Bandedge

Test Conditions / Setup

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand alone on the table top lined with 5cm thick Styrofoam. All other support equipment is located remote from this test area. The EUT Ethernet ports are connected to the performance analysis system. The EUT RF port is connected to the diplexer, then splitters and finally to the broadband router (CASA). The DHCP server is connected to the broadband router through the gigabit switch. The laptop is connected to the performance analysis system. The performance analysis system is running data. The EUT is transmitting continuously.
Temperature: 18°C, Humidity: 42%, Pressure: 100kPa.

Frequency range of EUT: 2412 to 2462MHz
802.11b (11Mbps),
Transmit Frequencies: 2412MHz, 2437MHz, 2462MHz (Channel 1, 6, 11)

802.11g (6Mbps)
Transmit Frequencies: 2412MHz, 2437MHz, 2462MHz (Channel 1, 6, 11)

802.11n (20MHz) (7.2Mbps)
Transmit Frequencies: 2412MHz, 2437MHz, 2462MHz (Channel 1, 6, 11)

802.11n (40MHz) (15Mbps)
Transmit Frequencies: 2422MHz, 2437MHz, 2452MHz (Channel 3, 6, 9)

Frequency range of EUT: 5745 to 5825MHz
802.11a (6Mbps),
Transmit Frequencies: 5745MHz, 5785MHz, 5825MHz (Channel 1, 6, 11)

802.11n (20MHz) (7.2Mbps)
Transmit Frequencies: 5745MHz, 5785MHz, 5825MHz (Channel 149, 157, 165)

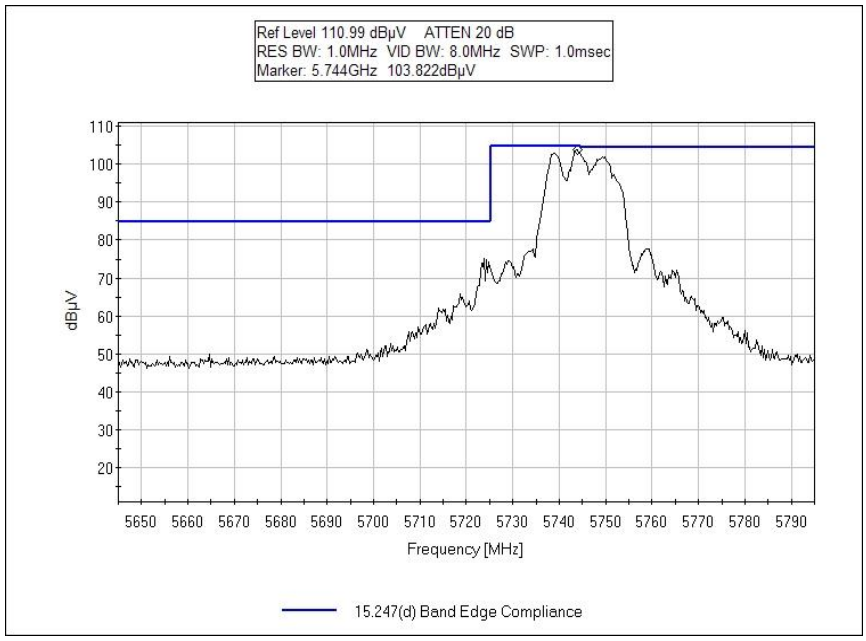
802.11n (40MHz) (15Mbps)
Transmit Frequencies: 5755MHz, 5795MHz (Channel 151, 159)

Integral Antenna Gain: 4.1 dBi max at 2.4GHz band.
Integral Antenna Gain: 4.4 dBi max at 5GHz band

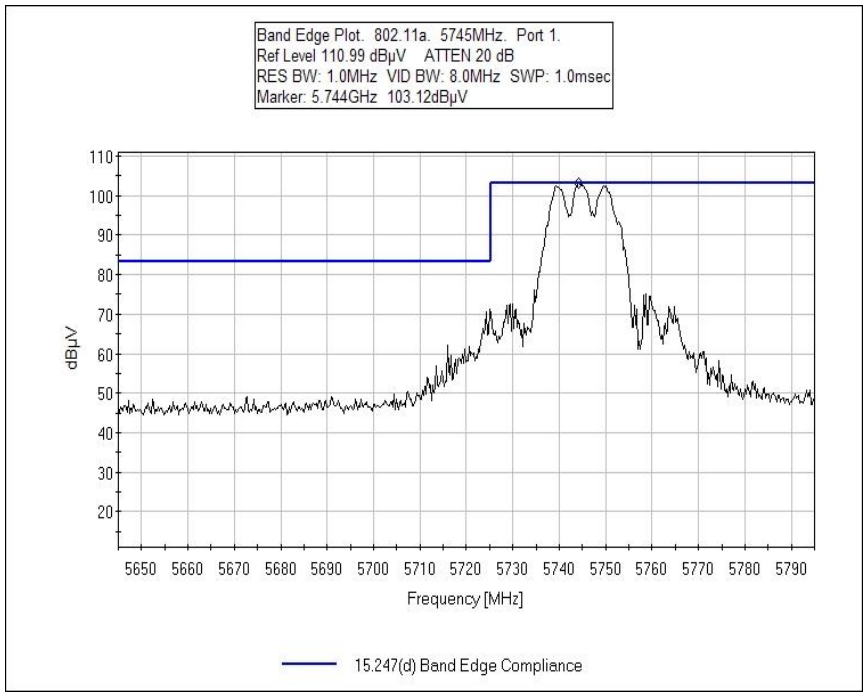
Engineer Name: S. Yamamoto

Test Equipment					
Asset/Serial #	**Description**	**Model**	**Manufacturer**	**Cal Date**	**Cal Due**
02672	Spectrum Analyzer	E4446A	Agilent	8/9/2010	8/9/2012
00849	Horn Antenna	3115	ETS	4/23/2010	4/23/2012
00786	Preamp	83017A	HP	8/5/2010	8/5/2012
03239	Cable	32022-2-29094K-24TC	Astrolab	8/30/2011	8/30/2013
P05421	Cable	Sucoflex 104A	Huber & Suhner	2/12/2010	2/12/2012
P06081	Cable	74Z-0-0-21/NCM 100	Huber & Suhner	4/28/2011	4/28/2013

