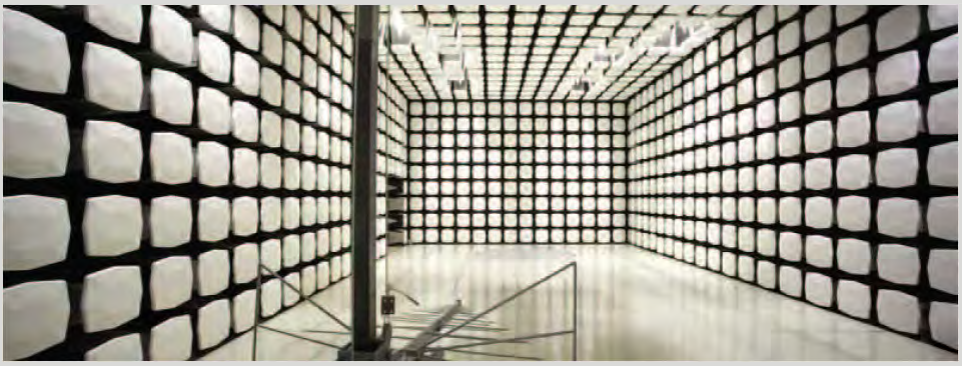
Intel Corporation

Intel 8-inch Tablet
Model: GQ110

FCC 15.207:2014
FCC 15.247:2014
802.11 bgn Radio

Report #: INTE5431.1



Report Prepared By Northwest EMC Inc.

NORTHWEST EMC – (888) 364-2378 – www.nwemc.com

California – Minnesota – Oregon – New York – Washington

CERTIFICATE OF TEST

WTD 12.5.23

Last Date of Test: April 25, 2014
Intel Corporation
Model: GQ110

Emissions

Test Description	Specification	Test Method	Pass/Fail
Duty Cycle	FCC 15.247:2014	ANSI C63.10:2009	Pass
Occupied Bandwidth	FCC 15.247:2014	ANSI C63.10:2009	Pass
Output Power	FCC 15.247:2014	ANSI C63.10:2009	Pass
Power Spectral Density	FCC 15.247:2014	ANSI C63.10:2009	Pass
Band Edge Compliance	FCC 15.247:2014	ANSI C63.10:2009	Pass
Spurious Conducted Emissions	FCC 15.247:2014	ANSI C63.10:2009	Pass
Spurious Radiated Emissions	FCC 15.247:2014	ANSI C63.10:2009	Pass
AC Powerline Conducted Emissions	FCC 15.207:2014	ANSI C63.10:2009	Pass

Deviations From Test Standards

None

Approved By:

Kyle Holgate, Operations Manager

NVLAP Lab Code: 200630-0
200629-0

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America.

Product compliance is the responsibility of the client, therefore the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. This Report may only be duplicated in its entirety. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.

REVISION HISTORY

REV 2012.08.02

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

NORTHWEST EMC

REV 2012.05.24

ACCREDITATIONS AND AUTHORIZATIONS

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC Guide 65 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

IC - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

European Union

European Commission – Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and as a Notified Body under the R&TTE Directive.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

KCC / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Hong Kong

OFTA – Recognized by OFTA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

Russia

GOST – Accredited by Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC to perform EMC and Hygienic testing for Information Technology products to GOST standards.

SCOPE

For details on the Scopes of our Accreditations, please visit:
http://www.nwemc.com/accreditations/

MEASUREMENT UNCERTAINTY

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) for each test is listed below. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-1 as applicable), and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

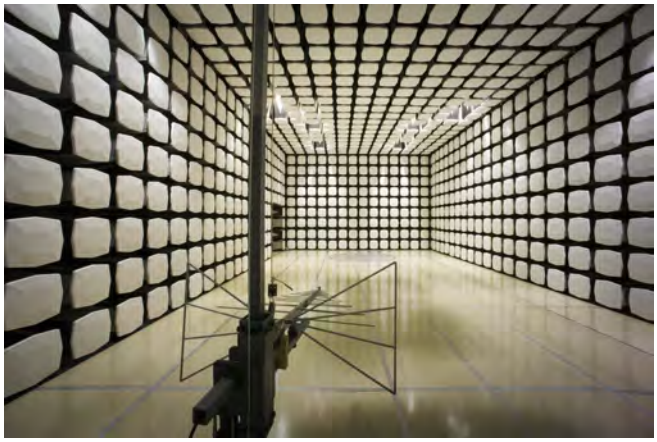
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.12	-0.01
Amplitude Accuracy (dB)	0.49	-0.49
Conducted Power (dB)	0.41	-0.41
Radiated Power via Substitution (dB)	0.69	-0.68
Temperature (degrees C)	0.81	-0.81
Humidity (% RH)	2.89	-2.89
Field Strength (dB)	3.80	-3.80
AC Powerline Conducted Emissions (dB)	2.94	-2.94

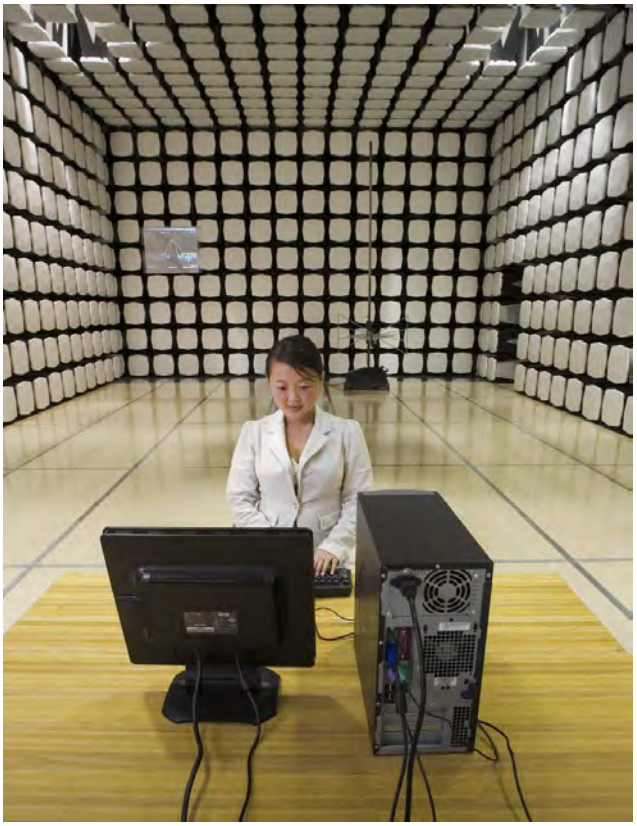
NORTHWEST EMC

REV 2013.06.28

FACILITIES

Oregon	California	New York	Minnesota	Washington
Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	Labs MN01-08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	Labs NC01-05,SU02,SU07 19201 120th Ave. NE Bothell, WA 98011 (425) 984-6600
VCCI				
A-0108	A-0029		A-0109	A-0110
Industry Canada				
2834D-1, 2834D-*2*	2834B-1, 2834B-2, 2834B-3		2834E-1	2834F-1
NVLAP				
NVLAP Lab Code: 200630-0	NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200629-0





PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	Intel Corporation
Address:	5200 NE Elam Young Pkwy
City, State, Zip:	Hillsboro, OR 97124
Test Requested By:	Aaron Cohen
Model:	GQ110
First Date of Test:	March 26, 2014
Last Date of Test:	April 3, 2014
Receipt Date of Samples:	March 26, 2014
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
Tablet with 802.11bgn 20 MHz bandwidth, SISO, with Bluetooth 4.0 and GPS.

Testing Objective:
To demonstrate compliance under FCC 15.247 for operation in the 2.4 GHz band.

CONFIGURATIONS

Configuration INTE5431- 1

Software/Firmware Running during test	
Description	**Version**
Android OS	4.4.2

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Intel 8-inch Tablet	Intel Corporation	GQ110	EZF83450005Z

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC/DC Adapter	Salcomp	S11A02	131100233060

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
USB Cable	Yes	.3m	No	Intel 8-inch Tablet	AC/DC Adapter
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration INTE5431- 4

Software/Firmware Running during test	
Description	**Version**
Android OS	4.4.2

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Intel 8-inch Tablet	Intel Corporation	GQ110	EZF8344000UK

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC/DC Adapter	Salcomp	S11A02	131100233060

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
USB Cable	Yes	.3m	No	Intel 8-inch Tablet	AC/DC Adapter
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATIONS

Configuration INTE5431- 6

Software/Firmware Running during test	
Description	**Version**
Android OS	4.4.2

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Intel 8-inch Tablet	Intel Corporation	GQ110	EZF8344000UK

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC/DC Adapter	Salcomp	S11A02	131100233060
Headphones(ear buds)	None	None	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
USB Cable	Yes	.3m	No	Intel 8-inch Tablet	AC/DC Adapter
HDMI Cable	Yes	3m	No	Intel 8-inch Tablet	Unterminated
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

MODIFICATIONS

WTD 12.5.23

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	3/26/2014	Duty Cycle	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	3/26/2014	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	3/26/2014	Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	3/26/2014	Power Spectral Density	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
5	3/26/2014	Band Edge Compliance	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
6	3/26/2014	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
7	3/28/2014	AC Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
8	4/3/2014	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

DUTY CYCLE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

The Duty Cycle (x) of the single channel operation of the radio as controlled by the provided test software was measured for each of the EUT operating modes.

The measurements were made using a zero span on the spectrum analyzer to see the pulses in the time domain. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used.

The duty cycle was calculated by dividing the transmission pulse duration (T) by the total period of a single on and total off time.

If the transmit duty cycle < 98 percent, burst gating was used during some of the other tests in this report to only measure during the burst duration.

DUTY CYCLE

EUT:	GQ110			**Work Order:**	INTE5431
Serial Number:	EZF83450005Z			**Date:**	03/26/14
Customer:	Intel Corporation			**Temperature:**	21.7°C
Attendees:	None			**Humidity:**	39%
Project:	GQ110			**Barometric Pres.:**	1001.8
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2014	ANSI C63.10:2009

COMMENTS

Mode of operation tested were client provided.

DEVIATIONS FROM TEST STANDARD

None

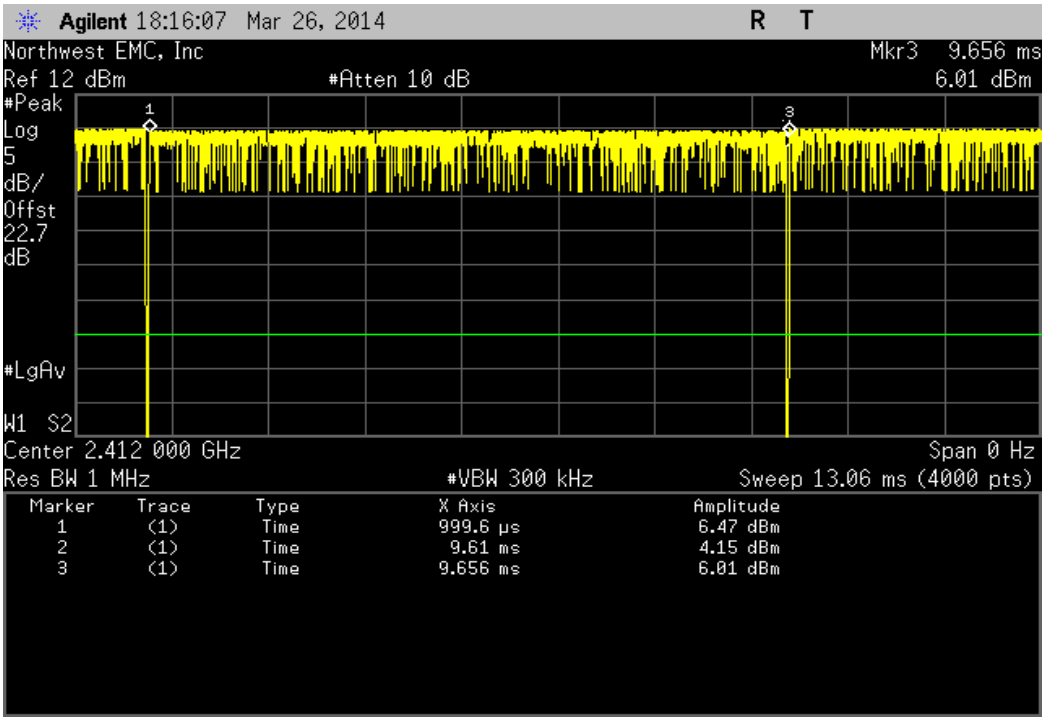
Configuration #	1	Signature

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
2400 MHz - 2483.5 MHz Band						
802.11(b) 1 Mbps						
Low Channel 1, 2412 MHz	8.611 mS	8.657 mS	1	99.5	N/A	N/A
Low Channel 1, 2412 MHz	N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	8.611 mS	8.657 mS	1	99.5	N/A	N/A
Mid Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz	8.614 mS	8.657 mS	1	99.5	N/A	N/A
High Channel 11, 2462 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(b) 11 Mbps						
Low Channel 1, 2412 MHz	864.8 uS	910.8 uS	1	94.9	N/A	N/A
Low Channel 1, 2412 MHz	N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	863.2 uS	909.2 uS	1	94.9	N/A	N/A
Mid Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz	864.8 uS	910.8 uS	1	94.9	N/A	N/A
High Channel 11, 2462 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(g) 6 Mbps						
Low Channel 1, 2412 MHz	1.42 mS	1.478 mS	1	96.1	N/A	N/A
Low Channel 1, 2412 MHz	N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	1.42 mS	1.478 mS	1	96.1	N/A	N/A
Mid Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz	1.42 mS	1.478 mS	1	96.1	N/A	N/A
High Channel 11, 2462 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(g) 36 Mbps						
Low Channel 1, 2412 MHz	248 uS	306 uS	1	81	N/A	N/A
Low Channel 1, 2412 MHz	N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	248 uS	306 uS	1	81	N/A	N/A
Mid Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz	249 uS	306 uS	1	81.4	N/A	N/A
High Channel 11, 2462 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(g) 54 Mbps						
Low Channel 1, 2412 MHz	172 uS	230 uS	1	74.8	N/A	N/A
Low Channel 1, 2412 MHz	N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	172 uS	230 uS	1	74.8	N/A	N/A
Mid Channel 6, 2437 MHz	N/A	N/A	6	N/A	N/A	N/A
High Channel 11, 2462 MHz	172 uS	229 uS	1	75.1	N/A	N/A
High Channel 11, 2462 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0						
Low Channel 1, 2412 MHz	1.33 mS	1.388 mS	1	95.8	N/A	N/A
Low Channel 1, 2412 MHz	N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	1.328 mS	1.386 mS	1	95.8	N/A	N/A
Mid Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz	1.328 mS	1.386 mS	1	95.8	N/A	N/A
High Channel 11, 2462 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7						
Low Channel 1, 2412 MHz	159 uS	217 uS	1	73.3	N/A	N/A
Low Channel 1, 2412 MHz	N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	159 uS	218 uS	1	72.9	N/A	N/A
Mid Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz	160 uS	218 uS	1	73.4	N/A	N/A
High Channel 11, 2462 MHz	N/A	N/A	5	N/A	N/A	N/A

DUTY CYCLE

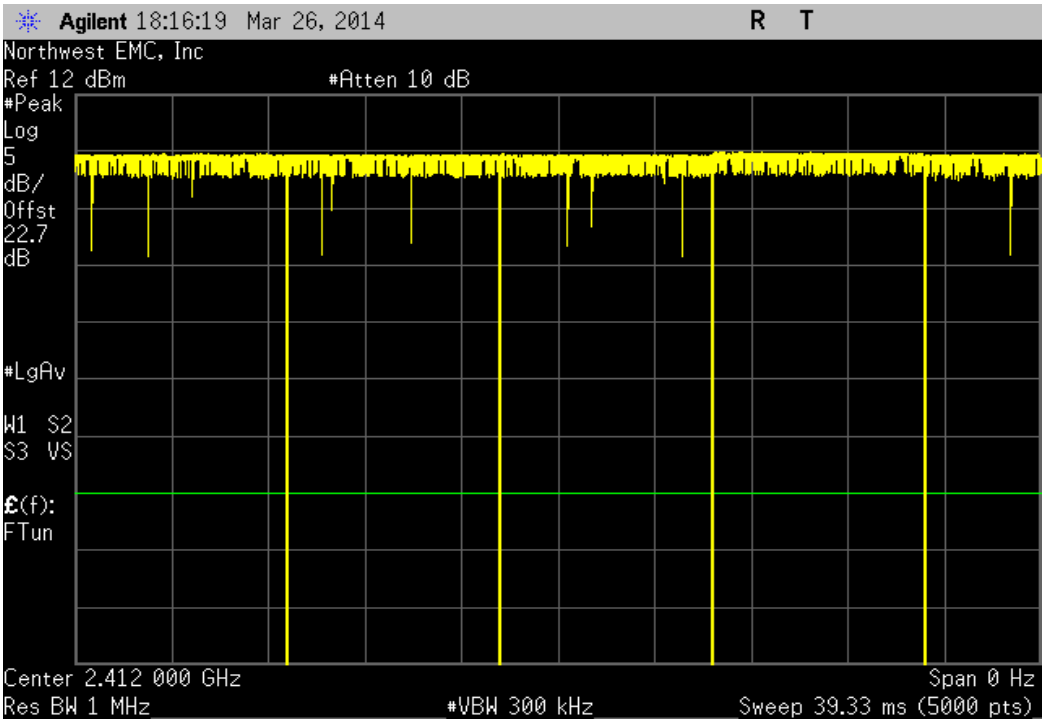
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.611 mS	8.657 mS	1	99.5	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

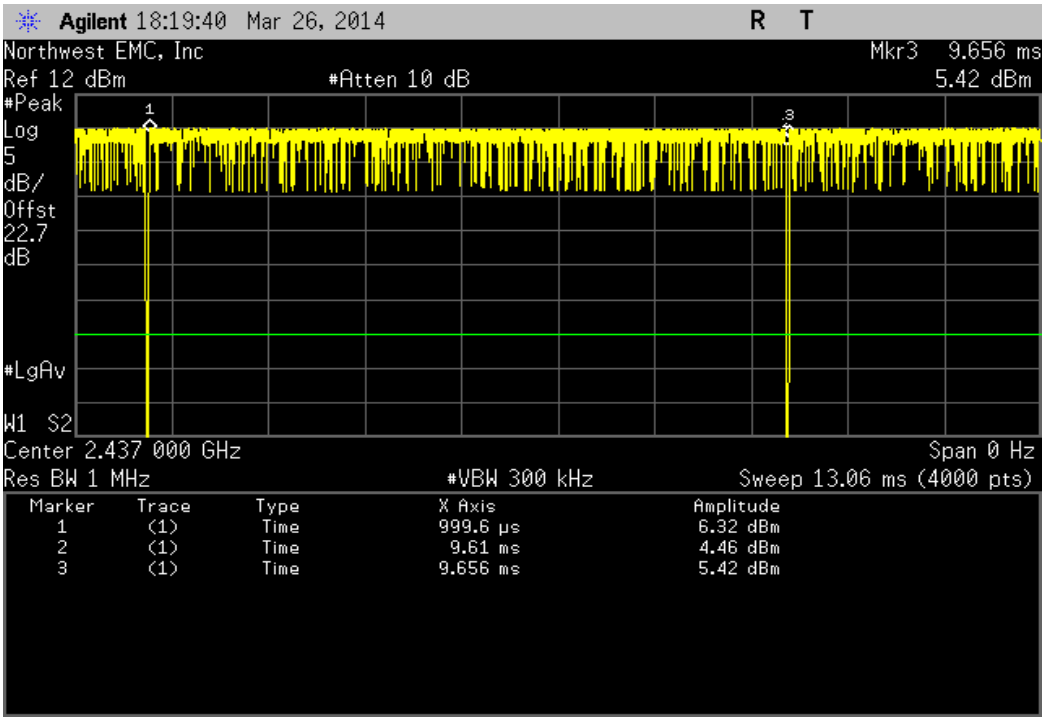
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

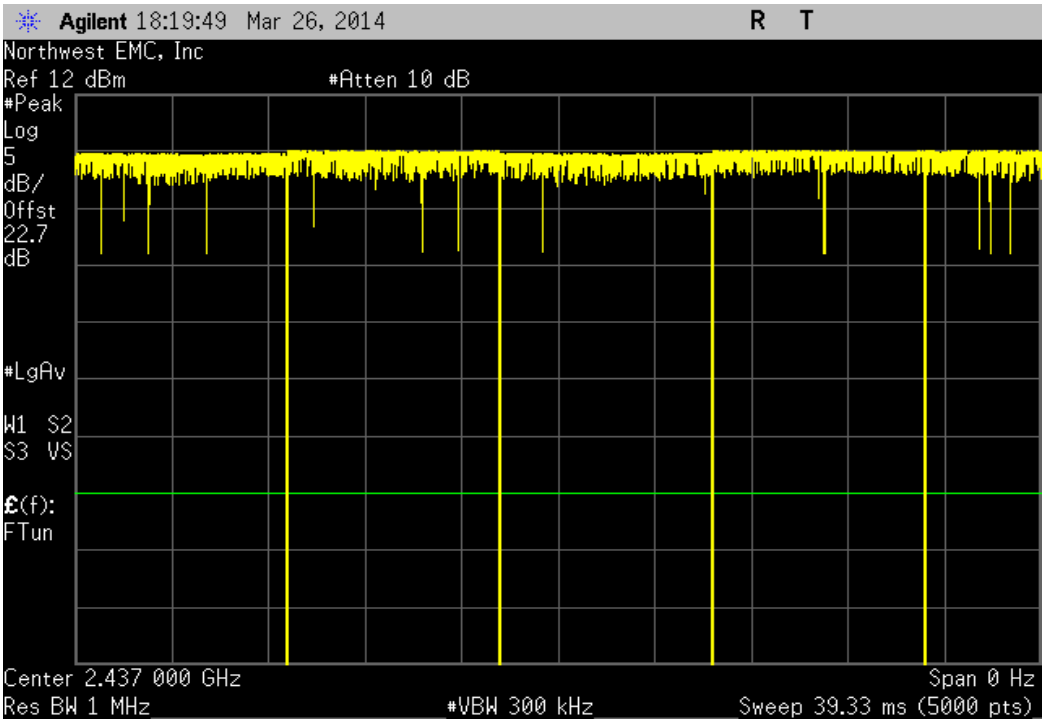
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.611 mS	8.657 mS	1	99.5	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

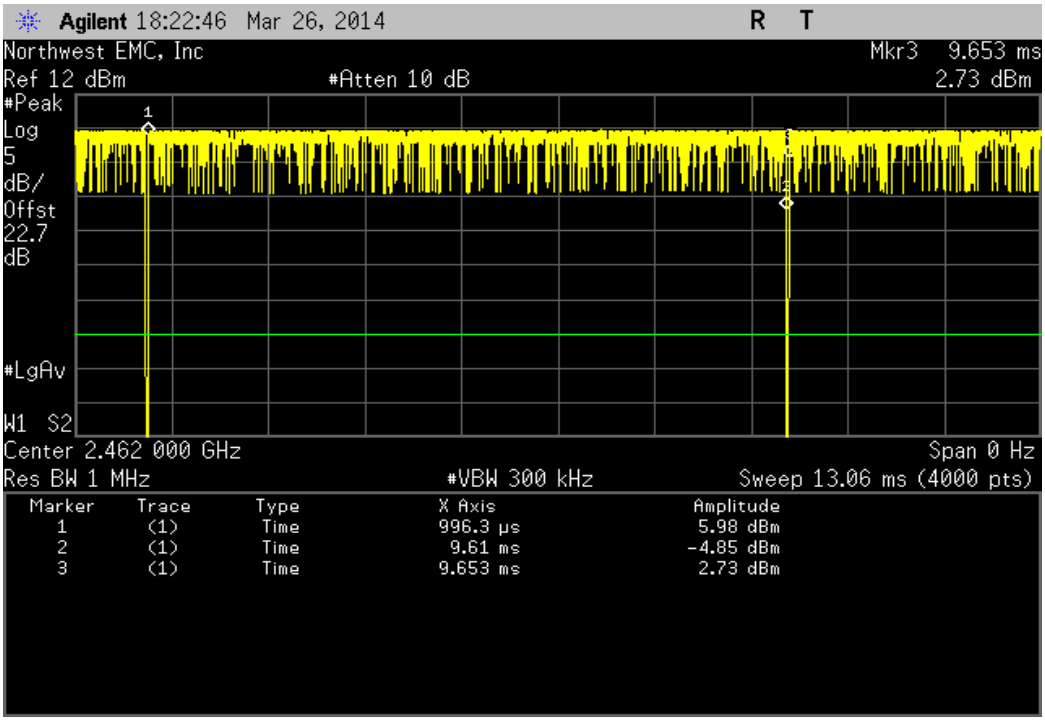
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

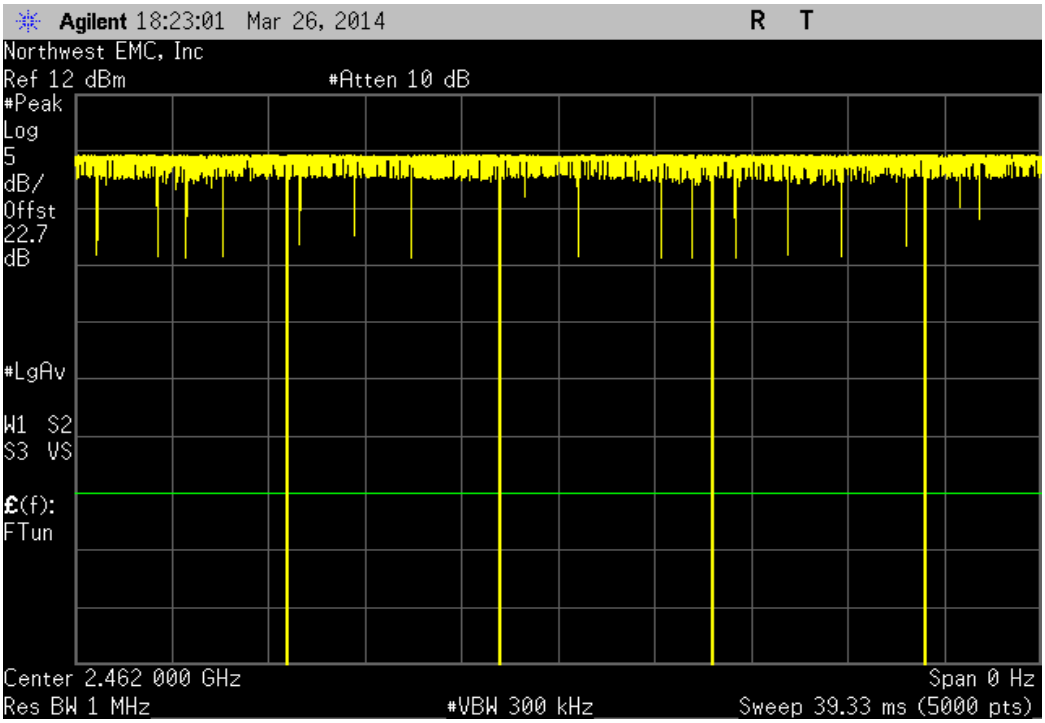
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
8.614 mS	8.657 mS	1	99.5	N/A	N/A



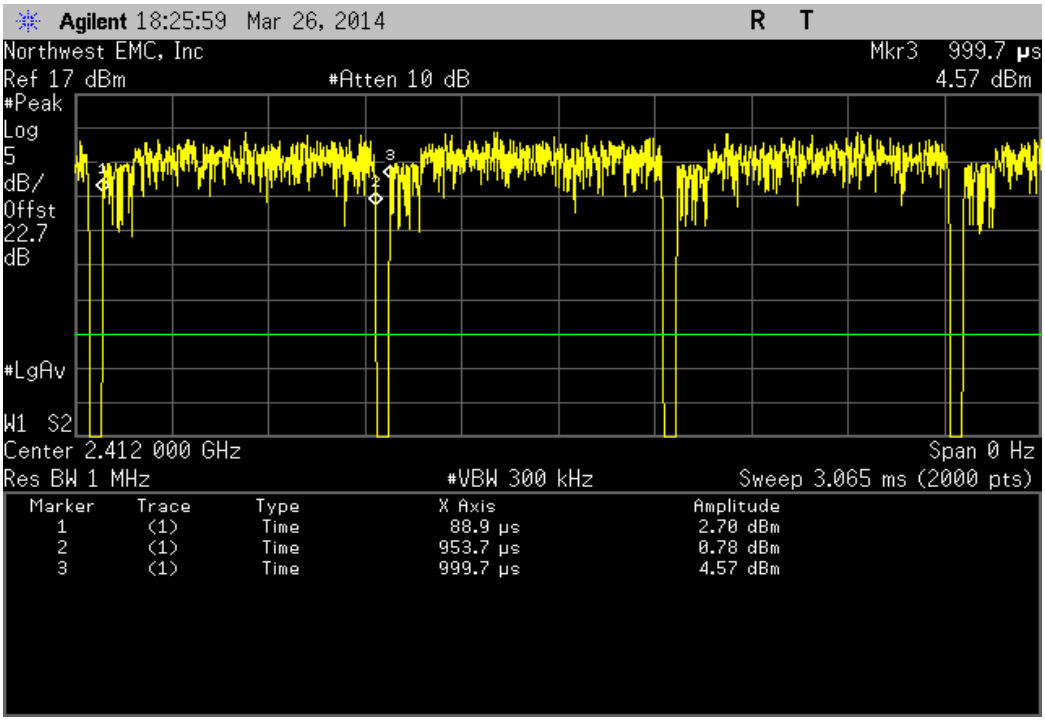
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
N/A	N/A	5	N/A	N/A	N/A

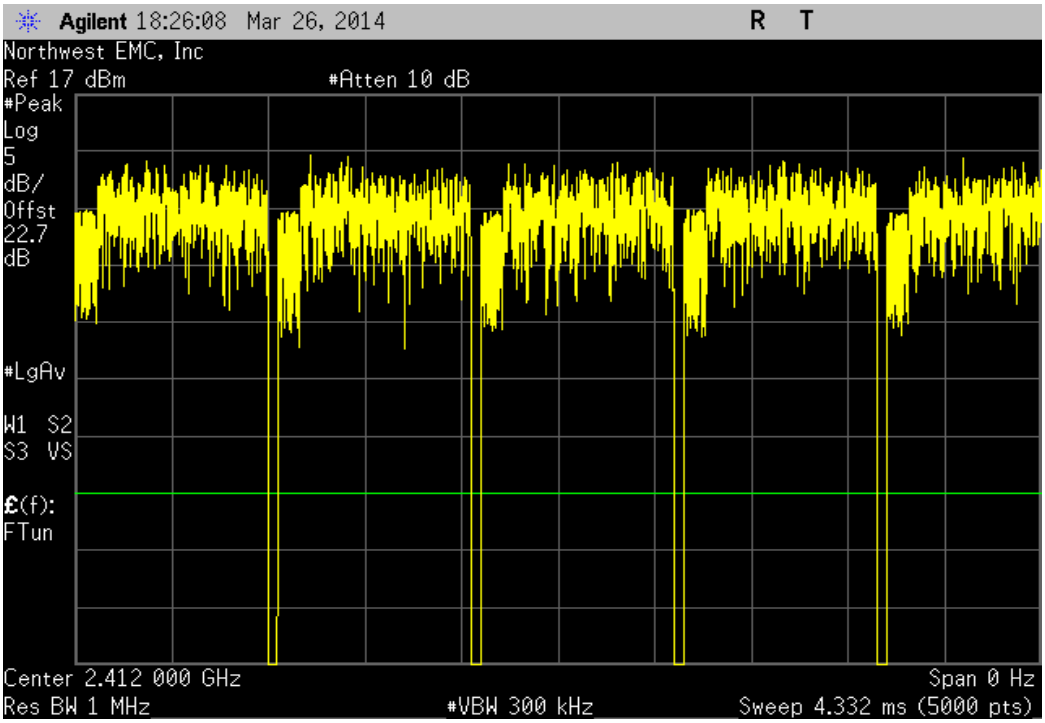


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	864.8 uS	910.8 uS	1	94.9	N/A	N/A

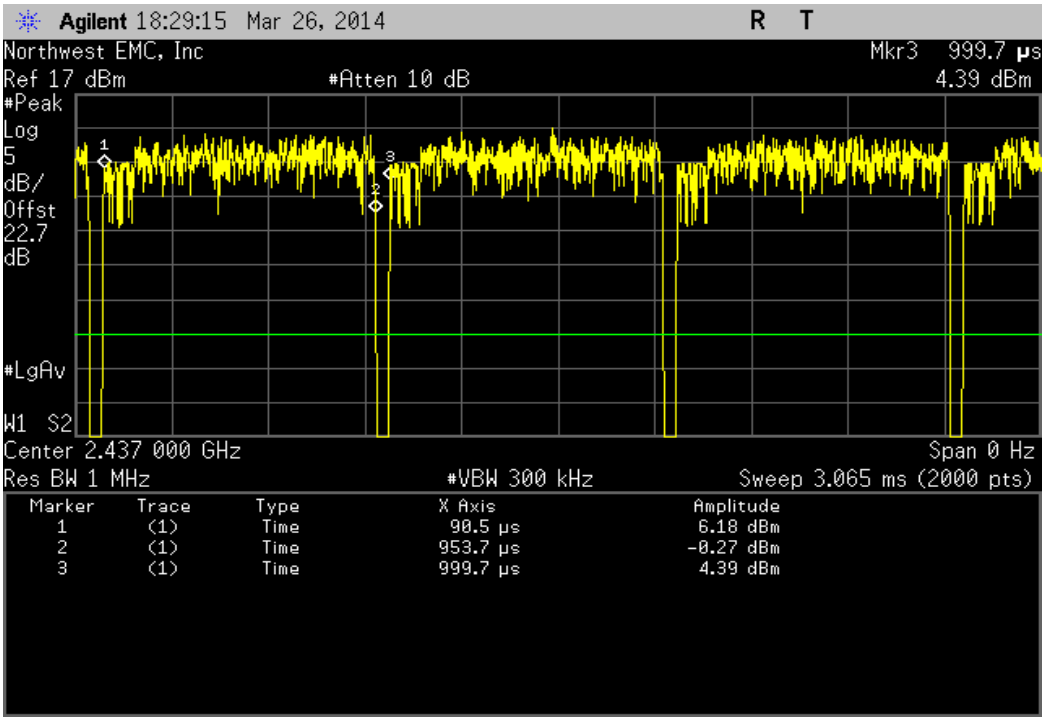


2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

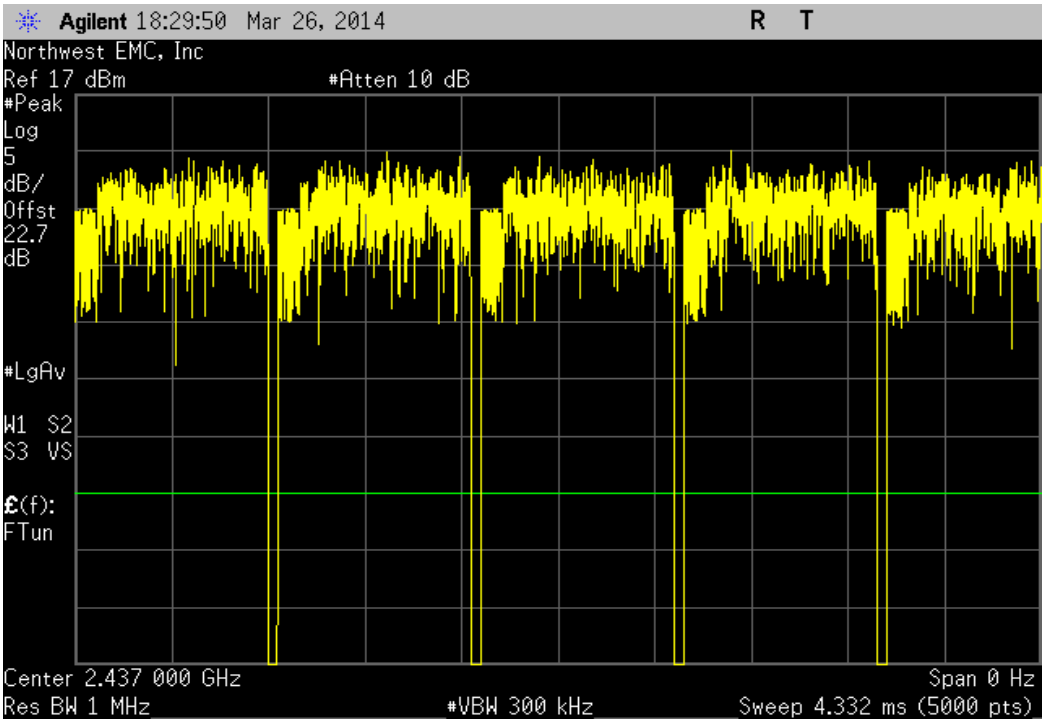


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	863.2 uS	909.2 uS	1	94.9	N/A	N/A



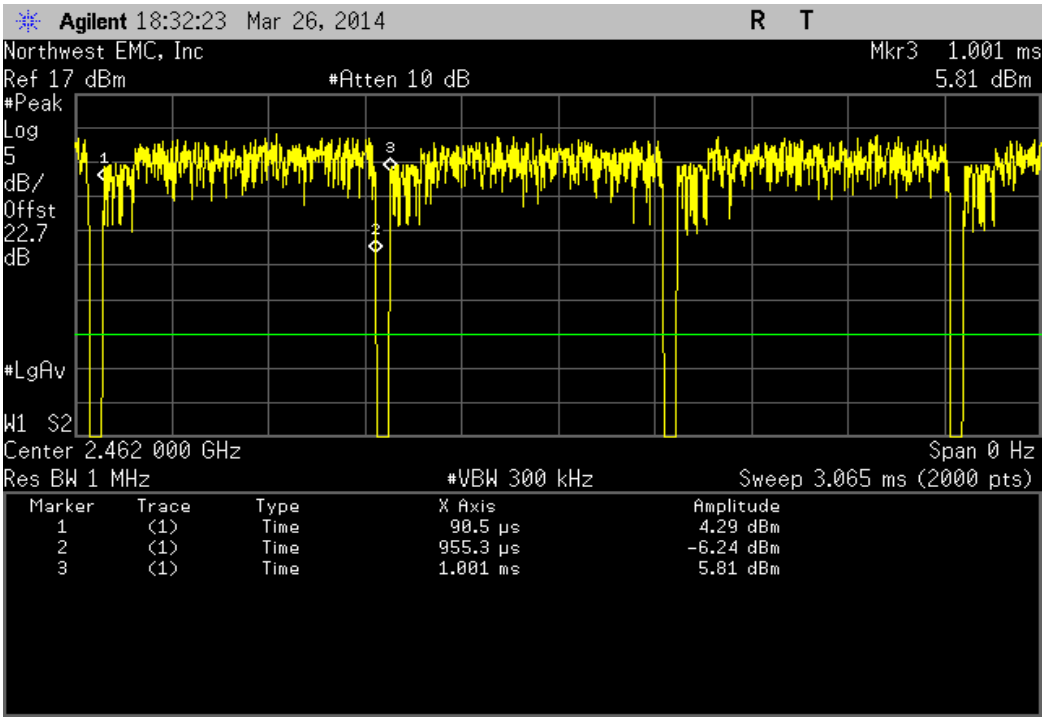
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

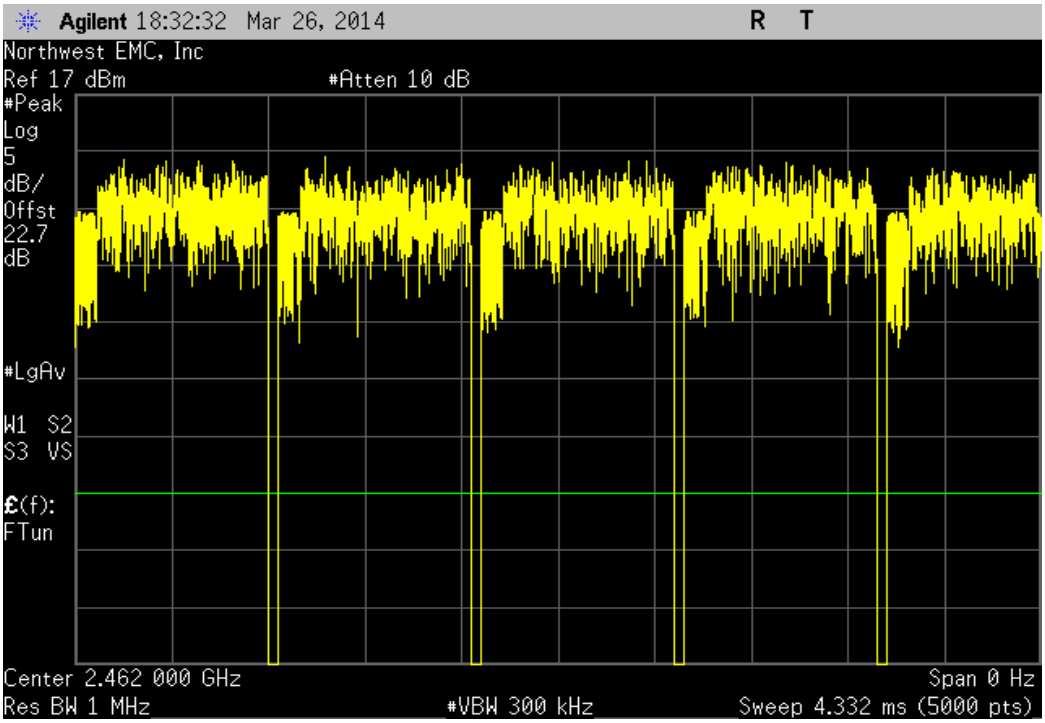
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	864.8 uS	910.8 uS	1	94.9	N/A	N/A



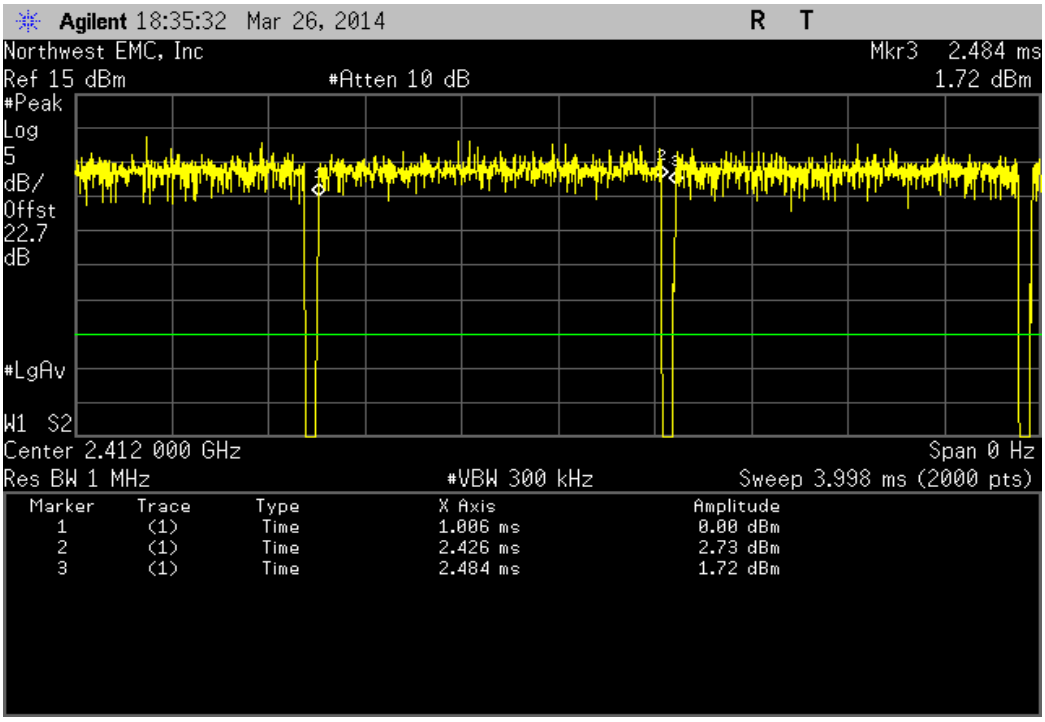
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



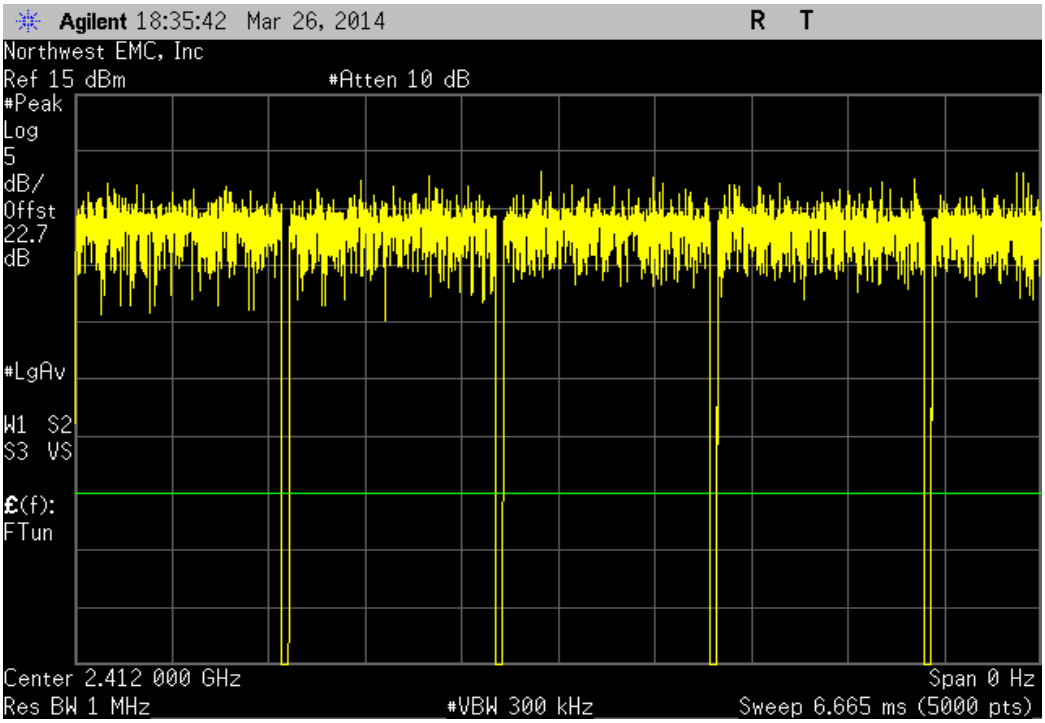
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.42 mS	1.478 mS	1	96.1	N/A	N/A



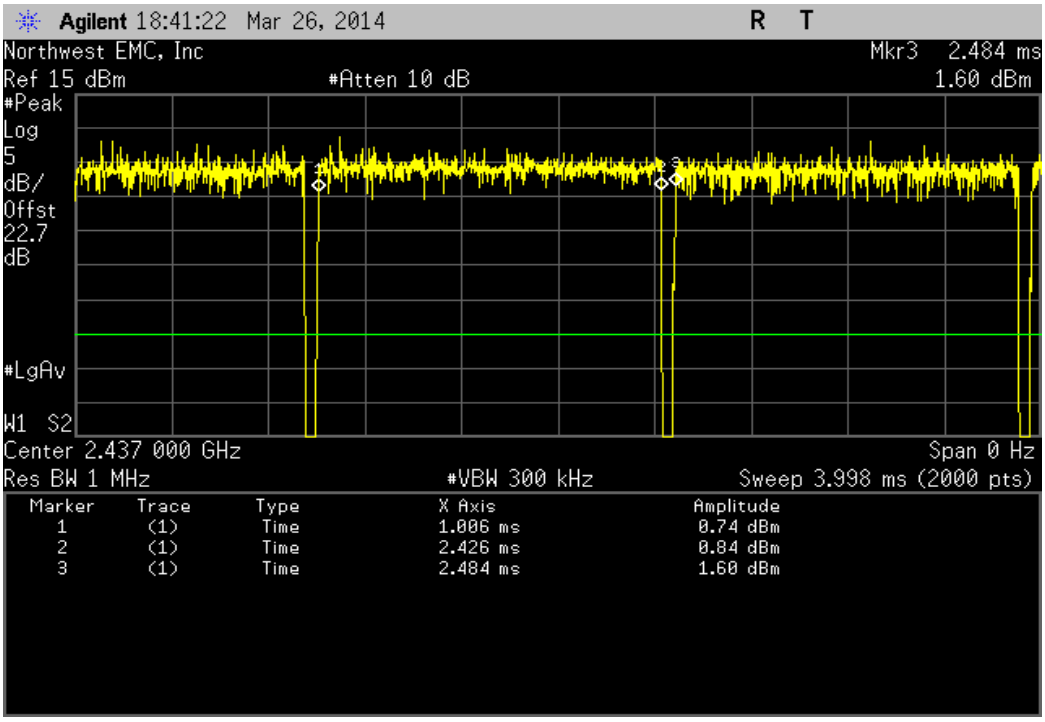
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

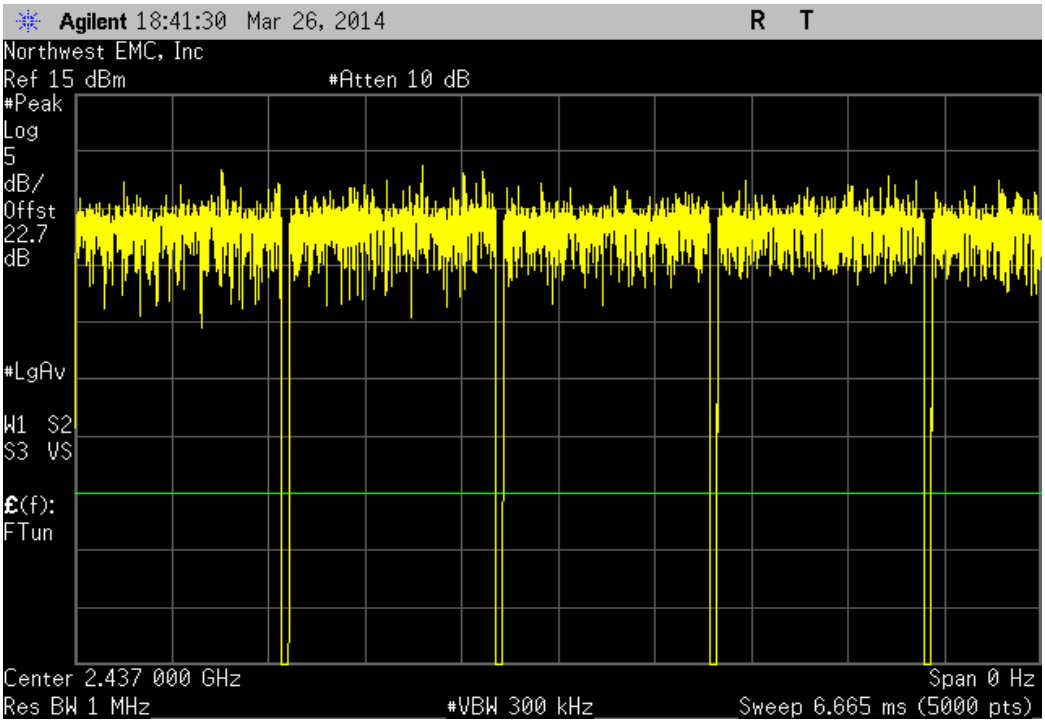


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.42 mS	1.478 mS	1	96.1	N/A	N/A



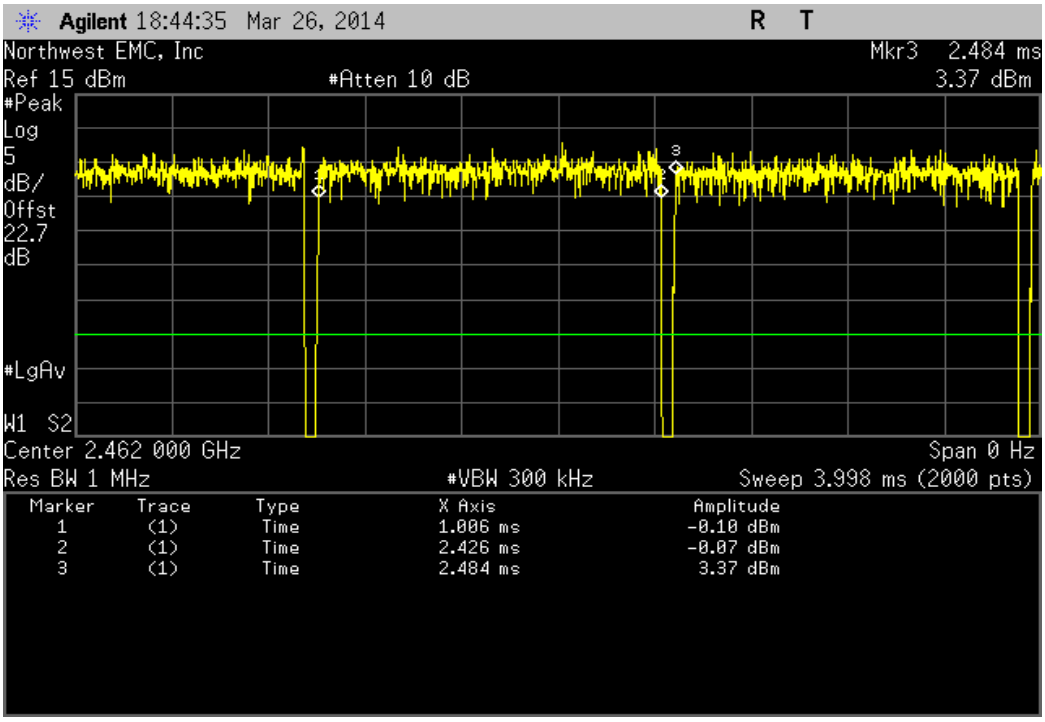
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

