

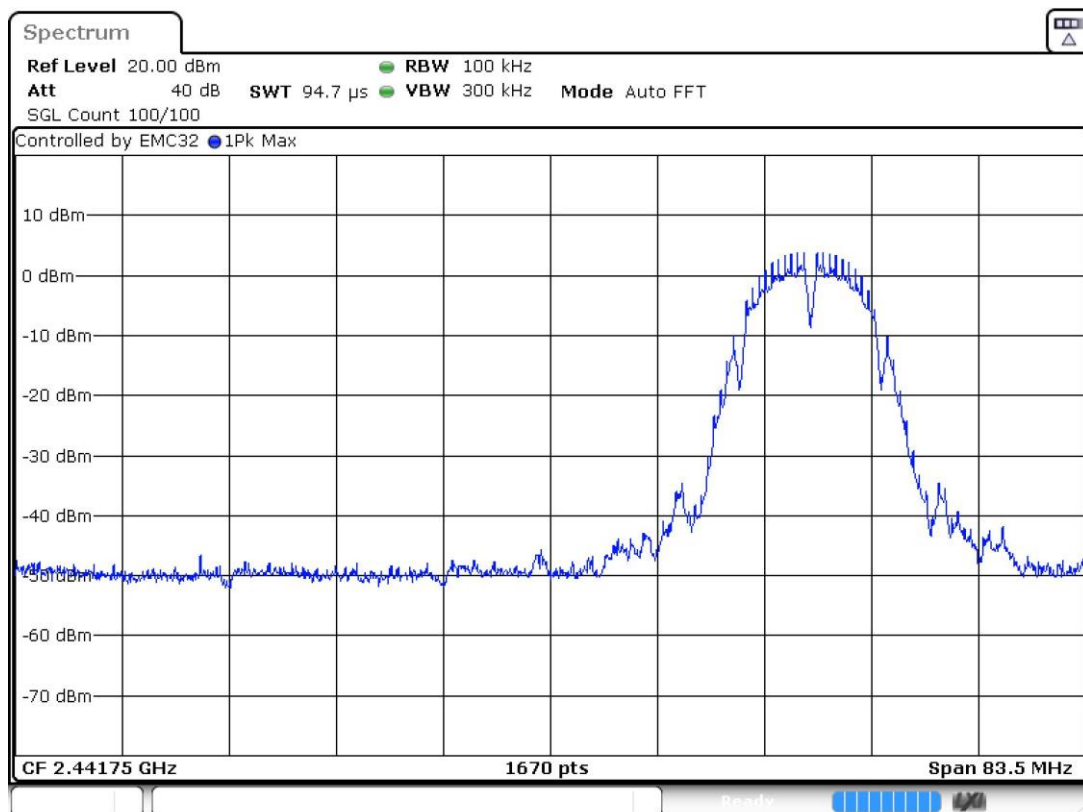
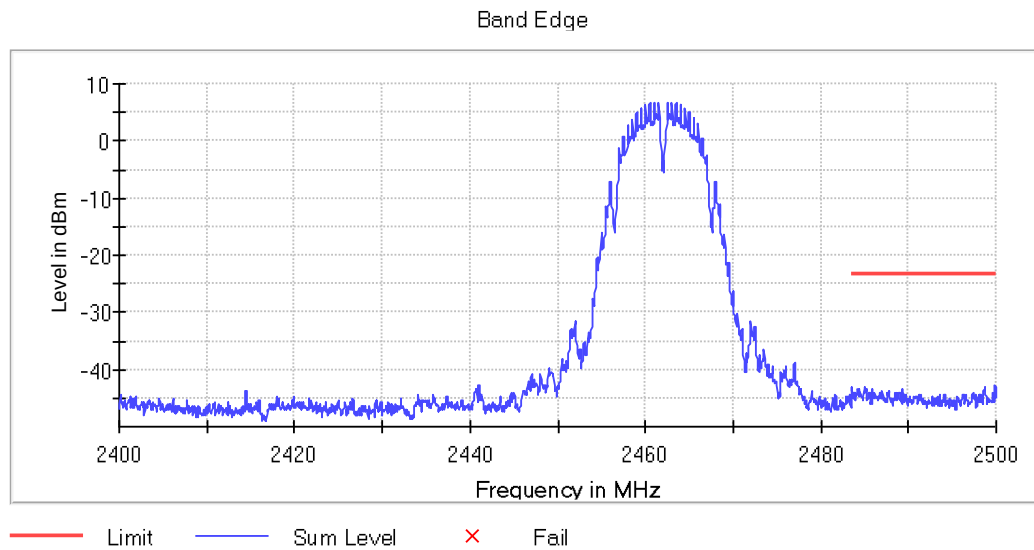
Frequency MHz = 2462.00000

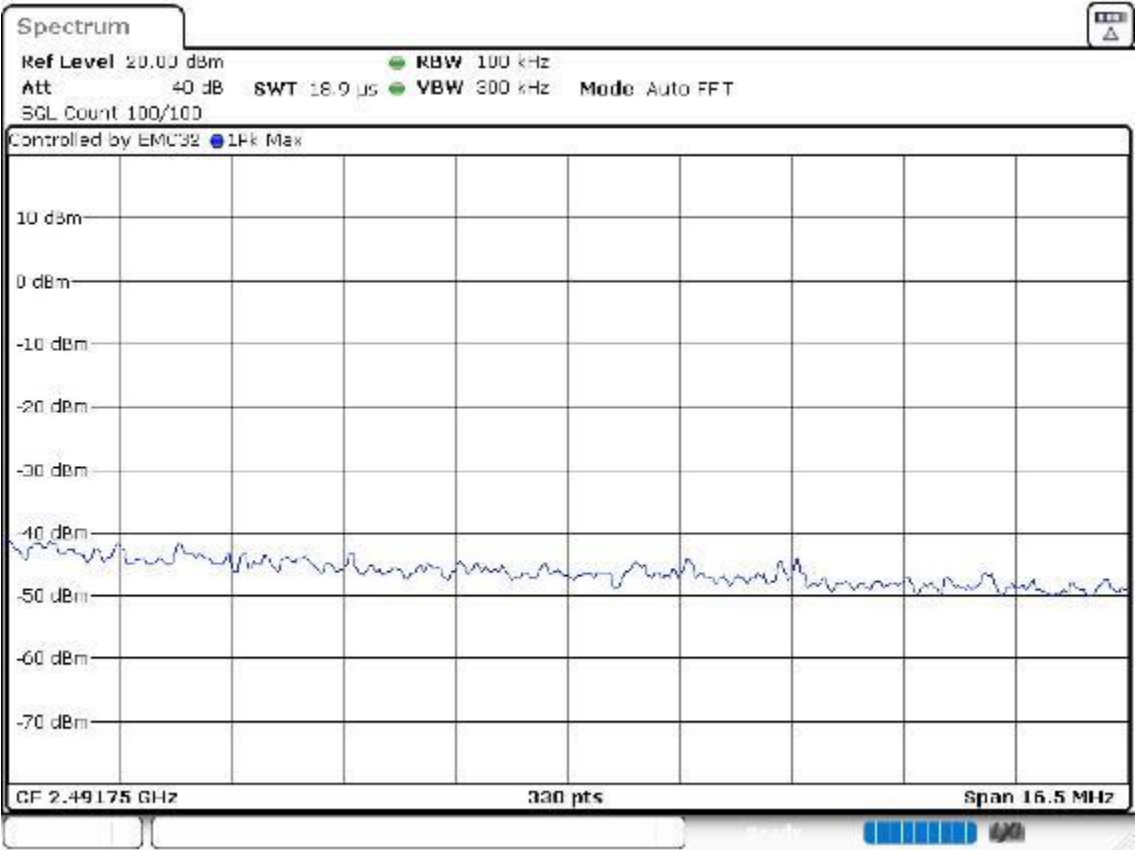
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)

Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

Images:





Modulation: 802.11g (OFDM 6 Mbit/s)

Results

Freq (MHz)	Frequency(MHz)	Level(dBm)	Margin(dB)	Limit(dBm)	Result
2412.00000	2399.925000	-35.059	8.3	-26.711	PASS
	2399.875000	-35.151	8.4	-26.711	PASS
	2399.675000	-35.187	8.5	-26.711	PASS
	2399.625000	-35.316	8.6	-26.711	PASS
	2399.825000	-36.172	9.5	-26.711	PASS
	2398.925000	-36.222	9.5	-26.711	PASS
	2399.975000	-36.305	9.6	-26.711	PASS
	2398.525000	-36.468	9.8	-26.711	PASS
	2398.475000	-36.543	9.8	-26.711	PASS
	2399.525000	-36.552	9.8	-26.711	PASS
	2398.875000	-36.640	9.9	-26.711	PASS
	2399.475000	-36.669	10.0	-26.711	PASS
	2398.825000	-36.730	10.0	-26.711	PASS
	2397.875000	-36.736	10.0	-26.711	PASS
	2397.925000	-36.739	10.0	-26.711	PASS

Freq (MHz)	Frequency(MHz)	Level(dBm)	Margin(dB)	Limit(dBm)	Result
2462.00000	2483.575000	-37.069	10.6	-26.491	PASS
	2483.525000	-37.381	10.9	-26.491	PASS
	2483.625000	-37.571	11.1	-26.491	PASS
	2484.175000	-37.661	11.2	-26.491	PASS
	2485.125000	-37.754	11.3	-26.491	PASS
	2487.925000	-37.968	11.5	-26.491	PASS
	2487.875000	-38.021	11.5	-26.491	PASS
	2484.225000	-38.141	11.7	-26.491	PASS
	2485.075000	-38.254	11.8	-26.491	PASS
	2485.175000	-38.372	11.9	-26.491	PASS
	2485.625000	-38.547	12.1	-26.491	PASS
	2483.975000	-38.771	12.3	-26.491	PASS
	2485.525000	-38.869	12.4	-26.491	PASS
	2484.125000	-38.900	12.4	-26.491	PASS
	2484.475000	-38.975	12.5	-26.491	PASS

Verdict

Pass

Attachments

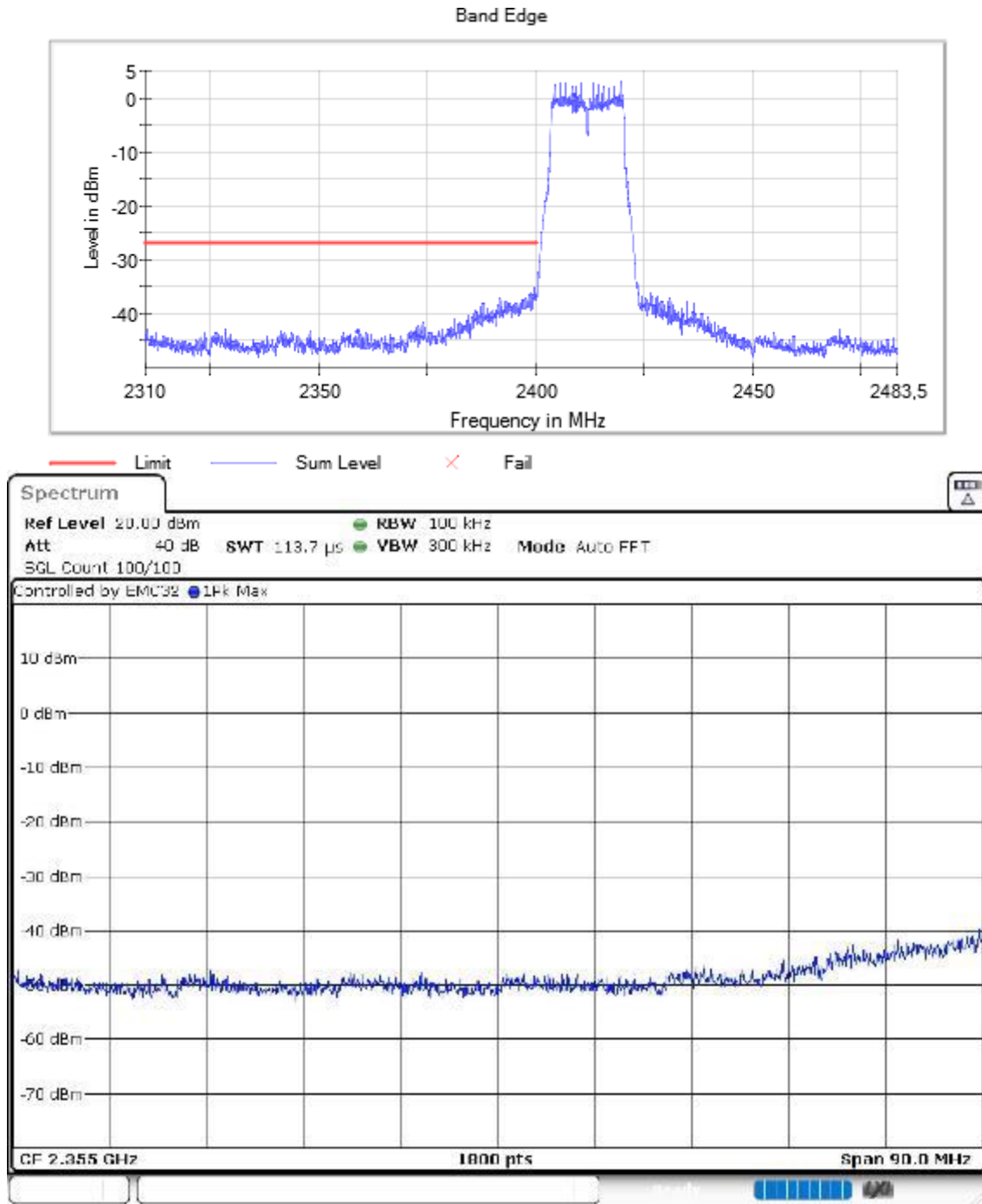
Frequency MHz = 2412.00000

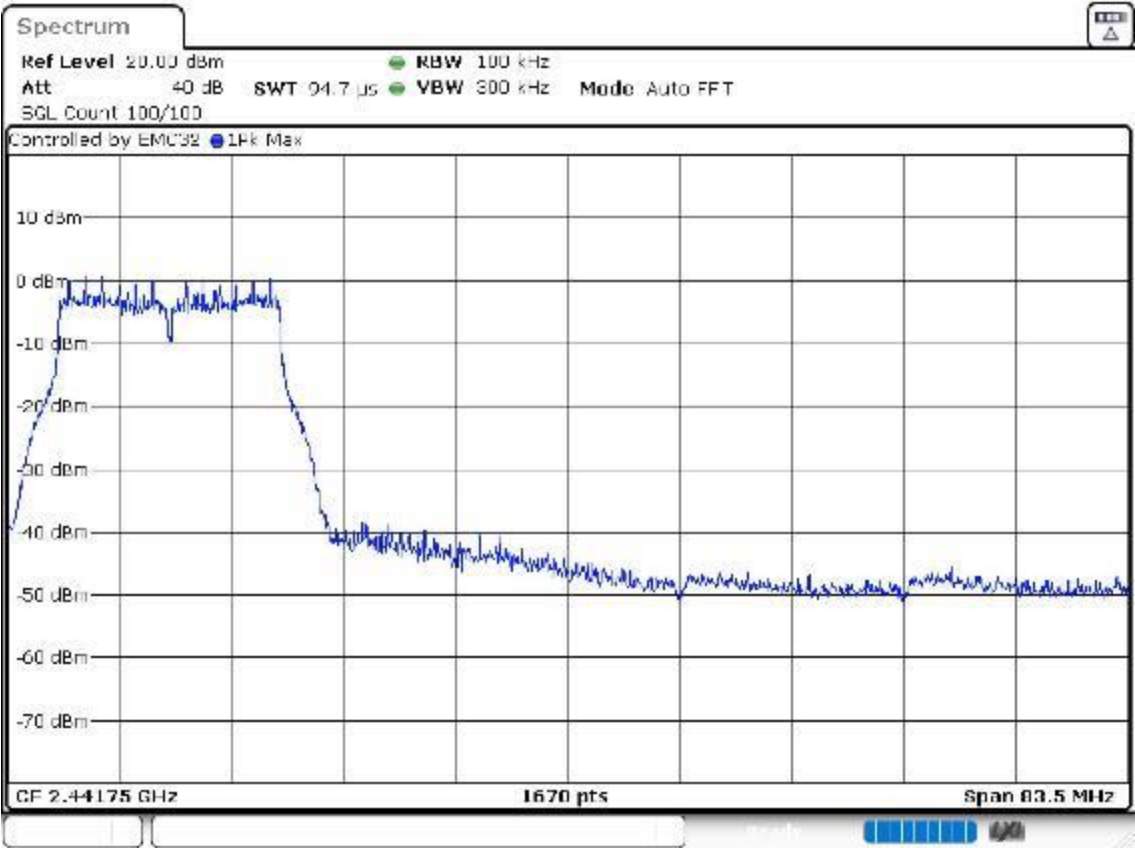
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)

Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

Images:





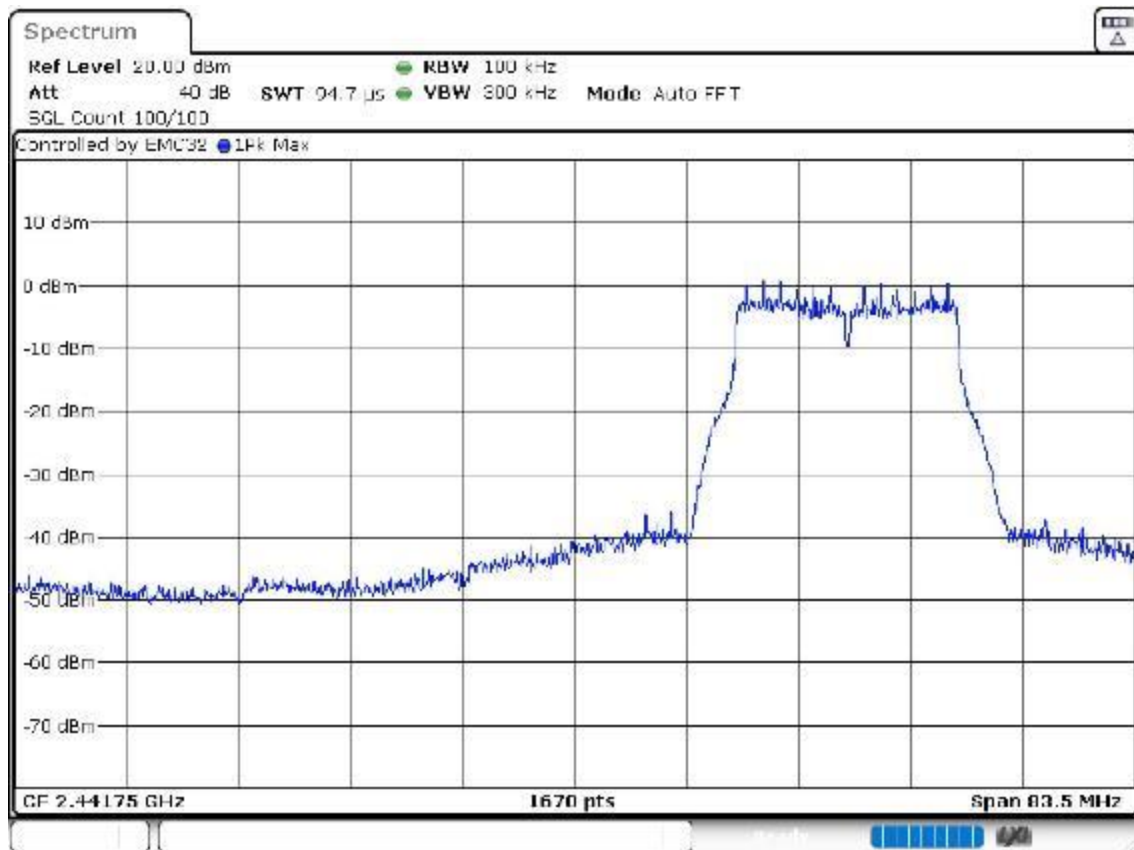
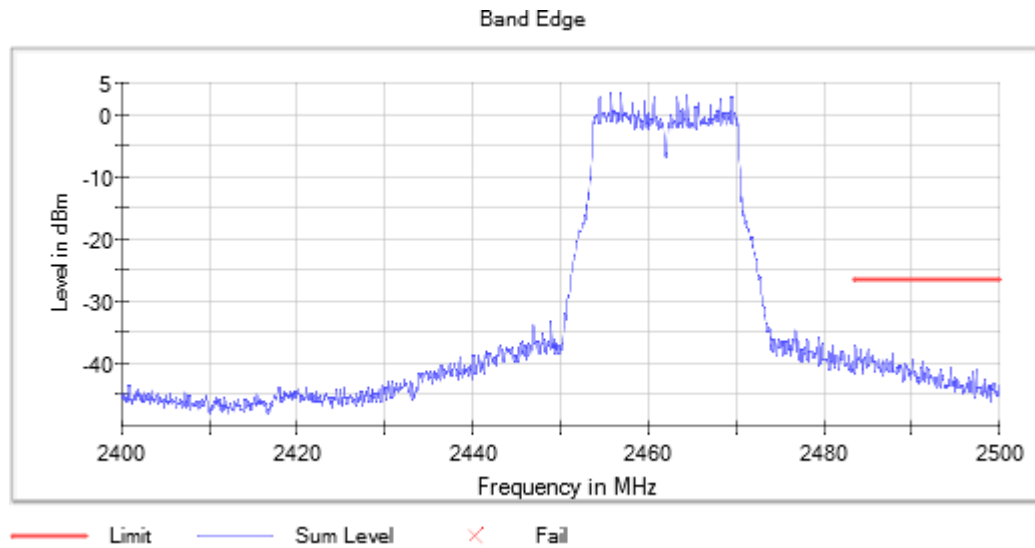
Frequency MHz = 2462.00000

