

Appendix B: Test results. 802.11 B/G/N 20 MHz 1x1

Approved by (name / position & signature)

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TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

Vnominal:	3.87Vdc
Type of Power Supply:	Battery

ANTENNA (*):

Type of Antenna:	Integral
Maximum Declared Antenna Gain:	-3.6 dBi

TEST FREQUENCIES (*):

Low Channel:	2412 MHz
Middle Channel:	2437 MHz
High Channel:	2462 MHz

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).

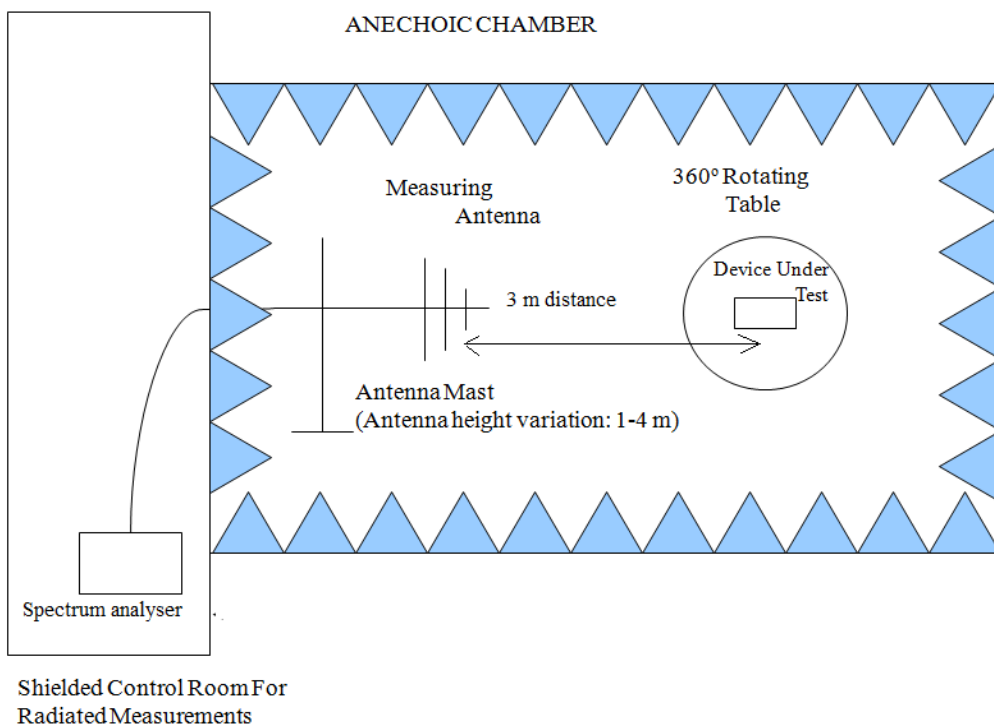
For radiated emissions in the range 17 GHz-26 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

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.

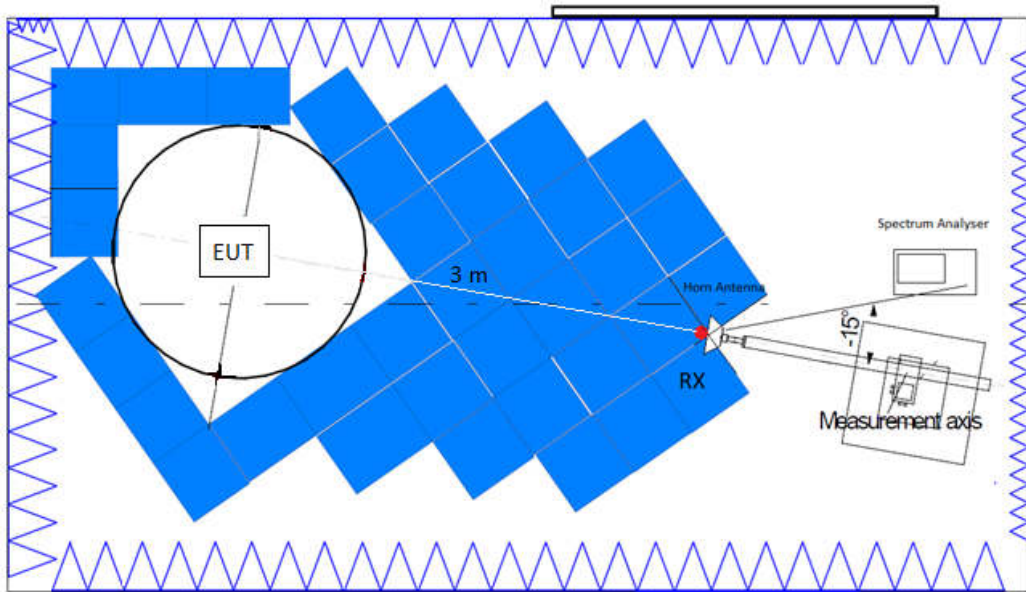
Measurements were made in both horizontal and vertical planes of polarization.

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.

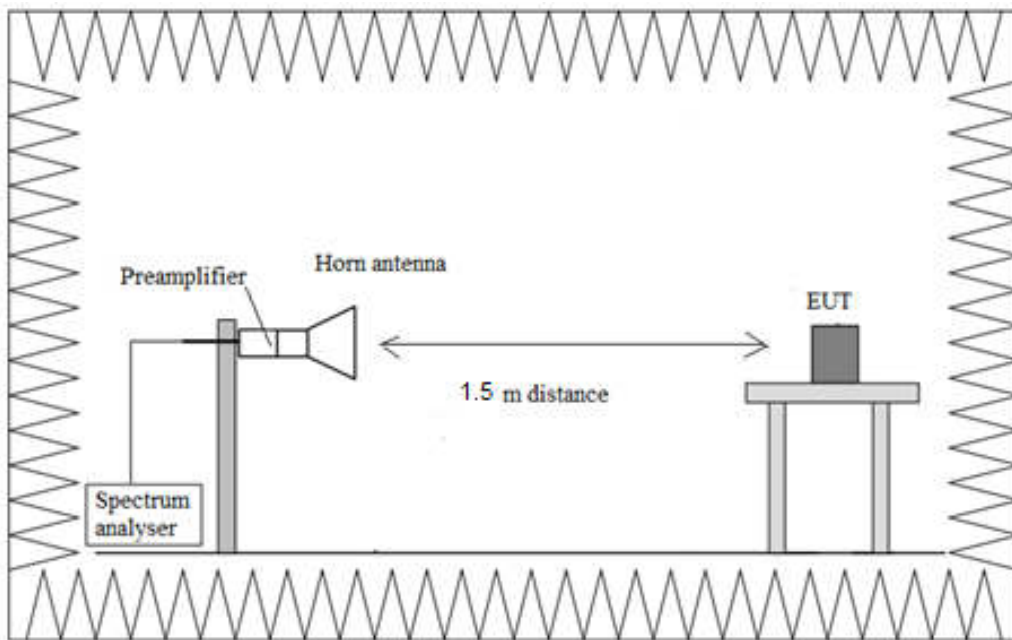
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup $f > 17$ GHz:



TEST CASES DETAILS

99dBw Occupied Channel Bandwidth 99%

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

Freq (MHz)	Occ Ch BW (MHz)
2412.00000	13.200
2437.00000	13.400
2462.00000	13.400

Modulation: 802.11g (OFDM 6 Mbit/s)

Freq (MHz)	Occ Ch BW (MHz)
2412.00000	16.300
2437.00000	16.500
2462.00000	16.500

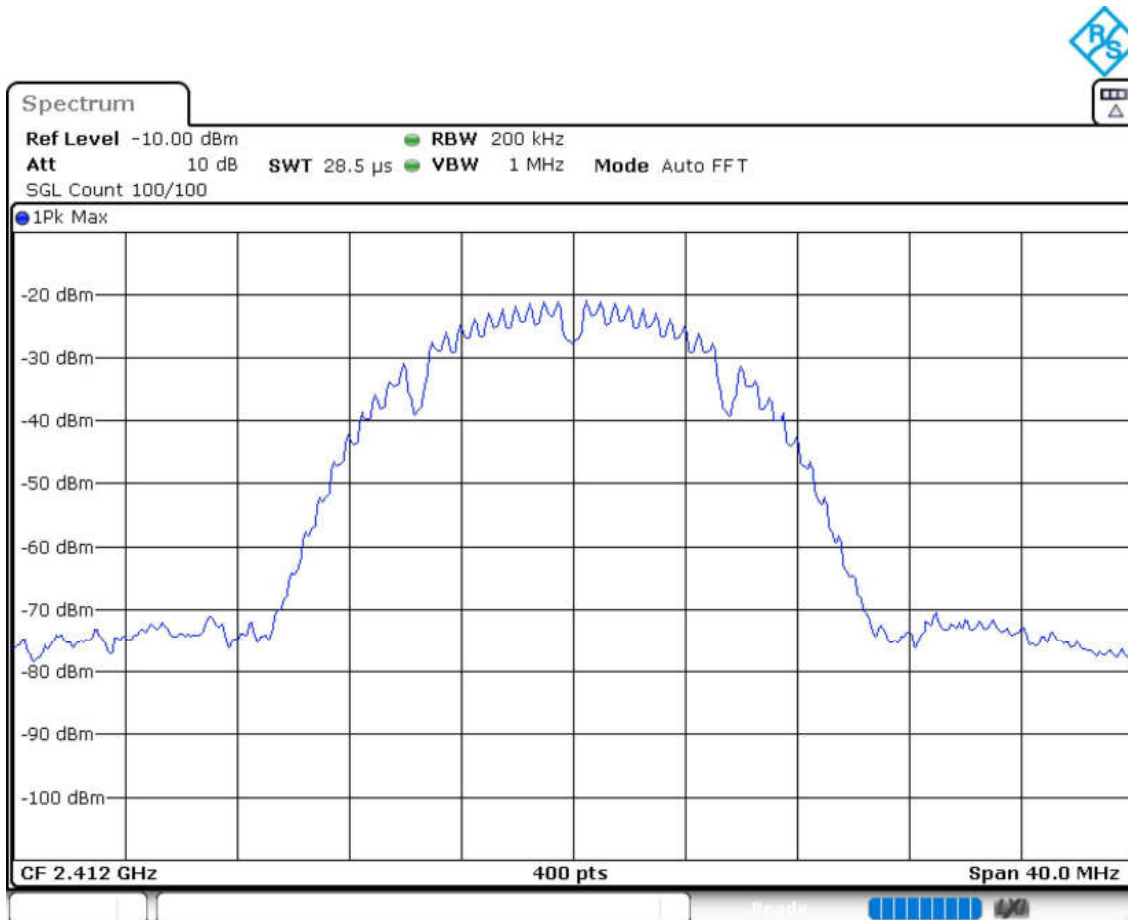
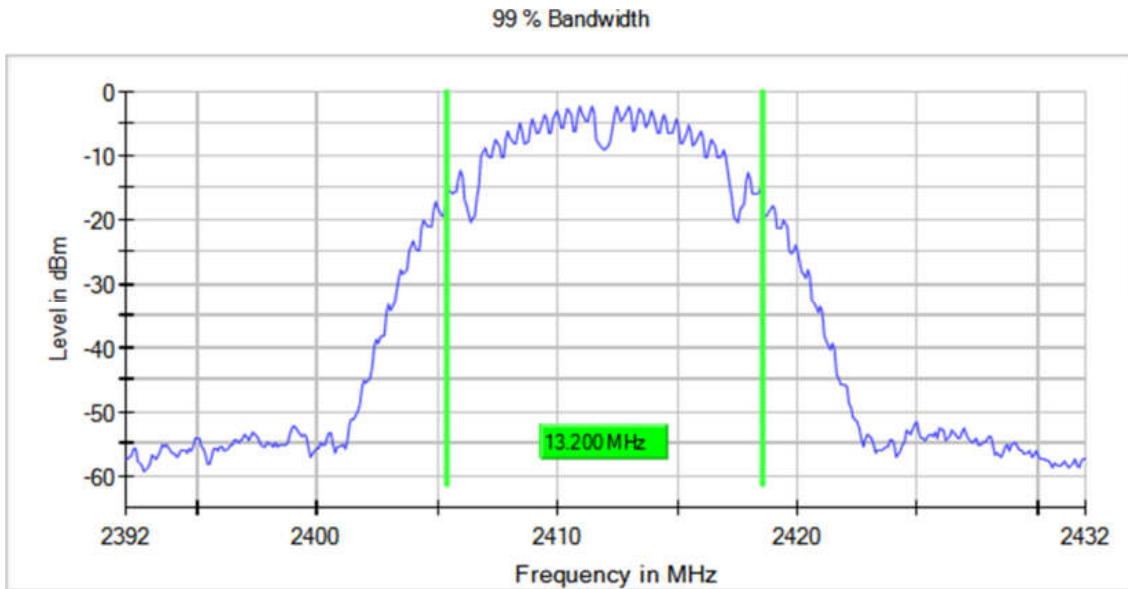
Modulation: 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)

Freq (MHz)	Occ Ch BW (MHz)
2412.00000	17.400
2437.00000	17.500
2462.00000	17.500

Attachments

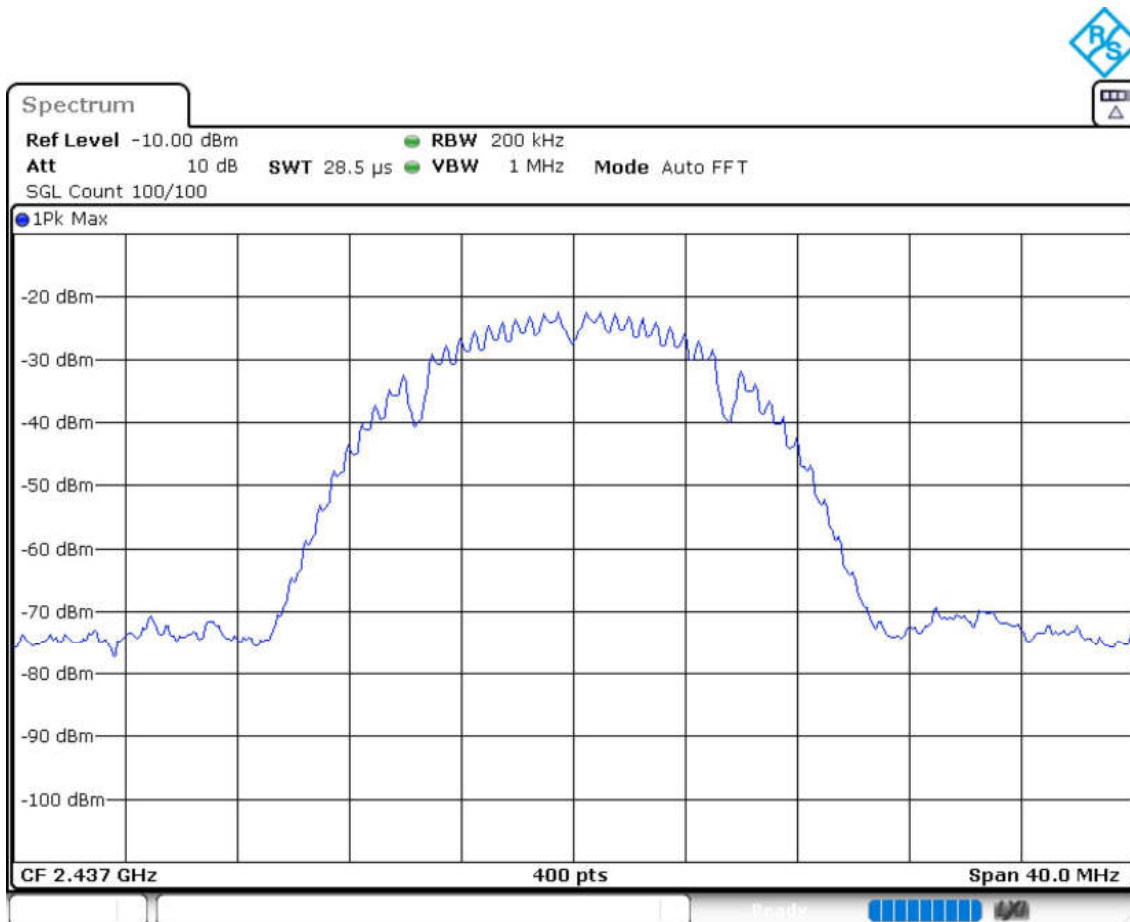
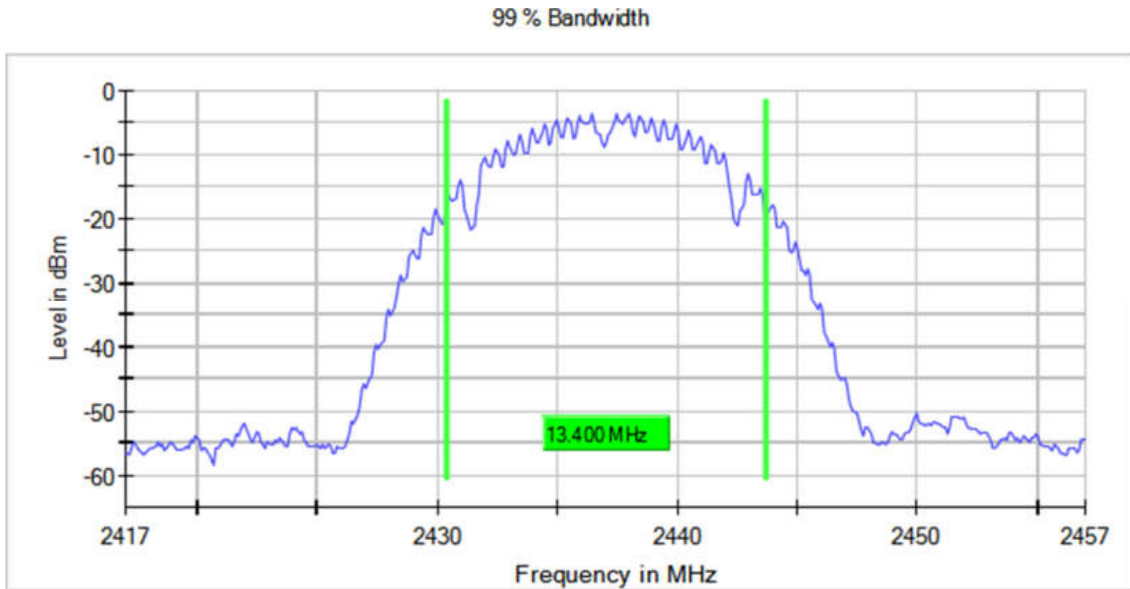
Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



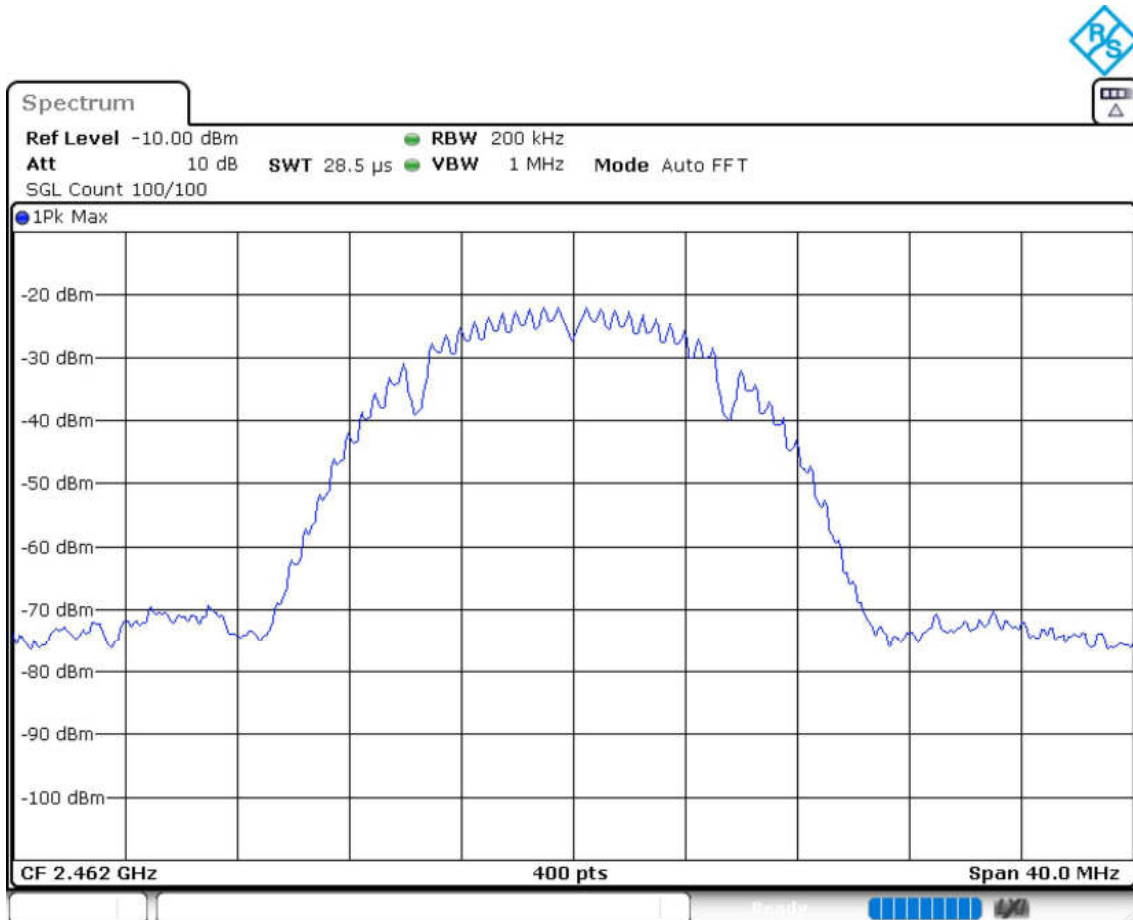
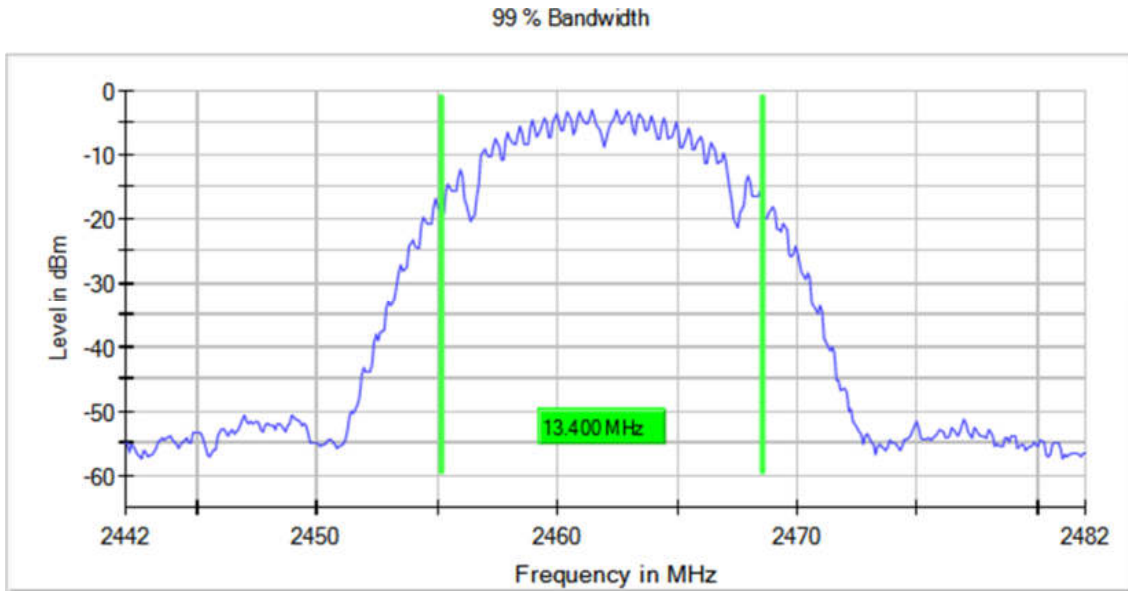
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Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



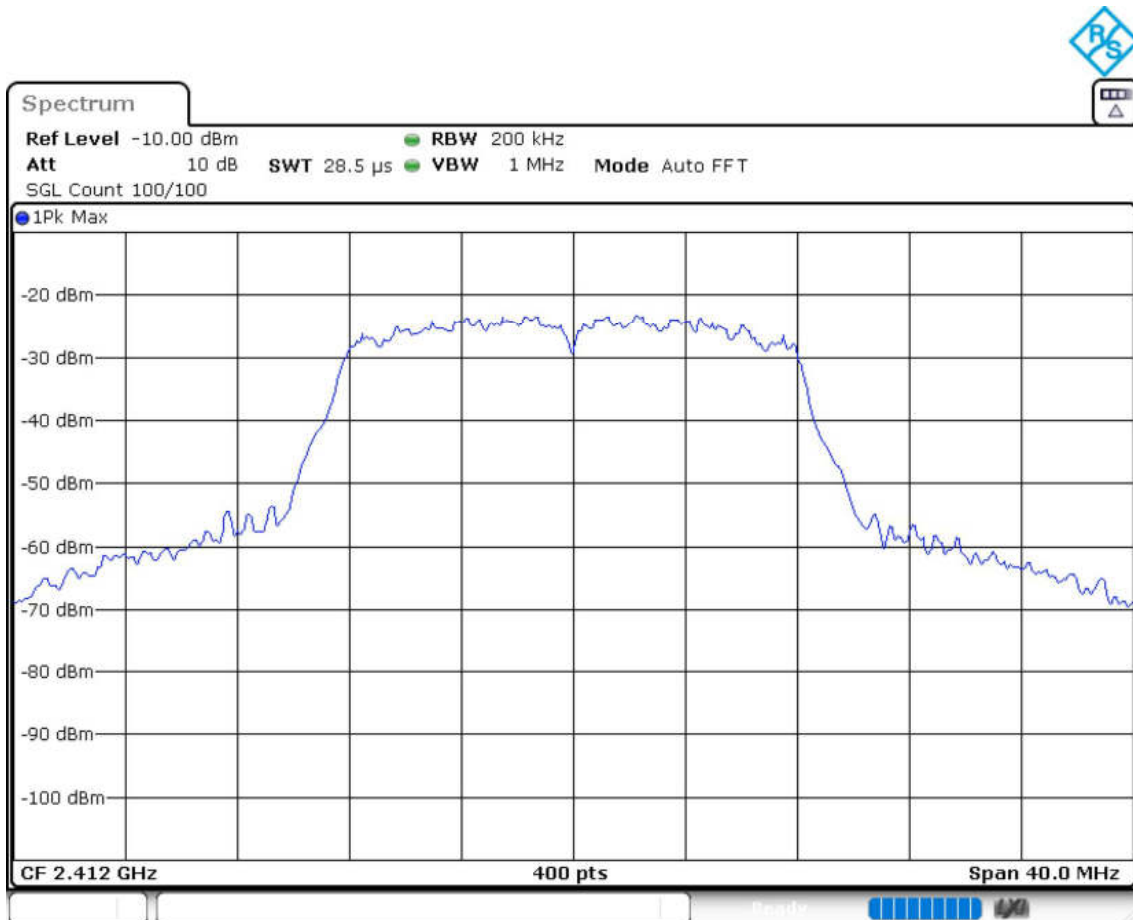
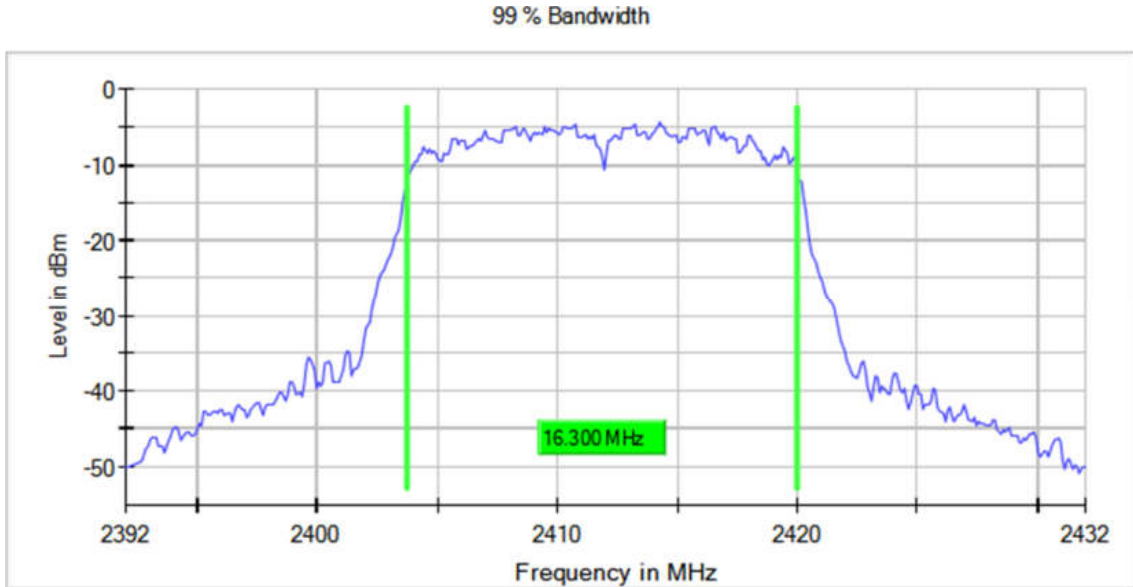
Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

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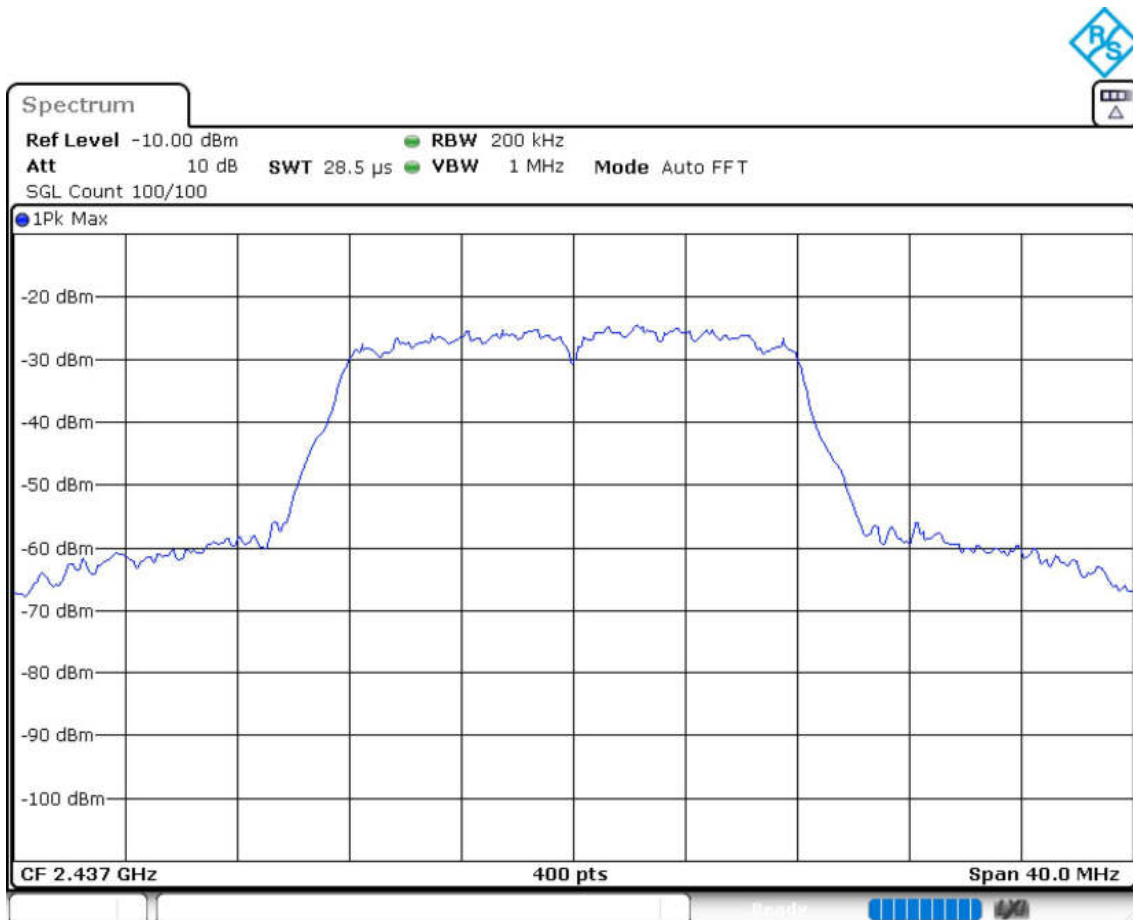
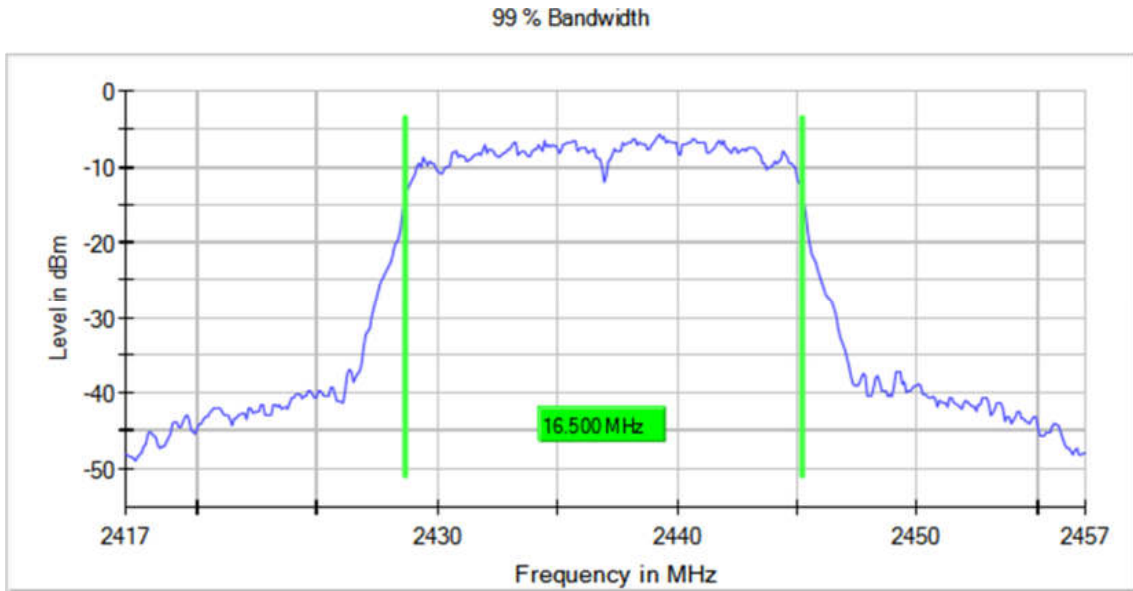
Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