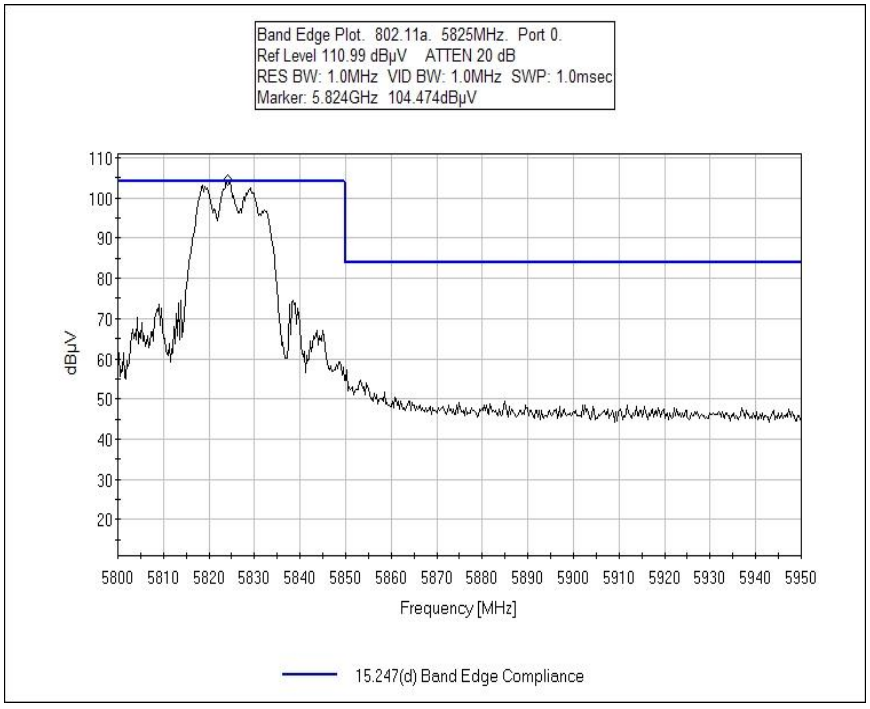
Test Plots



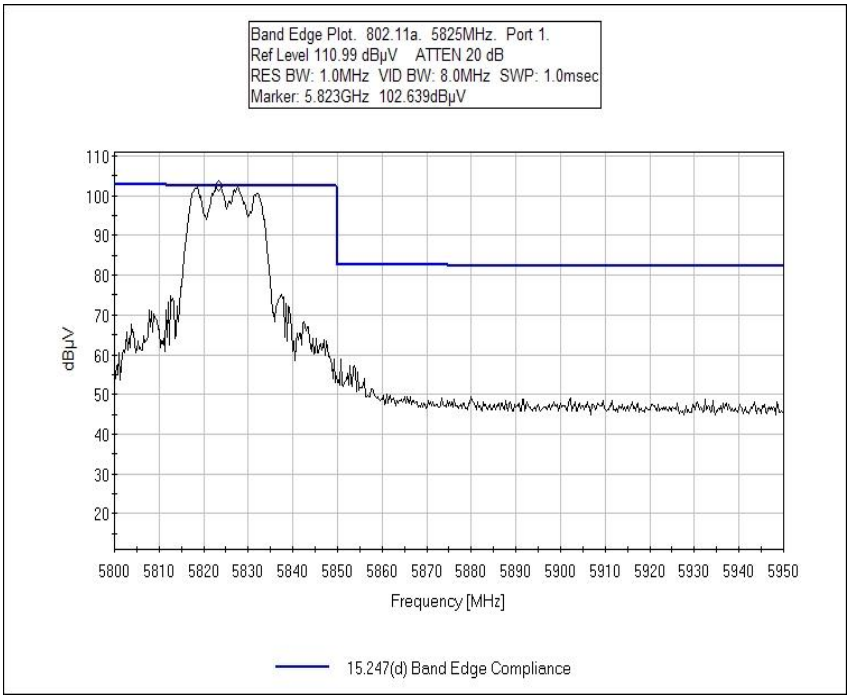
802.11a - Antenna Port 0



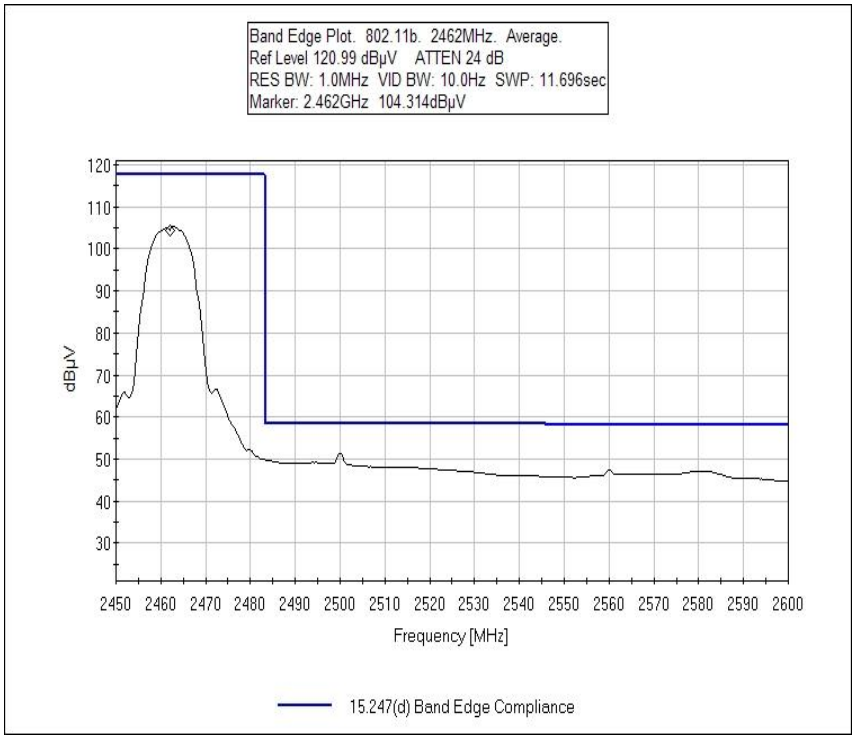
802.11a - Antenna Port 1



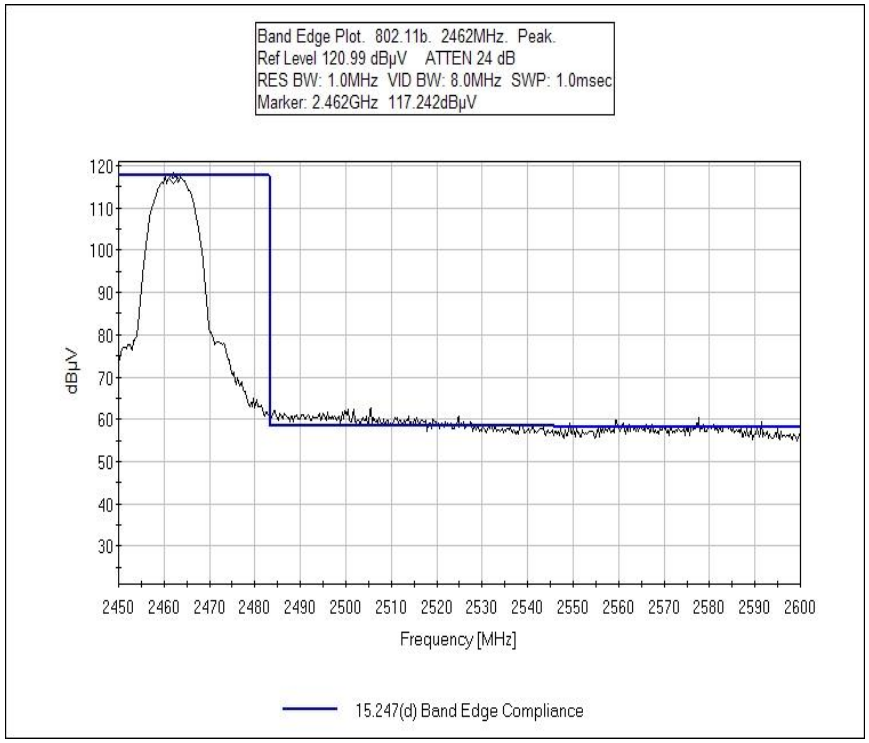
802.11a - Antenna Port 0



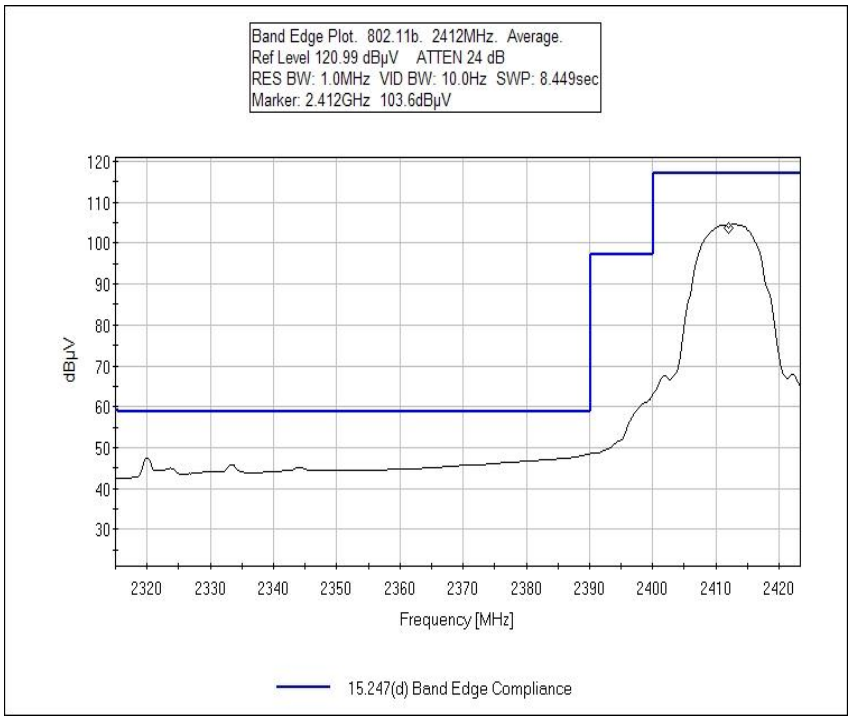
802.11a - Antenna Port 1



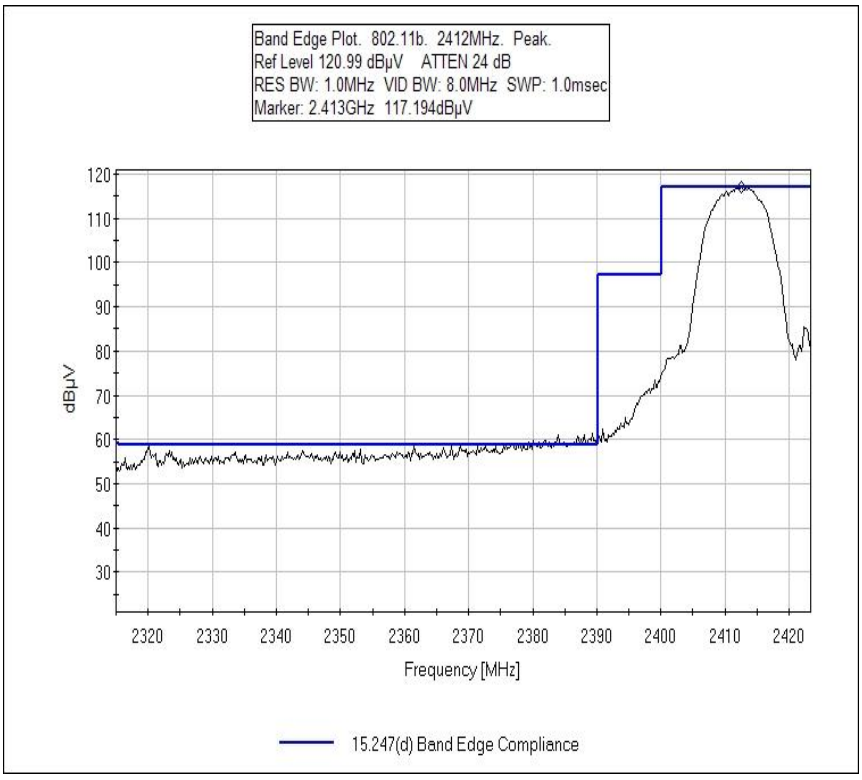
802.11b



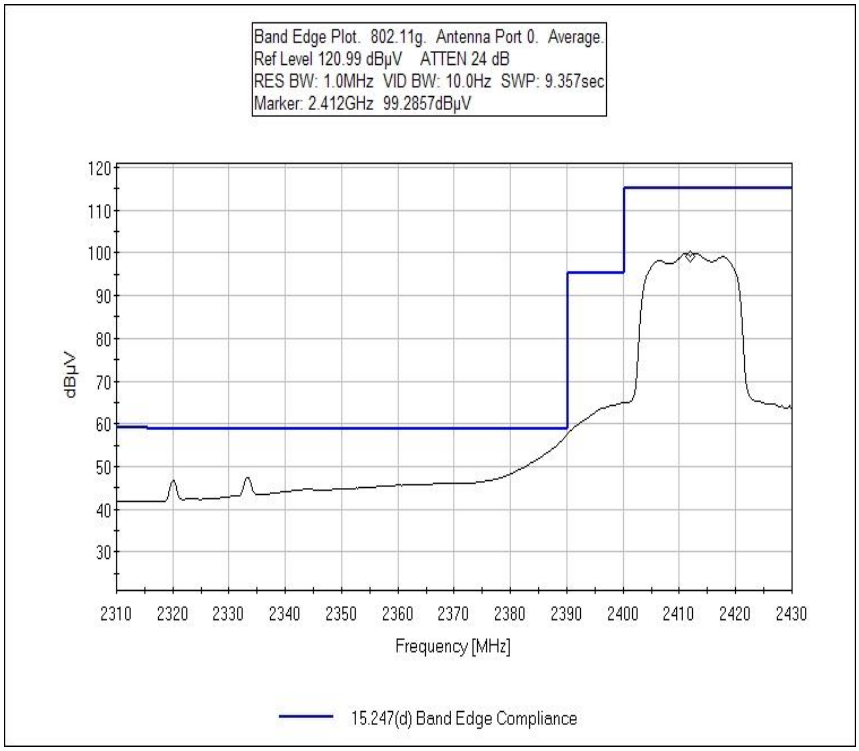
802.11b



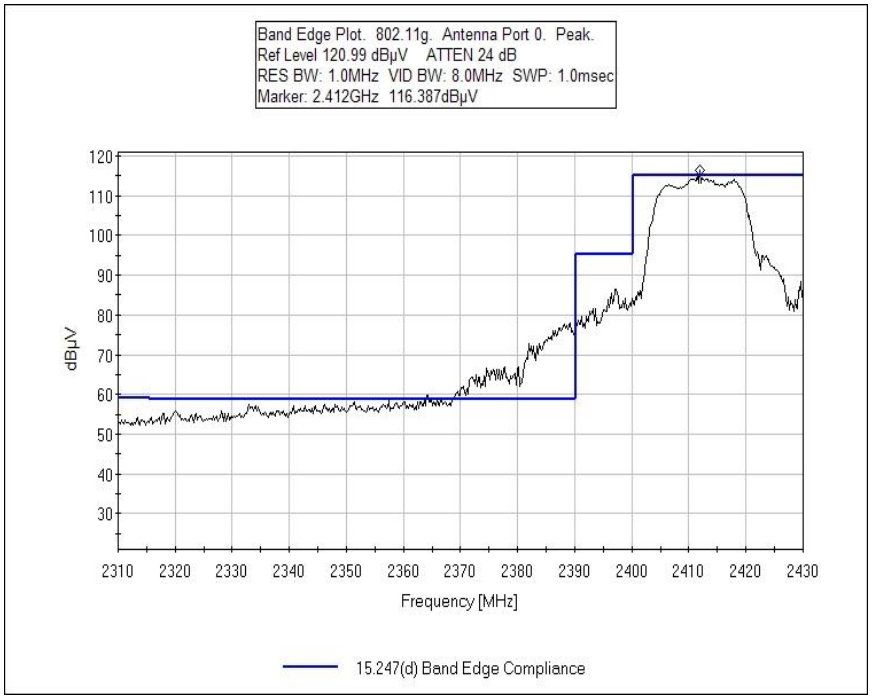
802.11b



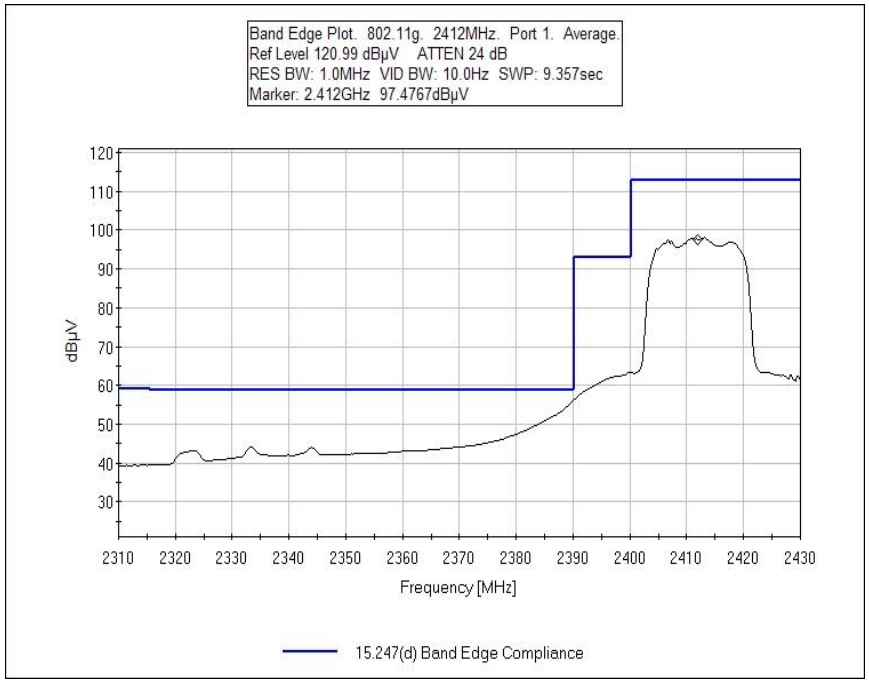
802.11b



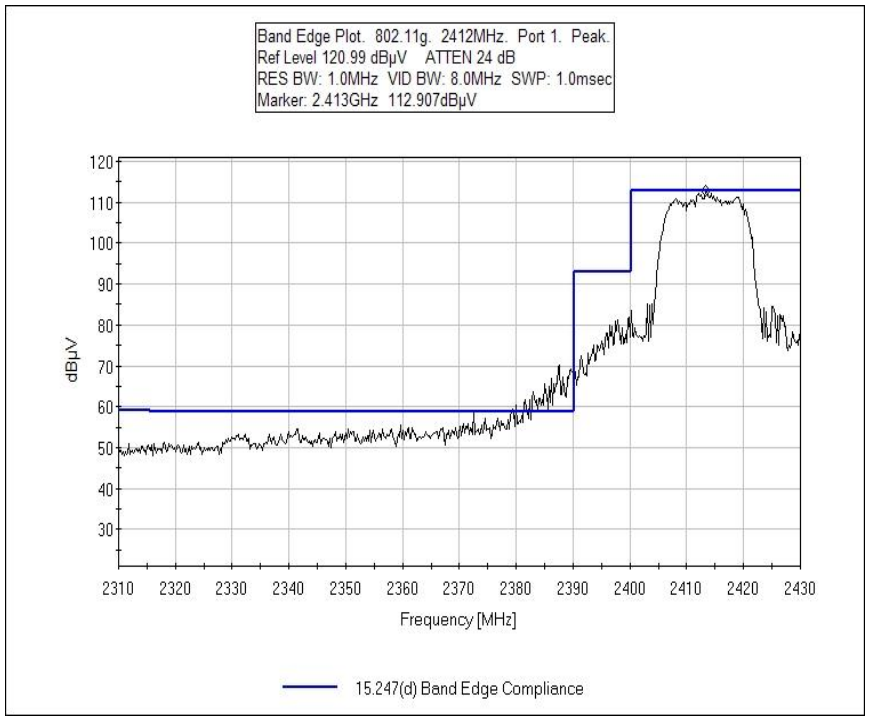
802.11g - Antenna Port 0



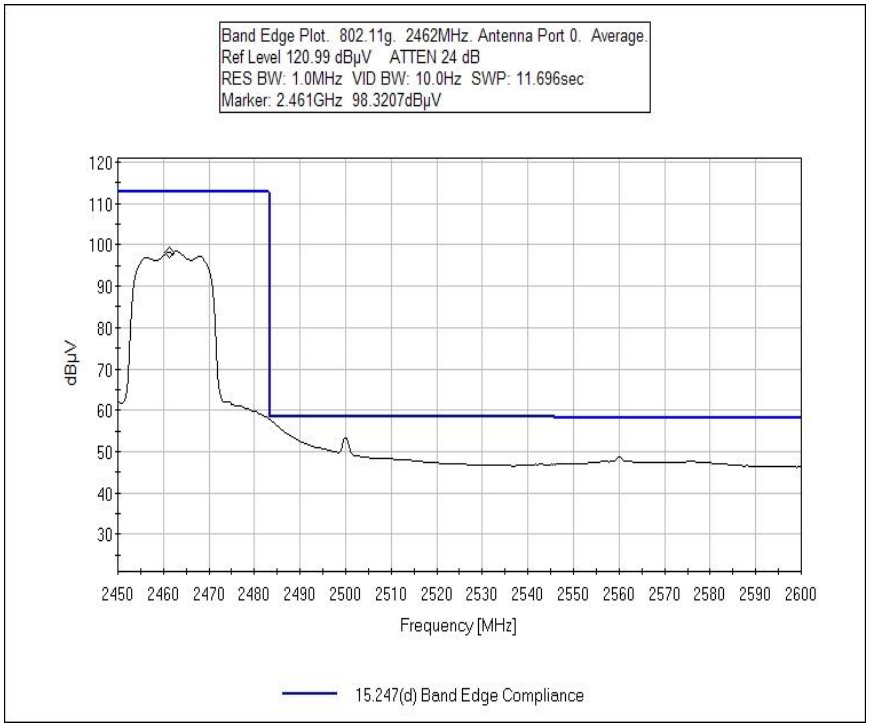
802.11g - Antenna Port 0



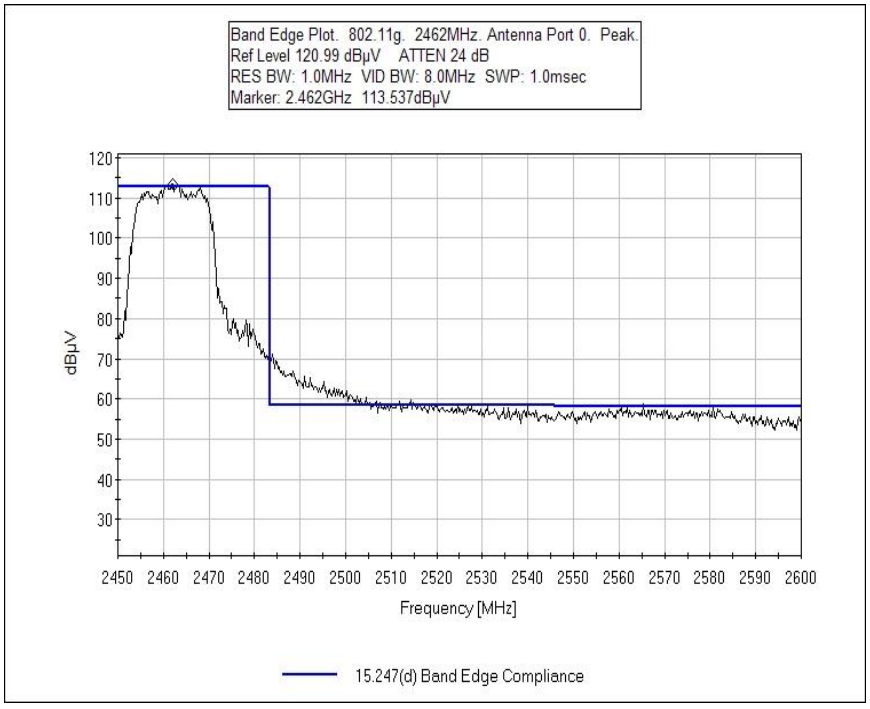
802.11g - Antenna Port 1



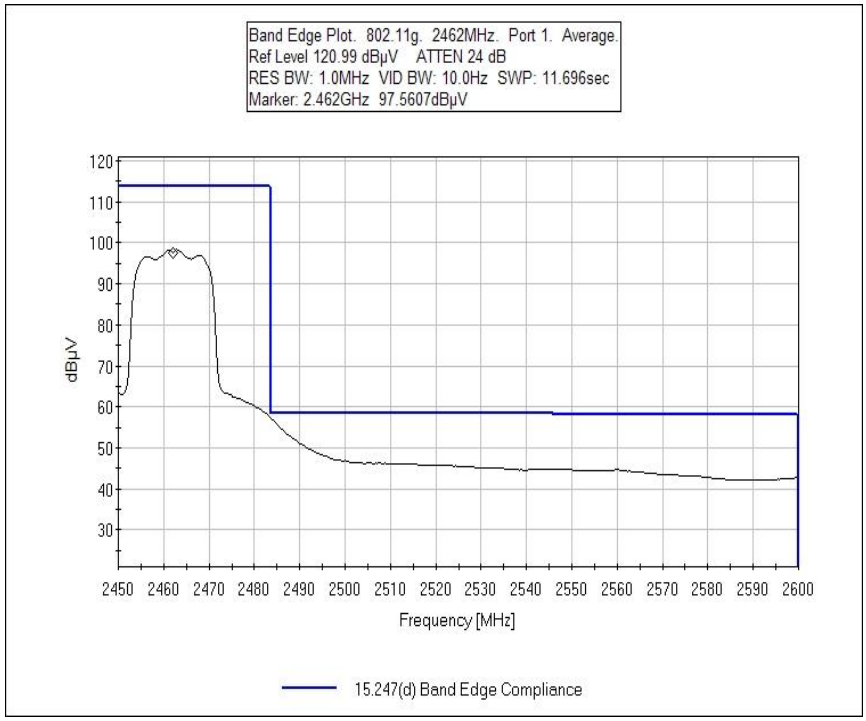
802.11g - Antenna Port 1



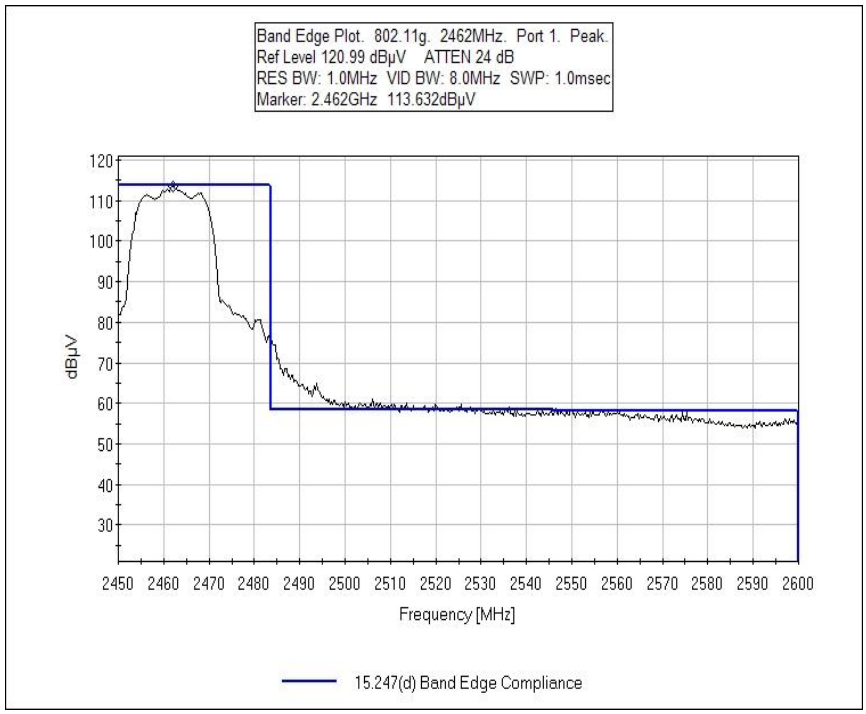
802.11g - Antenna Port 0



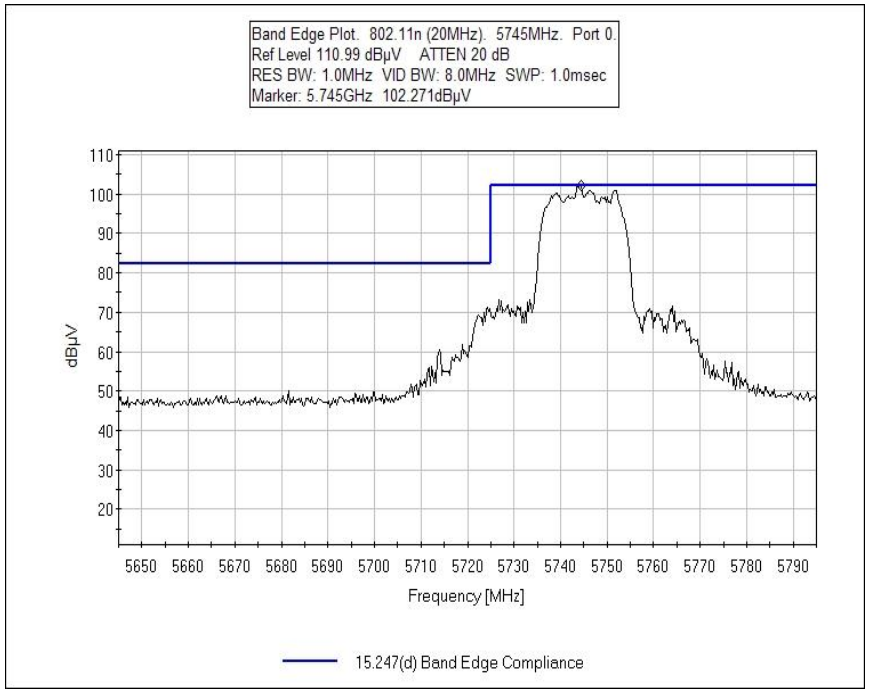
802.11g - Antenna Port 0



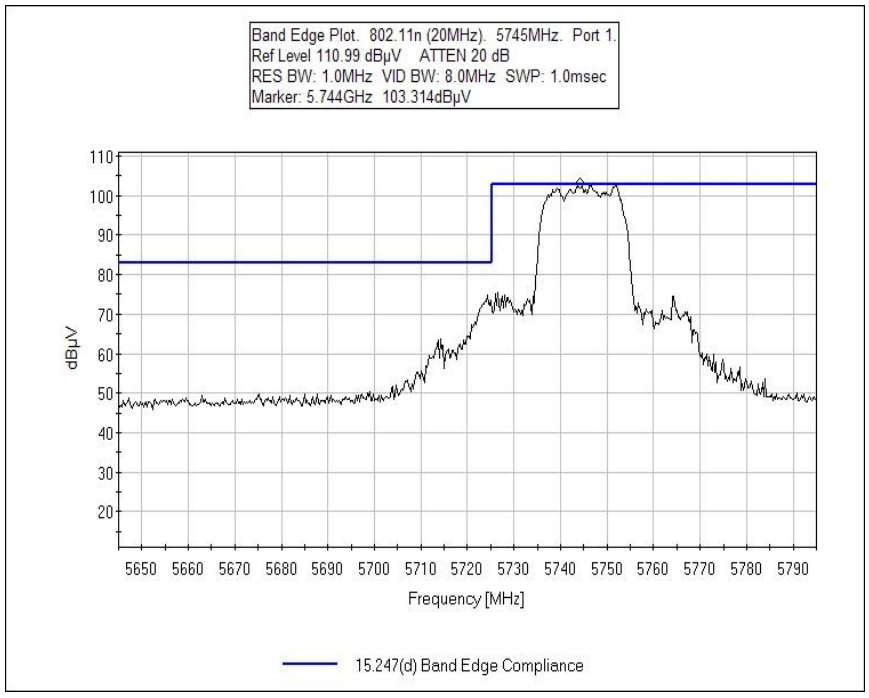
802.11g - Antenna Port 1



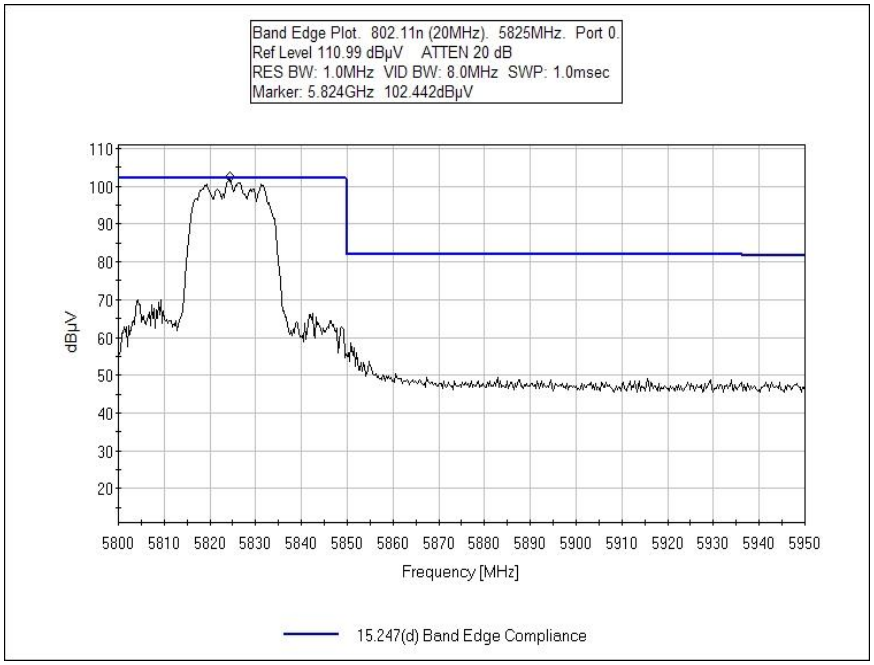
802.11g - Antenna Port 1



802.11n - Antenna Port 0



802.11n - Antenna Port 1



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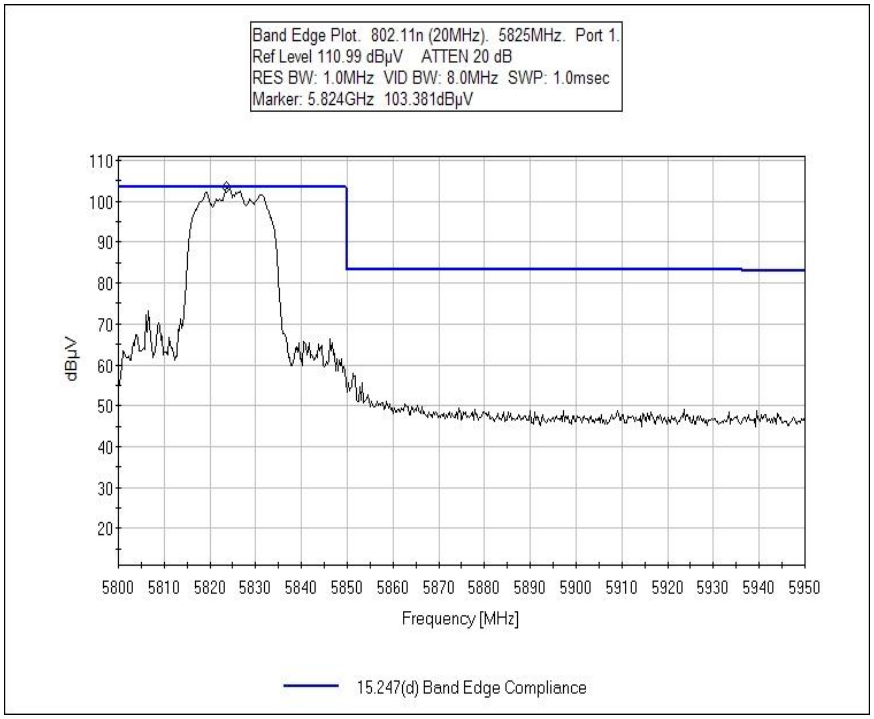

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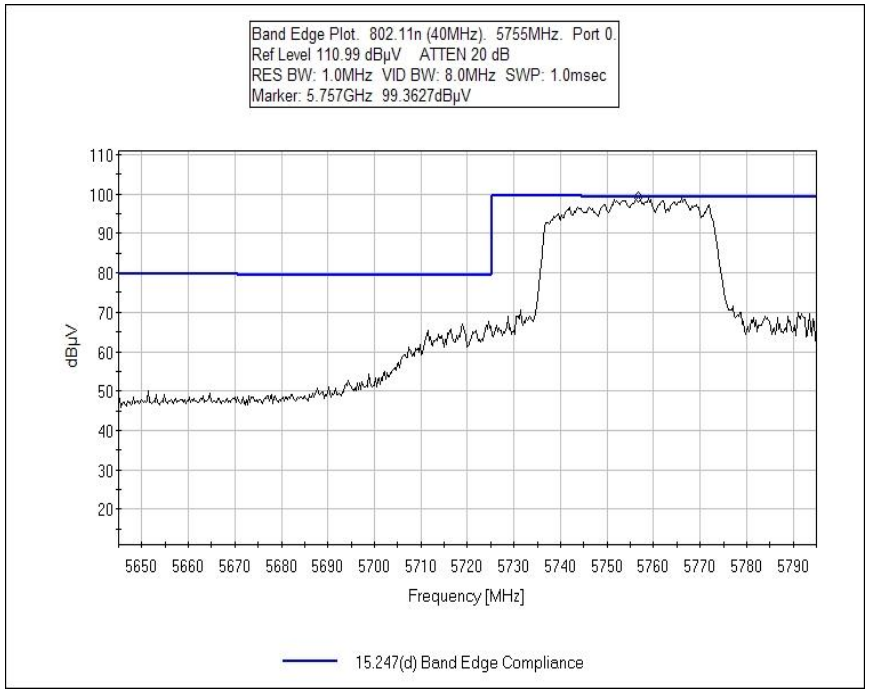
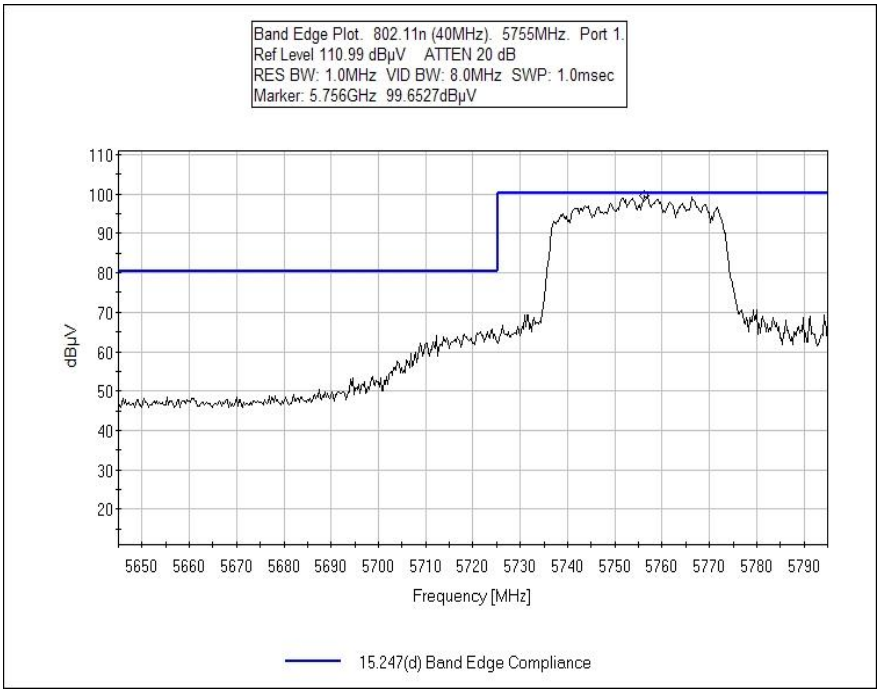
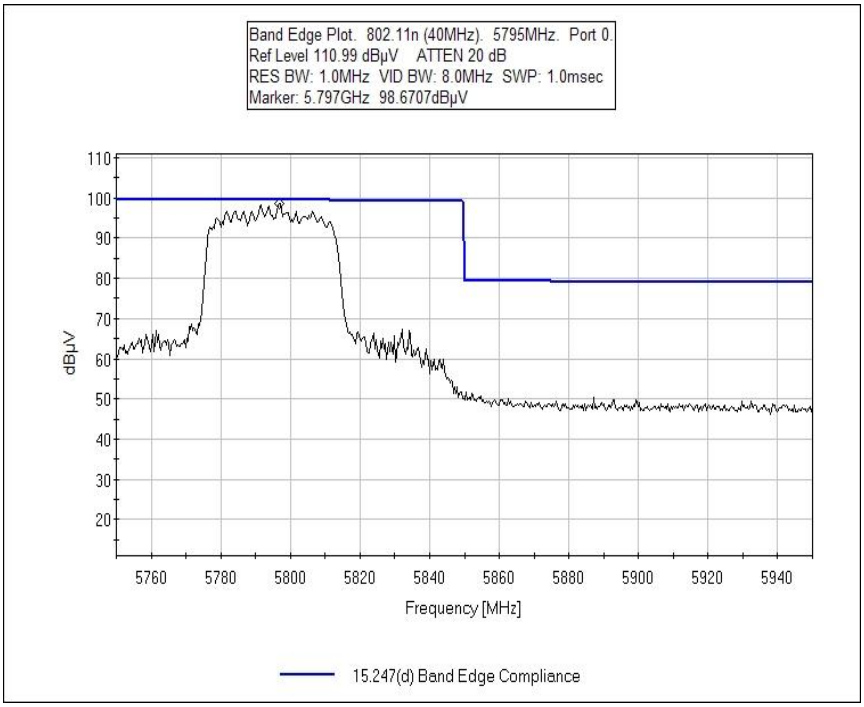


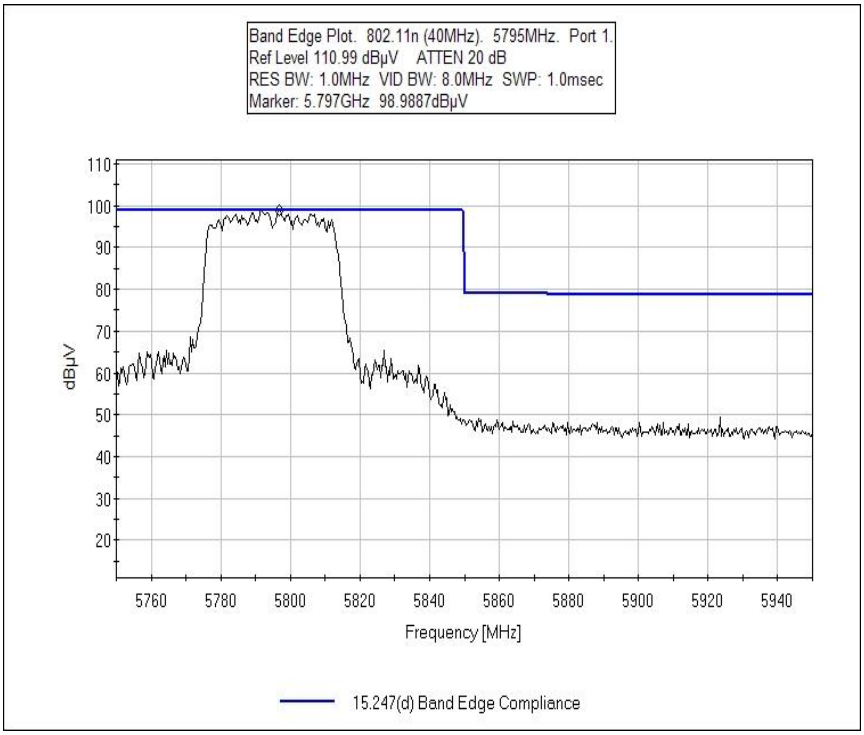
802.11n - Antenna Port 0



802.11n - Antenna Port 1



802.11n - Antenna Port 0



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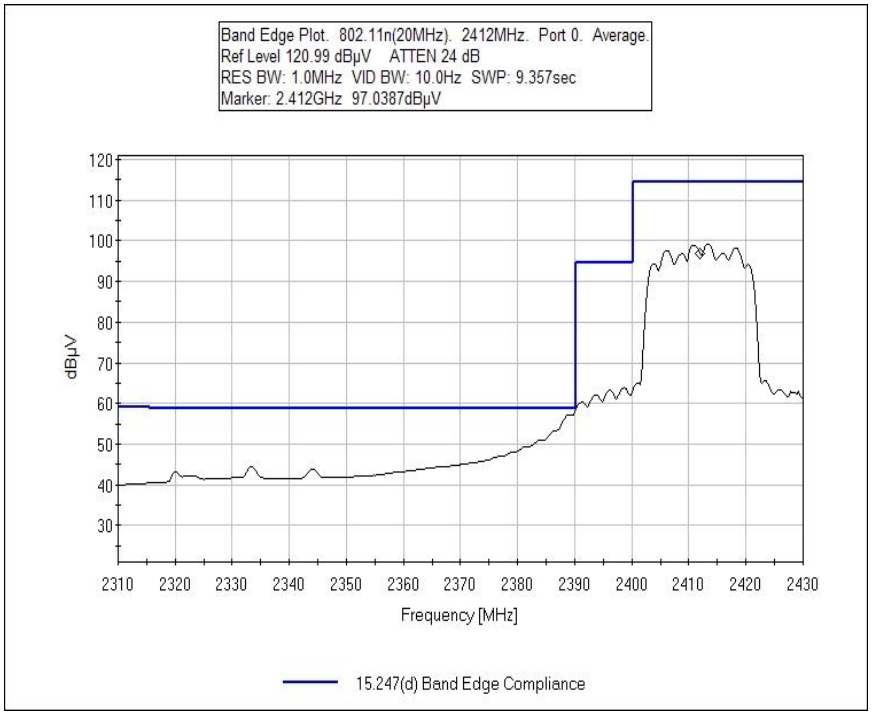

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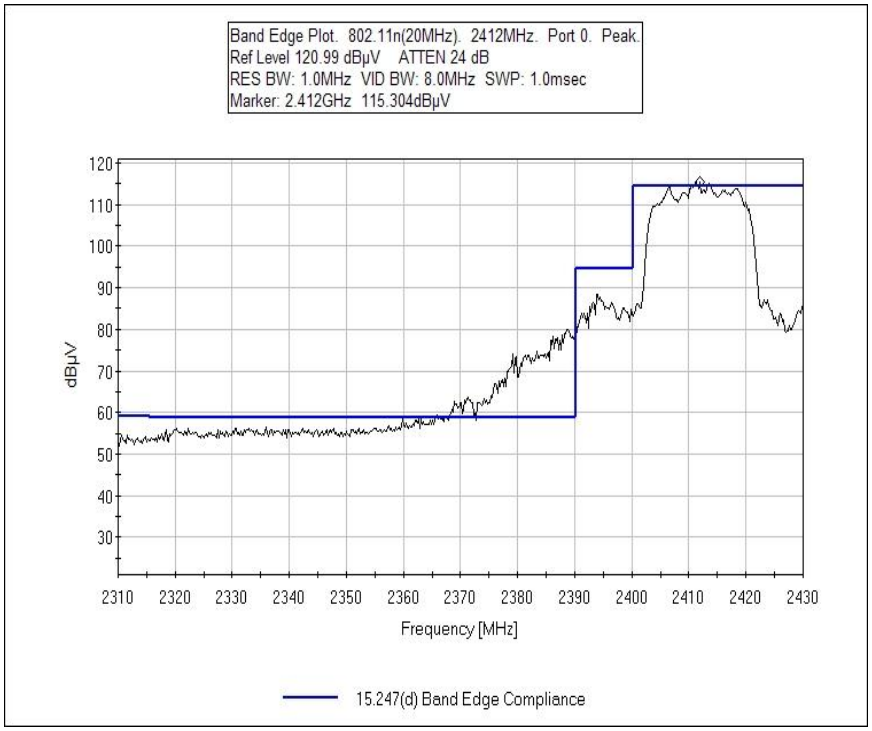
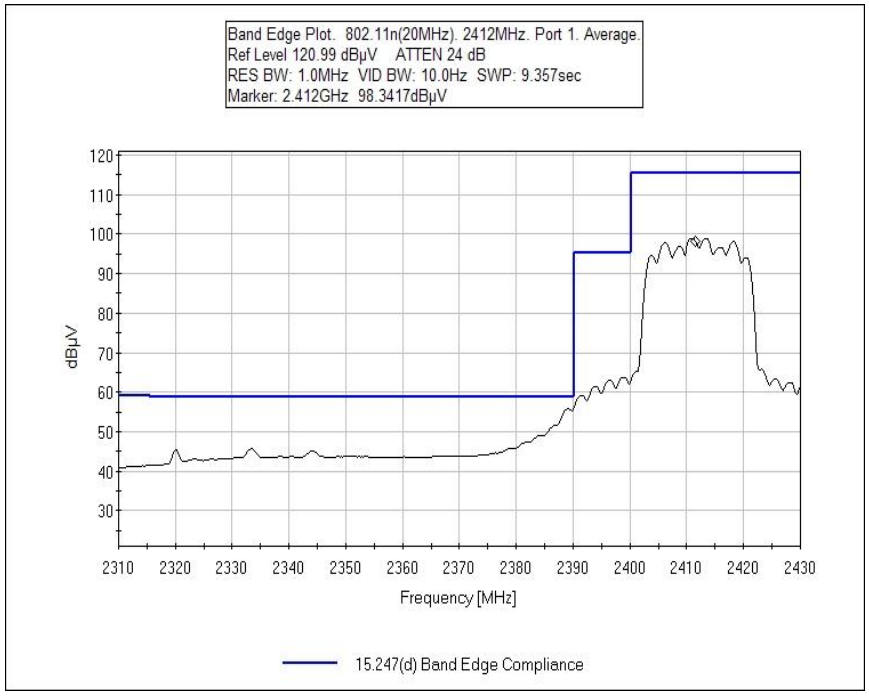
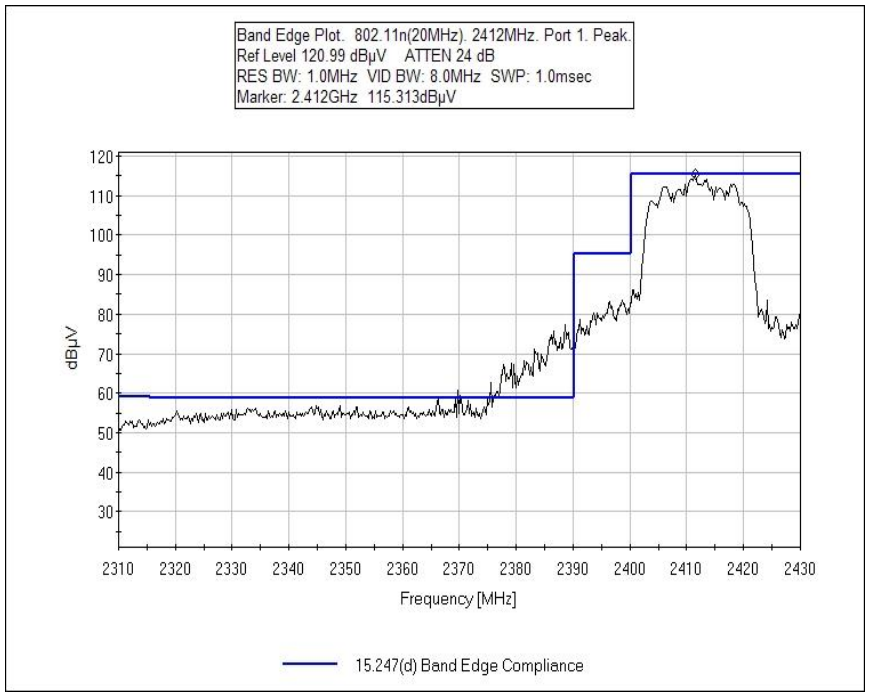


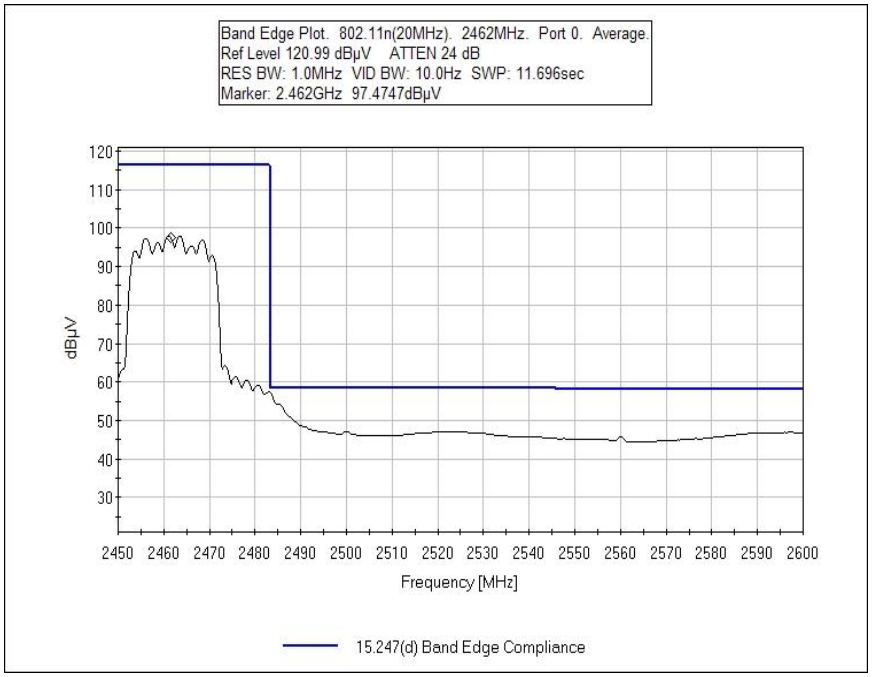
802.11n - Antenna Port 0



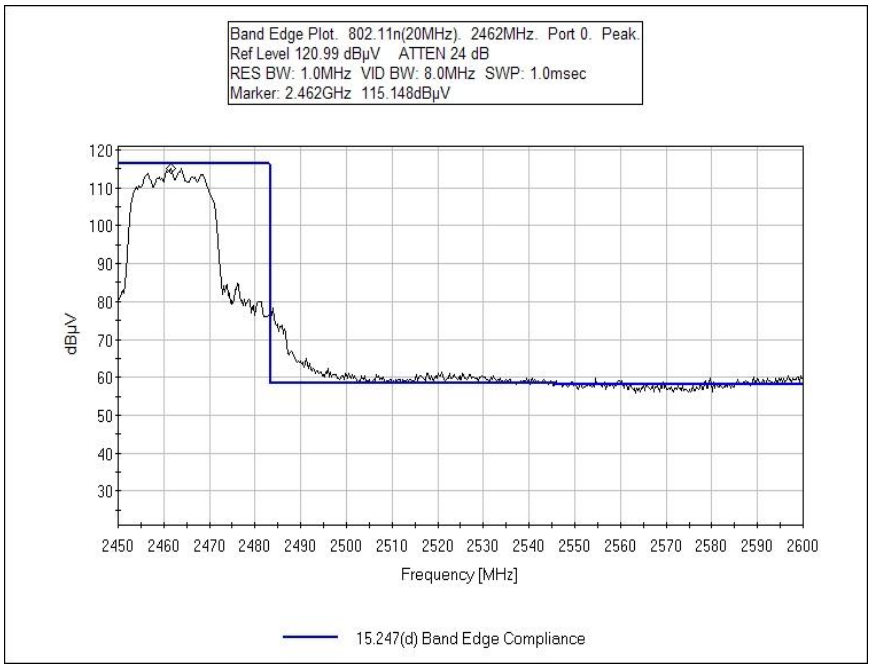
802.11n - Antenna Port 1



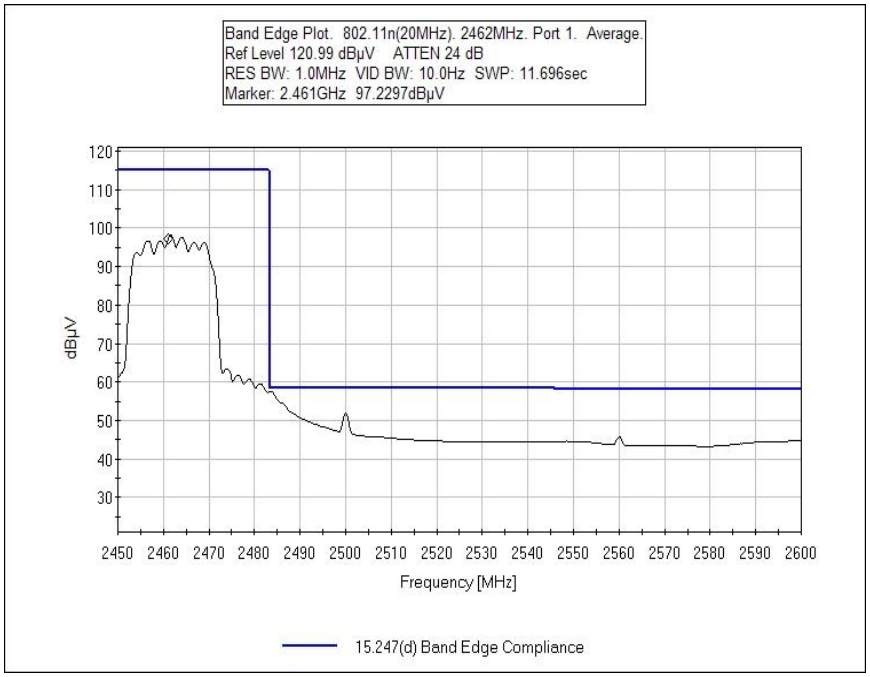
802.11n - Antenna Port 1



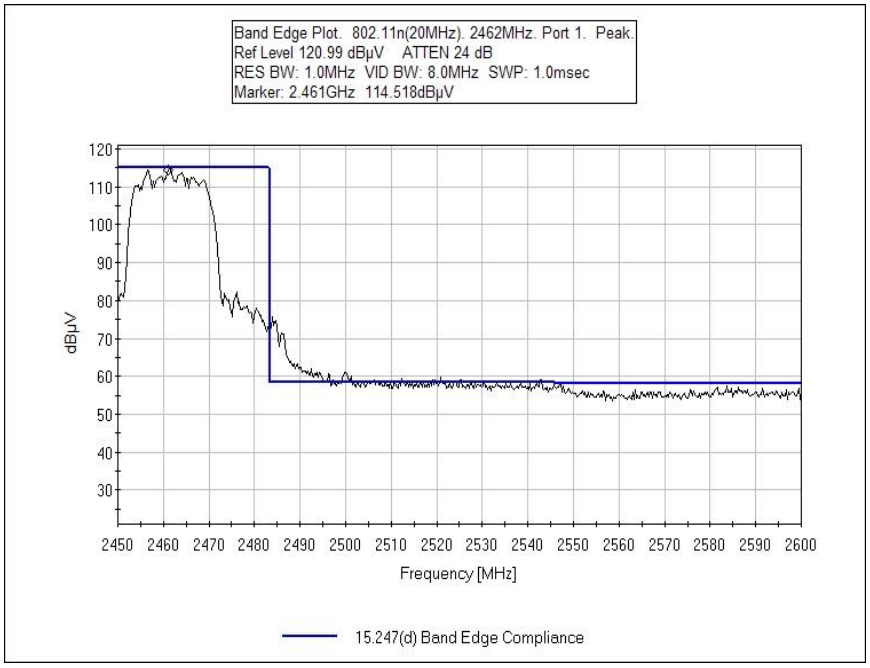
802.11n - Antenna Port 0



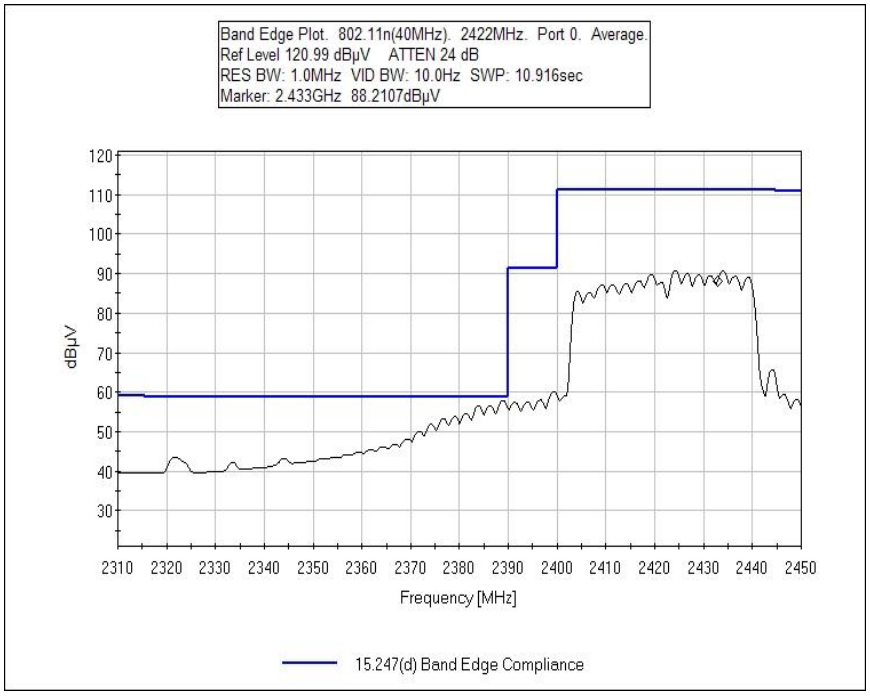
802.11n - Antenna Port 0



802.11n - Antenna Port 1



802.11n - Antenna Port 1



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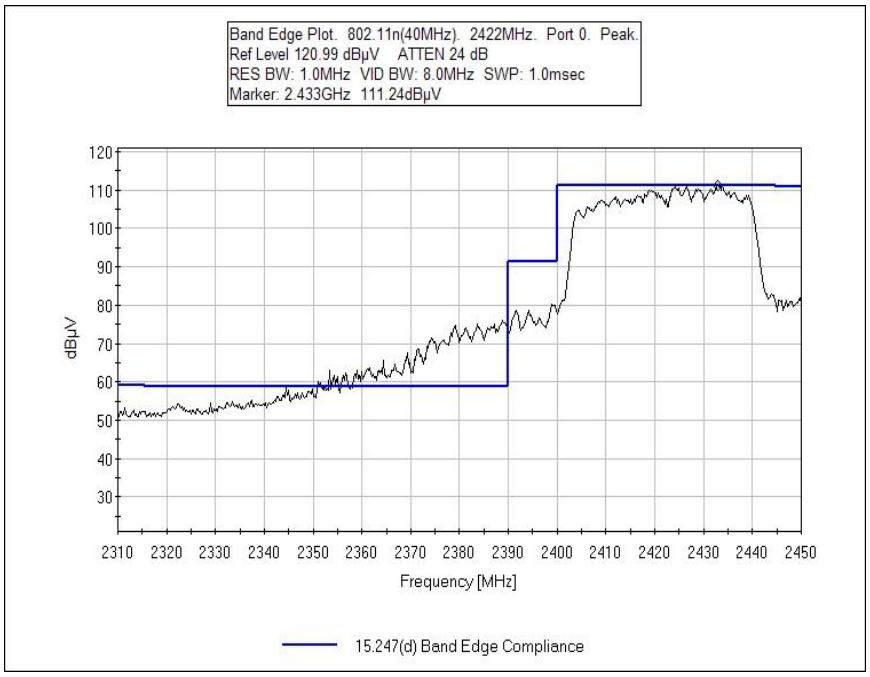

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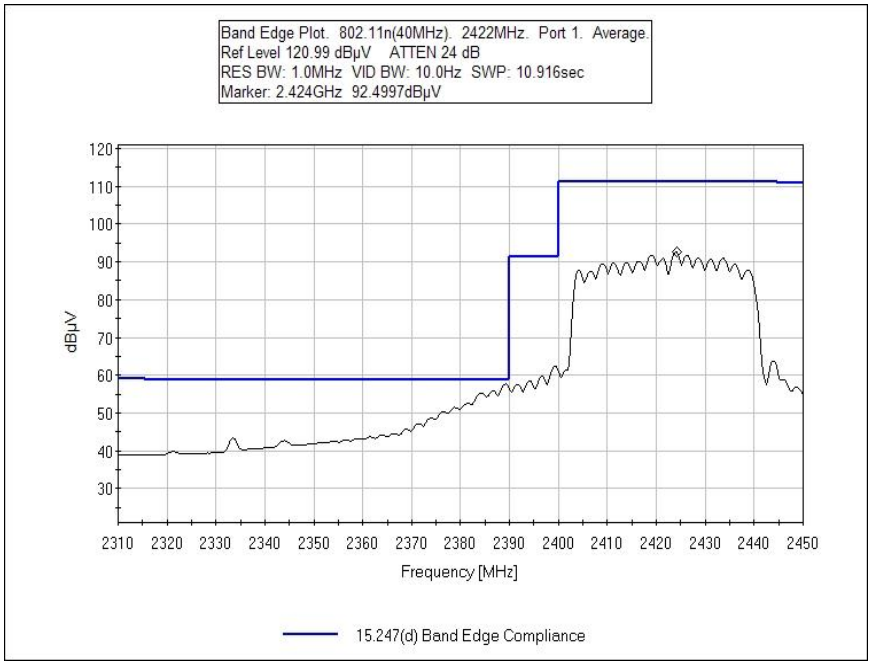

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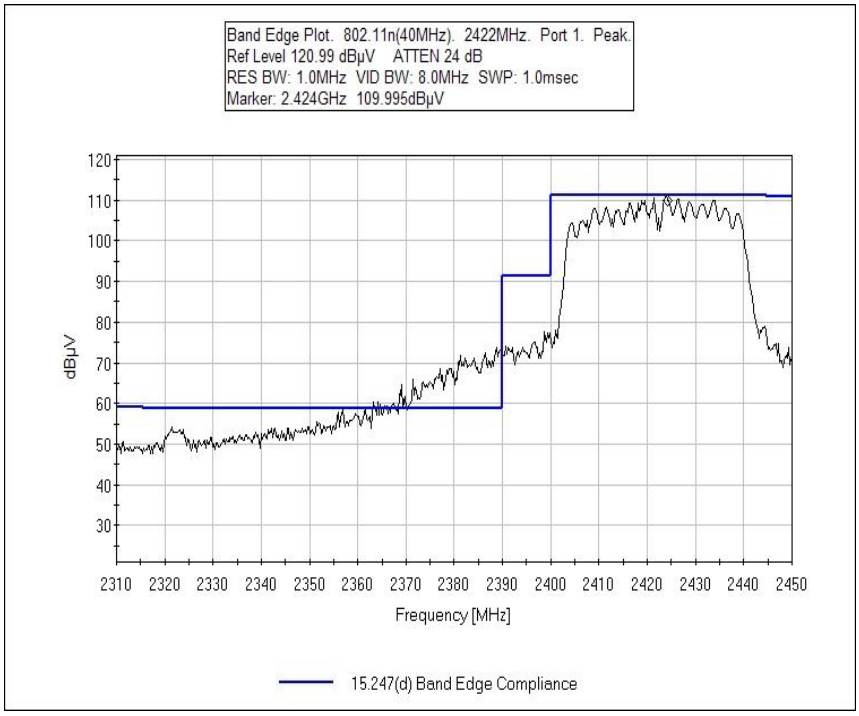
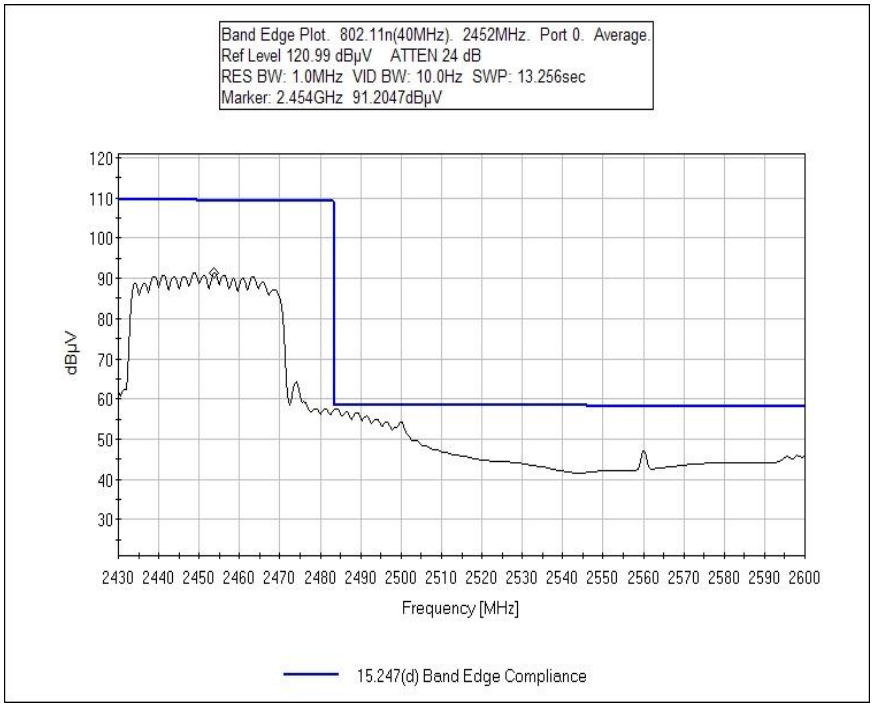


802.11n - Antenna Port 1



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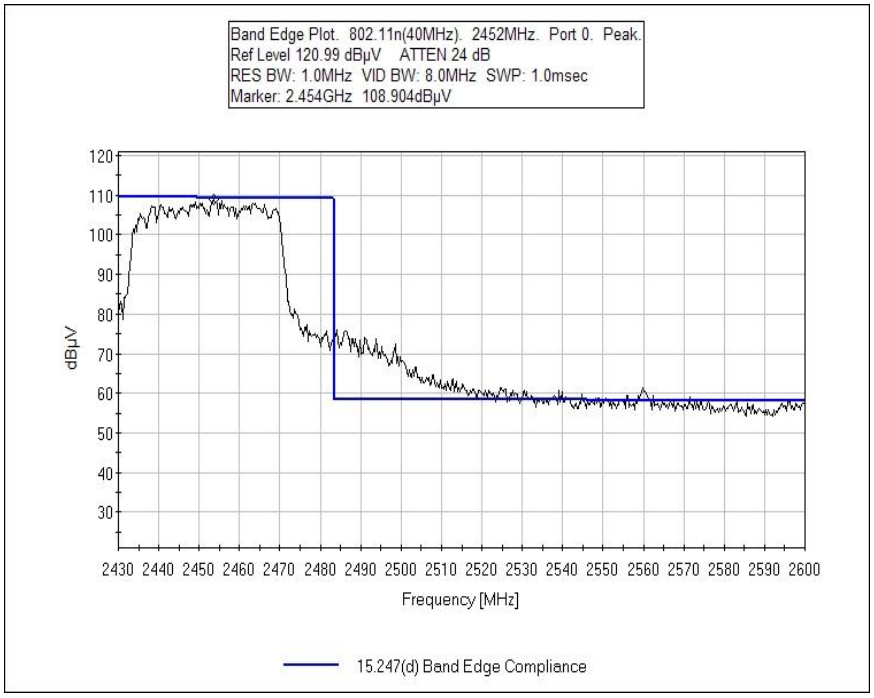

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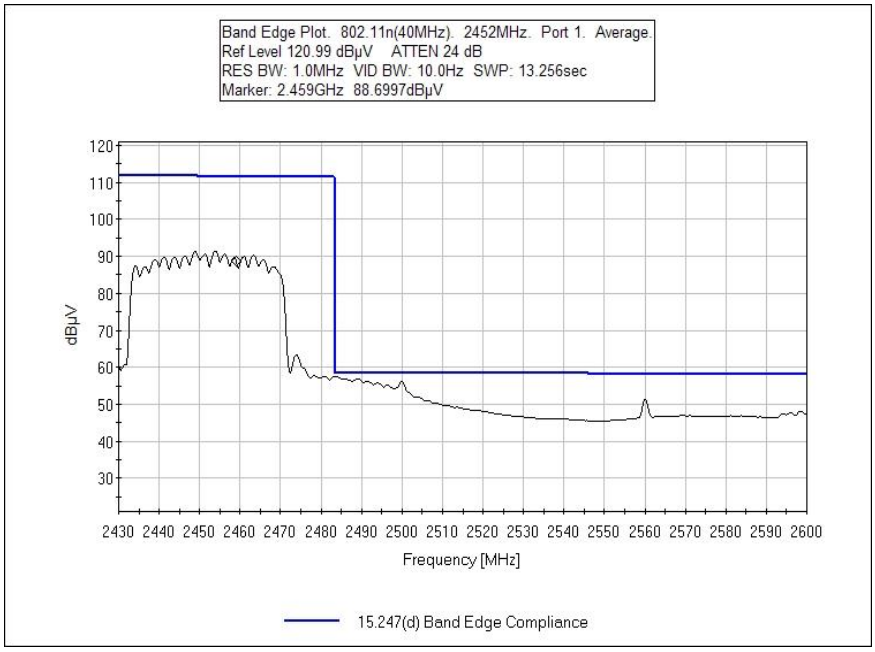
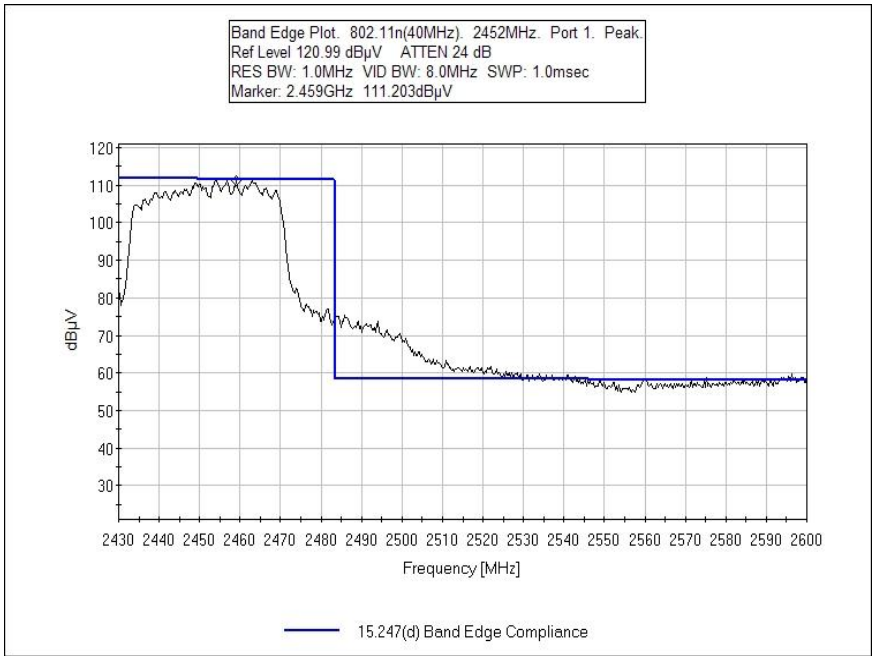


802.11n - Antenna Port 1



802.11n - Antenna Port 1

Test Setup Photos

15.247(d) Antenna Conducted Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Motorola Mobility, Inc.**		
Specification:	**15.247(d) Conducted Spurious Emissions**		
Work Order #:	**92742**	Date:	2/1/2012
Test Type:	**Conducted Emissions**	Time:	13:52:48
Equipment:	**DOCSIS 3.0 Wi-Fi Gateway**	Sequence#:	1
Manufacturer:	Motorola Mobility, Inc.	Tested By:	S. Yamamoto
Model:	SBG6580 P2		12VDC
S/N:	35560113060007050705008 5		

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T2	AN02945	Cable	32022-2-2909K-36TC	10/19/2011	10/19/2013

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
DOCSIS 3.0 Wi-Fi Gateway*	Motorola Mobility, Inc.	SBG6580 P2	35560113060007050705008 5

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop Computer	Dell Corporation	PP15L	35351137477

Test Conditions / Notes:

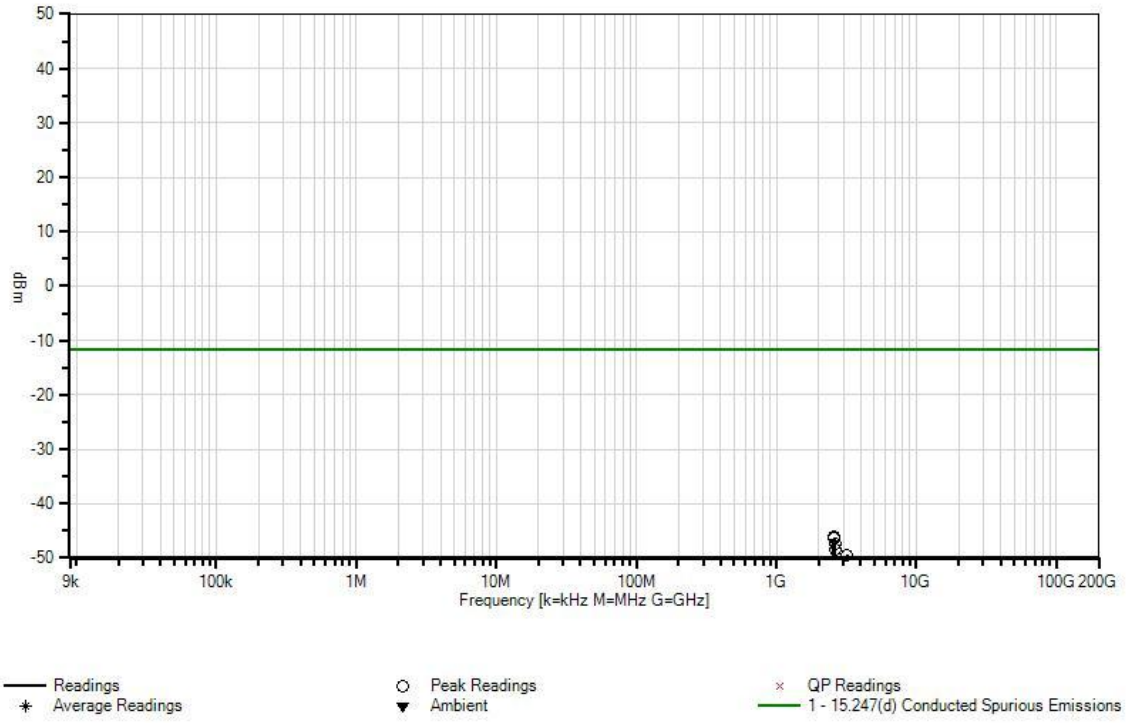
The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand along on the table top. The EUT is powered on and transmitting continuously. The spectrum analyzer is connected to the EUT antenna port using a coaxial cable. Data taken from antenna port 0. RBW=100kHz, VBW=300kHz, Detector=Peak. Frequency range of measurement, 9kHz to 25GHz. Specification limit is 20dB below the maximum measured in-band peak PSD level. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa. Frequency range of EUT: 2412MHz to 2462MHz. This data sheet is for the EUT transmitting 802.11b (11Mbps), 2412MHz (Low), 2437MHz (Middle), and 2462MHz (High). Channels 1, 6, and 11.

Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Antenna Port

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	2600.930M	-46.9	+0.0	+0.7			+0.0	-46.2	-11.6	-34.6	Anten
2	2571.983M	-47.1	+0.0	+0.7			+0.0	-46.4	-11.6	-34.8	Anten
3	2623.934M	-48.1	+0.0	+0.7			+0.0	-47.4	-11.6	-35.8	Anten
4	2621.000M	-49.1	+0.0	+0.7			+0.0	-48.4	-11.6	-36.8	Anten
5	3215.963M	-50.2	+0.0	+0.8			+0.0	-49.4	-11.6	-37.8	Anten

CKC Laboratories, Inc. Date: 2/1/2012 Time: 13:52:48 Motorola Mobility, Inc. WO#: 92742
15.247(d) Conducted Spurious Emissions Test Lead: Antenna Port 12VDC Sequence#: 1 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola Mobility, Inc.**
Specification: **15.247(d) Conducted Spurious Emissions**
Work Order #: **92742** Date: 2/1/2012
Test Type: **Conducted Emissions** Time: 14:19:59
Equipment: **DOCSIS 3.0 Wi-Fi Gateway** Sequence#: 2
Manufacturer: Motorola Mobility, Inc. Tested By: S. Yamamoto
Model: SBG6580 P2 12VDC
S/N: 35560113060007050705008 5

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	AN02945	Cable	32022-2-2909K-36TC	10/19/2011	10/19/2013

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
DOCSIS 3.0 Wi-Fi Gateway*	Motorola Mobility, Inc.	SBG6580 P2	35560113060007050705008 5

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop Computer	Dell Corporation	PP15L	35351137477

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand along on the table top. The EUT is powered on and transmitting continuously. The spectrum analyzer is connected to the EUT antenna port using a coaxial cable. Data taken from each antenna port. RBW=100kHz, VBW=300kHz, Detector=Peak. Frequency range of measurement, 9kHz to 25GHz. Specification limit is 20dB below the maximum measured in-band peak PSD level. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa. Frequency range of EUT: 2412MHz to 2462MHz. This data sheet is for the EUT transmitting 802.11g (6Mbps), 2412MHz (Low), 2437MHz (Middle), and 2462MHz (High). Channels 1, 6, and 11.

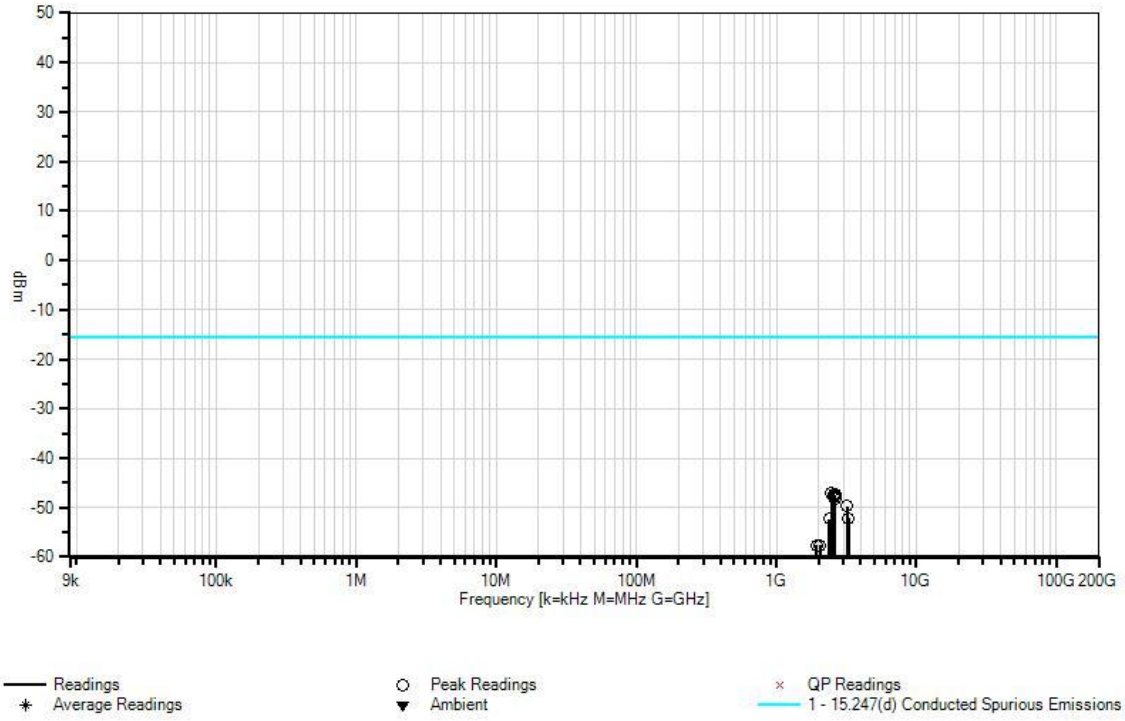
Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Antenna Port

#	Freq MHz	Rdng dBµV	T1 dB	dB	dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	2479.995M	-47.6	+0.7				+0.0	-46.9	-15.6	-31.3	Anten
2	2571.960M	-48.0	+0.7				+0.0	-47.3	-15.6	-31.6	Anten
3	2568.080M	-48.0	+0.7				+0.0	-47.3	-15.6	-31.7	Anten
4	2628.000M	-48.1	+0.7				+0.0	-47.4	-15.6	-31.8	Anten
5	2601.000M	-48.4	+0.7				+0.0	-47.7	-15.6	-32.1	Anten
6	2602.250M	-48.6	+0.7				+0.0	-47.9	-15.6	-32.3	Anten
7	2622.000M	-48.8	+0.7				+0.0	-48.1	-15.6	-32.5	Anten
8	3215.995M	-50.5	+0.8				+0.0	-49.7	-15.6	-34.1	Anten

9	3282.670M	-53.0	+0.8	+0.0	-52.2	-15.6	-36.6	Anten
10	2400.000M	-53.0	+0.7	+0.0	-52.3	-15.6	-36.7	Anten
11	2057.130M	-58.2	+0.6	+0.0	-57.6	-15.6	-42.0	Anten
12	1930.920M	-58.3	+0.6	+0.0	-57.7	-15.6	-42.1	Anten

CKC Laboratories, Inc. Date: 2/1/2012 Time: 14:19:59 Motorola Mobility, Inc. WO#: 92742
15.247(d) Conducted Spurious Emissions Test Lead: Antenna Port 12VDC Sequence#: 2 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola Mobility, Inc.**
Specification: **15.247(d) Conducted Spurious Emissions**
Work Order #: **92742** Date: 2/1/2012
Test Type: **Conducted Emissions** Time: 14:35:41
Equipment: **DOCSIS 3.0 Wi-Fi Gateway** Sequence#: 3
Manufacturer: Motorola Mobility, Inc. Tested By: S. Yamamoto
Model: SBG6580 P2 12VDC
S/N: 355601130600070507050085

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	AN02945	Cable	32022-2-2909K-36TC	10/19/2011	10/19/2013

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
DOCSIS 3.0 Wi-Fi Gateway*	Motorola Mobility, Inc.	SBG6580 P2	35560113060007050705008 5

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop Computer	Dell Corporation	PP15L	35351137477

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand along on the table top. The EUT is powered on and transmitting continuously. The spectrum analyzer is connected to the EUT antenna port using a coaxial cable. Data taken each antenna port. RBW=100kHz, VBW=300kHz, Detector=Peak. Frequency range of measurement, 9kHz to 25GHz. Specification limit is 20dB below the maximum measured in-band peak PSD level. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa. Frequency range of EUT: 2412MHz to 2462MHz. This data sheet is for the EUT transmitting 802.11n (20MHz) (7.2Mbps), 2412MHz (Low), 2437MHz (Middle), and 2462MHz (High). Channels 1, 6, and 11.

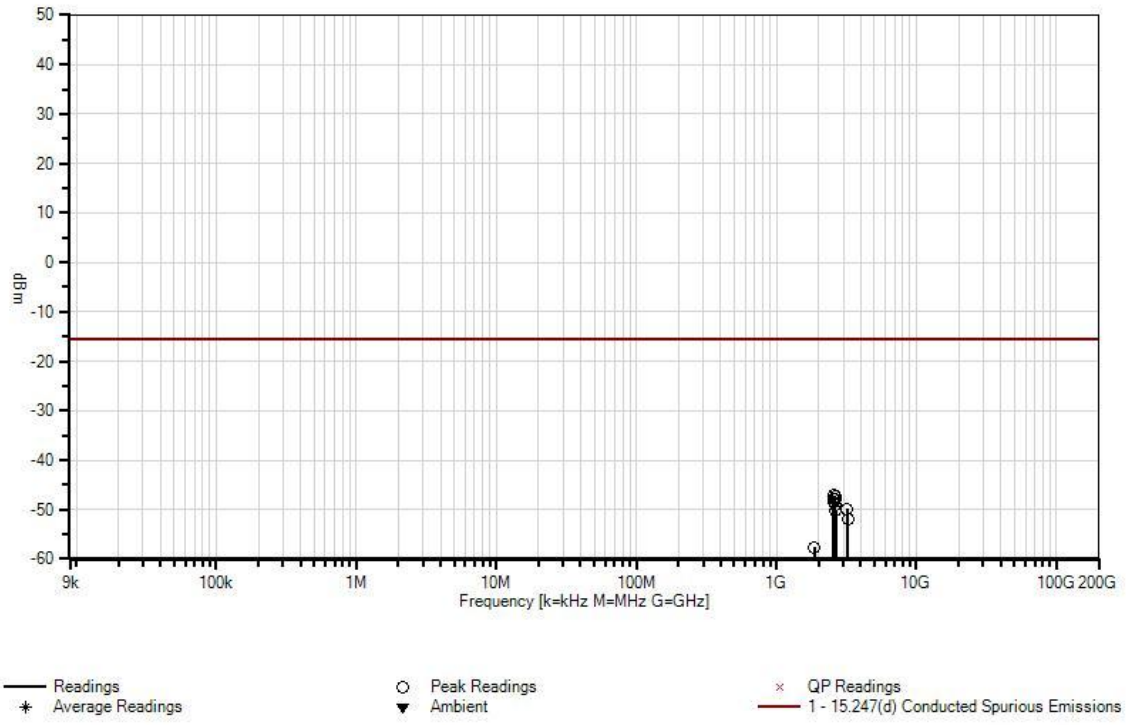
Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Antenna Port

#	Freq MHz	Rdng dBµV	T1 dB	dB	dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	2606.000M	-47.8	+0.7				+0.0	-47.1	-15.6	-31.5	Anten
2	2572.000M	-47.9	+0.7				+0.0	-47.2	-15.6	-31.6	Anten
3	2627.000M	-48.1	+0.7				+0.0	-47.4	-15.6	-31.8	Anten
4	2602.330M	-48.6	+0.7				+0.0	-47.9	-15.6	-32.3	Anten
5	2622.000M	-48.6	+0.7				+0.0	-47.9	-15.6	-32.3	Anten
6	2578.250M	-49.0	+0.7				+0.0	-48.3	-15.6	-32.7	Anten
7	2624.000M	-49.6	+0.7				+0.0	-48.9	-15.6	-33.3	Anten
8	3215.988M	-50.6	+0.8				+0.0	-49.8	-15.6	-34.2	Anten

9	2640.000M	-51.0	+0.7	+0.0	-50.3	-15.6	-34.7	Anten
10	3249.330M	-52.8	+0.8	+0.0	-52.0	-15.6	-36.4	Anten
11	1859.330M	-58.2	+0.6	+0.0	-57.6	-15.6	-42.0	Anten

CKC Laboratories, Inc. Date: 2/1/2012 Time: 14:35:41 Motorola Mobility, Inc. WO#: 92742
15.247(d) Conducted Spurious Emissions Test Lead: Antenna Port 12VDC Sequence#: 3 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola Mobility, Inc.**
Specification: **15.247(d) Conducted Spurious Emissions**
Work Order #: **92742** Date: 2/1/2012
Test Type: **Conducted Emissions** Time: 14:58:43
Equipment: **DOCSIS 3.0 Wi-Fi Gateway** Sequence#: 4
Manufacturer: Motorola Mobility, Inc. Tested By: S. Yamamoto
Model: SBG6580 P2 12VDC
S/N: 355601130600070507050085

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	AN02945	Cable	32022-2-2909K-36TC	10/19/2011	10/19/2013

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
DOCSIS 3.0 Wi-Fi Gateway*	Motorola Mobility, Inc.	SBG6580 P2	35560113060007050705008 5

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop Computer	Dell Corporation	PP15L	35351137477

Test Conditions / Notes:

The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand along on the table top. The EUT is powered on and transmitting continuously. The spectrum analyzer is connected to the EUT antenna port using a coaxial cable. Data taken from each antenna port. RBW=100kHz, VBW=300kHz, Detector=Peak. Frequency range of measurement, 9kHz to 25GHz. Specification limit is 20dB below the maximum measured in-band peak PSD level. Temperature: 20°C, Humidity: 38%, Pressure: 100kPa. Frequency range of EUT: 2422MHz to 2452MHz. This data sheet is for the EUT transmitting 802.11n (40MHz) (15Mbps), 2422MHz (Low), 2437MHz (Middle), and 2452MHz (High). Channels 3, 6, and 9.

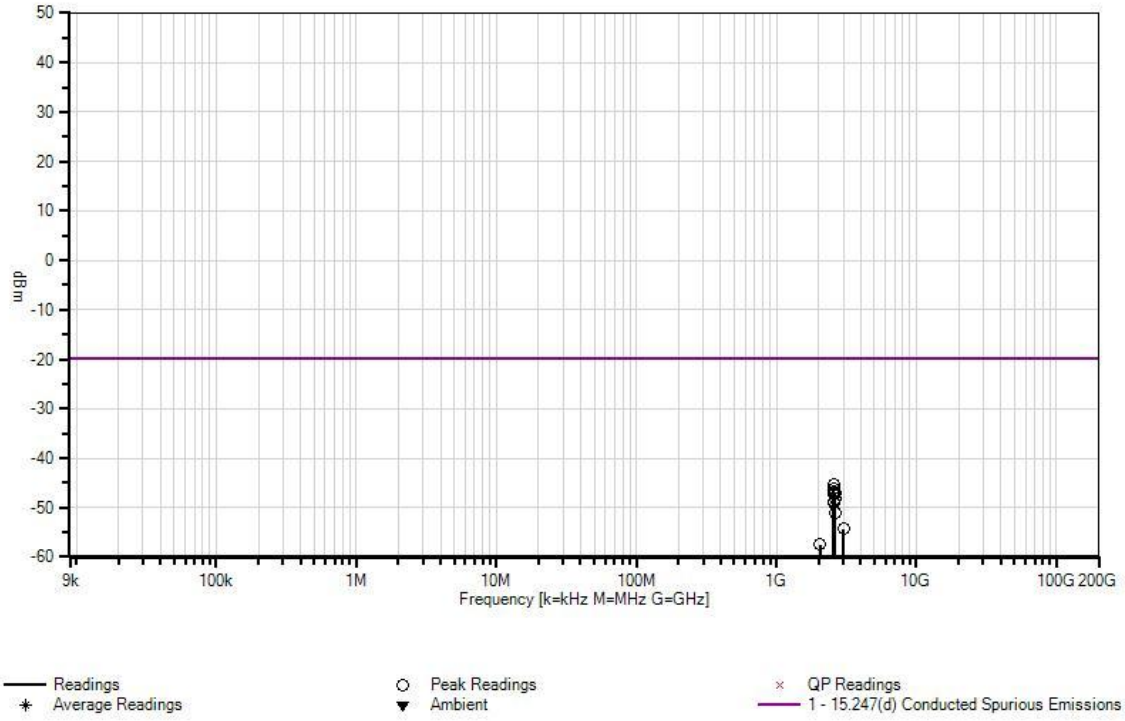
Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Antenna Port

#	Freq MHz	Rdng dBµV	T1 dB	dB	dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	2560.000M	-46.1	+0.7				+0.0	-45.4	-19.8	-25.6	Anten
2	2560.000M	-46.1	+0.7				+0.0	-45.4	-19.8	-25.6	Anten
3	2560.000M	-46.8	+0.7				+0.0	-46.1	-19.8	-26.3	Anten
4	2560.000M	-47.4	+0.7				+0.0	-46.7	-19.8	-26.9	Anten
5	2612.000M	-47.7	+0.7				+0.0	-47.0	-19.8	-27.2	Anten
6	2560.000M	-47.9	+0.7				+0.0	-47.2	-19.8	-27.4	Anten
7	2612.000M	-49.0	+0.7				+0.0	-48.3	-19.8	-28.5	Anten
8	2597.000M	-49.5	+0.7				+0.0	-48.8	-19.8	-29.0	Anten

9	2582.000M	-49.7	+0.7	+0.0	-49.0	-19.8	-29.2	Anten
10	2624.500M	-51.9	+0.7	+0.0	-51.2	-19.8	-31.4	Anten
11	3023.670M	-55.2	+0.8	+0.0	-54.4	-19.8	-34.6	Anten
12	2043.170M	-58.0	+0.6	+0.0	-57.4	-19.8	-37.6	Anten

CKC Laboratories, Inc. Date: 2/1/2012 Time: 14:58:43 Motorola Mobility, Inc. WO#: 92742
15.247(d) Conducted Spurious Emissions Test Lead: Antenna Port 12VDC Sequence#: 4 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola Mobility, Inc.**
Specification: **15.247(d) Conducted Spurious Emissions**
Work Order #: **92742** Date: 2/4/2012
Test Type: **Conducted Emissions** Time: 15:13:48
Equipment: **DOCSIS 3.0 Wi-Fi Gateway** Sequence#: 14
Manufacturer: Motorola Mobility, Inc. Tested By: S. Yamamoto
Model: SBG6580 P2 12VDC
S/N: 355601130600070507050085

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	AN02945	Cable	32022-2-2909K-36TC	10/19/2011	10/19/2013

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
DOCSIS 3.0 Wi-Fi Gateway*	Motorola Mobility, Inc.	SBG6580 P2	35560113060007050705008 5

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop Computer	Dell Corporation	PP15L	35351137477

Test Conditions / Notes:

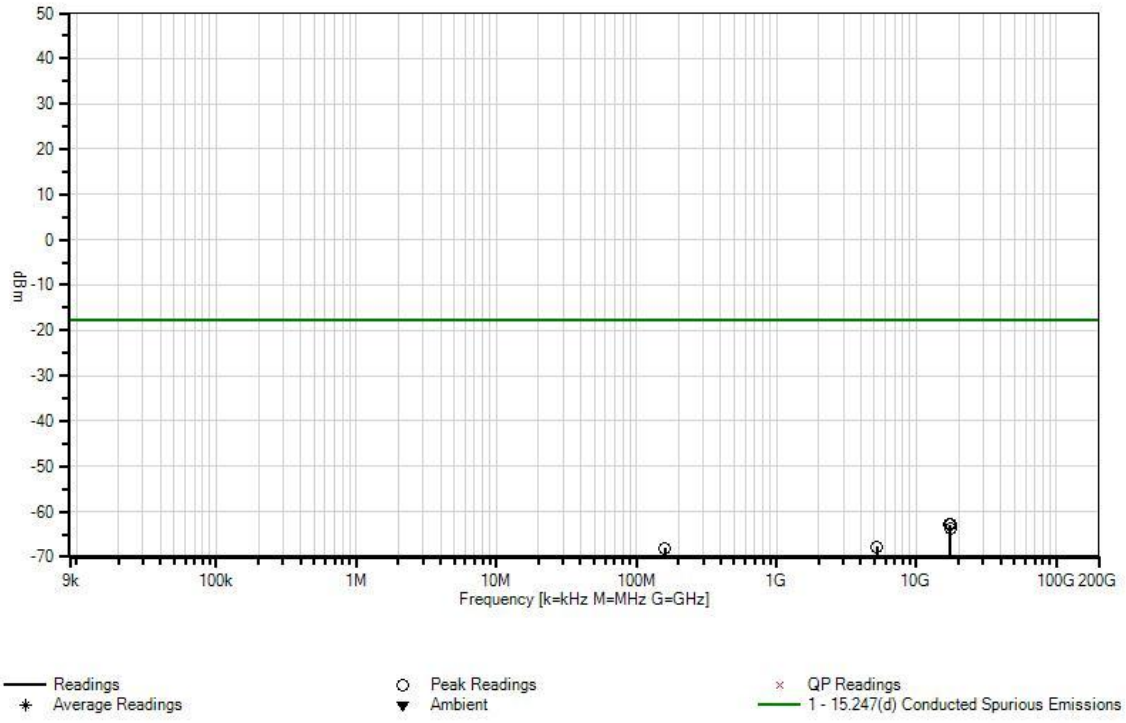
The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand along on the table top. The EUT is powered on and transmitting continuously. The spectrum analyzer is connected to the EUT antenna port using a coaxial cable. Data taken each antenna port. RBW=100kHz, VBW=300kHz, Detector=Peak. Frequency range of measurement, 9kHz to 40GHz. Specification limit is 20dB below the maximum measured in-band peak PSD level. Temperature: 21°C, Humidity: 36%, Pressure: 100kPa. Frequency range of EUT: 5745MHz to 5825MHz. This data sheet is for the EUT transmitting 802.11a (6Mbps), 5745MHz (Low), 5785MHz (Middle), and 5825MHz (High). Channels 149, 157, and 165.

Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Antenna Port

#	Freq MHz	Rdng dBµV	T1 dB	dB	dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	17477.500 M	-65.0	+2.2				+0.0	-62.8	-17.8	-45.0	Anten
2	17234.170 M	-65.1	+2.2				+0.0	-62.9	-17.8	-45.1	Anten
3	17355.000 M	-65.9	+2.2				+0.0	-63.7	-17.8	-45.9	Anten
4	5200.000M	-68.8	+1.0				+0.0	-67.8	-17.8	-50.0	Anten
5	159.995M	-68.2	+0.2				+0.0	-68.0	-17.8	-50.2	Anten

CKC Laboratories, Inc. Date: 2/4/2012 Time: 15:13:48 Motorola Mobility, Inc. WO#: 92742
15.247(d) Conducted Spurious Emissions Test Lead: Antenna Port 12VDC Sequence#: 14 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola Mobility, Inc.**
Specification: **15.247(d) Conducted Spurious Emissions**
Work Order #: **92742** Date: 2/4/2012
Test Type: **Conducted Emissions** Time: 15:44:33
Equipment: **DOCSIS 3.0 Wi-Fi Gateway** Sequence#: 15
Manufacturer: Motorola Mobility, Inc. Tested By: S. Yamamoto
Model: SBG6580 P2 12VDC
S/N: 355601130600070507050085

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	AN02945	Cable	32022-2-2909K-36TC	10/19/2011	10/19/2013

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
DOCSIS 3.0 Wi-Fi Gateway*	Motorola Mobility, Inc.	SBG6580 P2	35560113060007050705008 5

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop Computer	Dell Corporation	PP15L	35351137477

Test Conditions / Notes:

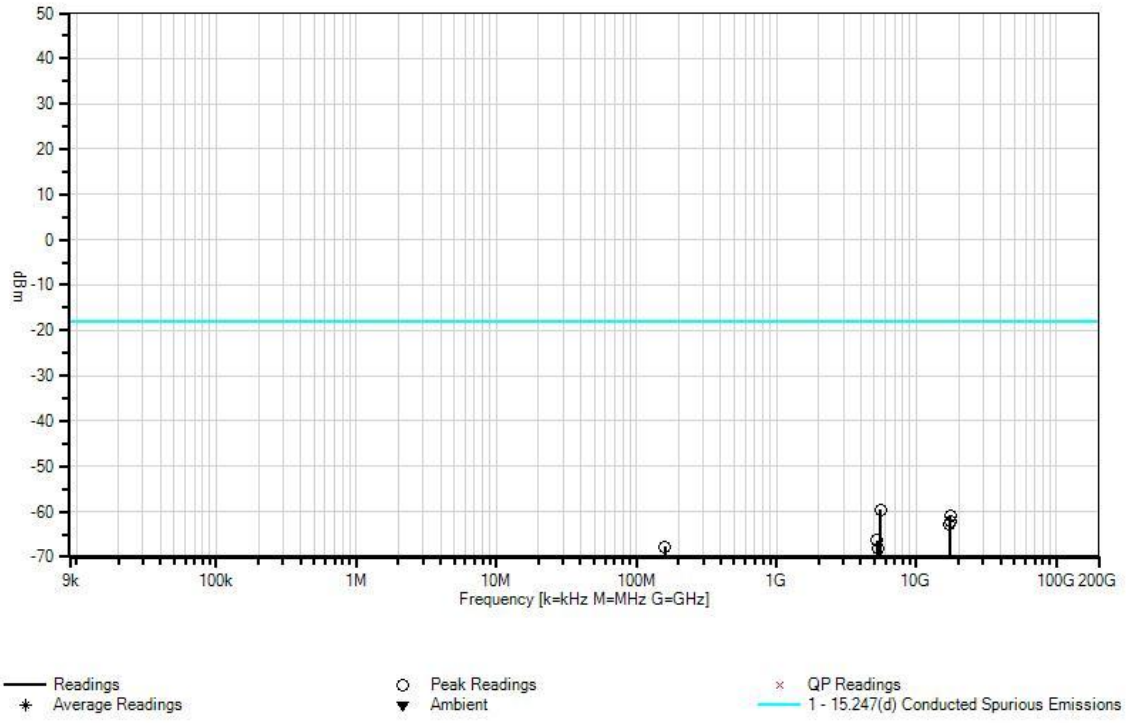
The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand along on the table top. The EUT is powered on and transmitting continuously. The spectrum analyzer is connected to the EUT antenna port using a coaxial cable. Data taken each antenna port. RBW=100kHz, VBW=300kHz, Detector=Peak. Frequency range of measurement, 9kHz to 40GHz. Specification limit is 20dB below the maximum measured in-band peak PSD level. Temperature: 21°C, Humidity: 36%, Pressure: 100kPa. Frequency range of EUT: 5745MHz to 5825MHz. This data sheet is for the EUT transmitting 802.11n (20MHz) (7.2Mbps), 5745MHz (Low), 5785MHz (Middle), and 5825MHz (High). Channels 149, 157, and 165.

Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Antenna Port

#	Freq MHz	Rdng dBµV	T1 dB	dB	dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	5519.977M	-60.7	+1.1				+0.0	-59.6	-17.9	-41.7	Anten
2	17474.972M	-63.2	+2.2				+0.0	-61.0	-17.9	-43.1	Anten
3	17356.870M	-64.3	+2.2				+0.0	-62.1	-17.9	-44.2	Anten
4	17232.670M	-65.0	+2.2				+0.0	-62.8	-17.9	-44.9	Anten
5	5199.965M	-67.4	+1.0				+0.0	-66.4	-17.9	-48.5	Anten
6	159.981M	-68.0	+0.2				+0.0	-67.8	-17.9	-49.9	Anten
7	5279.995M	-69.1	+1.0				+0.0	-68.1	-17.9	-50.2	Anten

CKC Laboratories, Inc. Date: 2/4/2012 Time: 15:44:33 Motorola Mobility, Inc. WO#: 92742
15.247(d) Conducted Spurious Emissions Test Lead: Antenna Port 12VDC Sequence#: 15 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola Mobility, Inc.**
Specification: **15.247(d) Conducted Spurious Emissions**
Work Order #: **92742** Date: 2/4/2012
Test Type: **Conducted Emissions** Time: 16:14:21
Equipment: **DOCSIS 3.0 Wi-Fi Gateway** Sequence#: 16
Manufacturer: Motorola Mobility, Inc. Tested By: S. Yamamoto
Model: SBG6580 P2 12VDC
S/N: 355601130600070507050085

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	AN02945	Cable	32022-2-2909K-36TC	10/19/2011	10/19/2013

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
DOCSIS 3.0 Wi-Fi Gateway*	Motorola Mobility, Inc.	SBG6580 P2	35560113060007050705008 5

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop Computer	Dell Corporation	PP15L	35351137477

Test Conditions / Notes:

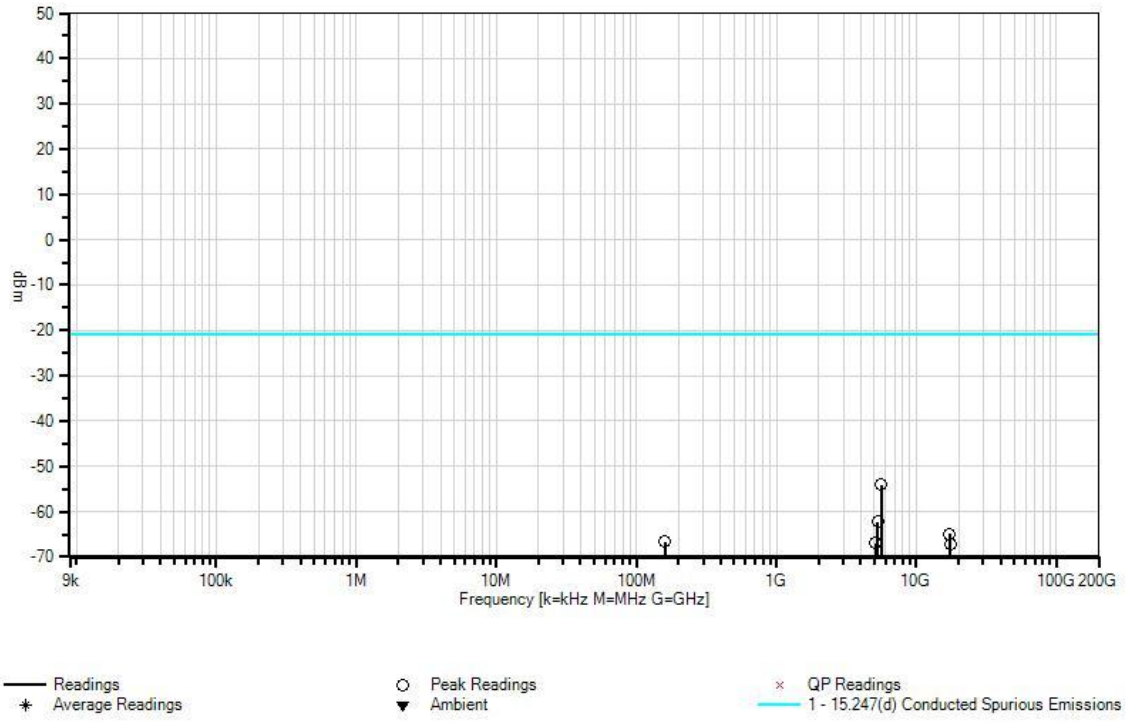
The equipment under test (EUT) is a DOCSIS 3.0 Wi-Fi Gateway. The EUT is stand along on the table top. The EUT is powered on and transmitting continuously. The spectrum analyzer is connected to the EUT antenna port using a coaxial cable. Data taken each antenna port. RBW=100kHz, VBW=300kHz, Detector=Peak. Frequency range of measurement, 9kHz to 40GHz. Specification limit is 20dB below the maximum measured in-band peak PSD level. Temperature: 21°C, Humidity: 36%, Pressure: 100kPa. Frequency range of EUT: 5755MHz to 5795MHz. This data sheet is for the EUT transmitting 802.11n (40MHz) (15Mbps), 5755MHz (Low) and 5795MHz (High). Channels 151 and 159.

Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Antenna Port

#	Freq MHz	Rdng dBµV	T1 dB	dB	dB	dB	Dist Table	Corr dBm	Spec dBm	Margin dB	Polar Ant
1	5599.989M	-55.2	+1.1				+0.0	-54.1	-20.9	-33.2	Anten
2	5280.009M	-63.2	+1.0				+0.0	-62.2	-20.9	-41.3	Anten
3	17264.958 M	-67.1	+2.2				+0.0	-64.9	-20.9	-44.0	Anten
4	159.989M	-66.8	+0.2				+0.0	-66.6	-20.9	-45.7	Anten
5	5119.985M	-68.0	+1.0				+0.0	-67.0	-20.9	-46.1	Anten
6	17384.973 M	-69.4	+2.2				+0.0	-67.2	-20.9	-46.3	Anten

CKC Laboratories, Inc. Date: 2/4/2012 Time: 16:14:21 Motorola Mobility, Inc. WO#: 92742
15.247(d) Conducted Spurious Emissions Test Lead: Antenna Port 12VDC Sequence#: 16 Ext ATTN: 0 dB



Test Setup Photos