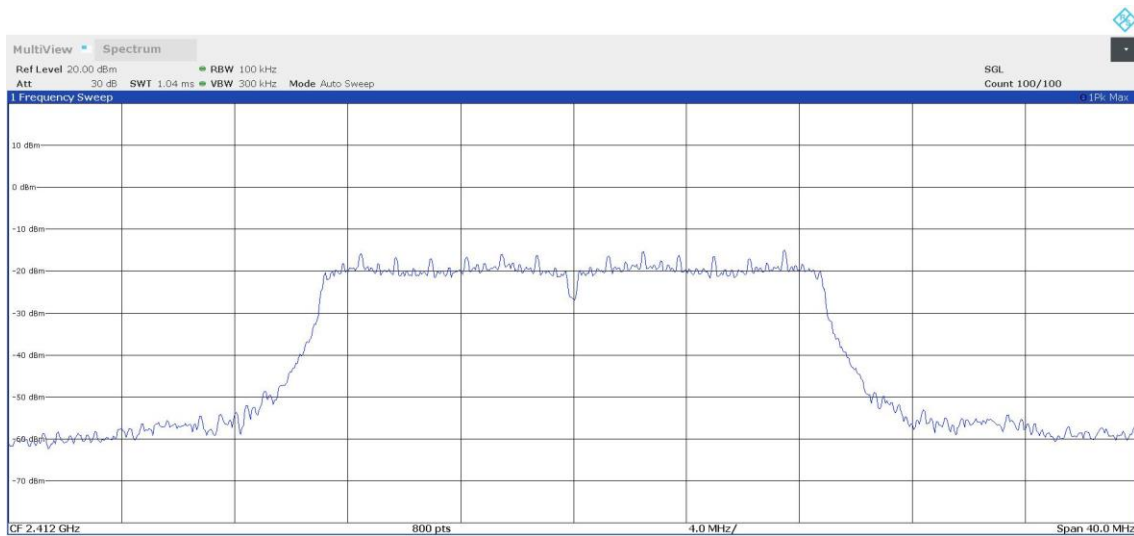
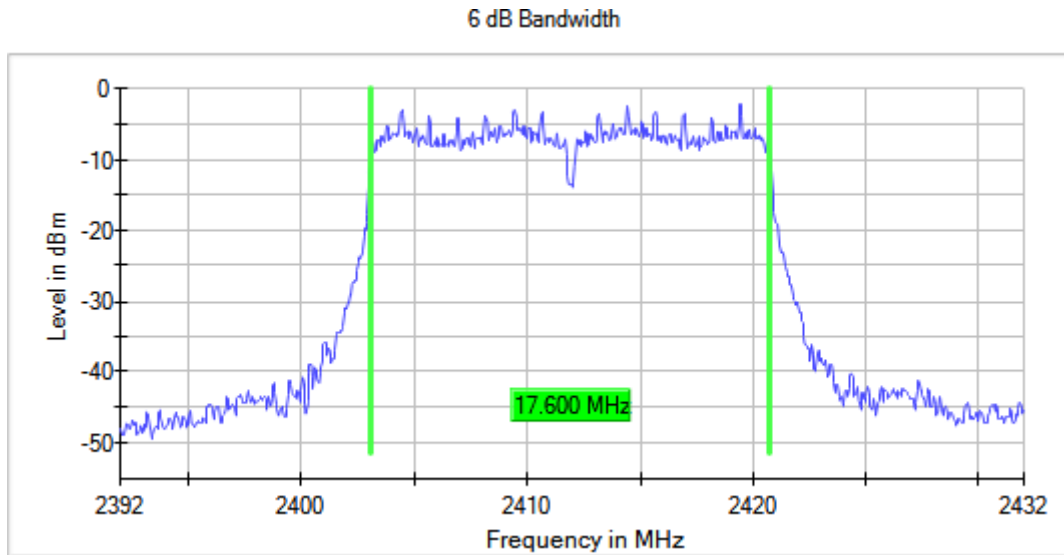
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2412.00000 Antenna configuration: SISO
Active Port = 3

Images:



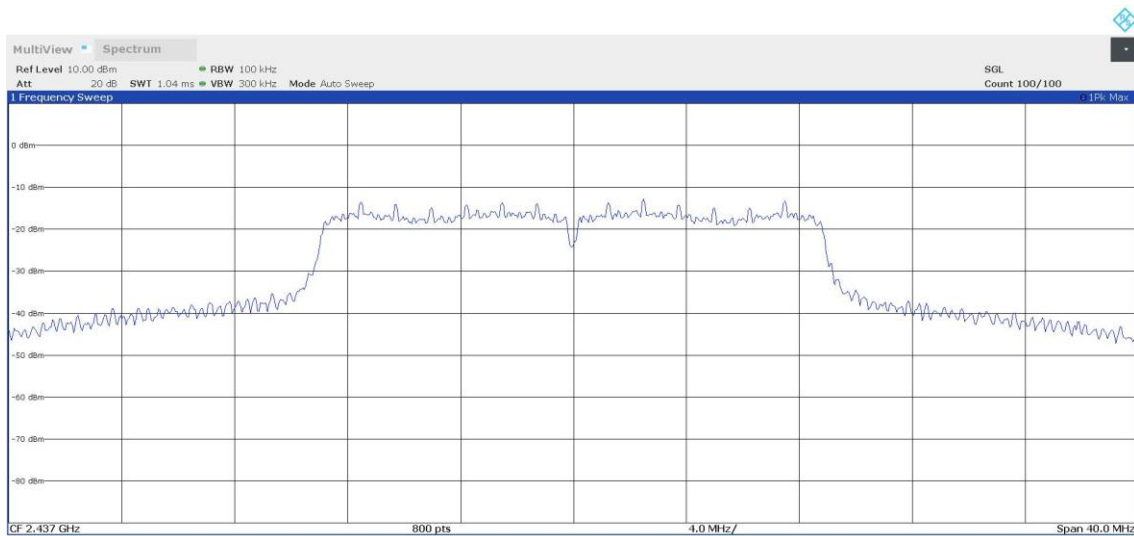
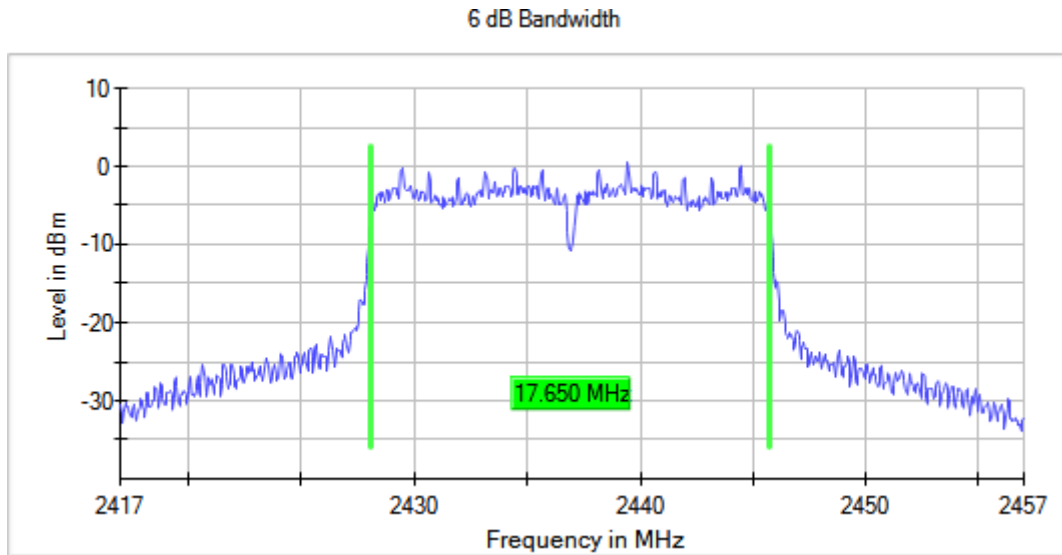
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2412.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



