

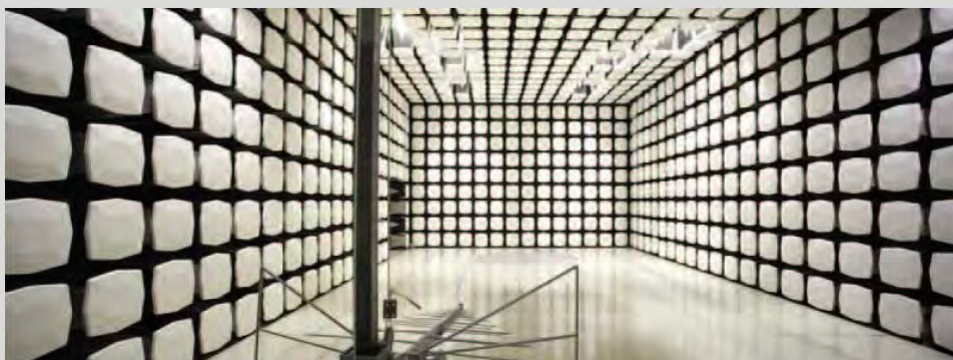


Honeywell, Automation and Control Solutions

RTH9590WF01

FCC 15.247:2013

Report #: HNYW0042



Report Prepared By Northwest EMC Inc.

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

California – Minnesota – Oregon – New York – Washington

CERTIFICATE OF TEST

Last Date of Test: May 10, 2013
Honeywell, Automation and Control Solutions
Model: RTH9590WF01

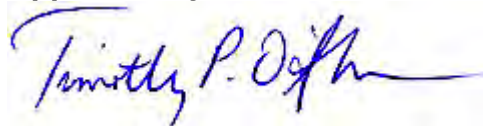
Emissions

Test Description	Specification	Test Method	Pass/Fail
Duty Cycle	FCC 15.247:2013	ANSI C63.10:2009	Pass
Occupied Bandwidth	FCC 15.247:2013	ANSI C63.10:2009	Pass
Output Power	FCC 15.247:2013	ANSI C63.10:2009	Pass
Band Edge Compliance	FCC 15.247:2013	ANSI C63.10:2009	Pass
Power Spectral Density	FCC 15.247:2013	ANSI C63.10:2009	Pass
Spurious Conducted Emissions	FCC 15.247:2013	ANSI C63.10:2009	Pass
Spurious Radiated Emissions	FCC 15.247:2013	ANSI C63.10:2009	Pass
AC Powerline Conducted Emissions	FCC 15.207:2013	ANSI C63.10:2009	Pass

Deviations From Test Standards

None

Approved By:



Tim O'Shea, Operations Manager



NVLAP Lab Code: 200881-0

Test Facility

The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
9349 W Broadway Ave.
Brooklyn Park, MN 55445

Phone: (763) 425-2281 Fax: (763) 424-3469

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada (Site filing #2834E-1).

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 Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

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. The scope includes radio, ITE, and medical standards from around the world. See: <http://www.nwemc.com/accreditations/>

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.

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.

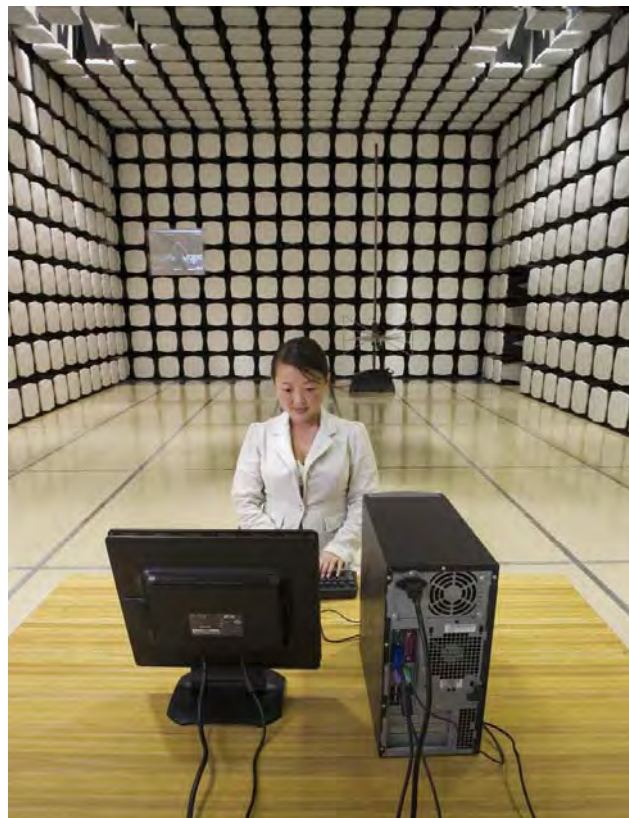
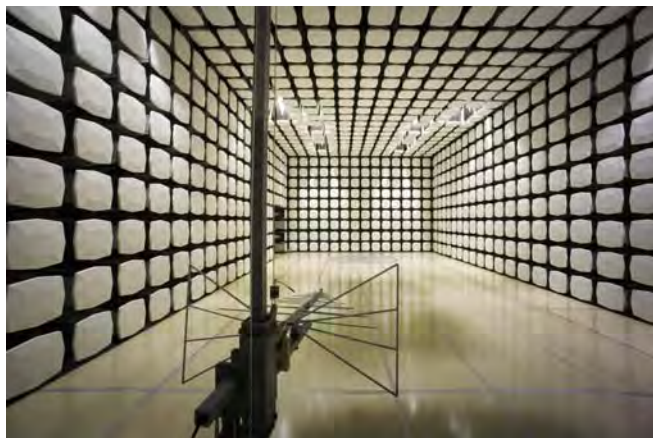
A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) for each test is on each data sheet. Our measurement 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)	4.00	-4.00
AC Powerline Conducted Emissions (dB)	2.70	-2.70



Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	California Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	New York Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	Minnesota Labs MN01-08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	Washington Labs NC01-05, SU02, SU07 19201 120 th 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	2834C-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



Client and Equipment Under Test (EUT) Information

Company Name:	Honeywell, Automation and Control Solutions
Address:	1985 Douglas Drive North
City, State, Zip:	Golden Valley, MN 55422-3992
Test Requested By:	Dave Mulhouse
Model:	RTH9590WF01
First Date of Test:	May 3, 2013
Last Date of Test:	May 10, 2013
Receipt Date of Samples:	May 3, 2013
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
802.11bgn radio module, 2 antenna SISO
Testing Objective:
To demonstrate compliance to FCC 15.247 requirements
EUT Photo



Configuration HNYW0042- 1

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Thermostat	Honeywell, Automation and Control Solutions	RTH9590WF01	4174001 0010110

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Load Board	Honeywell, Automation and Control Solutions	None	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	2.50m	No	Load Board	AC Mains
Power Load	No	1.90m	No	Thermostat	Load Board
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration HNYW0042- 2

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Thermostat	Honeywell, Automation and Control Solutions	RTH9590WF01	4174001 0010151

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Load Board	Honeywell, Automation and Control Solutions	None	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	2.50m	No	Load Board	AC Mains
Power Load	No	1.90m	No	Thermostat	Load Board
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration HNYW0042- 3

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Thermostat	Honeywell, Automation and Control Solutions	RTH9590WF01	4174001 0010118

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Load Board	Honeywell, Automation and Control Solutions	None	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	2.50m	No	Load Board	AC Mains
Power Load	No	1.90m	No	Thermostat	Load Board
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	5/3/2013	Spurious Radiated 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.
2	5/6/2013	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.
3	5/6/2013	Spurious Radiated Emissions	Modified from delivered configuration.	Modified resistor value. Lowered power for 802.11b. Modification authorized by Dave Mulhouse.	EUT remained at Northwest EMC following the test.
4	5/8/2013	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.
5	5/8/2013	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.
6	5/8/2013	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.
7	5/8/2013	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.
8	5/8/2013	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.
9	5/8/2013	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.
10	5/10/2013	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
40 GHz DC block	Fairview Microwave	SD3379	AMI	10/5/2012	12
Attenuator - 20db, 'SMA'	SM Electronics	SA26B-20	RFW	4/12/2013	12
Signal Generator MXG	Agilent	N5183A	TIK	6/7/2012	36
Spectrum Analyzer	Agilent	E4440A	AAX	5/15/2012	24

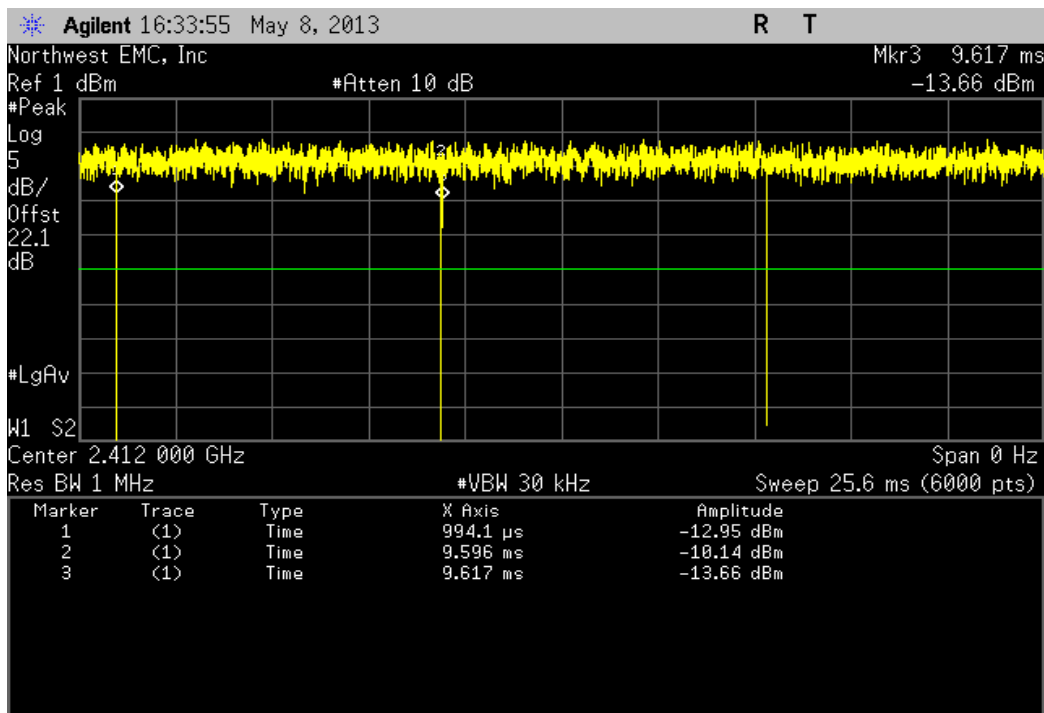
TEST DESCRIPTION

The Duty Cycle (x) were 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

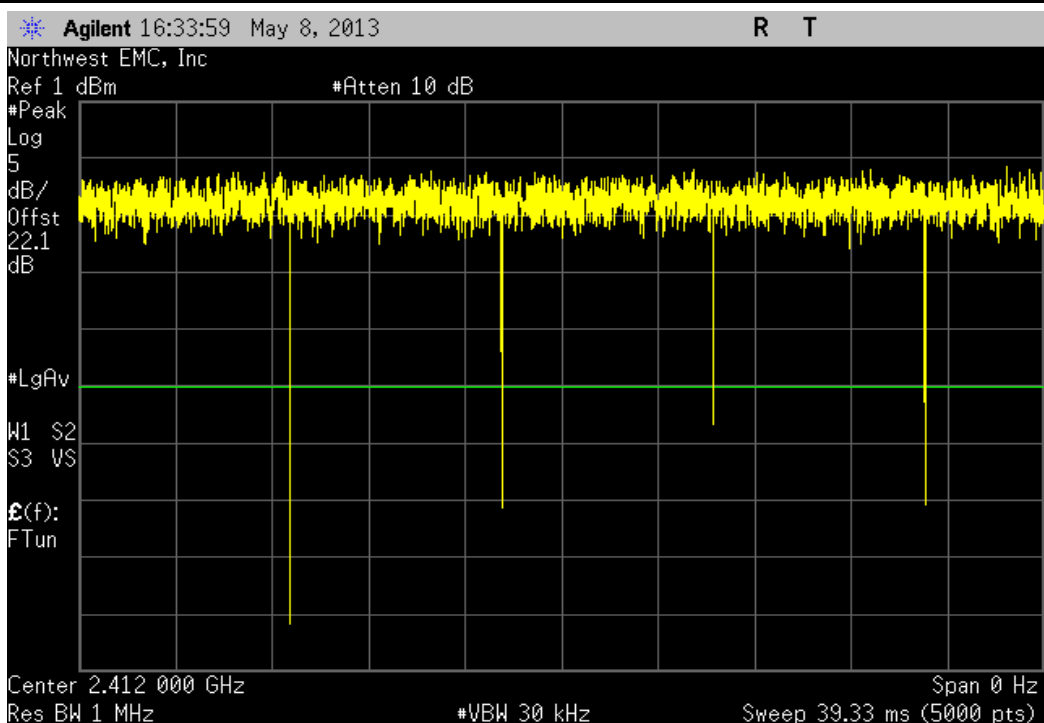
The duty cycle was calculated by dividing the transmission pulse duration (T) by the total period of a single on and total off time.

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.

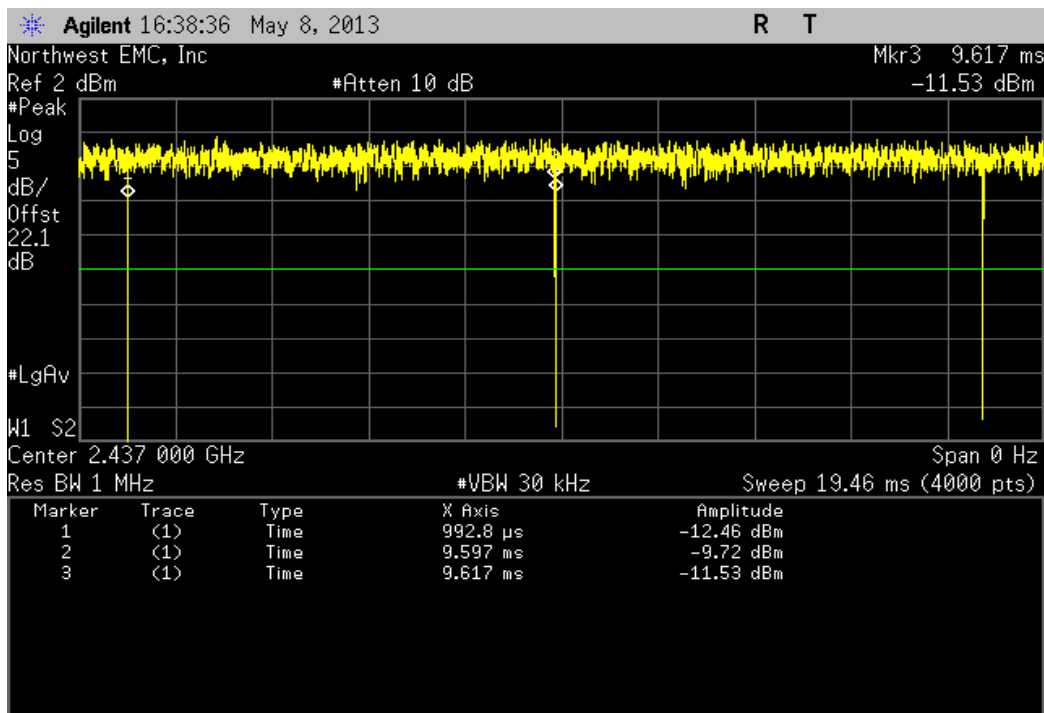
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.602 mS	8.623 mS	1	99.8	N/A	N/A



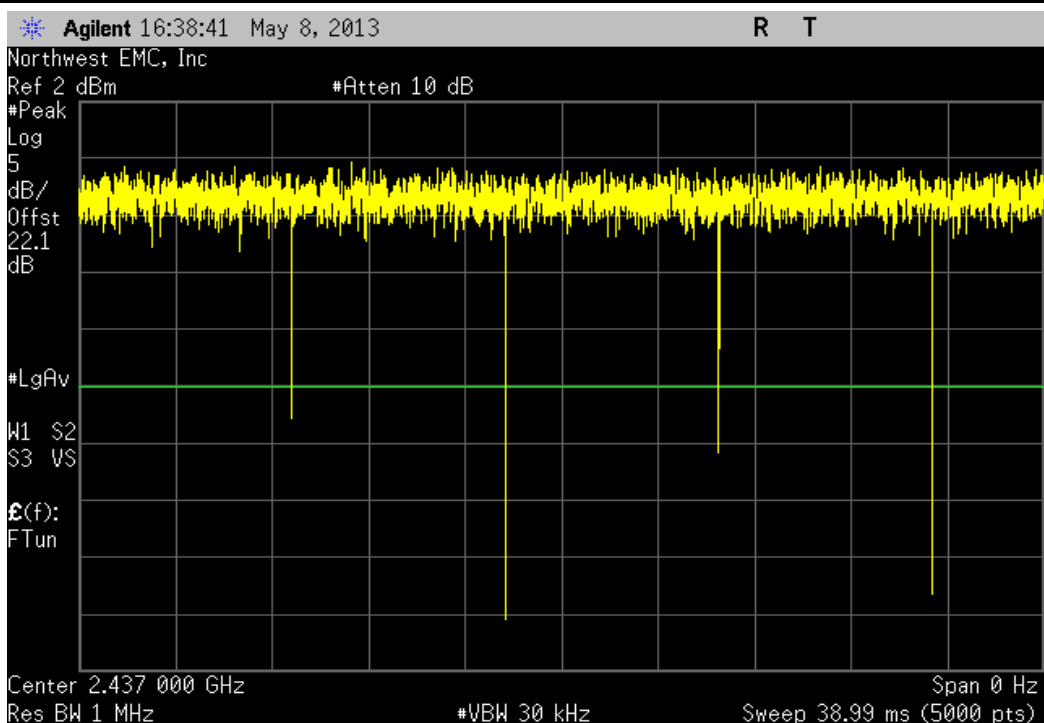
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



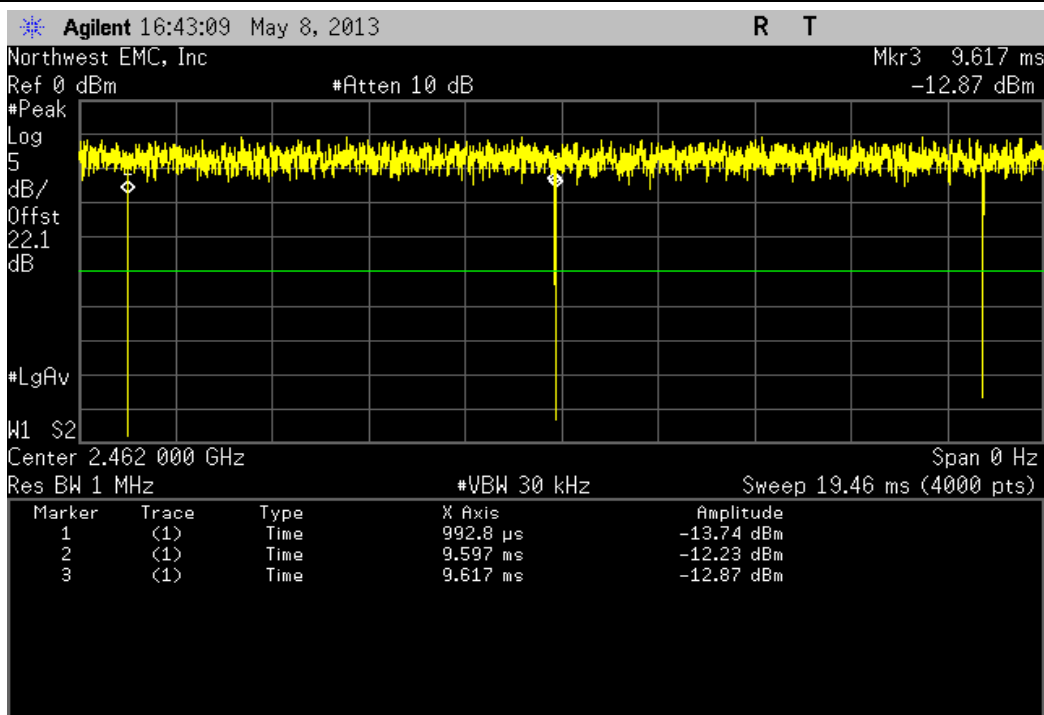
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.604 mS	8.624 mS	1	99.8	N/A	N/A



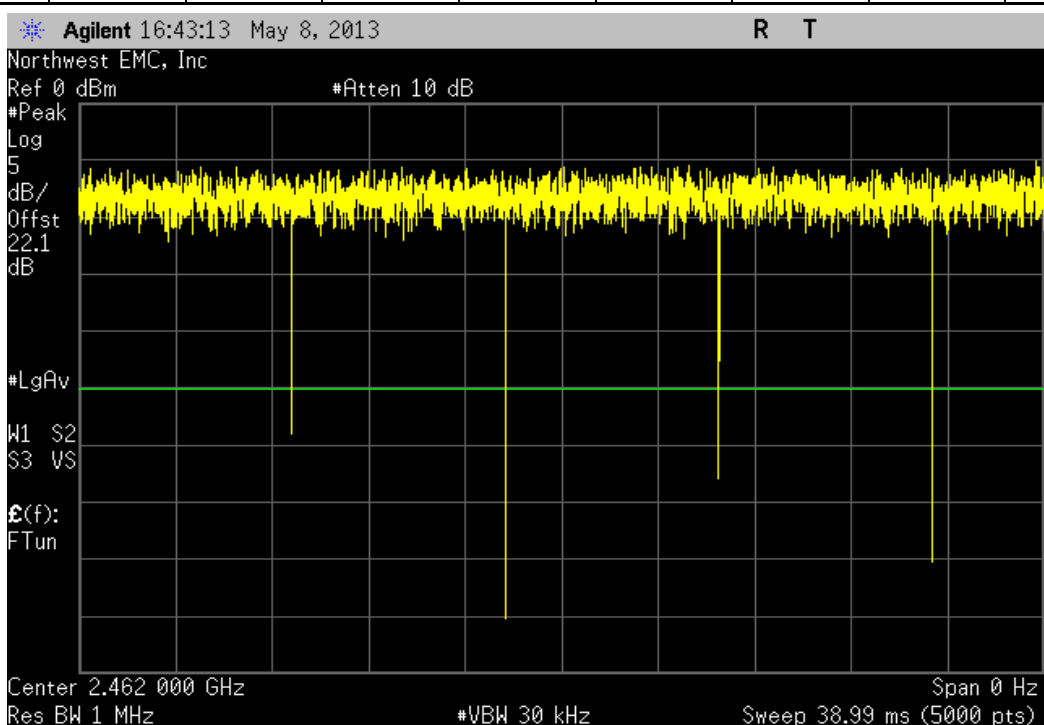
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



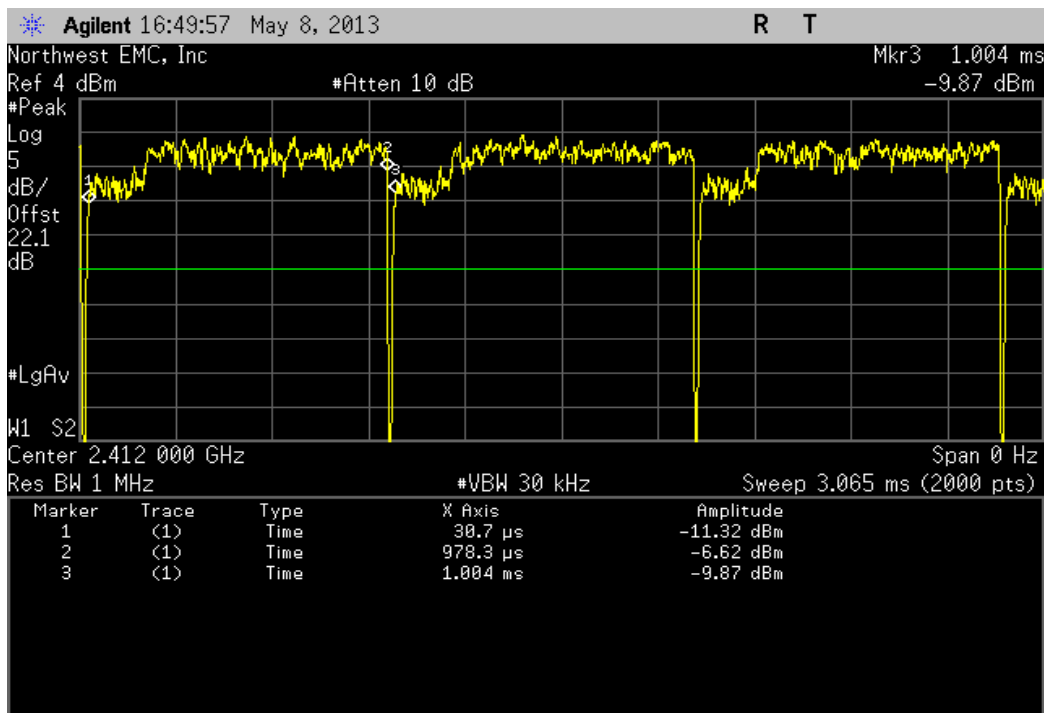
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.604 mS	8.624 mS	1	99.8	N/A	N/A



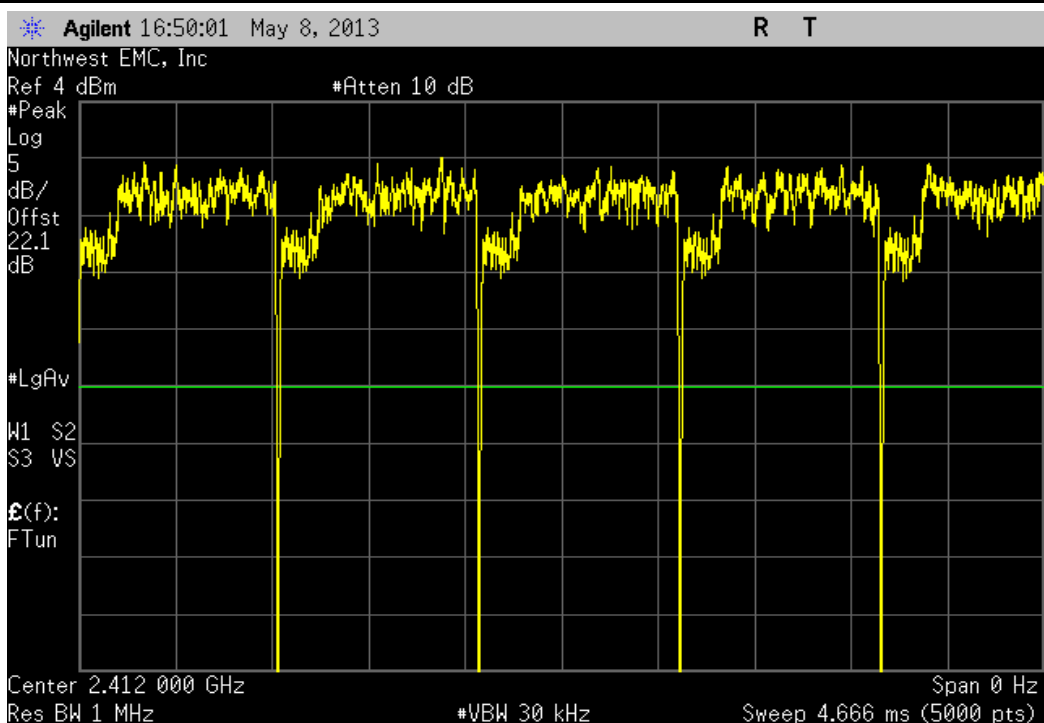
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



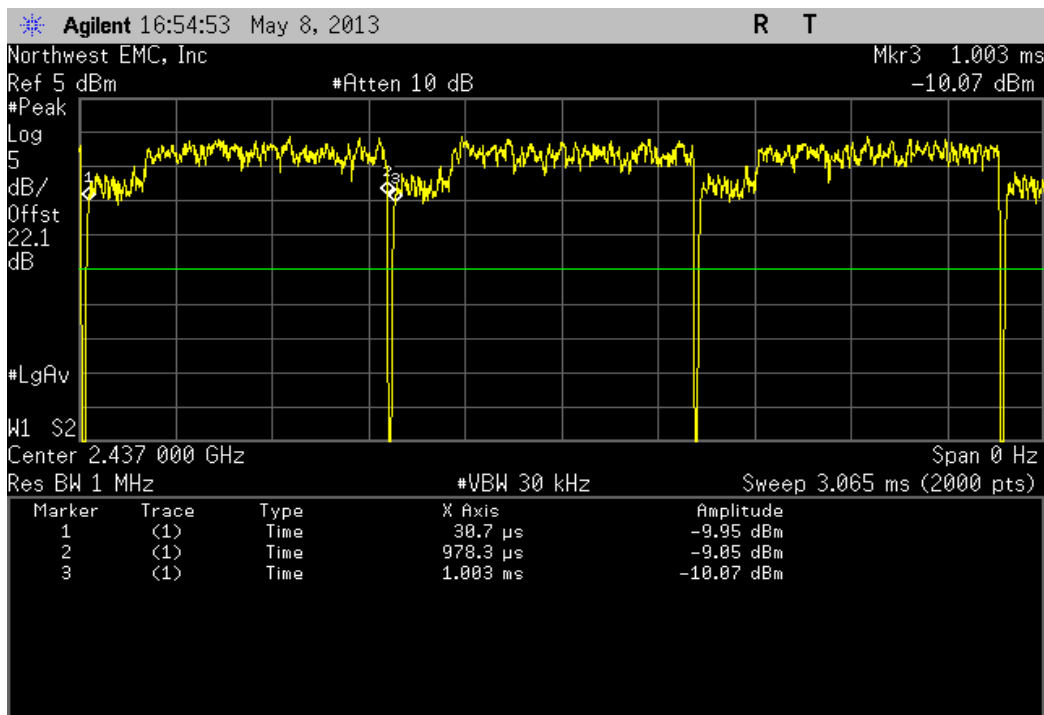
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
947.6 uS	973.6 uS	1	97.3	N/A	N/A	



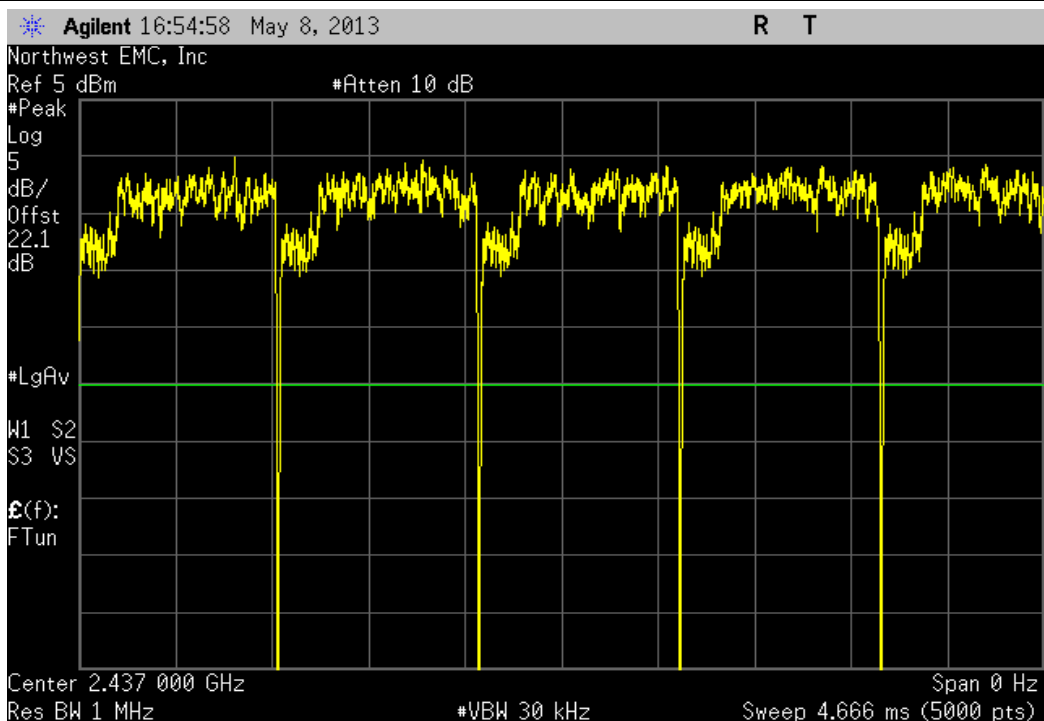
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



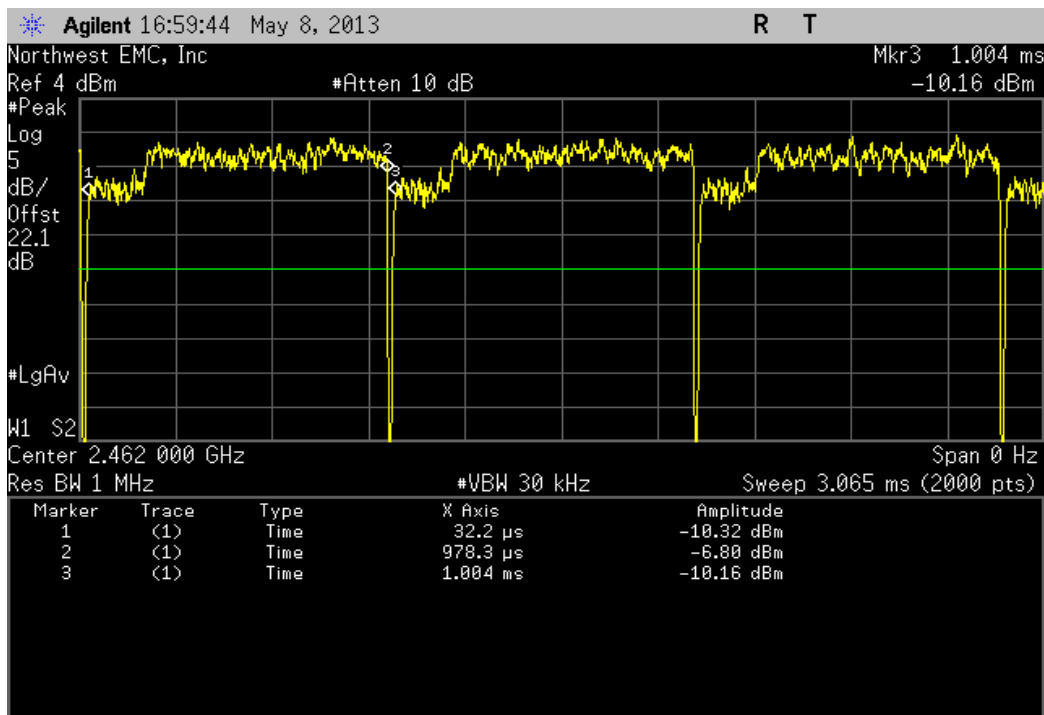
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
947.6 uS	972.1 uS	1	97.5	N/A	N/A	



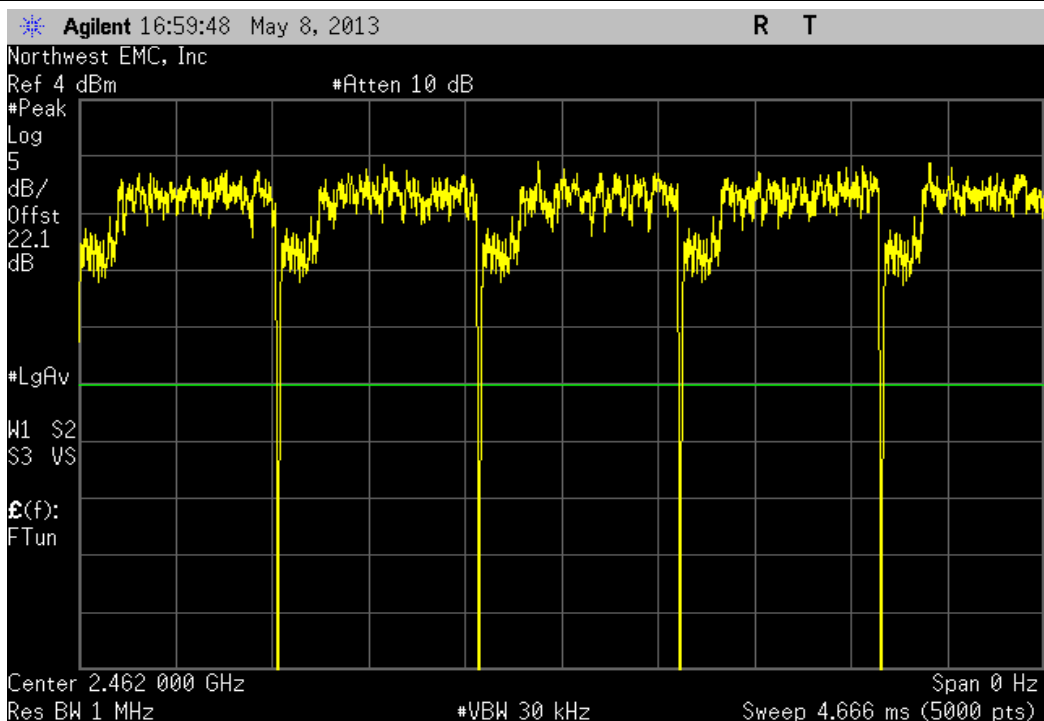
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



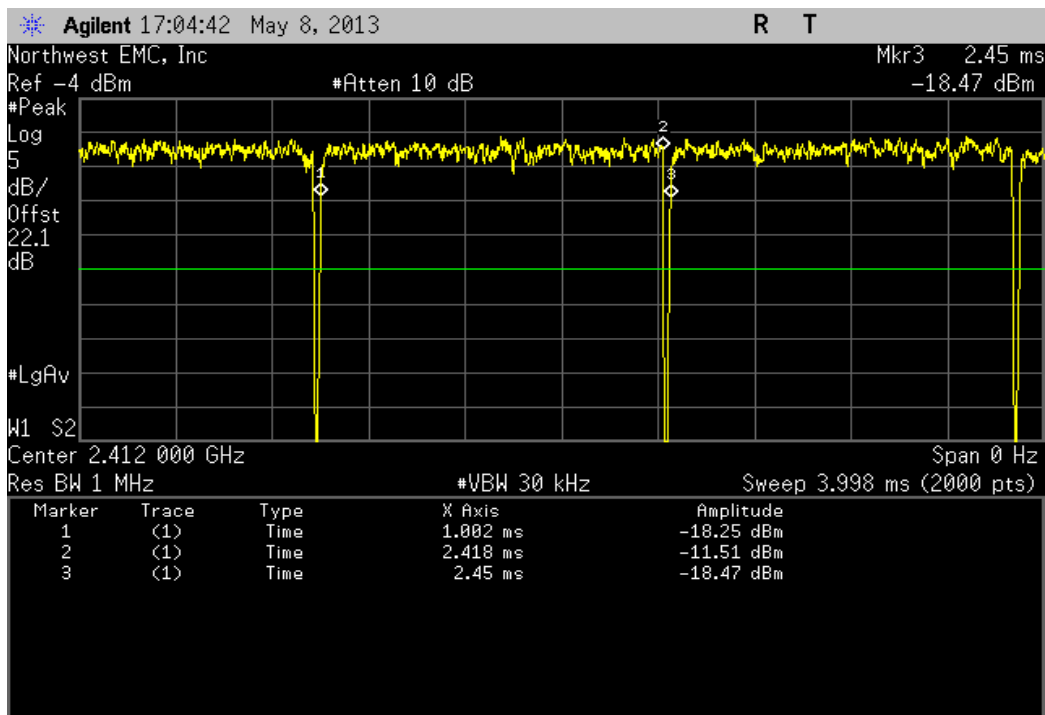
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Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
946.1 uS	972.1 uS	1	97.3	N/A	N/A	



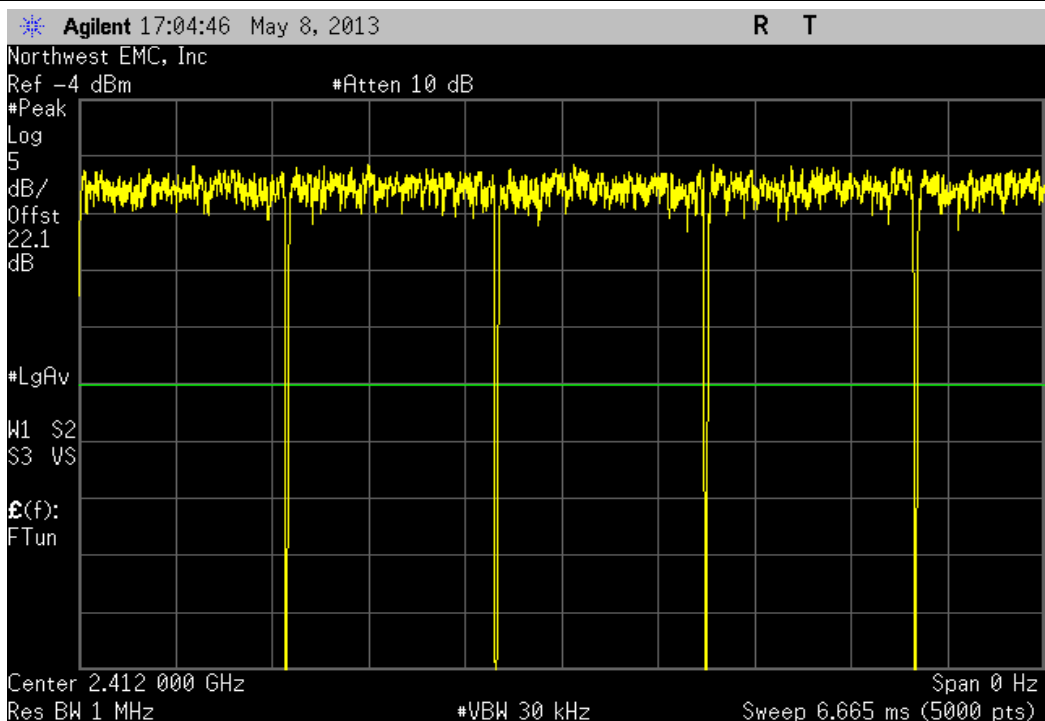
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



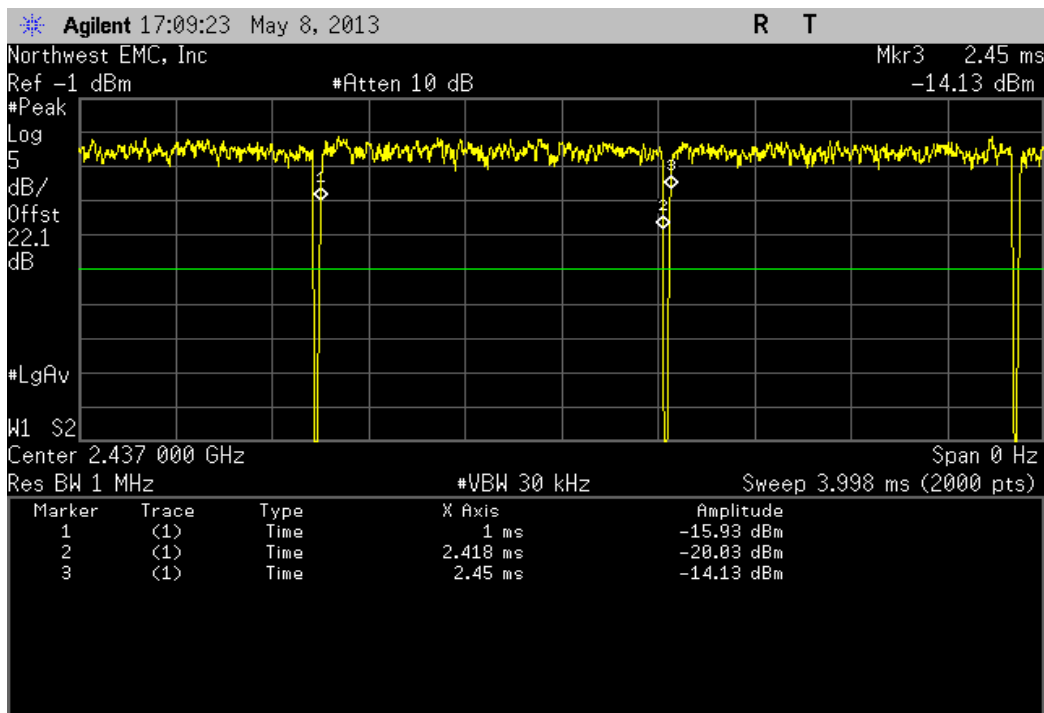
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.416 mS	1.448 mS	1	97.8	N/A	N/A



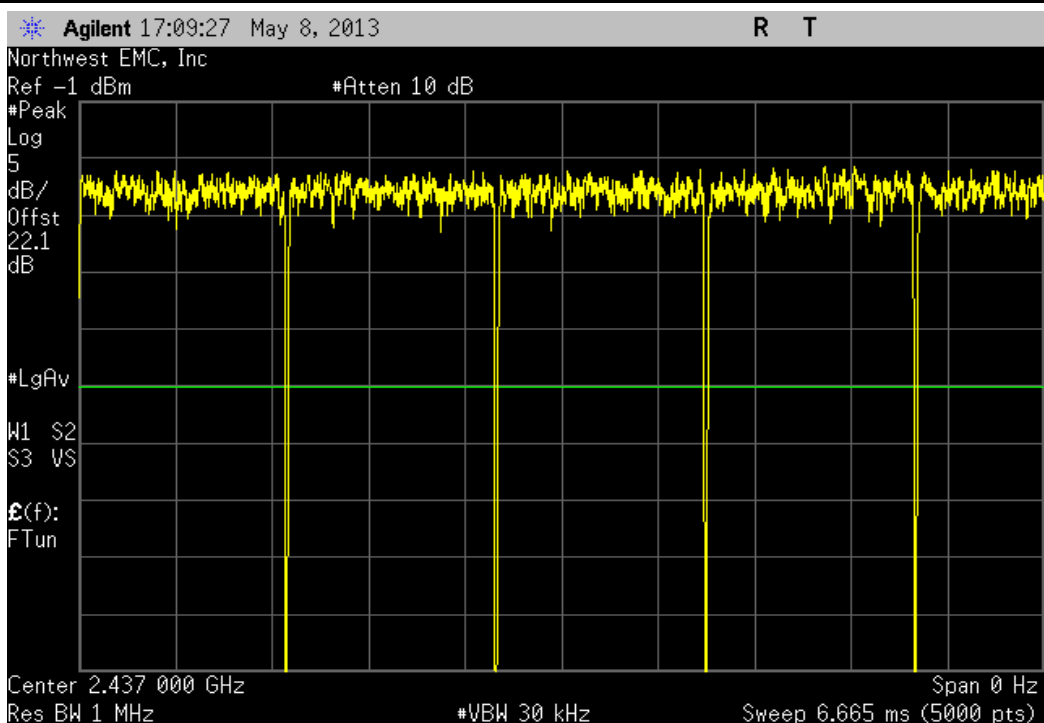
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



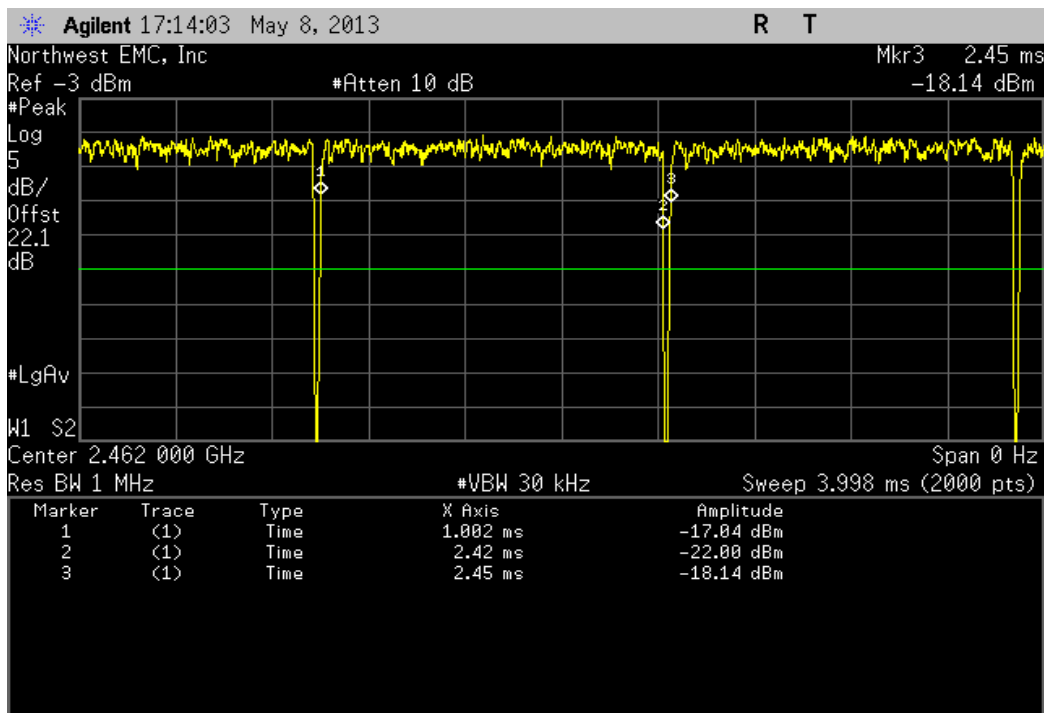
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.418 mS	1.45 mS	1	97.8	N/A	N/A



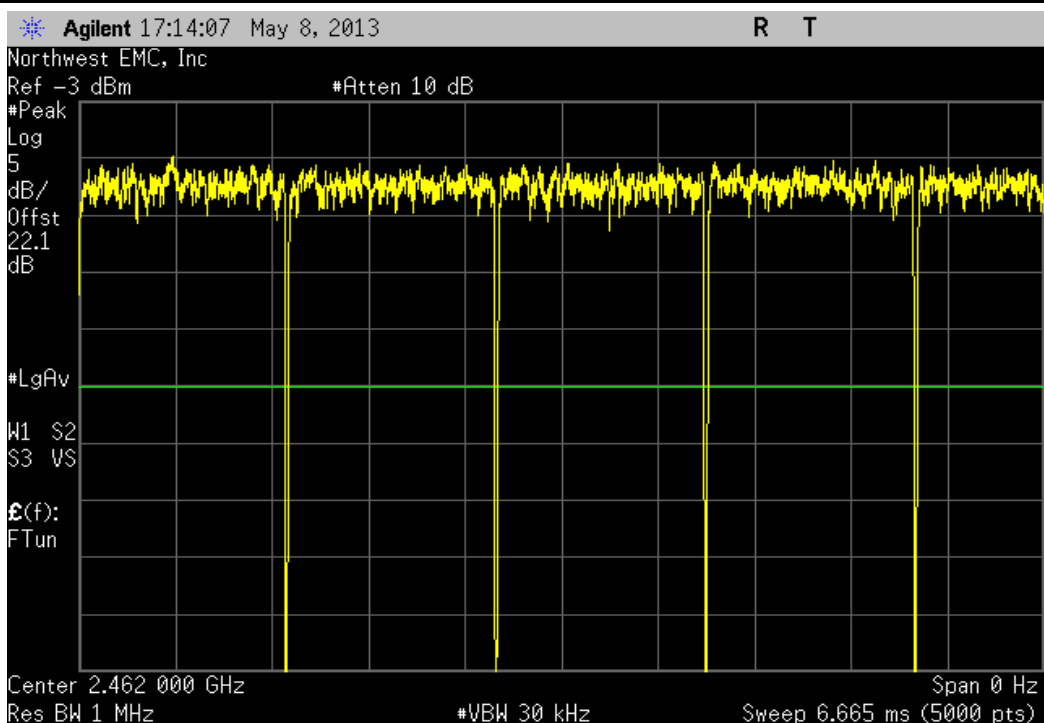
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



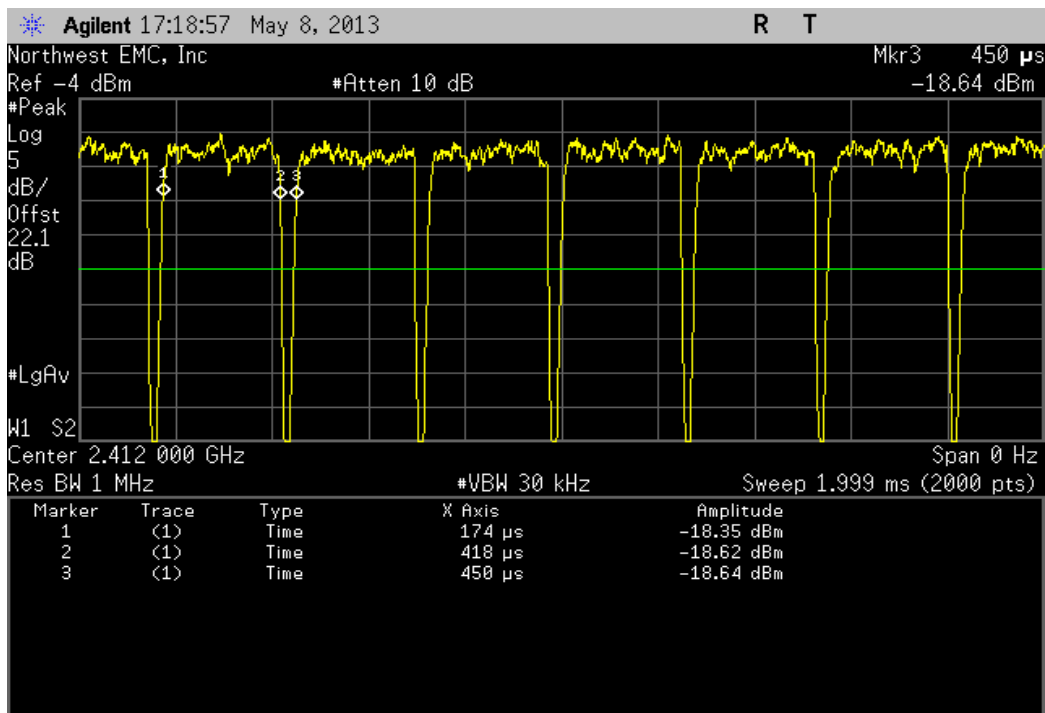
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.418 mS	1.448 mS	1	97.9	N/A	N/A



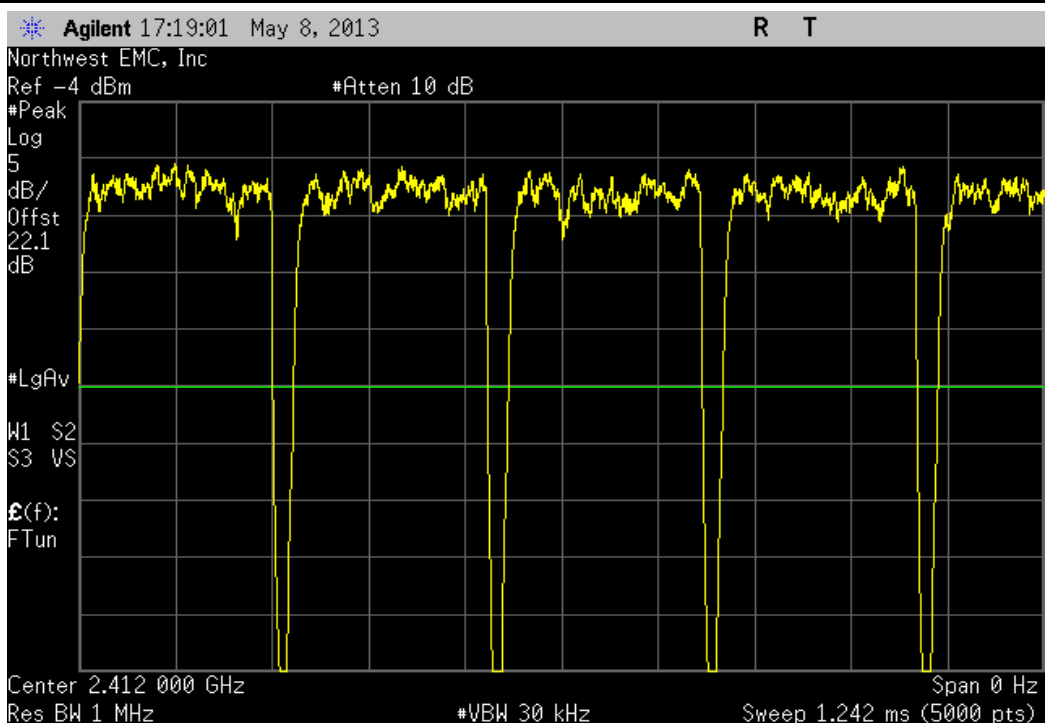
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



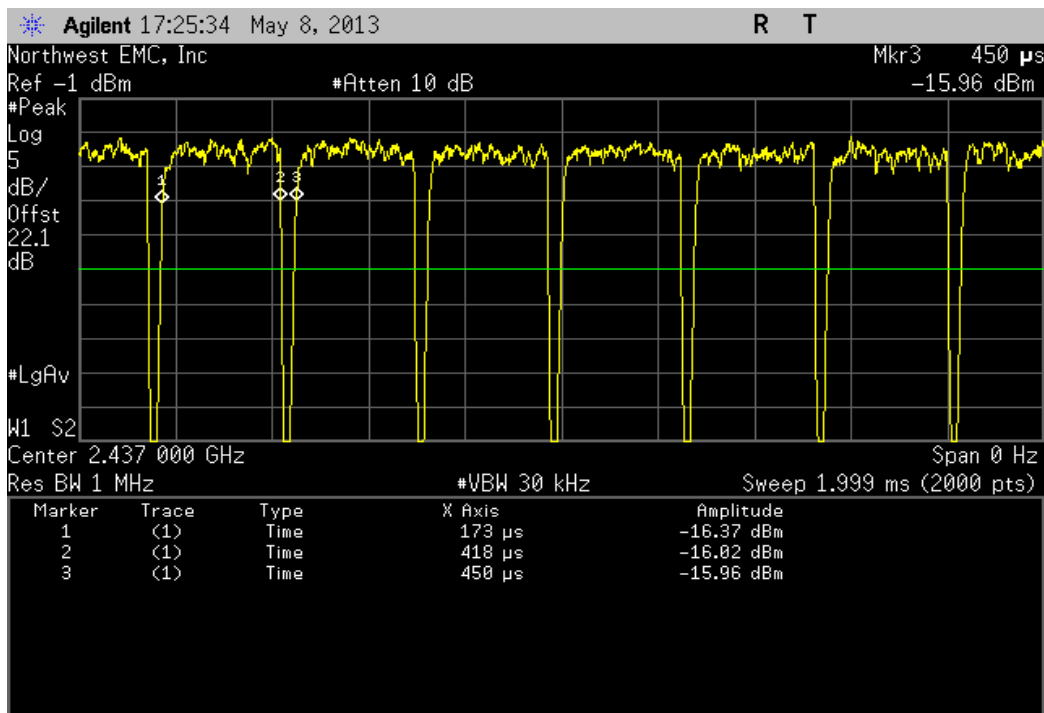
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	244 uS	276 uS	1	88.4	N/A	N/A



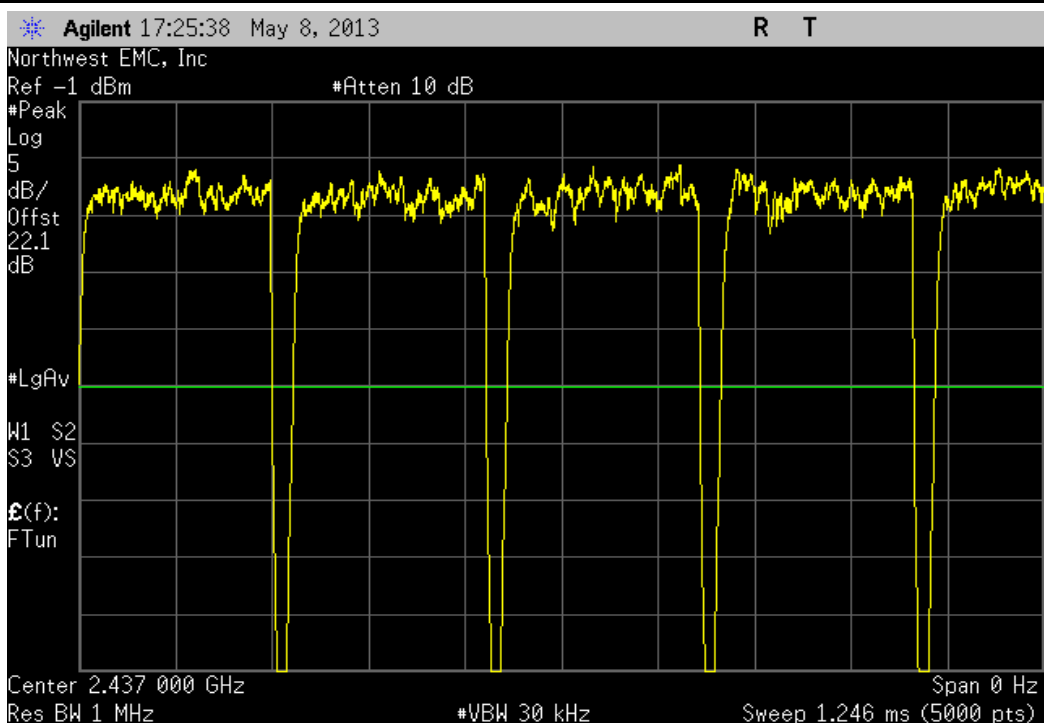
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



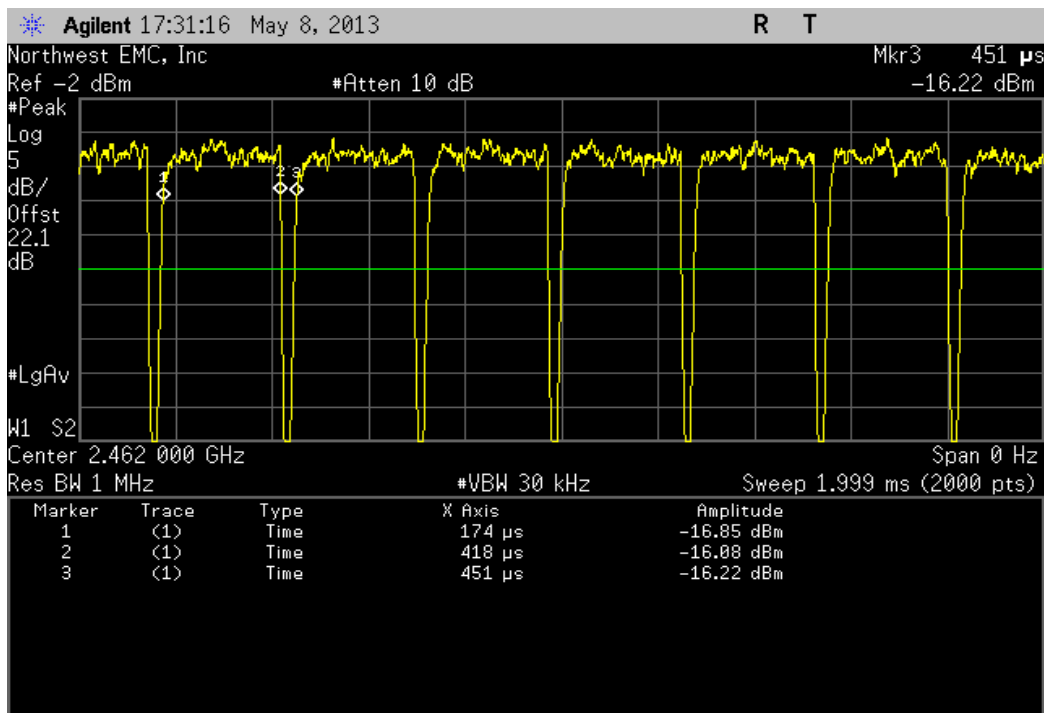
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	245 uS	277 uS	1	88.4	N/A	N/A



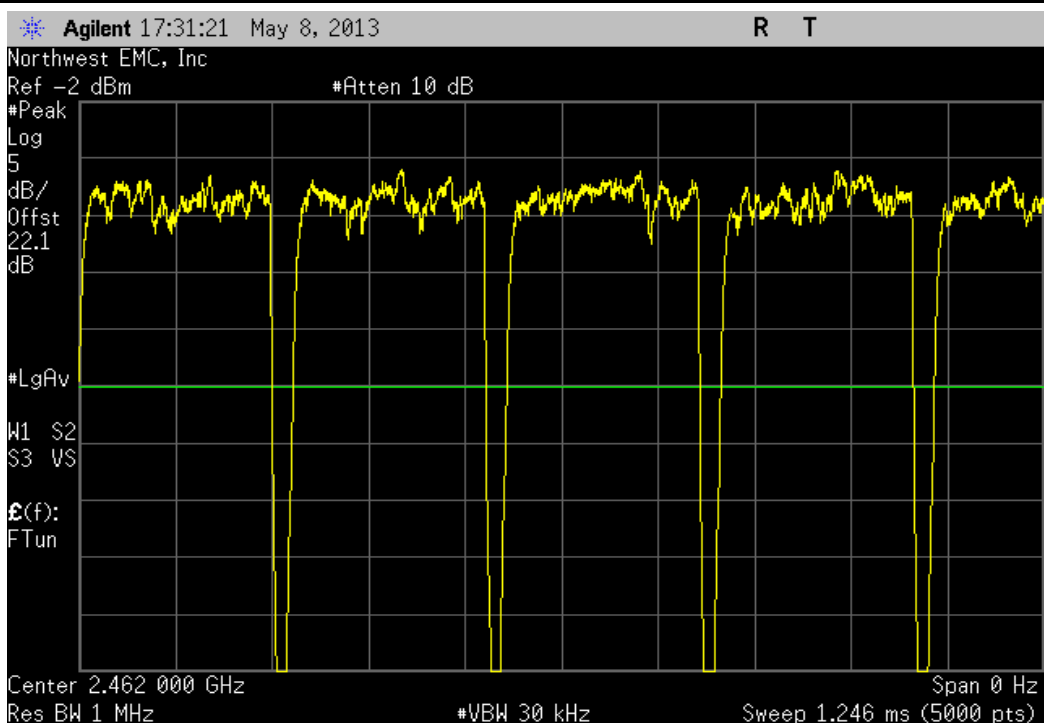
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



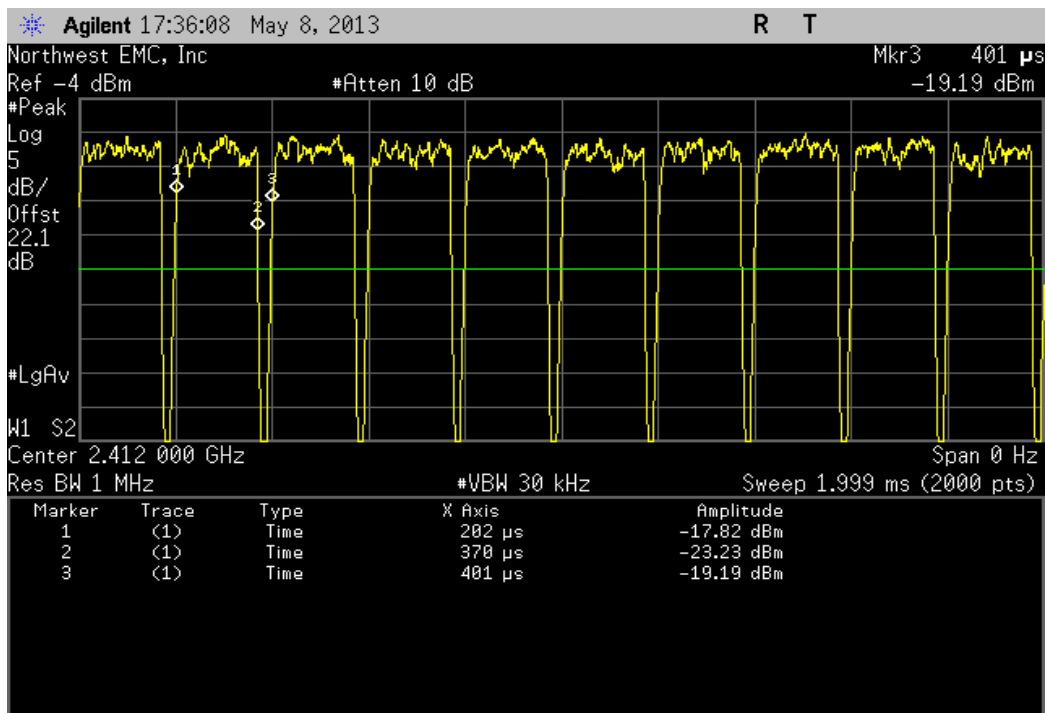
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	244 uS	277 uS	1	88.1	N/A	N/A



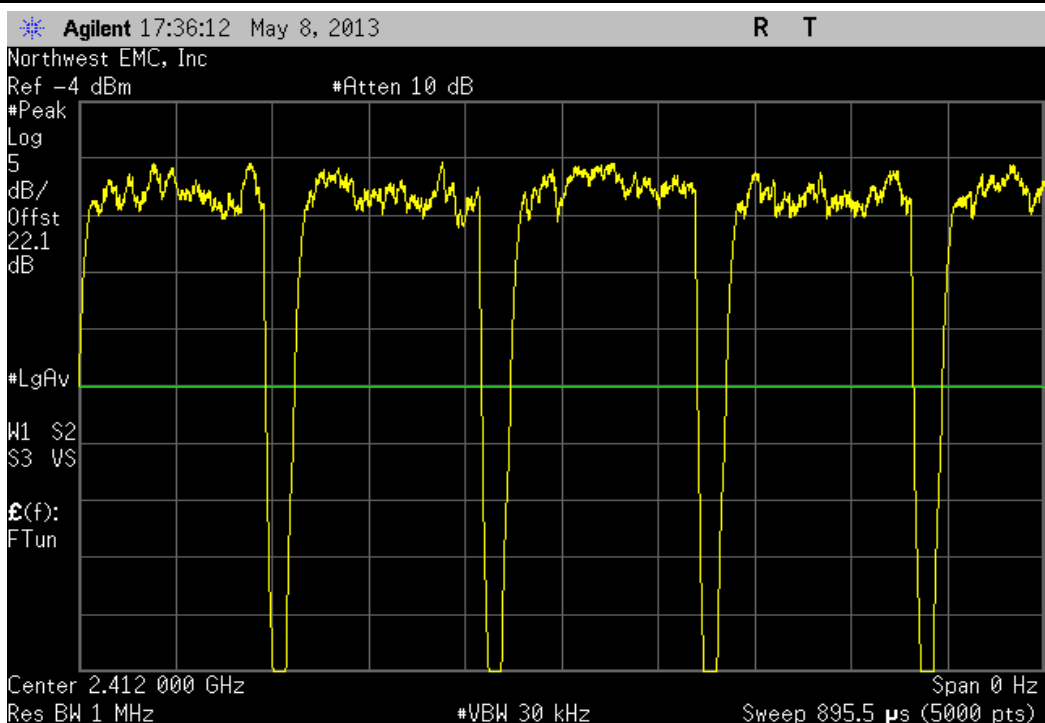
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



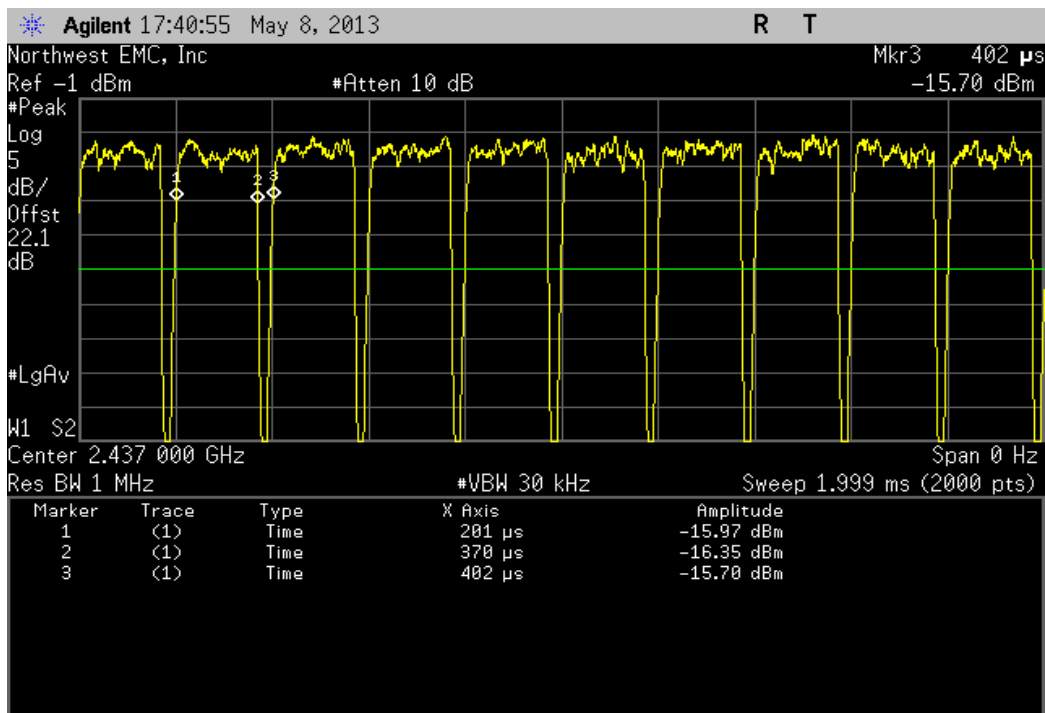
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	168 μ S	199 μ S	1	84.4	N/A	N/A



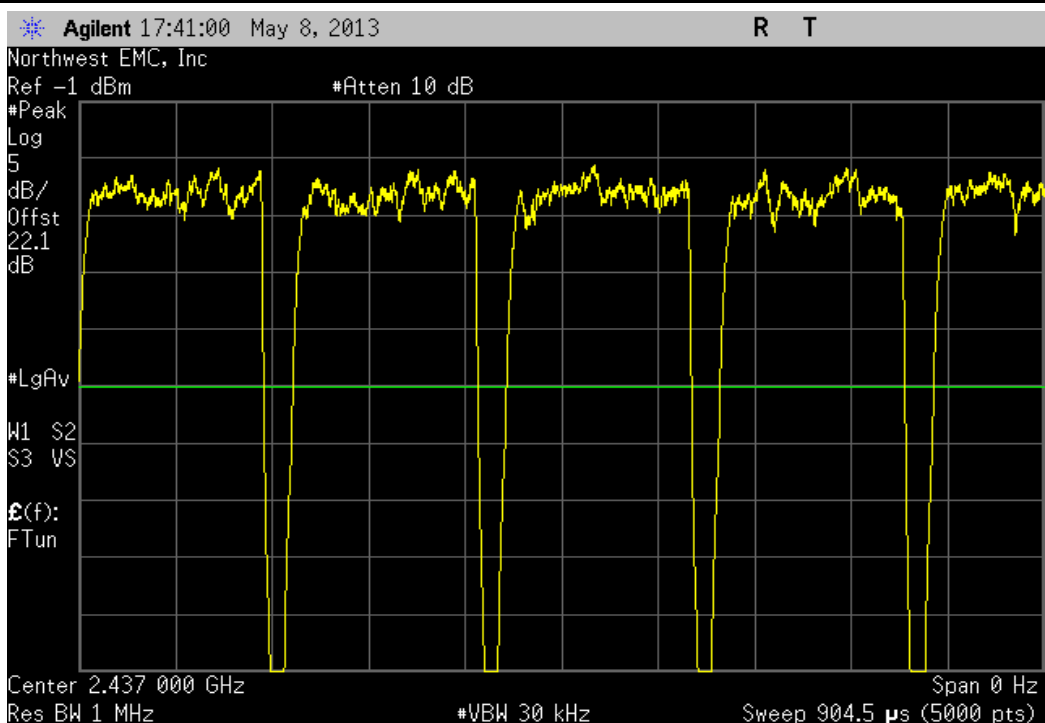
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



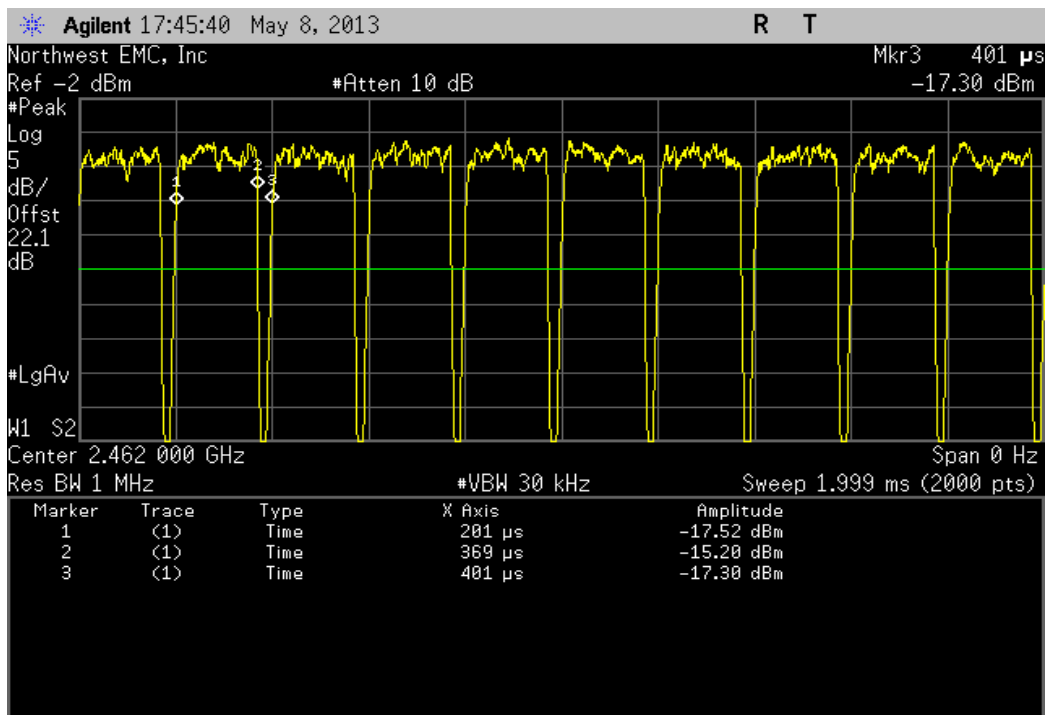
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	169 uS	201 uS	1	84.1	N/A	N/A



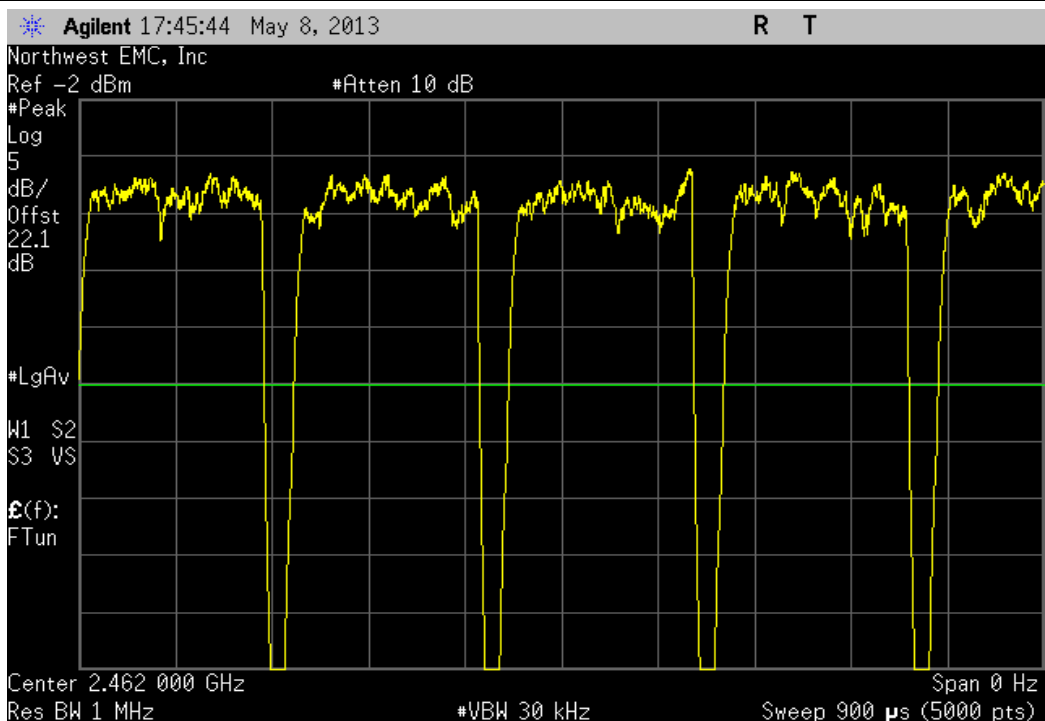
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



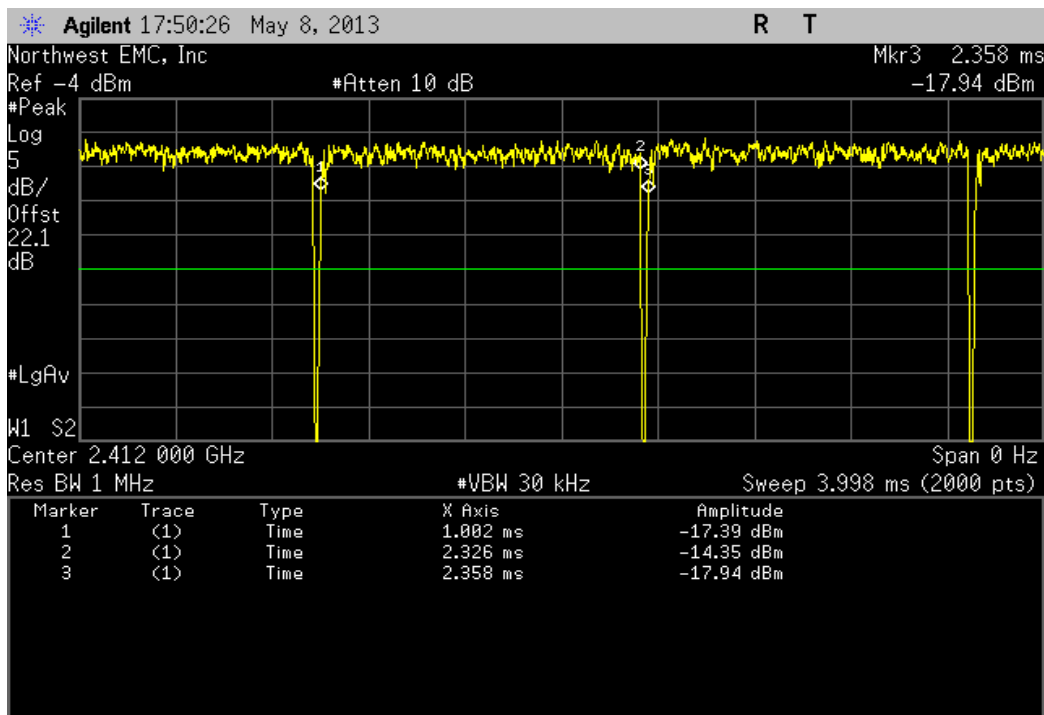
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	168 μ S	200 μ S	1	84	N/A	N/A



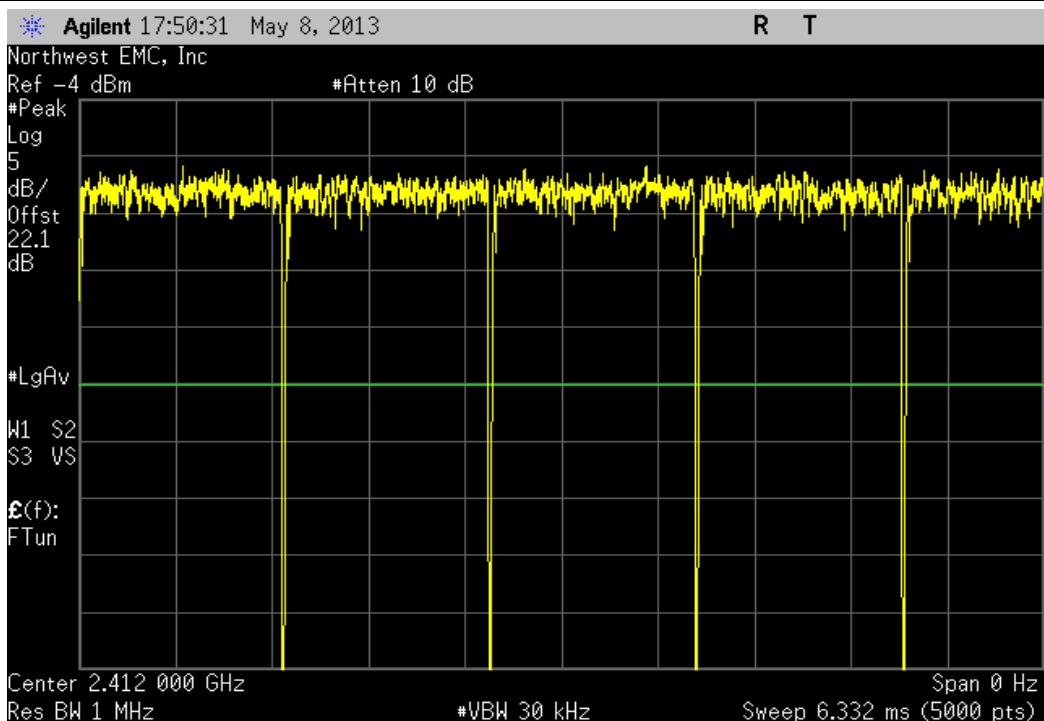
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



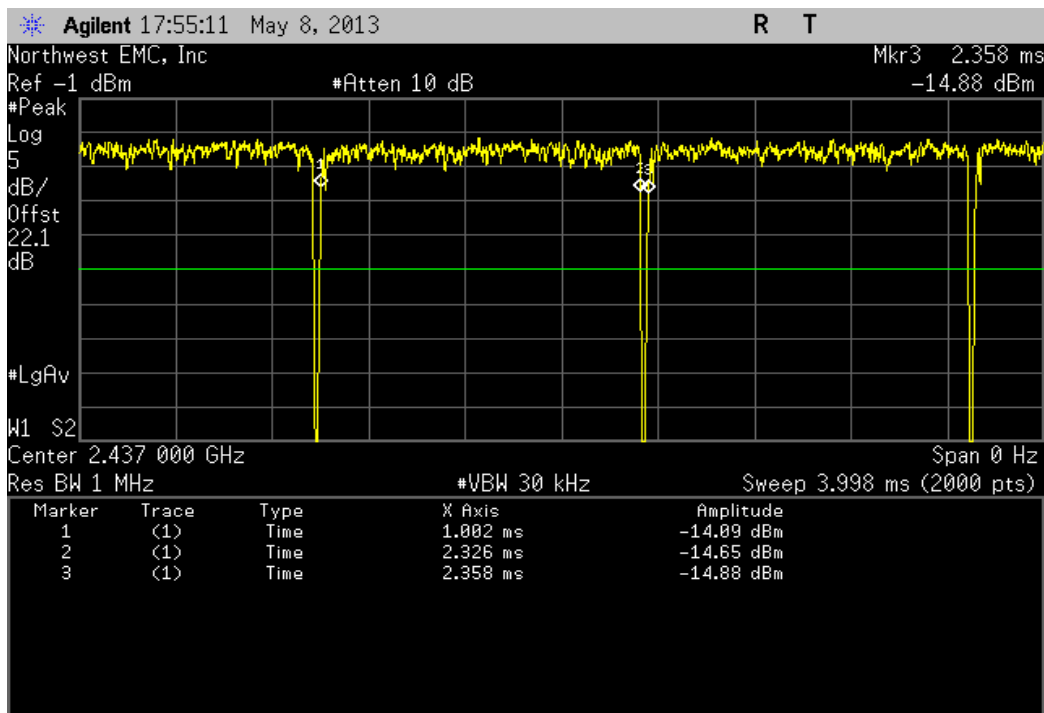
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
1.324 mS	1.356 mS	1	97.6	N/A	N/A	



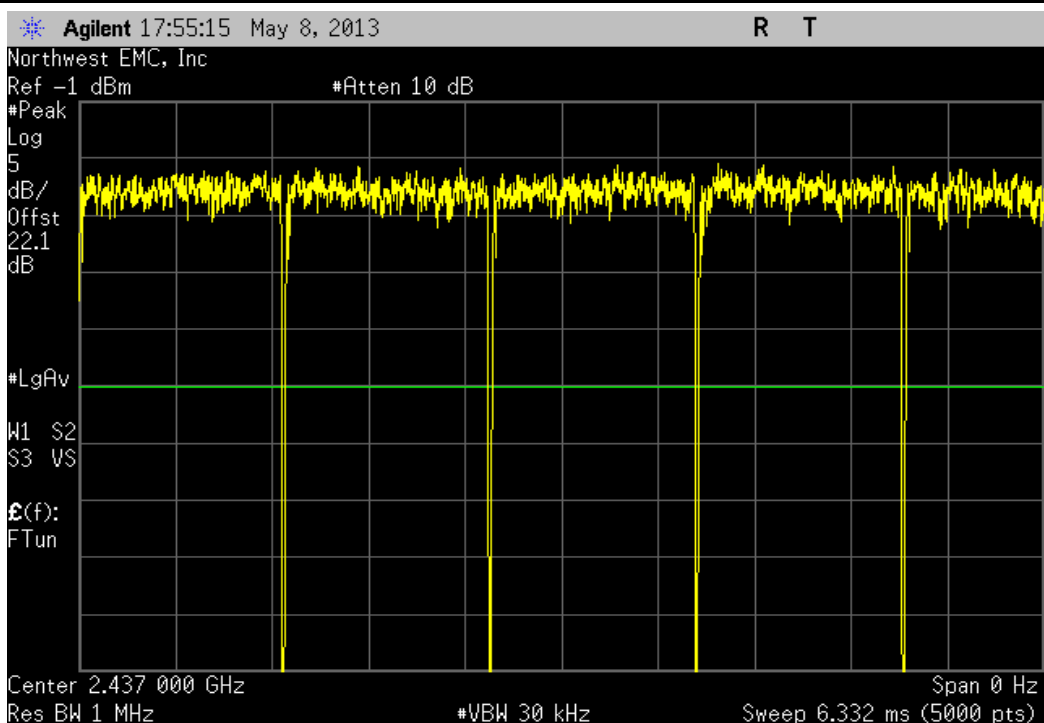
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



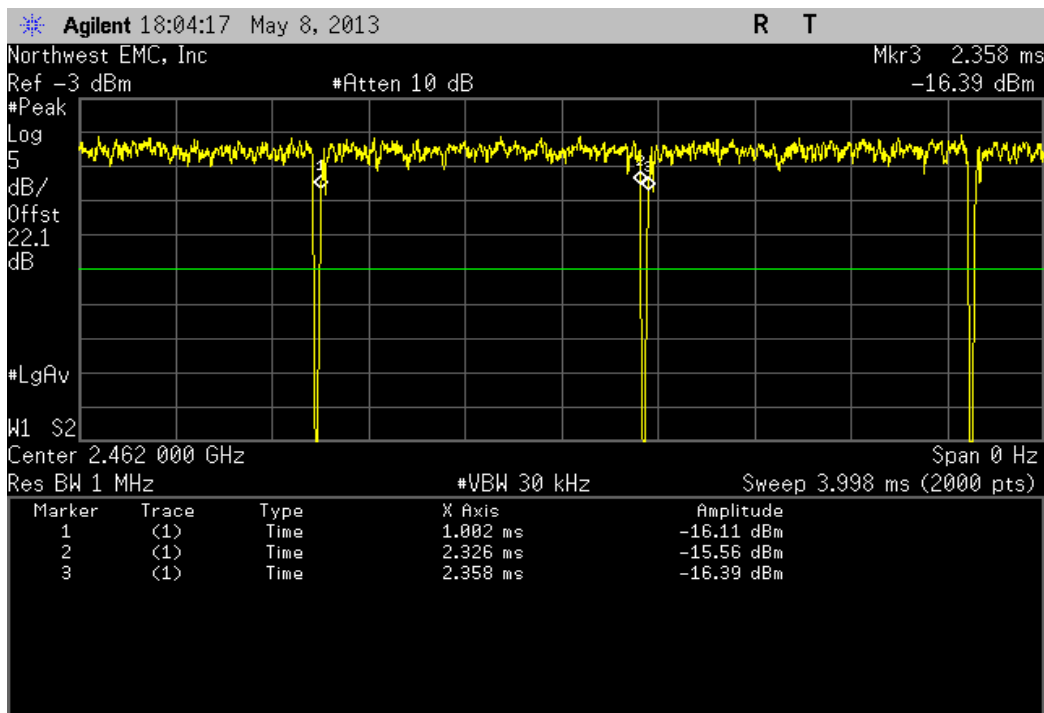
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.324 mS	1.356 mS	1	97.6	N/A	N/A



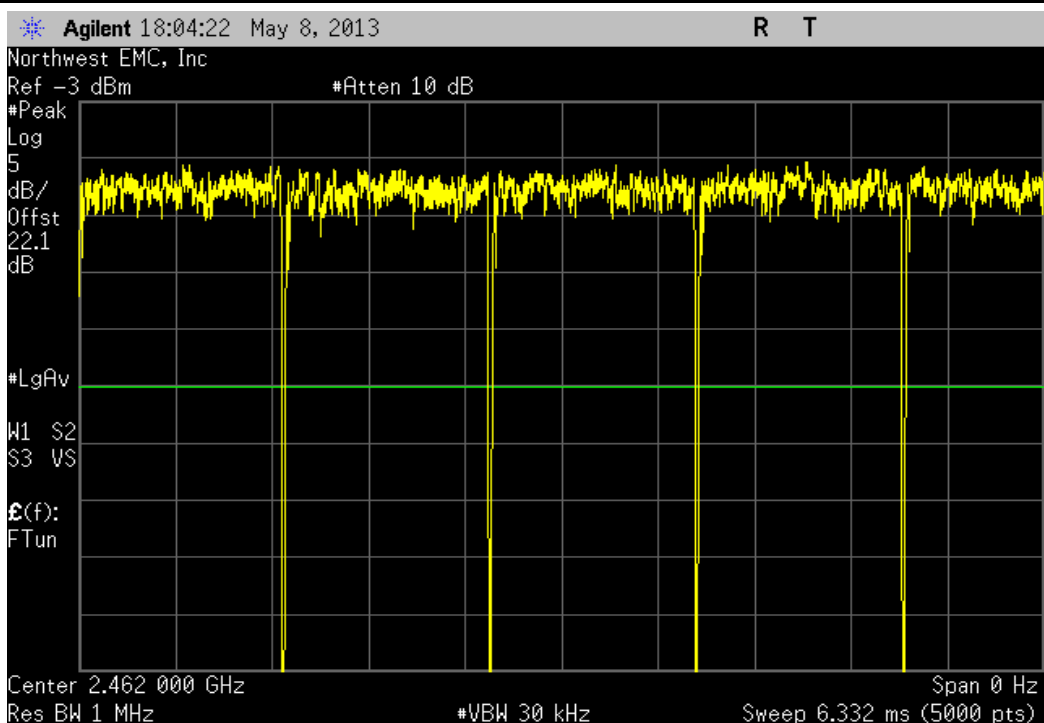
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



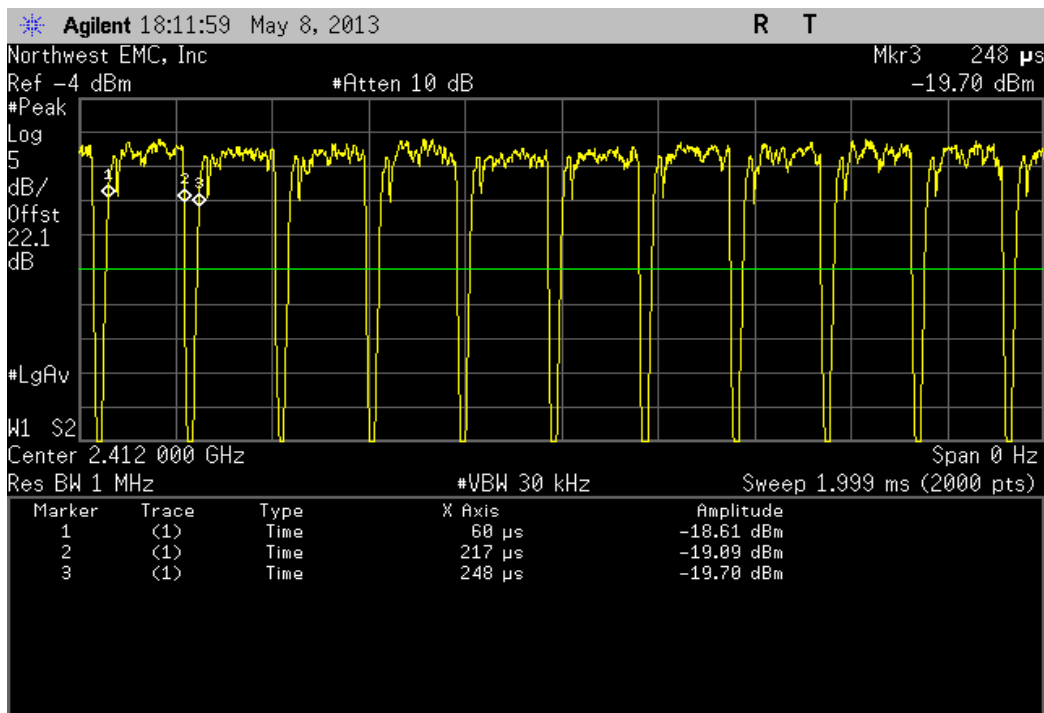
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
1.324 mS	1.356 mS	1	97.6	N/A	N/A	



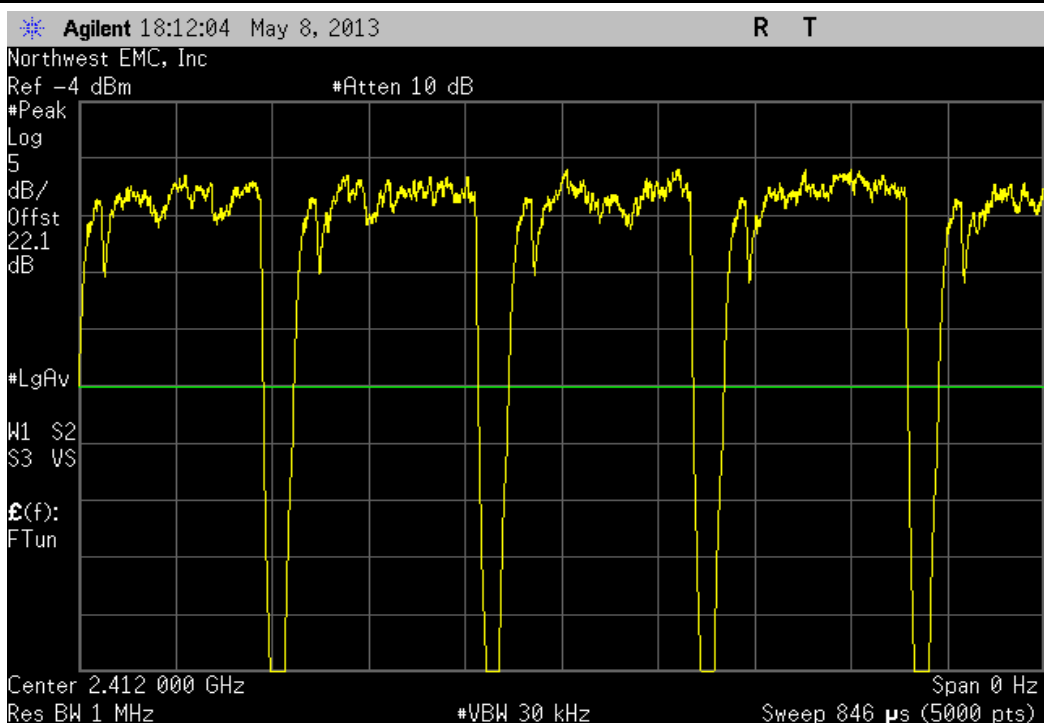
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	157 uS	188 uS	1	83.5	N/A	N/A

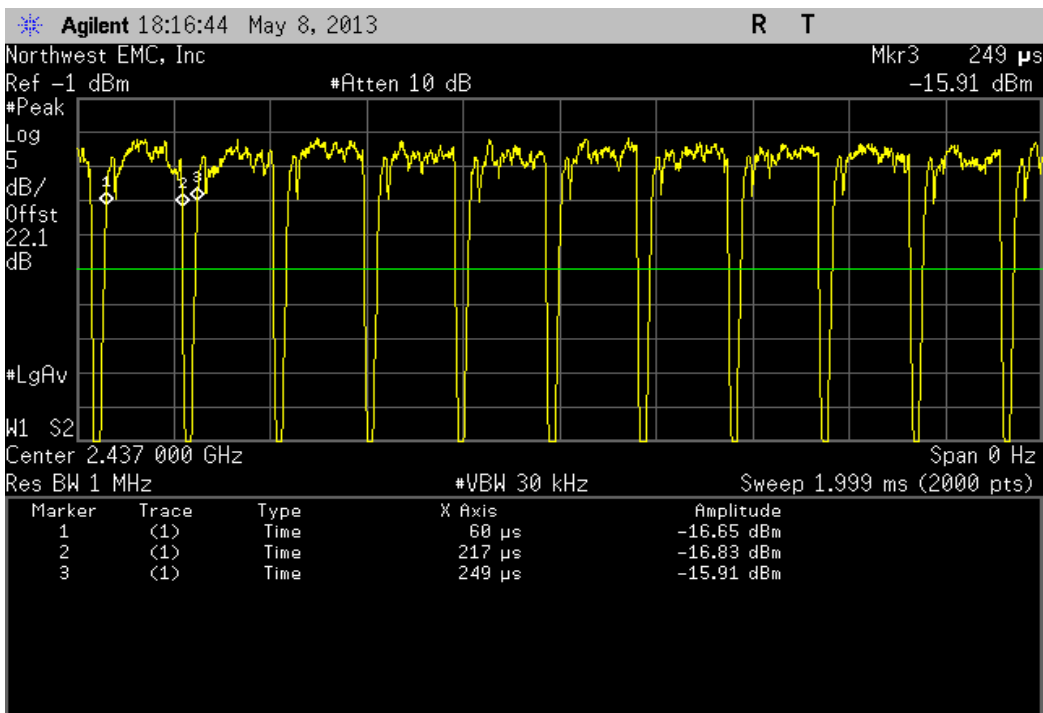


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



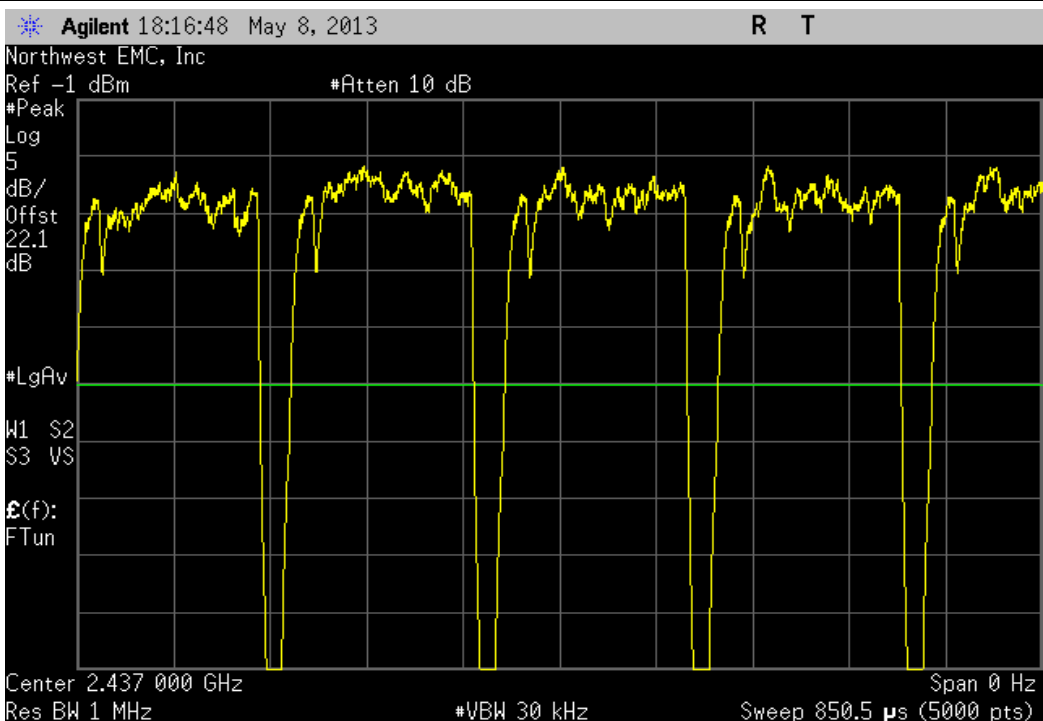
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	157 μ S	189 μ S	1	83.1	N/A	N/A

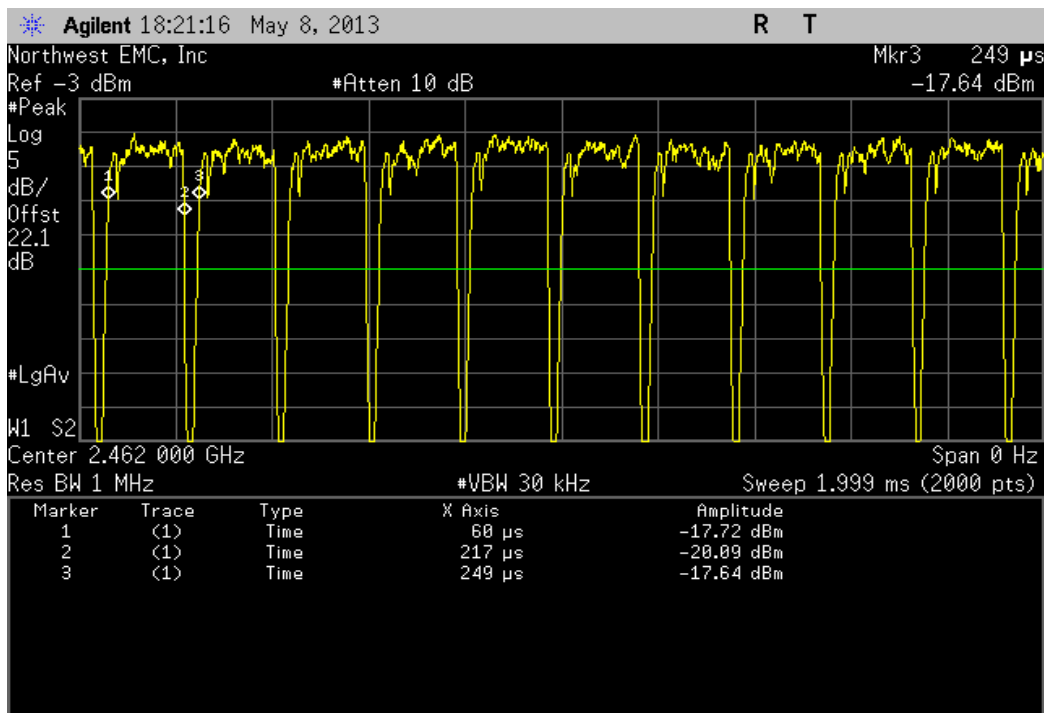


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

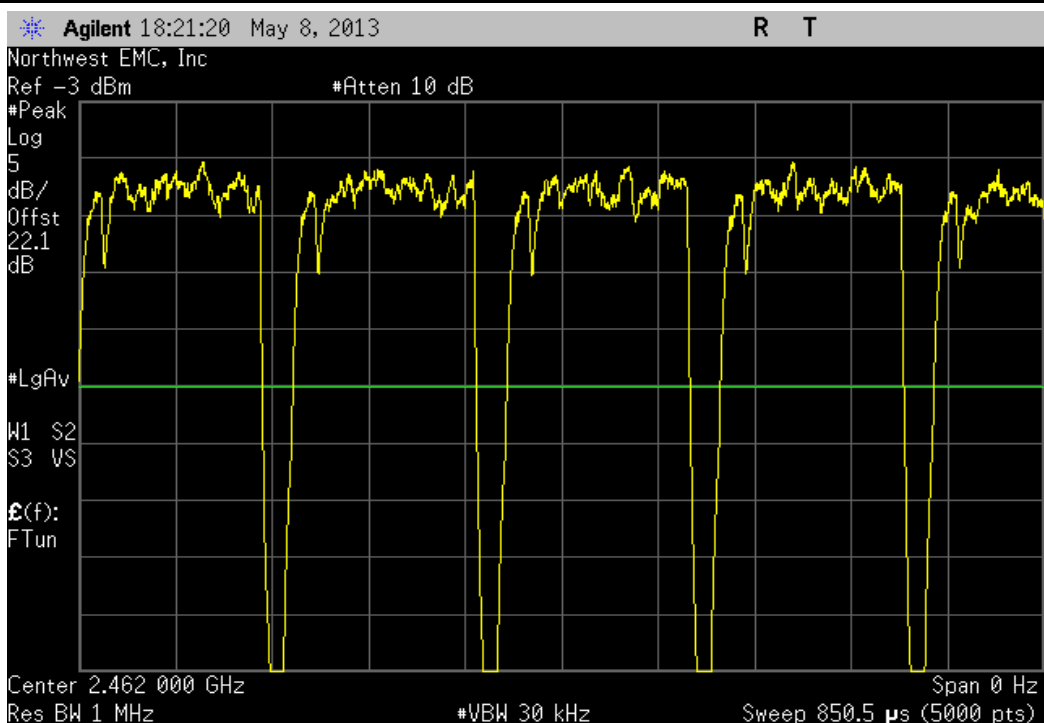
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



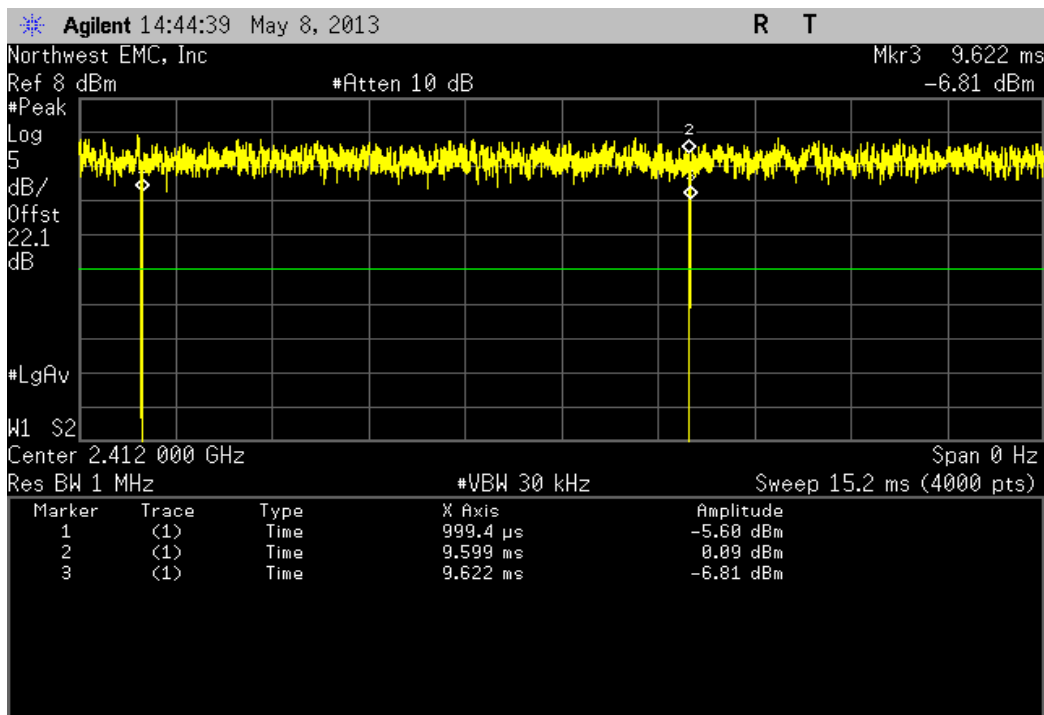
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	157 uS	189 uS	1	83.1	N/A	N/A



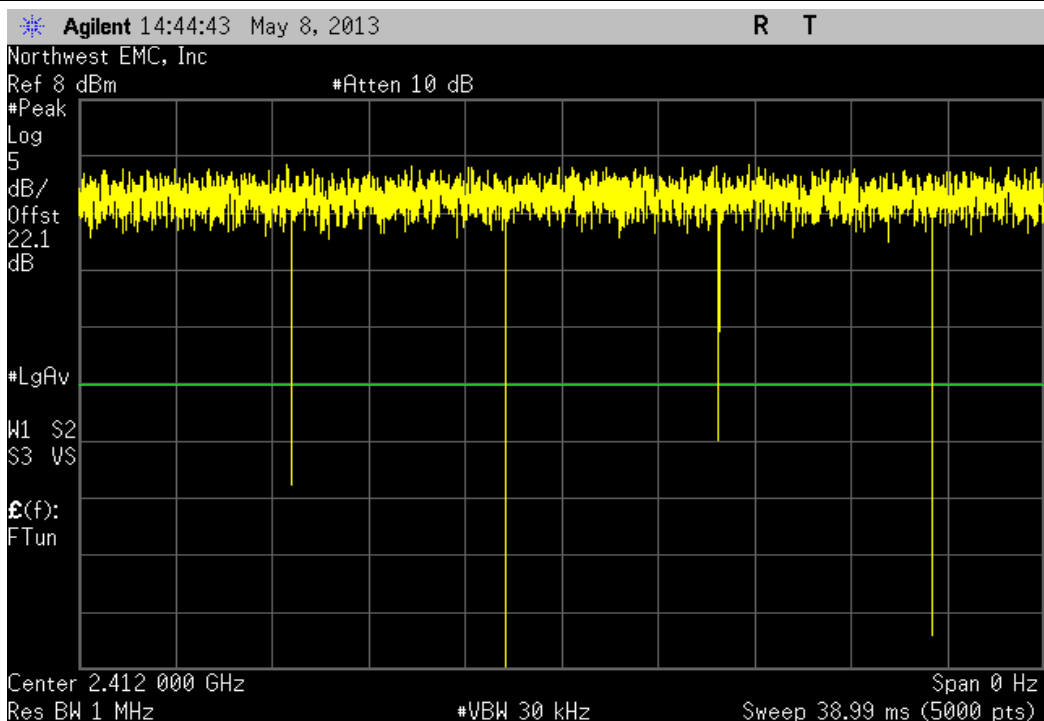
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



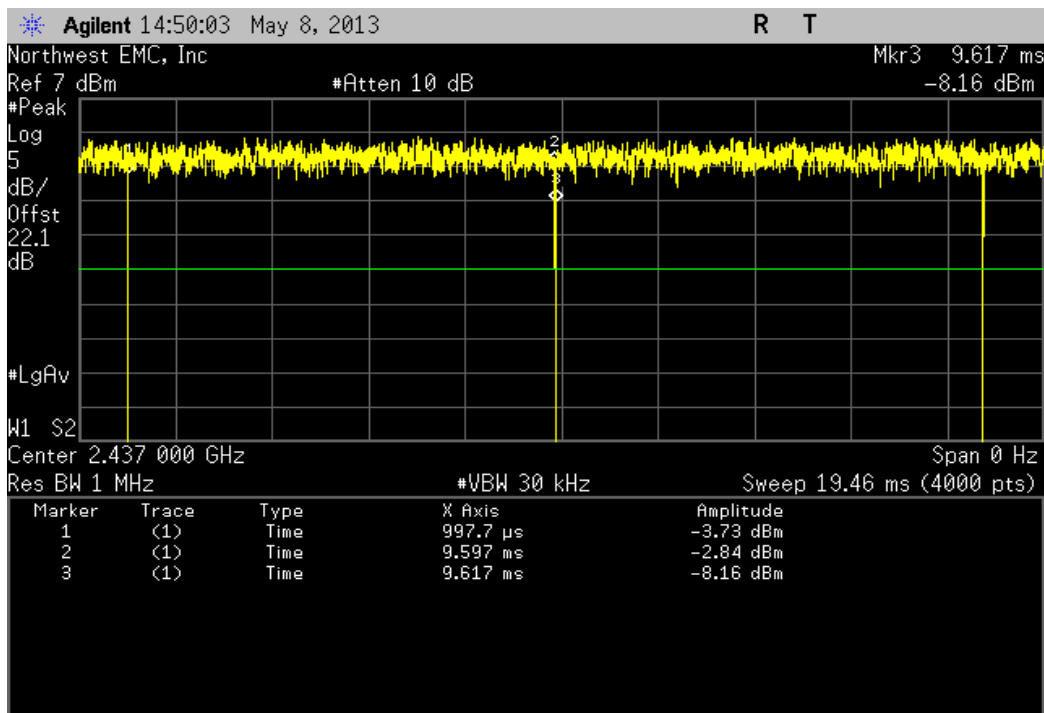
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.599 mS	8.622 mS	1	99.7	N/A	N/A



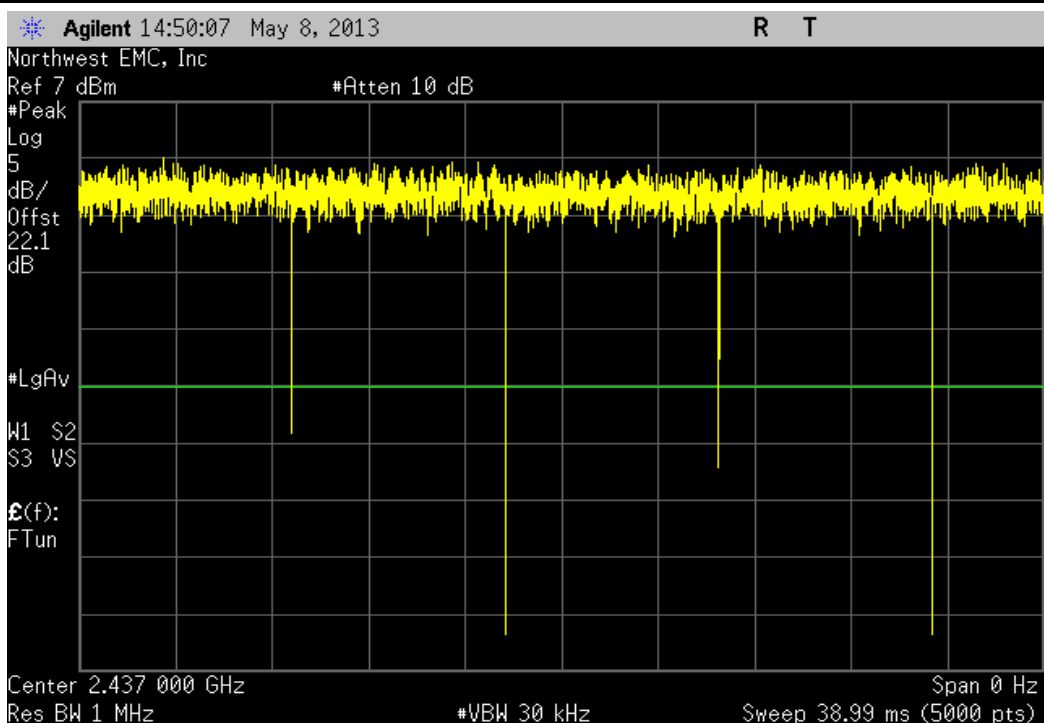
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



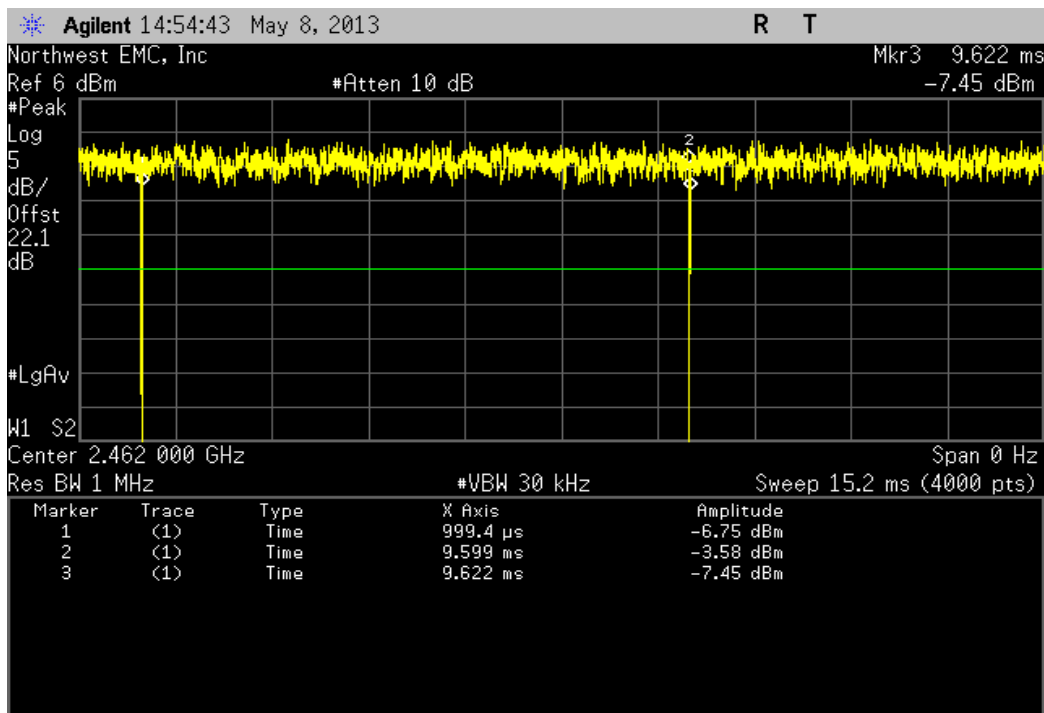
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.599 mS	8.619 mS	1	99.8	N/A	N/A



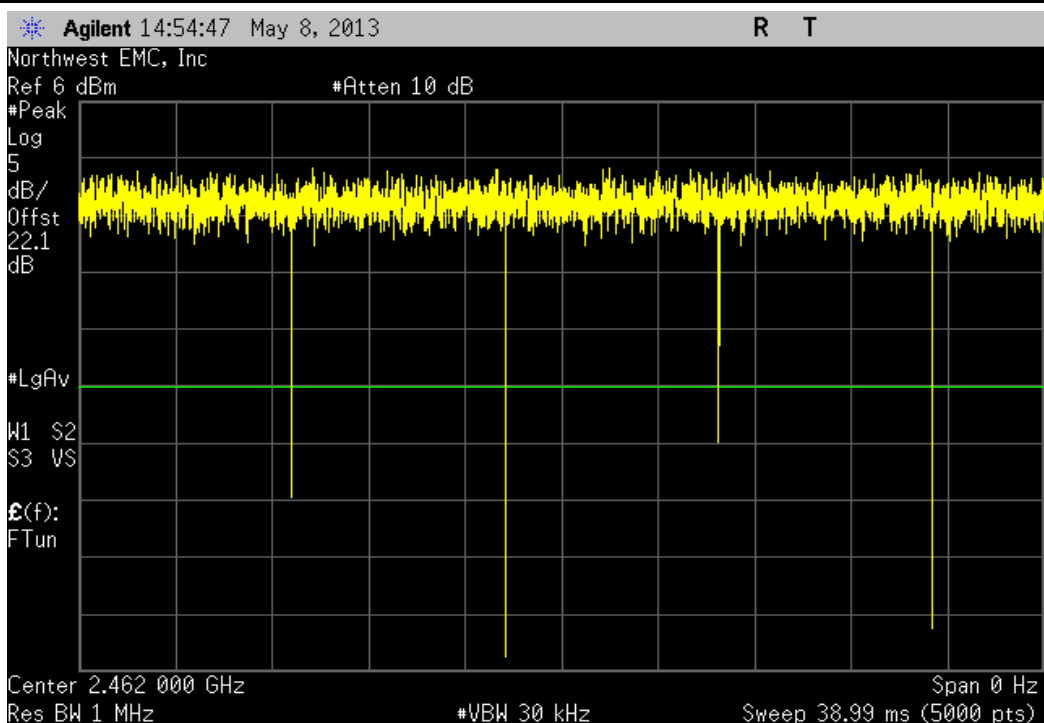
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



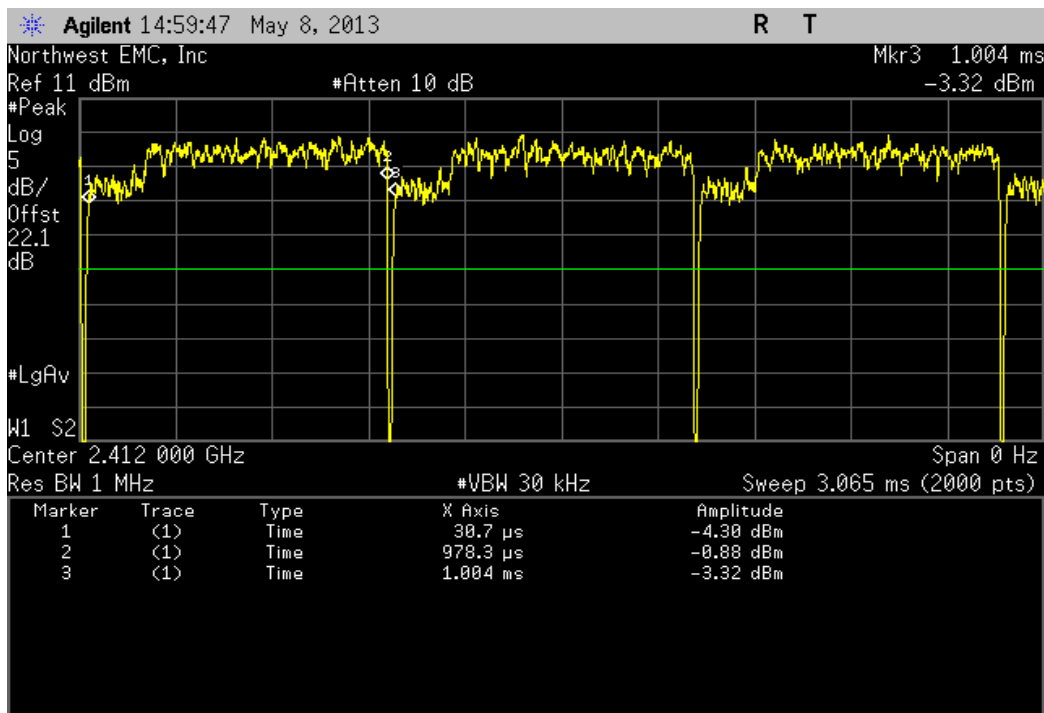
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	8.599 mS	8.622 mS	1	99.7	N/A	N/A



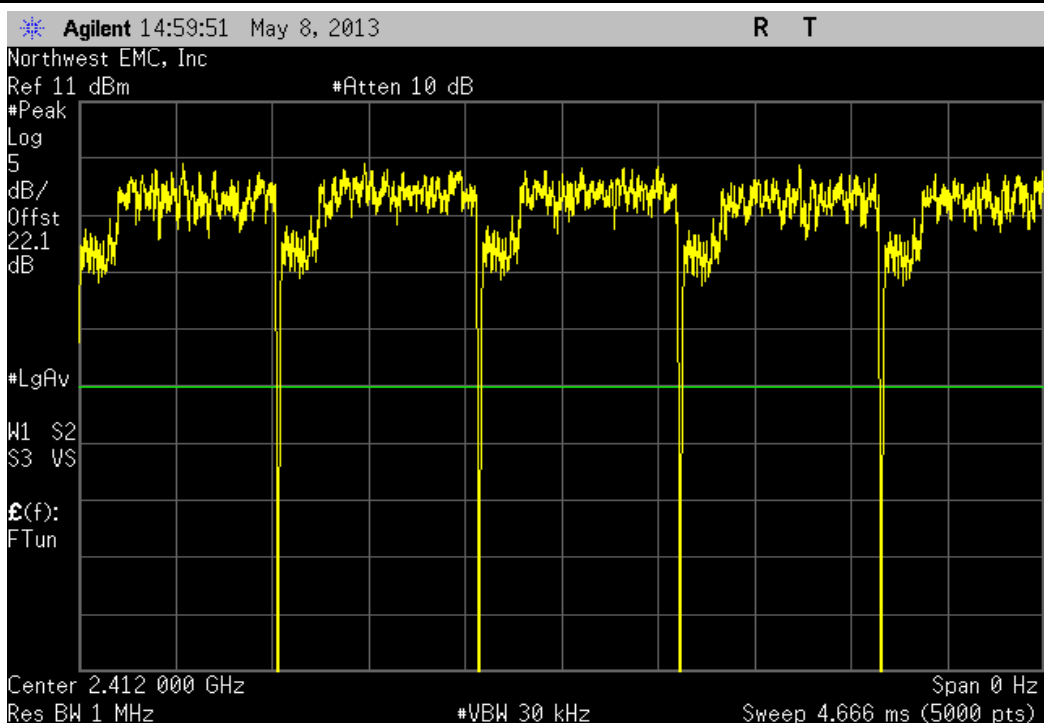
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



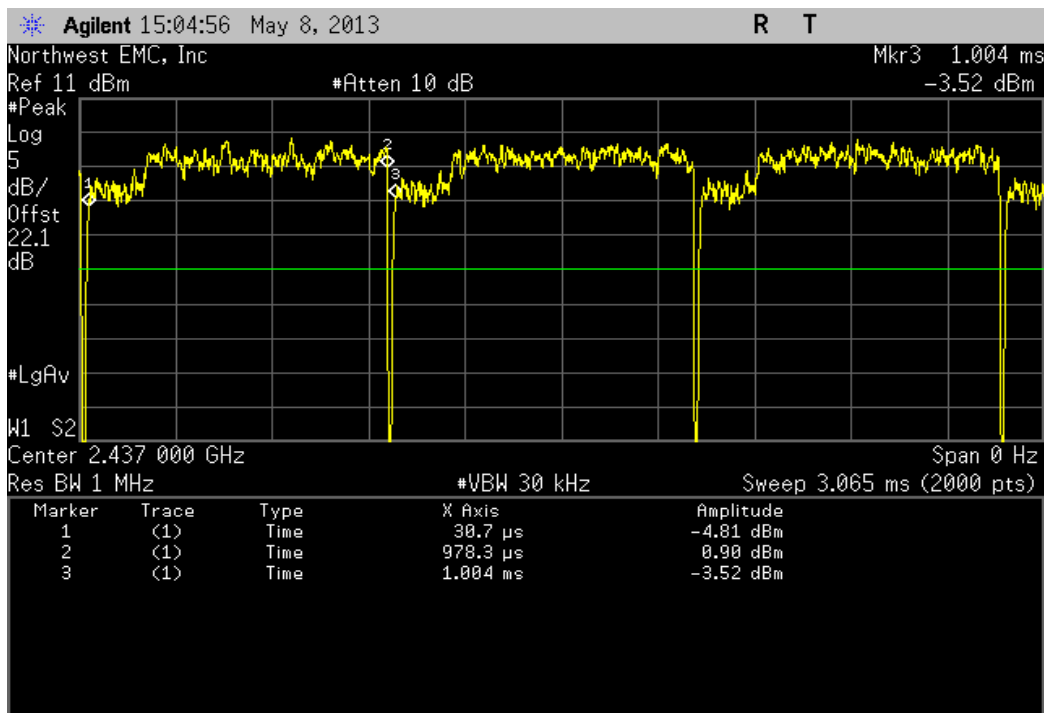
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
947.6 uS	973.6 uS	1	97.3	N/A	N/A	



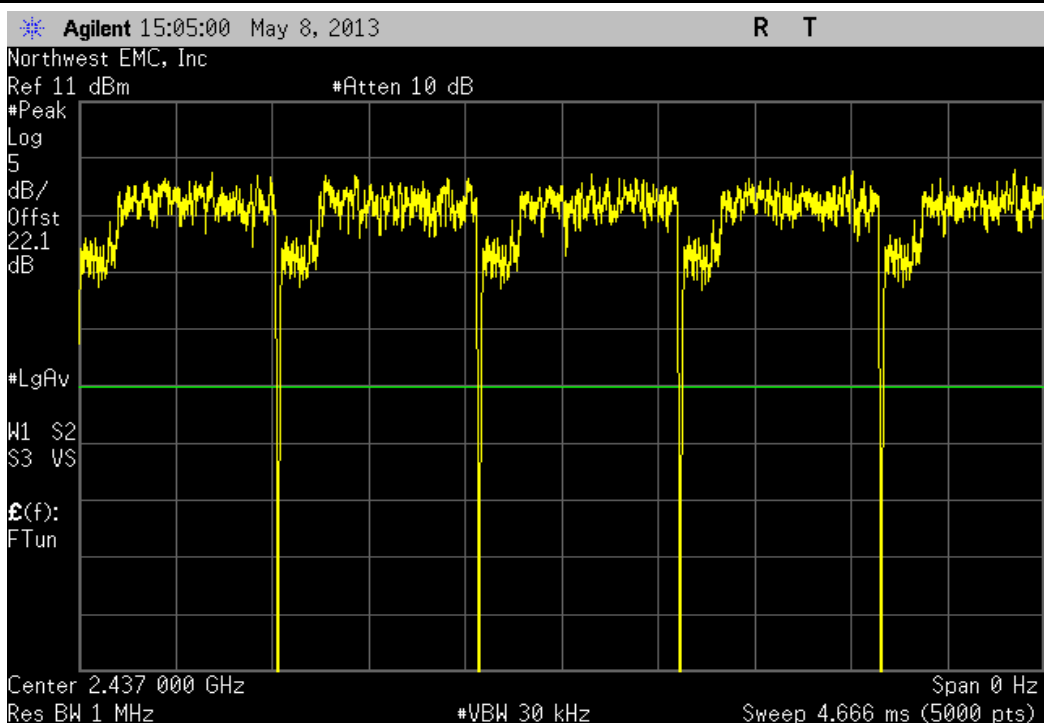
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



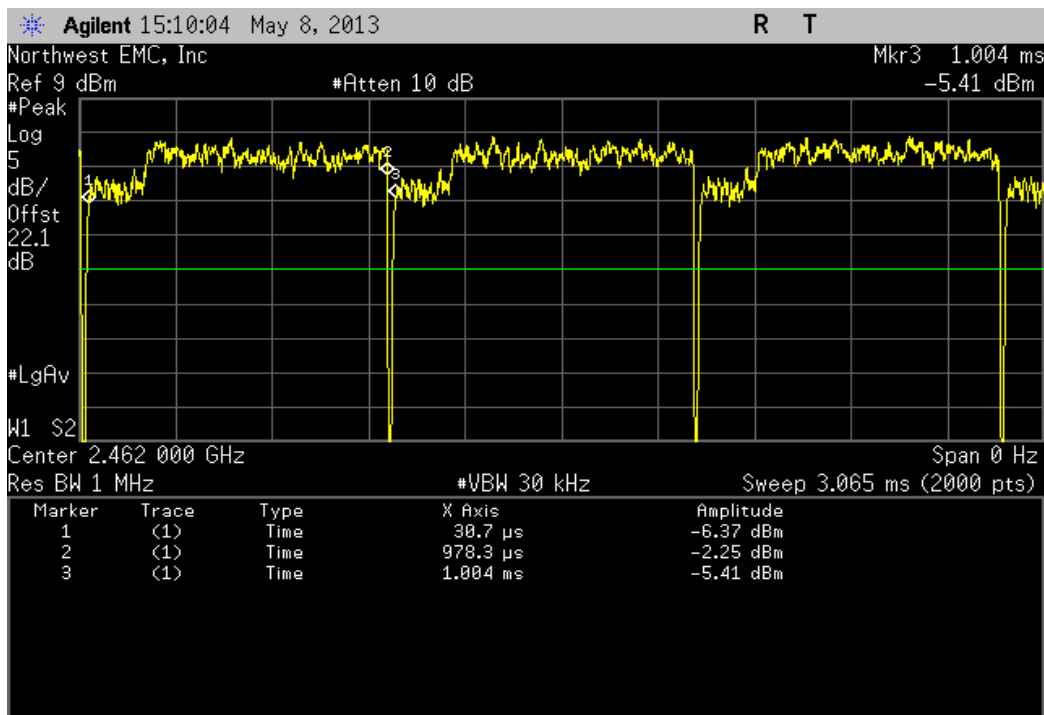
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
947.6 uS	973.6 uS	1	97.3	N/A	N/A	



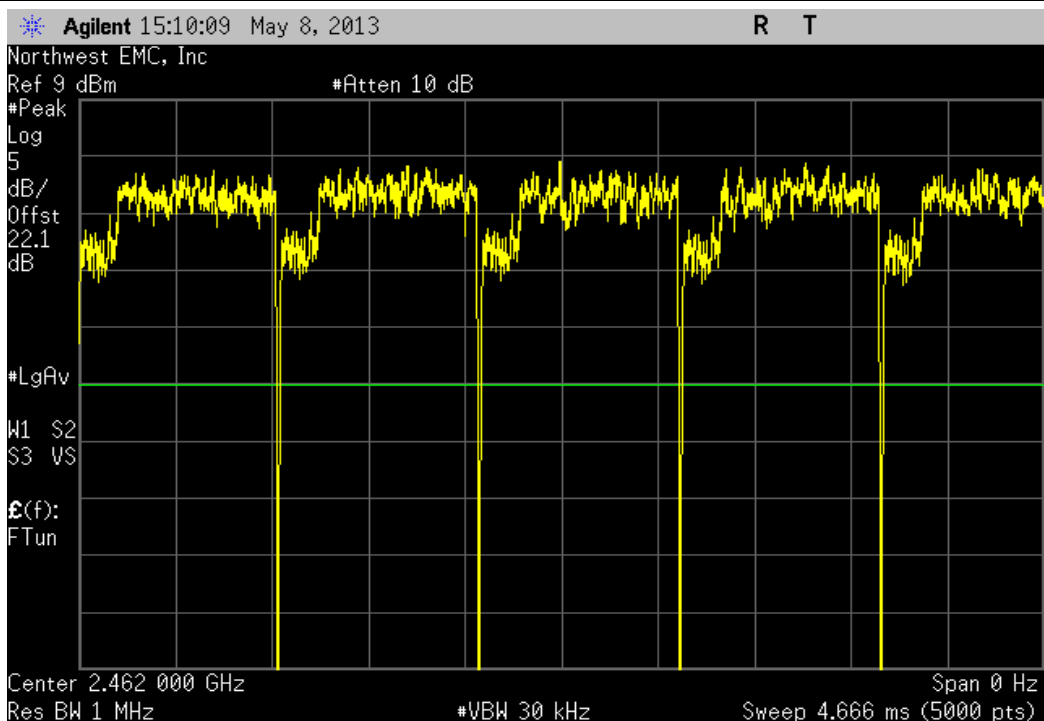
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



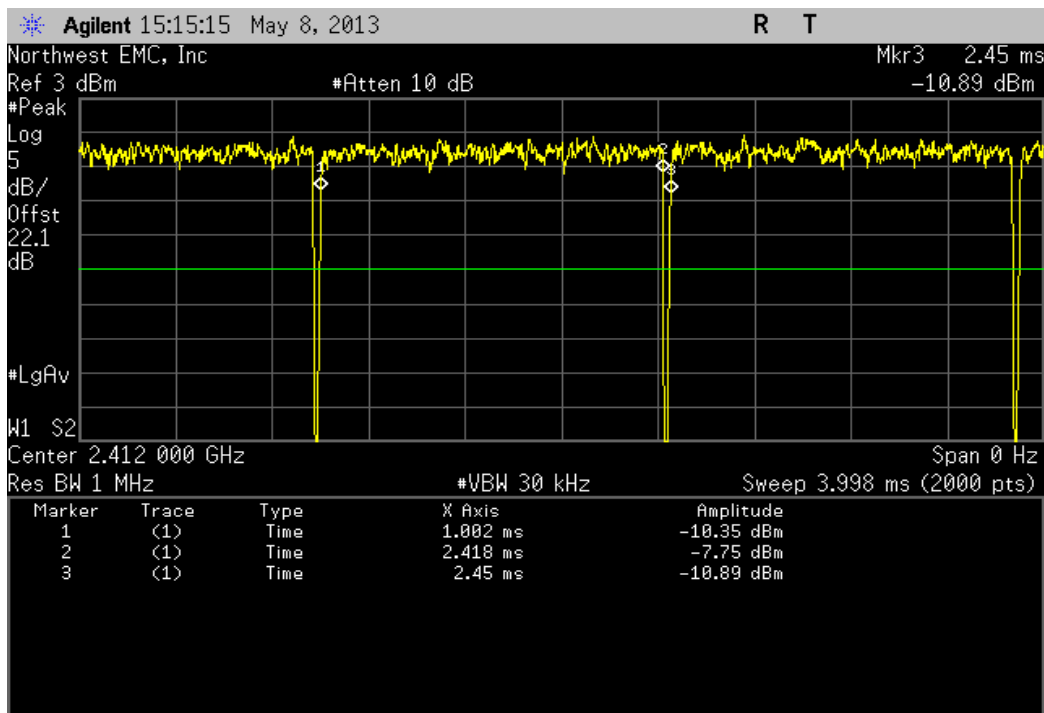
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	947.6 μ S	973.6 μ S	1	97.3	N/A	N/A



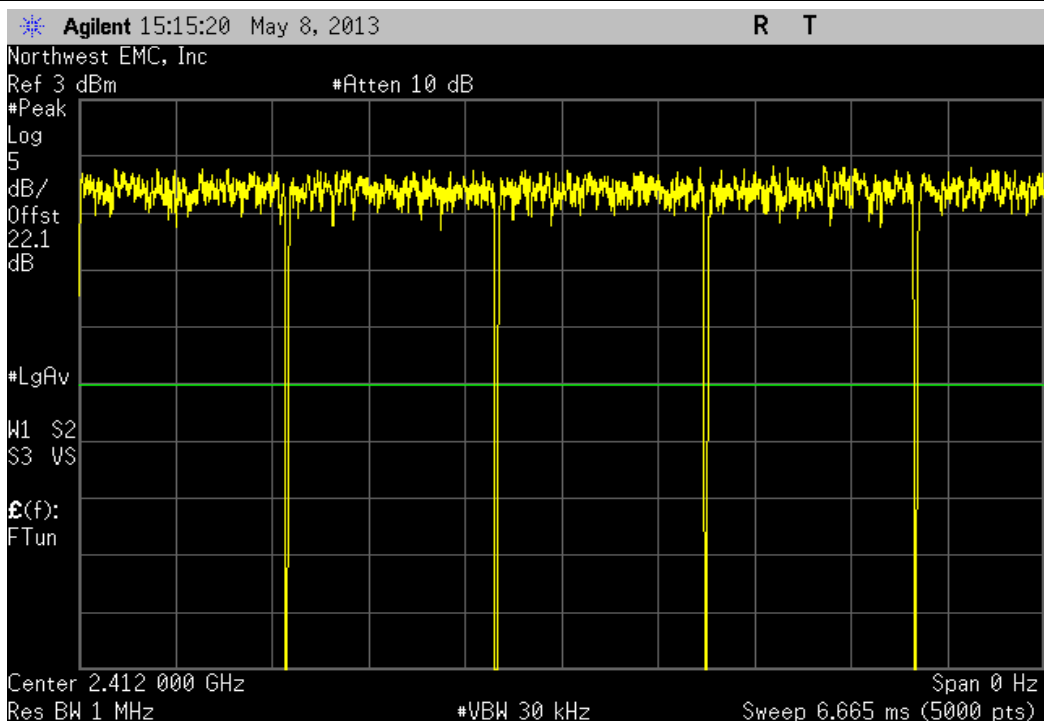
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



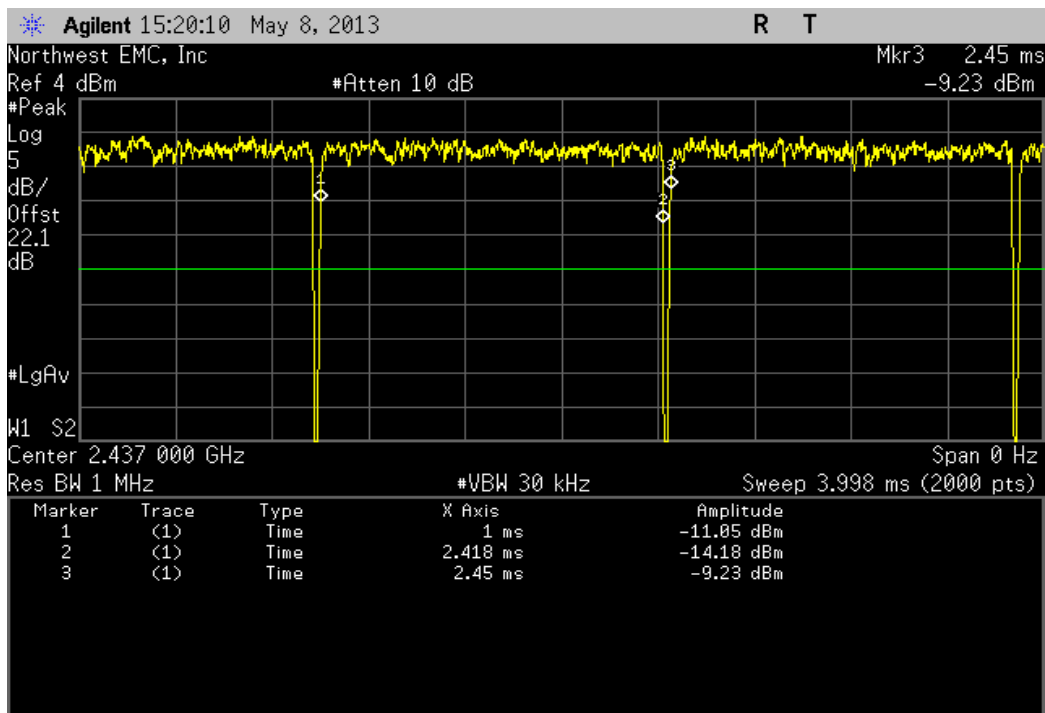
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.416 mS	1.448 mS	1	97.8	N/A	N/A



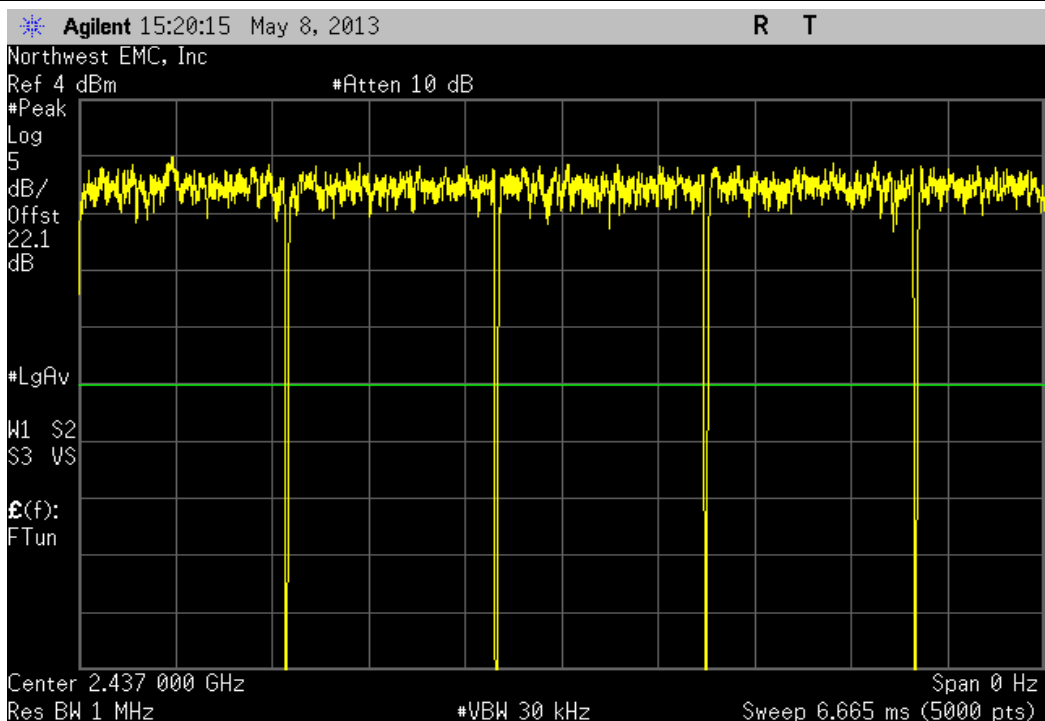
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



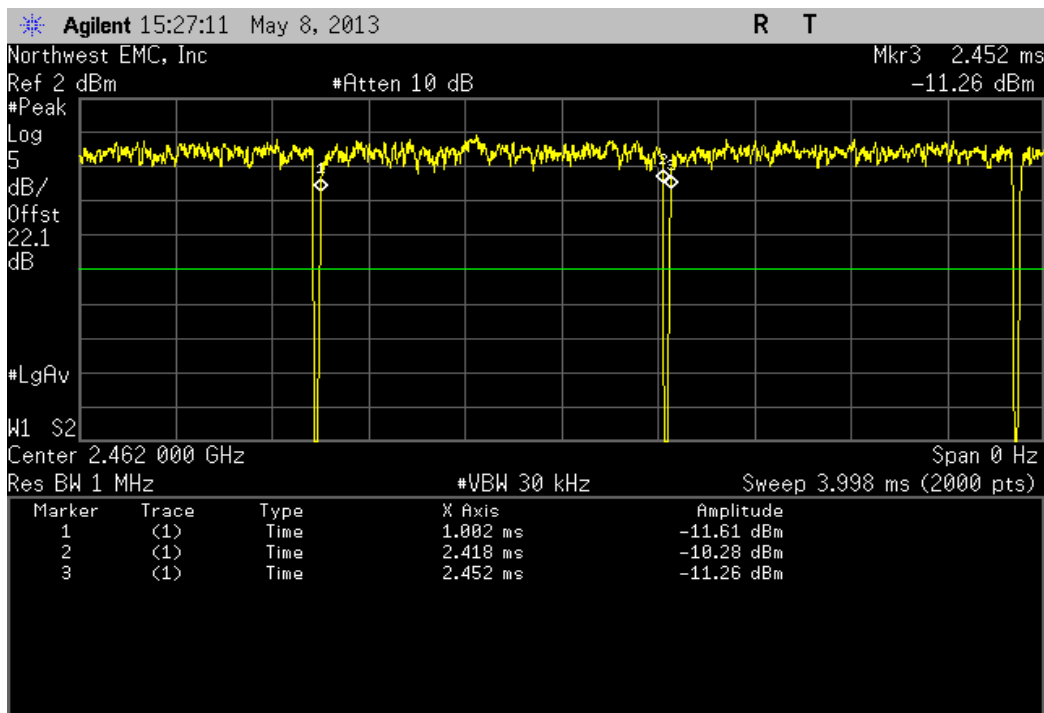
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.418 mS	1.45 mS	1	97.8	N/A	N/A



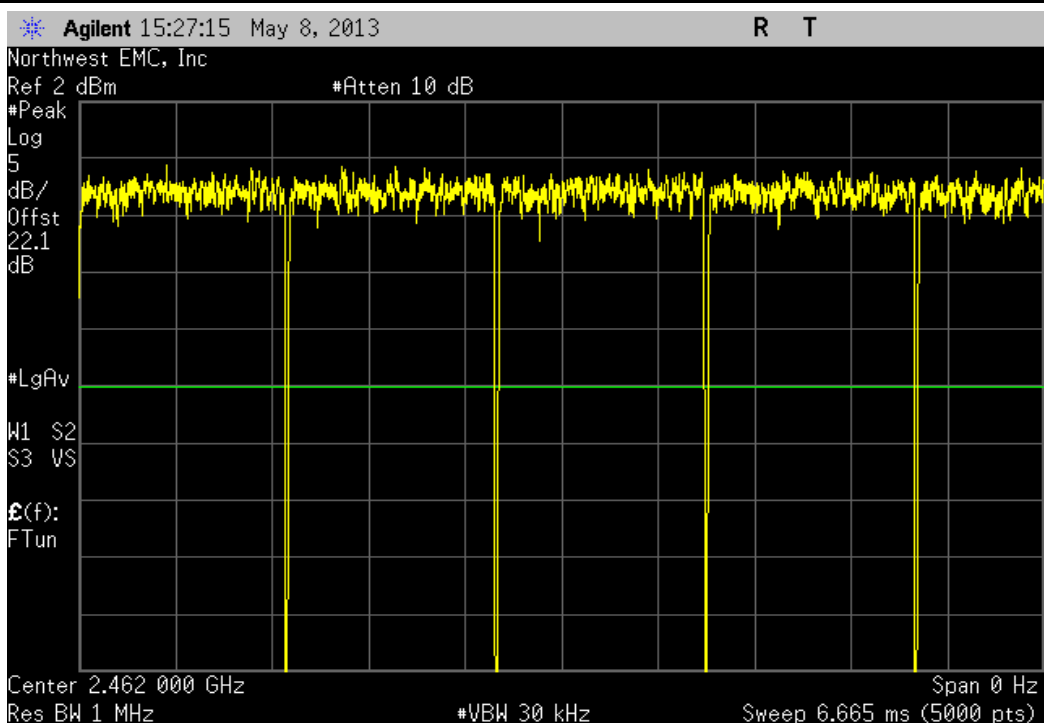
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



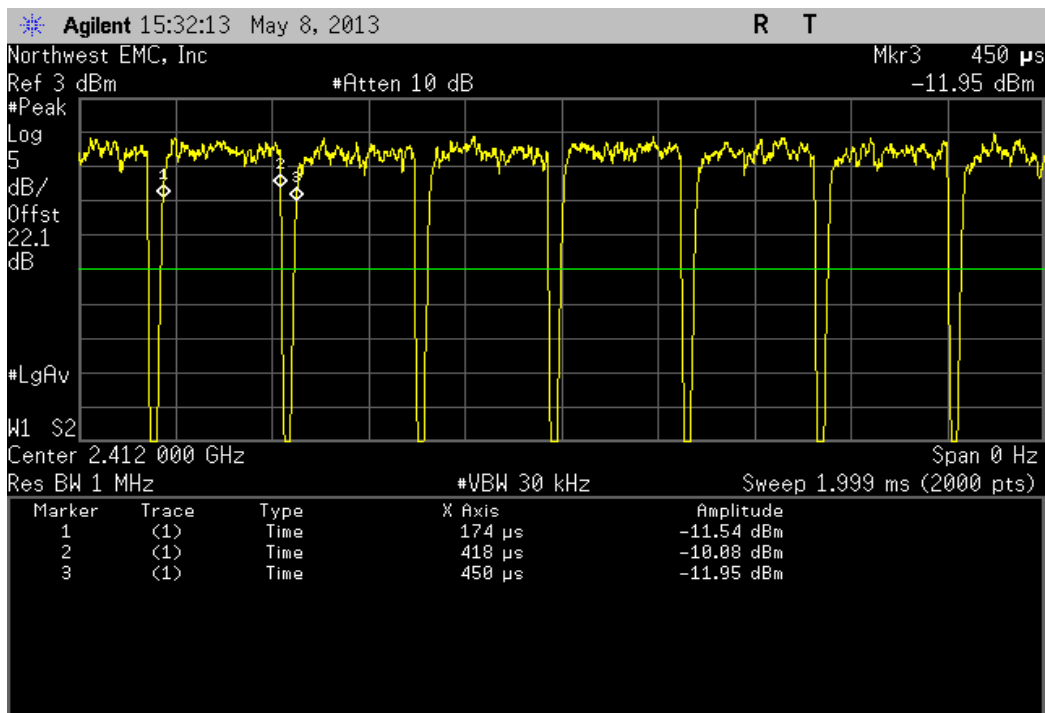
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
1.416 mS	1.45 mS	1	97.7	N/A	N/A	



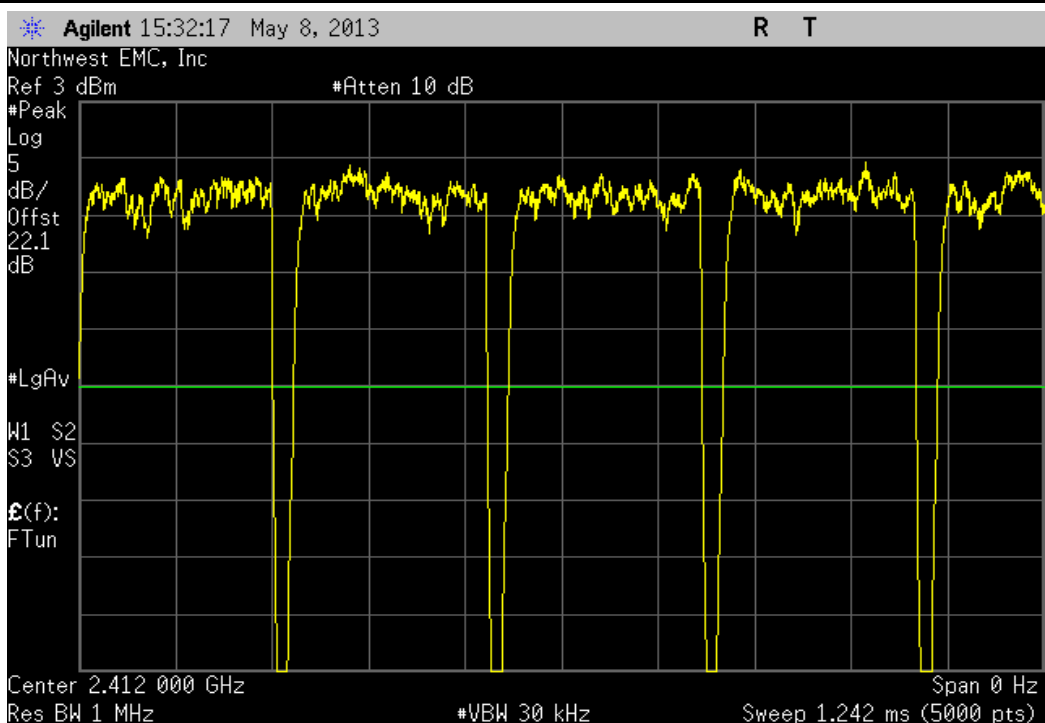
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



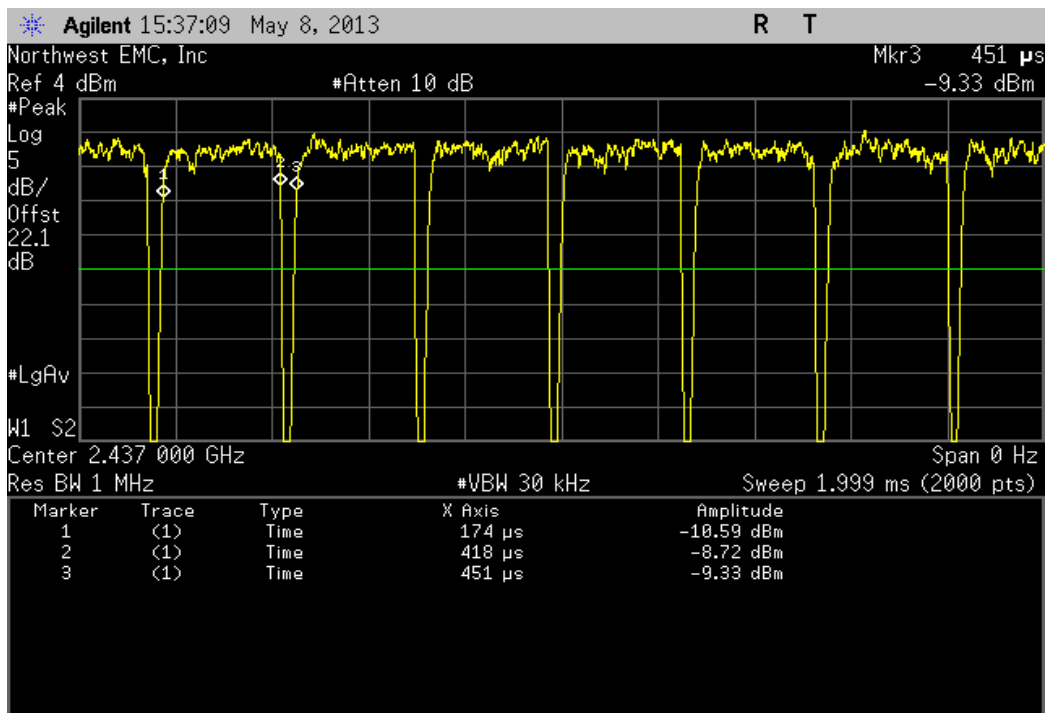
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	244 uS	276 uS	1	88.4	N/A	N/A



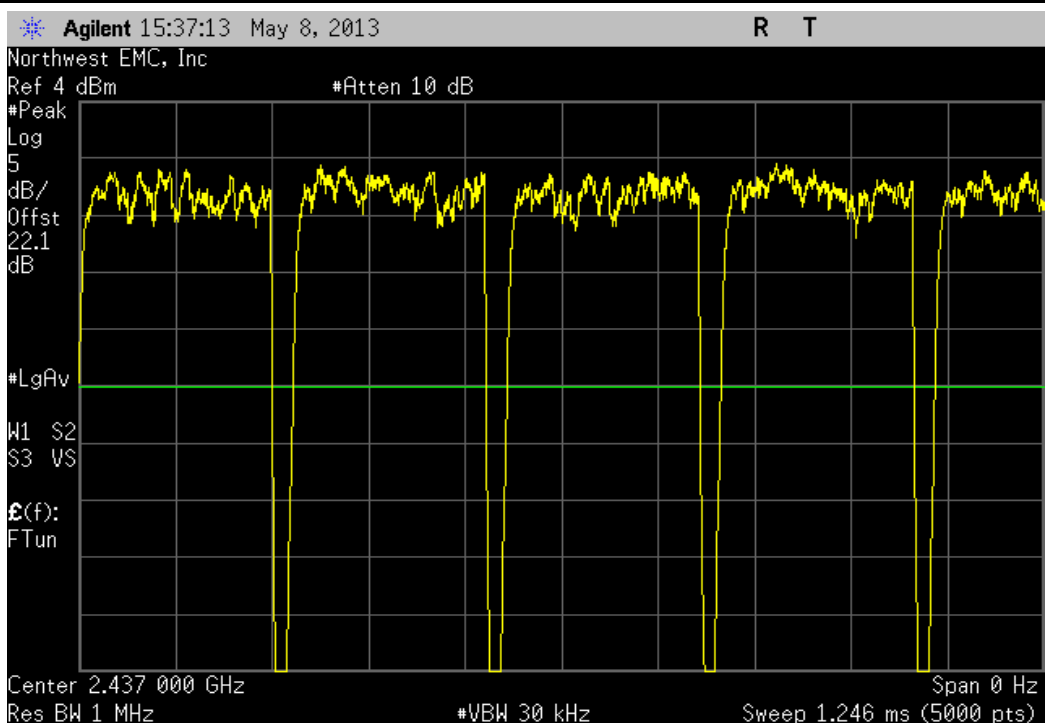
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



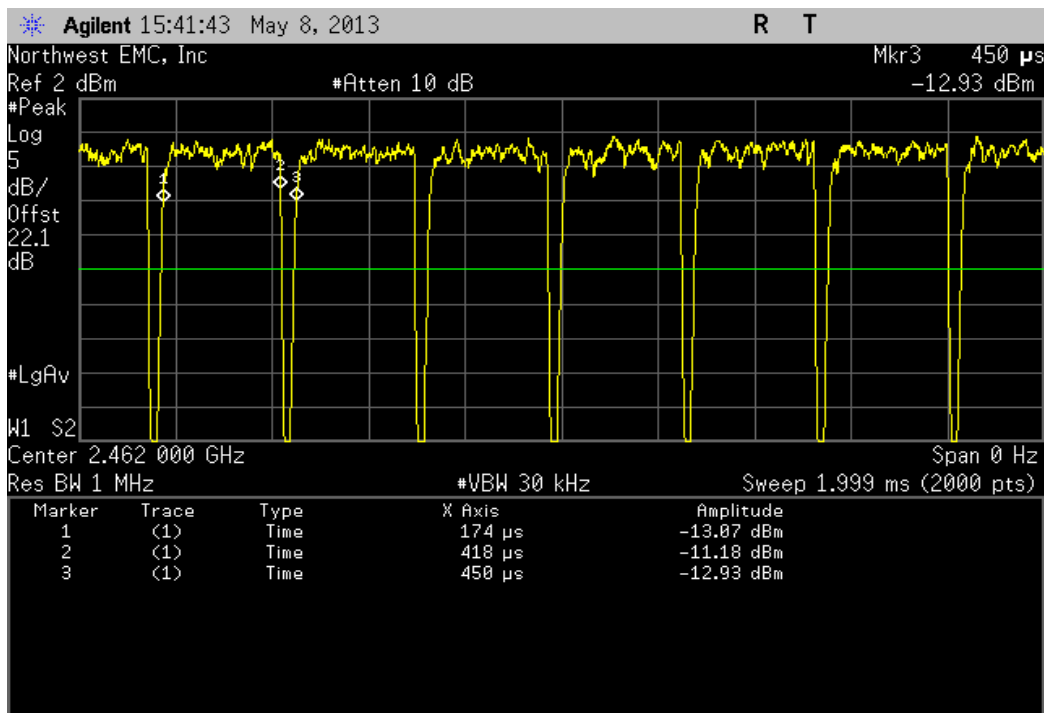
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	244 uS	277 uS	1	88.1	N/A	N/A



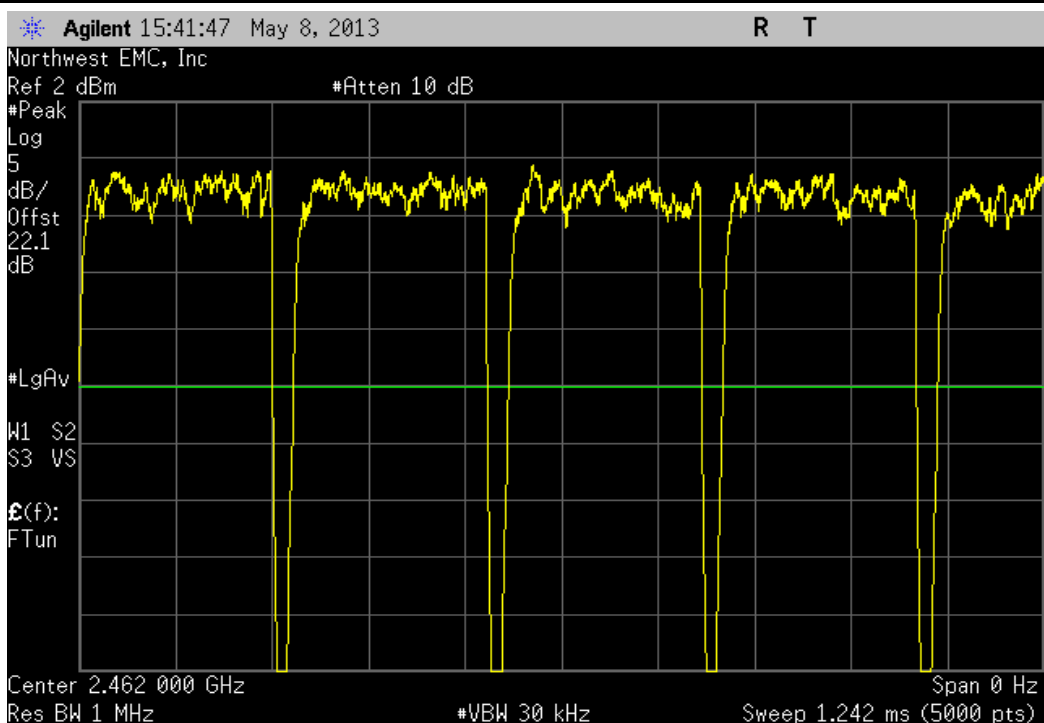
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



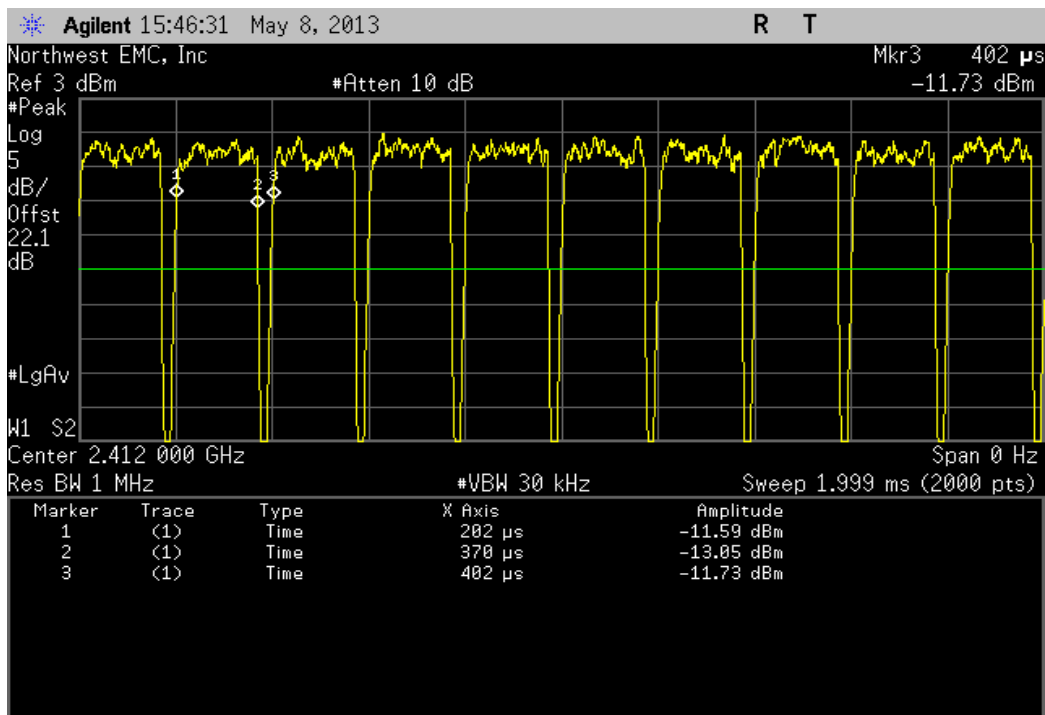
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	244 uS	276 uS	1	88.4	N/A	N/A



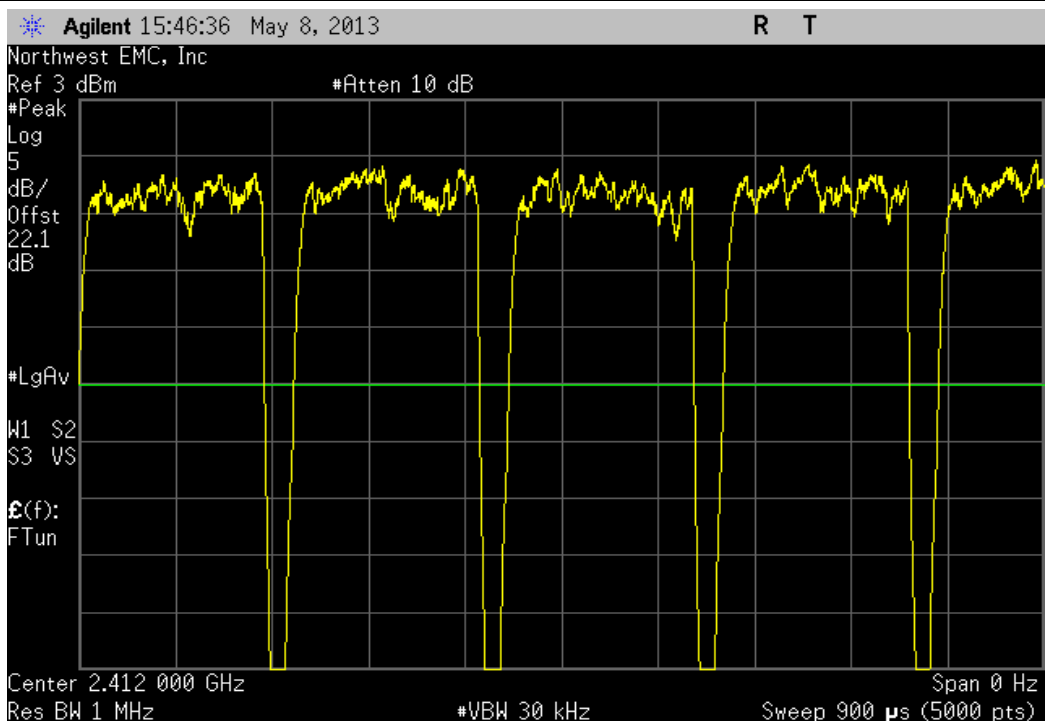
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



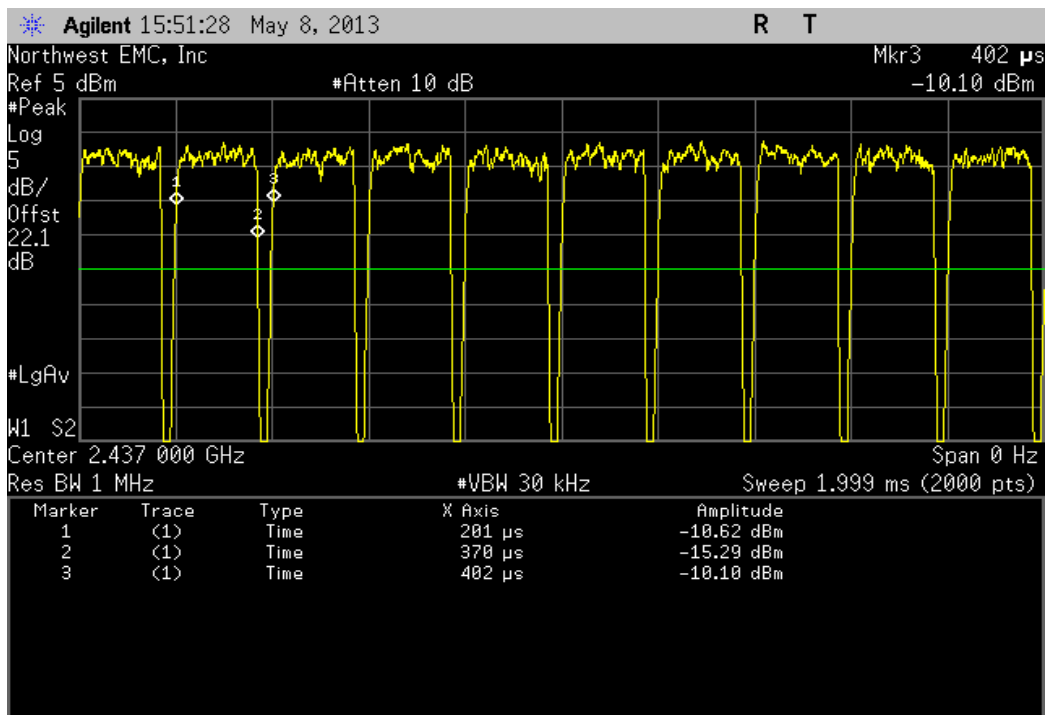
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	168 μ S	200 μ S	1	84	N/A	N/A



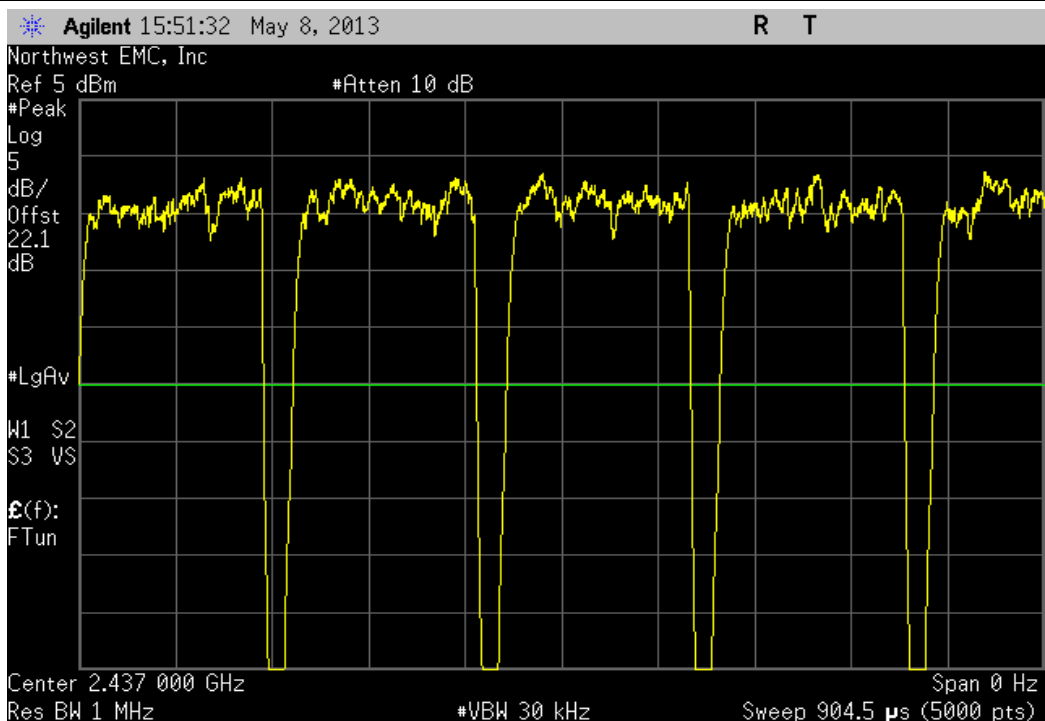
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



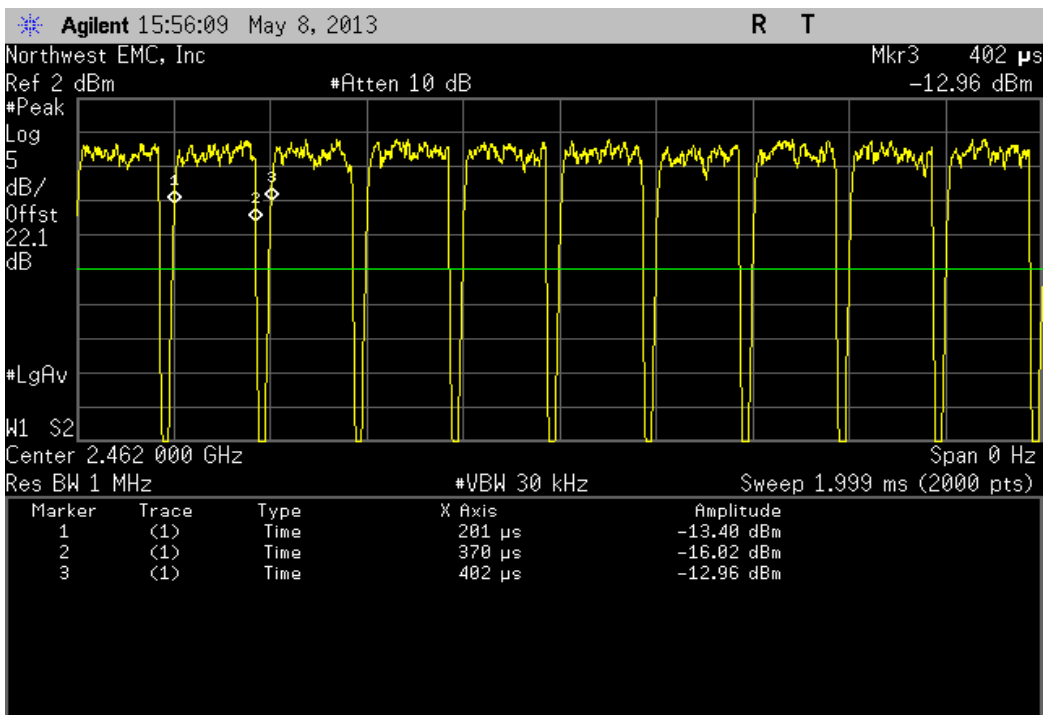
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	169 μ s	201 μ s	1	84.1	N/A	N/A



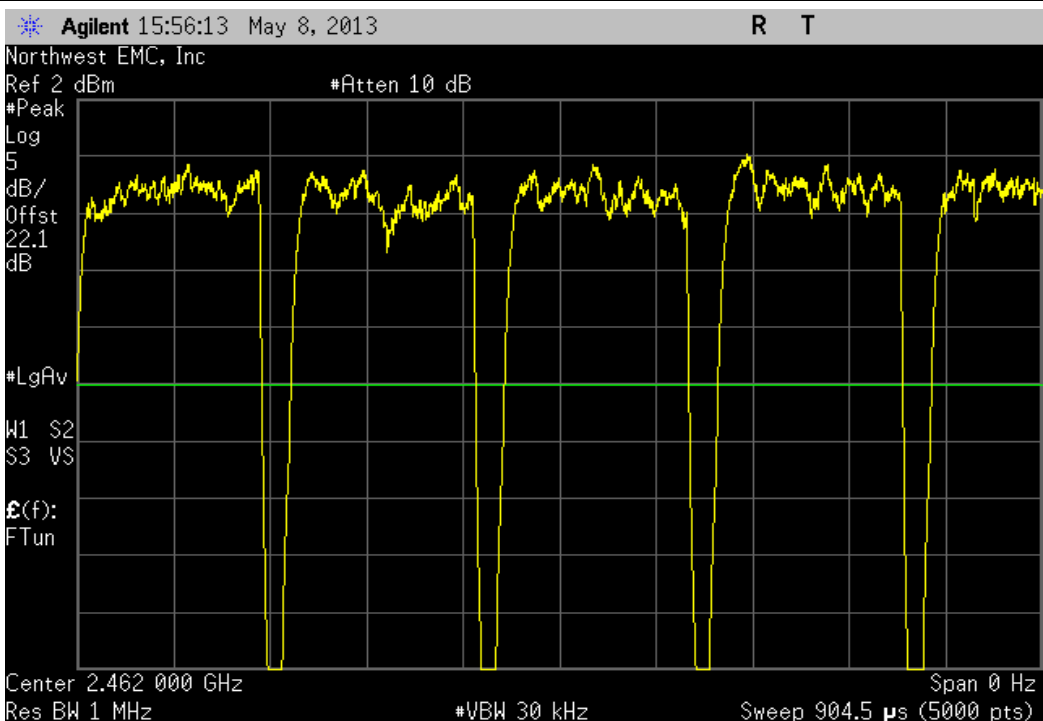
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



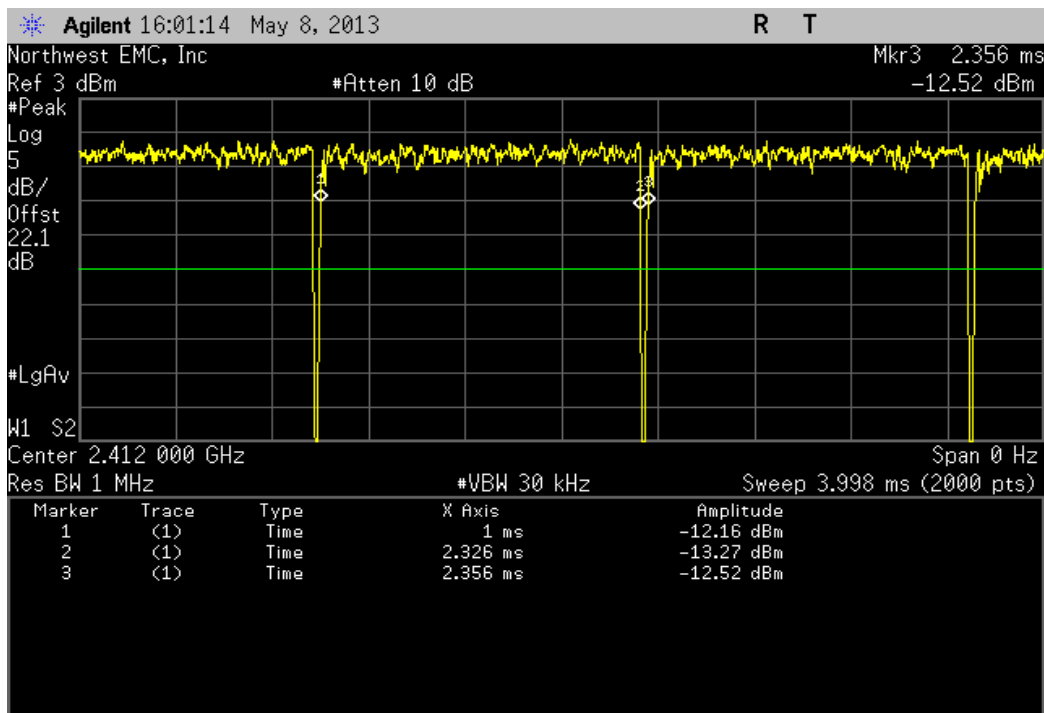
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	169 μ S	201 μ S	1	84.1	N/A	N/A



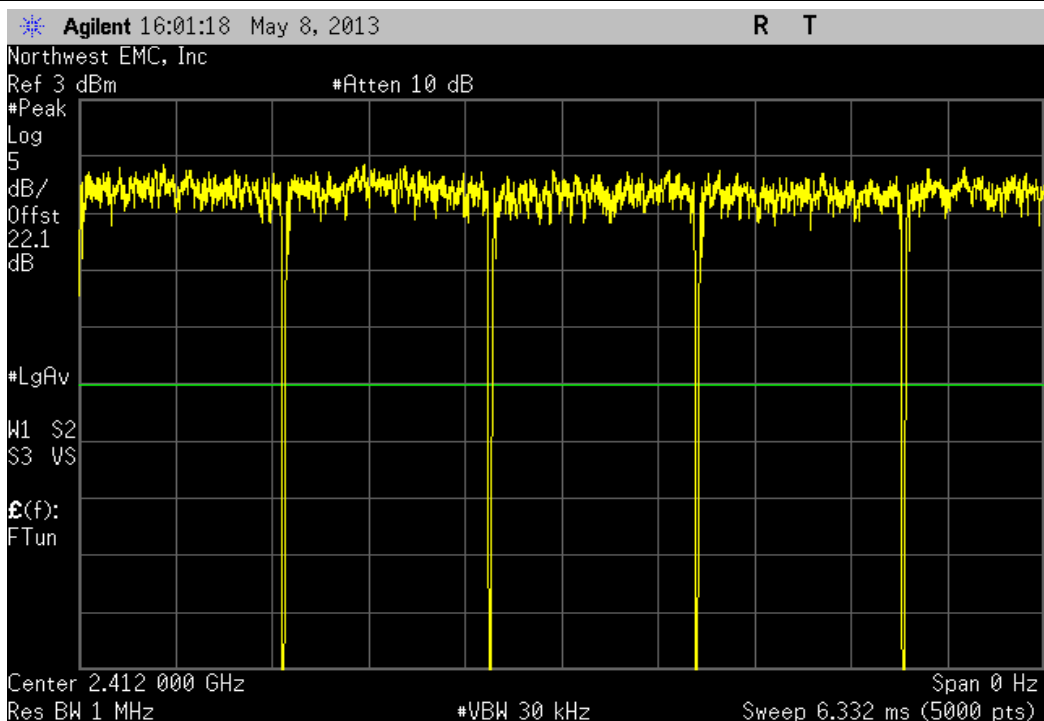
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



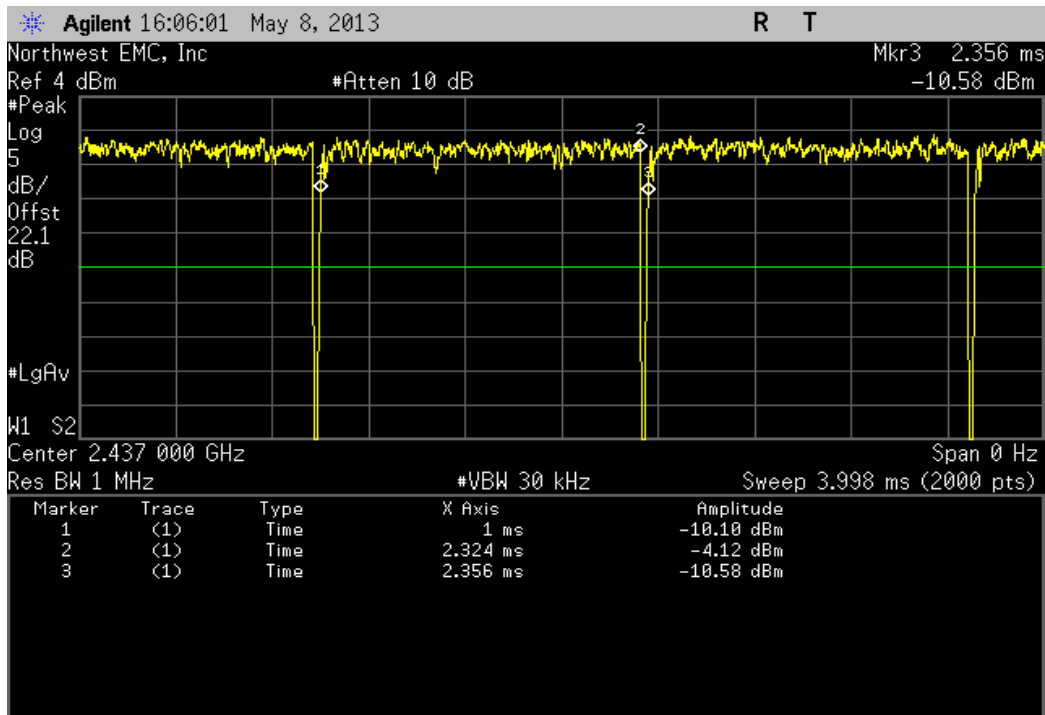
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
1.326 mS	1.356 mS	1	97.8	N/A	N/A	



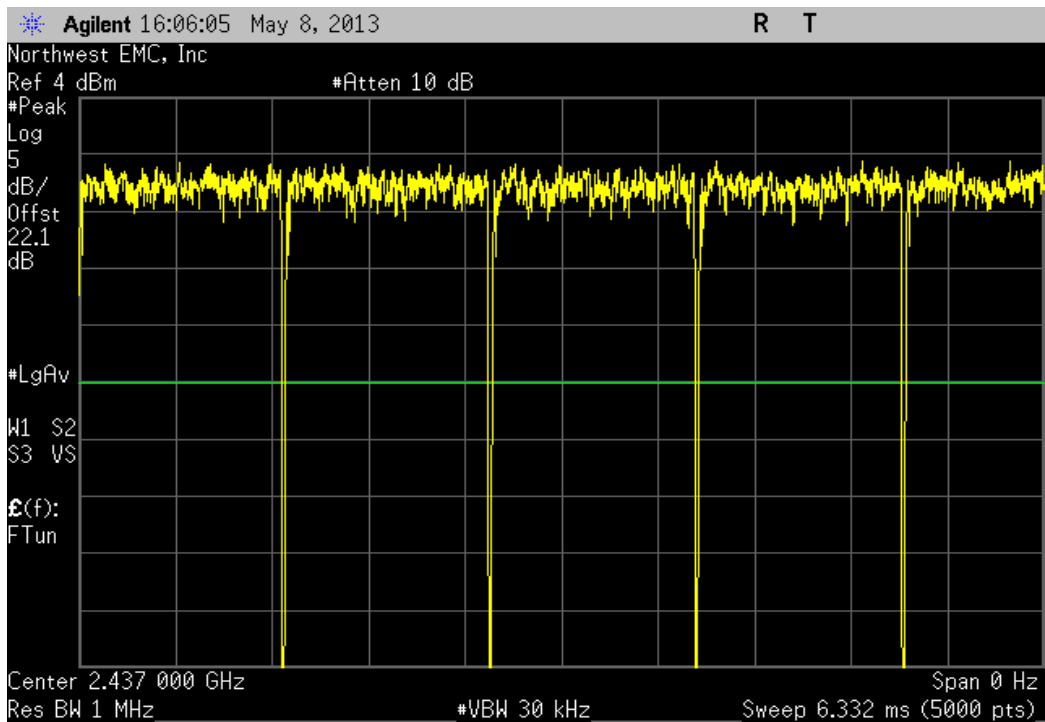
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



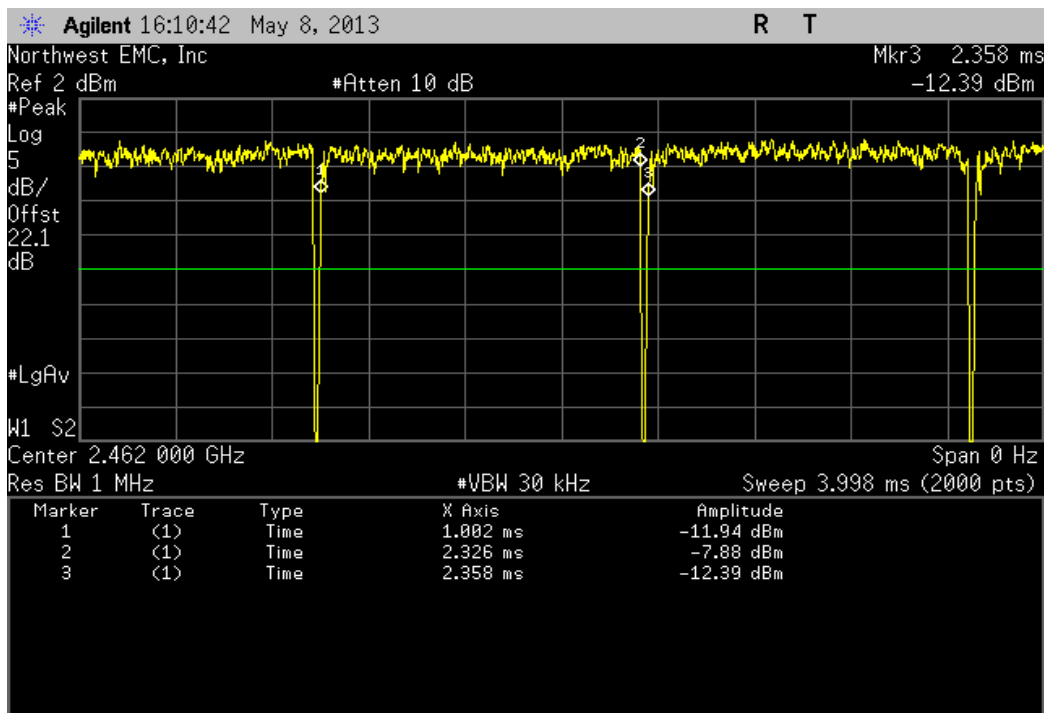
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	1.324 mS	1.356 mS	1	97.6	N/A	N/A



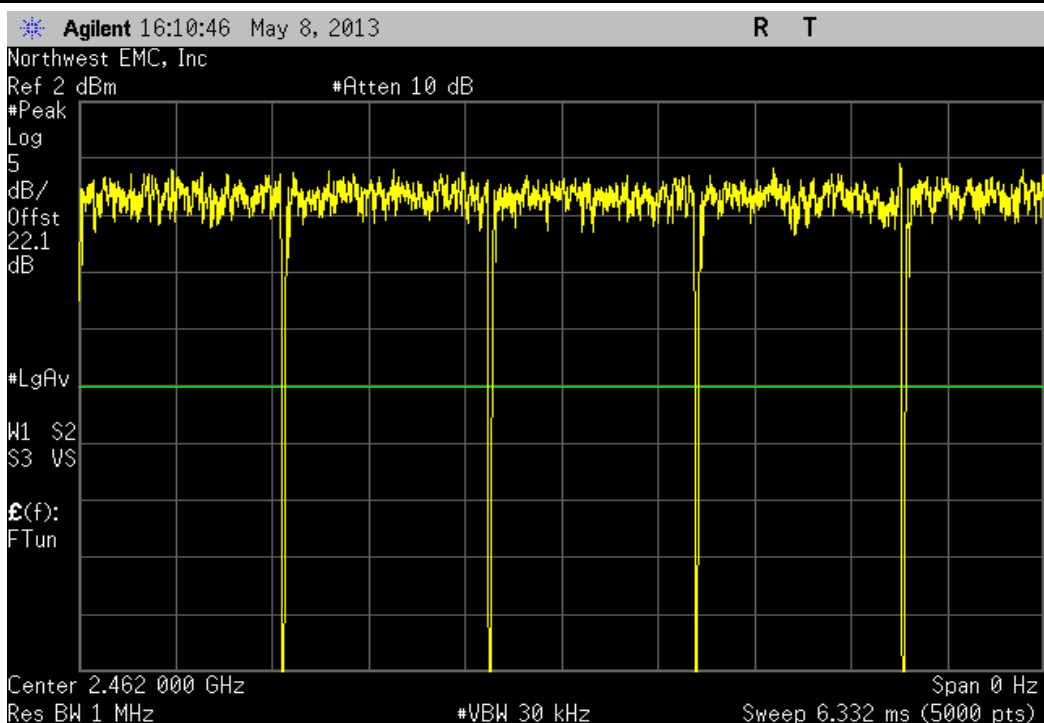
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



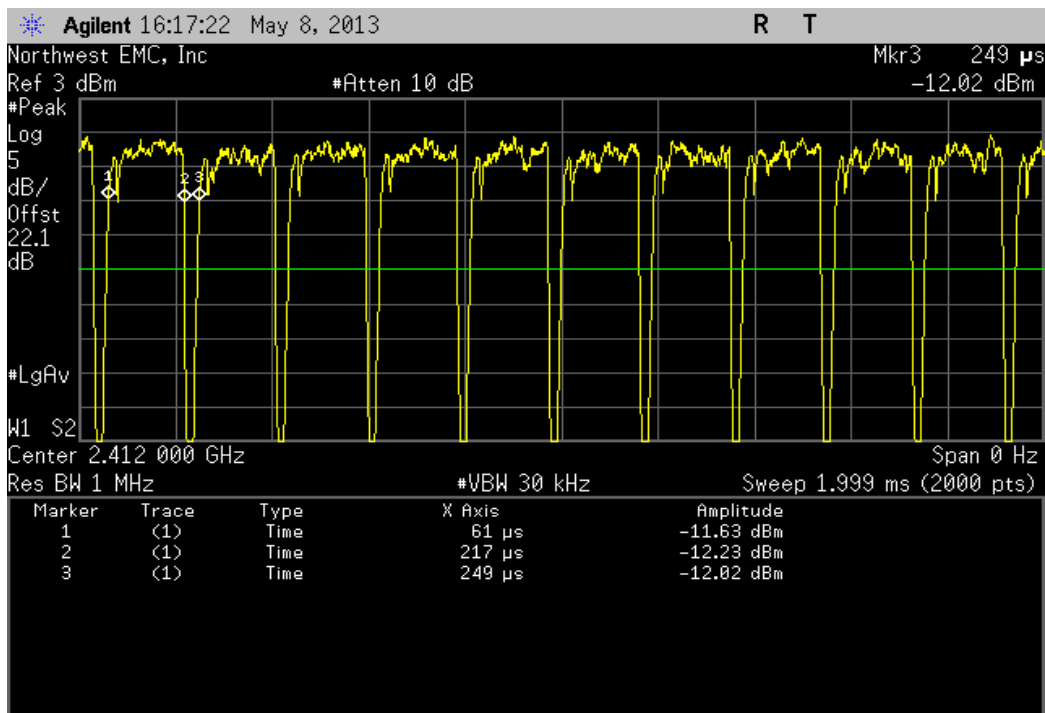
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
1.324 mS	1.356 mS	1	97.6	N/A	N/A	



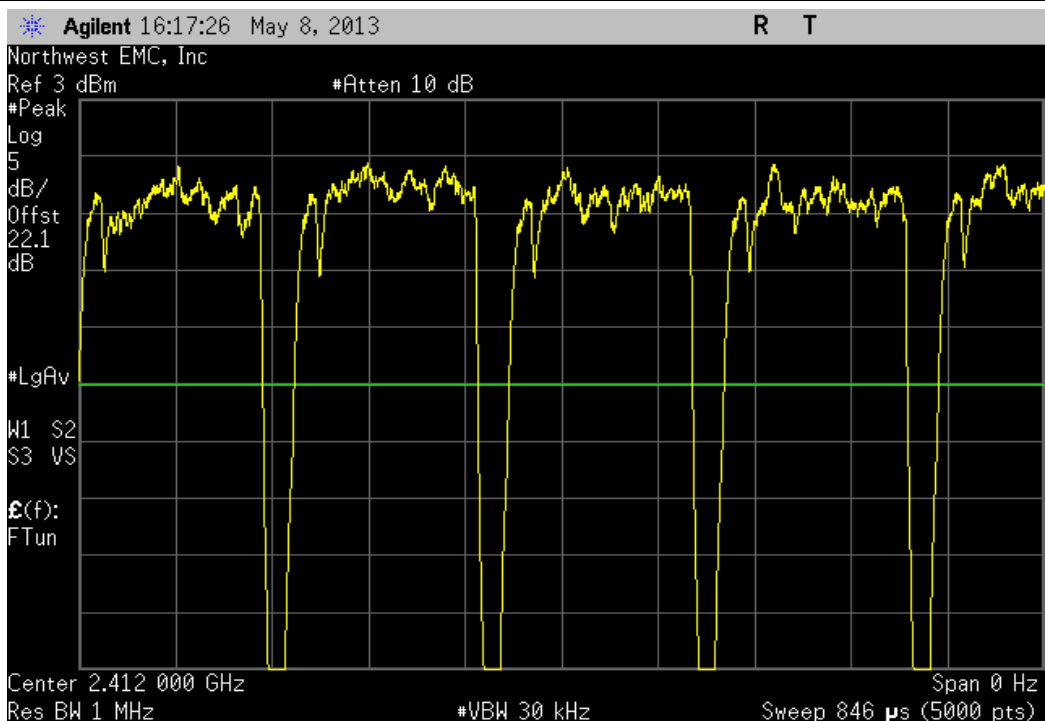
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



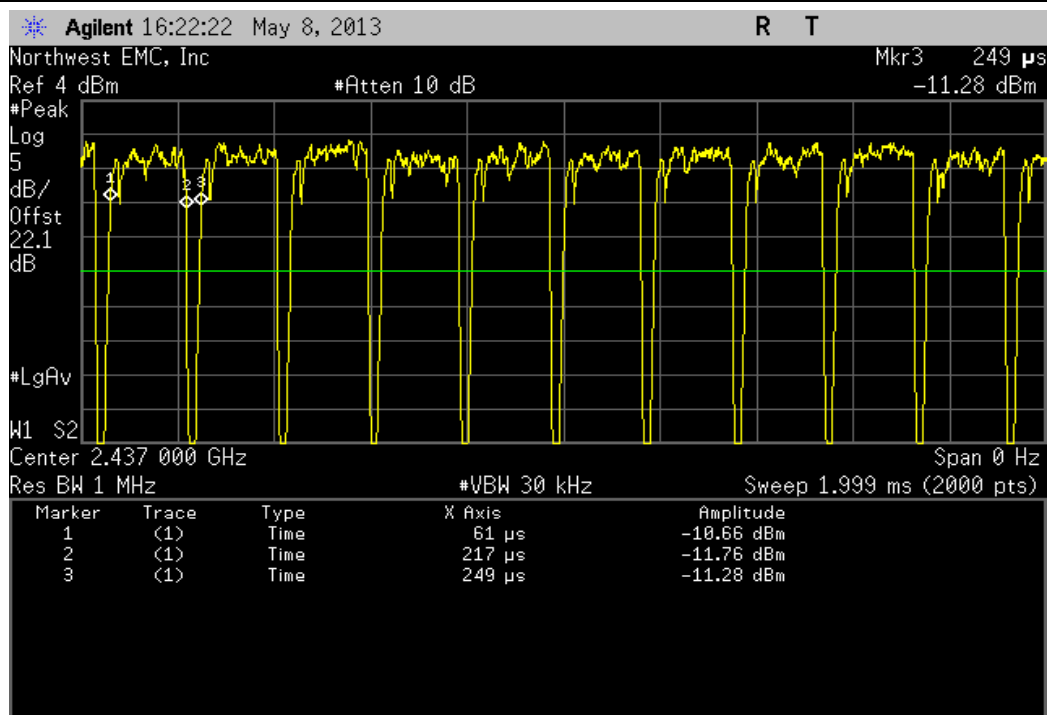
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	156 μ S	188 μ S	1	83	N/A	N/A



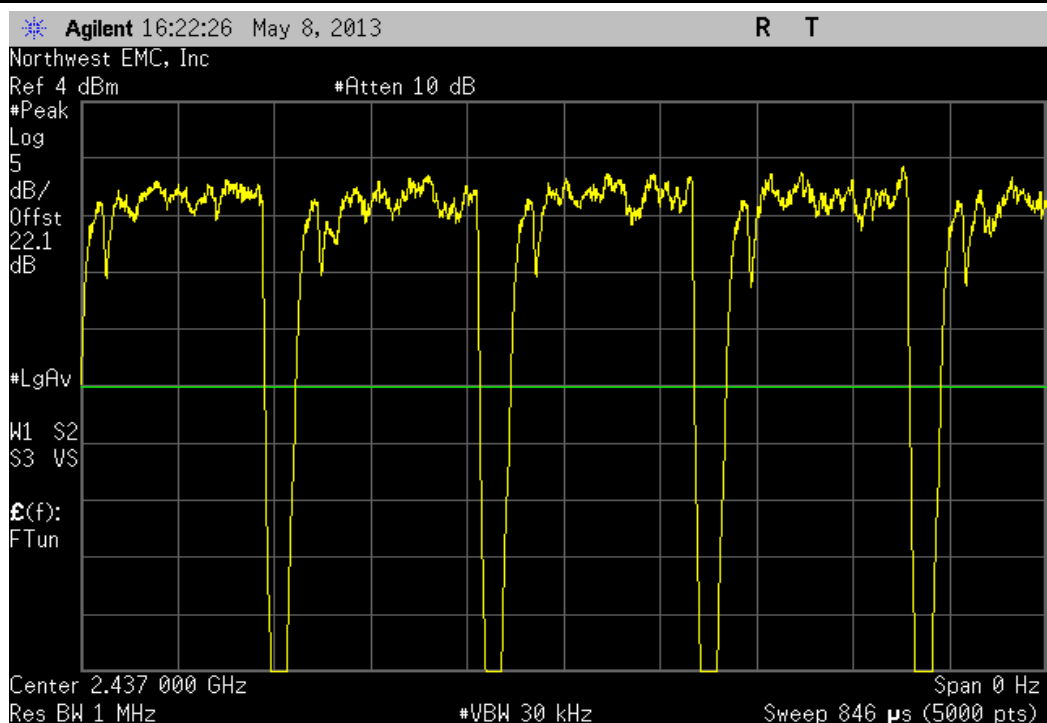
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



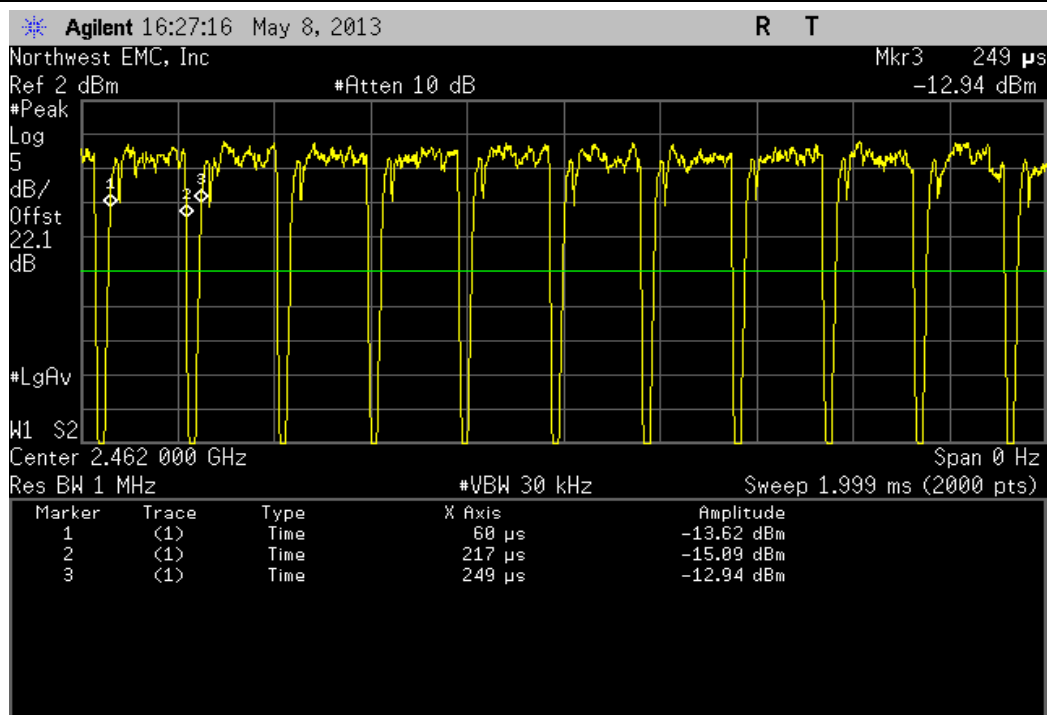
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	156 uS	188 uS	1	83	N/A	N/A



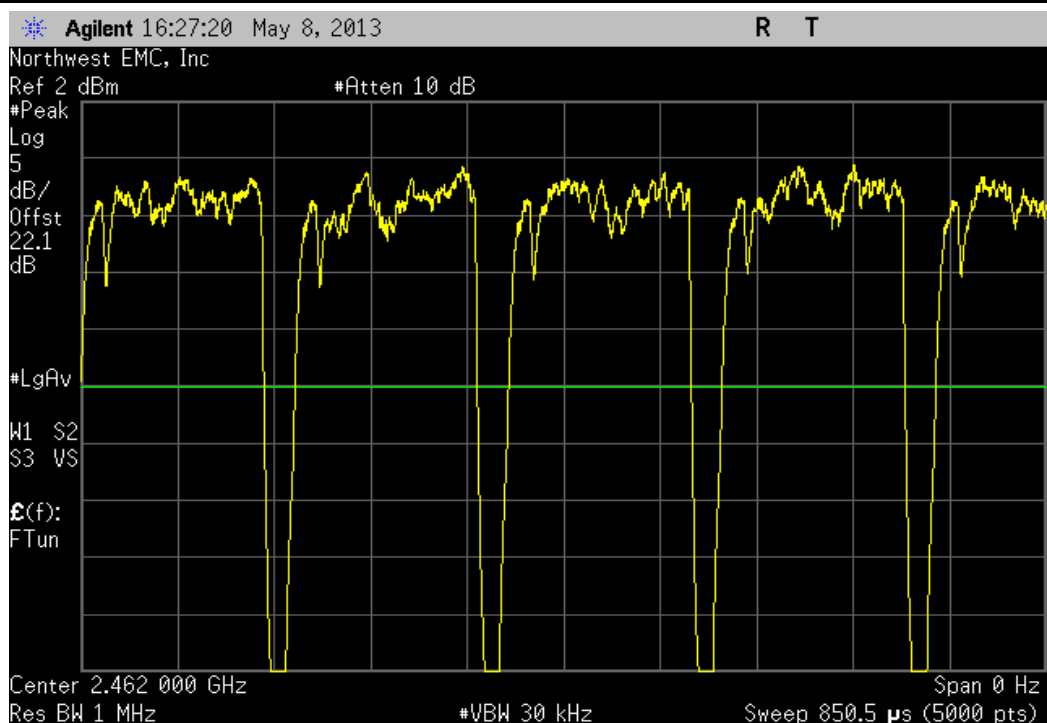
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	N/A	N/A	5	N/A	N/A	N/A



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
	157 uS	189 uS	1	83.1	N/A	N/A



Antenna 1, 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
40 GHz DC block	Fairview Microwave	SD3379	AMI	10/5/2012	12
Attenuator - 20db, 'SMA'	SM Electronics	SA26B-20	RFW	4/12/2013	12
Signal Generator MXG	Agilent	N5183A	TIK	6/7/2012	36
Spectrum Analyzer	Agilent	E4440A	AAX	5/15/2012	24

TEST DESCRIPTION

The 6dB occupied bandwidth was measured. The 26 dB (99.9%) 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

XMit 2013.02.28
PsaTx 2013.04.12

EUT: RTH9590WF01	Work Order: HNYW0042
Serial Number: 4174001 0010151	Date: 05/08/13
Customer: Honeywell, Automation and Control Solutions	Temperature: 24.7°C
Attendees: None	Humidity: 38%
Project: None	Barometric Pres.: 1015.3
Tested by: Trevor Buls	Power: 110VAC/60Hz
	Job Site: MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2013	ANSI C63.10:2009

COMMENTS
None

DEVIATIONS FROM TEST STANDARD
None

Configuration #	3	Signature <i>Trevor Buls</i>
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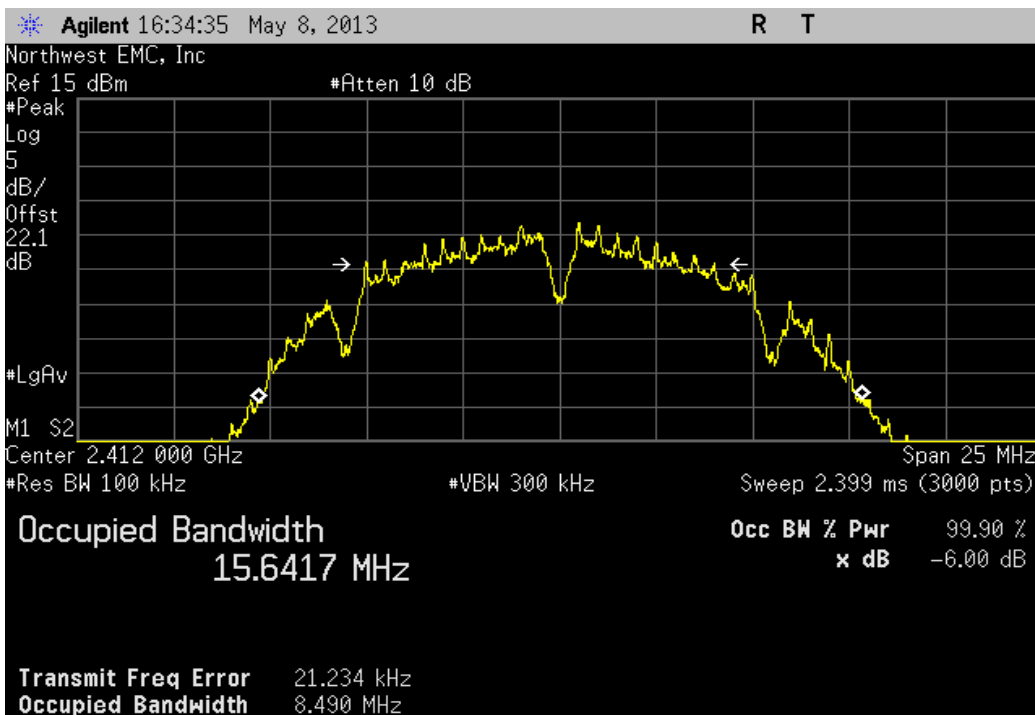
	Value	Limit	Result
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Antenna 0	2400 MHz - 2483.5 MHz Band		
802.11(b) 1 Mbps			
Low Channel 1, 2412 MHz	8.49 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	8.587 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	7.927 MHz	> 500 kHz	Pass
802.11(b) 11 Mbps			
Low Channel 1, 2412 MHz	8.665 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	8.547 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	8.242 MHz	> 500 kHz	Pass
802.11(g) 6 Mbps			
Low Channel 1, 2412 MHz	15.966 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	15.075 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	15.137 MHz	> 500 kHz	Pass
802.11(g) 36 Mbps			
Low Channel 1, 2412 MHz	15.768 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	15.975 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	15.536 MHz	> 500 kHz	Pass
802.11(g) 54 Mbps			
Low Channel 1, 2412 MHz	15.478 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	16.172 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	16.308 MHz	> 500 kHz	Pass
802.11(n) MCS0			
Low Channel 1, 2412 MHz	16.091 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	16.832 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	14.158 MHz	> 500 kHz	Pass
802.11(n) MCS7			
Low Channel 1, 2412 MHz	16.655 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	17.161 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	17.376 MHz	> 500 kHz	Pass

Antenna 1	2400 MHz - 2483.5 MHz Band		
802.11(b) 1 Mbps			
Low Channel 1, 2412 MHz	8.519 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	8.325 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	7.809 MHz	> 500 kHz	Pass
802.11(b) 11 Mbps			
Low Channel 1, 2412 MHz	7.938 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	8.37 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	8.075 MHz	> 500 kHz	Pass
802.11(g) 6 Mbps			
Low Channel 1, 2412 MHz	15.198 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	14.563 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	13.174 MHz	> 500 kHz	Pass
802.11(g) 36 Mbps			
Low Channel 1, 2412 MHz	16.26 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	15.319 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	15.573 MHz	> 500 kHz	Pass
802.11(g) 54 Mbps			
Low Channel 1, 2412 MHz	15.943 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	15.354 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	15.679 MHz	> 500 kHz	Pass
802.11(n) MCS0			
Low Channel 1, 2412 MHz	15.007 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	13.462 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	15.528 MHz	> 500 kHz	Pass
802.11(n) MCS7			
Low Channel 1, 2412 MHz	17.125 MHz	> 500 kHz	Pass
Mid Channel 6, 2437 MHz	16.023 MHz	> 500 kHz	Pass
High Channel 11, 2462 MHz	16.317 MHz	> 500 kHz	Pass

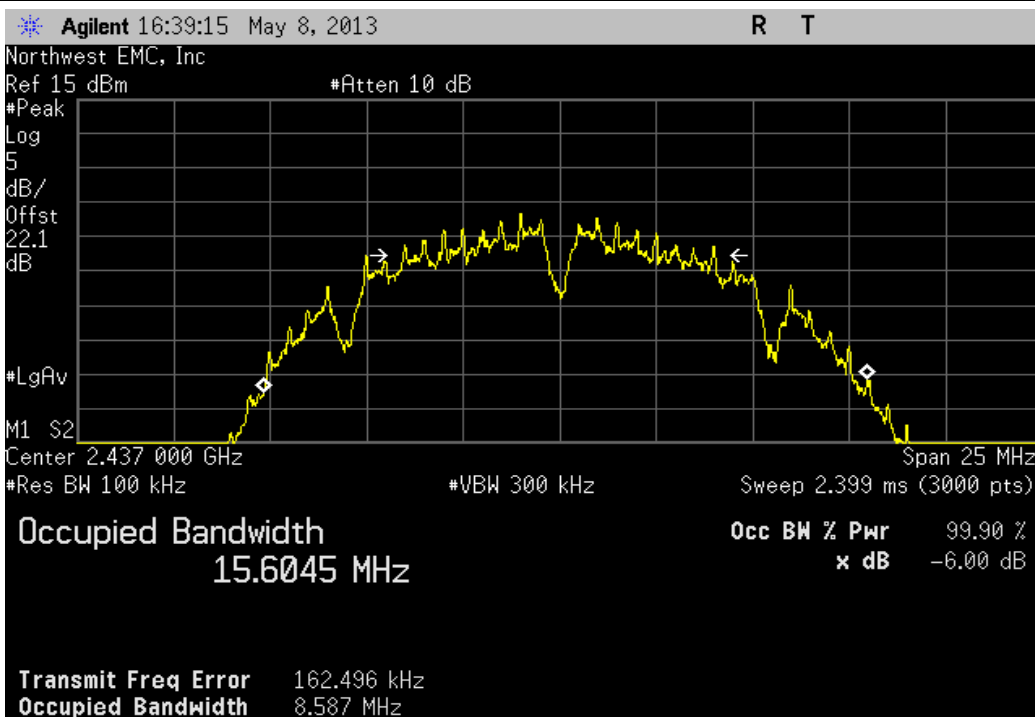
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
8.49 MHz	> 500 kHz	Pass



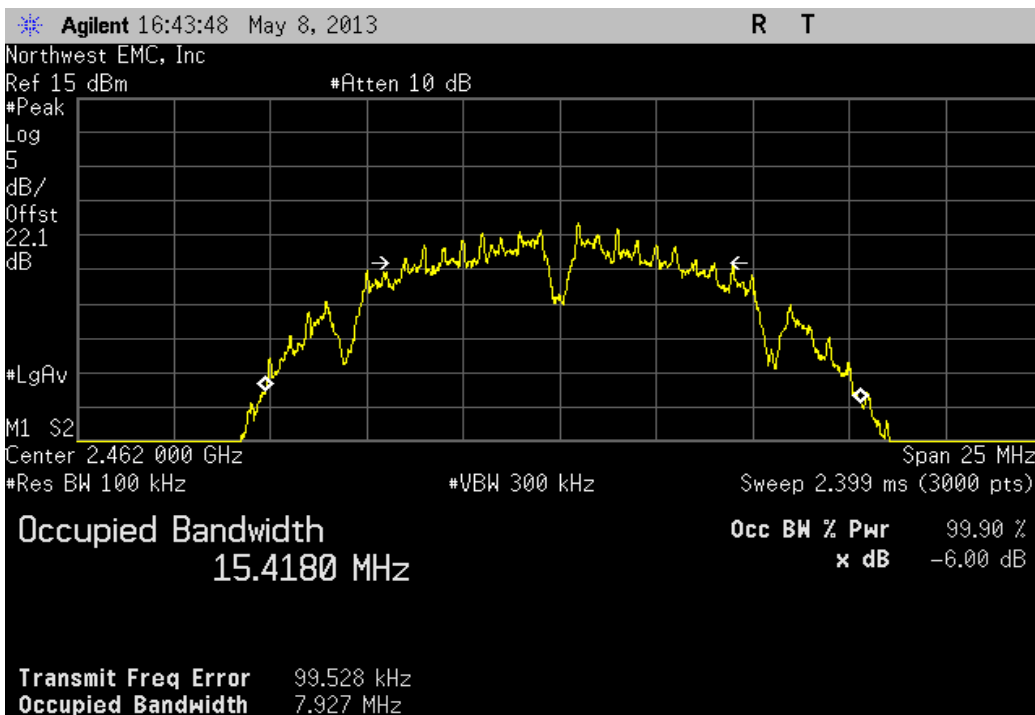
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
8.587 MHz	> 500 kHz	Pass



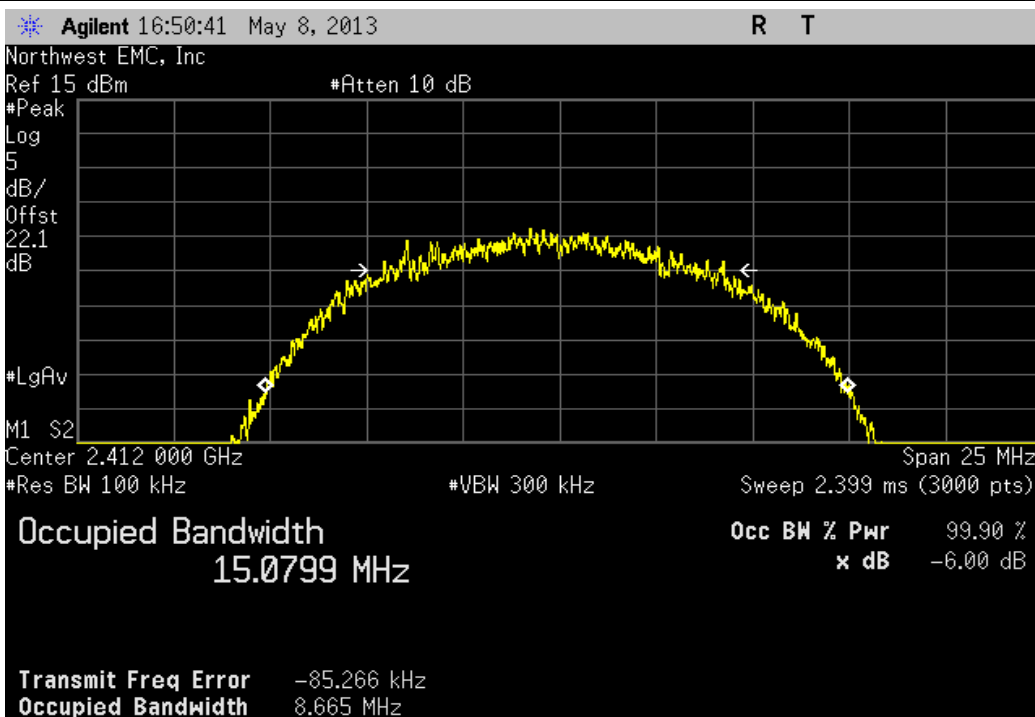
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
7.927 MHz	> 500 kHz	Pass



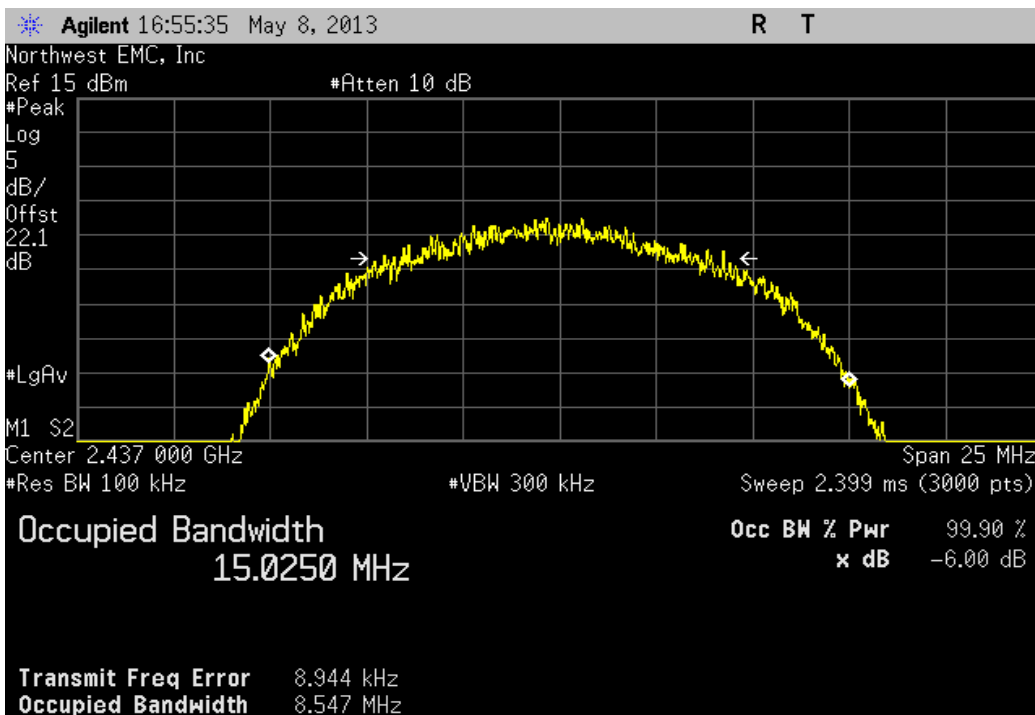
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
8.665 MHz	> 500 kHz	Pass



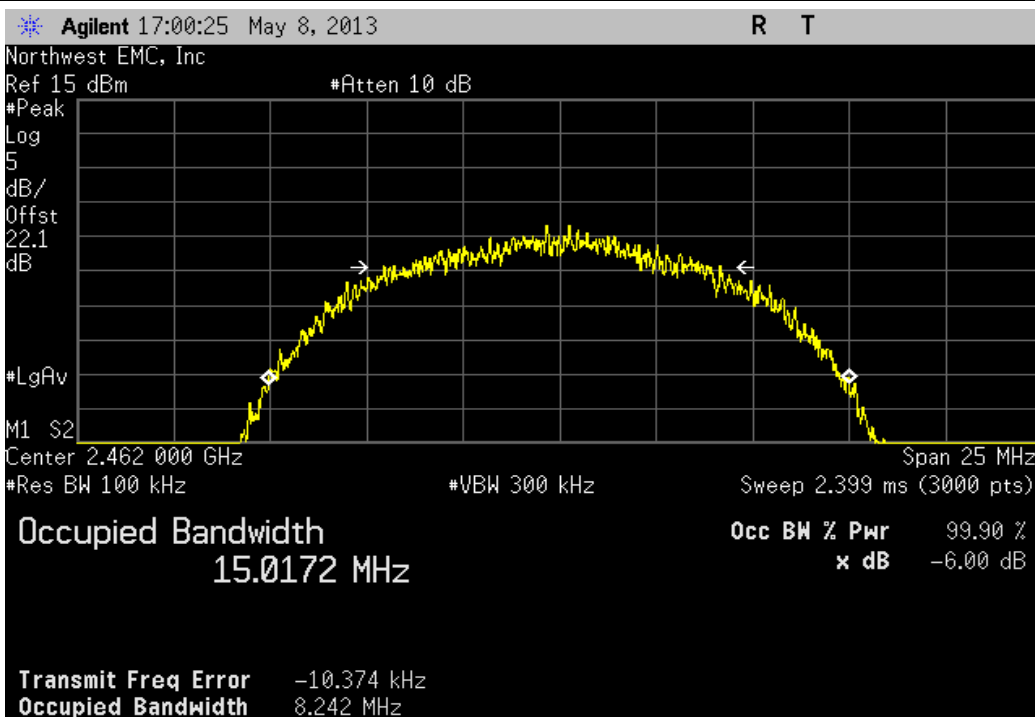
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	8.547 MHz	> 500 kHz	Pass



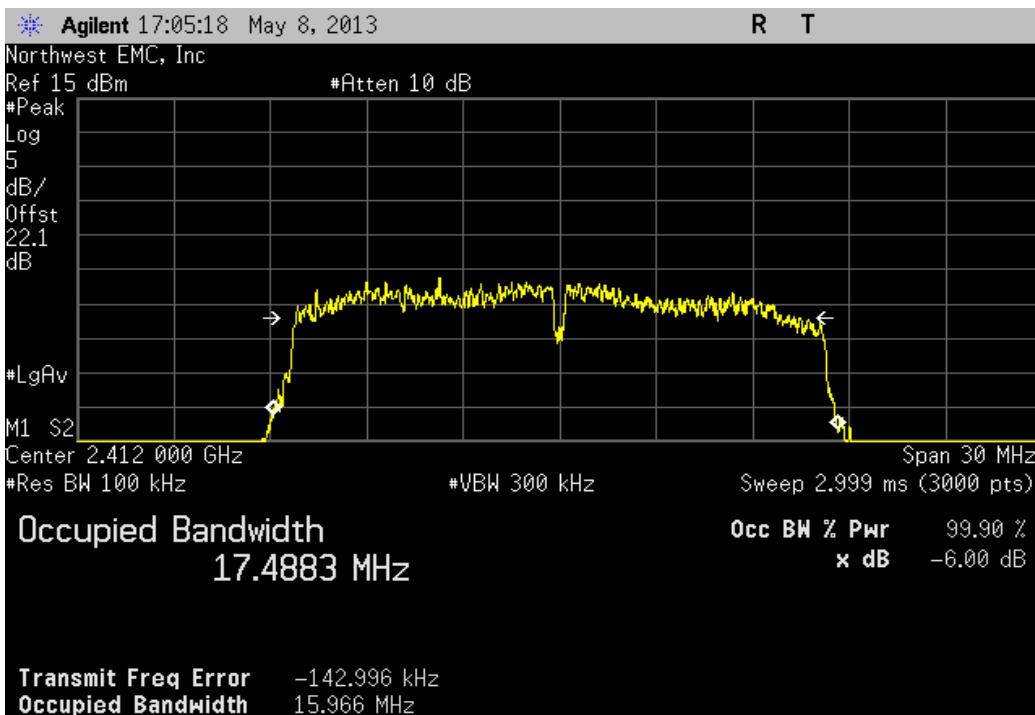
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

	Value	Limit	Result
	8.242 MHz	> 500 kHz	Pass



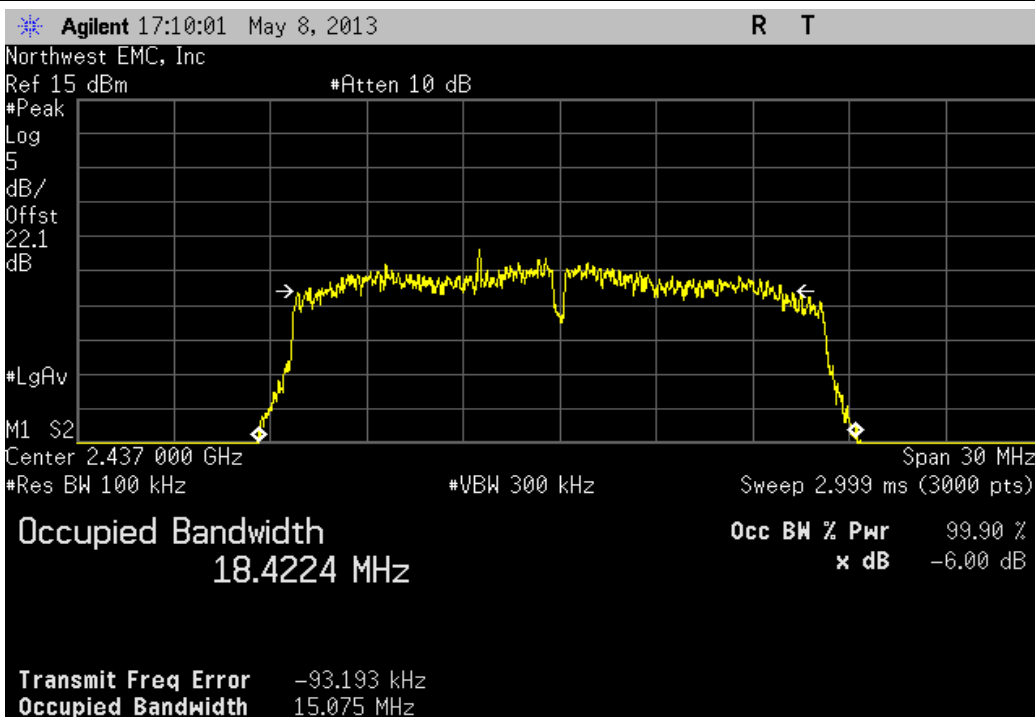
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
15.966 MHz	> 500 kHz	Pass



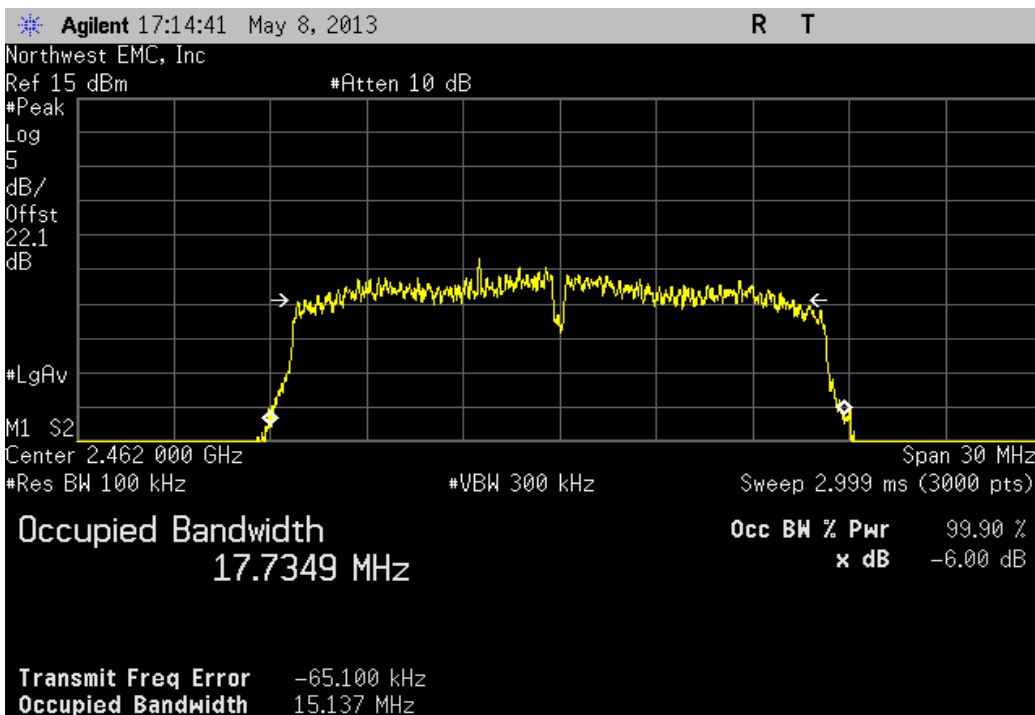
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
15.075 MHz	> 500 kHz	Pass



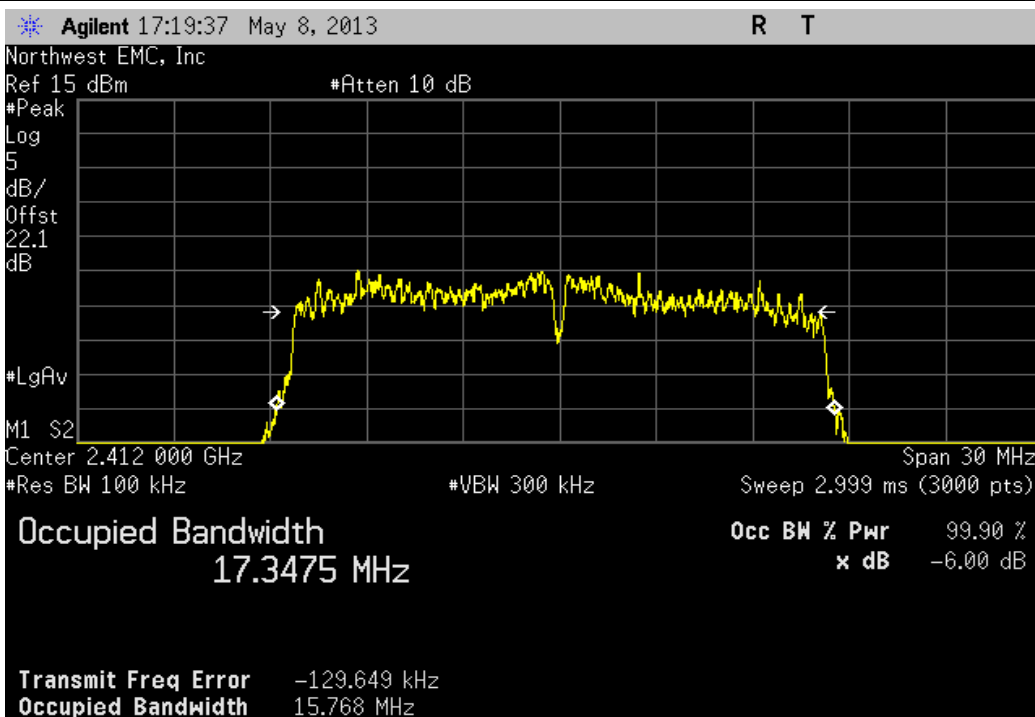
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
15.137 MHz	> 500 kHz	Pass



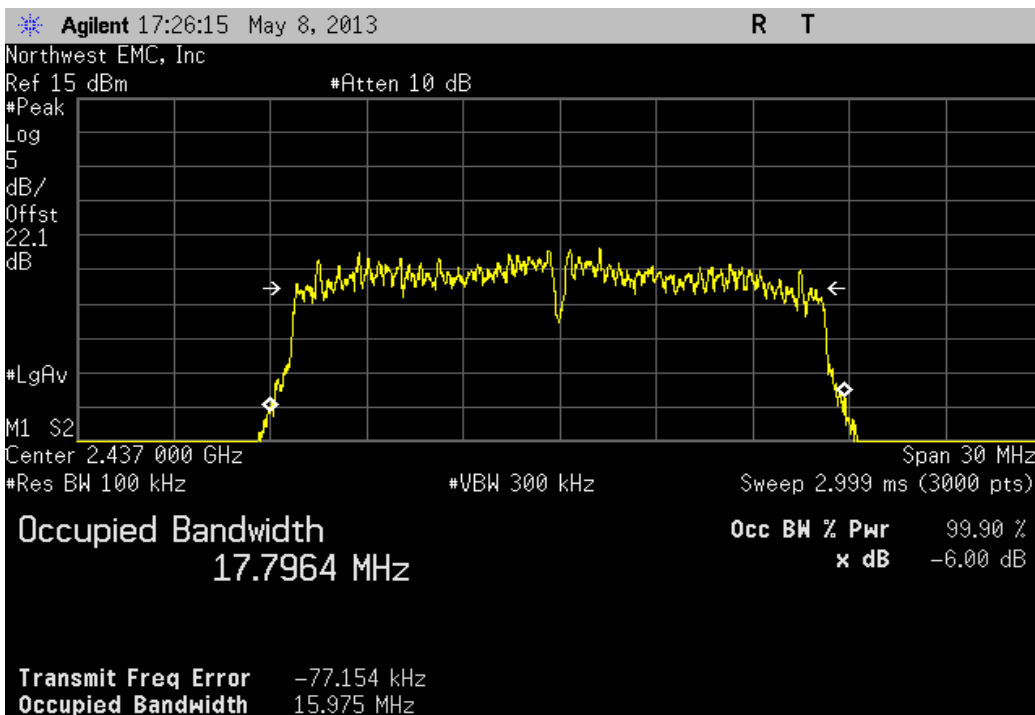
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
15.768 MHz	> 500 kHz	Pass



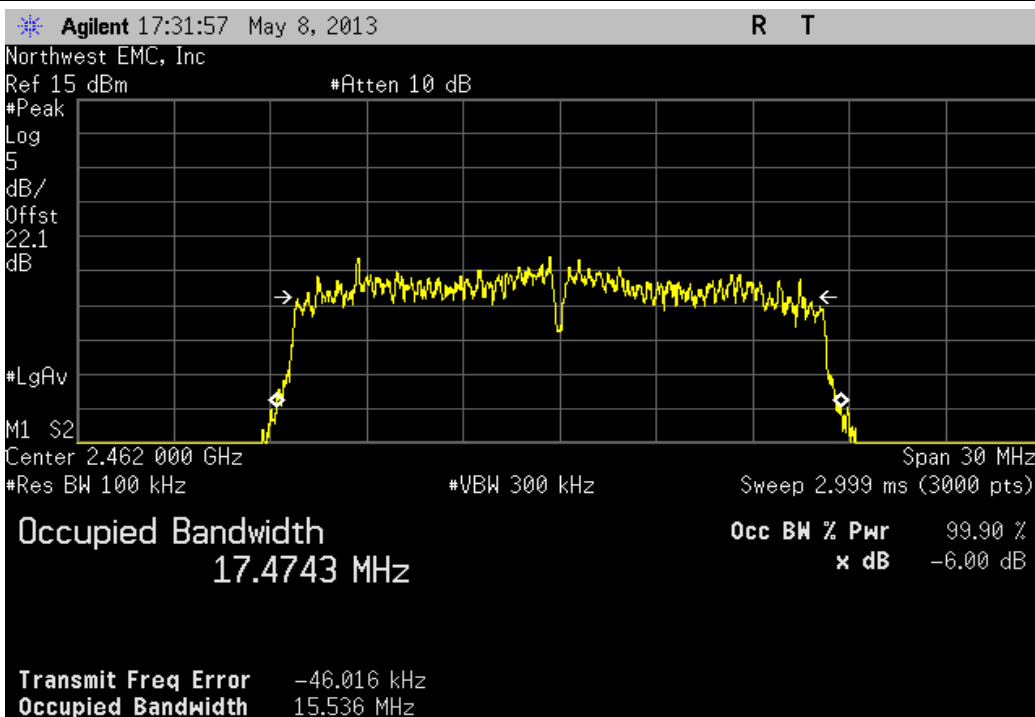
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
15.975 MHz	> 500 kHz	Pass



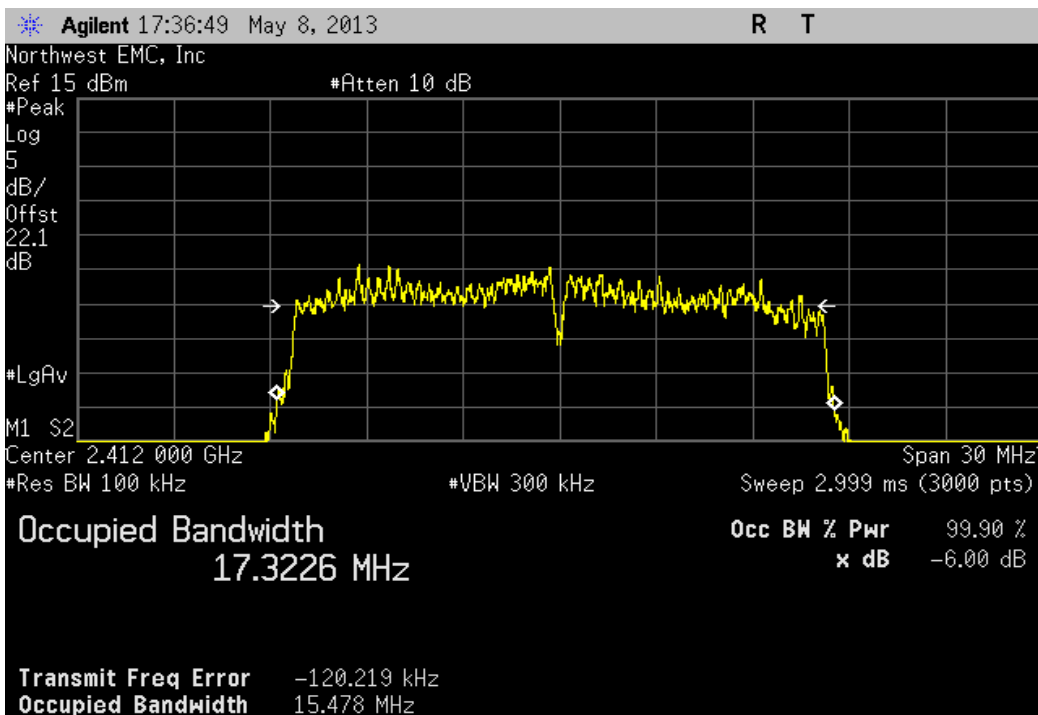
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
15.536 MHz	> 500 kHz	Pass



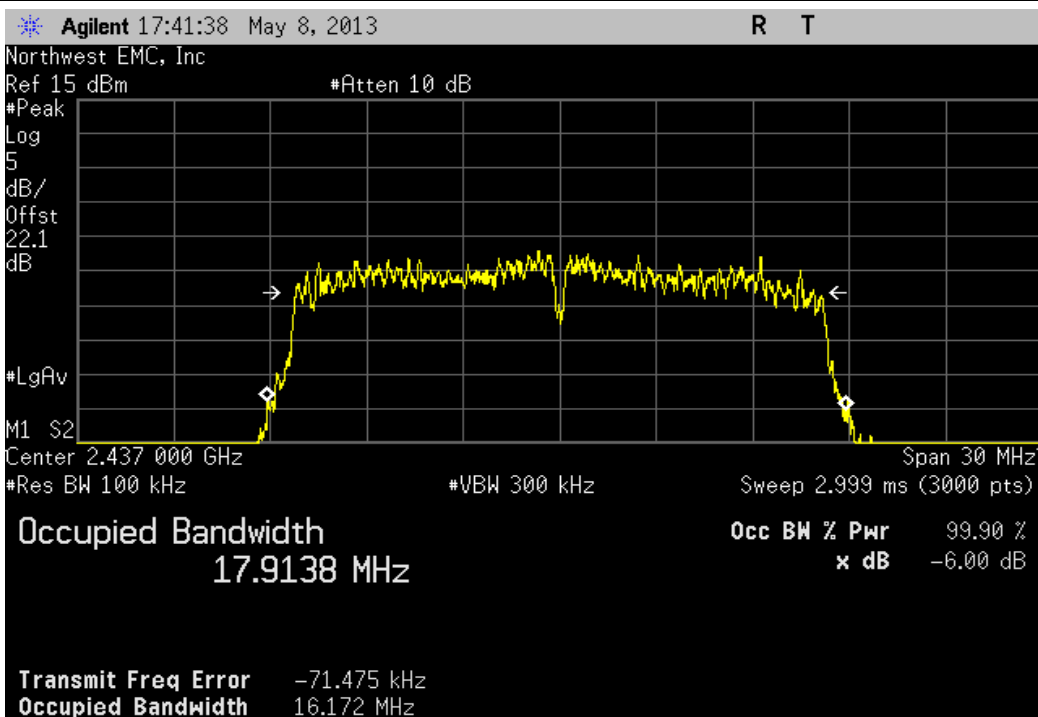
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
15.478 MHz	> 500 kHz	Pass



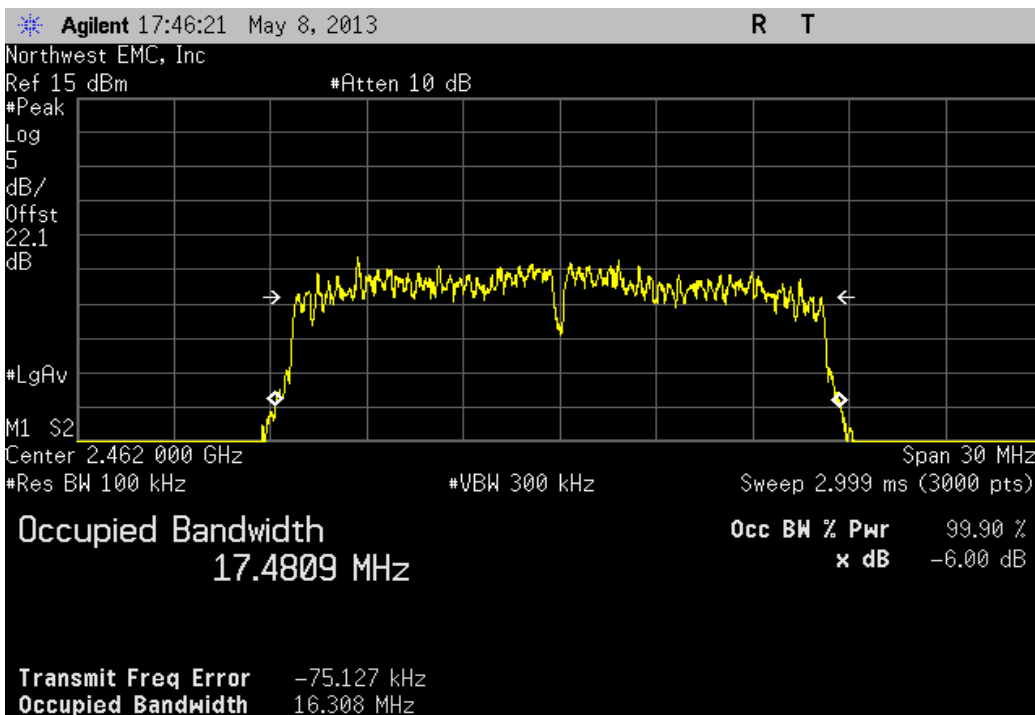
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
16.172 MHz	> 500 kHz	Pass



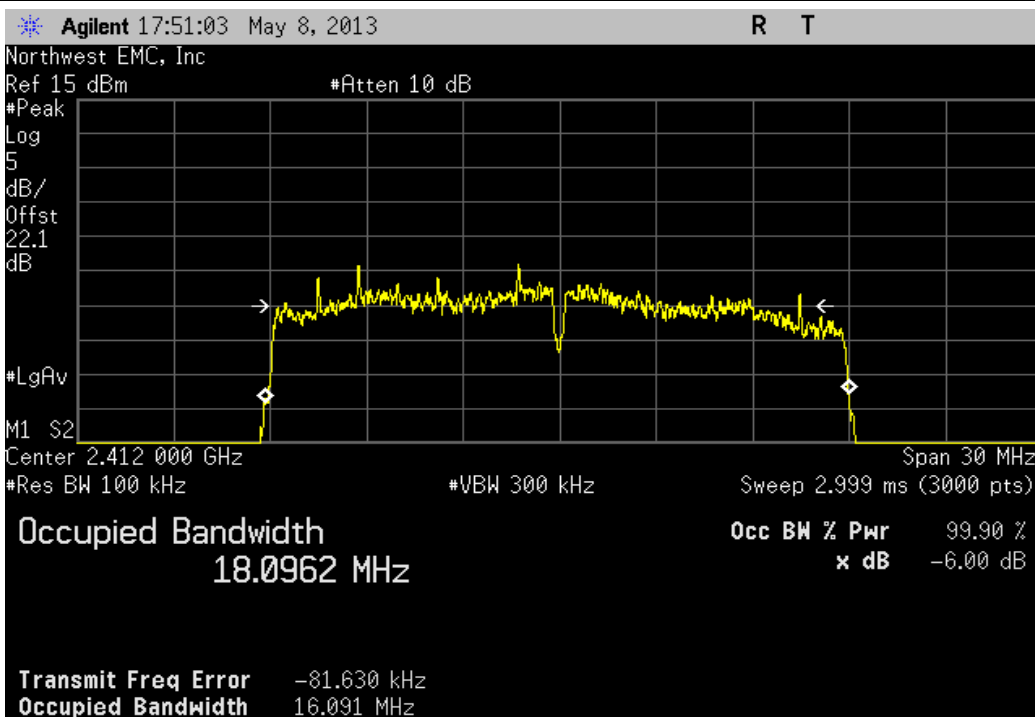
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
16.308 MHz	> 500 kHz	Pass



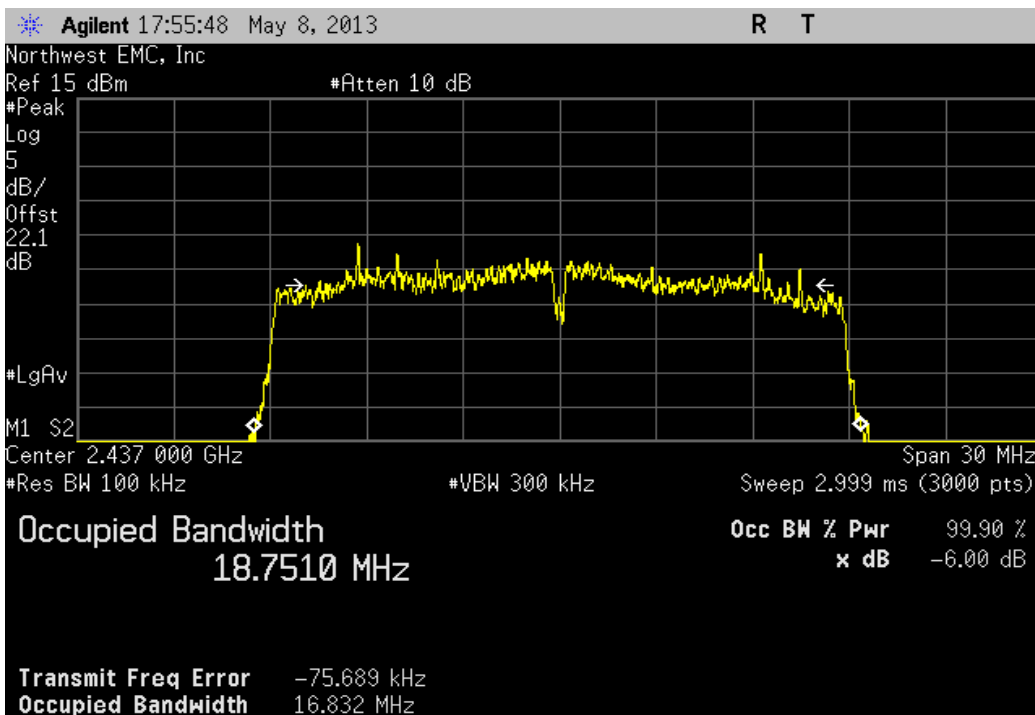
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	Limit	Result
16.091 MHz	> 500 kHz	Pass



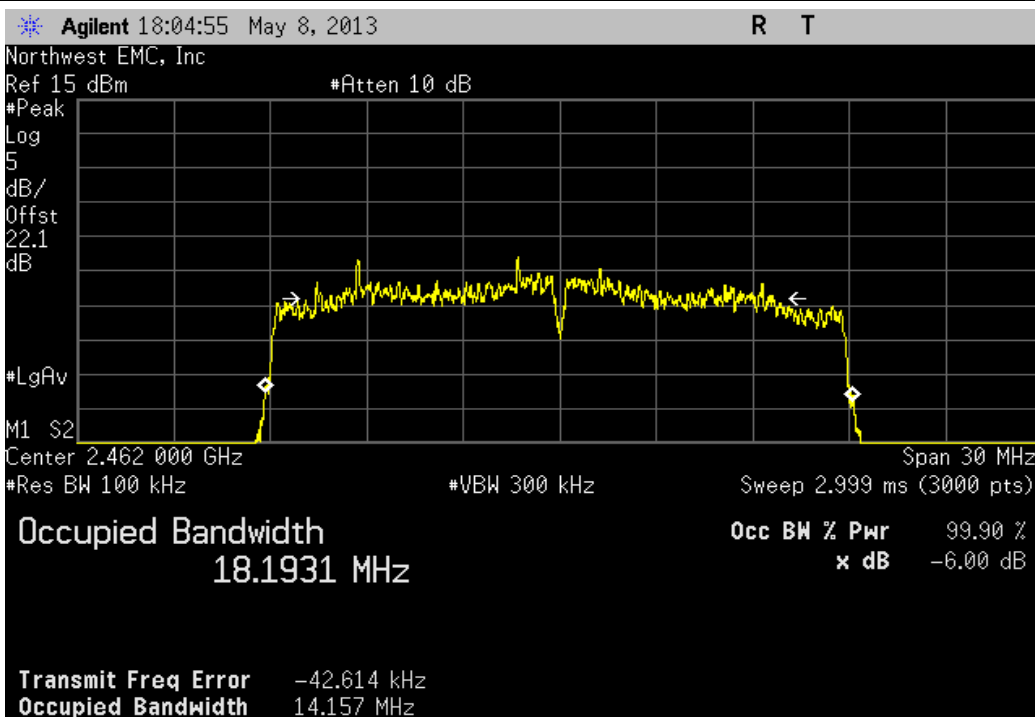
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

Value	Limit	Result
16.832 MHz	> 500 kHz	Pass



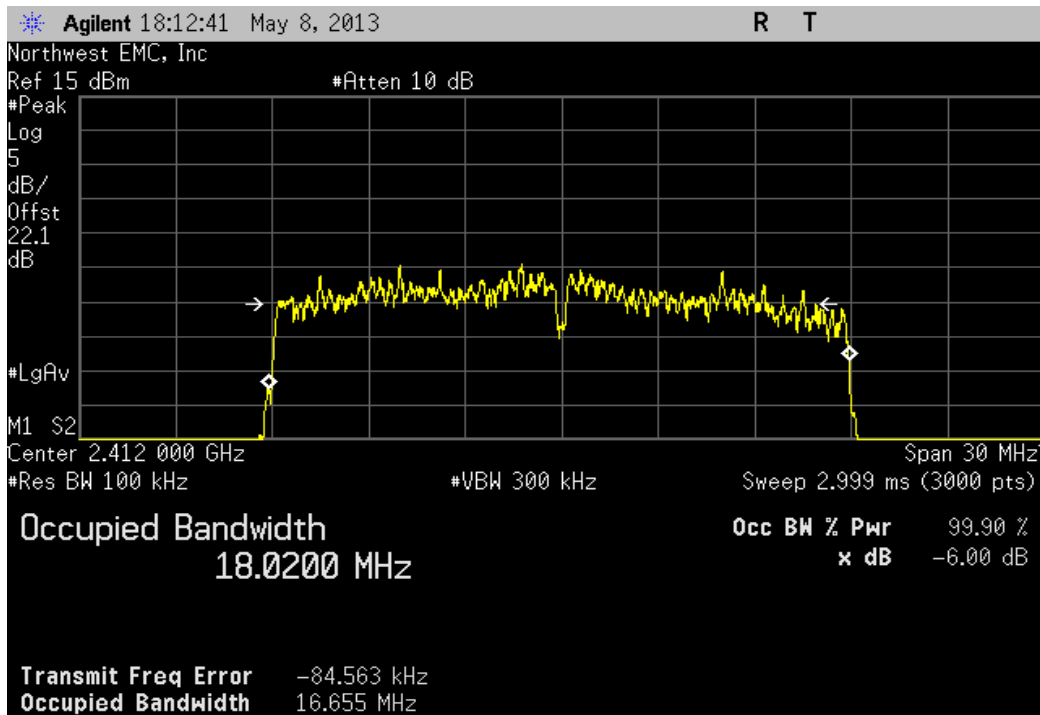
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

Value	Limit	Result
14.158 MHz	> 500 kHz	Pass



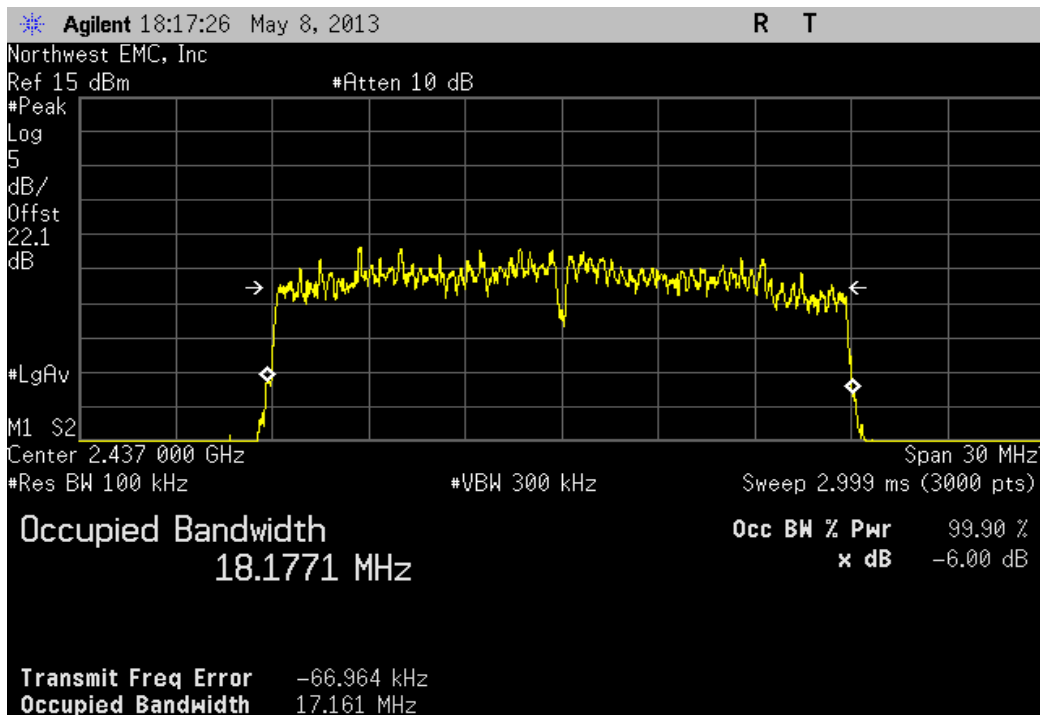
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

Value	Limit	Result
16.655 MHz	> 500 kHz	Pass



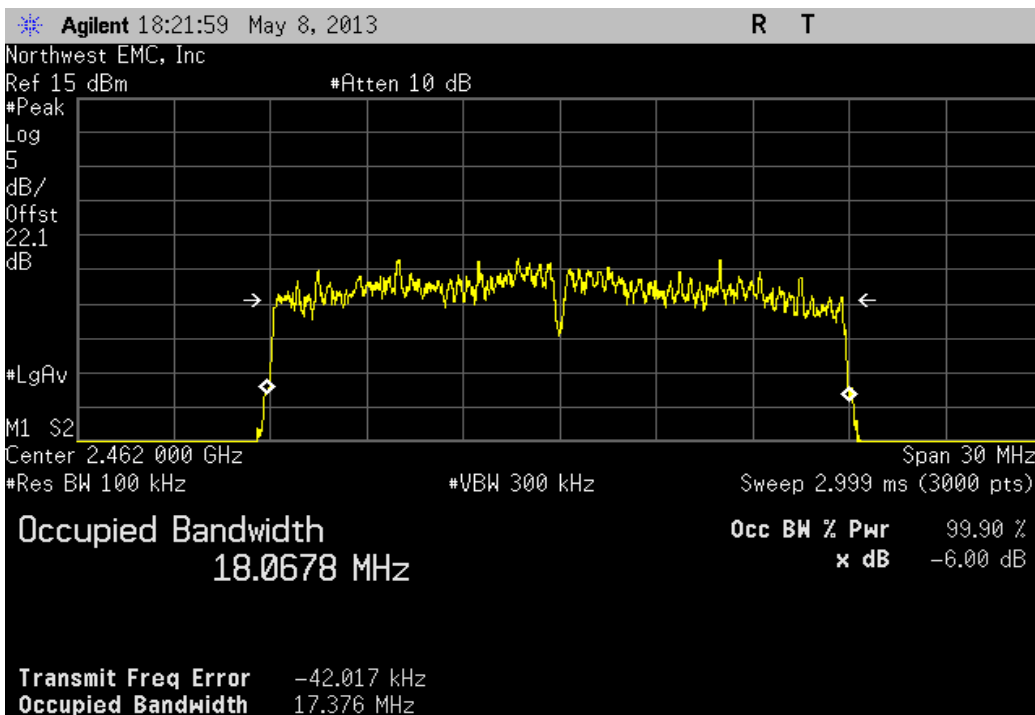
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

Value	Limit	Result
17.161 MHz	> 500 kHz	Pass



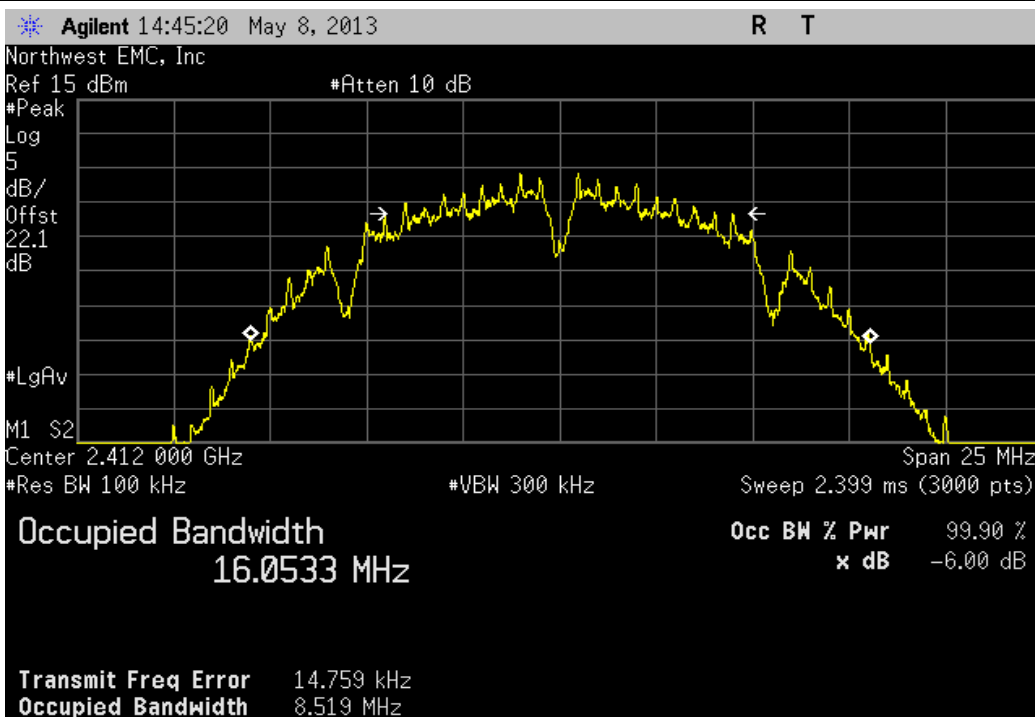
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value	Limit	Result
17.376 MHz	> 500 kHz	Pass



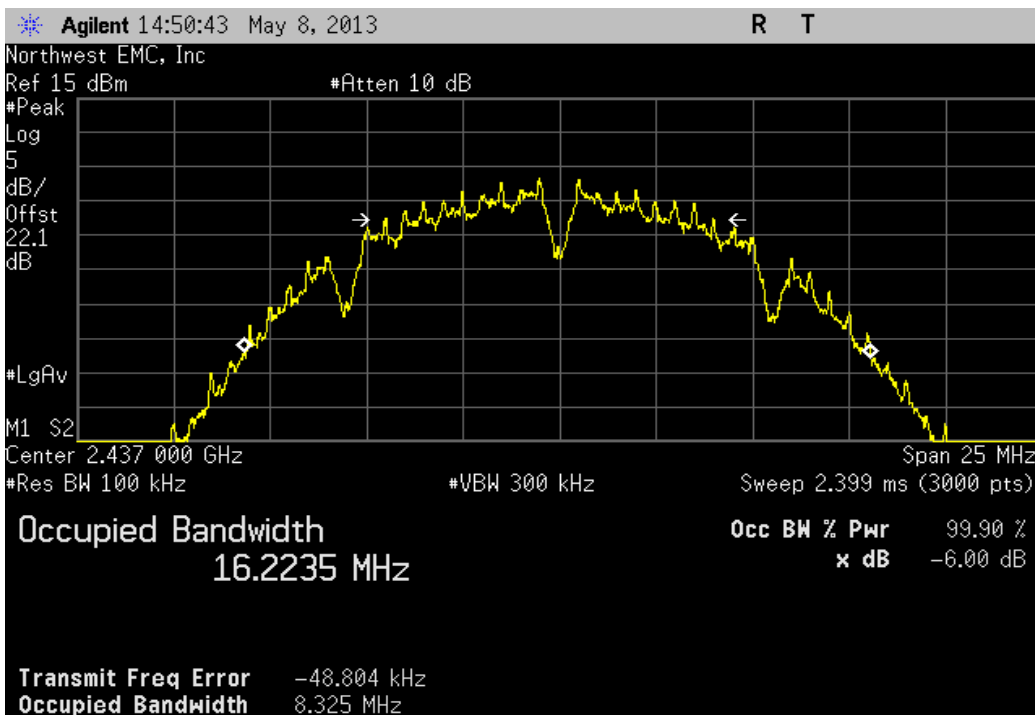
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
8.519 MHz	> 500 kHz	Pass



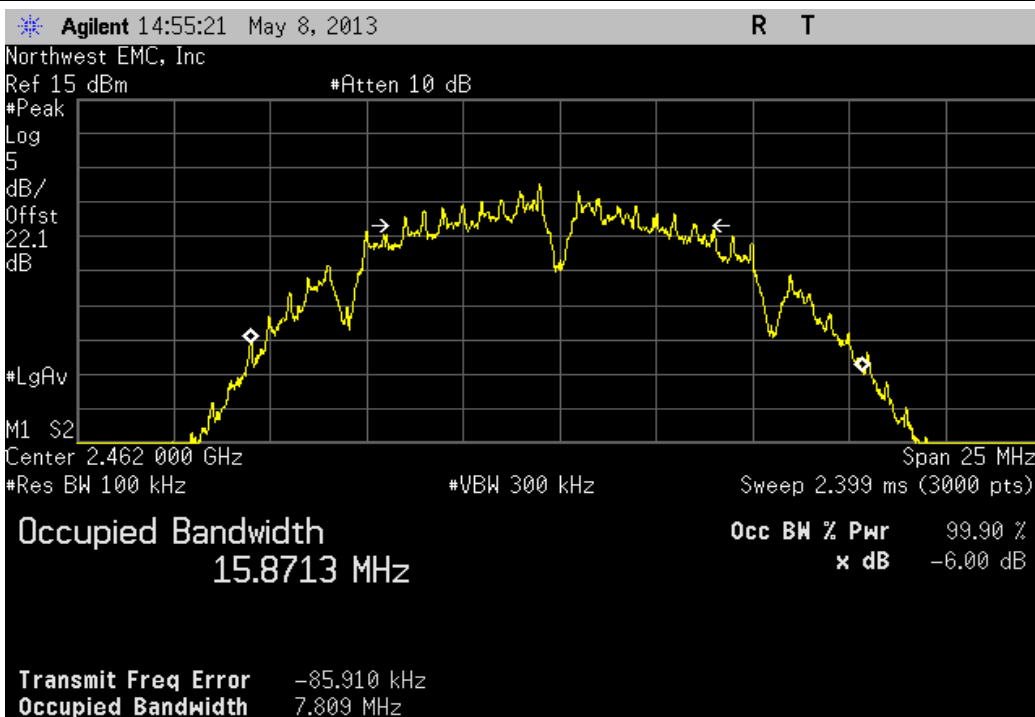
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	8.325 MHz	> 500 kHz	Pass



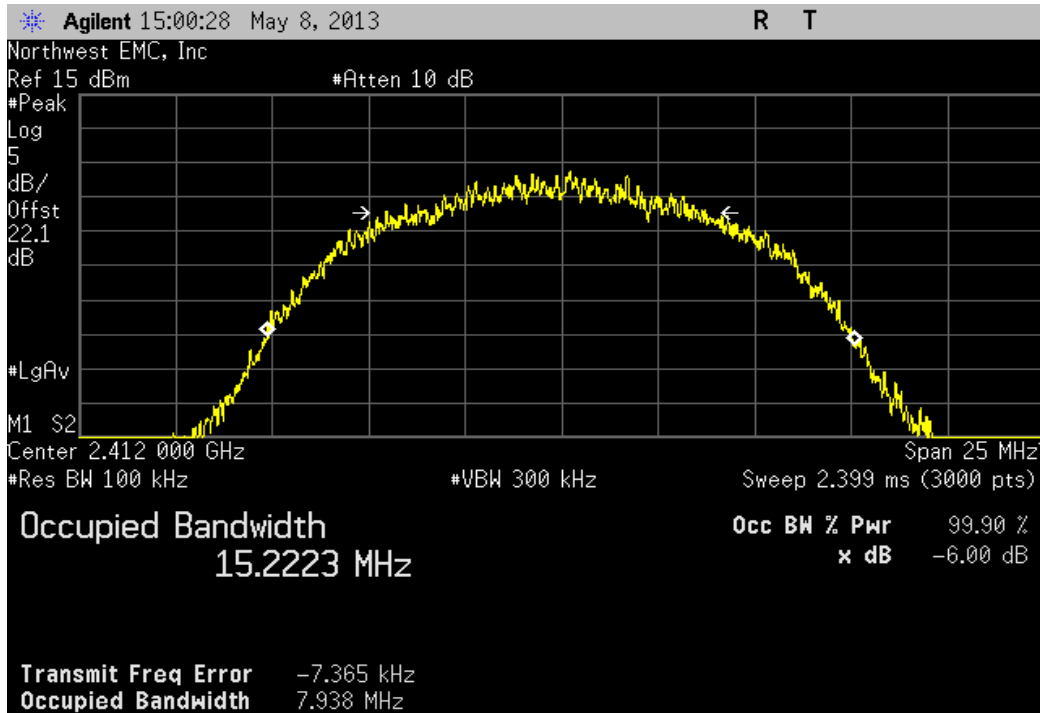
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

	Value	Limit	Result
	7.809 MHz	> 500 kHz	Pass



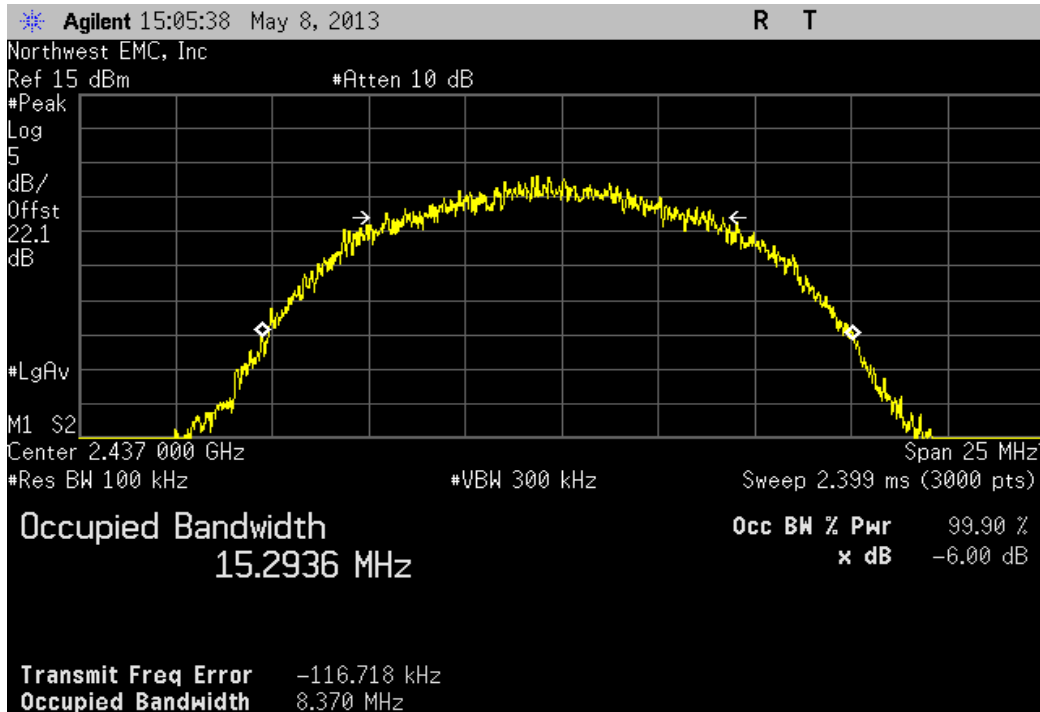
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
7.938 MHz	> 500 kHz	Pass



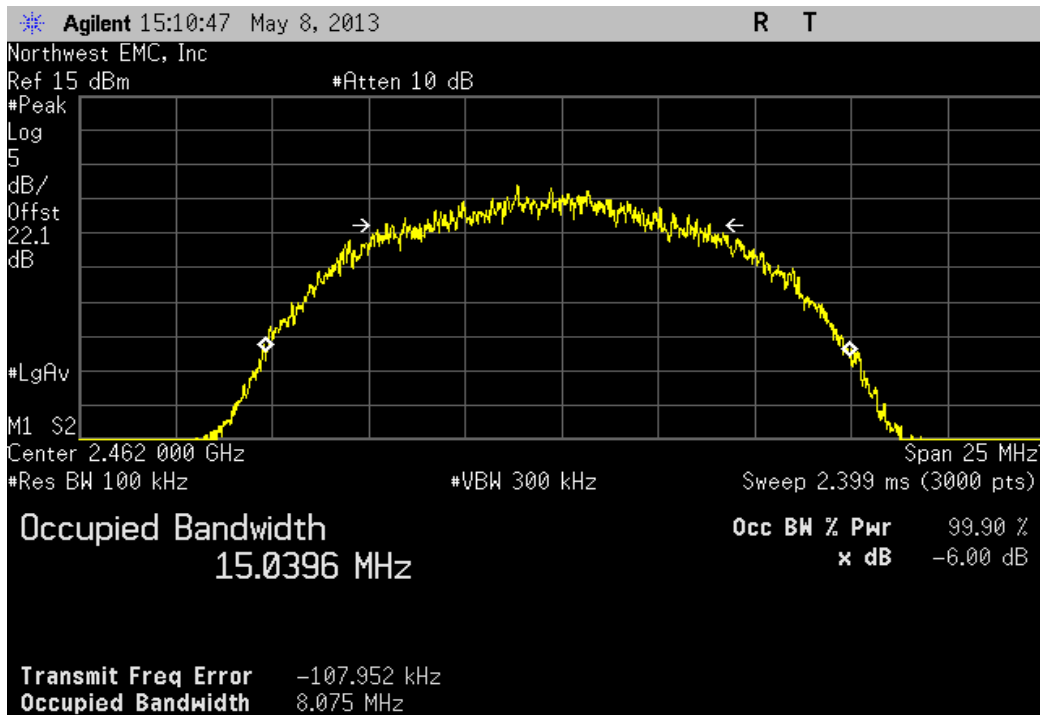
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
8.37 MHz	> 500 kHz	Pass



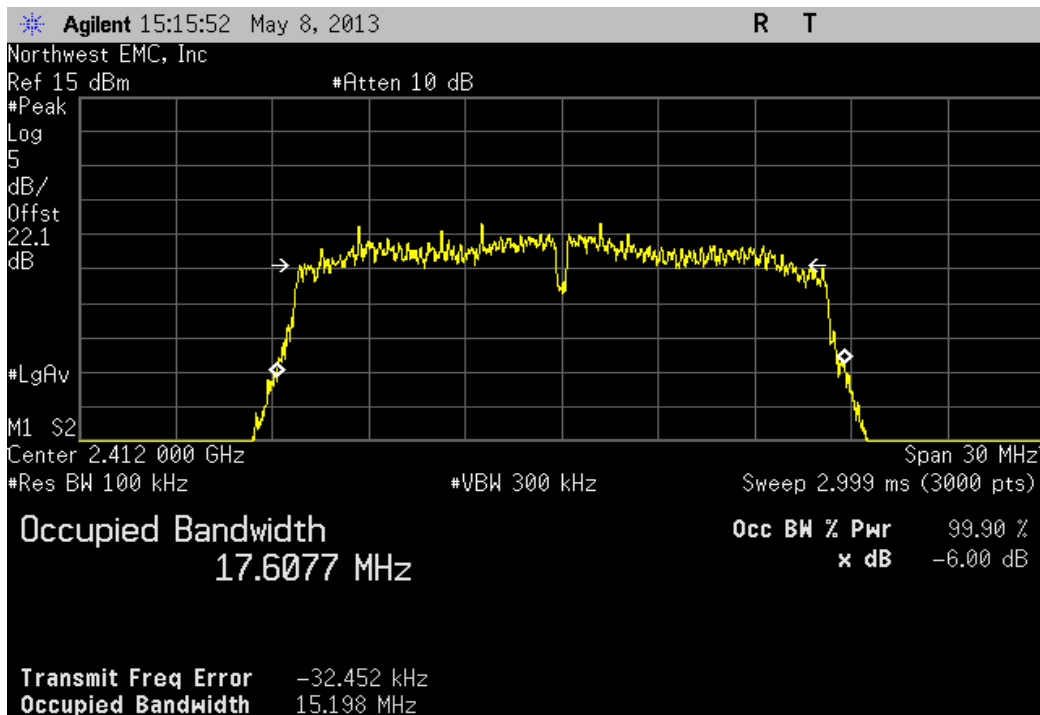
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
8.075 MHz	> 500 kHz	Pass



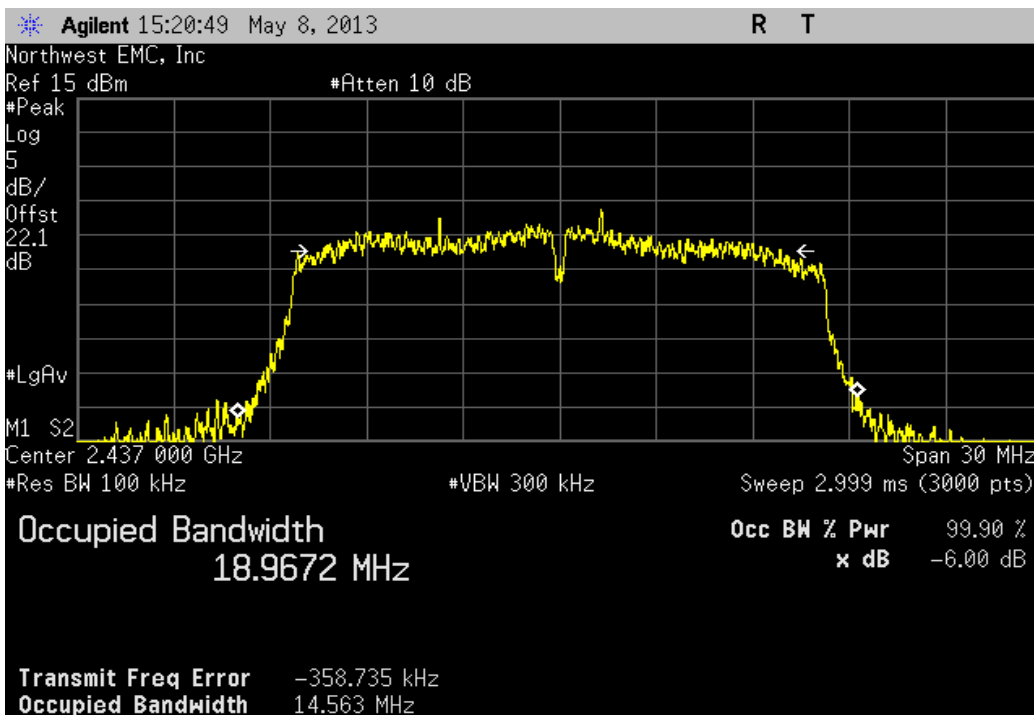
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
15.198 MHz	> 500 kHz	Pass



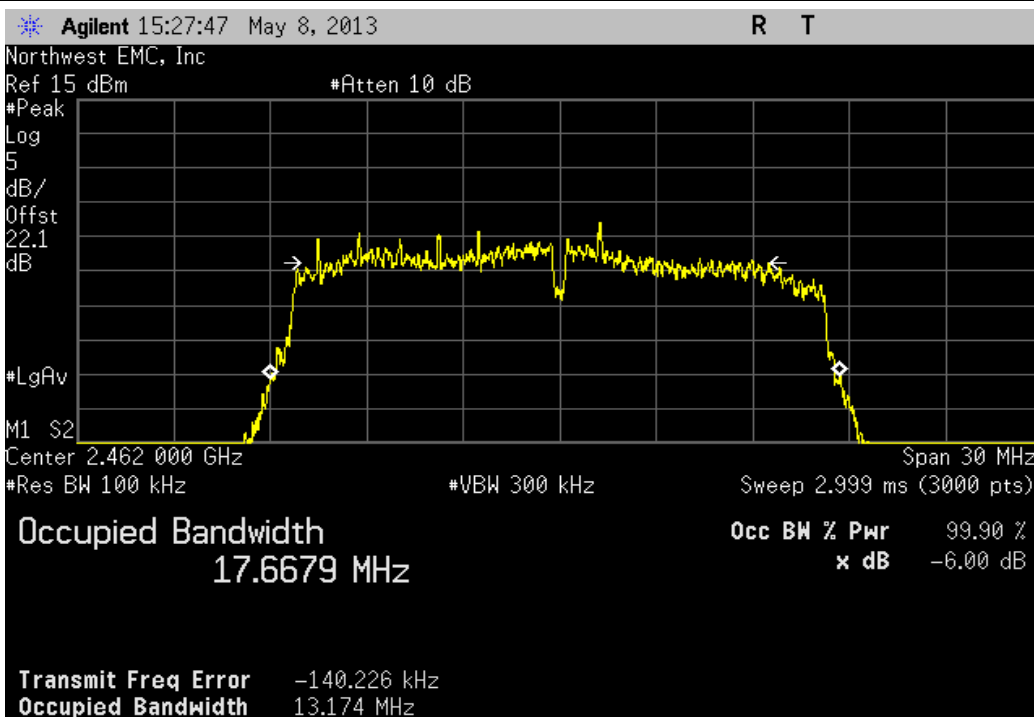
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	14.563 MHz	> 500 kHz	Pass



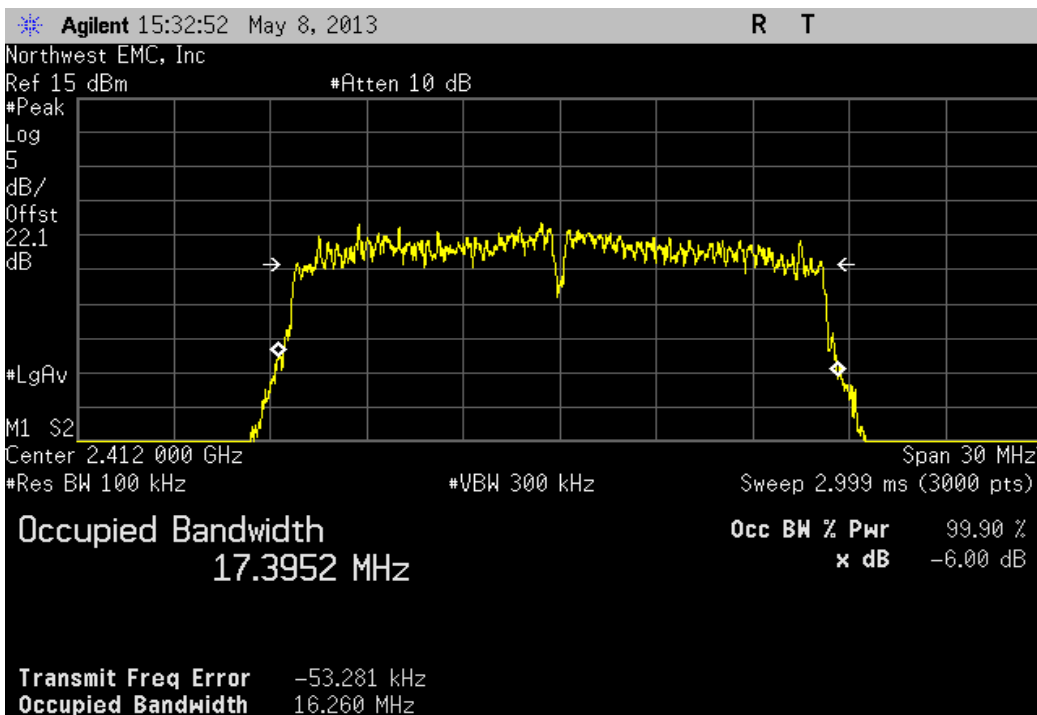
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

	Value	Limit	Result
	13.174 MHz	> 500 kHz	Pass



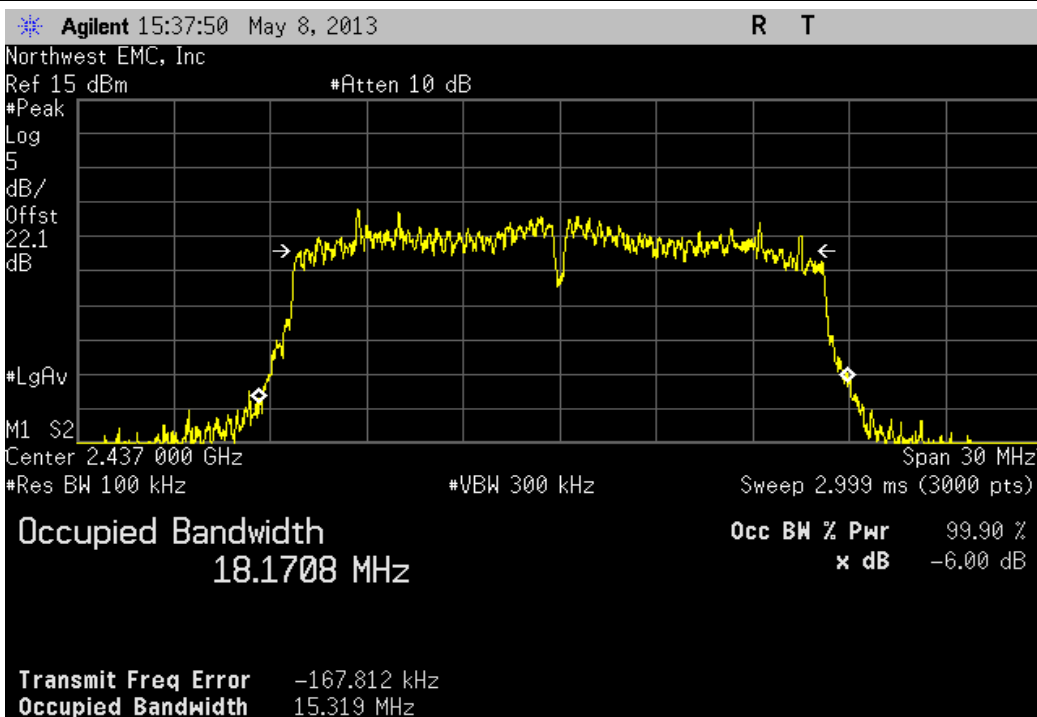
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
16.26 MHz	> 500 kHz	Pass



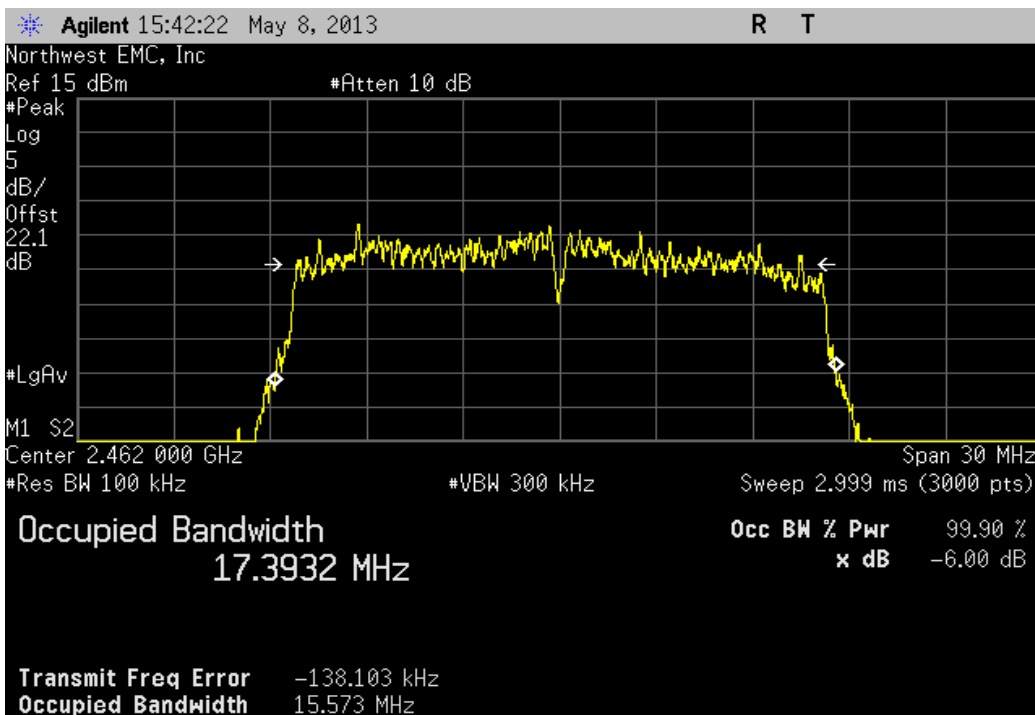
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
15.319 MHz	> 500 kHz	Pass



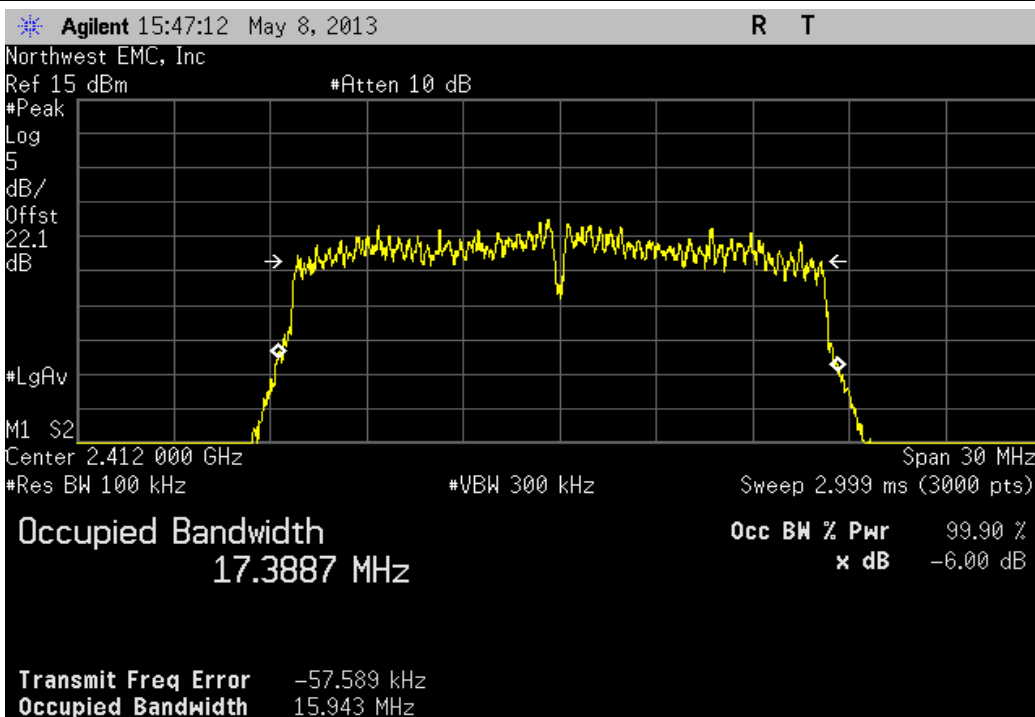
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
15.573 MHz	> 500 kHz	Pass



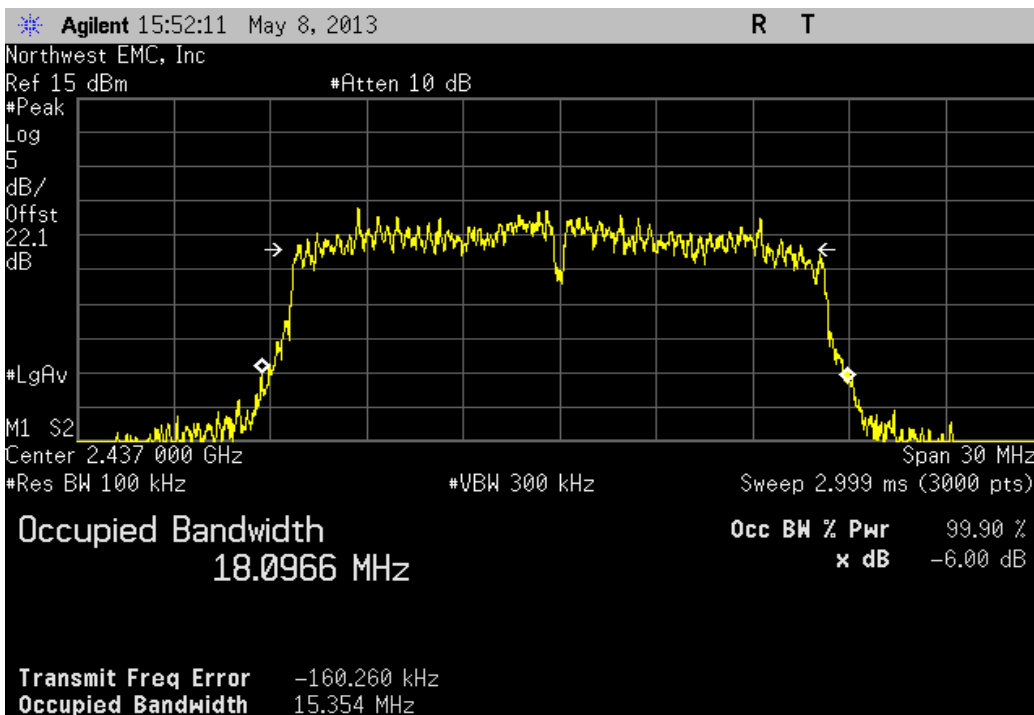
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
15.943 MHz	> 500 kHz	Pass



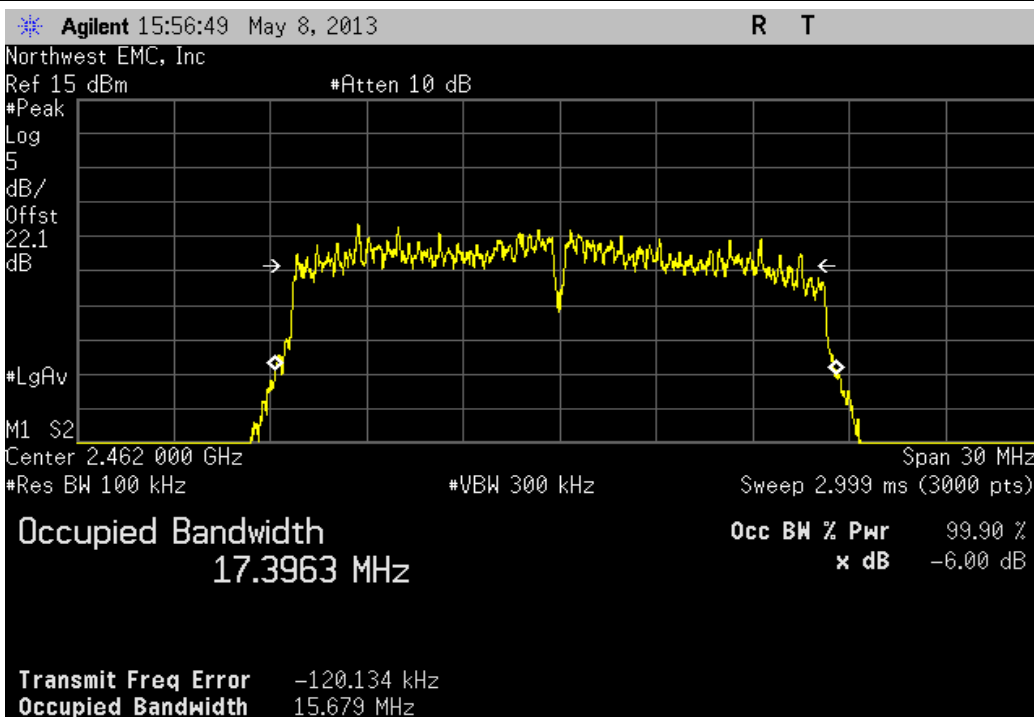
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
15.354 MHz	> 500 kHz	Pass



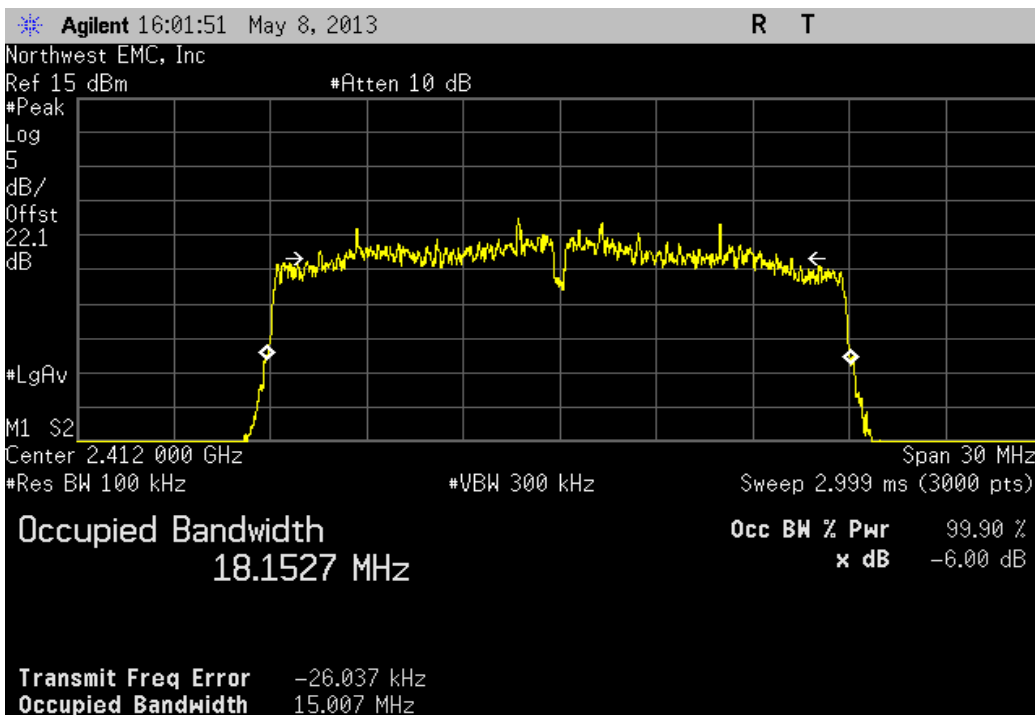
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
15.679 MHz	> 500 kHz	Pass



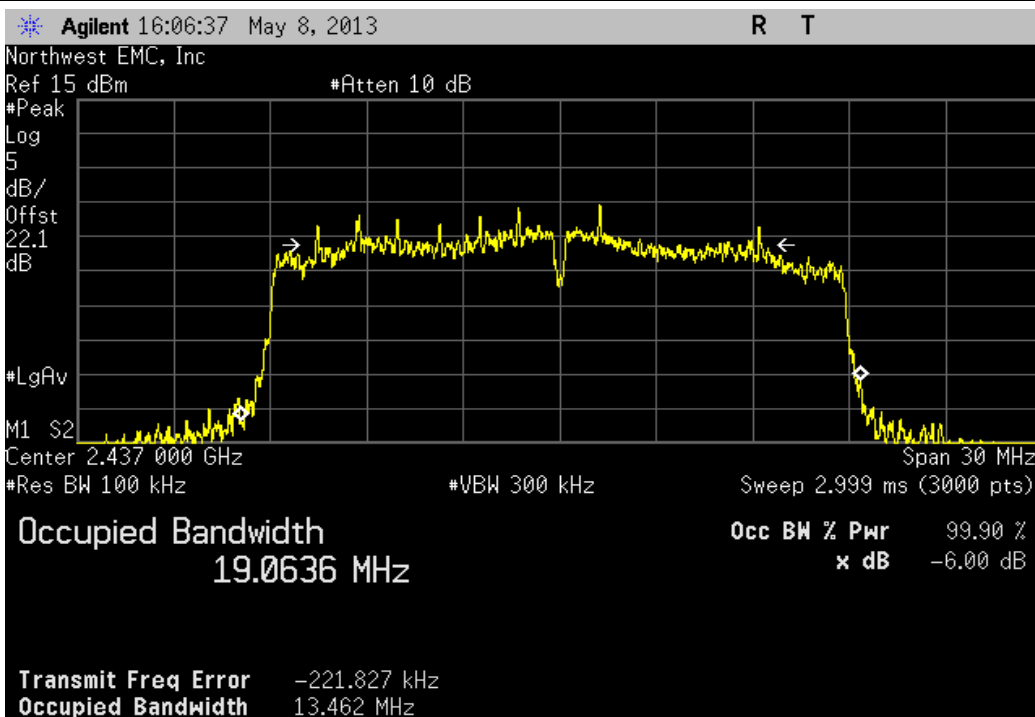
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	Limit	Result
15.007 MHz	> 500 kHz	Pass



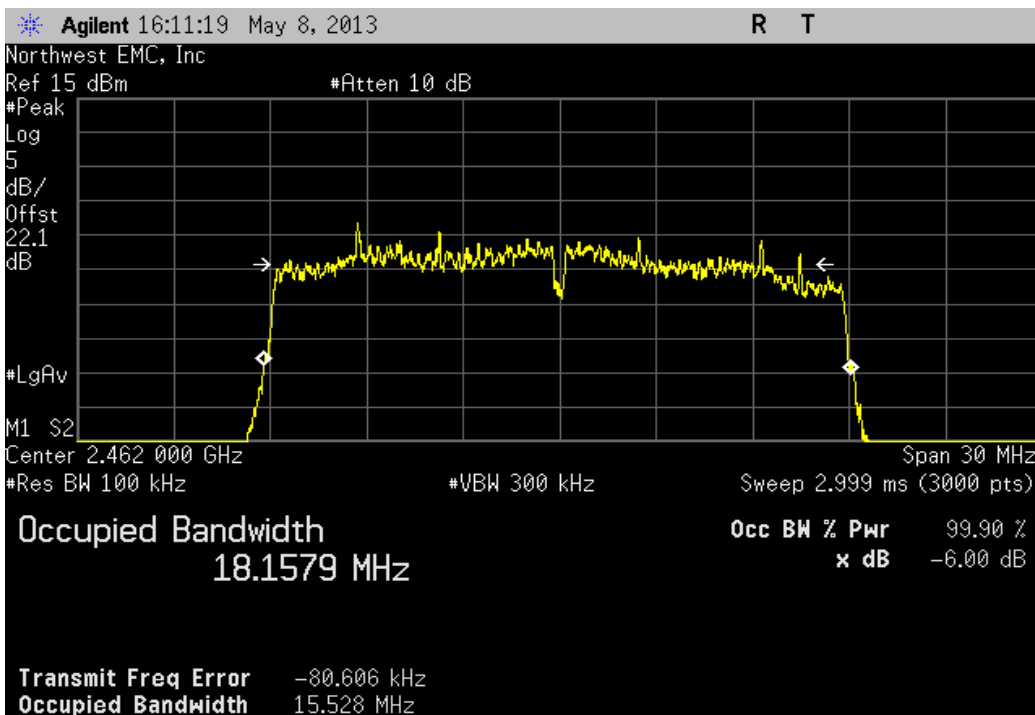
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

Value	Limit	Result
13.462 MHz	> 500 kHz	Pass



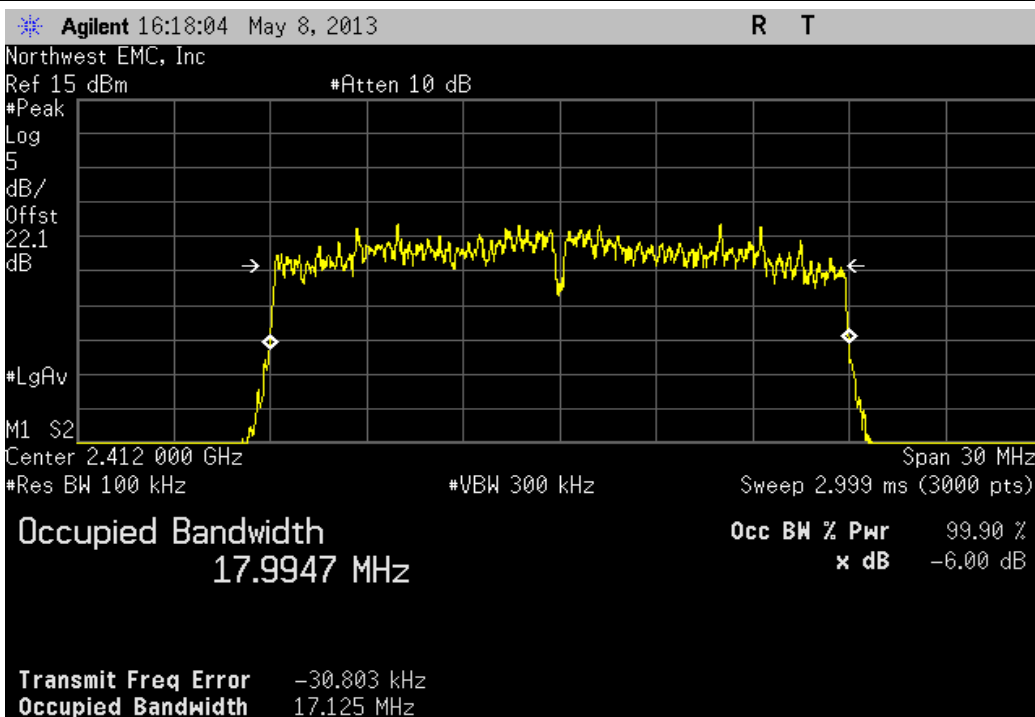
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

	Value	Limit	Result
	15.528 MHz	> 500 kHz	Pass



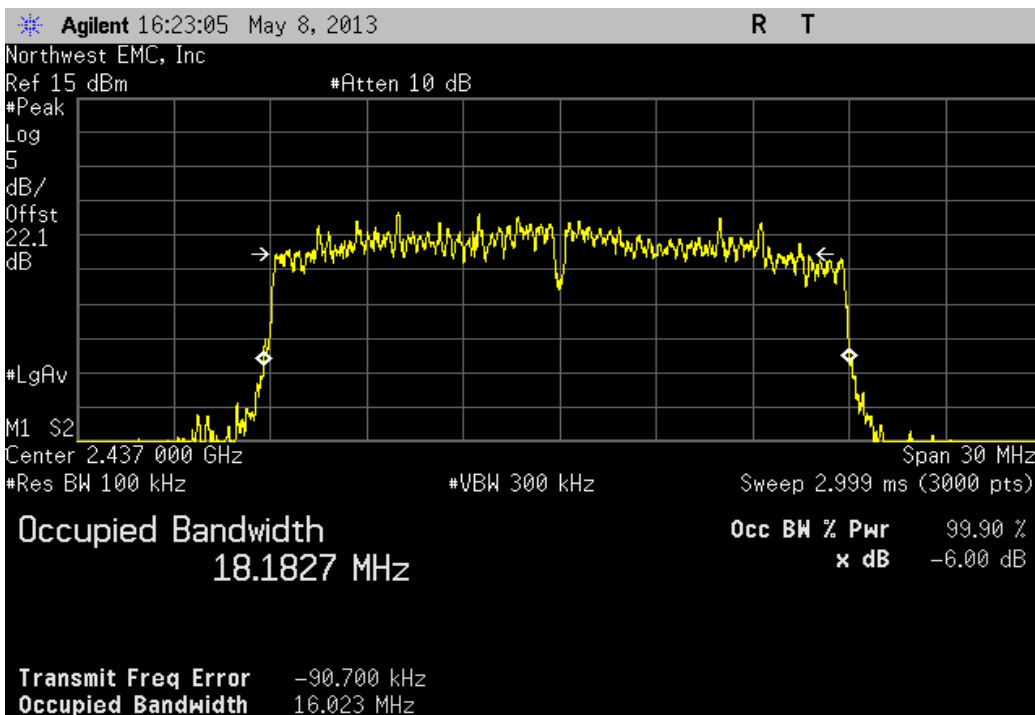
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

	Value	Limit	Result
	17.125 MHz	> 500 kHz	Pass



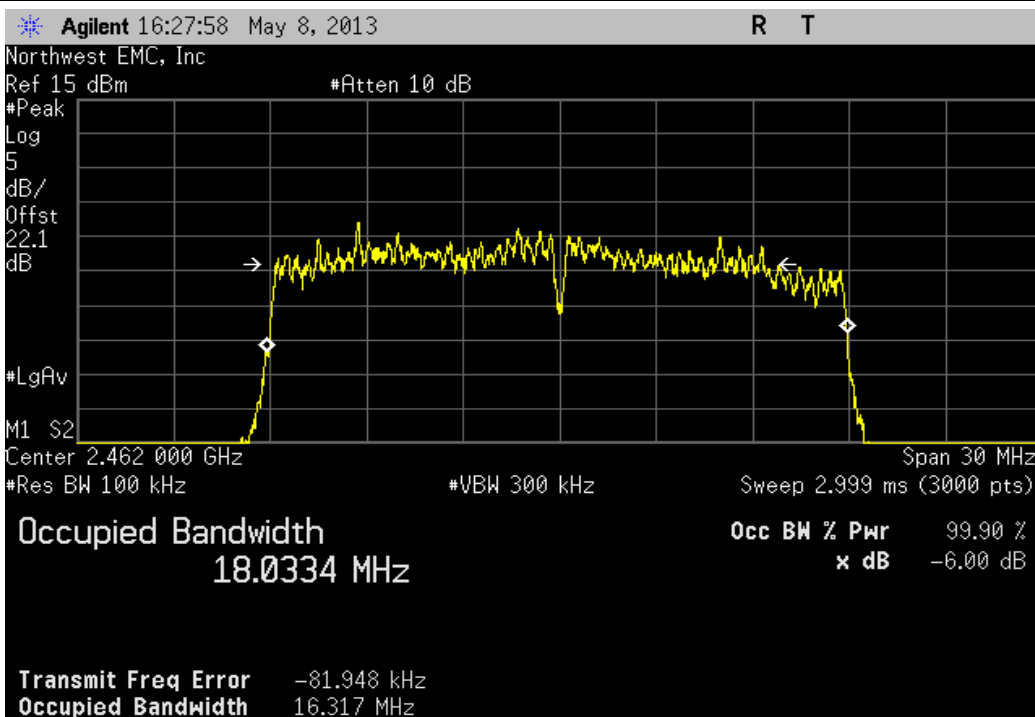
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

Value	Limit	Result
16.023 MHz	> 500 kHz	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value	Limit	Result
16.317 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
Attenuator - 20db, 'SMA'	SM Electronics	SA26B-20	RFW	4/12/2013	12
40 GHz DC block	Fairview Microwave	SD3379	AMI	10/5/2012	12
Signal Generator MXG	Agilent	N5183A	TIK	6/7/2012	36
Spectrum Analyzer	Agilent	E4440A	AAX	5/15/2012	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.

Method PK2 found in KDB 558074 DTS D01 Measurement Section 5.2.1.2 was used because the Emission Bandwidth was greater than the largest RBW on the analyzer.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- The RBW = 1 MHz, VBW = 3 MHz.
- Peak detector mode
- Power was integrated across "B", by using the channel power function of the analyzer.



Output Power

XMit 2013.02.28
PsaTx 2013.04.12

EUT: RTH9590WF01	Work Order: HNYW0042
Serial Number: 4174001 0010151	Date: 05/08/13
Customer: Honeywell, Automation and Control Solutions	Temperature: 24.7°C
Attendees: None	Humidity: 38%
Project: None	Barometric Pres.: 1015.3
Tested by: Trevor Buls	Power: 110VAC/60Hz
	Job Site: MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2013	ANSI C63.10:2009

COMMENTS

None

DEVIATIONS FROM TEST STANDARD

None

Configuration #	3	Signature <i>Trevor Buls</i>
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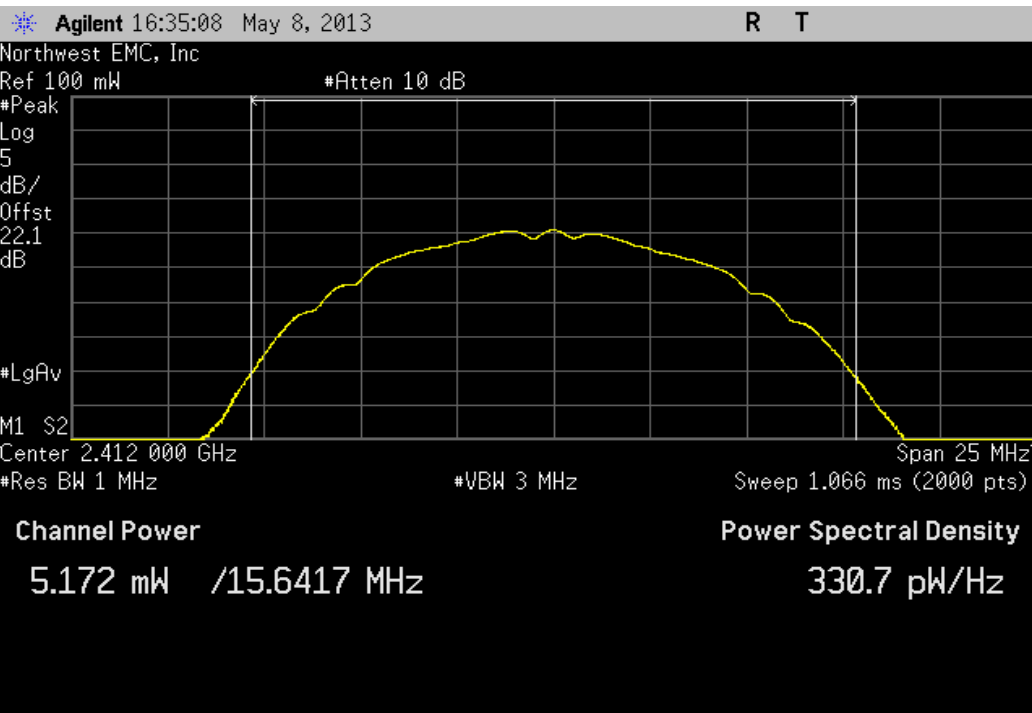
	Value	Limit	Result
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Antenna 0	2400 MHz - 2483.5 MHz Band			
	802.11(b) 1 Mbps			
	Low Channel 1, 2412 MHz	5.172 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	6.682 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	4.772 mW	< 1 W	Pass
	802.11(b) 11 Mbps			
	Low Channel 1, 2412 MHz	4.977 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	6.323 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	4.561 mW	< 1 W	Pass
	802.11(g) 6 Mbps			
	Low Channel 1, 2412 MHz	2.23 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	4.177 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	2.95 mW	< 1 W	Pass
	802.11(g) 36 Mbps			
	Low Channel 1, 2412 MHz	2.222 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	4.242 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	3.034 mW	< 1 W	Pass
	802.11(g) 54 Mbps			
	Low Channel 1, 2412 MHz	2.21 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	4.279 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	3.109 mW	< 1 W	Pass
	802.11(n) MCS0			
	Low Channel 1, 2412 MHz	2.109 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	4.351 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	2.904 mW	< 1 W	Pass
	802.11(n) MCS7			
	Low Channel 1, 2412 MHz	2.147 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	4.203 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	2.98 mW	< 1 W	Pass

Antenna 1	2400 MHz - 2483.5 MHz Band			
	802.11(b) 1 Mbps			
	Low Channel 1, 2412 MHz	25.987 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	22.311 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	15.886 mW	< 1 W	Pass
	802.11(b) 11 Mbps			
	Low Channel 1, 2412 MHz	24.155 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	21.402 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	14.876 mW	< 1 W	Pass
	802.11(g) 6 Mbps			
	Low Channel 1, 2412 MHz	10.334 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	13.564 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	8.326 mW	< 1 W	Pass
	802.11(g) 36 Mbps			
	Low Channel 1, 2412 MHz	10.495 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	14.153 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	8.49 mW	< 1 W	Pass
	802.11(g) 54 Mbps			
	Low Channel 1, 2412 MHz	10.793 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	14.398 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	8.415 mW	< 1 W	Pass
	802.11(n) MCS0			
	Low Channel 1, 2412 MHz	10.155 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	13.838 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	8.1 mW	< 1 W	Pass
	802.11(n) MCS7			
	Low Channel 1, 2412 MHz	10.442 mW	< 1 W	Pass
	Mid Channel 6, 2437 MHz	12.571 mW	< 1 W	Pass
	High Channel 11, 2462 MHz	8.042 mW	< 1 W	Pass

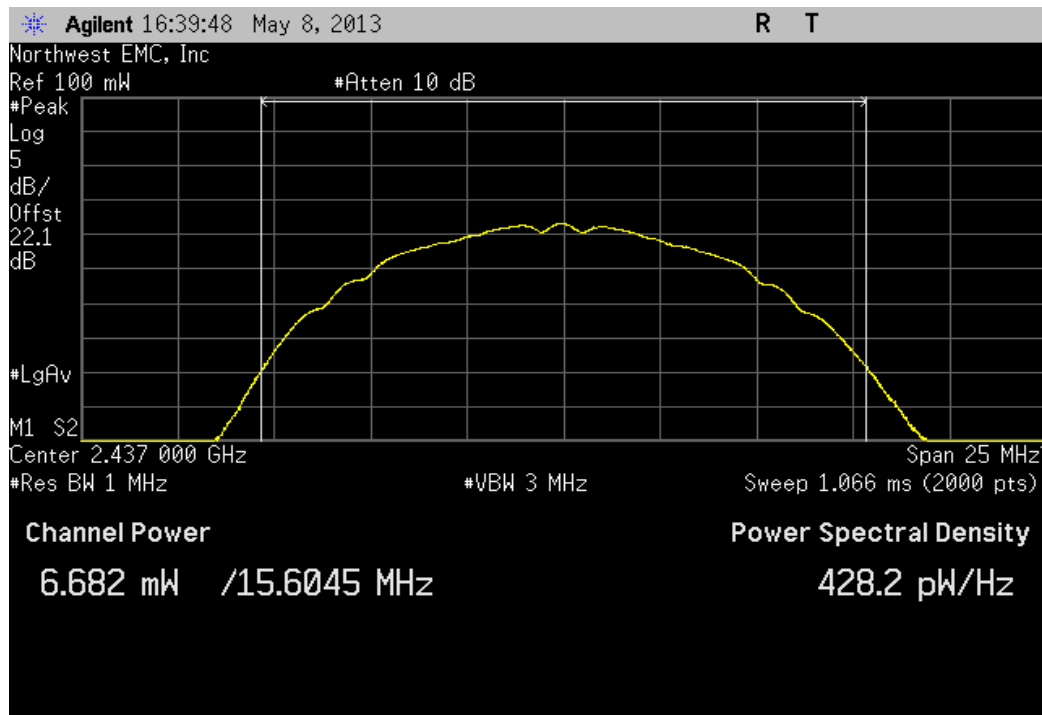
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
5.172 mW	< 1 W	Pass



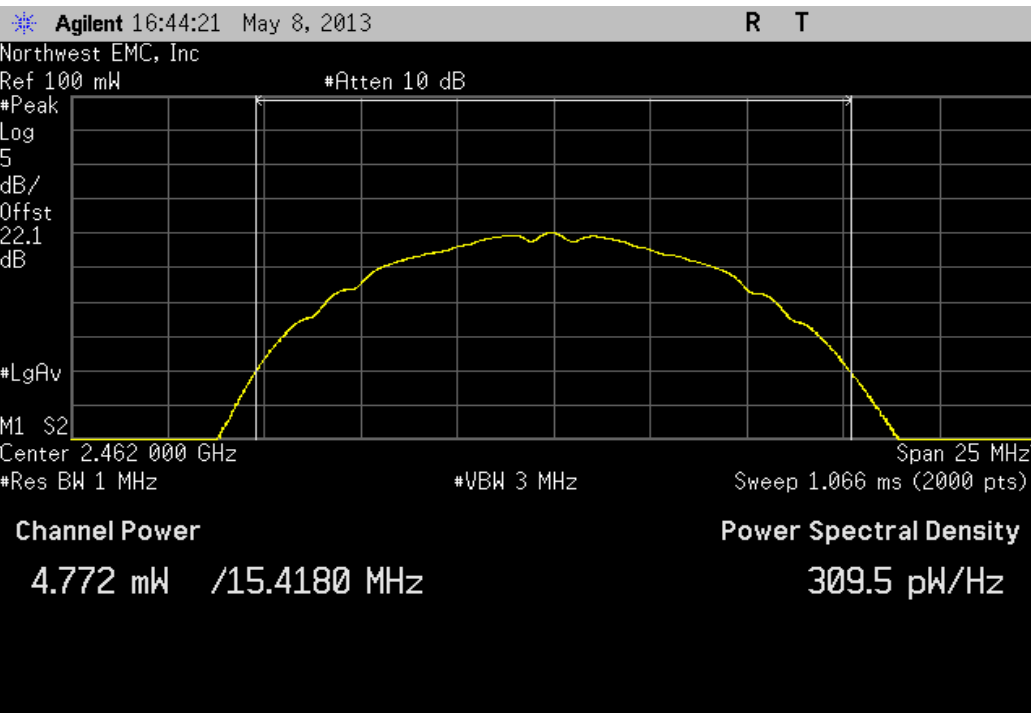
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
6.682 mW	< 1 W	Pass



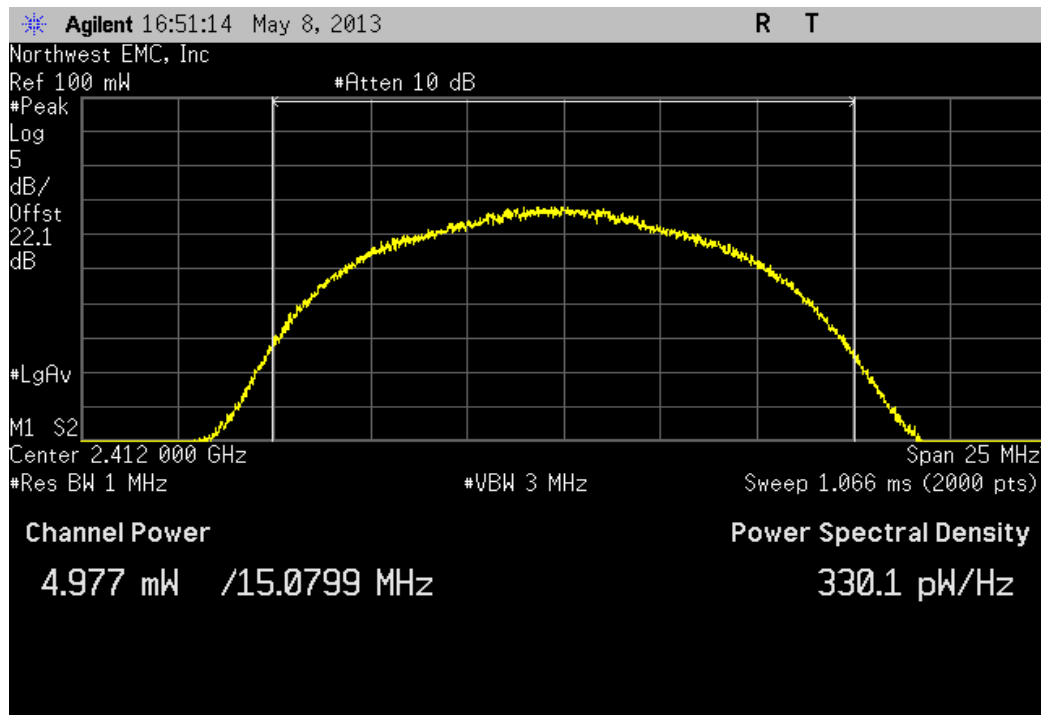
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
4.772 mW	< 1 W	Pass



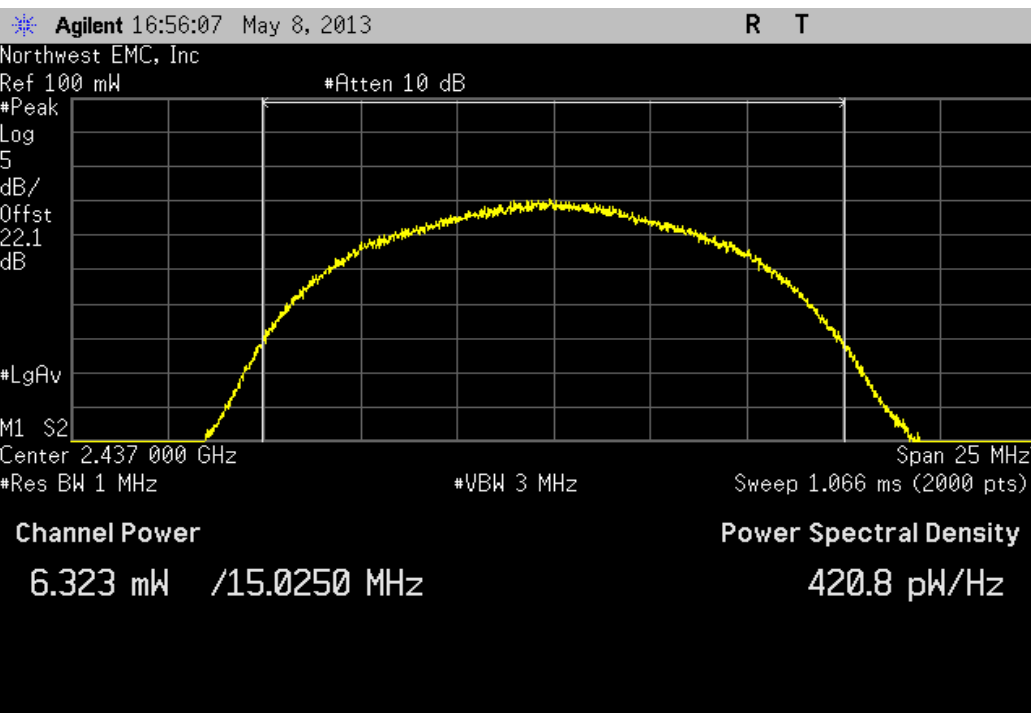
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
4.977 mW	< 1 W	Pass



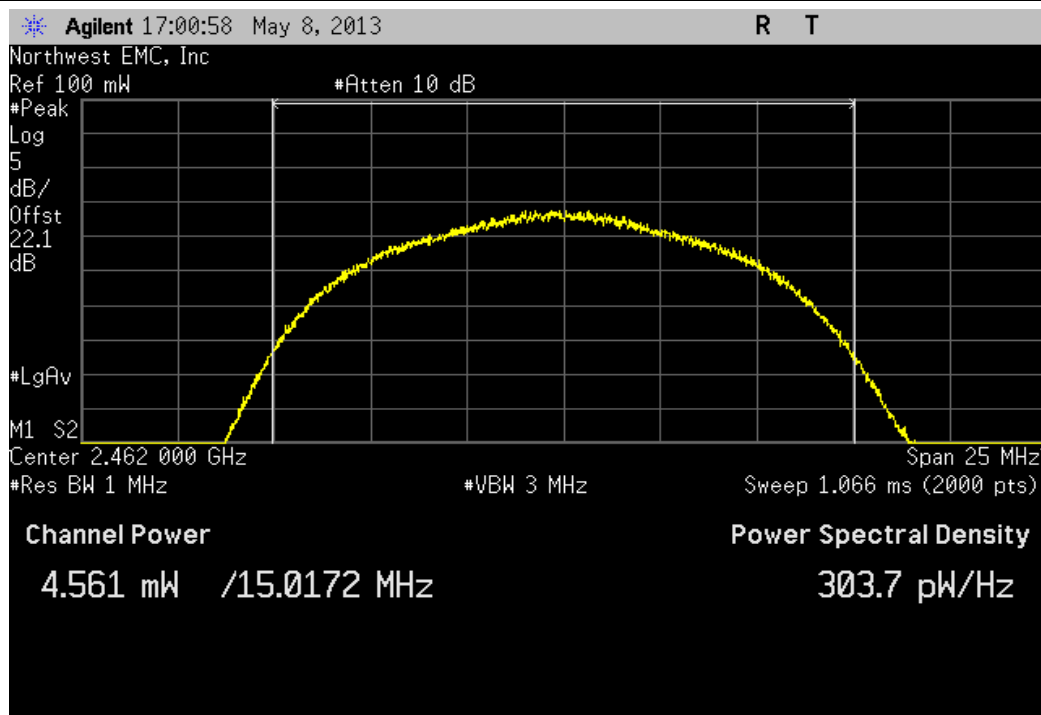
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
6.323 mW	< 1 W	Pass



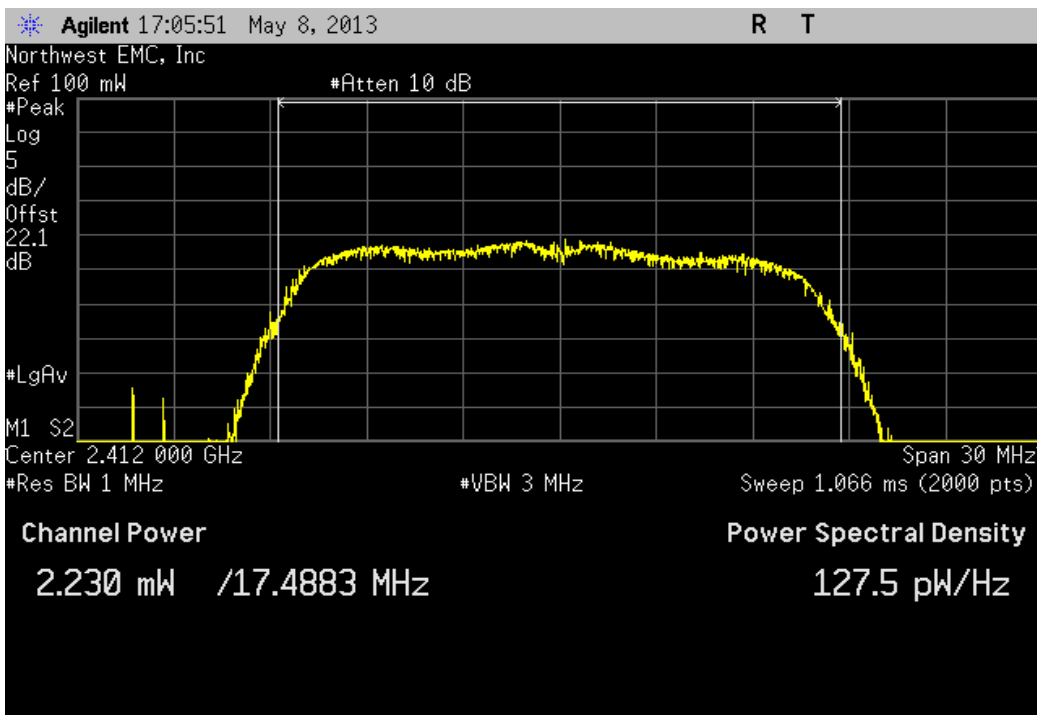
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
4.561 mW	< 1 W	Pass



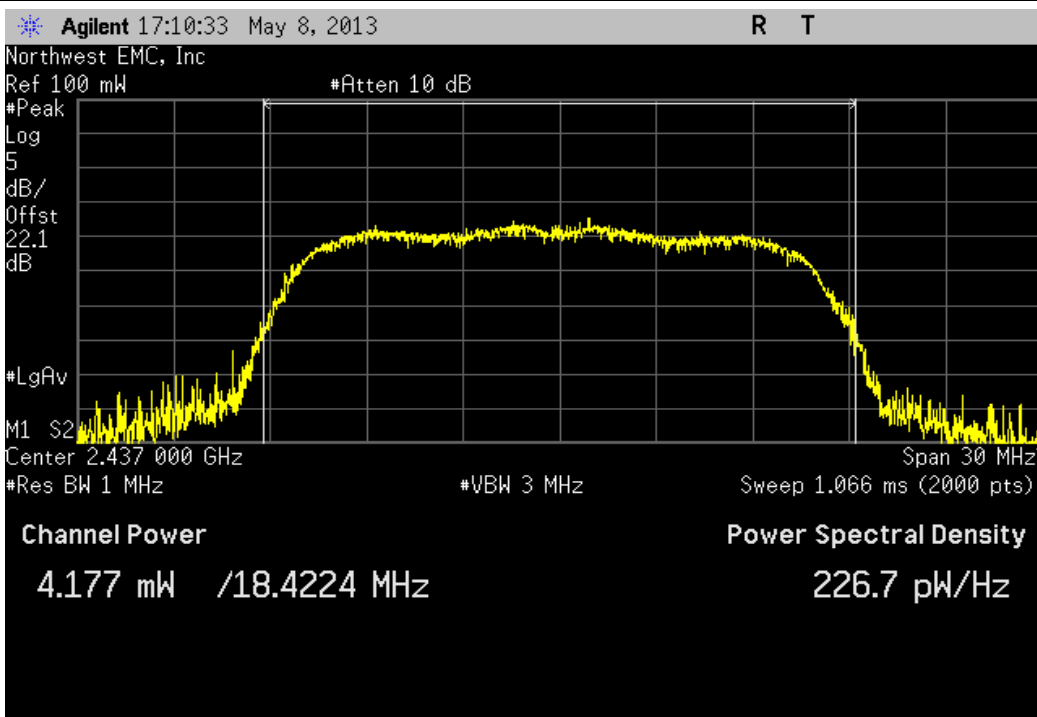
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

	Value	Limit	Result
	2.23 mW	< 1 W	Pass



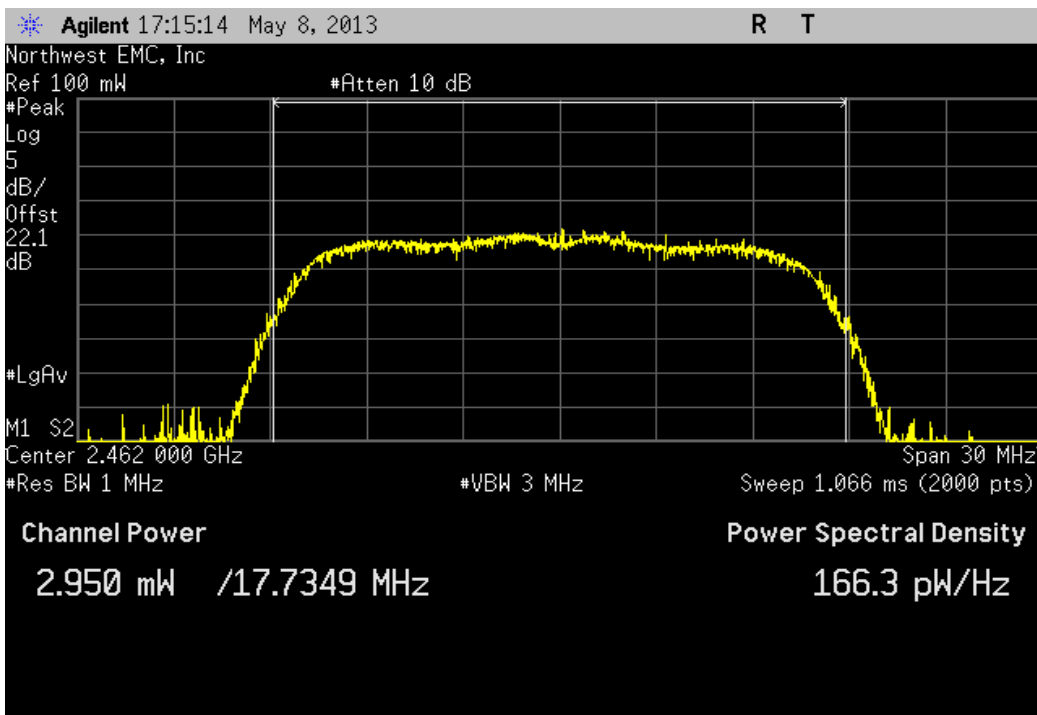
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	4.177 mW	< 1 W	Pass



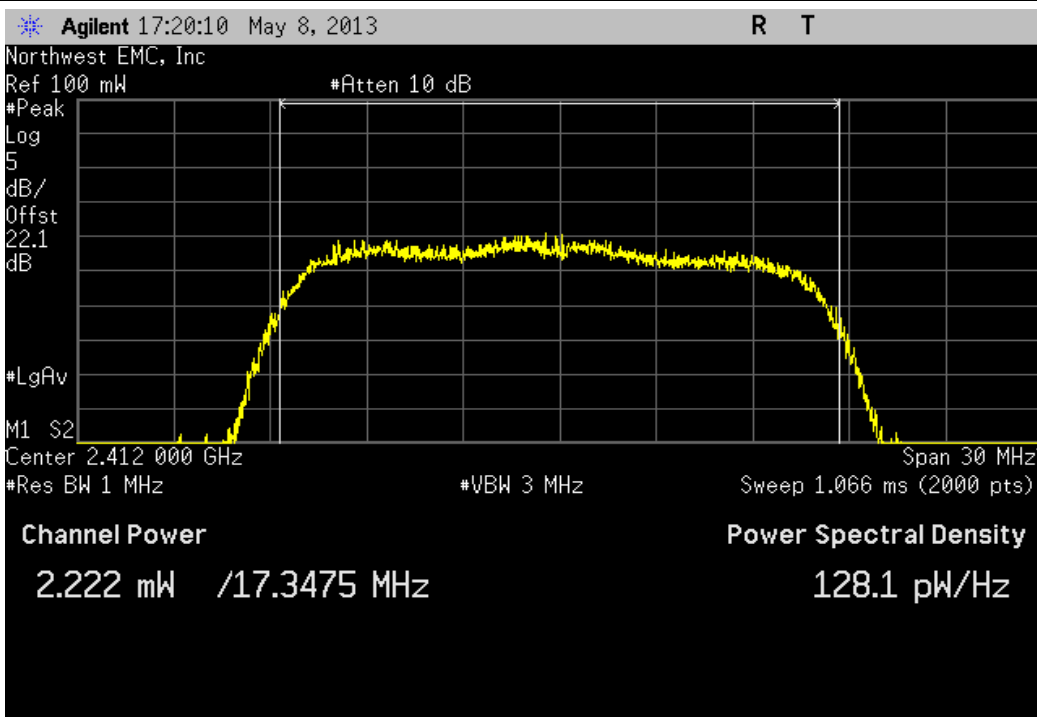
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

	Value	Limit	Result
	2.95 mW	< 1 W	Pass



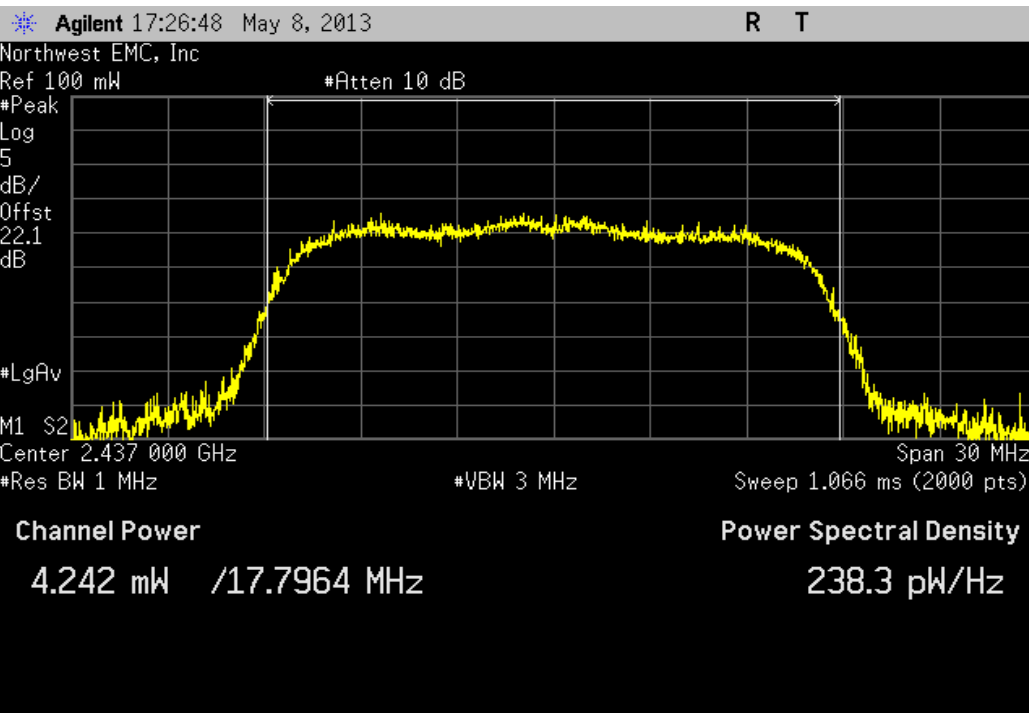
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

	Value	Limit	Result
	2.222 mW	< 1 W	Pass



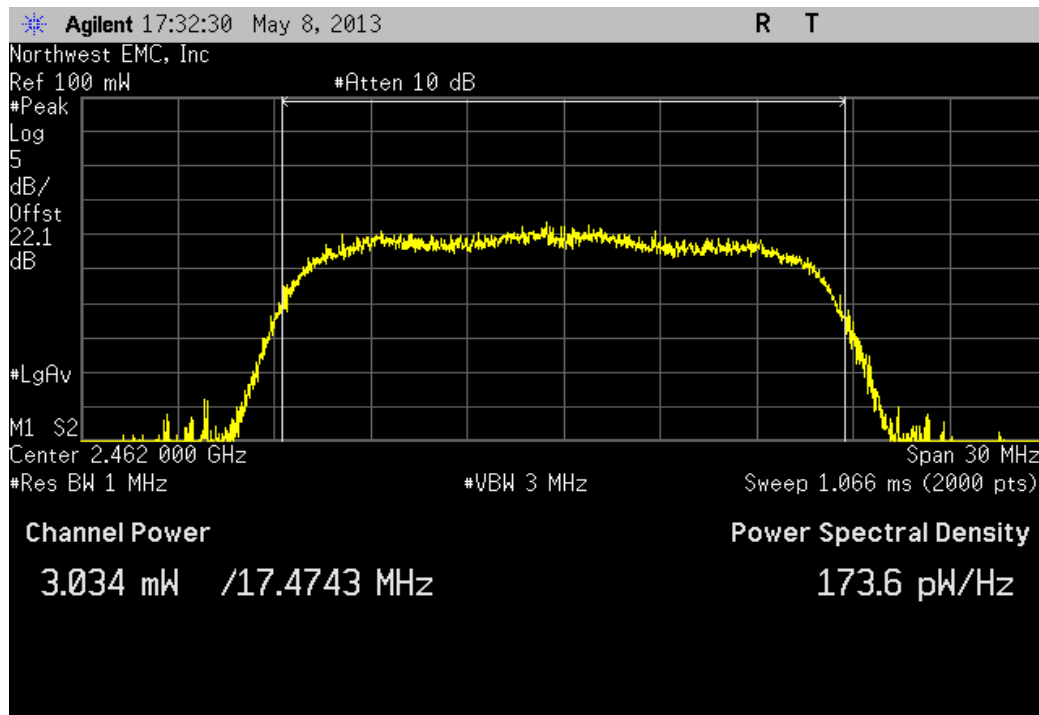
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
4.242 mW	< 1 W	Pass



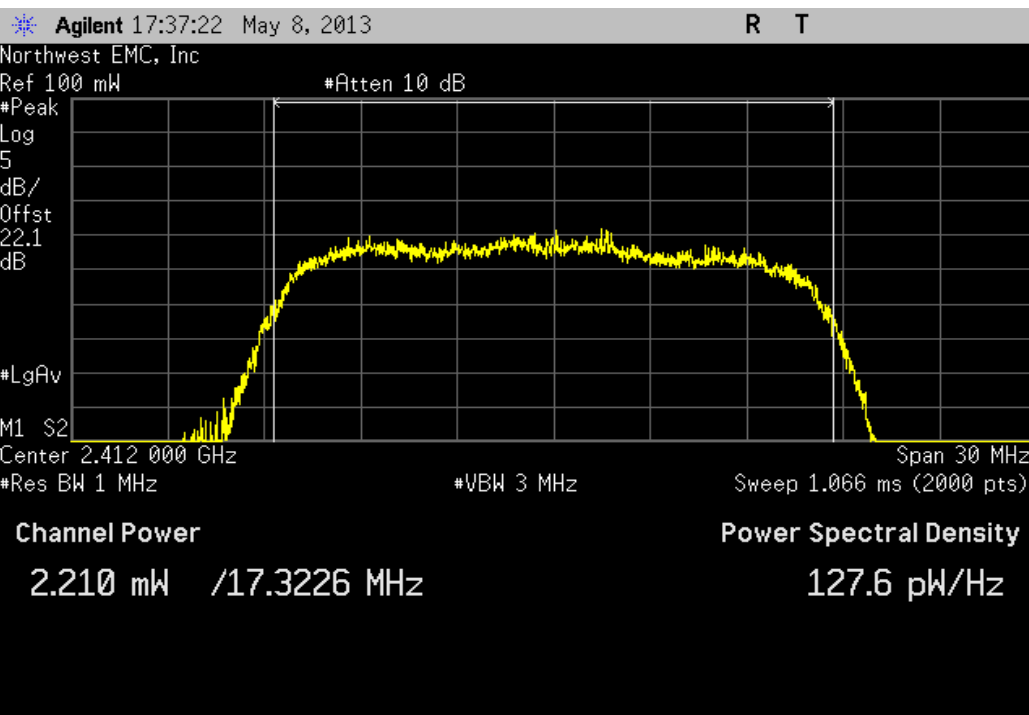
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
3.034 mW	< 1 W	Pass



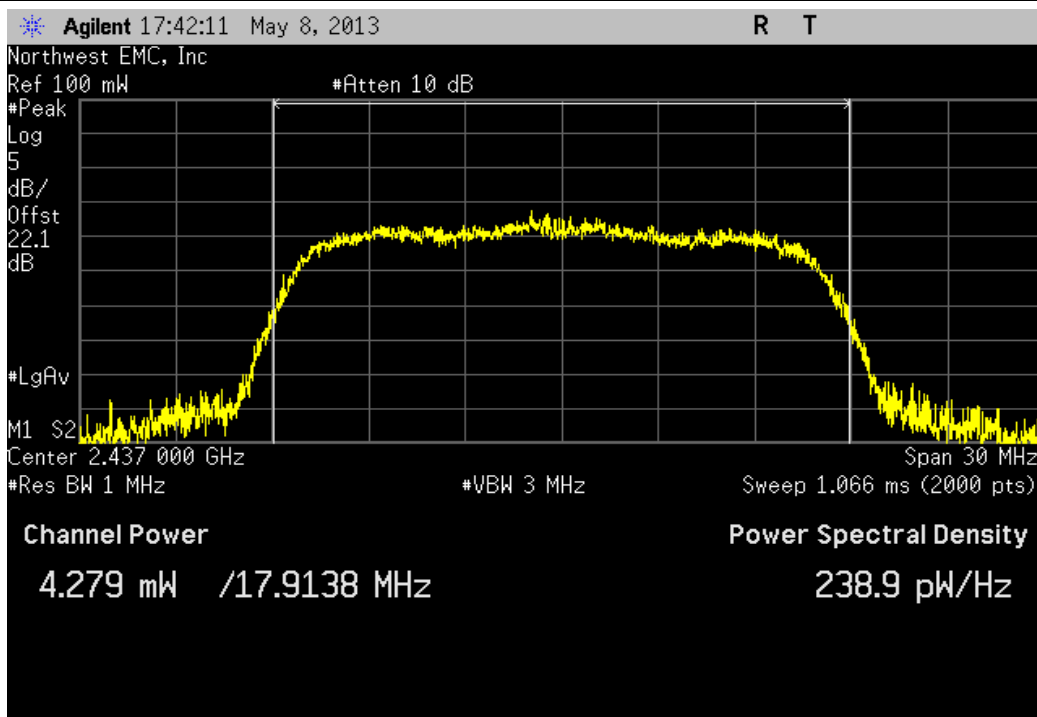
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
2.21 mW	< 1 W	Pass



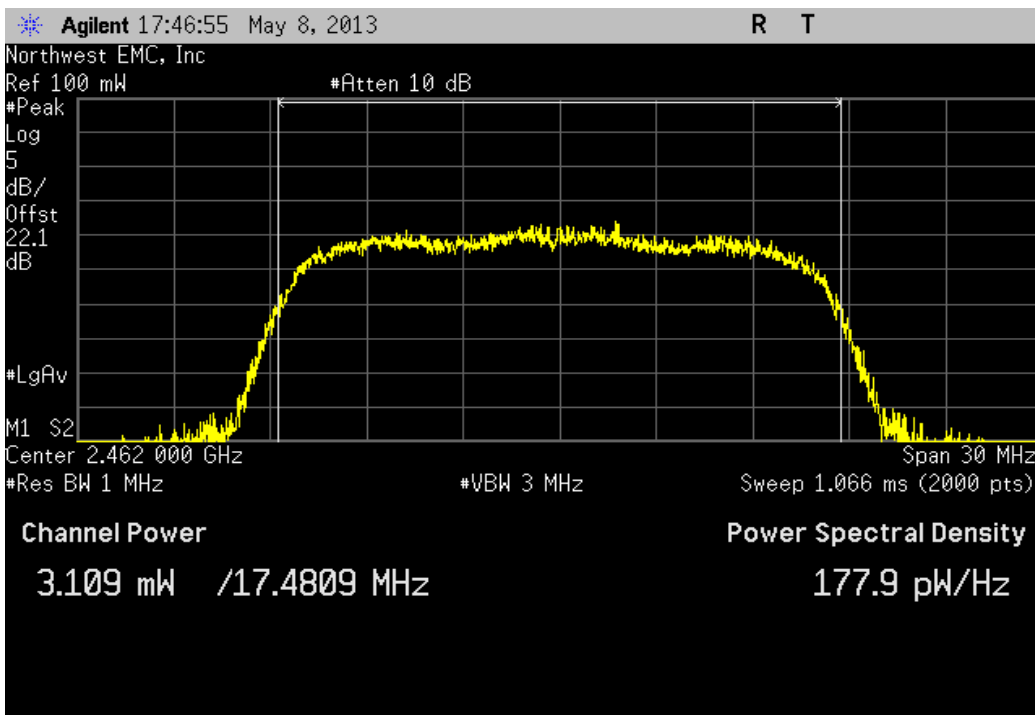
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
4.279 mW	< 1 W	Pass



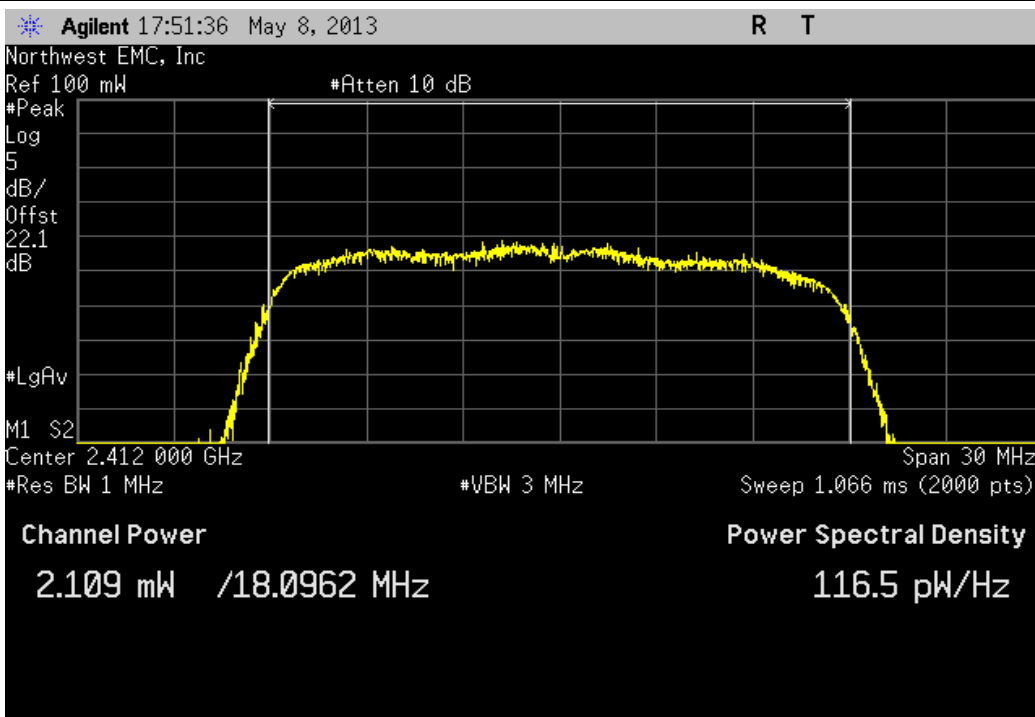
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

				Value	Limit	Result
				3.109 mW	< 1 W	Pass



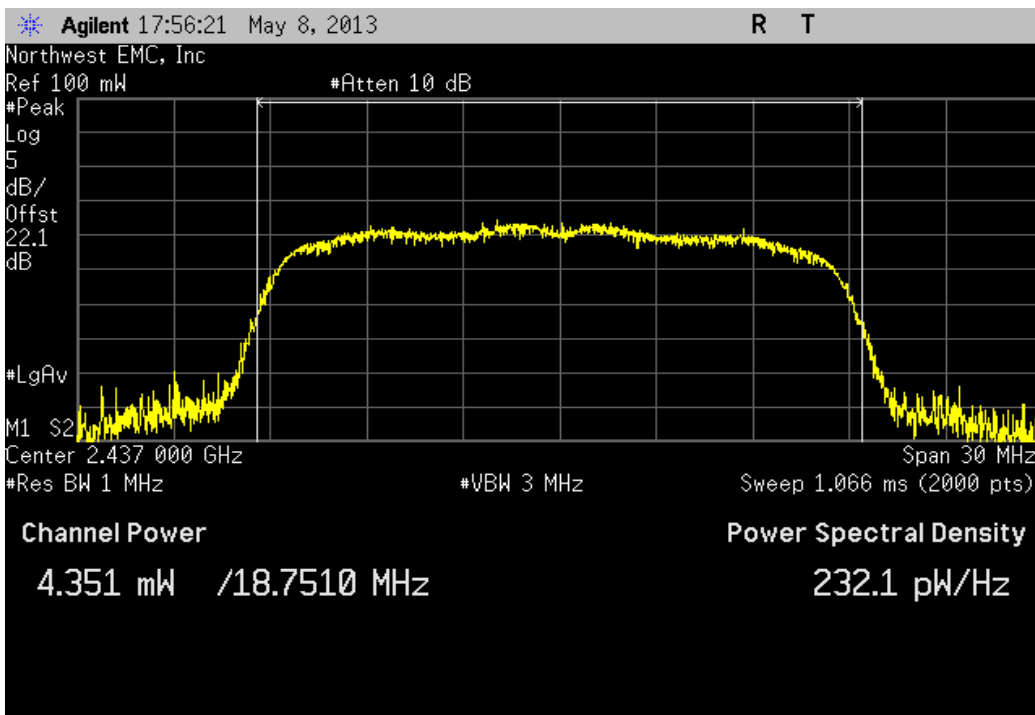
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

				Value	Limit	Result
				2.109 mW	< 1 W	Pass



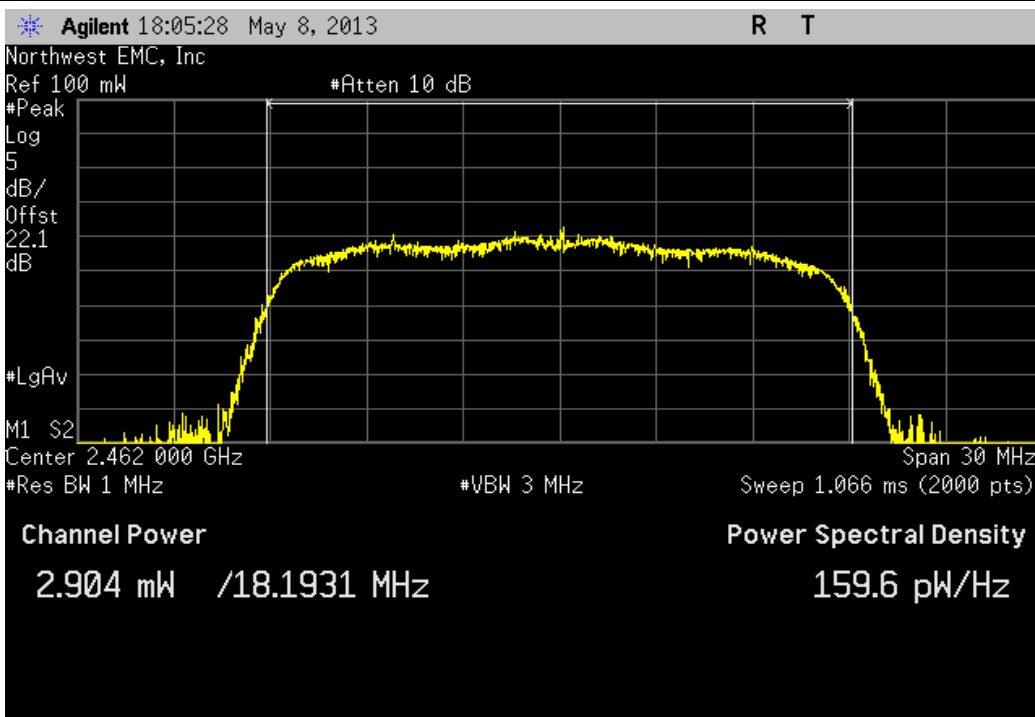
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	4.351 mW	< 1 W	Pass



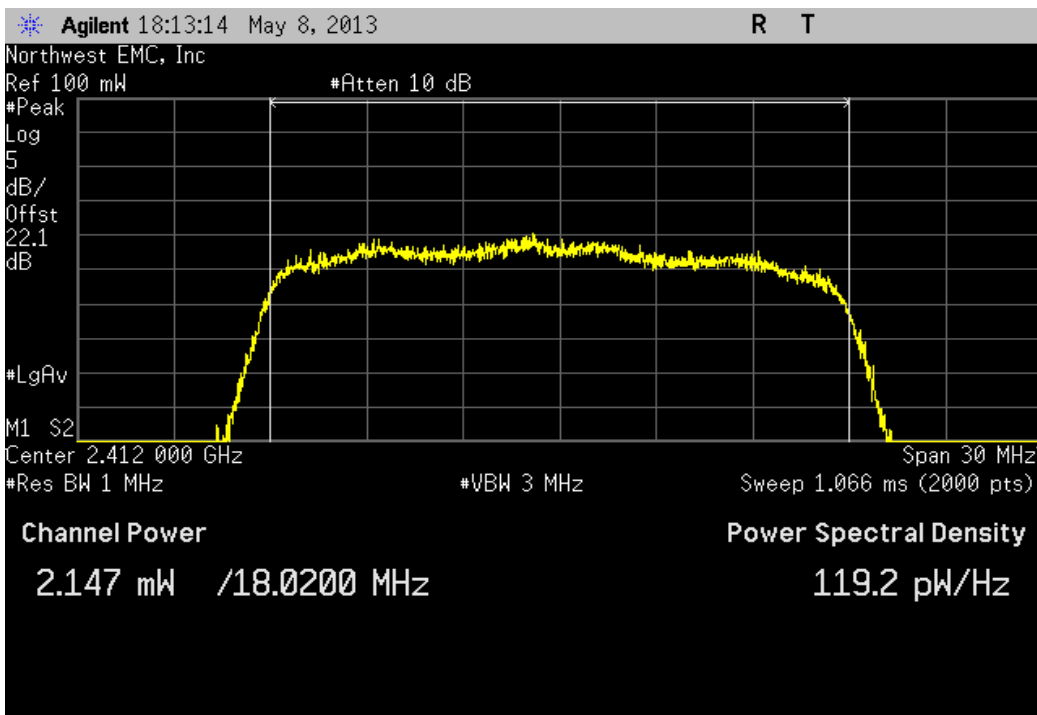
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

	Value	Limit	Result
	2.904 mW	< 1 W	Pass



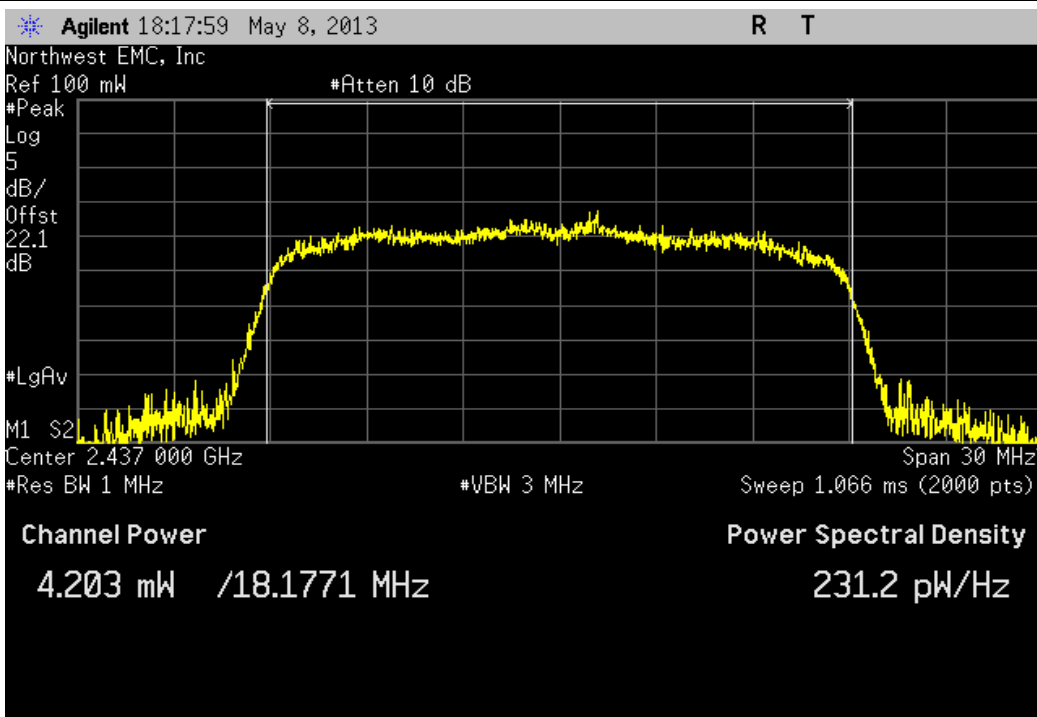
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

	Value	Limit	Result
	2.147 mW	< 1 W	Pass



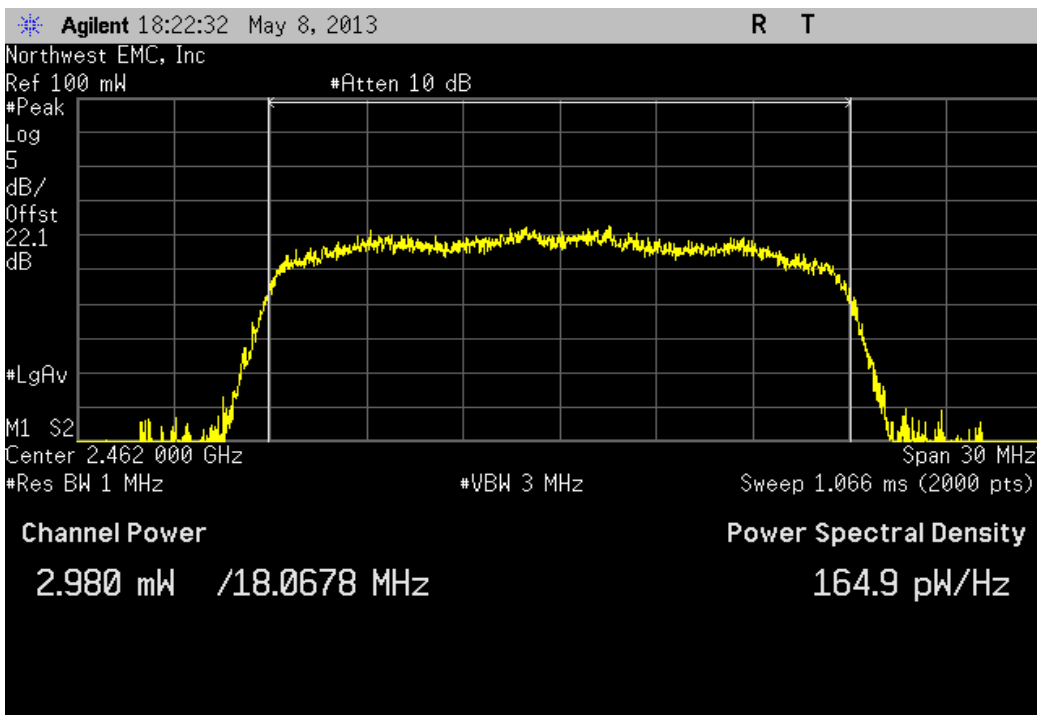
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	4.203 mW	< 1 W	Pass



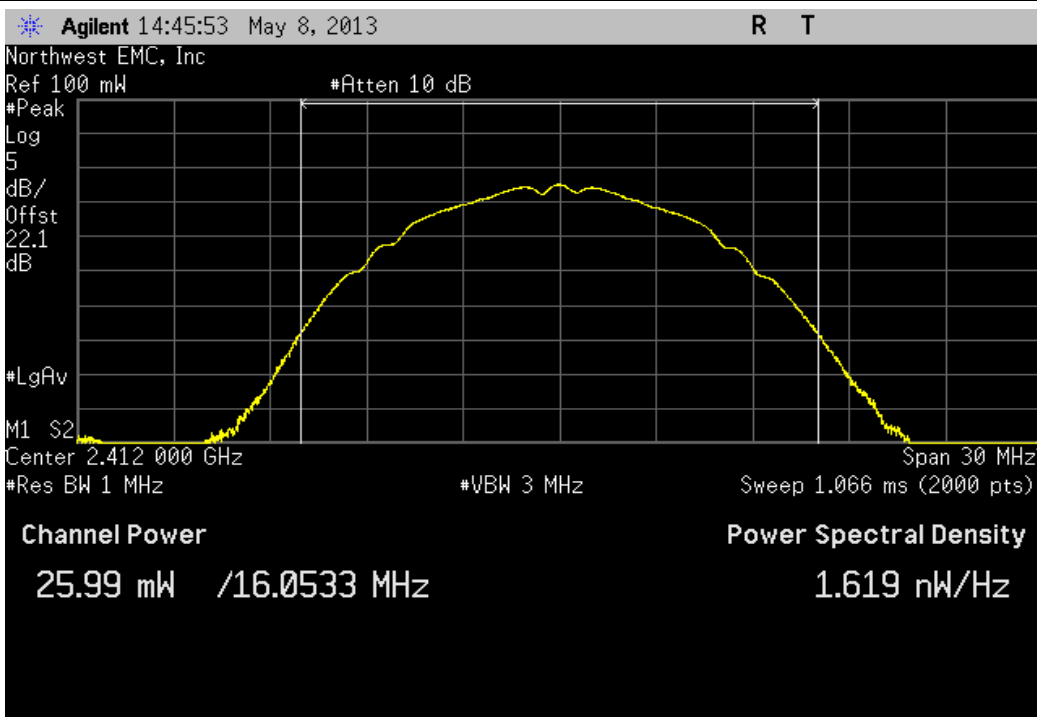
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

	Value	Limit	Result
	2.98 mW	< 1 W	Pass



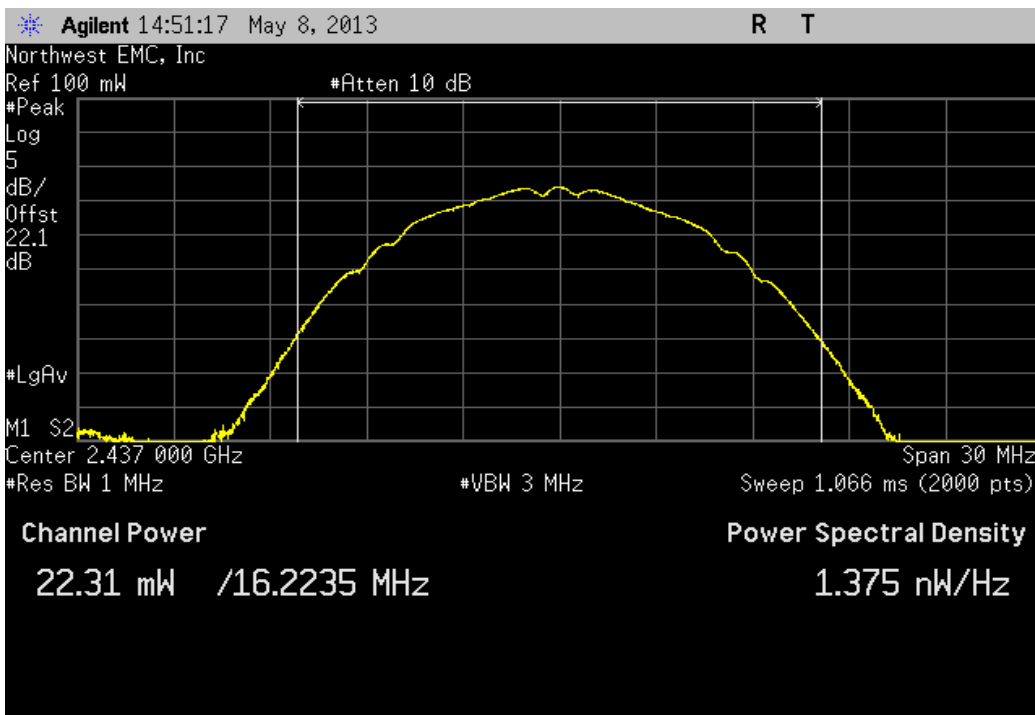
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

	Value	Limit	Result
	25.987 mW	< 1 W	Pass



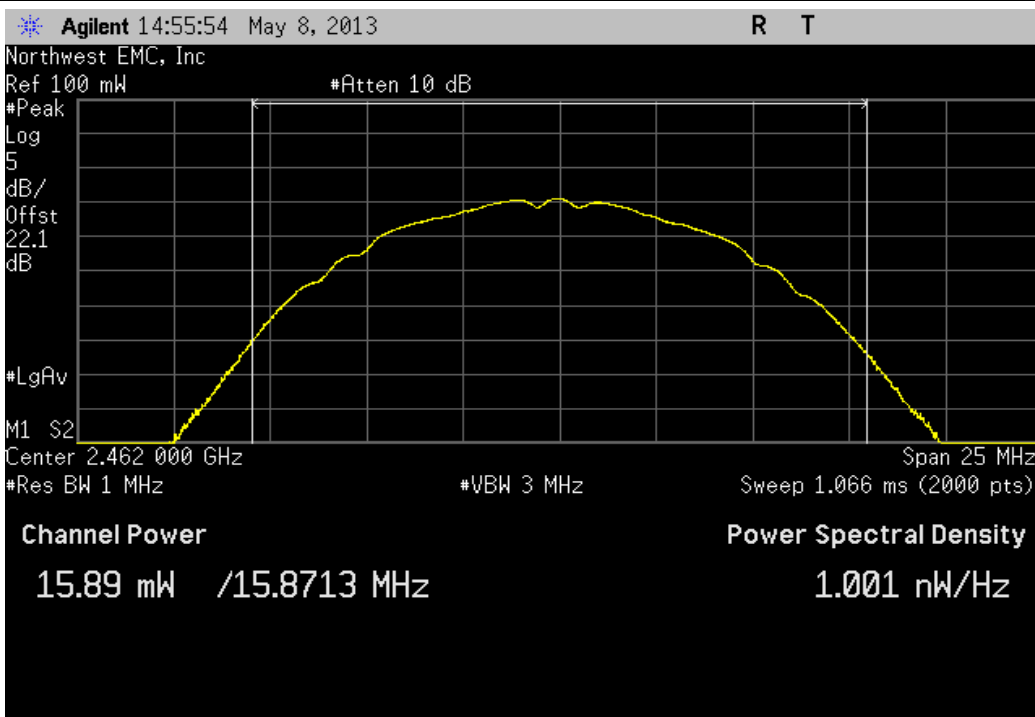
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	22.311 mW	< 1 W	Pass



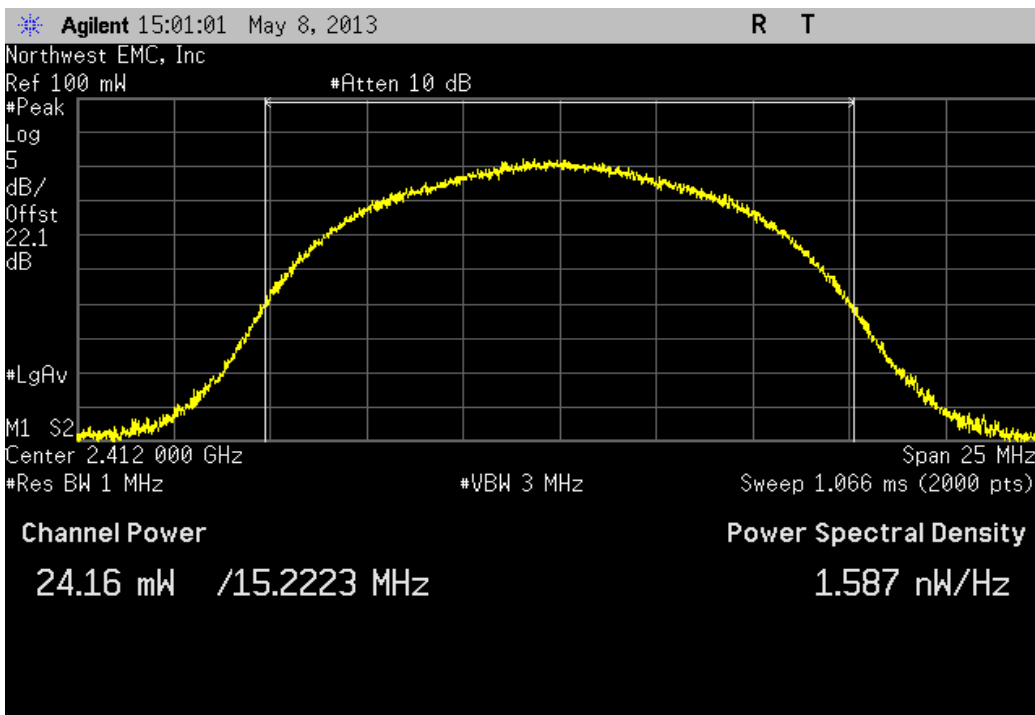
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

	Value	Limit	Result
	15.886 mW	< 1 W	Pass



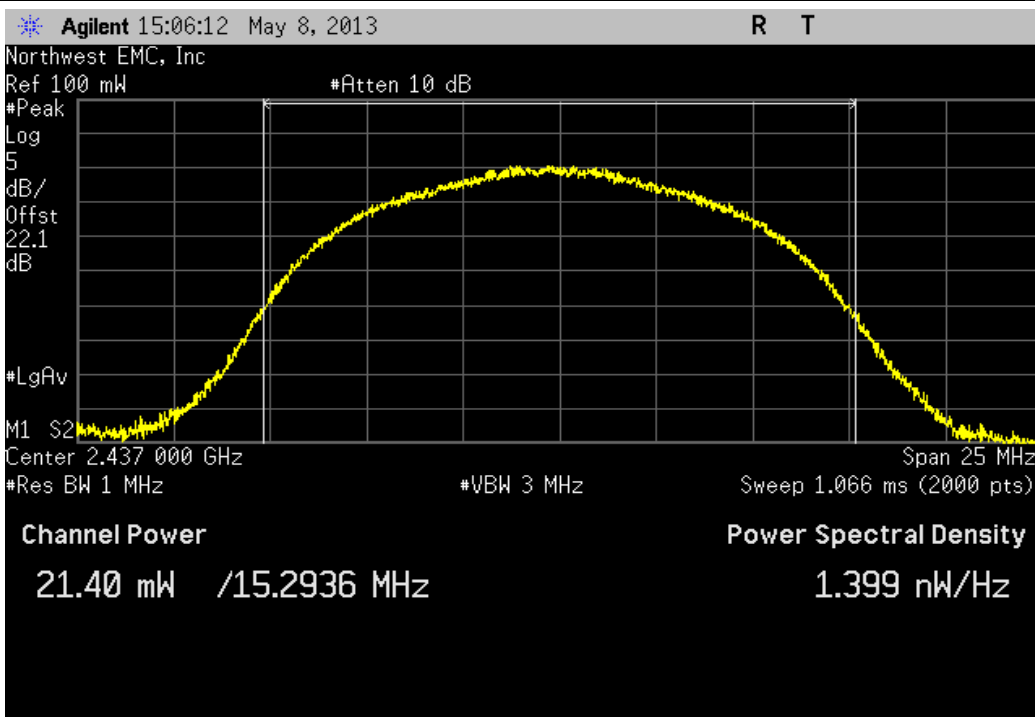
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

	Value	Limit	Result
	24.155 mW	< 1 W	Pass



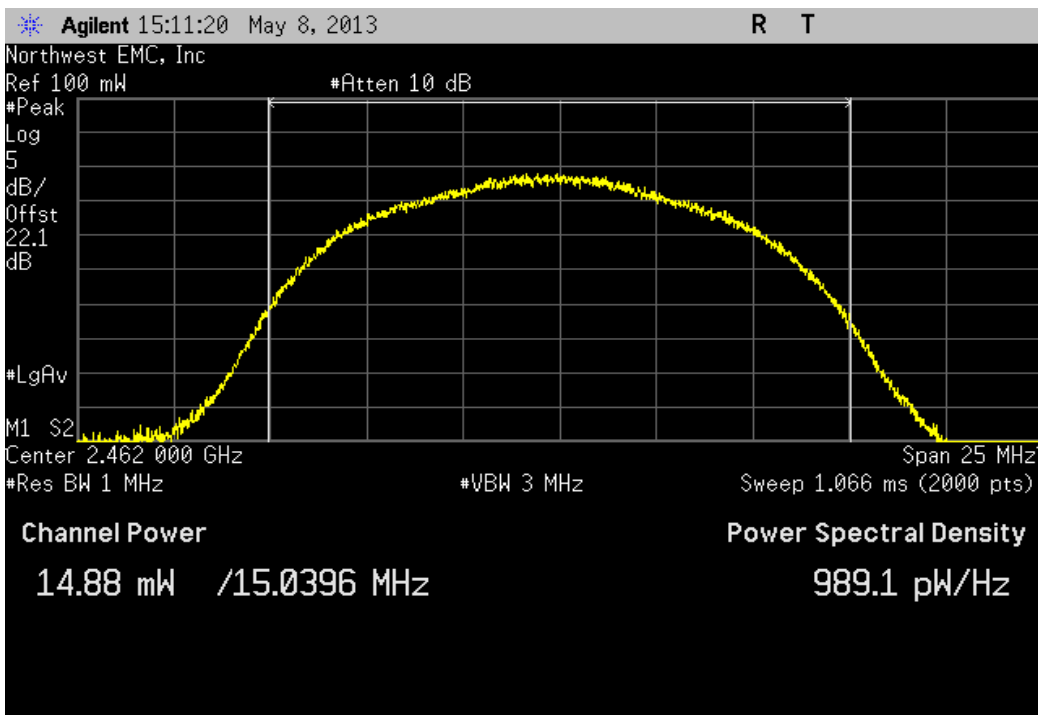
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

	Value	Limit	Result
	21.402 mW	< 1 W	Pass



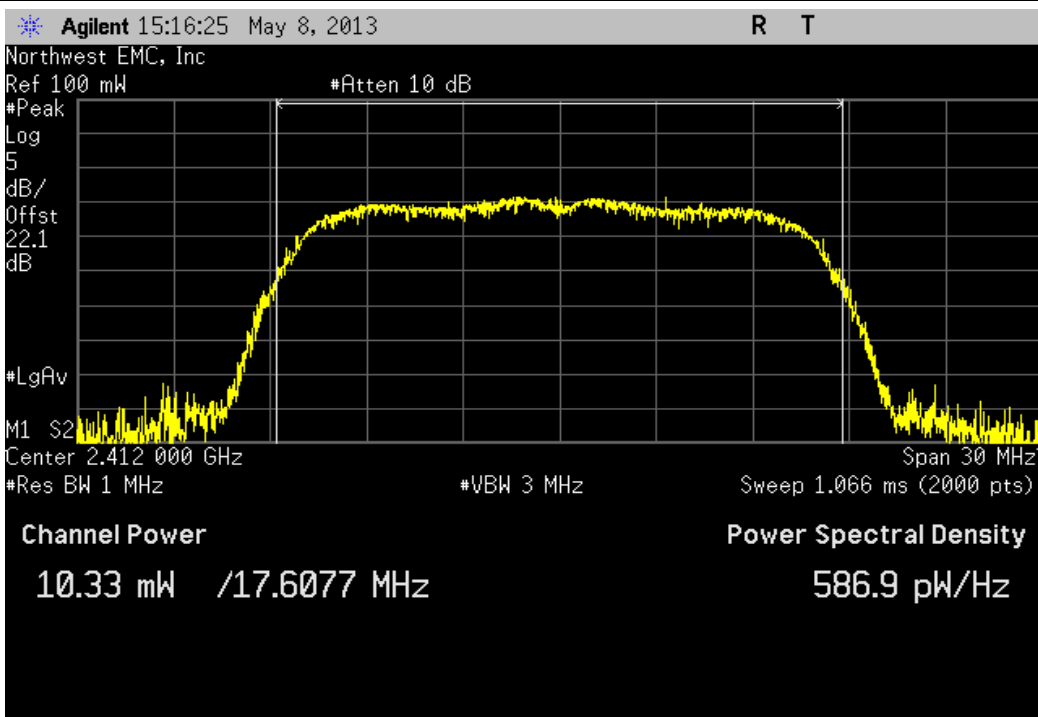
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
14.876 mW	< 1 W	Pass



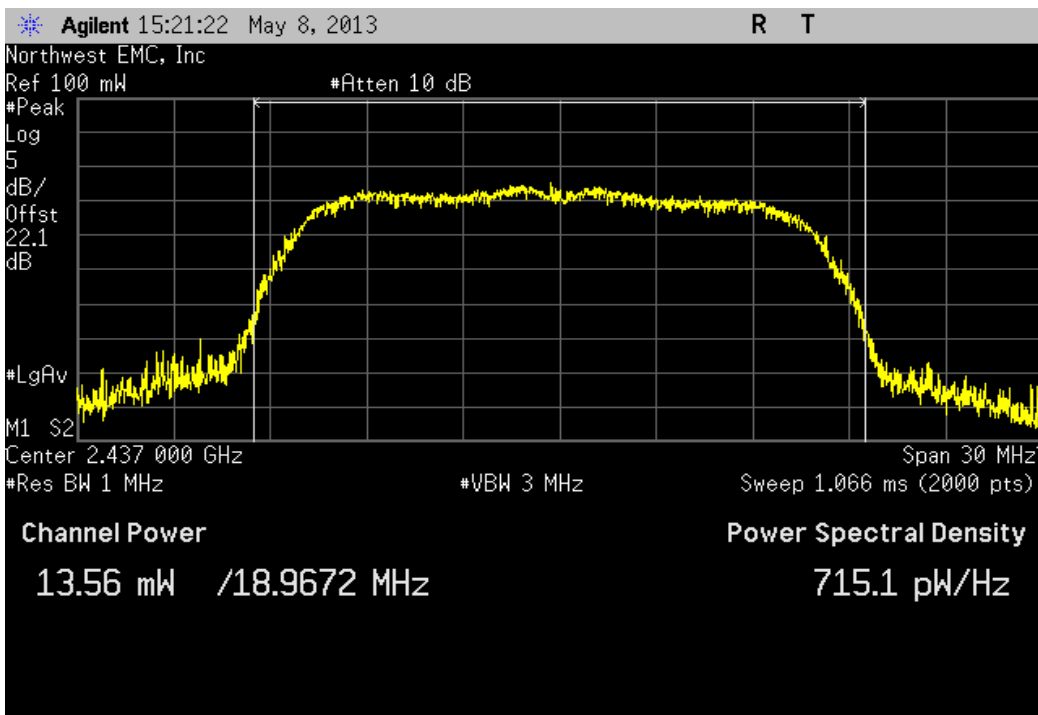
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
10.334 mW	< 1 W	Pass



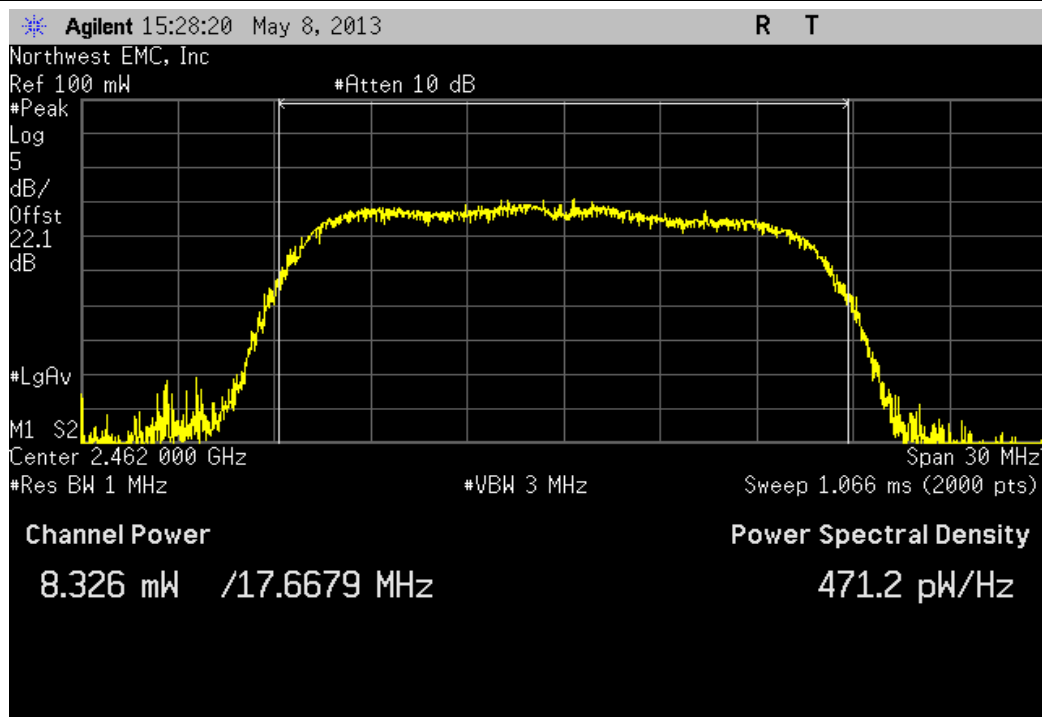
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
13.564 mW	< 1 W	Pass



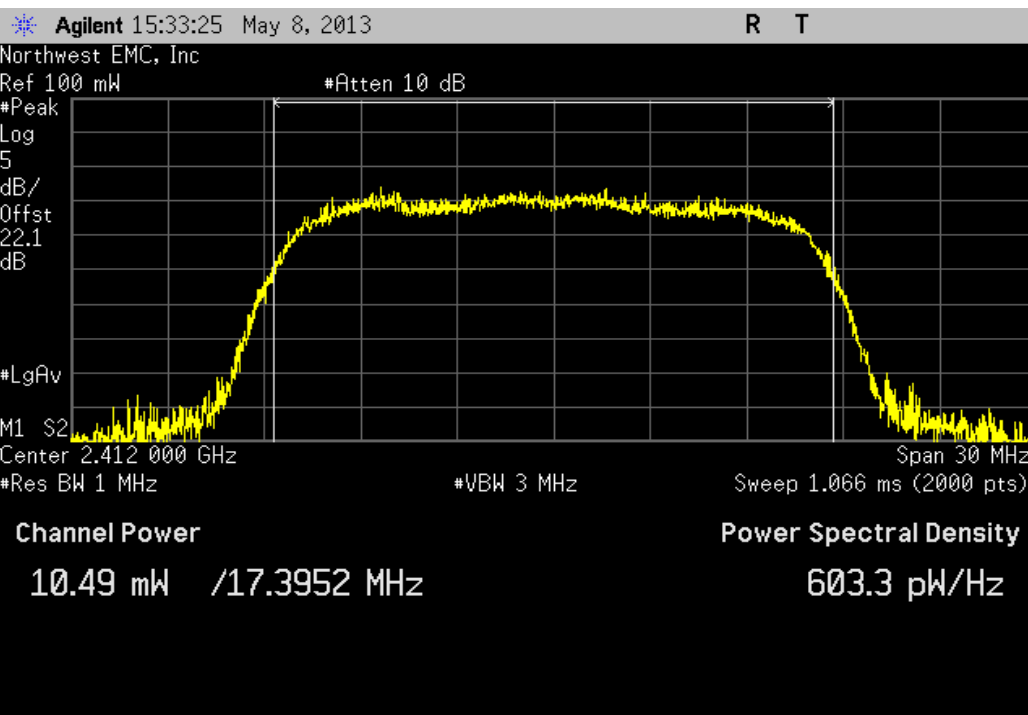
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
8.326 mW	< 1 W	Pass



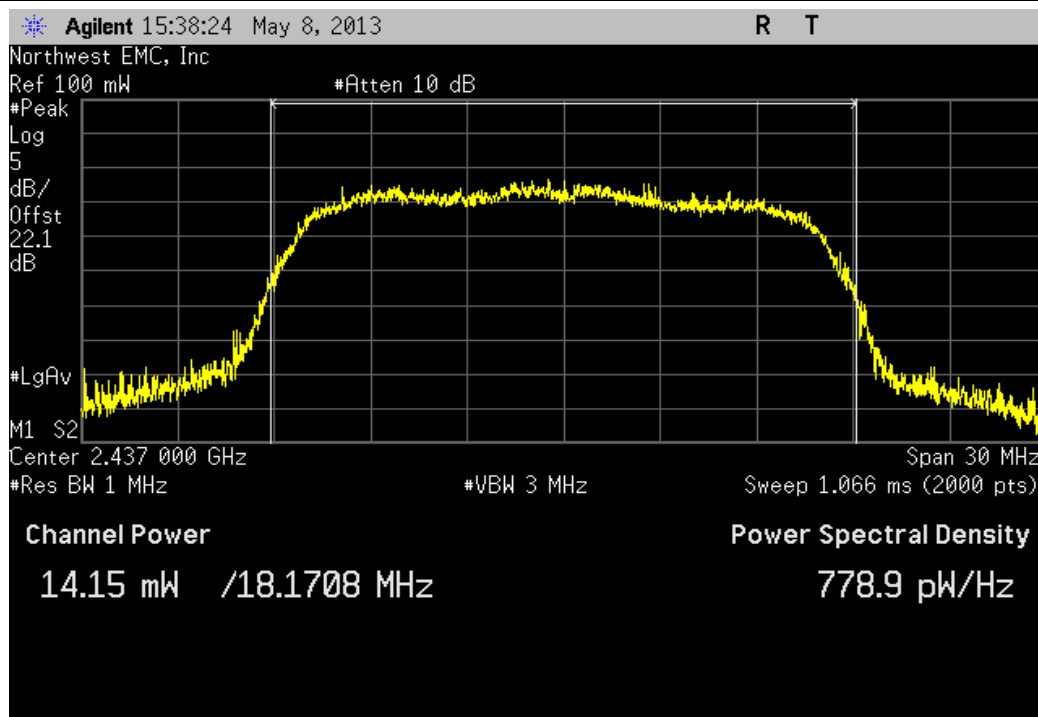
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
10.495 mW	< 1 W	Pass



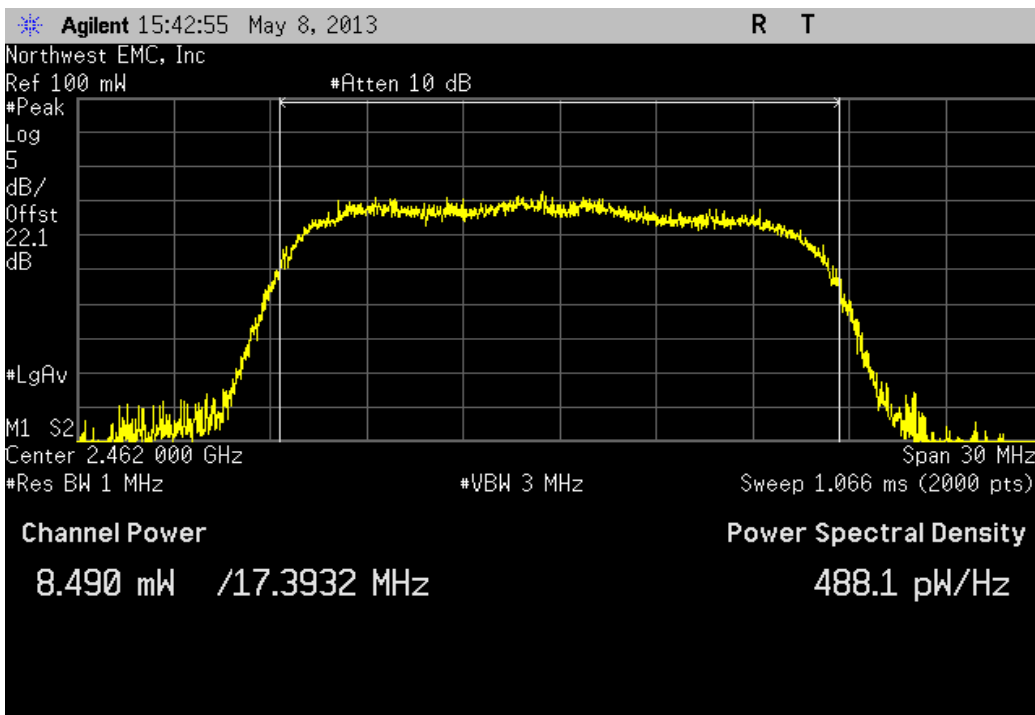
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
14.153 mW	< 1 W	Pass



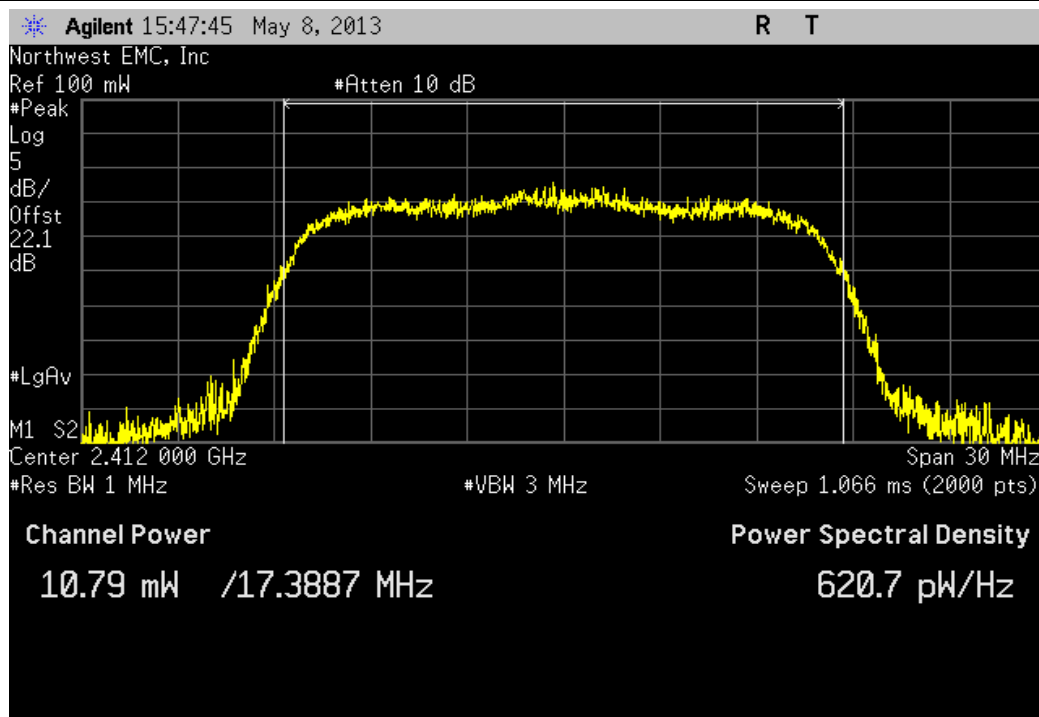
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
8.49 mW	< 1 W	Pass



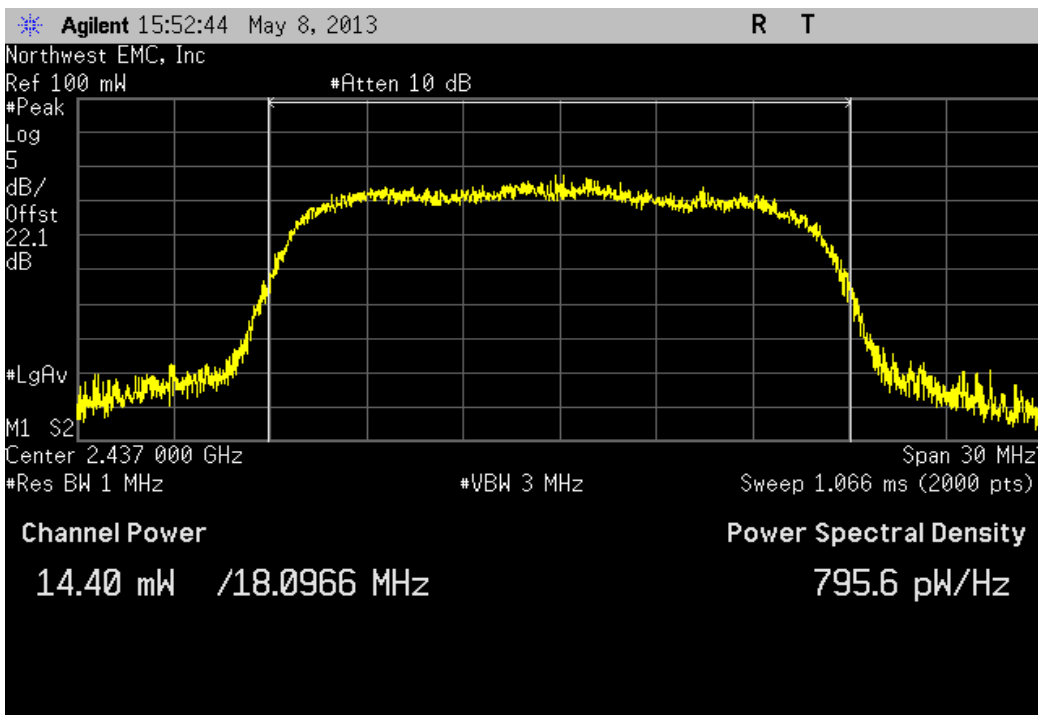
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
10.793 mW	< 1 W	Pass



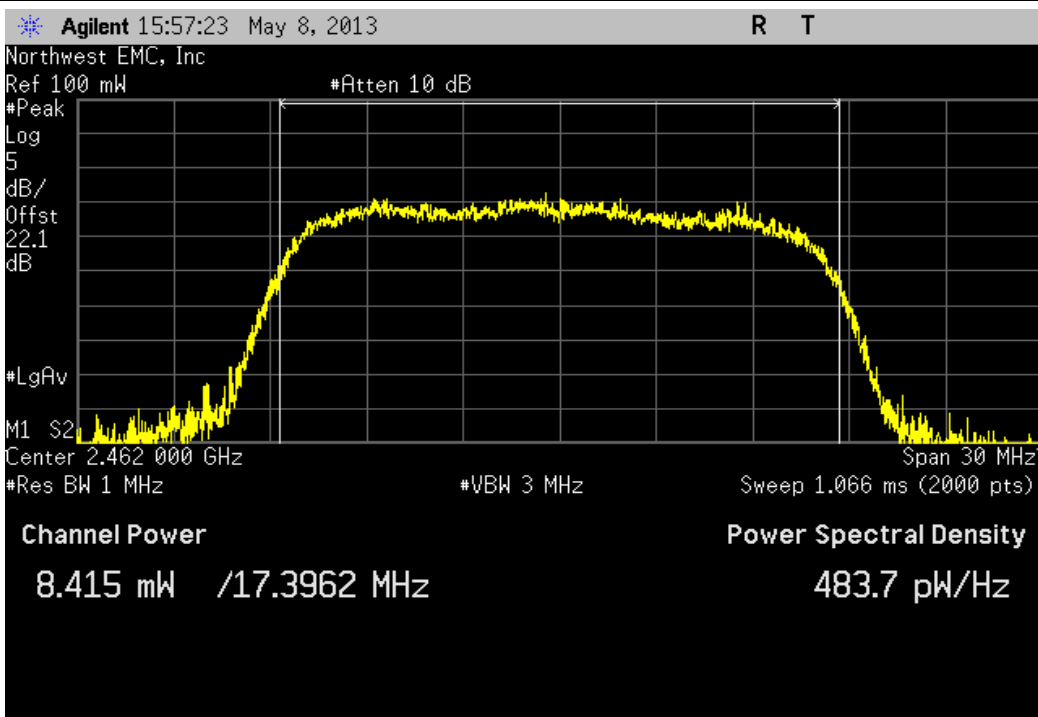
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz

Value	Limit	Result
14.398 mW	< 1 W	Pass



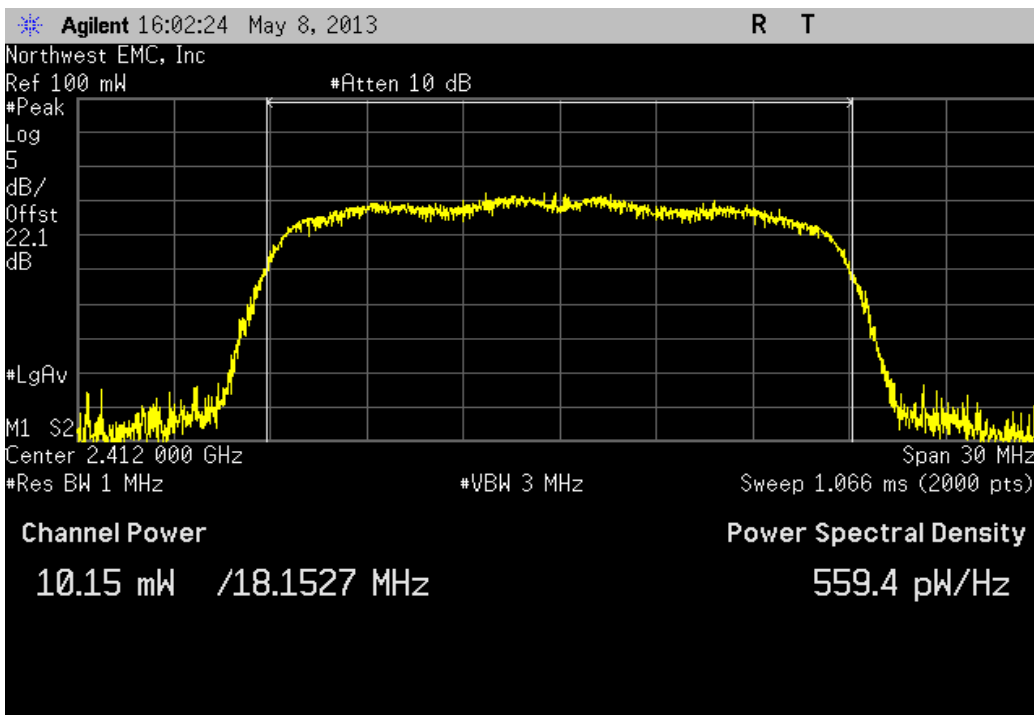
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
8.415 mW	< 1 W	Pass



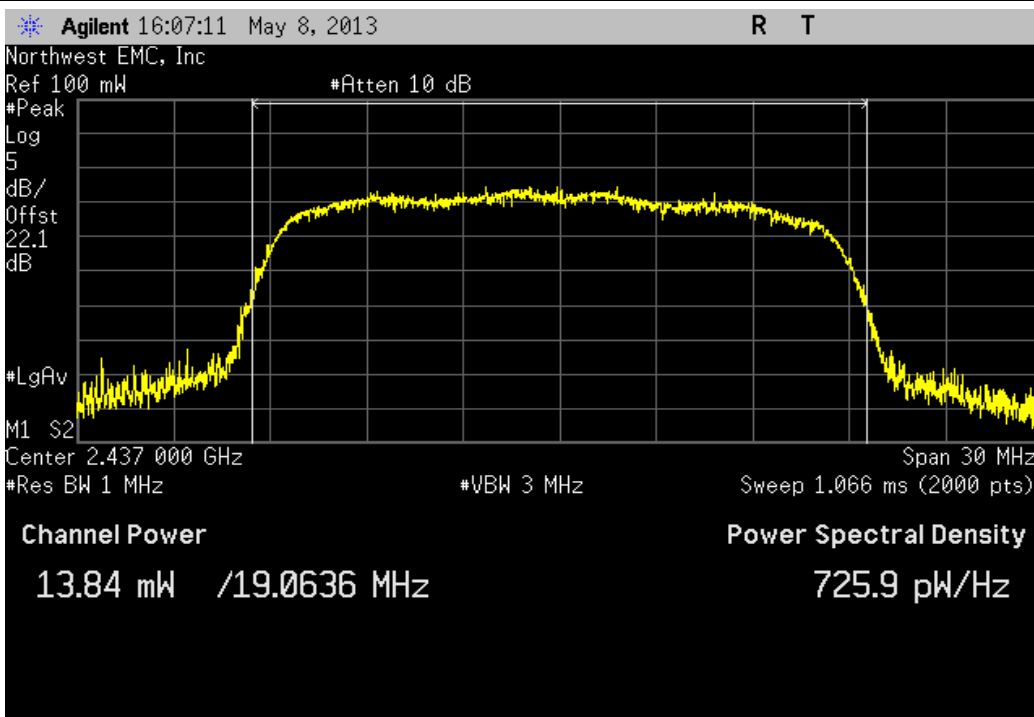
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	Limit	Result
10.155 mW	< 1 W	Pass



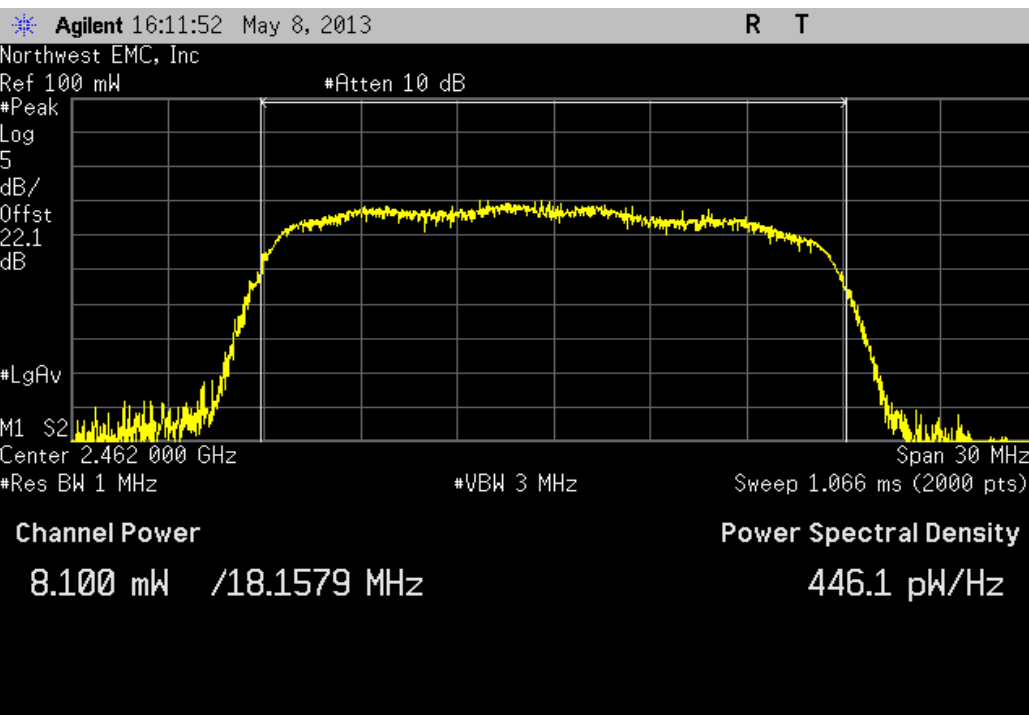
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

Value	Limit	Result
13.838 mW	< 1 W	Pass



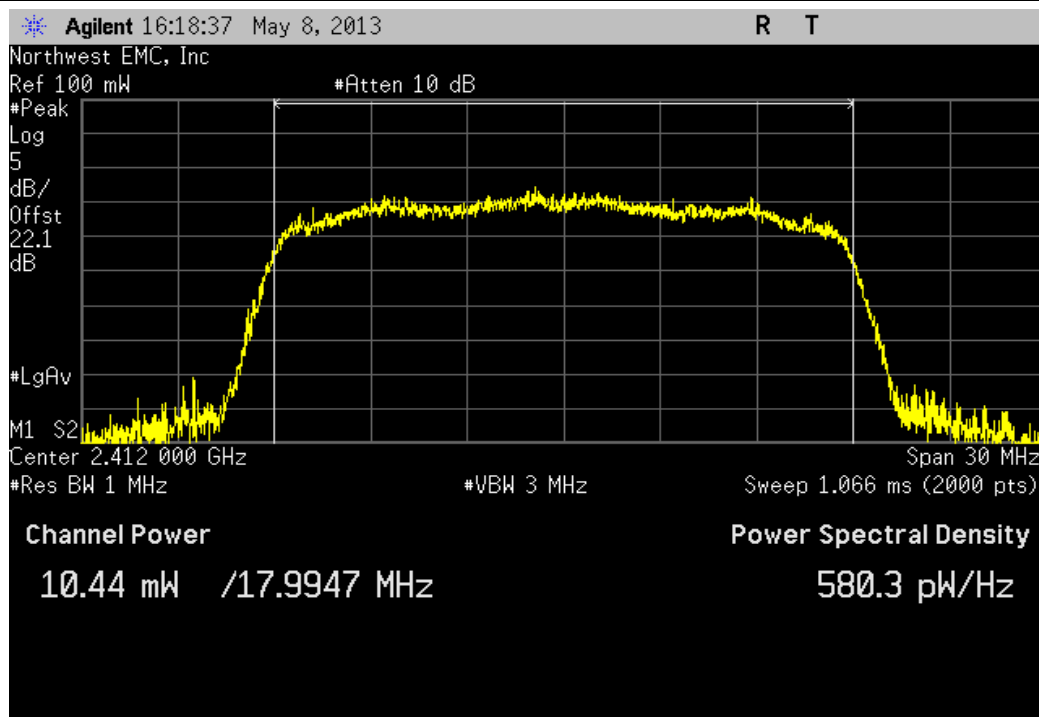
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

Value	Limit	Result
8.1 mW	< 1 W	Pass



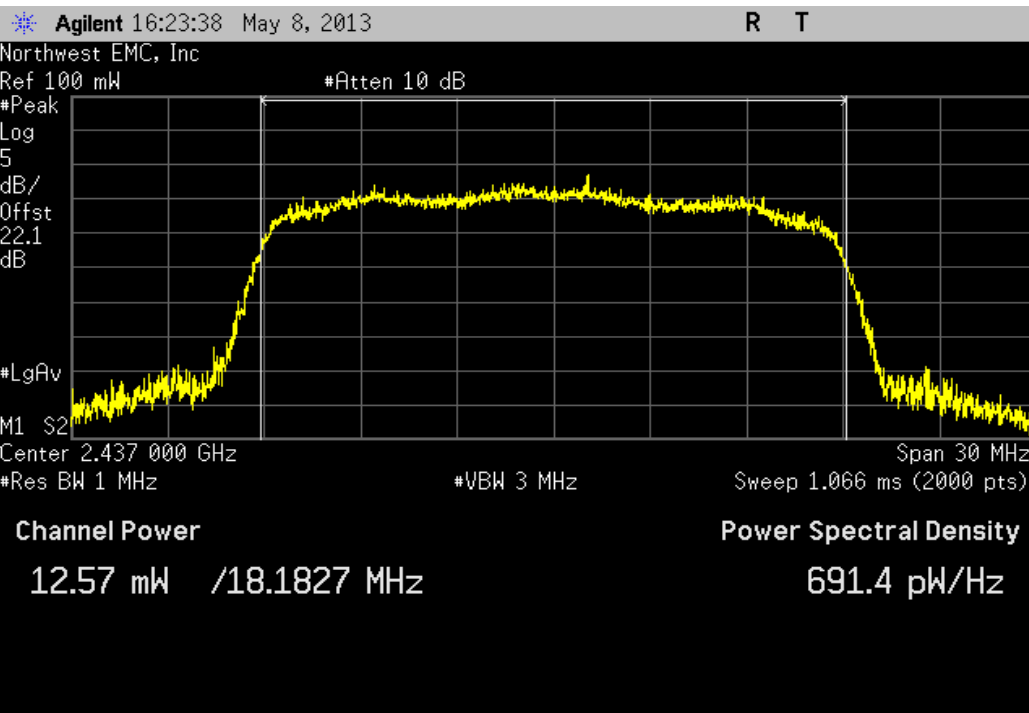
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

Value	Limit	Result
10.442 mW	< 1 W	Pass



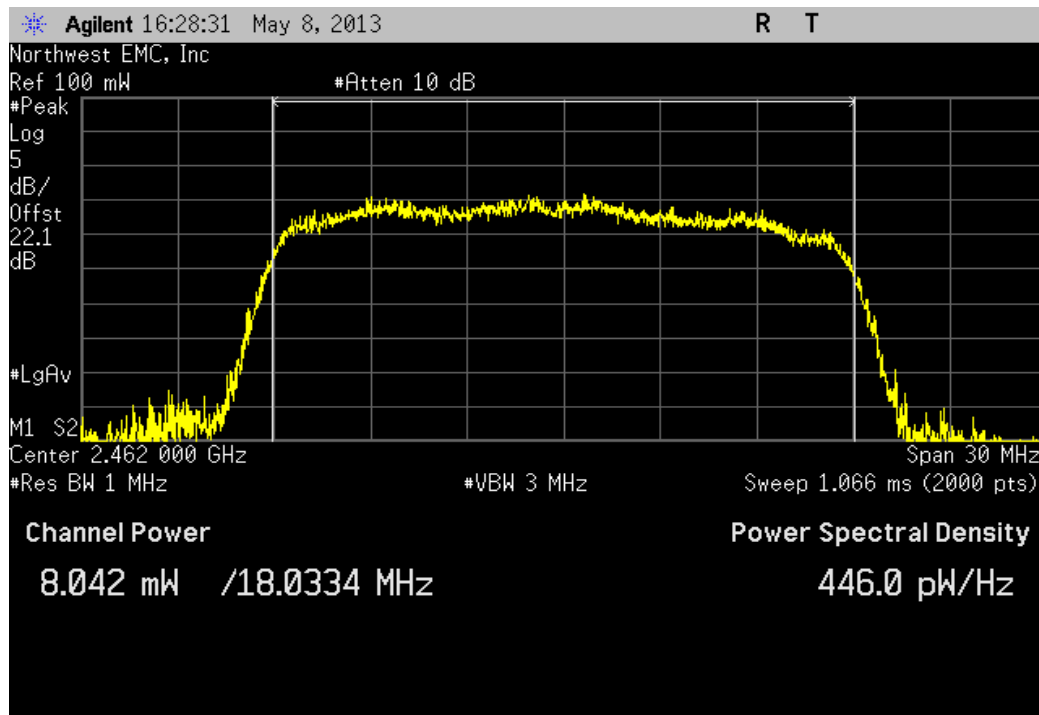
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

Value	Limit	Result
12.571 mW	< 1 W	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value	Limit	Result
8.042 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
40 GHz DC block	Fairview Microwave	SD3379	AMI	10/5/2012	12
Attenuator - 20db, 'SMA'	SM Electronics	SA26B-20	RFW	4/12/2013	12
Signal Generator MXG	Agilent	N5183A	TIK	6/7/2012	36
Spectrum Analyzer	Agilent	E4440A	AAX	5/15/2012	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

XMit 2013.02.28
PsaTx 2013.04.12

EUT: RTH9590WF01	Work Order: HNYW0042
Serial Number: 4174001 0010151	Date: 05/08/13
Customer: Honeywell, Automation and Control Solutions	Temperature: 24.7°C
Attendees: None	Humidity: 38%
Project: None	Barometric Pres.: 1015.3
Tested by: Trevor Buls	Power: 110VAC/60Hz
	Job Site: MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2013	ANSI C63.10:2009

COMMENTS
None

DEVIATIONS FROM TEST STANDARD
None

Configuration #	3	Signature <i>Trevor Buls</i>
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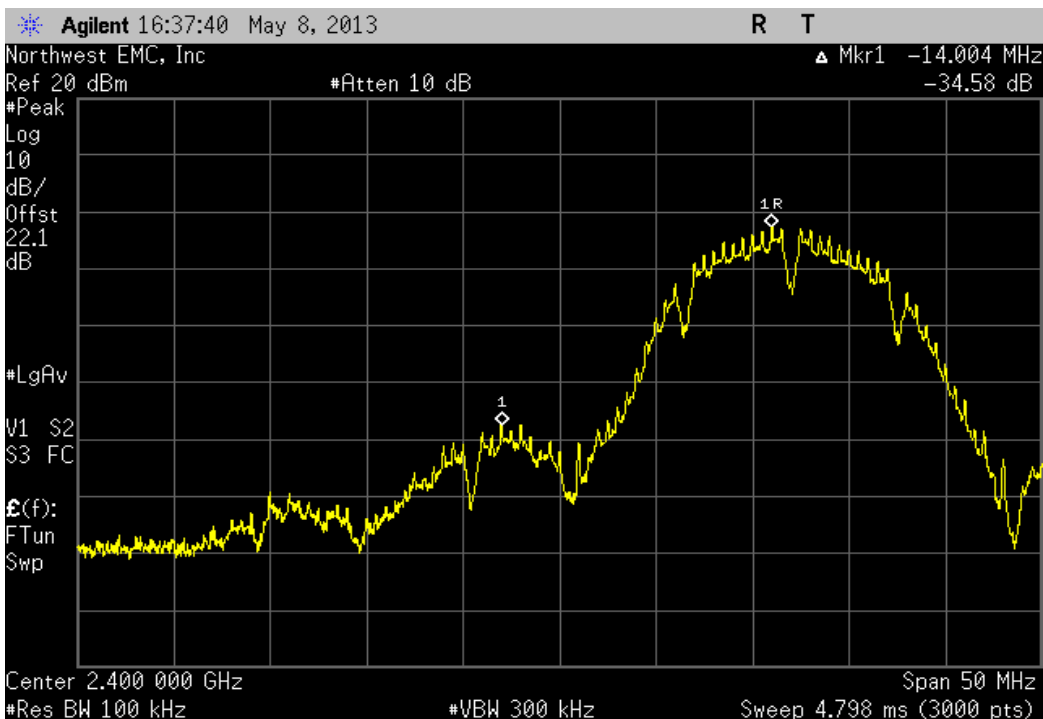
	Value	Limit	Result
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Antenna 0	2400 MHz - 2483.5 MHz Band			
	802.11(b) 1 Mbps			
	Low Channel 1, 2412 MHz	-34.58 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-49.93 dBc	≤ -20 dBc	Pass
	802.11(b) 11 Mbps			
	Low Channel 1, 2412 MHz	-36.52 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-51.36 dBc	≤ -20 dBc	Pass
	802.11(g) 6 Mbps			
	Low Channel 1, 2412 MHz	-34.97 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-45.07 dBc	≤ -20 dBc	Pass
	802.11(g) 36 Mbps			
	Low Channel 1, 2412 MHz	-33.25 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-45.16 dBc	≤ -20 dBc	Pass
	802.11(g) 54 Mbps			
	Low Channel 1, 2412 MHz	-36.52 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-44.46 dBc	≤ -20 dBc	Pass
	802.11(n) MCS0			
	Low Channel 1, 2412 MHz	-35.95 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-42.75 dBc	≤ -20 dBc	Pass
	802.11(n) MCS7			
	Low Channel 1, 2412 MHz	-36.81 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-43.3 dBc	≤ -20 dBc	Pass

Antenna 1	2400 MHz - 2483.5 MHz Band			
	802.11(b) 1 Mbps			
	Low Channel 1, 2412 MHz	-37.46 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-57.59 dBc	≤ -20 dBc	Pass
	802.11(b) 11 Mbps			
	Low Channel 1, 2412 MHz	-37.69 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-57.75 dBc	≤ -20 dBc	Pass
	802.11(g) 6 Mbps			
	Low Channel 1, 2412 MHz	-36.42 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-46.21 dBc	≤ -20 dBc	Pass
	802.11(g) 36 Mbps			
	Low Channel 1, 2412 MHz	-37.83 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-46.48 dBc	≤ -20 dBc	Pass
	802.11(g) 54 Mbps			
	Low Channel 1, 2412 MHz	-36.57 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-47.44 dBc	≤ -20 dBc	Pass
	802.11(n) MCS0			
	Low Channel 1, 2412 MHz	-35.94 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-46.73 dBc	≤ -20 dBc	Pass
	802.11(n) MCS7			
	Low Channel 1, 2412 MHz	-36.94 dBc	≤ -20 dBc	Pass
	High Channel 11, 2462 MHz	-46.98 dBc	≤ -20 dBc	Pass

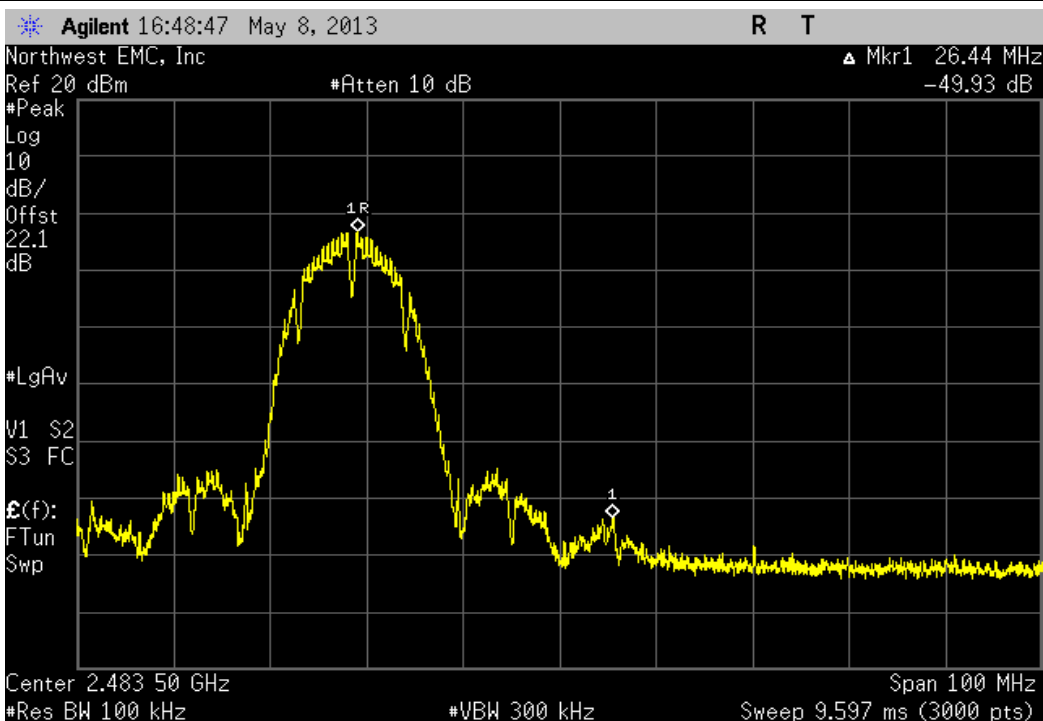
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-34.58 dBc	≤ -20 dBc	Pass



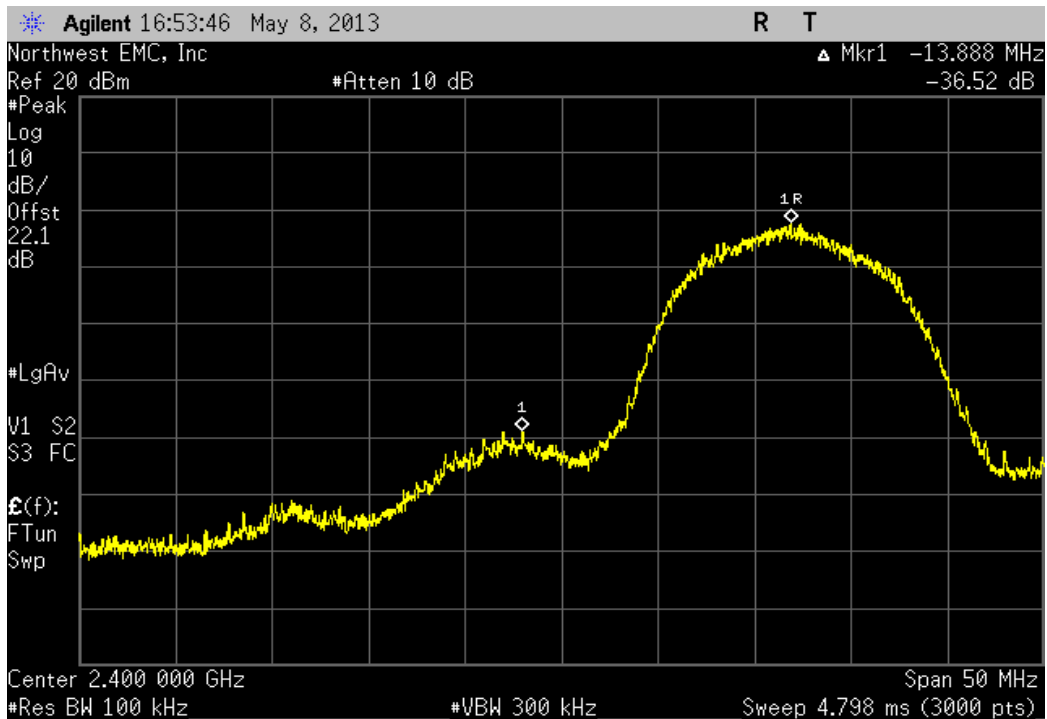
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-49.93 dBc	≤ -20 dBc	Pass



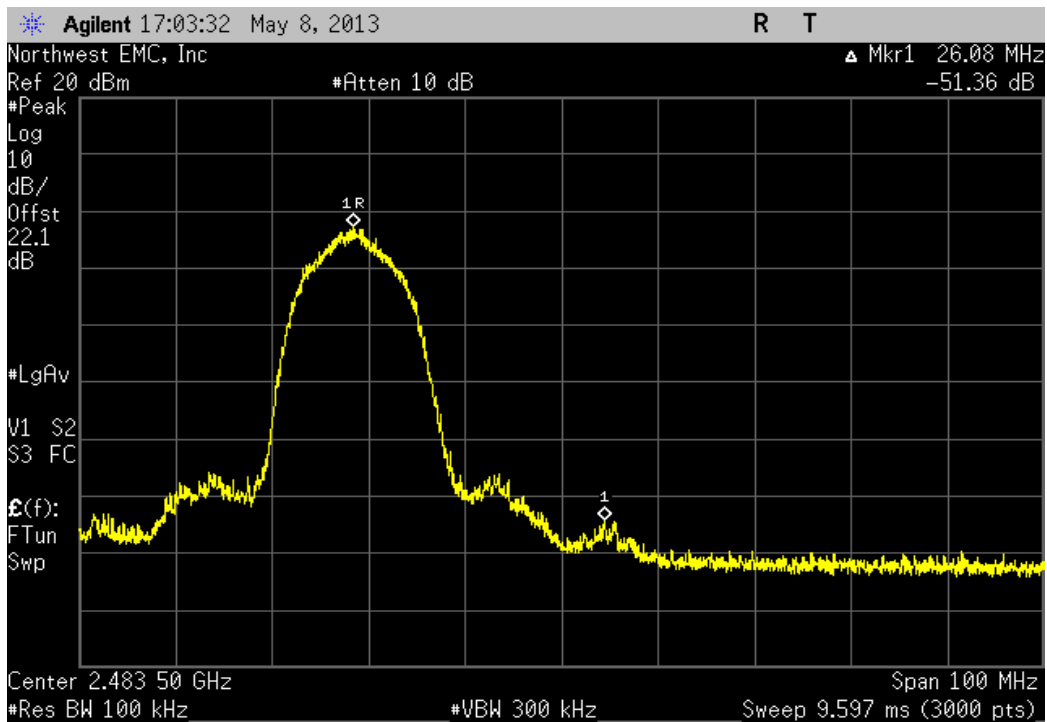
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-36.52 dBc	≤ -20 dBc	Pass



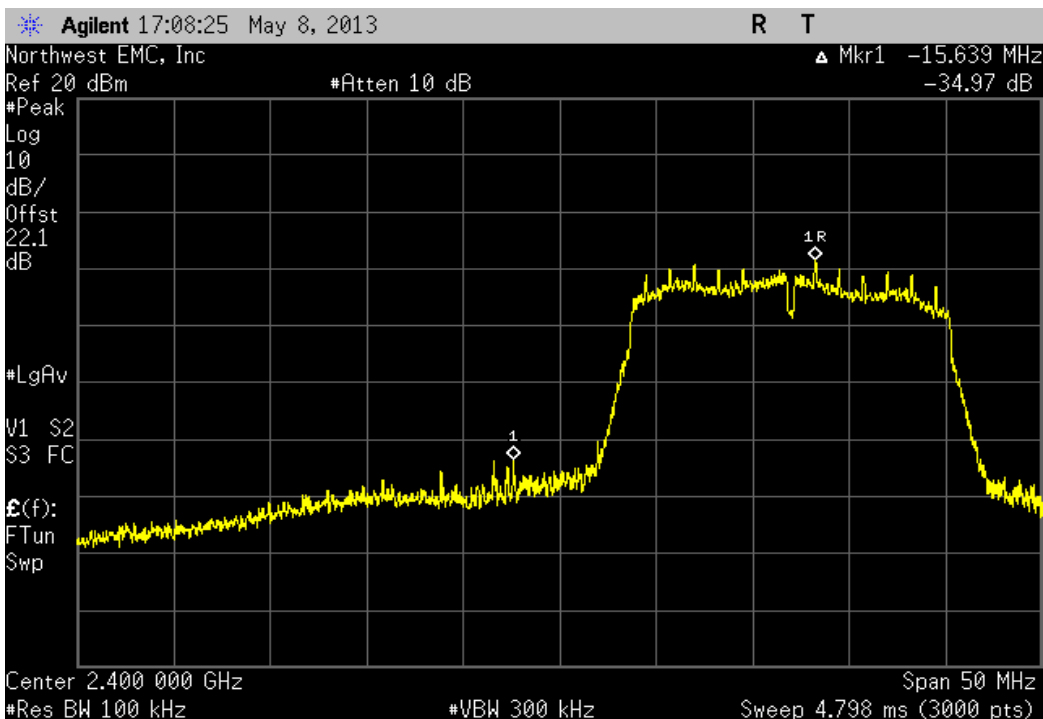
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-51.36 dBc	≤ -20 dBc	Pass



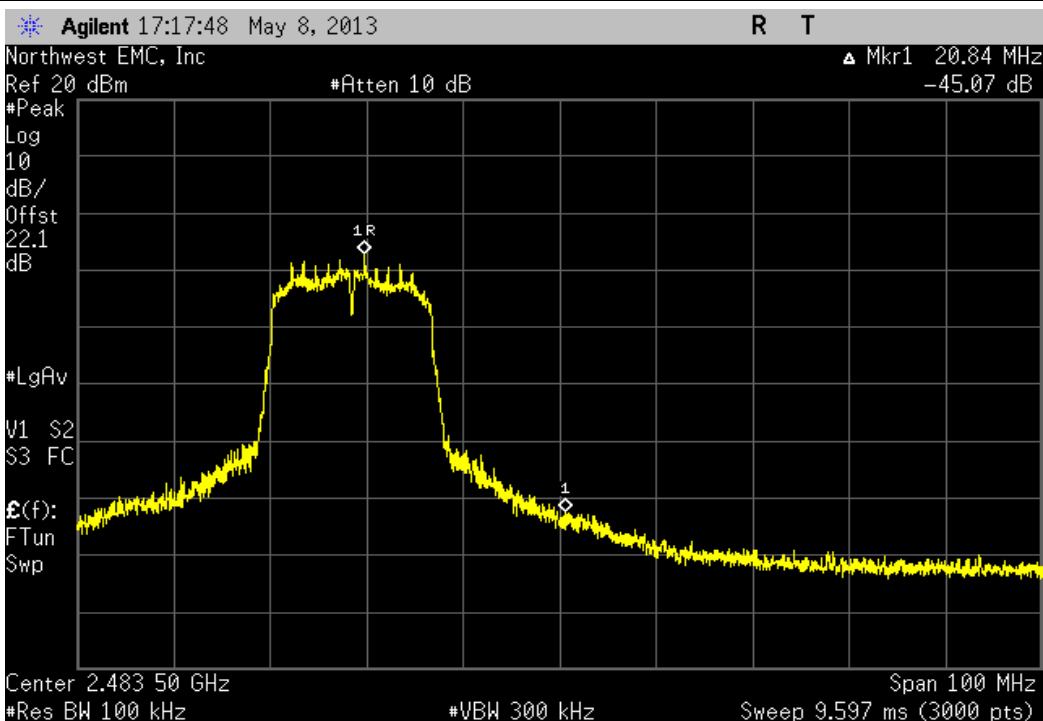
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-34.97 dBc	≤ -20 dBc	Pass



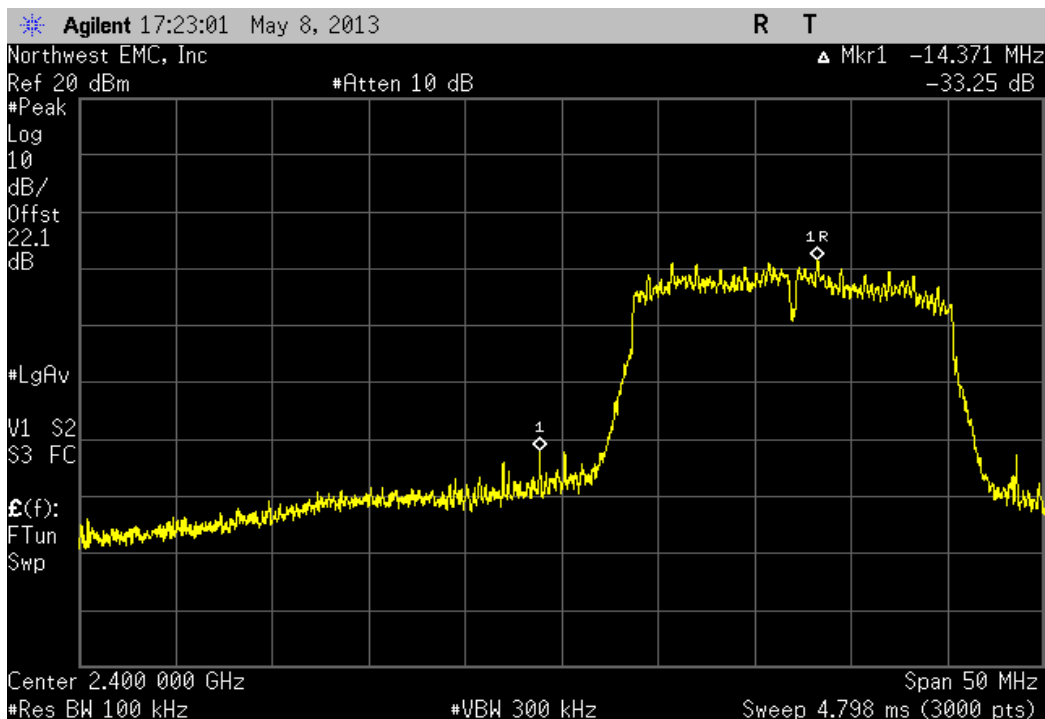
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-45.07 dBc	≤ -20 dBc	Pass



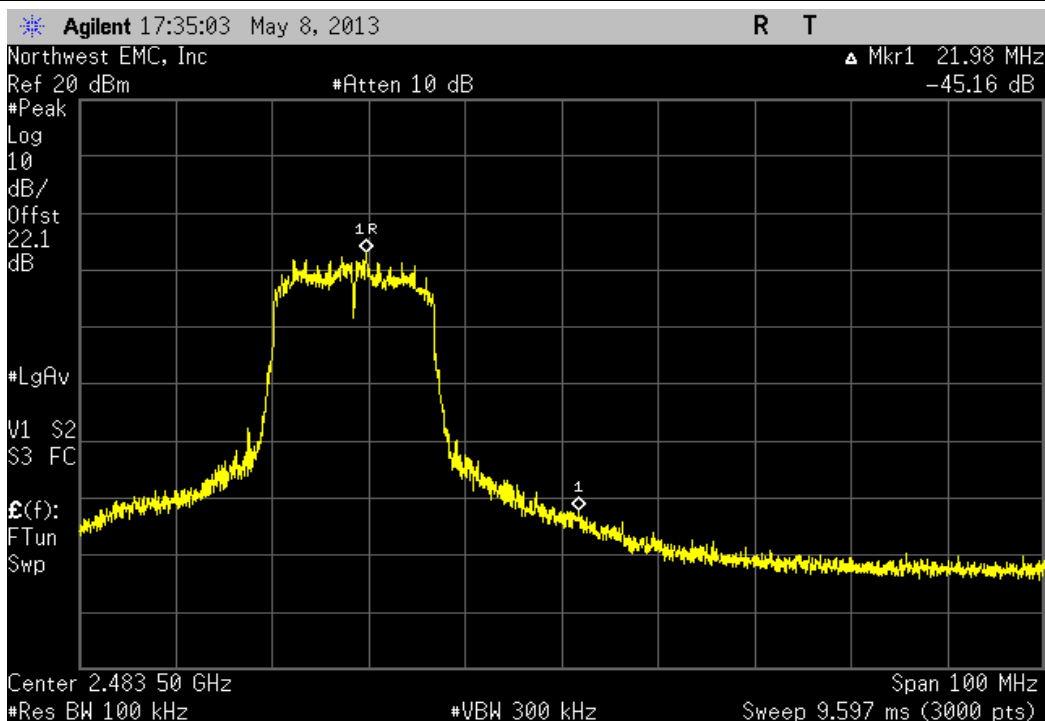
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-33.25 dBc	≤ -20 dBc	Pass



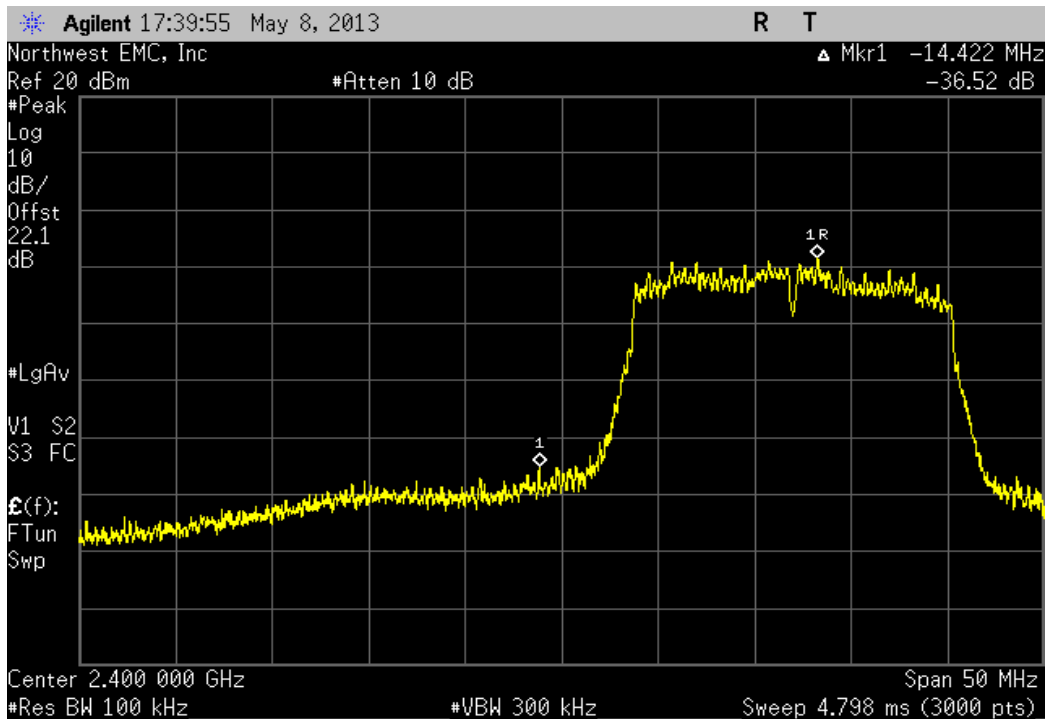
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-45.16 dBc	≤ -20 dBc	Pass



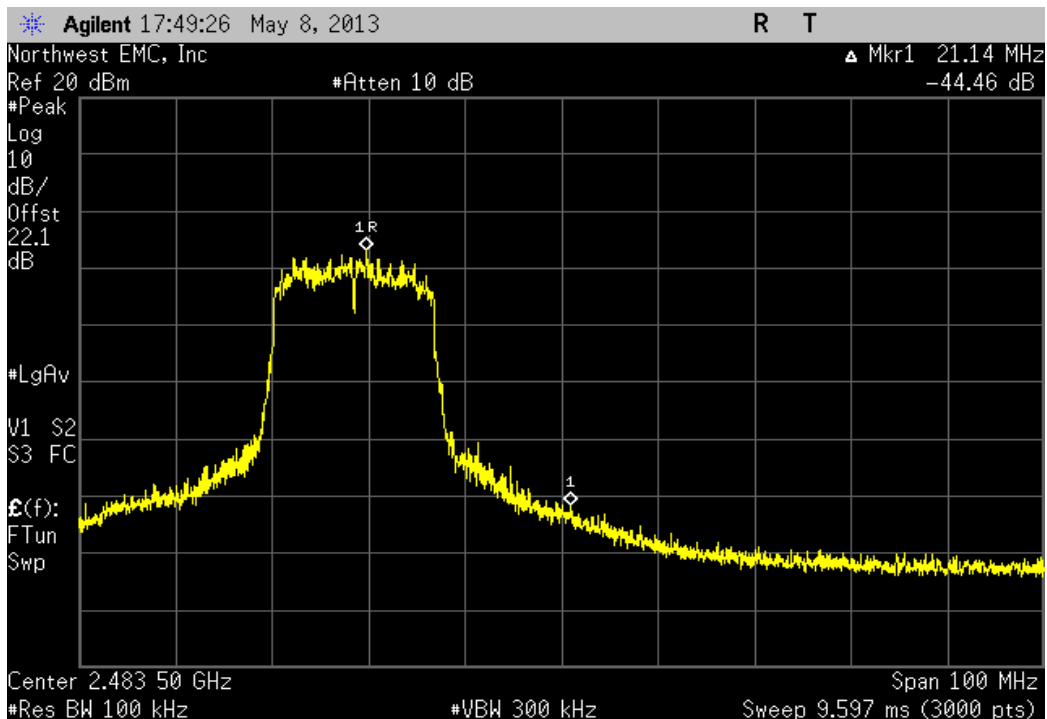
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-36.52 dBc	≤ -20 dBc	Pass



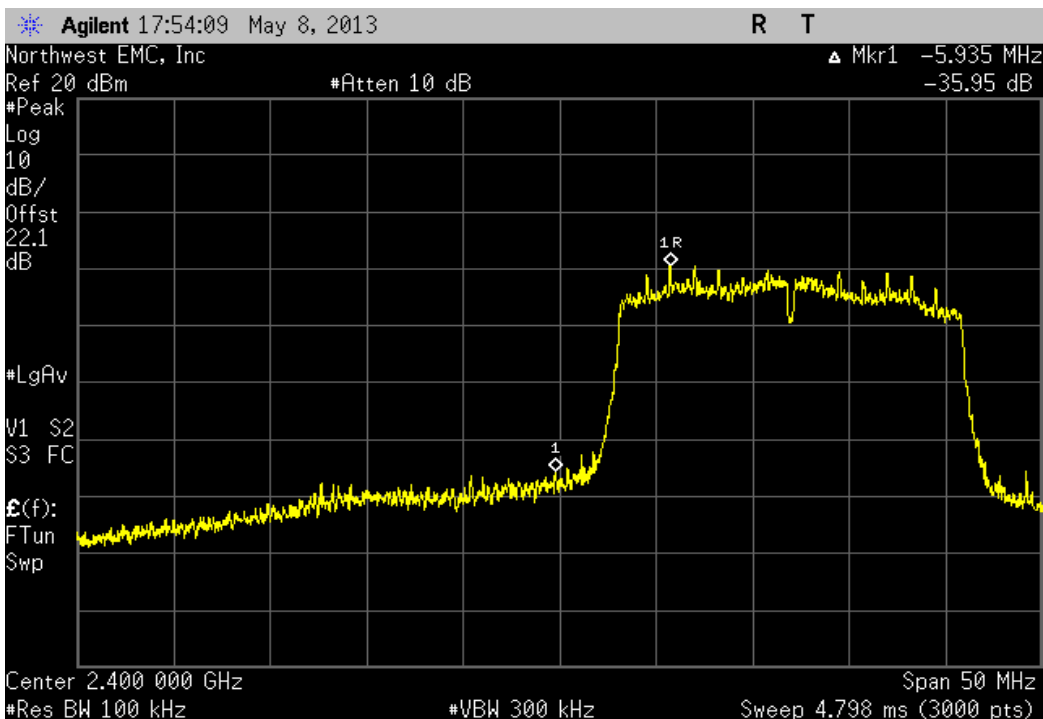
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-44.46 dBc	≤ -20 dBc	Pass



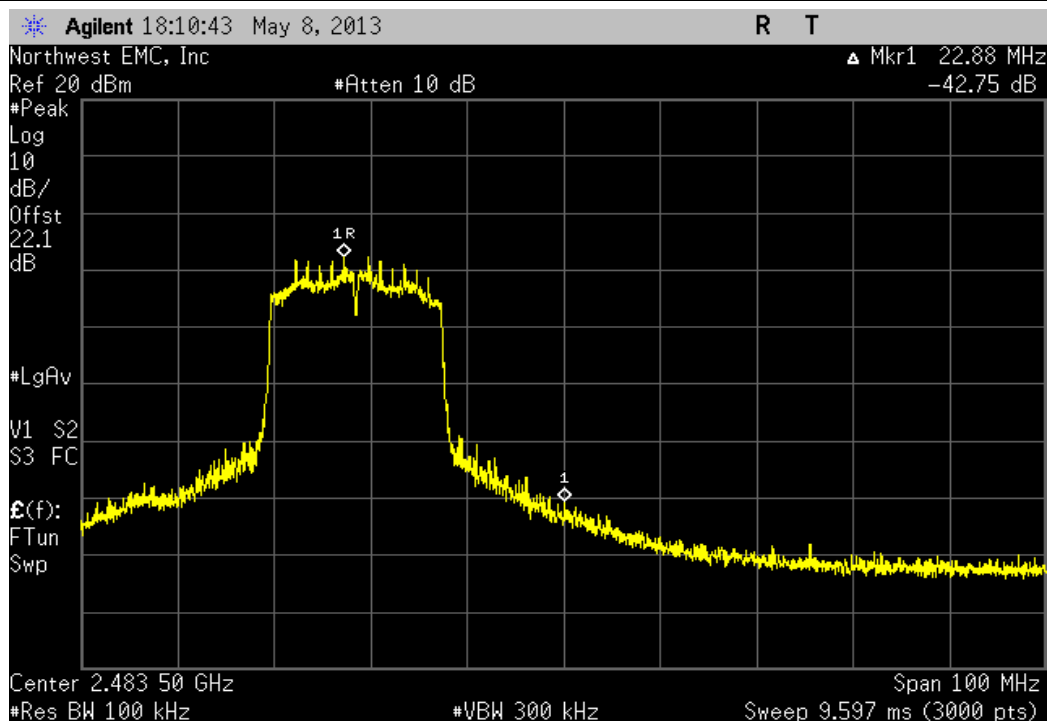
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	Limit	Result
-35.95 dBc	≤ -20 dBc	Pass



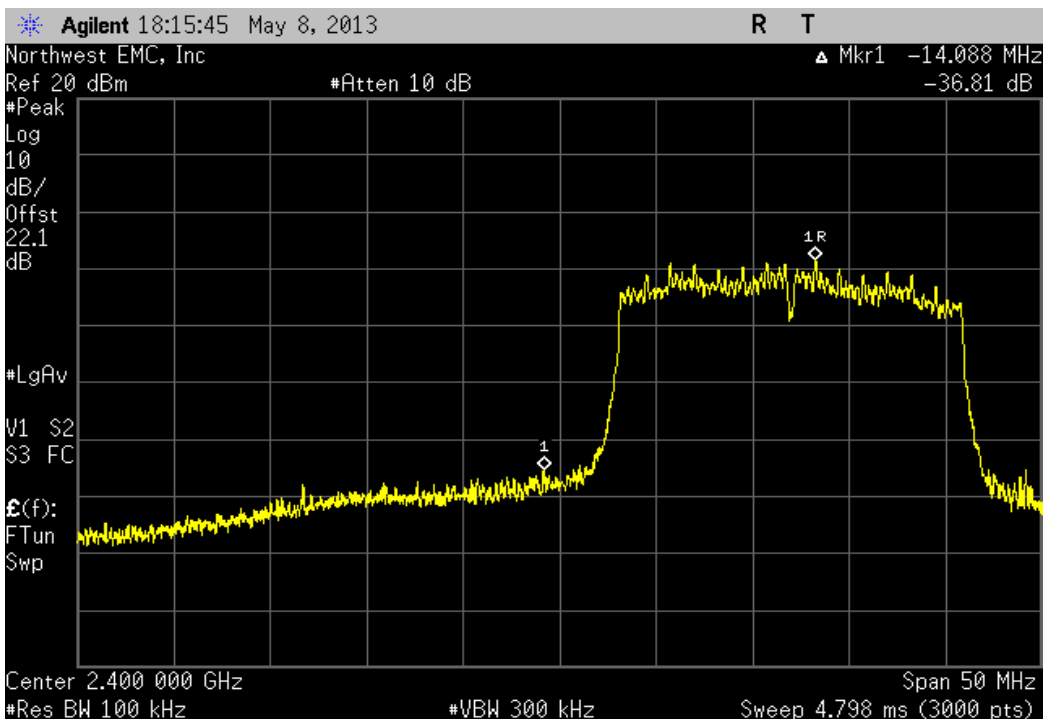
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

Value	Limit	Result
-42.75 dBc	≤ -20 dBc	Pass



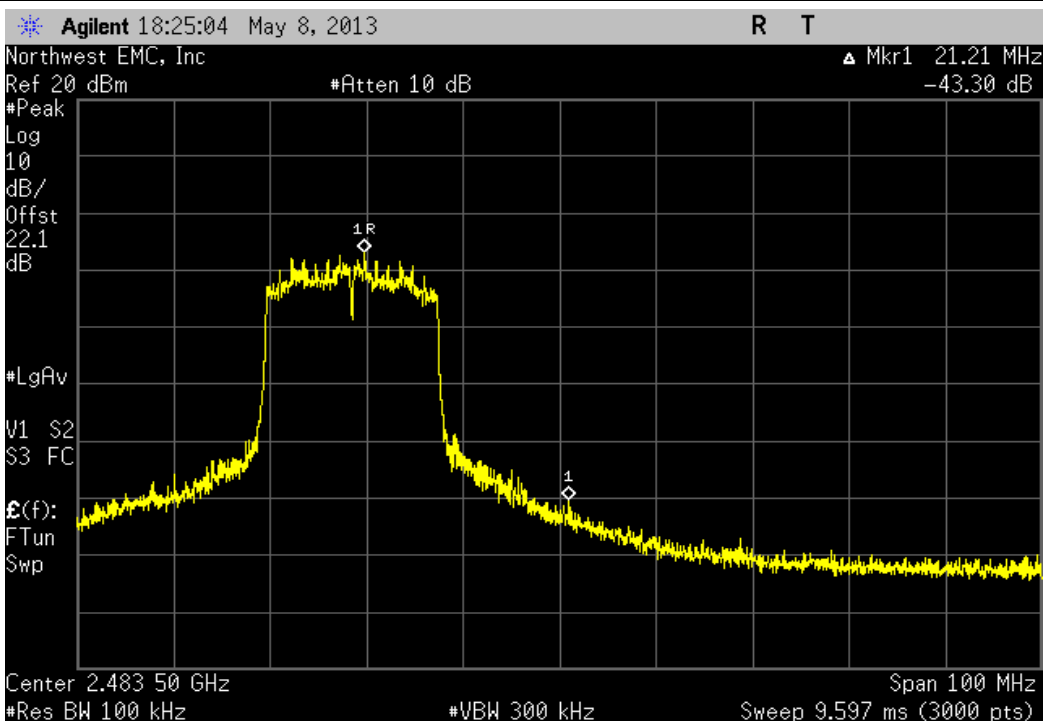
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

Value	Limit	Result
-36.81 dBc	≤ -20 dBc	Pass



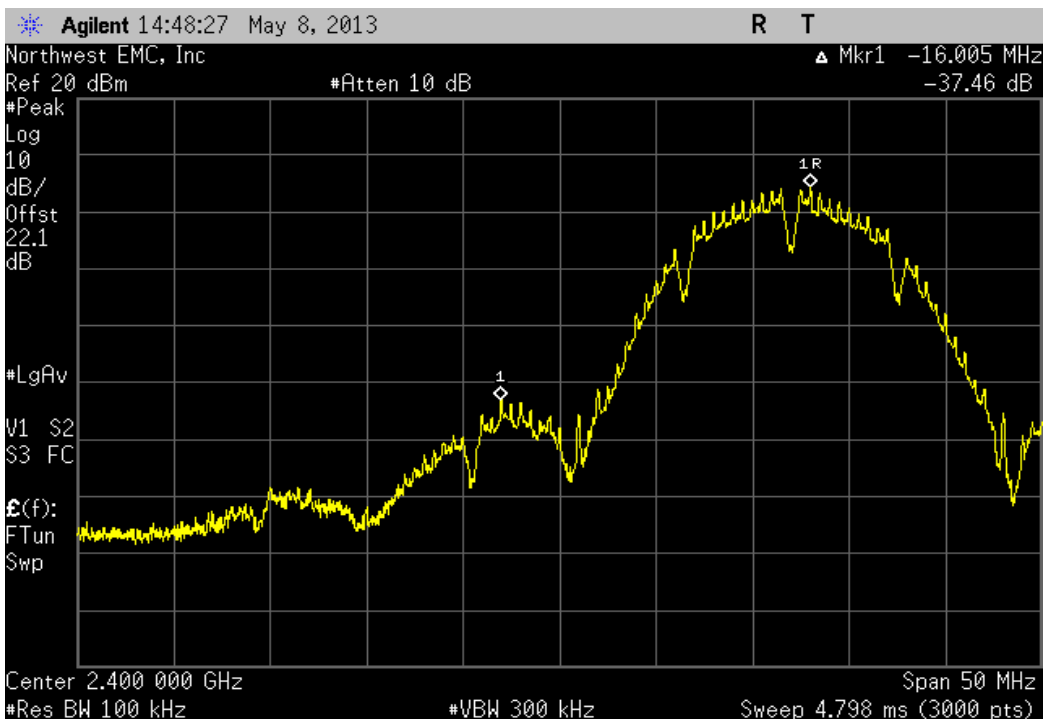
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value	Limit	Result
-43.3 dBc	≤ -20 dBc	Pass



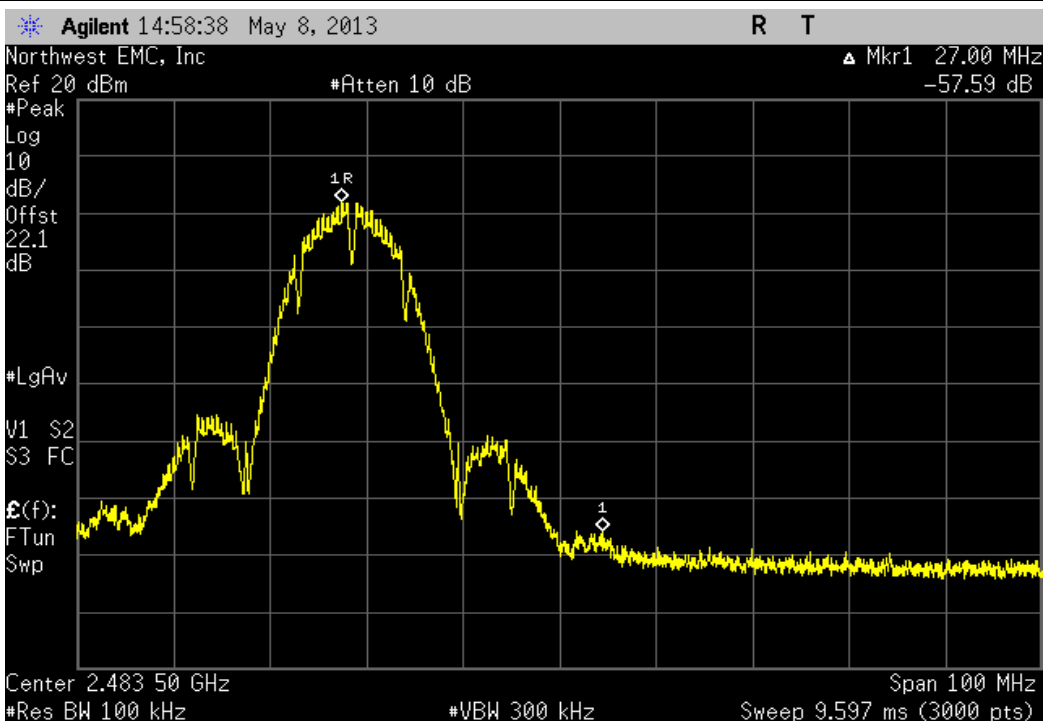
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-37.46 dBc	≤ -20 dBc	Pass



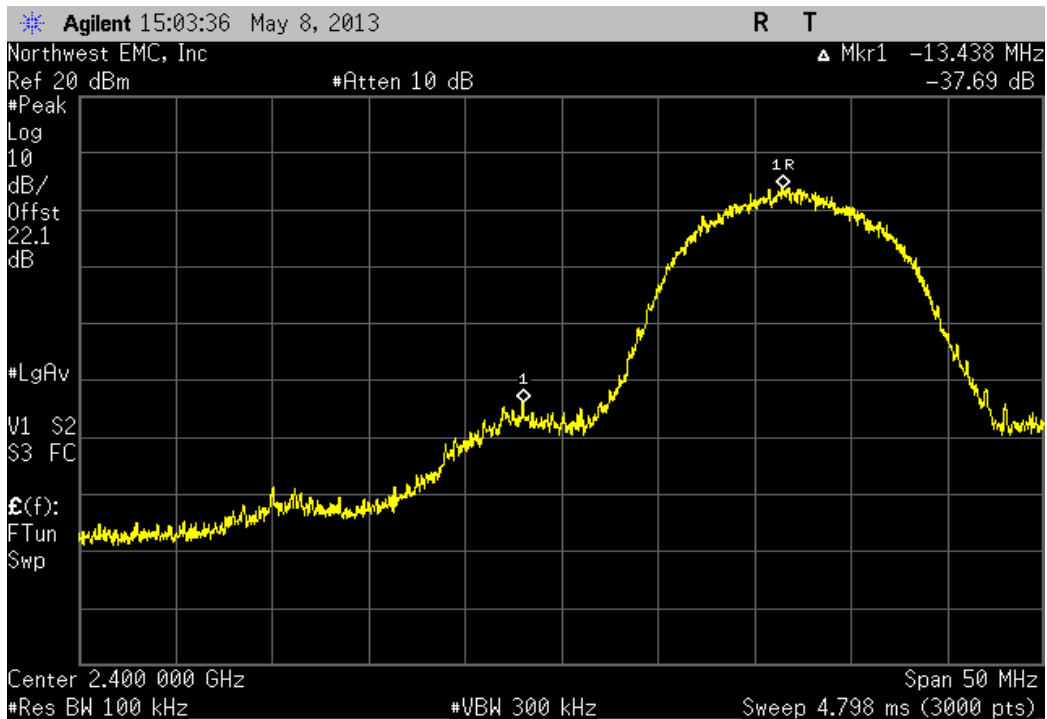
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-57.59 dBc	≤ -20 dBc	Pass



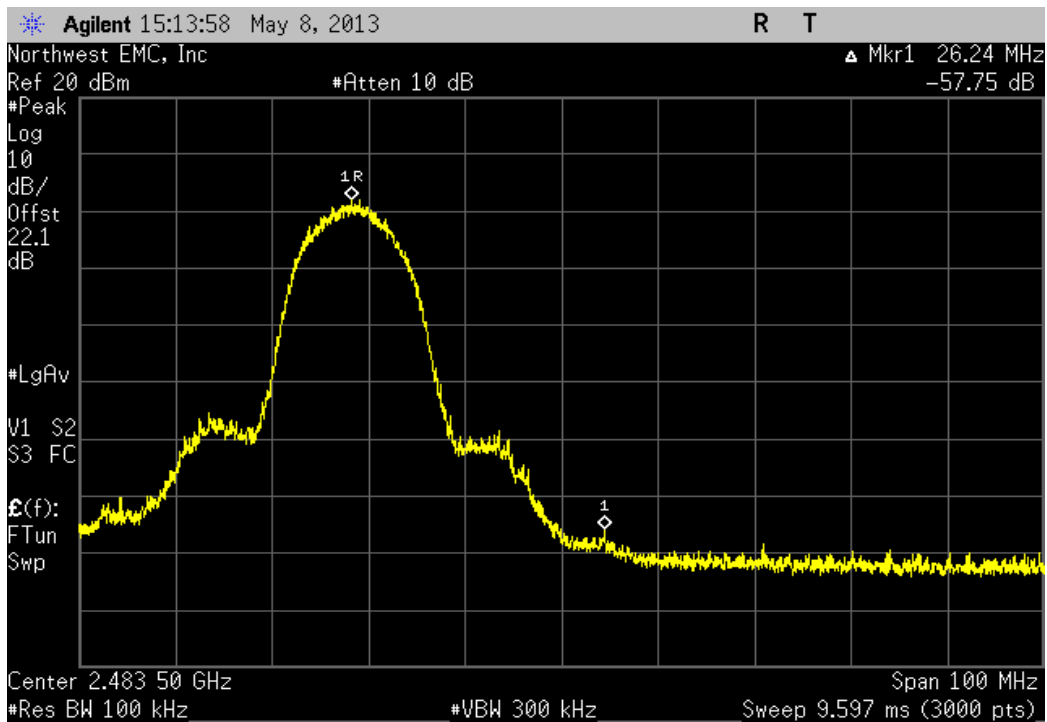
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-37.69 dBc	≤ -20 dBc	Pass



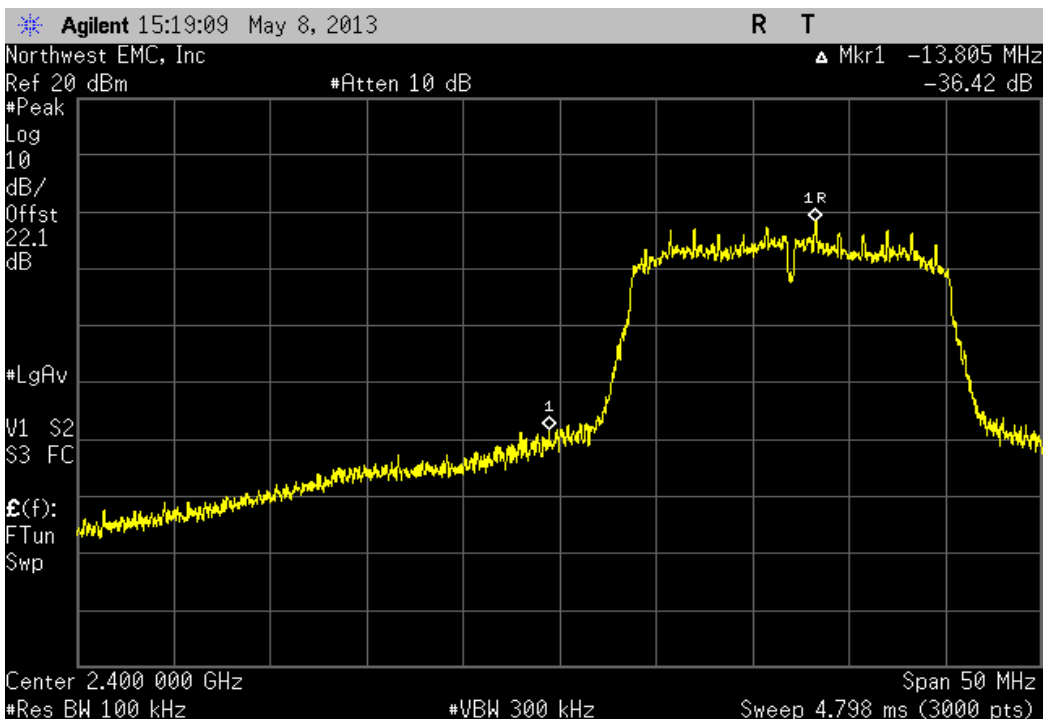
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-57.75 dBc	≤ -20 dBc	Pass



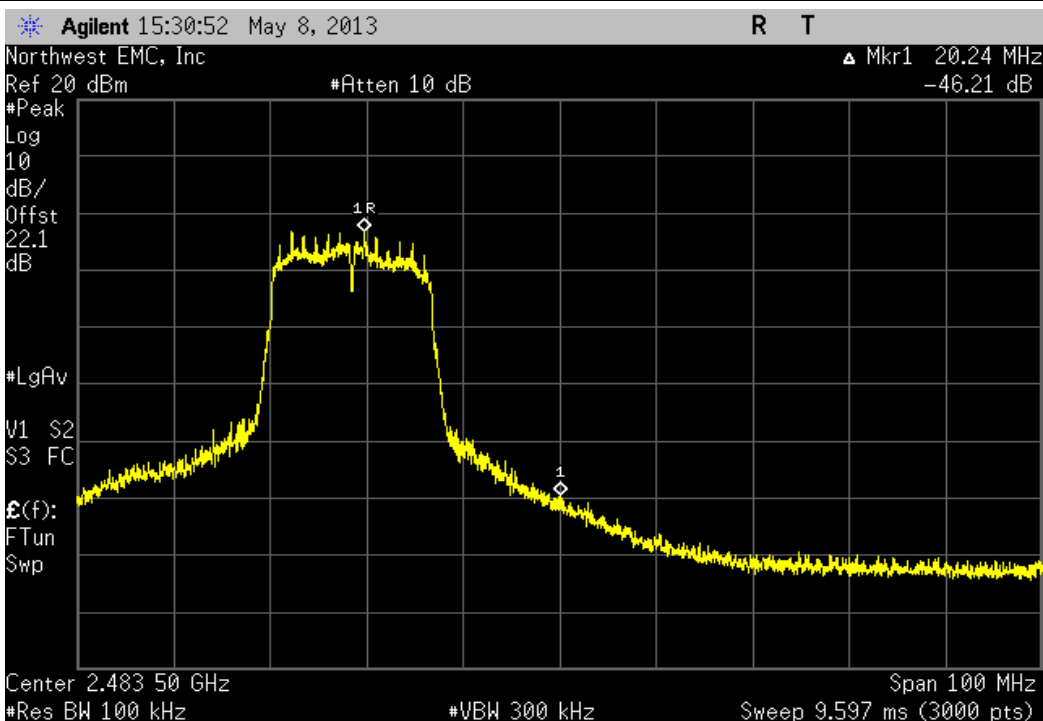
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-36.42 dBc	≤ -20 dBc	Pass



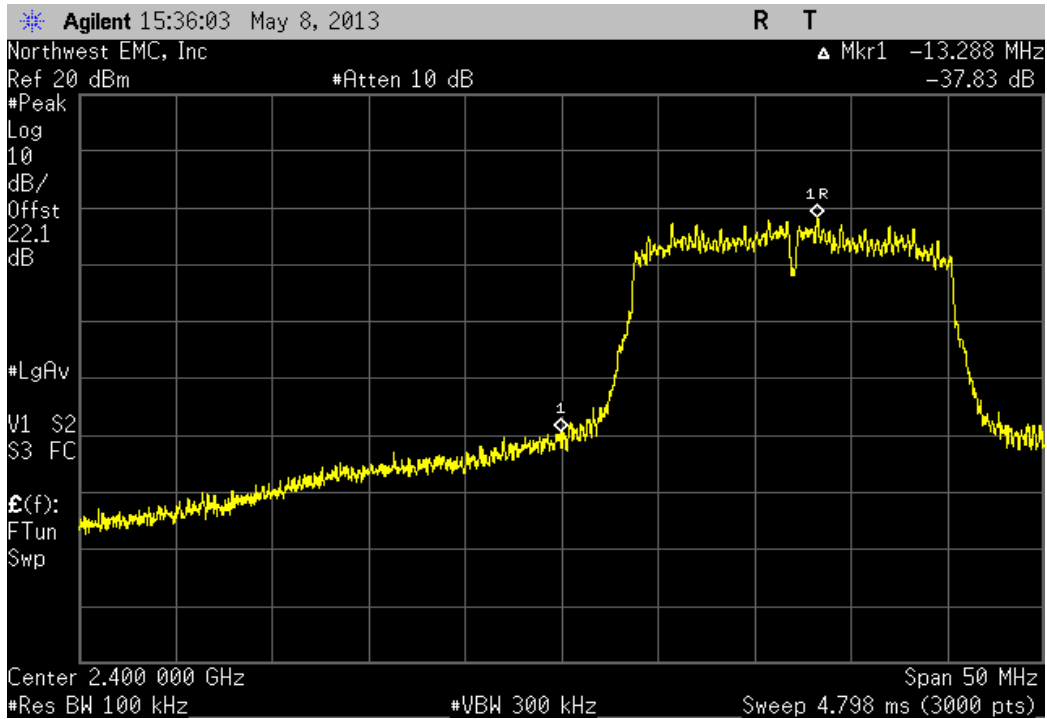
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-46.21 dBc	≤ -20 dBc	Pass



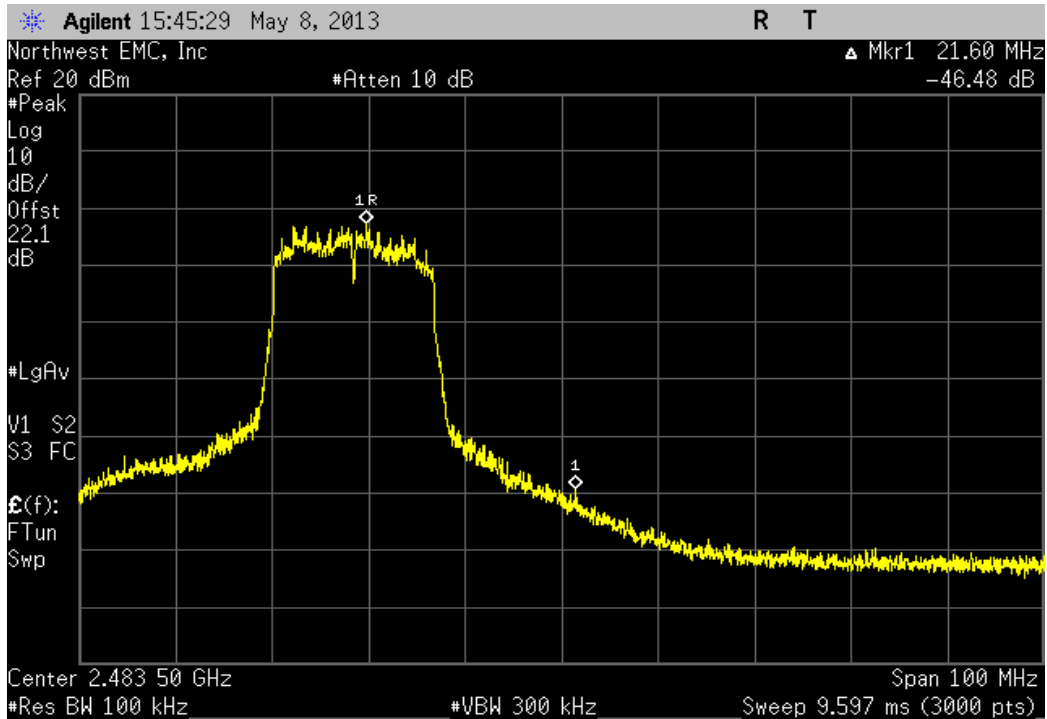
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-37.83 dBc	≤ -20 dBc	Pass



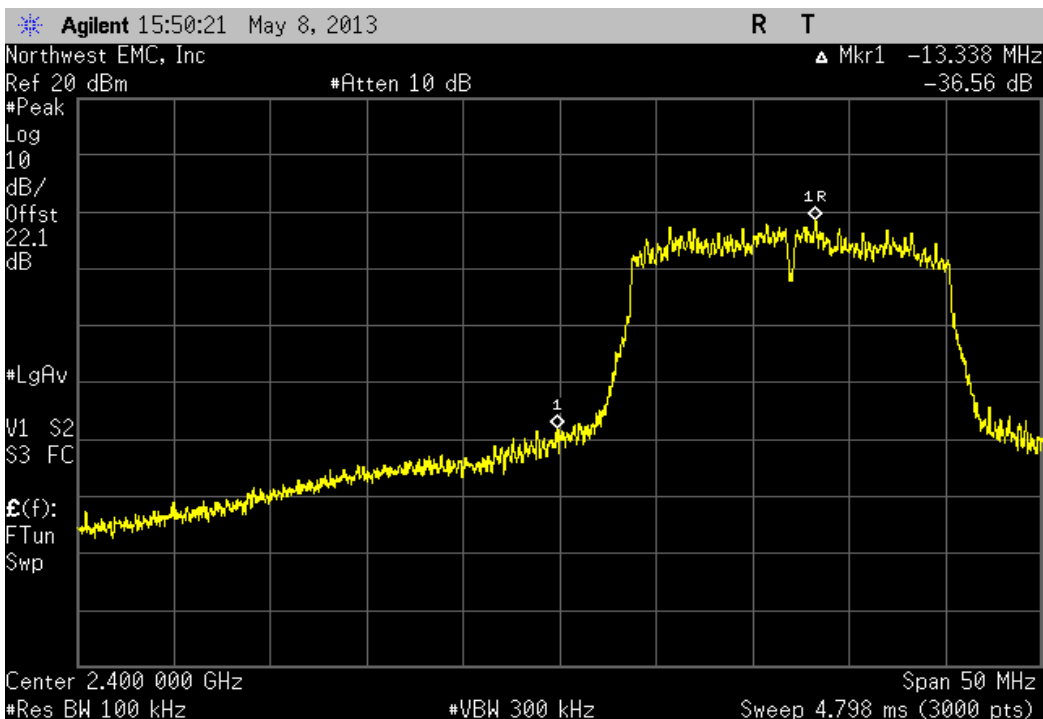
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-46.48 dBc	≤ -20 dBc	Pass



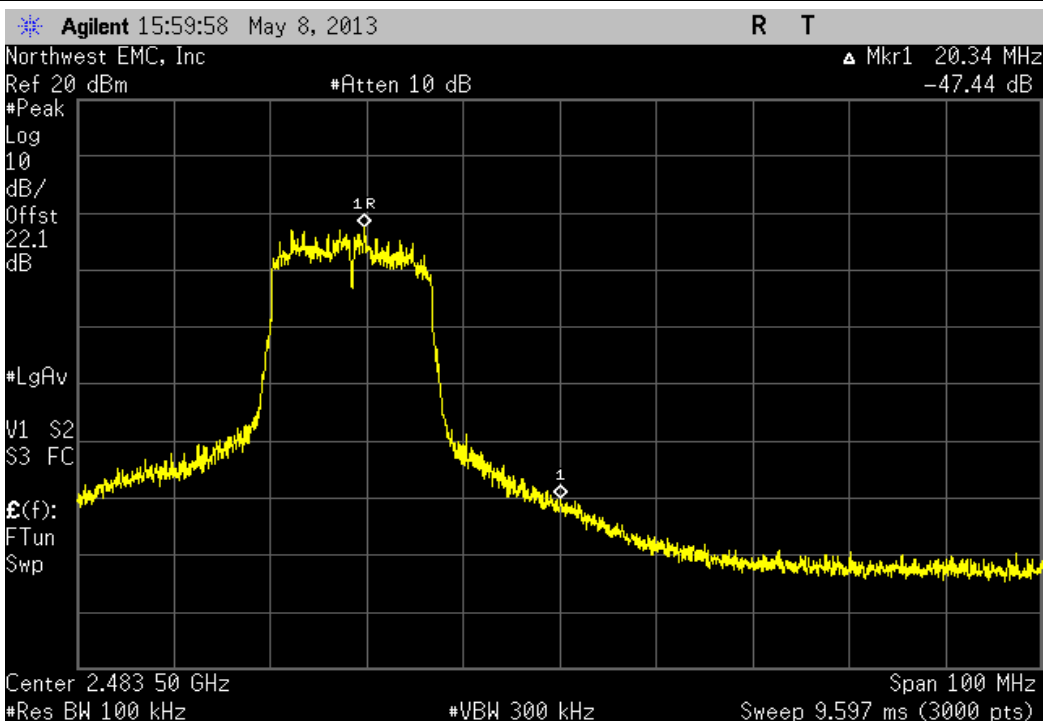
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Result
-36.57 dBc	≤ -20 dBc	Pass



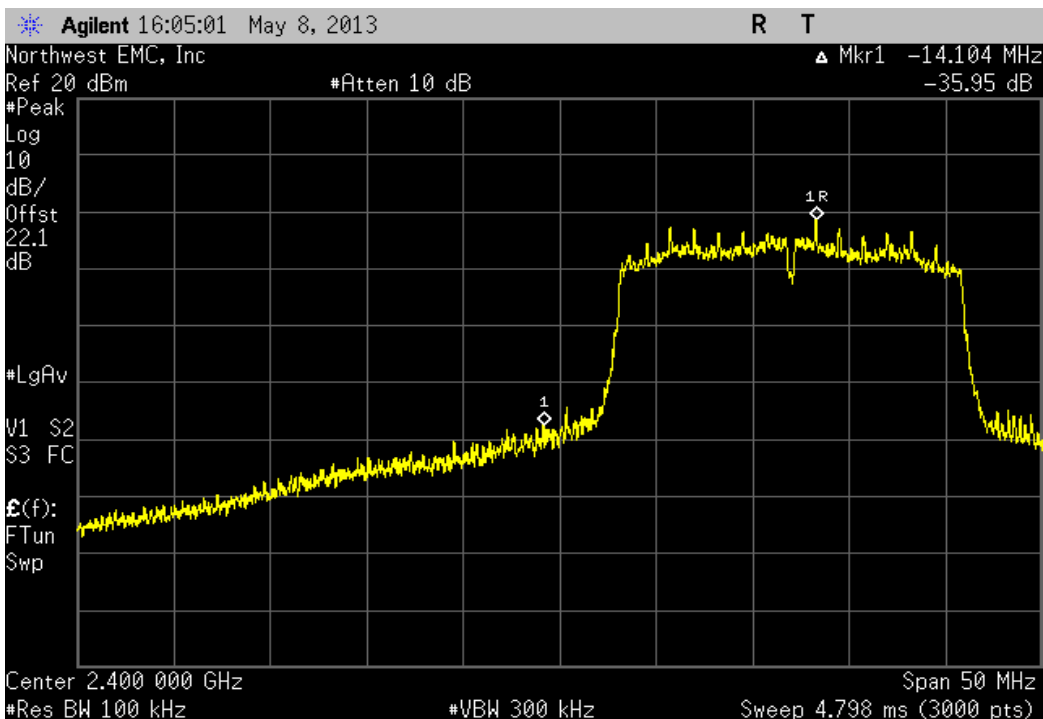
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Value	Limit	Result
-47.44 dBc	≤ -20 dBc	Pass



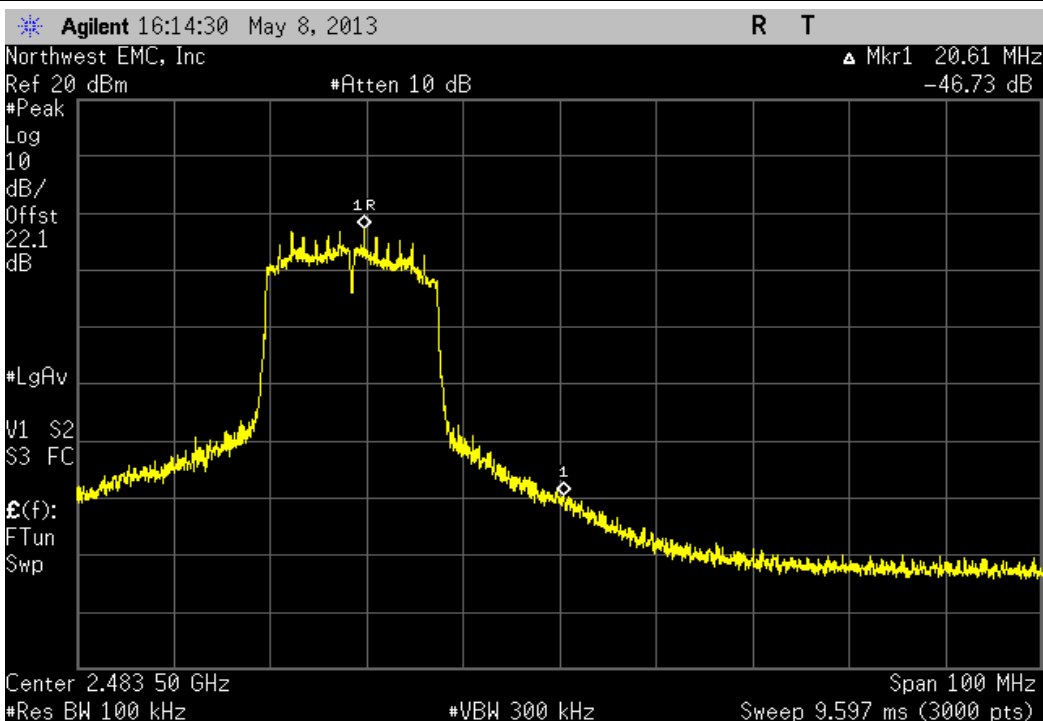
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	Limit	Result
-35.94 dBc	≤ -20 dBc	Pass



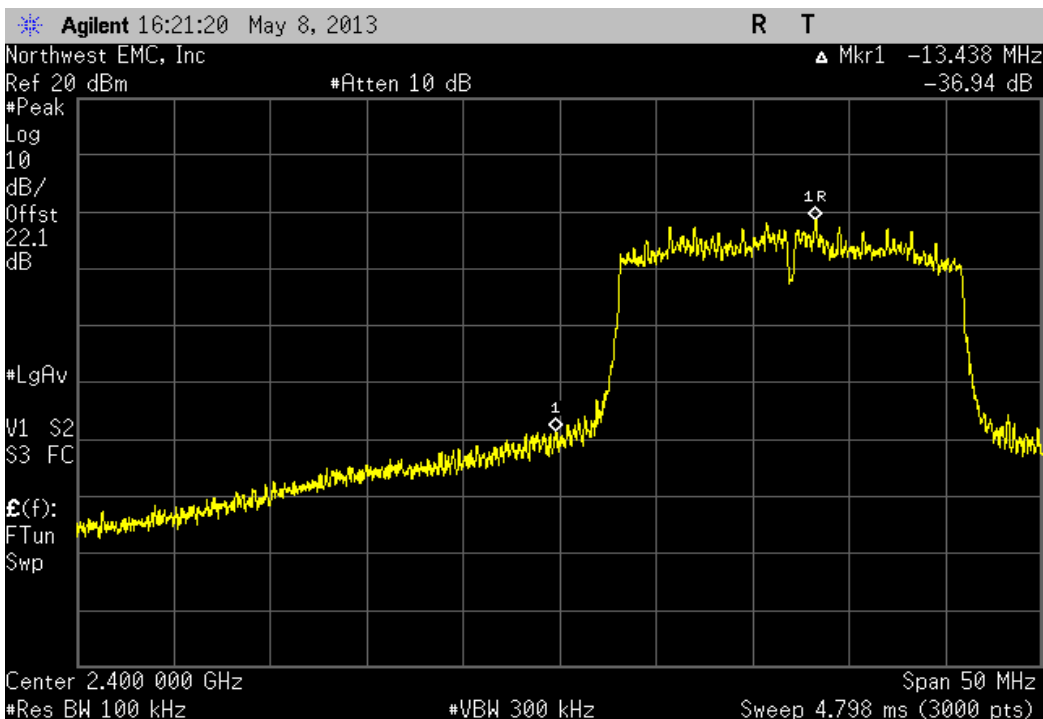
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

Value	Limit	Result
-46.73 dBc	≤ -20 dBc	Pass



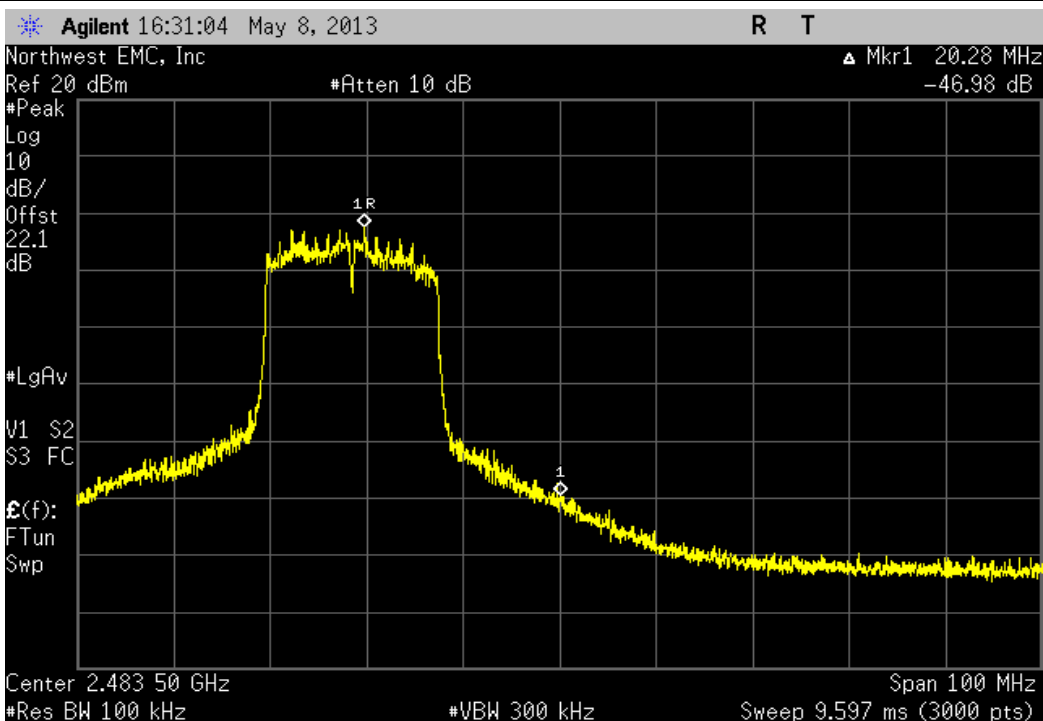
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

Value	Limit	Result
-36.94 dBc	≤ -20 dBc	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value	Limit	Result
-46.98 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
40 GHz DC block	Fairview Microwave	SD3379	AMI	10/5/2012	12
Attenuator - 20db, 'SMA'	SM Electronics	SA26B-20	RFW	4/12/2013	12
Signal Generator MXG	Agilent	N5183A	TIK	6/7/2012	36
Spectrum Analyzer	Agilent	E4440A	AAX	5/15/2012	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:

$$\text{BWCF} = 10 \cdot \text{LOG} (3 \text{ kHz} / 100 \text{ kHz}) = -15.2 \text{ dB}$$

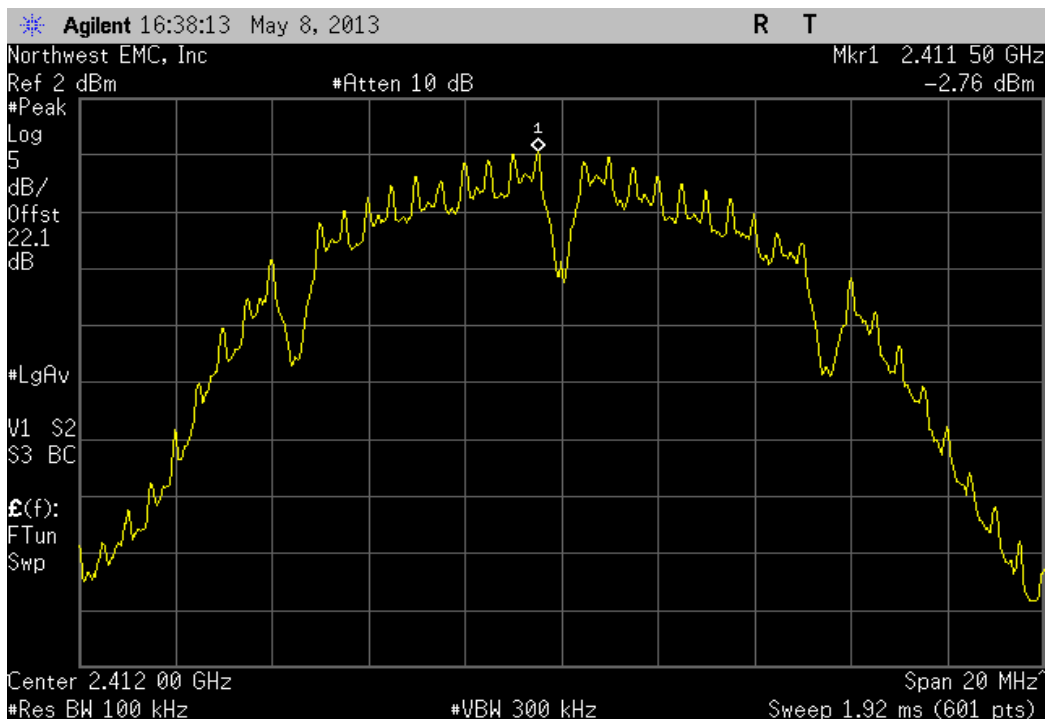


Power Spectral Density

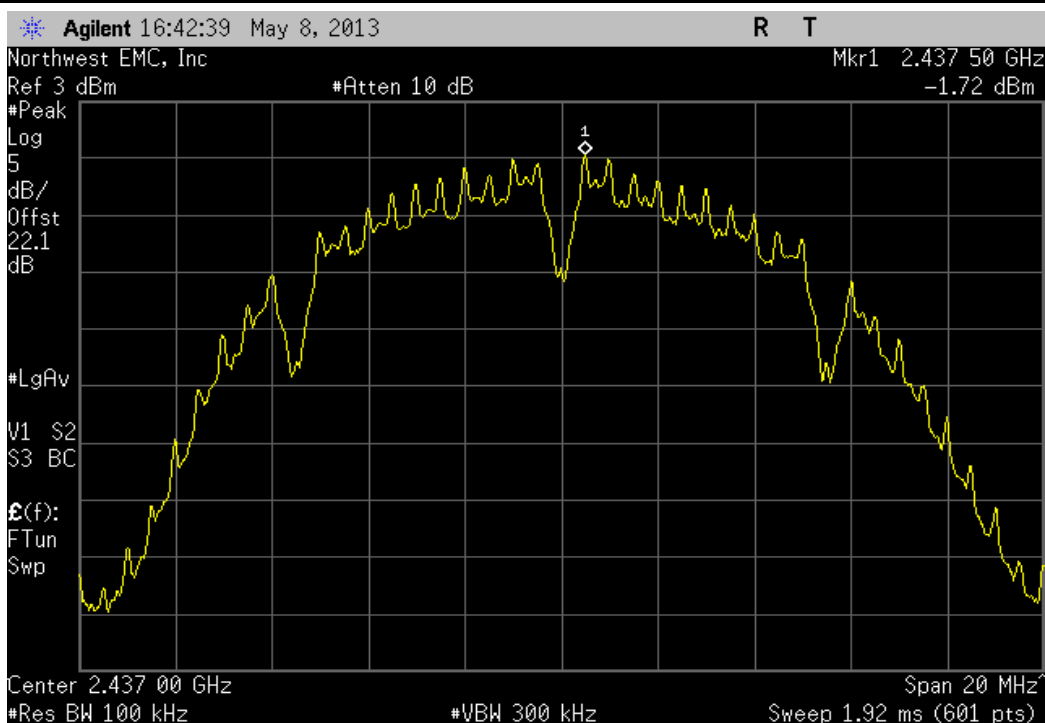
XMit 2013.02.28
PsaTx 2013.04.12

EUT: RTH9590WF01		Work Order: HNYW0042				
Serial Number: 4174001 0010151		Date: 05/08/13				
Customer: Honeywell, Automation and Control Solutions		Temperature: 24.7°C				
Attendees: None		Humidity: 38%				
Project: None		Barometric Pres.: 1015.3				
Tested by: Trevor Buls		Power: 110VAC/60Hz				
Job Site: MN08						
TEST SPECIFICATIONS		Test Method				
FCC 15.247:2013		ANSI C63.10:2009				
COMMENTS						
None						
DEVIATIONS FROM TEST STANDARD						
None						
Configuration #	3	Signature Trevor Buls				
		Value dBm/100kHz	dBm/100kHz To dBm/3kHz	Value dBm/3kHz	Limit dBm/3kHz	Result
Antenna 0						
2400 MHz - 2483.5 MHz Band						
802.11(b) 1 Mbps						
Low Channel 1, 2412 MHz		-2.76	-15.2	-17.96	8	Pass
Mid Channel 6, 2437 MHz		-1.724	-15.2	-16.924	8	Pass
High Channel 11, 2462 MHz		-3.559	-15.2	-18.759	8	Pass
802.11(b) 11 Mbps						
Low Channel 1, 2412 MHz		-3.086	-15.2	-18.286	8	Pass
Mid Channel 6, 2437 MHz		-1.665	-15.2	-16.865	8	Pass
High Channel 11, 2462 MHz		-3.331	-15.2	-18.531	8	Pass
802.11(g) 6 Mbps						
Low Channel 1, 2412 MHz		-9.211	-15.2	-24.411	8	Pass
Mid Channel 6, 2437 MHz		-6.218	-15.2	-21.418	8	Pass
High Channel 11, 2462 MHz		-7.683	-15.2	-22.883	8	Pass
802.11(g) 36 Mbps						
Low Channel 1, 2412 MHz		-8.967	-15.2	-24.167	8	Pass
Mid Channel 6, 2437 MHz		-6.98	-15.2	-22.18	8	Pass
High Channel 11, 2462 MHz		-8.255	-15.2	-23.455	8	Pass
802.11(g) 54 Mbps						
Low Channel 1, 2412 MHz		-9.277	-15.2	-24.477	8	Pass
Mid Channel 6, 2437 MHz		-6.181	-15.2	-21.381	8	Pass
High Channel 11, 2462 MHz		-7.581	-15.2	-22.781	8	Pass
802.11(n) MCS0						
Low Channel 1, 2412 MHz		-9.126	-15.2	-24.326	8	Pass
Mid Channel 6, 2437 MHz		-5.211	-15.2	-20.411	8	Pass
High Channel 11, 2462 MHz		-8.752	-15.2	-23.952	8	Pass
802.11(n) MCS7						
Low Channel 1, 2412 MHz		-9.164	-15.2	-24.364	8	Pass
Mid Channel 6, 2437 MHz		-6.567	-15.2	-21.767	8	Pass
High Channel 11, 2462 MHz		-8.181	-15.2	-23.381	8	Pass
Antenna 1						
2400 MHz - 2483.5 MHz Band						
802.11(b) 1 Mbps						
Low Channel 1, 2412 MHz		4.504	-15.2	-10.696	8	Pass
Mid Channel 6, 2437 MHz		3.414	-15.2	-11.786	8	Pass
High Channel 11, 2462 MHz		1.948	-15.2	-13.252	8	Pass
802.11(b) 11 Mbps						
Low Channel 1, 2412 MHz		3.542	-15.2	-11.658	8	Pass
Mid Channel 6, 2437 MHz		3.278	-15.2	-11.922	8	Pass
High Channel 11, 2462 MHz		2.881	-15.2	-12.319	8	Pass
802.11(g) 6 Mbps						
Low Channel 1, 2412 MHz		-1.768	-15.2	-16.968	8	Pass
Mid Channel 6, 2437 MHz		-1.157	-15.2	-16.357	8	Pass
High Channel 11, 2462 MHz		-3.316	-15.2	-18.516	8	Pass
802.11(g) 36 Mbps						
Low Channel 1, 2412 MHz		-2.657	-15.2	-17.857	8	Pass
Mid Channel 6, 2437 MHz		-1.275	-15.2	-16.475	8	Pass
High Channel 11, 2462 MHz		-3.494	-15.2	-18.694	8	Pass
802.11(g) 54 Mbps						
Low Channel 1, 2412 MHz		-2.609	-15.2	-17.809	8	Pass
Mid Channel 6, 2437 MHz		-0.658	-15.2	-15.858	8	Pass
High Channel 11, 2462 MHz		-3.486	-15.2	-18.686	8	Pass
802.11(n) MCS0						
Low Channel 1, 2412 MHz		-2.859	-15.2	-18.059	8	Pass
Mid Channel 6, 2437 MHz		-1.398	-15.2	-16.598	8	Pass
High Channel 11, 2462 MHz		-2.691	-15.2	-17.891	8	Pass
802.11(n) MCS7						
Low Channel 1, 2412 MHz		-2.909	-15.2	-18.109	8	Pass
Mid Channel 6, 2437 MHz		-1.201	-15.2	-16.401	8	Pass
High Channel 11, 2462 MHz		-3.03	-15.2	-18.23	8	Pass

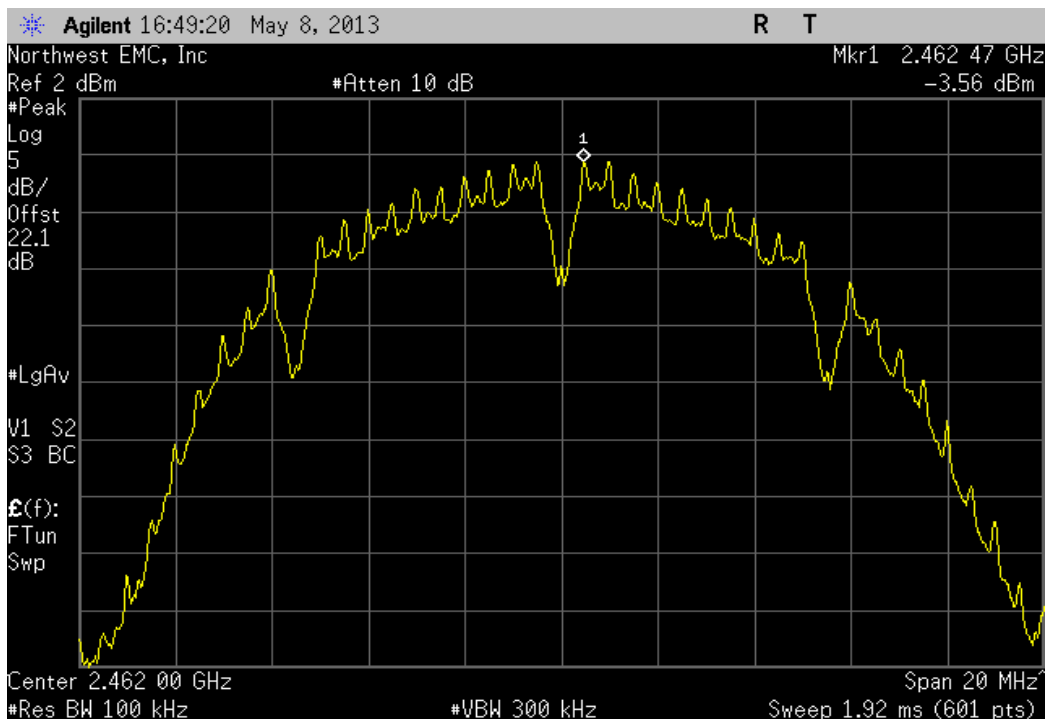
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz						
	Value	dBm/100kHz	Value	Limit		
		To dBm/3kHz	dBm/3kHz			
					Result	
	-2.76	-15.2	-17.96	8	Pass	



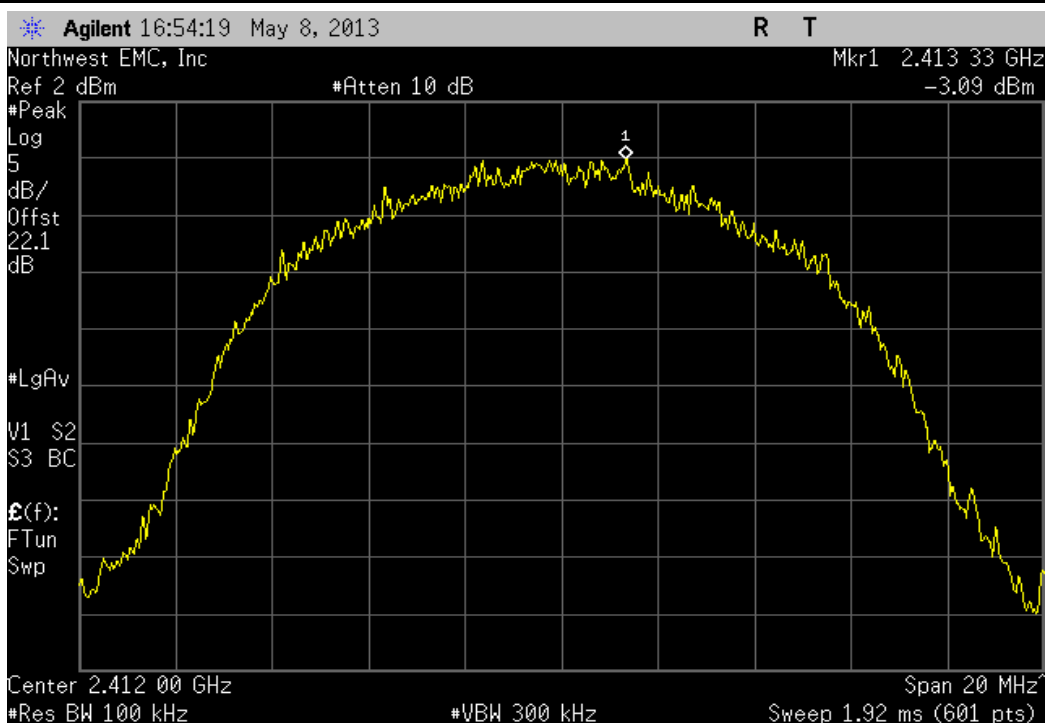
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
	Value	dBm/100kHz	Value	Limit		
		To dBm/3kHz	dBm/3kHz			
					Result	
	-1.724	-15.2	-16.924	8	Pass	



Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-3.559	-15.2	-18.759	8	Pass	

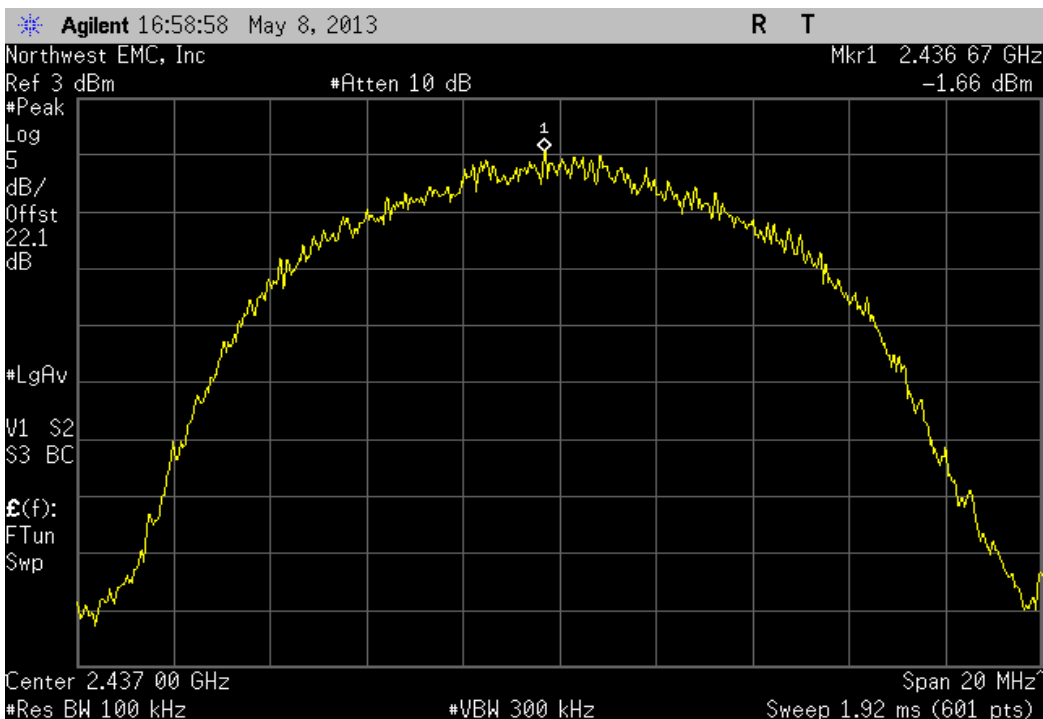


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-3.086	-15.2	-18.286	8	Pass	



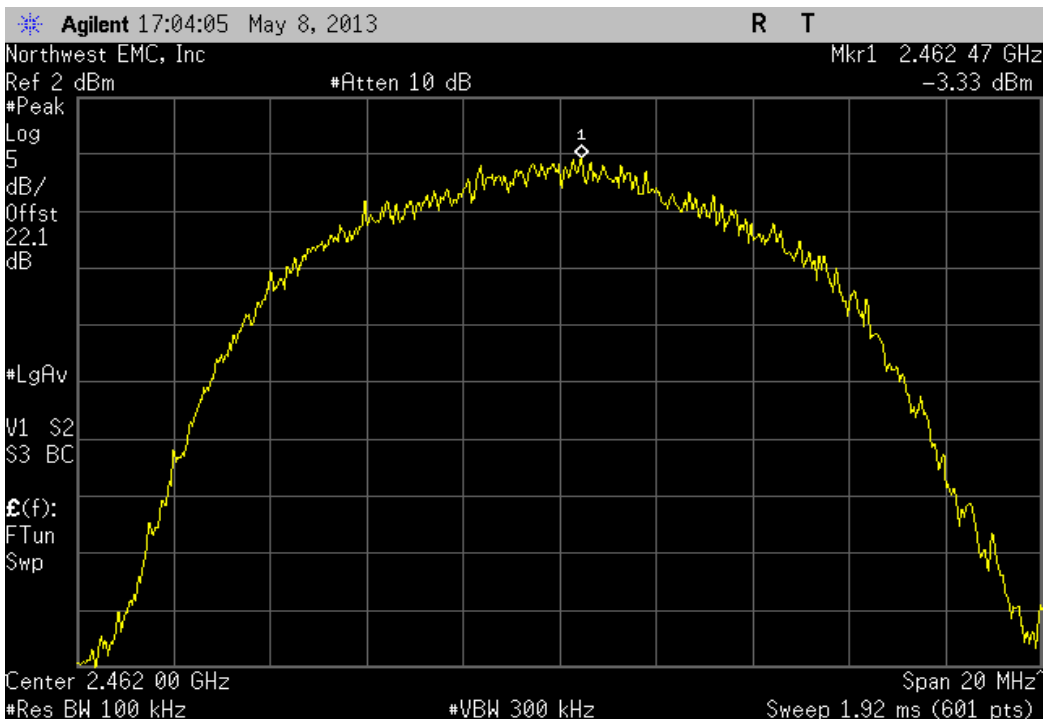
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-1.665	-15.2	-16.865	8	Pass



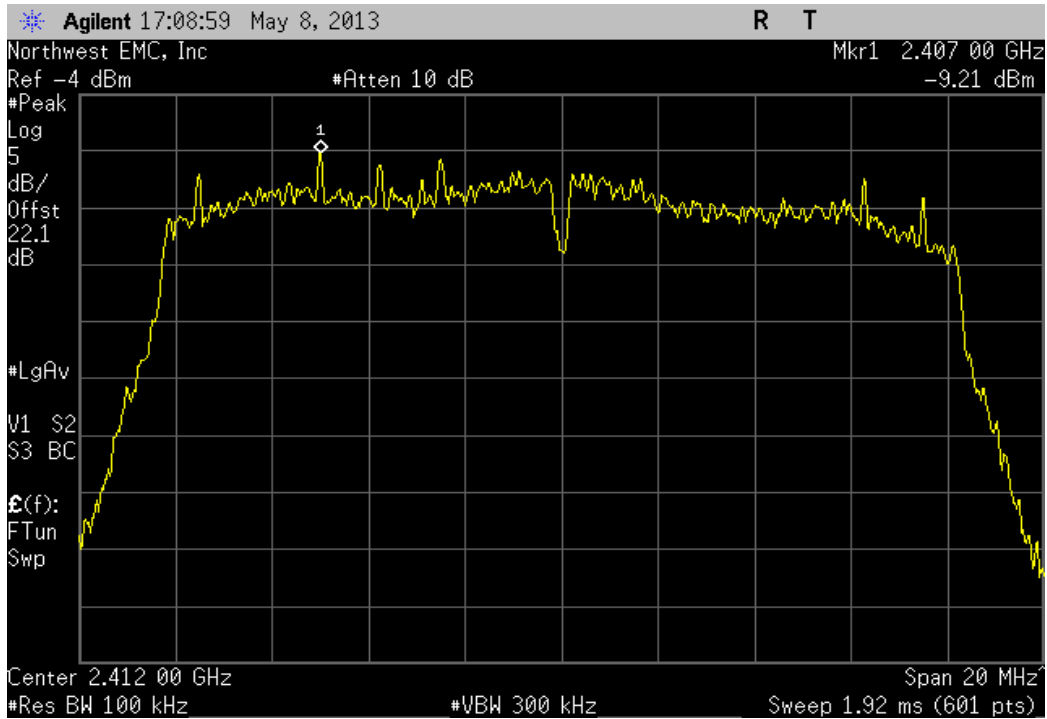
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-3.331	-15.2	-18.531	8	Pass



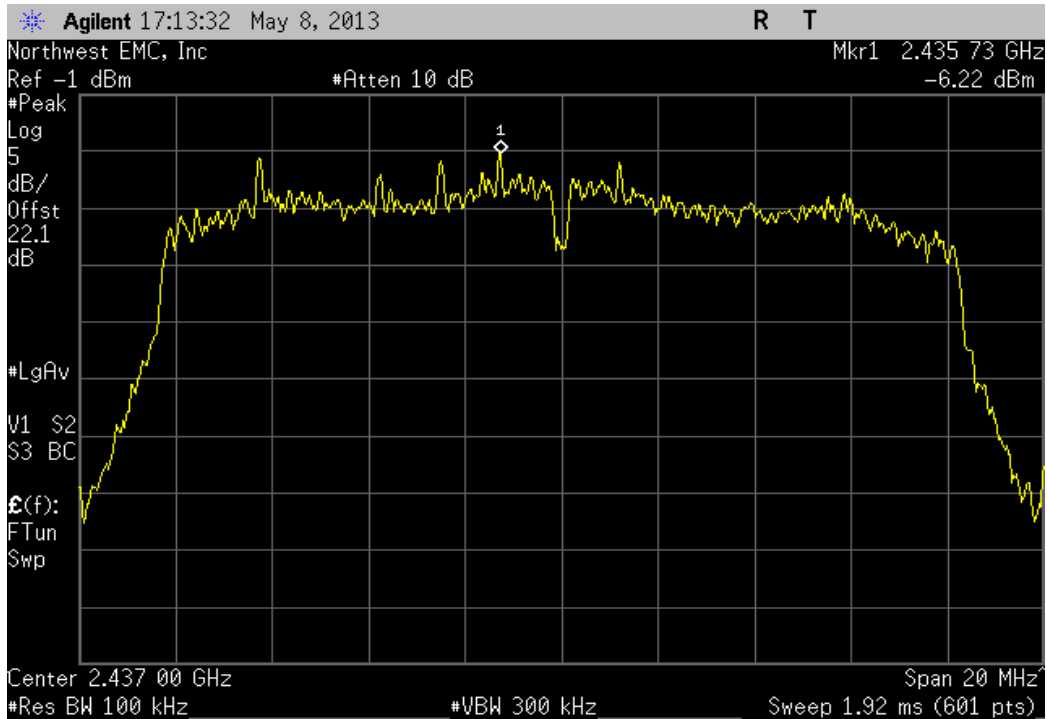
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-9.211	-15.2	-24.411	8	Pass

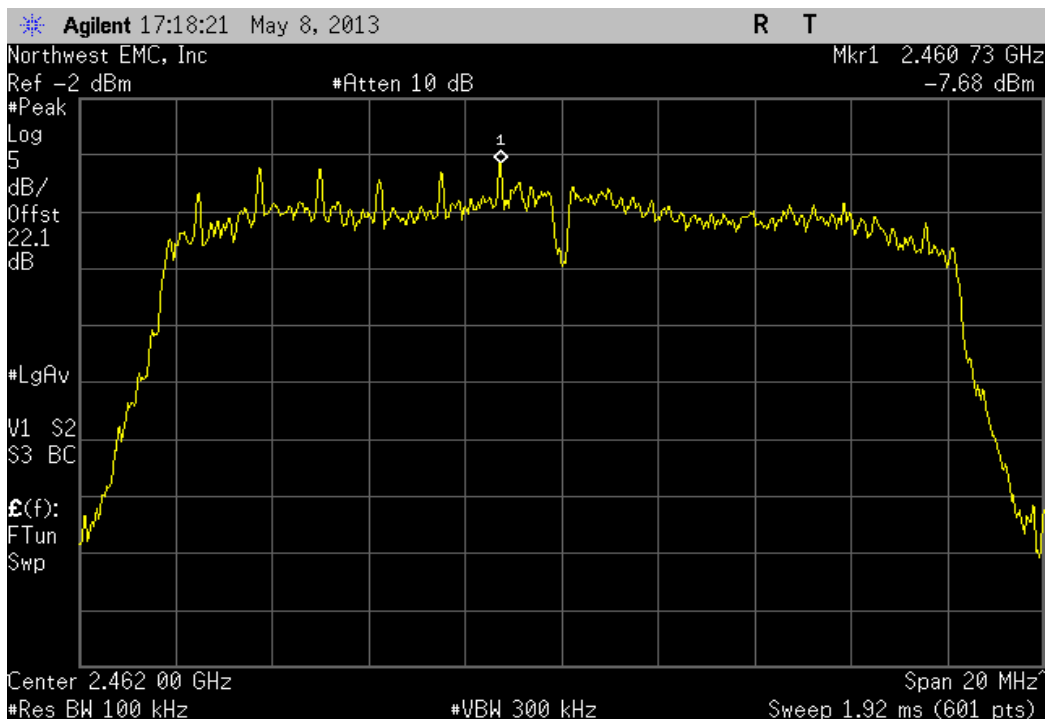


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

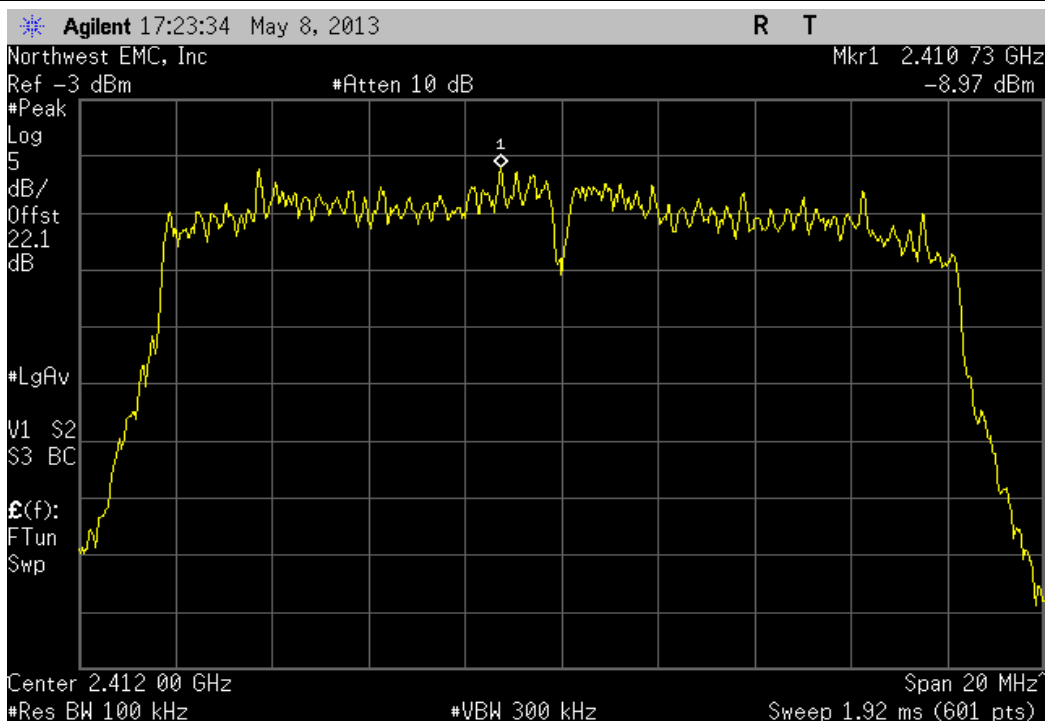
Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-6.218	-15.2	-21.418	8	Pass



Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-7.683	-15.2	-22.883	8	Pass	

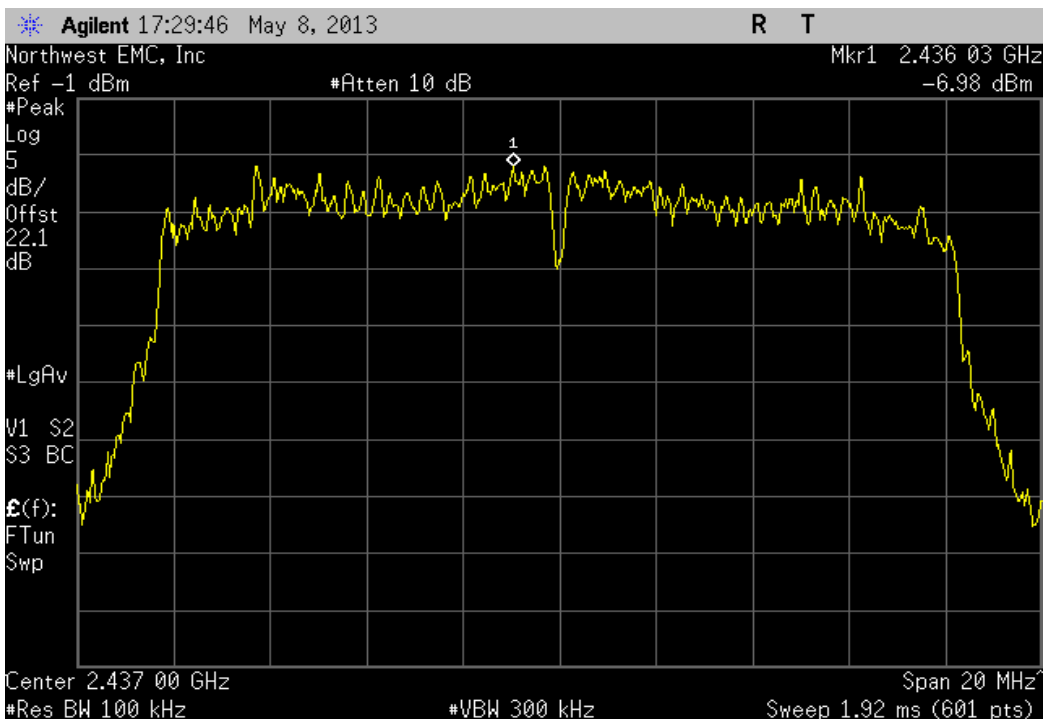


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-8.967	-15.2	-24.167	8	Pass	



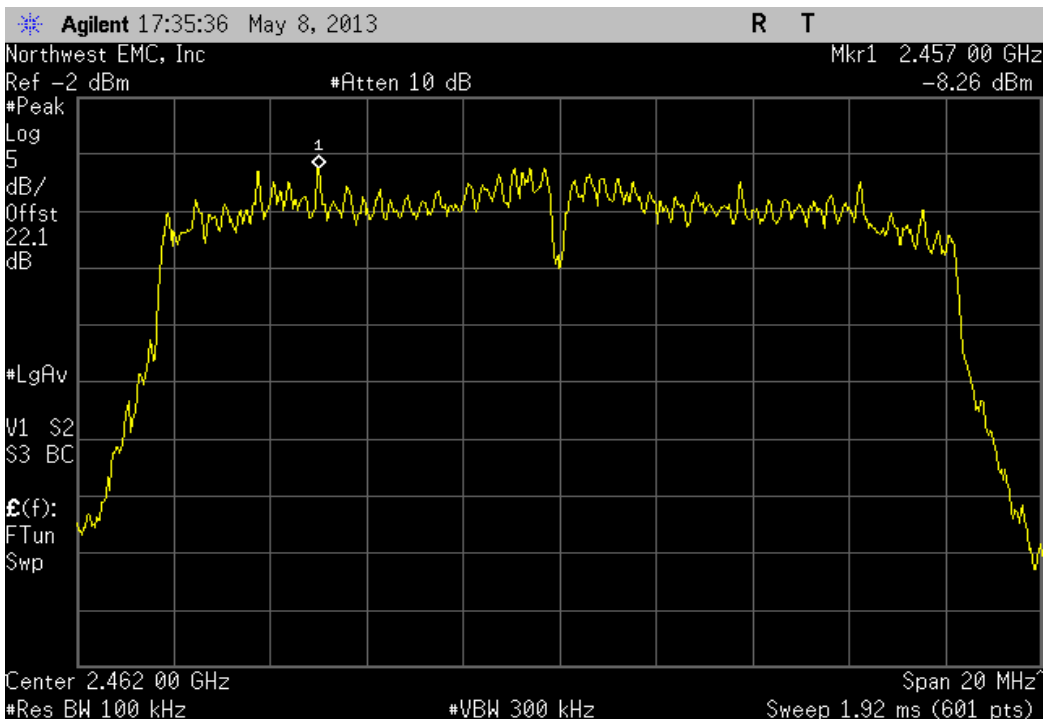
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-6.98	-15.2	-22.18	8	Pass

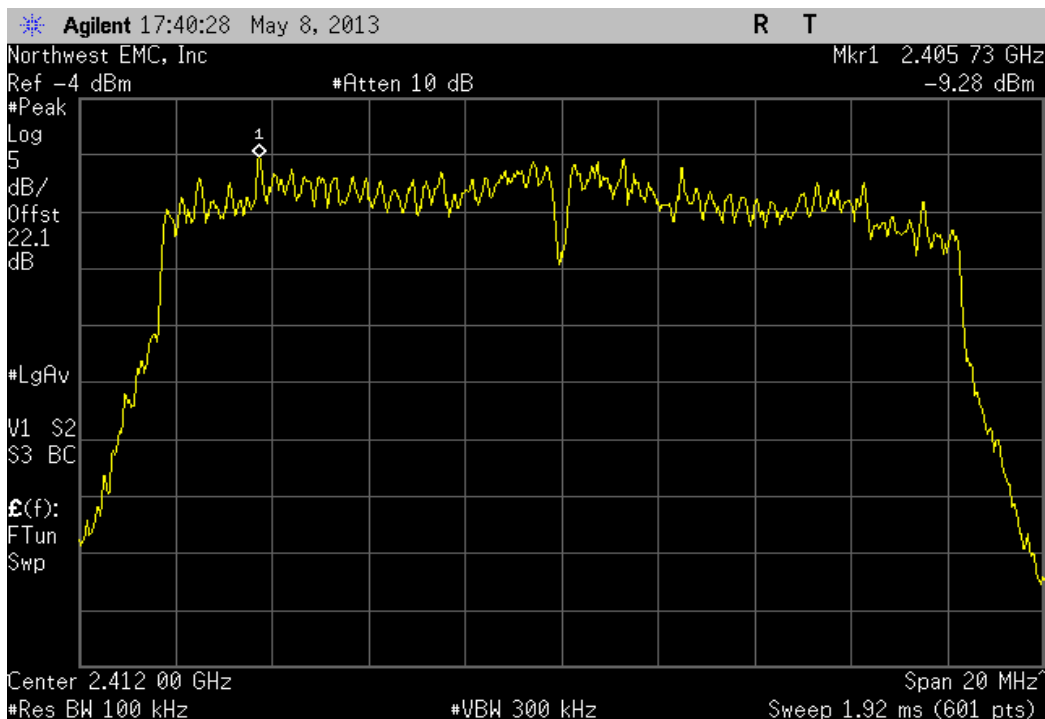


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

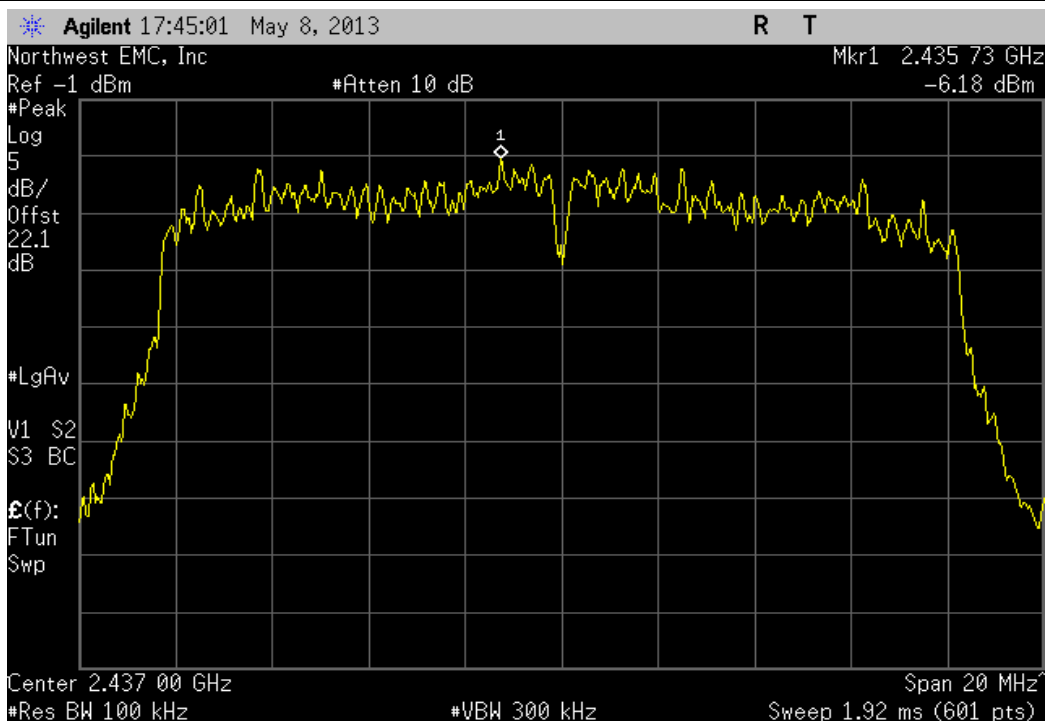
Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-8.255	-15.2	-23.455	8	Pass



Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-9.277	-15.2	-24.477	8	Pass	

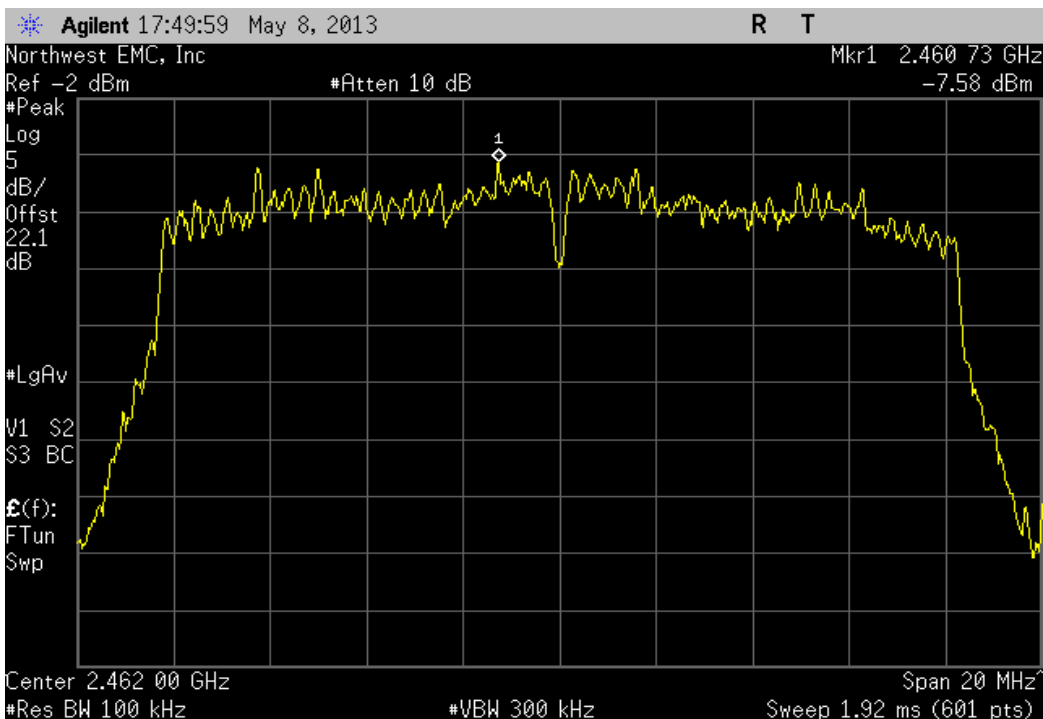


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-6.181	-15.2	-21.381	8	Pass	



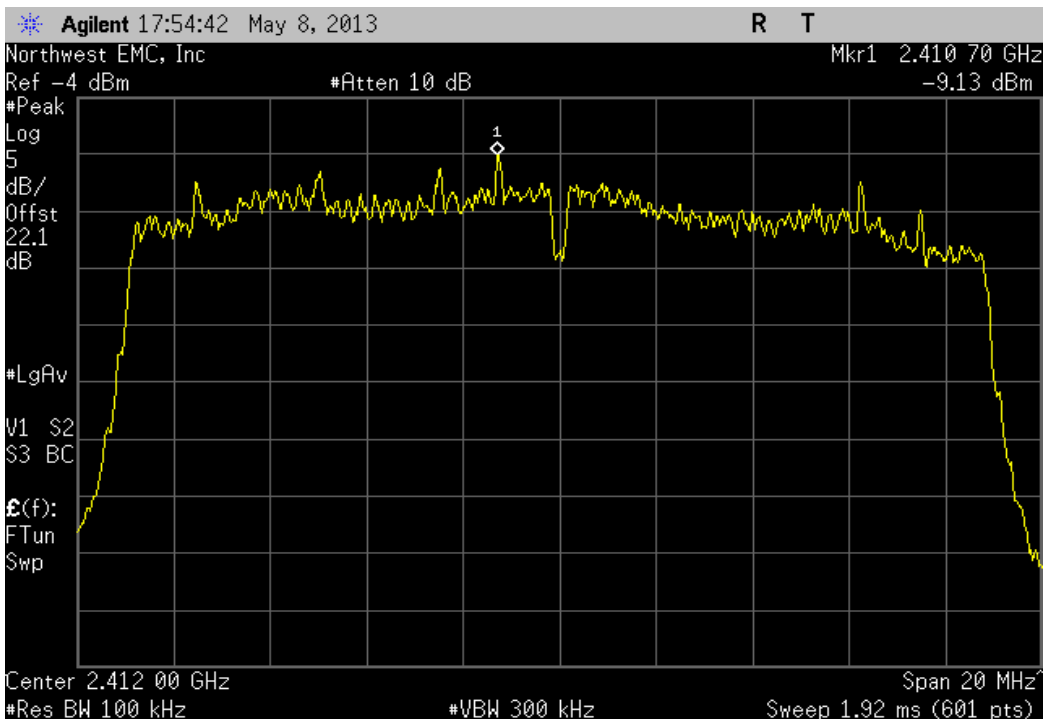
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-7.581	-15.2	-22.781	8	Pass



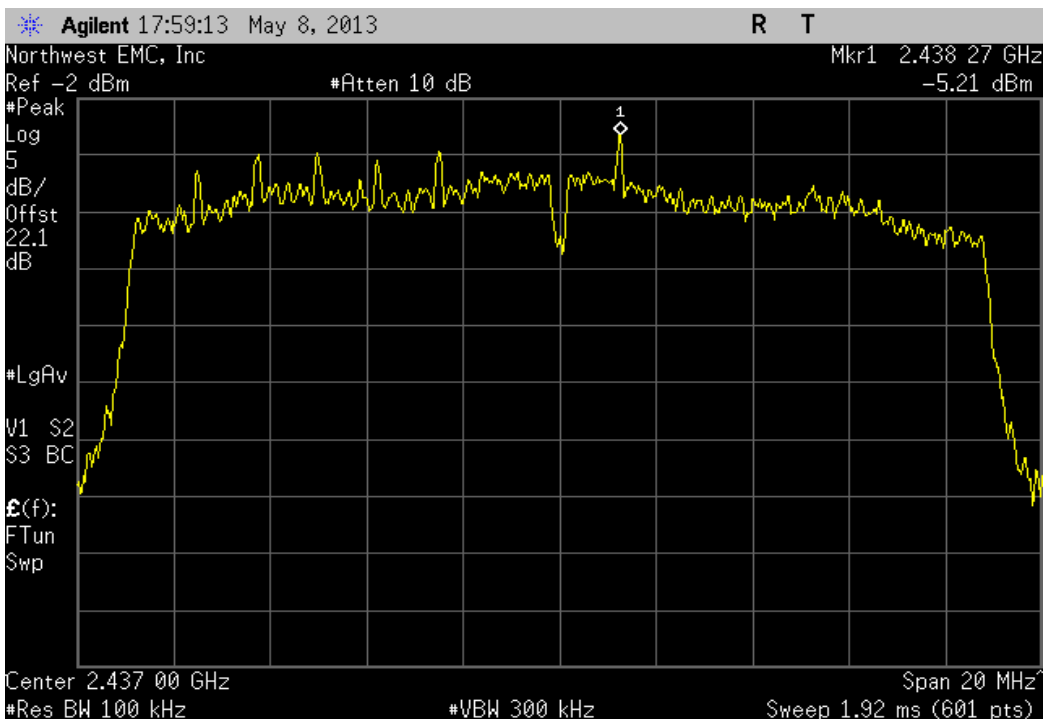
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-9.126	-15.2	-24.326	8	Pass



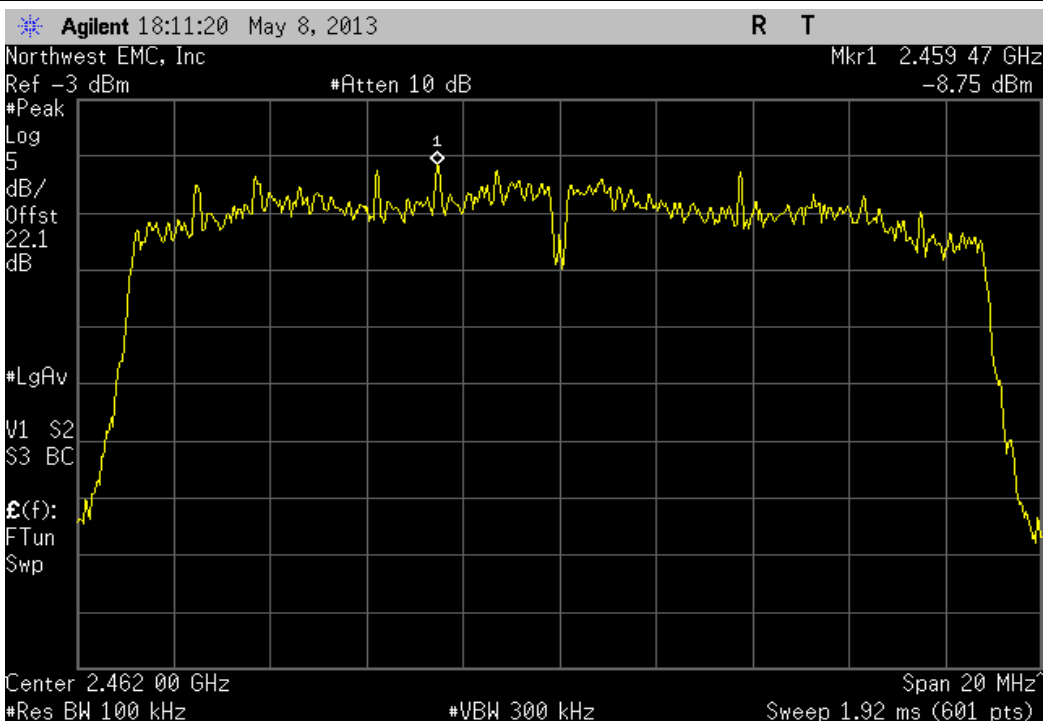
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-5.211	-15.2	-20.411	8	Pass

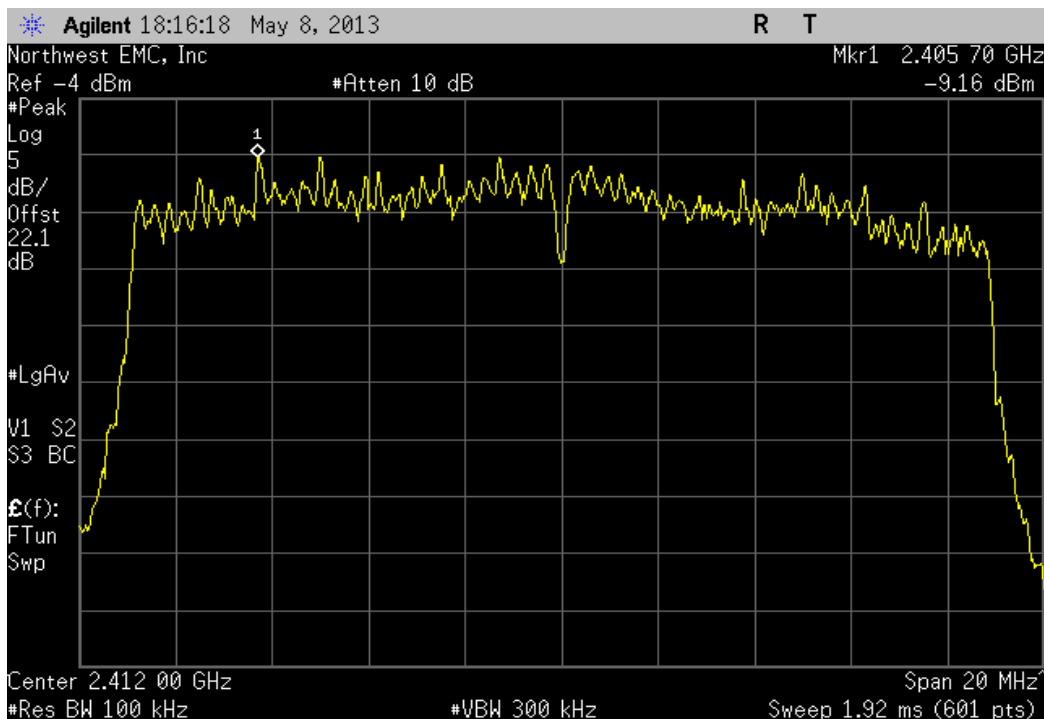


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz

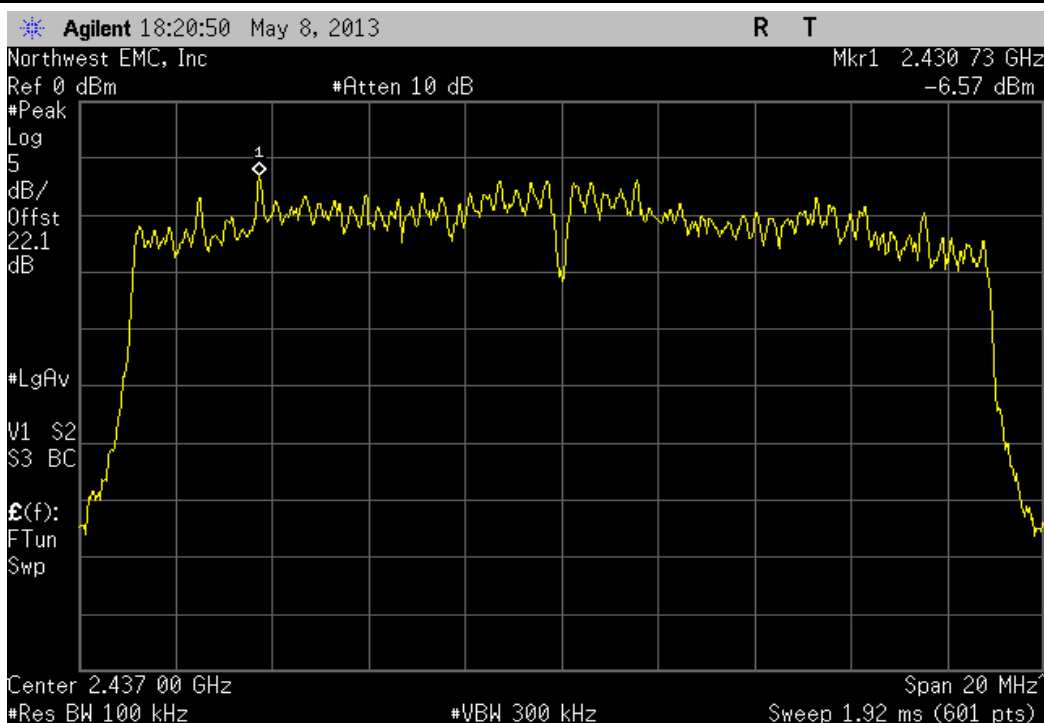
Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-8.752	-15.2	-23.952	8	Pass



Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-9.164	-15.2	-24.364	8	Pass	

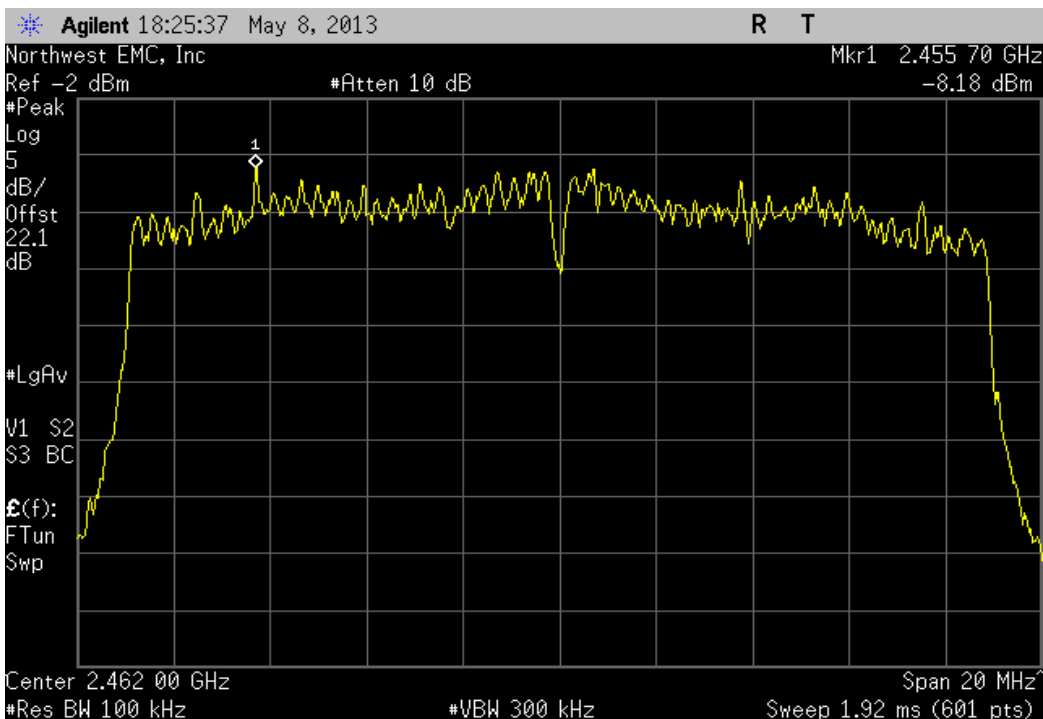


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-6.567	-15.2	-21.767	8	Pass	



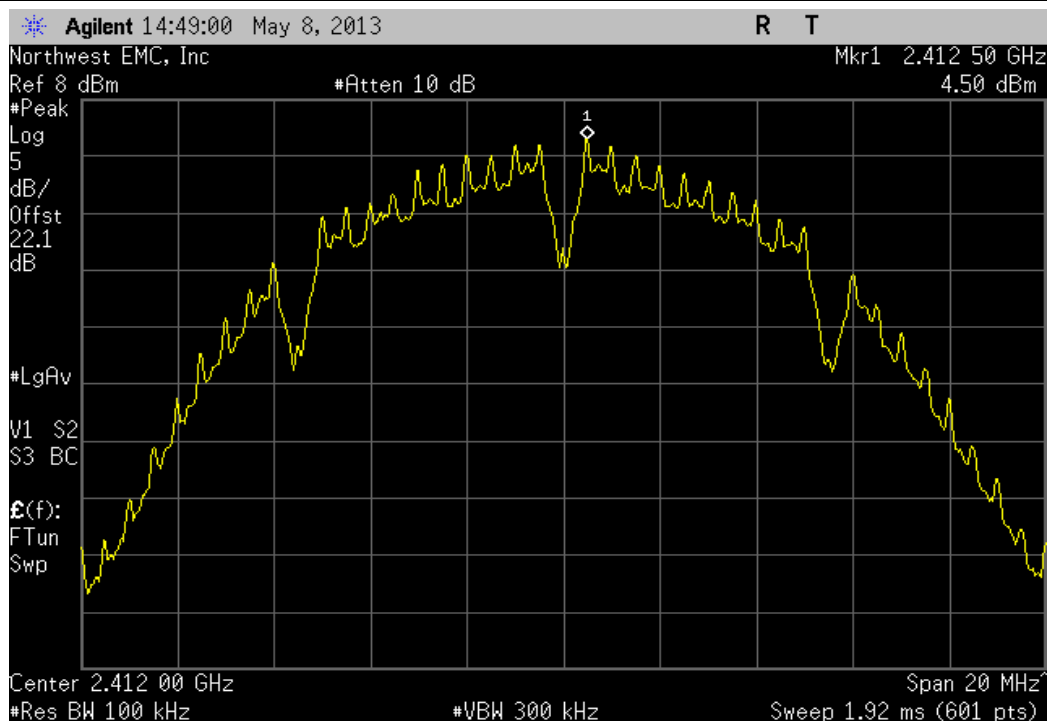
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-8.181	-15.2	-23.381	8	Pass



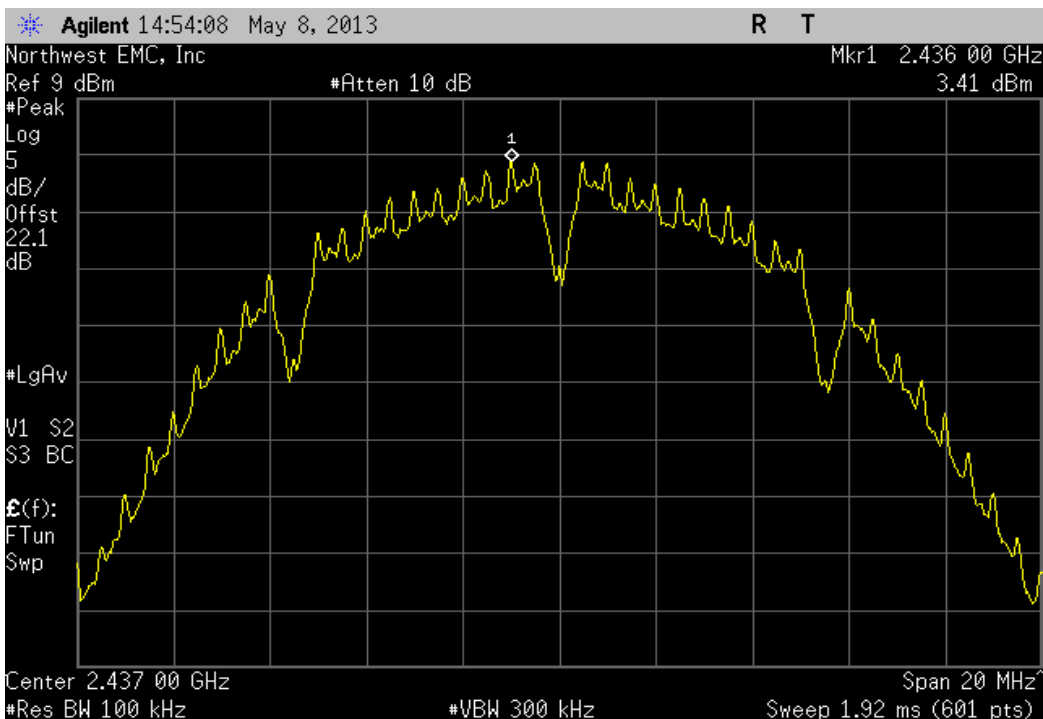
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
4.504	-15.2	-10.696	8	Pass



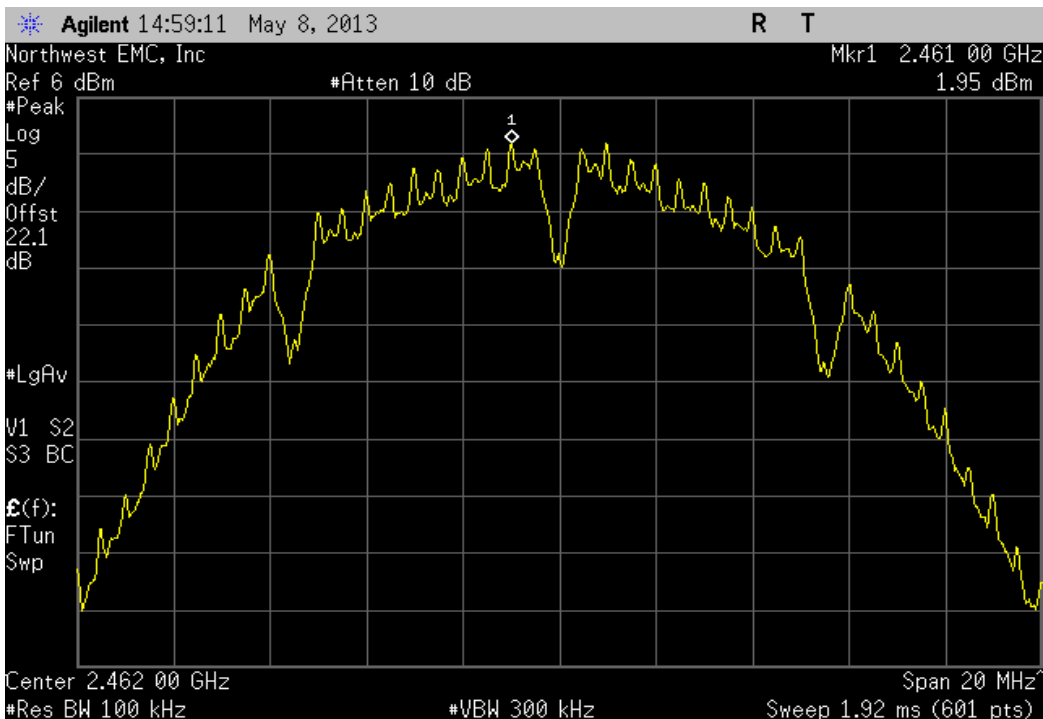
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
3.414	-15.2	-11.786	8	Pass



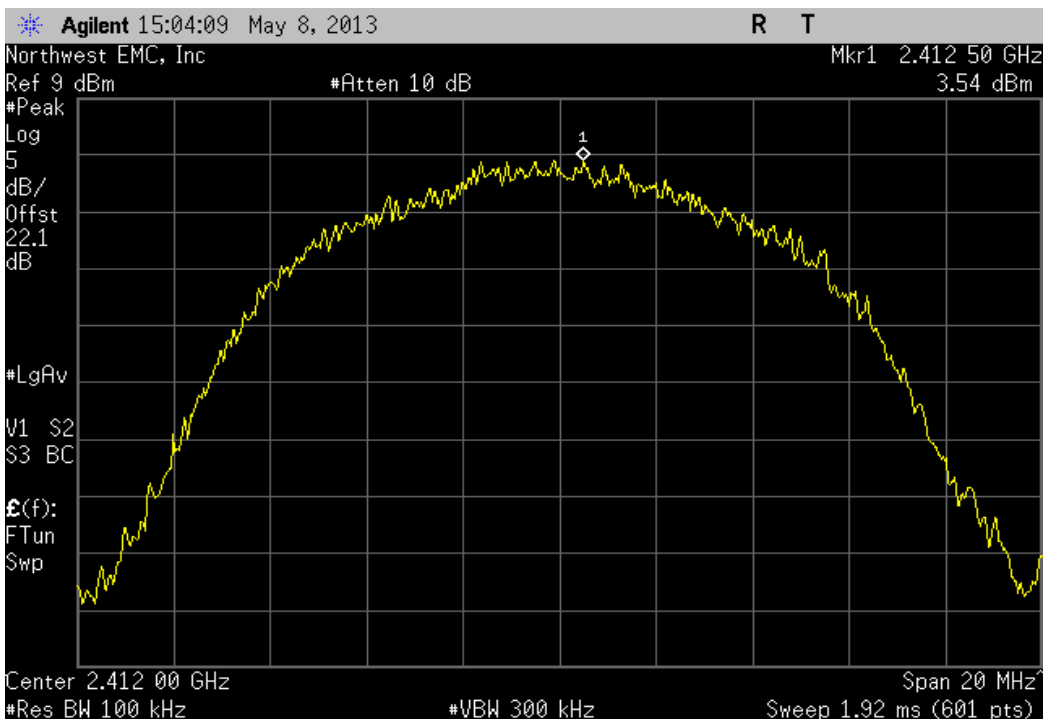
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
1.948	-15.2	-13.252	8	Pass



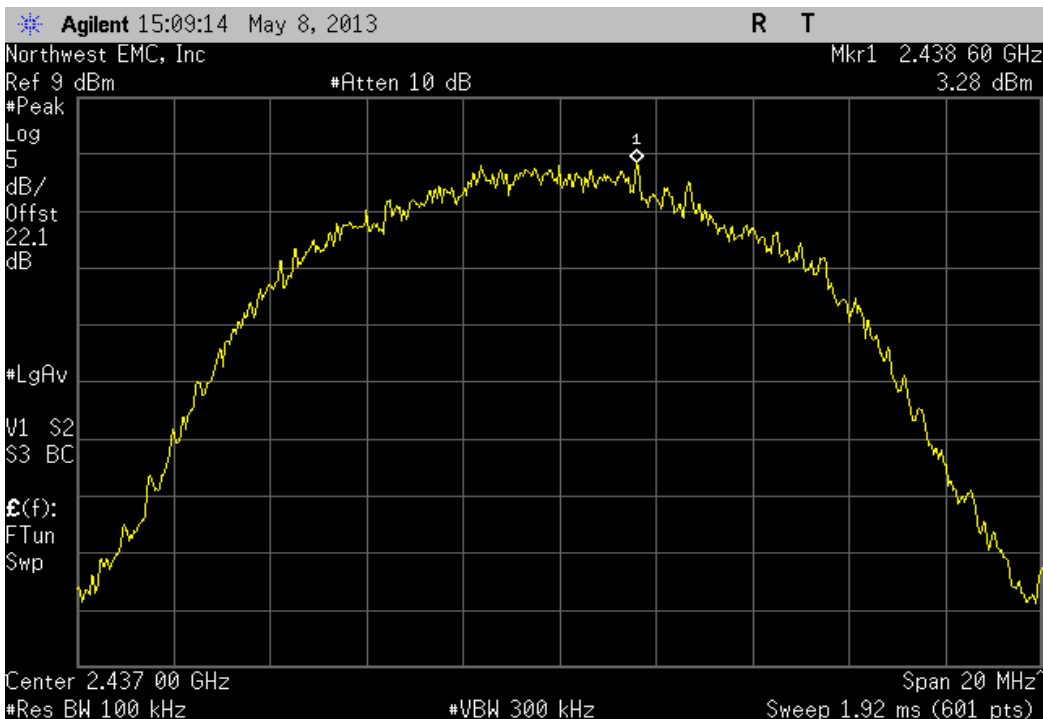
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
3.542	-15.2	-11.658	8	Pass



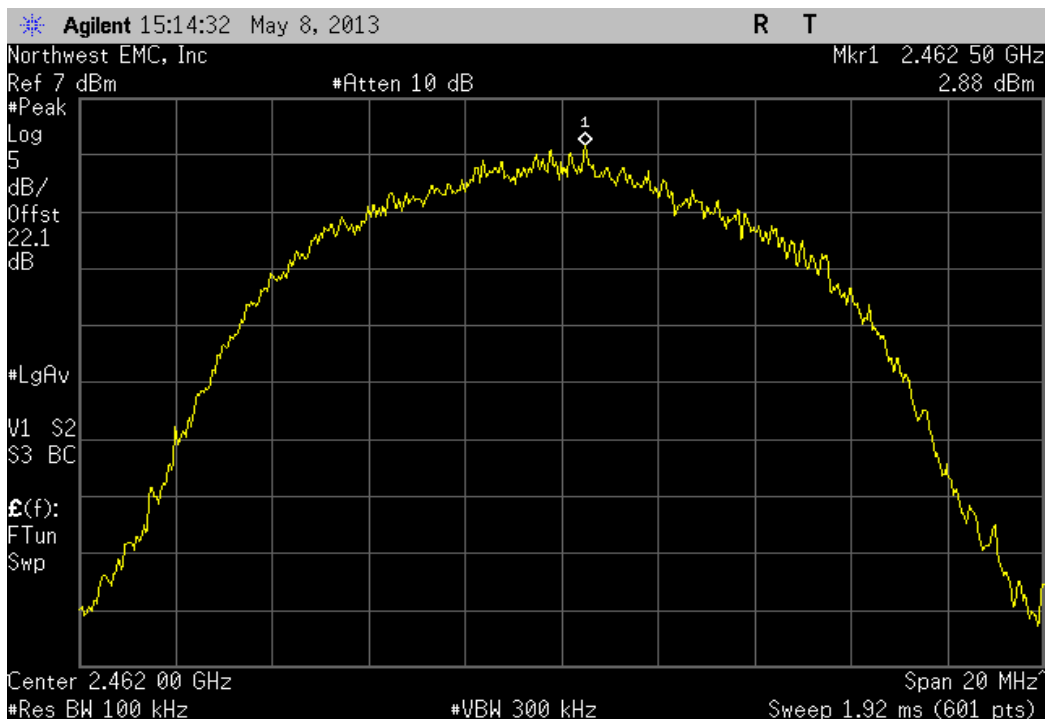
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
3.278	-15.2	-11.922	8	Pass



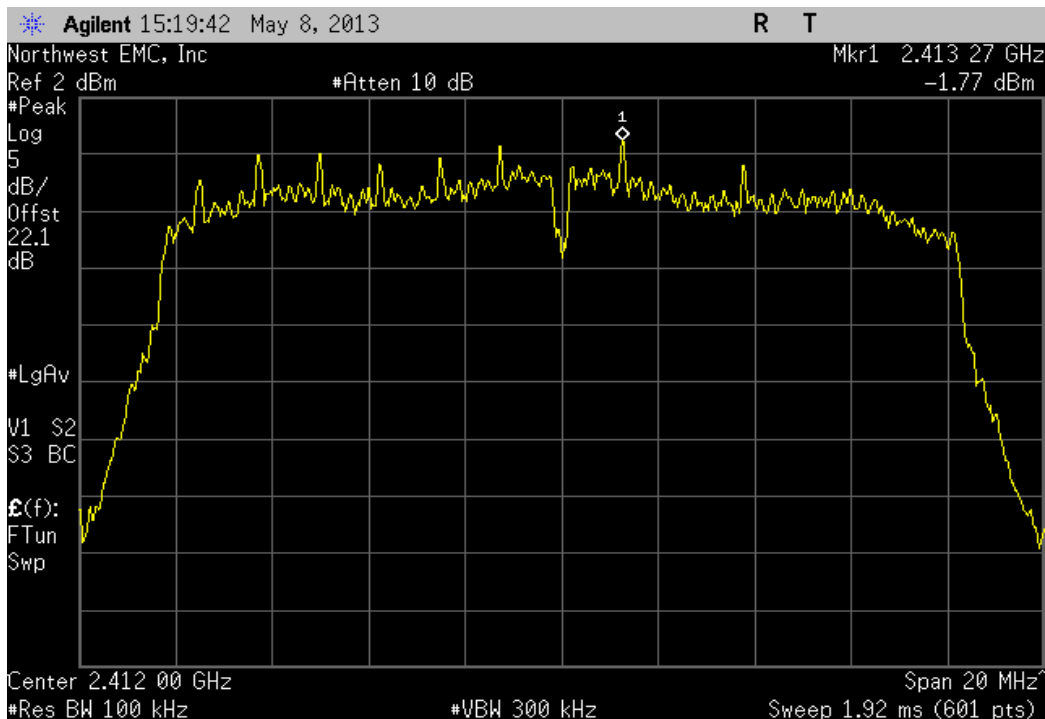
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
2.881	-15.2	-12.319	8	Pass



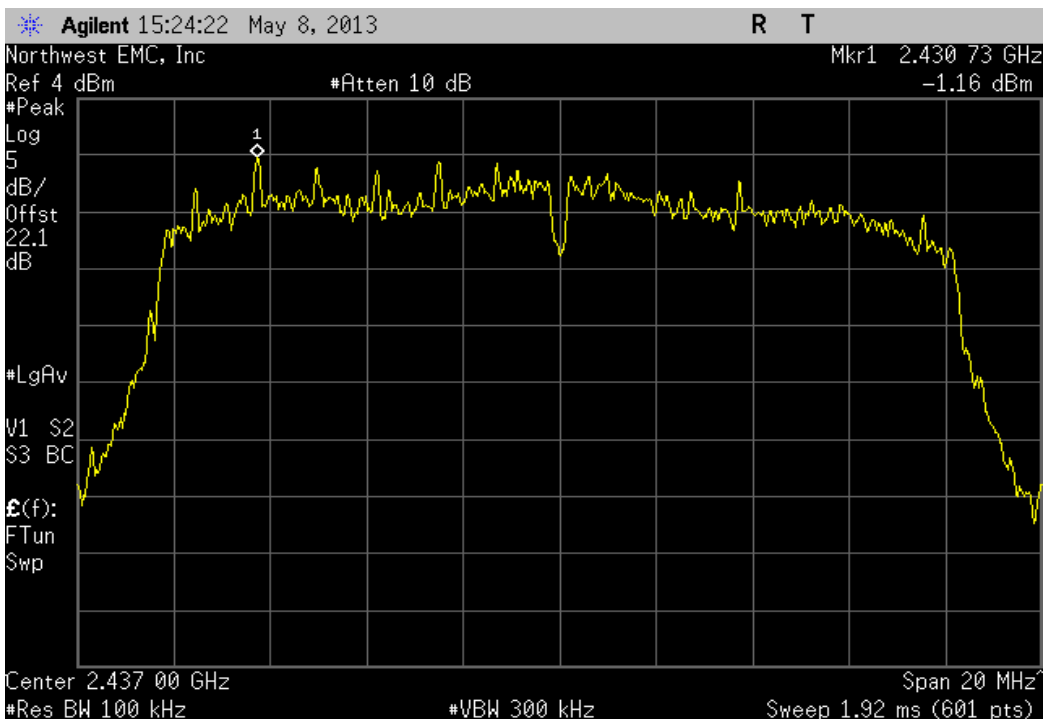
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-1.768	-15.2	-16.968	8	Pass



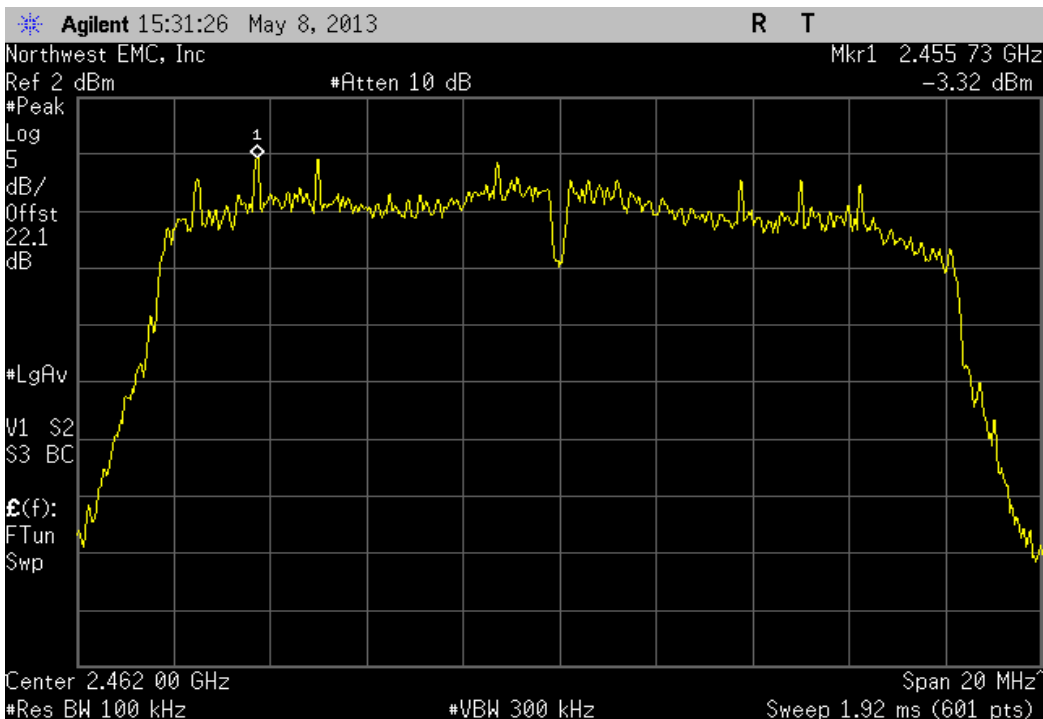
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-1.157	-15.2	-16.357	8	Pass

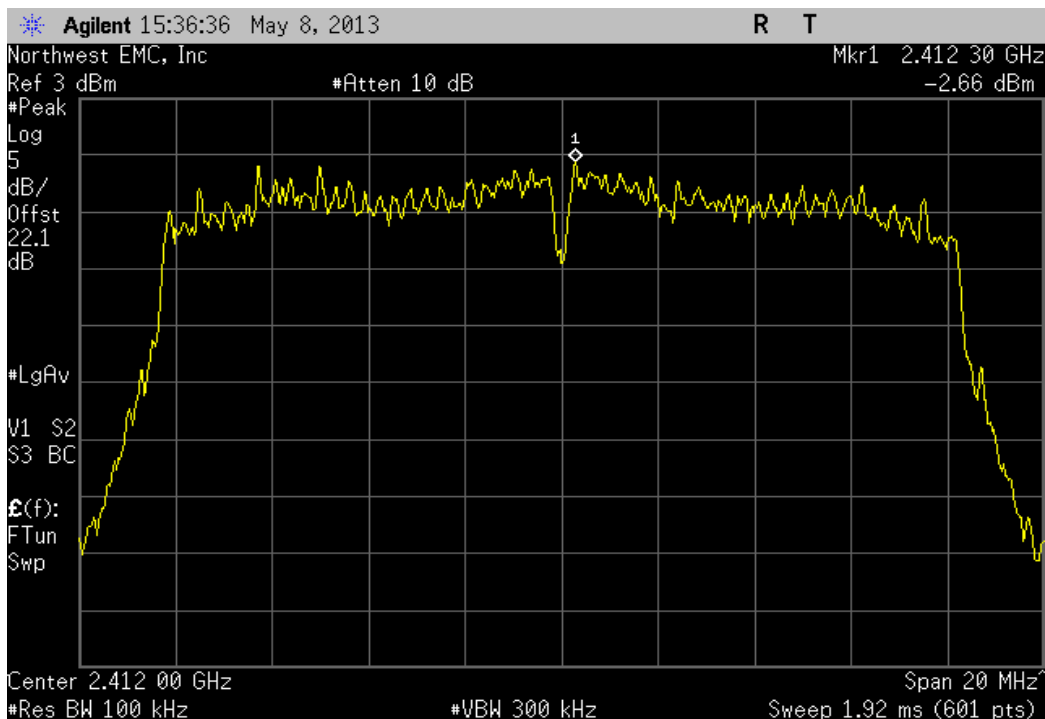


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz

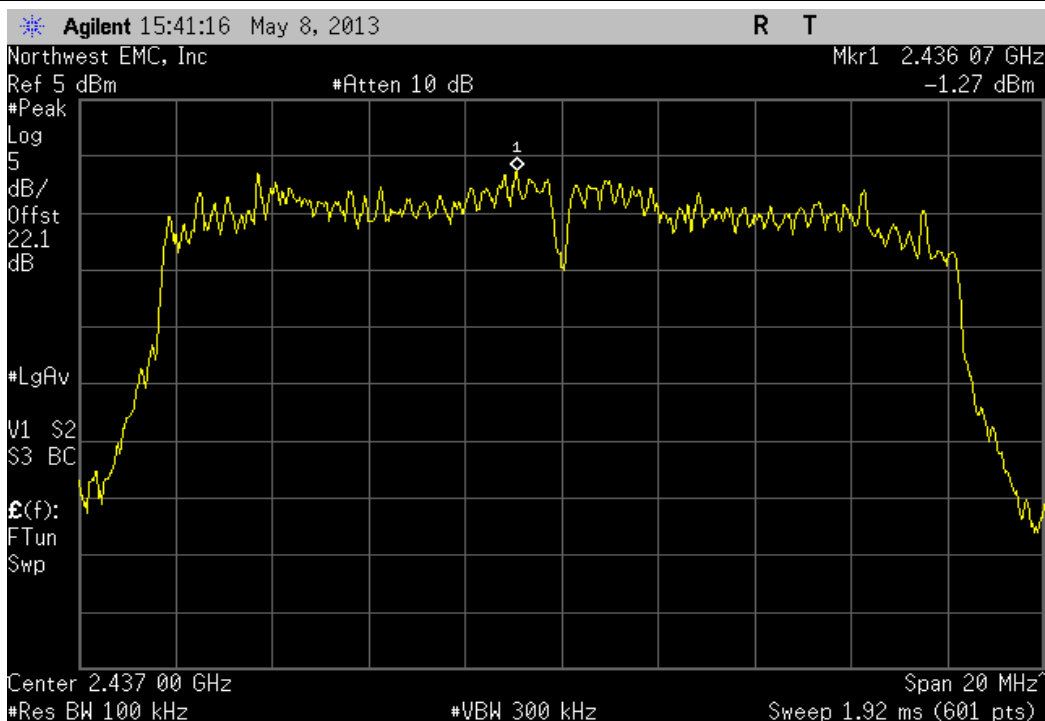
Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-3.316	-15.2	-18.516	8	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
	Value	dBm/100kHz	Value	Limit		
		To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-2.657	-15.2	-17.857	8	Pass	

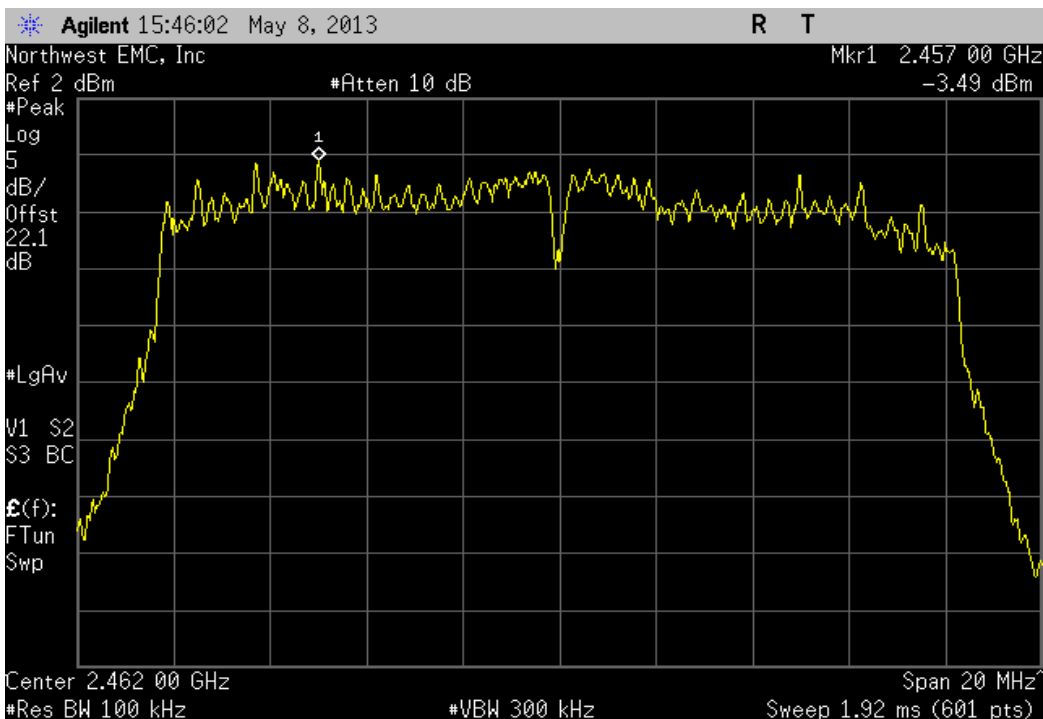


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
	Value	dBm/100kHz	Value	Limit		
		To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-1.275	-15.2	-16.475	8	Pass	



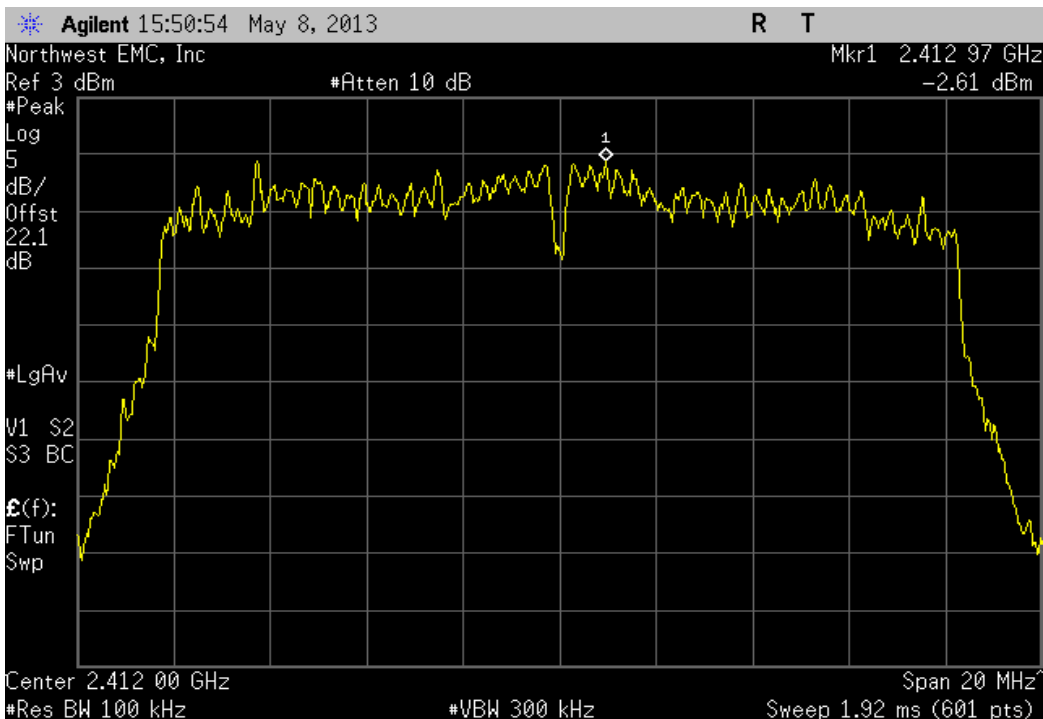
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-3.494	-15.2	-18.694	8	Pass

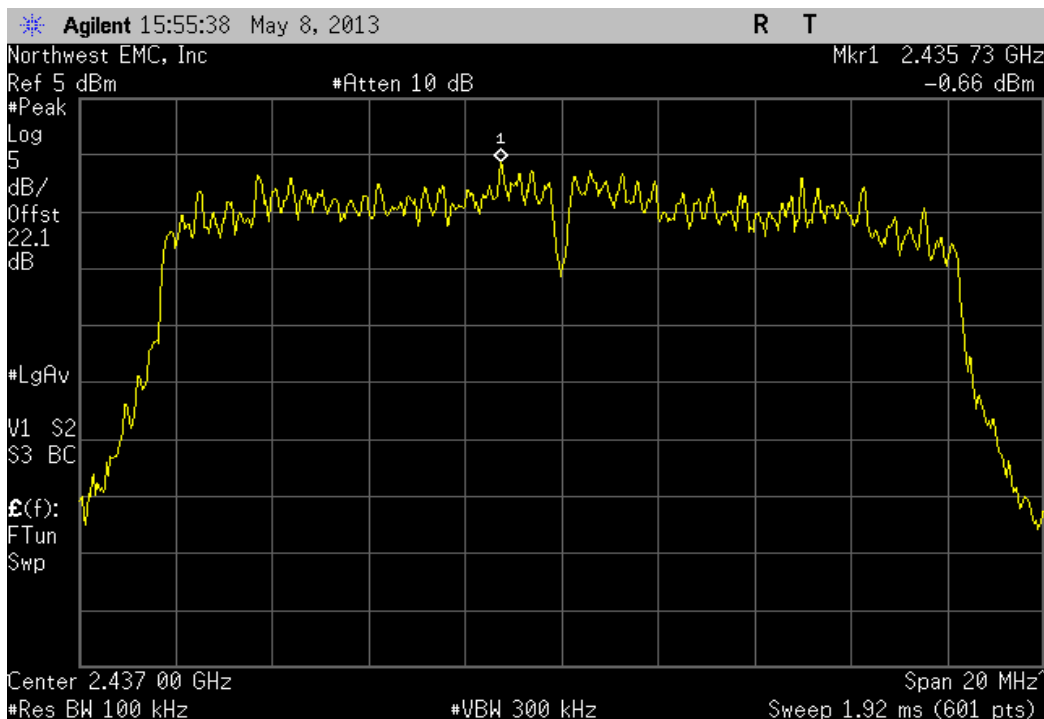


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz

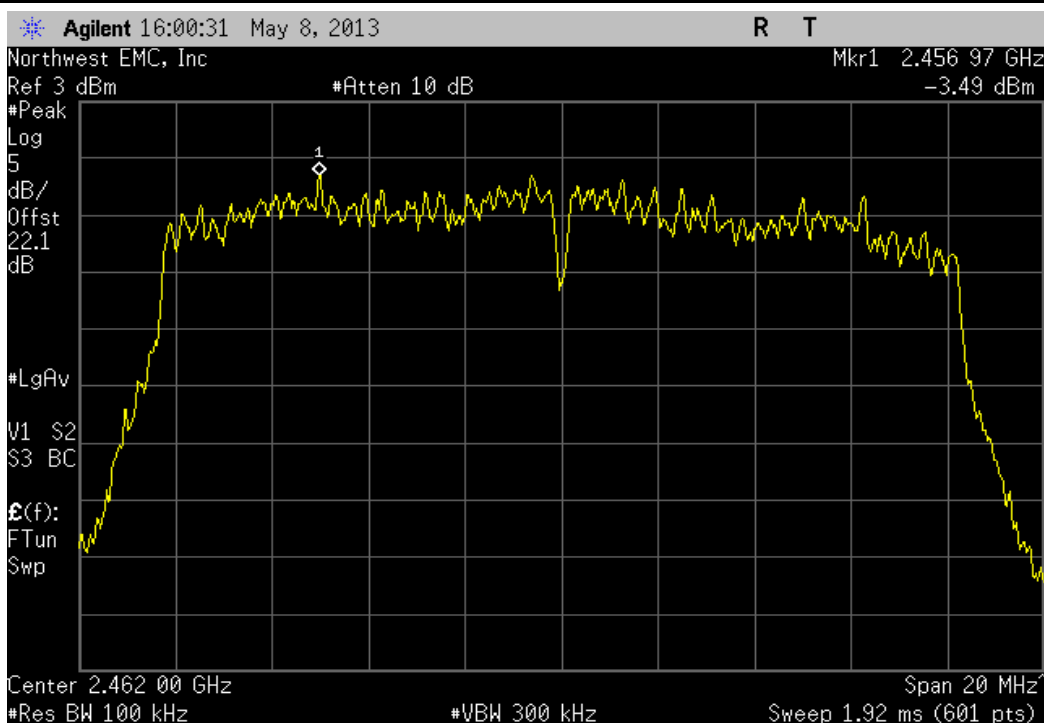
Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-2.609	-15.2	-17.809	8	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-0.658	-15.2	-15.858	8	Pass	

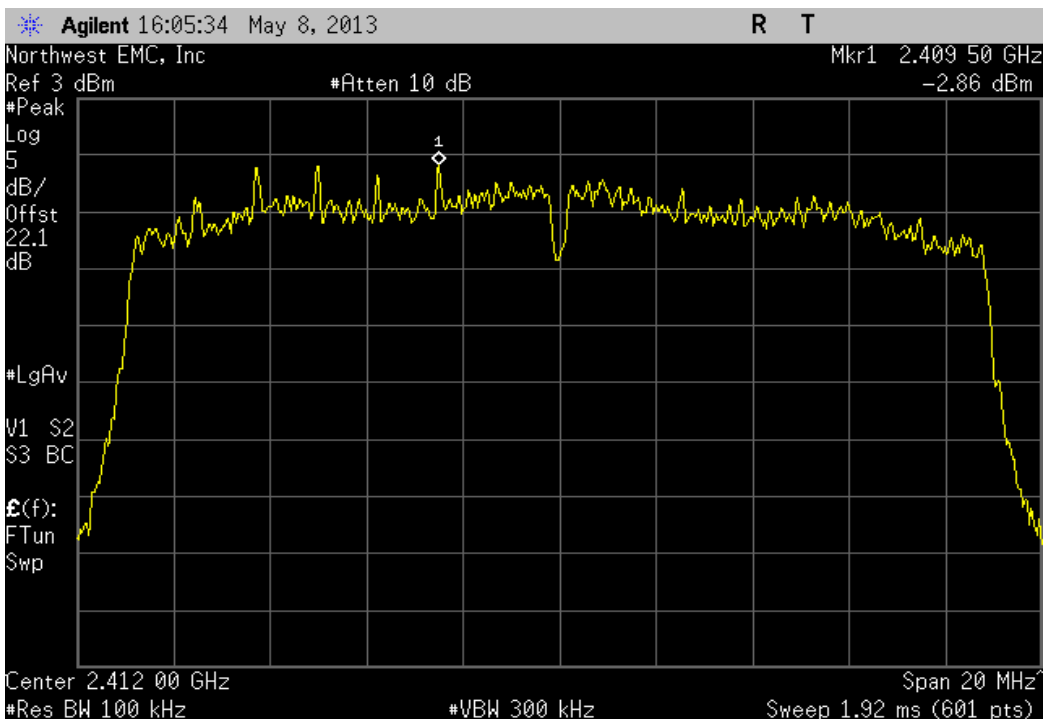


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-3.486	-15.2	-18.686	8	Pass	



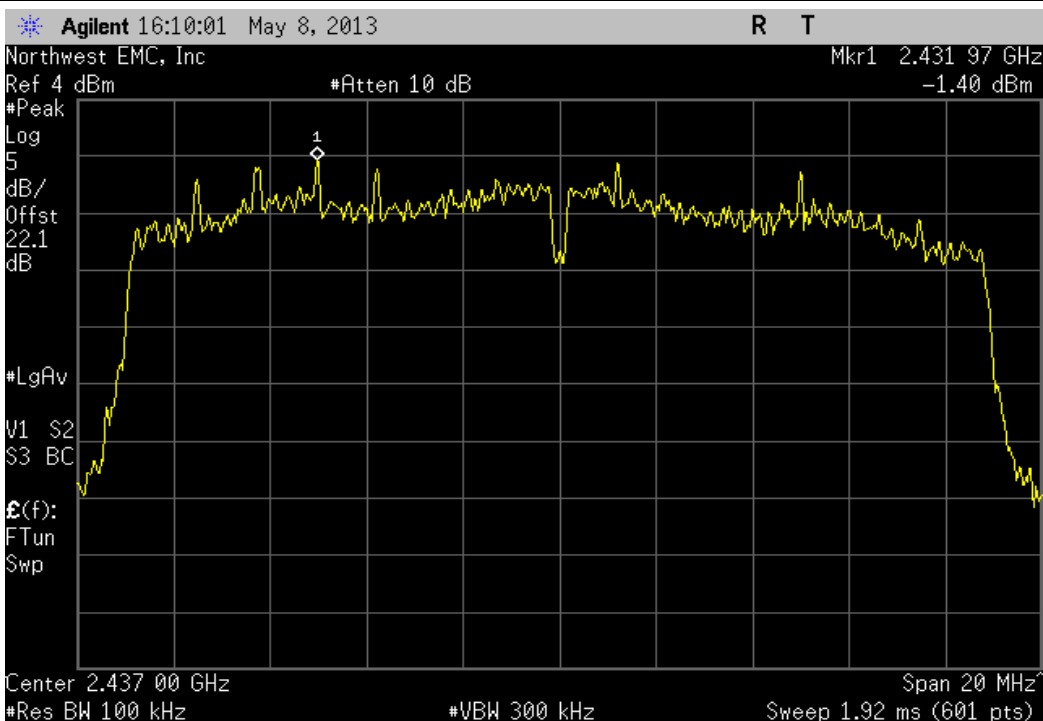
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-2.859	-15.2	-18.059	8	Pass

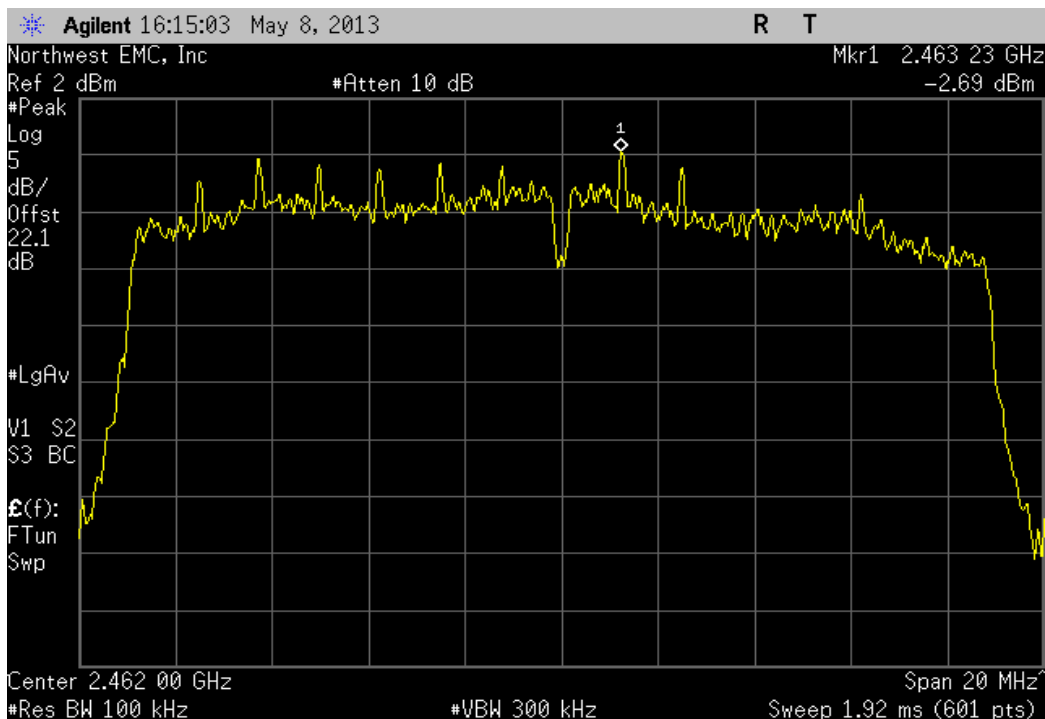


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

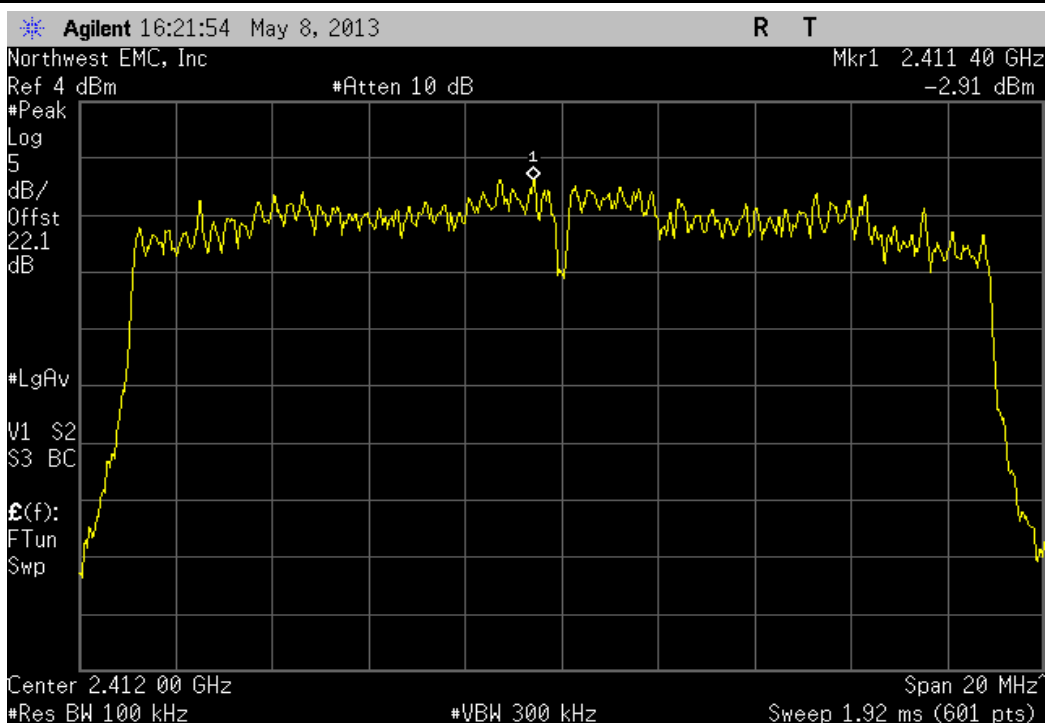
Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-1.398	-15.2	-16.598	8	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-2.691	-15.2	-17.891	8	Pass	

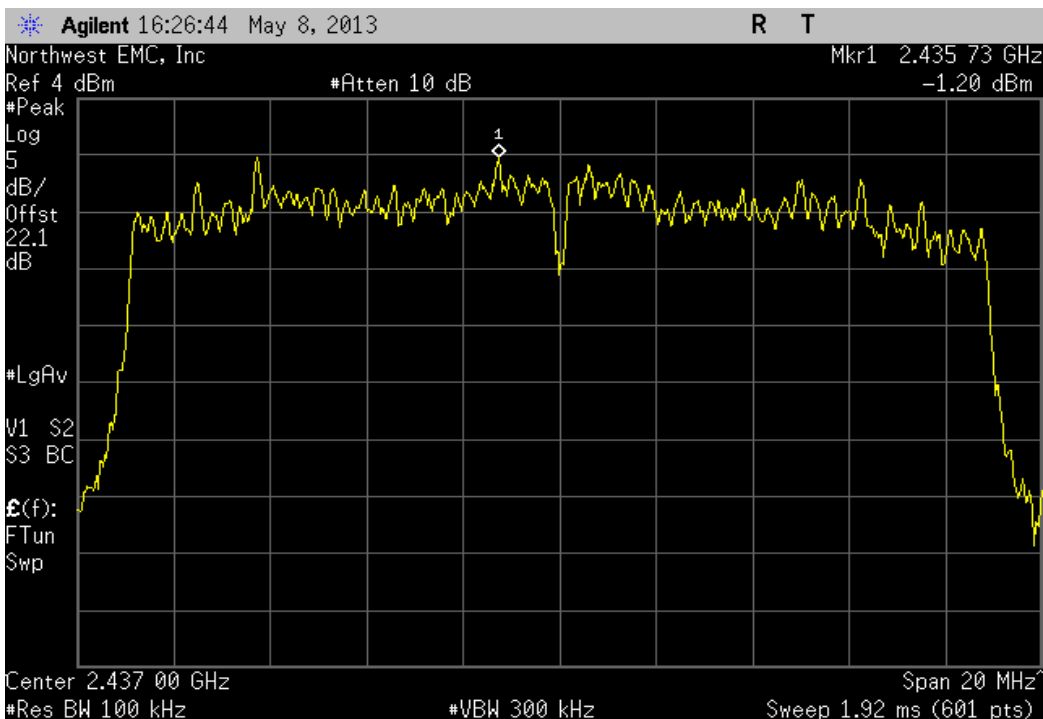


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Value	dBm/100kHz	Value	Limit		
	dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	Result	
	-2.909	-15.2	-18.109	8	Pass	



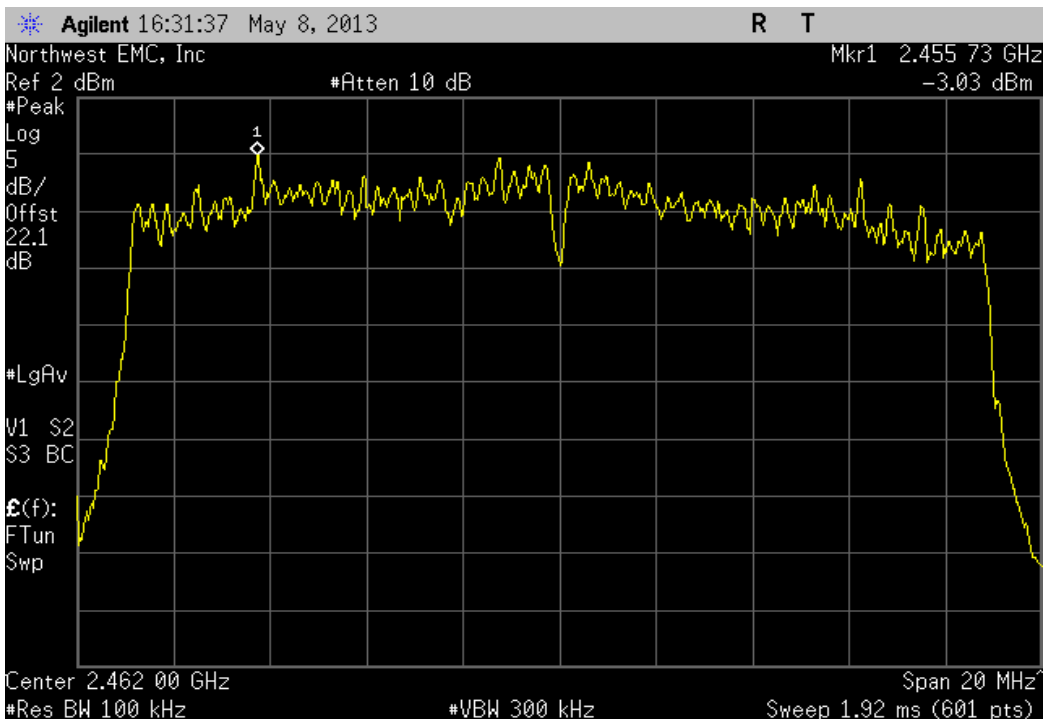
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-1.201	-15.2	-16.401	8	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value	dBm/100kHz	Value	Limit	Result
dBm/100kHz	To dBm/3kHz	dBm/3kHz	dBm/3kHz	
-3.03	-15.2	-18.23	8	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
40 GHz DC block	Fairview Microwave	SD3379	AMI	10/5/2012	12
Attenuator - 20db, 'SMA'	SM Electronics	SA26B-20	RFW	4/12/2013	12
Signal Generator MXG	Agilent	N5183A	TIK	6/7/2012	36
Spectrum Analyzer	Agilent	E4440A	AAX	5/15/2012	24

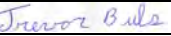
TEST DESCRIPTION

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.

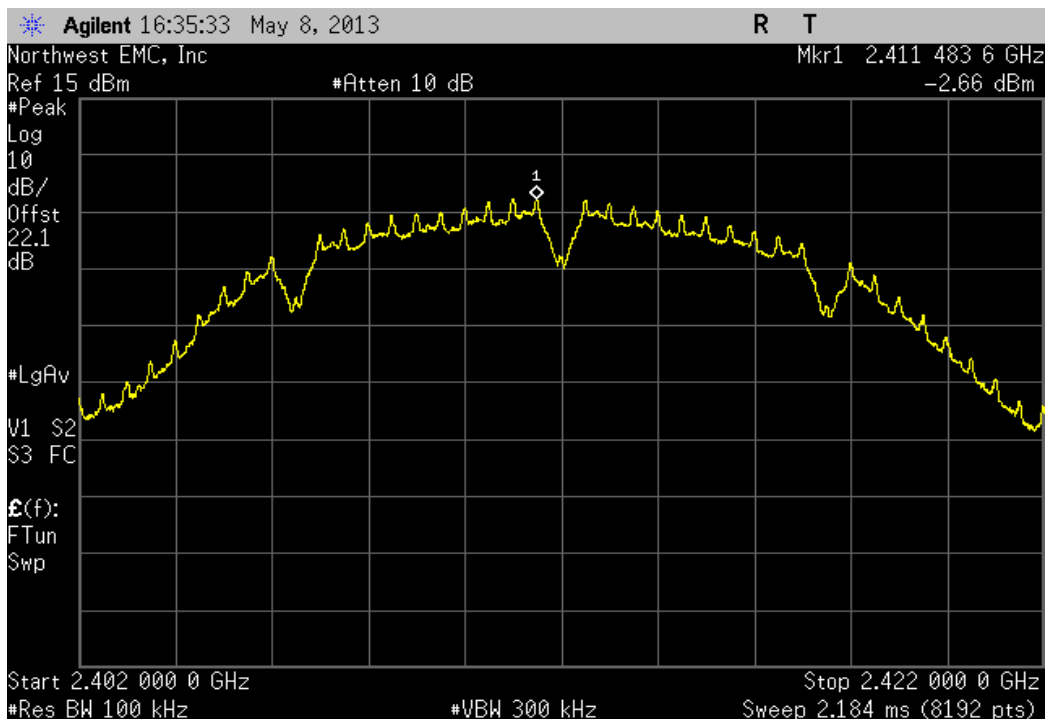


Spurious Conducted Emissions

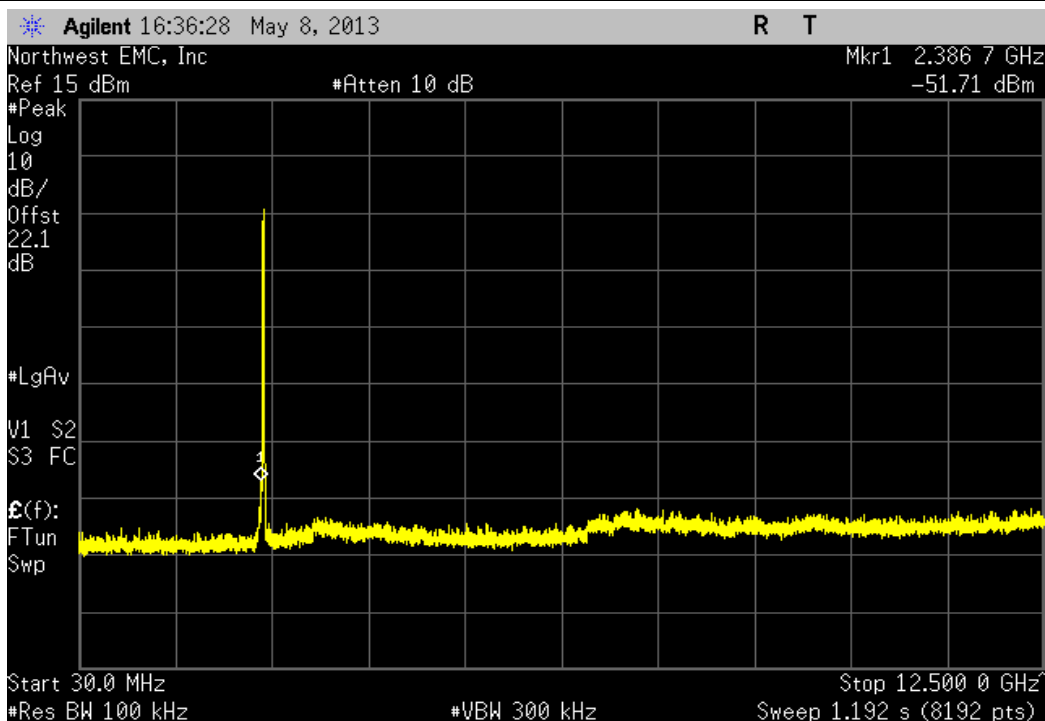
XMI 2013.02.28
PiaTr 2013.04.12

EUT:RTN850WF01				Work Order:JNYW0642			
Serial Number:4174001 0010151				Date:05/09/13			
Customer:Noneveet, Automation and Control Solutions				Temperature:24.7°C			
Attendees:None				Humidity:38%			
Project:None				Barometric Press.:1015.3			
Tested by:Trevor Bula				Power:110VAC/60Hz			
Job Site:MW08							
TEST SPECIFICATIONS				Test Method			
PCC 15.247.2013				ANSI C63.10-2009			
COMMENTS							
None							
DEVIATIONS FROM TEST STANDARD							
None							
Configuration #		3		Signature			
				Frequency Range		Value Limit Result	
Antenna 0							
2400 MHz - 2483.5 MHz Band							
802.11(b) 1 Mbps							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-49.05 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-49.37 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		-50.01 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-51.27 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		-52.66 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-49.39 dBc < -20 dBc Pass	
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		-49.9 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-49.73 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		-54.92 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-50.99 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		-51.82 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-50.08 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		-43.35 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-43.61 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		-50.52 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-46.80 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		-48.59 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-44.61 dBc < -20 dBc Pass	
802.11(g) 36 Mbps							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-43.18 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-44.05 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		-48.78 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-46.66 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		-45.54 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-44.91 dBc < -20 dBc Pass	
802.11(g) 54 Mbps							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-44.27 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-43.71 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		-49.81 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-47.02 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		-48.74 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-45.31 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		-42.28 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-43.42 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		-50.67 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-47.05 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		-49.19 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-44.34 dBc < -20 dBc Pass	
802.11(n) MCS7							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-42.62 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-43.57 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		-49.93 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-47.37 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		-49.44 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-46.46 dBc < -20 dBc Pass	
Antenna 1							
2400 MHz - 2483.5 MHz Band							
802.11(b) 1 Mbps							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-54.29 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-56.42 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		-60.14 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		-57.81 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-54.25 dBc < -20 dBc Pass	
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		-55.01 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-56.03 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		-60.66 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-56.8 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		-56.69 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-54.84 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		-45.66 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-50.48 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		-54.25 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-51.81 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		-53.78 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-49.5 dBc < -20 dBc Pass	
802.11(g) 36 Mbps							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-46.65 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-50.09 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		-56.03 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-52.21 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		-53.49 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-49.56 dBc < -20 dBc Pass	
802.11(g) 54 Mbps							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-46.4 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-50.21 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		-55.87 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-52.35 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		-53.79 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-49.85 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		-46.47 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-50.74 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		-56.36 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-51.56 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		-53.78 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-49 dBc < -20 dBc Pass	
802.11(n) MCS7							
Low Channel 1, 2412 MHz				Fundamental		N/A N/A N/A	
Low Channel 1, 2412 MHz				30 MHz - 12.5 GHz		-45.74 dBc < -20 dBc Pass	
Low Channel 1, 2412 MHz				12.5 GHz - 25 GHz		-50.77 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		-55.81 dBc < -20 dBc Pass	
Mid Channel 6, 2437 MHz				12.5 GHz - 25 GHz		-51.48 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		-54.2 dBc < -20 dBc Pass	
High Channel 11, 2462 MHz				12.5 GHz - 25 GHz		-50 dBc < -20 dBc Pass	

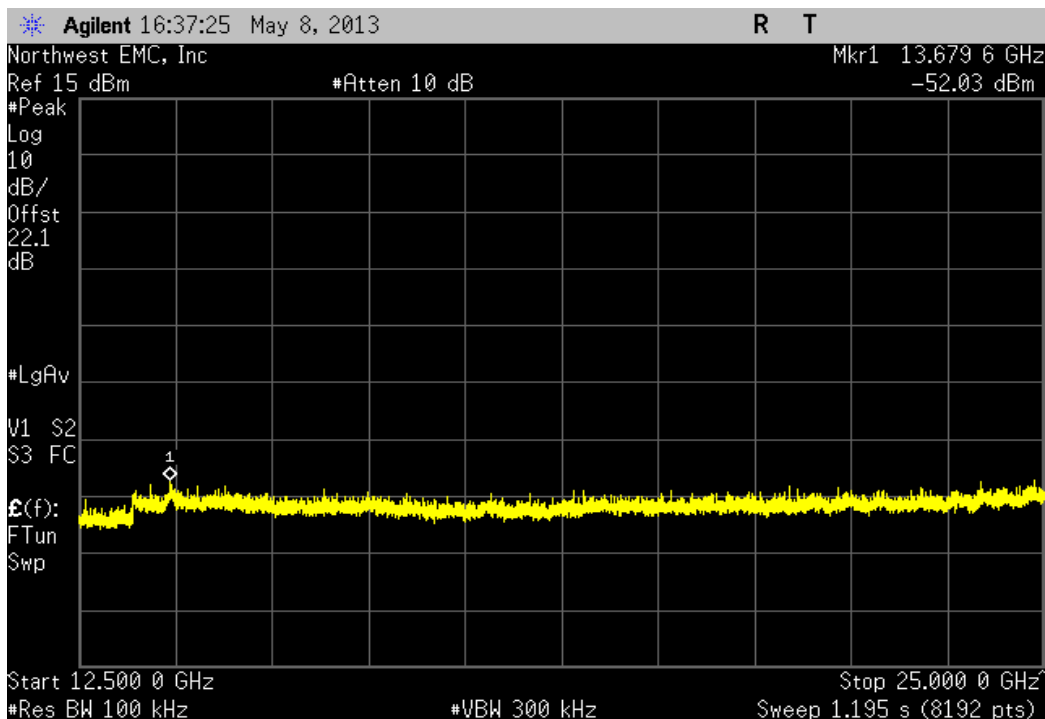
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



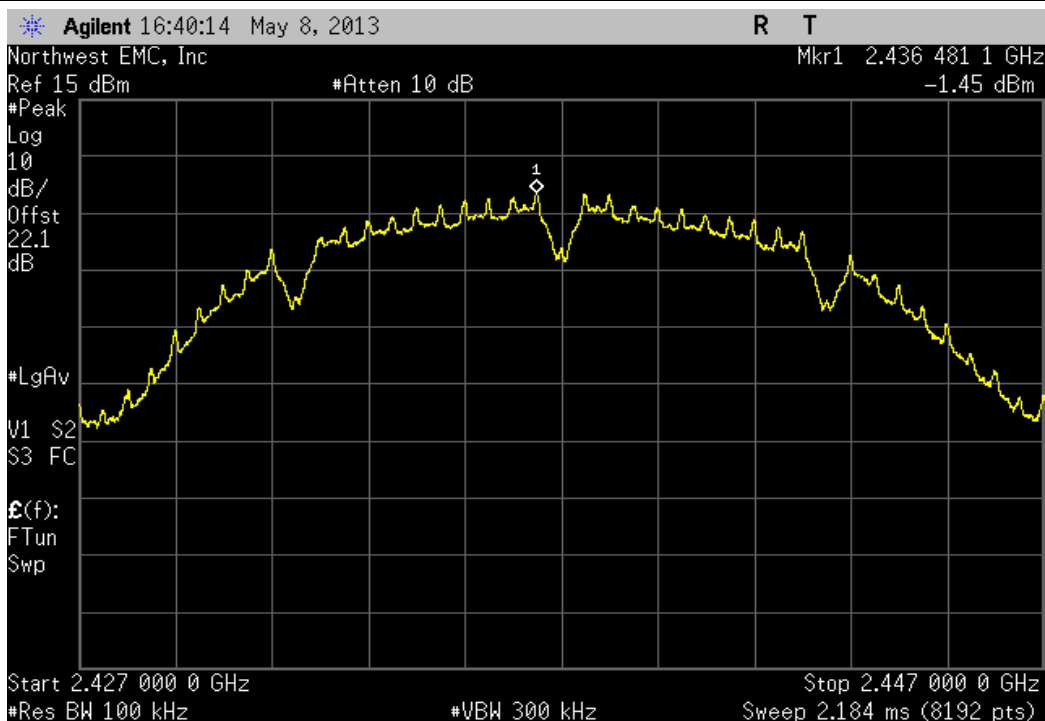
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
30 MHz - 12.5 GHz		-49.05 dBc	≤ -20 dBc	Pass



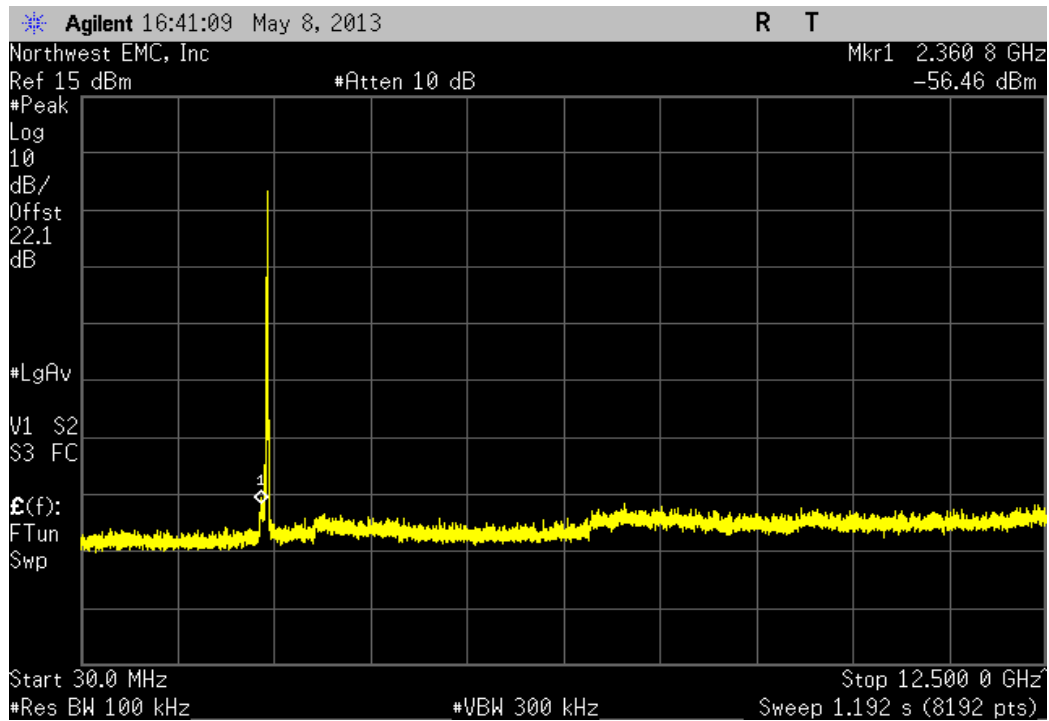
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-49.37 dBc	≤ -20 dBc	Pass



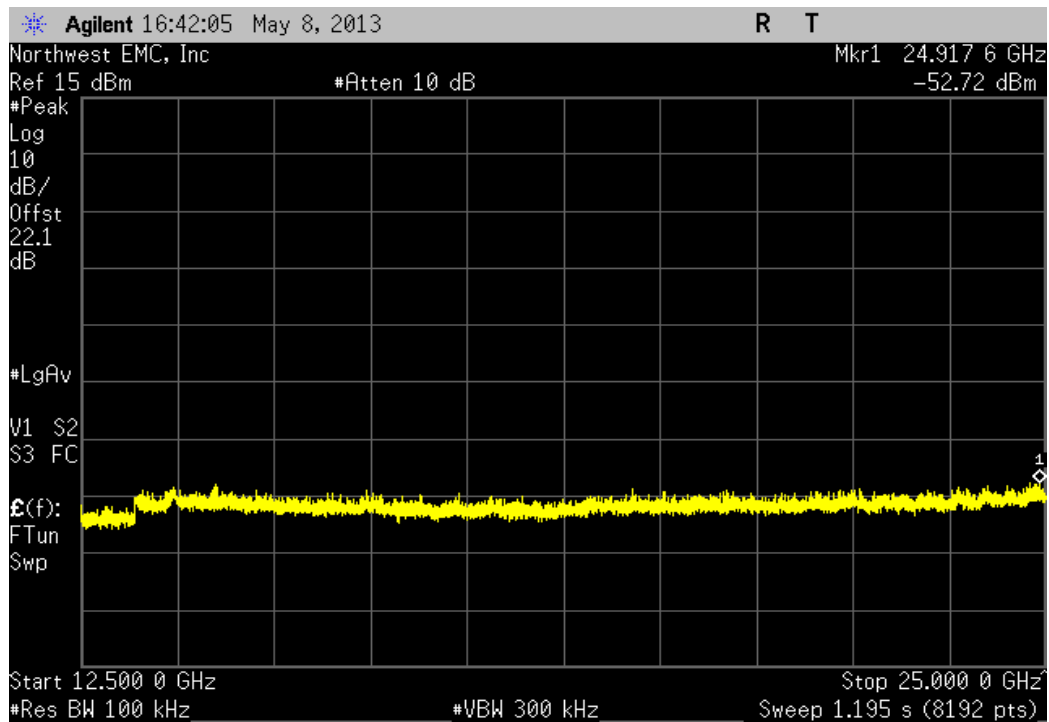
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



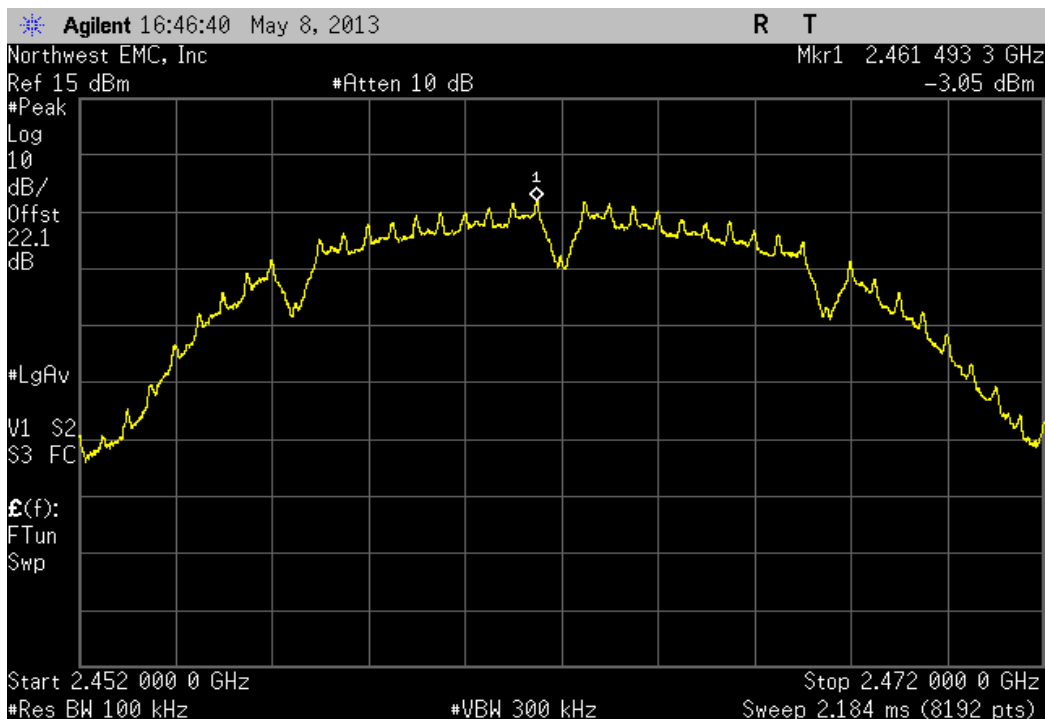
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-55.01 dBc	≤ -20 dBc	Pass	



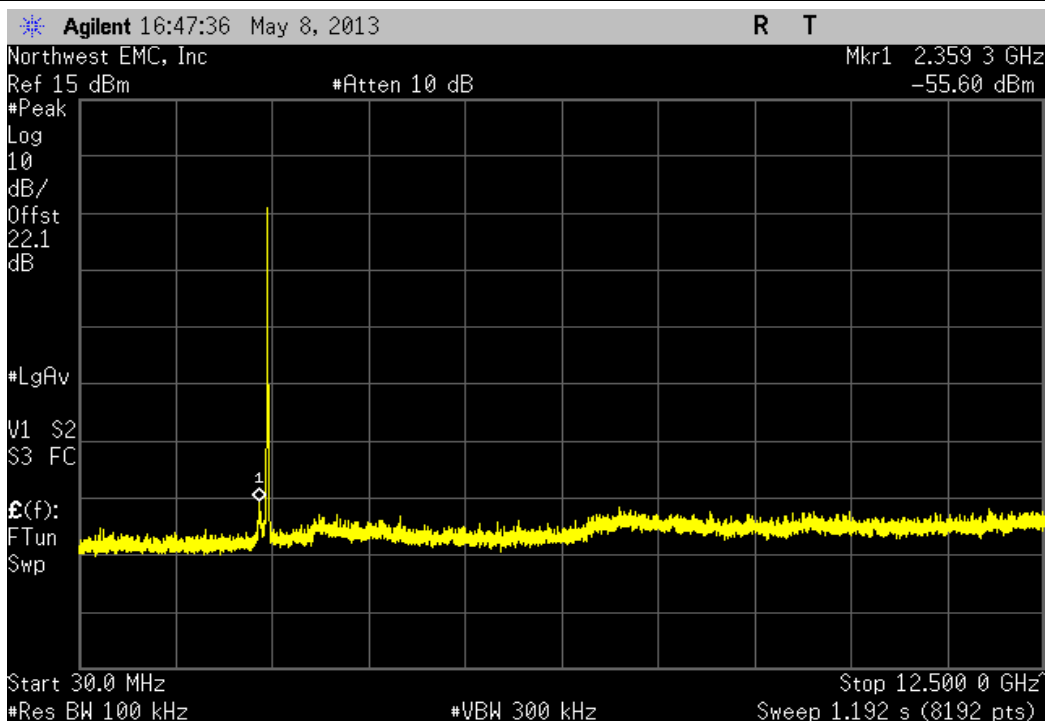
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-51.27 dBc	≤ -20 dBc	Pass	



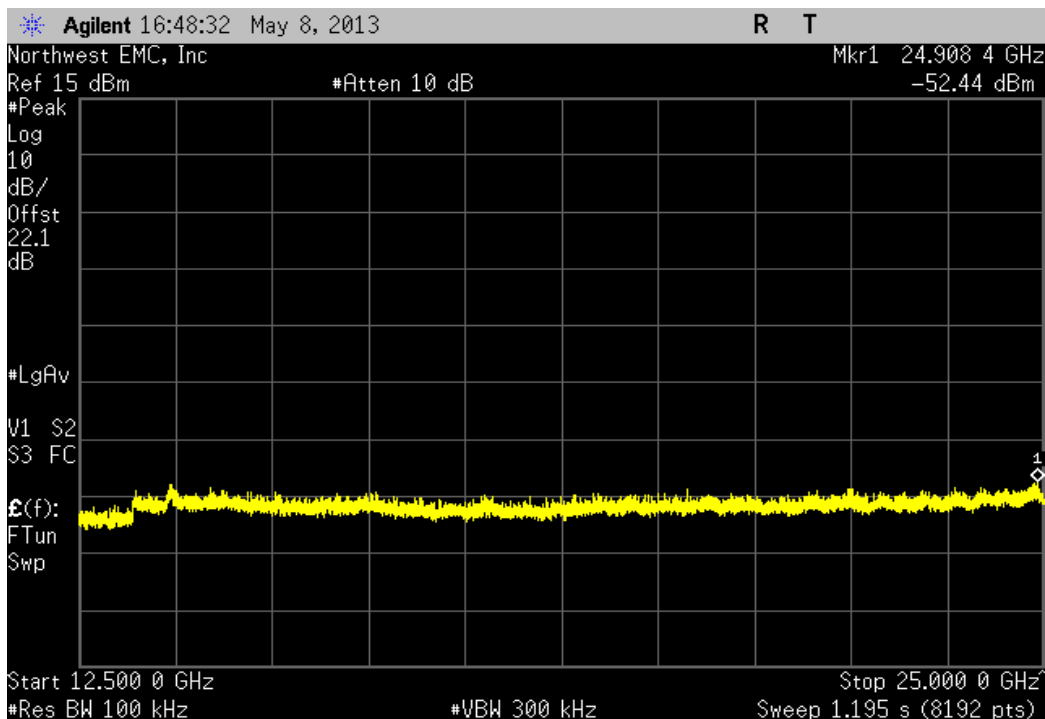
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



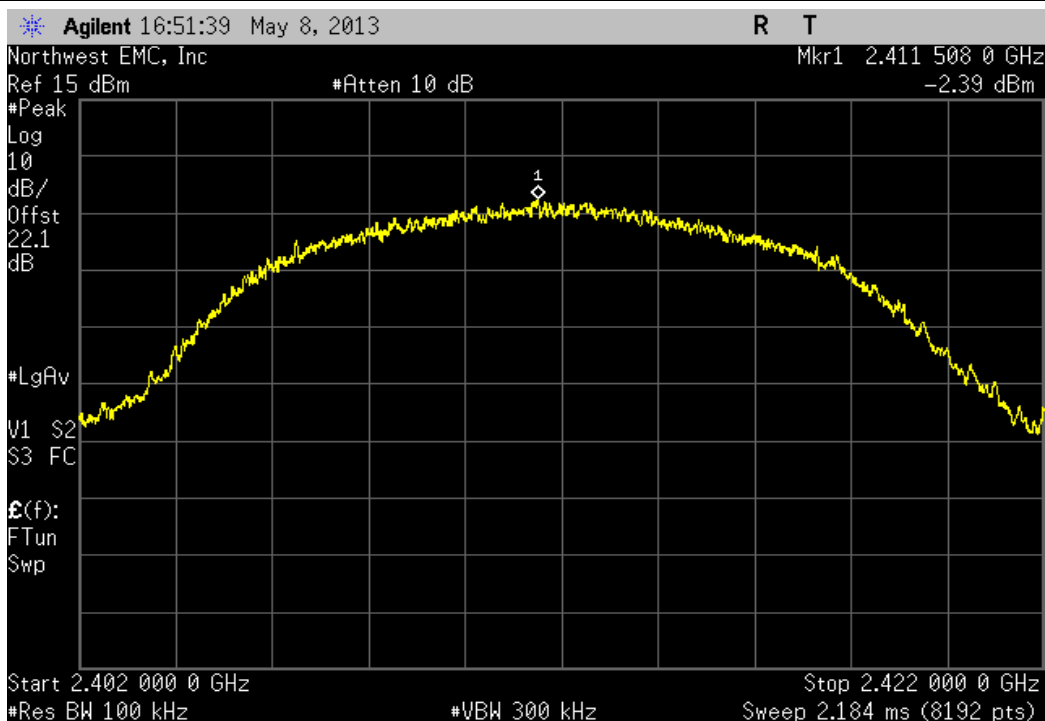
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
30 MHz - 12.5 GHz		-52.56 dBc	≤ -20 dBc	Pass



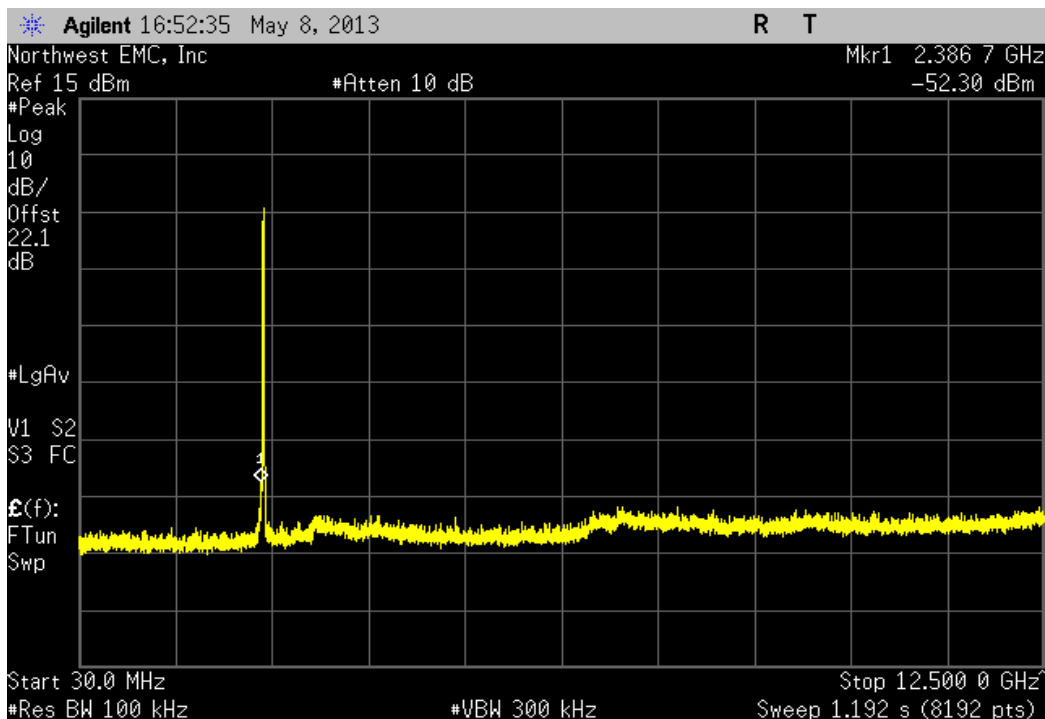
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-49.39 dBc	≤ -20 dBc	Pass	



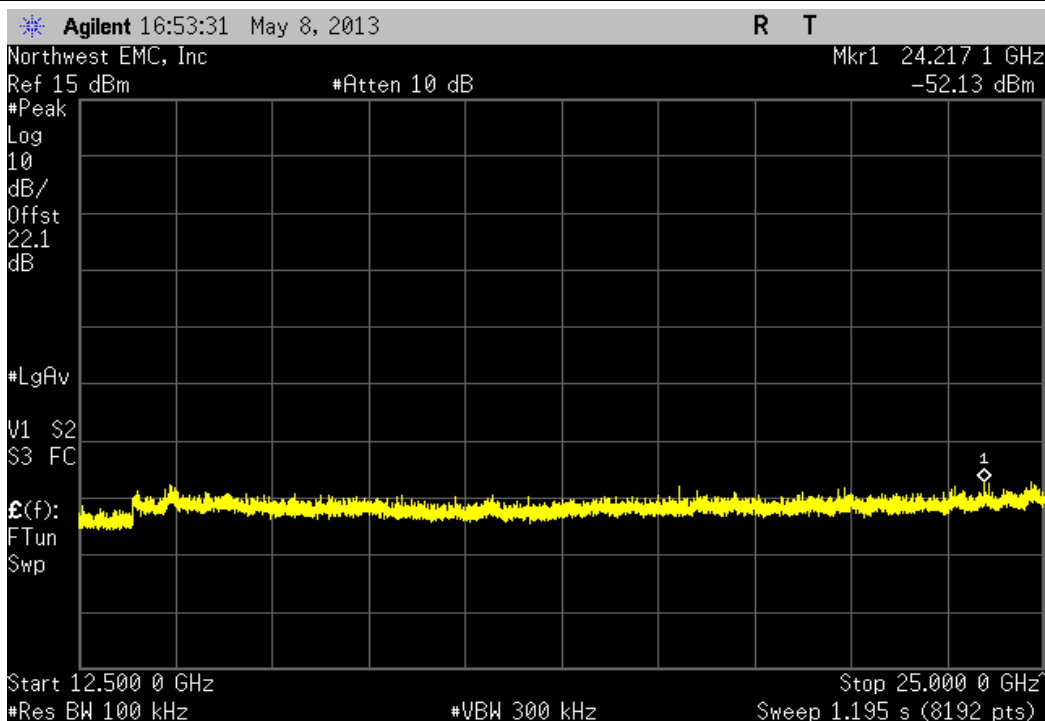
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
Fundamental	N/A	N/A	N/A	



Antenna 0, 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	-49.9 dBc	≤ -20 dBc	Pass	



Antenna 0, 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	-49.73 dBc	≤ -20 dBc	Pass	



Antenna 0, 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

Agilent 16:56:32 May 8, 2013

R T

Northwest EMC, Inc

Mkr1 2.437 448 1 GHz

Ref 15 dBm

#Atten 10 dB

-1.33 dBm

#Peak

Log

10

dB/

Offst

22.1

dB

#LgAv

V1 S2

S3 FC

E(f):

FTun

Swp

Start 2.427 000 0 GHz

Stop 2.447 000 0 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 2.184 ms (8192 pts)

Antenna 0, 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

-54.92 dBc

≤ -20 dBc

Pass

Agilent 16:57:28 May 8, 2013

R T

Northwest EMC, Inc

Mkr1 7.055 9 GHz

Ref 15 dBm

#Atten 10 dB

-56.25 dBm

#Peak

Log

10

dB/

Offst

22.1

dB

#LgAv

V1 S2

S3 FC

E(f):

FTun

Swp

Start 30.0 MHz

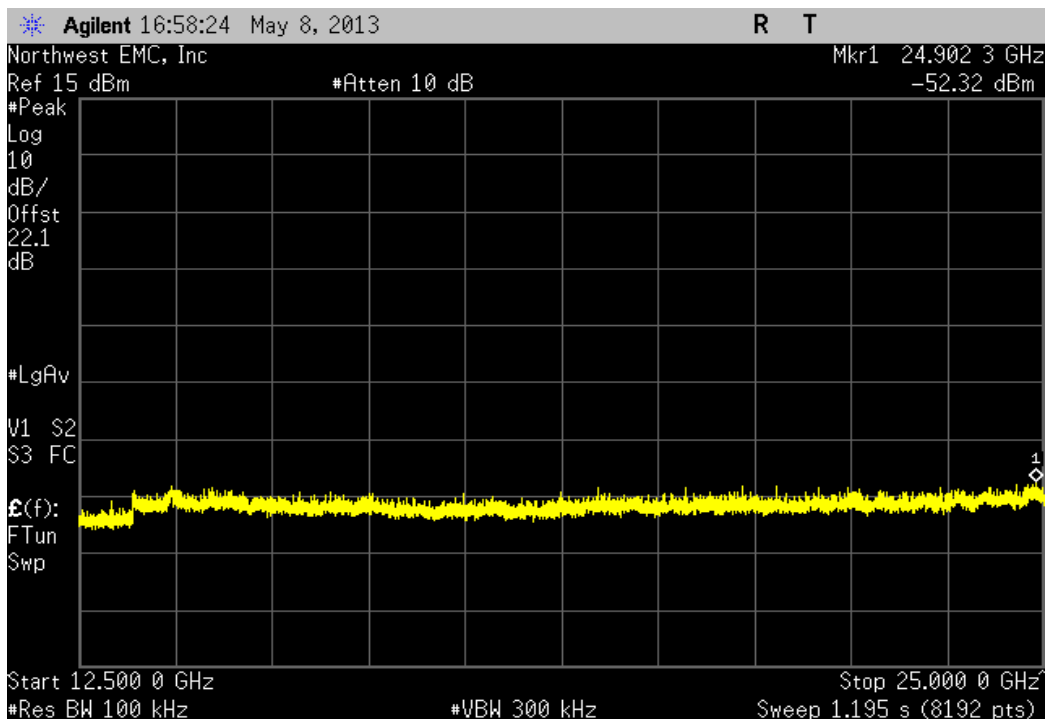
Stop 12.500 0 GHz

#Res BW 100 kHz

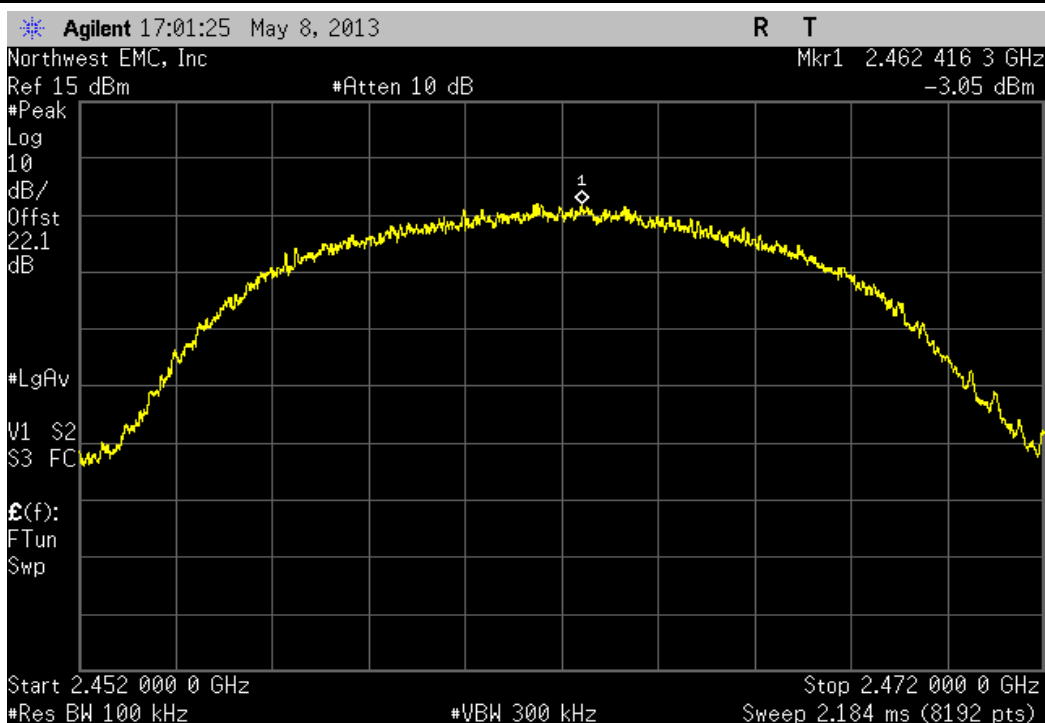
#VBW 300 kHz

Sweep 1.192 s (8192 pts)

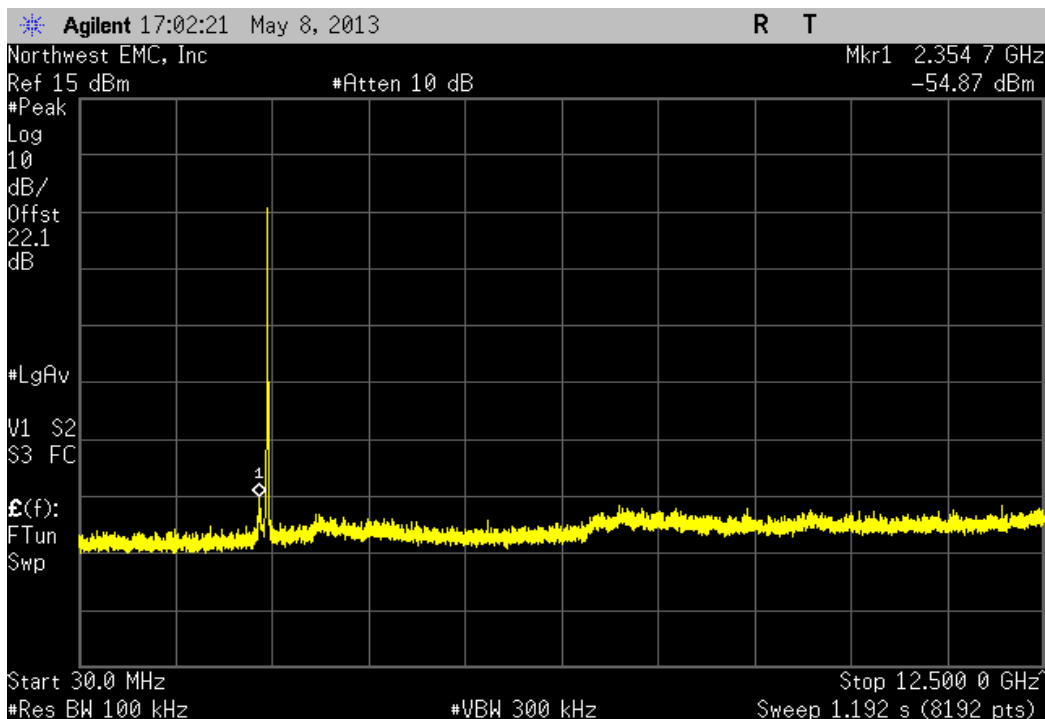
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-50.99 dBc	≤ -20 dBc	Pass



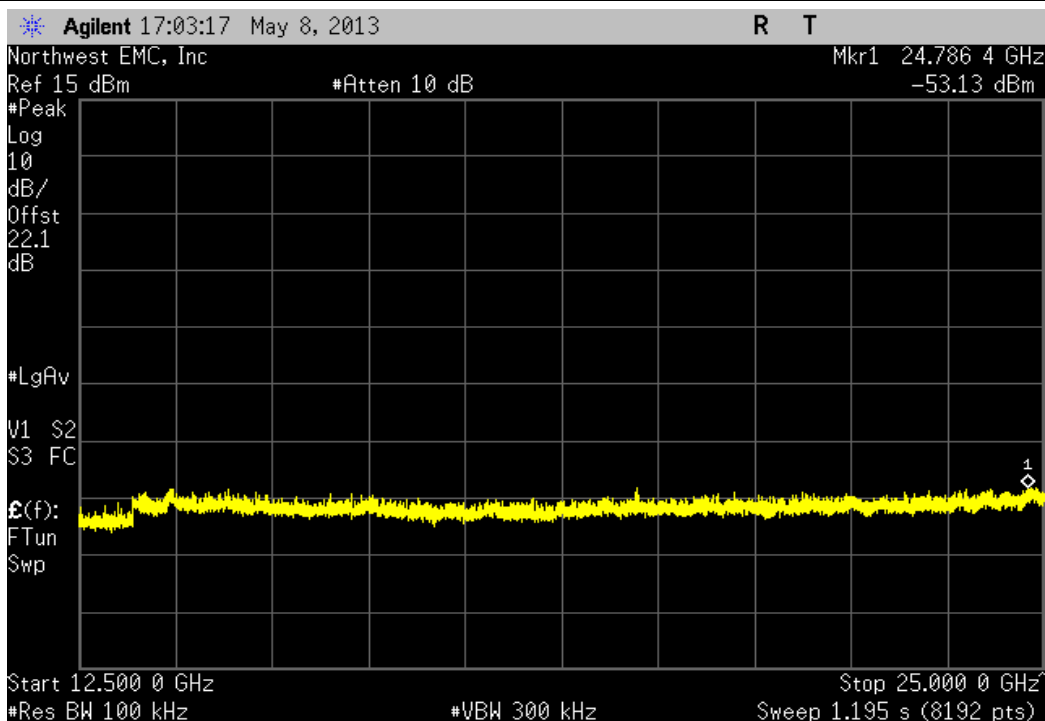
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



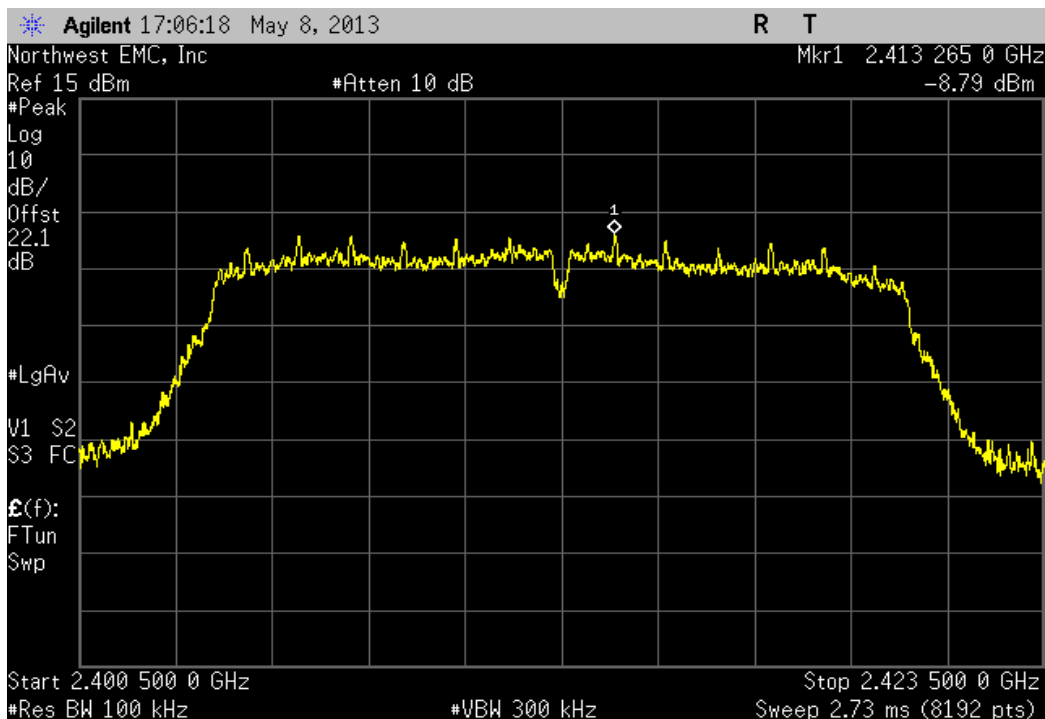
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-51.82 dBc	≤ -20 dBc	Pass	



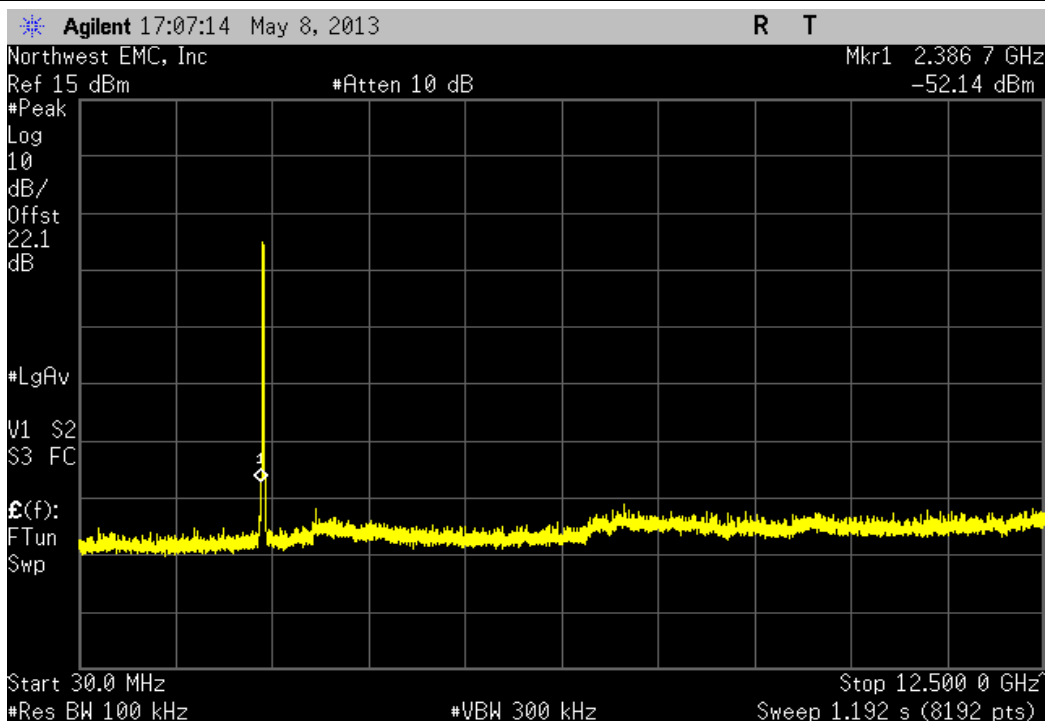
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-50.08 dBc	≤ -20 dBc	Pass	



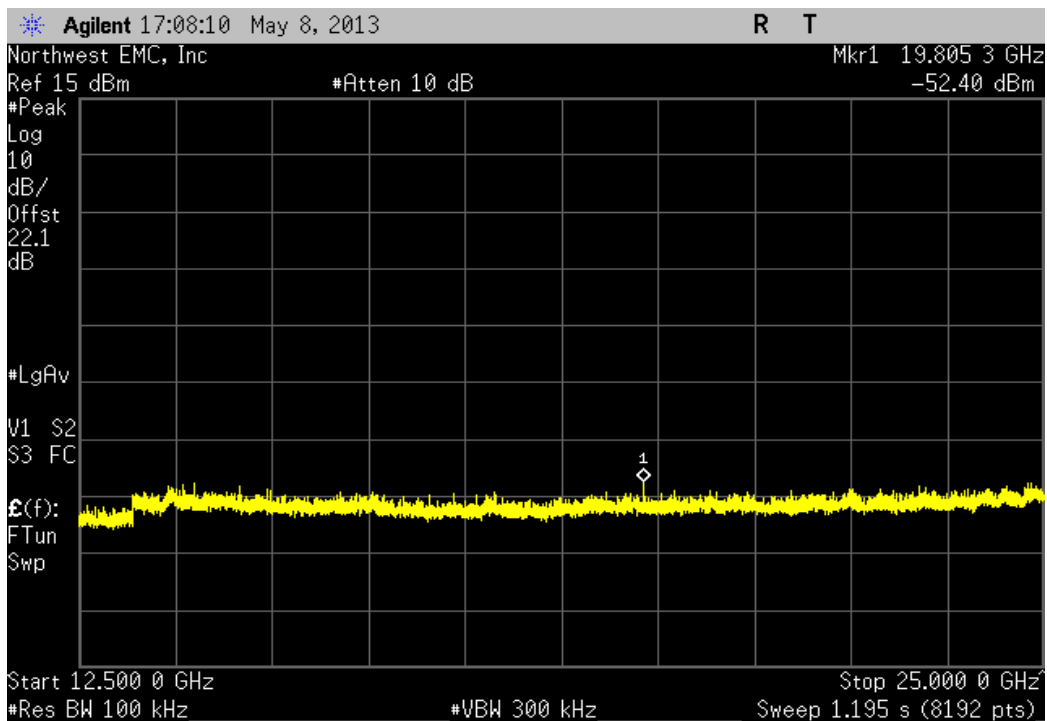
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
Frequency Range		Value	Limit	Result		
Fundamental		N/A	N/A	N/A		



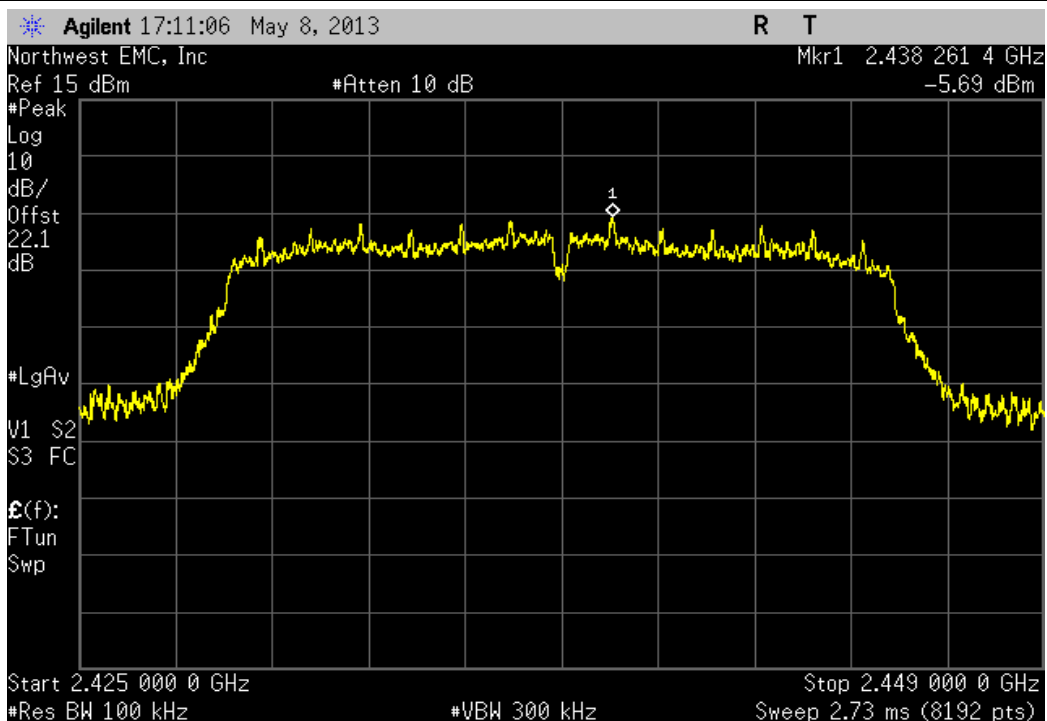
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz						
Frequency Range		Value	Limit	Result		
30 MHz - 12.5 GHz		-43.35 dBc	≤ -20 dBc	Pass		



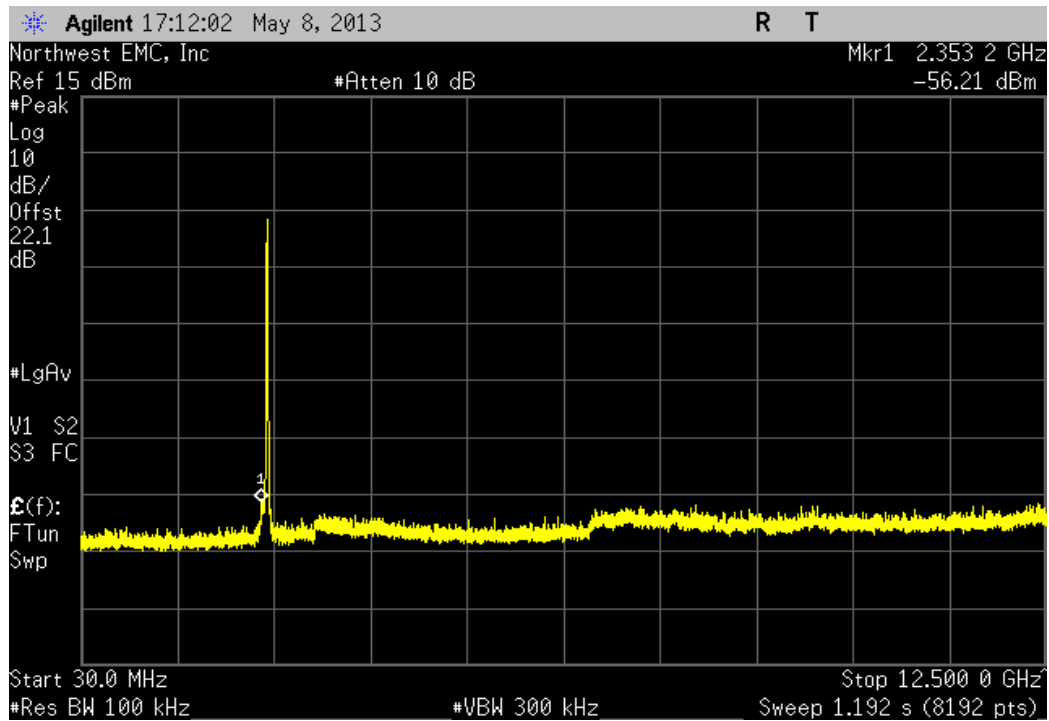
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-43.61 dBc	≤ -20 dBc	Pass



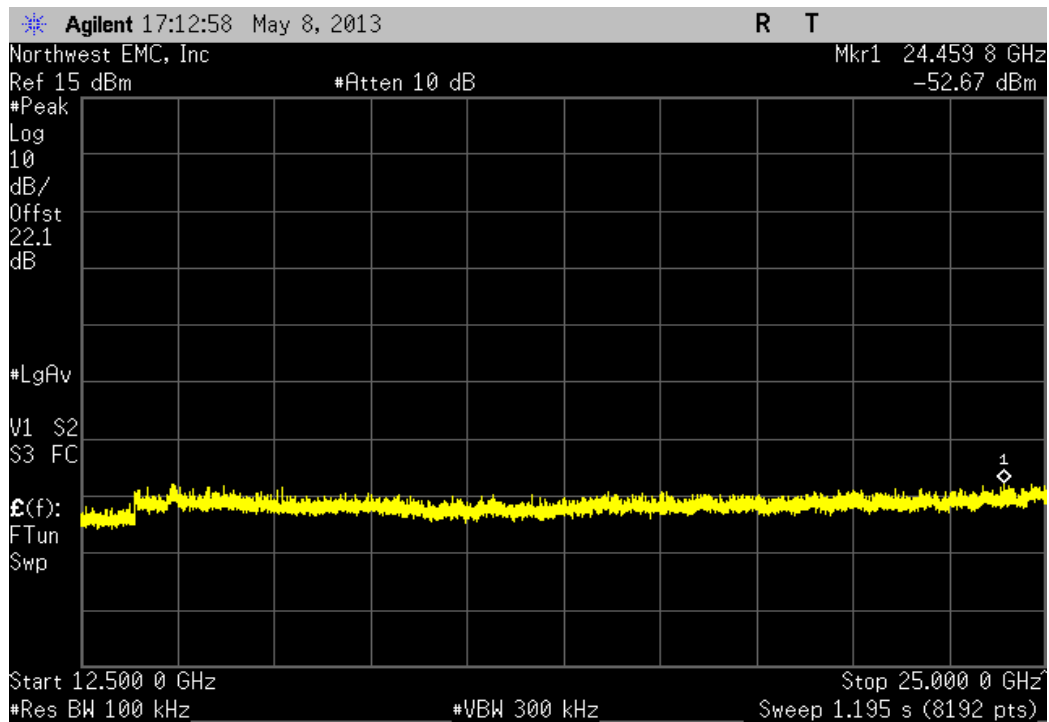
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



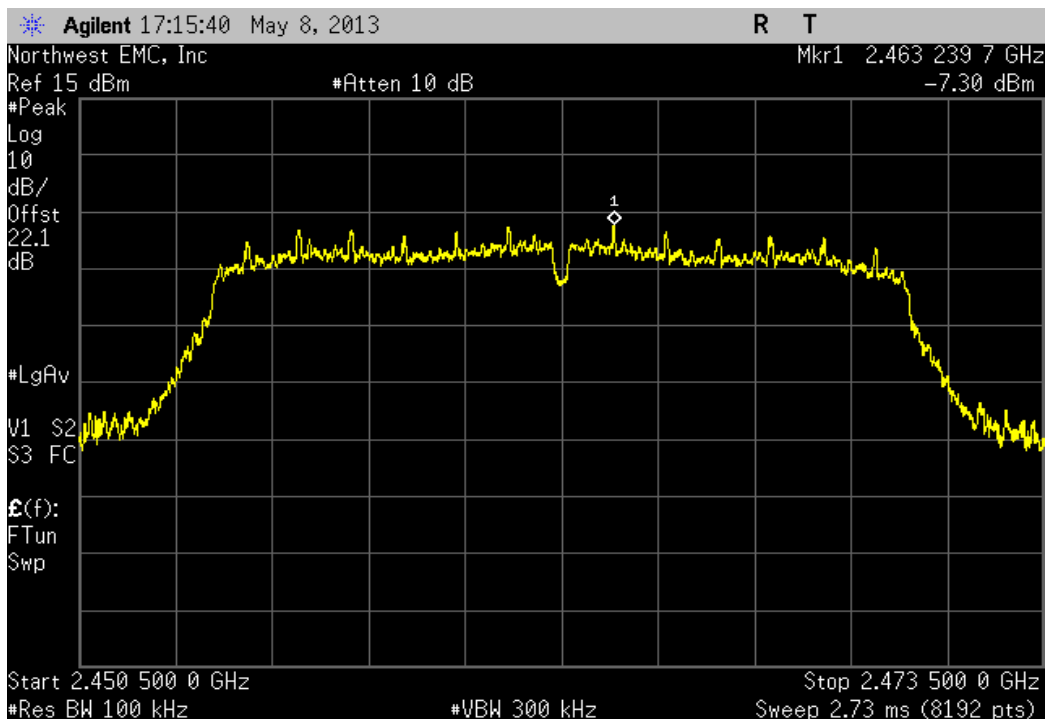
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-50.52 dBc	≤ -20 dBc	Pass	



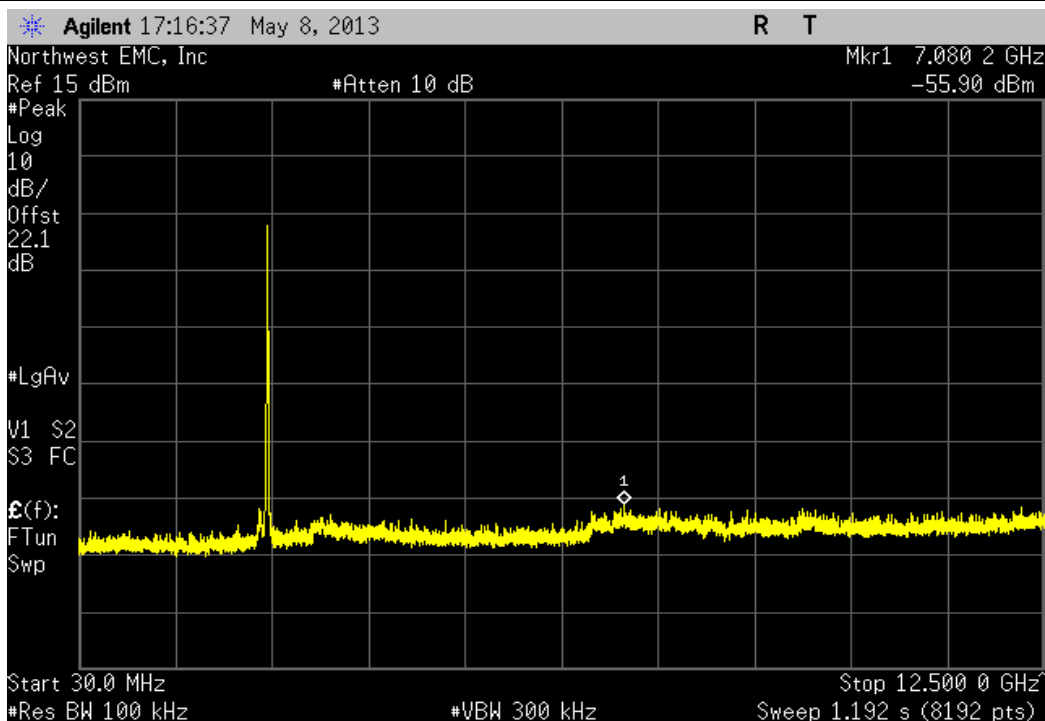
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-46.98 dBc	≤ -20 dBc	Pass	



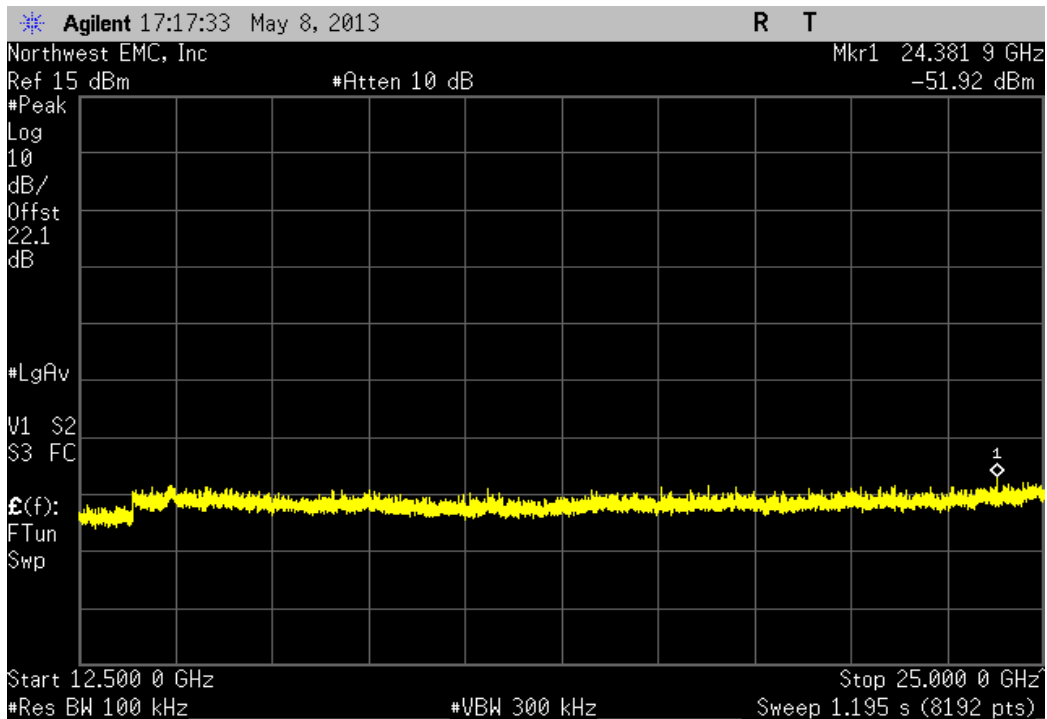
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
Fundamental				N/A	N/A	N/A



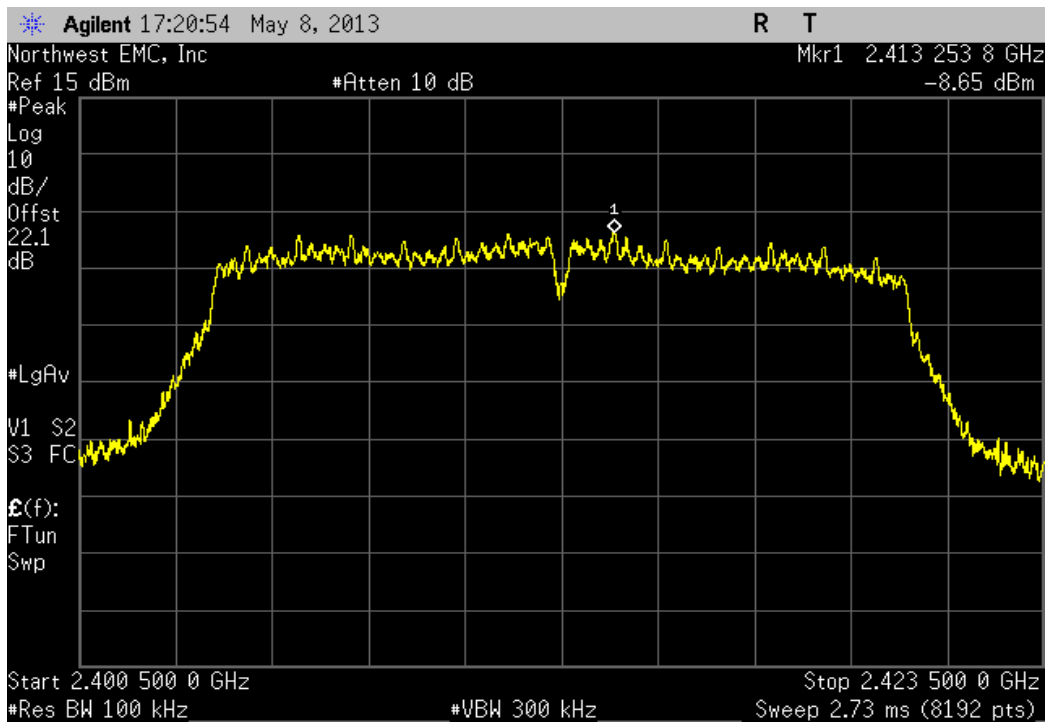
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-48.59 dBc	≤ -20 dBc	Pass



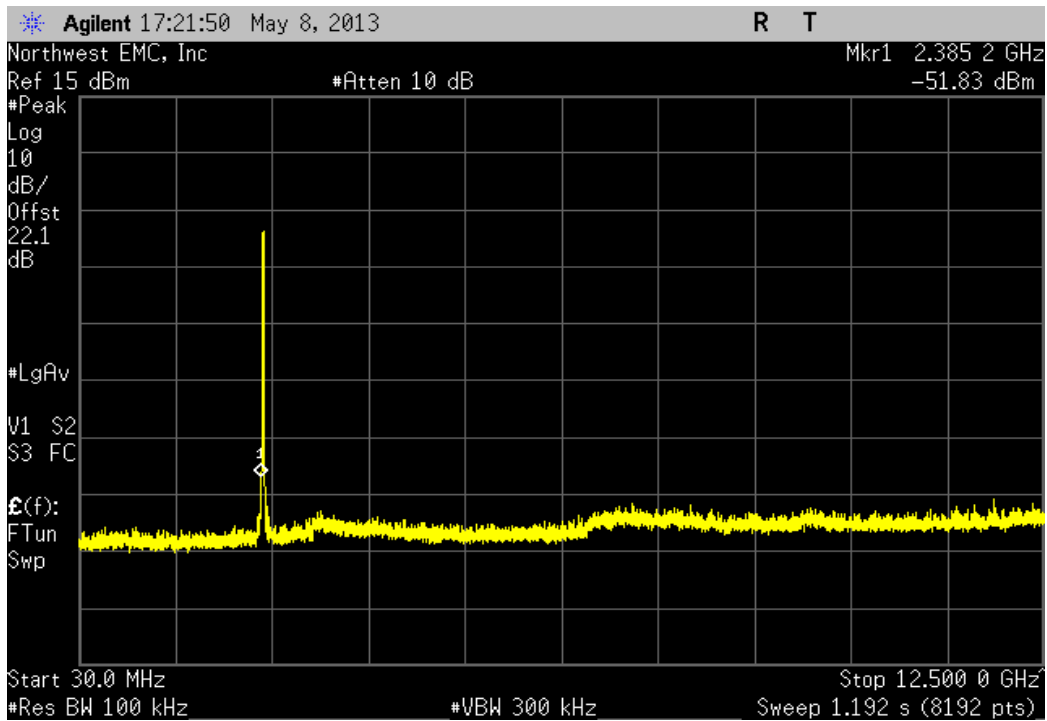
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-44.61 dBc	≤ -20 dBc	Pass



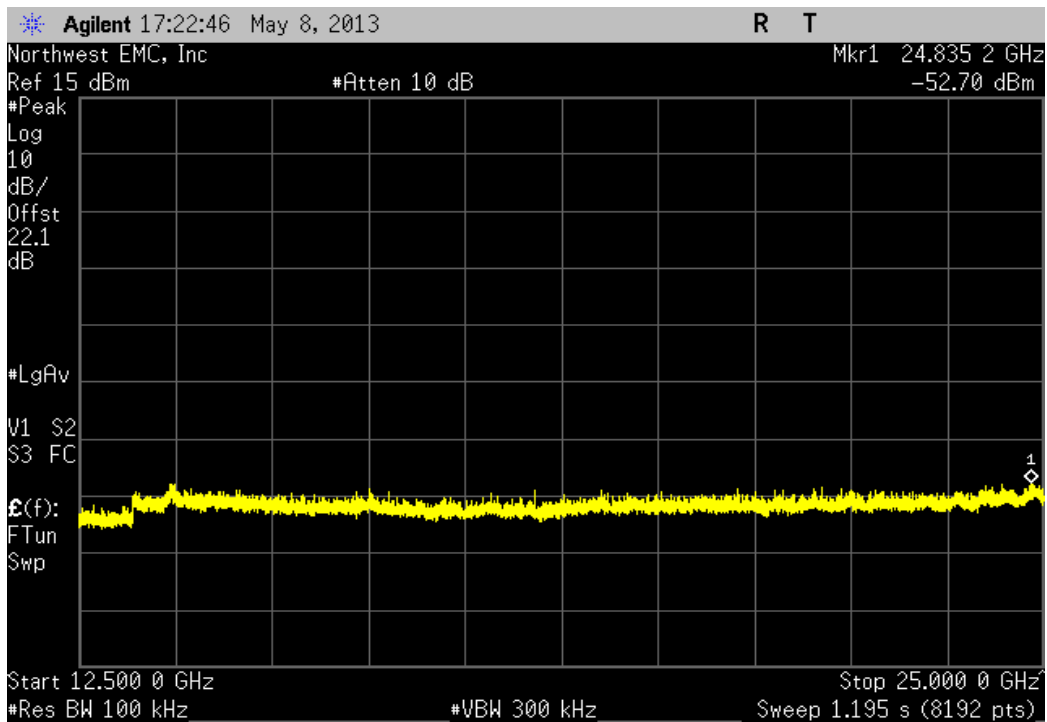
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



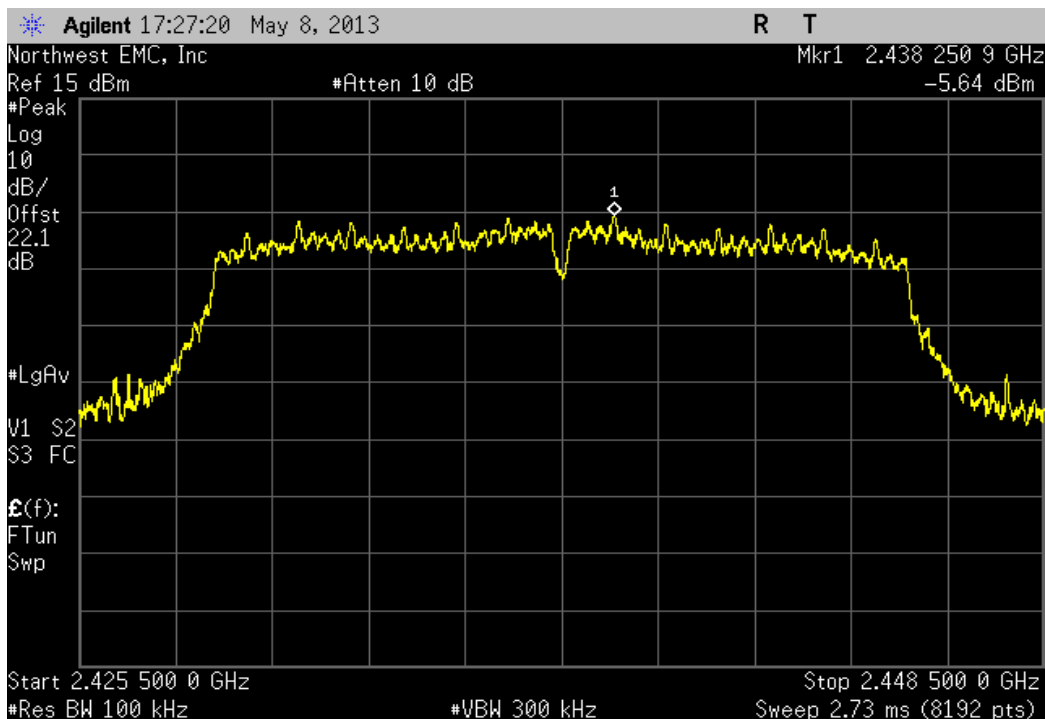
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-43.18 dBc	≤ -20 dBc	Pass	



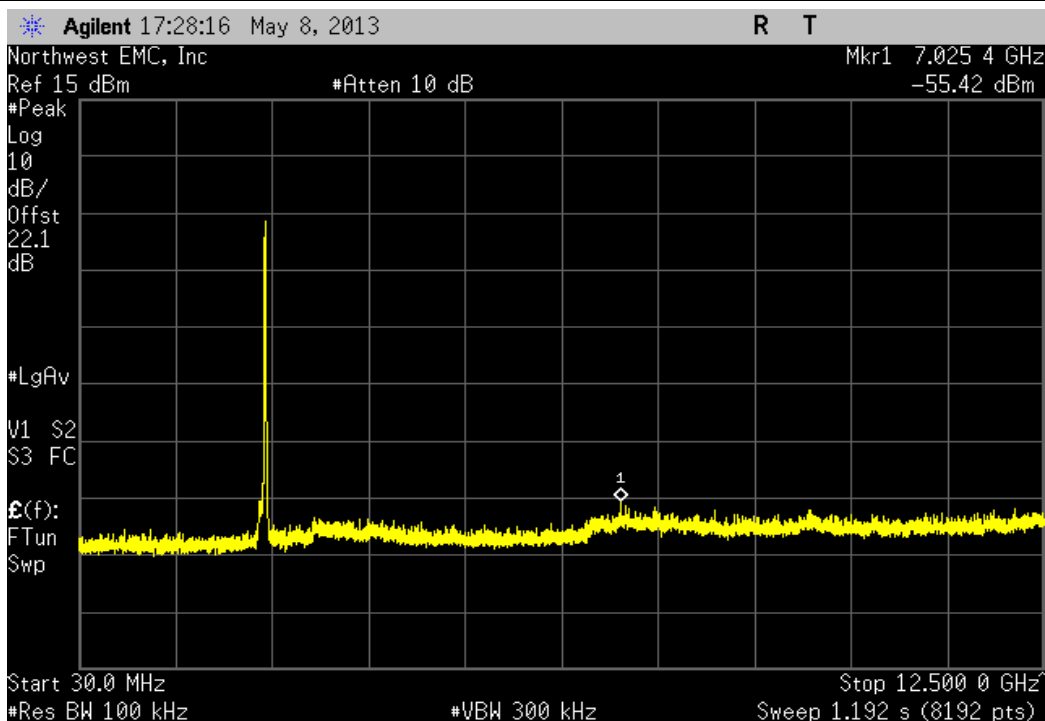
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-44.05 dBc	≤ -20 dBc	Pass	



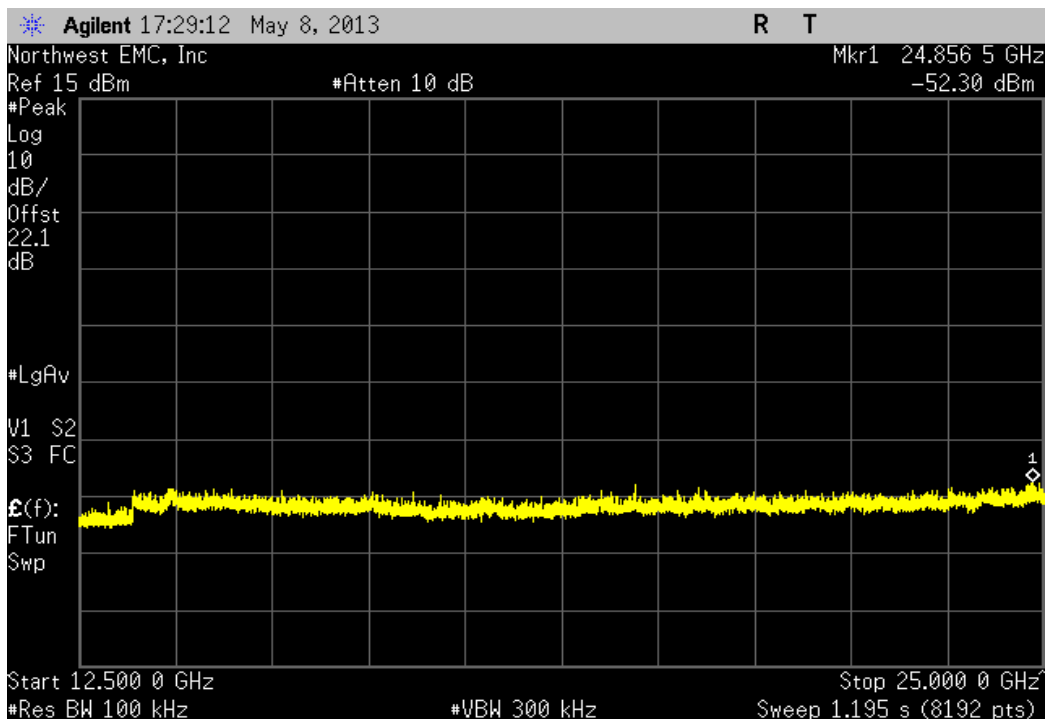
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range		Value	Limit	Result		
Fundamental		N/A	N/A	N/A		



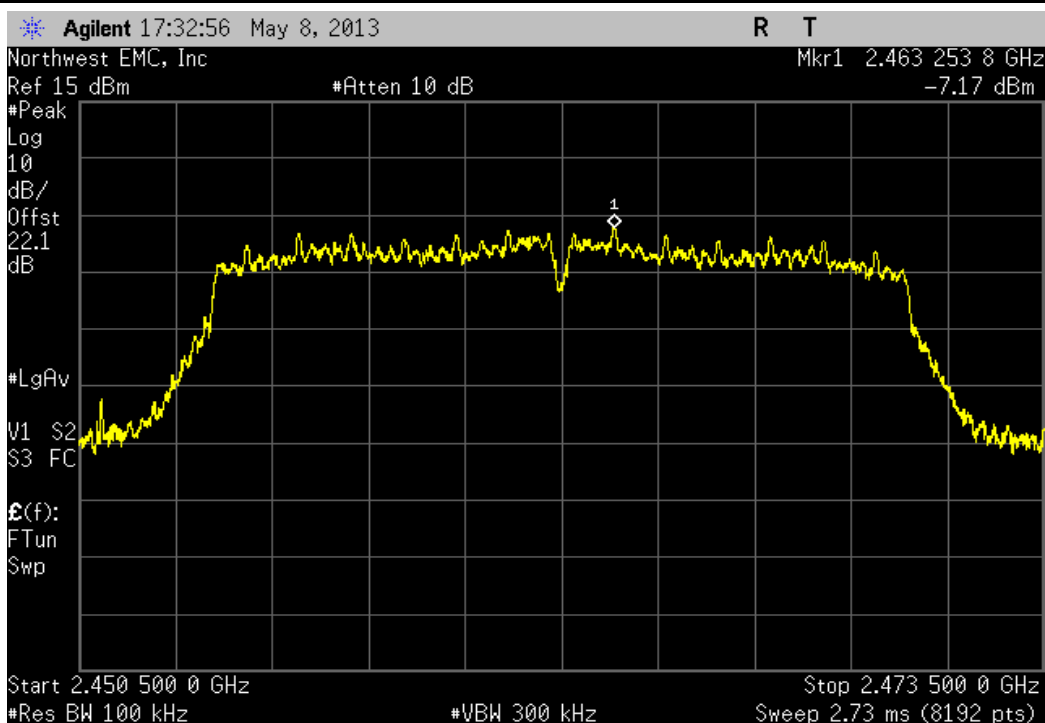
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range		Value	Limit	Result		
30 MHz - 12.5 GHz		-49.78 dBc	≤ -20 dBc	Pass		



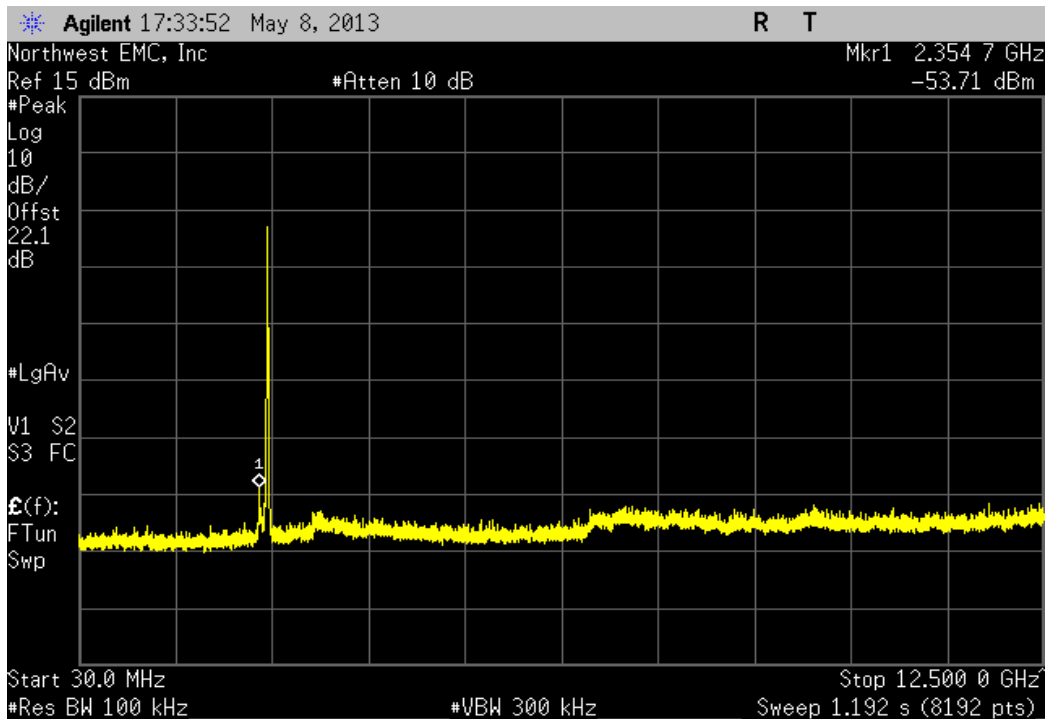
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-46.66 dBc	≤ -20 dBc	Pass	



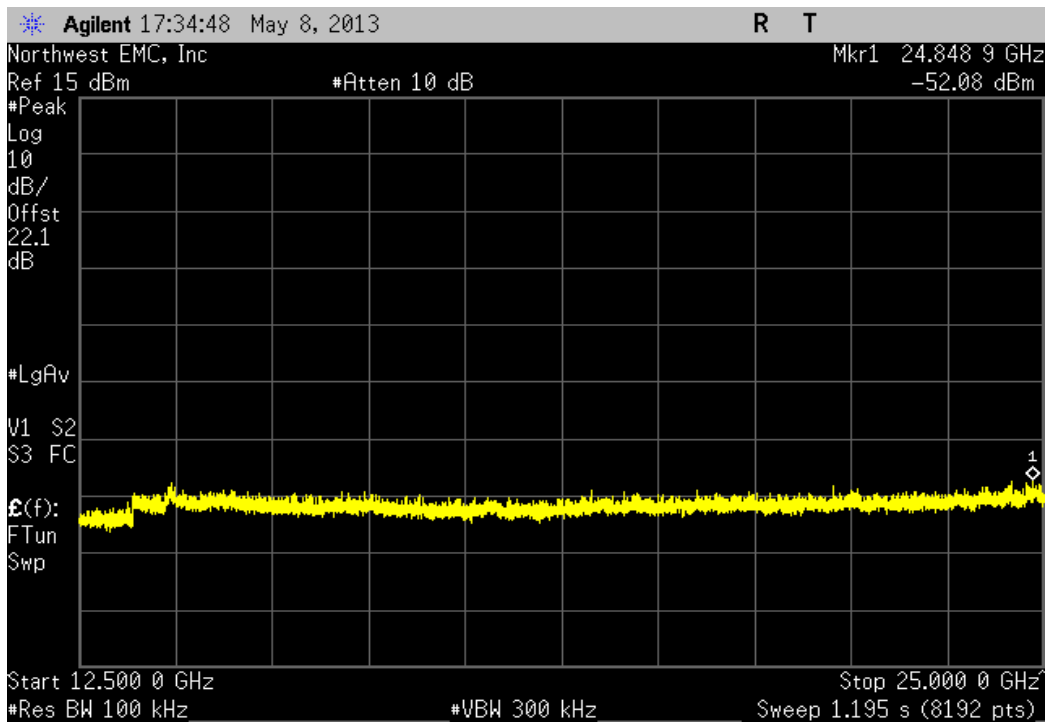
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
Fundamental	N/A	N/A	N/A	



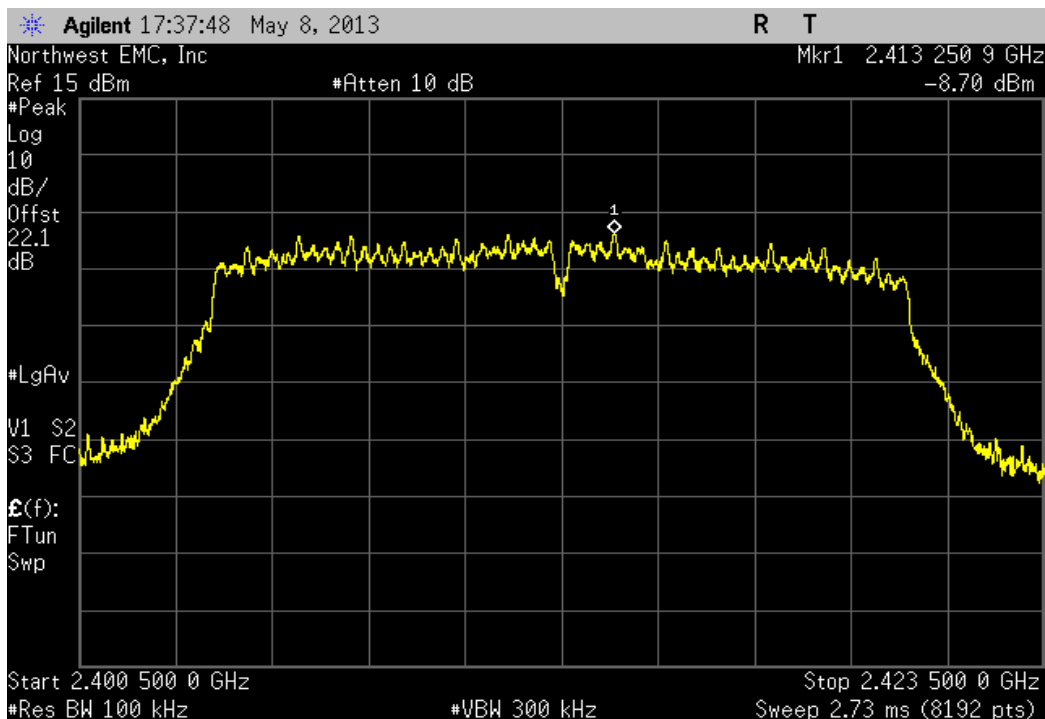
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-46.54 dBc	≤ -20 dBc	Pass	



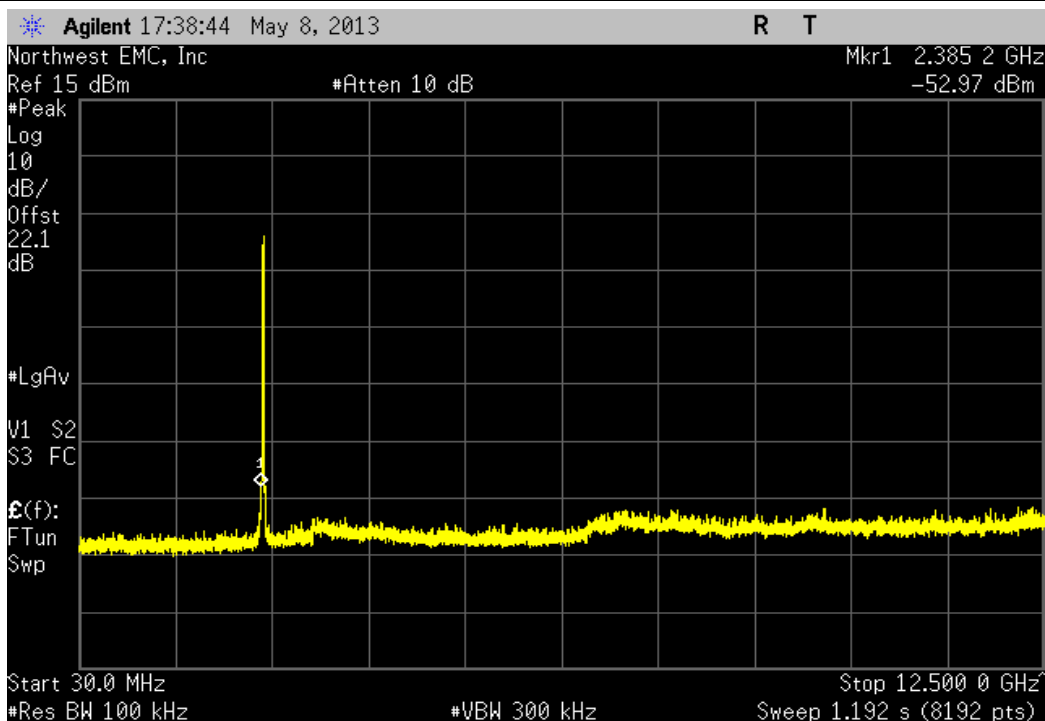
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-44.91 dBc	≤ -20 dBc	Pass	



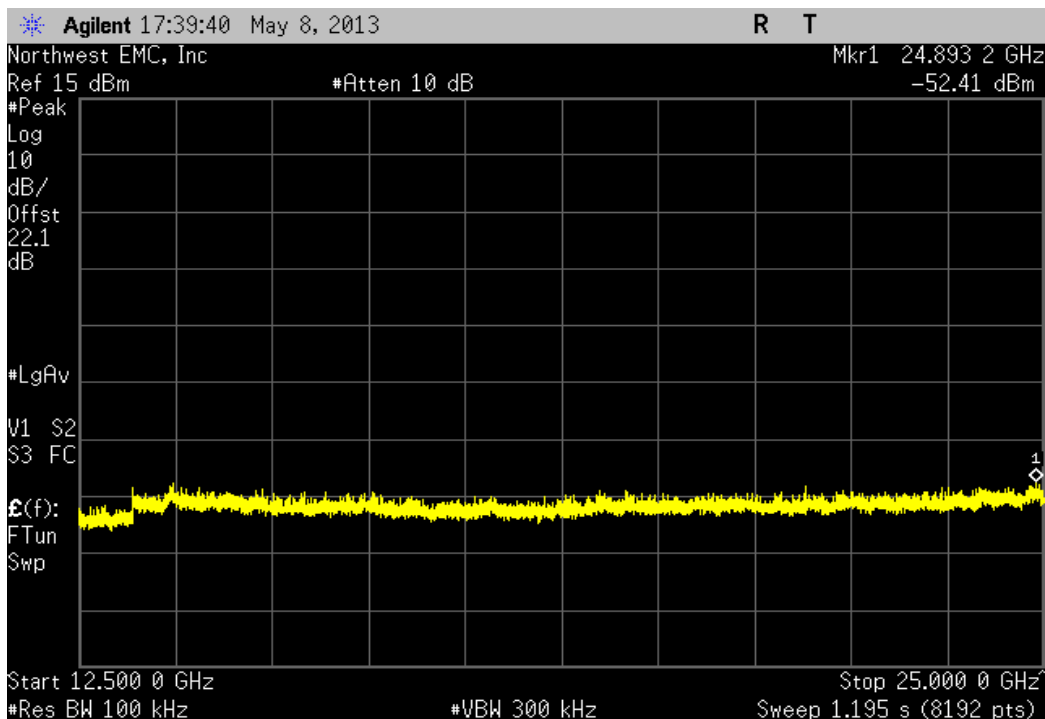
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
Frequency Range		Value	Limit	Result		
Fundamental		N/A	N/A	N/A		



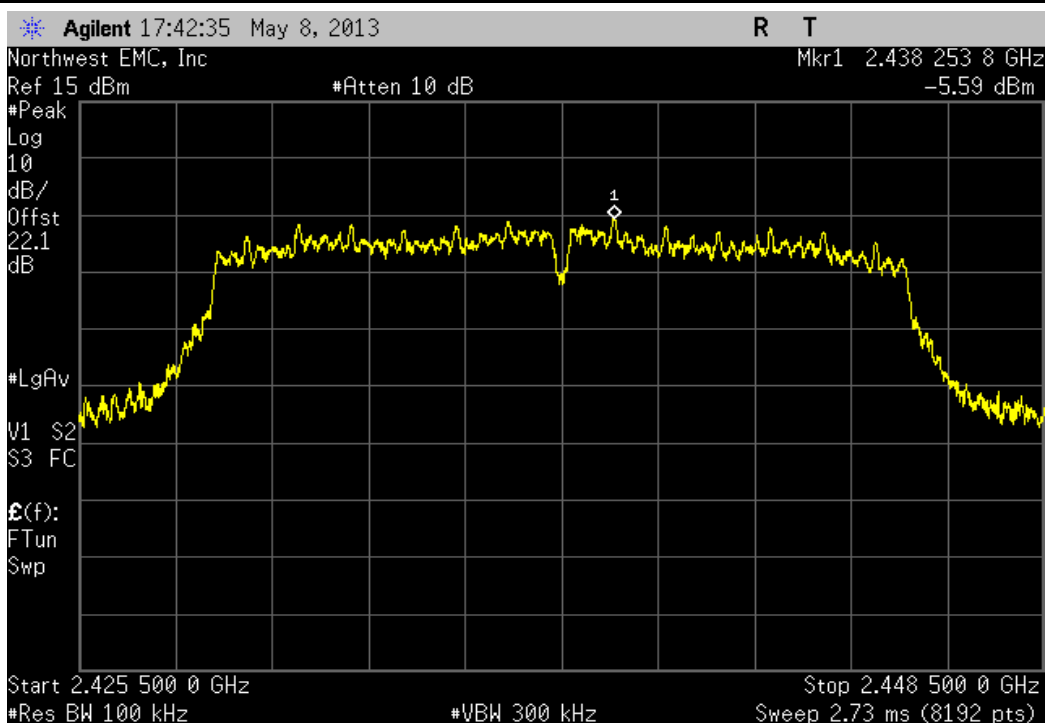
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz						
Frequency Range		Value	Limit	Result		
30 MHz - 12.5 GHz		-44.27 dBc	≤ -20 dBc	Pass		



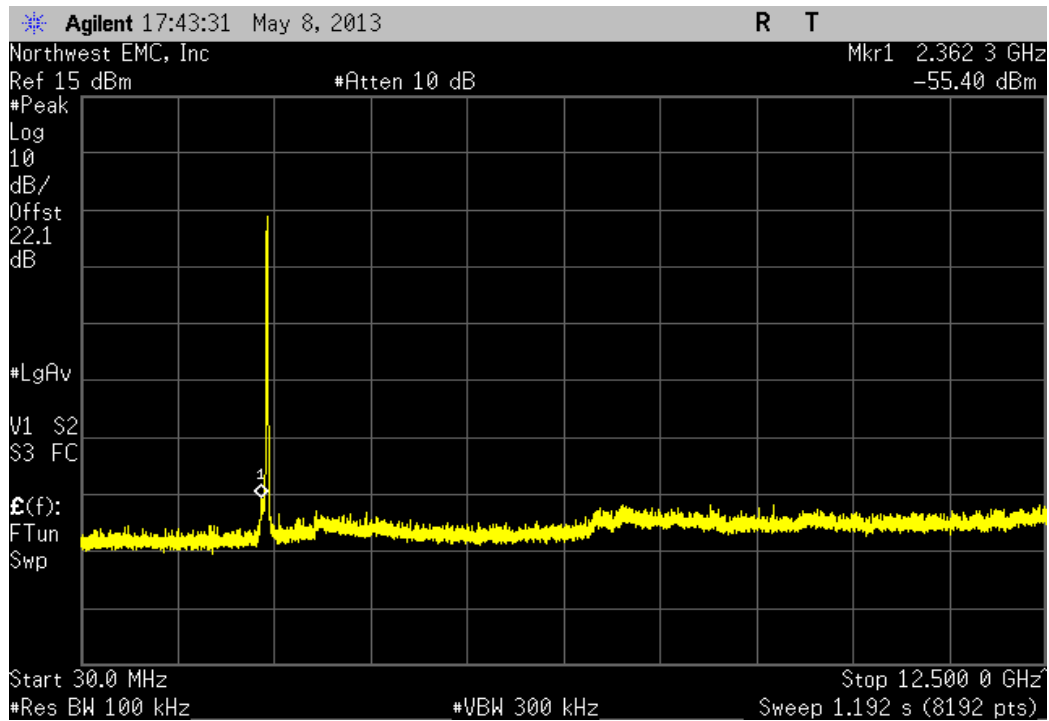
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-43.71 dBc	≤ -20 dBc	Pass



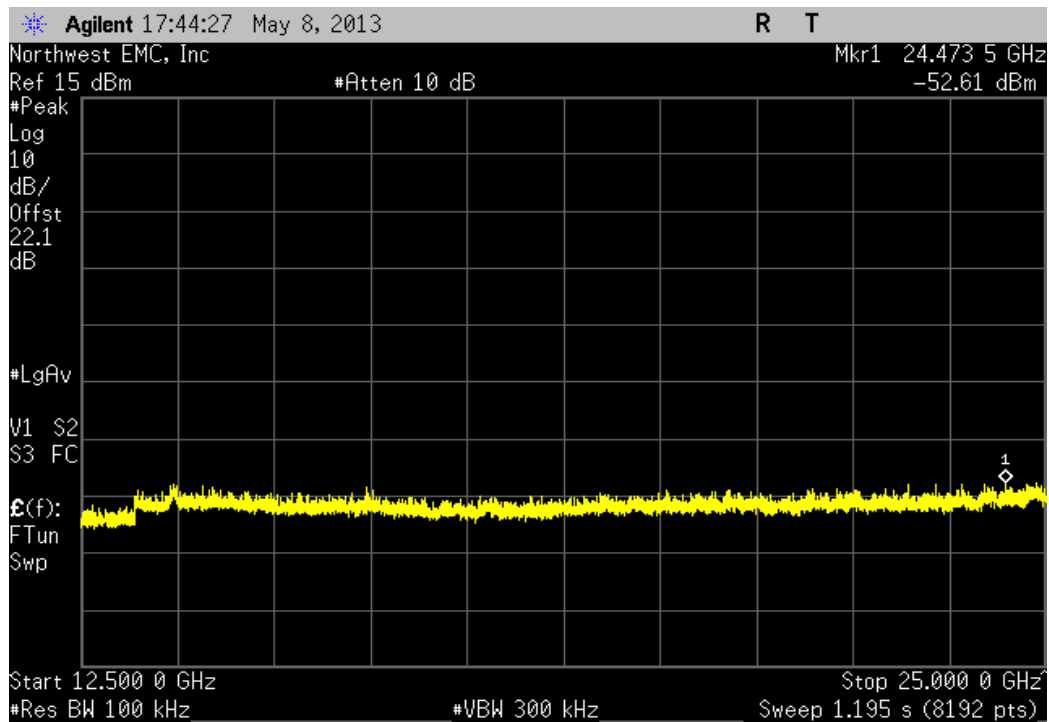
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



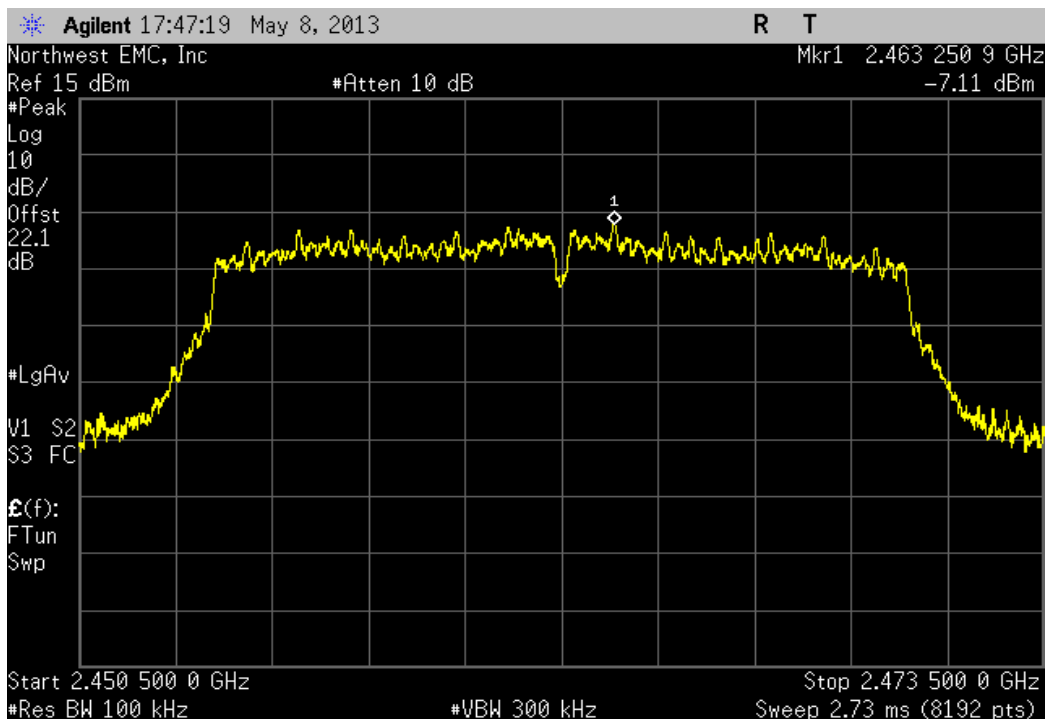
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-49.81 dBc	≤ -20 dBc	Pass	



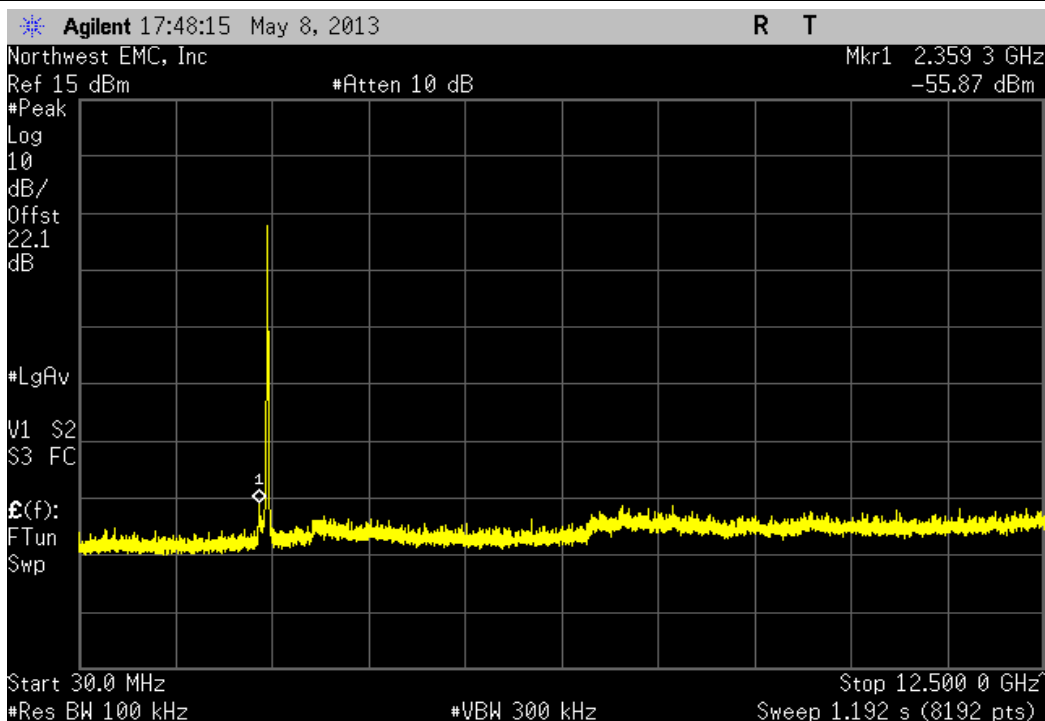
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-47.02 dBc	≤ -20 dBc	Pass	



Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
	Fundamental			N/A	N/A	N/A

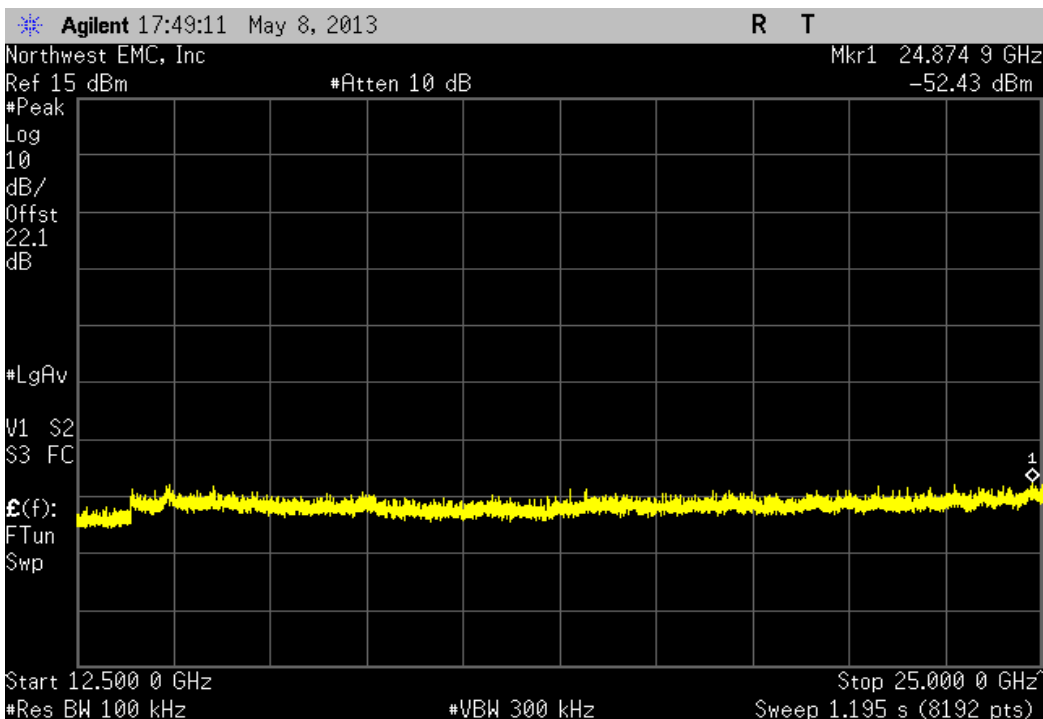


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
	30 MHz - 12.5 GHz			-48.74 dBc	≤ -20 dBc	Pass



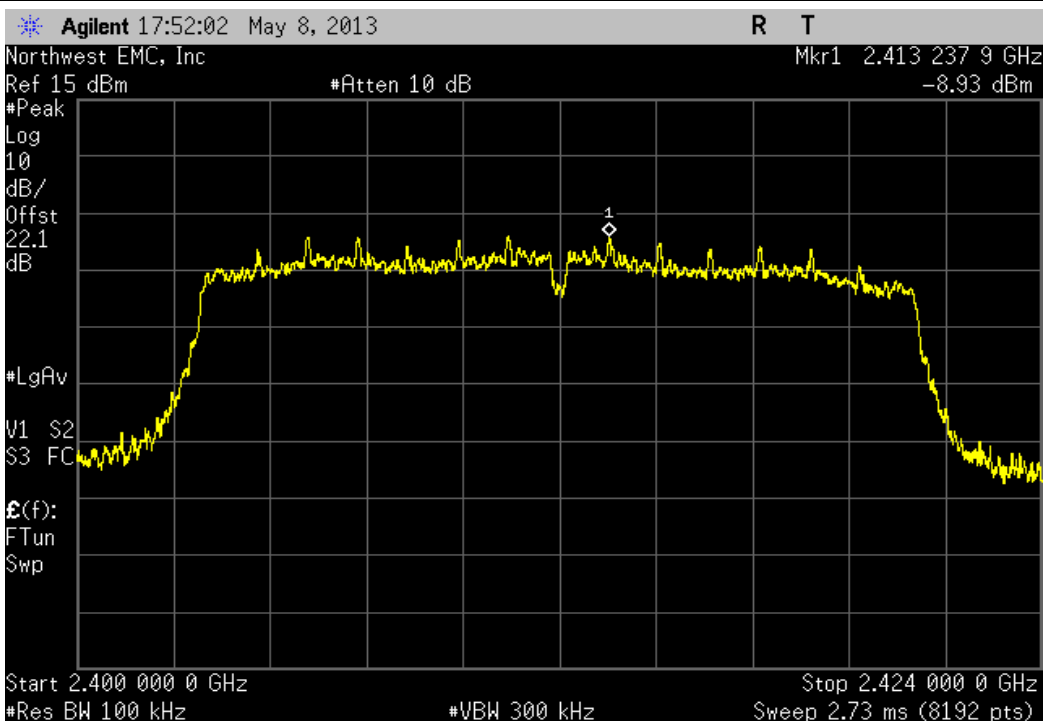
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Frequency Range	Value	Limit	Result
12.5 GHz - 25 GHz	-45.31 dBc	≤ -20 dBc	Pass

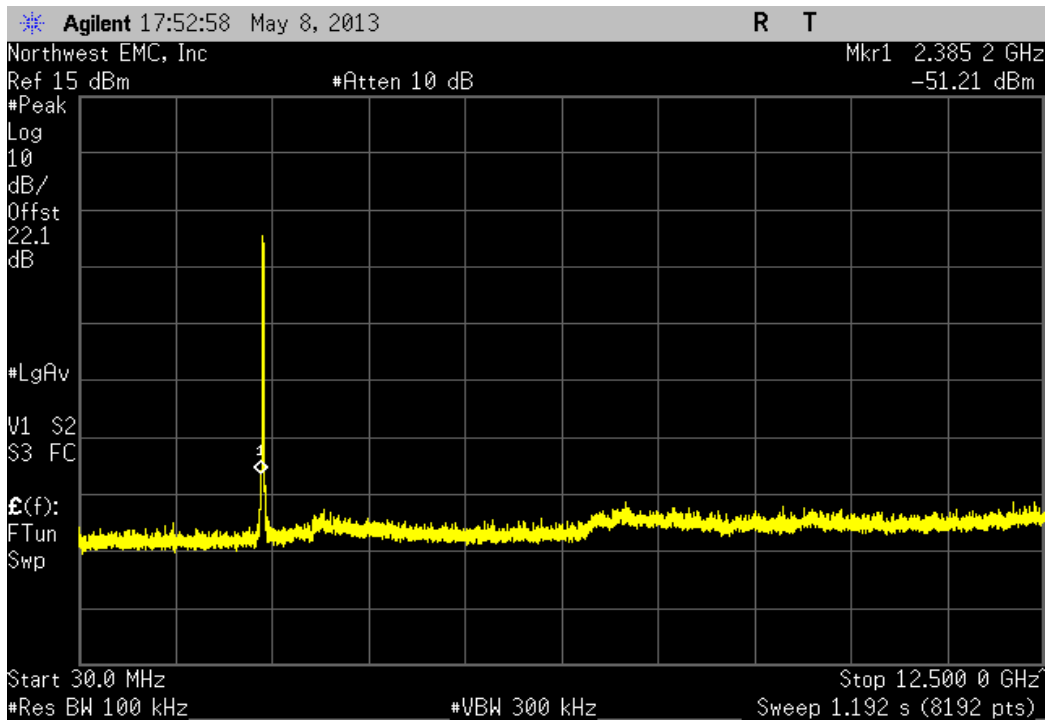


Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

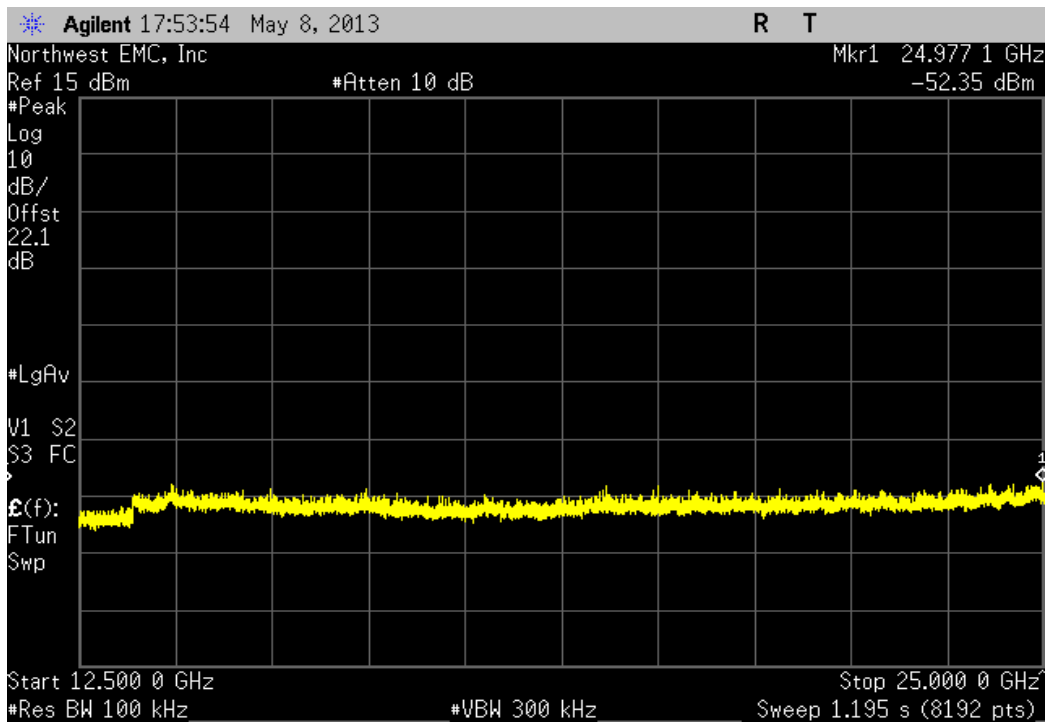
Frequency Range	Value	Limit	Result
Fundamental	N/A	N/A	N/A



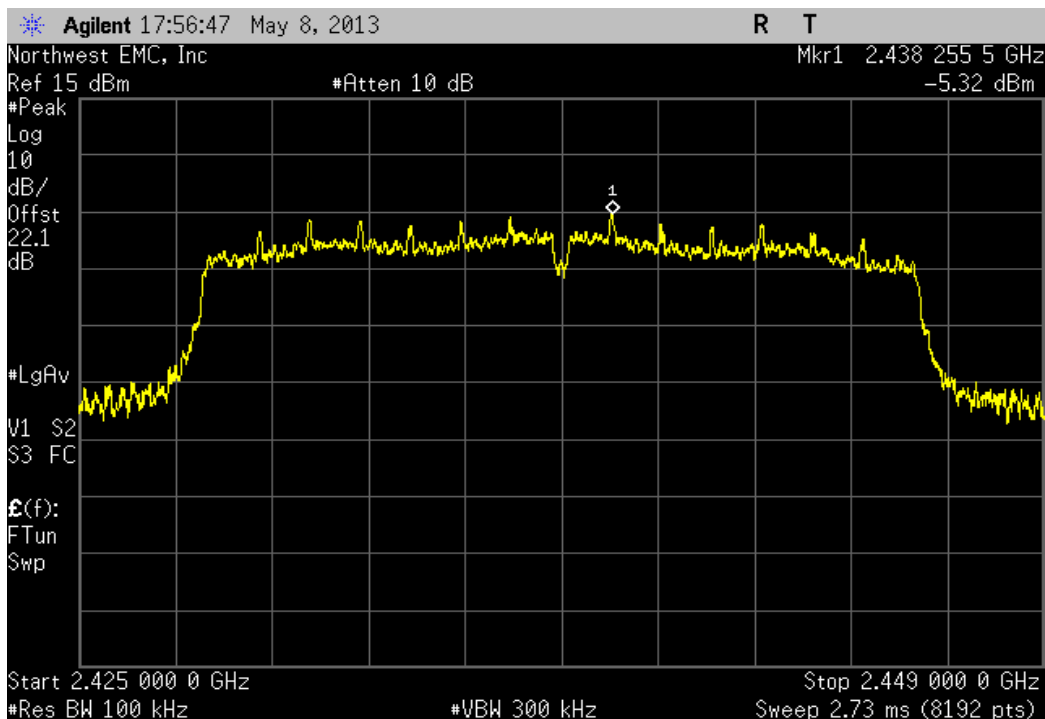
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-42.28 dBc	≤ -20 dBc	Pass	



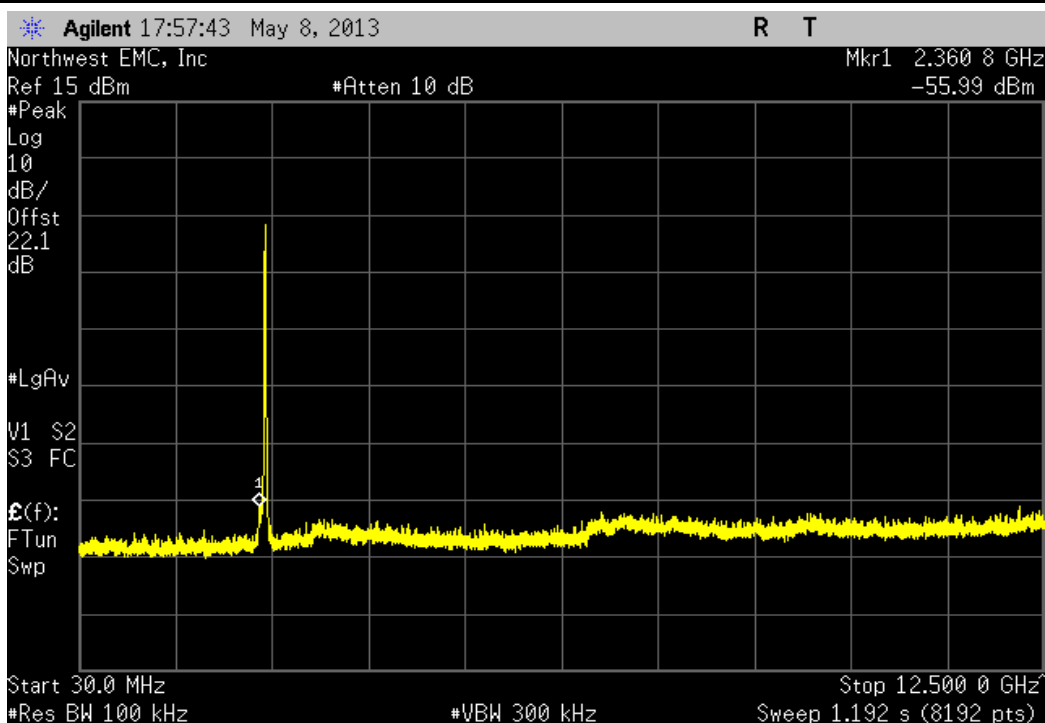
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-43.42 dBc	≤ -20 dBc	Pass	



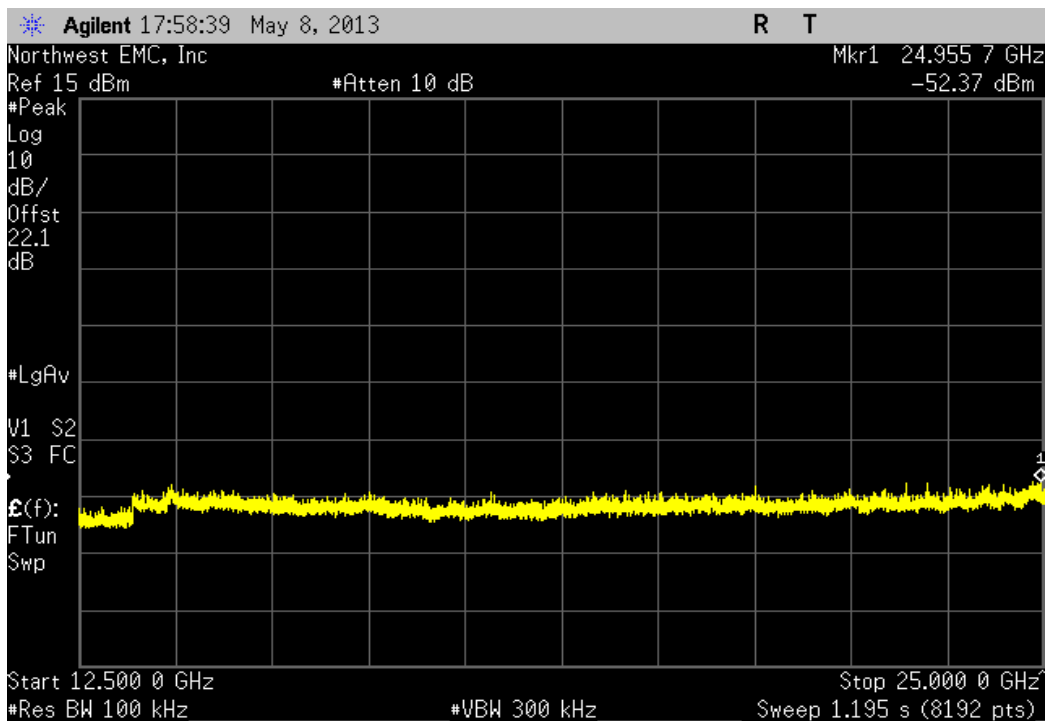
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
Fundamental				N/A	N/A	N/A



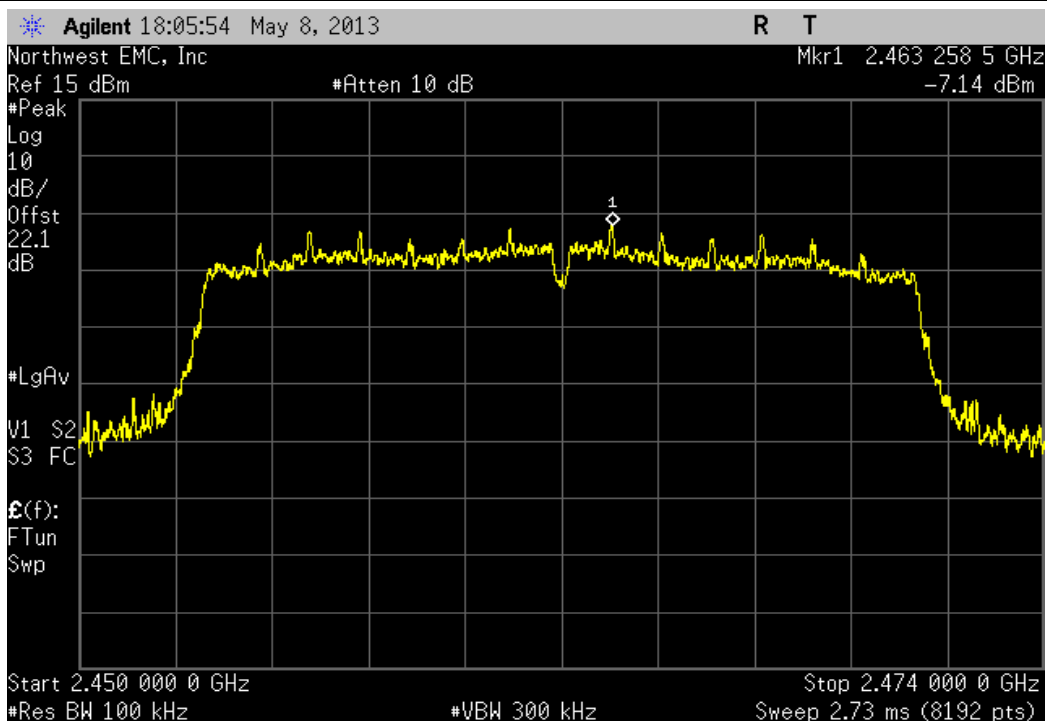
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-50.67 dBc	≤ -20 dBc	Pass



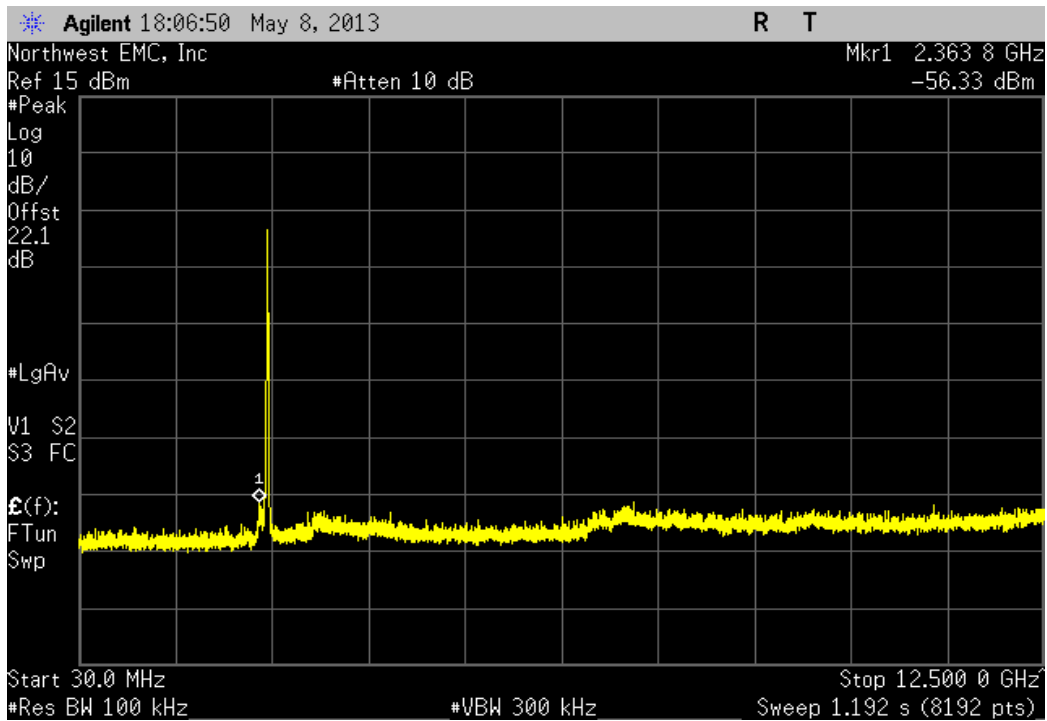
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-47.05 dBc	≤ -20 dBc	Pass



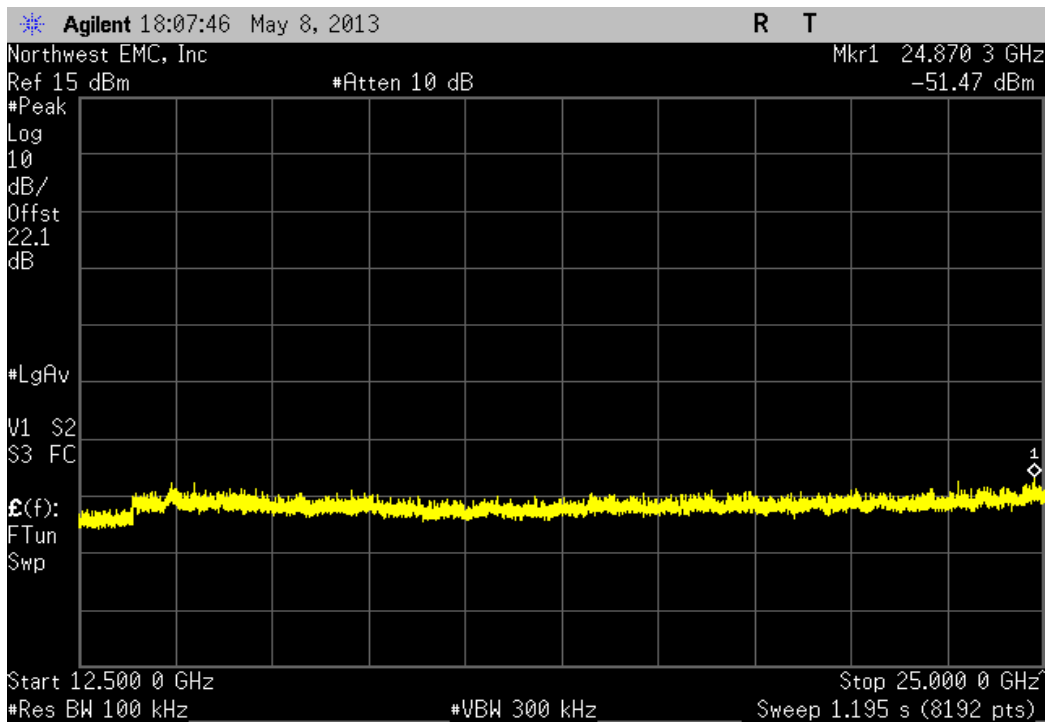
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



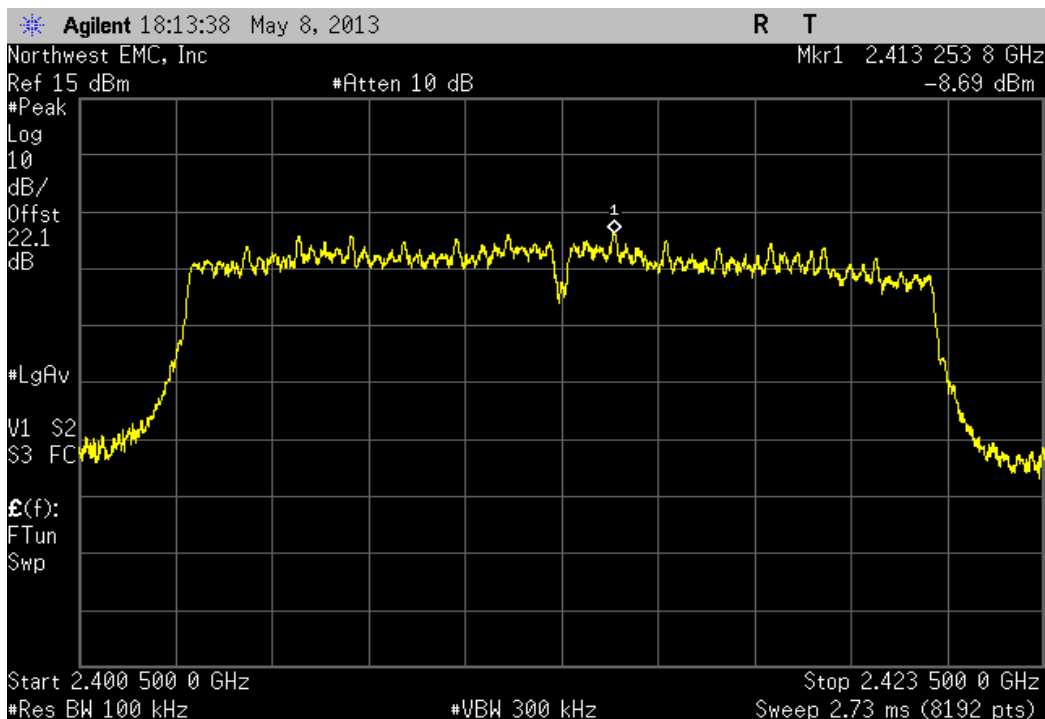
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-49.18 dBc	≤ -20 dBc	Pass	



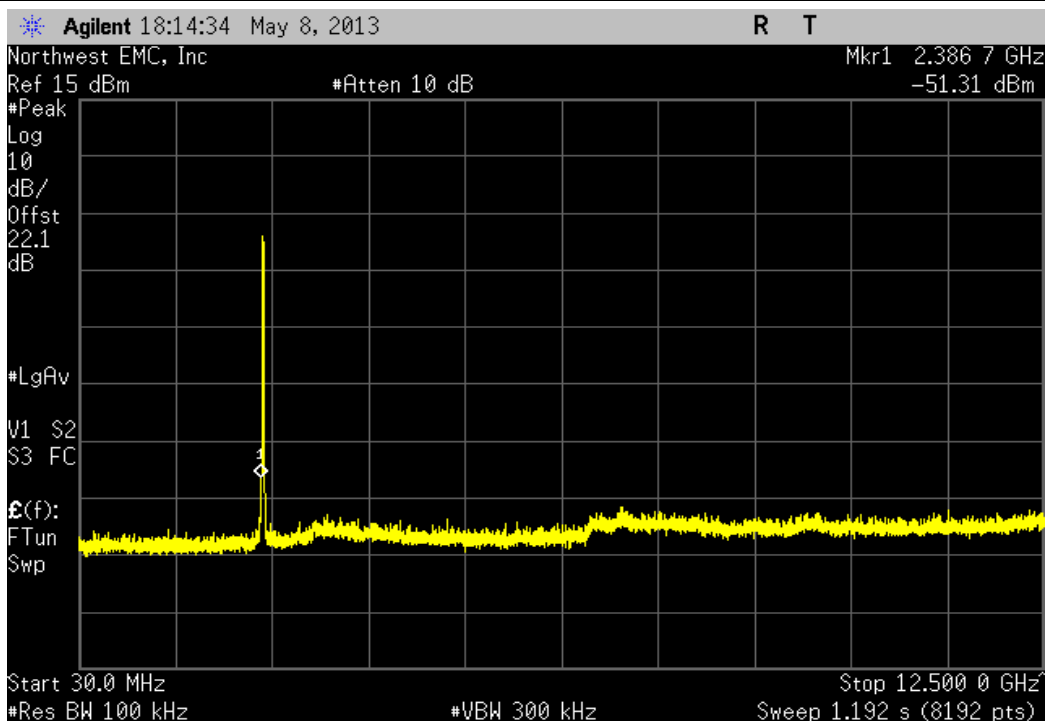
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-44.34 dBc	≤ -20 dBc	Pass	



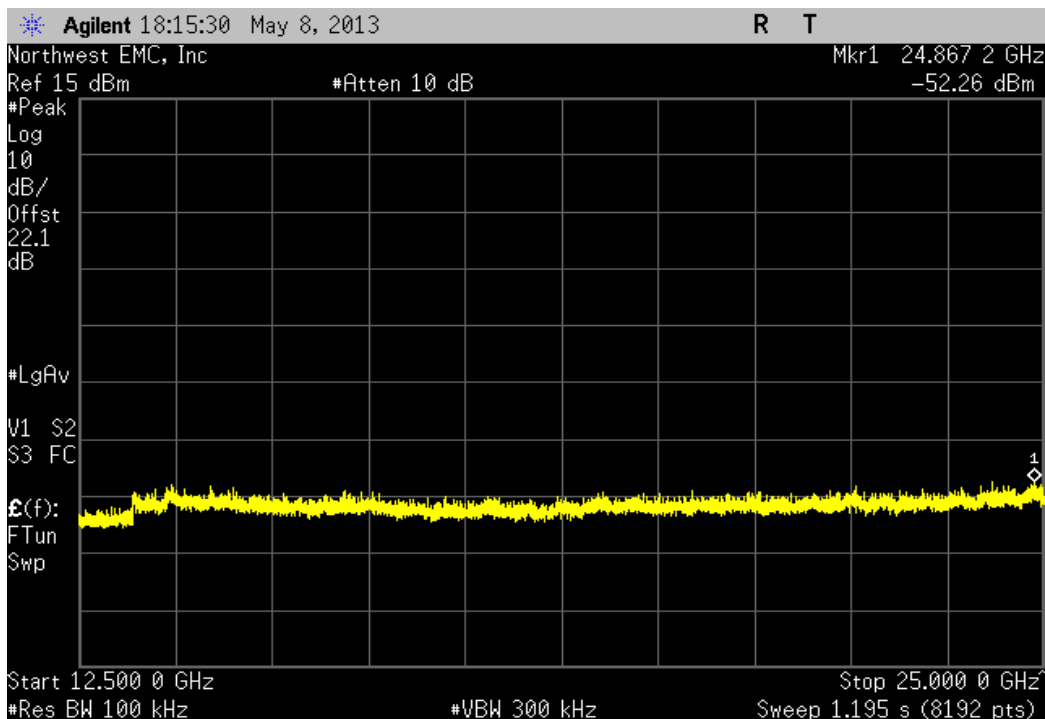
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



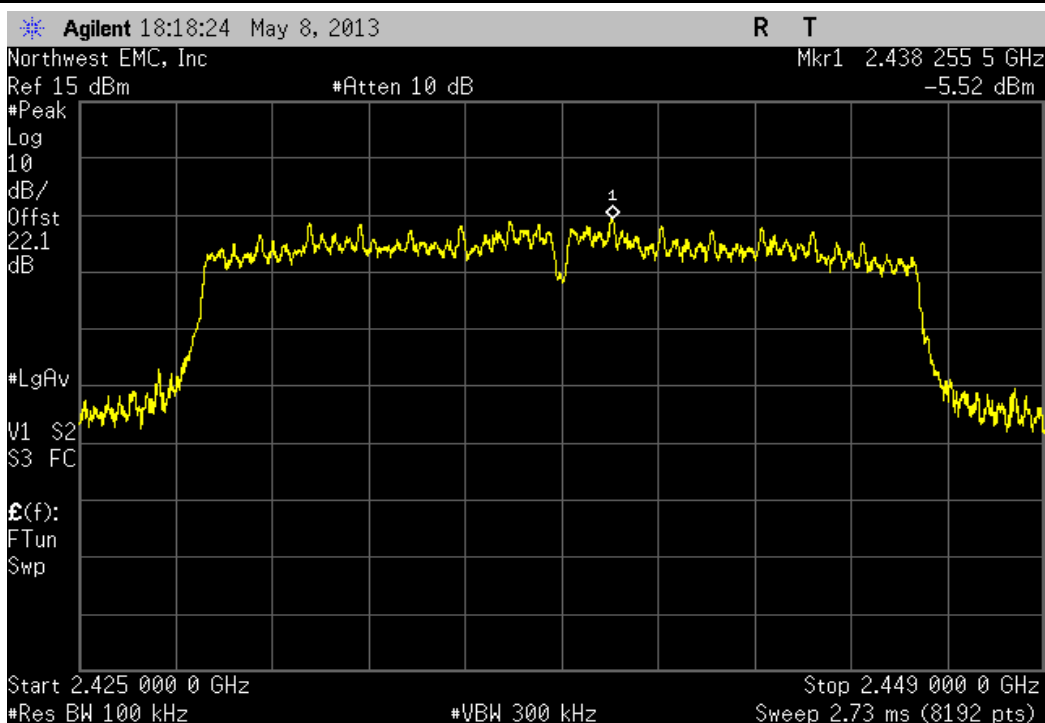
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
30 MHz - 12.5 GHz		-42.62 dBc	≤ -20 dBc	Pass



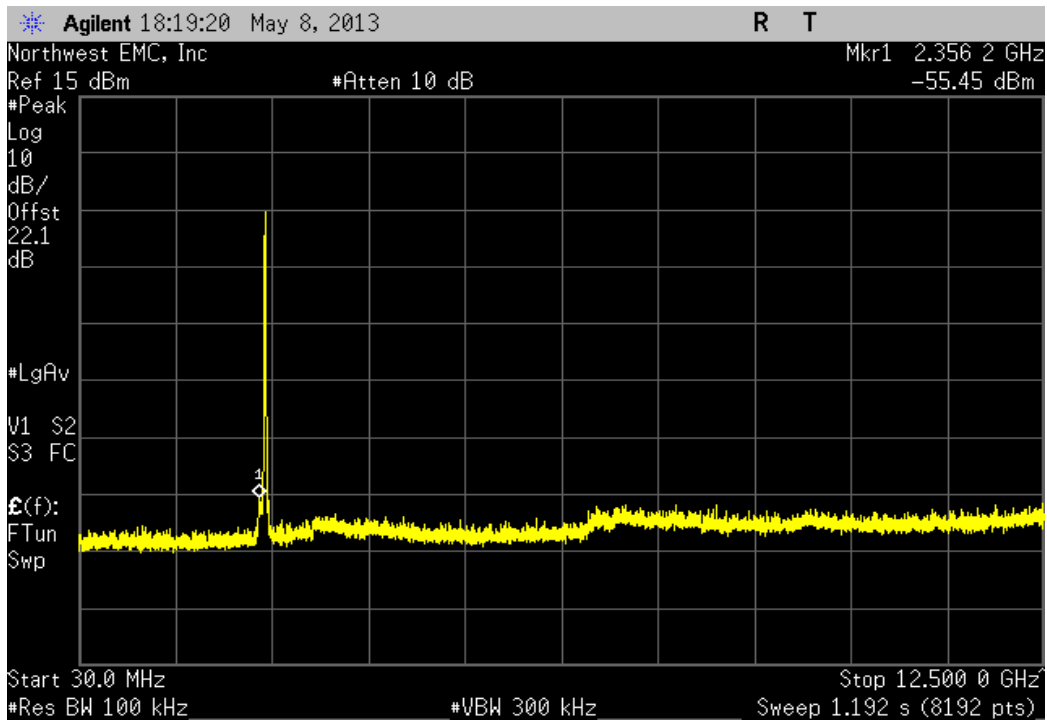
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz				
Frequency		Value	Limit	Result
Range				
12.5 GHz - 25 GHz		-43.57 dBc	≤ -20 dBc	Pass



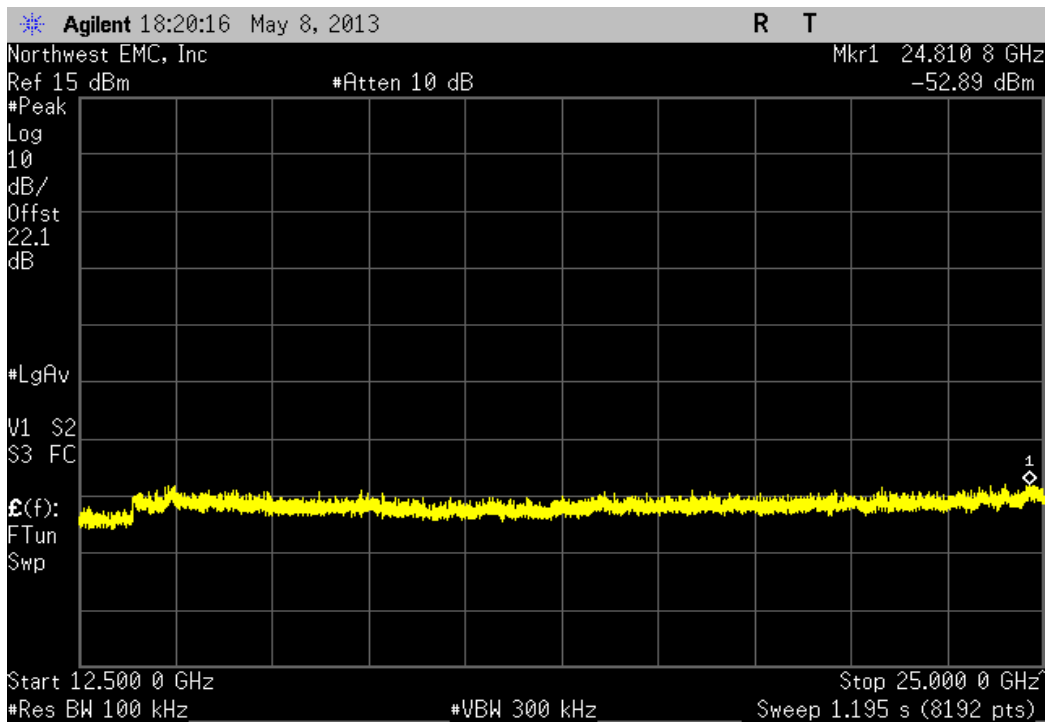
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz				
Frequency		Value	Limit	Result
Range				
Fundamental		N/A	N/A	N/A



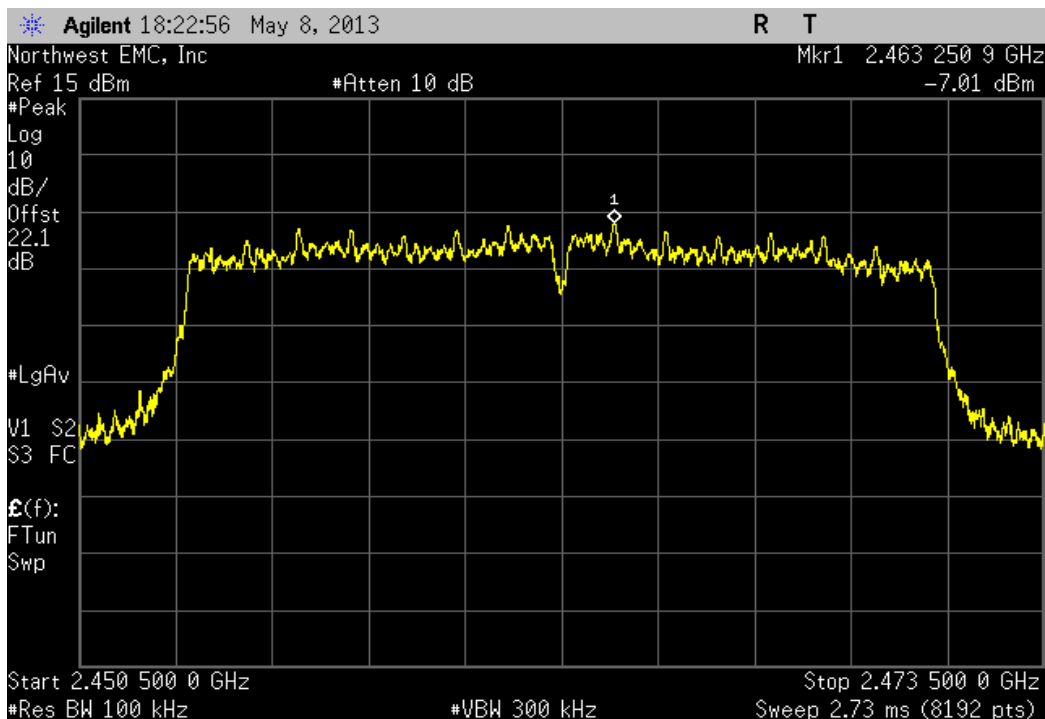
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-49.93 dBc	≤ -20 dBc	Pass	



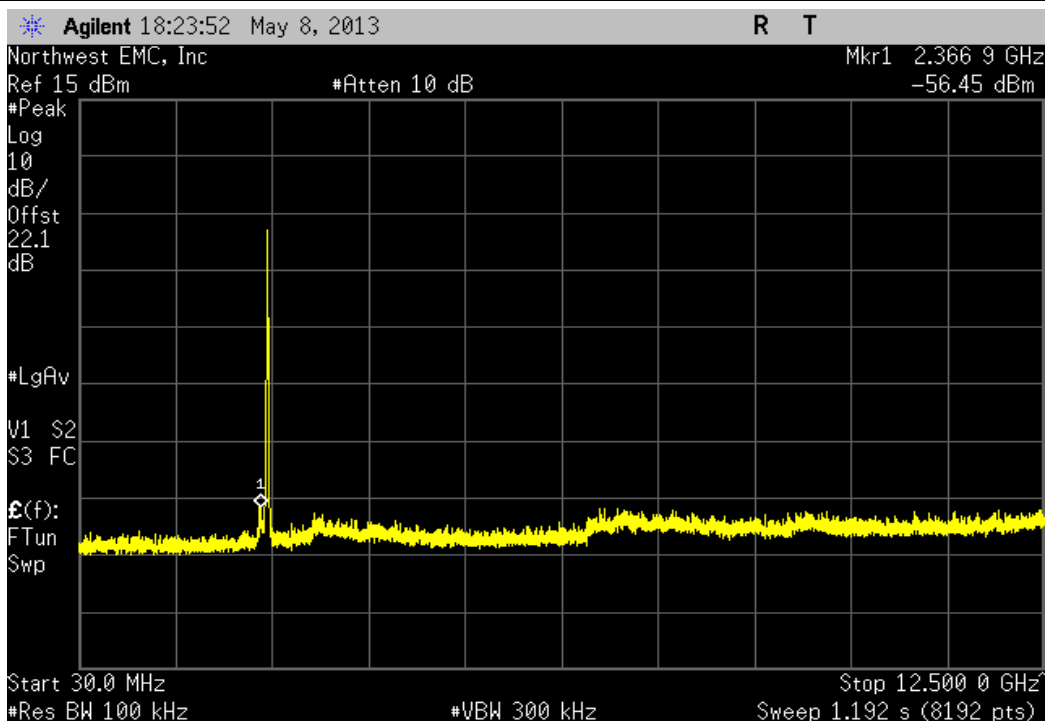
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-47.37 dBc	≤ -20 dBc	Pass	



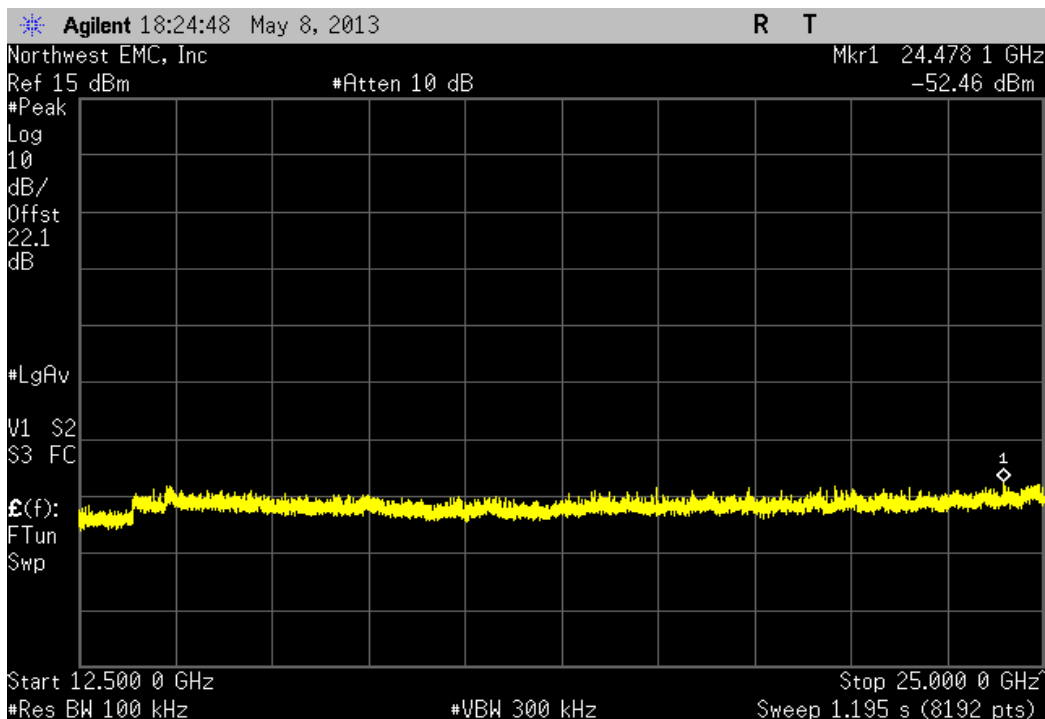
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
	Fundamental			N/A	N/A	N/A



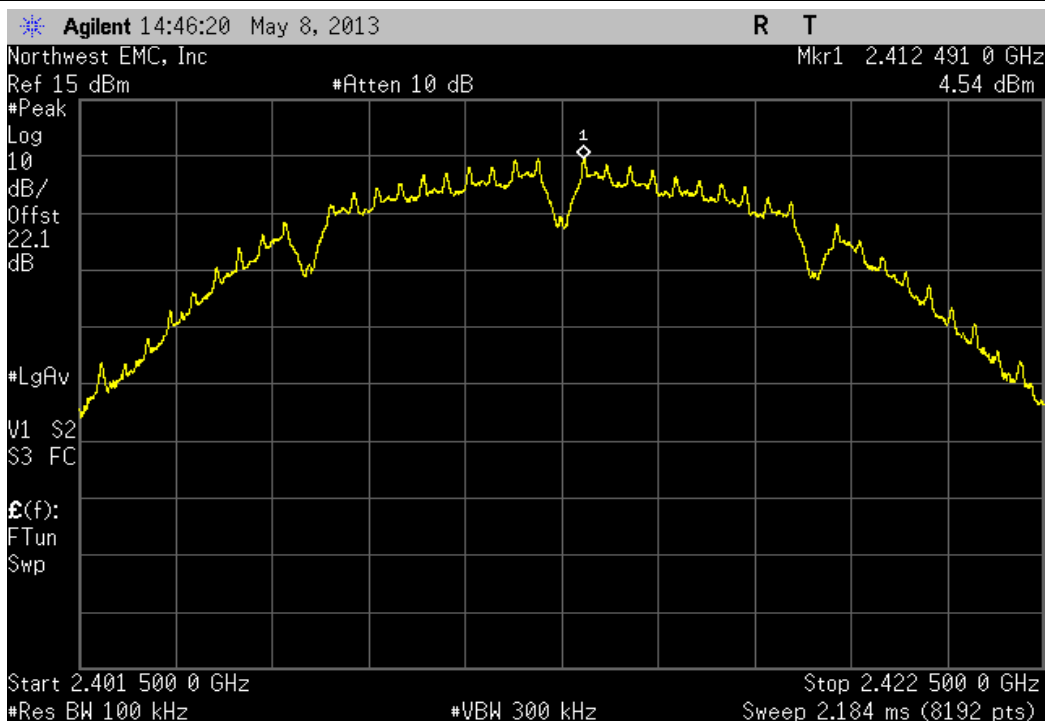
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
	30 MHz - 12.5 GHz			-49.44 dBc	≤ -20 dBc	Pass



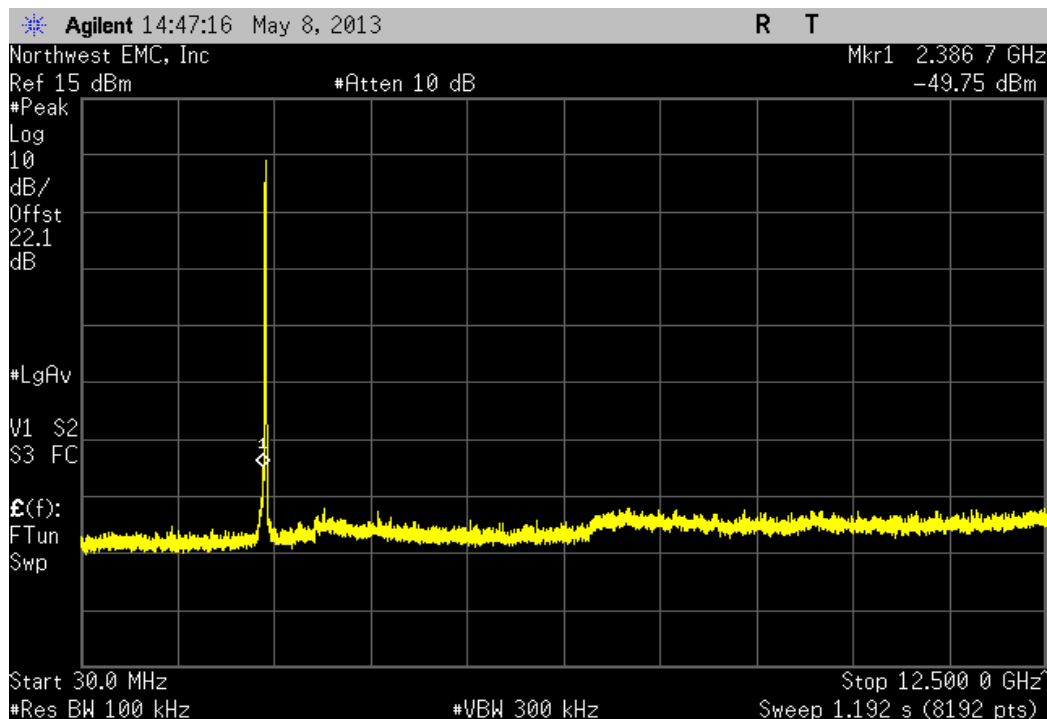
Antenna 0, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-45.45 dBc	≤ -20 dBc	Pass



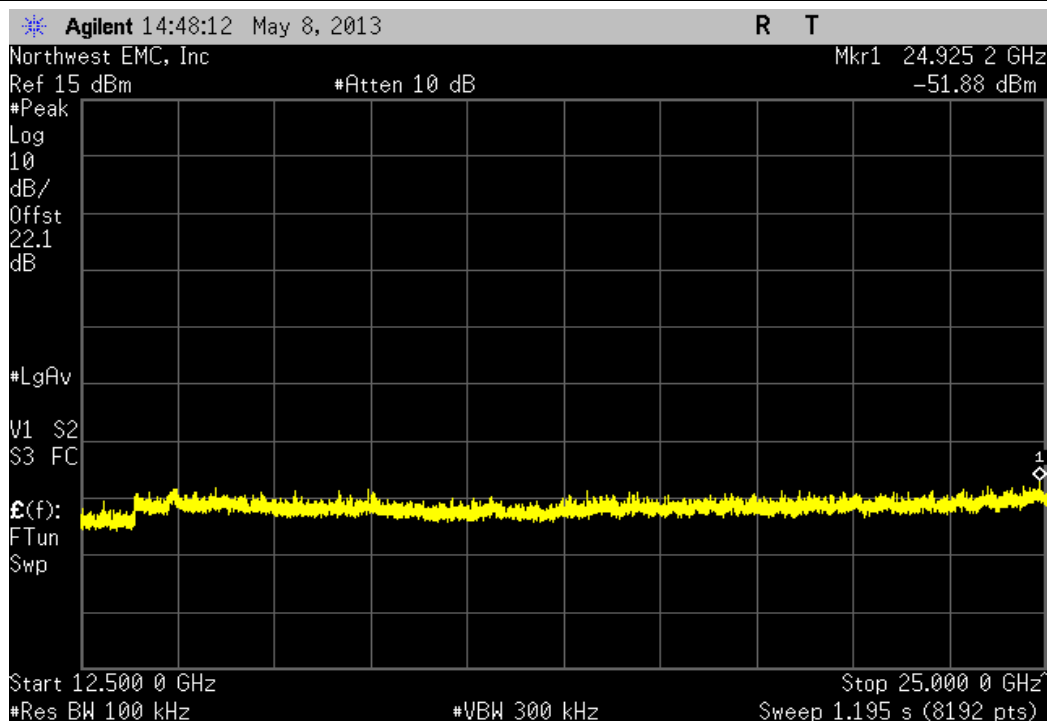
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



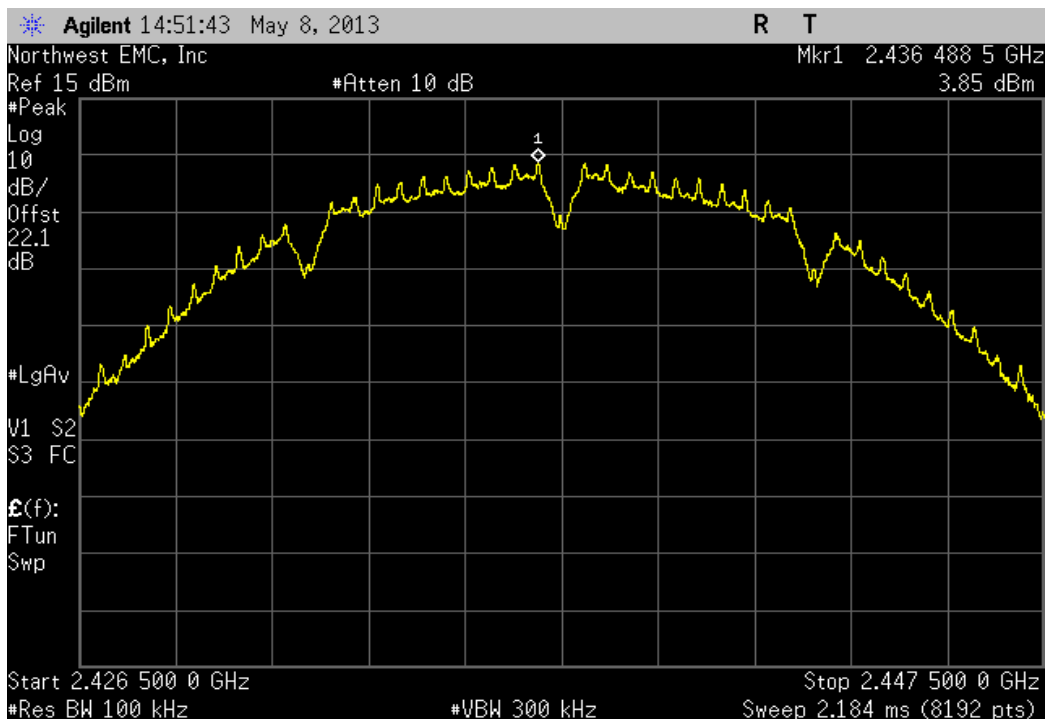
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-54.29 dBc	≤ -20 dBc	Pass	



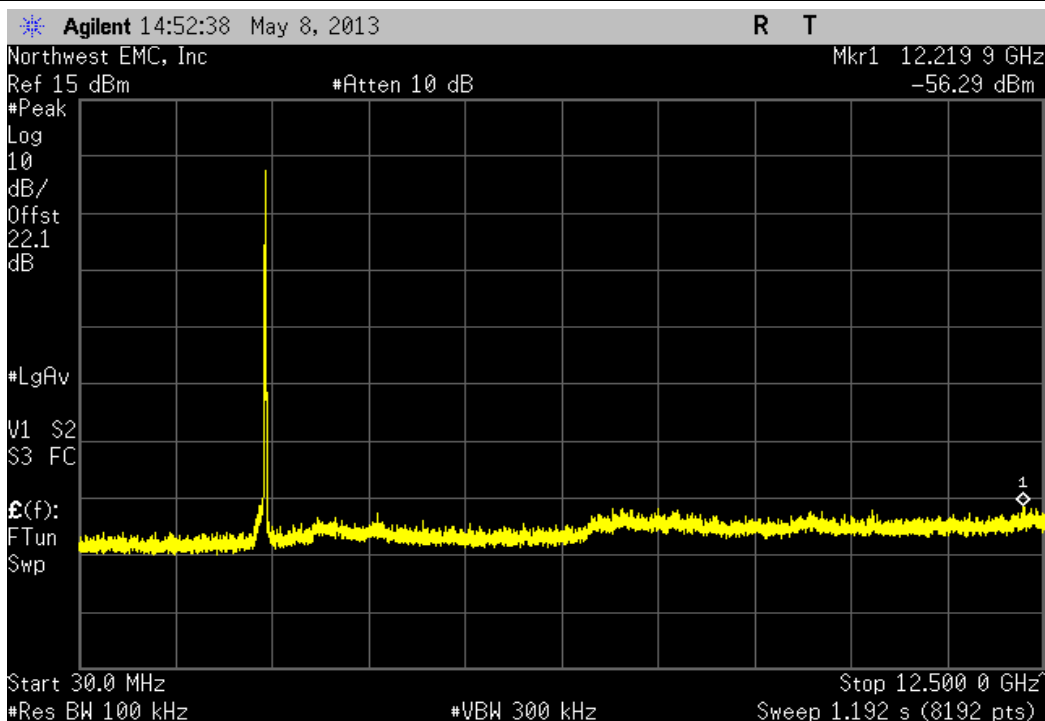
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-56.42 dBc	≤ -20 dBc	Pass	



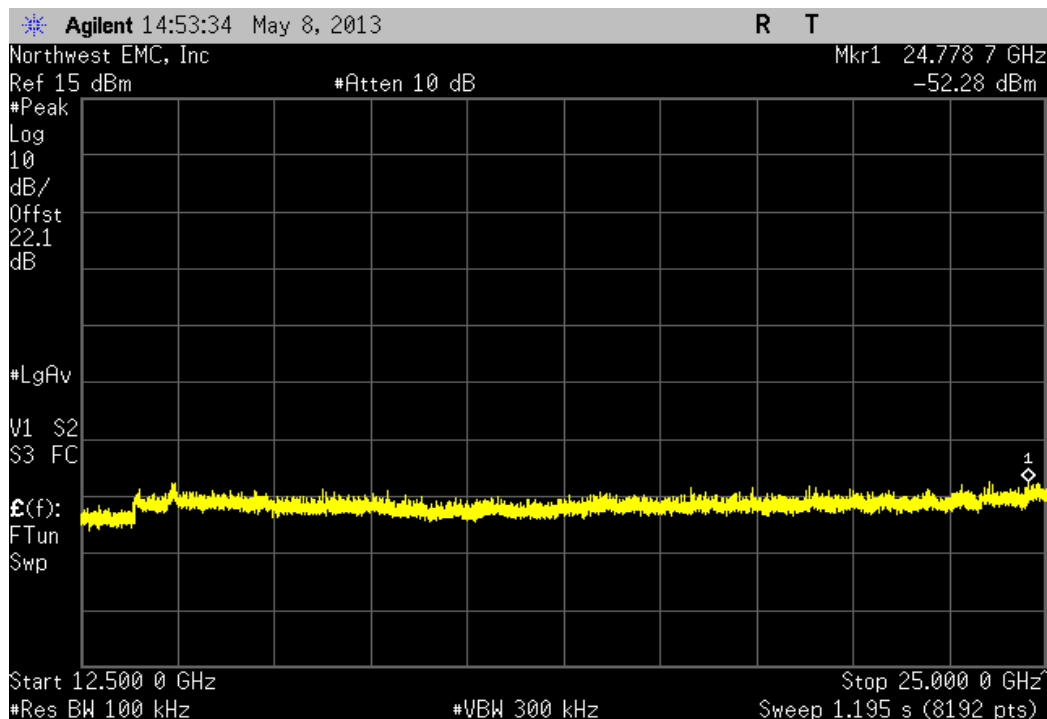
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
Fundamental				N/A	N/A	N/A



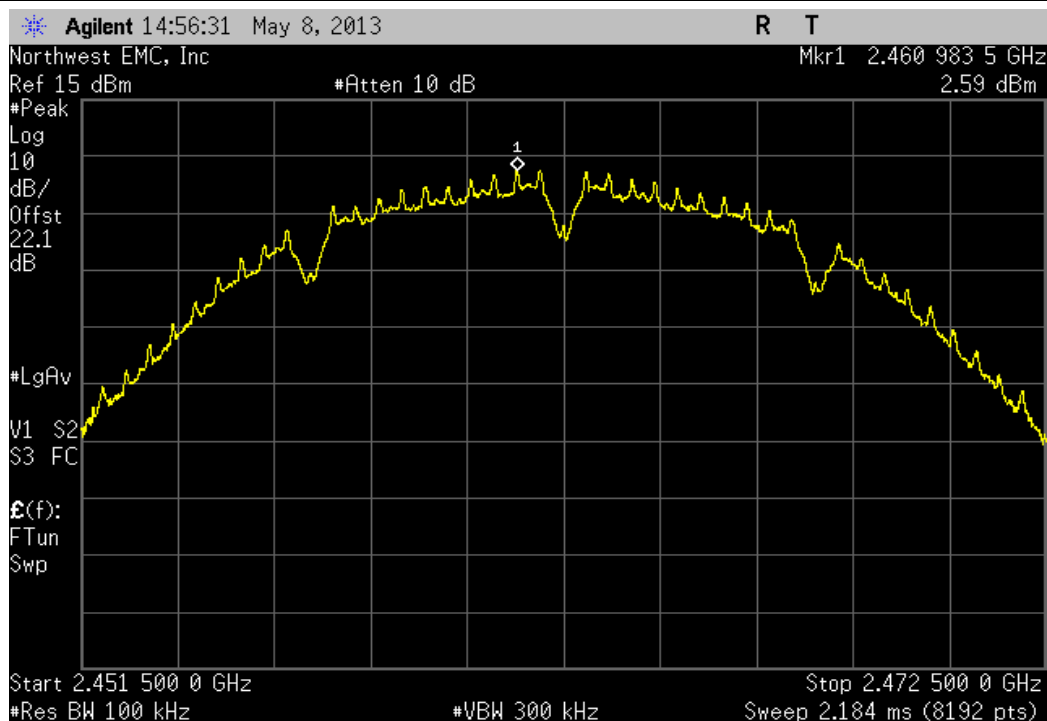
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-60.14 dBc	≤ -20 dBc	Pass



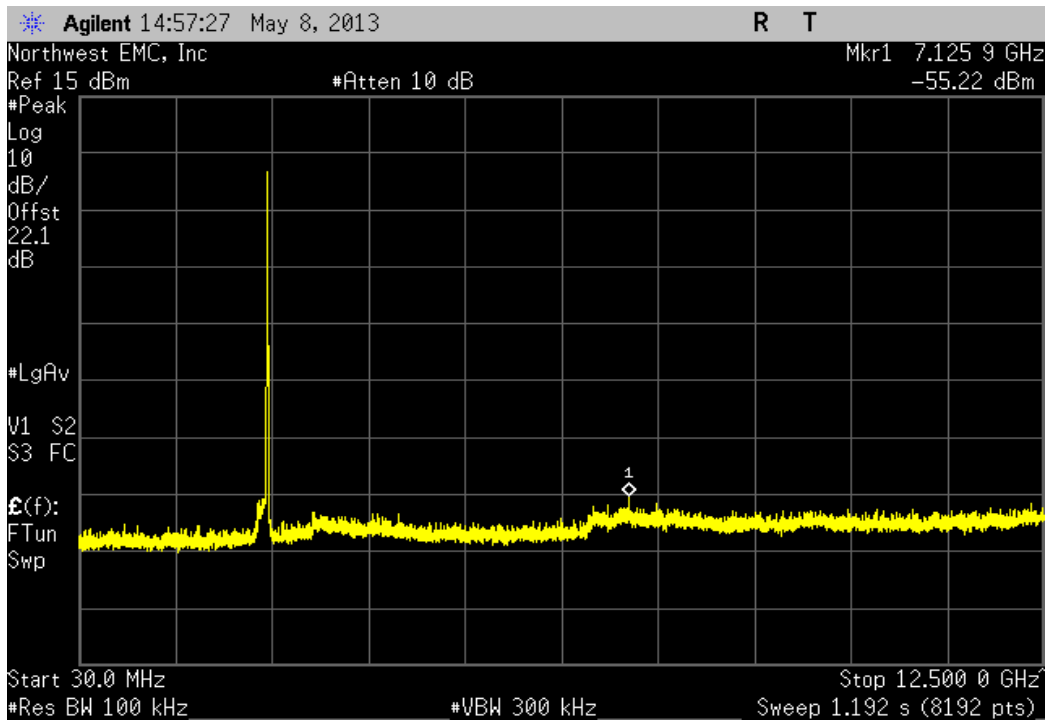
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-56.13 dBc	≤ -20 dBc	Pass	



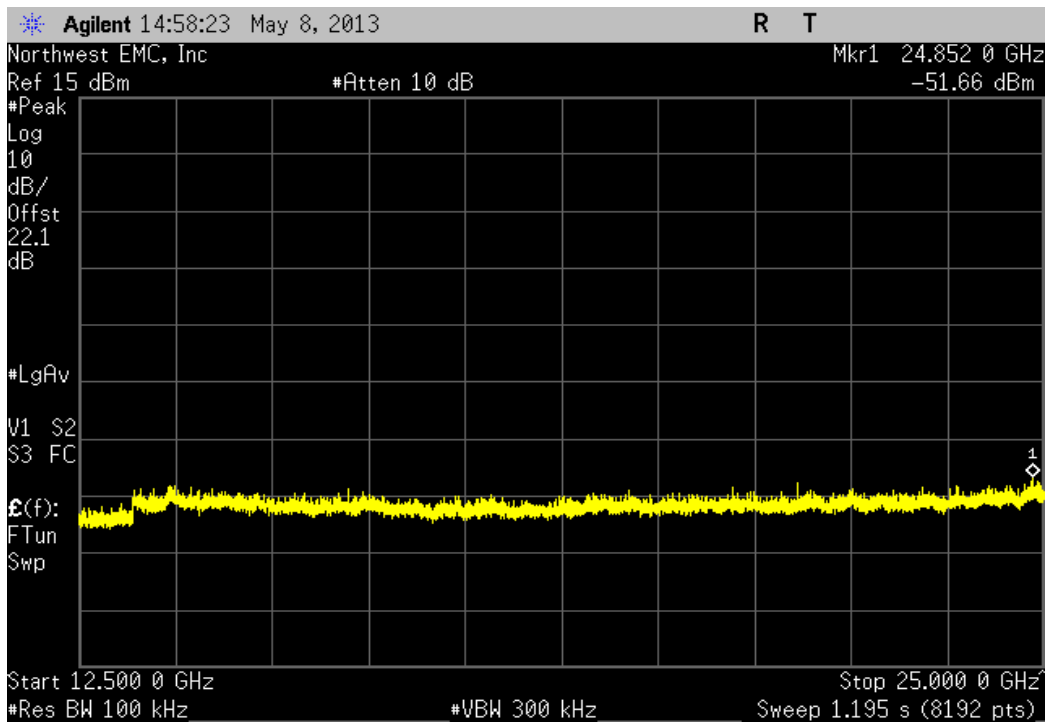
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
Fundamental	N/A	N/A	N/A	



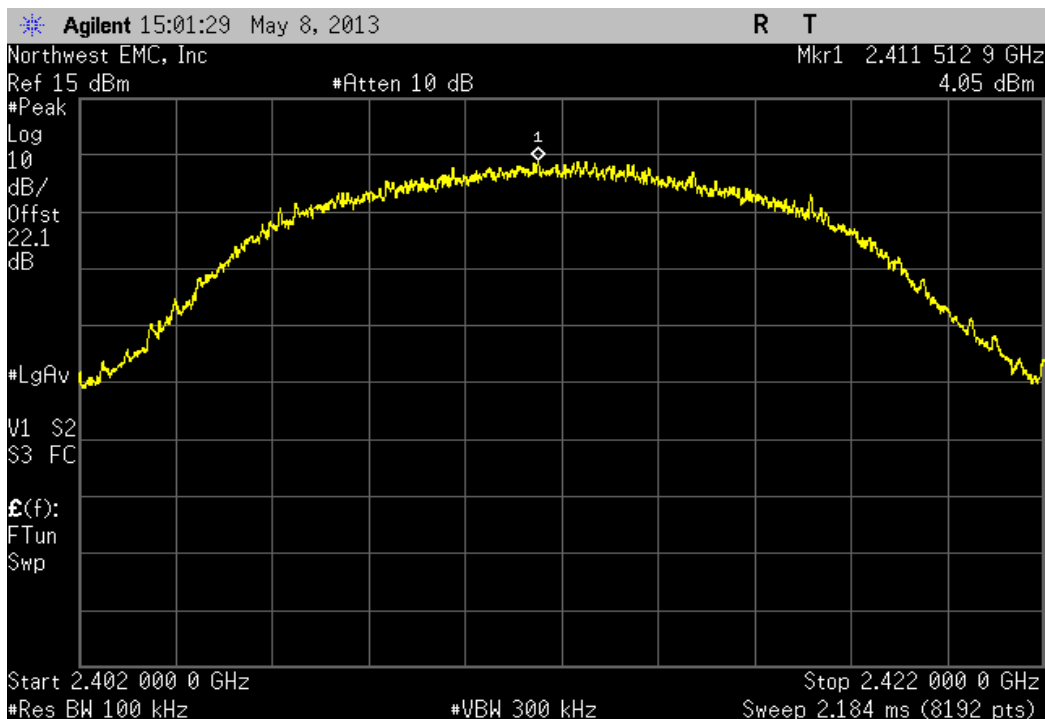
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-57.81 dBc	≤ -20 dBc	Pass	



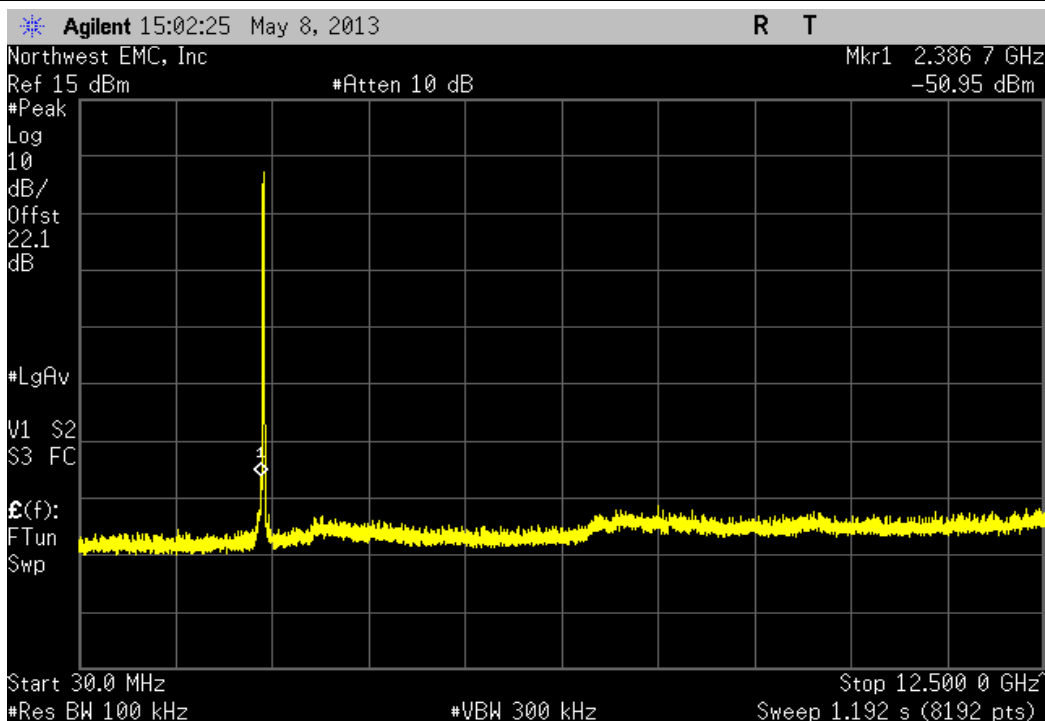
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-54.25 dBc	≤ -20 dBc	Pass	



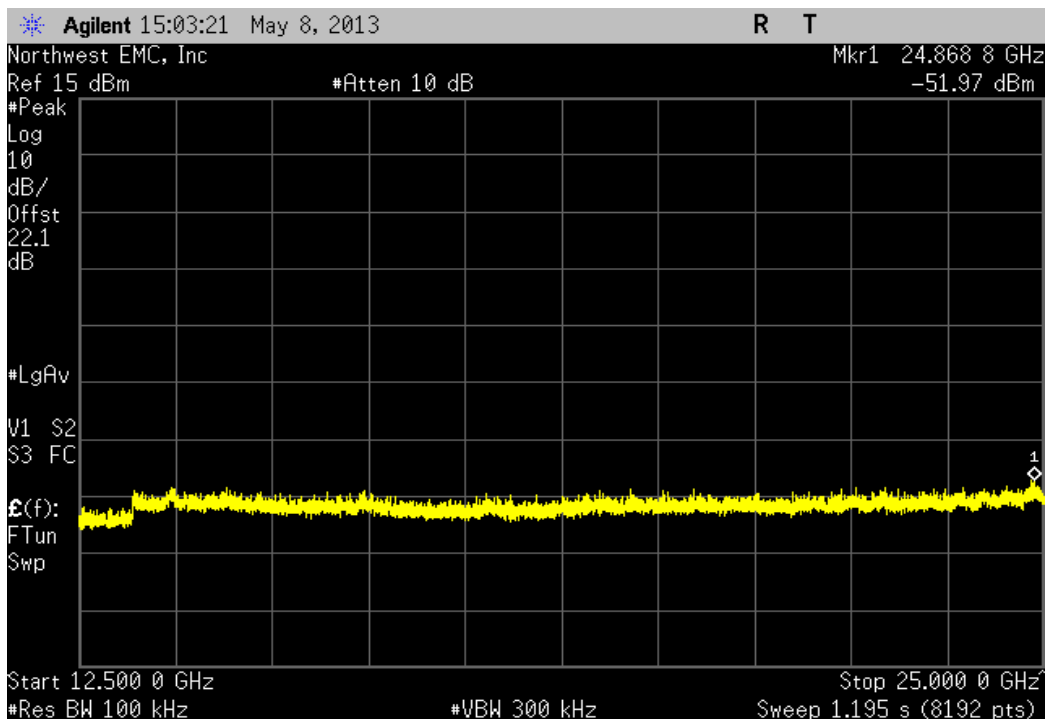
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
Frequency Range				Value	Limit	Result
Fundamental				N/A	N/A	N/A



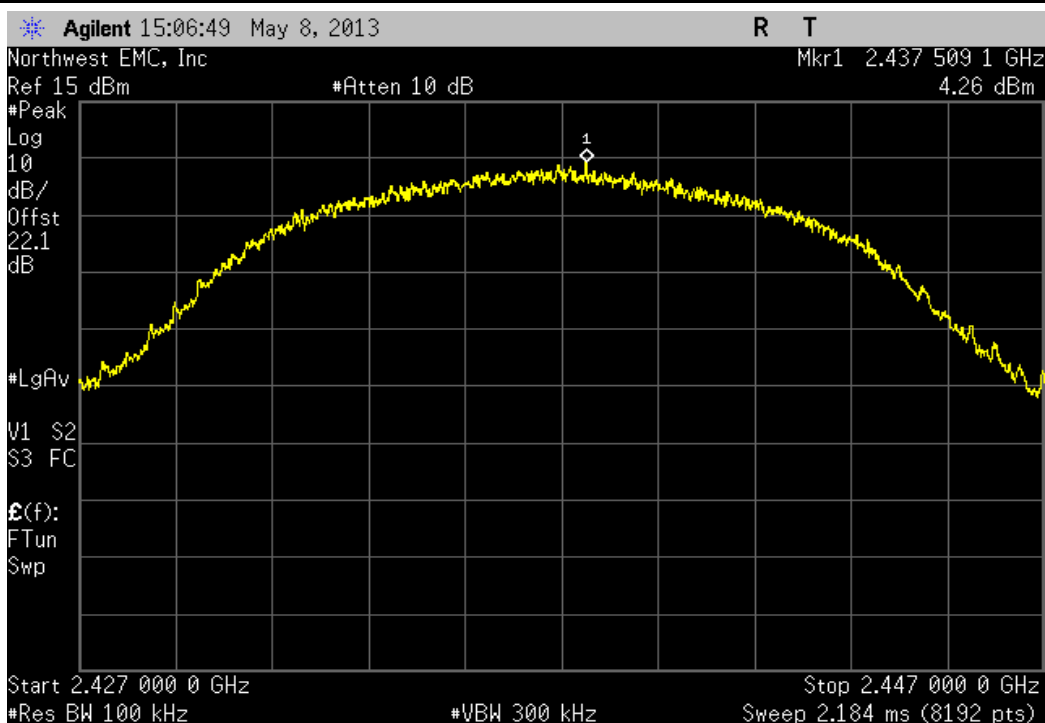
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-55.01 dBc	≤ -20 dBc	Pass



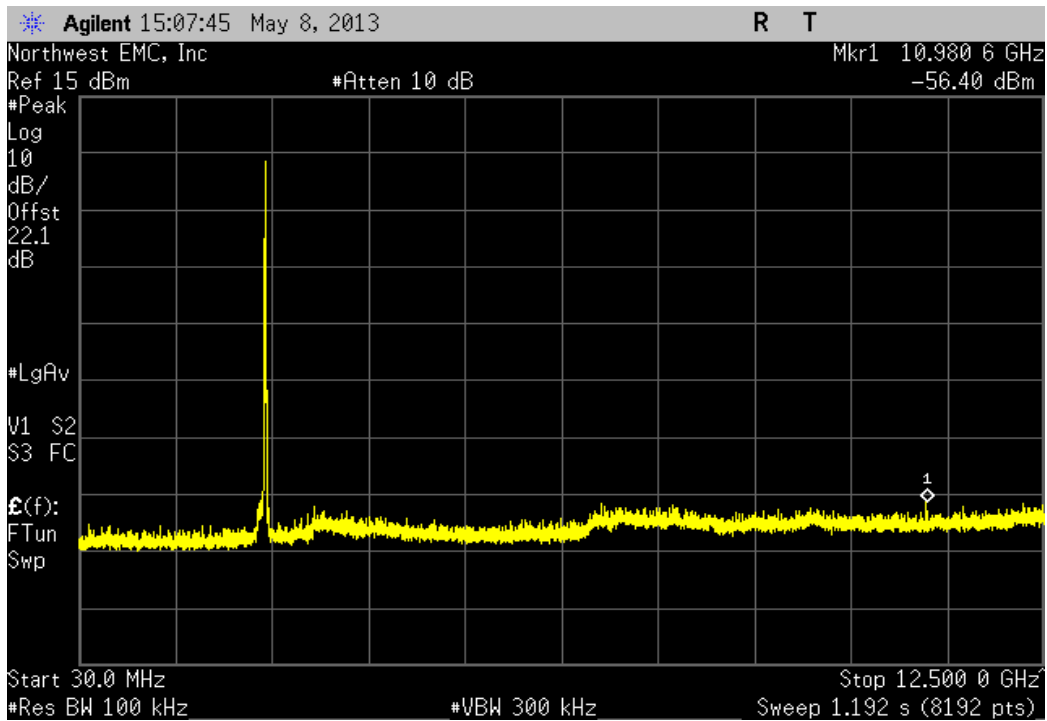
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-56.03 dBc	≤ -20 dBc	Pass



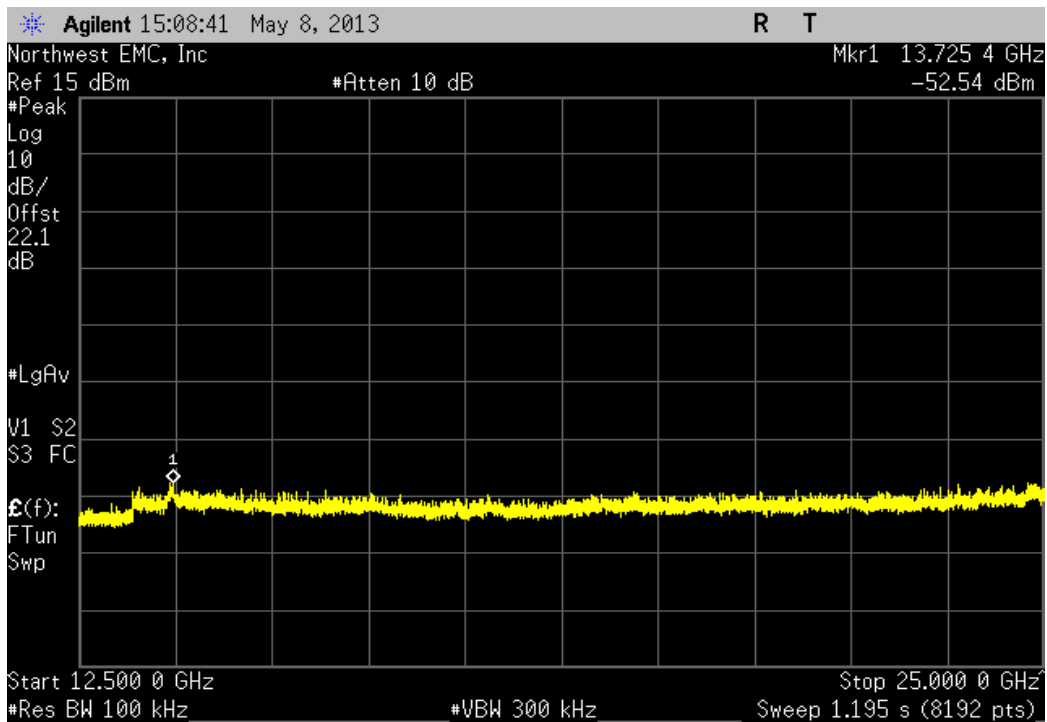
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



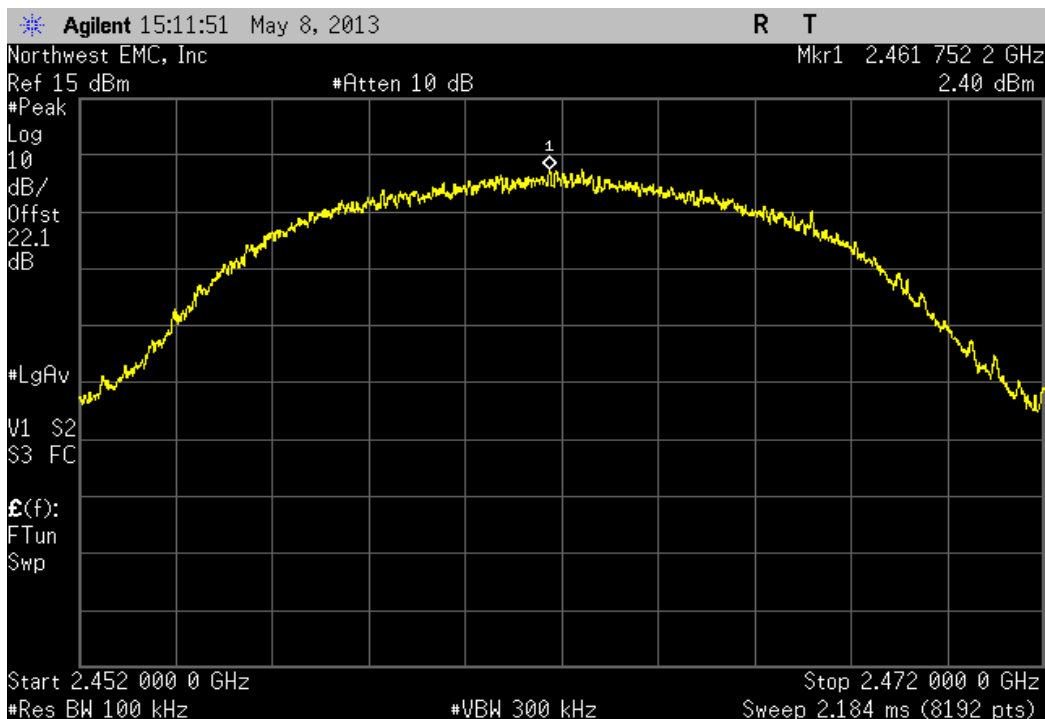
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-60.66 dBc	≤ -20 dBc	Pass	



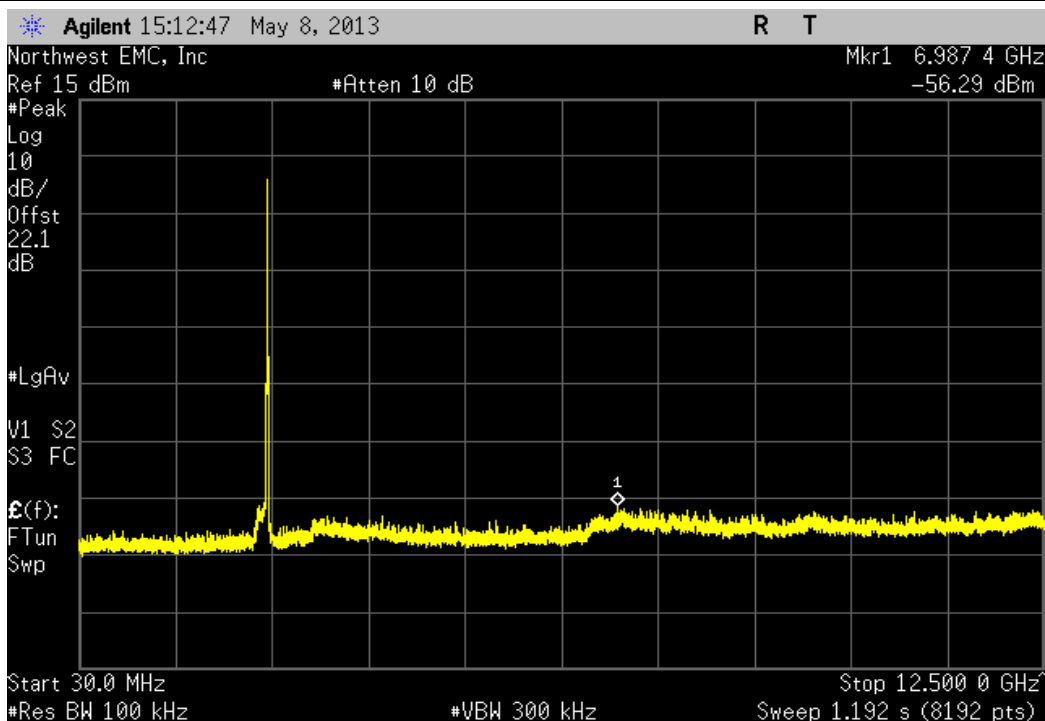
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-56.8 dBc	≤ -20 dBc	Pass	



Antenna 1, 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

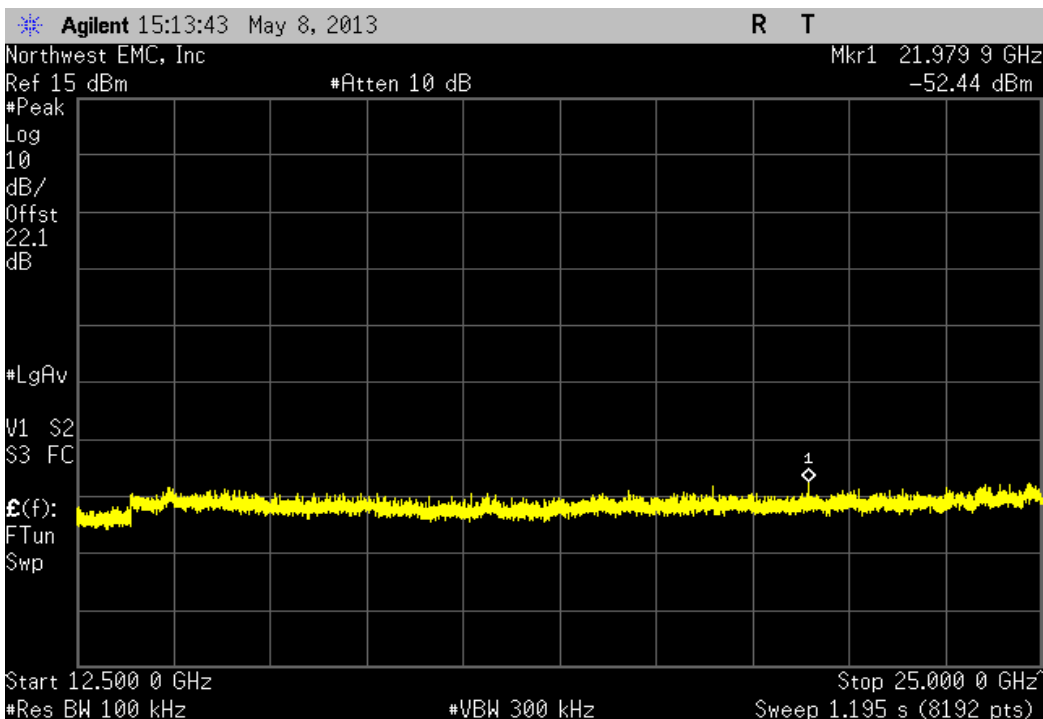


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-58.69 dBc	≤ -20 dBc	Pass



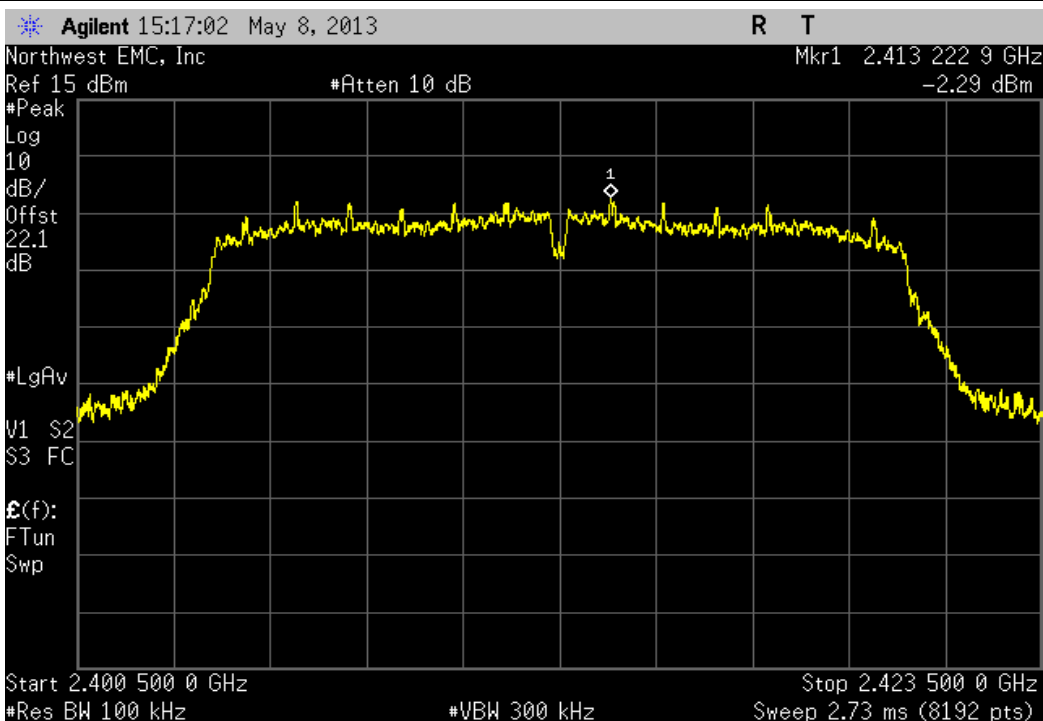
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Frequency Range	Value	Limit	Result
12.5 GHz - 25 GHz	-54.84 dBc	≤ -20 dBc	Pass

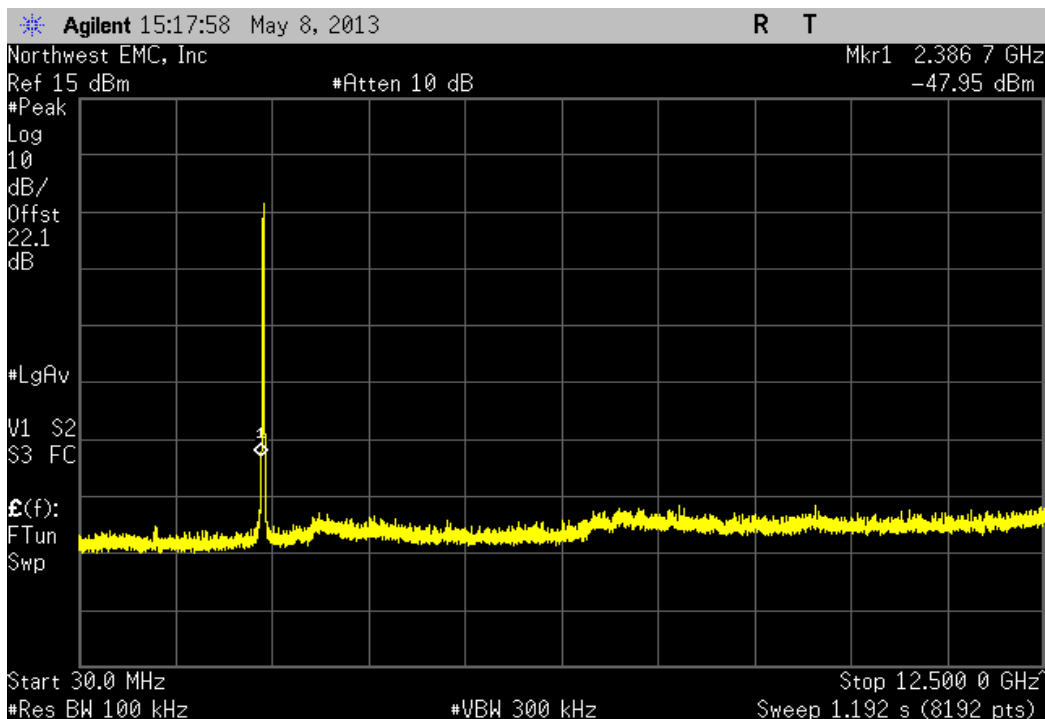


Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz

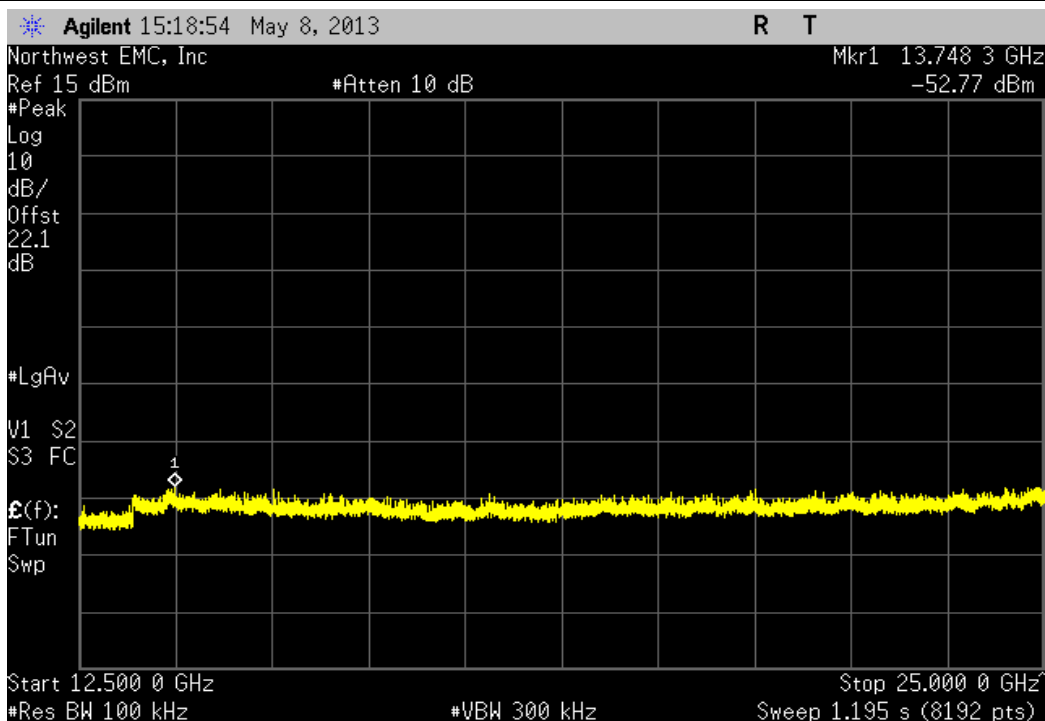
Frequency Range	Value	Limit	Result
Fundamental	N/A	N/A	N/A



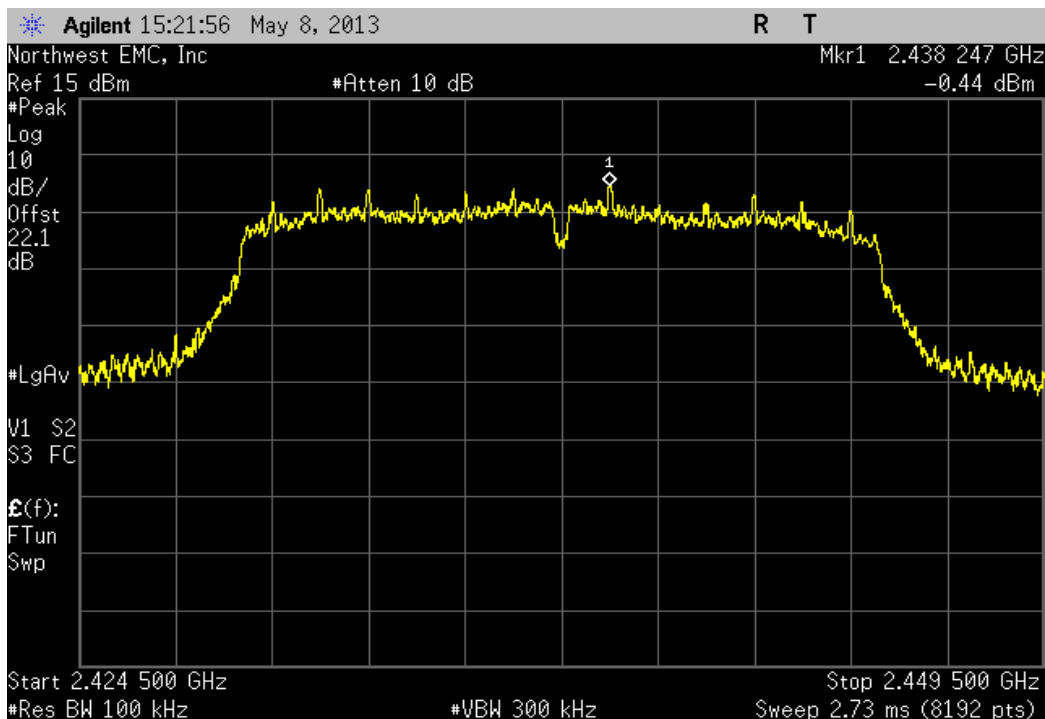
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-45.66 dBc	≤ -20 dBc	Pass	



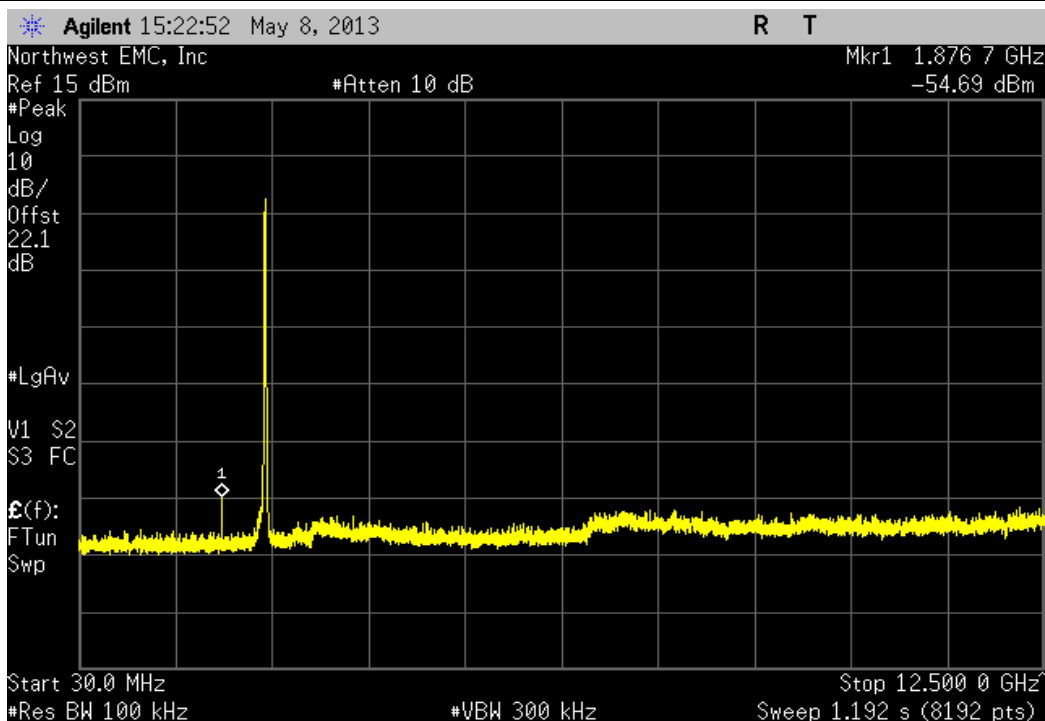
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-50.48 dBc	≤ -20 dBc	Pass	



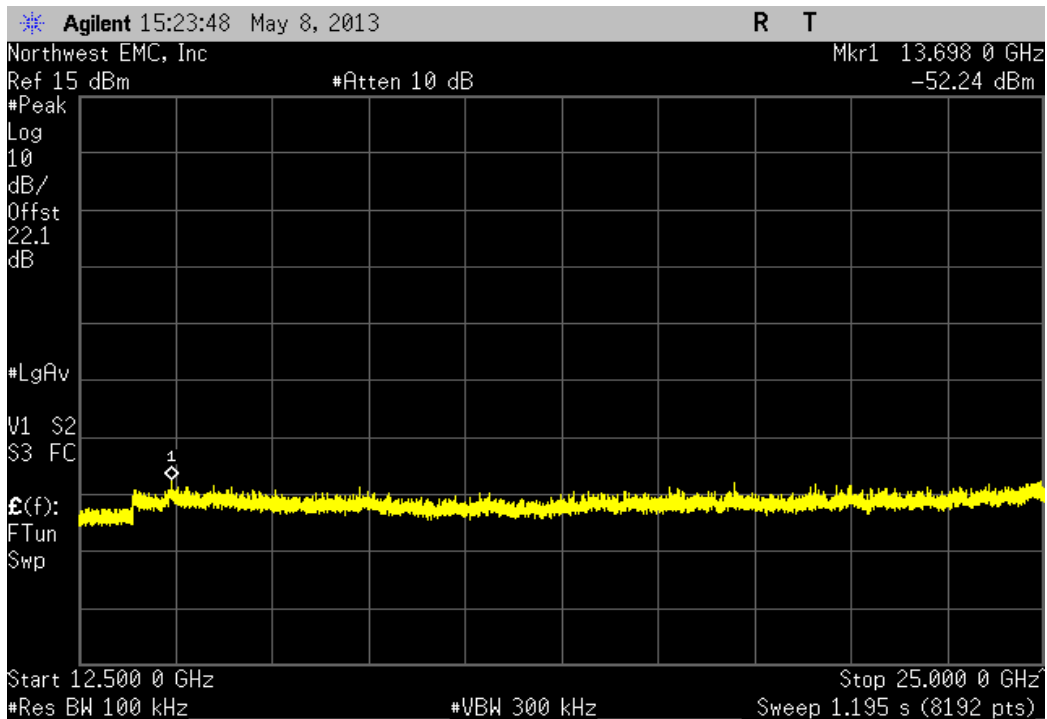
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
	Fundamental			N/A	N/A	N/A



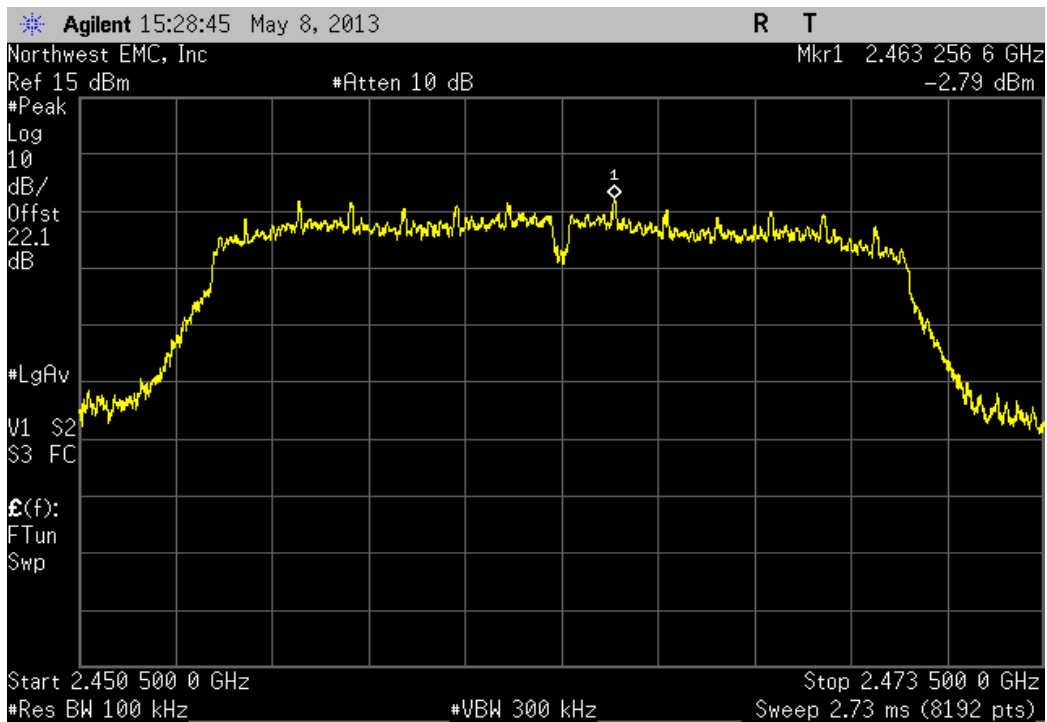
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
	30 MHz - 12.5 GHz			-54.25 dBc	≤ -20 dBc	Pass



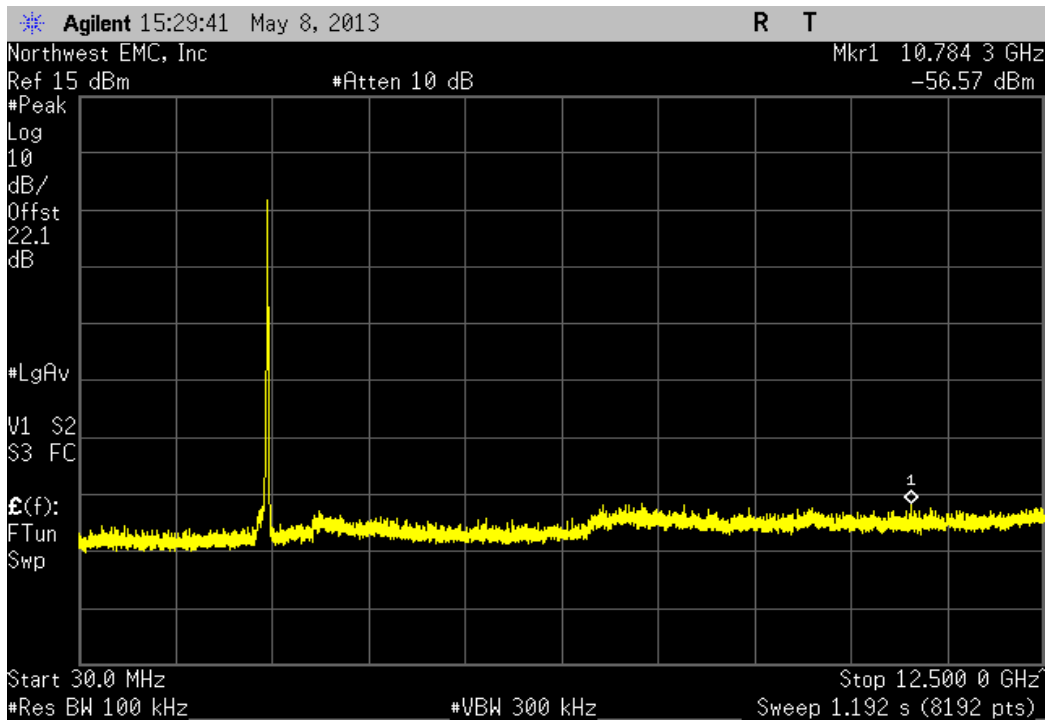
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-51.81 dBc	≤ -20 dBc	Pass



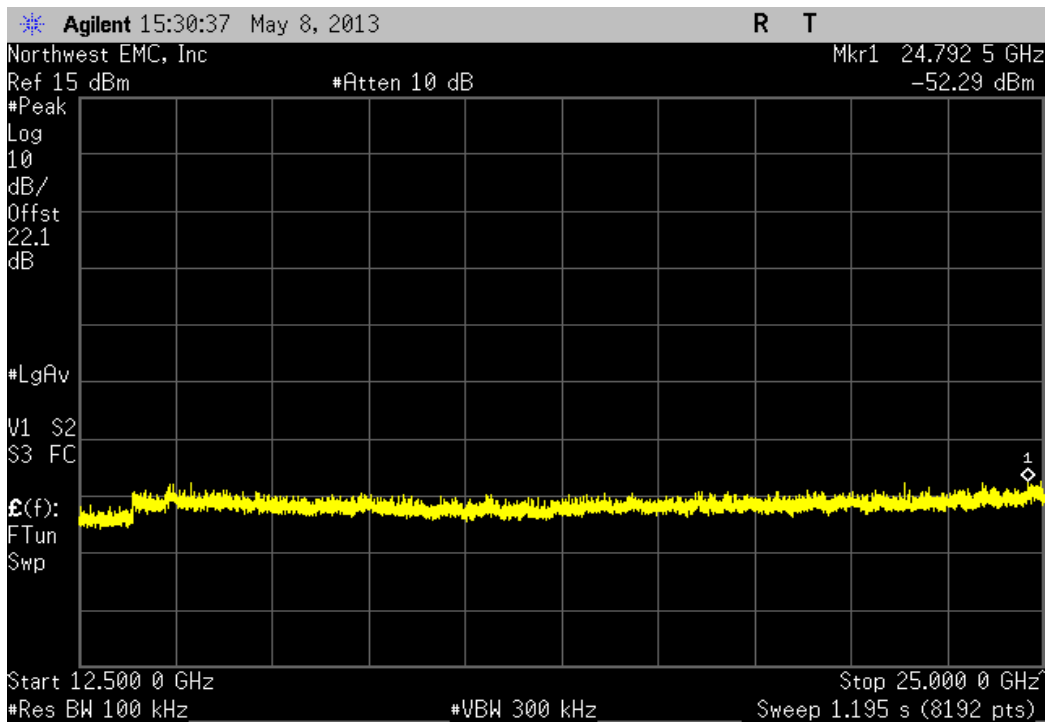
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



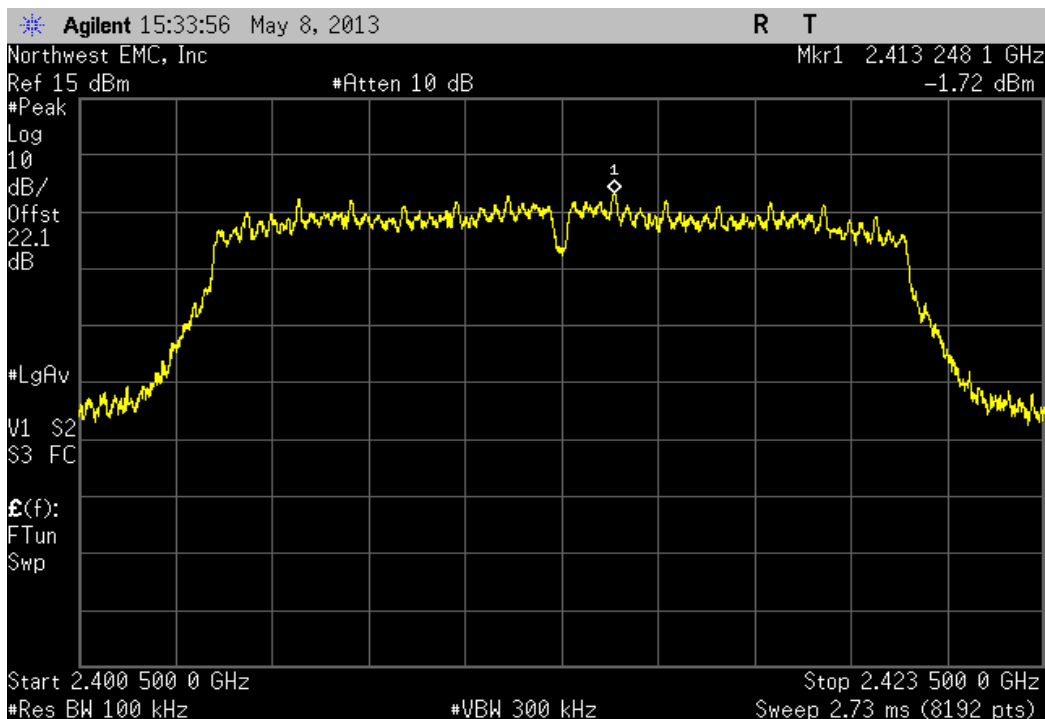
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-53.78 dBc	≤ -20 dBc	Pass	



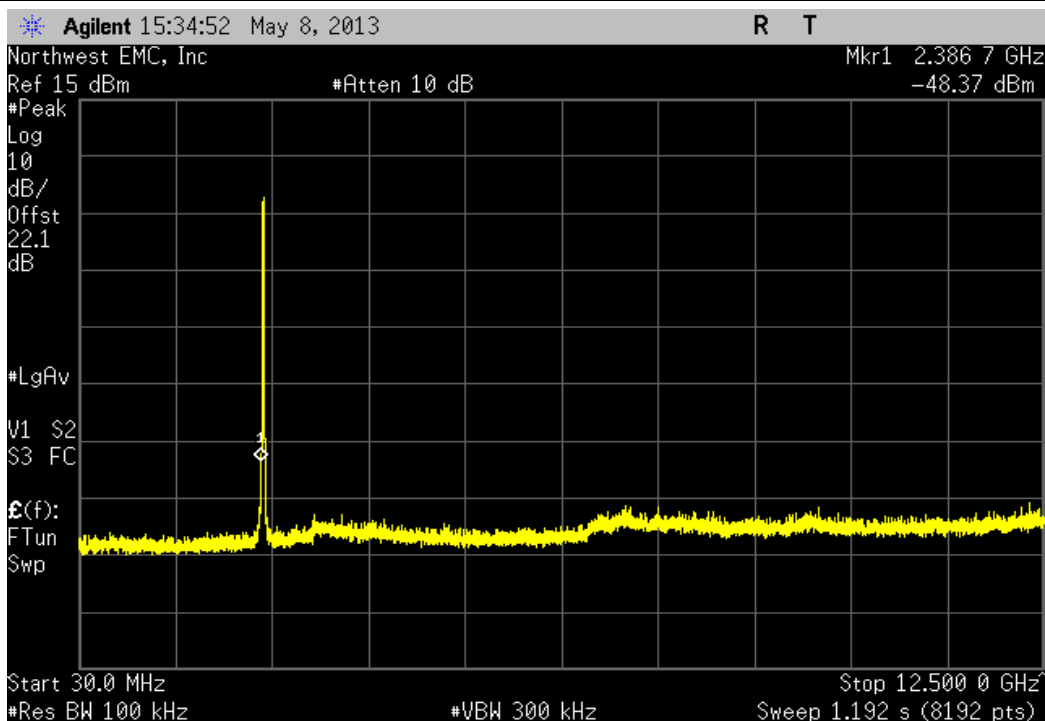
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-49.5 dBc	≤ -20 dBc	Pass	



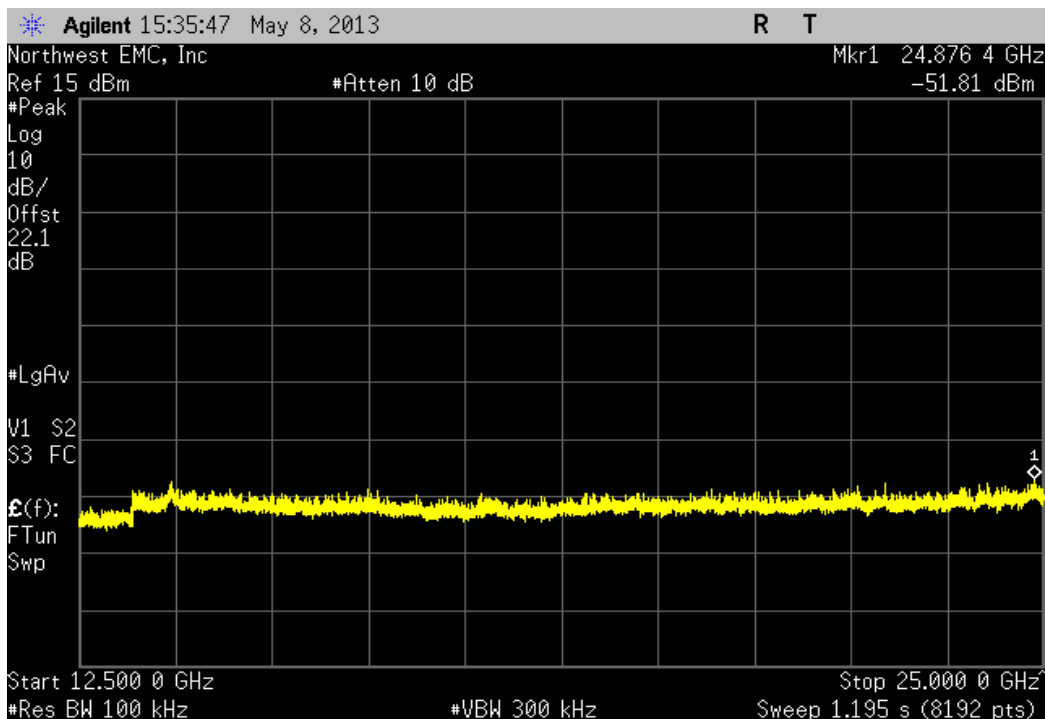
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
Frequency Range		Value	Limit	Result		
Fundamental		N/A	N/A	N/A		



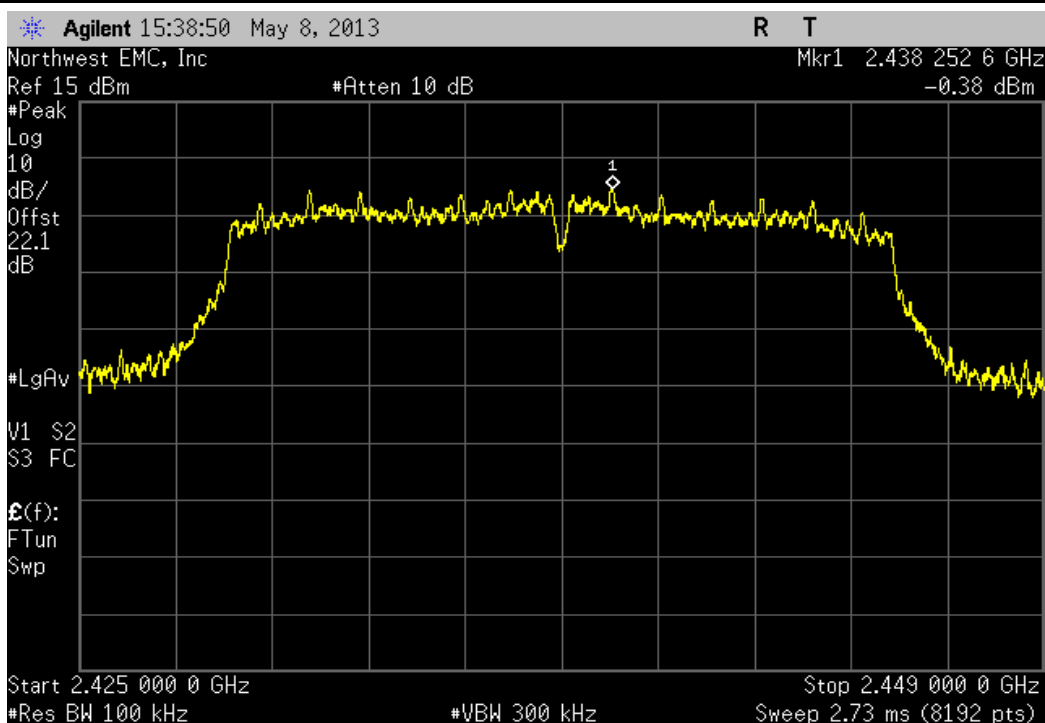
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz						
Frequency Range		Value	Limit	Result		
30 MHz - 12.5 GHz		-46.65 dBc	≤ -20 dBc	Pass		



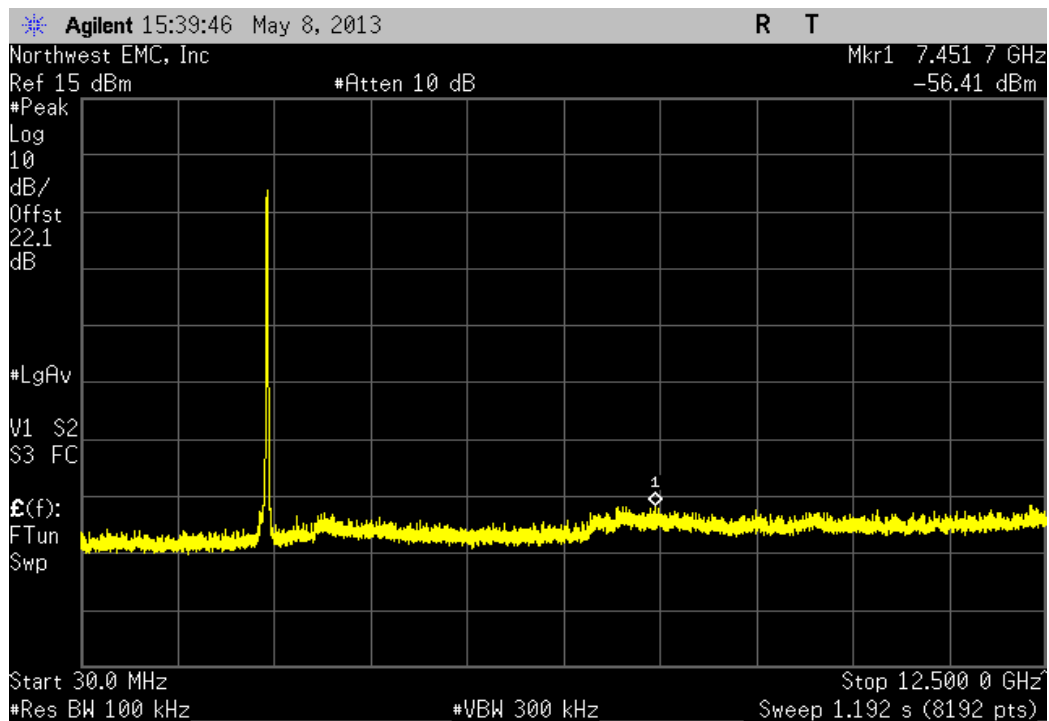
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-50.09 dBc	≤ -20 dBc	Pass



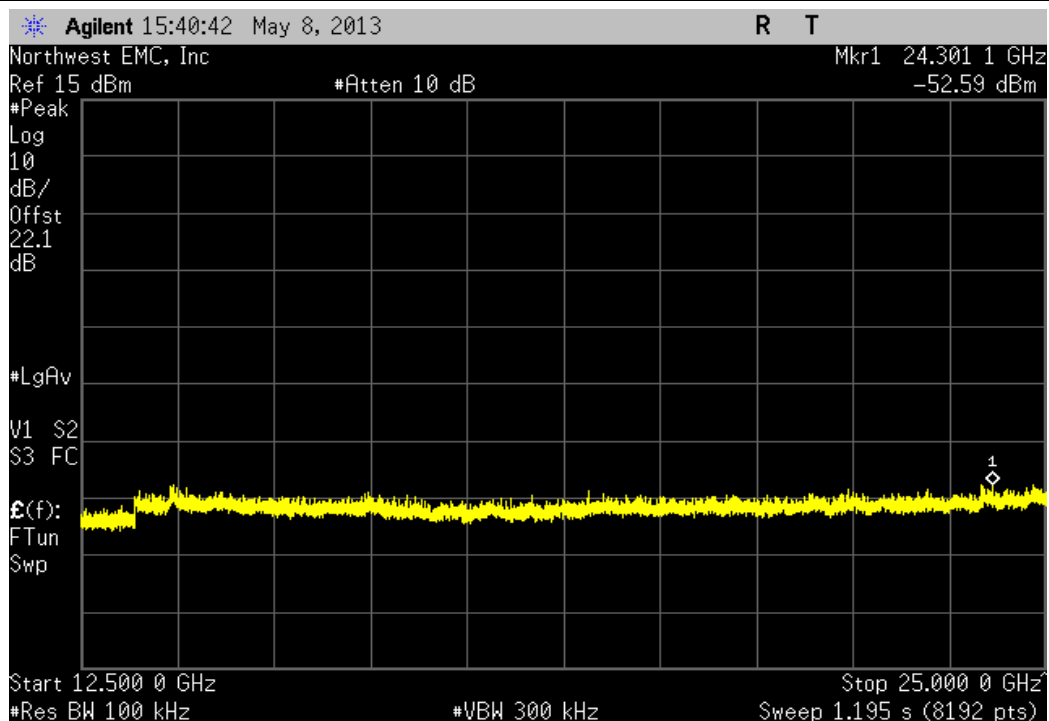
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-56.03 dBc	≤ -20 dBc	Pass	



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-52.21 dBc	≤ -20 dBc	Pass	



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

**Frequency
Range**

Value

Limit

Result

Fundamental

N/A

N/A

N/A

Agilent 15:43:22 May 8, 2013

R T

Northwest EMC, Inc

Mkr1 2.463 256 6 GHz

Ref 15 dBm

#Atten 10 dB

-2.77 dBm

#Peak

Log

10

dB/

Offst

22.1

dB

#LgAv

V1 S2

S3 FC

E(f):

FTun

Swp

Start 2.450 500 0 GHz

Stop 2.473 500 0 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 2.73 ms (8192 pts)

Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz

**Frequency
Range**

Value

Limit

Result

30 MHz - 12.5 GHz

-53.49 dBc

≤ -20 dBc

Pass

Agilent 15:44:18 May 8, 2013

R T

Northwest EMC, Inc

Mkr1 12.379 7 GHz

Ref 15 dBm

#Atten 10 dB

-56.26 dBm

#Peak

Log

10

dB/

Offst

22.1

dB

#LgAv

V1 S2

S3 FC

E(f):

FTun

Swp

Start 30.0 MHz

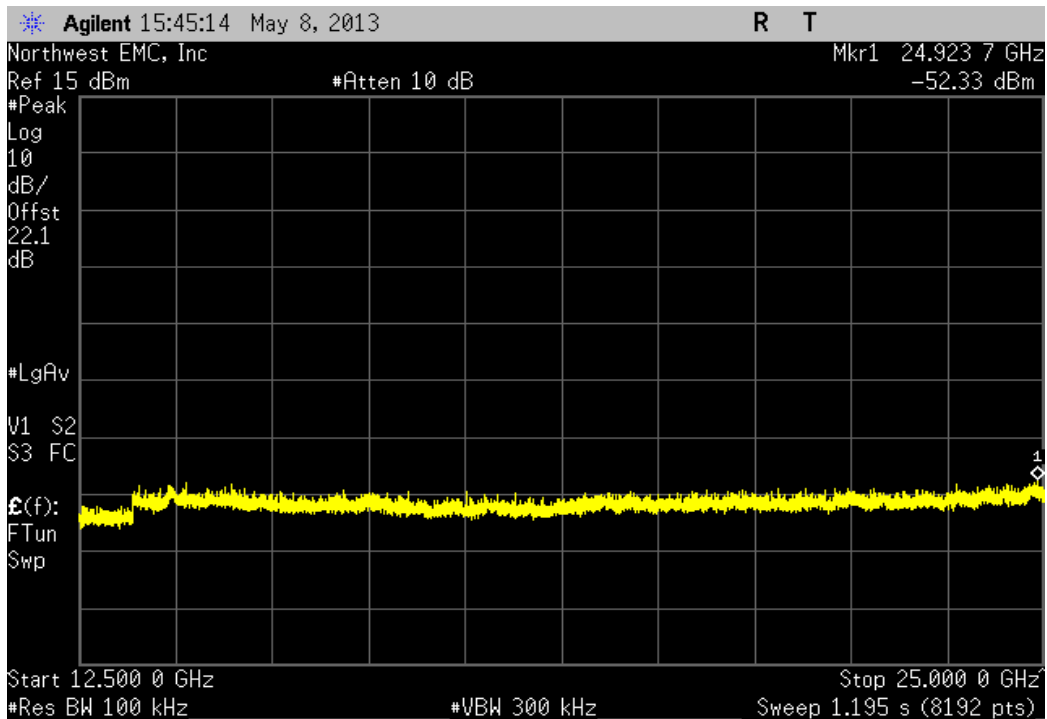
Stop 12.500 0 GHz

#Res BW 100 kHz

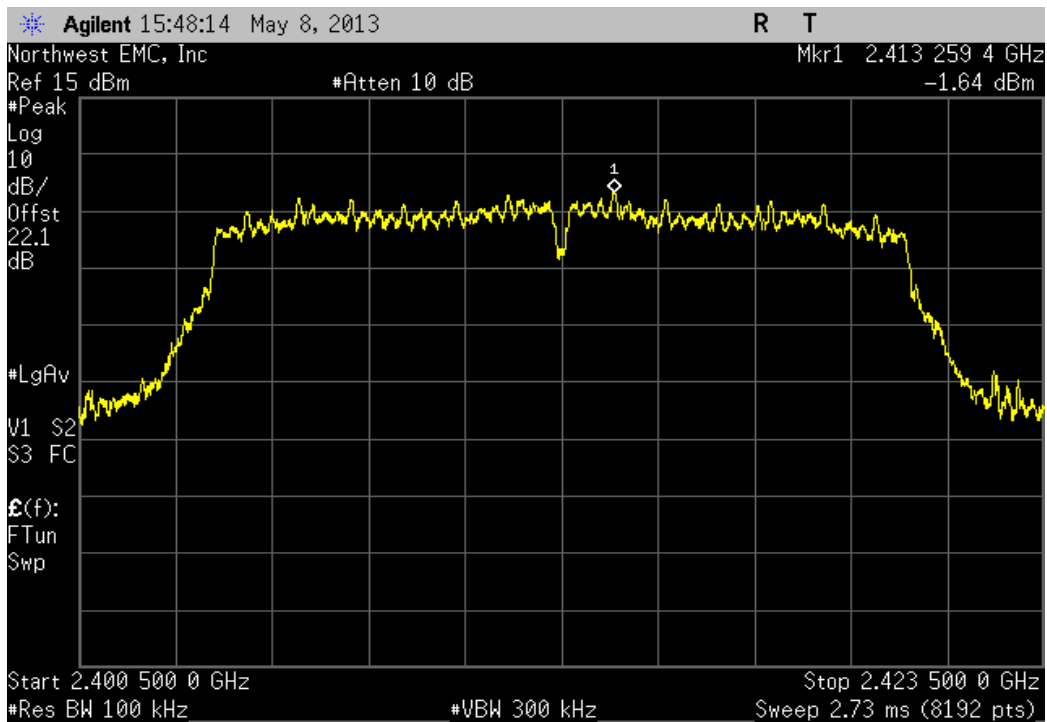
#VBW 300 kHz

Sweep 1.192 s (8192 pts)

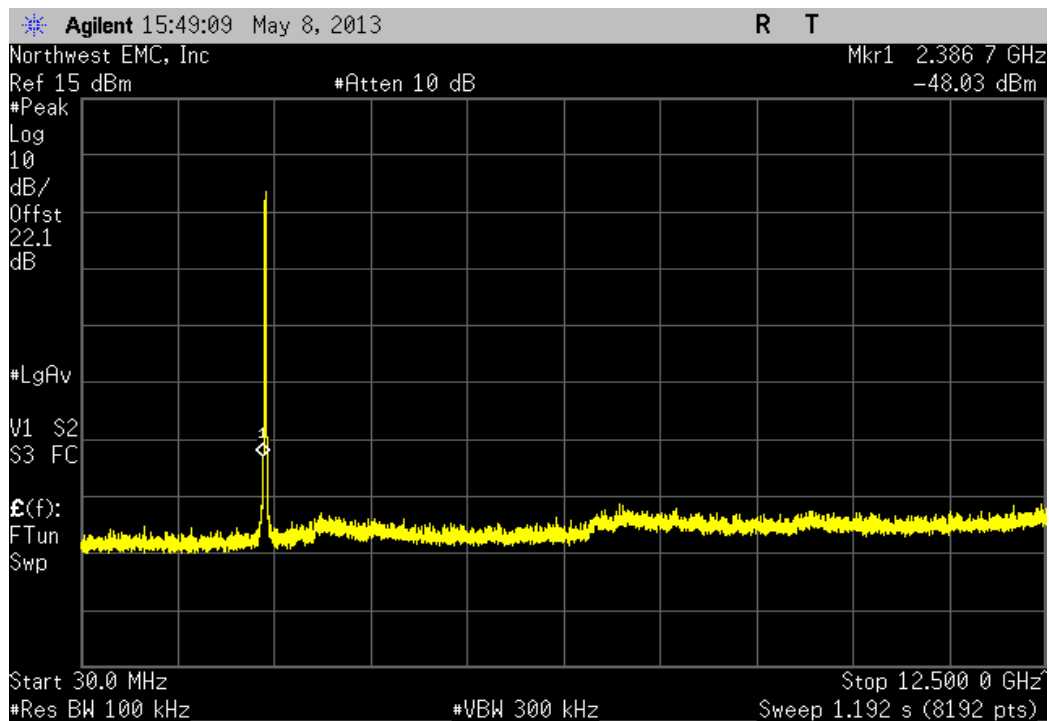
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-49.56 dBc	≤ -20 dBc	Pass



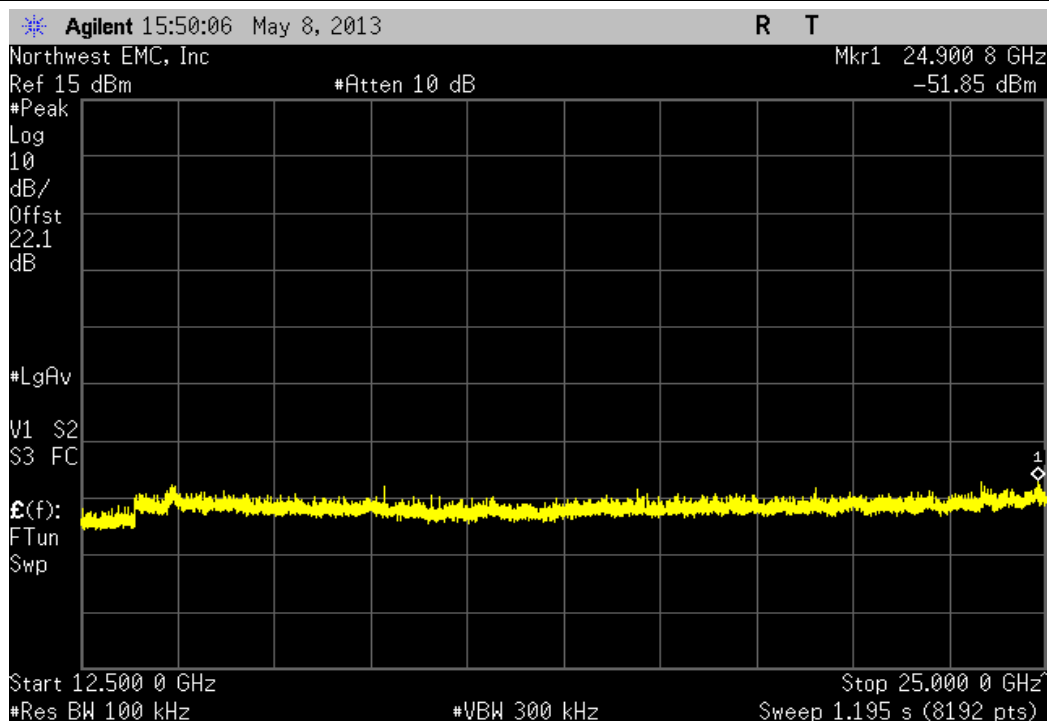
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



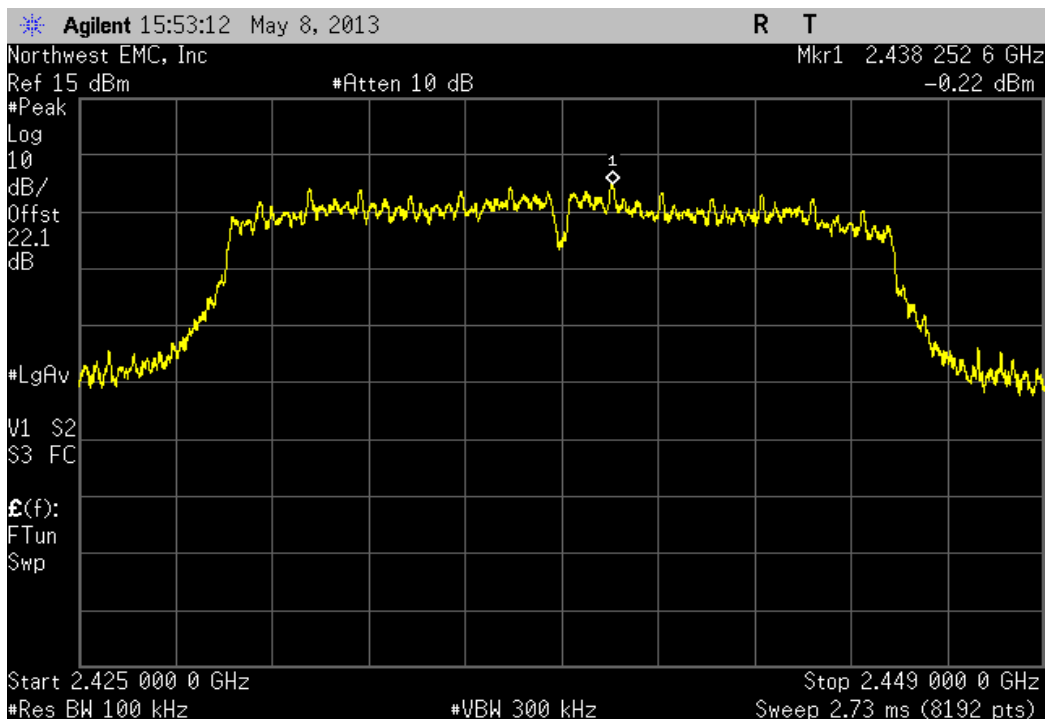
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-46.4 dBc	≤ -20 dBc	Pass	



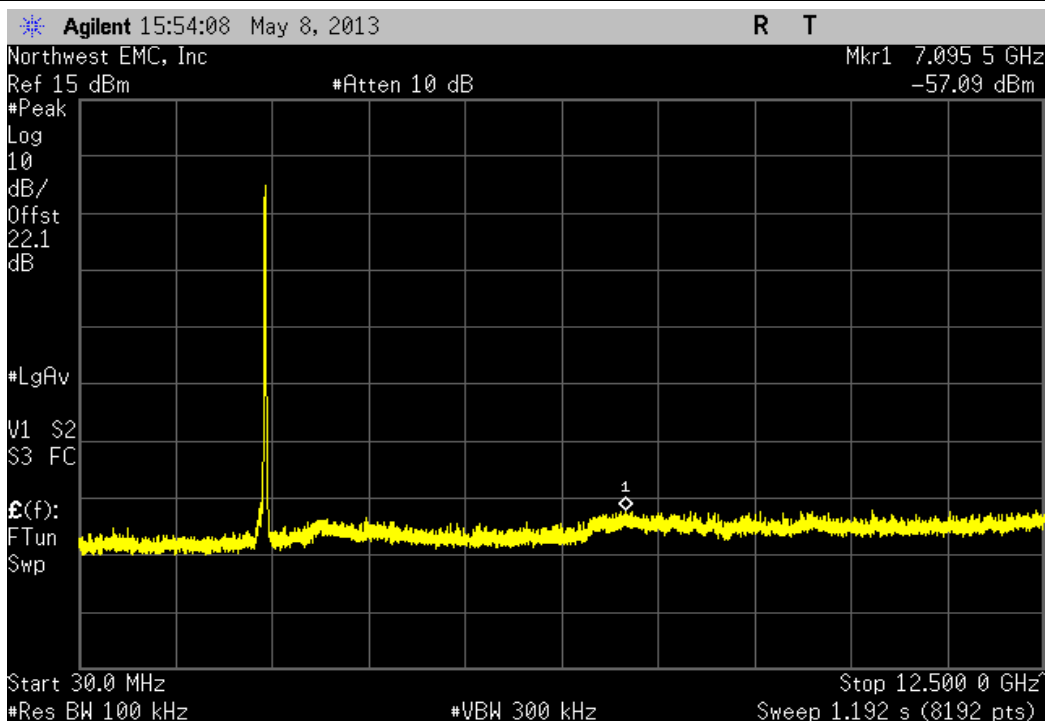
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-50.21 dBc	≤ -20 dBc	Pass	



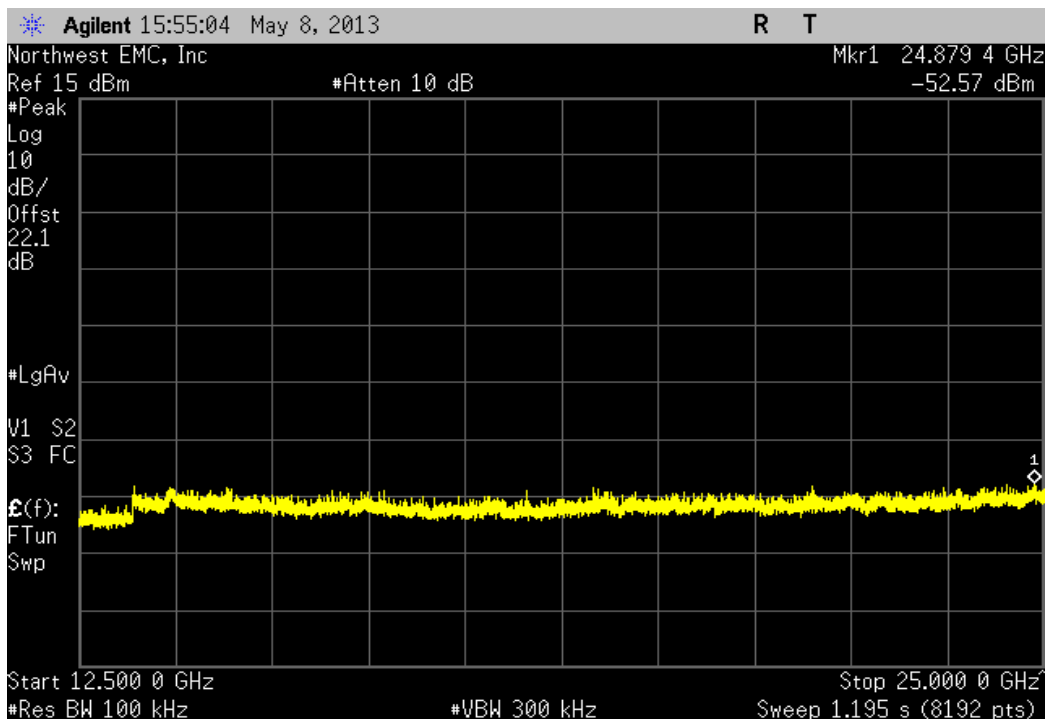
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
Fundamental				N/A	N/A	N/A



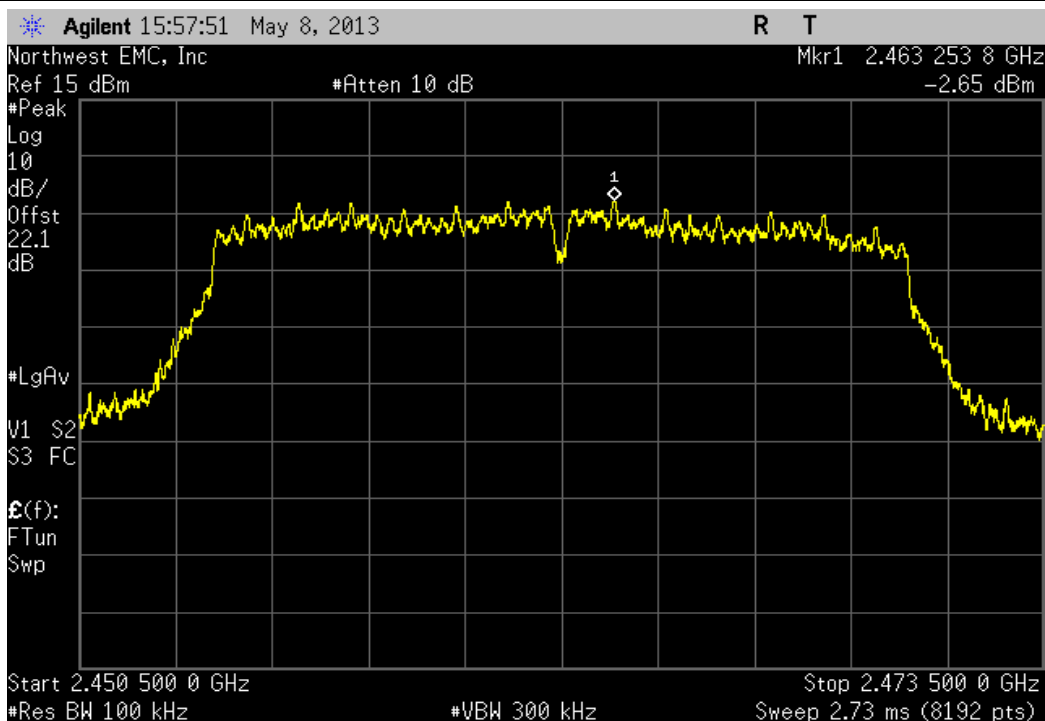
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-56.87 dBc	≤ -20 dBc	Pass



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-52.35 dBc	≤ -20 dBc	Pass	



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
Fundamental	N/A	N/A	N/A	



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Frequency

Range

Value

Limit

Result

30 MHz - 12.5 GHz

-53.79 dBc

≤ -20 dBc

Pass

Agilent 15:58:47 May 8, 2013

R T

Northwest EMC, Inc

Mkr1 7.527 8 GHz

Ref 15 dBm

#Atten 10 dB

-56.44 dBm

#Peak

Log

10

dB/

Offst

22.1

dB

#LgAv

V1 S2

S3 FC

£(f):

FTun

Swp

Start 30.0 MHz

Stop 12.500 0 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.192 s (8192 pts)

Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Frequency

Range

Value

Limit

Result

12.5 GHz - 25 GHz

-49.85 dBc

≤ -20 dBc

Pass

Agilent 15:59:43 May 8, 2013

R T

Northwest EMC, Inc

Mkr1 24.855 0 GHz

Ref 15 dBm

#Atten 10 dB

-52.50 dBm

#Peak

Log

10

dB/

Offst

22.1

dB

#LgAv

V1 S2

S3 FC

£(f):

FTun

Swp

Start 12.500 0 GHz

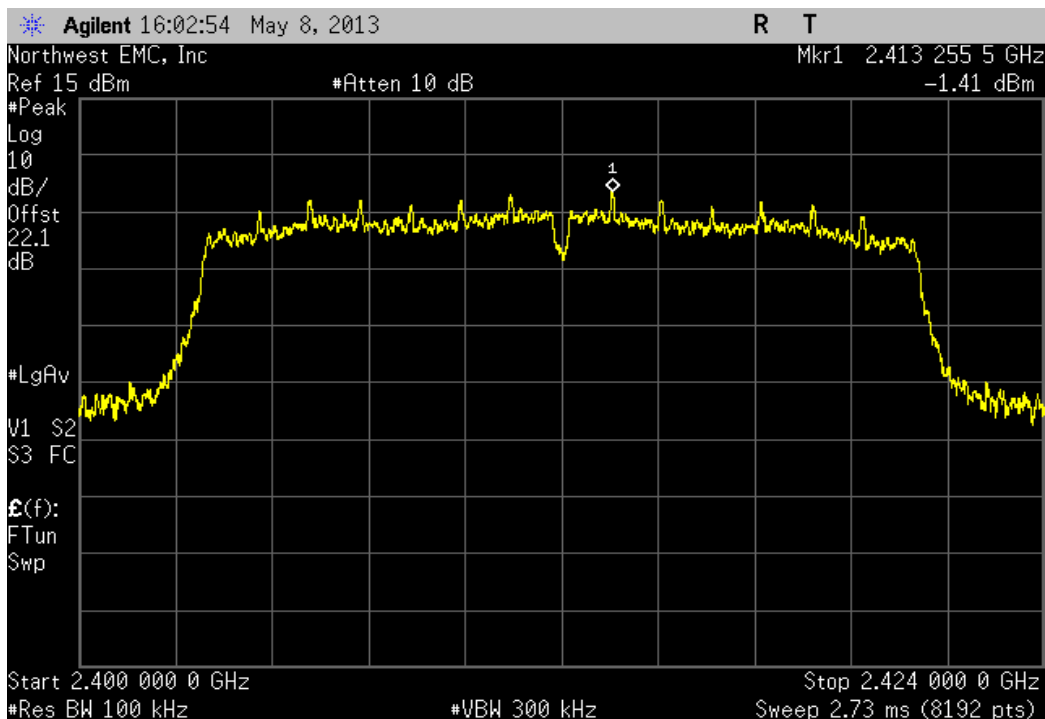
Stop 25.000 0 GHz

#Res BW 100 kHz

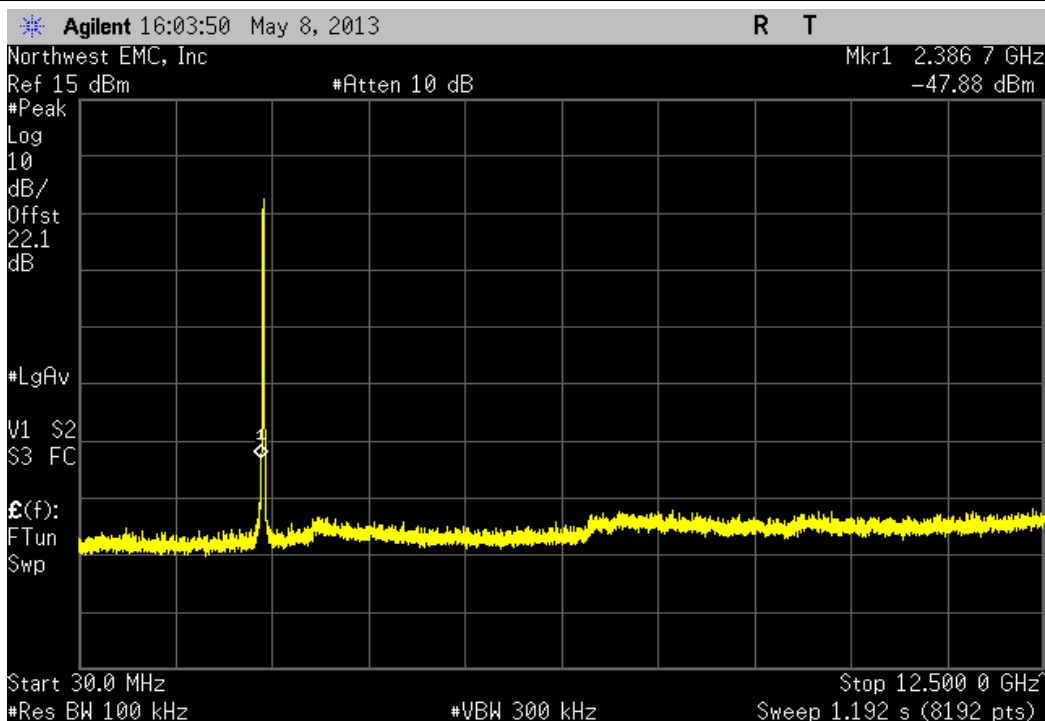
#VBW 300 kHz

Sweep 1.195 s (8192 pts)

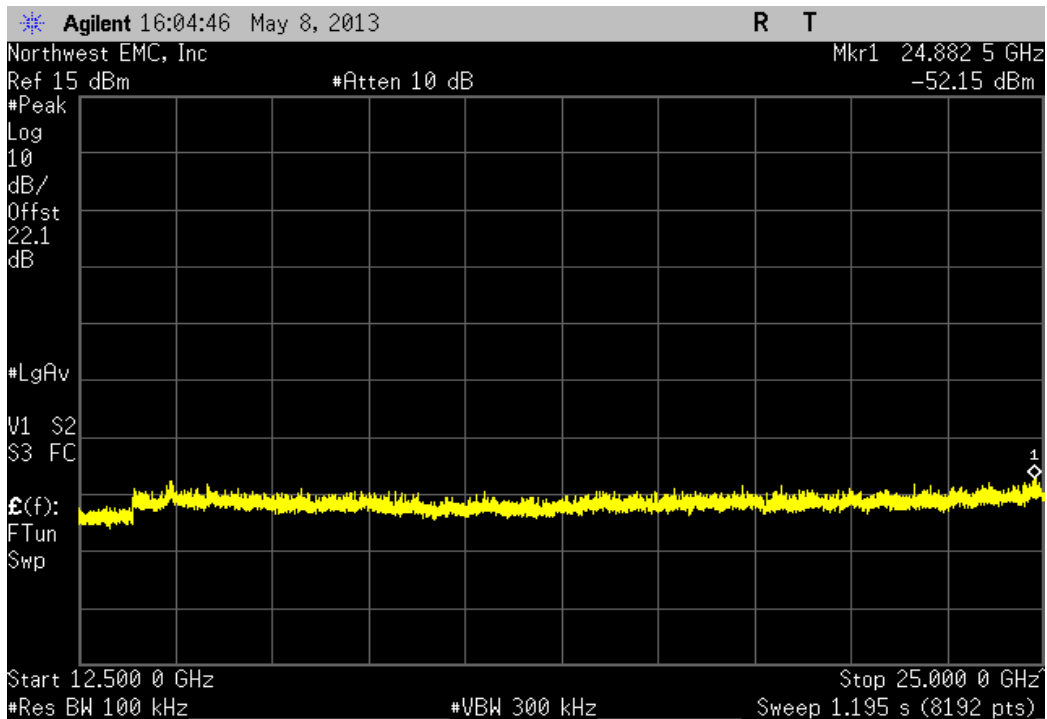
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Frequency Range				Value	Limit	Result
Fundamental				N/A	N/A	N/A



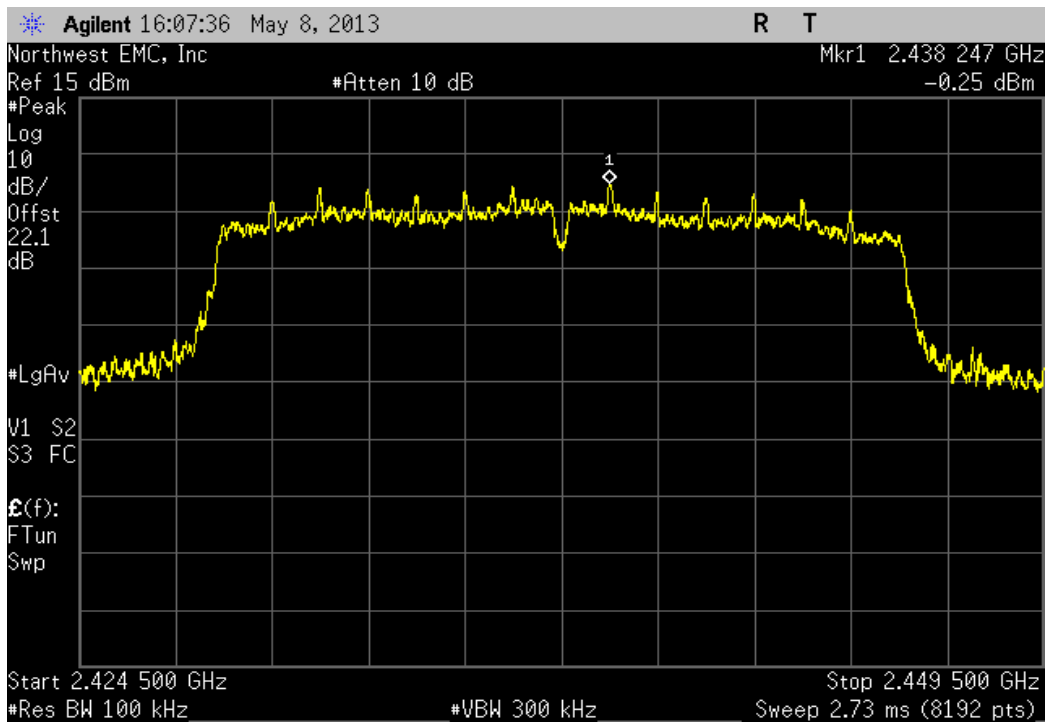
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-46.47 dBc	≤ -20 dBc	Pass



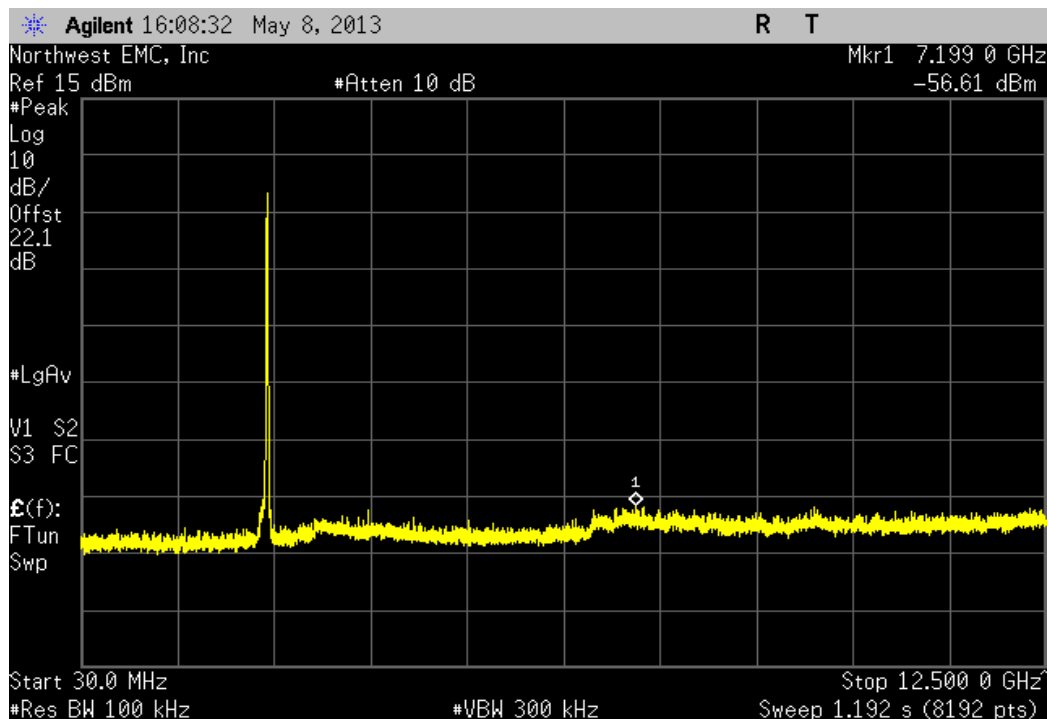
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz				
Frequency Range		Value	Limit	Result
12.5 GHz - 25 GHz		-50.74 dBc	≤ -20 dBc	Pass



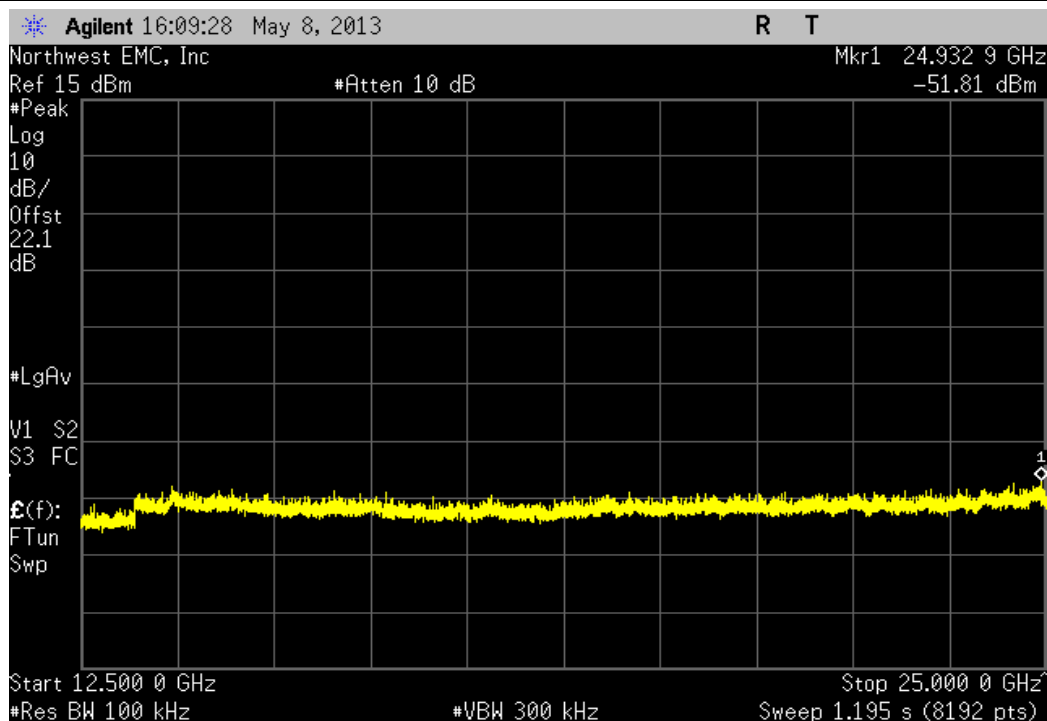
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



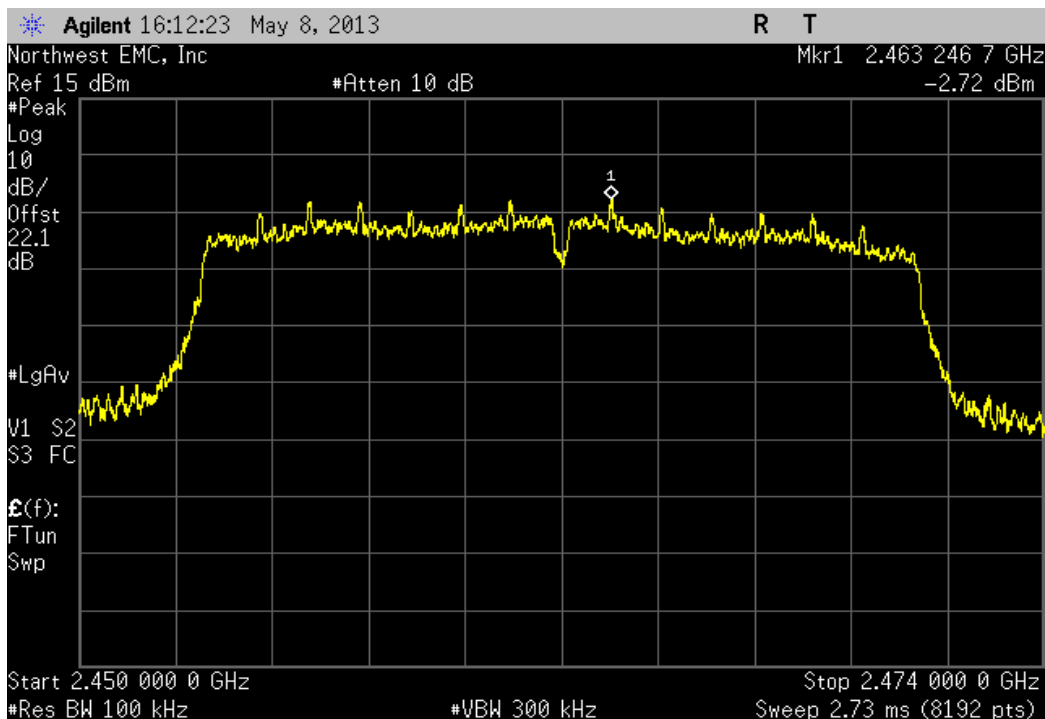
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-56.36 dBc	≤ -20 dBc	Pass	



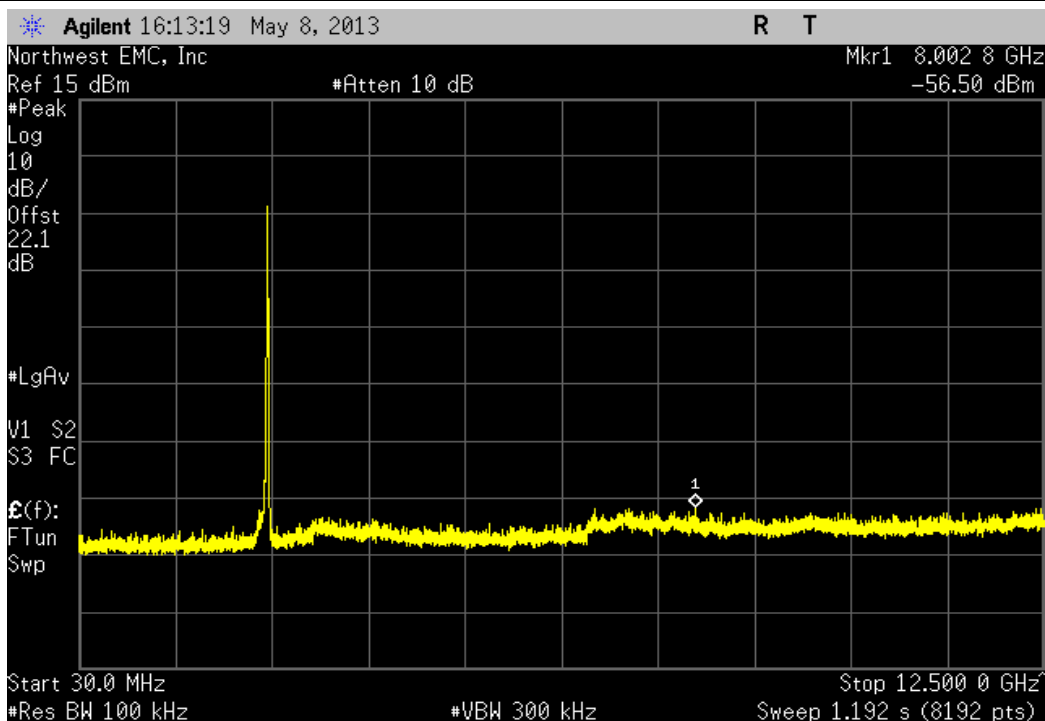
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-51.56 dBc	≤ -20 dBc	Pass	



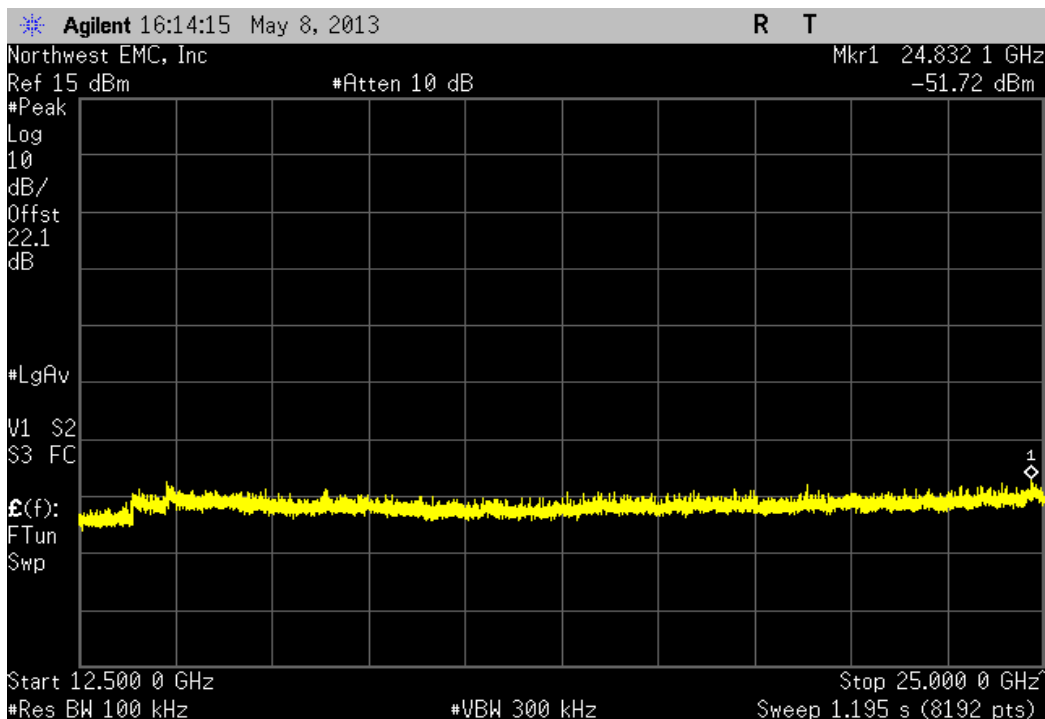
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
Fundamental				N/A	N/A	N/A



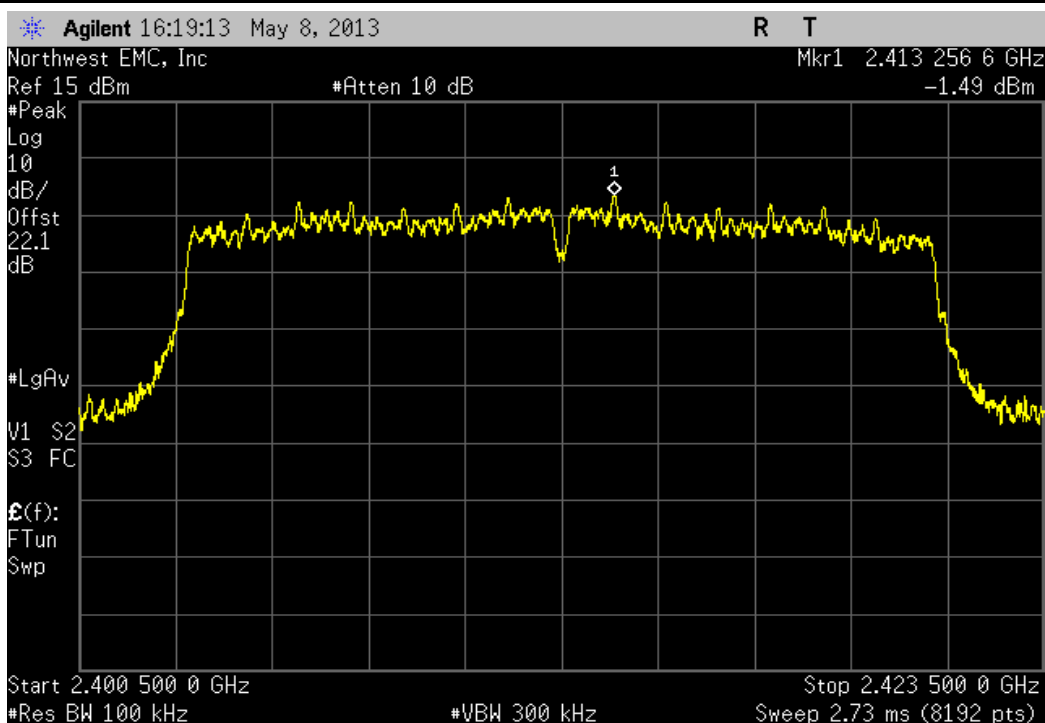
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Frequency Range				Value	Limit	Result
30 MHz - 12.5 GHz				-53.78 dBc	≤ -20 dBc	Pass



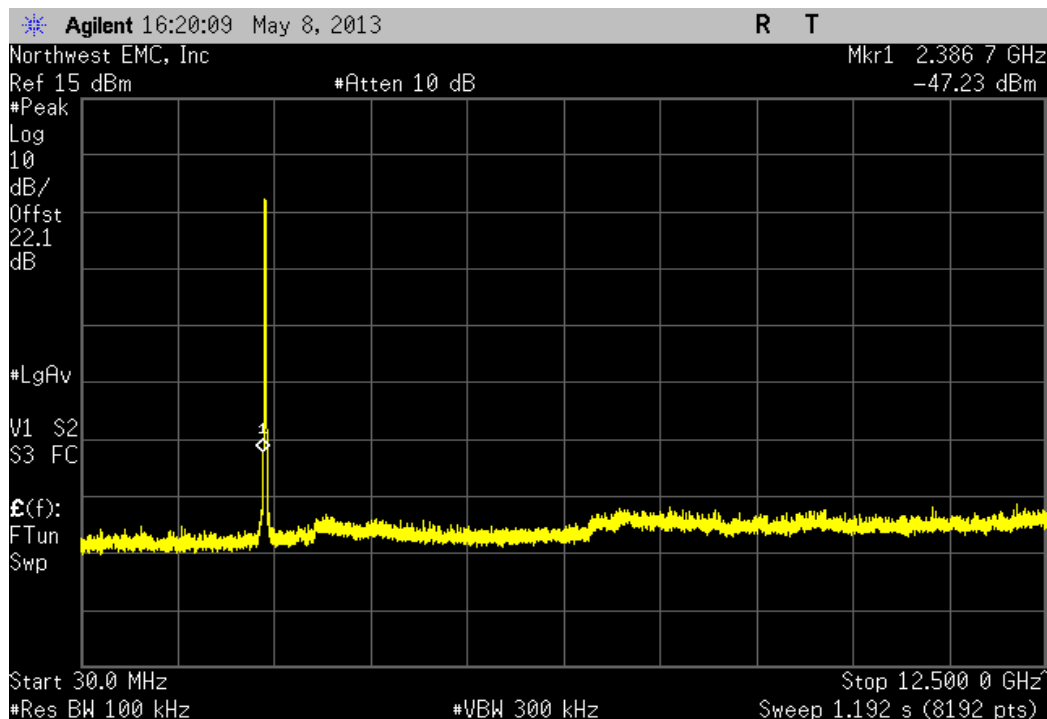
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-49 dBc	≤ -20 dBc	Pass	



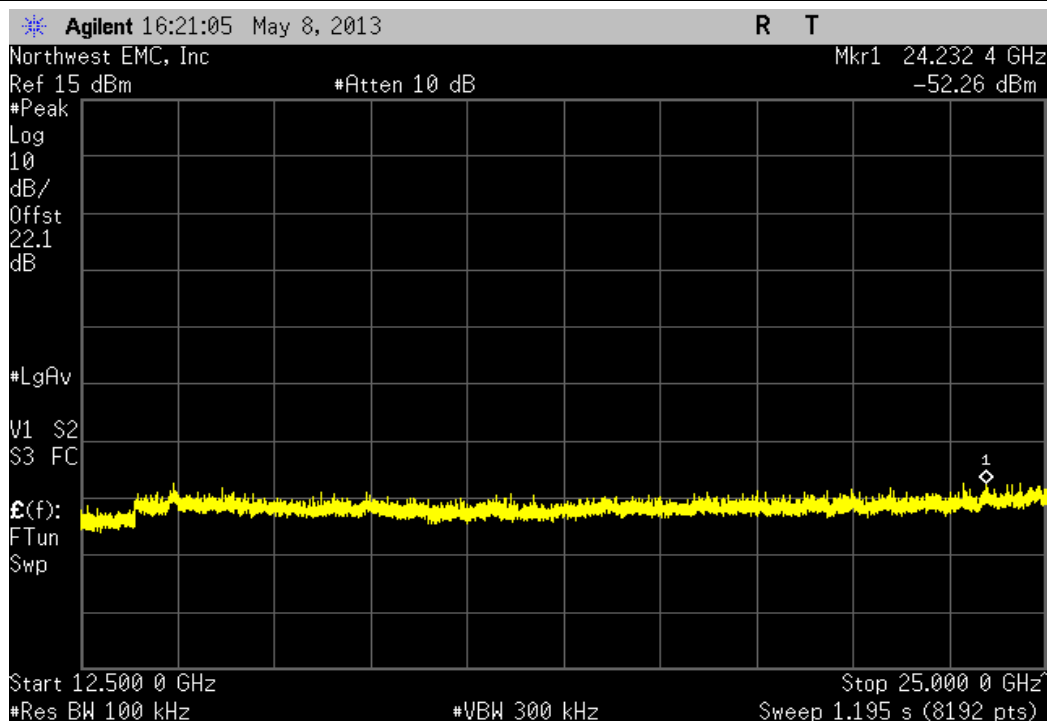
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
Fundamental	N/A	N/A	N/A	



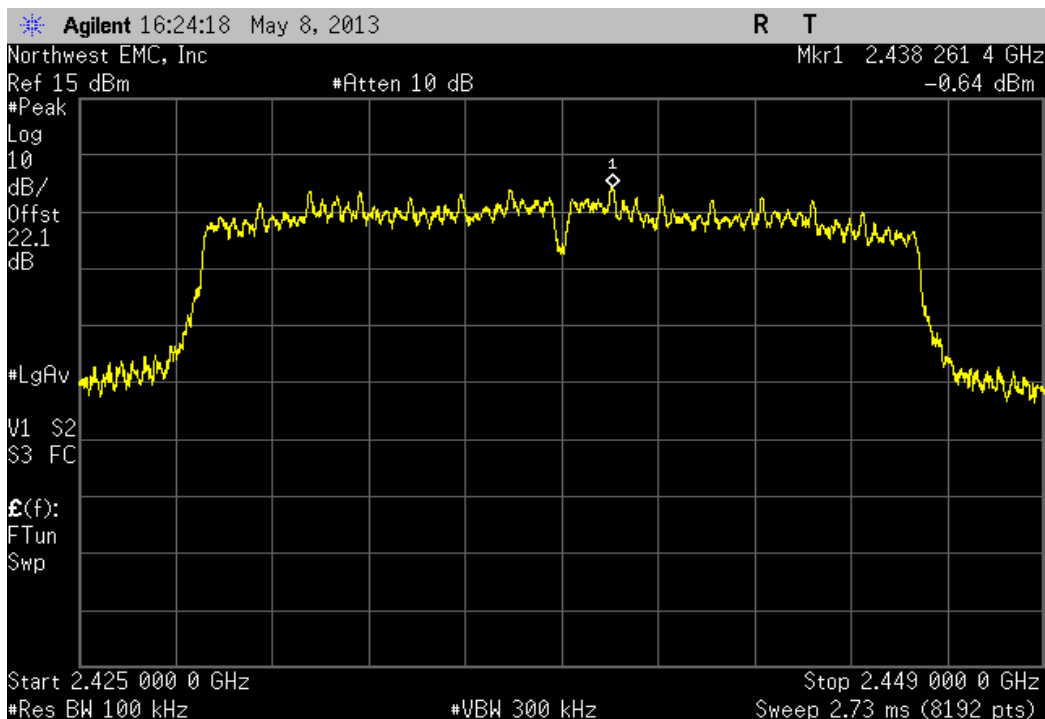
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-45.74 dBc	≤ -20 dBc	Pass	



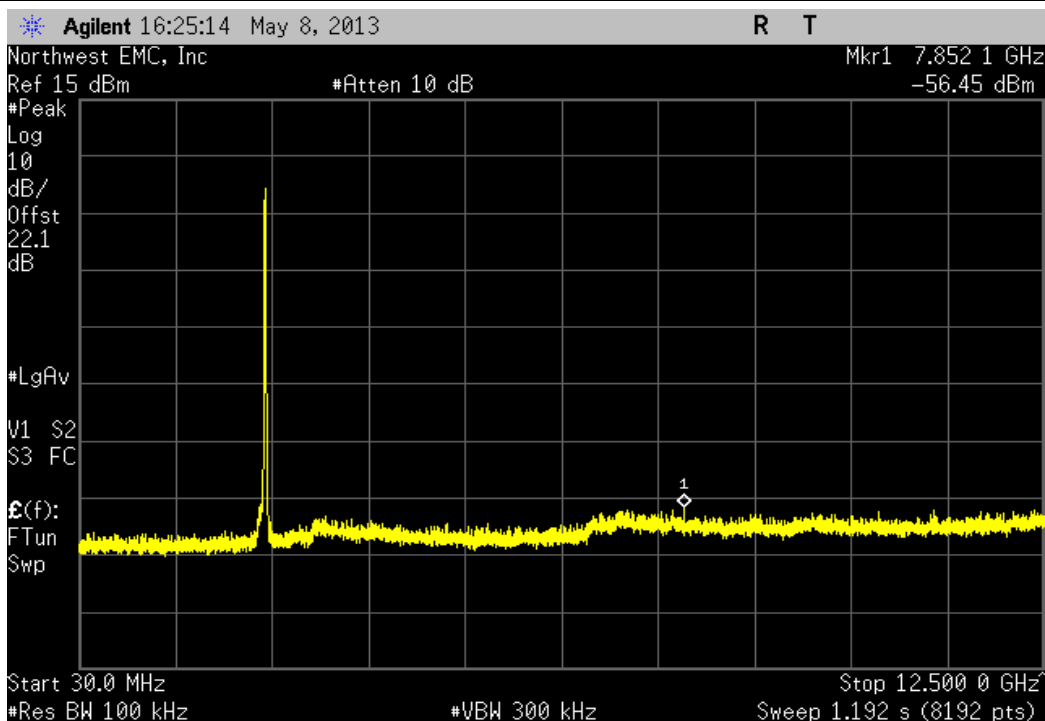
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-50.77 dBc	≤ -20 dBc	Pass	



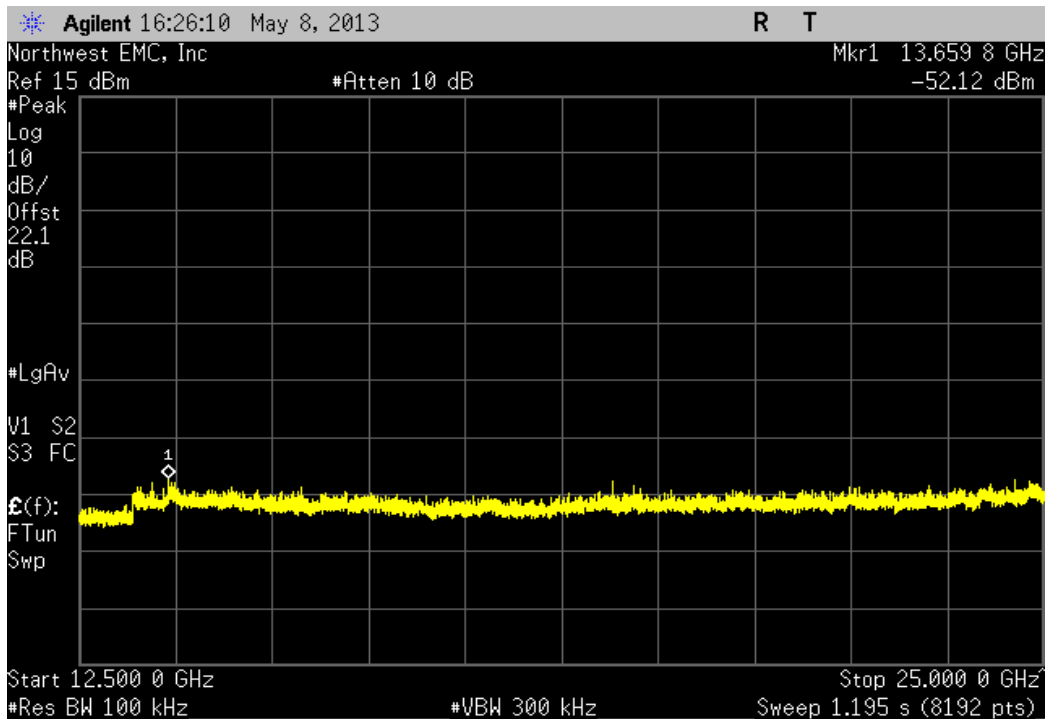
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



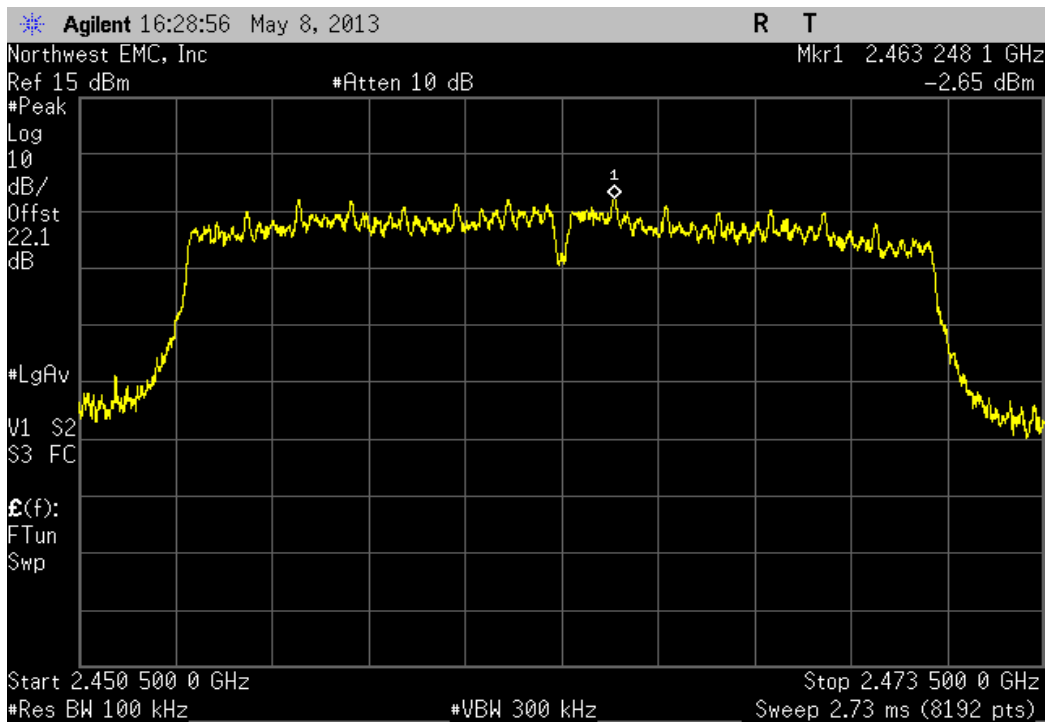
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz				
Frequency Range		Value	Limit	Result
30 MHz - 12.5 GHz		-55.81 dBc	≤ -20 dBc	Pass



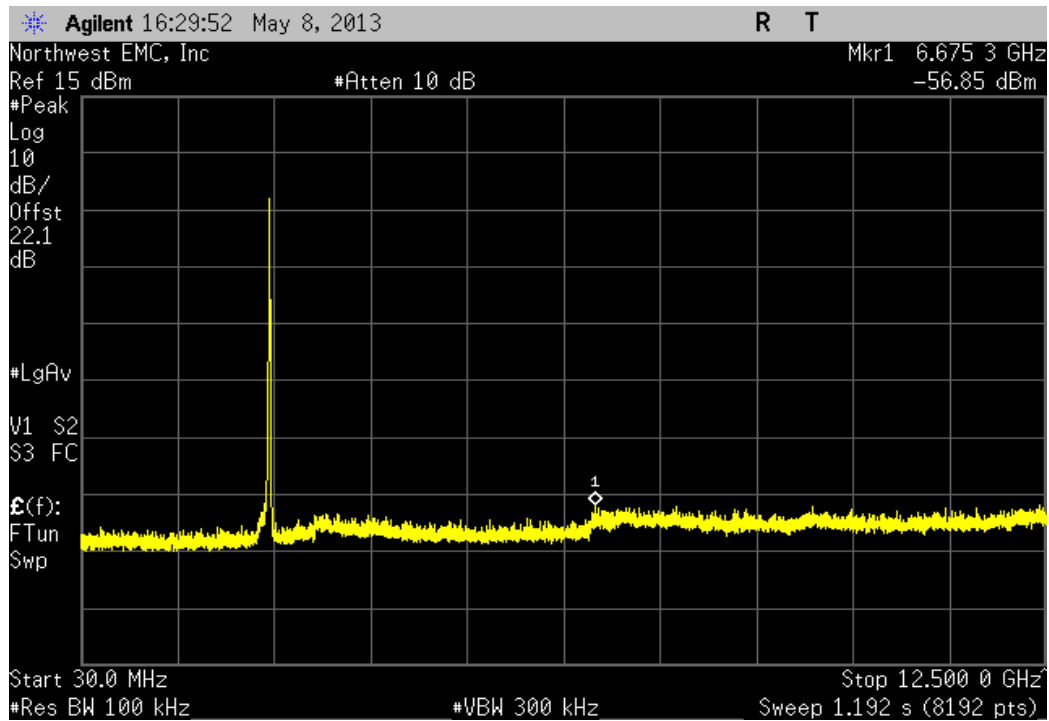
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-51.48 dBc	≤ -20 dBc	Pass	



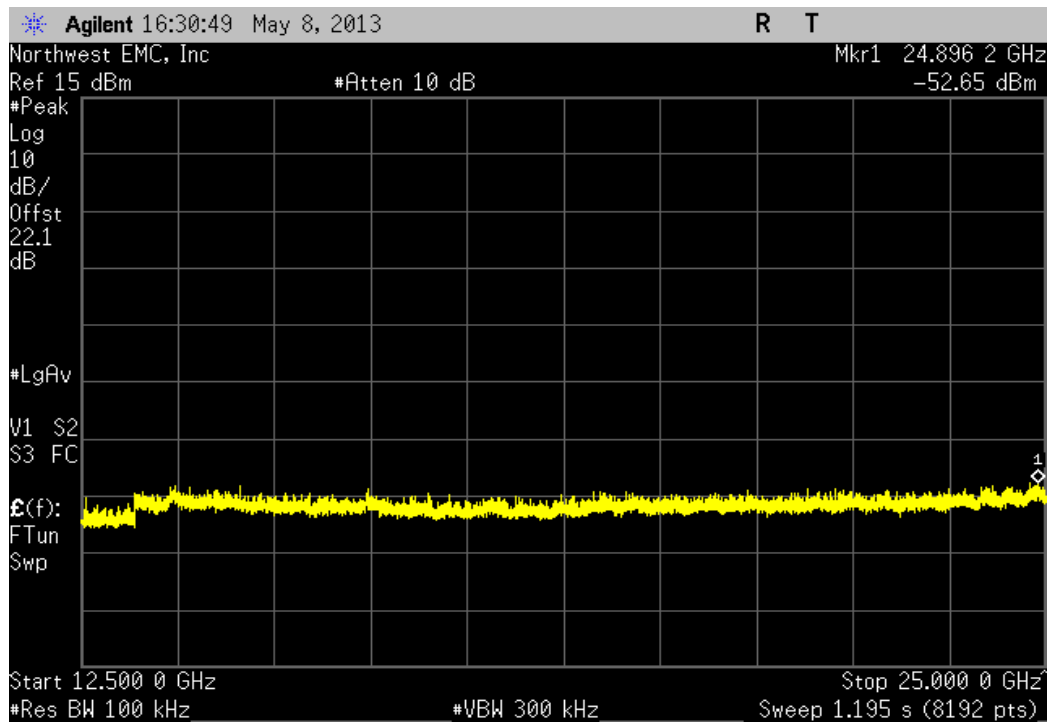
Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
Fundamental	N/A	N/A	N/A	



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-54.2 dBc	≤ -20 dBc	Pass	



Antenna 1, 2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz				
Frequency Range	Value	Limit	Result	
12.5 GHz - 25 GHz	-50 dBc	≤ -20 dBc	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, Ch 1, 6, 11 (2412, 2437, 2462 MHz) at 1, 11, 6, 36, 54 Mbps, MCS0, MCS7 on Ant 1 (see comments)
Transmitting, Ch 1, 6, 11 (2412, 2437, 2462 MHz) at 1, 11, 6, 36, 54 Mbps, MCS0, MCS7 on Ant 0 (see comments)

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

HNYW0042 - 2

FREQUENCY RANGE INVESTIGATED

Start Frequency 30 MHz Stop Frequency 25 GHz

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
High Pass Filter	Micro-Tronics	HPM50111	HGQ	6/1/2012	24 mo
Low Pass Filter	Micro-Tronics	LPM50004	HGK	5/31/2012	24 mo
Attenuator, 20 dB, 'SMA'	SM Electronics	SA6-20	REO	5/31/2012	12 mo
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	10/5/2012	12 mo
MN05 Cables	N/A	6GHz Standard Gain Horn C	MNP	10/5/2012	12 mo
Antenna, Horn	ETS	3160-09	AHG	NCR	0 mo
Antenna, Horn	ETS Lindgren	3160-08	AIQ	NCR	0 mo
Antenna, Horn	ETS	3160-07	AXP	NCR	0 mo
MN05 Cables	ESM Cable Corp.	Standard Gain Horn Cables	MNJ	5/30/2012	12 mo
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVW	5/30/2012	12 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVV	5/30/2012	12 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVX	5/30/2012	12 mo
MN05 Cables	ESM Cable Corp.	Double Ridge Guide Horn Cab	MNI	5/30/2012	12 mo
Antenna, Horn (DRG)	ETS Lindgren	3115	AIP	6/29/2011	24 mo
Pre-Amplifier	Miteq	AM-1616-1000	PAD	8/28/2012	12 mo
MN05 Cables	ESM Cable Corp.	Bilog Cables	MNH	5/31/2012	12 mo
Antenna, Bilog	Teseq	CBL 6141B	AYD	12/17/2012	12 mo
Spectrum Analyzer	Agilent	E4446A	AAT	6/28/2012	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 sensitivity.



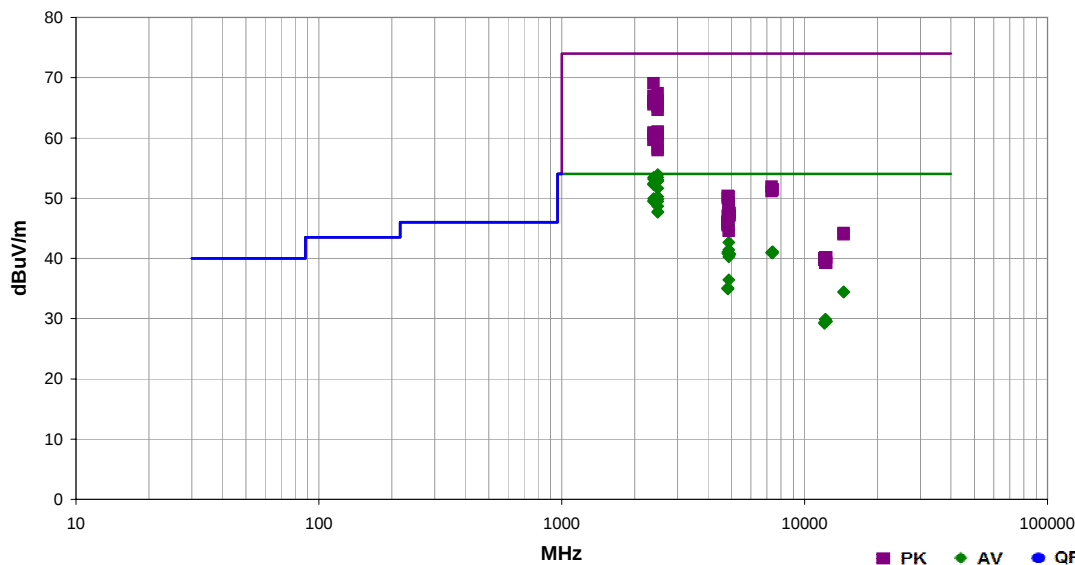
Spurious Radiated Emissions

PSA-ESCI 2012.12.14
PSA-ESCI Version 2013.2.20

Work Order:	HNW0042	Date:	05/07/13	<i>Trevor Buls</i>
Project:	None	Temperature:	23.4 °C	
Job Site:	MN05	Humidity:	35.5% RH	
Serial Number:	4174001 0010151	Barometric Pres.:	1017.5 mbar	
EUT:	RTH9590WF01			
Configuration:	2			
Customer:	Honeywell, Automation and Control Solutions			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, Ch 1, 6, 11 (2412, 2437, 2462 MHz) at 1, 11, 6, 36, 54 Mbps, MCS0. MCS7 on Ant 0 (see comments)			
Deviations:	None			
Comments:	None			

Test Specifications	Test Method
FCC 15.247:2013	ANSI C63.10:2009

Run #	20	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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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
2483.658	37.7	-3.8	1.3	309.0	3.0	20.0	Horz	AV	0.0	53.9	54.0	-0.1	EUT Horizontal, Ch 11, MCS0
2389.992	37.5	-4.0	1.6	314.0	3.0	20.0	Horz	AV	0.0	53.5	54.0	-0.5	EUT Horizontal, Ch 1, MCS0, AV(10Hz)
2483.617	37.2	-3.8	1.3	309.0	3.0	20.0	Horz	AV	0.0	53.4	54.0	-0.6	EUT Horizontal, Ch 11, MCS7
2390.000	37.2	-4.0	1.6	314.0	3.0	20.0	Horz	AV	0.0	53.2	54.0	-0.8	EUT Horizontal, Ch 1, 6 Mbps, AV(10Hz)
2483.508	36.8	-3.8	1.3	309.0	3.0	20.0	Horz	AV	0.0	53.0	54.0	-1.0	EUT Horizontal, Ch 11, 6 Mbps
2483.525	36.7	-3.8	1.3	309.0	3.0	20.0	Horz	AV	0.0	52.9	54.0	-1.1	EUT Horizontal, Ch 11, 54 Mbps
2483.617	36.6	-3.8	1.3	309.0	3.0	20.0	Horz	AV	0.0	52.8	54.0	-1.2	EUT Horizontal, Ch 11, 36 Mbps
2390.000	36.5	-4.0	1.6	314.0	3.0	20.0	Horz	AV	0.0	52.5	54.0	-1.5	EUT Horizontal, Ch 1, 36 Mbps, AV(10Hz)
2389.967	36.3	-4.0	1.6	314.0	3.0	20.0	Horz	AV	0.0	52.3	54.0	-1.7	EUT Horizontal, Ch 1, MCS7, AV(10Hz)
2390.000	36.3	-4.0	1.6	314.0	3.0	20.0	Horz	AV	0.0	52.3	54.0	-1.7	EUT Horizontal, Ch 1, 54 Mbps, AV(10Hz)
2487.600	35.4	-3.7	1.3	309.0	3.0	20.0	Horz	AV	0.0	51.7	54.0	-2.3	EUT Horizontal, Ch 11, 1 Mbps
2483.550	34.0	-3.8	1.3	309.0	3.0	20.0	Horz	AV	0.0	50.2	54.0	-3.8	EUT Horizontal, Ch 11, 11 Mbps
2389.750	34.0	-4.0	1.0	265.0	3.0	20.0	Vert	AV	0.0	50.0	54.0	-4.0	EUT on Side, Ch 1, 6 Mbps
2483.742	33.6	-3.8	1.2	208.0	3.0	20.0	Horz	AV	0.0	49.8	54.0	-4.2	EUT Vertical, Ch 11, 6 Mbps
2386.117	33.6	-4.0	1.6	314.0	3.0	20.0	Horz	AV	0.0	49.6	54.0	-4.4	EUT Horizontal, Ch 1, 1 Mbps
2389.908	33.5	-4.0	1.6	314.0	3.0	20.0	Horz	AV	0.0	49.5	54.0	-4.5	EUT Horizontal, Ch 1, 11 Mbps
2483.608	33.2	-3.8	1.0	351.0	3.0	20.0	Vert	AV	0.0	49.4	54.0	-4.6	EUT on Side, Ch 11, 6 Mbps
2389.258	53.1	-4.0	1.6	314.0	3.0	20.0	Horz	PK	0.0	69.1	74.0	-4.9	EUT Horizontal, Ch 1, MCS0
2483.592	32.4	-3.8	1.0	274.0	3.0	20.0	Vert	AV	0.0	48.6	54.0	-5.4	EUT Vertical, Ch 11, 6 Mbps
2485.325	31.5	-3.8	2.5	74.0	3.0	20.0	Horz	AV	0.0	47.7	54.0	-6.3	EUT on Side, Ch 11, 6 Mbps



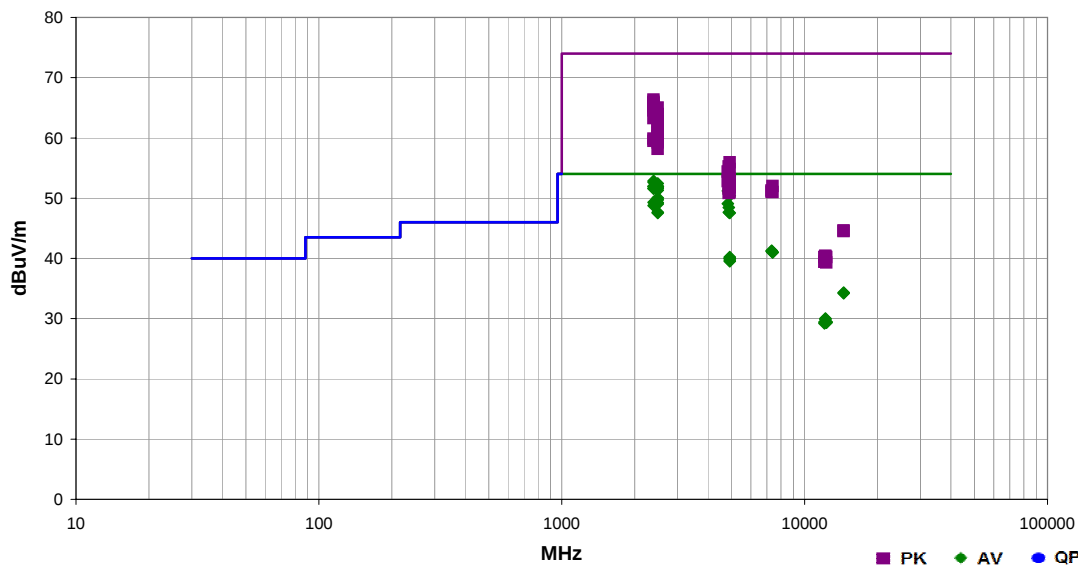
Spurious Radiated Emissions

PSA-ESCI 2012.12.14
PSA-ESCI Version 2013.2.20

Work Order:	HNW0042	Date:	05/07/13	<i>Trevor Buls</i>
Project:	None	Temperature:	23.4 °C	
Job Site:	MN05	Humidity:	35.5% RH	
Serial Number:	4174001 0010151	Barometric Pres.:	1017.5 mbar	
EUT:	RTH9590WF01			
Configuration:	2			
Customer:	Honeywell, Automation and Control Solutions			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, Ch 1, 6, 11 (2412, 2437, 2462 MHz) at 1, 11, 6, 36, 54 Mbps, MCS0. MCS7 on Ant 1 (see comments)			
Deviations:	None			
Comments:	None			

Test Specifications	Test Method
FCC 15.247:2013	ANSI C63.10:2009

Run #	10	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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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
4923.976	49.2	4.4	1.0	314.0	3.0	0.0	Horz	AV	0.0	53.6	54.0	-0.4	EUT Horizontal, Ch 11, 1 Mbps
4873.999	48.8	4.3	1.0	132.0	3.0	0.0	Horz	AV	0.0	53.1	54.0	-0.9	EUT Horizontal, Ch 6, 1 Mbps
2389.975	36.9	-4.0	1.0	272.0	3.0	20.0	Vert	AV	0.0	52.9	54.0	-1.1	EUT on Side, Ch 1, 6 Mbps
2390.000	36.7	-4.0	1.6	322.0	3.0	20.0	Horz	AV	0.0	52.7	54.0	-1.3	EUT Horizontal, Ch 1, MCS0, AV(10Hz)
2483.625	36.2	-3.8	1.6	301.0	3.0	20.0	Horz	AV	0.0	52.4	54.0	-1.6	EUT Horizontal, Ch 11, MCS0
2389.975	36.0	-4.0	1.6	322.0	3.0	20.0	Horz	AV	0.0	52.0	54.0	-2.0	EUT Horizontal, Ch 1, MCS7, AV(10Hz)
2390.000	36.0	-4.0	1.6	322.0	3.0	20.0	Horz	AV	0.0	52.0	54.0	-2.0	EUT Horizontal, Ch 1, 6 Mbps, AV(10Hz)
2483.517	35.7	-3.8	1.6	301.0	3.0	20.0	Horz	AV	0.0	51.9	54.0	-2.1	EUT Horizontal, Ch 11, 6 Mbps
2483.500	35.7	-3.8	1.6	301.0	3.0	20.0	Horz	AV	0.0	51.9	54.0	-2.1	EUT Horizontal, Ch 11, MCS7
2483.600	35.6	-3.8	1.6	301.0	3.0	20.0	Horz	AV	0.0	51.8	54.0	-2.2	EUT Horizontal, Ch 11, 36 Mbps
2390.000	35.7	-4.0	1.6	322.0	3.0	20.0	Horz	AV	0.0	51.7	54.0	-2.3	EUT Horizontal, Ch 1, 36 Mbps, AV(10Hz)
2483.683	35.4	-3.8	1.6	301.0	3.0	20.0	Horz	AV	0.0	51.6	54.0	-2.4	EUT Horizontal, Ch 11, 54 Mbps
4874.007	47.3	4.3	1.0	172.0	3.0	0.0	Horz	AV	0.0	51.6	54.0	-2.4	EUT Vertical, Ch 6, 1 Mbps
2390.000	35.6	-4.0	1.6	322.0	3.0	20.0	Horz	AV	0.0	51.6	54.0	-2.4	EUT Horizontal, Ch 1, 54 Mbps, AV(10Hz)
2483.708	35.1	-3.8	1.0	241.0	3.0	20.0	Vert	AV	0.0	51.3	54.0	-2.7	EUT on Side, Ch 11, 6 Mbps
4823.962	47.1	4.1	1.1	313.0	3.0	0.0	Horz	AV	0.0	51.2	54.0	-2.8	EUT Horizontal, Ch 1, 1 Mbps
4874.007	46.7	4.3	1.2	102.0	3.0	0.0	Vert	AV	0.0	51.0	54.0	-3.0	EUT on Side, Ch 6, 1 Mbps
4874.024	46.4	4.3	1.0	114.0	3.0	0.0	Vert	AV	0.0	50.7	54.0	-3.3	EUT Vertical, Ch 6, 1 Mbps
4924.001	46.0	4.4	1.1	322.0	3.0	0.0	Vert	AV	0.0	50.4	54.0	-3.6	EUT on Side, Ch 11, 1 Mbps
2487.983	33.8	-3.7	1.6	301.0	3.0	20.0	Horz	AV	0.0	50.1	54.0	-3.9	EUT Horizontal, Ch 11, 1 Mbps

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 50 Ω .

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Receiver	Rohde & Schwarz	ESCI	ARG	04/01/2013	12 mo
LISN	Solar Electronics	9252-50-R-24-BNC	LIY	05/30/2012	12 mo
High Pass Filter	TTE	H97-100K-50-720B	HGN	05/31/2012	24 mo
Attenuator 20dB, BNC	Fairview Microwave	SA01B-20	AQP	08/15/2012	12 mo
MN03 Cables	ESM Cable Corp.	Conducted Cables	MNC	01/17/2013	12 mo

CONFIGURATIONS INVESTIGATED

HNYW0042-1

MODES INVESTIGATED

Transmitting, 1Mbps, Ch 1, A0
 Transmitting, 1Mbps, Ch 1, A1
 Transmitting, 1Mbps, Ch 11, A0
 Transmitting, 1Mbps, Ch 11, A1
 Transmitting, 1Mbps, Ch 6, A0
 Transmitting, 1Mbps, Ch 6, A1

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

Run #:	1	Line:	High Line	Ext. Attenuation (dB):	20
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COMMENTS

None

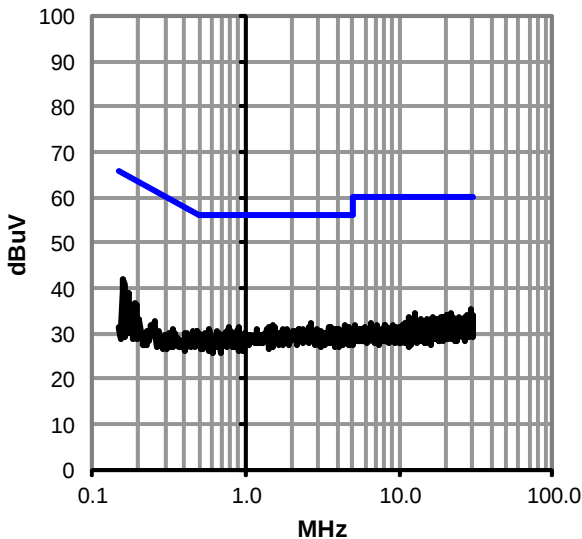
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 1, A0

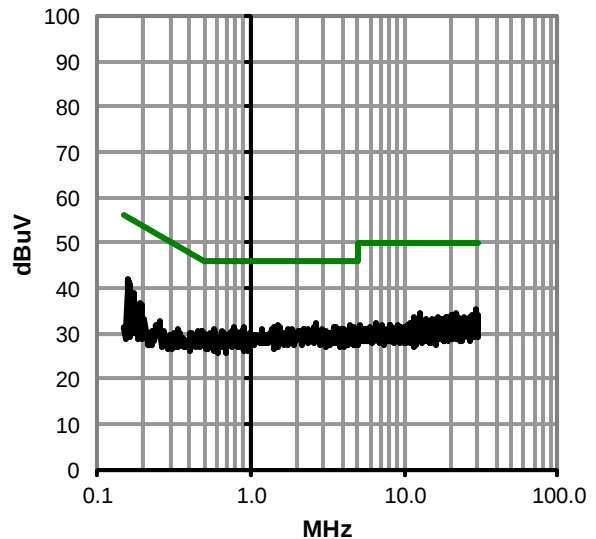
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #1

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.160	21.7	20.2	41.9	65.5	-23.6
2.680	12.1	20.3	32.4	56.0	-23.6
1.504	11.5	20.3	31.8	56.0	-24.2
4.448	11.3	20.4	31.7	56.0	-24.3
2.560	11.3	20.3	31.6	56.0	-24.4
0.912	11.4	20.2	31.6	56.0	-24.4
3.472	11.2	20.3	31.5	56.0	-24.5
1.416	11.3	20.2	31.5	56.0	-24.5
1.560	11.2	20.3	31.5	56.0	-24.5
4.728	11.0	20.4	31.4	56.0	-24.6
3.552	11.0	20.4	31.4	56.0	-24.6
29.710	12.9	22.4	35.3	60.0	-24.7
0.779	11.0	20.2	31.2	56.0	-24.8
0.587	10.9	20.2	31.1	56.0	-24.9
1.736	10.8	20.3	31.1	56.0	-24.9
2.952	10.7	20.3	31.0	56.0	-25.0
4.960	10.6	20.4	31.0	56.0	-25.0
4.056	10.6	20.4	31.0	56.0	-25.0
1.192	10.7	20.2	30.9	56.0	-25.1
3.984	10.5	20.4	30.9	56.0	-25.1
4.648	10.4	20.4	30.8	56.0	-25.2
3.840	10.4	20.4	30.8	56.0	-25.2
0.573	10.5	20.2	30.7	56.0	-25.3
0.806	10.5	20.2	30.7	56.0	-25.3
0.872	10.4	20.2	30.6	56.0	-25.4
21.840	13.0	21.5	34.5	60.0	-25.5

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.160	21.7	20.2	41.9	55.5	-13.6
2.680	12.1	20.3	32.4	46.0	-13.6
1.504	11.5	20.3	31.8	46.0	-14.2
4.448	11.3	20.4	31.7	46.0	-14.3
2.560	11.3	20.3	31.6	46.0	-14.4
0.912	11.4	20.2	31.6	46.0	-14.4
3.472	11.2	20.3	31.5	46.0	-14.5
1.416	11.3	20.2	31.5	46.0	-14.5
1.560	11.2	20.3	31.5	46.0	-14.5
4.728	11.0	20.4	31.4	46.0	-14.6
3.552	11.0	20.4	31.4	46.0	-14.6
29.710	12.9	22.4	35.3	50.0	-14.7
0.779	11.0	20.2	31.2	46.0	-14.8
0.587	10.9	20.2	31.1	46.0	-14.9
1.736	10.8	20.3	31.1	46.0	-14.9
2.952	10.7	20.3	31.0	46.0	-15.0
4.960	10.6	20.4	31.0	46.0	-15.0
4.056	10.6	20.4	31.0	46.0	-15.0
1.192	10.7	20.2	30.9	46.0	-15.1
3.984	10.5	20.4	30.9	46.0	-15.1
4.648	10.4	20.4	30.8	46.0	-15.2
3.840	10.4	20.4	30.8	46.0	-15.2
0.573	10.5	20.2	30.7	46.0	-15.3
0.806	10.5	20.2	30.7	46.0	-15.3
0.872	10.4	20.2	30.6	46.0	-15.4
21.840	13.0	21.5	34.5	50.0	-15.5

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

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

None

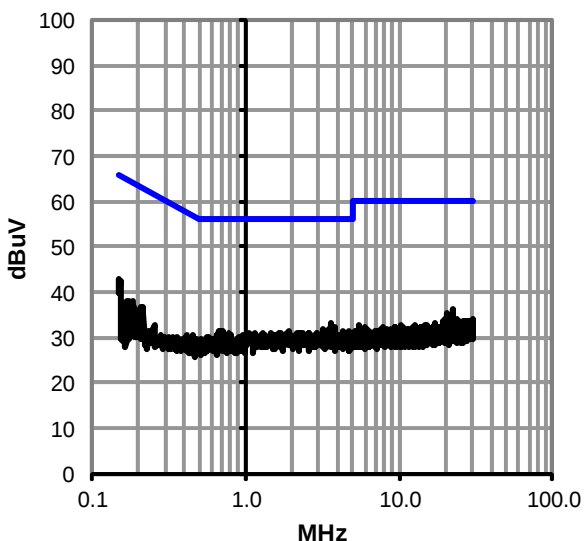
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 1, A0

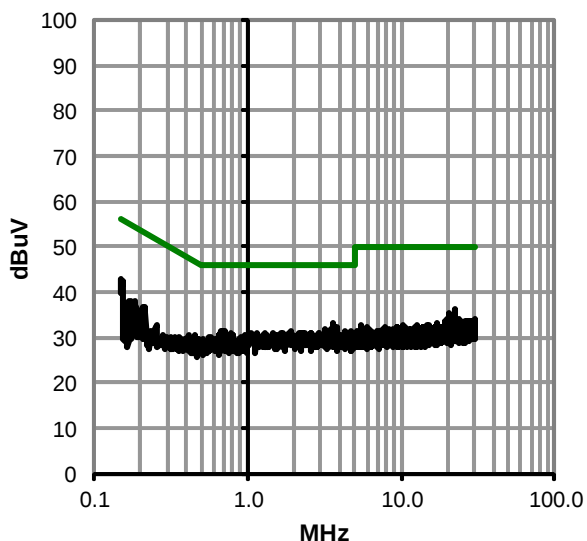
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #2

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.592	12.8	20.4	33.2	56.0	-22.8
0.150	22.7	20.2	42.9	66.0	-23.1
3.688	12.1	20.4	32.5	56.0	-23.5
3.768	11.9	20.4	32.3	56.0	-23.7
22.470	14.6	21.6	36.2	60.0	-23.8
3.560	11.5	20.4	31.9	56.0	-24.1
3.200	11.3	20.3	31.6	56.0	-24.4
4.368	11.1	20.4	31.5	56.0	-24.5
0.679	11.2	20.2	31.4	56.0	-24.6
0.713	11.1	20.2	31.3	56.0	-24.7
1.896	11.0	20.3	31.3	56.0	-24.7
4.776	10.8	20.4	31.2	56.0	-24.8
4.336	10.8	20.4	31.2	56.0	-24.8
20.740	13.7	21.5	35.2	60.0	-24.8
2.600	10.8	20.3	31.1	56.0	-24.9
2.144	10.8	20.3	31.1	56.0	-24.9
1.064	10.8	20.2	31.0	56.0	-25.0
4.568	10.6	20.4	31.0	56.0	-25.0
1.656	10.7	20.3	31.0	56.0	-25.0
0.774	10.7	20.2	30.9	56.0	-25.1
1.480	10.6	20.2	30.8	56.0	-25.2
1.288	10.6	20.2	30.8	56.0	-25.2
1.144	10.6	20.2	30.8	56.0	-25.2
2.376	10.5	20.3	30.8	56.0	-25.2
0.798	10.4	20.2	30.6	56.0	-25.4
0.793	10.3	20.2	30.5	56.0	-25.5

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.592	12.8	20.4	33.2	46.0	-12.8
0.150	22.7	20.2	42.9	56.0	-13.1
3.688	12.1	20.4	32.5	46.0	-13.5
3.768	11.9	20.4	32.3	46.0	-13.7
22.470	14.6	21.6	36.2	50.0	-13.8
3.560	11.5	20.4	31.9	46.0	-14.1
3.200	11.3	20.3	31.6	46.0	-14.4
4.368	11.1	20.4	31.5	46.0	-14.5
0.679	11.2	20.2	31.4	46.0	-14.6
0.713	11.1	20.2	31.3	46.0	-14.7
1.896	11.0	20.3	31.3	46.0	-14.7
4.776	10.8	20.4	31.2	46.0	-14.8
4.336	10.8	20.4	31.2	46.0	-14.8
20.740	13.7	21.5	35.2	50.0	-14.8
2.600	10.8	20.3	31.1	46.0	-14.9
2.144	10.8	20.3	31.1	46.0	-14.9
1.064	10.8	20.2	31.0	46.0	-15.0
4.568	10.6	20.4	31.0	46.0	-15.0
1.656	10.7	20.3	31.0	46.0	-15.0
0.774	10.7	20.2	30.9	46.0	-15.1
1.480	10.6	20.2	30.8	46.0	-15.2
1.288	10.6	20.2	30.8	46.0	-15.2
1.144	10.6	20.2	30.8	46.0	-15.2
2.376	10.5	20.3	30.8	46.0	-15.2
0.798	10.4	20.2	30.6	46.0	-15.4
0.793	10.3	20.2	30.5	46.0	-15.5

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

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

None

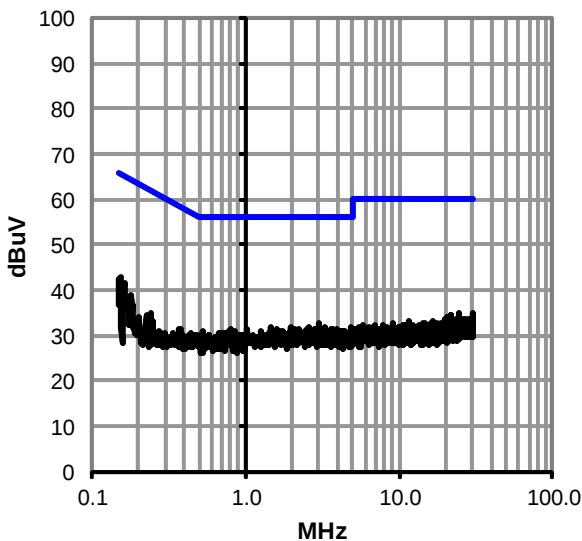
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 6, A0

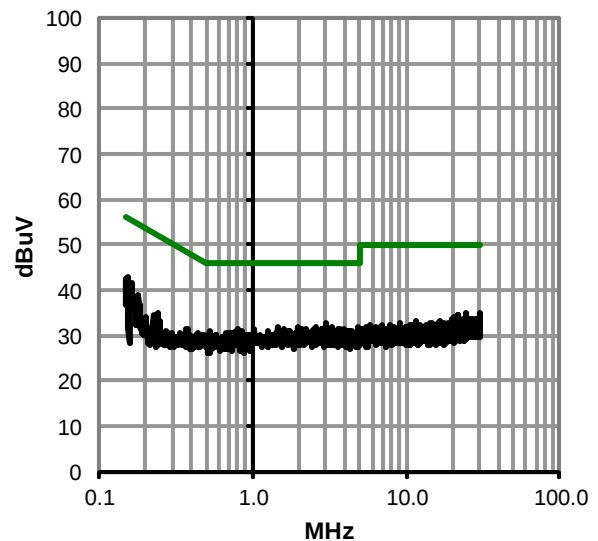
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #3

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.153	22.7	20.2	42.9	65.8	-22.9
2.984	12.2	20.3	32.5	56.0	-23.5
0.162	21.3	20.2	41.5	65.4	-23.9
3.000	11.8	20.3	32.1	56.0	-23.9
3.280	11.7	20.3	32.0	56.0	-24.0
2.560	11.6	20.3	31.9	56.0	-24.1
1.992	11.5	20.3	31.8	56.0	-24.2
1.464	11.5	20.2	31.7	56.0	-24.3
4.880	11.3	20.4	31.7	56.0	-24.3
2.248	11.3	20.3	31.6	56.0	-24.4
2.120	11.3	20.3	31.6	56.0	-24.4
1.032	11.4	20.2	31.6	56.0	-24.4
1.600	11.1	20.3	31.4	56.0	-24.6
3.680	11.0	20.4	31.4	56.0	-24.6
0.798	11.1	20.2	31.3	56.0	-24.7
3.984	10.9	20.4	31.3	56.0	-24.7
3.616	10.9	20.4	31.3	56.0	-24.7
2.840	10.9	20.3	31.2	56.0	-24.8
4.344	10.8	20.4	31.2	56.0	-24.8
1.760	10.9	20.3	31.2	56.0	-24.8
4.216	10.8	20.4	31.2	56.0	-24.8
3.344	10.8	20.3	31.1	56.0	-24.9
3.872	10.7	20.4	31.1	56.0	-24.9
0.526	10.8	20.2	31.0	56.0	-25.0
0.844	10.8	20.2	31.0	56.0	-25.0
29.940	12.6	22.4	35.0	60.0	-25.0

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.153	22.7	20.2	42.9	55.8	-12.9
2.984	12.2	20.3	32.5	46.0	-13.5
0.162	21.3	20.2	41.5	55.4	-13.9
3.000	11.8	20.3	32.1	46.0	-13.9
3.280	11.7	20.3	32.0	46.0	-14.0
2.560	11.6	20.3	31.9	46.0	-14.1
1.992	11.5	20.3	31.8	46.0	-14.2
1.464	11.5	20.2	31.7	46.0	-14.3
4.880	11.3	20.4	31.7	46.0	-14.3
2.248	11.3	20.3	31.6	46.0	-14.4
2.120	11.3	20.3	31.6	46.0	-14.4
1.032	11.4	20.2	31.6	46.0	-14.4
1.600	11.1	20.3	31.4	46.0	-14.6
3.680	11.0	20.4	31.4	46.0	-14.6
0.798	11.1	20.2	31.3	46.0	-14.7
3.984	10.9	20.4	31.3	46.0	-14.7
3.616	10.9	20.4	31.3	46.0	-14.7
2.840	10.9	20.3	31.2	46.0	-14.8
4.344	10.8	20.4	31.2	46.0	-14.8
1.760	10.9	20.3	31.2	46.0	-14.8
4.216	10.8	20.4	31.2	46.0	-14.8
3.344	10.8	20.3	31.1	46.0	-14.9
3.872	10.7	20.4	31.1	46.0	-14.9
0.526	10.8	20.2	31.0	46.0	-15.0
0.844	10.8	20.2	31.0	46.0	-15.0
29.940	12.6	22.4	35.0	50.0	-15.0

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

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

None

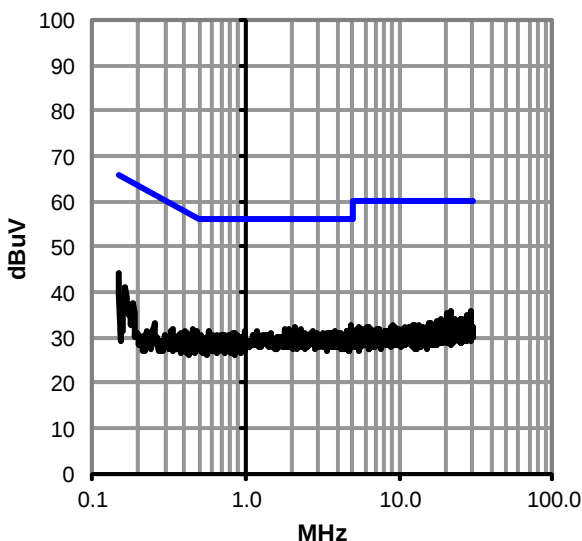
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 6, A0

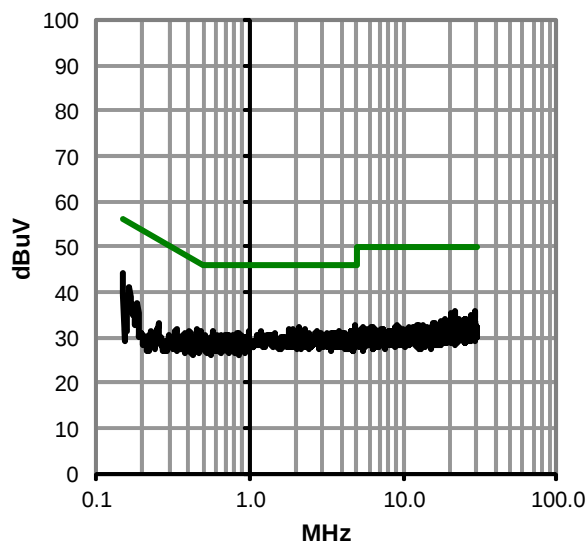
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #4

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	24.0	20.2	44.2	66.0	-21.8
4.808	12.2	20.4	32.6	56.0	-23.4
2.112	11.8	20.3	32.1	56.0	-23.9
0.165	21.0	20.2	41.2	65.2	-24.0
21.520	14.4	21.5	35.9	60.0	-24.1
2.272	11.6	20.3	31.9	56.0	-24.1
1.800	11.6	20.3	31.9	56.0	-24.1
4.880	11.4	20.4	31.8	56.0	-24.2
28.870	13.5	22.3	35.8	60.0	-24.2
1.912	11.4	20.3	31.7	56.0	-24.3
4.600	11.2	20.4	31.6	56.0	-24.4
1.176	11.3	20.2	31.5	56.0	-24.5
0.580	11.1	20.2	31.3	56.0	-24.7
3.784	10.9	20.4	31.3	56.0	-24.7
2.752	10.9	20.3	31.2	56.0	-24.8
0.980	11.0	20.2	31.2	56.0	-24.8
4.160	10.8	20.4	31.2	56.0	-24.8
20.750	13.7	21.5	35.2	60.0	-24.8
1.472	10.9	20.2	31.1	56.0	-24.9
2.920	10.8	20.3	31.1	56.0	-24.9
20.170	13.7	21.4	35.1	60.0	-24.9
0.861	10.9	20.2	31.1	56.0	-24.9
3.656	10.7	20.4	31.1	56.0	-24.9
3.216	10.7	20.3	31.0	56.0	-25.0
4.672	10.6	20.4	31.0	56.0	-25.0
4.072	10.6	20.4	31.0	56.0	-25.0

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	24.0	20.2	44.2	56.0	-11.8
4.808	12.2	20.4	32.6	46.0	-13.4
2.112	11.8	20.3	32.1	46.0	-13.9
0.165	21.0	20.2	41.2	55.2	-14.0
21.520	14.4	21.5	35.9	50.0	-14.1
2.272	11.6	20.3	31.9	46.0	-14.1
1.800	11.6	20.3	31.9	46.0	-14.1
4.880	11.4	20.4	31.8	46.0	-14.2
28.870	13.5	22.3	35.8	50.0	-14.2
1.912	11.4	20.3	31.7	46.0	-14.3
4.600	11.2	20.4	31.6	46.0	-14.4
1.176	11.3	20.2	31.5	46.0	-14.5
0.580	11.1	20.2	31.3	46.0	-14.7
3.784	10.9	20.4	31.3	46.0	-14.7
2.752	10.9	20.3	31.2	46.0	-14.8
0.980	11.0	20.2	31.2	46.0	-14.8
4.160	10.8	20.4	31.2	46.0	-14.8
20.750	13.7	21.5	35.2	50.0	-14.8
1.472	10.9	20.2	31.1	46.0	-14.9
2.920	10.8	20.3	31.1	46.0	-14.9
20.170	13.7	21.4	35.1	50.0	-14.9
0.861	10.9	20.2	31.1	46.0	-14.9
3.656	10.7	20.4	31.1	46.0	-14.9
3.216	10.7	20.3	31.0	46.0	-15.0
4.672	10.6	20.4	31.0	46.0	-15.0
4.072	10.6	20.4	31.0	46.0	-15.0

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

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

None

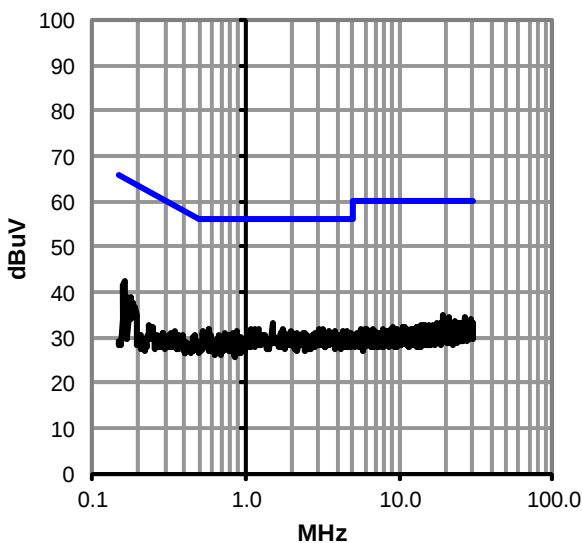
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 11, A0

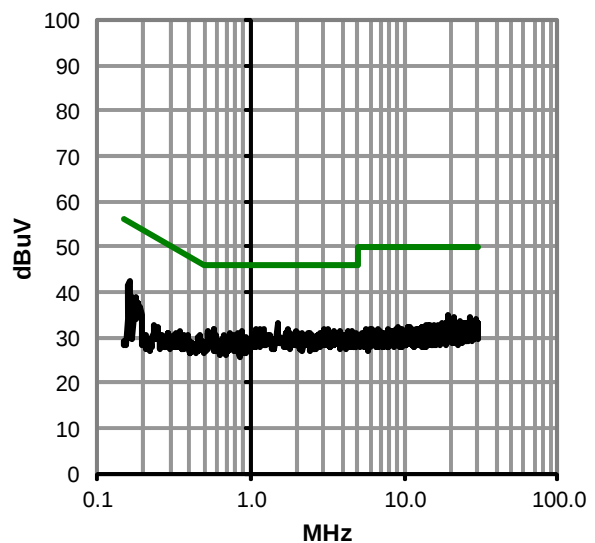
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #5

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.162	22.2	20.2	42.4	65.4	-23.0
1.488	12.7	20.2	32.9	56.0	-23.1
1.144	11.8	20.2	32.0	56.0	-24.0
1.208	11.7	20.2	31.9	56.0	-24.1
0.580	11.7	20.2	31.9	56.0	-24.1
1.072	11.5	20.2	31.7	56.0	-24.3
1.752	11.4	20.3	31.7	56.0	-24.3
3.224	11.3	20.3	31.6	56.0	-24.4
2.992	11.3	20.3	31.6	56.0	-24.4
0.534	11.3	20.2	31.5	56.0	-24.5
0.878	11.2	20.2	31.4	56.0	-24.6
4.512	11.0	20.4	31.4	56.0	-24.6
4.264	11.0	20.4	31.4	56.0	-24.6
3.792	11.0	20.4	31.4	56.0	-24.6
1.952	11.0	20.3	31.3	56.0	-24.7
2.384	10.8	20.3	31.1	56.0	-24.9
0.835	10.9	20.2	31.1	56.0	-24.9
4.904	10.7	20.4	31.1	56.0	-24.9
2.136	10.6	20.3	30.9	56.0	-25.1
0.730	10.6	20.2	30.8	56.0	-25.2
1.784	10.5	20.3	30.8	56.0	-25.2
19.220	13.4	21.3	34.7	60.0	-25.3
2.512	10.3	20.3	30.6	56.0	-25.4
0.679	10.4	20.2	30.6	56.0	-25.4
4.144	10.2	20.4	30.6	56.0	-25.4
21.140	13.0	21.5	34.5	60.0	-25.5

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.162	22.2	20.2	42.4	55.4	-13.0
1.488	12.7	20.2	32.9	46.0	-13.1
1.144	11.8	20.2	32.0	46.0	-14.0
1.208	11.7	20.2	31.9	46.0	-14.1
0.580	11.7	20.2	31.9	46.0	-14.1
1.072	11.5	20.2	31.7	46.0	-14.3
1.752	11.4	20.3	31.7	46.0	-14.3
3.224	11.3	20.3	31.6	46.0	-14.4
2.992	11.3	20.3	31.6	46.0	-14.4
0.534	11.3	20.2	31.5	46.0	-14.5
0.878	11.2	20.2	31.4	46.0	-14.6
4.512	11.0	20.4	31.4	46.0	-14.6
4.264	11.0	20.4	31.4	46.0	-14.6
3.792	11.0	20.4	31.4	46.0	-14.6
1.952	11.0	20.3	31.3	46.0	-14.7
2.384	10.8	20.3	31.1	46.0	-14.9
0.835	10.9	20.2	31.1	46.0	-14.9
4.904	10.7	20.4	31.1	46.0	-14.9
2.136	10.6	20.3	30.9	46.0	-15.1
0.730	10.6	20.2	30.8	46.0	-15.2
1.784	10.5	20.3	30.8	46.0	-15.2
19.220	13.4	21.3	34.7	50.0	-15.3
2.512	10.3	20.3	30.6	46.0	-15.4
0.679	10.4	20.2	30.6	46.0	-15.4
4.144	10.2	20.4	30.6	46.0	-15.4
21.140	13.0	21.5	34.5	50.0	-15.5

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

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

None

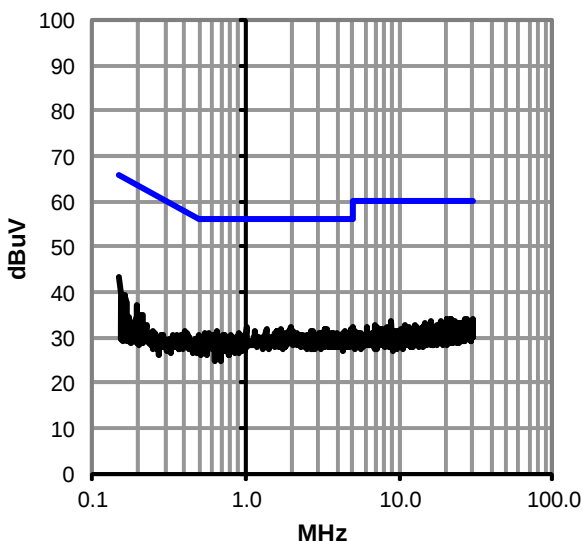
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 11, A0

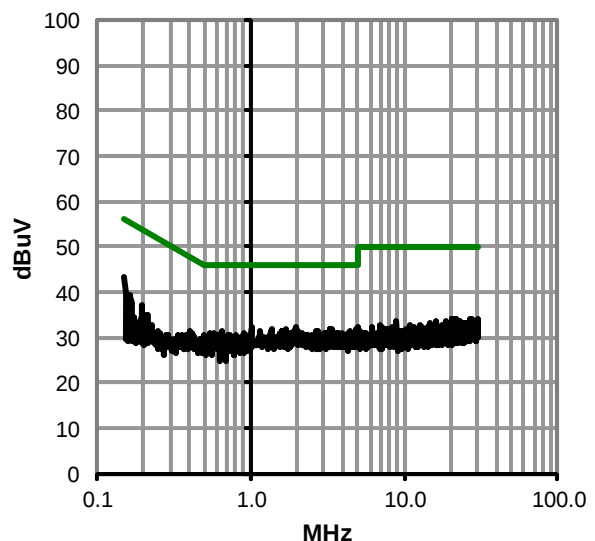
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #6

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.152	23.1	20.2	43.3	65.9	-22.6
1.008	11.9	20.2	32.1	56.0	-23.9
1.976	11.8	20.3	32.1	56.0	-23.9
1.704	11.7	20.3	32.0	56.0	-24.0
3.312	11.5	20.3	31.8	56.0	-24.2
3.240	11.5	20.3	31.8	56.0	-24.2
4.872	11.4	20.4	31.8	56.0	-24.2
3.368	11.3	20.3	31.6	56.0	-24.4
1.360	11.4	20.2	31.6	56.0	-24.4
1.168	11.4	20.2	31.6	56.0	-24.4
2.680	11.2	20.3	31.5	56.0	-24.5
4.472	11.1	20.4	31.5	56.0	-24.5
1.592	11.2	20.3	31.5	56.0	-24.5
2.048	11.1	20.3	31.4	56.0	-24.6
0.645	11.2	20.2	31.4	56.0	-24.6
2.760	11.0	20.3	31.3	56.0	-24.7
3.568	10.8	20.4	31.2	56.0	-24.8
3.664	10.7	20.4	31.1	56.0	-24.9
3.000	10.7	20.3	31.0	56.0	-25.0
0.539	10.7	20.2	30.9	56.0	-25.1
3.992	10.5	20.4	30.9	56.0	-25.1
0.578	10.6	20.2	30.8	56.0	-25.2
0.896	10.6	20.2	30.8	56.0	-25.2
4.312	10.4	20.4	30.8	56.0	-25.2
0.612	10.4	20.2	30.6	56.0	-25.4
0.742	10.3	20.2	30.5	56.0	-25.5

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.152	23.1	20.2	43.3	55.9	-12.6
1.008	11.9	20.2	32.1	46.0	-13.9
1.976	11.8	20.3	32.1	46.0	-13.9
1.704	11.7	20.3	32.0	46.0	-14.0
3.312	11.5	20.3	31.8	46.0	-14.2
3.240	11.5	20.3	31.8	46.0	-14.2
4.872	11.4	20.4	31.8	46.0	-14.2
3.368	11.3	20.3	31.6	46.0	-14.4
1.360	11.4	20.2	31.6	46.0	-14.4
1.168	11.4	20.2	31.6	46.0	-14.4
2.680	11.2	20.3	31.5	46.0	-14.5
4.472	11.1	20.4	31.5	46.0	-14.5
1.592	11.2	20.3	31.5	46.0	-14.5
2.048	11.1	20.3	31.4	46.0	-14.6
0.645	11.2	20.2	31.4	46.0	-14.6
2.760	11.0	20.3	31.3	46.0	-14.7
3.568	10.8	20.4	31.2	46.0	-14.8
3.664	10.7	20.4	31.1	46.0	-14.9
3.000	10.7	20.3	31.0	46.0	-15.0
0.539	10.7	20.2	30.9	46.0	-15.1
3.992	10.5	20.4	30.9	46.0	-15.1
0.578	10.6	20.2	30.8	46.0	-15.2
0.896	10.6	20.2	30.8	46.0	-15.2
4.312	10.4	20.4	30.8	46.0	-15.2
0.612	10.4	20.2	30.6	46.0	-15.4
0.742	10.3	20.2	30.5	46.0	-15.5

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

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

None

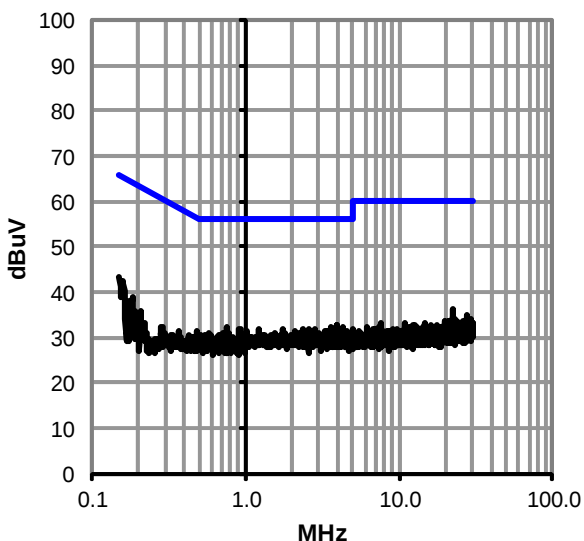
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 11, A1

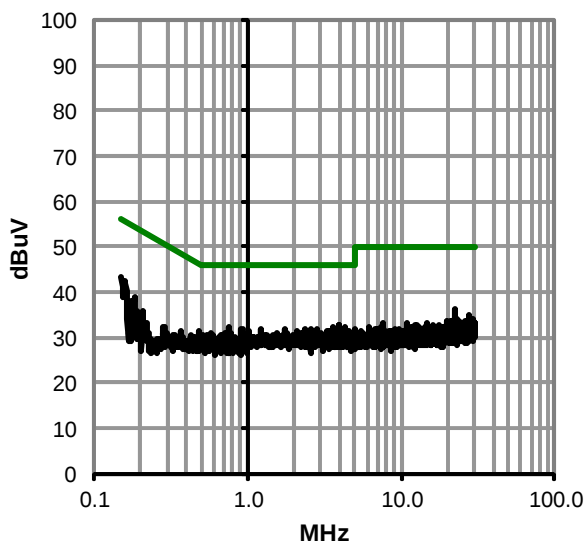
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #7

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	22.9	20.2	43.1	66.0	-22.9
0.159	22.1	20.2	42.3	65.5	-23.2
3.912	12.3	20.4	32.7	56.0	-23.3
3.896	12.2	20.4	32.6	56.0	-23.4
0.764	12.2	20.2	32.4	56.0	-23.6
22.490	14.6	21.6	36.2	60.0	-23.8
3.584	11.8	20.4	32.2	56.0	-23.8
4.312	11.7	20.4	32.1	56.0	-23.9
3.736	11.7	20.4	32.1	56.0	-23.9
0.918	11.8	20.2	32.0	56.0	-24.0
1.744	11.7	20.3	32.0	56.0	-24.0
2.808	11.5	20.3	31.8	56.0	-24.2
1.216	11.5	20.2	31.7	56.0	-24.3
2.344	11.4	20.3	31.7	56.0	-24.3
2.584	11.3	20.3	31.6	56.0	-24.4
4.536	11.2	20.4	31.6	56.0	-24.4
3.368	11.1	20.3	31.4	56.0	-24.6
1.008	11.2	20.2	31.4	56.0	-24.6
3.488	11.0	20.3	31.3	56.0	-24.7
3.264	11.0	20.3	31.3	56.0	-24.7
2.528	11.0	20.3	31.3	56.0	-24.7
2.096	10.9	20.3	31.2	56.0	-24.8
27.610	12.9	22.1	35.0	60.0	-25.0
0.782	10.8	20.2	31.0	56.0	-25.0
4.848	10.6	20.4	31.0	56.0	-25.0
4.616	10.6	20.4	31.0	56.0	-25.0

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	22.9	20.2	43.1	56.0	-12.9
0.159	22.1	20.2	42.3	55.5	-13.2
3.912	12.3	20.4	32.7	46.0	-13.3
3.896	12.2	20.4	32.6	46.0	-13.4
0.764	12.2	20.2	32.4	46.0	-13.6
22.490	14.6	21.6	36.2	50.0	-13.8
3.584	11.8	20.4	32.2	46.0	-13.8
4.312	11.7	20.4	32.1	46.0	-13.9
3.736	11.7	20.4	32.1	46.0	-13.9
0.918	11.8	20.2	32.0	46.0	-14.0
1.744	11.7	20.3	32.0	46.0	-14.0
2.808	11.5	20.3	31.8	46.0	-14.2
1.216	11.5	20.2	31.7	46.0	-14.3
2.344	11.4	20.3	31.7	46.0	-14.3
2.584	11.3	20.3	31.6	46.0	-14.4
4.536	11.2	20.4	31.6	46.0	-14.4
3.368	11.1	20.3	31.4	46.0	-14.6
1.008	11.2	20.2	31.4	46.0	-14.6
3.488	11.0	20.3	31.3	46.0	-14.7
3.264	11.0	20.3	31.3	46.0	-14.7
2.528	11.0	20.3	31.3	46.0	-14.7
2.096	10.9	20.3	31.2	46.0	-14.8
27.610	12.9	22.1	35.0	50.0	-15.0
0.782	10.8	20.2	31.0	46.0	-15.0
4.848	10.6	20.4	31.0	46.0	-15.0
4.616	10.6	20.4	31.0	46.0	-15.0

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

Run #:	8	Line:	High Line	Ext. Attenuation (dB):	20
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COMMENTS

None

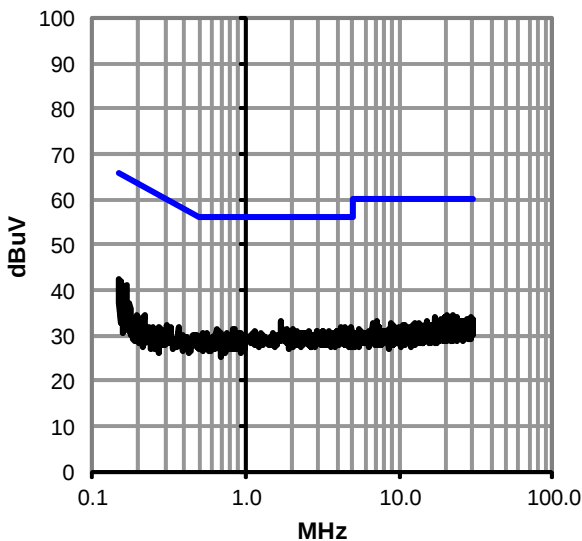
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 11, A1

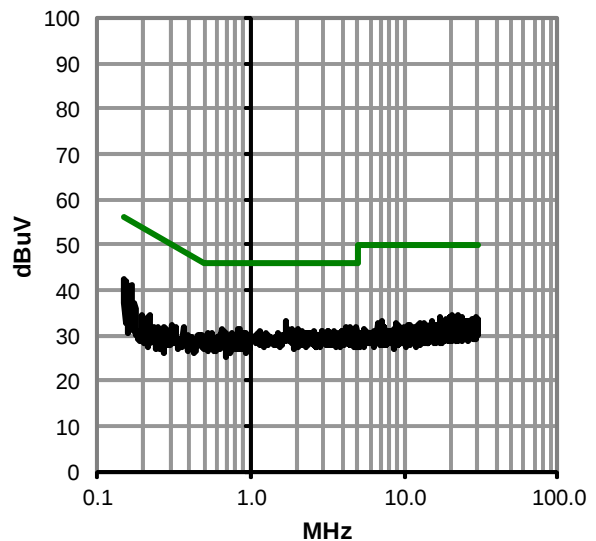
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #8

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.688	12.7	20.3	33.0	56.0	-23.0
0.150	22.4	20.2	42.6	66.0	-23.4
0.157	21.7	20.2	41.9	65.6	-23.7
4.456	11.6	20.4	32.0	56.0	-24.0
0.167	20.8	20.2	41.0	65.1	-24.1
4.152	11.5	20.4	31.9	56.0	-24.1
4.920	11.3	20.4	31.7	56.0	-24.3
2.040	11.2	20.3	31.5	56.0	-24.5
0.842	11.2	20.2	31.4	56.0	-24.6
4.304	10.9	20.4	31.3	56.0	-24.7
0.643	11.0	20.2	31.2	56.0	-24.8
4.088	10.8	20.4	31.2	56.0	-24.8
2.880	10.7	20.3	31.0	56.0	-25.0
3.456	10.6	20.3	30.9	56.0	-25.1
2.624	10.6	20.3	30.9	56.0	-25.1
2.144	10.6	20.3	30.9	56.0	-25.1
1.168	10.6	20.2	30.8	56.0	-25.2
1.248	10.5	20.2	30.7	56.0	-25.3
0.874	10.5	20.2	30.7	56.0	-25.3
4.832	10.3	20.4	30.7	56.0	-25.3
3.728	10.3	20.4	30.7	56.0	-25.3
0.555	10.4	20.2	30.6	56.0	-25.4
0.759	10.4	20.2	30.6	56.0	-25.4
0.927	10.4	20.2	30.6	56.0	-25.4
22.490	13.0	21.6	34.6	60.0	-25.4
20.170	12.9	21.4	34.3	60.0	-25.7

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.688	12.7	20.3	33.0	46.0	-13.0
0.150	22.4	20.2	42.6	56.0	-13.4
0.157	21.7	20.2	41.9	55.6	-13.7
4.456	11.6	20.4	32.0	46.0	-14.0
0.167	20.8	20.2	41.0	55.1	-14.1
4.152	11.5	20.4	31.9	46.0	-14.1
4.920	11.3	20.4	31.7	46.0	-14.3
2.040	11.2	20.3	31.5	46.0	-14.5
0.842	11.2	20.2	31.4	46.0	-14.6
4.304	10.9	20.4	31.3	46.0	-14.7
0.643	11.0	20.2	31.2	46.0	-14.8
4.088	10.8	20.4	31.2	46.0	-14.8
2.880	10.7	20.3	31.0	46.0	-15.0
3.456	10.6	20.3	30.9	46.0	-15.1
2.624	10.6	20.3	30.9	46.0	-15.1
2.144	10.6	20.3	30.9	46.0	-15.1
1.168	10.6	20.2	30.8	46.0	-15.2
1.248	10.5	20.2	30.7	46.0	-15.3
0.874	10.5	20.2	30.7	46.0	-15.3
4.832	10.3	20.4	30.7	46.0	-15.3
3.728	10.3	20.4	30.7	46.0	-15.3
0.555	10.4	20.2	30.6	46.0	-15.4
0.759	10.4	20.2	30.6	46.0	-15.4
0.927	10.4	20.2	30.6	46.0	-15.4
22.490	13.0	21.6	34.6	50.0	-15.4
20.170	12.9	21.4	34.3	50.0	-15.7

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

Run #:	9	Line:	High Line	Ext. Attenuation (dB):	20
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COMMENTS

None

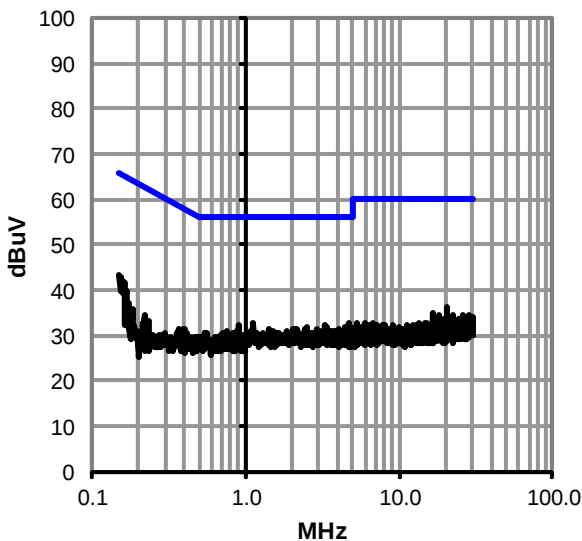
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 6, A1

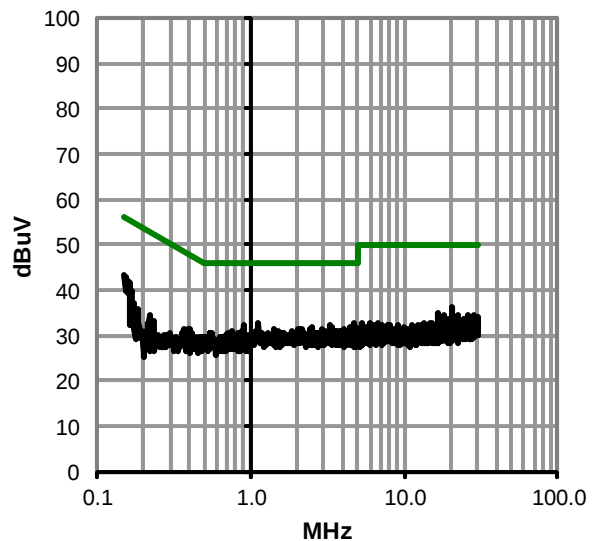
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #9

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	23.1	20.2	43.3	66.0	-22.7
0.157	22.6	20.2	42.8	65.6	-22.8
1.128	12.5	20.2	32.7	56.0	-23.3
4.704	12.2	20.4	32.6	56.0	-23.4
20.170	14.9	21.4	36.3	60.0	-23.7
0.895	12.1	20.2	32.3	56.0	-23.7
3.304	11.8	20.3	32.1	56.0	-23.9
2.528	11.7	20.3	32.0	56.0	-24.0
4.904	11.3	20.4	31.7	56.0	-24.3
4.496	11.3	20.4	31.7	56.0	-24.3
1.416	11.1	20.2	31.3	56.0	-24.7
2.192	11.0	20.3	31.3	56.0	-24.7
4.088	10.9	20.4	31.3	56.0	-24.7
2.880	10.9	20.3	31.2	56.0	-24.8
2.432	10.9	20.3	31.2	56.0	-24.8
4.232	10.8	20.4	31.2	56.0	-24.8
3.528	10.8	20.4	31.2	56.0	-24.8
3.824	10.7	20.4	31.1	56.0	-24.9
0.767	10.8	20.2	31.0	56.0	-25.0
3.600	10.6	20.4	31.0	56.0	-25.0
16.720	13.8	21.1	34.9	60.0	-25.1
0.869	10.6	20.2	30.8	56.0	-25.2
1.528	10.5	20.3	30.8	56.0	-25.2
0.565	10.5	20.2	30.7	56.0	-25.3
0.828	10.4	20.2	30.6	56.0	-25.4
0.167	19.5	20.2	39.7	65.1	-25.4

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	23.1	20.2	43.3	56.0	-12.7
0.157	22.6	20.2	42.8	55.6	-12.8
1.128	12.5	20.2	32.7	46.0	-13.3
4.704	12.2	20.4	32.6	46.0	-13.4
20.170	14.9	21.4	36.3	50.0	-13.7
0.895	12.1	20.2	32.3	46.0	-13.7
3.304	11.8	20.3	32.1	46.0	-13.9
2.528	11.7	20.3	32.0	46.0	-14.0
4.904	11.3	20.4	31.7	46.0	-14.3
4.496	11.3	20.4	31.7	46.0	-14.3
1.416	11.1	20.2	31.3	46.0	-14.7
2.192	11.0	20.3	31.3	46.0	-14.7
4.088	10.9	20.4	31.3	46.0	-14.7
2.880	10.9	20.3	31.2	46.0	-14.8
2.432	10.9	20.3	31.2	46.0	-14.8
4.232	10.8	20.4	31.2	46.0	-14.8
3.528	10.8	20.4	31.2	46.0	-14.8
3.824	10.7	20.4	31.1	46.0	-14.9
0.767	10.8	20.2	31.0	46.0	-15.0
3.600	10.6	20.4	31.0	46.0	-15.0
16.720	13.8	21.1	34.9	50.0	-15.1
0.869	10.6	20.2	30.8	46.0	-15.2
1.528	10.5	20.3	30.8	46.0	-15.2
0.565	10.5	20.2	30.7	46.0	-15.3
0.828	10.4	20.2	30.6	46.0	-15.4
0.167	19.5	20.2	39.7	55.1	-15.4

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

Run #:	10	Line:	Neutral	Ext. Attenuation (dB):	20
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COMMENTS

None

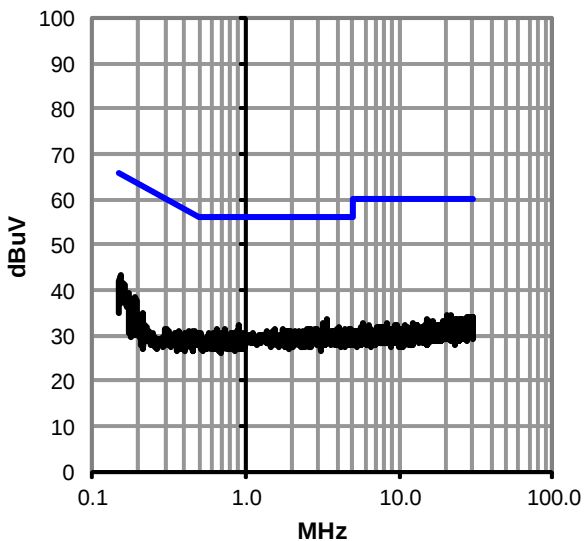
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 6, A1

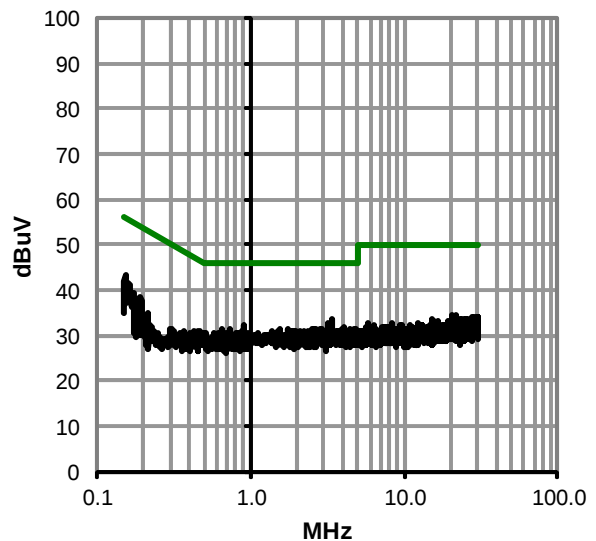
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #10

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.153	23.3	20.2	43.5	65.8	-22.3
3.360	13.2	20.3	33.5	56.0	-22.5
3.208	12.3	20.3	32.6	56.0	-23.4
0.912	12.3	20.2	32.5	56.0	-23.5
0.160	21.4	20.2	41.6	65.5	-23.9
4.064	11.3	20.4	31.7	56.0	-24.3
0.733	11.4	20.2	31.6	56.0	-24.4
1.768	11.3	20.3	31.6	56.0	-24.4
2.920	11.2	20.3	31.5	56.0	-24.5
2.840	11.1	20.3	31.4	56.0	-24.6
2.576	11.1	20.3	31.4	56.0	-24.6
1.560	11.1	20.3	31.4	56.0	-24.6
4.840	10.9	20.4	31.3	56.0	-24.7
3.888	10.9	20.4	31.3	56.0	-24.7
2.648	10.9	20.3	31.2	56.0	-24.8
0.657	11.0	20.2	31.2	56.0	-24.8
4.400	10.8	20.4	31.2	56.0	-24.8
3.080	10.8	20.3	31.1	56.0	-24.9
2.344	10.6	20.3	30.9	56.0	-25.1
2.072	10.6	20.3	30.9	56.0	-25.1
1.976	10.6	20.3	30.9	56.0	-25.1
1.896	10.6	20.3	30.9	56.0	-25.1
1.376	10.6	20.2	30.8	56.0	-25.2
0.881	10.6	20.2	30.8	56.0	-25.2
20.750	13.2	21.5	34.7	60.0	-25.3
21.900	13.1	21.6	34.7	60.0	-25.3

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.153	23.3	20.2	43.5	55.8	-12.3
3.360	13.2	20.3	33.5	46.0	-12.5
3.208	12.3	20.3	32.6	46.0	-13.4
0.912	12.3	20.2	32.5	46.0	-13.5
0.160	21.4	20.2	41.6	55.5	-13.9
4.064	11.3	20.4	31.7	46.0	-14.3
0.733	11.4	20.2	31.6	46.0	-14.4
1.768	11.3	20.3	31.6	46.0	-14.4
2.920	11.2	20.3	31.5	46.0	-14.5
2.840	11.1	20.3	31.4	46.0	-14.6
2.576	11.1	20.3	31.4	46.0	-14.6
1.560	11.1	20.3	31.4	46.0	-14.6
4.840	10.9	20.4	31.3	46.0	-14.7
3.888	10.9	20.4	31.3	46.0	-14.7
2.648	10.9	20.3	31.2	46.0	-14.8
0.657	11.0	20.2	31.2	46.0	-14.8
4.400	10.8	20.4	31.2	46.0	-14.8
3.080	10.8	20.3	31.1	46.0	-14.9
2.344	10.6	20.3	30.9	46.0	-15.1
2.072	10.6	20.3	30.9	46.0	-15.1
1.976	10.6	20.3	30.9	46.0	-15.1
1.896	10.6	20.3	30.9	46.0	-15.1
1.376	10.6	20.2	30.8	46.0	-15.2
0.881	10.6	20.2	30.8	46.0	-15.2
20.750	13.2	21.5	34.7	50.0	-15.3
21.900	13.1	21.6	34.7	50.0	-15.3

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

Run #:	11	Line:	Neutral	Ext. Attenuation (dB):	20
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COMMENTS

None

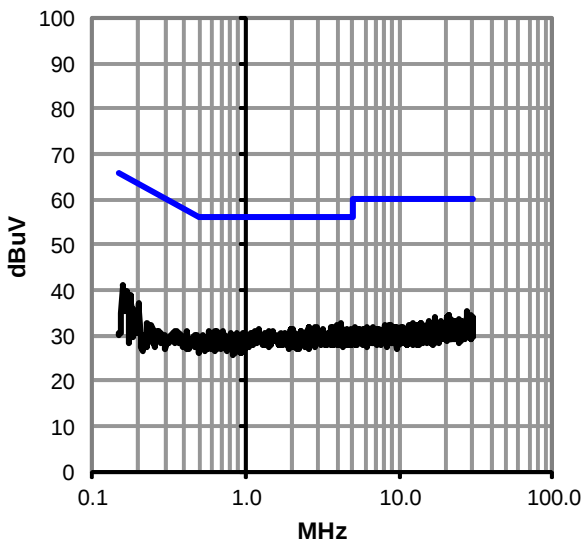
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 1, A1

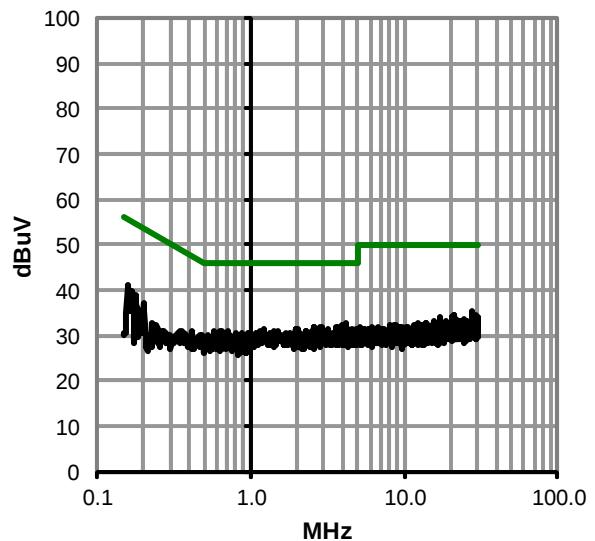
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #11

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
4.120	12.3	20.4	32.7	56.0	-23.3
3.912	11.7	20.4	32.1	56.0	-23.9
2.880	11.7	20.3	32.0	56.0	-24.0
2.608	11.7	20.3	32.0	56.0	-24.0
4.232	11.4	20.4	31.8	56.0	-24.2
3.752	11.4	20.4	31.8	56.0	-24.2
3.616	11.4	20.4	31.8	56.0	-24.2
2.816	11.3	20.3	31.6	56.0	-24.4
4.512	11.2	20.4	31.6	56.0	-24.4
4.040	11.2	20.4	31.6	56.0	-24.4
0.160	20.8	20.2	41.0	65.5	-24.5
1.216	11.2	20.2	31.4	56.0	-24.6
2.056	11.1	20.3	31.4	56.0	-24.6
1.976	11.1	20.3	31.4	56.0	-24.6
4.816	11.0	20.4	31.4	56.0	-24.6
3.552	11.0	20.4	31.4	56.0	-24.6
3.168	10.9	20.3	31.2	56.0	-24.8
27.490	13.1	22.1	35.2	60.0	-24.8
4.368	10.8	20.4	31.2	56.0	-24.8
2.320	10.8	20.3	31.1	56.0	-24.9
0.655	10.9	20.2	31.1	56.0	-24.9
4.664	10.6	20.4	31.0	56.0	-25.0
2.480	10.6	20.3	30.9	56.0	-25.1
0.628	10.7	20.2	30.9	56.0	-25.1
0.704	10.7	20.2	30.9	56.0	-25.1
1.440	10.6	20.2	30.8	56.0	-25.2

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
4.120	12.3	20.4	32.7	46.0	-13.3
3.912	11.7	20.4	32.1	46.0	-13.9
2.880	11.7	20.3	32.0	46.0	-14.0
2.608	11.7	20.3	32.0	46.0	-14.0
4.232	11.4	20.4	31.8	46.0	-14.2
3.752	11.4	20.4	31.8	46.0	-14.2
3.616	11.4	20.4	31.8	46.0	-14.2
2.816	11.3	20.3	31.6	46.0	-14.4
4.512	11.2	20.4	31.6	46.0	-14.4
4.040	11.2	20.4	31.6	46.0	-14.4
0.160	20.8	20.2	41.0	55.5	-14.5
1.216	11.2	20.2	31.4	46.0	-14.6
2.056	11.1	20.3	31.4	46.0	-14.6
1.976	11.1	20.3	31.4	46.0	-14.6
4.816	11.0	20.4	31.4	46.0	-14.6
3.552	11.0	20.4	31.4	46.0	-14.6
3.168	10.9	20.3	31.2	46.0	-14.8
27.490	13.1	22.1	35.2	50.0	-14.8
4.368	10.8	20.4	31.2	46.0	-14.8
2.320	10.8	20.3	31.1	46.0	-14.9
0.655	10.9	20.2	31.1	46.0	-14.9
4.664	10.6	20.4	31.0	46.0	-15.0
2.480	10.6	20.3	30.9	46.0	-15.1
0.628	10.7	20.2	30.9	46.0	-15.1
0.704	10.7	20.2	30.9	46.0	-15.1
1.440	10.6	20.2	30.8	46.0	-15.2

CONCLUSION

Pass

Bryan Welles

Tested By

EUT:	RTH9590WF01	Work Order:	HNYW0042
Serial Number:	4174001 0010110	Date:	05/06/2013
Customer:	Honeywell, Automation and Control Solutions	Temperature:	23.4°C
Attendees:	None	Relative Humidity:	31.1%
Customer Project:	None	Bar. Pressure:	1019.8 mb
Tested By:	Bryan Weller	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	HNYW0042-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2013	ANSI C63.10:2009

TEST PARAMETERS

Run #:	12	Line:	High Line	Ext. Attenuation (dB):	20
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COMMENTS

None

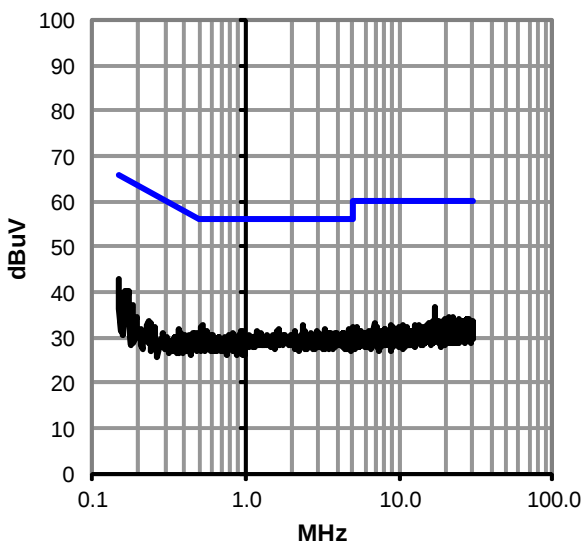
EUT OPERATING MODES

Transmitting, 1Mbps, Ch 1, A1

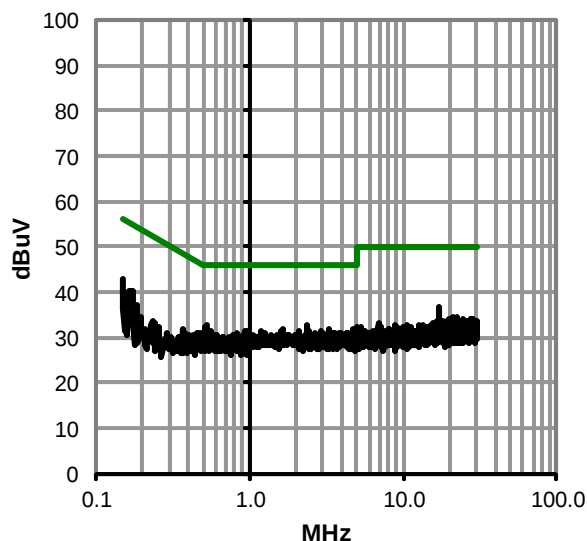
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



RESULTS - Run #12

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	22.8	20.2	43.0	66.0	-23.0
17.300	15.6	21.2	36.8	60.0	-23.2
2.376	12.3	20.3	32.6	56.0	-23.4
0.522	12.4	20.2	32.6	56.0	-23.4
4.952	12.0	20.4	32.4	56.0	-23.6
4.672	11.5	20.4	31.9	56.0	-24.1
3.312	11.5	20.3	31.8	56.0	-24.2
1.648	11.5	20.3	31.8	56.0	-24.2
0.947	11.4	20.2	31.6	56.0	-24.4
1.200	11.2	20.2	31.4	56.0	-24.6
0.174	19.9	20.2	40.1	64.8	-24.7
2.912	10.9	20.3	31.2	56.0	-24.8
2.456	10.9	20.3	31.2	56.0	-24.8
0.565	11.0	20.2	31.2	56.0	-24.8
3.784	10.8	20.4	31.2	56.0	-24.8
0.830	10.9	20.2	31.1	56.0	-24.9
4.752	10.7	20.4	31.1	56.0	-24.9
0.162	20.2	20.2	40.4	65.4	-25.0
4.888	10.6	20.4	31.0	56.0	-25.0
4.344	10.6	20.4	31.0	56.0	-25.0
4.272	10.6	20.4	31.0	56.0	-25.0
3.616	10.6	20.4	31.0	56.0	-25.0
2.704	10.6	20.3	30.9	56.0	-25.1
0.510	10.7	20.2	30.9	56.0	-25.1
0.912	10.4	20.2	30.6	56.0	-25.4
22.680	12.9	21.6	34.5	60.0	-25.5

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.150	22.8	20.2	43.0	56.0	-13.0
17.300	15.6	21.2	36.8	50.0	-13.2
2.376	12.3	20.3	32.6	46.0	-13.4
0.522	12.4	20.2	32.6	46.0	-13.4
4.952	12.0	20.4	32.4	46.0	-13.6
4.672	11.5	20.4	31.9	46.0	-14.1
3.312	11.5	20.3	31.8	46.0	-14.2
1.648	11.5	20.3	31.8	46.0	-14.2
0.947	11.4	20.2	31.6	46.0	-14.4
1.200	11.2	20.2	31.4	46.0	-14.6
0.174	19.9	20.2	40.1	54.8	-14.7
2.912	10.9	20.3	31.2	46.0	-14.8
2.456	10.9	20.3	31.2	46.0	-14.8
0.565	11.0	20.2	31.2	46.0	-14.8
3.784	10.8	20.4	31.2	46.0	-14.8
0.830	10.9	20.2	31.1	46.0	-14.9
4.752	10.7	20.4	31.1	46.0	-14.9
0.162	20.2	20.2	40.4	55.4	-15.0
4.888	10.6	20.4	31.0	46.0	-15.0
4.344	10.6	20.4	31.0	46.0	-15.0
4.272	10.6	20.4	31.0	46.0	-15.0
3.616	10.6	20.4	31.0	46.0	-15.0
2.704	10.6	20.3	30.9	46.0	-15.1
0.510	10.7	20.2	30.9	46.0	-15.1
0.912	10.4	20.2	30.6	46.0	-15.4
22.680	12.9	21.6	34.5	50.0	-15.5

CONCLUSION

Pass

Bryan Welles

Tested By