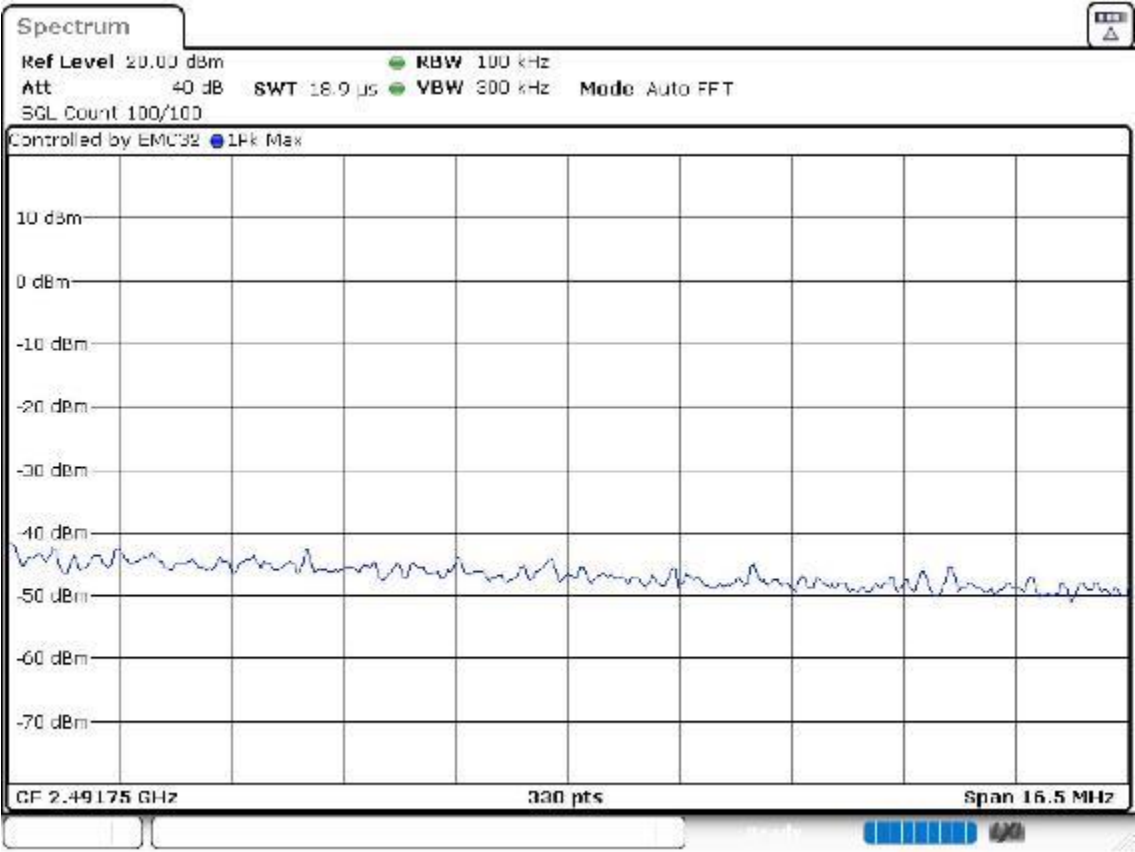
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)

Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

Images:





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

Results

Freq (MHz)	Frequency(MHz)	Level(dBm)	Margin(dB)	Limit(dBm)	Result
2412.00000	2399.775000	-35.232	8.6	-26.616	PASS
	2399.825000	-35.376	8.8	-26.616	PASS
	2398.325000	-35.521	8.9	-26.616	PASS
	2398.275000	-35.594	9.0	-26.616	PASS
	2397.325000	-35.749	9.1	-26.616	PASS
	2397.275000	-35.773	9.2	-26.616	PASS
	2399.975000	-35.818	9.2	-26.616	PASS
	2394.175000	-35.834	9.2	-26.616	PASS
	2394.225000	-36.006	9.4	-26.616	PASS
	2399.725000	-36.009	9.4	-26.616	PASS
	2398.225000	-36.492	9.9	-26.616	PASS
	2398.825000	-36.585	10.0	-26.616	PASS
	2397.375000	-36.622	10.0	-26.616	PASS
	2398.175000	-36.691	10.1	-26.616	PASS
	2398.875000	-36.708	10.1	-26.616	PASS

Freq (MHz)	Frequency(MHz)	Level(dBm)	Margin(dB)	Limit(dBm)	Result
2462.00000	2483.775000	-37.035	10.8	-26.203	PASS
	2484.425000	-37.064	10.9	-26.203	PASS
	2483.825000	-37.145	10.9	-26.203	PASS
	2484.475000	-37.423	11.2	-26.203	PASS
	2484.375000	-37.509	11.3	-26.203	PASS
	2486.075000	-37.808	11.6	-26.203	PASS
	2486.125000	-37.814	11.6	-26.203	PASS
	2485.075000	-37.940	11.7	-26.203	PASS
	2485.125000	-37.955	11.8	-26.203	PASS
	2483.525000	-37.971	11.8	-26.203	PASS
	2485.775000	-38.108	11.9	-26.203	PASS
	2484.225000	-38.193	12.0	-26.203	PASS
	2487.625000	-38.259	12.1	-26.203	PASS
	2484.175000	-38.276	12.1	-26.203	PASS
	2485.725000	-38.365	12.2	-26.203	PASS

Verdict

Pass

Attachments

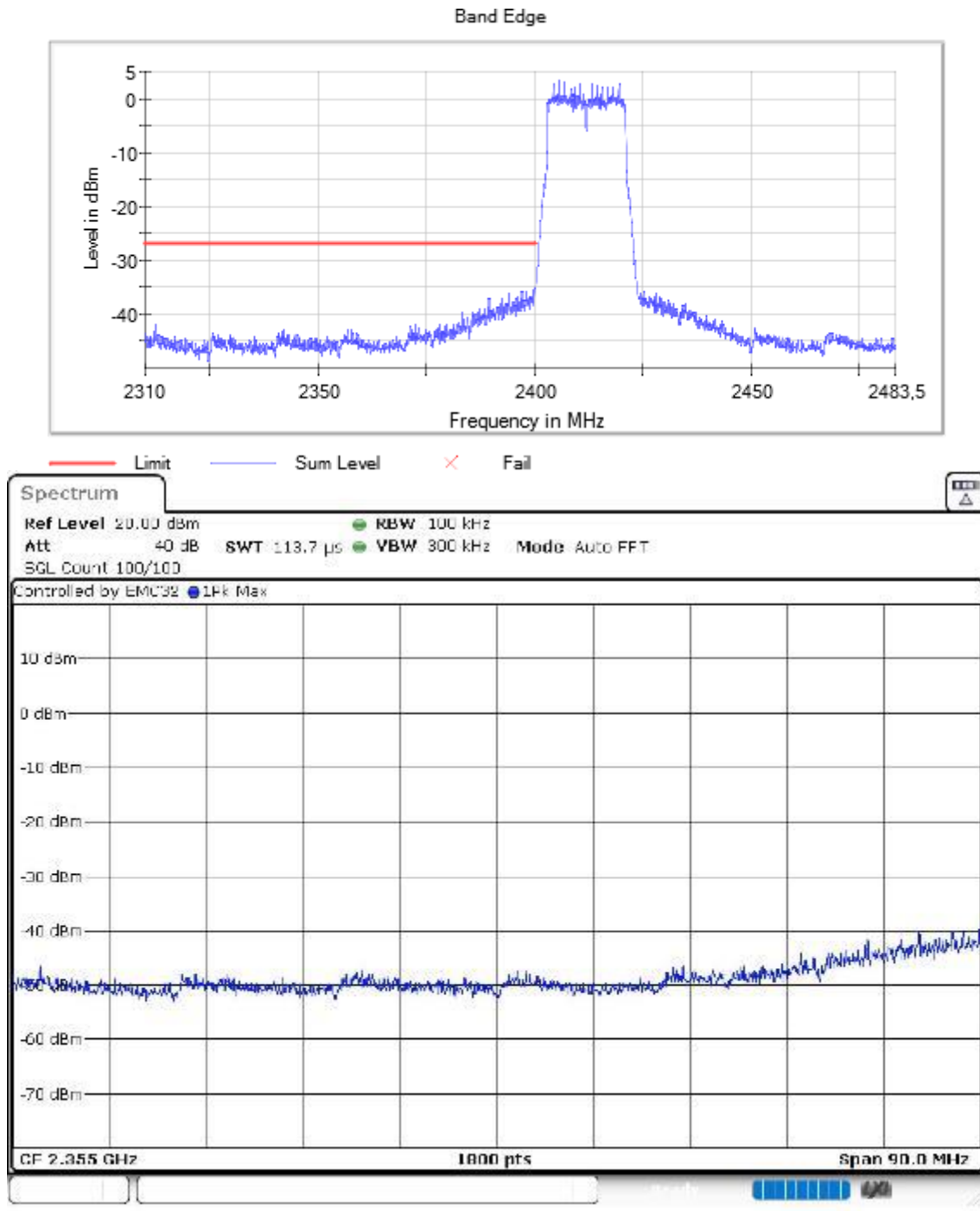
Frequency MHz = 2412.00000

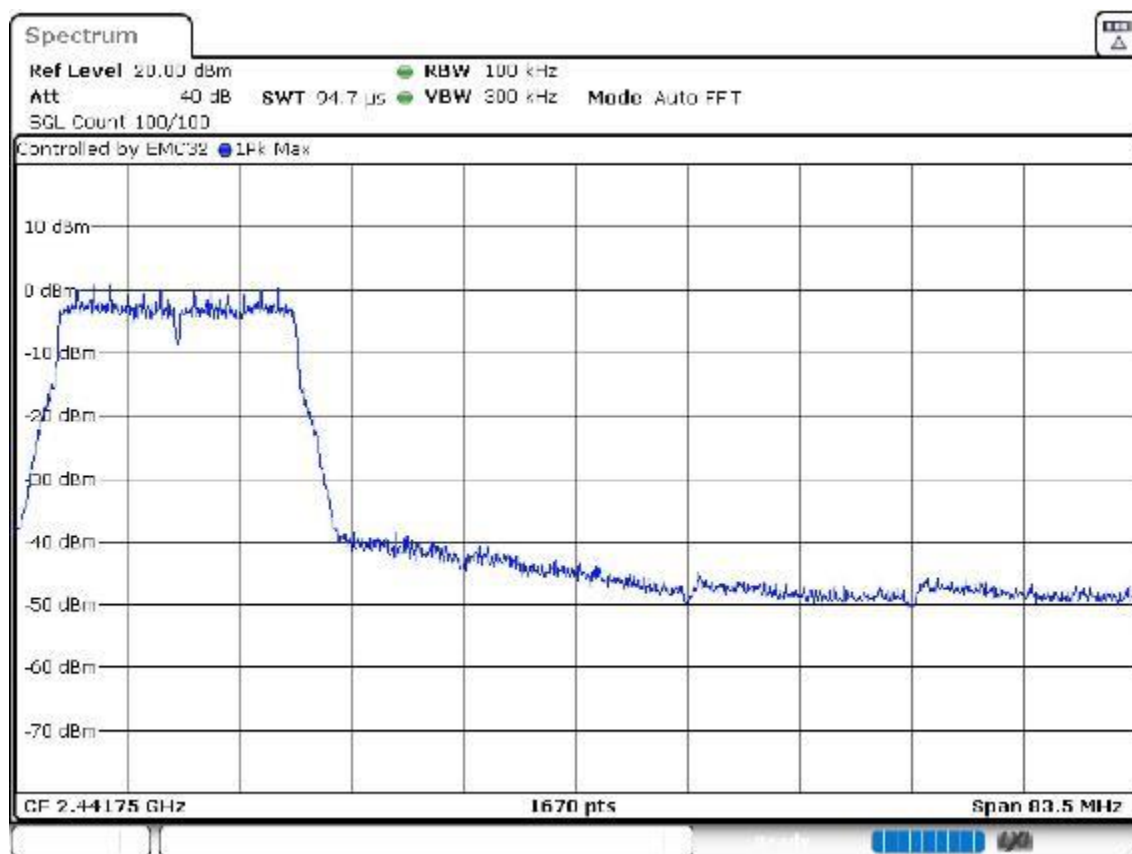
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

Images:





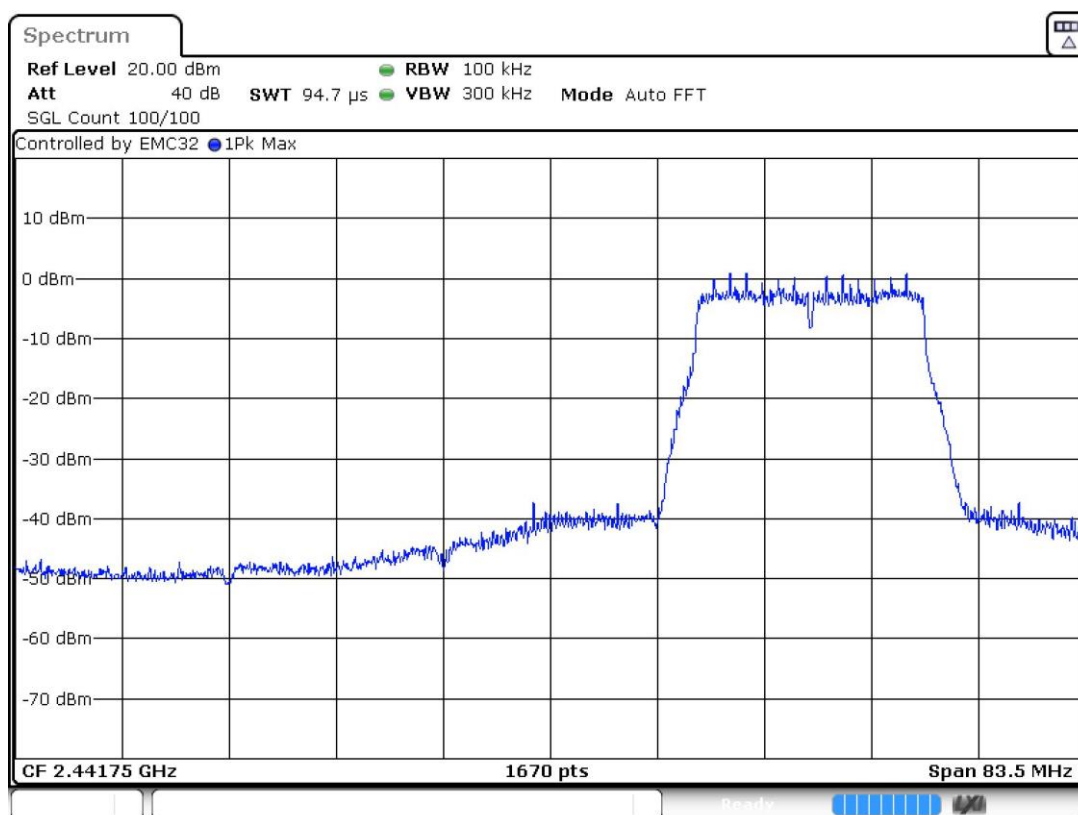
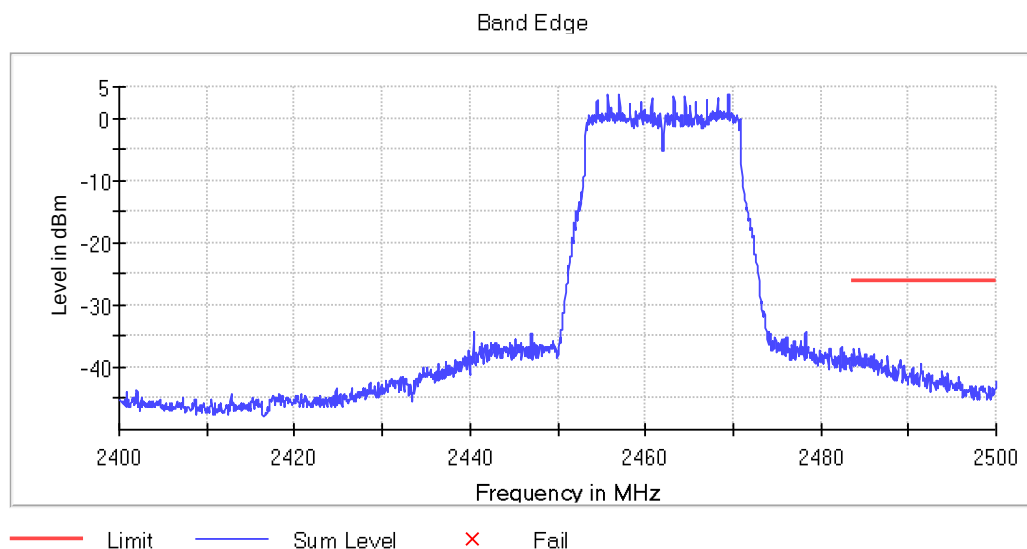
Frequency MHz = 2462.00000

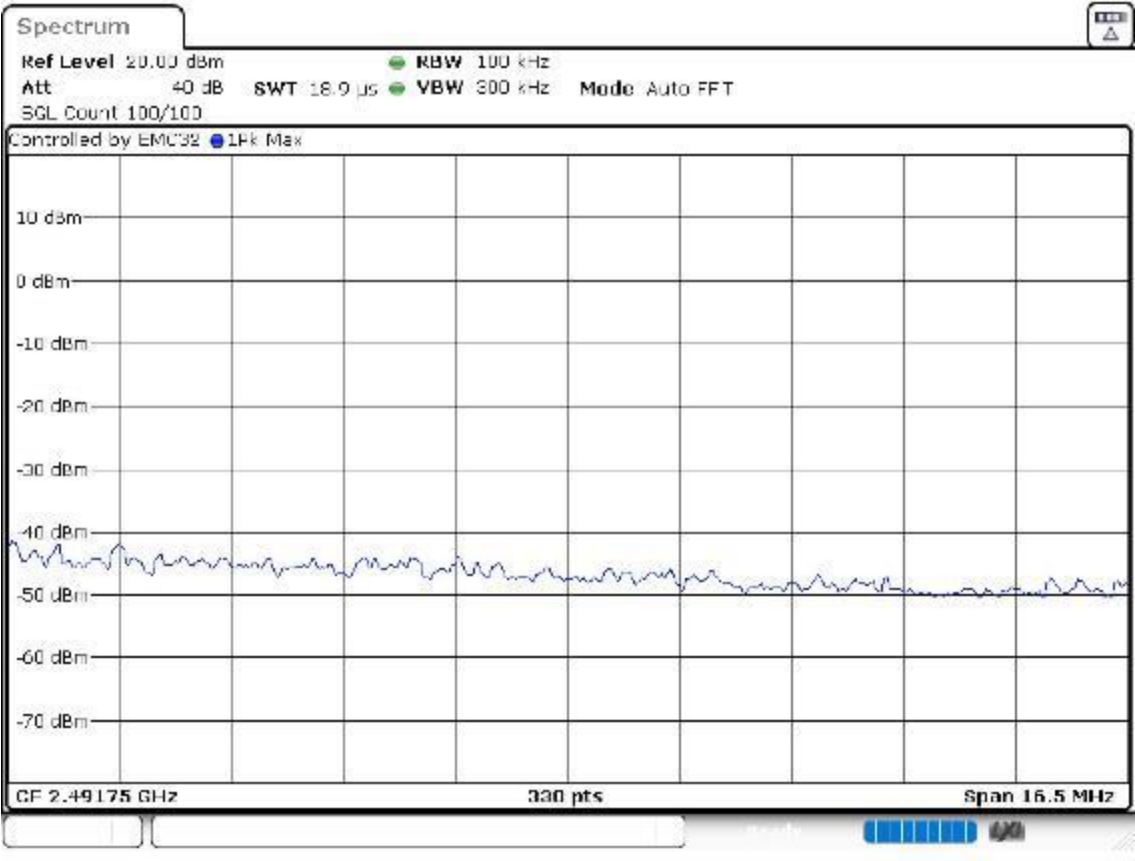
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

Images:





RSS-247 5.5 / FCC 15.247 (d) [RSE] Emission limitations radiated (Transmitter)

Limits

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

Frequency Range (MHz)	Field strength ($\mu\text{V/m}$)	Field strength ($\text{dB}\mu\text{V/m}$)	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
Above 960	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.