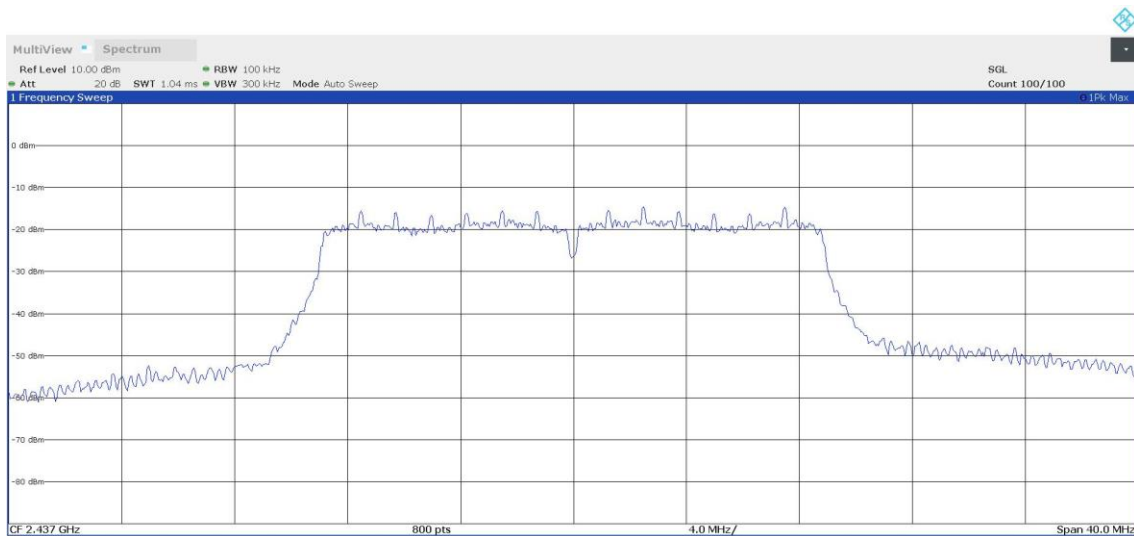
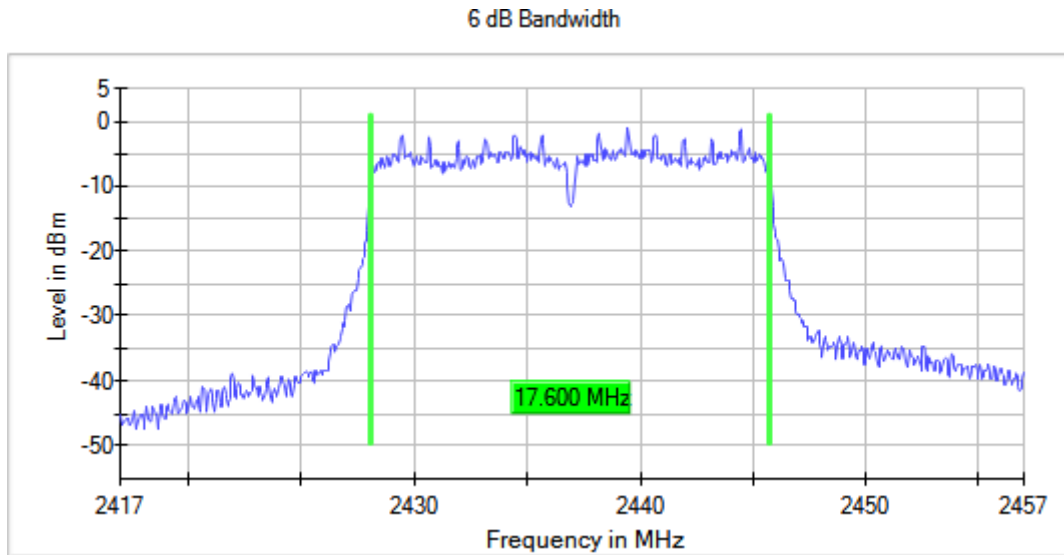
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2437.00000 Antenna configuration: SISO
Active Port = 1

Images:



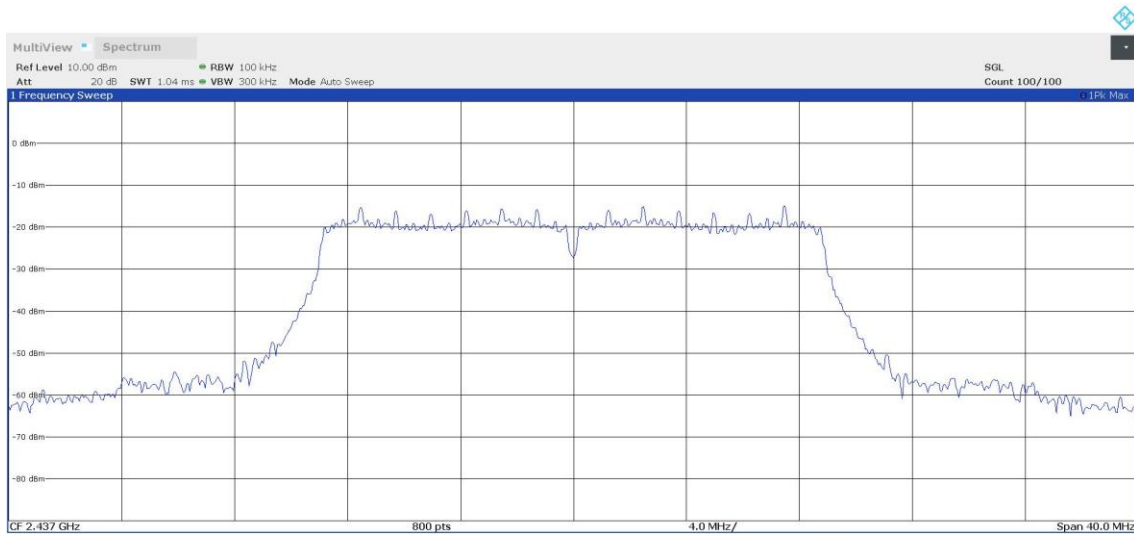
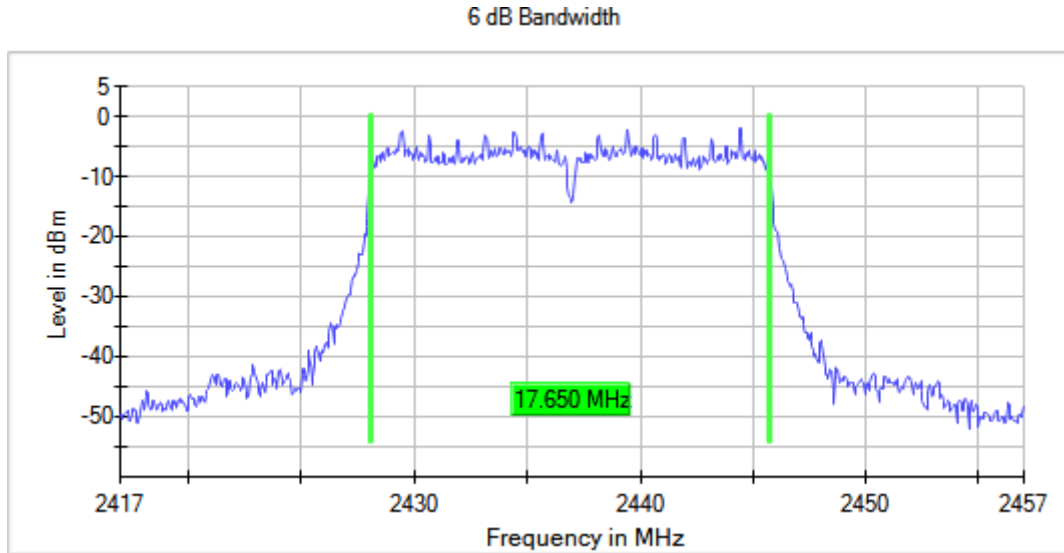
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2437.00000 Antenna configuration: SISO
Active Port = 3

Images:



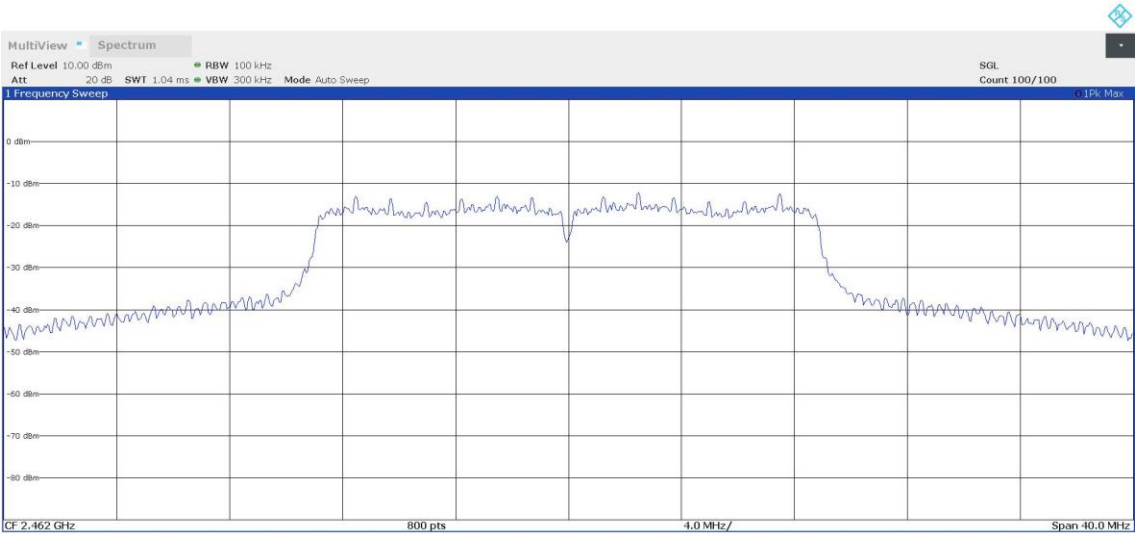
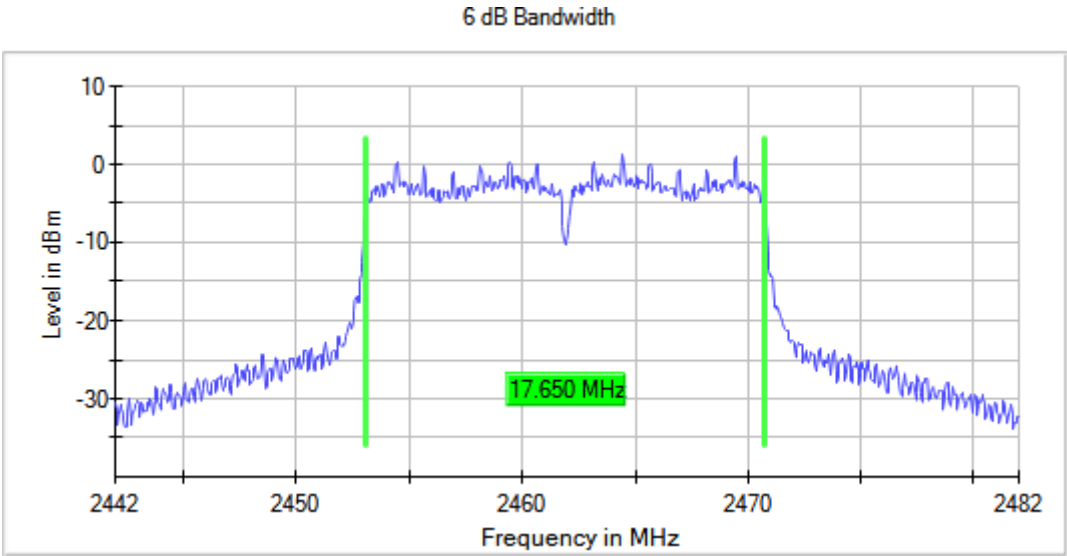
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2437.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



