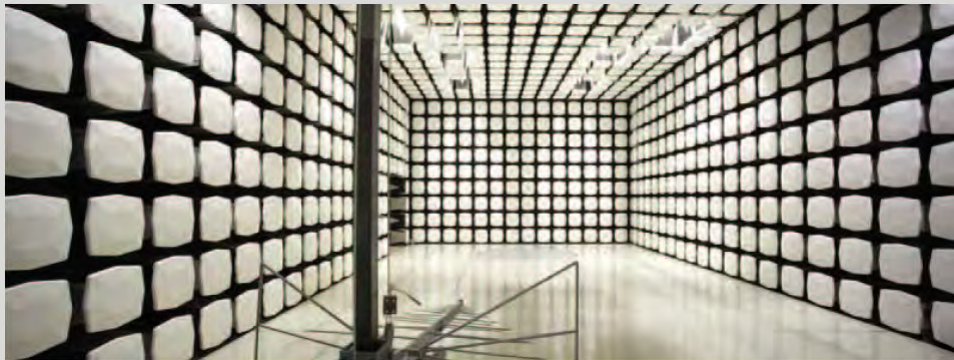




Summit Semiconductor
Model 444-2225 (Athena UFL)
FCC 15.407:2013

Report #: FOCU0140



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 16, 2013
Summit Semiconductor
Model: Model 444-2225 (Athena UFL)

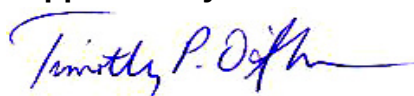
Emissions

Test Description	Specification	Test Method	Pass/Fail
Transmissions Burst Duration	FCC 15.407:2013	FCC 15.407:2013	Pass
Peak Transmit Power	FCC 15.407:2013	FCC 15.407:2013	Pass
Peak Power Spectral Density	FCC 15.407:2013	FCC 15.407:2013	Pass
Emission Bandwidth	FCC 15.407:2013	FCC 15.407:2013	Pass
Peak Excursion	FCC 15.407:2013	FCC 15.407:2013	Pass
Frequency Stability	FCC 15.407:2013	FCC 15.407:2013	Pass
Spurious Radiated Emissions	FCC 15.407:2013	FCC 15.407:2013	Pass
AC Powerline Conducted Emissions	FCC 15.407:2013	FCC 15.407:2013	Pass

Deviations From Test Standards

None

Approved By:



Tim O'Shea, Operations Manager



NVLAP Lab Code: 200630-0

Test Facility

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

Northwest EMC, Inc.
22975 NW Evergreen Parkway, Suite 400
Hillsboro, OR 97124

Phone: (503) 844-4066 Fax: 844-3826

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

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

Canada

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

European Union

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

Australia/New Zealand

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

Korea

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

Japan

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

Taiwan

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

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

Singapore

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

Hong Kong

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

Vietnam

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

Russia

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

SCOPE

For details on the Scopes of our Accreditations, please visit:

<http://www.nwemc.com/accreditations/>

How Important Is It To Understand Performance Criteria?

It is the responsibility of the test laboratory to observe the results of the tests that are performed and to accurately report those results. The data sheets detail the observable and repeatable performance criterion.

The variety and diversity of the apparatus within the scope of standard make it difficult to define precise criteria for the evaluation of the immunity test results. The manufacturer has the obligation to express the performance criteria in terms which relate to the performance of his specific product when used as intended. If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then it may be derived from the product description, documentation, and/or by what the user may reasonably expect from the EUT if used as intended.

As the responsible party (manufacturer, importer, etc.) it is your responsibility that you are fully aware of the requirements, how your device performs when tested to those requirements, and what information is being used to declare conformity.

To better assist you in making those conformity decisions, Northwest EMC has adopted a very simple, yet very clear performance assessment procedure. The following criteria's are used when performing immunity or susceptibility tests. In all cases the observed phenomena will be documented in the data sheets.

Performance Criteria 1:

The EUT exhibited no change in performance when operating as specified by the manufacturer.

- ❑ In most cases this would be equivalent to Performance Criteria A. When operating the equipment in the modes or configurations specified by the responsible party, monitoring the parameters specified, no changes were observed, user intervention was not required, nothing happened.

Performance Criteria 2:

The EUT exhibited a temporary change in performance when operating as specified by the manufacturer- Operator Intervention was not required to resume normal operation.

- ❑ In most cases this would be equivalent to Performance Criteria B. When operating the equipment in the modes or configurations specified by the responsible party, monitoring the parameters specified, a Temporary loss of function was observed. The EUT was able to recover from those changes without any operator intervention, once the test signal was removed. The apparatus continued to operate as intended after the test. No loss of data was observed.
- ❑ Example: During testing, an analogue function value may deviate. After the test, the deviation vanishes.

Performance Criteria 3:

A temporary loss of function was observed. User intervention is required to restore the operation of device to the mode specified by the responsible party.

- ❑ In most cases this would be equivalent to Performance Criteria C. When operating the equipment in the modes or configurations specified by the responsible party, monitoring the parameters specified, changes were observed. The EUT requires some sort of operator intervention to recover. There was no permanent damage and the EUT appeared to function normally after completion of test.
- ❑ Example: The EUT locked up during the immunity test; User intervention is required to restore the device to the specified mode of operation.

Performance Criteria 4:

- ❑ In this case the equipment was damaged and/or would not recover to the mode specified by the responsible party. The data sheets will detail the exact phenomena observed.

Measurement Uncertainty

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

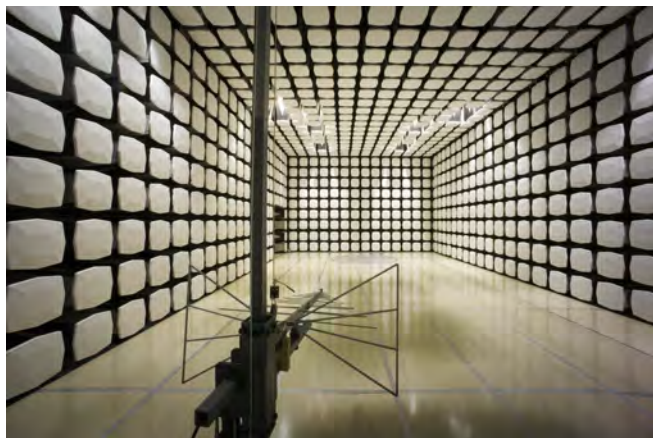
A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) for each test is listed below. Our measurement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

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

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



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:	Summit Semiconductor
Address:	22867 NW Bennett St, Suite 200
City, State, Zip:	Hillsboro, OR 97124
Test Requested By:	Ponnappa Pasura
Model:	Model 444-2225 (Athena UFL)
First Date of Test:	May 14, 2013
Last Date of Test:	May 09, 2013
Receipt Date of Samples:	May 1, 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):
Digital wireless Audio client device (Athena UFL) using an 802.11a SISO radio with one antenna.
Testing Objective:
Seeking modular approval of the client under FCC 15.407 for operation in the 5.2, 5.3, and 5.6 GHz bands.

Configuration FOCU0140- 1

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Athena UFL	Summit Semiconductor	444-2225	02EA4D000027

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop	Dell	Latitude D820	26000021917
La Grande Amplifier/DC Power Supply	Summit Semiconductor	Unknown	1
Inverted F Antenna	Tyco	Unknown	Unknown

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop DC Power Supply	Dell	AC-PA-10	Unknown

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	2.4m	No	AC Mains	La Grande Amplifier/DC Power Supply
Antenna Wires x 4	No	0.36m	No	Athena UFL	Inverted F Antenna
RS232	Yes	1.7m	No	I/O to Serial Adapter	Laptop
DC Power	No	1.1m	Yes	Laptop DC Power Supply	Laptop
AC Power	No	0.8	No	AC Mains	Laptop DC Power Supply
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration FOCU0140- 2

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Athena UFL	Summit Semiconductor	444-2225	02EA4D000027

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Inverted F Antenna	Tyco	Unknown	Unknown
Topward DC Power Supply	Topward Electronic Instruments Co., LTD.	TPS-2000	946425

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop	Dell	Latitude D820	26000021917

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
Antenna Wires x 4	No	0.36m	No	Athena UFL	Inverted F Antenna
RS232	Yes	1.7m	No	I/O to Serial Adapter	Laptop
DC Power	No	1.1m	Yes	Laptop DC Power Supply	Laptop
AC Power	No	0.8	No	AC Mains	Laptop DC Power Supply
AC Power	No	1.4m	No	AC Mains	Topward DC Supply
I/O to Serial Adapter	No	.1m	No	RS232	Athena
DC Power Cable x1	No	1.5m	No	Topward DC Power Supply	Athena
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration FOCU0140- 3

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Athena UFL	Summit Semiconductor	444-2225	02EA4D000003

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Topward DC Power Supply	Topward Electronic Instruments Co., LTD.	TPS-2000	946425
Laptop DC Power Supply	Dell	AC-PA-10	Unknown

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop	Dell	Latitude D820	26000021917

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
RS232	Yes	1.7m	No	I/O to Serial Adapter	Laptop
DC Power	No	1.1m	Yes	Laptop DC Power Supply	Laptop
AC Power	No	0.8	No	AC Mains	Laptop DC Power Supply
AC Power	No	1.4m	No	AC Mains	Topward DC Supply
I/O to Serial Adapter	No	.1m	No	RS232	Athena
DC Power Cable x1	No	1.5m	No	Topward DC Power Supply	Athena
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration FOCU0140- 4

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Athena UFL	Summit Semiconductor	444-2225	02EA4D000027

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Topward DC Power Supply	Topward Electronic Instruments Co., LTD.	TPS-2000	946425
Laptop DC Power Supply	Dell	AC-PA-10	Unknown

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop	Dell	Latitude D820	26000021917

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
RS232	Yes	1.7m	No	I/O to Serial Adapter	Laptop
DC Power	No	1.1m	Yes	Laptop DC Power Supply	Laptop
AC Power	No	0.8	No	AC Mains	Laptop DC Power Supply
AC Power	No	1.4m	No	AC Mains	Topward DC Supply
I/O to Serial Adapter	No	.1m	No	RS232	Athena
DC Power Cable x1	No	1.5m	No	Topward DC Power Supply	Athena
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration FOCU0140- 5

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Athena UFL	Summit Semiconductor	444-2225	02EA4D000027

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop DC Power Supply	Dell	AC-PA-10	Unknown

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop	Dell	Latitude D820	26000021917

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
RS232	Yes	1.7m	No	I/O to Serial Adapter	Laptop
DC Power	No	1.1m	Yes	Laptop DC Power Supply	Laptop
AC Power	No	0.8	No	AC Mains	Laptop DC Power Supply
I/O to Serial Adapter	No	.1m	No	RS232	Athena
AC/DC Power Adapter Cable	PA	1.5m	Yes	AC Mains	Athena
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration FOCU0140- 6

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Inverted F Antenna	Tyco	Unknown	Unknown
Athena UFL	Summit Semiconductor	444-2225	02EA4D000003

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop	Dell	Latitude D820	26000021917
La Grande Amplifier/DC Power Supply	Summit Semiconductor	Unknown	1
Laptop DC Power Supply	Dell	AC-PA-10	Unknown

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	2.4m	No	AC Mains	La Grande Amplifier/DC Power Supply
Antenna Wires x 4	No	0.36m	No	Athena UFL	Inverted F Antenna
RS232	Yes	1.7m	No	I/O to Serial Adapter	Laptop
DC Power	No	1.1m	Yes	Laptop DC Power Supply	Laptop
AC Power	No	0.8	No	AC Mains	Laptop DC Power Supply
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration FOCU0140- 7

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Athena UFL	Summit Semiconductor	444-2225	02EA4D000003

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Inverted F Antenna	Tyco	Unknown	Unknown
Topward DC Power Supply	Topward Electronic Instruments Co., LTD.	TPS-2000	946425

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Laptop	Dell	Latitude D820	26000021917

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
Antenna Wires x 4	No	0.36m	No	Athena UFL	Inverted F Antenna
RS232	Yes	1.7m	No	I/O to Serial Adapter	Laptop
DC Power	No	1.1m	Yes	Laptop DC Power Supply	Laptop
AC Power	No	0.8	No	AC Mains	Laptop DC Power Supply
AC Power	No	1.4m	No	AC Mains	Topward DC Supply
I/O to Serial Adapter	No	.1m	No	RS232	Athena
DC Power Cable x1	No	1.5m	No	Topward DC Power Supply	Athena
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	5/7/2013	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	5/8/2013	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.
3	5/8/2013	Radiated Immunity	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	5/8/2013	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.
5	5/9/2013	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.
6	5/14/2013	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.
7	5/15/2013	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.
8	5/17/2013	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.

Transmissions Burst Duration

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
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	24
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	3/25/2013	12
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0
Power Meter	Gigatronics	8651A	SPM	1/9/2012	24
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	3/5/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	6/25/2012	12
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	24

TEST DESCRIPTION

The transmission pulse duration (T) and Duty Cycle (x) were measured for each of the EUT operating modes per the FCC KDB 789033 D01 General UNII Test Procedures.

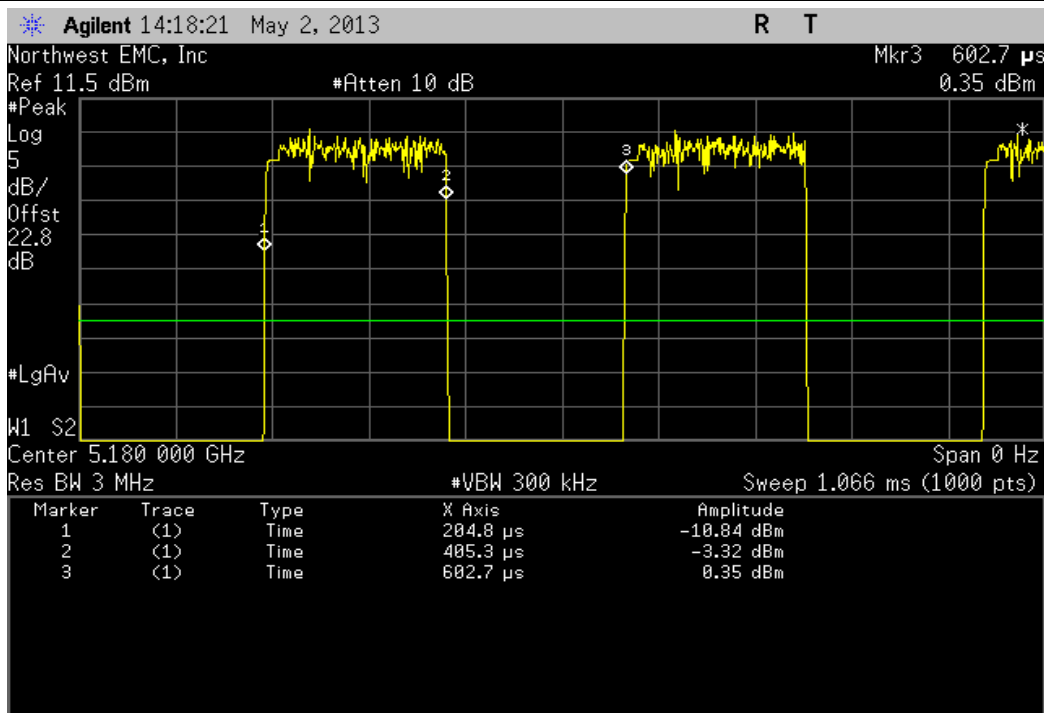
The measurements were made using a zero span on the spectrum analyzer to see the pulses in the time domain. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used

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

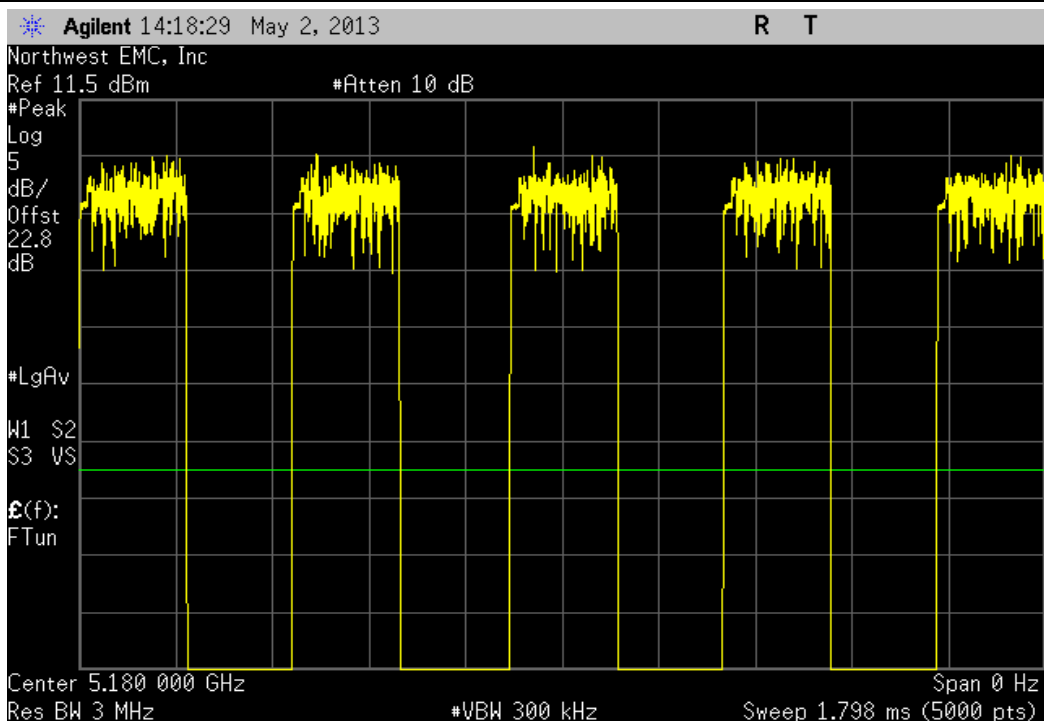
If the transmit duty cycle < 98 percent, burst gating was used during some of the other tests in this report only measure during the burst duration.

EUT: Model 444-2225 (Athena UFL)			Work Order: FOCU0140				
Serial Number: 02EA4D000027			Date: 05/03/13				
Customer: Summit Semiconductor			Temperature: 24°C				
Attendees: None			Humidity: 30%				
Project: None			Barometric Pres.: 1023				
Tested by: Brandon Hobbs		Power: 3.3V DC	Job Site: EV06				
TEST SPECIFICATIONS			Test Method				
FCC 15.407:2013			ANSI C63.10:2009				
COMMENTS							
All testing was completed on the highest output power antenna port A2.							
DEVIATIONS FROM TEST STANDARD							
None							
Configuration #	5	Signature 					
		Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result
802.11(a) 6 Mbps							
5150 - 5250 MHz Band							
Channel 36, Low Channel 5180 MHz		200.516 uS	397.884 uS	1	50.4	N/A	N/A
Channel 36, Low Channel 5180 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 48, High Channel 5240 MHz		199.449 uS	396.8 uS	1	50.3	N/A	N/A
Channel 48, High Channel 5240 MHz		N/A	N/A	5	N/A	N/A	N/A
5250 - 5350 MHz Band							
Channel 52, Low Channel 5260 MHz		199.449 uS	396.783 uS	1	50.3	N/A	N/A
Channel 52, Low Channel 5260 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 64, High Channel 5320 MHz		200.551 uS	396.817 uS	1	50.5	N/A	N/A
Channel 64, High Channel 5320 MHz		N/A	N/A	5	N/A	N/A	N/A
5470 - 5725 MHz Band							
Channel 100, Low Channel 5500 MHz		200.516 uS	396.817 uS	1	50.5	N/A	N/A
Channel 100, Low Channel 5500 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 116, Mid Channel 5580 MHz		199.484 uS	396.8 uS	1	50.3	N/A	N/A
Channel 116, Mid Channel 5580 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 140, High Channel 5700 MHz		200.516 uS	397.867 uS	1	50.4	N/A	N/A
Channel 140, High Channel 5700 MHz		N/A	N/A	5	N/A	N/A	N/A
802.11(a) 18 Mbps							
5150 - 5250 MHz Band							
Channel 36, Low Channel 5180 MHz		87.484 uS	284.8 uS	1	30.7	N/A	N/A
Channel 36, Low Channel 5180 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 48, High Channel 5240 MHz		88.516 uS	284.766 uS	1	31.1	N/A	N/A
Channel 48, High Channel 5240 MHz		N/A	N/A	5	N/A	N/A	N/A
5250 - 5350 MHz Band							
Channel 52, Low Channel 5260 MHz		87.449 uS	293.333 uS	1	29.8	N/A	N/A
Channel 52, Low Channel 5260 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 64, High Channel 5320 MHz		87.501 uS	283.733 uS	1	30.8	N/A	N/A
Channel 64, High Channel 5320 MHz		N/A	N/A	5	N/A	N/A	N/A
5470 - 5725 MHz Band							
Channel 100, Low Channel 5500 MHz		88.516 uS	284.8 uS	1	31.1	N/A	N/A
Channel 100, Low Channel 5500 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 116, Mid Channel 5580 MHz		87.501 uS	284.8 uS	1	30.7	N/A	N/A
Channel 116, Mid Channel 5580 MHz		N/A	N/A	5	N/A	N/A	N/A
Channel 140, High Channel 5700 MHz		88.568 uS	284.8 uS	1	31.1	N/A	N/A
Channel 140, High Channel 5700 MHz		N/A	N/A	5	N/A	N/A	N/A

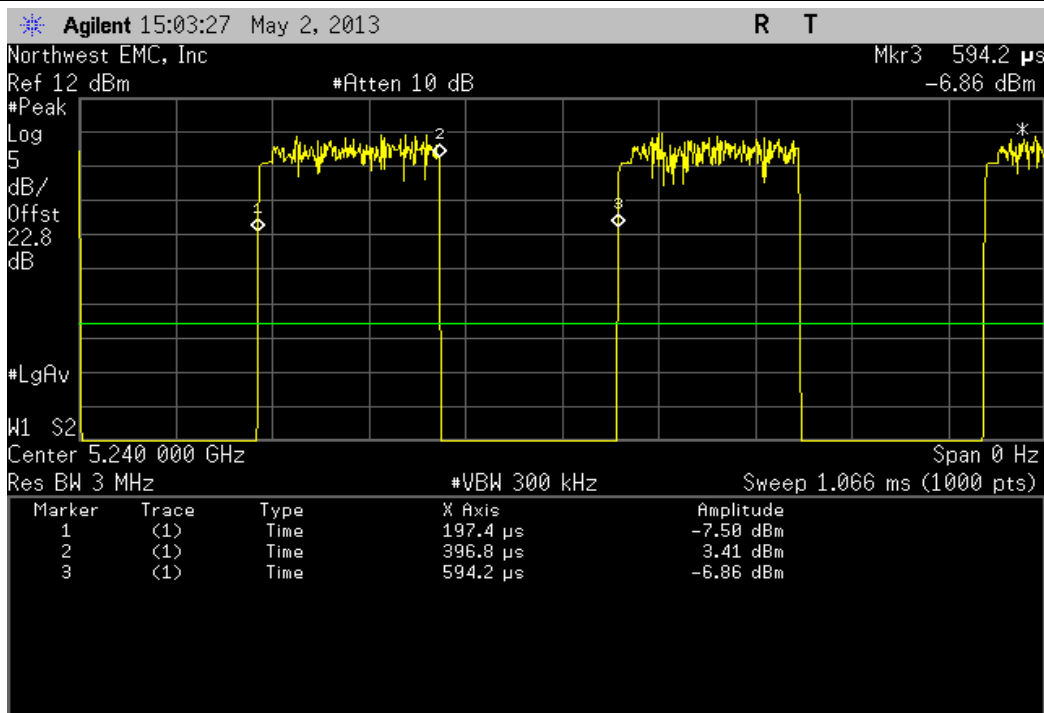
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
200.516 uS	397.884 uS	1	50.4	N/A	N/A	



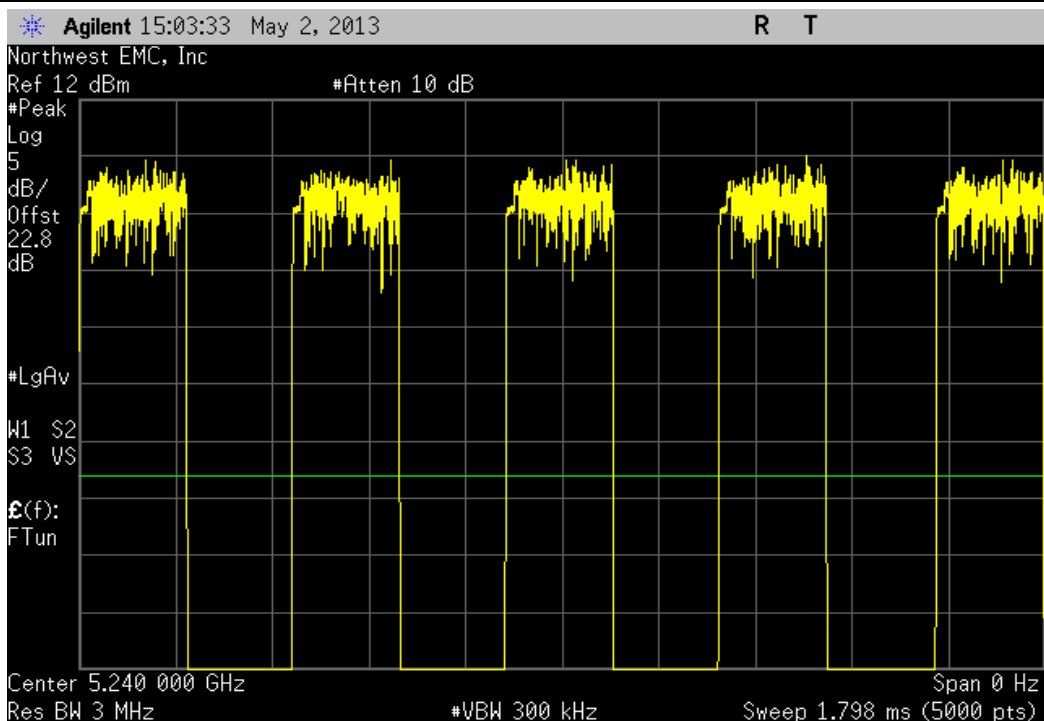
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



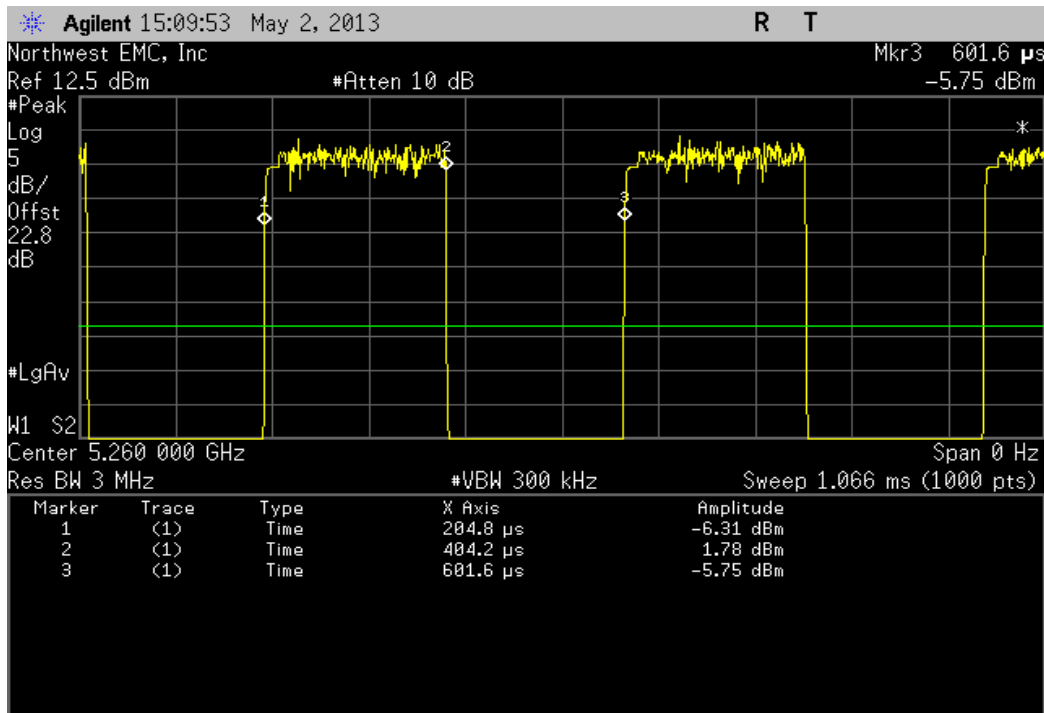
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
199.449 uS	396.8 uS	1	50.3	N/A	N/A	



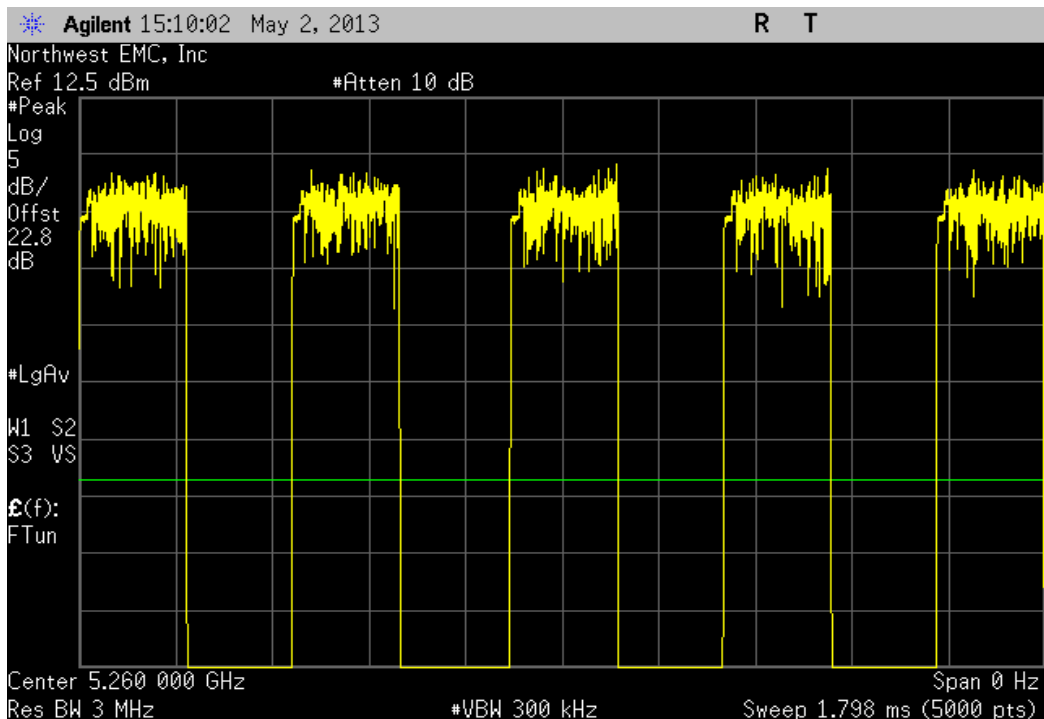
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



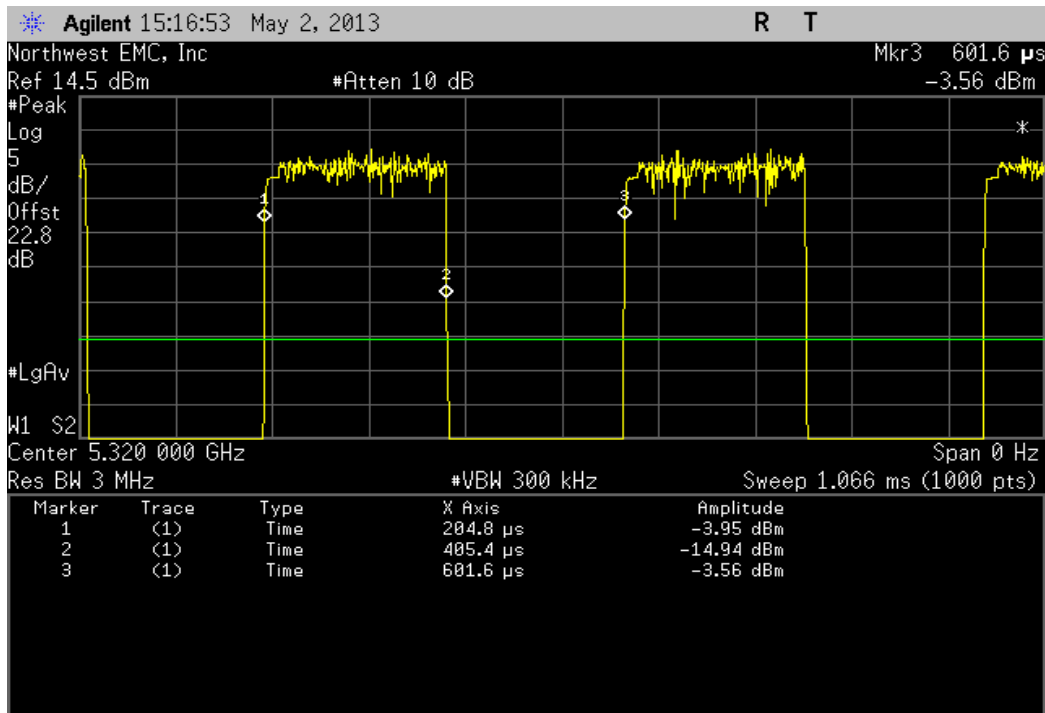
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
199.449 uS	396.783 uS	1	50.3	N/A	N/A	



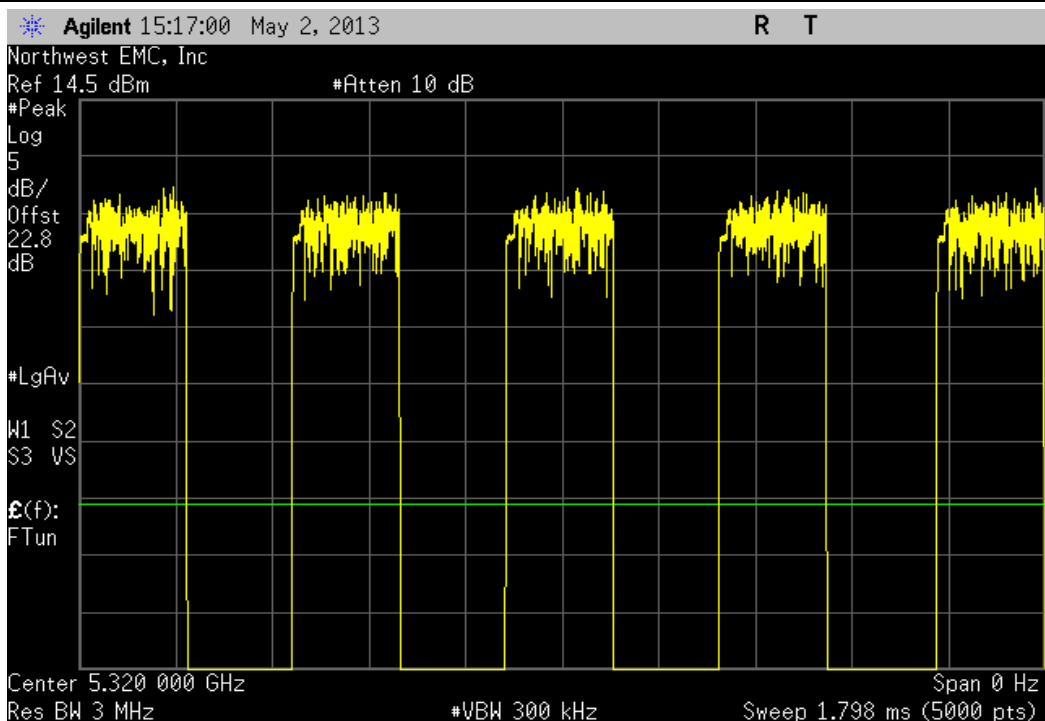
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



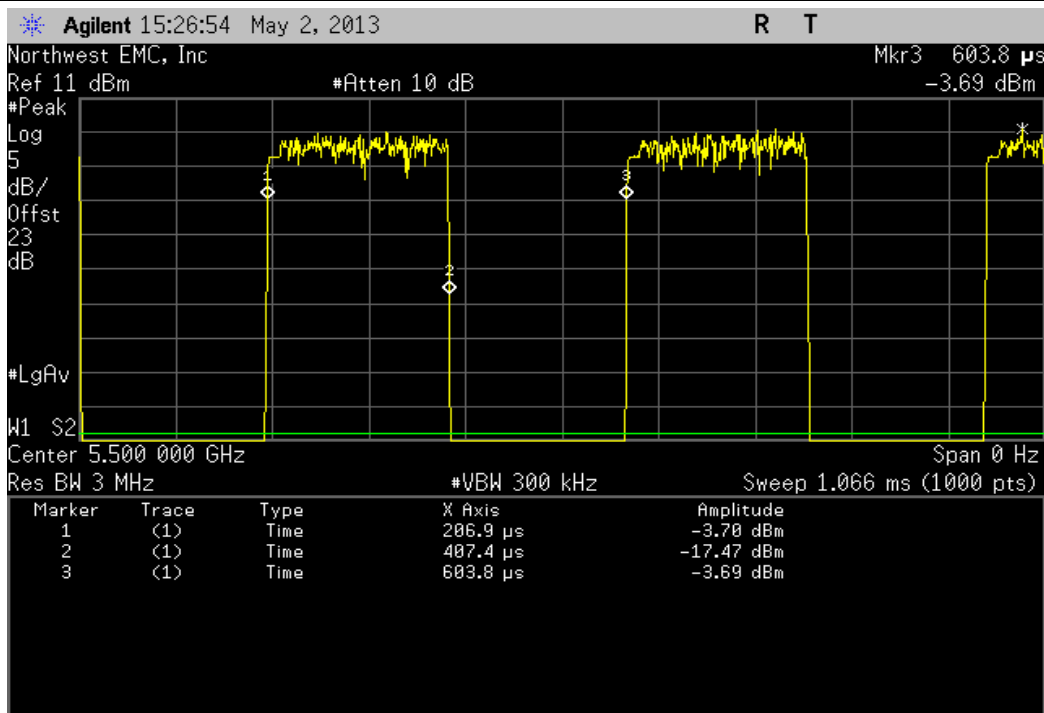
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
200.551 uS	396.817 uS	1	50.5	N/A	N/A	



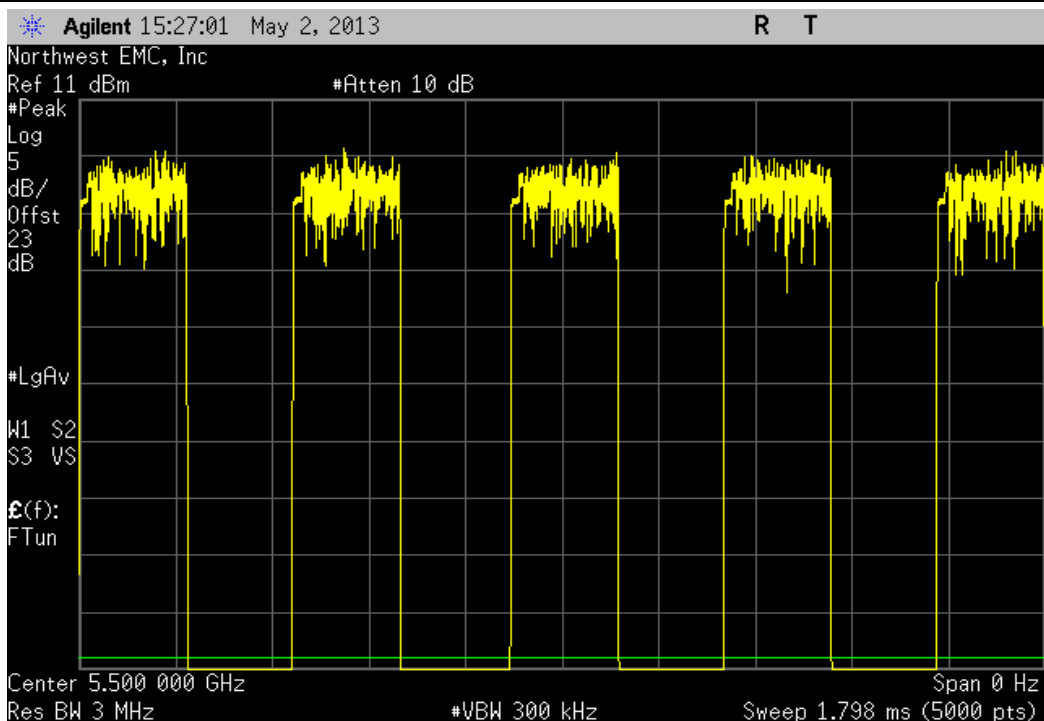
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



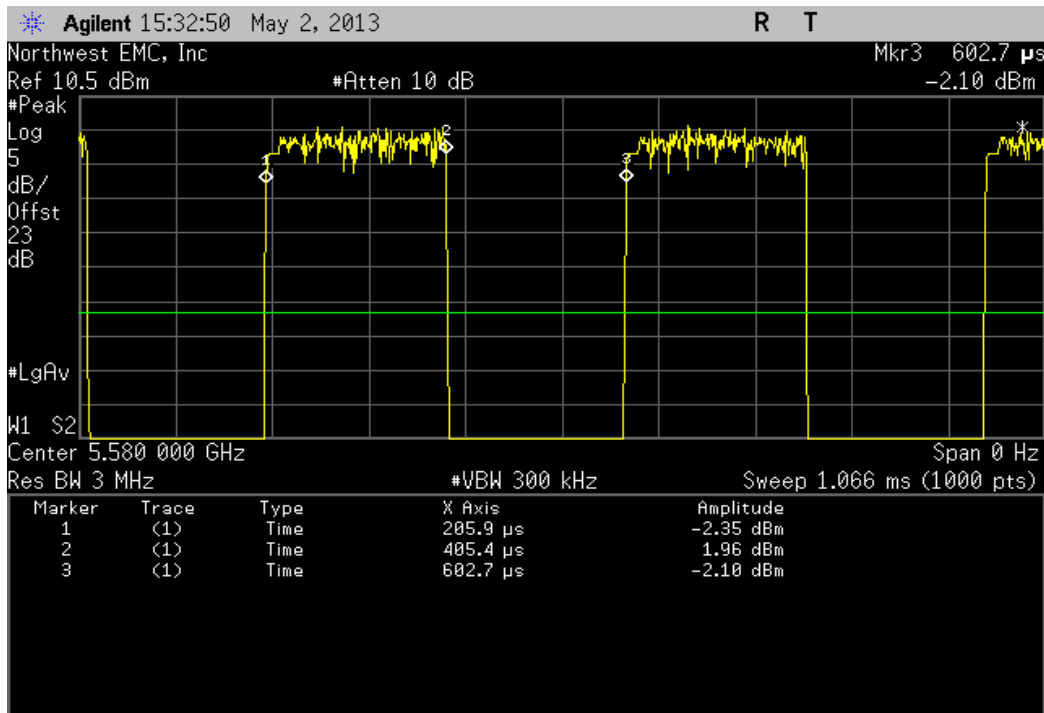
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
200.516 uS	396.817 uS	1	50.5	N/A	N/A	



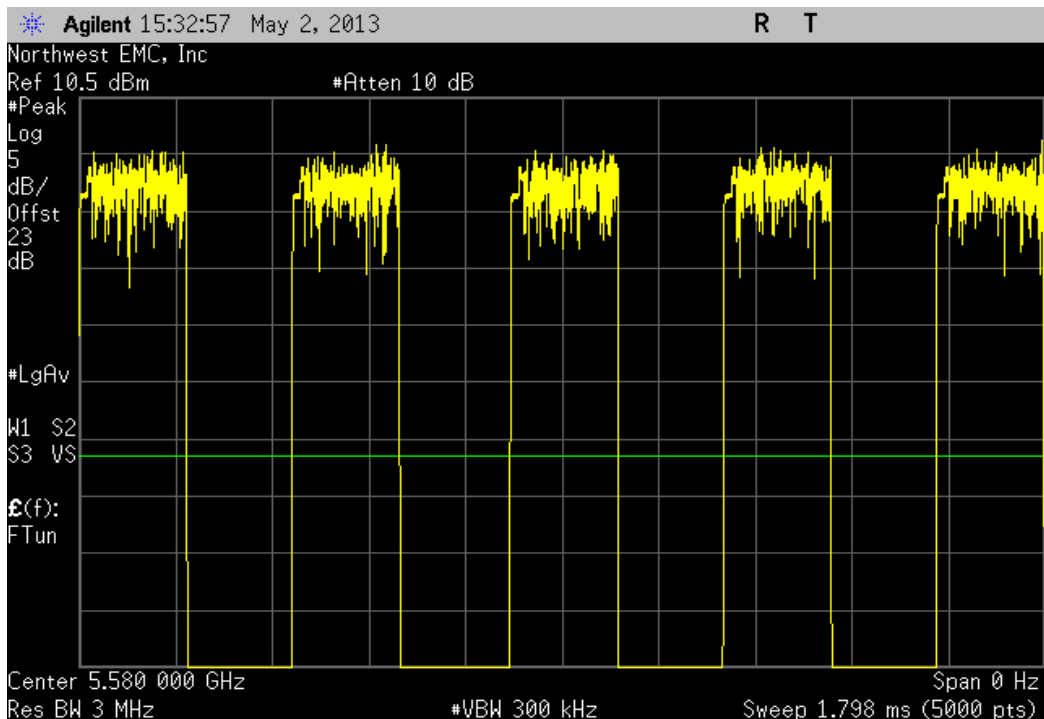
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	

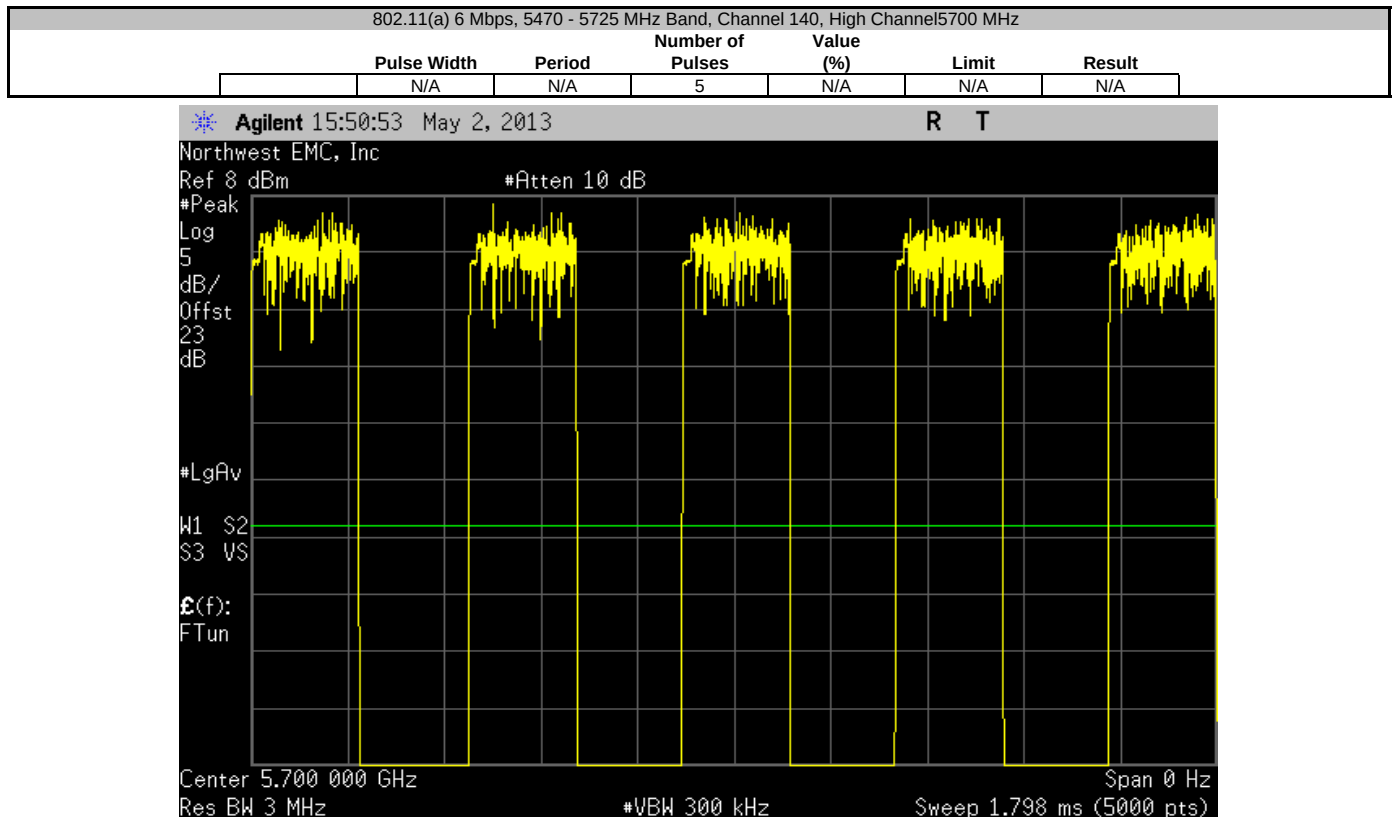
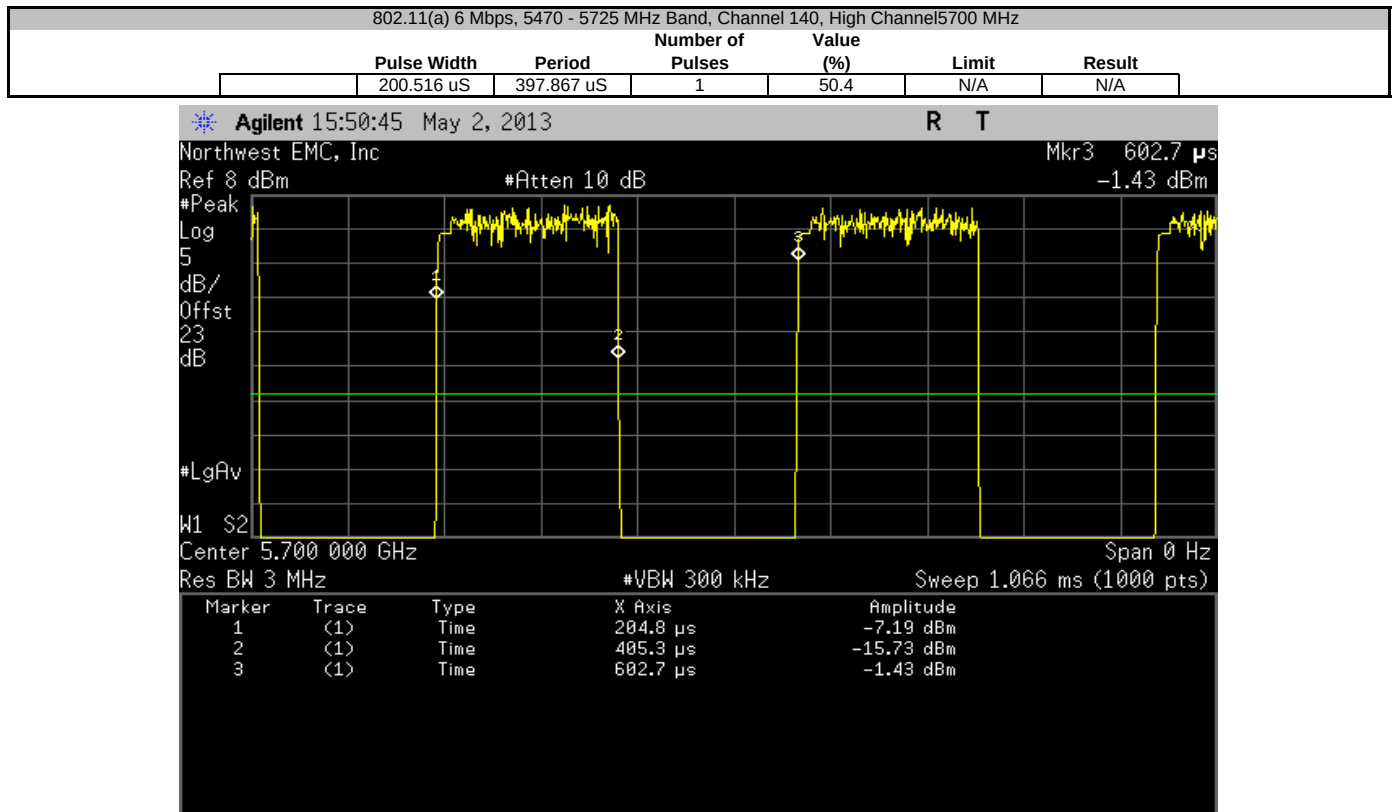


802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
199.484 uS	396.8 uS	1	50.3	N/A	N/A	

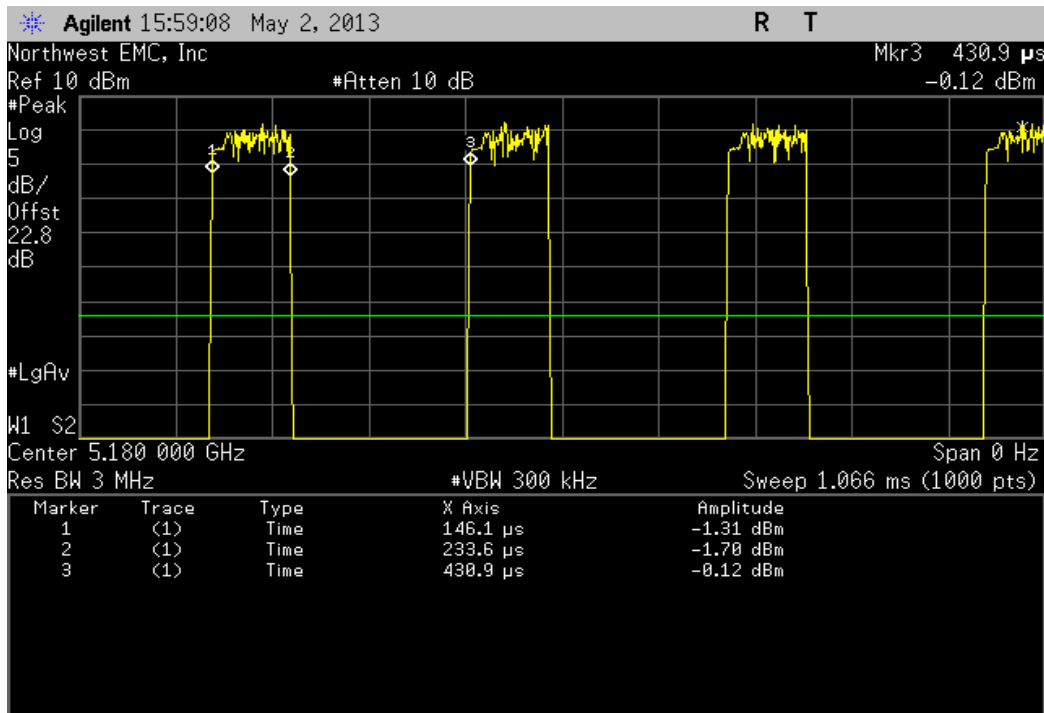


802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	

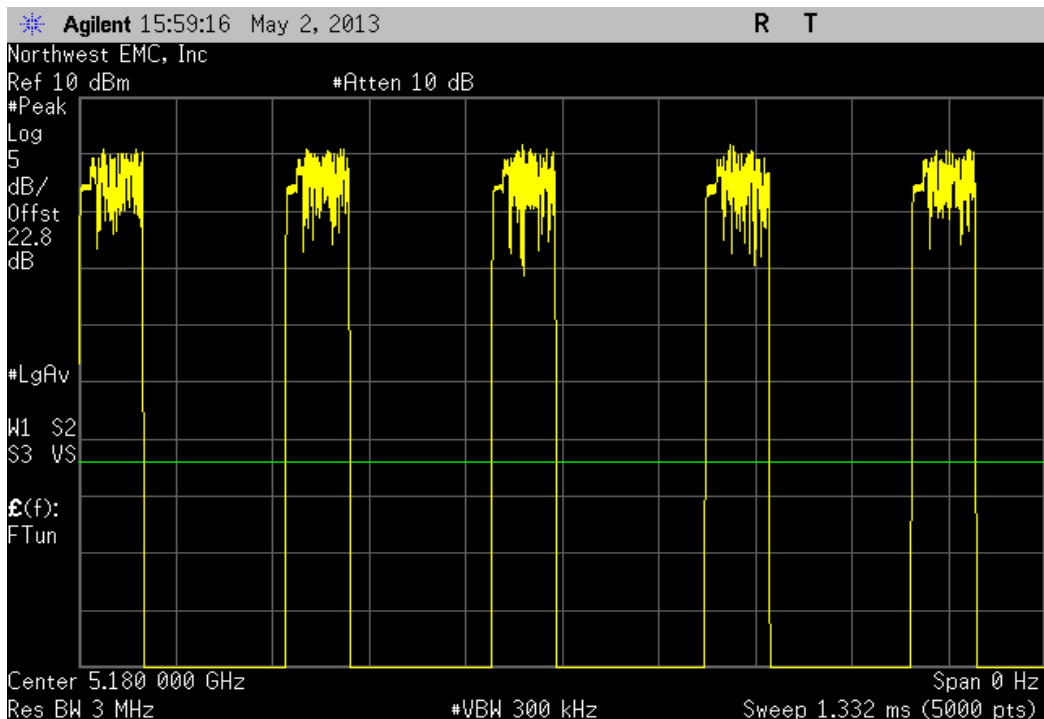




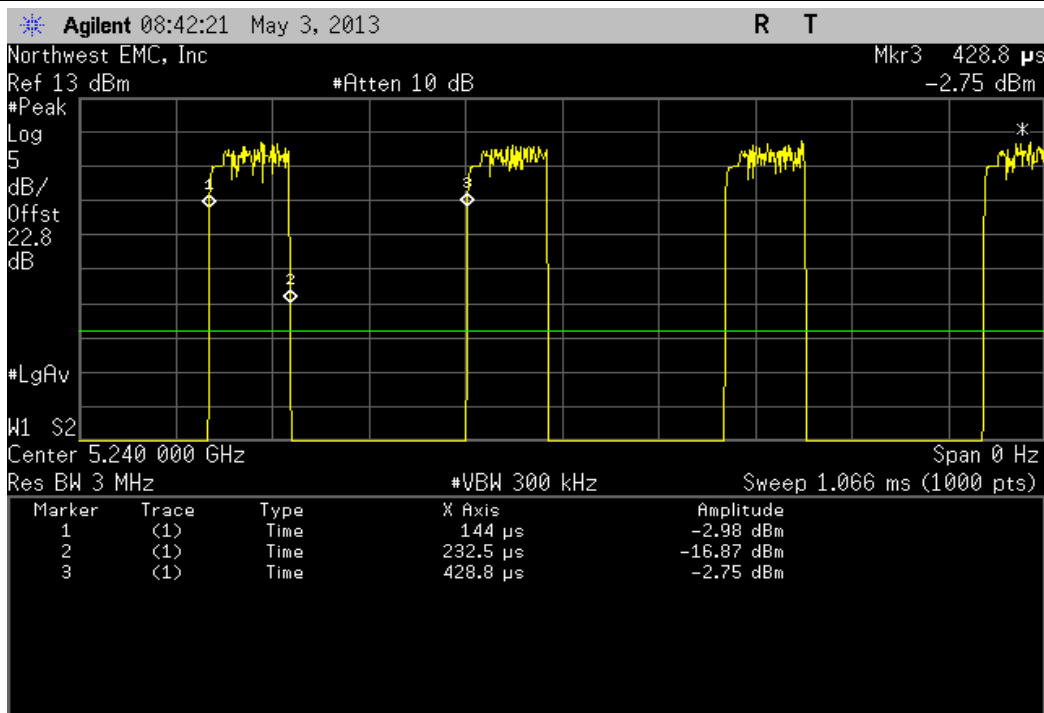
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
87.484 uS	284.8 uS	1	30.7	N/A	N/A	



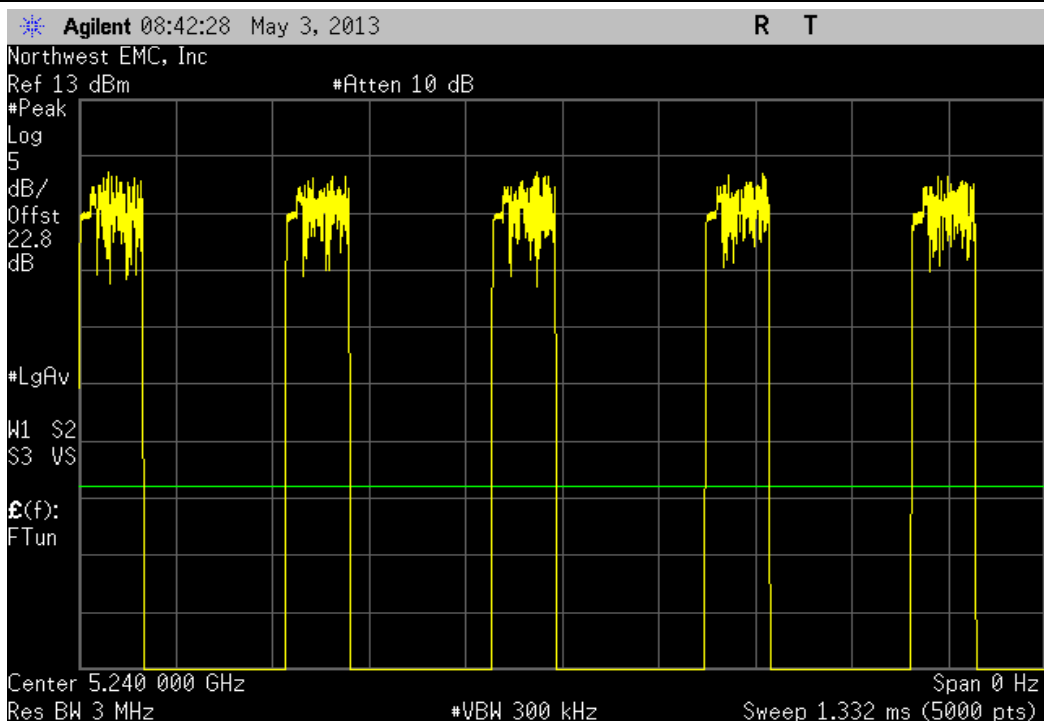
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



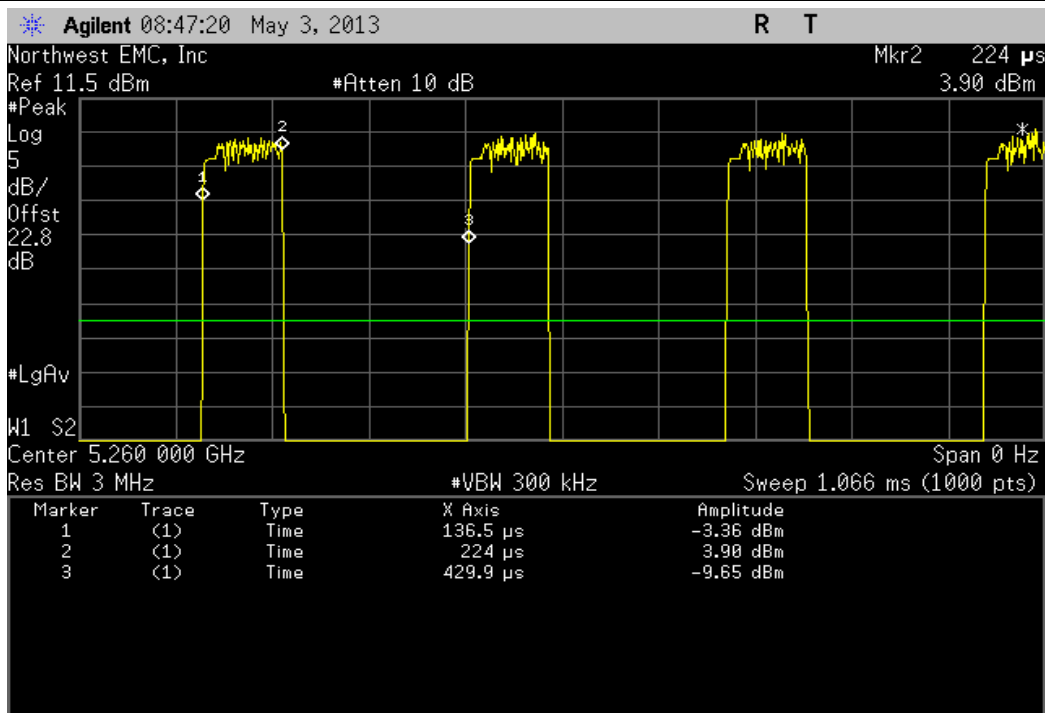
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
88.516 uS	284.766 uS	1	31.1	N/A	N/A	



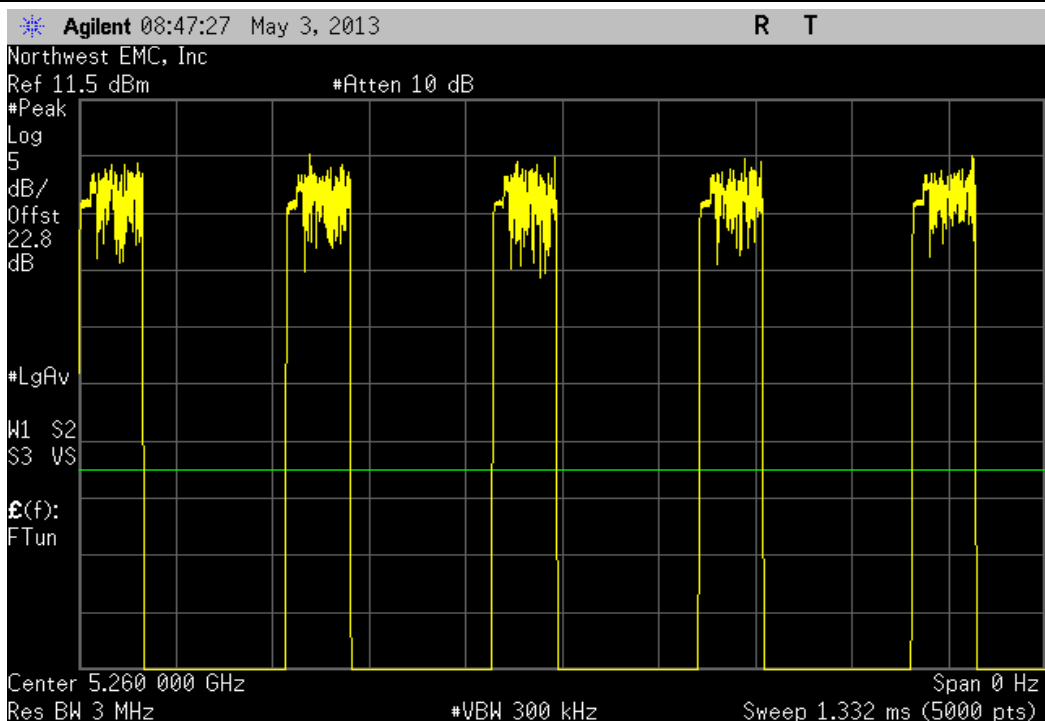
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



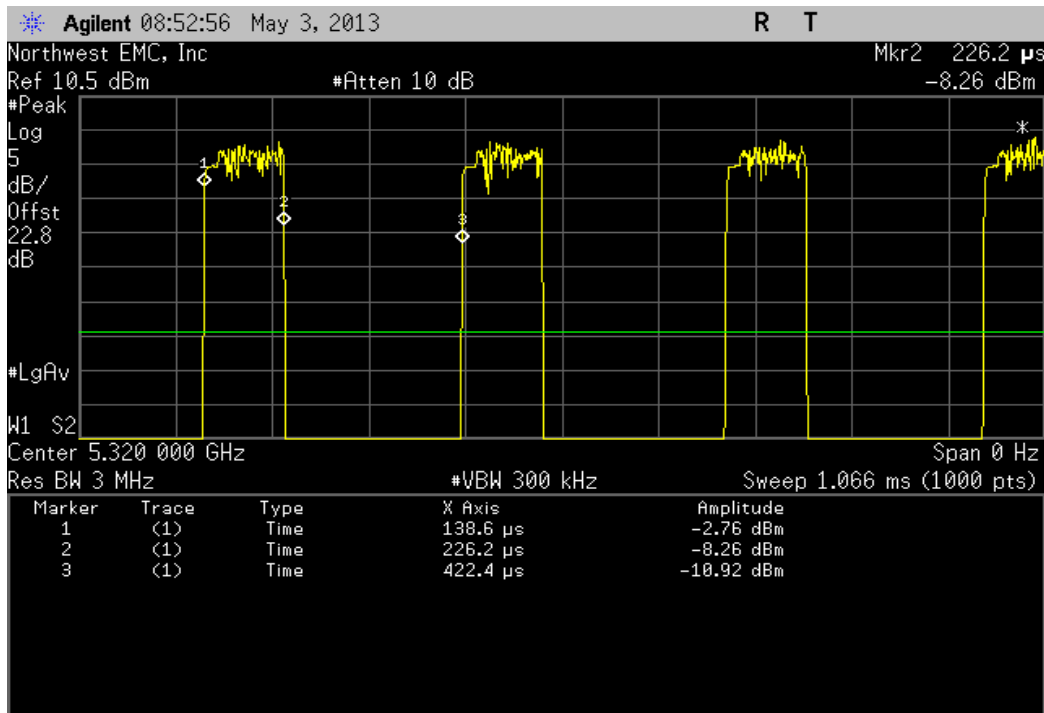
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
87.449 uS	293.333 uS	1	29.8	N/A	N/A	



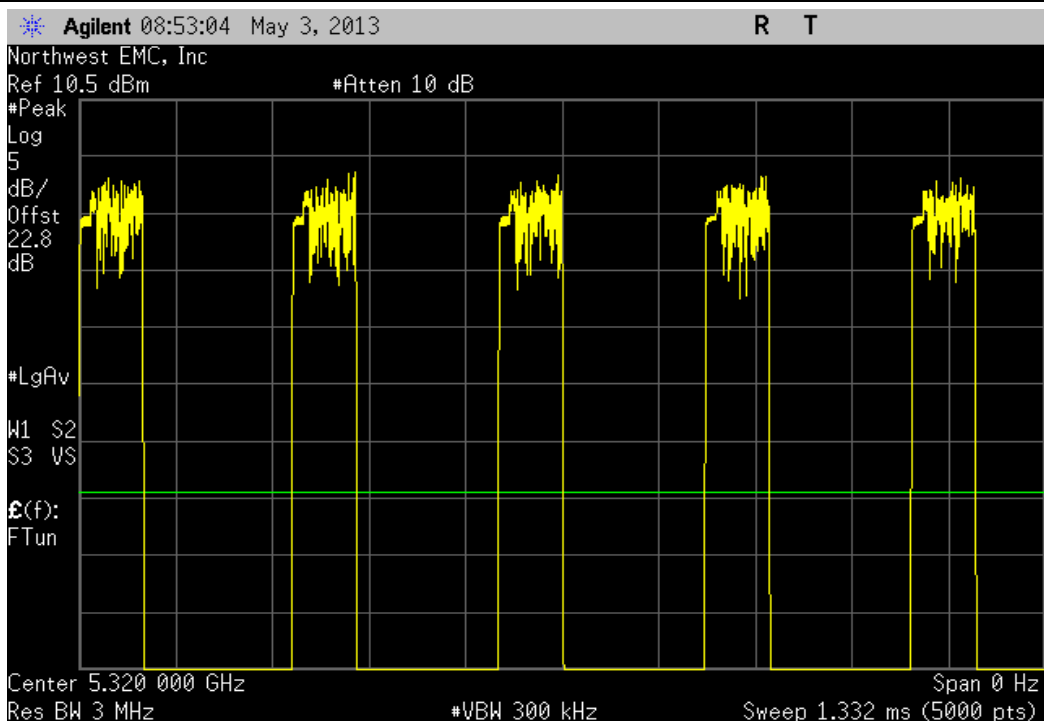
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



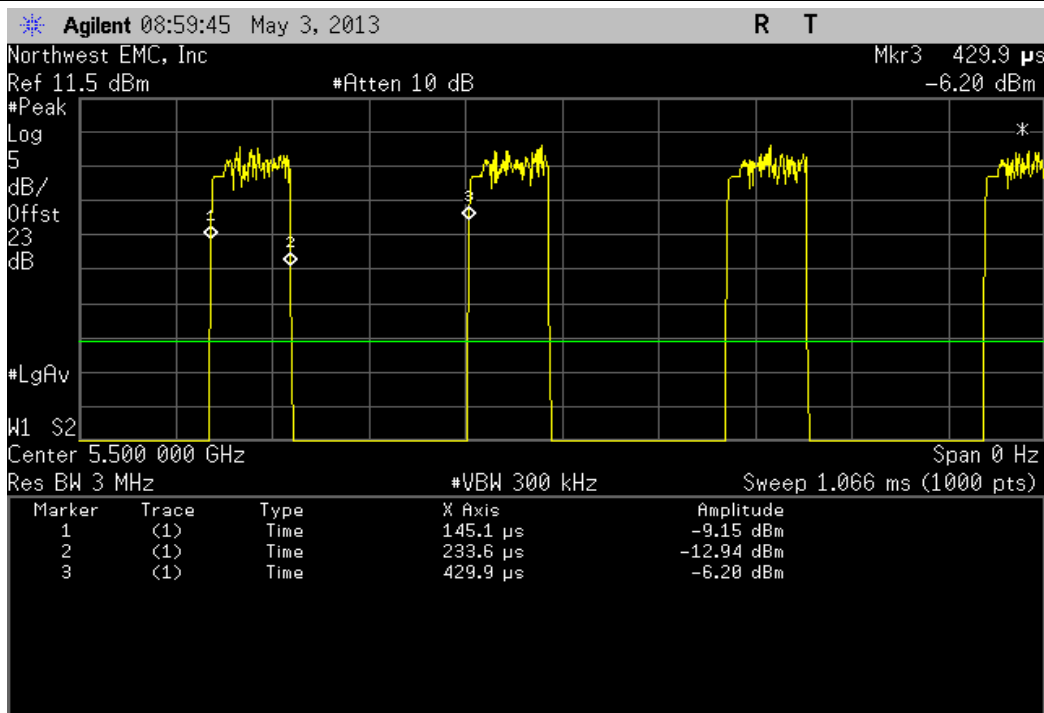
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
87.501 uS	283.733 uS	1	30.8	N/A	N/A	



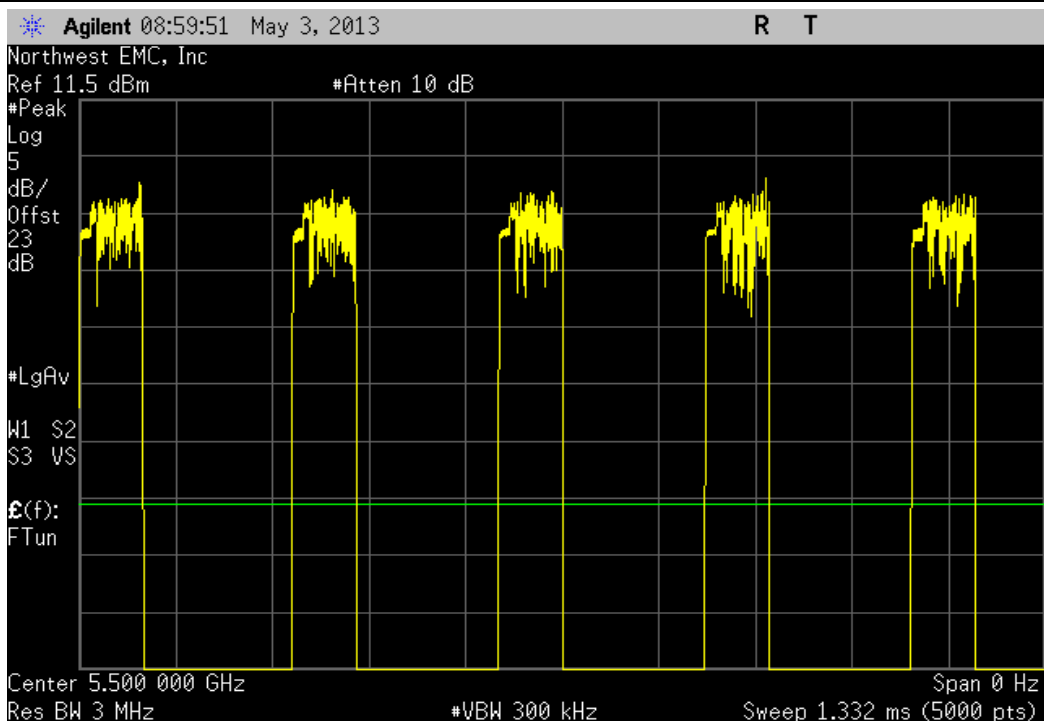
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



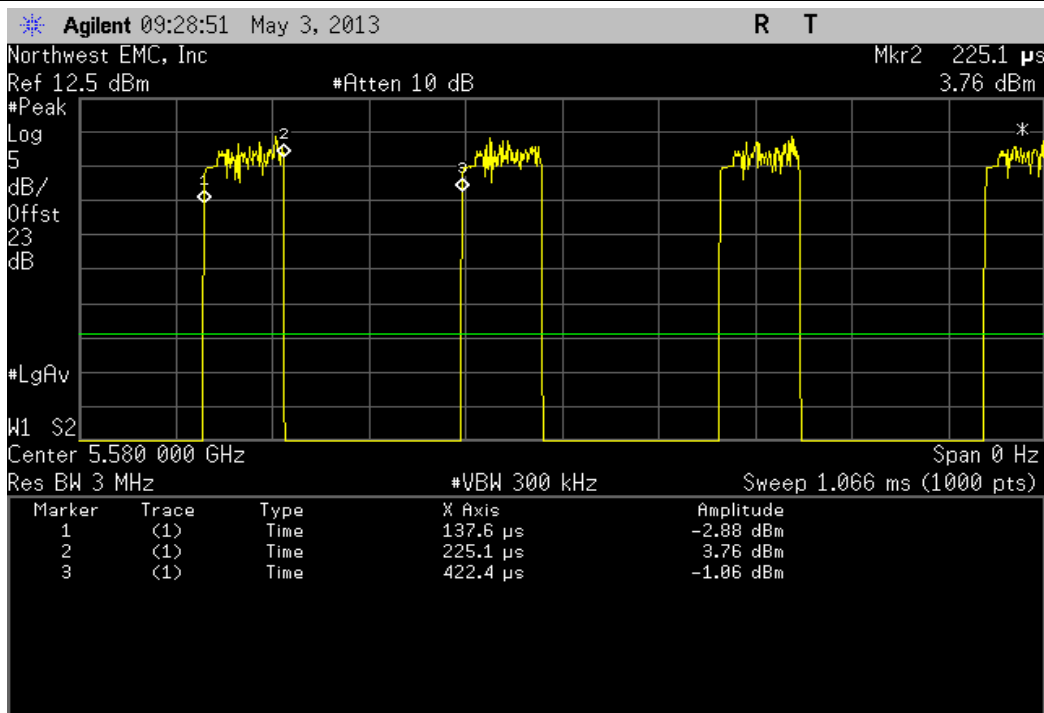
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
88.516 uS	284.8 uS	1	31.1	N/A	N/A	



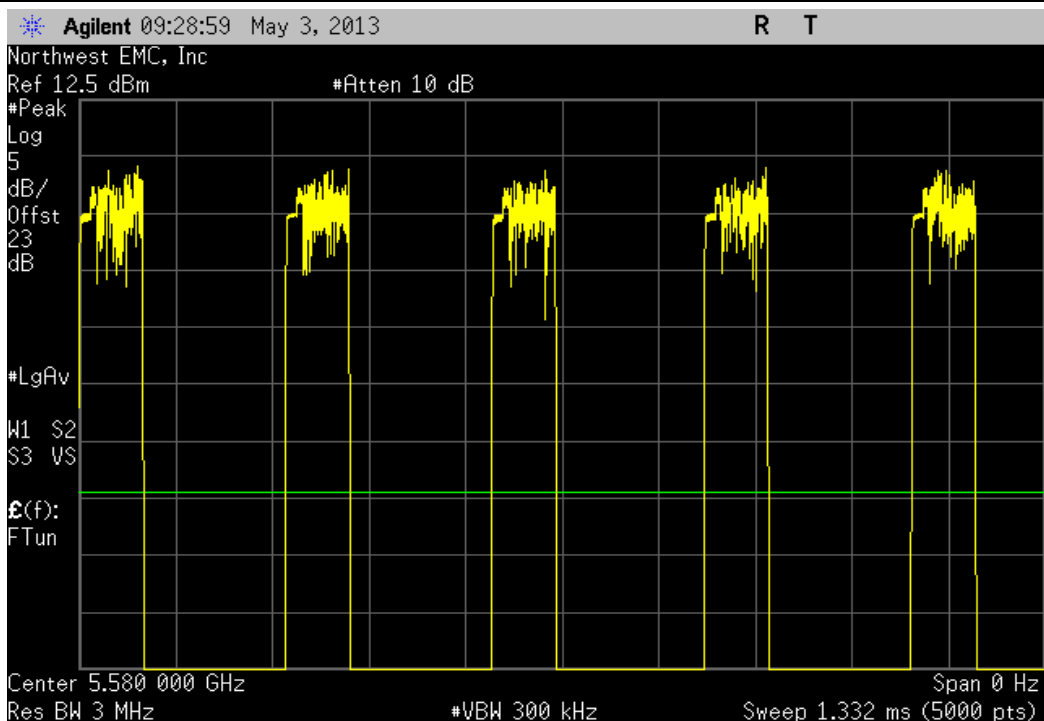
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



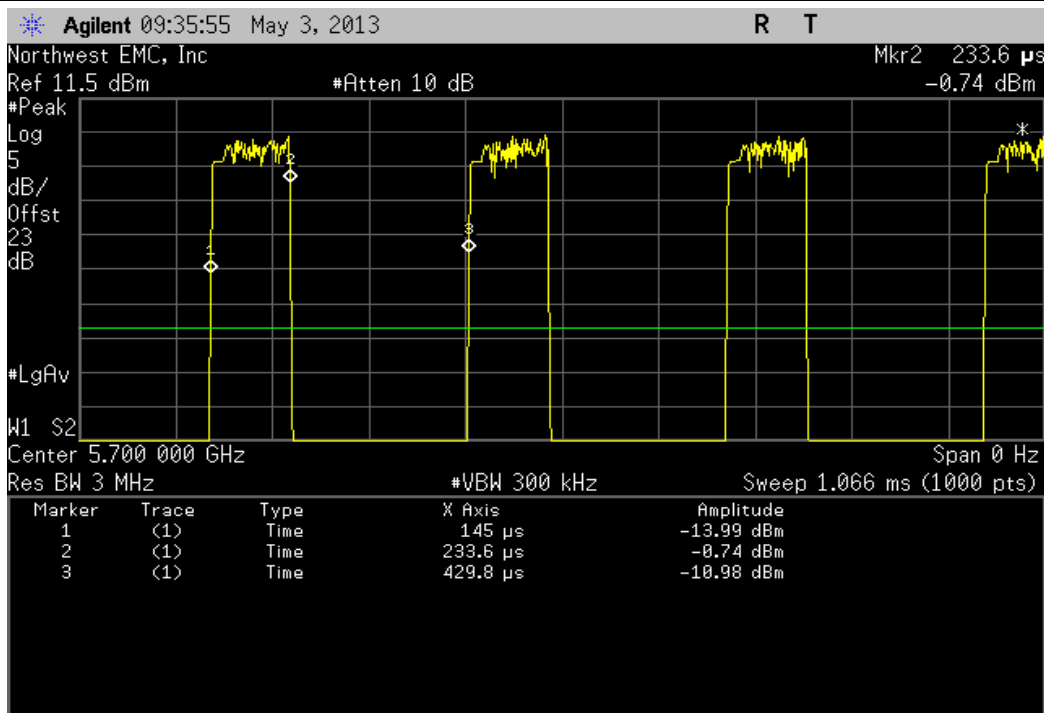
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
87.501 μ s	284.8 μ s	1	30.7	N/A	N/A	



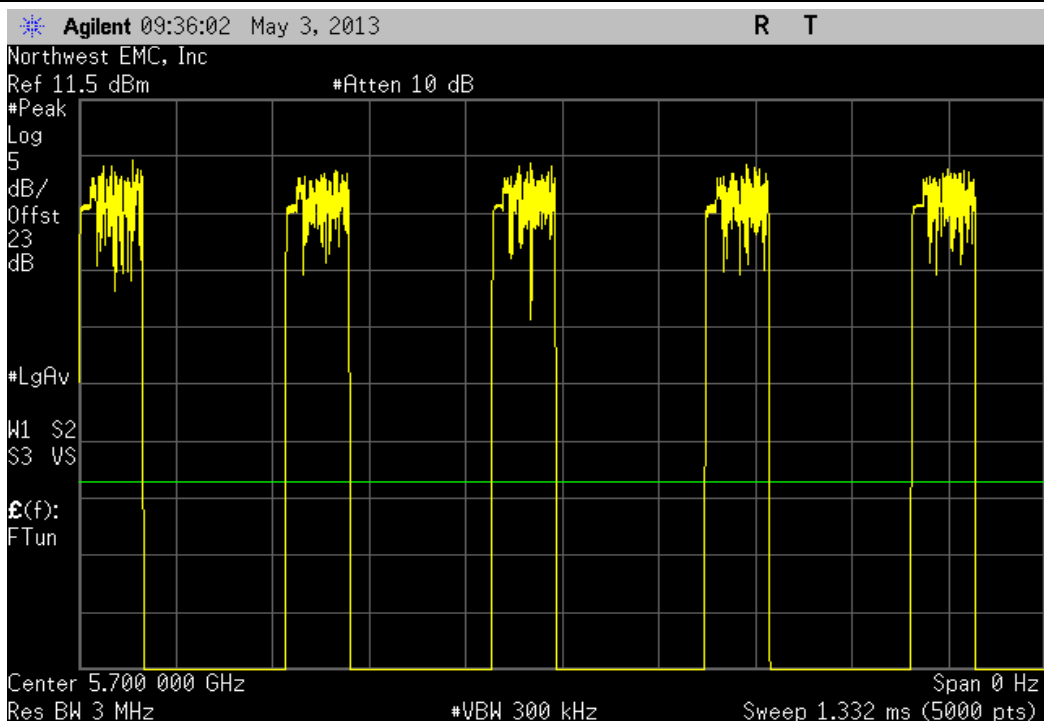
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
88.568 μ s	284.8 μ s	1	31.1	N/A	N/A	



802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Result	
N/A	N/A	5	N/A	N/A	N/A	



Peak Transmit 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, 6dB	S.M. Electronics	18N-06	AWN	3/25/2013	12
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0
Power Meter	Gigatronics	8651A	SPM	1/9/2012	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	24
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	3/5/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	6/25/2012	12
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section E was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The data rate(s) listed in the datasheet were tested. 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 power spectral density, the transmission pulse duration (T) was measured. The transmission pulse duration and the associated data are found elsewhere in this test report.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- RBW = 1 MHz, VBW ≥ 3 MHz
- Sample detector was used because Method SA-1 Alternate was used to measure the Maximum Conducted Output Power.
- Trace average 100 traces in power averaging mode (not video averaging).

