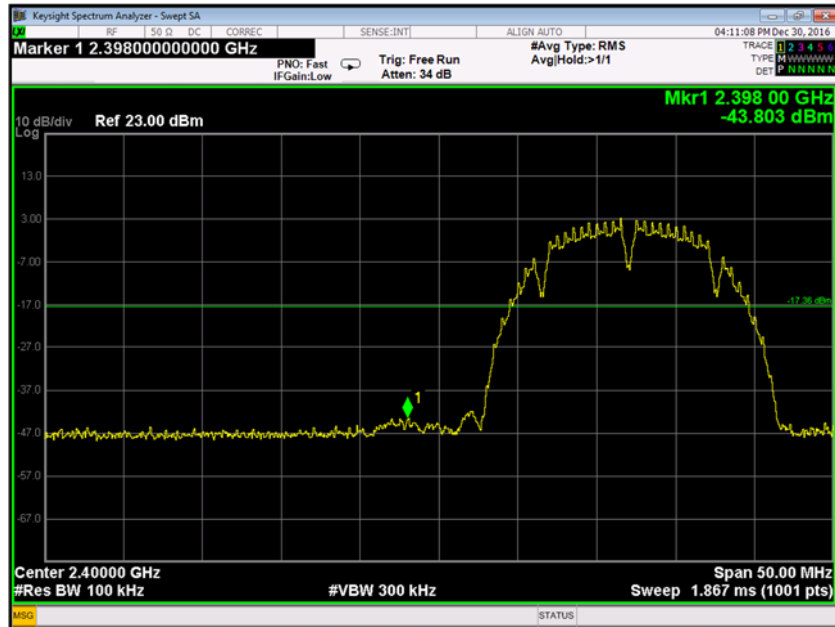
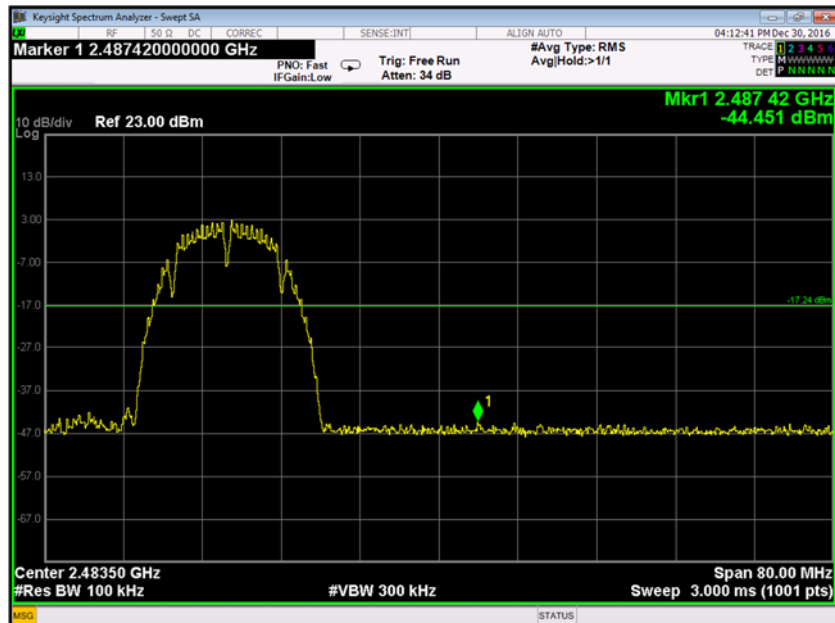


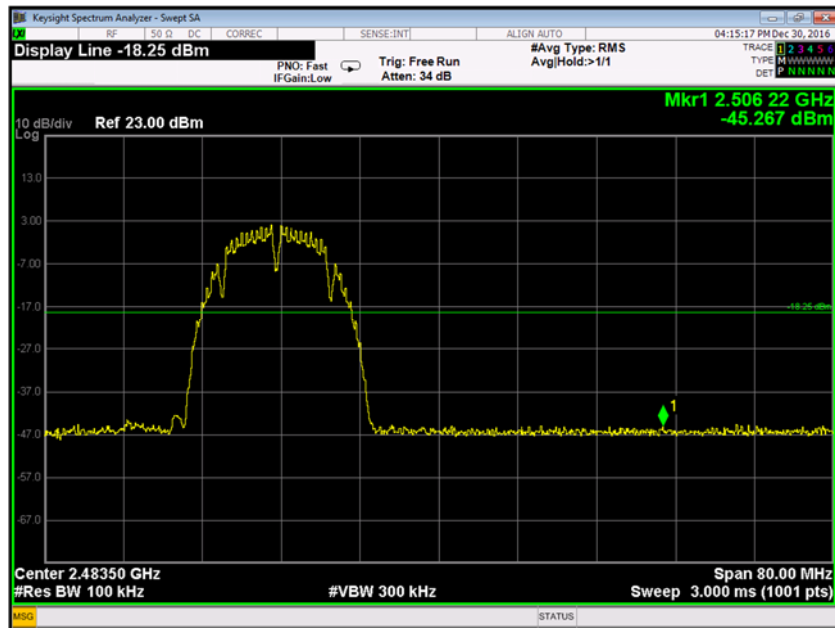
9.7.5 Test Data:



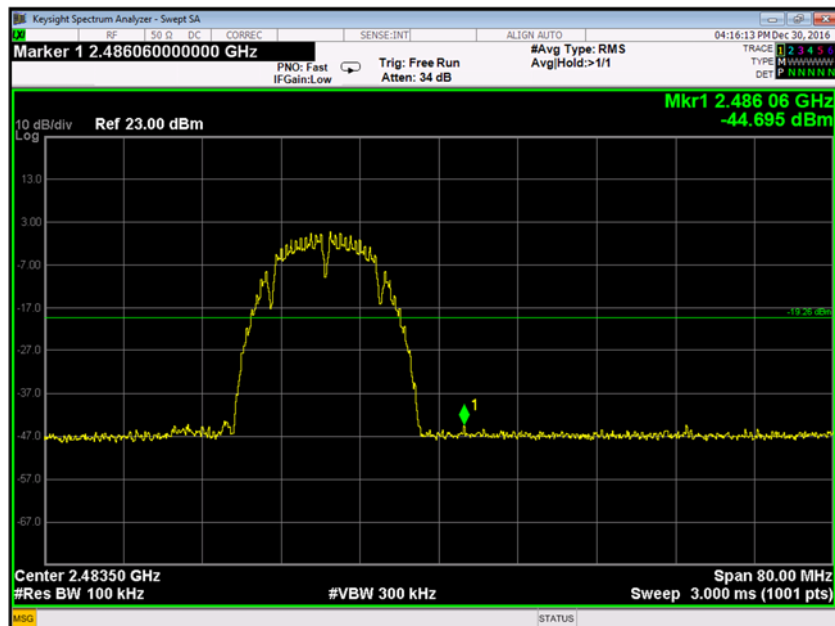
Plot 9-184 Chain A Conducted Band Edge 802.11b - Ch. 1 (2412 MHz)



Plot 9-185 Chain A Conducted Band Edge 802.11b - Ch. 11 (2462 MHz)



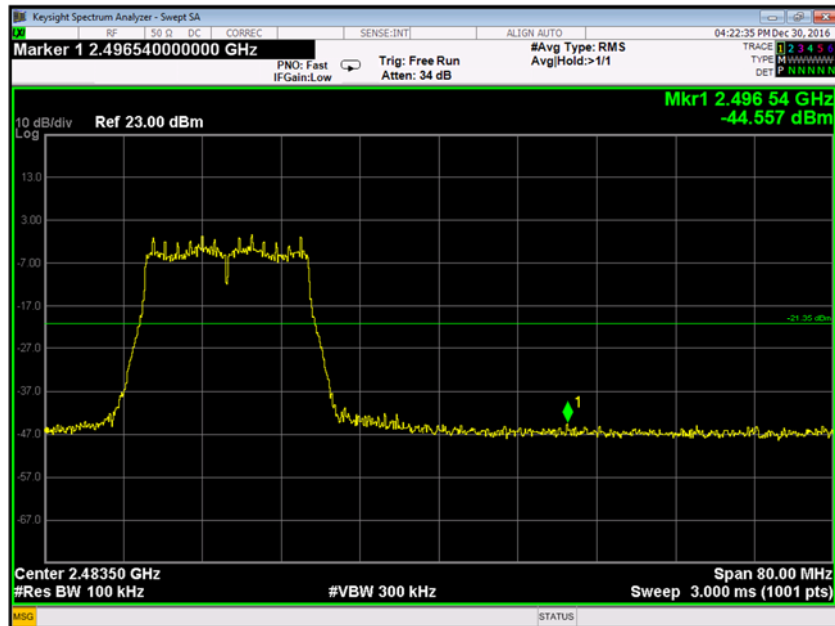
Plot 9-186 Chain A Conducted Band Edge 802.11b - Ch. 12 (2467 MHz)



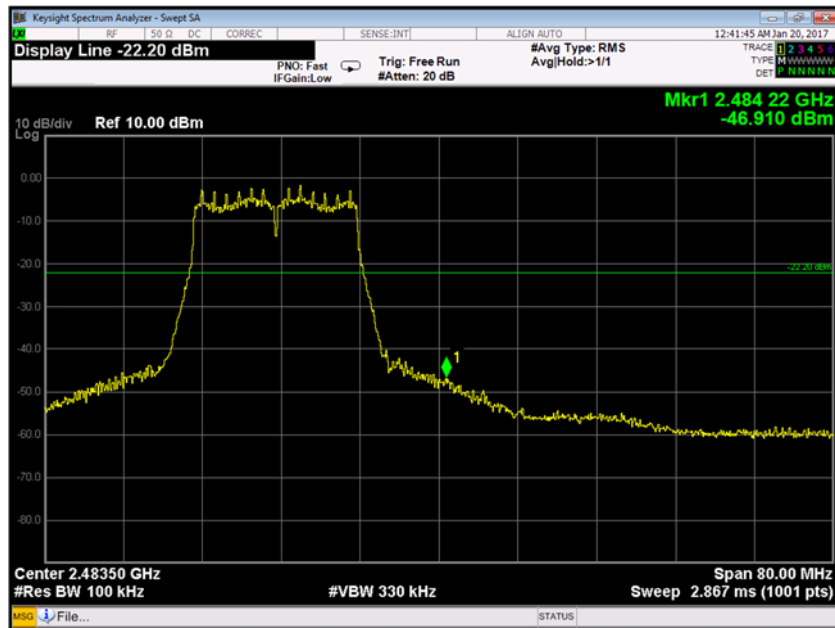
Plot 9-187 Chain A Conducted Band Edge 802.11b - Ch. 13 (2472 MHz)



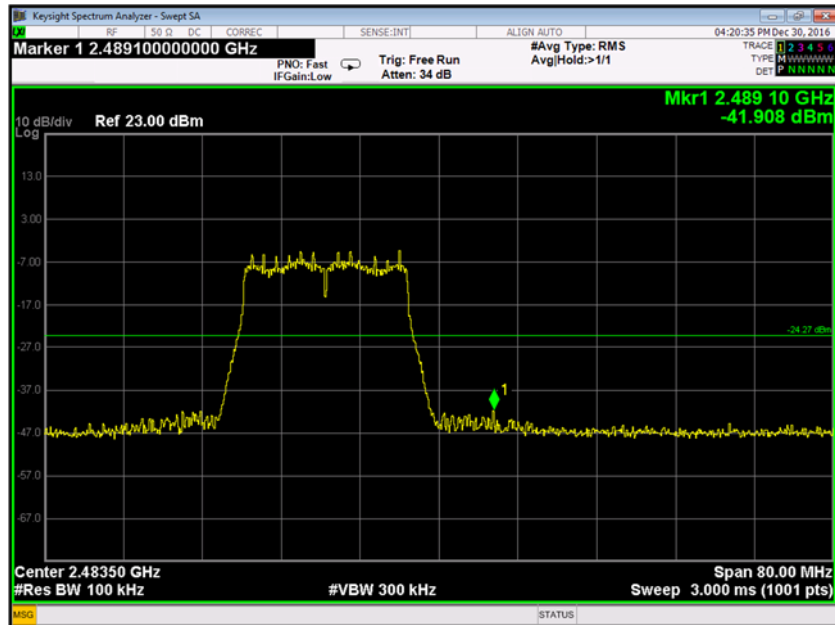
Plot 9-188 Chain A Conducted Band Edge 802.11g - Ch. 1 (2412 MHz)



Plot 9-189 Chain A Conducted Band Edge 802.11g - Ch. 11 (2462 MHz)



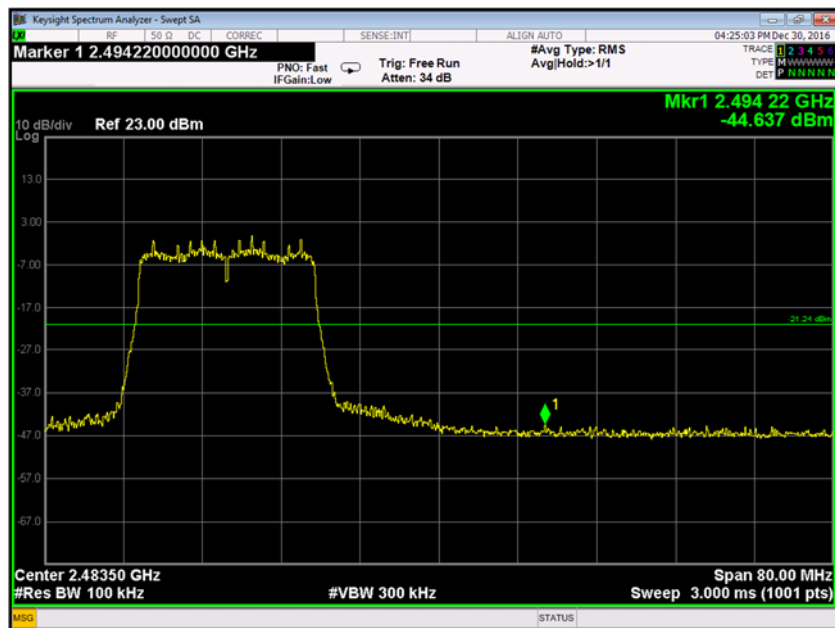
Plot 9-190 Chain A Conducted Band Edge 802.11g - Ch. 12 (2467 MHz)



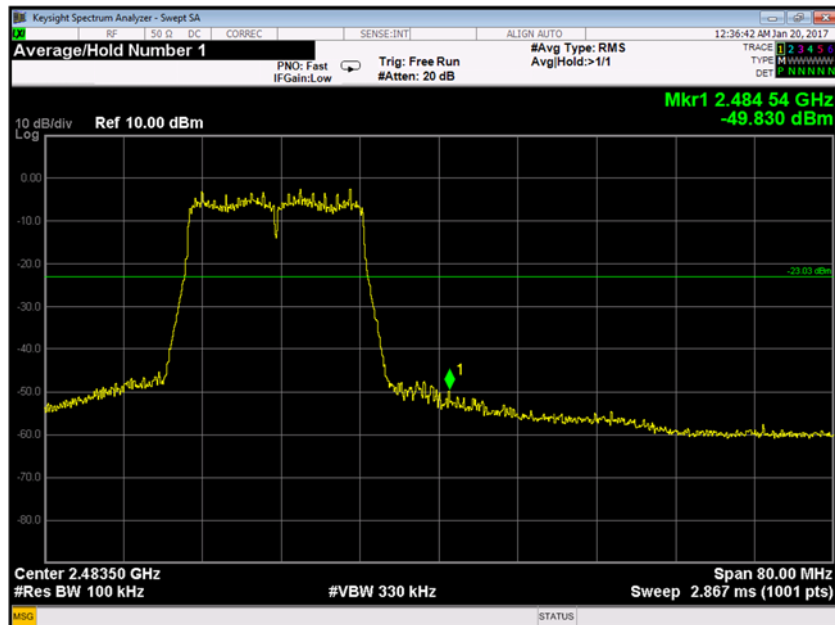
Plot 9-191 Chain A Conducted Band Edge 802.11g - Ch. 13 (2472 MHz)



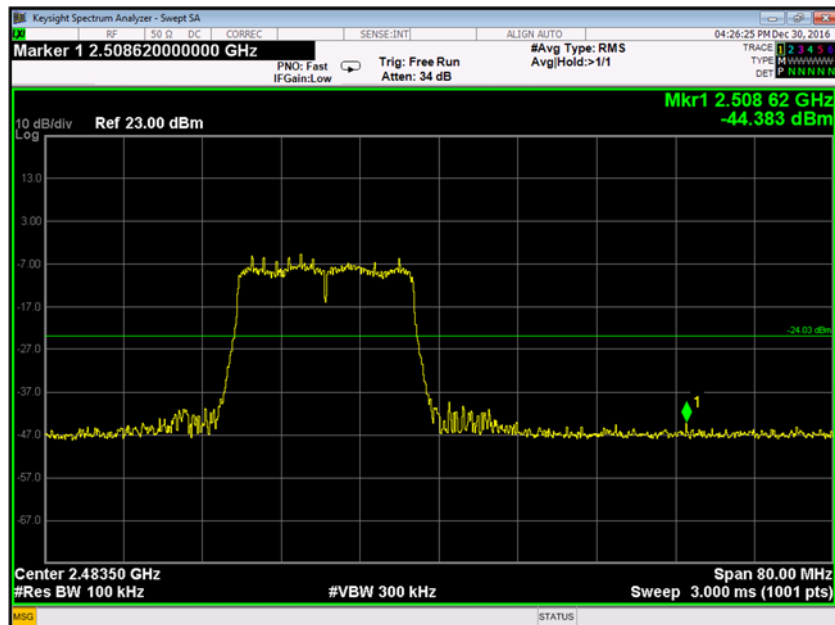
Plot 9-192 Chain A Conducted Band Edge 802.11n - Ch. 1 (2412 MHz)



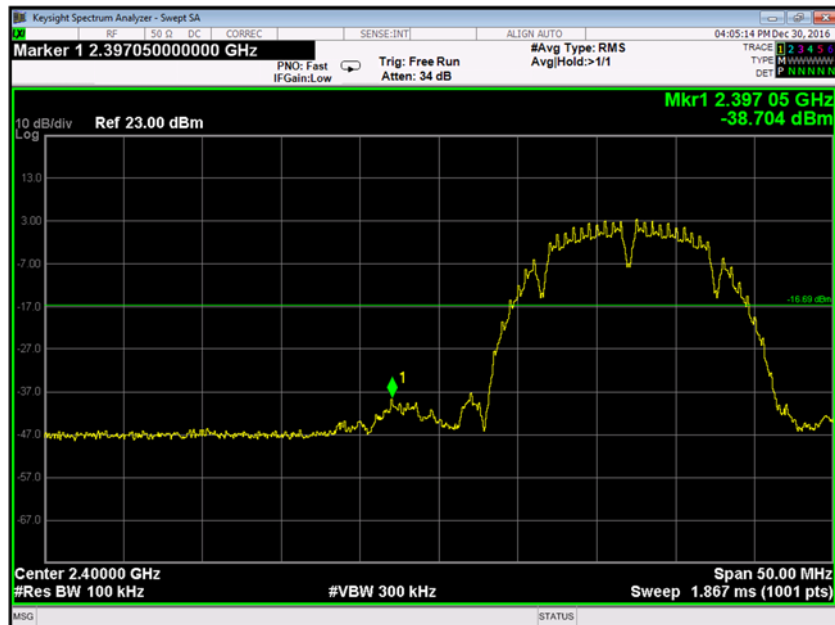
Plot 9-193 Chain A Conducted Band Edge 802.11n - Ch. 11 (2462 MHz)



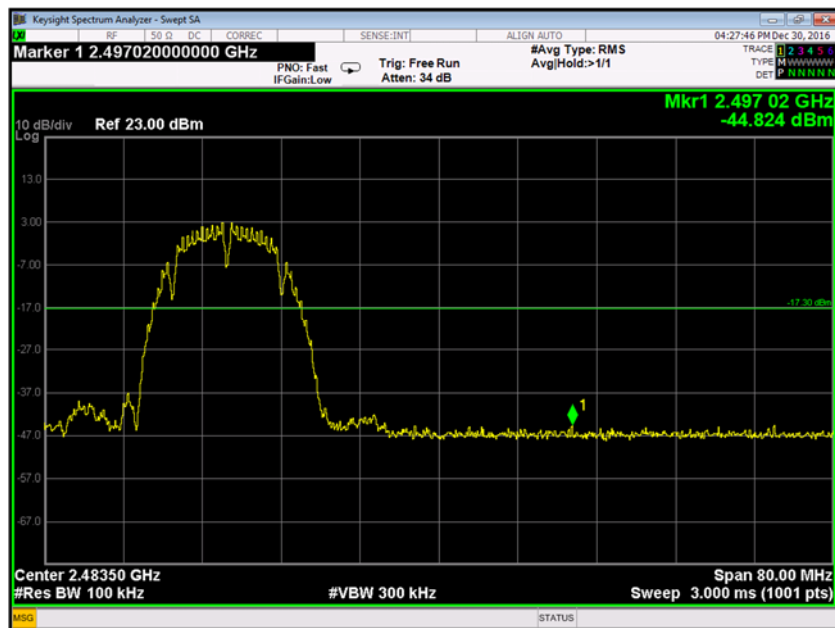
Plot 9-194 Chain A Conducted Band Edge 802.11n - Ch. 12 (2467 MHz)



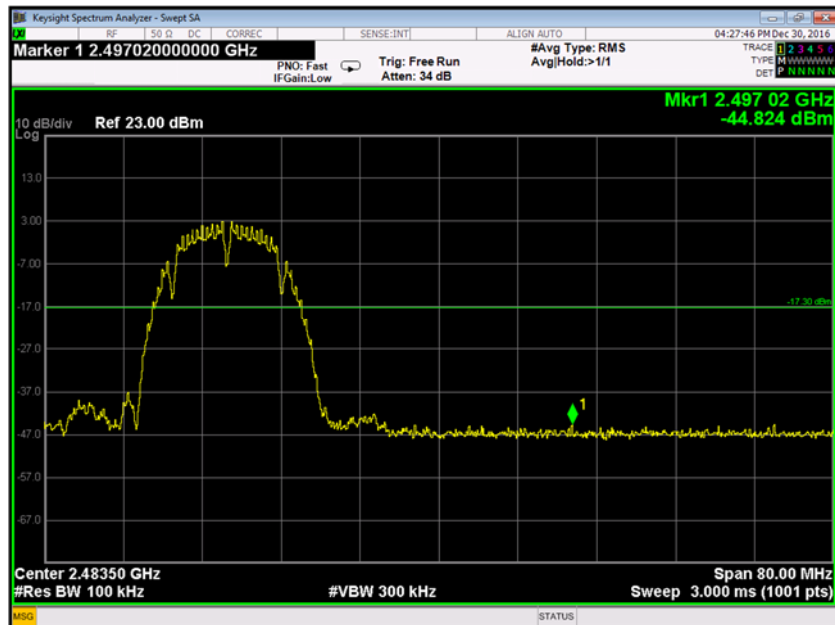
Plot 9-195 Chain A Conducted Band Edge 802.11n - Ch. 13 (2472 MHz)



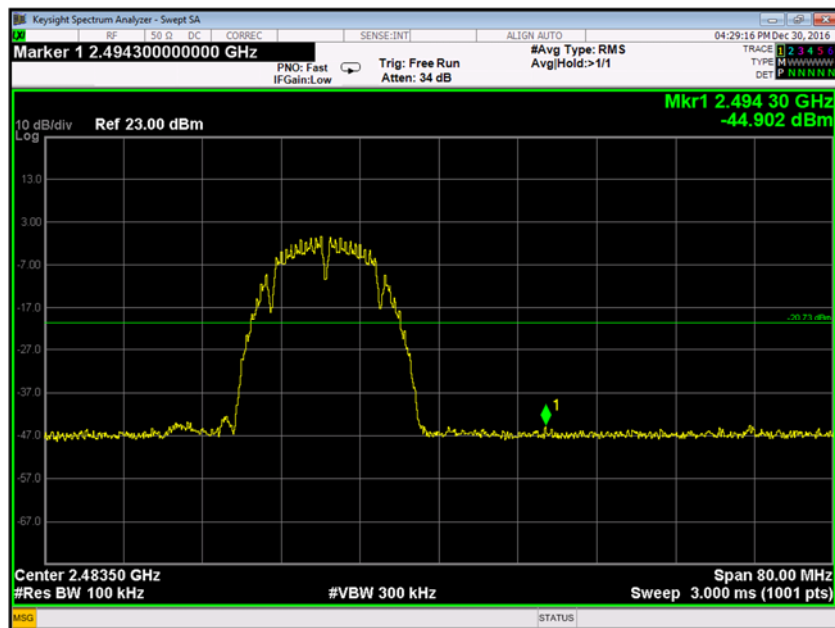
Plot 9-196 Chain B Conducted Band Edge 802.11b - Ch. 1 (2412 MHz)



Plot 9-197 Chain B Conducted Band Edge 802.11b - Ch. 11 (2462 MHz)

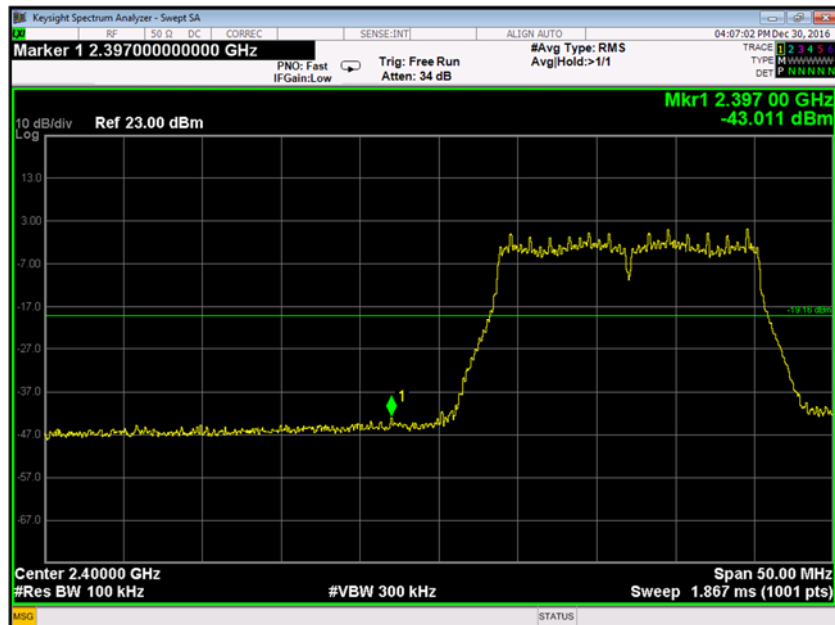


Plot 9-198 Chain B Conducted Band Edge 802.11b - Ch. 12 (2467 MHz)

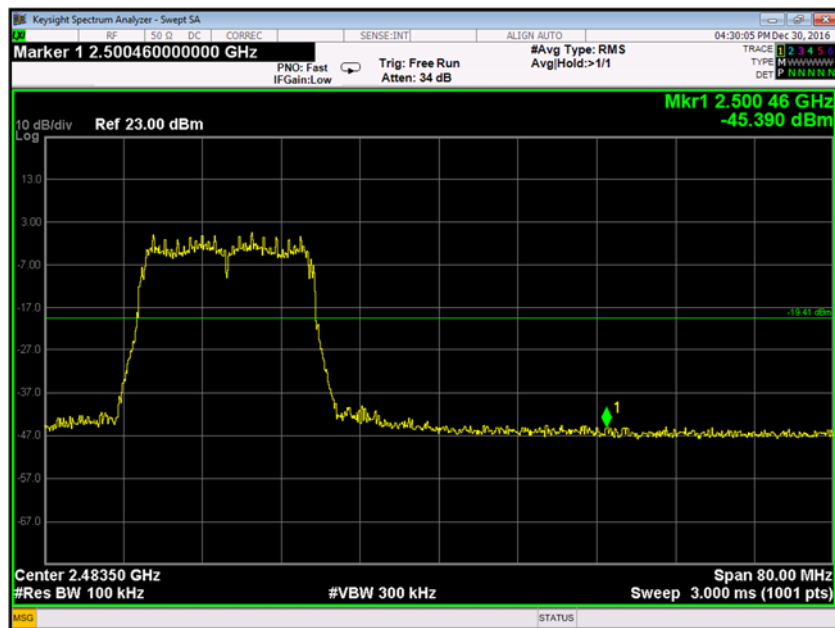


Plot 9-199 Chain B Conducted Band Edge 802.11b - Ch. 13 (2472 MHz)

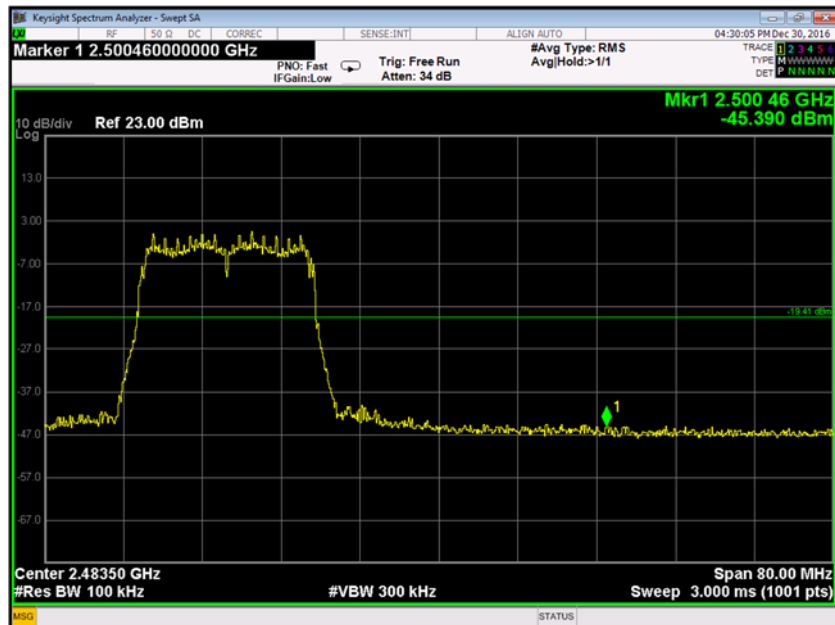




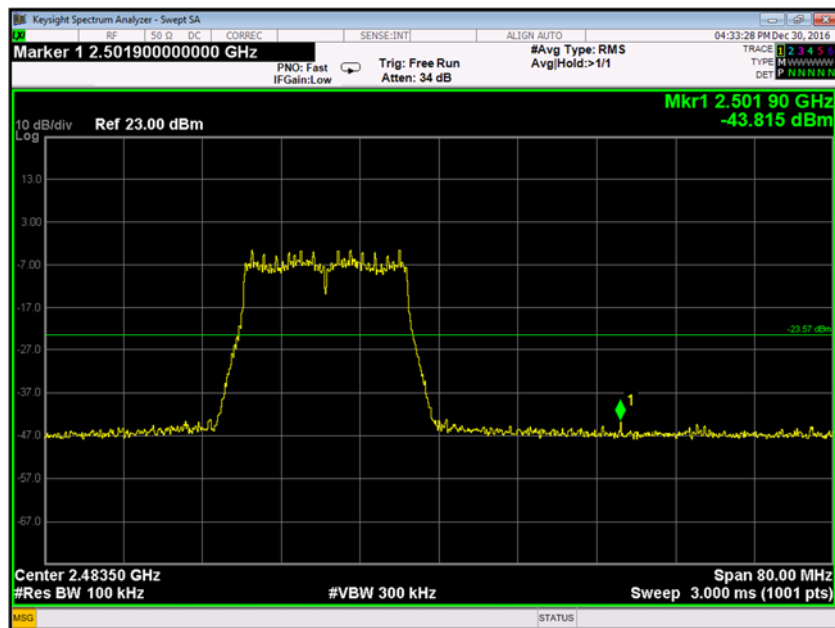
Plot 9-200 Chain B Conducted Band Edge 802.11g - Ch. 1 (2412 MHz)



Plot 9-201 Chain B Conducted Band Edge 802.11g - Ch. 11 (2462 MHz)



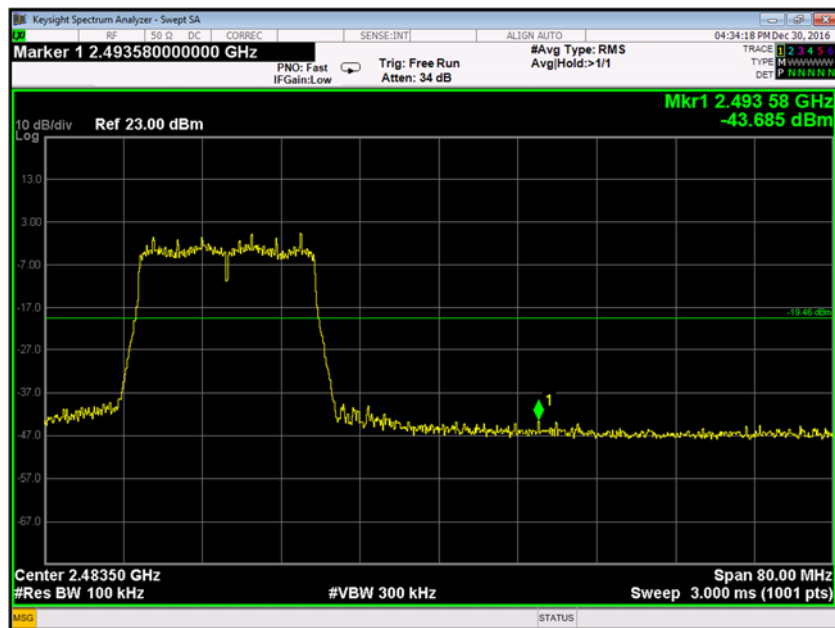
Plot 9-202 Chain B Conducted Band Edge 802.11g - Ch. 12 (2467 MHz)



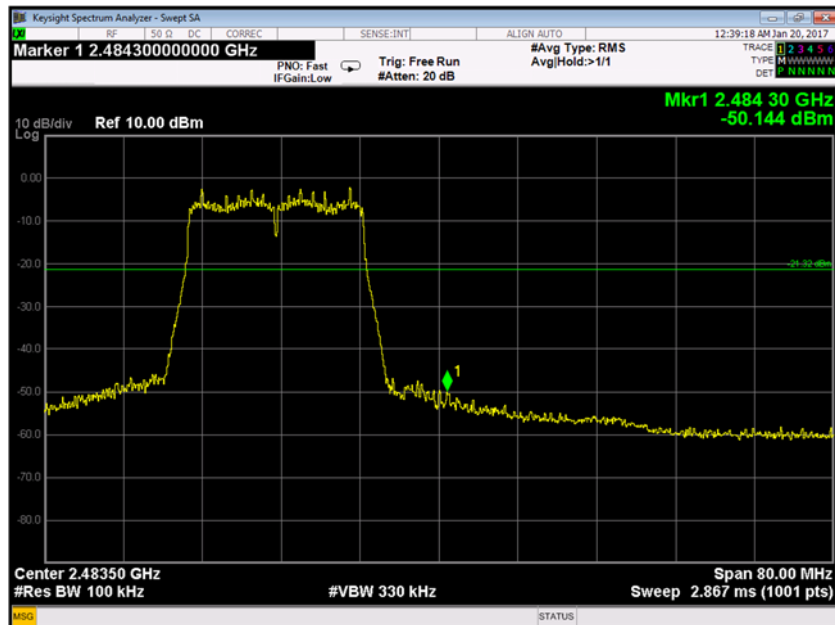
Plot 9-203 Chain B Conducted Band Edge 802.11g - Ch. 13 (2472 MHz)



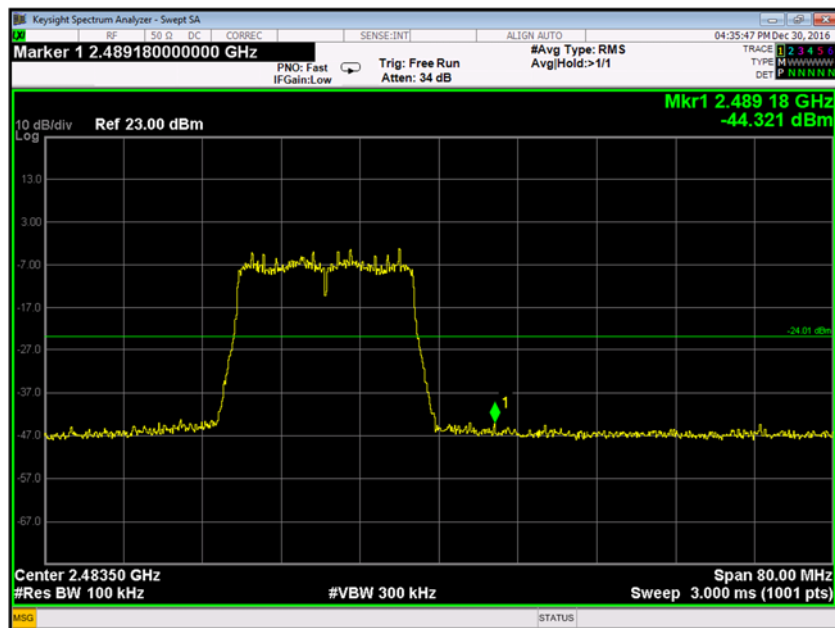
Plot 9-204 Chain B Conducted Band Edge 802.11n - Ch. 1 (2412 MHz)



Plot 9-205 Chain B Conducted Band Edge 802.11n - Ch. 11 (2462 MHz)



Plot 9-206 Chain B Conducted Band Edge 802.11n - Ch. 12 (2467 MHz)



Plot 9-207 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 V04 and ANSI C63.10 2013.

Radiated spurious measurements are made from 30MHz to the 10th harmonic of the fundamental frequency of the transmitter. Measurements below 30MHz were not performed since the radio circuitry of the EUT does not contain clocks below 30MHz. 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.

A pre-amp and a high pass filter were required for this test 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.

Both horizontal and vertical antenna polarizations were investigated. Worst-case maximized data for both polarizations is shown in this test report.

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

**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

Sweep points  $\geq 2 \times$  Span/RBW**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

Sweep points  $\geq 2 \times$  Span/RBW**Final Measurements above 1 GHz****Peak Measurements****Spectrum Analyzer Settings:**

RBW= 1 MHz

VBW= 3 MHz

Trace Mode: Peak Detector (Max Hold)

Span= wide enough to encompass the emission

Sweep Points  $\geq 2 \times$  Span/RBW

Sweep Time = Auto

**RMS Average Measurements****Spectrum Analyzer Settings:**

RBW= 1 MHz

VBW  $\geq 3 \times$  RBW

Detector= RMS

Span= wide enough to encompass the emission

Sweep points  $\geq 2 \times$  Span/RBW

Sweep time = auto

Trace= Average at least 100 traces

Trace Averaging Type= power (RMS)

The duty cycle correction factor is added to the emission level.

**Restricted Band-Edge Emissions****Peak Measurements****Spectrum Analyzer Settings:**

RBW= 1 MHz

VBW= 3 MHz

Trace Mode: Peak Detector (Max Hold)

Span= 2310 – 2500 MHz

Sweep Points = 401

Sweep Time = Auto

**Average Measurements (Reduced Video Bandwidth Method)****Spectrum Analyzer Settings:**

RBW= 1 MHz

VBW= 2 kHz

VBW Mode = Linear

Trace Mode: Peak Detector (Max Hold)

Span= 2310 – 2500 MHz

Sweep Points = 401

Sweep Time = Auto

Sweep Count = 200

**Sample Calculation:**

Field Strength Level: Amplitude (Analyzer level) + AFCL (Antenna Factor and Cable losses) –  
Amplifier Gain = 50 dBuV + 33 dB – 25 dB = 58dBuV/m

### 9.8.3 Limits:

Frequency (MHz)	Field Strength ( $\mu\text{V/m}$ )	Measurement Distance (meters)	Corrected Field Strength for 3m measurement distance (dB $\mu\text{V/m}$ )
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 (Restricted Frequency Bands)	500	3	54 (Average) 74 (Peak)

### 9.8.4 Test Result:

Pass.

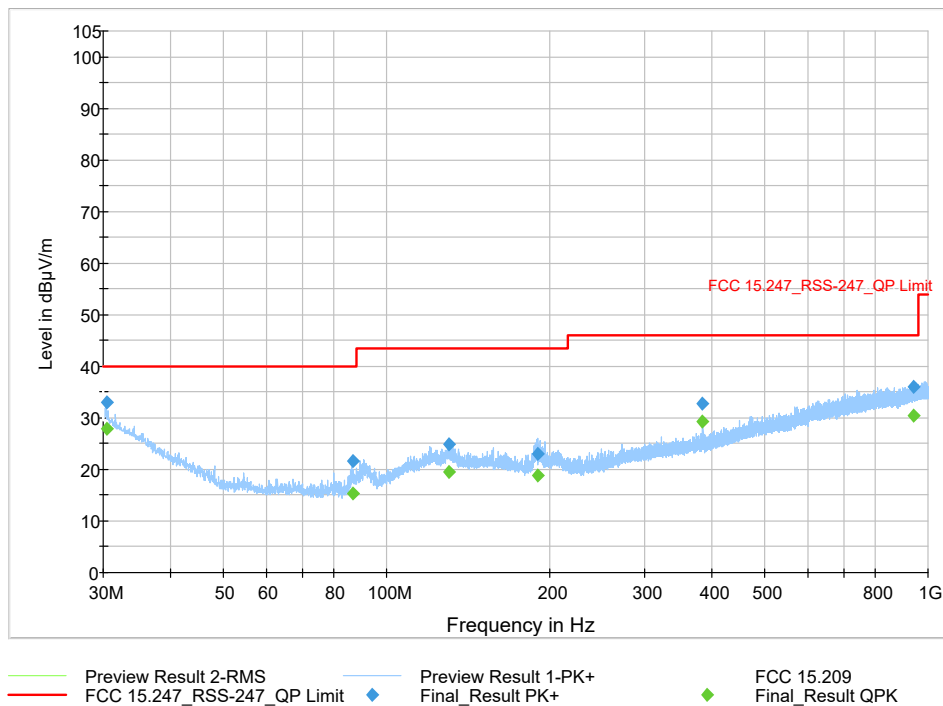


9.8.5 Test Data:

9.8.5.1 Emissions in 30 MHz- 1 GHz range

All channels and modes were tested and worst case results from 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)
30.40	27.89	27.30	24.25	40.00	-12.11
86.69	15.40	14.60	24.48	40.00	-24.6
130.72	19.56	20.40	26.33	43.50	-23.94
190.16	18.77	18.50	29.10	43.50	-24.73
384.00	29.26	23.00	33.94	46.00	-16.74
942.83	30.55	31.50	35.53	46.00	-15.45



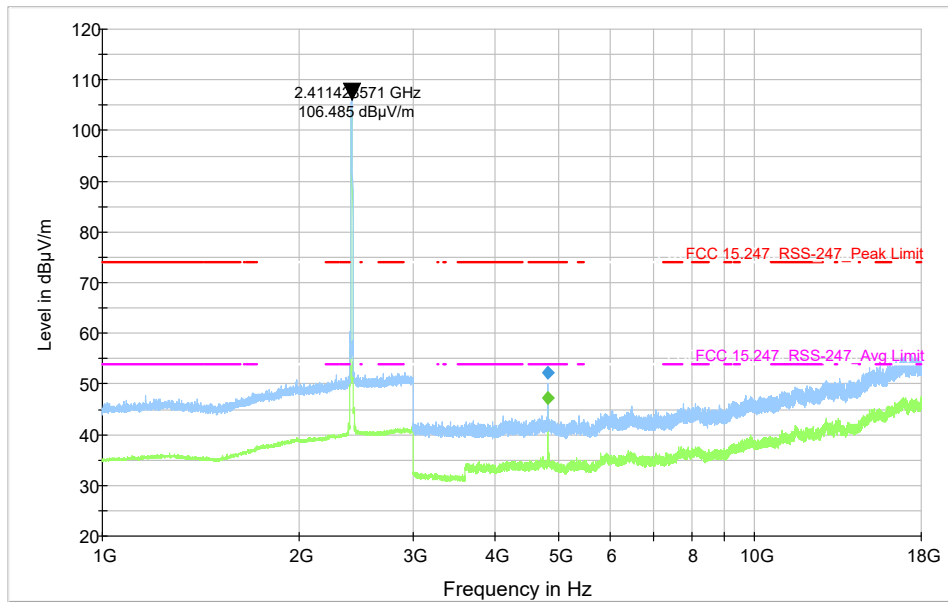
Plot 9-166 Radiated Spurious Emissions 30 – 1000 MHz 802.11b - Ch. 6 (2437 MHz)

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	37.69	9.6	47.29	54	-6.71
2437	4874.00	40.24	9.5	49.74	54	-4.26
2462	4924.00	42.16	9.0	51.16	54	-2.84

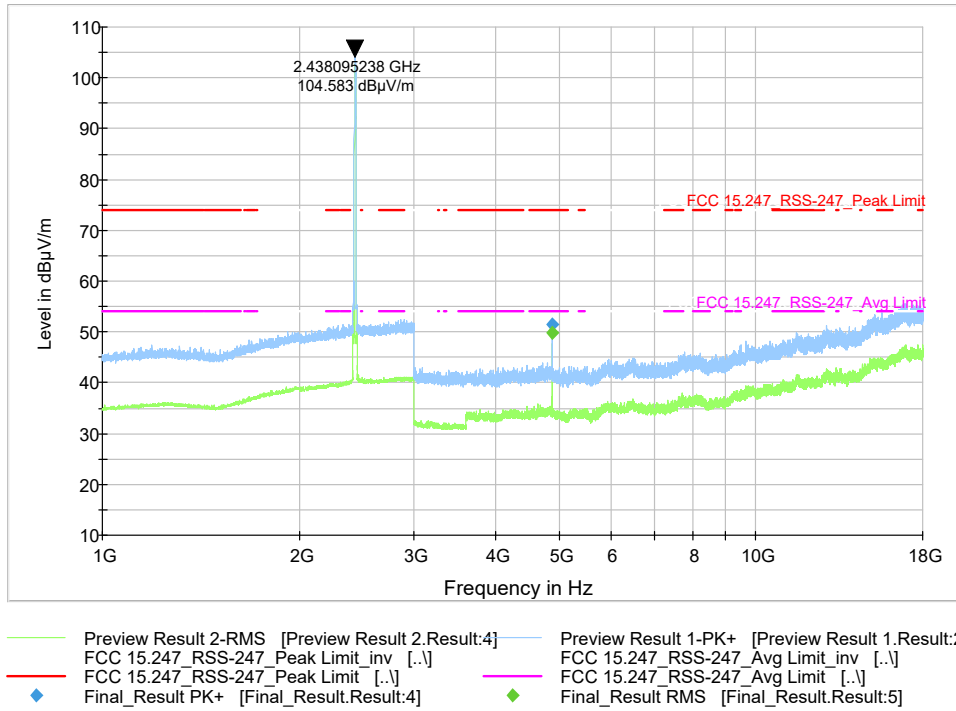
  

802.11b RSE 1 - 18GHz Peak Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Peak Amplitude (dBµV)	Correction Factor (dB)	Corrected Peak Field Strength (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)
2412	4824.00	42.52	9.6	52.12	74	-21.8
2437	4874.00	42.08	9.5	51.58	74	-22.42
2462	4924.00	45.45	9.0	54.45	74	-19.55

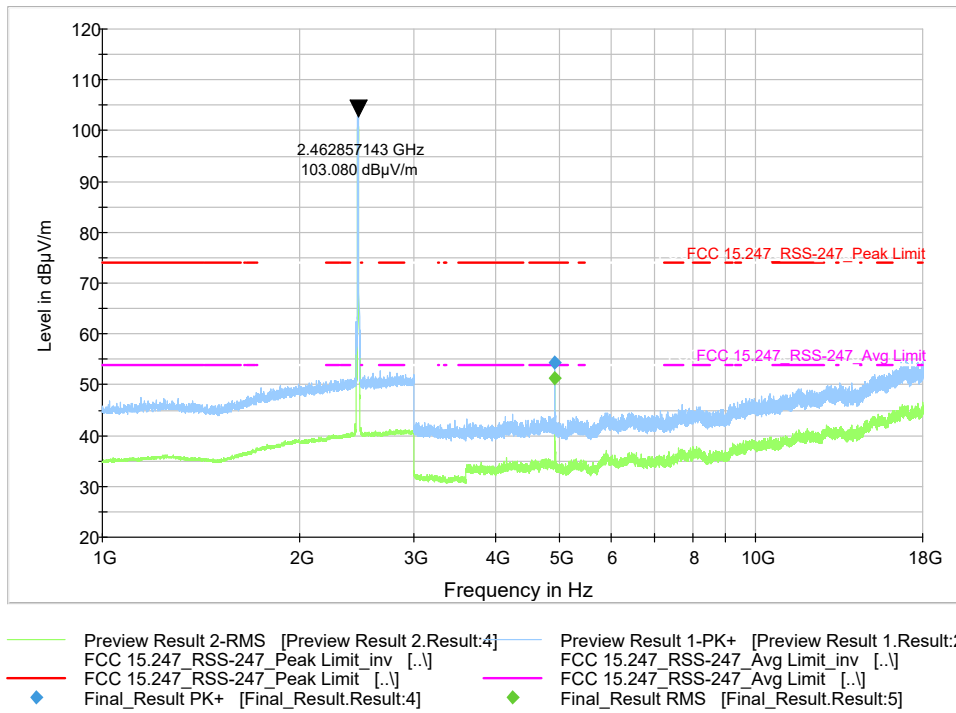


— Preview Result 2-RMS [Preview Result 2.Result:4]    — Preview Result 1-PK+ [Preview Result 1.Result:2]  
--- FCC 15.247\_RSS-247\_Peak Limit\_inv [...]    --- FCC 15.247\_RSS-247\_Avg Limit\_inv [...]  
--- FCC 15.247\_RSS-247\_Peak Limit [...]    --- FCC 15.247\_RSS-247\_Avg Limit [...]  
◆ Final\_Result PK+ [Final\_Result.Result:4]    ◆ Final\_Result RMS [Final\_Result.Result:5]

Plot 9-208 Radiated Spurious Emission 1-18GHz 802.11b - Ch.1 (2412 MHz)

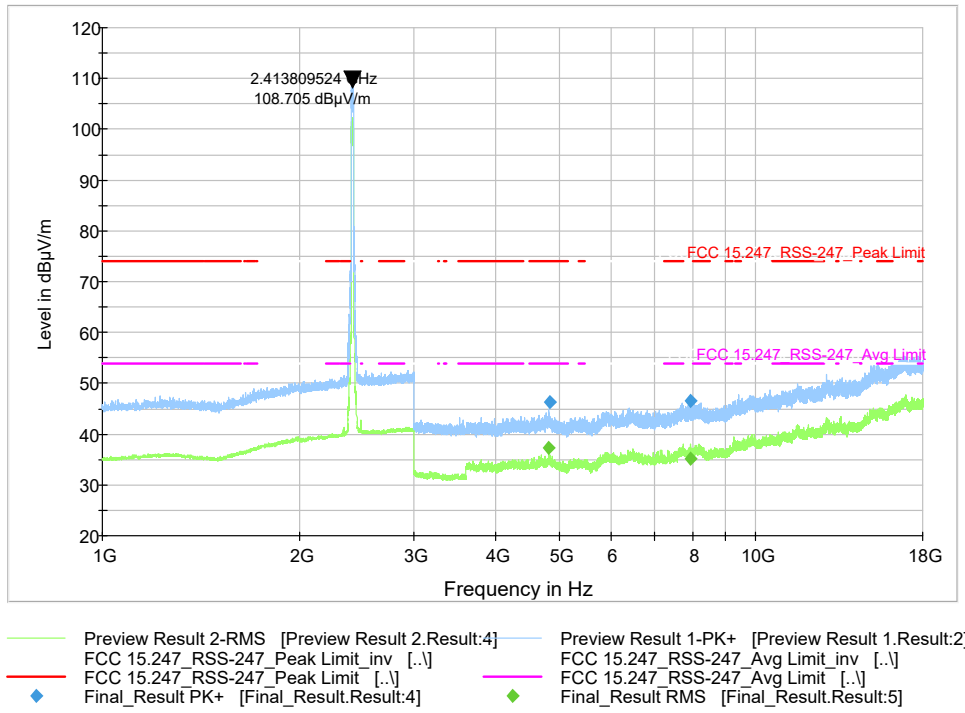


**Plot 9-209 Radiated Spurious Emission 1-18GHz 802.11b - Ch.6 (2437 MHz)**

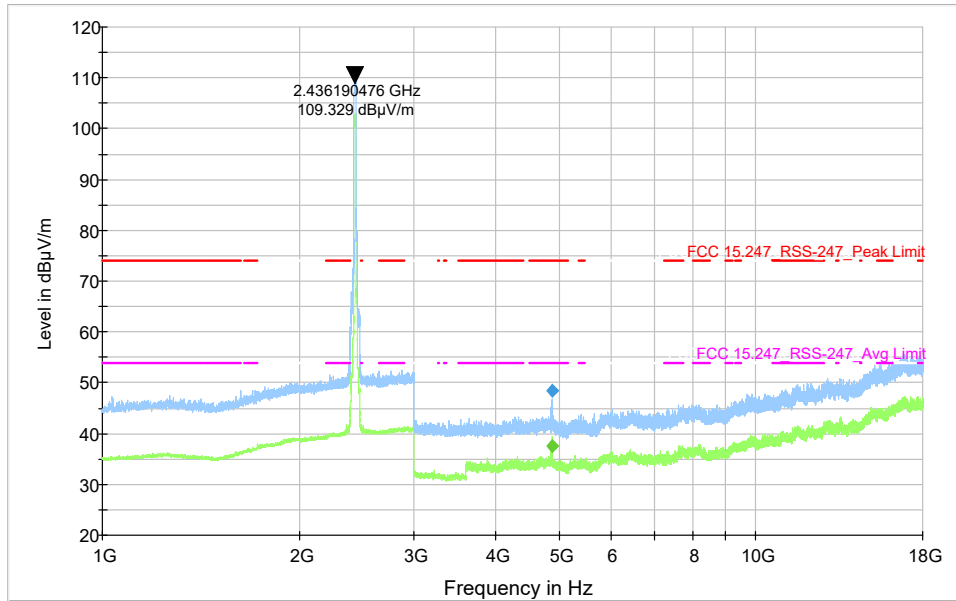


**Plot 9-210 Radiated Spurious Emission 1-18GHz 802.11b - Ch.11 (2462 MHz)**

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	7931.30	21.59	13.60	35.19	54	-18.81
2412	4824.00	27.80	9.60	37.40	54	-16.60
2437	4875.90	28.07	9.50	37.57	54	-16.43
2462	4926.30	27.00	9.00	36.00	54	-18.00
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	36.68	9.60	46.28	74	-27.72
2412	7236.00	32.94	13.60	46.54	74	-27.46
2437	4877.70	38.85	9.50	48.35	74	-25.65
2462	7311.40	36.69	9.00	45.69	74	-28.31

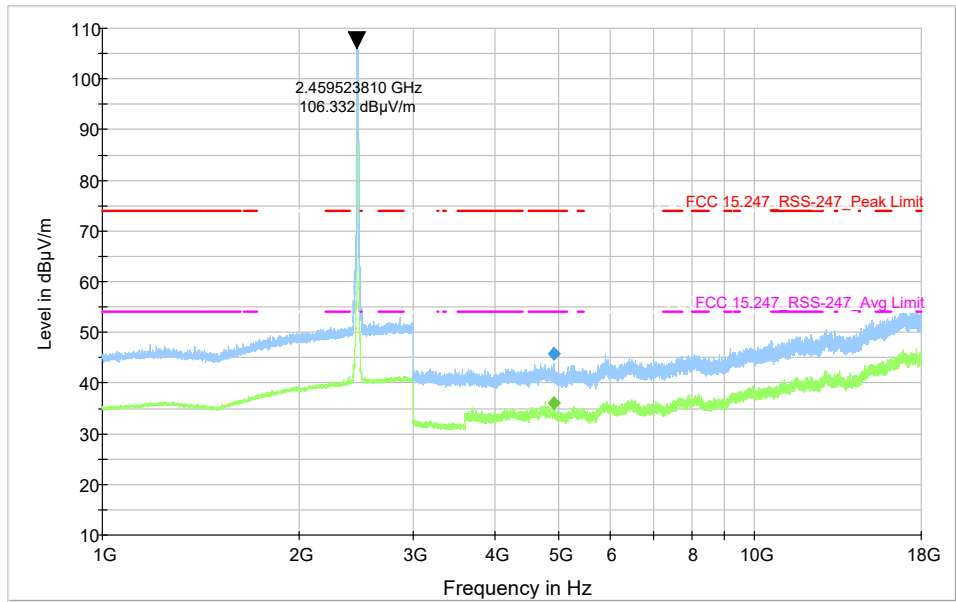


Plot 9-211 Radiated Spurious Emission 1-18GHz 802.11g - Ch.1 (2412 MHz)



— Preview Result 2-RMS [Preview Result 2.Result:4]    — Preview Result 1-PK+ [Preview Result 1.Result:2]  
— FCC 15.247\_RSS-247\_Peak Limit\_inv [...]    — FCC 15.247\_RSS-247\_Avg Limit\_inv [...]  
◆ Final\_Result PK+ [Final\_Result.Result:4]    ◆ Final\_Result RMS [Final\_Result.Result:5]

**Plot 9-212 Radiated Spurious Emission 1-18GHz 802.11g - Ch.6 (2437 MHz)**



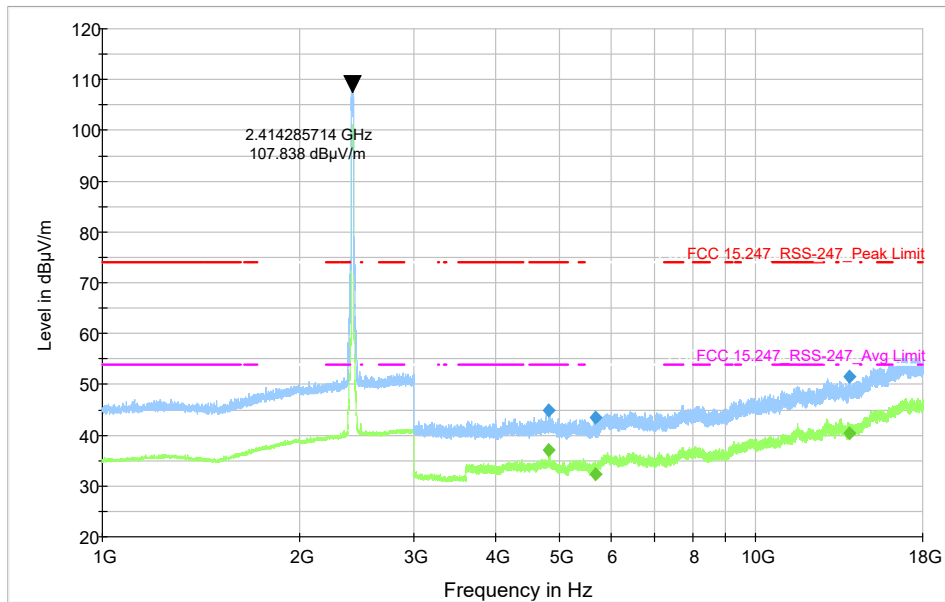
— Preview Result 2-RMS [Preview Result 2.Result:4]    — Preview Result 1-PK+ [Preview Result 1.Result:2]  
— FCC 15.247\_RSS-247\_Peak Limit\_inv [...]    — FCC 15.247\_RSS-247\_Avg Limit\_inv [...]  
◆ Final\_Result PK+ [Final\_Result.Result:4]    ◆ Final\_Result RMS [Final\_Result.Result:5]

**Plot 9-213 Radiated Spurious Emission 1-18GHz 802.11g - Ch.11 (2462 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	5673.60	22.01	10.20	32.21	54	-21.79
2412	4823.90	27.43	9.60	37.03	54	-16.97
2412	13893.20	20.05	20.30	40.35	54	-13.65
2437	4874.10	28.89	9.50	38.39	54	-15.61
2462	4924.00	27.29	9.00	36.29	54	-17.71

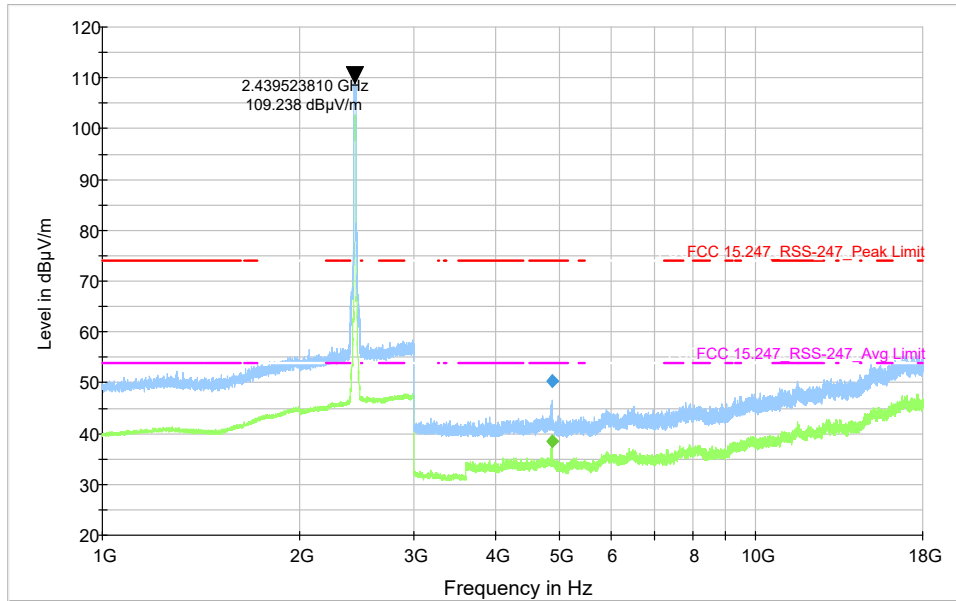
  

802.11n RSE 1 - 18GHz Peak Data						
Carrier Frequency (MHz)	Frequency (MHz)	Raw Peak Amplitude (dBµV)	Correction Factor (dB)	Corrected Peak Field Strength (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)
2412	4820.90	33.34	10.20	43.54	74	-30.46
2412	7238.20	35.19	9.60	44.79	74	-29.21
2437	4876.90	31.37	20.20	51.57	74	-22.43
2437	7300.50	40.95	9.50	50.45	74	-23.55
2462	4928.00	39.22	9.00	48.22	74	-25.78



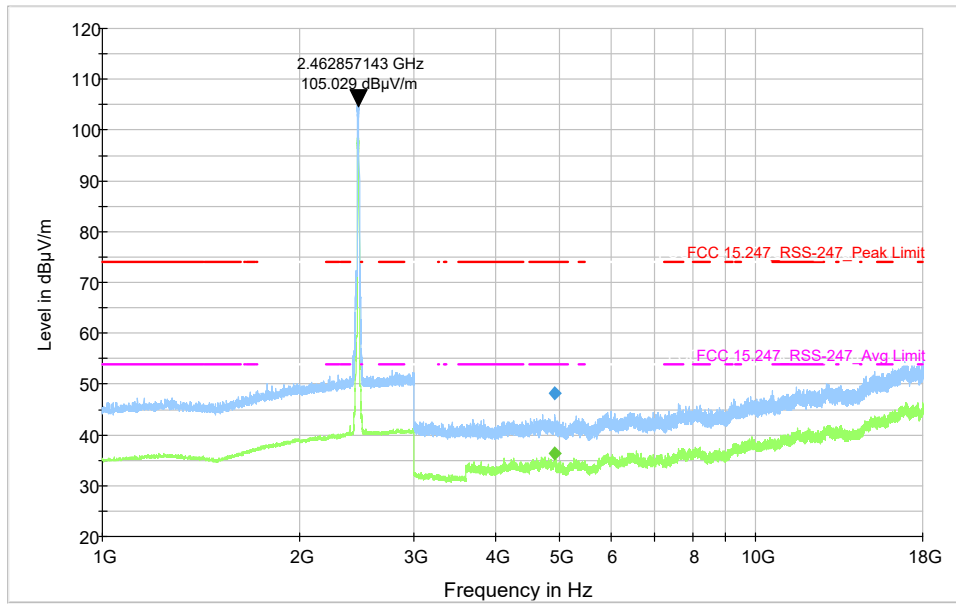
— Preview Result 2-RMS [Preview Result 2.Result:4]     — Preview Result 1-PK+ [Preview Result 1.Result:2]  
— FCC 15.247\_RSS-247\_Peak Limit\_inv [...]     — FCC 15.247\_RSS-247\_Avg Limit\_inv [...]  
— FCC 15.247\_RSS-247\_Peak Limit [...]     — FCC 15.247\_RSS-247\_Avg Limit [...]  
◆ Final\_Result PK+ [Final\_Result.Result:4]     ◆ Final\_Result RMS [Final\_Result.Result:5]

**Plot 9-214 Radiated Spurious Emission 1-18GHz 802.11n - Ch.1 (2412 MHz)**



— Preview Result 2-RMS [Preview Result 2.Result:4]    — Preview Result 1-PK+ [Preview Result 1.Result:2]  
— FCC 15.247\_RSS-247\_Peak Limit\_inv [...]    — FCC 15.247\_RSS-247\_Avg Limit\_inv [...]  
— FCC 15.247\_RSS-247\_Peak Limit [...]    — FCC 15.247\_RSS-247\_Avg Limit [...]  
◆ Final\_Result PK+ [Final\_Result.Result:4]    ◆ Final\_Result RMS [Final\_Result.Result:5]

**Plot 9-215 Radiated Spurious Emission 1-18GHz 802.11n - Ch.6 (2437 MHz)**



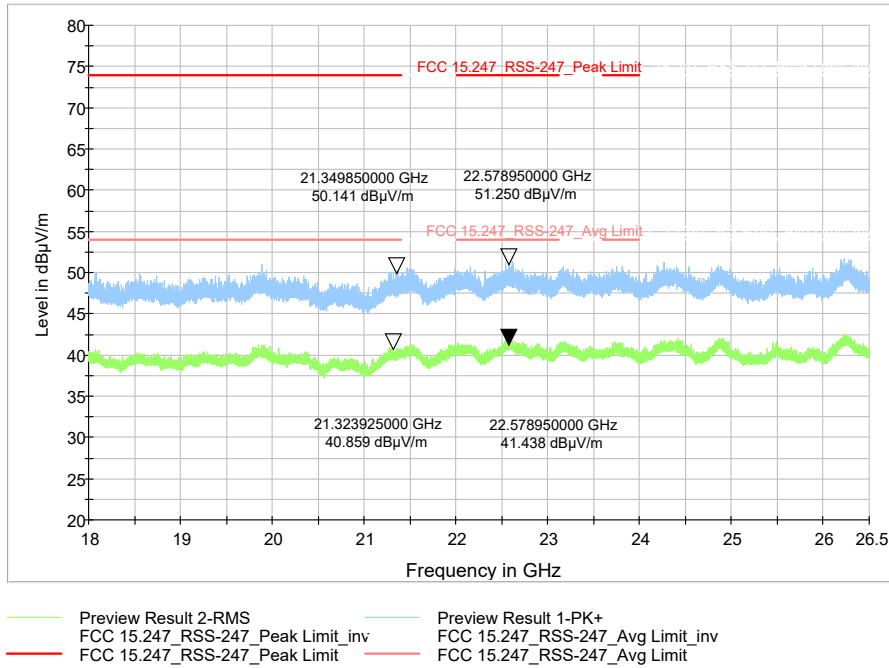
— Preview Result 2-RMS [Preview Result 2.Result:4]    — Preview Result 1-PK+ [Preview Result 1.Result:2]  
— FCC 15.247\_RSS-247\_Peak Limit\_inv [...]    — FCC 15.247\_RSS-247\_Avg Limit\_inv [...]  
— FCC 15.247\_RSS-247\_Peak Limit [...]    — FCC 15.247\_RSS-247\_Avg Limit [...]  
◆ Final\_Result PK+ [Final\_Result.Result:4]    ◆ Final\_Result RMS [Final\_Result.Result:5]

**Plot 9-216 Radiated Spurious Emission 1-18GHz 802.11n - Ch.11 (2462 MHz)**

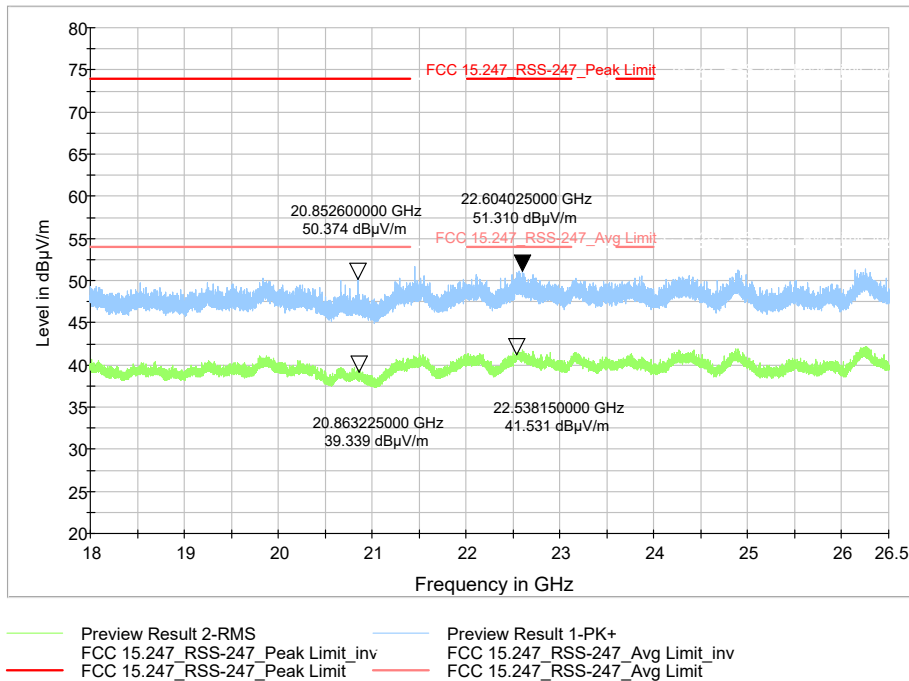
**9.8.5.3 Emissions in 18-26.5 GHz range**

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

No significant emissions to report above noise floor.

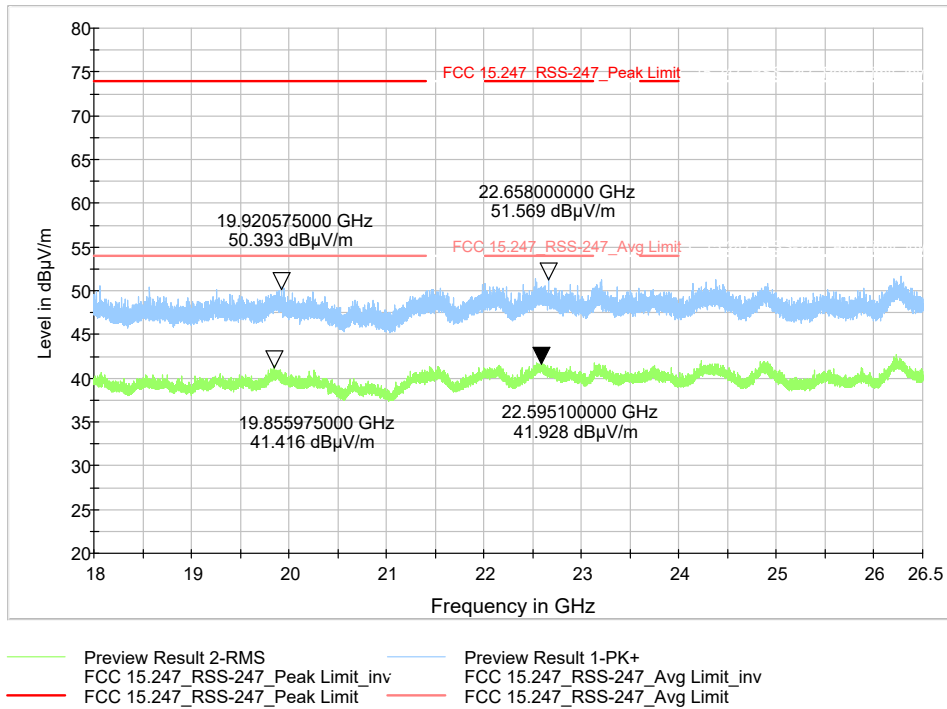


**Plot 9-217 Radiated Spurious Emissions 18-26.5GHz 802.11b - Ch.6 (2437 MHz)**



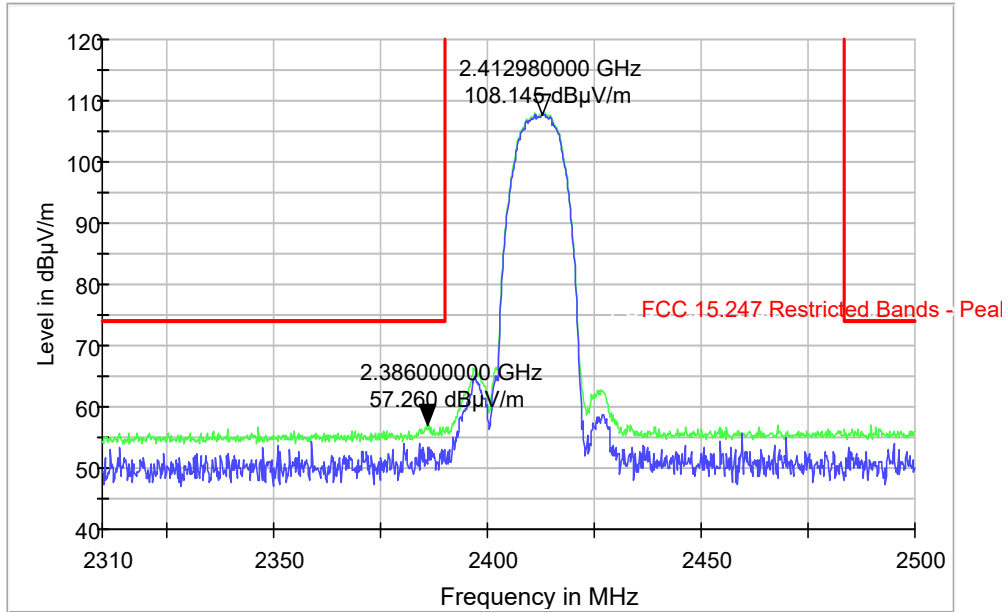
**Plot 9-218 Radiated Spurious Emissions 18-26.5GHz 802.11g - Ch.6 (2437 MHz)**





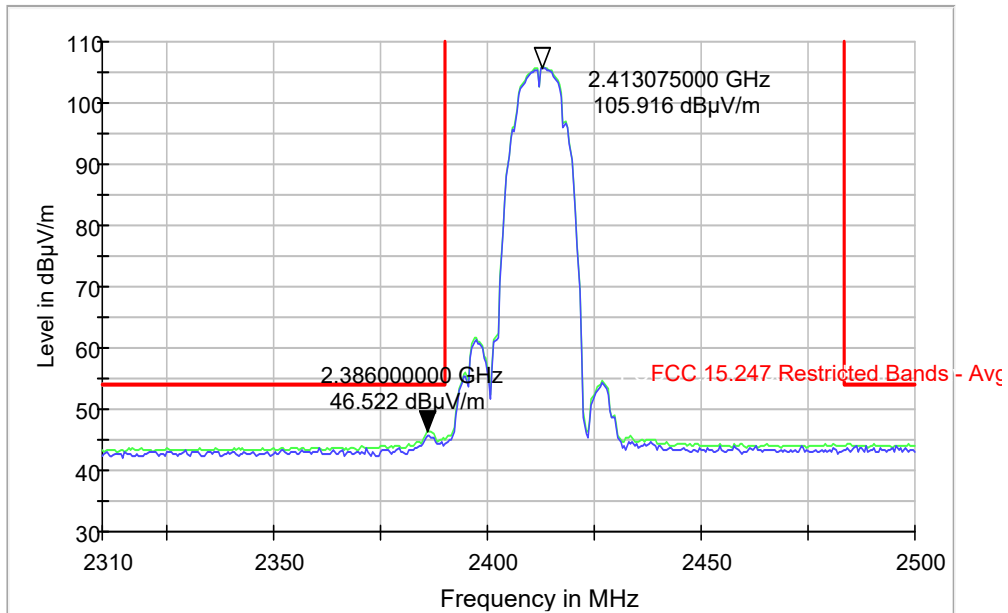
**Plot 9-219 Radiated Spurious Emissions 18-26.5GHz 802.11n - Ch.6 (2437 MHz)**

9.8.5.4 Radiated restricted Band-edge emissions



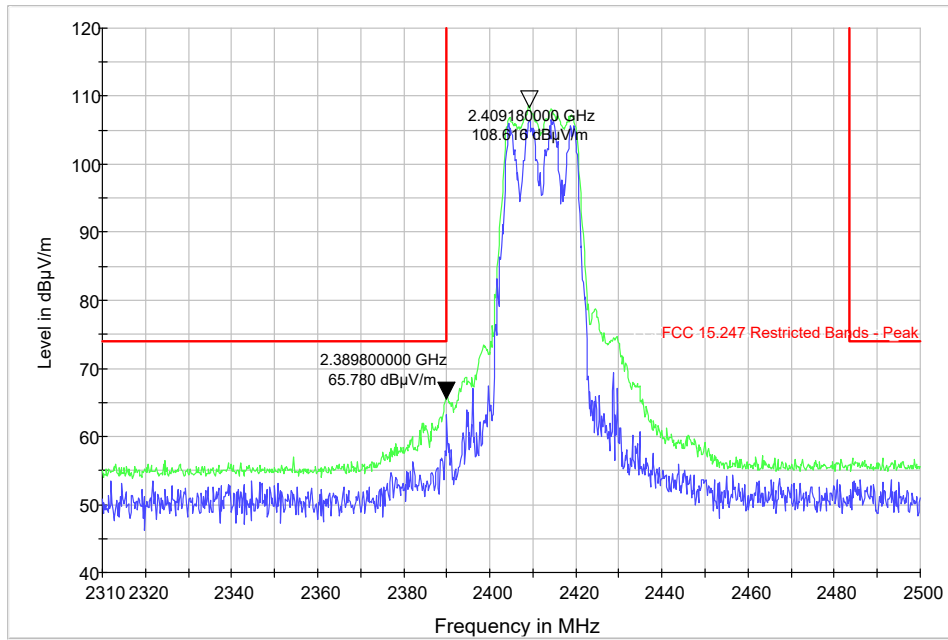
PK+\_MAXH PK+\_CLRWR  
FCC 15.247 Restricted Bands - Peak inv FCC 15.247 Restricted Bands - Peak

Plot 9-220 Radiated Band Edge Peak 802.11b - Ch.1 (2412 MHz)



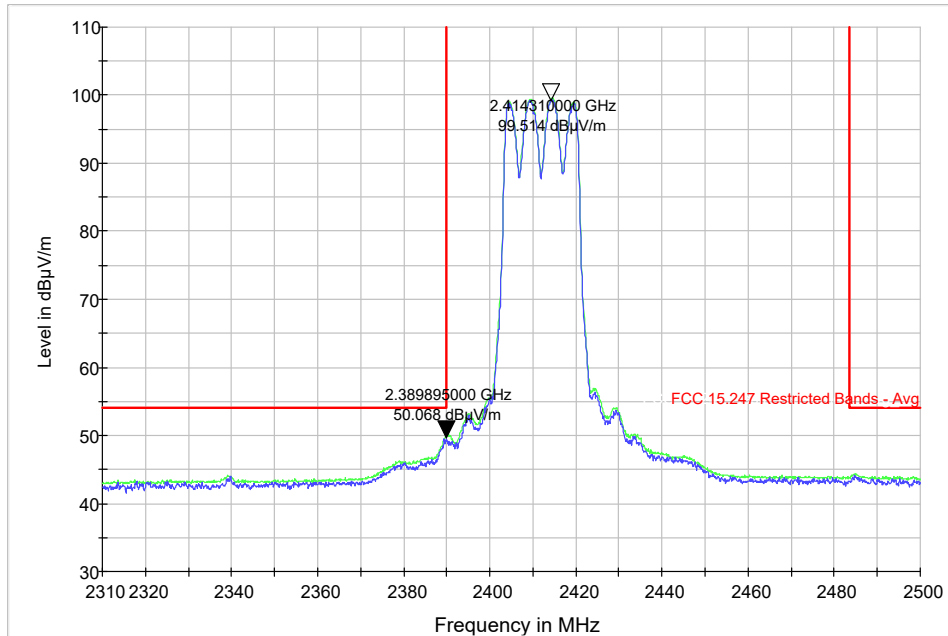
PK+\_MAXH PK+\_CLRWR  
FCC 15.247 Restricted Bands - Avg inv FCC 15.247 Restricted Bands - Avg

Plot 9-221 Radiated Band Edge Average 802.11b - Ch.1 (2412 MHz)



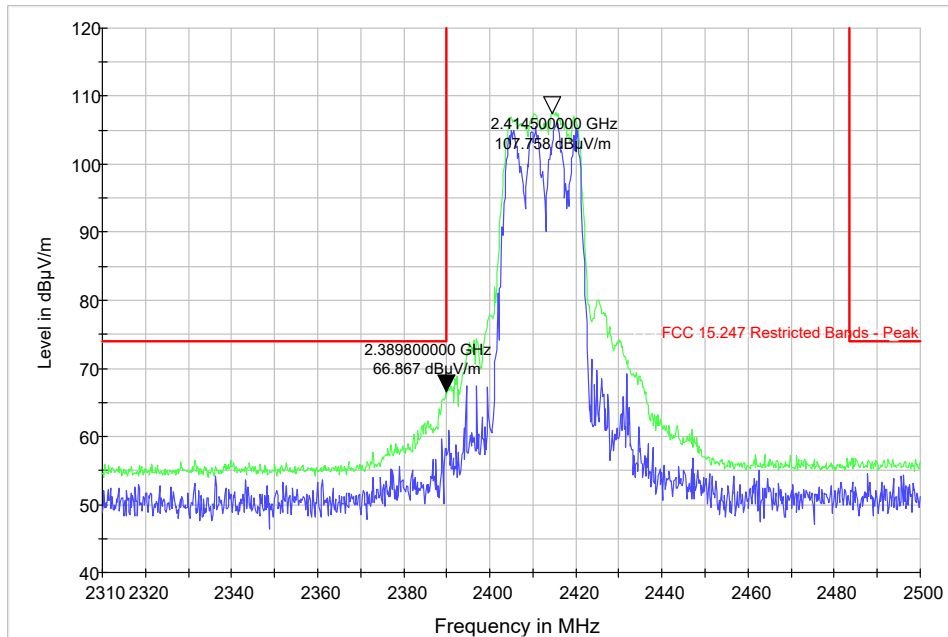
— PK+ MAXH [Result Table.Result:2]      — PK+ CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Peak\_inv [..]      — FCC 15.247 Restricted Bands - Peak [..]

**Plot 9-222 Radiated Band Edge Peak 802.11g - Ch.1 (2412 MHz)**



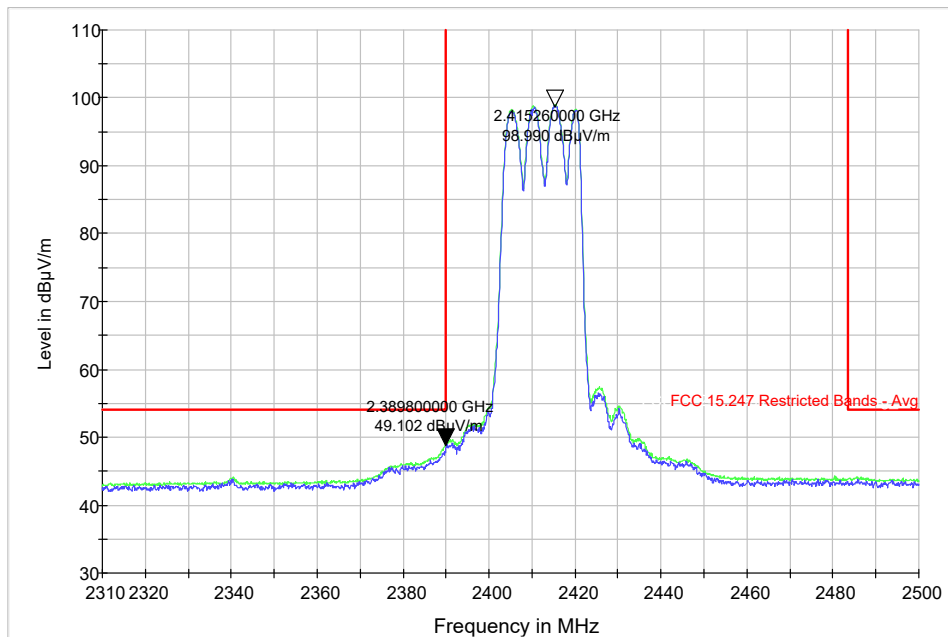
— PK+ MAXH [Result Table.Result:2]      — PK+ CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Avg\_inv [..]      — FCC 15.247 Restricted Bands - Avg [..]

**Plot 9-223 Radiated Band Edge Average 802.11g - Ch.1 (2412 MHz)**



— PK+ MAXH [Result Table.Result:2]      — PK+ CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Peak\_inv [..]      — FCC 15.247 Restricted Bands - Peak [..]

**Plot 9-224 Radiated Band Edge Peak 802.11n - Ch.1 (2412 MHz)**



— PK+ MAXH [Result Table.Result:2]      — PK+ CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Avg\_inv [..]      — FCC 15.247 Restricted Bands - Avg [..]

**Plot 9-225 Radiated Band Edge Average 802.11n - Ch.1 (2412 MHz)**

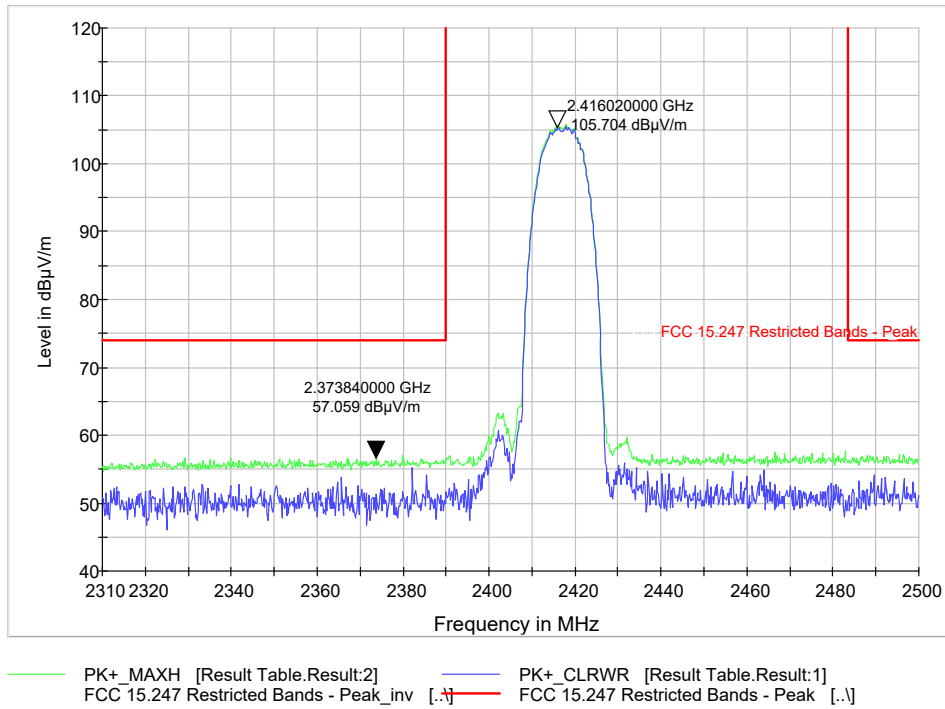


Figure 9-226 Radiated Band Edge Peak 802.11b - Ch.2 (2417 MHz)

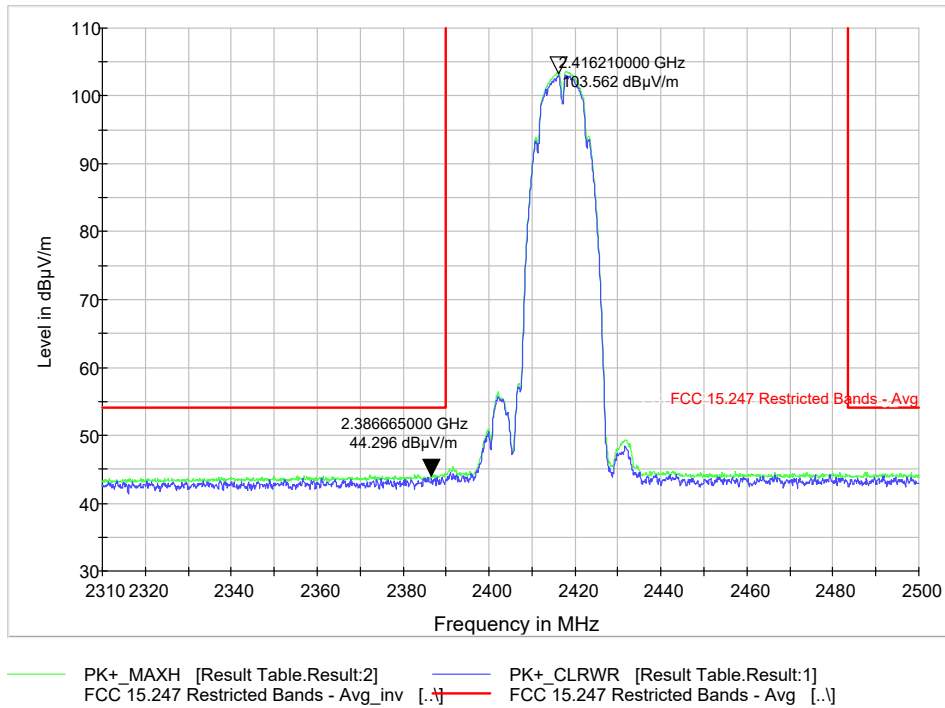


Figure 9-227 Radiated Band Edge Average 802.11b - Ch.2 (2417 MHz)

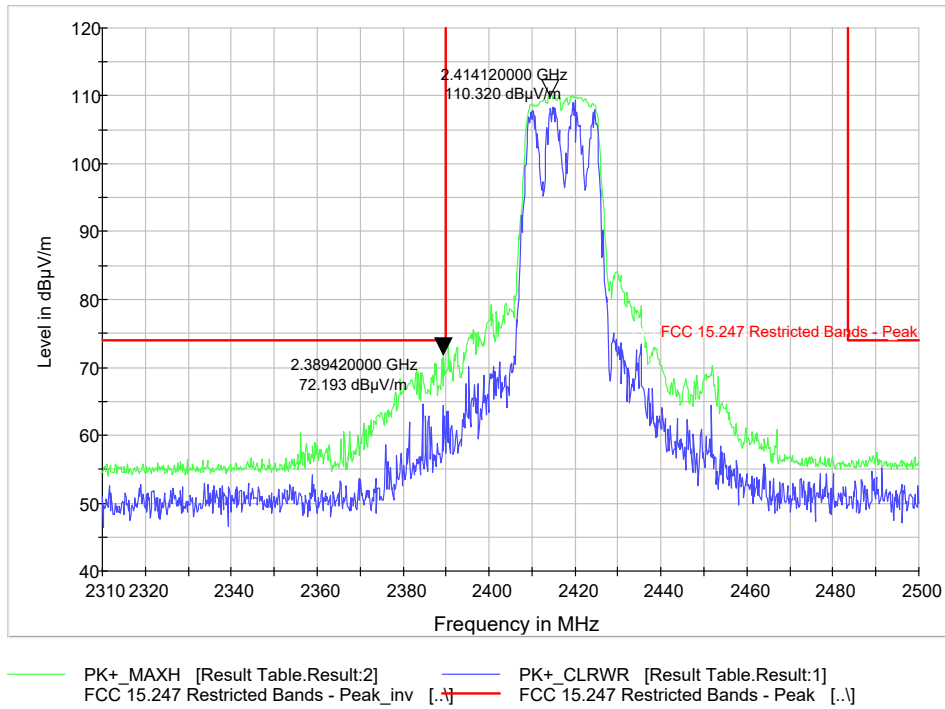


Figure 9-228 Radiated Band Edge Peak 802.11g - Ch.2 (2417 MHz)

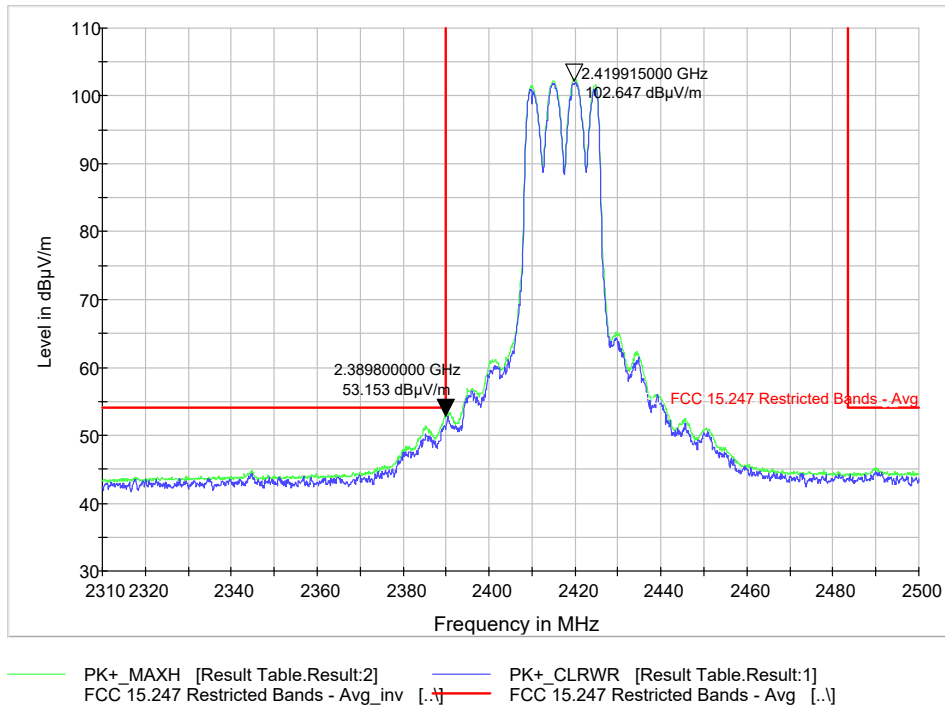


Figure 9-229 Radiated Band Edge Average 802.11g - Ch.2 (2417 MHz)

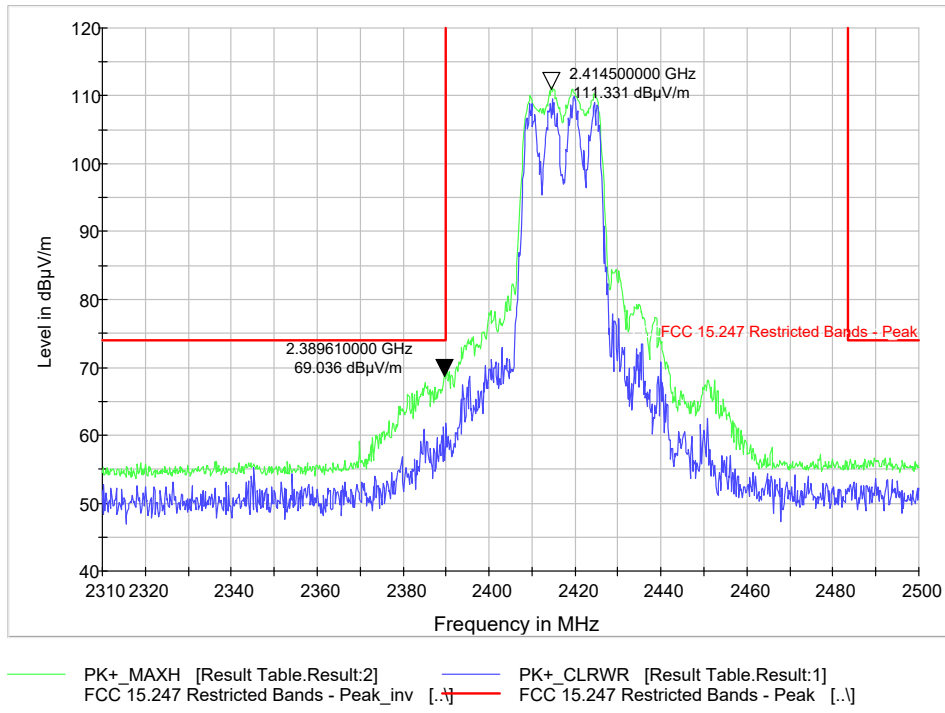


Figure 9-230 Radiated Band Edge Peak 802.11n - Ch.2 (2417 MHz)

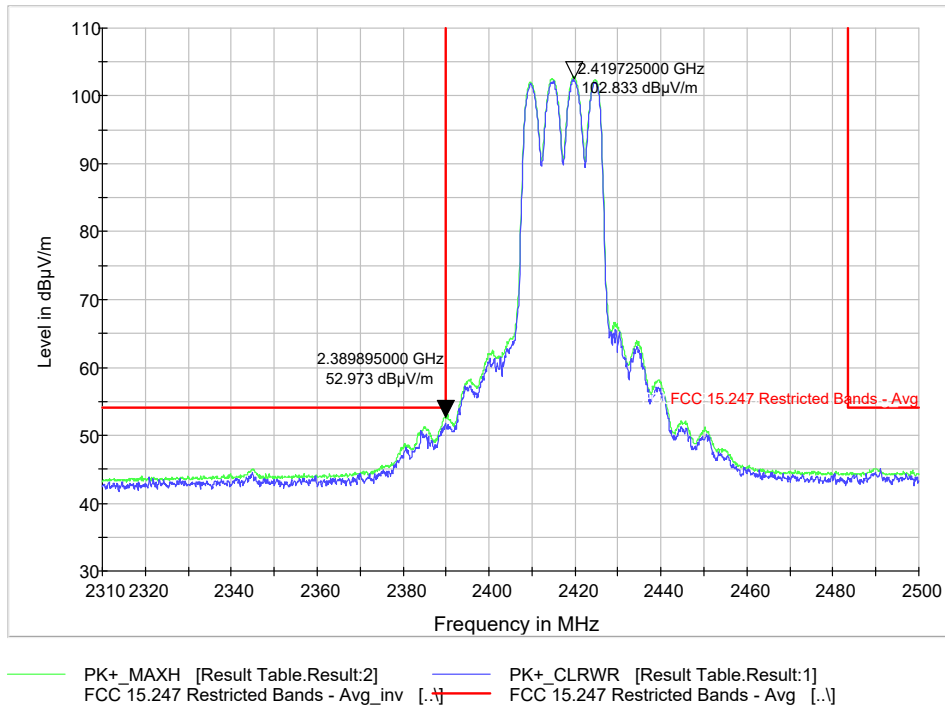


Figure 9-231 Radiated Band Edge Average 802.11n - Ch.2 (2417 MHz)

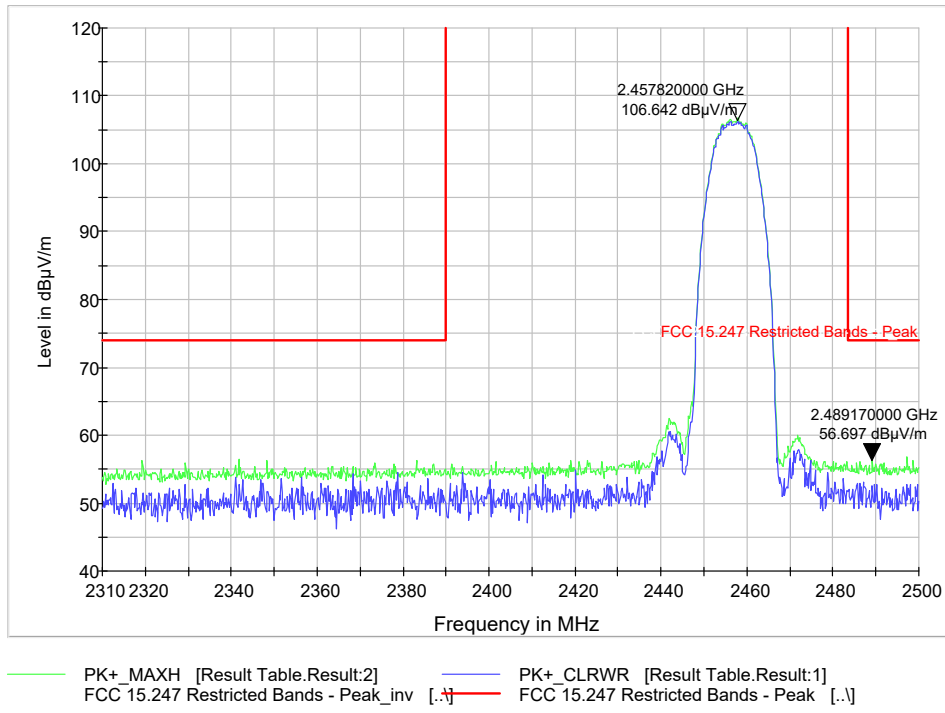


Figure 9-232 Radiated Band Edge Peak 802.11b - Ch.10 (2457 MHz)

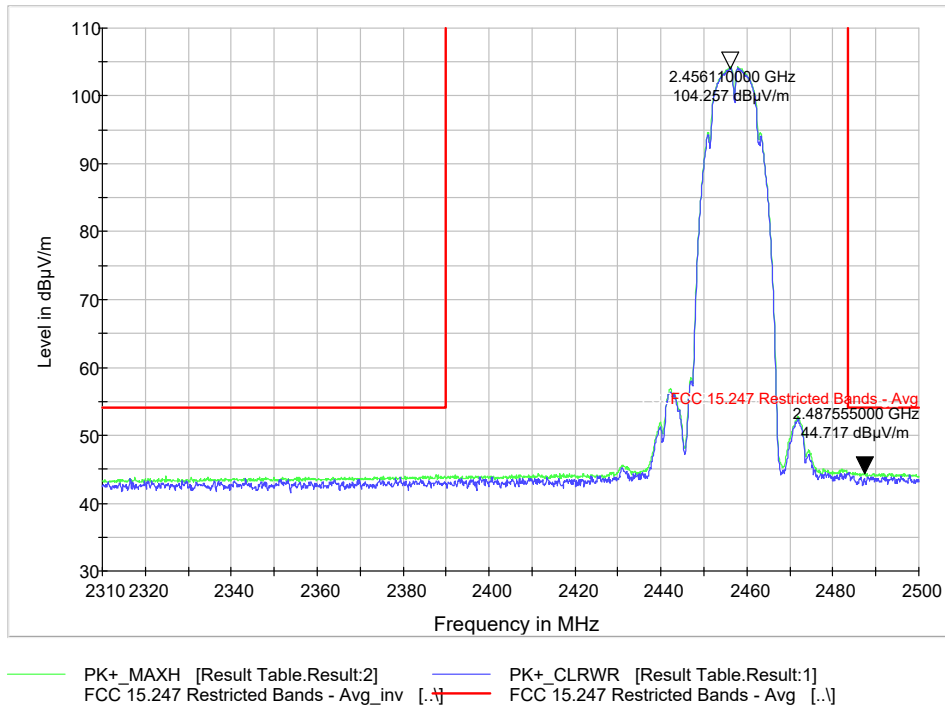
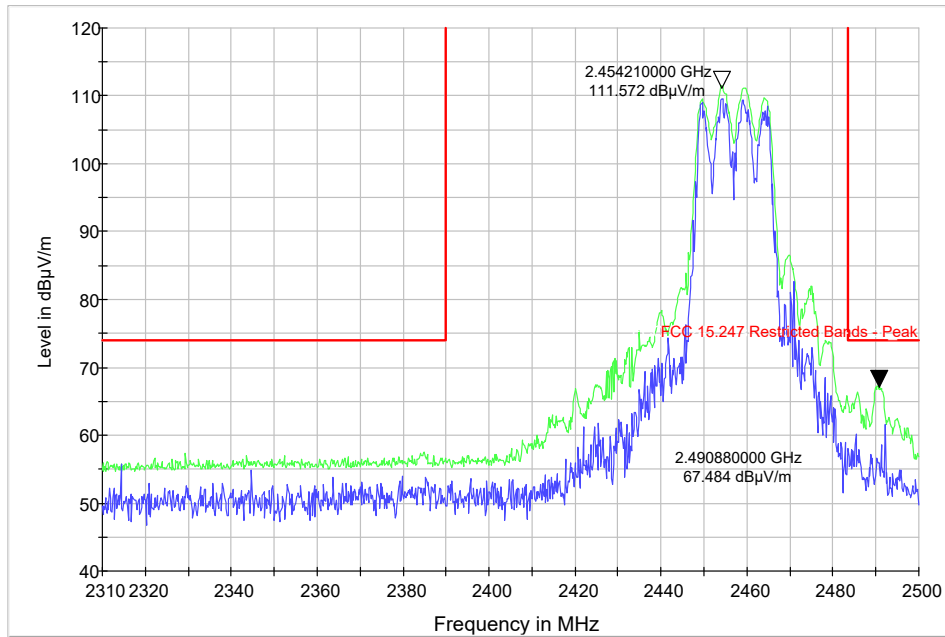


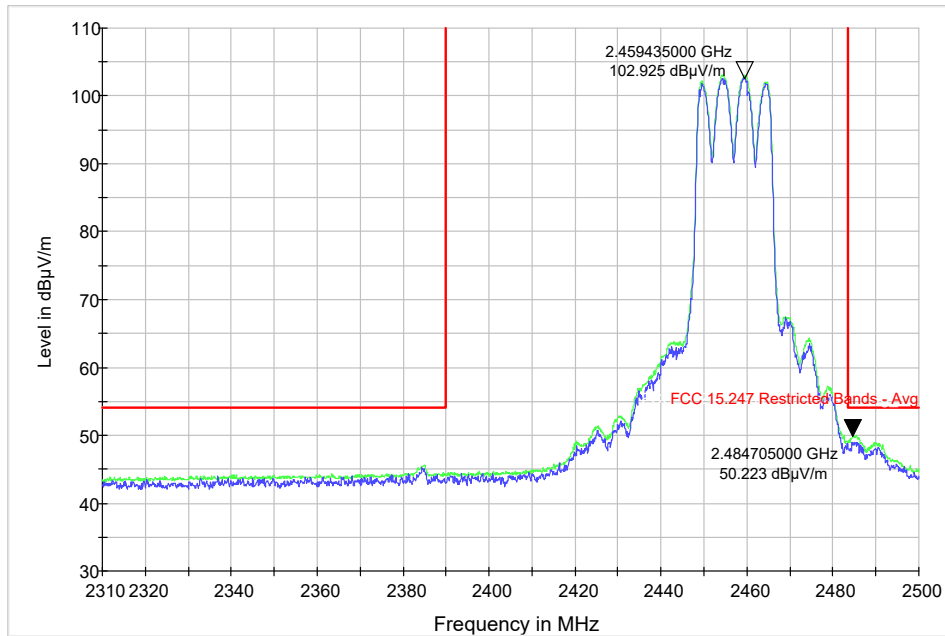
Figure 9-233 Radiated Band Edge Average 802.11b - Ch.10 (2457 MHz)





PK+ \_MAXH [Result Table.Result:2]      PK+ \_CLRWR [Result Table.Result:1]  
FCC 15.247 Restricted Bands - Peak\_inv [..]      FCC 15.247 Restricted Bands - Peak [..]

Figure 9-234 Radiated Band Edge Peak 802.11g - Ch.10 (2457 MHz)



PK+ \_MAXH [Result Table.Result:2]      PK+ \_CLRWR [Result Table.Result:1]  
FCC 15.247 Restricted Bands - Avg\_inv [..]      FCC 15.247 Restricted Bands - Avg [..]

Figure 9-235 Radiated Band Edge Average 802.11g - Ch.10 (2457 MHz)

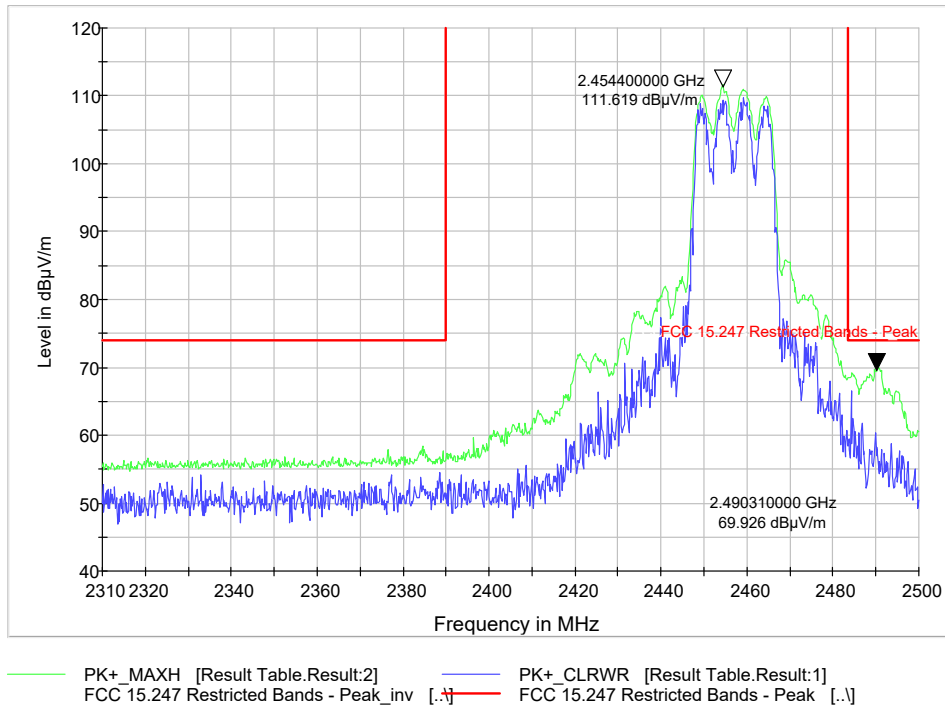


Figure 9-236 Radiated Band Edge Peak 802.11n - Ch.10 (2457 MHz)

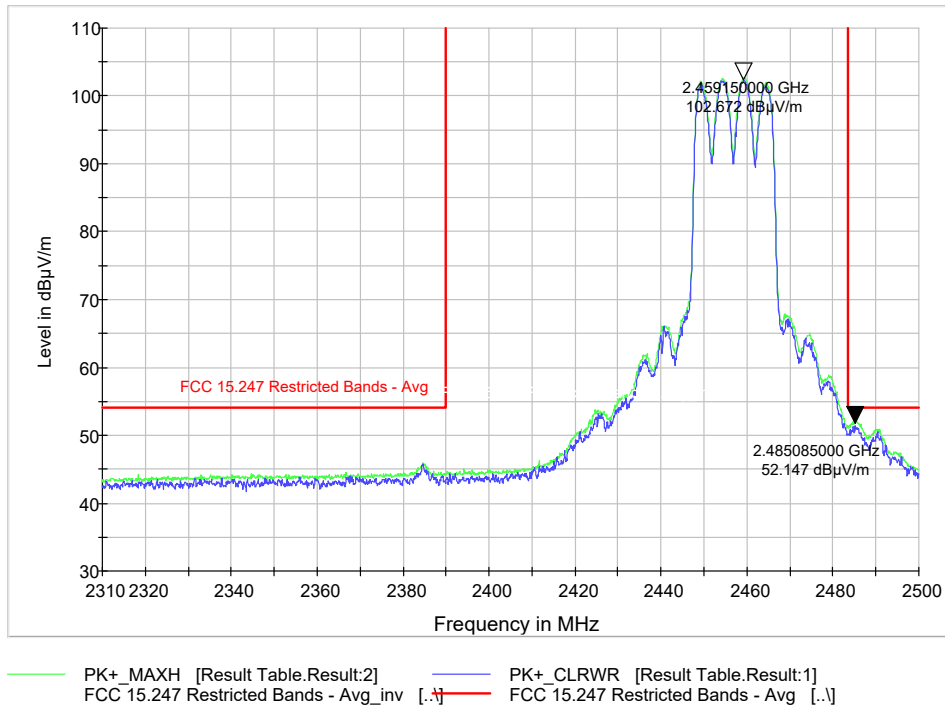
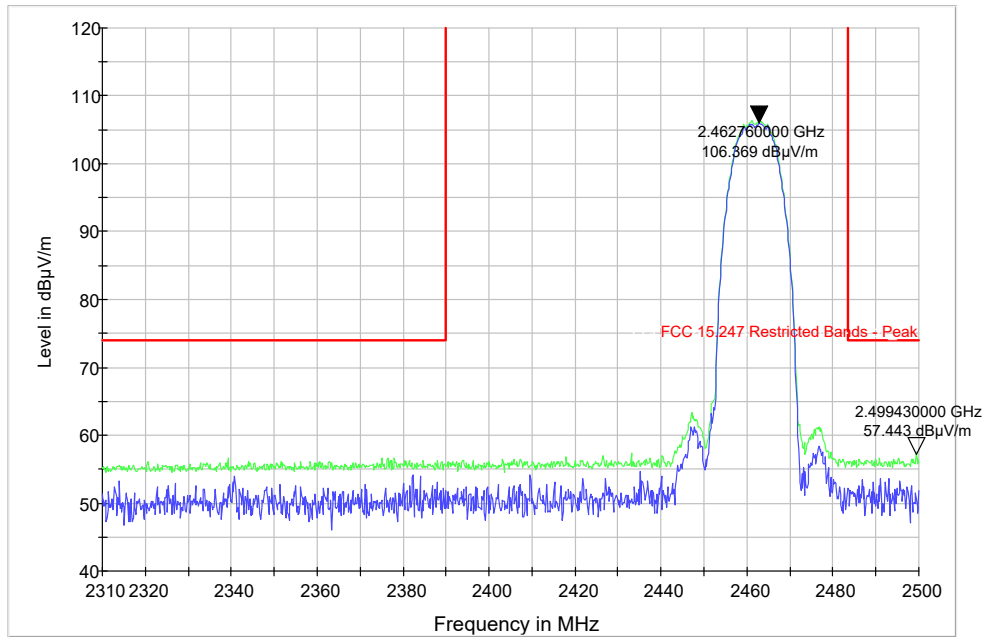
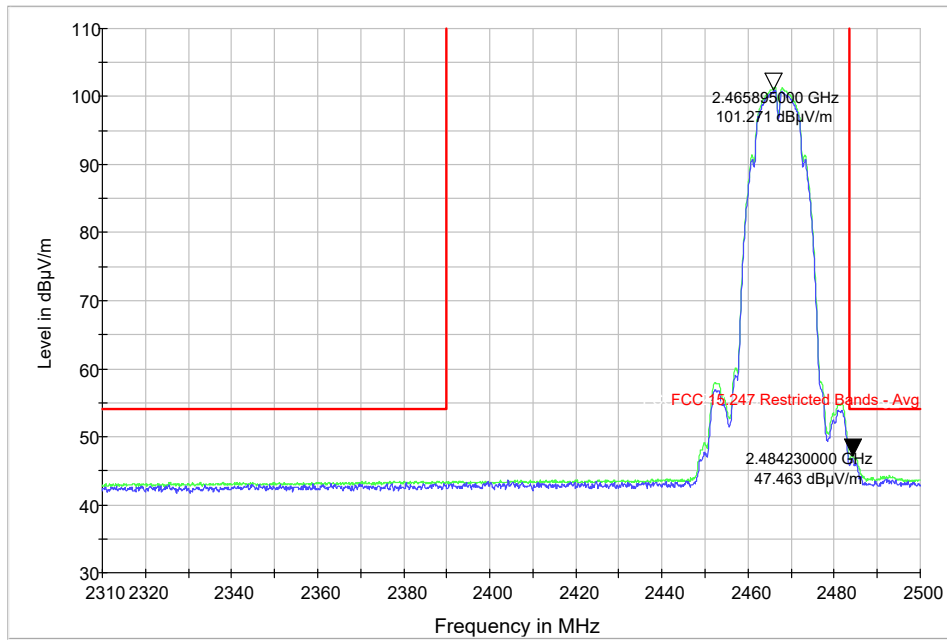


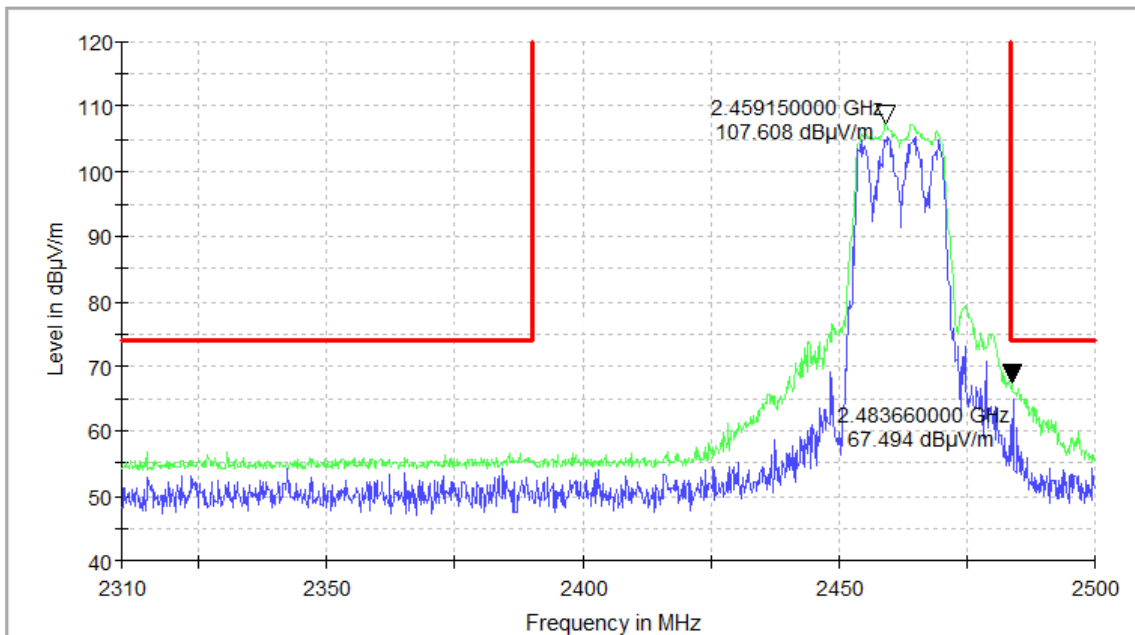
Figure 9-237 Radiated Band Edge Average 802.11n - Ch.10 (2457 MHz)



**Plot 9-238 Radiated Band Edge Peak 802.11b - Ch.11 (2462 MHz)**

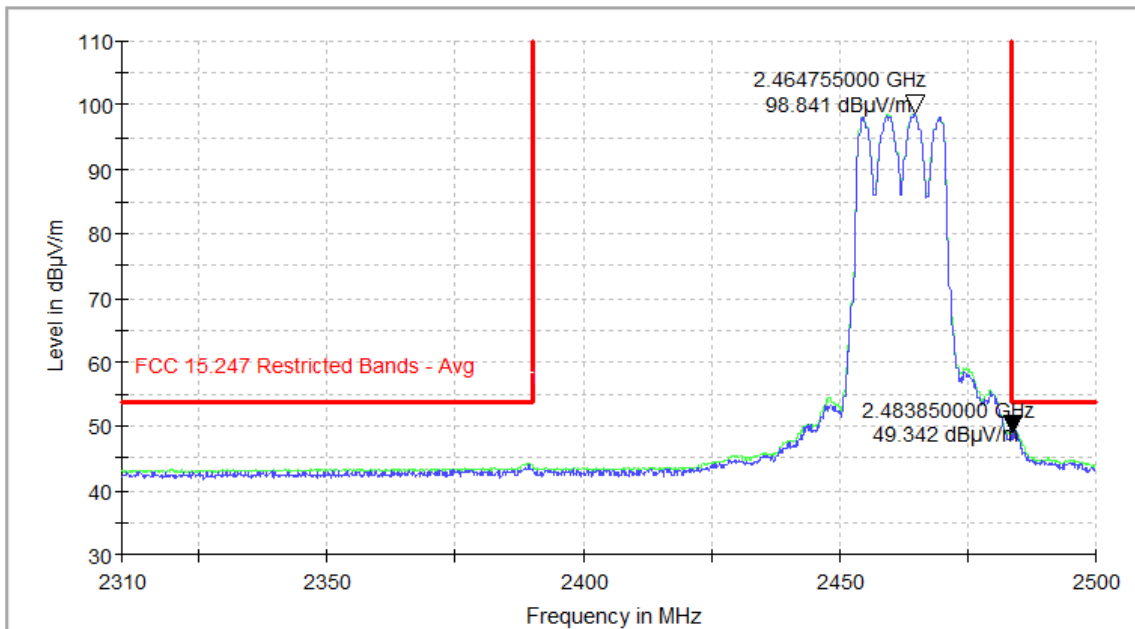


**Plot 9-239 Radiated Band Edge Average 802.11b - Ch.11 (2462 MHz)**



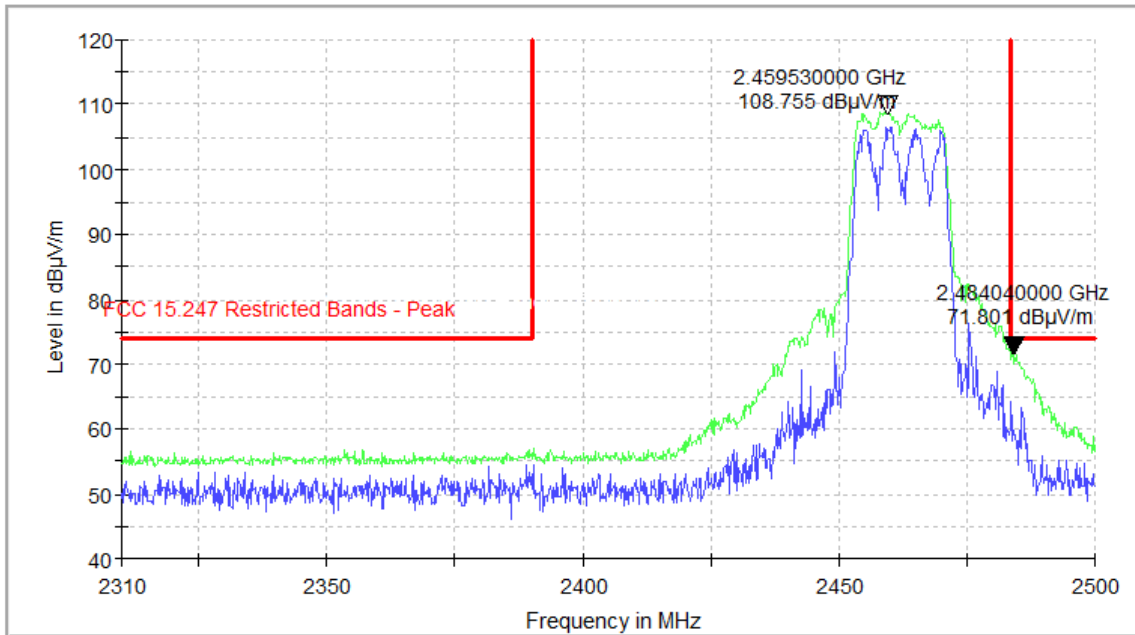
— PK+\_MAXH [Result Table.Result:2]      — PK+\_CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Peak\_inv [...]      — FCC 15.247 Restricted Bands - Peak [...]

**Plot 9-240 Radiated Band Edge Peak 802.11g - Ch.11 (2462 MHz)**



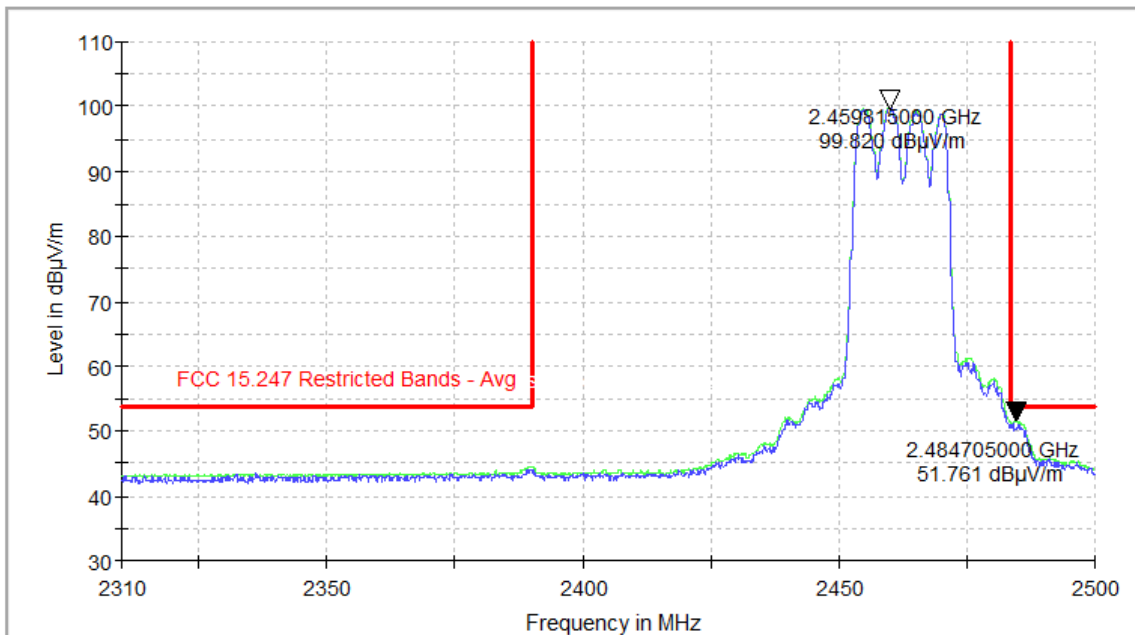
— PK+\_MAXH [Result Table.Result:2]      — PK+\_CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Avg\_inv [...]      — FCC 15.247 Restricted Bands - Avg [...]

**Plot 9-241 Radiated Band Edge Average 802.11g - Ch.11 (2462 MHz)**



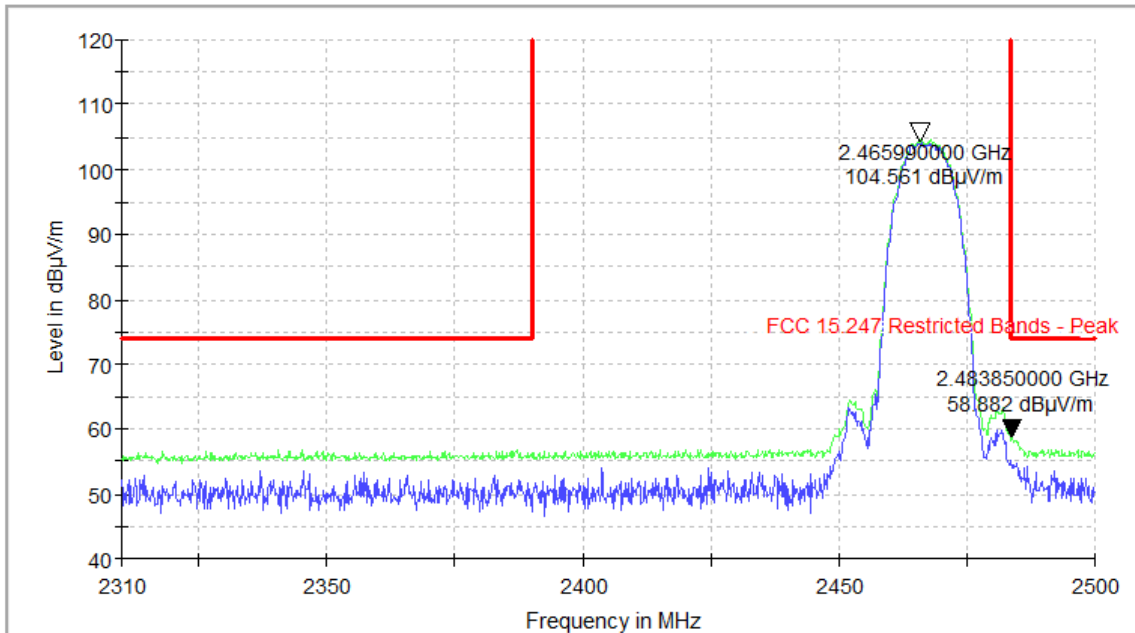
— PK+\_MAXH [Result Table.Result:2]      — PK+\_CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Peak\_inv [..]      — FCC 15.247 Restricted Bands - Peak [..]

**Plot 9-242 Radiated Band Edge Peak 802.11n - Ch.11 (2462 MHz)**

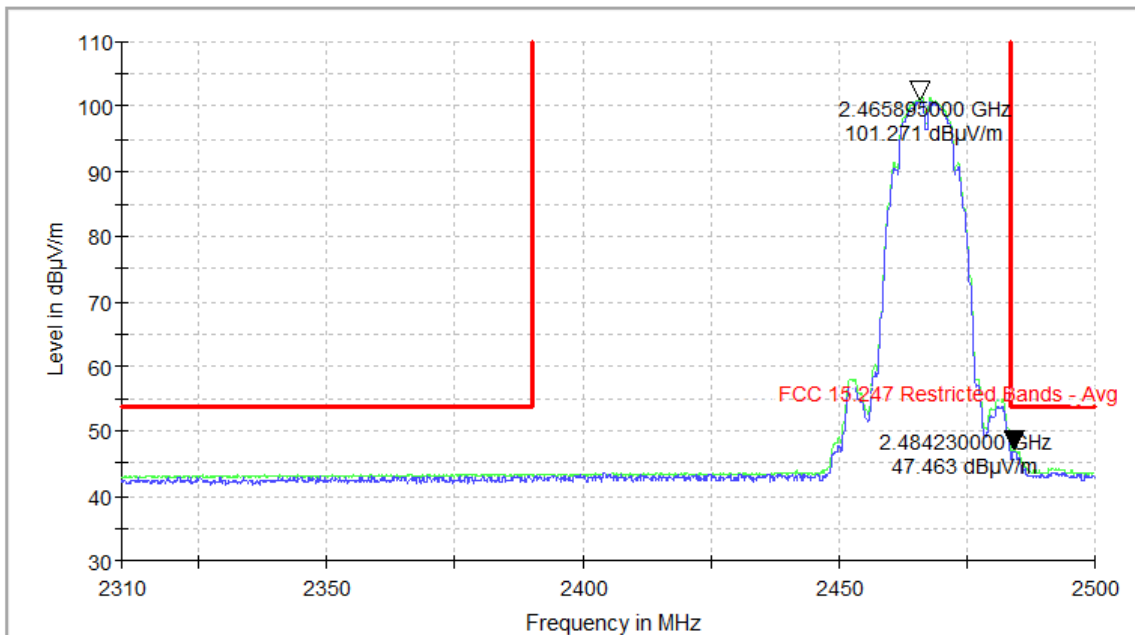


— PK+\_MAXH [Result Table.Result:2]      — PK+\_CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Avg\_inv [..]      — FCC 15.247 Restricted Bands - Avg [..]

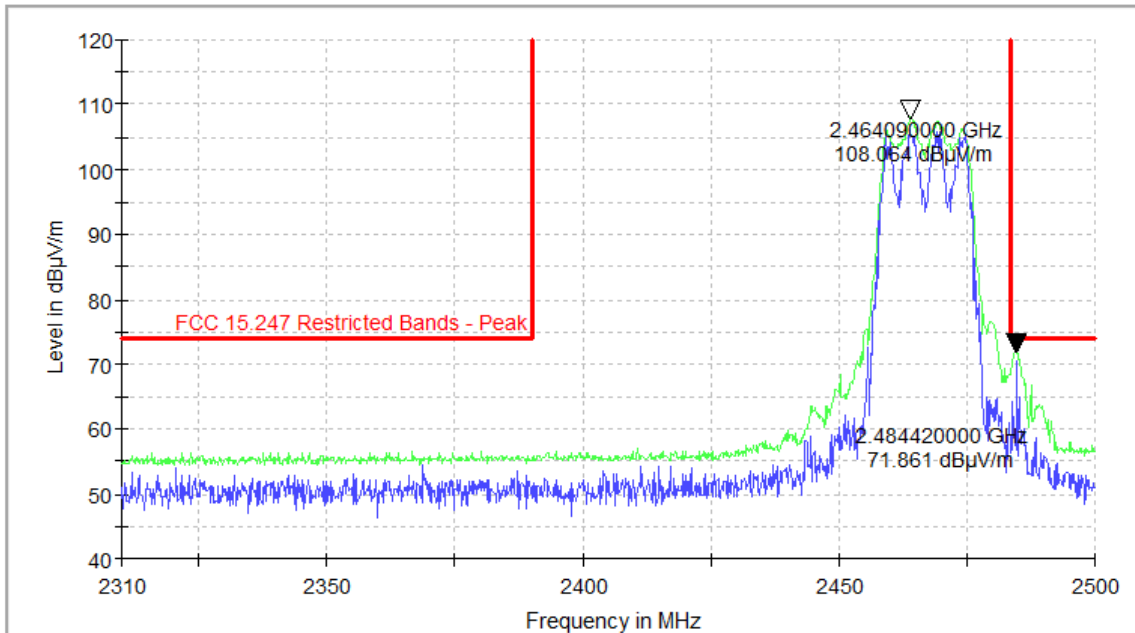
**Plot 9-243 Radiated Band Edge Average 802.11n - Ch.11 (2462 MHz)**



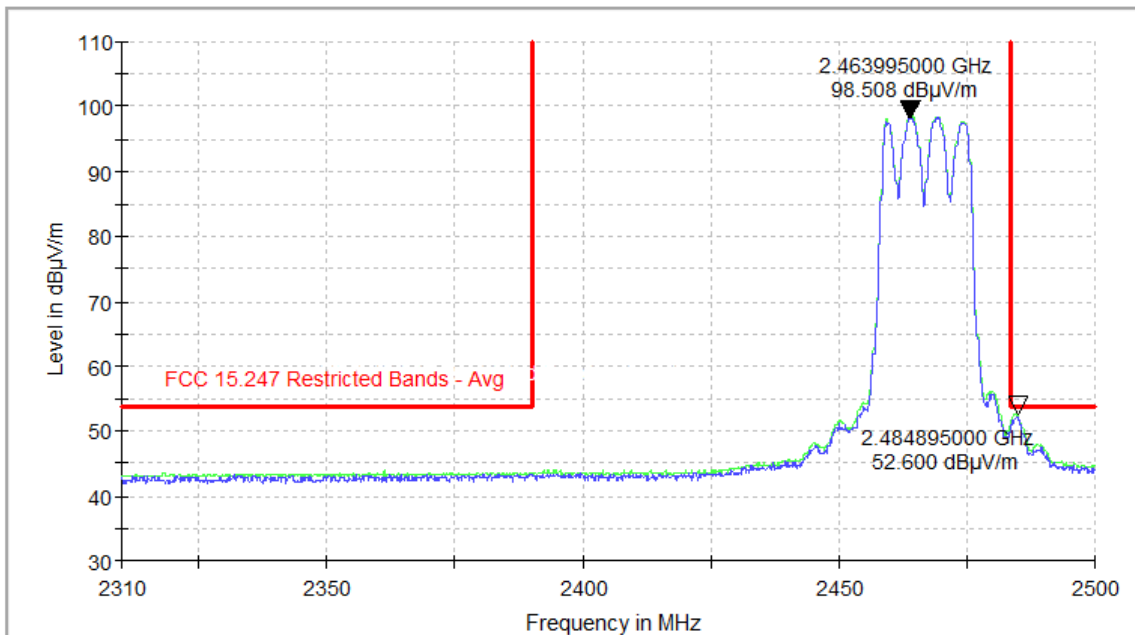
**Plot 9-244 Radiated Band Edge Peak 802.11b - Ch.12 (2467 MHz)**



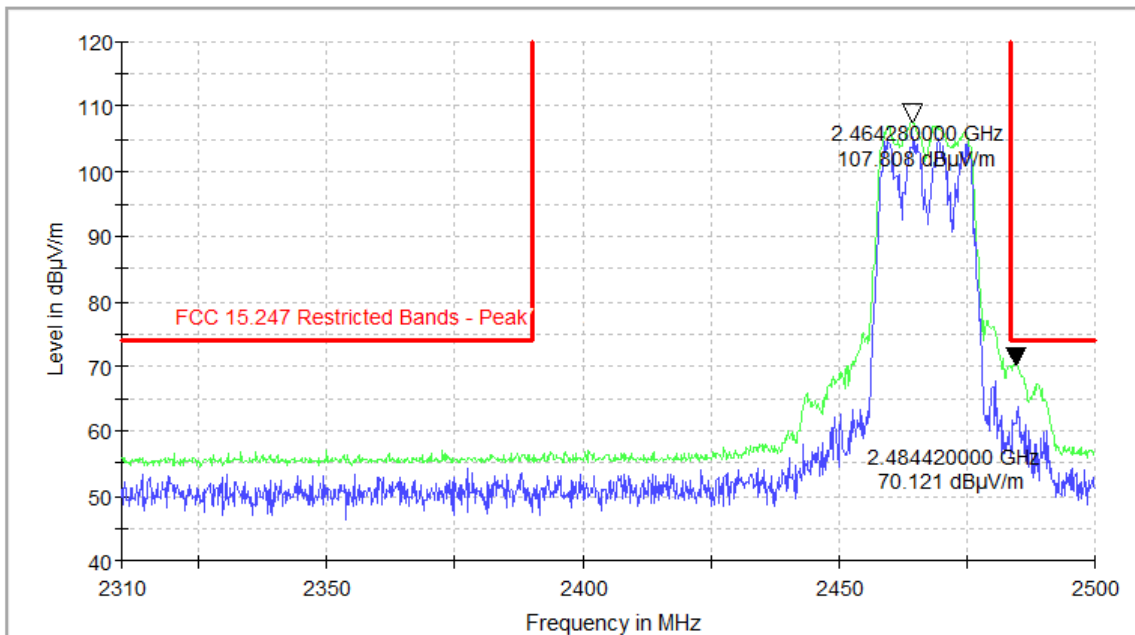
**Plot 9-245 Radiated Band Edge Average 802.11b - Ch.12 (2467 MHz)**



**Plot 9-246 Radiated Band Edge Peak 802.11g - Ch.12 (2467 MHz)**

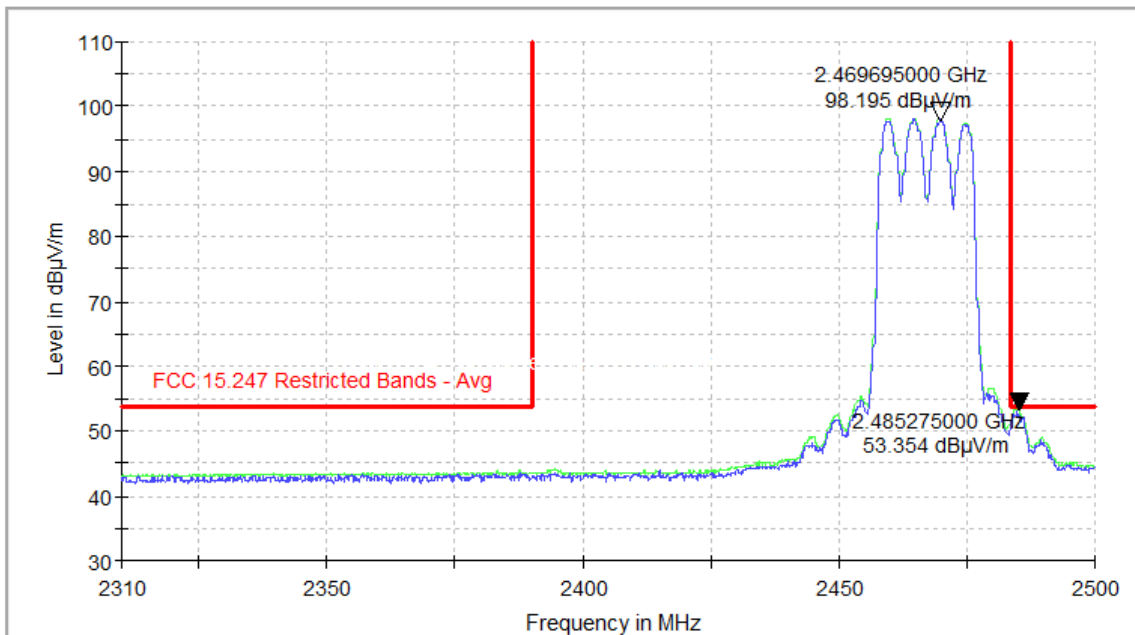


**Plot 9-247 Radiated Band Edge Average 802.11g - Ch.12 (2467 MHz)**



PK+\_MAXH [Result Table.Result:2]      PK+\_CLRWR [Result Table.Result:1]  
FCC 15.247 Restricted Bands - Peak\_inv [...]      FCC 15.247 Restricted Bands - Peak [...]

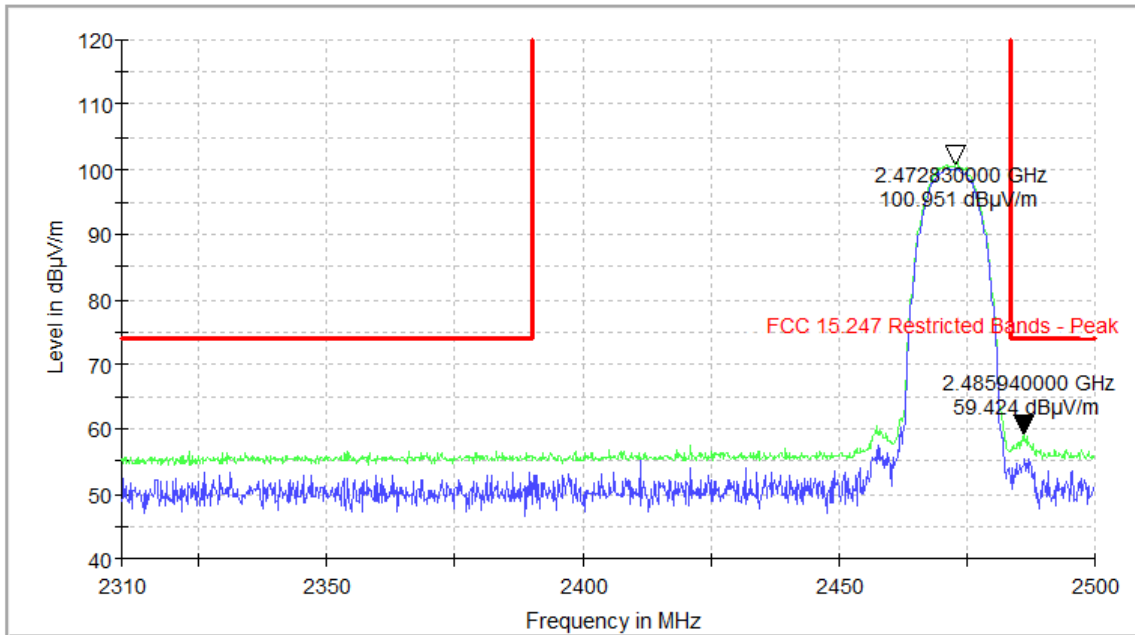
**Plot 9-248 Radiated Band Edge Peak 802.11n - Ch.12 (2467 MHz)**



PK+\_MAXH [Result Table.Result:2]      PK+\_CLRWR [Result Table.Result:1]  
FCC 15.247 Restricted Bands - Avg\_inv [...]      FCC 15.247 Restricted Bands - Avg [...]

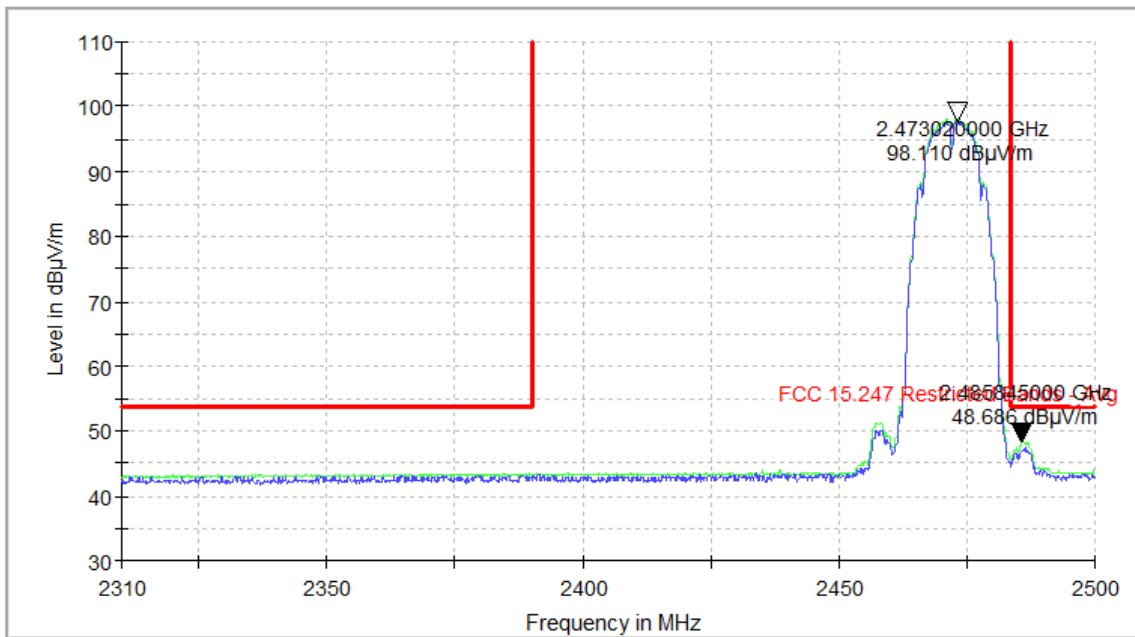
**Plot 9-249 Radiated Band Edge Average 802.11n - Ch.12 (2467 MHz)**





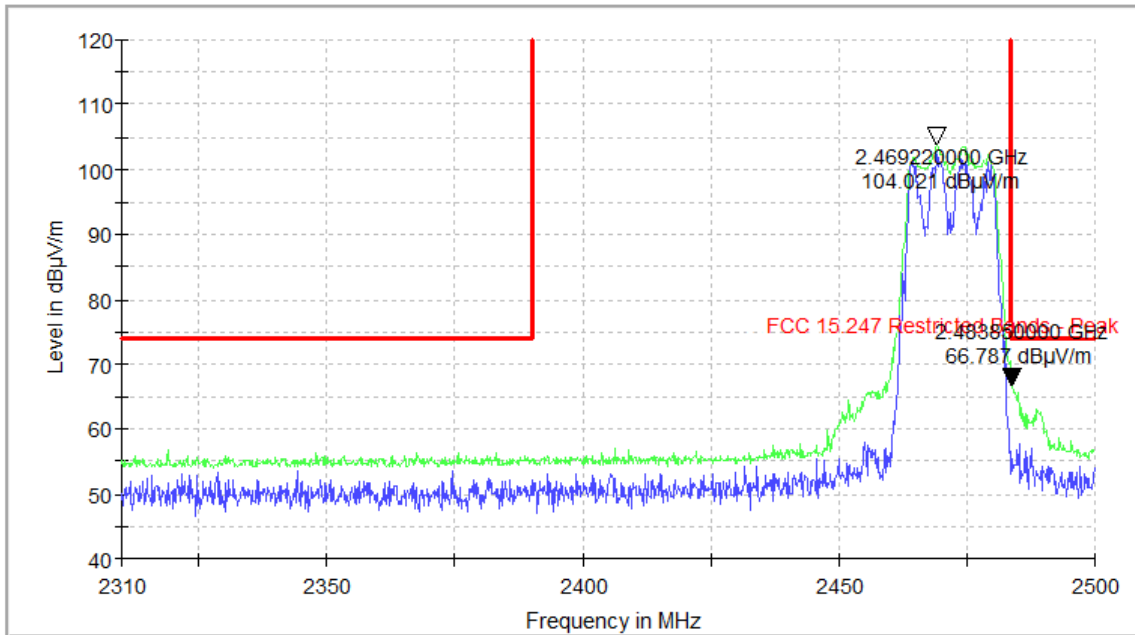
PK+\_MAXH [Result Table.Result:2]      PK+\_CLRWR [Result Table.Result:1]  
FCC 15.247 Restricted Bands - Peak\_inv [..]      FCC 15.247 Restricted Bands - Peak [..]

**Plot 9-250 Radiated Band Edge Peak 802.11b - Ch.13 (2472 MHz)**



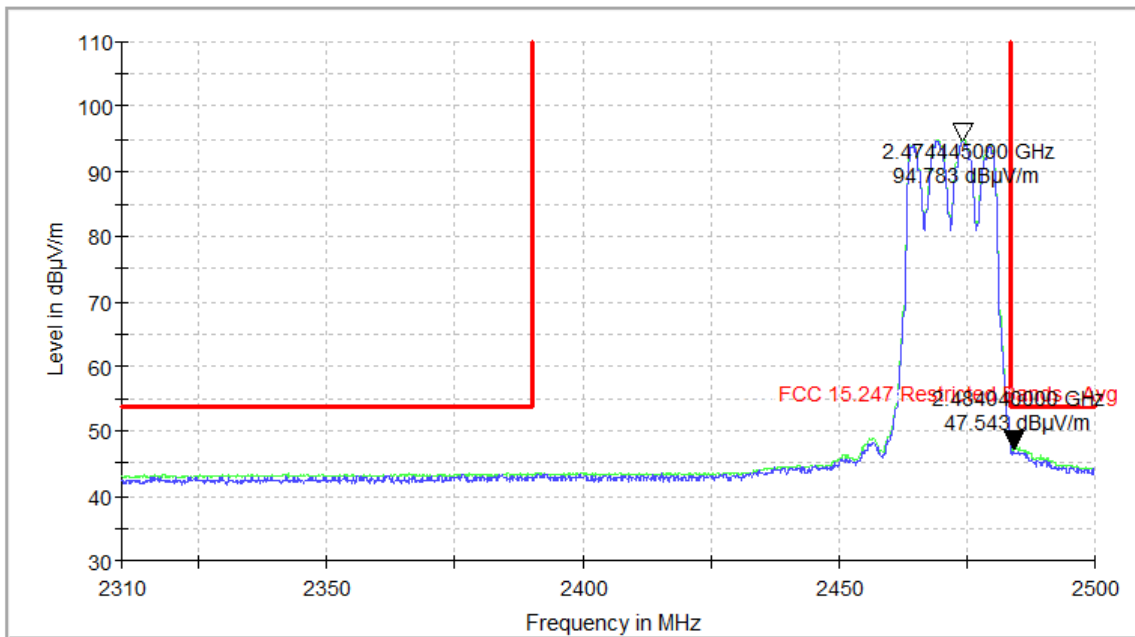
PK+\_MAXH [Result Table.Result:2]      PK+\_CLRWR [Result Table.Result:1]  
FCC 15.247 Restricted Bands - Avg\_inv [..]      FCC 15.247 Restricted Bands - Avg [..]

**Plot 9-251 Radiated Band Edge Average 802.11b - Ch.13 (2472 MHz)**



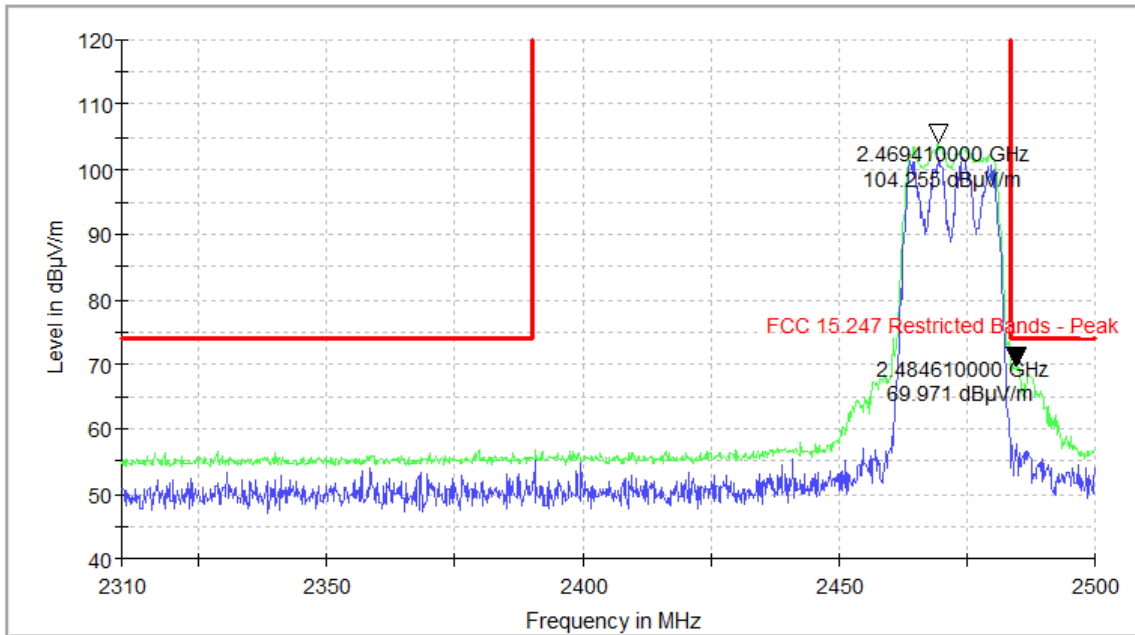
— PK+\_MAXH [Result Table.Result:2]      — PK+\_CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Peak\_inv [...]      — FCC 15.247 Restricted Bands - Peak [...]

**Plot 9-252 Radiated Band Edge Peak 802.11g - Ch.13 (2472 MHz)**

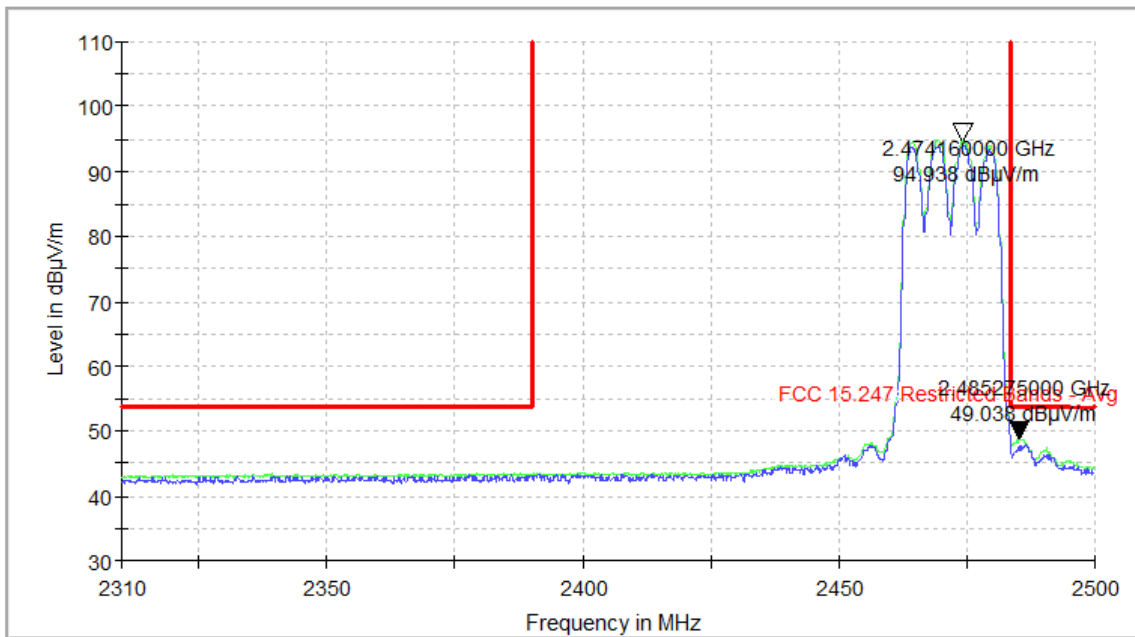


— PK+\_MAXH [Result Table.Result:2]      — PK+\_CLRWR [Result Table.Result:1]  
— FCC 15.247 Restricted Bands - Avg\_inv [...]      — FCC 15.247 Restricted Bands - Avg [...]

**Plot 9-253 Radiated Band Edge Average 802.11g - Ch.13 (2472 MHz)**



**Plot 9-254 Radiated Band Edge Peak 802.11n - Ch.13 (2472 MHz)**



**Plot 9-255 Radiated Band Edge Average 802.11n - Ch.13 (2472 MHz)**

## 9.9 AC Line Conducted Emissions

### 9.9.1 Test Requirements

FCC CFR 47 Rule Part 15.207 (a)

Innovation Science and Economic Development Canada RSS-Gen [8.8]

### 9.9.2 Test Method

Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the unsymmetric radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with the power cords that are used under normal operating conditions. These measurements are made using a LISN (Line Impedance Stabilization Network). AC powered peripherals are attached to a second LISN with the 50 ohm measuring port terminated by a 50 ohm resistive load.

#### EMI Receiver Settings:

**150 kHz – 30 MHz:**

RBW= 9 kHz

VBW  $\geq$  3 X RBW

Trace Mode: Peak Detector (Max Hold).

Final measurements performed using Quasi-Peak and Average Detectors.

Span= 150 kHz – 30 MHz

Sweep time= Auto

### 9.9.3 Limit

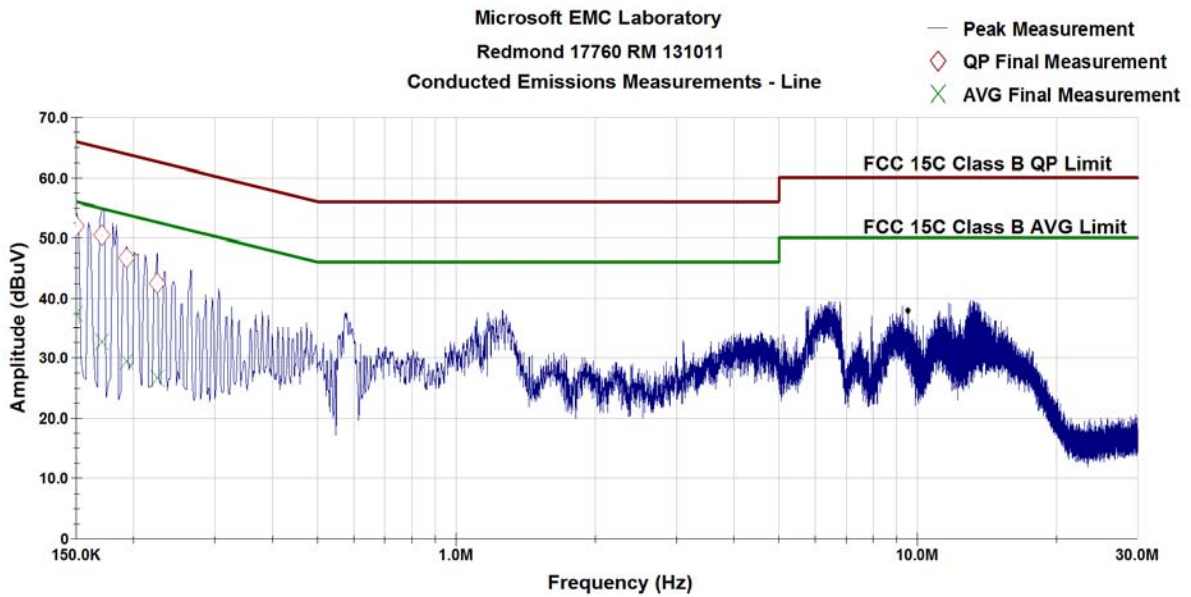
Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

### 9.9.4 Test Result:

Pass

9.9.5 Test Data:

Worst case results from 802.11n-mod channel of operation shown here.

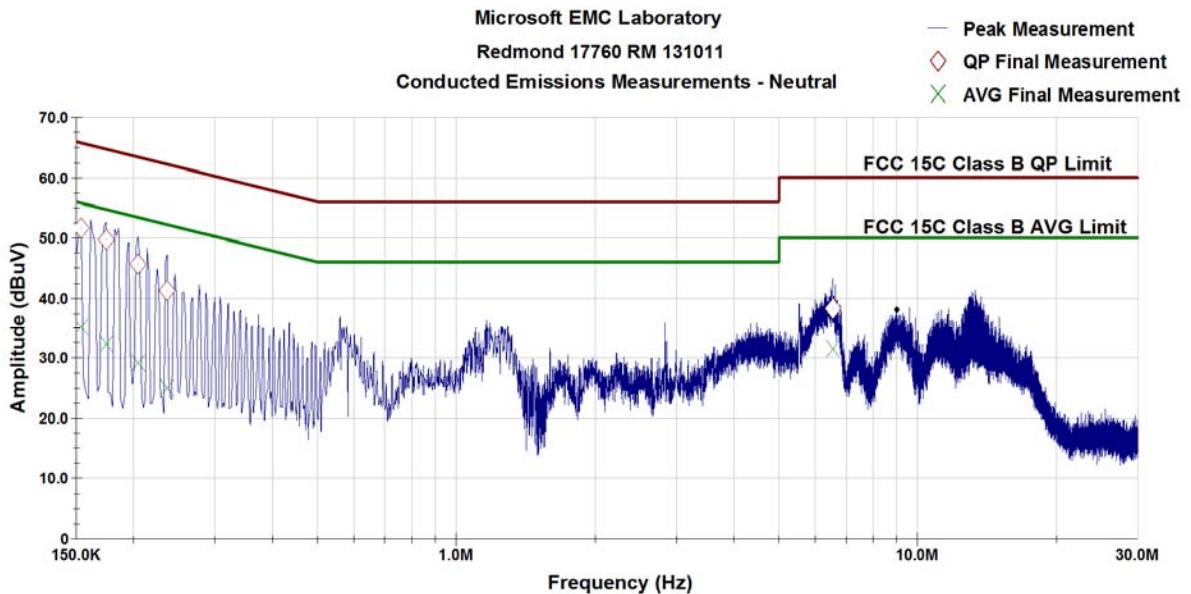


Operator: Vishwas

Current Time -01:10:25 PM, Friday, December 23, 2016

CE Profile V2.1

Plot 9-256 Conducted Emissions Measurements-Line



Operator: Vishwas

Current Time -01:16:19 PM, Friday, December 23, 2016

CE Profile V2.1

Plot 9-257 Conducted Emissions Measurements- Neutral

Frequency (MHz)	AVG Amplitude (dBuV)	QP Amplitude (dBuV)	AVG Limit (dBuV)	QP Limit (dBuV)	Line Tested (L or N)	AVG Margin (dB)	QP Margin (dB)
0.15	37.40	52.01	56.00	66.00	L	-18.60	-13.99
0.15	35.18	51.65	55.89	65.89	N	-20.71	-14.24
0.17	32.64	50.48	55.41	65.41	L	-22.77	-14.93
0.17	32.30	49.74	55.31	65.31	N	-23.00	-15.56
0.19	29.45	46.70	54.77	64.77	L	-25.32	-18.07
0.20	29.12	45.67	54.45	64.45	N	-25.33	-18.78
0.23	26.61	42.50	53.86	63.86	L	-27.26	-21.36
0.24	25.00	41.30	53.54	63.54	N	-28.54	-22.24
6.55	31.49	38.31	50.00	60.00	N	-18.51	-21.69

# End of Report