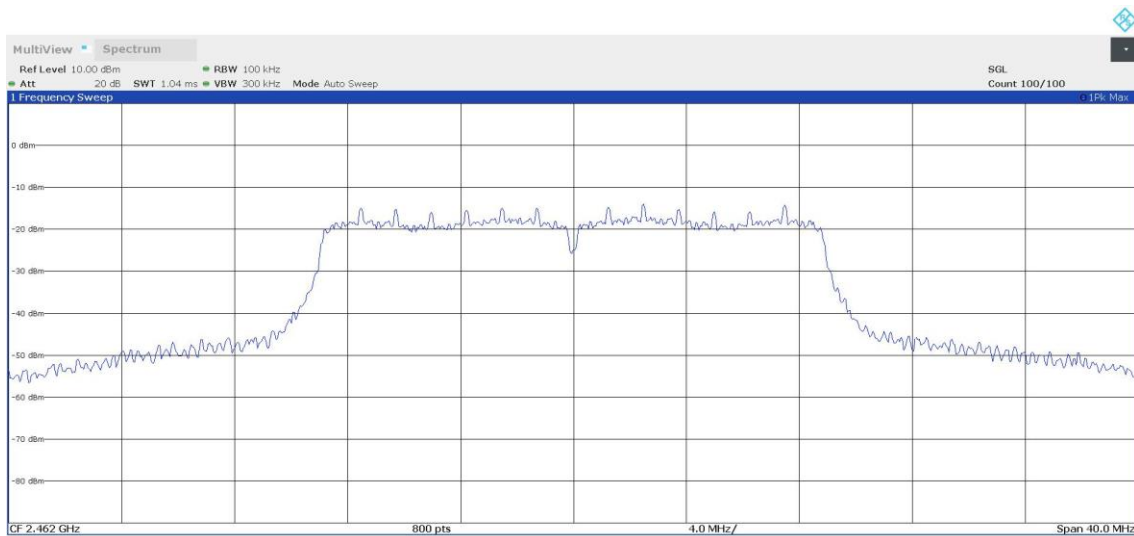
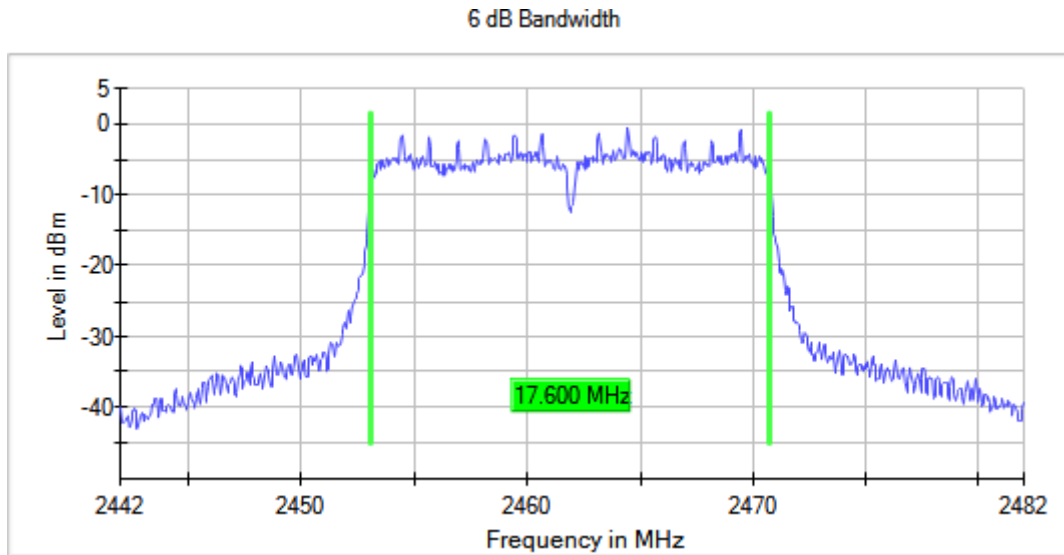
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2462.00000 Antenna configuration: SISO
Active Port = 1

Images:



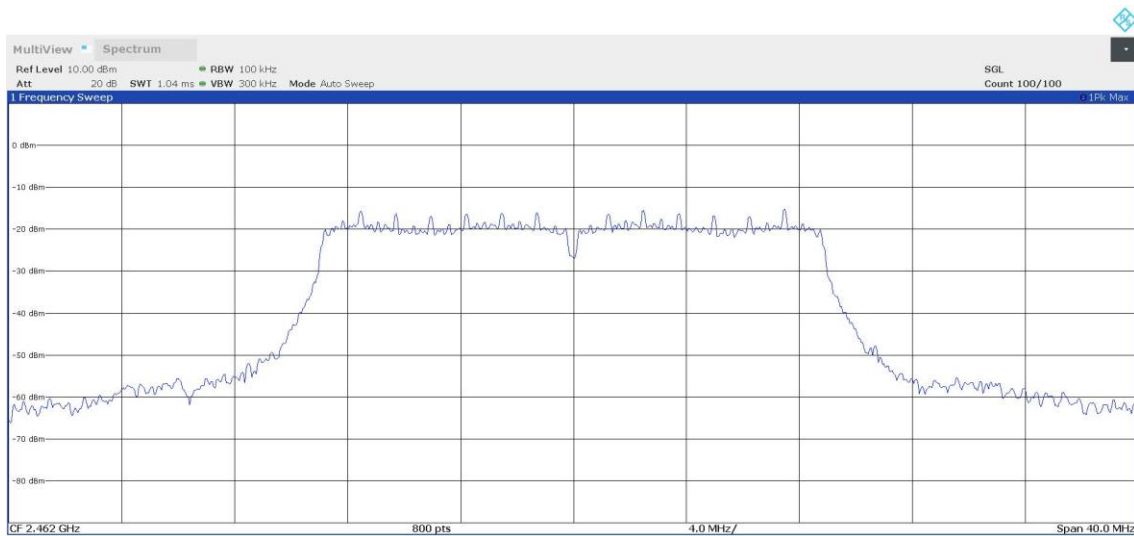
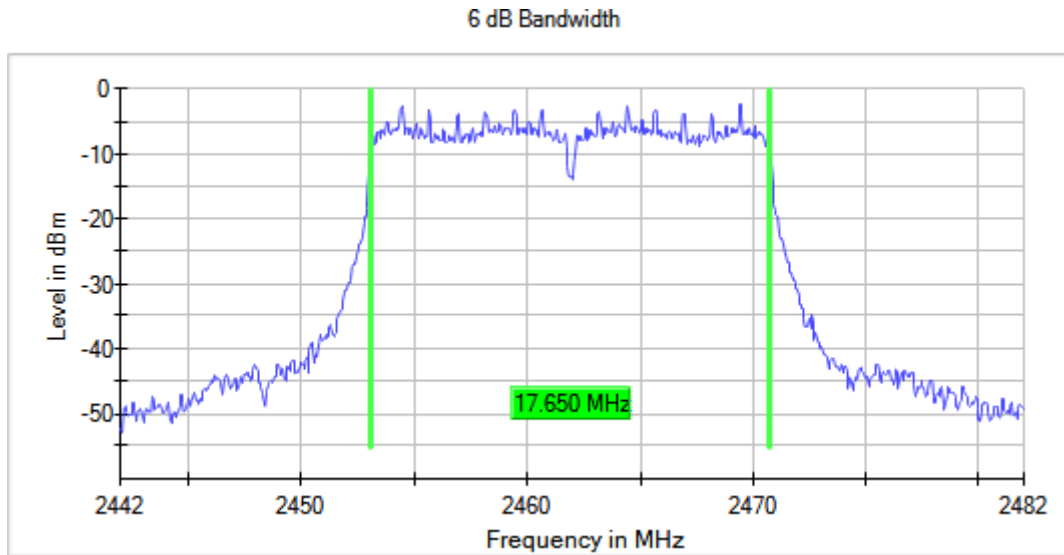
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2462.00000 Antenna configuration: SISO
Active Port = 3

