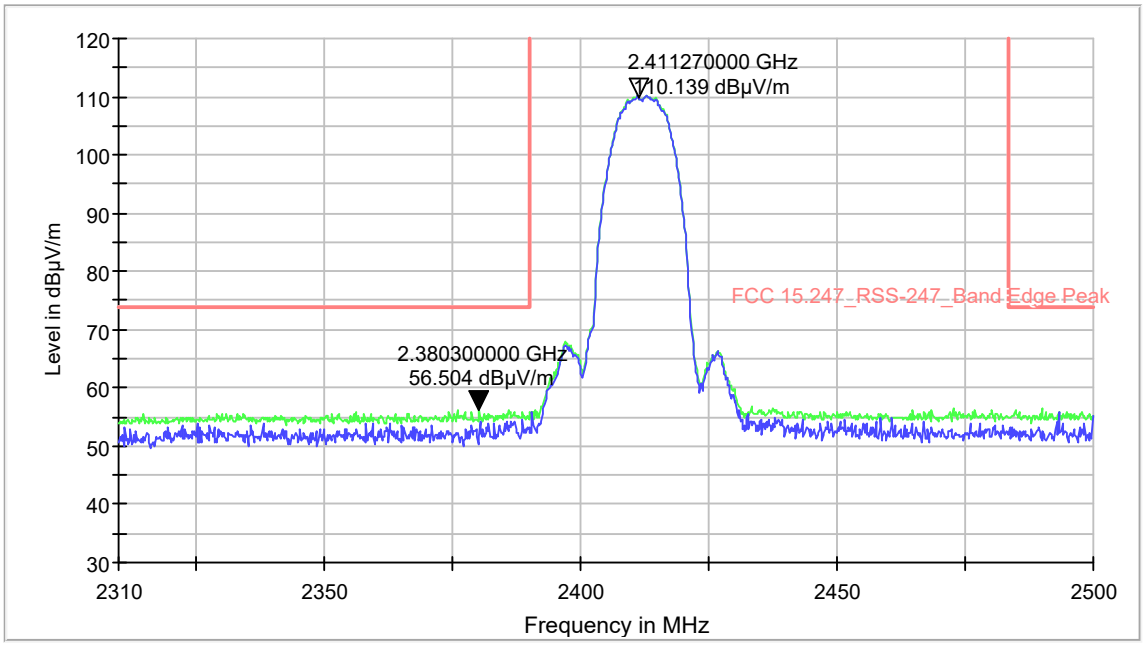
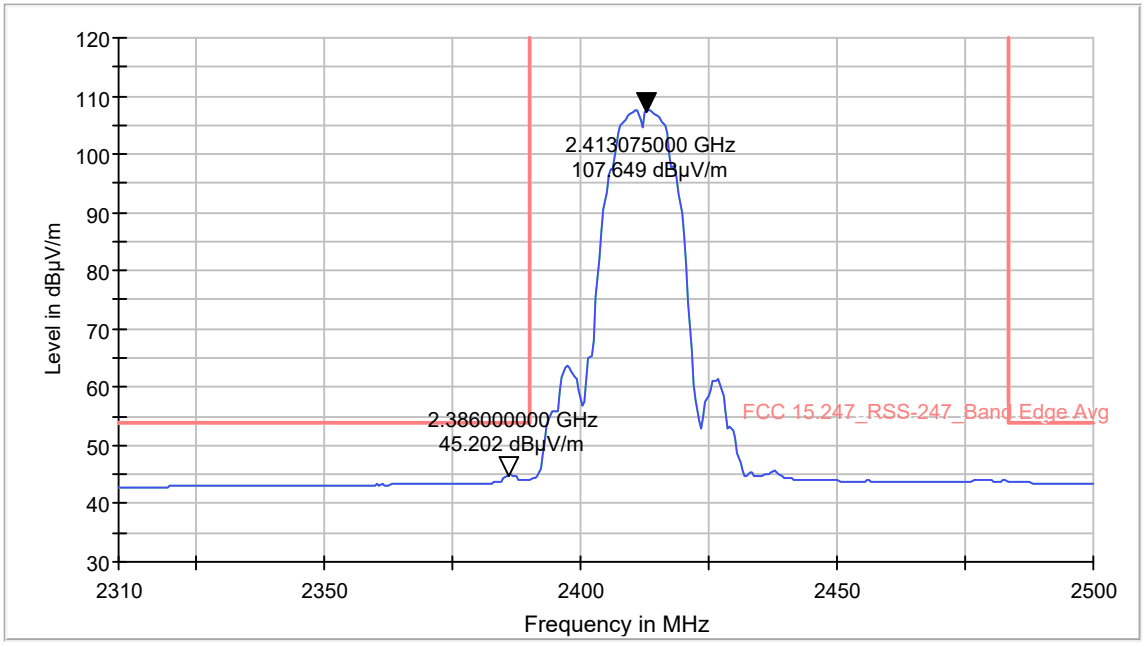
9.8.5.4 Radiated restricted Band-edge emissions



PK+_MAXH-PK+ [Result Table.Result:2]
FCC 15.247 Band Edge Peak [..\]

PK+_CLRWR-PK+ [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Peak [..\]

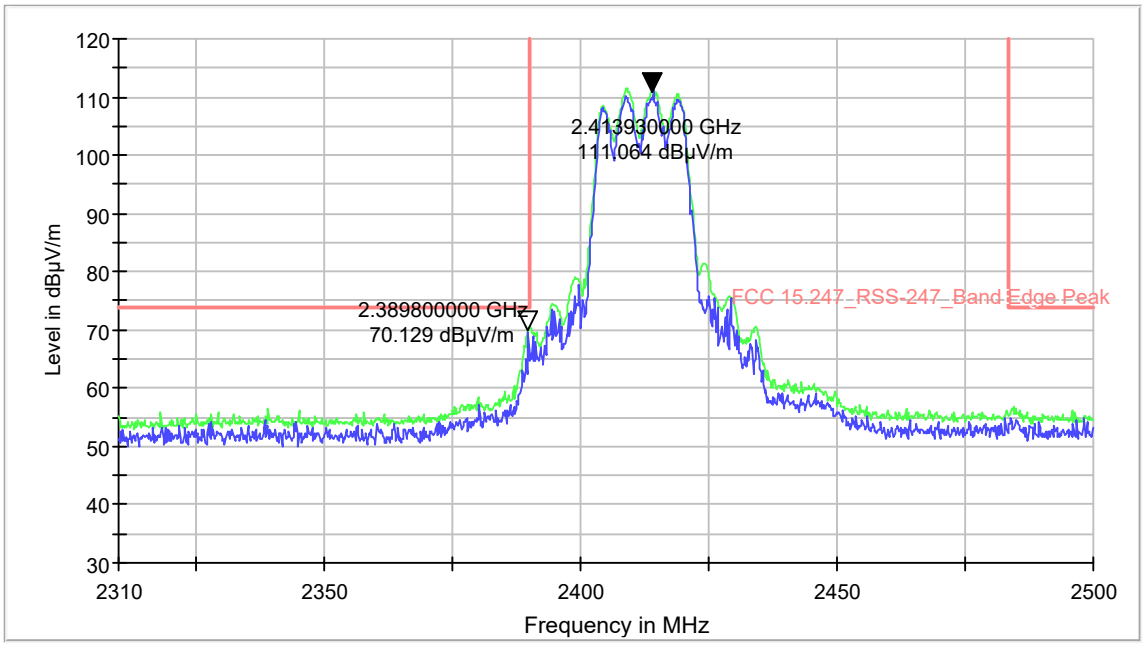
Plot 9-180 Radiated Band Edge Peak 802.11b - Ch.1 (2412 MHz)



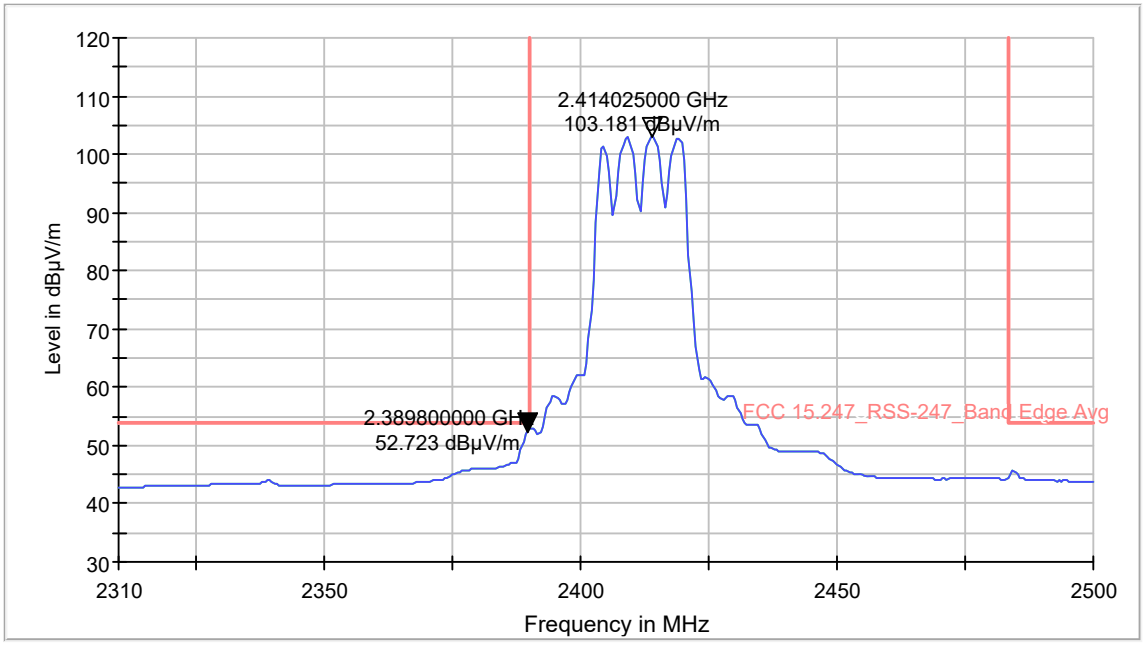
RMS_MAXH-RMS [Result Table.Result:2]
FCC 15.247 Band Edge Avg [..\]

RMS_CLRWR-RMS [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Avg [..\]

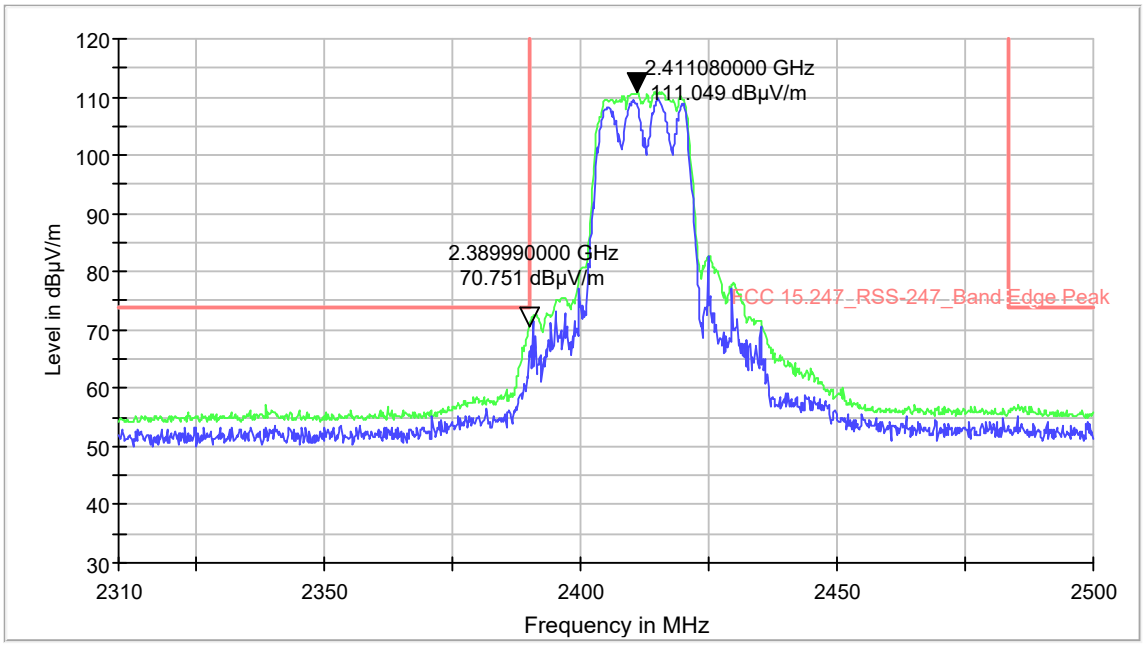
Plot 9-181 Radiated Band Edge Average 802.11b - Ch.1 (2412 MHz)



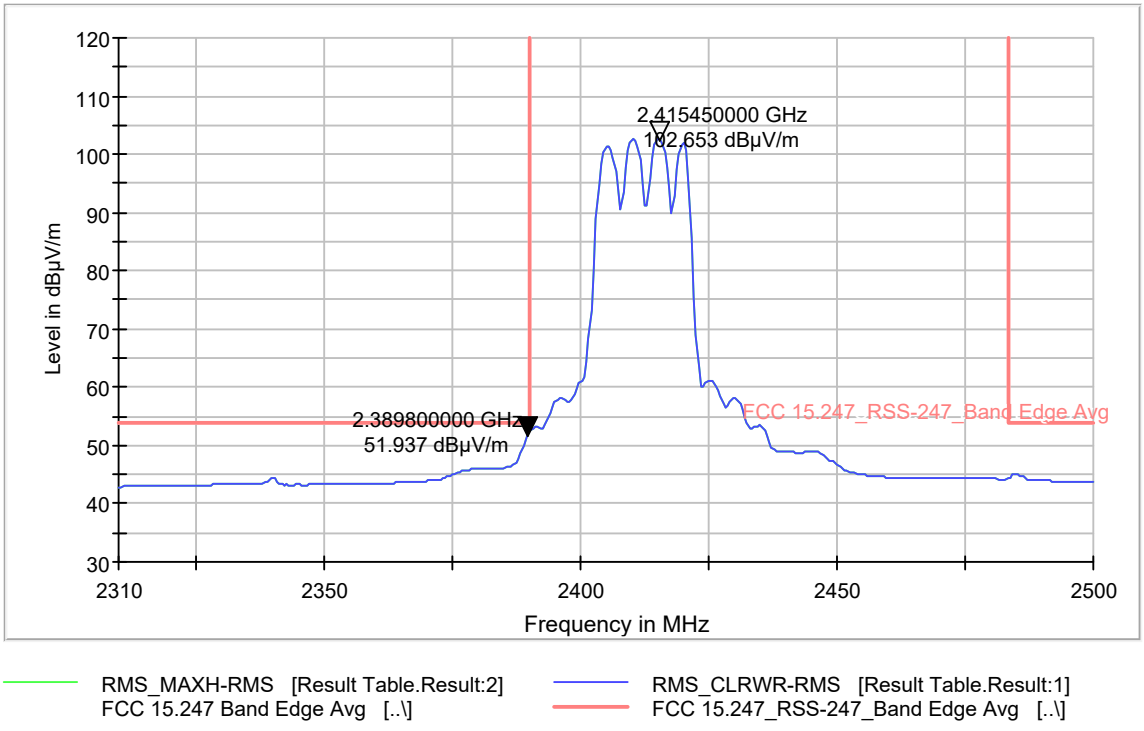
Plot 9-182 Radiated Band Edge Peak 802.11g - Ch.1 (2412 MHz)



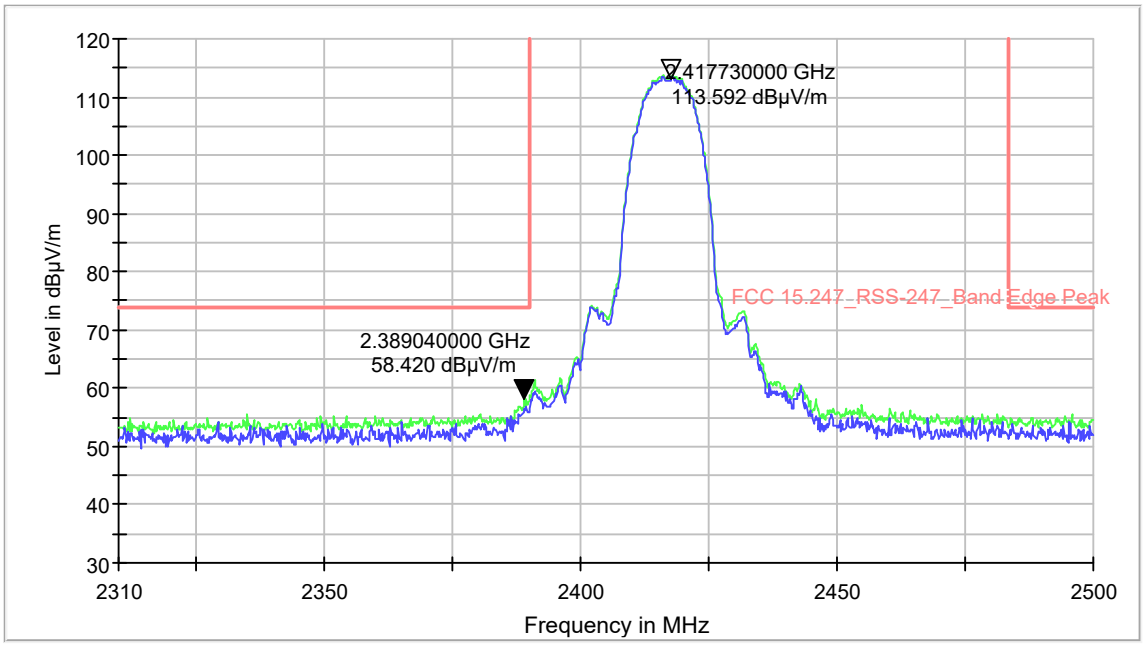
Plot 9-183 Radiated Band Edge Average 802.11g - Ch.1 (2412 MHz)



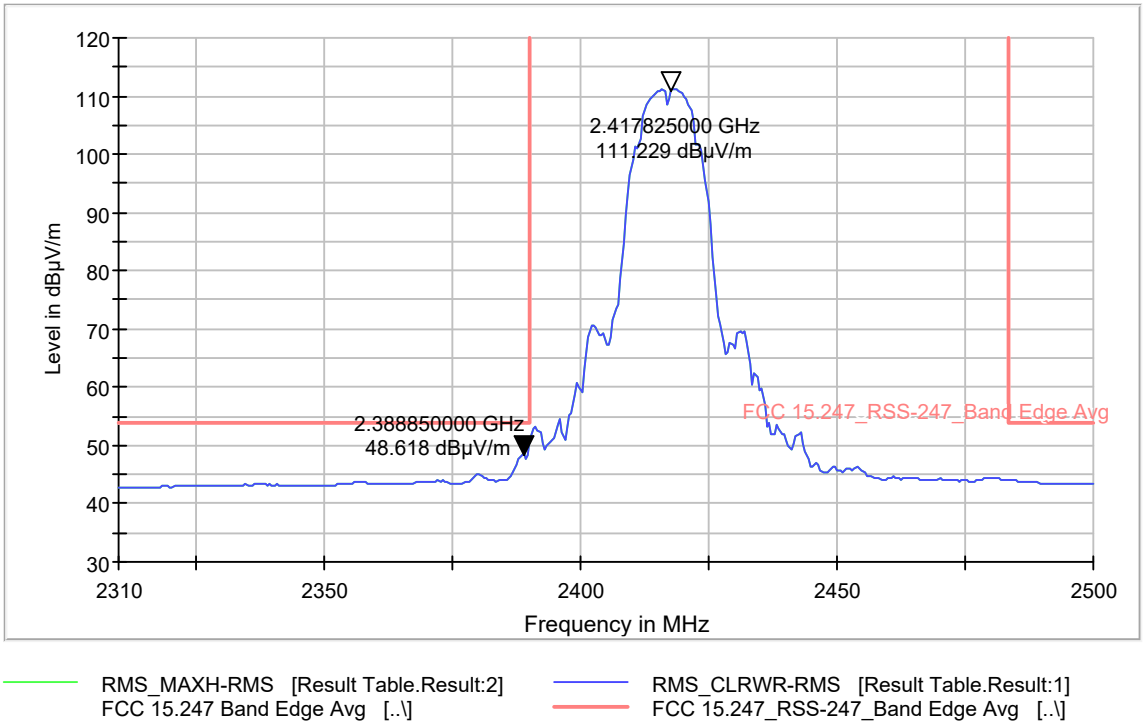
Plot 9-184 Radiated Band Edge Peak 802.11n - Ch.1 (2412 MHz)



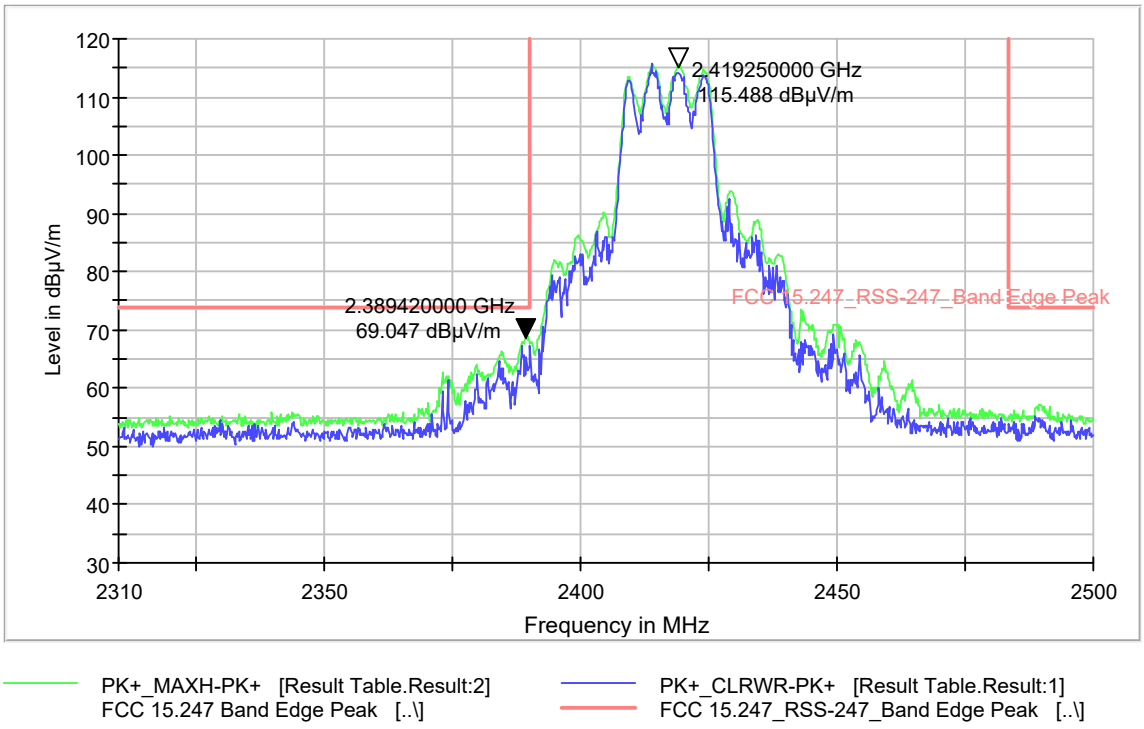
Plot 9-185 Radiated Band Edge Average 802.11n - Ch.1 (2412 MHz)



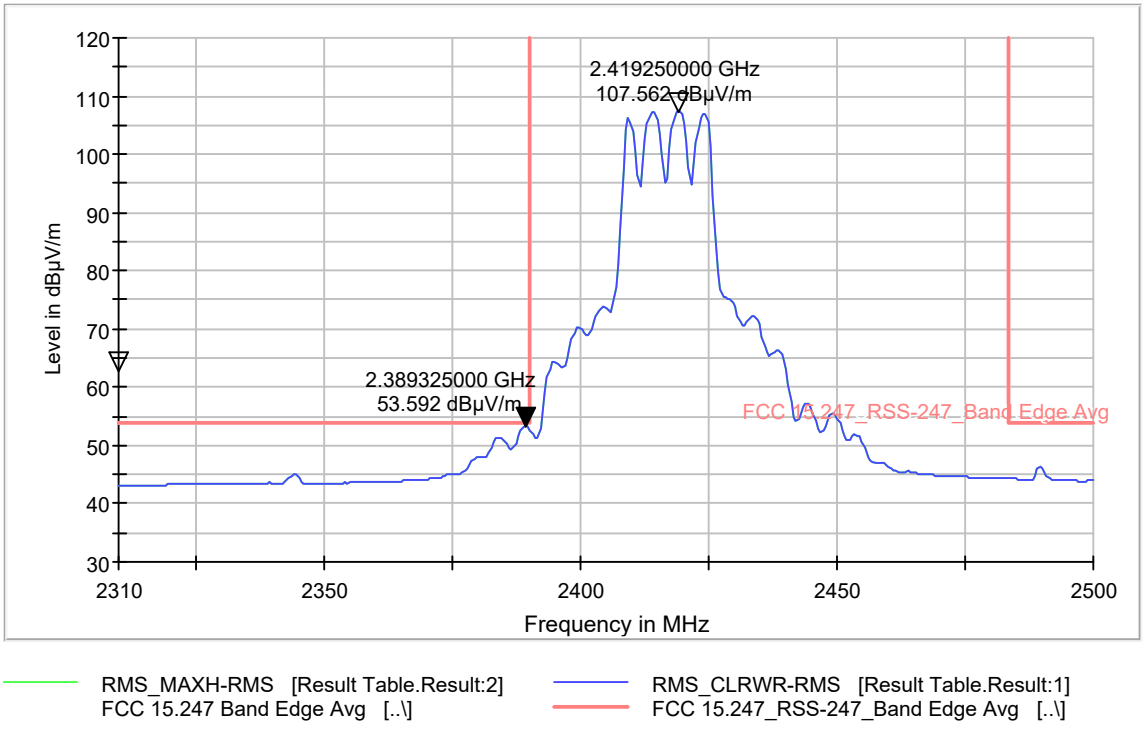
Plot 9-186 Radiated Band Edge Peak 802.11b - Ch.2 (2417 MHz)



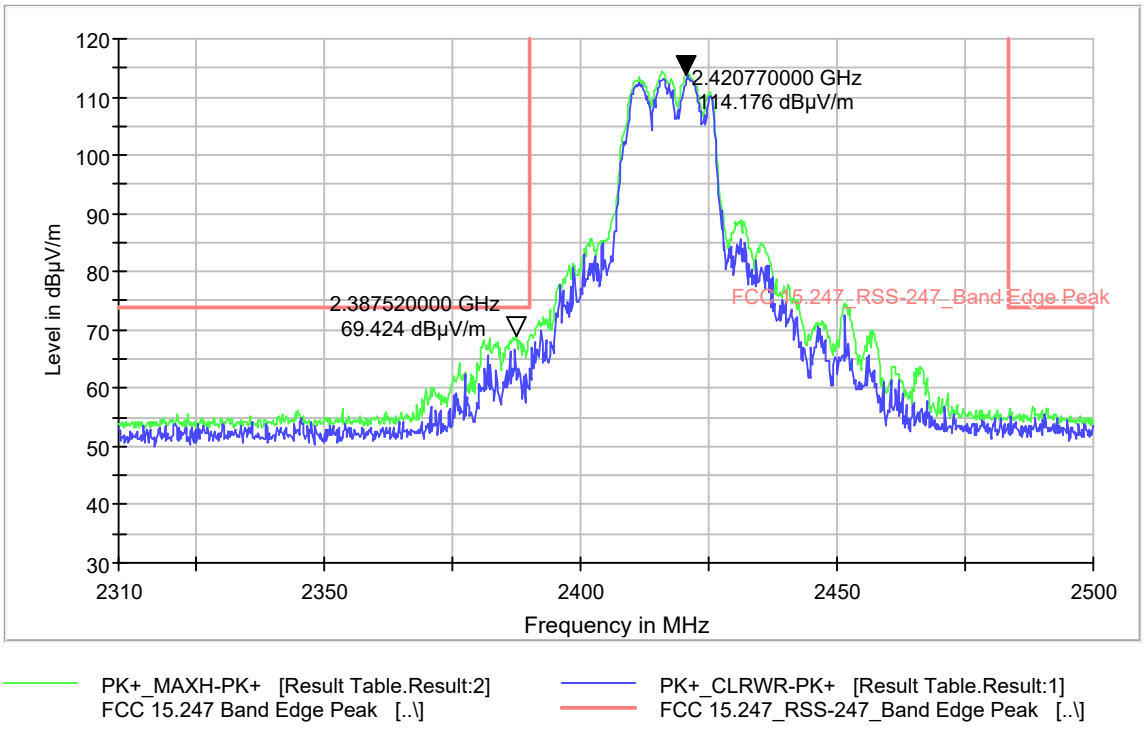
Plot 9-187 Radiated Band Edge Average 802.11b - Ch.2 (2417 MHz)



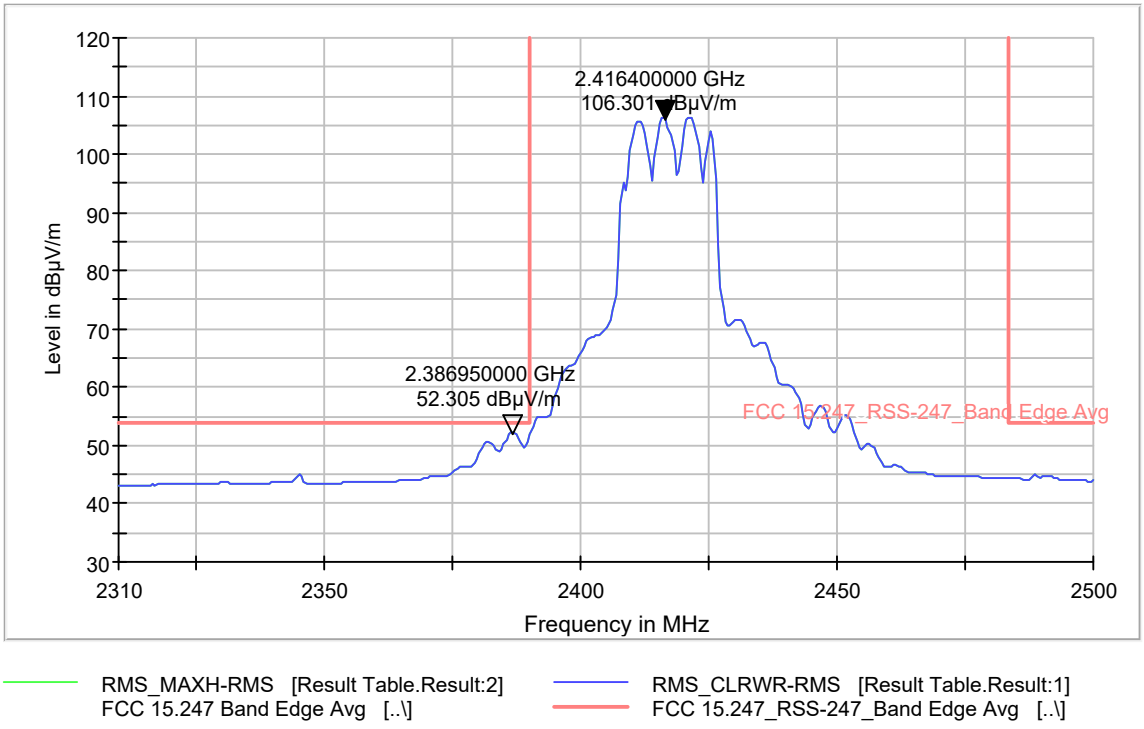
Plot 9-188 Radiated Band Edge Peak 802.11g - Ch.2 (2417 MHz)



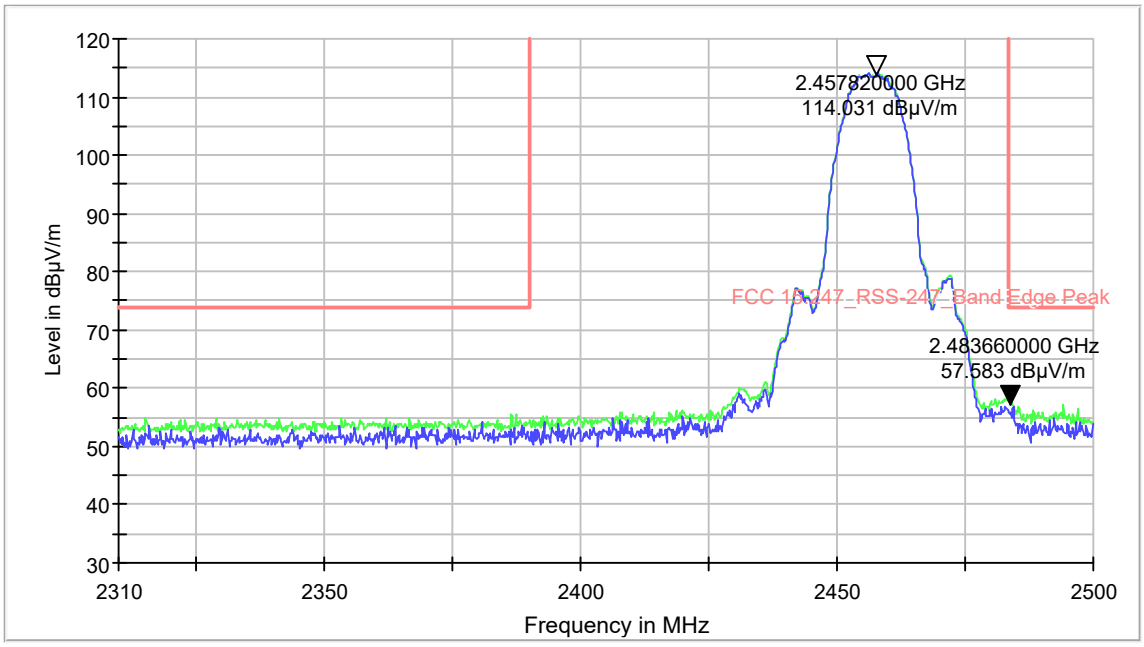
Plot 9-189 Radiated Band Edge Average 802.11g - Ch.2 (2417 MHz)



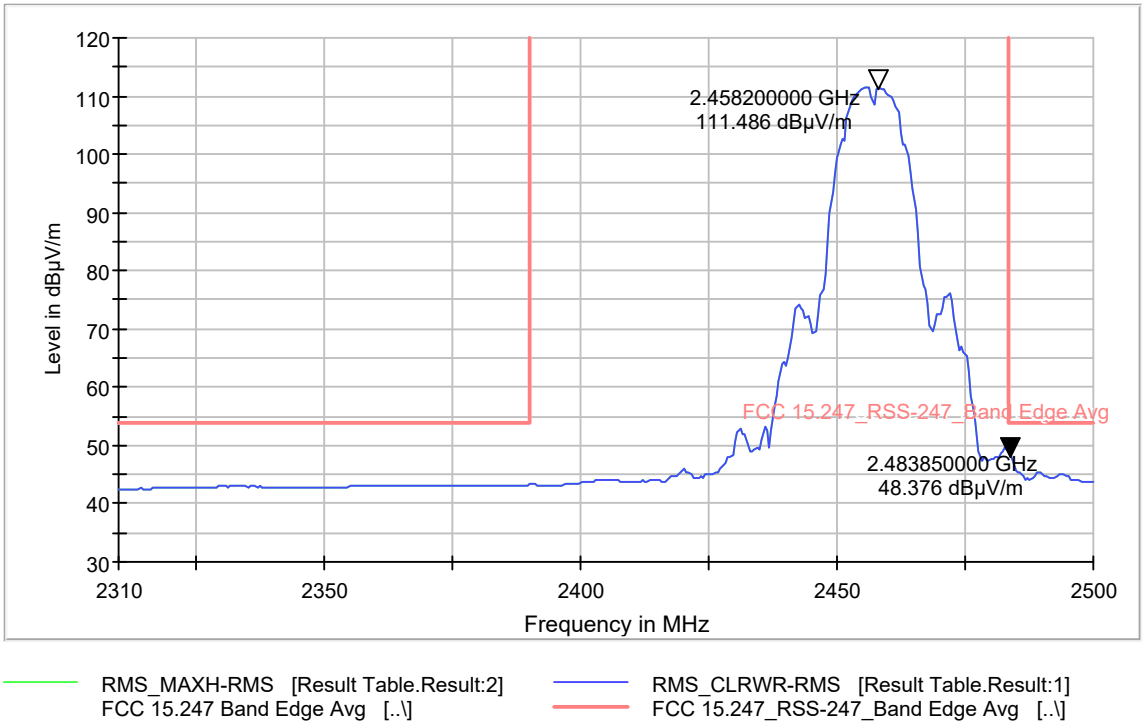
Plot 9-190 Radiated Band Edge Peak 802.11n - Ch.2 (2417 MHz)



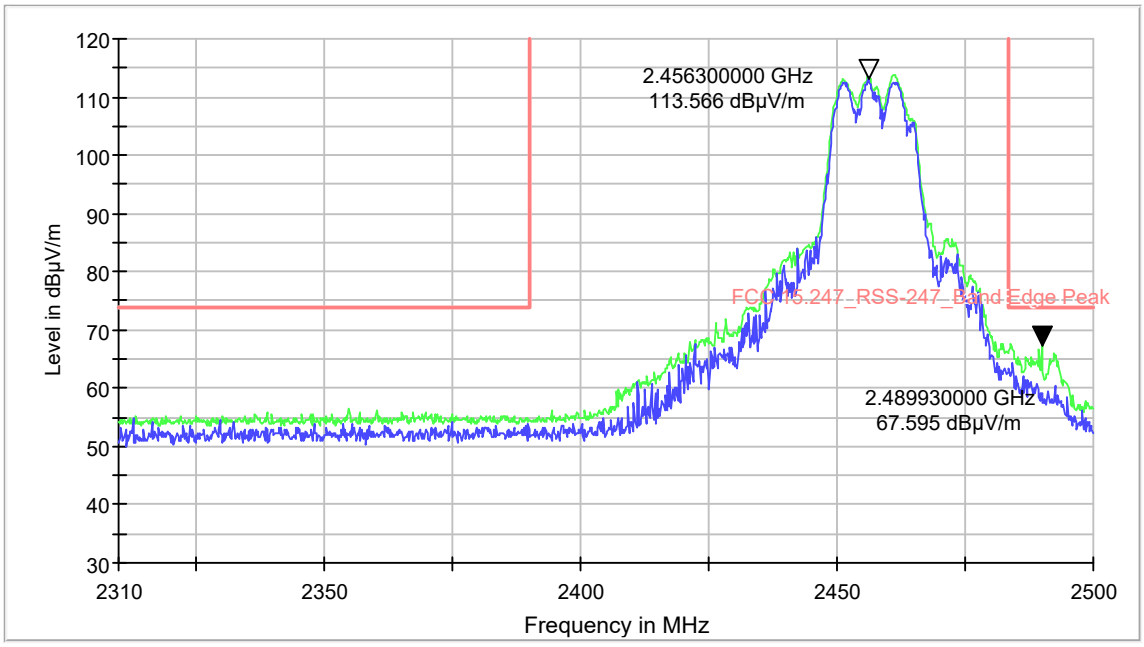
Plot 9-191 Radiated Band Edge Average 802.11n - Ch.2 (2417 MHz)



Plot 9-192 Radiated Band Edge Peak 802.11b - Ch.10 (2457 MHz)



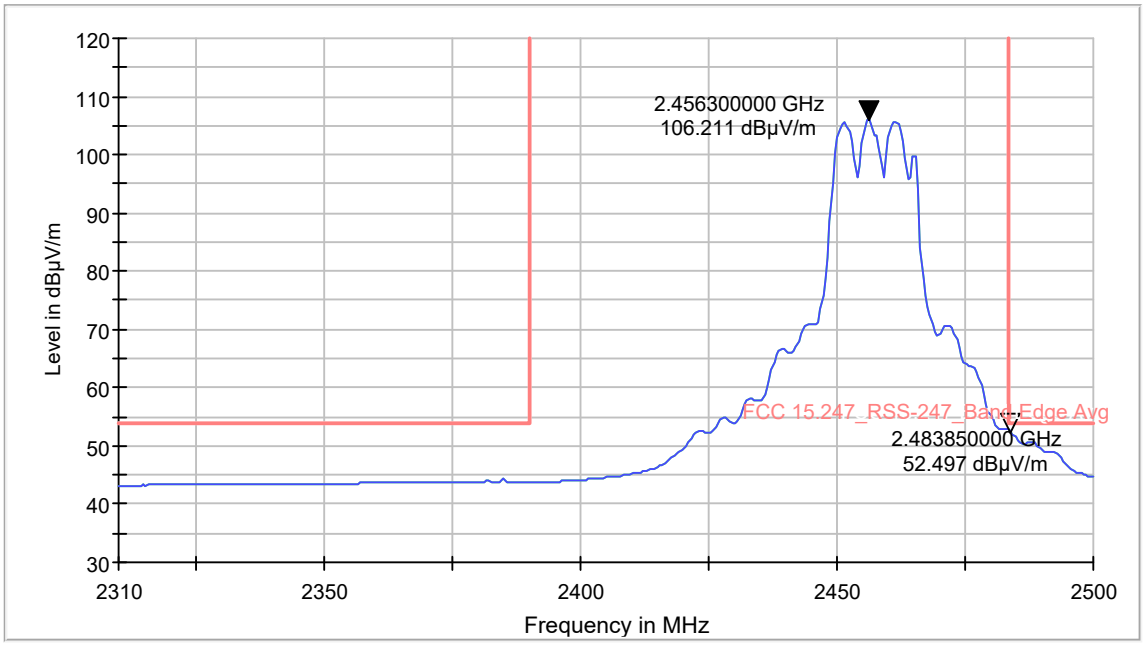
Plot 9-193 Radiated Band Edge Average 802.11b - Ch.10 (2457 MHz)



PK+_MAXH-PK+ [Result Table.Result:2]
FCC 15.247 Band Edge Peak [..\]

PK+_CLRWR-PK+ [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Peak [..\]

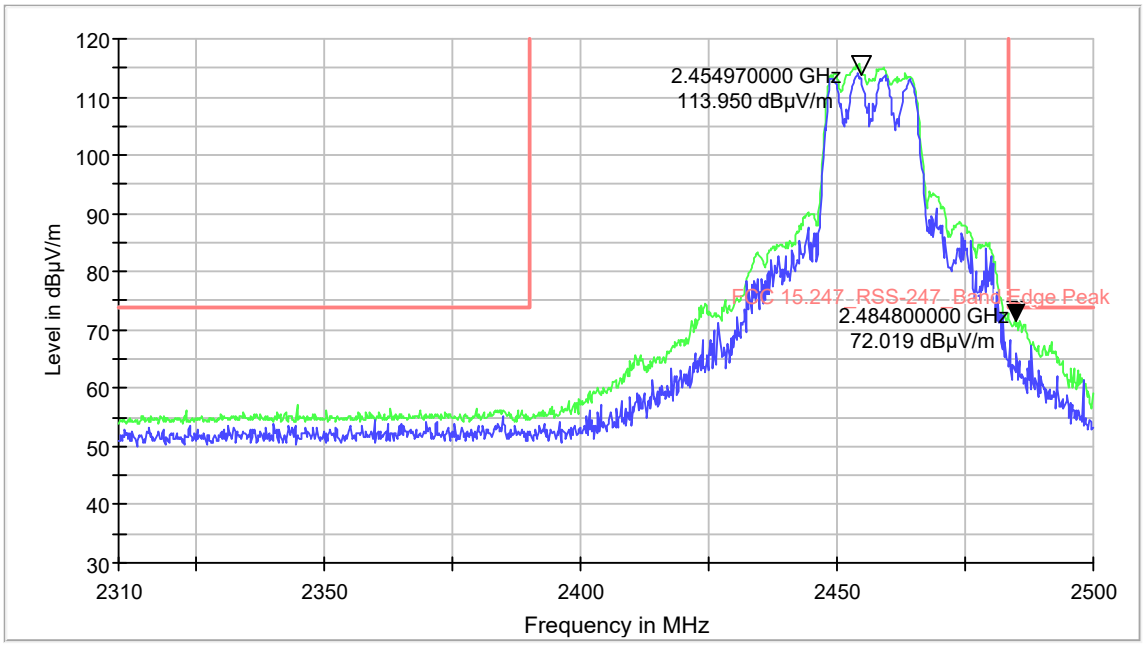
Plot 9-194 Radiated Band Edge Peak 802.11g - Ch.10 (2457 MHz)



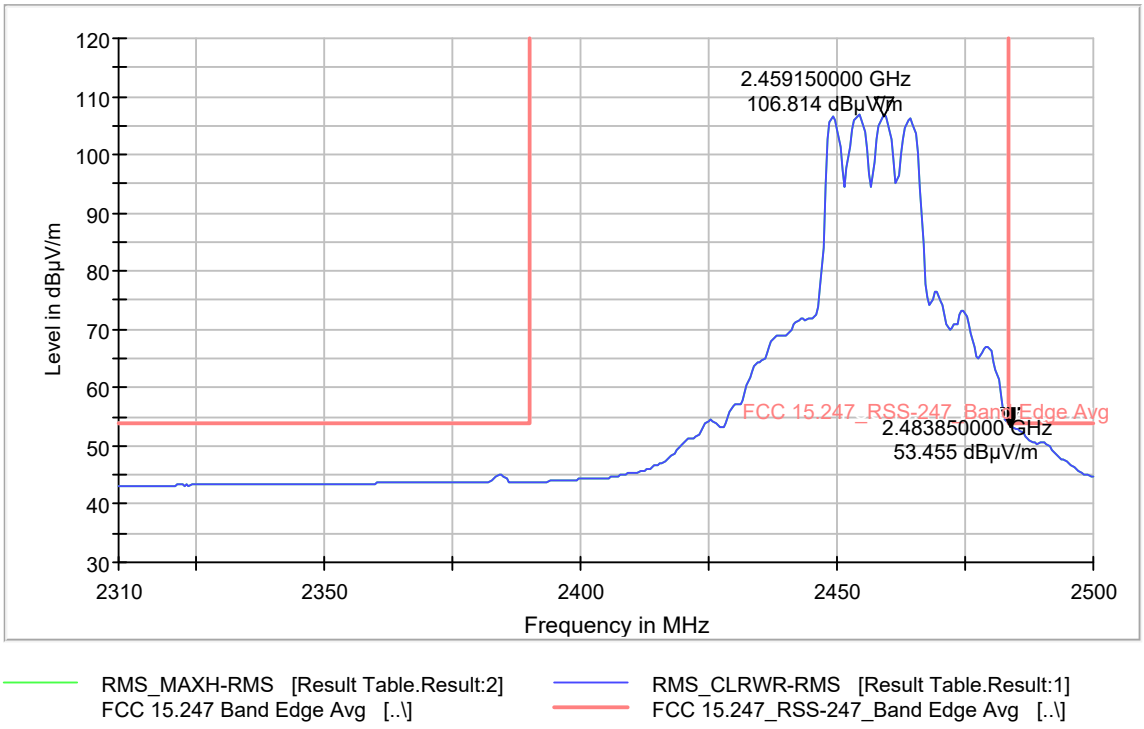
RMS_MAXH-RMS [Result Table.Result:2]
FCC 15.247 Band Edge Avg [..\]

RMS_CLRWR-RMS [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Avg [..\]

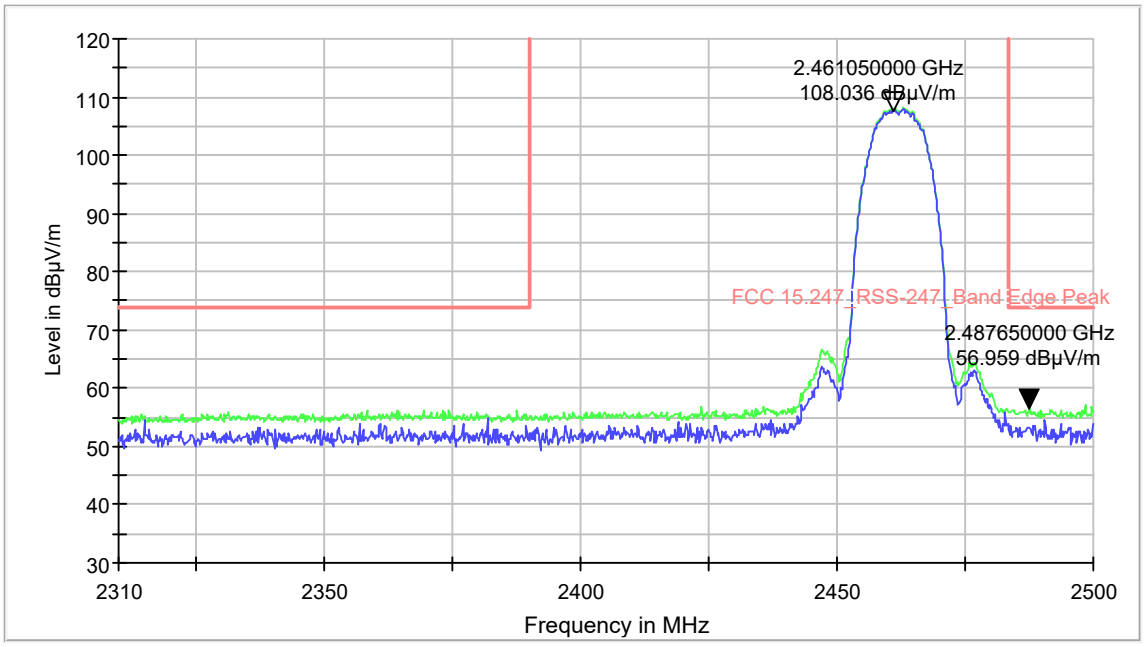
Plot 9-195 Radiated Band Edge Average 802.11g - Ch.10 (2457 MHz)



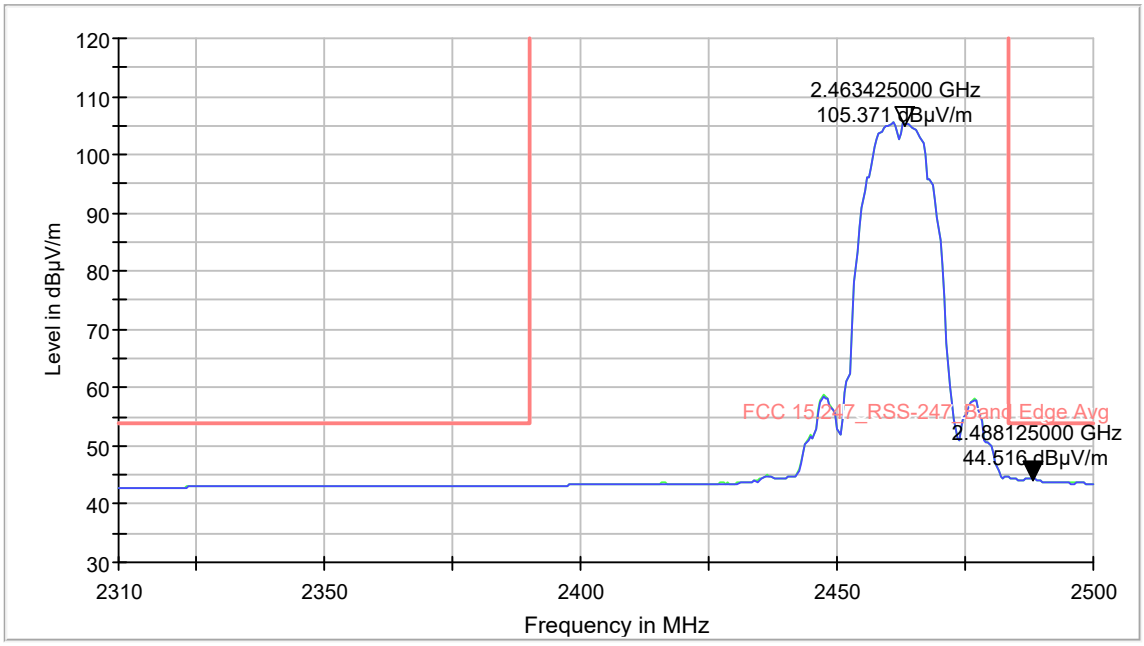
Plot 9-196 Radiated Band Edge Peak 802.11n - Ch.10 (2457 MHz)



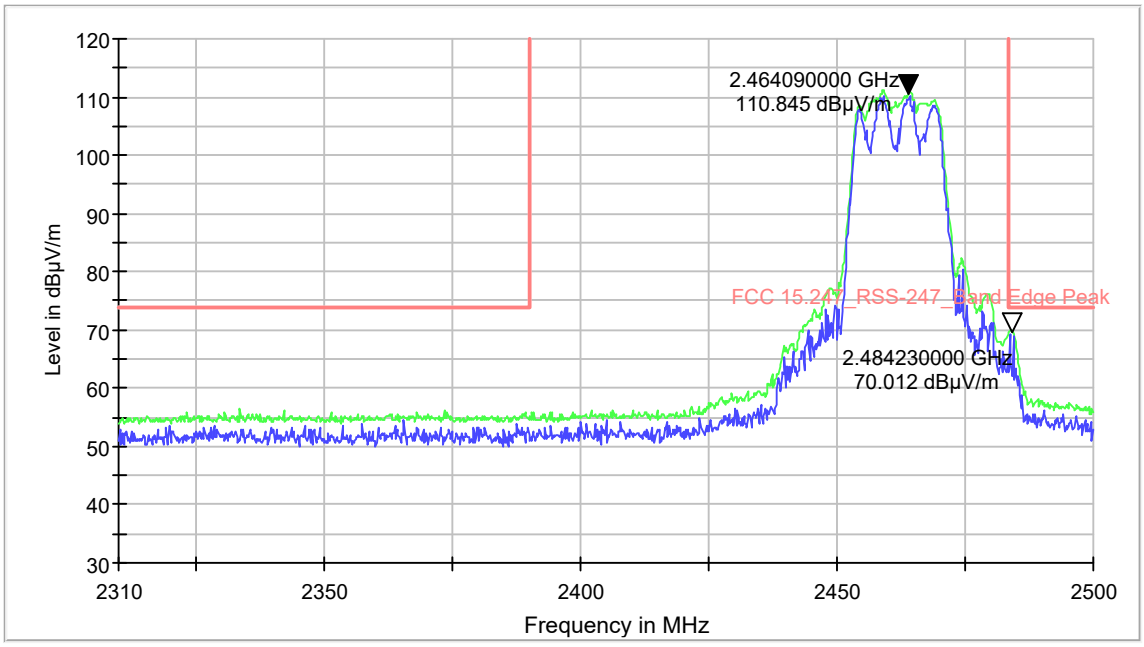
Plot 9-197 Radiated Band Edge Average 802.11n - Ch.10 (2457 MHz)



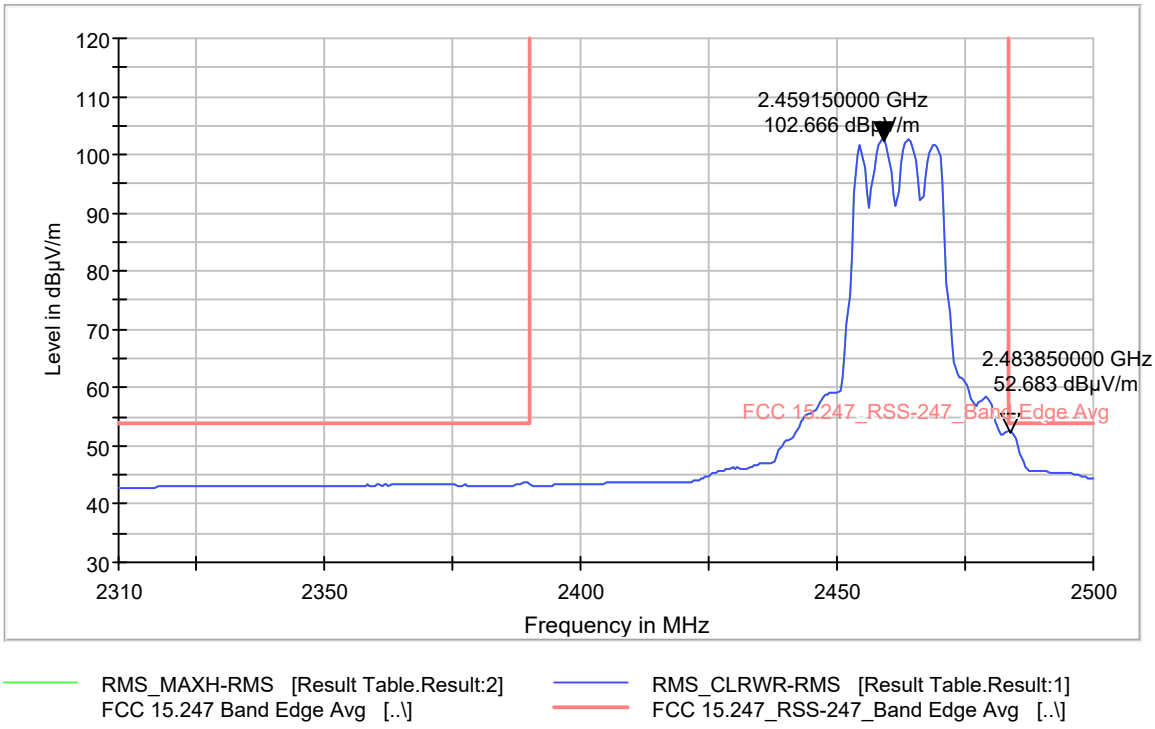
Plot 9-198 Radiated Band Edge Peak 802.11b - Ch.11 (2462 MHz)



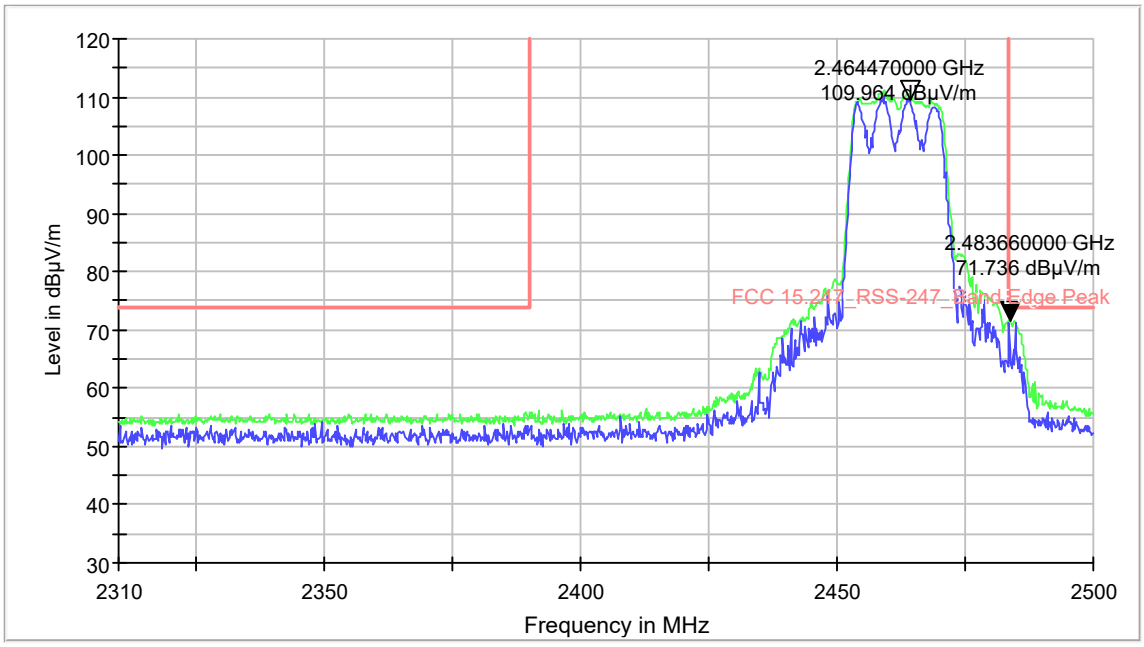
Plot 9-199 Radiated Band Edge Average 802.11b - Ch.11 (2462 MHz)



Plot 9-200 Radiated Band Edge Peak 802.11g - Ch.11 (2462 MHz)



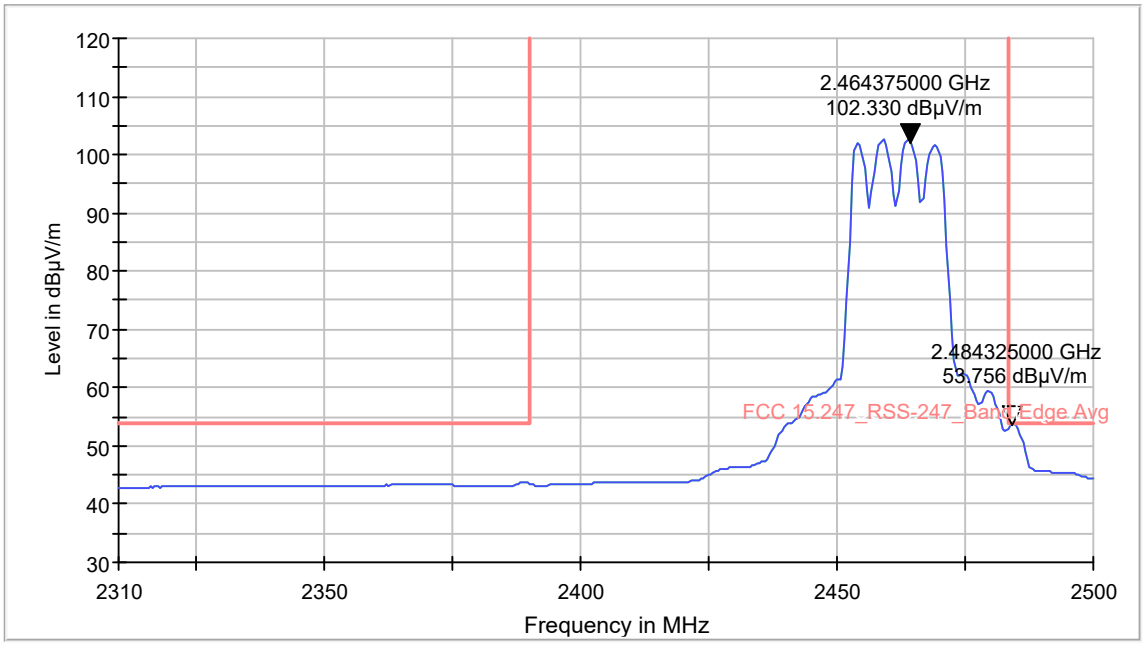
Plot 9-201 Radiated Band Edge Average 802.11g - Ch.11 (2462 MHz)



PK+_MAXH-PK+ [Result Table.Result:2]
FCC 15.247 Band Edge Peak [..\]

PK+_CLRWR-PK+ [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Peak [..\]

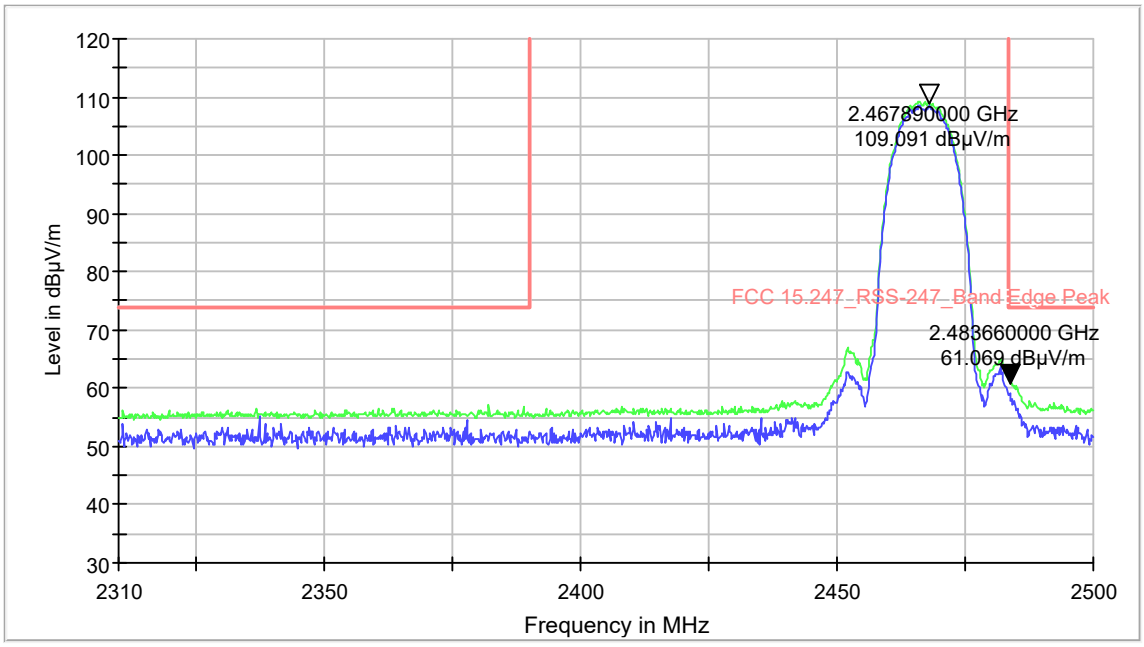
Plot 9-202 Radiated Band Edge Peak 802.11n - Ch.11 (2462 MHz)



RMS_MAXH-RMS [Result Table.Result:2]
FCC 15.247 Band Edge Avg [..\]

RMS_CLRWR-RMS [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Avg [..\]

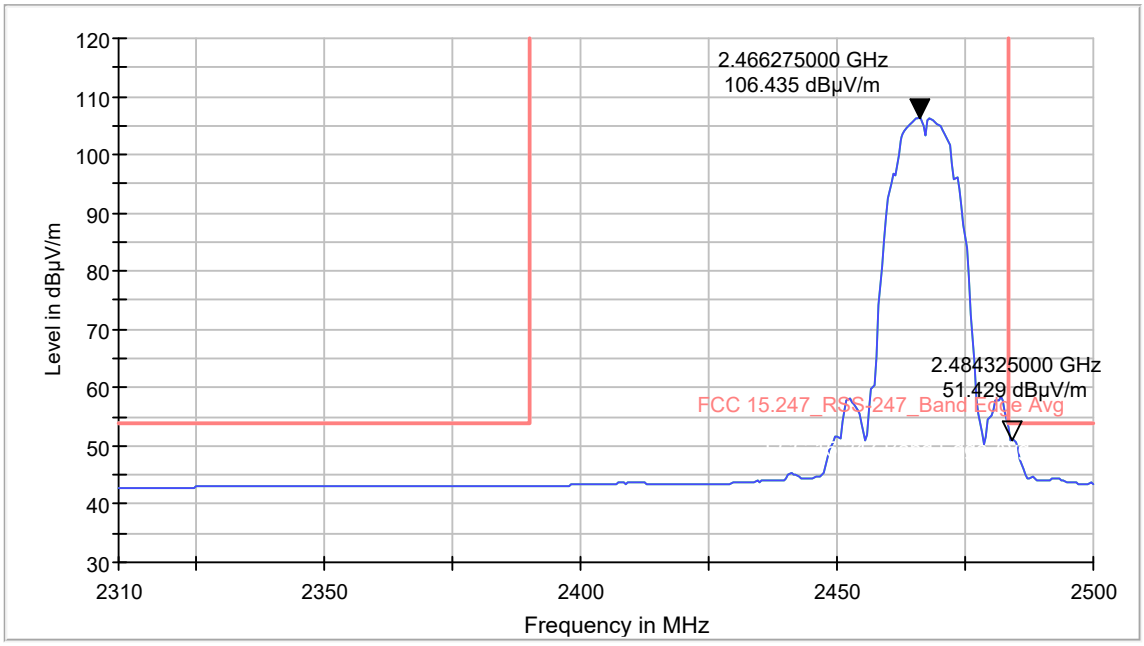
Plot 9-203 Radiated Band Edge Average 802.11n - Ch.11 (2462 MHz)



PK+_MAXH-PK+ [Result Table.Result:2]
FCC 15.247 Band Edge Peak [..\]

PK+_CLRWR-PK+ [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Peak [..\]

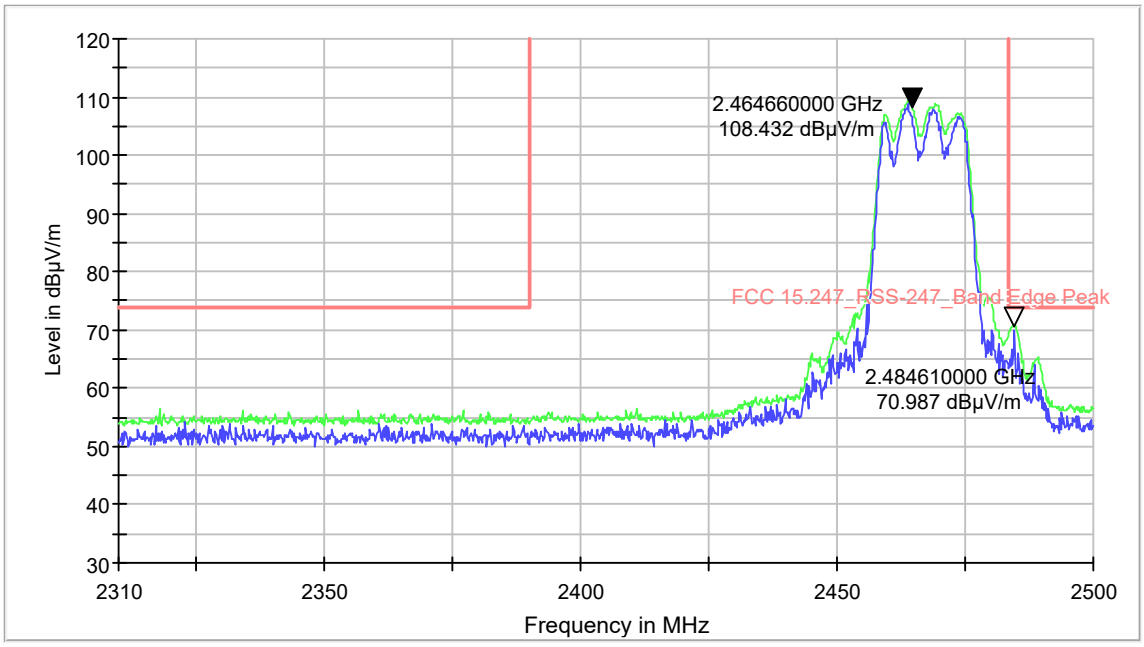
Plot 9-204 Radiated Band Edge Peak 802.11b - Ch.12 (2467 MHz)



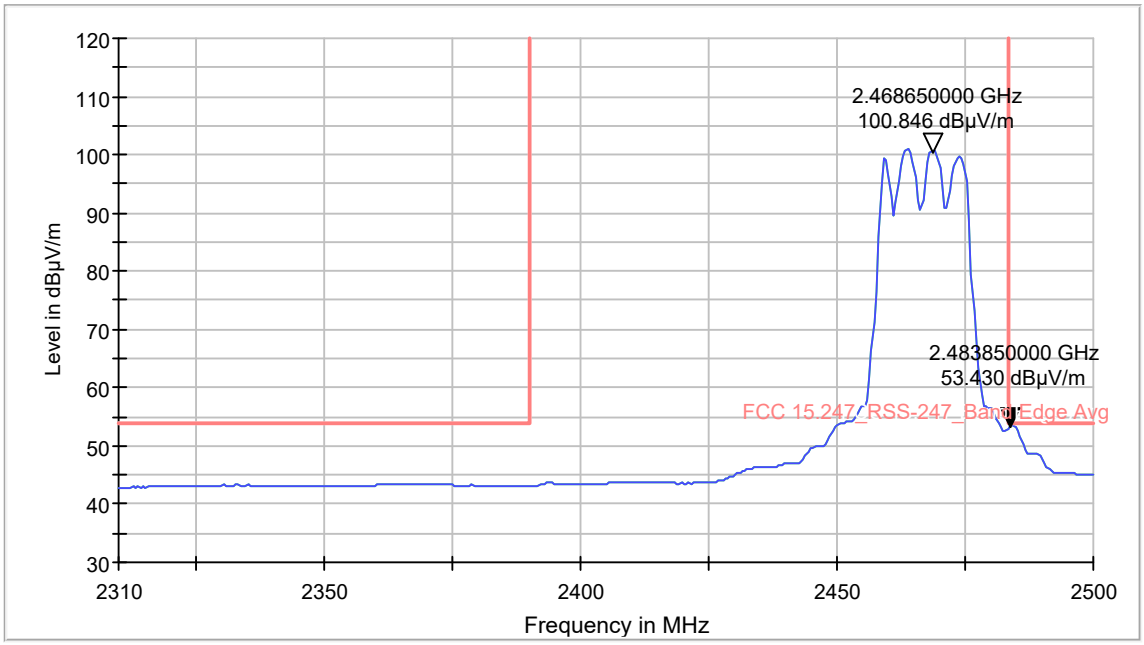
RMS_MAXH-RMS [Result Table.Result:2]
FCC 15.247 Band Edge Avg [..\]

RMS_CLRWR-RMS [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Avg [..\]

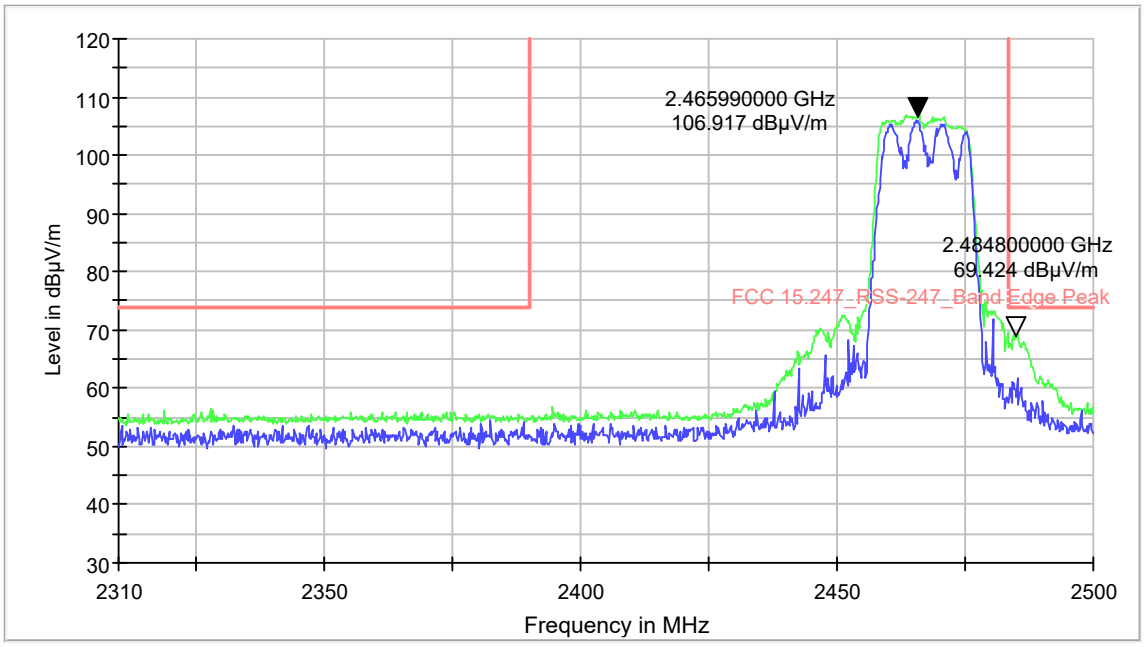
Plot 9-205 Radiated Band Edge Average 802.11b - Ch.12 (2467 MHz)



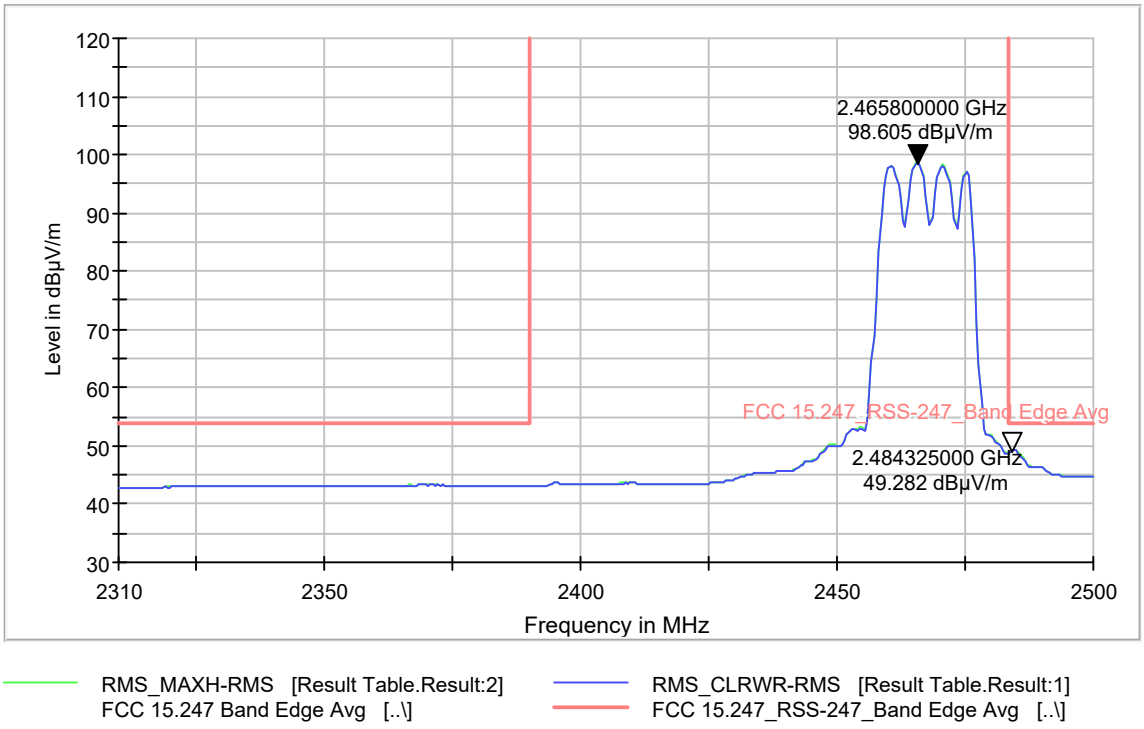
Plot 9-206 Radiated Band Edge Peak 802.11g - Ch.12 (2467 MHz)



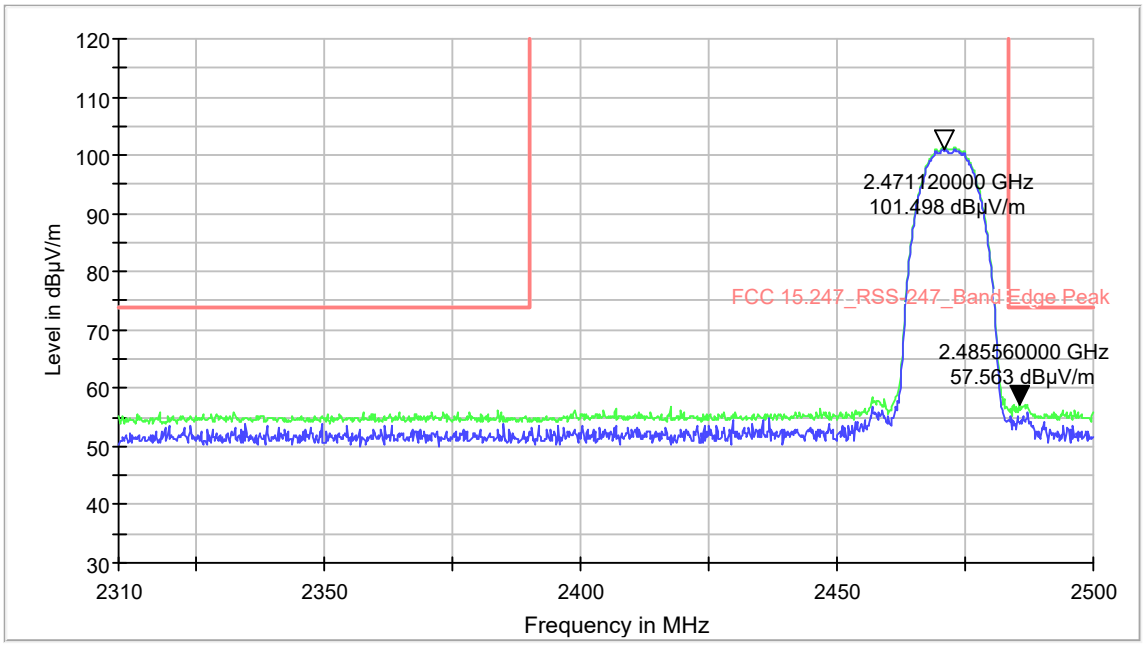
Plot 9-207 Radiated Band Edge Average 802.11g - Ch.12 (2467 MHz)



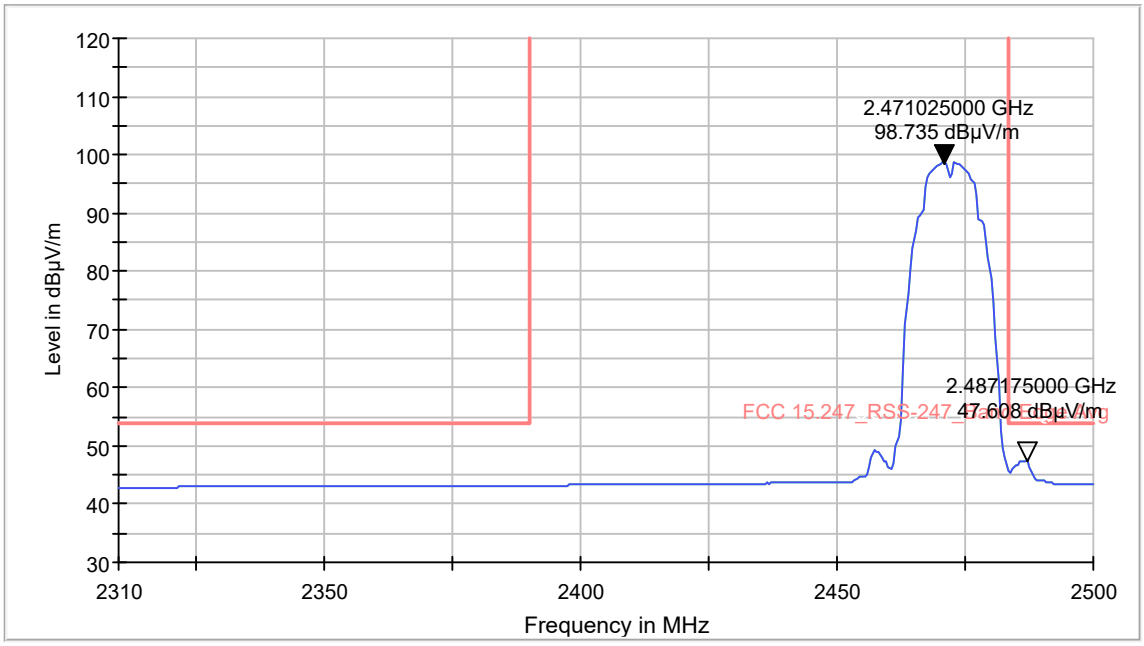
Plot 9-208 Radiated Band Edge Peak 802.11n - Ch.12 (2467 MHz)



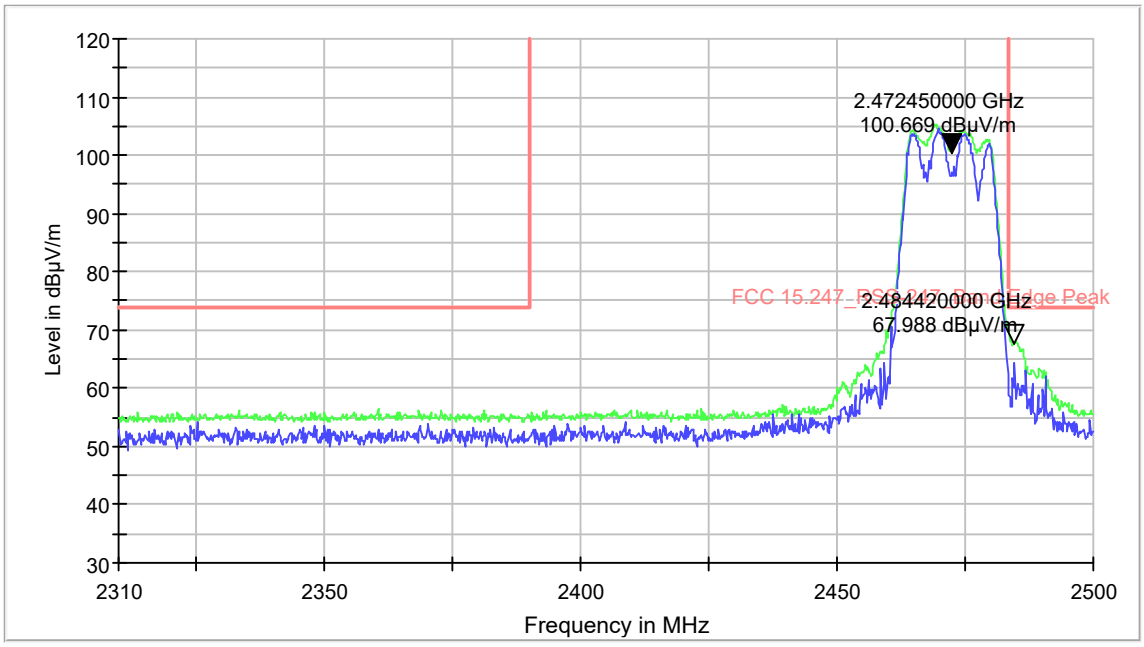
Plot 9-209 Radiated Band Edge Average 802.11n - Ch.12 (2467 MHz)



Plot 9-210 Radiated Band Edge Peak 802.11b - Ch.13 (2472 MHz)



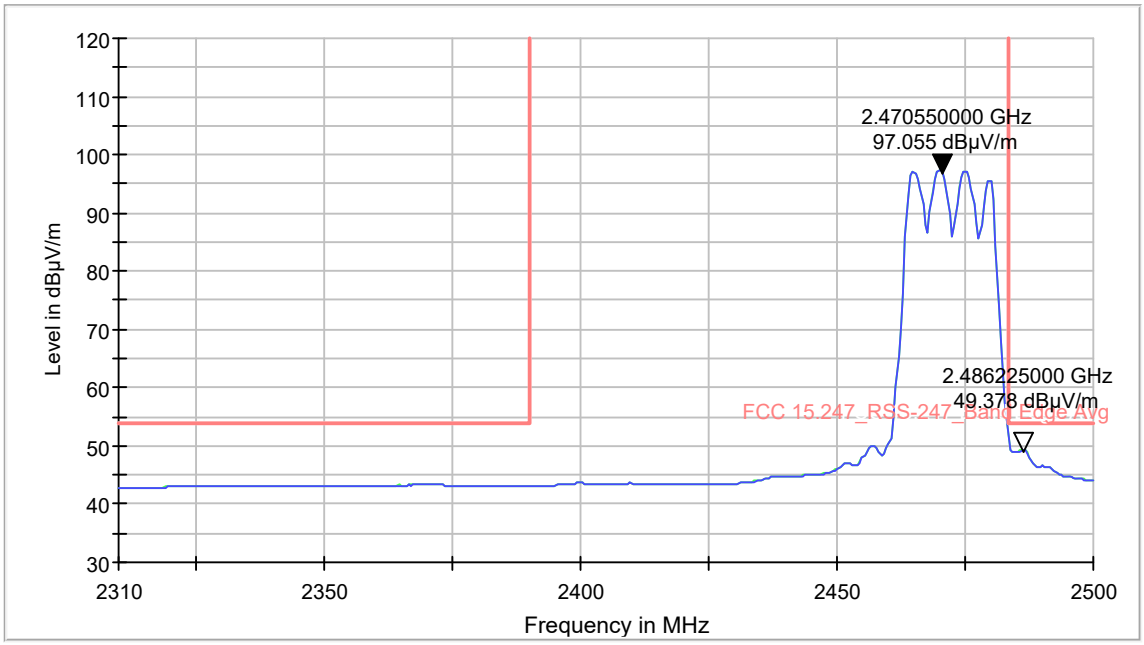
Plot 9-211 Radiated Band Edge Average 802.11b - Ch.13 (2472 MHz)



PK+_MAXH-PK+ [Result Table.Result:2]
FCC 15.247 Band Edge Peak [..\]

PK+_CLRWR-PK+ [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Peak [..\]

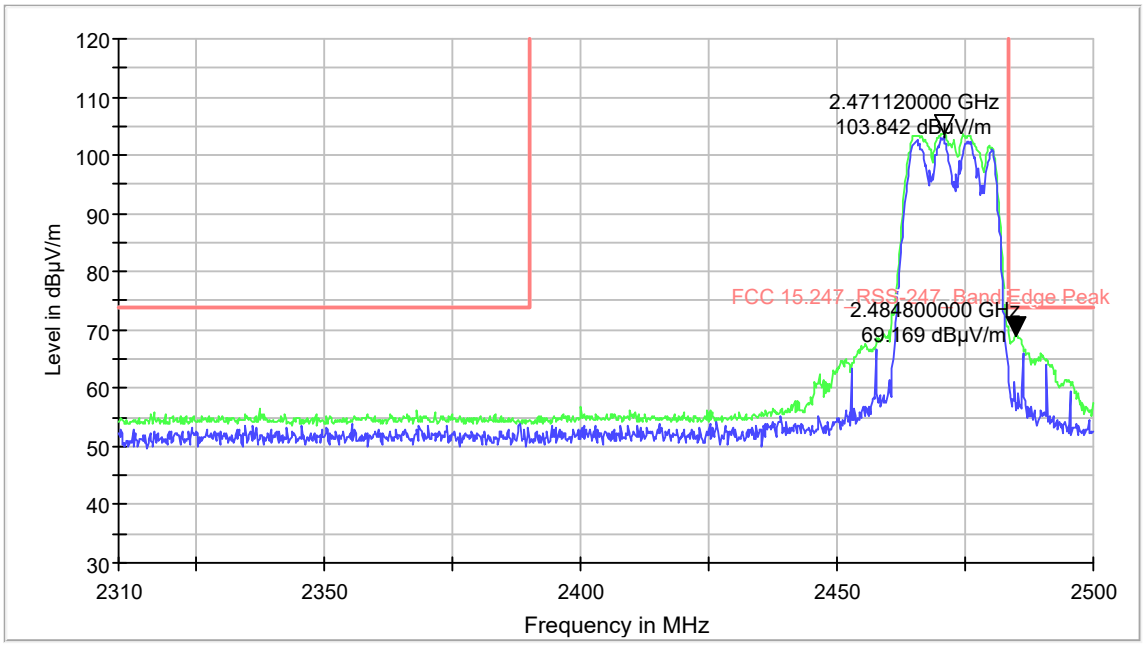
Plot 9-212 Radiated Band Edge Peak 802.11g - Ch.13 (2472 MHz)



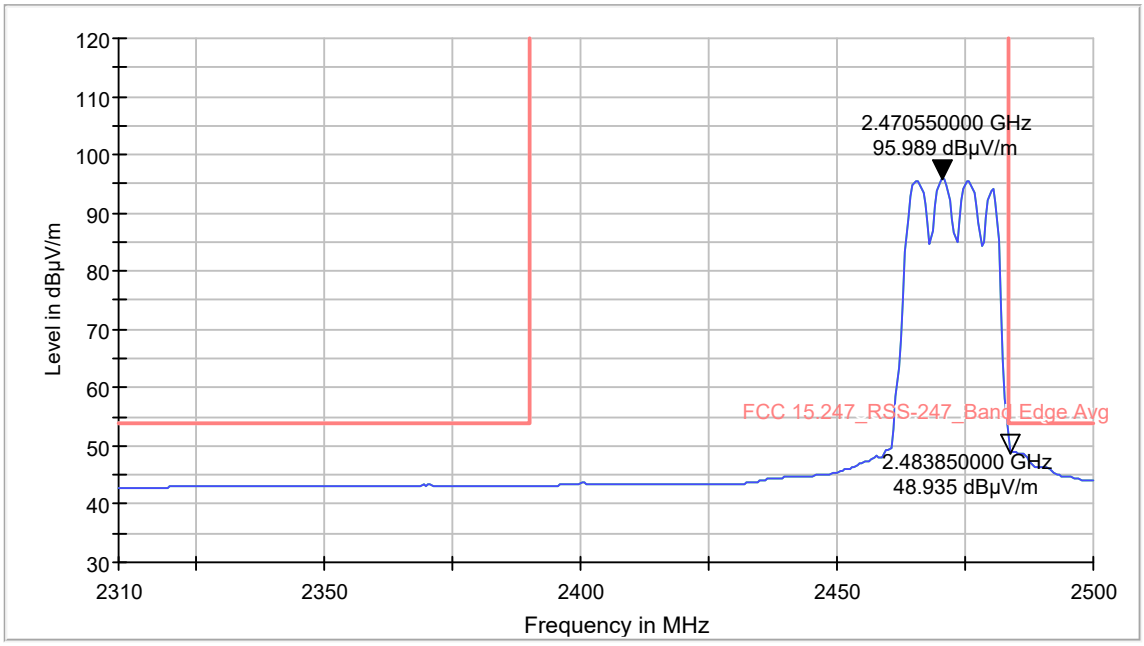
RMS_MAXH-RMS [Result Table.Result:2]
FCC 15.247 Band Edge Avg [..\]

RMS_CLRWR-RMS [Result Table.Result:1]
FCC 15.247_RSS-247_Band Edge Avg [..\]

Plot 9-213 Radiated Band Edge Average 802.11g - Ch.13 (2472 MHz)



Plot 9-214 Radiated Band Edge Peak 802.11n - Ch.13 (2472 MHz)



Plot 9-215 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 line-to-ground 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 ≥ 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

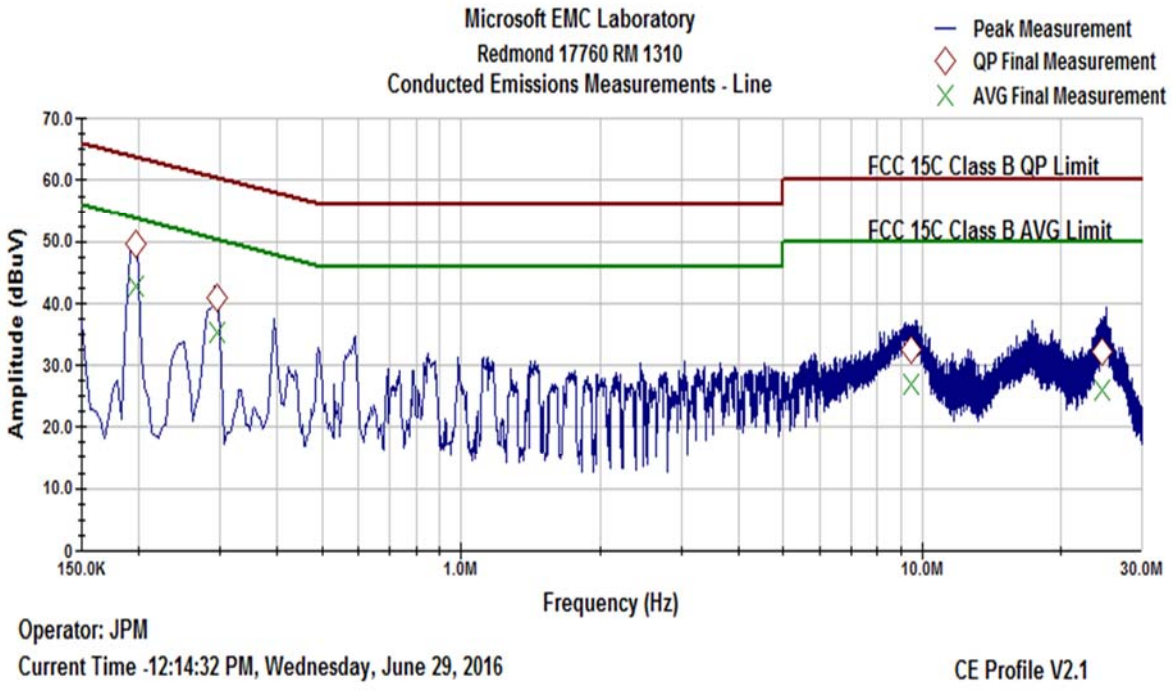
Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

9.9.4 Test Result:

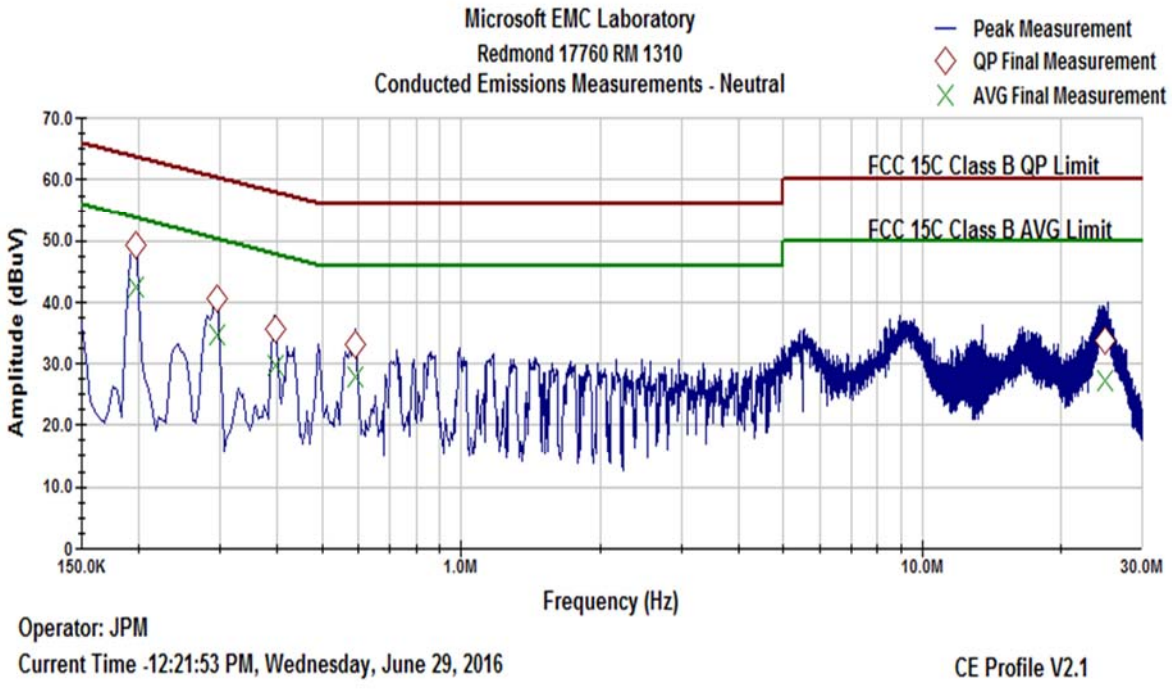
Pass

9.9.5 Test Data:

Worst case emissions in mid channel (2437MHz) '802.11g' mode of operation shown here.



Plot 9-216 Conducted Emissions Measurements-Line



Plot 9-217 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)
0.20	42.89	49.52	54.64	64.64	L	-11.75	-15.11
0.20	42.59	49.25	54.64	64.64	N	-12.06	-15.39
0.30	35.24	40.81	51.86	61.86	L	-16.62	-21.05
0.30	34.81	40.45	51.85	61.85	N	-17.04	-21.41
0.59	27.74	33.26	46.00	56.00	N	-18.27	-22.74
0.40	29.68	35.60	49.00	59.00	N	-19.32	-23.40
24.95	27.09	33.75	50.00	60.00	N	-22.91	-26.25
9.49	26.96	32.42	50.00	60.00	L	-23.04	-27.58
24.60	26.12	32.28	50.00	60.00	L	-23.88	-27.72

End of Report