The peak power spectral density (PPSD) was determined to be the highest level found across the emission in any 1 MHz band after 100 sweeps of power averaging (not video averaging).



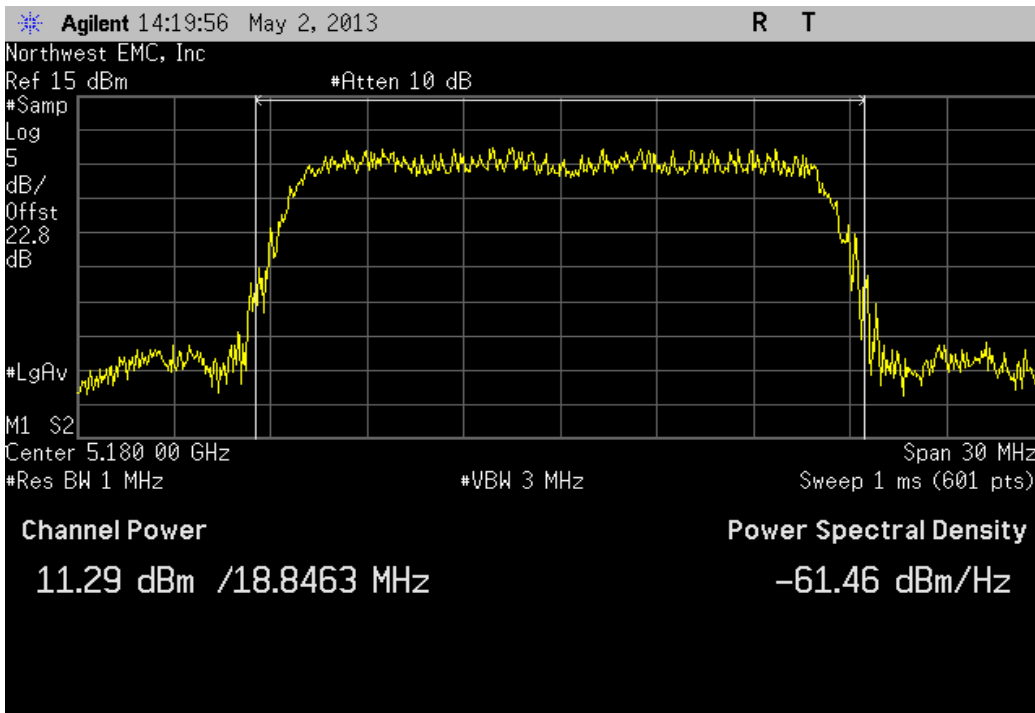
Peak Transmit Power

XMit 2013.02.28
PsaTx 2013.01.10

EUT: Model 444-2225 (Athena UFL)		Work Order: FOCU0140	
Serial Number: 02EA4D000027		Date: 05/03/13	
Customer: Summit Semiconductor		Temperature: 24°C	
Attendees: None		Humidity: 30%	
Project: None		Barometric Pres.: 1023	
Tested by: Brandon Hobbs		Power: 3.3V DC	
		Job Site: EV06	
TEST SPECIFICATIONS			
FCC 15.407:2013		Test Method	
		ANSI C63.10:2009	
COMMENTS			
All testing was completed on the highest output power antenna port A2.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	5	Signature 	
		Value	Limit
			Result
802.11(a) 6 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		11.292 dBm	< 17 dBm
Channel 48, High Channel 5240 MHz		11.465 dBm	< 17 dBm
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		11.037 dBm	< 24 dBm
Channel 64, High Channel 5320 MHz		11.419 dBm	< 24 dBm
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		11.275 dBm	< 24 dBm
Channel 116, Mid Channel 5580 MHz		11.051 dBm	< 24 dBm
Channel 140, High Channel 5700 MHz		11.267 dBm	< 24 dBm
802.11(a) 18 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		11.049 dBm	< 17 dBm
Channel 48, High Channel 5240 MHz		11.712 dBm	< 17 dBm
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		11.294 dBm	< 24 dBm
Channel 64, High Channel 5320 MHz		11.729 dBm	< 24 dBm
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		11.421 dBm	< 24 dBm
Channel 116, Mid Channel 5580 MHz		11.279 dBm	< 24 dBm
Channel 140, High Channel 5700 MHz		10.984 dBm	< 24 dBm

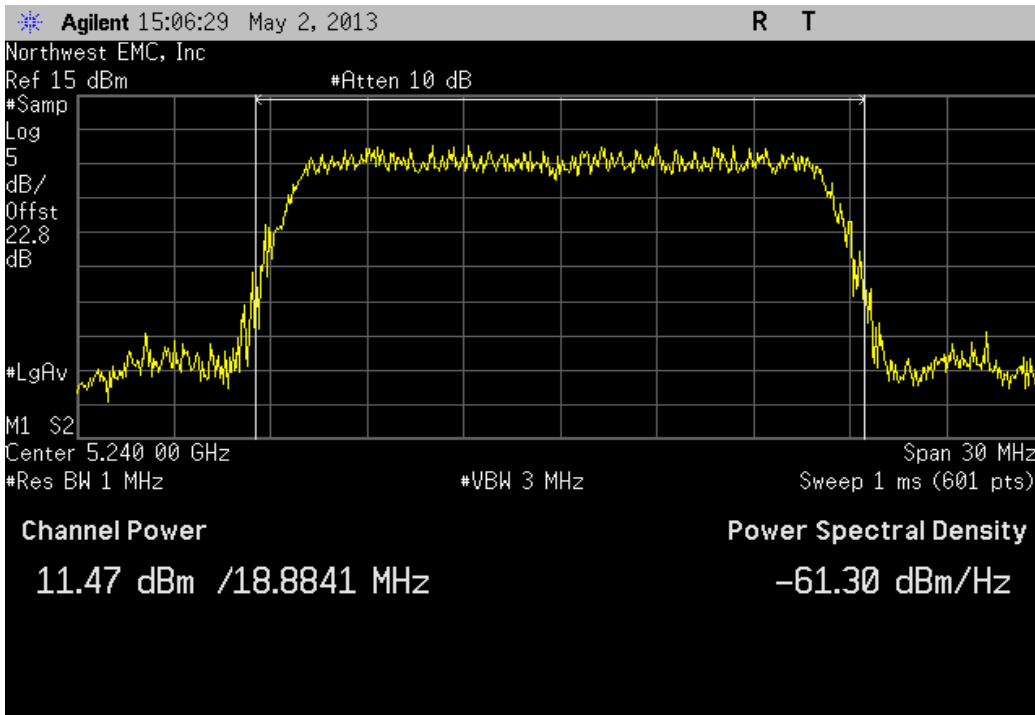
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz

Value	Limit	Result
11.292 dBm	< 17 dBm	Pass



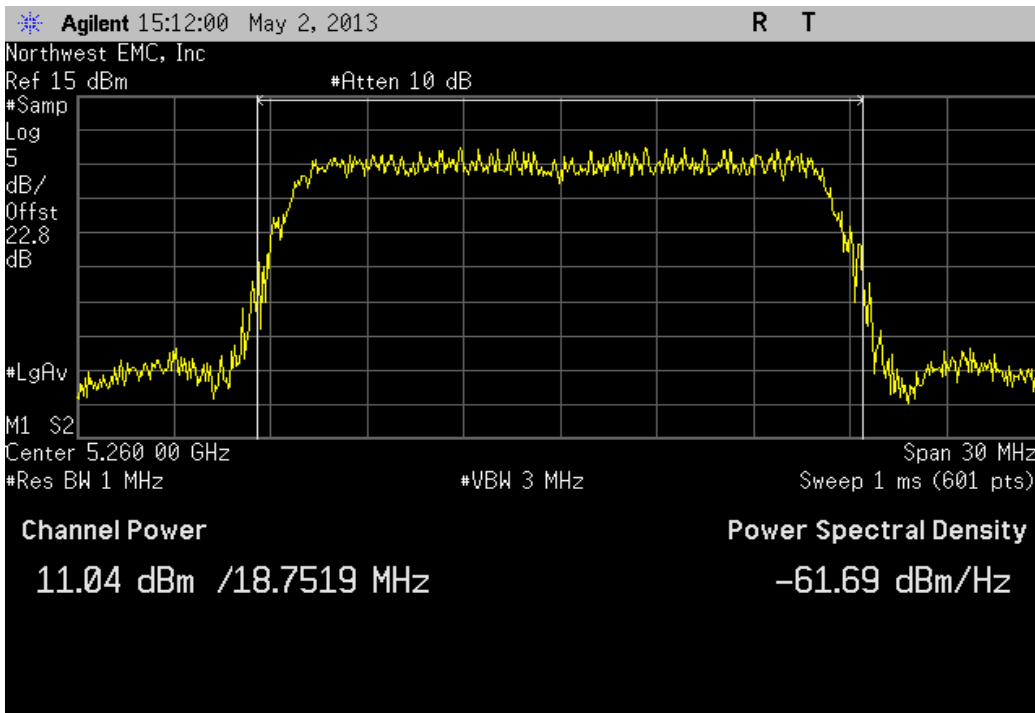
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz

Value	Limit	Result
11.465 dBm	< 17 dBm	Pass



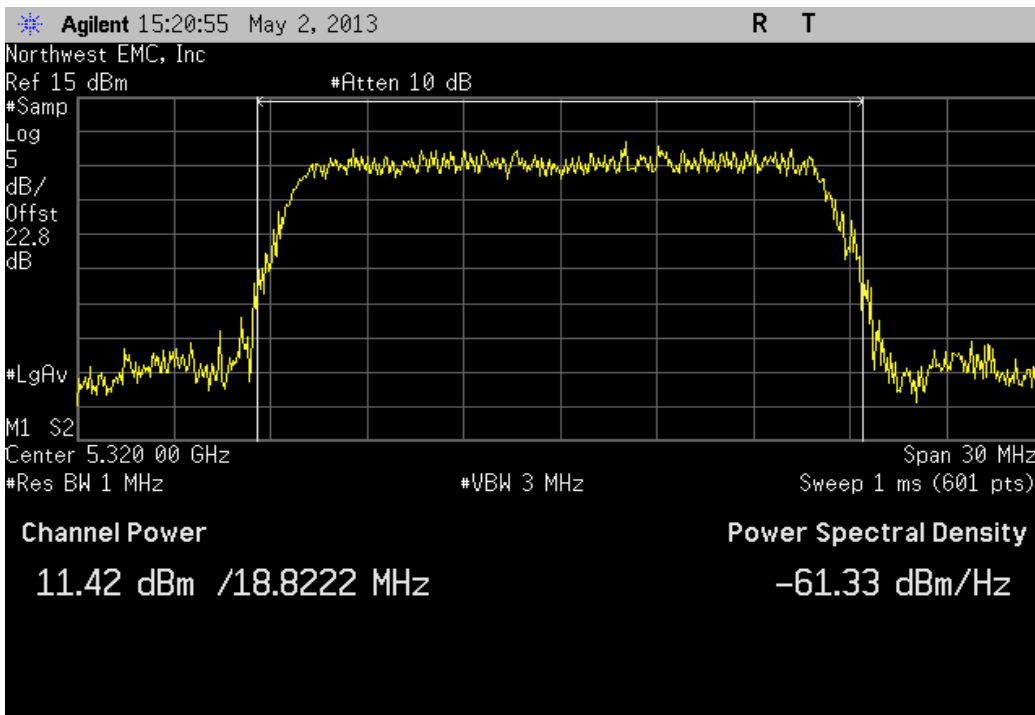
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz

Value	Limit	Result
11.037 dBm	< 24 dBm	Pass



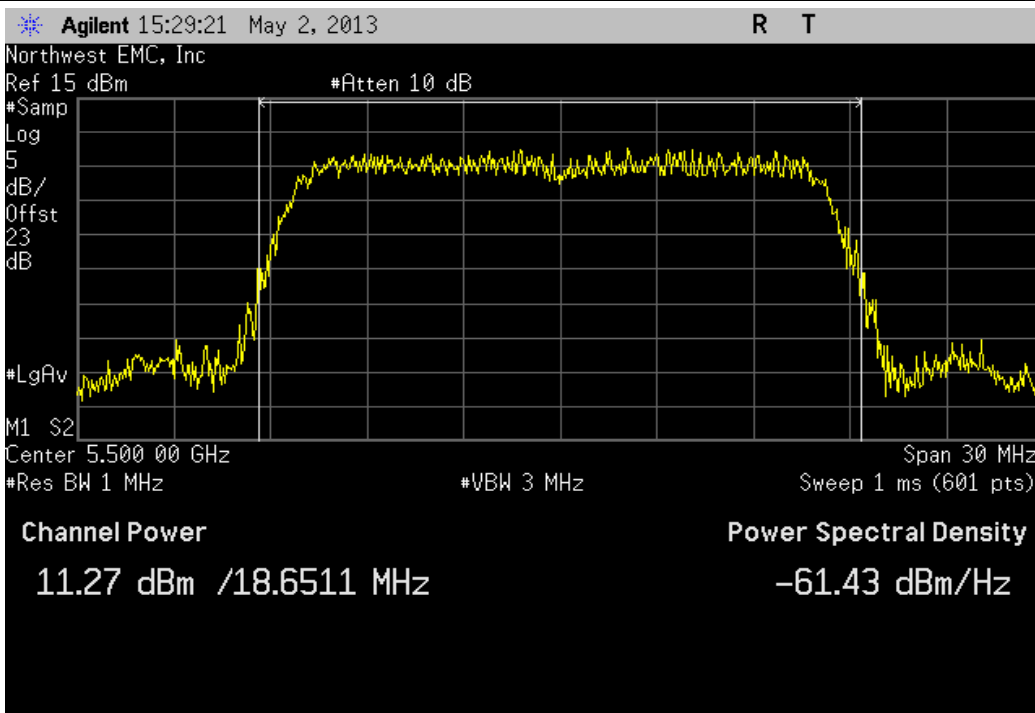
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz

Value	Limit	Result
11.419 dBm	< 24 dBm	Pass



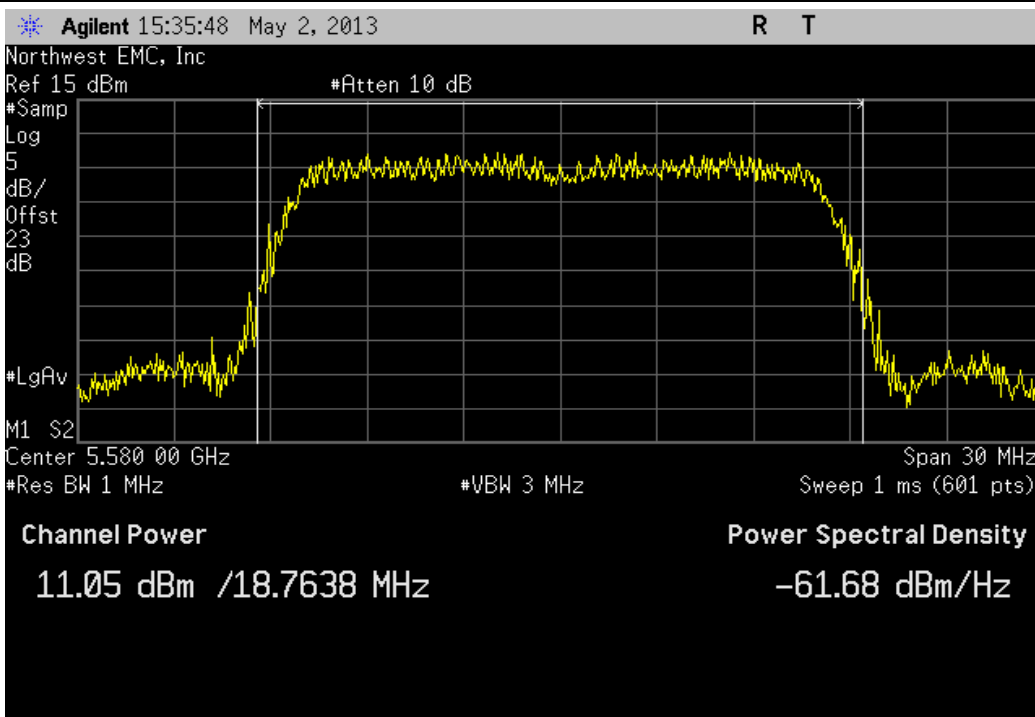
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

Value	Limit	Result
11.275 dBm	< 24 dBm	Pass



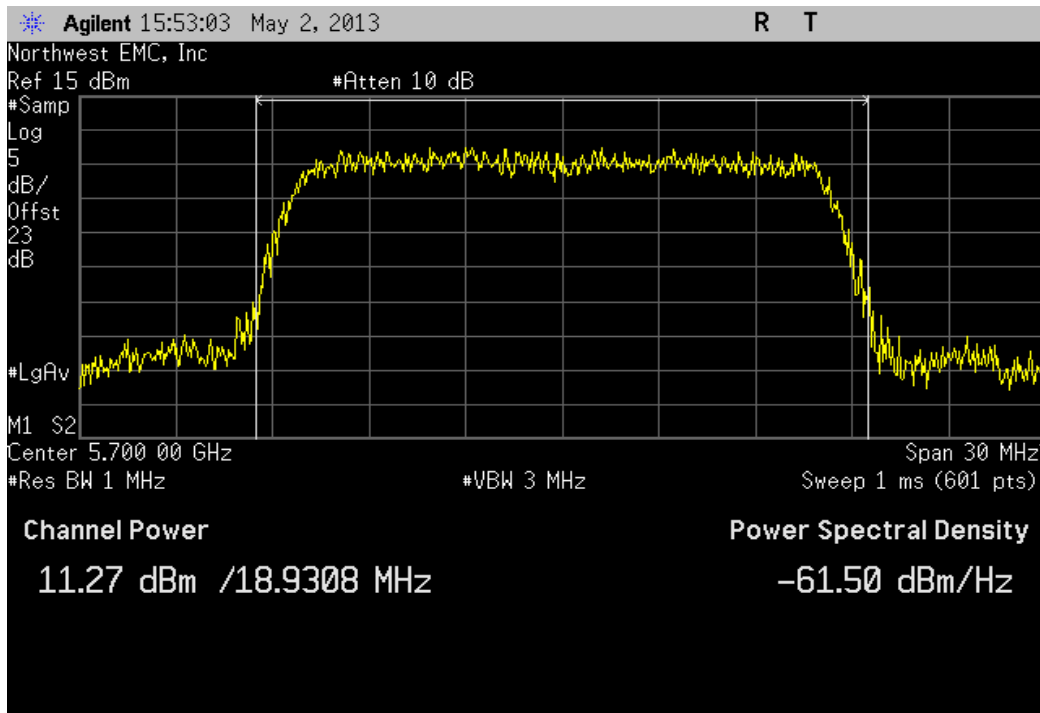
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

Value	Limit	Result
11.051 dBm	< 24 dBm	Pass



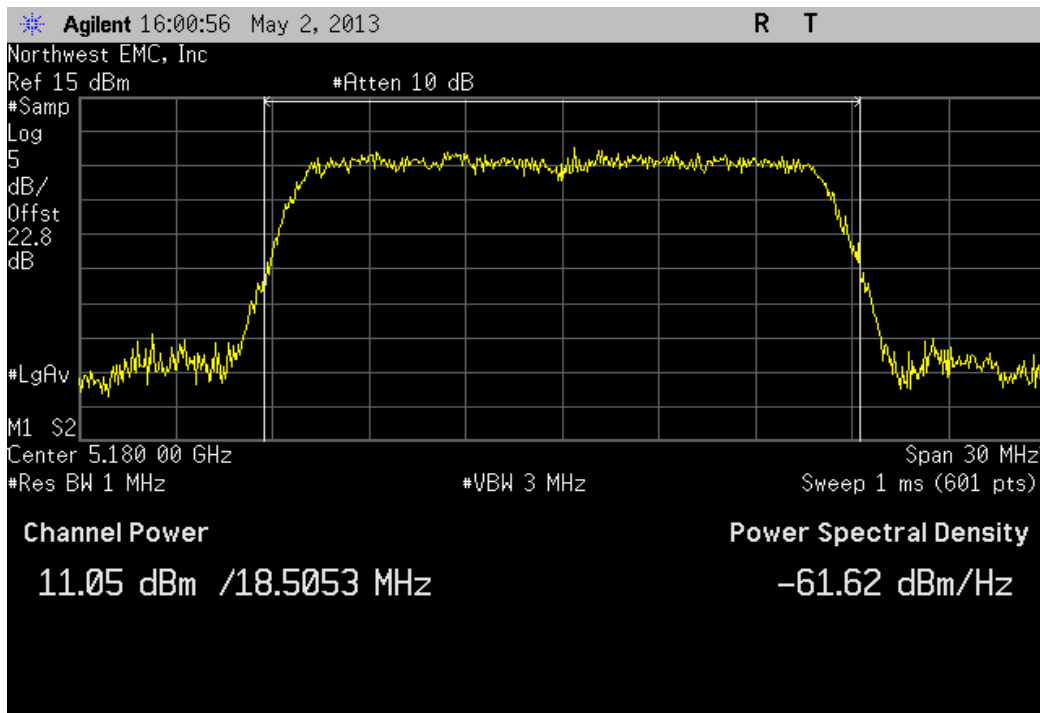
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

Value	Limit	Result
11.267 dBm	< 24 dBm	Pass



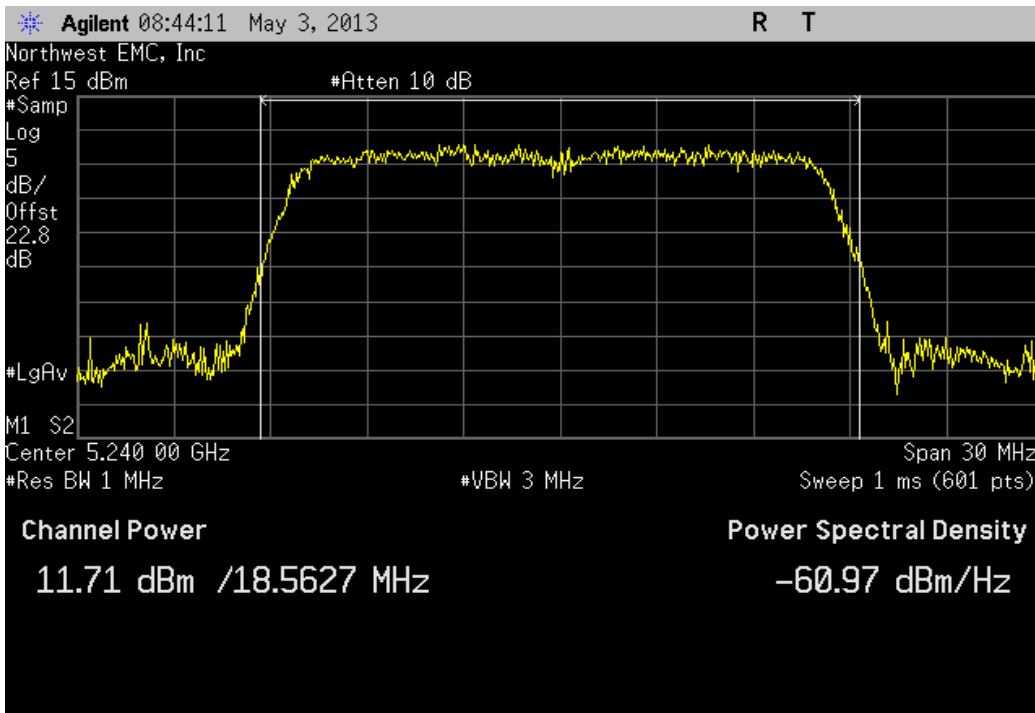
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz

Value	Limit	Result
11.049 dBm	< 17 dBm	Pass



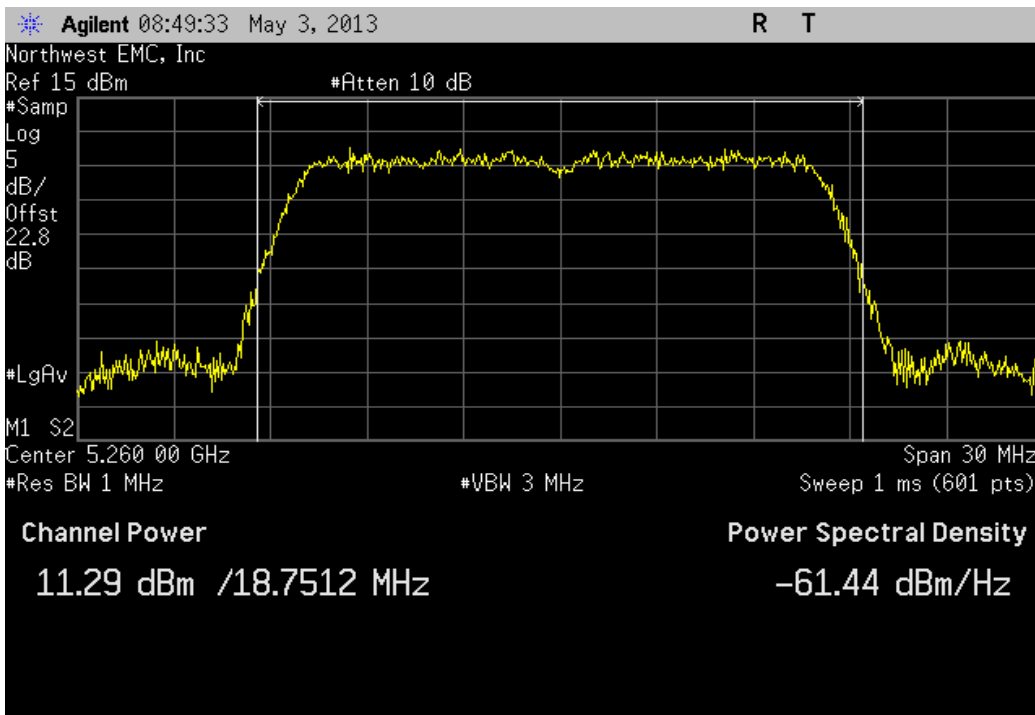
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz

	Value	Limit	Result
	11.712 dBm	< 17 dBm	Pass



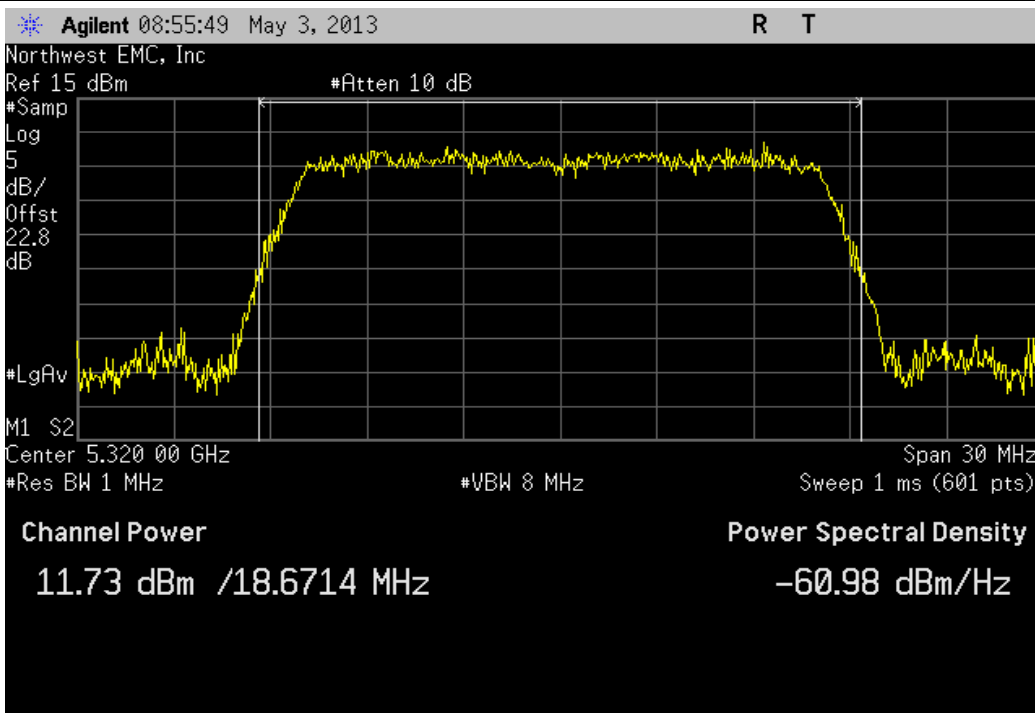
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz

	Value	Limit	Result
	11.294 dBm	< 24 dBm	Pass



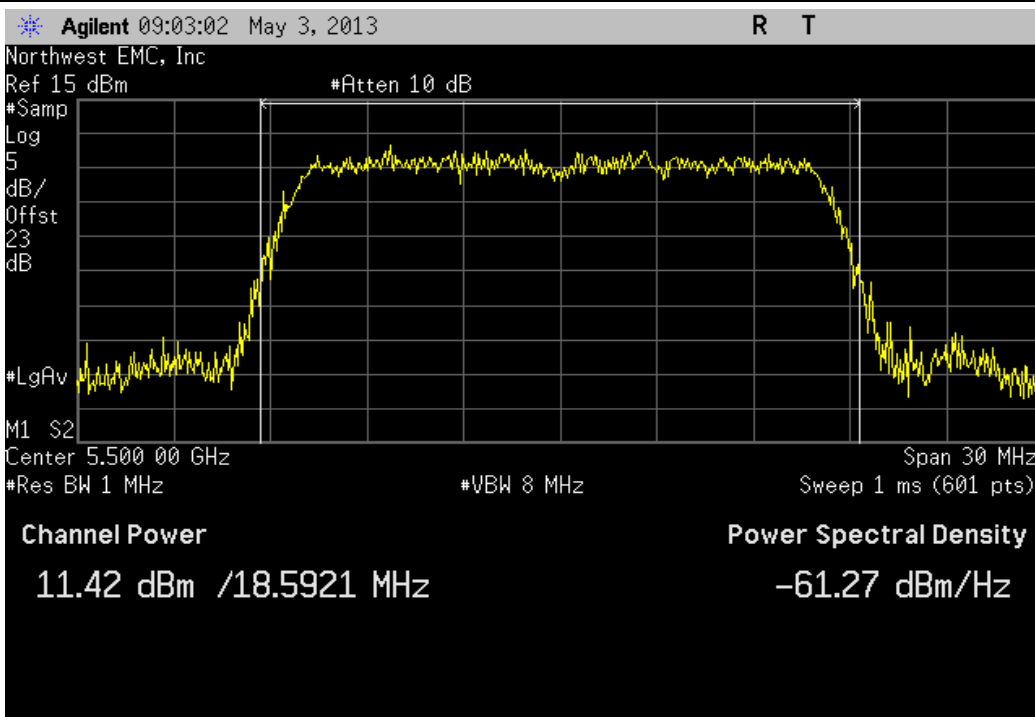
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz

Value	Limit	Result
11.729 dBm	< 24 dBm	Pass



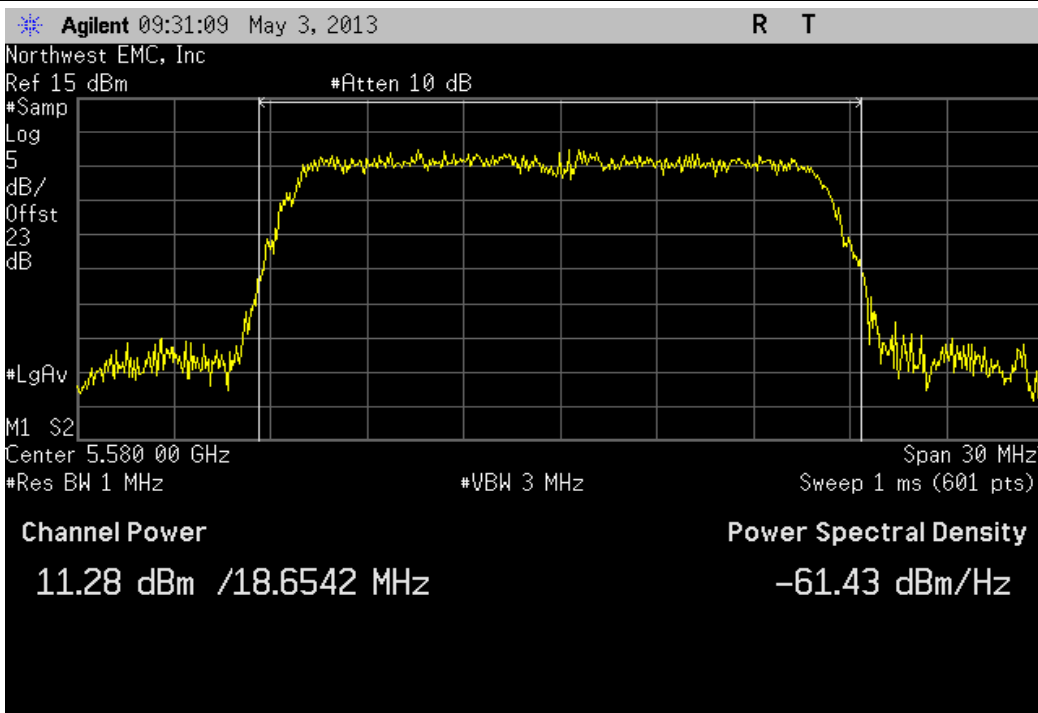
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

Value	Limit	Result
11.421 dBm	< 24 dBm	Pass



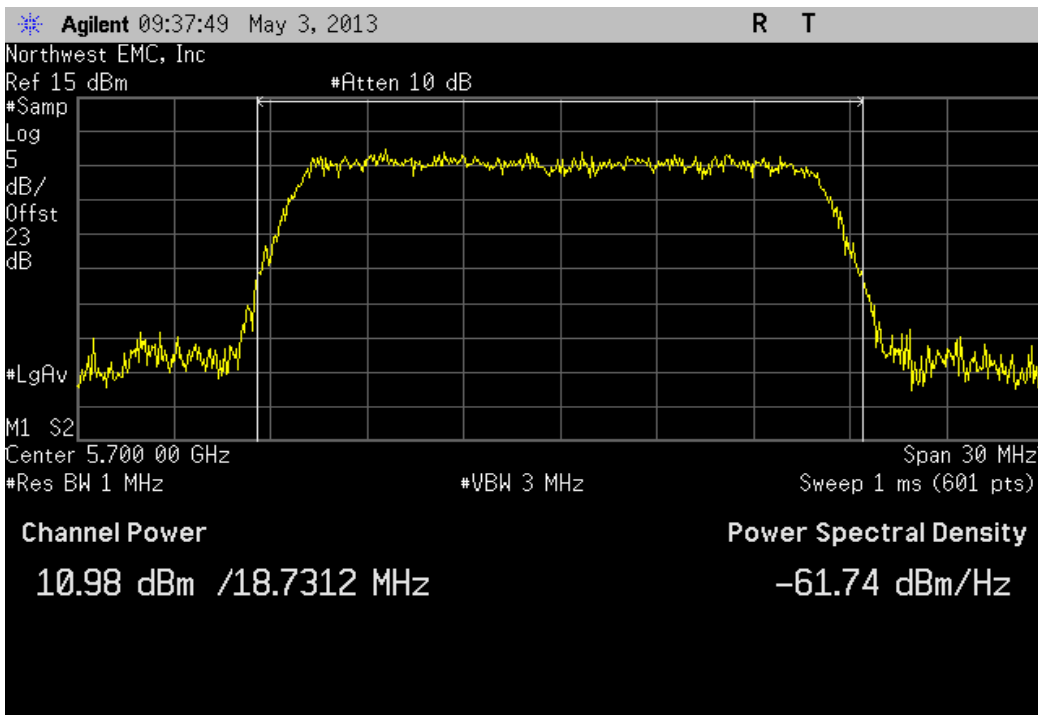
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

Value	Limit	Result
11.279 dBm	< 24 dBm	Pass



802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

Value	Limit	Result
10.984 dBm	< 24 dBm	Pass



Peak 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
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	3/25/2013	12
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0
Power Meter	Gigatronics	8651A	SPM	1/9/2012	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	24
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	3/5/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	6/25/2012	12
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section F was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The data rate(s) listed in the datasheet were tested. 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 power spectral density, the transmission pulse duration (T) was measured. The transmission pulse duration and the associated data are found elsewhere in this test report.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- RBW = 1 MHz, VBW ≥ 3 MHz
- Sample detector was used because Method SA-1 Alternate was used to measure the Maximum Conducted Output Power.
- Trace average 100 traces in power averaging mode (not video averaging).

The peak power spectral density (PPSD) was determined to be the highest level found across the emission in any 1 MHz band after 100 sweeps of power averaging (not video averaging).

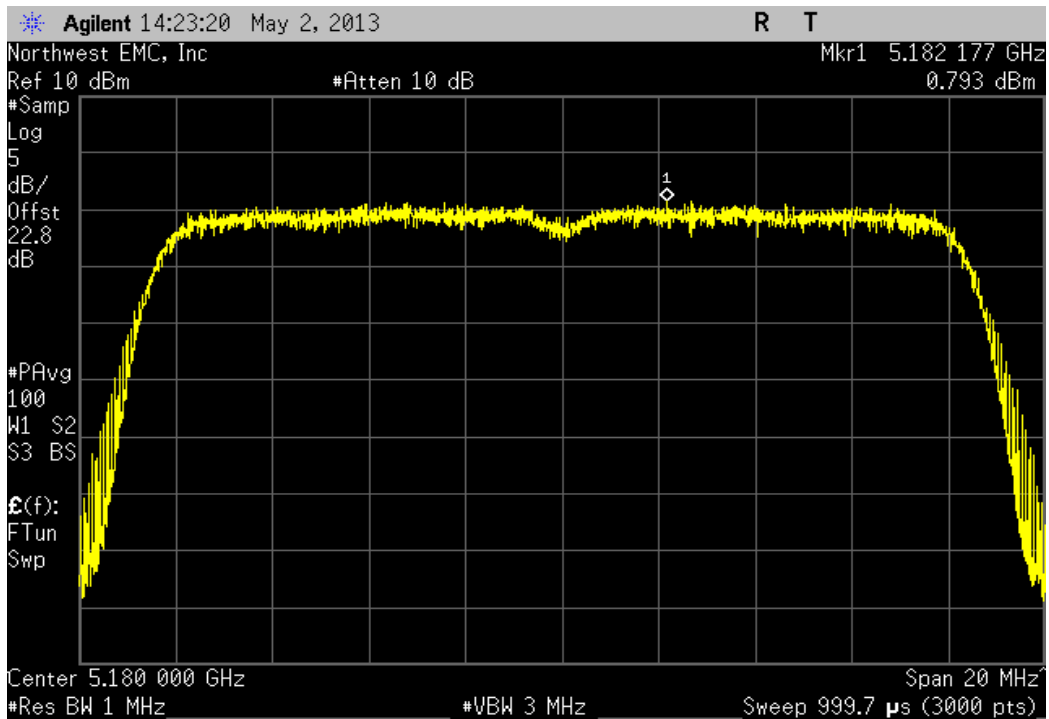


Peak Power Spectral Density

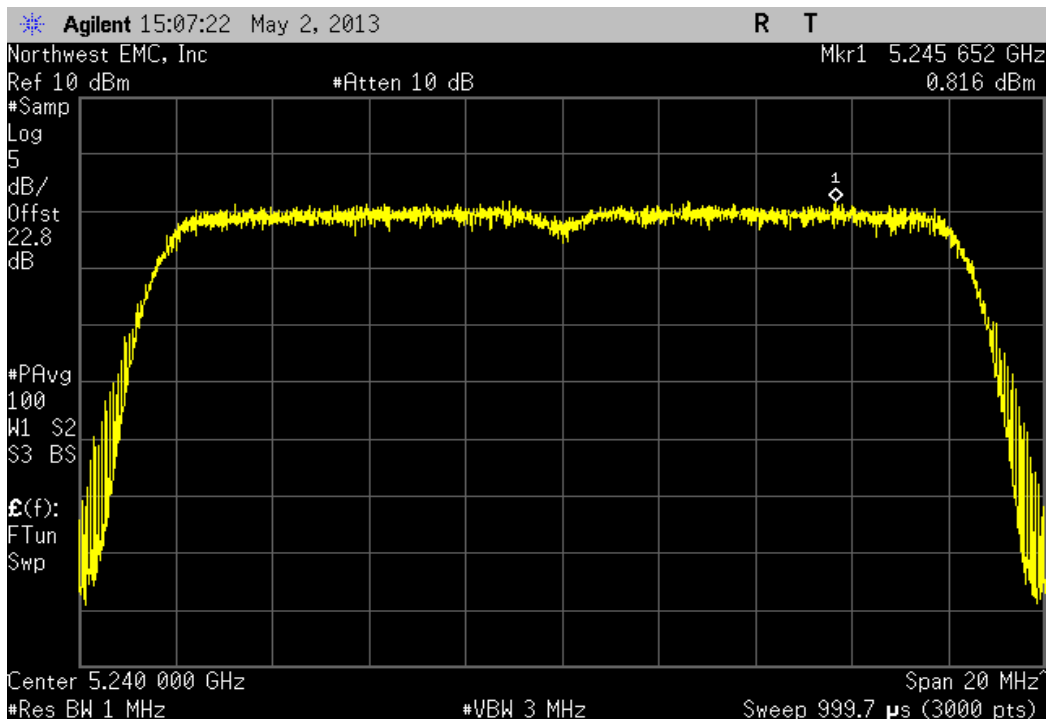
XMit 2013.02.28
PsaTx 2013.01.10

EUT: Model 444-2225 (Athena UFL)		Work Order: FOCU0140	
Serial Number: 02EA4D000027		Date: 05/03/13	
Customer: Summit Semiconductor		Temperature: 24°C	
Attendees: None		Humidity: 30%	
Project: None		Barometric Pres.: 1023	
Tested by: Brandon Hobbs		Power: 3.3V DC	
		Job Site: EV06	
TEST SPECIFICATIONS			
FCC 15.407:2013		Test Method	
		ANSI C63.10:2009	
COMMENTS			
All testing was completed on the highest output power antenna port A2.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	5	Signature 	
		Value (dBm / MHz)	Limit (dBm / MHz)
			Result
802.11(a) 6 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		0.793	4
Channel 48, High Channel 5240 MHz		0.816	4
Pass			
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		0.993	4
Channel 64, High Channel 5320 MHz		1.198	4
Pass			
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		0.671	4
Channel 116, Mid Channel 5580 MHz		0.824	4
Channel 140, High Channel 5700 MHz		1.354	4
Pass			
802.11(a) 18 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		1.47	4
Channel 48, High Channel 5240 MHz		2.758	4
Pass			
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		2.039	4
Channel 64, High Channel 5320 MHz		3.791	4
Pass			
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		2.419	4
Channel 116, Mid Channel 5580 MHz		2.414	4
Channel 140, High Channel 5700 MHz		2.179	4
Pass			

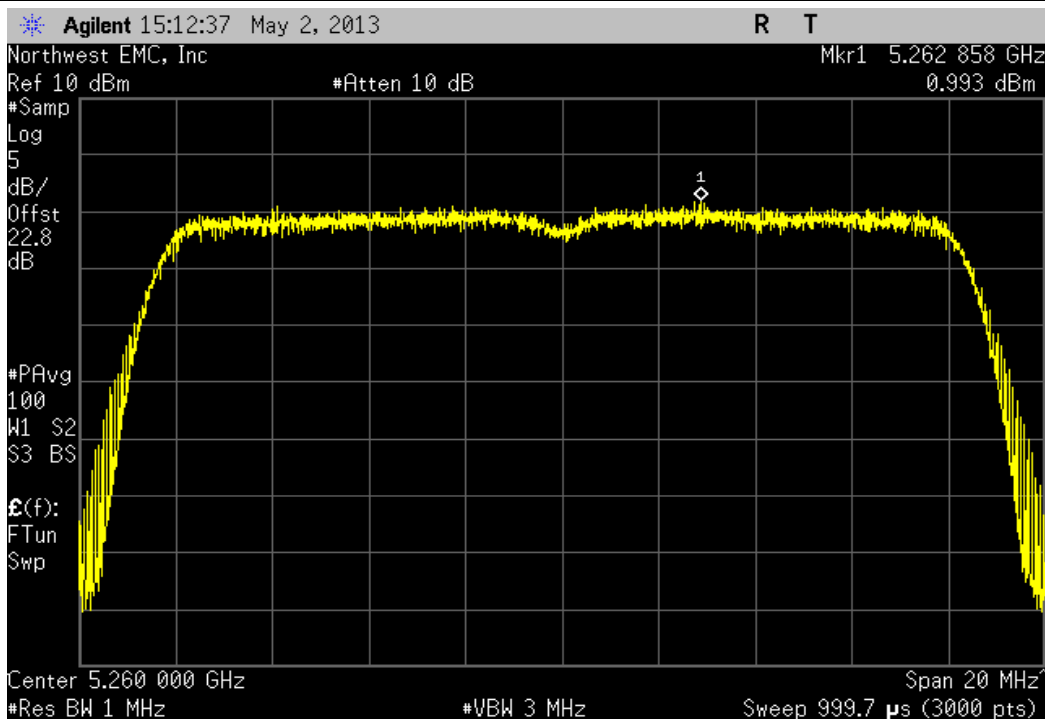
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz				Value	Limit	Result
				(dBm / MHz)	(dBm / MHz)	
				0.793	4	Pass



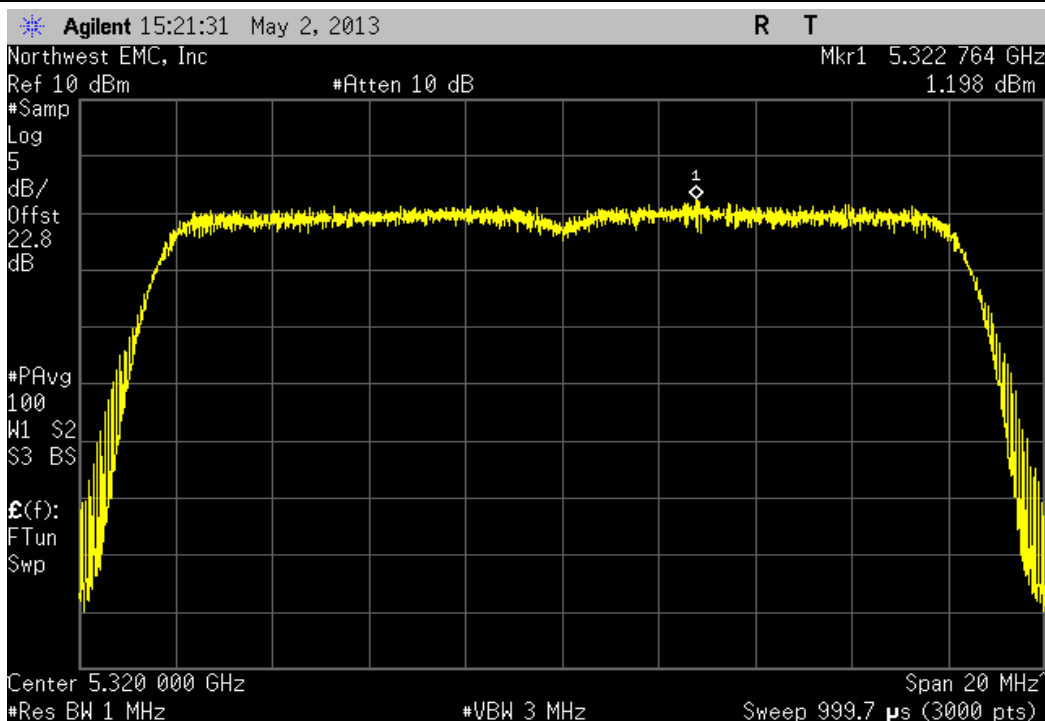
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz				Value	Limit	Result
				(dBm / MHz)	(dBm / MHz)	
				0.816	4	Pass



802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz				Value	Limit	Result
				(dBm / MHz)	(dBm / MHz)	
				0.993	4	Pass

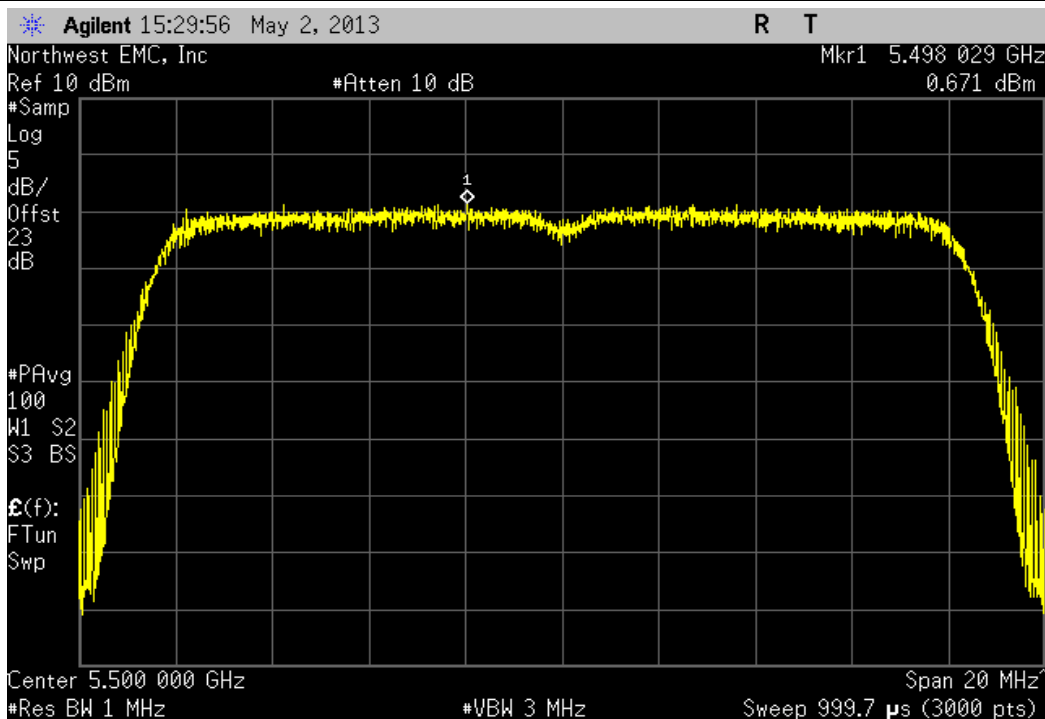


802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz				Value	Limit	Result
				(dBm / MHz)	(dBm / MHz)	
				1.198	4	Pass



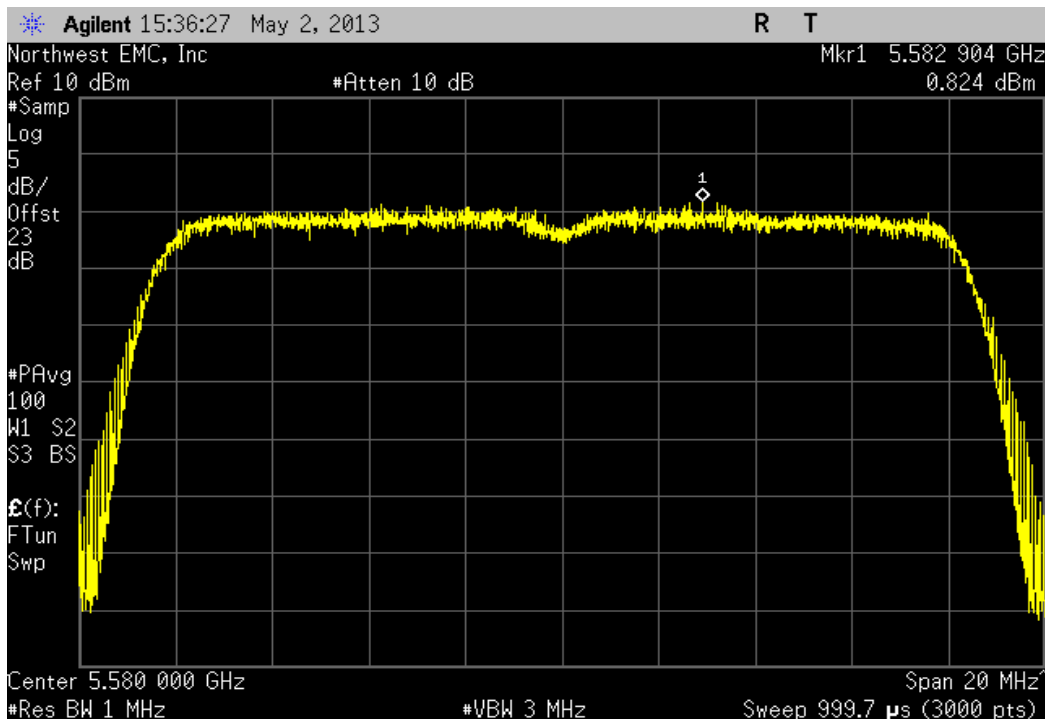
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
0.671	4	Pass



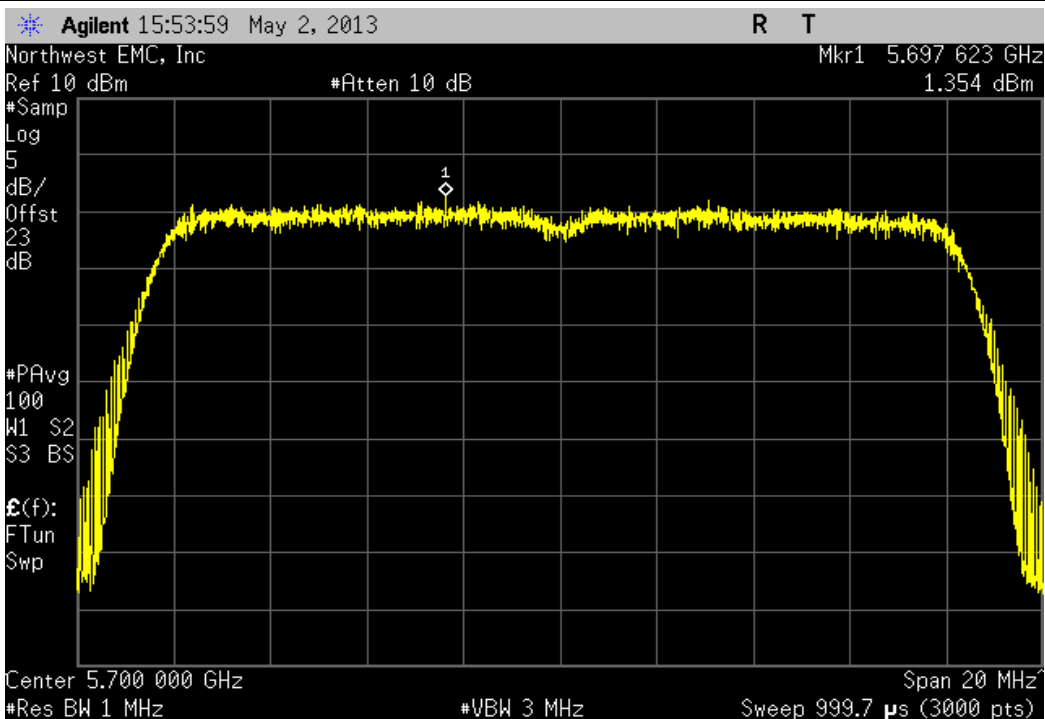
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
0.824	4	Pass



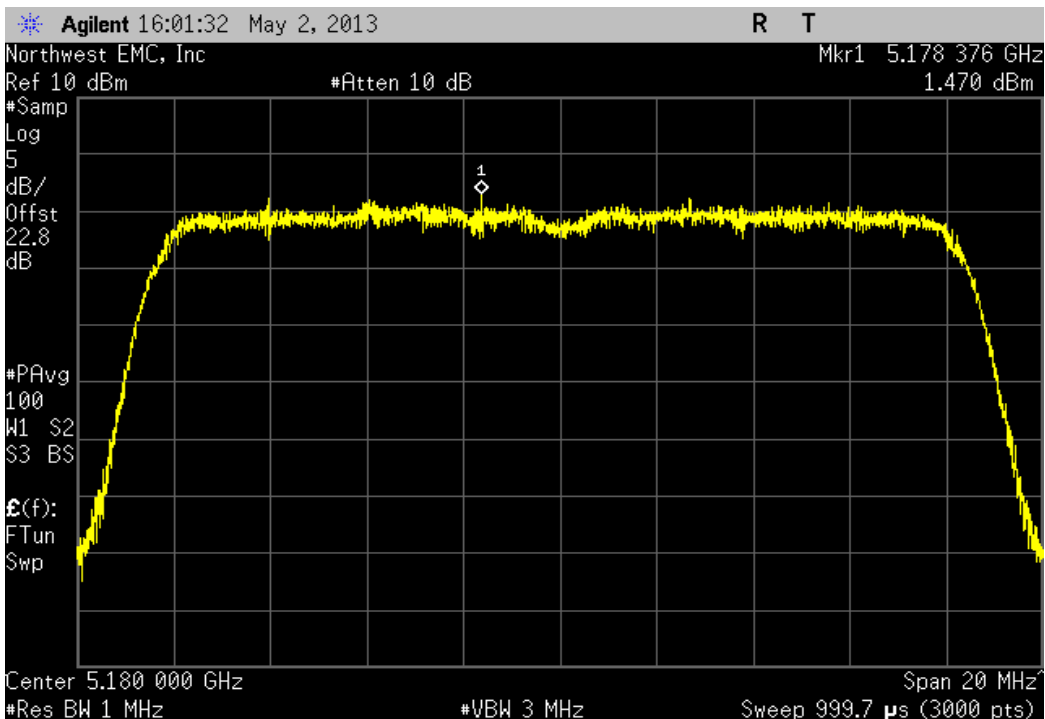
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
1.354	4	Pass



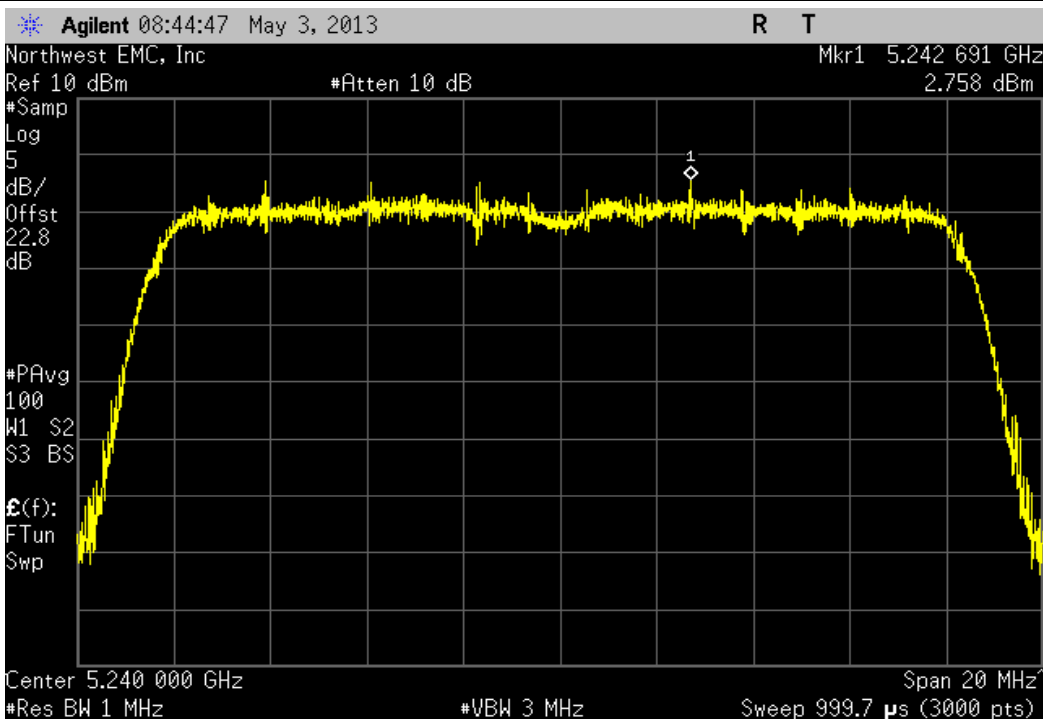
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
1.47	4	Pass



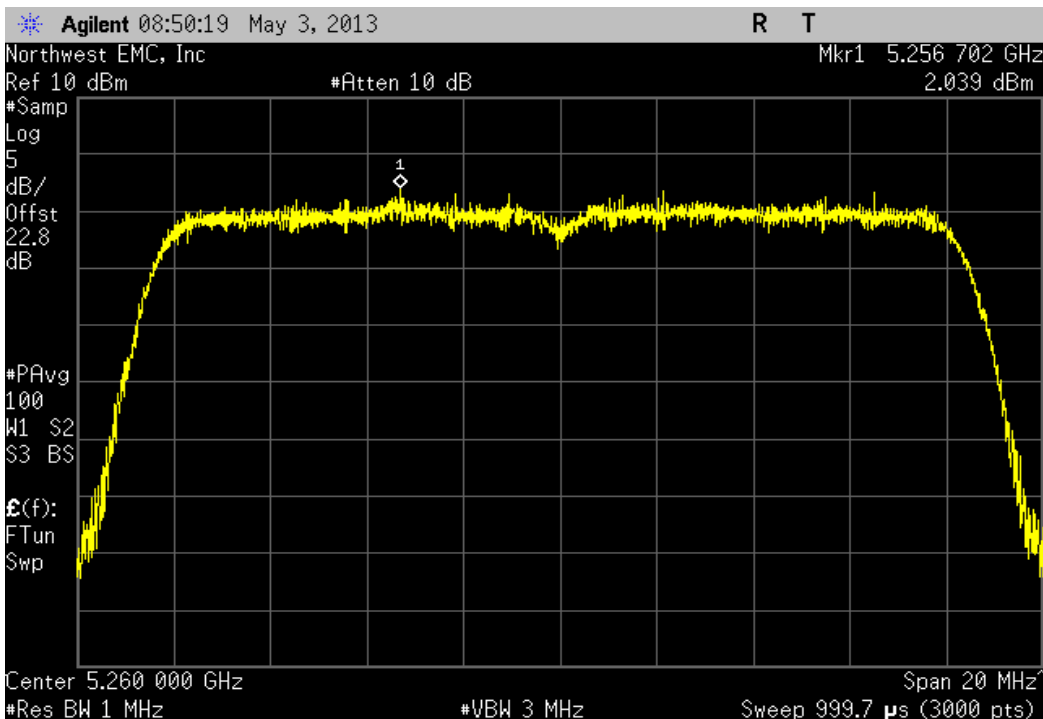
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
2.758	4	Pass



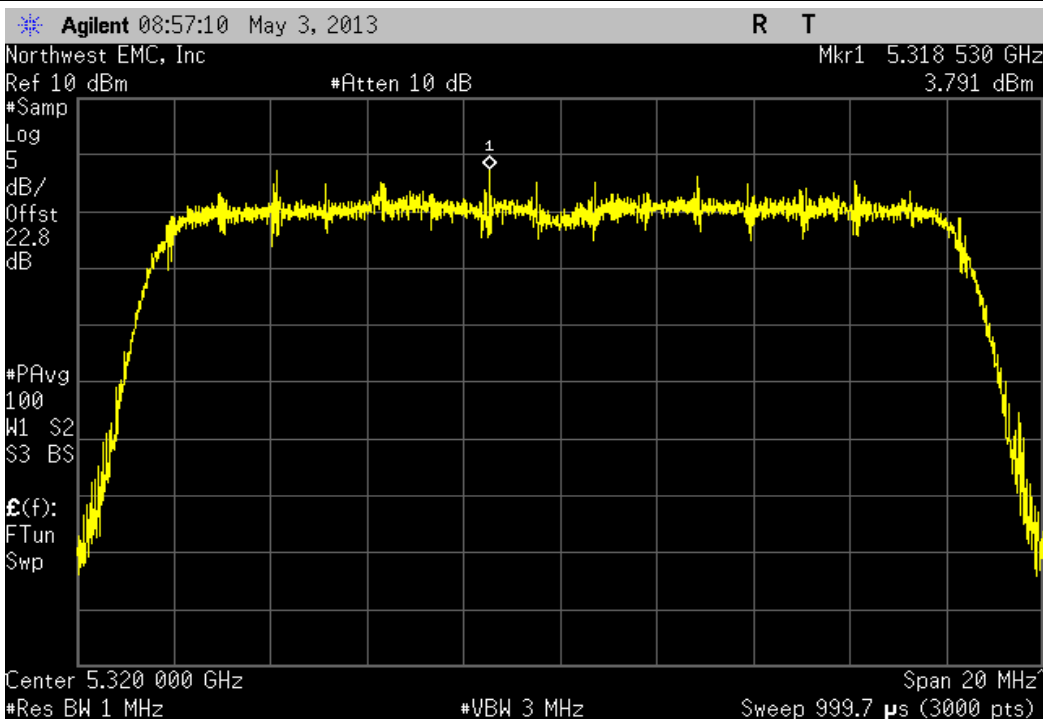
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
2.039	4	Pass



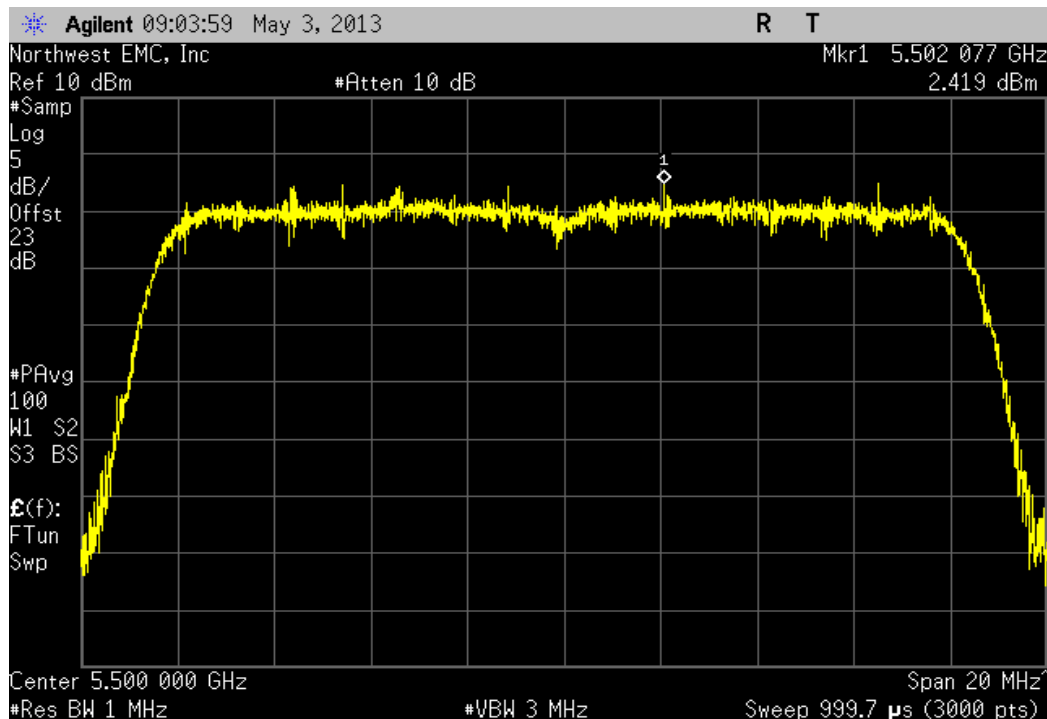
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
3.791	4	Pass



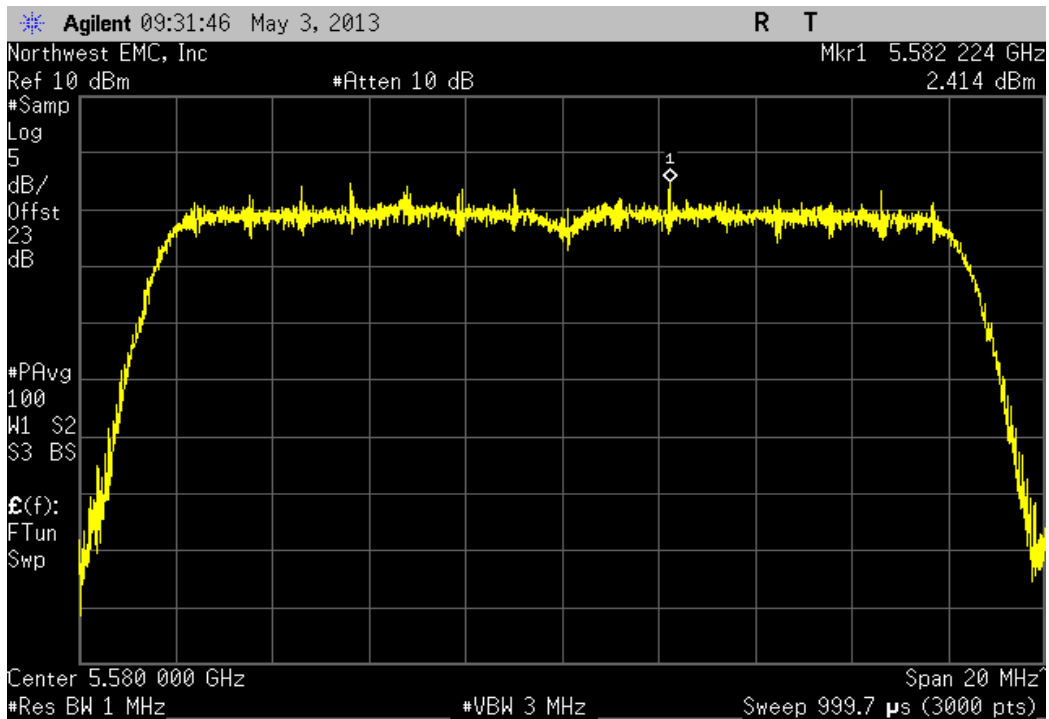
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
2.419	4	Pass



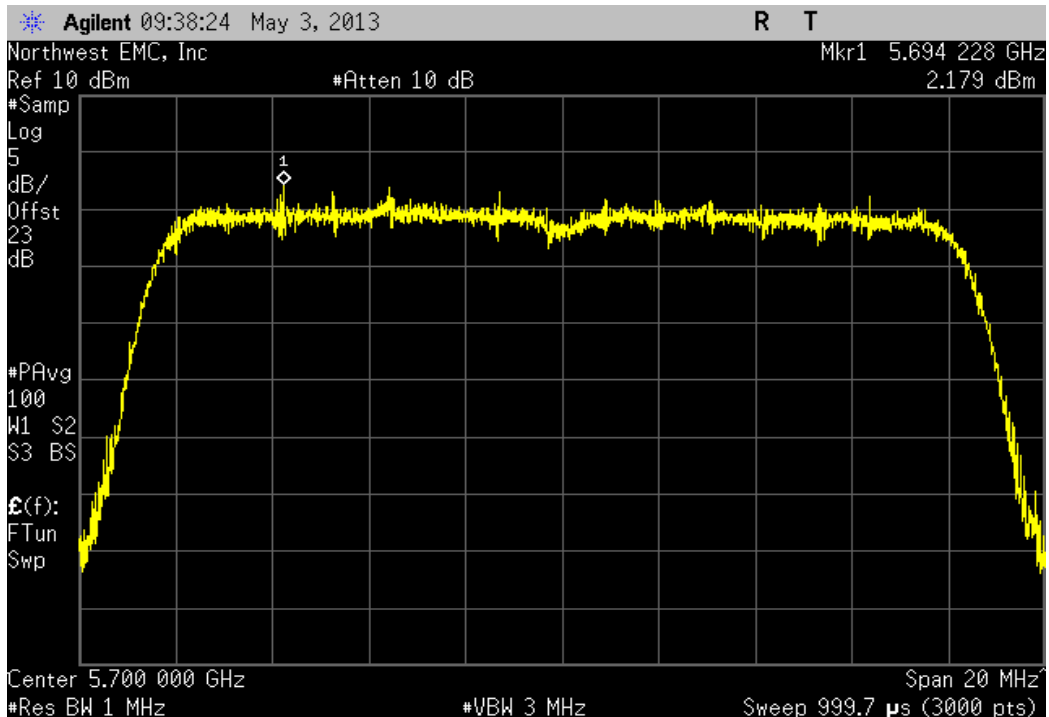
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
2.414	4	Pass



802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

Value (dBm / MHz)	Limit (dBm / MHz)	Result
2.179	4	Pass



Emission Bandwidth

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	3/25/2013	12
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0
Power Meter	Gigatronics	8651A	SPM	1/9/2012	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	24
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	3/5/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	6/25/2012	12
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section C was followed. The transmit frequency was set to the lowest, a medium, and the highest channels in each band. The transmit power was set to its default maximum. The data rate(s) listed in the datasheet were measured. 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.

The spectrum analyzer settings were as follows:

- Span = approximately 1.5 to 2 times the emission bandwidth, centered on the transmit channel.
- RBW = Approx. 1% of the emission bandwidth (B). This was an iterative process to determine the RBW based on the emissions bandwidth (B).
- A peak detector was used.

The spectrum analyzer Occupied Bandwidth measurement function was then used to measure 26 dB emission bandwidth.



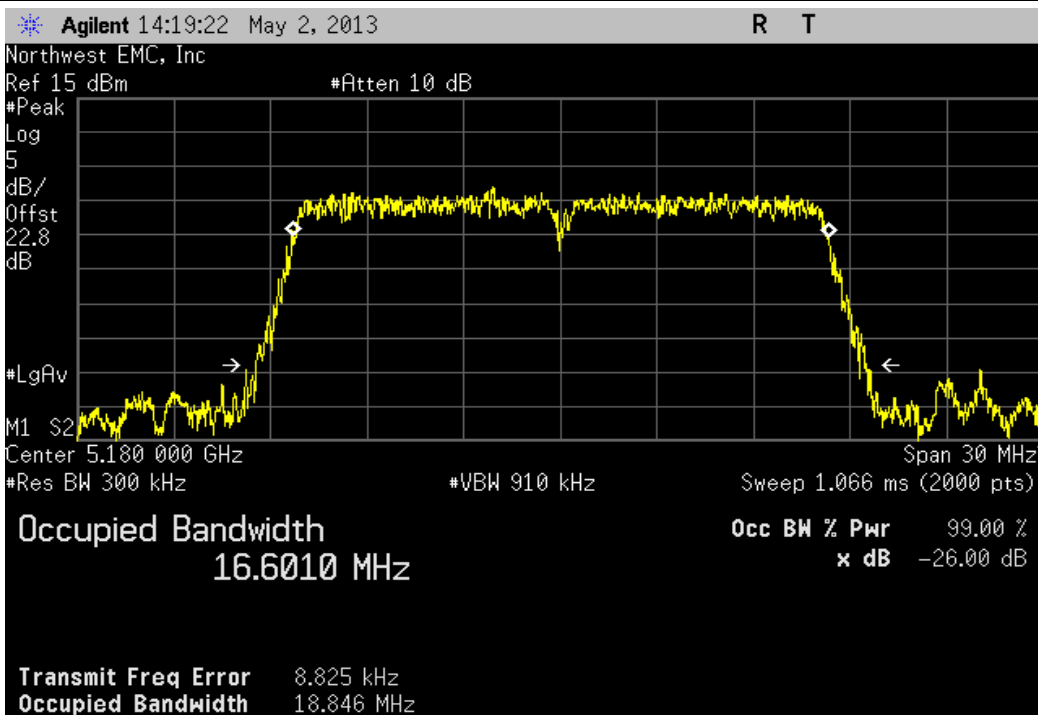
Emission Bandwidth

XMit 2013.02.28
PsaTx 2013.01.10

EUT: Model 444-2225 (Athena UFL)		Work Order: FOCU0140	
Serial Number: 02EA4D000027		Date: 05/03/13	
Customer: Summit Semiconductor		Temperature: 24°C	
Attendees: None		Humidity: 30%	
Project: None		Barometric Pres.: 1023	
Tested by: Brandon Hobbs		Power: 3.3V DC	
		Job Site: EV06	
TEST SPECIFICATIONS			
FCC 15.407:2013		Test Method	
		ANSI C63.10:2009	
COMMENTS			
All testing was completed on the highest output power antenna port A2.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	5	Signature 	
		Value	Limit
			Result
802.11(a) 6 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		18.846 MHz	> 500 kHz
Channel 48, High Channel 5240 MHz		18.884 MHz	> 500 kHz
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		18.752 MHz	> 500 kHz
Channel 64, High Channel 5320 MHz		18.822 MHz	> 500 kHz
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		18.651 MHz	> 500 kHz
Channel 116, Mid Channel 5580 MHz		18.764 MHz	> 500 kHz
Channel 140, High Channel 5700 MHz		18.931 MHz	> 500 kHz
802.11(a) 18 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		18.505 MHz	> 500 kHz
Channel 48, High Channel 5240 MHz		18.563 MHz	> 500 kHz
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		18.751 MHz	> 500 kHz
Channel 64, High Channel 5320 MHz		18.671 MHz	> 500 kHz
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		18.592 MHz	> 500 kHz
Channel 116, Mid Channel 5580 MHz		18.654 MHz	> 500 kHz
Channel 140, High Channel 5700 MHz		18.731 MHz	> 500 kHz

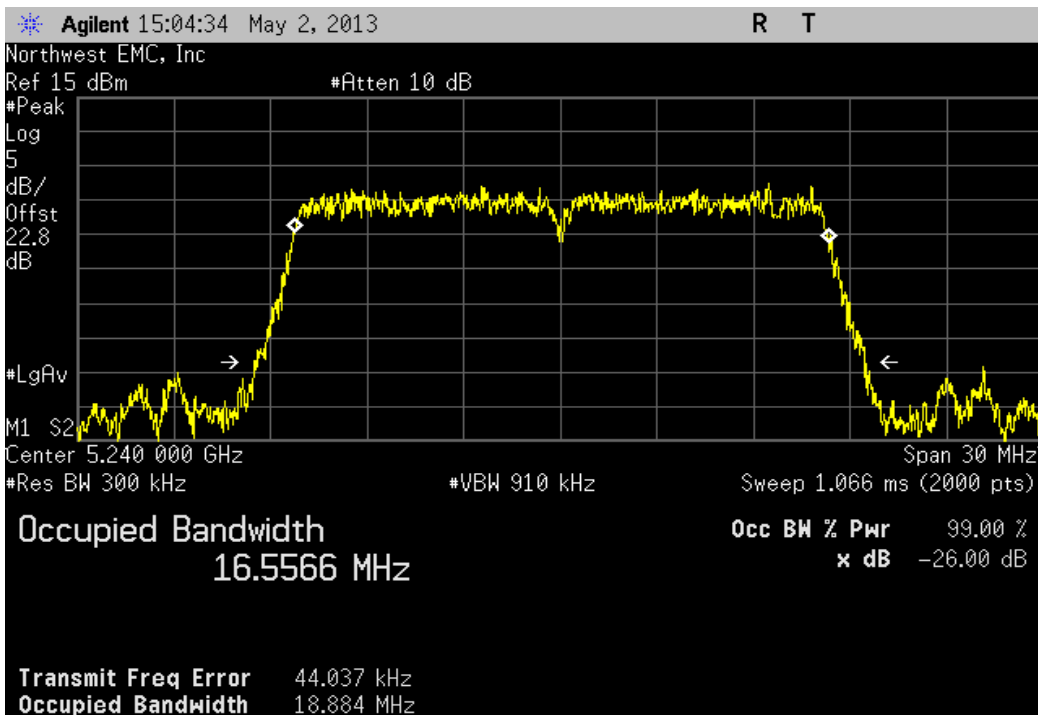
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz

Value	Limit	Result
18.846 MHz	> 500 kHz	Pass



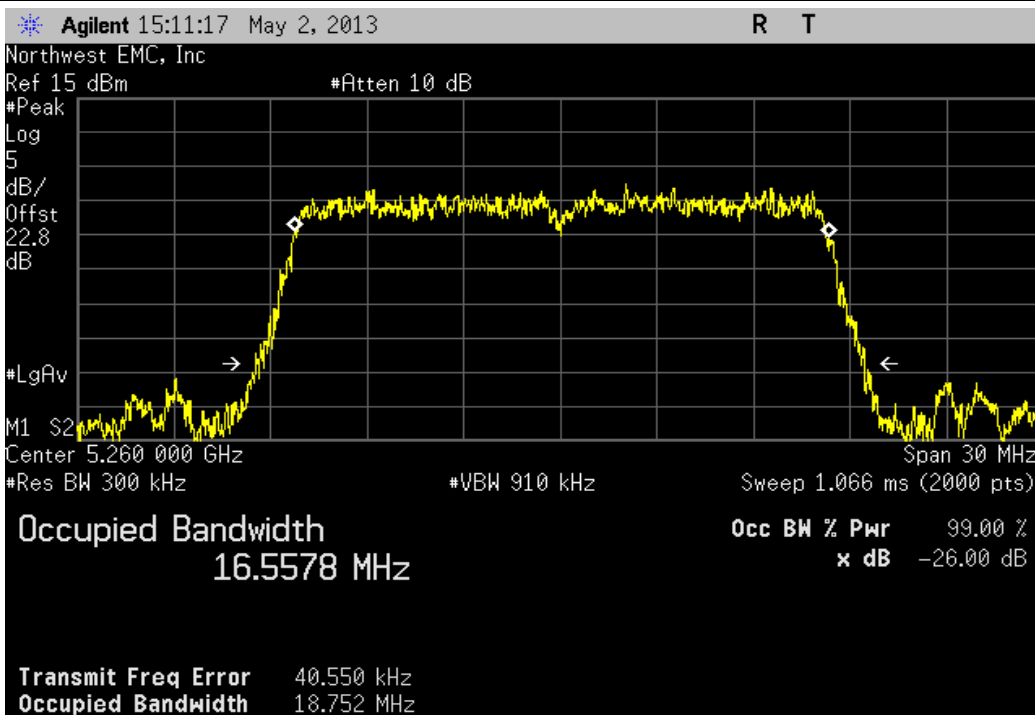
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz

Value	Limit	Result
18.884 MHz	> 500 kHz	Pass



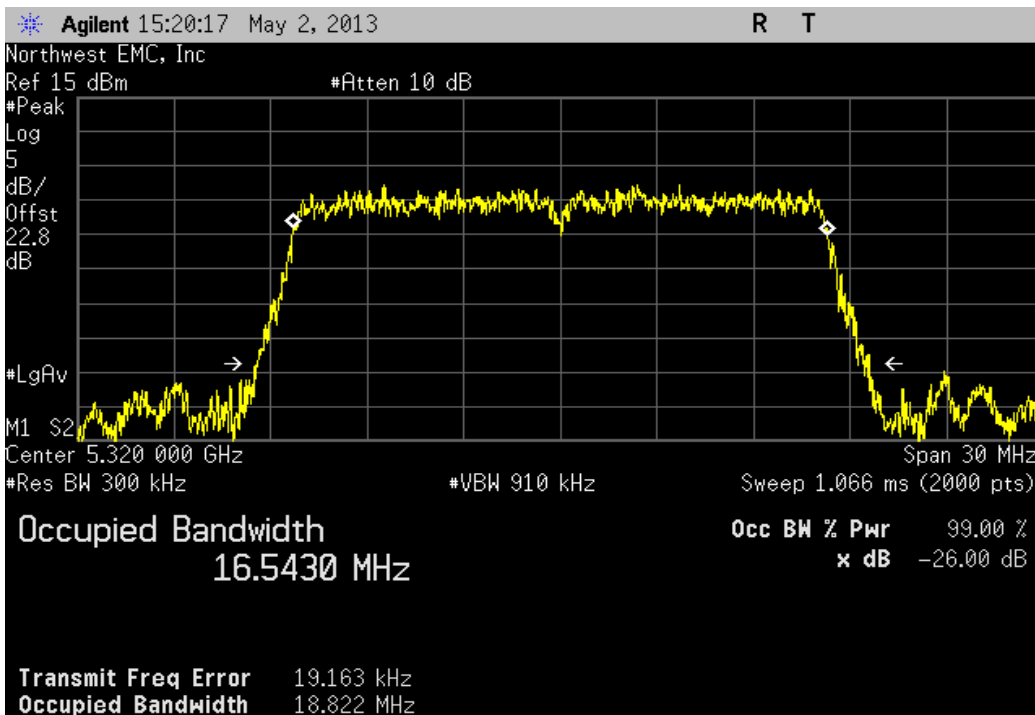
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz

Value	Limit	Result
18.752 MHz	> 500 kHz	Pass



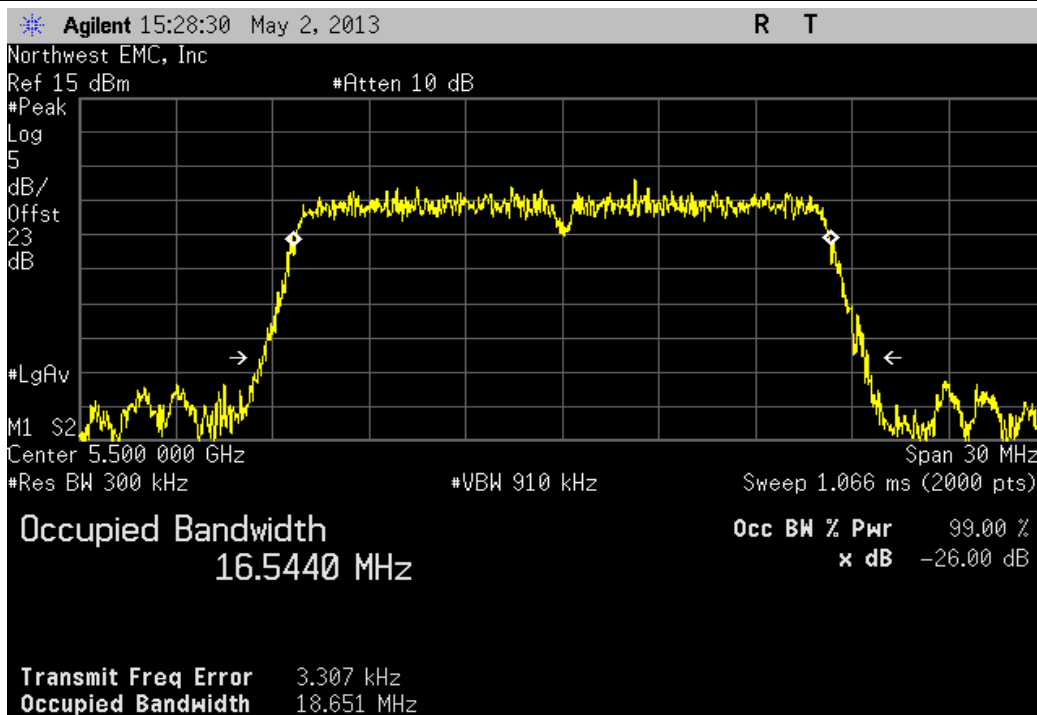
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz

Value	Limit	Result
18.822 MHz	> 500 kHz	Pass



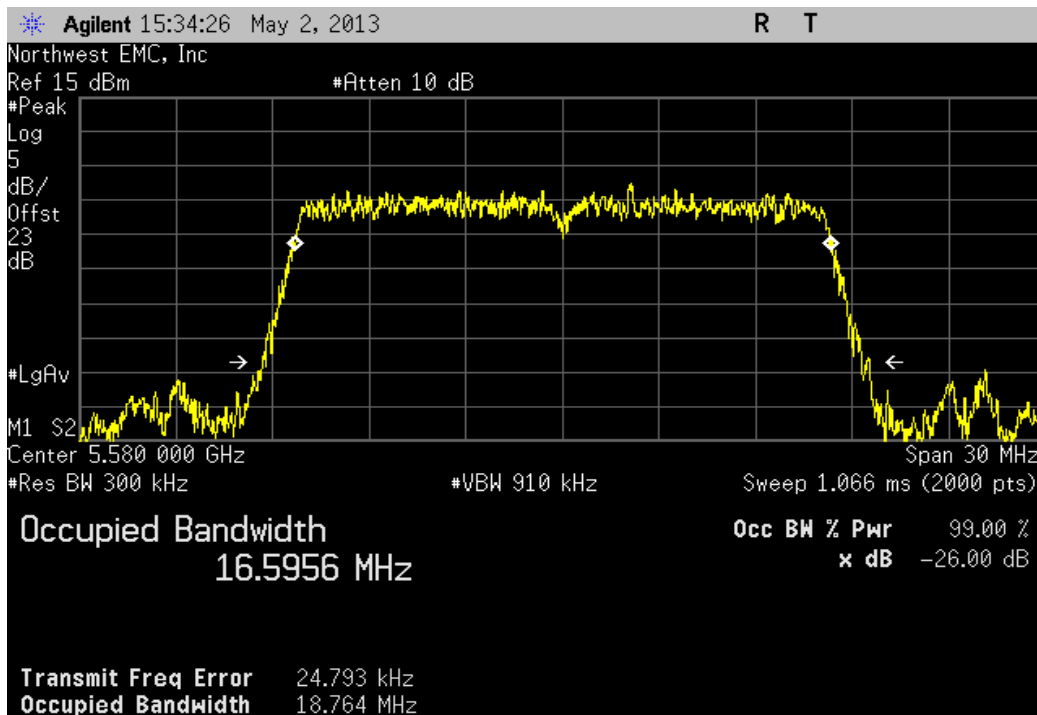
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

Value	Limit	Result
18.651 MHz	> 500 kHz	Pass



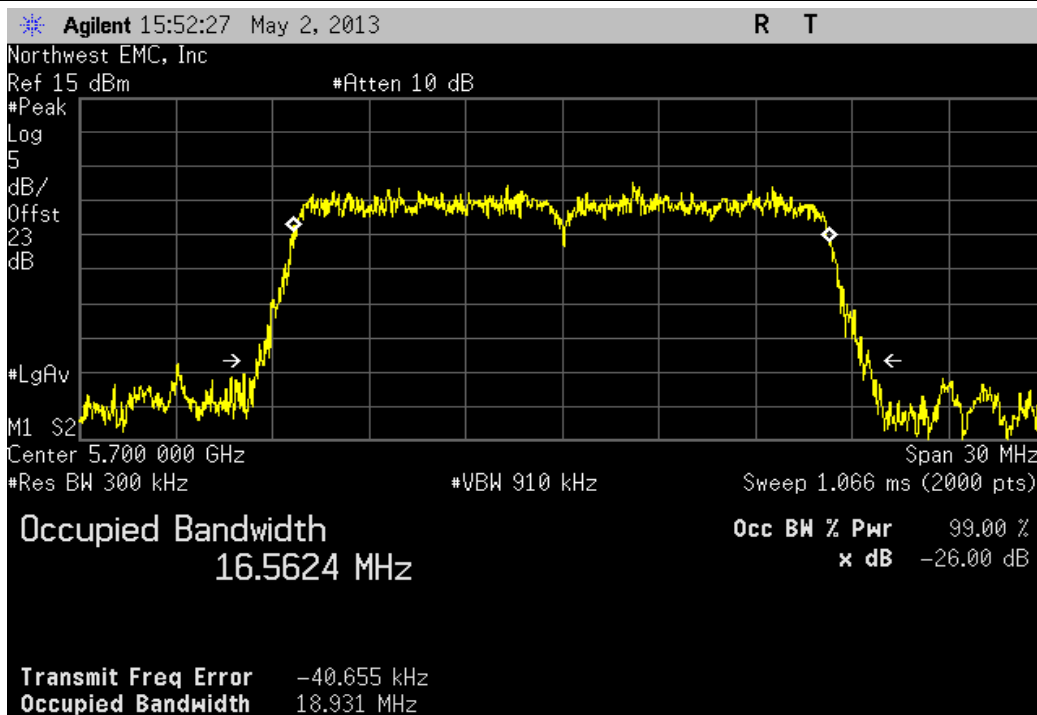
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

Value	Limit	Result
18.764 MHz	> 500 kHz	Pass



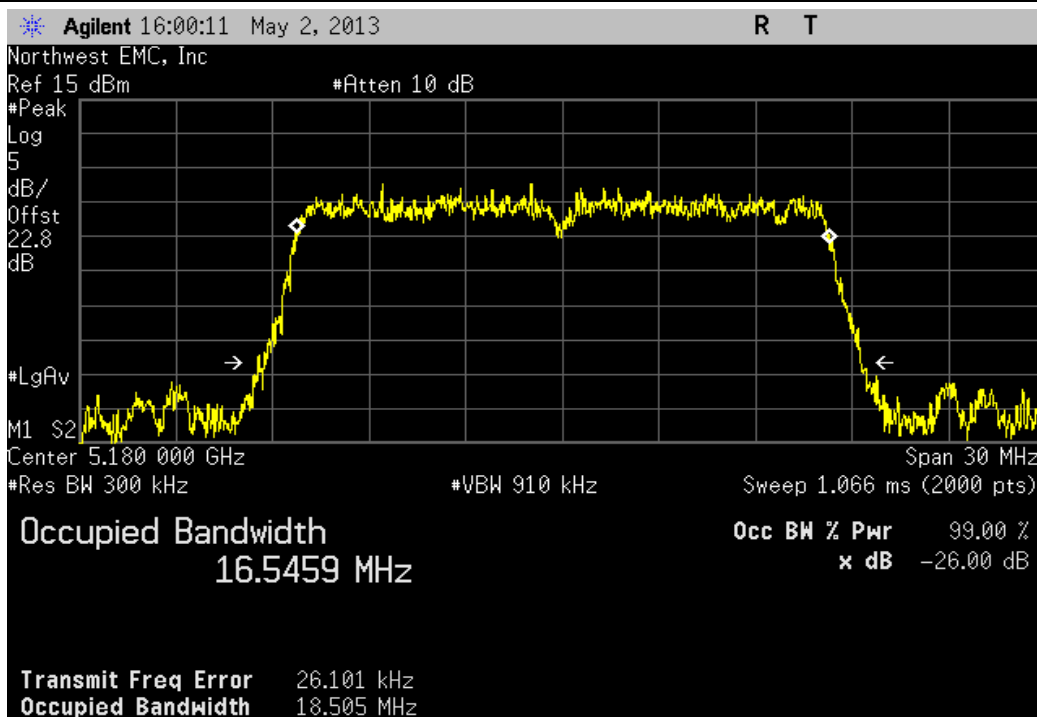
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

Value	Limit	Result
18.931 MHz	> 500 kHz	Pass



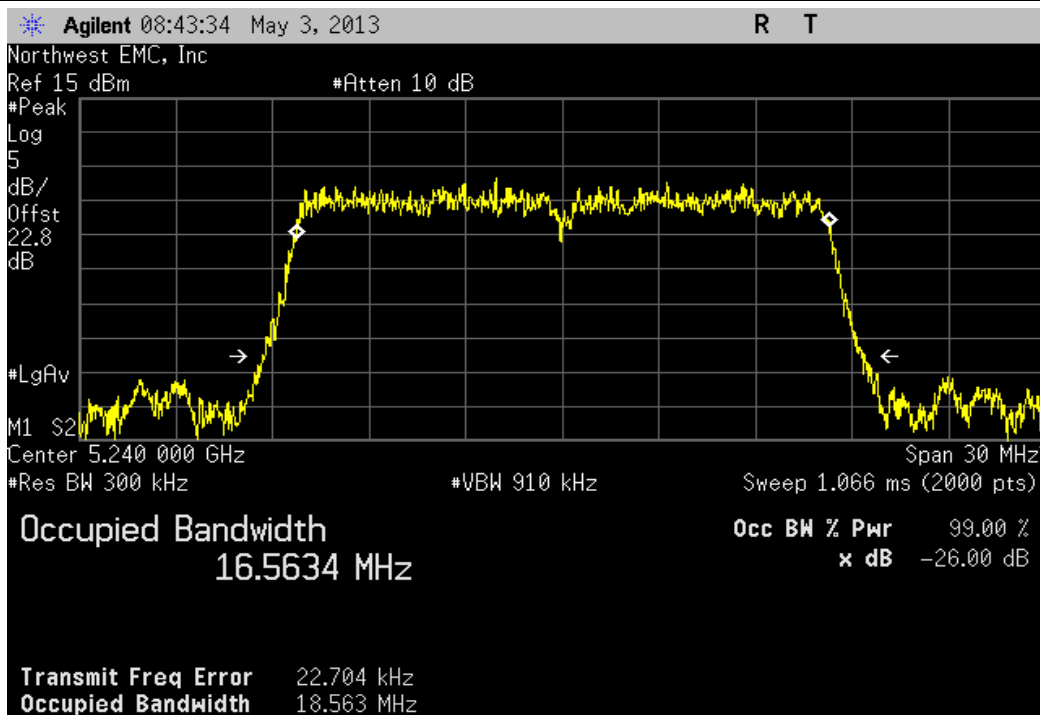
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz

Value	Limit	Result
18.505 MHz	> 500 kHz	Pass



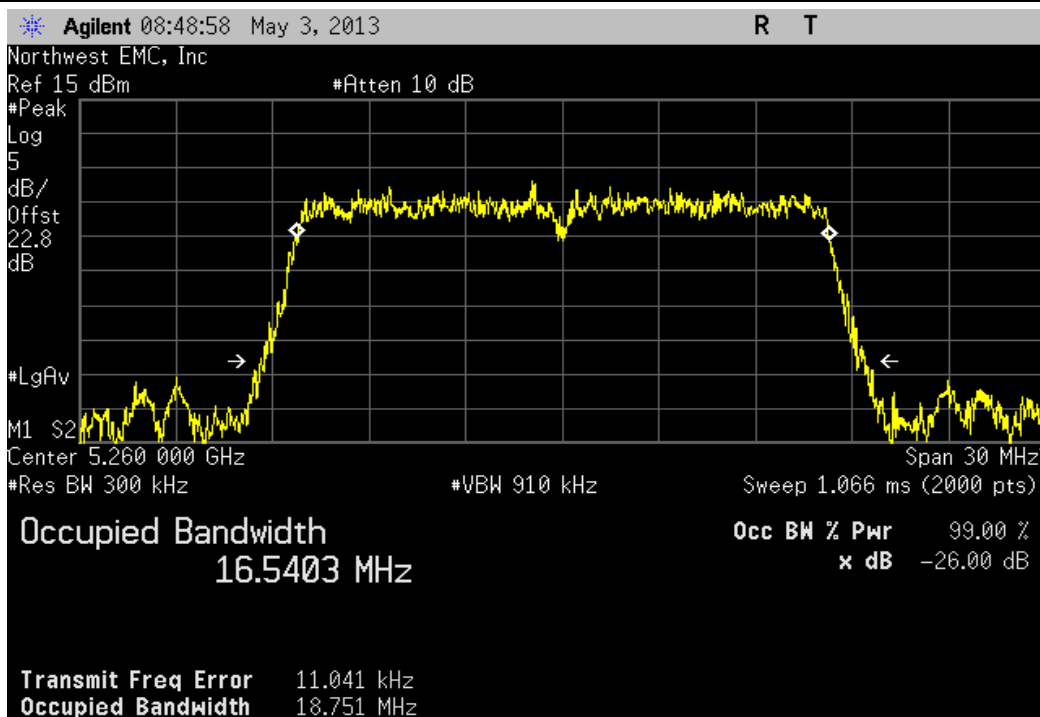
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz

				Value	Limit	Result
				18.563 MHz	> 500 kHz	Pass



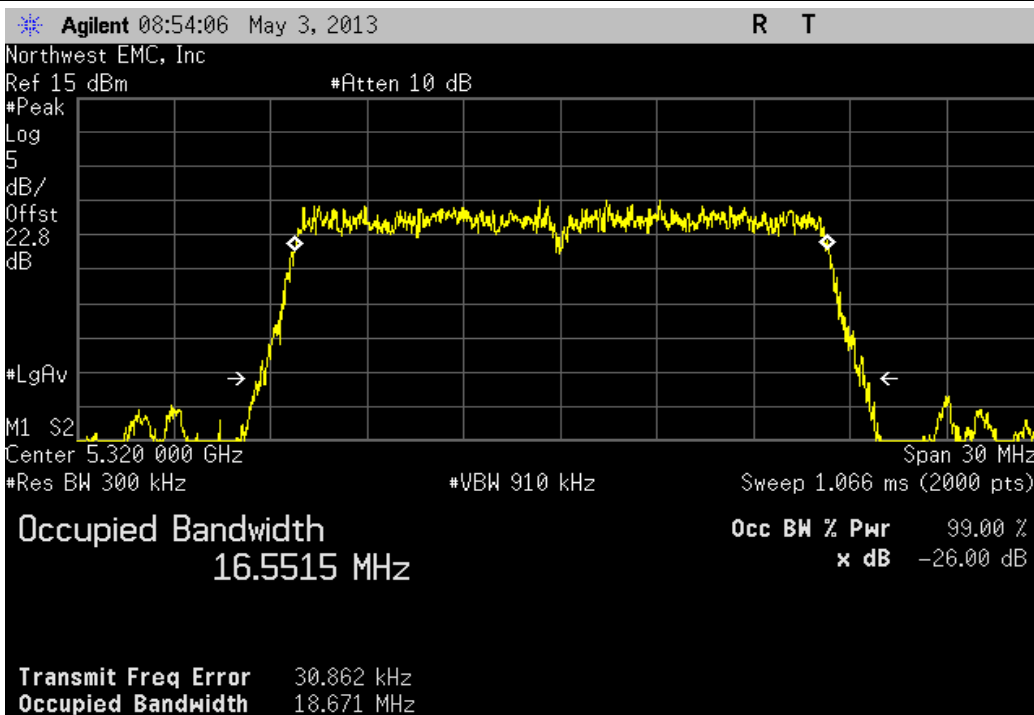
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz

				Value	Limit	Result
				18.751 MHz	> 500 kHz	Pass



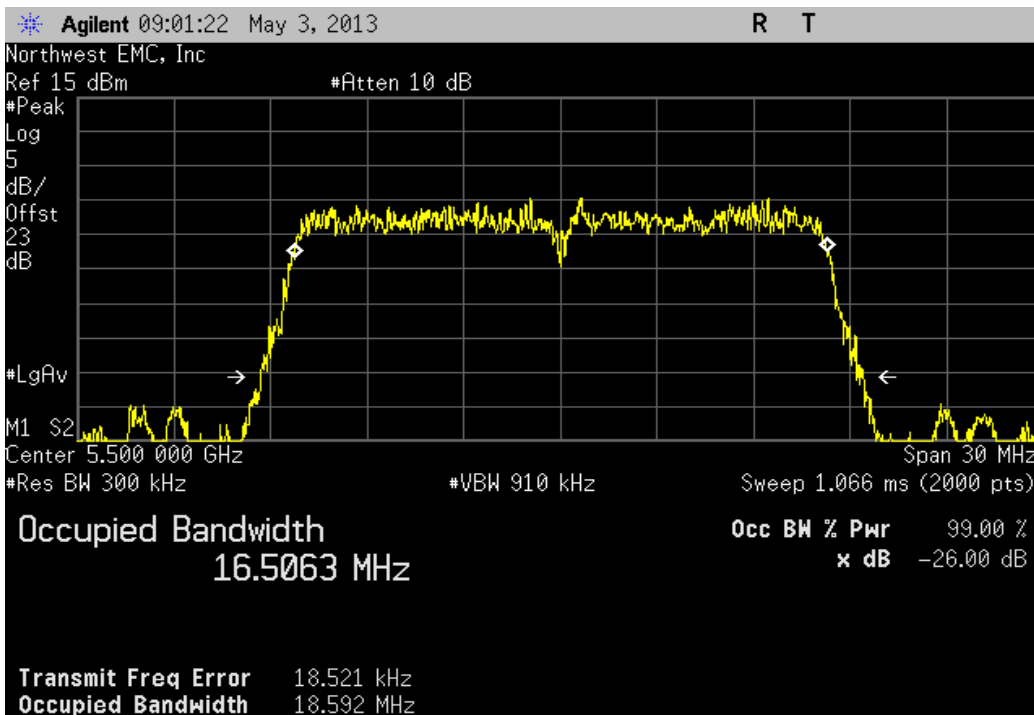
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz

Value	Limit	Result
18.671 MHz	> 500 kHz	Pass



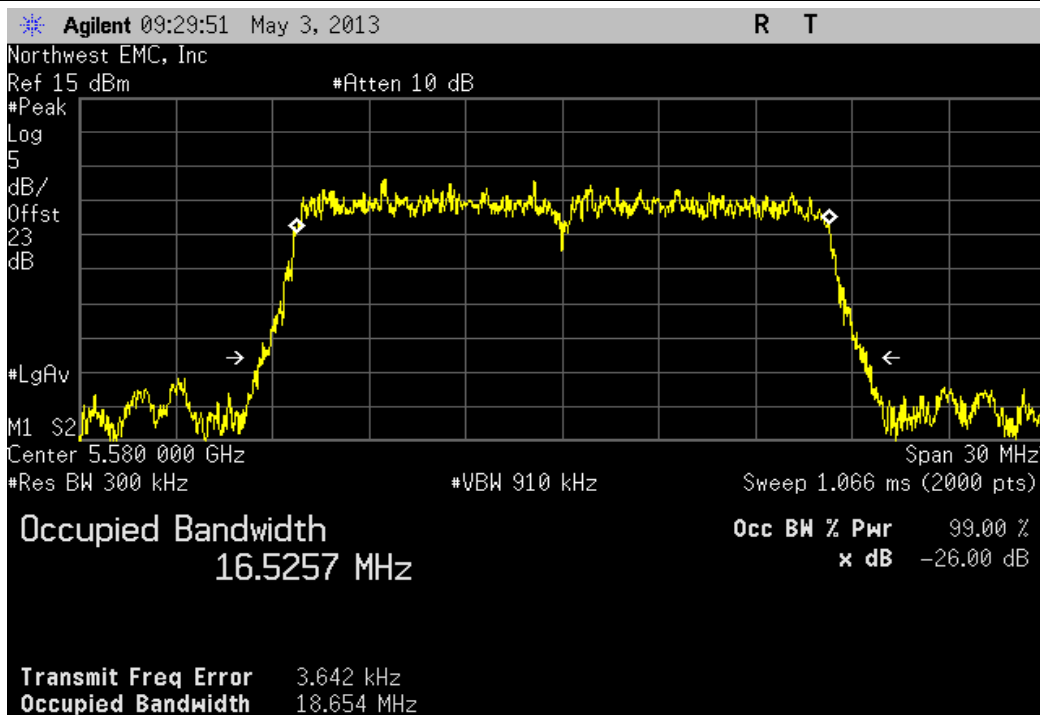
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

Value	Limit	Result
18.592 MHz	> 500 kHz	Pass



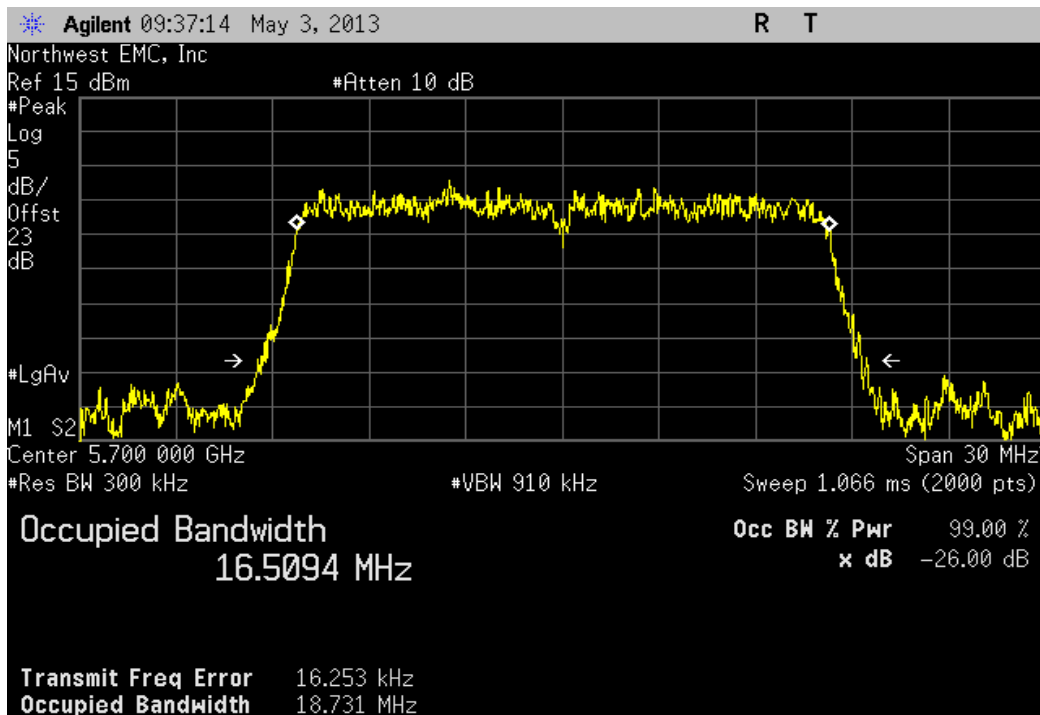
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

Value	Limit	Result
18.654 MHz	> 500 kHz	Pass



802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

Value	Limit	Result
18.731 MHz	> 500 kHz	Pass



Peak Excursion

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, 6dB	S.M. Electronics	18N-06	AWN	3/25/2013	12
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0
Power Meter	Gigatronics	8651A	SPM	1/9/2012	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	24
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	3/5/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	6/25/2012	12
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section G was followed to show that the ratio of the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed 13 dBm.

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.

The spectrum analyzer settings were as follows:

Span set to encompass the entire emission bandwidth (B), centered on the transmit channel.

Using the marker delta function, the largest difference between the following two traces was measured:

➤1st Trace: RBW = 1 MHz, VBW $\geq$ 3 MHz with peak detector and trace max-hold..



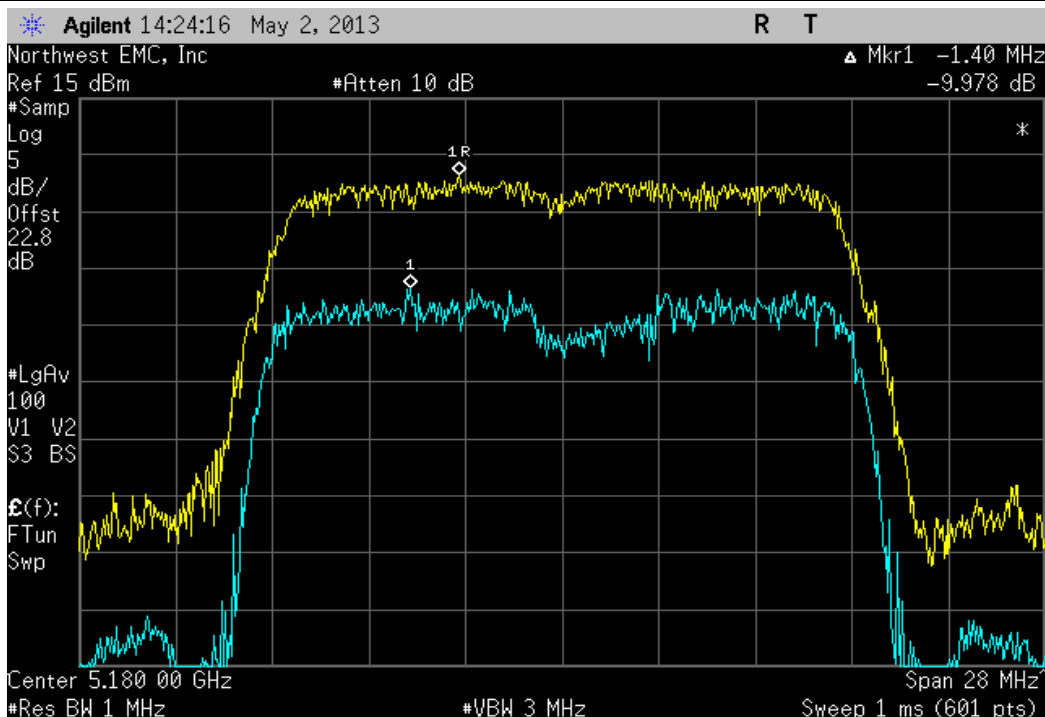
Peak Excursion

XMit 2013.02.28
PsaTx 2013.01.10

EUT: Model 444-2225 (Athena UFL)		Work Order: FOCU0140	
Serial Number: 02EA4D000027		Date: 05/03/13	
Customer: Summit Semiconductor		Temperature: 24°C	
Attendees: None		Humidity: 30%	
Project: None		Barometric Pres.: 1023	
Tested by: Brandon Hobbs		Power: 3.3V DC	
		Job Site: EV06	
TEST SPECIFICATIONS			
FCC 15.407:2013		Test Method	
		ANSI C63.10:2009	
COMMENTS			
All testing was completed on the highest output power antenna port A2.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	5	Signature 	
		Value	Limit
			Result
802.11(a) 6 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		9.978 dB	≤ 13 dB
Channel 48, High Channel 5240 MHz		9.73 dB	≤ 13 dB
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		10.042 dB	≤ 13 dB
Channel 64, High Channel 5320 MHz		8.536 dB	≤ 13 dB
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		9.138 dB	≤ 13 dB
Channel 116, Mid Channel 5580 MHz		8.704 dB	≤ 13 dB
Channel 140, High Channel 5700 MHz		9.266 dB	≤ 13 dB
802.11(a) 18 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel 5180 MHz		10.315 dB	≤ 13 dB
Channel 48, High Channel 5240 MHz		9.843 dB	≤ 13 dB
5250 - 5350 MHz Band			
Channel 52, Low Channel 5260 MHz		10.34 dB	≤ 13 dB
Channel 64, High Channel 5320 MHz		10.866 dB	≤ 13 dB
5470 - 5725 MHz Band			
Channel 100, Low Channel 5500 MHz		9.712 dB	≤ 13 dB
Channel 116, Mid Channel 5580 MHz		9.036 dB	≤ 13 dB
Channel 140, High Channel 5700 MHz		10.042 dB	≤ 13 dB

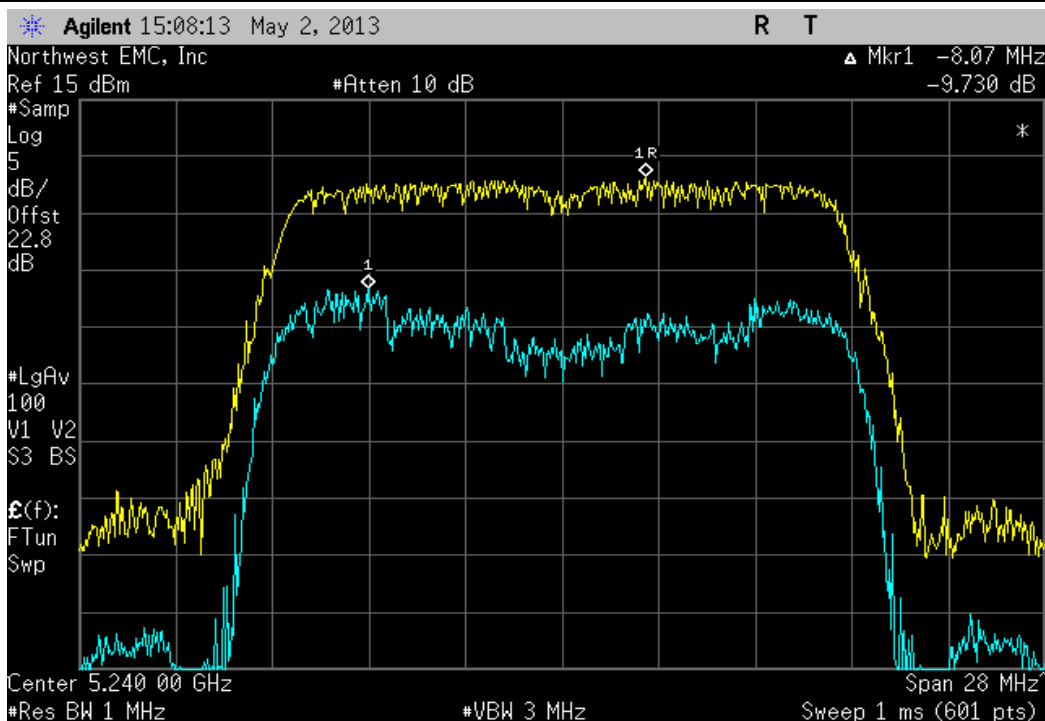
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz

	Value	Limit	Result
	9.978 dB	≤ 13 dB	Pass



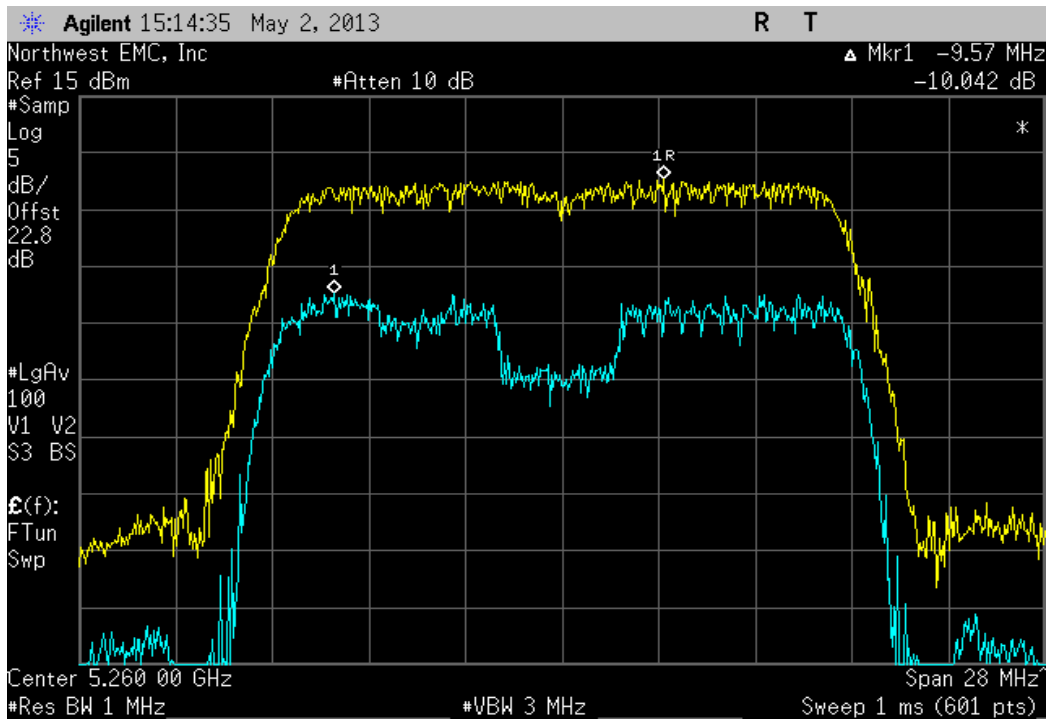
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz

	Value	Limit	Result
	9.73 dB	≤ 13 dB	Pass



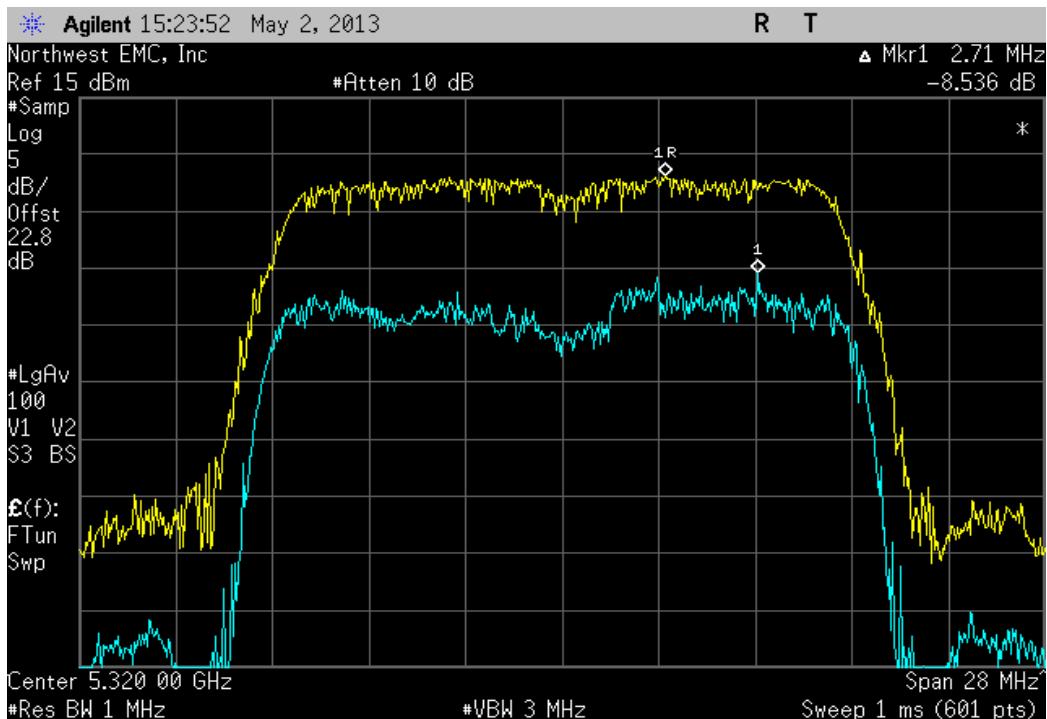
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz

	Value	Limit	Result
	10.042 dB	≤ 13 dB	Pass



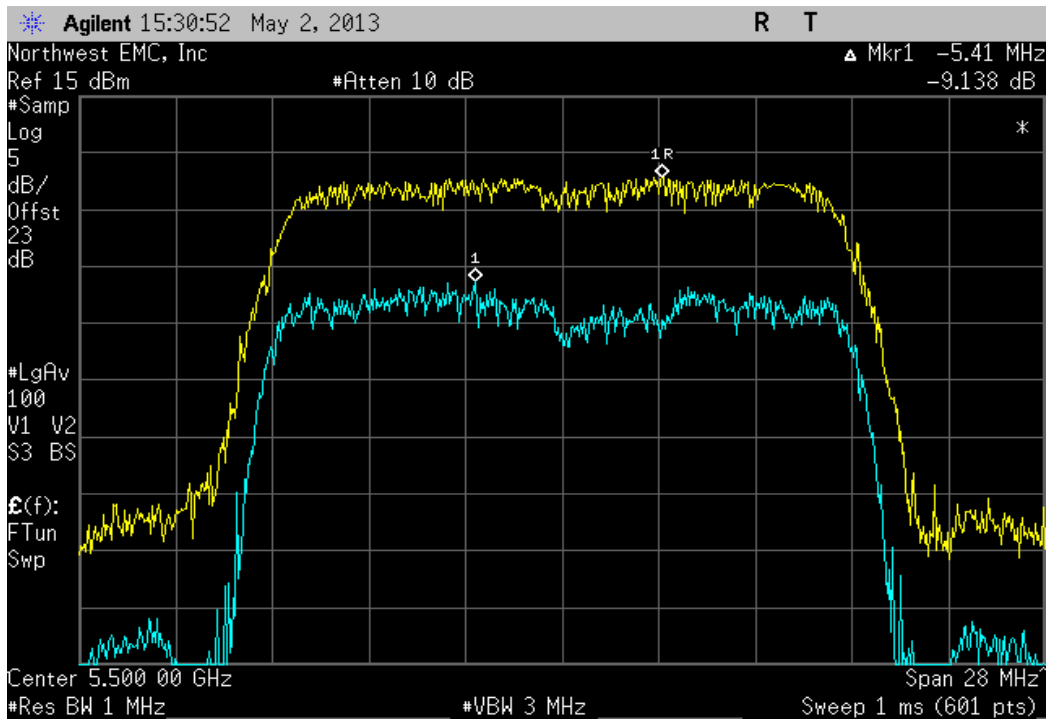
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz

	Value	Limit	Result
	8.536 dB	≤ 13 dB	Pass



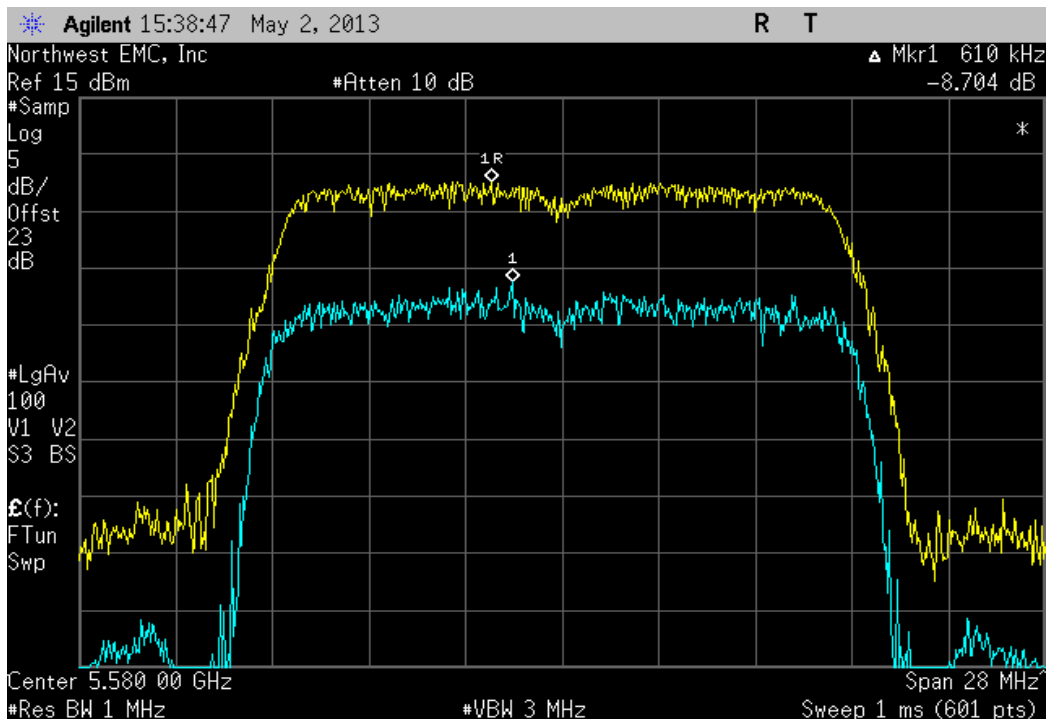
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

	Value	Limit	Result
	9.138 dB	≤ 13 dB	Pass



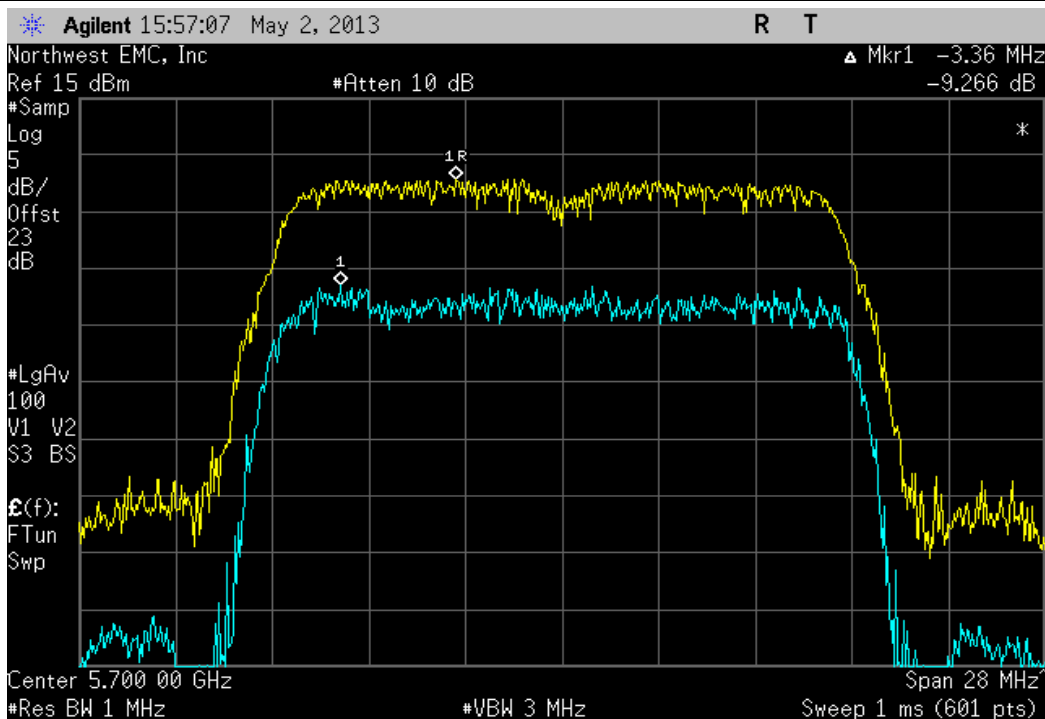
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

	Value	Limit	Result
	8.704 dB	≤ 13 dB	Pass



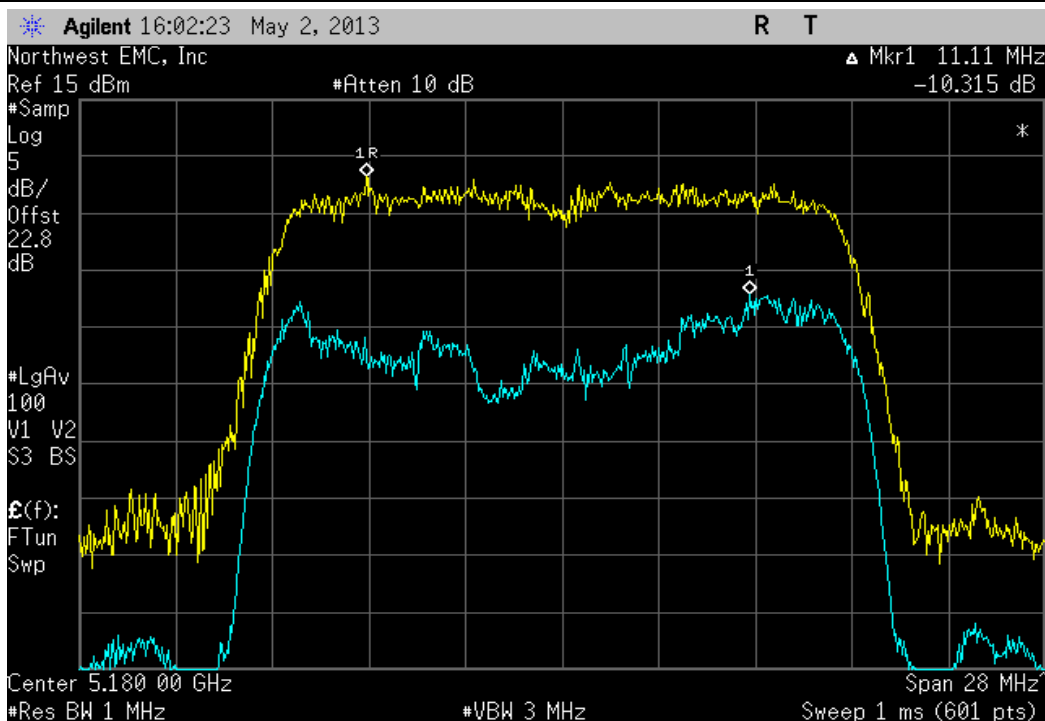
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

	Value	Limit	Result
	9.266 dB	≤ 13 dB	Pass



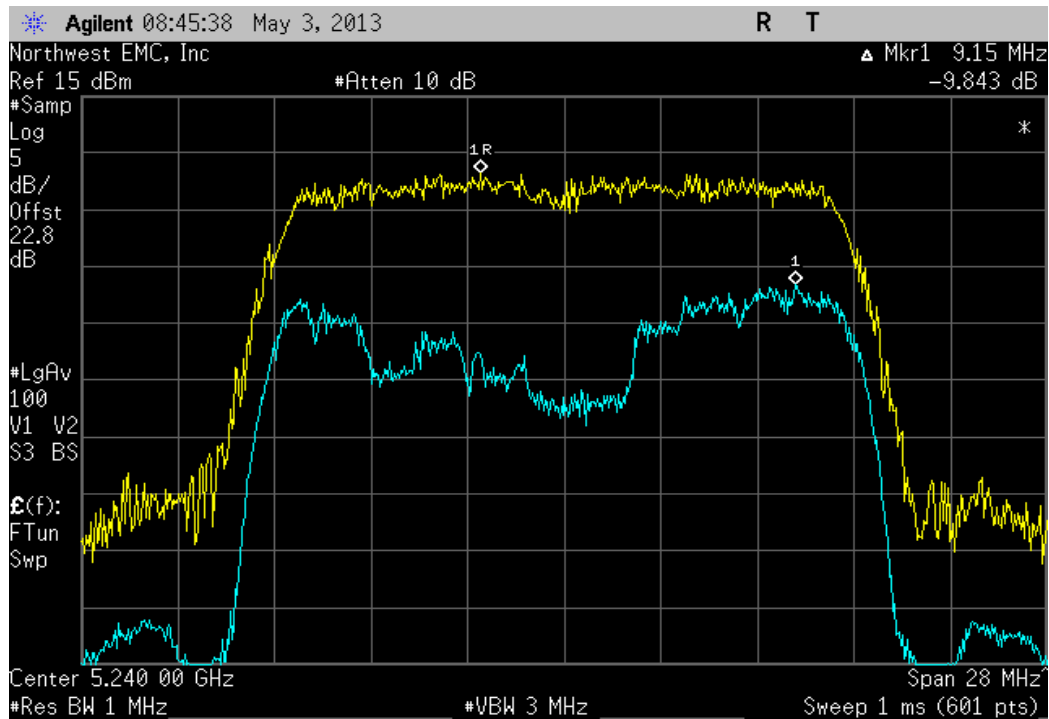
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel 5180 MHz

	Value	Limit	Result
	10.315 dB	≤ 13 dB	Pass



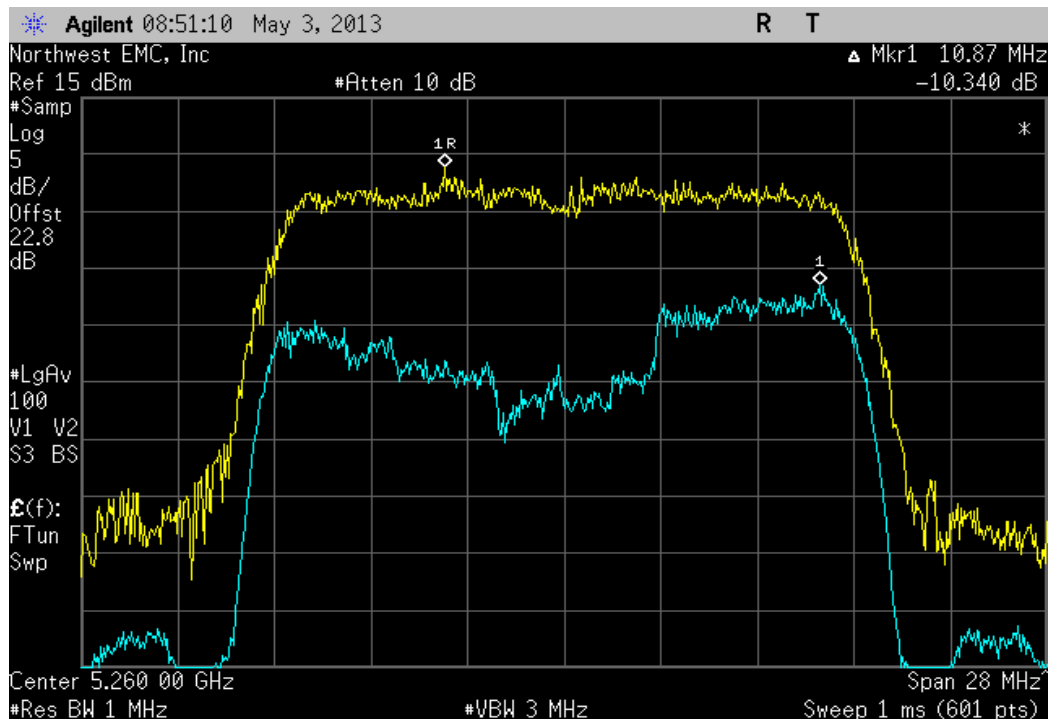
802.11(a) 18 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel 5240 MHz

	Value	Limit	Result
	9.843 dB	≤ 13 dB	Pass



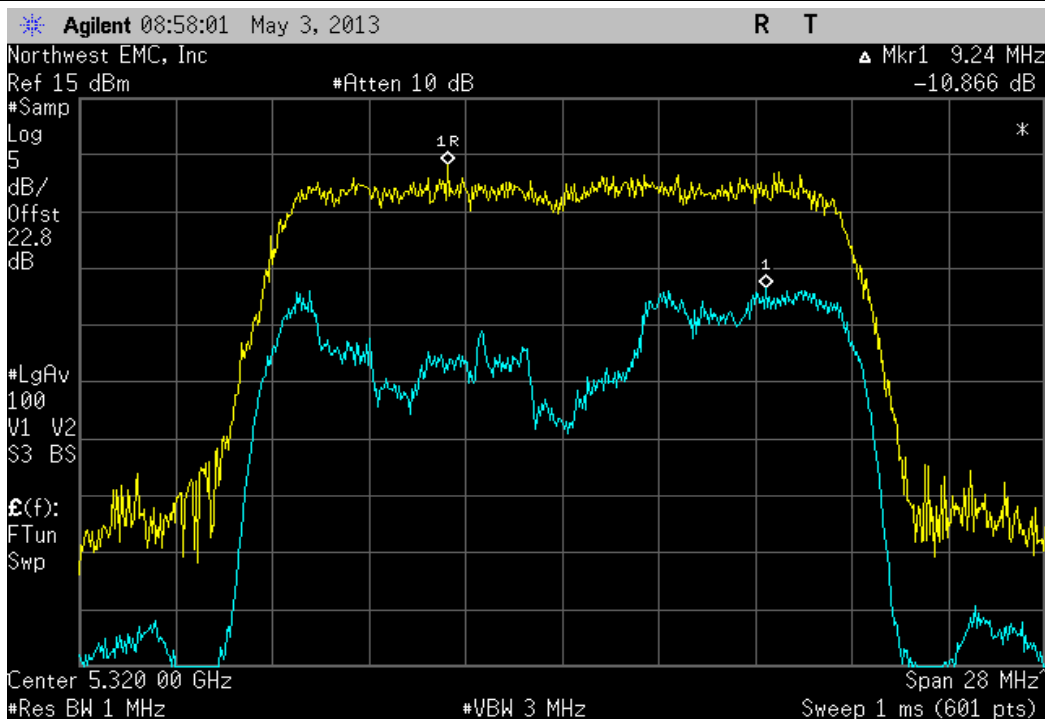
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel 5260 MHz

	Value	Limit	Result
	10.34 dB	≤ 13 dB	Pass



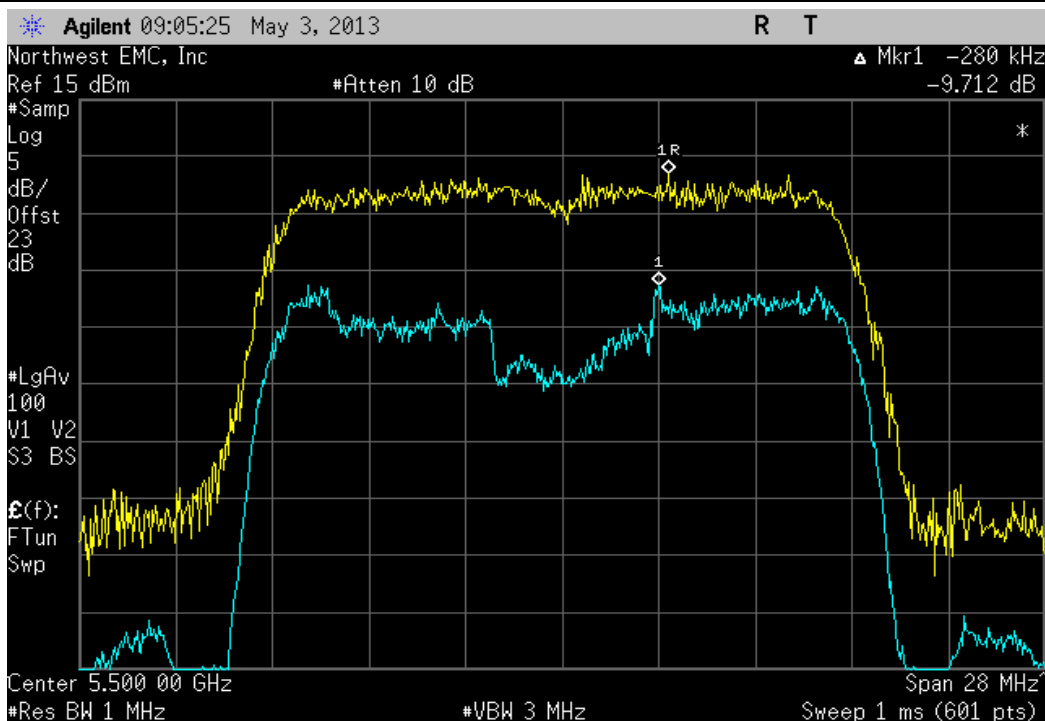
802.11(a) 18 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel 5320 MHz

	Value	Limit	Result
	10.866 dB	≤ 13 dB	Pass



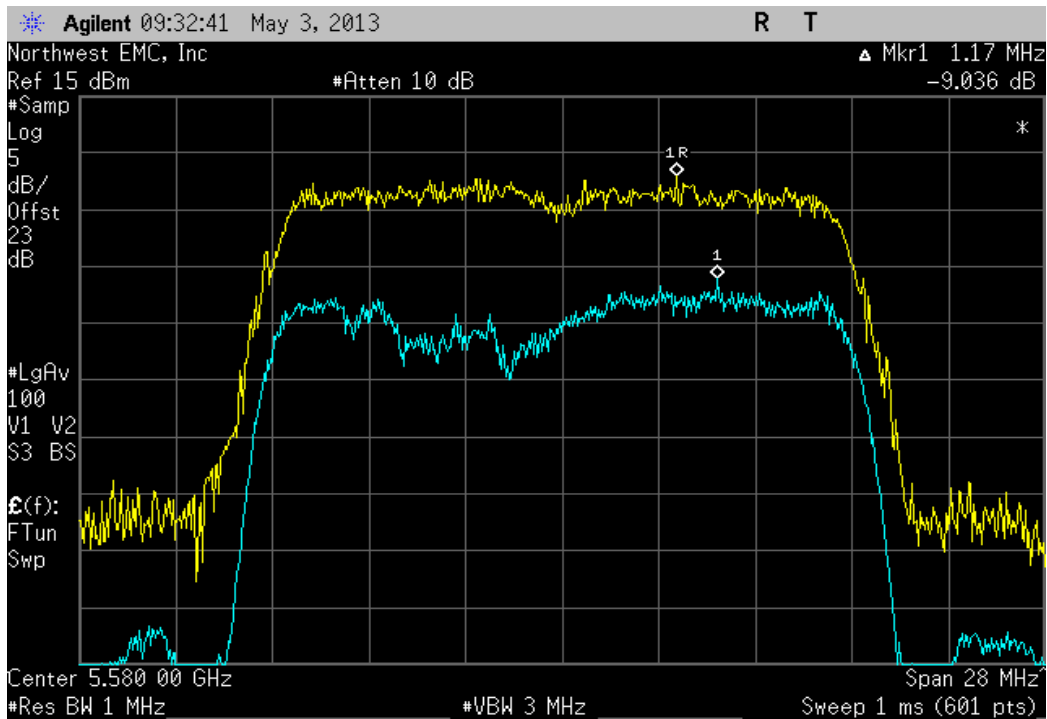
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel 5500 MHz

	Value	Limit	Result
	9.712 dB	≤ 13 dB	Pass



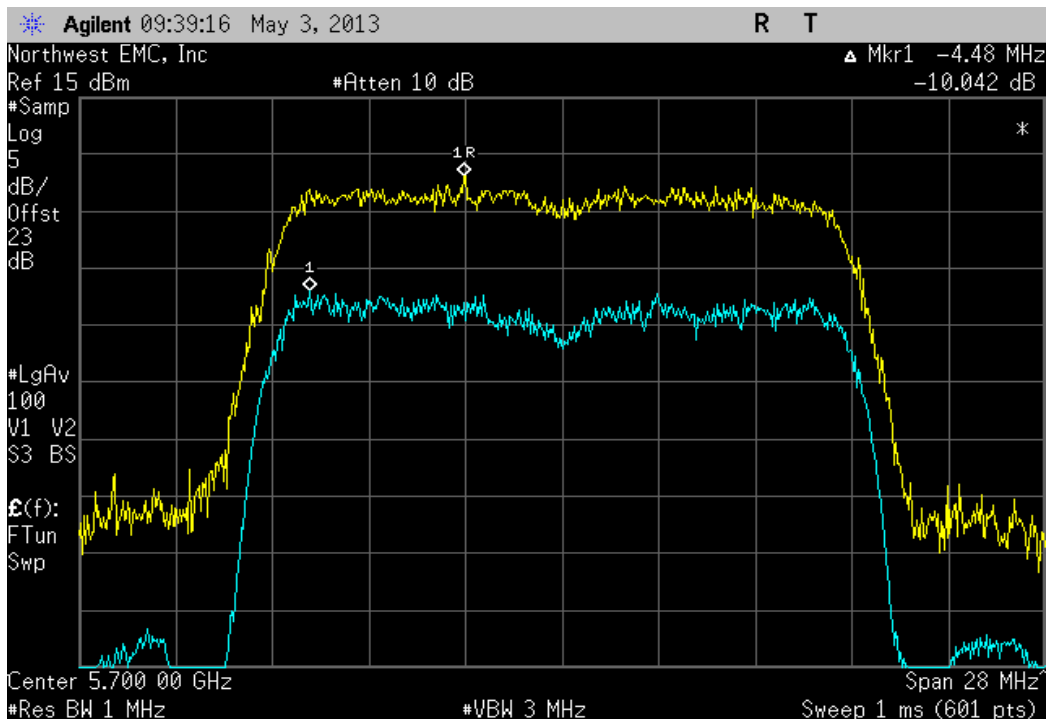
802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 116, Mid Channel 5580 MHz

	Value	Limit	Result
	9.036 dB	≤ 13 dB	Pass



802.11(a) 18 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel 5700 MHz

	Value	Limit	Result
	10.042 dB	≤ 13 dB	Pass



Frequency Stability

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
Temp./Humidity Chamber	Cincinnati Sub Zero (CSZ)	ZH-32-2-2-H/AC	TBA	NCR	0
DC Power Supply	MPJA	9950 PS	TQA	NCR	0
Multimeter	Tektronix	DMM912	MMH	2/5/2013	24
Humidity Temperature Meter	Omegatette	HH311	DTY	3/29/2011	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	3/25/2013	12
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0
Power Meter	Gigatronix	8651A	SPM	1/9/2012	24
Power Sensor	Gigatronix	80701A	SPL	7/8/2011	24
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	3/5/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	6/25/2012	12
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	24

TEST DESCRIPTION

Variation of Supply Voltage

The primary supply voltage was varied from 85 % to 115% of the nominal voltage

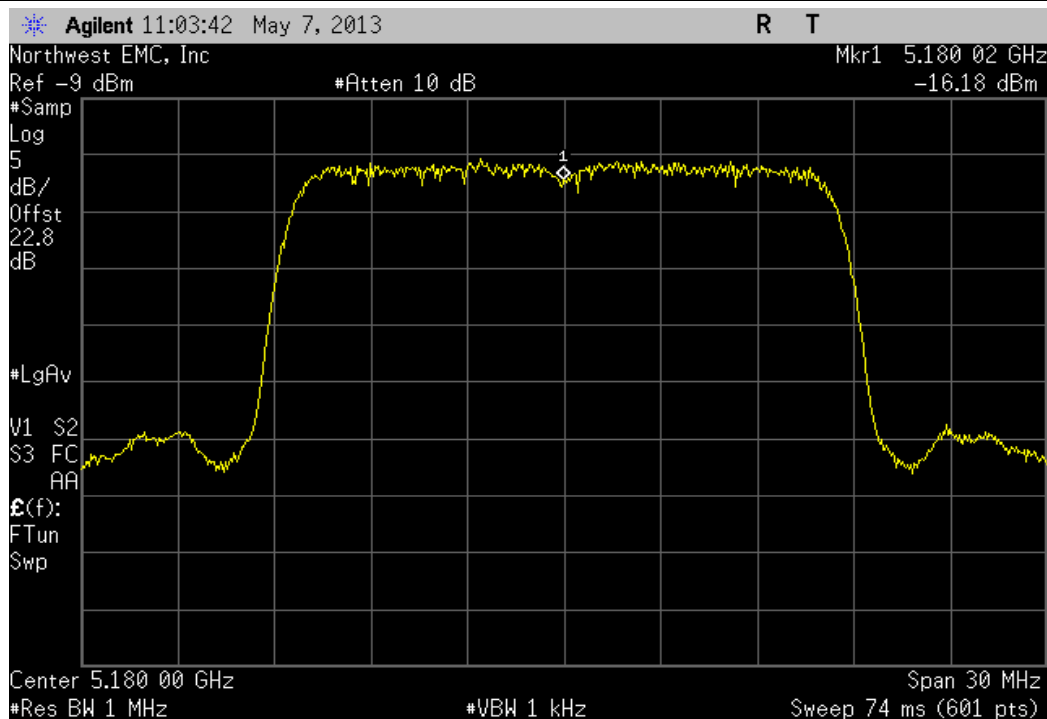
Variation of Ambient Temperature

Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range (-30 ° to +50° C) and at 10°C intervals.

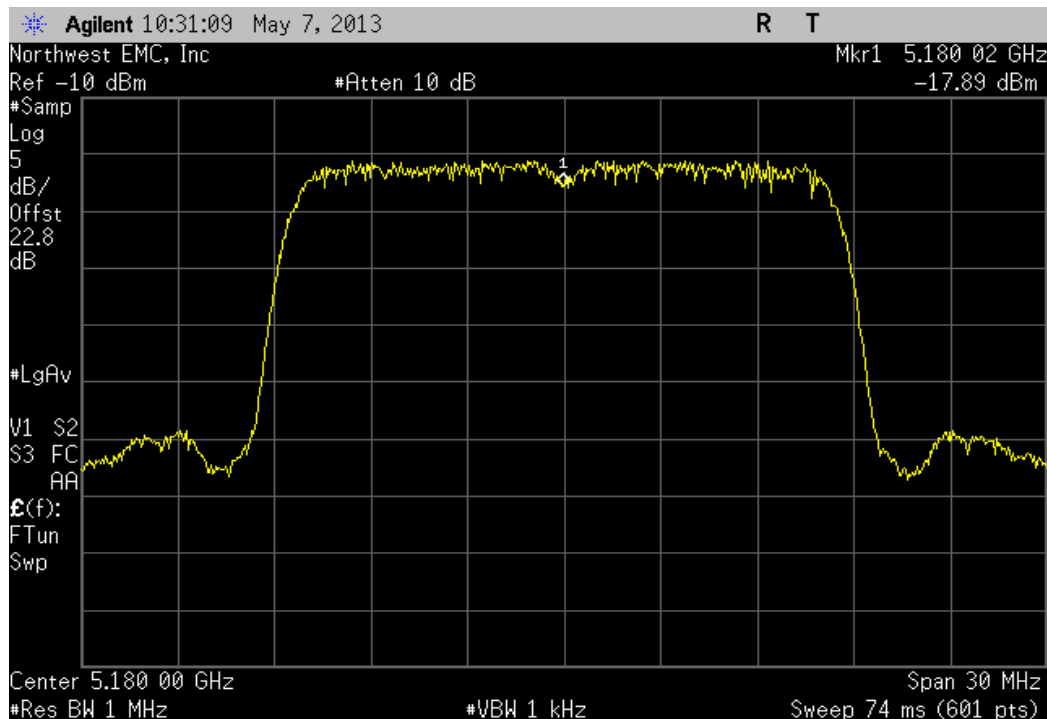
A direct connect measurement was made between the EUT's antenna cable and a spectrum analyzer. The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT. Measurements were made at the mid channel of each band to determine frequency stability. If the frequency variation is less than 100 ppm, the EUT will meet the requirement of 15.407(g), that the emissions are maintained within the band of operation.

EUT: Model 444-2225 (Athena UPL)		Work Order: FOCU0140				
Serial Number: 025A-0000002		Date: 05/07/13				
Customer: Summit Semiconductor		Temperature: 24°C				
Attended: None		Humidity: 37%				
Project: None		Barometric Press.: 1034				
Tested by: Brandon Hobbs		Power: 13.3 VDC		Job Site: JEV06		
TEST SPECIFICATIONS		Test Method				
FCC 18.407-2013		ANSI C63.10 2009				
COMMENTS						
All testing was completed on the highest output power antenna port A2.						
DEVIATIONS FROM TEST STANDARD						
None						
Configuration #	4	Signature 				
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
8 Mbps						
5150 MHz - 5250 MHz - Low Channel, 5180 MHz						
Voltage: 115%		5180.02	5180	3.9	100	Pass
Voltage: 100%		5180.02	5180	3.9	100	Pass
Voltage: 85%		5180	5180	0	100	Pass
Temperature: +50°		5180.02	5180	3.9	100	Pass
Temperature: +40°		5180.02	5180	3.9	100	Pass
Temperature: +30°		5180.02	5180	3.9	100	Pass
Temperature: +20°		5180.02	5180	3.9	100	Pass
Temperature: +10°		5180.02	5180	3.9	100	Pass
Temperature: 0°		5180.05	5180	15.4	100	Pass
Temperature: -10°		5180.05	5180	9.6	100	Pass
Temperature: -20°		5180.05	5180	9.6	100	Pass
Temperature: -30°		5180	5180	0	100	Pass
5150 MHz - 5250 MHz - High Channel, 5240 MHz						
Voltage: 115%		5239.98	5240	3.8	100	Pass
Voltage: 100%		5240.02	5240	3.8	100	Pass
Voltage: 85%		5240.02	5240	3.8	100	Pass
Temperature: +50°		5240.02	5240	3.8	100	Pass
Temperature: +40°		5240.02	5240	3.8	100	Pass
Temperature: +30°		5240.02	5240	3.8	100	Pass
Temperature: +20°		5240.02	5240	3.8	100	Pass
Temperature: +10°		5240.02	5240	3.8	100	Pass
Temperature: 0°		5240.05	5240	9.5	100	Pass
Temperature: -10°		5240.02	5240	3.8	100	Pass
Temperature: -20°		5240.02	5240	3.8	100	Pass
Temperature: -30°		5239.98	5240	3.8	100	Pass
5150 MHz - 5250 MHz - Low Channel, 5260 MHz						
Voltage: 115%		5260.02	5260	3.8	100	Pass
Voltage: 100%		5260.02	5260	3.8	100	Pass
Voltage: 85%		5260.02	5260	3.8	100	Pass
Temperature: +50°		5260.02	5260	3.8	100	Pass
Temperature: +40°		5260.02	5260	3.8	100	Pass
Temperature: +30°		5260.02	5260	3.8	100	Pass
Temperature: +20°		5260.02	5260	3.8	100	Pass
Temperature: +10°		5260.05	5260	9.5	100	Pass
Temperature: 0°		5260.05	5260	9.5	100	Pass
Temperature: -10°		5260.02	5260	3.8	100	Pass
Temperature: -20°		5260.02	5260	3.8	100	Pass
Temperature: -30°		5260.02	5260	3.8	100	Pass
5250 MHz - 5350 MHz - High Channel, 5320 MHz						
Voltage: 115%		5320.02	5320	3.8	100	Pass
Voltage: 100%		5320.05	5320	9.4	100	Pass
Voltage: 85%		5320.02	5320	3.8	100	Pass
Temperature: +50°		5320.02	5320	3.8	100	Pass
Temperature: +40°		5320.02	5320	3.8	100	Pass
Temperature: +30°		5320.02	5320	3.8	100	Pass
Temperature: +20°		5320.02	5320	3.8	100	Pass
Temperature: +10°		5320.02	5320	3.8	100	Pass
Temperature: 0°		5320.08	5320	15	100	Pass
Temperature: -10°		5320.02	5320	3.8	100	Pass
Temperature: -20°		5320.02	5320	3.8	100	Pass
Temperature: -30°		5320.02	5320	3.8	100	Pass
5470 MHz - 5725 MHz - Low Channel, 5500 MHz						
Voltage: 115%		5500.02	5500	3.6	100	Pass
Voltage: 100%		5500.02	5500	3.6	100	Pass
Voltage: 85%		5500.05	5500	9.1	100	Pass
Temperature: +50°		5500.02	5500	3.6	100	Pass
Temperature: +40°		5500.02	5500	3.6	100	Pass
Temperature: +30°		5500.05	5500	9.1	100	Pass
Temperature: +20°		5500.02	5500	3.6	100	Pass
Temperature: +10°		5500.02	5500	3.6	100	Pass
Temperature: 0°		5500.05	5500	9.1	100	Pass
Temperature: -10°		5500	5500	0	100	Pass
Temperature: -20°		5500	5500	0	100	Pass
Temperature: -30°		5500	5500	0	100	Pass
5470 MHz - 5725 MHz - High Channel, 5700 MHz						
Voltage: 115%		5700	5700	0	100	Pass
Voltage: 100%		5700.02	5700	3.5	100	Pass
Voltage: 85%		5700.18	5700	31.6	100	Pass
Temperature: +50°		5700.02	5700	3.5	100	Pass
Temperature: +40°		5700.02	5700	3.5	100	Pass
Temperature: +30°		5700.02	5700	3.5	100	Pass
Temperature: +20°		5700.05	5700	8.8	100	Pass
Temperature: +10°		5700.05	5700	8.8	100	Pass
Temperature: 0°		5700.02	5700	3.5	100	Pass
Temperature: -10°		5700.05	5700	8.8	100	Pass
Temperature: -20°		5700.02	5700	3.5	100	Pass
Temperature: -30°		5699.98	5700	3.5	100	Pass

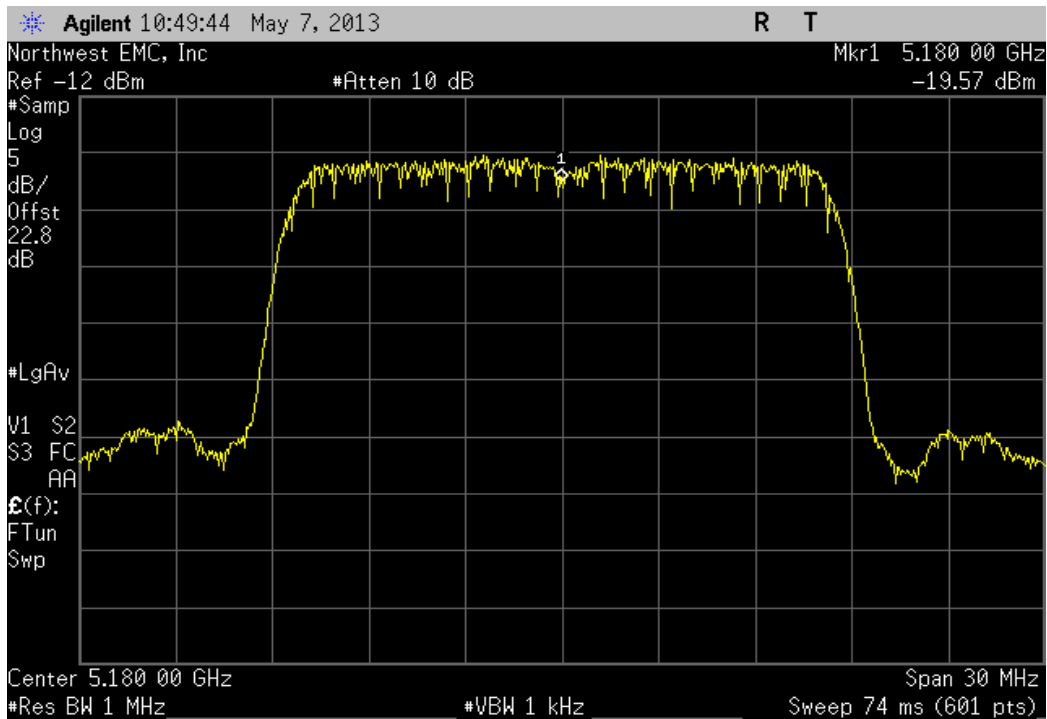
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



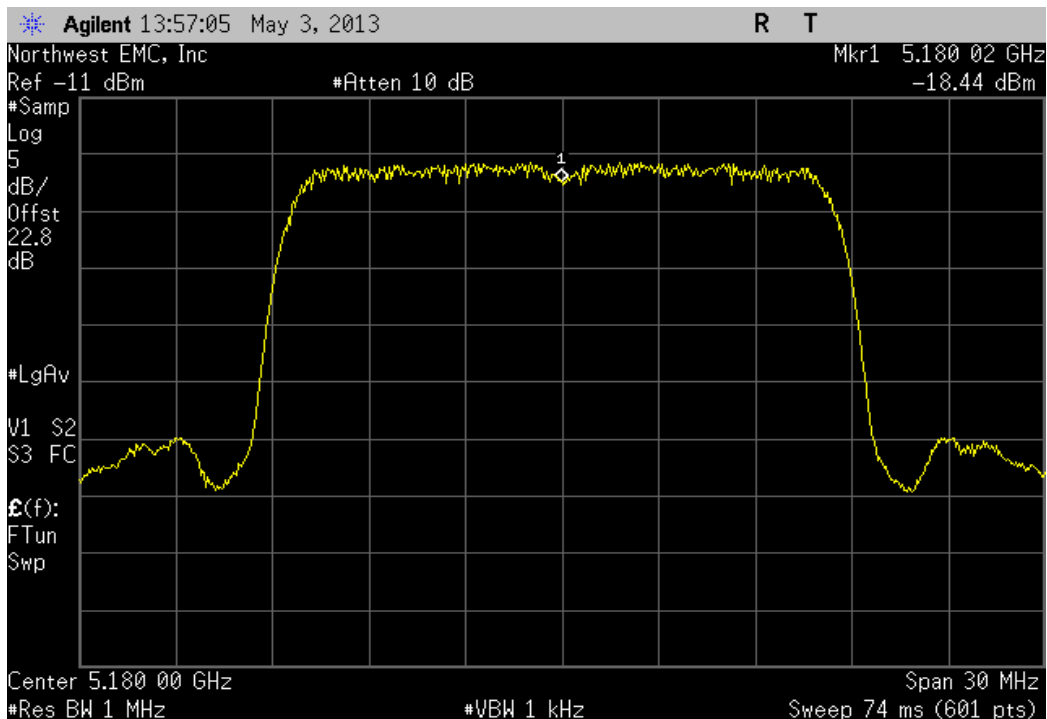
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



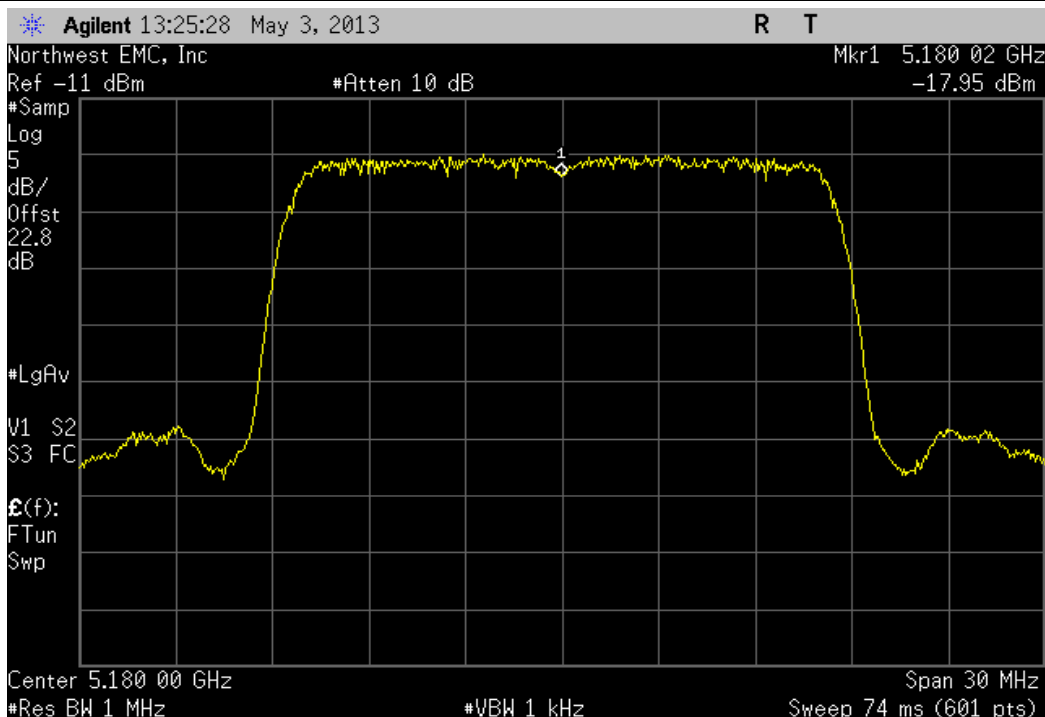
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180	5180	0	100	Pass



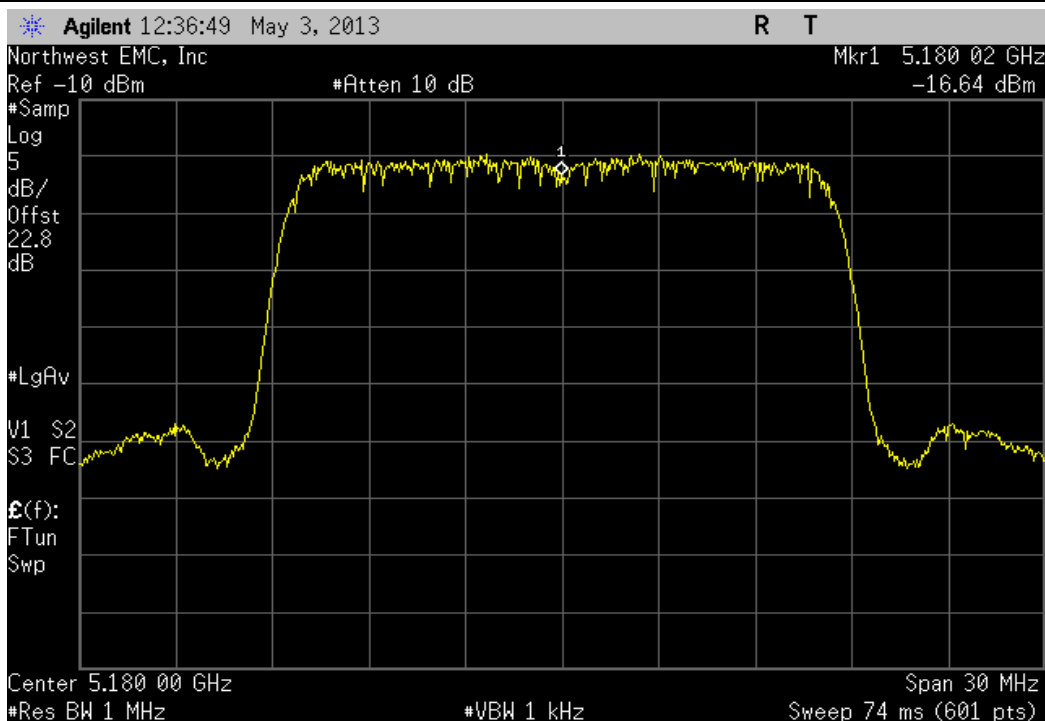
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



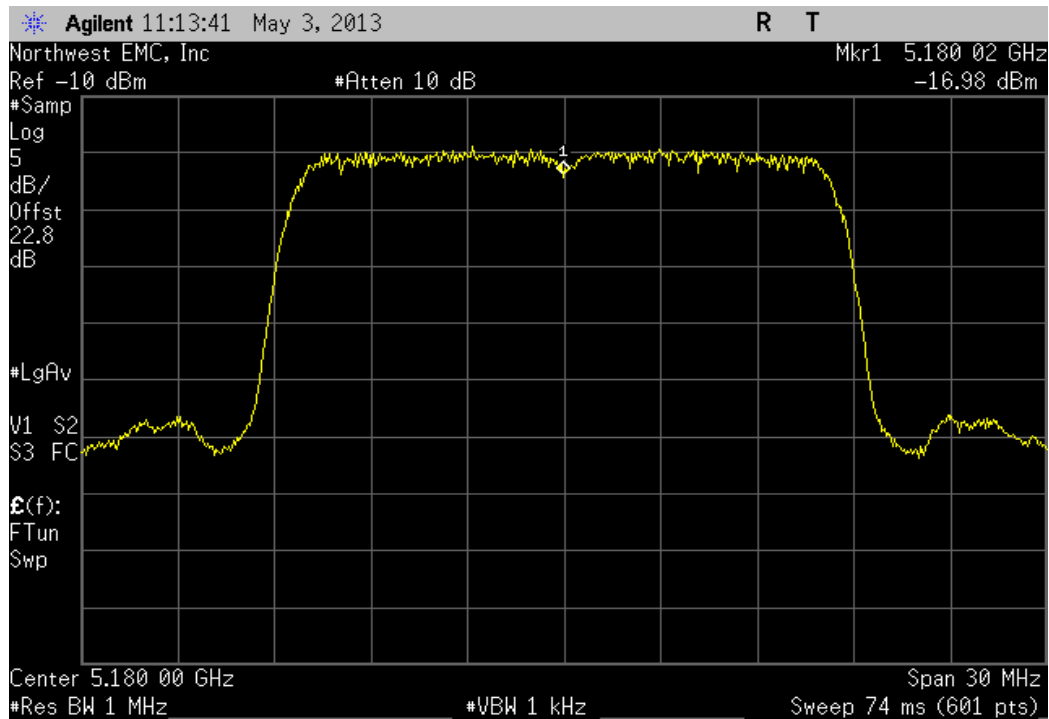
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



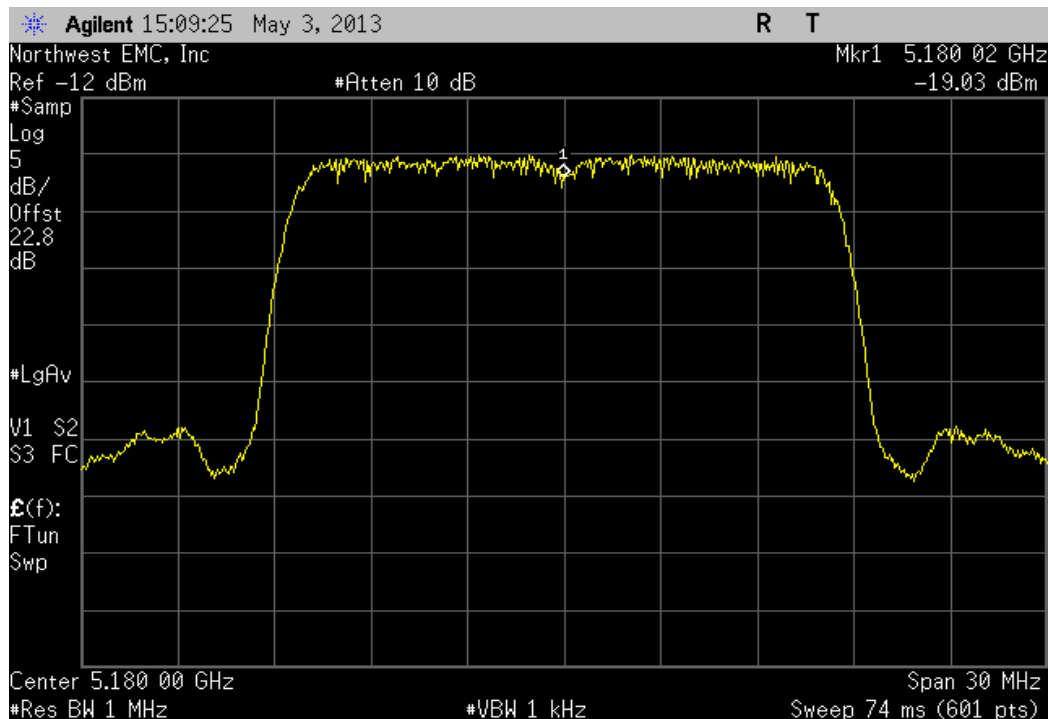
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass

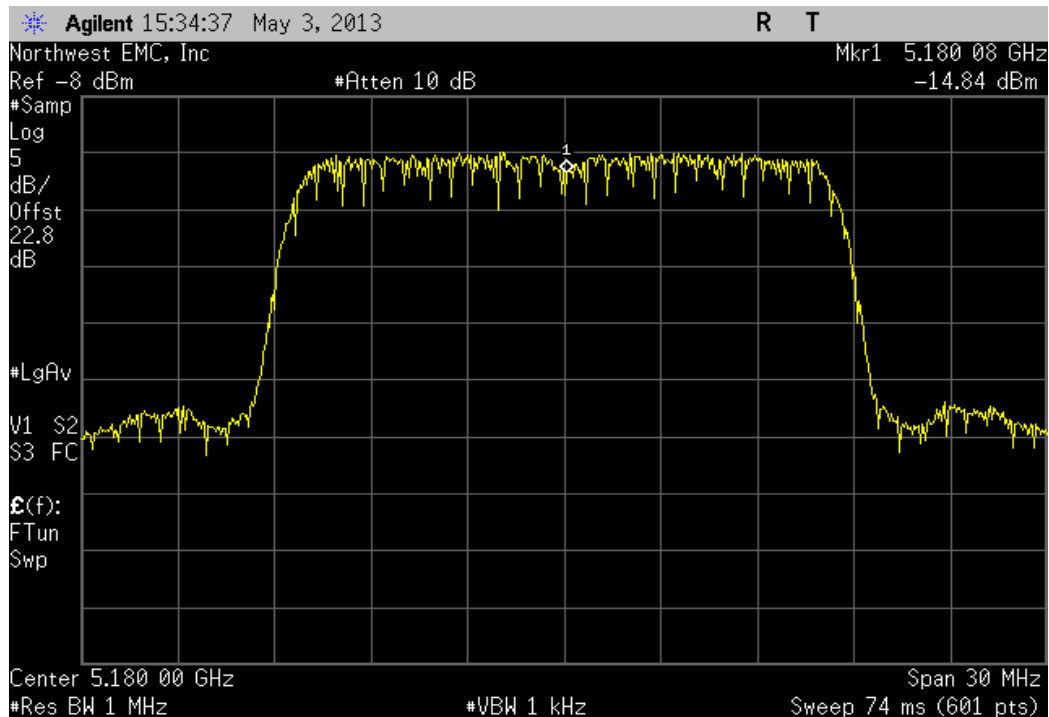


6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



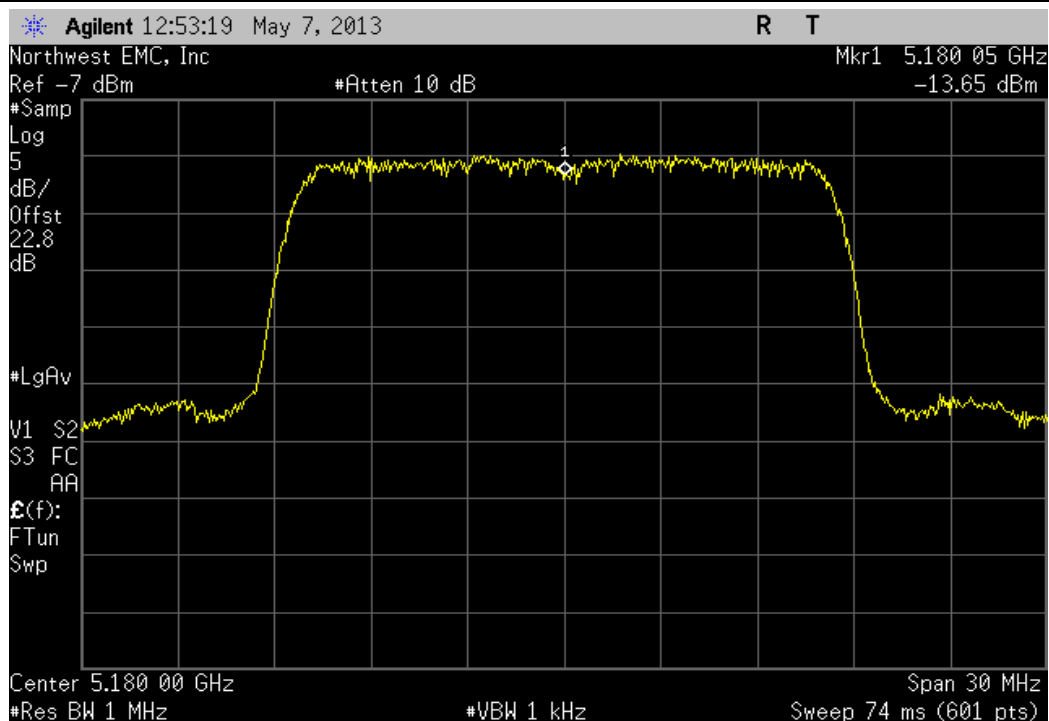
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: 0°

Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
5180.08	5180	15.4	100	Pass



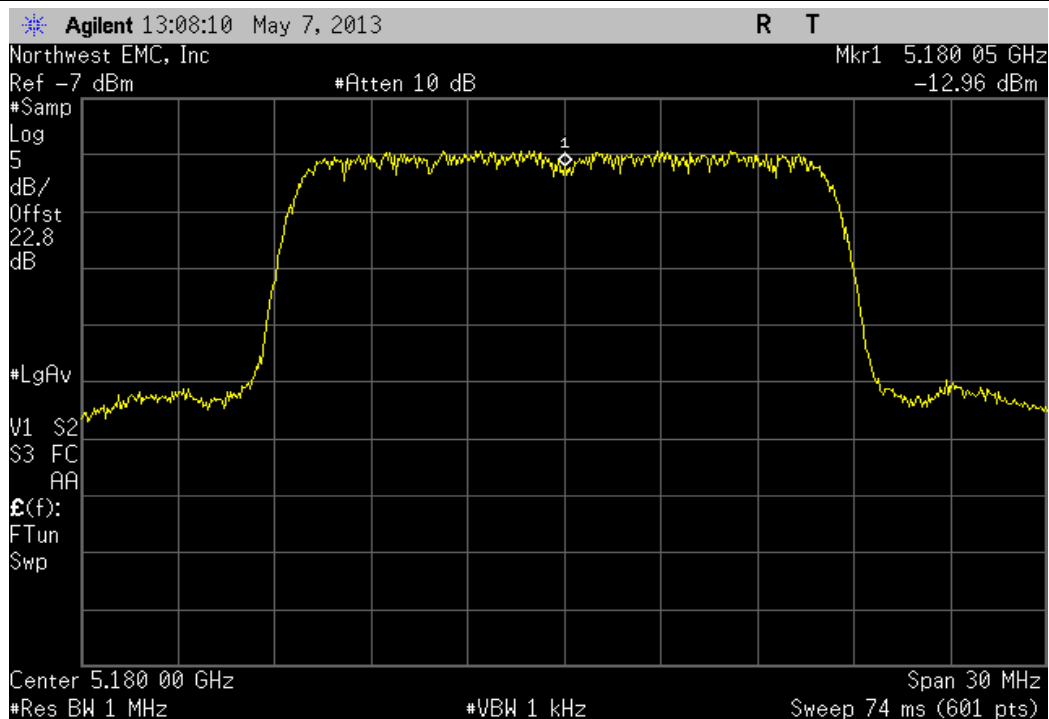
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: -10°

Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
5180.05	5180	9.6	100	Pass



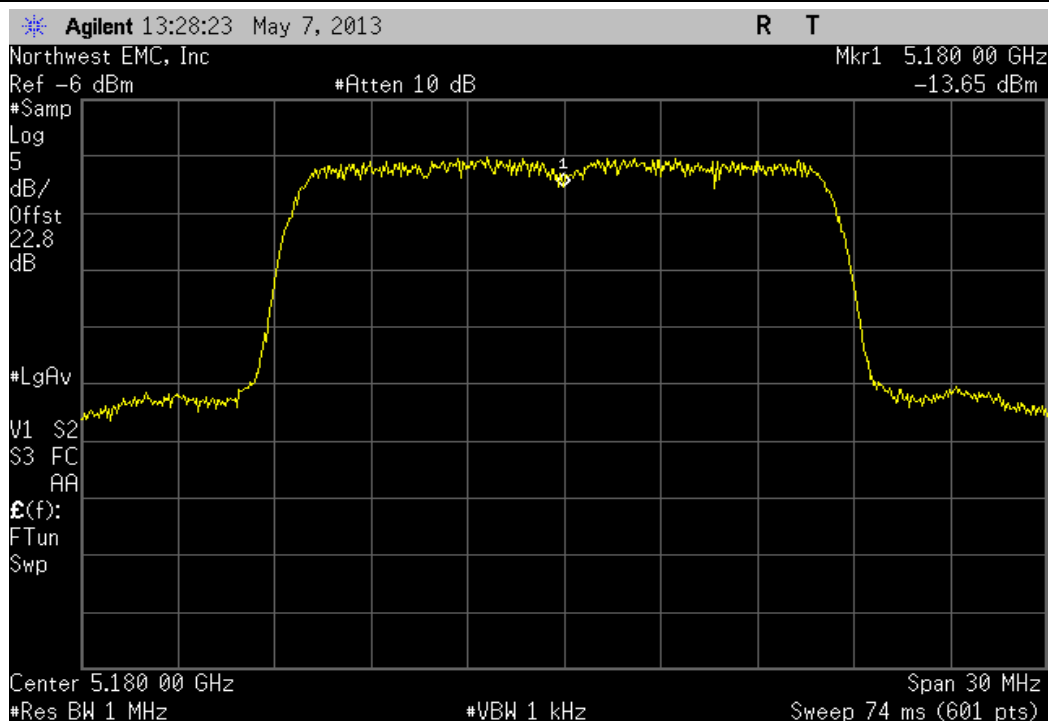
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: -20°

Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
5180.05	5180	9.6	100	Pass

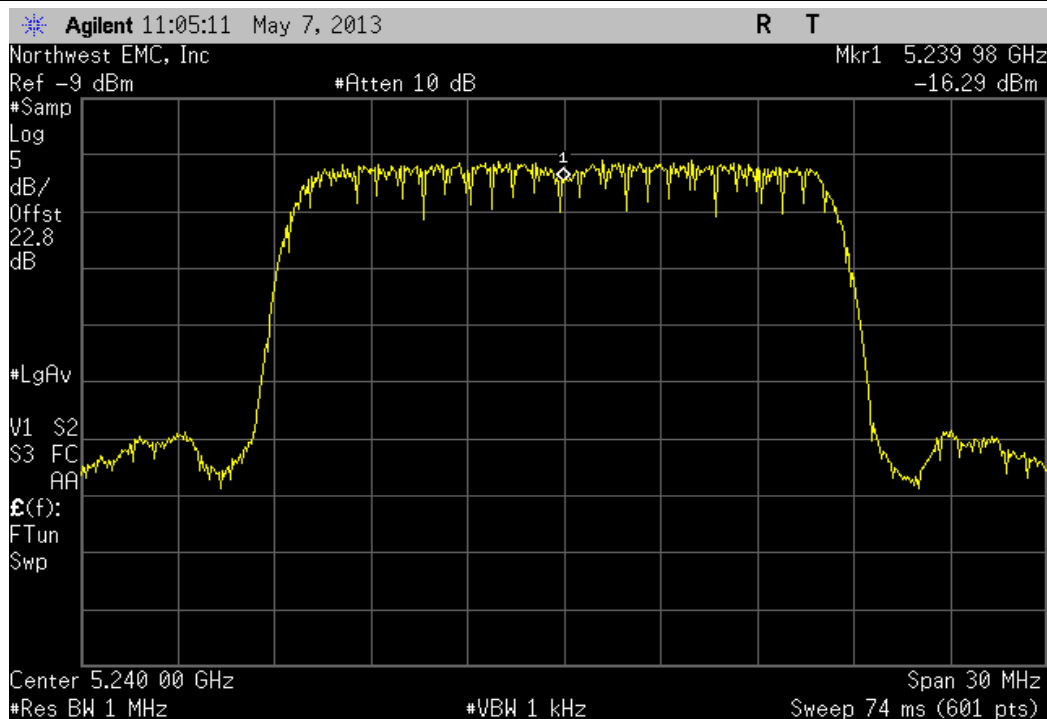


6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: -30°

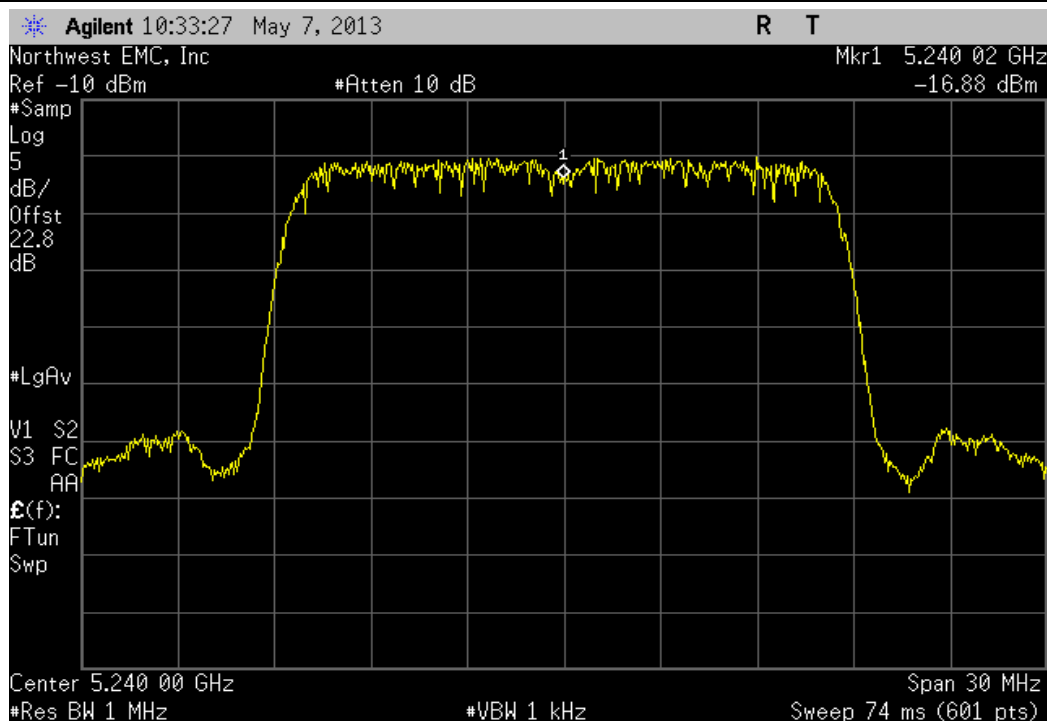
Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
5180	5180	0	100	Pass



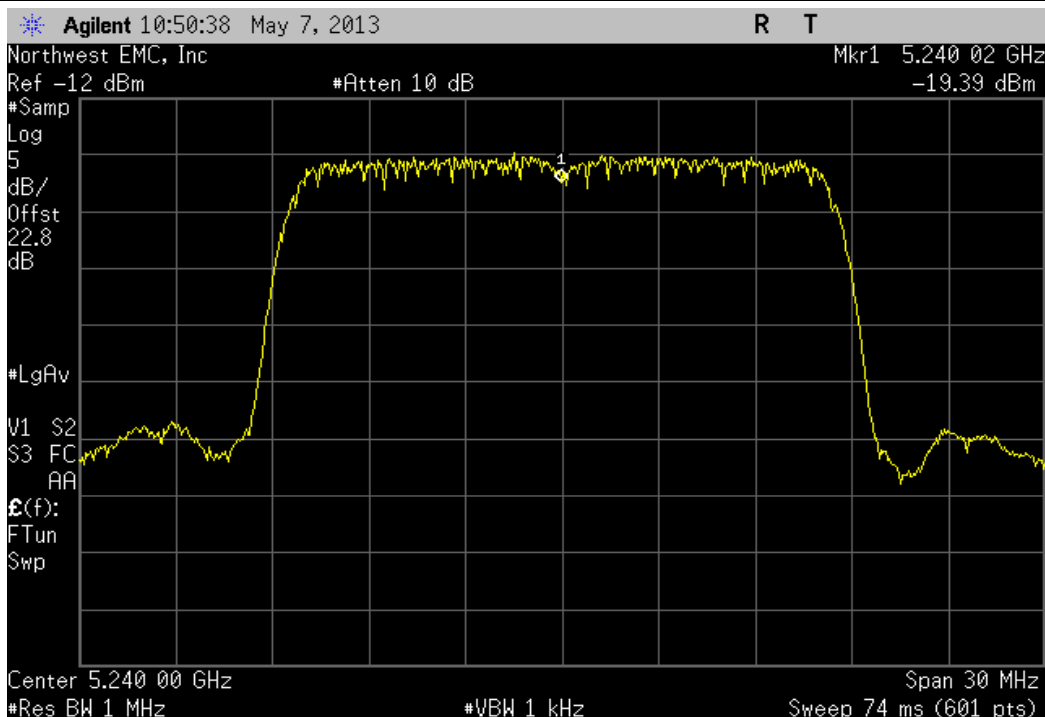
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5239.98	5240	3.8	100	Pass



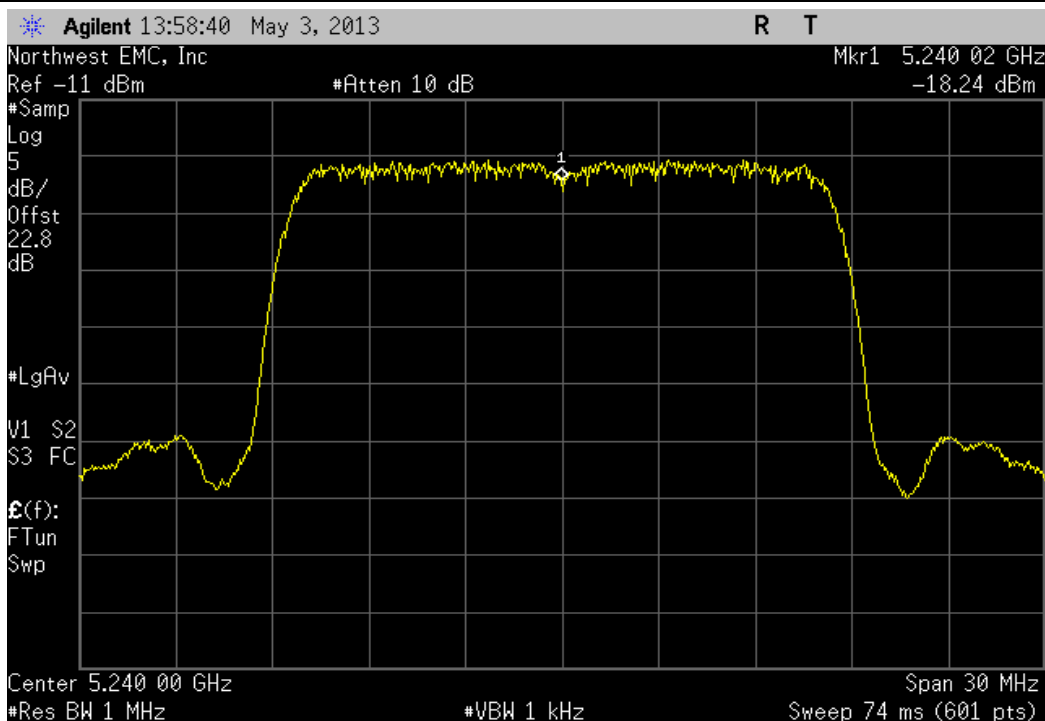
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



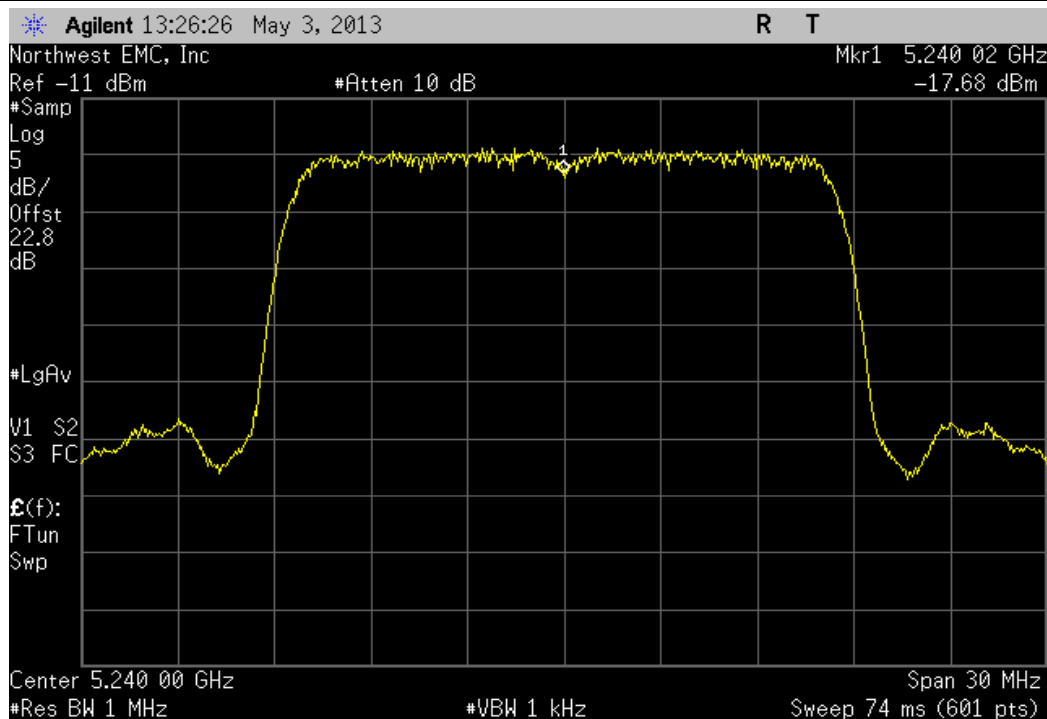
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



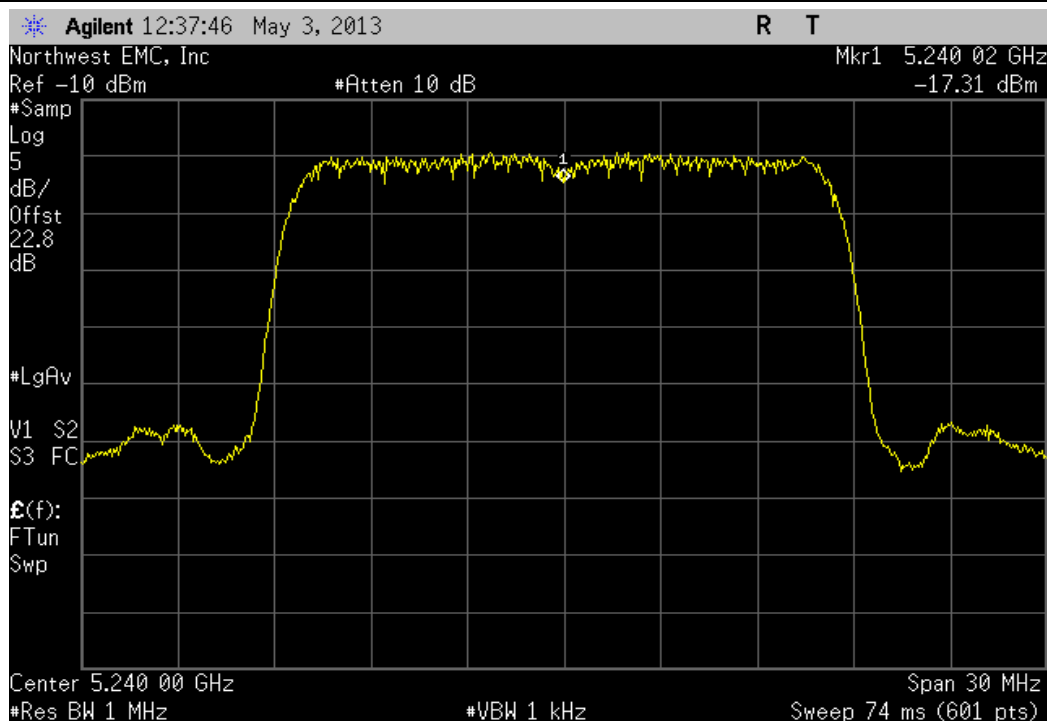
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



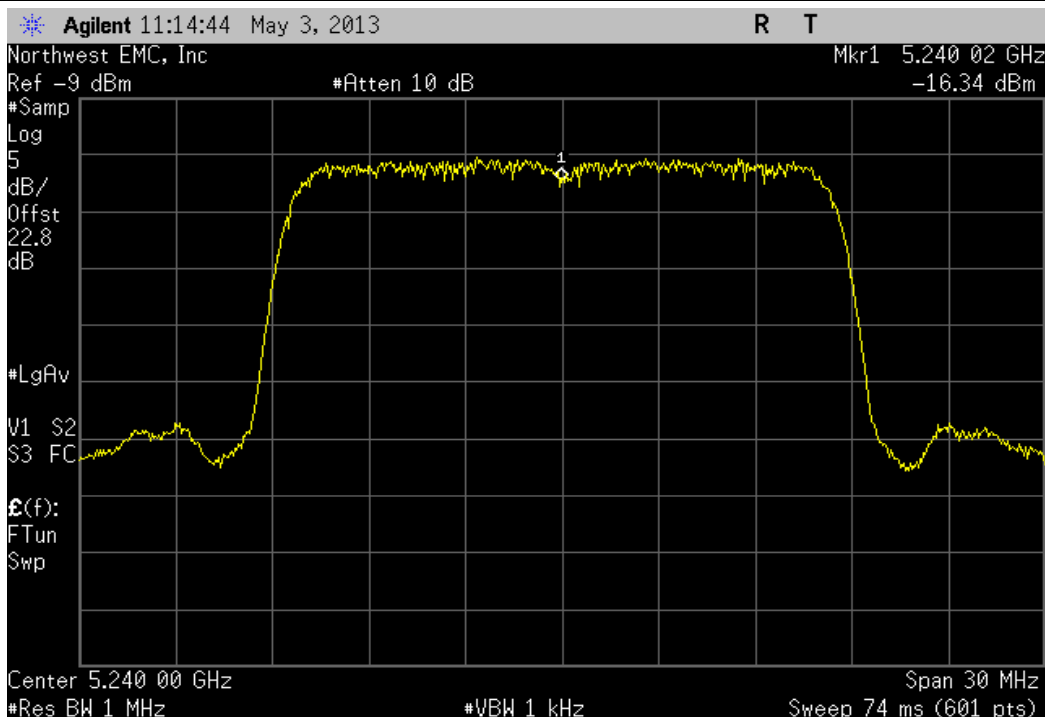
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



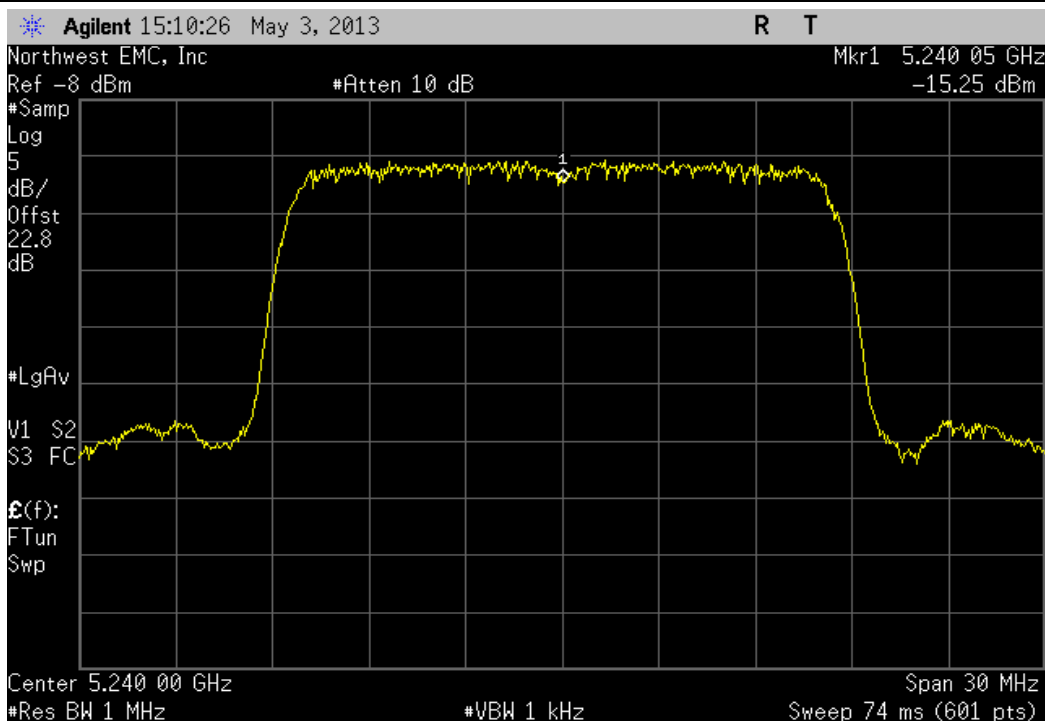
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



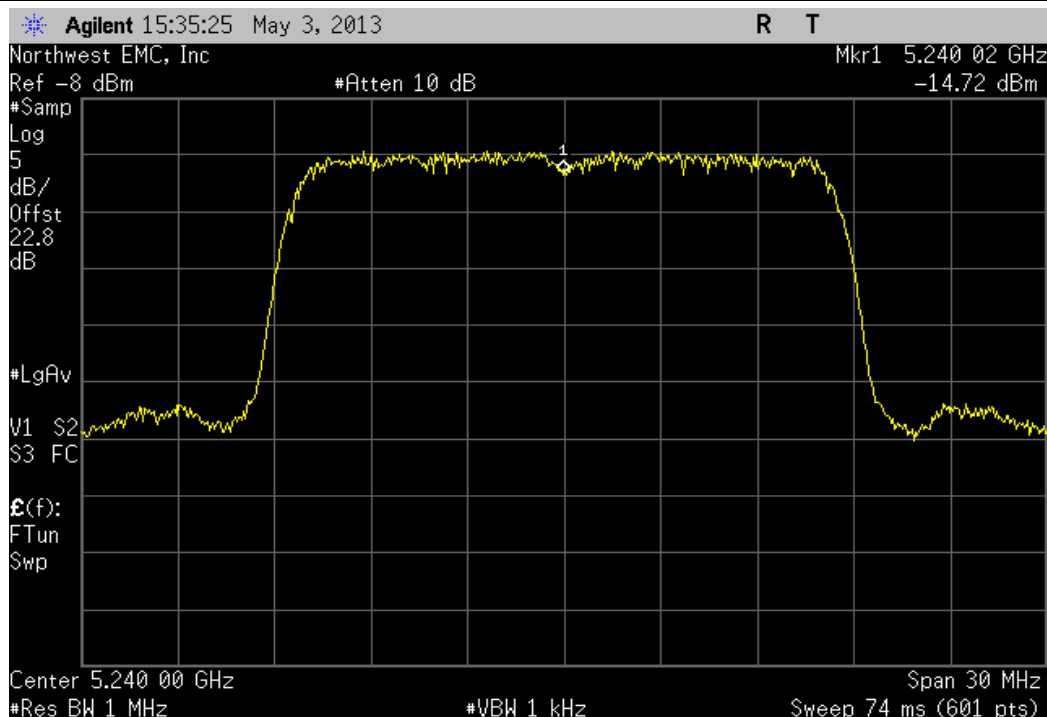
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



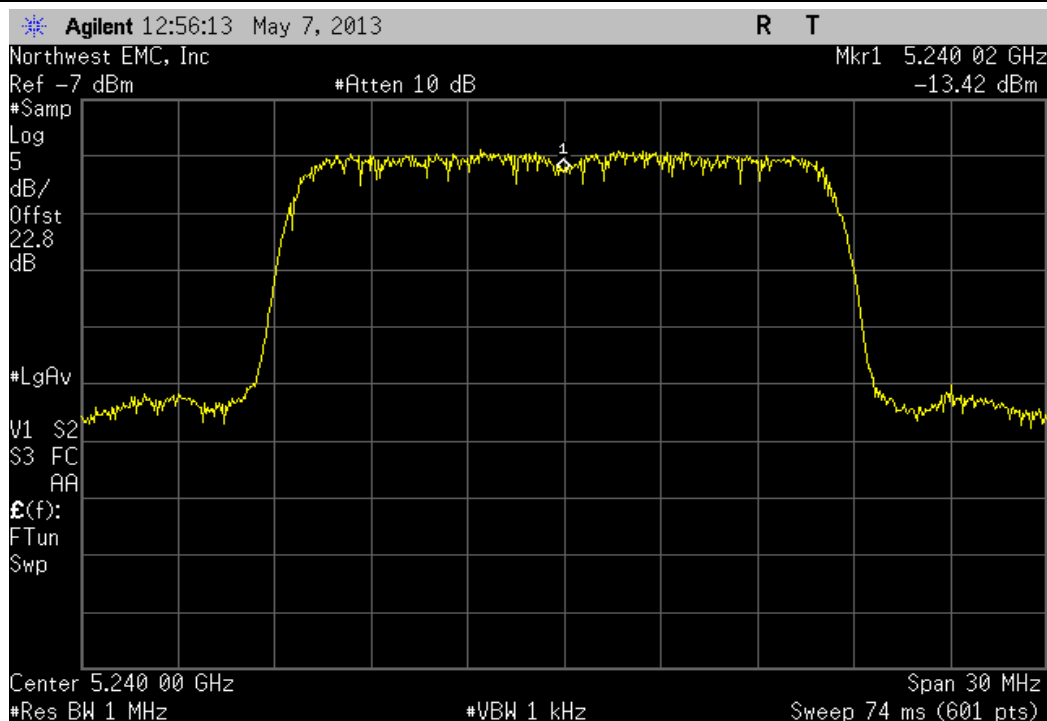
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.05	5240	9.5	100	Pass



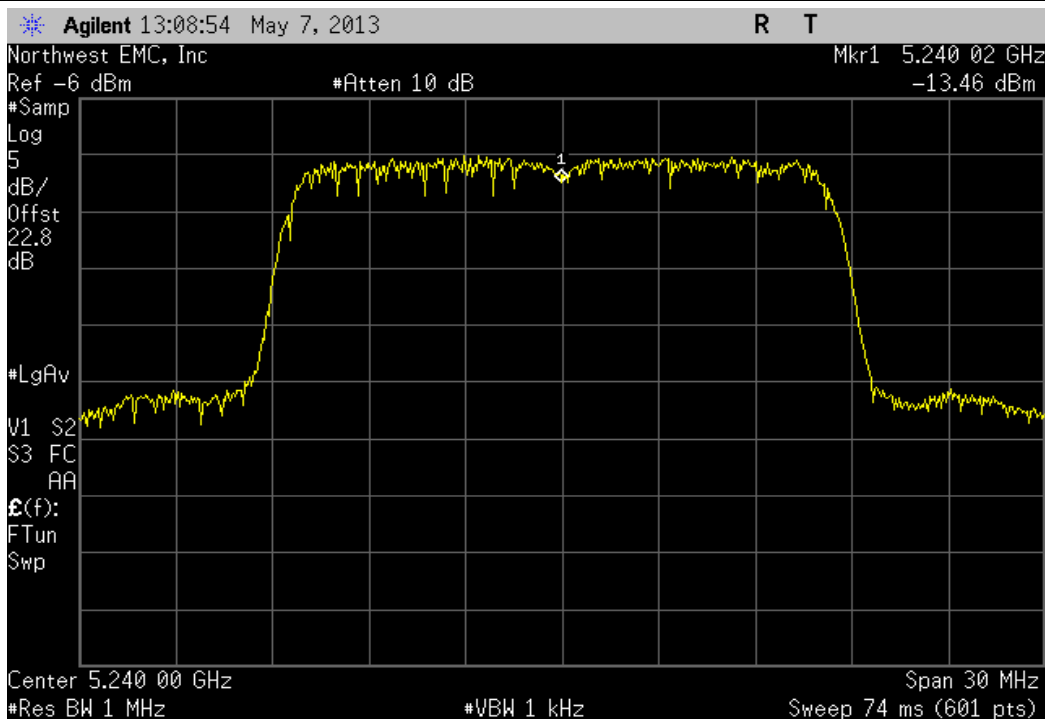
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



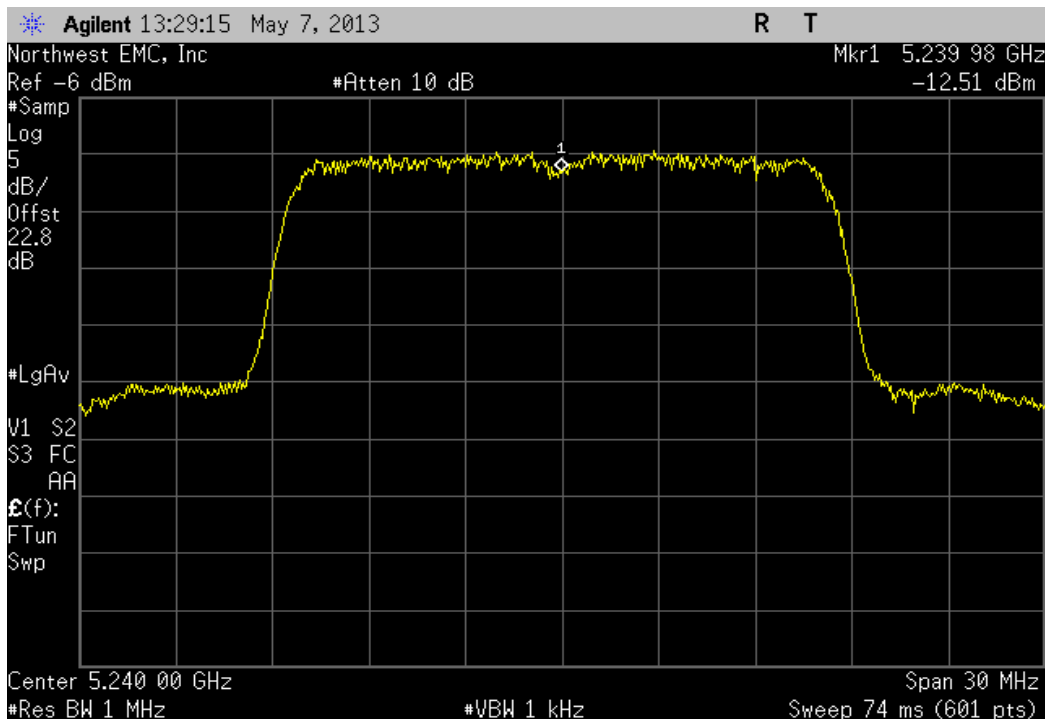
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



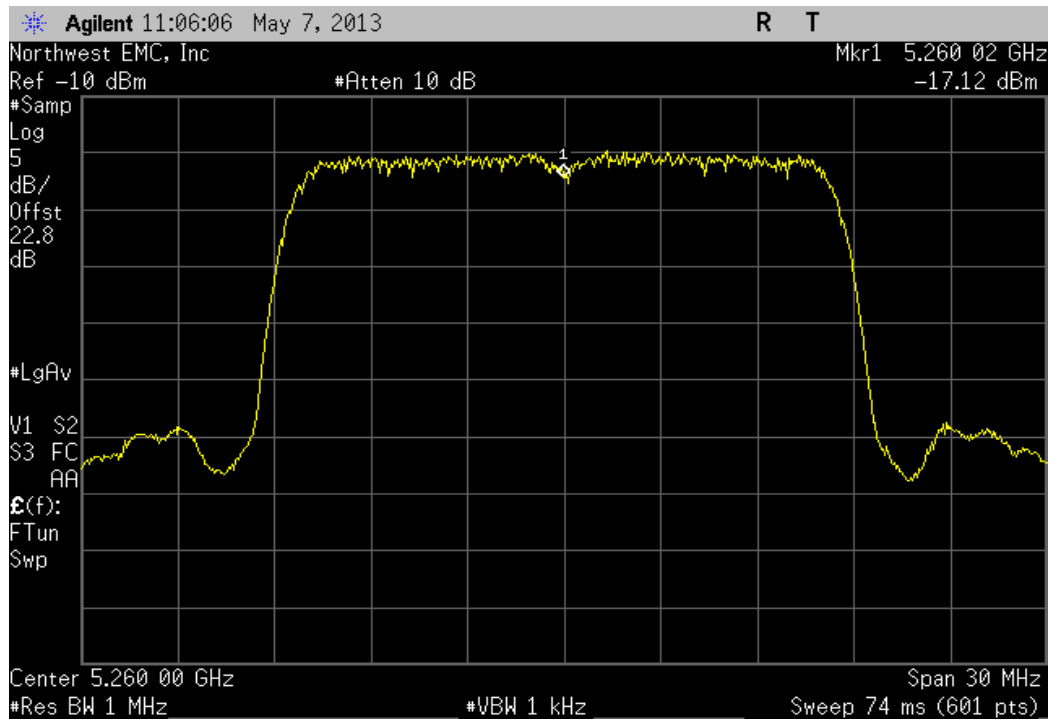
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



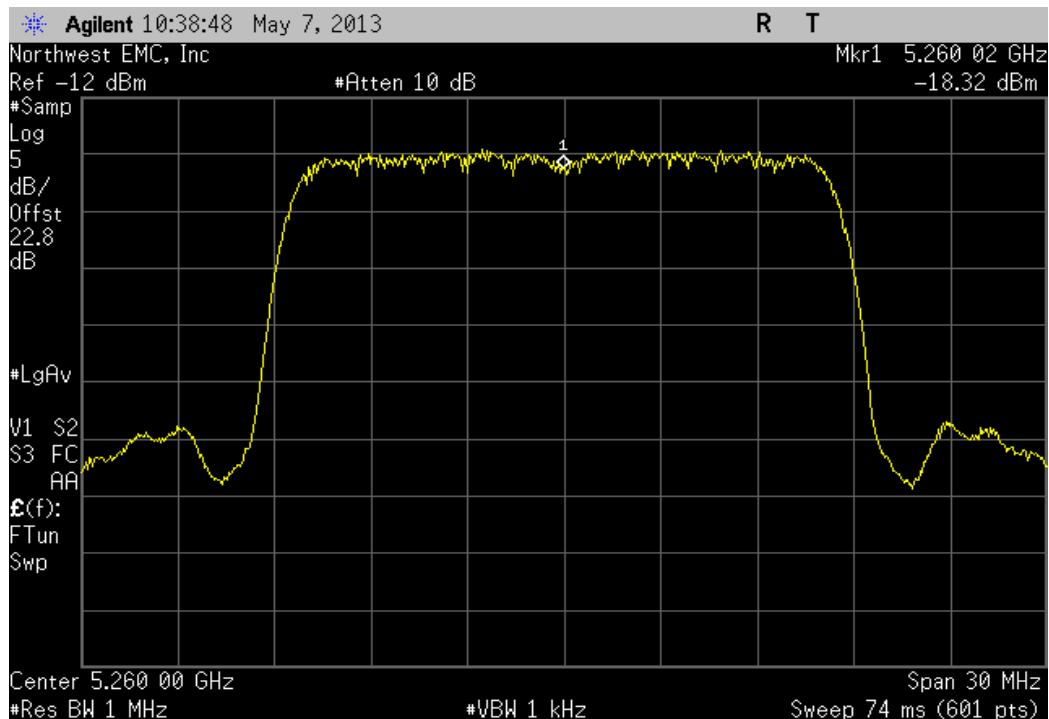
6 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5239.98	5240	3.8	100	Pass



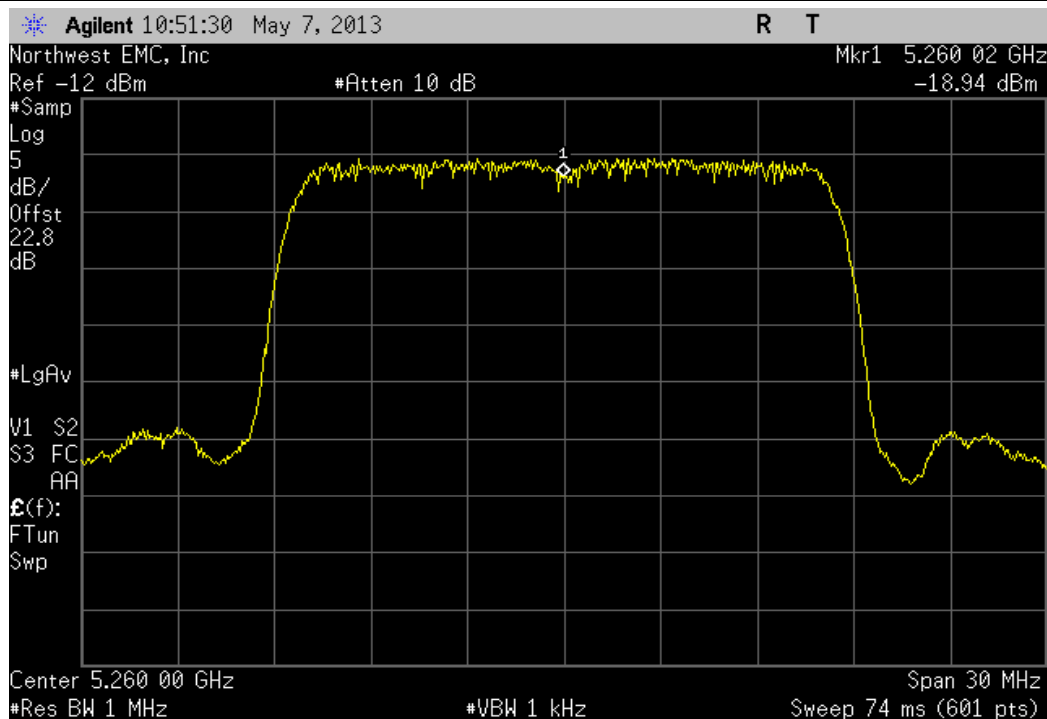
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



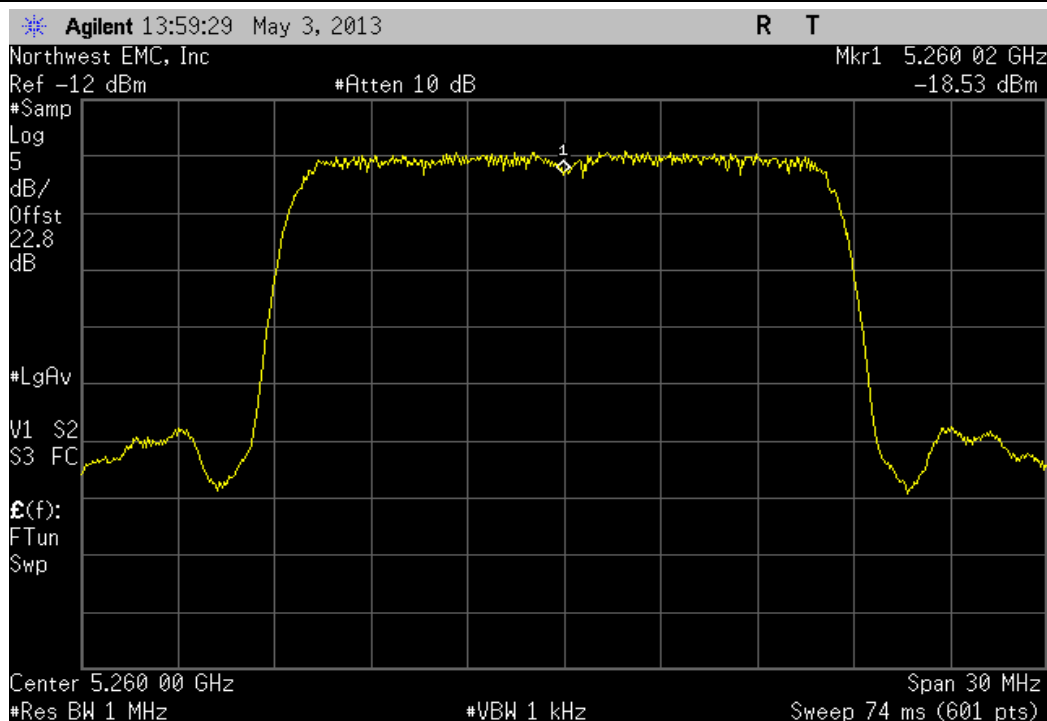
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



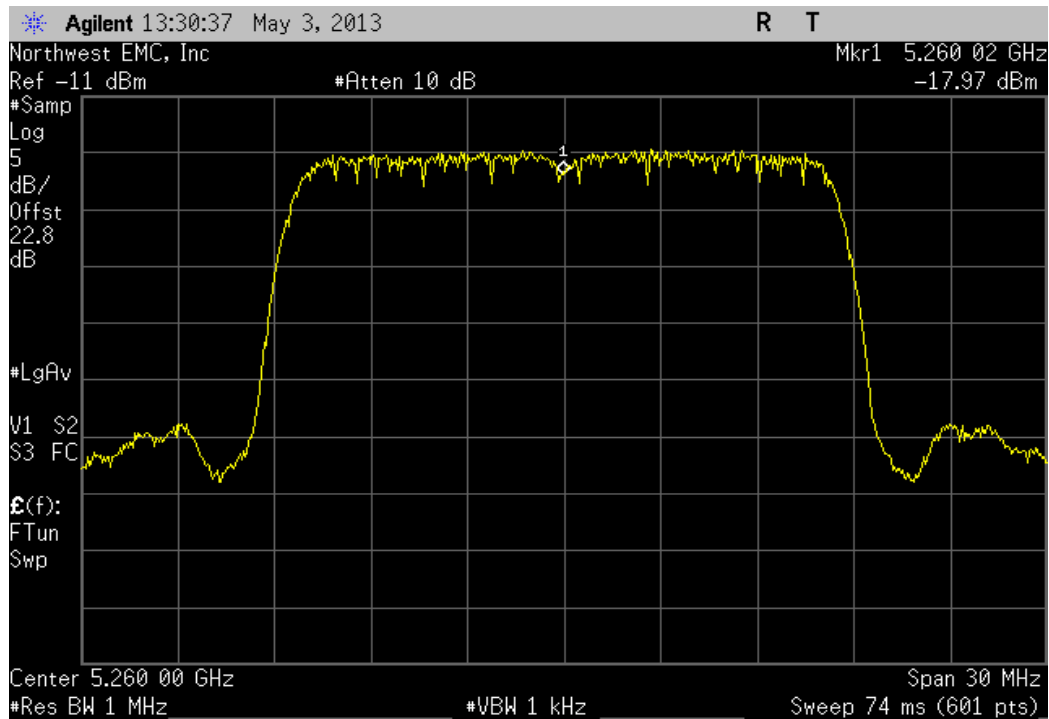
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



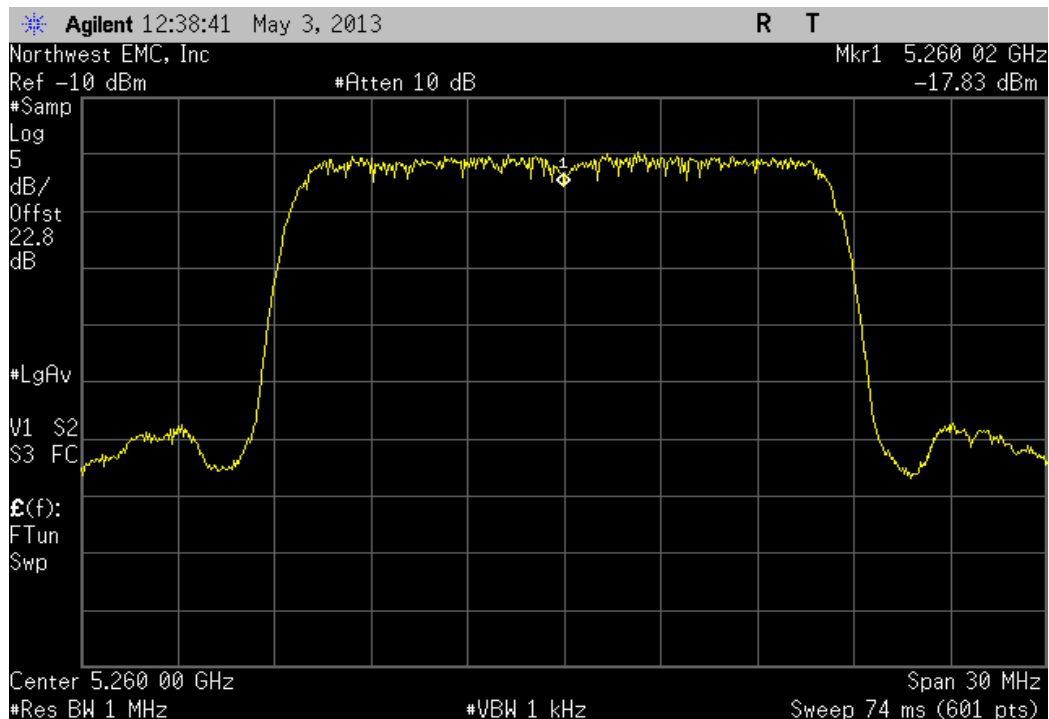
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



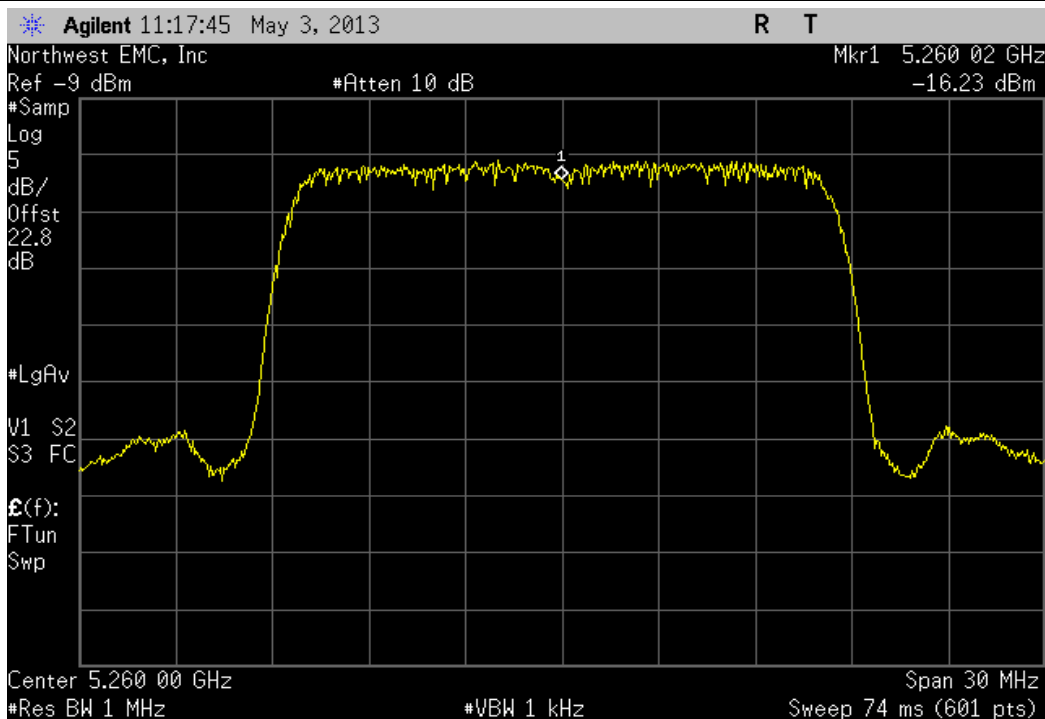
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



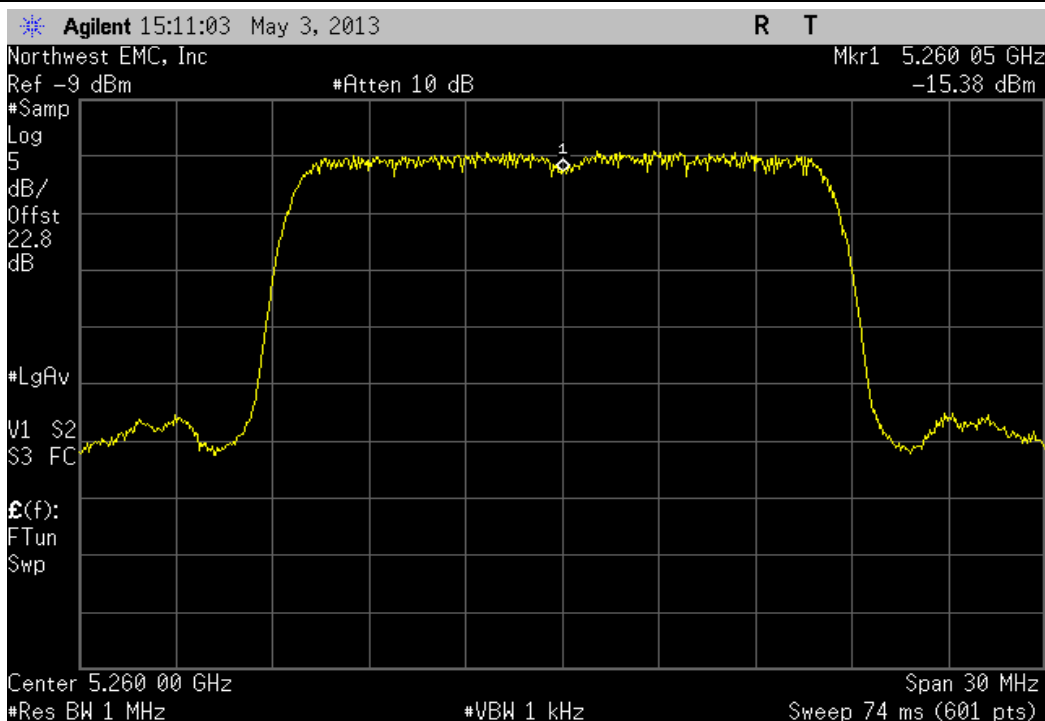
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



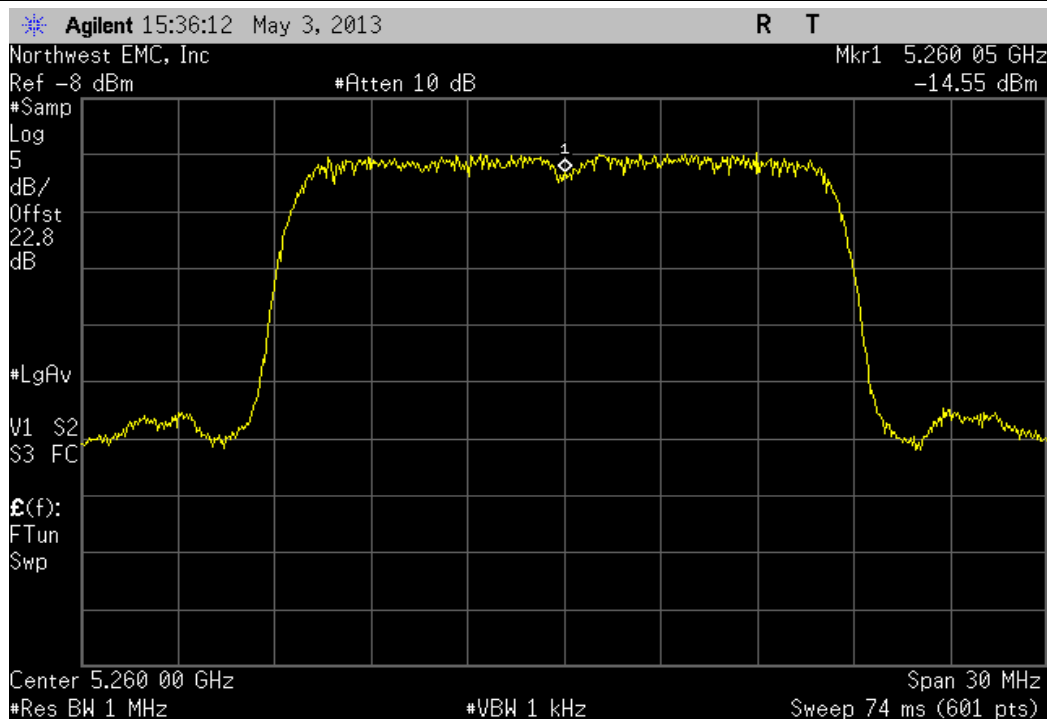
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



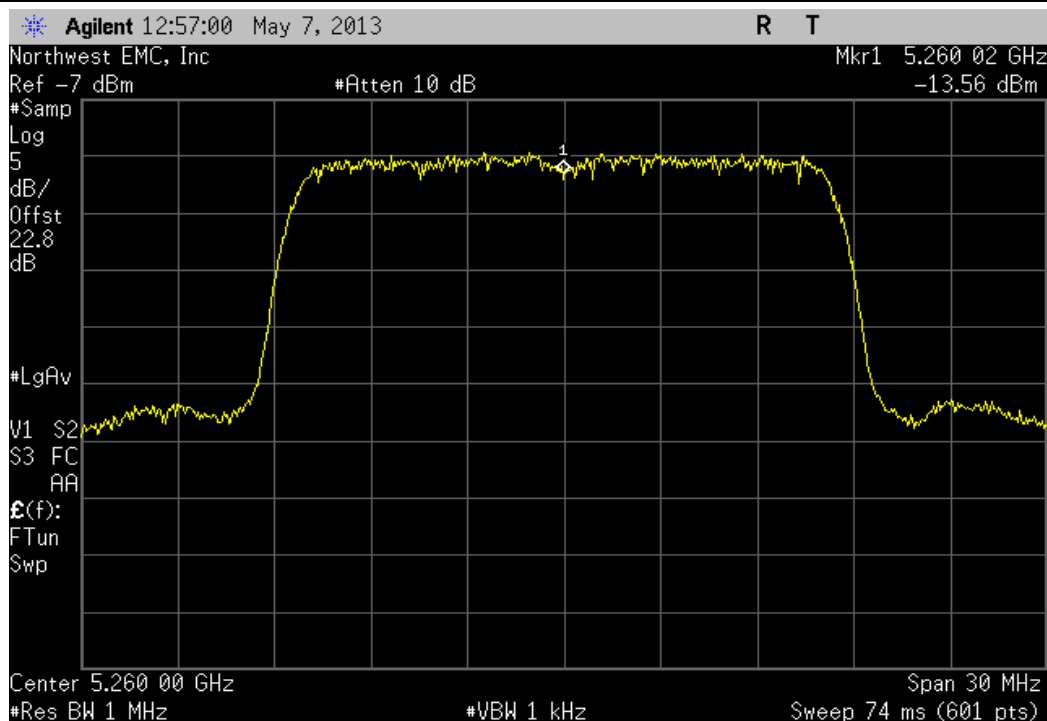
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.05	5260	9.5	100	Pass



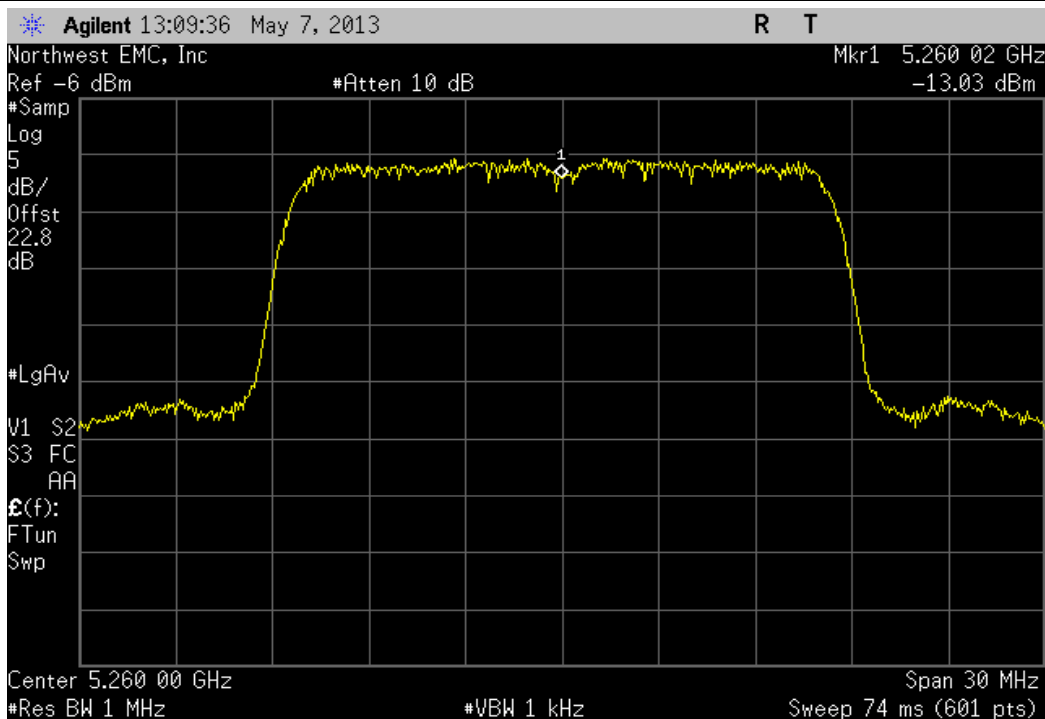
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.05	5260	9.5	100	Pass



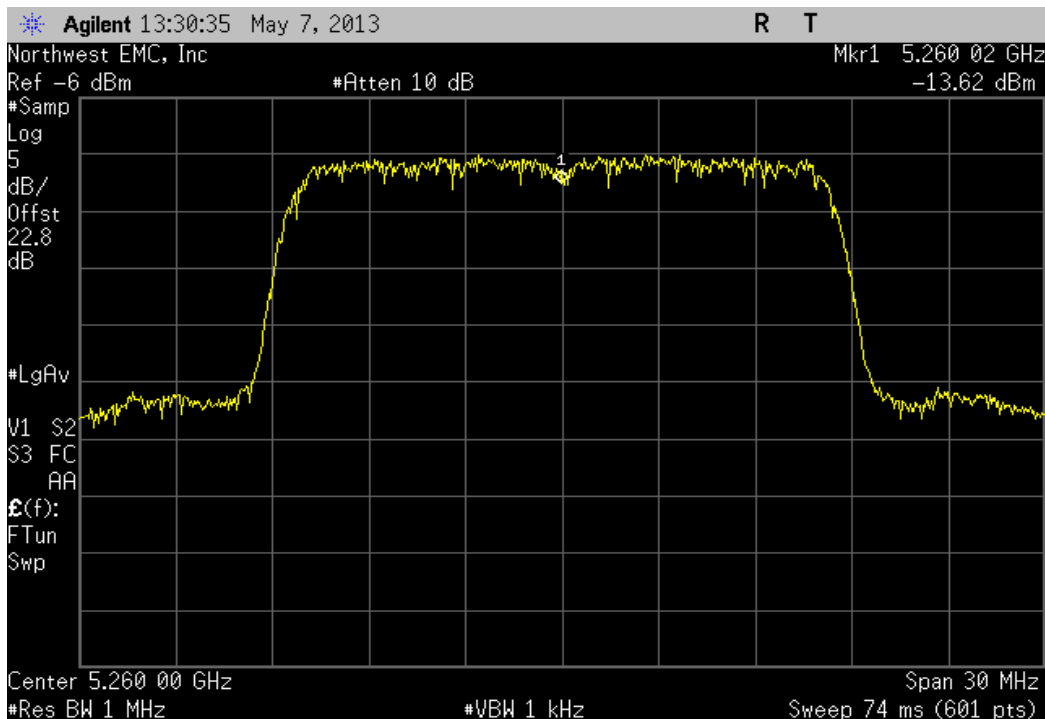
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



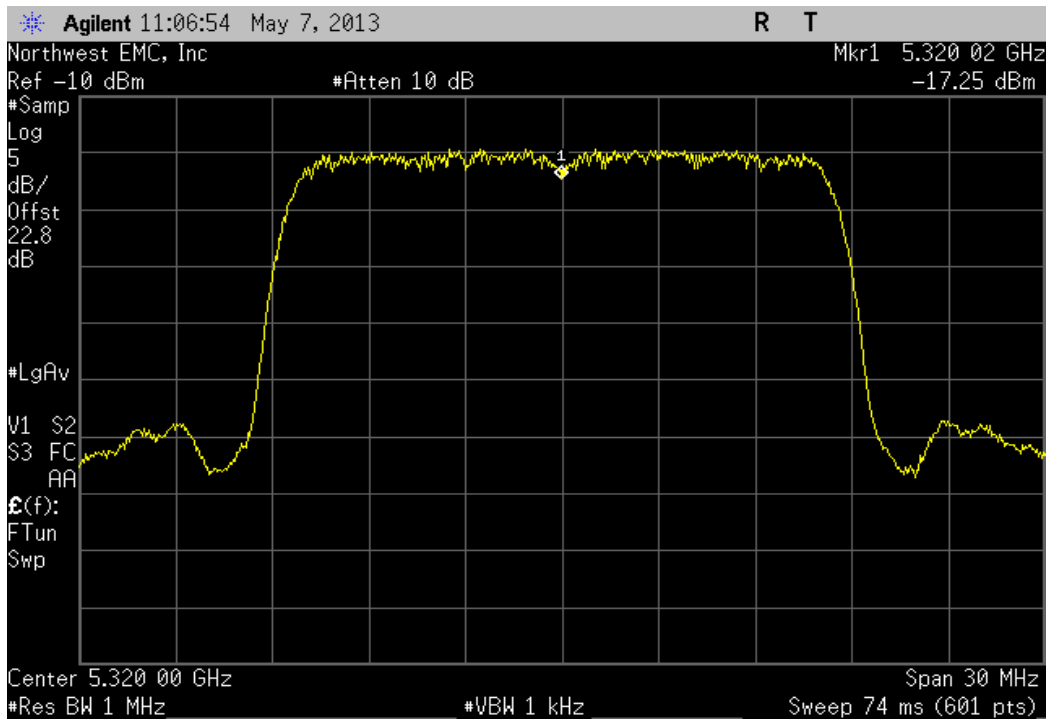
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



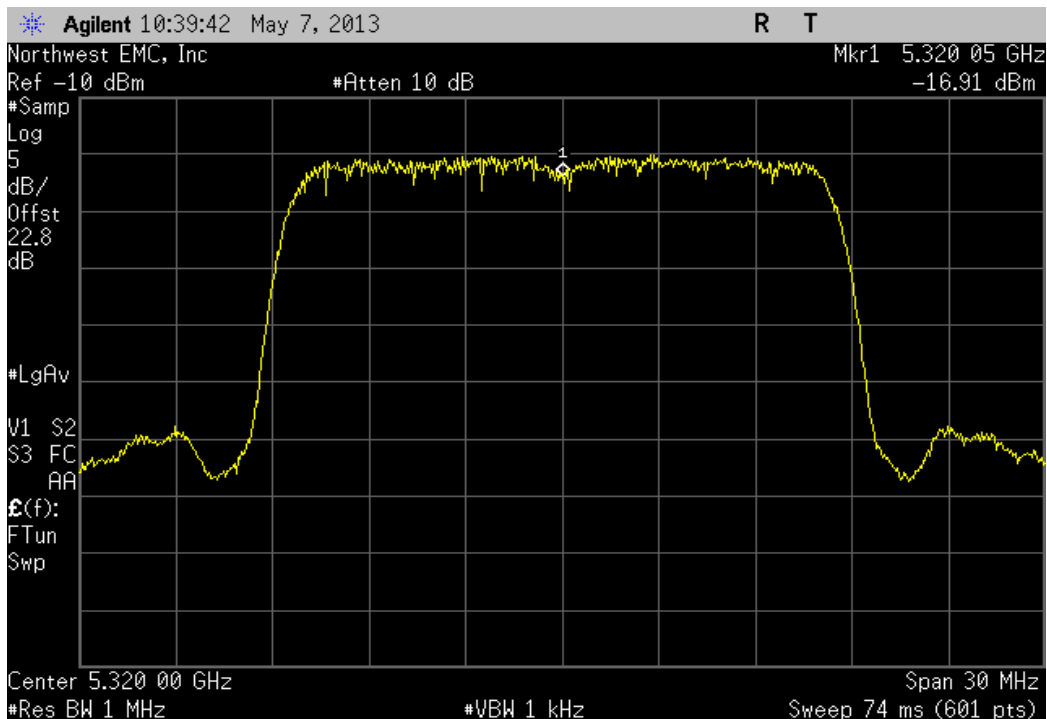
6 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



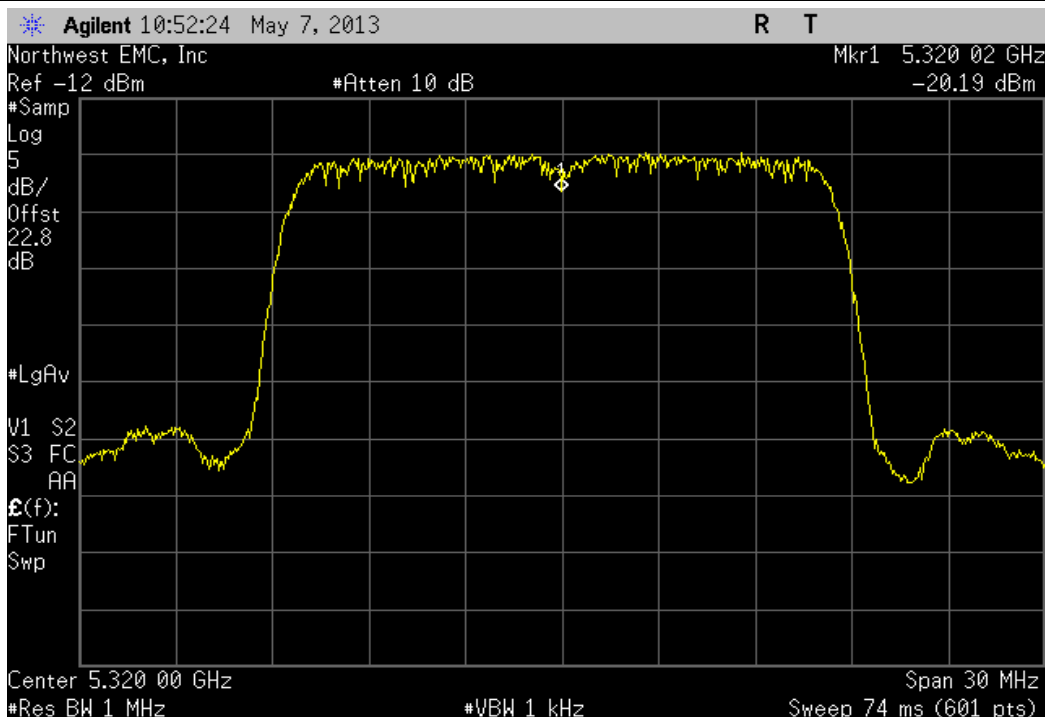
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



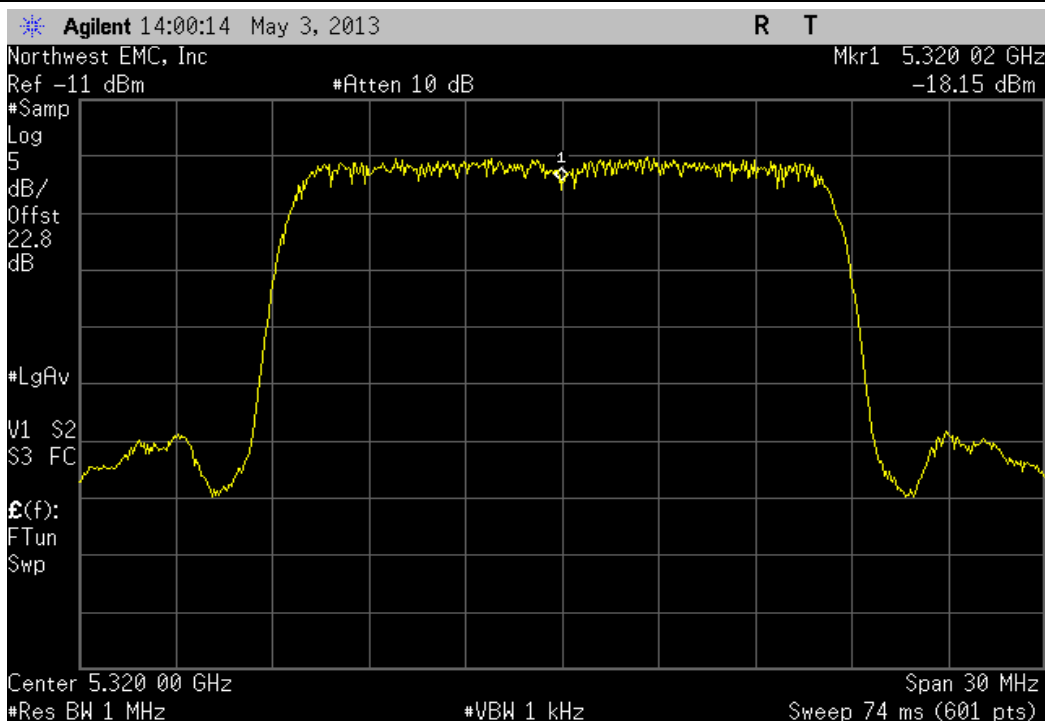
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.05	5320	9.4	100	Pass



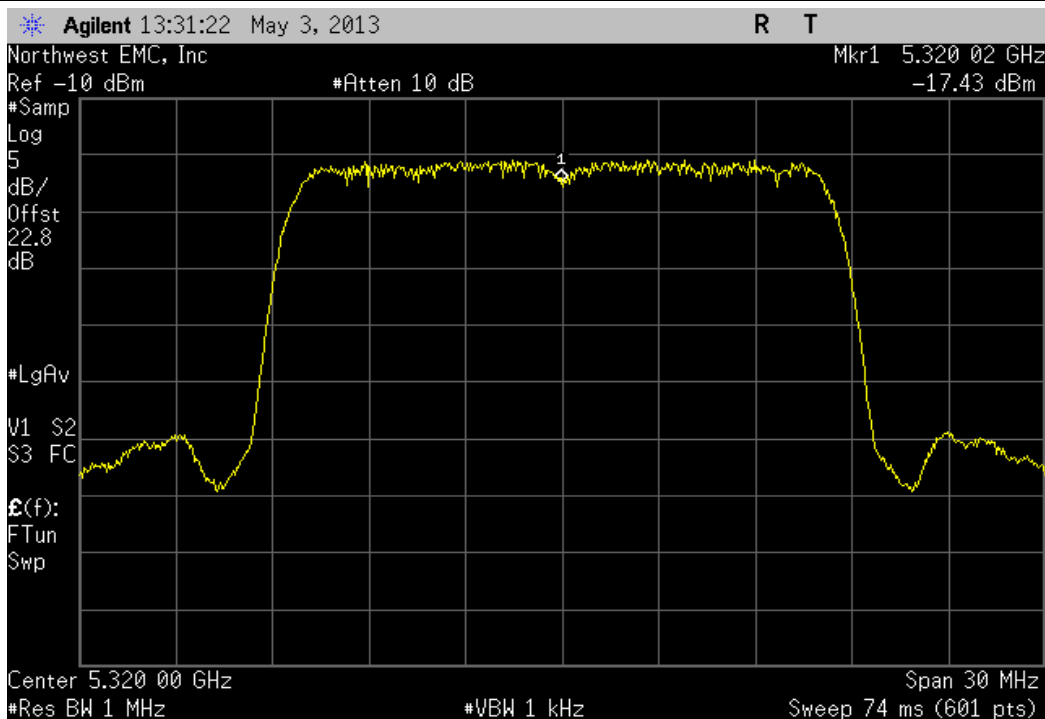
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



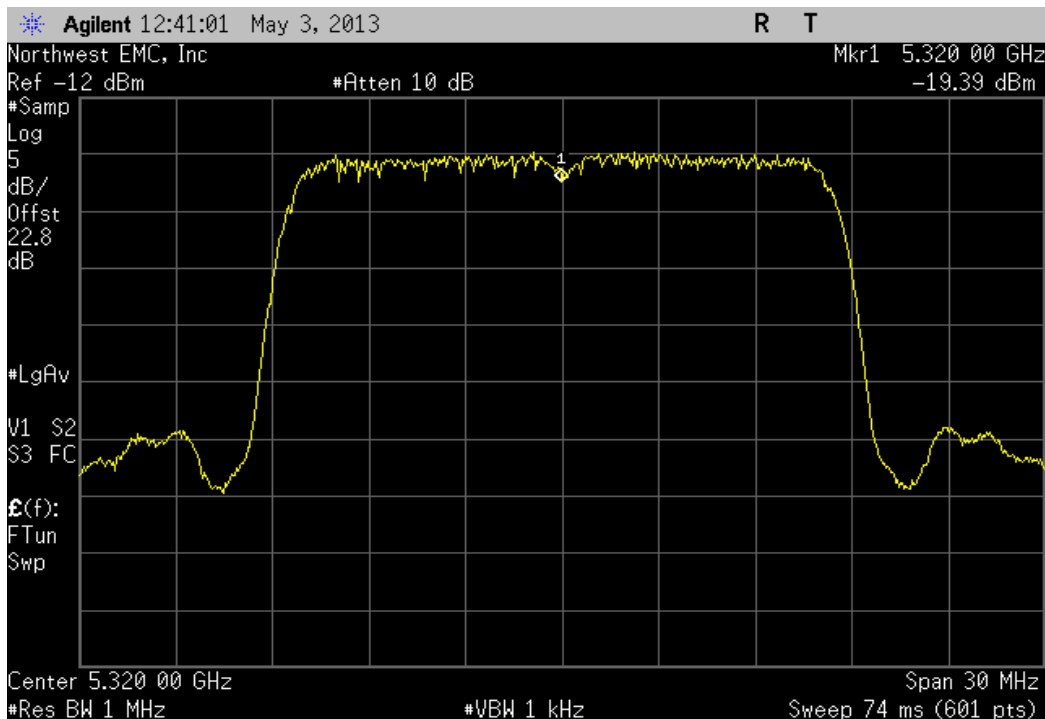
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



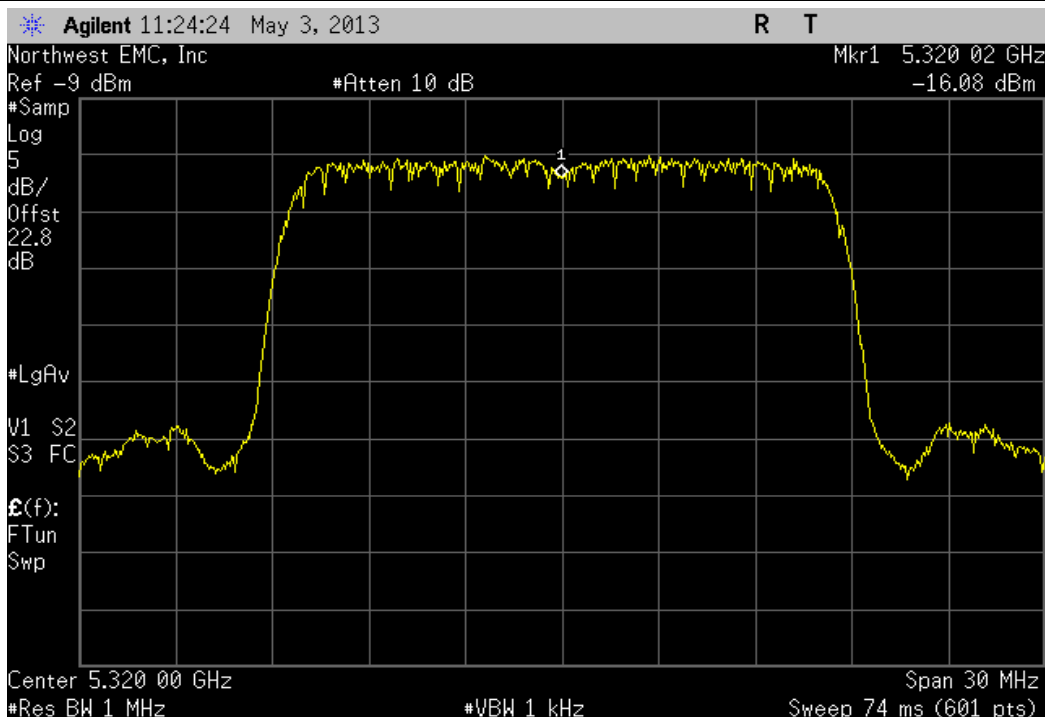
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



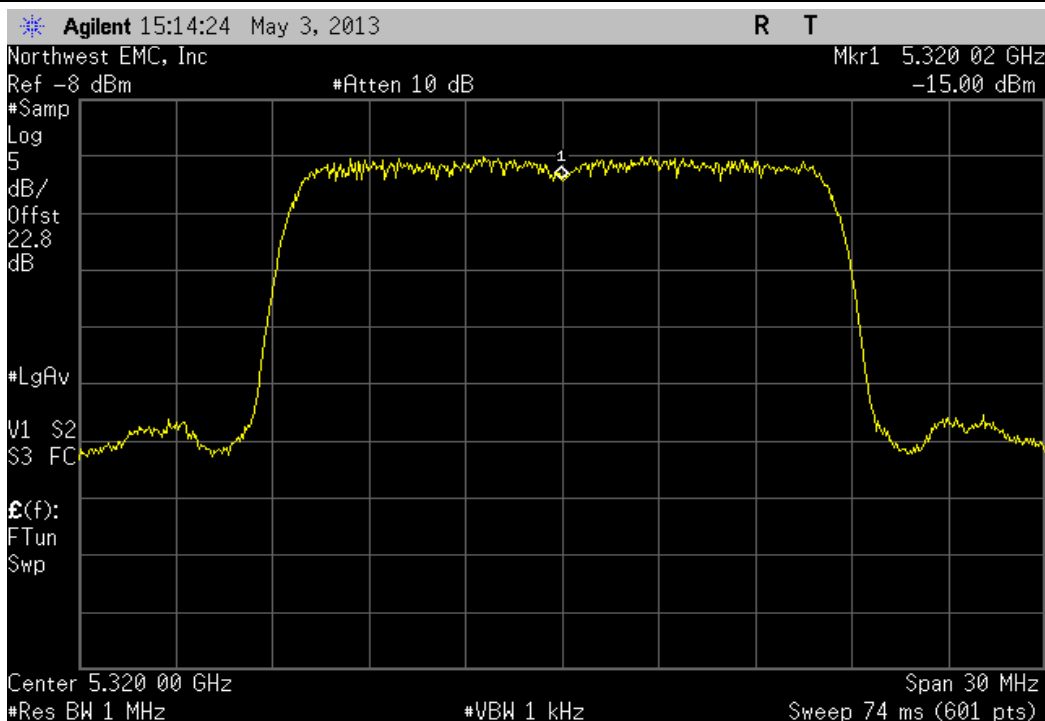
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320	5320	0	100	Pass



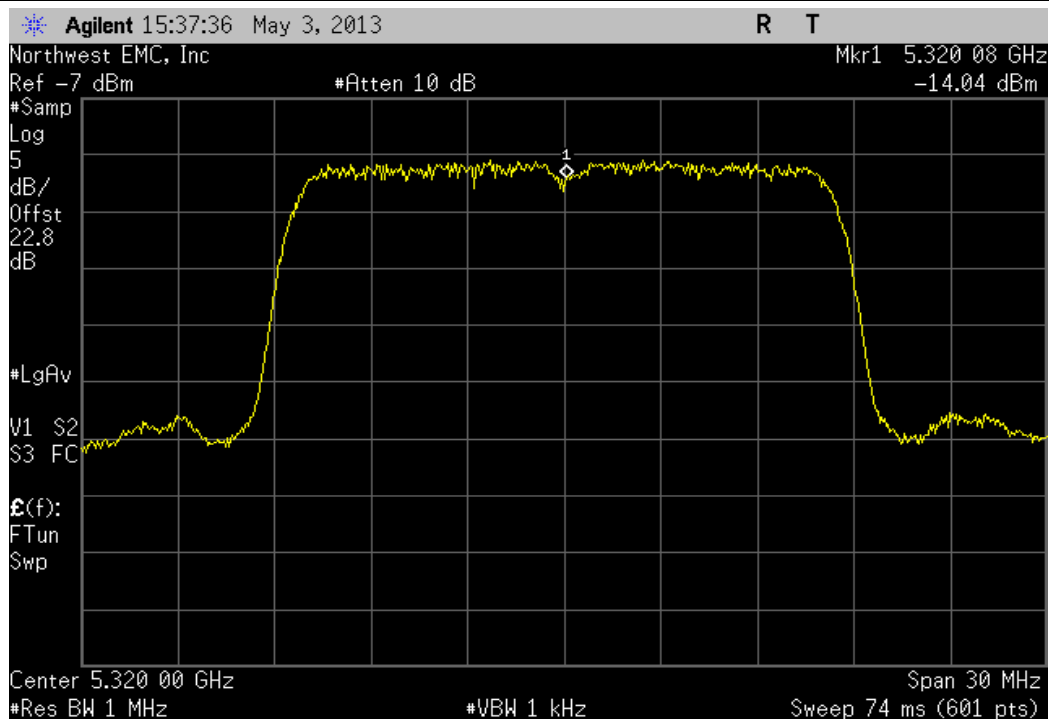
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