Images:



Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Frequency MHz = 2462.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



Modulation: 802.11ax HE20 (OFDMA MCS0) SU
Antenna configuration: SISO (port 1 and port 3) & MIMO (ports 1+3)
Results

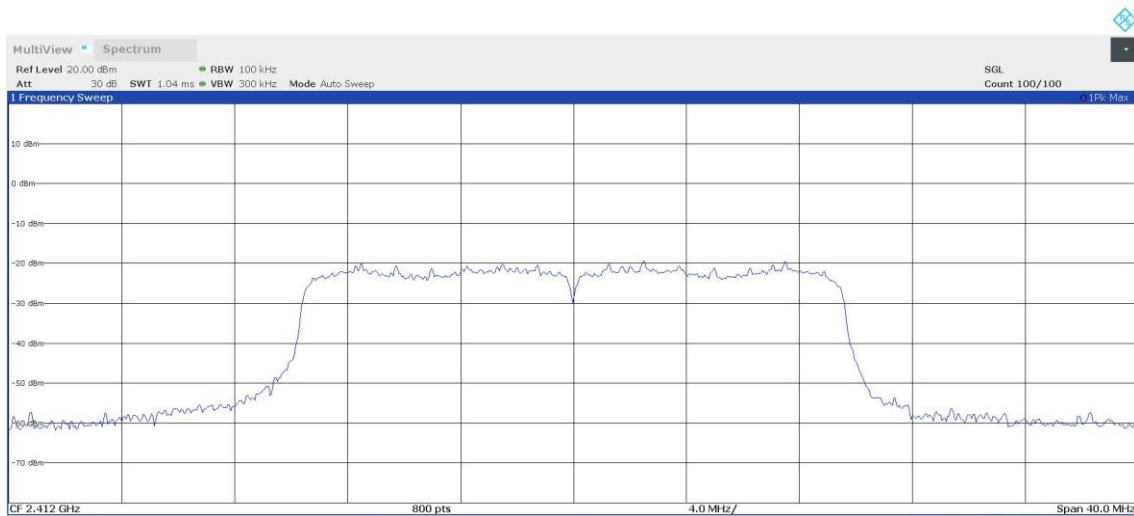
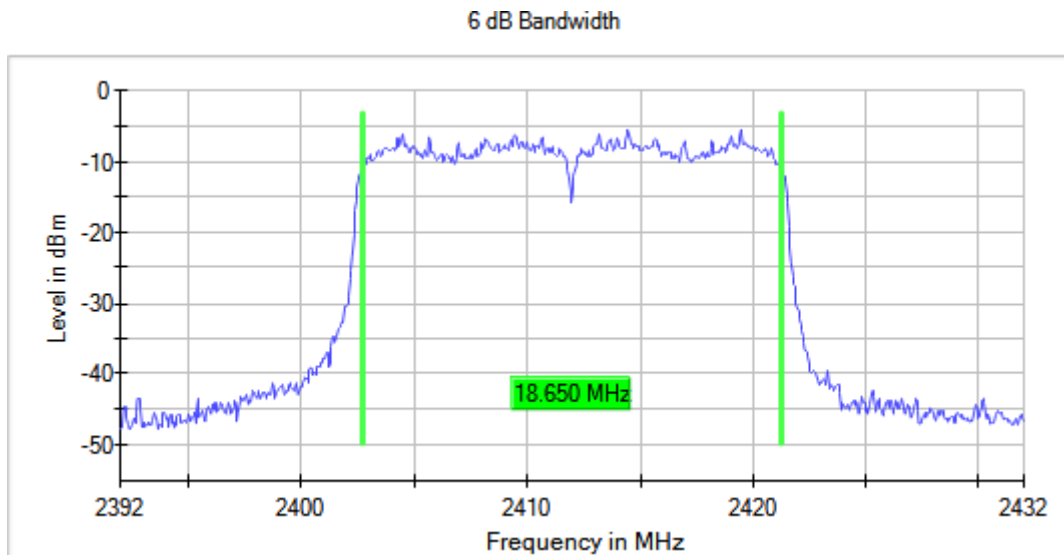
BW (MHz)	Freq (MHz)	Port	6dB Bandwidth (MHz)
20	2412.00000	1	18.650
		3	18.800
		1+3	18.700
	2437.00000	1	18.700
		3	18.650
		1+3	18.650
	2462.00000	1	18.600
		3	18.700
		1+3	18.650

Verdict
Pass

Attachments

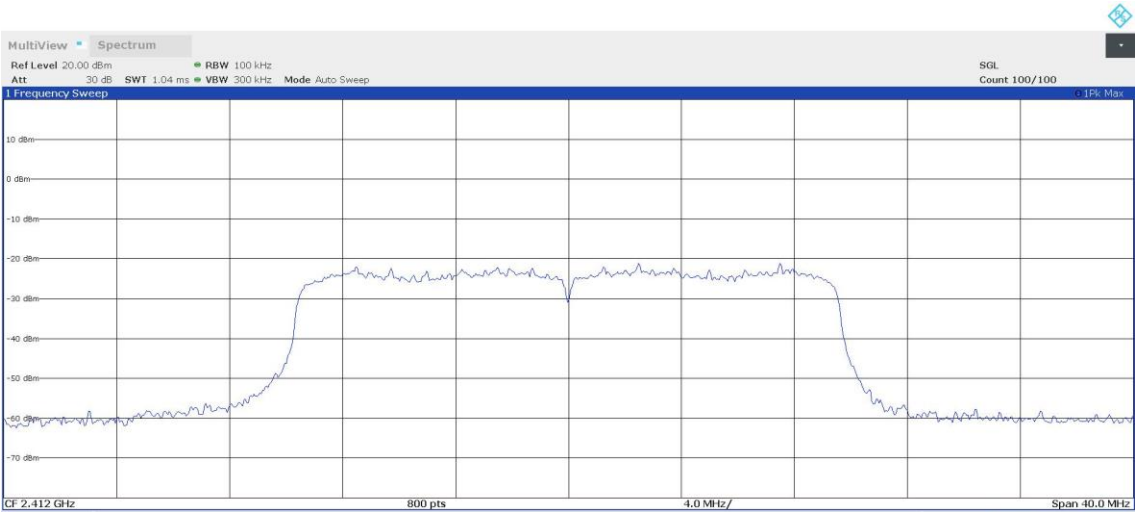
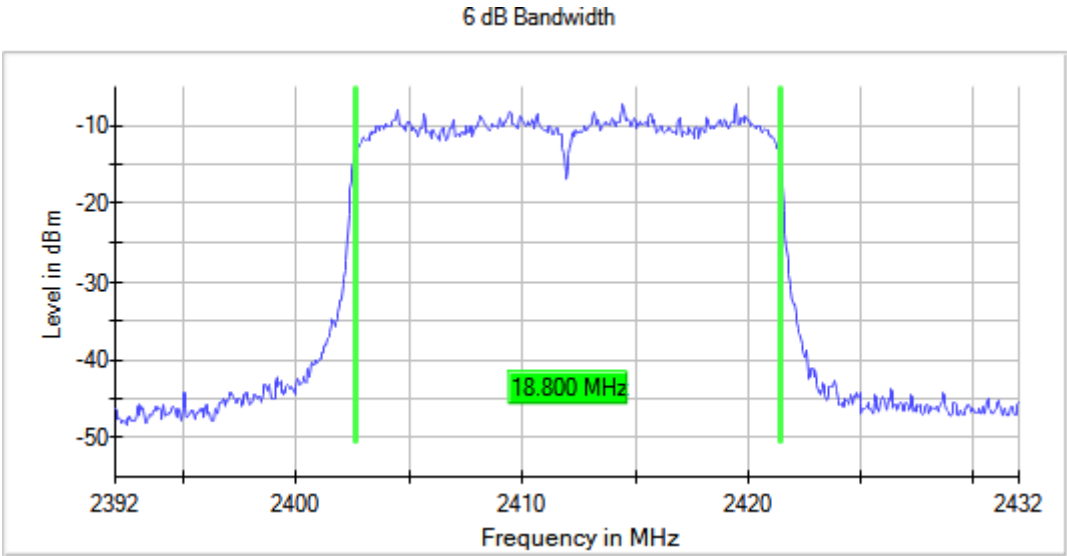
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2412.00000 Antenna configuration = SISO
Active Port = 1

Images:



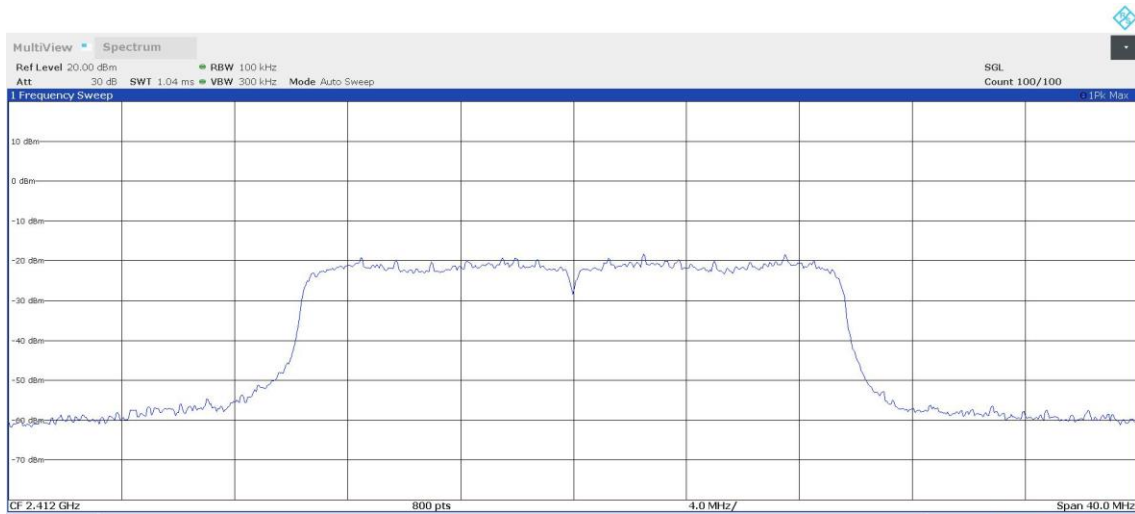
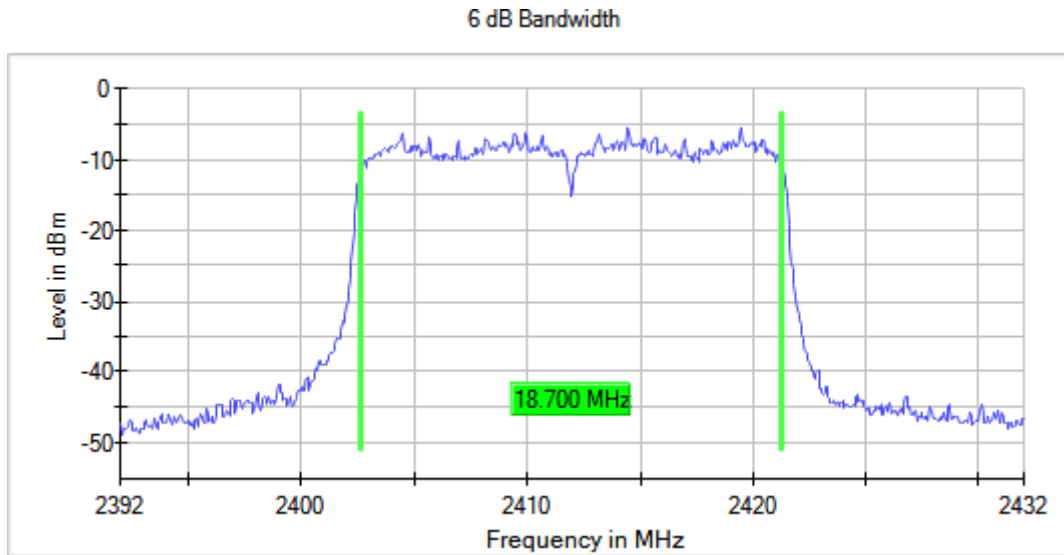
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2412.00000 Antenna configuration = SISO
Active Port = 3

Images:



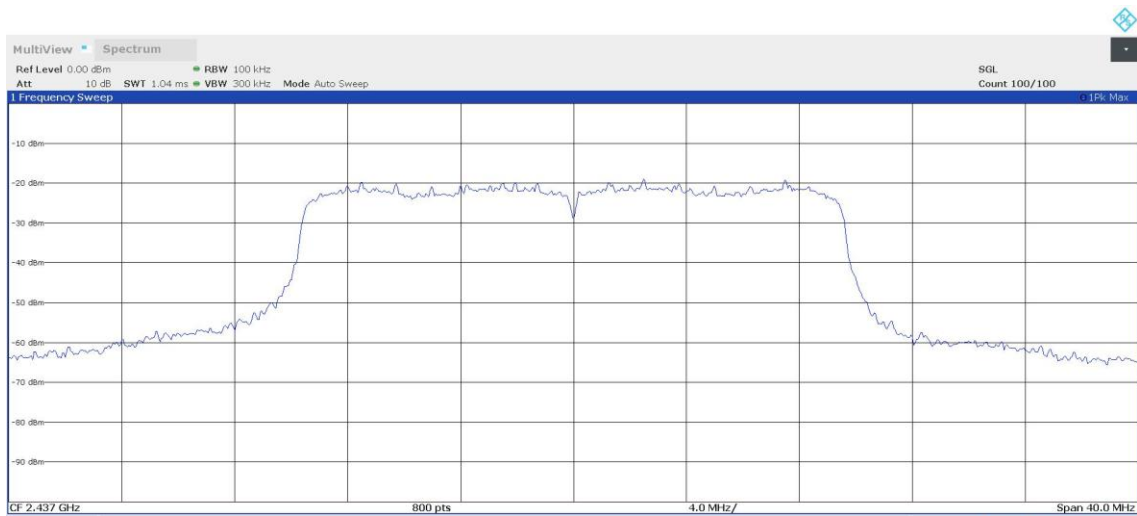
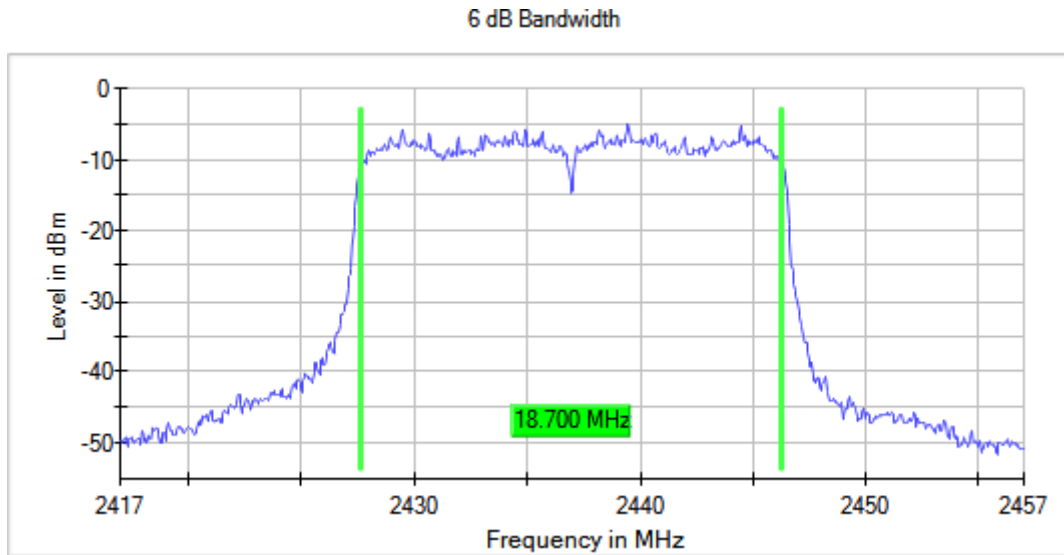
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2412.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



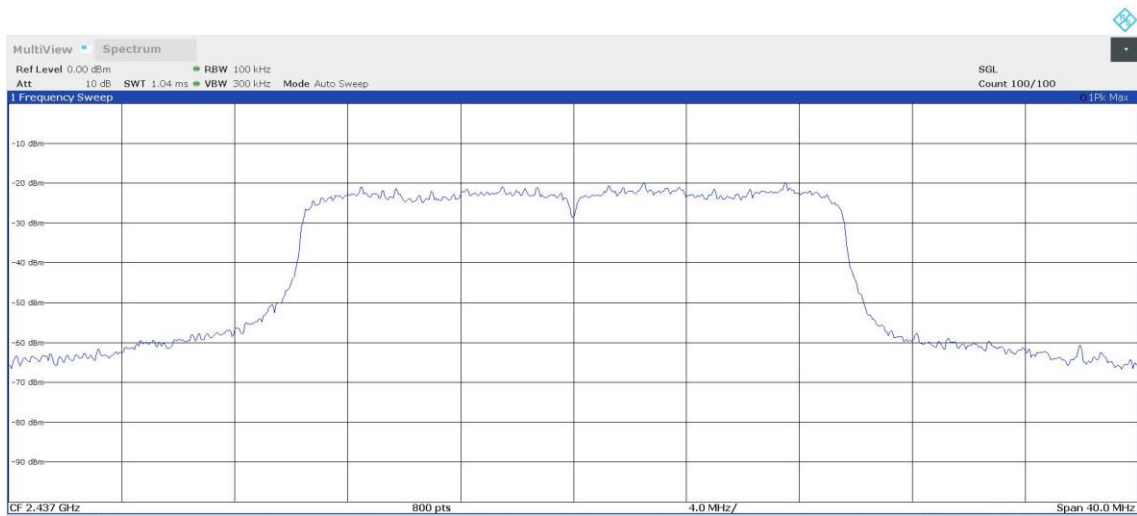
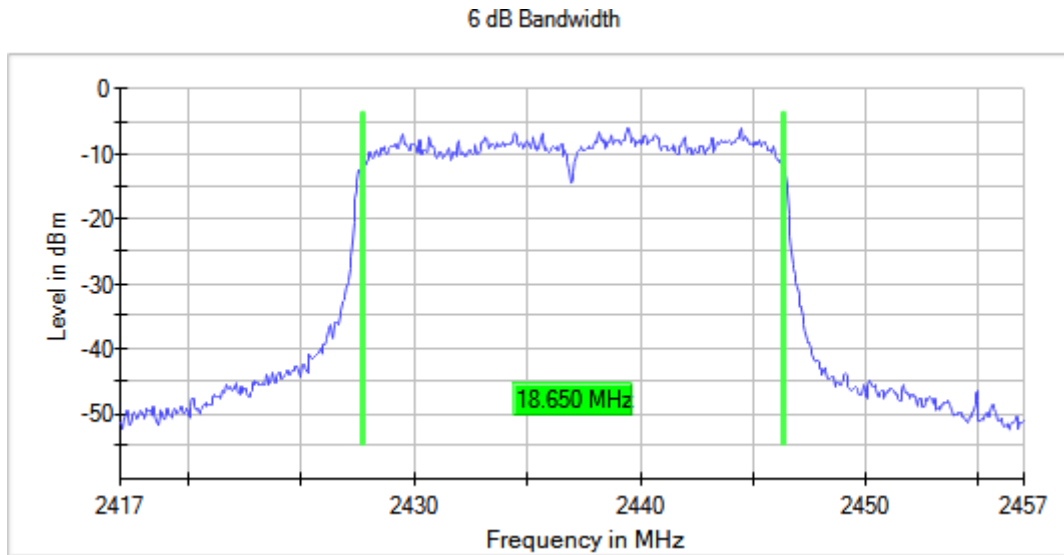
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2437.00000 Antenna configuration = SISO
Active Port = 1