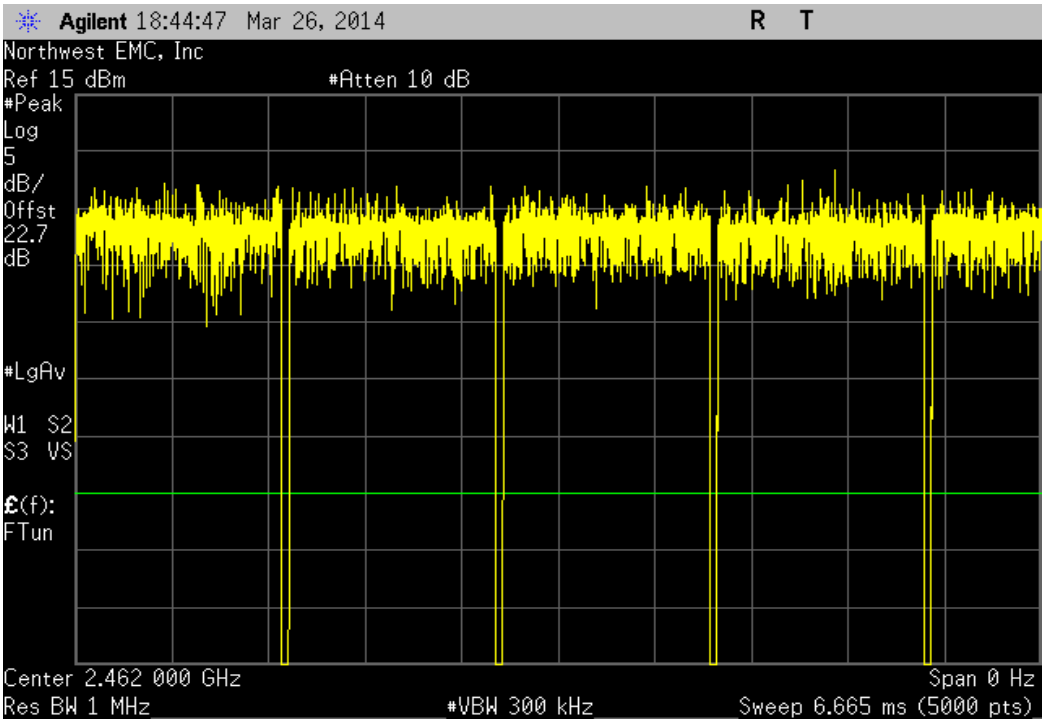
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
1.42 mS	1.478 mS	1	96.1	N/A	N/A



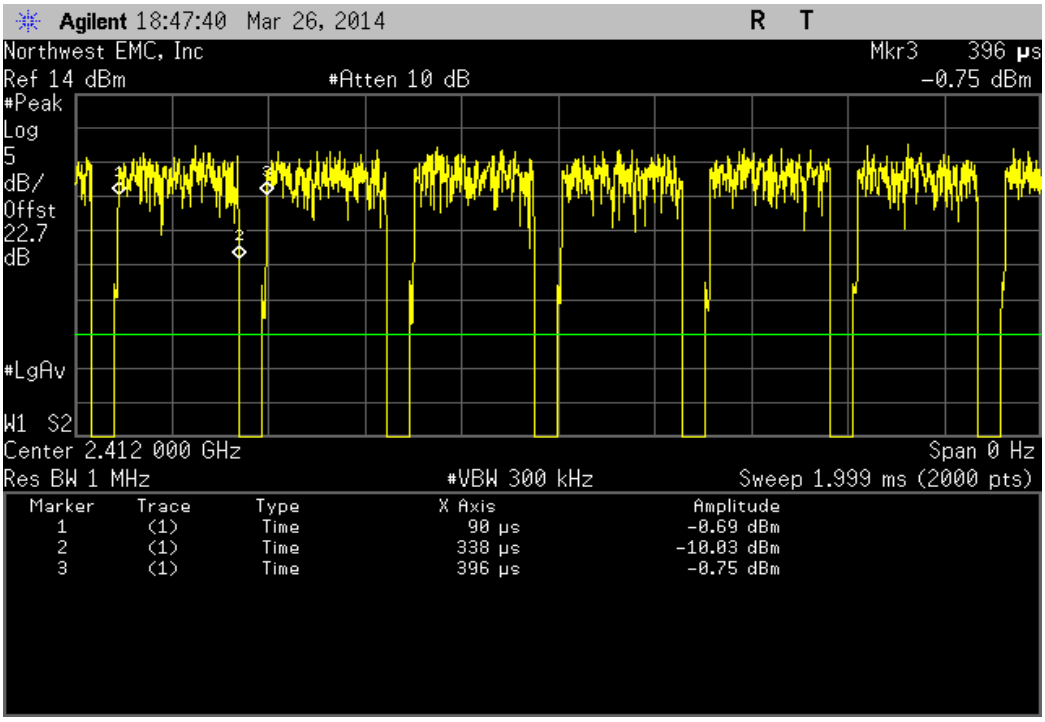
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
N/A	N/A	5	N/A	N/A	N/A

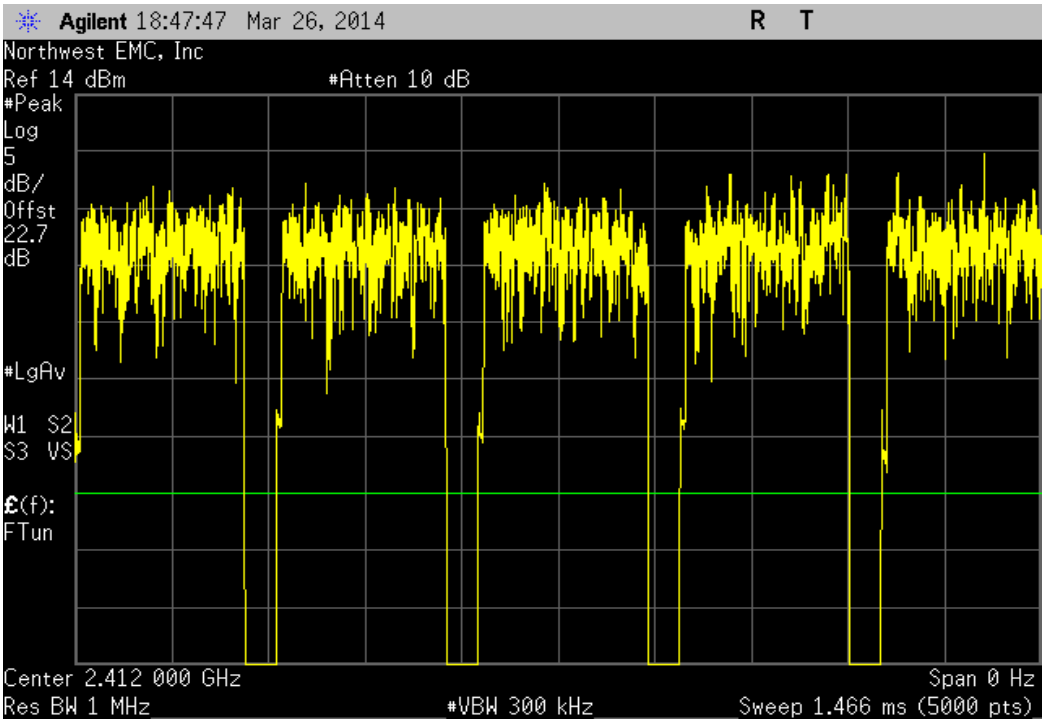


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	248 uS	306 uS	1	81	N/A	N/A

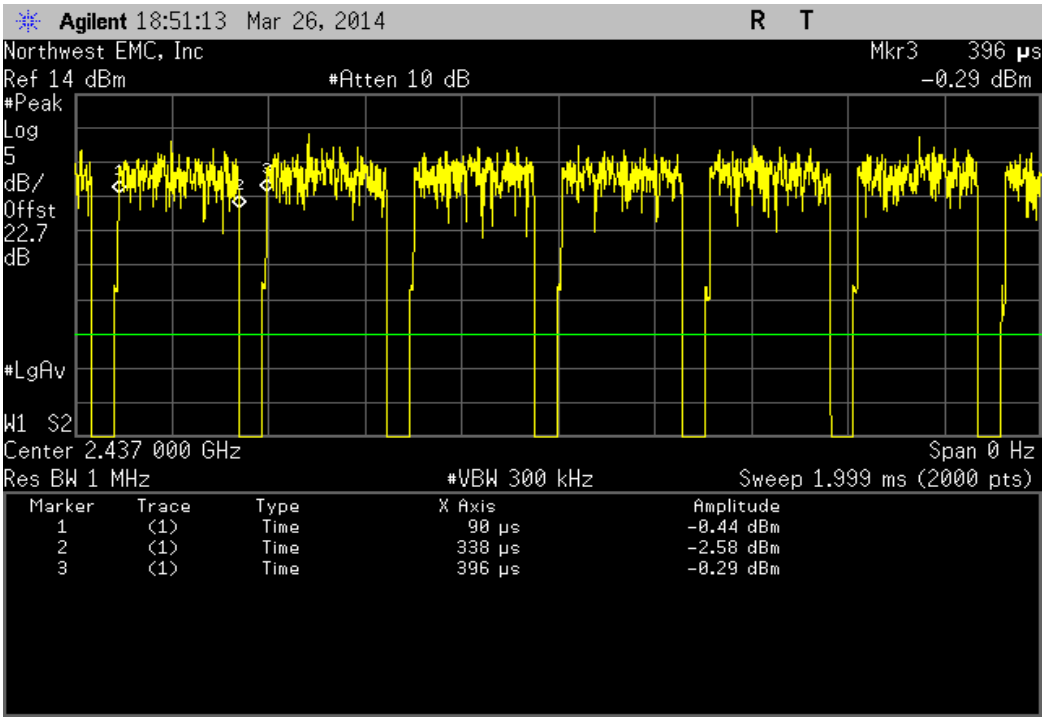


2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

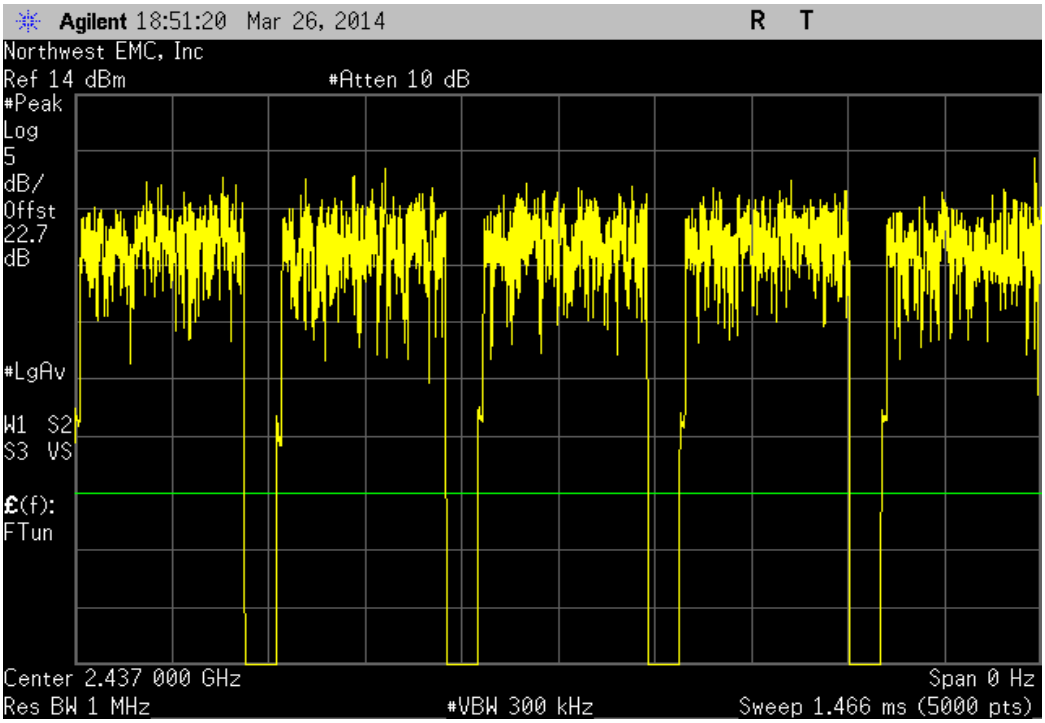


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	248 uS	306 uS	1	81	N/A	N/A

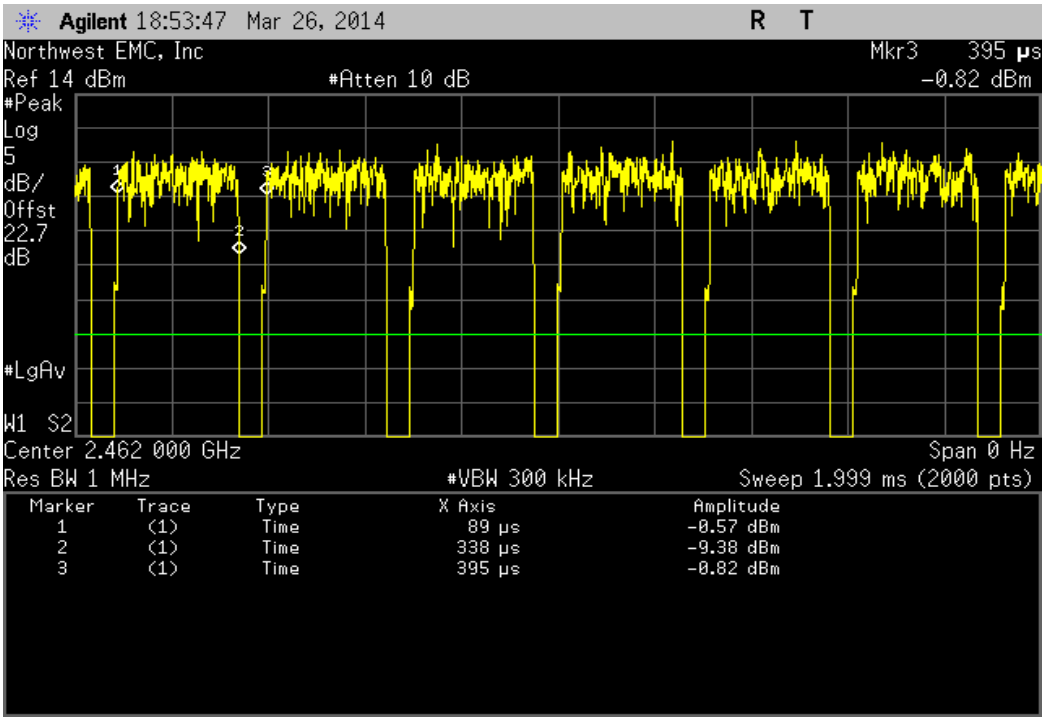


2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

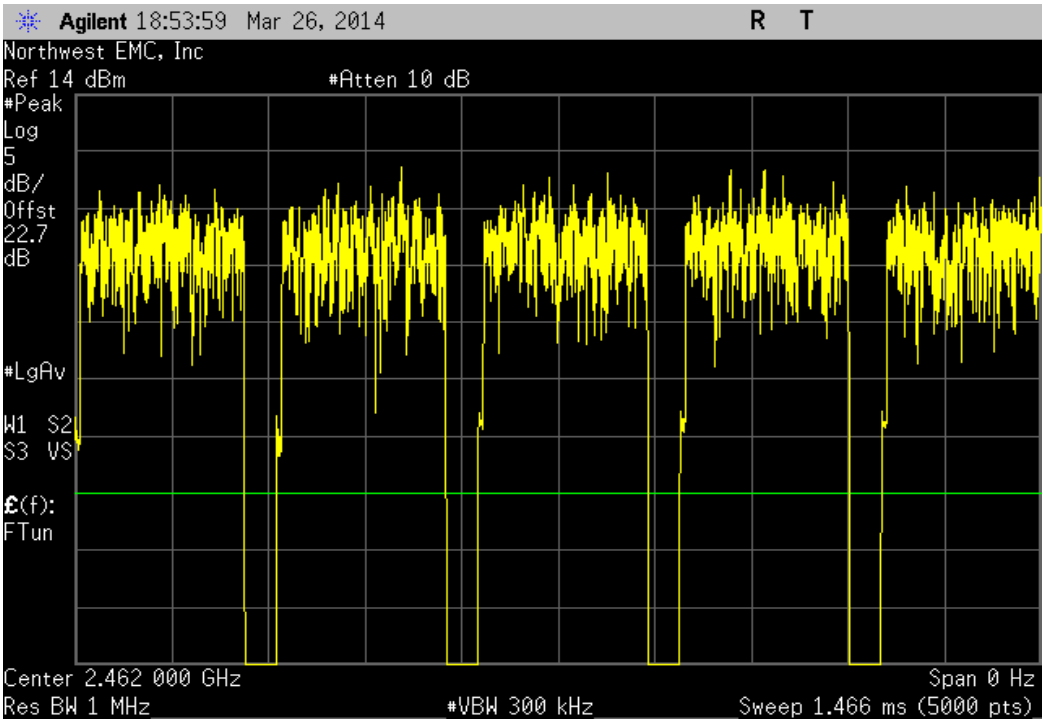


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	249 uS	306 uS	1	81.4	N/A	N/A

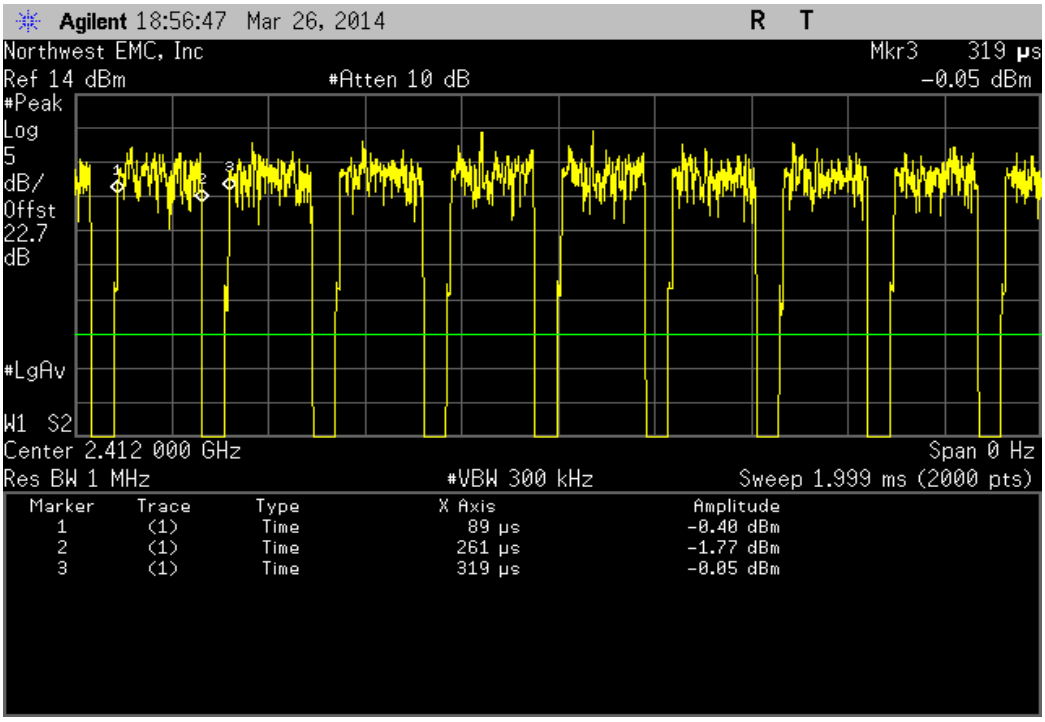


2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

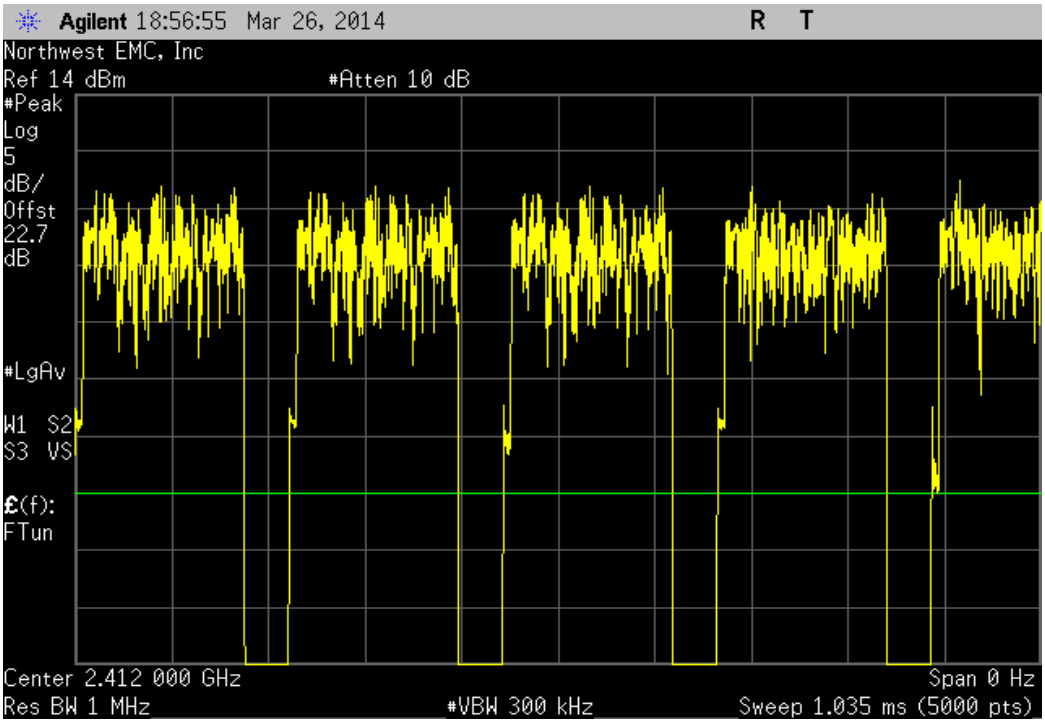


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	172 uS	230 uS	1	74.8	N/A	N/A

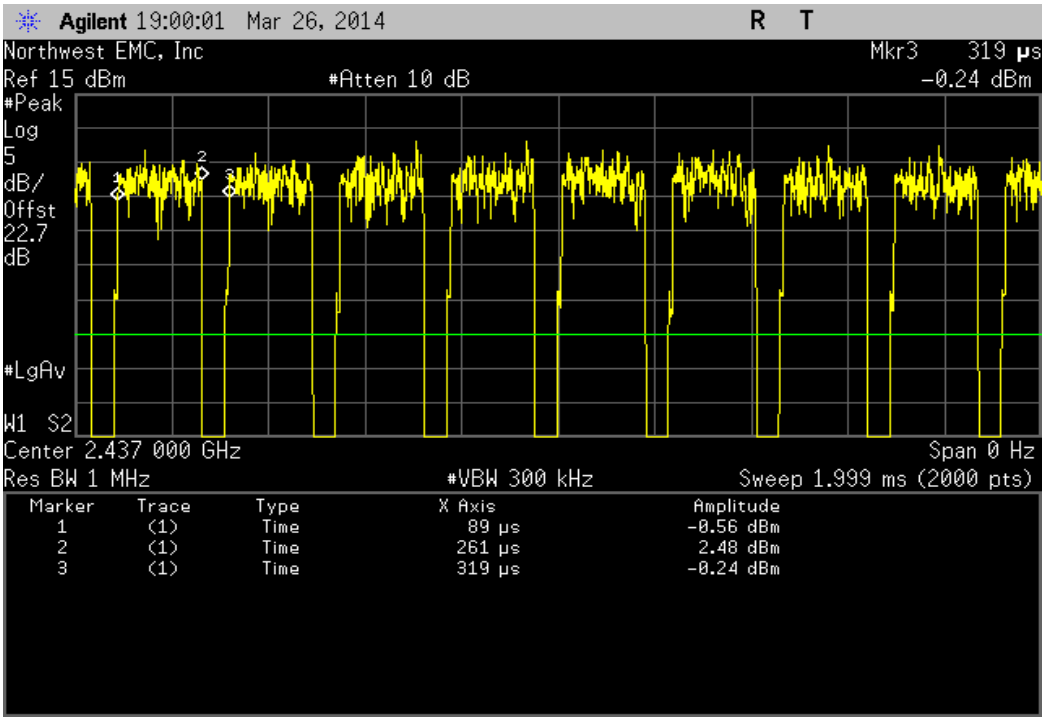


2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

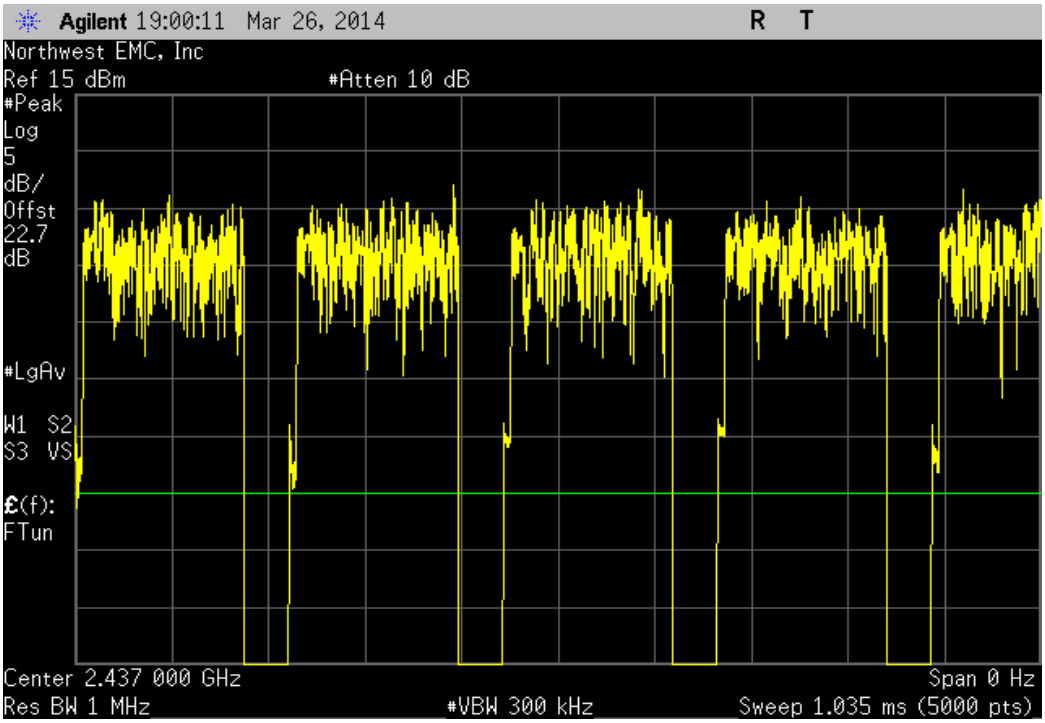


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	172 uS	230 uS	1	74.8	N/A	N/A

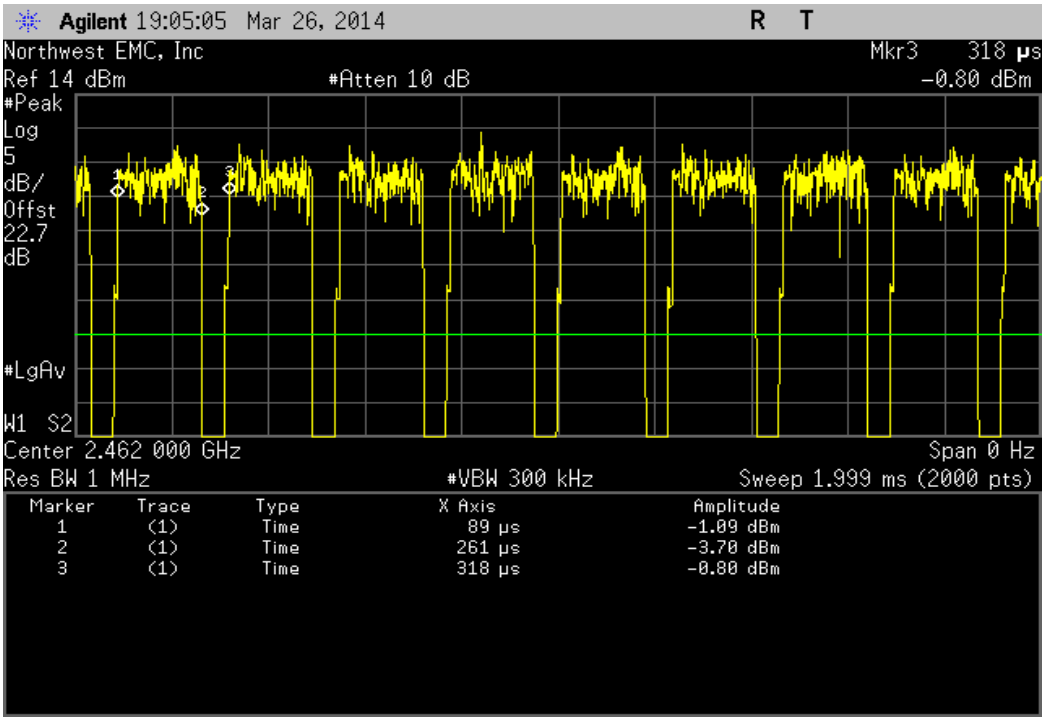


2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	6	N/A	N/A	N/A

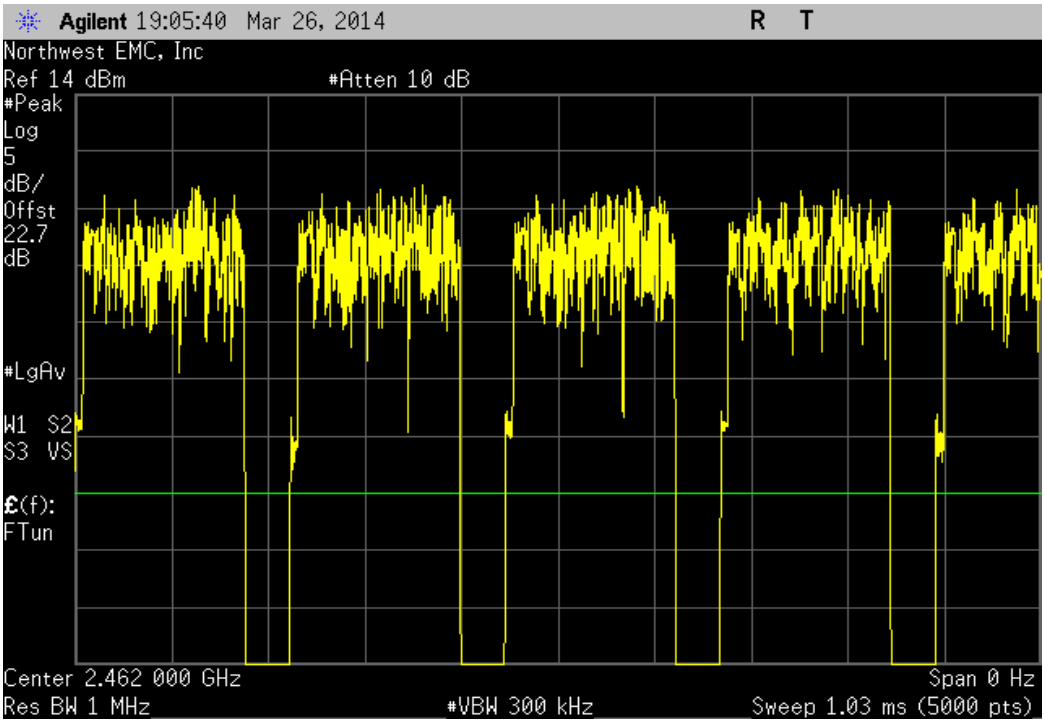


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	172 uS	229 uS	1	75.1	N/A	N/A

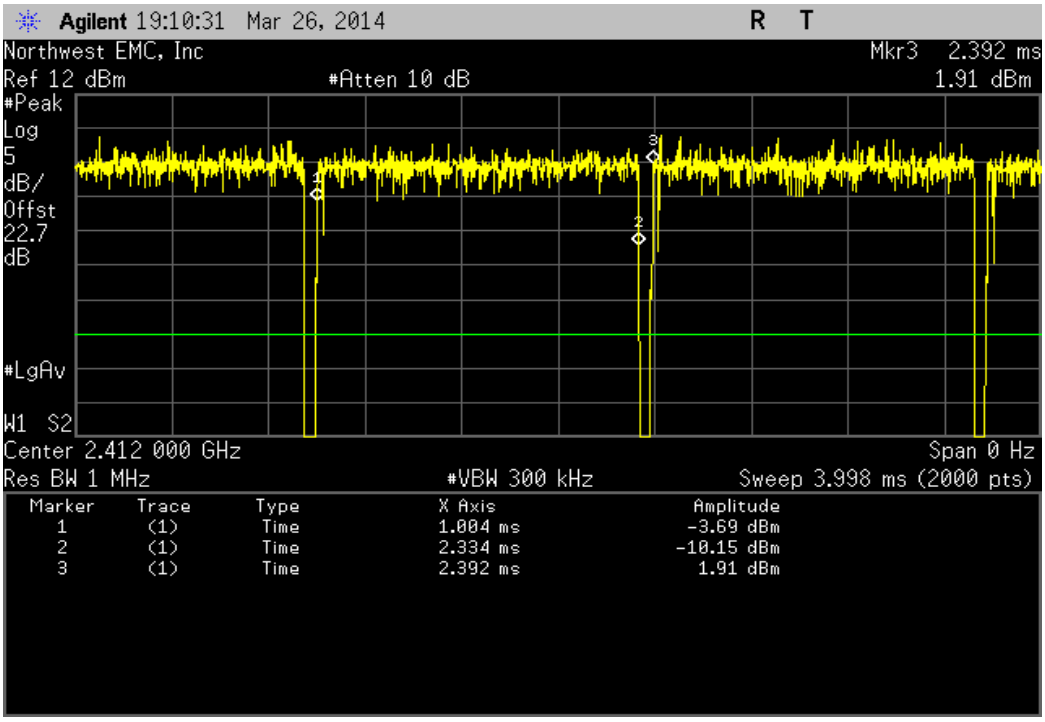


2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



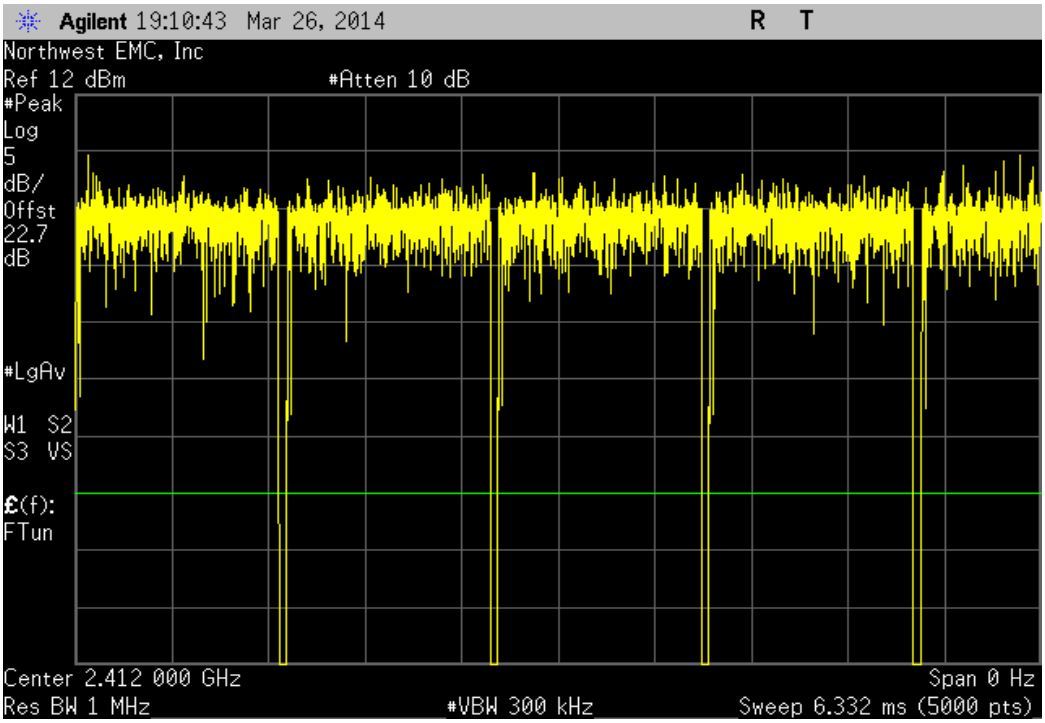
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
1.33 mS	1.388 mS	1	95.8	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

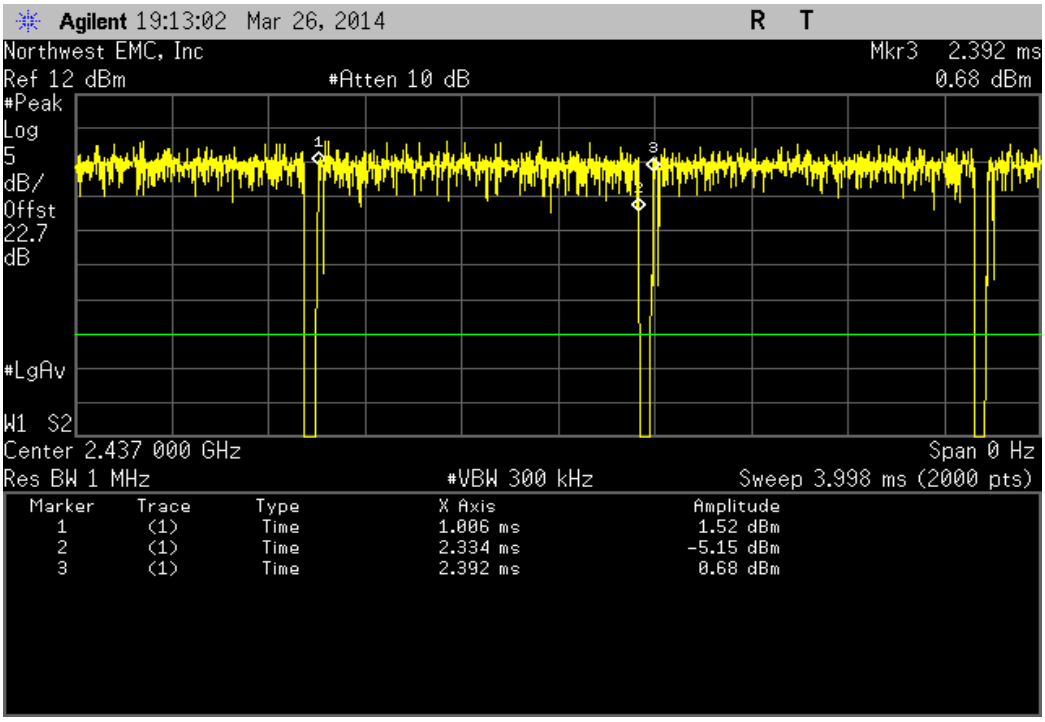
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

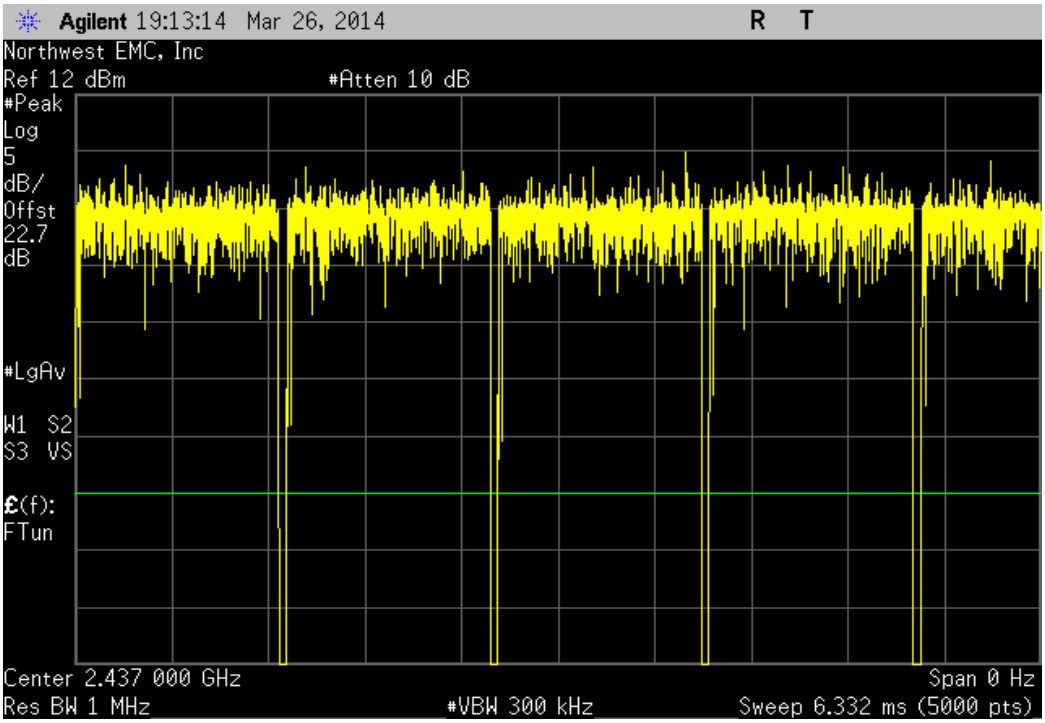
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.328 mS	1.386 mS	1	95.8	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

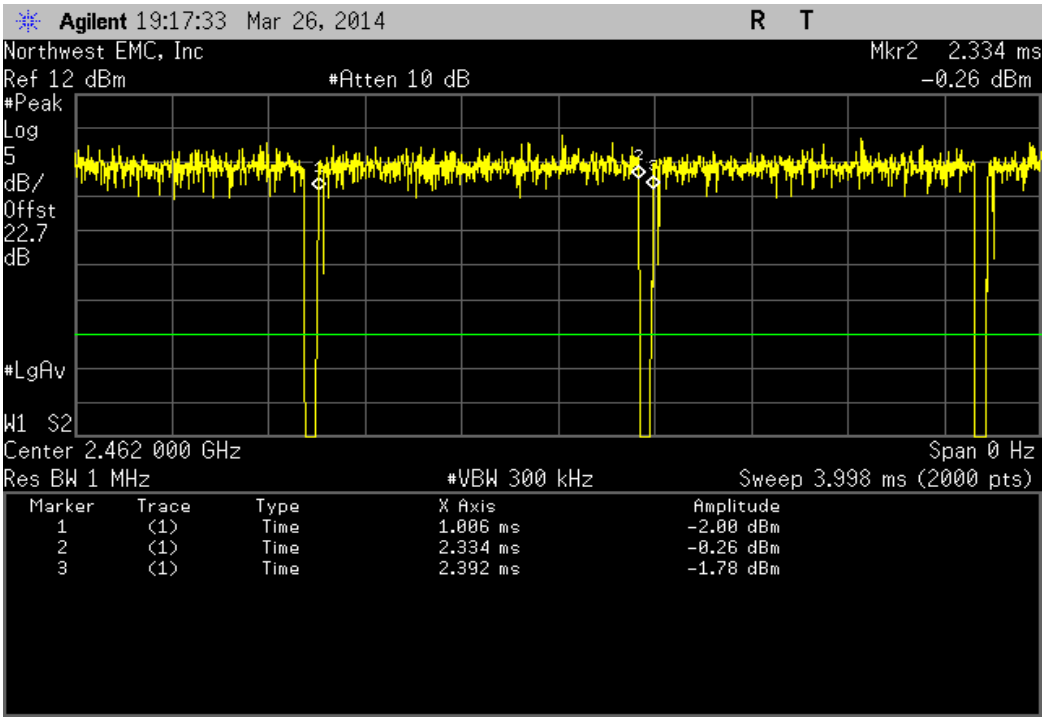
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

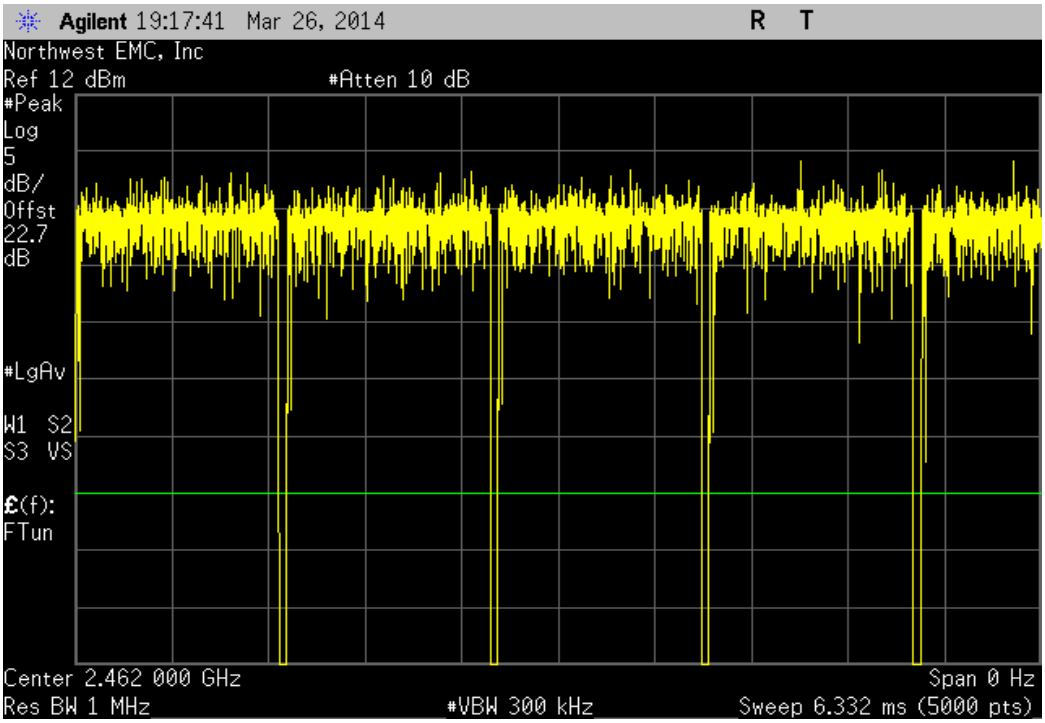
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.328 mS	1.386 mS	1	95.8	N/A	N/A

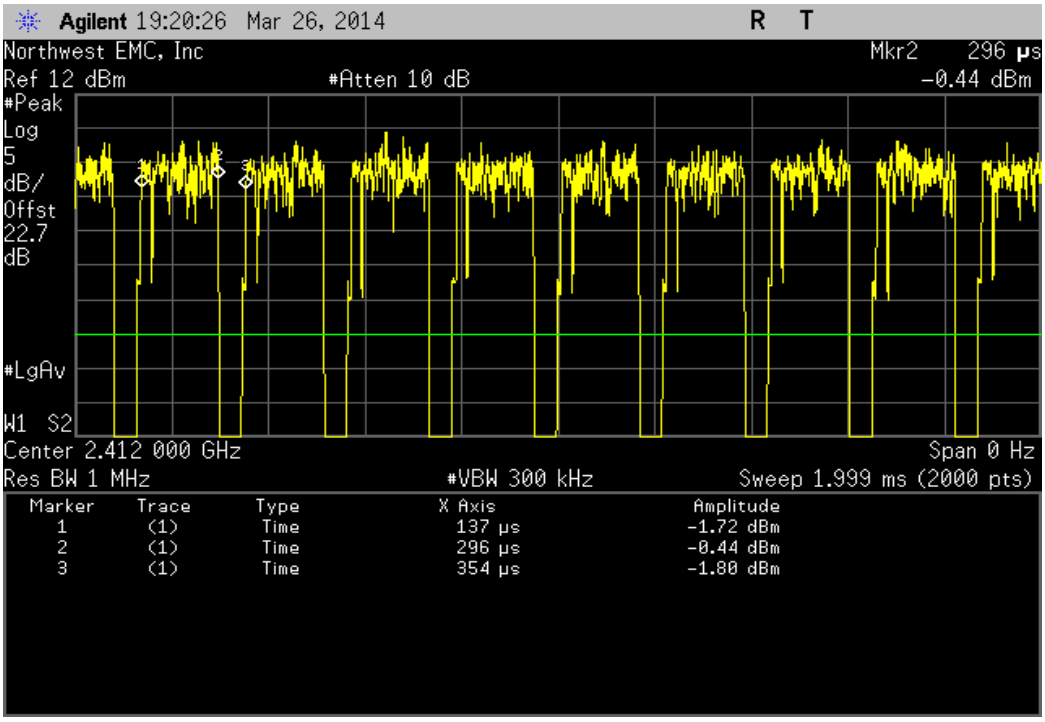


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

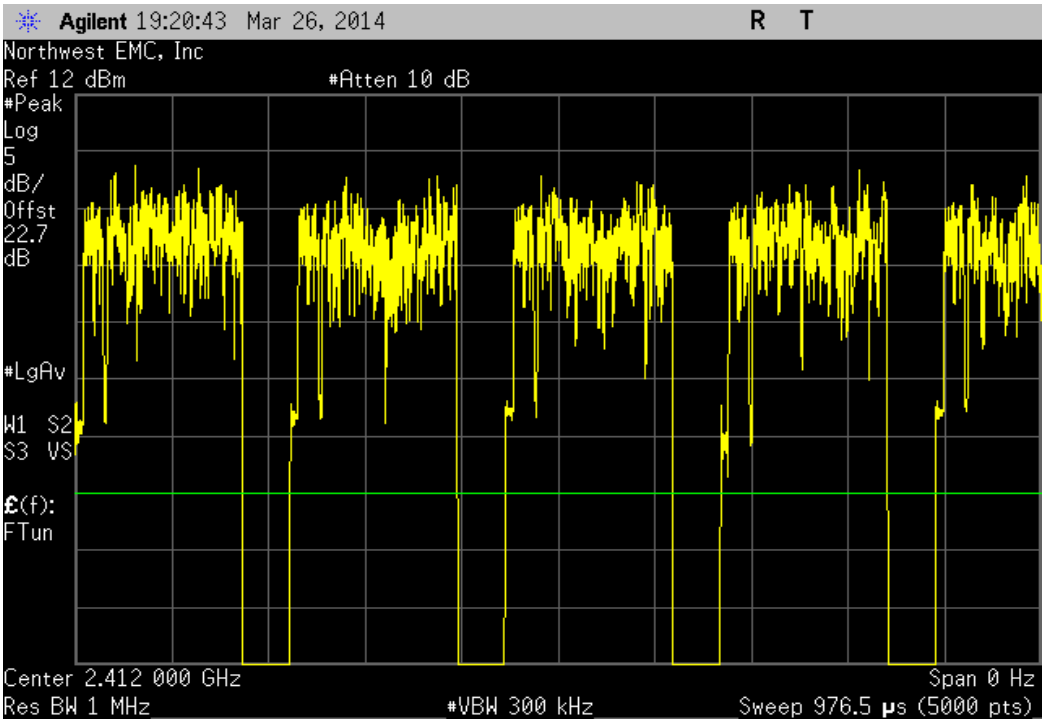
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	159 uS	217 uS	1	73.3	N/A	N/A

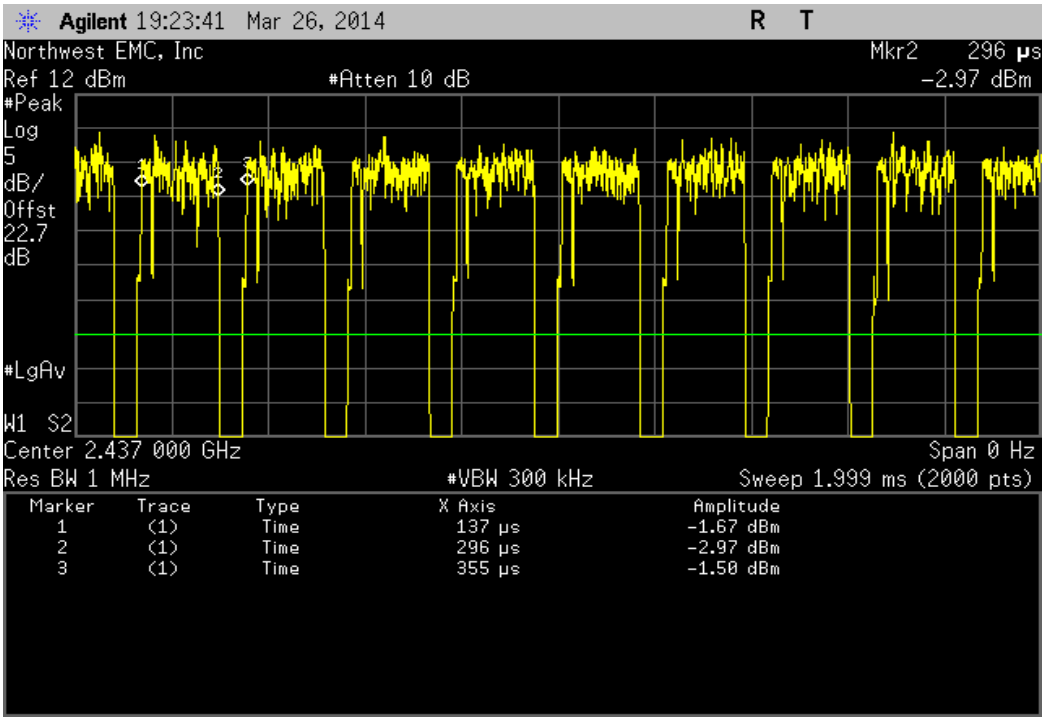


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

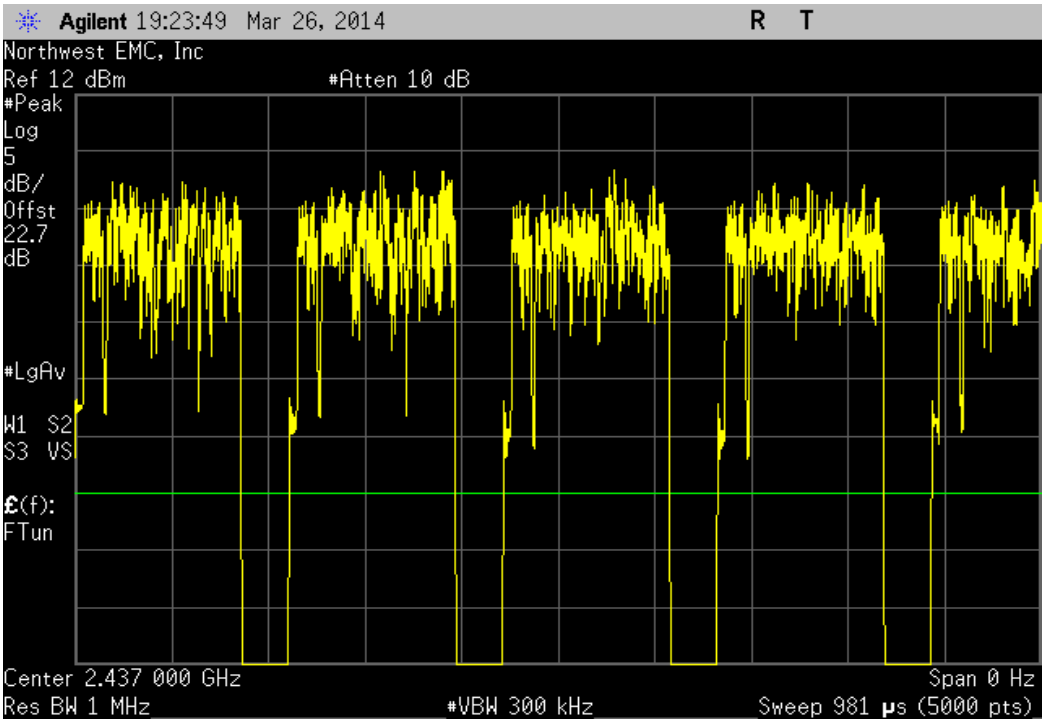


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	159 uS	218 uS	1	72.9	N/A	N/A

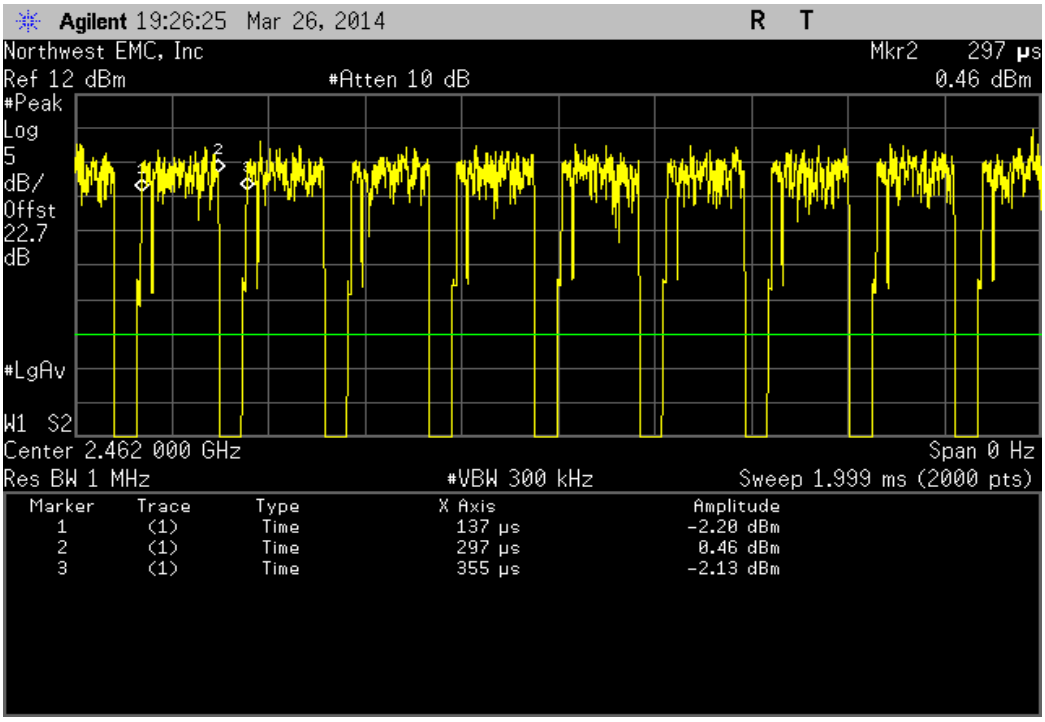


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A

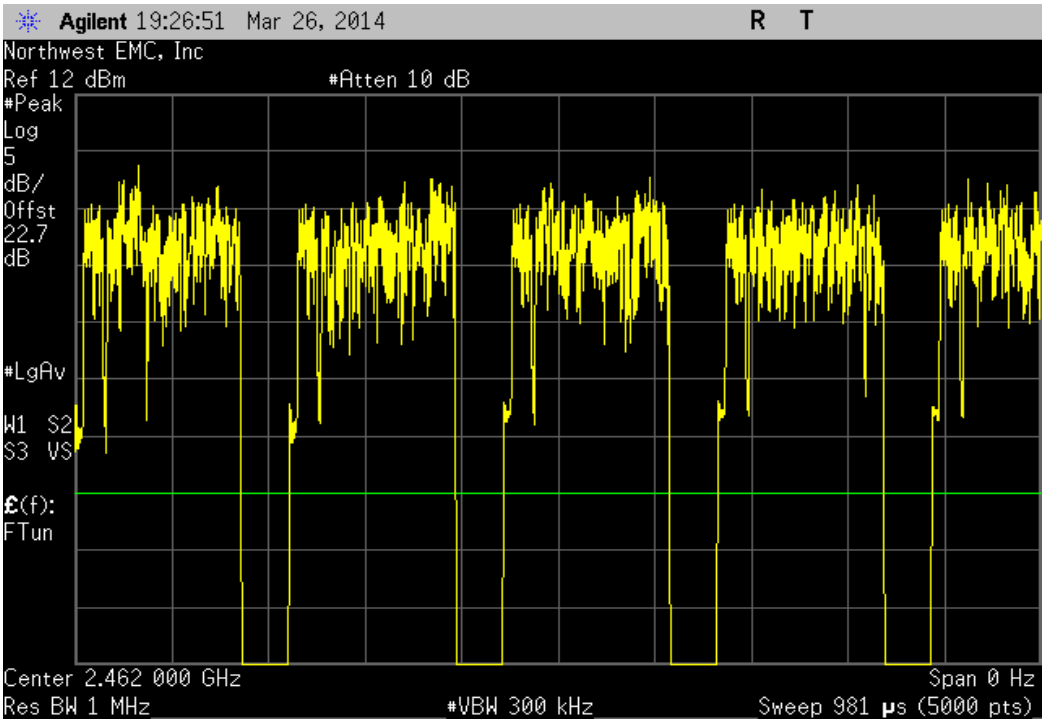


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	160 uS	218 uS	1	73.4	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



OCCUPIED BANDWIDTH

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

The 6dB occupied bandwidth was measured using 100 kHz resolution bandwidth and 300 kHz video bandwidth. The 99.9% (approximate 26 dB) emission bandwidth (EBW) was also measured at the same time.

The EUT was set to low, medium and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet.

OCCUPIED BANDWIDTH

EUT:	GQ110			**Work Order:**	INTE5431
Serial Number:	EZF83450005Z			**Date:**	03/26/14
Customer:	Intel Corporation			**Temperature:**	21.7°C
Attendees:	None			**Humidity:**	39%
Project:	GQ110			**Barometric Pres.:**	1001.8
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2014	ANSI C63.10:2009

COMMENTS

Mode of operation tested were client provided.

DEVIATIONS FROM TEST STANDARD

None

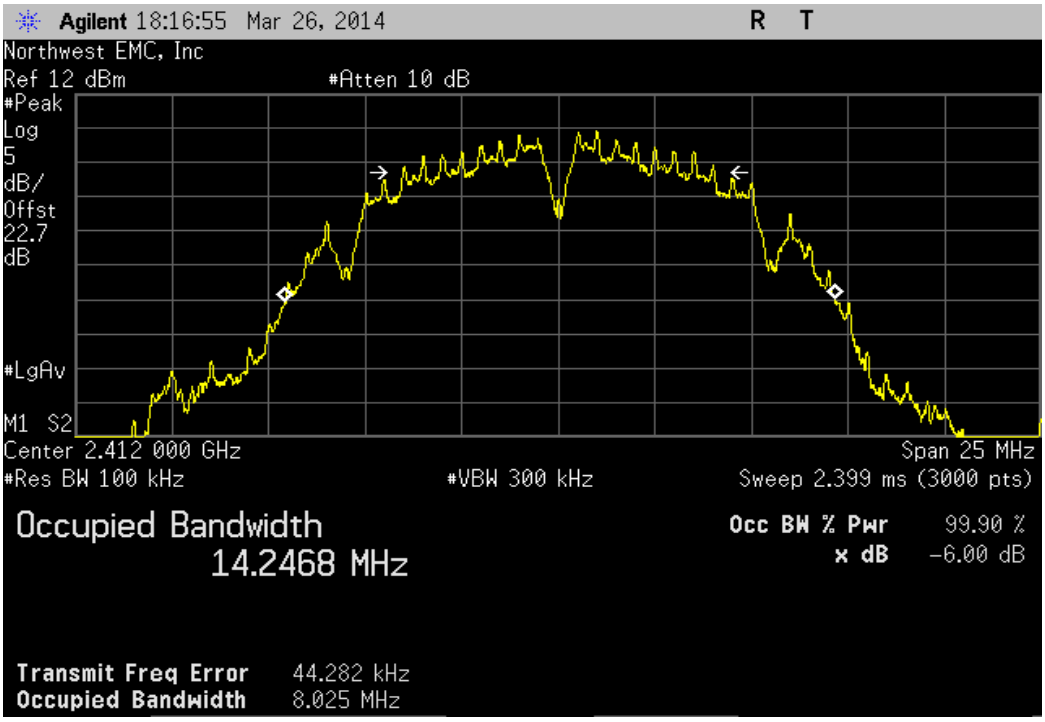
Configuration #	1	Signature

	Value	Limit	Result
2400 MHz - 2483.5 MHz Band			
802.11(b) 1 Mbps			
Low Channel 1, 2412 MHz	8.025 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	7.946 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	7.735 MHz	> 500 kHz	Pass
802.11(b) 11 Mbps			
Low Channel 1, 2412 MHz	7.749 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	7.766 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	7.119 MHz	> 500 kHz	Pass
802.11(g) 6 Mbps			
Low Channel 1, 2412 MHz	13.144 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	14.844 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	15.956 MHz	> 500 kHz	Pass
802.11(g) 36 Mbps			
Low Channel 1, 2412 MHz	16.084 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	16.302 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	15.951 MHz	> 500 kHz	Pass
802.11(g) 54 Mbps			
Low Channel 1, 2412 MHz	15.361 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	15.953 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	16.265 MHz	> 500 kHz	Pass
802.11(n) MCS0			
Low Channel 1, 2412 MHz	14.429 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	14.937 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	16.062 MHz	> 500 kHz	Pass
802.11(n) MCS7			
Low Channel 1, 2412 MHz	15.93 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	16.276 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	17.377 MHz	> 500 kHz	Pass

OCCUPIED BANDWIDTH

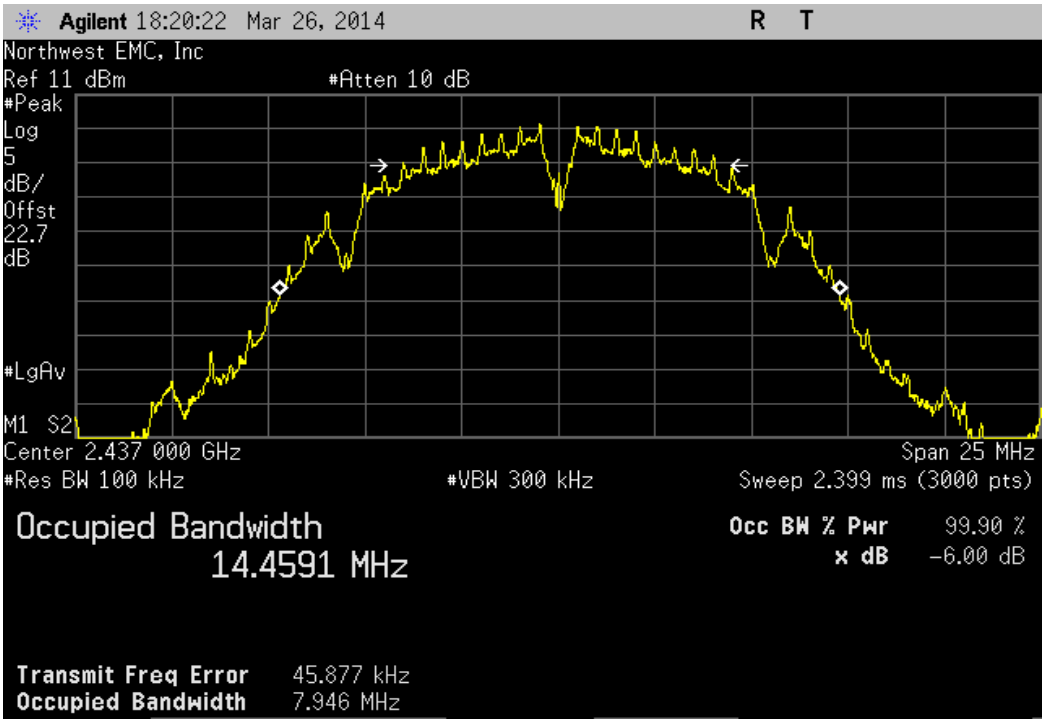
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				8.025 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

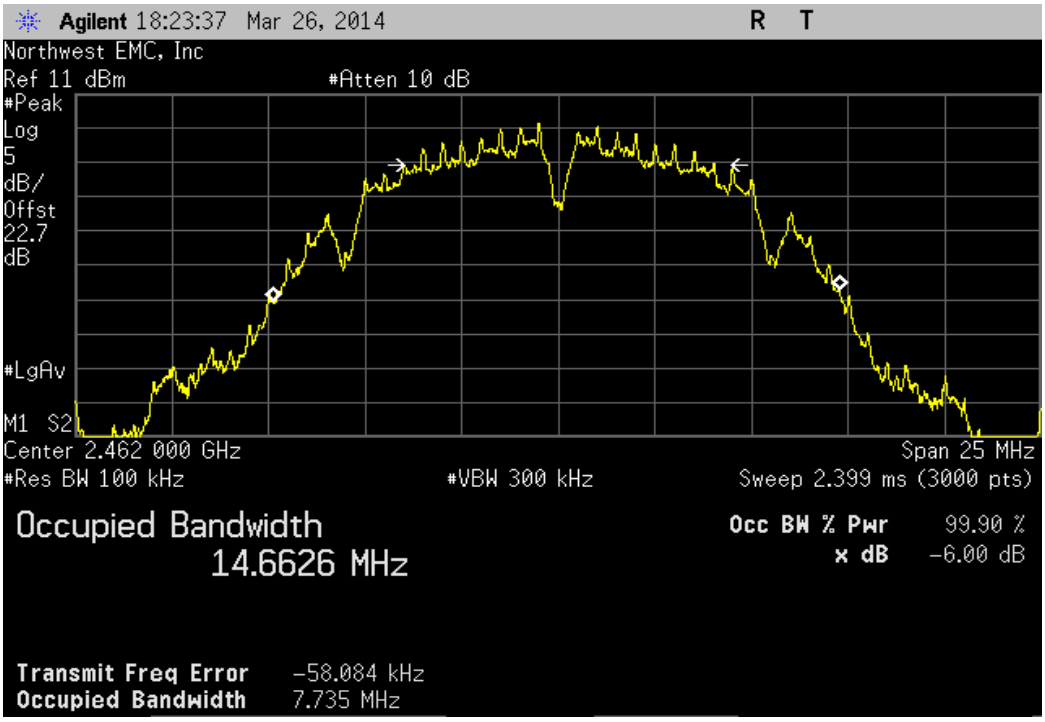
				Value	Limit	Result
				7.946 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

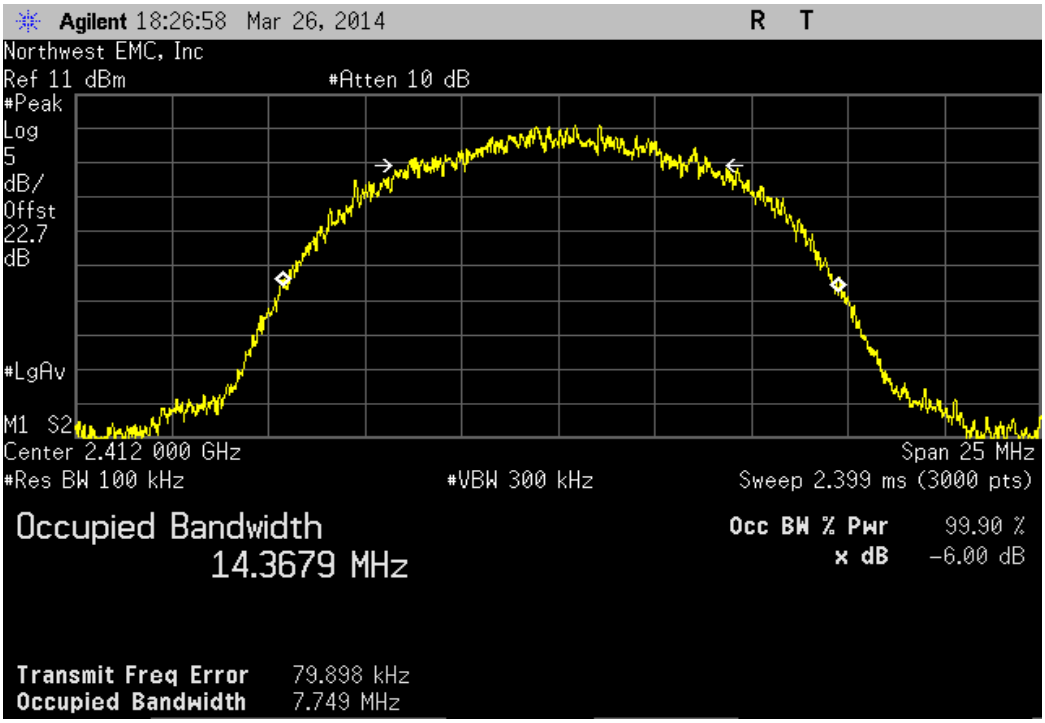
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

				Value	Limit	Result
				7.735 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

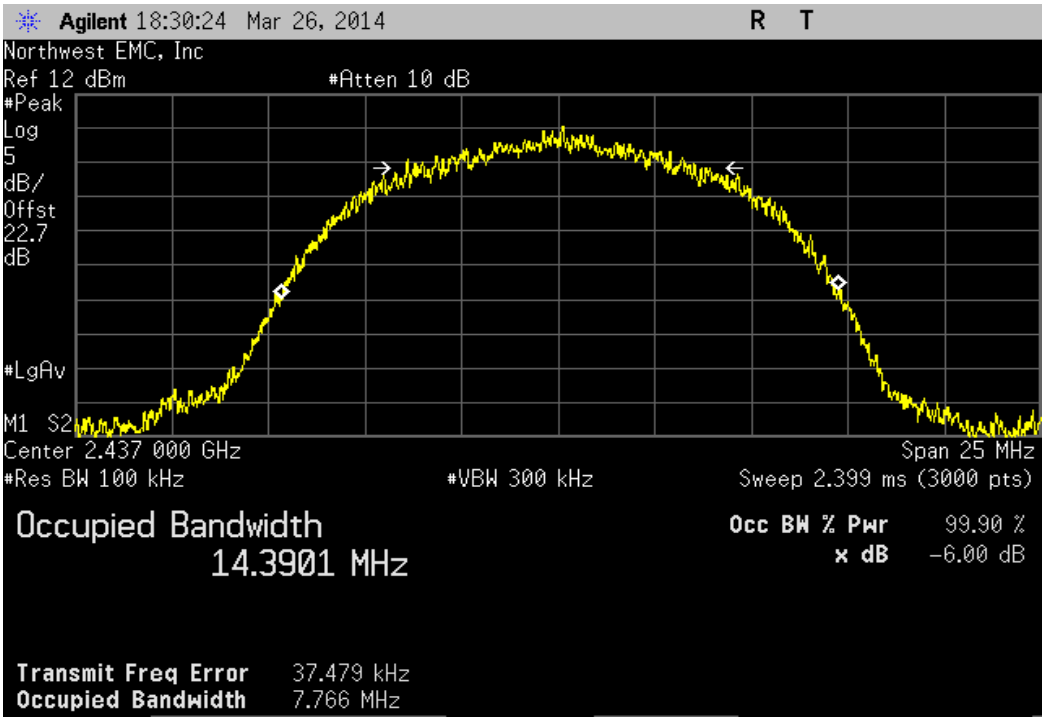
				Value	Limit	Result
				7.749 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

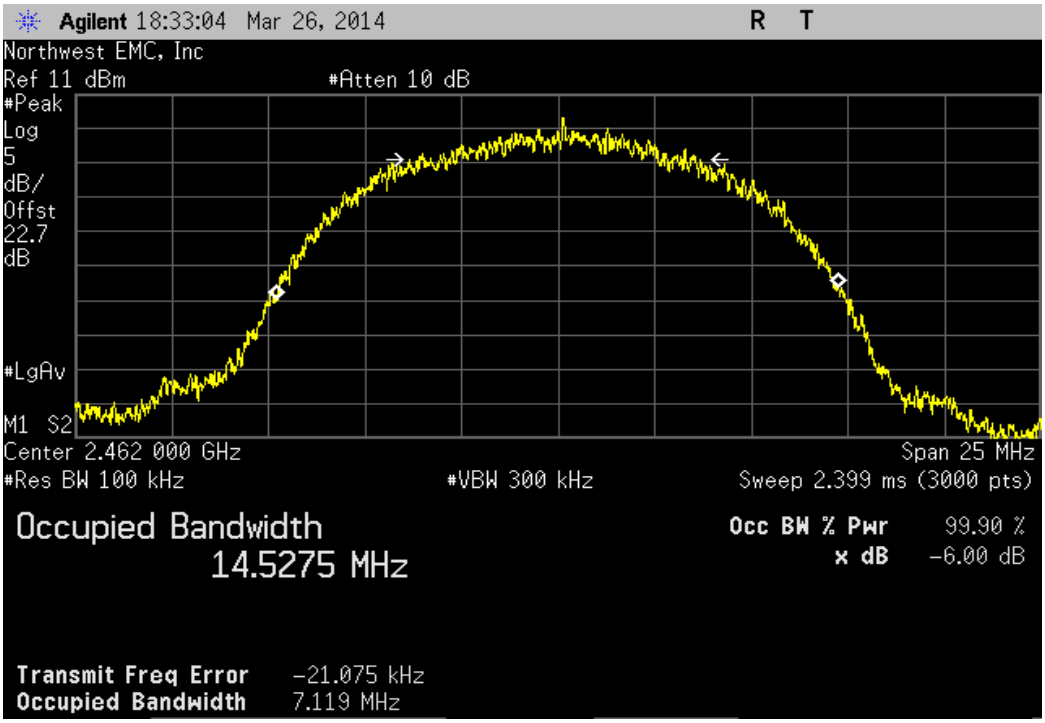
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				7.766 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

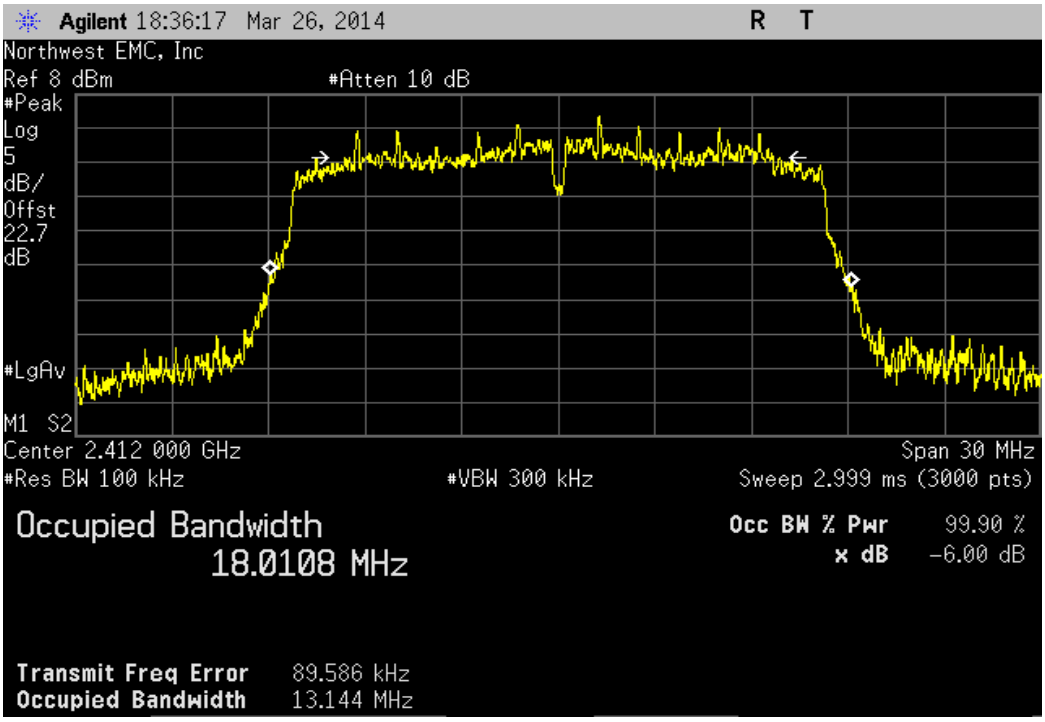
				Value	Limit	Result
				7.119 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

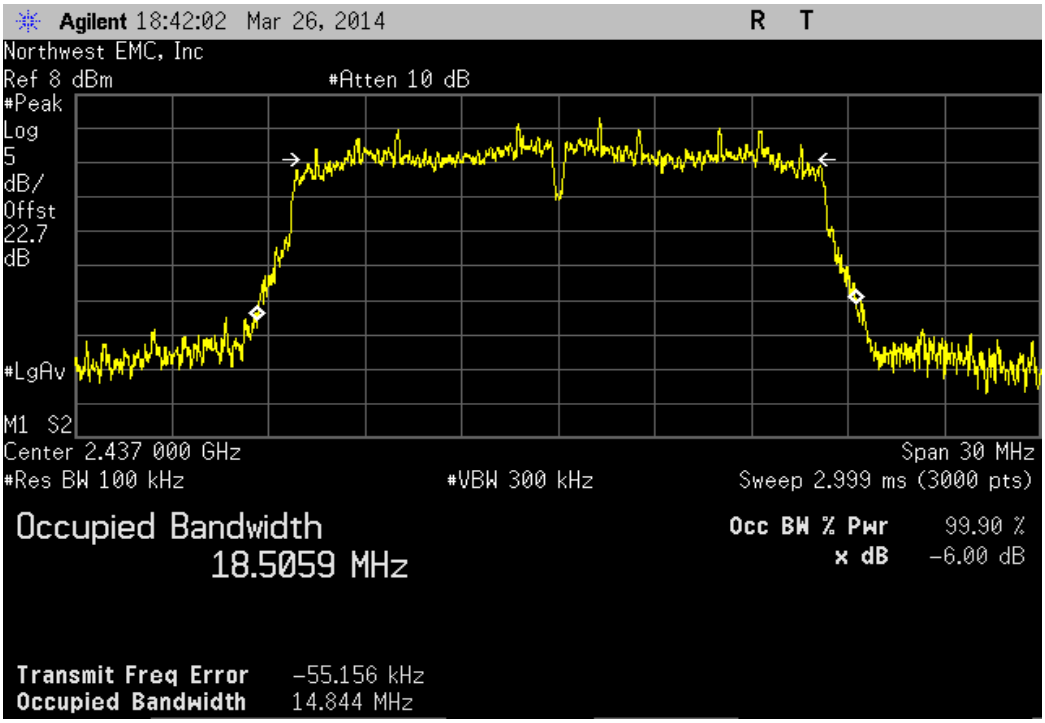
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				13.144 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

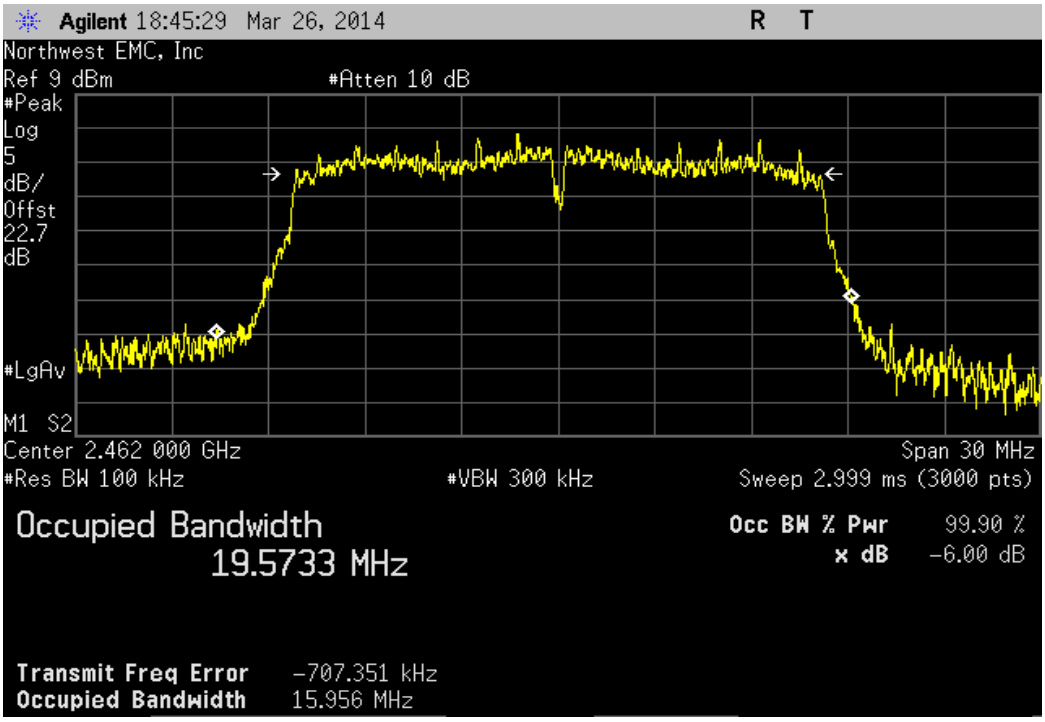
				Value	Limit	Result
				14.844 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

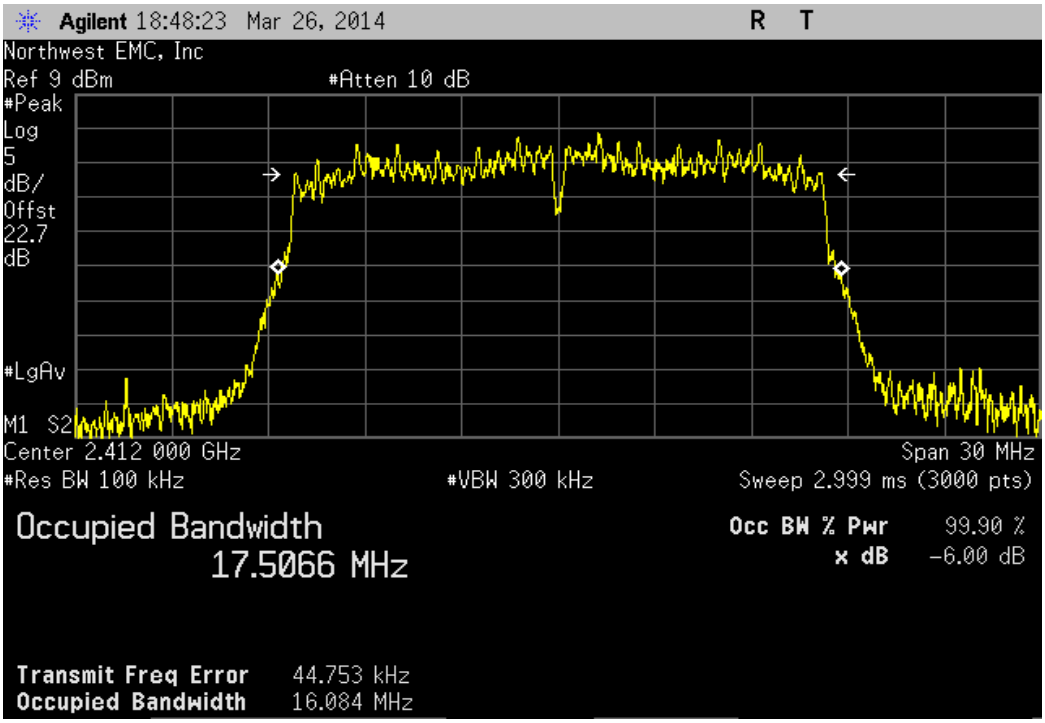
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

				Value	Limit	Result
				15.956 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

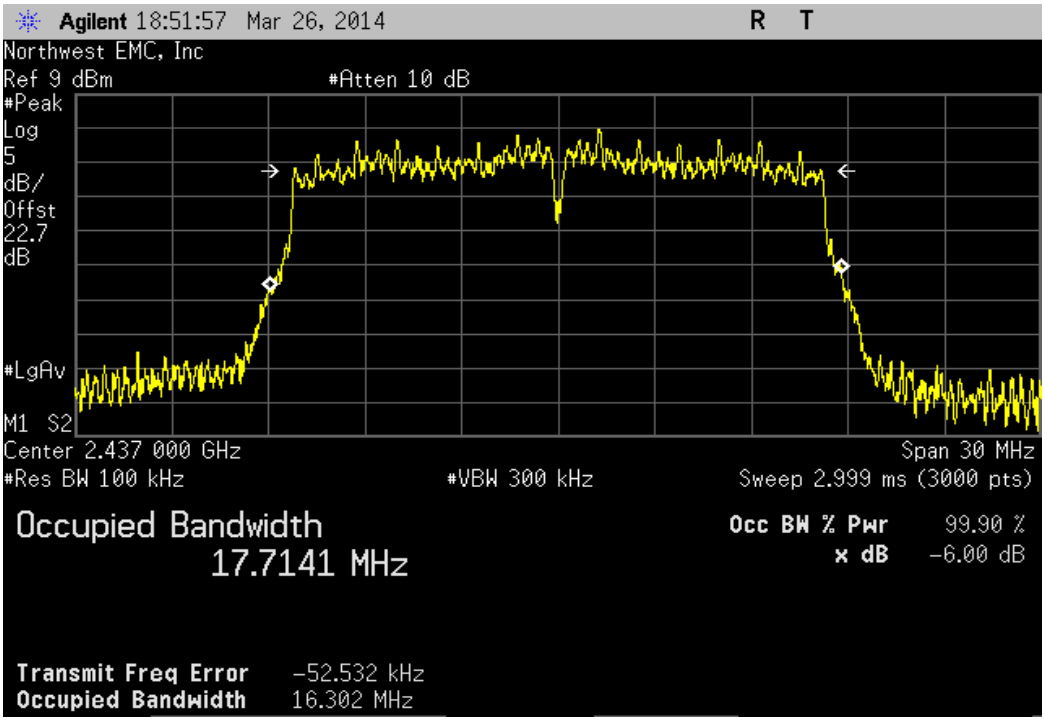
				Value	Limit	Result
				16.084 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

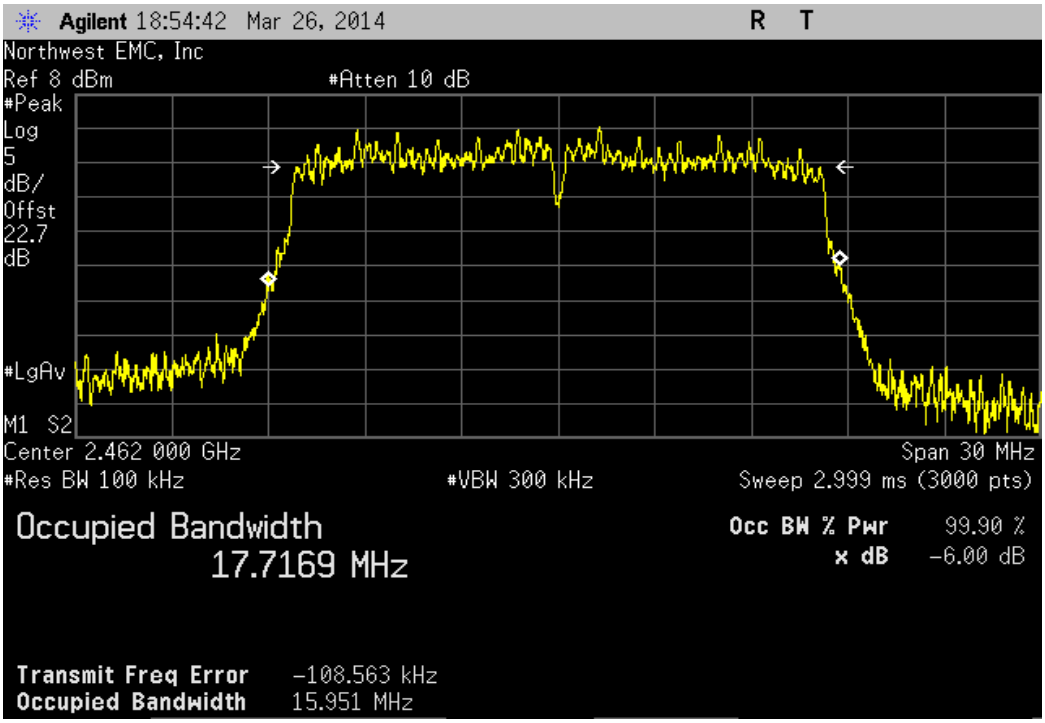
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				16.302 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

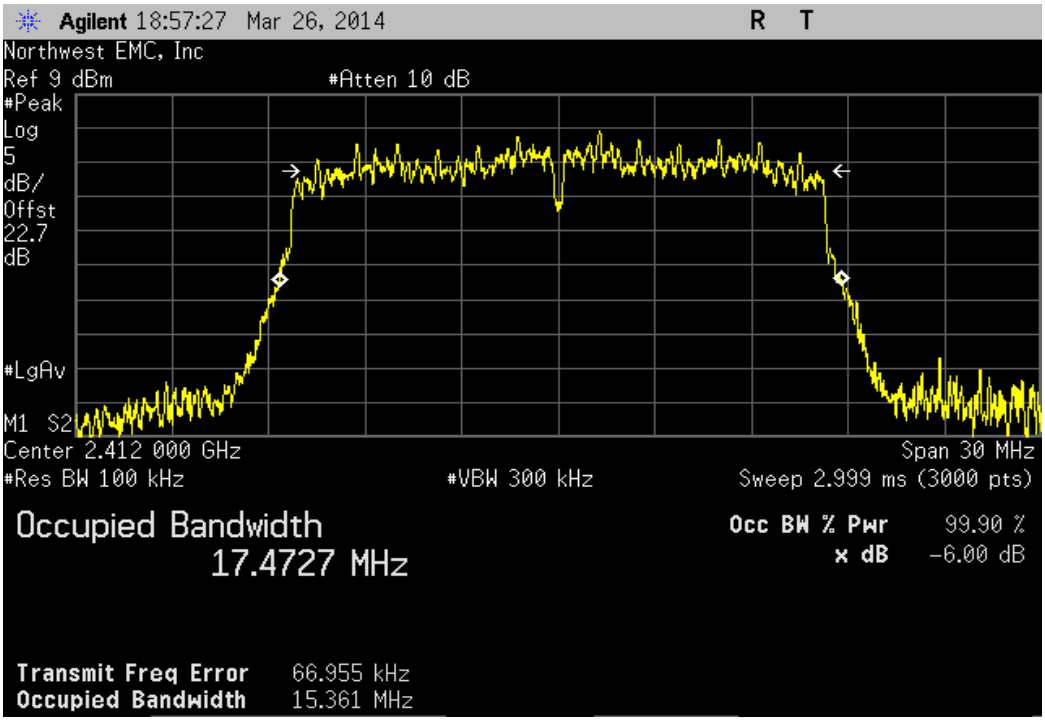
				Value	Limit	Result
				15.951 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

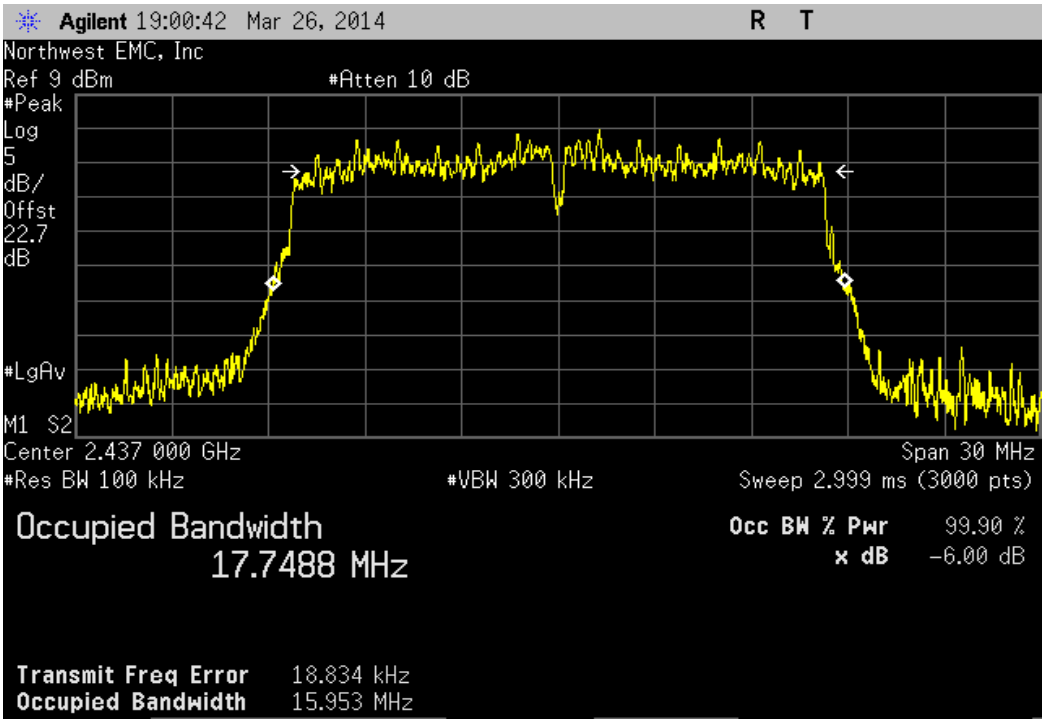
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				15.361 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz

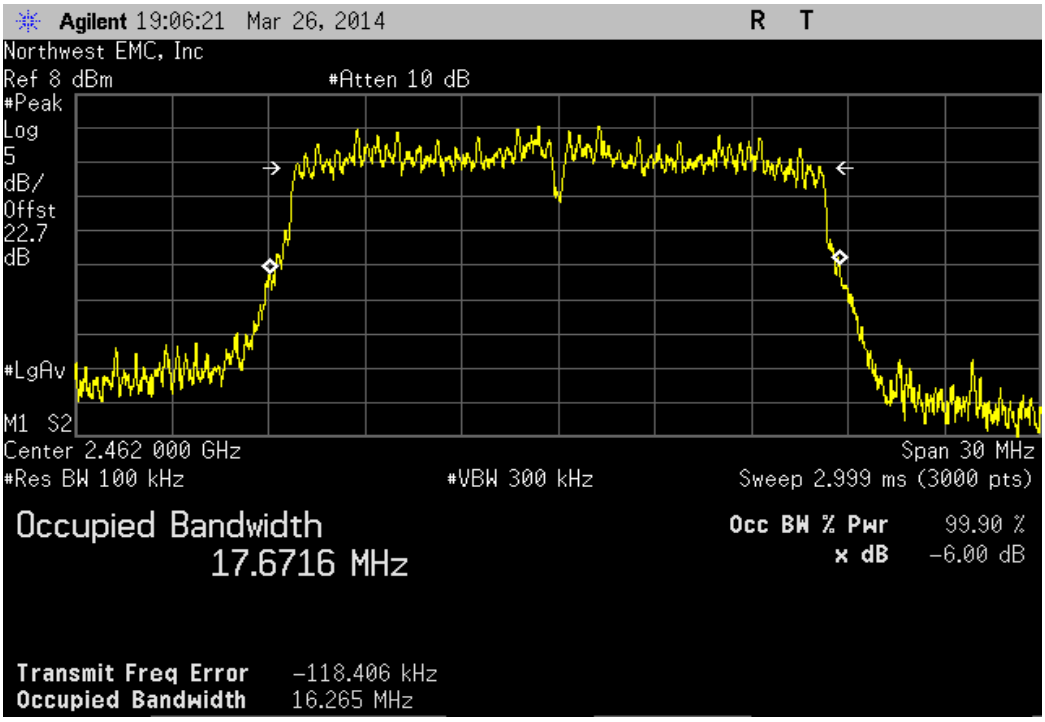
				Value	Limit	Result
				15.953 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

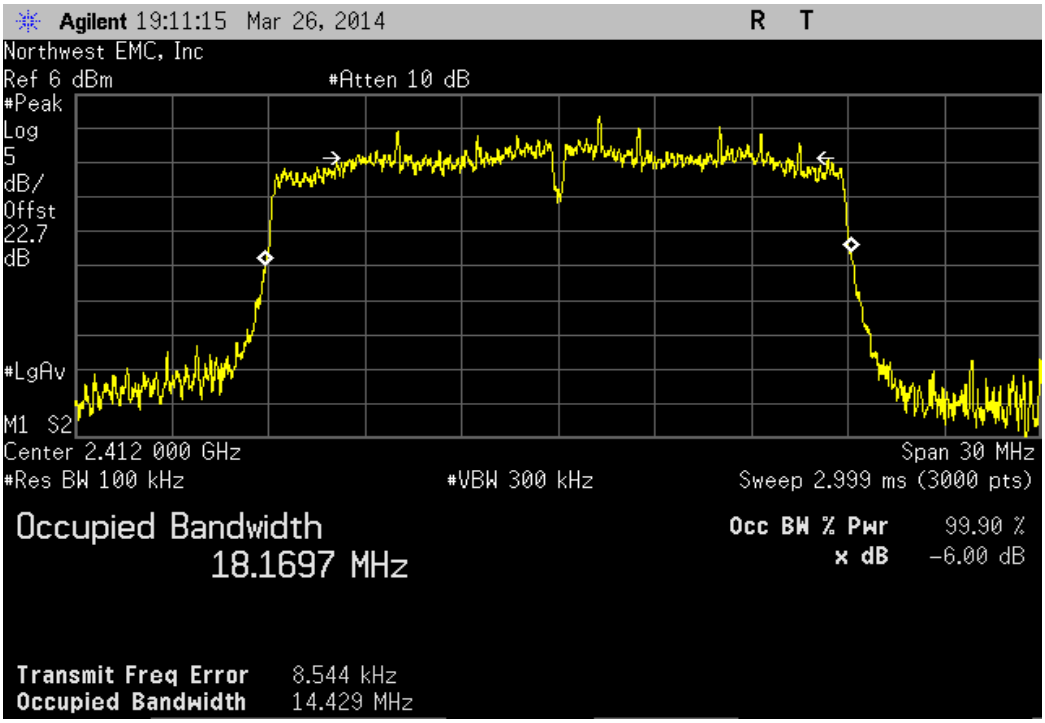
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

				Value	Limit	Result
				16.265 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

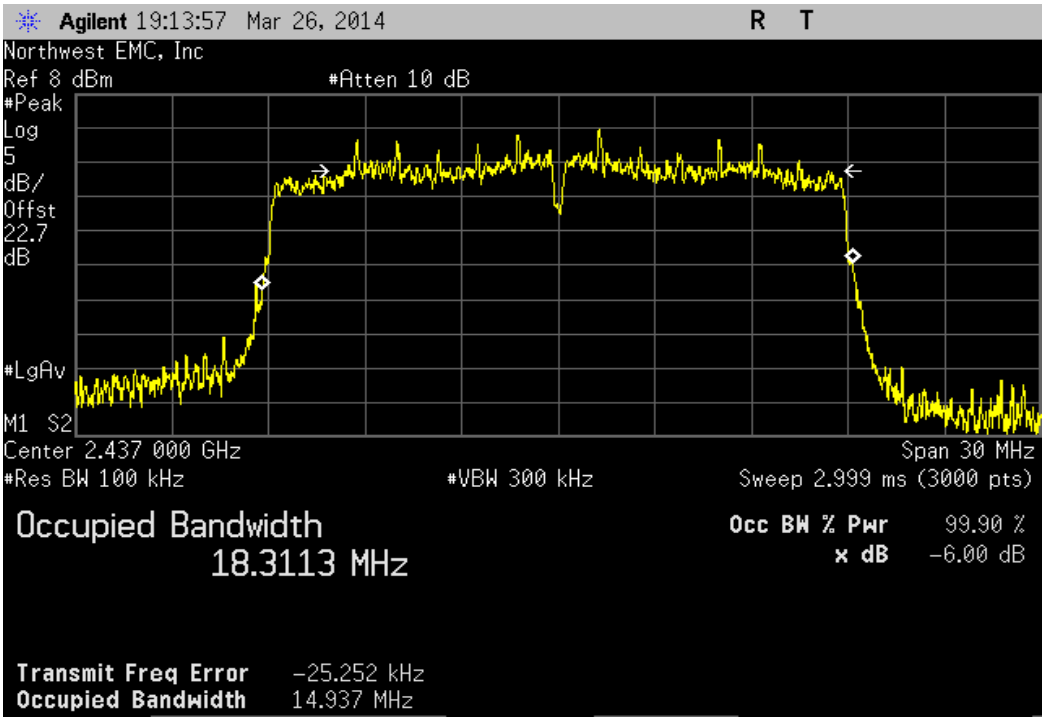
				Value	Limit	Result
				14.429 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

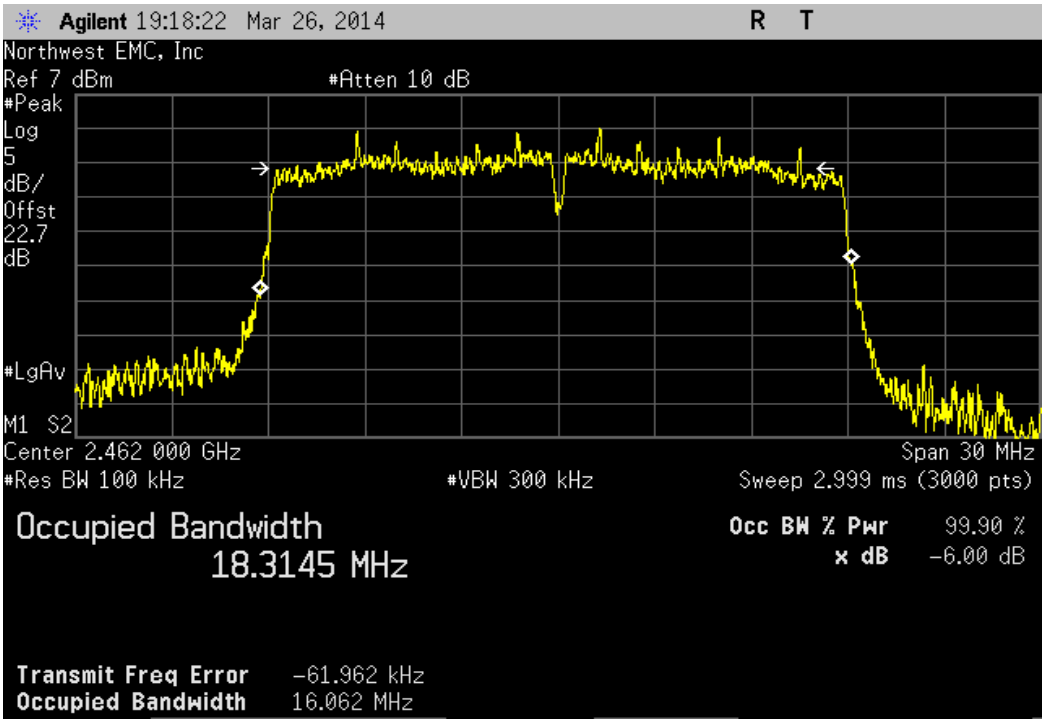
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				14.937 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

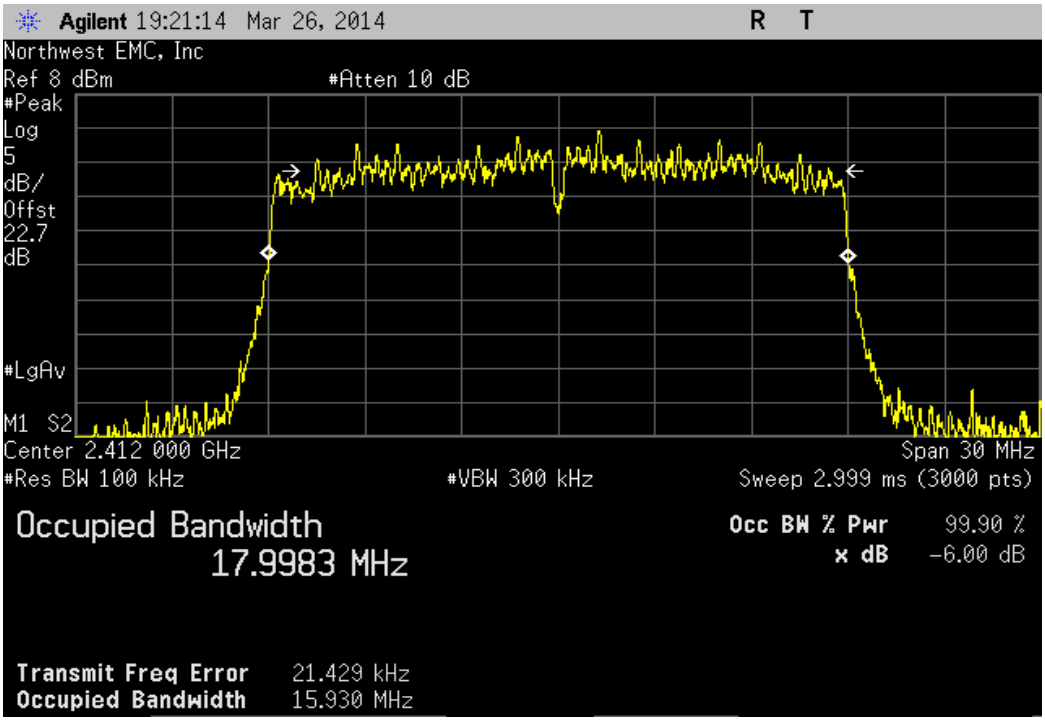
				Value	Limit	Result
				16.062 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

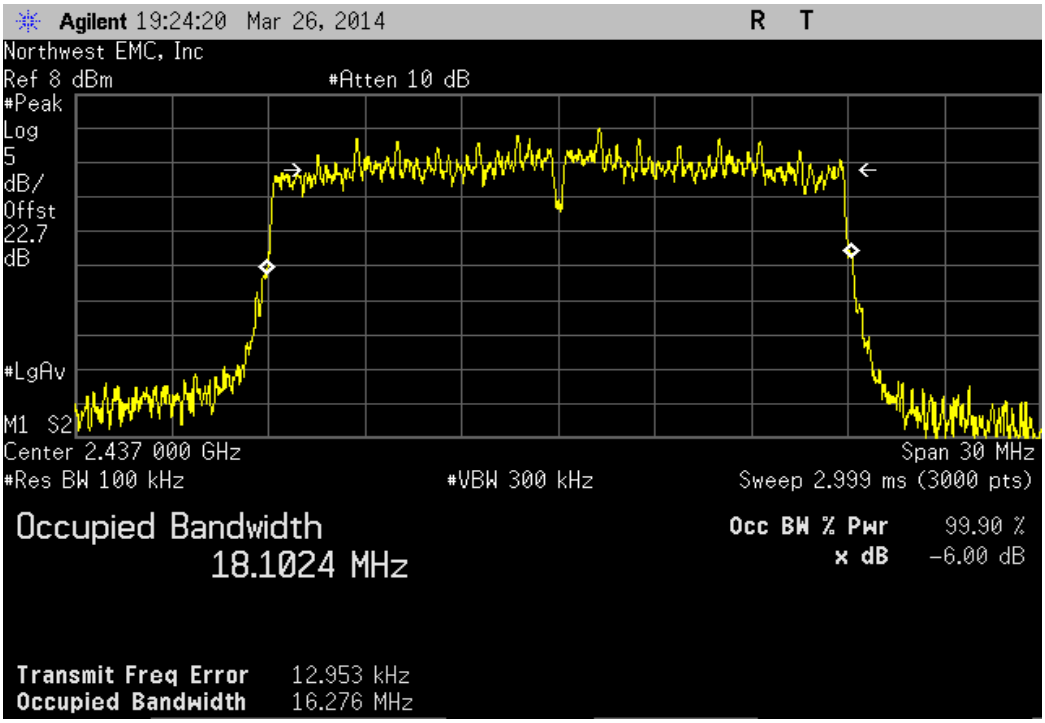
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

				Value	Limit	Result
				15.93 MHz	> 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

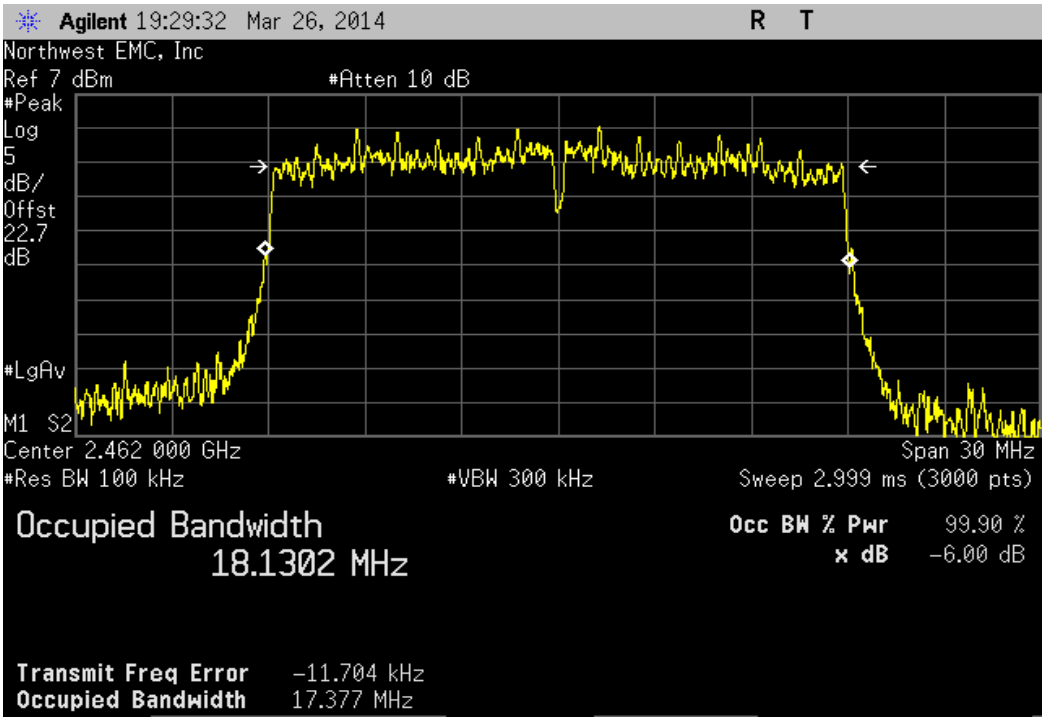
				Value	Limit	Result
				16.276 MHz	> 500 kHz	Pass



OCCUPIED BANDWIDTH

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

				Value	Limit	Result
				17.377 MHz	> 500 kHz	Pass



OUTPUT POWER

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

Prior to measuring peak transmit power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring Maximum Conducted Output Power. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The channel power integration method found in KDB 558074 DTS D01 Measurement Section 9.1.2 was used because the DTS Bandwidth of the radio was greater than the RBW on the analyzer.

OUTPUT POWER

EUT:	GQ110			**Work Order:**	INTE5431
Serial Number:	EZF83450005Z			**Date:**	03/26/14
Customer:	Intel Corporation			**Temperature:**	21.7°C
Attendees:	None			**Humidity:**	39%
Project:	GQ110			**Barometric Pres.:**	1001.8
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2014	ANSI C63.10:2009

COMMENTS

Mode of operation tested were client provided.

DEVIATIONS FROM TEST STANDARD

None

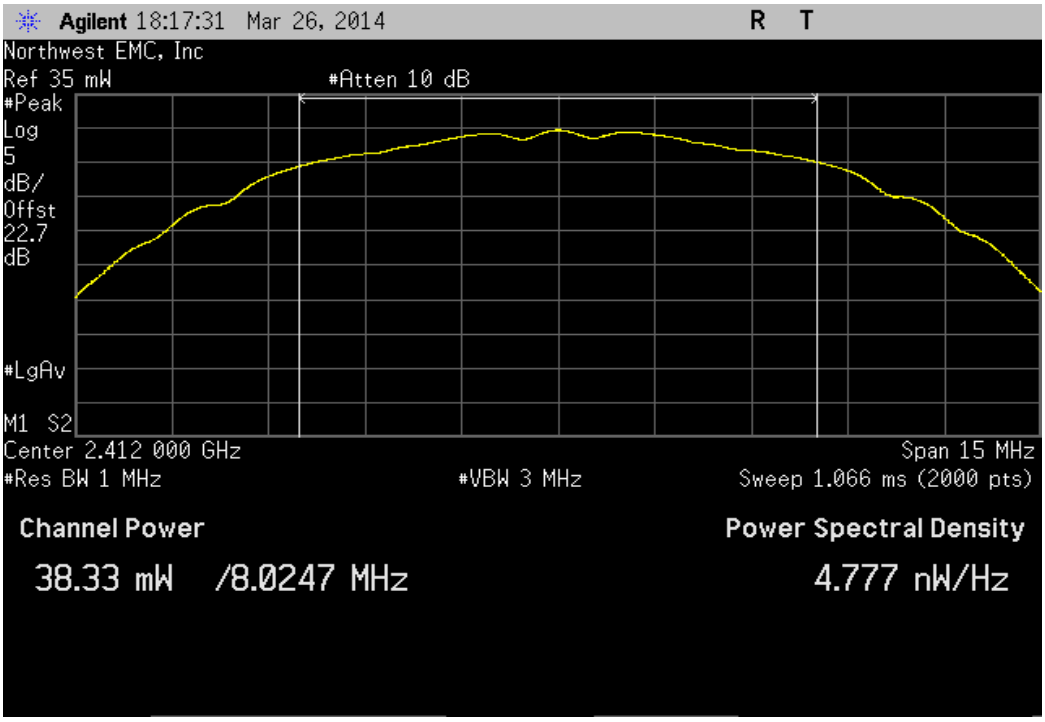
Configuration #	1	Signature

		Value	Limit	Result
2400 MHz - 2483.5 MHz Band				
	802.11(b) 1 Mbps			
	Low Channel 1, 2412 MHz	38.332 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	111.866 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	106.218 mW	< 1 W	Pass
	802.11(b) 11 Mbps			
	Low Channel 1, 2412 MHz	102.447 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	113.684 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	108.643 mW	< 1 W	Pass
	802.11(g) 6 Mbps			
	Low Channel 1, 2412 MHz	34.199 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	40.589 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	39.685 mW	< 1 W	Pass
	802.11(g) 36 Mbps			
	Low Channel 1, 2412 MHz	28.11 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	30.836 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	28.757 mW	< 1 W	Pass
	802.11(g) 54 Mbps			
	Low Channel 1, 2412 MHz	26.103 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	28.077 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	28.044 mW	< 1 W	Pass
	802.11(n) MCS0			
	Low Channel 1, 2412 MHz	23.059 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	24.837 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	24.513 mW	< 1 W	Pass
	802.11(n) MCS7			
	Low Channel 1, 2412 MHz	19.621 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	21.818 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	21.493 mW	< 1 W	Pass

OUTPUT POWER

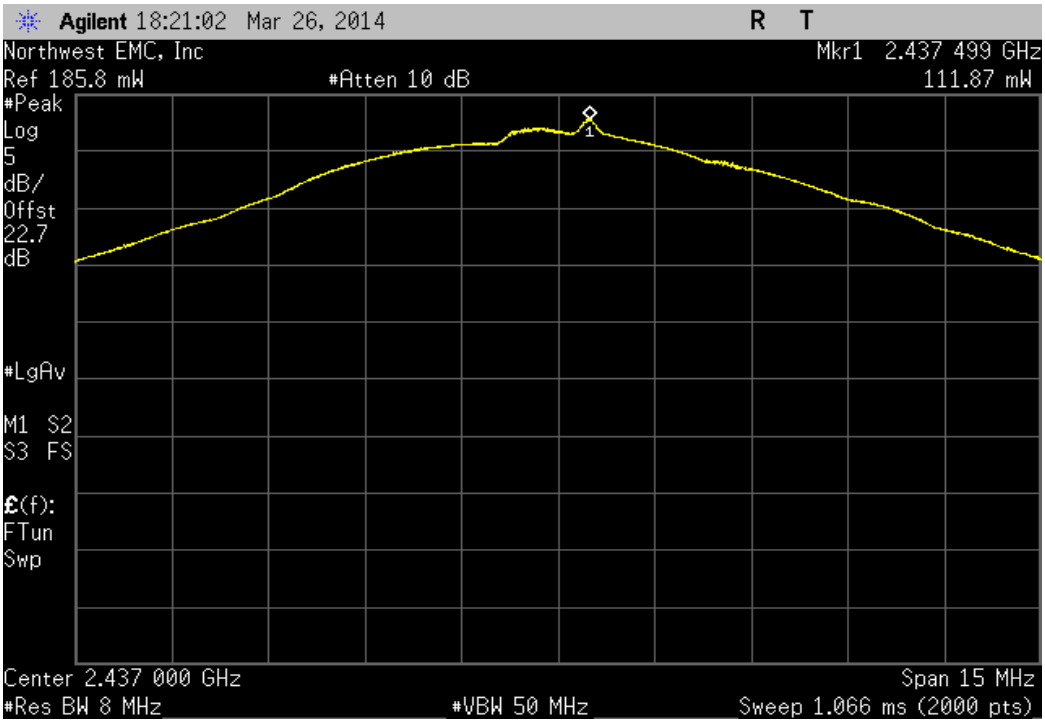
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				38.332 mW	< 1 W	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

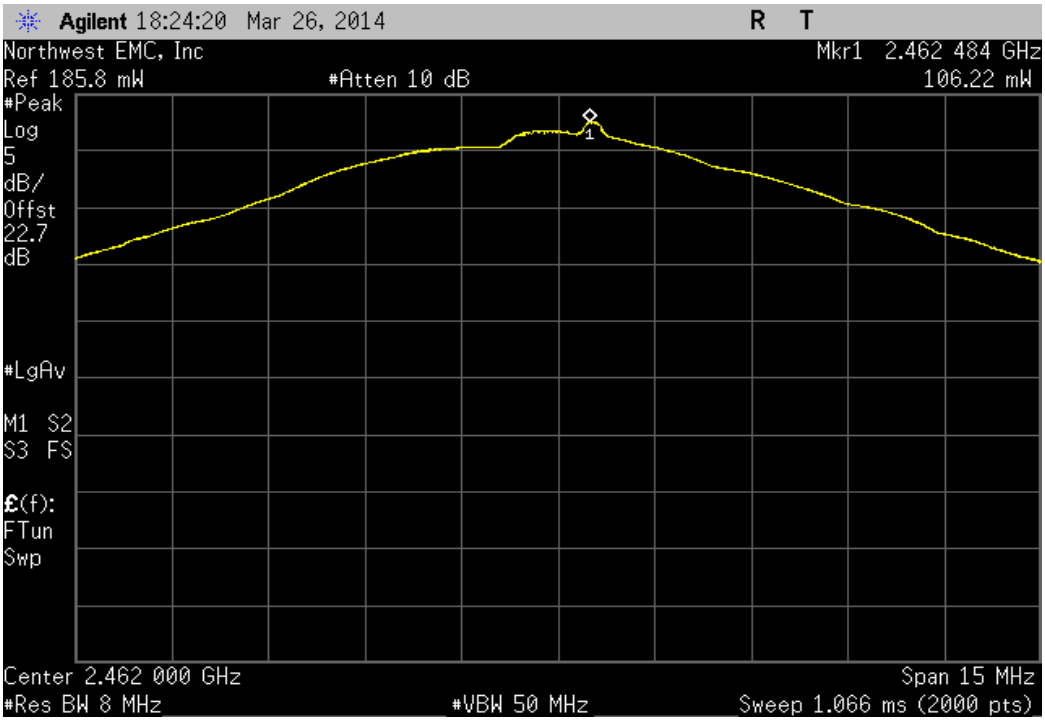
				Value	Limit	Result
				111.866 mW	< 1 W	Pass



OUTPUT POWER

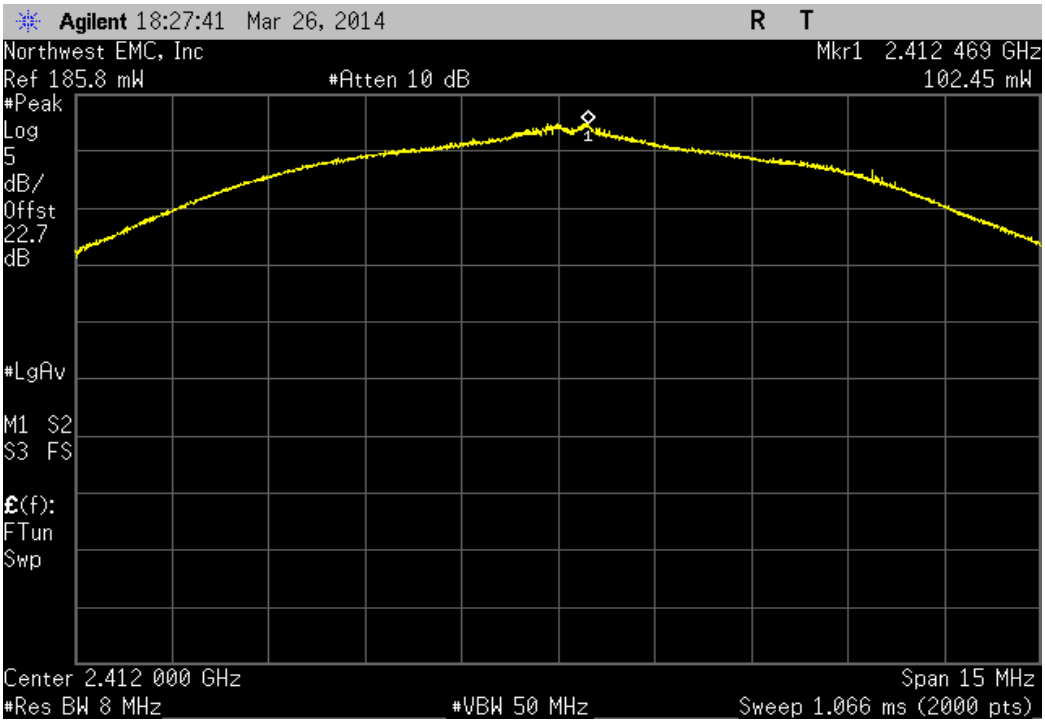
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
106.218 mW	< 1 W	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

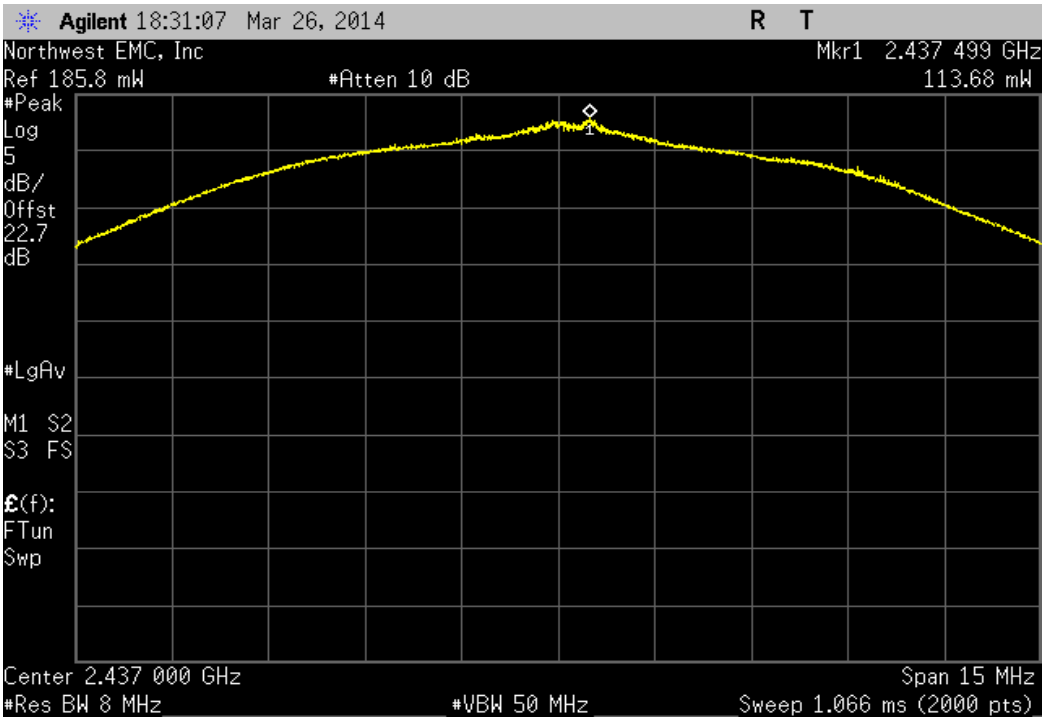
Value	Limit	Result
102.447 mW	< 1 W	Pass



OUTPUT POWER

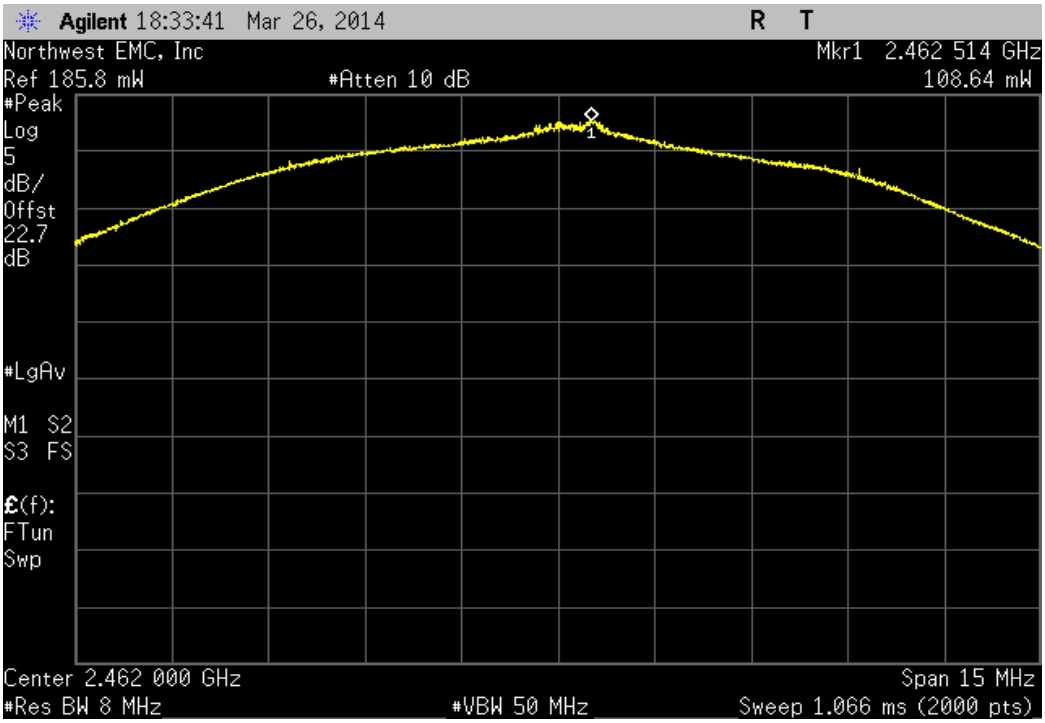
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				113.684 mW	< 1 W	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

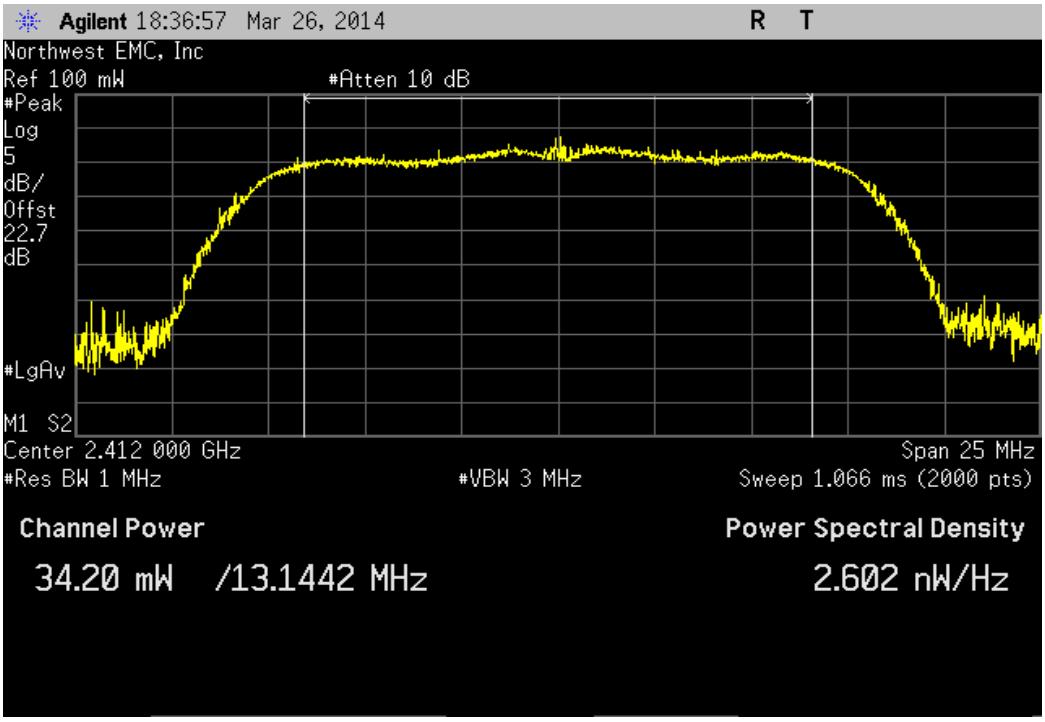
				Value	Limit	Result
				108.643 mW	< 1 W	Pass



OUTPUT POWER

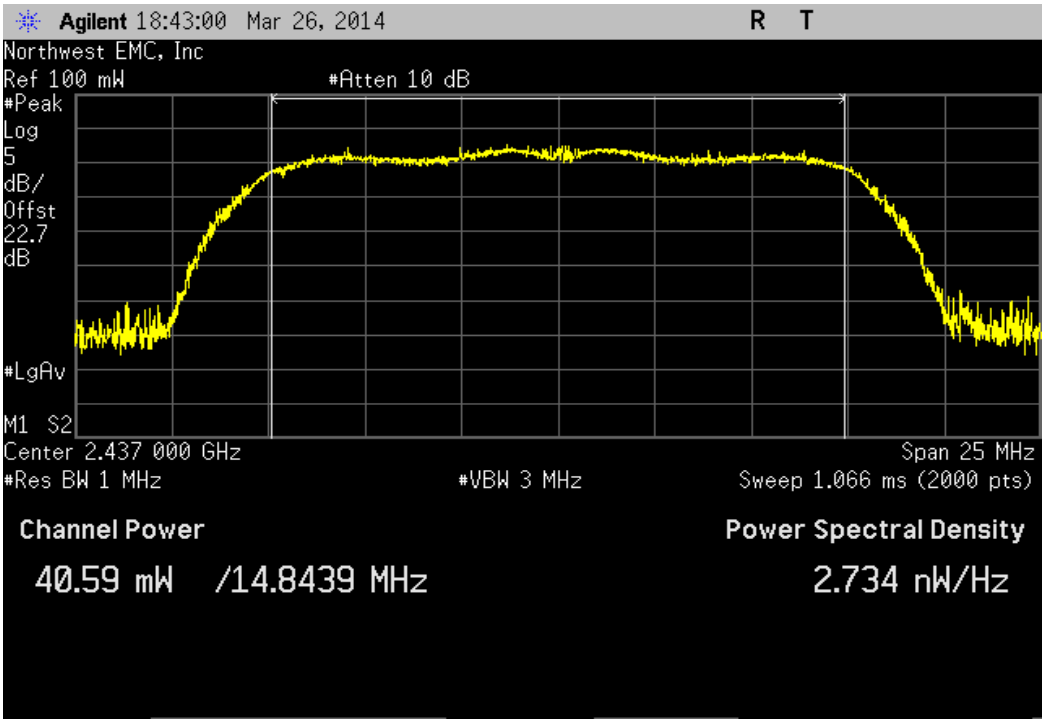
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				34.199 mW	< 1 W	Pass



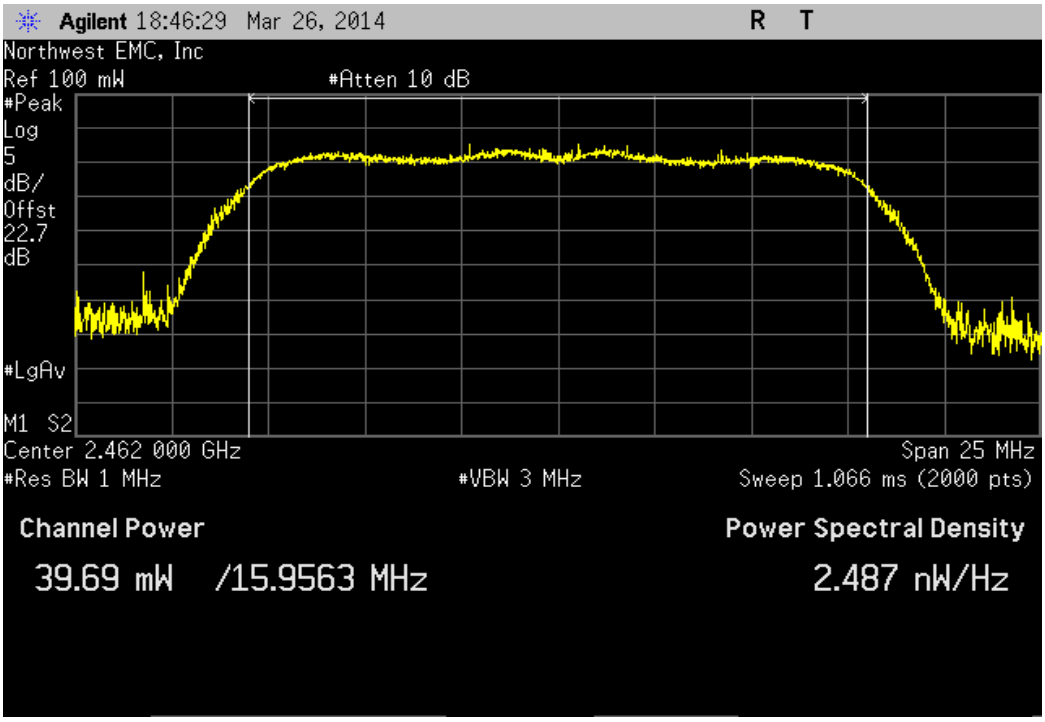
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				40.589 mW	< 1 W	Pass



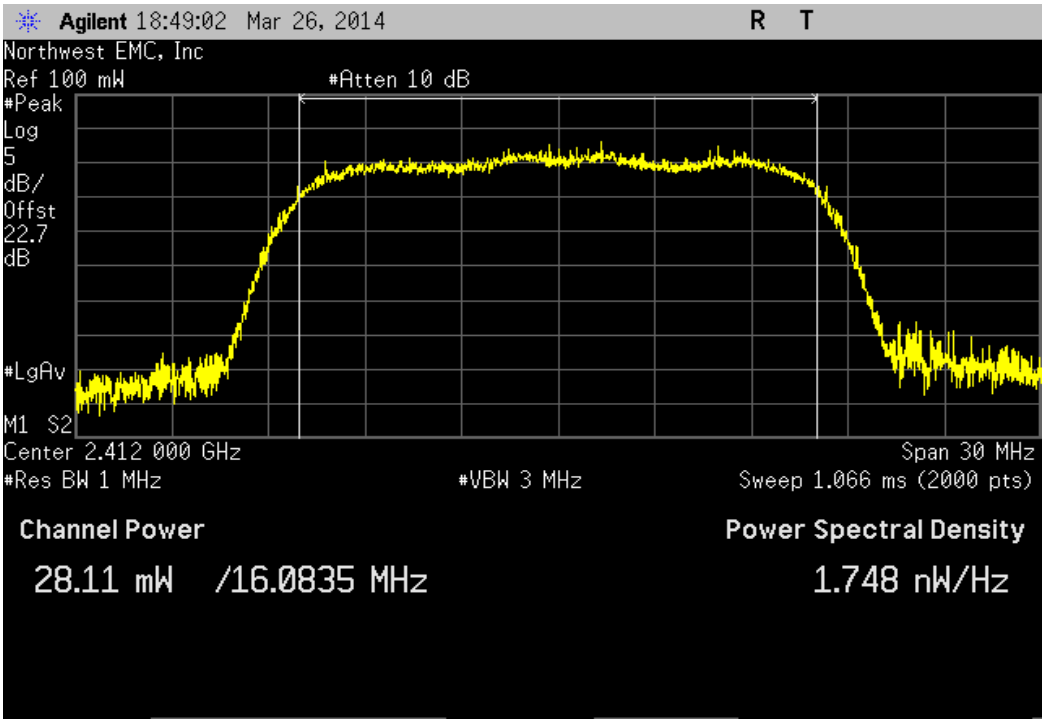
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

				Value	Limit	Result
				39.685 mW	< 1 W	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

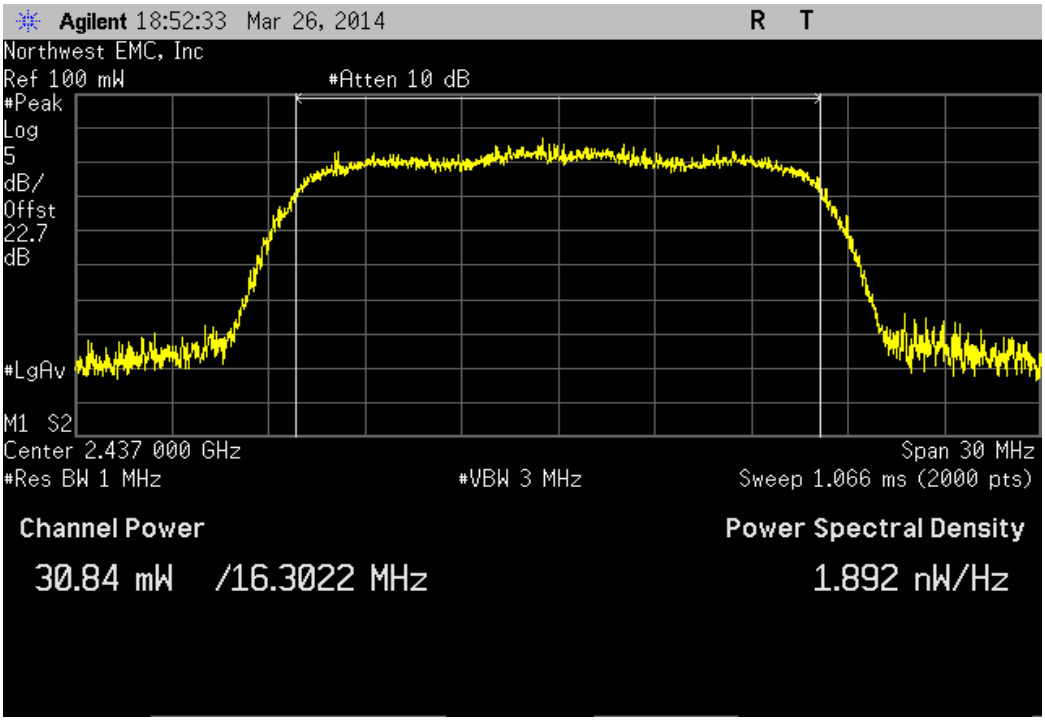
				Value	Limit	Result
				28.11 mW	< 1 W	Pass



OUTPUT POWER

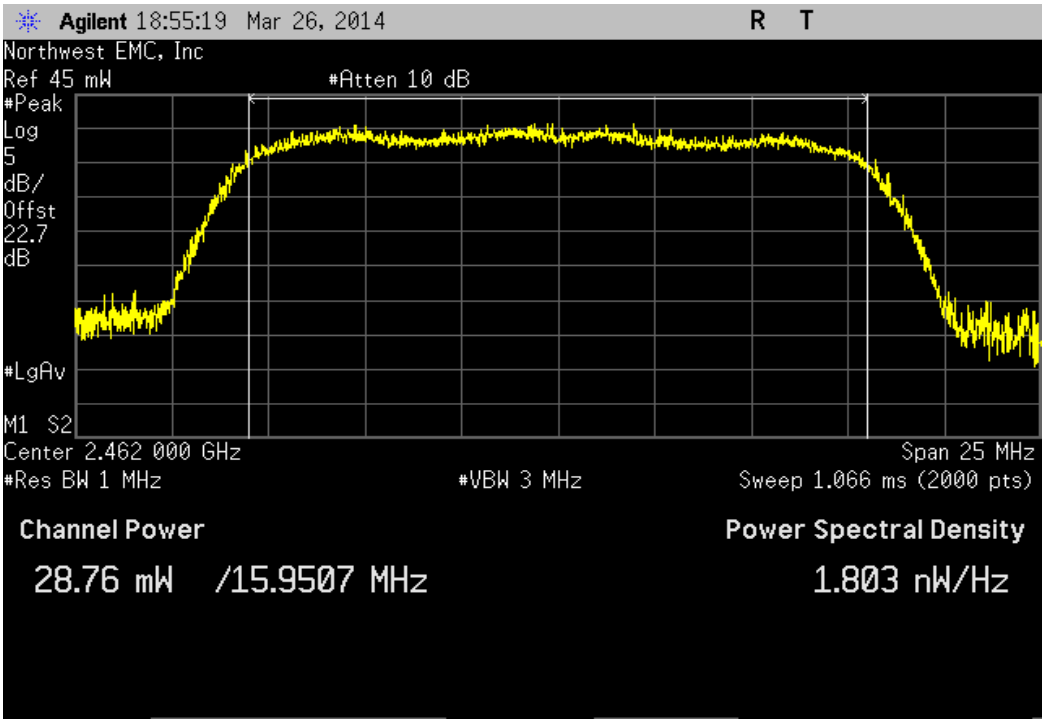
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				30.836 mW	< 1 W	Pass



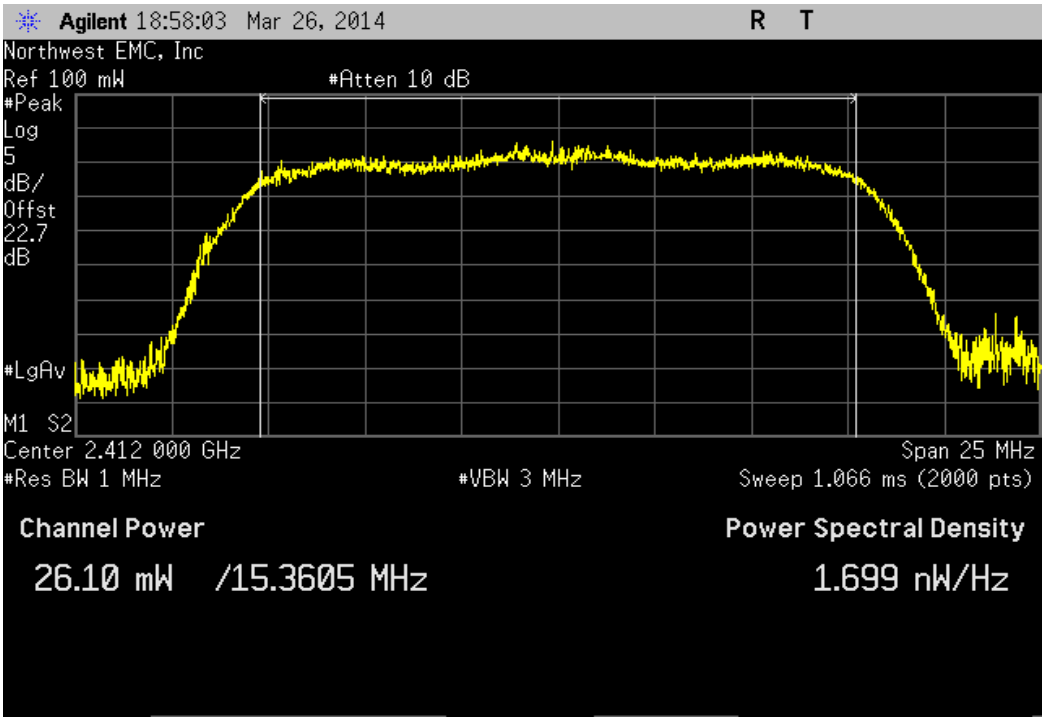
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

				Value	Limit	Result
				28.757 mW	< 1 W	Pass



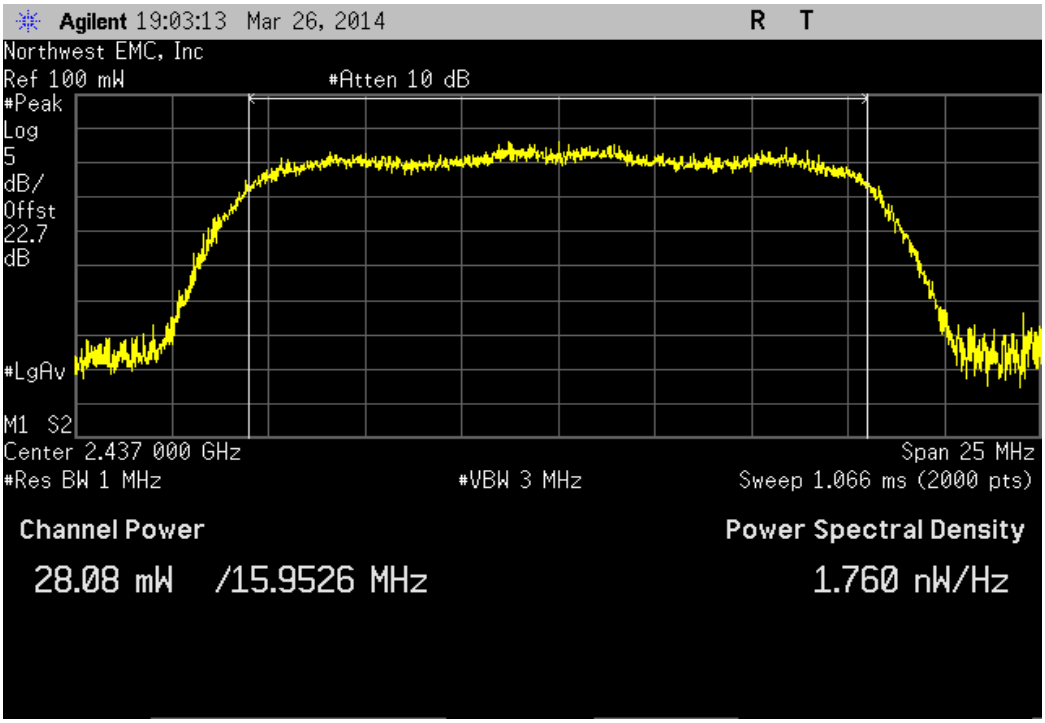
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				26.103 mW	< 1 W	Pass



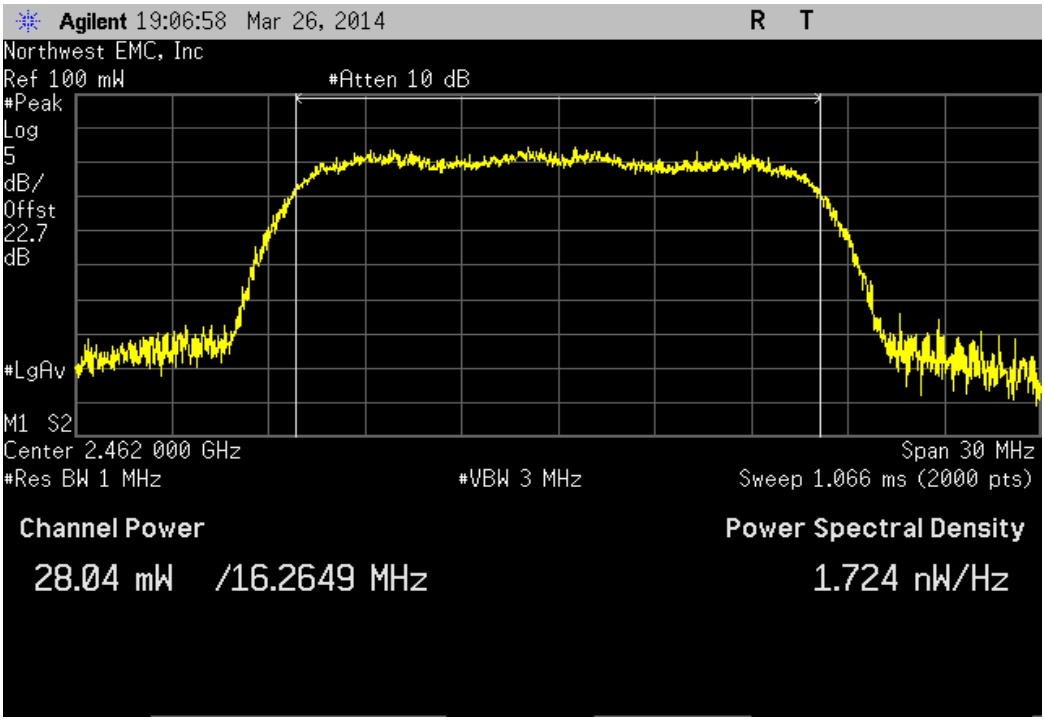
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				28.077 mW	< 1 W	Pass



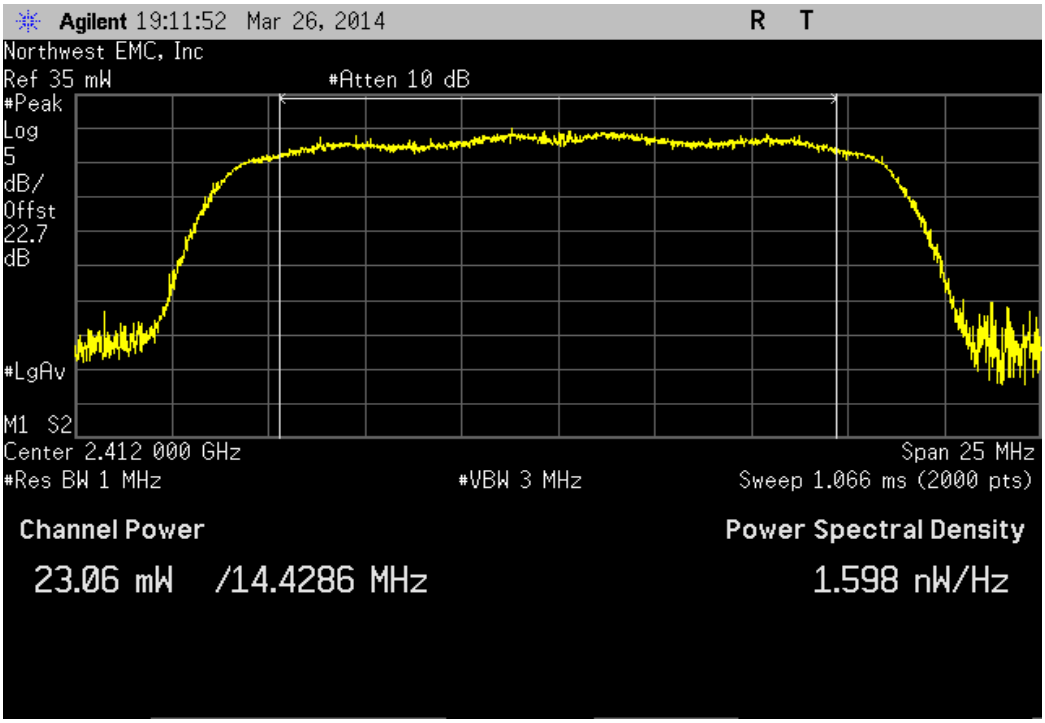
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

				Value	Limit	Result
				28.044 mW	< 1 W	Pass



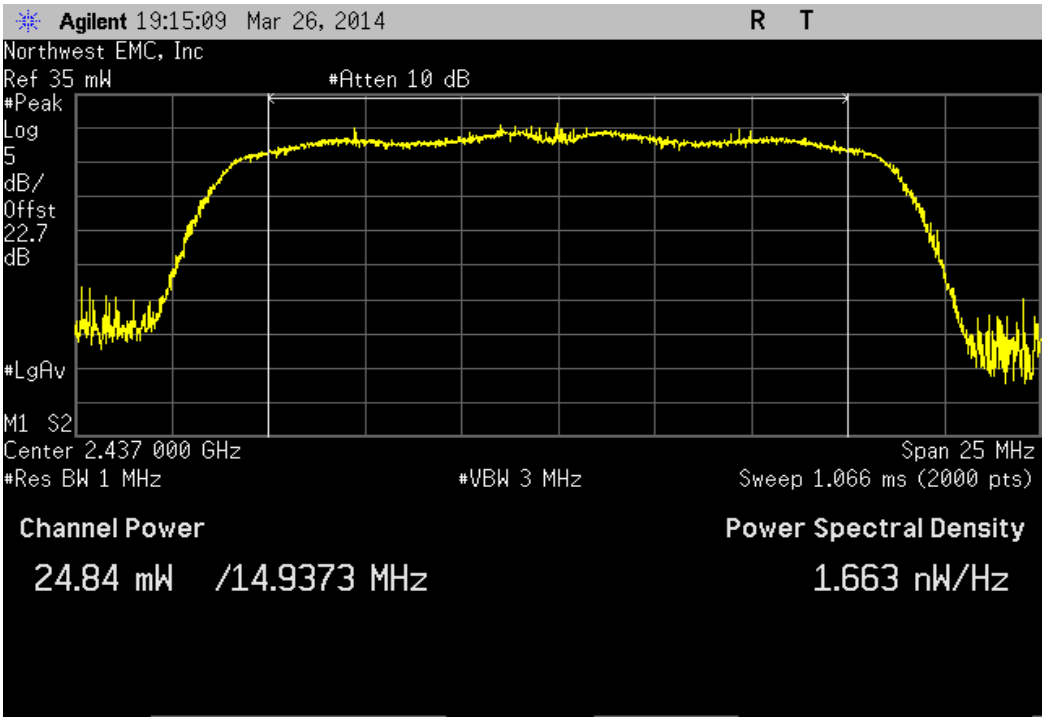
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

				Value	Limit	Result
				23.059 mW	< 1 W	Pass



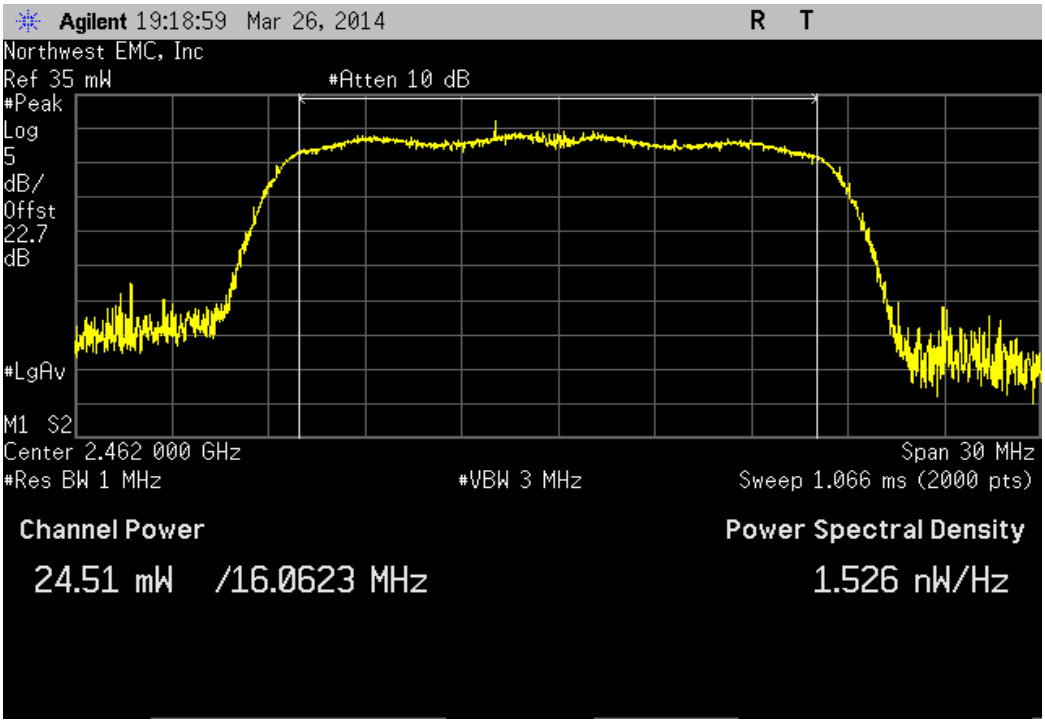
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

				Value	Limit	Result
				24.837 mW	< 1 W	Pass

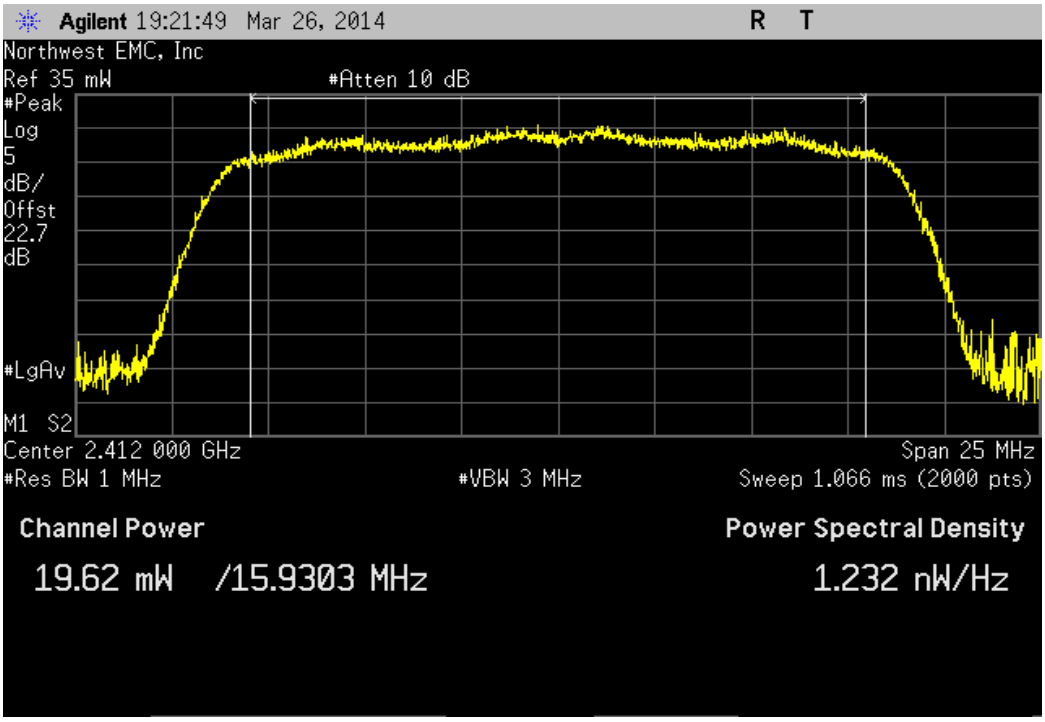


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

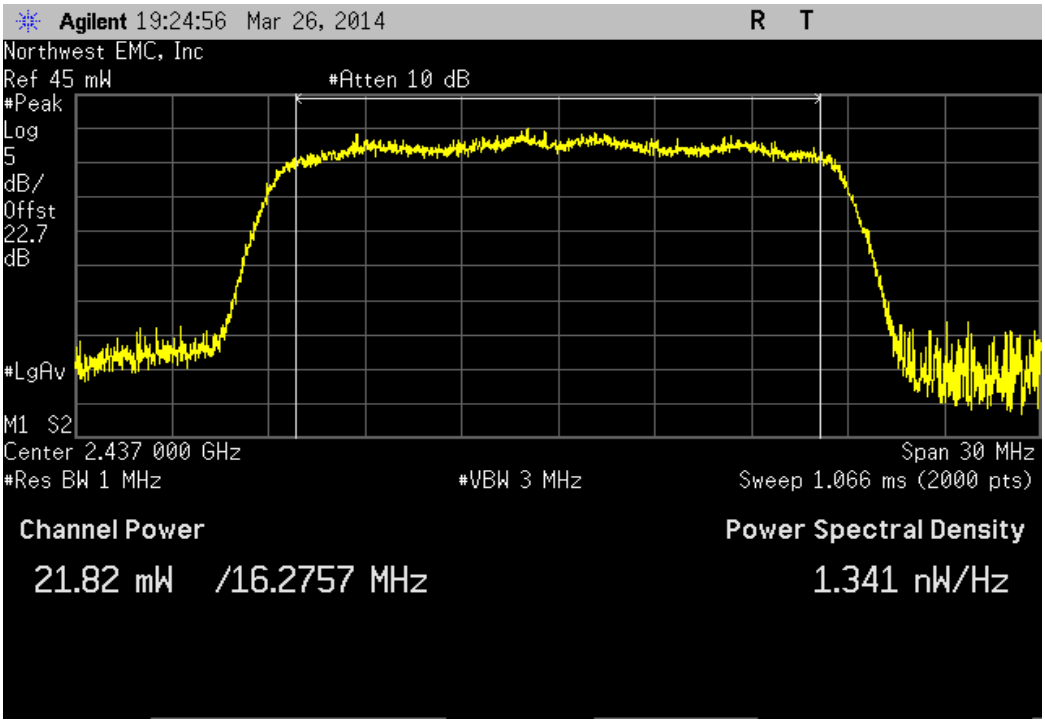
				Value	Limit	Result
				24.513 mW	< 1 W	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
				Value	Limit	Result
				19.621 mW	< 1 W	Pass

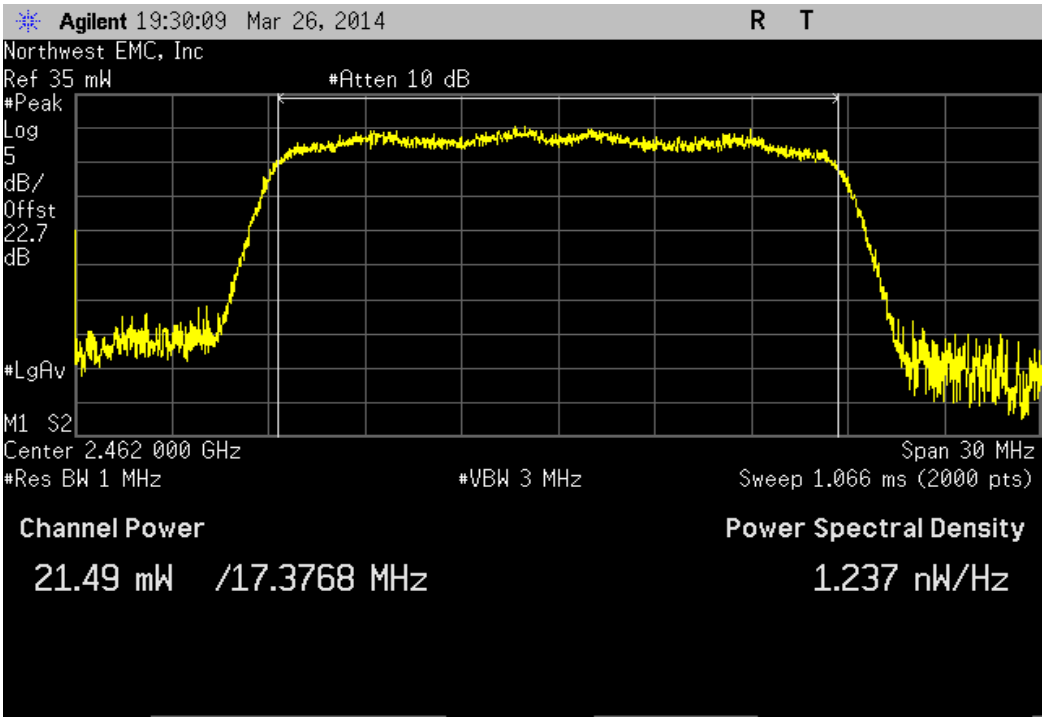


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
				Value	Limit	Result
				21.818 mW	< 1 W	Pass



OUTPUT POWER

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
				Value	Limit	Result
				21.493 mW	< 1 W	Pass



BAND EDGE COMPLIANCE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in each available band. The channels closest to the band edges were selected. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

BAND EDGE COMPLIANCE

EUT:	GQ110			**Work Order:**	INTE5431
Serial Number:	EZF83450005Z			**Date:**	03/26/14
Customer:	Intel Corporation			**Temperature:**	21.7°C
Attendees:	None			**Humidity:**	39%
Project:	GQ110			**Barometric Pres.:**	1001.8
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2014	ANSI C63.10:2009

COMMENTS

Mode of operation tested were client provided.

DEVIATIONS FROM TEST STANDARD

None

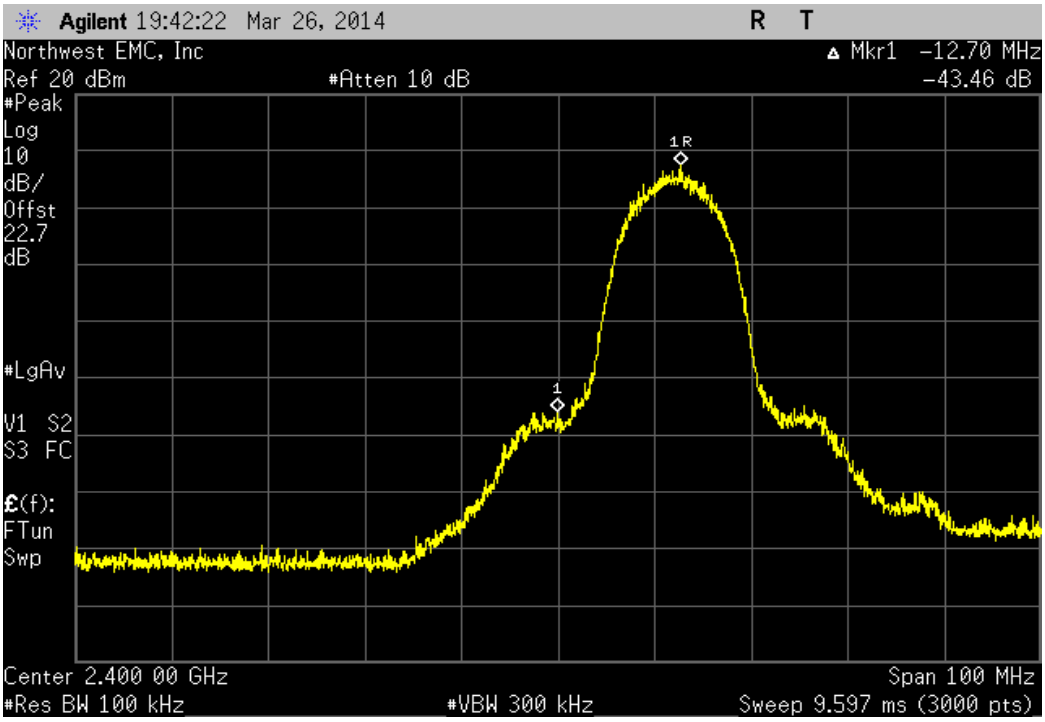
Configuration #	1	Signature

	Value	Limit	Result
2400 MHz - 2483.5 MHz Band			
802.11(b) 11 Mbps			
Low Channel 1, 2412 MHz	-43.46 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	-60.34 dBc	≤ -20 dBc	Pass
802.11(g) 6 Mbps			
Low Channel 1, 2412 MHz	-34 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	-46.64 dBc	≤ -20 dBc	Pass
802.11(n) MCS0			
Low Channel 1, 2412 MHz	-36.61 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	-44.92 dBc	≤ -20 dBc	Pass

BAND EDGE COMPLIANCE

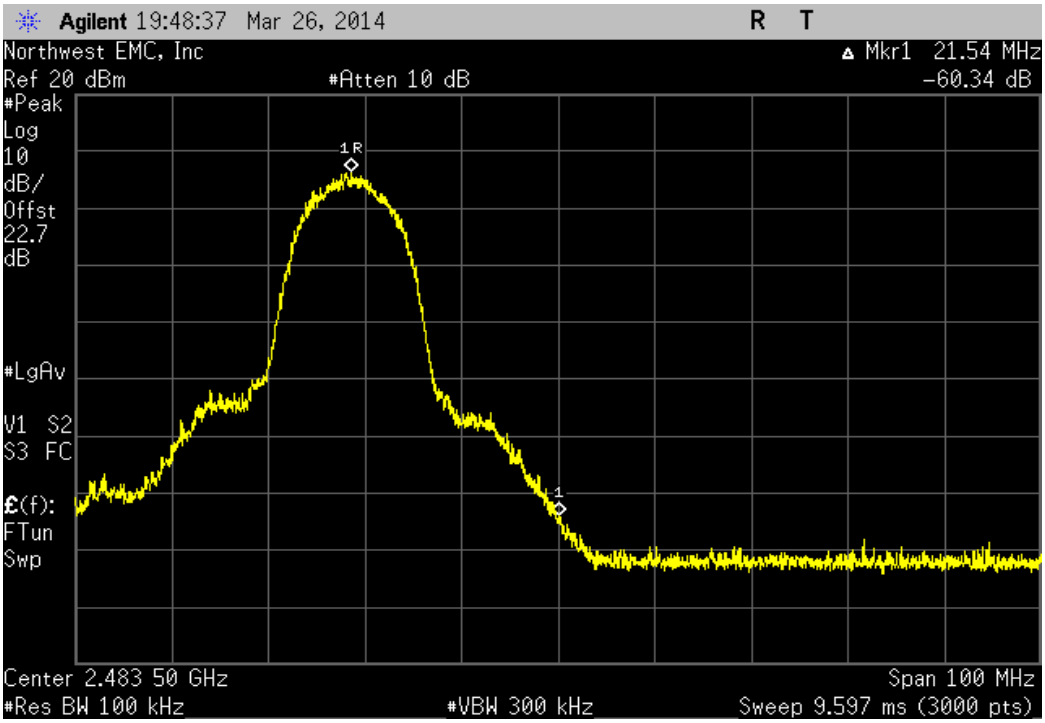
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				-43.46 dBc	≤ -20 dBc	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

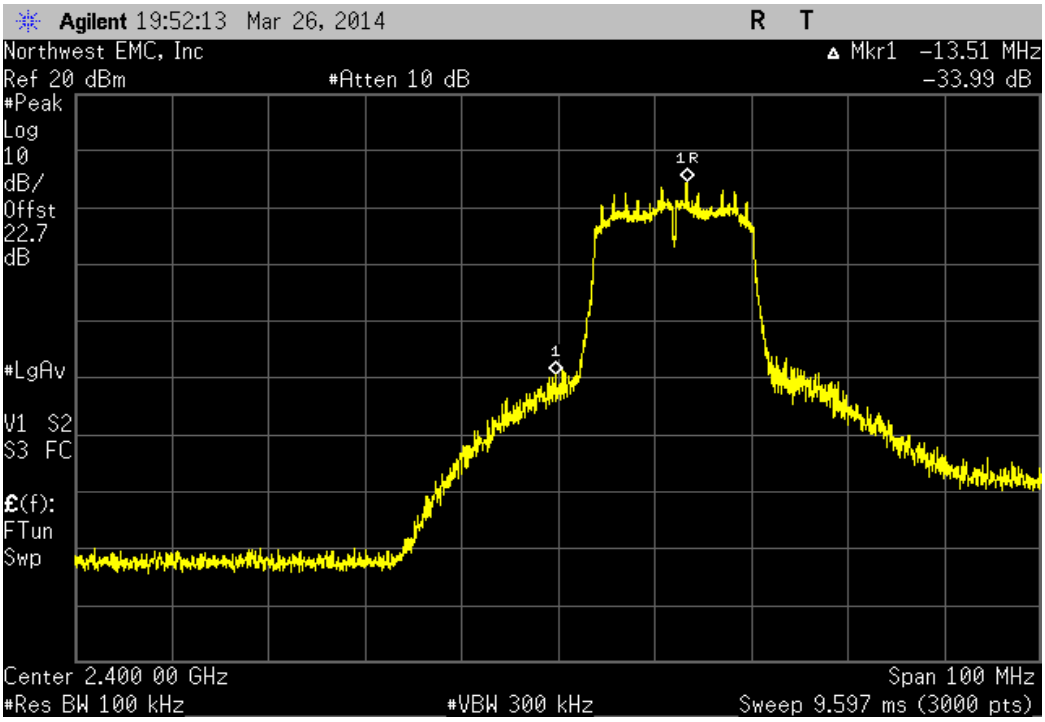
				Value	Limit	Result
				-60.34 dBc	≤ -20 dBc	Pass



BAND EDGE COMPLIANCE

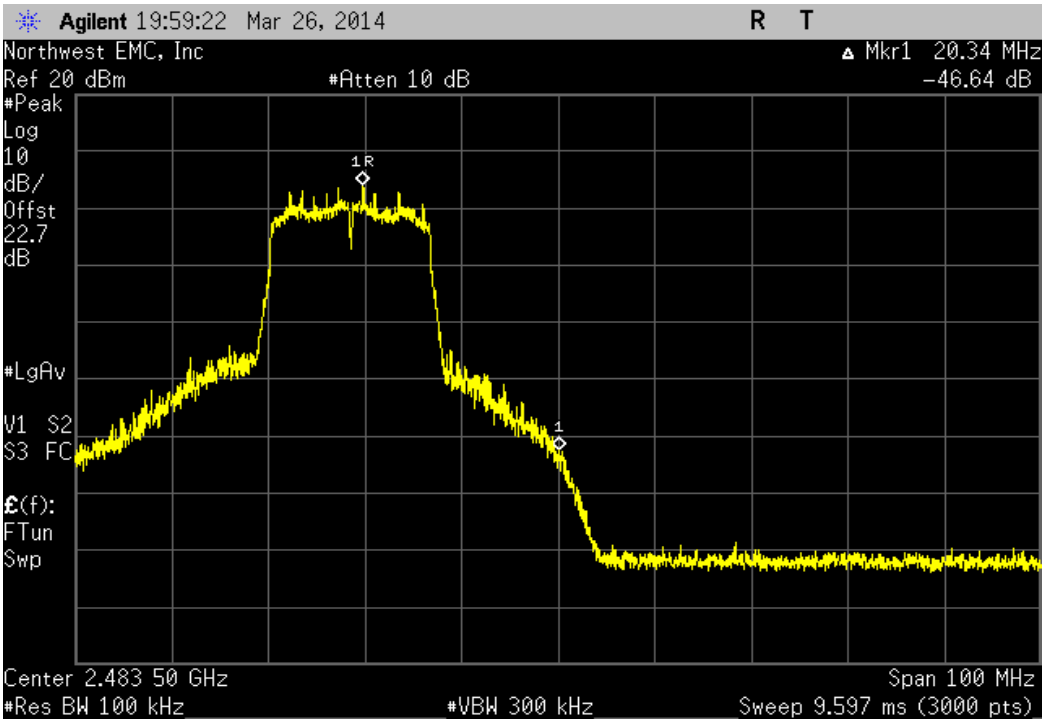
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

				Value	Limit	Result
				-34 dBc	≤ -20 dBc	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

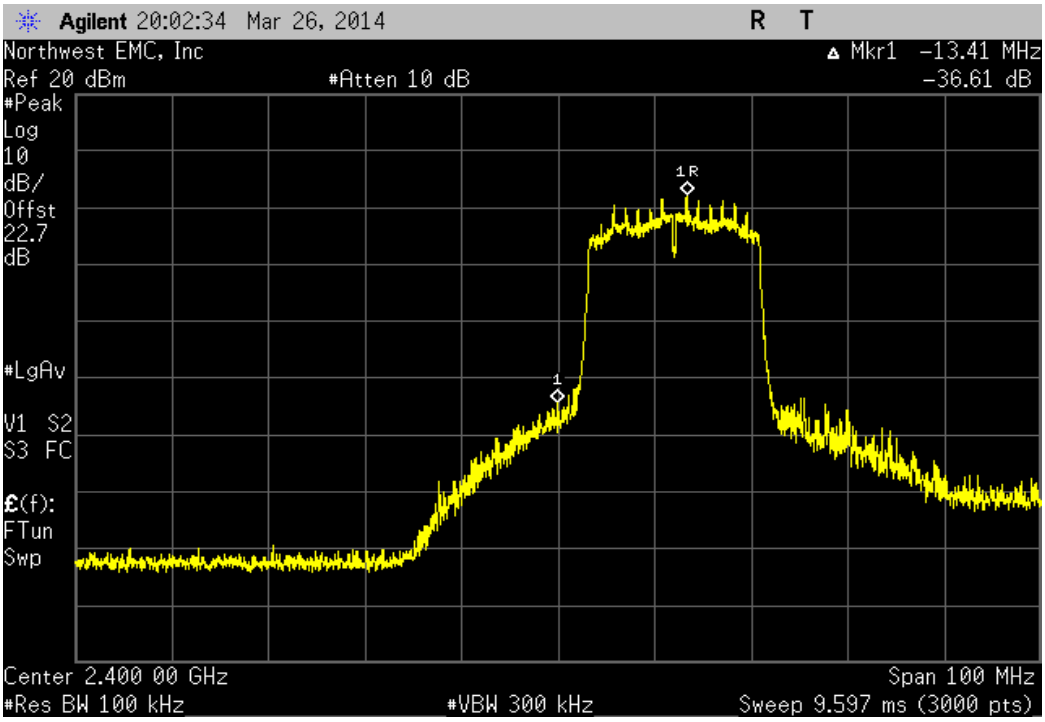
				Value	Limit	Result
				-46.64 dBc	≤ -20 dBc	Pass



BAND EDGE COMPLIANCE

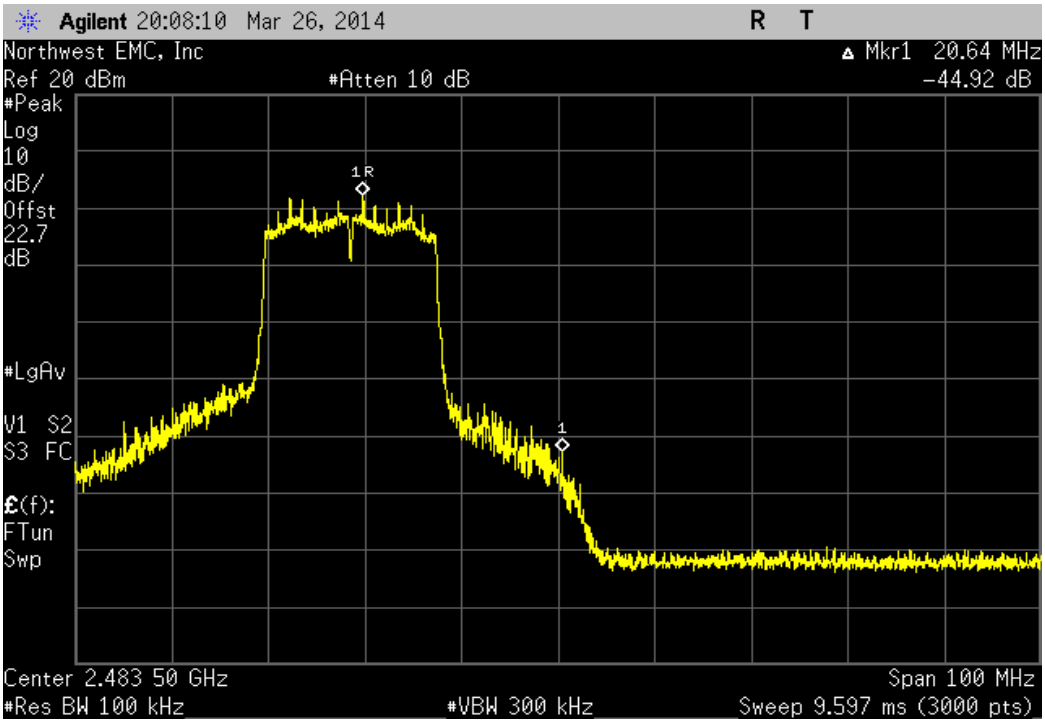
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

				Value	Limit	Result
				-36.61 dBc	≤ -20 dBc	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

				Value	Limit	Result
				-44.92 dBc	≤ -20 dBc	Pass



SPURIOUS CONDUCTED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

SPURIOUS CONDUCTED EMISSIONS

EUT:	GQ110			**Work Order:**	INTE5431
Serial Number:	EZF83450005Z			**Date:**	03/26/14
Customer:	Intel Corporation			**Temperature:**	21.7°C
Attendees:	None			**Humidity:**	39%
Project:	GQ110			**Barometric Pres.:**	1001.8
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2014	ANSI C63.10:2009

COMMENTS

Mode of operation tested were client provided.

DEVIATIONS FROM TEST STANDARD

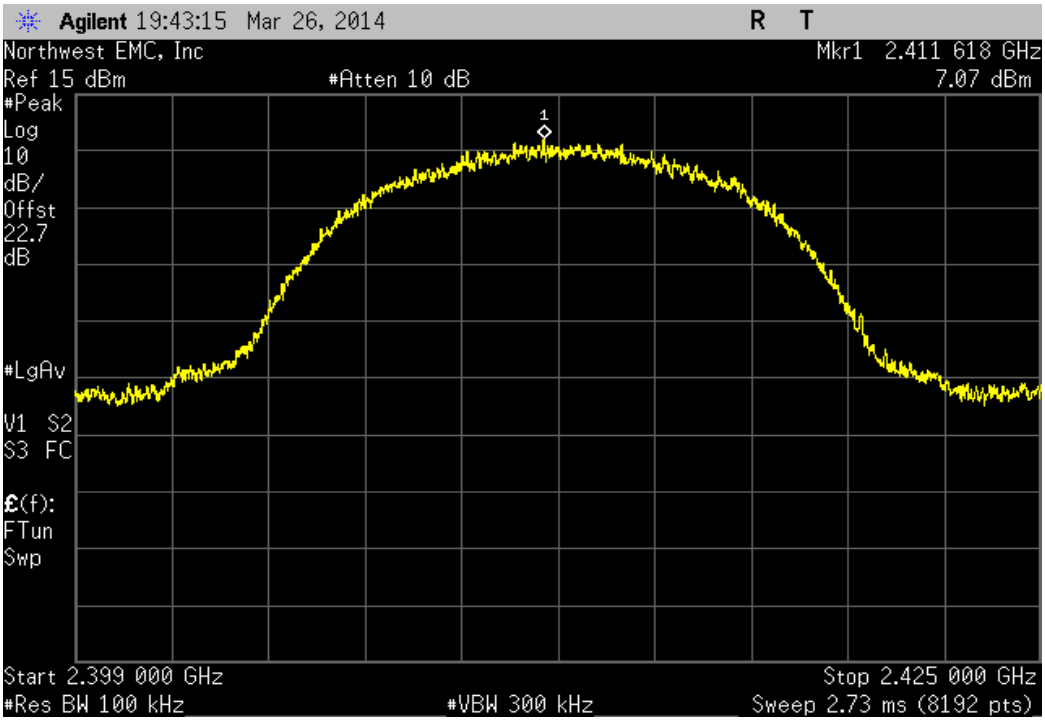
None

Configuration #	1	Signature

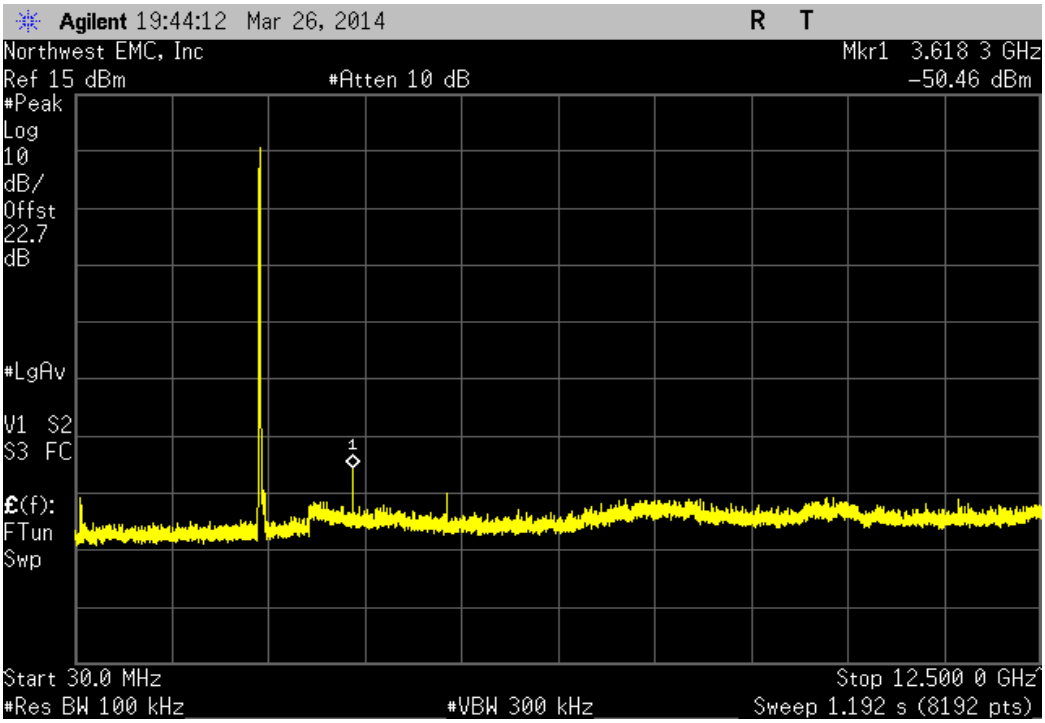
	Frequency Range	Value	Limit	Result
2400 MHz - 2483.5 MHz Band				
802.11(b) 11 Mbps				
Low Channel 1, 2412 MHz	Fundamental	N/A	N/A	N/A
Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-57.53 dBc	≤ -20 dBc	Pass
Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-59.02 dBc	≤ -20 dBc	Pass
Mid Channel 6, 2437 MHz	Fundamental	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-58.32 dBc	≤ -20 dBc	Pass
Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-60.36 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	Fundamental	N/A	N/A	N/A
High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-56.93 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-58.33 dBc	≤ -20 dBc	Pass
802.11(g) 6 Mbps				
Low Channel 1, 2412 MHz	Fundamental	N/A	N/A	N/A
Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-54.89 dBc	≤ -20 dBc	Pass
Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-55.7 dBc	≤ -20 dBc	Pass
Mid Channel 6, 2437 MHz	Fundamental	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-54.19 dBc	≤ -20 dBc	Pass
Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-56.13 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	Fundamental	N/A	N/A	N/A
High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-53.48 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-55.62 dBc	≤ -20 dBc	Pass
802.11(n) MCS0				
Low Channel 1, 2412 MHz	Fundamental	N/A	N/A	N/A
Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-52.79 dBc	≤ -20 dBc	Pass
Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-54.48 dBc	≤ -20 dBc	Pass
Mid Channel 6, 2437 MHz	Fundamental	N/A	N/A	N/A
Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-53.15 dBc	≤ -20 dBc	Pass
Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-54.17 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	Fundamental	N/A	N/A	N/A
High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-52.3 dBc	≤ -20 dBc	Pass
High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-54.96 dBc	≤ -20 dBc	Pass

SPURIOUS CONDUCTED EMISSIONS

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
	Frequency Range			Value	Limit	Result
	Fundamental			N/A	N/A	N/A

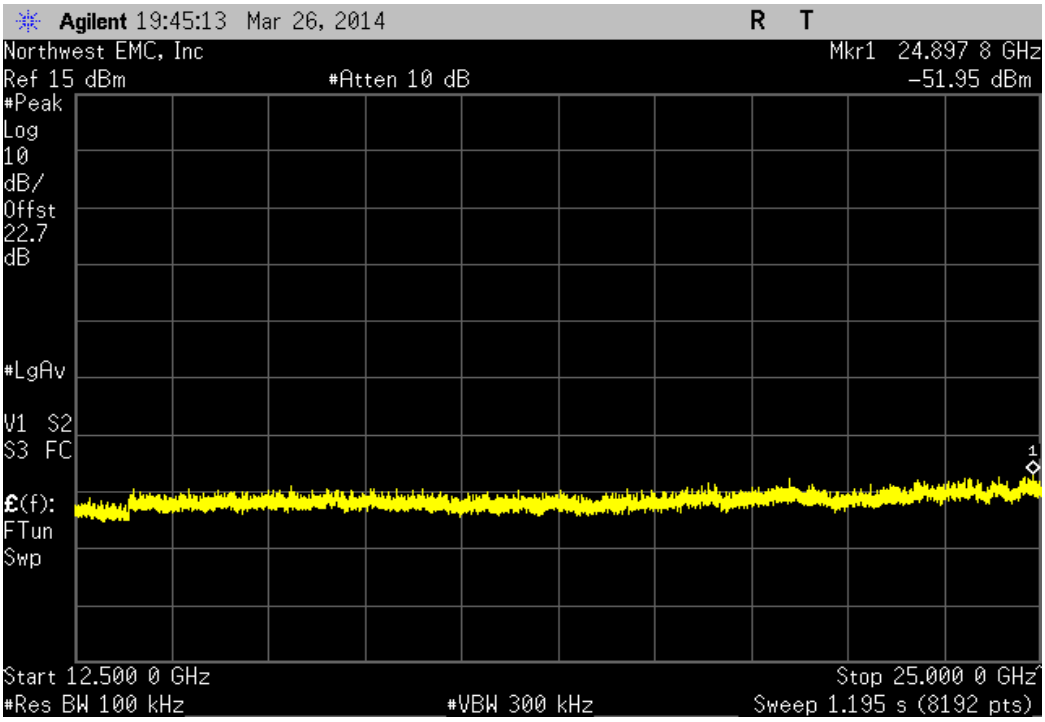


2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz					
	Frequency Range		Value	Limit	Result
	30 MHz - 12.5 GHz		-57.53 dBc	≤ -20 dBc	Pass



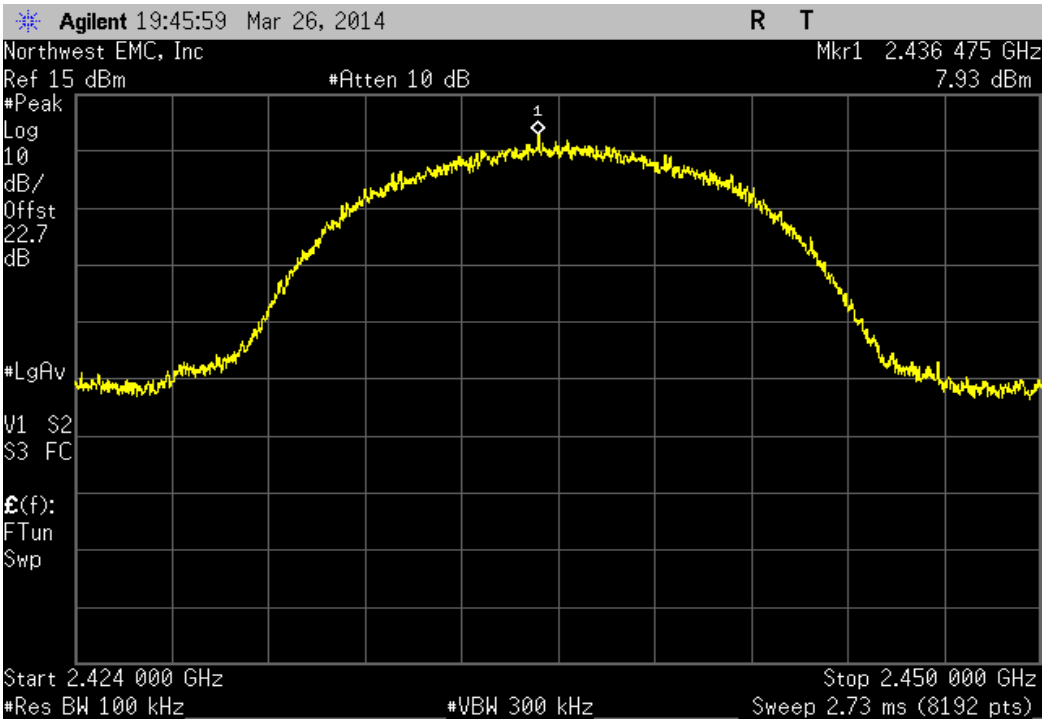
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-59.02 dBc	≤ -20 dBc	Pass

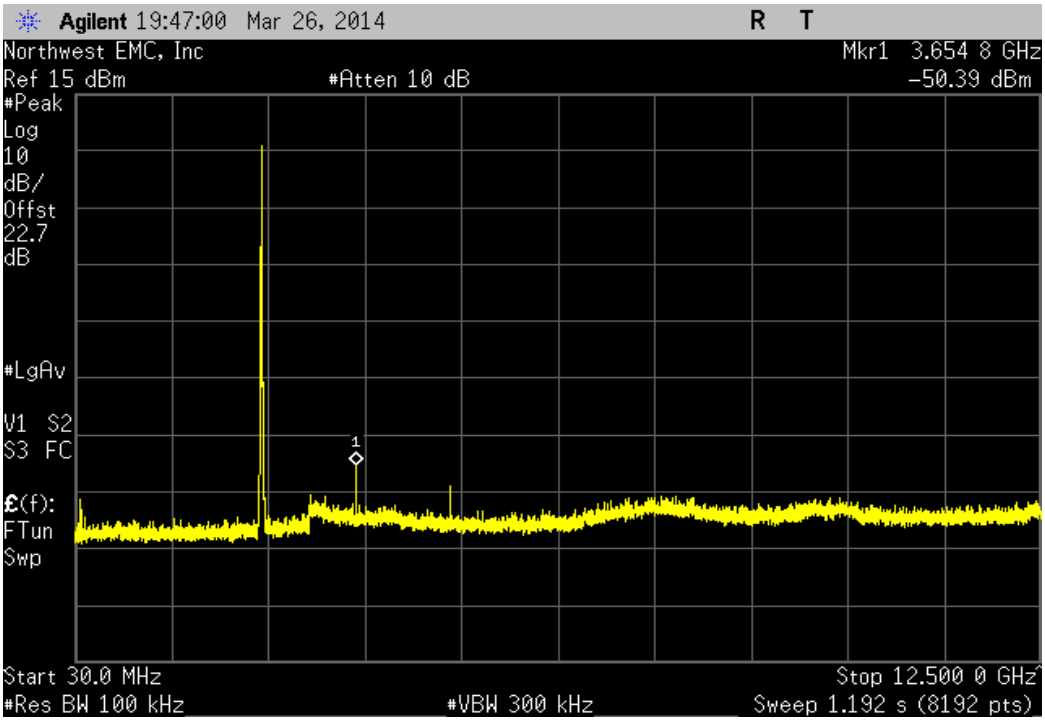


2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

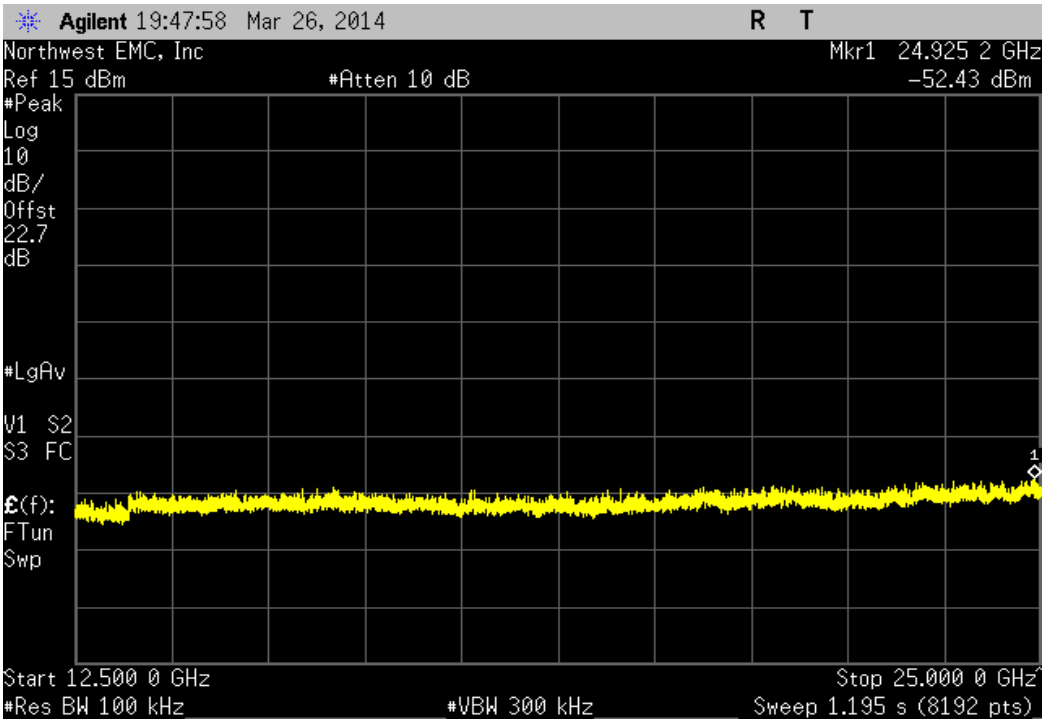
Frequency Range				Value	Limit	Result
	Fundamental			N/A	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
30 MHz - 12.5 GHz		-58.32 dBc	≤ -20 dBc	Pass

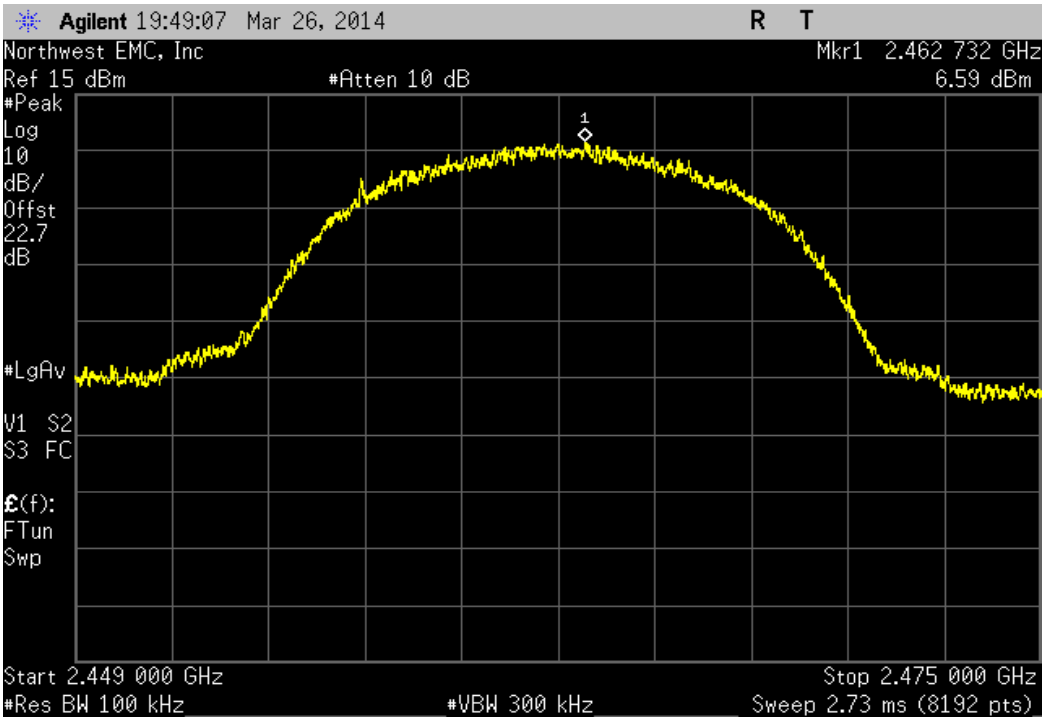


2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-60.36 dBc	≤ -20 dBc	Pass

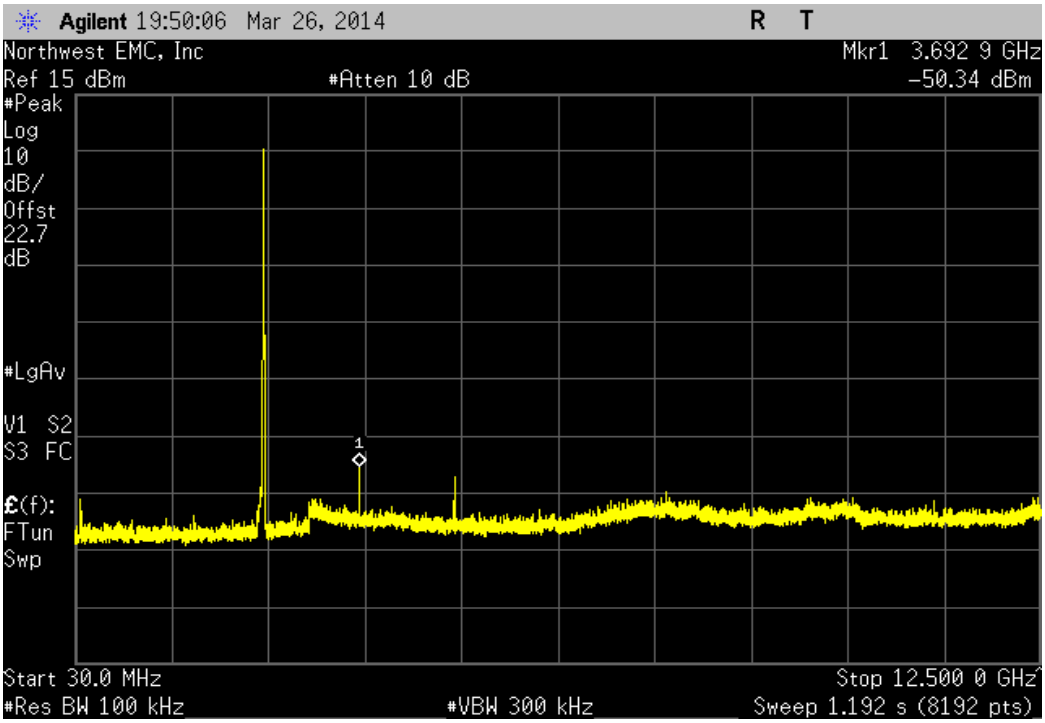


SPURIOUS CONDUCTED EMISSIONS

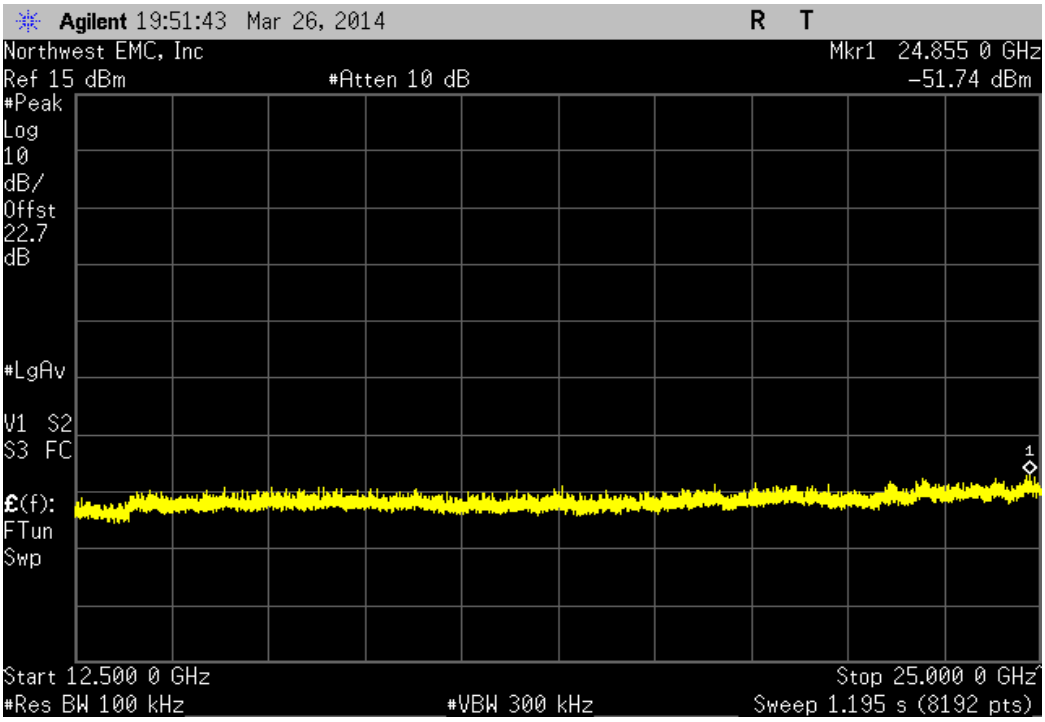
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz						
	Frequency Range			Value	Limit	Result
	Fundamental			N/A	N/A	N/A



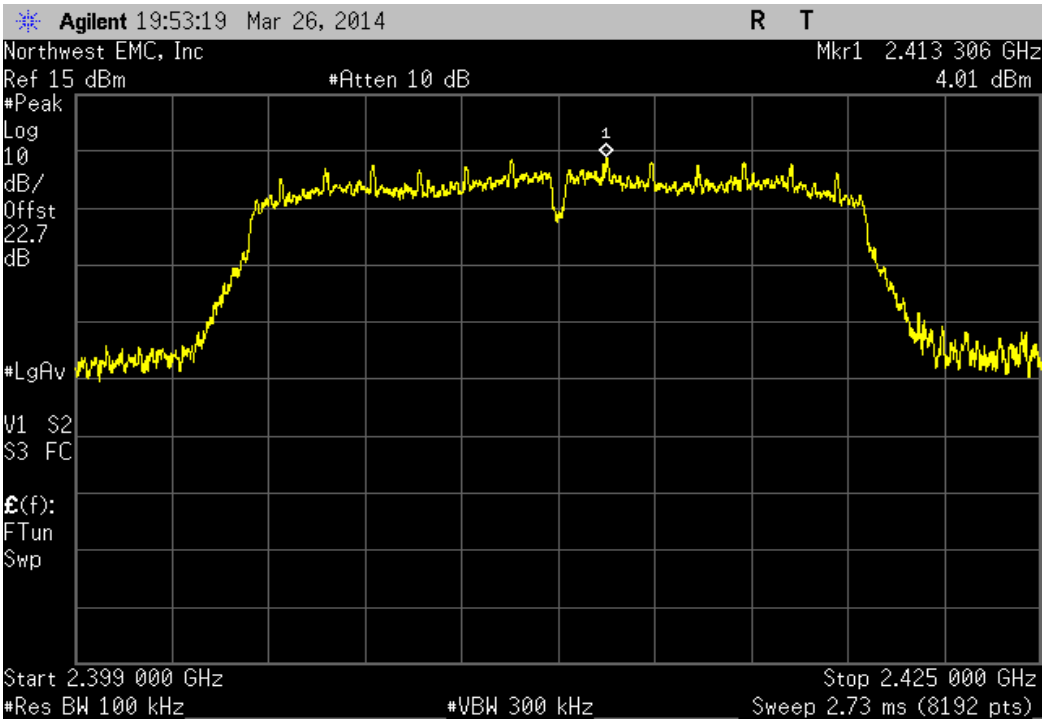
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz					
	Frequency Range		Value	Limit	Result
	30 MHz - 12.5 GHz		-56.93 dBc	≤ -20 dBc	Pass



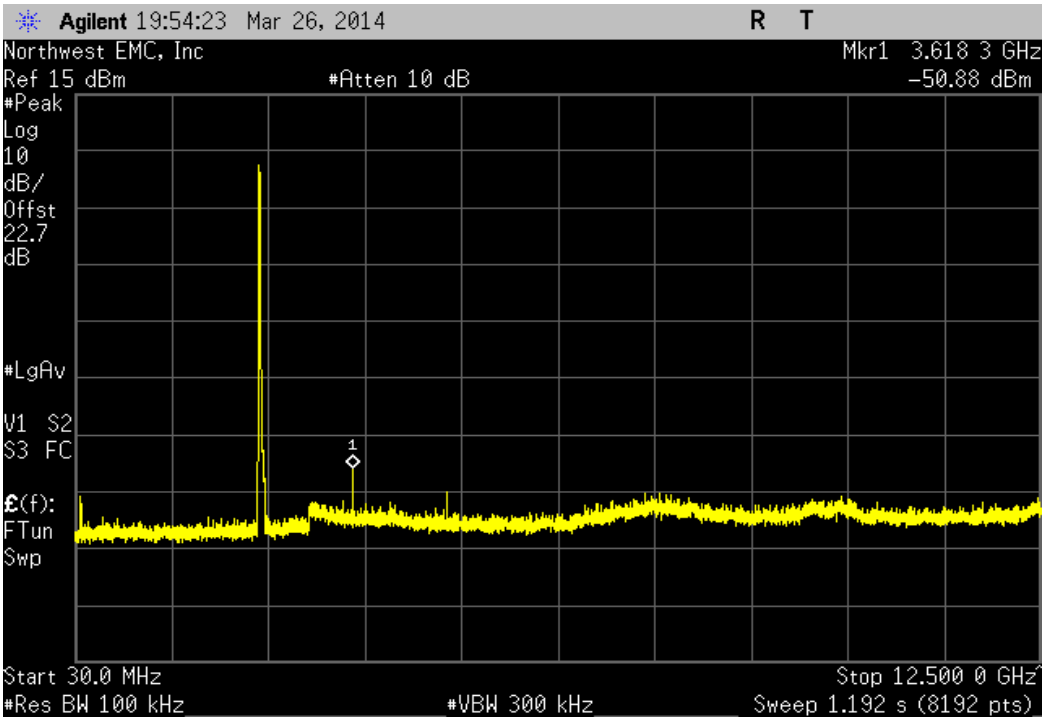
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-58.33 dBc	≤ -20 dBc	Pass



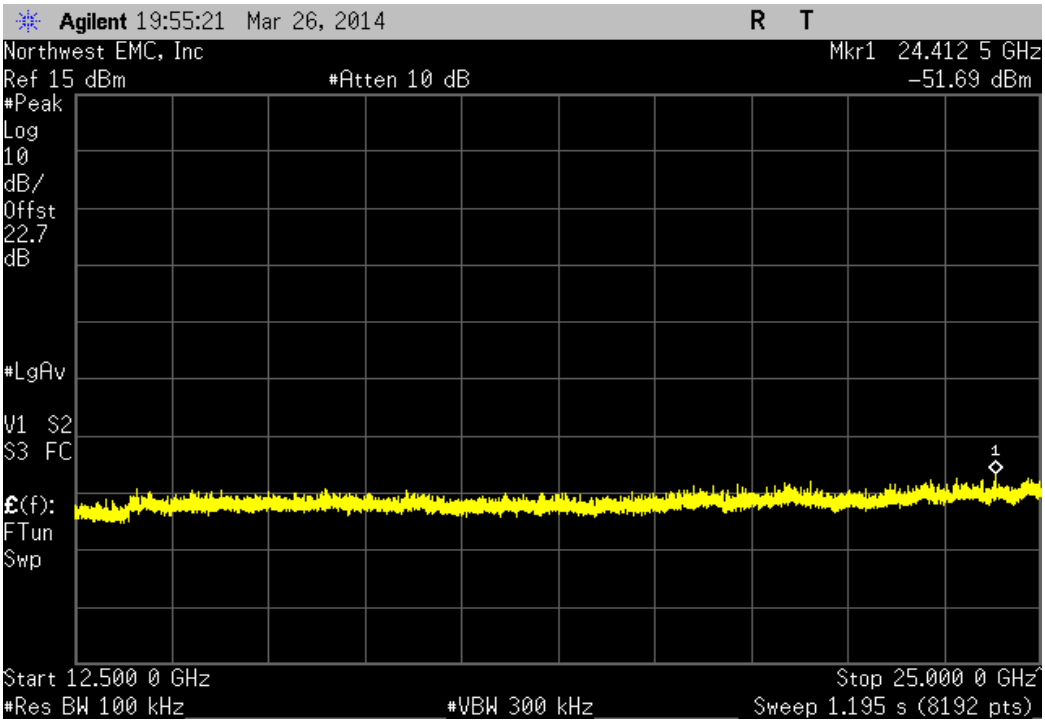
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
	Frequency Range			Value	Limit	Result
	Fundamental			N/A	N/A	N/A



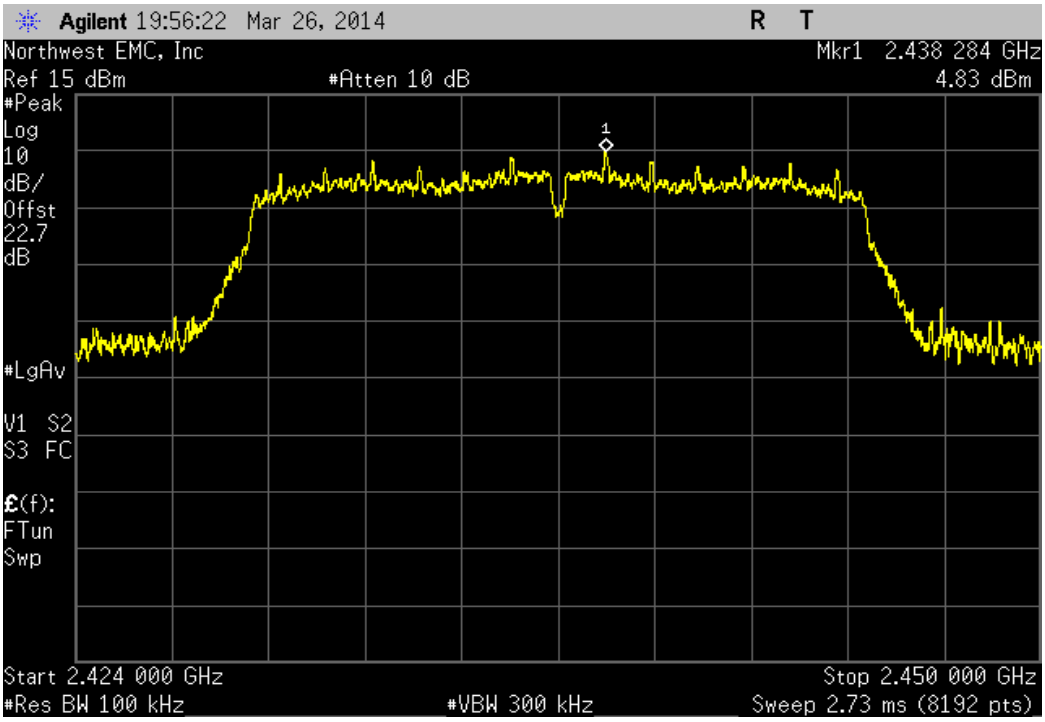
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		**Value**	**Limit**	**Result**
30 MHz - 12.5 GHz		-54.89 dBc	≤ -20 dBc	Pass



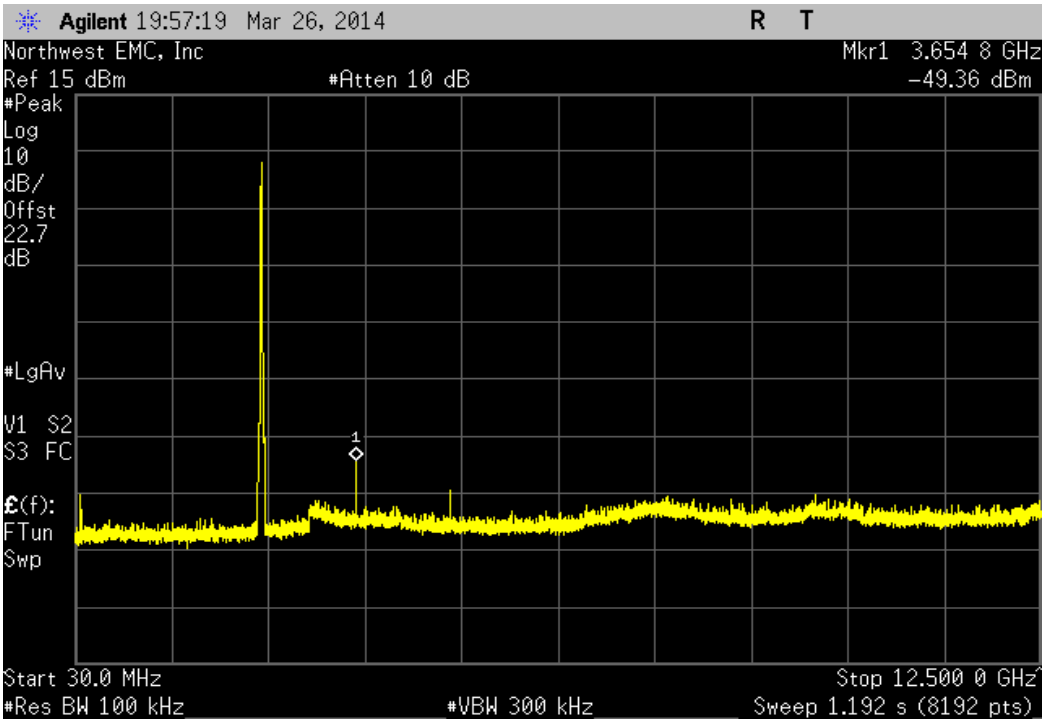
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		**Value**	**Limit**	**Result**
12.5 GHz - 25 GHz		-55.7 dBc	≤ -20 dBc	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
	Frequency Range			Value	Limit	Result
	Fundamental			N/A	N/A	N/A

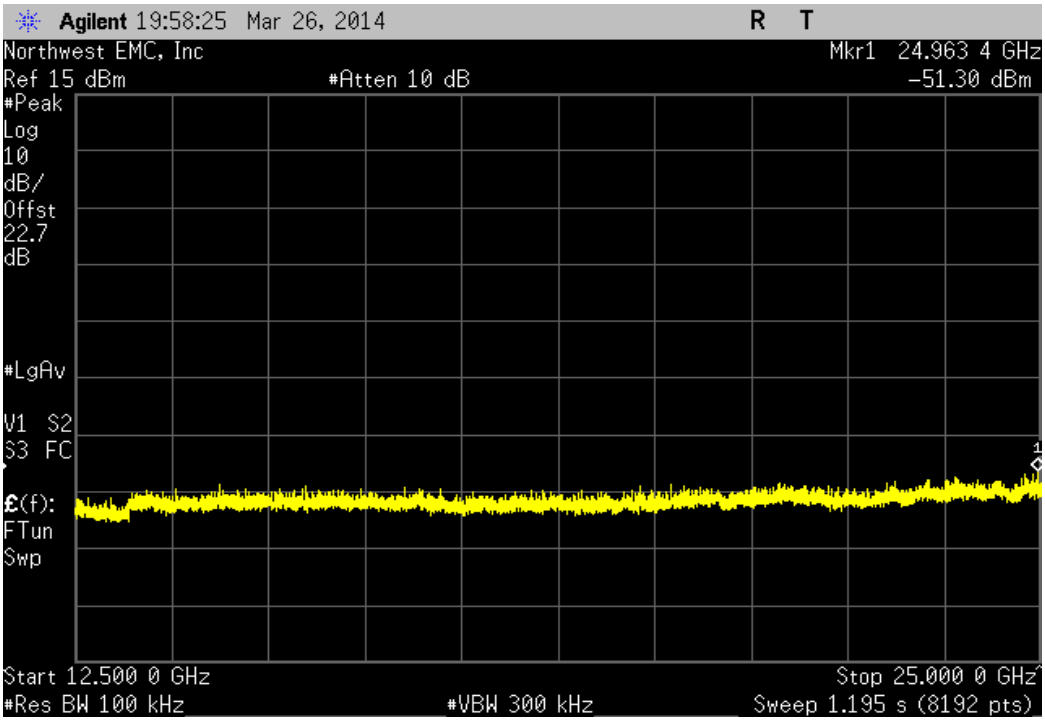


2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz					
Frequency Range			Value	Limit	Result
30 MHz - 12.5 GHz			-54.19 dBc	≤ -20 dBc	Pass

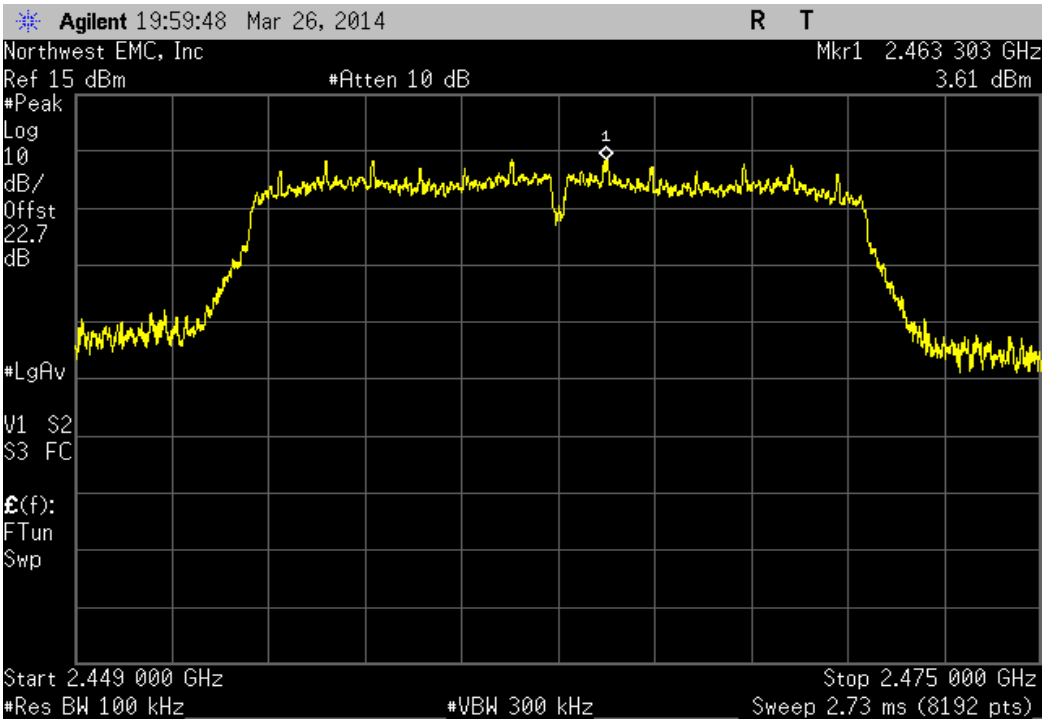


SPURIOUS CONDUCTED EMISSIONS

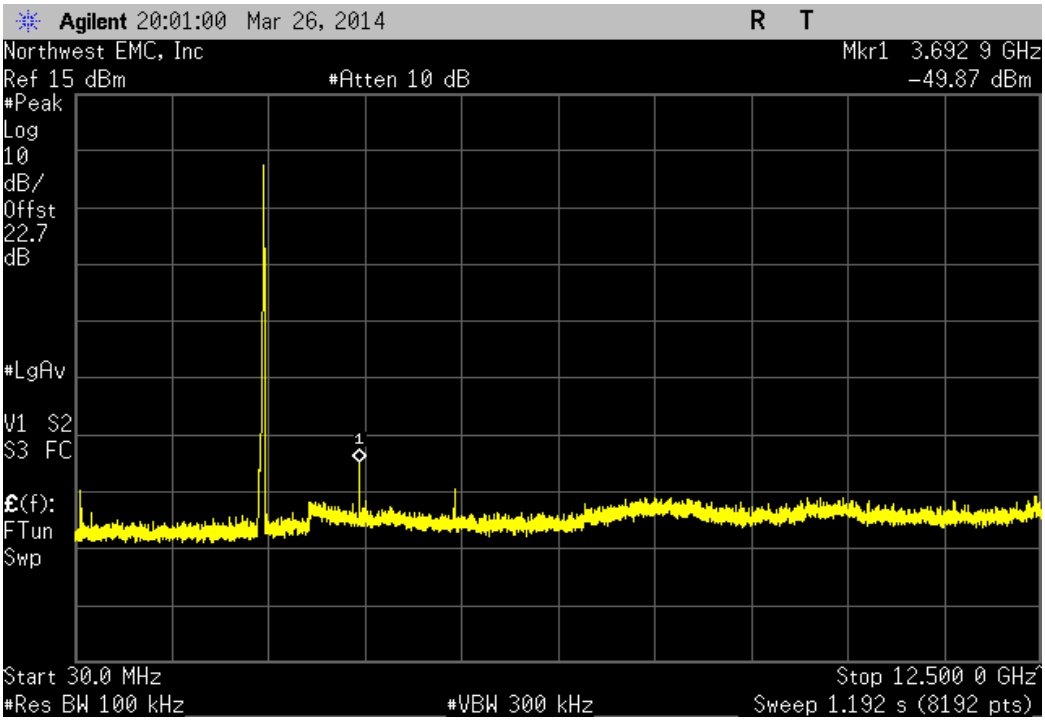
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		**Value**	**Limit**	**Result**
12.5 GHz - 25 GHz		-56.13 dBc	≤ -20 dBc	Pass



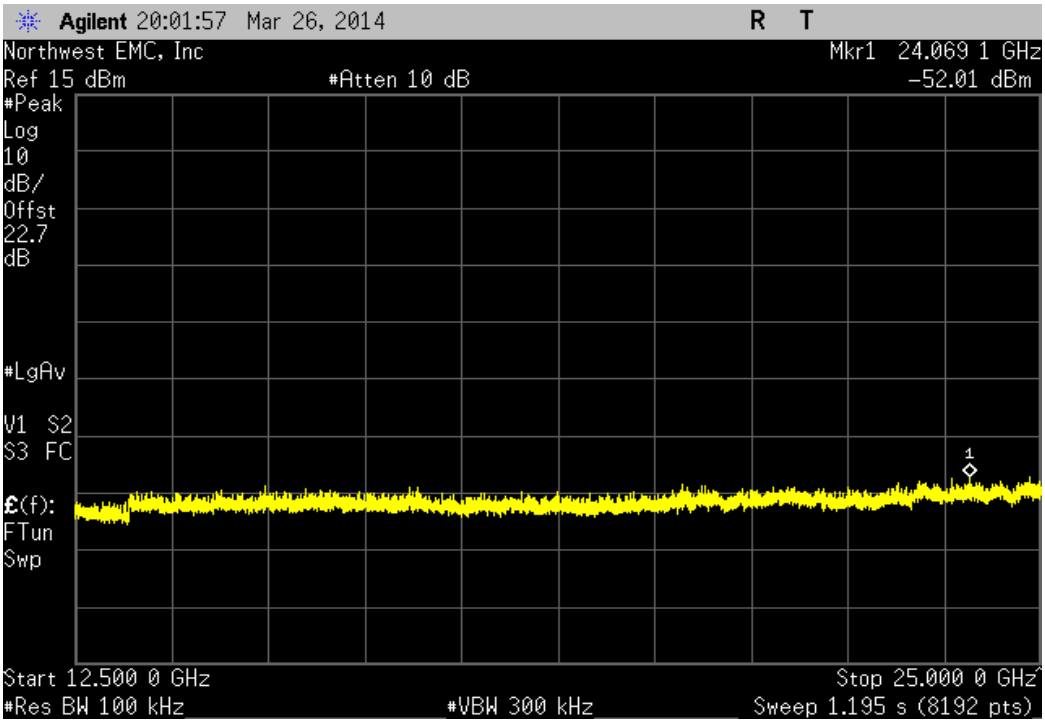
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
	Frequency Range			**Value**	**Limit**	**Result**
	Fundamental			N/A	N/A	N/A



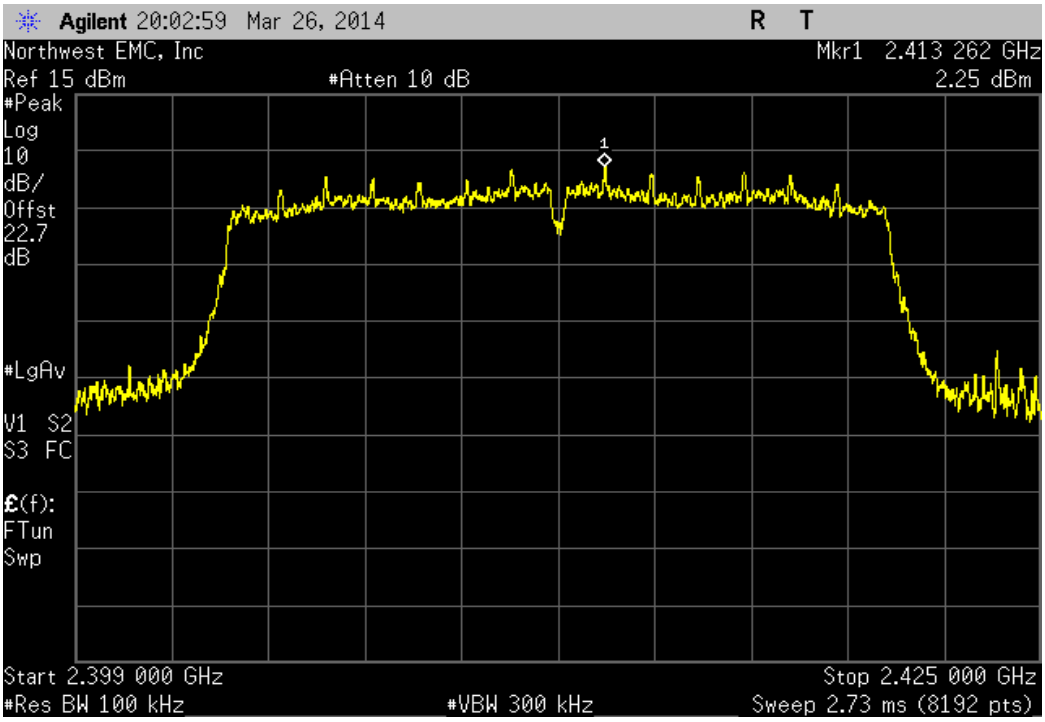
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz				
Frequency Range		**Value**	**Limit**	**Result**
30 MHz - 12.5 GHz		-53.48 dBc	≤ -20 dBc	Pass



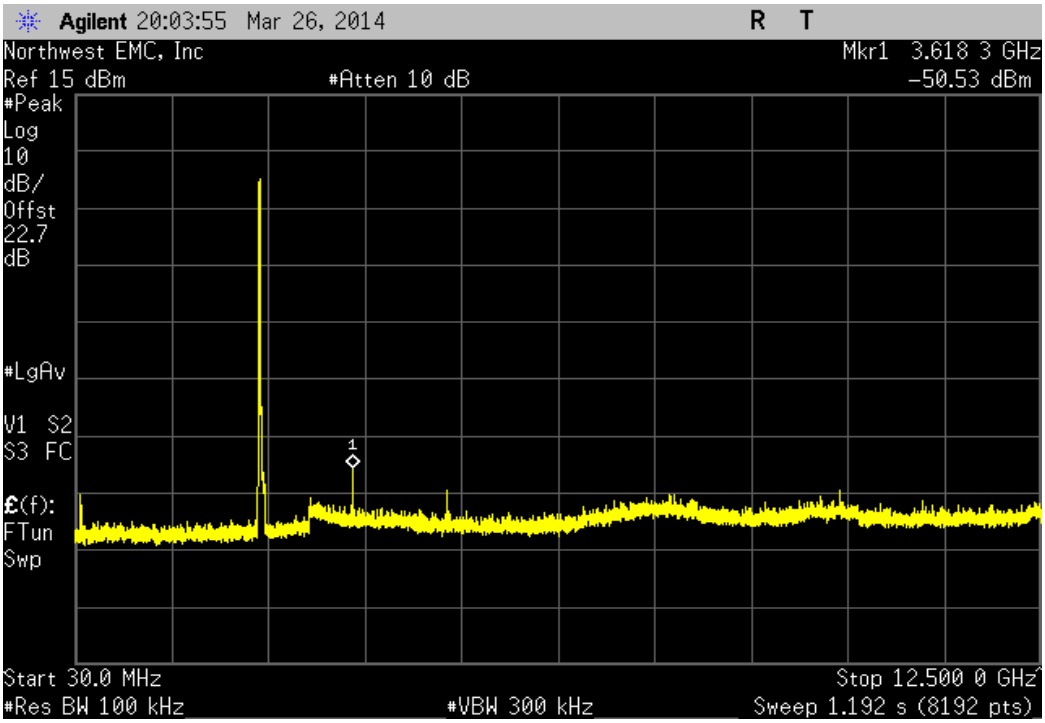
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz				
Frequency Range		**Value**	**Limit**	**Result**
12.5 GHz - 25 GHz		-55.62 dBc	≤ -20 dBc	Pass



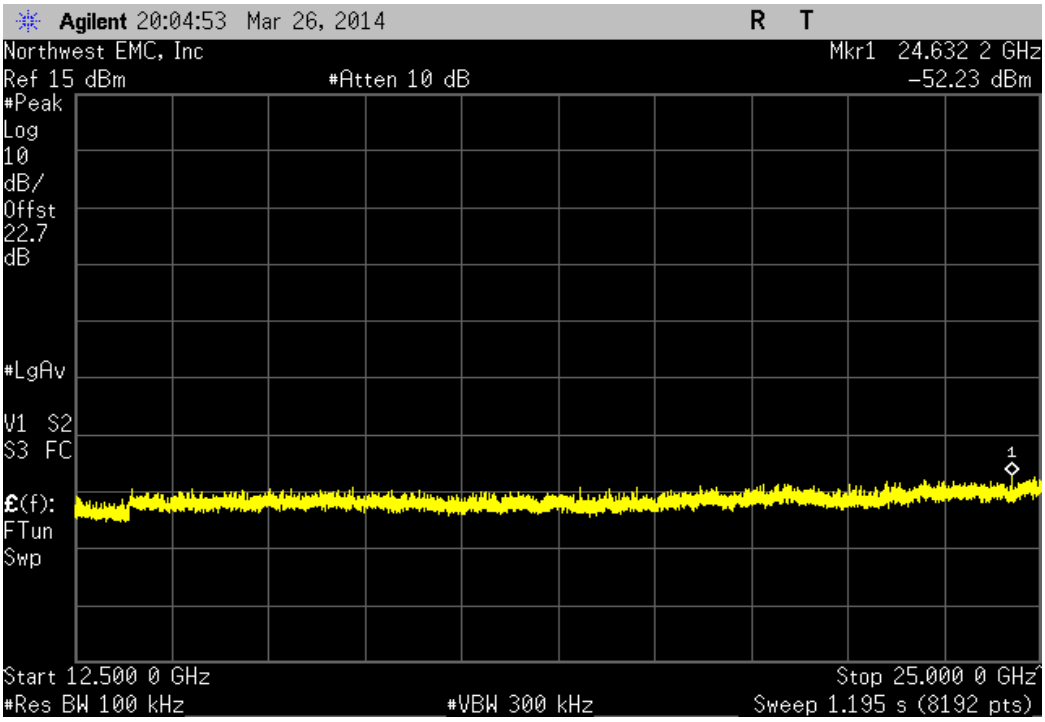
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
	Frequency Range			Value	Limit	Result
	Fundamental			N/A	N/A	N/A



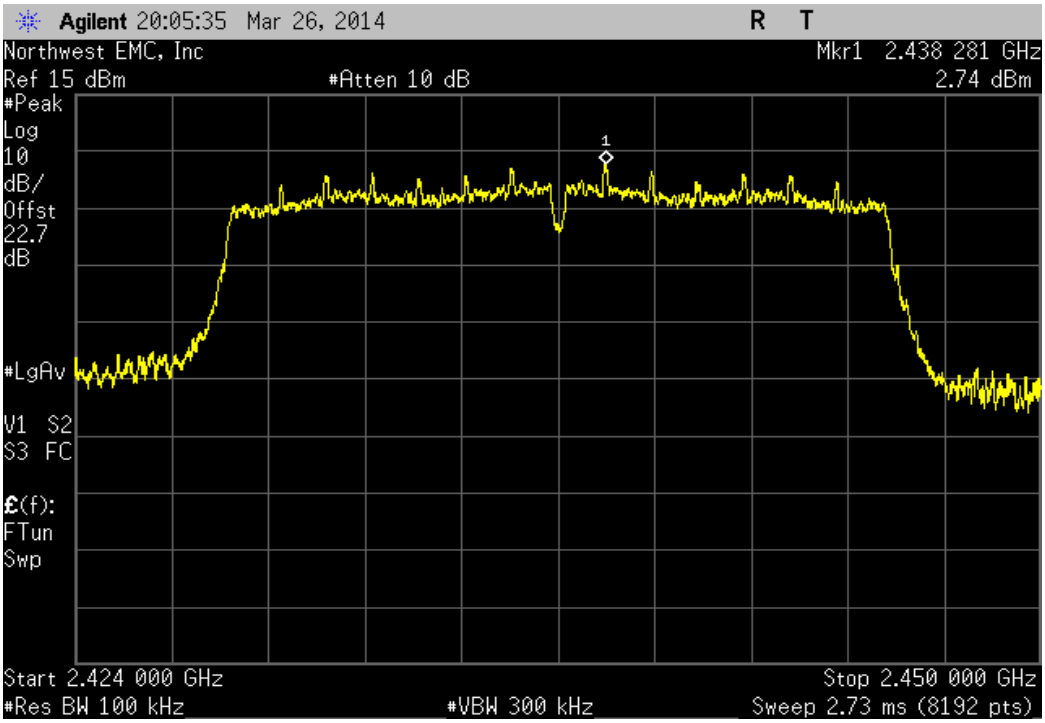
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz					
Frequency Range			Value	Limit	Result
30 MHz - 12.5 GHz			-52.79 dBc	≤ -20 dBc	Pass



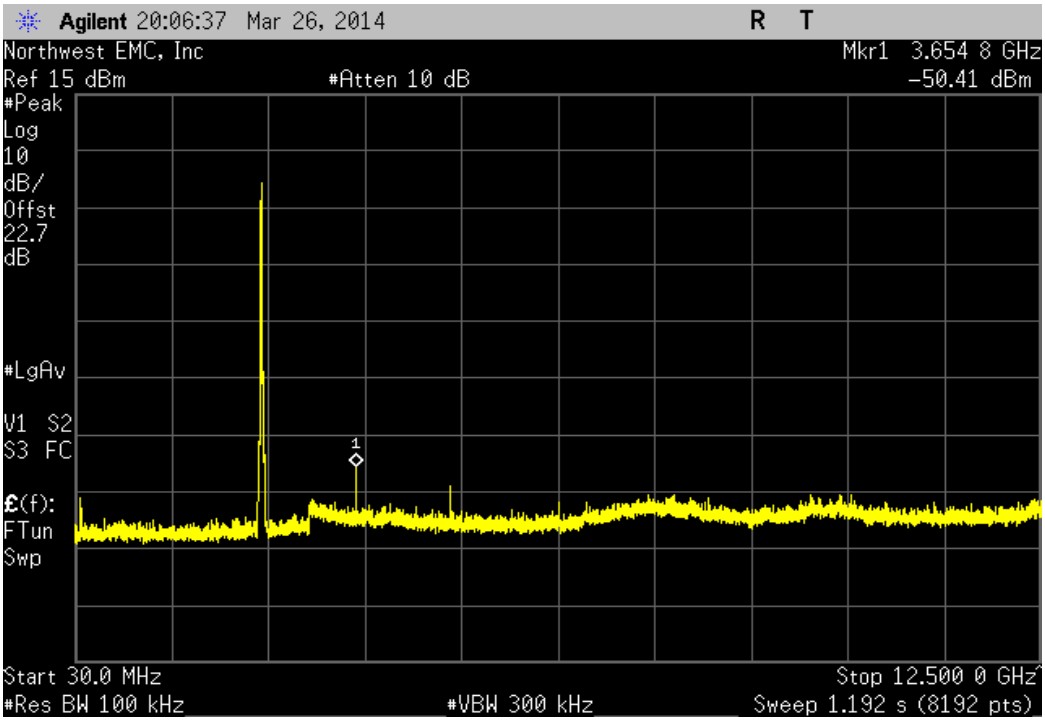
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-54.48 dBc	≤ -20 dBc	Pass



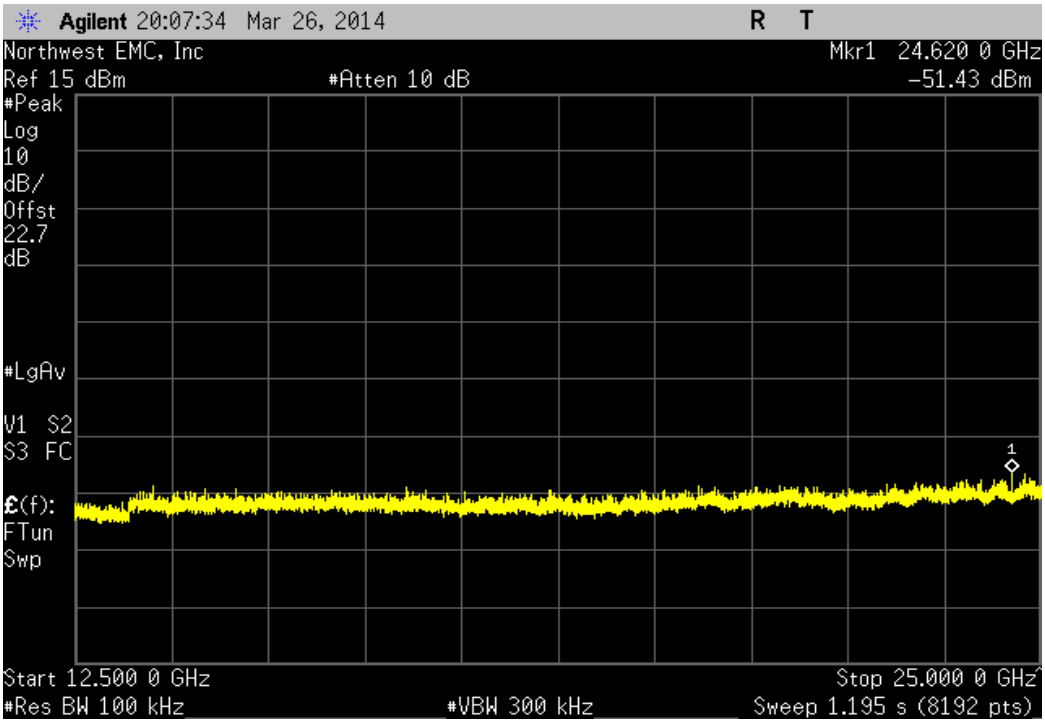
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
	Frequency Range			Value	Limit	Result
	Fundamental			N/A	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
30 MHz - 12.5 GHz		-53.15 dBc	≤ -20 dBc	Pass

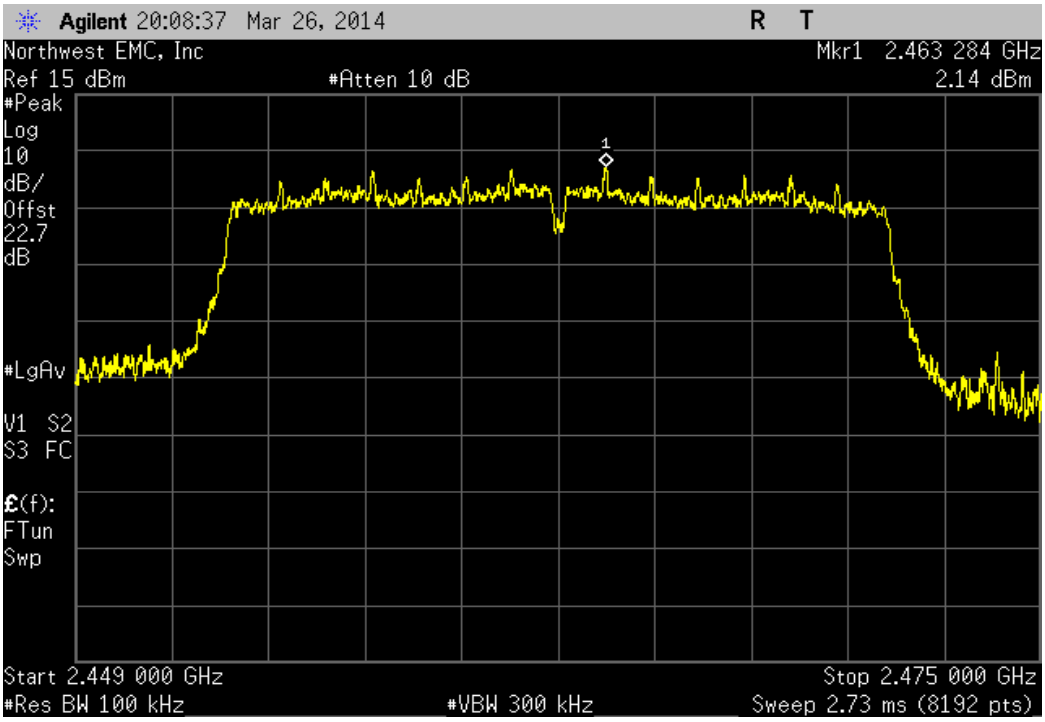


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-54.17 dBc	≤ -20 dBc	Pass

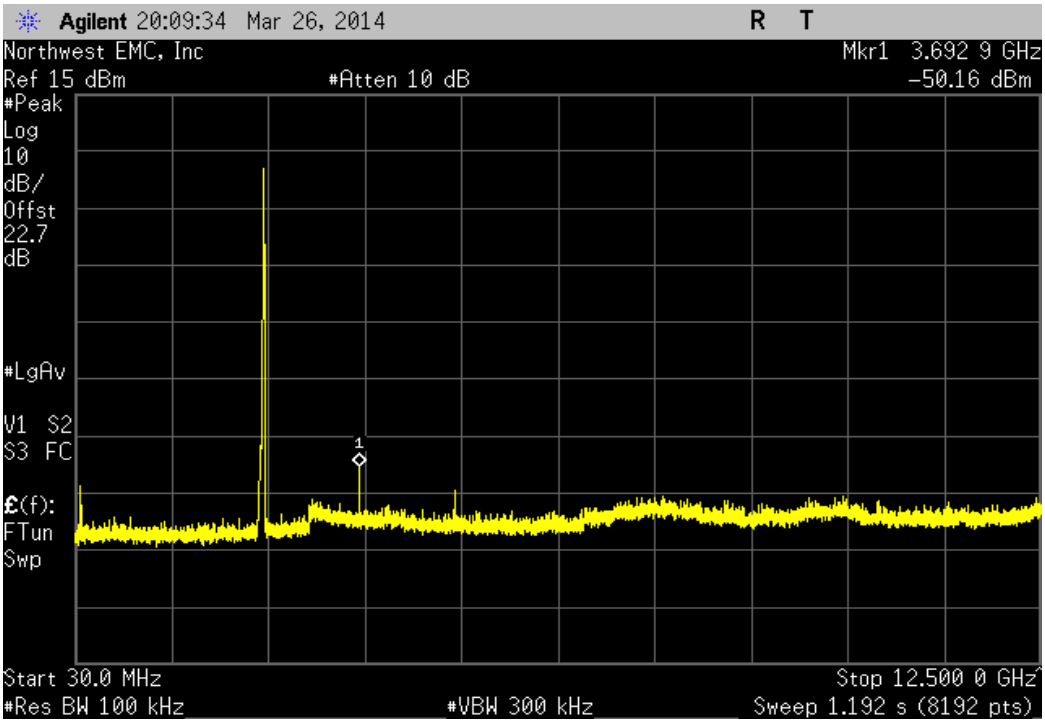


SPURIOUS CONDUCTED EMISSIONS

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
	Frequency Range			Value	Limit	Result
	Fundamental			N/A	N/A	N/A

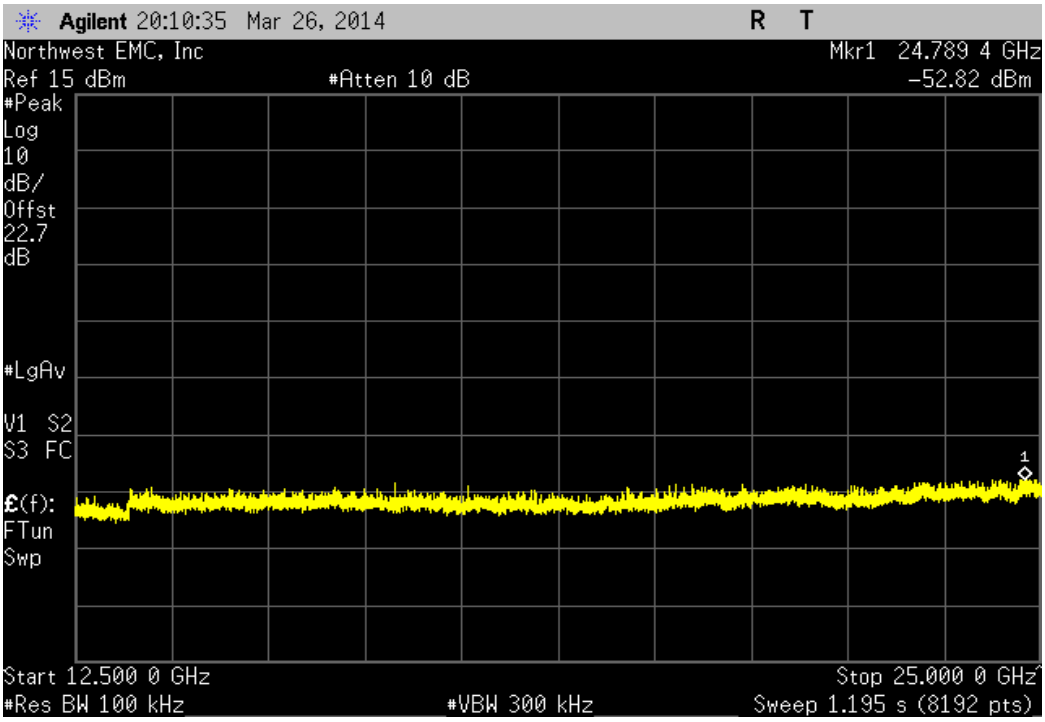


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz					
Frequency Range			Value	Limit	Result
30 MHz - 12.5 GHz			-52.3 dBc	≤ -20 dBc	Pass



SPURIOUS CONDUCTED EMISSIONS

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz				
Frequency Range		**Value**	**Limit**	**Result**
12.5 GHz - 25 GHz		-54.96 dBc	≤ -20 dBc	Pass



POWER SPECTRAL DENSITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

The maximum power spectral density measurements were measured with the EUT set to the required transmit frequencies in each band. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the lowest, middle, and maximum data rate for each modulation type available.

Per the procedure outlined in FCC KDB 558074 D01 DTS Measurement Section 5.3.1, the spectrum analyzer was used as follows:

- RBW = 100 kHz
- VBW = 300 kHz
- Detector = Peak (to match method used for power measurement)
- Trace = Max hold

The observed power level is then scaled to an equivalent value in 3 kHz by adding a Bandwidth Correction Factor (BWCF) where:

BWCF = 10*LOG (3 kHz / 100 kHz) = -15.2 dB

POWER SPECTRAL DENSITY

EUT:	GQ110			**Work Order:**	INTE5431
Serial Number:	EZF83450005Z			**Date:**	03/26/14
Customer:	Intel Corporation			**Temperature:**	21.7°C
Attendees:	None			**Humidity:**	39%
Project:	GQ110			**Barometric Pres.:**	1001.8
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2014	ANSI C63.10:2009

COMMENTS

Mode of operation tested were client provided.

DEVIATIONS FROM TEST STANDARD

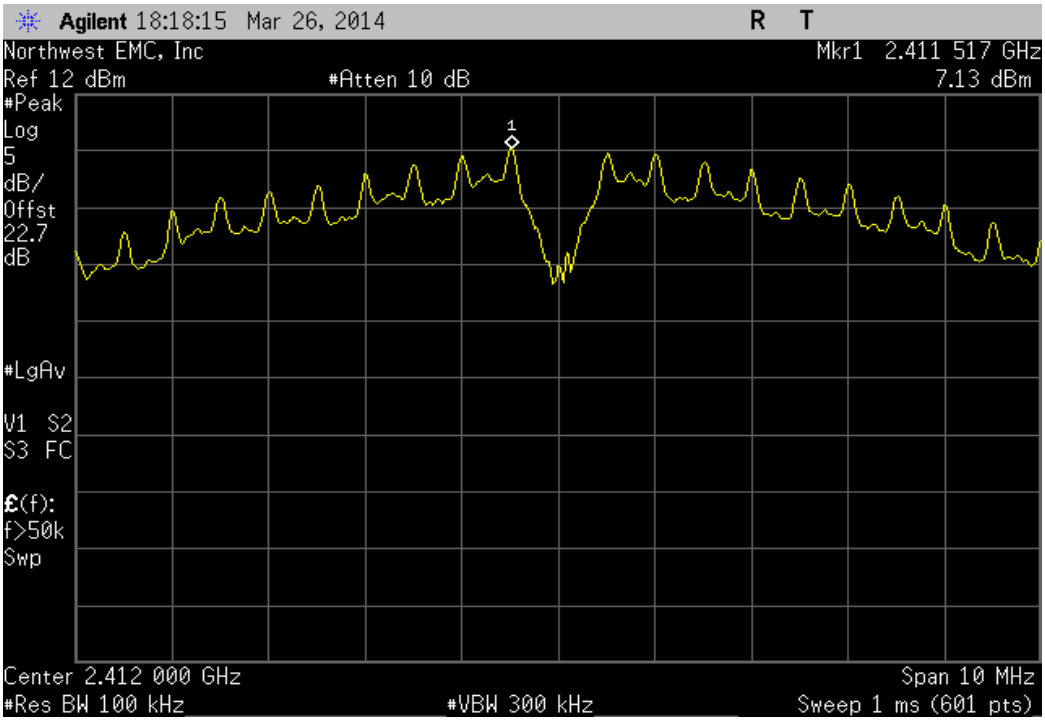
None

Configuration #	1	Signature

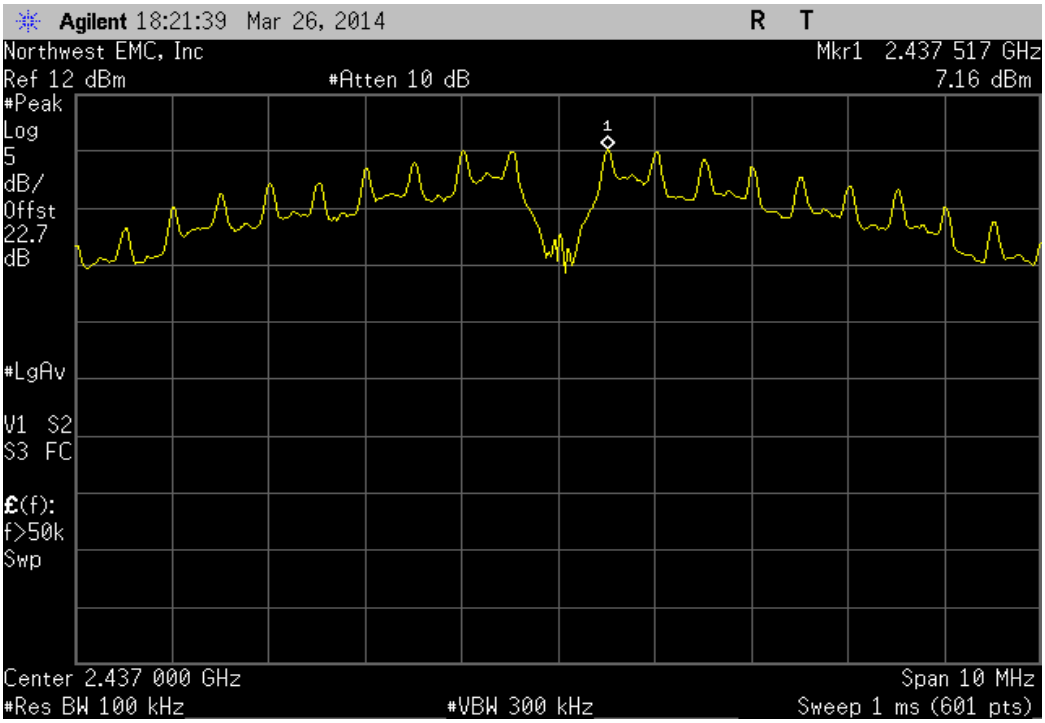
	Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
2400 MHz - 2483.5 MHz Band					
802.11(b) 1 Mbps					
Low Channel 1, 2412 MHz	7.133	-15.2	-8.067	8	Pass
Mid Channel 6, 2437 MHz	7.161	-15.2	-8.039	8	Pass
High Channel 11, 2462 MHz	6.854	-15.2	-8.346	8	Pass
802.11(b) 11 Mbps					
Low Channel 1, 2412 MHz	7.001	-15.2	-8.199	8	Pass
Mid Channel 6, 2437 MHz	7.087	-15.2	-8.113	8	Pass
High Channel 11, 2462 MHz	7.711	-15.2	-7.489	8	Pass
802.11(g) 6 Mbps					
Low Channel 1, 2412 MHz	4.859	-15.2	-10.341	8	Pass
Mid Channel 6, 2437 MHz	4.925	-15.2	-10.275	8	Pass
High Channel 11, 2462 MHz	4.461	-15.2	-10.739	8	Pass
802.11(g) 36 Mbps					
Low Channel 1, 2412 MHz	3.663	-15.2	-11.537	8	Pass
Mid Channel 6, 2437 MHz	3.863	-15.2	-11.337	8	Pass
High Channel 11, 2462 MHz	3.339	-15.2	-11.861	8	Pass
802.11(g) 54 Mbps					
Low Channel 1, 2412 MHz	3.705	-15.2	-11.495	8	Pass
Mid Channel 6, 2437 MHz	3.971	-15.2	-11.229	8	Pass
High Channel 11, 2462 MHz	3.304	-15.2	-11.896	8	Pass
802.11(n) MCS0					
Low Channel 1, 2412 MHz	2.63	-15.2	-12.57	8	Pass
Mid Channel 6, 2437 MHz	2.804	-15.2	-12.396	8	Pass
High Channel 11, 2462 MHz	2.293	-15.2	-12.907	8	Pass
802.11(n) MCS7					
Low Channel 1, 2412 MHz	2.625	-15.2	-12.575	8	Pass
Mid Channel 6, 2437 MHz	2.978	-15.2	-12.222	8	Pass
High Channel 11, 2462 MHz	2.304	-15.2	-12.896	8	Pass

POWER SPECTRAL DENSITY

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		7.133	-15.2	-8.067	8	Pass

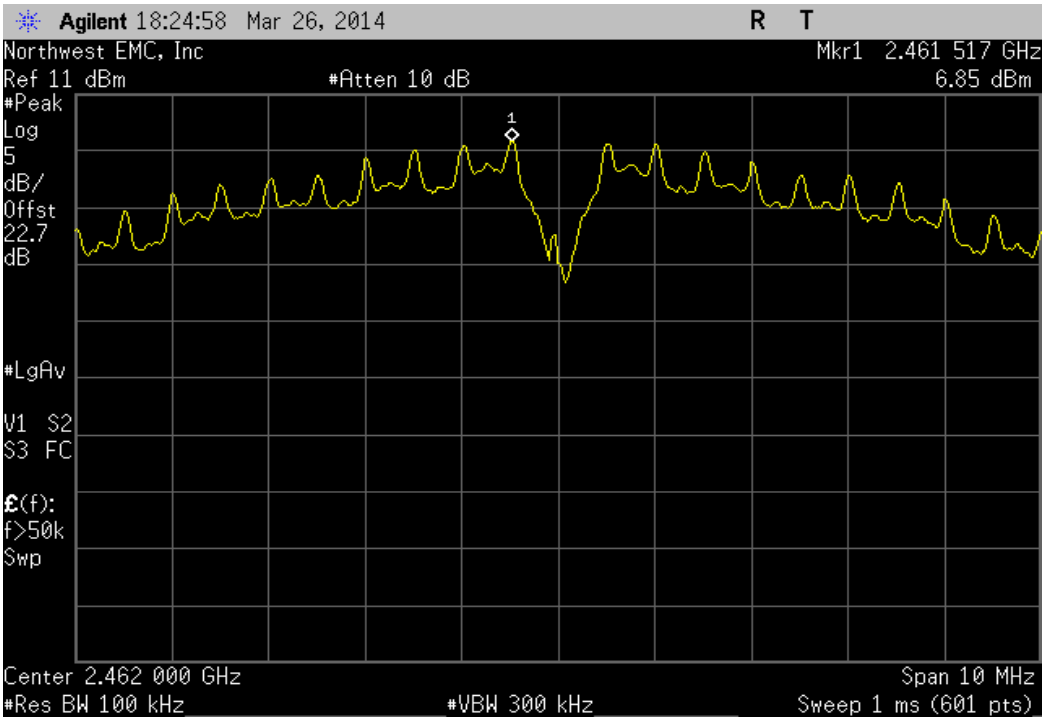


2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		7.161	-15.2	-8.039	8	Pass

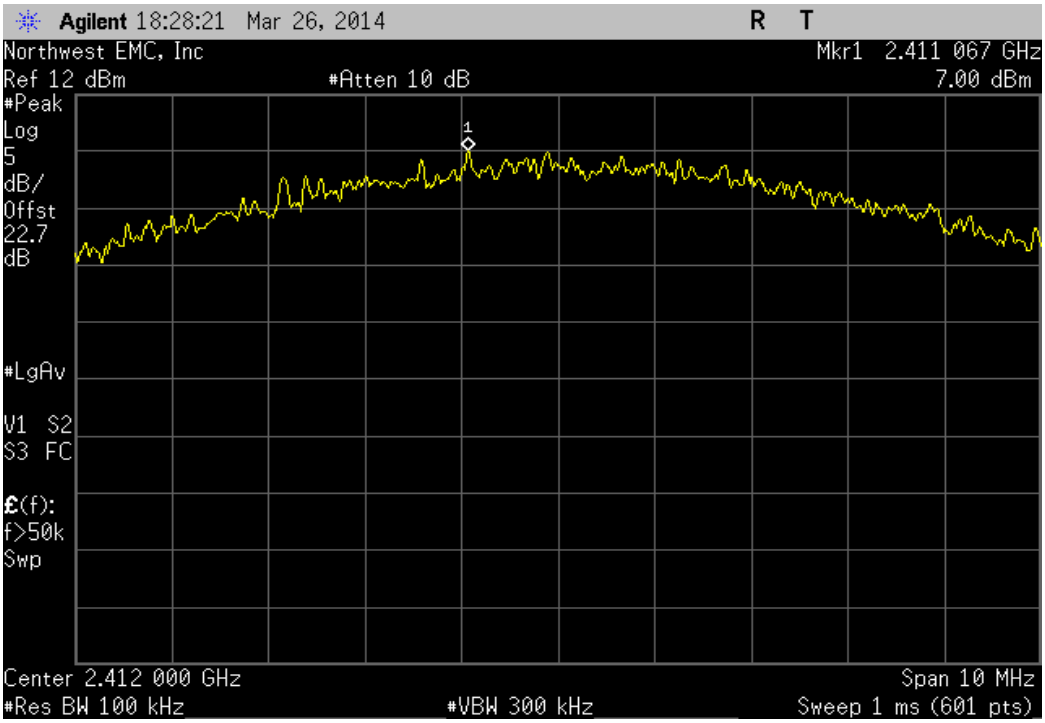


POWER SPECTRAL DENSITY

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		6.854	-15.2	-8.346	8	Pass

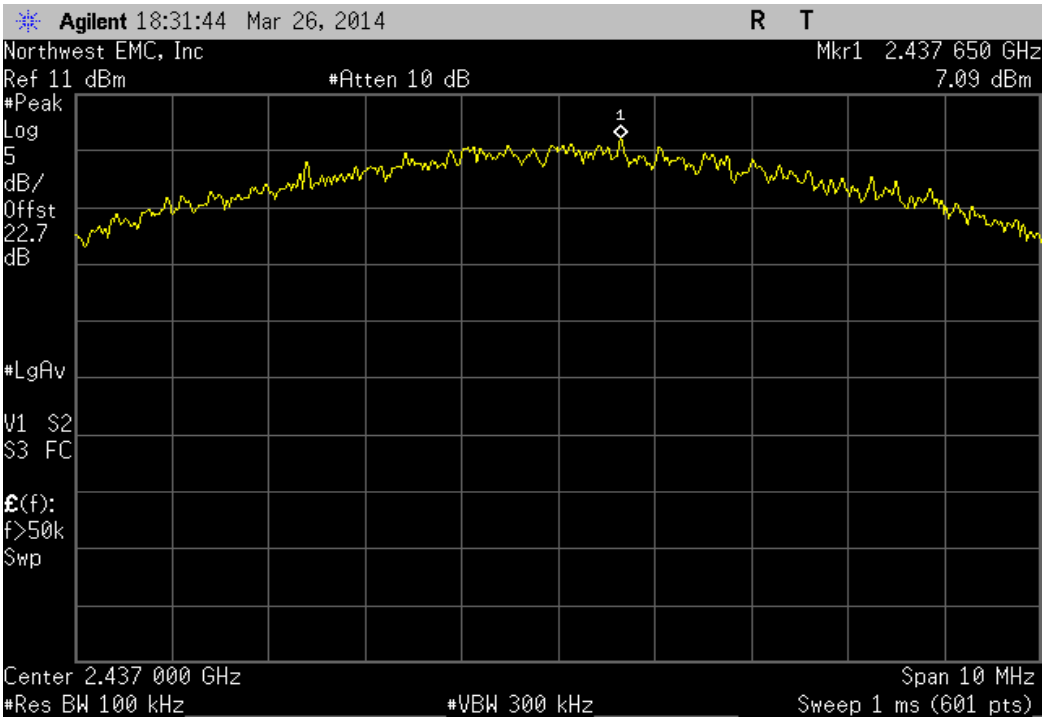


2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		7.001	-15.2	-8.199	8	Pass

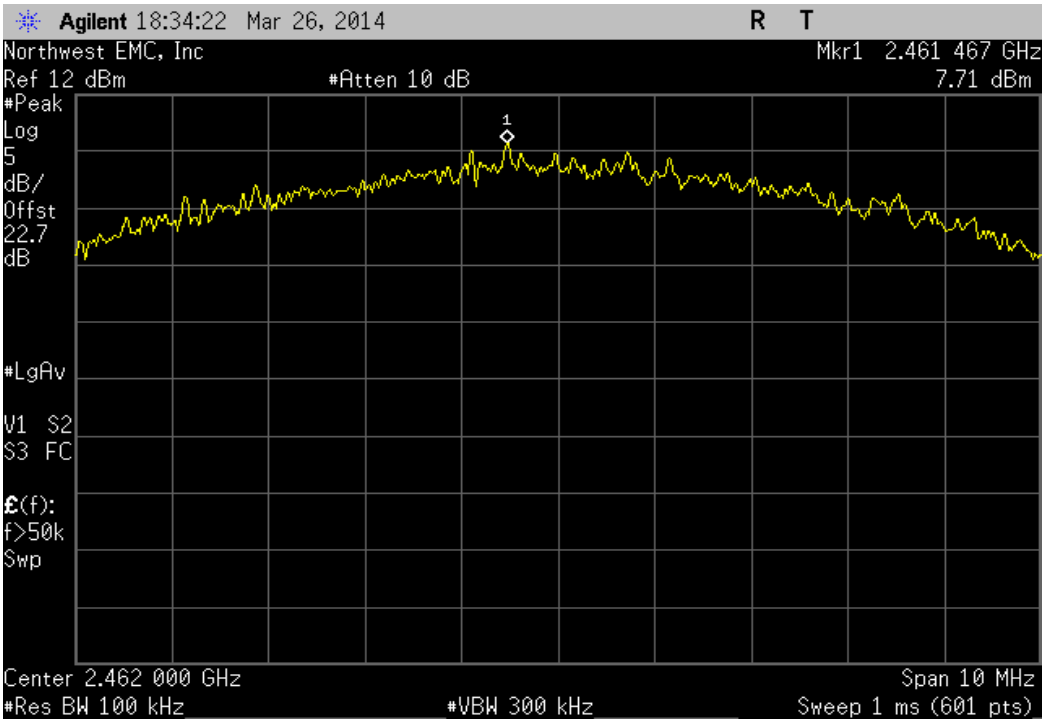


POWER SPECTRAL DENSITY

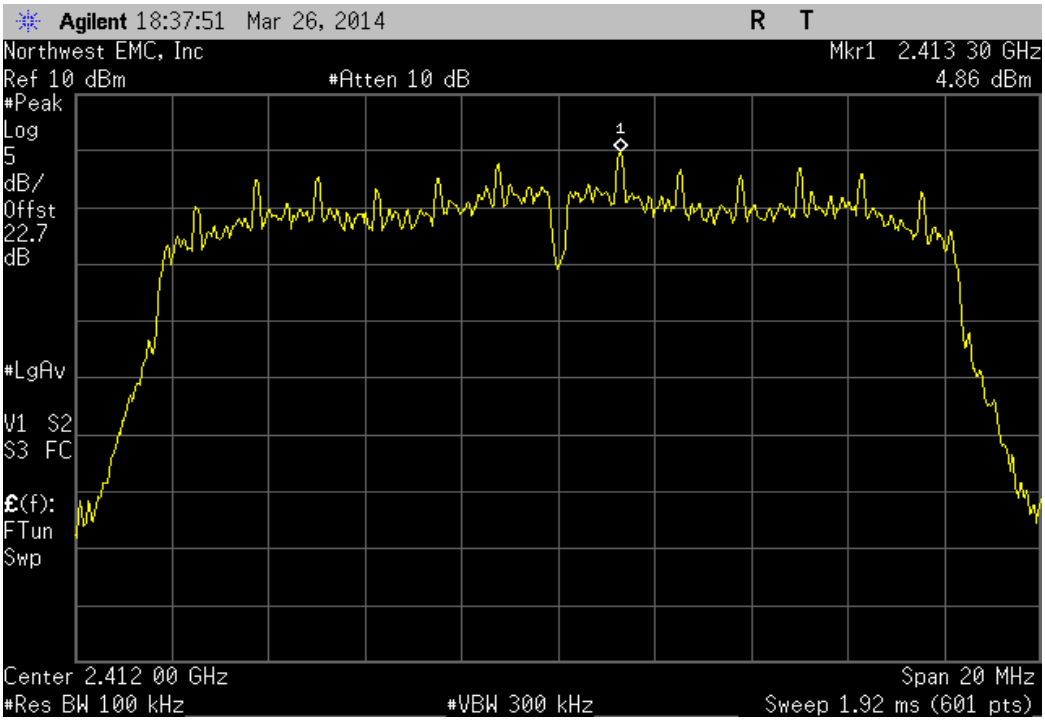
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		7.087	-15.2	-8.113	8	Pass



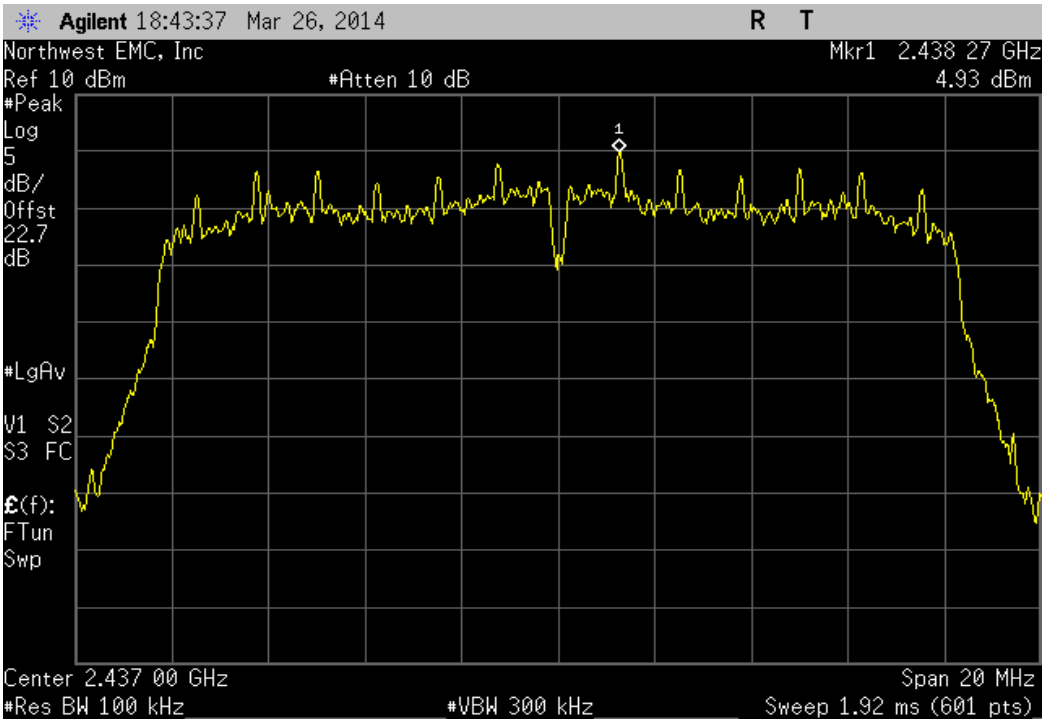
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		7.711	-15.2	-7.489	8	Pass



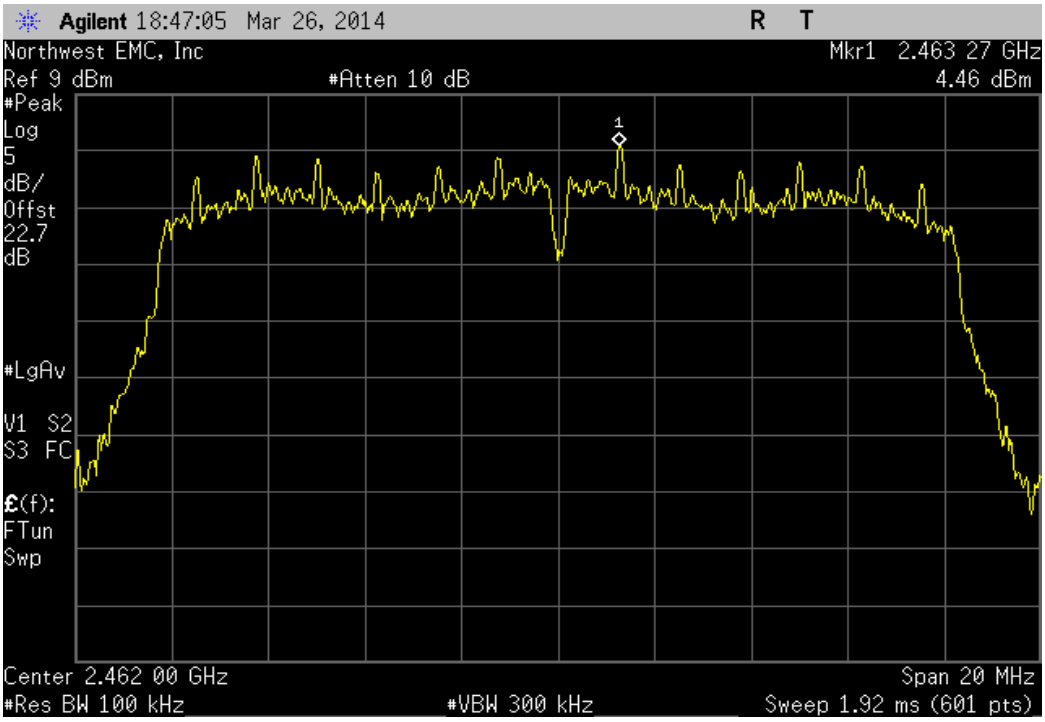
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		4.859	-15.2	-10.341	8	Pass



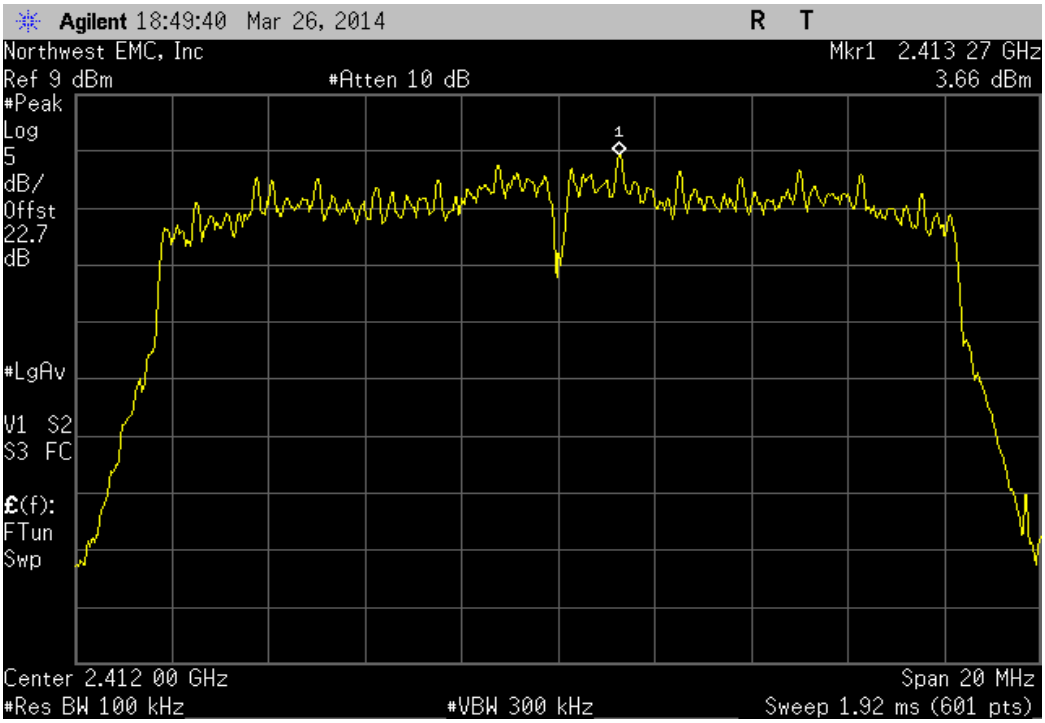
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		4.925	-15.2	-10.275	8	Pass



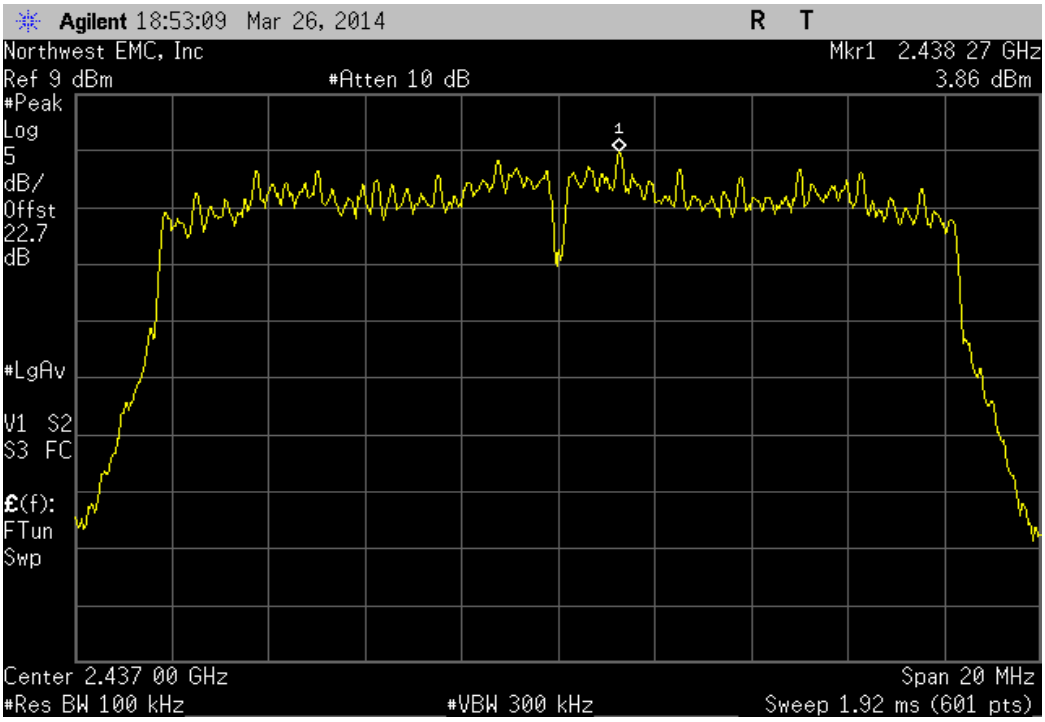
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		4.461	-15.2	-10.739	8	Pass



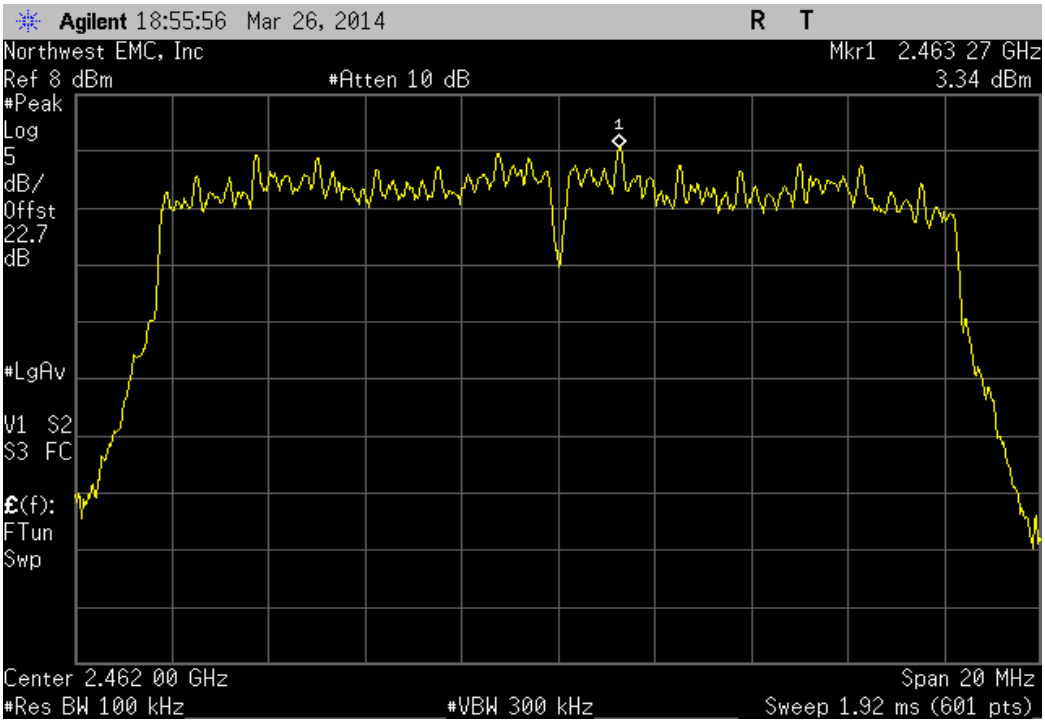
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		3.663	-15.2	-11.537	8	Pass



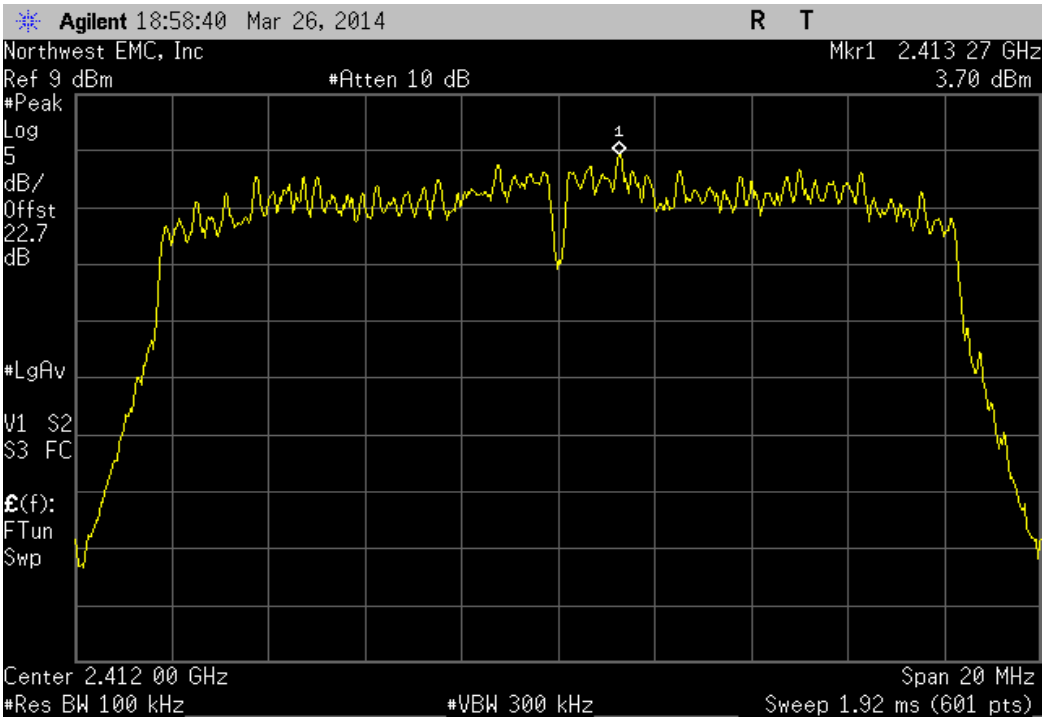
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		3.863	-15.2	-11.337	8	Pass



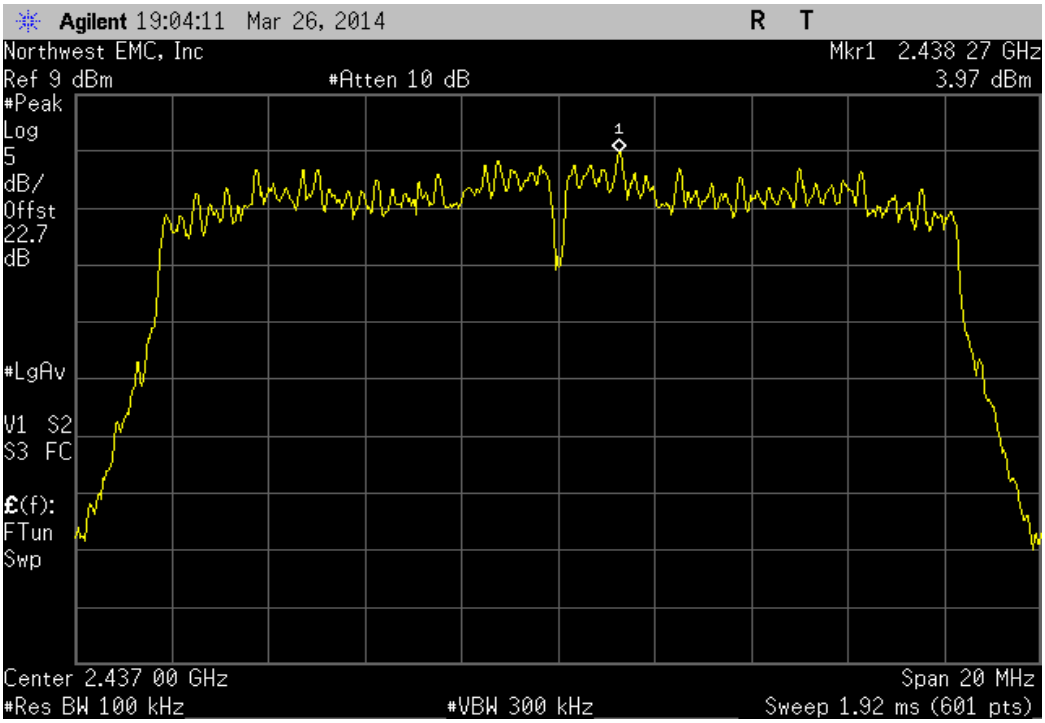
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		3.339	-15.2	-11.861	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		3.705	-15.2	-11.495	8	Pass

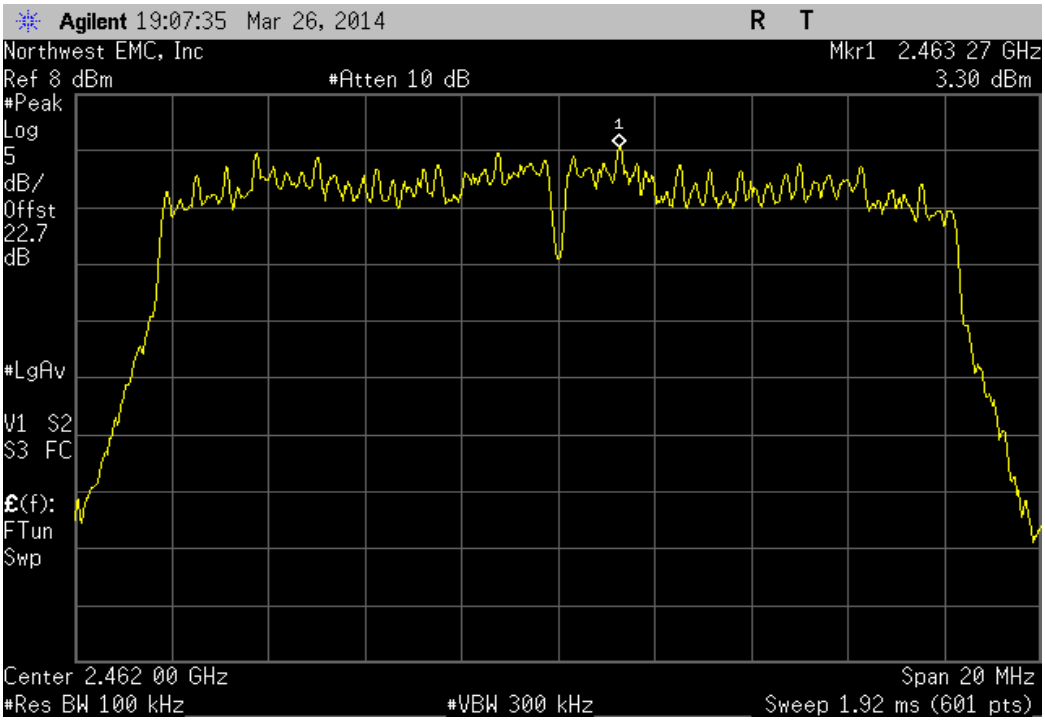


2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		3.971	-15.2	-11.229	8	Pass

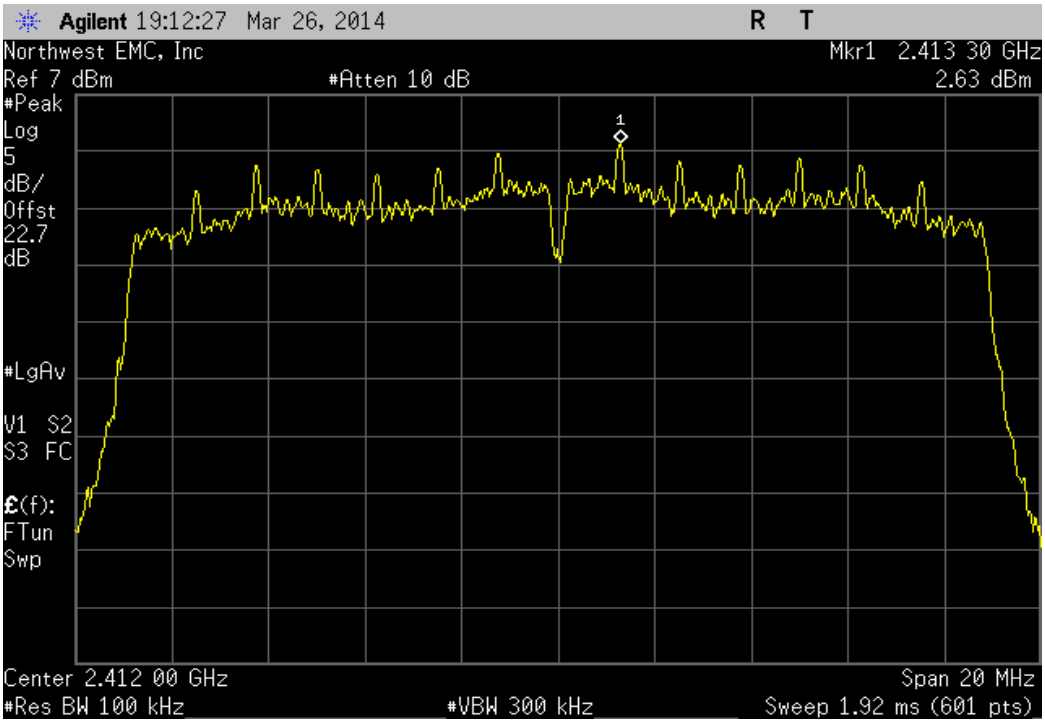


POWER SPECTRAL DENSITY

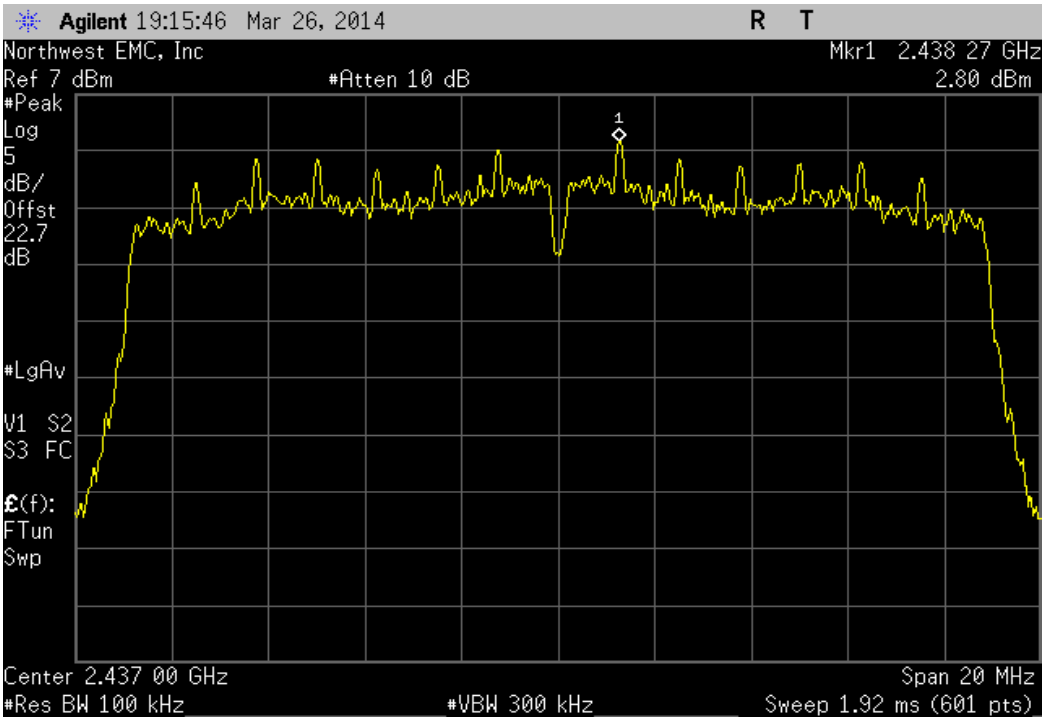
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		3.304	-15.2	-11.896	8	Pass



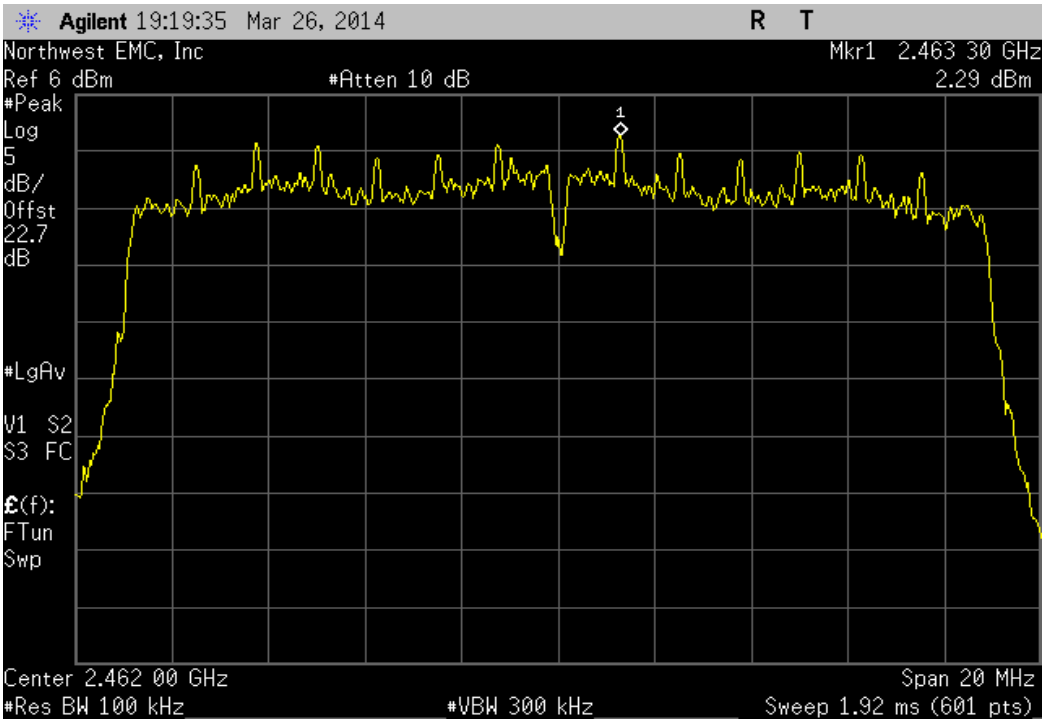
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		2.63	-15.2	-12.57	8	Pass



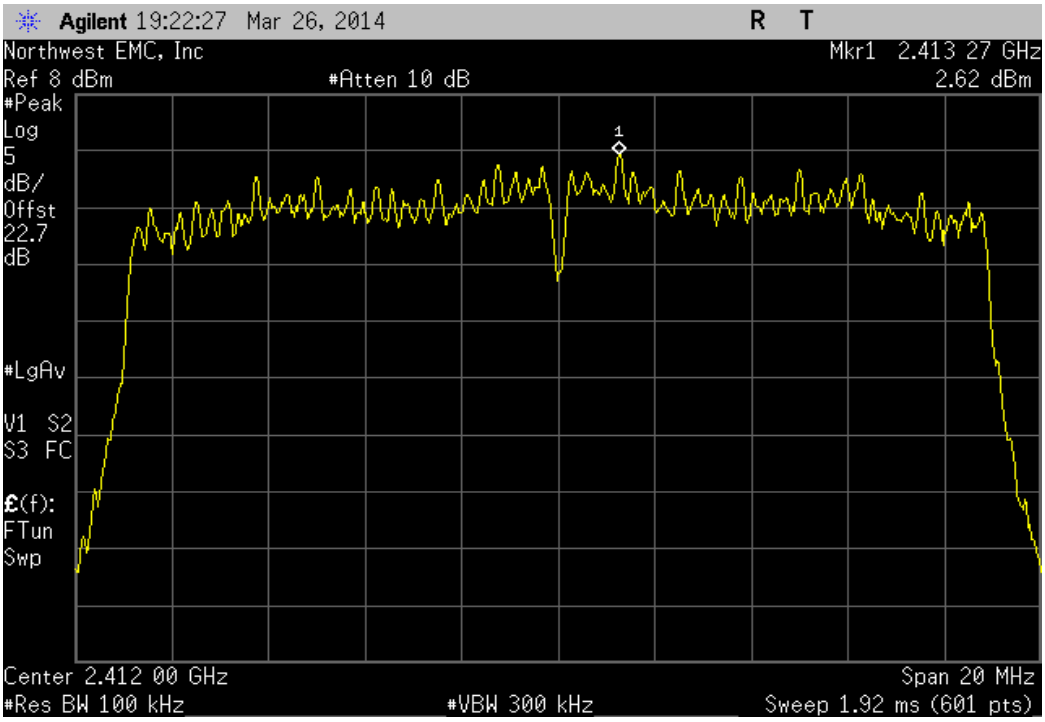
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		2.804	-15.2	-12.396	8	Pass



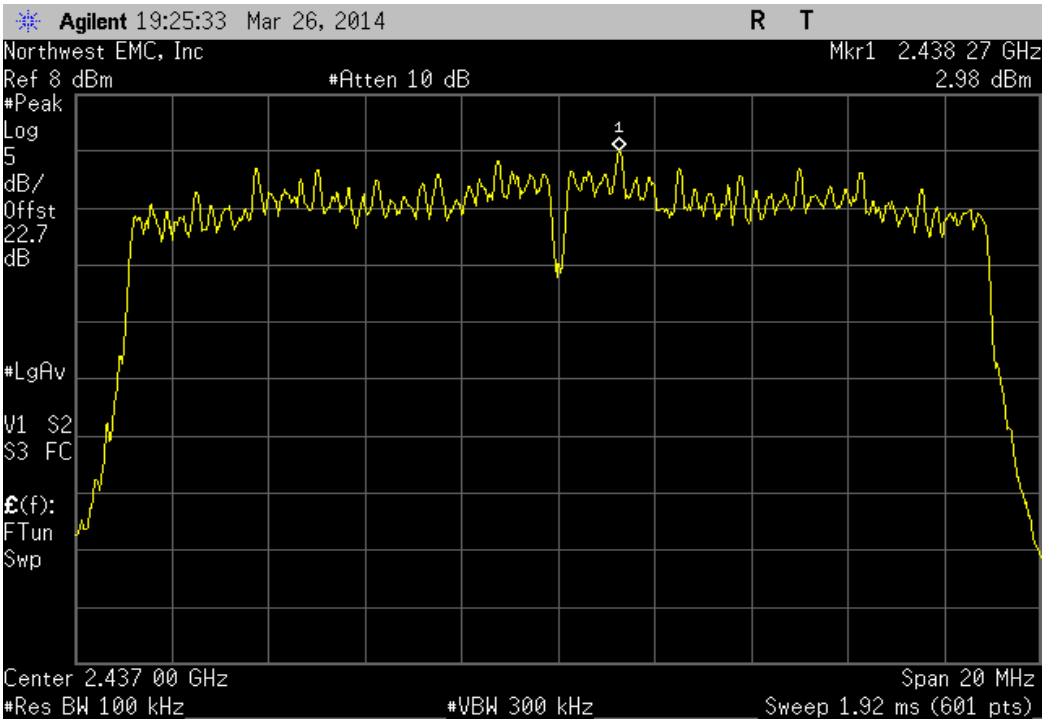
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		2.293	-15.2	-12.907	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		2.625	-15.2	-12.575	8	Pass

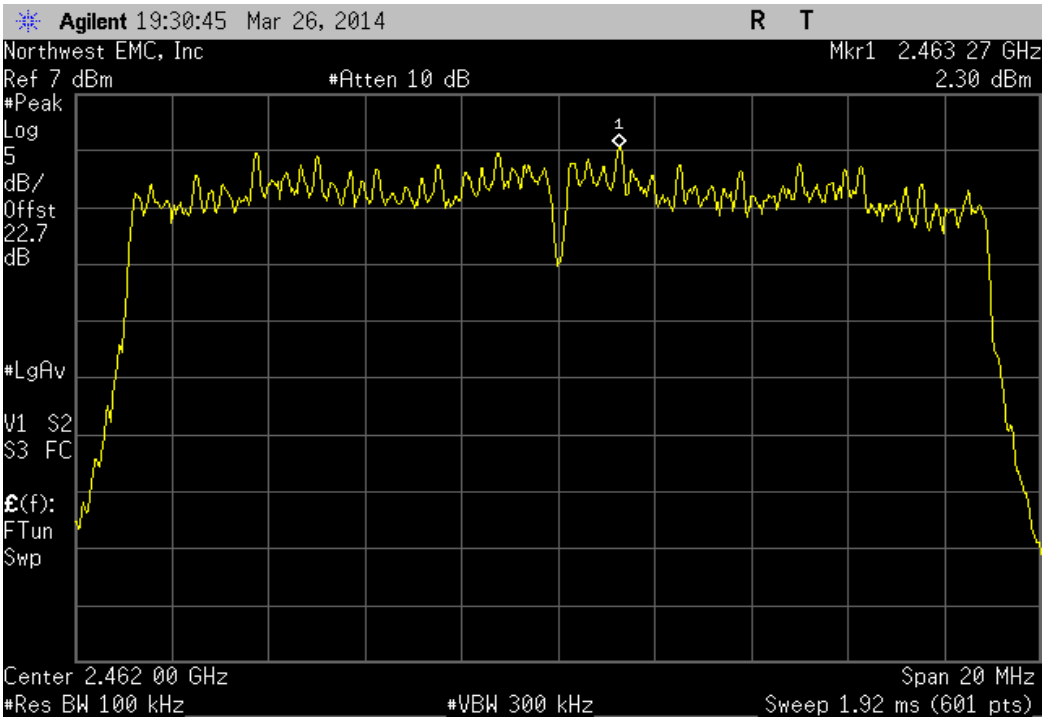


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		2.978	-15.2	-12.222	8	Pass



POWER SPECTRAL DENSITY

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
		2.304	-15.2	-12.896	8	Pass



SPURIOUS RADIATED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting 802.11(b), 1Mbps
Transmitting 802.11(b), 11Mbps
Transmitting 802.11(g), 6Mbps
Transmitting 802.11(g), 36Mbps
Transmitting 802.11(g), 54Mbps
Transmitting 802.11(n), MCS0
Transmitting 802.11(n), MCS7

CHANNELS TESTED

Low Channel 1, 2412 MHz
Mid Channel 6, 2437 MHz
High Channel 11, 2462 MHz

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

INTE5431-6

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	26000 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator	Fairview Microwave	SA18E-20	AQV	12/6/2013	12 mo
HP Filter	Micro-Tronics	HPM50111	HHI	1/18/2013	24 mo
LP Filter	Micro-Tronics	LPM50004	LFF	11/14/2013	24 mo
Cable I	N/A	N/A	SUM	7/10/2013	12 mo
NC01 Cables	N/A	Standard Gain Horn Cable	NC3	12/6/2013	12 mo
NC01 Cables	N/A	3115 Horn Cable	NC2	10/24/2013	12 mo
NC01 Cables	N/A	Bilog Cables	NC1	10/24/2013	12 mo
Pre-Amplifier	Miteq	AMF-6F-18002650-25-10P	AOD	7/10/2013	12 mo
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AOJ	12/6/2013	12 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AOK	12/6/2013	12 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVZ	10/24/2013	12 mo
Pre-Amplifier	Miteq	AM-1616-1000	PAB	10/24/2013	12 mo
Antenna, Horn	ETS	3160-09	AIY	NCR	0 mo
Antenna, Horn	EMCO	3160-08	AHO	NCR	0 mo
Antenna, Horn	EMCO	3160-07	AHP	NCR	0 mo
Antenna, Horn	EMCO	3115	AHM	6/19/2012	24 mo
Antenna, Biconilog	EMCO	3142	AXJ	5/16/2012	36 mo
Spectrum Analyzer	Agilent	E4440A	AAW	2/21/2013	24 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

TEST DESCRIPTION

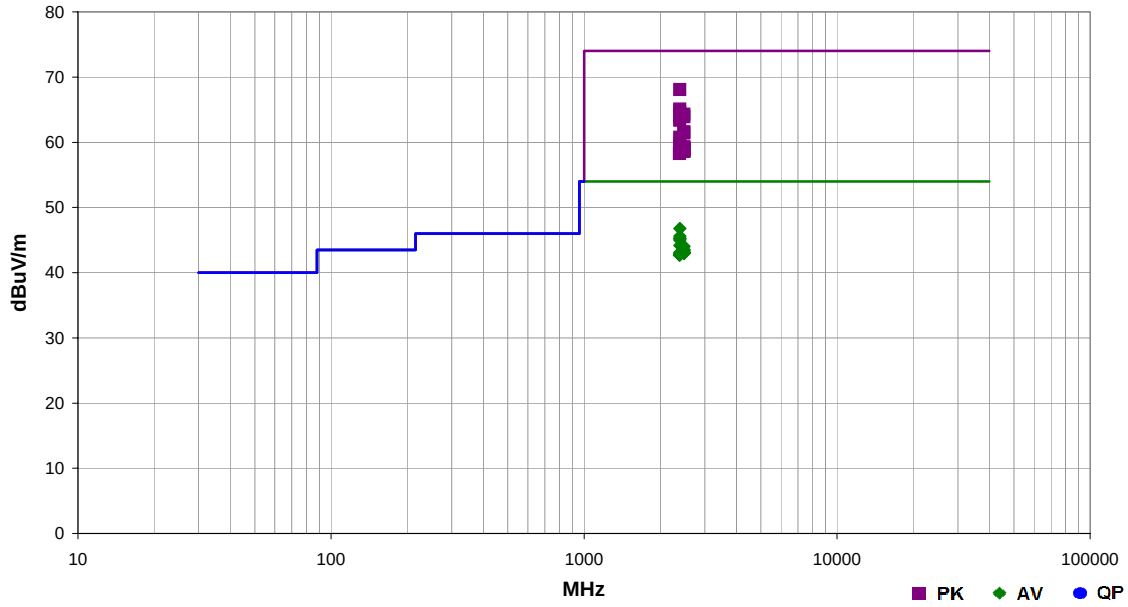
The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization. A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivty

SPURIOUS RADIATED EMISSIONS

Work Order:	INTE5431	**Date:**	04/03/14		
Project:	GQ110	**Temperature:**	24 °C		
Job Site:	NC01	**Humidity:**	28% RH		
Serial Number:	EZF8344000UK	**Barometric Pres.:**	1015 mbar	**Tested by:**	Richard Mellroth
EUT:	GQ110				
Configuration:	6				
Customer:	Intel Corporation				
Attendees:	None				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting 802.11(b/g/n), See comments next to data points for EUT orientation, channel and data rate.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.247:2014	ANSI C63.10:2009

Run #	32-33	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2389.877	50.3	-2.2	2.0	229.0	3.0	20.0	Horz	PK	0.0	68.1	74.0	-5.9	Ch 1, 2412 MHz, 6Mbps, EUT Horz
2390.000	29.0	-2.2	2.0	229.0	3.0	20.0	Horz	AV	0.0	46.8	54.0	-7.2	Ch 1, 2412 MHz, 6Mbps, EUT Horz
2389.990	27.8	-2.2	1.2	218.0	3.0	20.0	Vert	AV	0.0	45.6	54.0	-8.4	Ch 1, 2412 MHz, 6Mbps, EUT Vert
2389.990	27.5	-2.2	1.2	246.0	3.0	20.0	Vert	AV	0.0	45.3	54.0	-8.7	Ch 1, 2412 MHz, 6Mbps, EUT Flat
2389.993	27.4	-2.2	1.2	213.0	3.0	20.0	Horz	AV	0.0	45.2	54.0	-8.8	Ch 1, 2412 MHz, 6Mbps, EUT Flat
2389.853	47.3	-2.2	1.2	218.0	3.0	20.0	Vert	PK	0.0	65.1	74.0	-8.9	Ch 1, 2412 MHz, 6Mbps, EUT Vert
2389.993	27.2	-2.2	1.2	151.0	3.0	20.0	Horz	AV	0.0	45.0	54.0	-9.0	Ch 1, 2412 MHz, 6Mbps, EUT Vert
2389.613	46.8	-2.2	1.2	246.0	3.0	20.0	Vert	PK	0.0	64.6	74.0	-9.4	Ch 1, 2412 MHz, 6Mbps, EUT Flat
2483.833	46.3	-2.0	2.8	3.0	3.0	20.0	Horz	PK	0.0	64.3	74.0	-9.7	Ch 11, 2462 MHz, MCS0, EUT Flat
2389.747	46.5	-2.2	1.2	151.0	3.0	20.0	Horz	PK	0.0	64.3	74.0	-9.7	Ch 1, 2412 MHz, 6Mbps, EUT Vert
2390.000	26.4	-2.2	1.2	245.0	3.0	20.0	Vert	AV	0.0	44.2	54.0	-9.8	Ch 1, 2412 MHz, 6Mbps, EUT Horz
2483.503	26.0	-2.0	1.0	45.0	3.0	20.0	Horz	AV	0.0	44.0	54.0	-10.0	Ch 11, 2462 MHz, 6Mbps, EUT Flat
2389.823	46.2	-2.2	1.2	213.0	3.0	20.0	Horz	PK	0.0	64.0	74.0	-10.0	Ch 1, 2412 MHz, 6Mbps, EUT Flat
2483.680	45.9	-2.0	1.0	45.0	3.0	20.0	Horz	PK	0.0	63.9	74.0	-10.1	Ch 11, 2462 MHz, 6Mbps, EUT Flat
2483.500	25.5	-2.0	1.0	176.0	3.0	20.0	Vert	AV	0.0	43.5	54.0	-10.5	Ch 11, 2462 MHz, 6Mbps, EUT Horz
2483.500	25.5	-2.0	1.2	314.0	3.0	20.0	Horz	AV	0.0	43.5	54.0	-10.5	Ch 11, 2462 MHz, 6Mbps, EUT Vert
2389.803	45.6	-2.2	1.2	245.0	3.0	20.0	Vert	PK	0.0	63.4	74.0	-10.6	Ch 1, 2412 MHz, 6Mbps, EUT Horz
2483.587	25.2	-2.0	2.8	3.0	3.0	20.0	Horz	AV	0.0	43.2	54.0	-10.8	Ch 11, 2462 MHz, MCS0, EUT Flat
2483.557	25.1	-2.0	1.2	179.0	3.0	20.0	Vert	AV	0.0	43.1	54.0	-10.9	Ch 11, 2462 MHz, 6Mbps, EUT Flat
2389.993	25.3	-2.2	1.2	35.0	3.0	20.0	Horz	AV	0.0	43.1	54.0	-10.9	Ch 1, 2412 MHz, 36Mbps, EUT Horz
2485.457	25.0	-2.0	1.4	18.0	3.0	20.0	Horz	AV	0.0	43.0	54.0	-11.0	Ch 11, 2462 MHz, 1Mbps, EUT Flat
2485.143	25.0	-2.0	1.2	101.0	3.0	20.0	Horz	AV	0.0	43.0	54.0	-11.0	Ch 11, 2462 MHz, 36Mbps, EUT Flat
2485.187	25.0	-2.0	1.2	303.0	3.0	20.0	Horz	AV	0.0	43.0	54.0	-11.0	Ch 11, 2462 MHz, MCS7, EUT Flat
2484.480	25.0	-2.0	1.2	120.0	3.0	20.0	Horz	AV	0.0	43.0	54.0	-11.0	Ch 11, 2462 MHz, 54Mbps, EUT Flat
2483.850	25.0	-2.0	1.2	309.0	3.0	20.0	Vert	AV	0.0	43.0	54.0	-11.0	Ch 11, 2462 MHz, 6Mbps, EUT Vert
2483.580	25.0	-2.0	3.2	161.0	3.0	20.0	Horz	AV	0.0	43.0	54.0	-11.0	Ch 11, 2462 MHz, 6Mbps, EUT Horz
2483.540	25.0	-2.0	1.2	211.0	3.0	20.0	Horz	AV	0.0	43.0	54.0	-11.0	Ch 11, 2462 MHz, 11Mbps, EUT Flat

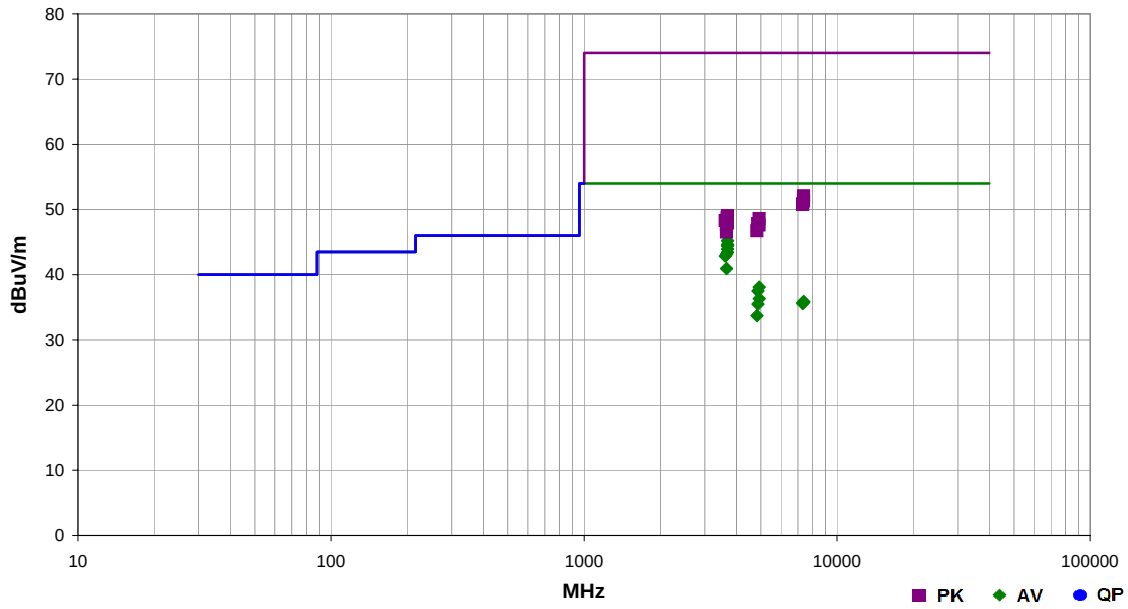
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2389.983	25.2	-2.2	1.2	29.0	3.0	20.0	Horz	AV	0.0	43.0	54.0	-11.0	Ch 1, 2412 MHz, MCS0, EUT Horz
2389.900	25.1	-2.2	1.2	1.0	3.0	20.0	Horz	AV	0.0	42.9	54.0	-11.1	Ch 1, 2412 MHz, MCS7, EUT Horz
2389.823	25.0	-2.2	1.2	247.0	3.0	20.0	Horz	AV	0.0	42.8	54.0	-11.2	Ch 1, 2412 MHz, 54Mbps, EUT Horz
2388.307	24.9	-2.2	1.2	66.0	3.0	20.0	Horz	AV	0.0	42.7	54.0	-11.3	Ch 1, 2412 MHz, 1Mbps, EUT Horz
2388.110	24.9	-2.2	1.2	314.0	3.0	20.0	Horz	AV	0.0	42.7	54.0	-11.3	Ch 1, 2412 MHz, 11Mbps, EUT Horz
2483.593	43.6	-2.0	1.0	176.0	3.0	20.0	Vert	PK	0.0	61.6	74.0	-12.4	Ch 11, 2462 MHz, 6Mbps, EUT Horz
2483.817	43.4	-2.0	1.2	314.0	3.0	20.0	Horz	PK	0.0	61.4	74.0	-12.6	Ch 11, 2462 MHz, 6Mbps, EUT Vert
2389.977	43.0	-2.2	1.2	35.0	3.0	20.0	Horz	PK	0.0	60.8	74.0	-13.2	Ch 1, 2412 MHz, 36Mbps, EUT Horz
2389.663	42.0	-2.2	1.2	29.0	3.0	20.0	Horz	PK	0.0	59.8	74.0	-14.2	Ch 1, 2412 MHz, MCS0, EUT Horz
2485.293	41.3	-2.0	1.2	303.0	3.0	20.0	Horz	PK	0.0	59.3	74.0	-14.7	Ch 11, 2462 MHz, MCS7, EUT Flat
2485.340	41.2	-2.0	1.2	179.0	3.0	20.0	Vert	PK	0.0	59.2	74.0	-14.8	Ch 11, 2462 MHz, 6Mbps, EUT Flat
2485.073	41.1	-2.0	1.2	309.0	3.0	20.0	Vert	PK	0.0	59.1	74.0	-14.9	Ch 11, 2462 MHz, 6Mbps, EUT Vert
2485.423	41.0	-2.0	1.2	211.0	3.0	20.0	Horz	PK	0.0	59.0	74.0	-15.0	Ch 11, 2462 MHz, 11Mbps, EUT Flat
2484.090	40.8	-2.0	3.2	161.0	3.0	20.0	Horz	PK	0.0	58.8	74.0	-15.2	Ch 11, 2462 MHz, 6Mbps, EUT Horz
2389.377	41.0	-2.2	1.2	1.0	3.0	20.0	Horz	PK	0.0	58.8	74.0	-15.2	Ch 1, 2412 MHz, MCS7, EUT Horz
2484.450	40.7	-2.0	1.4	18.0	3.0	20.0	Horz	PK	0.0	58.7	74.0	-15.3	Ch 11, 2462 MHz, 1Mbps, EUT Flat
2484.633	40.6	-2.0	1.2	101.0	3.0	20.0	Horz	PK	0.0	58.6	74.0	-15.4	Ch 11, 2462 MHz, 36Mbps, EUT Flat
2484.270	40.6	-2.0	1.2	120.0	3.0	20.0	Horz	PK	0.0	58.6	74.0	-15.4	Ch 11, 2462 MHz, 54Mbps, EUT Flat
2388.570	40.8	-2.2	1.2	247.0	3.0	20.0	Horz	PK	0.0	58.6	74.0	-15.4	Ch 1, 2412 MHz, 54Mbps, EUT Horz
2389.890	40.7	-2.2	1.2	314.0	3.0	20.0	Horz	PK	0.0	58.5	74.0	-15.5	Ch 1, 2412 MHz, 11Mbps, EUT Horz
2388.347	40.5	-2.2	1.2	66.0	3.0	20.0	Horz	PK	0.0	58.3	74.0	-15.7	Ch 1, 2412 MHz, 1Mbps, EUT Horz

SPURIOUS RADIATED EMISSIONS

Work Order:	INTE5431	**Date:**	04/03/14		
Project:	GQ110	**Temperature:**	24 °C		
Job Site:	NC01	**Humidity:**	28% RH		
Serial Number:	EZF8344000UK	**Barometric Pres.:**	1015 mbar	**Tested by:**	Richard Mellroth
EUT:	GQ110				
Configuration:	6				
Customer:	Intel Corporation				
Attendees:	None				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting 802.11(b/g/n), See comments next to data points for EUT orientation, channel and data rate.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.247:2014	ANSI C63.10:2009

Run #	29	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
3693.025	42.6	2.6	1.8	107.0	3.0	0.0	Horz	AV	0.0	45.2	54.0	-8.8	Ch 11, 2462 MHz, 6Mbps, EUT Flat
3693.030	42.0	2.6	1.8	106.0	3.0	0.0	Horz	AV	0.0	44.6	54.0	-9.4	Ch 11, 2462 MHz, 36Mbps, EUT Flat
3693.015	41.9	2.6	1.8	109.0	3.0	0.0	Horz	AV	0.0	44.5	54.0	-9.5	Ch 11, 2462 MHz, 54Mbps, EUT Flat
3693.015	41.8	2.6	1.8	117.0	3.0	0.0	Horz	AV	0.0	44.4	54.0	-9.6	Ch 11, 2462 MHz, MCS0, EUT Flat
3693.025	41.3	2.6	2.1	118.0	3.0	0.0	Horz	AV	0.0	43.9	54.0	-10.1	Ch 11, 2462 MHz, 11Mbps, EUT Flat
3693.025	40.8	2.6	1.9	119.0	3.0	0.0	Horz	AV	0.0	43.4	54.0	-10.6	Ch 11, 2462 MHz, MCS7, EUT Flat
3655.535	41.0	2.1	2.1	105.0	3.0	0.0	Horz	AV	0.0	43.1	54.0	-10.9	Ch 6, 2437 MHz, 1Mbps, EUT Flat
3618.020	41.0	1.9	1.8	112.0	3.0	0.0	Horz	AV	0.0	42.9	54.0	-11.1	Ch 1, 2412 MHz, 1Mbps, EUT Flat
3655.530	38.8	2.1	1.2	42.0	3.0	0.0	Vert	AV	0.0	40.9	54.0	-13.1	Ch 6, 2437 MHz, 1Mbps, EUT Horz
4924.030	30.7	7.4	1.4	148.0	3.0	0.0	Horz	AV	0.0	38.1	54.0	-15.9	Ch 11, 2462 MHz, 1Mbps, EUT Flat
4874.050	30.2	7.3	1.2	93.0	3.0	0.0	Horz	AV	0.0	37.5	54.0	-16.5	Ch 6, 2437 MHz, 1Mbps, EUT Flat
4924.042	28.9	7.4	1.0	119.0	3.0	0.0	Vert	AV	0.0	36.3	54.0	-17.7	Ch 11, 2462 MHz, 1Mbps, EUT Vert
7384.058	23.3	12.6	1.0	332.0	3.0	0.0	Vert	AV	0.0	35.9	54.0	-18.1	Ch 11, 2462 MHz, 1Mbps, EUT Vert
7387.135	23.2	12.6	1.0	105.0	3.0	0.0	Horz	AV	0.0	35.8	54.0	-18.2	Ch 11, 2462 MHz, 1Mbps, EUT Flat
7309.940	23.5	12.2	2.8	186.0	3.0	0.0	Horz	AV	0.0	35.7	54.0	-18.3	Ch 6, 2437 MHz, 1Mbps, EUT Flat
7311.715	23.4	12.2	1.2	148.0	3.0	0.0	Vert	AV	0.0	35.6	54.0	-18.4	Ch 6, 2437 MHz, 1Mbps, EUT Horz
4874.035	28.2	7.3	1.2	87.0	3.0	0.0	Vert	AV	0.0	35.5	54.0	-18.5	Ch 6, 2437 MHz, 1Mbps, EUT Horz
4824.045	26.5	7.2	1.4	97.0	3.0	0.0	Horz	AV	0.0	33.7	54.0	-20.3	Ch 1, 2412 MHz, 1Mbps, EUT Flat
7385.910	39.5	12.6	1.0	105.0	3.0	0.0	Horz	PK	0.0	52.1	74.0	-21.9	Ch 11, 2462 MHz, 1Mbps, EUT Flat
7386.458	38.7	12.6	1.0	332.0	3.0	0.0	Vert	PK	0.0	51.3	74.0	-22.7	Ch 11, 2462 MHz, 1Mbps, EUT Vert
7309.525	38.7	12.2	1.2	148.0	3.0	0.0	Vert	PK	0.0	50.9	74.0	-23.1	Ch 6, 2437 MHz, 1Mbps, EUT Horz
7311.140	38.6	12.2	2.8	186.0	3.0	0.0	Horz	PK	0.0	50.8	74.0	-23.2	Ch 6, 2437 MHz, 1Mbps, EUT Flat
3693.140	46.4	2.6	1.8	107.0	3.0	0.0	Horz	PK	0.0	49.0	74.0	-25.0	Ch 11, 2462 MHz, 6Mbps, EUT Flat
3693.125	46.1	2.6	1.8	106.0	3.0	0.0	Horz	PK	0.0	48.7	74.0	-25.3	Ch 11, 2462 MHz, 36Mbps, EUT Flat
3692.975	46.1	2.6	1.8	109.0	3.0	0.0	Horz	PK	0.0	48.7	74.0	-25.3	Ch 11, 2462 MHz, 54Mbps, EUT Flat
3693.165	46.0	2.6	1.8	117.0	3.0	0.0	Horz	PK	0.0	48.6	74.0	-25.4	Ch 11, 2462 MHz, MCS0, EUT Flat
4923.975	41.2	7.4	1.4	148.0	3.0	0.0	Horz	PK	0.0	48.6	74.0	-25.4	Ch 11, 2462 MHz, 1Mbps, EUT Flat

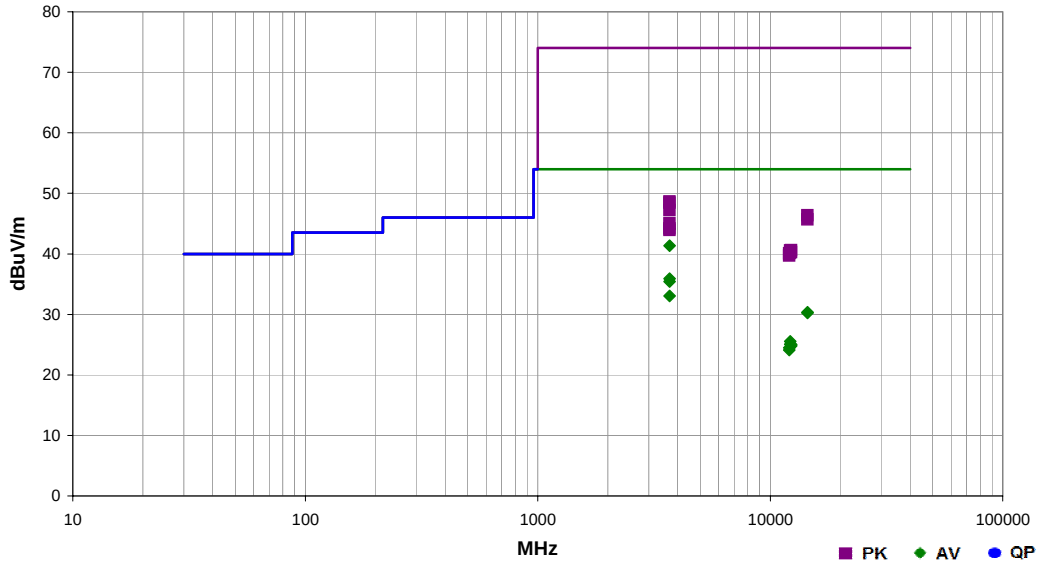
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
3692.920	45.7	2.6	2.1	118.0	3.0	0.0	Horz	PK	0.0	48.3	74.0	-25.7	Ch 11, 2462 MHz, 11Mbps, EUT Flat
3618.040	46.4	1.9	1.8	112.0	3.0	0.0	Horz	PK	0.0	48.3	74.0	-25.7	Ch 1, 2412 MHz, 1Mbps, EUT Flat
3693.030	45.3	2.6	1.9	119.0	3.0	0.0	Horz	PK	0.0	47.9	74.0	-26.1	Ch 11, 2462 MHz, MCS7, EUT Flat
4873.905	40.5	7.3	1.2	87.0	3.0	0.0	Vert	PK	0.0	47.8	74.0	-26.2	Ch 6, 2437 MHz, 1Mbps, EUT Horz
4873.920	40.5	7.3	1.2	93.0	3.0	0.0	Horz	PK	0.0	47.8	74.0	-26.2	Ch 6, 2437 MHz, 1Mbps, EUT Flat
3655.375	45.5	2.1	2.1	105.0	3.0	0.0	Horz	PK	0.0	47.6	74.0	-26.4	Ch 6, 2437 MHz, 1Mbps, EUT Flat
4924.250	40.2	7.4	1.0	119.0	3.0	0.0	Vert	PK	0.0	47.6	74.0	-26.4	Ch 11, 2462 MHz, 1Mbps, EUT Vert
4824.500	39.5	7.2	1.4	97.0	3.0	0.0	Horz	PK	0.0	46.7	74.0	-27.3	Ch 1, 2412 MHz, 1Mbps, EUT Flat
3655.630	44.4	2.1	1.2	42.0	3.0	0.0	Vert	PK	0.0	46.5	74.0	-27.5	Ch 6, 2437 MHz, 1Mbps, EUT Horz

SPURIOUS RADIATED EMISSIONS

Work Order:	INTE5431	**Date:**	04/03/14		
Project:	GQ110	**Temperature:**	24 °C		
Job Site:	NC01	**Humidity:**	28% RH		
Serial Number:	EZF8344000UK	**Barometric Pres.:**	1015 mbar	**Tested by:**	Richard Mellroth
EUT:	GQ110				
Configuration:	6				
Customer:	Intel Corporation				
Attendees:	None				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting 802.11(b/g/n), See comments next to data points for EUT orientation, channel and data rate.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.247:2014	ANSI C63.10:2009

Run #	28,30-31	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
3693.035	41.5	2.6	1.8	116.0	3.0	0.0	Horz	AV	0.0	44.1	54.0	-9.9	Ch 11, 2462 MHz, 1Mbps, EUT Flat
3693.025	41.5	2.6	1.9	205.0	3.0	0.0	Horz	AV	0.0	44.1	54.0	-9.9	Ch 11, 2462 MHz, 1Mbps, EUT Vert
3693.030	38.7	2.6	1.2	34.0	3.0	0.0	Vert	AV	0.0	41.3	54.0	-12.7	Ch 11, 2462 MHz, 1Mbps, EUT Horz
3693.040	33.3	2.6	3.4	257.0	3.0	0.0	Vert	AV	0.0	35.9	54.0	-18.1	Ch 11, 2462 MHz, 1Mbps, EUT Vert
3693.015	32.8	2.6	1.2	236.0	3.0	0.0	Horz	AV	0.0	35.4	54.0	-18.6	Ch 11, 2462 MHz, 1Mbps, EUT Horz
3693.050	30.4	2.6	1.1	277.0	3.0	0.0	Vert	AV	0.0	33.0	54.0	-21.0	Ch 11, 2462 MHz, 1Mbps, EUT Flat
14472.300	25.2	5.2	1.2	193.0	3.0	0.0	Vert	AV	0.0	30.4	54.0	-23.6	Ch 1, 2412 MHz, 1Mbps, EUT Horz
14473.040	25.1	5.2	1.2	335.0	3.0	0.0	Horz	AV	0.0	30.3	54.0	-23.7	Ch 1, 2412 MHz, 1Mbps, EUT Flat
3692.870	46.0	2.6	1.9	205.0	3.0	0.0	Horz	PK	0.0	48.6	74.0	-25.4	Ch 11, 2462 MHz, 1Mbps, EUT Vert
3693.035	45.8	2.6	1.8	116.0	3.0	0.0	Horz	PK	0.0	48.4	74.0	-25.6	Ch 11, 2462 MHz, 1Mbps, EUT Flat
3693.095	44.6	2.6	1.2	34.0	3.0	0.0	Vert	PK	0.0	47.2	74.0	-26.8	Ch 11, 2462 MHz, 1Mbps, EUT Horz
14471.140	41.2	5.2	1.2	193.0	3.0	0.0	Vert	PK	0.0	46.4	74.0	-27.6	Ch 1, 2412 MHz, 1Mbps, EUT Horz
14471.280	40.5	5.2	1.2	335.0	3.0	0.0	Horz	PK	0.0	45.7	74.0	-28.3	Ch 1, 2412 MHz, 1Mbps, EUT Flat
12185.790	27.7	-2.1	1.2	20.0	3.0	0.0	Vert	AV	0.0	25.6	54.0	-28.4	Ch 6, 2437 MHz, 1Mbps, EUT Horz
12185.680	27.2	-2.1	1.2	28.0	3.0	0.0	Horz	AV	0.0	25.1	54.0	-28.9	Ch 6, 2437 MHz, 1Mbps, EUT Flat
3693.270	42.4	2.6	3.4	257.0	3.0	0.0	Vert	PK	0.0	45.0	74.0	-29.0	Ch 11, 2462 MHz, 1Mbps, EUT Vert
12310.810	27.1	-2.1	1.2	13.0	3.0	0.0	Vert	AV	0.0	25.0	54.0	-29.0	Ch 11, 2462 MHz, 1Mbps, EUT Horz
12311.460	26.9	-2.1	1.2	200.0	3.0	0.0	Horz	AV	0.0	24.8	54.0	-29.2	Ch 11, 2462 MHz, 1Mbps, EUT Flat
12060.920	26.7	-2.2	1.2	18.0	3.0	0.0	Vert	AV	0.0	24.5	54.0	-29.5	Ch 1, 2412 MHz, 1Mbps, EUT Horz
3693.085	41.6	2.6	1.1	277.0	3.0	0.0	Vert	PK	0.0	44.2	74.0	-29.8	Ch 11, 2462 MHz, 1Mbps, EUT Flat
12061.430	26.3	-2.2	1.2	93.0	3.0	0.0	Horz	AV	0.0	24.1	54.0	-29.9	Ch 1, 2412 MHz, 1Mbps, EUT Flat
3692.530	41.3	2.6	1.2	236.0	3.0	0.0	Horz	PK	0.0	43.9	74.0	-30.1	Ch 11, 2462 MHz, 1Mbps, EUT Horz
12309.970	42.7	-2.1	1.2	13.0	3.0	0.0	Vert	PK	0.0	40.6	74.0	-33.4	Ch 11, 2462 MHz, 1Mbps, EUT Horz
12186.020	42.7	-2.1	1.2	20.0	3.0	0.0	Vert	PK	0.0	40.6	74.0	-33.4	Ch 6, 2437 MHz, 1Mbps, EUT Horz
12308.610	42.4	-2.1	1.2	200.0	3.0	0.0	Horz	PK	0.0	40.3	74.0	-33.7	Ch 11, 2462 MHz, 1Mbps, EUT Flat
12185.200	42.3	-2.1	1.2	28.0	3.0	0.0	Horz	PK	0.0	40.2	74.0	-33.8	Ch 6, 2437 MHz, 1Mbps, EUT Flat
12060.140	42.3	-2.2	1.2	93.0	3.0	0.0	Horz	PK	0.0	40.1	74.0	-33.9	Ch 1, 2412 MHz, 1Mbps, EUT Flat
12058.910	41.9	-2.2	1.2	18.0	3.0	0.0	Vert	PK	0.0	39.7	74.0	-34.3	Ch 1, 2412 MHz, 1Mbps, EUT Horz

AC POWERLINE CONDUCTED EMISSIONS

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. 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 power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50 Ω measuring port is terminated by a 50 Ω EMI meter or a 50 Ω resistive load. All 50 Ω measuring ports of the LISN are terminated by 50Ω.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
EV07 Cables	N/A	Conducted Cables	EVG	03/07/2014	12 mo
Attenuator	Fairview Microwave	SA6B10W-20	RKA	10/24/2013	12 mo
High Pass Filter	TTE	H97-100K-50-720B	HHD	01/22/2014	12 mo
Receiver	Rohde & Schwarz	ESCI	ARH	02/05/2014	12 mo
LISN	Solar	9252-50-R-24-BNC	LIP	02/16/2014	12 mo
LISN	Solar	9252-50-R-24-BNC	LIN	02/03/2014	12 mo

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	2.94 dB	-2.94 dB

CONFIGURATIONS INVESTIGATED

INTE5431-4

MODES INVESTIGATED

EUT powered on. Tx, 802.11(b) Channel 1, 1Mbps
EUT powered on. Tx, 802.11(b) Channel 6, 1Mbps
EUT powered on. Tx, 802.11(b) Channel 11, 1Mbps

AC POWERLINE CONDUCTED EMISSIONS

EUT:	GQ110	Work Order:	INTE5431
Serial Number:	EZF8344000UK	Date:	03/28/2014
Customer:	Intel Corporation	Temperature:	20.2°C
Attendees:	Sahithi Kandula	Relative Humidity:	42.7%
Customer Project:	GQ110	Bar. Pressure:	1009.1 mb
Tested By:	Jared Ison	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	INTE5431-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	2	Line:	Neutral	Ext. Attenuation (dB):	20

COMMENTS

None.

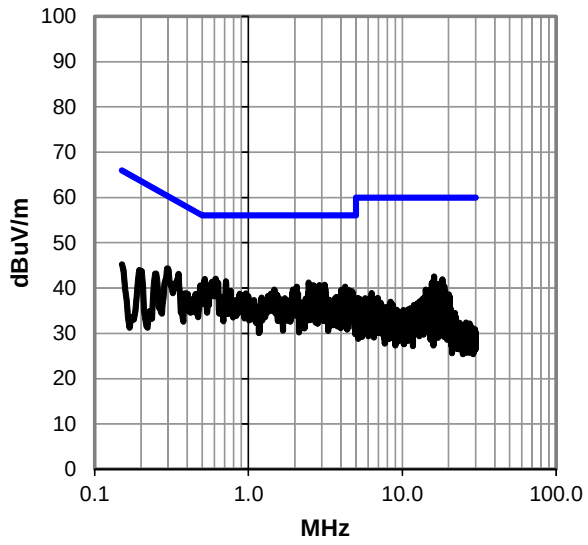
EUT OPERATING MODES

EUT powered on. Tx, 802.11(b) Channel 1, 1Mbps

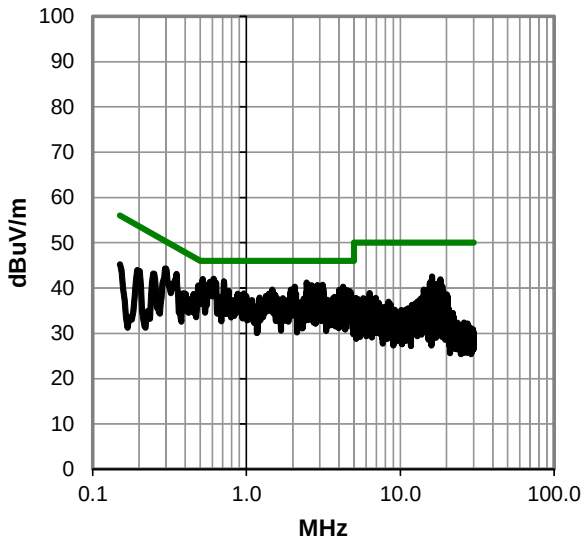
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #2

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.613	22.3	19.8	42.1	56.0	-13.9
0.519	22.2	19.8	42.0	56.0	-14.0
0.713	21.7	19.8	41.5	56.0	-14.5
0.579	21.6	19.8	41.4	56.0	-14.6
2.463	21.6	19.6	41.2	56.0	-14.8
3.127	21.2	19.5	40.7	56.0	-15.3
2.534	21.1	19.6	40.7	56.0	-15.3
2.896	21.1	19.6	40.7	56.0	-15.3
2.650	21.0	19.6	40.6	56.0	-15.4
2.642	20.9	19.6	40.5	56.0	-15.5
2.497	20.8	19.6	40.4	56.0	-15.6
0.486	20.8	19.8	40.6	56.2	-15.6
2.060	20.7	19.6	40.3	56.0	-15.7
4.239	20.7	19.6	40.3	56.0	-15.7
0.545	20.5	19.8	40.3	56.0	-15.7
0.351	23.3	19.8	43.1	58.9	-15.8
2.948	20.5	19.6	40.1	56.0	-15.9
0.299	24.5	19.8	44.3	60.3	-16.0
2.832	20.3	19.6	39.9	56.0	-16.1
1.474	20.0	19.7	39.7	56.0	-16.3
1.941	20.0	19.6	39.6	56.0	-16.4
4.015	20.0	19.6	39.6	56.0	-16.4
4.519	19.9	19.6	39.5	56.0	-16.5
3.015	19.8	19.6	39.4	56.0	-16.6
0.766	19.6	19.7	39.3	56.0	-16.7
4.690	19.7	19.6	39.3	56.0	-16.7

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.613	22.3	19.8	42.1	46.0	-3.9
0.519	22.2	19.8	42.0	46.0	-4.0
0.713	21.7	19.8	41.5	46.0	-4.5
0.579	21.6	19.8	41.4	46.0	-4.6
2.463	21.6	19.6	41.2	46.0	-4.8
3.127	21.2	19.5	40.7	46.0	-5.3
2.534	21.1	19.6	40.7	46.0	-5.3
2.896	21.1	19.6	40.7	46.0	-5.3
2.650	21.0	19.6	40.6	46.0	-5.4
2.642	20.9	19.6	40.5	46.0	-5.5
2.497	20.8	19.6	40.4	46.0	-5.6
0.486	20.8	19.8	40.6	46.2	-5.6
2.060	20.7	19.6	40.3	46.0	-5.7
4.239	20.7	19.6	40.3	46.0	-5.7
0.545	20.5	19.8	40.3	46.0	-5.7
0.351	23.3	19.8	43.1	48.9	-5.8
2.948	20.5	19.6	40.1	46.0	-5.9
0.299	24.5	19.8	44.3	50.3	-6.0
2.832	20.3	19.6	39.9	46.0	-6.1
1.474	20.0	19.7	39.7	46.0	-6.3
1.941	20.0	19.6	39.6	46.0	-6.4
4.015	20.0	19.6	39.6	46.0	-6.4
4.519	19.9	19.6	39.5	46.0	-6.5
3.015	19.8	19.6	39.4	46.0	-6.6
0.766	19.6	19.7	39.3	46.0	-6.7
4.690	19.7	19.6	39.3	46.0	-6.7

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

EUT:	GQ110	Work Order:	INTE5431
Serial Number:	EZF8344000UK	Date:	03/28/2014
Customer:	Intel Corporation	Temperature:	20.2°C
Attendees:	Sahithi Kandula	Relative Humidity:	42.7%
Customer Project:	GQ110	Bar. Pressure:	1009.1 mb
Tested By:	Jared Ison	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	INTE5431-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	3	Line:	High Line	Ext. Attenuation (dB):	20

COMMENTS

None.

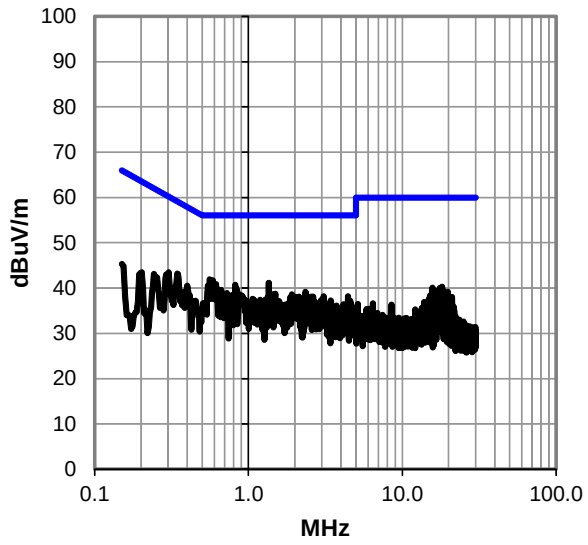
EUT OPERATING MODES

EUT powered on. Tx, 802.11(b) Channel 1, 1Mbps

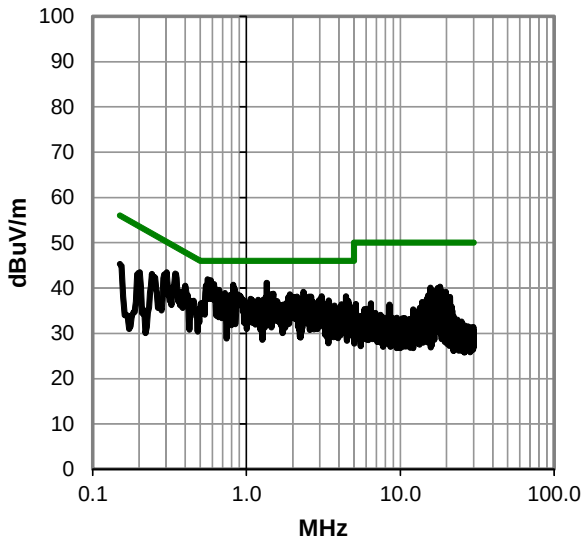
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #3

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.560	22.1	19.8	41.9	56.0	-14.1
0.587	21.9	19.8	41.7	56.0	-14.3
1.351	21.5	19.7	41.2	56.0	-14.8
0.616	21.1	19.8	40.9	56.0	-15.1
0.822	21.0	19.7	40.7	56.0	-15.3
0.545	20.8	19.8	40.6	56.0	-15.4
0.344	23.4	19.8	43.2	59.1	-15.9
0.665	19.8	19.8	39.6	56.0	-16.4
0.303	23.7	19.8	43.5	60.2	-16.7
2.347	19.6	19.6	39.2	56.0	-16.8
0.725	19.1	19.8	38.9	56.0	-17.1
1.493	19.1	19.7	38.8	56.0	-17.2
1.460	19.0	19.7	38.7	56.0	-17.3
0.400	20.7	19.8	40.5	57.9	-17.4
0.878	18.9	19.7	38.6	56.0	-17.4
1.915	19.0	19.6	38.6	56.0	-17.4
0.781	18.7	19.7	38.4	56.0	-17.6
1.407	18.6	19.7	38.3	56.0	-17.7
4.437	18.6	19.6	38.2	56.0	-17.8
3.079	18.6	19.5	38.1	56.0	-17.9
2.131	18.5	19.6	38.1	56.0	-17.9
2.553	18.5	19.6	38.1	56.0	-17.9
2.631	18.5	19.6	38.1	56.0	-17.9
2.034	18.4	19.6	38.0	56.0	-18.0
1.874	18.3	19.6	37.9	56.0	-18.1
2.418	18.3	19.6	37.9	56.0	-18.1

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.560	22.1	19.8	41.9	46.0	-4.1
0.587	21.9	19.8	41.7	46.0	-4.3
1.351	21.5	19.7	41.2	46.0	-4.8
0.616	21.1	19.8	40.9	46.0	-5.1
0.822	21.0	19.7	40.7	46.0	-5.3
0.545	20.8	19.8	40.6	46.0	-5.4
0.344	23.4	19.8	43.2	49.1	-5.9
0.665	19.8	19.8	39.6	46.0	-6.4
0.303	23.7	19.8	43.5	50.2	-6.7
2.347	19.6	19.6	39.2	46.0	-6.8
0.725	19.1	19.8	38.9	46.0	-7.1
1.493	19.1	19.7	38.8	46.0	-7.2
1.460	19.0	19.7	38.7	46.0	-7.3
0.400	20.7	19.8	40.5	47.9	-7.4
0.878	18.9	19.7	38.6	46.0	-7.4
1.915	19.0	19.6	38.6	46.0	-7.4
0.781	18.7	19.7	38.4	46.0	-7.6
1.407	18.6	19.7	38.3	46.0	-7.7
4.437	18.6	19.6	38.2	46.0	-7.8
3.079	18.6	19.5	38.1	46.0	-7.9
2.131	18.5	19.6	38.1	46.0	-7.9
2.553	18.5	19.6	38.1	46.0	-7.9
2.631	18.5	19.6	38.1	46.0	-7.9
2.034	18.4	19.6	38.0	46.0	-8.0
1.874	18.3	19.6	37.9	46.0	-8.1
2.418	18.3	19.6	37.9	46.0	-8.1

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

WTD.2013.07.23, PSA-ESCI 2014.02.19, EmiR5 2014.02.04

EUT:	GQ110	Work Order:	INTE5431
Serial Number:	EZF8344000UK	Date:	03/28/2014
Customer:	Intel Corporation	Temperature:	20.2°C
Attendees:	Sahithi Kandula	Relative Humidity:	42.7%
Customer Project:	GQ110	Bar. Pressure:	1009.1 mb
Tested By:	Jared Ison	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	INTE5431-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	4	Line:	Neutral	Ext. Attenuation (dB):	20

COMMENTS

None.

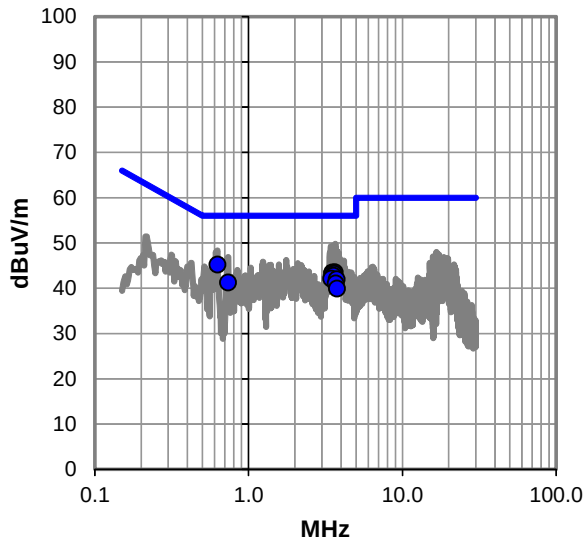
EUT OPERATING MODES

EUT powered on. Tx, 802.11(b) Channel 6, 1Mbps

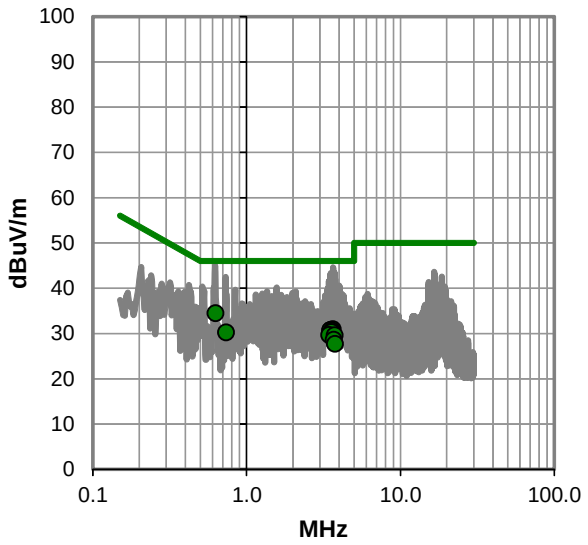
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #4

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.629	25.4	19.8	45.2	56.0	-10.8
3.641	23.9	19.6	43.5	56.0	-12.5
3.491	23.8	19.6	43.4	56.0	-12.6
3.521	23.7	19.6	43.3	56.0	-12.7
3.599	23.5	19.6	43.1	56.0	-12.9
3.565	23.1	19.6	42.7	56.0	-13.3
3.453	22.5	19.6	42.1	56.0	-13.9
3.734	22.3	19.6	41.9	56.0	-14.1
0.737	21.5	19.8	41.3	56.0	-14.7
3.684	21.4	19.6	41.0	56.0	-15.0
3.765	20.3	19.6	39.9	56.0	-16.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.629	14.7	19.8	34.5	46.0	-11.5
3.641	11.3	19.6	30.9	46.0	-15.1
3.521	11.1	19.6	30.7	46.0	-15.3
3.491	11.1	19.6	30.7	46.0	-15.3
3.599	11.0	19.6	30.6	46.0	-15.4
3.565	10.7	19.6	30.3	46.0	-15.7
0.737	10.5	19.8	30.3	46.0	-15.7
3.453	10.1	19.6	29.7	46.0	-16.3
3.734	10.0	19.6	29.6	46.0	-16.4
3.684	9.0	19.6	28.6	46.0	-17.4
3.765	8.1	19.6	27.7	46.0	-18.3

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

EUT:	GQ110	Work Order:	INTE5431
Serial Number:	EZF8344000UK	Date:	03/28/2014
Customer:	Intel Corporation	Temperature:	20.2°C
Attendees:	Sahithi Kandula	Relative Humidity:	42.7%
Customer Project:	GQ110	Bar. Pressure:	1009.1 mb
Tested By:	Jared Ison	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	INTE5431-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	5	Line:	High Line	Ext. Attenuation (dB):	20

COMMENTS

None.

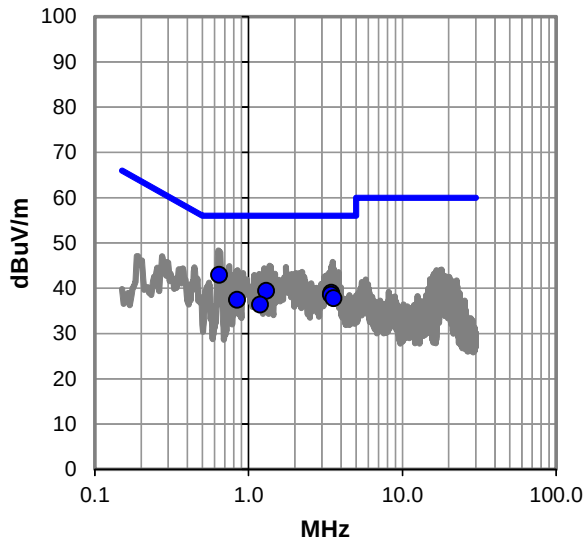
EUT OPERATING MODES

EUT powered on. Tx, 802.11(b) Channel 6, 1Mbps

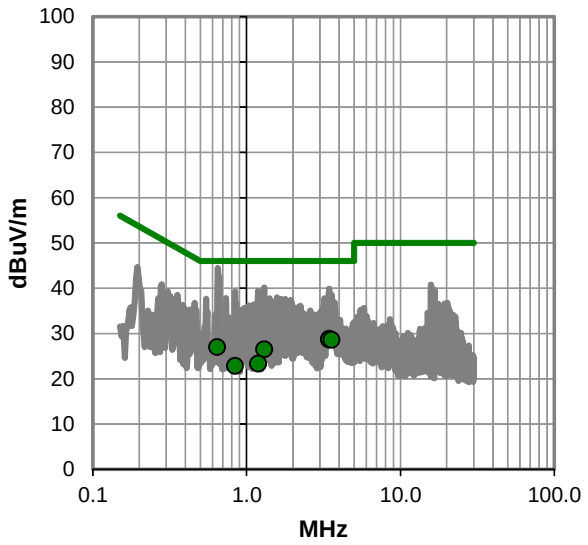
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



WTD.2013.07.23, PSA-ESCI 2014.02.19, EmiR5 2014.02.04

AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #5

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.643	23.2	19.8	43.0	56.0	-13.0
1.304	19.7	19.7	39.4	56.0	-16.6
3.456	19.4	19.6	39.0	56.0	-17.0
3.424	19.0	19.6	38.6	56.0	-17.4
3.567	18.2	19.6	37.8	56.0	-18.2
0.842	17.7	19.7	37.4	56.0	-18.6
1.191	16.7	19.7	36.4	56.0	-19.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
3.456	9.2	19.6	28.8	46.0	-17.2
3.424	9.1	19.6	28.7	46.0	-17.3
3.567	9.0	19.6	28.6	46.0	-17.4
0.643	7.2	19.8	27.0	46.0	-19.0
1.304	6.8	19.7	26.5	46.0	-19.5
1.191	3.6	19.7	23.3	46.0	-22.7
0.842	3.1	19.7	22.8	46.0	-23.2

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

WTD.2013.07.23, PSA-ESCI 2014.02.19, EmiR5 2014.02.04

EUT:	GQ110	Work Order:	INTE5431
Serial Number:	EZF8344000UK	Date:	03/28/2014
Customer:	Intel Corporation	Temperature:	20.2°C
Attendees:	Sahithi Kandula	Relative Humidity:	42.7%
Customer Project:	GQ110	Bar. Pressure:	1009.1 mb
Tested By:	Jared Ison	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	INTE5431-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	6	Line:	Neutral	Ext. Attenuation (dB):	20

COMMENTS

None.

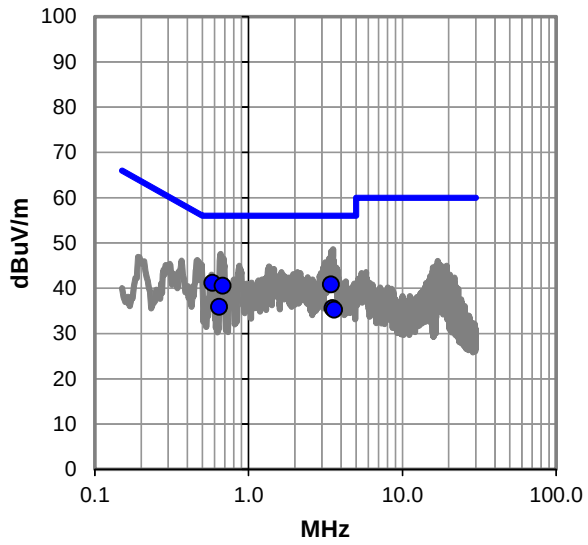
EUT OPERATING MODES

EUT powered on. Tx, 802.11(b) Channel 11, 1Mbps

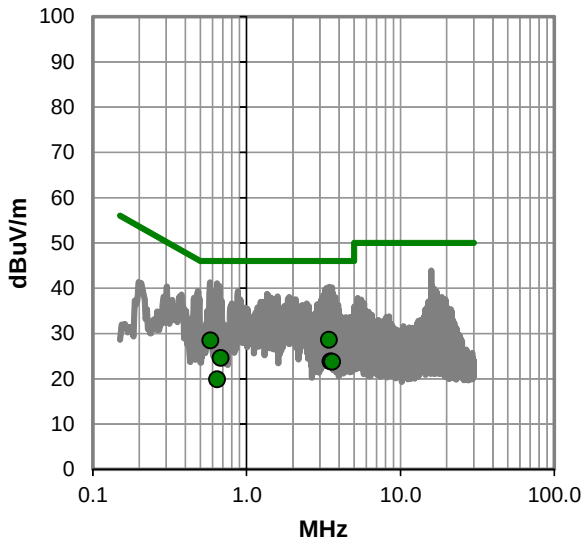
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



WTD.2013.07.23, PSA-ESCI 2014.02.19, EmiR5 2014.02.04

AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #6

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.582	21.4	19.8	41.2	56.0	-14.8
3.438	21.2	19.6	40.8	56.0	-15.2
0.677	20.8	19.8	40.6	56.0	-15.4
0.643	16.1	19.8	35.9	56.0	-20.1
3.508	16.0	19.6	35.6	56.0	-20.4
3.594	15.6	19.6	35.2	56.0	-20.8

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
3.438	9.0	19.6	28.6	46.0	-17.4
0.582	8.7	19.8	28.5	46.0	-17.5
0.677	4.8	19.8	24.6	46.0	-21.4
3.508	4.2	19.6	23.8	46.0	-22.2
3.594	4.1	19.6	23.7	46.0	-22.3
0.643	0.1	19.8	19.9	46.0	-26.1

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

WTD.2013.07.23, PSA-ESCI 2014.02.19, EmiR5 2014.02.04

EUT:	GQ110	Work Order:	INTE5431
Serial Number:	EZF8344000UK	Date:	03/28/2014
Customer:	Intel Corporation	Temperature:	20.2°C
Attendees:	Sahithi Kandula	Relative Humidity:	42.7%
Customer Project:	GQ110	Bar. Pressure:	1009.1 mb
Tested By:	Jared Ison	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	INTE5431-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	7	Line:	High Line	Ext. Attenuation (dB):	20

COMMENTS

None.

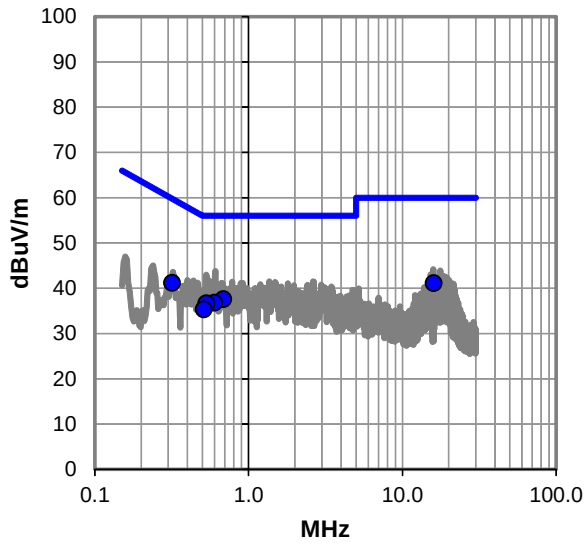
EUT OPERATING MODES

EUT powered on. Tx, 802.11(b) Channel 11, 1Mbps

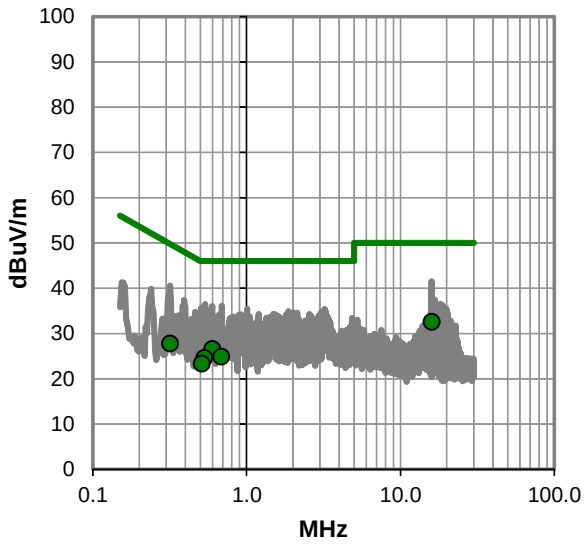
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



NORTHWEST EMC

WTD.2013.07.23, PSA-ESCI 2014.02.19, EmiR5 2014.02.04

AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #7

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
0.685	17.8	19.8	37.6	56.0	-18.4
0.319	21.4	19.8	41.2	59.7	-18.5
15.992	21.5	19.6	41.1	60.0	-18.9
0.601	17.0	19.8	36.8	56.0	-19.2
0.532	16.9	19.8	36.7	56.0	-19.3
0.512	15.5	19.8	35.3	56.0	-20.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Margin (dB)
15.992	13.0	19.6	32.6	50.0	-17.4
0.601	6.8	19.8	26.6	46.0	-19.4
0.685	5.1	19.8	24.9	46.0	-21.1
0.532	4.8	19.8	24.6	46.0	-21.4
0.319	8.0	19.8	27.8	49.7	-21.9
0.512	3.5	19.8	23.3	46.0	-22.7

CONCLUSION

Pass

Tested By