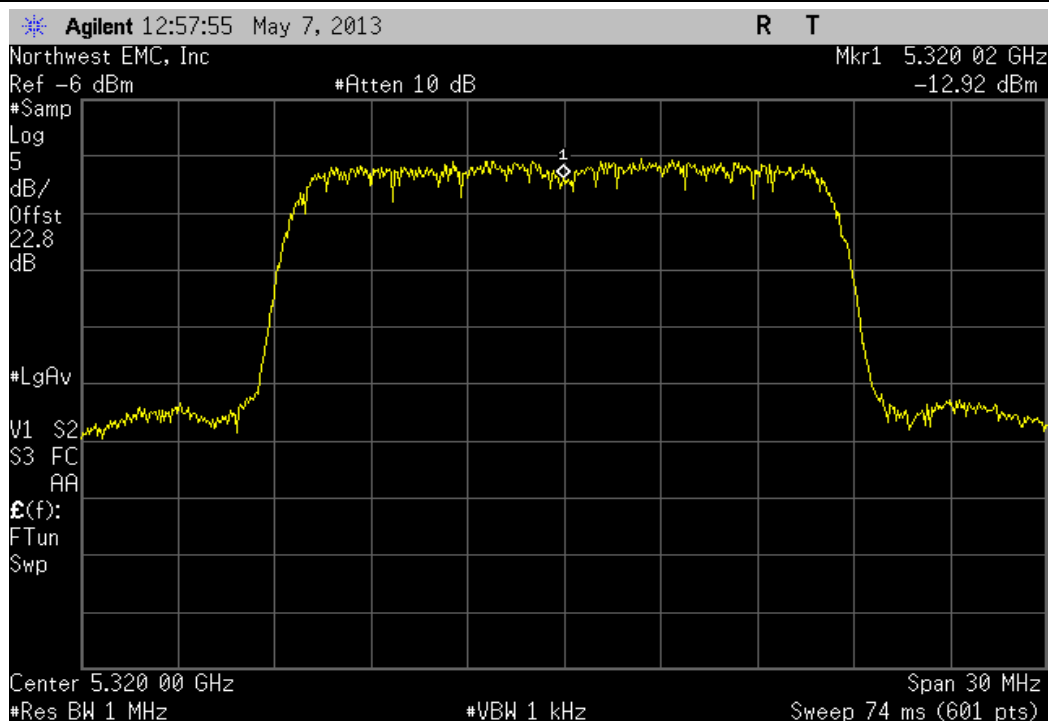
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



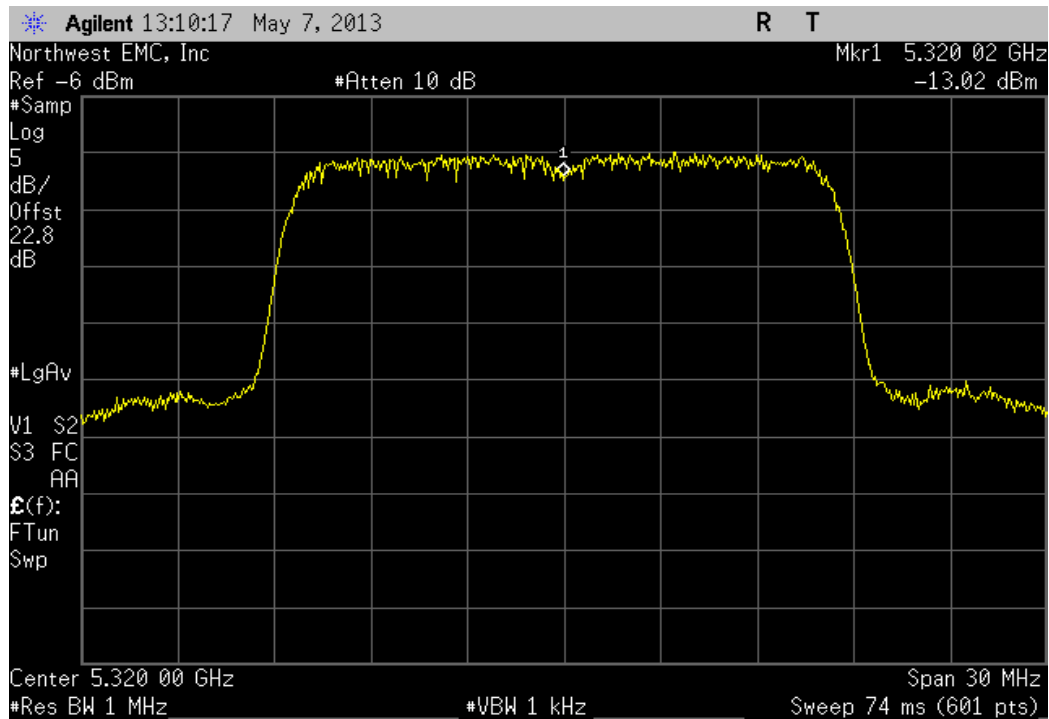
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.08	5320	15	100	Pass



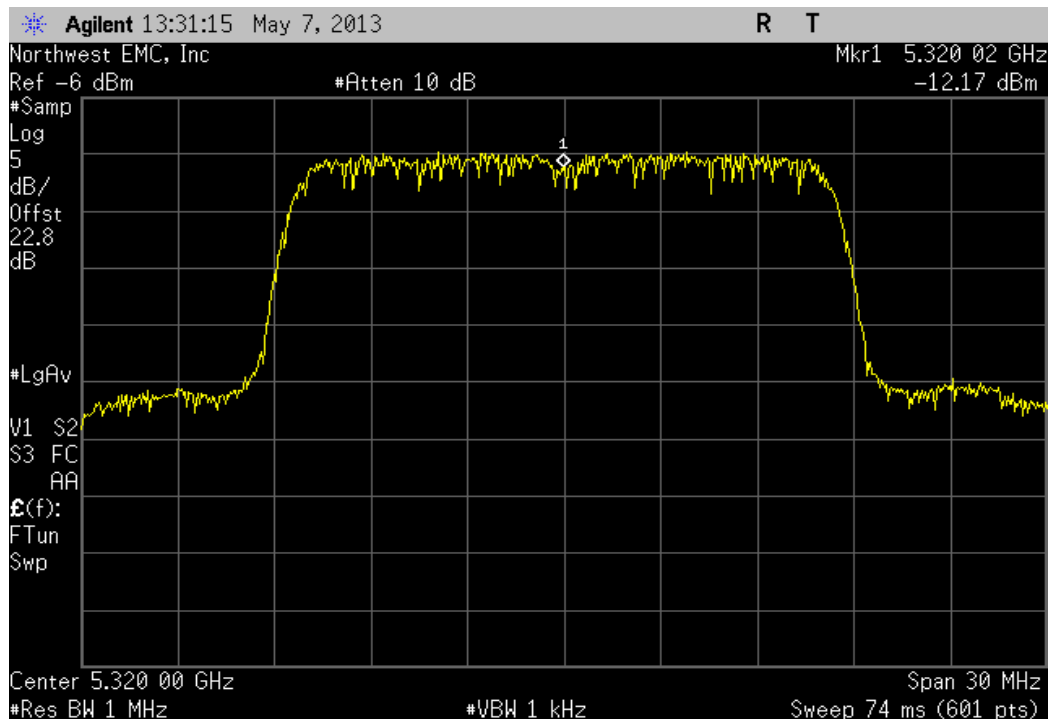
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



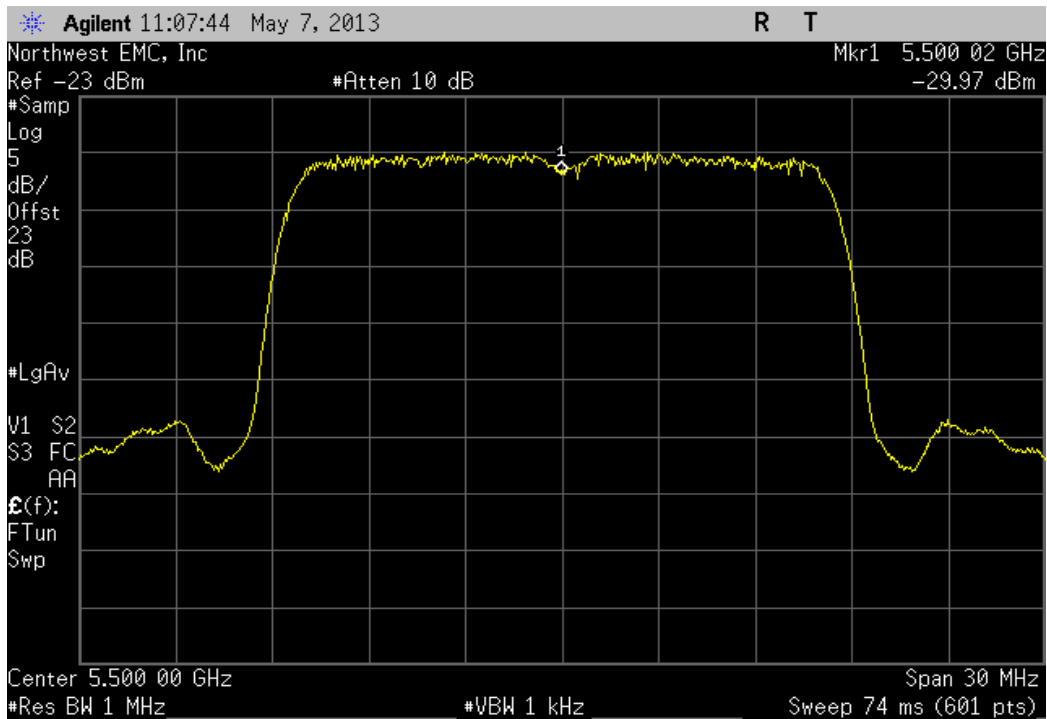
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



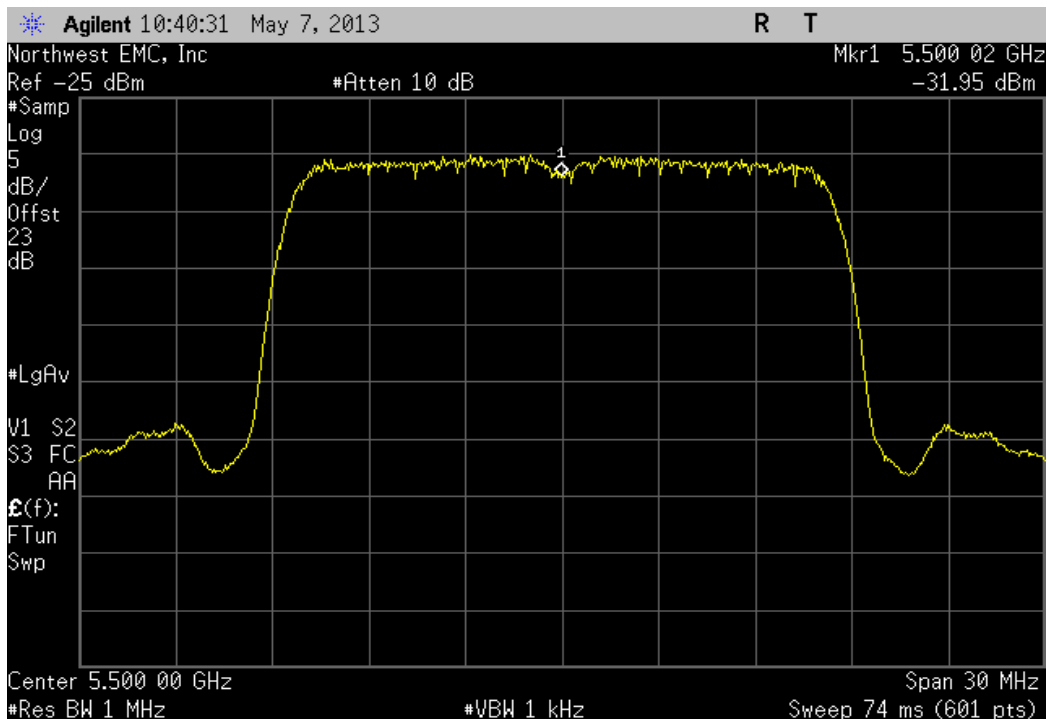
6 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



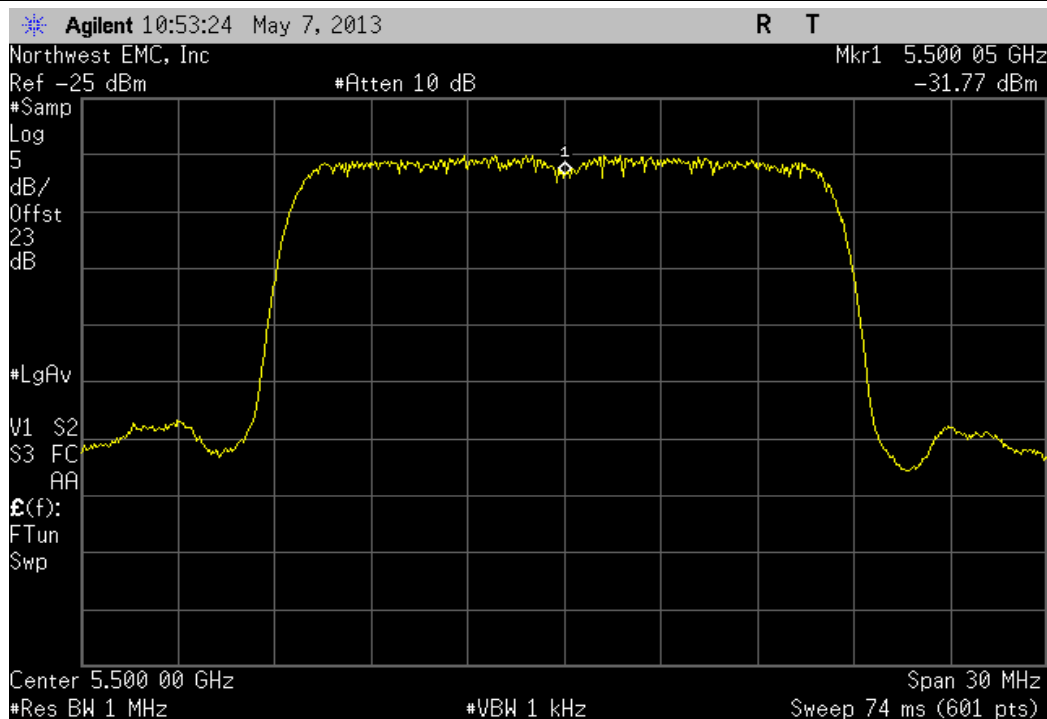
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



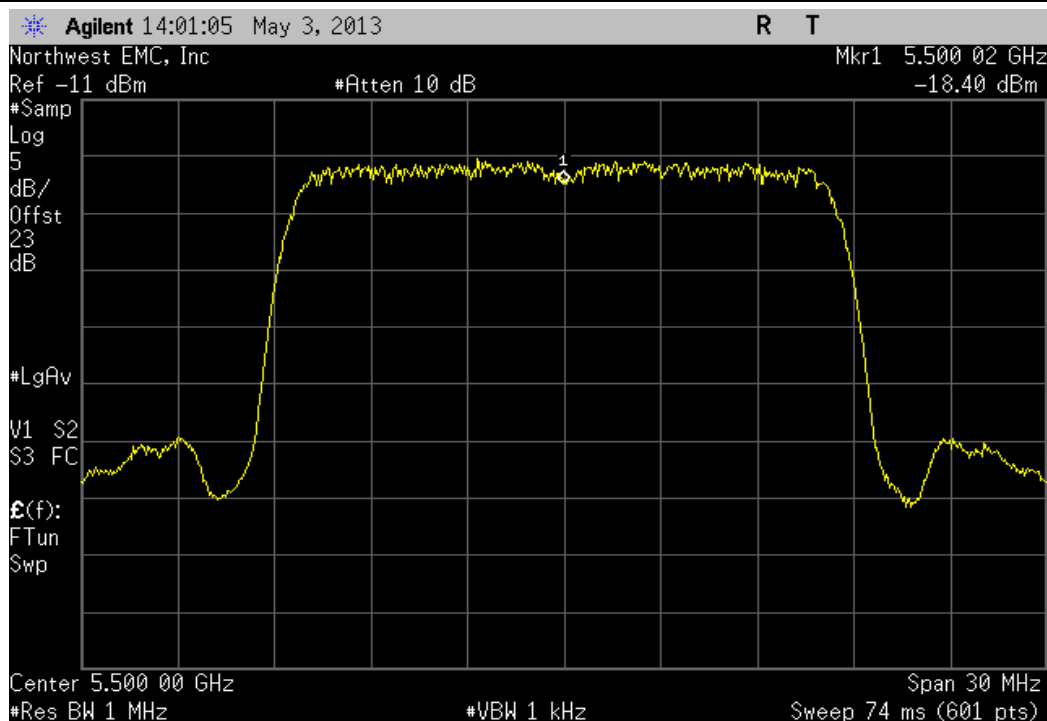
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



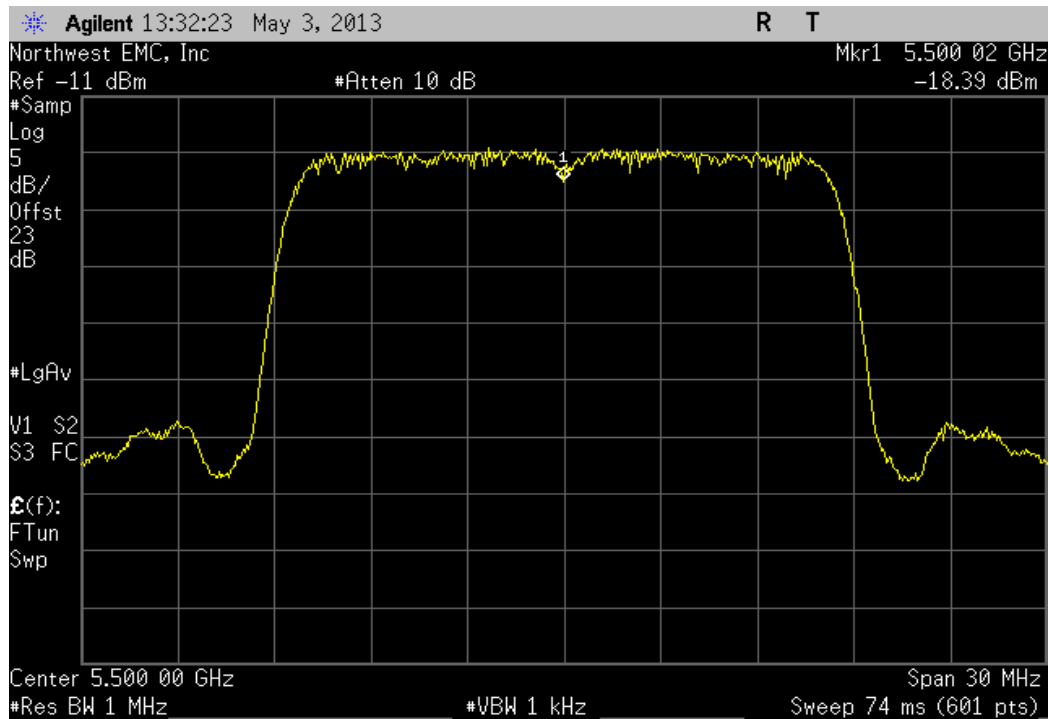
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.05	5500	9.1	100	Pass



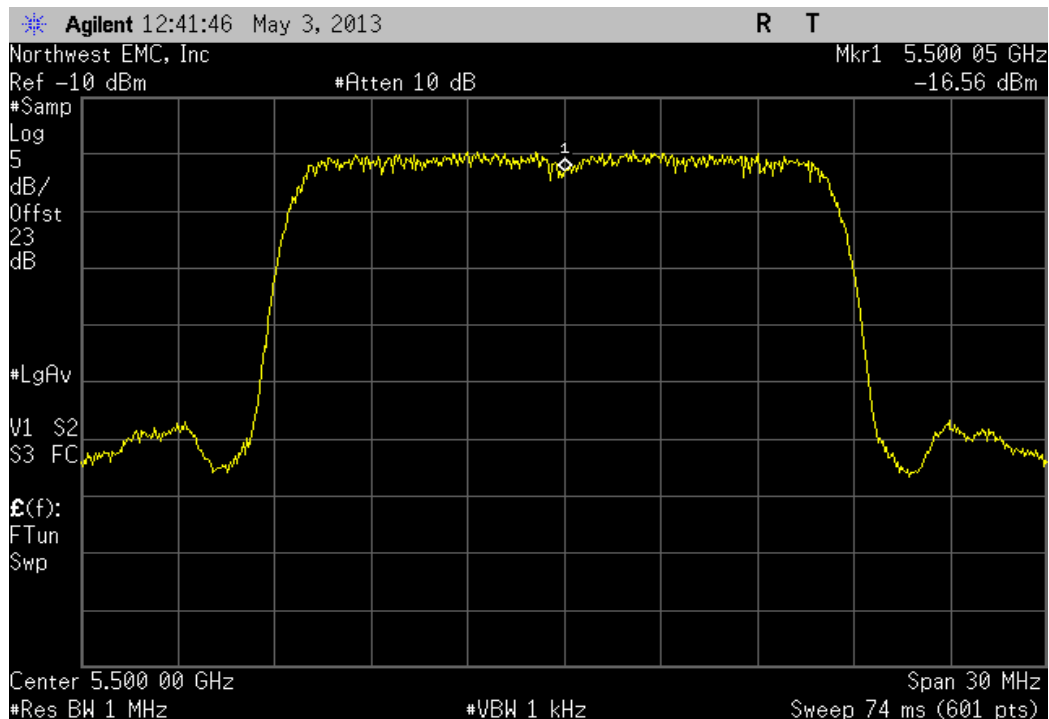
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



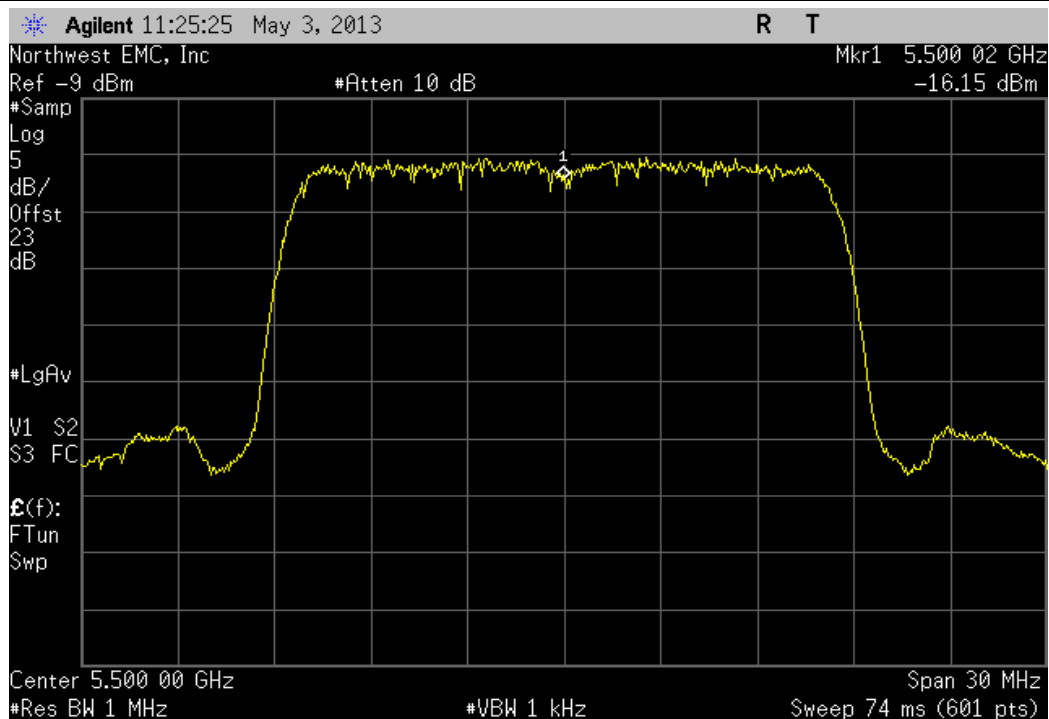
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



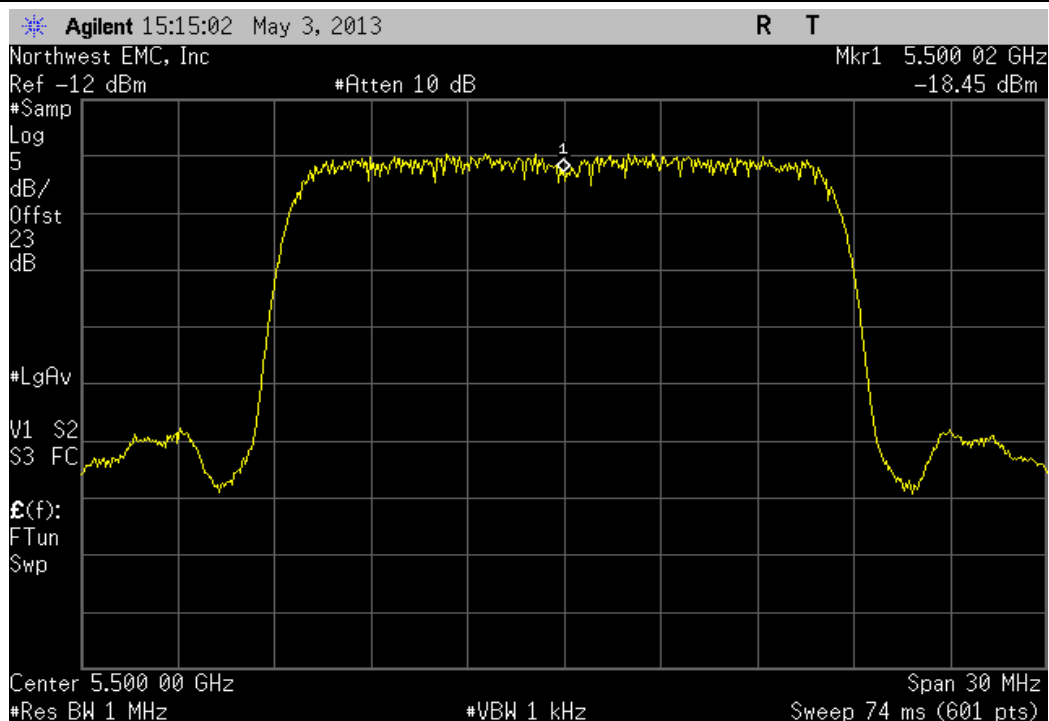
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.05	5500	9.1	100	Pass



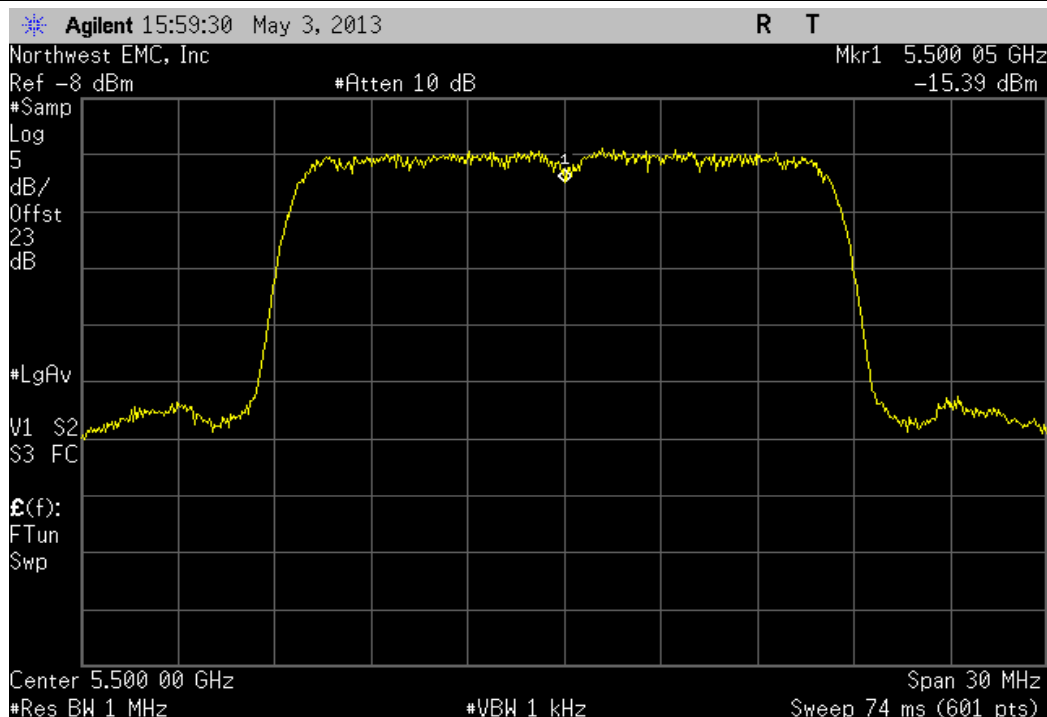
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



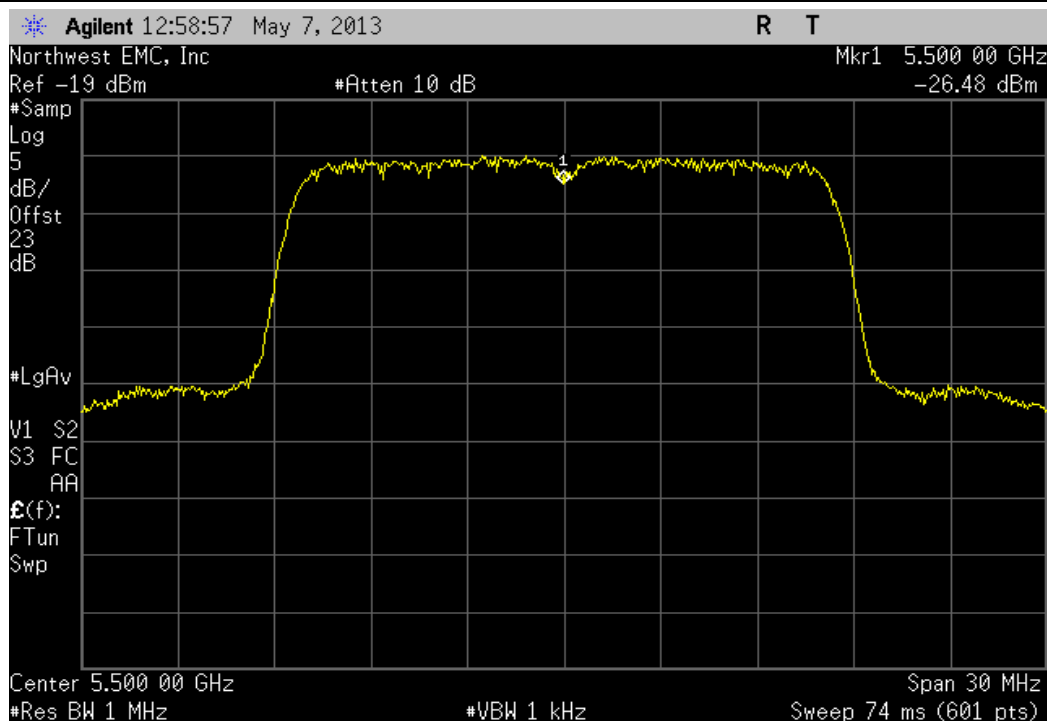
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



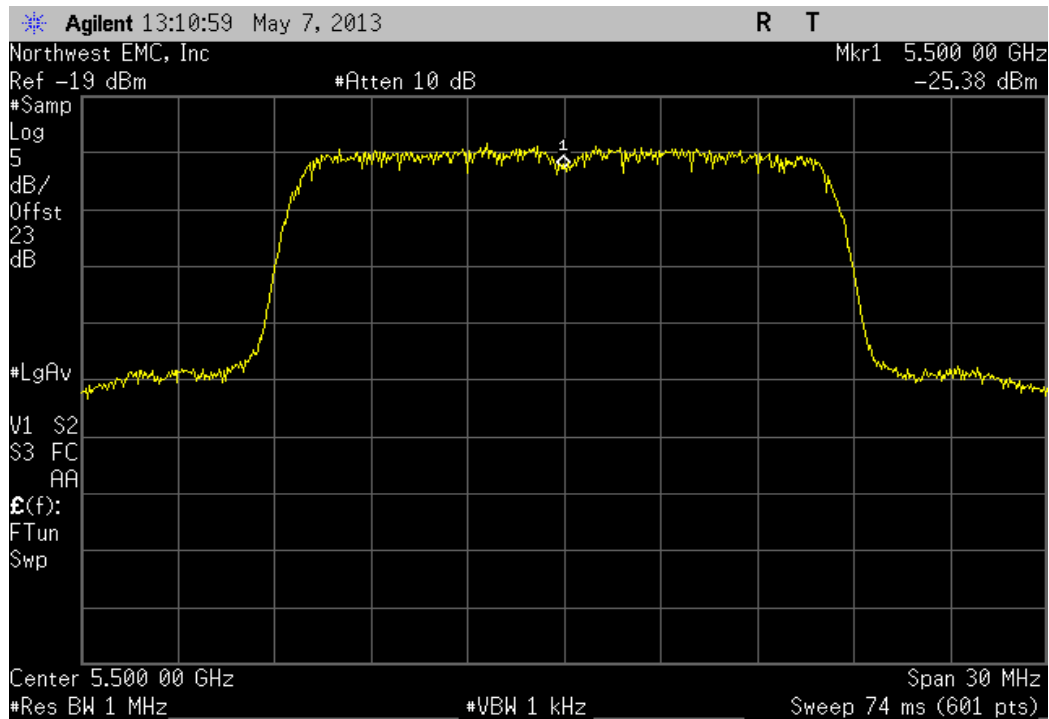
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: 0°						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result	
	5500.05	5500	9.1	100	Pass	



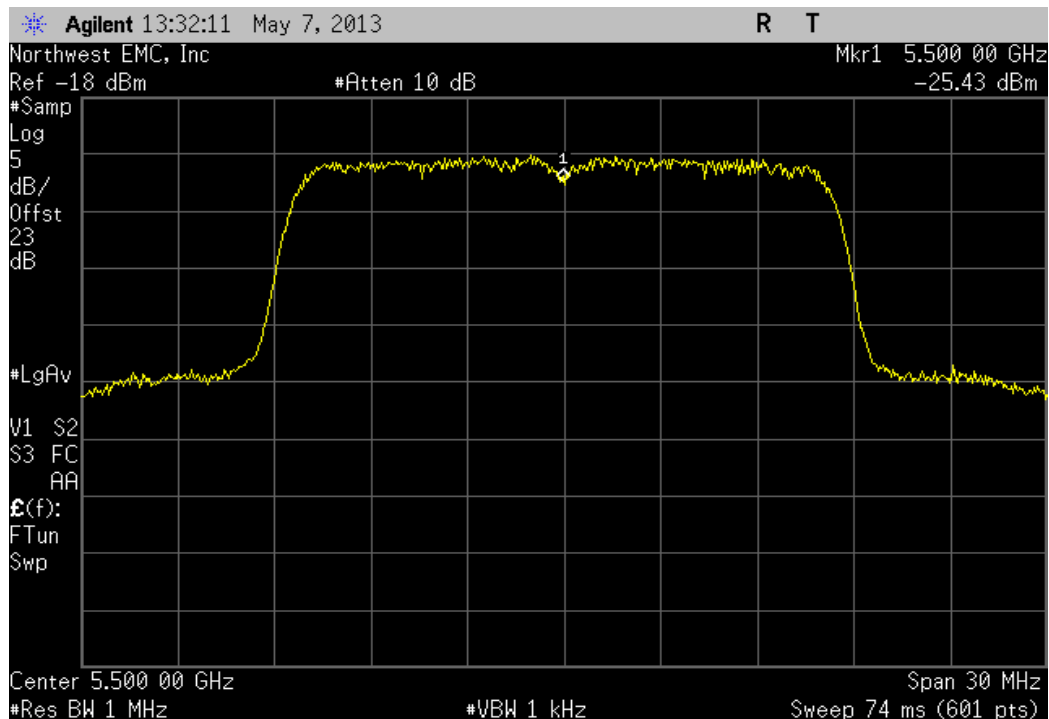
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: -10°						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result	
	5500	5500	0	100	Pass	



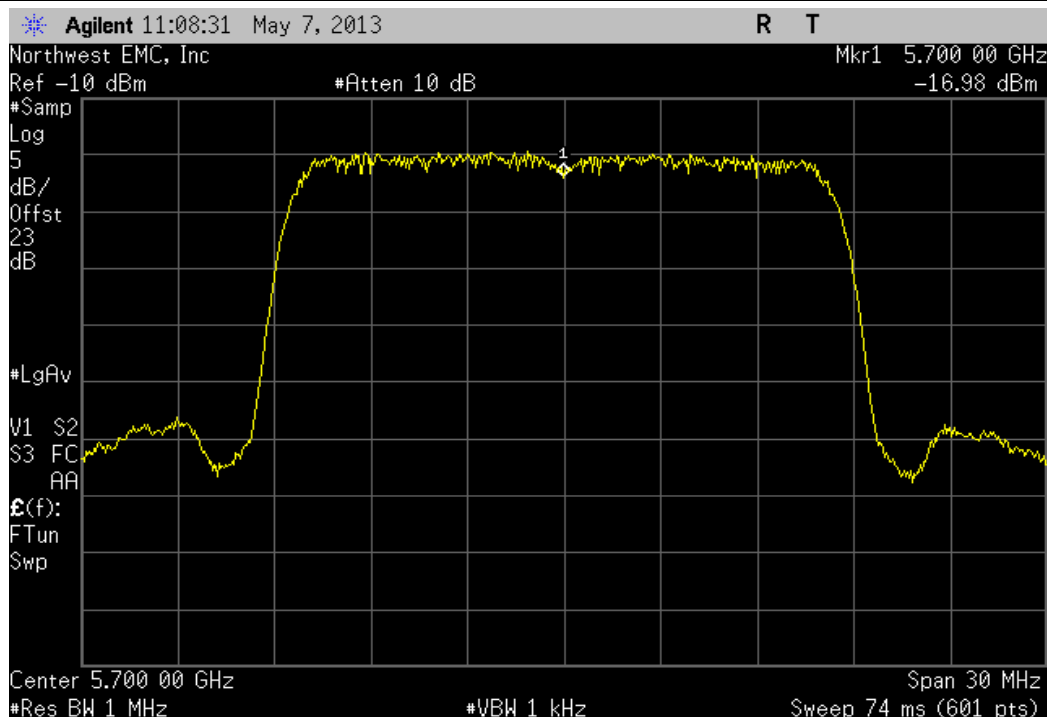
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500	5500	0	100	Pass



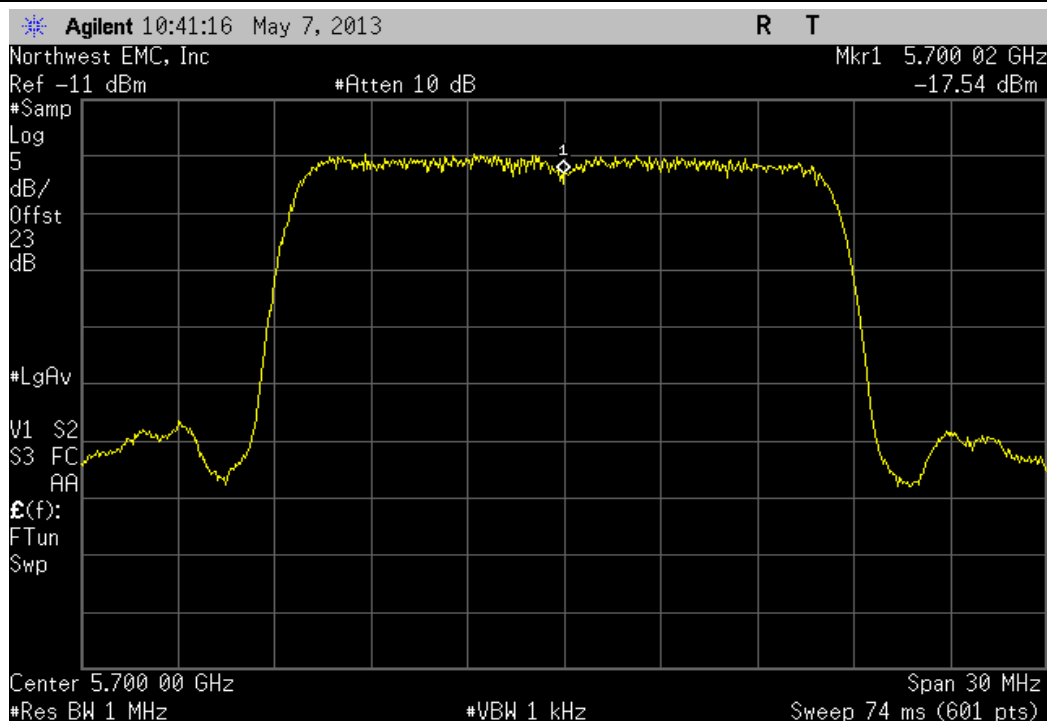
6 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500	5500	0	100	Pass



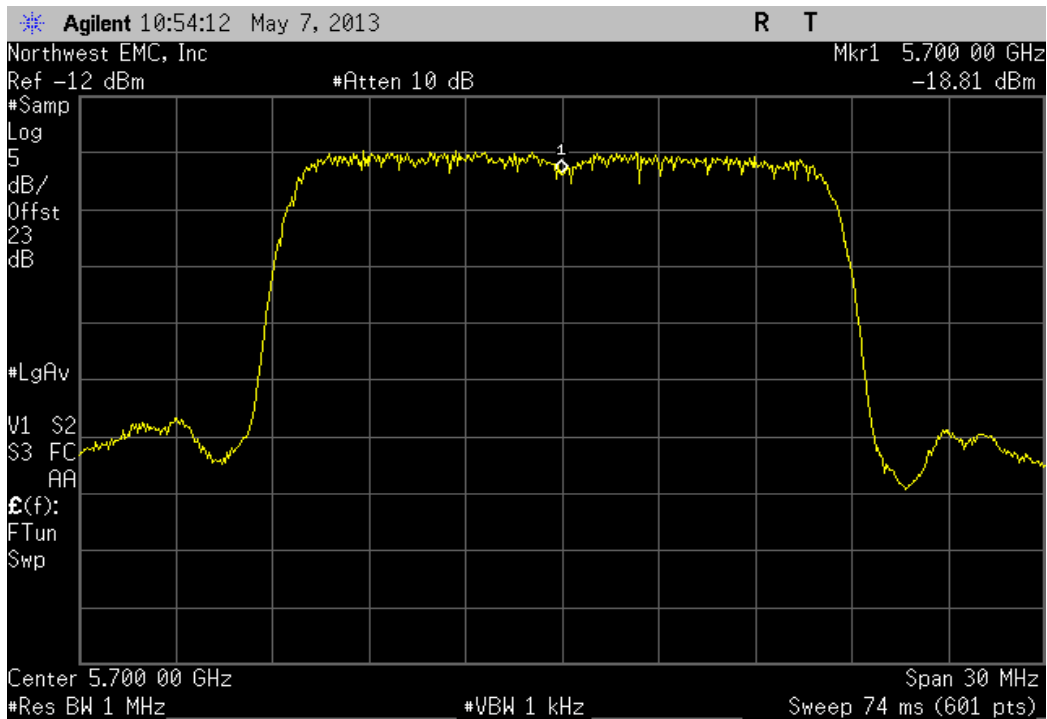
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700	5700	0	100	Pass



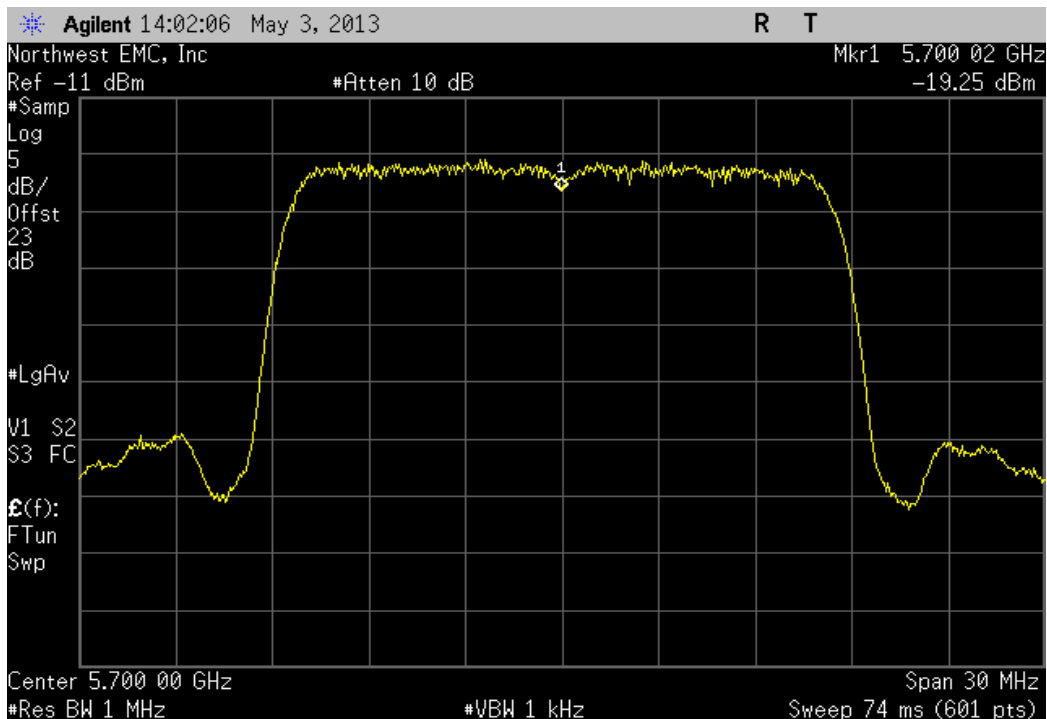
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



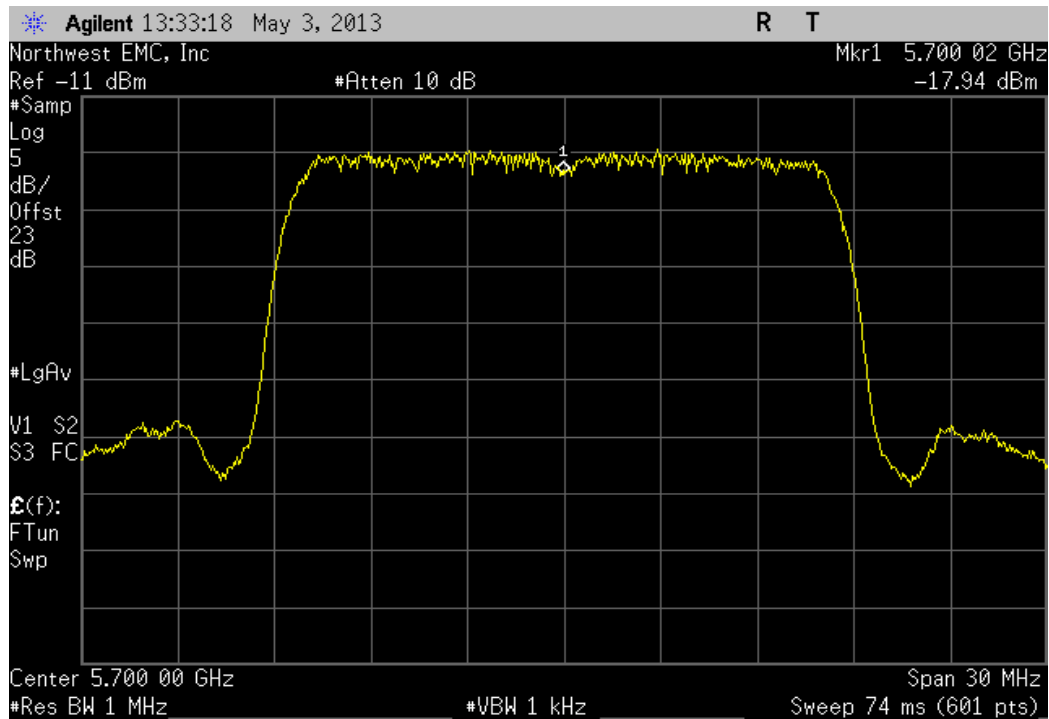
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700	5700	0	100	Pass



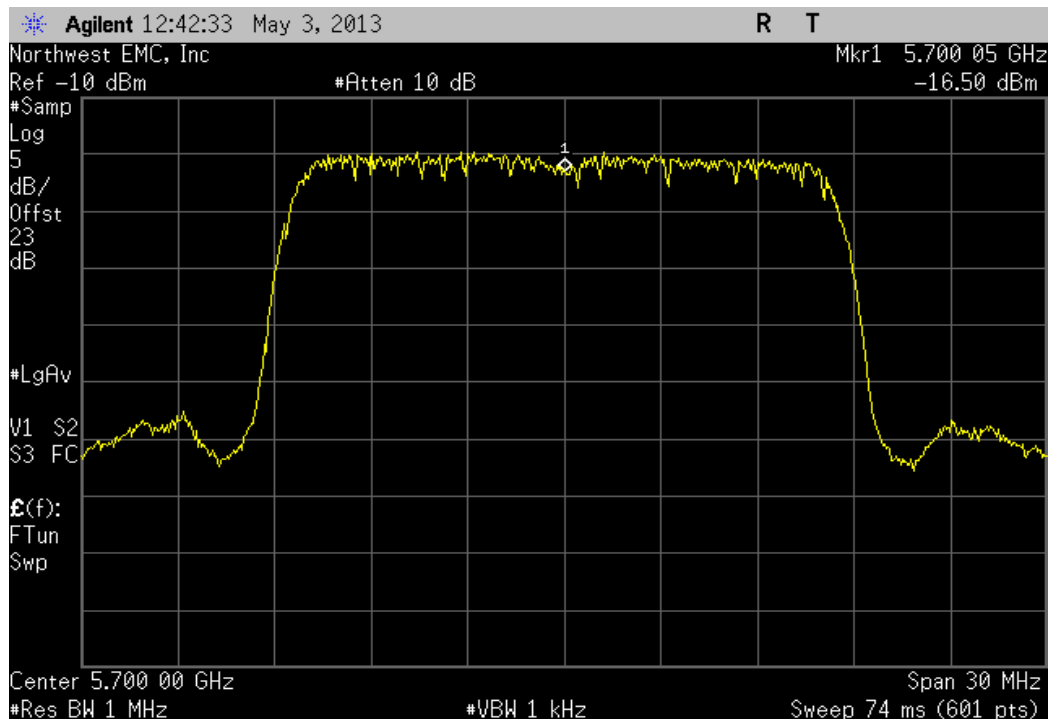
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



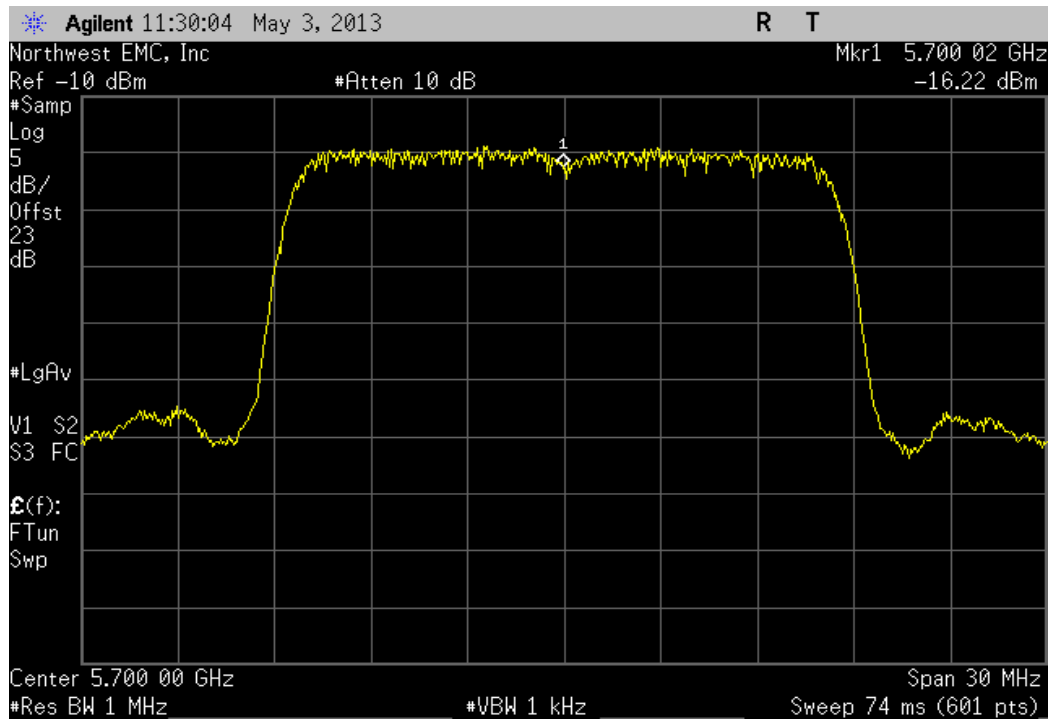
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



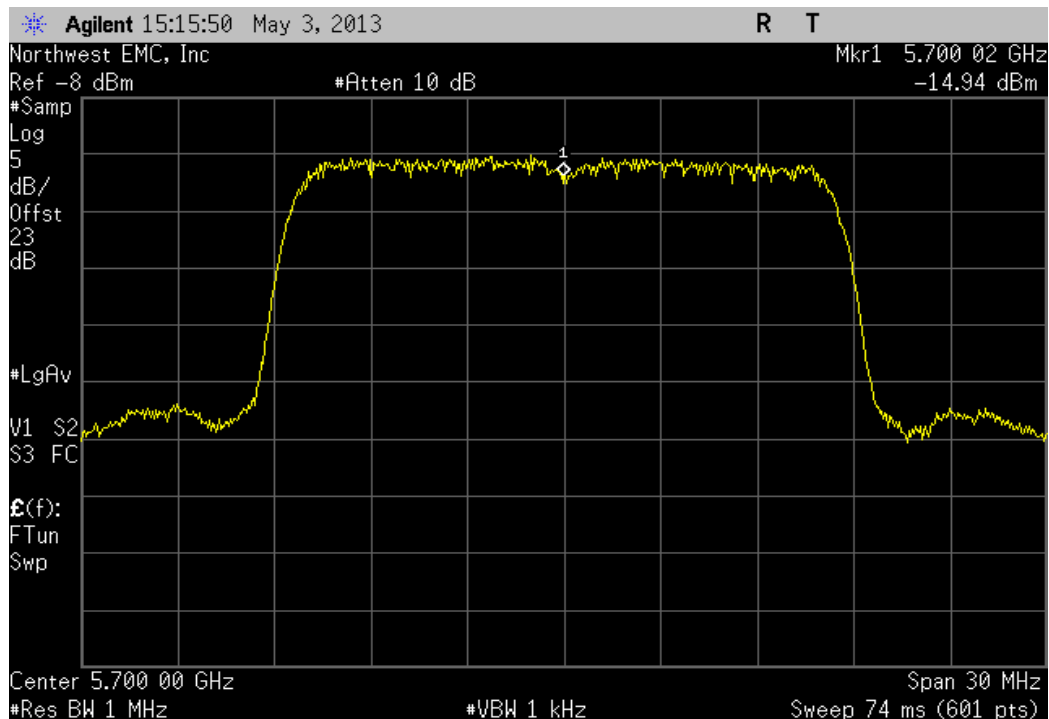
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.05	5700	8.8	100	Pass



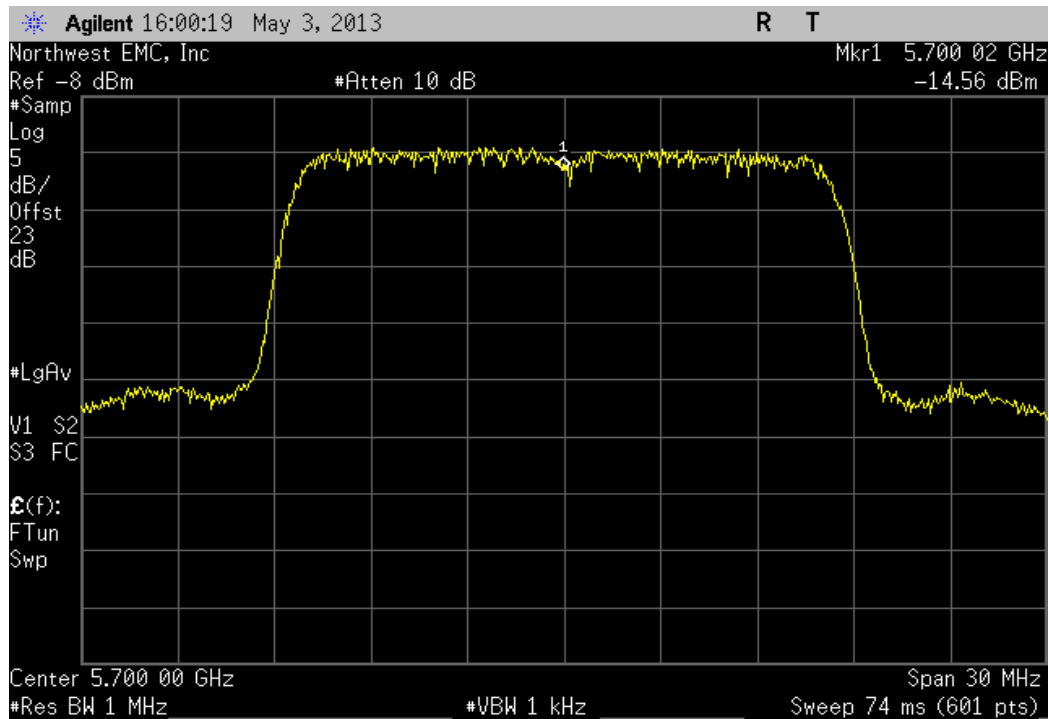
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



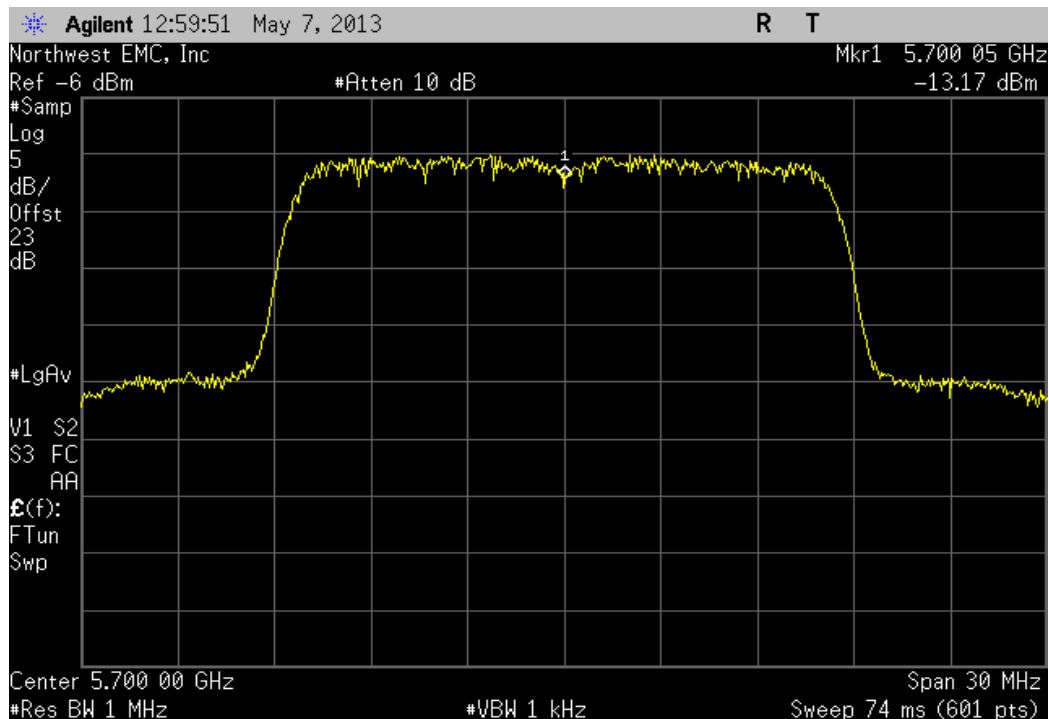
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



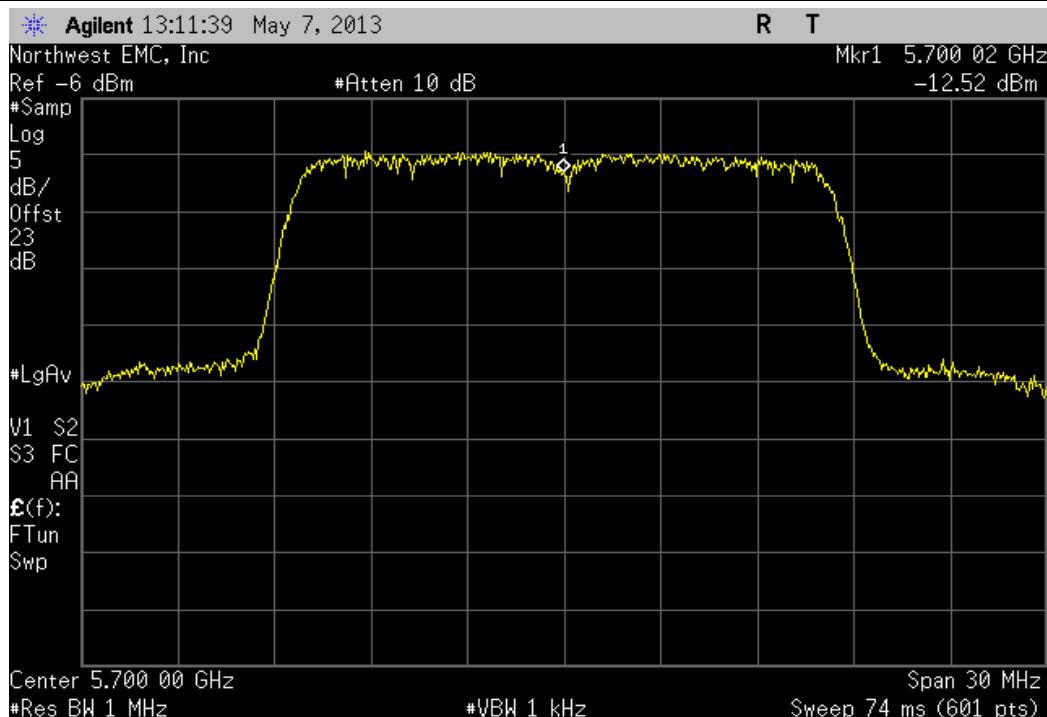
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



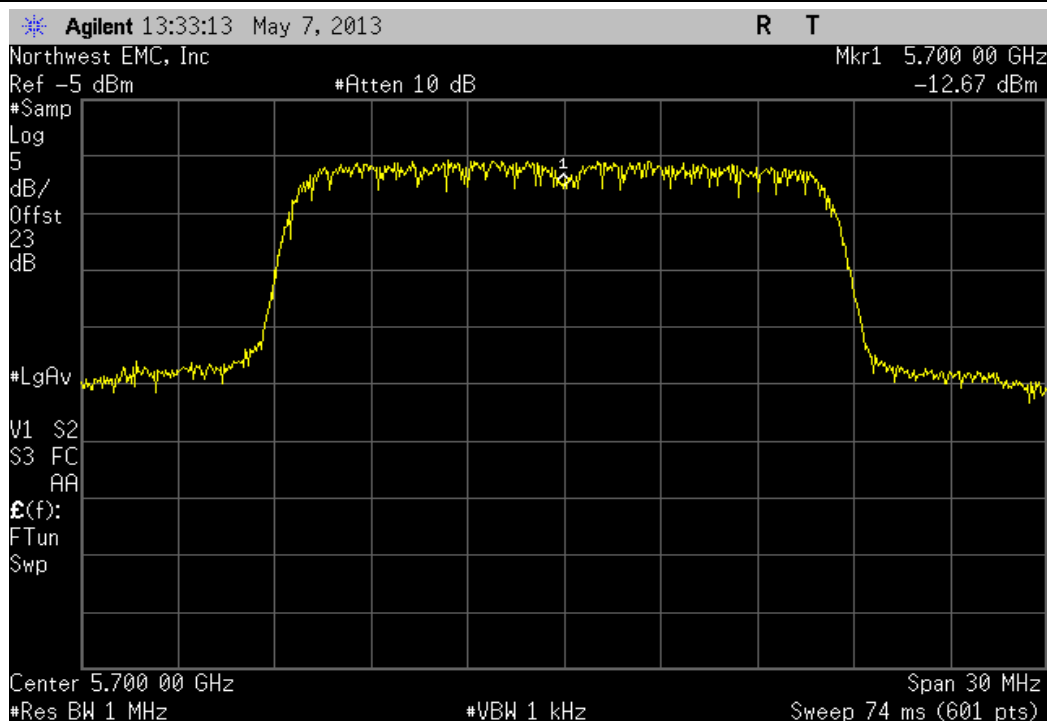
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.05	5700	8.8	100	Pass



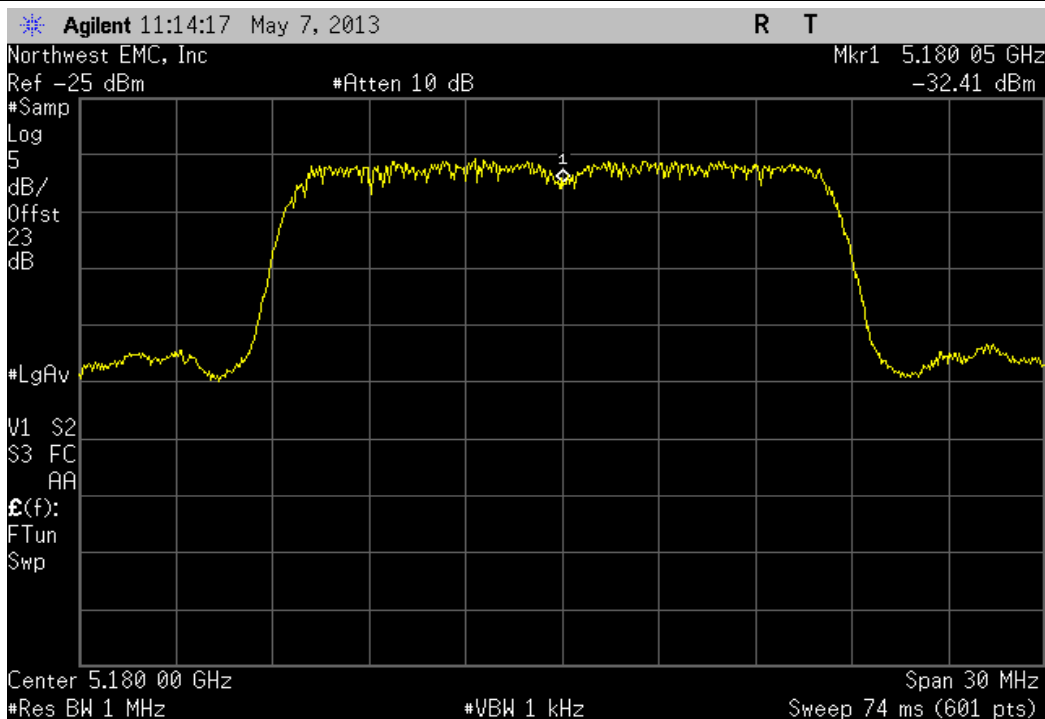
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



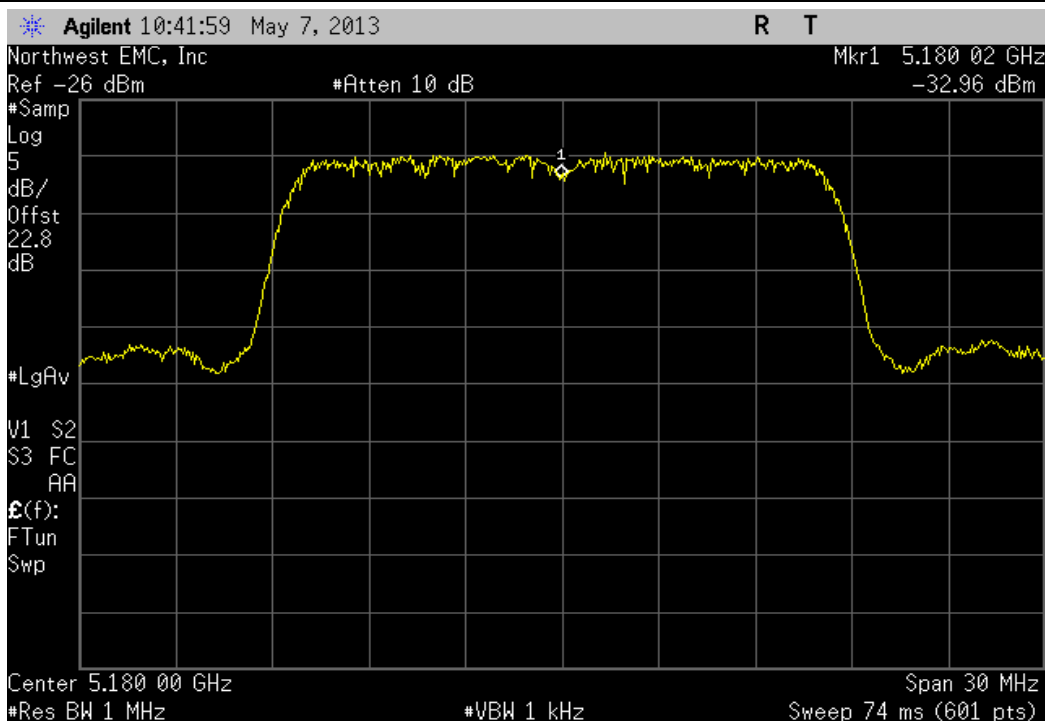
6 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700	5700	0	100	Pass



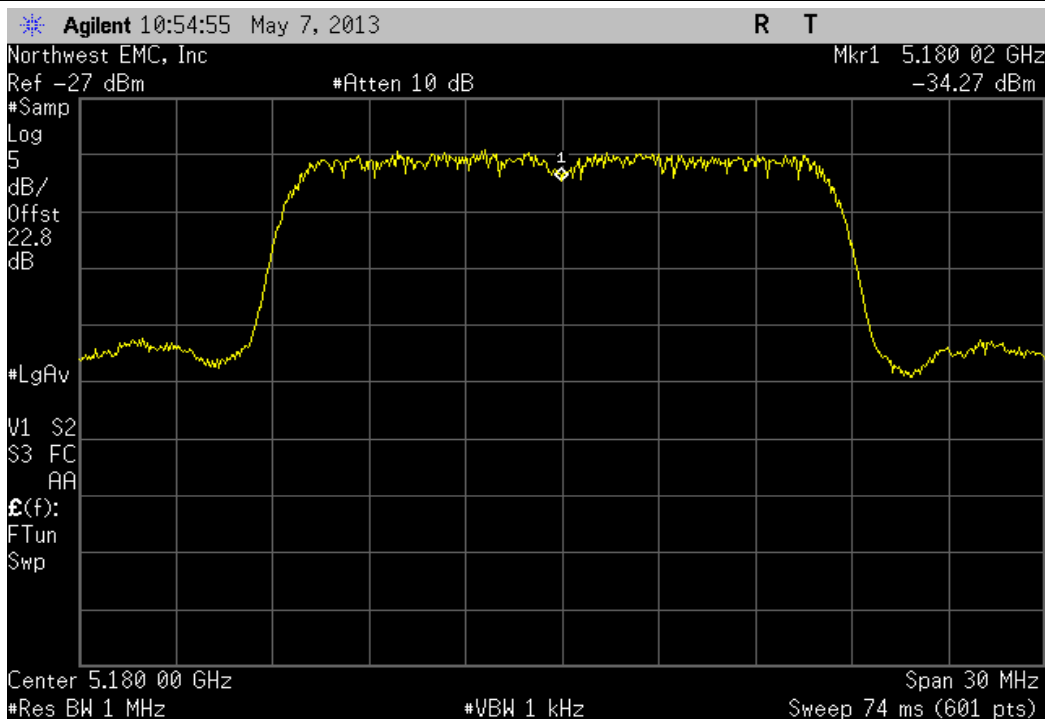
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.05	5180	9.6	100	Pass



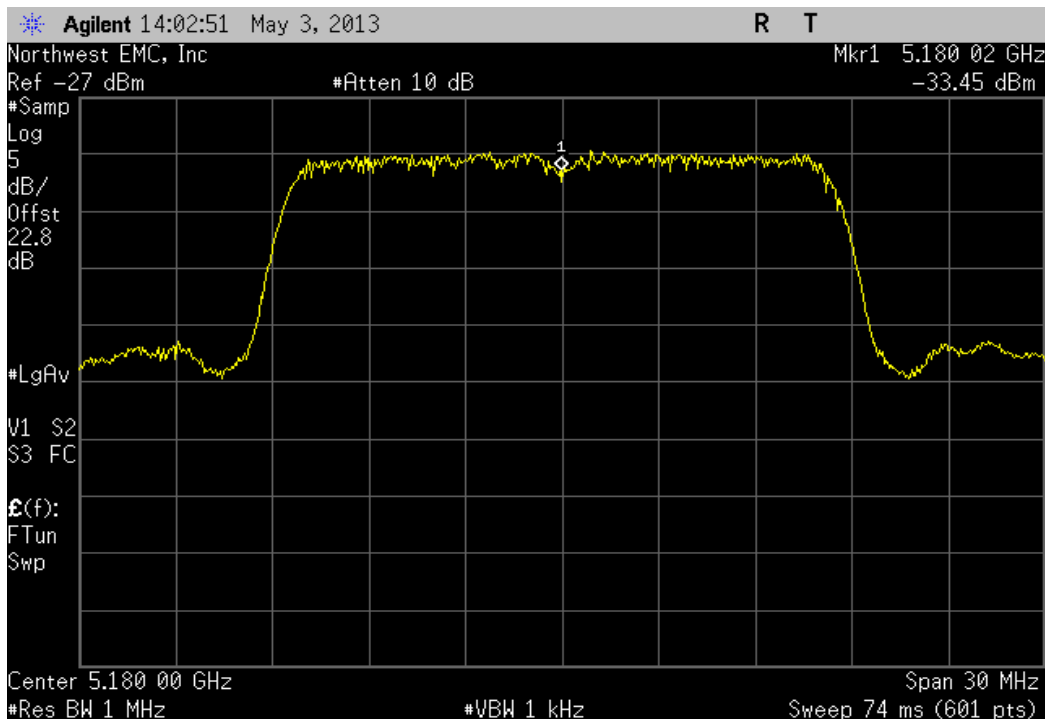
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



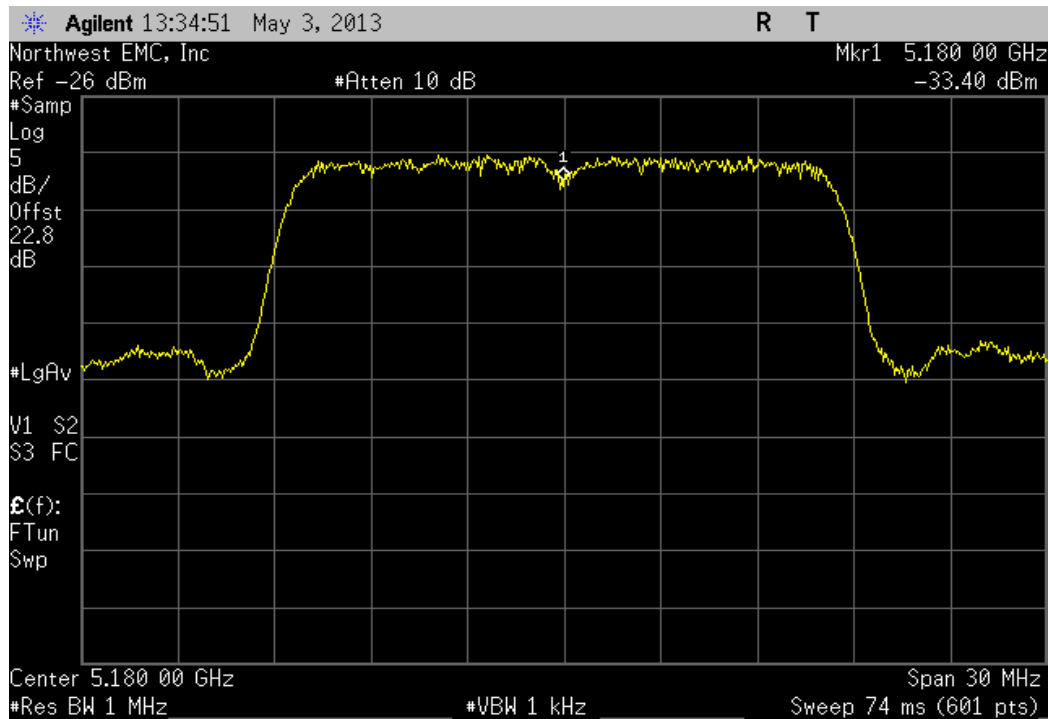
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



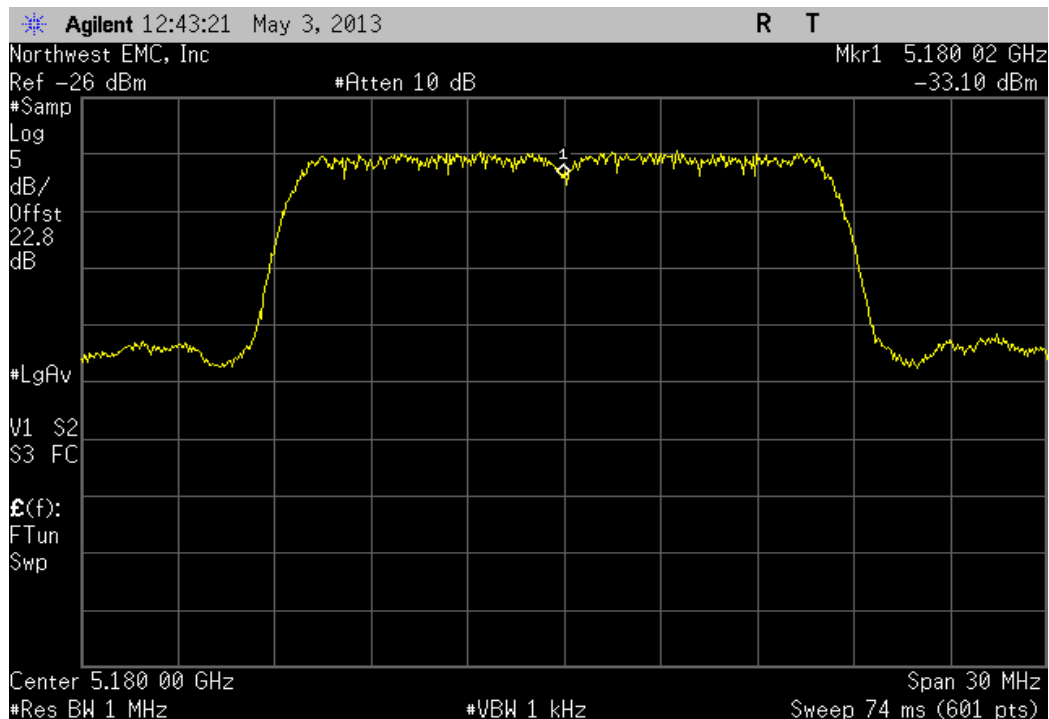
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



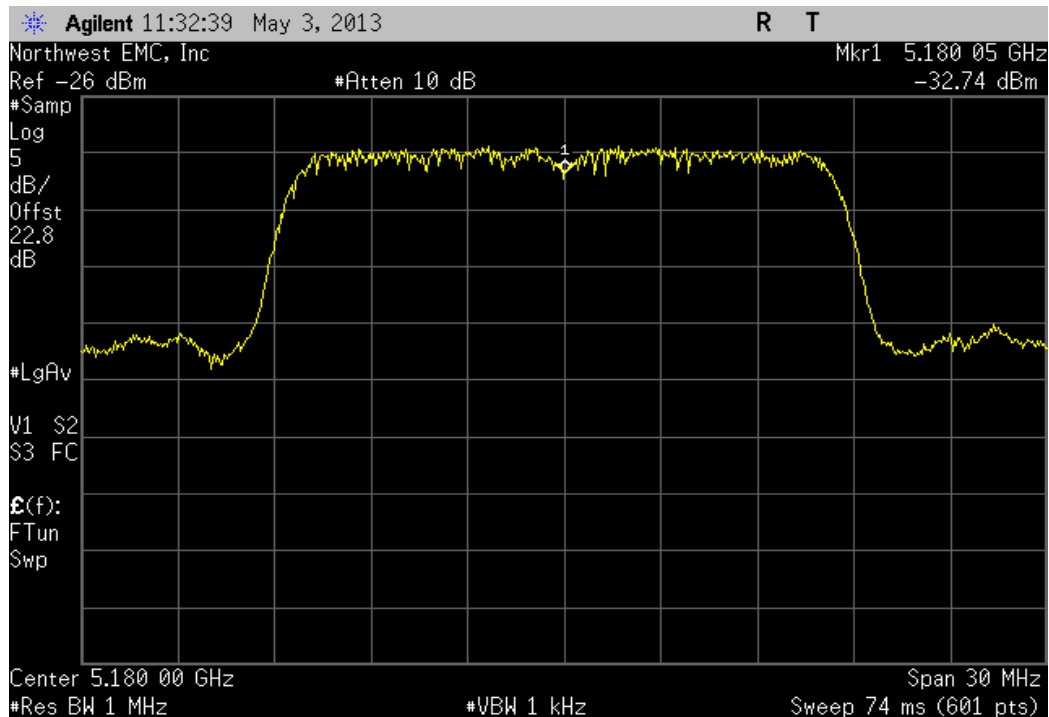
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180	5180	0	100	Pass



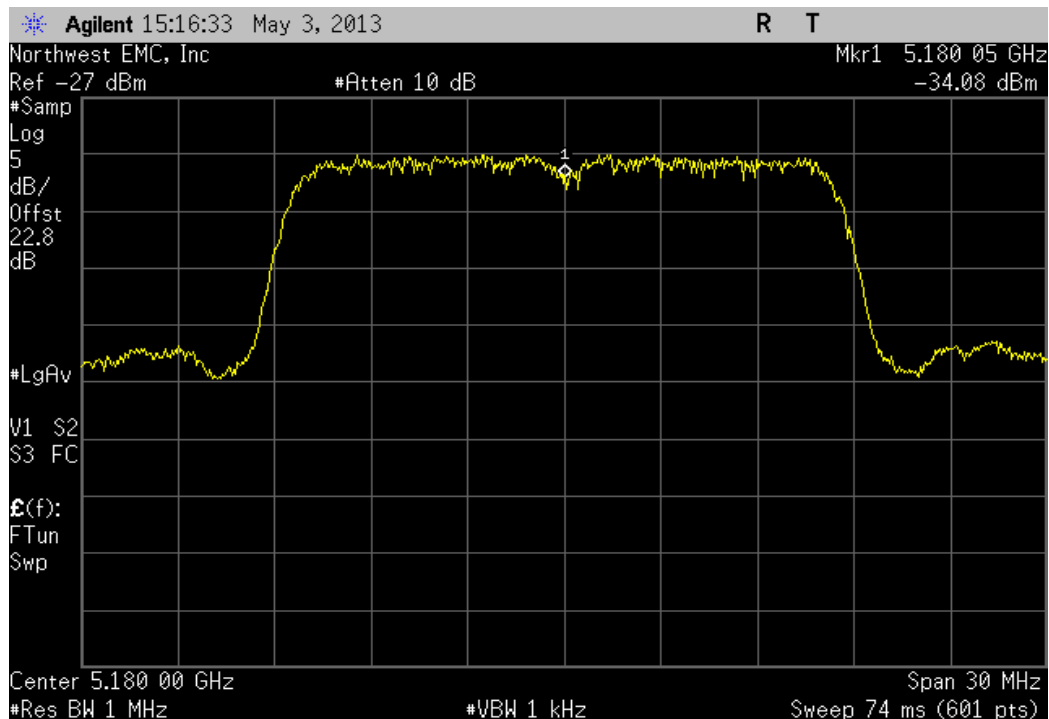
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



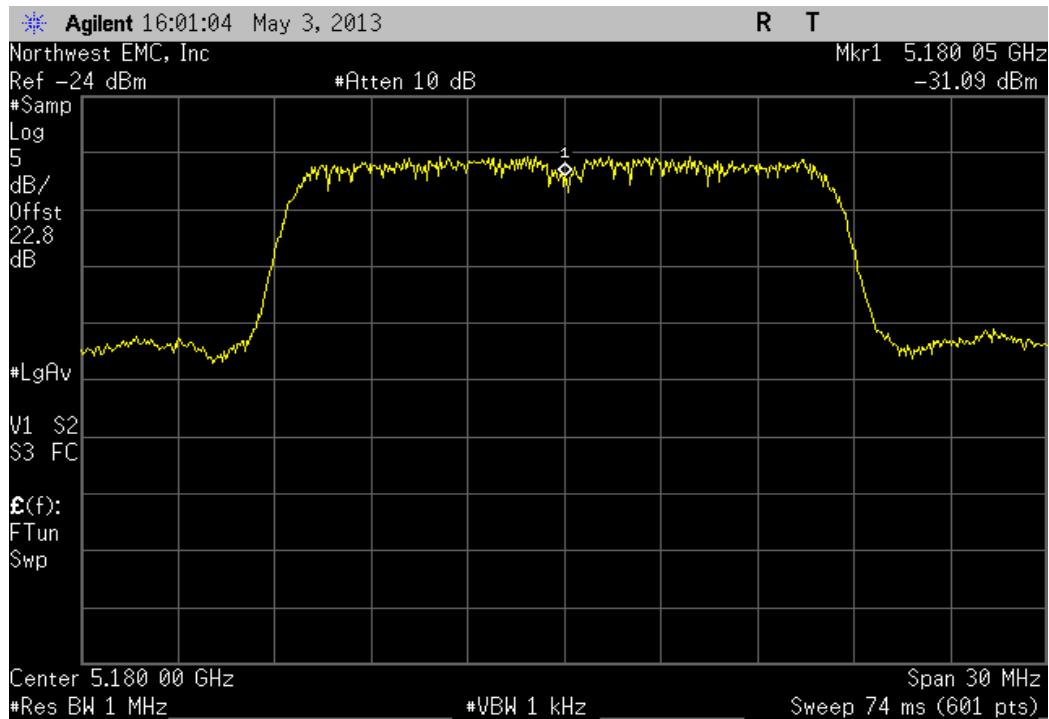
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.05	5180	9.6	100	Pass