Images:



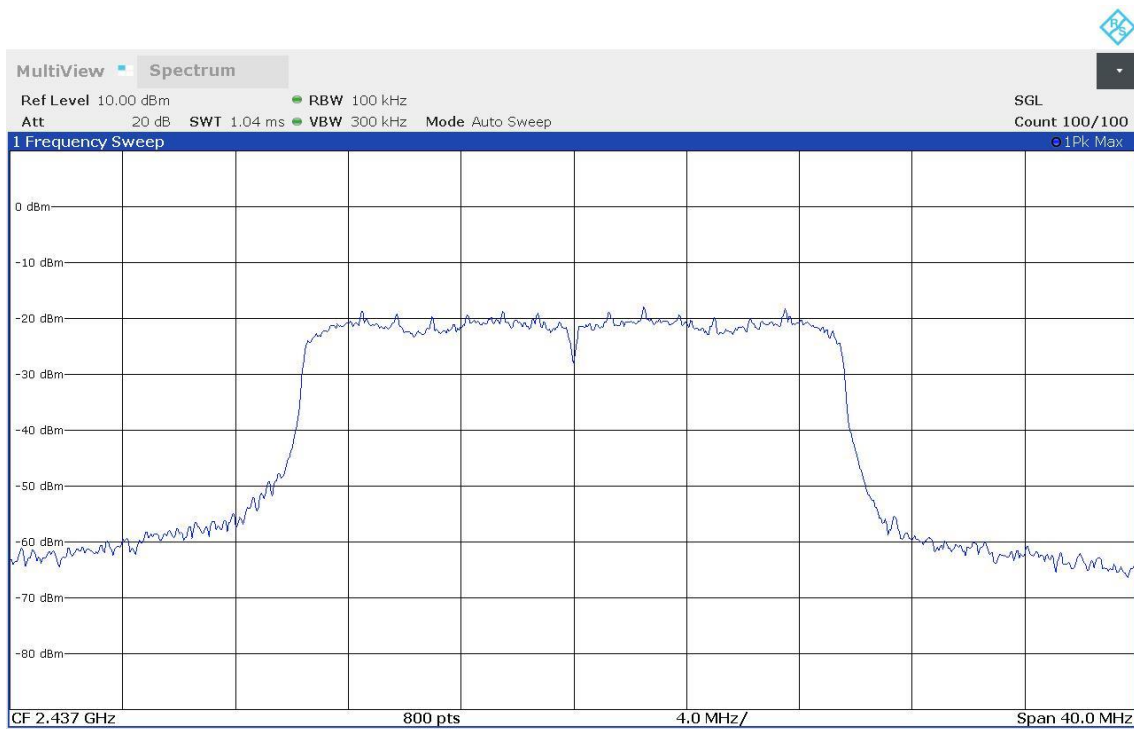
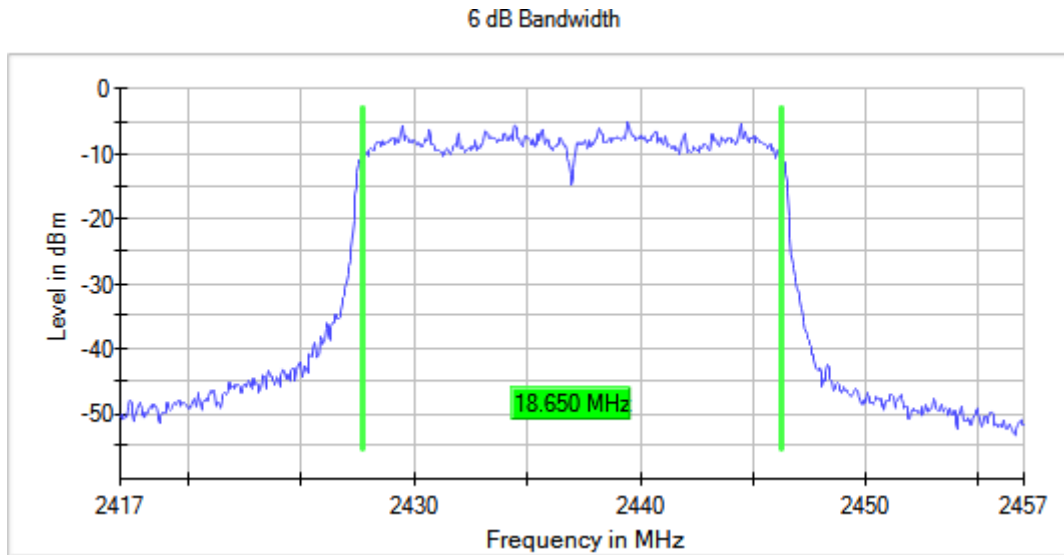
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2437.00000 Antenna configuration = SISO
Active Port = 3

Images:



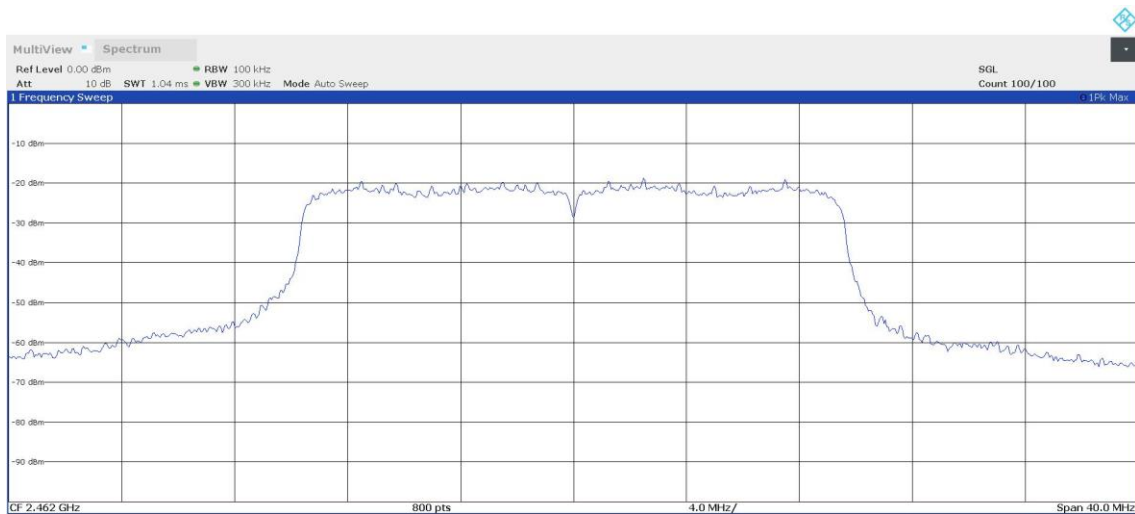
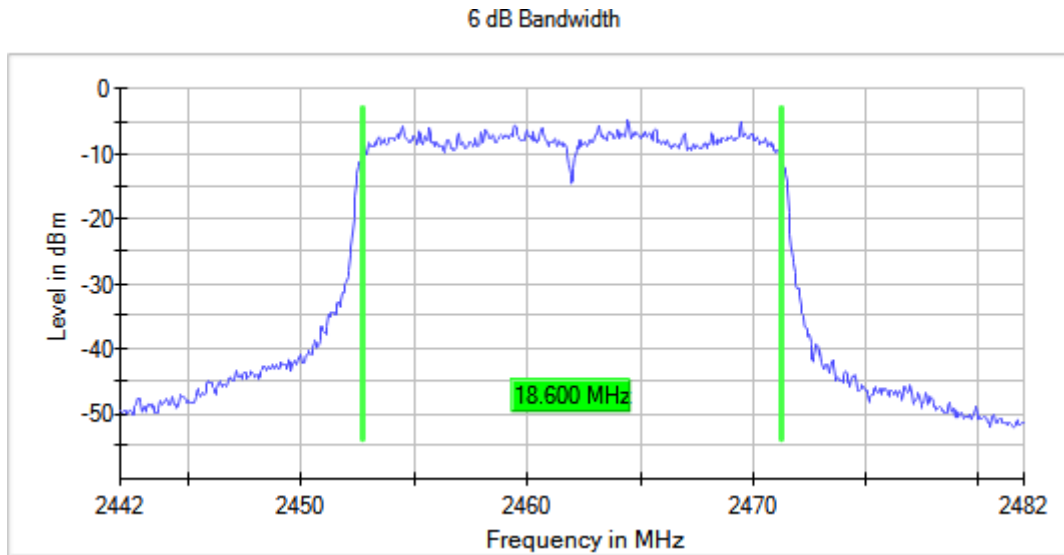
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2437.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