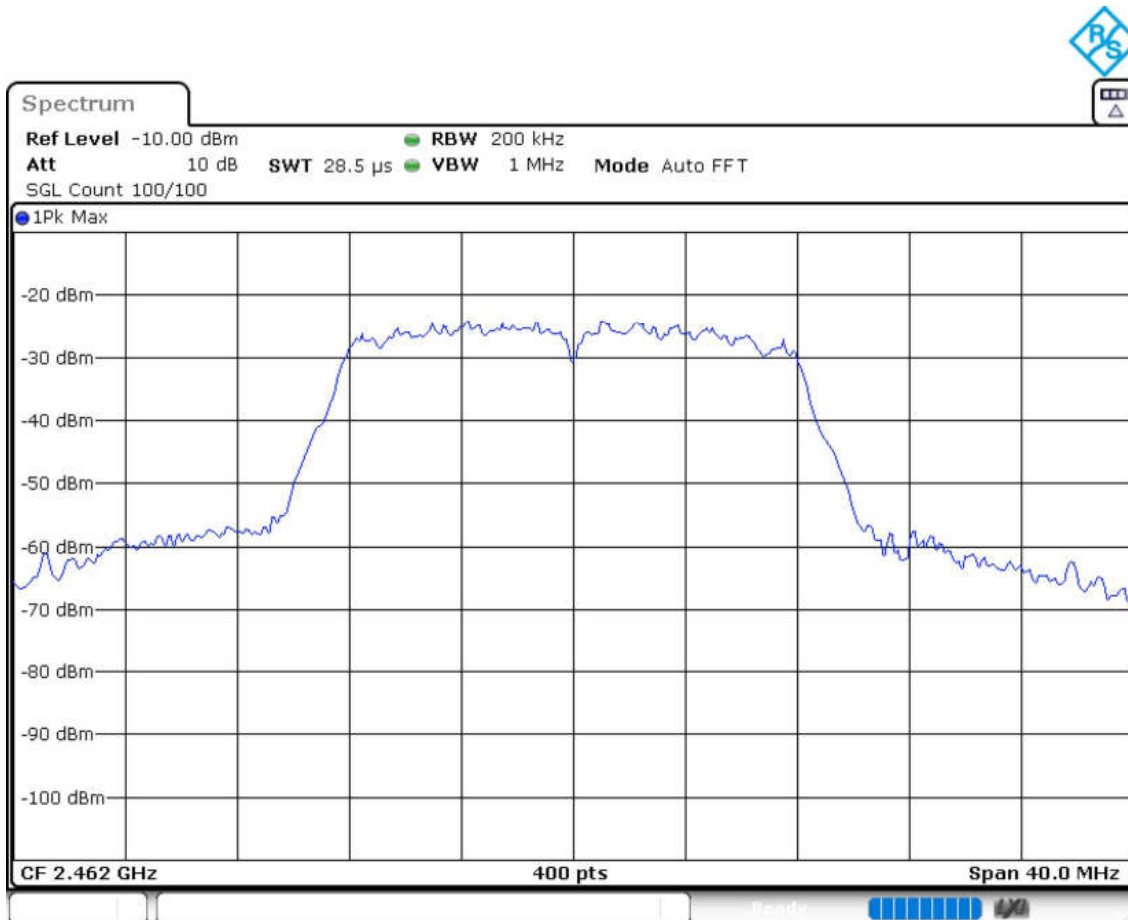
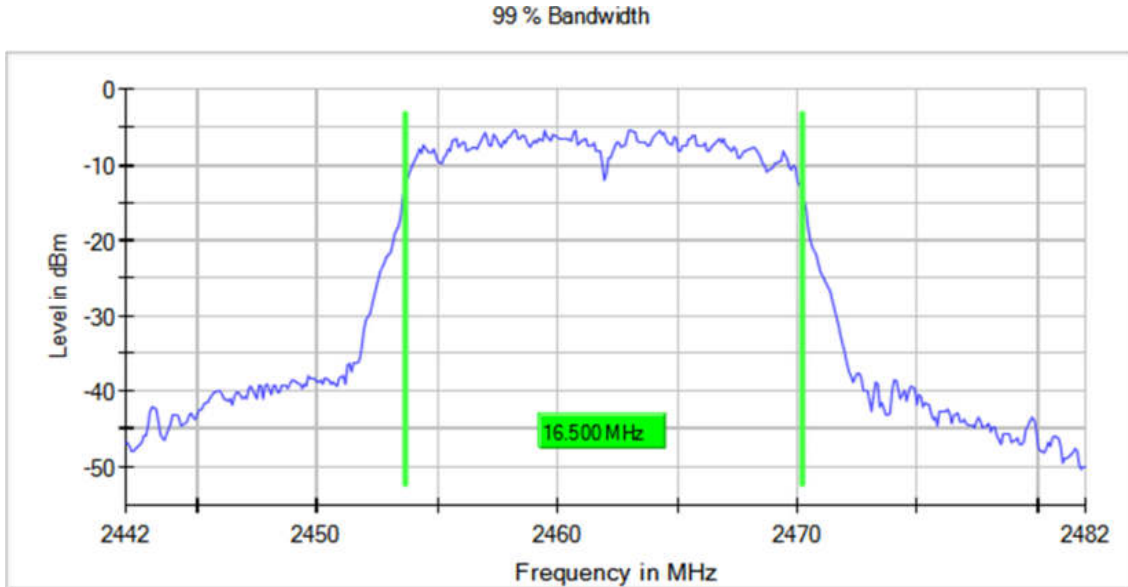
Frequency MHz = 2437.00000 Equipment Type = Digital Transmission System (DTS)
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



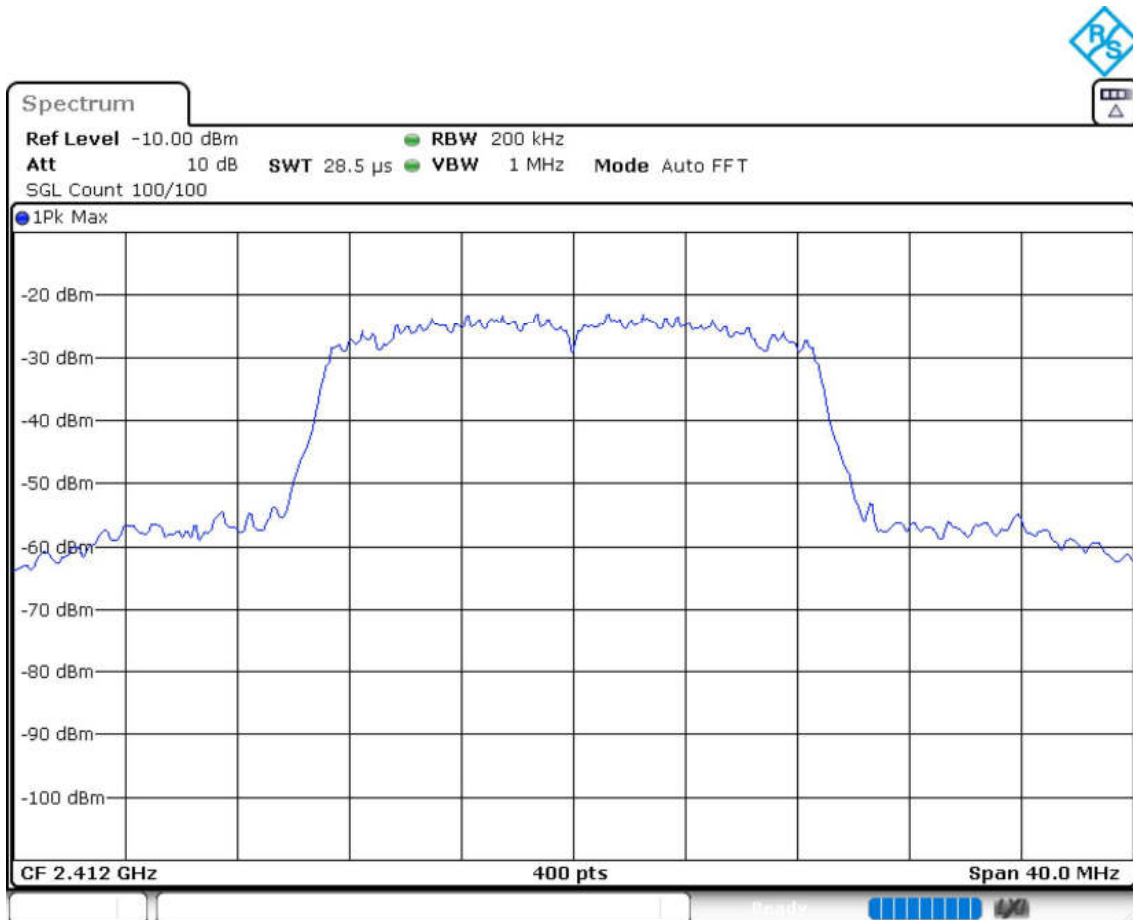
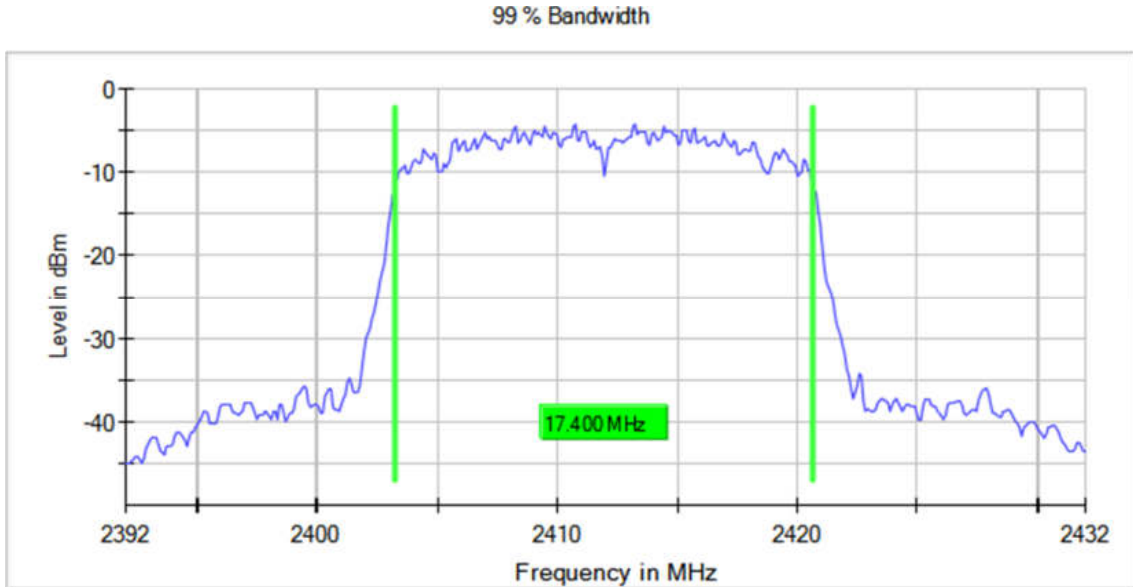
Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



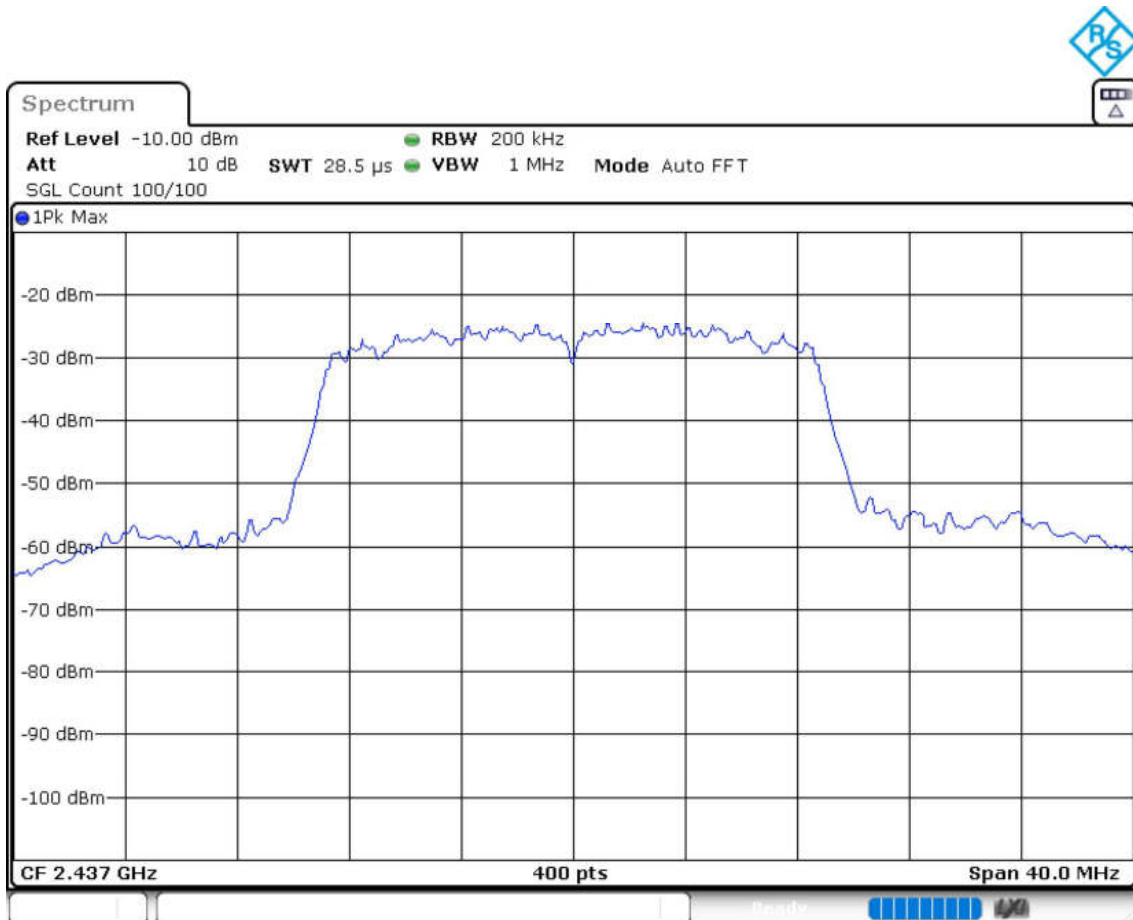
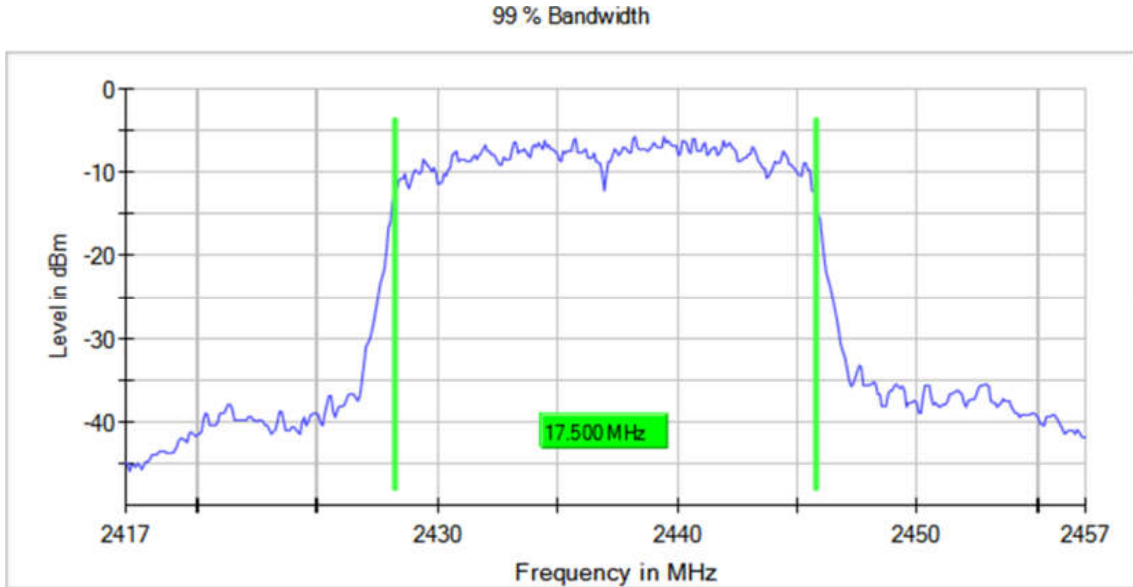
Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



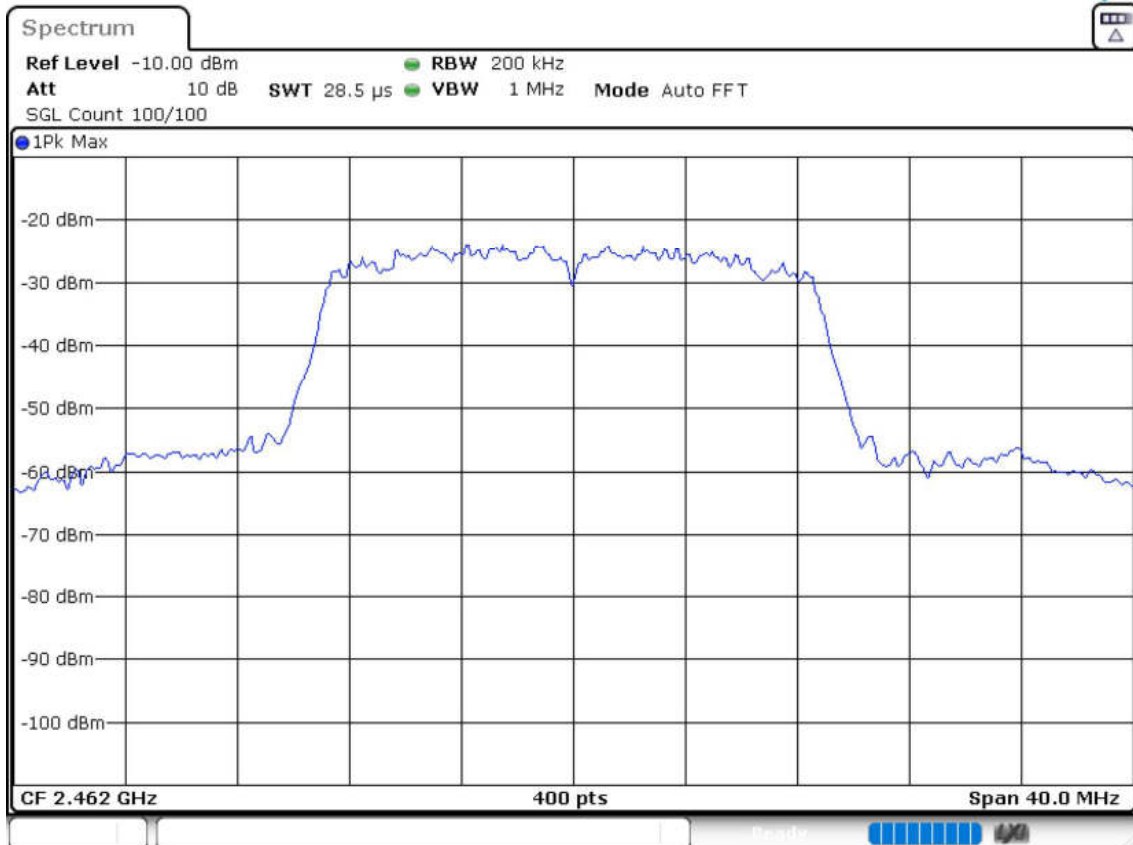
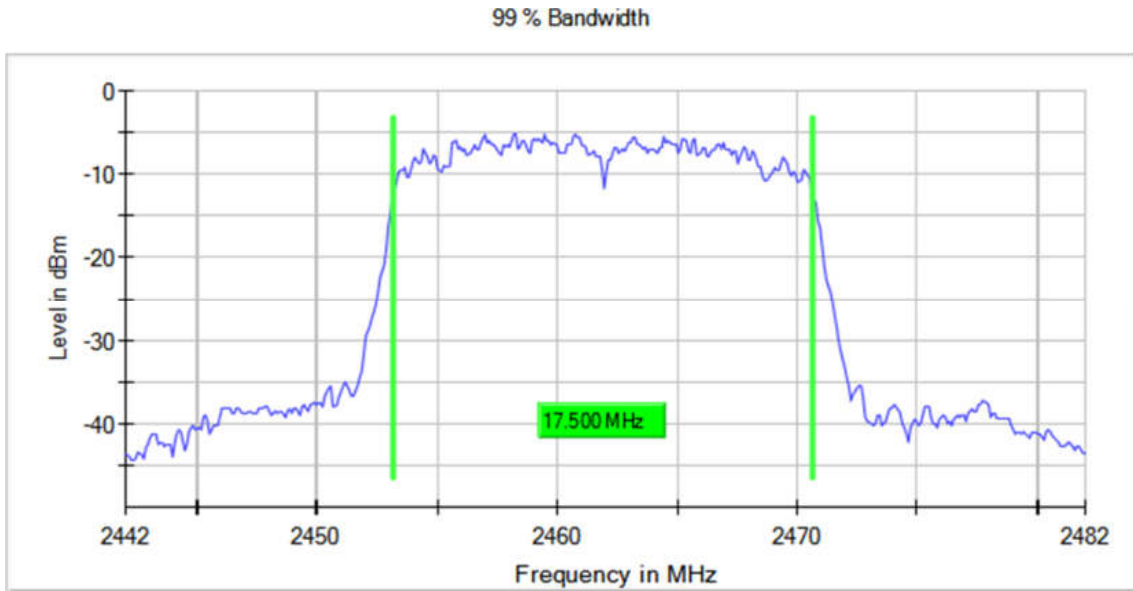
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Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
Number of Transmission Chains = 1 Active Port = 1

Plots:



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)

Freq (MHz)	Emission Bandwidth (MHz)
2412.00000	8.150
2437.00000	9.150
2462.00000	9.650

Modulation: 802.11g (OFDM 6 Mbit/s)

Freq (MHz)	Emission Bandwidth (MHz)
2412.00000	15.200
2437.00000	15.500
2462.00000	15.550

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

Freq (MHz)	Emission Bandwidth (MHz)
2412.00000	15.200
2437.00000	15.700
2462.00000	15.800

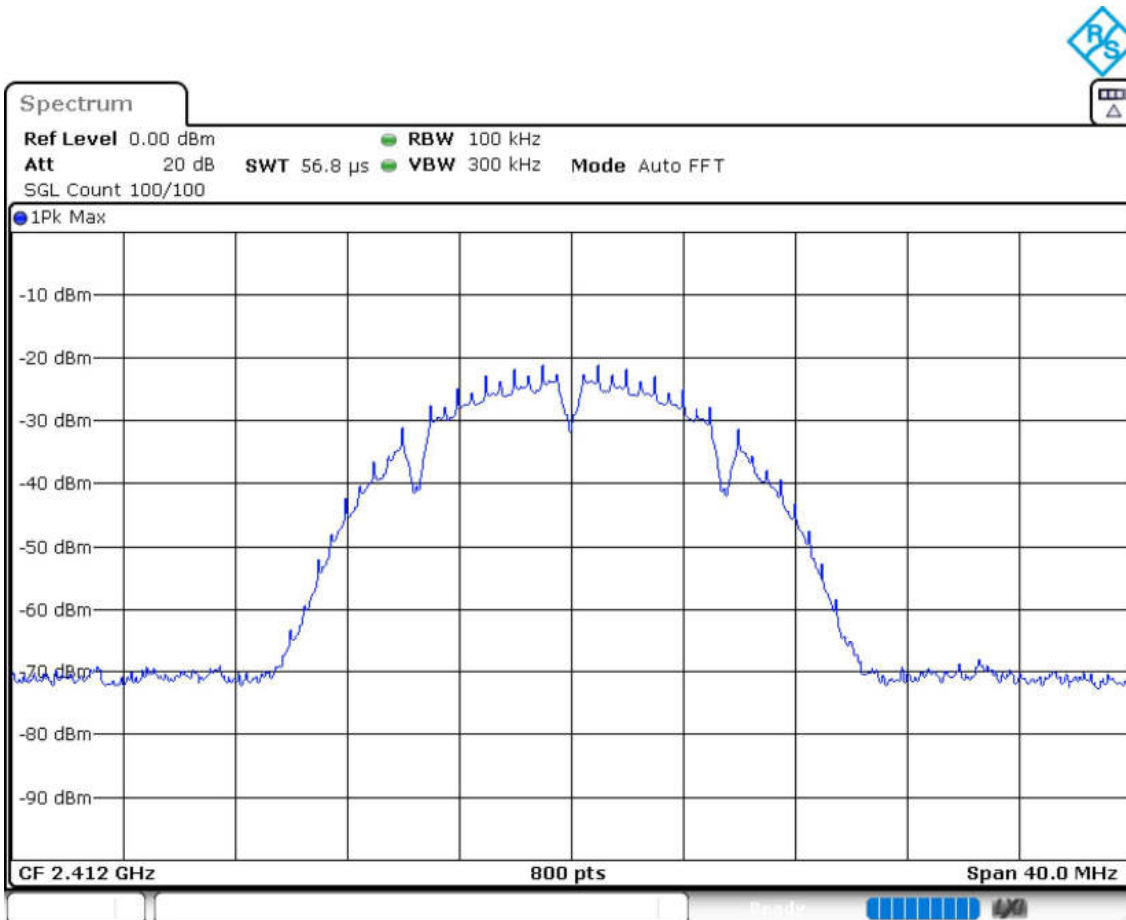
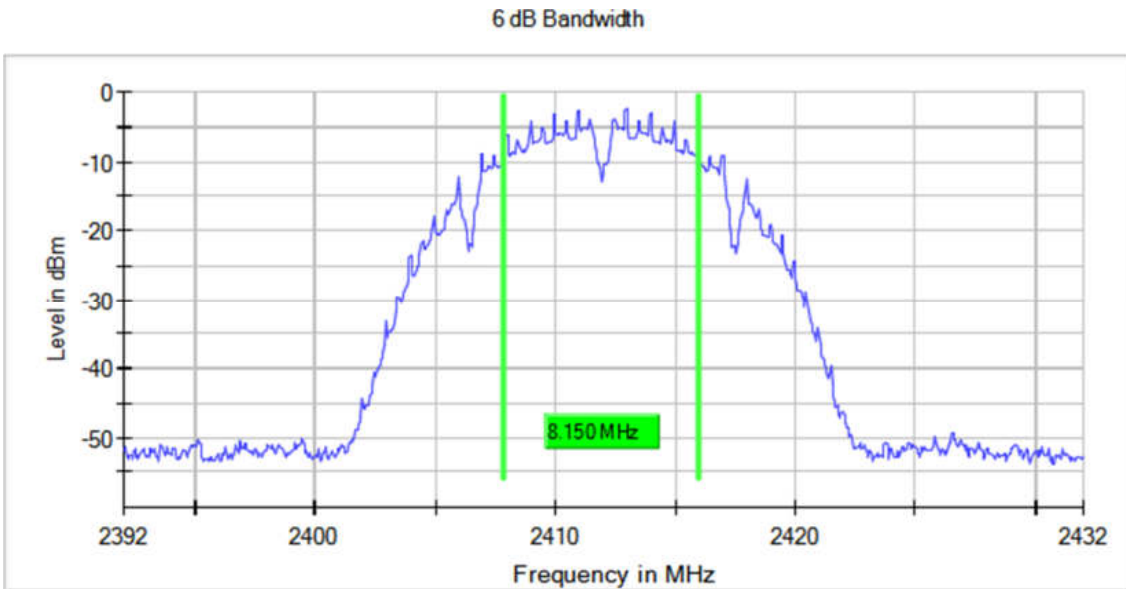
Verdict

Pass

Attachments

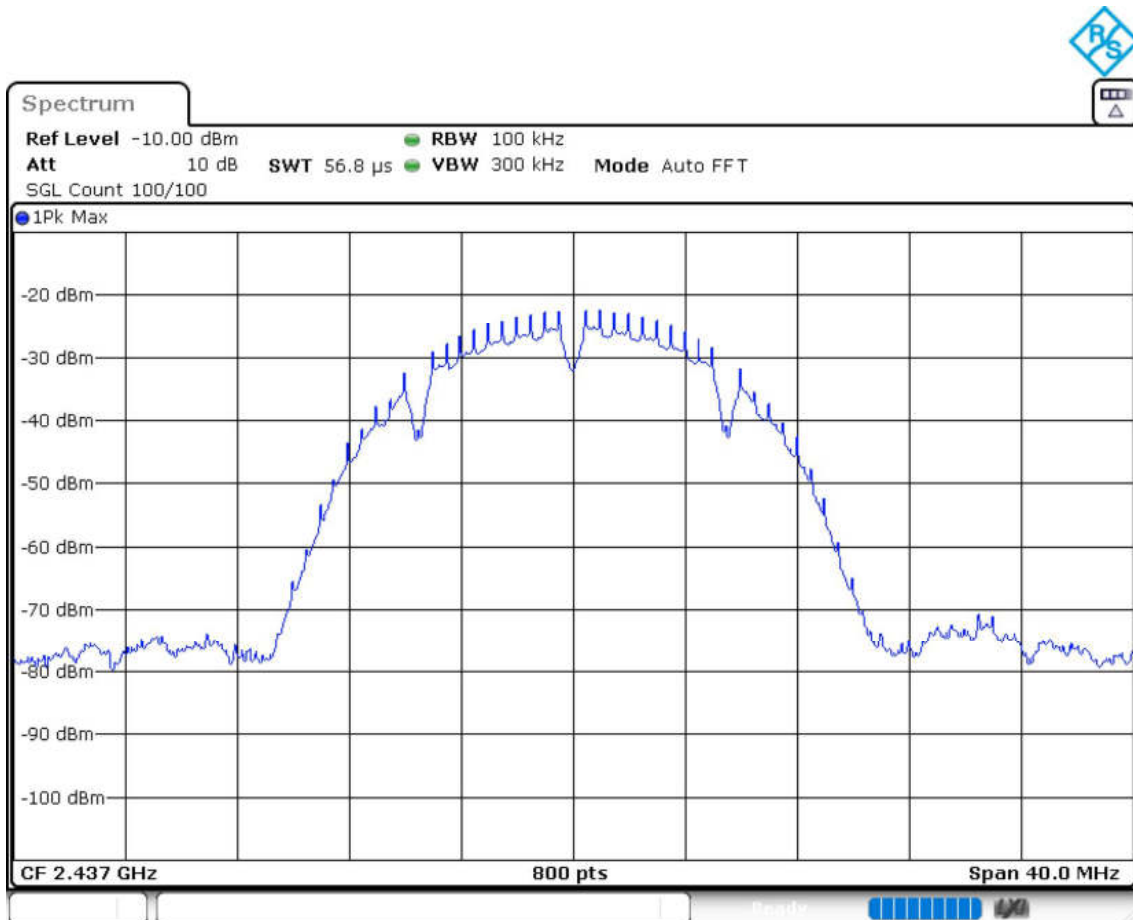
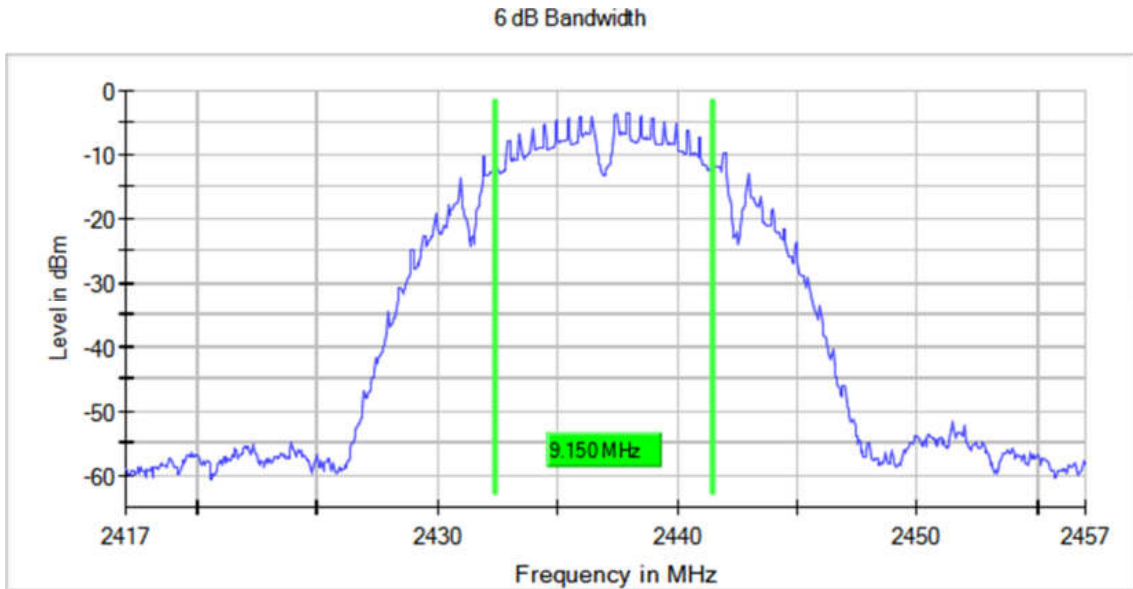
Frequency MHz = 2412.00000 Bandwidth MHz = 20
Modulation = 802.11b (DSSS 1 Mbit/s) Number of Transmission Chains = 1
Active Port = 1

Plots:



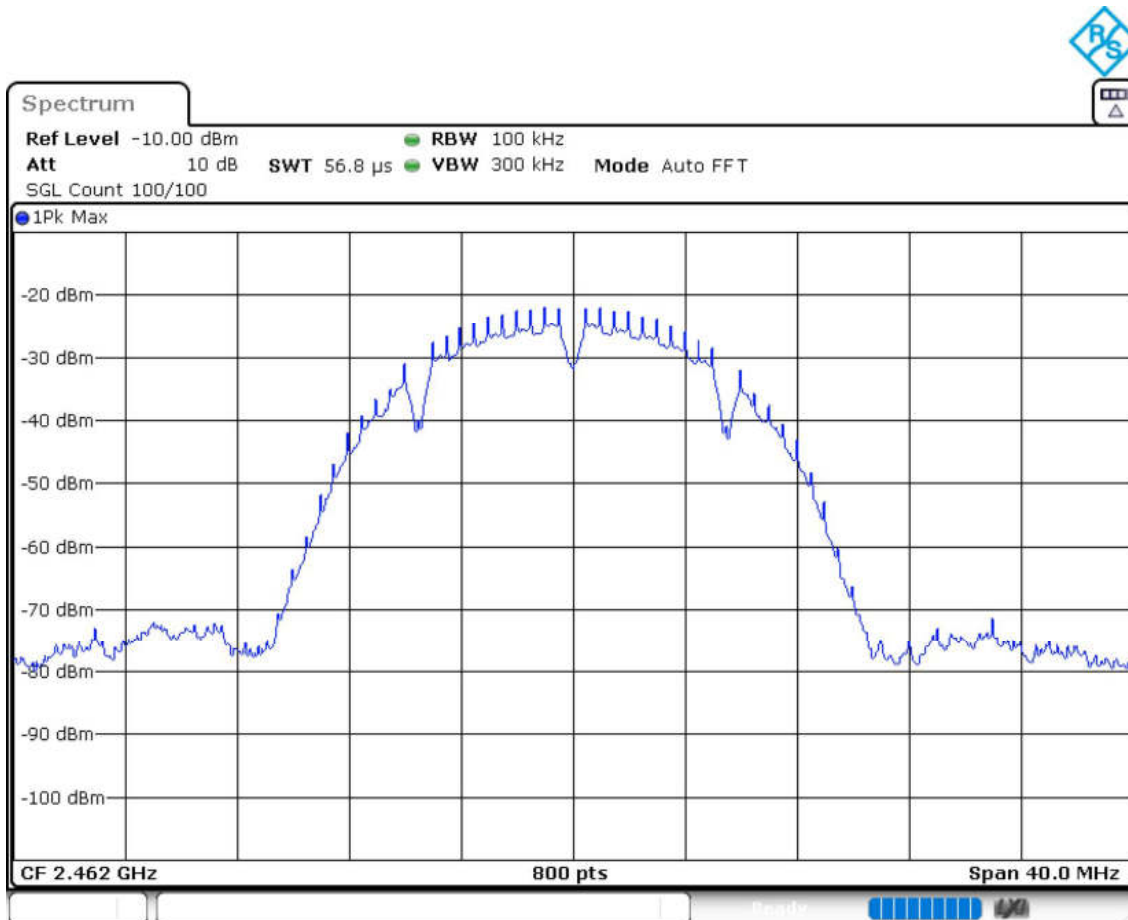
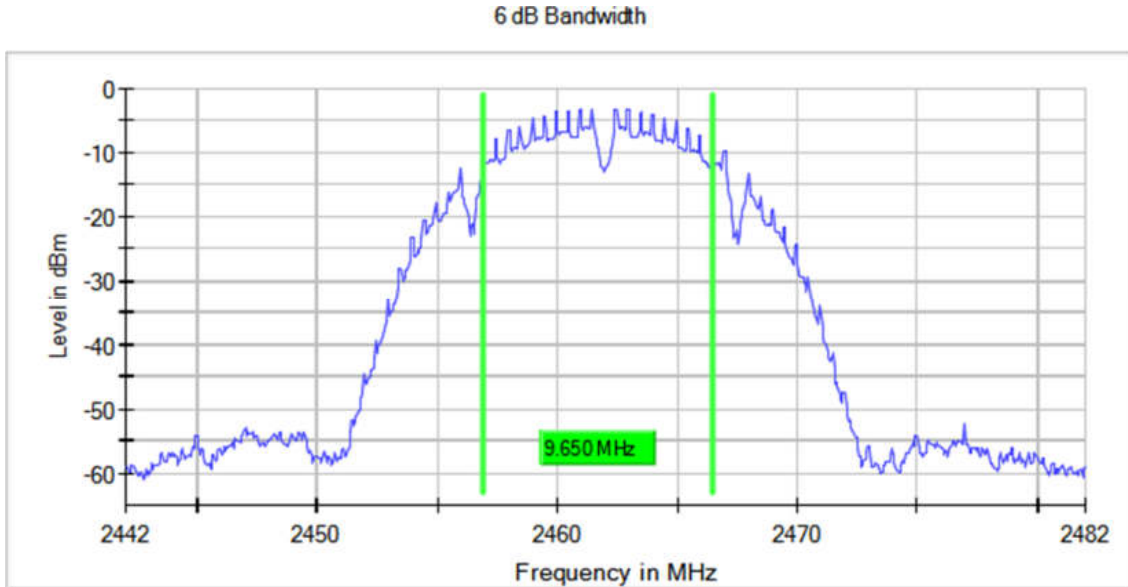
Frequency MHz = 2437.00000 Bandwidth MHz = 20
 Modulation = 802.11b (DSSS 1 Mbit/s) Number of Transmission Chains = 1
 Active Port = 1

Plots:



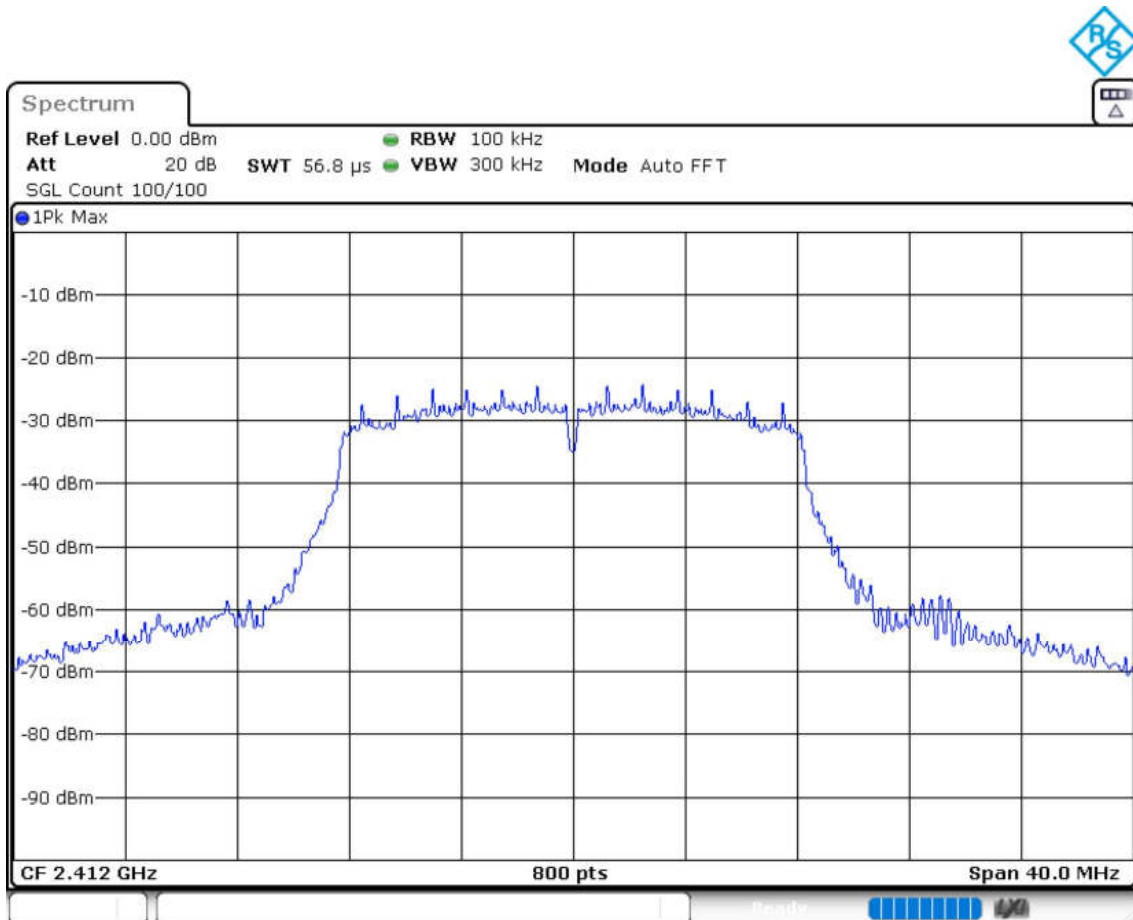
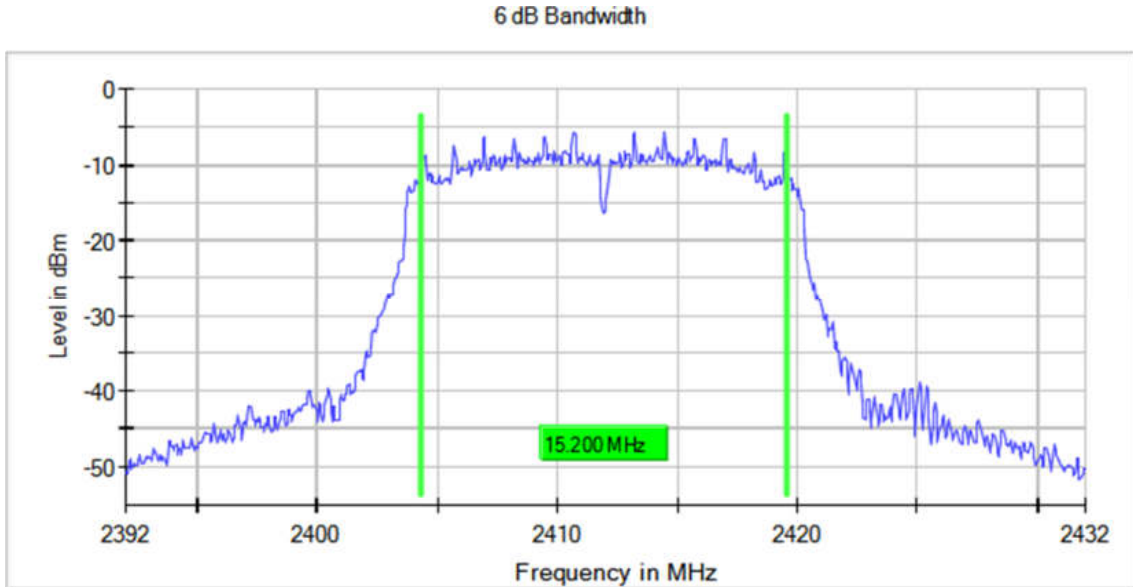
Frequency MHz = 2462.00000 Bandwidth MHz = 20
Modulation = 802.11b (DSSS 1 Mbit/s) Number of Transmission Chains = 1
Active Port = 1

Plots:



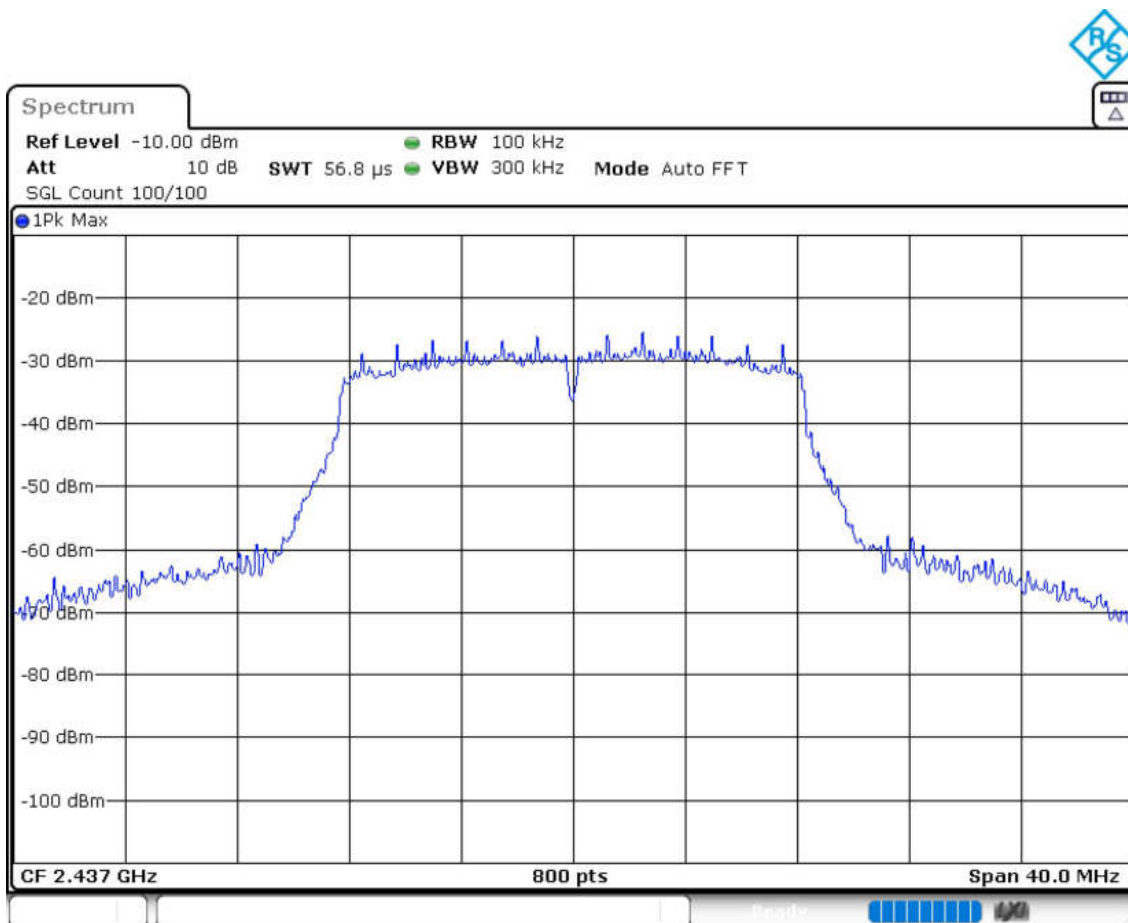
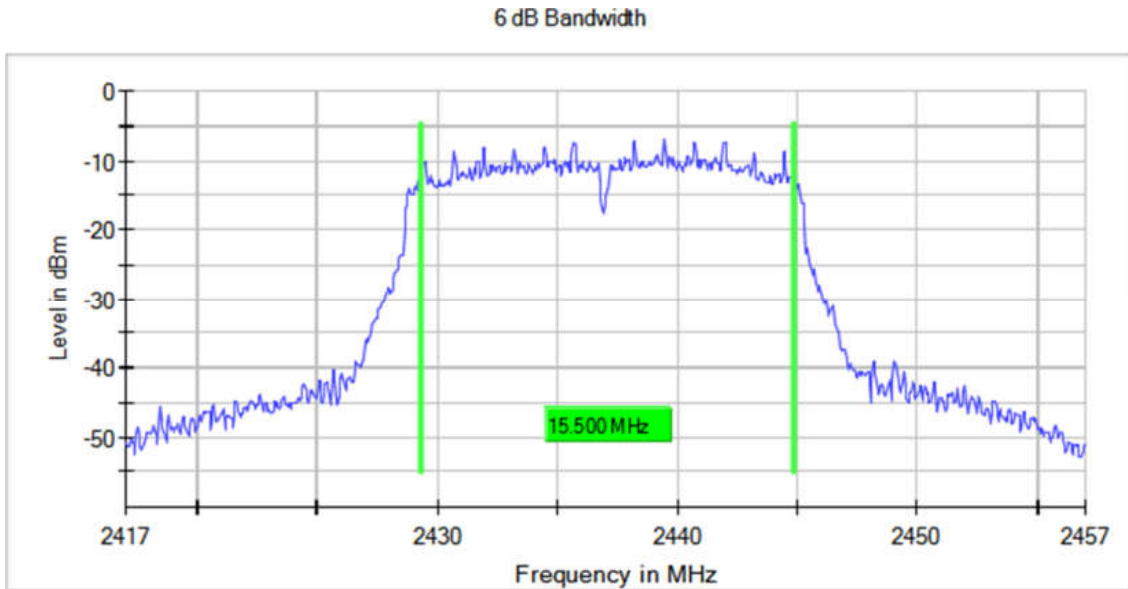
Frequency MHz = 2412.00000 Bandwidth MHz = 20
Modulation = 802.11g (OFDM 6 Mbit/s) Number of Transmission Chains = 1
Active Port = 1

Plots:



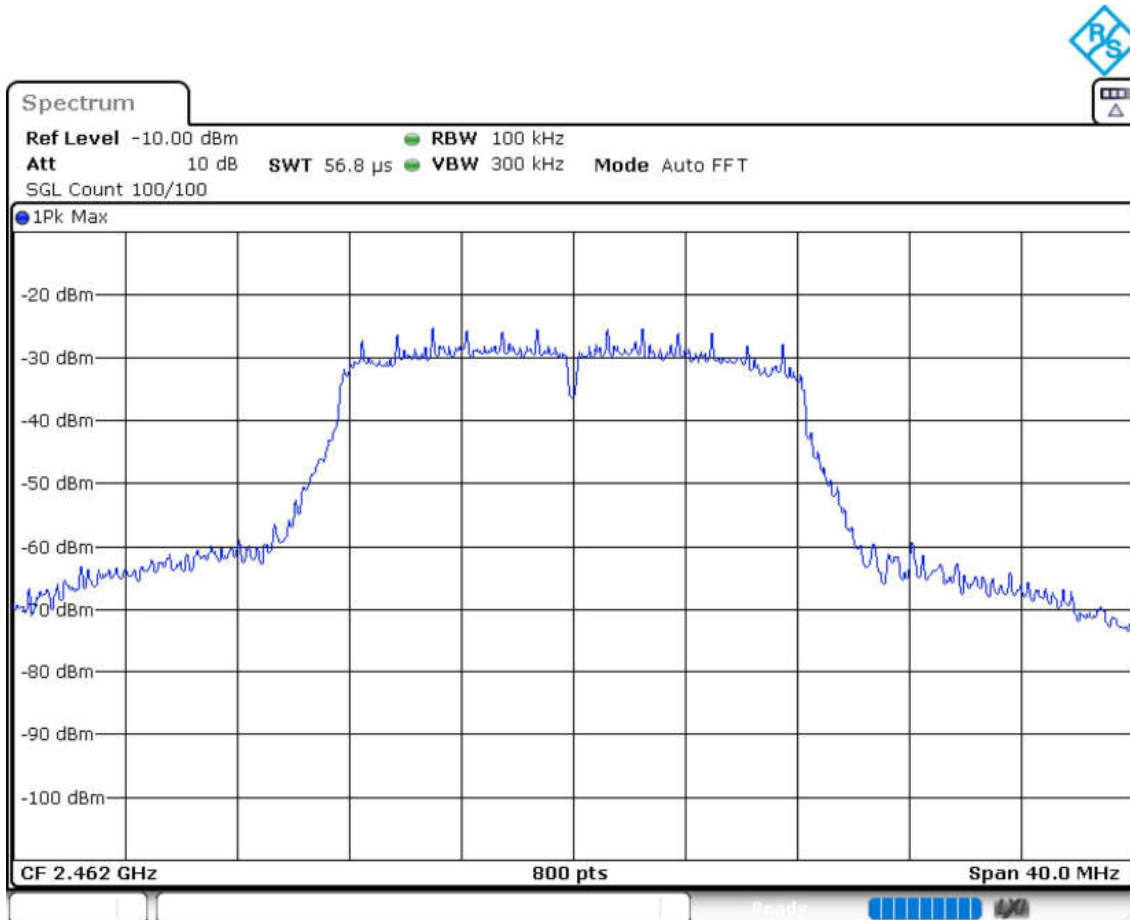
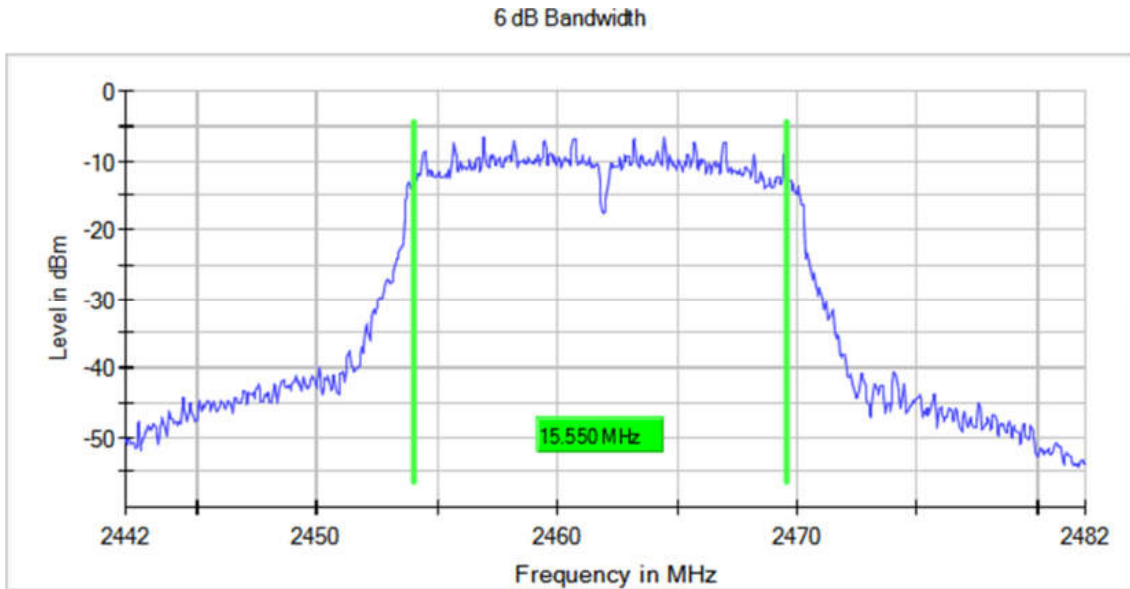
Frequency MHz = 2437.00000 Bandwidth MHz = 20
 Modulation = 802.11g (OFDM 6 Mbit/s) Number of Transmission Chains = 1
 Active Port = 1

Plots:



Frequency MHz = 2462.00000 Bandwidth MHz = 20
Modulation = 802.11g (OFDM 6 Mbit/s) Number of Transmission Chains = 1
Active Port = 1

Plots:



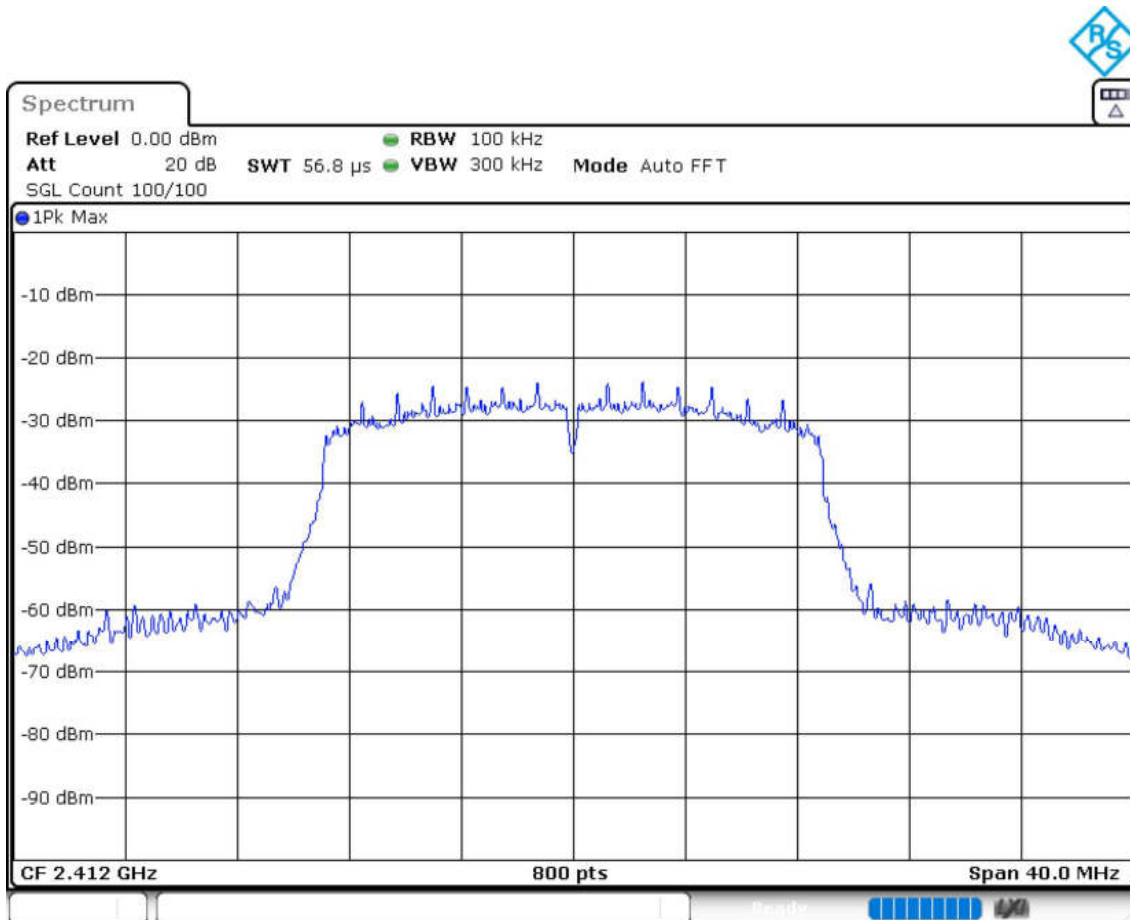
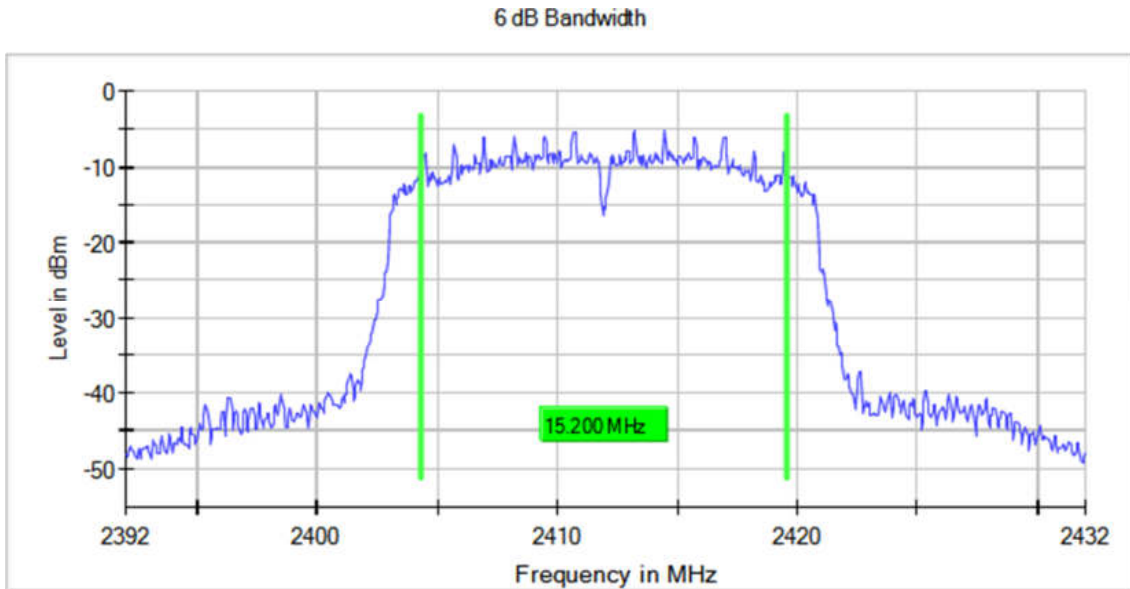
Frequency MHz = 2412.00000

Bandwidth MHz = 20

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Number of Transmission Chains = 1

Active Port = 1

Plots:



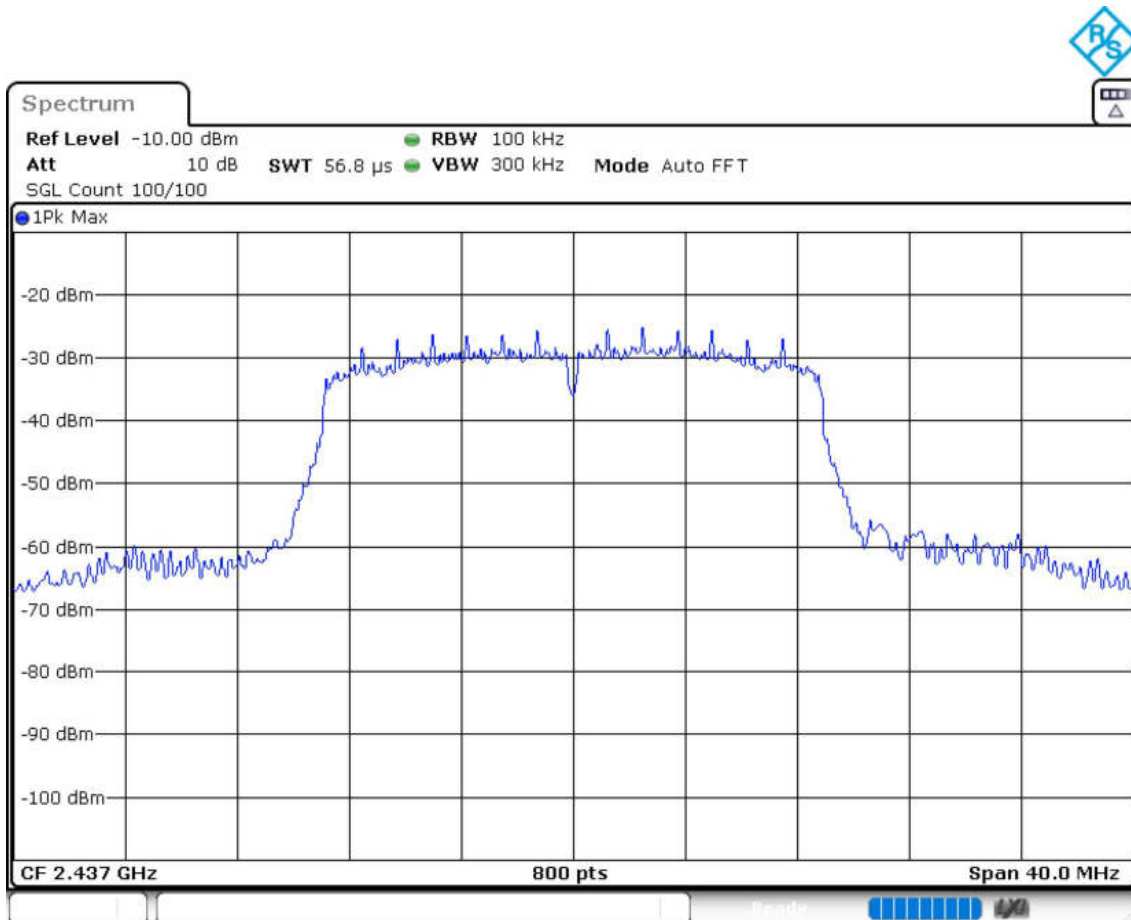
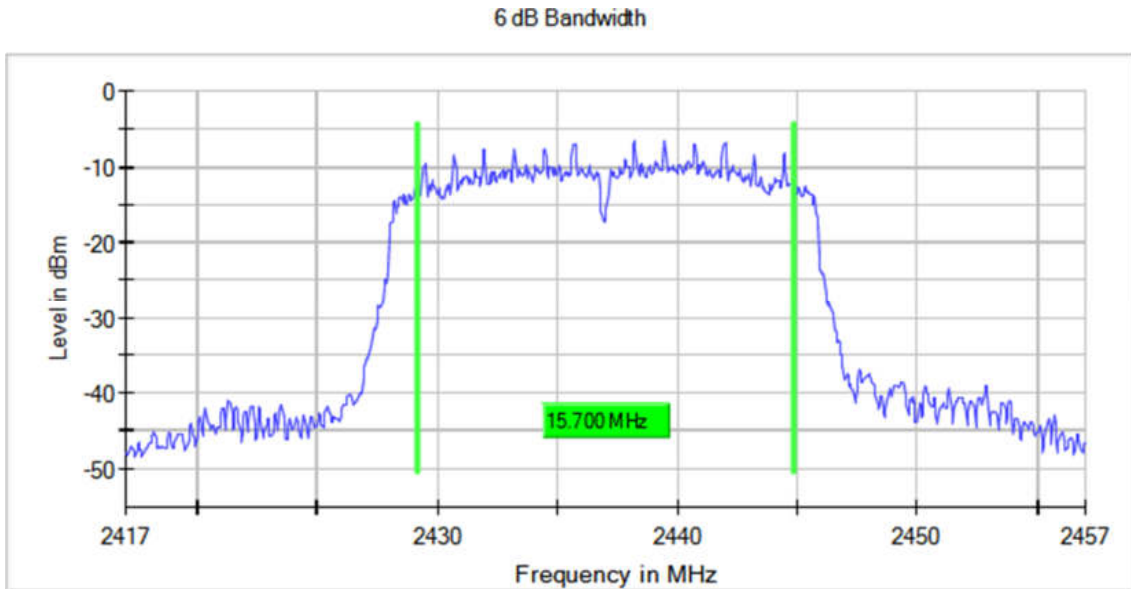
Frequency MHz = 2437.00000

Bandwidth MHz = 20

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Number of Transmission Chains = 1

Active Port = 1

Plots:



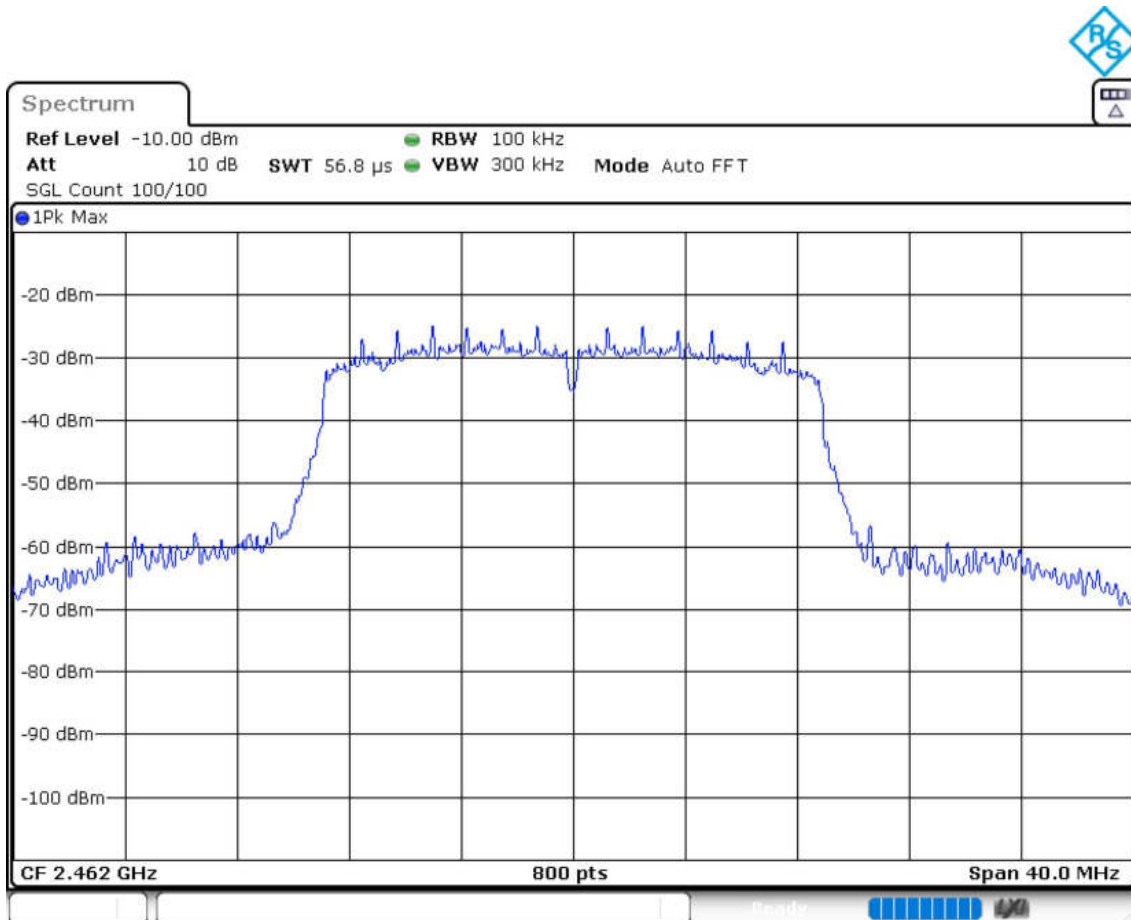
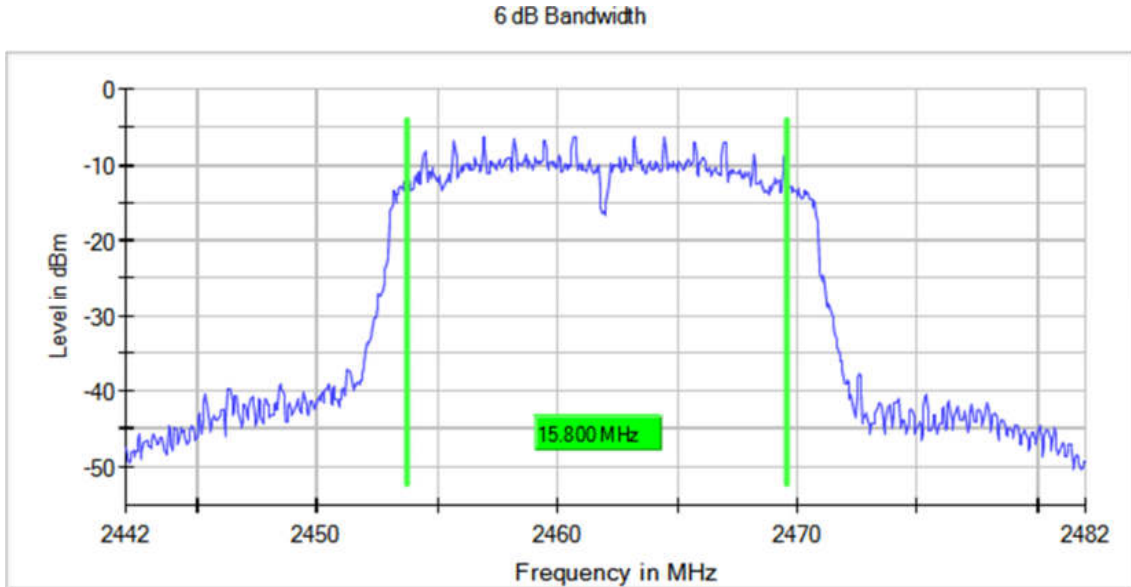
Frequency MHz = 2462.00000

Bandwidth MHz = 20

Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Number of Transmission Chains = 1

Active Port = 1

Plots:



RSS-247 5.2 (b) / FCC 15.247 (e) Power spectral density

Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

Freq (MHz)	Measured Freq (MHz)	PSD (dBm)
2412.0000	2409.9550	-4.92
2437.0000	2437.9500	-5.63
2462.0000	2460.9500	-4.99

Modulation: 802.11g (OFDM 6 Mbit/s)

Freq (MHz)	Measured Freq (MHz)	PSD (dBm)
2412.00000	2414.4750	-5.78
2437.00000	2439.4500	-7.04
2462.00000	2456.9696	-6.71

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

Freq (MHz)	Measured Freq (MHz)	PSD (dBm)
2412.00000	2414.4750	-5.35
2437.00000	2439.4500	-6.63
2462.00000	2456.9750	-6.39

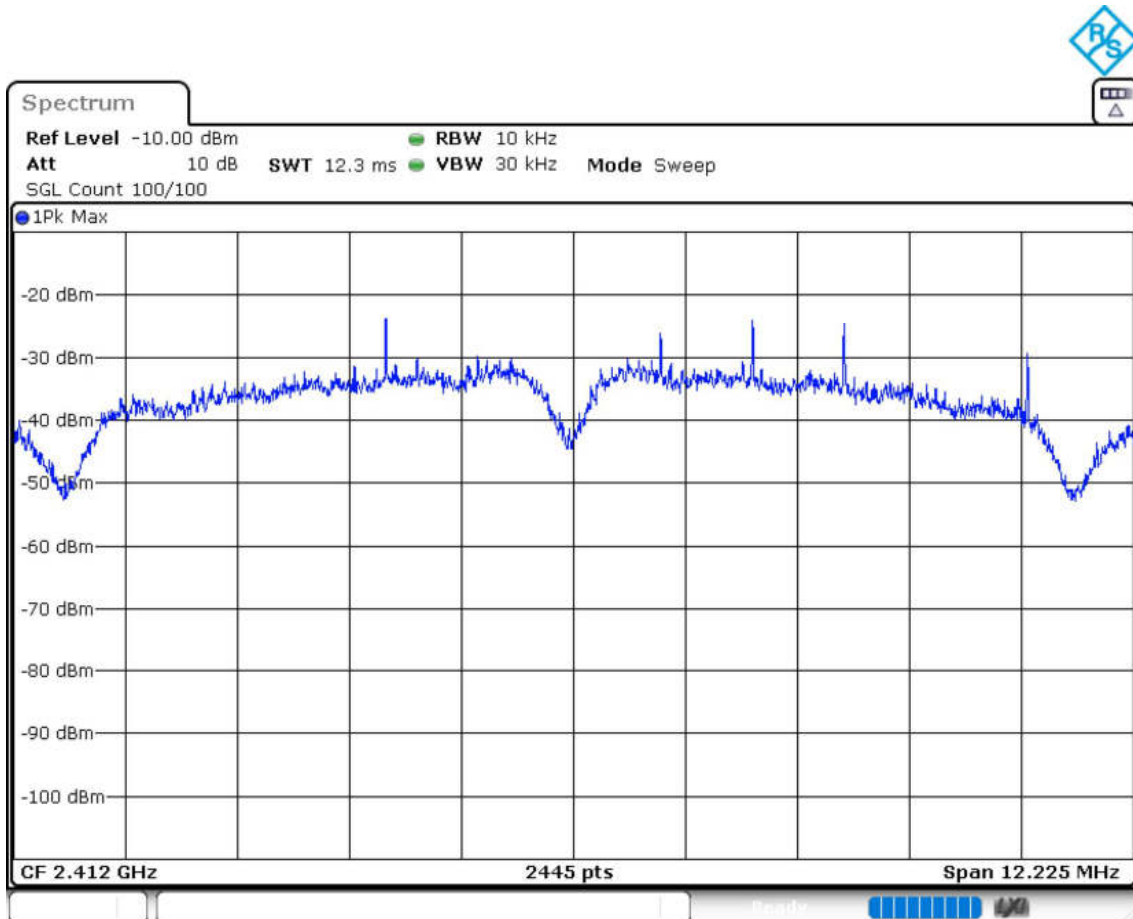
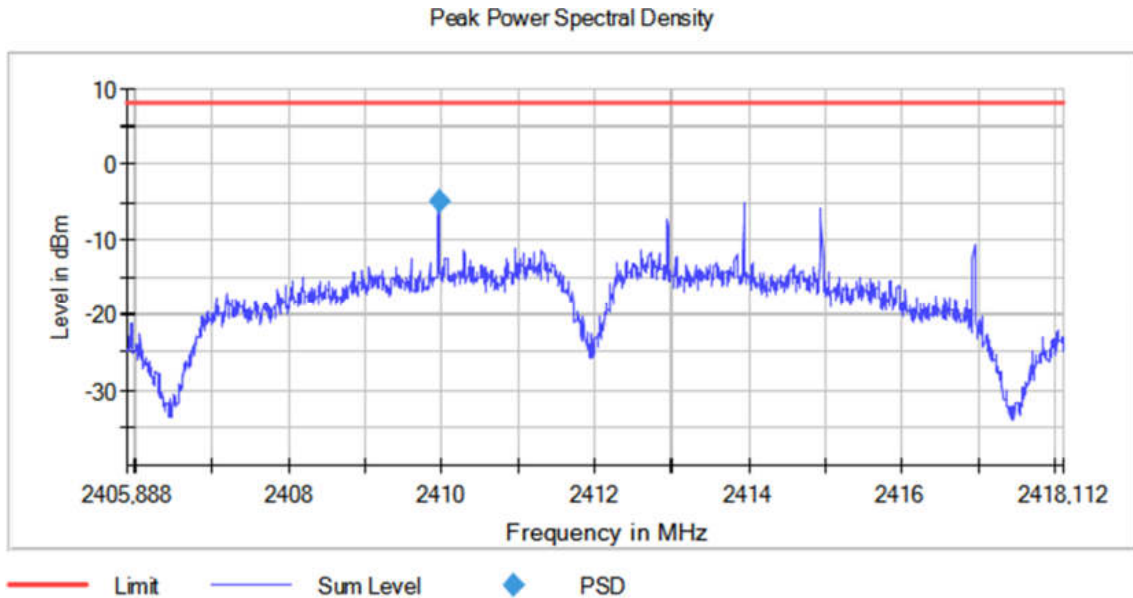
Verdict

Pass

Attachments

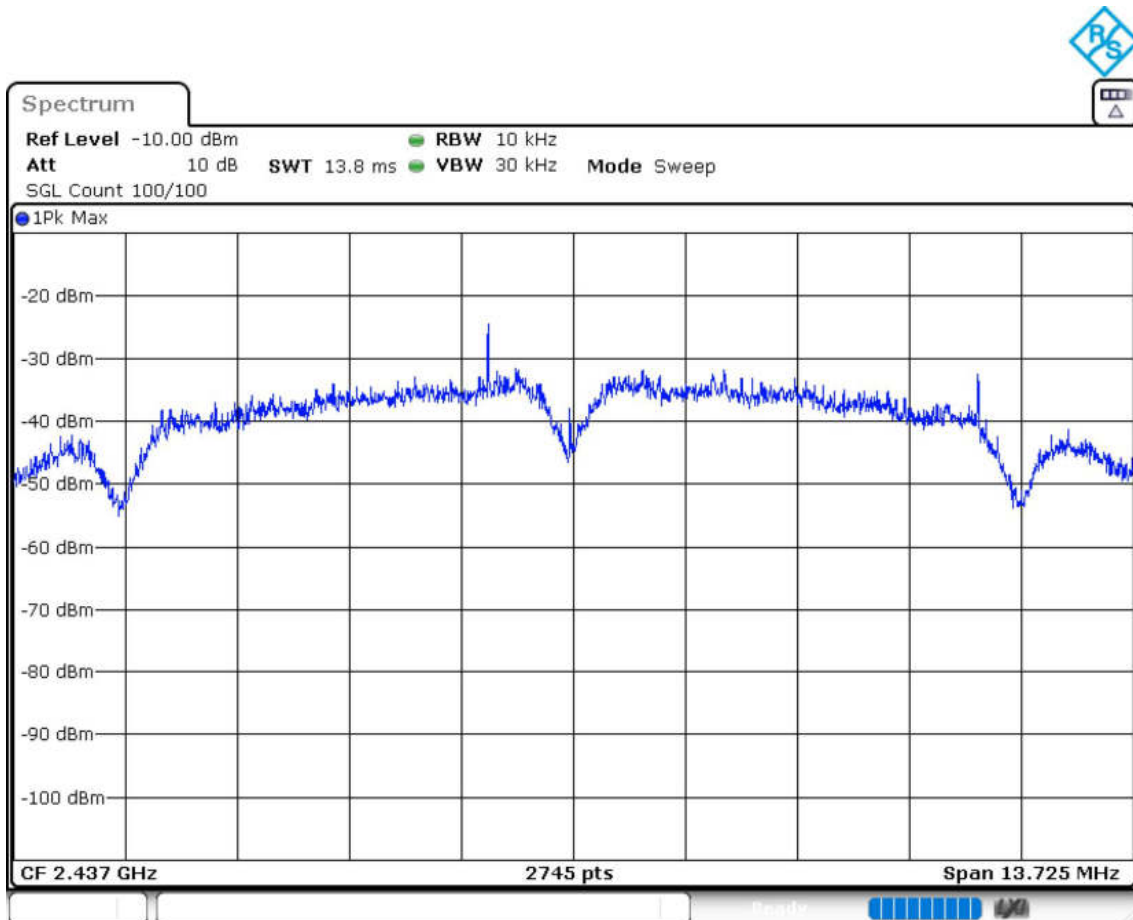
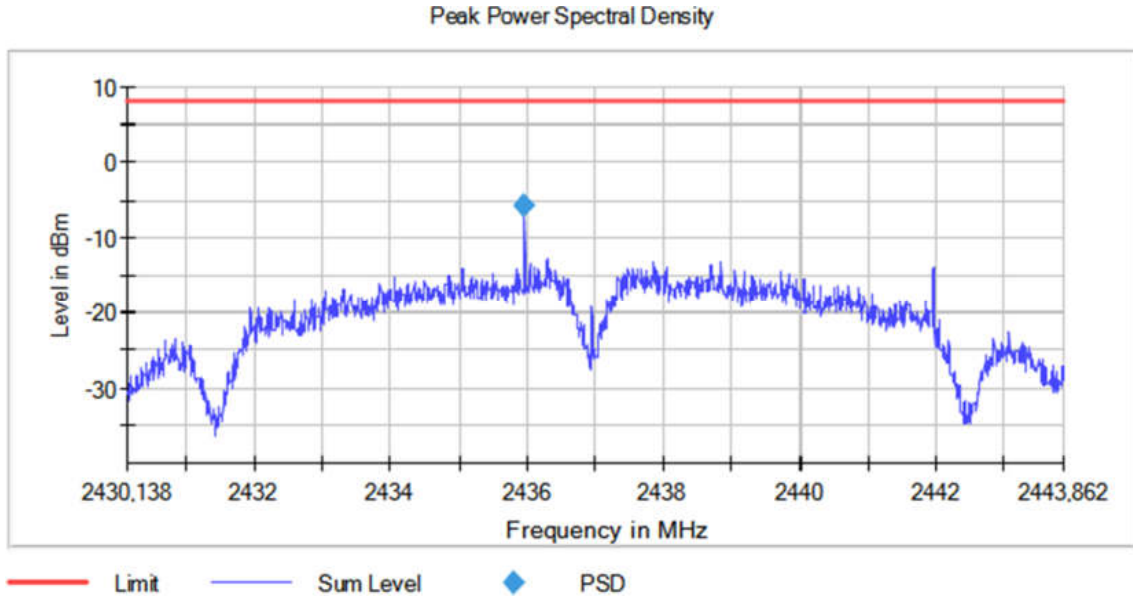
Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



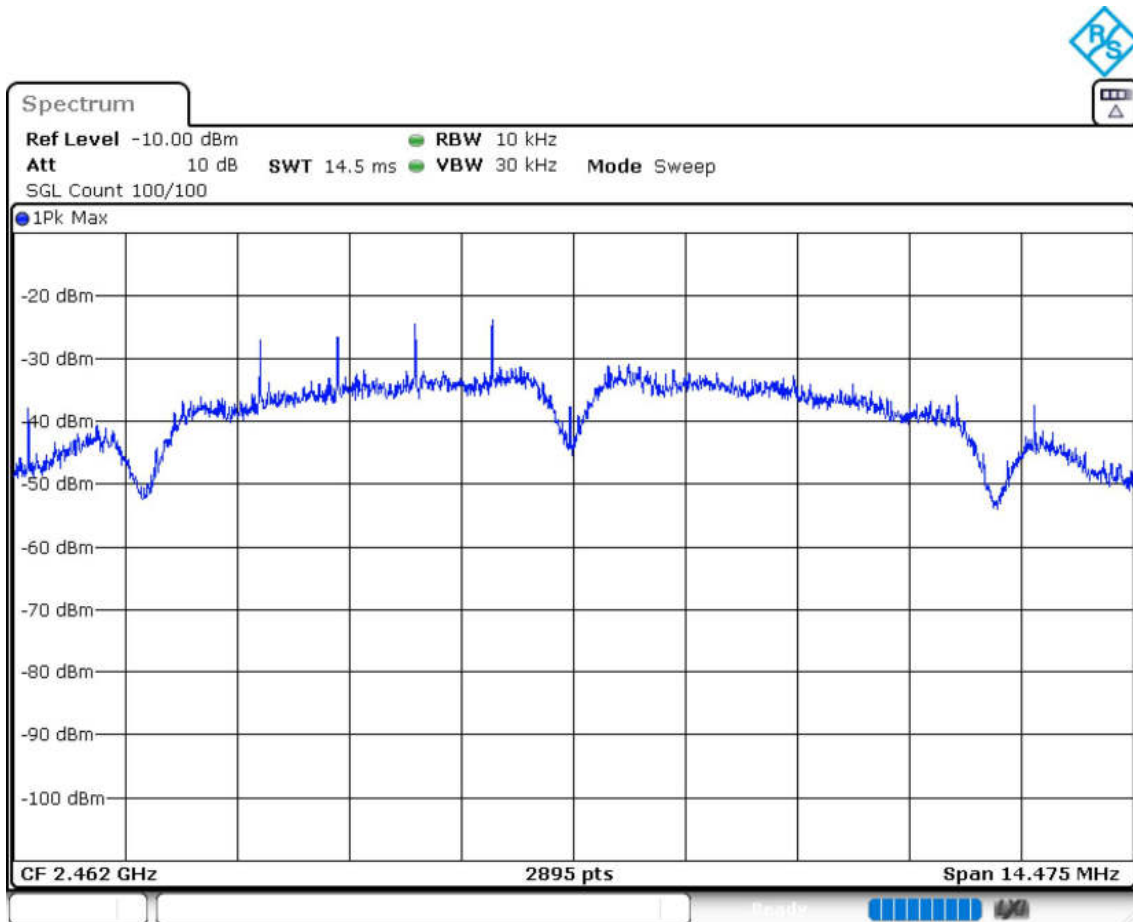
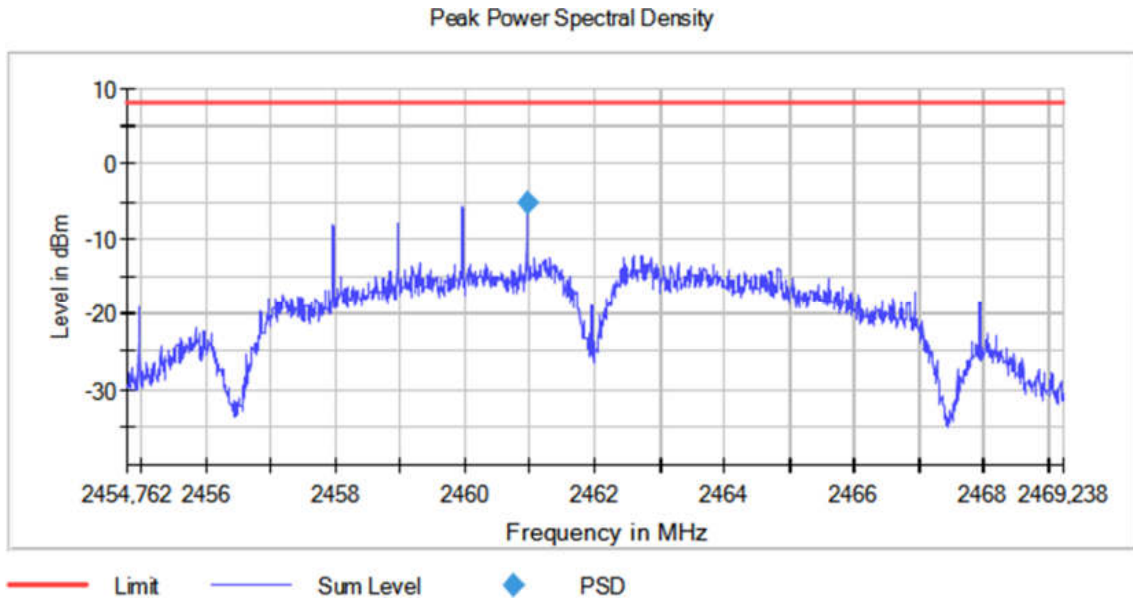
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 Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



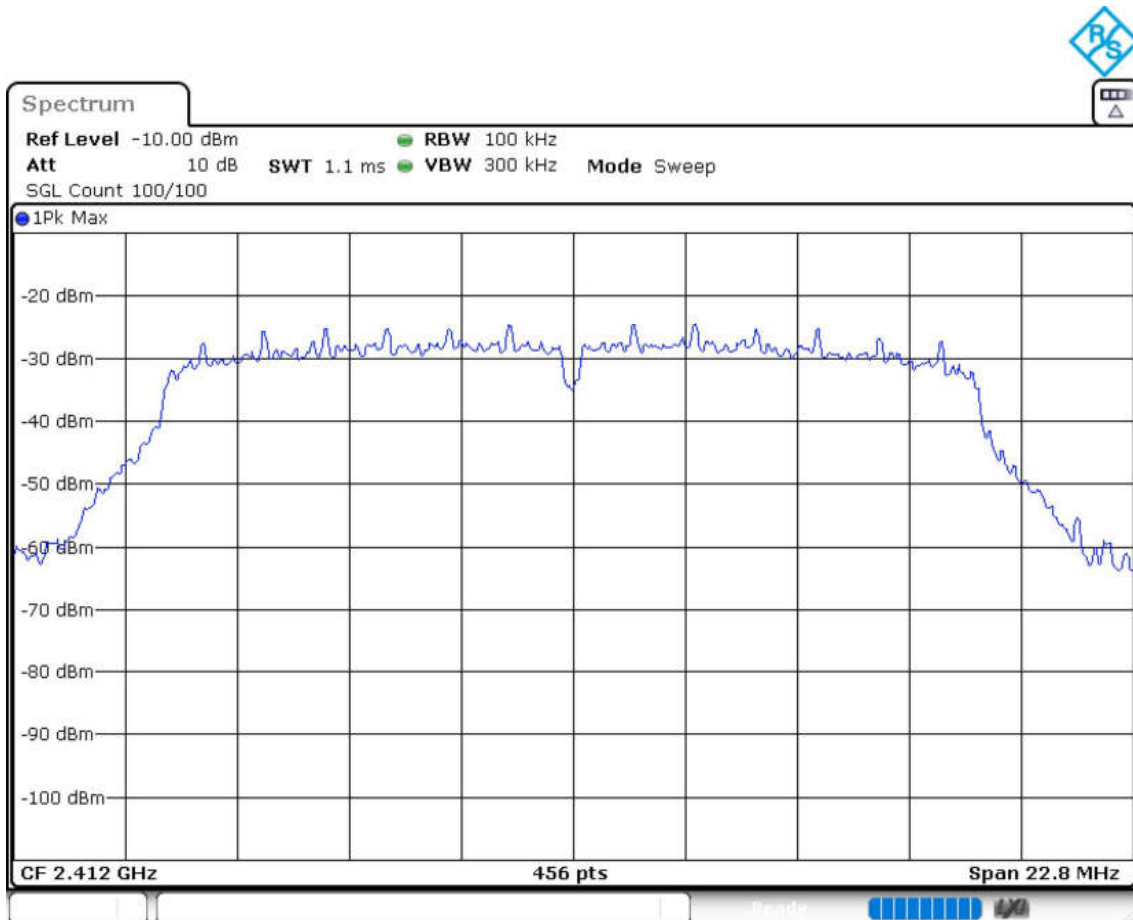
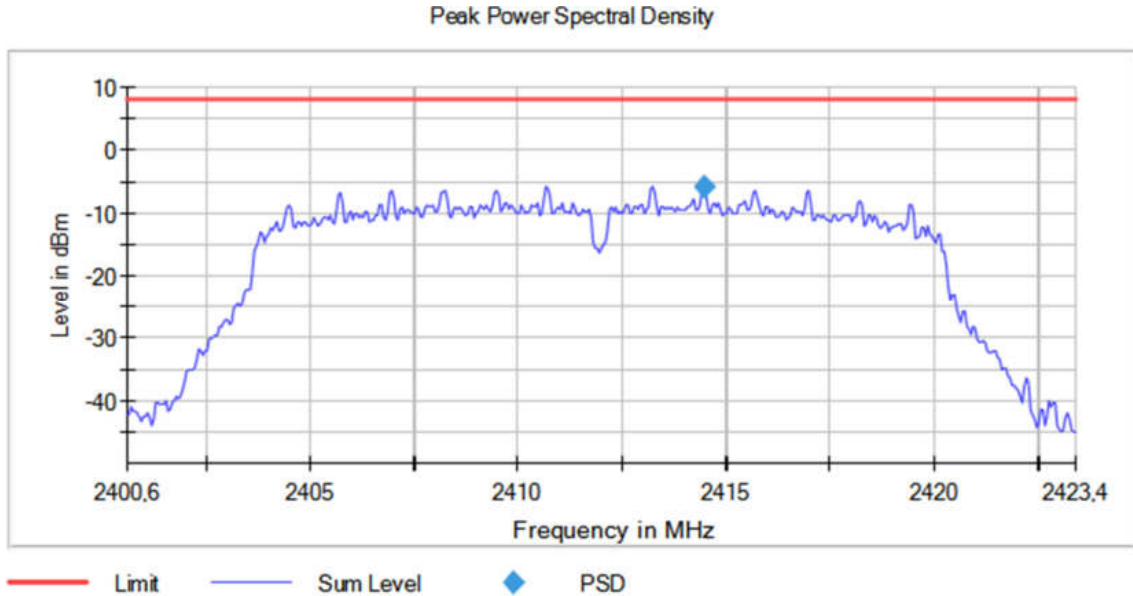
Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



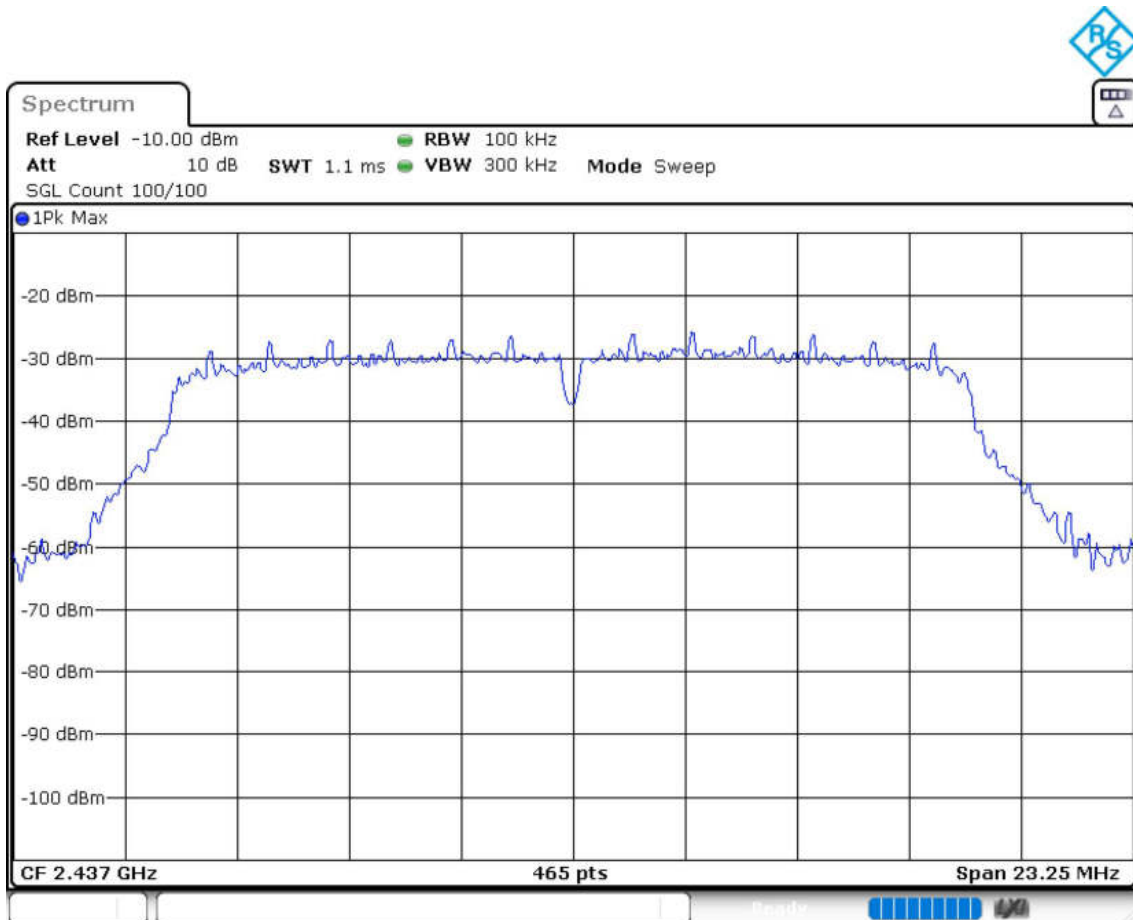
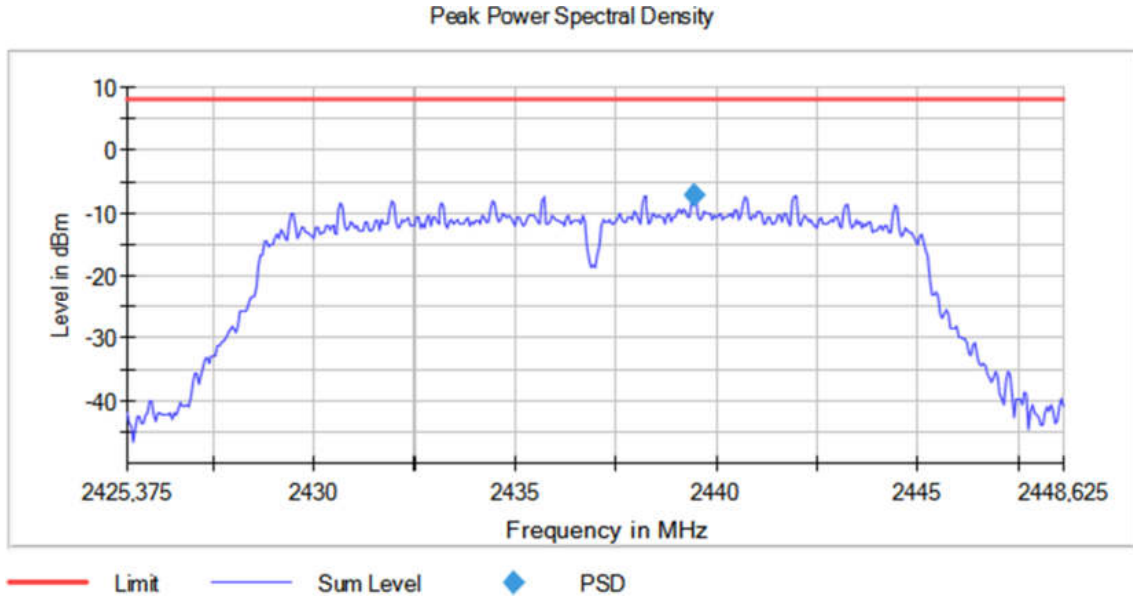
Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



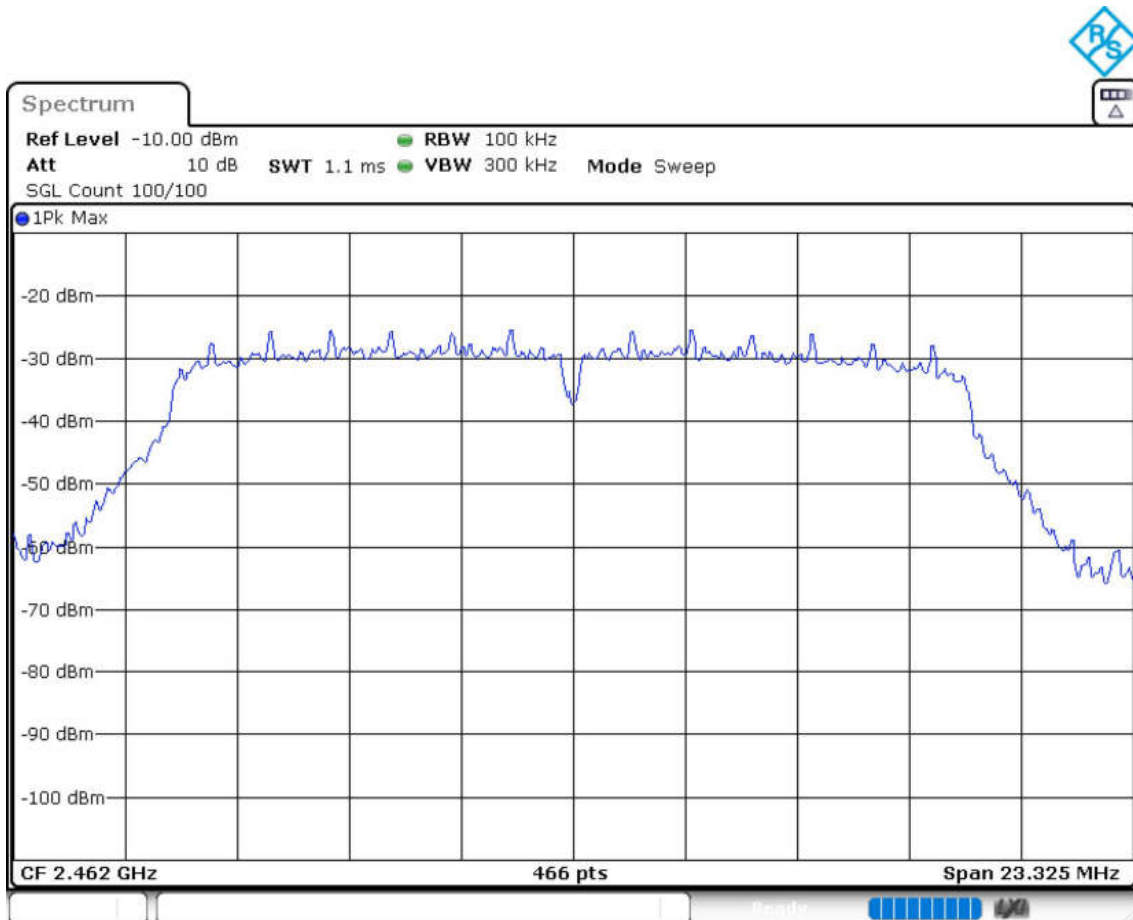
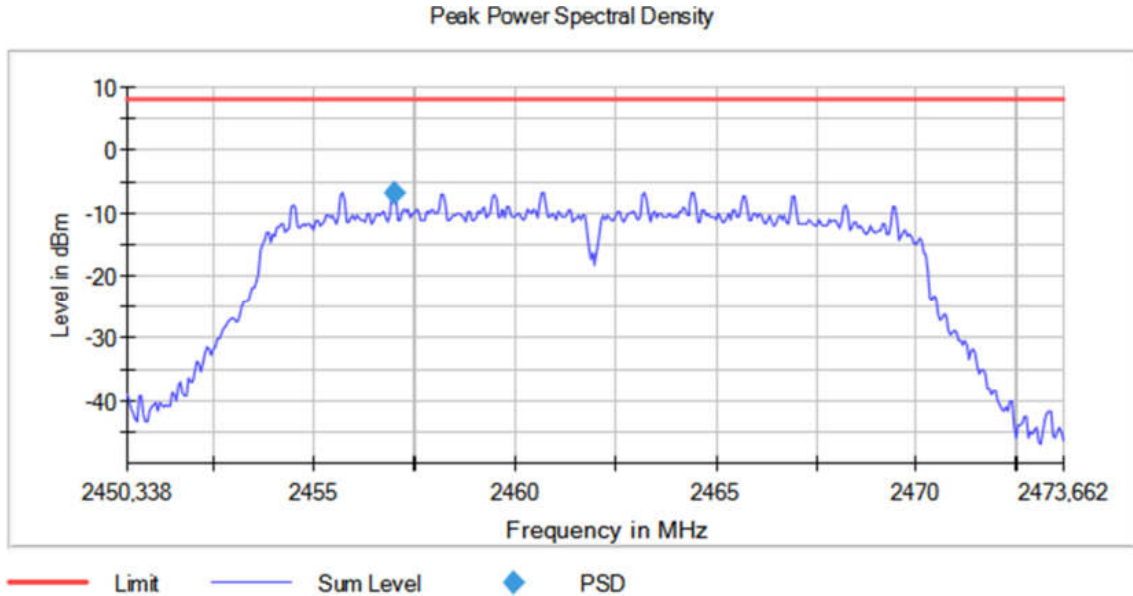
Frequency MHz = 2437.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



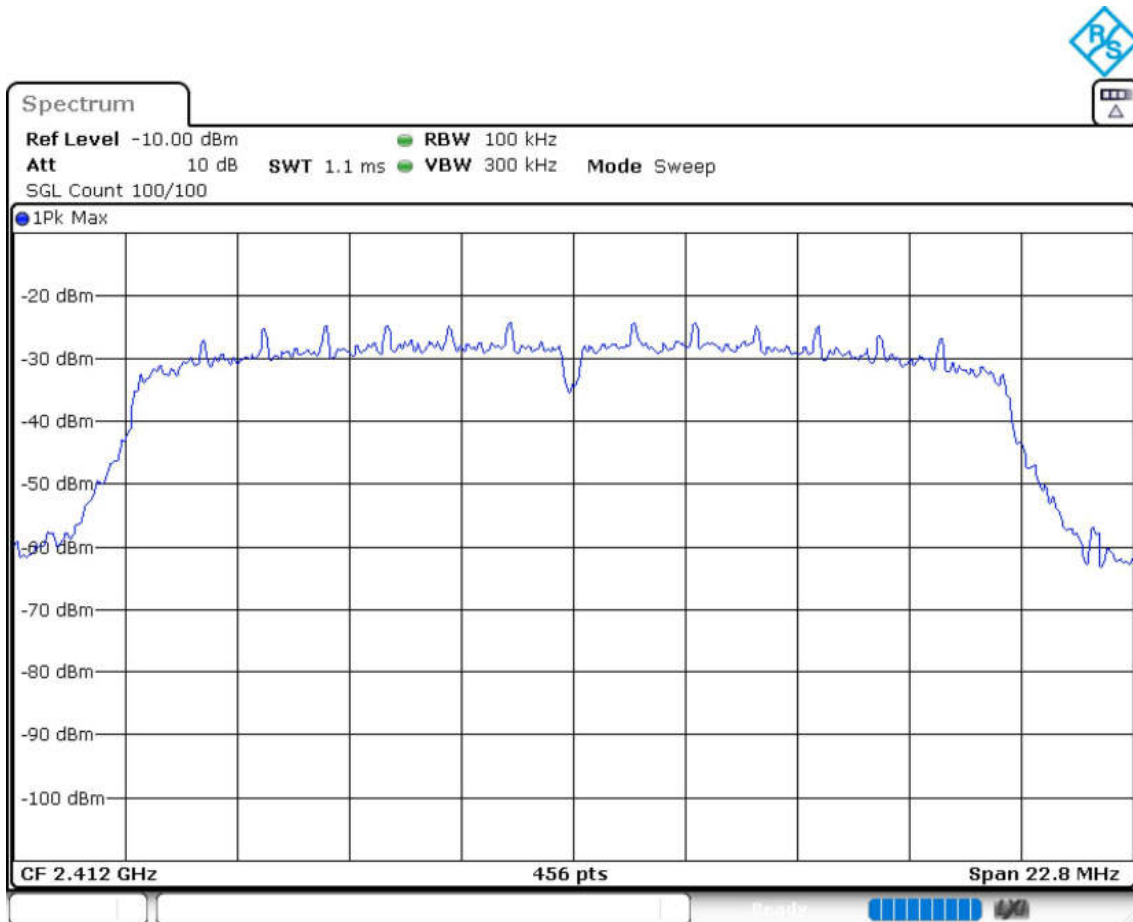
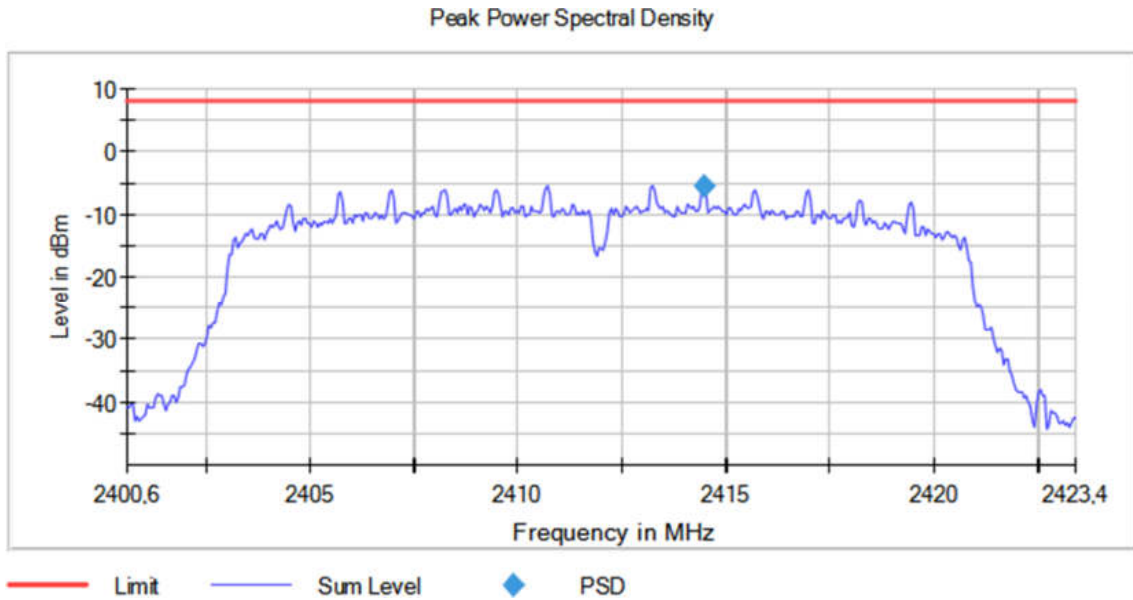
Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



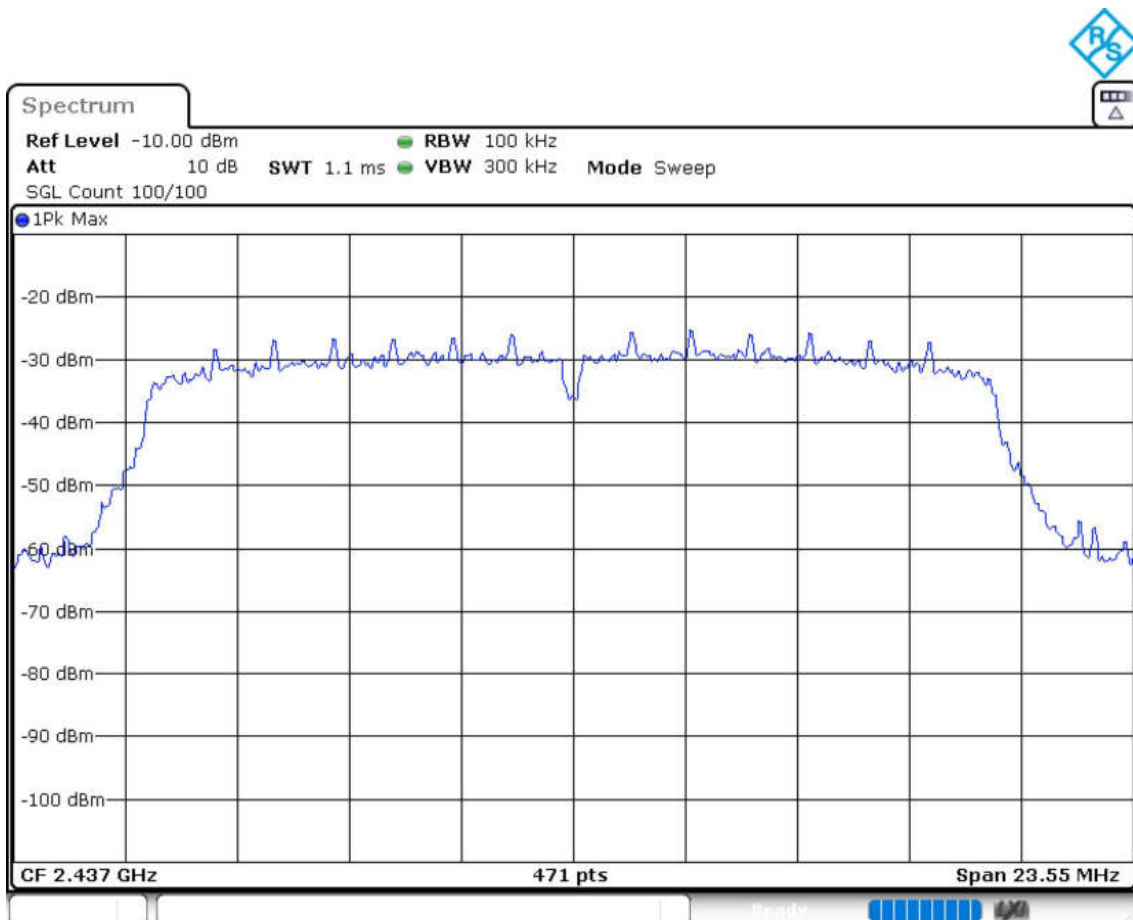
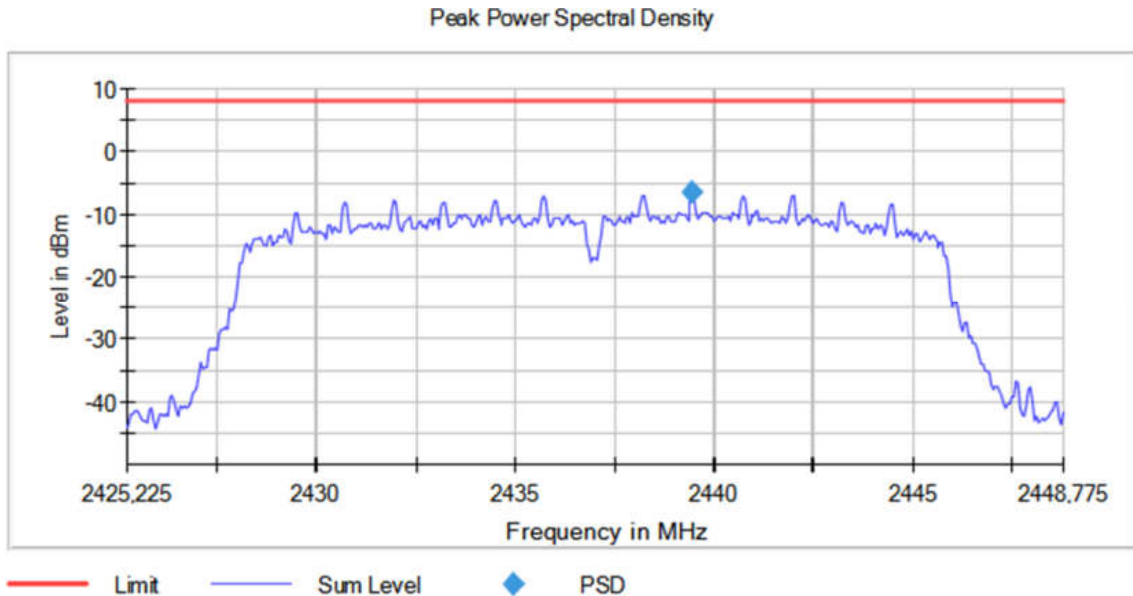
Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



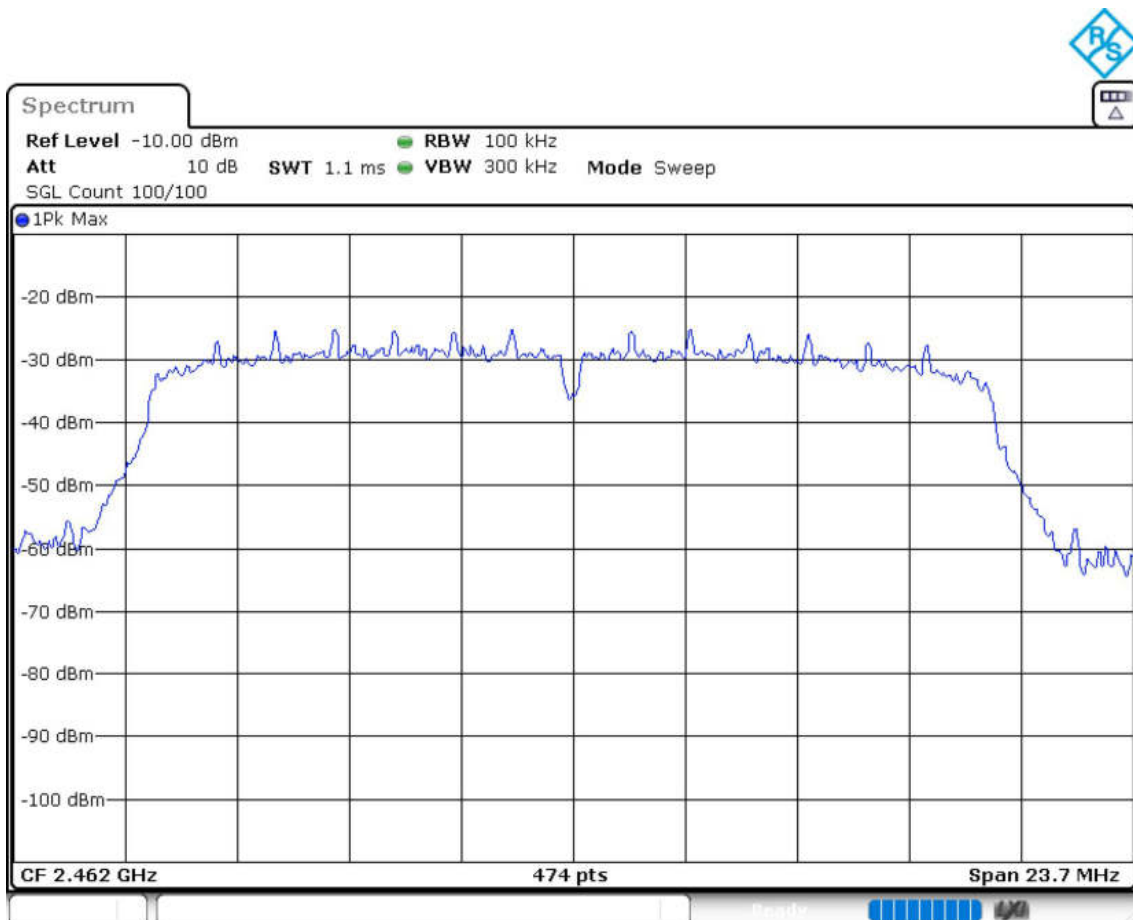
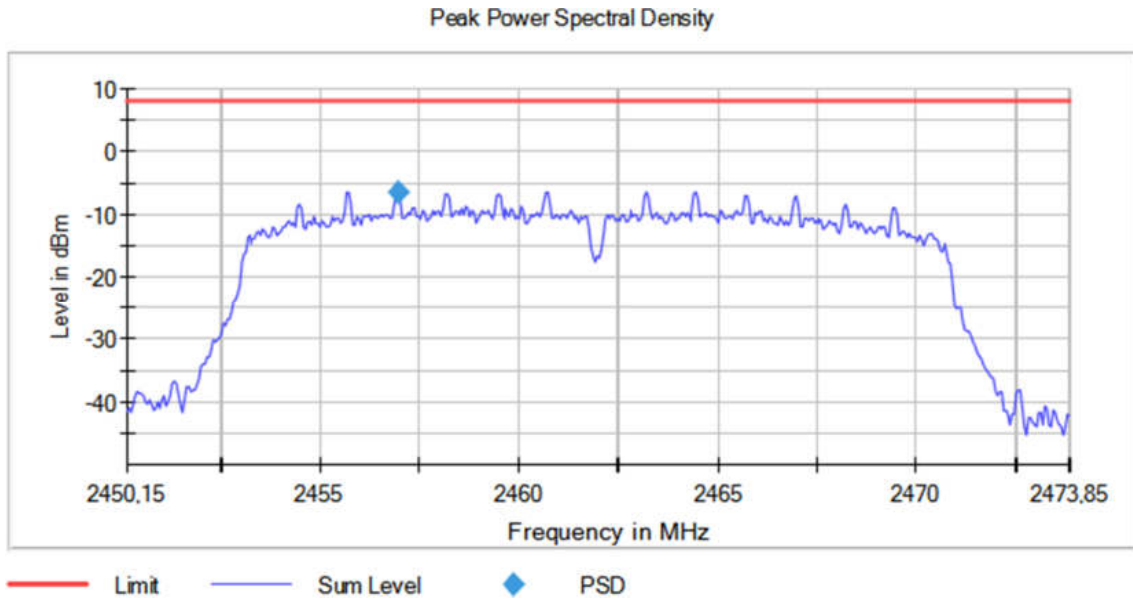
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 Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
 Number of Transmission Chains = 1 Active Port = 1

Plots:



RSS-247 5.4 (d) / FCC 15.247 (b) (1) Maximum Average Conducted output Power

Limits

For systems using digital modulation in the 2400-2483.5 MHz band: 1 watt (30 dBm).
 The e.i.r.p. shall not exceed 4 W (36 dBm) (Canada).

Results

The Maximum Average Conducted output Power level in the fundamental emission was measured according to clause 11.9.2.3.2 "Method AVGPM-G" of ANSI C.63.10-2013.

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power.

Maximum Declared Antenna Gain: -3.6 dBi

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

Freq (MHz)	Avg Power (dBm)	Maximum EIRP Power (dBm)
2412.00000	7.397	3.797
2437.00000	6.029	2.429
2462.00000	6.682	3.082

Modulation: 802.11g (OFDM 6 Mbit/s)

Freq (MHz)	Avg Power (dBm)	Maximum EIRP Power (dBm)
2412.00000	6.599	2.999
2437.00000	5.433	1.833
2462.00000	6.112	2.512

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

Freq (MHz)	Avg Power (dBm)	Maximum EIRP Power (dBm)
2412.00000	6.819	3.219
2437.00000	5.587	1.987
2462.00000	6.196	2.596

Verdict

Pass

RSS-247 5.5 / FCC 15.247 (d) Band-edge emissions compliance (Transmitter)

Limits

In any 100 kHz bandwidths outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Results

Radiated measurements were used to show compliance with the limits in the restricted bands 2.31-2.39 GHz and 2.4835-2.5 GHz.

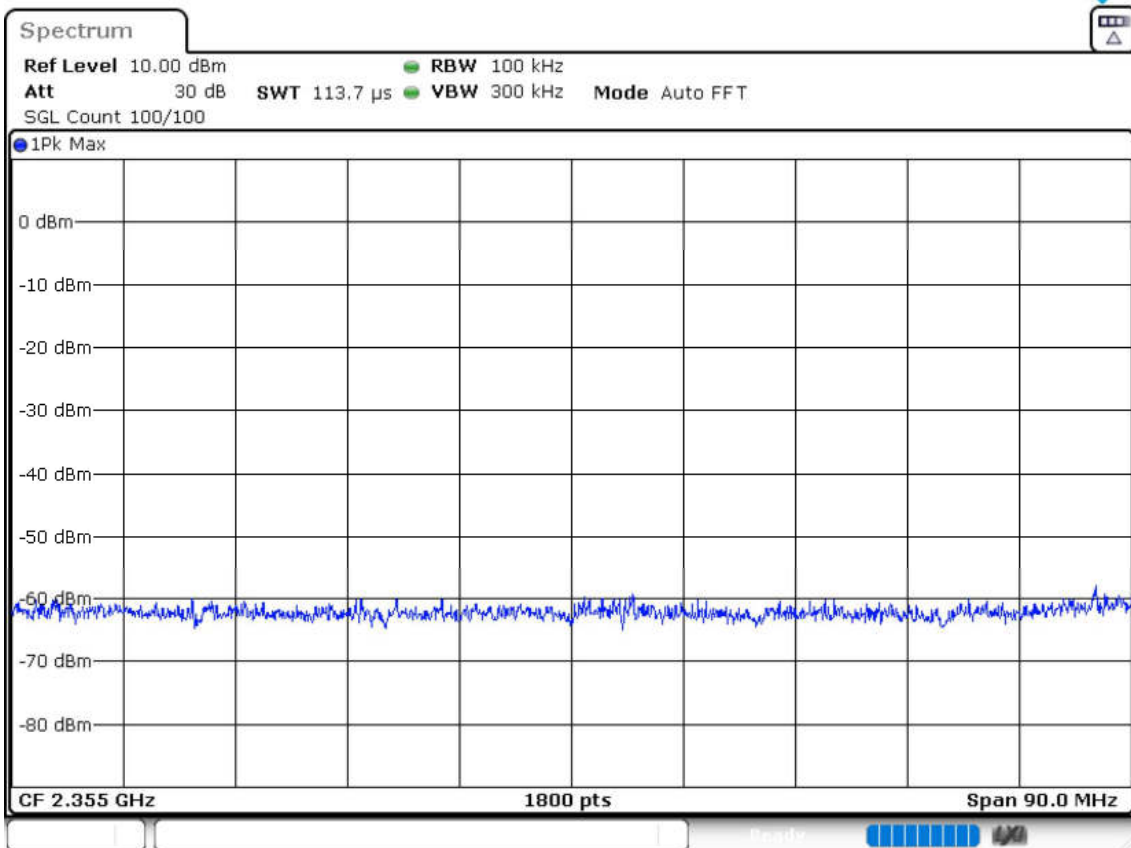
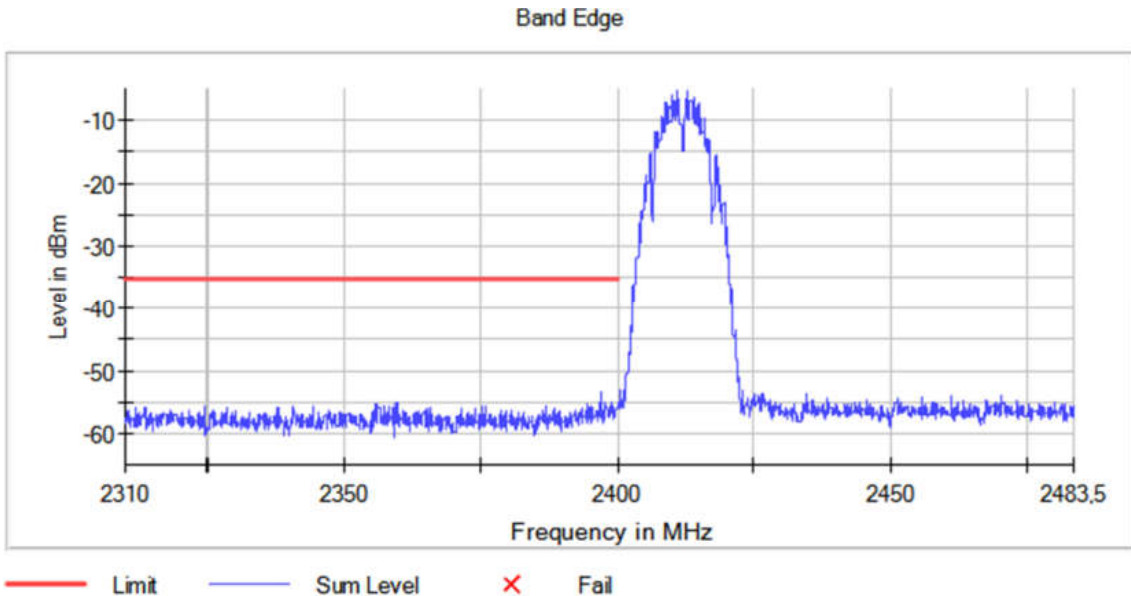
Verdict

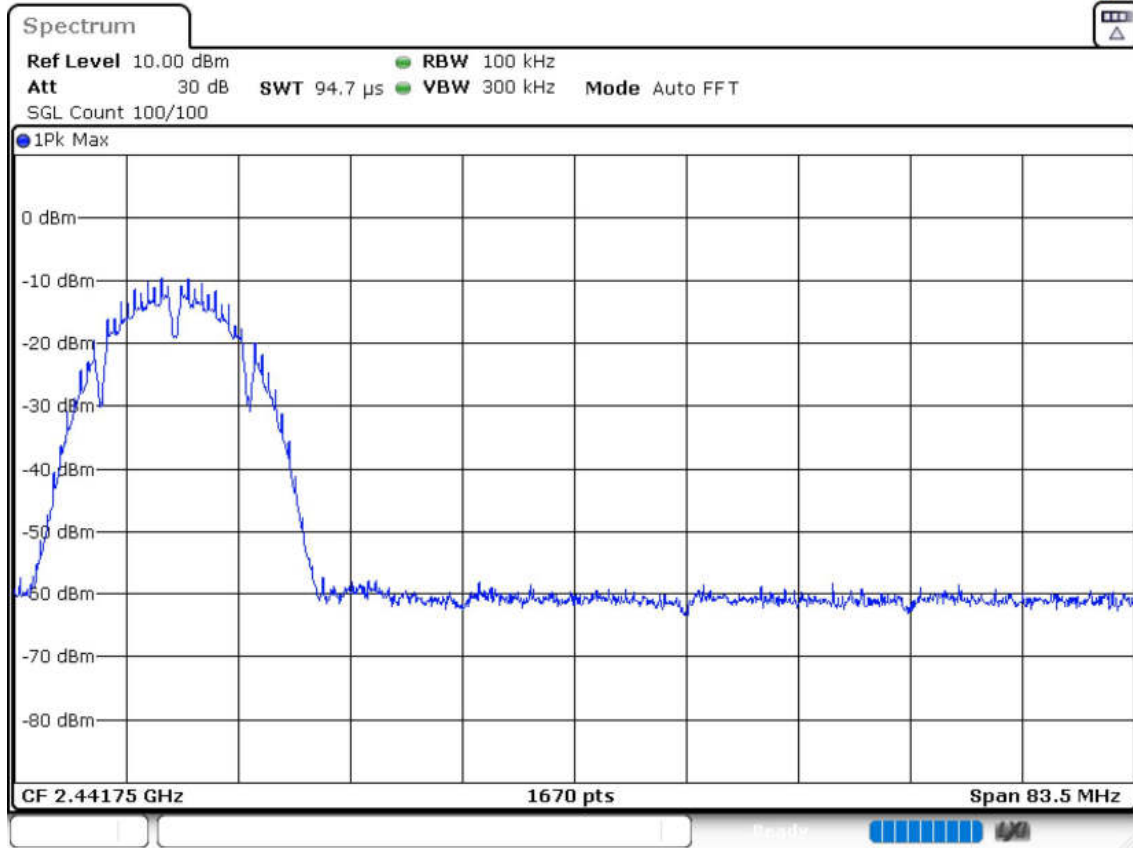
Pass

Attachments

Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

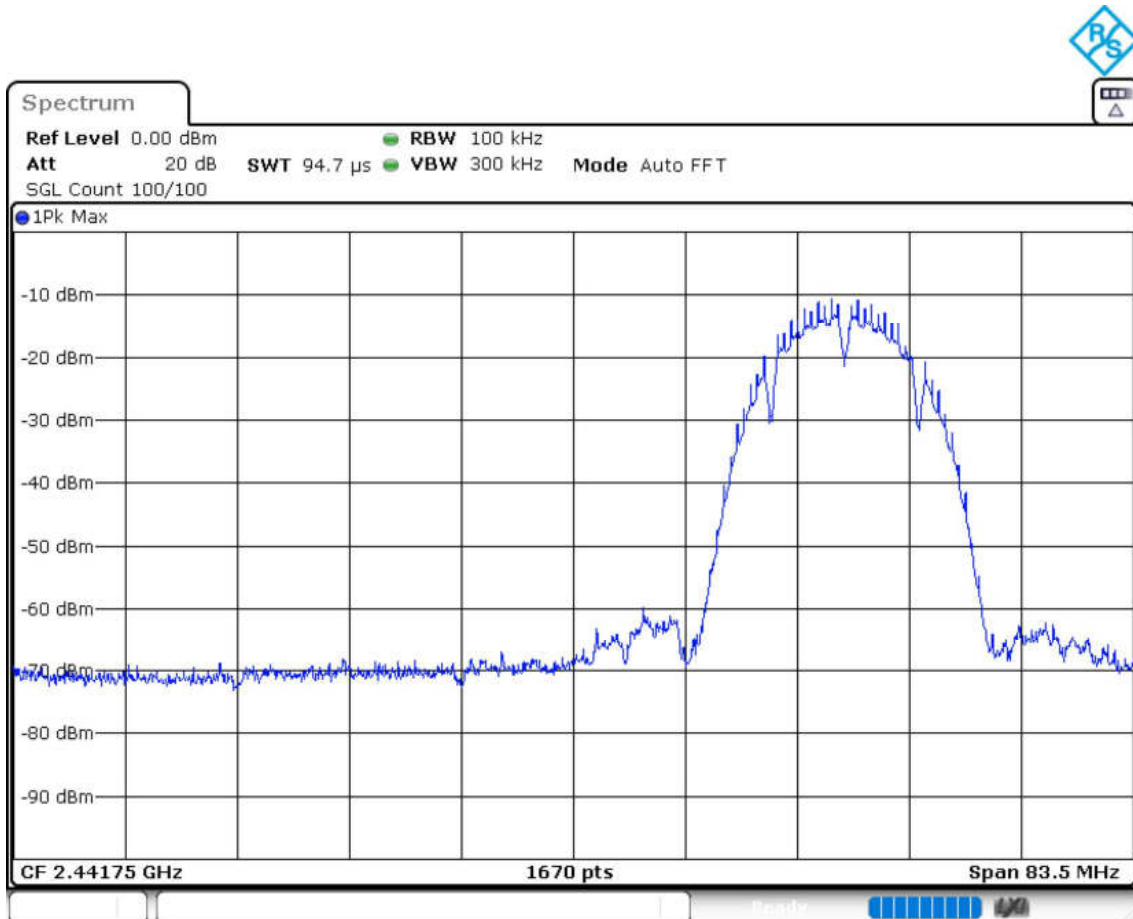
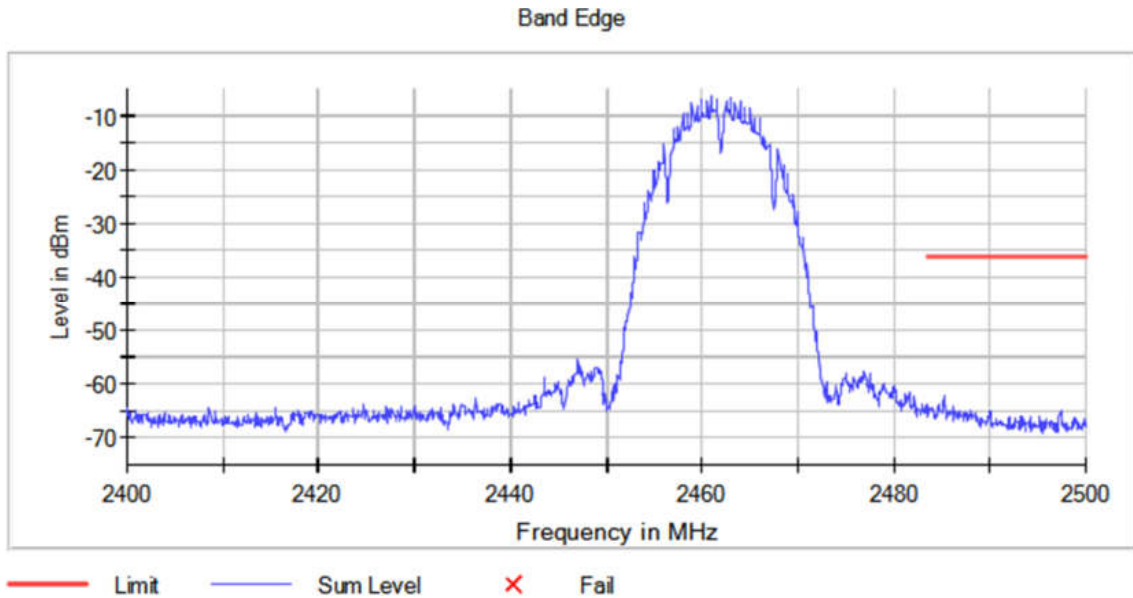
Plots:

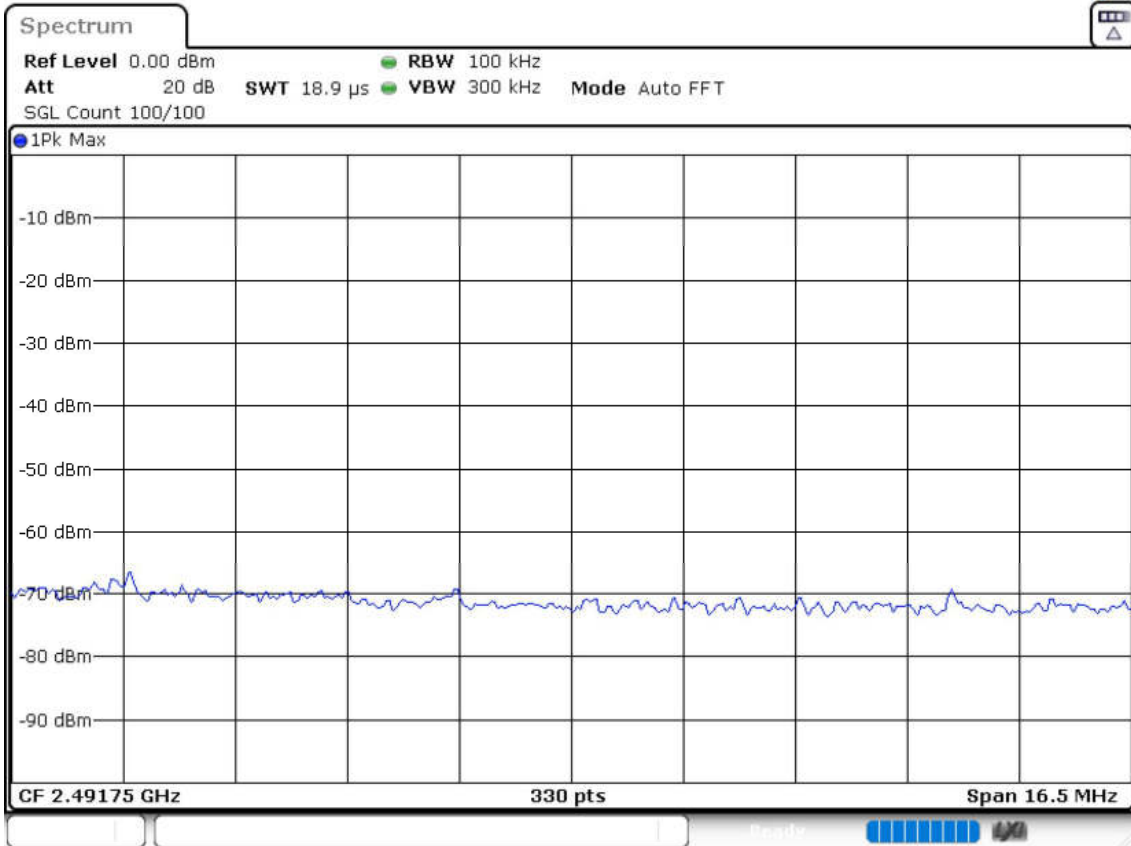




Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11b (DSSS 1 Mbit/s)
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

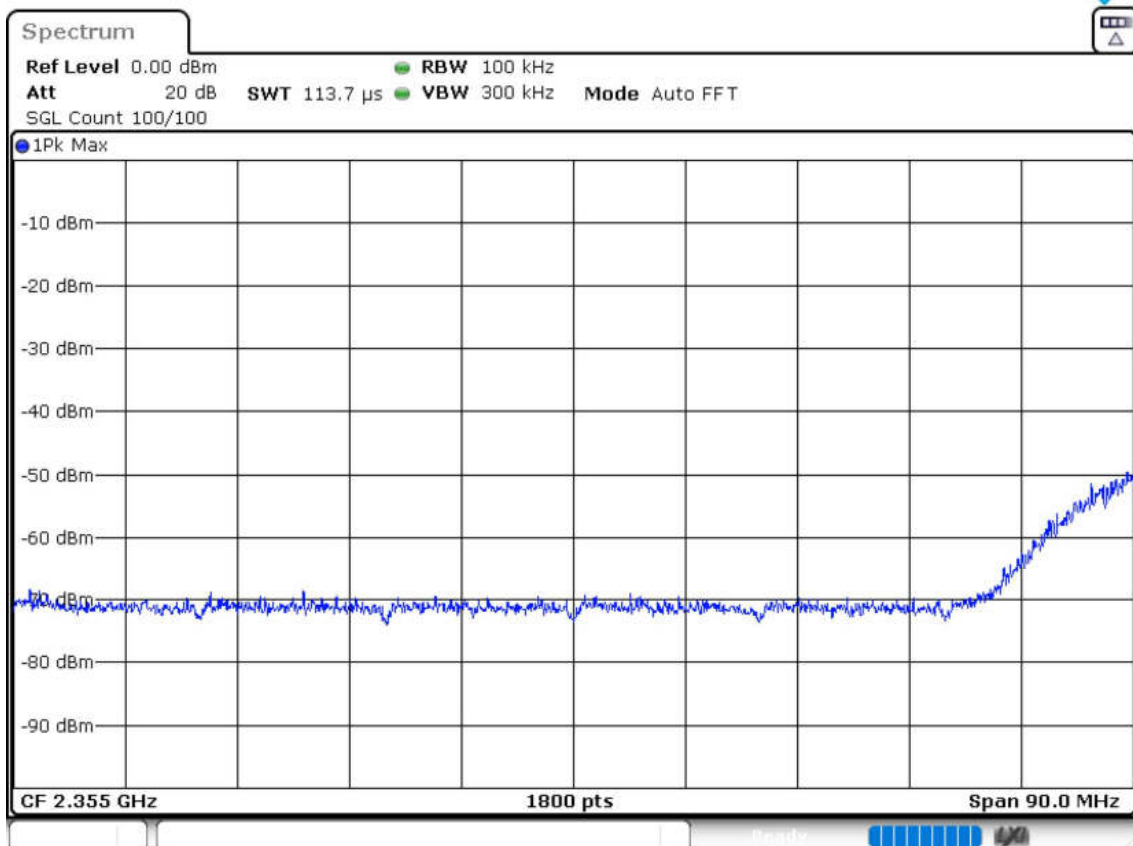
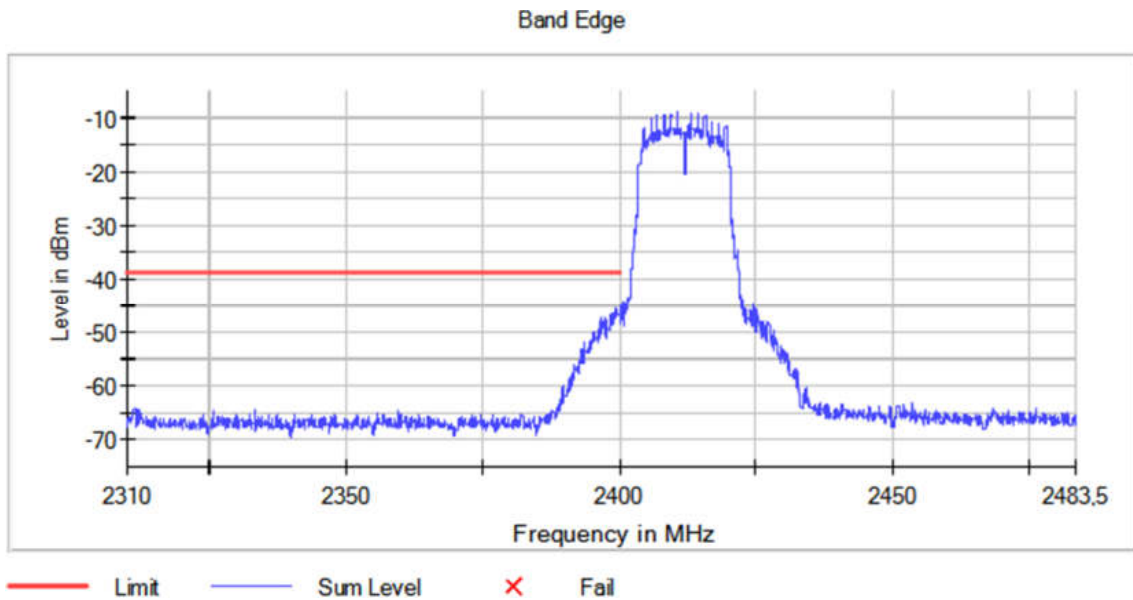
Plots:

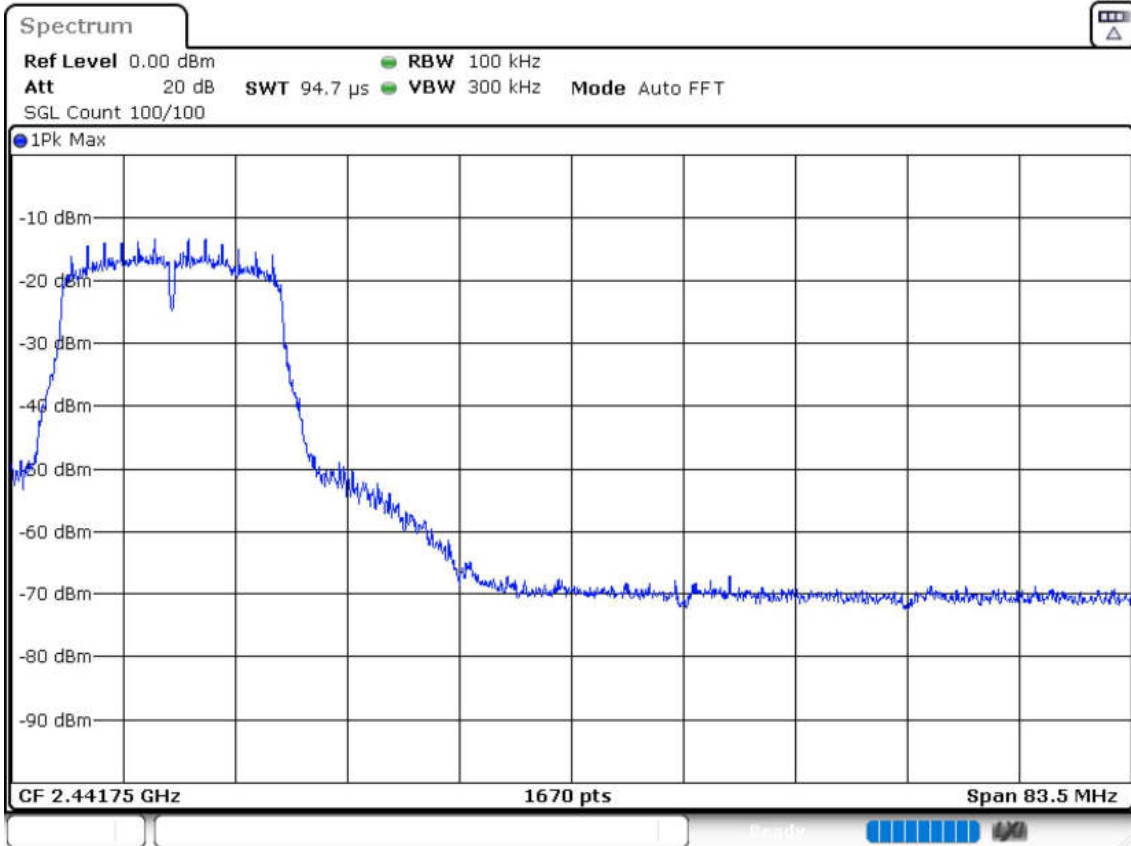




Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

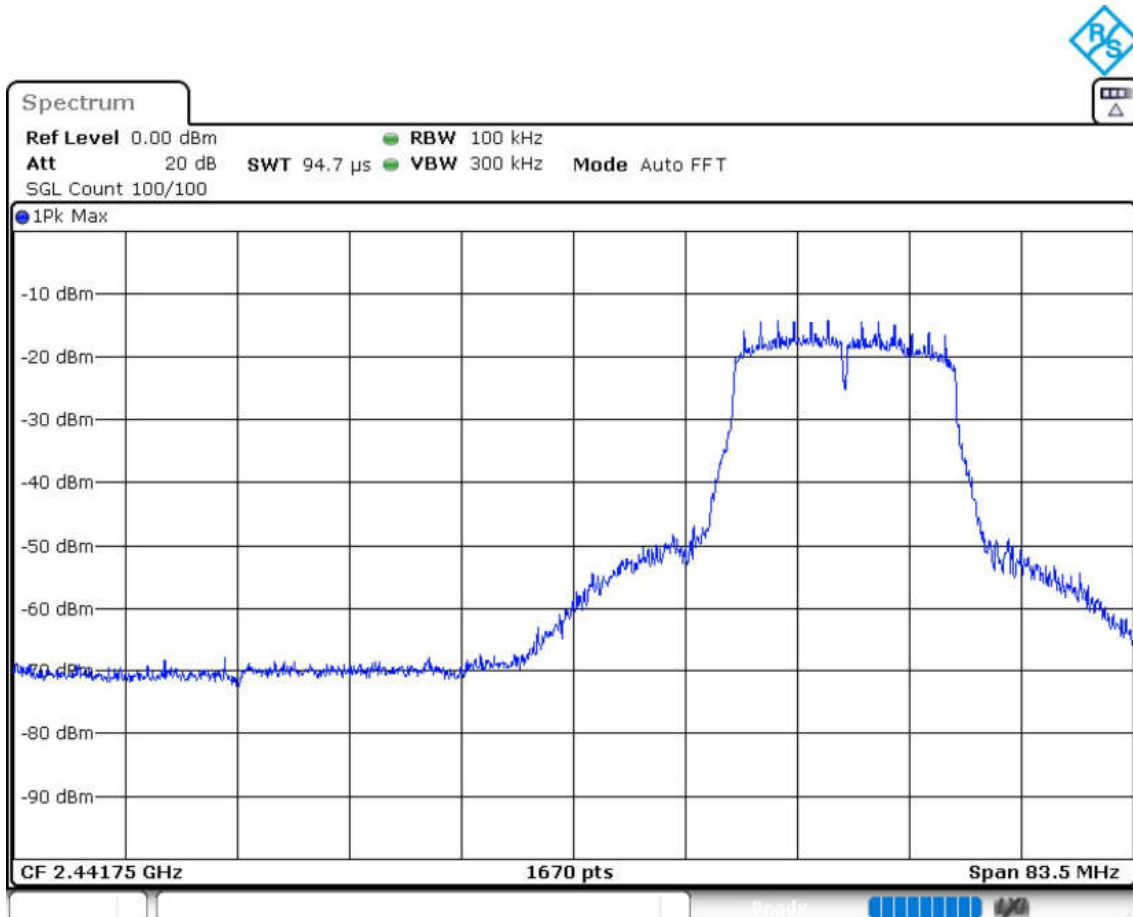
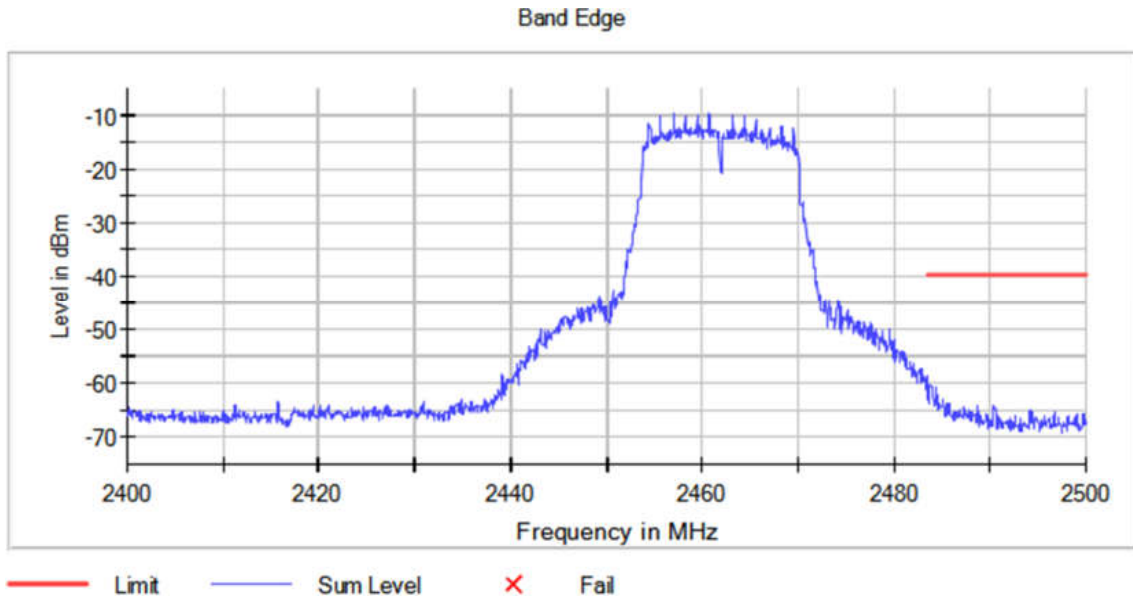
Plots:

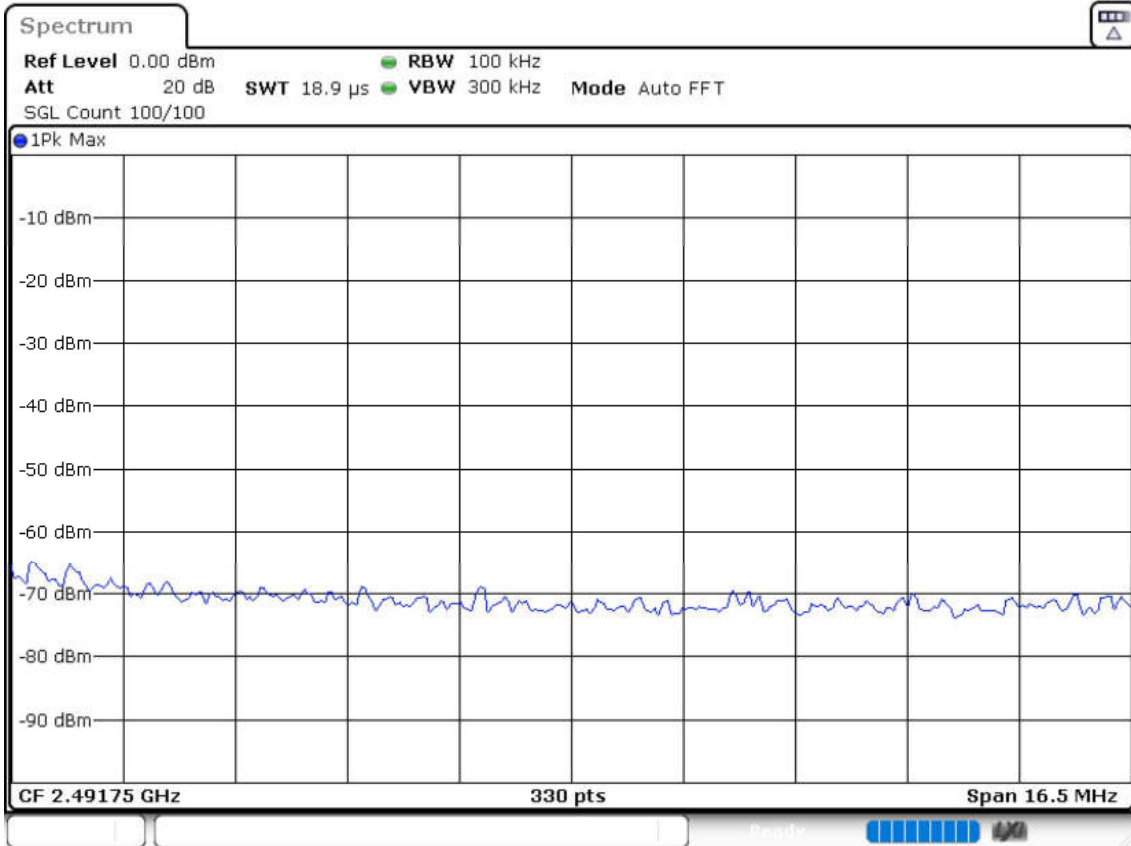




Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11g (OFDM 6 Mbit/s)
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

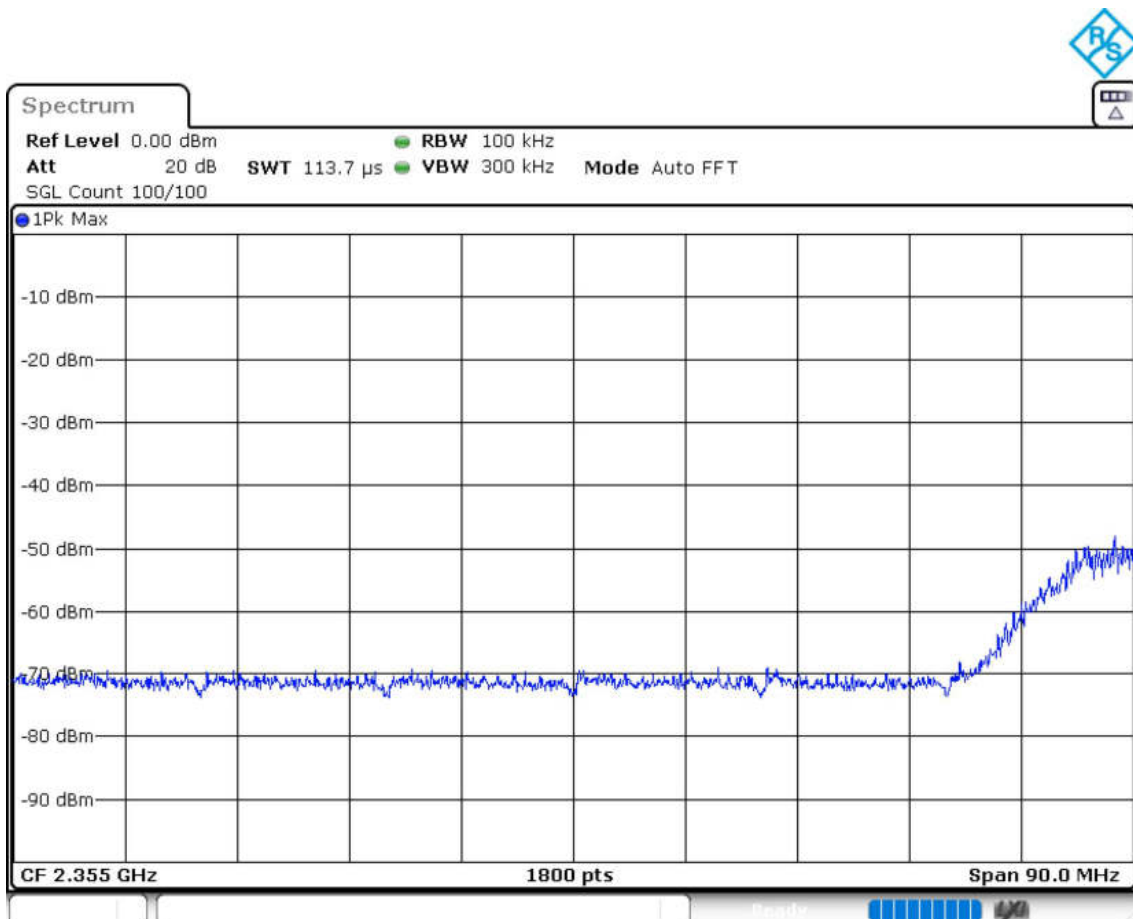
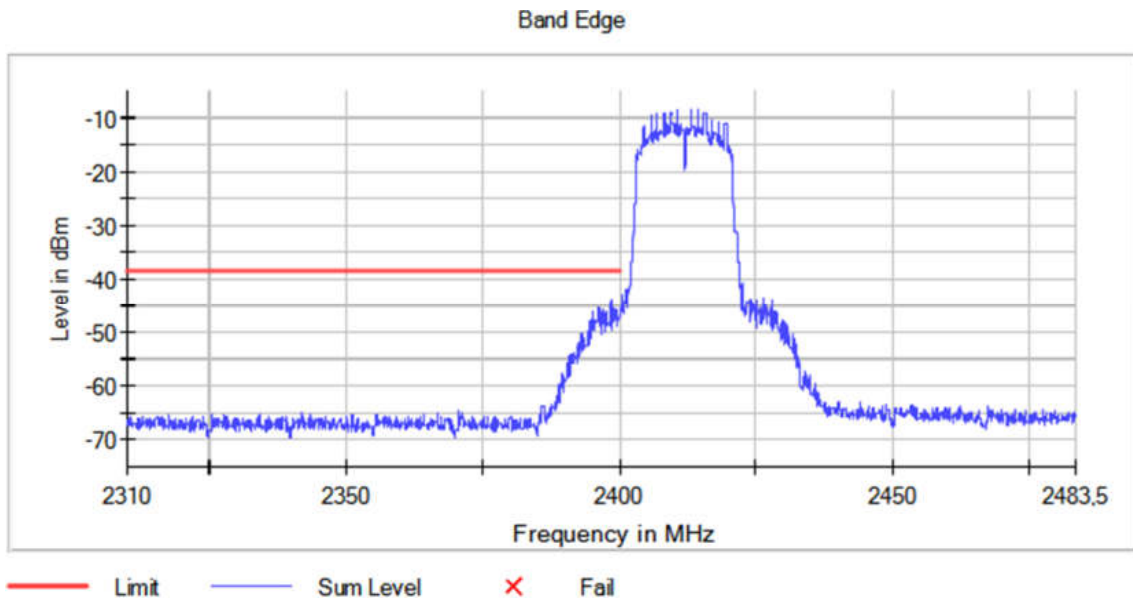
Plots:

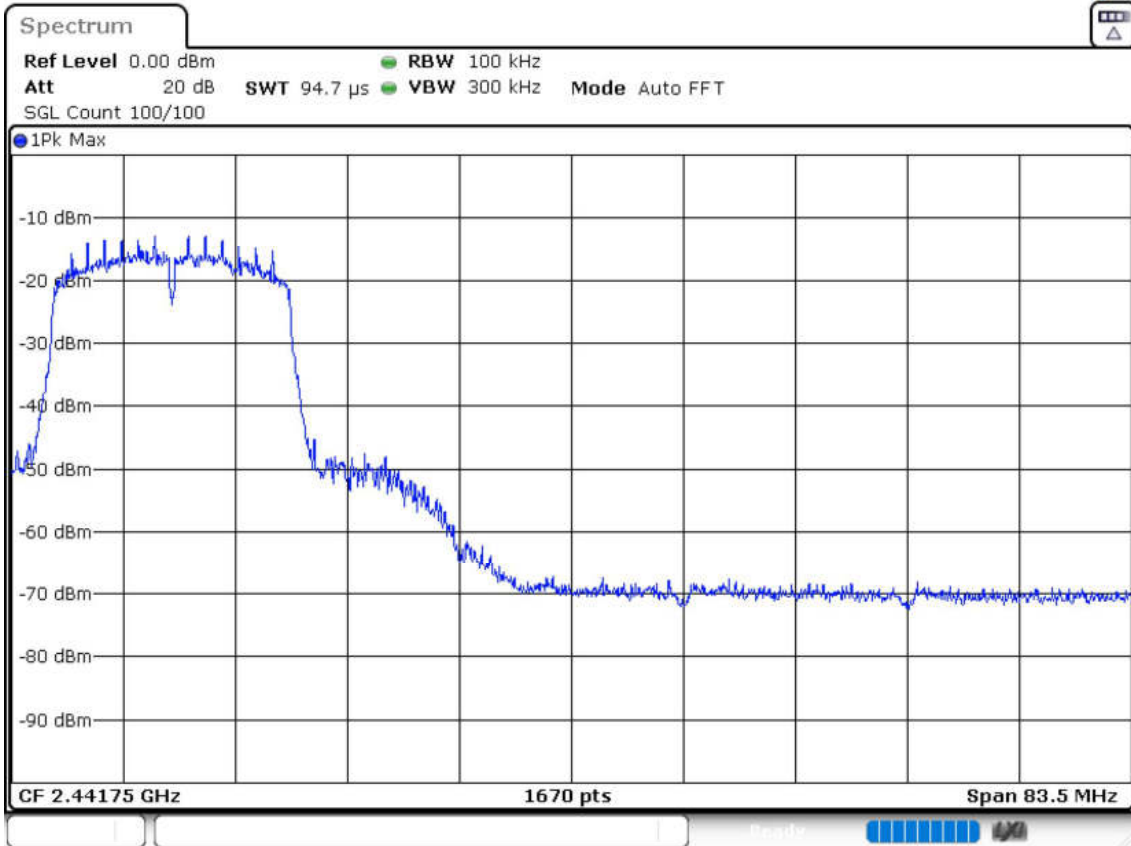




Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

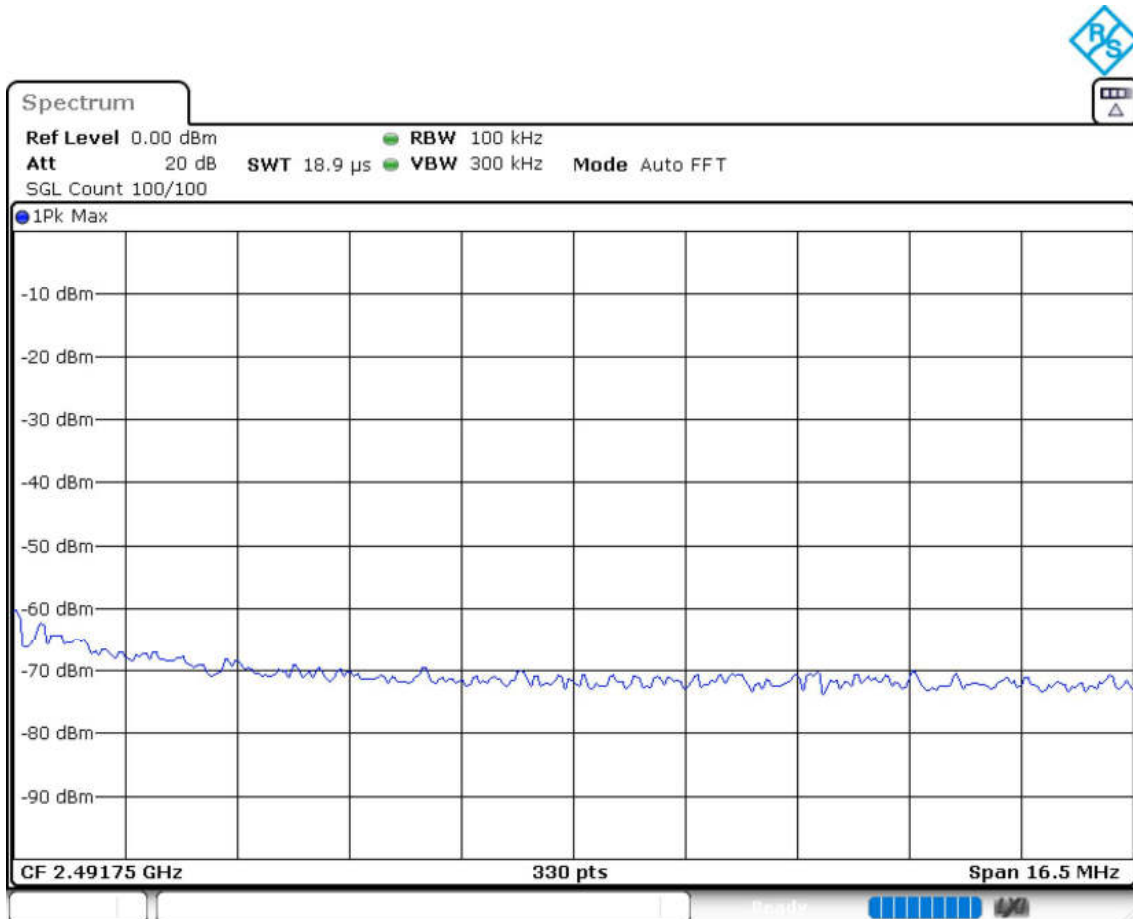
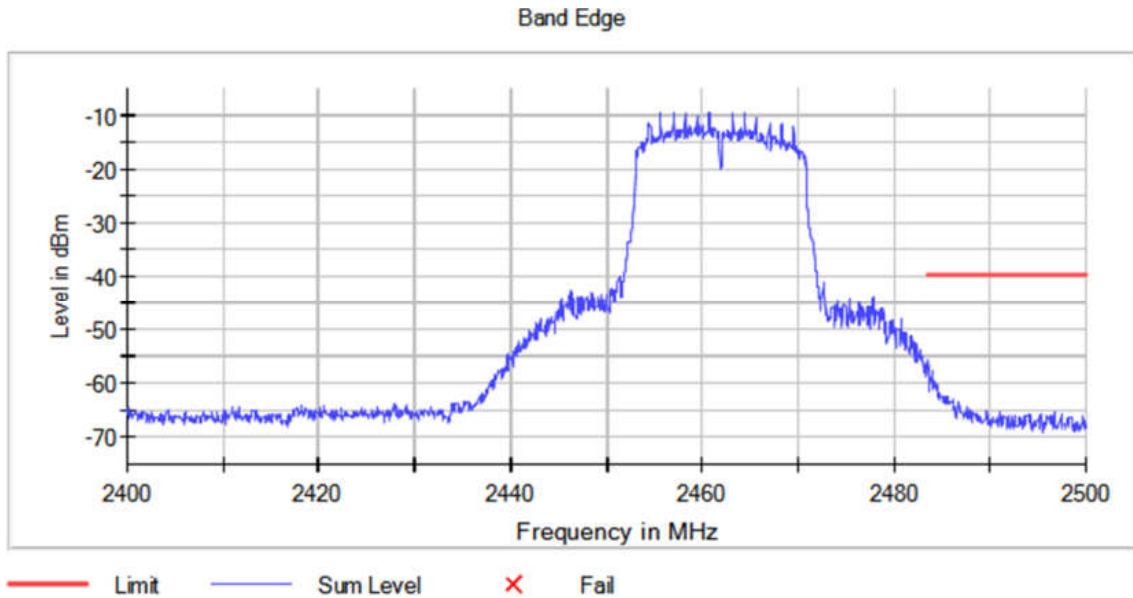
Plots:

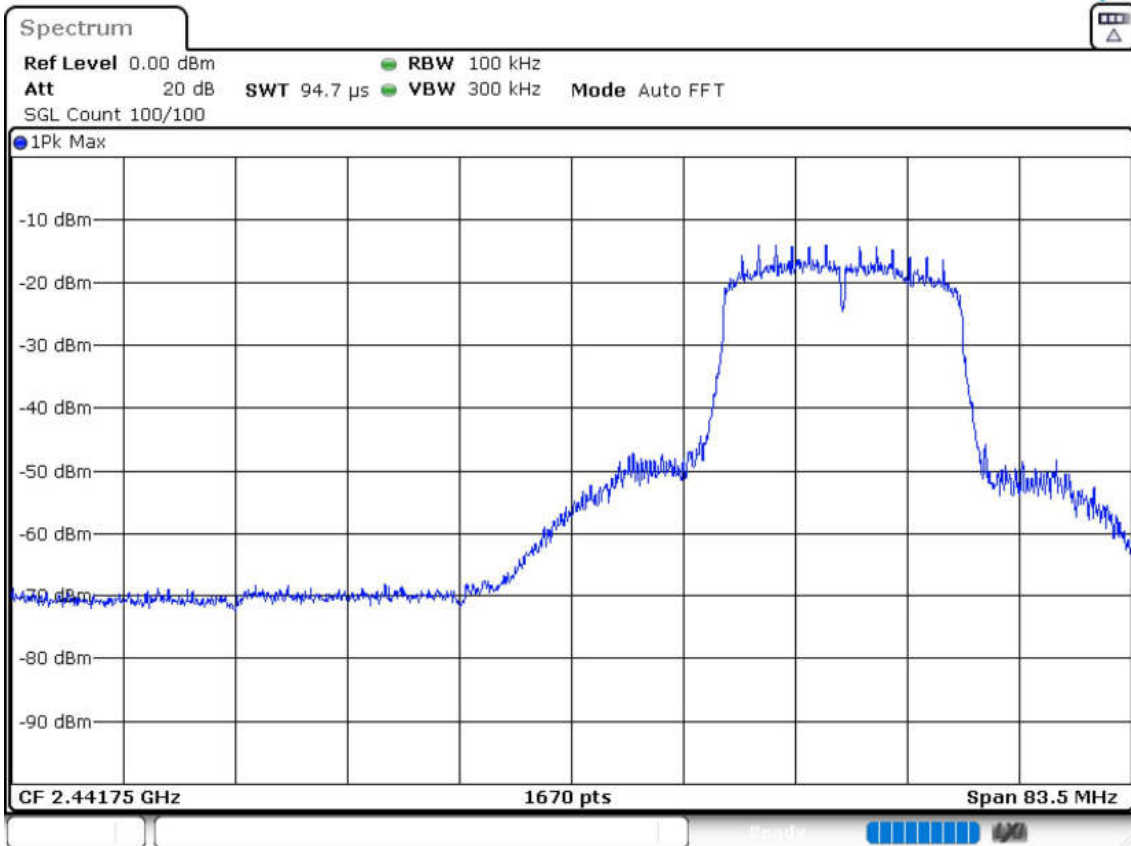




Frequency MHz = 2462.00000 Equipment Type = Digital Transmission System (DTS)
 Bandwidth MHz = 20 Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s)
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Plots:





RSS-247 5.5 / FCC 15.247 (d) 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)):

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

Frequency range 30 MHz – 1 GHz:

The spurious frequencies detected do not depend on either the modulation or the operating channel.

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

Frequency range 1 GHz – 26 GHz:

The results in the next tables show the maximum measured levels in the 1 – 26 GHz range including the restricted bands 2.31 – 2.39 GHz and 2.4835 – 2.5 GHz.

Spurious frequencies with peak levels above the average limit (54 $\text{dB}\mu\text{V/m}$ at 3 m) are measured with average detector for compliance checking with the average limit.

Modulation: 802.11b (DSSS 1 Mbit/s)

Spurious frequencies detected at less than 20 dB below the limit:

Freq (MHz)	Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
2412.00000	[3, 17]	4823.5000	50.78	V	PK
2437.00000		4874.0000	50.26	V	PK
2462.00000		4874.0000	49.64	V	PK

Modulation: 802.11g (OFDM 6 Mbit/s)

Freq (MHz)	Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
2412.00000	[3, 17]	4830.0000	49.94	V	PK
2437.00000		4874.0000	47.92	V	PK
2462.00000		4926.5000	49.16	V	PK

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

Freq (MHz)	Freq Rng (GHz)	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
2412.00000	[3, 17]	4828.0000	49.60	V	PK
2437.00000		4874.5000	48.85	V	PK
2462.00000		4926.0000	48.32	V	PK

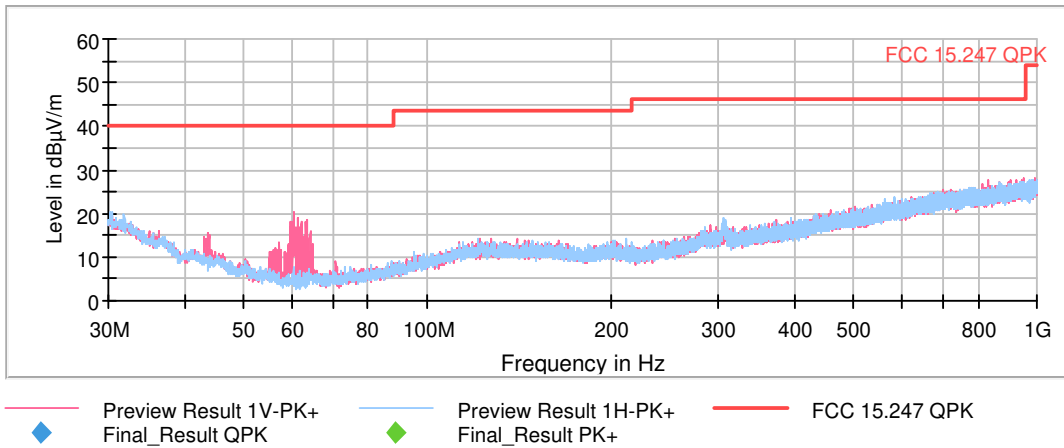
Verdict

Pass

Attachments

Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [0.03, 1]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Plots:



This plot is valid for all channel

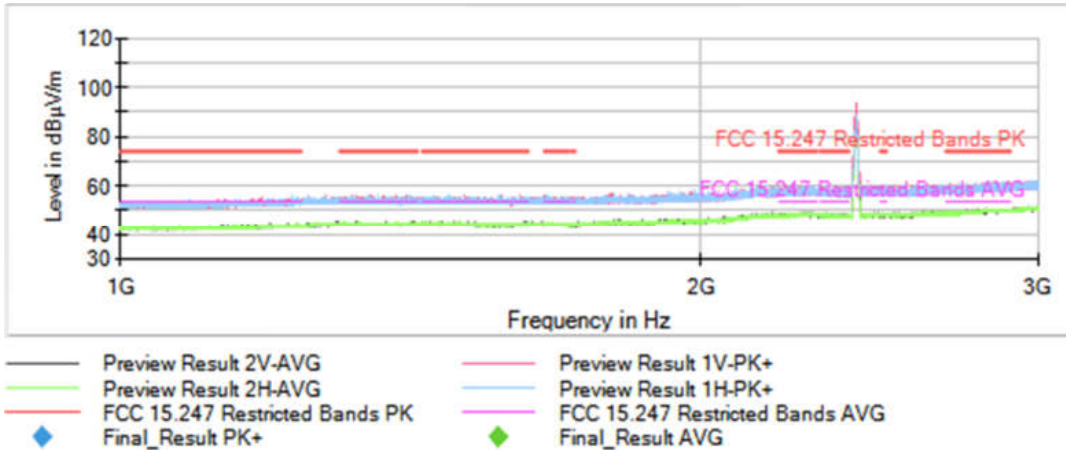
Tables:

Spectrum Analyzer Parameters

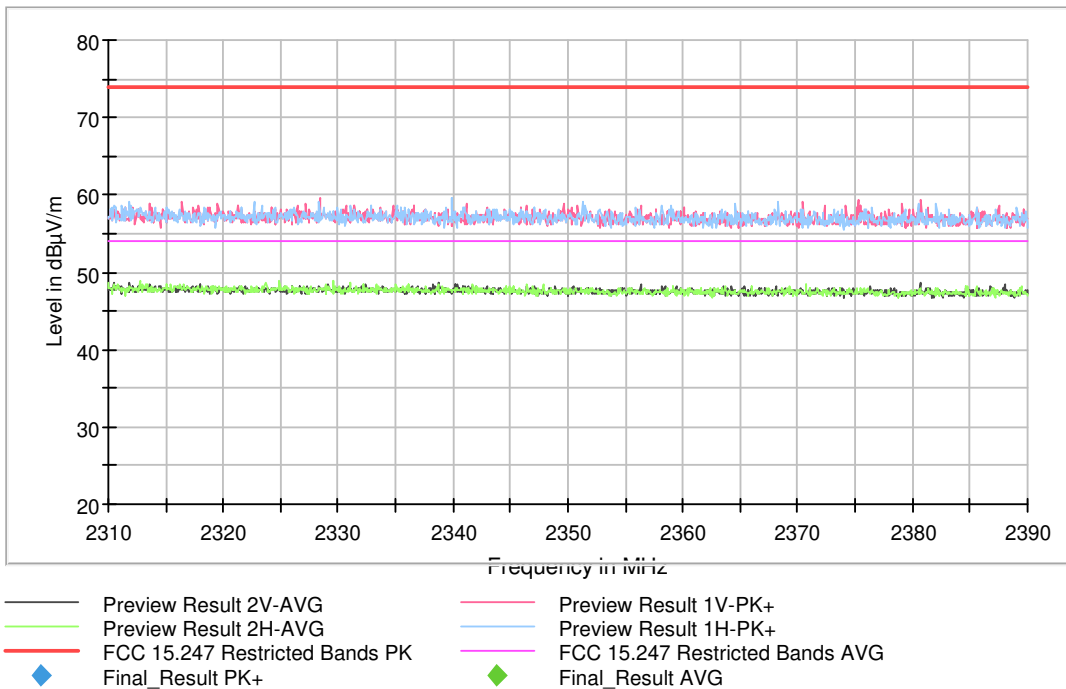
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESR 7]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

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

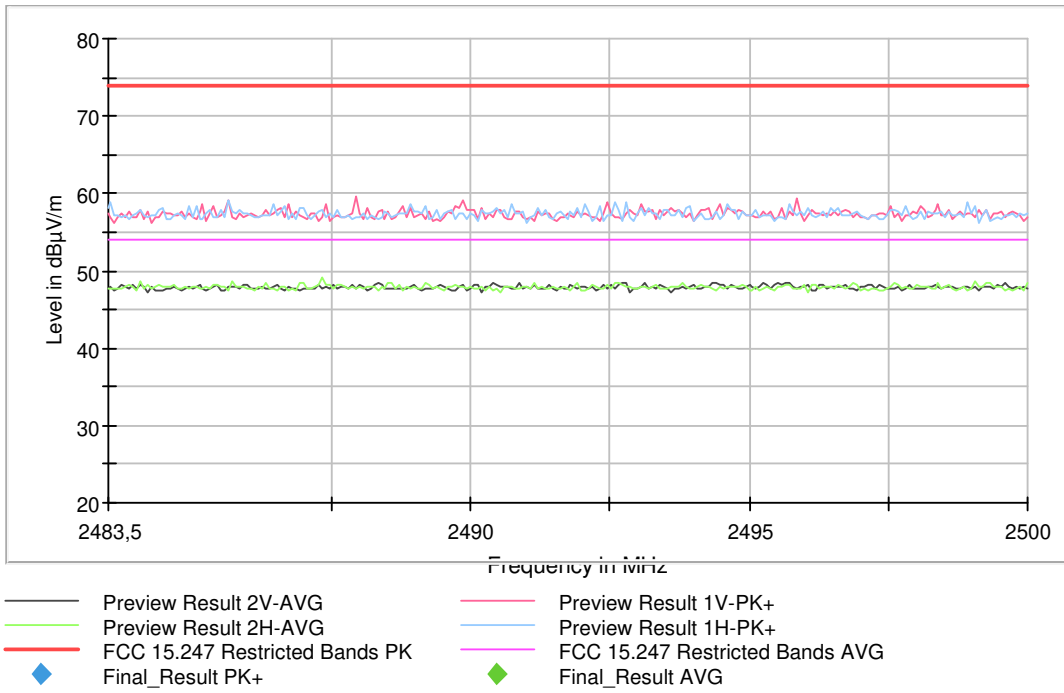
Plots:



Full Spectrum



Full Spectrum



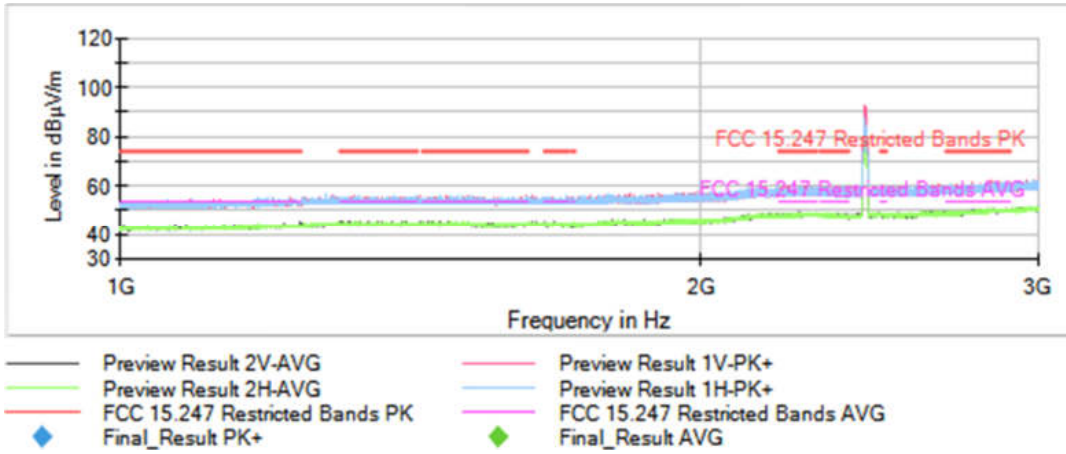
Tables:

Spectrum Analyzer Parameters

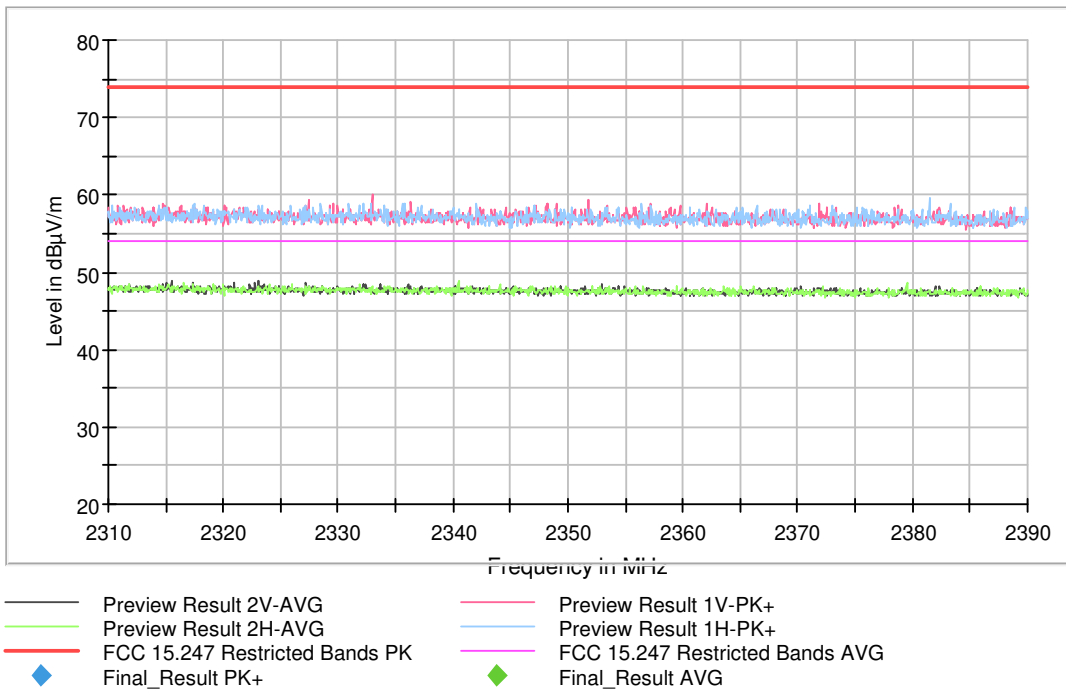
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2437.00000 Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [1, 3]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

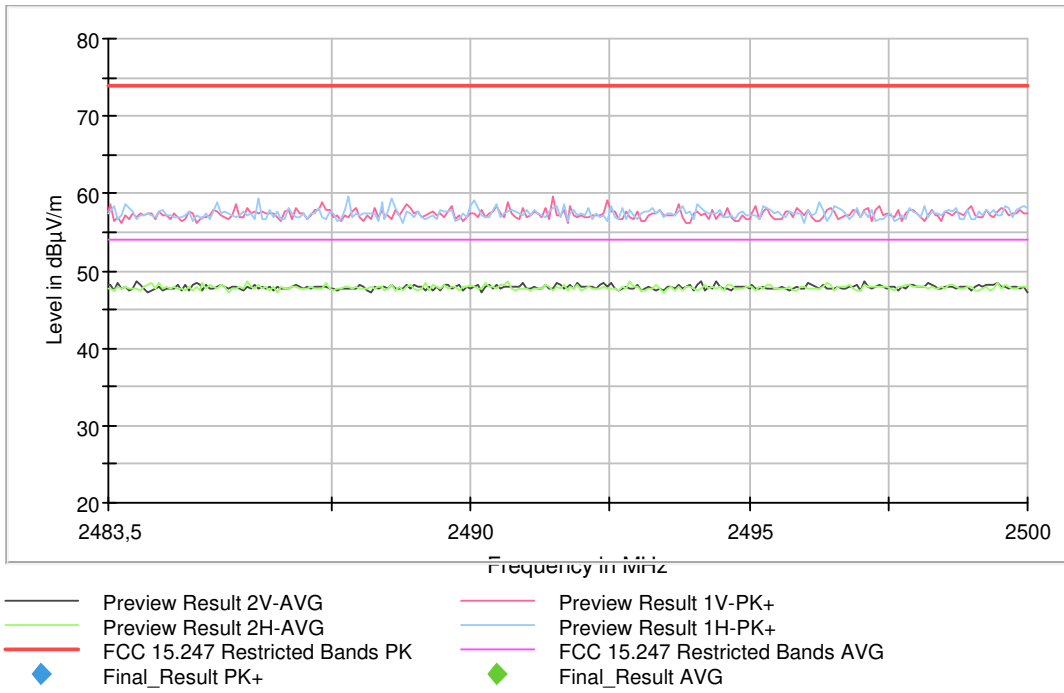
Plots:



Full Spectrum



Full Spectrum



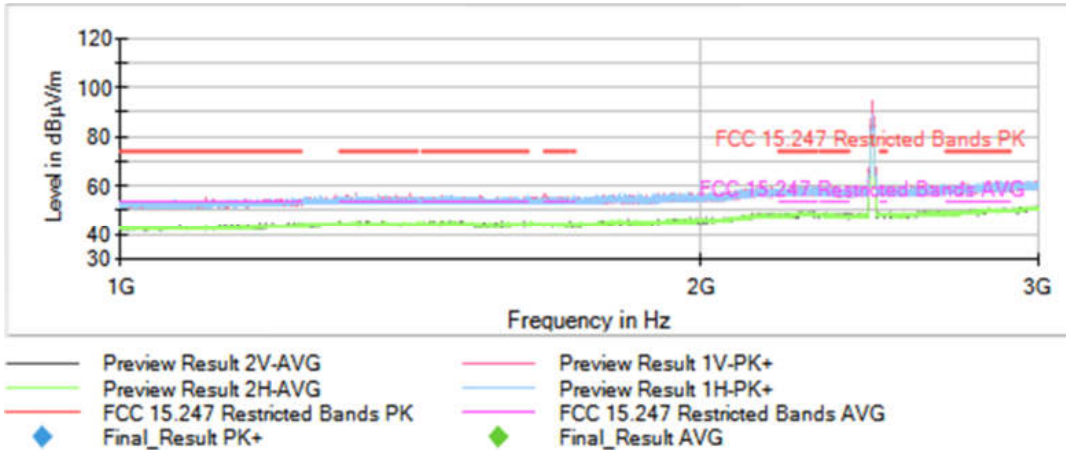
Tables:

Spectrum Analyzer Parameters

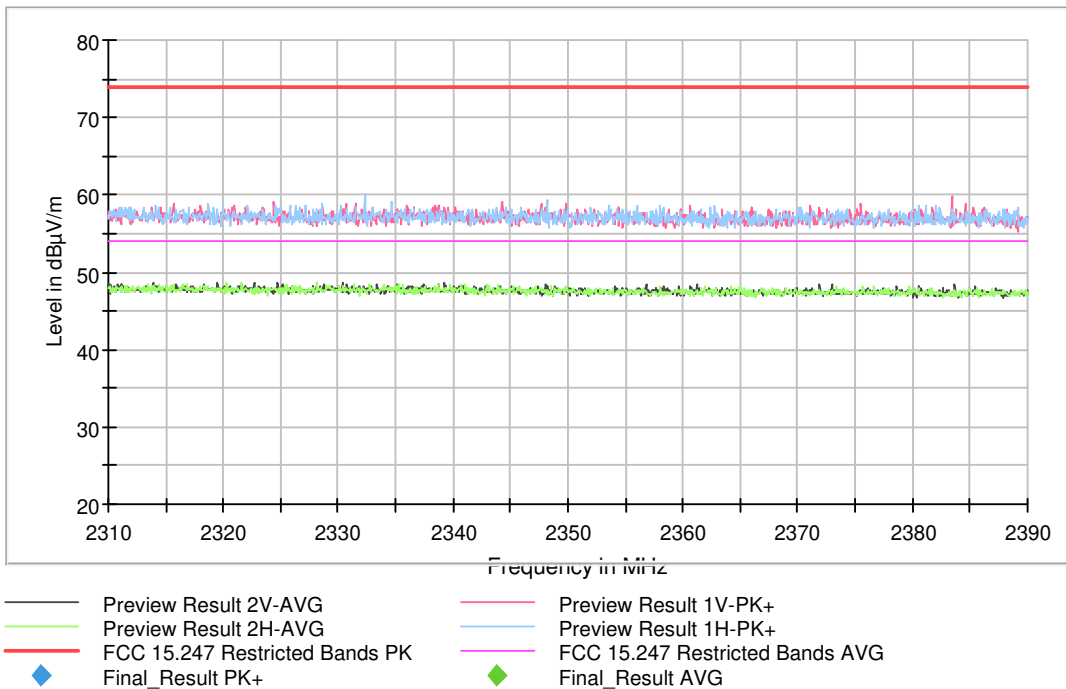
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

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

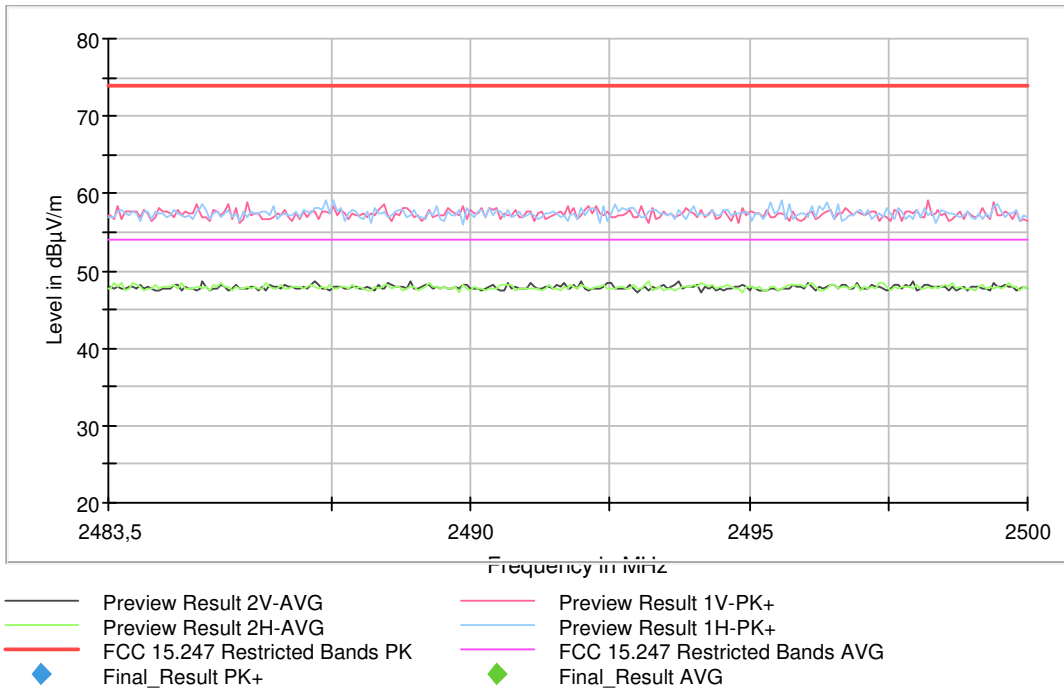
Plots:



Full Spectrum



Full Spectrum



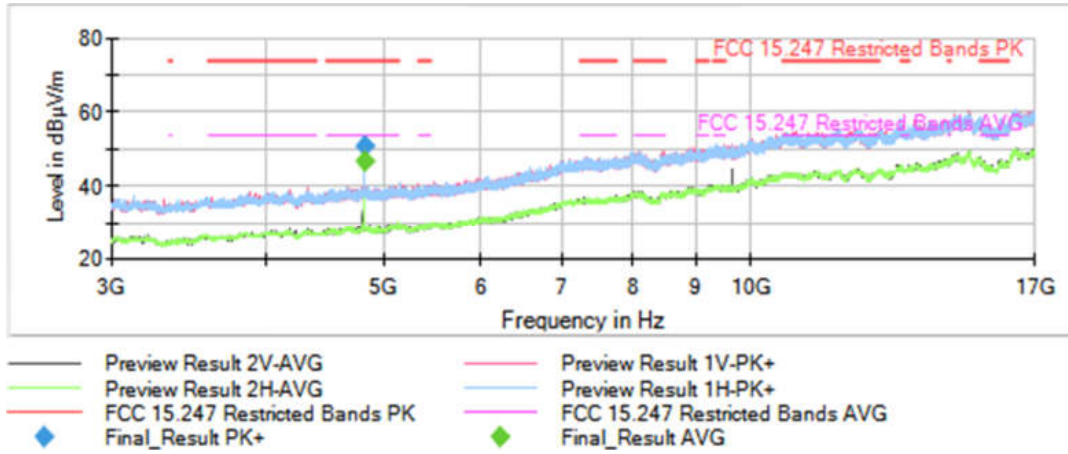
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

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

Plots:



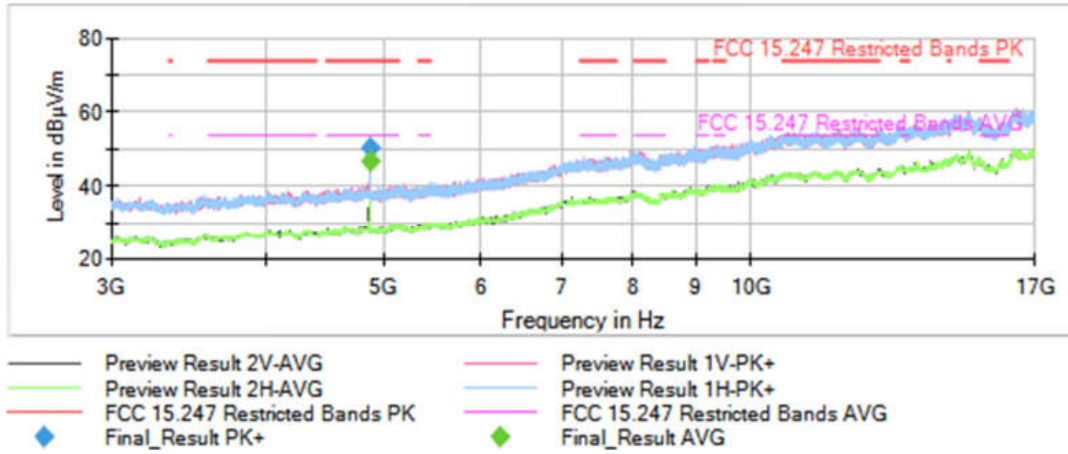
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2437.00000 Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [3, 17]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Plots:



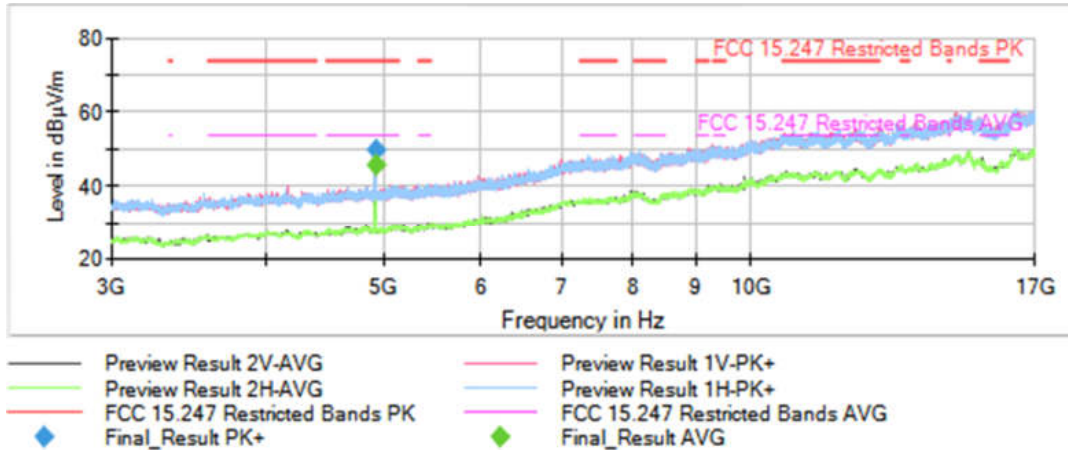
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

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

Plots:



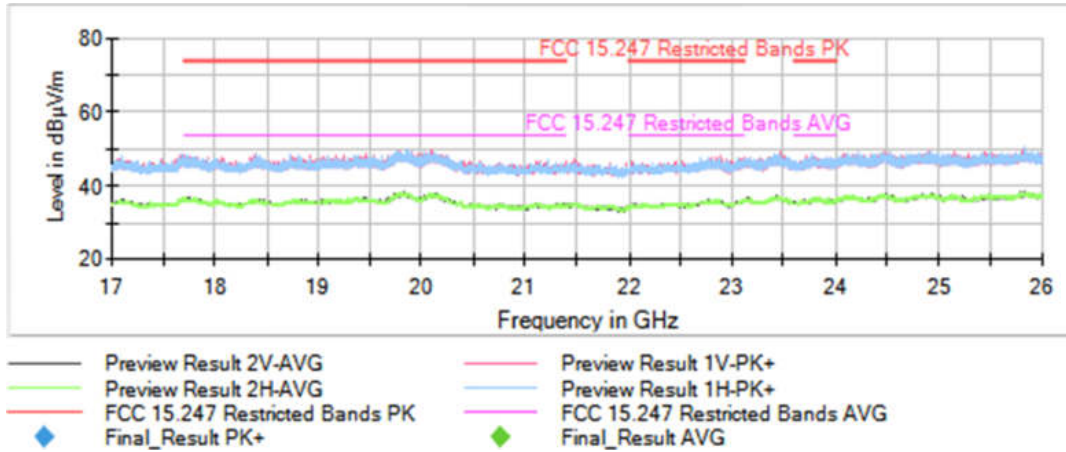
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [17, 26]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Plots:



This plot is valid for all channels

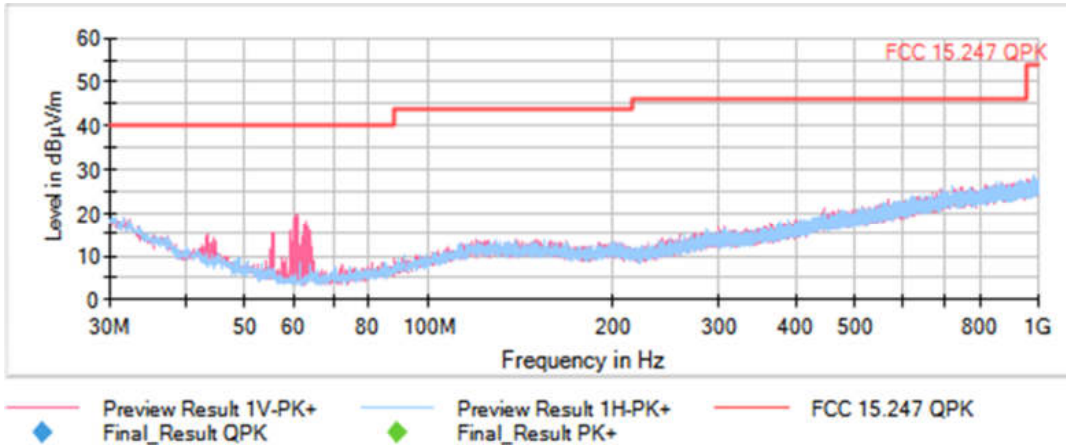
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2412.00000 Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11g (OFDM 6 Mbit/s) Frequency Range GHz = [0.03, 1]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Plots:



This plot is valid for all channels

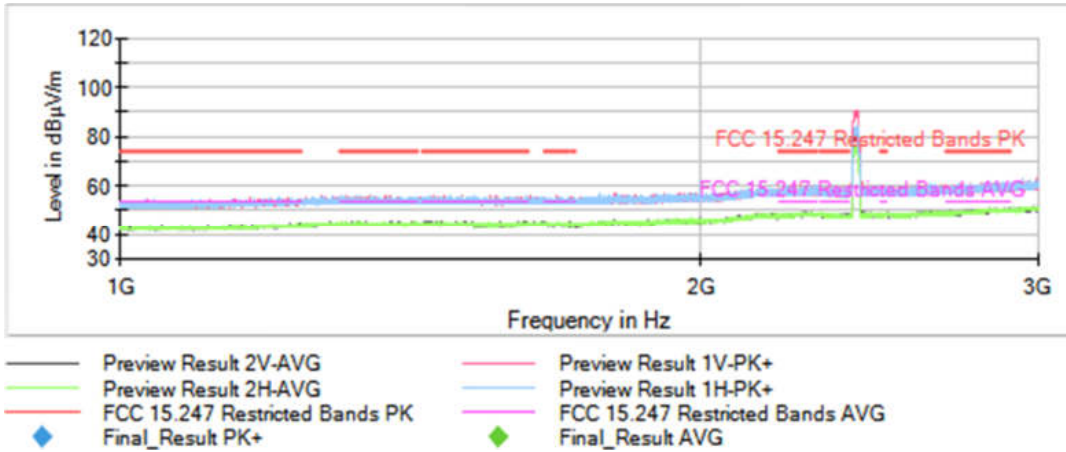
Tables:

Spectrum Analyzer Parameters

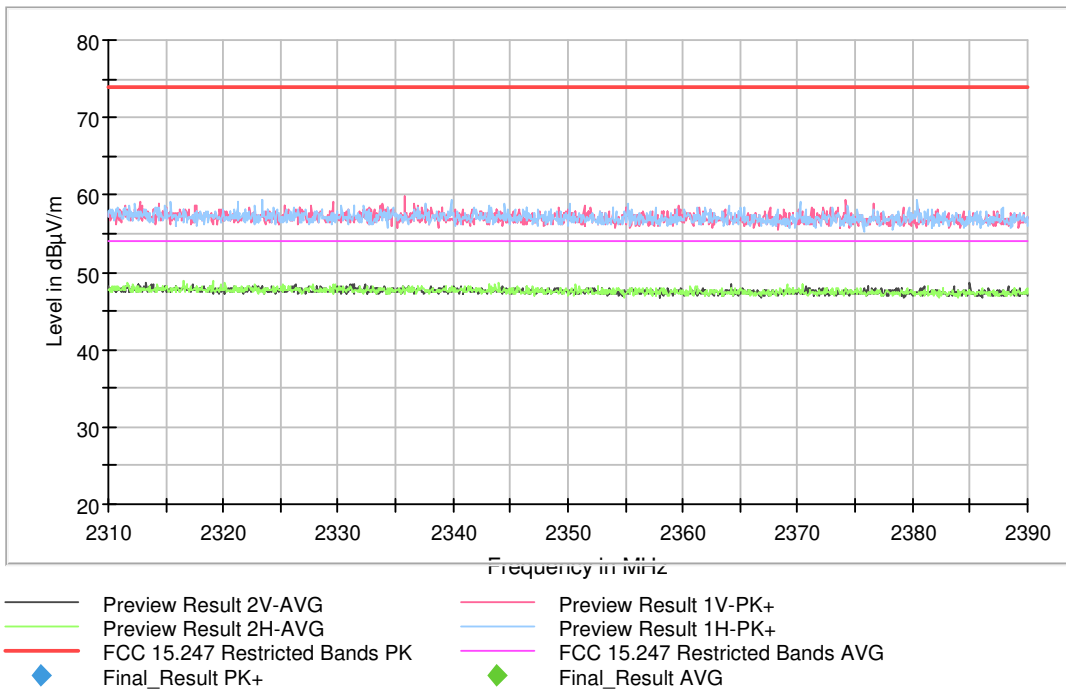
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESR 7]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

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

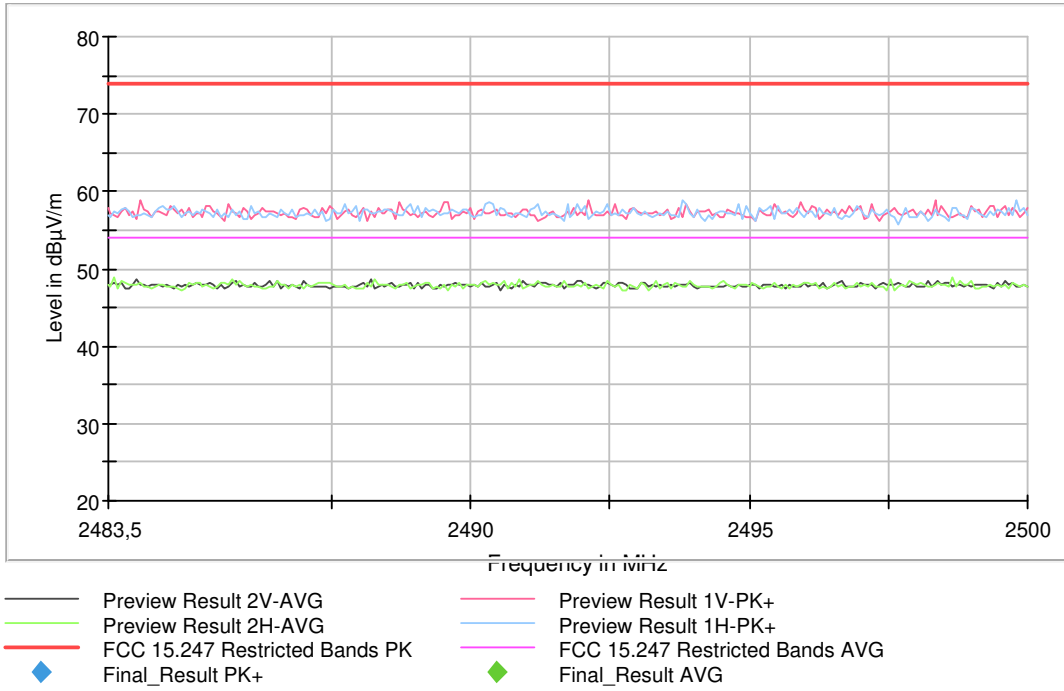
Plots:



Full Spectrum



Full Spectrum



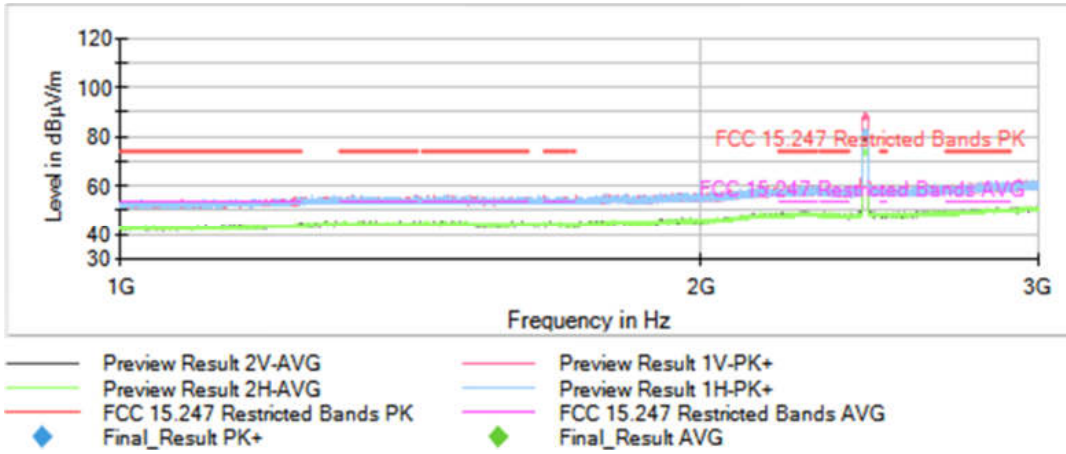
Tables:

Spectrum Analyzer Parameters

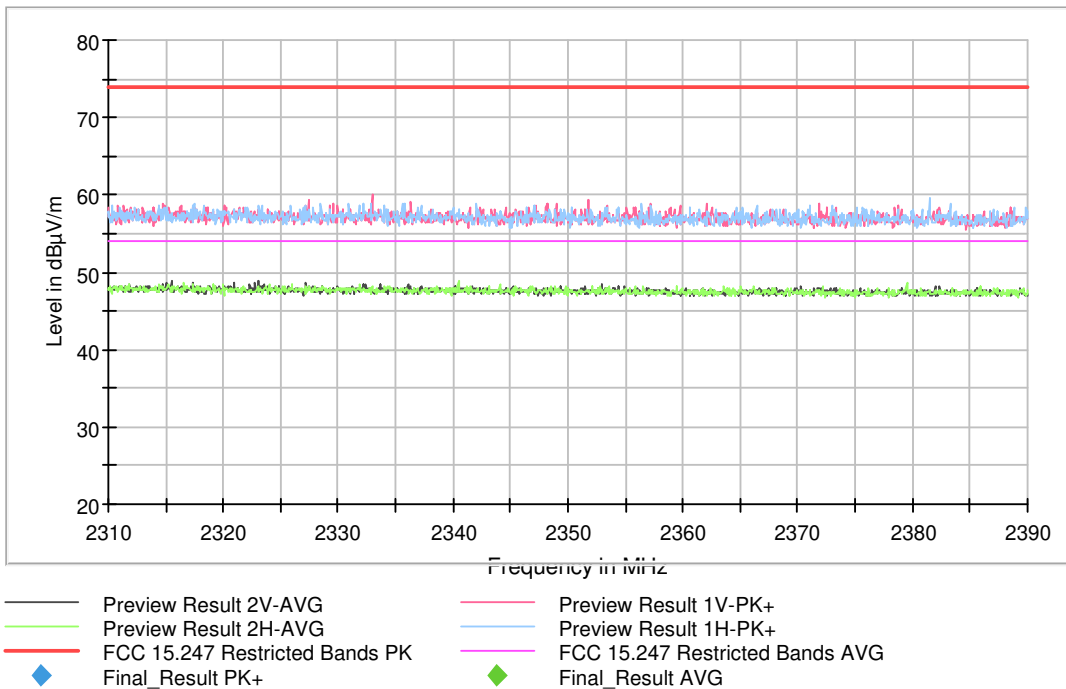
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2437.00000 Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11g (OFDM 6 Mbit/s) Frequency Range GHz = [1, 3]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

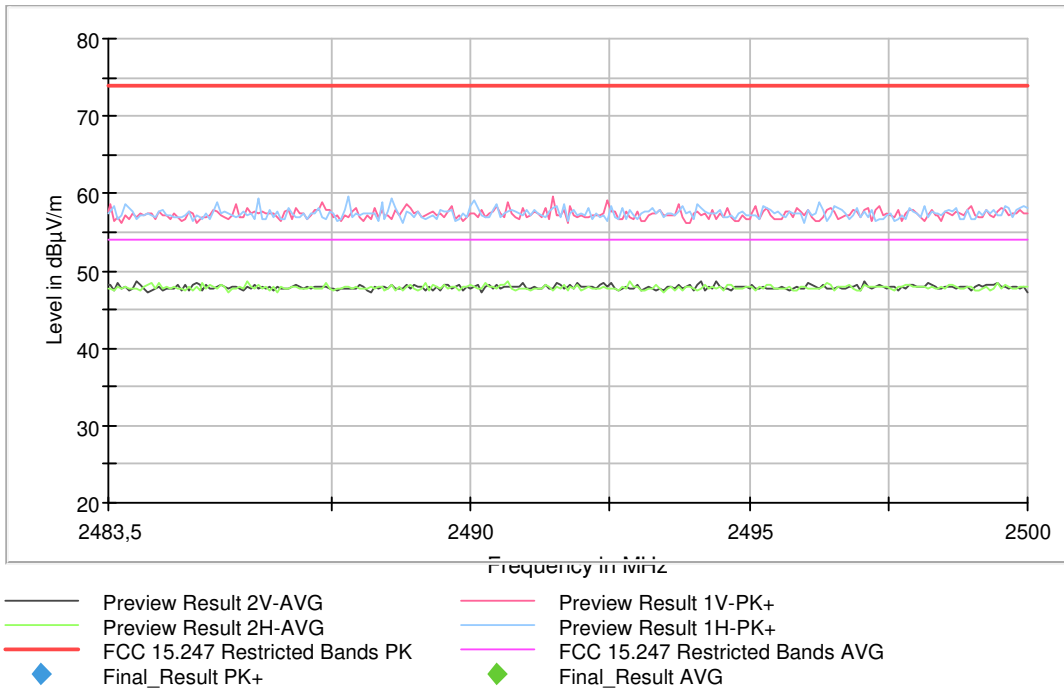
Plots:



Full Spectrum



Full Spectrum



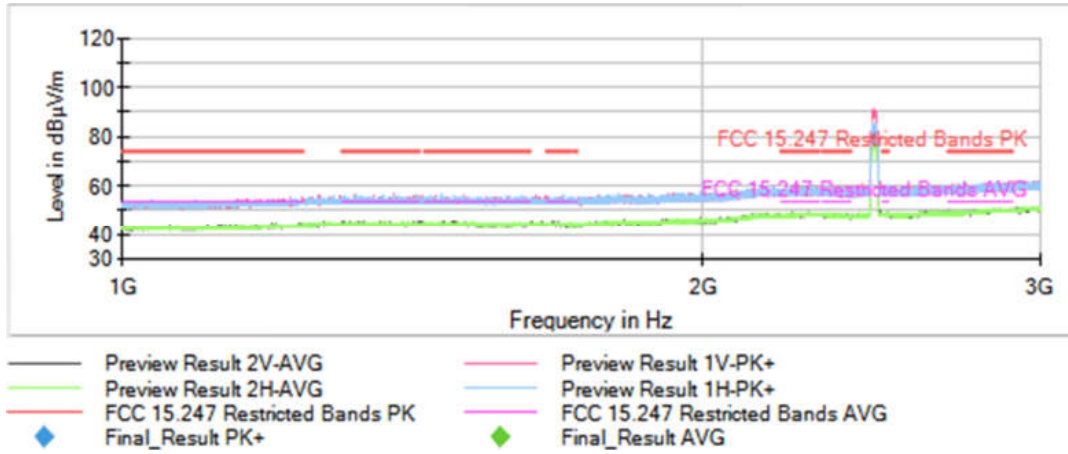
Tables:

Spectrum Analyzer Parameters

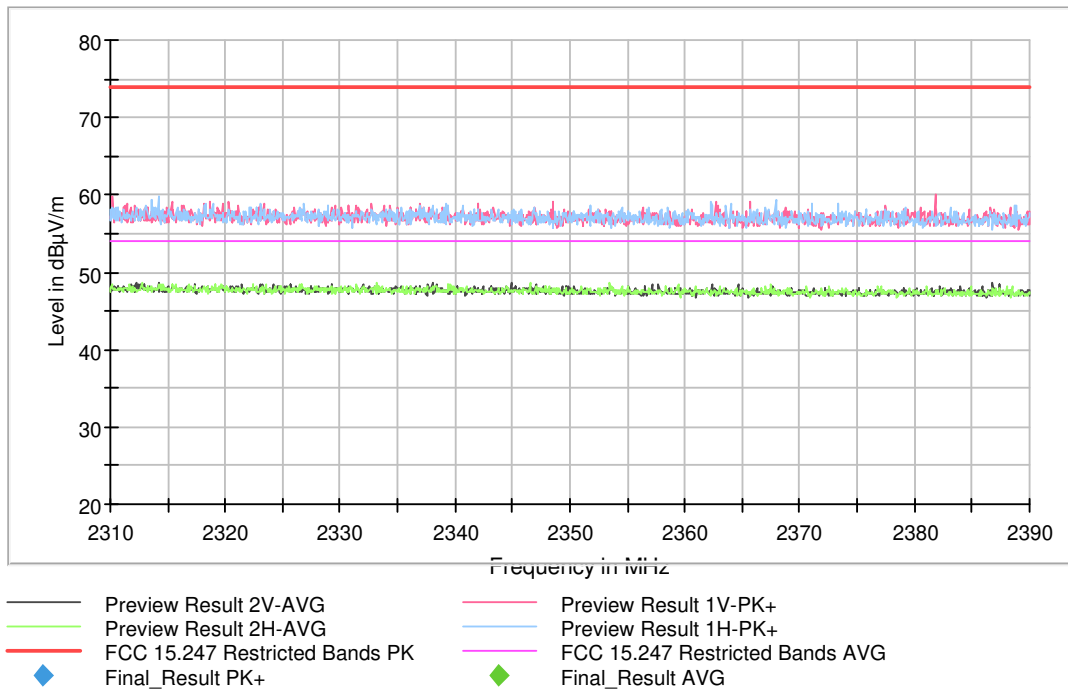
	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

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

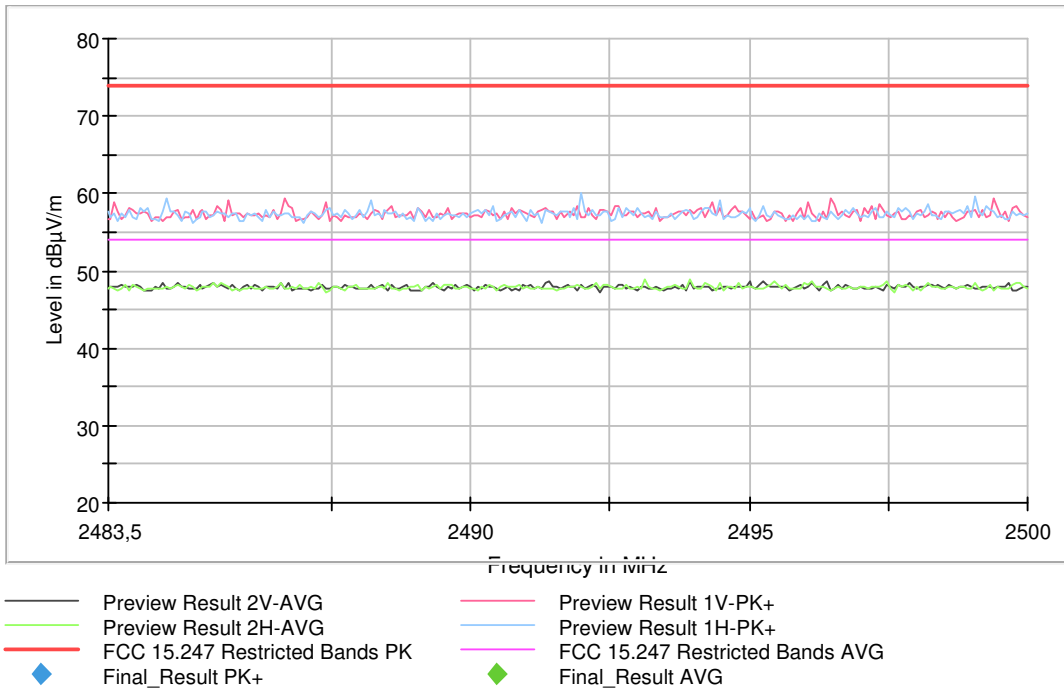
Plots:



Full Spectrum



Full Spectrum



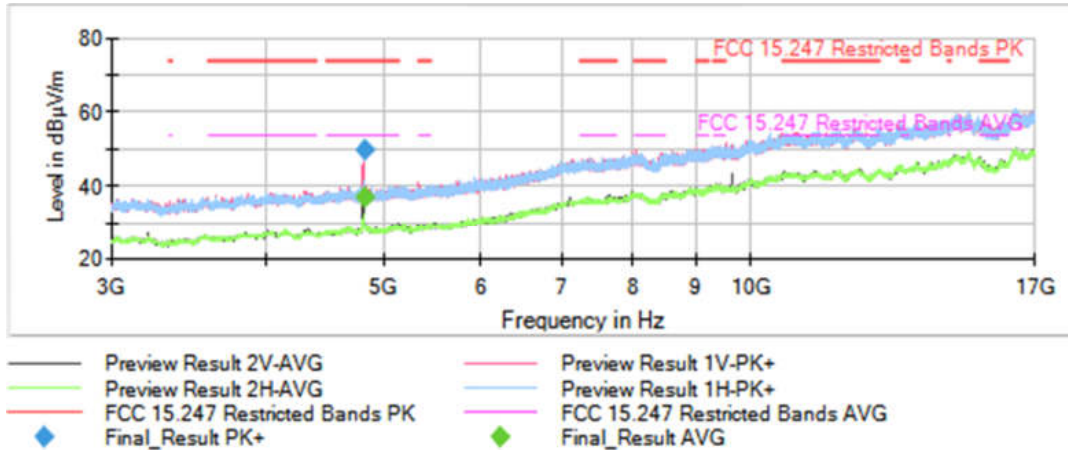
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

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

Plots:



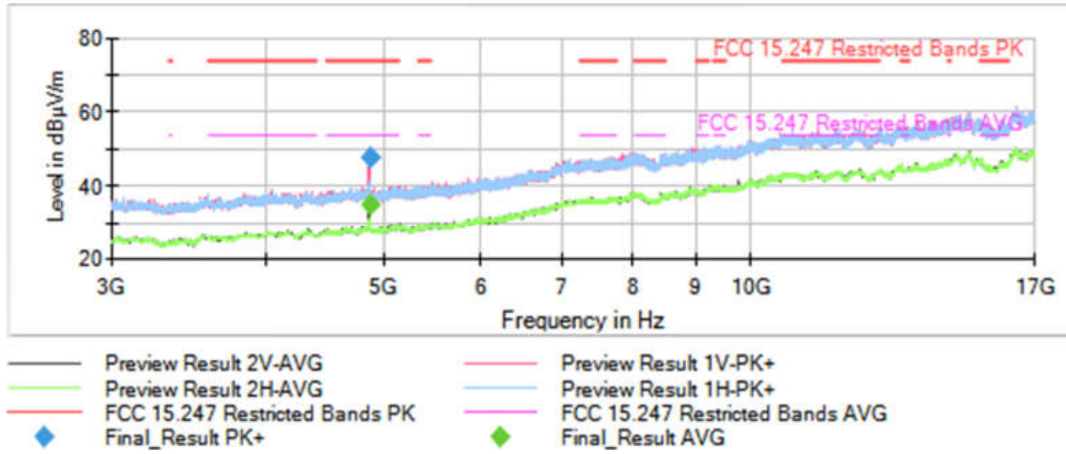
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2437.00000 Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11g (OFDM 6 Mbit/s) Frequency Range GHz = [3, 17]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Plots:



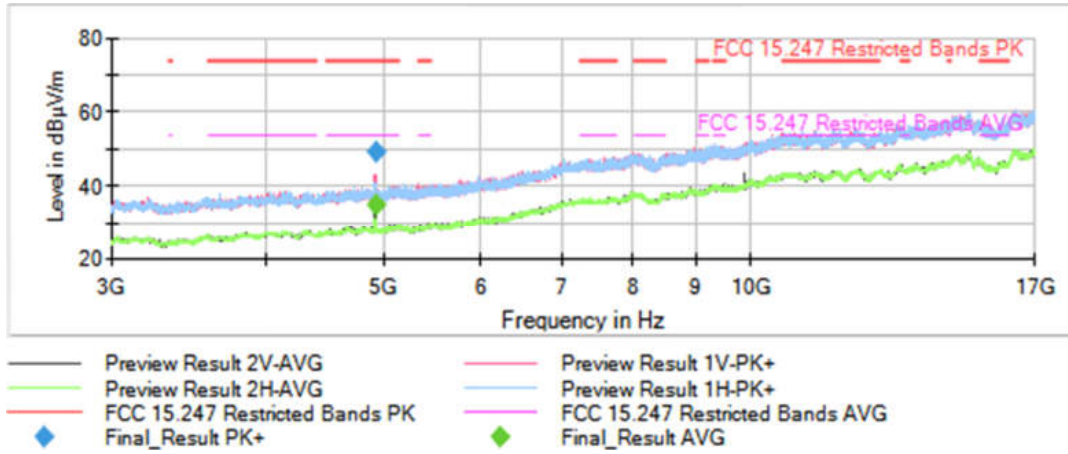
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

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

Plots:



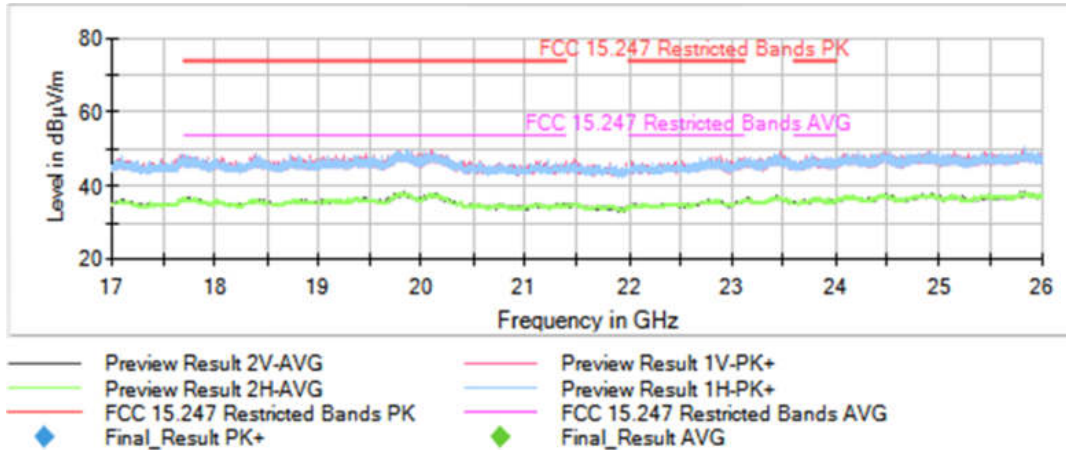
Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Equipment Type = Digital Transmission System (DTS)
 Modulation = 802.11b (DSSS 1 Mbit/s) Frequency Range GHz = [17, 26]
 Number of Transmission Chains = 1 Measurement Point = 1
 Active Port = 1

Plots:



This plot is valid for all channels

Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Equipment Type = Digital Transmission System (DTS)

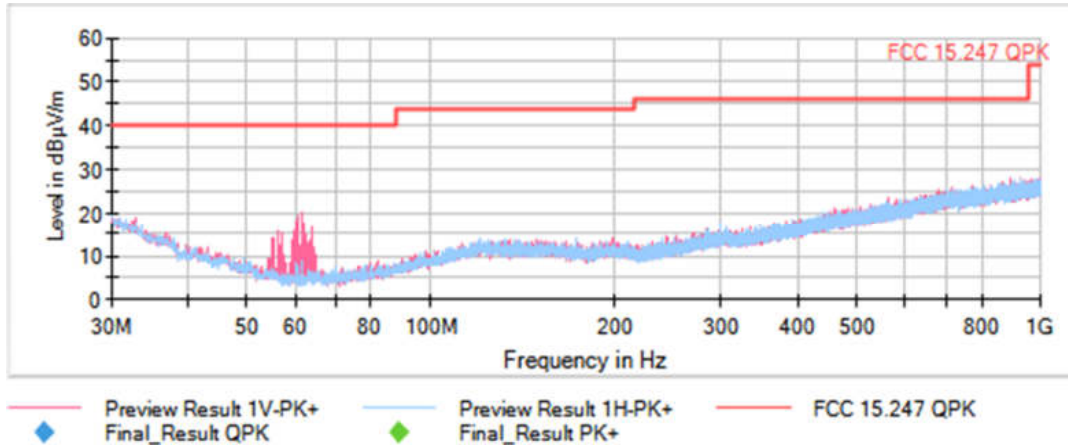
Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [0.03, 1]

Number of Transmission Chains = 1

Measurement Point = 1

Active Port = 1

Plots:



This plot is valid for all channels

Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [ESR 7]					
	30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	20 dB

Frequency MHz = 2412.00000

Equipment Type = Digital Transmission System (DTS)

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

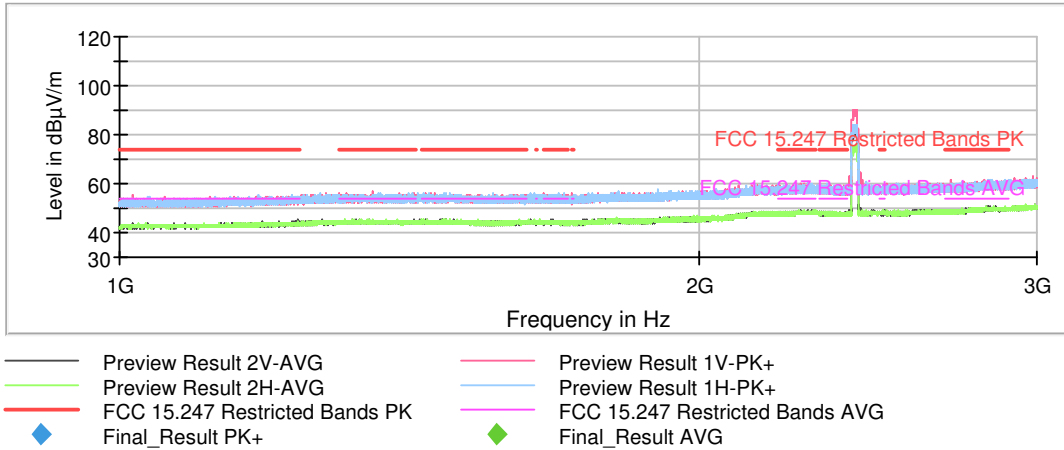
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

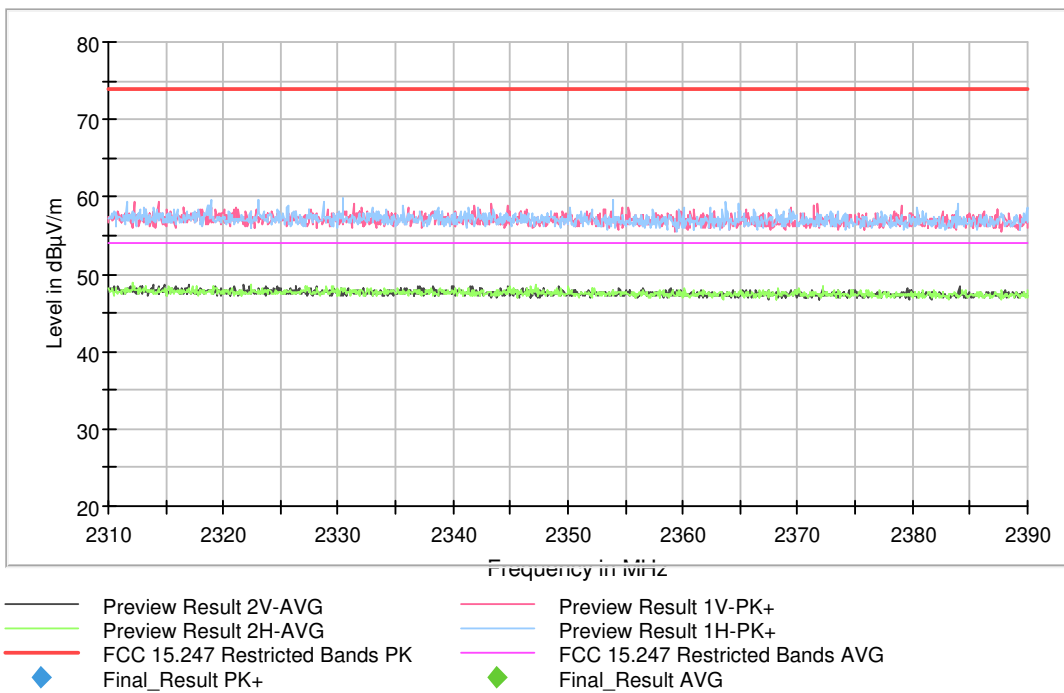
Measurement Point = 1

Active Port = 1

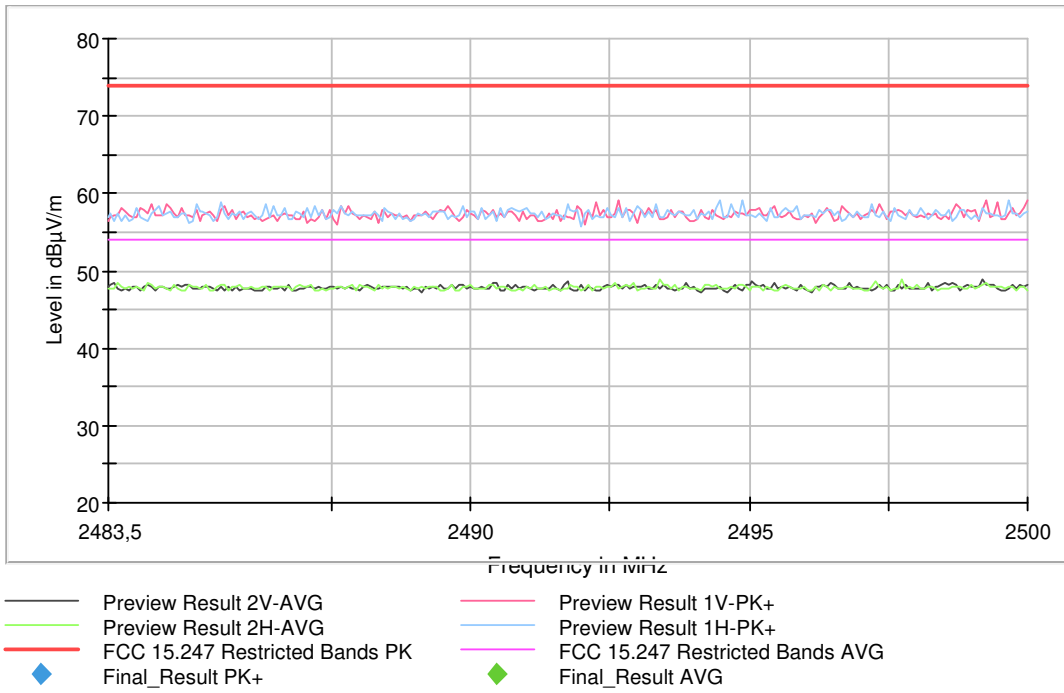
Plots:



Full Spectrum



Full Spectrum



Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2437.00000

Equipment Type = Digital Transmission System (DTS)

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

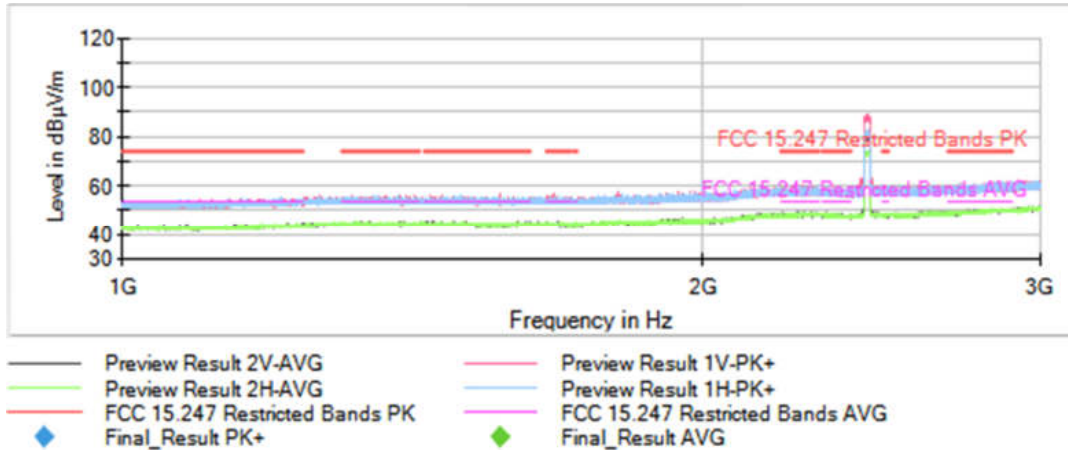
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

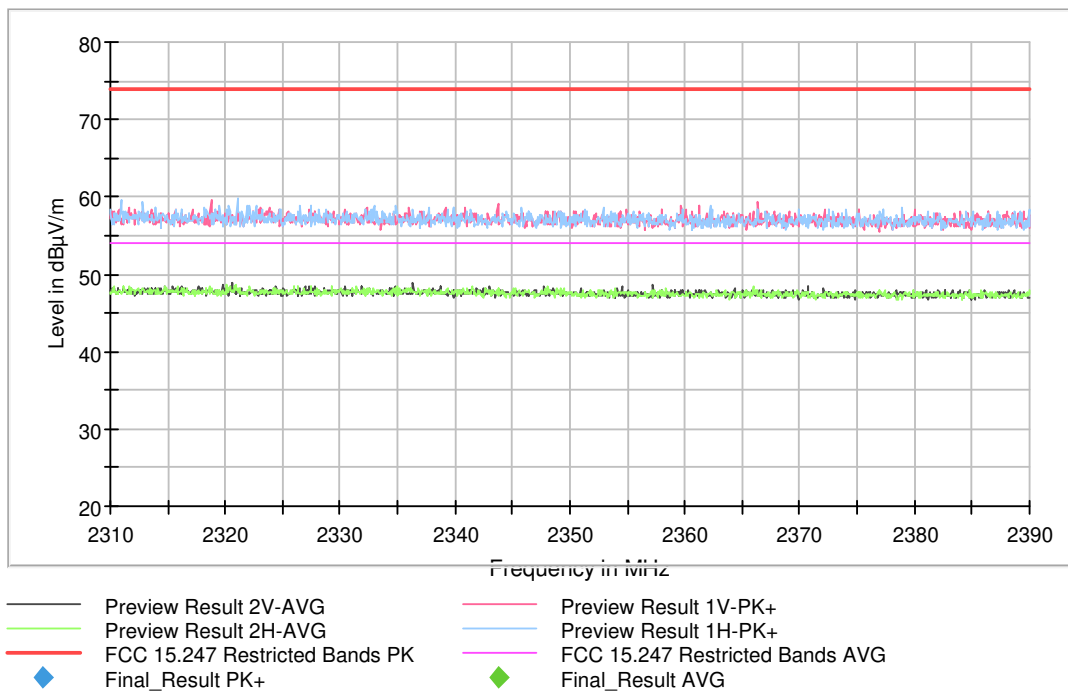
Measurement Point = 1

Active Port = 1

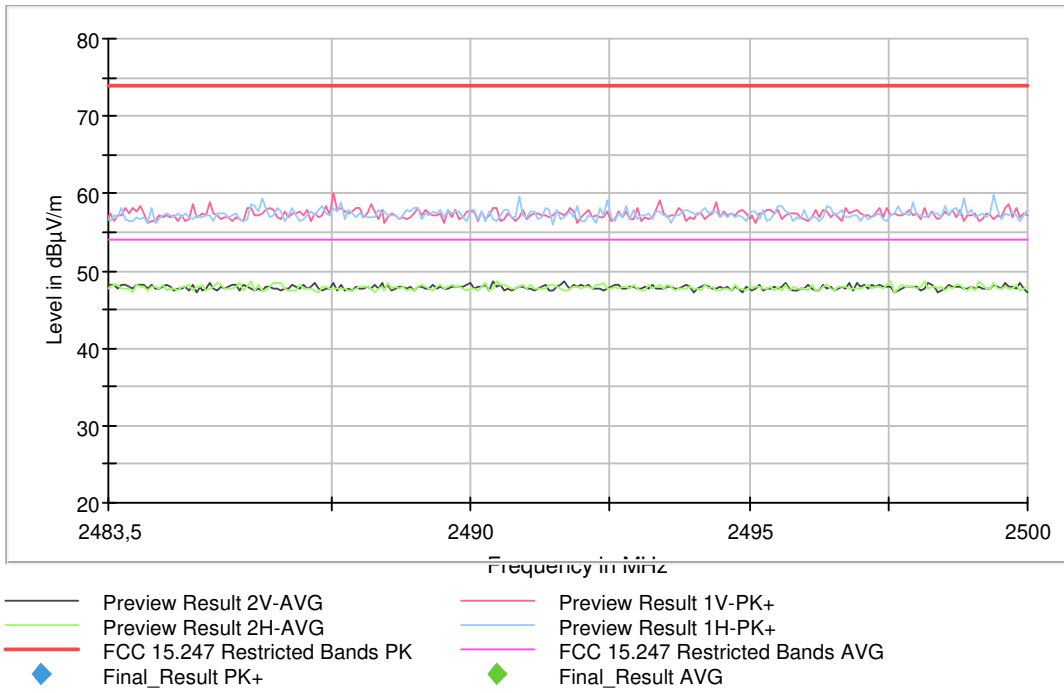
Plots:



Full Spectrum



Full Spectrum



Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2462.00000

Equipment Type = Digital Transmission System (DTS)

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

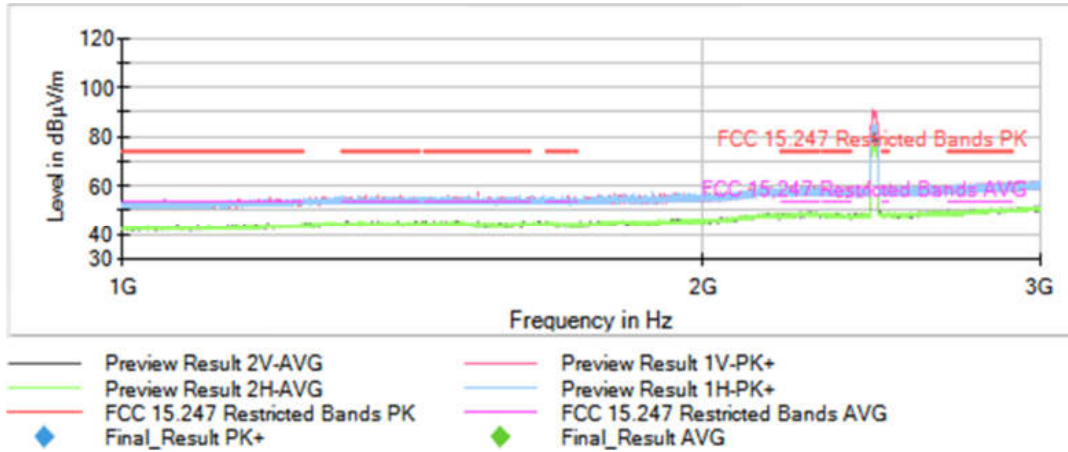
Frequency Range GHz = [1, 3]

Number of Transmission Chains = 1

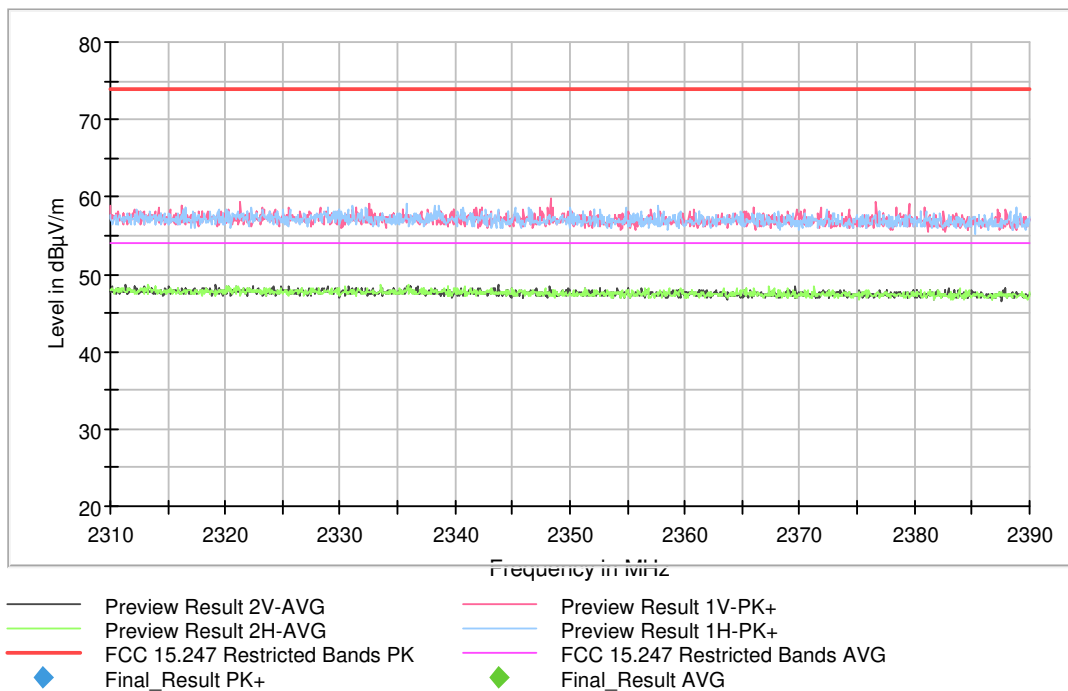
Measurement Point = 1

Active Port = 1

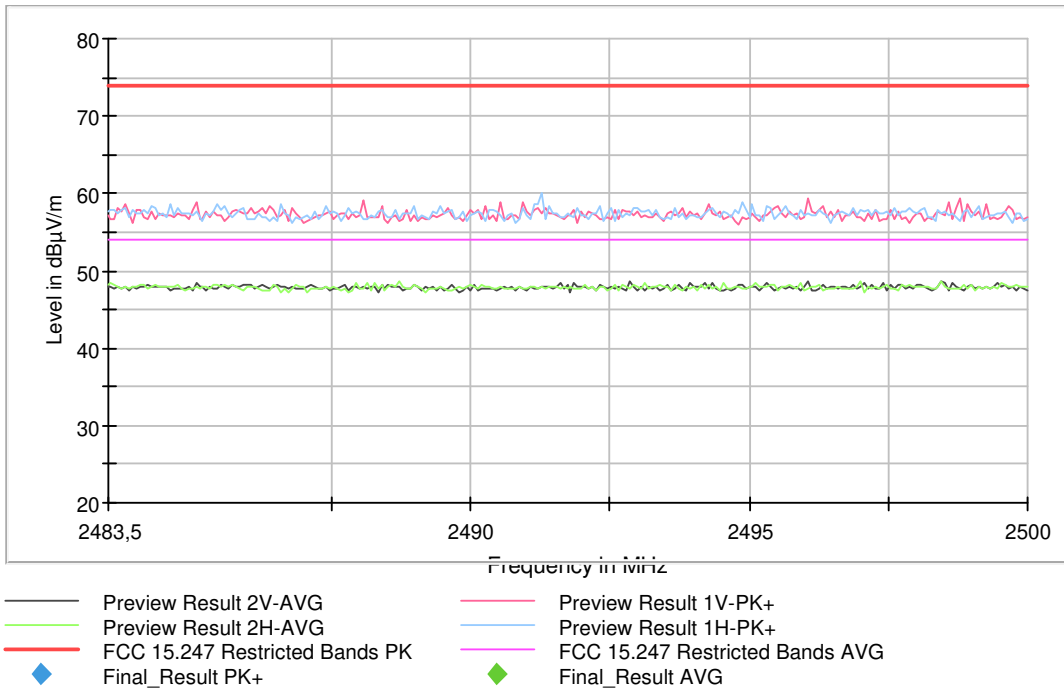
Plots:



Full Spectrum



Full Spectrum



Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	1 GHz - 3 GHz	66,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2412.00000

Equipment Type = Digital Transmission System (DTS)

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

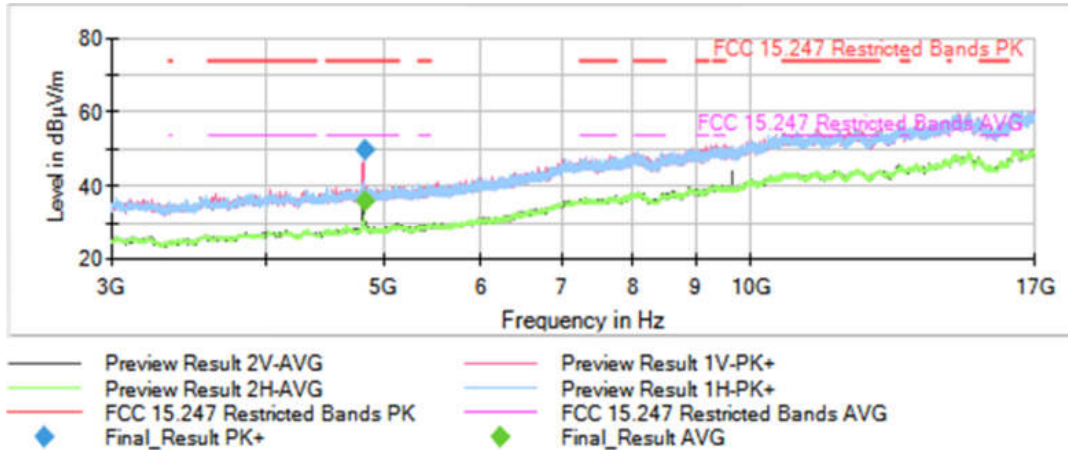
Frequency Range GHz = [3, 17]

Number of Transmission Chains = 1

Measurement Point = 1

Active Port = 1

Plots:



Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2437.00000

Equipment Type = Digital Transmission System (DTS)

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

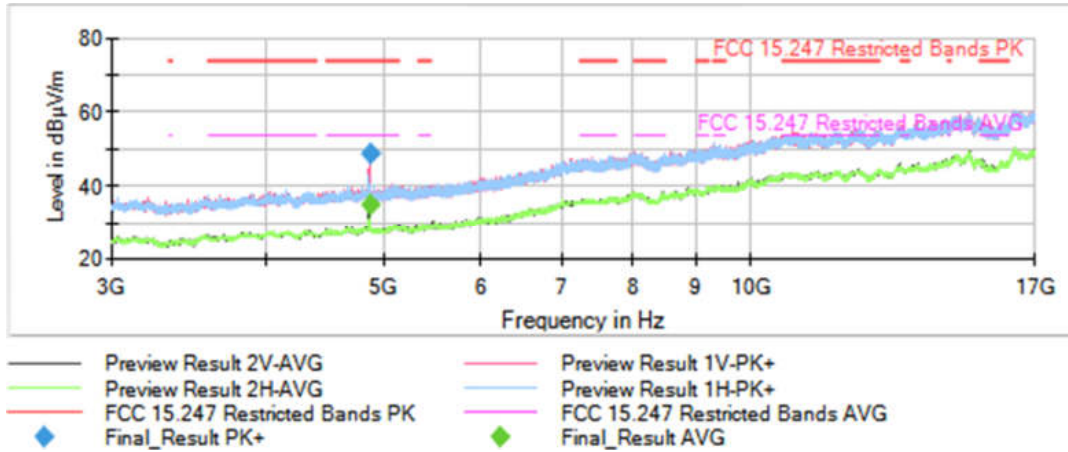
Frequency Range GHz = [3, 17]

Number of Transmission Chains = 1

Measurement Point = 1

Active Port = 1

Plots:



Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Frequency MHz = 2462.00000

Equipment Type = Digital Transmission System (DTS)

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

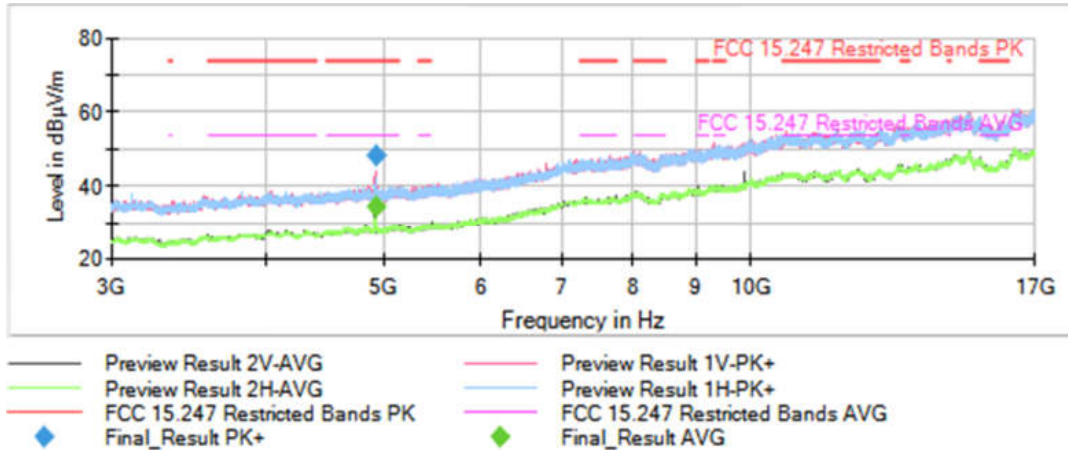
Frequency Range GHz = [3, 17]

Number of Transmission Chains = 1

Measurement Point = 1

Active Port = 1

Plots:



Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	3 GHz - 17 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

Equipment Type = Digital Transmission System (DTS)

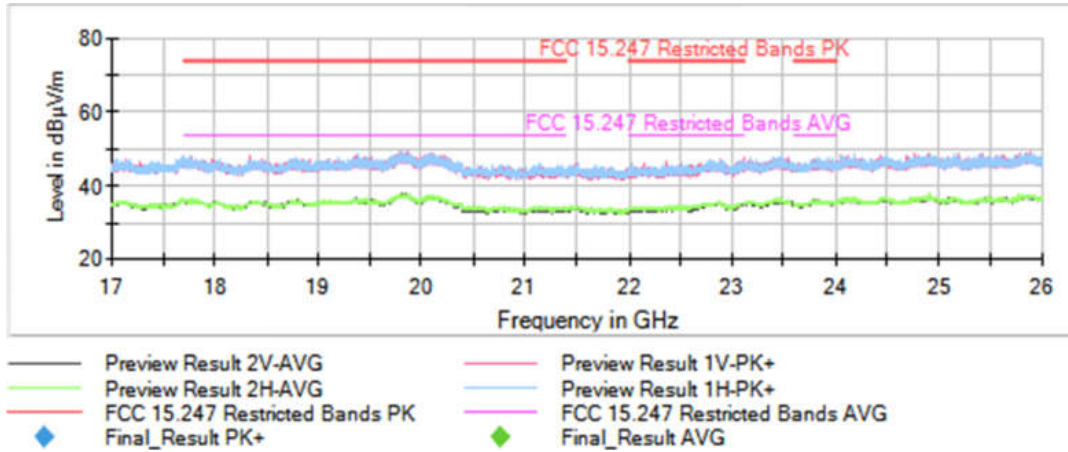
Modulation = 802.11n HT20 (OFDM MCS0 6.5 Mbit/s) Frequency Range GHz = [17, 26]

Number of Transmission Chains = 1

Measurement Point = 1

Active Port = 1

Plots:



This plot is valid for all channels

Tables:

Spectrum Analyzer Parameters

	Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
	Receiver: [FSV 40]					
	17 GHz - 26 GHz	500 kHz	PK+ ; AVG	1 MHz	1 s	0 dB