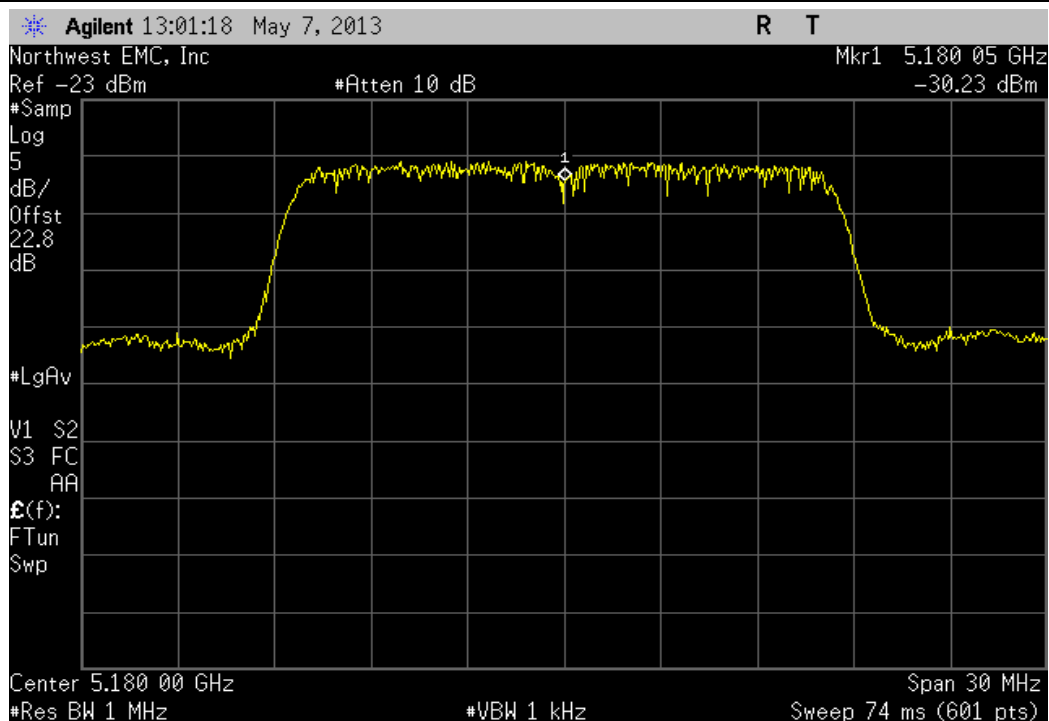
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.05	5180	9.6	100	Pass



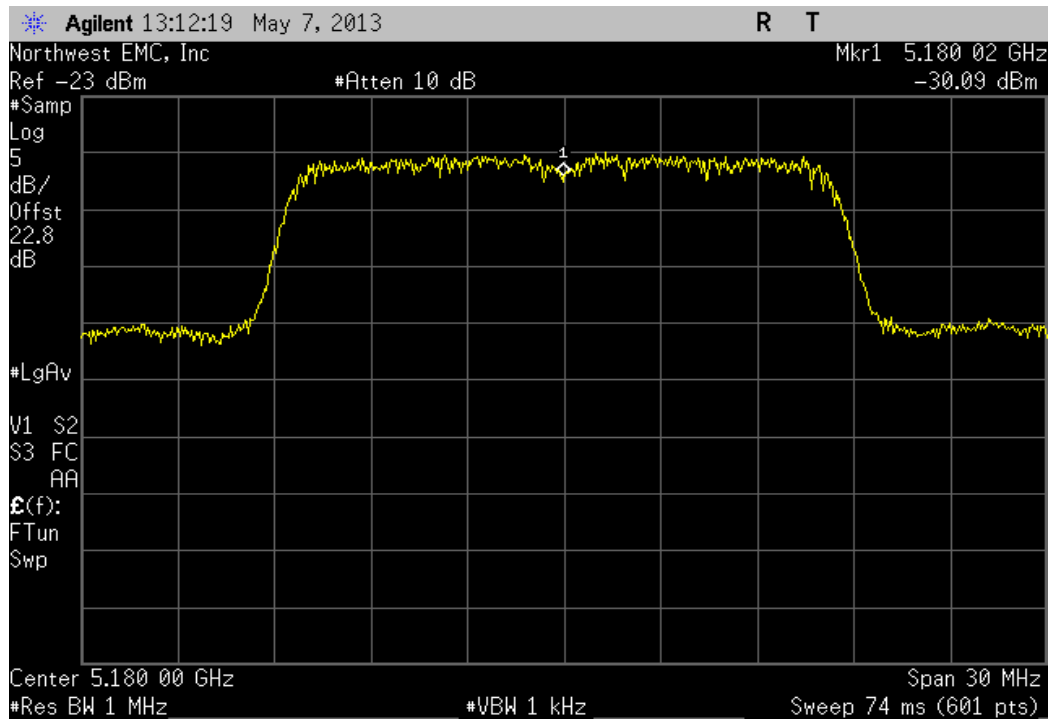
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.05	5180	9.6	100	Pass



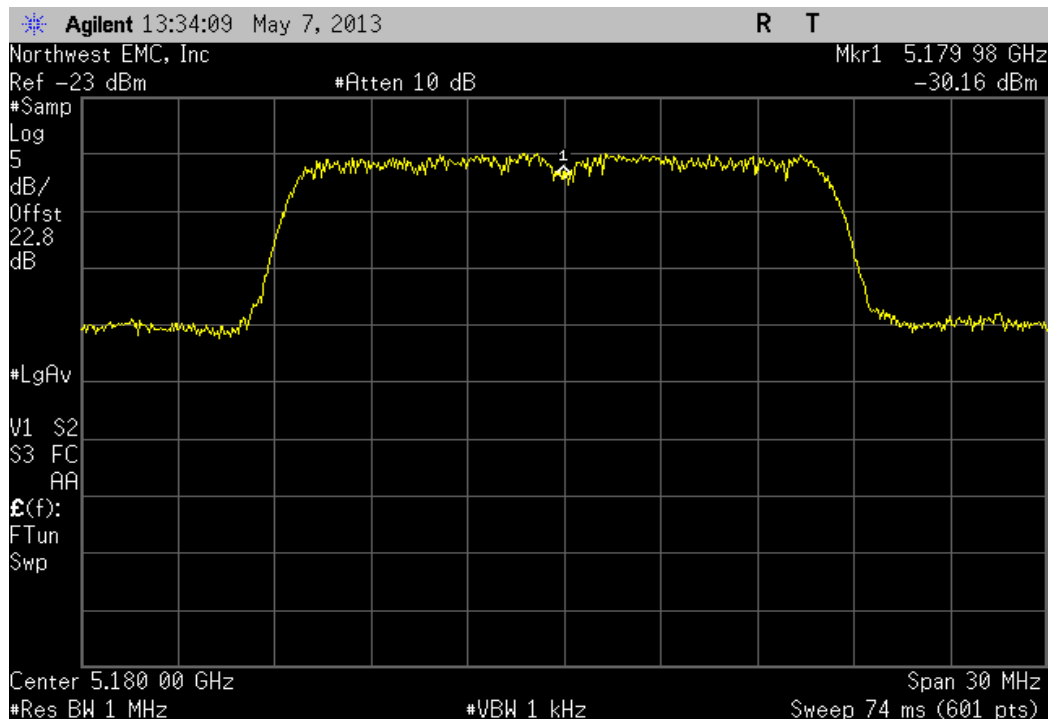
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.05	5180	9.6	100	Pass



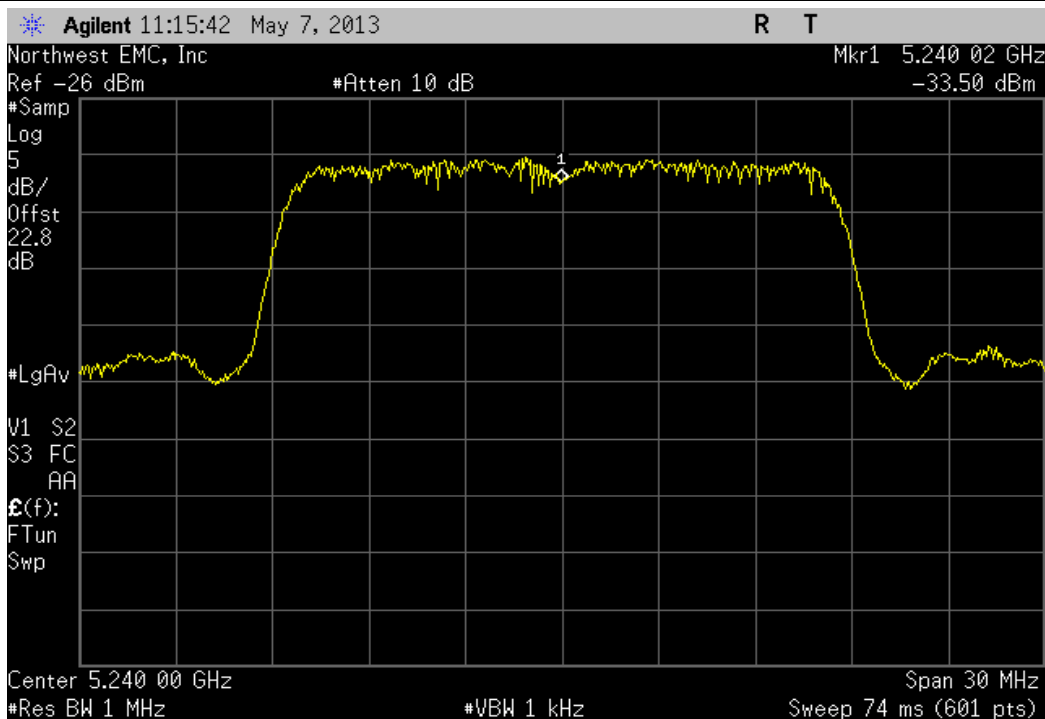
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5180.02	5180	3.9	100	Pass



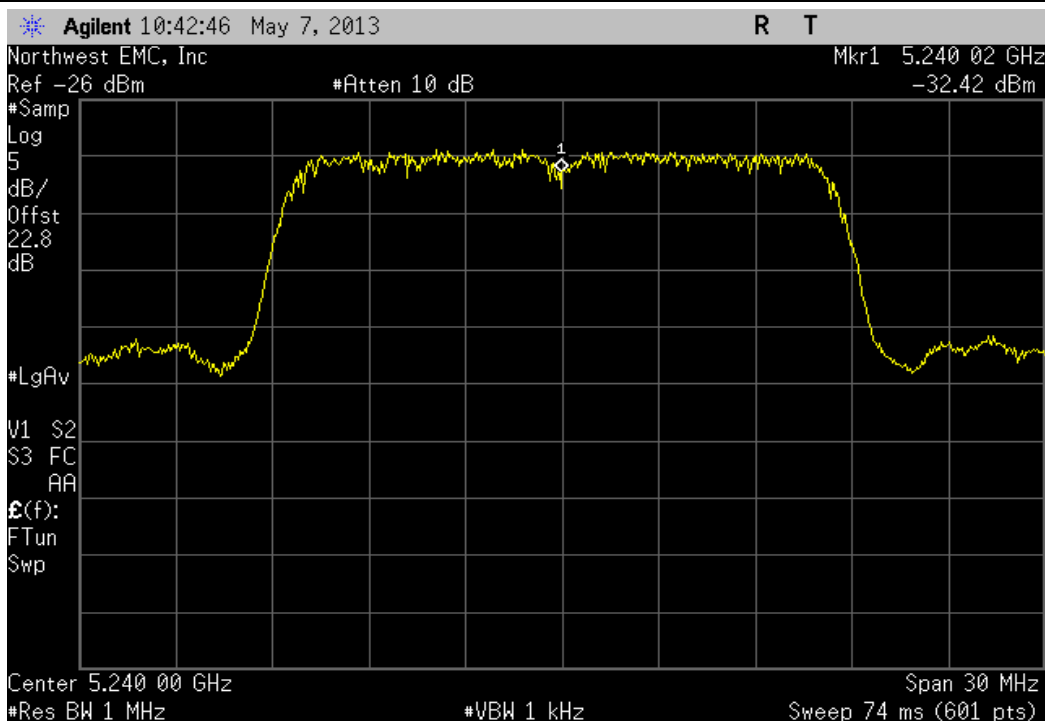
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5180 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5179.98	5180	3.9	100	Pass



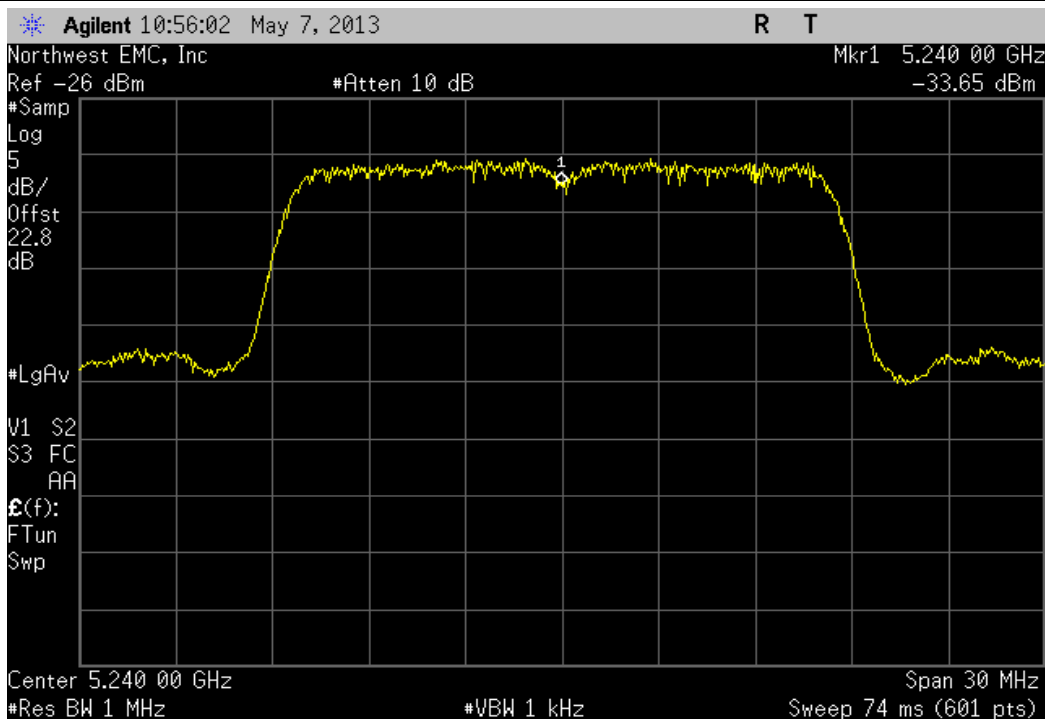
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



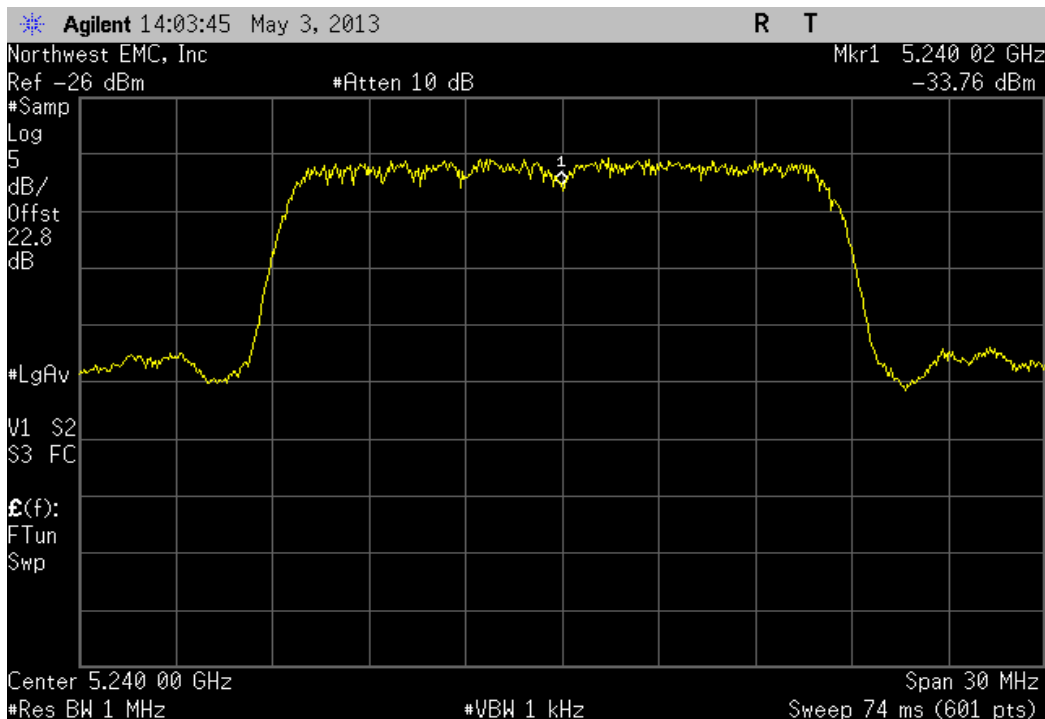
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



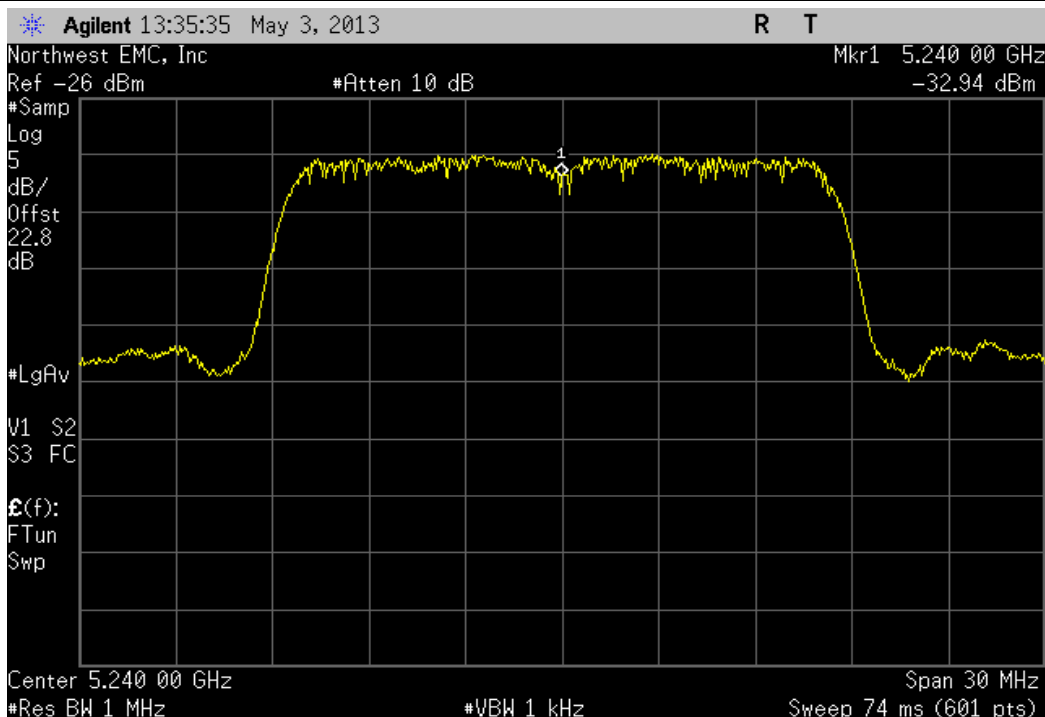
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240	5240	0	100	Pass



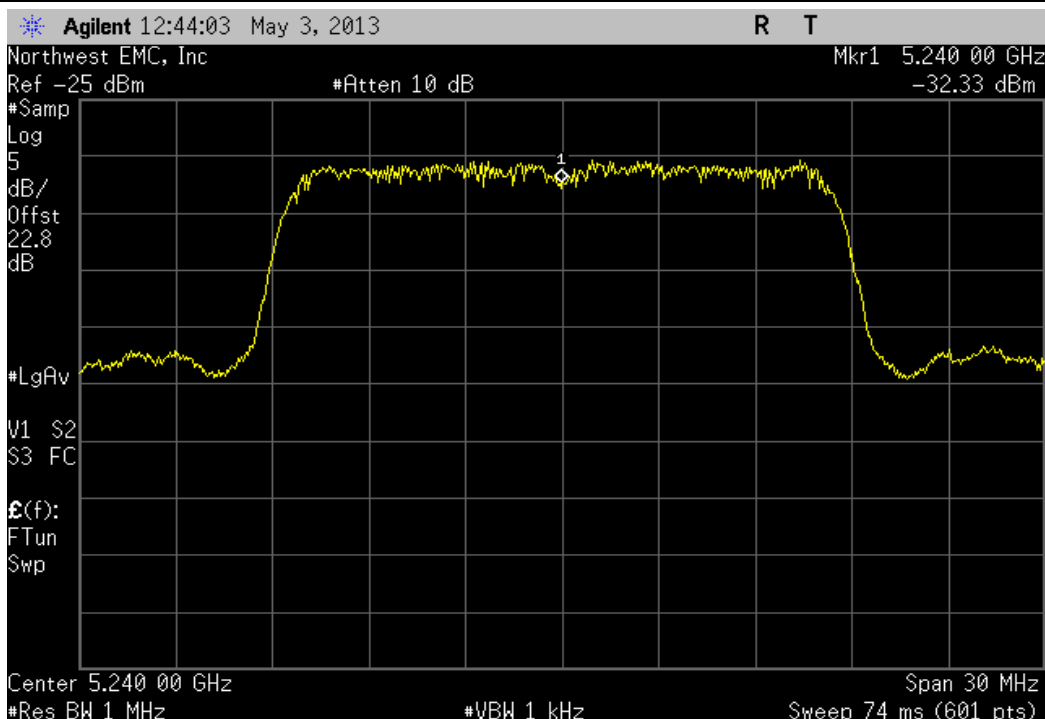
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



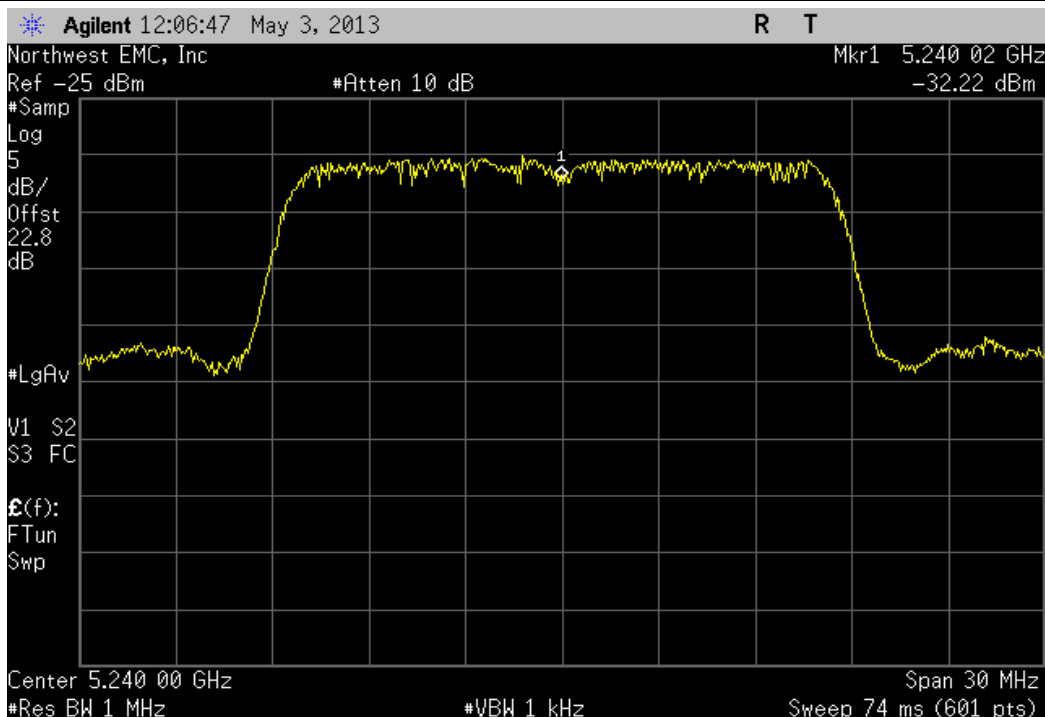
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240	5240	0	100	Pass



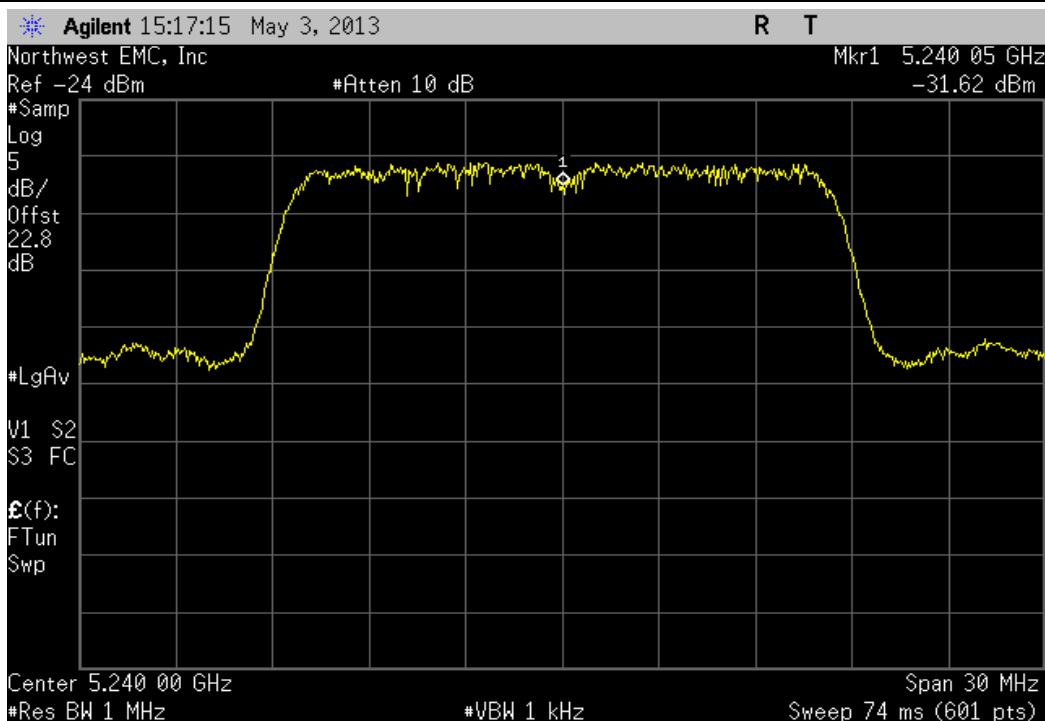
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240	5240	0	100	Pass



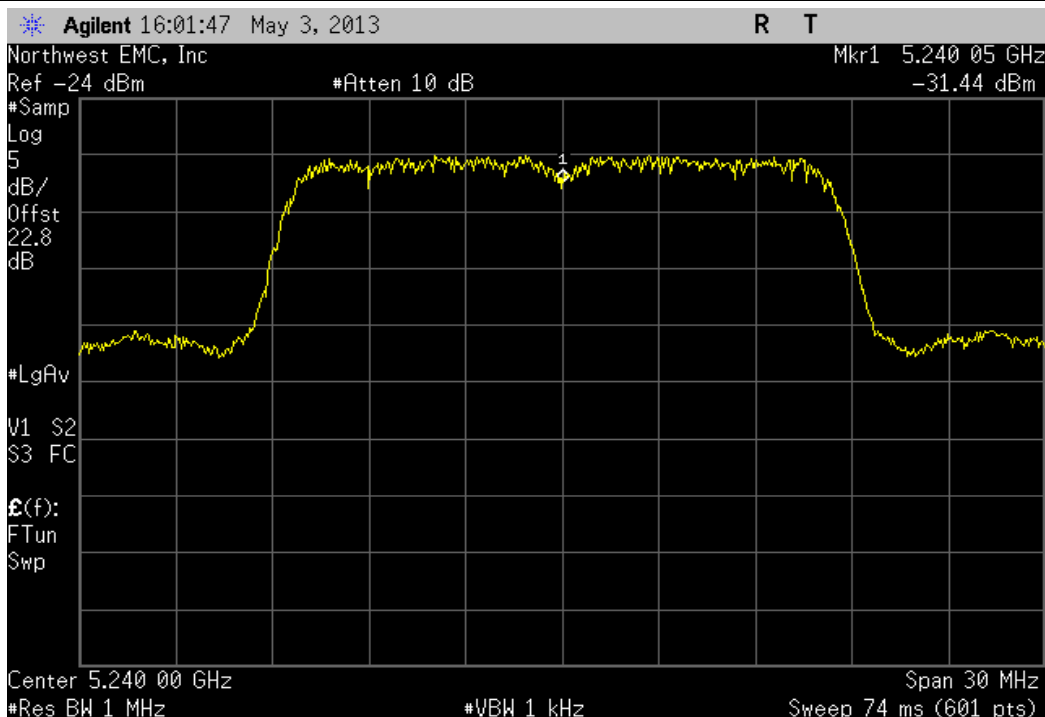
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.02	5240	3.8	100	Pass



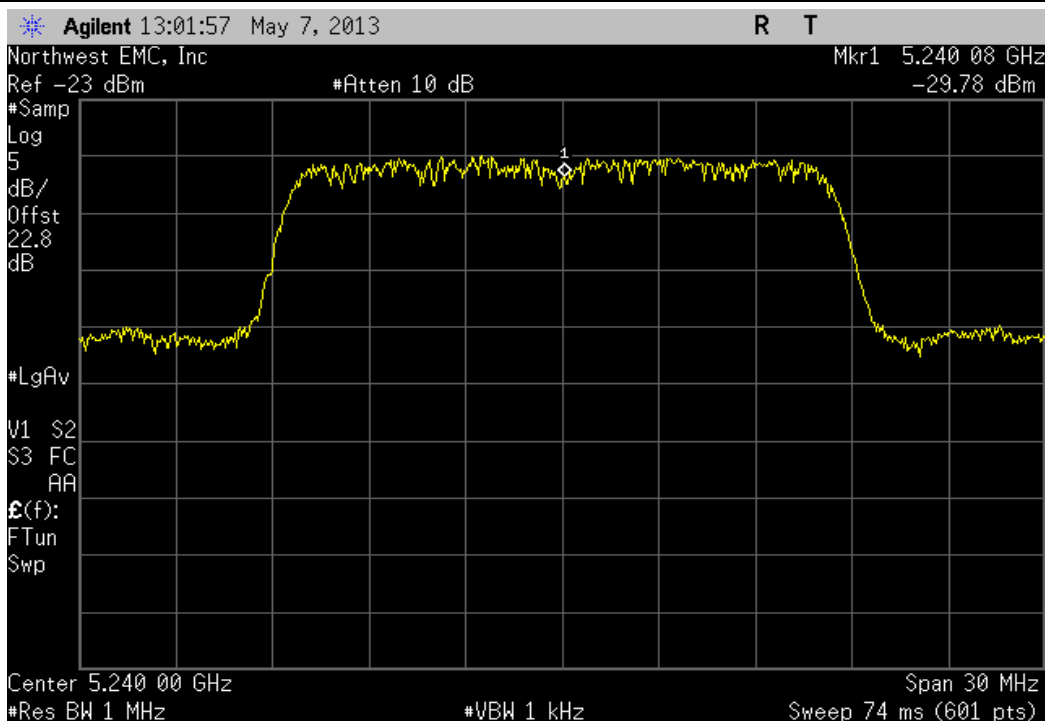
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.05	5240	9.5	100	Pass



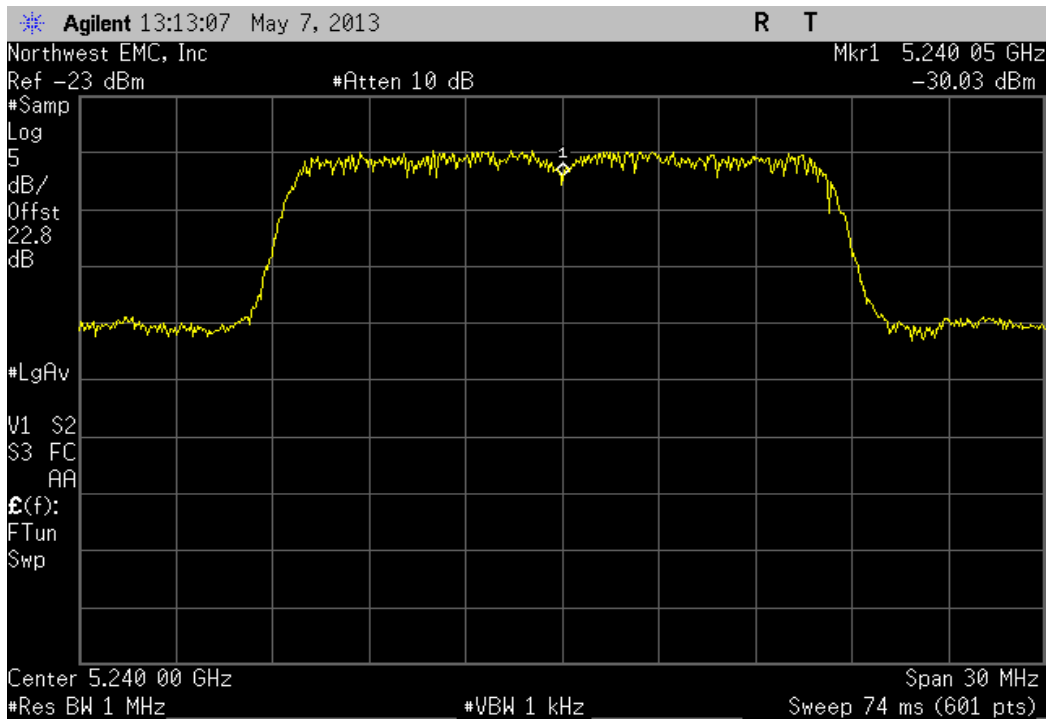
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.05	5240	9.5	100	Pass



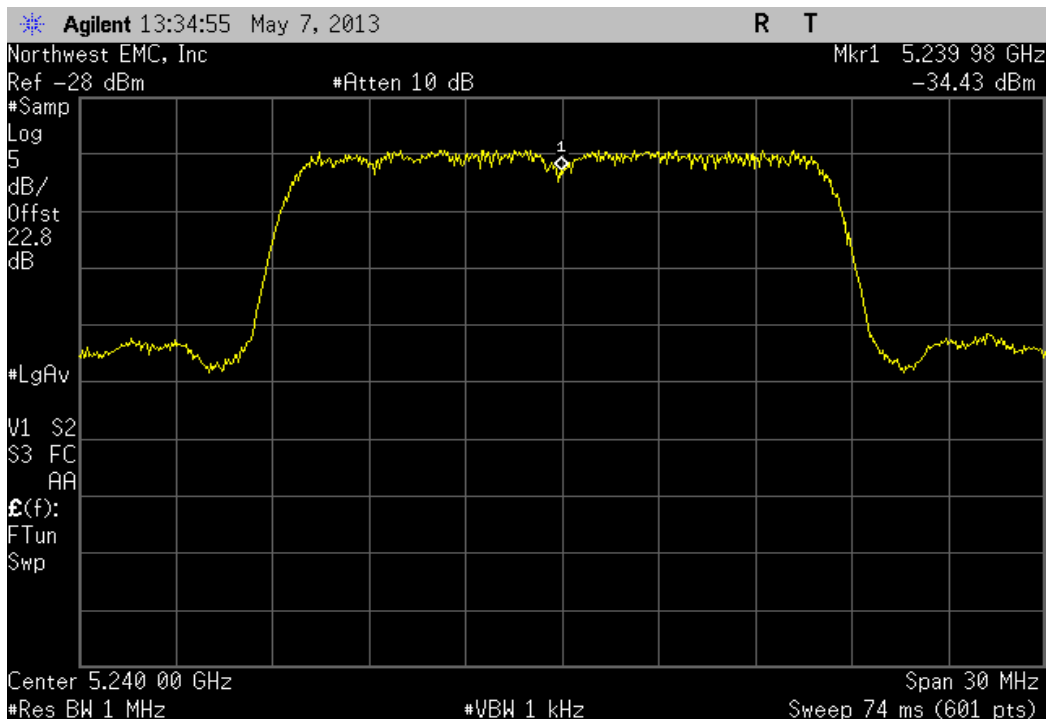
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.08	5240	15.3	100	Pass



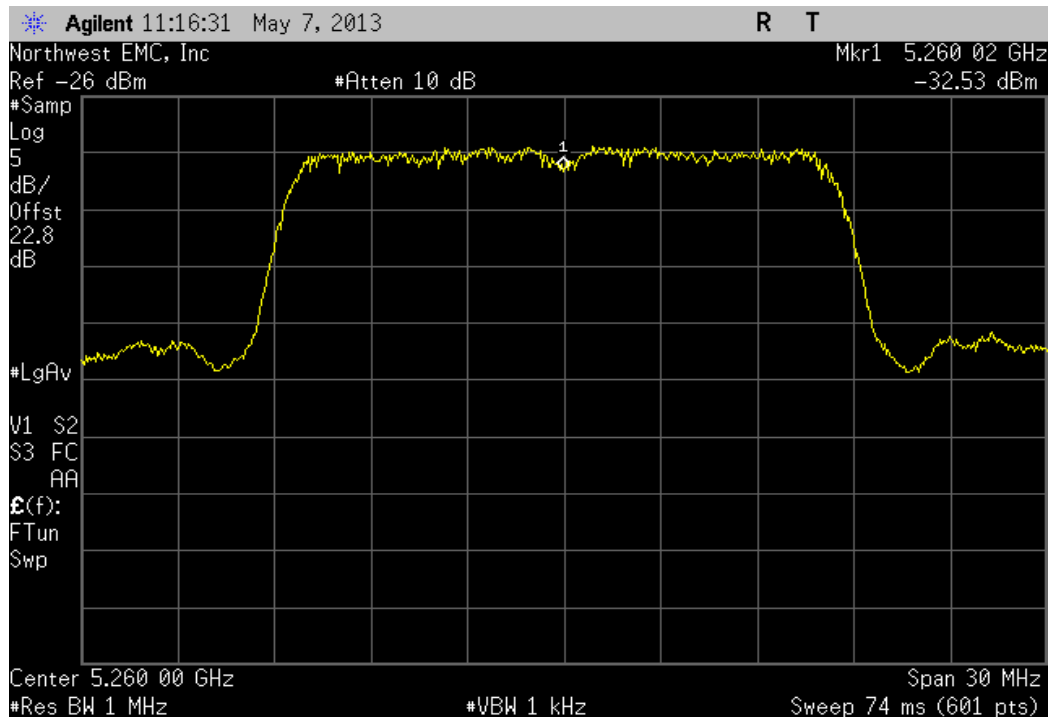
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5240.05	5240	9.5	100	Pass



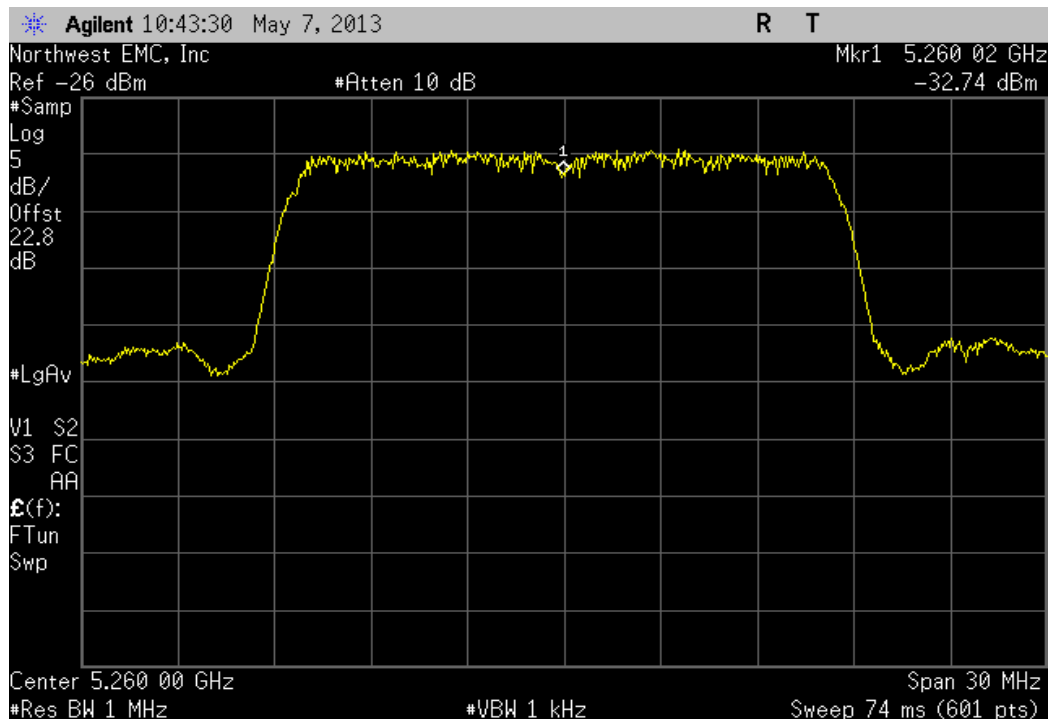
18 Mbps, 5150 MHz - 5250 MHz - High Channel, 5240 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5239.98	5240	3.8	100	Pass



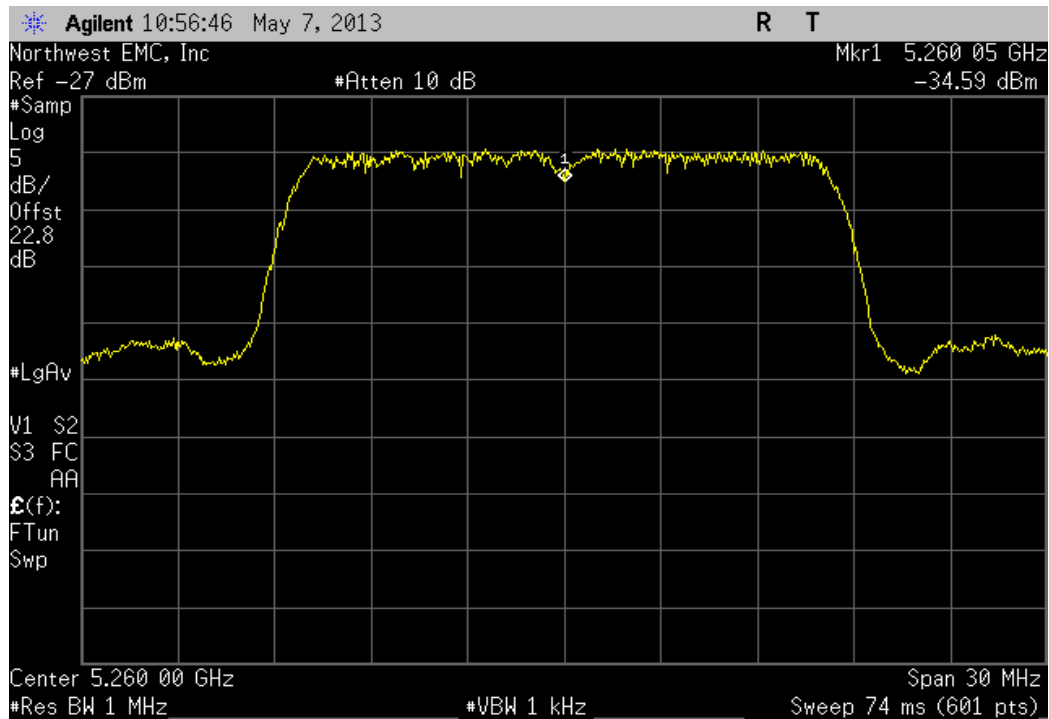
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



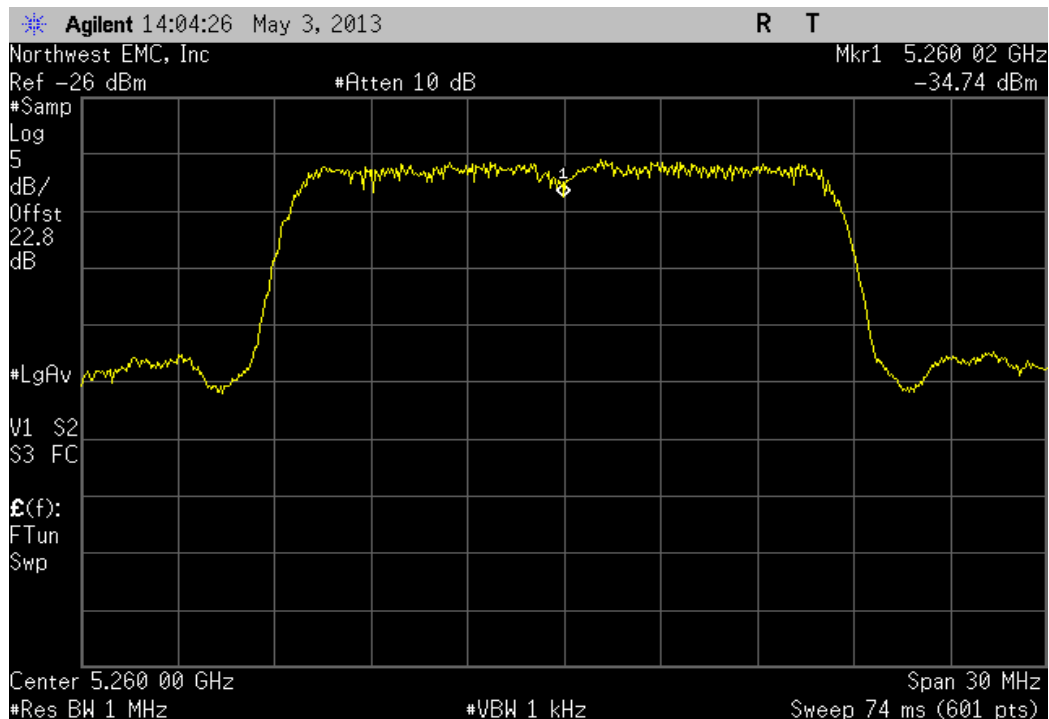
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



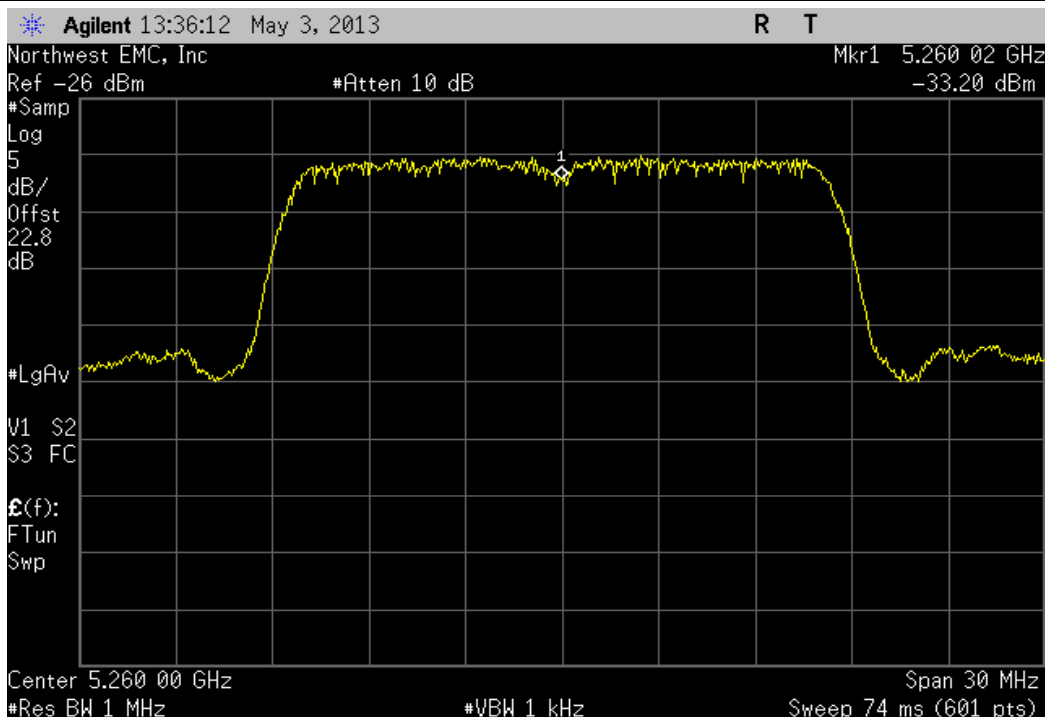
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.05	5260	9.5	100	Pass



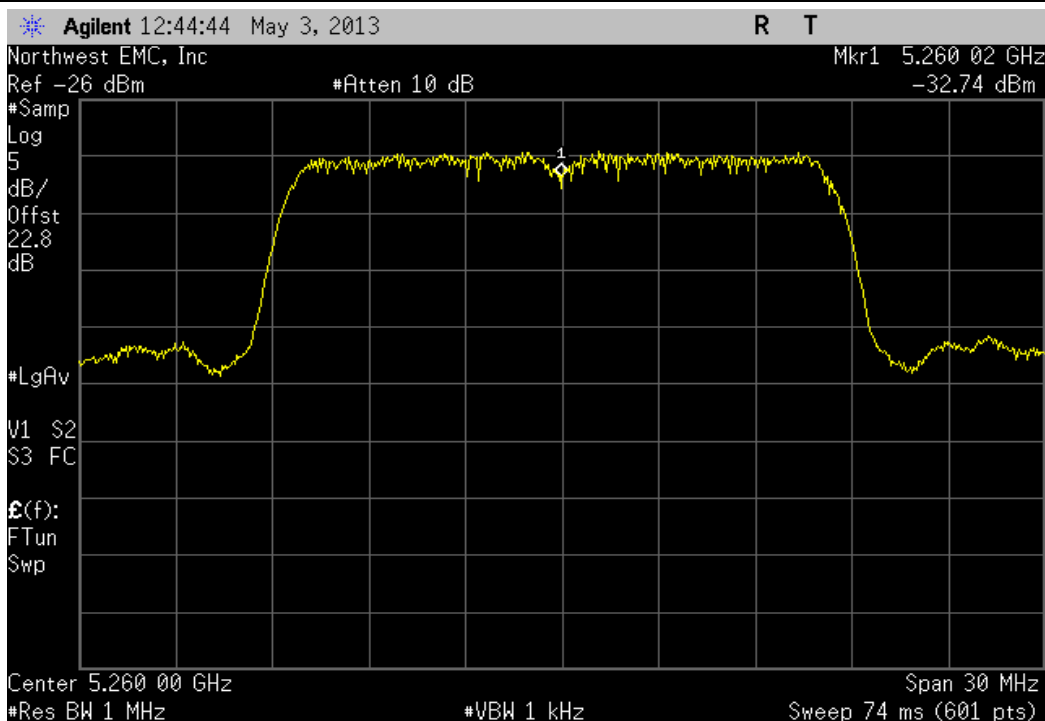
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



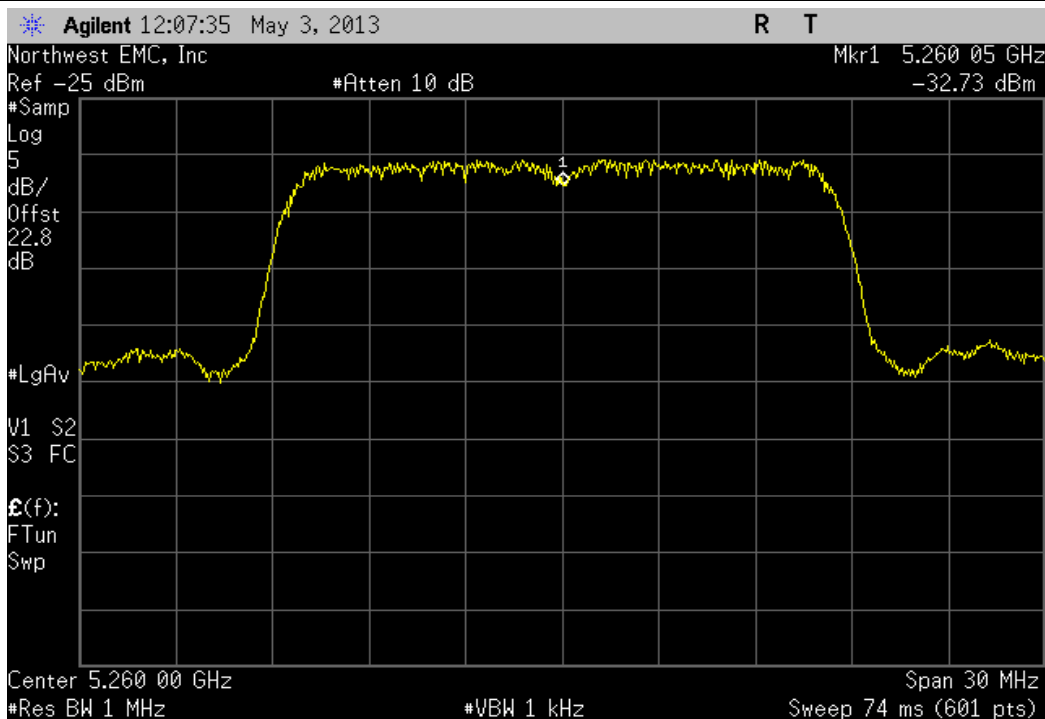
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



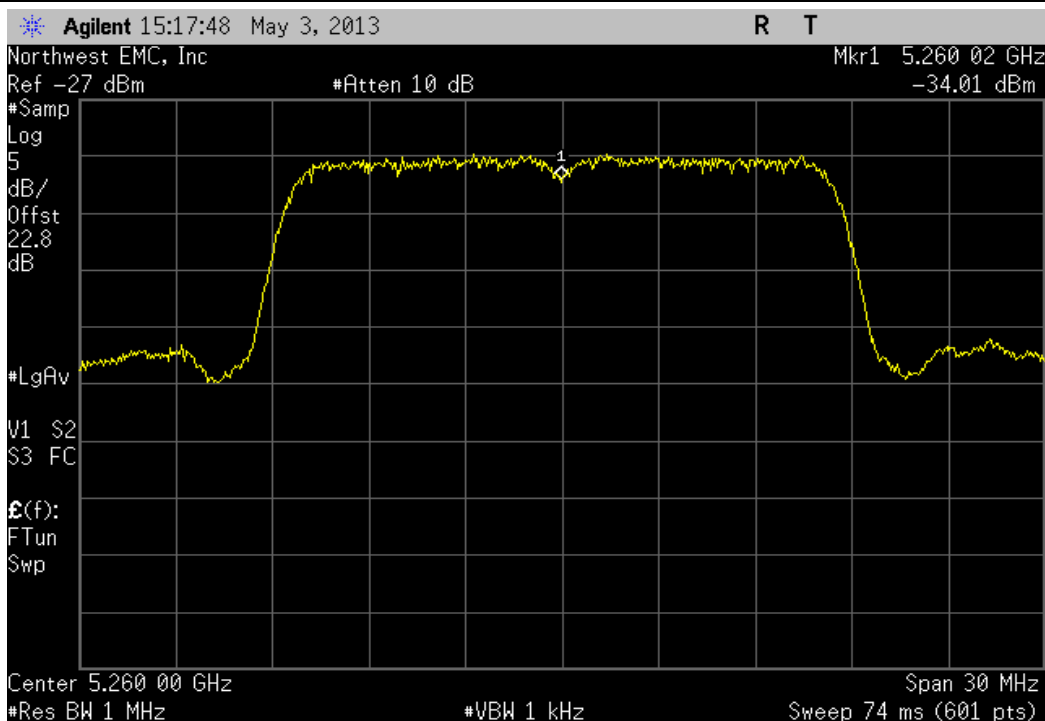
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



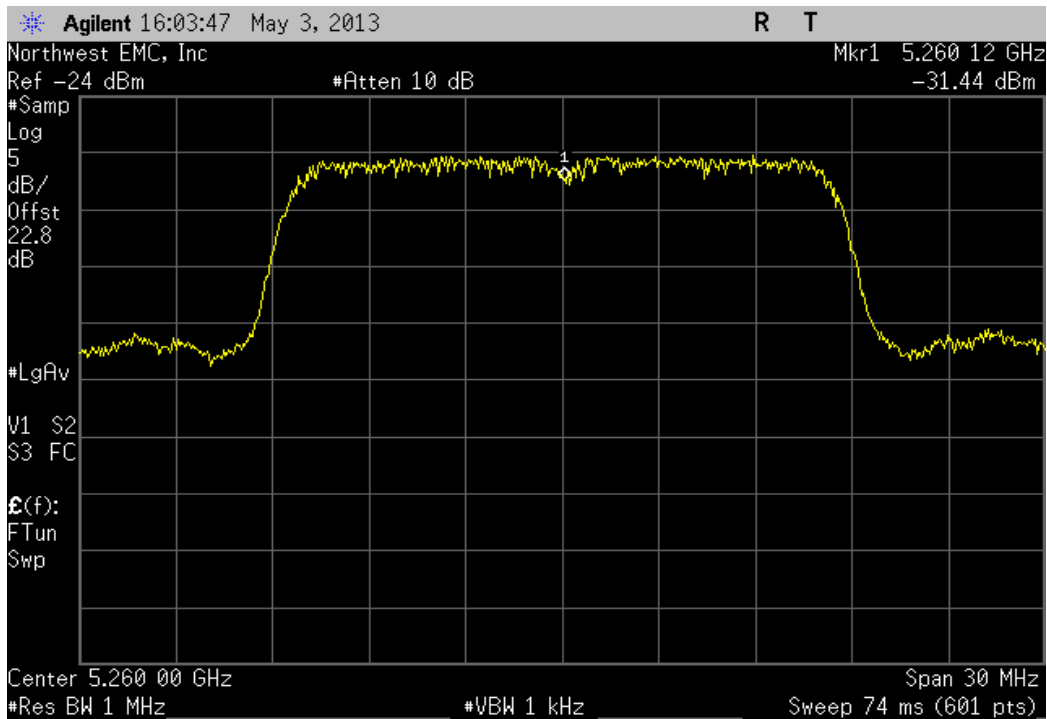
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.05	5260	9.5	100	Pass



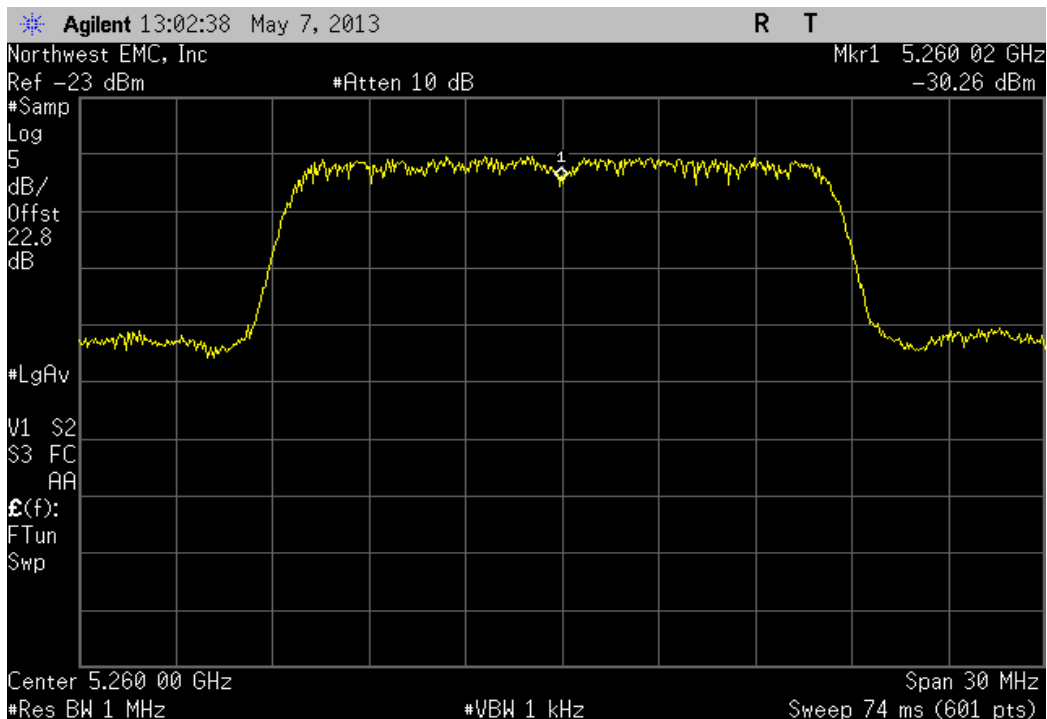
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



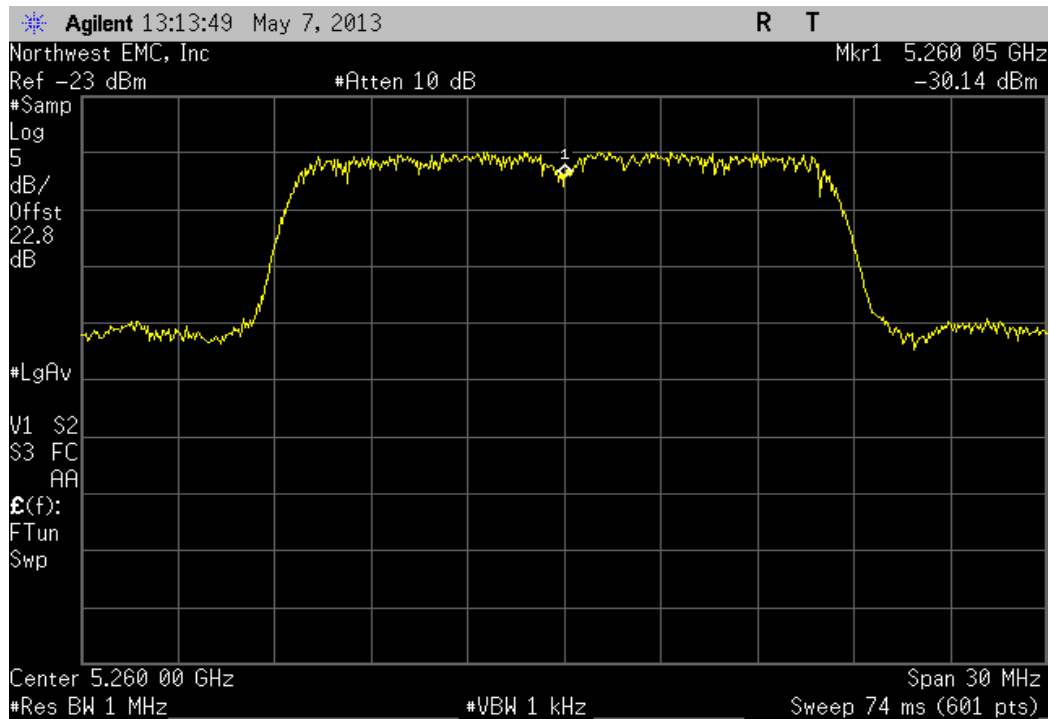
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.12	5260	22.8	100	Pass



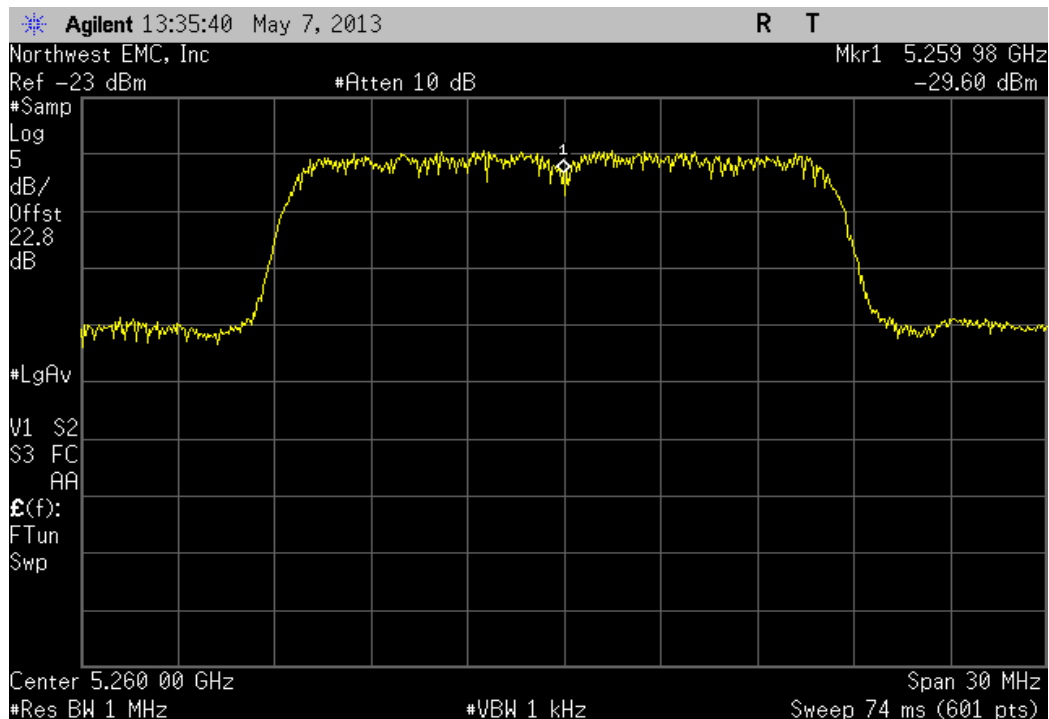
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.02	5260	3.8	100	Pass



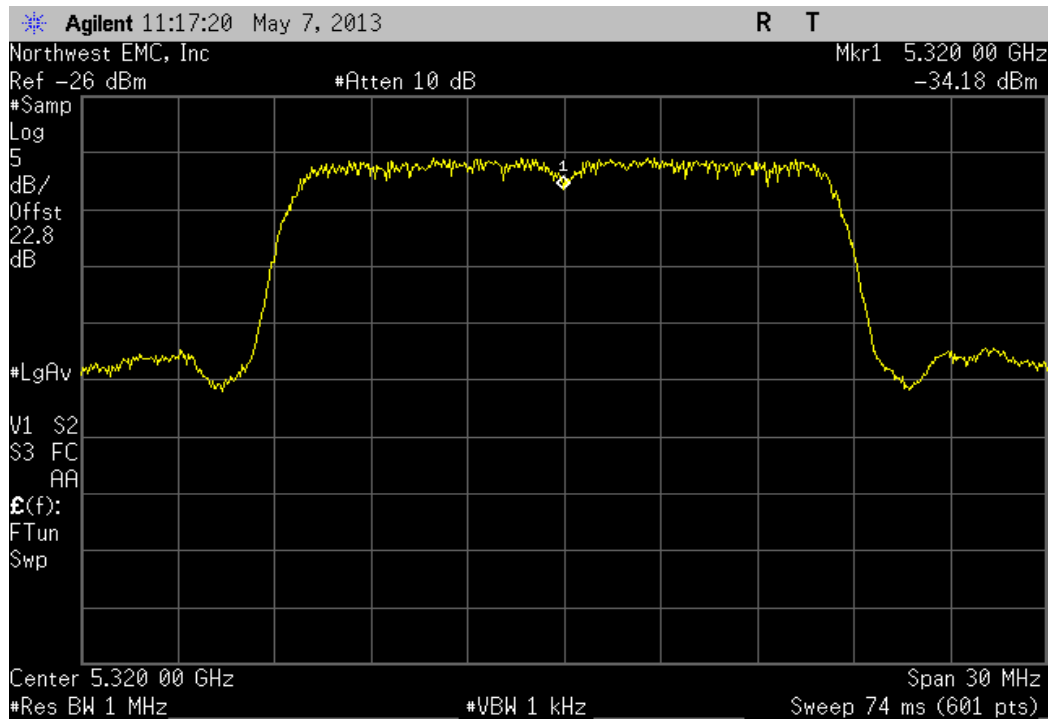
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5260.05	5260	9.5	100	Pass



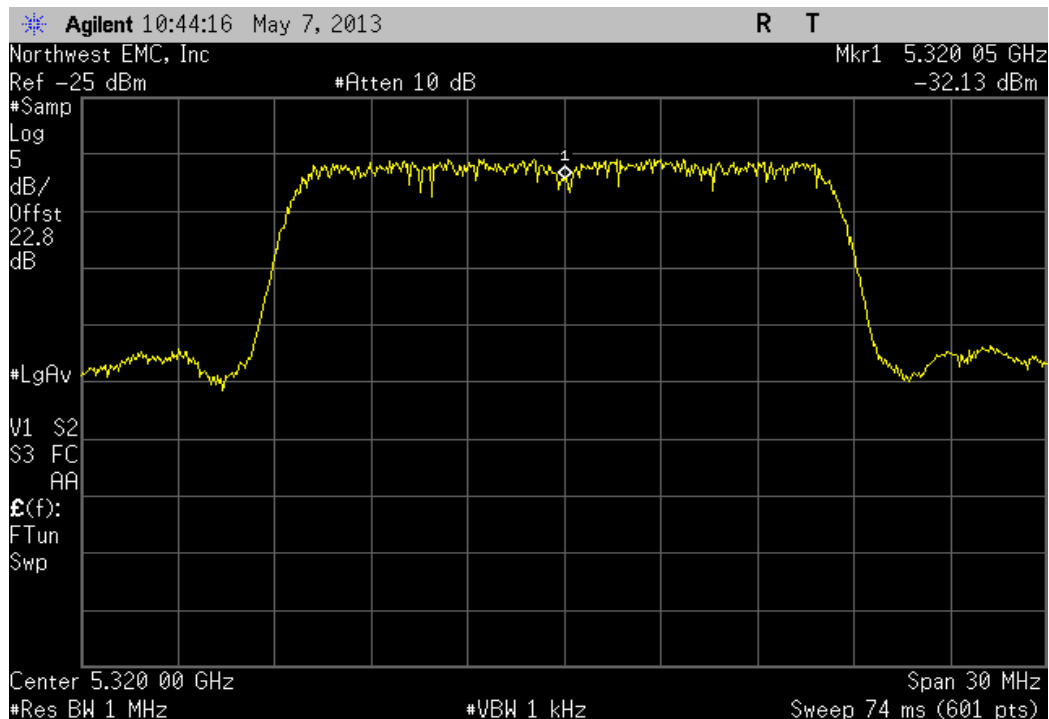
18 Mbps, 5150 MHz - 5250 MHz - Low Channel, 5260 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5259.98	5260	3.8	100	Pass



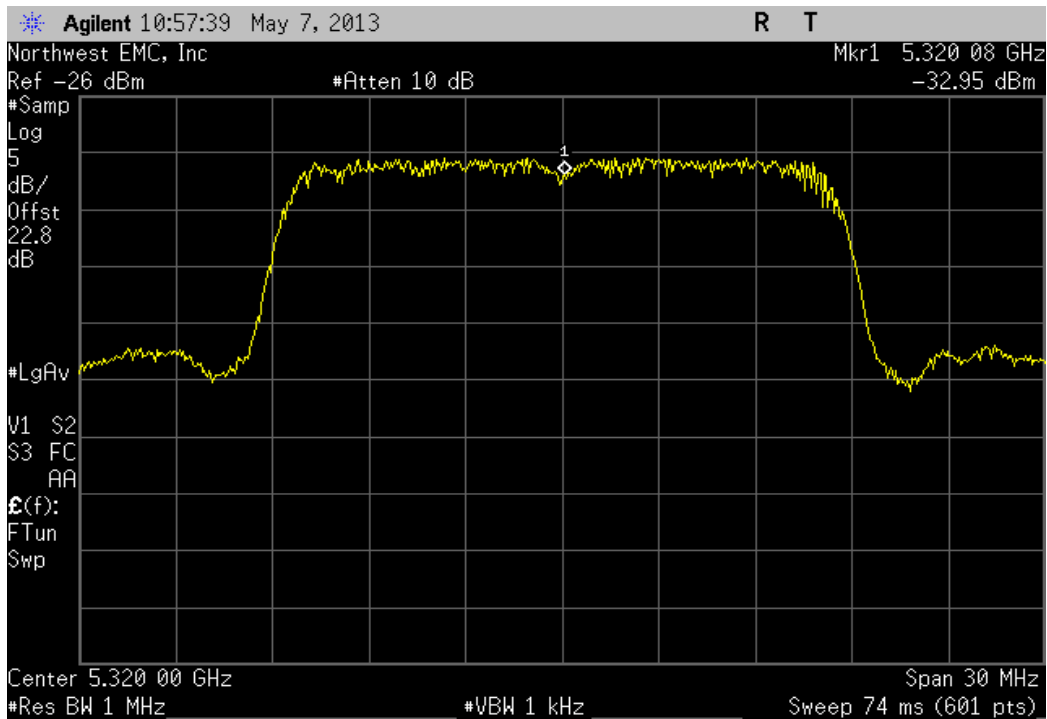
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320	5320	0	100	Pass



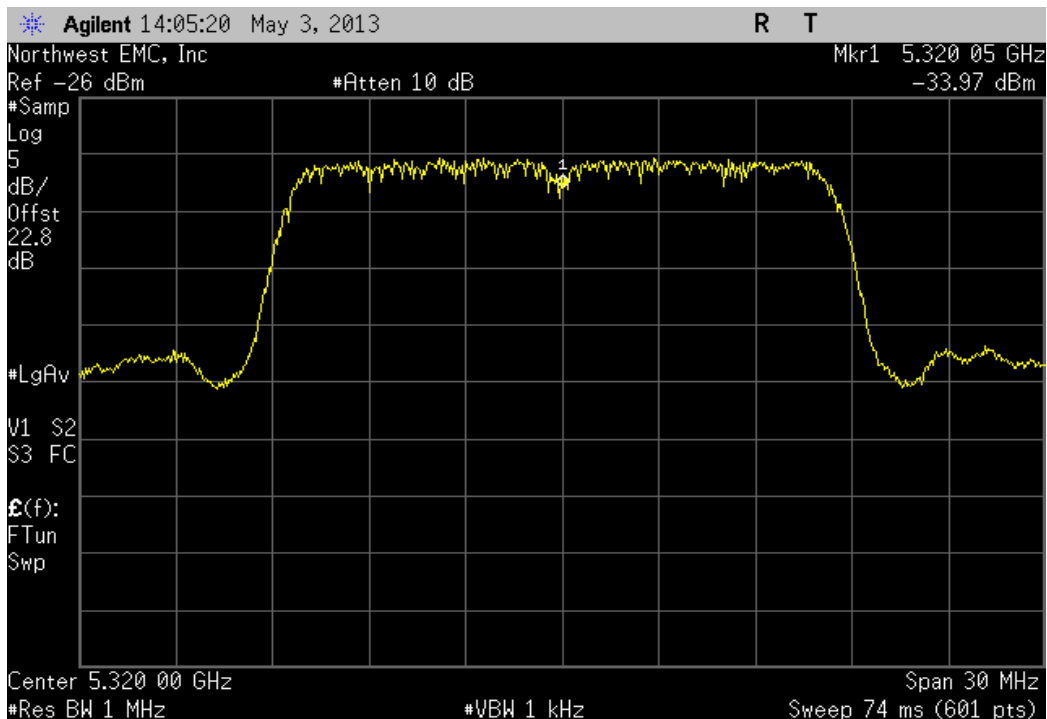
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.05	5320	9.4	100	Pass



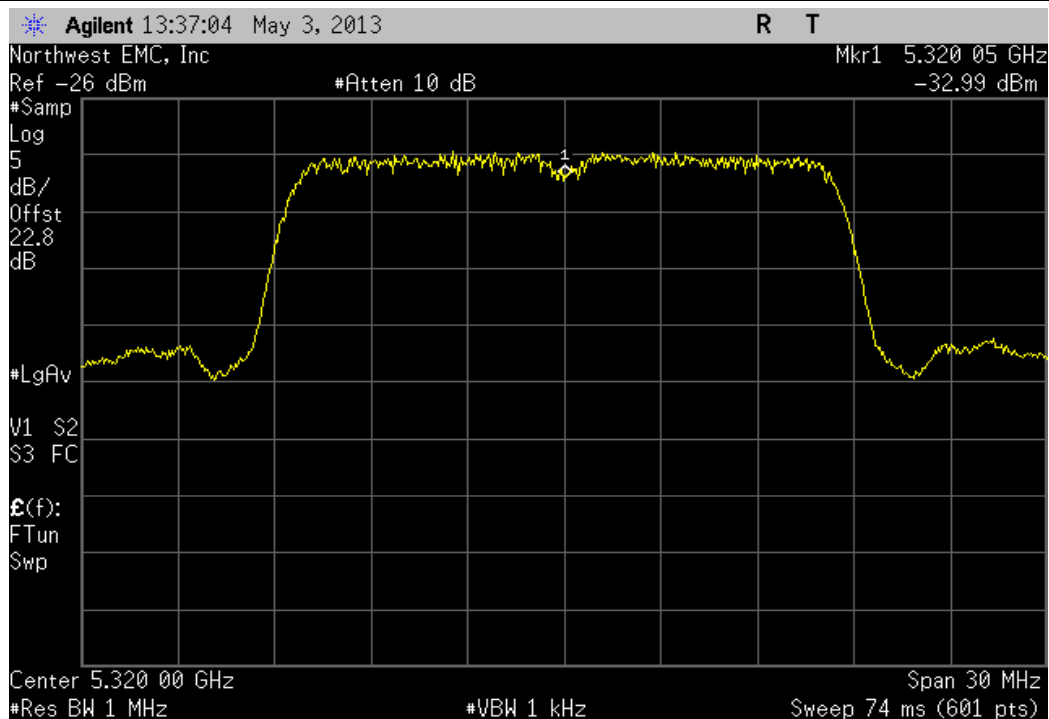
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.08	5320	15	100	Pass



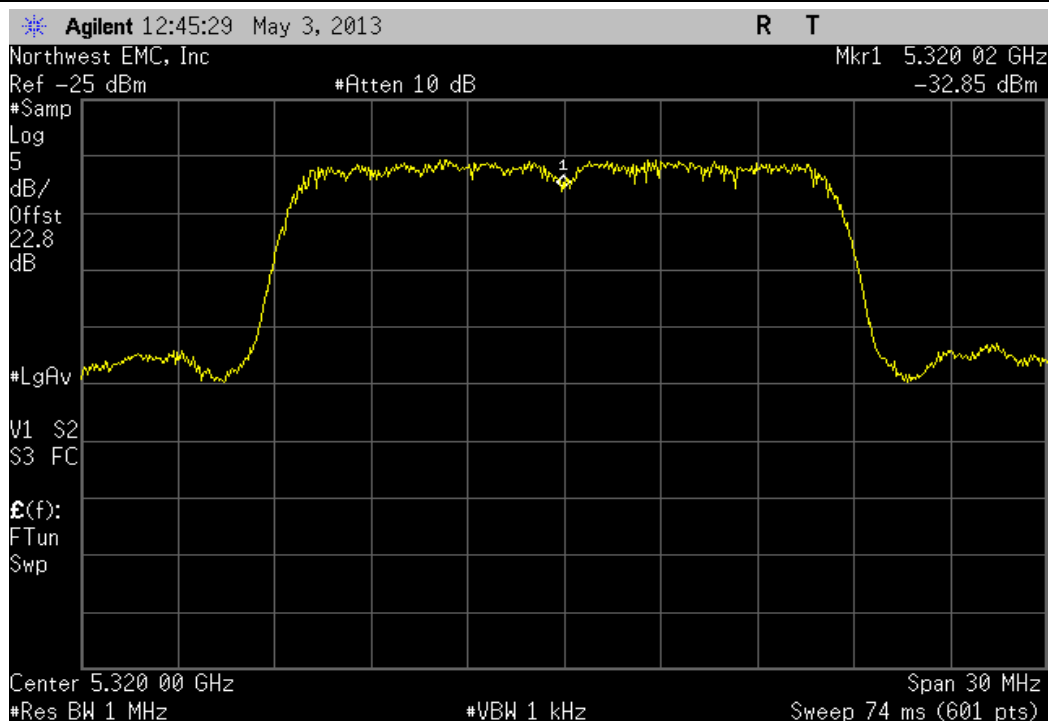
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.05	5320	9.4	100	Pass



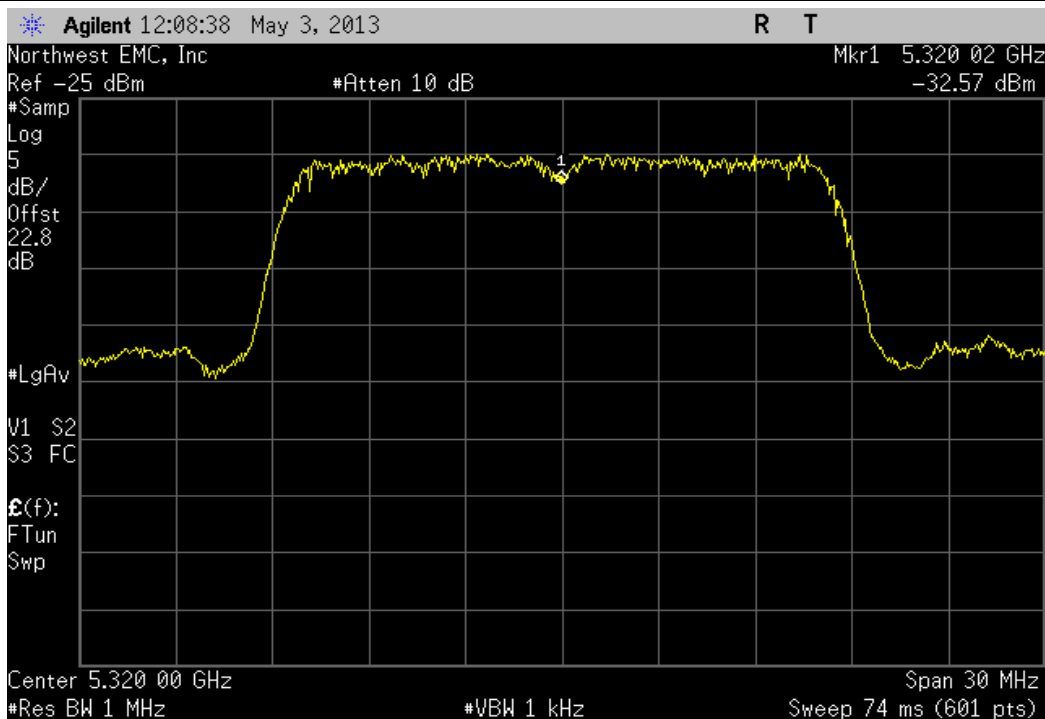
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.05	5320	9.4	100	Pass



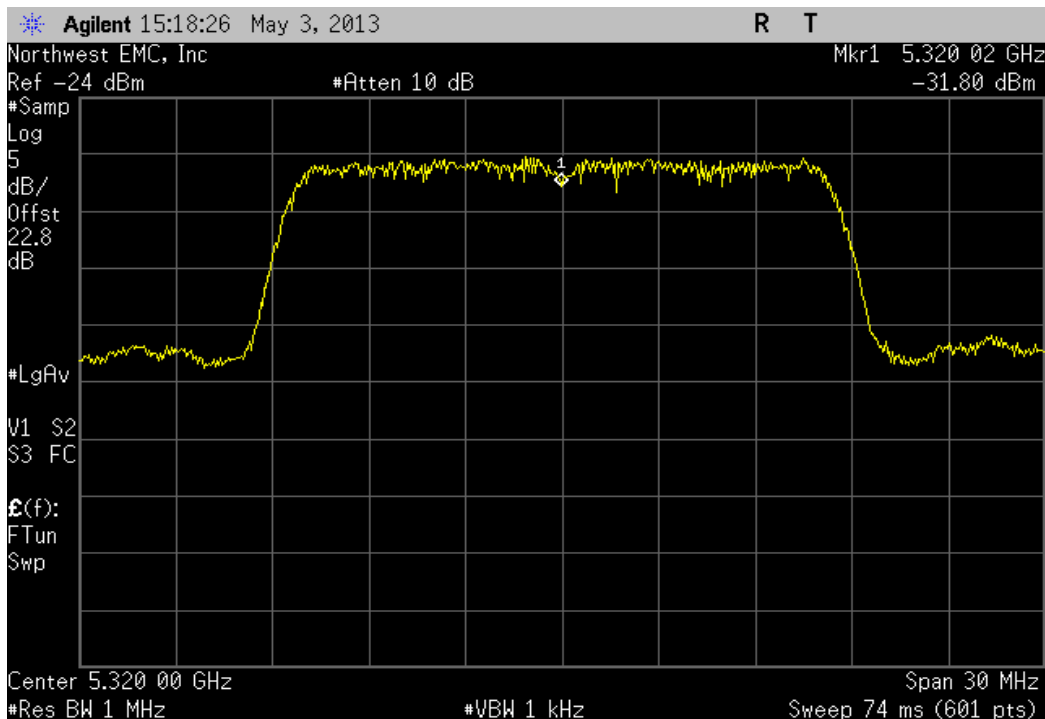
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



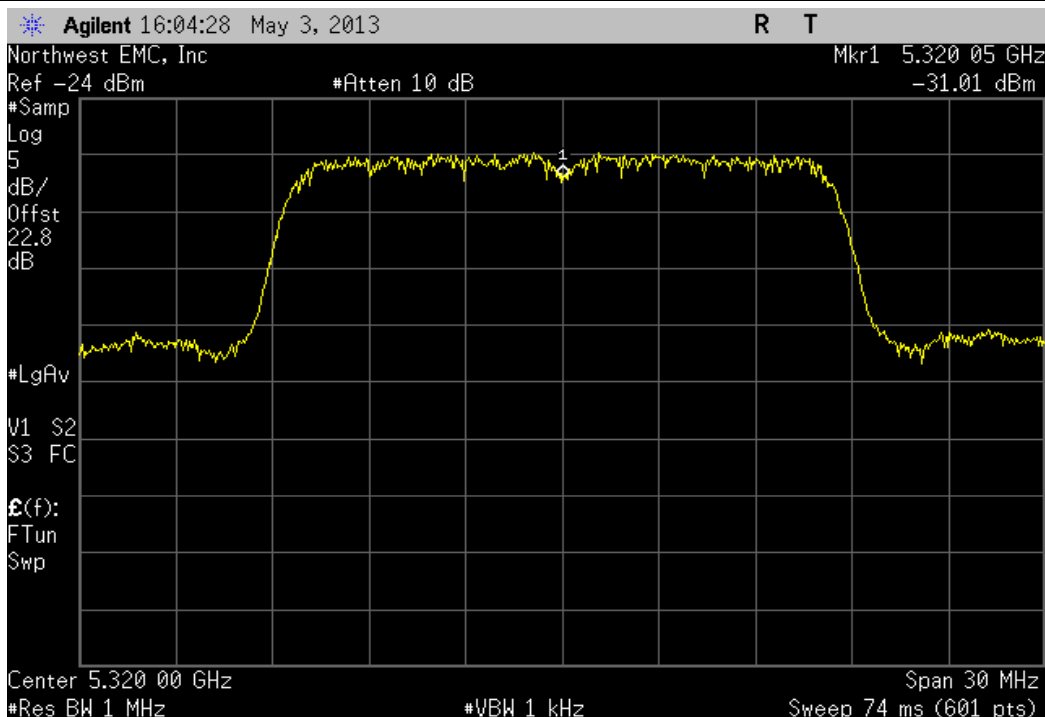
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



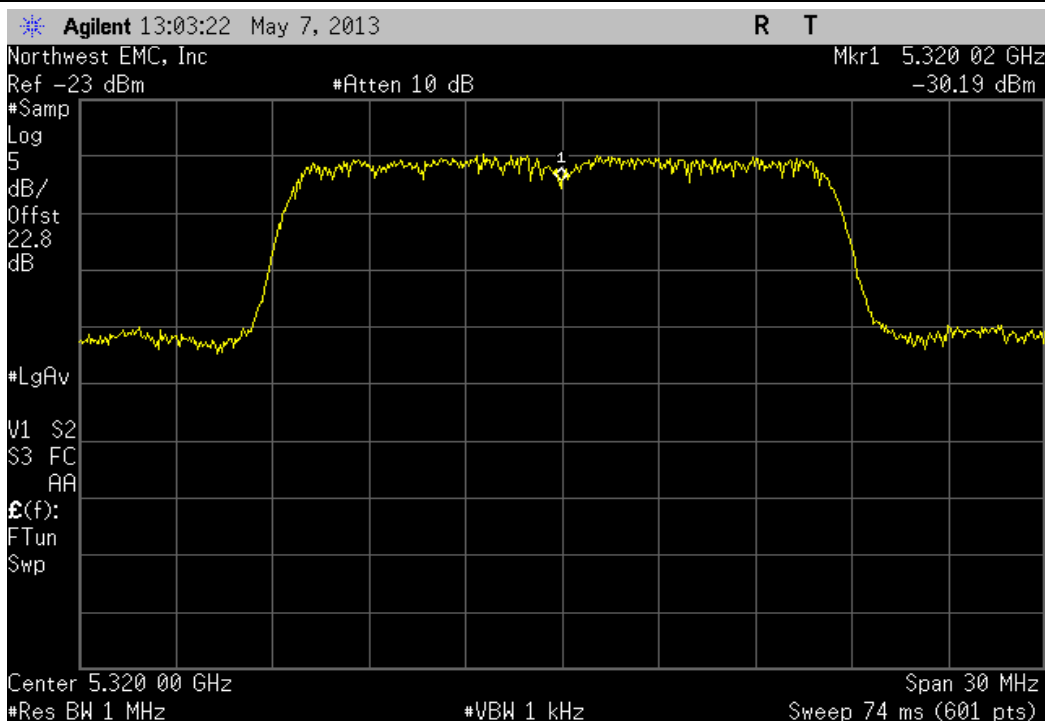
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



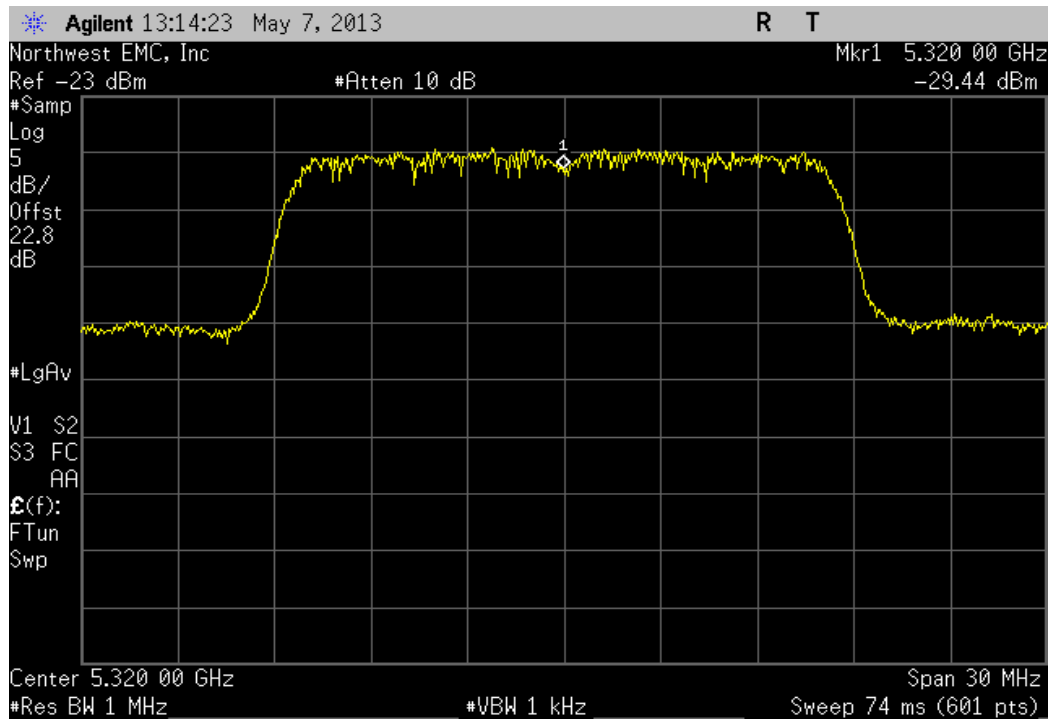
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.05	5320	9.4	100	Pass



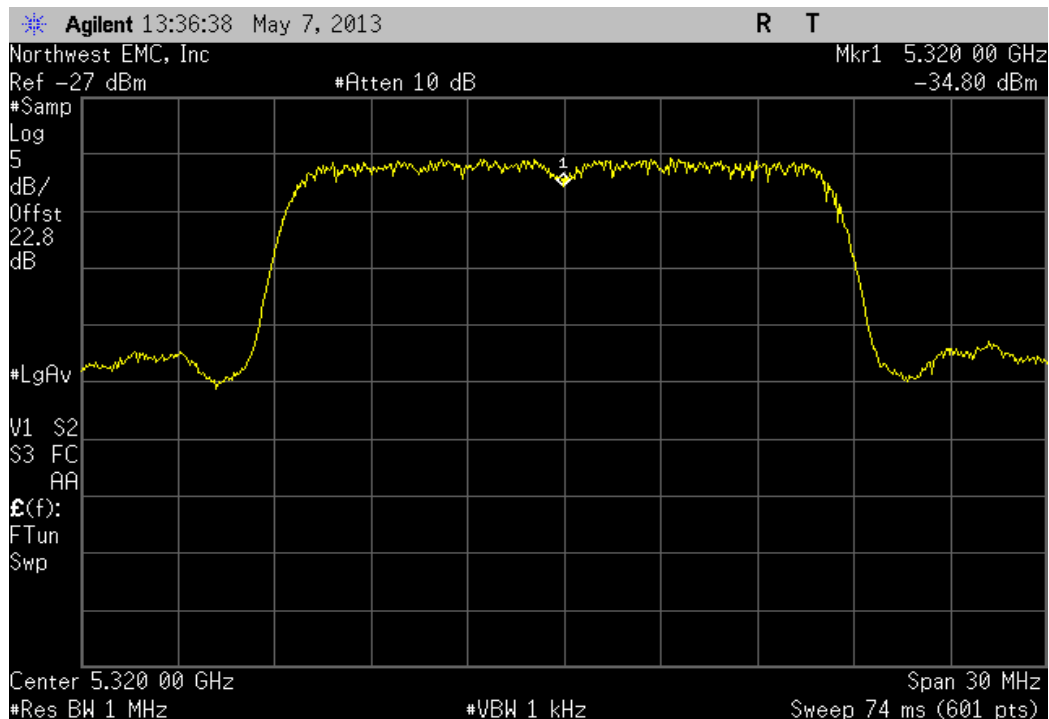
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320.02	5320	3.8	100	Pass



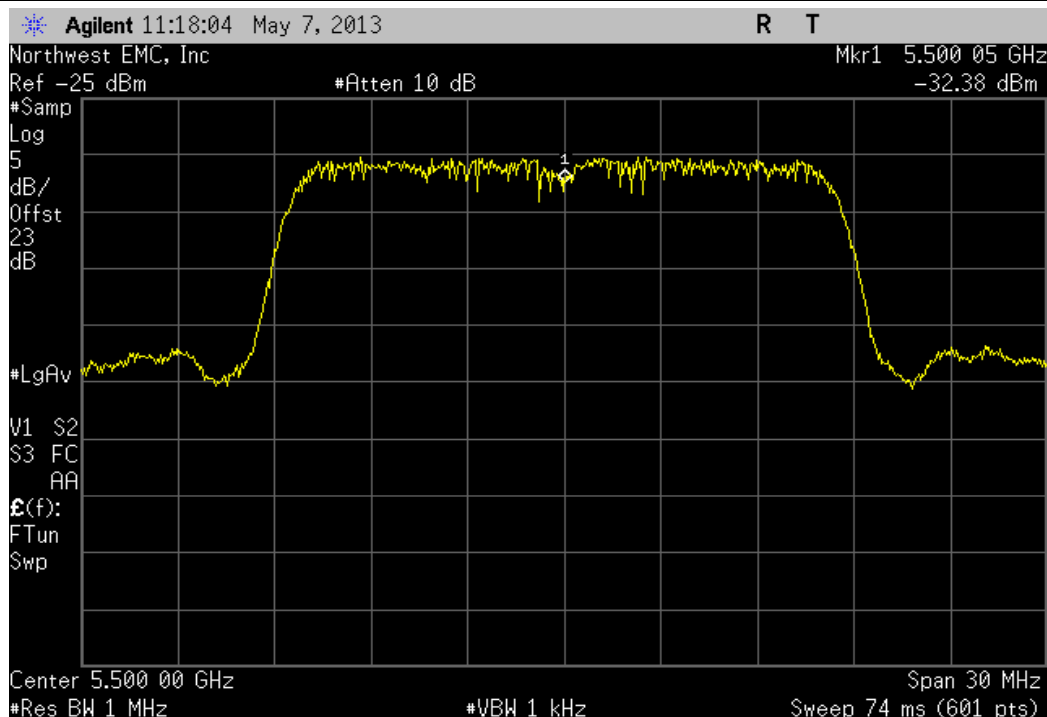
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320	5320	0	100	Pass



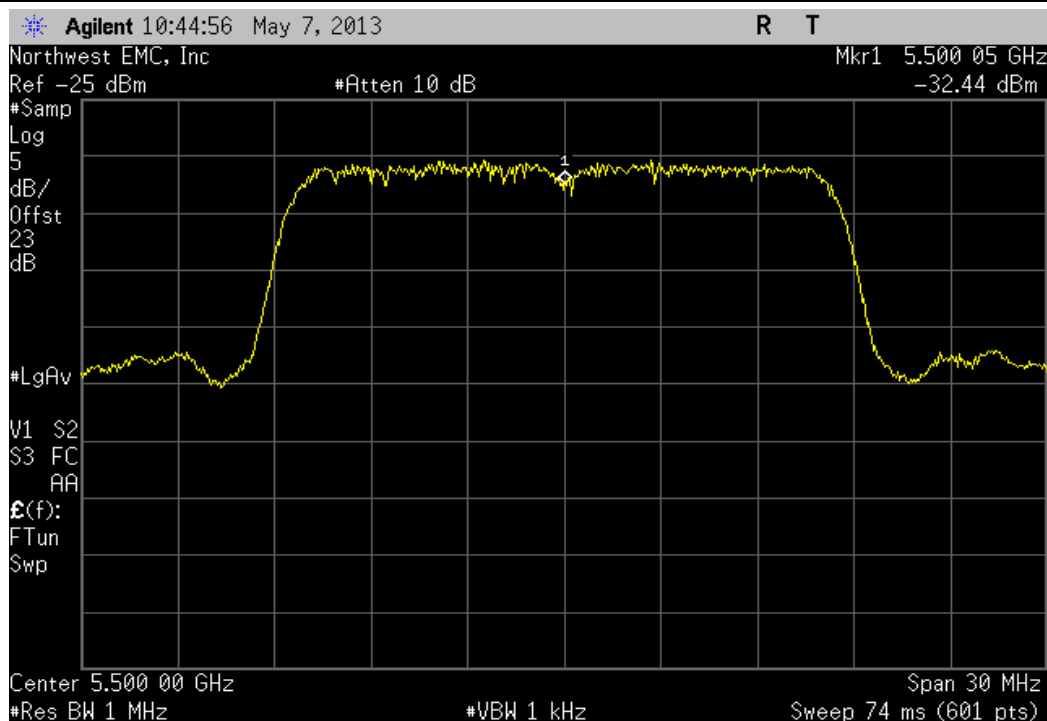
18 Mbps, 5250 MHz - 5350 MHz - High Channel, 5320 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5320	5320	0	100	Pass



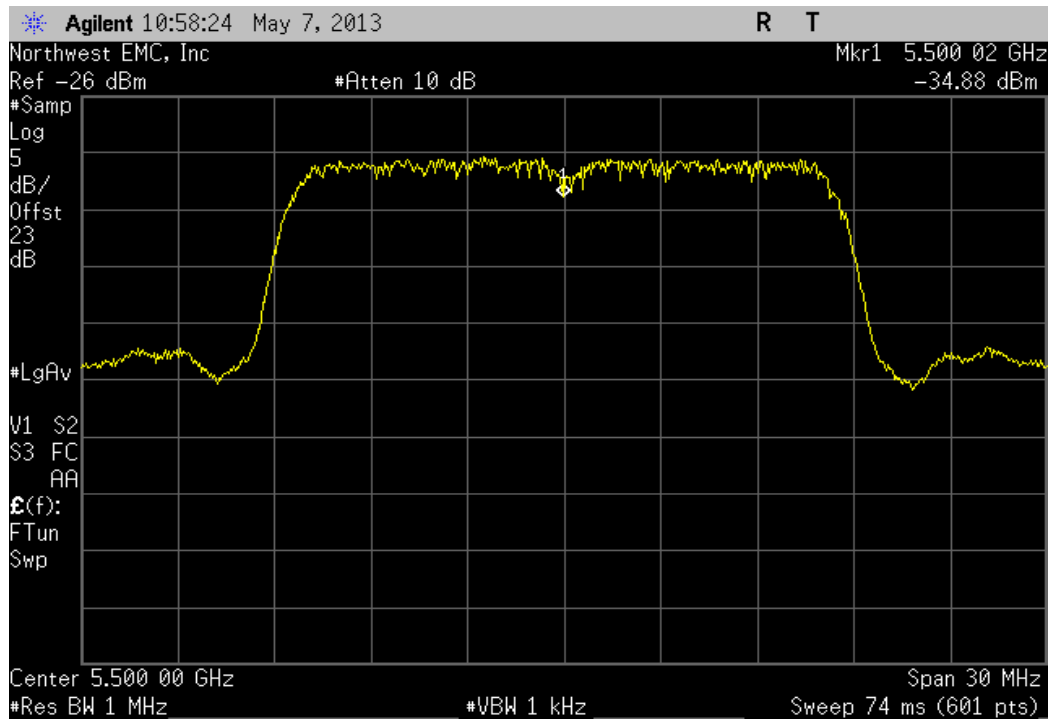
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.05	5500	9.1	100	Pass



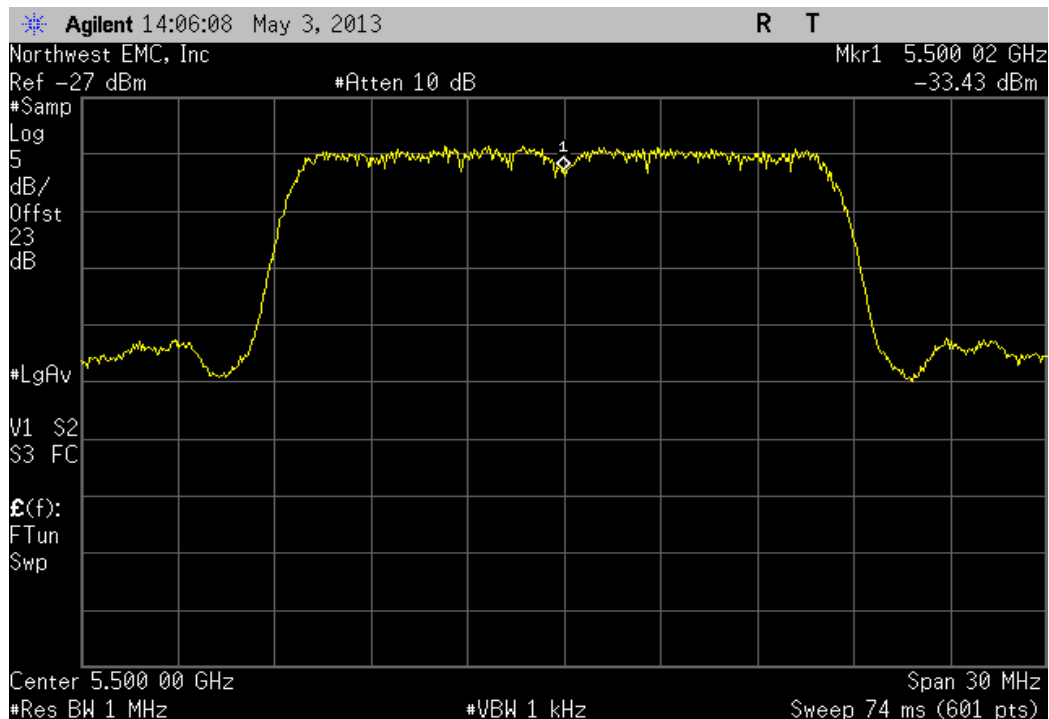
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.05	5500	9.1	100	Pass



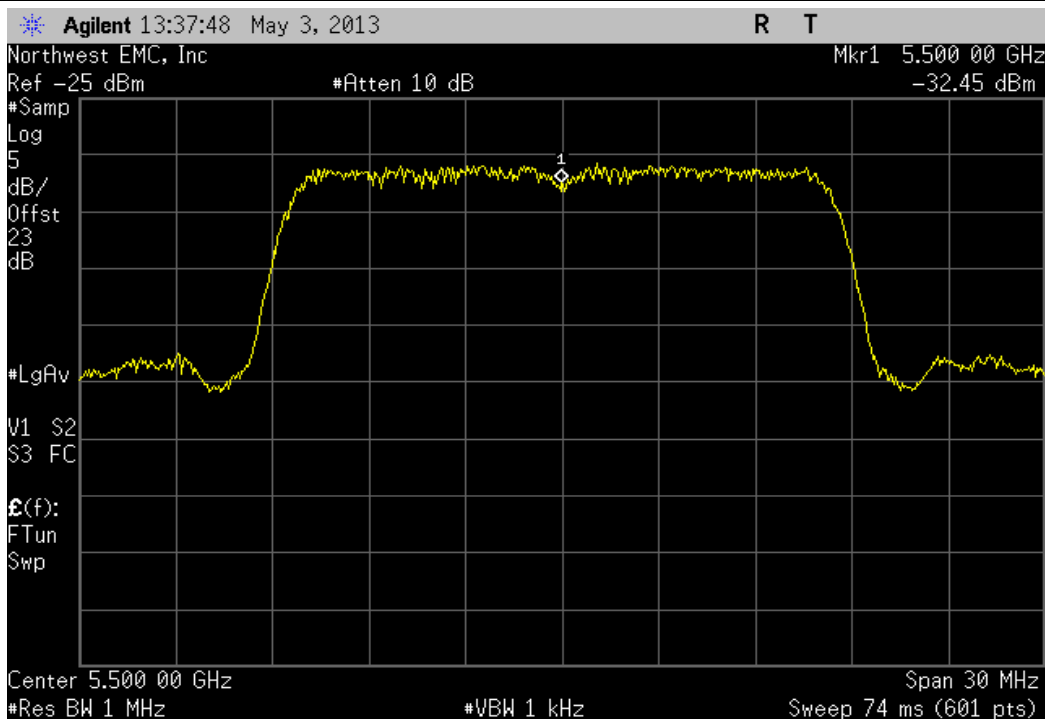
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



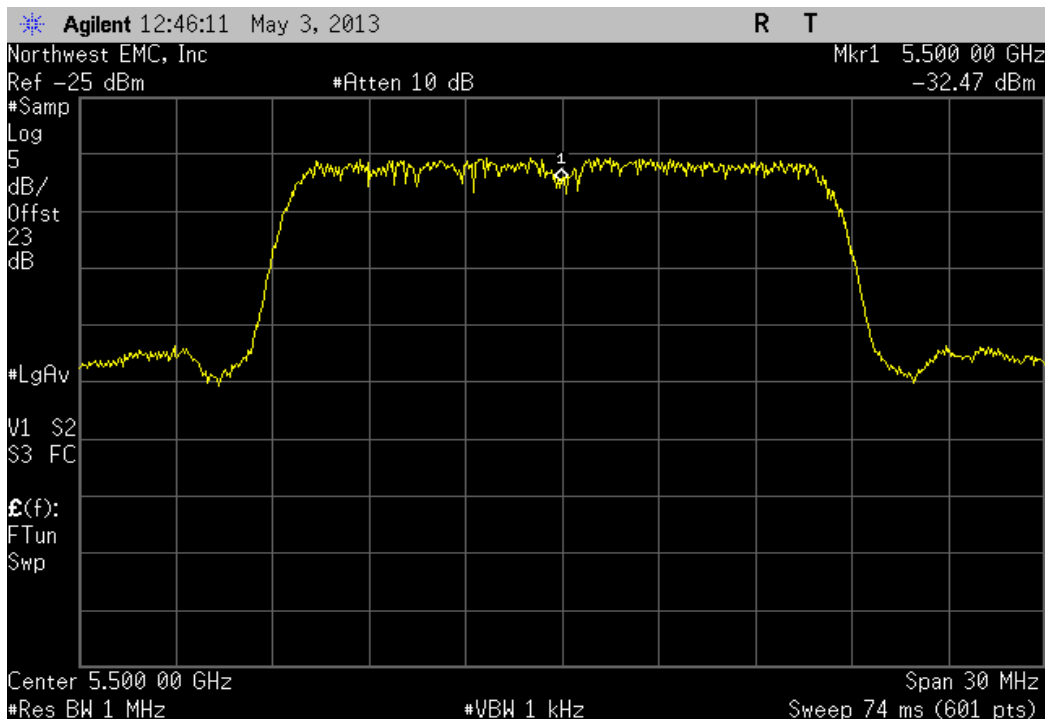
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



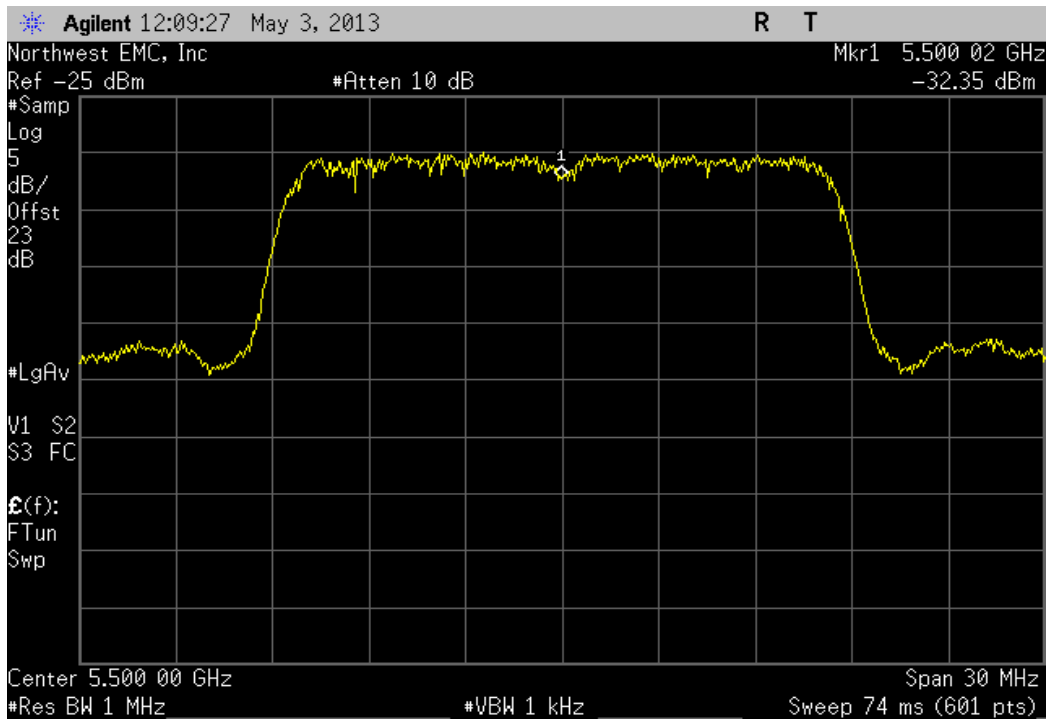
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +40°						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result	
	5500	5500	0	100	Pass	



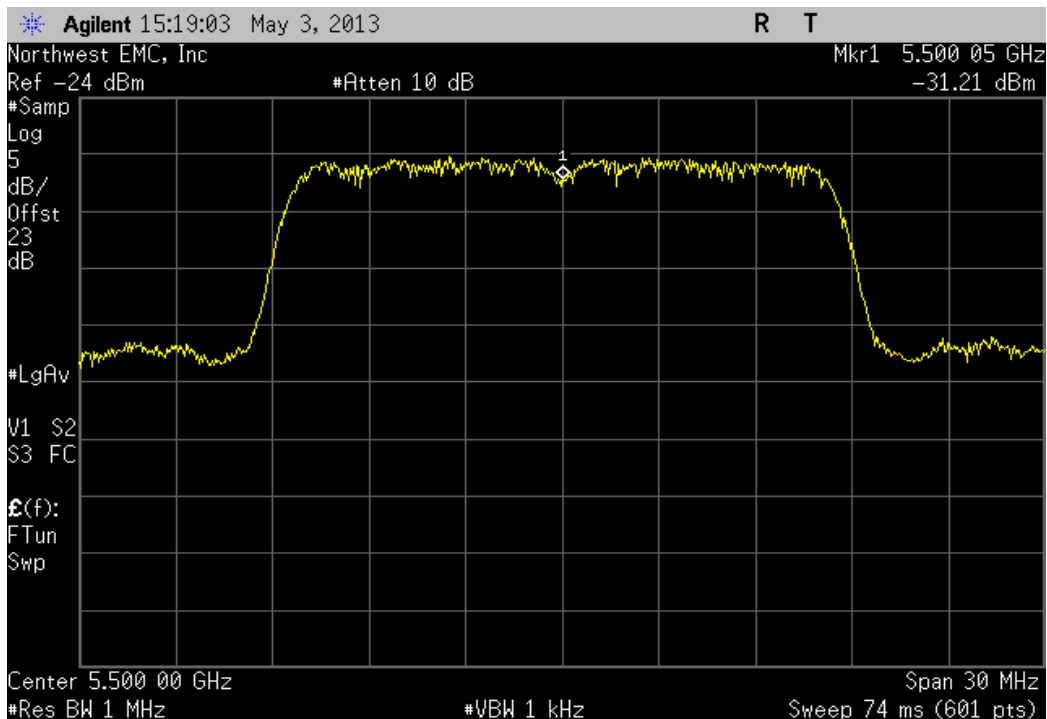
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +30°						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result	
	5500	5500	0	100	Pass	



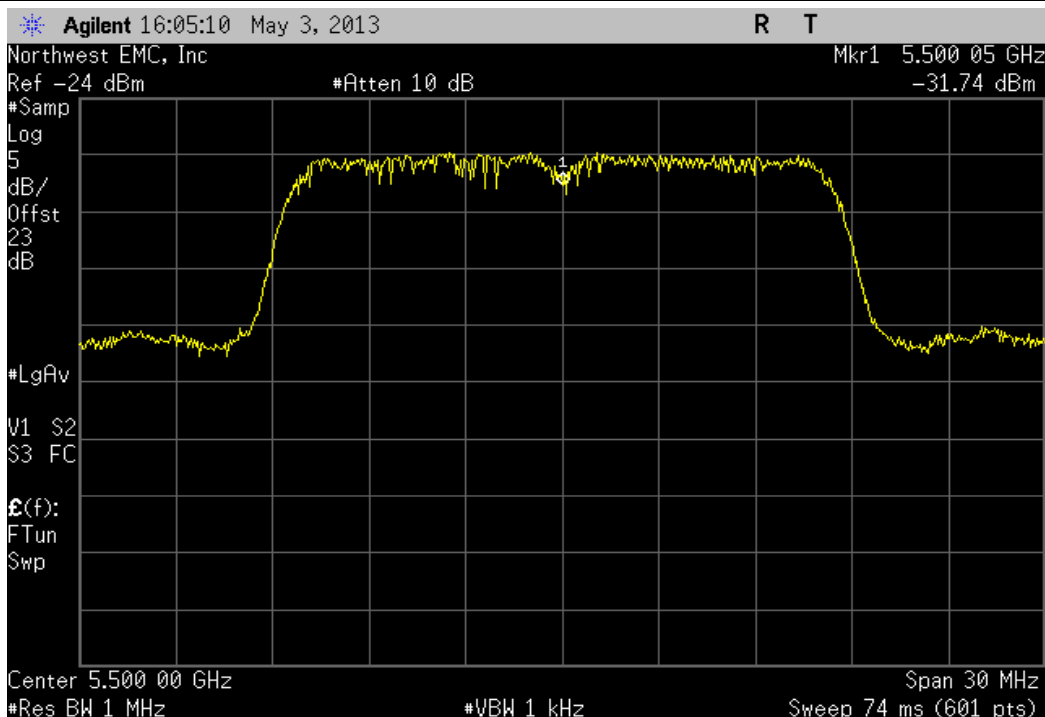
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.02	5500	3.6	100	Pass



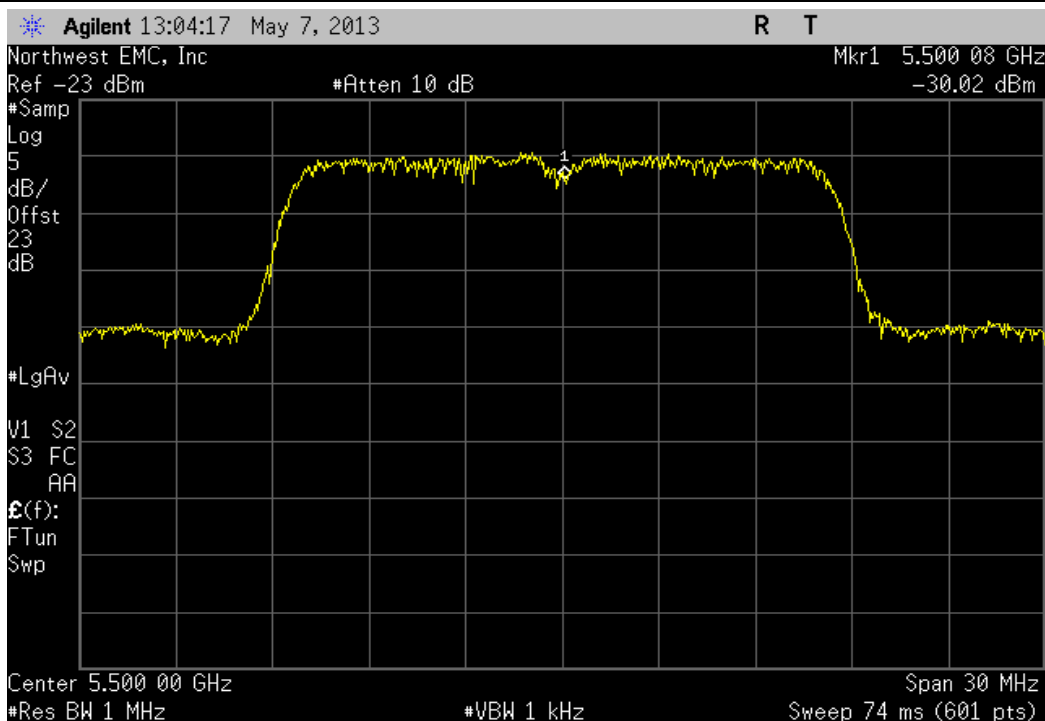
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.05	5500	9.1	100	Pass



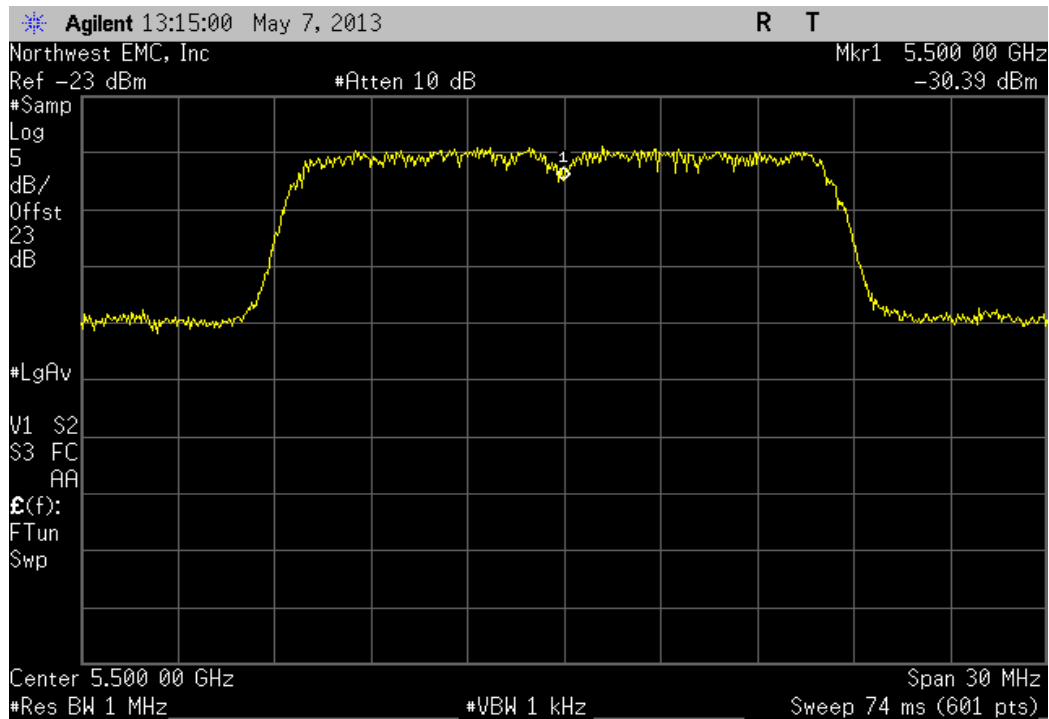
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.05	5500	9.1	100	Pass



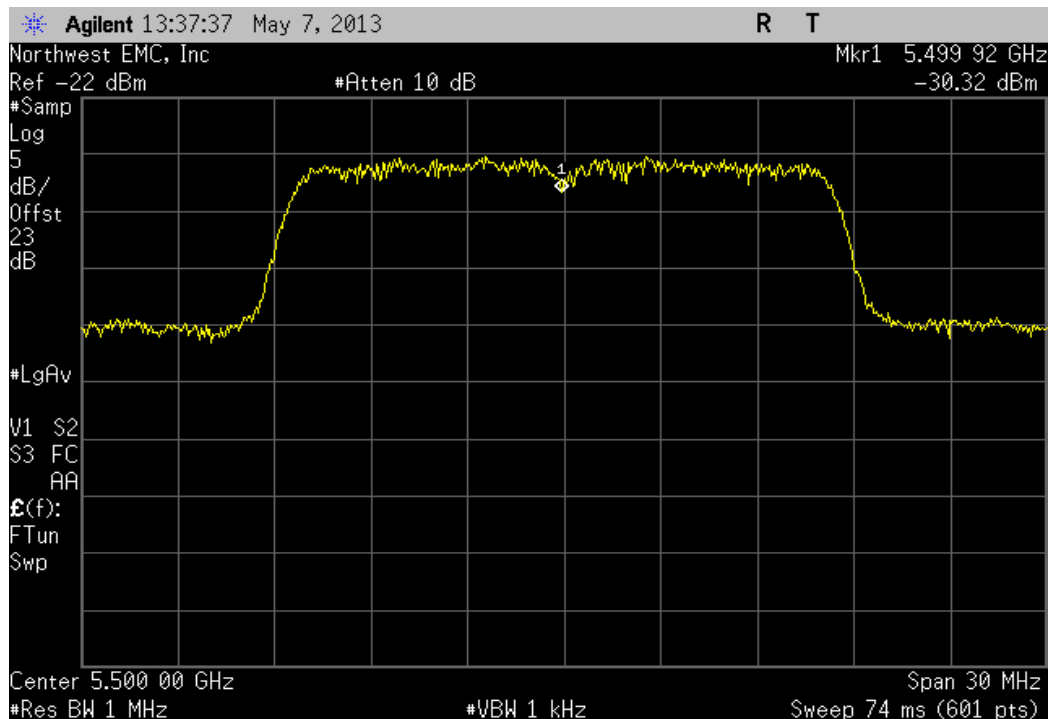
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5500.08	5500	14.6	100	Pass



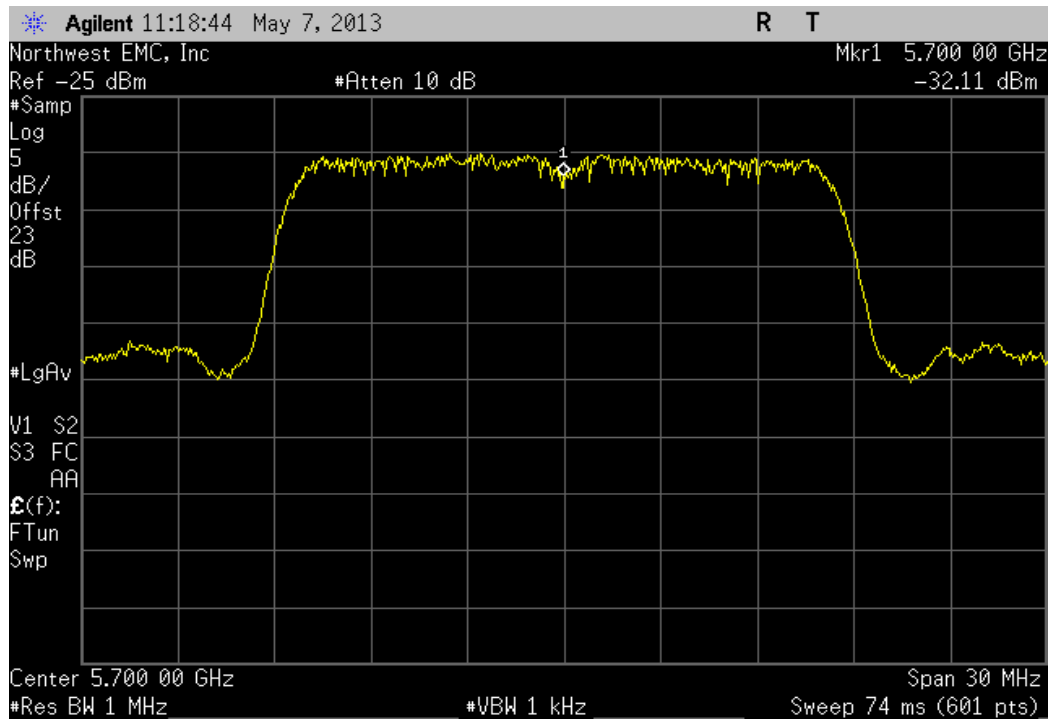
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: -20°						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result	
	5500	5500	0	100	Pass	



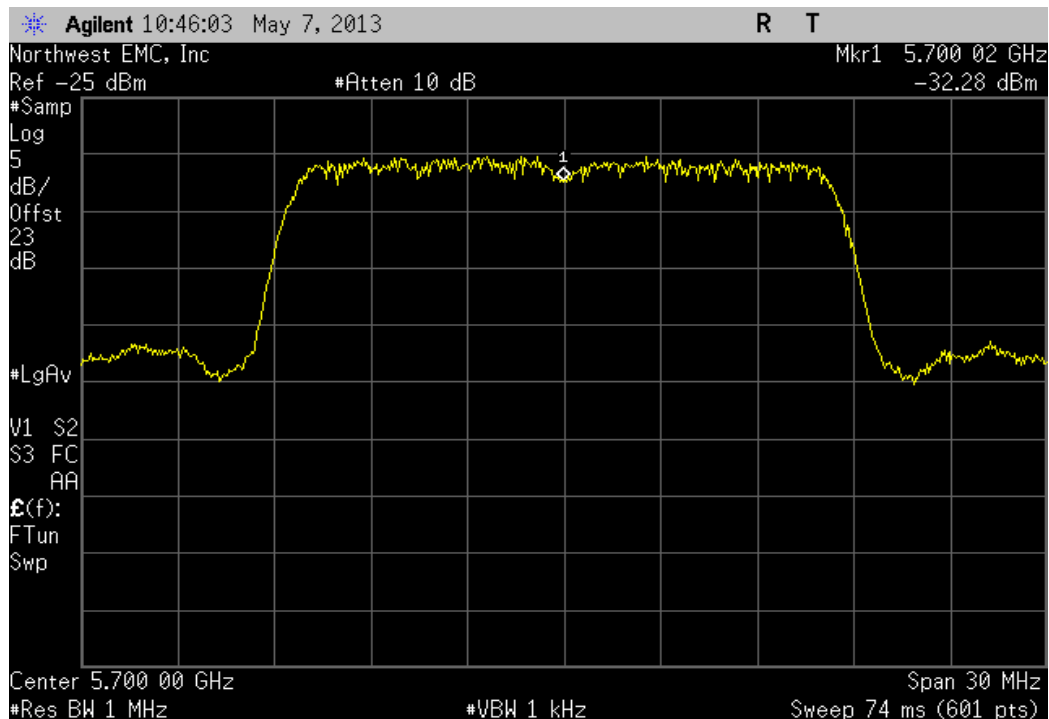
18 Mbps, 5470 MHz - 5725 MHz - Low Channel, 5500 MHz, Temperature: -30°						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result	
	5499.92	5500	14.6	100	Pass	



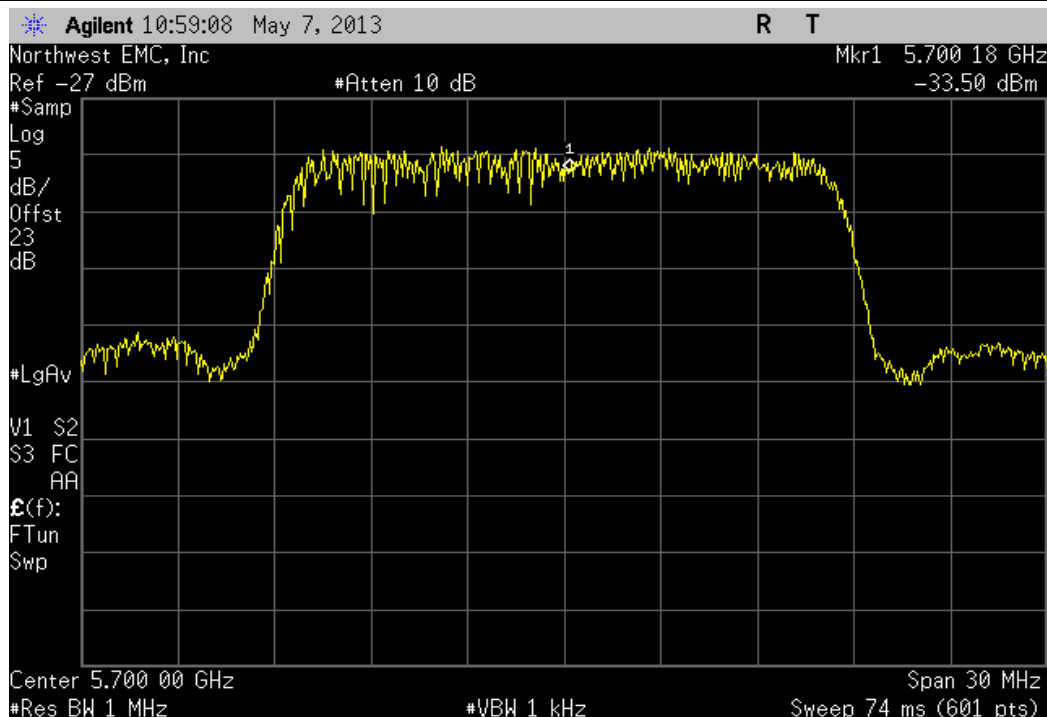
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Voltage: 115%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700	5700	0	100	Pass



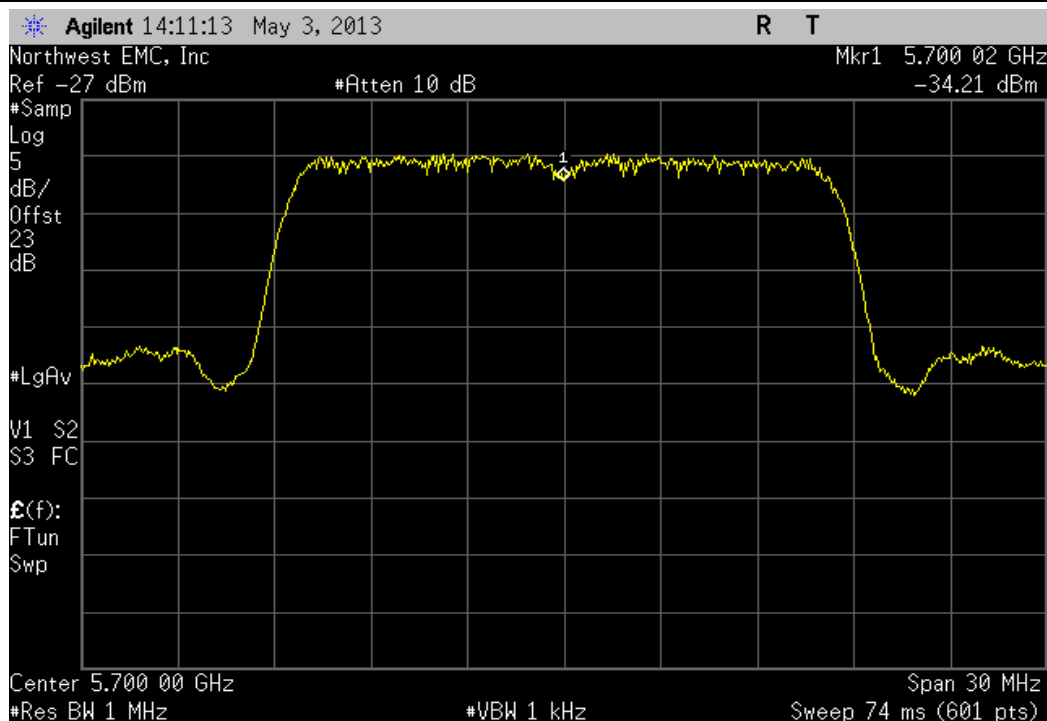
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Voltage: 100%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



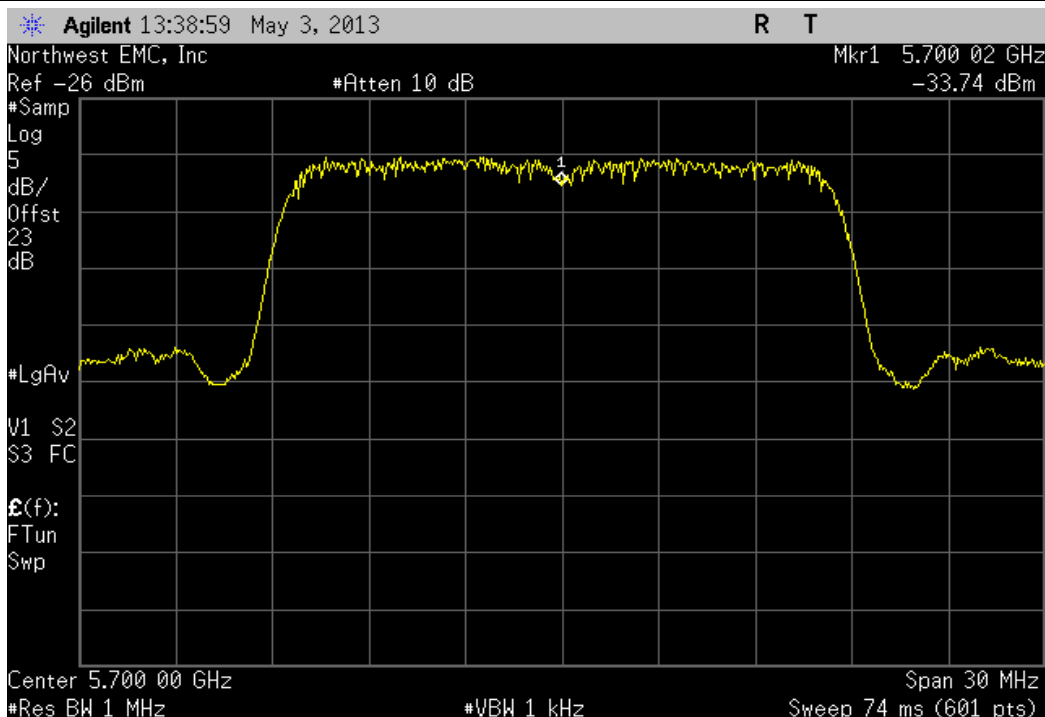
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Voltage: 85%					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.18	5700	31.6	100	Pass



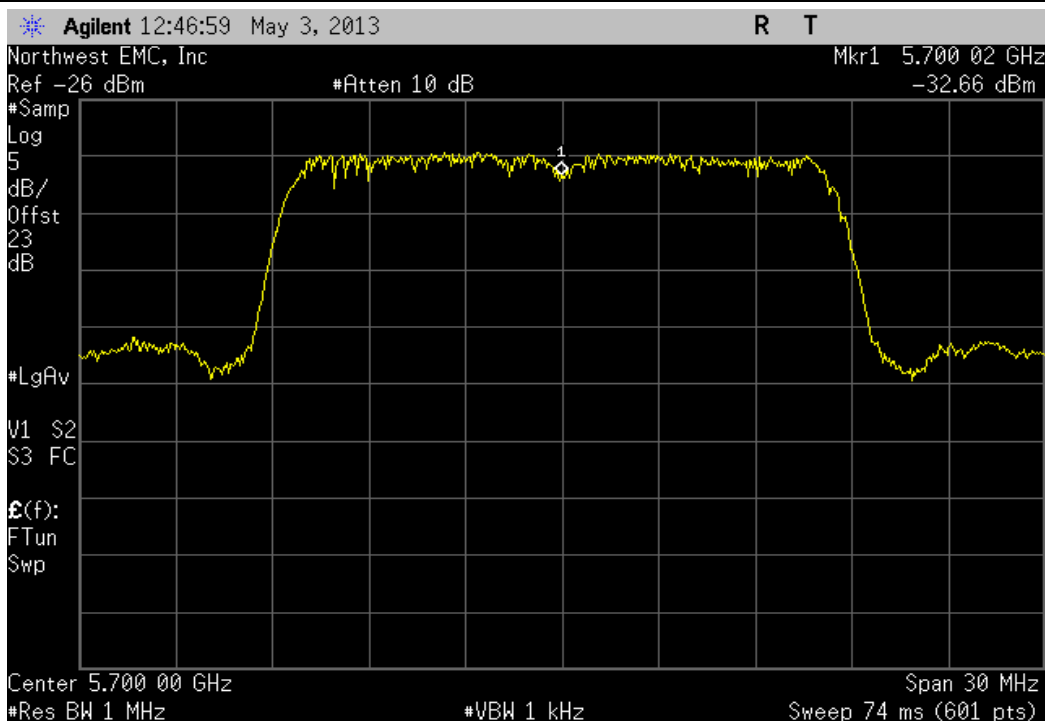
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +50°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



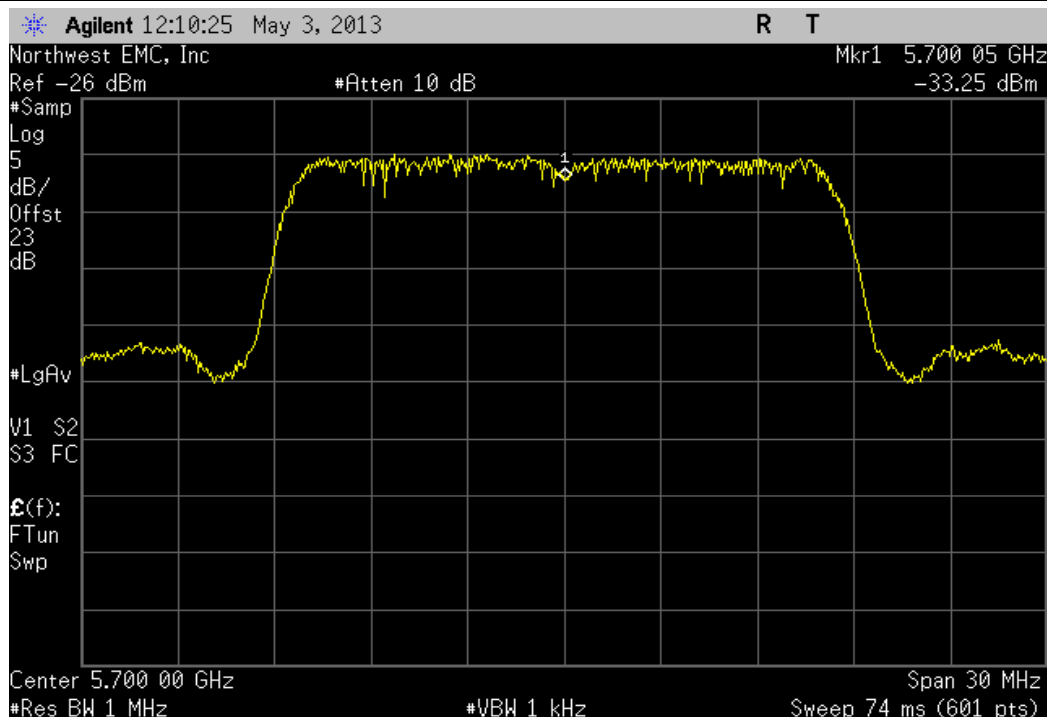
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +40°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



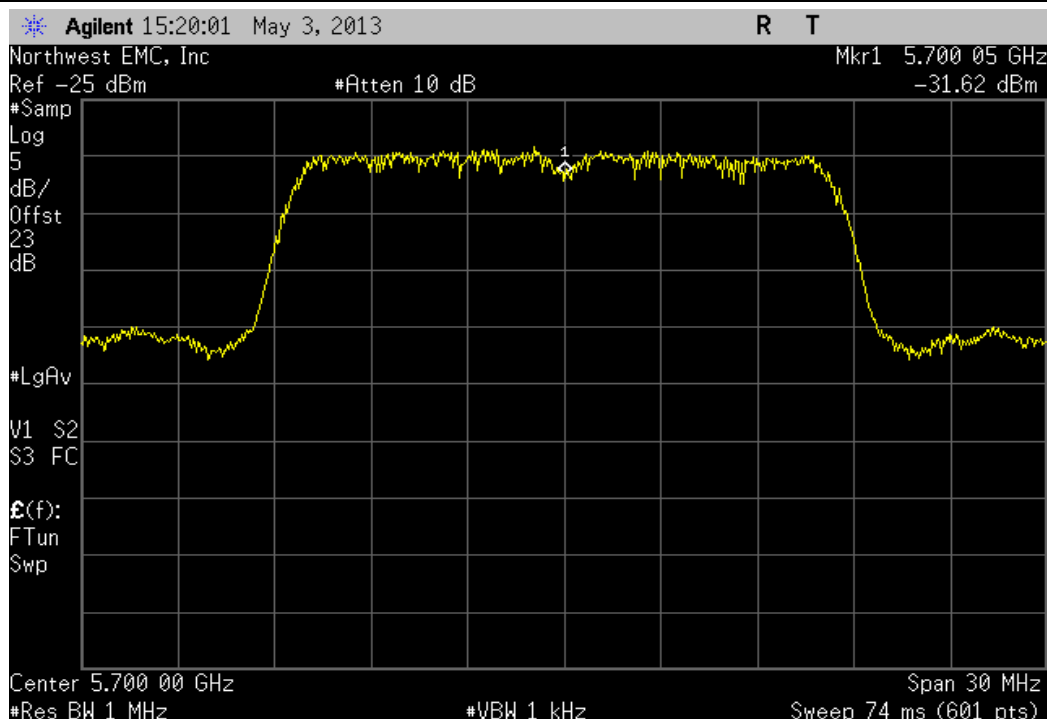
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



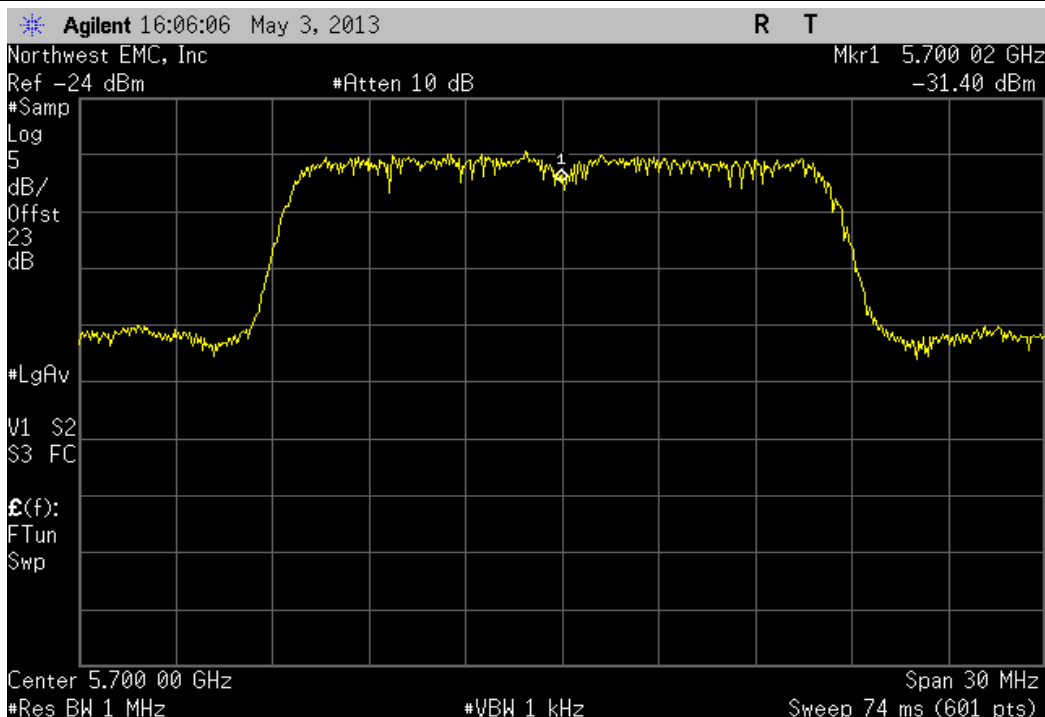
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.05	5700	8.8	100	Pass



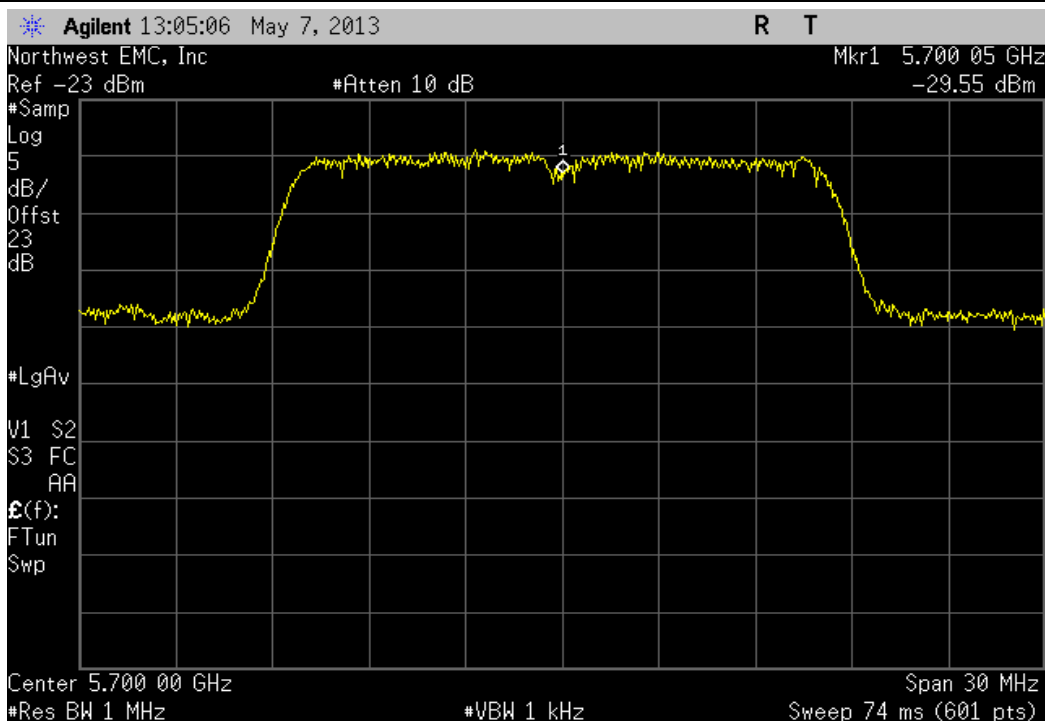
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: +10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.05	5700	8.8	100	Pass



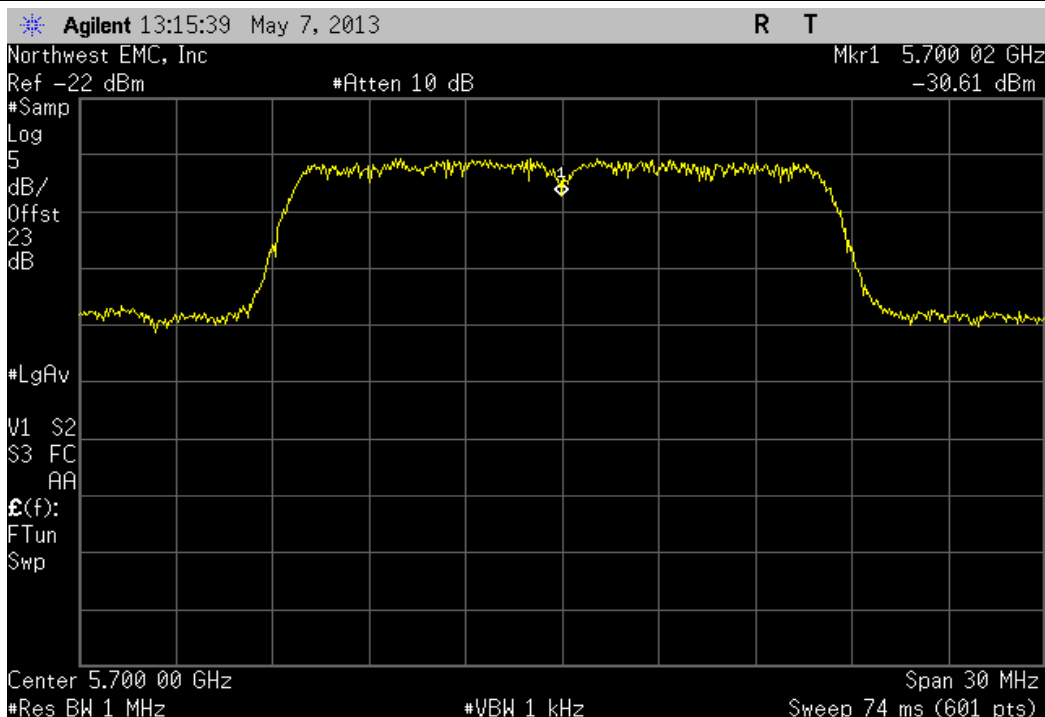
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: 0°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



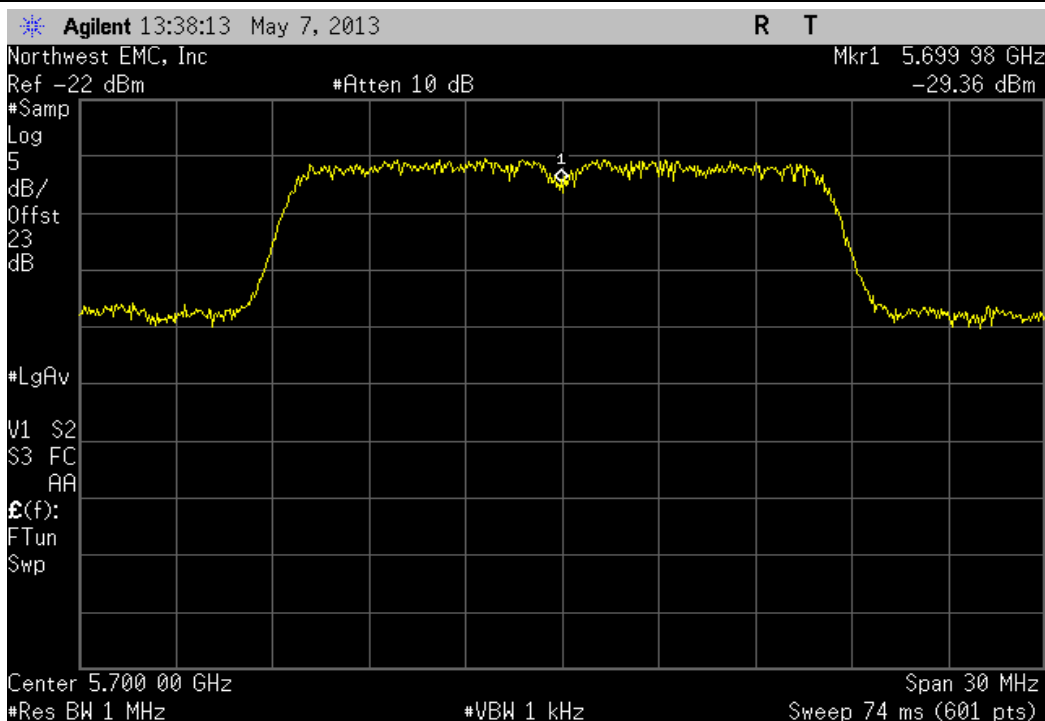
18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: -10°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.05	5700	8.8	100	Pass



18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: -20°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5700.02	5700	3.5	100	Pass



18 Mbps, 5470 MHz - 5725 MHz - High Channel, 5700 MHz, Temperature: -30°					
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Result
	5699.98	5700	3.5	100	Pass



Spurious Radiated Emissions

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

MODES OF OPERATION

Transmitting 802.11a, 50% Duty Cycle

POWER SETTINGS INVESTIGATED

3.3V DC

CONFIGURATIONS INVESTIGATED

FOCU0140 - 2

FOCU0140 - 7

FREQUENCY RANGE INVESTIGATED

Start Frequency 30 MHz Stop Frequency 40000 MHz

SAMPLE CALCULATIONS

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
High Pass Filter	Micro-Tronics	HPM50112	HGA	10/4/2012	24 mo
5.725-5.875 Notch Filter	Micro-Tronics	BRC50705	HGJ	3/21/2012	24 mo
5.47-5.725 Notch Filter	Micro-Tronics	BRC50704	HGI	10/4/2012	24 mo
5.25 GHz Notch Filter	K&L Microwave	8N50-5250/X200-0/0	HFK	3/21/2012	24 mo
EV01 Cable	ESM Cable Corp.	TTBJ-141 KMKM-72	ECC	8/27/2012	12 mo
Antenna, Horn	EMCO	3115	AHC	6/20/2012	24 mo
Spectrum Analyzer	Agilent	E4440A	AFD	7/5/2012	24 mo
OC Cable	ESM Cable Corp.	KMKM-72	OCV	6/28/2012	12 mo
Pre-Amplifier	Miteq	JSW45-26004000-40-5P	AVR	6/28/2012	12 mo
Antenna, Horn	ETS Lindgren	3160-10	AIW	NCR	0 mo
Cable	ESM Cable Corp.	KMKM-72	EVY	9/11/2012	12 mo
Pre-Amplifier	Miteq	AMF-6F-18002650-25-10P	AVU	9/11/2012	12 mo
Antenna, Horn	ETS Lindgren	3160-09	AIV	NCR	0 mo
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVD	2/27/2013	12 mo
Antenna, Horn	ETS	3160-08	AHV	NCR	0 mo
EV01 Cables	N/A	Standard Gain Horns Cables	EVF	2/27/2013	12 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVC	2/27/2013	12 mo
Antenna, Horn	ETS	3160-07	AHU	NCR	0 mo
EV01 Cables	N/A	Double Ridge Horn Cables	EVB	6/27/2012	12 mo
Pre-Amplifier	Miteq	AMF-4D-010100-24-10P	APW	6/27/2012	12 mo
Antenna, Horn	ETS	3115	AIZ	1/24/2011	36 mo
EV01 Cables	N/A	Bilog Cables	EVA	6/26/2012	12 mo
Pre-Amplifier	Miteq	AM-1616-1000	AOL	6/26/2012	12 mo
Antenna, Biconilog	EMCO	3141	AXG	4/10/2012	36 mo
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	3/25/2013	12 mo
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0 mo
Power Meter	Gigatronics	8651A	SPM	1/9/2012	24 mo
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36 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

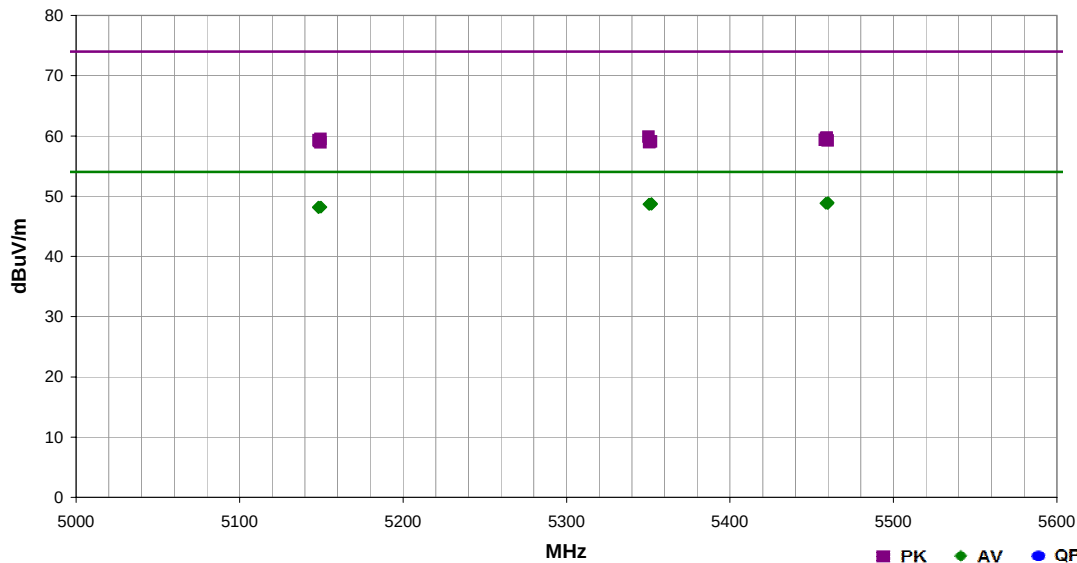
The highest gain antenna of each type to be used with the EUT were tested. The EUT was configured for the lowest, a middle, and the highest transmit frequency in each operational band. For each configuration, the spectrum was scanned throughout the specified range. Measurements were made to satisfy the three requirements of 47 CFR 15.407: Field strength under 1GHz, Restricted Bands of 47 CFR 15.205, and EIRP of 47 CFR 15.407.

While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.10:2009). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

Work Order:	FOCU0140	Date:	05/09/13	<i>Rocky Le Pelouin</i>
Project:	None	Temperature:	23.2 °C	
Job Site:	EV01	Humidity:	46% RH	
Serial Number:	02EA4D000027	Barometric Pres.:	1020 mbar	
EUT:	Model 444-2225 (Athena UFL)			Tested by: Carl Engholm, Rod Peloquin
Configuration:	2			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3V DC			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle			
Deviations:	None			
Comments:	See comments below for channel, frequency, data rate and EUT orientation.			

Test Specifications	Test Method
FCC 15.209:2013	ANSI C63.10:2009

Run #	50	Test Distance (m)	1	Antenna Height(s)	1-4m	Results	Pass
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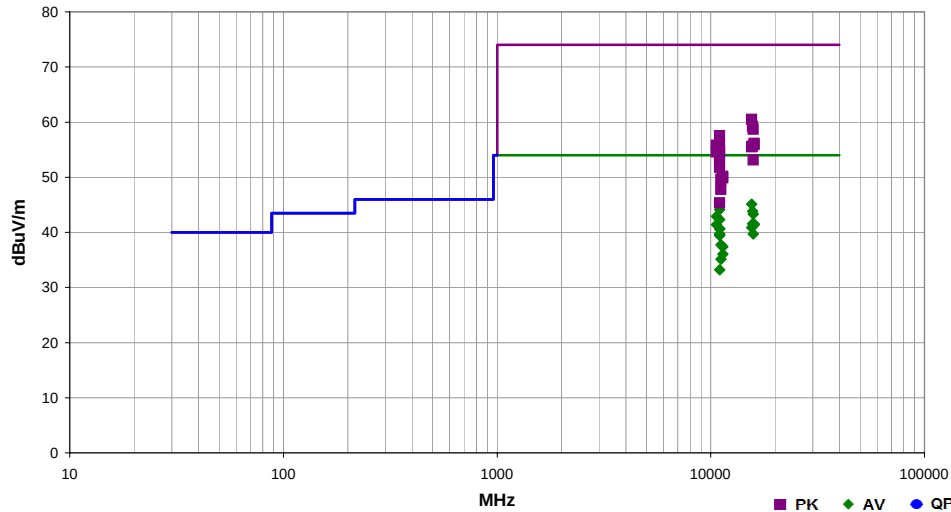


Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
5459.973	20.9	37.6	1.0	263.0	1.0	0.0	Horz	AV	-9.5	48.9	54.0	-5.1	Ch.19 (5500 MHz), 6 Mbps, EUT on Side
5459.930	20.8	37.6	1.0	210.0	1.0	0.0	Horz	AV	-9.5	48.8	54.0	-5.2	Ch.19 (5500 MHz), 18 Mbps, EUT on Side
5459.900	20.8	37.6	1.0	302.0	1.0	0.0	Vert	AV	-9.5	48.8	54.0	-5.2	Ch.19 (5500 MHz), 18 Mbps, EUT on Side
5458.640	20.8	37.6	1.0	286.0	1.0	0.0	Vert	AV	-9.5	48.8	54.0	-5.2	Ch.19 (5500 MHz), 6 Mbps, EUT on Side
5351.983	20.9	37.4	1.0	169.0	1.0	0.0	Horz	AV	-9.5	48.8	54.0	-5.2	Ch.18 (5320 MHz), 18 Mbps, EUT on Side
5350.380	20.8	37.4	1.0	305.0	1.0	0.0	Vert	AV	-9.5	48.7	54.0	-5.3	Ch.18 (5320 MHz), 6 Mbps, EUT on Side
5350.767	20.8	37.4	1.0	307.0	1.0	0.0	Vert	AV	-9.5	48.7	54.0	-5.3	Ch.18 (5320 MHz), 18 Mbps, EUT on Side
5352.000	20.8	37.4	1.0	283.0	1.0	0.0	Horz	AV	-9.5	48.7	54.0	-5.3	Ch.18 (5320 MHz), 6 Mbps, EUT on Side
5148.467	20.9	36.8	1.0	157.0	1.0	0.0	Vert	AV	-9.5	48.2	54.0	-5.8	Ch.8 (5180 MHz), 6 Mbps, EUT on Side
5149.740	20.9	36.8	1.0	83.0	1.0	0.0	Vert	AV	-9.5	48.2	54.0	-5.8	Ch.8 (5180 MHz), 18 Mbps, EUT on Side
5148.180	20.8	36.8	1.0	59.0	1.0	0.0	Horz	AV	-9.5	48.1	54.0	-5.9	Ch.8 (5180 MHz), 18 Mbps, EUT on Side
5148.403	20.8	36.8	1.0	201.0	1.0	0.0	Horz	AV	-9.5	48.1	54.0	-5.9	Ch.8 (5180 MHz), 6 Mbps, EUT on Side
5350.197	32.0	37.4	1.0	169.0	1.0	0.0	Horz	PK	-9.5	59.9	74.0	-14.1	Ch.18 (5320 MHz), 18 Mbps, EUT on Side
5459.230	31.7	37.6	1.0	210.0	1.0	0.0	Horz	PK	-9.5	59.7	74.0	-14.3	Ch.19 (5500 MHz), 18 Mbps, EUT on Side
5458.910	31.6	37.6	1.0	286.0	1.0	0.0	Vert	PK	-9.5	59.6	74.0	-14.4	Ch.19 (5500 MHz), 6 Mbps, EUT on Side
5149.630	32.2	36.8	1.0	83.0	1.0	0.0	Vert	PK	-9.5	59.5	74.0	-14.5	Ch.8 (5180 MHz), 18 Mbps, EUT on Side
5458.127	31.3	37.6	1.0	263.0	1.0	0.0	Horz	PK	-9.5	59.3	74.0	-14.7	Ch.19 (5500 MHz), 6 Mbps, EUT on Side
5148.297	32.0	36.8	1.0	59.0	1.0	0.0	Horz	PK	-9.5	59.3	74.0	-14.7	Ch.8 (5180 MHz), 18 Mbps, EUT on Side
5459.773	31.2	37.6	1.0	302.0	1.0	0.0	Vert	PK	-9.5	59.2	74.0	-14.8	Ch.19 (5500 MHz), 18 Mbps, EUT on Side
5148.690	31.8	36.8	1.0	201.0	1.0	0.0	Horz	PK	-9.5	59.1	74.0	-14.9	Ch.8 (5180 MHz), 6 Mbps, EUT on Side
5351.780	31.2	37.4	1.0	305.0	1.0	0.0	Vert	PK	-9.5	59.1	74.0	-14.9	Ch.18 (5320 MHz), 6 Mbps, EUT on Side
5350.527	31.1	37.4	1.0	283.0	1.0	0.0	Horz	PK	-9.5	59.0	74.0	-15.0	Ch.18 (5320 MHz), 6 Mbps, EUT on Side
5350.750	31.1	37.4	1.0	307.0	1.0	0.0	Vert	PK	-9.5	59.0	74.0	-15.0	Ch.18 (5320 MHz), 18 Mbps, EUT on Side
5149.583	31.6	36.8	1.0	157.0	1.0	0.0	Vert	PK	-9.5	58.9	74.0	-15.1	Ch.8 (5180 MHz), 6 Mbps, EUT on Side

Work Order:	FOCU0140	Date:	05/09/13	
Project:	None	Temperature:	24 °C	
Job Site:	EV01	Humidity:	39% RH	
Serial Number:	02EA4D000027	Barometric Pres.:	1022 mbar	
EUT:	Model 444-2225 (Athena UFL)			
Configuration:	2			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3V DC			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle			
Deviations:	None			
Comments:	Please reference the data comments for EUT frequency, orientation and channel			

Test Specifications	Test Method
FCC 15.209:2013	ANSI C63.10:2009

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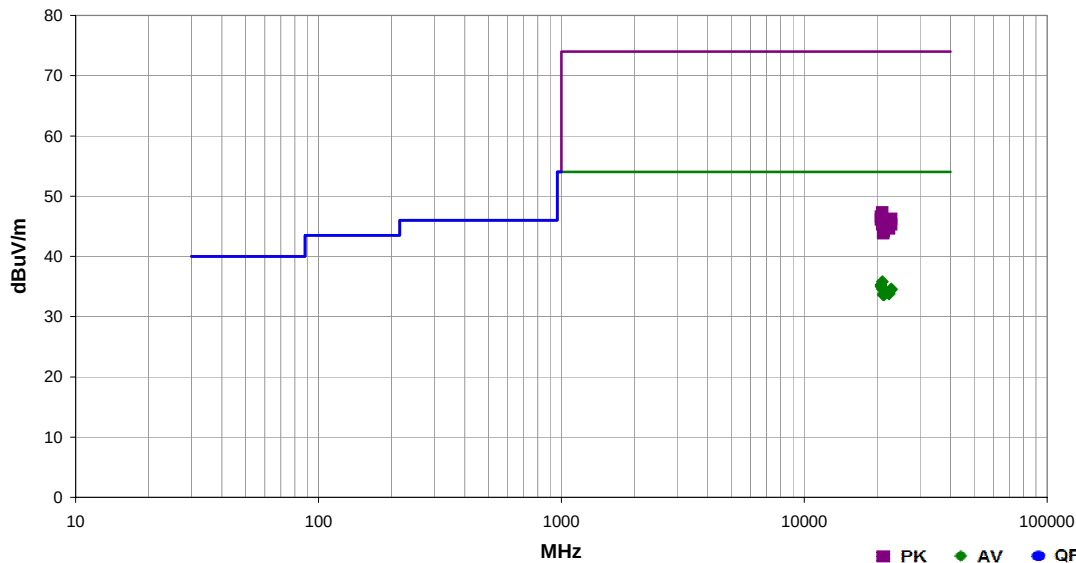


Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
15540.210	35.0	10.1	1.0	81.0	3.0	0.0	Vert	AV	0.0	45.1	54.0	-8.9	Ch.8 (5180 MHz) 6Mbps, EUT Vert
10998.650	53.5	-9.4	1.3	70.0	3.0	0.0	Horz	AV	0.0	44.1	54.0	-9.9	Ch.19 (5500 MHz) 6Mbps, EUT Vert
15718.630	33.6	10.2	1.0	83.0	3.0	0.0	Vert	AV	0.0	43.8	54.0	-10.2	Ch.14 (5240 MHz) 6Mbps, EUT Vert
15780.090	33.0	10.3	1.0	218.0	3.0	0.0	Vert	AV	0.0	43.3	54.0	-10.7	Ch.15 (5260 MHz) 6Mbps, EUT Vert
10638.720	54.1	-11.2	1.3	170.0	3.0	0.0	Vert	AV	0.0	42.9	54.0	-11.1	Ch.18 (5320 MHz) 6Mbps, EUT Vert
10998.900	51.7	-9.4	1.2	337.0	3.0	0.0	Horz	AV	0.0	42.3	54.0	-11.7	Ch.19 (5500 MHz) 6Mbps, EUT On Side
15720.400	31.3	10.2	1.0	87.0	3.0	0.0	Horz	AV	0.0	41.5	54.0	-12.5	Ch.14 (5240 MHz) 6Mbps, EUT Vert
15960.750	30.9	10.6	1.0	86.0	3.0	0.0	Vert	AV	0.0	41.5	54.0	-12.5	Ch.18 (5320 MHz) 6Mbps, EUT Vert
15959.570	30.8	10.6	1.1	88.0	3.0	0.0	Horz	AV	0.0	41.4	54.0	-12.6	Ch.18 (5320 MHz) 6Mbps, EUT Vert
10638.660	52.6	-11.2	1.0	185.0	3.0	0.0	Horz	AV	0.0	41.4	54.0	-12.6	Ch.18 (5320 MHz) 6Mbps, EUT Vert
15540.060	30.8	10.1	1.0	85.0	3.0	0.0	Horz	AV	0.0	40.9	54.0	-13.1	Ch.8 (5180 MHz) 6Mbps, EUT Vert
10998.910	50.0	-9.4	1.2	237.0	3.0	0.0	Horz	AV	0.0	40.6	54.0	-13.4	Ch.19 (5500 MHz) 18Mbps, EUT Vert
10998.550	50.0	-9.4	1.4	351.0	3.0	0.0	Vert	AV	0.0	40.6	54.0	-13.4	Ch.19 (5500 MHz) 6Mbps, EUT Vert
15540.160	50.4	10.1	1.0	81.0	3.0	0.0	Vert	PK	0.0	60.5	74.0	-13.5	Ch.8 (5180 MHz) 6Mbps, EUT Vert
15780.410	29.4	10.3	1.0	223.0	3.0	0.0	Horz	AV	0.0	39.7	54.0	-14.3	Ch.15 (5260 MHz) 6Mbps, EUT Vert
10998.650	49.1	-9.4	1.2	42.0	3.0	0.0	Vert	AV	0.0	39.7	54.0	-14.3	Ch.19 (5500 MHz) 6Mbps, EUT On Side
10998.870	49.0	-9.4	1.4	66.0	3.0	0.0	Vert	AV	0.0	39.6	54.0	-14.4	Ch.19 (5500 MHz) 6Mbps, EUT Horiz
10998.810	48.8	-9.4	1.4	166.0	3.0	0.0	Vert	AV	0.0	39.4	54.0	-14.6	Ch.19 (5500 MHz) 18Mbps, EUT Vert
15720.220	49.0	10.2	1.0	83.0	3.0	0.0	Vert	PK	0.0	59.2	74.0	-14.8	Ch.14 (5240 MHz) 6Mbps, EUT Vert
15779.160	48.4	10.3	1.0	218.0	3.0	0.0	Vert	PK	0.0	58.7	74.0	-15.3	Ch.15 (5260 MHz) 6Mbps, EUT Vert
11161.190	46.5	-8.8	1.0	36.0	3.0	0.0	Vert	AV	0.0	37.7	54.0	-16.3	Ch.23 (5580 MHz) 6Mbps, EUT Vert
10998.110	66.9	-9.4	1.3	70.0	3.0	0.0	Horz	PK	0.0	57.5	74.0	-16.5	Ch.19 (5500 MHz) 6Mbps, EUT On Side
11398.590	45.3	-7.9	1.3	197.0	3.0	0.0	Vert	AV	0.0	37.4	54.0	-16.6	Ch.29 (5700 MHz) 6Mbps, EUT Vert
15958.400	45.5	10.6	1.1	88.0	3.0	0.0	Horz	PK	0.0	56.1	74.0	-17.9	Ch.18 (5320 MHz) 6Mbps, EUT Vert
11398.650	44.0	-7.9	1.1	235.0	3.0	0.0	Horz	AV	0.0	36.1	54.0	-17.9	Ch.29 (5700 MHz) 6Mbps, EUT Vert
10998.150	65.4	-9.4	1.2	337.0	3.0	0.0	Horz	PK	0.0	56.0	74.0	-18.0	Ch.19 (5500 MHz) 6Mbps, EUT On Side
15961.430	45.3	10.6	1.0	86.0	3.0	0.0	Vert	PK	0.0	55.9	74.0	-18.1	Ch.18 (5320 MHz) 6Mbps, EUT Vert
10638.040	67.0	-11.2	1.3	170.0	3.0	0.0	Vert	PK	0.0	55.8	74.0	-18.2	Ch.18 (5320 MHz) 6Mbps, EUT Vert
15721.810	45.4	10.2	1.0	87.0	3.0	0.0	Horz	PK	0.0	55.6	74.0	-18.4	Ch.14 (5240 MHz) 6Mbps, EUT Vert
15541.850	45.4	10.1	1.0	85.0	3.0	0.0	Horz	PK	0.0	55.5	74.0	-18.5	Ch.8 (5180 MHz) 6Mbps, EUT Vert
11158.590	43.9	-8.8	1.2	166.0	3.0	0.0	Horz	AV	0.0	35.1	54.0	-18.9	Ch.23 (5580 MHz) 6Mbps, EUT Vert
10998.990	64.2	-9.4	1.2	237.0	3.0	0.0	Horz	PK	0.0	54.8	74.0	-19.2	Ch.19 (5500 MHz) 18Mbps, EUT Vert
11001.770	64.1	-9.4	1.4	166.0	3.0	0.0	Vert	PK	0.0	54.7	74.0	-19.3	Ch.19 (5500 MHz) 18Mbps, EUT Vert
10638.090	65.8	-11.2	1.0	185.0	3.0	0.0	Horz	PK	0.0	54.6	74.0	-19.4	Ch.18 (5320 MHz) 6Mbps, EUT Vert
10998.030	63.4	-9.4	1.4	351.0	3.0	0.0	Vert	PK	0.0	54.0	74.0	-20.0	Ch.19 (5500 MHz) 6Mbps, EUT On Side
10998.840	42.6	-9.4	1.0	100.0	3.0	0.0	Horz	AV	0.0	33.2	54.0	-20.8	Ch.19 (5500 MHz) 6Mbps, EUT Horiz
10998.070	62.6	-9.4	1.2	42.0	3.0	0.0	Vert	PK	0.0	53.2	74.0	-20.8	Ch.19 (5500 MHz) 6Mbps, EUT On Side
15781.670	42.8	10.3	1.0	223.0	3.0	0.0	Horz	PK	0.0	53.1	74.0	-20.9	Ch.15 (5260 MHz) 6Mbps, EUT Vert
10998.120	61.2	-9.4	1.4	66.0	3.0	0.0	Vert	PK	0.0	51.8	74.0	-22.2	Ch.19 (5500 MHz) 6Mbps, EUT Horiz
11398.040	58.1	-7.9	1.3	197.0	3.0	0.0	Vert	PK	0.0	50.2	74.0	-23.8	Ch.29 (5700 MHz) 6Mbps, EUT Vert
11398.210	57.8	-7.9	1.1	235.0	3.0	0.0	Horz	PK	0.0	49.9	74.0	-24.1	Ch.29 (5700 MHz) 6Mbps, EUT Vert
11160.910	58.4	-8.8	1.0	36.0	3.0	0.0	Vert	PK	0.0	49.6	74.0	-24.4	Ch.23 (5580 MHz) 6Mbps, EUT Vert
11158.060	56.6	-8.8	1.2	166.0	3.0	0.0	Horz	PK	0.0	47.8	74.0	-26.2	Ch.23 (5580 MHz) 6Mbps, EUT Vert
10999.710	54.7	-9.4	1.0	100.0	3.0	0.0	Horz	PK	0.0	45.3	74.0	-28.7	Ch.19 (5500 MHz) 6Mbps, EUT Horiz

Work Order:	FOCU0140	Date:	05/09/13		
Project:	None	Temperature:	22.3 °C		
Job Site:	EV01	Humidity:	40.8% RH		
Serial Number:	02EA4D000003	Barometric Pres.:	1018 mbar		
EUT:	Model 444-2225 (Athena UFL)			Tested by:	Carl Engholm, Rod Peloquin
Configuration:	7				
Customer:	Summit Semiconductor				
Attendees:	None				
EUT Power:	3.3 VDC Nominal				
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle				
Deviations:	None				
Comments:	See comments below for channel, frequency, data rate and EUT orientation.				

Test Specifications	Test Method
FCC 15.209:2013	ANSI C63.10:2009

Run #	81	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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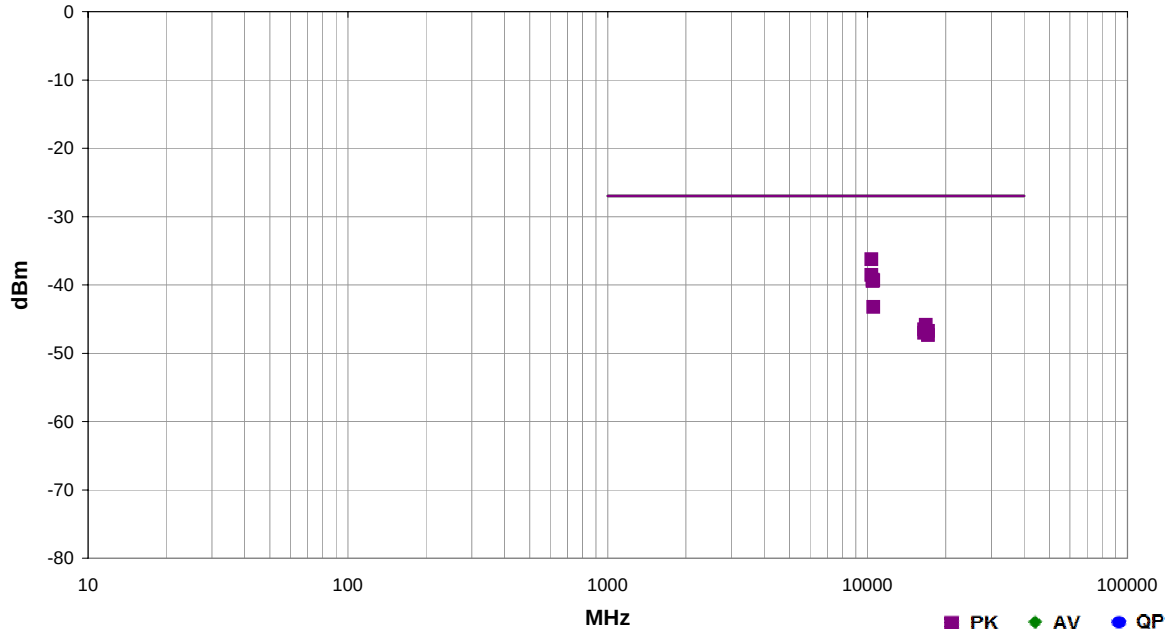


Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
20958.530	39.8	-4.0	1.0	313.0	3.0	0.0	Horz	AV	0.0	35.8	54.0	-18.2	Ch.14 (5240 MHz), 6 Mbps, EUT Vertical
20719.270	39.3	-4.0	1.0	111.0	3.0	0.0	Vert	AV	0.0	35.3	54.0	-18.7	Ch.8 (5180 MHz), 6 Mbps, EUT Vertical
20718.010	39.0	-4.0	1.0	181.0	3.0	0.0	Horz	AV	0.0	35.0	54.0	-19.0	Ch.8 (5180 MHz), 6 Mbps, EUT Vertical
22801.680	37.6	-3.0	1.0	69.0	3.0	0.0	Vert	AV	0.0	34.6	54.0	-19.4	Ch.29 (5700 MHz), 6 Mbps, EUT Vertical
20959.690	38.6	-4.0	1.0	261.0	3.0	0.0	Vert	AV	0.0	34.6	54.0	-19.4	Ch.14 (5240 MHz), 6 Mbps, EUT Vertical
22800.450	37.5	-3.0	1.0	250.0	3.0	0.0	Horz	AV	0.0	34.5	54.0	-19.5	Ch.29 (5700 MHz), 6 Mbps, EUT Vertical
22318.070	37.5	-3.6	1.0	14.0	3.0	0.0	Horz	AV	0.0	33.9	54.0	-20.1	Ch.23 (5580 MHz), 6 Mbps, EUT Vertical
22319.150	37.4	-3.6	1.0	190.0	3.0	0.0	Vert	AV	0.0	33.8	54.0	-20.2	Ch.23 (5580 MHz), 6 Mbps, EUT Vertical
21139.450	37.8	-4.1	1.0	296.0	3.0	0.0	Horz	AV	0.0	33.7	54.0	-20.3	Ch.15 (5260 MHz), 6 Mbps, EUT Vertical
21278.470	37.8	-4.2	1.0	139.0	3.0	0.0	Horz	AV	0.0	33.6	54.0	-20.4	Ch.18 (5320 MHz), 6 Mbps, EUT Vertical
21279.190	37.8	-4.2	1.0	307.0	3.0	0.0	Vert	AV	0.0	33.6	54.0	-20.4	Ch.18 (5320 MHz), 6 Mbps, EUT Vertical
21138.100	37.7	-4.1	1.0	194.0	3.0	0.0	Vert	AV	0.0	33.6	54.0	-20.4	Ch.15 (5260 MHz), 6 Mbps, EUT Vertical
20959.520	51.3	-4.0	1.0	313.0	3.0	0.0	Horz	PK	0.0	47.3	74.0	-26.7	Ch.14 (5240 MHz), 6 Mbps, EUT Vertical
20718.870	50.6	-4.0	1.0	111.0	3.0	0.0	Vert	PK	0.0	46.6	74.0	-27.4	Ch.8 (5180 MHz), 6 Mbps, EUT Vertical
22798.410	49.2	-3.0	1.0	250.0	3.0	0.0	Horz	PK	0.0	46.2	74.0	-27.8	Ch.29 (5700 MHz), 6 Mbps, EUT Vertical
20718.110	50.1	-4.0	1.0	181.0	3.0	0.0	Horz	PK	0.0	46.1	74.0	-27.9	Ch.8 (5180 MHz), 6 Mbps, EUT Vertical
21280.160	49.7	-4.2	1.0	307.0	3.0	0.0	Vert	PK	0.0	45.5	74.0	-28.5	Ch.18 (5320 MHz), 6 Mbps, EUT Vertical
22801.700	48.3	-3.0	1.0	69.0	3.0	0.0	Vert	PK	0.0	45.3	74.0	-28.7	Ch.29 (5700 MHz), 6 Mbps, EUT Vertical
20959.030	49.3	-4.0	1.0	261.0	3.0	0.0	Vert	PK	0.0	45.3	74.0	-28.7	Ch.14 (5240 MHz), 6 Mbps, EUT Vertical
22318.180	48.3	-3.6	1.0	14.0	3.0	0.0	Horz	PK	0.0	44.7	74.0	-29.3	Ch.23 (5580 MHz), 6 Mbps, EUT Vertical
22321.940	48.2	-3.6	1.0	190.0	3.0	0.0	Vert	PK	0.0	44.6	74.0	-29.4	Ch.23 (5580 MHz), 6 Mbps, EUT Vertical
21278.970	48.4	-4.2	1.0	139.0	3.0	0.0	Horz	PK	0.0	44.2	74.0	-29.8	Ch.18 (5320 MHz), 6 Mbps, EUT Vertical
21138.690	48.1	-4.1	1.0	194.0	3.0	0.0	Vert	PK	0.0	44.0	74.0	-30.0	Ch.15 (5260 MHz), 6 Mbps, EUT Vertical
21138.420	47.9	-4.1	1.0	296.0	3.0	0.0	Horz	PK	0.0	43.8	74.0	-30.2	Ch.15 (5260 MHz), 6 Mbps, EUT Vertical

Work Order:	FOCU0140	Date:	05/09/13	
Project:	None	Temperature:	24 °C	
Job Site:	EV01	Humidity:	39% RH	
Serial Number:	02EA4D000027	Barometric Pres.:	1022 mbar	Tested by: Brandon Hobbs
EUT:	Model 444-2225 (Athena UFL)			
Configuration:	2			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3V DC			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle			
Deviations:	None			
Comments:	Please reference the data comments for EUT frequency, orientation and channel			

Test Specifications	Test Method
FCC 15.407:2013	ANSI C63.10:2009

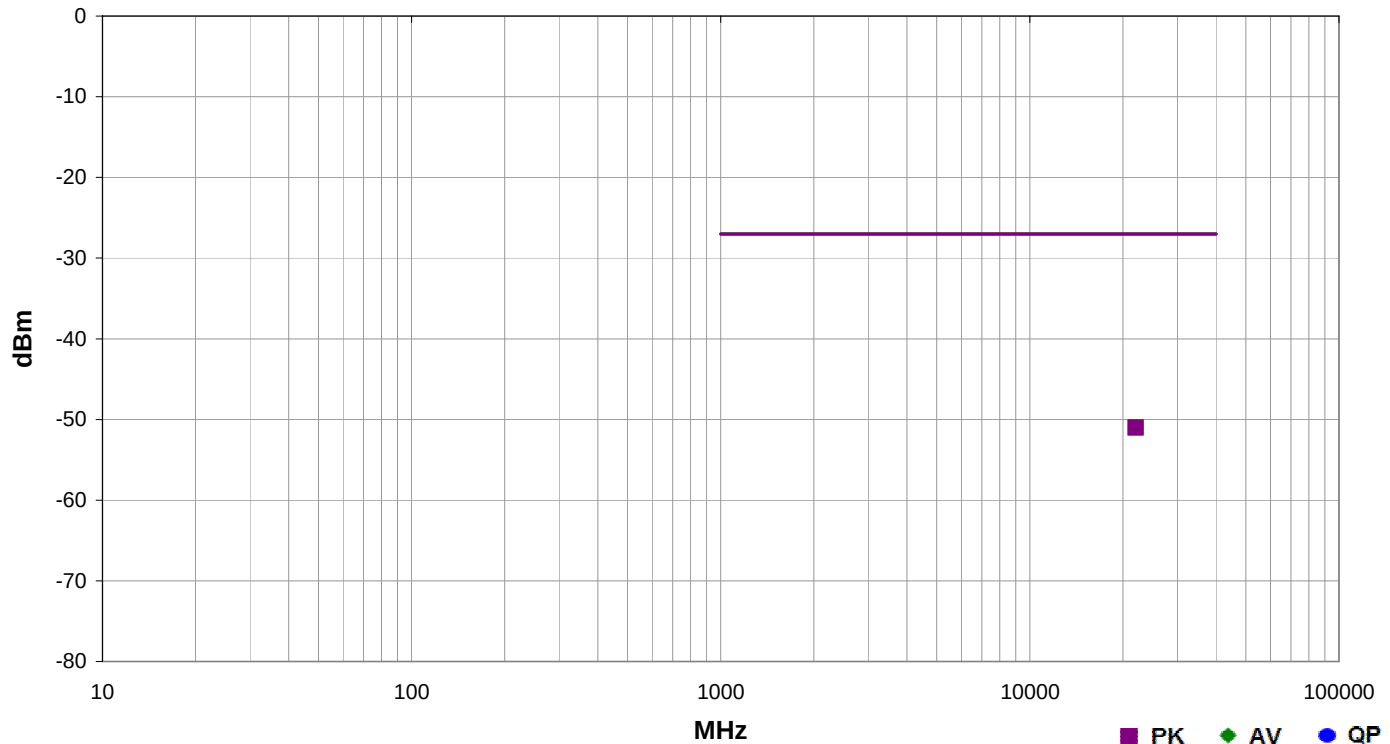
Run #	33	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
10358.000	1.4	208.0	Vert	PK	2.37E-07	-36.3	-27.0	-9.3	Ch.8 (5180 MHz) 6Mbps, EUT Vert
10358.100	1.2	179.0	Horz	PK	1.40E-07	-38.6	-27.0	-11.6	Ch.8 (5180 MHz) 6Mbps, EUT Vert
10478.030	1.1	182.0	Horz	PK	1.19E-07	-39.3	-27.0	-12.3	Ch.14 (5240 MHz) 6Mbps, EUT Vert
10518.130	1.1	180.0	Horz	PK	1.16E-07	-39.3	-27.0	-12.3	Ch.15 (5260 MHz) 6Mbps, EUT Vert
10478.140	1.2	176.0	Vert	PK	1.13E-07	-39.5	-27.0	-12.5	Ch.14 (5240 MHz) 6Mbps, EUT Vert
10518.800	1.0	197.0	Vert	PK	4.74E-08	-43.2	-27.0	-16.2	Ch.15 (5260 MHz) 6Mbps, EUT Vert
16739.400	3.1	286.0	Vert	PK	2.60E-08	-45.9	-27.0	-18.9	Ch.23 (5580 MHz) 6Mbps, EUT Vert
16498.010	1.7	71.0	Horz	PK	2.22E-08	-46.5	-27.0	-19.5	Ch.19 (5500 MHz) 6Mbps, EUT Vert
17098.110	1.0	357.0	Vert	PK	2.11E-08	-46.7	-27.0	-19.7	Ch.29 (5700 MHz) 6Mbps, EUT Vert
16738.310	3.1	199.0	Horz	PK	2.06E-08	-46.9	-27.0	-19.9	Ch.23 (5580 MHz) 6Mbps, EUT Vert
16499.420	1.0	53.0	Vert	PK	1.98E-08	-47.0	-27.0	-20.0	Ch.19 (5500 MHz) 6Mbps, EUT Vert
17102.000	3.7	225.0	Horz	PK	1.84E-08	-47.4	-27.0	-20.4	Ch.29 (5700 MHz) 6Mbps, EUT Vert

Work Order:	FOCU0140	Date:	05/09/13	<i>Rocky Le Pelouin</i>
Project:	None	Temperature:	22.3 °C	
Job Site:	EV01	Humidity:	40.8% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1018 mbar	
Tested by: Carl Engholm, Rod Peloquin				
EUT: Model 444-2225 (Athena UFL)				
Configuration: 7				
Customer: Summit Semiconductor				
Attendees: None				
EUT Power: 3.3 VDC Nominal				
Operating Mode: Transmitting 802.11a, 50% Duty Cycle				
Deviations: None				
Comments: See comments below for channel, frequency, data rate and EUT orientation.				

Test Specifications				Test Method	
FCC 15.407:2013				ANSI C63.10:2009	
Run #	81	Test Distance (m)	3	Antenna Height(s)	1-4m
				Results	Pass



Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
21998.860	1.0	54.0	Vert	PK	7.95E-09	-51.0	-27.0	-24.0	Ch.19 (5500 MHz), 6 Mbps, EUT Vertical
21998.290	1.0	238.0	Horz	PK	7.95E-09	-51.0	-27.0	-24.0	Ch.19 (5500 MHz), 6 Mbps, EUT Vertical

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.

MODES OF OPERATION

Transmitting 802.11a, 50% Duty Cycle, Ch. 29, 5700 MHz
 Transmitting 802.11a, 50% Duty Cycle, Ch. 23, 5580 MHz
 Transmitting 802.11a, 50% Duty Cycle, Ch. 19, 5500 MHz
 Transmitting 802.11a, 50% Duty Cycle, Ch. 18, 5320 MHz
 Transmitting 802.11a, 50% Duty Cycle, Ch. 15, 5260 MHz
 Transmitting 802.11a, 50% Duty Cycle, Ch. 14, 5240 MHz
 Transmitting 802.11a, 50% Duty Cycle, Ch. 8, 5180 MHz

POWER SETTINGS INVESTIGATED

3.3 VDC Nominal

CONFIGURATIONS INVESTIGATED

FOCU0140 - 7

SAMPLE CALCULATIONS

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
DC Power Supply	Topward	TPS-2000	TPD	NCR	0 mo
LISN	Solar	9252-50-R-24-BNC	LIN	3/11/2013	12 mo
Receiver	Rohde & Schwarz	ESCI	ARH	1/24/2013	12 mo
High Pass Filter	TTE	H97-100K-50-720B	HHD	2/1/2012	24 mo
Attenuator	Coaxicom	66702 2910-20	RBR	4/25/2013	12 mo
EV07 Cables	N/A	Conducted Cables	EVG	4/25/2013	12 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

Measurements were made using the bandwidths and detectors specified. No video filter was used.

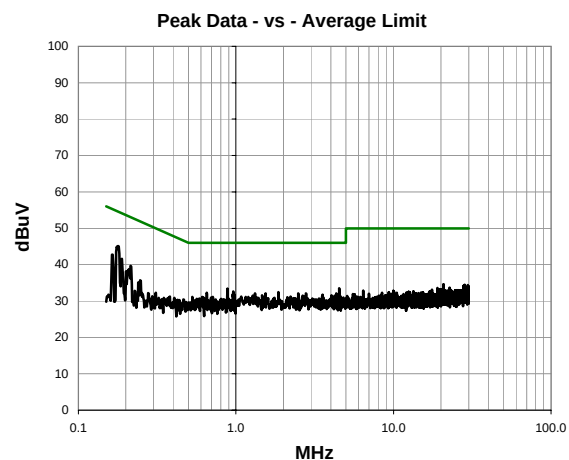
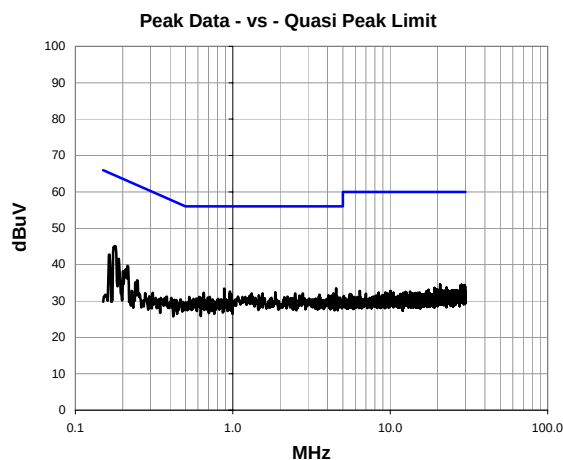
TEST DESCRIPTION

The EUT will be powered either directly or indirectly from the AC power line. Therefore, conducted emissions measurements were made on the AC input of the EUT, or on the AC input of the device used to power the EUT. The AC power line conducted emissions were measured with the EUT operating at the lowest, the highest, and a middle channel in the operational band. The EUT was transmitting at its maximum data rate. For each mode, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.10-2009.

Work Order:	FOCU0140	Date:	05/16/13		
Project:	None	Temperature:	23.7 °C		
Job Site:	EV07	Humidity:	40.3% RH		
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	Tested by:	Brandon Hobbs
EUT:	Model 444-2225 (Athena UFL)				
Configuration:	7				
Customer:	Summit Semiconductor				
Attendees:	None				
EUT Power:	3.3 VDC Nominal				
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 8, 5180 MHz				
Deviations:	None				
Comments:	Power Supply plugged into 110VAC/60Hz				

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	3	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.179	24.8	20.3	45.1	64.5	-19.4
0.189	21.3	20.3	41.6	64.1	-22.5
4.528	12.8	20.7	33.5	56.0	-22.5
0.164	22.4	20.3	42.7	65.3	-22.5
0.883	13.1	20.3	33.4	56.0	-22.6
0.961	12.3	20.3	32.6	56.0	-23.4
0.215	19.3	20.3	39.6	63.0	-23.4
1.864	12.0	20.4	32.4	56.0	-23.6
0.653	12.0	20.3	32.3	56.0	-23.7
1.544	11.7	20.4	32.1	56.0	-23.9
2.784	11.6	20.5	32.1	56.0	-23.9
1.320	11.7	20.4	32.1	56.0	-23.9
2.488	11.6	20.5	32.1	56.0	-23.9
4.344	11.4	20.7	32.1	56.0	-23.9
0.981	11.4	20.3	31.7	56.0	-24.3
3.552	11.1	20.6	31.7	56.0	-24.3
1.464	11.2	20.4	31.6	56.0	-24.4
4.048	10.9	20.6	31.5	56.0	-24.5
4.232	10.8	20.7	31.5	56.0	-24.5
3.528	10.7	20.6	31.3	56.0	-24.7

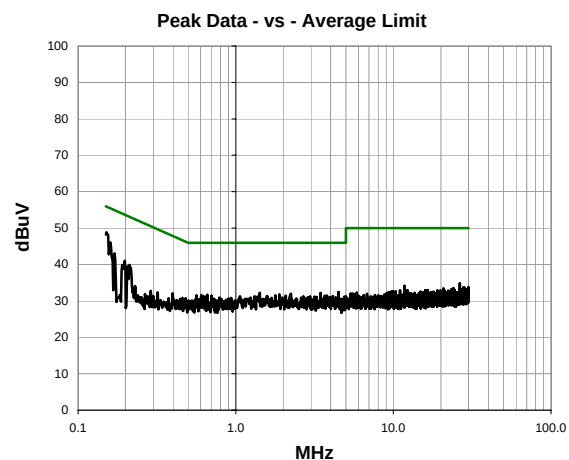
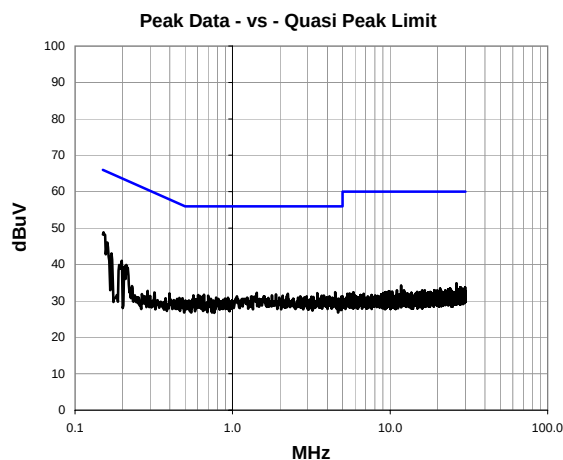
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.179	24.8	20.3	45.1	54.5	-9.4
0.189	21.3	20.3	41.6	54.1	-12.5
4.528	12.8	20.7	33.5	46.0	-12.5
0.164	22.4	20.3	42.7	55.3	-12.5
0.883	13.1	20.3	33.4	46.0	-12.6
0.961	12.3	20.3	32.6	46.0	-13.4
0.215	19.3	20.3	39.6	53.0	-13.4
1.864	12.0	20.4	32.4	46.0	-13.6
0.653	12.0	20.3	32.3	46.0	-13.7
1.544	11.7	20.4	32.1	46.0	-13.9
2.784	11.6	20.5	32.1	46.0	-13.9
1.320	11.7	20.4	32.1	46.0	-13.9
2.488	11.6	20.5	32.1	46.0	-13.9
4.344	11.4	20.7	32.1	46.0	-13.9
0.981	11.4	20.3	31.7	46.0	-14.3
3.552	11.1	20.6	31.7	46.0	-14.3
1.464	11.2	20.4	31.6	46.0	-14.4
4.048	10.9	20.6	31.5	46.0	-14.5
4.232	10.8	20.7	31.5	46.0	-14.5
3.528	10.7	20.6	31.3	46.0	-14.7

Work Order:	FOCU0140	Date:	05/16/13		
Project:	None	Temperature:	23.7 °C		
Job Site:	EV07	Humidity:	40.3% RH		
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	Tested by:	Brandon Hobbs
EUT:	Model 444-2225 (Athena UFL)				
Configuration:	7				
Customer:	Summit Semiconductor				
Attendees:	None				
EUT Power:	3.3 VDC Nominal				
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 8, 5180 MHz				
Deviations:	None				
Comments:	Power Supply plugged into 110VAC/60Hz				

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	4	Line:	High Line	Ext. Attenuation:	20	Results	Pass
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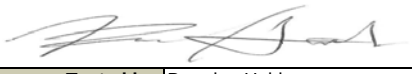


Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	28.4	20.4	48.8	65.9	-17.1
0.160	25.7	20.3	46.0	65.5	-19.4
0.170	22.7	20.3	43.0	64.9	-21.9
0.198	20.7	20.3	41.0	63.7	-22.7
0.211	19.6	20.3	39.9	63.2	-23.2
4.488	11.8	20.7	32.5	56.0	-23.5
1.424	11.9	20.4	32.3	56.0	-23.7
0.208	19.2	20.3	39.5	63.3	-23.8
3.456	11.6	20.6	32.2	56.0	-23.8
2.240	11.5	20.5	32.0	56.0	-24.0
1.888	11.4	20.4	31.8	56.0	-24.2
0.660	11.4	20.3	31.7	56.0	-24.3
0.606	11.4	20.3	31.7	56.0	-24.3
0.563	11.3	20.3	31.6	56.0	-24.4
0.701	11.2	20.3	31.5	56.0	-24.5
2.080	11.0	20.4	31.4	56.0	-24.6
3.800	10.8	20.6	31.4	56.0	-24.6
3.680	10.8	20.6	31.4	56.0	-24.6
0.621	11.1	20.3	31.4	56.0	-24.6
2.960	10.8	20.5	31.3	56.0	-24.7

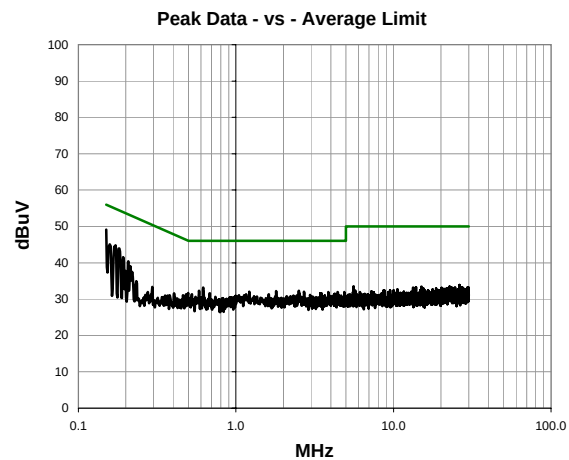
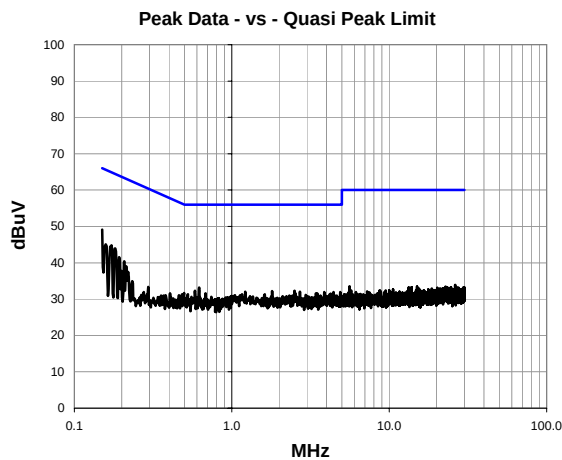
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	28.4	20.4	48.8	55.9	-7.1
0.160	25.7	20.3	46.0	55.5	-9.4
0.170	22.7	20.3	43.0	54.9	-11.9
0.198	20.7	20.3	41.0	53.7	-12.7
0.211	19.6	20.3	39.9	53.2	-13.2
4.488	11.8	20.7	32.5	46.0	-13.5
1.424	11.9	20.4	32.3	46.0	-13.7
0.208	19.2	20.3	39.5	53.3	-13.8
3.456	11.6	20.6	32.2	46.0	-13.8
2.240	11.5	20.5	32.0	46.0	-14.0
1.888	11.4	20.4	31.8	46.0	-14.2
0.660	11.4	20.3	31.7	46.0	-14.3
0.606	11.4	20.3	31.7	46.0	-14.3
0.563	11.3	20.3	31.6	46.0	-14.4
0.701	11.2	20.3	31.5	46.0	-14.5
2.080	11.0	20.4	31.4	46.0	-14.6
3.800	10.8	20.6	31.4	46.0	-14.6
3.680	10.8	20.6	31.4	46.0	-14.6
0.621	11.1	20.3	31.4	46.0	-14.6
2.960	10.8	20.5	31.3	46.0	-14.7

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:	Model 444-2225 (Athena UFL)			Tested by: Brandon Hobbs
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 14, 5240 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	5	Line:	High Line	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.7	20.4	49.1	66.0	-16.9
0.172	24.5	20.3	44.8	64.9	-20.0
0.182	23.6	20.3	43.9	64.4	-20.5
0.159	24.7	20.4	45.1	65.5	-20.5
0.193	21.2	20.3	41.5	63.9	-22.4
0.619	12.9	20.3	33.2	56.0	-22.8
0.208	20.1	20.3	40.4	63.3	-22.9
0.584	12.0	20.3	32.3	56.0	-23.7
2.504	11.8	20.5	32.3	56.0	-23.7
1.800	11.8	20.4	32.2	56.0	-23.8
2.704	11.6	20.5	32.1	56.0	-23.9
1.216	11.7	20.4	32.1	56.0	-23.9
0.213	18.8	20.3	39.1	63.1	-24.0
4.880	11.3	20.7	32.0	56.0	-24.0
4.424	11.3	20.7	32.0	56.0	-24.0
3.864	11.3	20.6	31.9	56.0	-24.1
0.497	11.4	20.3	31.7	56.1	-24.4
3.496	11.0	20.6	31.6	56.0	-24.4
0.682	11.3	20.3	31.6	56.0	-24.4
3.432	11.0	20.6	31.6	56.0	-24.4

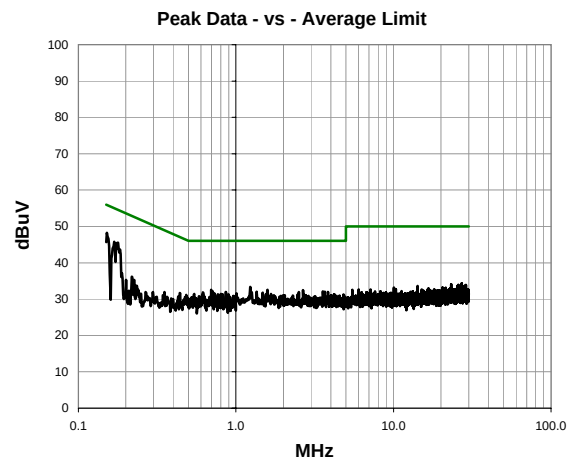
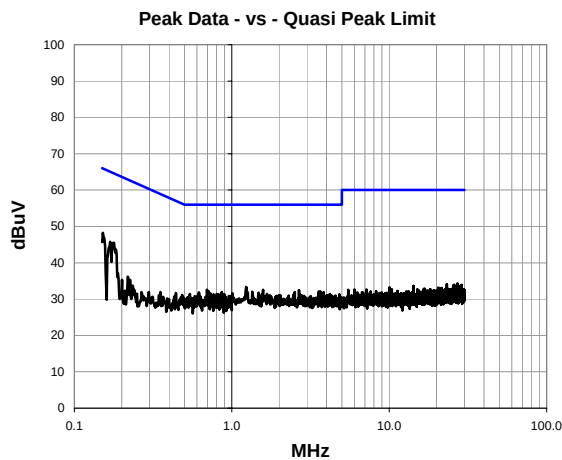
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.7	20.4	49.1	56.0	-6.9
0.172	24.5	20.3	44.8	54.9	-10.0
0.182	23.6	20.3	43.9	54.4	-10.5
0.159	24.7	20.4	45.1	55.5	-10.5
0.193	21.2	20.3	41.5	53.9	-12.4
0.619	12.9	20.3	33.2	46.0	-12.8
0.208	20.1	20.3	40.4	53.3	-12.9
0.584	12.0	20.3	32.3	46.0	-13.7
2.504	11.8	20.5	32.3	46.0	-13.7
1.800	11.8	20.4	32.2	46.0	-13.8
2.704	11.6	20.5	32.1	46.0	-13.9
1.216	11.7	20.4	32.1	46.0	-13.9
0.213	18.8	20.3	39.1	53.1	-14.0
4.880	11.3	20.7	32.0	46.0	-14.0
4.424	11.3	20.7	32.0	46.0	-14.0
3.864	11.3	20.6	31.9	46.0	-14.1
0.497	11.4	20.3	31.7	46.1	-14.4
3.496	11.0	20.6	31.6	46.0	-14.4
0.682	11.3	20.3	31.6	46.0	-14.4
3.432	11.0	20.6	31.6	46.0	-14.4

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:		Model 444-2225 (Athena UFL)		
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 14, 5240 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	6	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	27.8	20.4	48.2	65.9	-17.7
0.177	25.2	20.3	45.5	64.6	-19.1
0.169	25.4	20.3	45.7	65.0	-19.3
1.232	13.0	20.4	33.4	56.0	-22.6
1.584	12.2	20.4	32.6	56.0	-23.4
0.697	12.3	20.3	32.6	56.0	-23.4
2.672	12.0	20.5	32.5	56.0	-23.5
3.568	11.5	20.6	32.1	56.0	-23.9
0.713	11.8	20.3	32.1	56.0	-23.9
1.352	11.7	20.4	32.1	56.0	-23.9
2.512	11.5	20.5	32.0	56.0	-24.0
3.840	11.3	20.6	31.9	56.0	-24.1
0.864	11.6	20.3	31.9	56.0	-24.1
0.618	11.6	20.3	31.9	56.0	-24.1
1.480	11.4	20.4	31.8	56.0	-24.2
1.008	11.3	20.3	31.6	56.0	-24.4
0.730	11.3	20.3	31.6	56.0	-24.4
0.543	11.2	20.3	31.5	56.0	-24.5
0.804	11.1	20.3	31.4	56.0	-24.6
4.208	10.7	20.7	31.4	56.0	-24.6

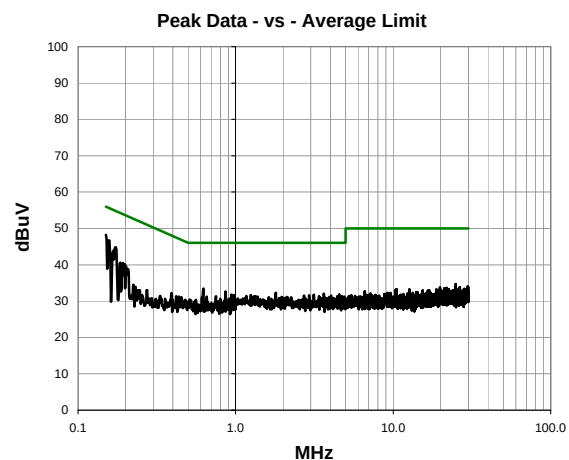
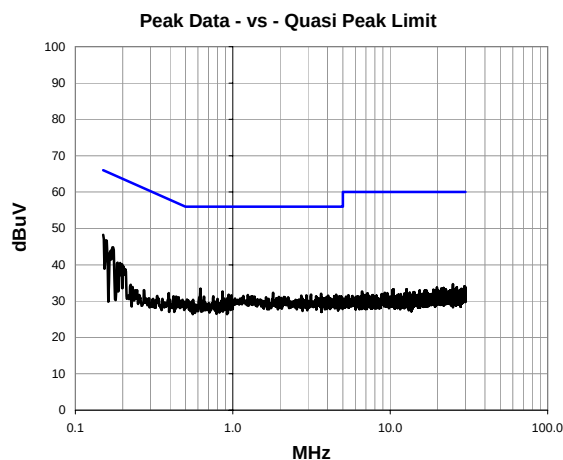
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	27.8	20.4	48.2	55.9	-7.7
0.177	25.2	20.3	45.5	54.6	-9.1
0.169	25.4	20.3	45.7	55.0	-9.3
1.232	13.0	20.4	33.4	46.0	-12.6
1.584	12.2	20.4	32.6	46.0	-13.4
0.697	12.3	20.3	32.6	46.0	-13.4
2.672	12.0	20.5	32.5	46.0	-13.5
3.568	11.5	20.6	32.1	46.0	-13.9
0.713	11.8	20.3	32.1	46.0	-13.9
1.352	11.7	20.4	32.1	46.0	-13.9
2.512	11.5	20.5	32.0	46.0	-14.0
3.840	11.3	20.6	31.9	46.0	-14.1
0.864	11.6	20.3	31.9	46.0	-14.1
0.618	11.6	20.3	31.9	46.0	-14.1
1.480	11.4	20.4	31.8	46.0	-14.2
1.008	11.3	20.3	31.6	46.0	-14.4
0.730	11.3	20.3	31.6	46.0	-14.4
0.543	11.2	20.3	31.5	46.0	-14.5
0.804	11.1	20.3	31.4	46.0	-14.6
4.208	10.7	20.7	31.4	46.0	-14.6

Work Order:	FOCU0140	Date:	05/16/13		
Project:	None	Temperature:	23.7 °C		
Job Site:	EV07	Humidity:	40.3% RH		
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	Tested by:	Brandon Hobbs
EUT:	Model 444-2225 (Athena UFL)				
Configuration:	7				
Customer:	Summit Semiconductor				
Attendees:	None				
EUT Power:	3.3 VDC Nominal				
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 15, 5260 MHz				
Deviations:	None				
Comments:	Power Supply plugged into 110VAC/60Hz				

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	7	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	27.8	20.4	48.2	66.0	-17.8
0.157	26.4	20.4	46.8	65.6	-18.9
0.172	24.5	20.3	44.8	64.9	-20.0
0.624	13.2	20.3	33.5	56.0	-22.5
0.862	12.3	20.3	32.6	56.0	-23.4
0.193	20.2	20.3	40.5	63.9	-23.4
0.198	19.8	20.3	40.1	63.7	-23.6
0.186	20.3	20.3	40.6	64.2	-23.6
1.800	11.9	20.4	32.3	56.0	-23.7
0.201	19.4	20.3	39.7	63.6	-23.8
3.632	11.4	20.6	32.0	56.0	-24.0
3.144	11.3	20.5	31.8	56.0	-24.2
4.544	11.1	20.7	31.8	56.0	-24.2
0.942	11.4	20.3	31.7	56.0	-24.3
1.248	11.3	20.4	31.7	56.0	-24.3
0.980	11.3	20.3	31.6	56.0	-24.4
2.928	11.1	20.5	31.6	56.0	-24.4
4.040	10.9	20.6	31.5	56.0	-24.5
2.720	11.0	20.5	31.5	56.0	-24.5
4.744	10.7	20.7	31.4	56.0	-24.6

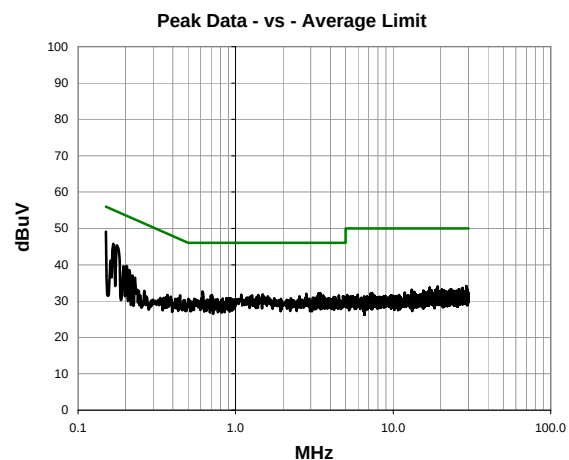
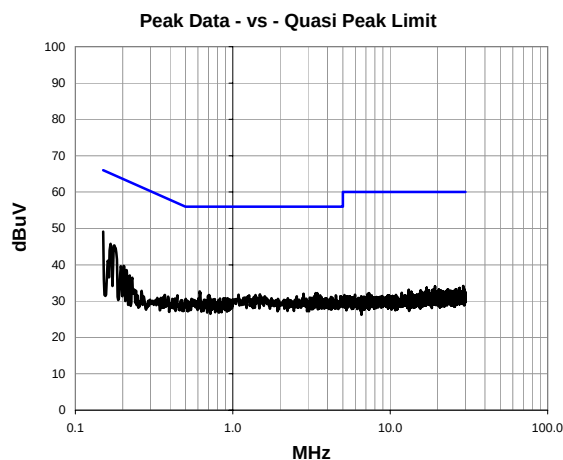
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	27.8	20.4	48.2	56.0	-7.8
0.157	26.4	20.4	46.8	55.6	-8.9
0.172	24.5	20.3	44.8	54.9	-10.0
0.624	13.2	20.3	33.5	46.0	-12.5
0.862	12.3	20.3	32.6	46.0	-13.4
0.193	20.2	20.3	40.5	53.9	-13.4
0.198	19.8	20.3	40.1	53.7	-13.6
0.186	20.3	20.3	40.6	54.2	-13.6
1.800	11.9	20.4	32.3	46.0	-13.7
0.201	19.4	20.3	39.7	53.6	-13.8
3.632	11.4	20.6	32.0	46.0	-14.0
3.144	11.3	20.5	31.8	46.0	-14.2
4.544	11.1	20.7	31.8	46.0	-14.2
0.942	11.4	20.3	31.7	46.0	-14.3
1.248	11.3	20.4	31.7	46.0	-14.3
0.980	11.3	20.3	31.6	46.0	-14.4
2.928	11.1	20.5	31.6	46.0	-14.4
4.040	10.9	20.6	31.5	46.0	-14.5
2.720	11.0	20.5	31.5	46.0	-14.5
4.744	10.7	20.7	31.4	46.0	-14.6

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:	Model 444-2225 (Athena UFL)			Tested by: Brandon Hobbs
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 15, 5260 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	8	Line:	High Line	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.7	20.4	49.1	66.0	-16.9
0.177	25.0	20.3	45.3	64.6	-19.3
0.167	25.4	20.3	45.7	65.1	-19.4
0.618	12.4	20.3	32.7	56.0	-23.3
3.368	11.7	20.6	32.3	56.0	-23.7
0.203	19.4	20.3	39.7	63.5	-23.8
3.448	11.6	20.6	32.2	56.0	-23.8
2.808	11.6	20.5	32.1	56.0	-23.9
1.488	11.5	20.4	31.9	56.0	-24.1
0.194	19.3	20.3	39.6	63.9	-24.2
1.088	11.4	20.3	31.7	56.0	-24.3
0.708	11.4	20.3	31.7	56.0	-24.3
0.160	20.8	20.3	41.1	65.5	-24.3
1.392	11.3	20.4	31.7	56.0	-24.3
3.592	11.0	20.6	31.6	56.0	-24.4
1.272	11.2	20.4	31.6	56.0	-24.4
4.520	10.9	20.7	31.6	56.0	-24.4
0.697	11.2	20.3	31.5	56.0	-24.5
2.544	10.9	20.5	31.4	56.0	-24.6
0.211	18.2	20.3	38.5	63.2	-24.6

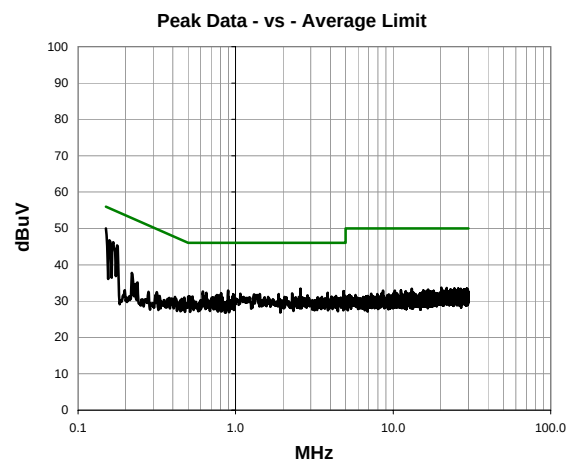
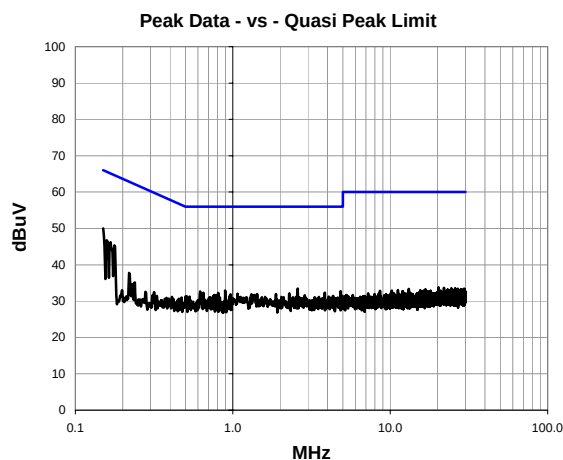
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.7	20.4	49.1	56.0	-6.9
0.177	25.0	20.3	45.3	54.6	-9.3
0.167	25.4	20.3	45.7	55.1	-9.4
0.618	12.4	20.3	32.7	46.0	-13.3
3.368	11.7	20.6	32.3	46.0	-13.7
0.203	19.4	20.3	39.7	53.5	-13.8
3.448	11.6	20.6	32.2	46.0	-13.8
2.808	11.6	20.5	32.1	46.0	-13.9
1.488	11.5	20.4	31.9	46.0	-14.1
0.194	19.3	20.3	39.6	53.9	-14.2
1.088	11.4	20.3	31.7	46.0	-14.3
0.708	11.4	20.3	31.7	46.0	-14.3
0.160	20.8	20.3	41.1	55.5	-14.3
1.392	11.3	20.4	31.7	46.0	-14.3
3.592	11.0	20.6	31.6	46.0	-14.4
1.272	11.2	20.4	31.6	46.0	-14.4
4.520	10.9	20.7	31.6	46.0	-14.4
0.697	11.2	20.3	31.5	46.0	-14.5
2.544	10.9	20.5	31.4	46.0	-14.6
0.211	18.2	20.3	38.5	53.2	-14.6

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:	Model 444-2225 (Athena UFL)			Tested by: Brandon Hobbs
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 18, 5320 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	9	Line:	High Line	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	29.6	20.4	50.0	66.0	-16.0
0.159	26.4	20.4	46.8	65.5	-18.8
0.167	25.9	20.3	46.2	65.1	-18.9
0.177	25.0	20.3	45.3	64.6	-19.3
2.584	13.0	20.5	33.5	56.0	-22.5
0.895	12.6	20.3	32.9	56.0	-23.1
4.848	12.1	20.7	32.8	56.0	-23.2
0.621	12.4	20.3	32.7	56.0	-23.3
3.848	11.7	20.6	32.3	56.0	-23.7
0.652	12.0	20.3	32.3	56.0	-23.7
0.810	11.9	20.3	32.2	56.0	-23.8
2.288	11.7	20.5	32.2	56.0	-23.8
1.072	11.7	20.3	32.0	56.0	-24.0
1.424	11.6	20.4	32.0	56.0	-24.0
1.880	11.5	20.4	31.9	56.0	-24.1
1.312	11.5	20.4	31.9	56.0	-24.1
0.966	11.5	20.3	31.8	56.0	-24.2
0.762	11.4	20.3	31.7	56.0	-24.3
0.782	11.3	20.3	31.6	56.0	-24.4
2.864	11.1	20.5	31.6	56.0	-24.4

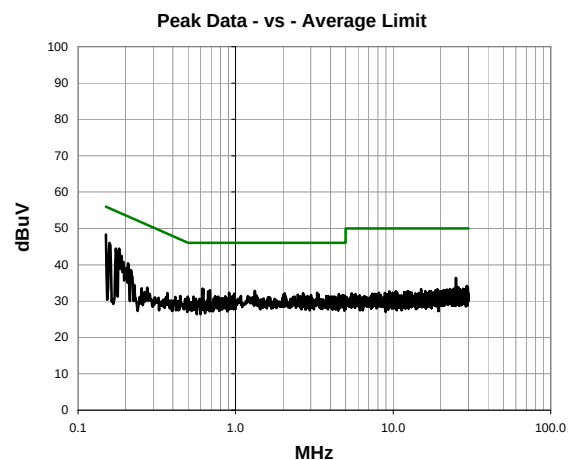
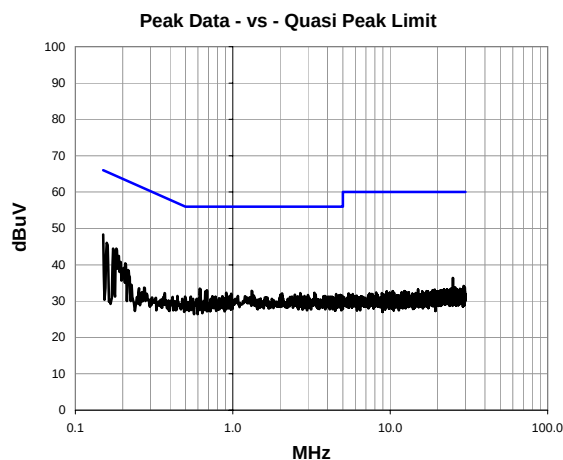
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	29.6	20.4	50.0	56.0	-6.0
0.159	26.4	20.4	46.8	55.5	-8.8
0.167	25.9	20.3	46.2	55.1	-8.9
0.177	25.0	20.3	45.3	54.6	-9.3
2.584	13.0	20.5	33.5	46.0	-12.5
0.895	12.6	20.3	32.9	46.0	-13.1
4.848	12.1	20.7	32.8	46.0	-13.2
0.621	12.4	20.3	32.7	46.0	-13.3
3.848	11.7	20.6	32.3	46.0	-13.7
0.652	12.0	20.3	32.3	46.0	-13.7
0.810	11.9	20.3	32.2	46.0	-13.8
2.288	11.7	20.5	32.2	46.0	-13.8
1.072	11.7	20.3	32.0	46.0	-14.0
1.424	11.6	20.4	32.0	46.0	-14.0
1.880	11.5	20.4	31.9	46.0	-14.1
1.312	11.5	20.4	31.9	46.0	-14.1
0.966	11.5	20.3	31.8	46.0	-14.2
0.762	11.4	20.3	31.7	46.0	-14.3
0.782	11.3	20.3	31.6	46.0	-14.4
2.864	11.1	20.5	31.6	46.0	-14.4

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:	Model 444-2225 (Athena UFL)			Tested by: Brandon Hobbs
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 18, 5320 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	10	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	27.9	20.4	48.3	66.0	-17.7
0.159	25.7	20.4	46.1	65.5	-19.5
0.182	24.1	20.3	44.4	64.4	-20.0
0.174	24.1	20.3	44.4	64.8	-20.4
0.189	22.1	20.3	42.4	64.1	-21.7
0.618	13.2	20.3	33.5	56.0	-22.5
0.208	20.1	20.3	40.4	63.3	-22.9
0.686	12.7	20.3	33.0	56.0	-23.0
1.320	12.5	20.4	32.9	56.0	-23.1
0.669	12.4	20.3	32.7	56.0	-23.3
25.020	14.7	21.7	36.4	60.0	-23.6
3.296	11.8	20.5	32.3	56.0	-23.7
0.910	12.0	20.3	32.3	56.0	-23.7
2.680	11.7	20.5	32.2	56.0	-23.8
2.056	11.7	20.4	32.1	56.0	-23.9
0.978	11.7	20.3	32.0	56.0	-24.0
4.528	11.3	20.7	32.0	56.0	-24.0
2.480	11.3	20.5	31.8	56.0	-24.2
2.008	11.3	20.4	31.7	56.0	-24.3
3.008	11.2	20.5	31.7	56.0	-24.3

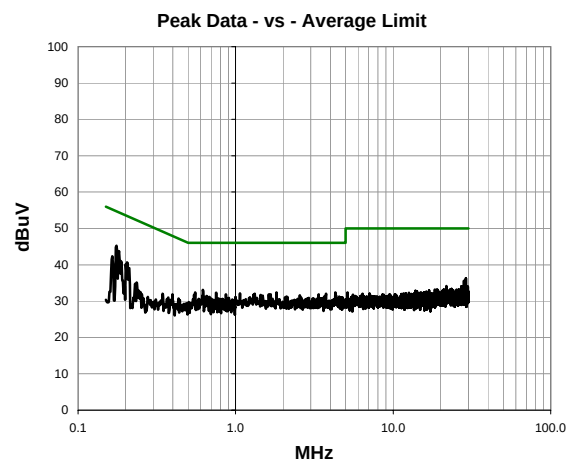
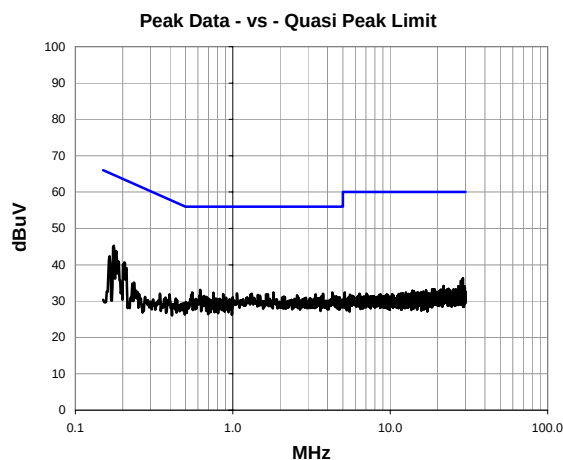
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	27.9	20.4	48.3	56.0	-7.7
0.159	25.7	20.4	46.1	55.5	-9.5
0.182	24.1	20.3	44.4	54.4	-10.0
0.174	24.1	20.3	44.4	54.8	-10.4
0.189	22.1	20.3	42.4	54.1	-11.7
0.618	13.2	20.3	33.5	46.0	-12.5
0.208	20.1	20.3	40.4	53.3	-12.9
0.686	12.7	20.3	33.0	46.0	-13.0
1.320	12.5	20.4	32.9	46.0	-13.1
0.669	12.4	20.3	32.7	46.0	-13.3
25.020	14.7	21.7	36.4	50.0	-13.6
3.296	11.8	20.5	32.3	46.0	-13.7
0.910	12.0	20.3	32.3	46.0	-13.7
2.680	11.7	20.5	32.2	46.0	-13.8
2.056	11.7	20.4	32.1	46.0	-13.9
0.978	11.7	20.3	32.0	46.0	-14.0
4.528	11.3	20.7	32.0	46.0	-14.0
2.480	11.3	20.5	31.8	46.0	-14.2
2.008	11.3	20.4	31.7	46.0	-14.3
3.008	11.2	20.5	31.7	46.0	-14.3

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:	Model 444-2225 (Athena UFL)			Tested by: Brandon Hobbs
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 19, 5500 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	11	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.176	24.9	20.3	45.2	64.7	-19.5
0.182	23.4	20.3	43.7	64.4	-20.7
0.204	20.3	20.3	40.6	63.4	-22.8
0.165	22.0	20.3	42.3	65.2	-22.9
0.621	12.8	20.3	33.1	56.0	-22.9
0.187	20.7	20.3	41.0	64.2	-23.1
1.816	12.0	20.4	32.4	56.0	-23.6
0.553	12.1	20.3	32.4	56.0	-23.6
4.296	11.7	20.7	32.4	56.0	-23.6
28.920	14.3	22.0	36.3	60.0	-23.7
0.753	12.0	20.3	32.3	56.0	-23.7
1.064	11.8	20.3	32.1	56.0	-23.9
1.320	11.7	20.4	32.1	56.0	-23.9
3.744	11.4	20.6	32.0	56.0	-24.0
0.211	18.8	20.3	39.1	63.2	-24.0
1.672	11.5	20.4	31.9	56.0	-24.1
3.368	11.3	20.6	31.9	56.0	-24.1
0.869	11.5	20.3	31.8	56.0	-24.2
1.448	11.3	20.4	31.7	56.0	-24.3
2.560	11.1	20.5	31.6	56.0	-24.4

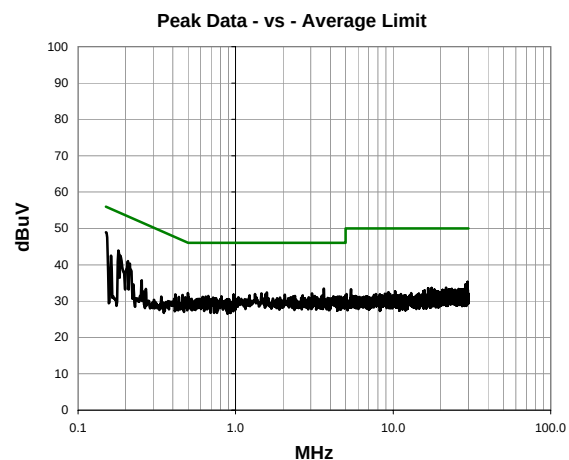
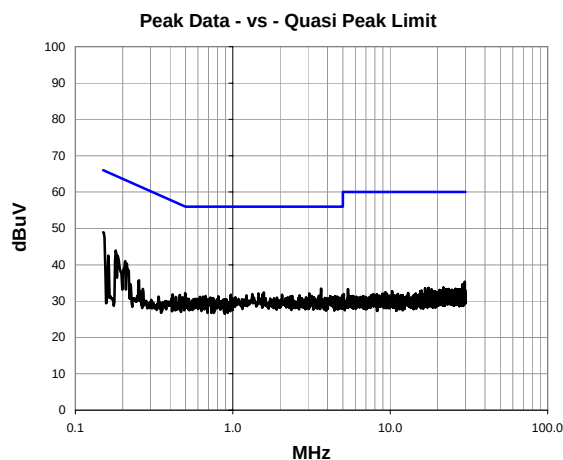
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.176	24.9	20.3	45.2	54.7	-9.5
0.182	23.4	20.3	43.7	54.4	-10.7
0.204	20.3	20.3	40.6	53.4	-12.8
0.165	22.0	20.3	42.3	55.2	-12.9
0.621	12.8	20.3	33.1	46.0	-12.9
0.187	20.7	20.3	41.0	54.2	-13.1
1.816	12.0	20.4	32.4	46.0	-13.6
0.553	12.1	20.3	32.4	46.0	-13.6
4.296	11.7	20.7	32.4	46.0	-13.6
28.920	14.3	22.0	36.3	50.0	-13.7
0.753	12.0	20.3	32.3	46.0	-13.7
1.064	11.8	20.3	32.1	46.0	-13.9
1.320	11.7	20.4	32.1	46.0	-13.9
3.744	11.4	20.6	32.0	46.0	-14.0
0.211	18.8	20.3	39.1	53.2	-14.0
1.672	11.5	20.4	31.9	46.0	-14.1
3.368	11.3	20.6	31.9	46.0	-14.1
0.869	11.5	20.3	31.8	46.0	-14.2
1.448	11.3	20.4	31.7	46.0	-14.3
2.560	11.1	20.5	31.6	46.0	-14.4

Work Order:	FOCU0140	Date:	05/16/13		
Project:	None	Temperature:	23.7 °C		
Job Site:	EV07	Humidity:	40.3% RH		
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	Tested by:	Brandon Hobbs
EUT:	Model 444-2225 (Athena UFL)				
Configuration:	7				
Customer:	Summit Semiconductor				
Attendees:	None				
EUT Power:	3.3 VDC Nominal				
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 19, 5500 MHz				
Deviations:	None				
Comments:	Power Supply plugged into 110VAC/60Hz				

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	12	Line:	High Line	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.5	20.4	48.9	66.0	-17.1
0.181	23.6	20.3	43.9	64.5	-20.5
0.186	22.2	20.3	42.5	64.2	-21.7
0.208	20.7	20.3	41.0	63.3	-22.3
3.632	12.8	20.6	33.4	56.0	-22.6
0.213	20.0	20.3	40.3	63.1	-22.8
0.162	22.2	20.3	42.5	65.4	-22.8
1.576	12.0	20.4	32.4	56.0	-23.6
0.499	12.0	20.3	32.3	56.0	-23.8
3.056	11.6	20.5	32.1	56.0	-23.9
1.456	11.7	20.4	32.1	56.0	-23.9
1.328	11.6	20.4	32.0	56.0	-24.0
1.544	11.5	20.4	31.9	56.0	-24.1
0.971	11.4	20.3	31.7	56.0	-24.3
2.056	11.3	20.4	31.7	56.0	-24.3
2.664	11.1	20.5	31.6	56.0	-24.4
3.528	10.9	20.6	31.5	56.0	-24.5
2.384	11.0	20.5	31.5	56.0	-24.5
3.184	10.9	20.5	31.4	56.0	-24.6
0.672	11.1	20.3	31.4	56.0	-24.6

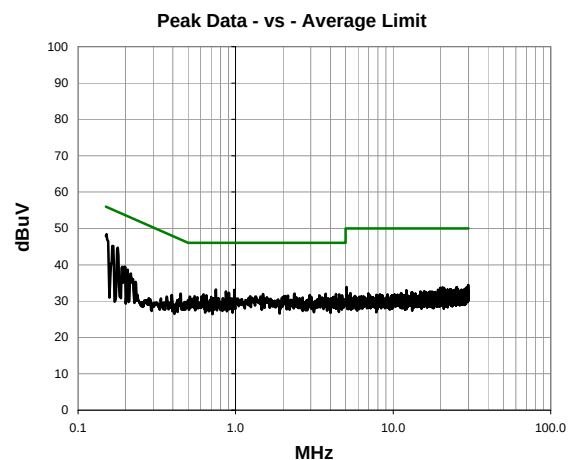
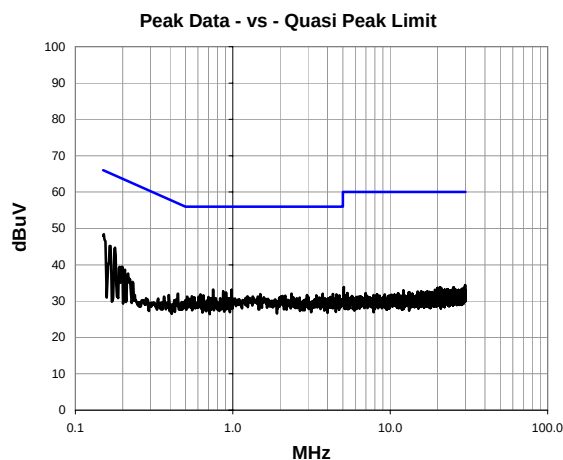
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.5	20.4	48.9	56.0	-7.1
0.181	23.6	20.3	43.9	54.5	-10.5
0.186	22.2	20.3	42.5	54.2	-11.7
0.208	20.7	20.3	41.0	53.3	-12.3
3.632	12.8	20.6	33.4	46.0	-12.6
0.213	20.0	20.3	40.3	53.1	-12.8
0.162	22.2	20.3	42.5	55.4	-12.8
1.576	12.0	20.4	32.4	46.0	-13.6
0.499	12.0	20.3	32.3	46.0	-13.8
3.056	11.6	20.5	32.1	46.0	-13.9
1.456	11.7	20.4	32.1	46.0	-13.9
1.328	11.6	20.4	32.0	46.0	-14.0
1.544	11.5	20.4	31.9	46.0	-14.1
0.971	11.4	20.3	31.7	46.0	-14.3
2.056	11.3	20.4	31.7	46.0	-14.3
2.664	11.1	20.5	31.6	46.0	-14.4
3.528	10.9	20.6	31.5	46.0	-14.5
2.384	11.0	20.5	31.5	46.0	-14.5
3.184	10.9	20.5	31.4	46.0	-14.6
0.672	11.1	20.3	31.4	46.0	-14.6

Work Order:	FOCU0140	Date:	05/16/13		
Project:	None	Temperature:	23.7 °C		
Job Site:	EV07	Humidity:	40.3% RH		
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	Tested by:	Brandon Hobbs
EUT:	Model 444-2225 (Athena UFL)				
Configuration:	7				
Customer:	Summit Semiconductor				
Attendees:	None				
EUT Power:	3.3 VDC Nominal				
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 23, 5580 MHz				
Deviations:	None				
Comments:	Power Supply plugged into 110VAC/60Hz				

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	13	Line:	High Line	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	28.0	20.4	48.4	65.9	-17.5
0.179	24.4	20.3	44.7	64.5	-19.8
0.165	24.8	20.3	45.1	65.2	-20.1
0.750	12.9	20.3	33.2	56.0	-22.8
0.981	12.8	20.3	33.1	56.0	-22.9
0.869	12.3	20.3	32.6	56.0	-23.4
0.906	12.0	20.3	32.3	56.0	-23.7
2.368	11.6	20.5	32.1	56.0	-23.9
3.728	11.4	20.6	32.0	56.0	-24.0
1.496	11.6	20.4	32.0	56.0	-24.0
4.328	11.3	20.7	32.0	56.0	-24.0
0.624	11.6	20.3	31.9	56.0	-24.1
4.552	11.2	20.7	31.9	56.0	-24.1
0.199	19.1	20.3	39.4	63.6	-24.2
2.960	11.2	20.5	31.7	56.0	-24.3
0.652	11.3	20.3	31.6	56.0	-24.4
4.744	10.9	20.7	31.6	56.0	-24.4
3.400	11.0	20.6	31.6	56.0	-24.4
2.152	11.1	20.4	31.5	56.0	-24.5
2.072	11.0	20.4	31.4	56.0	-24.6

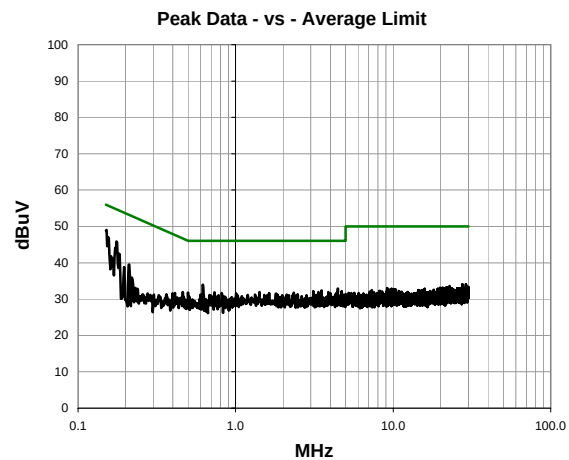
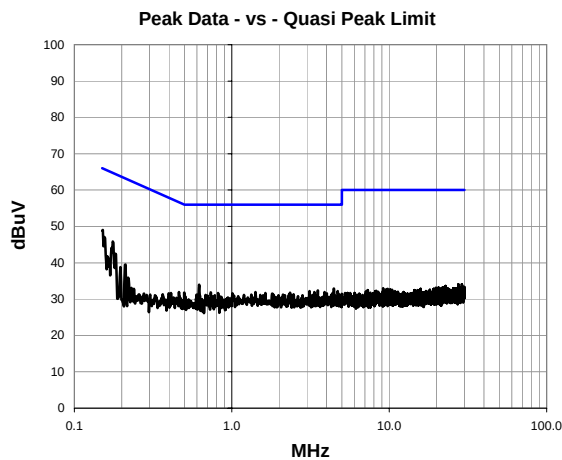
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	28.0	20.4	48.4	55.9	-7.5
0.179	24.4	20.3	44.7	54.5	-9.8
0.165	24.8	20.3	45.1	55.2	-10.1
0.750	12.9	20.3	33.2	46.0	-12.8
0.981	12.8	20.3	33.1	46.0	-12.9
0.869	12.3	20.3	32.6	46.0	-13.4
0.906	12.0	20.3	32.3	46.0	-13.7
2.368	11.6	20.5	32.1	46.0	-13.9
3.728	11.4	20.6	32.0	46.0	-14.0
1.496	11.6	20.4	32.0	46.0	-14.0
4.328	11.3	20.7	32.0	46.0	-14.0
0.624	11.6	20.3	31.9	46.0	-14.1
4.552	11.2	20.7	31.9	46.0	-14.1
0.199	19.1	20.3	39.4	53.6	-14.2
2.960	11.2	20.5	31.7	46.0	-14.3
0.652	11.3	20.3	31.6	46.0	-14.4
4.744	10.9	20.7	31.6	46.0	-14.4
3.400	11.0	20.6	31.6	46.0	-14.4
2.152	11.1	20.4	31.5	46.0	-14.5
2.072	11.0	20.4	31.4	46.0	-14.6

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:		Model 444-2225 (Athena UFL)		
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 23, 5580 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	14	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
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Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	28.6	20.4	49.0	65.9	-16.9
0.176	25.5	20.3	45.8	64.7	-18.9
0.182	22.2	20.3	42.5	64.4	-21.9
0.619	13.7	20.3	34.0	56.0	-22.0
4.456	12.3	20.7	33.0	56.0	-23.0
0.162	21.5	20.3	41.8	65.4	-23.5
3.520	11.8	20.6	32.4	56.0	-23.6
0.211	19.2	20.3	39.5	63.2	-23.6
3.112	11.7	20.5	32.2	56.0	-23.8
4.712	11.5	20.7	32.2	56.0	-23.8
1.416	11.6	20.4	32.0	56.0	-24.0
3.352	11.4	20.6	32.0	56.0	-24.0
3.880	11.3	20.6	31.9	56.0	-24.1
0.735	11.6	20.3	31.9	56.0	-24.1
0.500	11.5	20.3	31.8	56.0	-24.2
2.344	11.3	20.5	31.8	56.0	-24.2
0.818	11.4	20.3	31.7	56.0	-24.3
1.632	11.3	20.4	31.7	56.0	-24.3
4.360	11.0	20.7	31.7	56.0	-24.3
4.008	11.0	20.6	31.6	56.0	-24.4

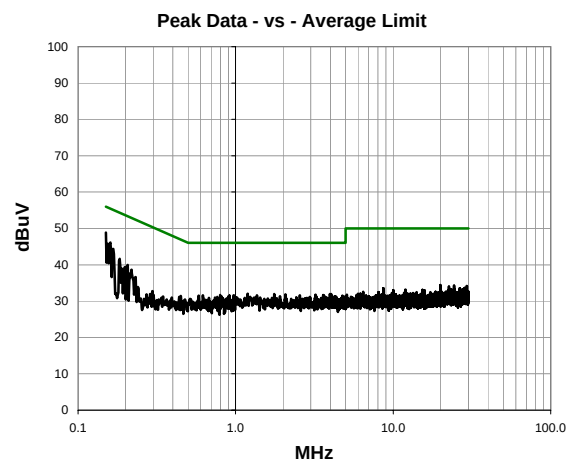
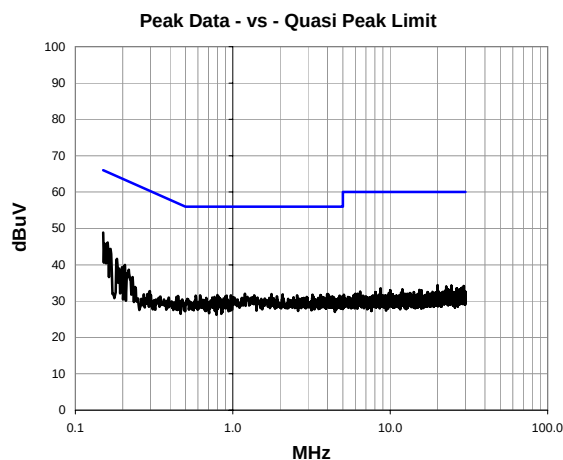
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	28.6	20.4	49.0	55.9	-6.9
0.176	25.5	20.3	45.8	54.7	-8.9
0.182	22.2	20.3	42.5	54.4	-11.9
0.619	13.7	20.3	34.0	46.0	-12.0
4.456	12.3	20.7	33.0	46.0	-13.0
0.162	21.5	20.3	41.8	55.4	-13.5
3.520	11.8	20.6	32.4	46.0	-13.6
0.211	19.2	20.3	39.5	53.2	-13.6
3.112	11.7	20.5	32.2	46.0	-13.8
4.712	11.5	20.7	32.2	46.0	-13.8
1.416	11.6	20.4	32.0	46.0	-14.0
3.352	11.4	20.6	32.0	46.0	-14.0
3.880	11.3	20.6	31.9	46.0	-14.1
0.735	11.6	20.3	31.9	46.0	-14.1
0.500	11.5	20.3	31.8	46.0	-14.2
2.344	11.3	20.5	31.8	46.0	-14.2
0.818	11.4	20.3	31.7	46.0	-14.3
1.632	11.3	20.4	31.7	46.0	-14.3
4.360	11.0	20.7	31.7	46.0	-14.3
4.008	11.0	20.6	31.6	46.0	-14.4

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	Tested by: Brandon Hobbs
EUT:	Model 444-2225 (Athena UFL)			
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 29, 5700 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	15	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
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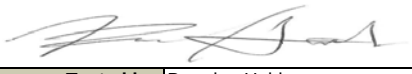


Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.4	20.4	48.8	66.0	-17.2
0.160	25.8	20.3	46.1	65.5	-19.3
0.153	25.4	20.4	45.8	65.8	-20.0
0.167	24.0	20.3	44.3	65.1	-20.8
0.184	21.3	20.3	41.6	64.3	-22.7
0.206	19.6	20.3	39.9	63.4	-23.4
1.192	11.7	20.4	32.1	56.0	-23.9
4.040	11.3	20.6	31.9	56.0	-24.1
3.976	11.3	20.6	31.9	56.0	-24.1
1.760	11.5	20.4	31.9	56.0	-24.1
2.072	11.4	20.4	31.8	56.0	-24.2
3.208	11.3	20.5	31.8	56.0	-24.2
0.218	18.3	20.3	38.6	62.9	-24.3
3.600	11.1	20.6	31.7	56.0	-24.3
0.799	11.4	20.3	31.7	56.0	-24.3
0.974	11.3	20.3	31.6	56.0	-24.4
0.198	19.0	20.3	39.3	63.7	-24.4
0.621	11.3	20.3	31.6	56.0	-24.4
2.560	11.1	20.5	31.6	56.0	-24.4
0.913	11.2	20.3	31.5	56.0	-24.5

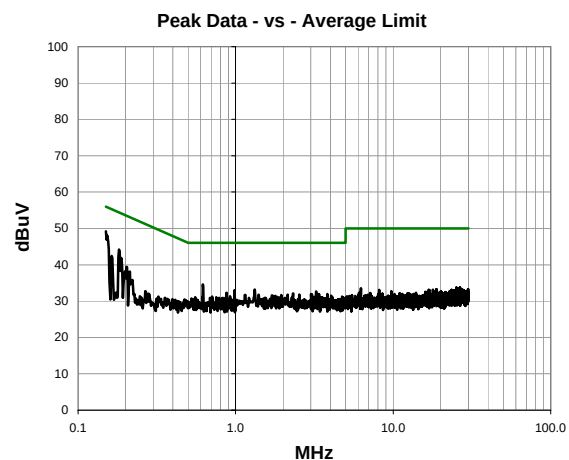
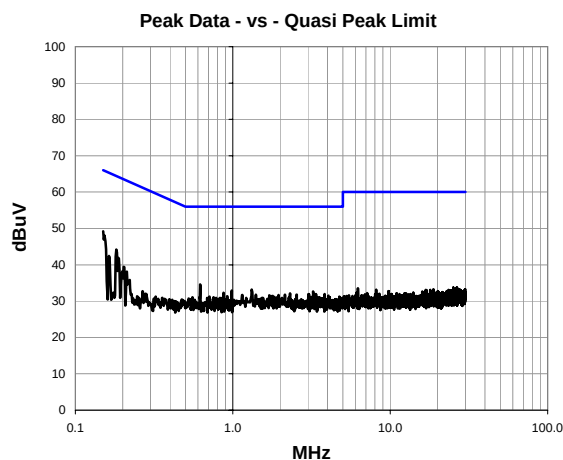
Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.4	20.4	48.8	56.0	-7.2
0.160	25.8	20.3	46.1	55.5	-9.3
0.153	25.4	20.4	45.8	55.8	-10.0
0.167	24.0	20.3	44.3	55.1	-10.8
0.184	21.3	20.3	41.6	54.3	-12.7
0.206	19.6	20.3	39.9	53.4	-13.4
1.192	11.7	20.4	32.1	46.0	-13.9
4.040	11.3	20.6	31.9	46.0	-14.1
3.976	11.3	20.6	31.9	46.0	-14.1
1.760	11.5	20.4	31.9	46.0	-14.1
2.072	11.4	20.4	31.8	46.0	-14.2
3.208	11.3	20.5	31.8	46.0	-14.2
0.218	18.3	20.3	38.6	52.9	-14.3
3.600	11.1	20.6	31.7	46.0	-14.3
0.799	11.4	20.3	31.7	46.0	-14.3
0.974	11.3	20.3	31.6	46.0	-14.4
0.198	19.0	20.3	39.3	53.7	-14.4
0.621	11.3	20.3	31.6	46.0	-14.4
2.560	11.1	20.5	31.6	46.0	-14.4
0.913	11.2	20.3	31.5	46.0	-14.5

Work Order:	FOCU0140	Date:	05/16/13	
Project:	None	Temperature:	23.7 °C	
Job Site:	EV07	Humidity:	40.3% RH	
Serial Number:	02EA4D000003	Barometric Pres.:	1014 mbar	
EUT:	Model 444-2225 (Athena UFL)			Tested by: Brandon Hobbs
Configuration:	7			
Customer:	Summit Semiconductor			
Attendees:	None			
EUT Power:	3.3 VDC Nominal			
Operating Mode:	Transmitting 802.11a, 50% Duty Cycle, Ch. 29, 5700 MHz			
Deviations:	None			
Comments:	Power Supply plugged into 110VAC/60Hz			

Test Specifications	Test Method
FCC 15.207:2013	ANSI C63.10:2009

Run #	16	Line:	High Line	Ext. Attenuation:	20	Results	Pass
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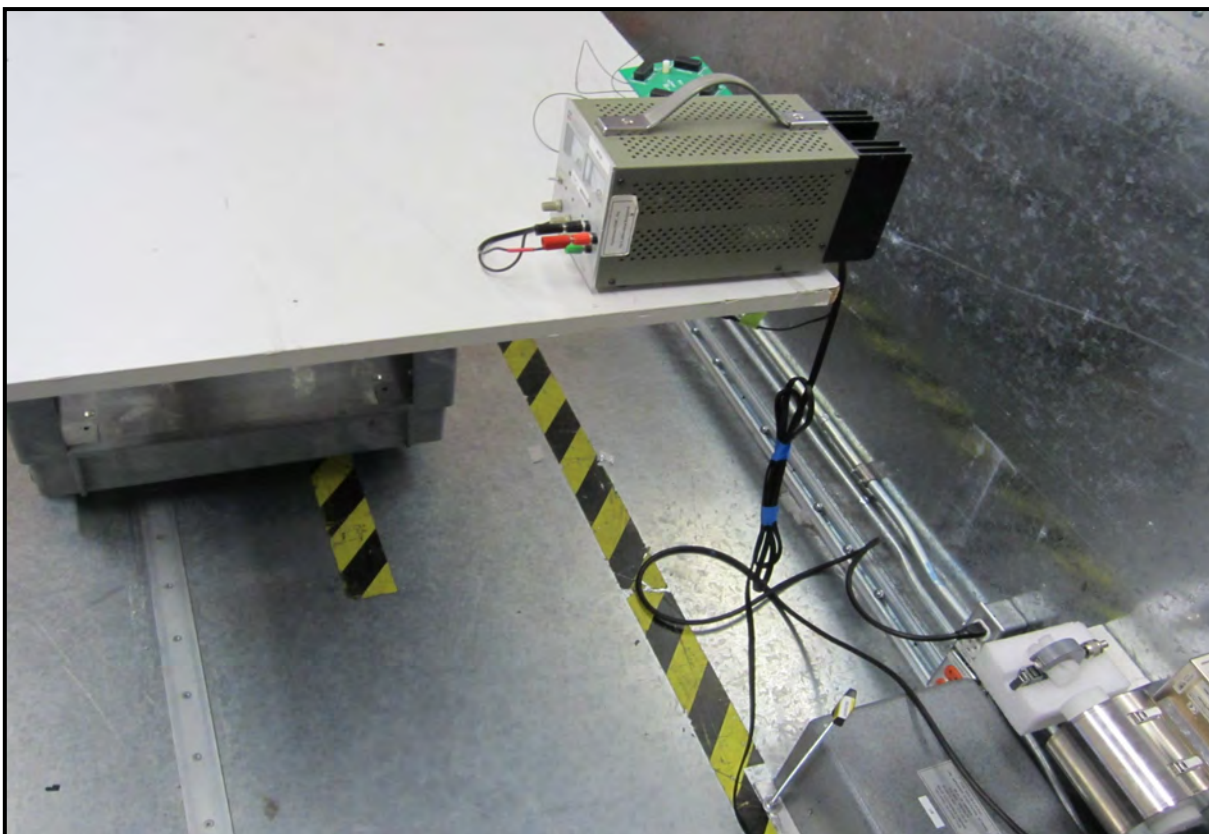
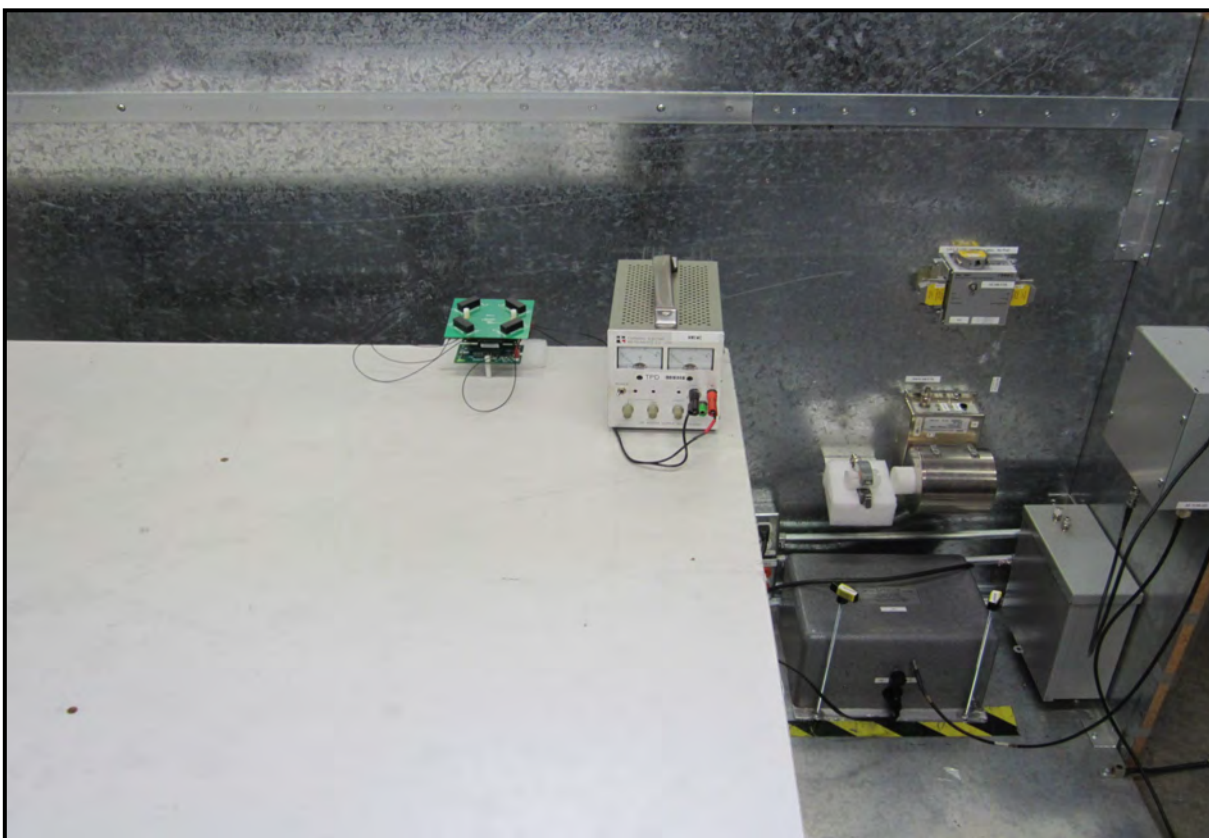
Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.8	20.4	49.2	66.0	-16.8
0.182	23.9	20.3	44.2	64.4	-20.2
0.621	14.3	20.3	34.6	56.0	-21.4
0.187	21.6	20.3	41.9	64.2	-22.2
1.320	12.8	20.4	33.2	56.0	-22.8
0.164	22.1	20.3	42.4	65.3	-22.8
0.985	12.6	20.3	32.9	56.0	-23.1
3.240	12.1	20.5	32.6	56.0	-23.4
0.874	12.0	20.3	32.3	56.0	-23.7
2.312	11.7	20.5	32.2	56.0	-23.8
3.040	11.5	20.5	32.0	56.0	-24.0
3.384	11.4	20.6	32.0	56.0	-24.0
3.824	11.3	20.6	31.9	56.0	-24.1
0.203	19.1	20.3	39.4	63.5	-24.1
1.400	11.4	20.4	31.8	56.0	-24.2
2.544	11.3	20.5	31.8	56.0	-24.2
2.144	11.3	20.4	31.7	56.0	-24.3
1.952	11.3	20.4	31.7	56.0	-24.3
1.152	11.3	20.4	31.7	56.0	-24.3
1.704	11.2	20.4	31.6	56.0	-24.4

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.8	20.4	49.2	56.0	-6.8
0.182	23.9	20.3	44.2	54.4	-10.2
0.621	14.3	20.3	34.6	46.0	-11.4
0.187	21.6	20.3	41.9	54.2	-12.2
1.320	12.8	20.4	33.2	46.0	-12.8
0.164	22.1	20.3	42.4	55.3	-12.8
0.985	12.6	20.3	32.9	46.0	-13.1
3.240	12.1	20.5	32.6	46.0	-13.4
0.874	12.0	20.3	32.3	46.0	-13.7
2.312	11.7	20.5	32.2	46.0	-13.8
3.040	11.5	20.5	32.0	46.0	-14.0
3.384	11.4	20.6	32.0	46.0	-14.0
3.824	11.3	20.6	31.9	46.0	-14.1
0.203	19.1	20.3	39.4	53.5	-14.1
1.400	11.4	20.4	31.8	46.0	-14.2
2.544	11.3	20.5	31.8	46.0	-14.2
2.144	11.3	20.4	31.7	46.0	-14.3
1.952	11.3	20.4	31.7	46.0	-14.3
1.152	11.3	20.4	31.7	46.0	-14.3
1.704	11.2	20.4	31.6	46.0	-14.4

CONDUCTED EMISSIONS



CONDUCTED EMISSIONS