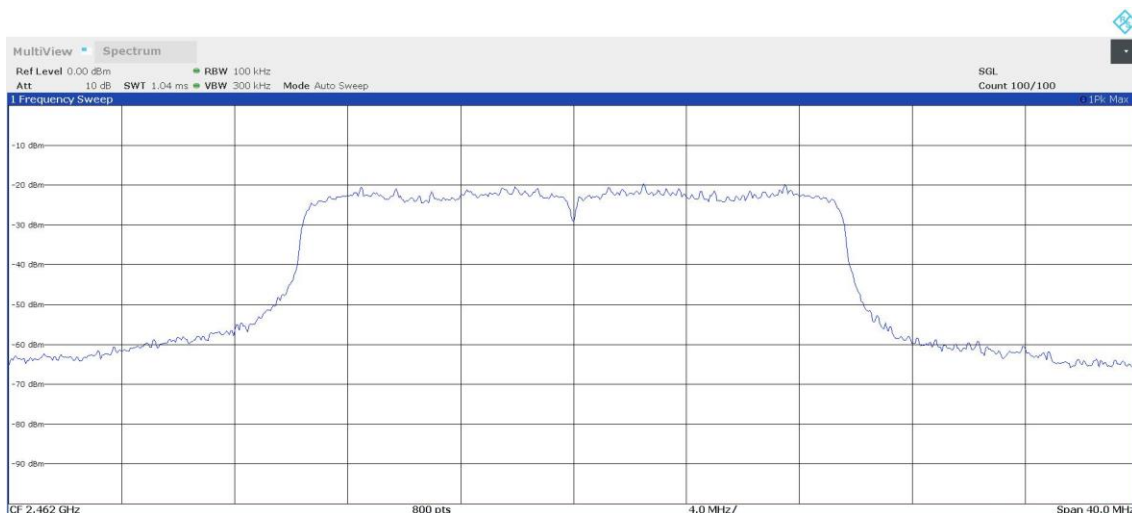
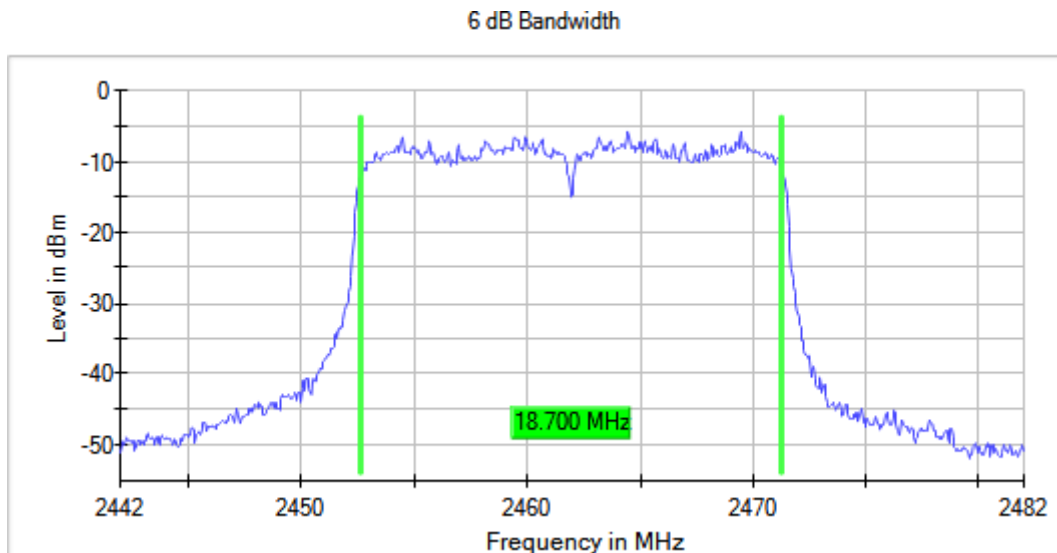
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2462.00000 Antenna configuration = SISO
Active Port = 1

Images:



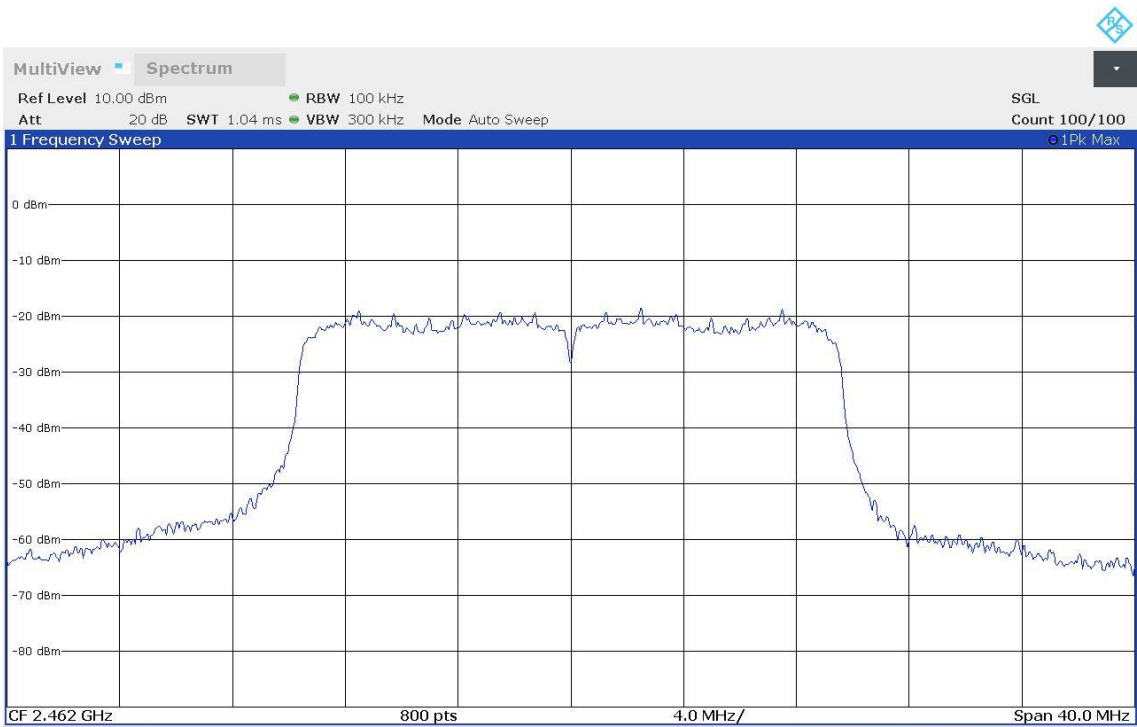
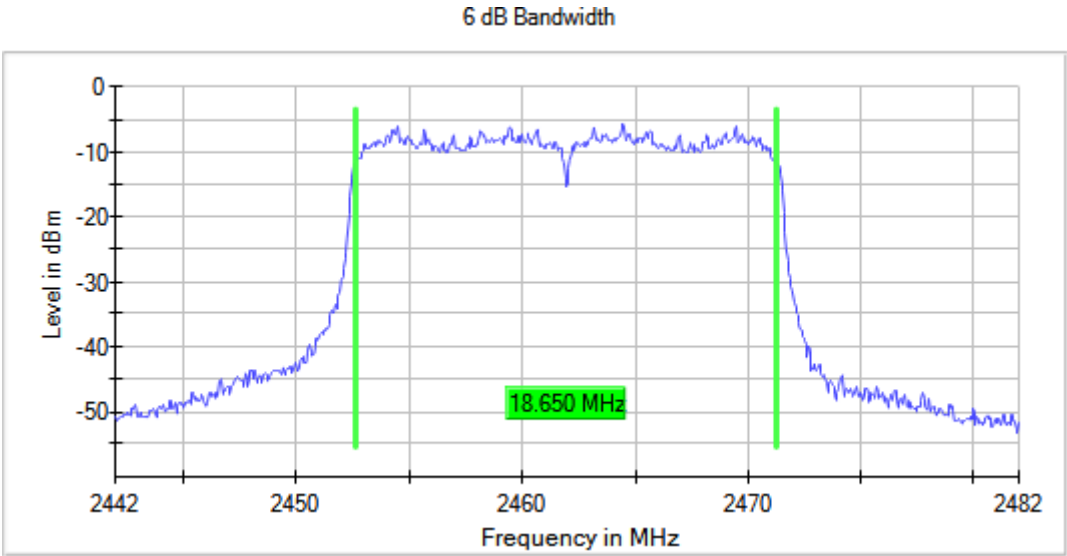
Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
 Frequency MHz = 2462.00000 Antenna configuration = SISO
 Active Port = 3