Results

Equipment	Freq Rng (GHz)	# of Tx Chains	Port	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
Digital Transmission System (DTS)	[0.03, 1]	1	1	63.980313	24.95	V	PK
					22.89	V	AVG

Verdict

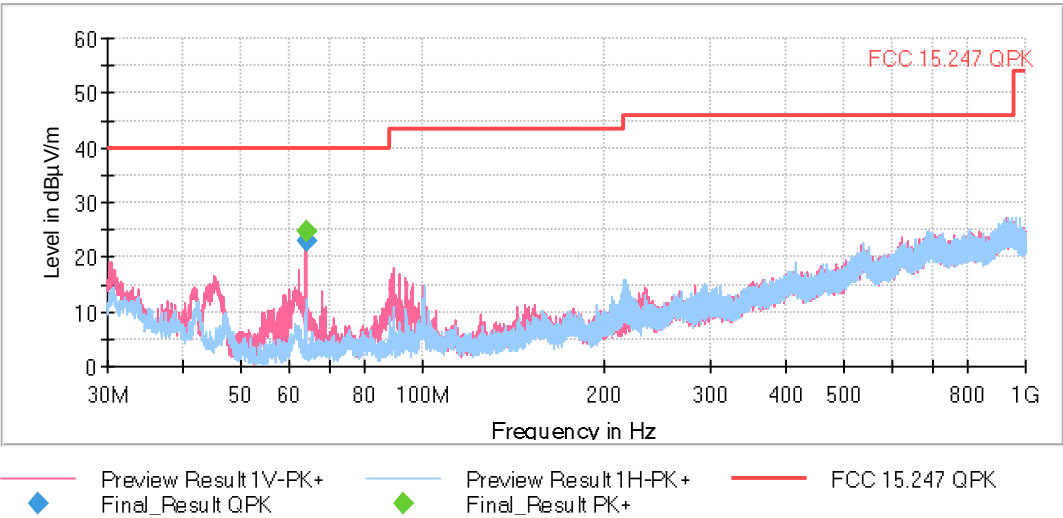
Pass

Attachments

Frequency Range GHz = [0.03, 1]
The spurious frequencies detected do not depend neither on the operating channel nor the modulation mode.

Equipment Type = Digital Transmission System (DTS)
Modulation = 802.11b (DSSS 1 Mbit/s)
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



Modulation: 802.11b (DSSS 1 Mbit/s)

Results

Freq (MHz)	Equipment	Freq Rng (GHz)	# of Tx Chains	Port	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
2412.00000	Digital Transmission System (DTS)	[1, 3]	1	1	2381.046	64.57	V	PK
					2381.046	46.91	V	AVG
					2389.877	66.07	V	PK
					2389.877	46.93	V	AVG
2462.00000					2483.635	48.80	H	AVG
					2489.169	68.97	H	PK

Verdict

Pass

Attachments

Frequency MHz = 2412.00000

Modulation = 802.11b (DSSS 1 Mbit/s)

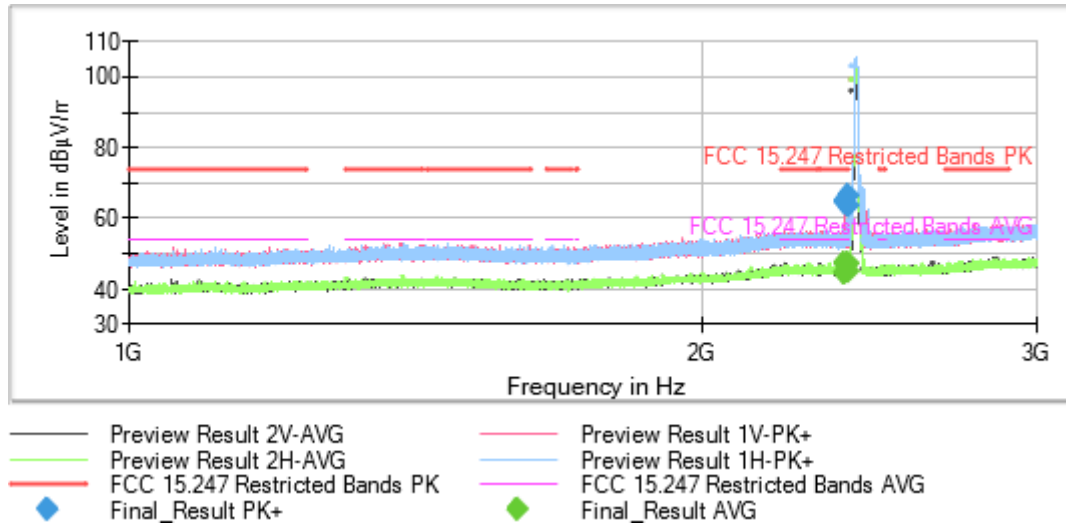
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

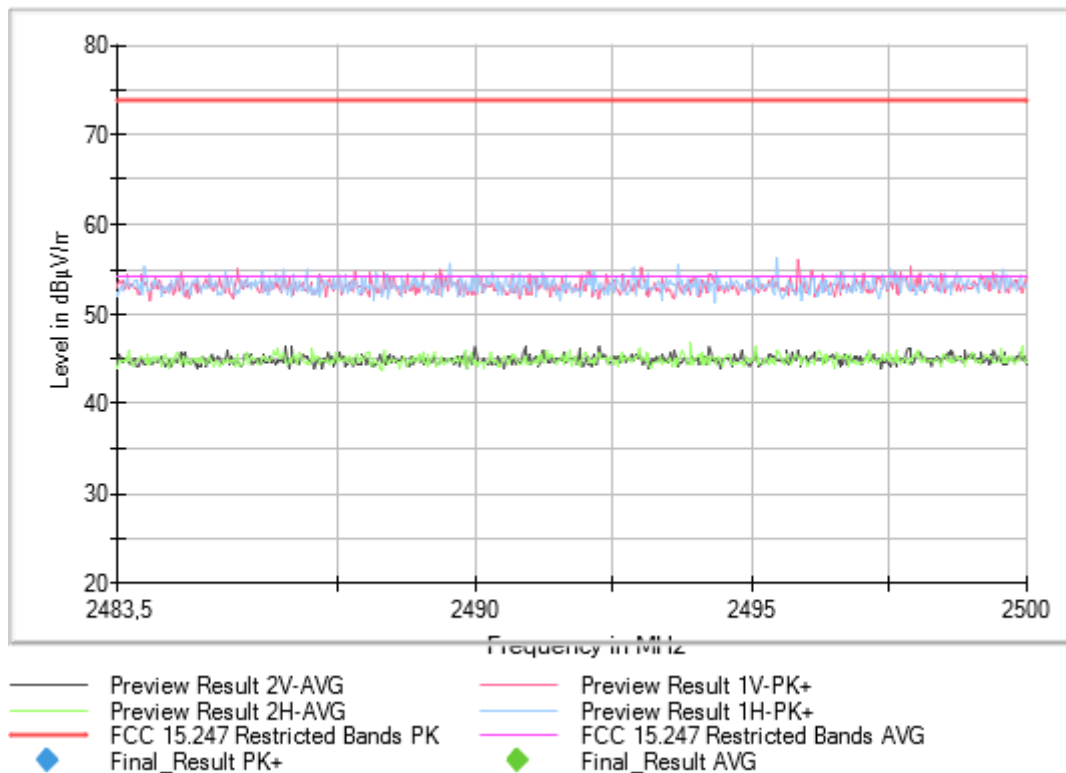
Measurement Point = 1

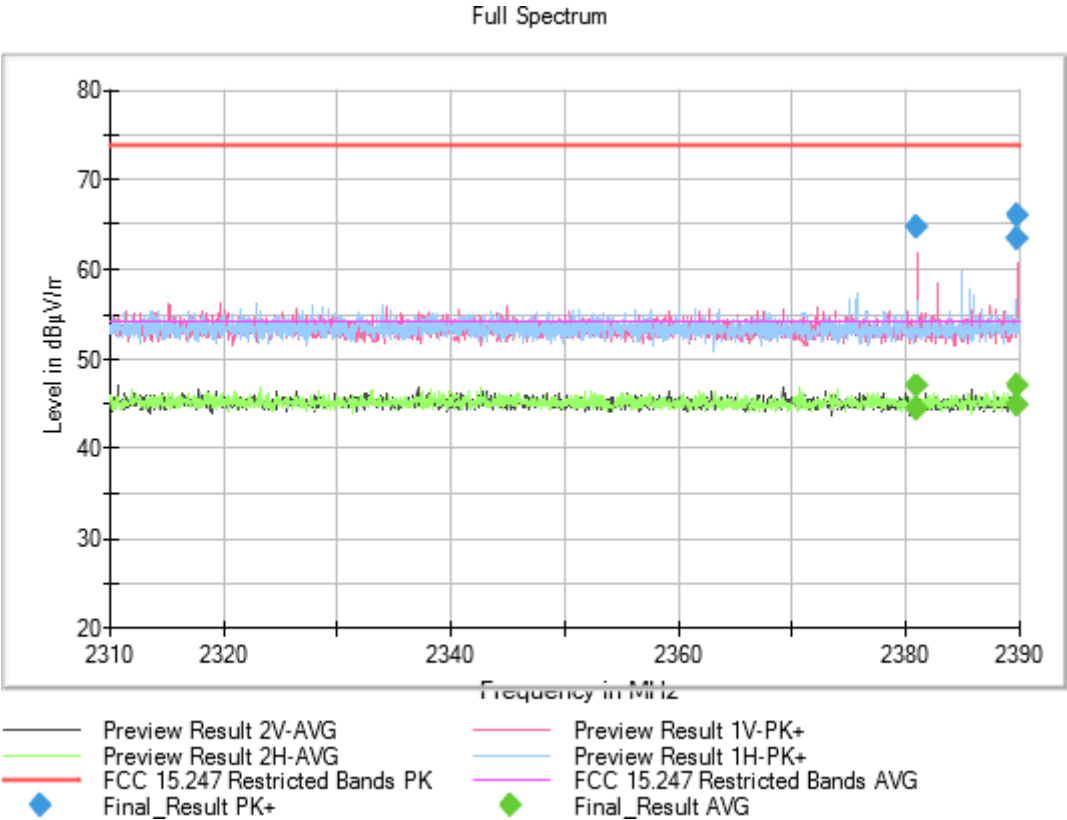
Active Port = 1

Images:



Full Spectrum





Frequency MHz = 2442.00000

Modulation = 802.11b (DSSS 1 Mbit/s)

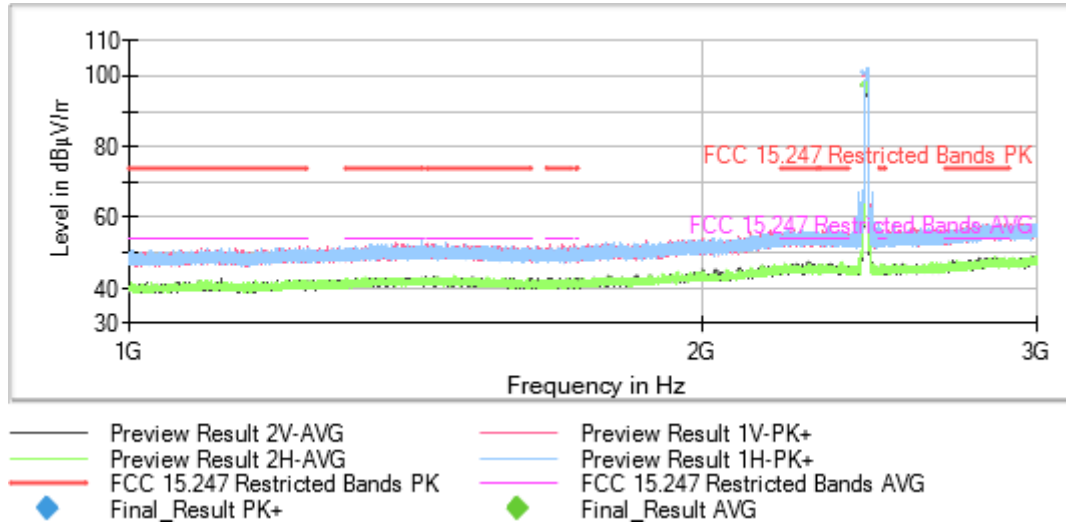
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

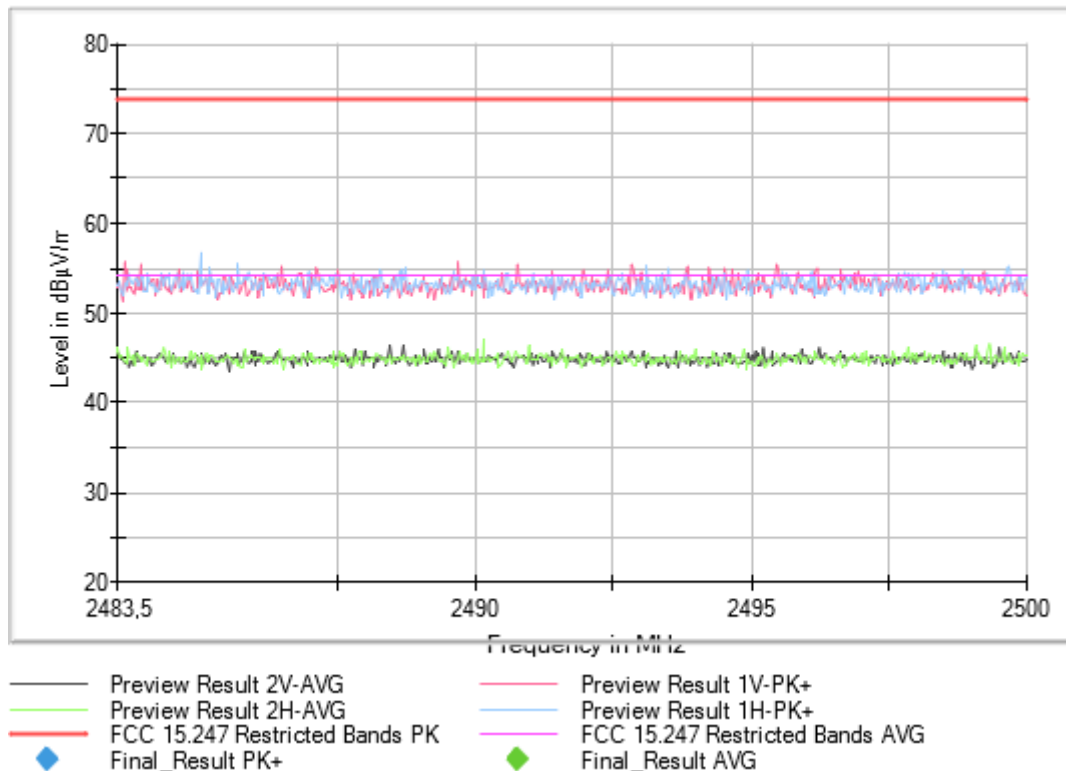
Measurement Point = 1

Active Port = 1

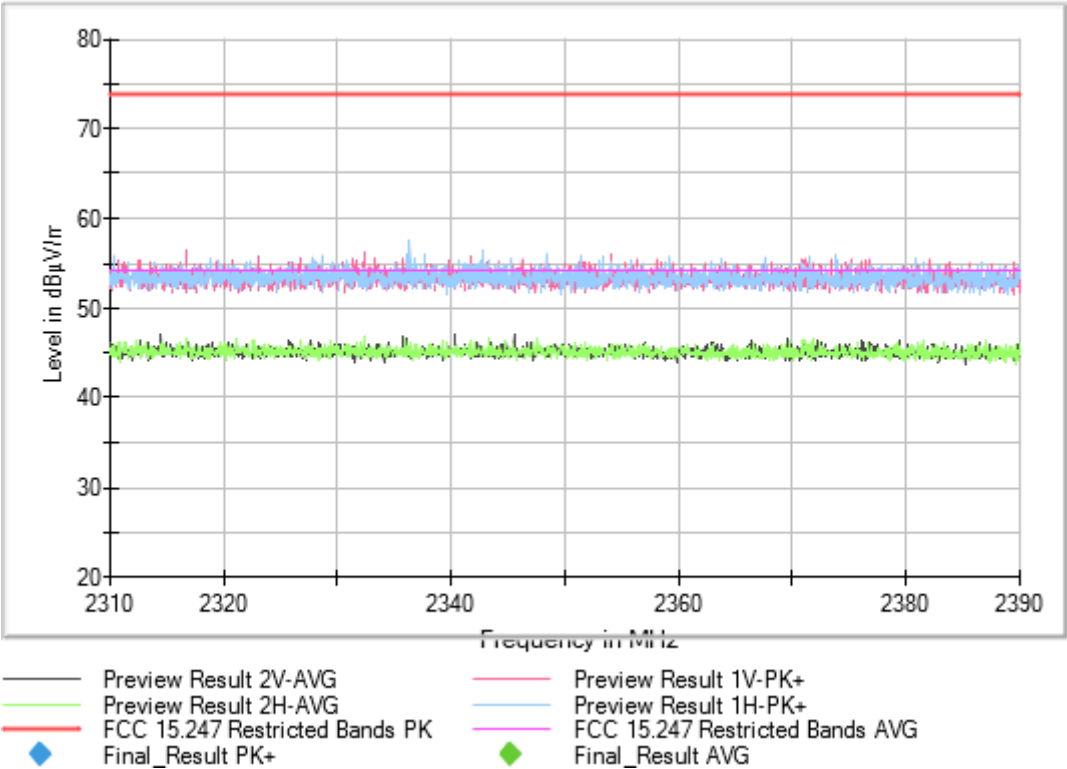
Images:



Full Spectrum



Full Spectrum



Frequency MHz = 2462.00000

Modulation = 802.11b (DSSS 1 Mbit/s)

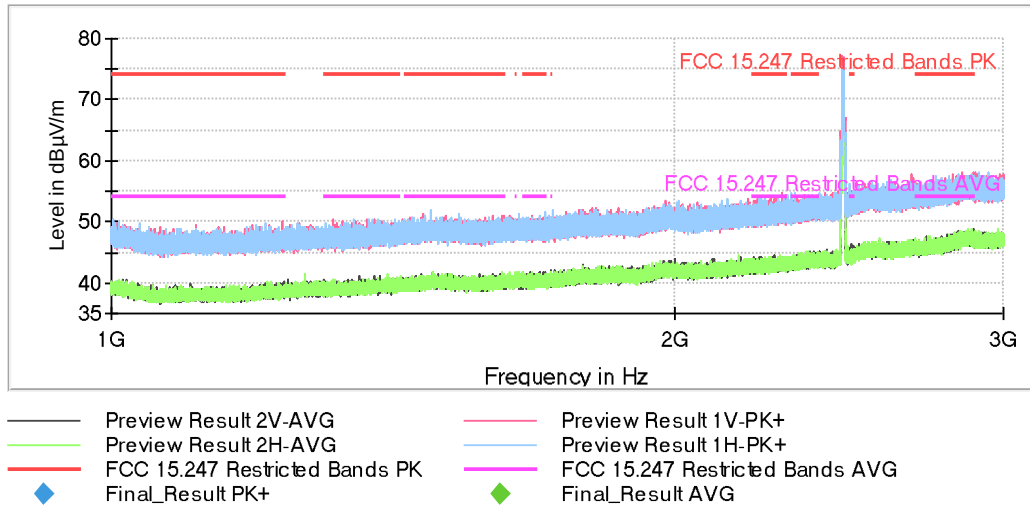
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

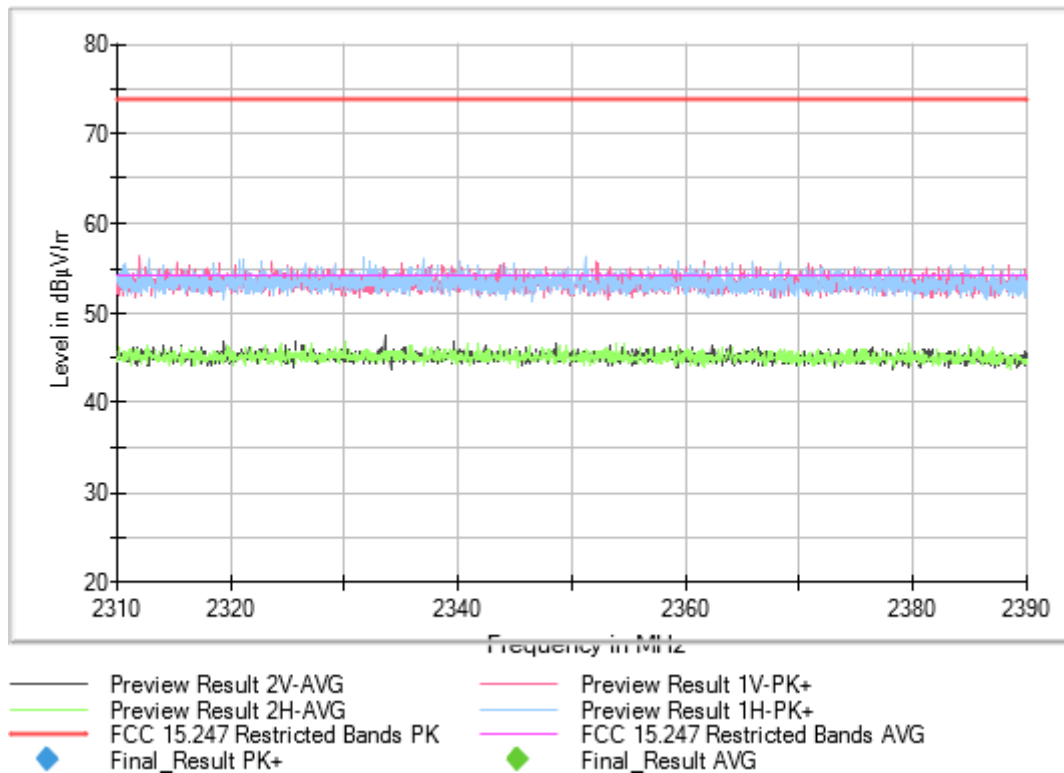
Measurement Point = 1

Active Port = 1

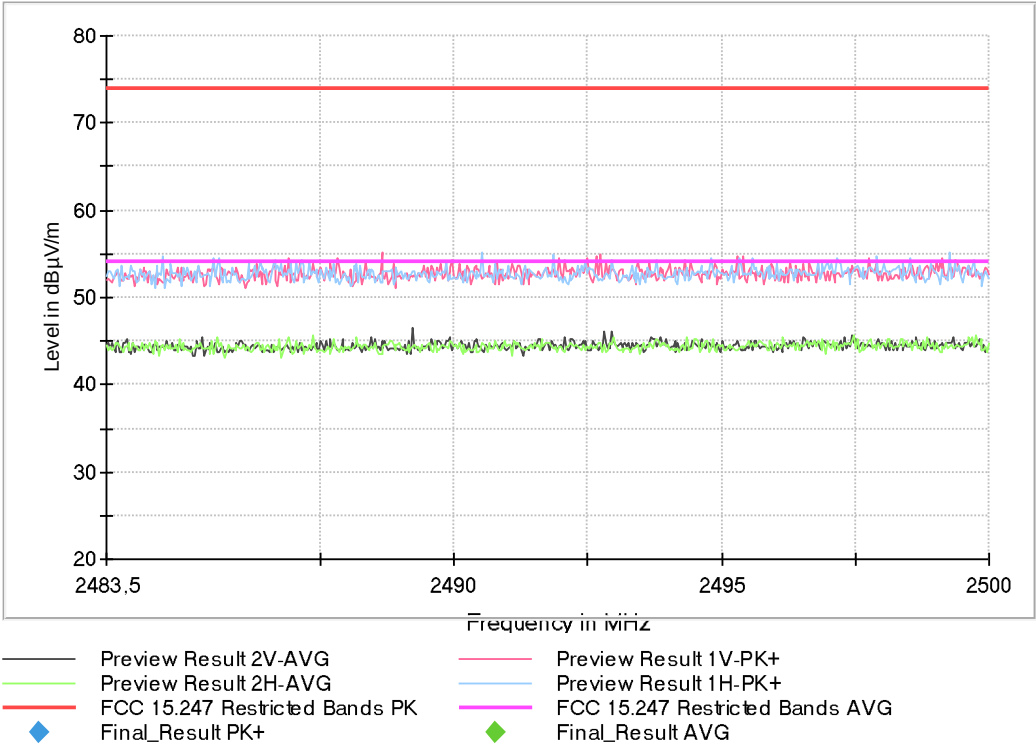
Images:



Full Spectrum

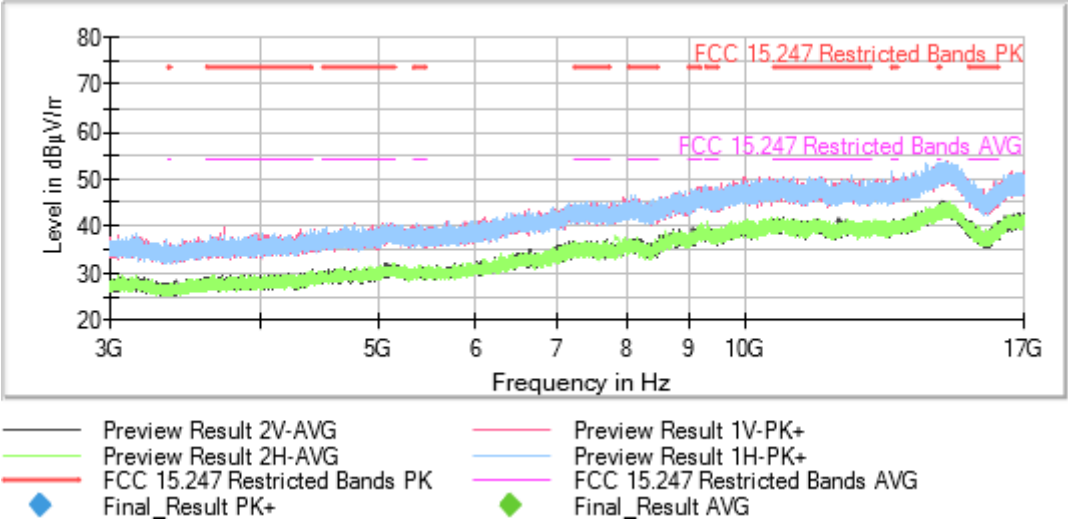


Full Spectrum



Frequency MHz = 2412.00000
Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:

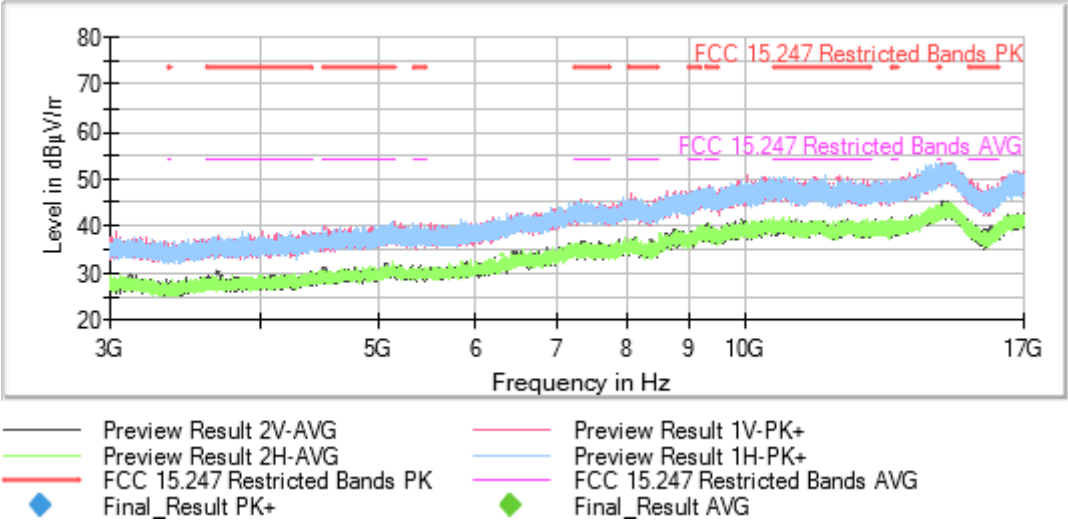


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2442.00000
Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:

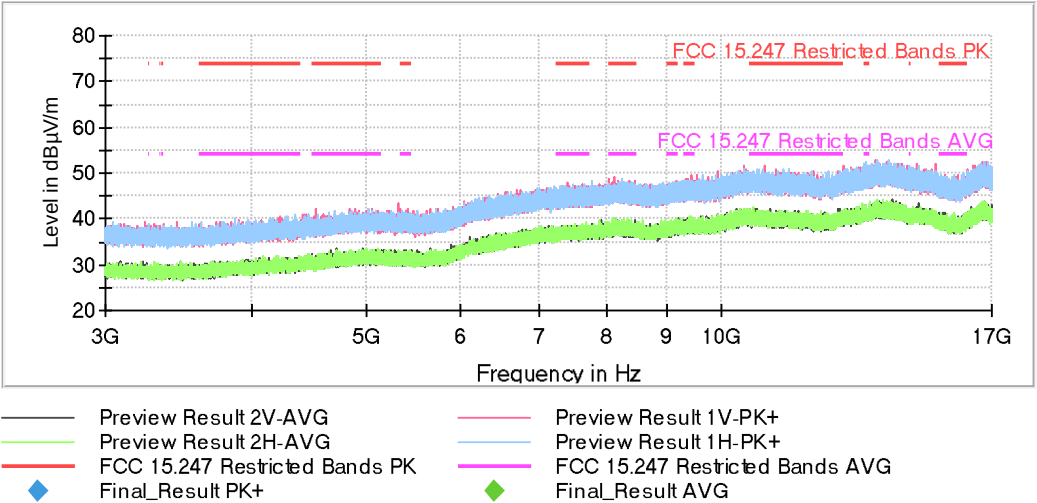


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2462.00000
Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Modulation: 802.11g (OFDM 6 Mbit/s)

Results

Freq (MHz)	Equipment	Freq Rng (GHz)	# of Tx Chains	Port	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
2412.00000	Digital Transmission System (DTS)	[1, 3]	1	1	2387.415	66.88	H	PK
					2387.415	53.71	H	AVG
					2389.446	64.26	H	PK
					2389.446	52.13	H	AVG
2442.00000					2486.985	58.60	H	PK

Verdict

Pass

Attachments

Frequency MHz = 2412.00000

Modulation = 802.11g (OFDM 6 Mbit/s)

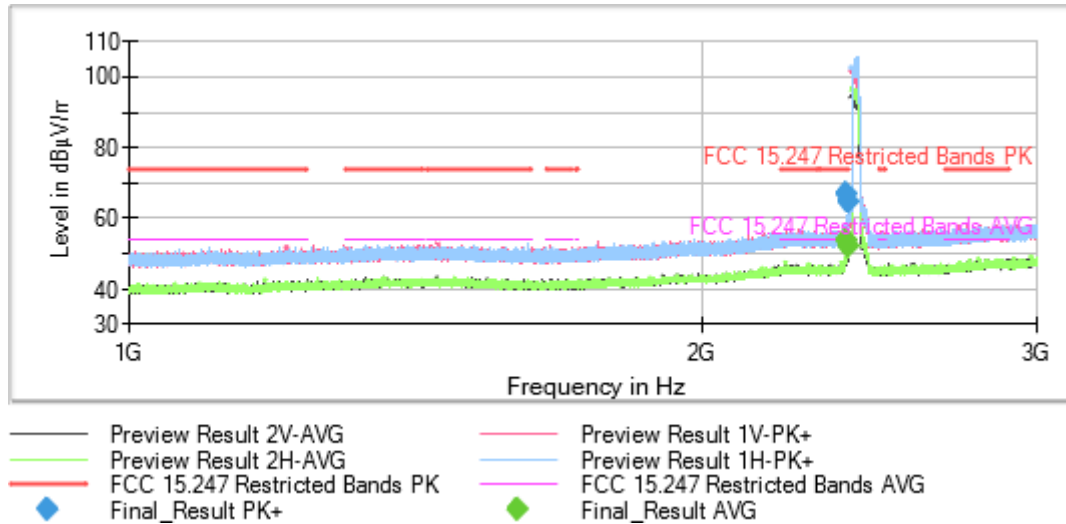
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

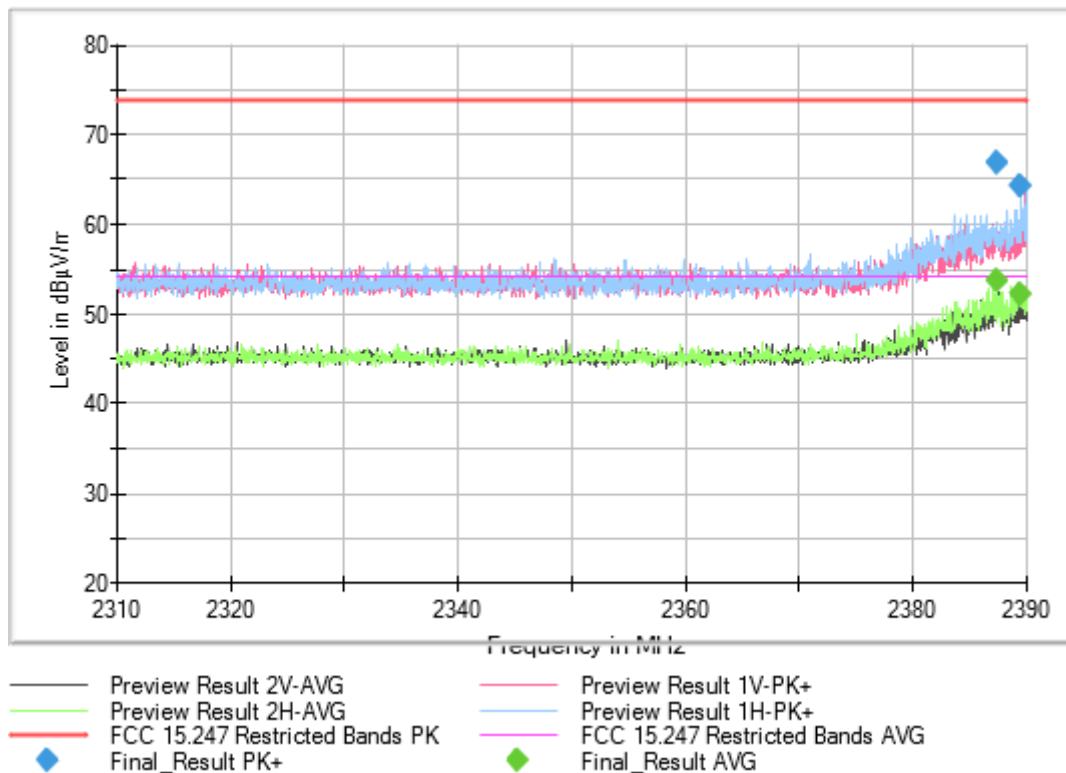
Measurement Point = 1

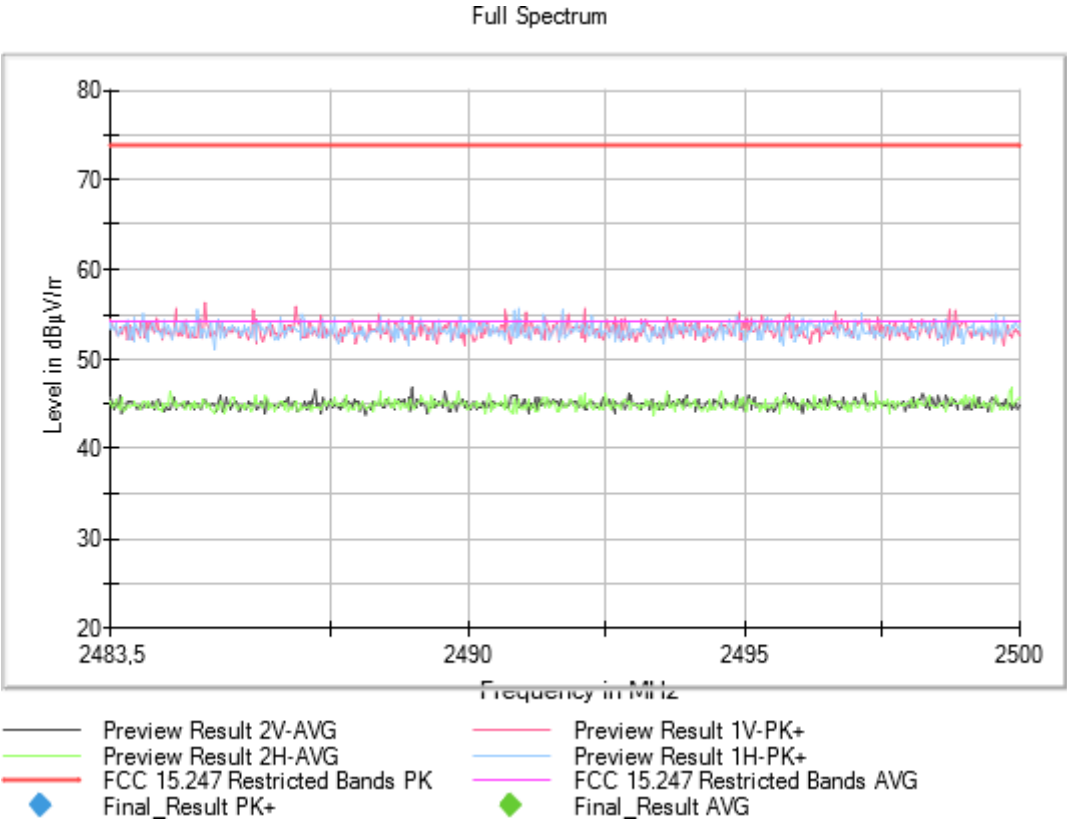
Active Port = 1

Images:



Full Spectrum





Frequency MHz = 2412.00000

Modulation = 802.11g (OFDM 6 Mbit/s)

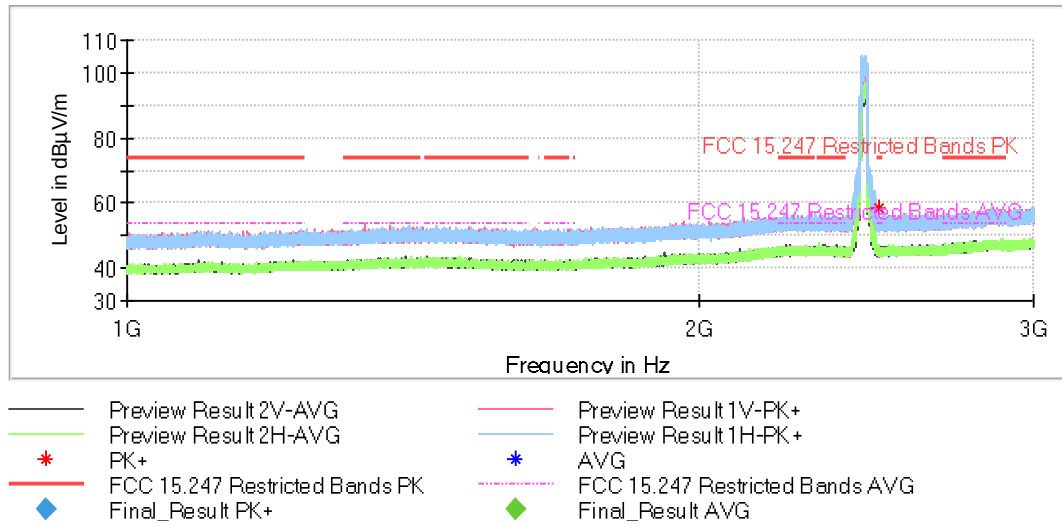
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

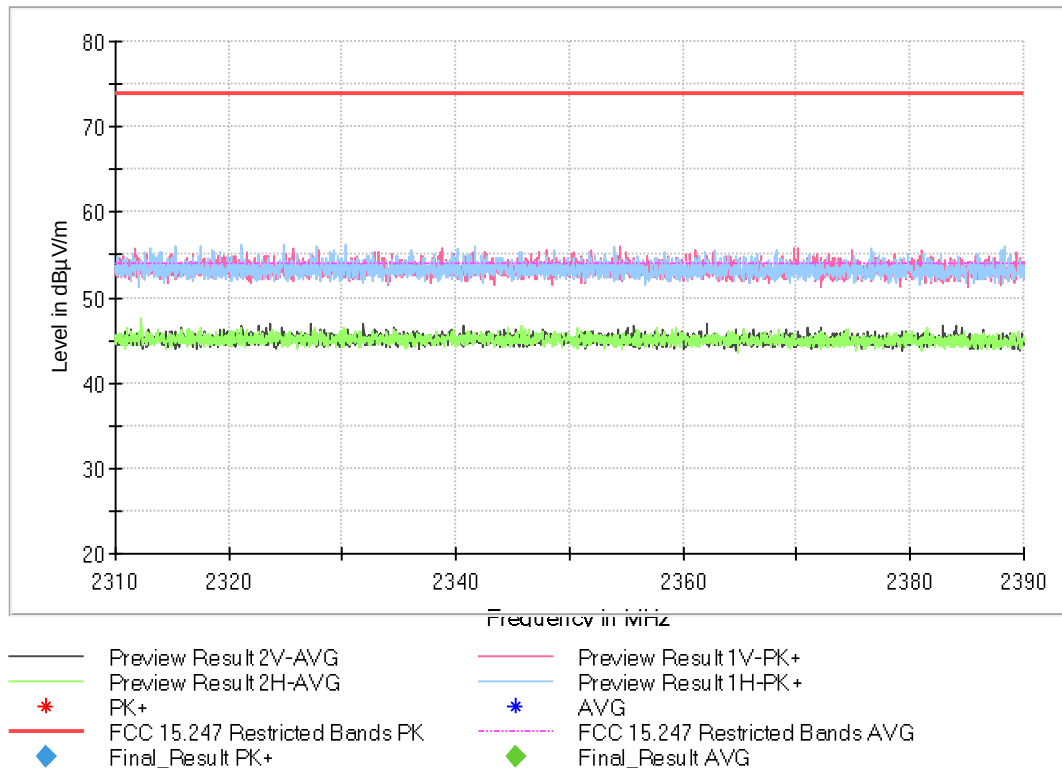
Measurement Point = 1

Active Port = 1

Images:



Full Spectrum



Full Spectrum



Frequency MHz = 2462.00000

Modulation = 802.11g (OFDM 6 Mbit/s)

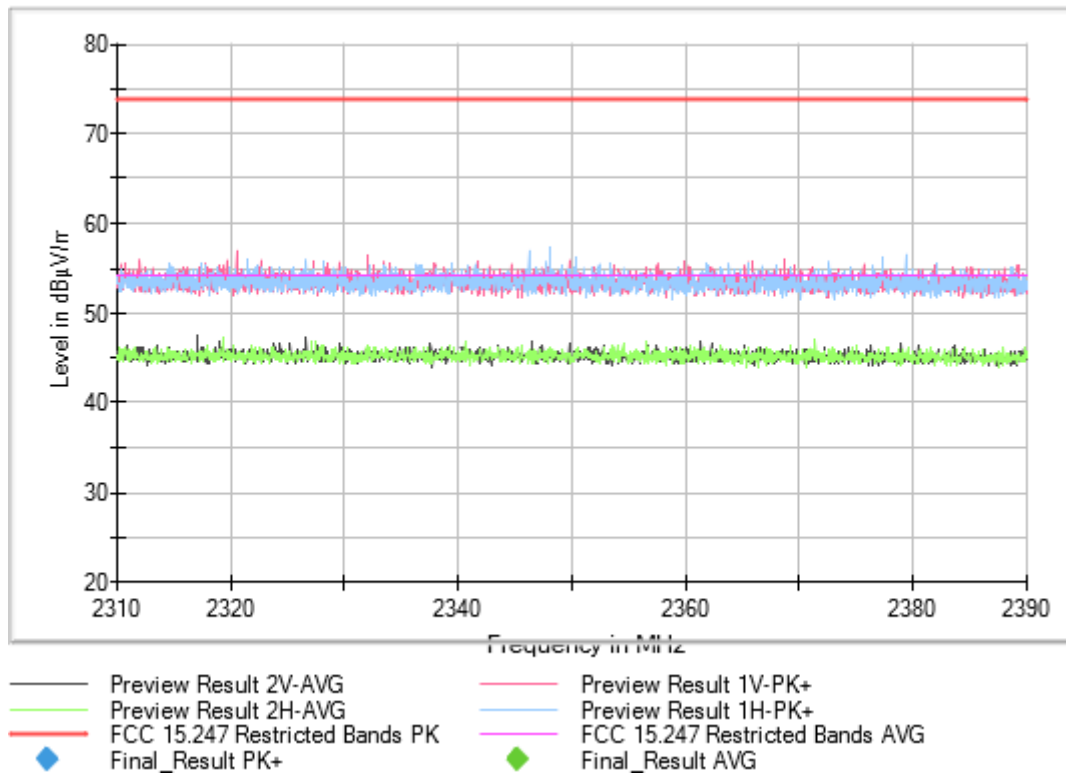
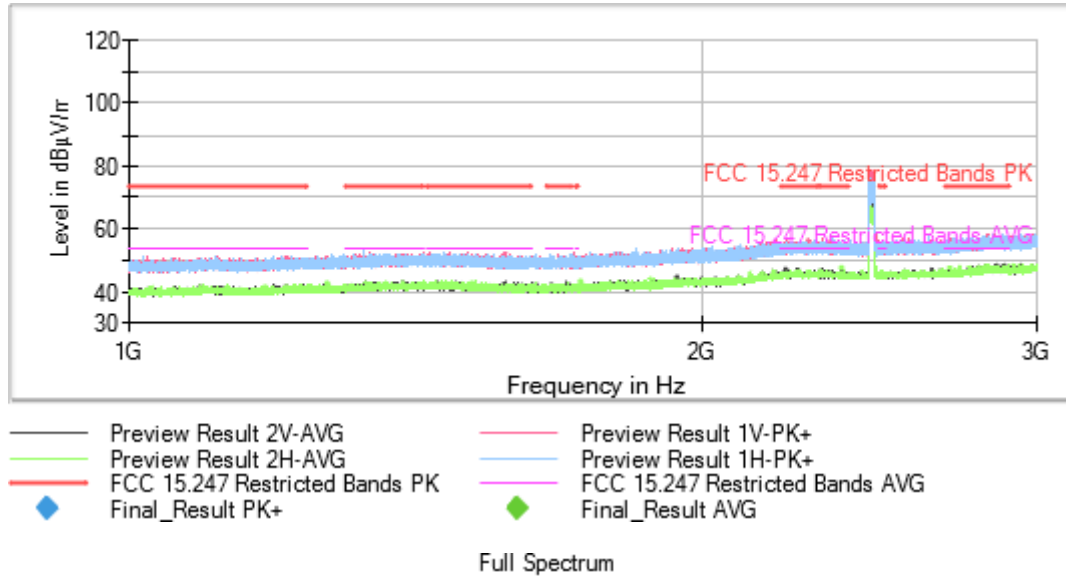
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

Measurement Point = 1

Active Port = 1

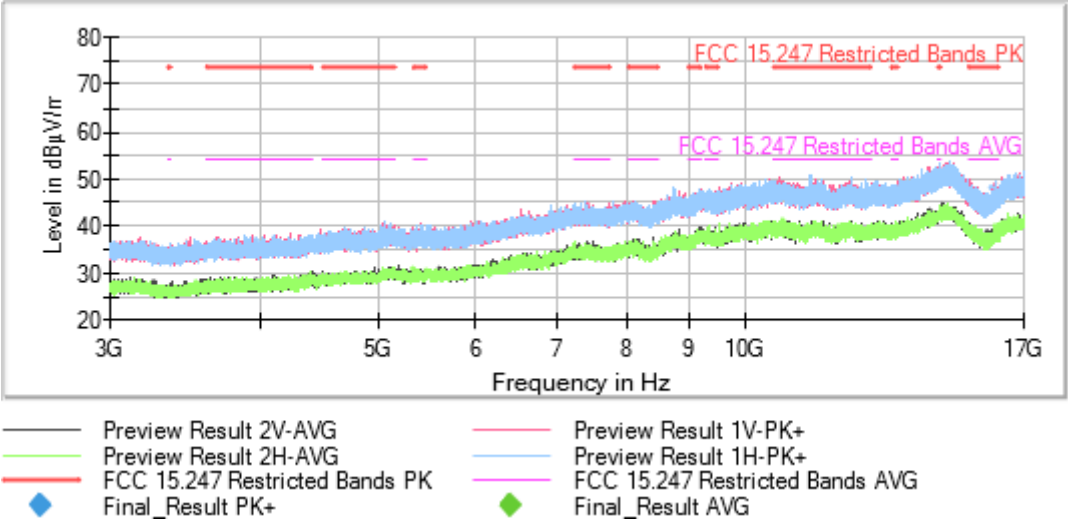
Images:





Frequency MHz = 2412.00000
Modulation = 802.11g (OFDM 6 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:

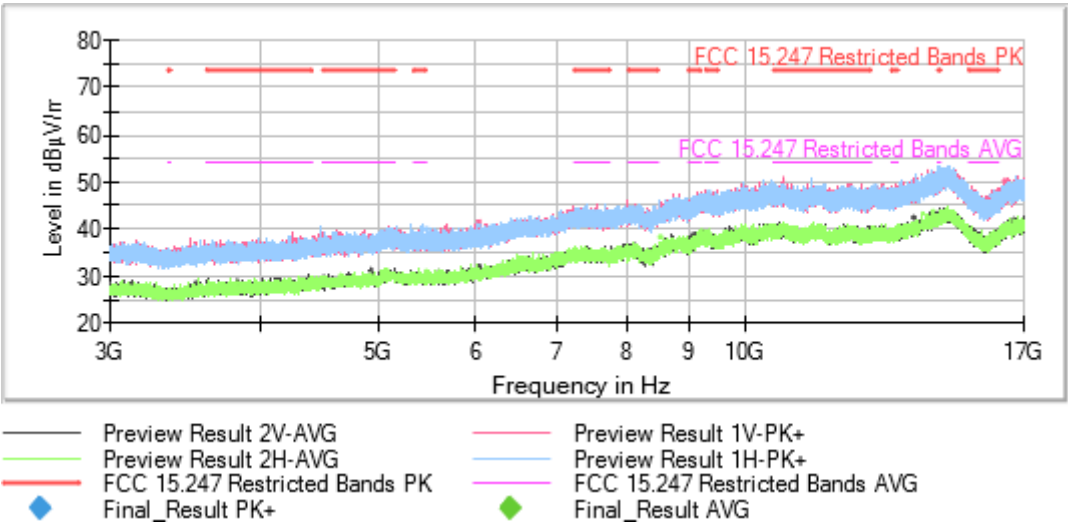


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2442.00000
Modulation = 802.11g (OFDM 6 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:

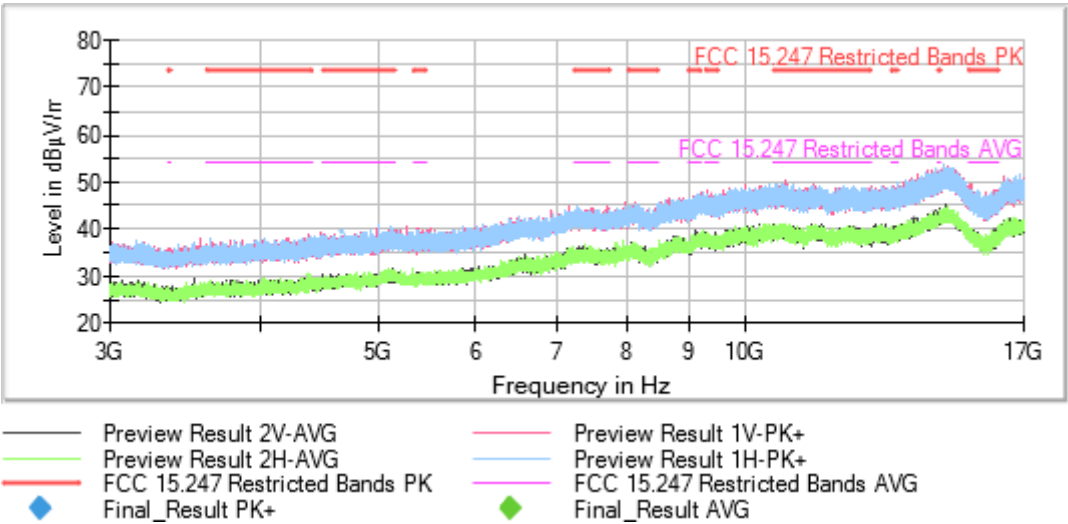


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2462.00000
Modulation = 802.11g (OFDM 6 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

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

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

Verdict

Pass

Attachments

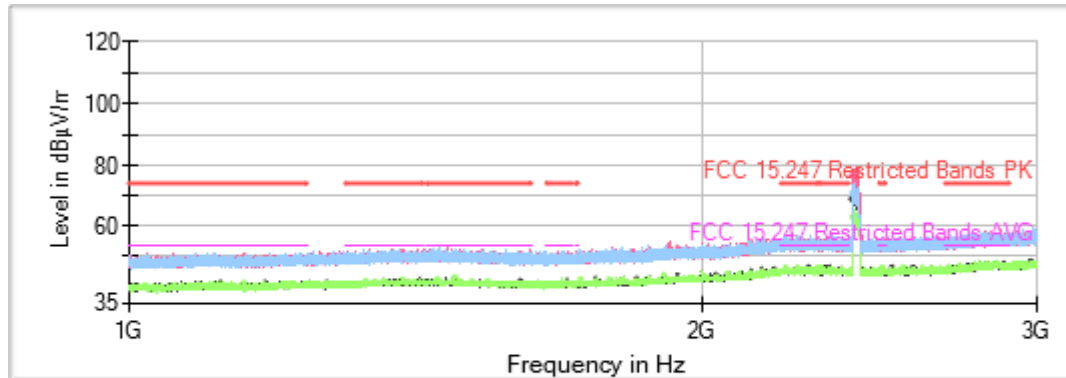
Frequency MHz = 2412.00000

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [1, 3]

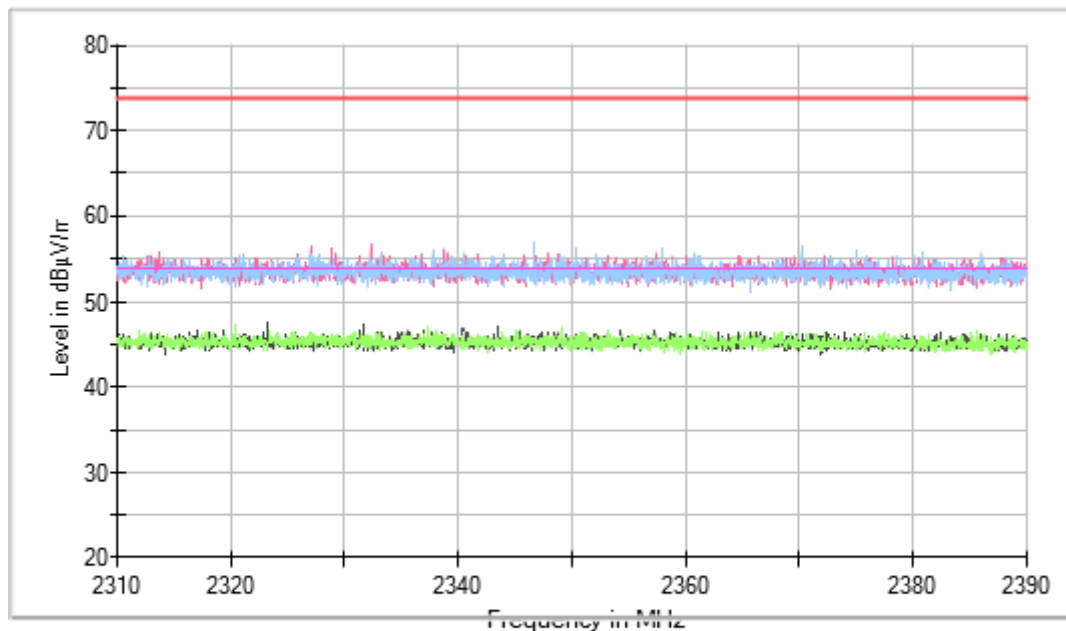
Number of Transmission Chains = 1 Measurement Point = 1

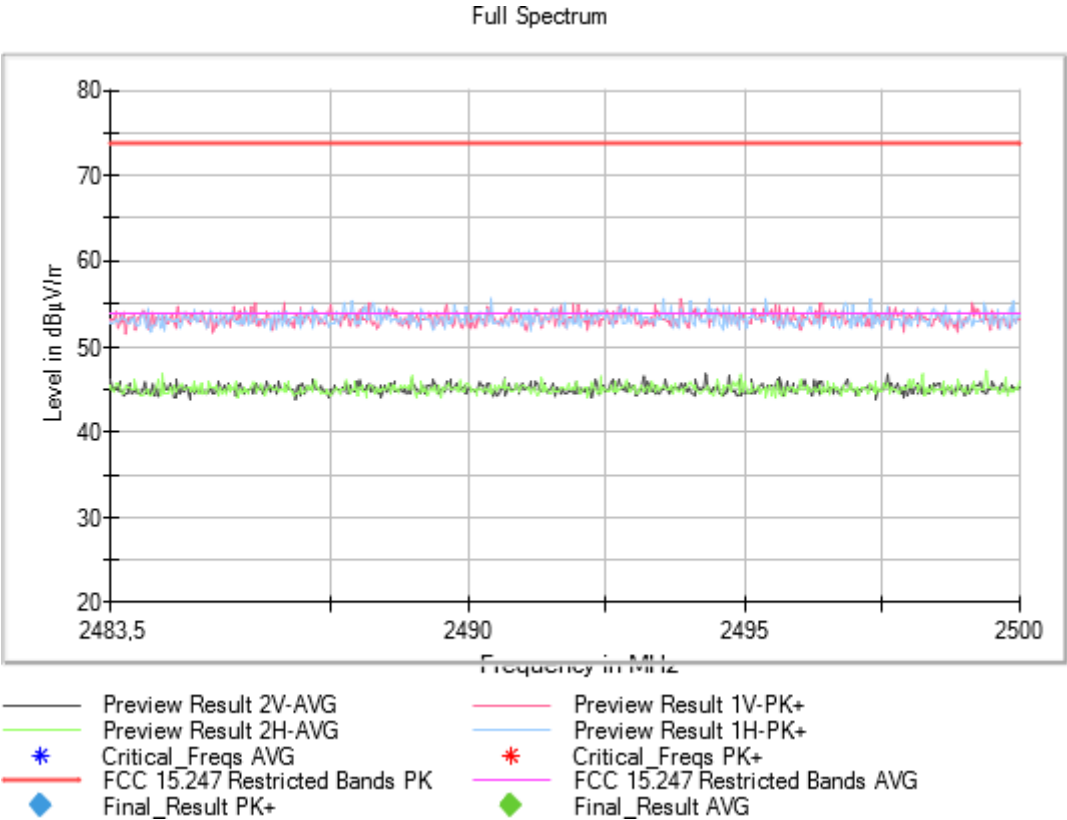
Active Port = 1

Images:



Full Spectrum





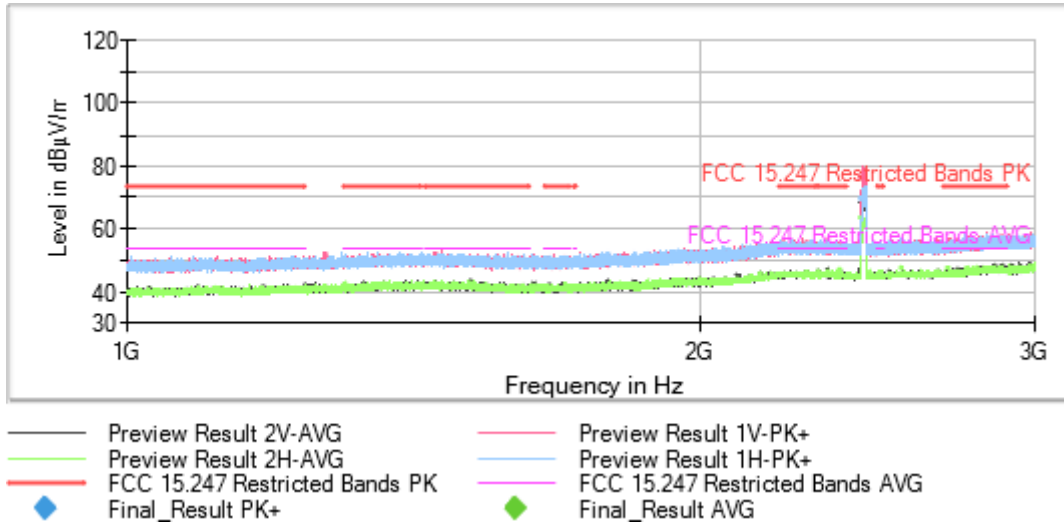
Frequency MHz = 2442.00000

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [1, 3]

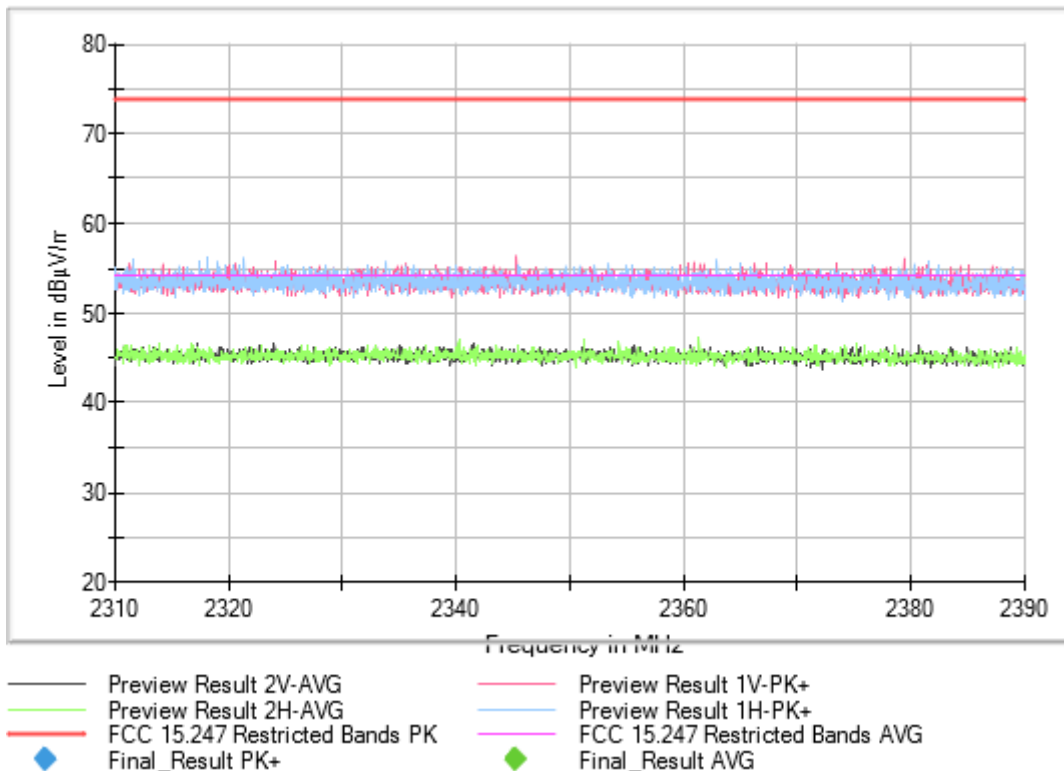
Number of Transmission Chains = 1 Measurement Point = 1

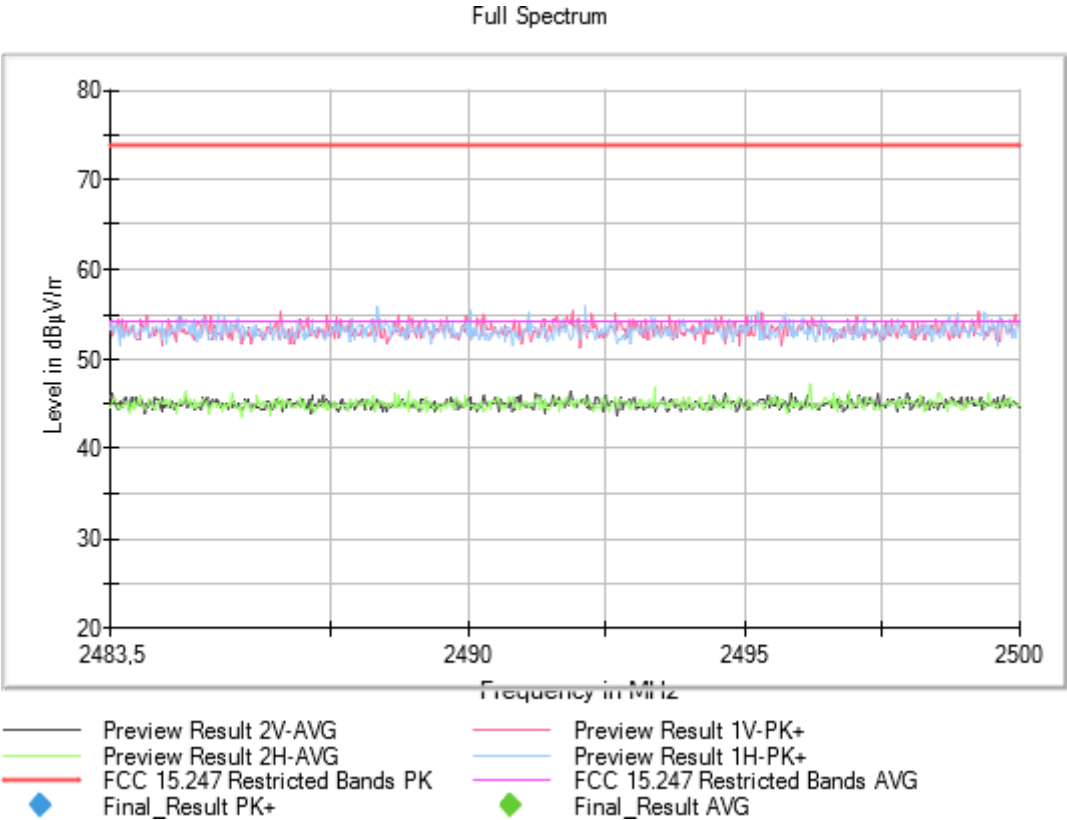
Active Port = 1

Images:



Full Spectrum





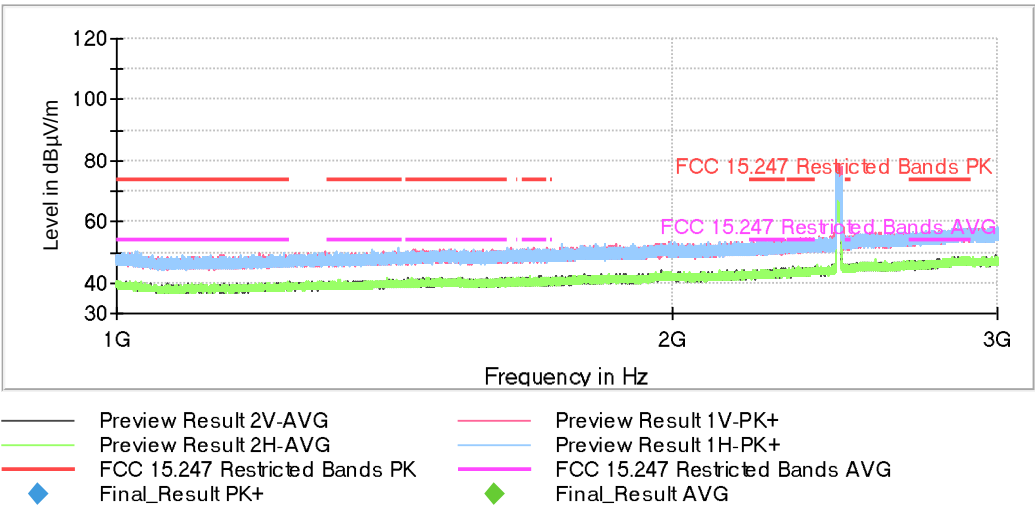
Frequency MHz = 2462.00000

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [1, 3]

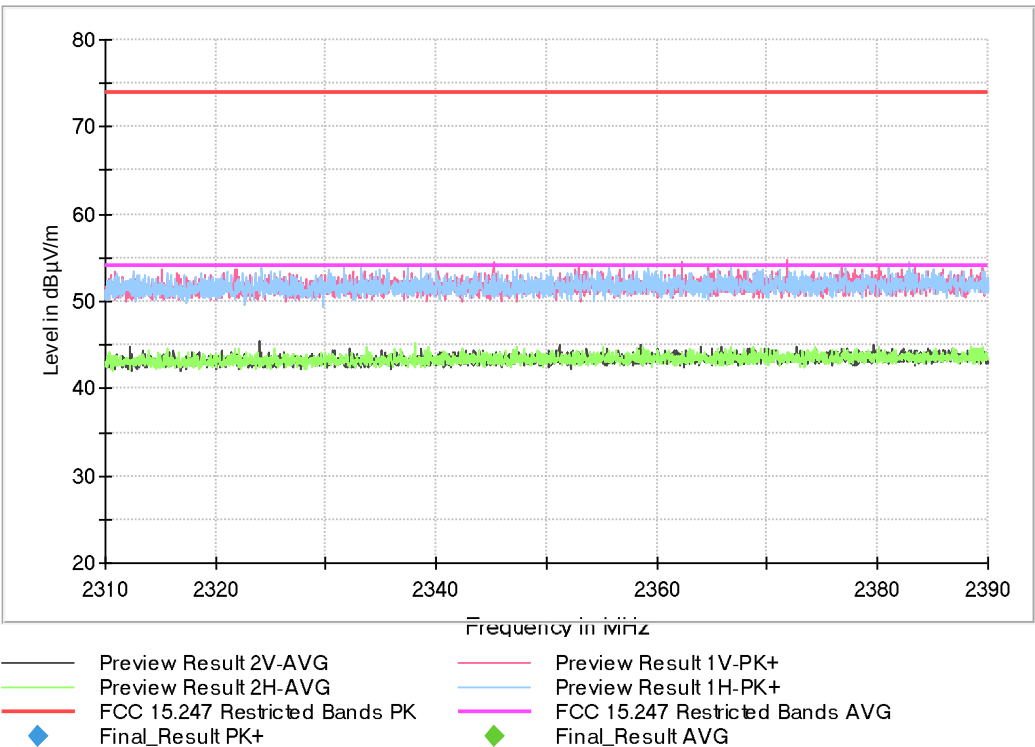
Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

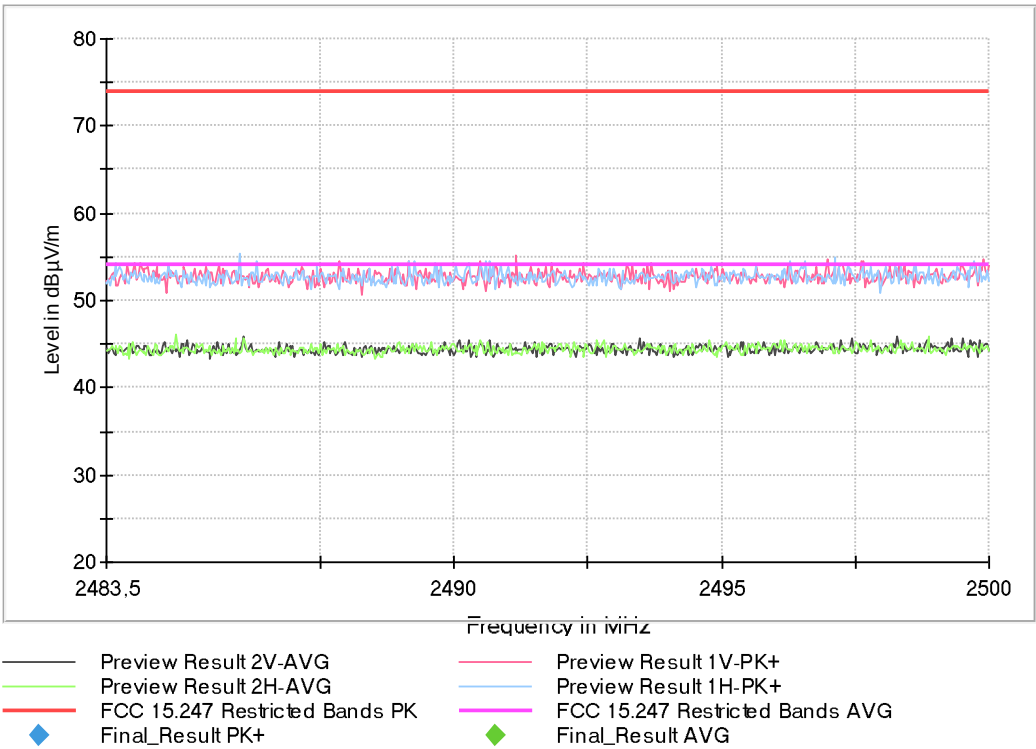
Images:



Full Spectrum

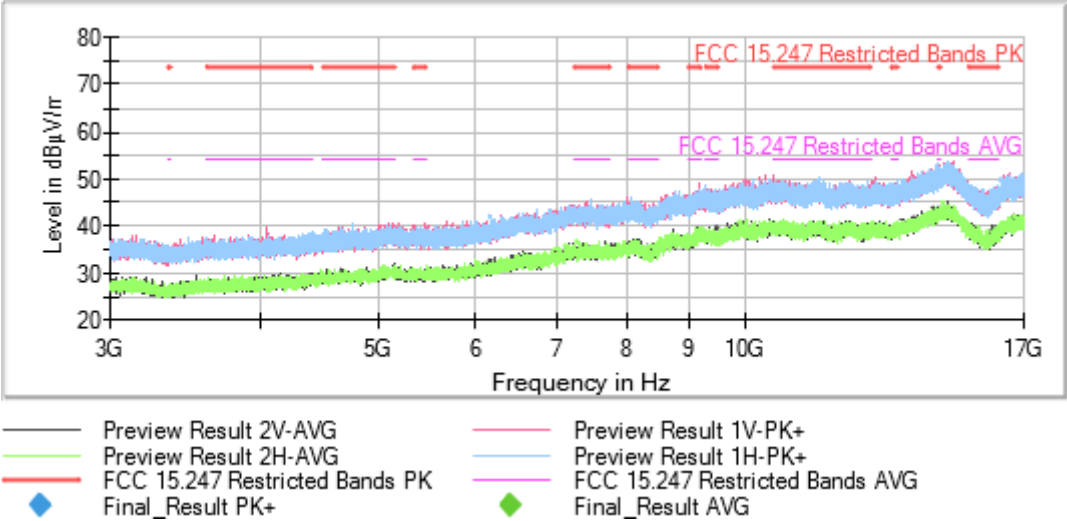


Full Spectrum



Frequency MHz = 2412.00000
Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:

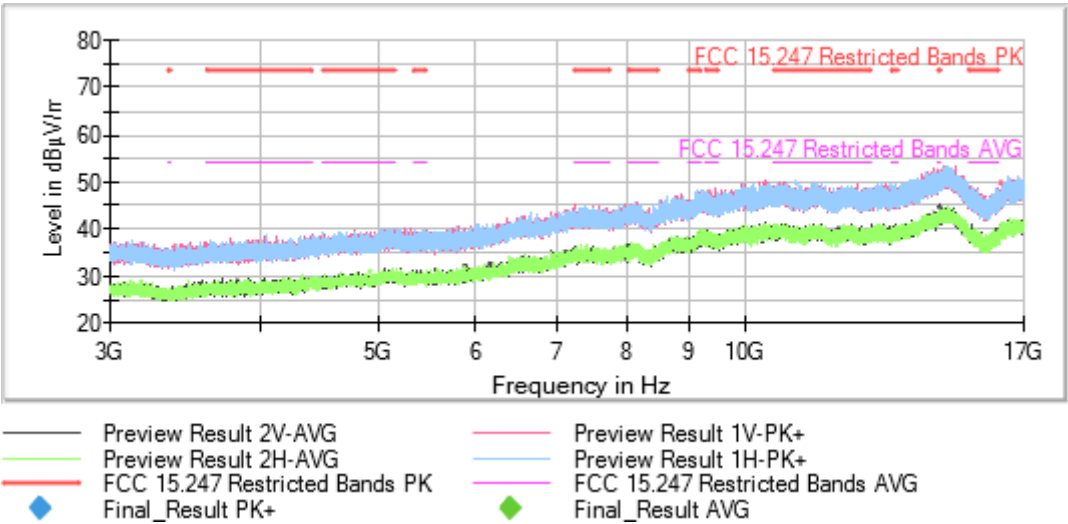


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2442.00000
Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:

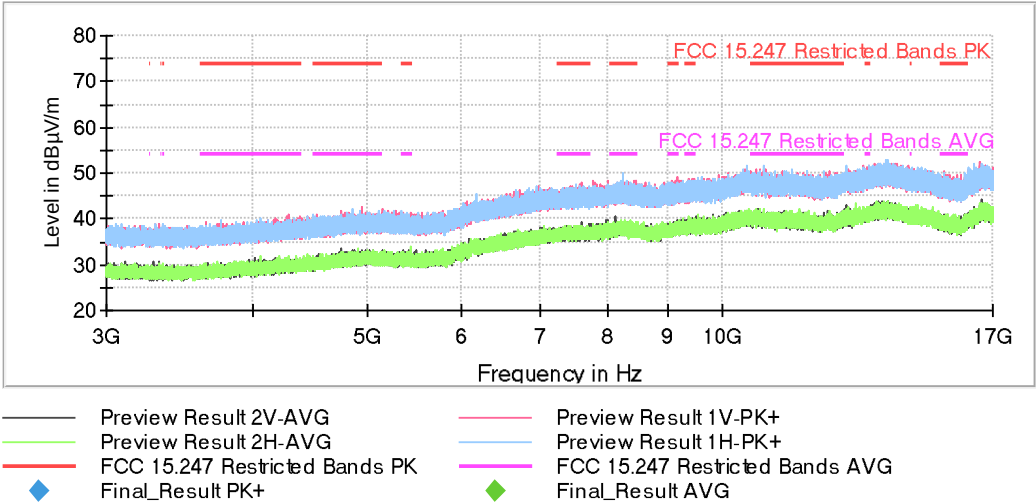


Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2462.00000
Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [3, 17]
Number of Transmission Chains = 1 Measurement Point = 1
Active Port = 1

Images:



Tables:
Spectrum Analyzer Parameters

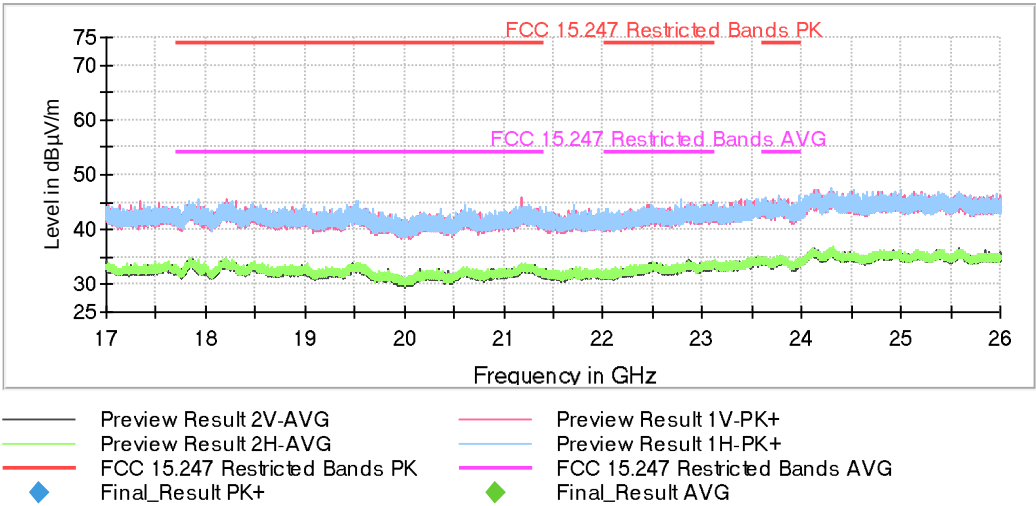
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	3 GHz - 17 GHz	140 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency Range GHz = [17, 26]
The spurious frequencies detected do not depend neither on the operating channel nor the modulation mode.

Number of Transmission Chains = 1 Measurement Point = 1

Active Port = 1

Images:



Tables:
Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSW 50]					
	17 GHz - 26 GHz	300 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

99dBw Occupied Channel Bandwidth 99%

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.

Modulation: 802.11b (DSSS 1 Mbit/s)

Results

Freq (MHz)	Equipment	BW (MHz)	# of Tx Chains	Port	Occ Ch BW (MHz)
2412.00000	Digital Transmission System (DTS)	20	1	1	11.700
2442.00000					11.700
2462.00000					11.500

Verdict

Pass

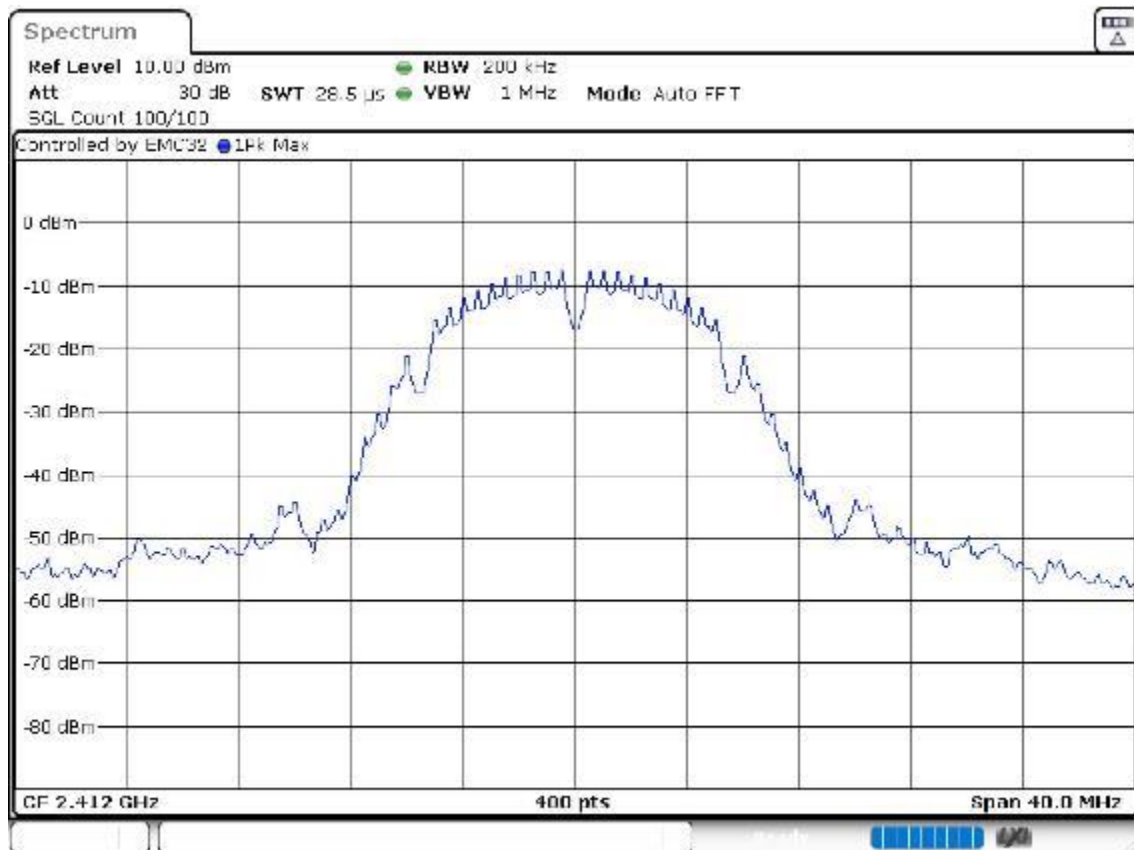
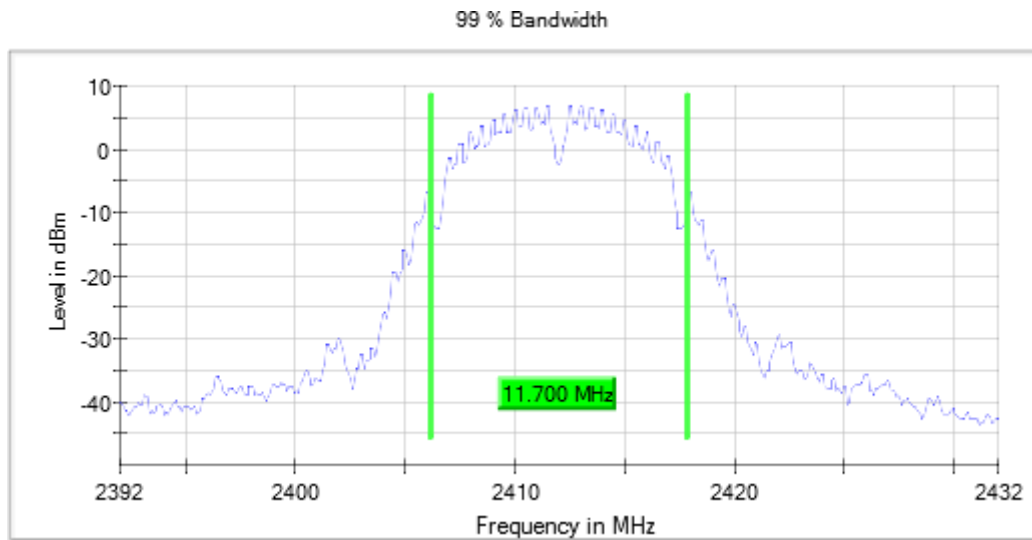
Attachments

Frequency MHz = 2412.00000

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

Number of Transmission Chains = 1 Active Port = 1

Images:

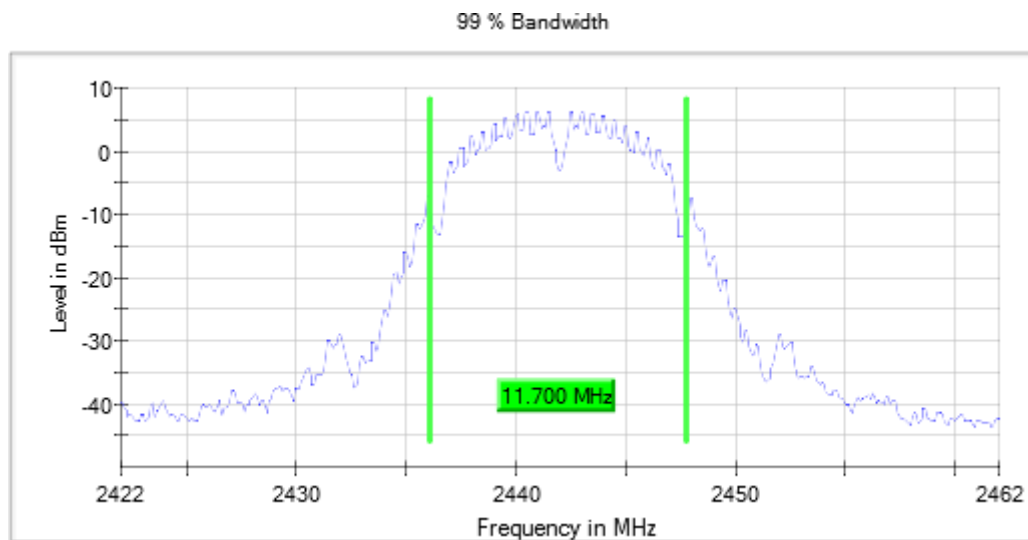


Frequency MHz = 2442.00000

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

Number of Transmission Chains = 1 Active Port = 1

Images:

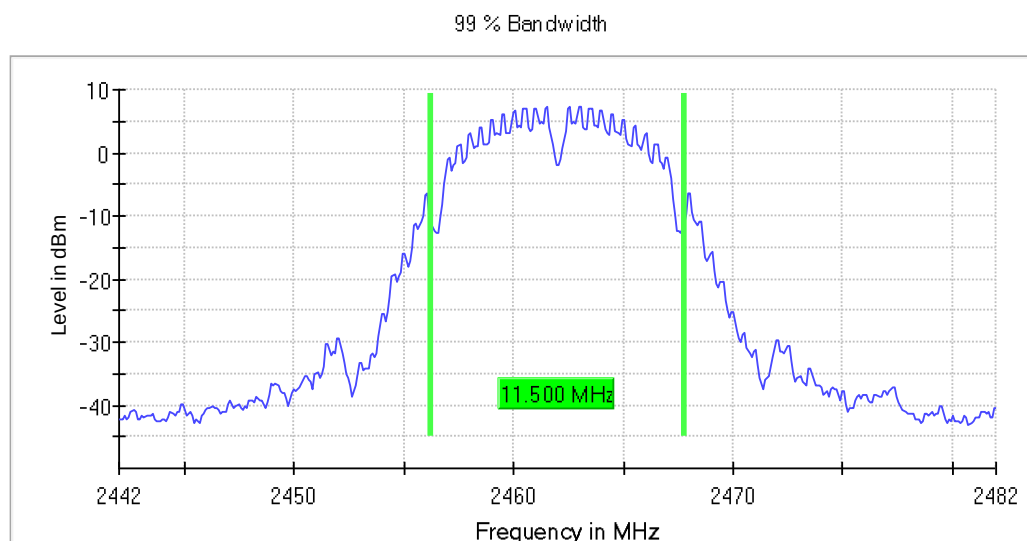


Frequency MHz = 2462.00000

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

Number of Transmission Chains = 1 Active Port = 1

Images:



Modulation: 802.11g (OFDM 6 Mbit/s)

Results

Freq (MHz)	Equipment	BW (MHz)	# of Tx Chains	Port	Occ Ch BW (MHz)
2412.00000	Digital Transmission System (DTS)	20	1	1	16.900
2442.00000					16.800
2462.00000					16.900

Verdict

Pass

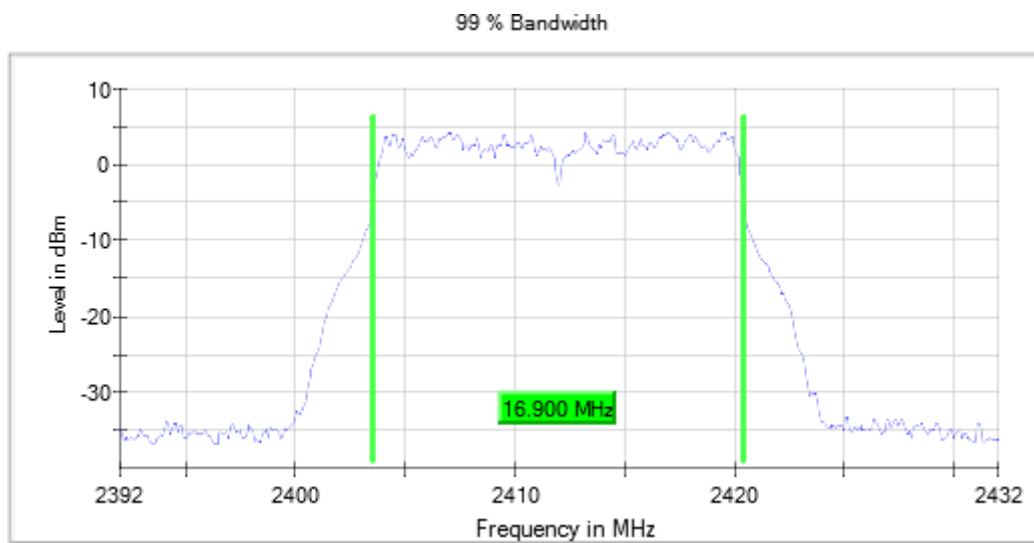
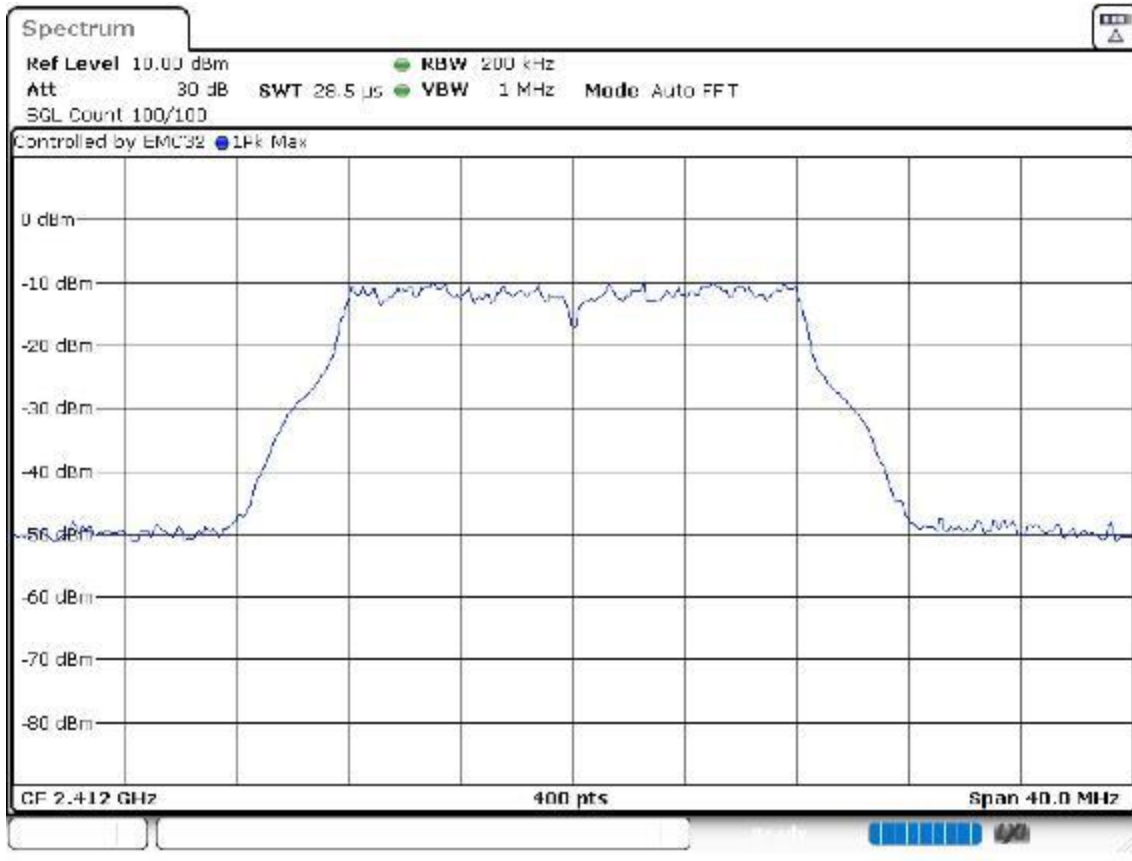
Attachments

Frequency MHz = 2412.00000

Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)

Number of Transmission Chains = 1 Active Port = 1

Images:

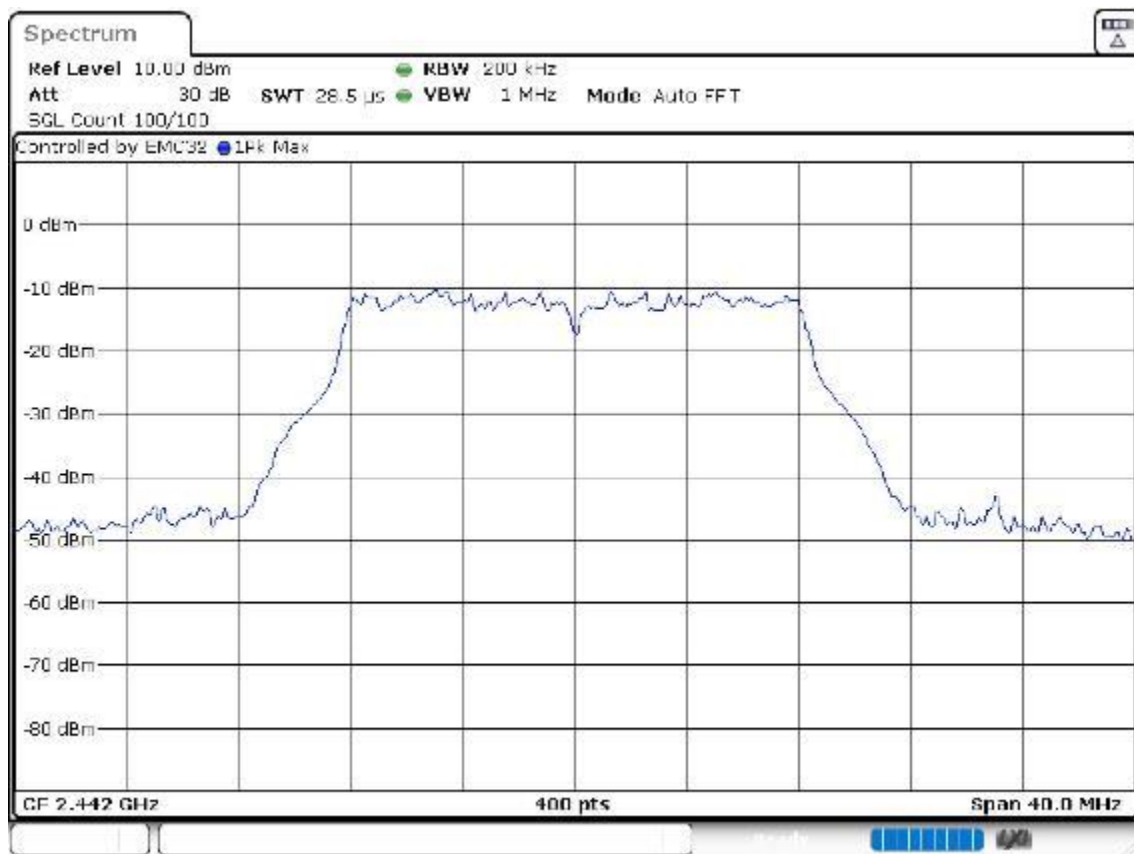
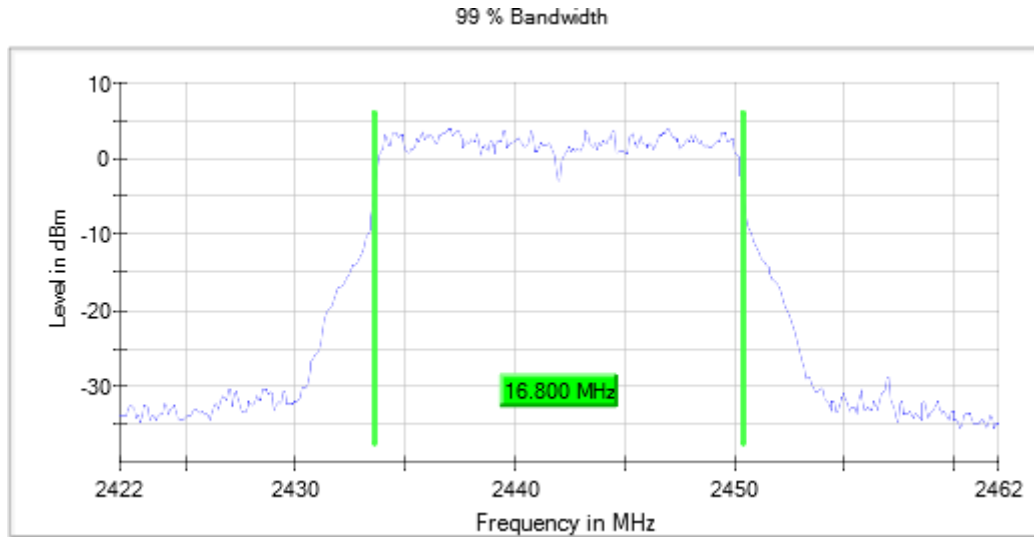


Frequency MHz = 2442.00000

Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)

Number of Transmission Chains = 1 Active Port = 1

Images:

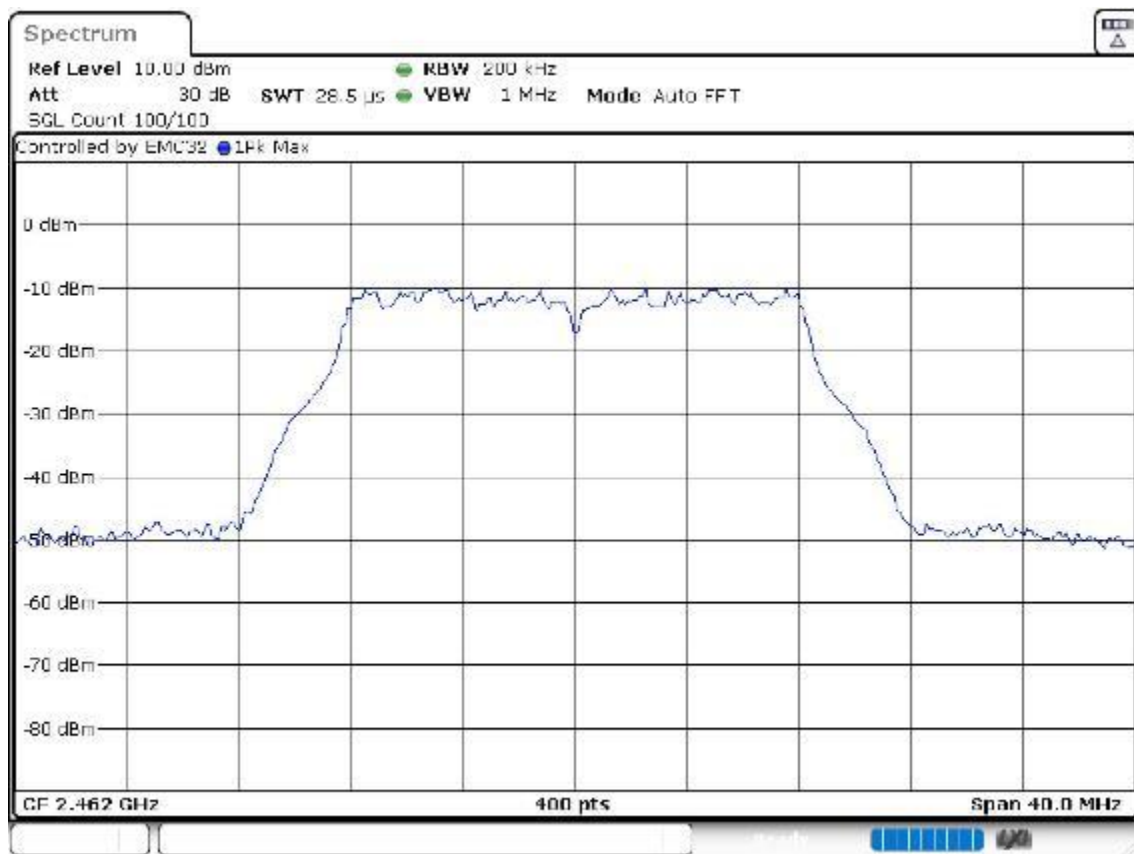
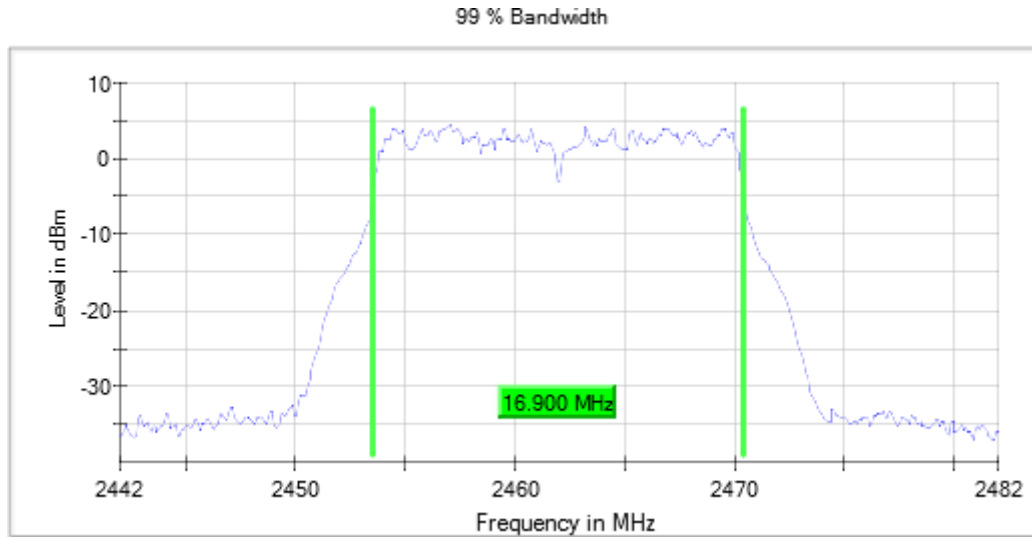


Frequency MHz = 2462.00000

Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)

Number of Transmission Chains = 1 Active Port = 1

Images:



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

Results

Freq (MHz)	Equipment	BW (MHz)	# of Tx Chains	Port	Occ Ch BW (MHz)
2412.00000	Digital Transmission System (DTS)	20	1	1	18.200
2442.00000					18.000
2462.00000					18.000

Verdict

Pass

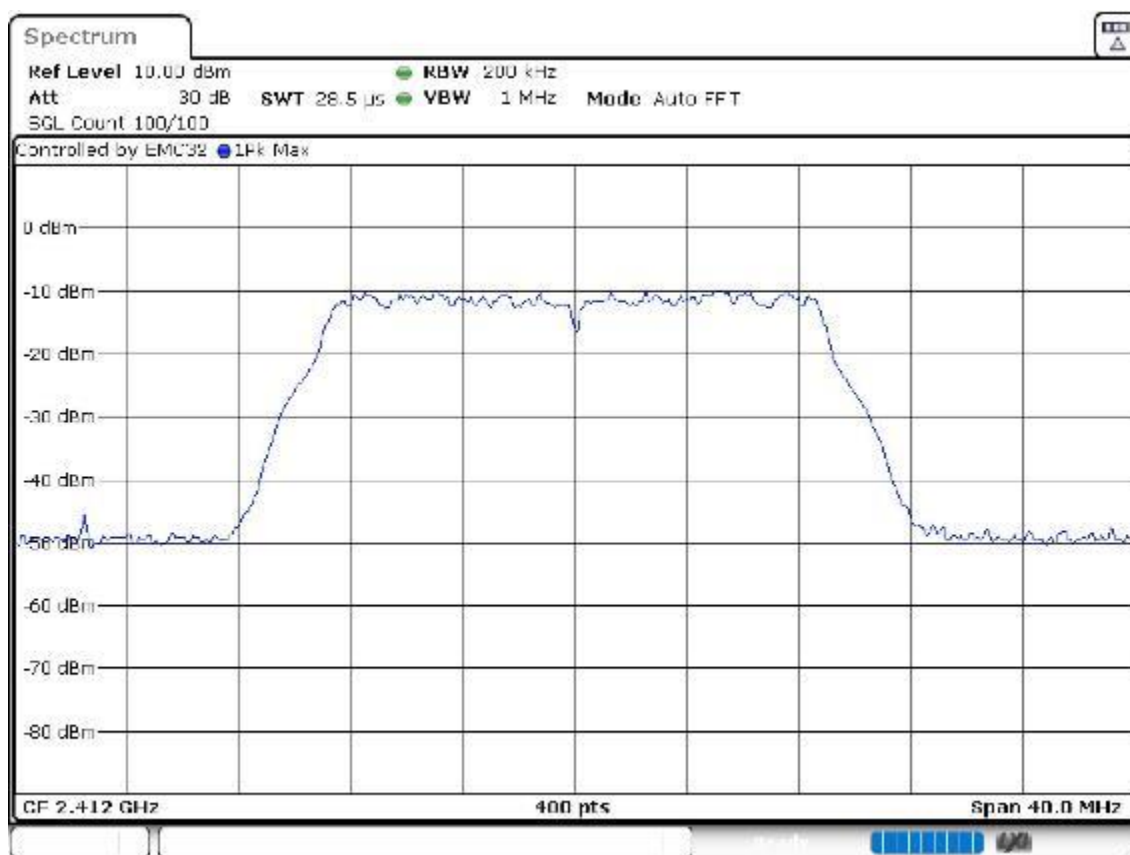
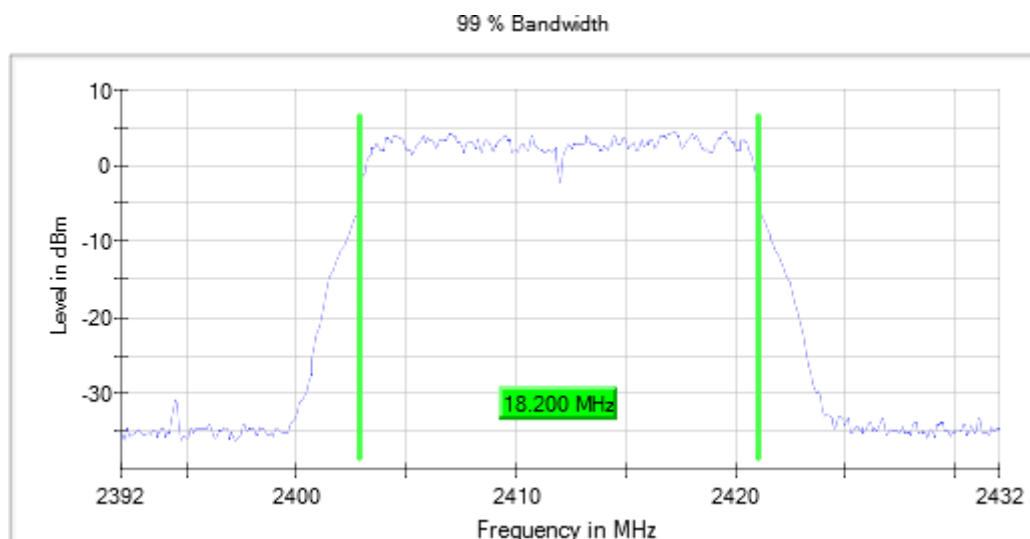
Attachments

Frequency MHz = 2412.00000

Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Number of Transmission Chains = 1 Active Port = 1

Images:

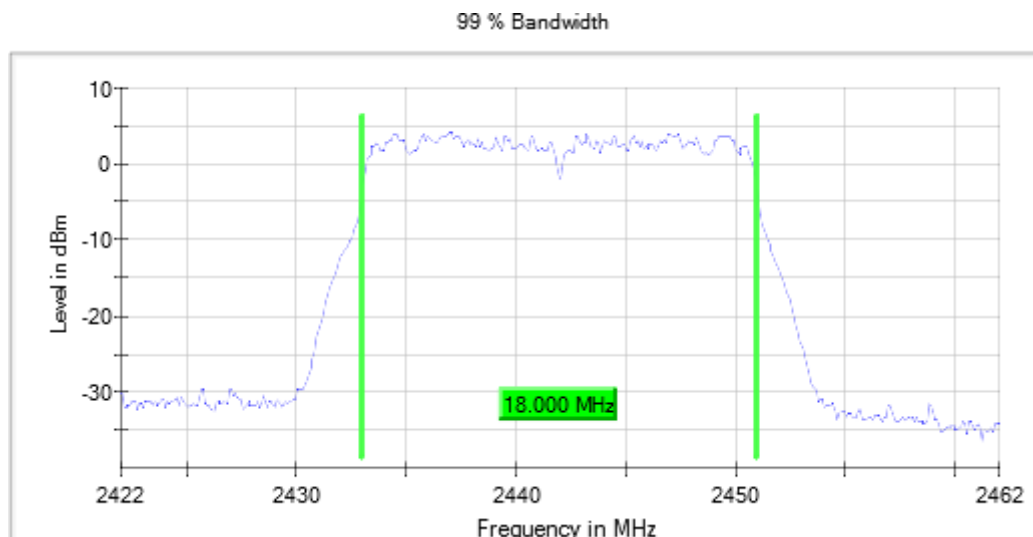
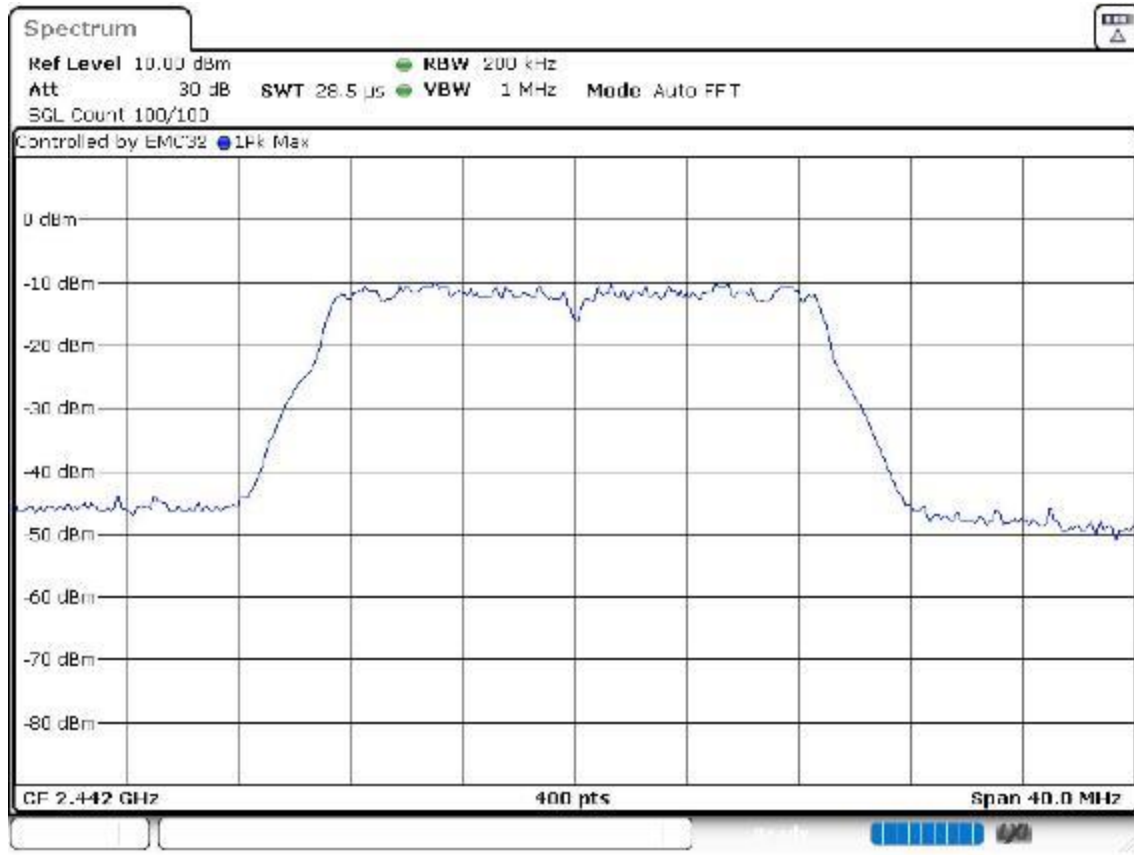


Frequency MHz = 2442.00000

Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Number of Transmission Chains = 1 Active Port = 1

Images:



Frequency MHz = 2462.00000

Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Number of Transmission Chains = 1 Active Port = 1

Images:

