

9.6 Conducted Spurious Emissions

9.6.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (d)
ISED RSS-247 [5.5]

9.6.2 Test Method:

Measurements were performed according to the procedure defined in KDB 558074 - Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 V03R05 and ANSI C63.10 2013.

Spectrum Analyzer settings:

Identification of Reference Level:

RBW= 100 kHz
VBW $\geq 3 \times$ RBW
Trace Mode= Peak Detector (Max Hold)
Sweep time= Auto
Span >1.5 times DTS Bandwidth
Peak Marker function to determine the max PSD level.

Conducted Spurious Emissions:

RBW= 1 MHz
VBW $\geq 3 \times$ RBW = 3 MHz
Trace Mode= Peak Detector (Max Hold)
Sweep time= Auto
Span= 30 MHz- 12 GHz; 12 GHz – 25 GHz
Sweep Points= 30000

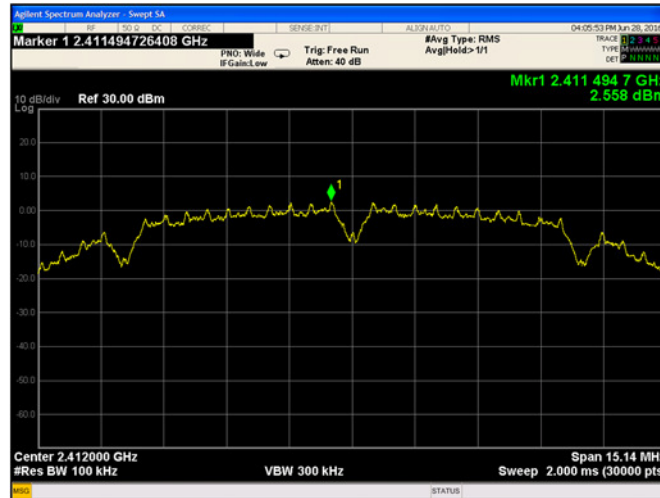
9.6.3 Limits:

All spurious emissions at least 20 dBc.

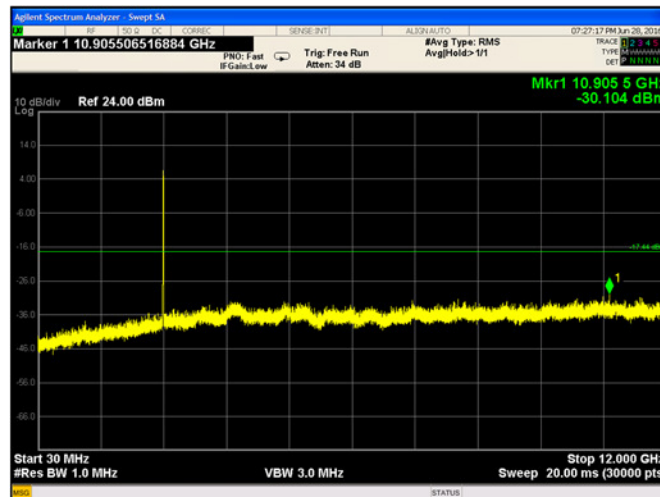
9.6.4 Test Result:

Pass.

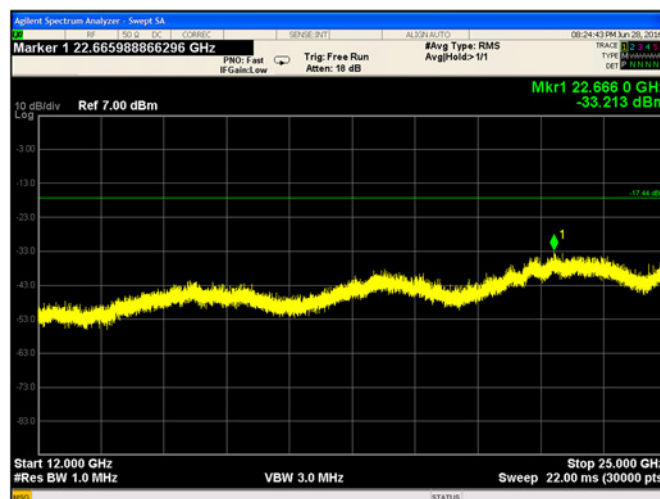
9.6.5 Test Data:



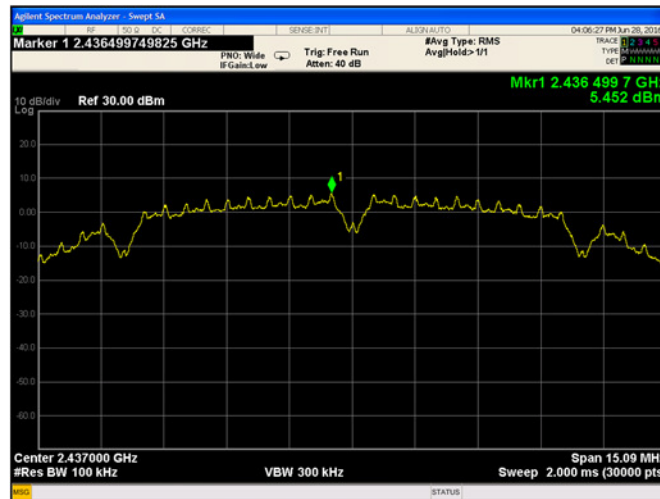
Plot 9-76 Chain A Reference Level 802.11b - Ch.1 (2412 MHz)



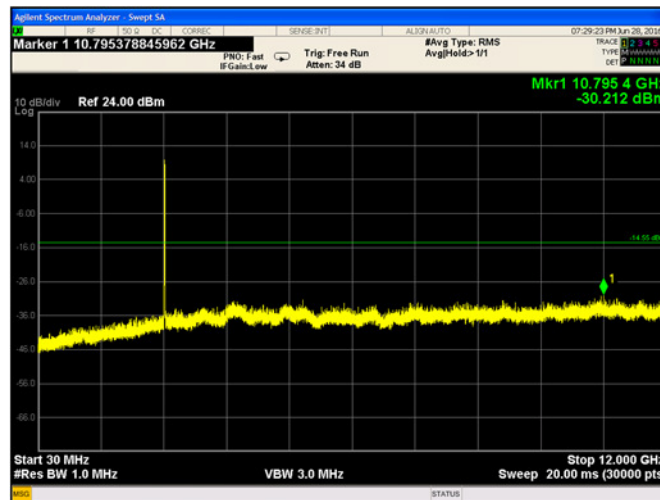
Plot 9-77 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11b - Ch.1 (2412 MHz)



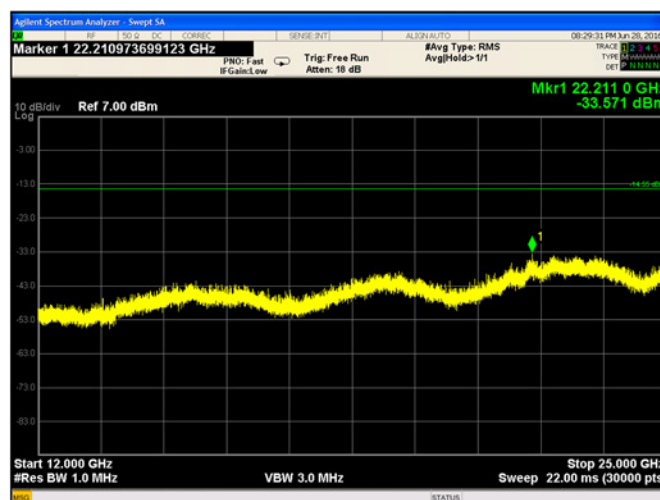
Plot 9-78 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.1 (2412 MHz)



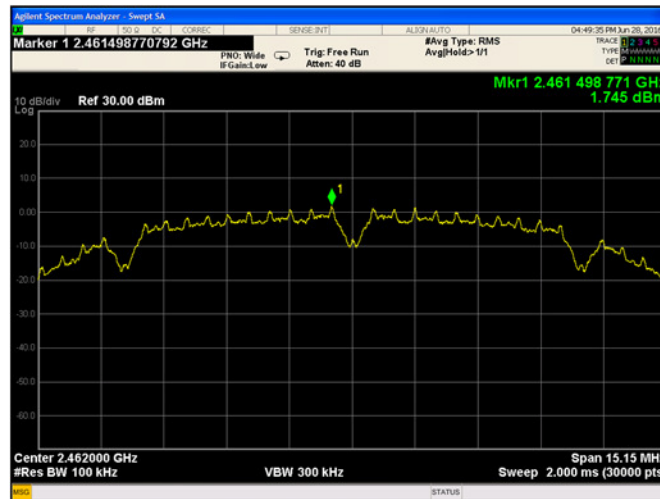
Plot 9-79 Chain A Reference Level 802.11b - Ch.6 (2437 MHz)



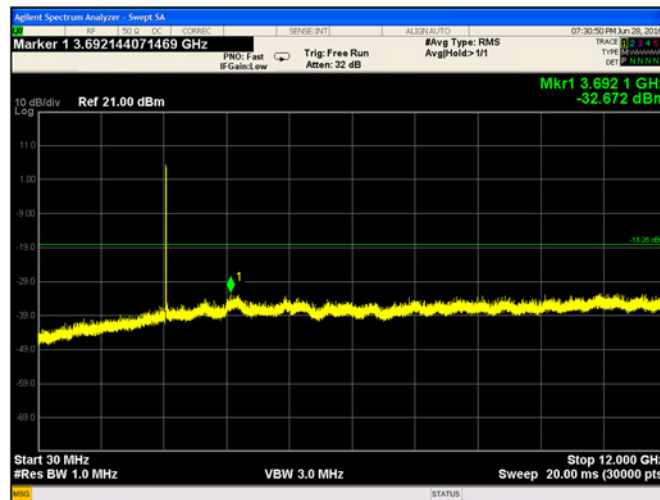
Plot 9-80 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11b - Ch.6 (2437 MHz)



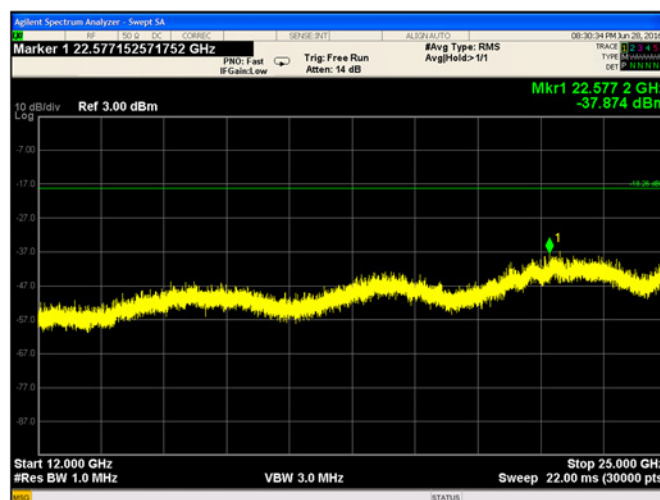
Plot 9-81 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.6 (2437 MHz)



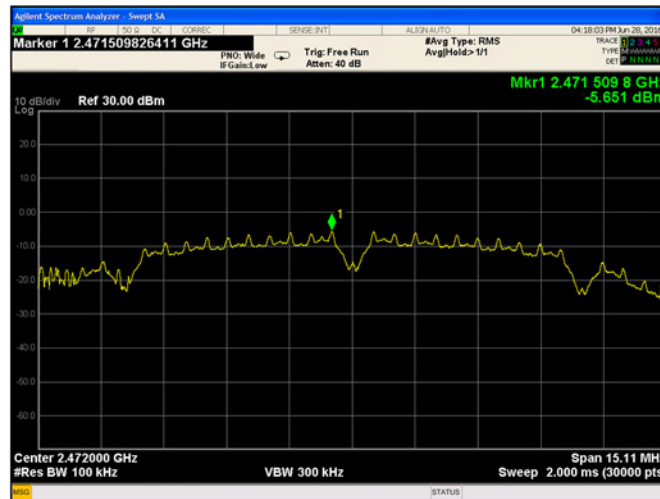
Plot 9-82 Chain A Reference Level 802.11b - Ch.11 (2462 MHz)



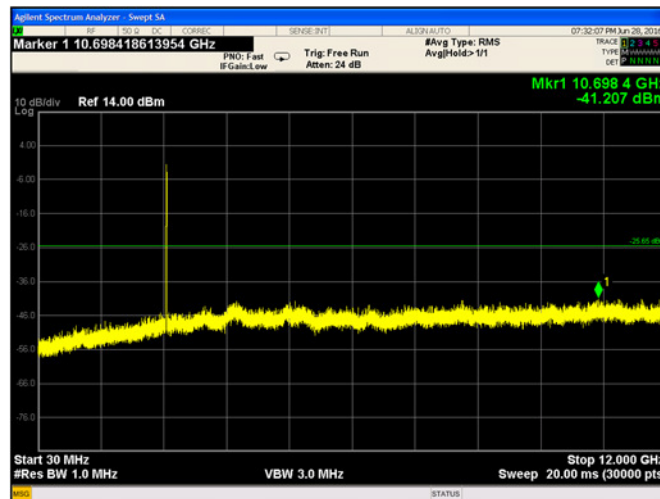
Plot 9-83 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11b - Ch.11 (2462 MHz)



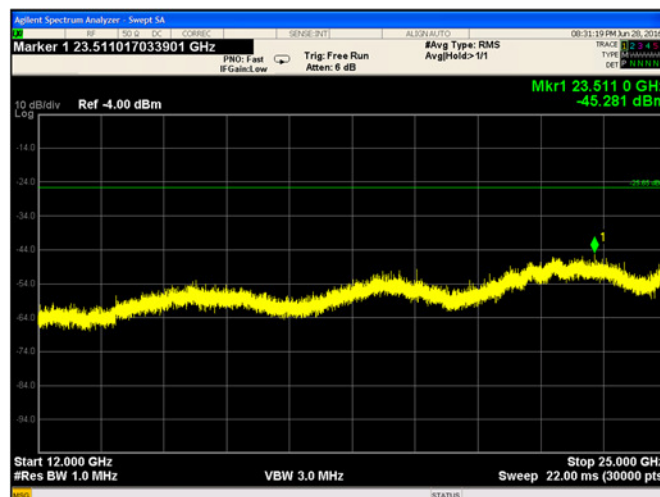
Plot 9-84 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.11 (2462 MHz)



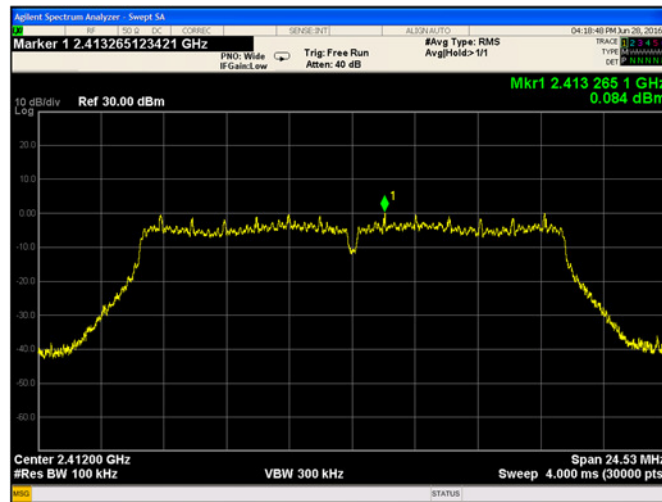
Plot 9-85 Chain A Reference Level 802.11b - Ch.13 (2472 MHz)



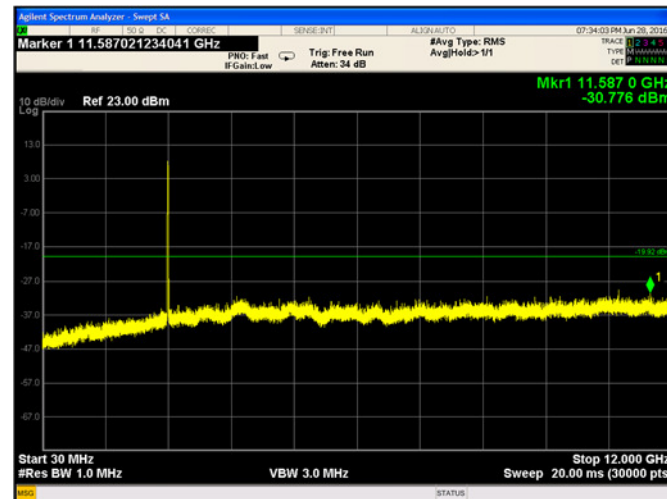
Plot 9-86 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11b - Ch.13 (2472 MHz)



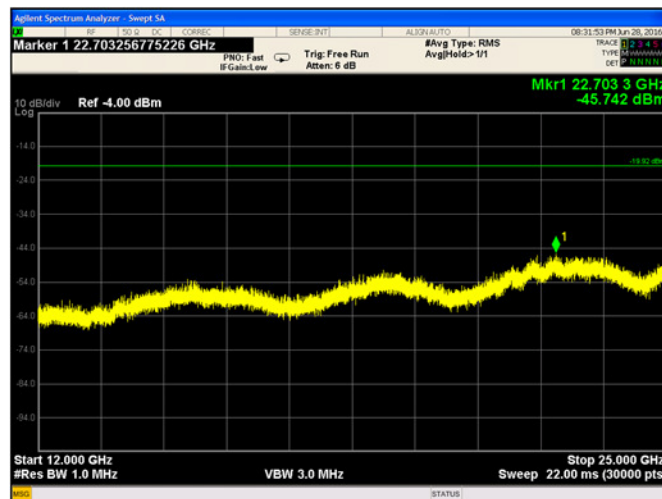
Plot 9-87 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.13 (2472 MHz)



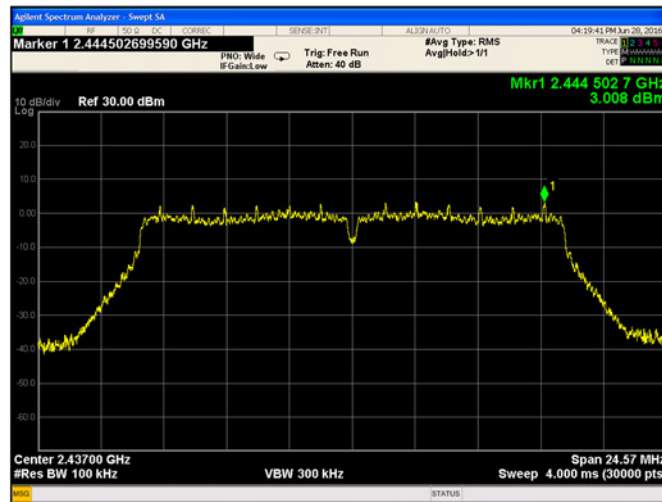
Plot 9-88 Chain A Reference Level 802.11g - Ch.1 (2412 MHz)



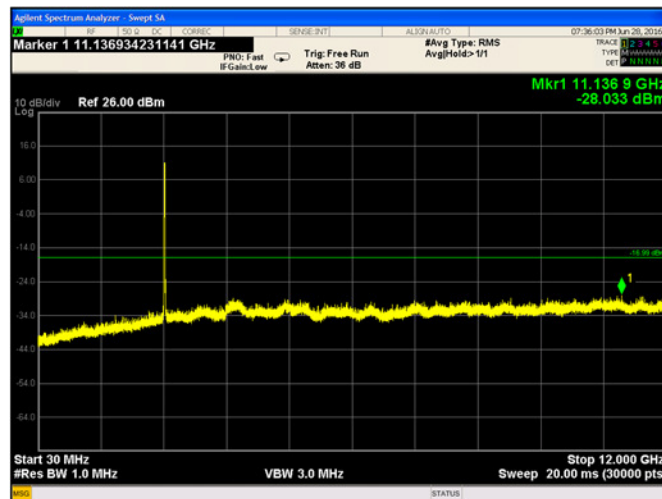
Plot 9-89 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.1 (2412 MHz)



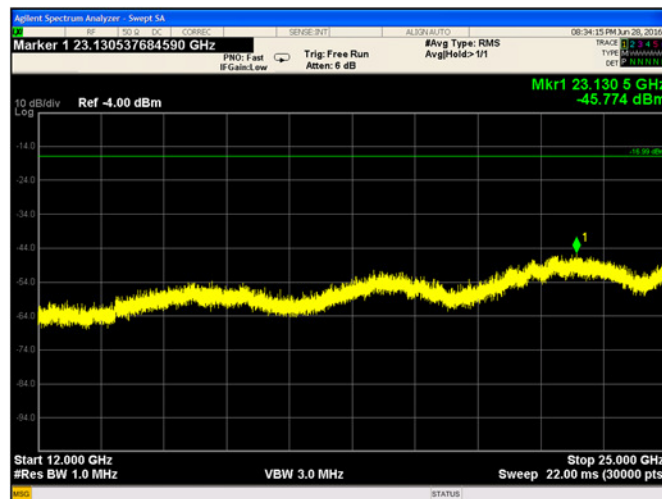
Plot 9-90 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.1 (2412 MHz)



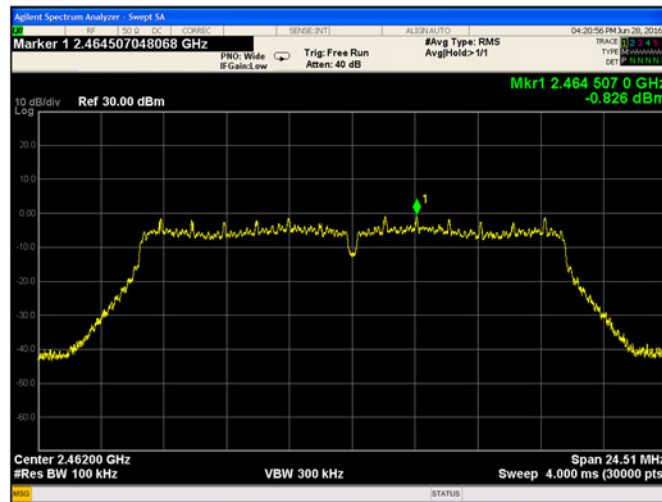
Plot 9-91 Chain A Reference Level 802.11g - Ch.6 (2437 MHz)



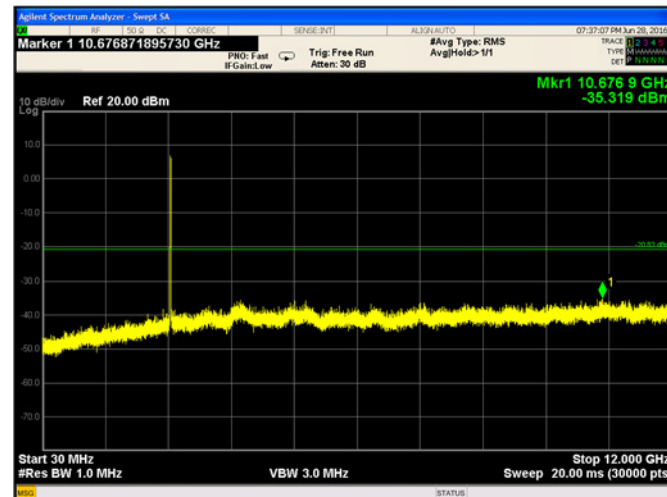
Plot 9-92 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.6 (2437 MHz)



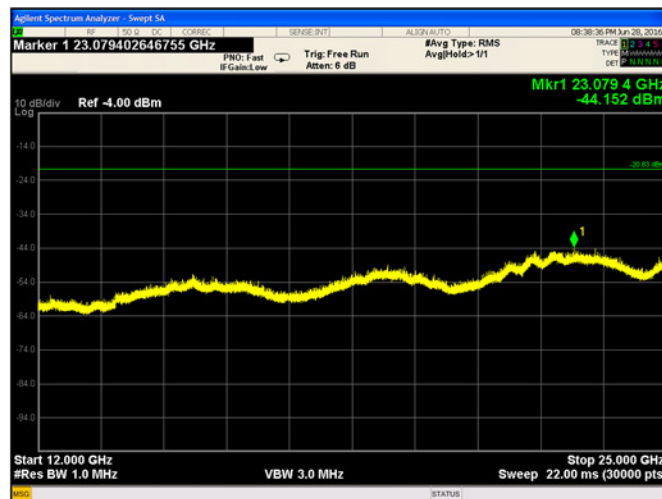
Plot 9-93 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.6 (2437 MHz)



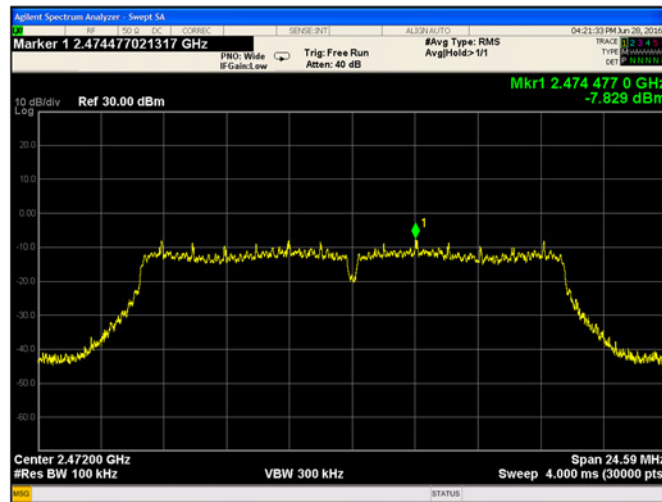
Plot 9-94 Chain A Reference Level 802.11g - Ch.11 (2462 MHz)



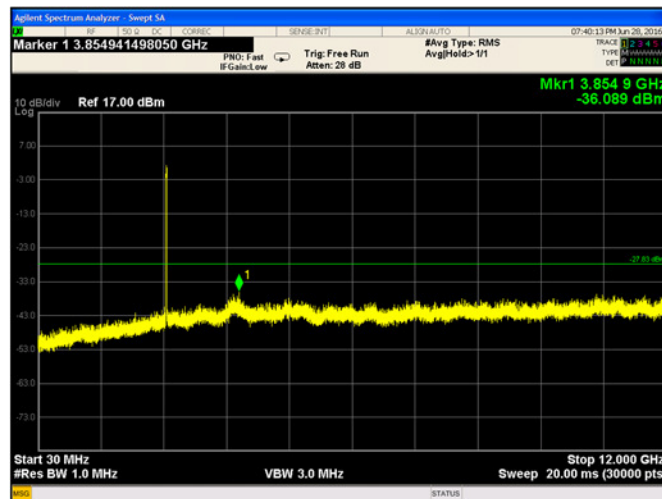
Plot 9-95 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.11 (2462 MHz)



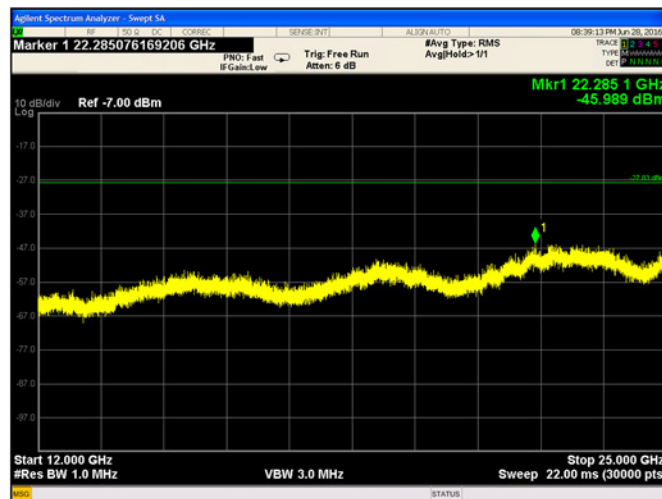
Plot 9-96 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.11 (2462 MHz)



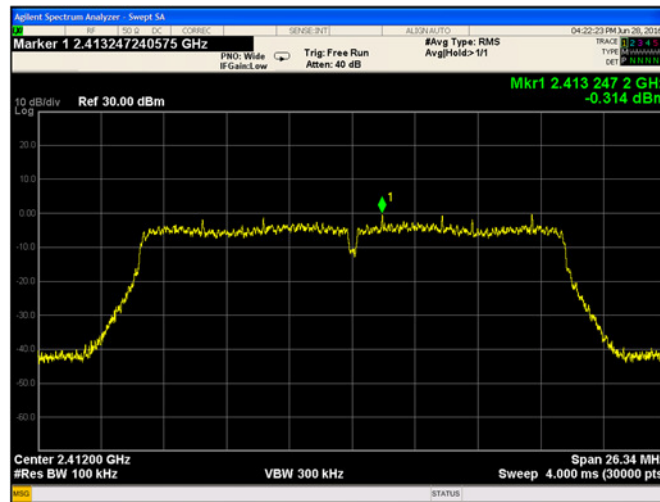
Plot 9-97 Chain A Reference Level 802.11g - Ch.13 (2472 MHz)



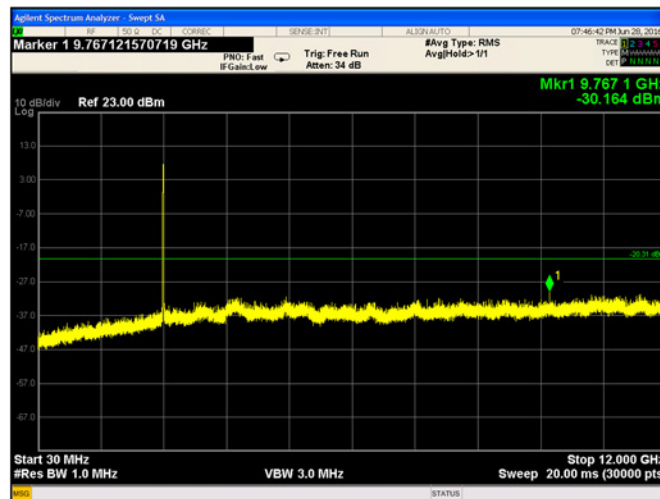
Plot 9-98 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.13 (2472 MHz)



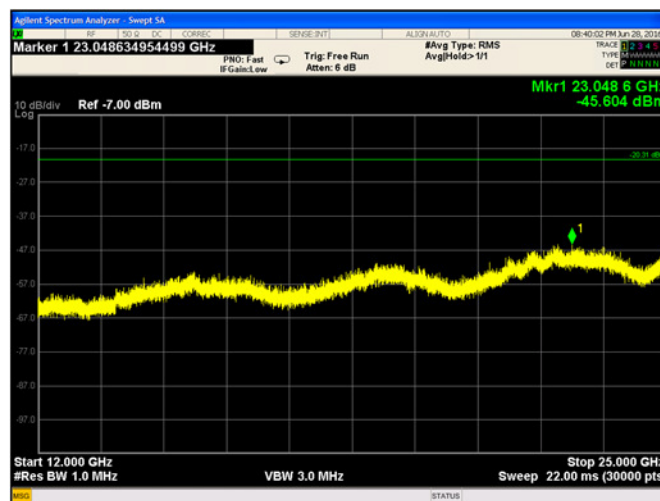
Plot 9-99 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.13 (2472 MHz)



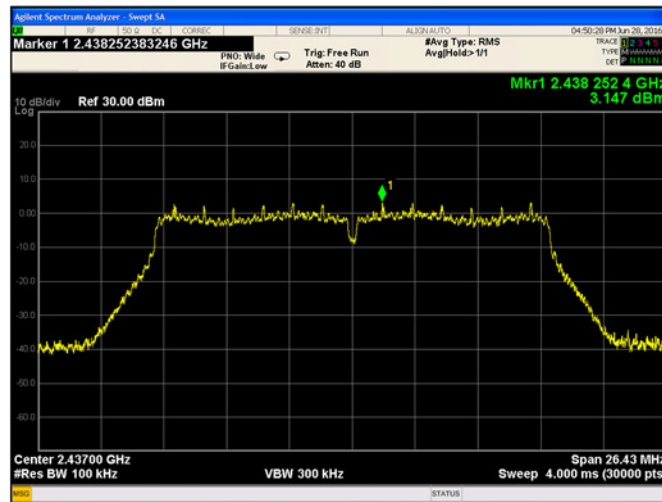
Plot 9-100 Chain A Reference Level 802.11n - Ch.1 (2412 MHz)



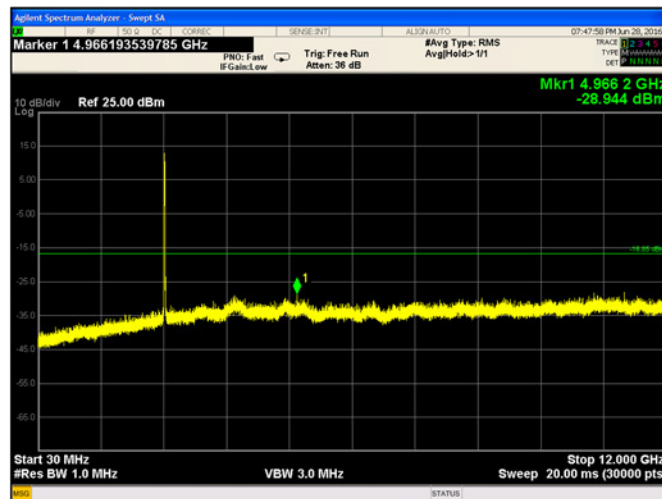
Plot 9-101 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.1 (2412 MHz)



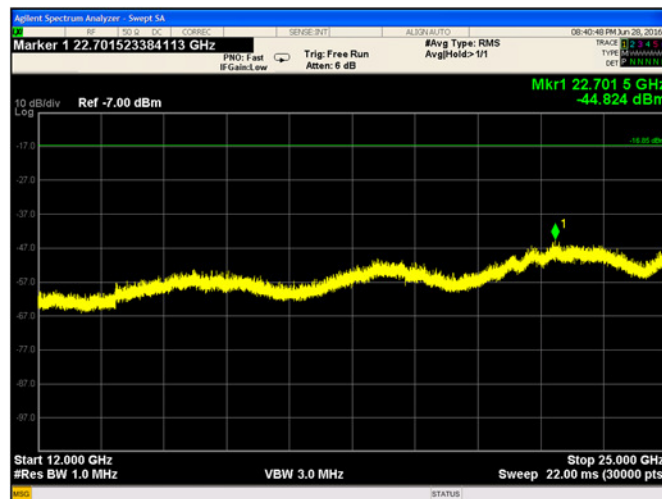
Plot 9-102 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.1 (2412 MHz)



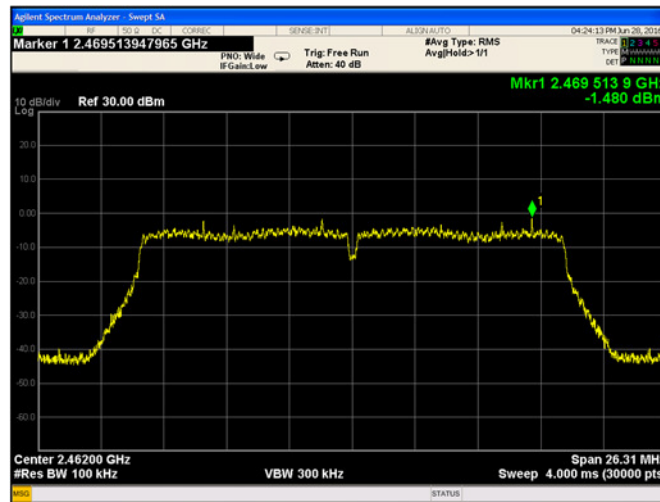
Plot 9-103 Chain A Reference Level 802.11n - Ch.6 (2437 MHz)



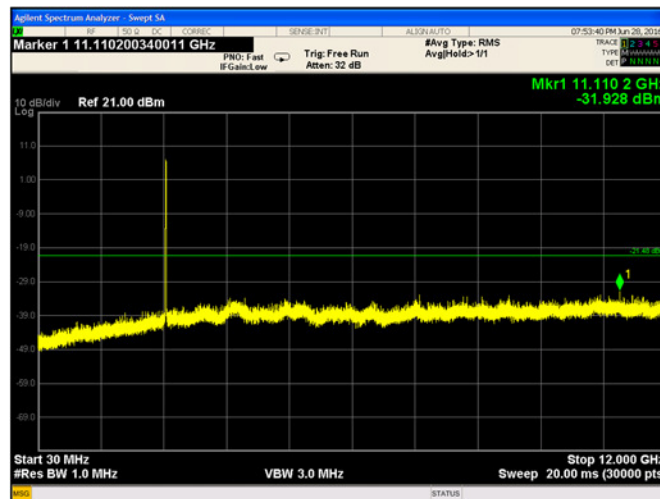
Plot 9-104 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.6 (2437 MHz)



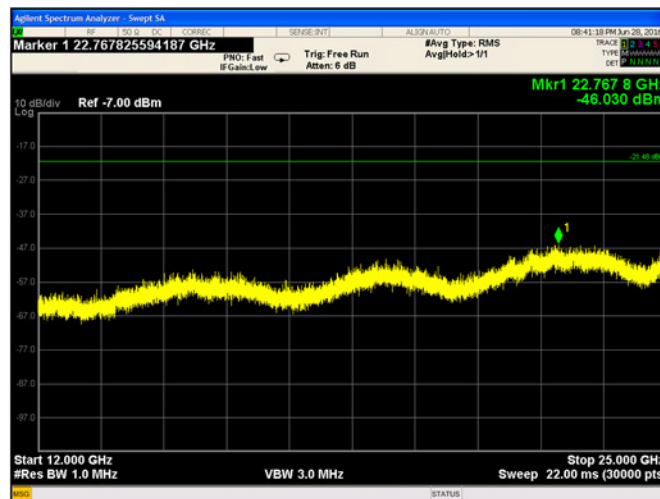
Plot 9-105 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.6 (2437 MHz)



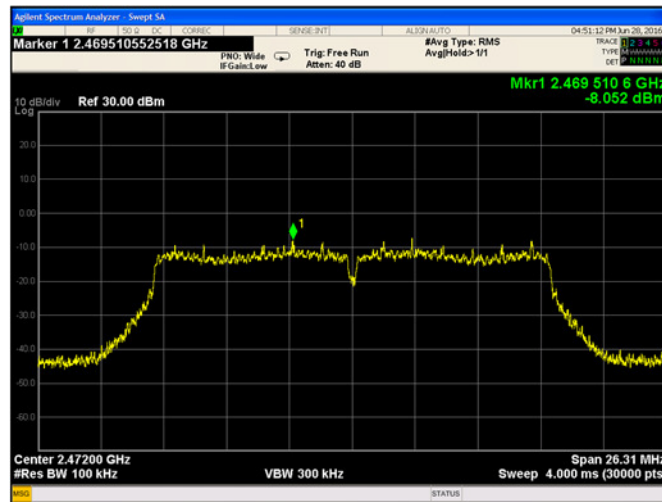
Plot 9-106 Chain A Reference Level 802.11n - Ch.11 (2462 MHz)



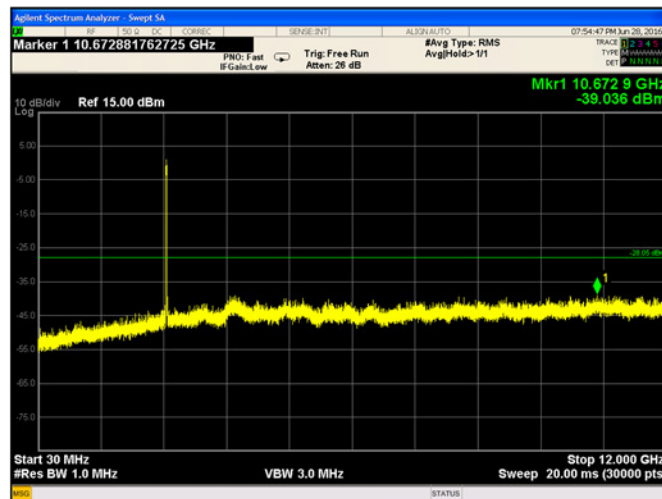
Plot 9-107 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.11 (2462 MHz)



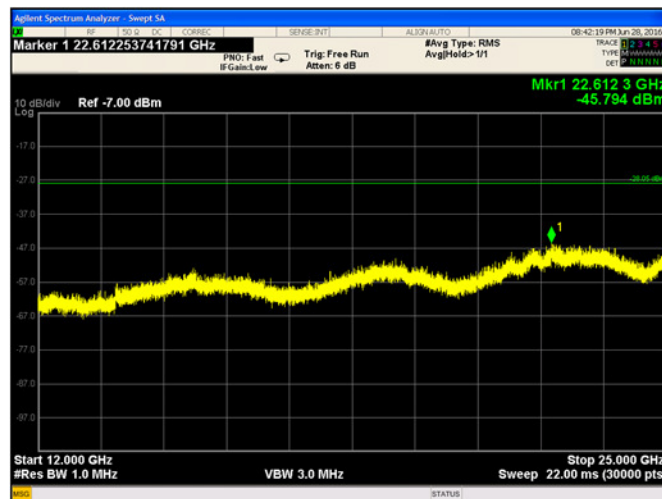
Plot 9-108 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.11 (2462 MHz)



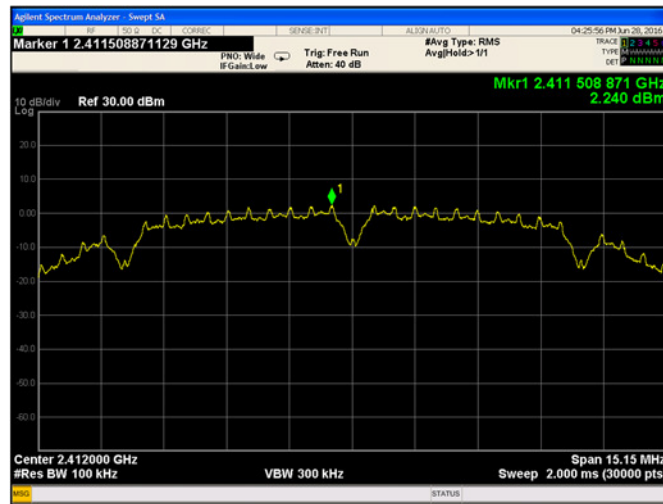
Plot 9-109 Chain A Reference Level 802.11n - Ch.13 (2472 MHz)



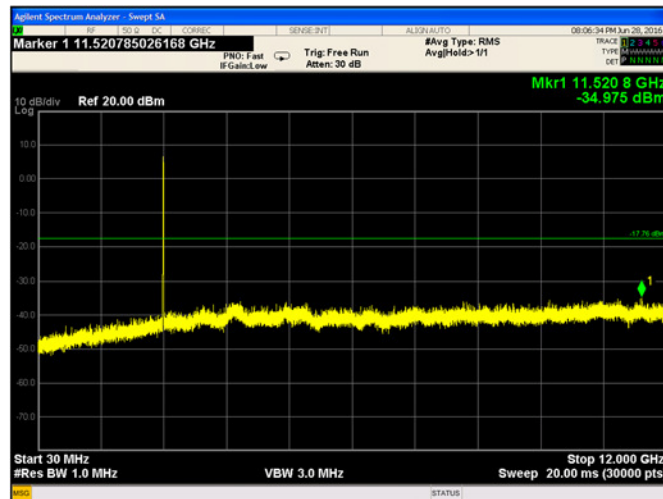
Plot 9-110 Chain A Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.13 (2472 MHz)



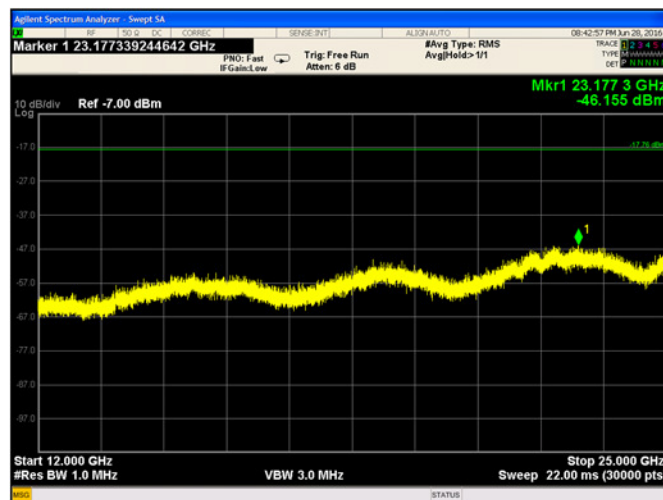
Plot 9-111 Chain A Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.13 (2472 MHz)



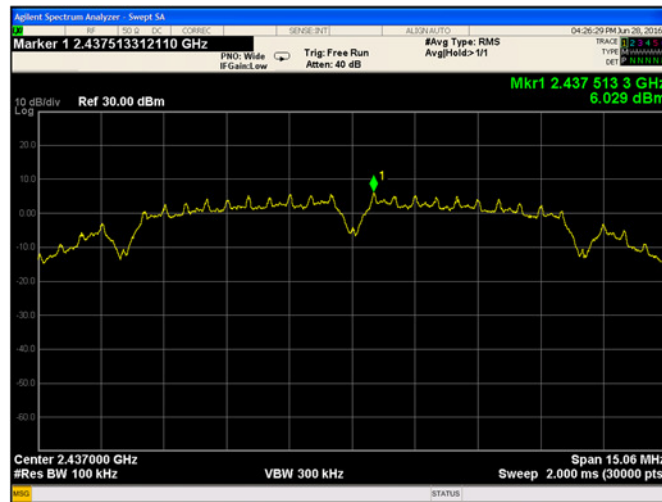
Plot 9-112 Chain B Reference Level 802.11b - Ch.1 (2412 MHz)



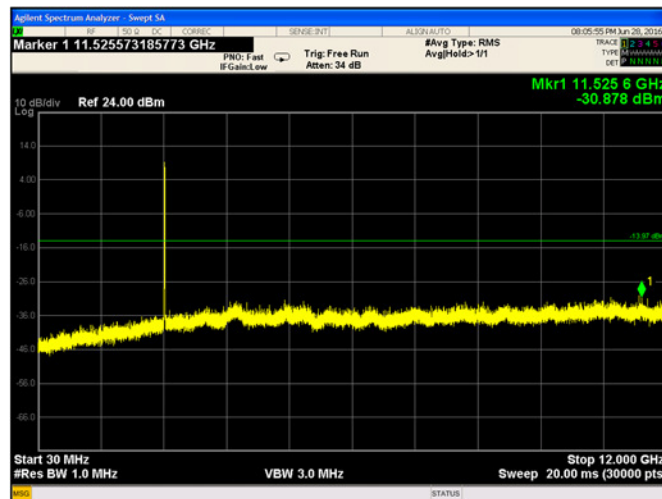
Plot 9-113 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11b - Ch.1 (2412 MHz)



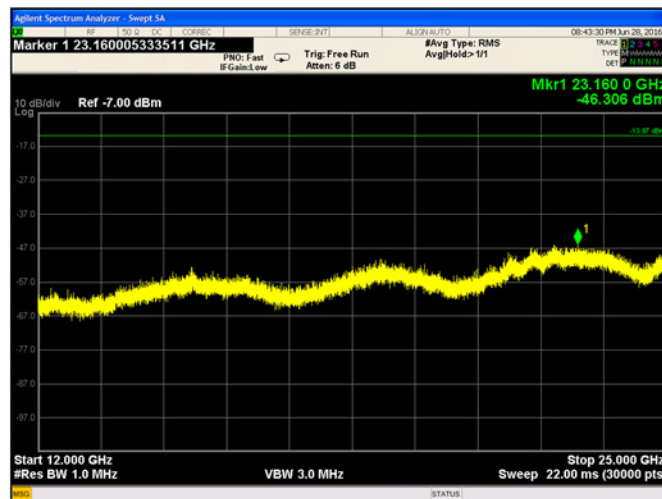
Plot 9-114 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.1 (2412 MHz)



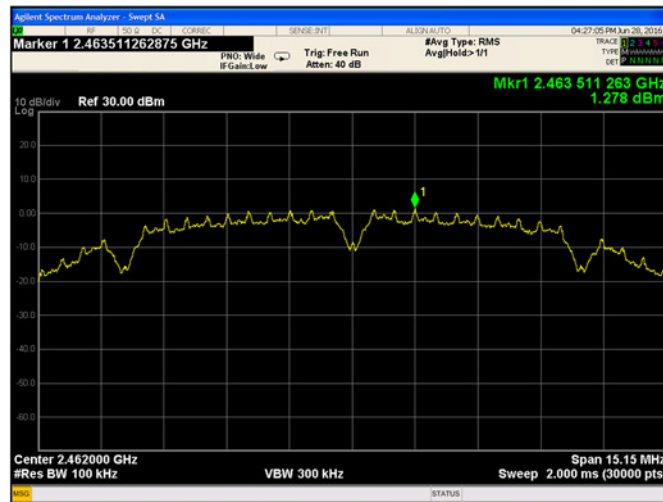
Plot 9-115 Chain B Reference Level 802.11b - Ch.6 (2437 MHz)



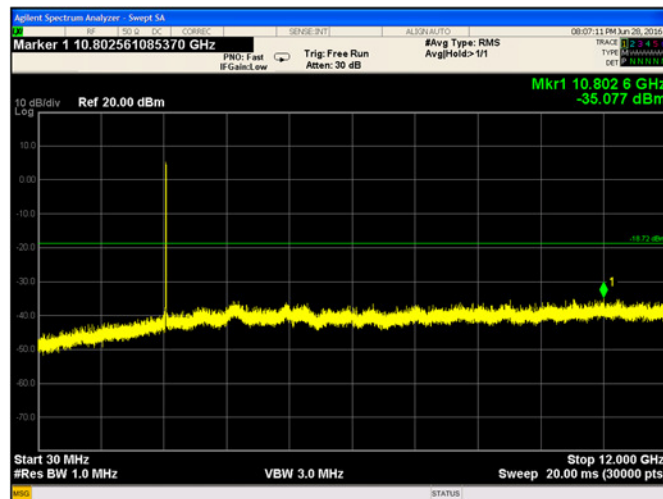
Plot 9-116 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11b - Ch.6 (2437 MHz)



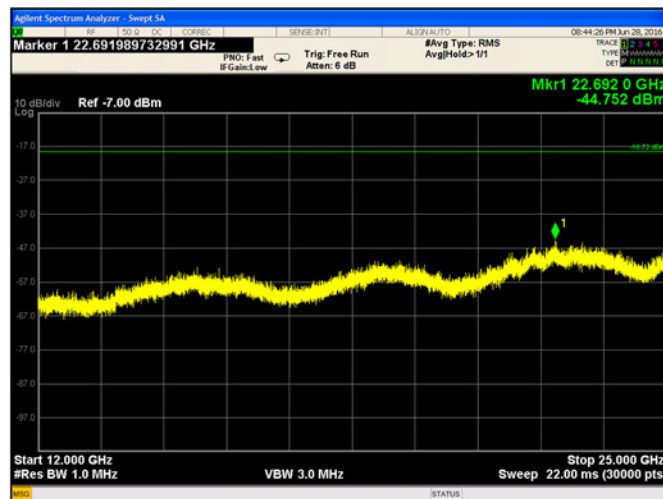
Plot 9-117 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.6 (2437 MHz)



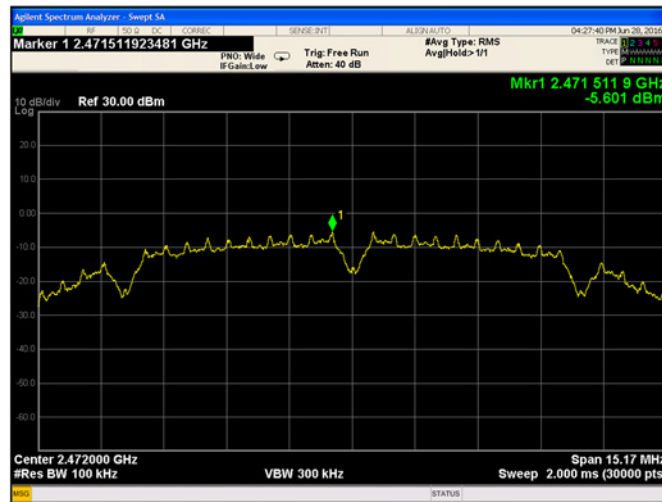
Plot 9-118 Chain B Reference Level 802.11b - Ch.11 (2462 MHz)



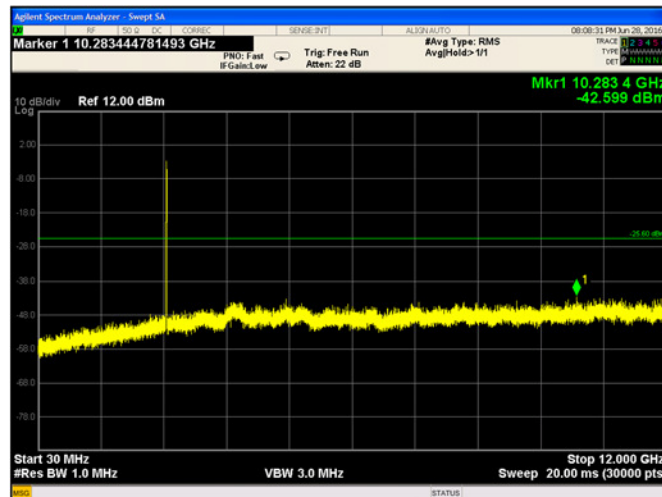
Plot 9-119 Chain B Conducted Spurious Emissions 3 0MHz - 12 GHz 802.11b - Ch.11 (2462 MHz)



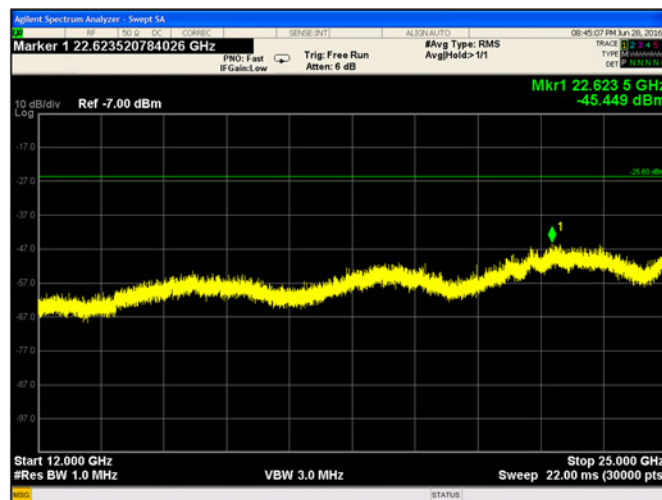
Plot 9-120 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.11 (2462 MHz)



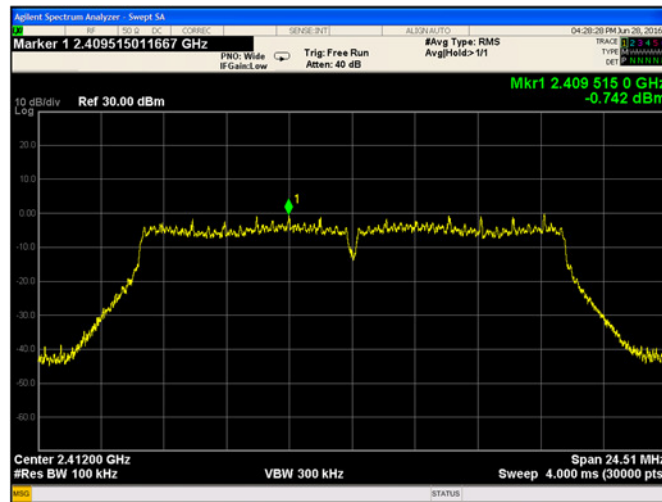
Plot 9-121 Chain B Reference Level 802.11b - Ch.13 (2472 MHz)



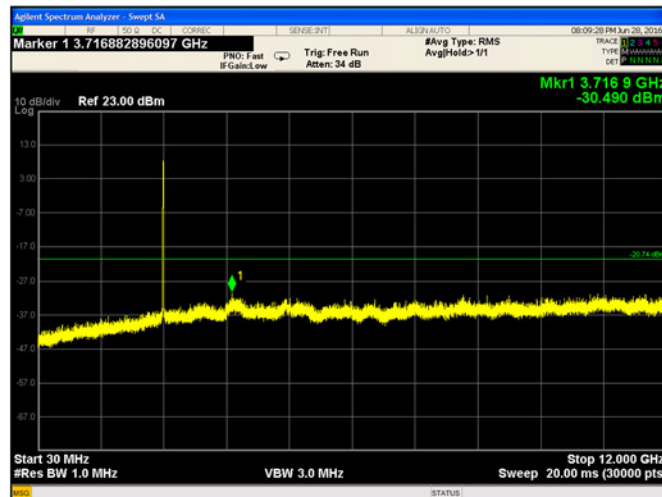
Plot 9-122 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11b - Ch.13 (2472 MHz)



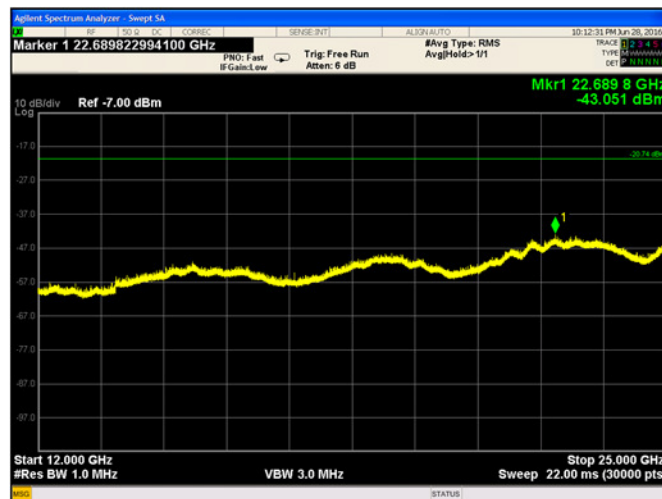
Plot 9-123 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11b - Ch.13 (2472 MHz)



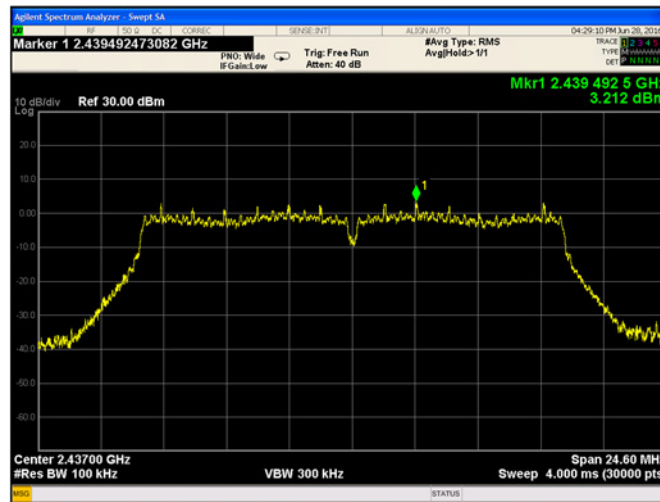
Plot 9-124 Chain B Reference Level 802.11g - Ch.1 (2412 MHz)



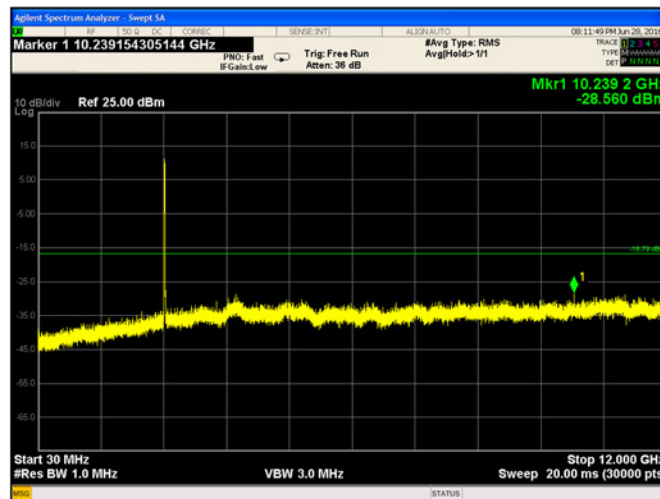
Plot 9-125 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.1 (2412 MHz)



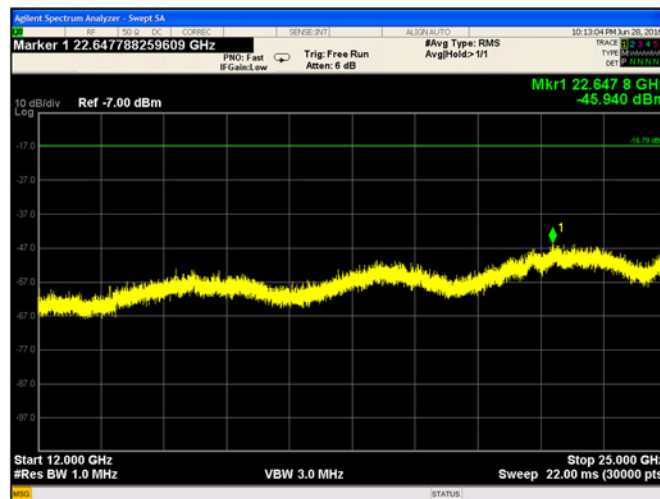
Plot 9-126 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.1 (2412 MHz)



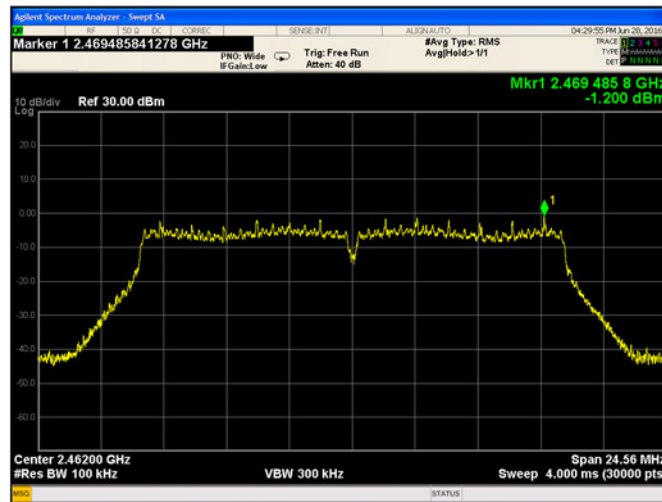
Plot 9-127 Chain B Reference Level 802.11g - Ch.6 (2437 MHz)



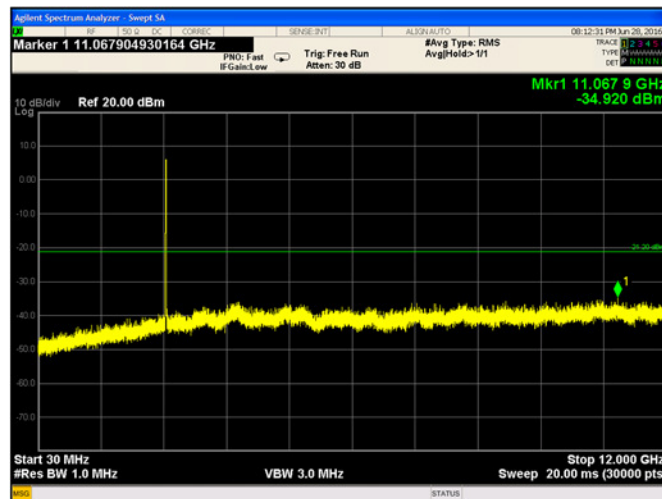
Plot 9-128 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.6 (2437 MHz)



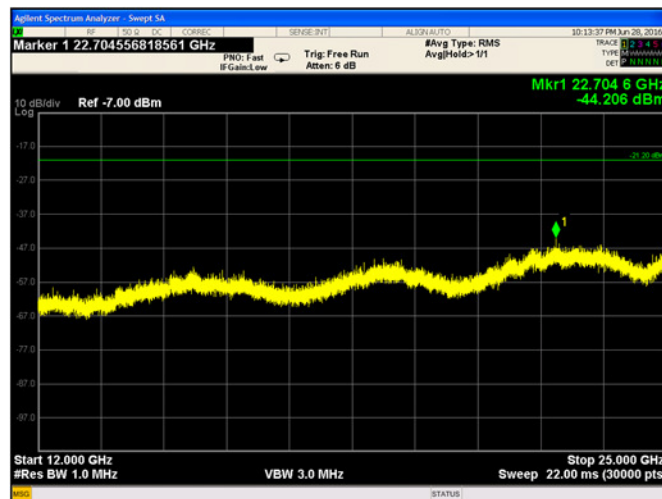
Plot 9-129 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.6 (2437 MHz)



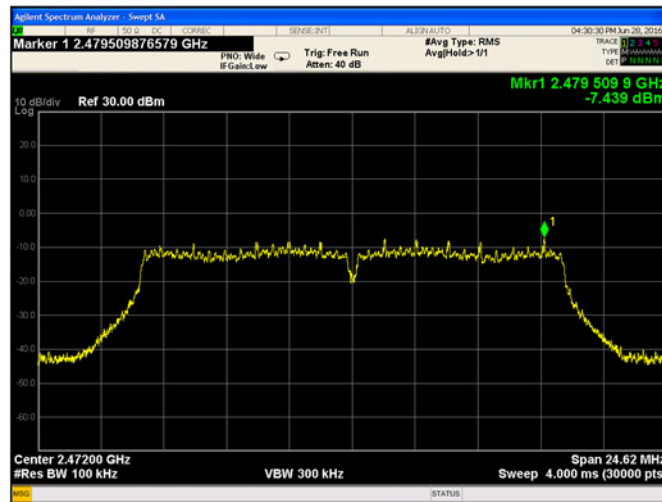
Plot 9-130 Chain B Reference Level 802.11g - Ch.11 (2462 MHz)



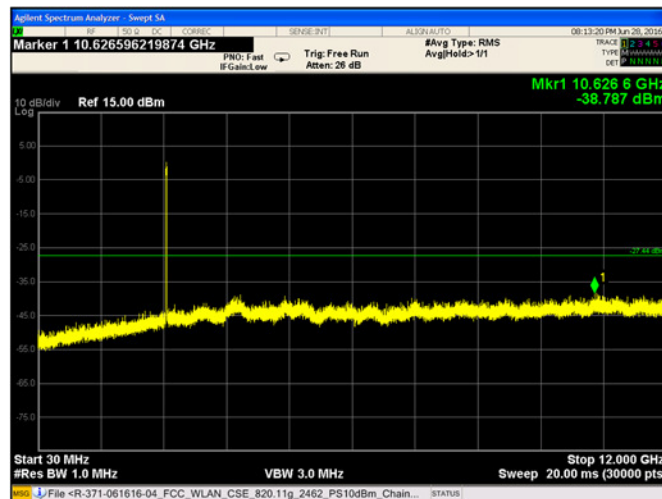
Plot 9-131 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.11 (2462 MHz)



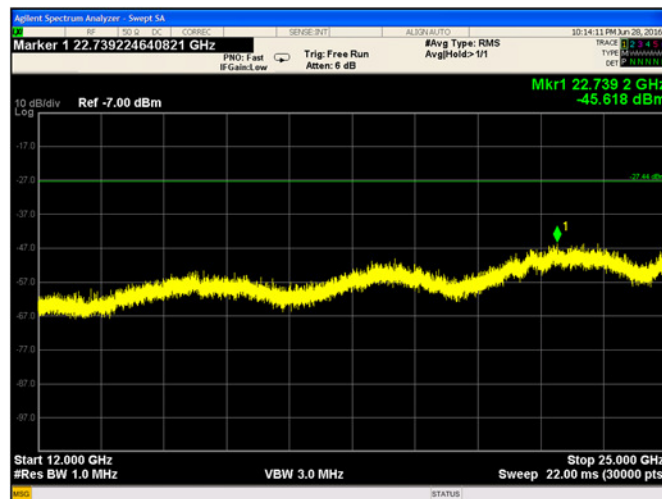
Plot 9-132 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.11 (2462 MHz)



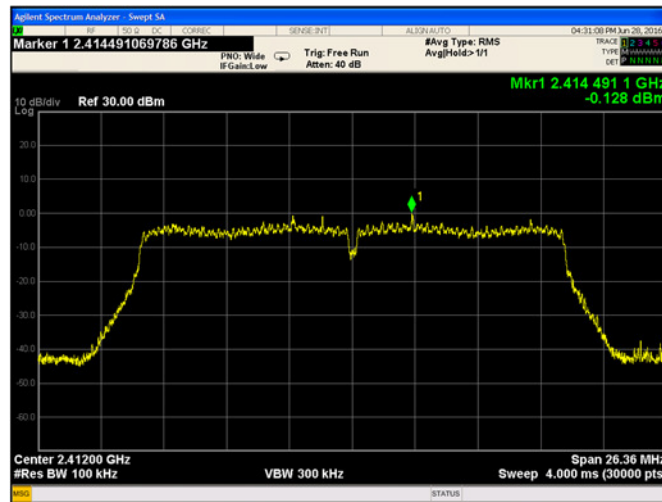
Plot 9-133 Chain B Reference Level 802.11g - Ch.13 (2472 MHz)



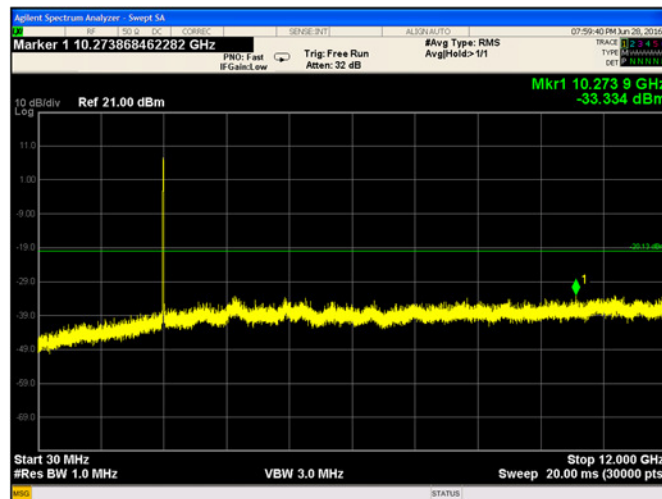
Plot 9-134 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11g - Ch.13 (2472 MHz)



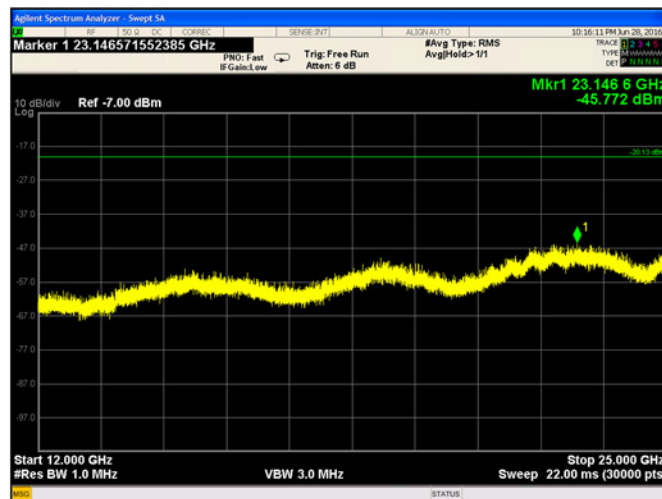
Plot 9-135 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11g - Ch.13 (2472 MHz)



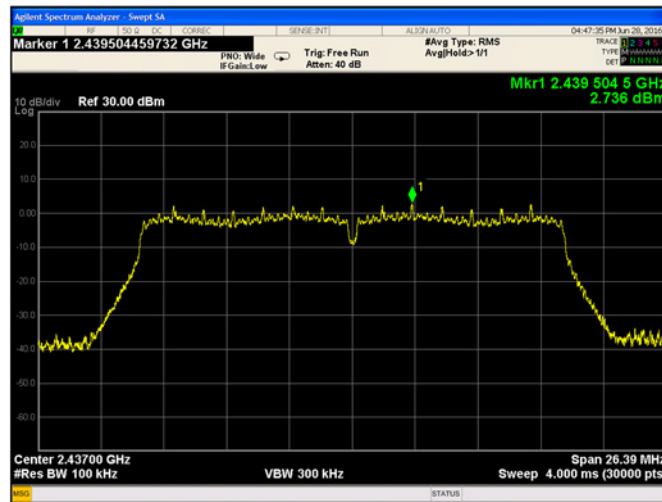
Plot 9-136 Chain B Reference Level 802.11n - Ch.1 (2412 MHz)



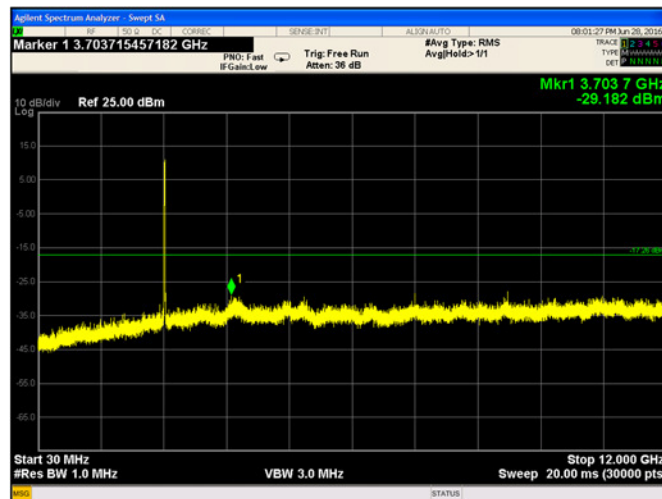
Plot 9-137 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.1 (2412 MHz)



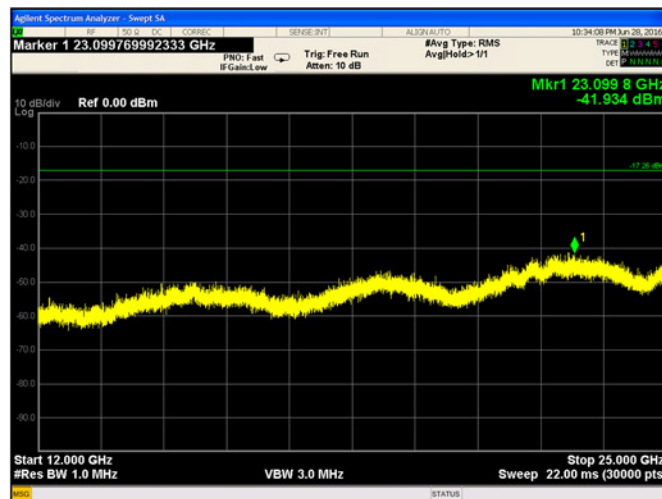
Plot 9-138 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.1 (2412 MHz)



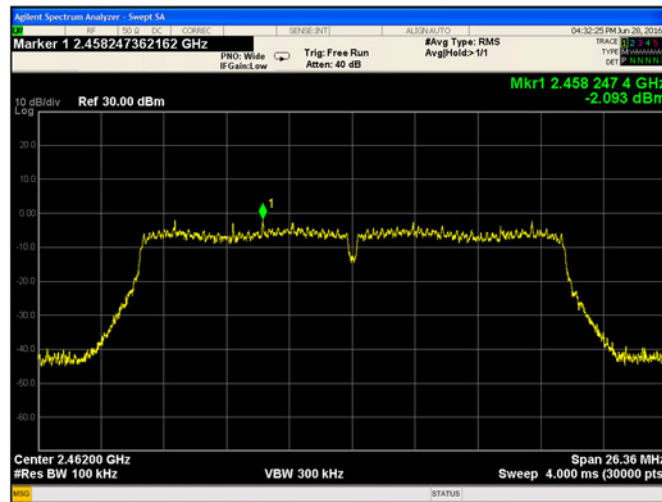
Plot 9-139 Chain B Reference Level 802.11n - Ch.6 (2437 MHz)



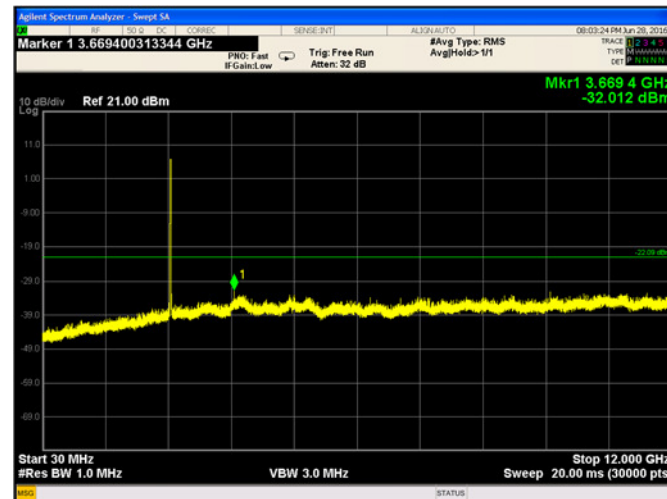
Plot 9-140 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.6 (2437 MHz)



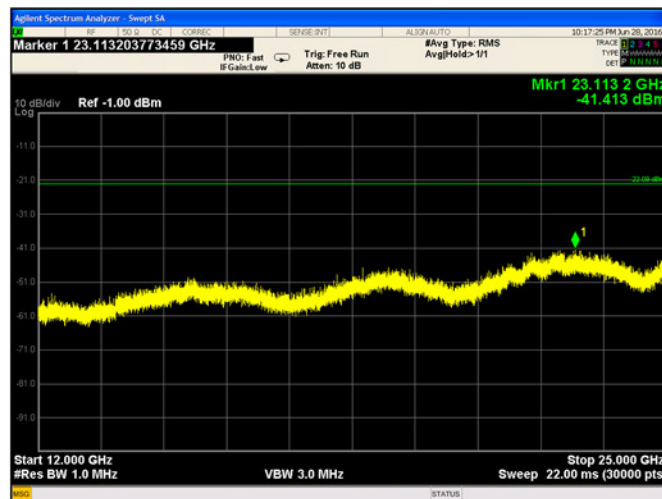
Plot 9-141 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.6 (2437 MHz)



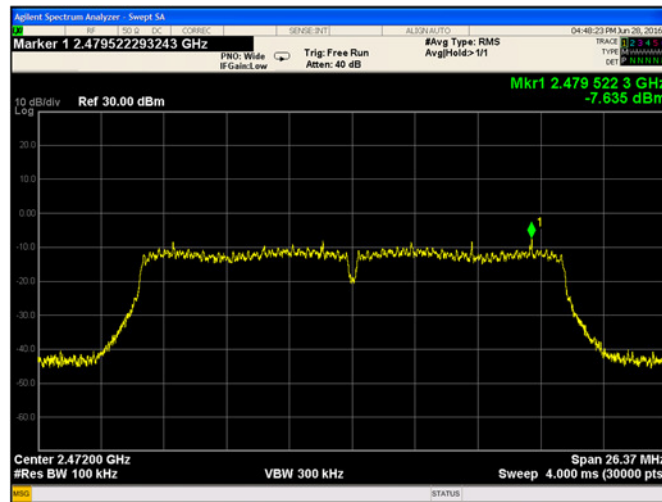
Plot 9-142 Chain B Reference Level 802.11n - Ch.11 (2462 MHz)



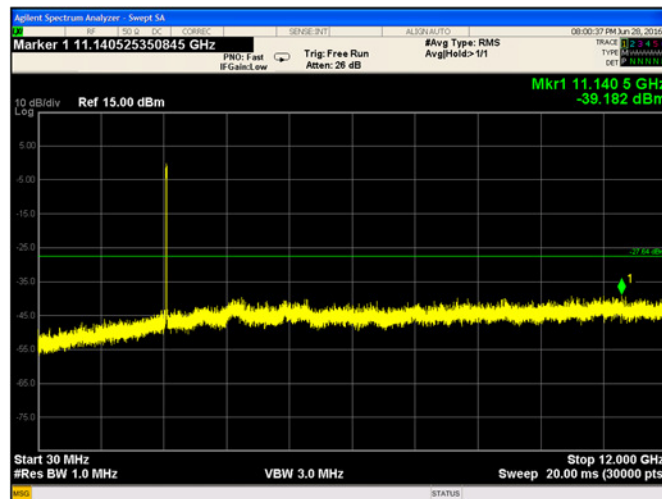
Plot 9-143 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.11 (2462 MHz)



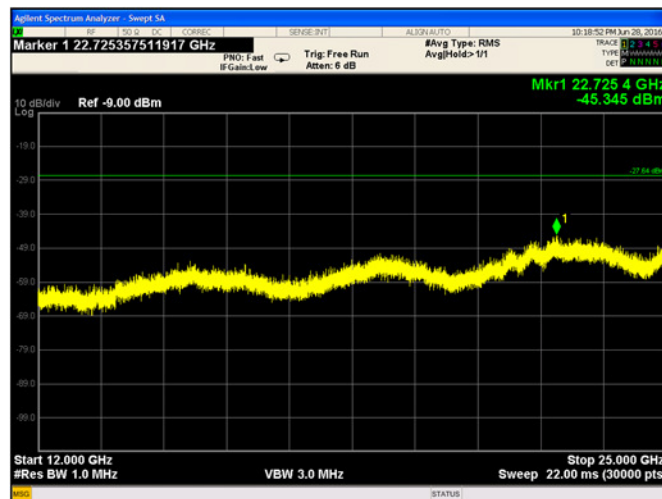
Plot 9-144 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.11 (2462 MHz)



Plot 9-145 Chain B Reference Level 802.11n - Ch.13 (2472 MHz)



Plot 9-146 Chain B Conducted Spurious Emissions 30 MHz - 12 GHz 802.11n - Ch.13 (2472 MHz)



Plot 9-147 Chain B Conducted Spurious Emissions 12 - 25 GHz 802.11n - Ch.13 (2472 MHz)

9.7 Conducted Band Edge Emissions

9.7.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (d)

ISED RSS-247 [5.5]

9.7.2 Test Method:

Measurements were performed according to the procedure defined in KDB 558074 - Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 V03R05 and ANSI C63.10 2013.

Spectrum analyzer settings:

Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation

RBW = 100 kHz

VBW = 300 kHz

Sweep = Auto

Detector function = Peak

Trace = Max Hold

The trace was allowed to stabilize. The marker was set on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. The delta marker function was set and the marker-to-peak function moved to the peak of the in-band emission.

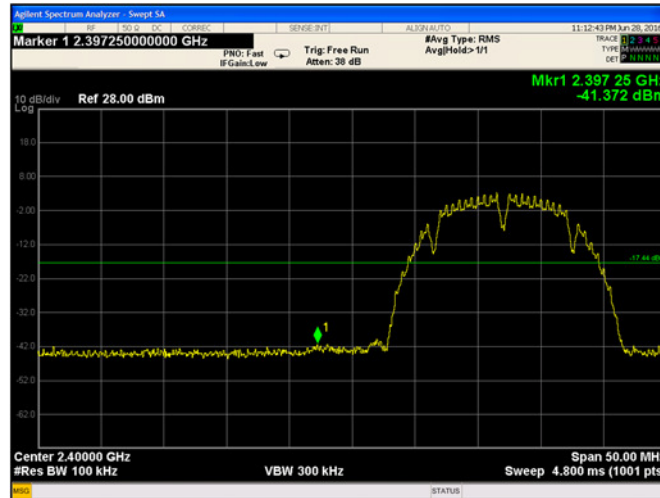
9.7.3 Limits:

All spurious emissions at least 20 dBc.

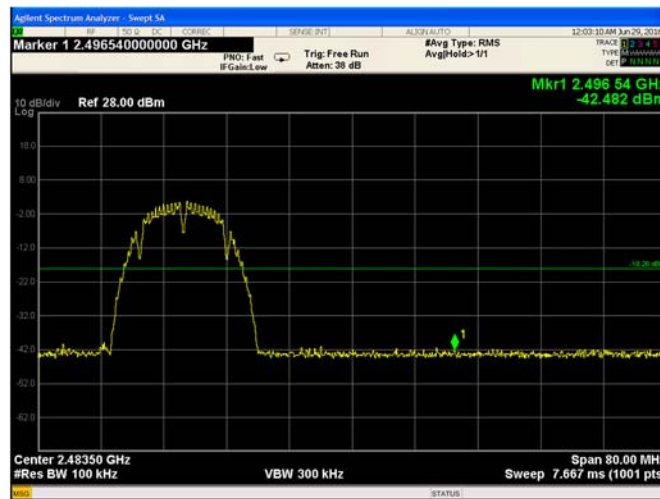
9.7.4 Test Result:

Pass.

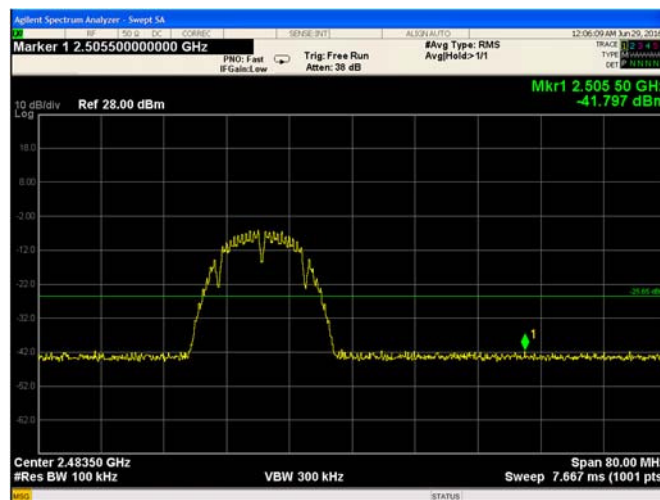
9.7.5 Test Data:



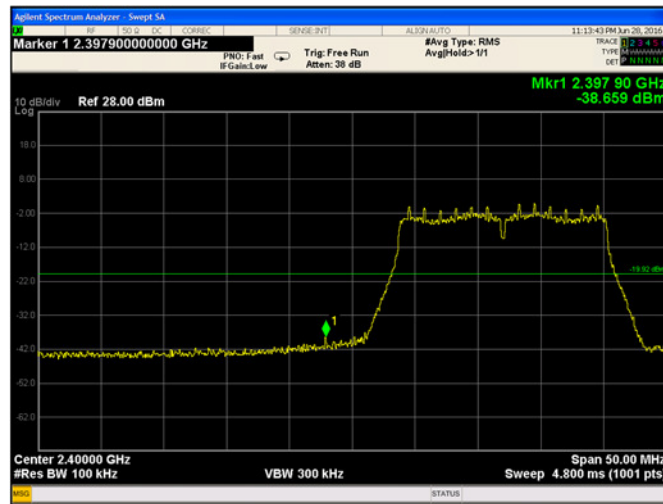
Plot 9-148 Chain A Conducted Band Edge 802.11b - Ch. 1 (2412 MHz)



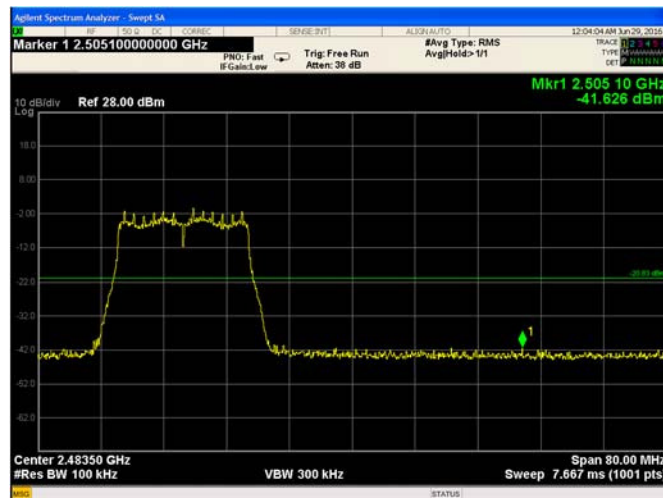
Plot 9-149 Chain A Conducted Band Edge 802.11b - Ch. 11 (2462 MHz)



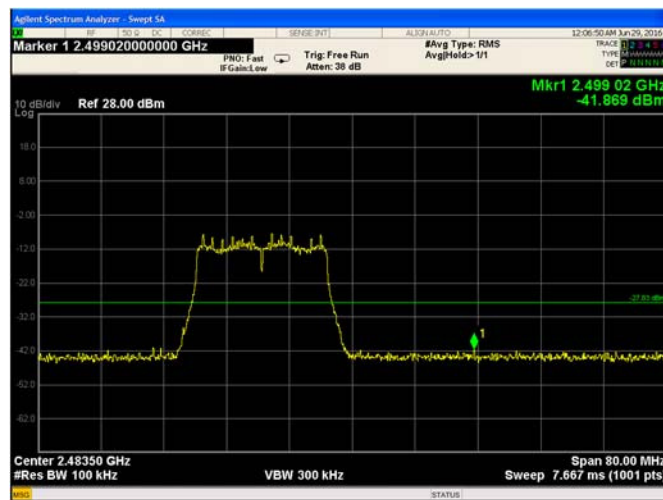
Plot 9-150 Chain A Conducted Band Edge 802.11b - Ch. 13 (2472 MHz)



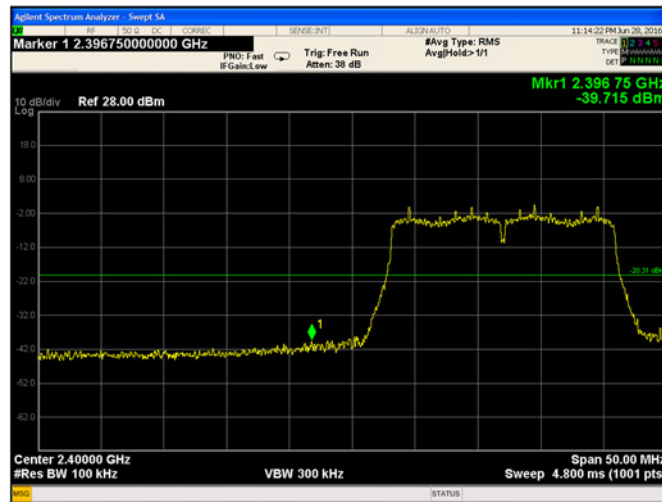
Plot 9-151 Chain A Conducted Band Edge 802.11g - Ch. 1 (2412 MHz)



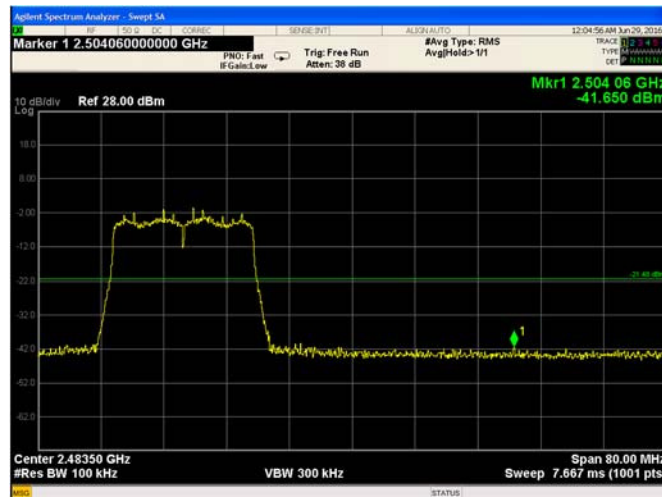
Plot 9-152 Chain A Conducted Band Edge 802.11g - Ch. 11 (2462 MHz)



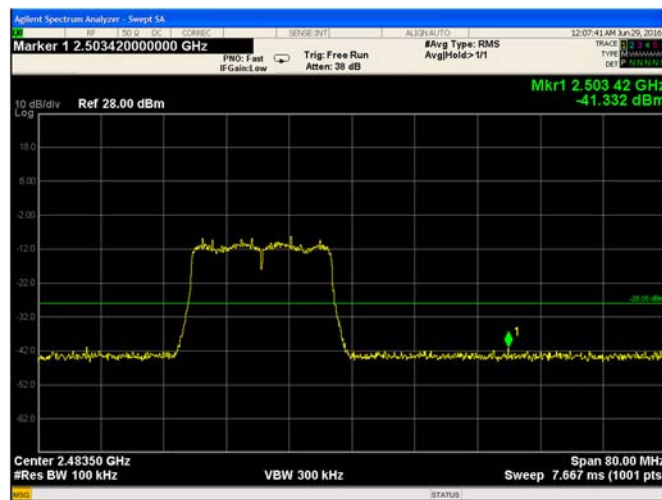
Plot 9-153 Chain A Conducted Band Edge 802.11g - Ch. 13 (2472 MHz)



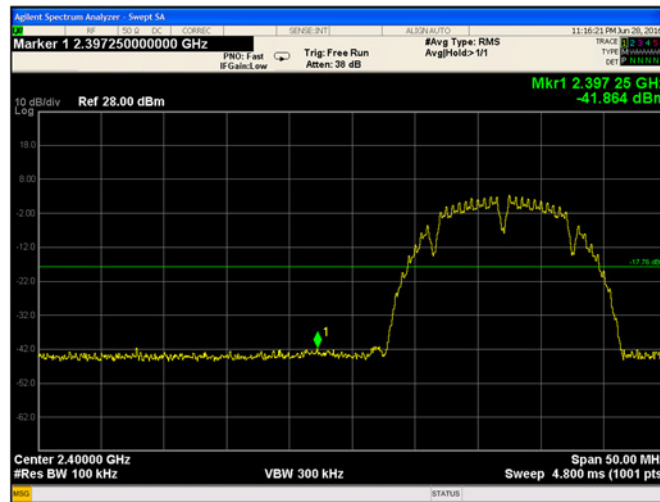
Plot 9-154 Chain A Conducted Band Edge 802.11n - Ch. 1 (2412 MHz)



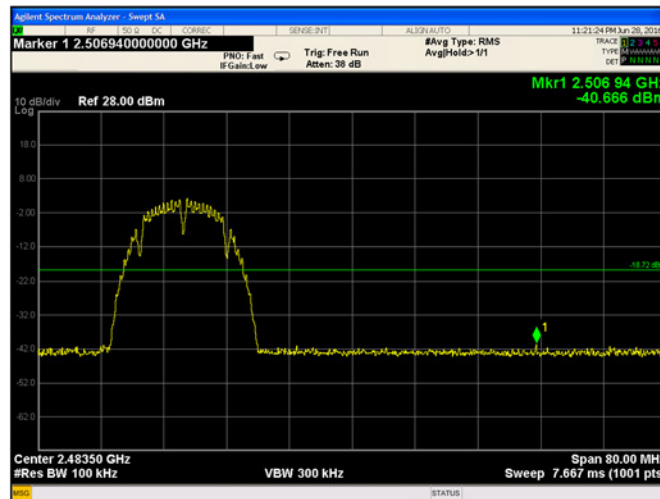
Plot 9-155 Chain A Conducted Band Edge 802.11n - Ch. 11 (2462 MHz)



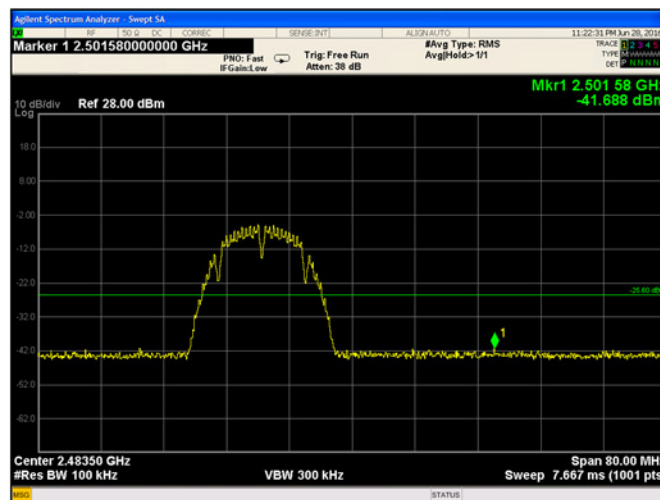
Plot 9-156 Chain A Conducted Band Edge 802.11n - Ch. 13 (2472 MHz)



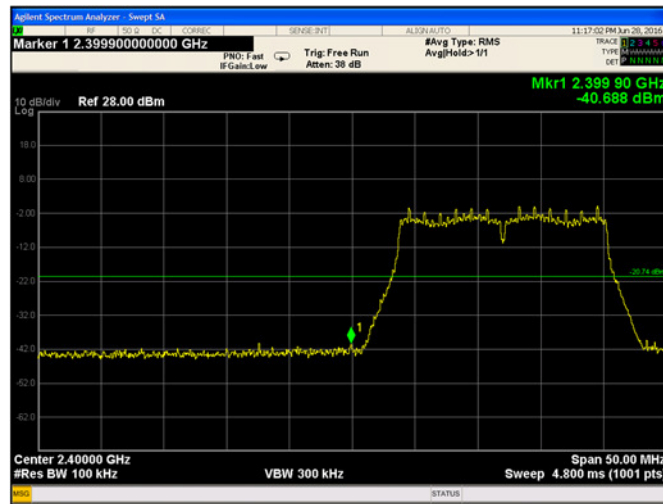
Plot 9-157 Chain B Conducted Band Edge 802.11b - Ch. 1 (2412 MHz)



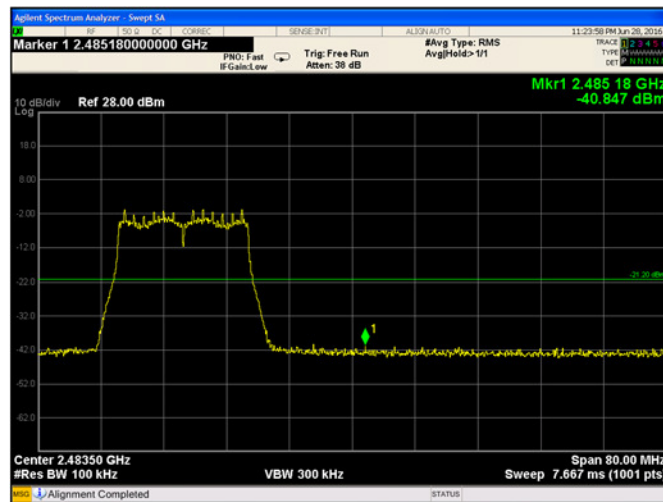
Plot 9-158 Chain B Conducted Band Edge 802.11b - Ch. 11 (2462 MHz)



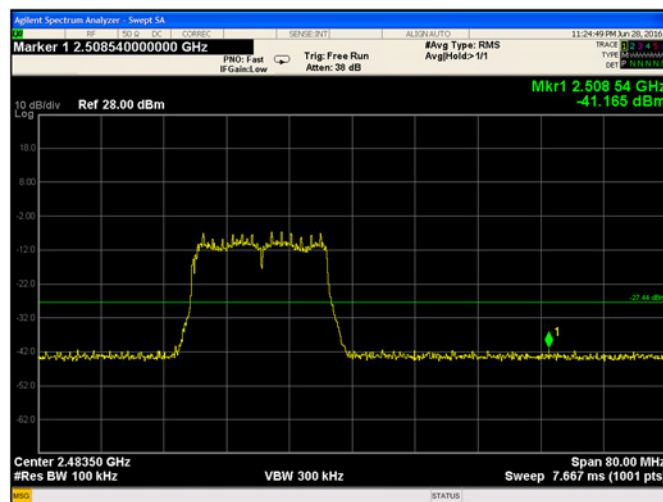
Plot 9-159 Chain B Conducted Band Edge 802.11b - Ch. 13 (2472 MHz)



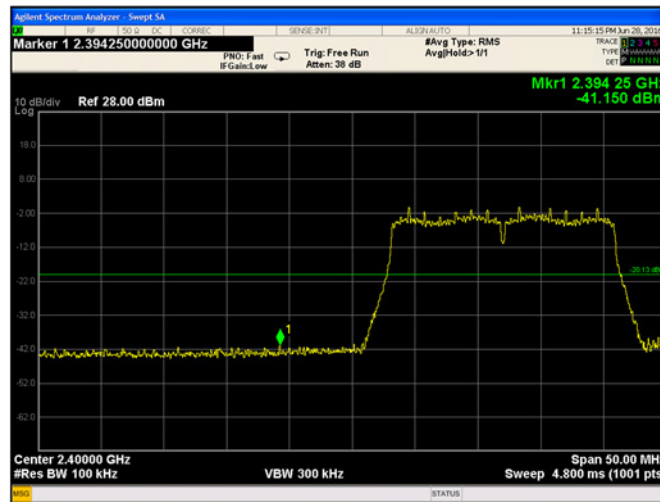
Plot 9-160 Chain B Conducted Band Edge 802.11g - Ch. 1 (2412 MHz)



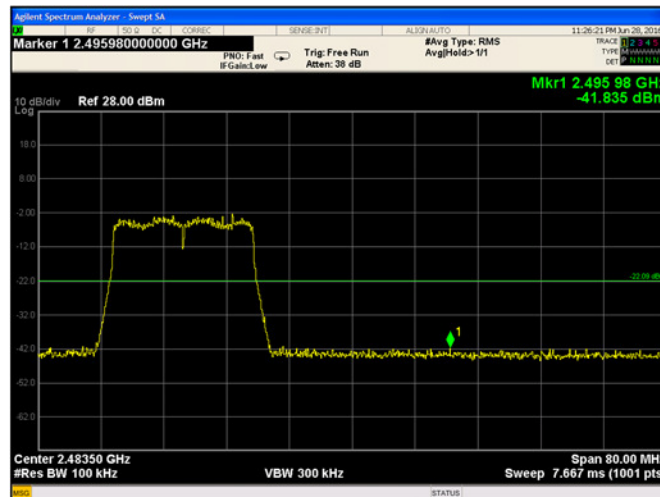
Plot 9-161 Chain B Conducted Band Edge 802.11g - Ch. 11 (2462 MHz)



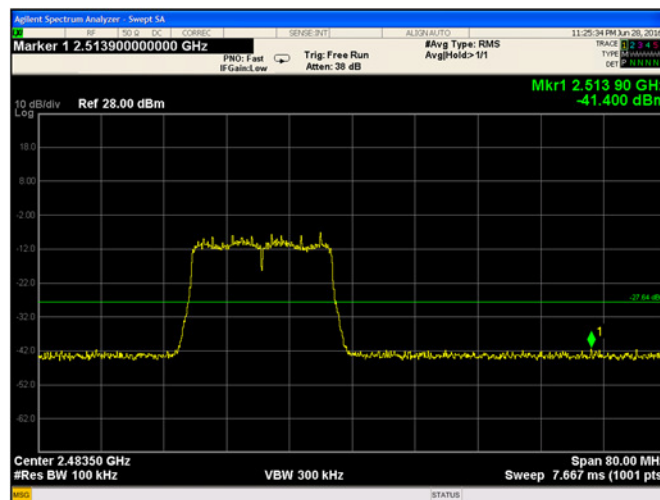
Plot 9-162 Chain B Conducted Band Edge 802.11g - Ch. 13 (2472 MHz)



Plot 9-163 Chain B Conducted Band Edge 802.11n - Ch. 1 (2412 MHz)



Plot 9-164 Chain B Conducted Band Edge 802.11n - Ch. 11 (2462 MHz)



Plot 9-165 Chain B Conducted Band Edge 802.11n - Ch. 13 (2472 MHz)

9.8 Radiated Spurious and Band Edge Emissions

9.8.1 Test Requirement:

FCC CFR 47 Rule Part 15.247 (d)
ISED RSS-247 [5.5] and RSS GEN [8.9]

9.8.2 Test Method:

Measurements were performed according to the procedure defined in KDB 558074 - Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 V03R05 and ANSI C63.10 2013.

Radiated spurious measurements are made from 30MHz to the 10th harmonic of the fundamental frequency of the transmitter. The limit for radiated spurious emissions is per 15.209 and RSS-247 [5.5]. Additionally, emissions found in the restricted bands as listed in 15.205 were tested for compliance per limits in 15.209 and RSS-Gen.

The EUT was tested near the low, middle and high channels of operation in each sub band. Guidelines in ANSI C63.10:2013 were followed with respect to maximizing the emissions. The EUT was placed on a turntable at a height of 80cm from the ground plane in standing position, which was estimated as the worst case orientation for all measurements.

Emissions below 1 GHz were maximized by rotating the EUT for 360 degs and with the antenna height scan performed from 1-4m. The same method was followed for emissions above 1GHz, but with the measurement antenna set in bore-sight mode. Both horizontal and vertical antenna polarizations were investigated. Worst case maximized data is shown in this test report.

All tests were performed in MIMO transmission mode to measure the worst case for both antennas

A pre-amp and a high pass filter were required for this test, in order to provide the measuring system with sufficient sensitivity. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength.

Radiated Spurious Emissions

Spectrum Analyzer Settings:

30 MHz- 1 GHz:

RBW= 120 kHz

VBW $\geq 3 \times$ RBW

Trace Mode: Peak Detector (Max Hold). Final measurements performed using QP Detector.

Span= 30 MHz- 1 GHz

Sweep time= Auto

Above 1 GHz:

RBW= 1 MHz

VBW= 3 MHz

Trace Mode: Peak Detector (Max Hold) and RMS Average Detector (Max Hold)

Span= 1- 18 GHz and 18- 26.5 GHz.

Sweep time= Auto

Restricted Band-Edge Emissions

Spectrum Analyzer Settings:

RBW= 1 MHz

VBW= 3 MHz

Trace Mode: Peak Detector (Max Hold) and RMS Average Detector (Max Hold)

Span= 2310 – 2500 MHz

Sweep Points = 801

Sweep Time = Peak: Auto; Average: 100 s

Sample Calculation:

Field Strength Level: Amplitude (Analyzer level) + AFCL (Antenna Factor and Cable losses) – Amplifier Gain = 50 dBuV + 33 dB – 25 dB = 78dBuV/m

9.8.3 Limits:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (meters)	Corrected Field Strength for 3m measurement distance (dBμV/m)
0.009-0.490	2400/F (kHz)	300	48.5- 13.8
0.490-1.705	24000/F (kHz)	30	33.8- 23.0
1.705-30	30	30	29.5
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
960-1000	500	3	54
Above 1000	500	3	54 (Average) 74 (Peak)

9.8.4 Test Result:

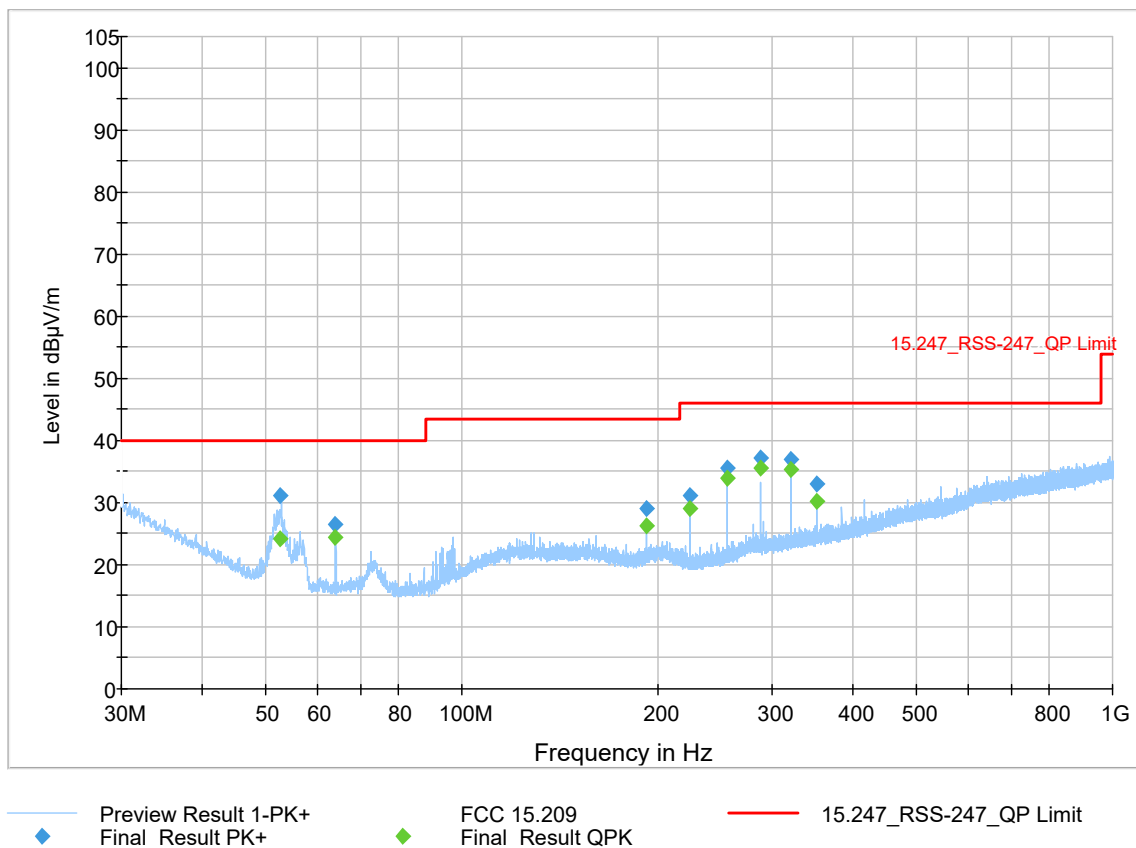
Pass.

9.8.5 Test Data:

9.8.5.1 Emissions in 30 MHz- 1 GHz range

All channels and modes were tested and worst case emissions in 802.11b mode, mid channel of operation shown here.

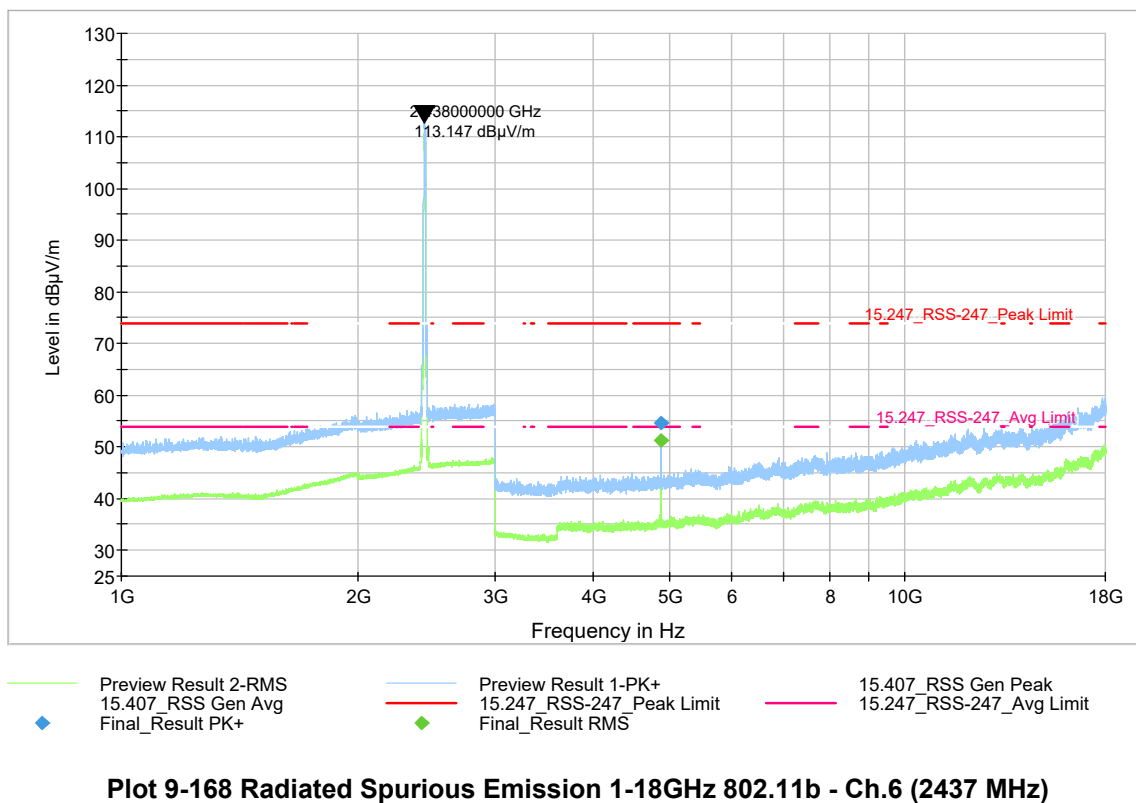
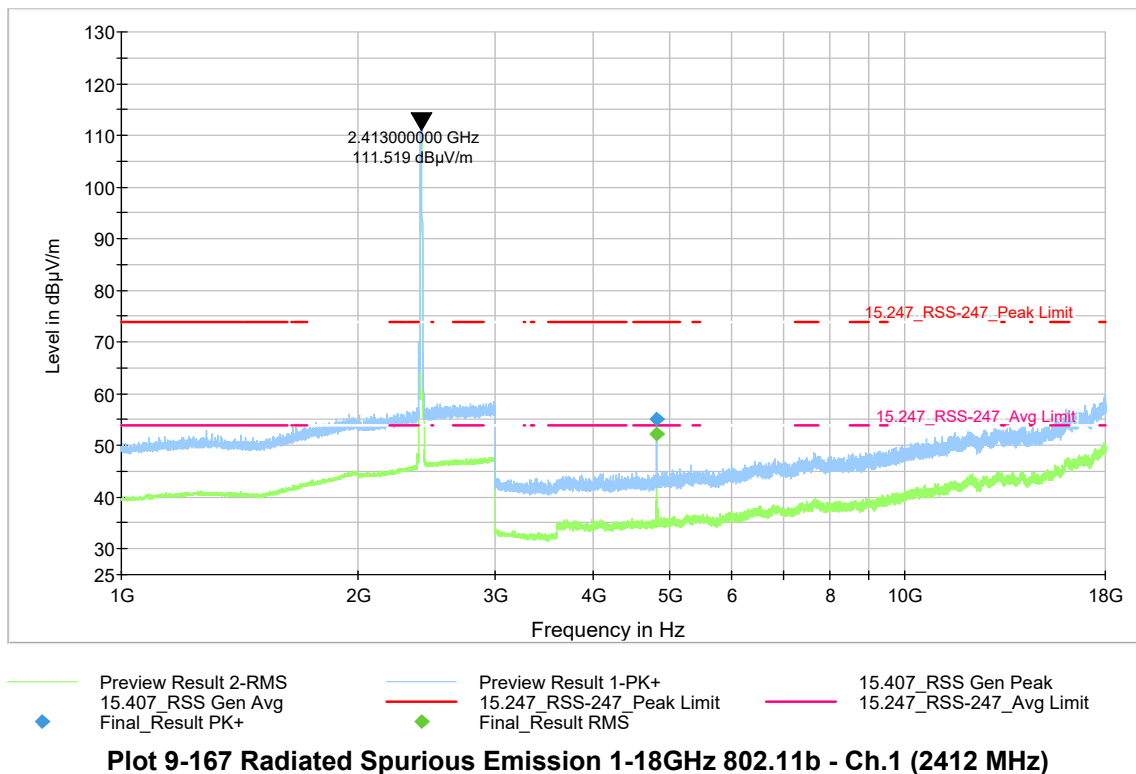
802.11b RSE 30-1000 MHz					
Spurious Frequency (MHz)	Raw Quasi-Peak Amplitude (dBμV/m)	System Correction Factor (dB)	Corrected Quasi-Peak Field Strength (dBμV/m)	Quasi-Peak Limit (dBμV/m)	Quasi-Peak Margin (dB)
52.60	9.55	14.7	24.25	40.00	-15.75
63.99	10.28	14.2	24.48	40.00	-15.52
191.99	7.73	18.6	26.33	43.52	-17.19
223.99	11.00	18.1	29.10	46.02	-16.92
256.01	14.64	19.3	33.94	46.00	-12.06
287.97	14.63	20.9	35.53	46.00	-10.47
319.98	13.95	21.4	35.35	46.00	-10.65
351.99	8.31	22.0	30.31	46.00	-15.69

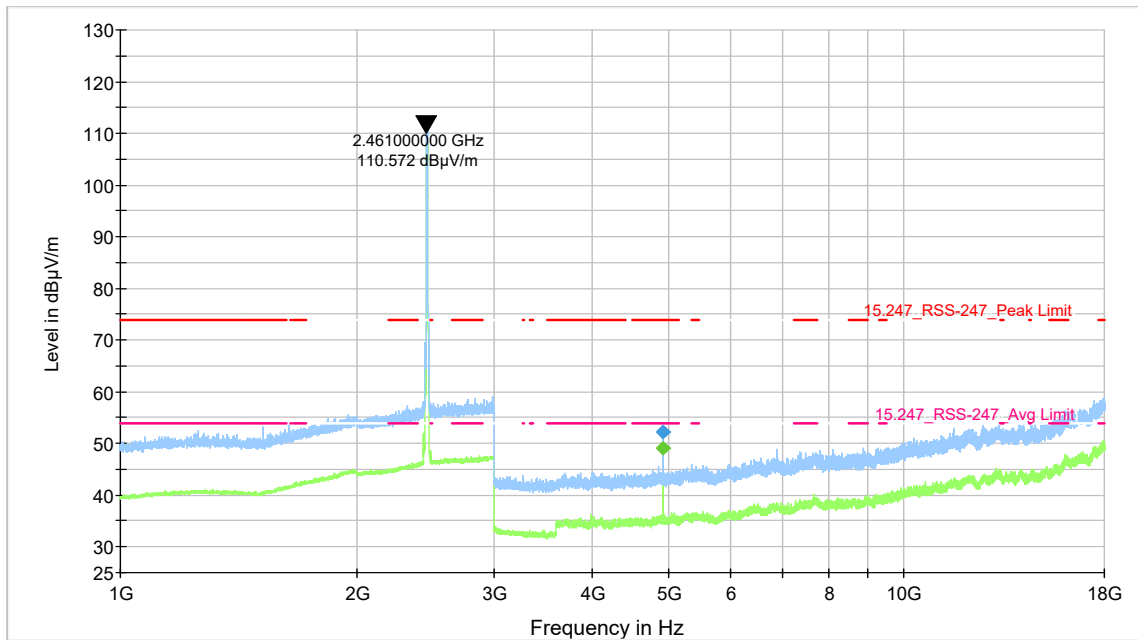


Plot 9-166 Radiated Spurious Emissions 30 – 1000 MHz 802.11b - Ch. 6 (2437 MHz)

9.8.5.2 Emissions in 1-18 GHz range

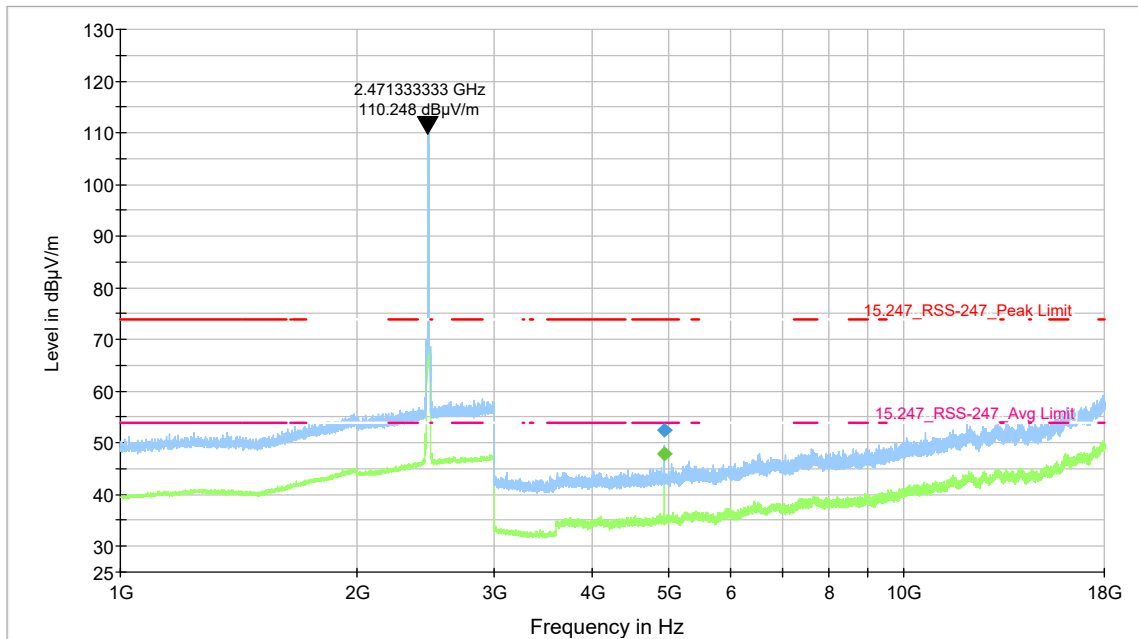
802.11b RSE 1 - 18GHz Average Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Avg. Amplitude (dBμV)	Correction Factor (incl DCF=0dB) (dB)	Corrected Avg. Field Strength (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)
2412	4824.00	42.99	9.2	52.19	54	-1.81
2437	4874.00	42.11	9.2	51.31	54	-2.69
2462	4924.00	40.08	9.0	49.08	54	-4.92
2472	4944.00	38.73	9.1	47.83	54	-6.17
802.11b RSE 1 – 18GHz Peak Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Peak Amplitude (dBμV)	Correction Factor (dB)	Corrected Peak Field Strength (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)
2412	4824.00	45.79	9.2	54.99	74	-27.73
2437	4874.00	45.53	9.2	54.73	74	-30.06
2462	4924.00	43.32	9.0	52.32	74	-30.40
2472	4943.90	43.52	9.0	52.52	74	-21.48





— Preview Result 2-RMS
— 15.407_RSS Gen Avg
◆ Final_Result PK+
 ◆ Final_Result RMS
 - - - 15.247_RSS-247_Peak Limit
 - - - 15.247_RSS-247_Avg Limit

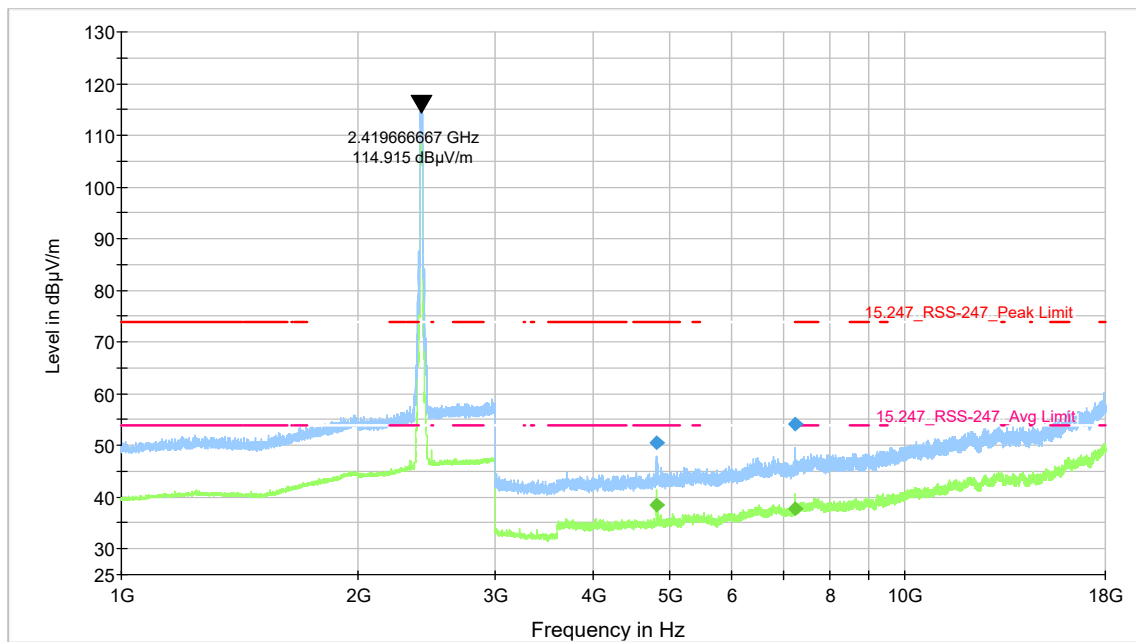
Plot 9-169 Radiated Spurious Emission 1-18GHz 802.11b - Ch.11 (2462 MHz)



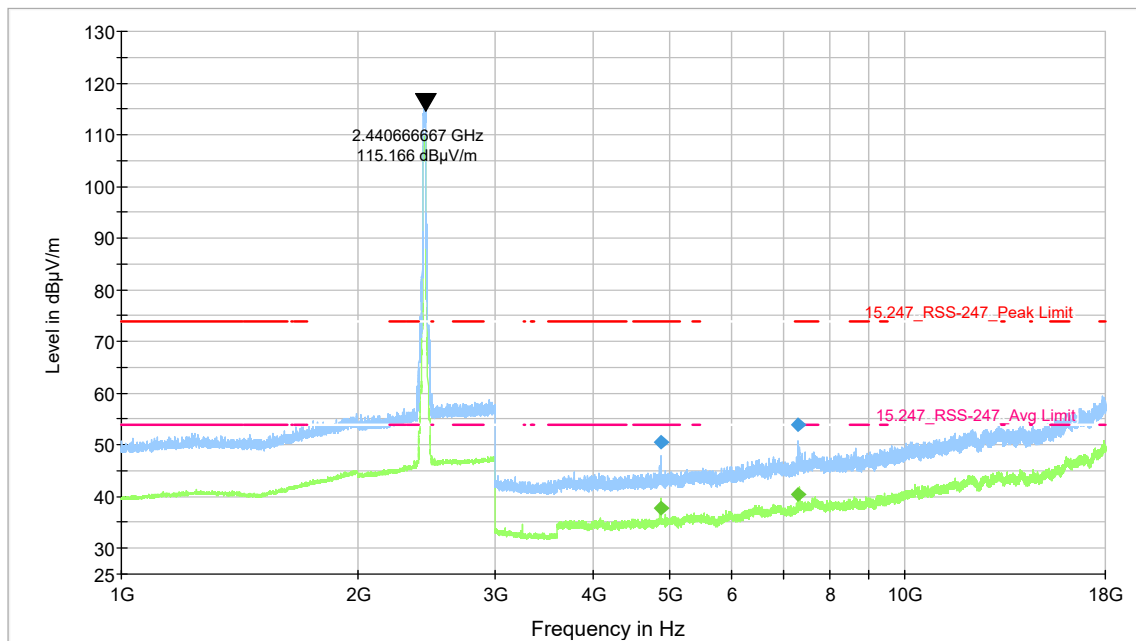
— Preview Result 2-RMS
— 15.407_RSS Gen Avg
◆ Final_Result PK+
 ◆ Final_Result RMS
 - - - 15.247_RSS-247_Peak Limit
 - - - 15.247_RSS-247_Avg Limit

Plot 9-170 Radiated Spurious Emission 1-18GHz 802.11b - Ch.13 (2472 MHz)

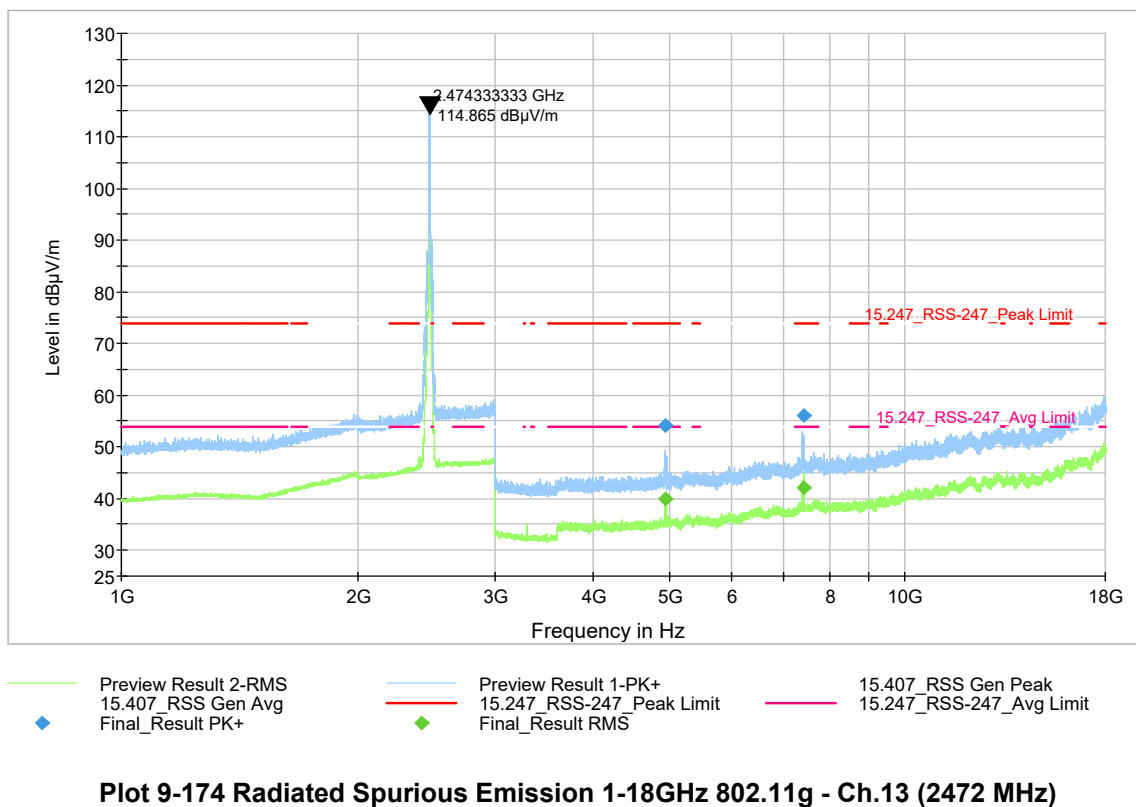
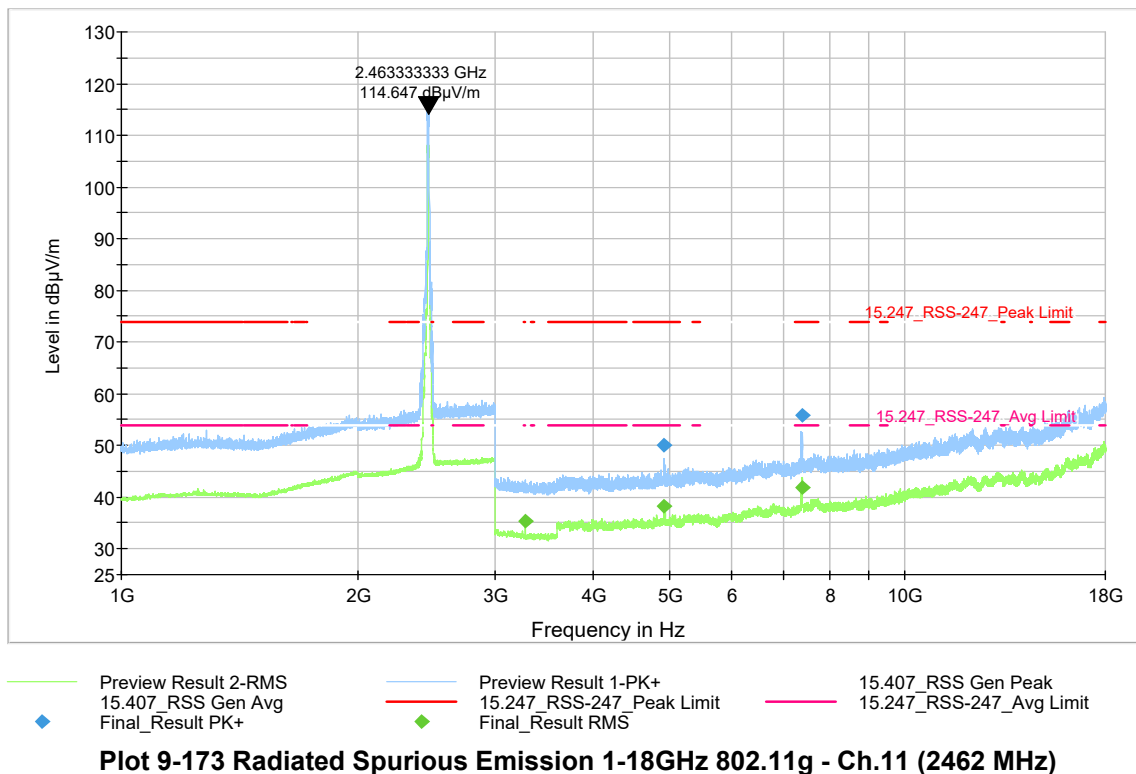
802.11g RSE 1 - 18GHz Average Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Avg. Amplitude (dBμV)	Correction Factor (incl DCF=0dB) (dB)	Corrected Avg. Field Strength (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)
2412	4824.00	29.37	9.2	38.57	54	-15.43
2412	7236.00	25.56	12.2	37.76	54	-16.24
2437	4877.30	28.47	9.2	37.67	54	-16.33
2437	7310.10	27.89	12.6	40.49	54	-13.51
2462	4922.90	29.19	9.0	38.19	54	-15.81
2462	7381.10	29.22	12.7	41.92	54	-12.08
2472	4943.50	30.93	9.0	39.93	54	-14.07
2472	7411.80	29.27	12.8	42.07	54	-11.93
802.11g RSE 1 - 18GHz Peak Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Peak Amplitude (dBμV)	Correction Factor (dB)	Corrected Peak Field Strength (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)
2412	4824.30	41.21	9.2	50.41	74	-23.59
2412	7236.00	41.91	12.2	54.11	74	-19.89
2437	4877.70	41.39	9.2	50.59	74	-23.41
2437	7311.40	41.18	12.6	53.78	74	-20.22
2462	4923.80	40.97	9.0	49.97	74	-24.03
2462	7385.70	43.14	12.7	55.84	74	-18.16
2472	4943.30	45.14	9.0	54.14	74	-19.86
2472	7411.70	43.33	12.8	56.13	74	-17.87



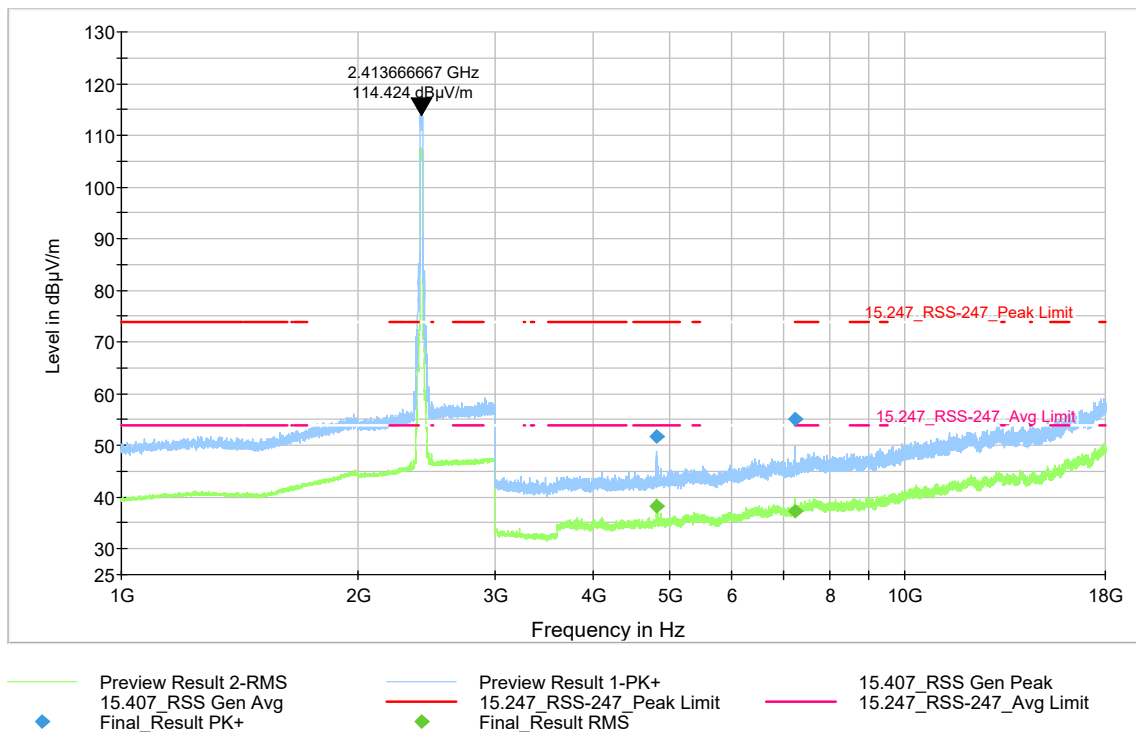
Plot 9-171 Radiated Spurious Emission 1-18GHz 802.11g - Ch.1 (2412 MHz)



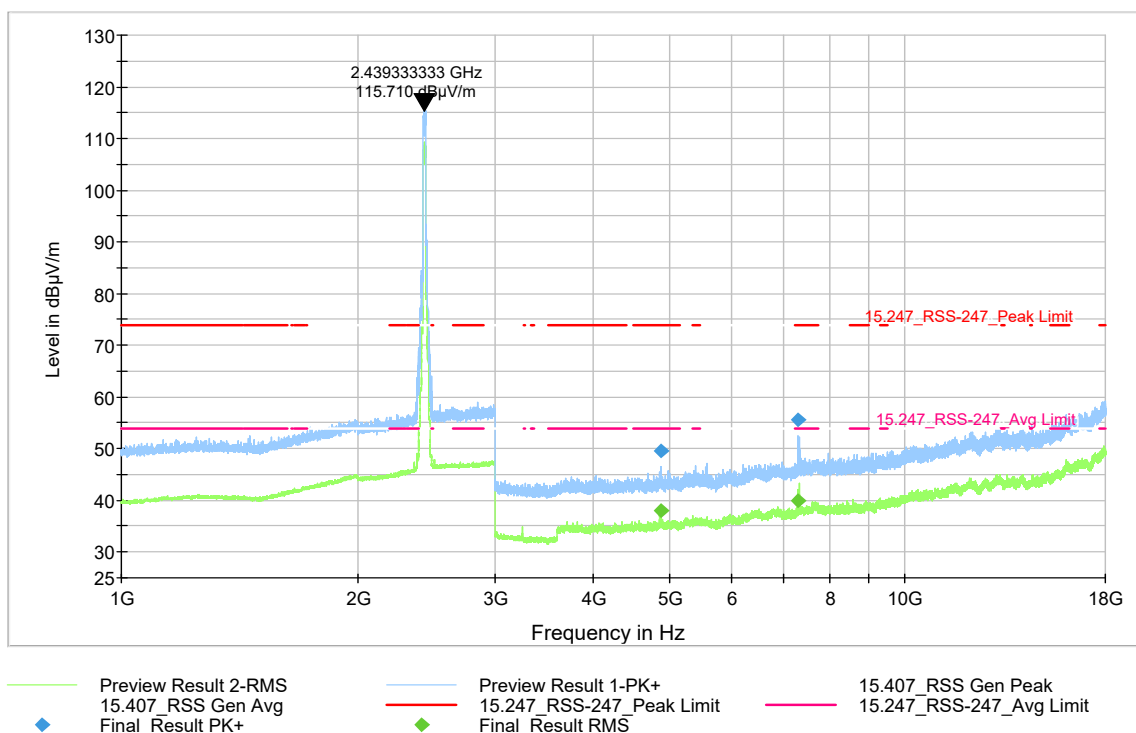
Plot 9-172 Radiated Spurious Emission 1-18GHz 802.11g - Ch.6 (2437 MHz)



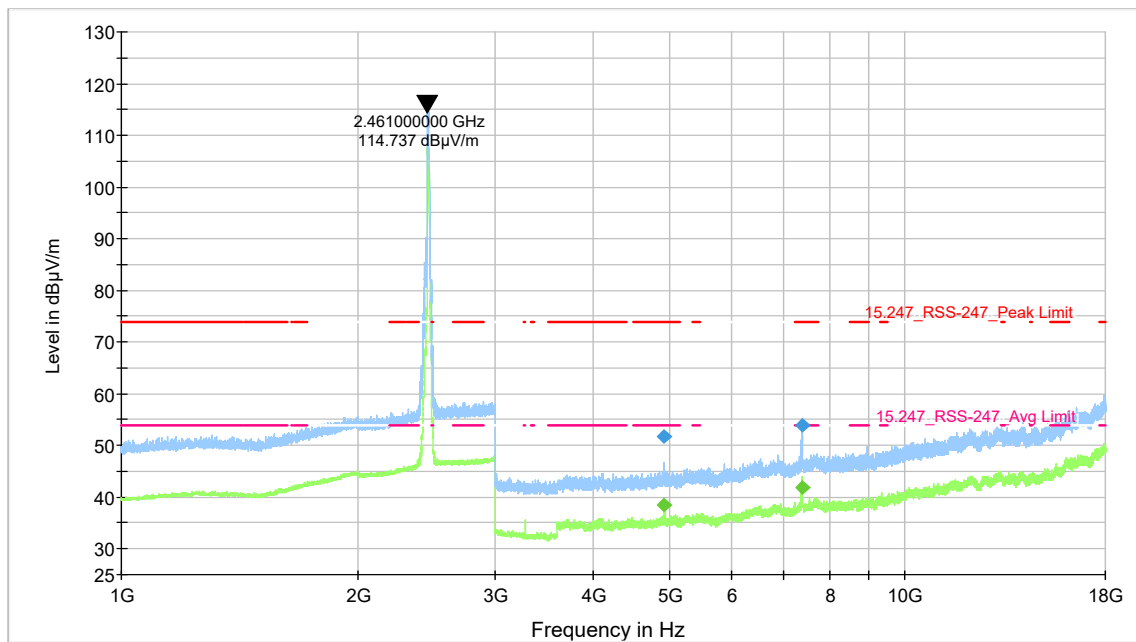
802.11n RSE 1 - 18GHz Average Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Avg. Amplitude (dBμV)	Correction Factor (incl DCF=0dB) (dB)	Corrected Avg. Field Strength (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)
2412	4825.70	29.37	9.1	38.22	54	-15.78
2412	7237.80	25.56	12.2	37.24	54	-16.76
2437	4871.20	28.47	9.3	38.11	54	-15.89
2437	7310.40	27.89	12.6	39.82	54	-14.18
2462	4923.80	29.19	9.0	38.51	54	-15.49
2462	7386.10	29.22	12.7	41.76	54	-12.24
2472	4943.50	31.25	9.0	40.25	54	-13.75
2472	7412.60	29.24	12.8	42.04	54	-11.96
802.11n RSE 1 - 18GHz Peak Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Peak Amplitude (dBμV)	Correction Factor (dB)	Corrected Peak Field Strength (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)
2412	4820.90	41.21	9.2	51.66	74	-22.34
2412	7238.20	41.91	12.2	55.12	74	-18.88
2437	4876.90	41.39	9.2	49.67	74	-24.33
2437	7300.50	41.18	12.6	55.66	74	-18.34
2462	4928.00	40.97	9.0	51.80	74	-22.2
2462	7396.80	43.14	13.0	53.92	74	-20.08
2472	4947.90	44.07	9.2	53.27	74	-20.73
2472	7405.00	45.24	12.9	58.14	74	-15.86



Plot 9-175 Radiated Spurious Emission 1-18GHz 802.11n - Ch.1 (2412 MHz)

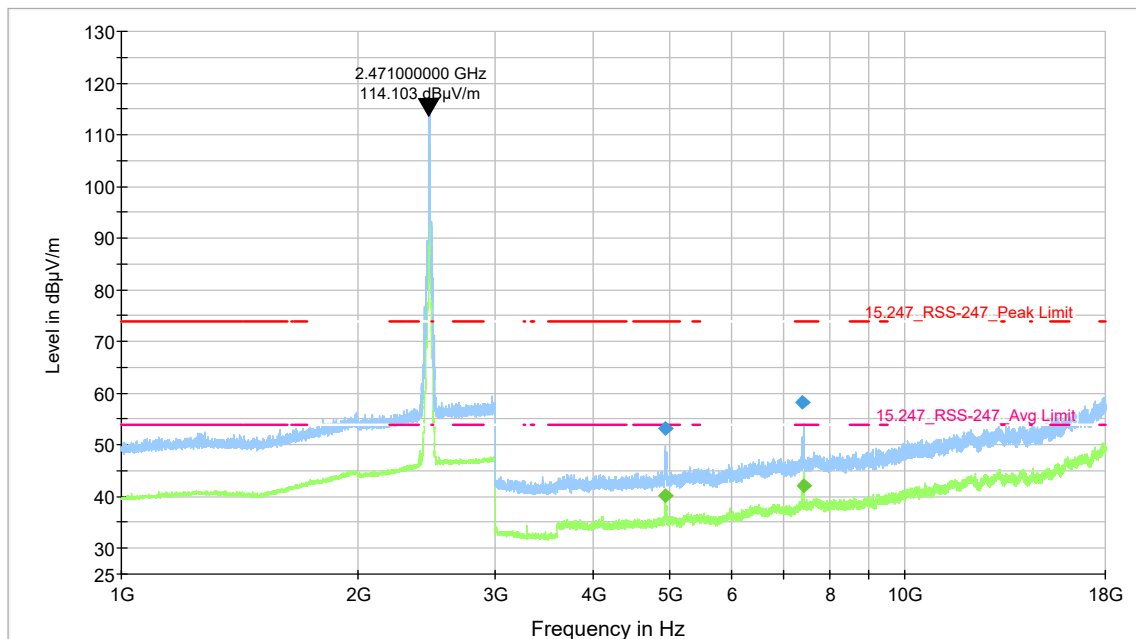


Plot 9-176 Radiated Spurious Emission 1-18GHz 802.11n - Ch.6 (2437 MHz)



— Preview Result 2-RMS
— 15.407_RSS Gen Avg
◆ Final_Result PK+
 ◆ Final_Result RMS
 - - - 15.247_RSS-247_Peak Limit
 - - - 15.247_RSS-247_Avg Limit

Plot 9-177 Radiated Spurious Emission 1-18GHz 802.11n - Ch.11 (2462 MHz)



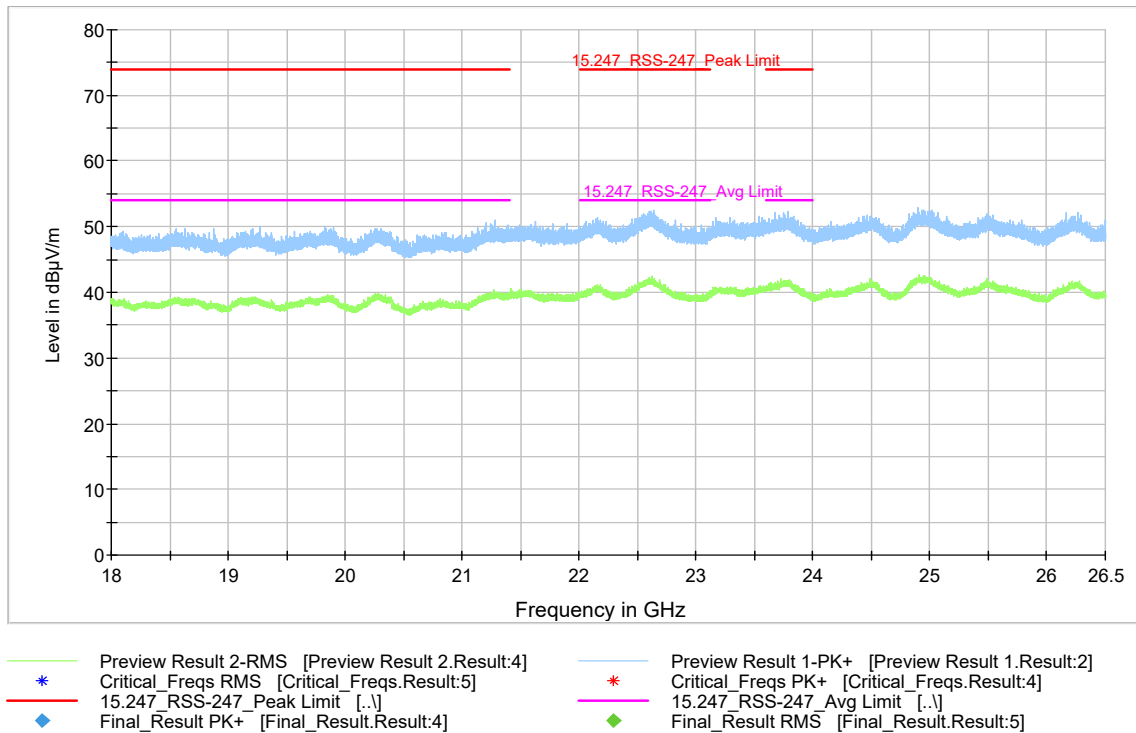
— Preview Result 2-RMS
— 15.407_RSS Gen Avg
◆ Final_Result PK+
 ◆ Final_Result RMS
 - - - 15.247_RSS-247_Peak Limit
 - - - 15.247_RSS-247_Avg Limit

Plot 9-178 Radiated Spurious Emission 1-18GHz 802.11n - Ch.13 (2472 MHz)

9.8.5.3 Emissions in 18-26.5 GHz range

All modes and channels were tested and worst case data from mid channel 802.11 'b' mode of operation shown here.

No significant emissions to report above noise floor.



Plot 9-179 Radiated Spurious Emissions 18-26.5GHz 802.11b - Ch.6 (2437 MHz)