Images:



Bandwidth MHz = 20 Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Frequency MHz = 2462.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:



Modulation: 802.11ax HE40 (OFDMA MCS0) SU
Antenna configuration: SISO (port 1 and port 3) & MIMO (ports 1+3)
Results

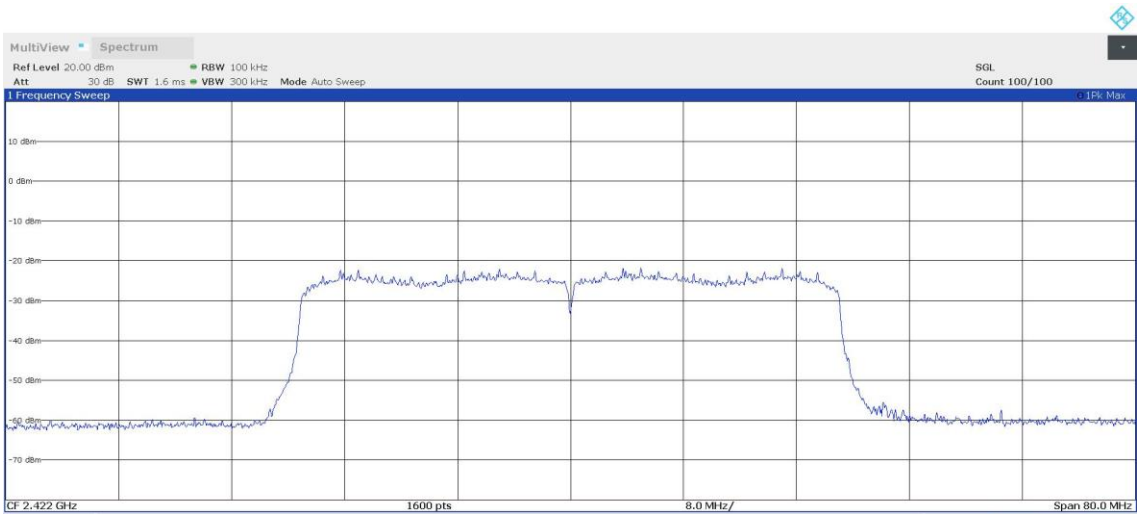
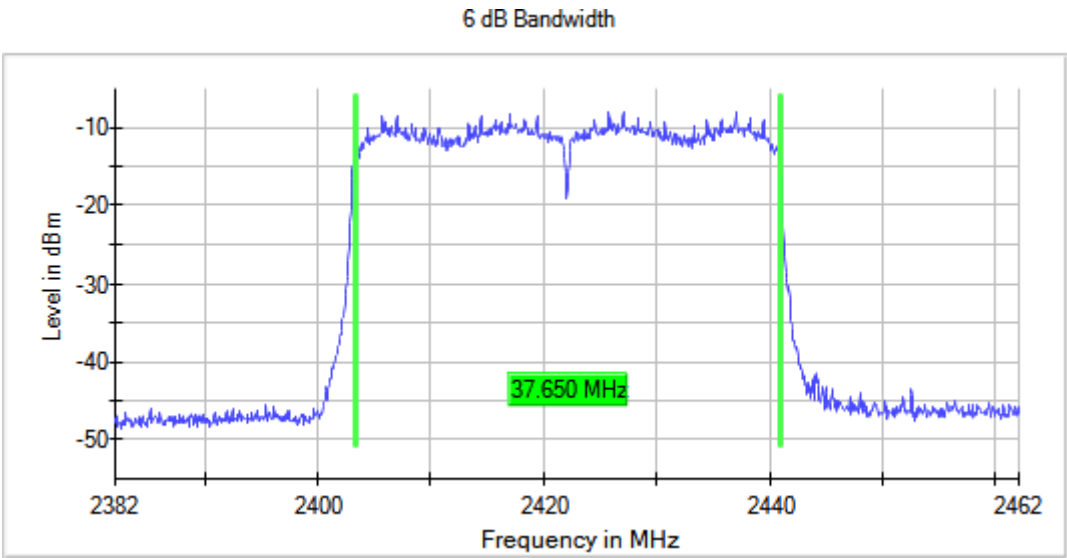
BW (MHz)	Freq (MHz)	Port	6dB Bandwidth (MHz)
40	2422.00000	1	37.650
		3	37.550
		1+3	37.500
	2437.00000	1	37.550
		3	37.250
		1+3	37.350
	2452.00000	1	37.650
		3	37.650
		1+3	37.600

Verdict
Pass

Attachments

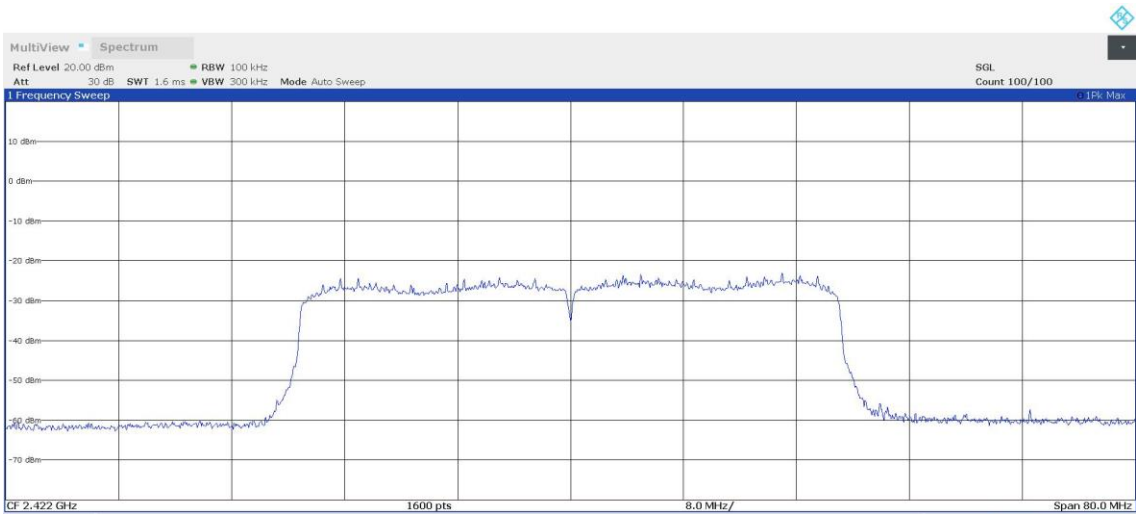
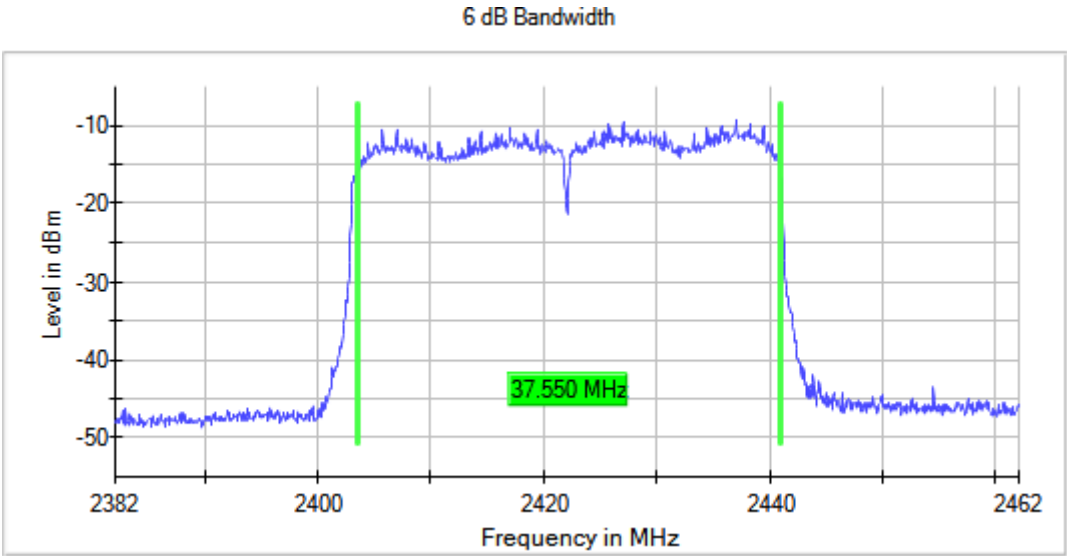
Bandwidth MHz = 40 Modulation = 802.11ax HE40 (OFDMA MCS0) SU
Frequency MHz = 2422.00000 Antenna configuration = SISO
Active Port = 1

Images:



Bandwidth MHz = 40 Modulation = 802.11ax HE40 (OFDMA MCS0) SU
Frequency MHz = 2422.00000 Antenna configuration = SISO
Active Port = 3

Images:



Bandwidth MHz = 40 Modulation = 802.11ax HE40 (OFDMA MCS0) SU
Frequency MHz = 2422.00000 Antenna configuration = MIMO CDD Mode 2x2
Active Port = 1+3

Images:

