NORTHWEST EMC

Zoll Medical Corp.

Zoll CF Card Module

FCC 15.207:2016
FCC 15.407:2016

802.11an SISO Radio

Report # LGPD0179.2

NVLAP Lab Code: 200881-0

CERTIFICATE OF TEST

NORTHWEST EMC
2014-12-10

Last Date of Test: April 21, 2016
Zoll Medical Corp.
Model: Zoll CF Card Module

Radio Equipment Testing

Standards

Specification	Method
FCC 15.207:2016	ANSI C63.10:2013
FCC 15.407:2016	

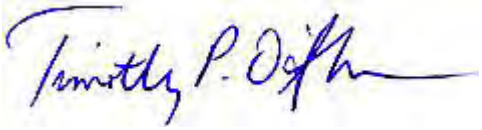
Results

Method Clause	Test Description	Applied	Results	Comments
6.2	AC - Powerline Conducted Emissions	Yes	Pass	
6.5, 6.6	Spurious Radiated Emissions	Yes	Pass	
6.8	Frequency Stability	Yes	Pass	
12.2	Duty Cycle	Yes	Pass	
12.3.2.4	Maximum Conducted Output Power	Yes	Pass	
12.4.1	Emission Bandwidth	Yes	Pass	
12.4.2	Occupied Bandwidth	Yes	Pass	
12.4.2	Band Edge	Yes	Pass	
12.5	Maximum Power Spectral Density	Yes	Pass	

Deviations From Test Standards

None

Approved By:



Tim O'Shea, Operations Manager

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. 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. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information.

REVISION HISTORY

NORTHWEST EMC
REV 2014.10.14

Revision Number	Description	Date	Page Number
00	None		

ACCREDITATIONS AND AUTHORIZATIONS

NORTHWEST EMC
REV 2016.3.22

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 17065 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 Notified Body under the R&TTE Directive.

Australia/New Zealand

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

Korea

MSIP / 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.

Israel

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

Hong Kong

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

Vietnam

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

SCOPE

For details on the Scopes of our Accreditations, please visit:
http://www.nwemc.com/accreditations/
http://gsi.nist.gov/global/docs/cabs/designations.html

MEASUREMENT UNCERTAINTY

TMU.2015.07.10

Measurement Uncertainty

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

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

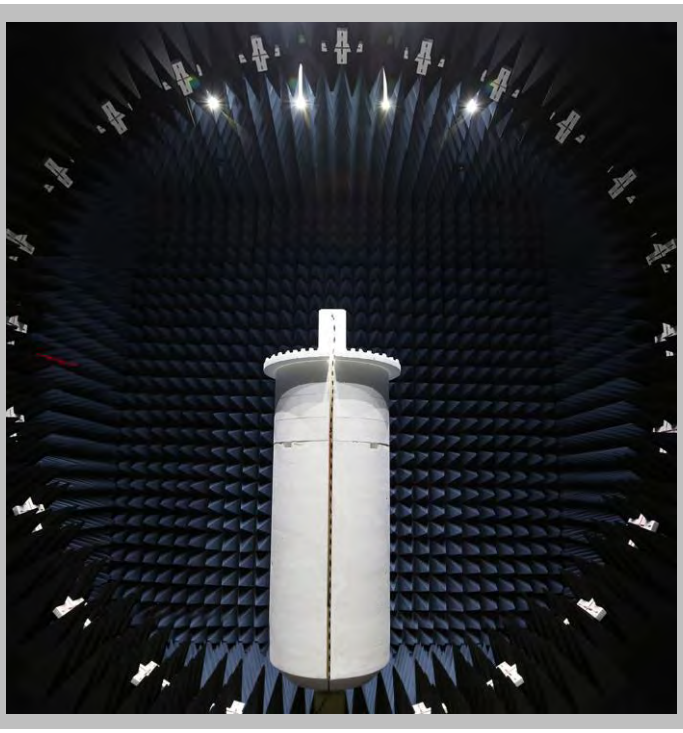
The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

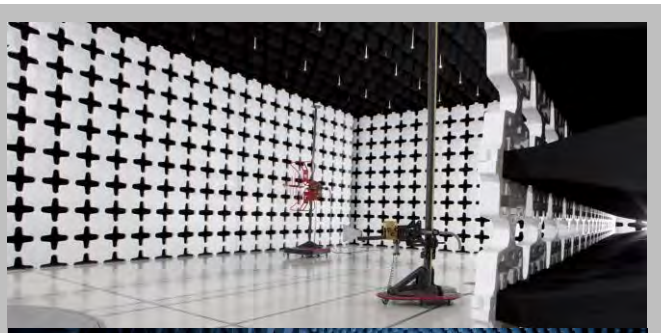
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	0.3 dB	-0.3 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.2 dB	-5.2 dB
AC Powerline Conducted Emissions (dB)	2.4 dB	-2.4 dB

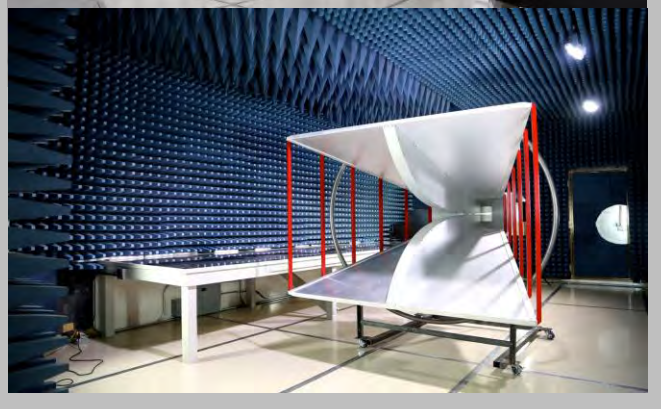
FACILITIES

NORTHWEST EMC
REV 2015.2.19

California	Minnesota	New York	Oregon	Texas	Washington
Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Labs NC01-05 19201 120th Ave NE Bothell, WA 98011 (425)984-6600
NVLAP					
NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
Industry Canada					
2834B-1, 2834B-3	2834E-1	N/A	2834D-1, 2834D-*2*	2834G-1	2834F-1
BSMI					
SL2-IN-E-1154R	SL2-IN-E-1152R	N/A	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
VCCI					
A-0029	A-0109	N/A	A-0108	A-0201	A-0110
Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA					
US0158	US0175	N/A	US0017	US0191	US0157







PRODUCT DESCRIPTION

NORTHWEST EMC
2014-12-10

Client and Equipment Under Test (EUT) Information

Company Name:	Zoll Medical Corp.
Address:	269 Mill Road
City, State, Zip:	Chelmsford, MA 01824
Test Requested By:	Adam Ford with Logic PD
Model:	Zoll CF Card Module
First Date of Test:	January 22, 2016
Last Date of Test:	April 21, 2016
Receipt Date of Samples:	March 11, 2016
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
802.11 abgn CF wireless card containing 1x1 SISO radio module operating in 20 MHz channel bandwidth. This card is normally installed in the Zoll R Series defibrillators. This is the same module that was tested in LGPD0165 except the conducted testing will be done at lower power levels.

Testing Objective:
To demonstrate compliance of the 802.11 radio under FCC 15.407 for operation in the 5.2 GHz, 5.3 GHz, 5.6 GHz and 5.8 GHz band(s).

CONFIGURATIONS

NORTHWEST EMC 2014-12-10

Configuration LGPD0165- 1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Zoll CF Card Module	Zoll Medical Corp.	None	0216M00003

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
CF Extender	Zoll Medical Corp.	CFExtend	Unknown
AC Adapter (CF Extender)	None	None	None
AC Adapter (Laptop)	None	None	None
Laptop	Dell	Precision M4600	F9V5LQ1

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Serial Cable	Yes	>3.0m	No	Development Board	Laptop
AC Cable (CF Extender)	No	1m	No	AC Mains	AC Adapter (CF Extender)
DC Cable (CF Extender)	No	1m	No	AC Adapter (CF Extender)	CF Extender
AC Cable (Laptop)	No	1m	No	AC Mains	AC Adapter (Laptop)
DC Cable (Laptop)	No	1m	No	AC Adapter (Laptop)	Laptop

Configuration LGPD0179- 1

Software/Firmware Running during test	
Description	**Version**
TeraTerm	None

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Zoll CF Card Module	Zoll Medical Corp.	None	0216M00003

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC Adapter (Development Board)	SCEPTRE	AD2405A/PS2D-5038APL6A	None
Laptop	Dell	Latitude	Unknown

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Cable (Laptop)	No	1m	No	AC Adapter	AC Mains
DC Power Cable (Laptop)	No	1.8m	Yes	AC Adapter	Laptop

CONFIGURATIONS

NORTHWEST EMC 2014-12-10

Configuration LGPD0188- 1

Software/Firmware Running during test	
Description	**Version**
TeraTerm	Unknown

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Wireless Module	Zoll Medical Corp.	1021711	2012M01206

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC Adapter	Sceptre	AD2405A/PS2D-5038APL6A	None
CF Extender	Zoll Medical Corp.	CFExtend	Unknown
Test Laptop	Lenevo	Thinkpad T400	A3-L9568-08/09
AC Adapter (Laptop)	Dell	DA180PM111	CN-074X5J-48661-15V-0WZ1-A00

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Cable (CF Extender)	No	1m	No	AC Adapter	AC Mains
AC Cable	No	2.5m	No	AC Adapter (Laptop)	AC Mains
DC Cable (CF Extender)	No	1m	No	AC Adapter	Banana to Mini Grabber
DC Cable (Laptop)	No	1m	No	Test Laptop	AC Adapter (Laptop)
Serial Cable	Yes	1.8m	No	CF Extender	CF Extender
Serial USB Adapter	Unknown	.5m	No	CF Extender	Serial USB Adapter
w.fl - SMA Cable	Unknown	.1m	No	Test Laptop	Serial Cable
Banana to Mini Grabber	No	1m	No	DC Cable (CF Extender)	CF Extender

MODIFICATIONS

NORTHWEST EMC 2014-12-10

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	1/22/2016	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	2/2/2016	AC – Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	3/18/2016	Duty Cycle	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	3/18/2016	Emission Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
5	3/18/2016	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
6	3/18/2016	Maximum Conducted Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
7	3/18/2016	Maximum Power Spectral Density	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.
8	4/21/2016	Band Edge	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.
9	4/21/2016	Frequency Stability	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Per the standard, an insulating material was also added to ground plane between the EUT's power and remote I/O cables. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50ohm measuring port is terminated by a 50ohm EMI meter or a 50ohm resistive load. All 50ohm measuring ports of the LISN are terminated by 50ohm. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
LISN	Solar Electronics	9252-50-R-24-BNC	LIY	3/23/2015	3/23/2016
Receiver	Rohde & Schwarz	ESR7	ARI	5/21/2015	5/21/2016
Filter - High Pass	TTE	H97-100K-50-720B	HGN	NCR	NCR
Cable - Conducted Cable Assembly	Northwest EMC	None	MNC	NCR	NCR

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	2.4 dB	-2.4 dB

CONFIGURATIONS INVESTIGATED

LGPD0165-1

MODES INVESTIGATED

Single channel continuous transmission. Channel 100 5500 MHz, 6 Mbps.
Single channel continuous transmission. Channel 120 5600 MHz, 6 Mbps.
Single channel continuous transmission. Channel 140 5700 MHz, 6 Mbps.
Single channel continuous transmission. Channel 149 5745 MHz, 6 Mbps.
Single channel continuous transmission. Channel 157 5785 MHz, 6 Mbps.
Single channel continuous transmission. Channel 165 5825 MHz, 6 Mbps.
Single channel continuous transmission. Channel 36 5180 MHz, 6 Mbps.
Single channel continuous transmission. Channel 48 5240 MHz, 6 Mbps.
Single channel continuous transmission. Channel 52 5260 MHz, 6 Mbps.
Single channel continuous transmission. Channel 64 5320 MHz, 6 Mbps.

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	7	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

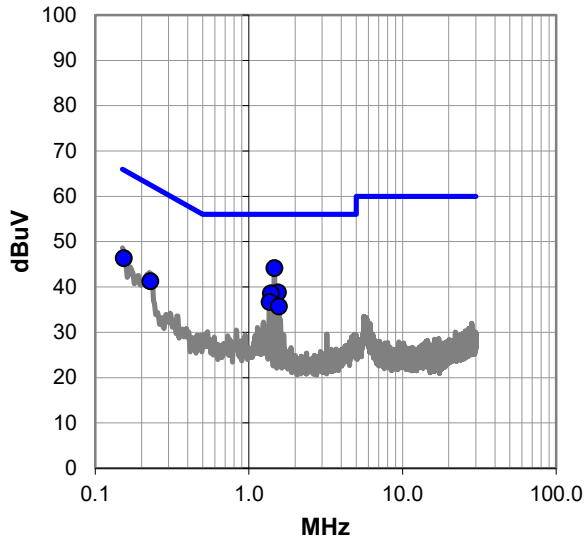
EUT OPERATING MODES

Single channel continuous transmission. Channel 36 5180 MHz, 6 Mbps.

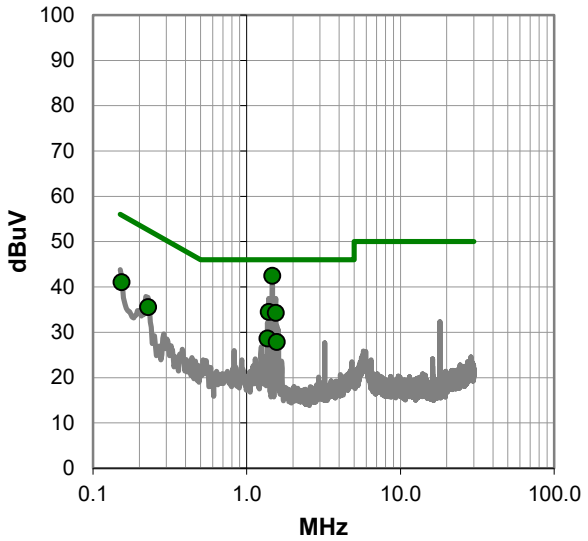
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #7

Quasi Peak Data - vs - Quasi Peak Limit

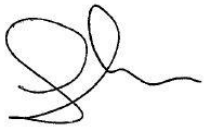
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.0	20.1	44.1	56.0	-11.9
1.546	18.6	20.2	38.8	56.0	-17.2
1.394	18.4	20.1	38.5	56.0	-17.5
1.368	16.5	20.1	36.6	56.0	-19.4
0.154	25.9	20.4	46.3	65.8	-19.5
1.572	15.5	20.2	35.7	56.0	-20.3
0.229	21.0	20.3	41.3	62.5	-21.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.3	20.1	42.4	46.0	-3.6
1.394	14.3	20.1	34.4	46.0	-11.6
1.546	14.1	20.2	34.3	46.0	-11.7
0.154	20.6	20.4	41.0	55.8	-14.8
0.229	15.3	20.3	35.6	52.5	-16.9
1.368	8.5	20.1	28.6	46.0	-17.4
1.572	7.7	20.2	27.9	46.0	-18.1

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	8	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

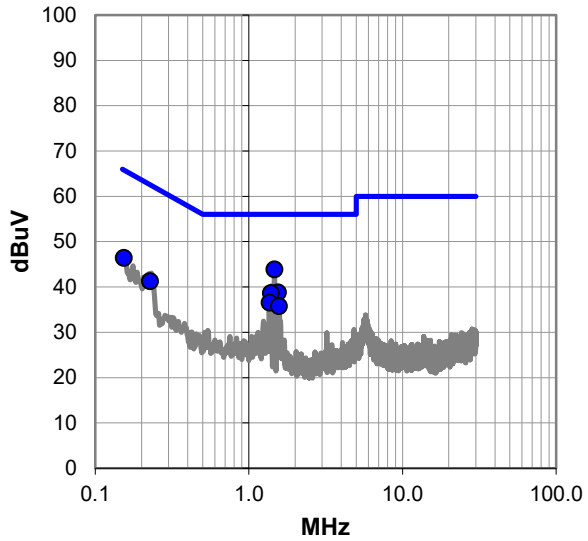
EUT OPERATING MODES

Single channel continuous transmission. Channel 36 5180 MHz, 6 Mbps.

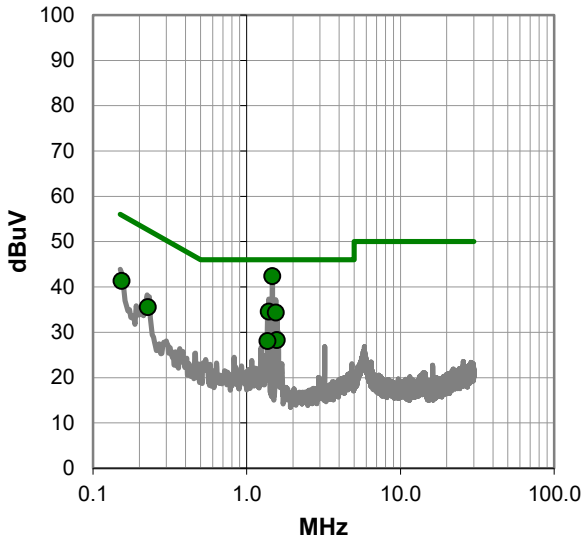
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #8

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	23.7	20.1	43.8	56.0	-12.2
1.546	18.6	20.2	38.8	56.0	-17.2
1.394	18.5	20.1	38.6	56.0	-17.4
0.153	26.0	20.4	46.4	65.8	-19.4
1.366	16.4	20.1	36.5	56.0	-19.5
1.573	15.6	20.2	35.8	56.0	-20.2
0.227	21.0	20.3	41.3	62.6	-21.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.2	20.1	42.3	46.0	-3.7
1.394	14.4	20.1	34.5	46.0	-11.5
1.546	14.2	20.2	34.4	46.0	-11.6
0.153	20.9	20.4	41.3	55.8	-14.5
0.227	15.3	20.3	35.6	52.6	-17.0
1.573	8.1	20.2	28.3	46.0	-17.7
1.366	7.9	20.1	28.0	46.0	-18.0

CONCLUSION

Pass

Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	9	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

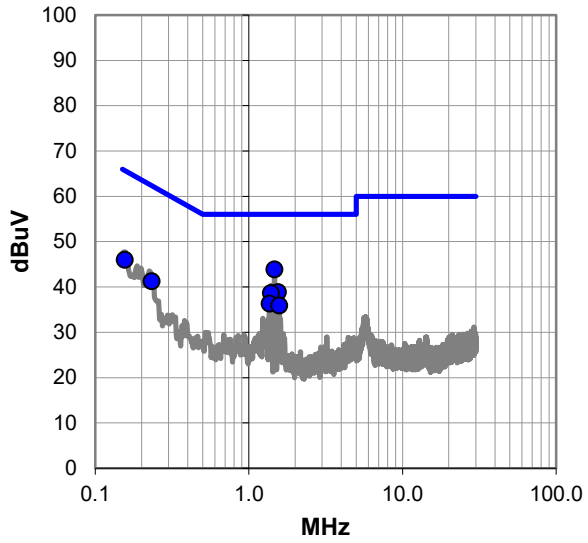
EUT OPERATING MODES

Single channel continuous transmission. Channel 48 5240 MHz, 6 Mbps.

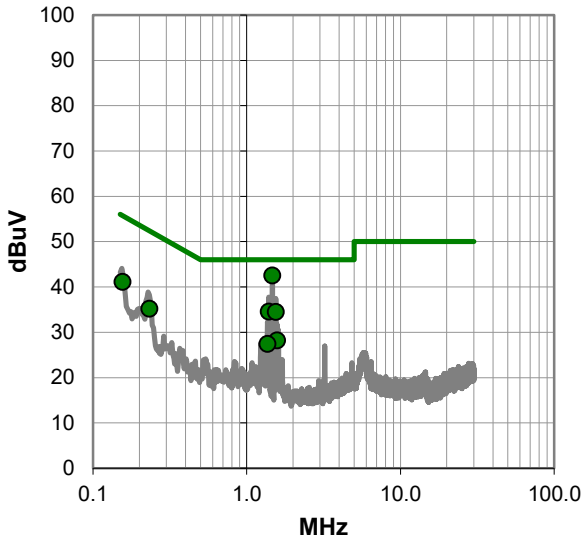
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #9

Quasi Peak Data - vs - Quasi Peak Limit

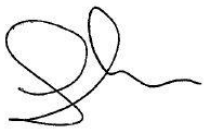
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	23.7	20.1	43.8	56.0	-12.2
1.548	18.7	20.2	38.9	56.0	-17.1
1.392	18.5	20.1	38.6	56.0	-17.4
1.366	16.2	20.1	36.3	56.0	-19.7
0.156	25.6	20.4	46.0	65.7	-19.7
1.576	15.7	20.2	35.9	56.0	-20.1
0.233	21.0	20.3	41.3	62.3	-21.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	22.4	20.1	42.5	46.0	-3.5
1.392	14.4	20.1	34.5	46.0	-11.5
1.548	14.3	20.2	34.5	46.0	-11.5
0.156	20.7	20.4	41.1	55.7	-14.6
0.233	14.9	20.3	35.2	52.3	-17.2
1.576	8.0	20.2	28.2	46.0	-17.8
1.366	7.3	20.1	27.4	46.0	-18.6

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	10	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

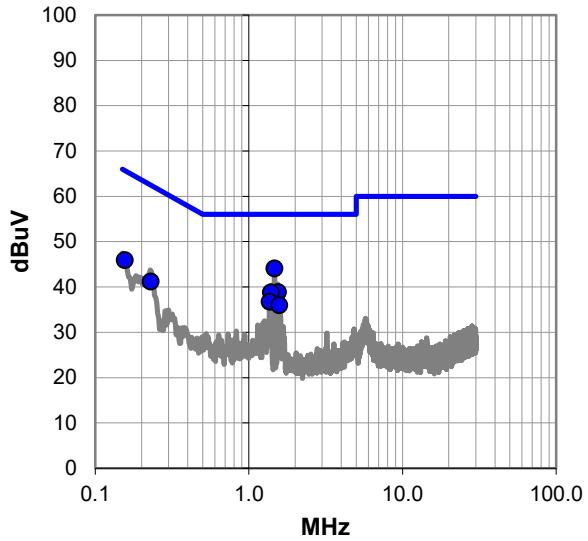
EUT OPERATING MODES

Single channel continuous transmission. Channel 48 5240 MHz, 6 Mbps.

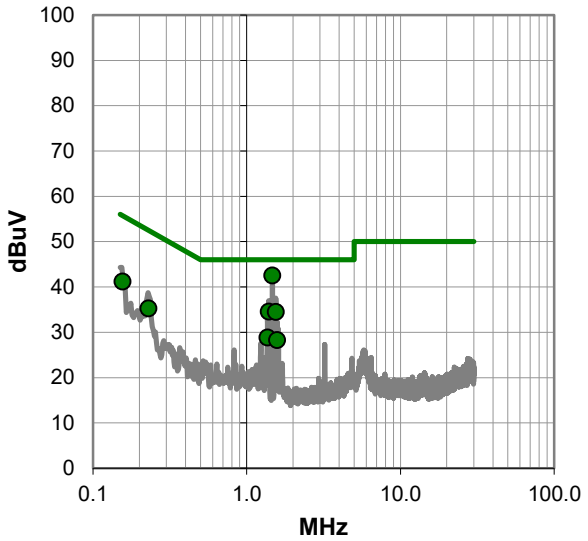
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #10

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.471	23.9	20.1	44.0	56.0	-12.0
1.548	18.7	20.2	38.9	56.0	-17.1
1.394	18.6	20.1	38.7	56.0	-17.3
1.370	16.6	20.1	36.7	56.0	-19.3
0.155	25.5	20.4	45.9	65.7	-19.8
1.575	15.8	20.2	36.0	56.0	-20.0
0.230	20.9	20.3	41.2	62.4	-21.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.471	22.4	20.1	42.5	46.0	-3.5
1.394	14.4	20.1	34.5	46.0	-11.5
1.548	14.3	20.2	34.5	46.0	-11.5
0.155	20.8	20.4	41.2	55.7	-14.5
1.370	8.7	20.1	28.8	46.0	-17.2
0.230	15.0	20.3	35.3	52.4	-17.2
1.575	8.1	20.2	28.3	46.0	-17.7

CONCLUSION

Pass

Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	11	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

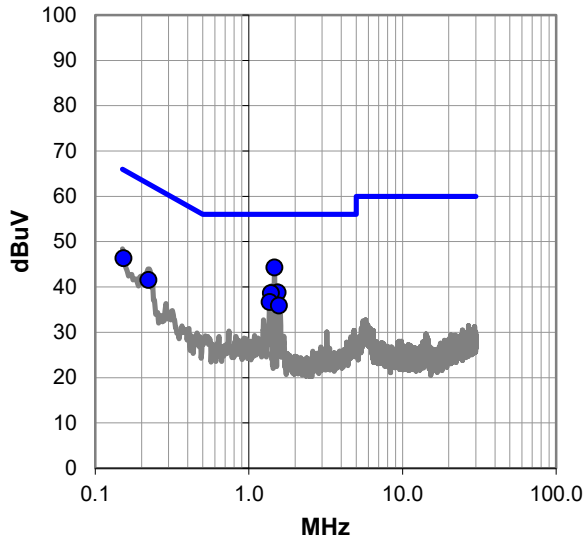
EUT OPERATING MODES

Single channel continuous transmission. Channel 52 5260 MHz, 6 Mbps.

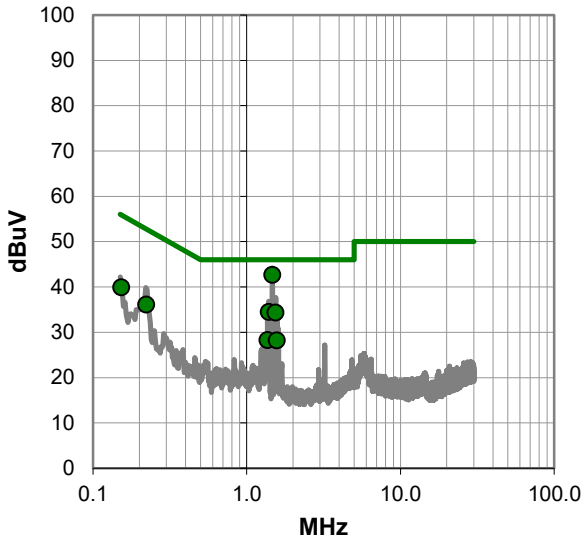
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC

WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #11

Quasi Peak Data - vs - Quasi Peak Limit

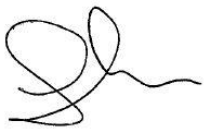
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	24.1	20.1	44.2	56.0	-11.8
1.543	18.6	20.2	38.8	56.0	-17.2
1.394	18.5	20.1	38.6	56.0	-17.4
1.367	16.5	20.1	36.6	56.0	-19.4
0.153	25.9	20.4	46.3	65.9	-19.6
1.574	15.7	20.2	35.9	56.0	-20.1
0.222	21.3	20.3	41.6	62.7	-21.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	22.5	20.1	42.6	46.0	-3.4
1.394	14.3	20.1	34.4	46.0	-11.6
1.543	14.2	20.2	34.4	46.0	-11.6
0.153	19.5	20.4	39.9	55.9	-16.0
0.222	15.8	20.3	36.1	52.7	-16.7
1.367	8.1	20.1	28.2	46.0	-17.8
1.574	8.0	20.2	28.2	46.0	-17.8

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	12	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

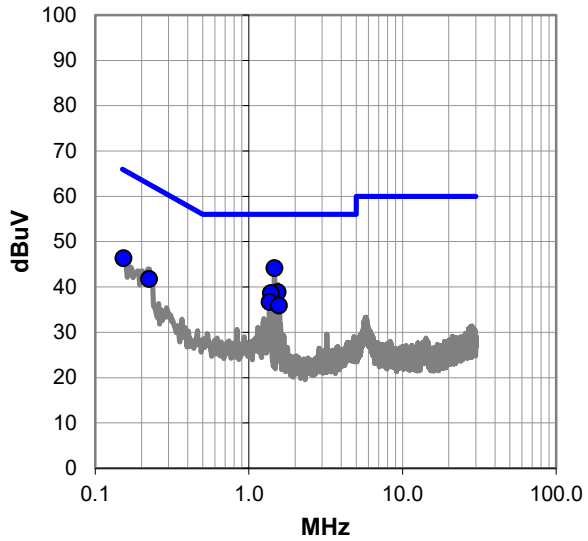
EUT OPERATING MODES

Single channel continuous transmission. Channel 52 5260 MHz, 6 Mbps.

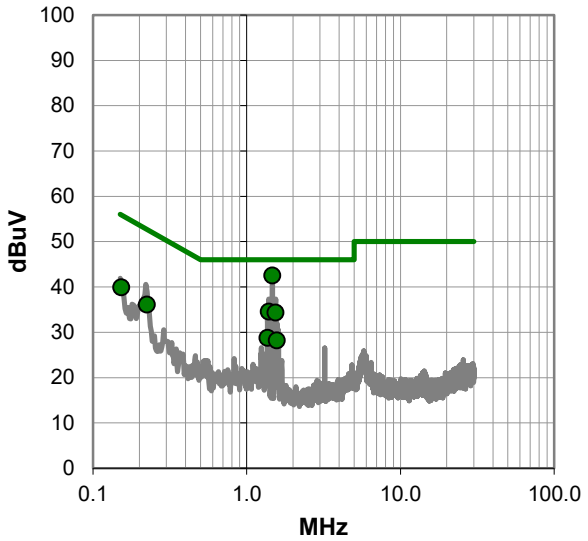
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC

WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #12

Quasi Peak Data - vs - Quasi Peak Limit

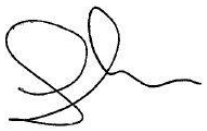
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.0	20.1	44.1	56.0	-11.9
1.544	18.7	20.2	38.9	56.0	-17.1
1.395	18.5	20.1	38.6	56.0	-17.4
1.369	16.5	20.1	36.6	56.0	-19.4
0.153	25.9	20.4	46.3	65.9	-19.6
1.574	15.7	20.2	35.9	56.0	-20.1
0.225	21.5	20.3	41.8	62.6	-20.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.4	20.1	42.5	46.0	-3.5
1.395	14.4	20.1	34.5	46.0	-11.5
1.544	14.2	20.2	34.4	46.0	-11.6
0.153	19.5	20.4	39.9	55.9	-16.0
0.225	15.8	20.3	36.1	52.6	-16.6
1.369	8.6	20.1	28.7	46.0	-17.3
1.574	8.0	20.2	28.2	46.0	-17.8

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	13	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

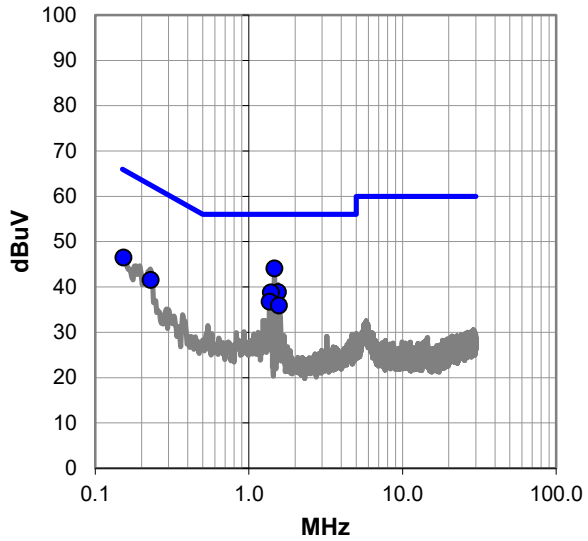
EUT OPERATING MODES

Single channel continuous transmission. Channel 64 5320 MHz, 6 Mbps.

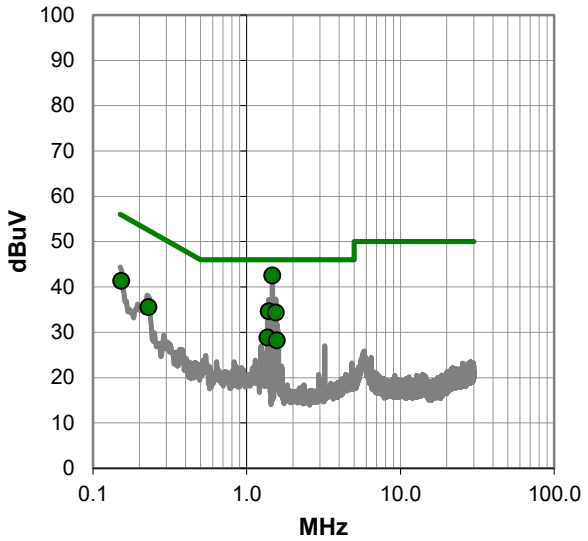
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #13

Quasi Peak Data - vs - Quasi Peak Limit

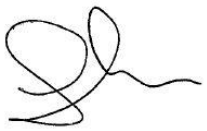
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	23.9	20.1	44.0	56.0	-12.0
1.546	18.7	20.2	38.9	56.0	-17.1
1.394	18.6	20.1	38.7	56.0	-17.3
1.369	16.6	20.1	36.7	56.0	-19.3
0.153	26.1	20.4	46.5	65.8	-19.3
1.574	15.7	20.2	35.9	56.0	-20.1
0.229	21.3	20.3	41.6	62.5	-20.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	22.4	20.1	42.5	46.0	-3.5
1.394	14.5	20.1	34.6	46.0	-11.4
1.546	14.2	20.2	34.4	46.0	-11.6
0.153	20.9	20.4	41.3	55.8	-14.5
0.229	15.3	20.3	35.6	52.5	-16.9
1.369	8.7	20.1	28.8	46.0	-17.2
1.574	8.0	20.2	28.2	46.0	-17.8

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	14	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

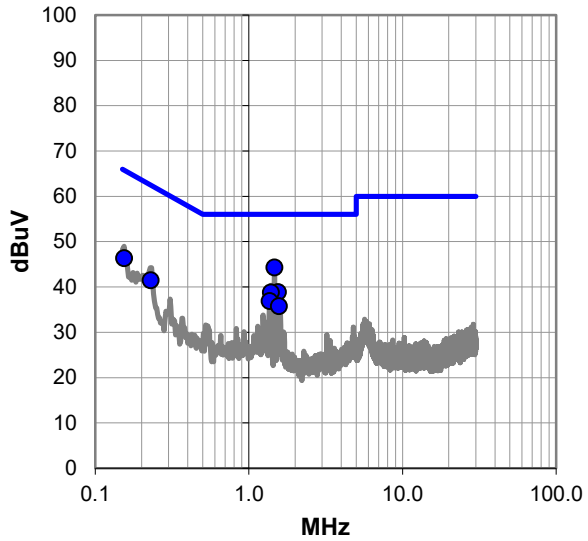
EUT OPERATING MODES

Single channel continuous transmission. Channel 64 5320 MHz, 6 Mbps.

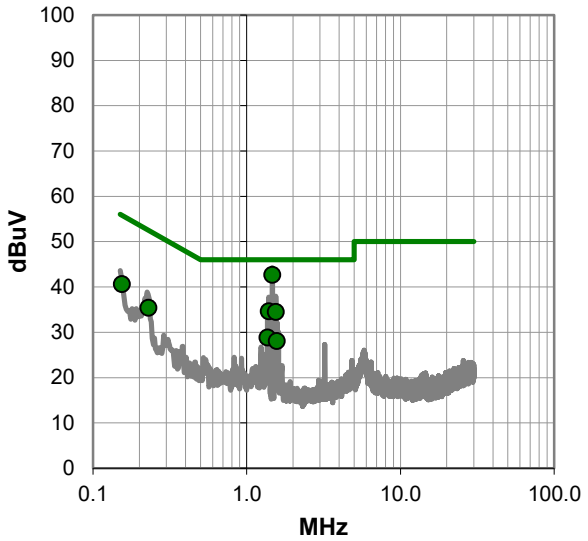
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #14

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.471	24.1	20.1	44.2	56.0	-11.8
1.546	18.7	20.2	38.9	56.0	-17.1
1.395	18.6	20.1	38.7	56.0	-17.3
1.369	16.7	20.1	36.8	56.0	-19.2
0.154	25.9	20.4	46.3	65.8	-19.5
1.573	15.6	20.2	35.8	56.0	-20.2
0.230	21.2	20.3	41.5	62.5	-21.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.471	22.5	20.1	42.6	46.0	-3.4
1.395	14.5	20.1	34.6	46.0	-11.4
1.546	14.3	20.2	34.5	46.0	-11.5
0.154	20.2	20.4	40.6	55.8	-15.2
0.230	15.1	20.3	35.4	52.5	-17.1
1.369	8.7	20.1	28.8	46.0	-17.2
1.573	7.9	20.2	28.1	46.0	-17.9

CONCLUSION

Pass

Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	15	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

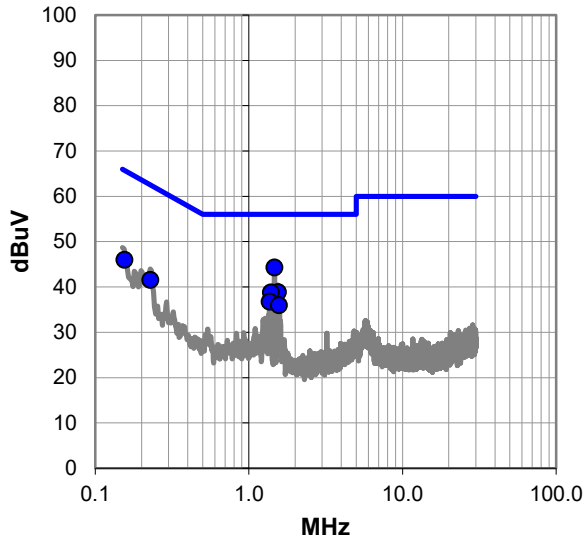
EUT OPERATING MODES

Single channel continuous transmission. Channel 100 5500 MHz, 6 Mbps.

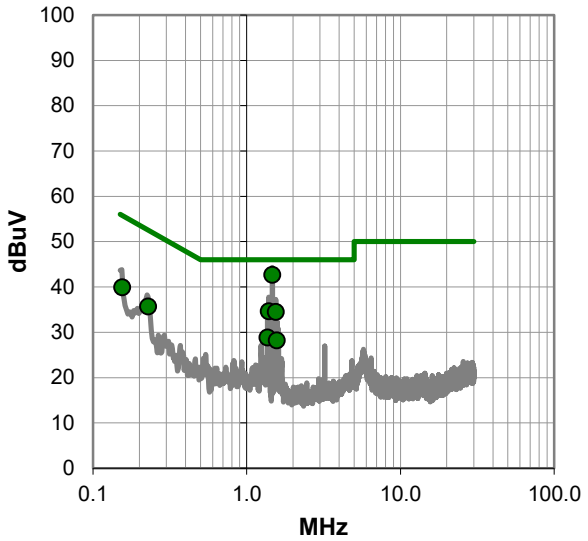
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC

WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #15

Quasi Peak Data - vs - Quasi Peak Limit

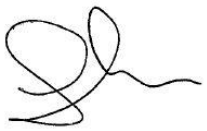
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.471	24.1	20.1	44.2	56.0	-11.8
1.546	18.7	20.2	38.9	56.0	-17.1
1.395	18.6	20.1	38.7	56.0	-17.3
1.370	16.6	20.1	36.7	56.0	-19.3
0.155	25.6	20.4	46.0	65.7	-19.7
1.574	15.8	20.2	36.0	56.0	-20.0
0.228	21.3	20.3	41.6	62.5	-21.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.471	22.5	20.1	42.6	46.0	-3.4
1.395	14.5	20.1	34.6	46.0	-11.4
1.546	14.3	20.2	34.5	46.0	-11.5
0.155	19.5	20.4	39.9	55.7	-15.8
0.228	15.4	20.3	35.7	52.5	-16.9
1.370	8.7	20.1	28.8	46.0	-17.2
1.574	8.0	20.2	28.2	46.0	-17.8

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	16	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

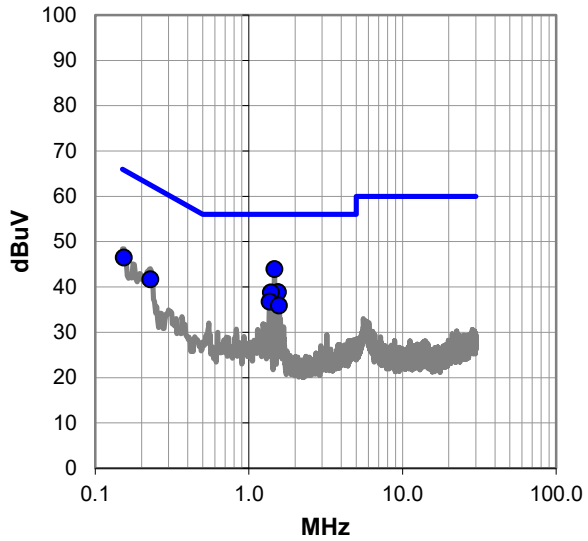
EUT OPERATING MODES

Single channel continuous transmission. Channel 100 5500 MHz, 6 Mbps.

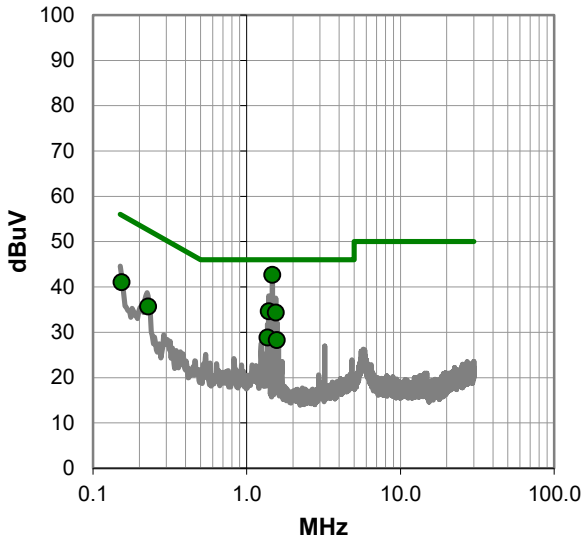
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #16

Quasi Peak Data - vs - Quasi Peak Limit

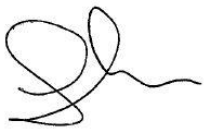
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	23.8	20.1	43.9	56.0	-12.1
1.546	18.7	20.2	38.9	56.0	-17.1
1.394	18.6	20.1	38.7	56.0	-17.3
1.370	16.6	20.1	36.7	56.0	-19.3
0.154	26.1	20.4	46.5	65.8	-19.3
1.574	15.7	20.2	35.9	56.0	-20.1
0.229	21.4	20.3	41.7	62.5	-20.8

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	22.5	20.1	42.6	46.0	-3.4
1.394	14.5	20.1	34.6	46.0	-11.4
1.546	14.2	20.2	34.4	46.0	-11.6
0.154	20.6	20.4	41.0	55.8	-14.8
0.229	15.4	20.3	35.7	52.5	-16.8
1.370	8.7	20.1	28.8	46.0	-17.2
1.574	8.1	20.2	28.3	46.0	-17.7

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	17	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

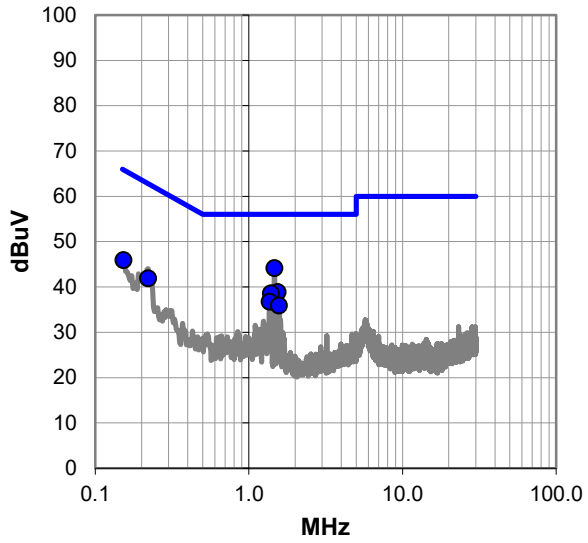
EUT OPERATING MODES

Single channel continuous transmission. Channel 120 5600 MHz, 6 Mbps.

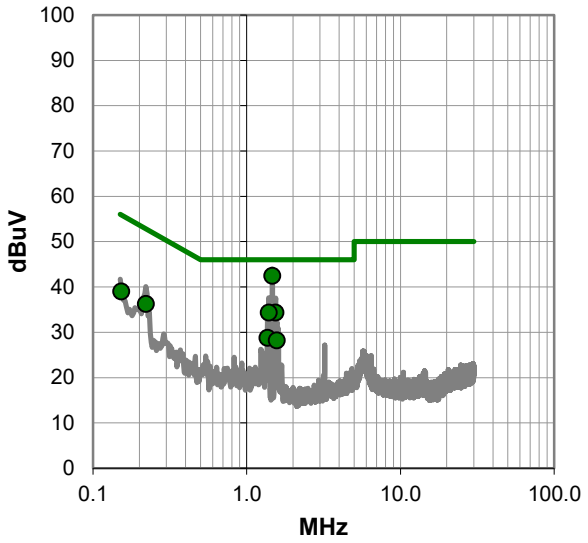
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #17

Quasi Peak Data - vs - Quasi Peak Limit

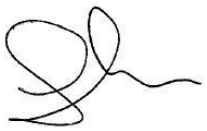
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.0	20.1	44.1	56.0	-11.9
1.544	18.7	20.2	38.9	56.0	-17.1
1.394	18.4	20.1	38.5	56.0	-17.5
1.368	16.6	20.1	36.7	56.0	-19.3
0.153	25.5	20.4	45.9	65.8	-19.9
1.574	15.7	20.2	35.9	56.0	-20.1
0.221	21.6	20.3	41.9	62.8	-20.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.3	20.1	42.4	46.0	-3.6
1.544	14.2	20.2	34.4	46.0	-11.6
1.394	14.2	20.1	34.3	46.0	-11.7
0.221	16.0	20.3	36.3	52.8	-16.5
0.153	18.6	20.4	39.0	55.8	-16.8
1.368	8.6	20.1	28.7	46.0	-17.3
1.574	8.0	20.2	28.2	46.0	-17.8

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	18	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

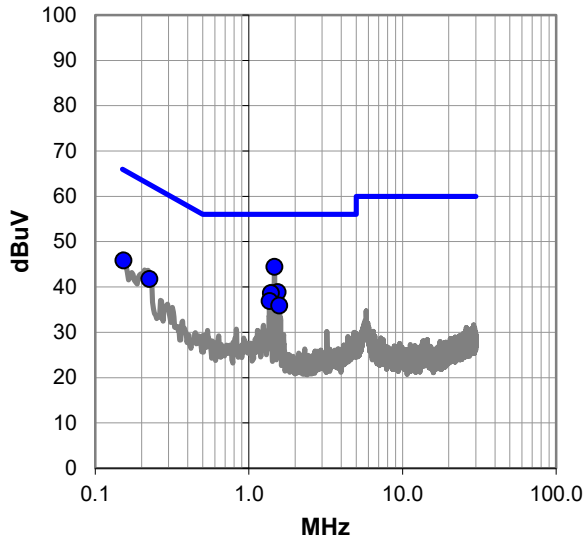
EUT OPERATING MODES

Single channel continuous transmission. Channel 120 5600 MHz, 6 Mbps.

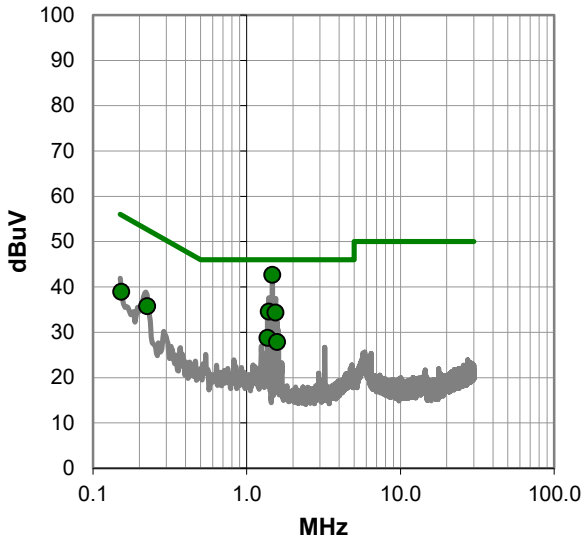
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #18

Quasi Peak Data - vs - Quasi Peak Limit

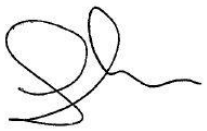
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	24.3	20.1	44.4	56.0	-11.6
1.544	18.7	20.2	38.9	56.0	-17.1
1.395	18.5	20.1	38.6	56.0	-17.4
1.369	16.7	20.1	36.8	56.0	-19.2
0.153	25.4	20.4	45.8	65.8	-20.0
1.576	15.7	20.2	35.9	56.0	-20.1
0.225	21.5	20.3	41.8	62.6	-20.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	22.5	20.1	42.6	46.0	-3.4
1.395	14.4	20.1	34.5	46.0	-11.5
1.544	14.2	20.2	34.4	46.0	-11.6
0.225	15.5	20.3	35.8	52.6	-16.9
0.153	18.5	20.4	38.9	55.8	-16.9
1.369	8.6	20.1	28.7	46.0	-17.3
1.576	7.7	20.2	27.9	46.0	-18.1

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	19	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

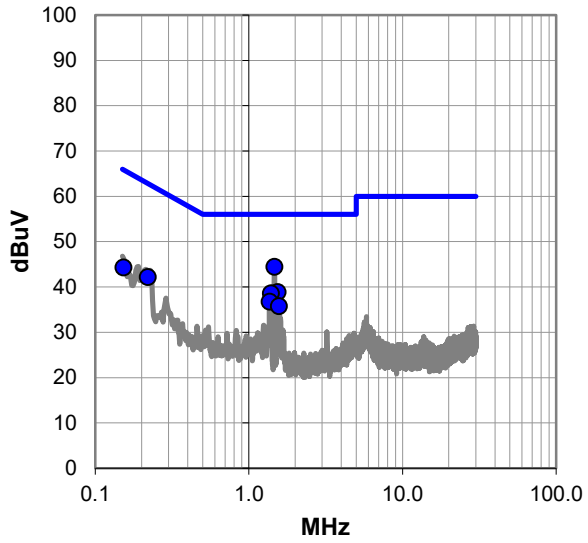
EUT OPERATING MODES

Single channel continuous transmission. Channel 140 5700 MHz, 6 Mbps.

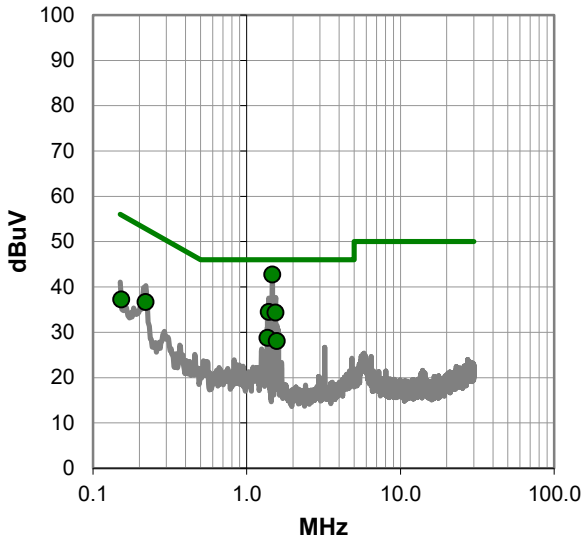
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #19

Quasi Peak Data - vs - Quasi Peak Limit

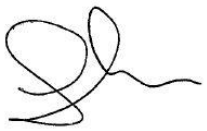
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	24.3	20.1	44.4	56.0	-11.6
1.542	18.7	20.2	38.9	56.0	-17.1
1.396	18.4	20.1	38.5	56.0	-17.5
1.369	16.6	20.1	36.7	56.0	-19.3
1.572	15.6	20.2	35.8	56.0	-20.2
0.220	21.9	20.3	42.2	62.8	-20.7
0.153	23.9	20.4	44.3	65.8	-21.5

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	22.6	20.1	42.7	46.0	-3.3
1.396	14.3	20.1	34.4	46.0	-11.6
1.542	14.2	20.2	34.4	46.0	-11.6
0.220	16.4	20.3	36.7	52.8	-16.2
1.369	8.6	20.1	28.7	46.0	-17.3
1.572	7.9	20.2	28.1	46.0	-17.9
0.153	16.8	20.4	37.2	55.8	-18.6

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	20	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

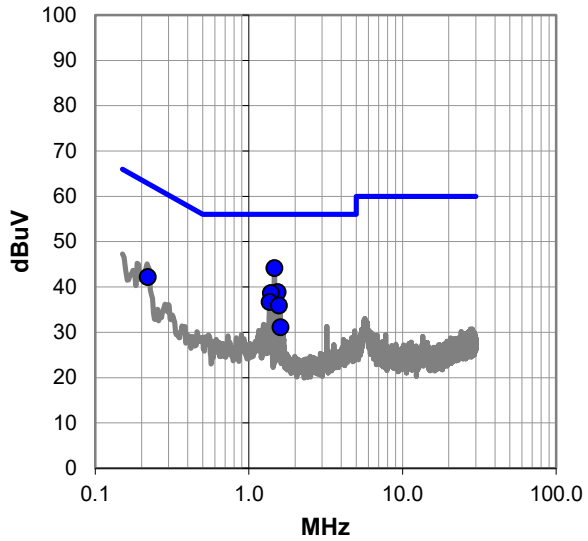
EUT OPERATING MODES

Single channel continuous transmission. Channel 140 5700 MHz, 6 Mbps.

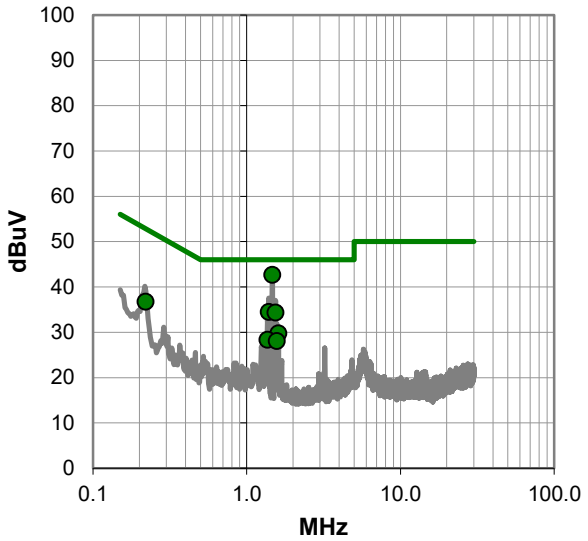
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #20

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.0	20.1	44.1	56.0	-11.9
1.542	18.7	20.2	38.9	56.0	-17.1
1.395	18.5	20.1	38.6	56.0	-17.4
1.367	16.5	20.1	36.6	56.0	-19.4
1.574	15.7	20.2	35.9	56.0	-20.1
0.220	21.9	20.3	42.2	62.8	-20.7
1.610	10.9	20.2	31.1	56.0	-24.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.5	20.1	42.6	46.0	-3.4
1.395	14.3	20.1	34.4	46.0	-11.6
1.542	14.2	20.2	34.4	46.0	-11.6
0.220	16.5	20.3	36.8	52.8	-16.1
1.610	9.6	20.2	29.8	46.0	-16.2
1.367	8.2	20.1	28.3	46.0	-17.7
1.574	7.9	20.2	28.1	46.0	-17.9

CONCLUSION

Pass

Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	21	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

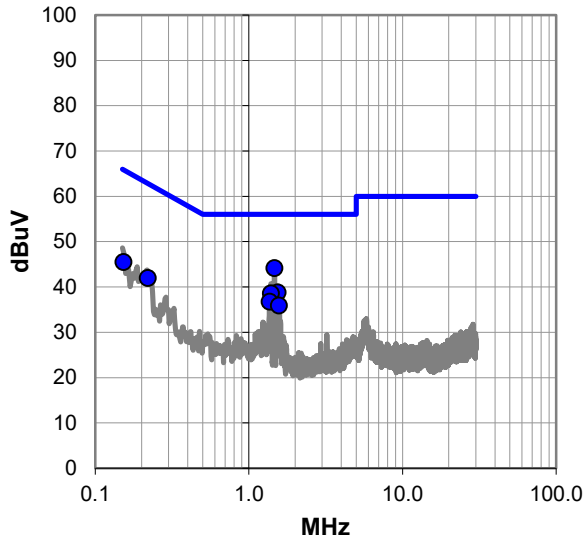
EUT OPERATING MODES

Single channel continuous transmission. Channel 149 5745 MHz, 6 Mbps.

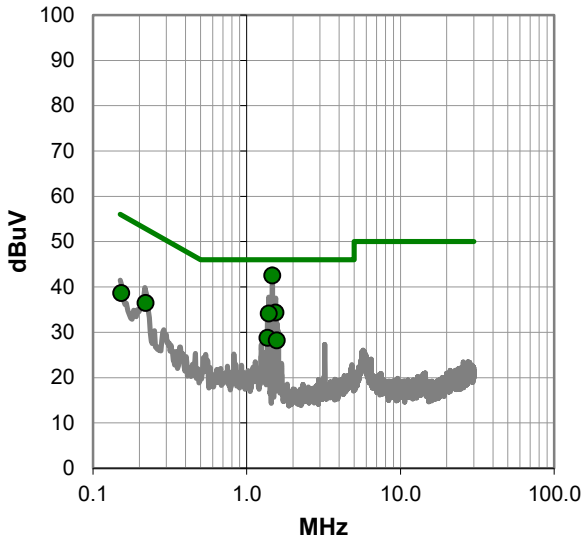
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #21

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.0	20.1	44.1	56.0	-11.9
1.543	18.6	20.2	38.8	56.0	-17.2
1.394	18.4	20.1	38.5	56.0	-17.5
1.369	16.6	20.1	36.7	56.0	-19.3
1.574	15.7	20.2	35.9	56.0	-20.1
0.153	25.1	20.4	45.5	65.9	-20.4
0.220	21.7	20.3	42.0	62.8	-20.8

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.4	20.1	42.5	46.0	-3.5
1.543	14.2	20.2	34.4	46.0	-11.6
1.394	14.0	20.1	34.1	46.0	-11.9
0.220	16.2	20.3	36.5	52.8	-16.3
0.153	18.2	20.4	38.6	55.9	-17.3
1.369	8.6	20.1	28.7	46.0	-17.3
1.574	8.0	20.2	28.2	46.0	-17.8

CONCLUSION

Pass

Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	22	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

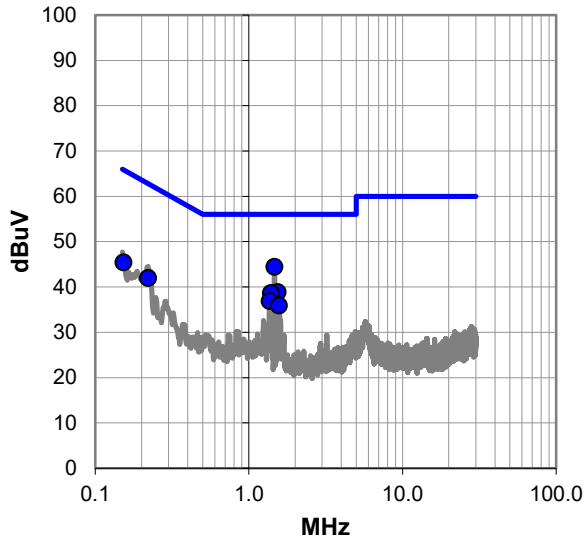
EUT OPERATING MODES

Single channel continuous transmission. Channel 149 5745 MHz, 6 Mbps.

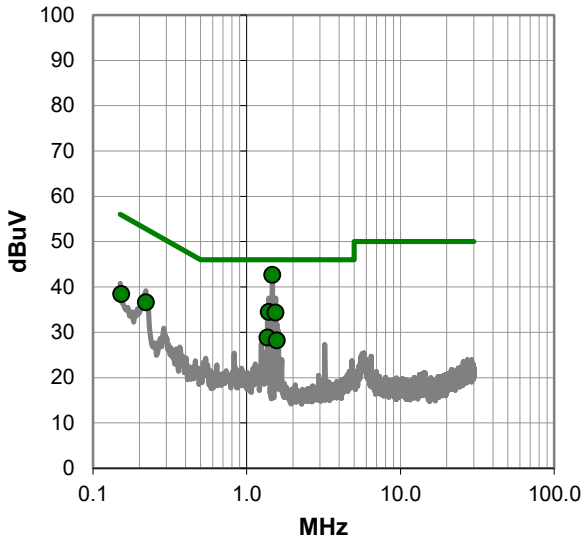
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #22

Quasi Peak Data - vs - Quasi Peak Limit

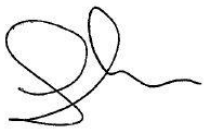
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.3	20.1	44.4	56.0	-11.6
1.542	18.7	20.2	38.9	56.0	-17.1
1.395	18.5	20.1	38.6	56.0	-17.4
1.369	16.7	20.1	36.8	56.0	-19.2
1.572	15.7	20.2	35.9	56.0	-20.1
0.153	25.0	20.4	45.4	65.8	-20.4
0.221	21.7	20.3	42.0	62.8	-20.8

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.5	20.1	42.6	46.0	-3.4
1.395	14.3	20.1	34.4	46.0	-11.6
1.542	14.2	20.2	34.4	46.0	-11.6
0.221	16.3	20.3	36.6	52.8	-16.2
1.369	8.7	20.1	28.8	46.0	-17.2
0.153	18.0	20.4	38.4	55.8	-17.4
1.572	8.0	20.2	28.2	46.0	-17.8

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	23	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

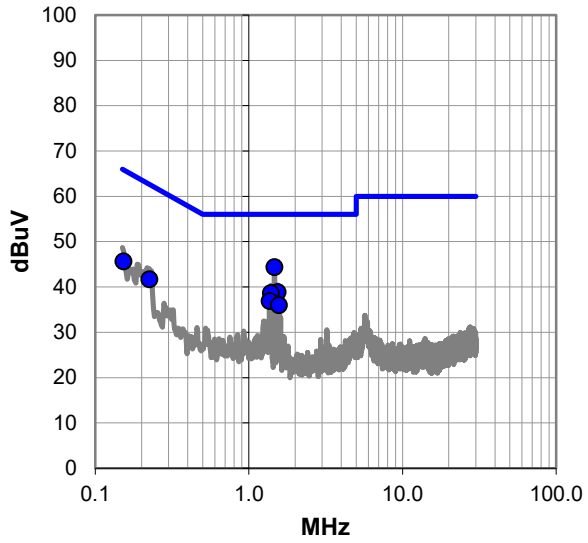
EUT OPERATING MODES

Single channel continuous transmission. Channel 157 5785 MHz, 6 Mbps.

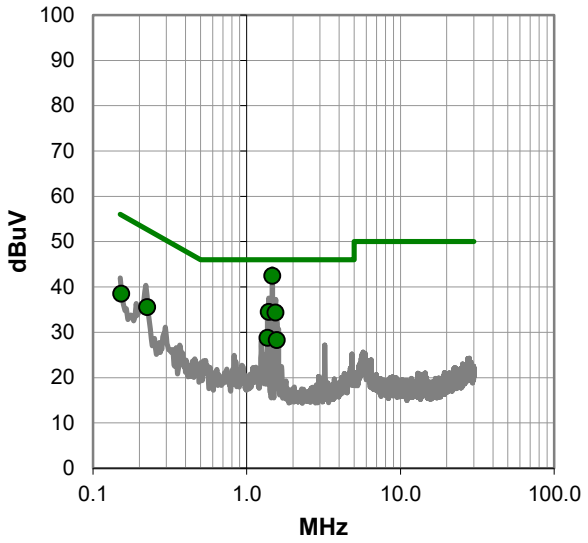
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC

WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #23

Quasi Peak Data - vs - Quasi Peak Limit

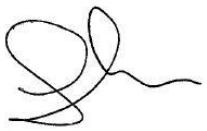
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.2	20.1	44.3	56.0	-11.7
1.543	18.7	20.2	38.9	56.0	-17.1
1.396	18.5	20.1	38.6	56.0	-17.4
1.368	16.7	20.1	36.8	56.0	-19.2
1.574	15.8	20.2	36.0	56.0	-20.0
0.153	25.2	20.4	45.6	65.8	-20.2
0.225	21.4	20.3	41.7	62.6	-21.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.3	20.1	42.4	46.0	-3.6
1.396	14.3	20.1	34.4	46.0	-11.6
1.543	14.2	20.2	34.4	46.0	-11.6
0.225	15.3	20.3	35.6	52.6	-17.1
1.368	8.6	20.1	28.7	46.0	-17.3
0.153	18.1	20.4	38.5	55.8	-17.3
1.574	8.1	20.2	28.3	46.0	-17.7

CONCLUSION

Pass



Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	24	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

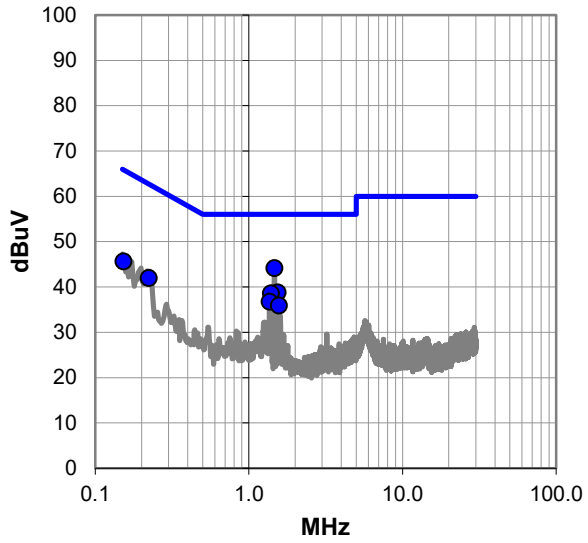
EUT OPERATING MODES

Single channel continuous transmission. Channel 157 5785 MHz, 6 Mbps.

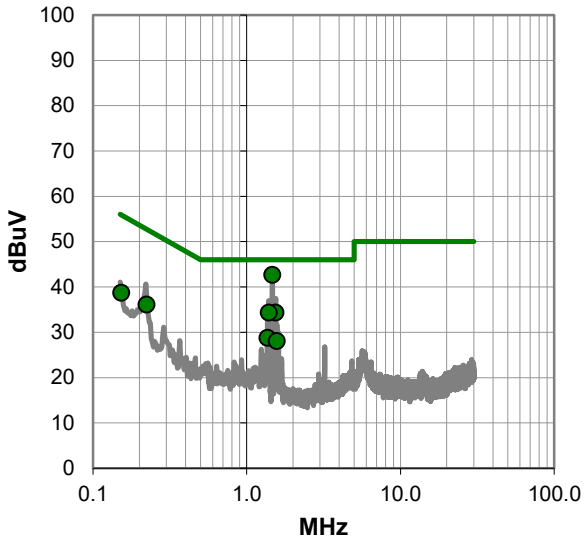
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC

WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #24

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	24.0	20.1	44.1	56.0	-11.9
1.543	18.6	20.2	38.8	56.0	-17.2
1.394	18.4	20.1	38.5	56.0	-17.5
1.369	16.6	20.1	36.7	56.0	-19.3
1.572	15.7	20.2	35.9	56.0	-20.1
0.153	25.2	20.4	45.6	65.9	-20.3
0.224	21.7	20.3	42.0	62.7	-20.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.469	22.5	20.1	42.6	46.0	-3.4
1.543	14.2	20.2	34.4	46.0	-11.6
1.394	14.2	20.1	34.3	46.0	-11.7
0.224	15.8	20.3	36.1	52.7	-16.6
0.153	18.3	20.4	38.7	55.9	-17.2
1.369	8.6	20.1	28.7	46.0	-17.3
1.572	7.9	20.2	28.1	46.0	-17.9

CONCLUSION

Pass

Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	25	Line:	Positive Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

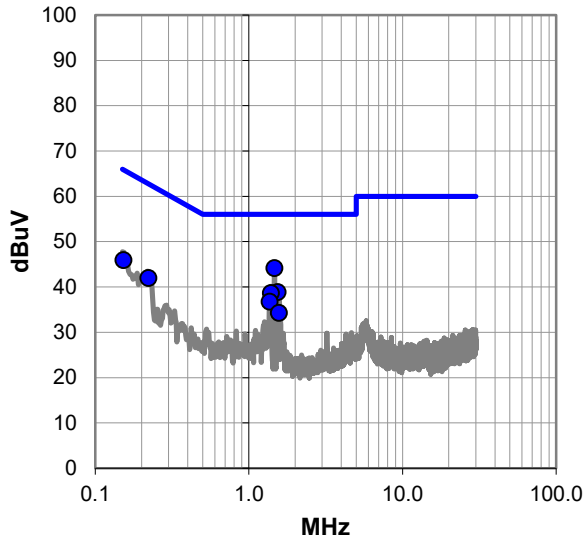
EUT OPERATING MODES

Single channel continuous transmission. Channel 165 5825 MHz, 6 Mbps.

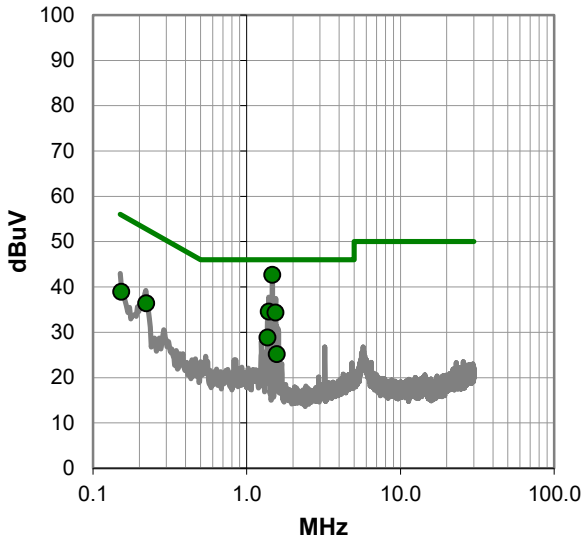
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #25

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	24.0	20.1	44.1	56.0	-11.9
1.543	18.7	20.2	38.9	56.0	-17.1
1.395	18.5	20.1	38.6	56.0	-17.4
1.370	16.6	20.1	36.7	56.0	-19.3
0.153	25.5	20.4	45.9	65.8	-20.0
0.222	21.7	20.3	42.0	62.7	-20.8
1.568	14.1	20.2	34.3	56.0	-21.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.470	22.5	20.1	42.6	46.0	-3.4
1.395	14.4	20.1	34.5	46.0	-11.5
1.543	14.2	20.2	34.4	46.0	-11.6
0.222	16.1	20.3	36.4	52.7	-16.4
0.153	18.5	20.4	38.9	55.8	-17.0
1.370	8.7	20.1	28.8	46.0	-17.2
1.568	5.0	20.2	25.2	46.0	-20.8

CONCLUSION

Pass

Tested By

AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

EUT:	Zoll CF Card Module	Work Order:	LGPD0165
Serial Number:	0216M00003	Date:	02/02/2016
Customer:	Zoll Medical Corp.	Temperature:	22.5°C
Attendees:	Adam Ford	Relative Humidity:	22.6%
Customer Project:	None	Bar. Pressure:	985.4 mb
Tested By:	Jared Ison	Job Site:	MN03
Power:	5 VDC	Configuration:	LGPD0165-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2016	ANSI C63.10:2013

TEST PARAMETERS

Run #:	26	Line:	Negative Lead	Add. Ext. Attenuation (dB):	0

COMMENTS

None

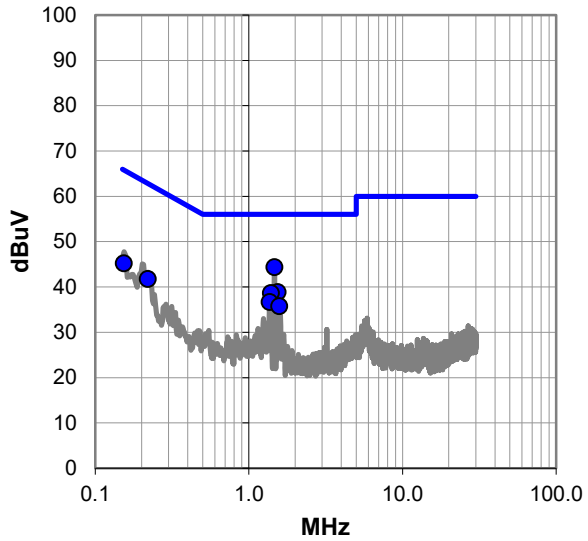
EUT OPERATING MODES

Single channel continuous transmission. Channel 165 5825 MHz, 6 Mbps.

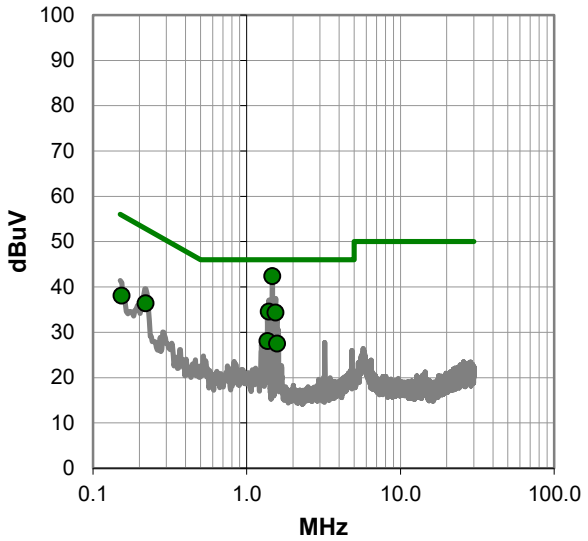
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC - POWERLINE CONDUCTED EMISSIONS

NORTHWEST EMC
WTD.2015.12.01
PSA-ESCI 2015.07.01, EmiR5 2015.11.06

RESULTS - Run #26

Quasi Peak Data - vs - Quasi Peak Limit

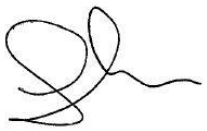
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.468	24.2	20.1	44.3	56.0	-11.7
1.543	18.7	20.2	38.9	56.0	-17.1
1.395	18.5	20.1	38.6	56.0	-17.4
1.366	16.5	20.1	36.6	56.0	-19.4
1.576	15.6	20.2	35.8	56.0	-20.2
0.153	24.8	20.4	45.2	65.8	-20.6
0.220	21.5	20.3	41.8	62.8	-21.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
1.468	22.2	20.1	42.3	46.0	-3.7
1.395	14.4	20.1	34.5	46.0	-11.5
1.543	14.2	20.2	34.4	46.0	-11.6
0.220	16.1	20.3	36.4	52.8	-16.5
0.153	17.7	20.4	38.1	55.8	-17.7
1.366	7.9	20.1	28.0	46.0	-18.0
1.576	7.3	20.2	27.5	46.0	-18.5

CONCLUSION

Pass



Tested By

SPURIOUS RADIATED EMISSIONS

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

MODES OF OPERATION

Transmitting 802.11 - channels 36, 48, 52, 64, 100, 120, 140, 149, 157, and 165; 6 Mbps, 36 Mbps, 54 Mbps, MCS0, and MCS7 data rates.

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

LGPD0165 - 1

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
Filter - Band Pass/Notch	Micro-Tronics	BRC50705	LFI	10/21/2015	12 mo
Filter - Band Pass/Notch	Micro-Tronics	BRC50704	LFH	10/21/2015	12 mo
Filter - Band Pass/Notch	Micro-Tronics	BRC50703	LFG	10/21/2015	12 mo
Filter - Low Pass	Micro-Tronics	LPM50004	LFK	10/21/2015	12 mo
Amplifier - Pre-Amplifier	Miteq	JSW45-26004000-40-5P	AVN	9/18/2015	12 mo
Cable	Northwest EMC	TTBJ141-KMKM-72	MNQ	9/18/2015	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-10	AIC	NCR	0 mo
Amplifier - Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	9/18/2015	12 mo
Cable	Northwest EMC	18-26GHz Standard Gain Horn Cable	MNP	9/18/2015	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-09	AHG	NCR	0 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVW	3/2/2015	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-08	AIQ	NCR	0 mo
Cable	ESM Cable Corp.	Standard Gain Horn Cables	MNJ	12/7/2015	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVV	3/2/2015	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-07	AXP	NCR	0 mo
Amplifier - Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVT	3/10/2015	12 mo
Cable	ESM Cable Corp.	Double Ridge Guide Horn Cables	MNI	12/7/2015	12 mo
Antenna - Double Ridge	ETS Lindgren	3115	AJA	6/3/2014	24 mo
Amplifier - Pre-Amplifier	Miteq	AM-1616-1000	AVO	12/10/2015	12 mo
Cable	ESM Cable Corp.	Bilog Cables	MNH	12/7/2015	12 mo
Antenna - Biconilog	Teseq	CBL 6141B	AYD	1/6/2016	24 mo
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	2/10/2015	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

TEST DESCRIPTION

The highest gain antenna of each type to be used with the EUT was tested. The EUT was configured for the required transmit frequency in each operational band and the modes as showed in the data sheets.

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.

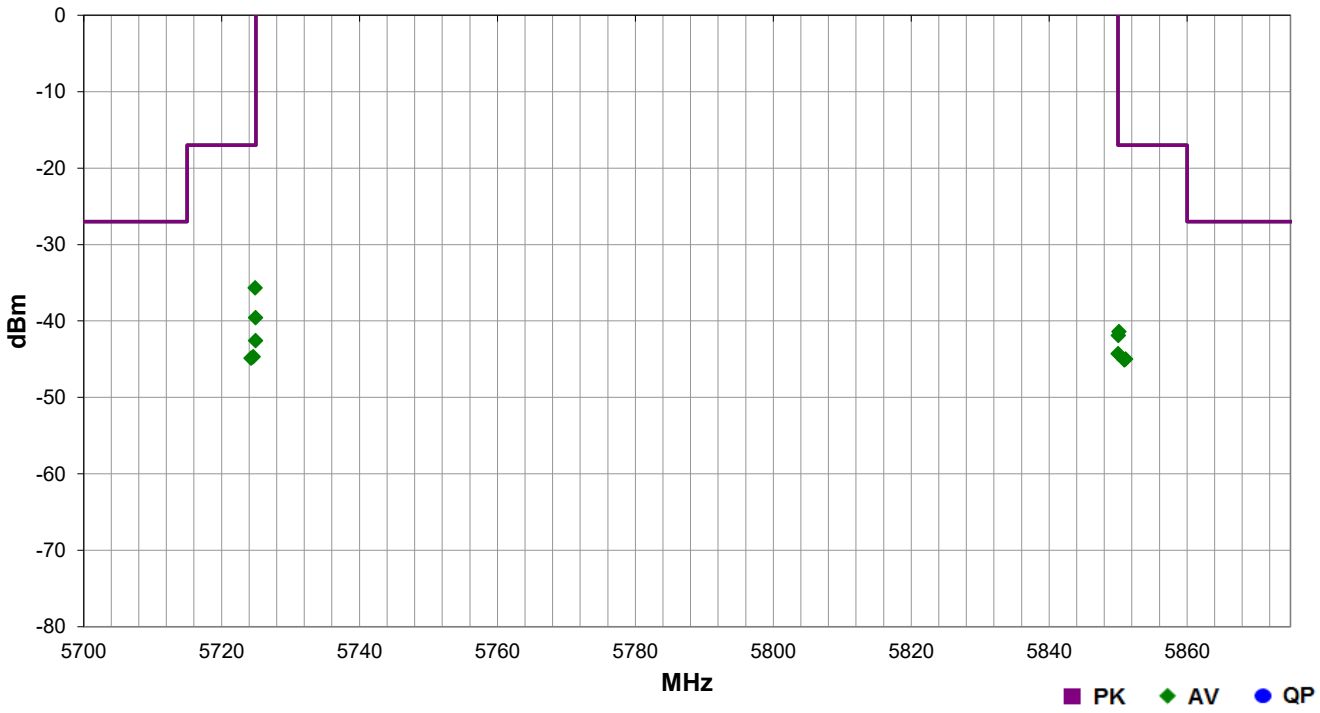
While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.10:2009). A preamp and high pass filter (and notch filter)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

SPURIOUS RADIATED EMISSIONS

Work Order:	LGPD0165	**Date:**	01/22/16		
Project:	None	**Temperature:**	21.8 °C		
Job Site:	MN05	**Humidity:**	17.5% RH		
Serial Number:	0216M00003	**Barometric Pres.:**	1001.8 mbar	**Tested by:**	Dustin Sparks
EUT:	Zoll CF Card Module				
Configuration:	1				
Customer:	ZOLL Medical Corp.				
Attendees:	Adam Ford				
EUT Power:	230VAC/50Hz				
Operating Mode:	Transmitting 802.11 - channels 36, 48, 52, 64, 100, 120, 140, 149, 157, and 165; 6 Mbps, 36 Mbps, 54 Mbps, MCS0, and MCS7 data rates.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.407:2015	

Run #	55	**Test Distance (m)**	1	**Antenna Height(s)**	1(m)	**Results**	Pass



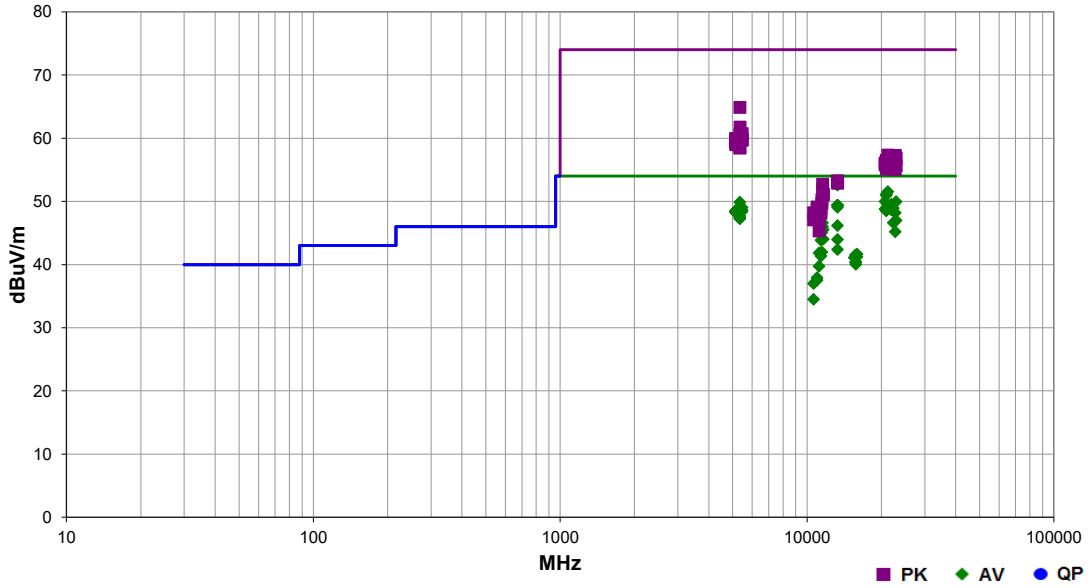
	Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
	5724.867	1.6	184.1	Horz	AV	2.70E-07	-35.7	-17.0	-18.7	Ch 149, EUT horz, MCS0
	5724.950	1.6	348.9	Horz	AV	1.10E-07	-39.6	-17.0	-22.6	Ch 149, EUT horz, 6 Mbps
	5850.133	1.6	336.0	Horz	AV	7.25E-08	-41.4	-17.0	-24.4	Ch 165, EUT horz, MCS0
	5850.050	1.6	326.9	Horz	AV	6.46E-08	-41.9	-17.0	-24.9	Ch 165, EUT horz, 6 Mbps
	5724.933	1.6	322.0	Horz	AV	5.52E-08	-42.6	-17.0	-25.6	Ch 149, EUT horz, 36 Mbps
	5850.000	1.6	326.8	Horz	AV	3.72E-08	-44.3	-17.0	-27.3	Ch 165, EUT horz, 36 Mbps
	5724.608	1.6	8.1	Horz	AV	3.40E-08	-44.7	-17.0	-27.7	Ch 149, EUT horz, 54 Mbps
	5724.300	1.6	148.1	Horz	AV	3.25E-08	-44.9	-17.0	-27.9	Ch 149, EUT horz, MCS7
	5851.100	1.6	326.8	Horz	AV	3.17E-08	-45.0	-17.0	-28.0	Ch 165, EUT horz, 54 Mbps
	5850.908	1.6	360.0	Horz	AV	3.10E-08	-45.1	-17.0	-28.1	Ch 165, EUT horz, MCS7

SPURIOUS RADIATED EMISSIONS

Work Order:	LGPD0165	**Date:**	01/25/16		
Project:	None	**Temperature:**	22.5 °C		
Job Site:	MN05	**Humidity:**	21.1% RH		
Serial Number:	0216M00003	**Barometric Pres.:**	980.3 mbar	**Tested by:**	Dustin Sparks
EUT:	Zoll CF Card Module				
Configuration:	1				
Customer:	ZOLL Medical Corp.				
Attendees:	Adam Ford				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting 802.11 - channels 36, 48, 52, 64, 100, 120, 140, 149, 157, and 165; 6 Mbps, 36 Mbps, 54 Mbps, MCS0, and MCS7 data rates.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.407:2016	ANSI C63.10:2013

Run #	122	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
13299.990	47.4	5.7	1.4	0.0	3.0	0.0	Horz	AV	0.0	53.1	54.0	-0.9	Ch 64, EUT on side, 6 Mbps
13299.990	46.9	5.7	1.7	360.0	3.0	0.0	Vert	AV	0.0	52.6	54.0	-1.4	Ch 64, EUT vert, 6 Mbps
21279.960	38.4	13.1	1.5	20.0	3.0	0.0	Horz	AV	0.0	51.5	54.0	-2.5	Ch 64, EUT on side, 6 Mbps
21040.070	38.1	13.1	1.6	289.9	3.0	0.0	Horz	AV	0.0	51.2	54.0	-2.8	Ch 52, EUT on side, 6 Mbps
20959.950	37.9	13.1	1.6	292.0	3.0	0.0	Horz	AV	0.0	51.0	54.0	-3.0	Ch 48, EUT on side, 6 Mbps
20720.070	37.0	13.0	1.5	324.0	3.0	0.0	Horz	AV	0.0	50.0	54.0	-4.0	Ch 36, EUT on side, 6 Mbps
22979.990	36.0	14.0	1.5	315.9	3.0	0.0	Vert	AV	0.0	50.0	54.0	-4.0	Ch 149, EUT vert, 6 Mbps
5350.150	23.9	35.5	1.6	360.0	1.0	0.0	Horz	AV	-9.5	49.9	54.0	-4.1	Ch 64, EUT horz, MCS0
22000.000	36.1	13.4	1.6	347.9	3.0	0.0	Vert	AV	0.0	49.5	54.0	-4.5	Ch 100, EUT vert, 6 Mbps
13300.020	43.7	5.7	1.0	41.1	3.0	0.0	Horz	AV	0.0	49.4	54.0	-4.6	Ch 64, EUT on side, MCS7
13300.000	43.7	5.7	1.0	41.1	3.0	0.0	Horz	AV	0.0	49.4	54.0	-4.6	Ch 64, EUT on side, 36 Mbps
13300.010	43.7	5.7	1.0	41.1	3.0	0.0	Horz	AV	0.0	49.4	54.0	-4.6	Ch 64, EUT on side, 54 Mbps
13300.010	43.7	5.7	1.0	41.1	3.0	0.0	Horz	AV	0.0	49.4	54.0	-4.6	Ch 64, EUT on side, MCS0
21279.980	36.0	13.1	1.6	321.0	3.0	0.0	Vert	AV	0.0	49.1	54.0	-4.9	Ch 64, EUT vert, 6 Mbps
13300.000	43.4	5.7	1.7	26.1	3.0	0.0	Horz	AV	0.0	49.1	54.0	-4.9	Ch 64, EUT vert, 6 Mbps
5459.925	22.6	36.0	1.6	128.0	1.0	0.0	Horz	AV	-9.5	49.0	54.0	-5.0	Ch 100, EUT horz, MCS0
22400.040	35.3	13.6	1.6	319.9	3.0	0.0	Vert	AV	0.0	48.9	54.0	-5.1	Ch 120, EUT vert, 6 Mbps
20719.940	35.8	13.0	1.7	34.1	3.0	0.0	Vert	AV	0.0	48.8	54.0	-5.2	Ch 36, EUT vert, 6 Mbps
21999.990	35.2	13.4	1.5	16.1	3.0	0.0	Horz	AV	0.0	48.6	54.0	-5.4	Ch 100, EUT on side, 6 Mbps
5457.783	22.2	36.0	1.6	141.1	1.0	0.0	Horz	AV	-9.5	48.6	54.0	-5.4	Ch 100, EUT horz, 6 Mbps
21040.070	35.5	13.1	1.5	322.0	3.0	0.0	Vert	AV	0.0	48.6	54.0	-5.4	Ch 52, EUT vert, 6 Mbps
5148.475	23.1	35.0	1.6	336.0	1.0	0.0	Horz	AV	-9.5	48.6	54.0	-5.4	Ch 36, EUT horz, MCS0
5456.608	22.1	36.0	1.6	141.1	1.0	0.0	Horz	AV	-9.5	48.5	54.0	-5.5	Ch 100, EUT horz, 36 Mbps
20960.060	35.4	13.1	1.7	332.0	3.0	0.0	Vert	AV	0.0	48.5	54.0	-5.5	Ch 48, EUT vert, 6 Mbps
5146.183	23.0	35.0	1.6	154.0	1.0	0.0	Horz	AV	-9.5	48.5	54.0	-5.5	Ch 36, EUT horz, 6 Mbps
5457.833	22.0	36.0	1.6	141.1	1.0	0.0	Horz	AV	-9.5	48.4	54.0	-5.6	Ch 100, EUT horz, 54 Mbps
5455.850	22.0	36.0	1.6	128.0	1.0	0.0	Horz	AV	-9.5	48.4	54.0	-5.6	Ch 100, EUT horz, MCS7
5149.967	22.9	35.0	1.6	336.0	1.0	0.0	Horz	AV	-9.5	48.4	54.0	-5.6	Ch 36, EUT horz, 36 Mbps
5149.100	22.9	35.0	1.6	221.1	1.0	0.0	Vert	AV	-9.5	48.4	54.0	-5.6	Ch 36, EUT vert, 6 Mbps
5146.025	22.9	35.0	1.6	121.0	1.0	0.0	Vert	AV	-9.5	48.4	54.0	-5.6	Ch 36, EUT horz, 6 Mbps

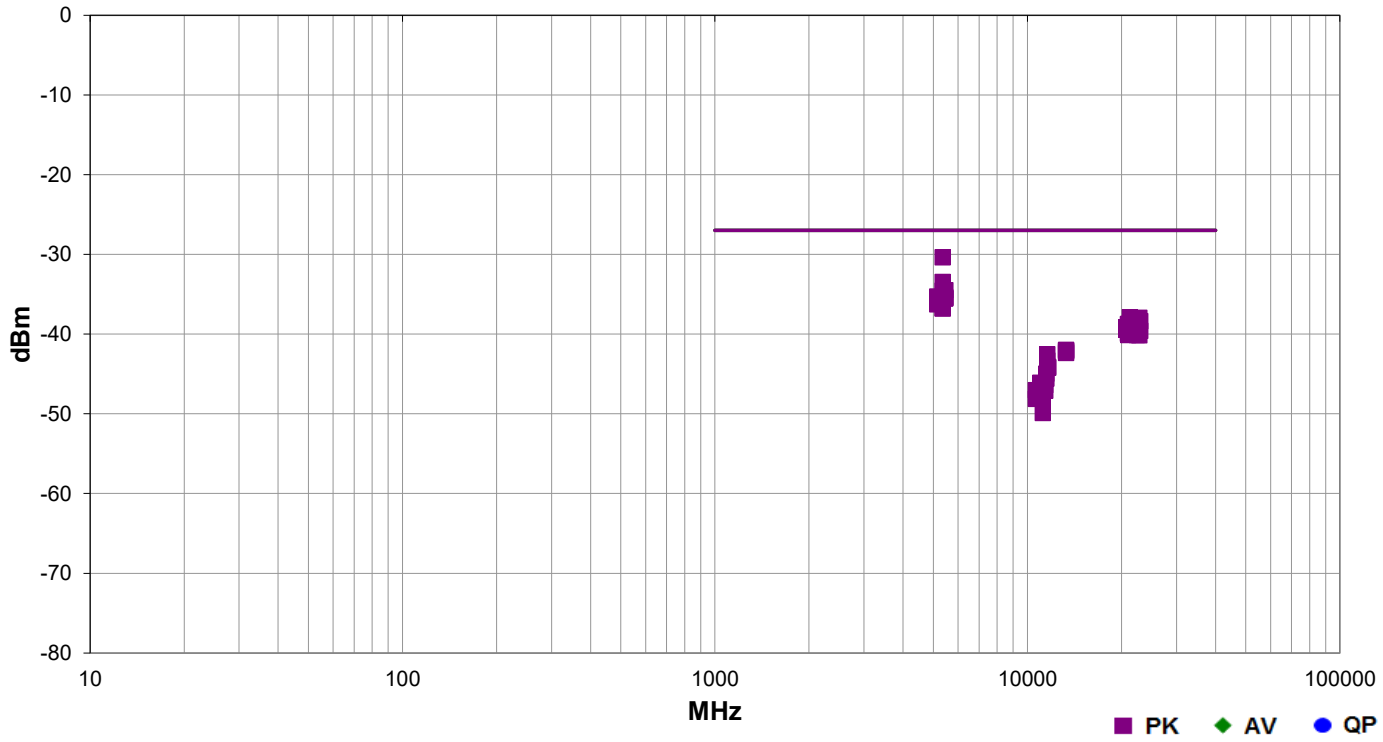
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
5145.575	22.9	35.0	1.6	336.0	1.0	0.0	Horz	AV	-9.5	48.4	54.0	-5.6	Ch 36, EUT horz, MCS7
5149.650	22.8	35.0	1.6	261.9	1.0	0.0	Horz	AV	-9.5	48.3	54.0	-5.7	Ch 36, EUT on side, 6 Mbps
5149.075	22.8	35.0	1.6	21.0	1.0	0.0	Vert	AV	-9.5	48.3	54.0	-5.7	Ch 36, EUT on side, 6 Mbps
5148.675	22.8	35.0	1.6	336.0	1.0	0.0	Horz	AV	-9.5	48.3	54.0	-5.7	Ch 36, EUT horz, 54 Mbps
5147.550	22.8	35.0	1.6	109.1	1.0	0.0	Horz	AV	-9.5	48.3	54.0	-5.7	Ch 36, EUT vert, 6 Mbps
22800.030	34.4	13.8	1.5	307.0	3.0	0.0	Vert	AV	0.0	48.2	54.0	-5.8	Ch 140, EUT vert, 6 Mbps
5350.083	21.7	35.5	1.6	205.0	1.0	0.0	Horz	AV	-9.5	47.7	54.0	-6.3	Ch 64, EUT horz, 6 Mbps
5350.200	21.5	35.5	1.6	148.1	1.0	0.0	Horz	AV	-9.5	47.5	54.0	-6.5	Ch 64, EUT horz, 36 Mbps
5351.883	21.3	35.5	1.6	360.0	1.0	0.0	Horz	AV	-9.5	47.3	54.0	-6.7	Ch 64, EUT horz, MCS7
5351.717	21.3	35.5	1.6	148.1	1.0	0.0	Horz	AV	-9.5	47.3	54.0	-6.7	Ch 64, EUT horz, 54 Mbps
22980.050	33.0	14.0	1.5	337.9	3.0	0.0	Horz	AV	0.0	47.0	54.0	-7.0	Ch 149, EUT on side, 6 Mbps
22399.980	33.0	13.6	1.6	343.0	3.0	0.0	Horz	AV	0.0	46.6	54.0	-7.4	Ch 120, EUT on side, 6 Mbps
11570.010	48.7	-2.1	1.8	2.0	3.0	0.0	Vert	AV	0.0	46.6	54.0	-7.4	Ch 157, EUT vert, 6 Mbps
13299.990	40.5	5.7	2.1	7.0	3.0	0.0	Vert	AV	0.0	46.2	54.0	-7.8	Ch 64, EUT on side, 6 Mbps
11569.930	48.1	-2.1	1.5	360.0	3.0	0.0	Horz	AV	0.0	46.0	54.0	-8.0	Ch 157, EUT on side, 6 Mbps
11650.030	47.9	-2.4	1.7	357.0	3.0	0.0	Vert	AV	0.0	45.5	54.0	-8.5	Ch 165, EUT vert, 6 Mbps
22799.830	31.4	13.8	1.5	23.1	3.0	0.0	Horz	AV	0.0	45.2	54.0	-8.8	Ch 140, EUT on side, 6 Mbps
11490.010	48.1	-3.0	1.8	347.0	3.0	0.0	Vert	AV	0.0	45.1	54.0	-8.9	Ch 149, EUT vert, 6 Mbps
5351.317	38.9	35.5	1.6	360.0	1.0	0.0	Horz	PK	-9.5	64.9	74.0	-9.1	Ch 64, EUT horz, MCS0
11649.980	46.4	-2.4	1.6	25.0	3.0	0.0	Horz	AV	0.0	44.0	54.0	-10.0	Ch 165, EUT on side, 6 Mbps
13299.980	38.3	5.7	4.0	264.0	3.0	0.0	Horz	AV	0.0	44.0	54.0	-10.0	Ch 64, EUT horz, 6 Mbps
11400.010	47.5	-3.7	1.7	358.0	3.0	0.0	Vert	AV	0.0	43.8	54.0	-10.2	Ch 140, EUT vert, 6 Mbps
13300.000	36.7	5.7	1.3	166.1	3.0	0.0	Vert	AV	0.0	42.4	54.0	-11.6	Ch 64, EUT horz, 6 Mbps
11489.960	45.0	-3.0	1.0	38.0	3.0	0.0	Horz	AV	0.0	42.0	54.0	-12.0	Ch 149, EUT on side, 6 Mbps
11200.000	45.4	-3.6	1.9	351.9	3.0	0.0	Vert	AV	0.0	41.8	54.0	-12.2	Ch 120, EUT vert, 6 Mbps
5352.542	35.8	35.5	1.6	148.1	1.0	0.0	Horz	PK	-9.5	61.8	74.0	-12.2	Ch 64, EUT horz, 36 Mbps
15959.950	31.2	10.4	1.8	333.9	3.0	0.0	Vert	AV	0.0	41.6	54.0	-12.4	Ch 64, EUT vert, 6 Mbps
15720.060	32.2	9.3	1.4	38.0	3.0	0.0	Horz	AV	0.0	41.5	54.0	-12.5	Ch 48, EUT on side, 6 Mbps
11399.990	45.0	-3.7	1.0	45.0	3.0	0.0	Horz	AV	0.0	41.3	54.0	-12.7	Ch 140, EUT on side, 6 Mbps
15959.990	30.8	10.4	1.4	2.0	3.0	0.0	Horz	AV	0.0	41.2	54.0	-12.8	Ch 64, EUT on side, 6 Mbps
15540.030	31.8	9.3	1.6	34.1	3.0	0.0	Vert	AV	0.0	41.1	54.0	-12.9	Ch 36, EUT vert, 6 Mbps
5459.592	34.3	36.0	1.6	128.0	1.0	0.0	Horz	PK	-9.5	60.7	74.0	-13.3	Ch 100, EUT horz, MCS0
5350.808	34.7	35.5	1.6	205.0	1.0	0.0	Horz	PK	-9.5	60.7	74.0	-13.3	Ch 64, EUT horz, 6 Mbps
15779.900	31.0	9.4	2.3	51.1	3.0	0.0	Vert	AV	0.0	40.4	54.0	-13.6	Ch 52, EUT vert, 6 Mbps
15719.980	31.0	9.3	1.6	30.1	3.0	0.0	Vert	AV	0.0	40.3	54.0	-13.7	Ch 48, EUT vert, 6 Mbps
15779.930	30.6	9.4	3.3	0.0	3.0	0.0	Horz	AV	0.0	40.0	54.0	-14.0	Ch 52, EUT on side, 6 Mbps
5145.992	34.5	35.0	1.6	121.0	1.0	0.0	Vert	PK	-9.5	60.0	74.0	-14.0	Ch 36, EUT horz, 6 Mbps
5149.267	34.4	35.0	1.6	21.0	1.0	0.0	Vert	PK	-9.5	59.9	74.0	-14.1	Ch 36, EUT on side, 6 Mbps
5148.708	34.4	35.0	1.6	154.0	1.0	0.0	Horz	PK	-9.5	59.9	74.0	-14.1	Ch 36, EUT horz, 6 Mbps
5458.567	33.4	36.0	1.6	128.0	1.0	0.0	Horz	PK	-9.5	59.8	74.0	-14.2	Ch 100, EUT horz, MCS7
11199.980	43.3	-3.6	1.0	46.0	3.0	0.0	Horz	AV	0.0	39.7	54.0	-14.3	Ch 120, EUT on side, 6 Mbps
5457.242	33.3	36.0	1.6	141.1	1.0	0.0	Horz	PK	-9.5	59.7	74.0	-14.3	Ch 100, EUT horz, 6 Mbps
5456.958	33.3	36.0	1.6	141.1	1.0	0.0	Horz	PK	-9.5	59.7	74.0	-14.3	Ch 100, EUT horz, 36 Mbps
5455.392	33.3	36.0	1.6	141.1	1.0	0.0	Horz	PK	-9.5	59.7	74.0	-14.3	Ch 100, EUT horz, 54 Mbps
5149.683	34.1	35.0	1.6	261.9	1.0	0.0	Horz	PK	-9.5	59.6	74.0	-14.4	Ch 36, EUT on side, 6 Mbps
5148.642	34.1	35.0	1.6	336.0	1.0	0.0	Horz	PK	-9.5	59.6	74.0	-14.4	Ch 36, EUT horz, MCS0
5149.283	34.0	35.0	1.6	336.0	1.0	0.0	Horz	PK	-9.5	59.5	74.0	-14.5	Ch 36, EUT horz, MCS7
5147.458	34.0	35.0	1.6	336.0	1.0	0.0	Horz	PK	-9.5	59.5	74.0	-14.5	Ch 36, EUT horz, 54 Mbps
5149.600	33.8	35.0	1.6	336.0	1.0	0.0	Horz	PK	-9.5	59.3	74.0	-14.7	Ch 36, EUT horz, 36 Mbps
5146.917	33.7	35.0	1.6	221.1	1.0	0.0	Vert	PK	-9.5	59.2	74.0	-14.8	Ch 36, EUT vert, 6 Mbps
5149.667	33.5	35.0	1.6	109.1	1.0	0.0	Horz	PK	-9.5	59.0	74.0	-15.0	Ch 36, EUT vert, 6 Mbps
5351.225	32.5	35.5	1.6	360.0	1.0	0.0	Horz	PK	-9.5	58.5	74.0	-15.5	Ch 64, EUT horz, MCS7
5350.325	32.5	35.5	1.6	148.1	1.0	0.0	Horz	PK	-9.5	58.5	74.0	-15.5	Ch 64, EUT horz, 54 Mbps
11000.080	41.2	-3.3	1.0	39.0	3.0	0.0	Horz	AV	0.0	37.9	54.0	-16.1	Ch 100, EUT on side, 6 Mbps
10999.990	40.8	-3.3	1.8	13.0	3.0	0.0	Vert	AV	0.0	37.5	54.0	-16.5	Ch 100, EUT vert, 6 Mbps
21280.140	44.2	13.1	1.5	20.0	3.0	0.0	Horz	PK	0.0	57.3	74.0	-16.7	Ch 64, EUT on side, 6 Mbps
22799.770	43.5	13.8	1.5	307.0	3.0	0.0	Vert	PK	0.0	57.3	74.0	-16.7	Ch 140, EUT vert, 6 Mbps
10639.870	40.5	-3.5	1.0	38.0	3.0	0.0	Horz	AV	0.0	37.0	54.0	-17.0	Ch 64, EUT on side, 6 Mbps
22980.070	42.9	14.0	1.5	315.9	3.0	0.0	Vert	PK	0.0	56.9	74.0	-17.1	Ch 149, EUT vert, 6 Mbps
21040.370	43.4	13.1	1.6	289.9	3.0	0.0	Horz	PK	0.0	56.5	74.0	-17.5	Ch 52, EUT on side, 6 Mbps
20959.930	43.4	13.1	1.6	292.0	3.0	0.0	Horz	PK	0.0	56.5	74.0	-17.5	Ch 48, EUT on side, 6 Mbps
21999.560	43.0	13.4	1.6	347.9	3.0	0.0	Vert	PK	0.0	56.4	74.0	-17.6	Ch 100, EUT vert, 6 Mbps
22400.000	42.7	13.6	1.6	319.9	3.0	0.0	Vert	PK	0.0	56.3	74.0	-17.7	Ch 120, EUT vert, 6 Mbps
20720.040	43.1	13.0	1.5	324.0	3.0	0.0	Horz	PK	0.0	56.1	74.0	-17.9	Ch 36, EUT on side, 6 Mbps
20720.080	42.8	13.0	1.7	34.1	3.0	0.0	Vert	PK	0.0	55.8	74.0	-18.2	Ch 36, EUT vert, 6 Mbps
21280.010	42.6	13.1	1.6	321.0	3.0	0.0	Vert	PK	0.0	55.7	74.0	-18.3	Ch 64, EUT vert, 6 Mbps
22979.950	41.7	14.0	1.5	337.9	3.0	0.0	Horz	PK	0.0	55.7	74.0	-18.3	Ch 149, EUT on side, 6 Mbps
22000.270	42.2	13.4	1.5	16.1	3.0	0.0	Horz	PK	0.0	55.6	74.0	-18.4	Ch 100, EUT on side, 6 Mbps
20959.880	42.2	13.1	1.7	332.0	3.0	0.0	Vert	PK	0.0	55.3	74.0	-18.7	Ch 48, EUT vert, 6 Mbps
22400.100	41.5	13.6	1.6	343.0	3.0	0.0	Horz	PK	0.0	55.1	74.0	-18.9	Ch 120, EUT on side, 6 Mbps
21039.940	42.0	13.1	1.5	322.0	3.0	0.0	Vert	PK	0.0	55.1	74.0	-18.9	Ch 52, EUT vert, 6 Mbps
22800.280	41.3	13.8	1.5	23.1	3.0	0.0	Horz	PK	0.0	55.1	74.0	-18.9	Ch 140, EUT on side, 6 Mbps
10639.830	38.0	-3.5	1.8	12.1	3.0	0.0	Vert	AV	0.0	34.5	54.0	-19.5	Ch 64, EUT vert, 6 Mbps
13300.000	47.6	5.7	1.0	41.1	3.0	0.0	Horz	PK	0.0	53.3	74.0	-20.7	Ch 64, EUT on side, 36 Mbps
13300.030	47.5	5.7	1.0	41.1	3.0	0.0	Horz	PK	0.0	53.2	74.0	-20.8	Ch 64, EUT on side, MCS7
13299.960	47.4	5.7	1.0	41.1	3.0	0.0	Horz	PK	0.0	53.1	74.0	-20.9	Ch 64, EUT on side, MCS0
13300.130	47.2	5.7	1.0	41.1	3.0	0.0	Horz	PK	0.0	52.9	74.0	-21.1	Ch 64, EUT on side, 54 Mbps
11569.940	54.8	-2.1	1.5	360.0	3.0	0.0	Horz	PK	0.0	52.7	74.0	-21.3	Ch 157, EUT on side, 6 Mbps
11570.250	54.0	-2.1	1.8	2.0	3.0	0.0	Vert	PK	0.0	51.9	74.0	-22.1	Ch 157, EUT vert, 6 Mbps
11649.850	53.5	-2.4	1.7	357.0	3.0	0.0	Vert	PK	0.0	51.1	74.0	-22.9	Ch 165, EUT vert, 6 Mbps
11649.970	53.4	-2.4	1.6	25.0	3.0	0.0	Horz	PK	0.0	51.0	74.0	-23.0	Ch 165, EUT on side, 6 Mbps
11490.020	53.3	-3.0	1.8	347.0	3.0	0.0	Vert	PK	0.0	50.3	74.0	-23.7	Ch 149, EUT vert, 6 Mbps
11489.940	52.7	-3.0	1.0	38.0	3.0	0.0	Horz	PK	0.0	49.7	74.0	-24.3	Ch 149, EUT on side, 6 Mbps
11000.420	52.4	-3.3	1.0	39.0	3.0	0.0	Horz	PK	0.0	49.1	74.0	-24.9	Ch 100, EUT on side, 6 Mbps
11400.140	52.5	-3.7	1.7	358.0	3.0	0.0	Vert	PK	0.0	48.8	74.0	-25.2	Ch 140, EUT vert, 6 Mbps
10999.980	52.0	-3.3	1.8	13.0	3.0	0.0	Vert	PK	0.0	48.7	74.0	-25.3	Ch 100, EUT vert, 6 Mbps
10640.600	51.7	-3.5	1.0	38.0	3.0	0.0	Horz	PK	0.0	48.2	74.0	-25.8	Ch 64, EUT on side, 6 Mbps
11400.080	51.8	-3.7	1.0	45.0	3.0	0.0	Horz	PK	0.0	48.1	74.0	-25.9	Ch 140, EUT on side, 6 Mbps
11199.980	50.8	-3.6	1.9	351.9	3.0	0.0	Vert	PK	0.0	47.2	74.0	-26.8	Ch 120, EUT vert, 6 Mbps
10641.110	50.6	-3.5	1.8	12.1	3.0	0.0	Vert	PK	0.0	47.1	74.0	-26.9	Ch 64, EUT vert, 6 Mbps
11200.100	48.9	-3.6	1.0	46.0	3.0	0.0	Horz	PK	0.0	45.3	74.0	-28.7	Ch 120, EUT on side, 6 Mbps

SPURIOUS RADIATED EMISSIONS

Work Order:	LGPD0165	**Date:**	01/25/16		
Project:	None	**Temperature:**	22.5 °C		
Job Site:	MN05	**Humidity:**	21.1% RH		
Serial Number:	0216M00003	**Barometric Pres.:**	980.3 mbar	**Tested by:**	Dustin Sparks
EUT:	Zoll CF Card Module				
Configuration:	1				
Customer:	ZOLL Medical Corp.				
Attendees:	Adam Ford				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting 802.11 - channels 36, 48, 52, 64, 100, 120, 140, 149, 157, and 165; 6 Mbps, 36 Mbps, 54 Mbps, MCS0, and MCS7 data rates.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.407:2016	ANSI C63.10:2013

Run #	122	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**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
	5351.317	1.6	360.0	Horz	PK	9.19E-07	-30.4	-27.0	-3.4	Ch 64, EUT horz, MCS0
	5352.542	1.6	148.1	Horz	PK	4.51E-07	-33.5	-27.0	-6.5	Ch 64, EUT horz, 36 Mbps
	5459.592	1.6	128.0	Horz	PK	3.55E-07	-34.5	-27.0	-7.5	Ch 100, EUT horz, MCS0
	5350.808	1.6	205.0	Horz	PK	3.49E-07	-34.6	-27.0	-7.6	Ch 64, EUT horz, 6 Mbps
	5145.992	1.6	121.0	Vert	PK	2.97E-07	-35.3	-27.0	-8.3	Ch 36, EUT horz, 6 Mbps
	5149.267	1.6	21.0	Vert	PK	2.91E-07	-35.4	-27.0	-8.4	Ch 36, EUT on side, 6 Mbps
	5148.708	1.6	154.0	Horz	PK	2.91E-07	-35.4	-27.0	-8.4	Ch 36, EUT horz, 6 Mbps
	5458.567	1.6	128.0	Horz	PK	2.88E-07	-35.4	-27.0	-8.4	Ch 100, EUT horz, MCS7

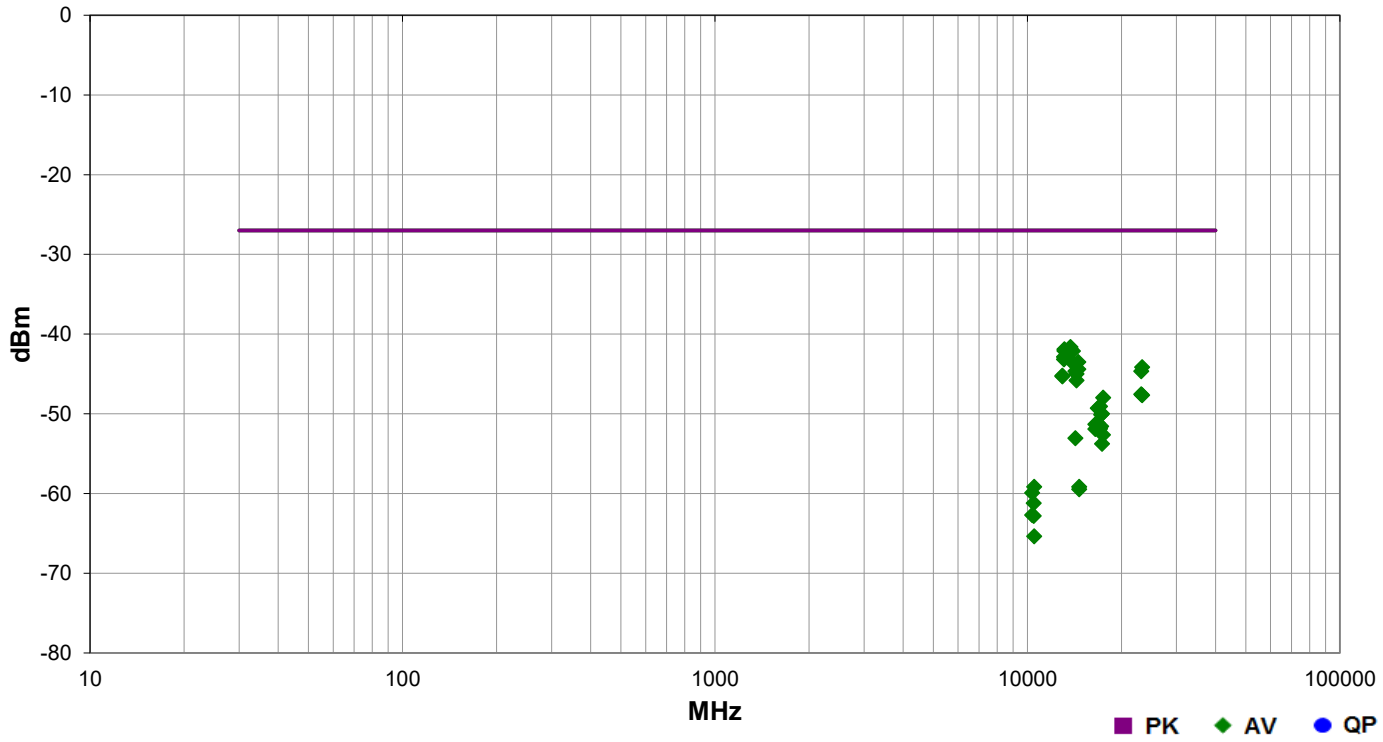
	Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
	5457.242	1.6	141.1	Horz	PK	2.81E-07	-35.5	-27.0	-8.5	Ch 100, EUT horz, 6 Mbps
	5456.958	1.6	141.1	Horz	PK	2.81E-07	-35.5	-27.0	-8.5	Ch 100, EUT horz, 36 Mbps
	5455.392	1.6	141.1	Horz	PK	2.81E-07	-35.5	-27.0	-8.5	Ch 100, EUT horz, 54 Mbps
	5149.683	1.6	261.9	Horz	PK	2.71E-07	-35.7	-27.0	-8.7	Ch 36, EUT on side, 6 Mbps
	5148.642	1.6	336.0	Horz	PK	2.71E-07	-35.7	-27.0	-8.7	Ch 36, EUT horz, MCS0
	5149.283	1.6	336.0	Horz	PK	2.65E-07	-35.8	-27.0	-8.8	Ch 36, EUT horz, MCS7
	5147.458	1.6	336.0	Horz	PK	2.65E-07	-35.8	-27.0	-8.8	Ch 36, EUT horz, 54 Mbps
	5149.600	1.6	336.0	Horz	PK	2.53E-07	-36.0	-27.0	-9.0	Ch 36, EUT horz, 36 Mbps
	5146.917	1.6	221.1	Vert	PK	2.47E-07	-36.1	-27.0	-9.1	Ch 36, EUT vert, 6 Mbps
	5149.667	1.6	109.1	Horz	PK	2.36E-07	-36.3	-27.0	-9.3	Ch 36, EUT vert, 6 Mbps
	5351.225	1.6	360.0	Horz	PK	2.11E-07	-36.8	-27.0	-9.8	Ch 64, EUT horz, MCS7
	5350.325	1.6	148.1	Horz	PK	2.10E-07	-36.8	-27.0	-9.8	Ch 64, EUT horz, 54 Mbps
	21280.140	1.5	20.0	Horz	PK	1.62E-07	-37.9	-27.0	-10.9	Ch 64, EUT on side, 6 Mbps
	22799.770	1.5	307.0	Vert	PK	1.60E-07	-37.9	-27.0	-10.9	Ch 140, EUT vert, 6 Mbps
	22980.070	1.5	315.9	Vert	PK	1.45E-07	-38.4	-27.0	-11.4	Ch 149, EUT vert, 6 Mbps
	21040.370	1.6	289.9	Horz	PK	1.34E-07	-38.7	-27.0	-11.7	Ch 52, EUT on side, 6 Mbps
	20959.930	1.6	292.0	Horz	PK	1.34E-07	-38.7	-27.0	-11.7	Ch 48, EUT on side, 6 Mbps
	21999.560	1.6	347.9	Vert	PK	1.32E-07	-38.8	-27.0	-11.8	Ch 100, EUT vert, 6 Mbps
	22400.000	1.6	319.9	Vert	PK	1.28E-07	-38.9	-27.0	-11.9	Ch 120, EUT vert, 6 Mbps
	20720.040	1.5	324.0	Horz	PK	1.22E-07	-39.1	-27.0	-12.1	Ch 36, EUT on side, 6 Mbps
	20720.080	1.7	34.1	Vert	PK	1.14E-07	-39.4	-27.0	-12.4	Ch 36, EUT vert, 6 Mbps
	21280.010	1.6	321.0	Vert	PK	1.12E-07	-39.5	-27.0	-12.5	Ch 64, EUT vert, 6 Mbps
	22979.950	1.5	337.9	Horz	PK	1.10E-07	-39.6	-27.0	-12.6	Ch 149, EUT on side, 6 Mbps
	22000.270	1.5	16.1	Horz	PK	1.10E-07	-39.6	-27.0	-12.6	Ch 100, EUT on side, 6 Mbps
	20959.880	1.7	332.0	Vert	PK	1.01E-07	-39.9	-27.0	-12.9	Ch 48, EUT vert, 6 Mbps
	22400.100	1.6	343.0	Horz	PK	9.71E-08	-40.1	-27.0	-13.1	Ch 120, EUT on side, 6 Mbps
	21039.940	1.5	322.0	Vert	PK	9.71E-08	-40.1	-27.0	-13.1	Ch 52, EUT vert, 6 Mbps
	22800.280	1.5	23.1	Horz	PK	9.67E-08	-40.1	-27.0	-13.1	Ch 140, EUT on side, 6 Mbps
	13300.000	1.0	41.1	Horz	PK	6.36E-08	-42.0	-27.0	-15.0	Ch 64, EUT on side, 36 Mbps
	13300.030	1.0	41.1	Horz	PK	6.21E-08	-42.1	-27.0	-15.1	Ch 64, EUT on side, MCS7
	13299.960	1.0	41.1	Horz	PK	6.07E-08	-42.2	-27.0	-15.2	Ch 64, EUT on side, MCS0
	13300.130	1.0	41.1	Horz	PK	5.80E-08	-42.4	-27.0	-15.4	Ch 64, EUT on side, 54 Mbps
	11569.940	1.5	360.0	Horz	PK	5.57E-08	-42.5	-27.0	-15.5	Ch 157, EUT on side, 6 Mbps
	11570.250	1.8	2.0	Vert	PK	4.64E-08	-43.3	-27.0	-16.3	Ch 157, EUT vert, 6 Mbps
	11649.850	1.7	357.0	Vert	PK	3.87E-08	-44.1	-27.0	-17.1	Ch 165, EUT vert, 6 Mbps
	11649.970	1.6	25.0	Horz	PK	3.78E-08	-44.2	-27.0	-17.2	Ch 165, EUT on side, 6 Mbps
	11490.020	1.8	347.0	Vert	PK	3.19E-08	-45.0	-27.0	-18.0	Ch 149, EUT vert, 6 Mbps
	11489.940	1.0	38.0	Horz	PK	2.78E-08	-45.6	-27.0	-18.6	Ch 149, EUT on side, 6 Mbps
	11000.420	1.0	39.0	Horz	PK	2.45E-08	-46.1	-27.0	-19.1	Ch 100, EUT on side, 6 Mbps
	11400.140	1.7	358.0	Vert	PK	2.30E-08	-46.4	-27.0	-19.4	Ch 140, EUT vert, 6 Mbps
	10999.980	1.8	13.0	Vert	PK	2.23E-08	-46.5	-27.0	-19.5	Ch 100, EUT vert, 6 Mbps
	10640.600	1.0	38.0	Horz	PK	1.97E-08	-47.0	-27.0	-20.0	Ch 64, EUT on side, 6 Mbps
	11400.080	1.0	45.0	Horz	PK	1.96E-08	-47.1	-27.0	-20.1	Ch 140, EUT on side, 6 Mbps
	11199.980	1.9	351.9	Vert	PK	1.59E-08	-48.0	-27.0	-21.0	Ch 120, EUT vert, 6 Mbps
	10641.110	1.8	12.1	Vert	PK	1.53E-08	-48.1	-27.0	-21.1	Ch 64, EUT vert, 6 Mbps
	11200.100	1.0	46.0	Horz	PK	1.02E-08	-49.9	-27.0	-22.9	Ch 120, EUT on side, 6 Mbps

SPURIOUS RADIATED EMISSIONS

Work Order:	LGPD0165	**Date:**	01/25/16		
Project:	None	**Temperature:**	22.5 °C		
Job Site:	MN05	**Humidity:**	21.1% RH		
Serial Number:	0216M00003	**Barometric Pres.:**	980.3 mbar	**Tested by:**	Dustin Sparks
EUT:	Zoll CF Card Module				
Configuration:	1				
Customer:	ZOLL Medical Corp.				
Attendees:	Adam Ford				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting 802.11 - channels 36, 48, 52, 64, 100, 120, 140, 149, 157, and 165; 6 Mbps, 36 Mbps, 54 Mbps, MCS0, and MCS7 data rates.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.407:2016	ANSI C63.10:2013

Run #	123	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**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
	13750.010	1.7	13.0	Vert	AV	6.84E-08	-41.6	-27.0	-14.6	Ch 100, EUT vert, 6 Mbps
	13749.970	1.4	360.0	Horz	AV	6.53E-08	-41.8	-27.0	-14.8	Ch 100, EUT on side, 6 Mbps
	13149.970	1.7	7.0	Vert	AV	6.43E-08	-41.9	-27.0	-14.9	Ch 52, EUT vert, 6 Mbps
	13150.000	1.4	2.0	Horz	AV	6.14E-08	-42.1	-27.0	-15.1	Ch 52, EUT on side, 6 Mbps
	14000.030	1.6	19.1	Vert	AV	6.11E-08	-42.1	-27.0	-15.1	Ch 120, EUT vert, 6 Mbps
	13100.020	1.5	360.0	Horz	AV	5.16E-08	-42.9	-27.0	-15.9	Ch 48, EUT on side, 6 Mbps
	13100.000	1.7	10.0	Vert	AV	4.82E-08	-43.2	-27.0	-16.2	Ch 48, EUT vert, 6 Mbps
	14562.490	1.6	14.0	Vert	AV	4.45E-08	-43.5	-27.0	-16.5	Ch 165, EUT vert, 6 Mbps

	Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
	13999.990	2.4	1.1	Horz	AV	4.32E-08	-43.6	-27.0	-16.6	Ch 120, EUT on side, 6 Mbps
	23300.030	1.5	300.9	Vert	AV	3.82E-08	-44.2	-27.0	-17.2	Ch 165, EUT vert, 6 Mbps
	14562.550	1.7	351.9	Horz	AV	3.61E-08	-44.4	-27.0	-17.4	Ch 165, EUT on side, 6 Mbps
	23140.070	1.5	303.0	Vert	AV	3.41E-08	-44.7	-27.0	-17.7	Ch 157, EUT vert, 6 Mbps
	14249.980	1.6	14.0	Vert	AV	3.41E-08	-44.7	-27.0	-17.7	Ch 140, EUT vert, 6 Mbps
	14362.500	1.5	16.1	Vert	AV	3.15E-08	-45.0	-27.0	-18.0	Ch 149, EUT vert, 6 Mbps
	12950.010	1.5	360.0	Horz	AV	3.00E-08	-45.2	-27.0	-18.2	Ch 36, EUT on side, 6 Mbps
	12950.000	1.7	360.0	Vert	AV	2.93E-08	-45.3	-27.0	-18.3	Ch 36, EUT vert, 6 Mbps
	14362.510	1.8	7.0	Horz	AV	2.62E-08	-45.8	-27.0	-18.8	Ch 149, EUT on side, 6 Mbps
	23140.020	1.5	16.1	Horz	AV	1.75E-08	-47.6	-27.0	-20.6	Ch 157, EUT on side, 6 Mbps
	23300.030	1.5	67.0	Horz	AV	1.71E-08	-47.7	-27.0	-20.7	Ch 165, EUT on side, 6 Mbps
	17475.730	1.6	340.0	Vert	AV	1.59E-08	-48.0	-27.0	-21.0	Ch 165, EUT vert, 6 Mbps
	17097.820	1.5	347.0	Vert	AV	1.23E-08	-49.1	-27.0	-22.1	Ch 140, EUT vert, 6 Mbps
	16799.630	2.5	353.0	Vert	AV	1.17E-08	-49.3	-27.0	-22.3	Ch 120, EUT vert, 6 Mbps
	17354.770	1.7	37.1	Vert	AV	1.00E-08	-50.0	-27.0	-23.0	Ch 157, EUT vert, 6 Mbps
	17234.480	1.4	347.9	Vert	AV	9.75E-09	-50.1	-27.0	-23.1	Ch 149, EUT vert, 6 Mbps
	16799.030	1.0	325.9	Horz	AV	7.59E-09	-51.2	-27.0	-24.2	Ch 120, EUT on side, 6 Mbps
	16500.080	1.5	65.1	Horz	AV	7.36E-09	-51.3	-27.0	-24.3	Ch 100, EUT on side, 6 Mbps
	17233.330	1.9	13.0	Horz	AV	6.94E-09	-51.6	-27.0	-24.6	Ch 149, EUT on side, 6 Mbps
	17095.810	2.7	60.0	Horz	AV	6.48E-09	-51.9	-27.0	-24.9	Ch 140, EUT on side, 6 Mbps
	16499.530	2.5	328.0	Vert	AV	6.41E-09	-51.9	-27.0	-24.9	Ch 100, EUT vert, 6 Mbps
	17474.460	1.0	318.9	Horz	AV	5.43E-09	-52.6	-27.0	-25.6	Ch 165, EUT on side, 6 Mbps
	14250.070	1.0	268.0	Horz	AV	4.92E-09	-53.1	-27.0	-26.1	Ch 140, EUT on side, 6 Mbps
	17355.080	2.2	143.0	Horz	AV	4.18E-09	-53.8	-27.0	-26.8	Ch 157, EUT on side, 6 Mbps
	14659.830	1.0	357.0	Vert	AV	1.21E-09	-59.2	-27.0	-32.2	Ch 157, EUT vert, 6 Mbps
	10519.630	1.7	27.0	Horz	AV	1.21E-09	-59.2	-27.0	-32.2	Ch 52, EUT on side, 6 Mbps
	14658.730	1.0	204.0	Horz	AV	1.13E-09	-59.5	-27.0	-32.5	Ch 157, EUT on side, 6 Mbps
	10359.970	1.0	27.0	Horz	AV	1.02E-09	-59.9	-27.0	-32.9	Ch 36, EUT on side, 6 Mbps
	10480.080	1.0	37.1	Horz	AV	7.55E-10	-61.2	-27.0	-34.2	Ch 48, EUT on side, 6 Mbps
	10360.300	2.8	357.0	Vert	AV	5.35E-10	-62.7	-27.0	-35.7	Ch 36, EUT vert, 6 Mbps
	10480.120	3.7	22.1	Vert	AV	5.22E-10	-62.8	-27.0	-35.8	Ch 48, EUT vert, 6 Mbps
	10520.060	1.0	111.0	Vert	AV	2.90E-10	-65.4	-27.0	-38.4	Ch 52, EUT vert, 6 Mbps

FREQUENCY STABILITY

XMit 2015.01.14

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 (mo)
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Power Supply - DC	EZ Digital Co., Ltd.	GP-4030D	TQK	NCR	0
Meter - Multimeter	Fluke	117	MLS	1/20/2014	36
Thermometer	Omega Engineering, Inc.	HH311	DUB	11/3/2014	36
Chamber - Temperature/Humidity	Cincinnati Sub Zero (CSZ)	ZPH-32-3.5-SCT/AC	TBF	10/21/2015	12

TEST DESCRIPTION

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 edges of the main transmit bands as called out on the data sheets. Testing was done with an absence of modulation in a CW mode of operation.

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

Where a ppm limit applies: ppm = (Measured Frequency / Measured Nominal Frequency - 1) * 1,000,000

Per the requirements of FCC 15.407:

"Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual."

No specific limits are provided in either FCC 15.407, the product specific rule part, or FCC 2.1055, the equipment authorization procedure for testing frequency stability. While there are no limits called out, any results less than 100ppm will still allow the radio to be operating within the band.

FREQUENCY STABILITY

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0188
Serial Number:	2012M01206			**Date:**	04/21/16
Customer:	ZOLL Medical Corp.			**Temperature:**	22.8°C
Attendees:	Adam Ford			**Humidity:**	24%
Project:	None			**Barometric Pres.:**	987.1 mb
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

None

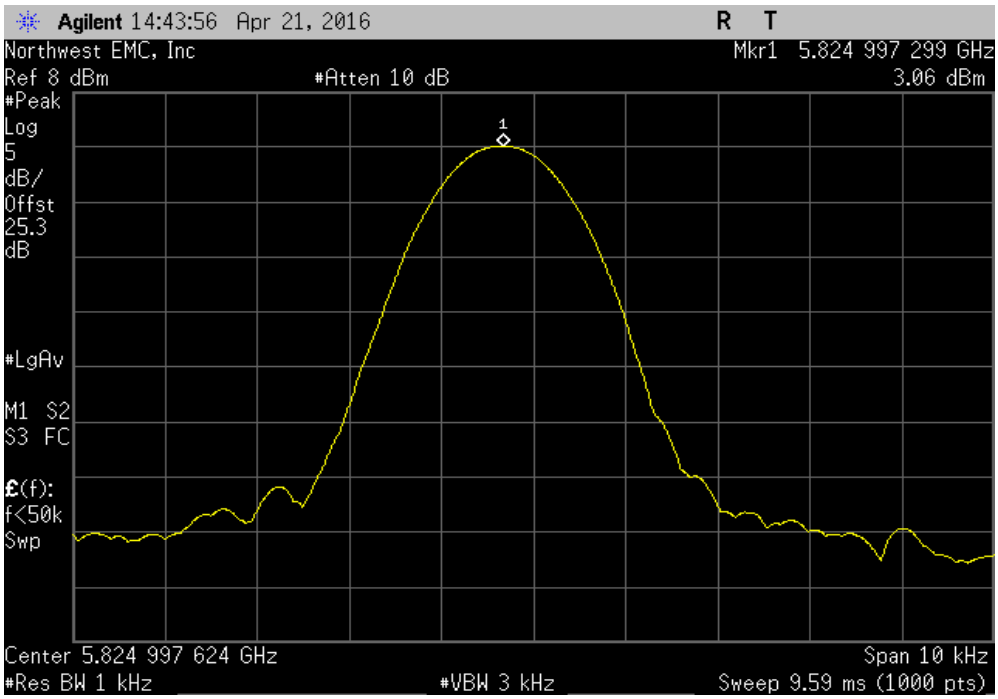
DEVIATIONS FROM TEST STANDARD

None

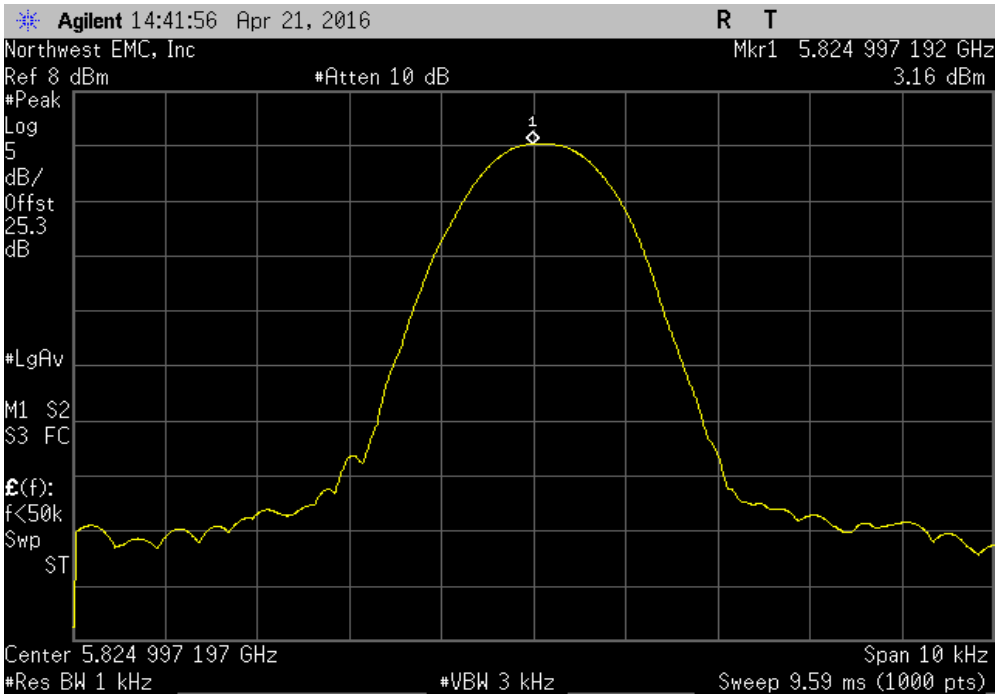
Configuration #	1	Signature

	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
5725 MHz - 5850 MHz - High Channel, 5825 MHz					
Voltage: 115%	5824.997299	5825	0.5	100	Pass
Voltage: 100%	5824.997227	5825	0.5	100	Pass
Voltage: 85%	5824.997131	5825	0.5	100	Pass
Temperature: +50°	5824.997459	5825	0.4	100	Pass
Temperature: +40°	5824.998103	5825	0.3	100	Pass
Temperature: +30°	5824.99769	5825	0.4	100	Pass
Temperature: +20°	5824.997289	5825	0.5	100	Pass
Temperature: +10°	5824.997248	5825	0.5	100	Pass
Temperature: 0°	5824.997569	5825	0.4	100	Pass
Temperature: -10°	5824.998151	5825	0.3	100	Pass
Temperature: -20°	5824.998466	5825	0.3	100	Pass
Temperature: -30°	5824.998838	5825	0.2	100	Pass

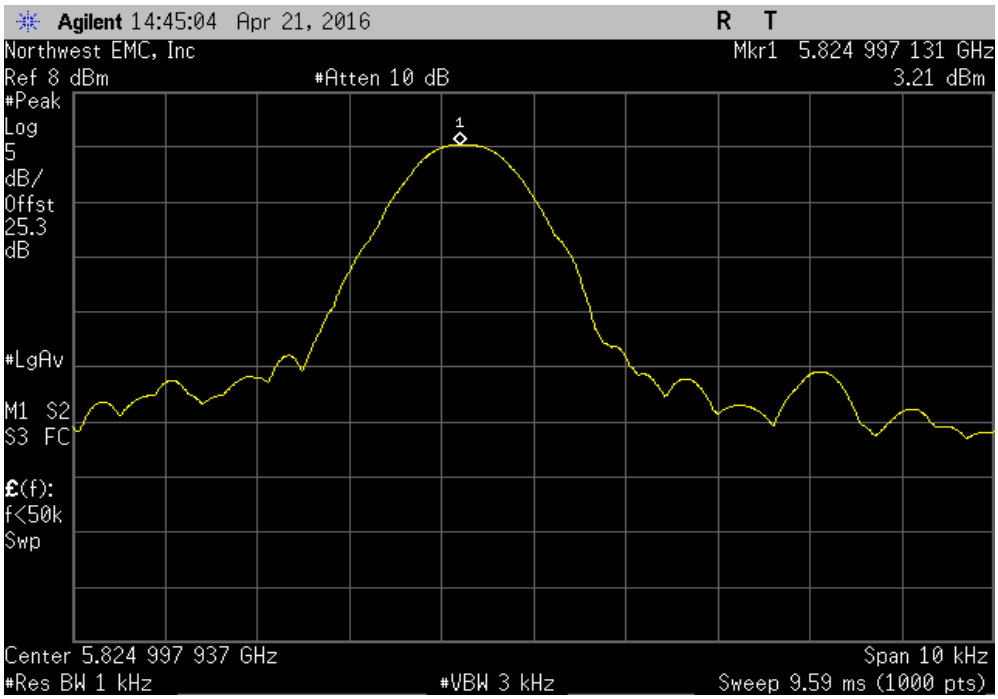
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Voltage: 115%						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.997299	5825	0.5	100	Pass



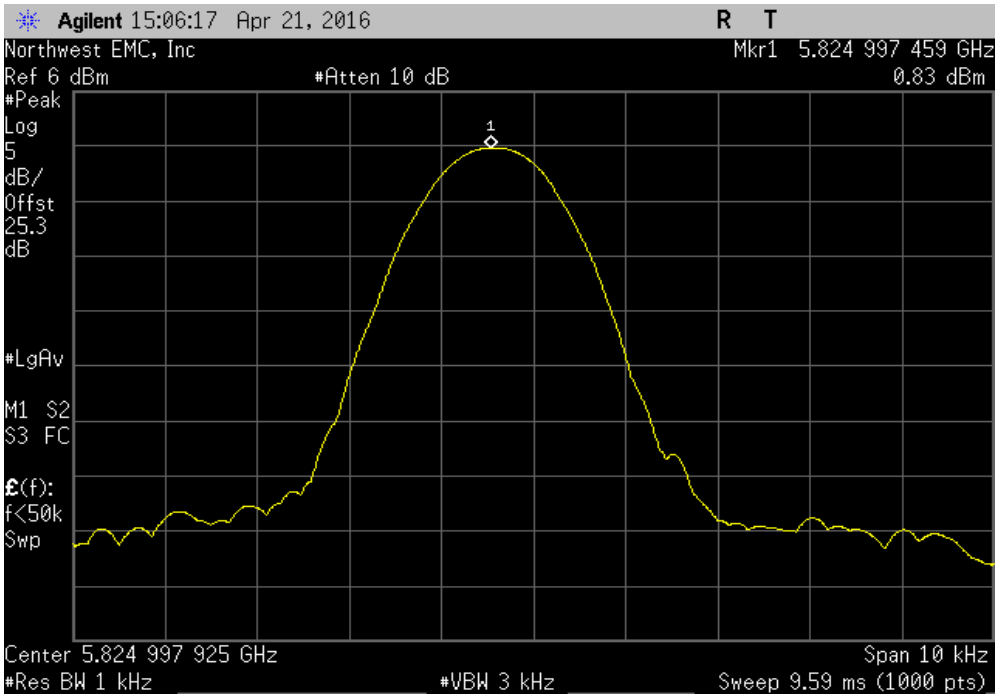
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Voltage: 100%						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.997227	5825	0.5	100	Pass



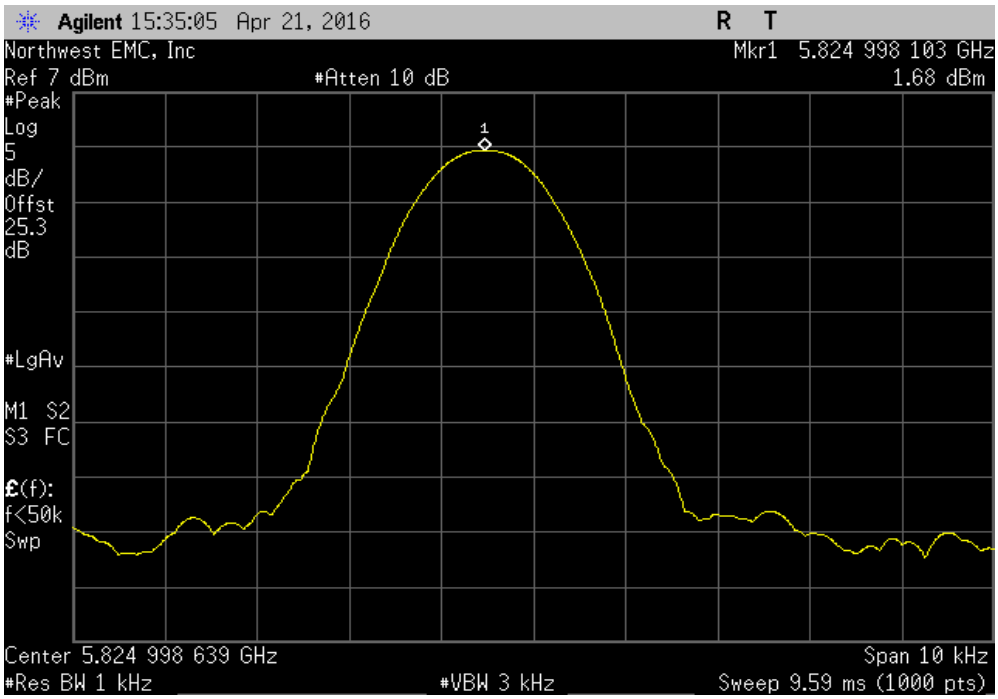
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Voltage: 85%						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.997131	5825	0.5	100	Pass



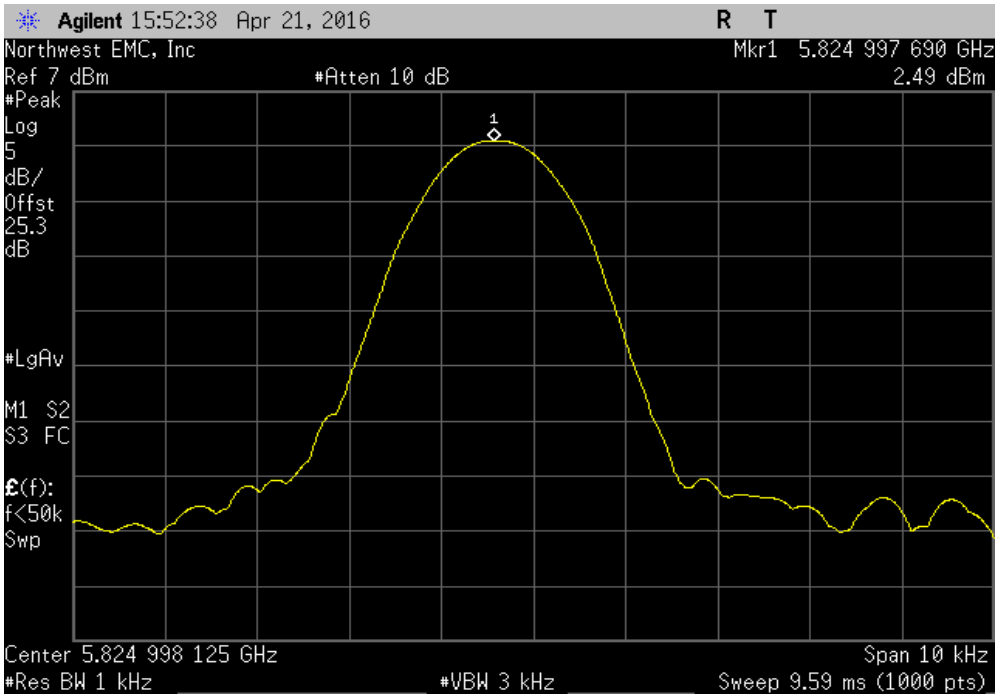
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: +50°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.997459	5825	0.4	100	Pass



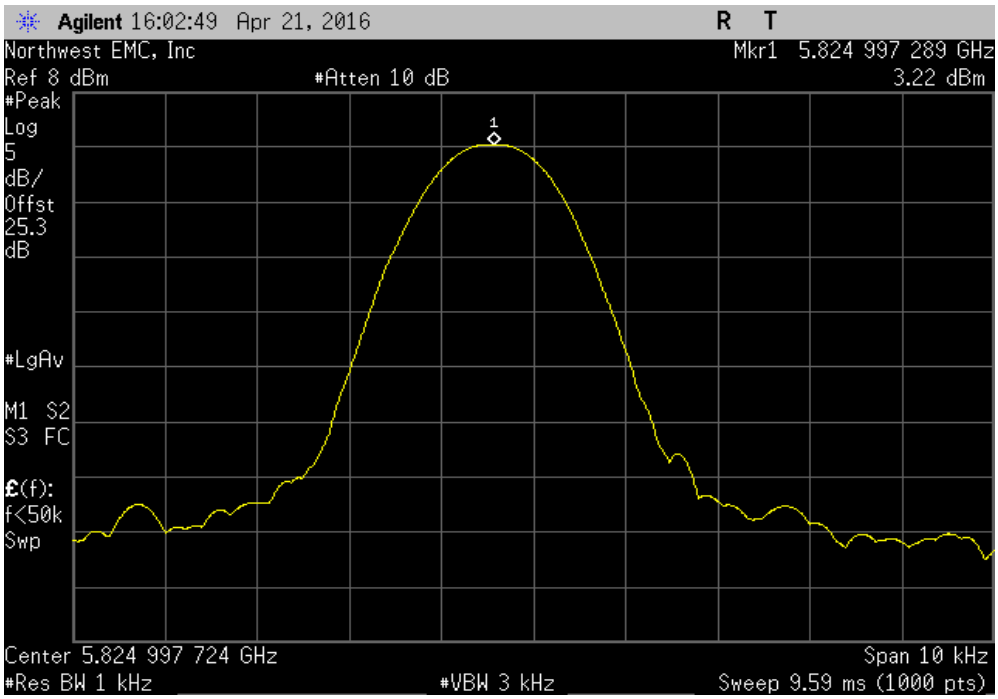
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: +40°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.998103	5825	0.3	100	Pass



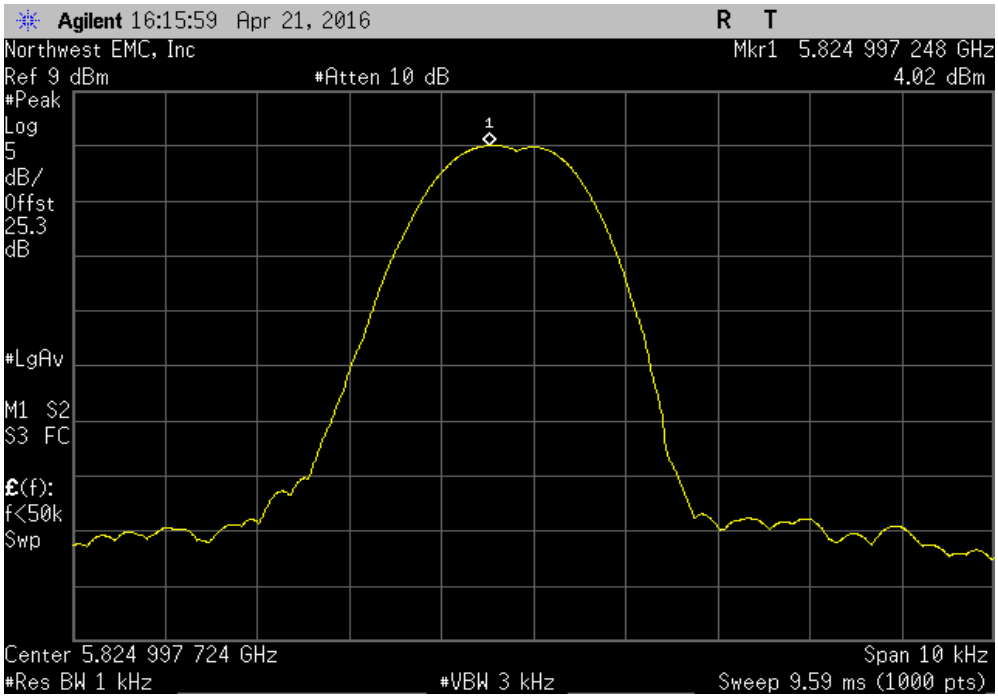
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: +30°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.99769	5825	0.4	100	Pass



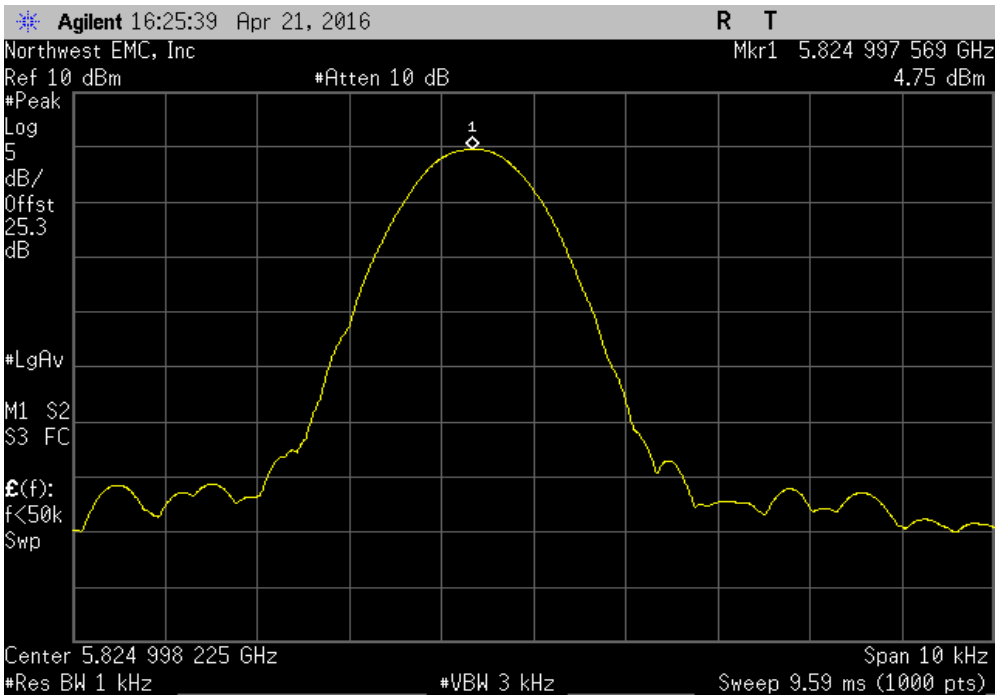
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: +20°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.997289	5825	0.5	100	Pass



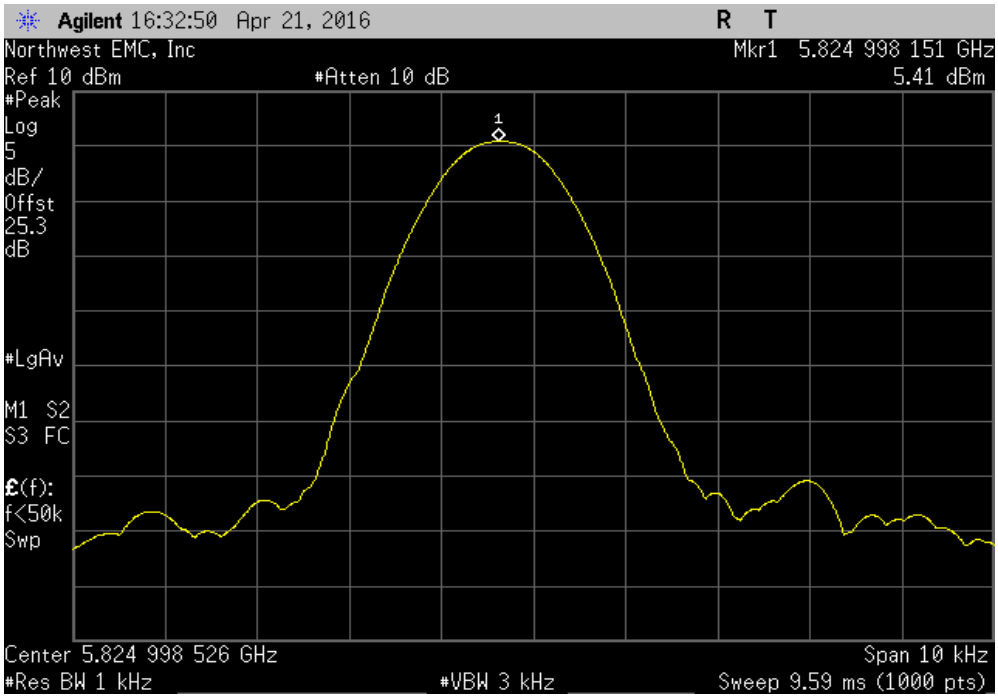
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: +10°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.997248	5825	0.5	100	Pass



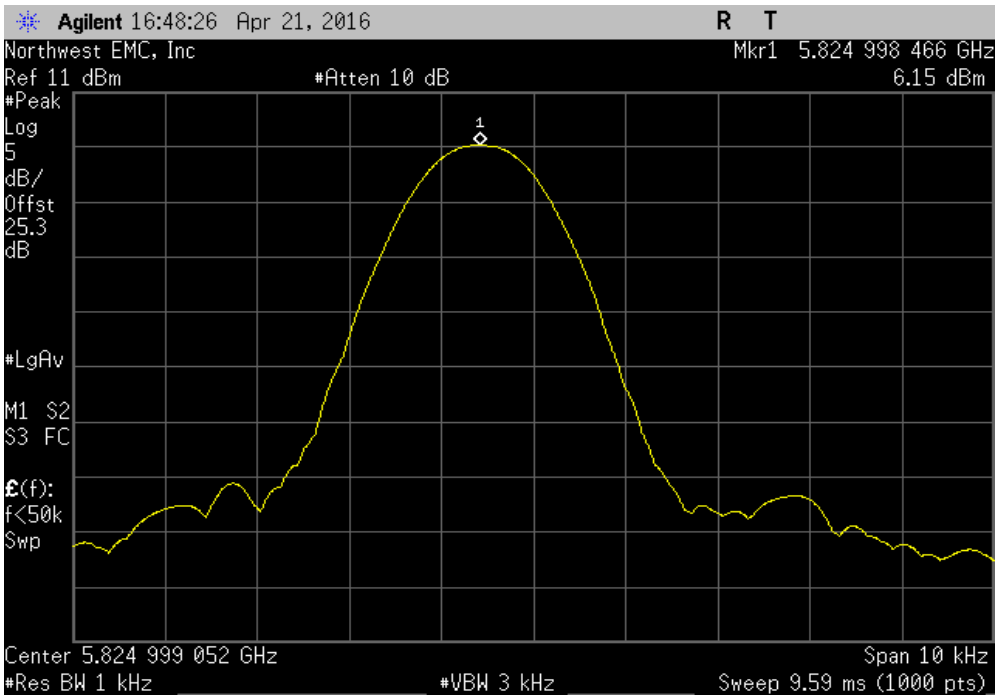
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: 0°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.997569	5825	0.4	100	Pass



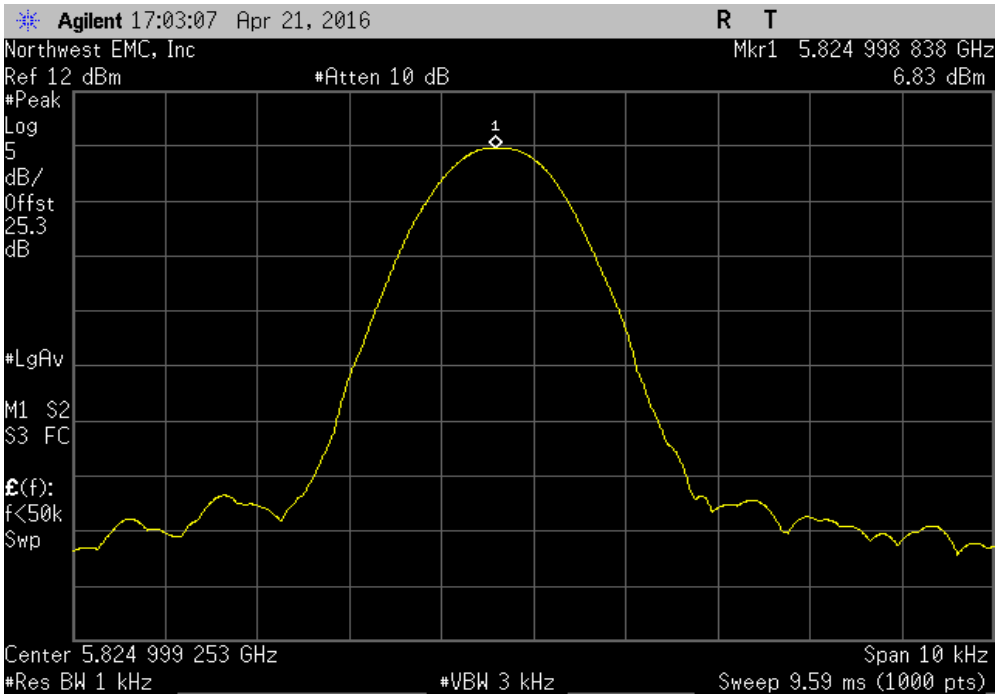
5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: -10°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.998151	5825	0.3	100	Pass



5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: -20°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.998466	5825	0.3	100	Pass



5725 MHz - 5850 MHz - High Channel, 5825 MHz, Temperature: -30°						
		Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
		5824.998838	5825	0.2	100	Pass



DUTY CYCLE

XMit 2015.01.14

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 (mo)
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	4/20/2015	12

TEST DESCRIPTION

Per ANSI C63.10, all measurements are to be performed with the EUT operating at 100% duty cycle at its maximum power level. In the event the EUT cannot be operated at 100% duty cycle, the transmission pulse duration (T) and Duty Cycle (x) are required to be measured for each of the EUT operating modes.

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

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

If the transmit duty cycle < 98 percent, a duty cycle correction factor in dB can be calculated to add to power measurements if required in the test method guidance using the following formula

10 * LOG (1/D) = dB

Where D is duty cycle of the radio transmissions

DUTY CYCLE

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0179
Serial Number:	0216M00003			**Date:**	03/18/16
Customer:	Zoll Medical Corp.			**Temperature:**	22.4°C
Attendees:	Adam Ford			**Humidity:**	27%
Project:	None			**Barometric Pres.:**	991.5
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

None

DEVIATIONS FROM TEST STANDARD

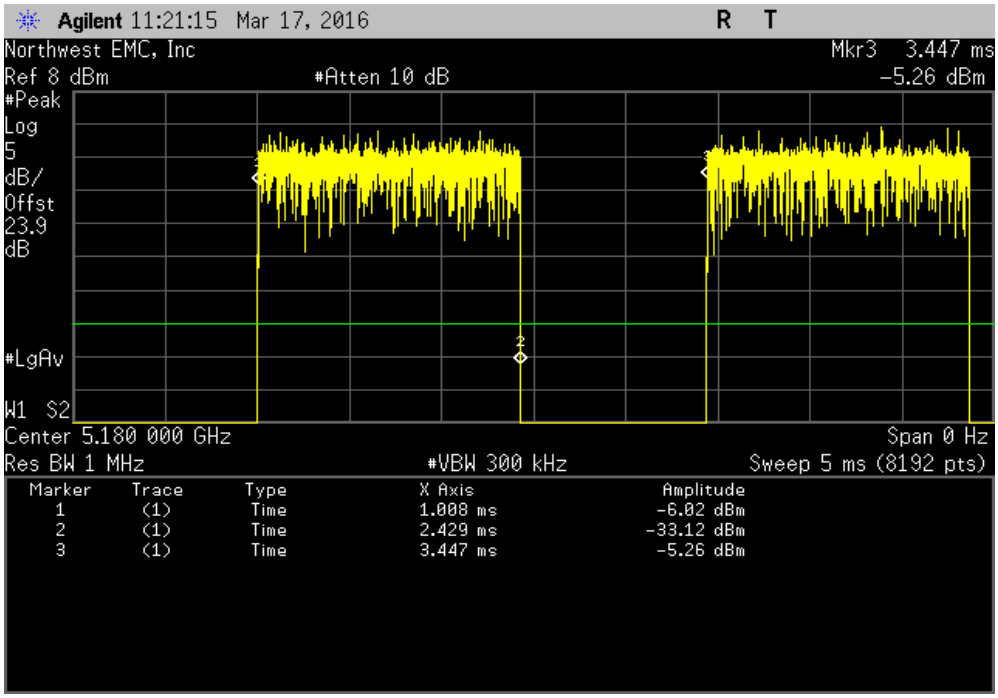
None

Configuration #	1	Signature

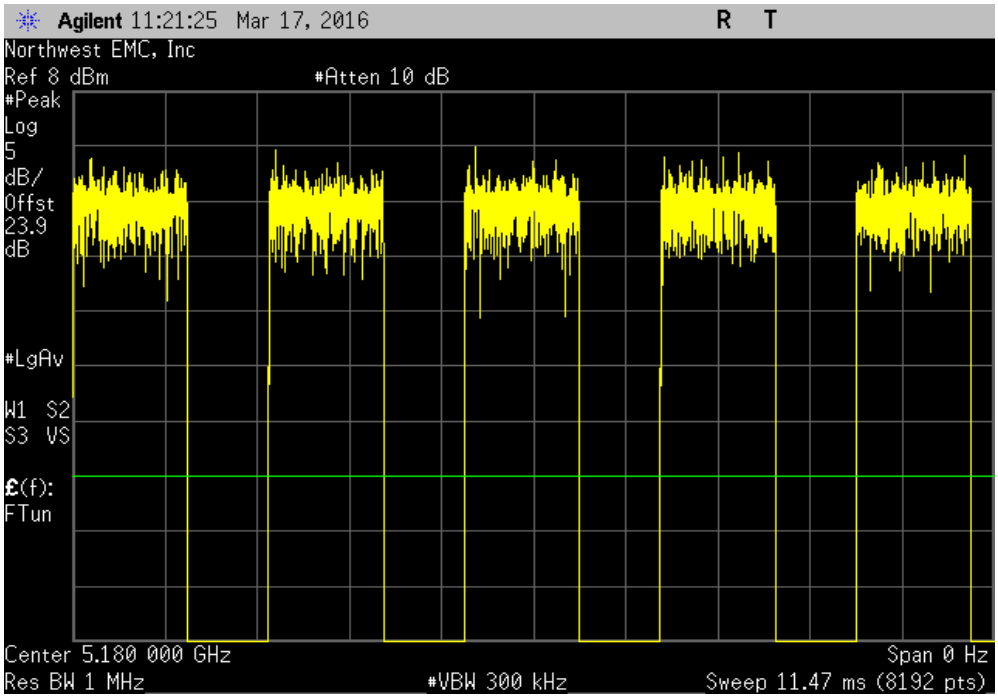
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
5150 - 5250 MHz Band						
Low Channel, Ch 36 - 5180 MHz						
802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.3	N/A	N/A
802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 36 Mbps	248.7 us	1.267 ms	1	19.6	N/A	N/A
802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 54 Mbps	172.5 us	1.191 ms	1	14.5	N/A	N/A
802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7	160.8 us	1.179 ms	1	13.6	N/A	N/A
802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
High Channel, Ch 48 - 5240 MHz						
802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.3	N/A	N/A
802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 36 Mbps	249.1 us	1.267 ms	1	19.7	N/A	N/A
802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 54 Mbps	172.5 us	1.191 ms	1	14.5	N/A	N/A
802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7	1.329 ms	2.347 ms	1	56.6	N/A	N/A
802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
5250 - 5350 MHz Band						
Low Channel, Ch 52 - 5260 MHz						
802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.2	N/A	N/A
802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 36 Mbps	249.1 us	1.267 ms	1	19.7	N/A	N/A
802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 54 Mbps	172.5 us	1.191 ms	1	14.5	N/A	N/A
802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7	160.8 us	1.179 ms	1	13.6	N/A	N/A
802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
High Channel, Ch 64 - 5320 MHz						
802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.2	N/A	N/A
802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 36 Mbps	248.7 us	1.267 ms	1	19.6	N/A	N/A
802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 54 Mbps	172.5 us	1.191 ms	1	14.5	N/A	N/A
802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0	1.329 ms	2.346 ms	1	56.6	N/A	N/A
802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7	160.8 us	1.179 ms	1	13.6	N/A	N/A
802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
5470 - 5725 MHz Band						
Low Channel, Ch 100 - 5500 MHz						
802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.3	N/A	N/A
802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 36 Mbps	249.1 us	1.267 ms	1	19.7	N/A	N/A
802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 54 Mbps	172.9 us	1.191 ms	1	14.5	N/A	N/A
802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7	160.8 us	1.179 ms	1	13.6	N/A	N/A
802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
Mid Channel, Ch 120 - 5600 MHz						
802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.3	N/A	N/A
802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 36 Mbps	248.7 us	1.267 ms	1	19.6	N/A	N/A
802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 54 Mbps	172.9 us	1.191 ms	1	14.5	N/A	N/A
802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7	160.8 us	1.179 ms	1	13.6	N/A	N/A
802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A

	High Channel, Ch 140 - 5700 MHz						
	802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.3	N/A	N/A
	802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 36 Mbps	248.7 us	1.267 ms	1	19.6	N/A	N/A
	802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 54 Mbps	172.5 us	1.191 ms	1	14.5	N/A	N/A
	802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
	802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS7	160.4 us	1.179 ms	1	13.6	N/A	N/A
	802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
5725 - 5785 MHz Band							
	Low Channel, Ch 149 - 5745 MHz						
	802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.3	N/A	N/A
	802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 36 Mbps	248.7 us	1.267 ms	1	19.6	N/A	N/A
	802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 54 Mbps	172.9 us	1.191 ms	1	14.5	N/A	N/A
	802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
	802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS7	160.4 us	1.179 ms	1	13.6	N/A	N/A
	802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
	Mid Channel, Ch 157 - 5785 MHz						
	802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.2	N/A	N/A
	802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 36 Mbps	248.7 us	1.267 ms	1	19.6	N/A	N/A
	802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 54 Mbps	172.5 us	1.191 ms	1	14.5	N/A	N/A
	802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
	802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS7	160.8 us	1.179 ms	1	13.6	N/A	N/A
	802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A
	High Channel, Ch 165 - 5825 MHz						
	802.11(a) 6 Mbps	1.421 ms	2.439 ms	1	58.2	N/A	N/A
	802.11(a) 6 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 36 Mbps	248.7 us	1.267 ms	1	19.6	N/A	N/A
	802.11(a) 36 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(a) 54 Mbps	172.9 us	1.191 ms	1	14.5	N/A	N/A
	802.11(a) 54 Mbps	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS0	1.329 ms	2.347 ms	1	56.6	N/A	N/A
	802.11(n) MCS0	N/A	N/A	5	N/A	N/A	N/A
	802.11(n) MCS7	161.2 us	1.179 ms	1	13.7	N/A	N/A
	802.11(n) MCS7	N/A	N/A	5	N/A	N/A	N/A

5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.3	N/A	N/A



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



DUTY CYCLE

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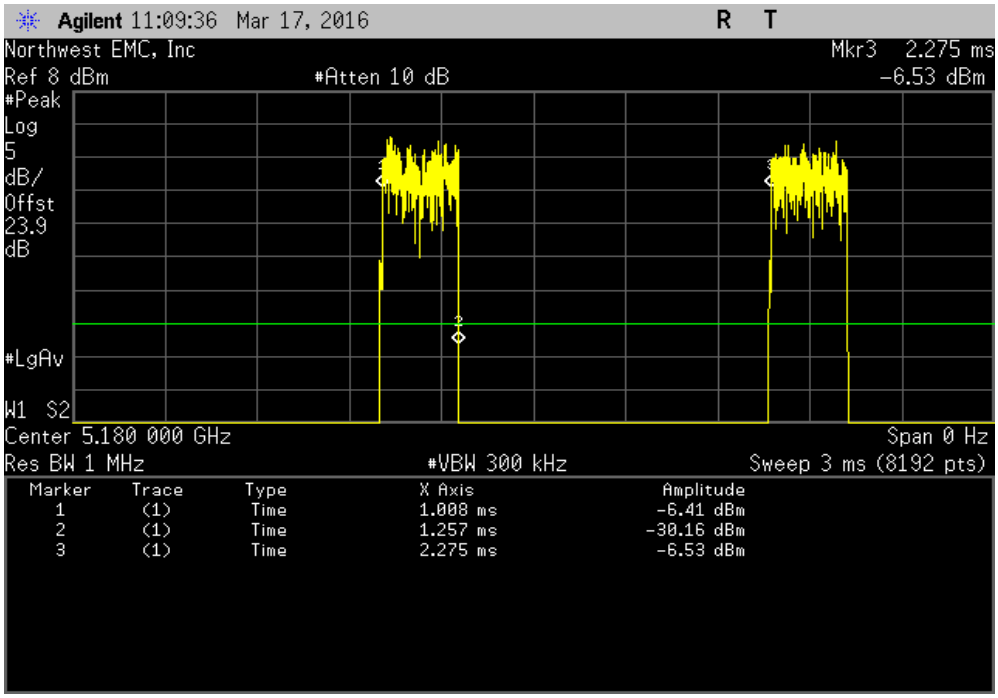
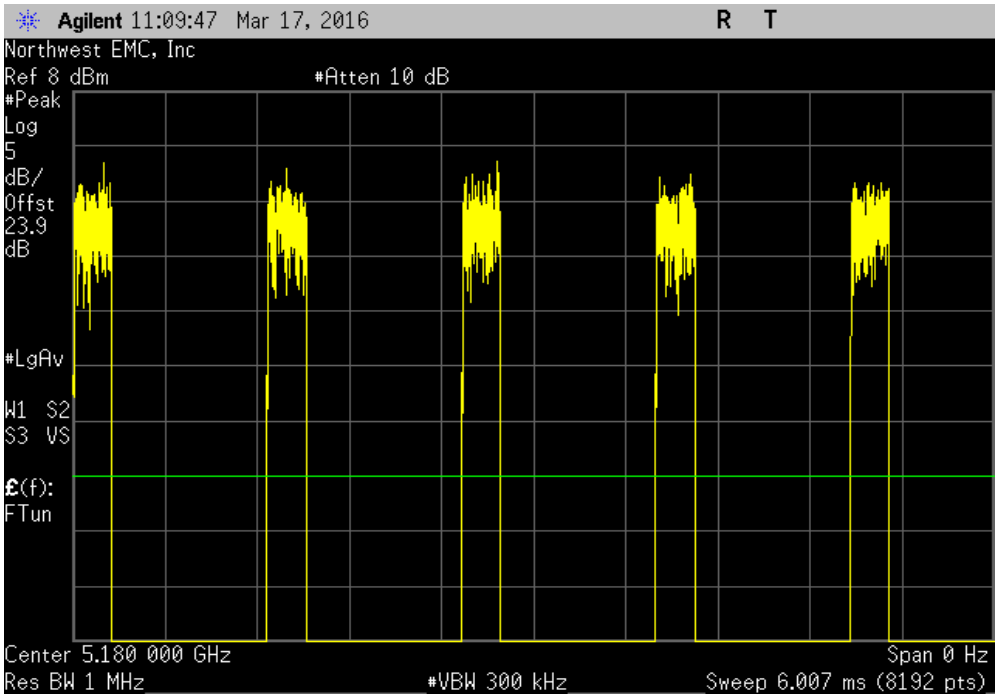
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	248.7 us	1.267 ms	1	19.6	N/A	N/A



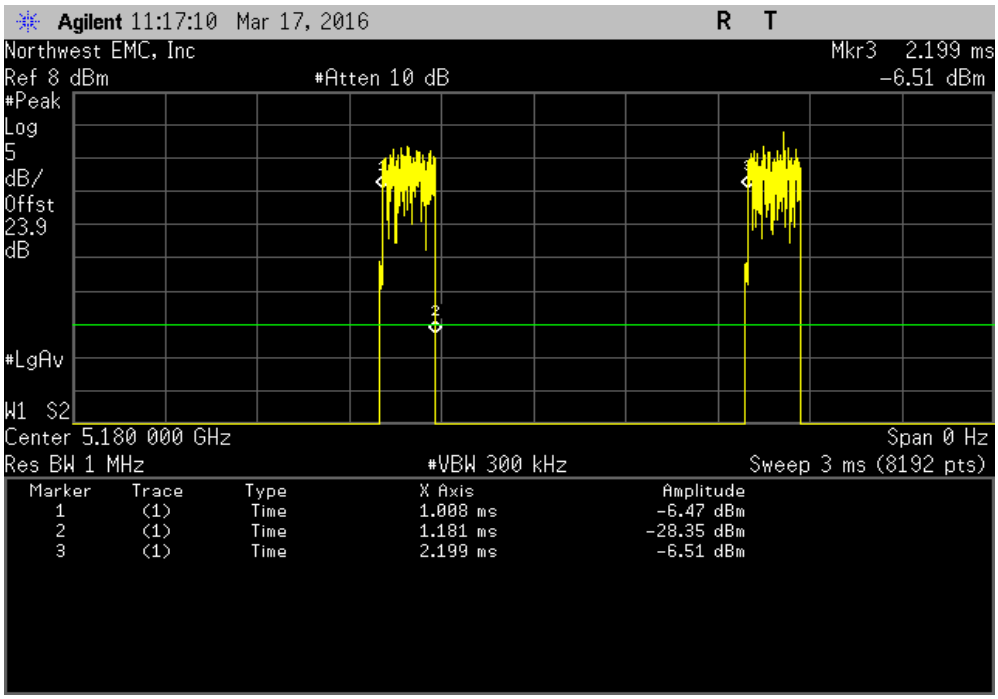
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



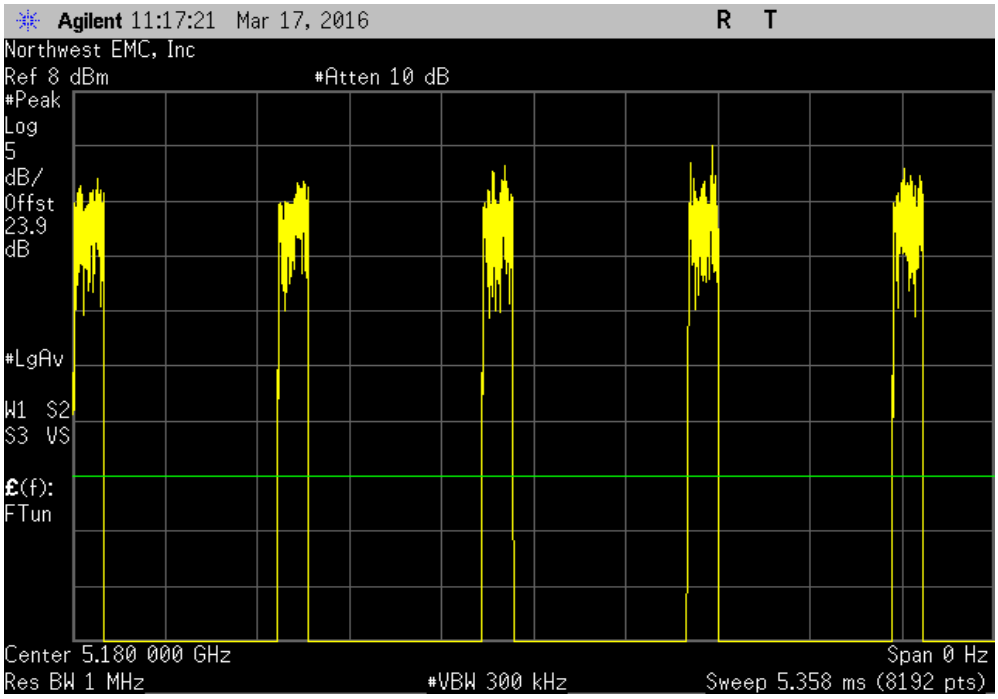
DUTY CYCLE

XMit 2015.01.14

5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.5 us	1.191 ms	1	14.5	N/A	N/A



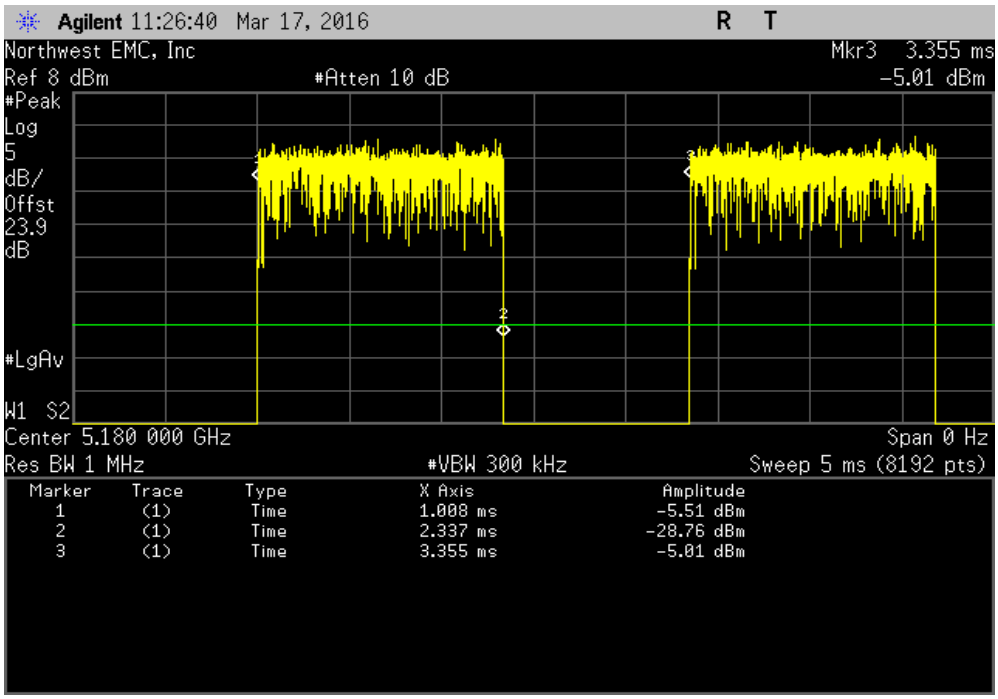
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



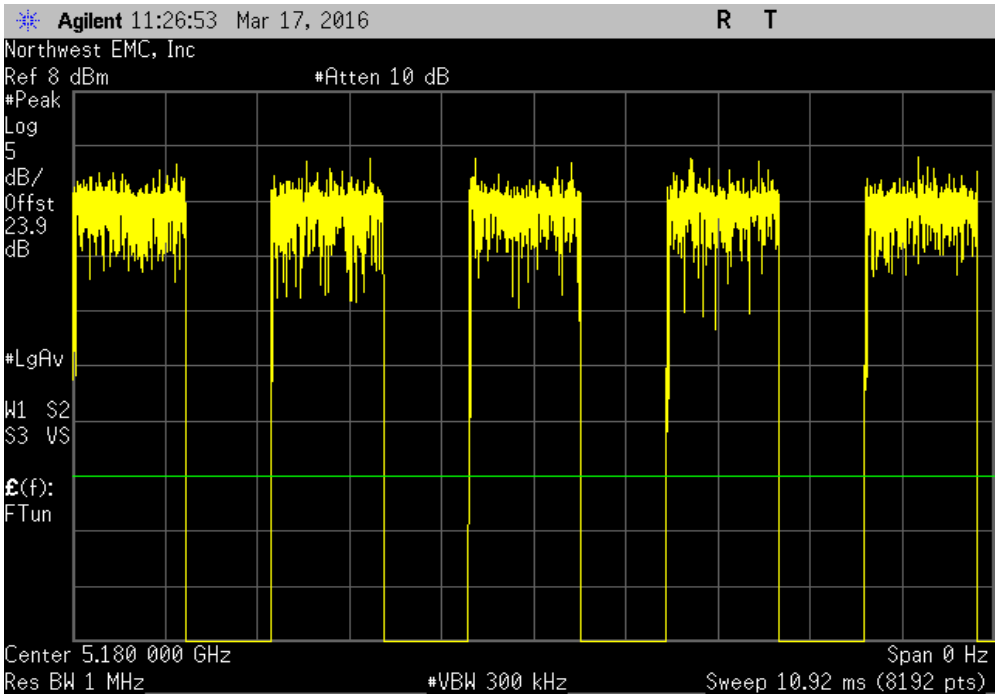
DUTY CYCLE

XMit 2015.01.14

5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



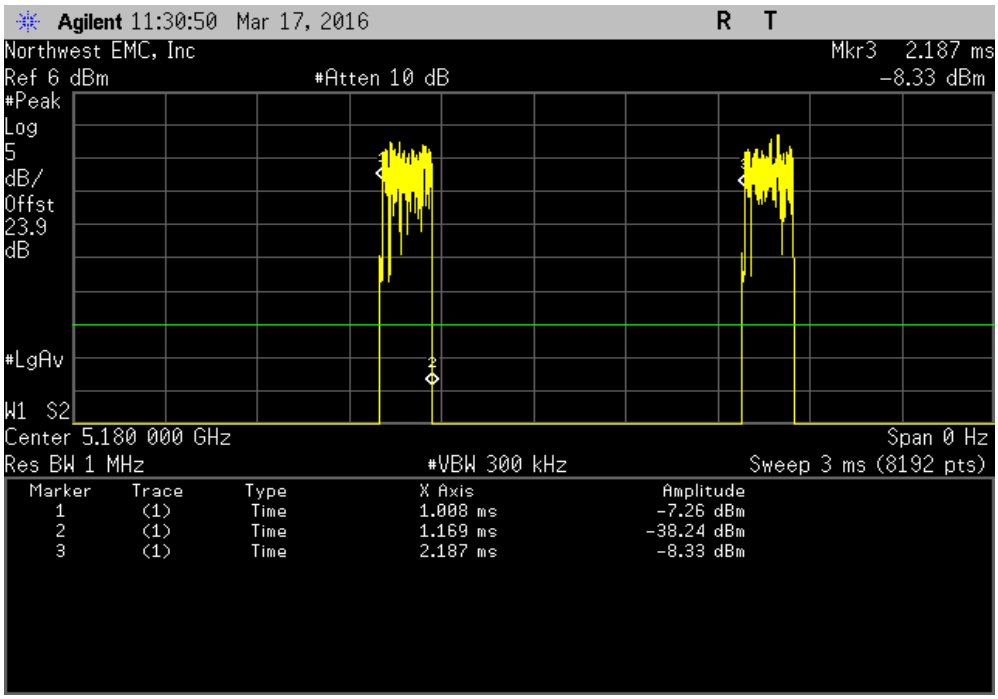
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



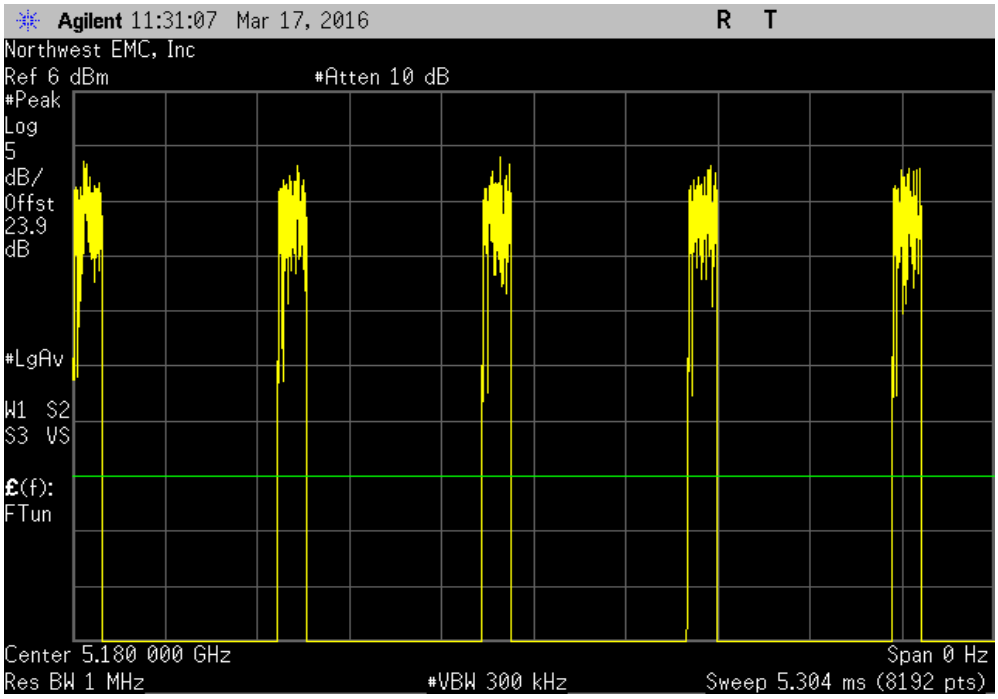
DUTY CYCLE

XMit 2015.01.14

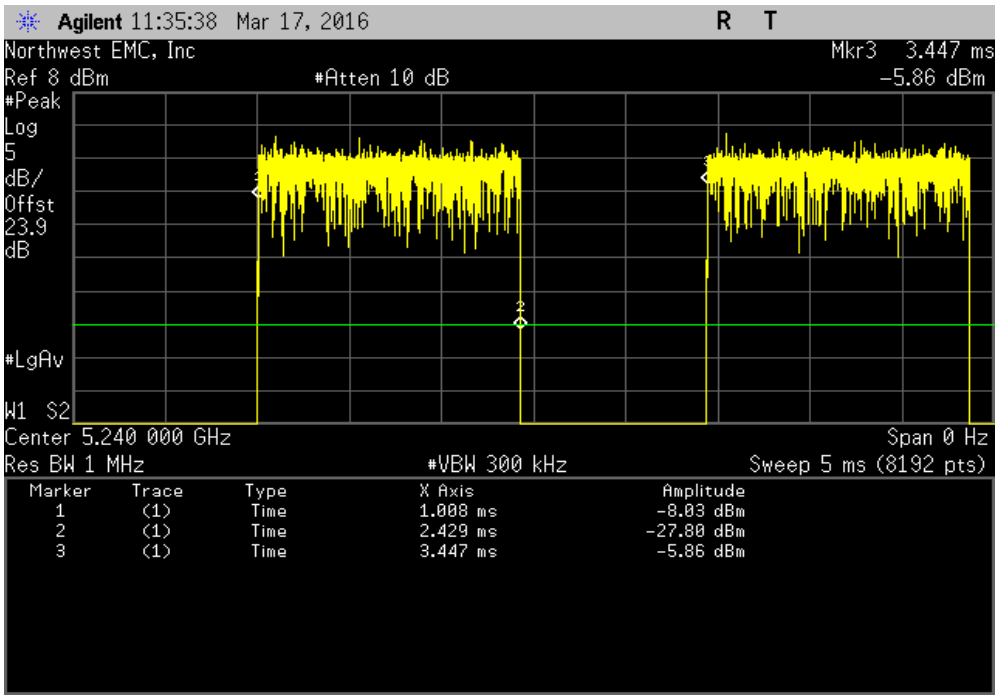
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.8 us	1.179 ms	1	13.6	N/A	N/A



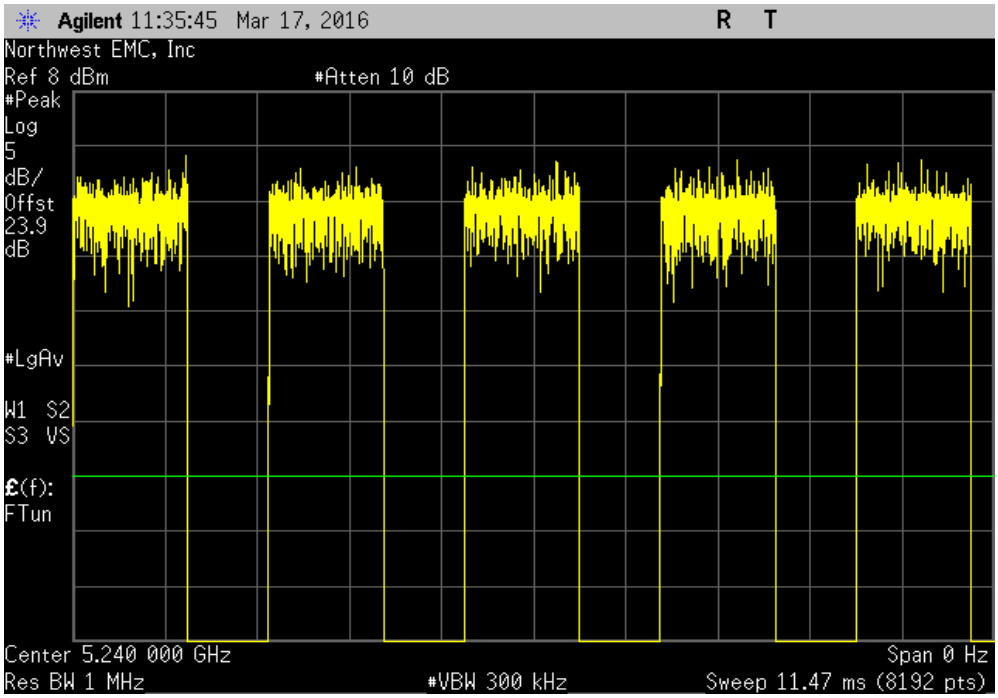
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



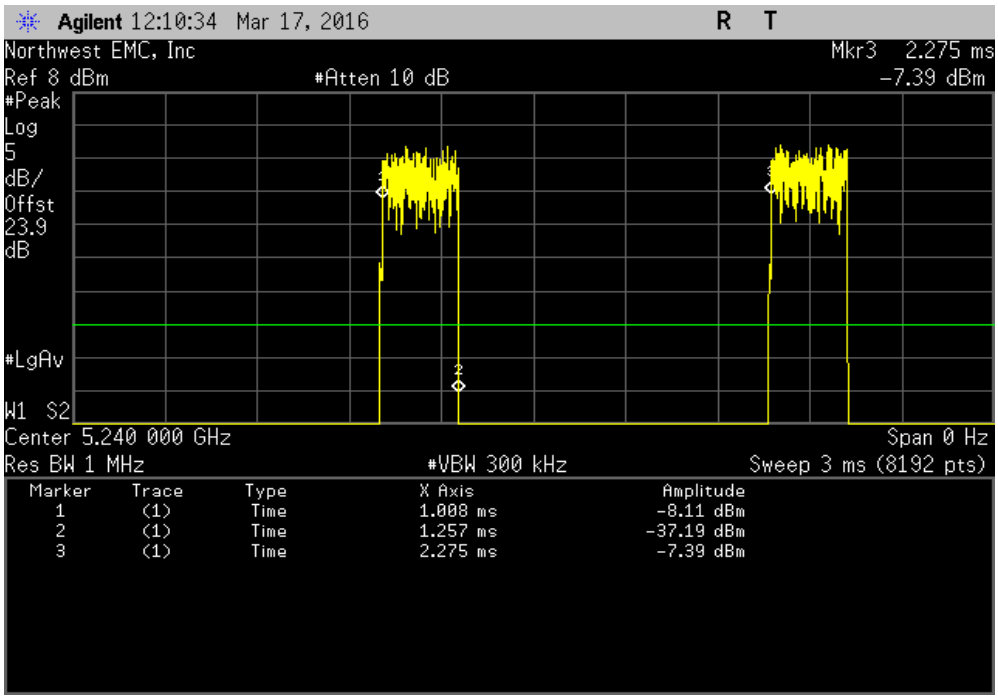
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.3	N/A	N/A



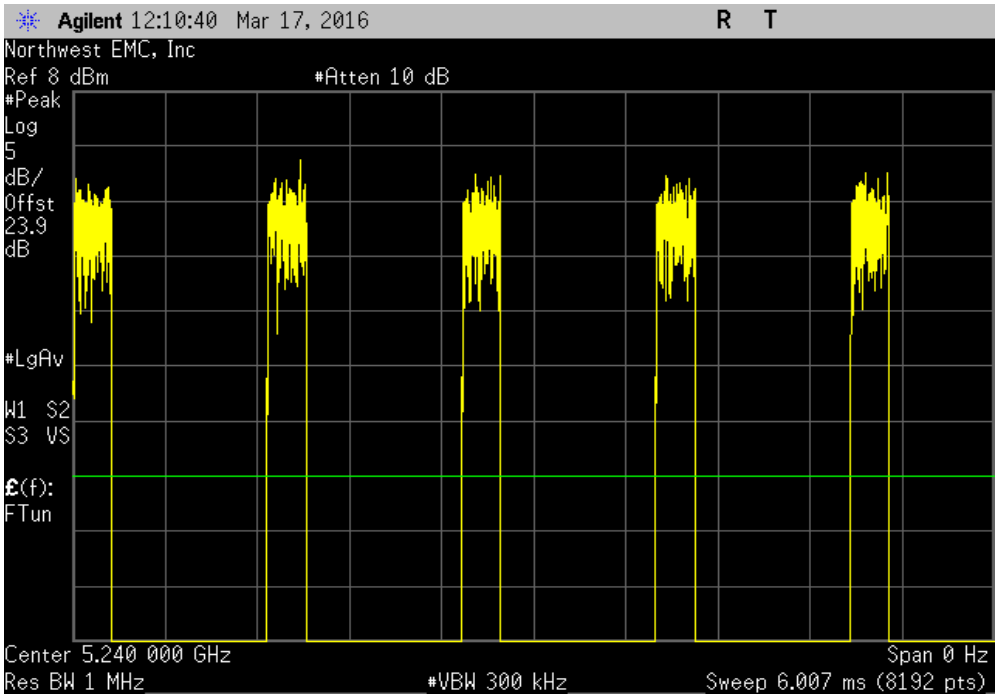
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	249.1 us	1.267 ms	1	19.7	N/A	N/A



5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

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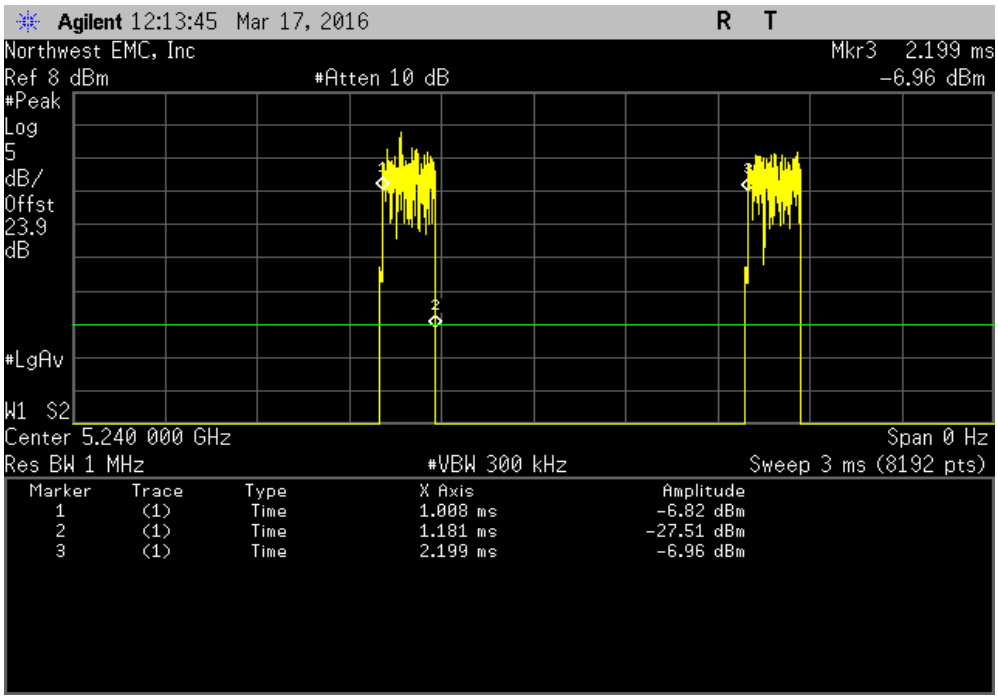
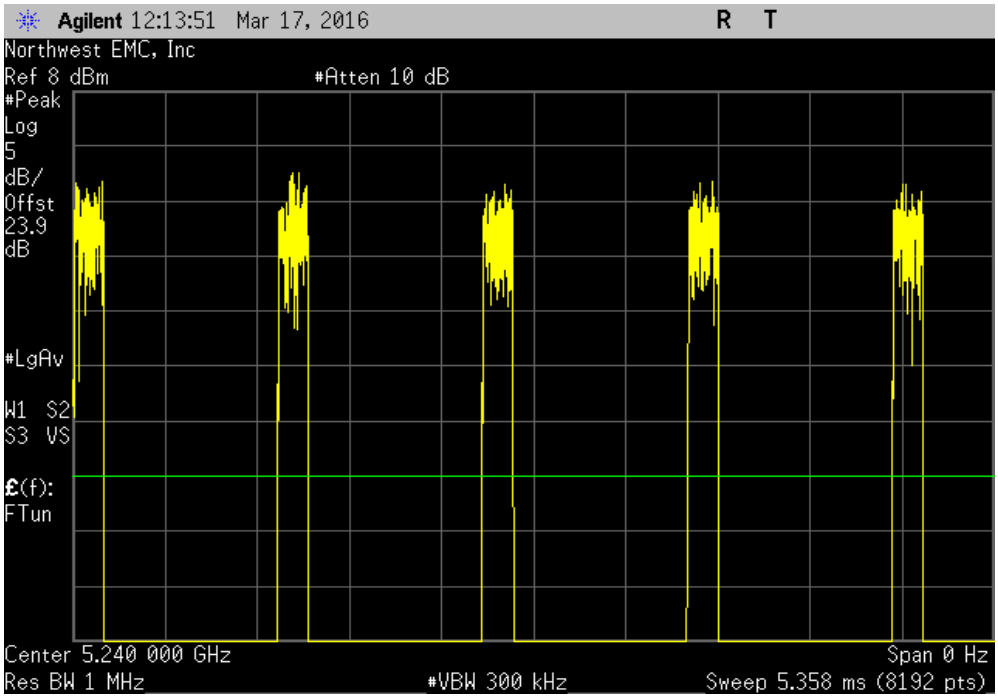
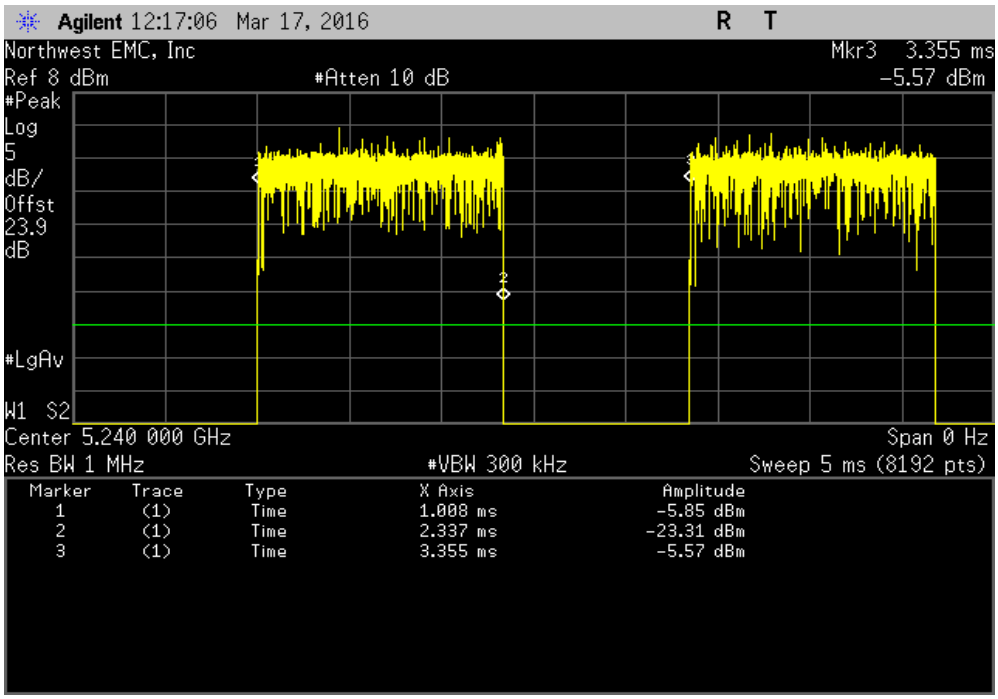
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.5 us	1.191 ms	1	14.5	N/A	N/A



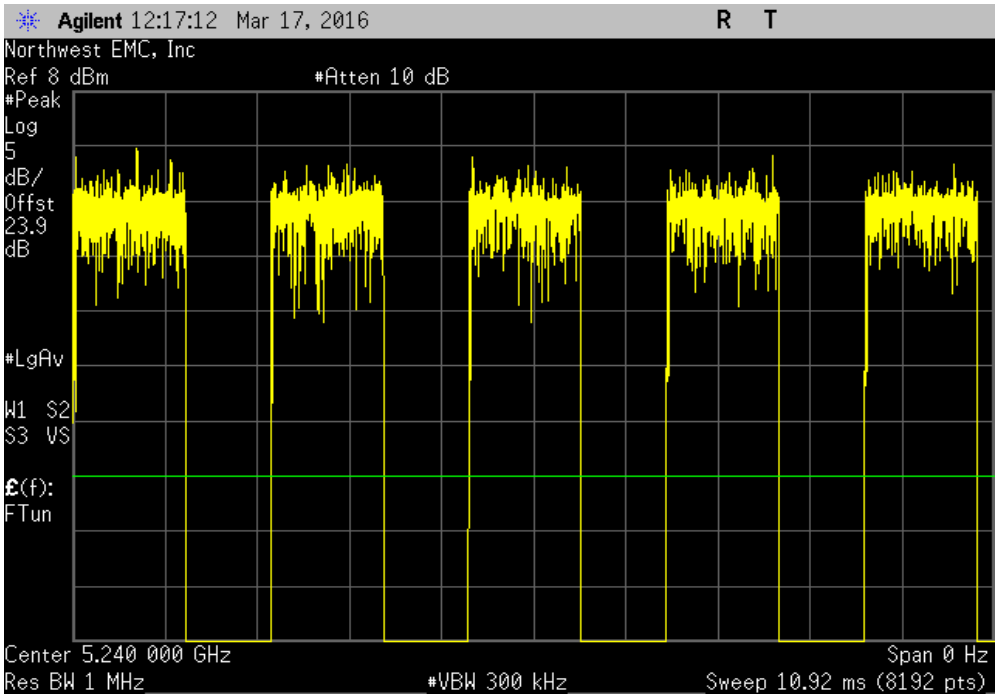
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



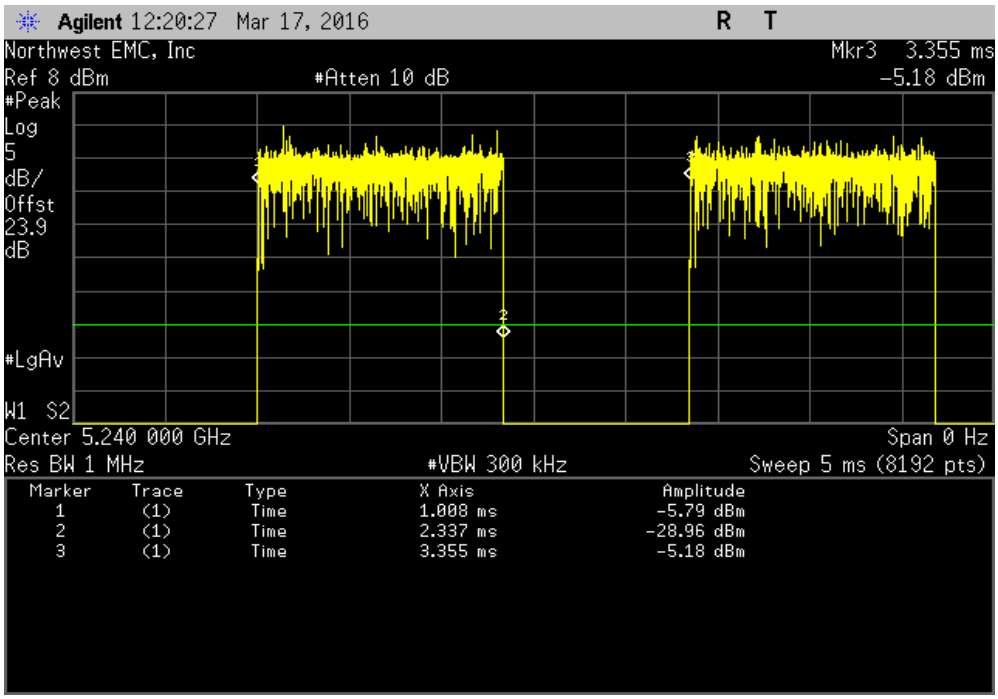
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



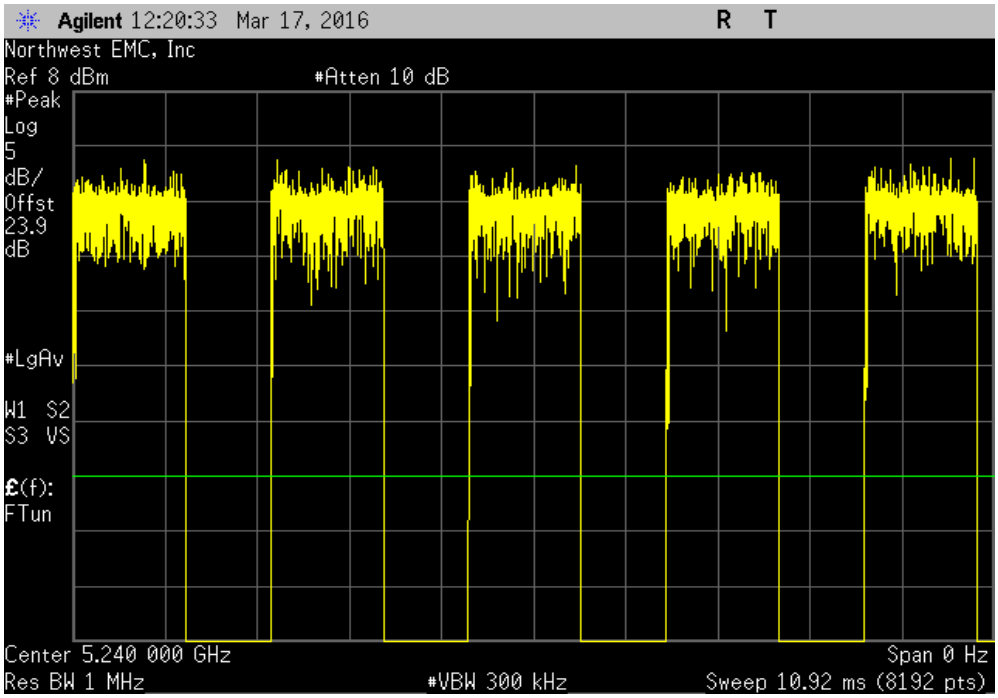
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

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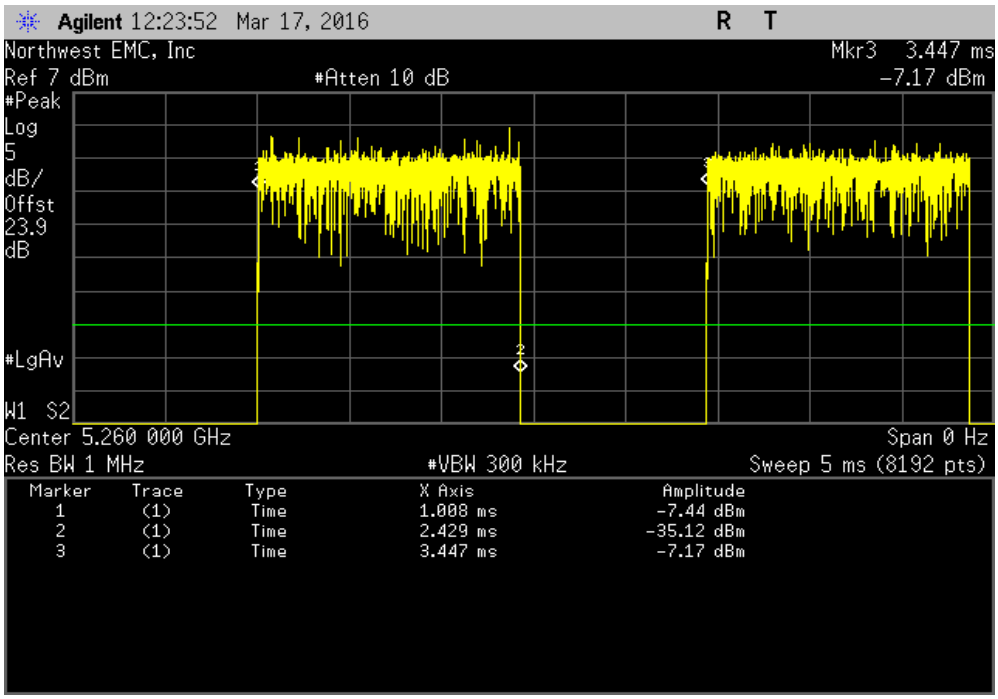
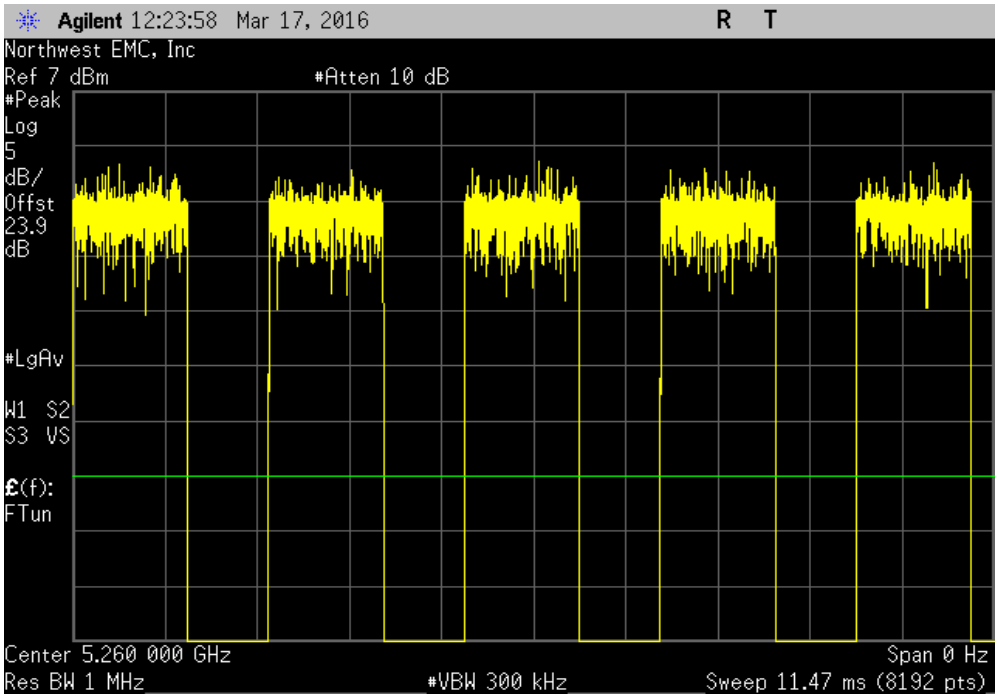
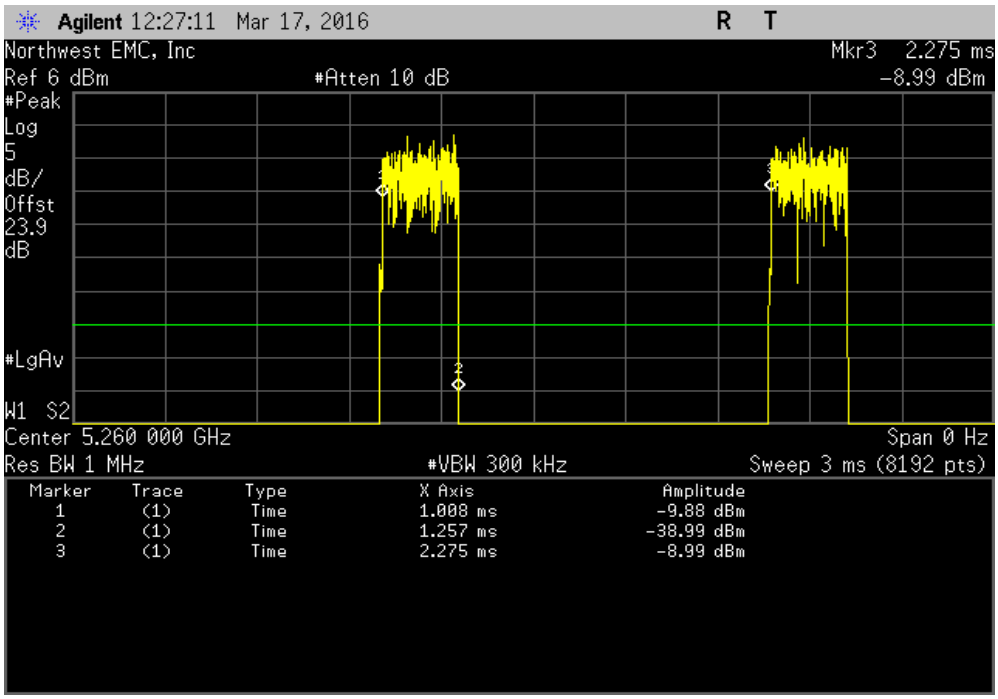
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.2	N/A	N/A



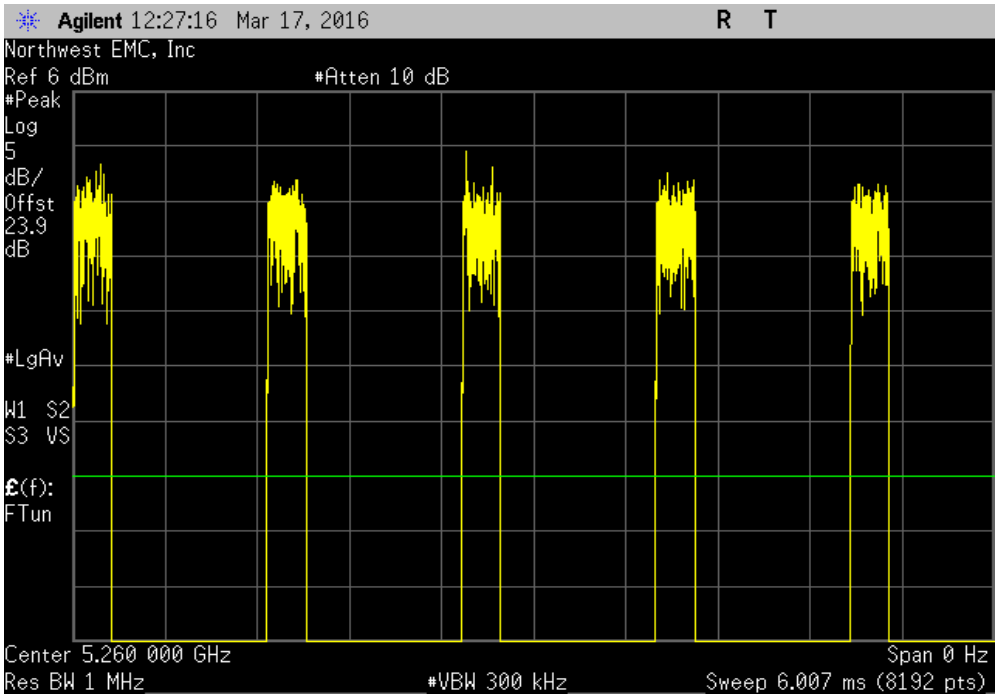
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	249.1 us	1.267 ms	1	19.7	N/A	N/A



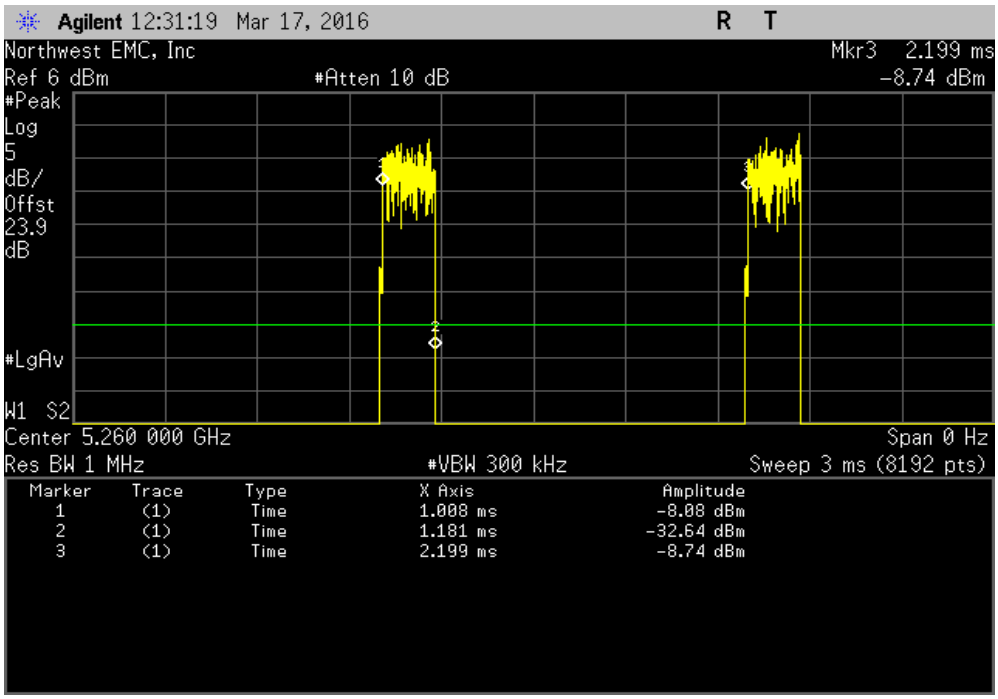
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



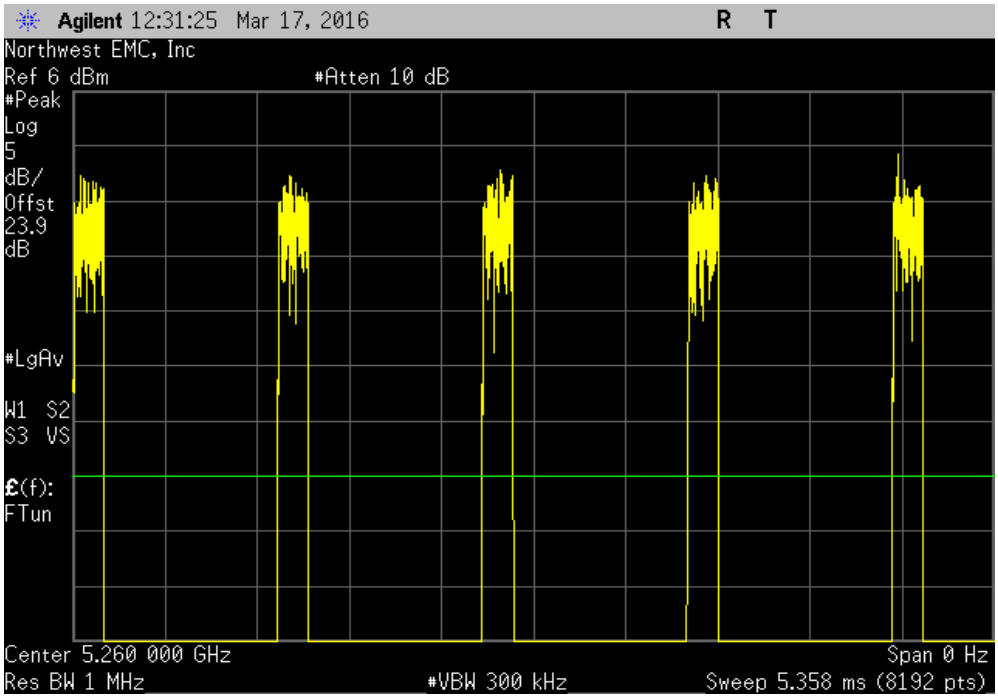
DUTY CYCLE

XMit 2015.01.14

5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.5 us	1.191 ms	1	14.5	N/A	N/A



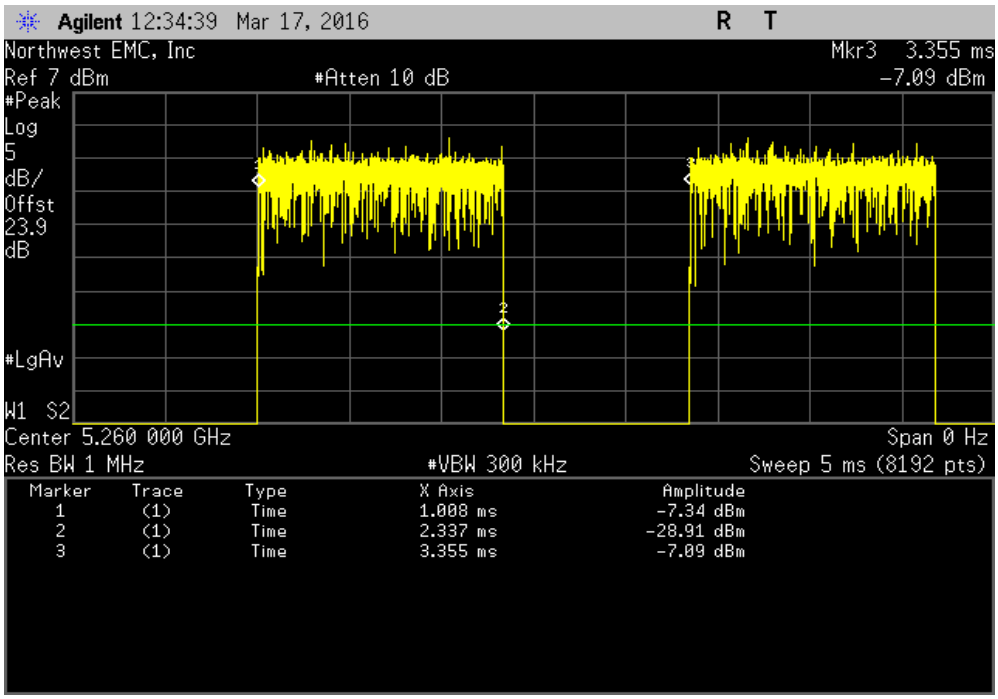
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



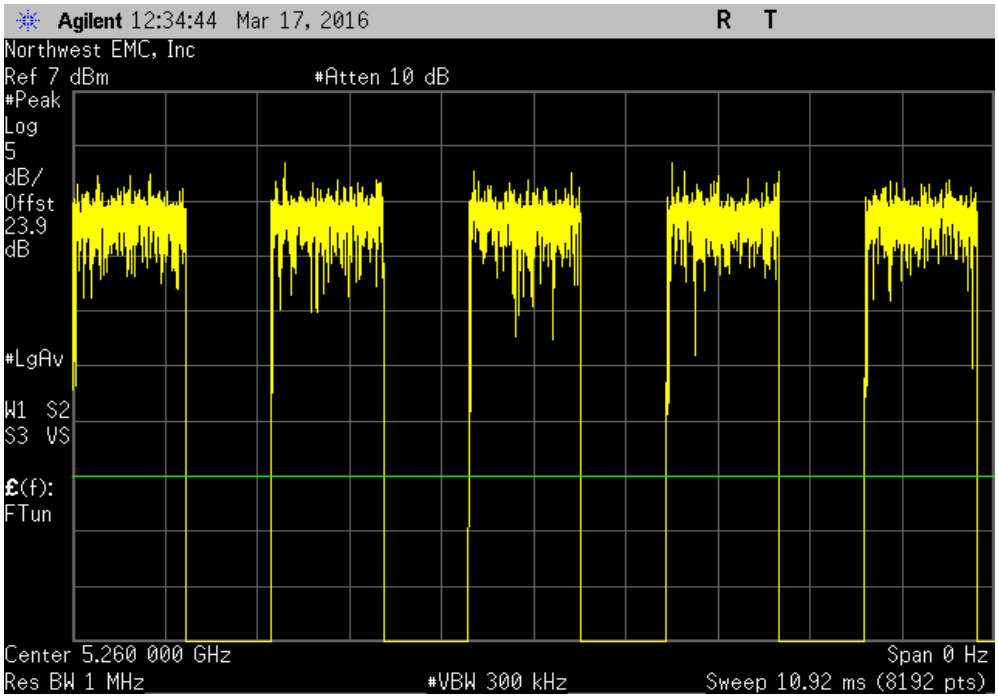
DUTY CYCLE

XMit 2015.01.14

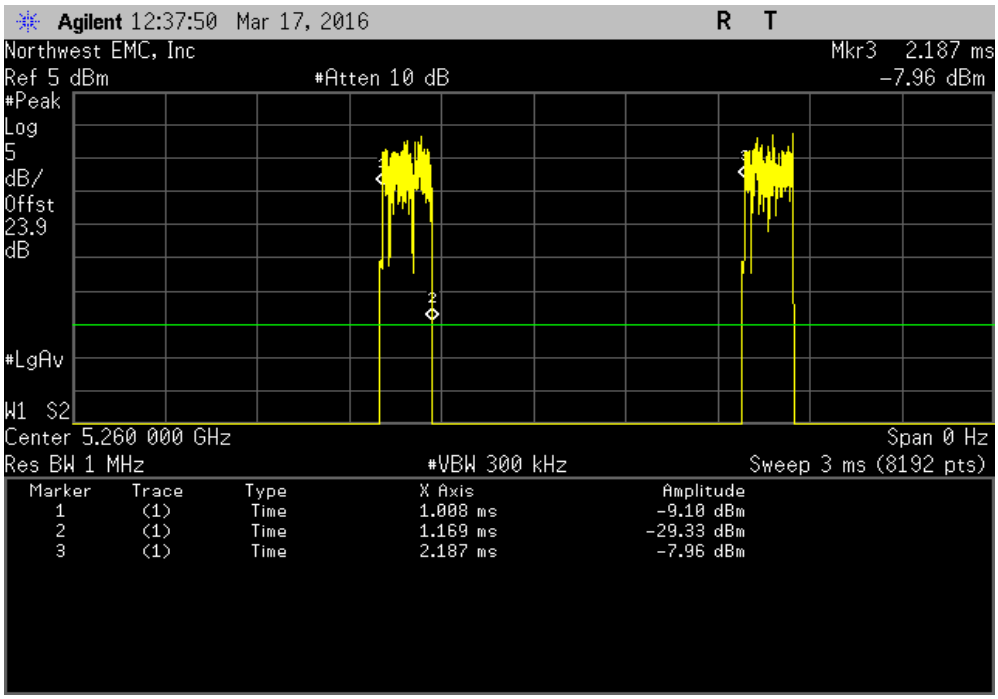
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



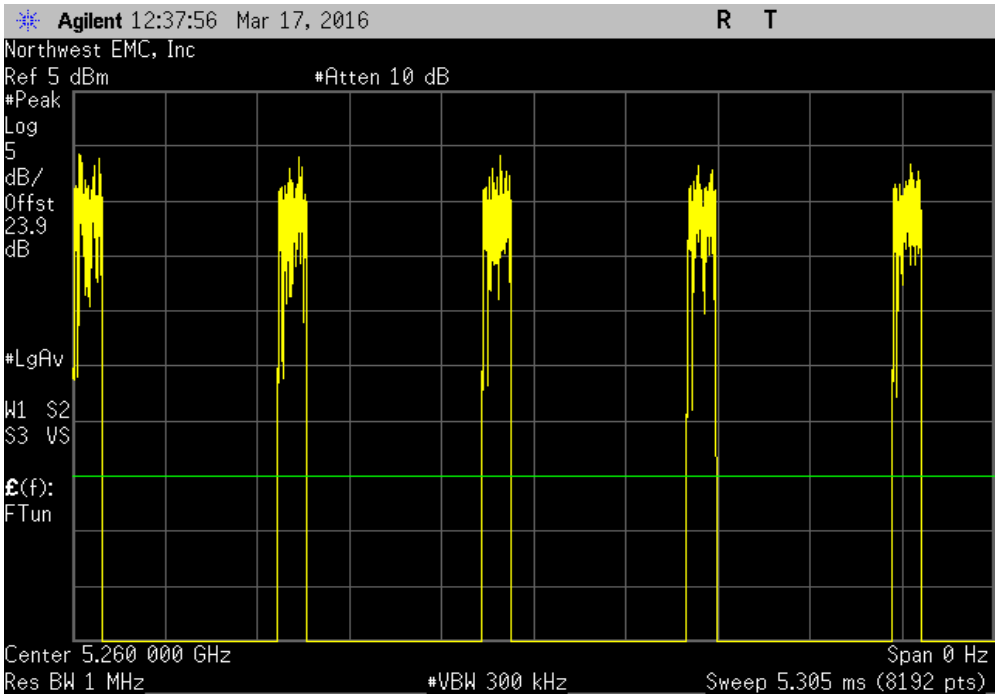
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.8 us	1.179 ms	1	13.6	N/A	N/A



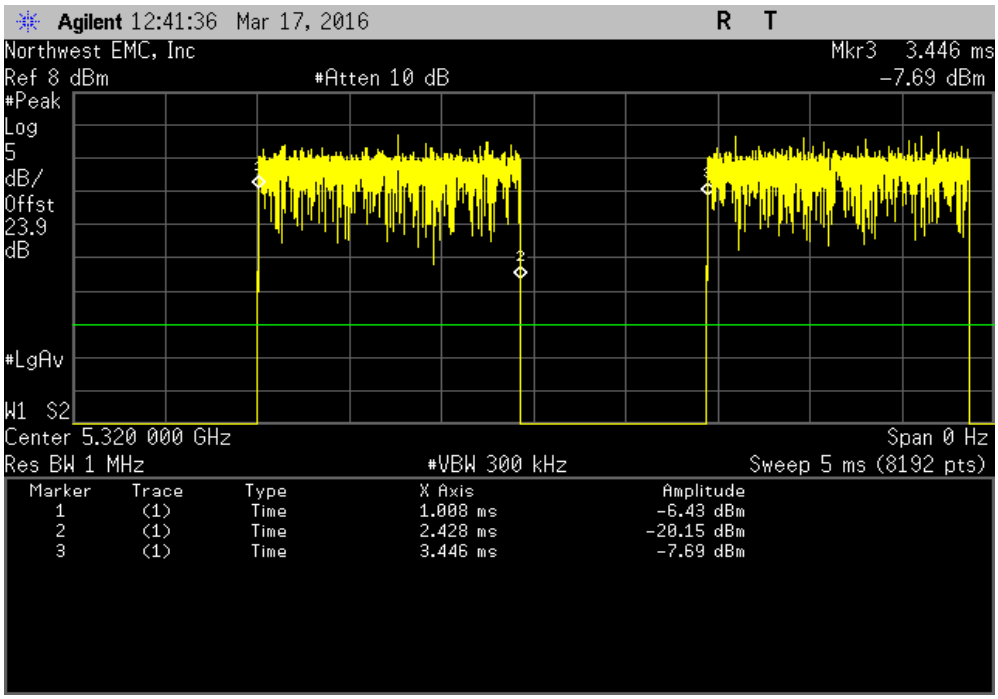
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



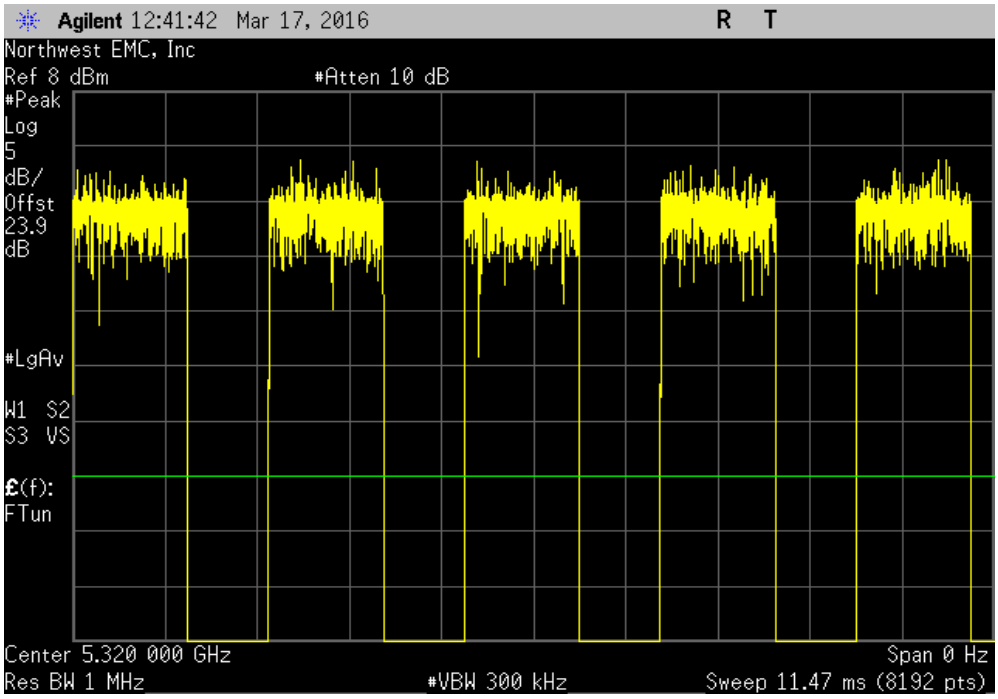
DUTY CYCLE

XMit 2015.01.14

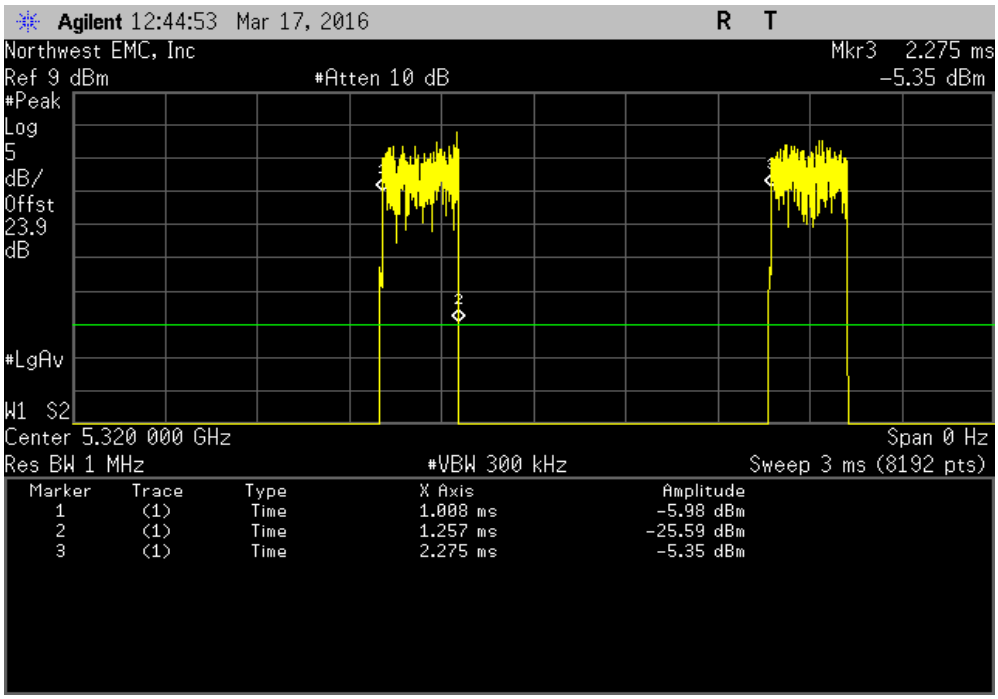
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.2	N/A	N/A



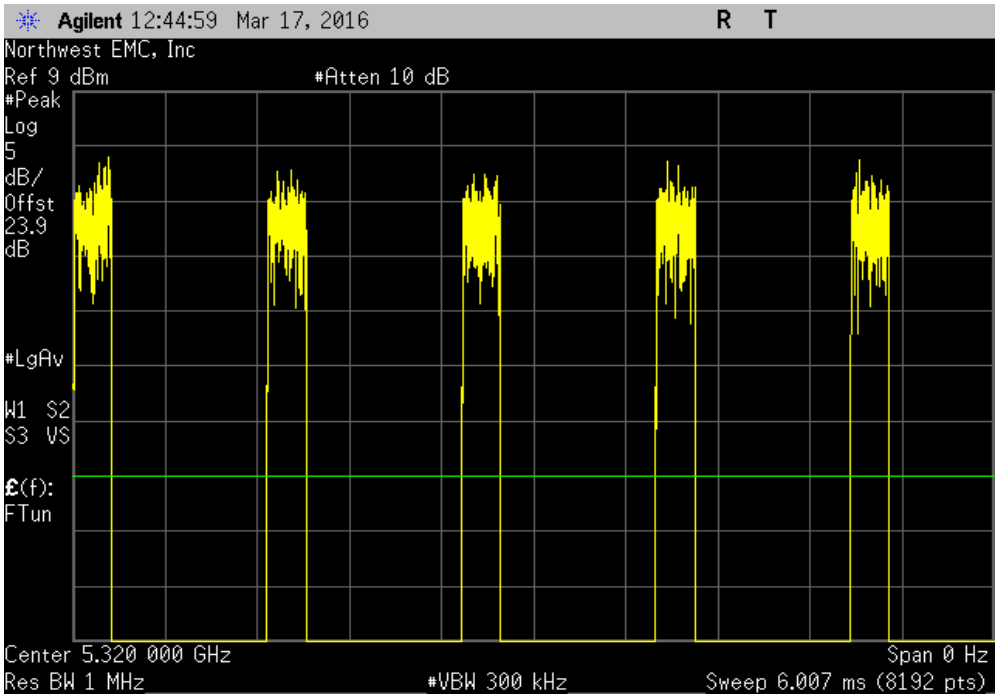
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	248.7 us	1.267 ms	1	19.6	N/A	N/A



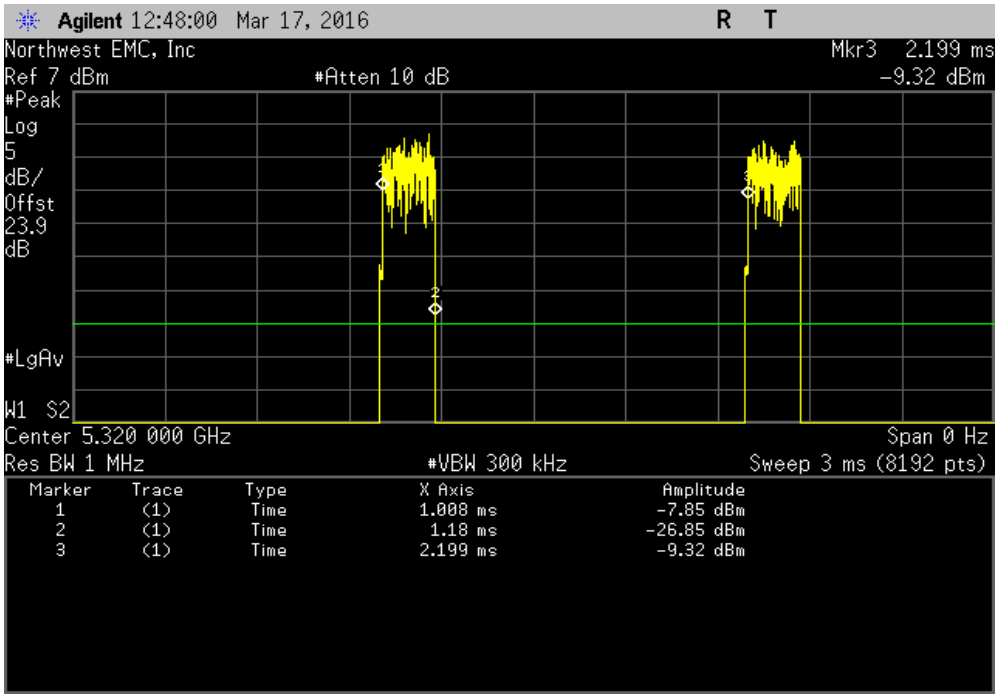
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



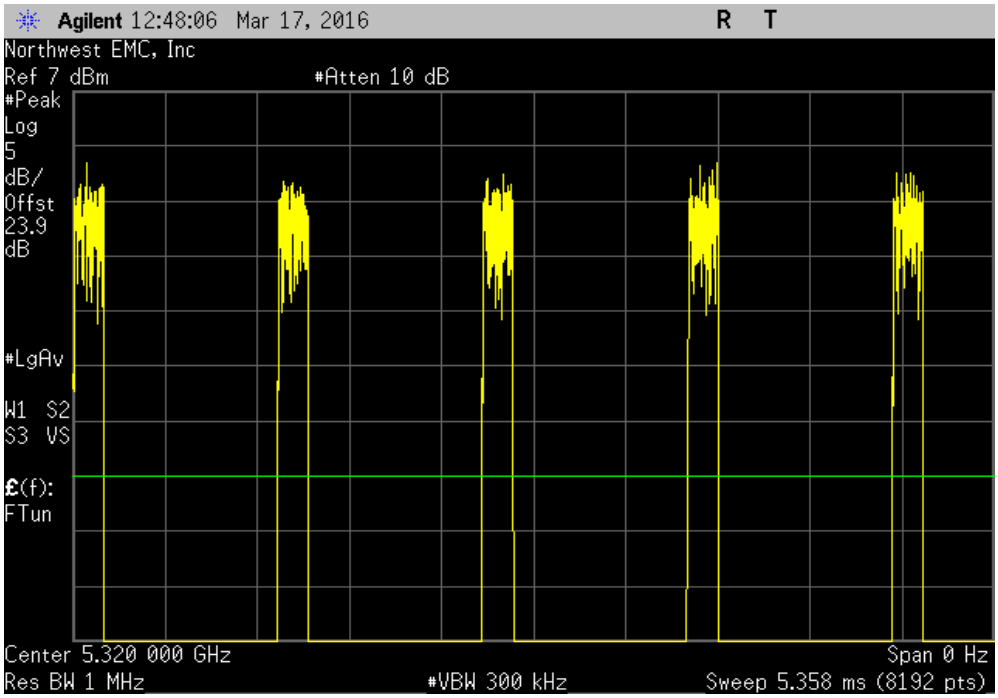
DUTY CYCLE

XMit 2015.01.14

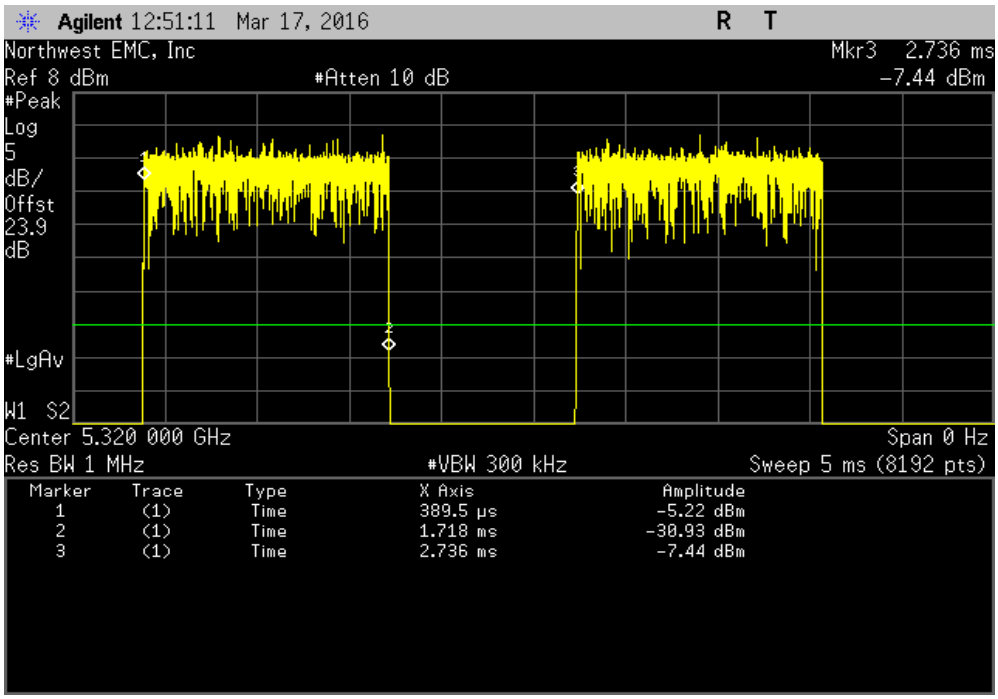
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.5 us	1.191 ms	1	14.5	N/A	N/A



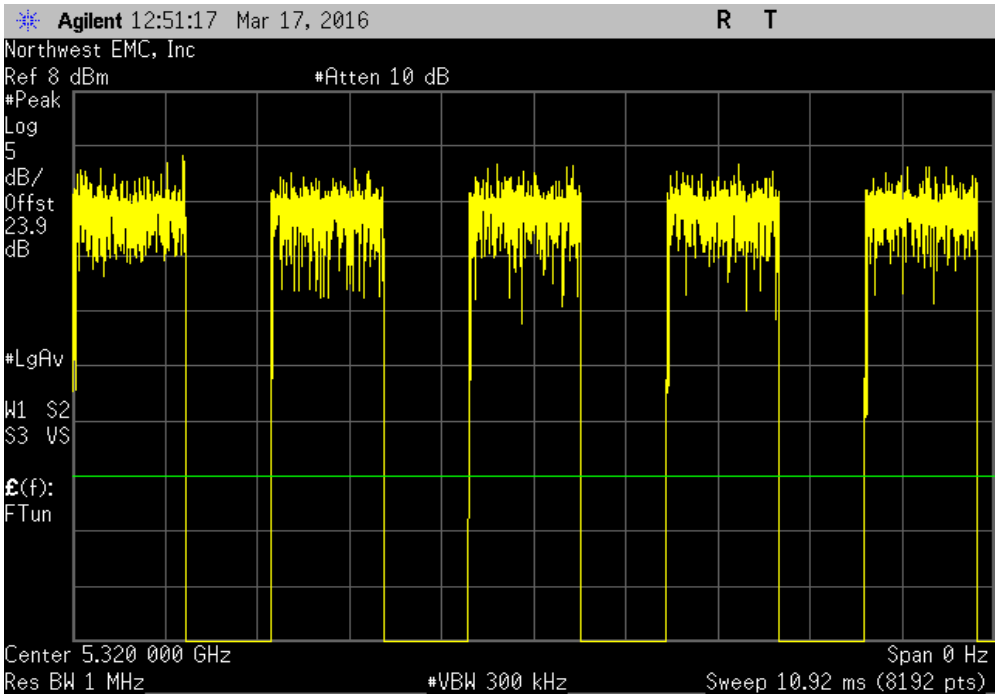
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



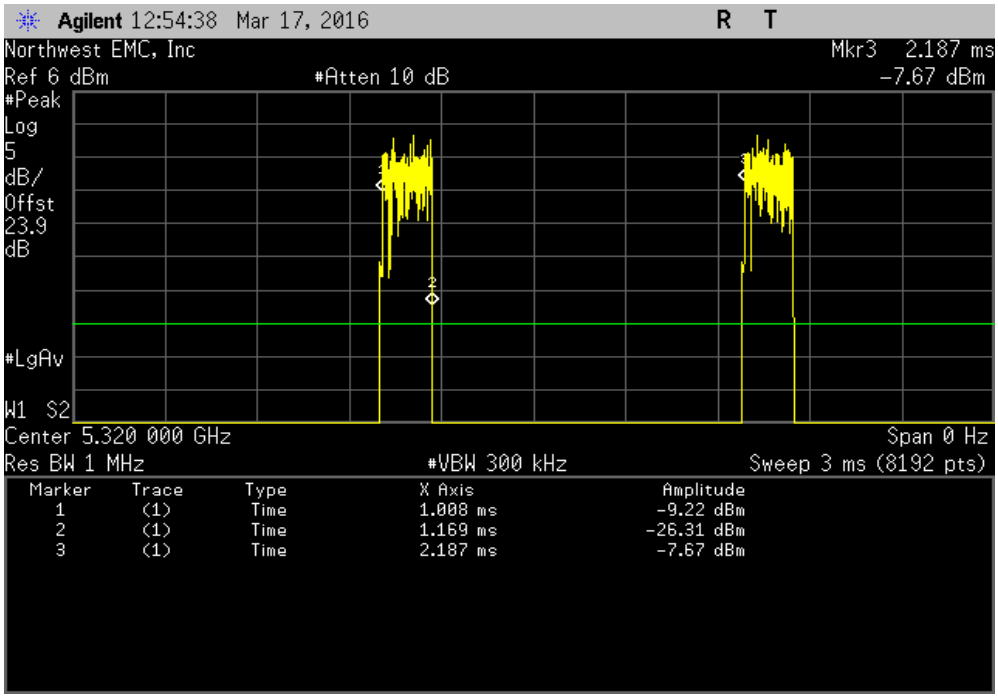
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.346 ms	1	56.6	N/A	N/A



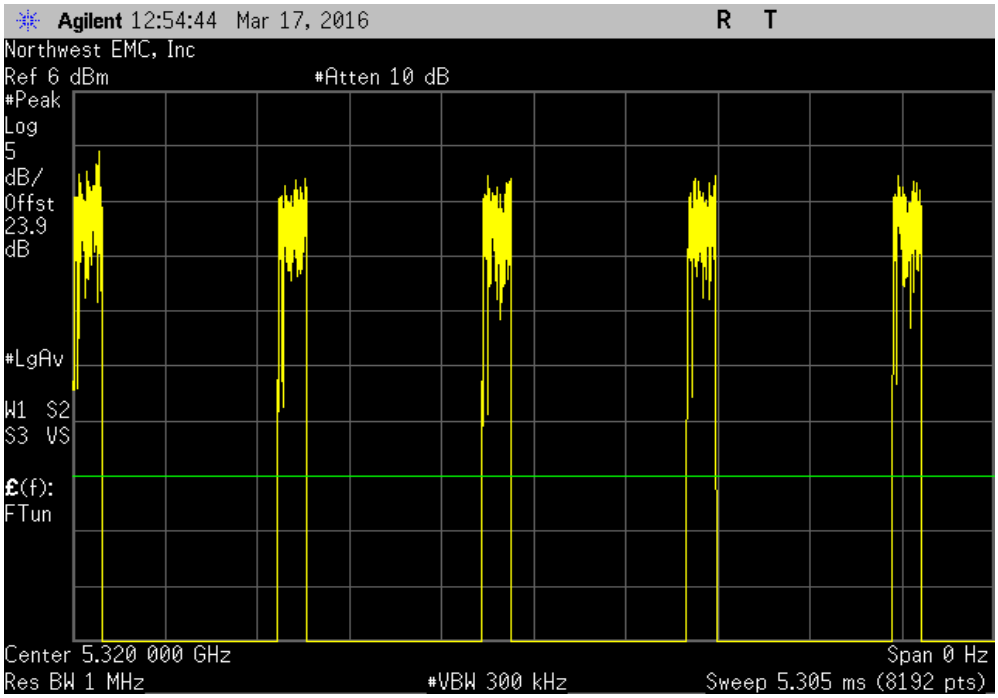
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



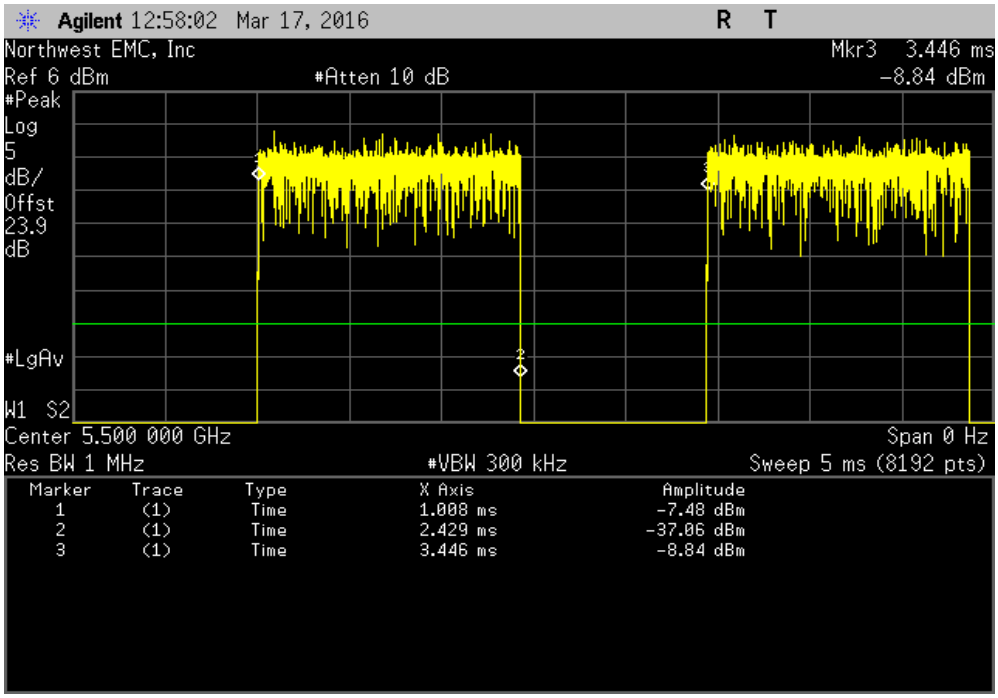
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.8 us	1.179 ms	1	13.6	N/A	N/A



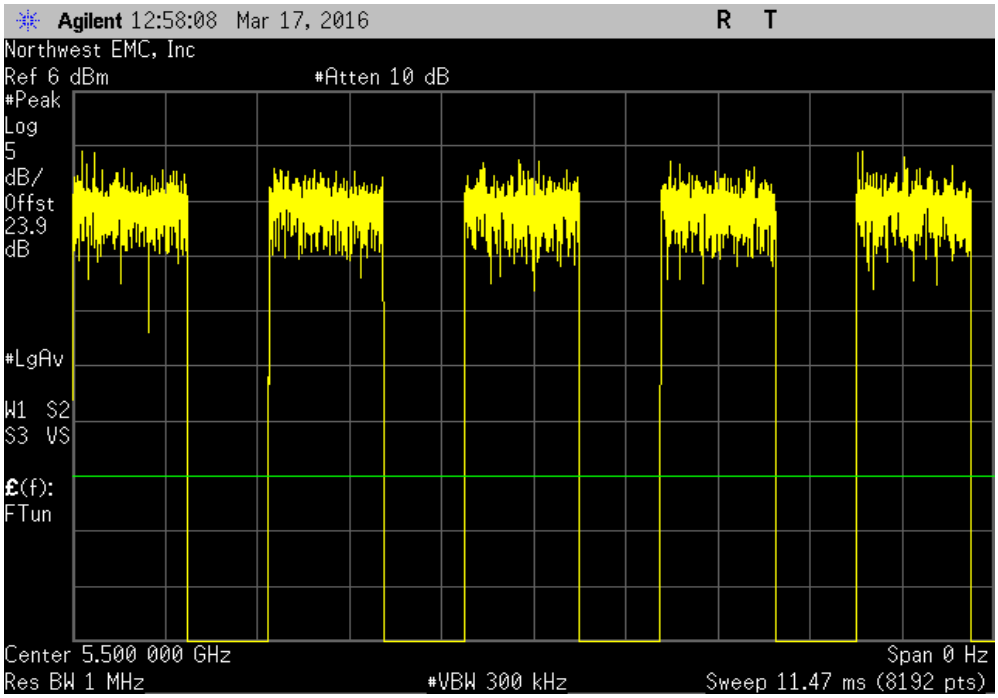
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.3	N/A	N/A



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



DUTY CYCLE

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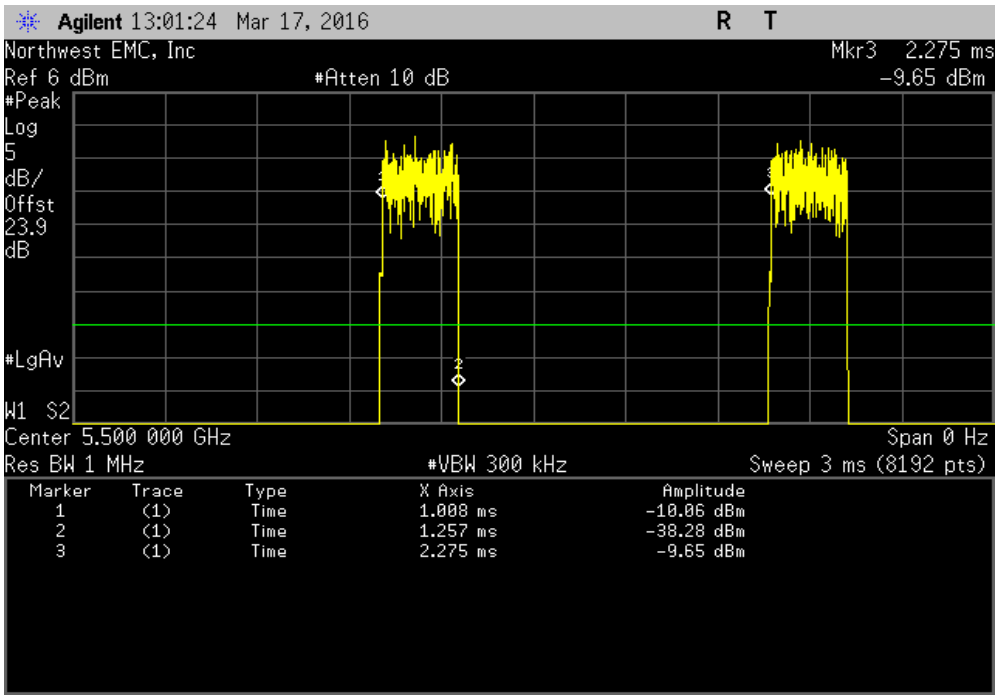
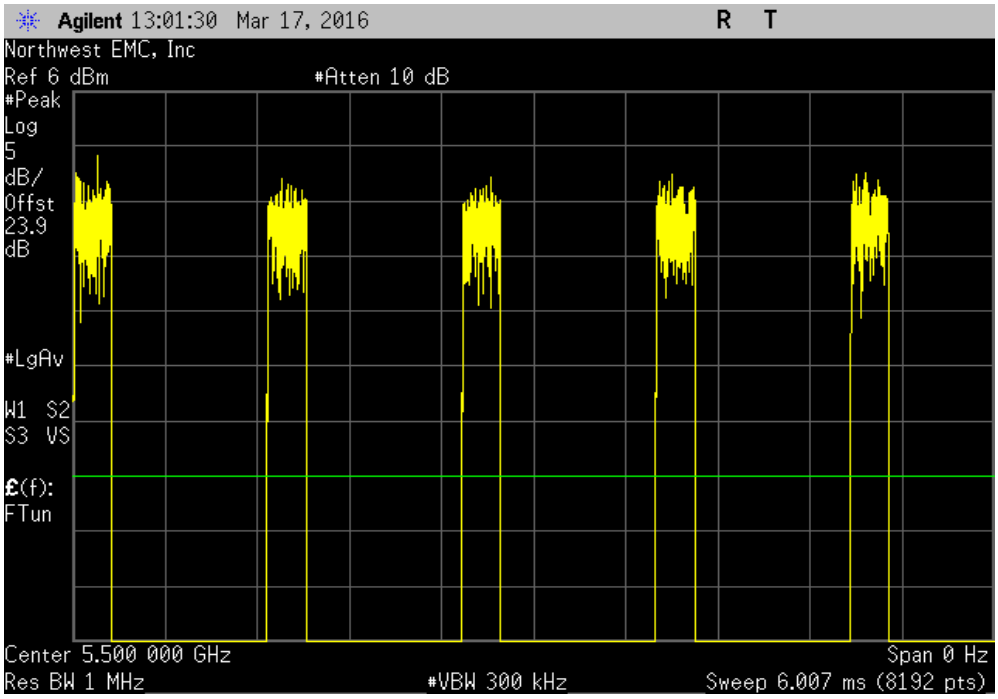
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	249.1 us	1.267 ms	1	19.7	N/A	N/A



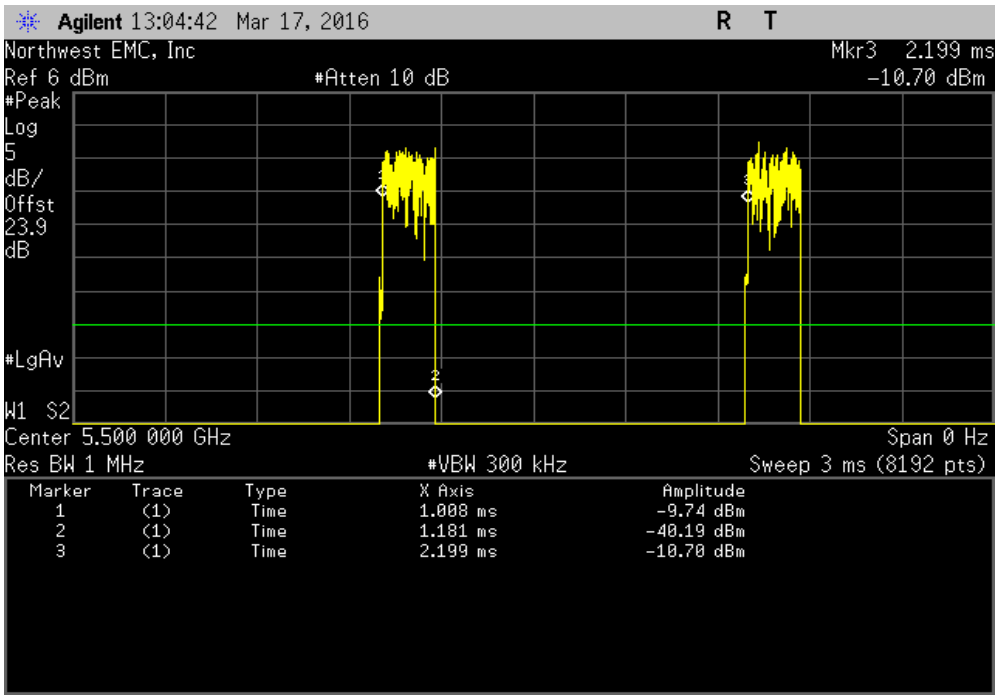
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



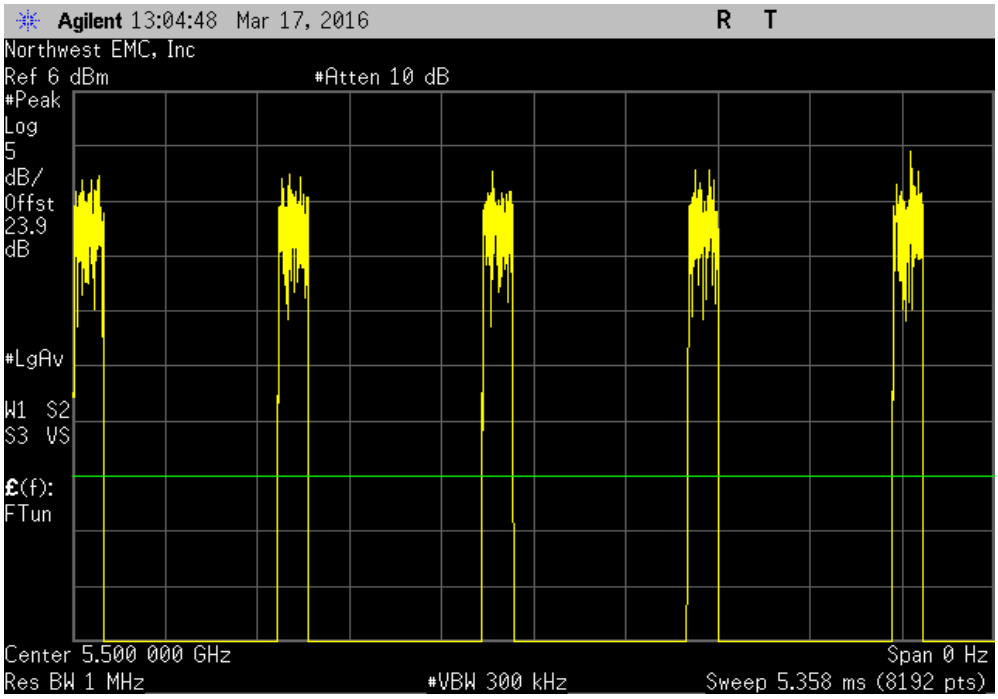
DUTY CYCLE

XMit 2015.01.14

5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.9 us	1.191 ms	1	14.5	N/A	N/A



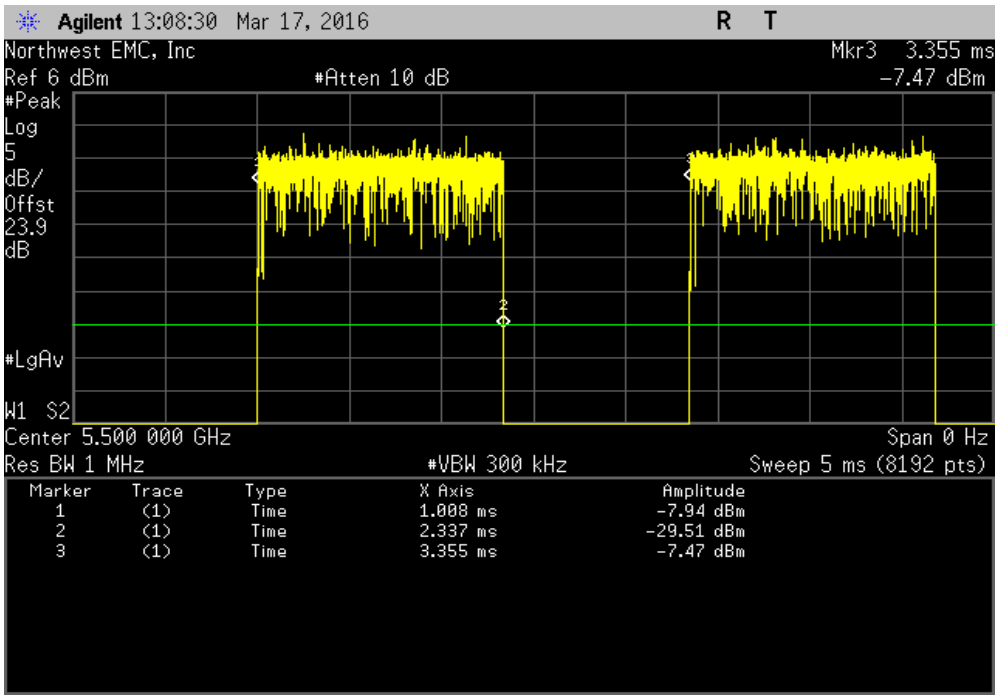
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



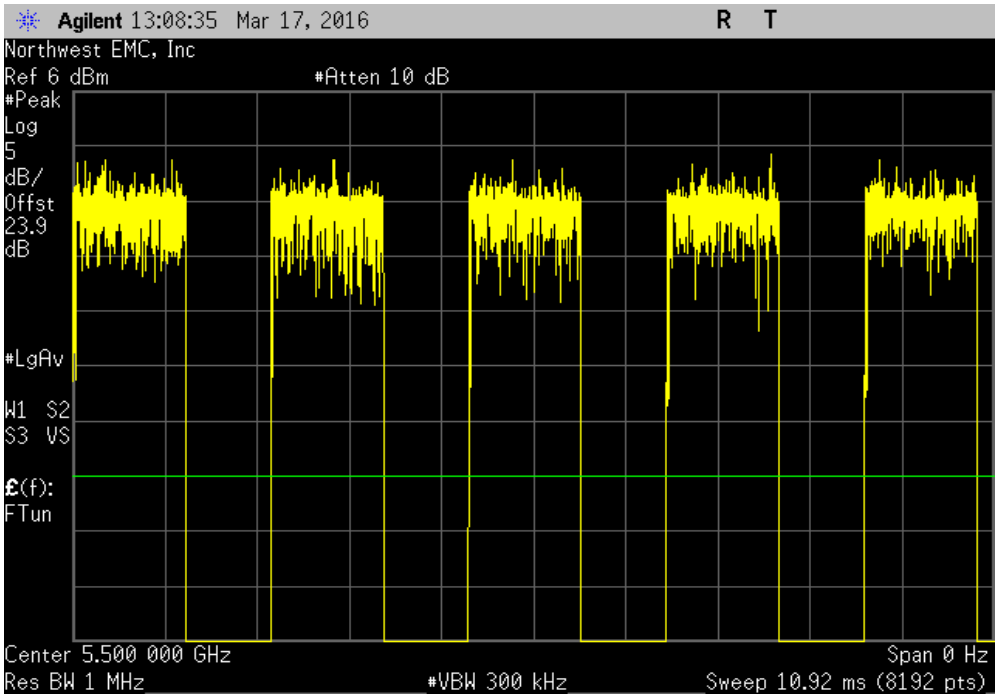
DUTY CYCLE

XMit 2015.01.14

5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



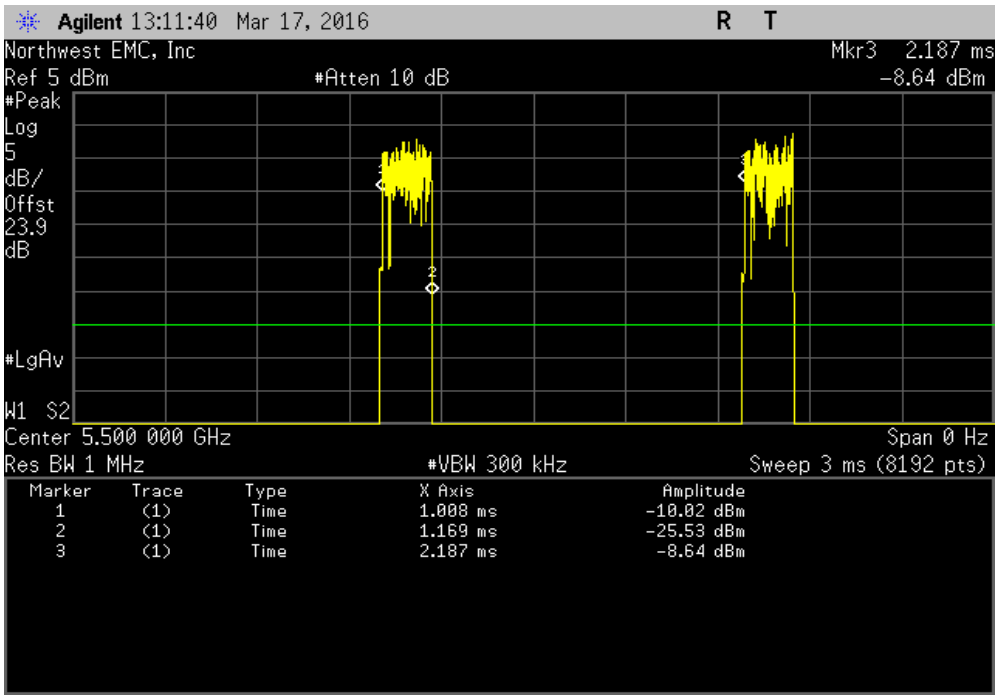
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



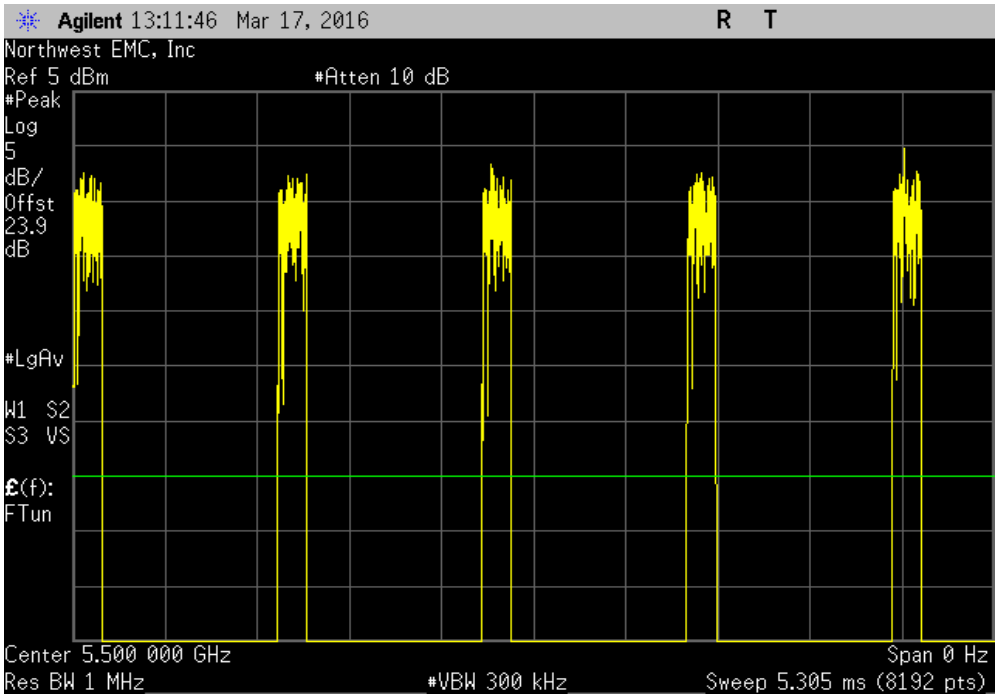
DUTY CYCLE

XMit 2015.01.14

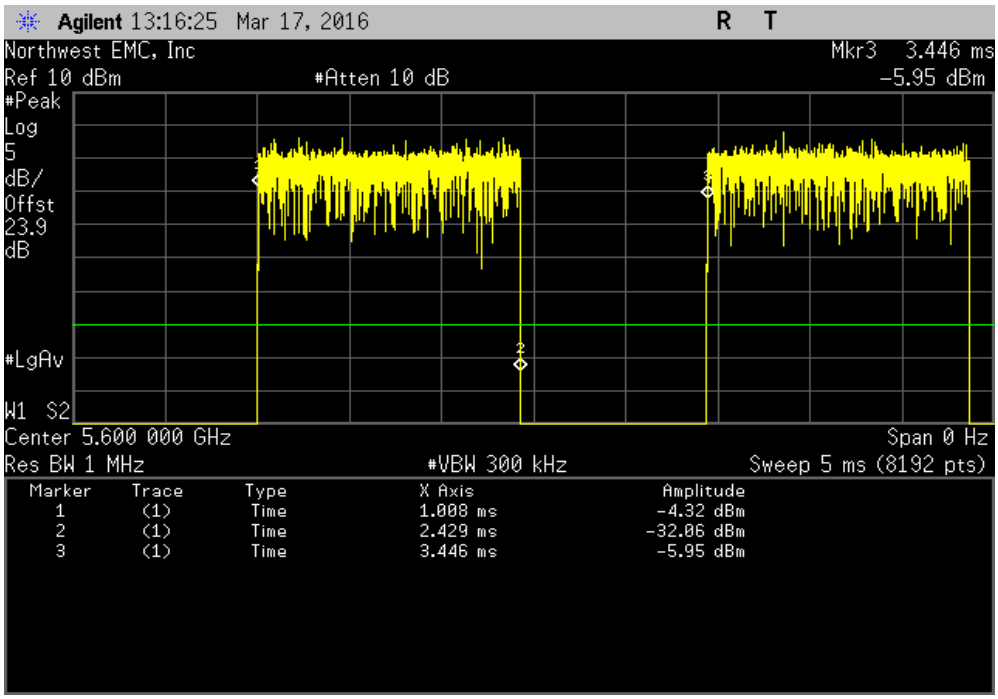
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.8 us	1.179 ms	1	13.6	N/A	N/A



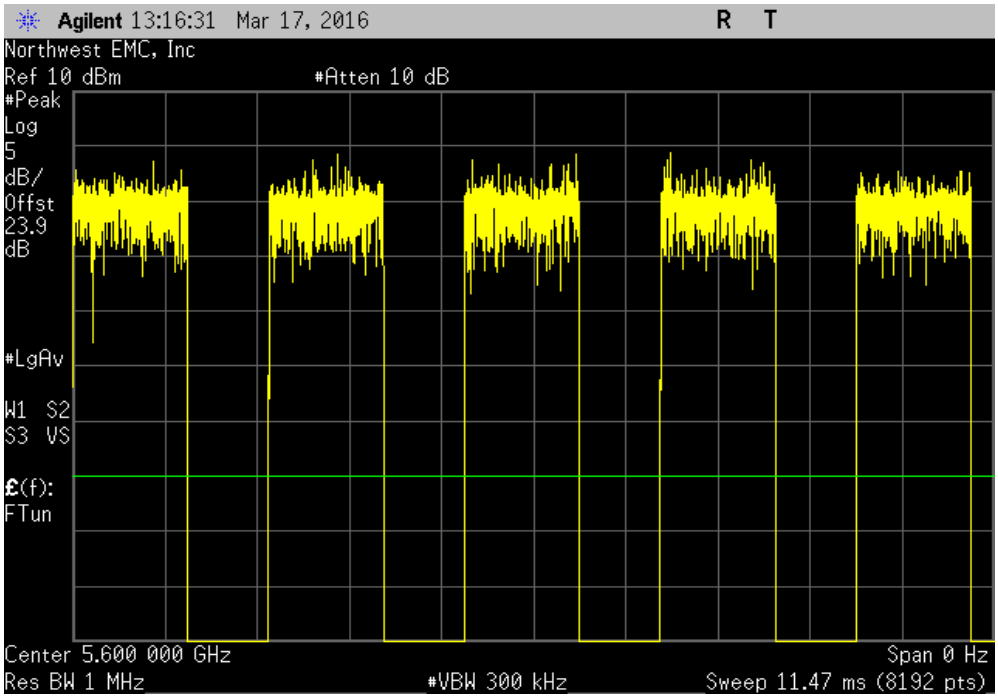
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.3	N/A	N/A



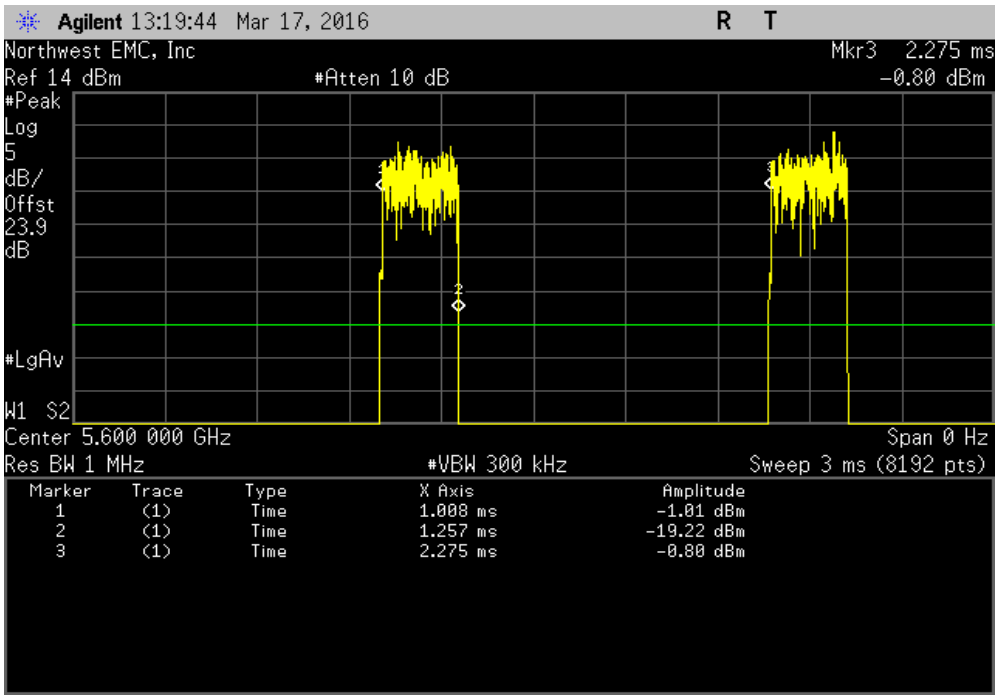
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



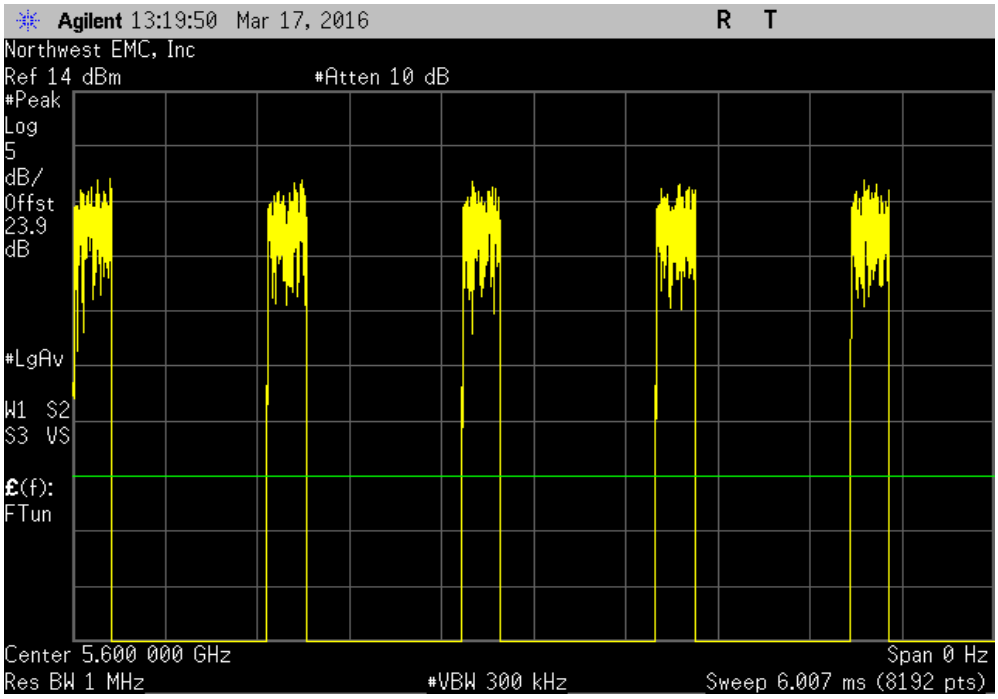
DUTY CYCLE

XMit 2015.01.14

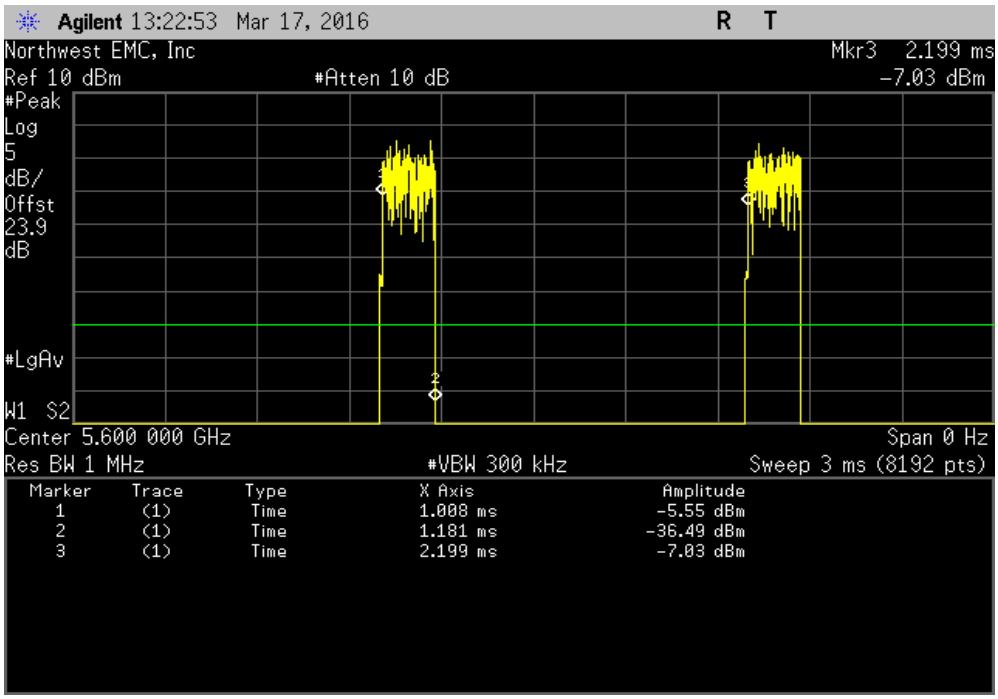
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	248.7 us	1.267 ms	1	19.6	N/A	N/A



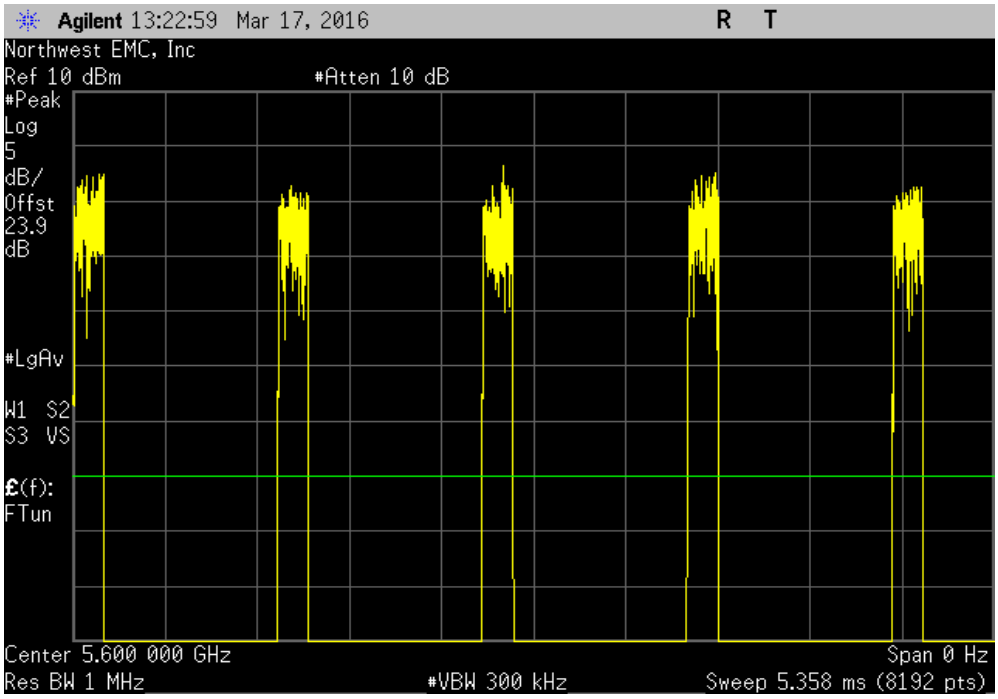
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.9 us	1.191 ms	1	14.5	N/A	N/A



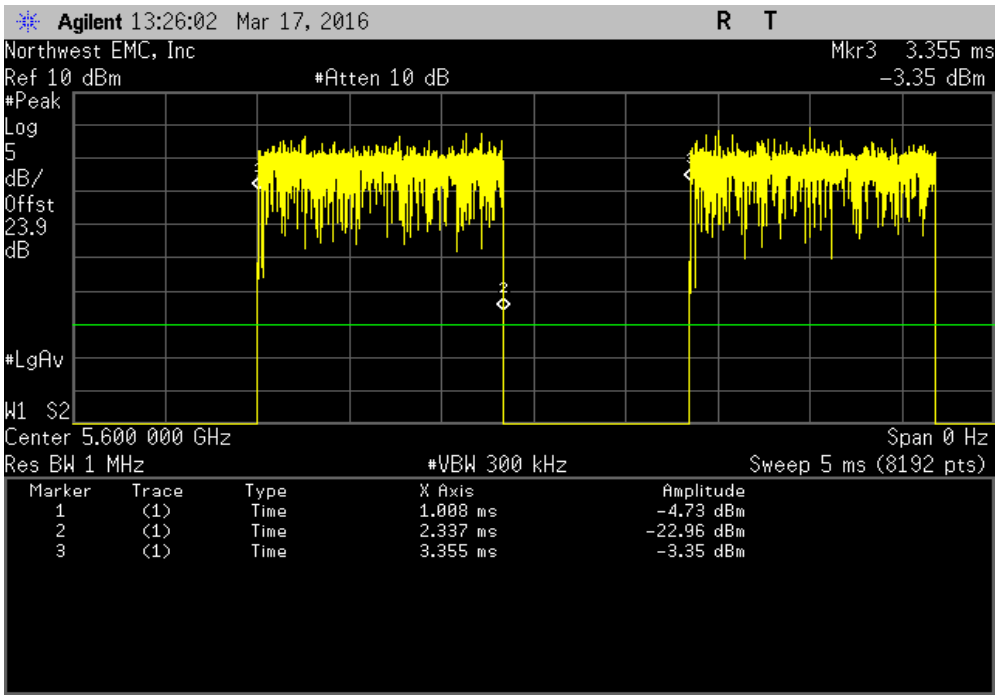
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



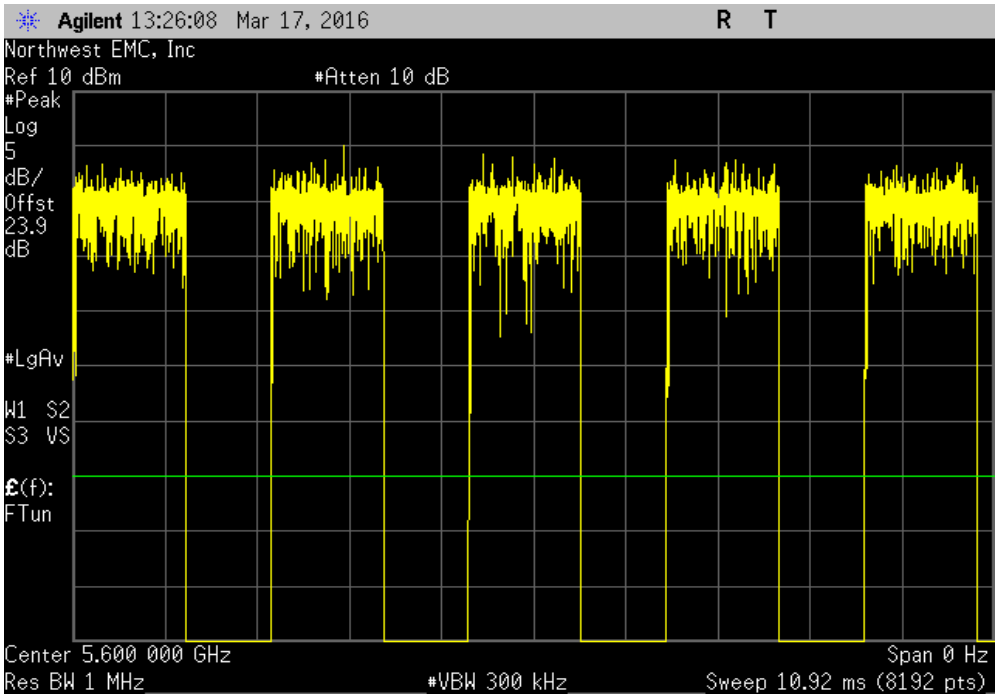
DUTY CYCLE

XMit 2015.01.14

5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



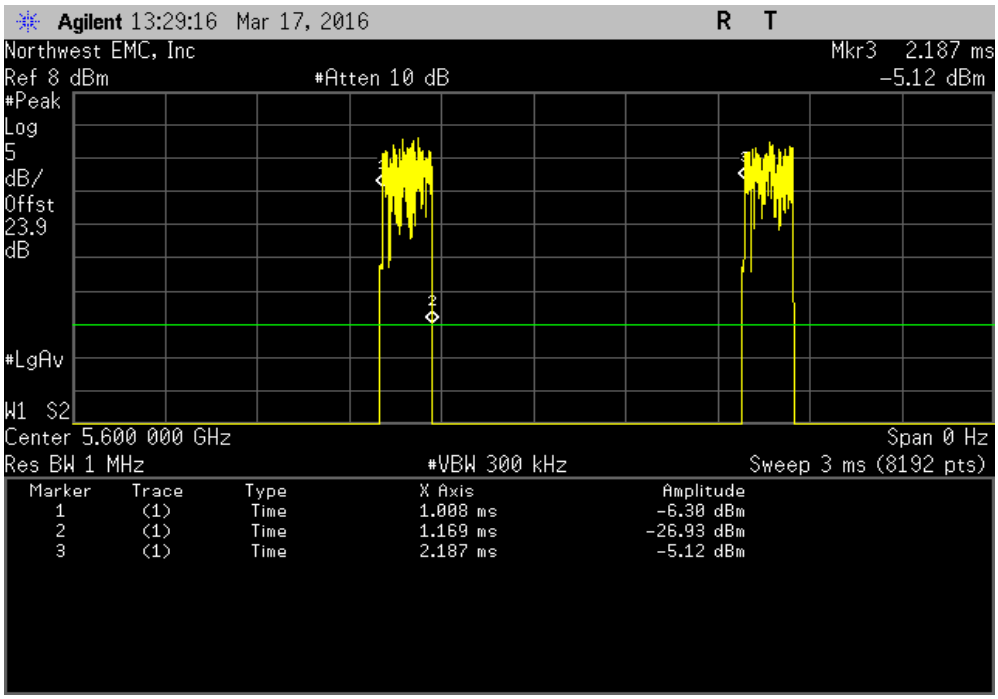
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



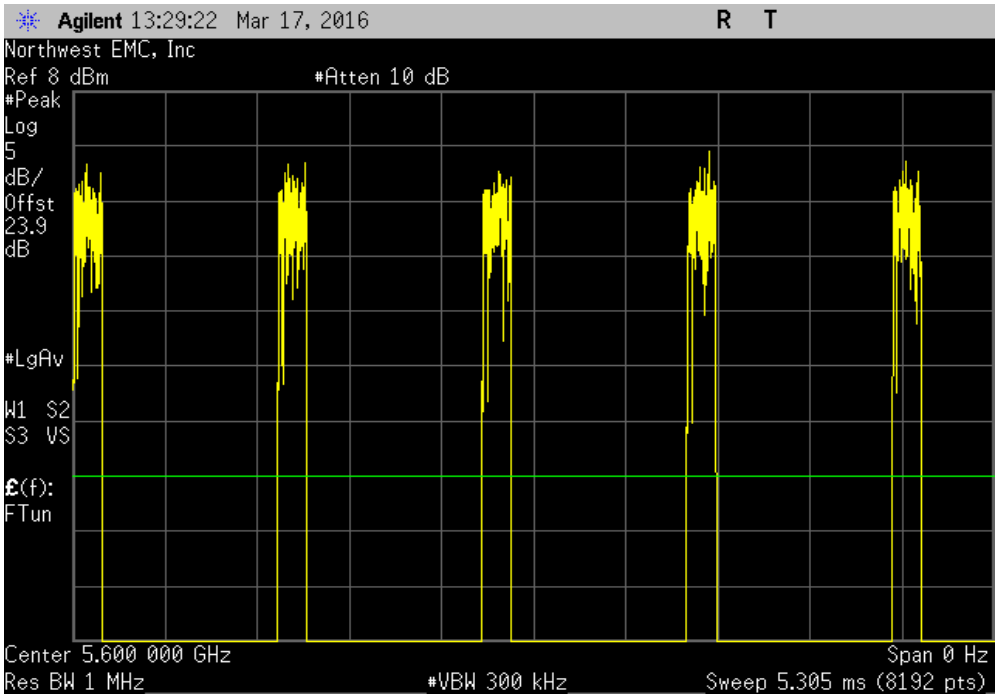
DUTY CYCLE

XMit 2015.01.14

5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.8 us	1.179 ms	1	13.6	N/A	N/A



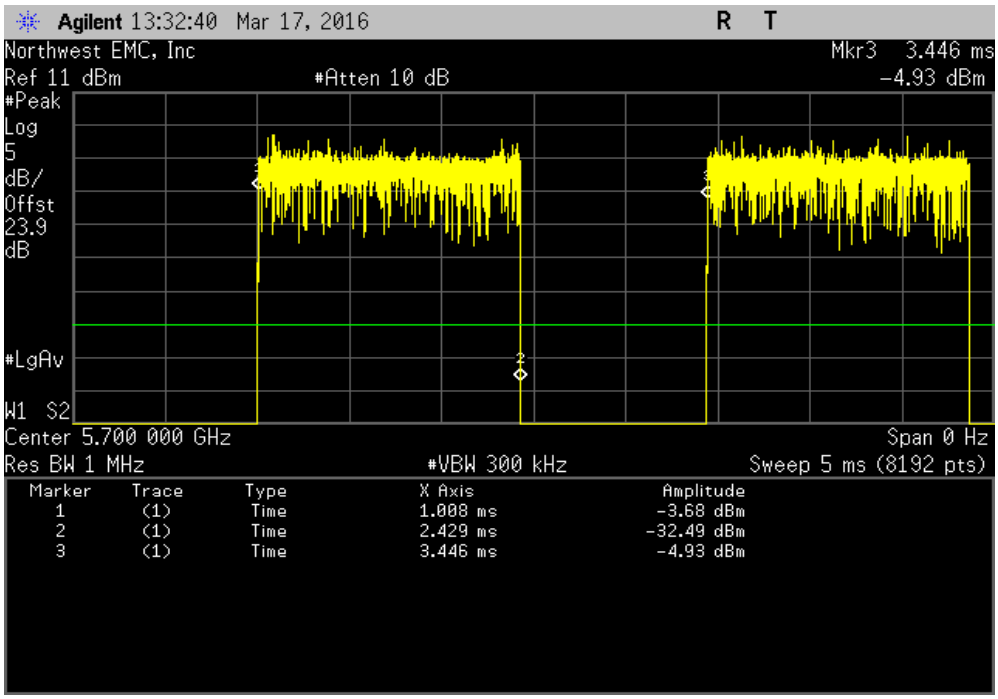
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



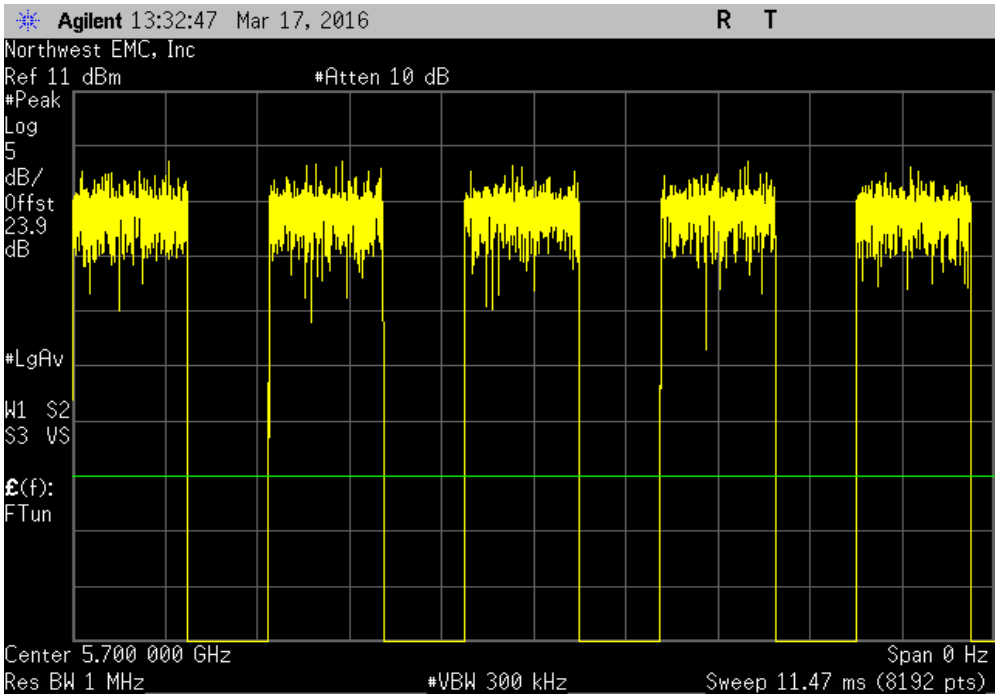
DUTY CYCLE

XMit 2015.01.14

5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.3	N/A	N/A



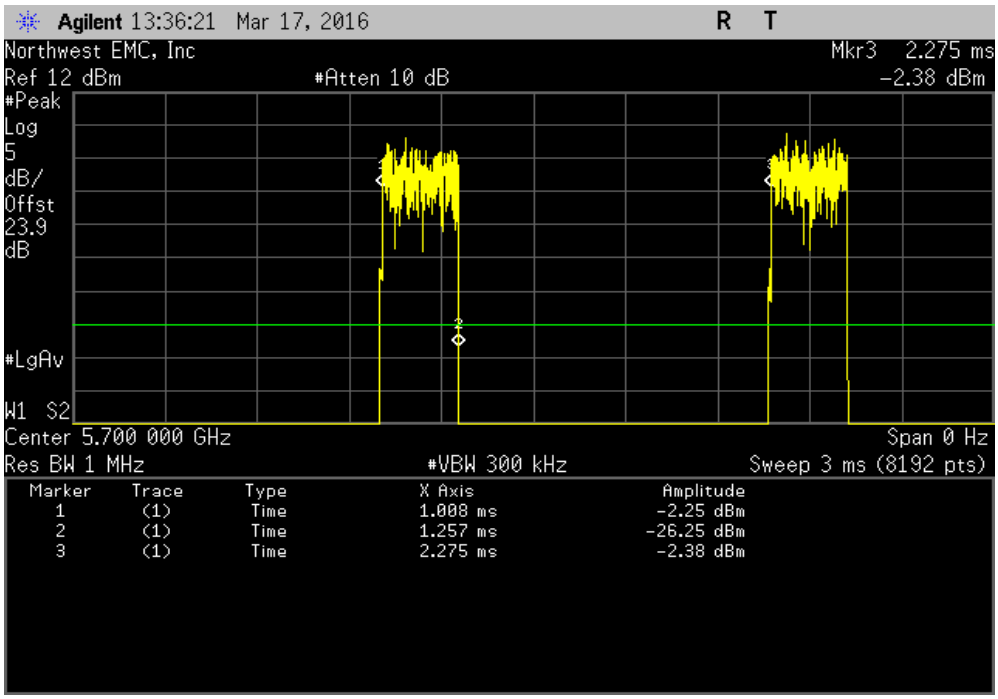
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



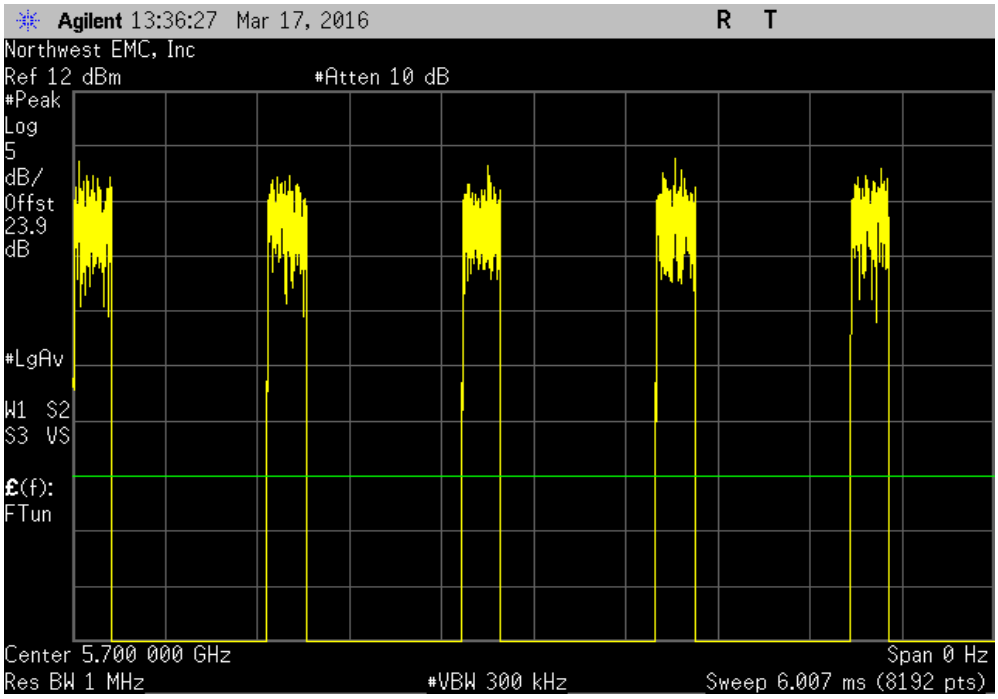
DUTY CYCLE

XMit 2015.01.14

5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	248.7 us	1.267 ms	1	19.6	N/A	N/A



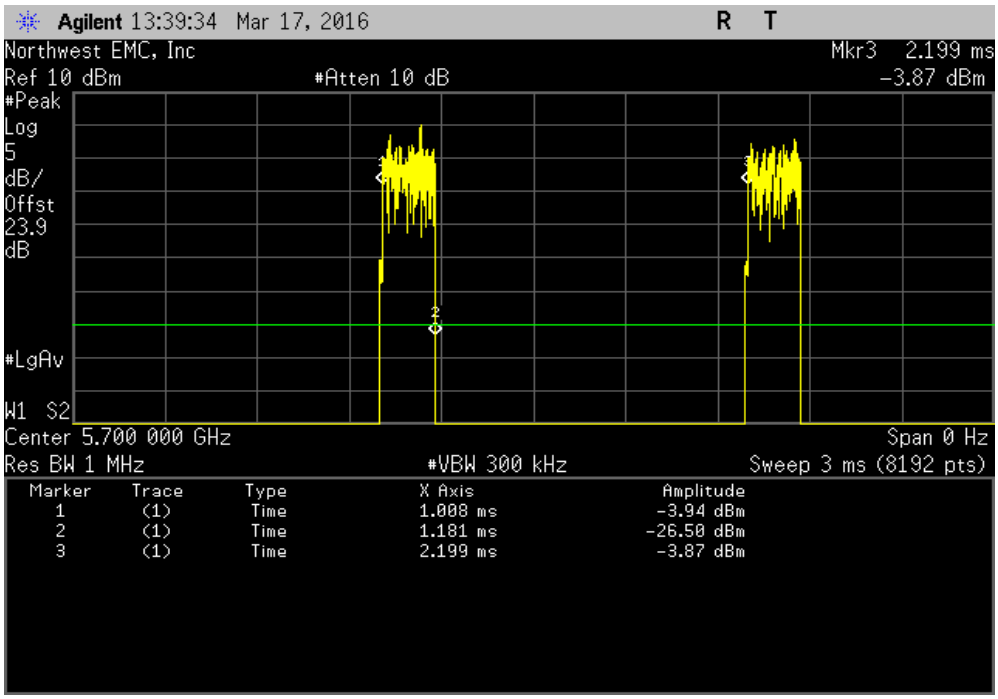
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



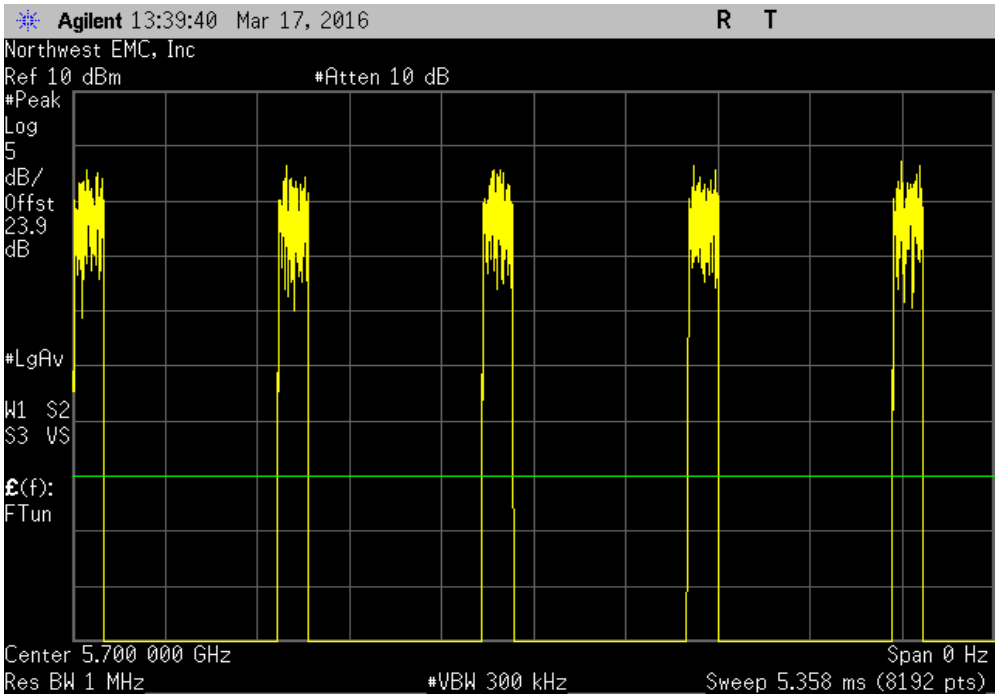
DUTY CYCLE

XMit 2015.01.14

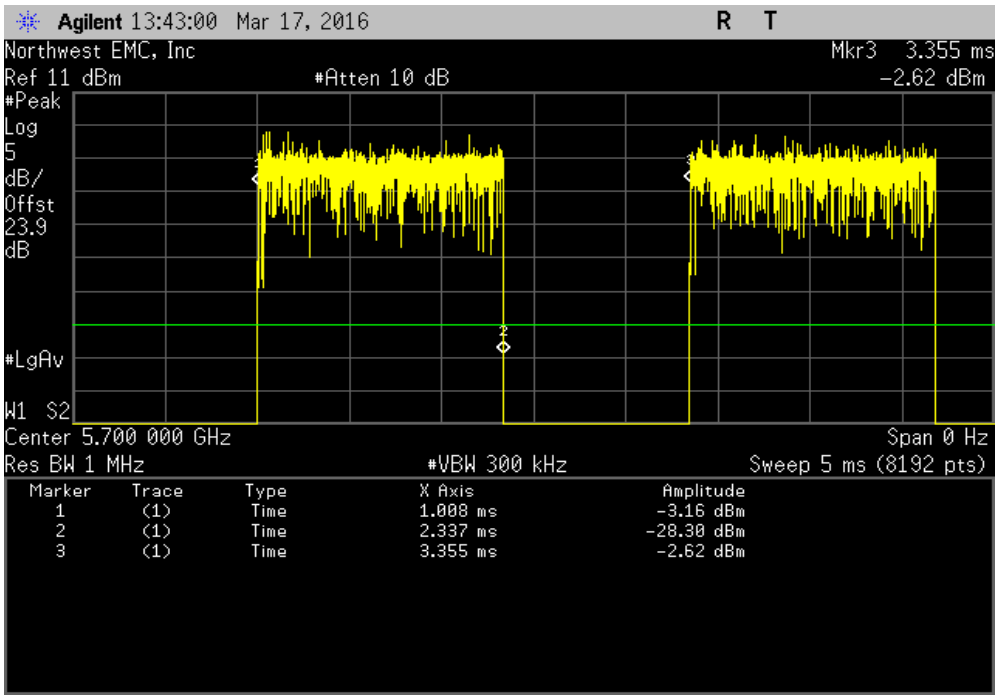
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.5 us	1.191 ms	1	14.5	N/A	N/A



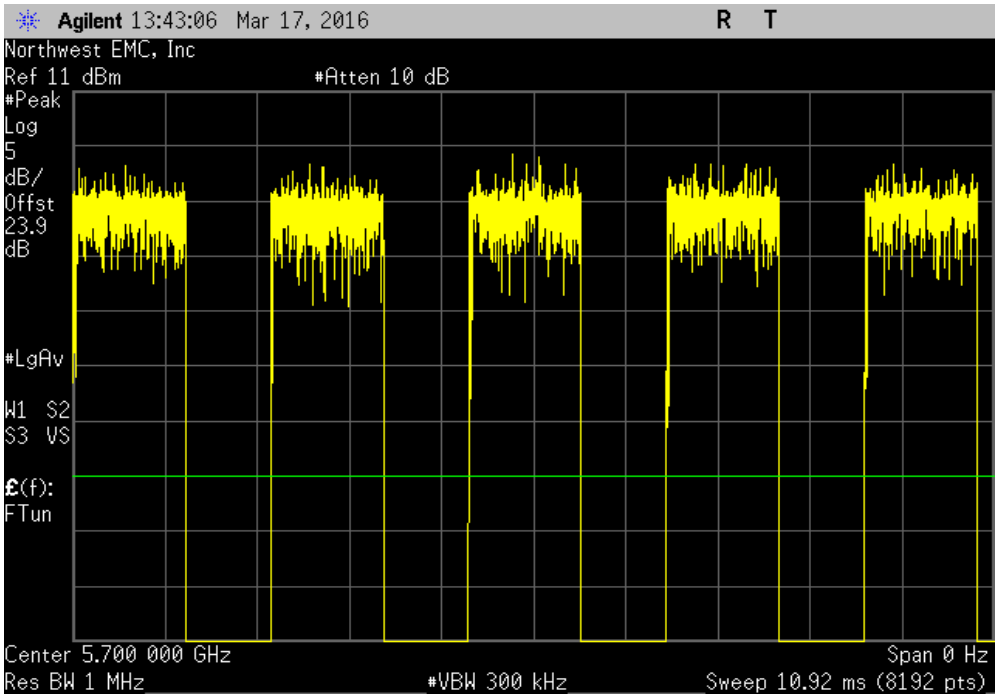
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



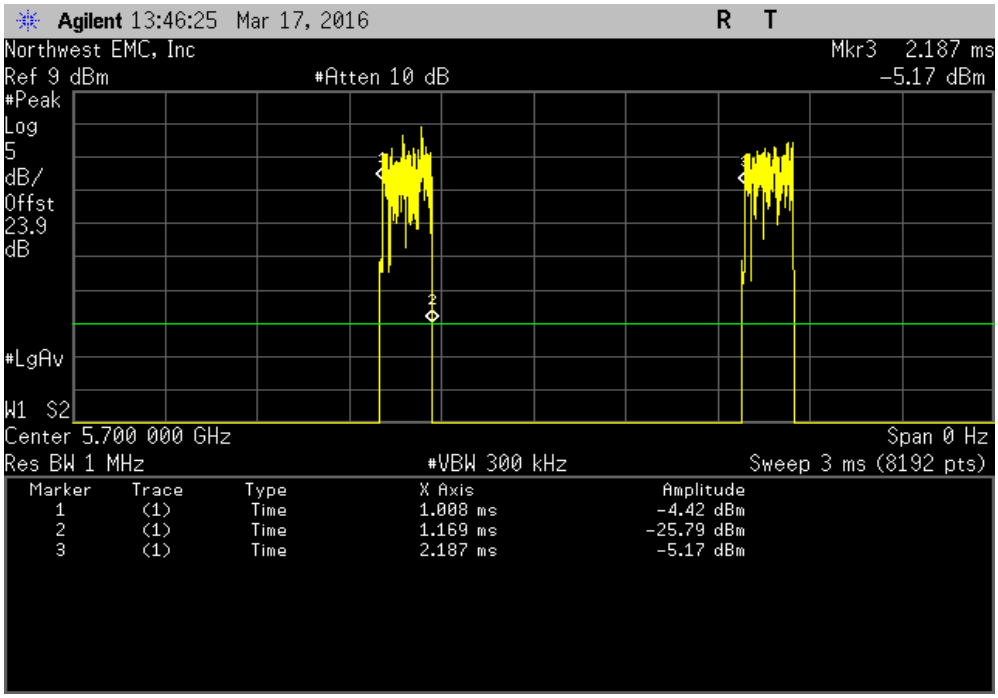
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



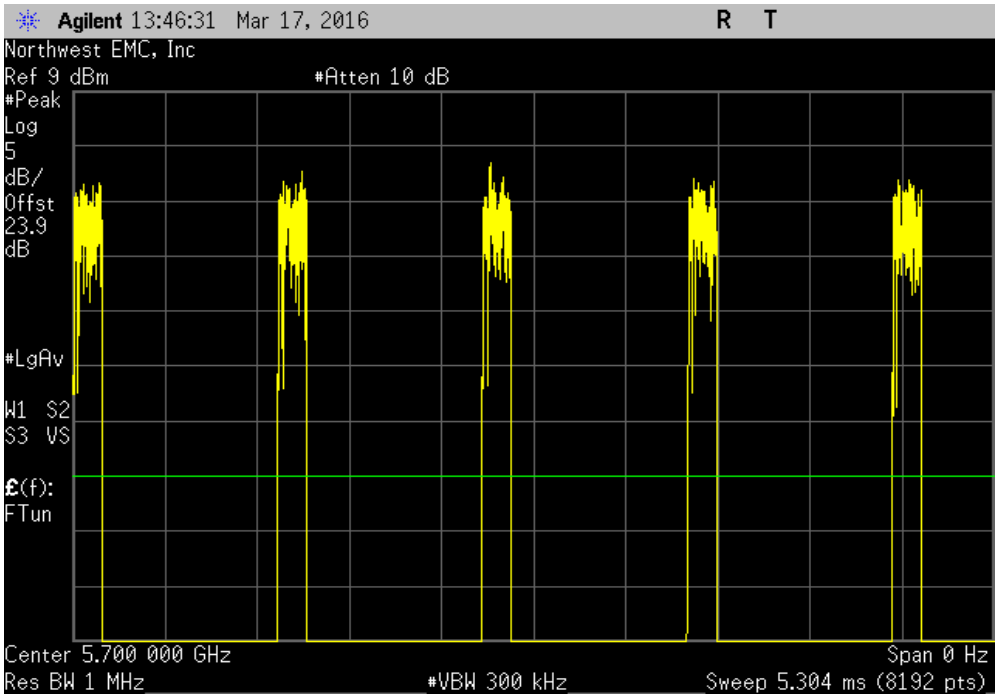
DUTY CYCLE

XMit 2015.01.14

5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.4 us	1.179 ms	1	13.6	N/A	N/A



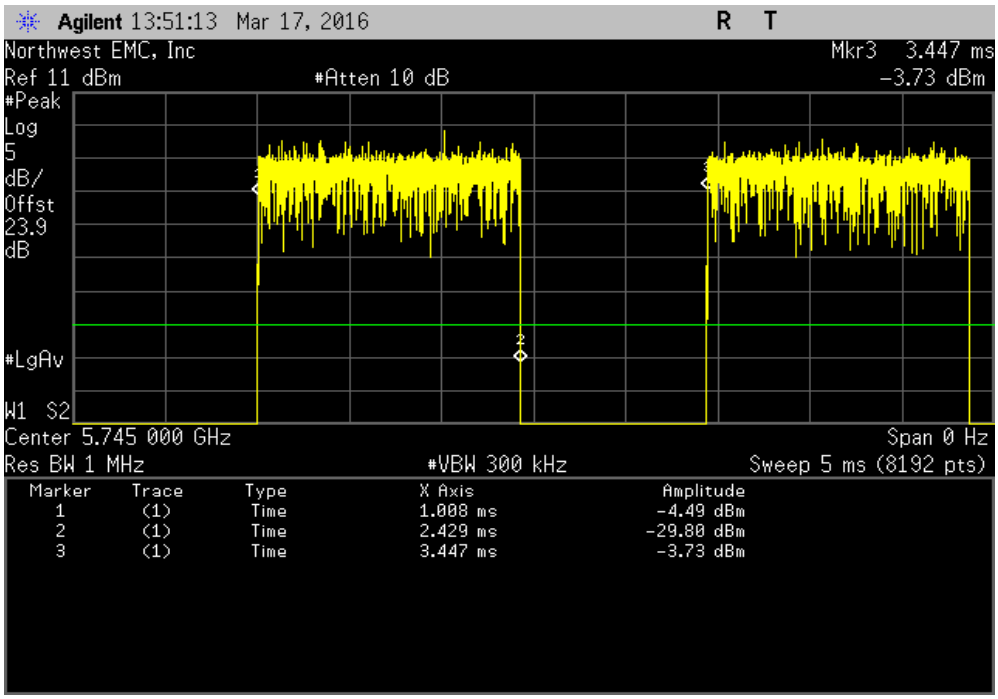
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



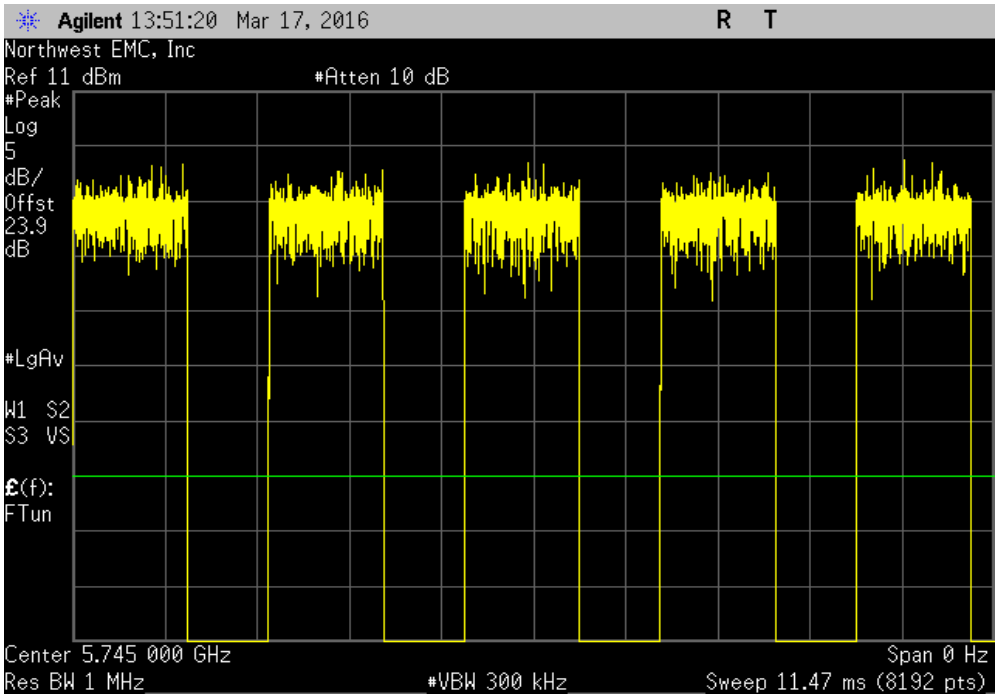
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.3	N/A	N/A



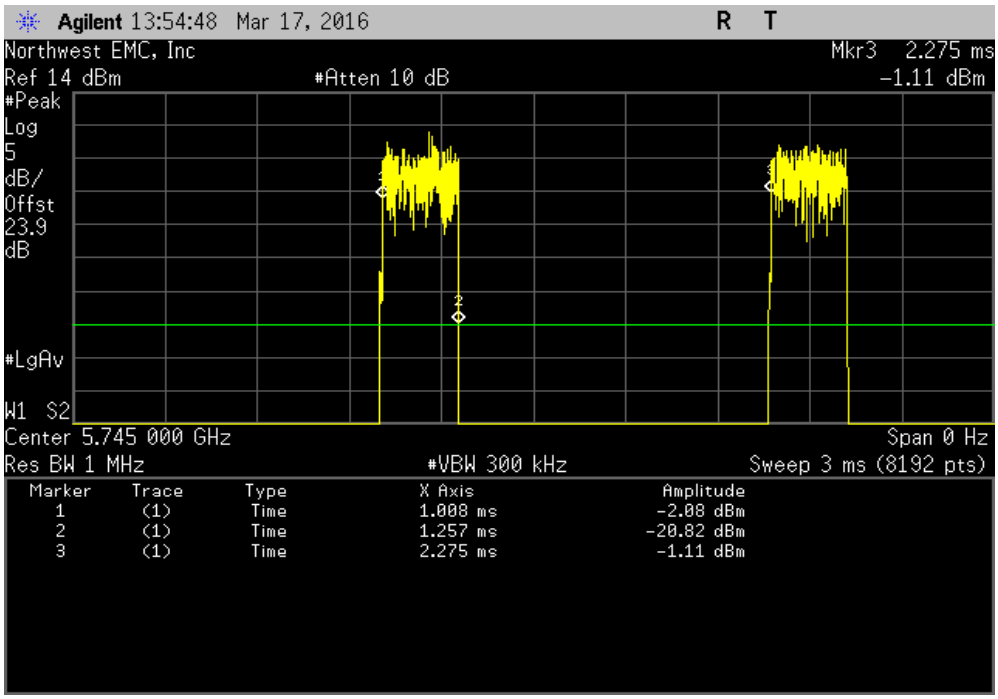
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



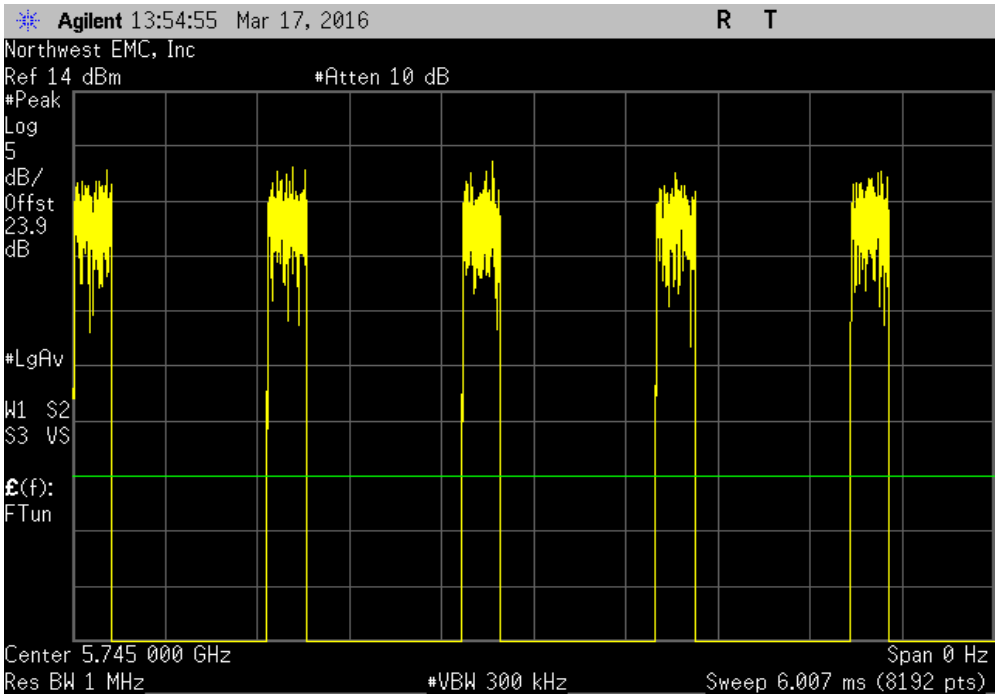
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	248.7 us	1.267 ms	1	19.6	N/A	N/A



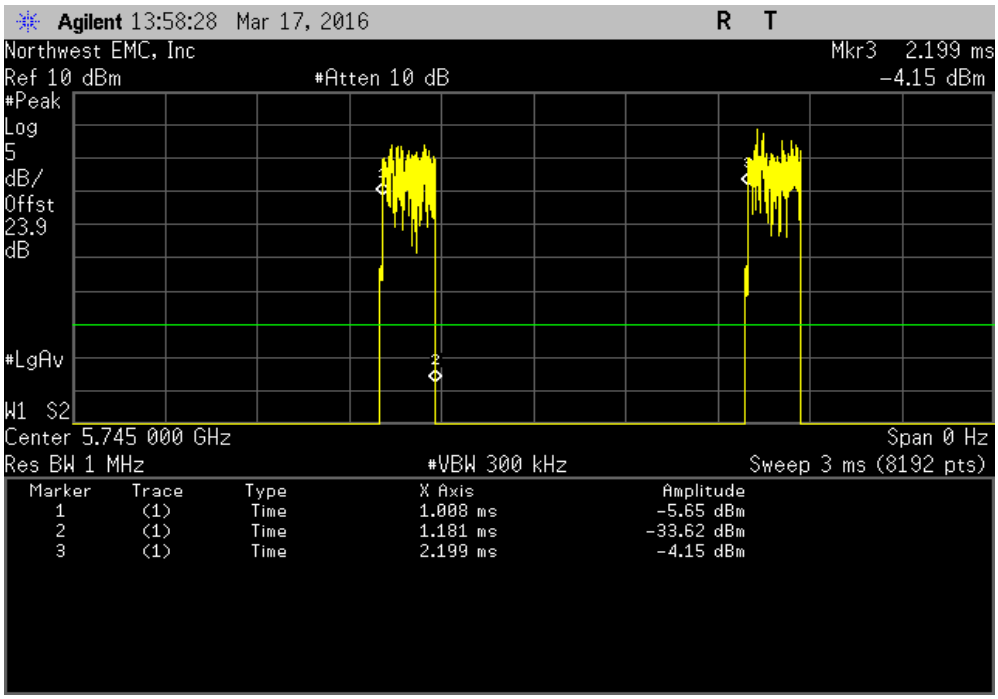
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



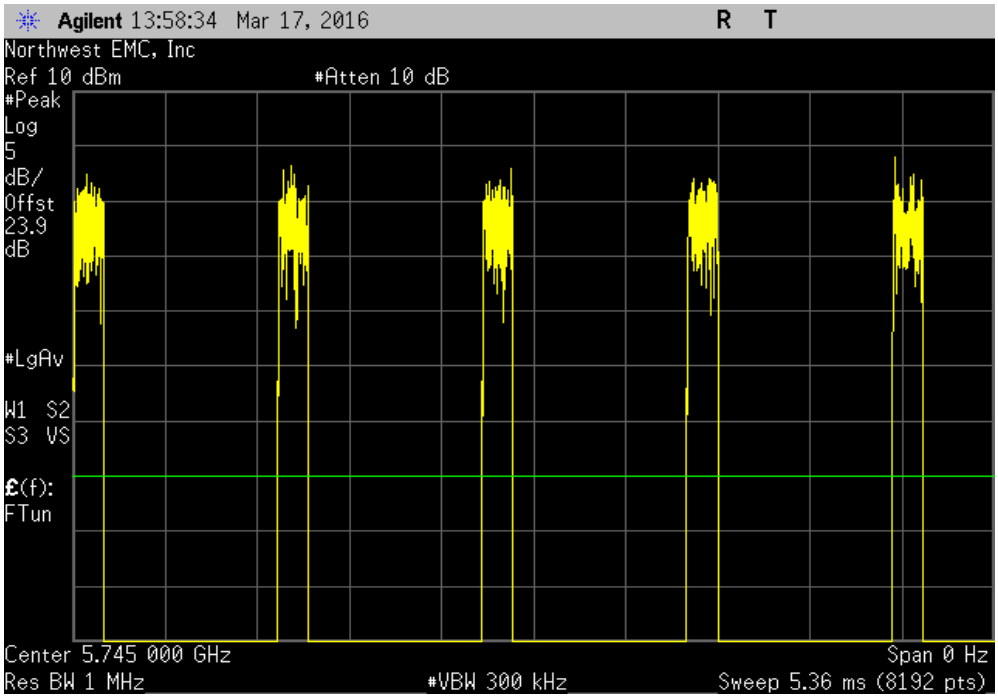
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.9 us	1.191 ms	1	14.5	N/A	N/A



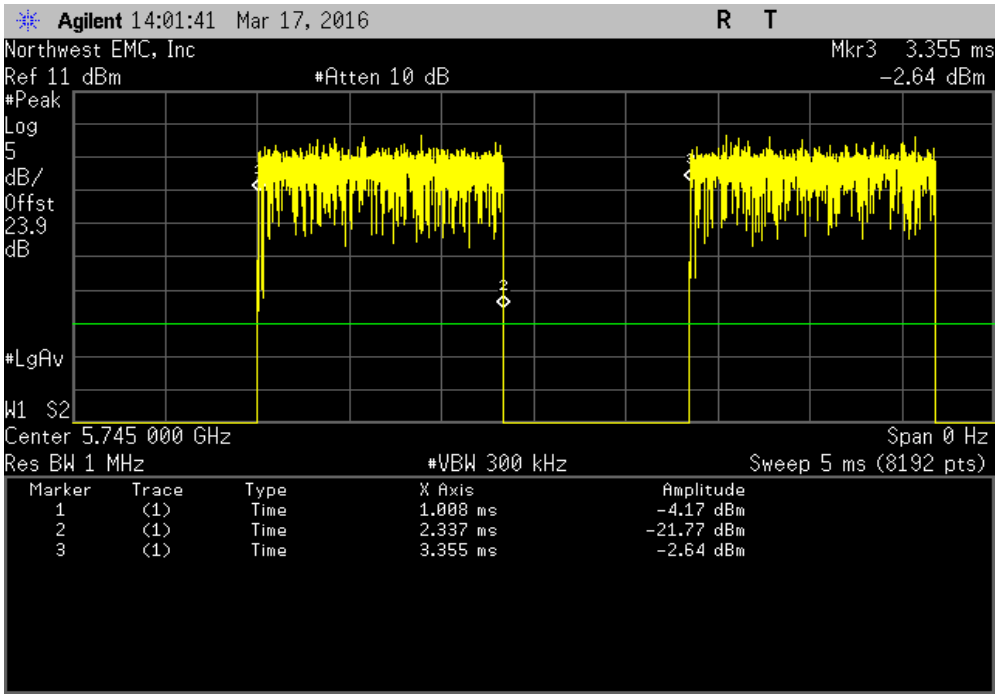
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



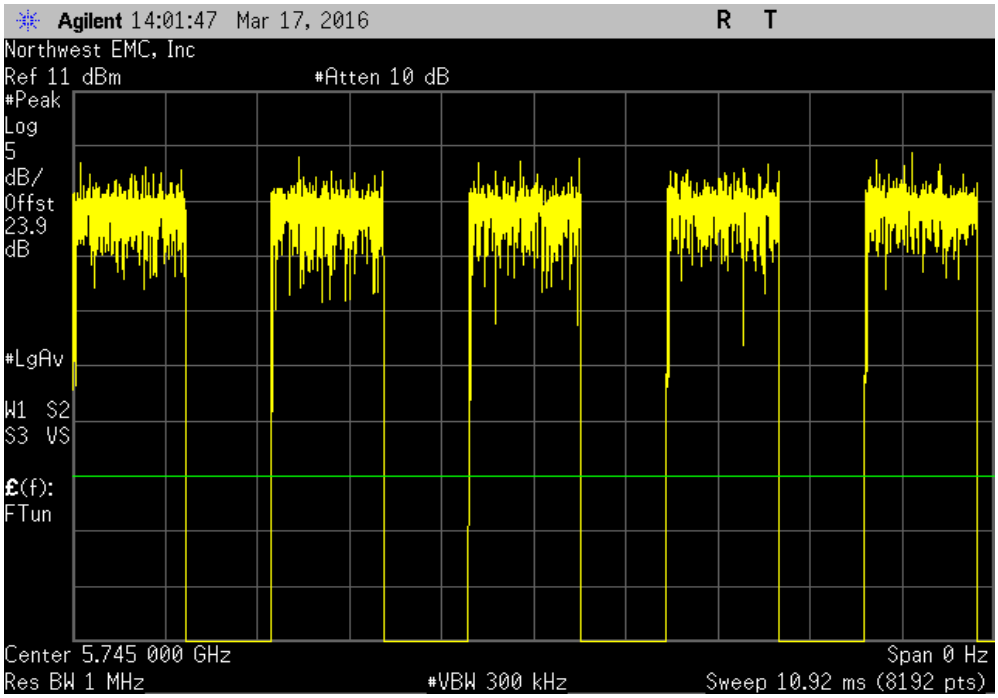
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



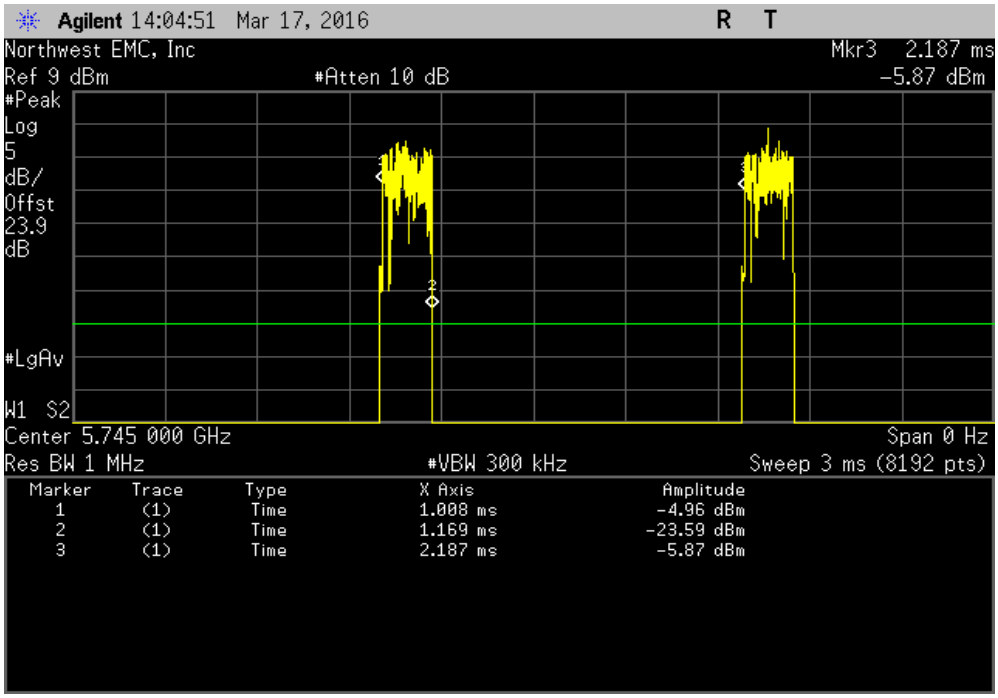
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



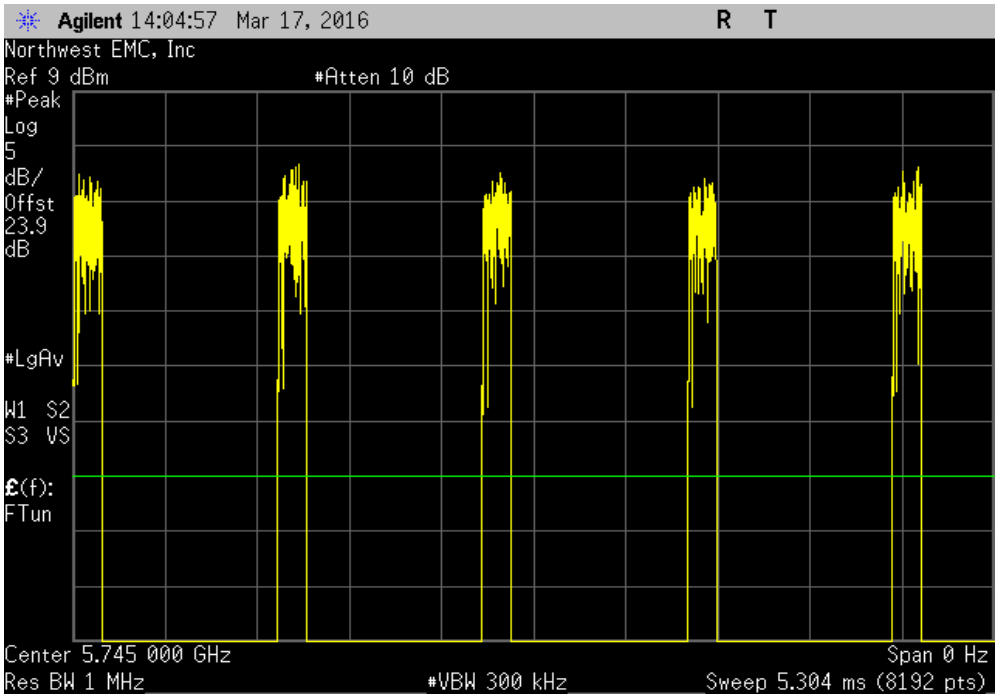
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.4 us	1.179 ms	1	13.6	N/A	N/A



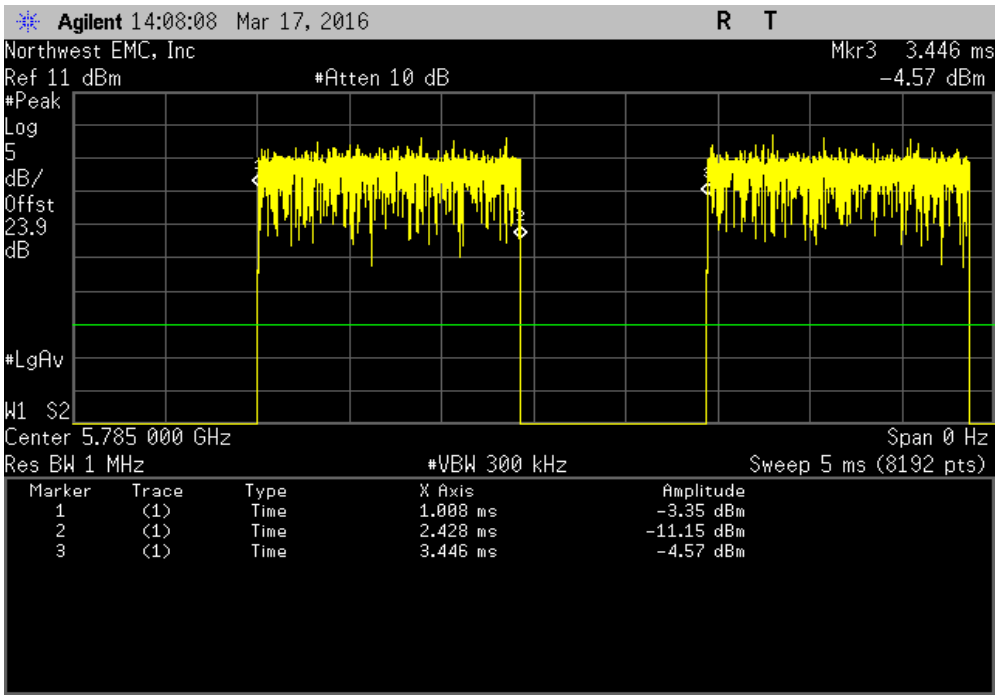
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



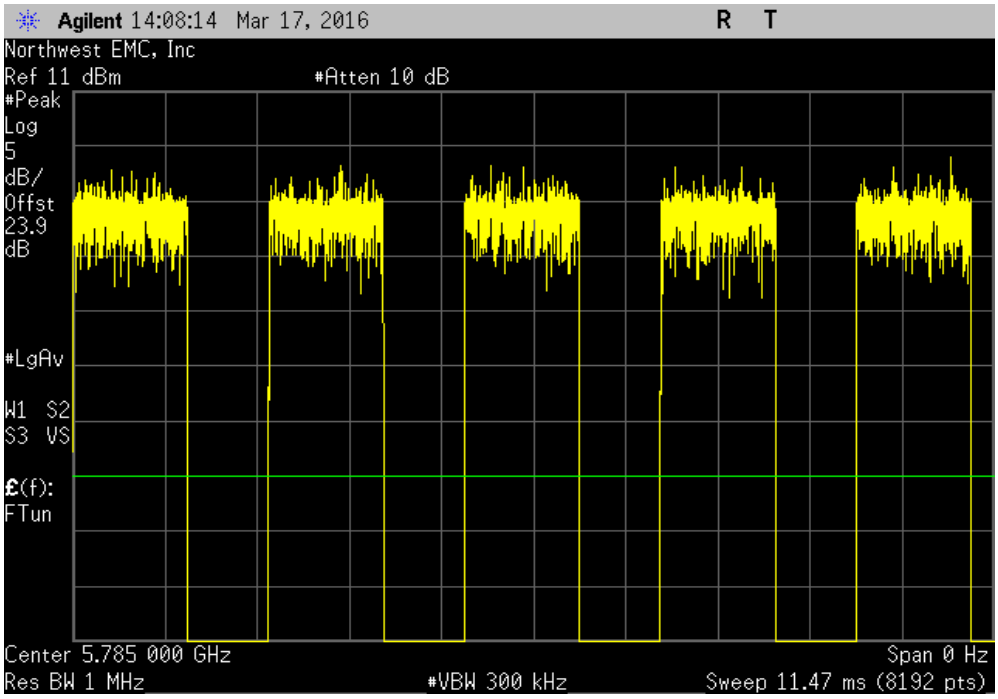
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.2	N/A	N/A



5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A

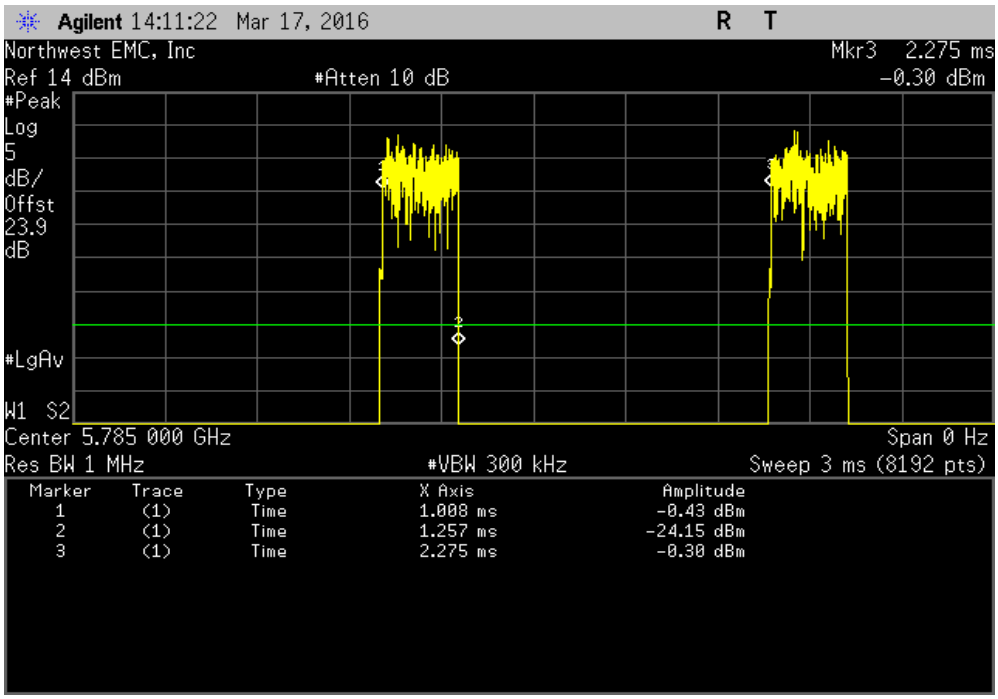


DUTY CYCLE

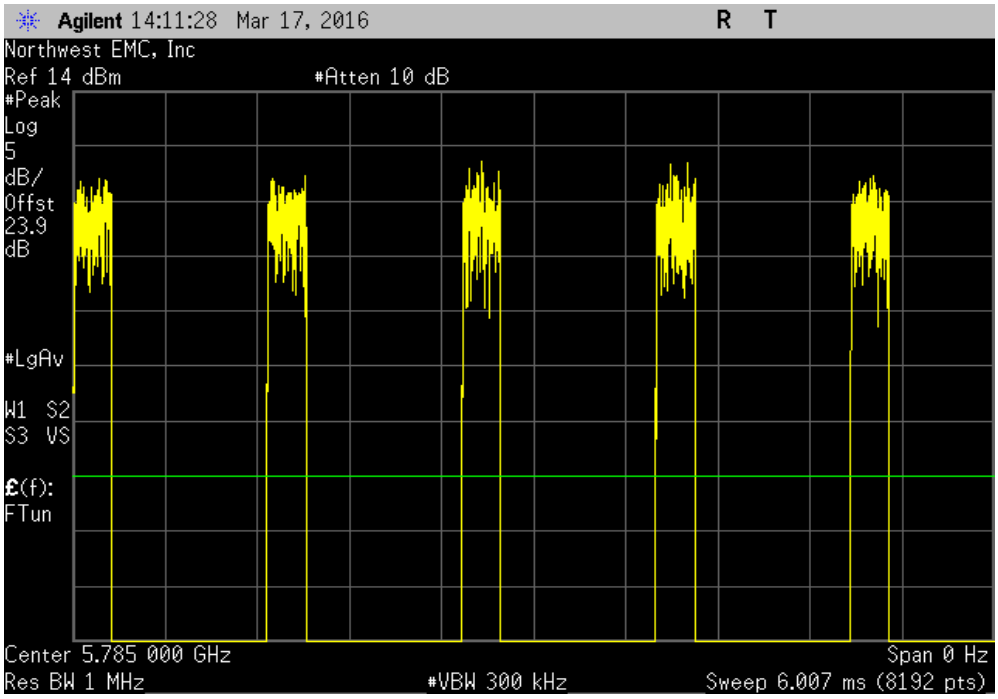
NORTHWEST EMC

XMit 2015.01.14

5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	248.7 us	1.267 ms	1	19.6	N/A	N/A



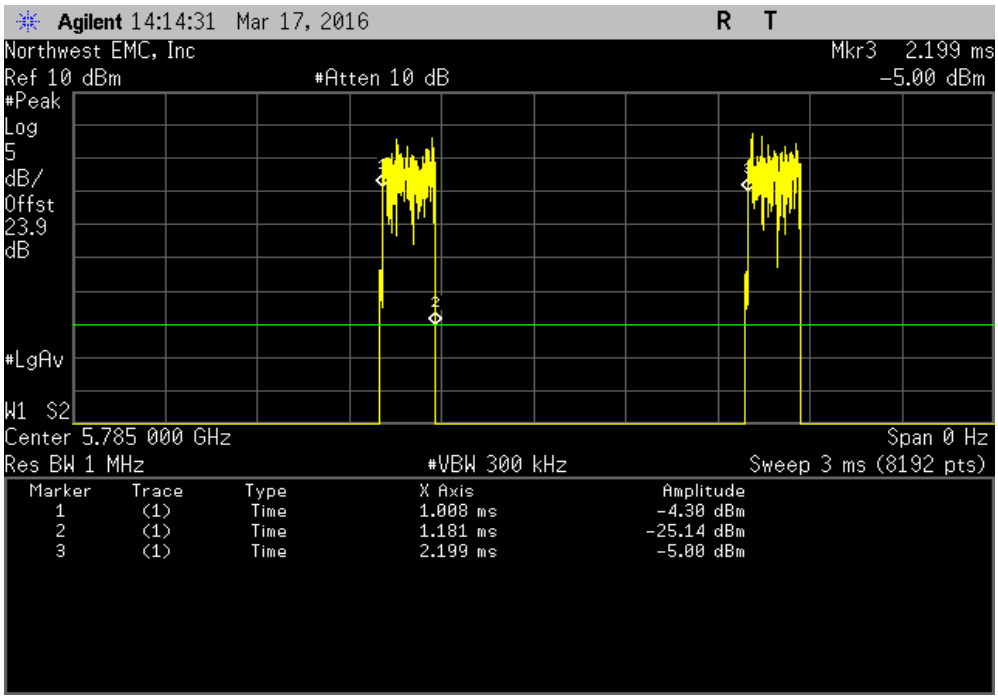
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



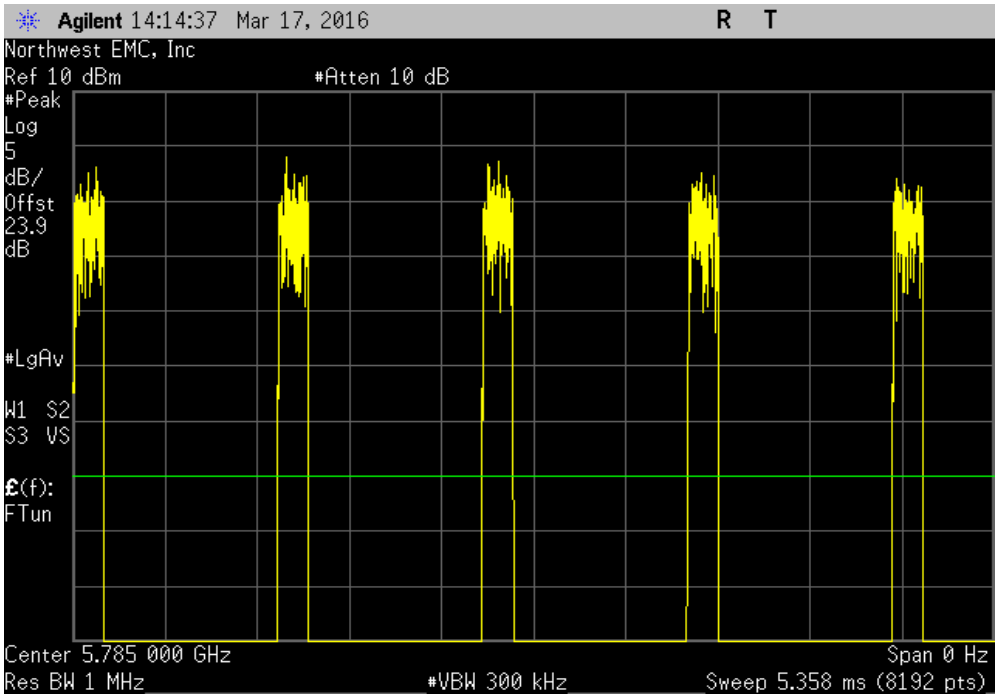
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.5 us	1.191 ms	1	14.5	N/A	N/A



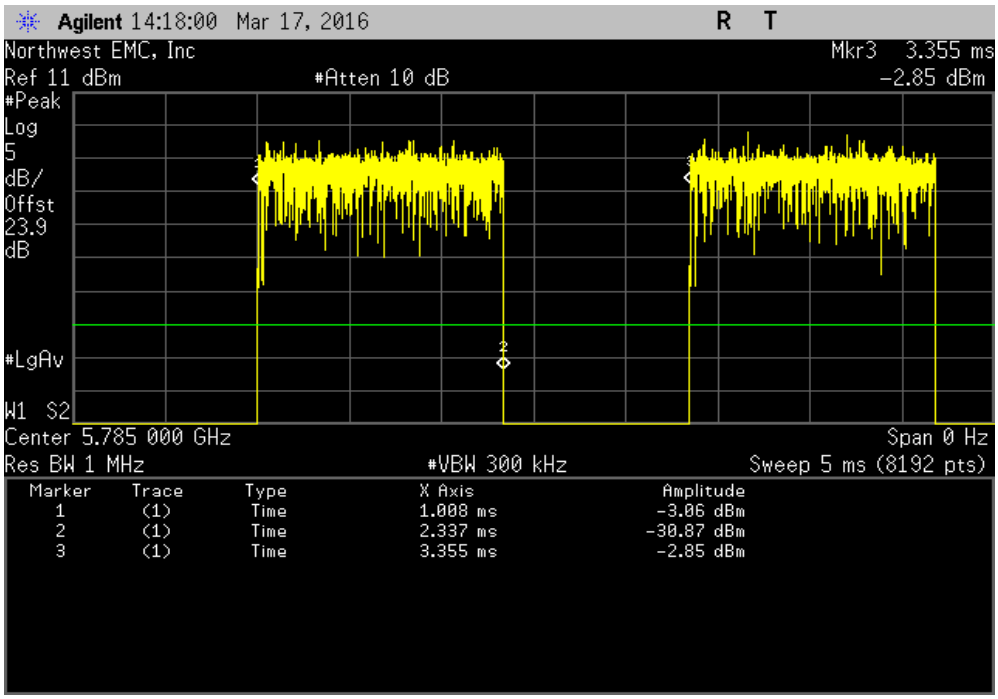
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



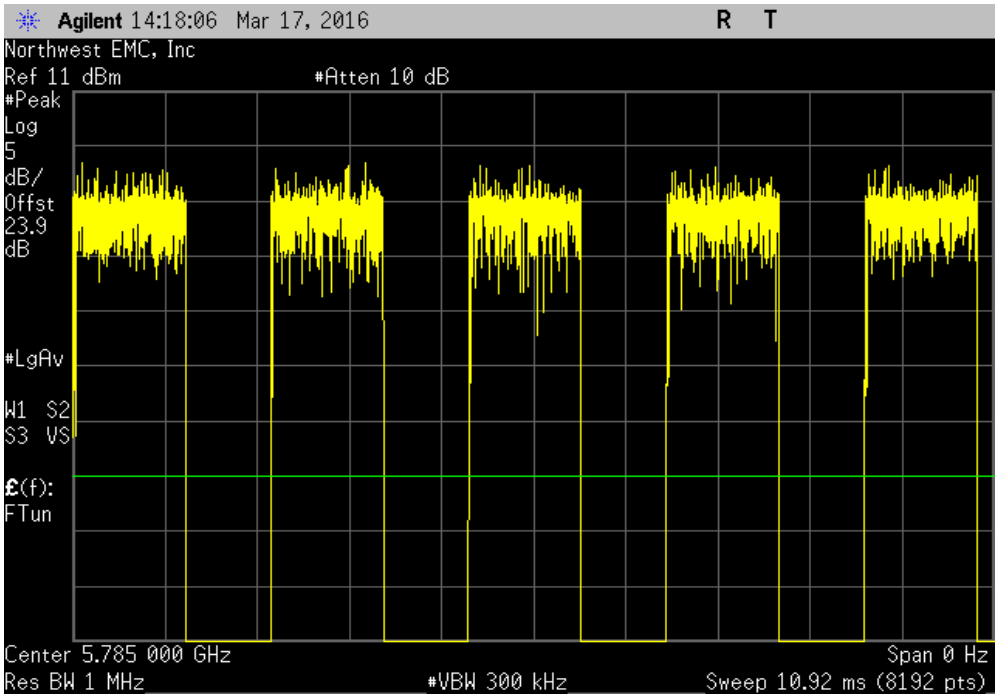
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



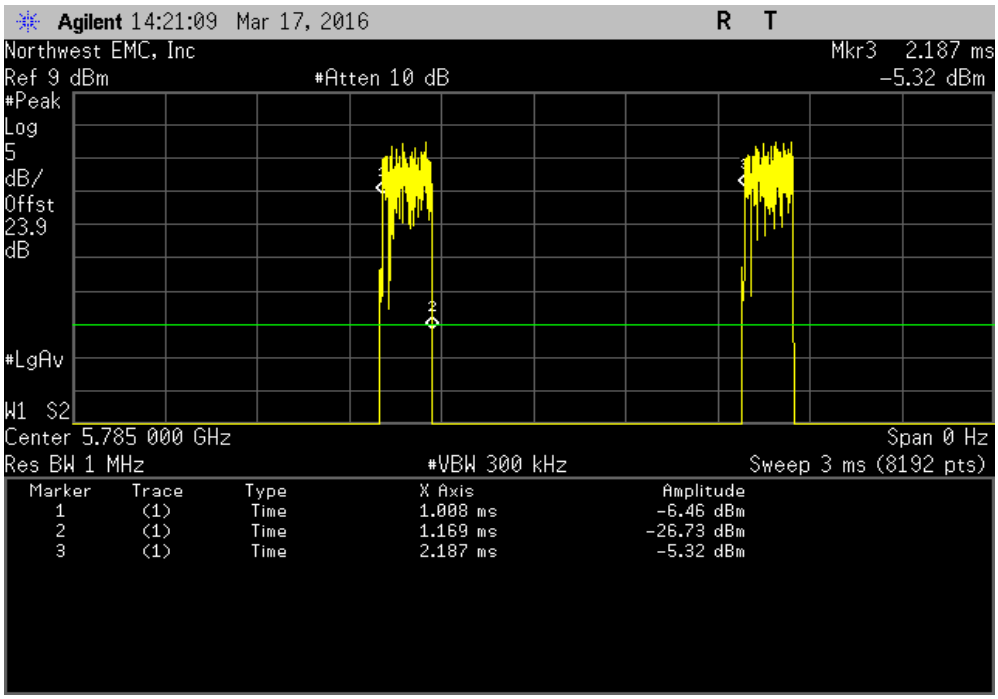
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



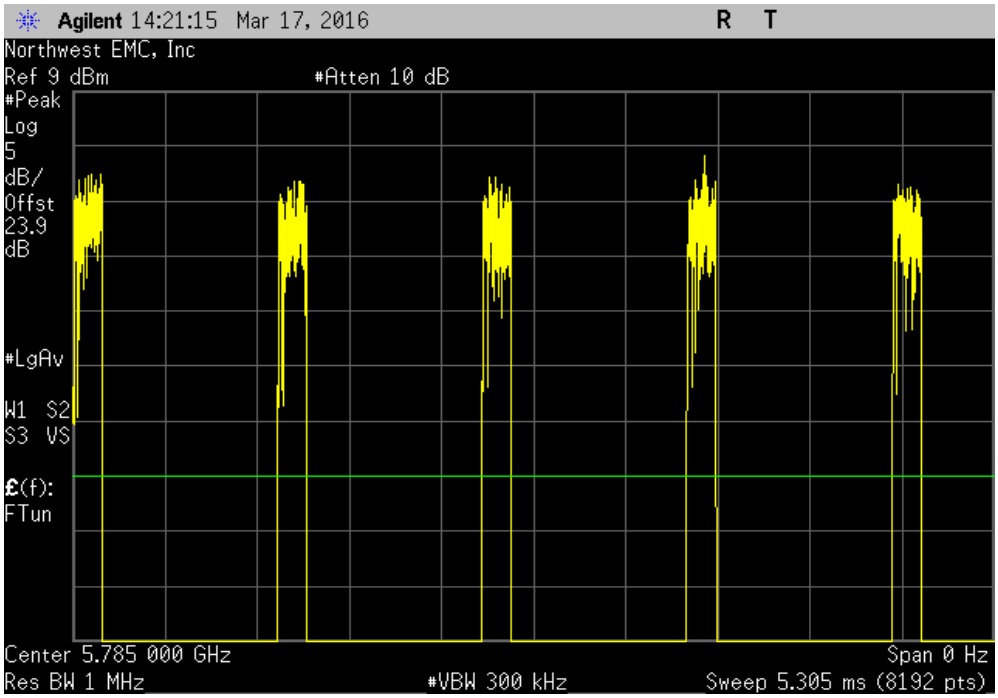
DUTY CYCLE

XMit 2015.01.14

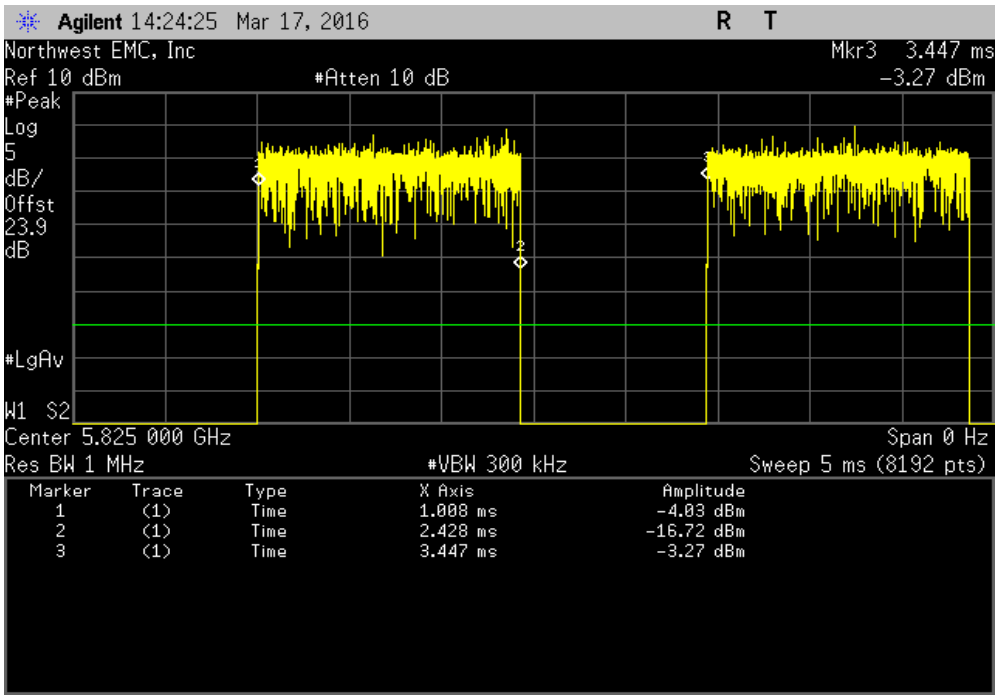
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	160.8 us	1.179 ms	1	13.6	N/A	N/A



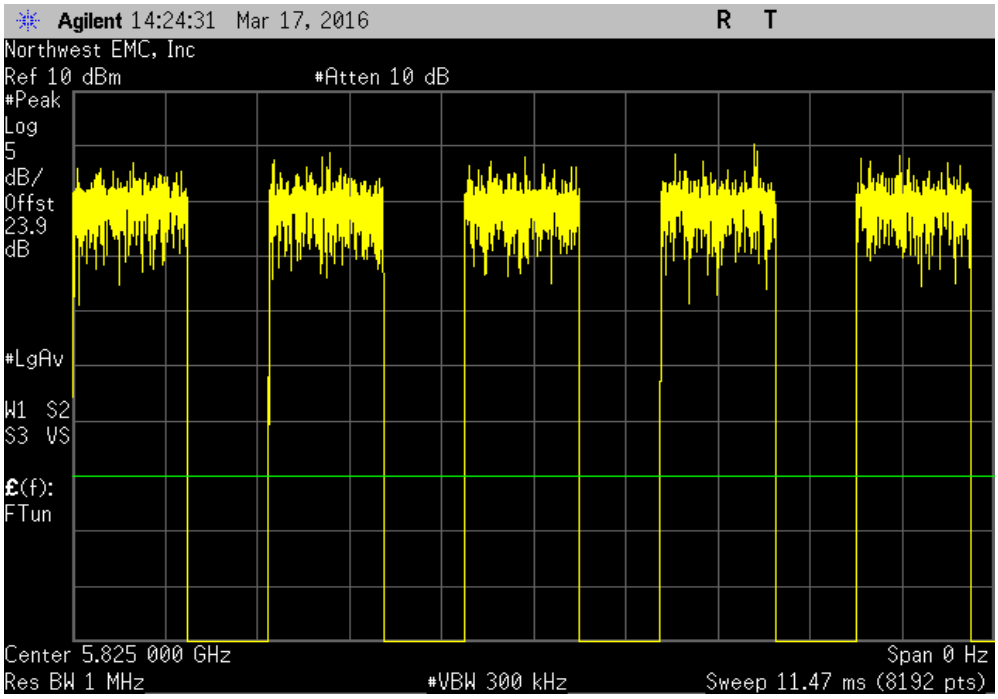
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.421 ms	2.439 ms	1	58.2	N/A	N/A



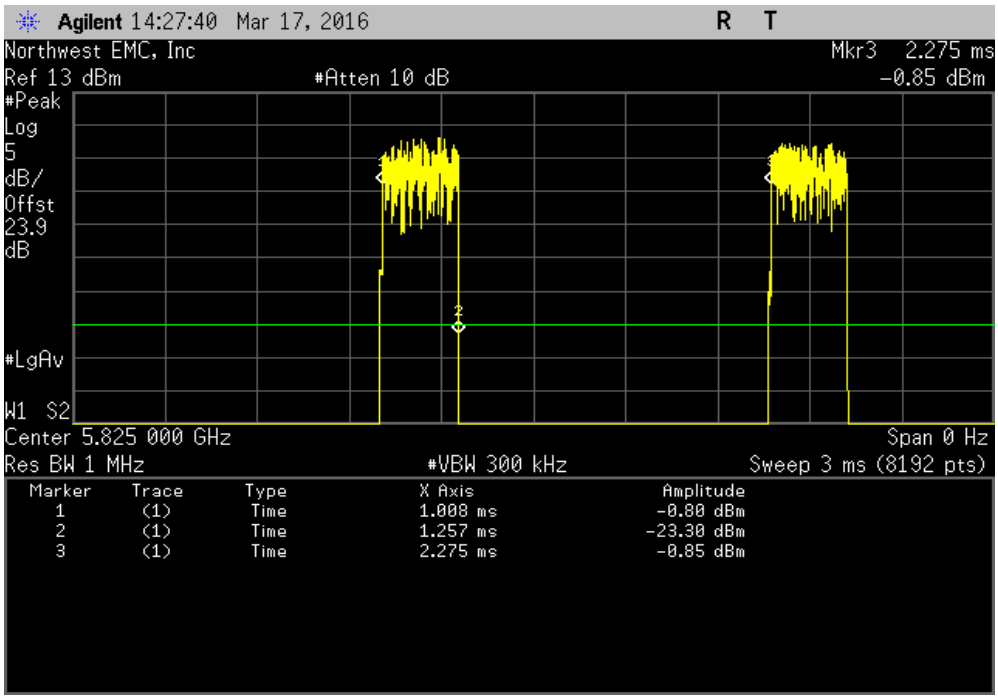
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 6 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



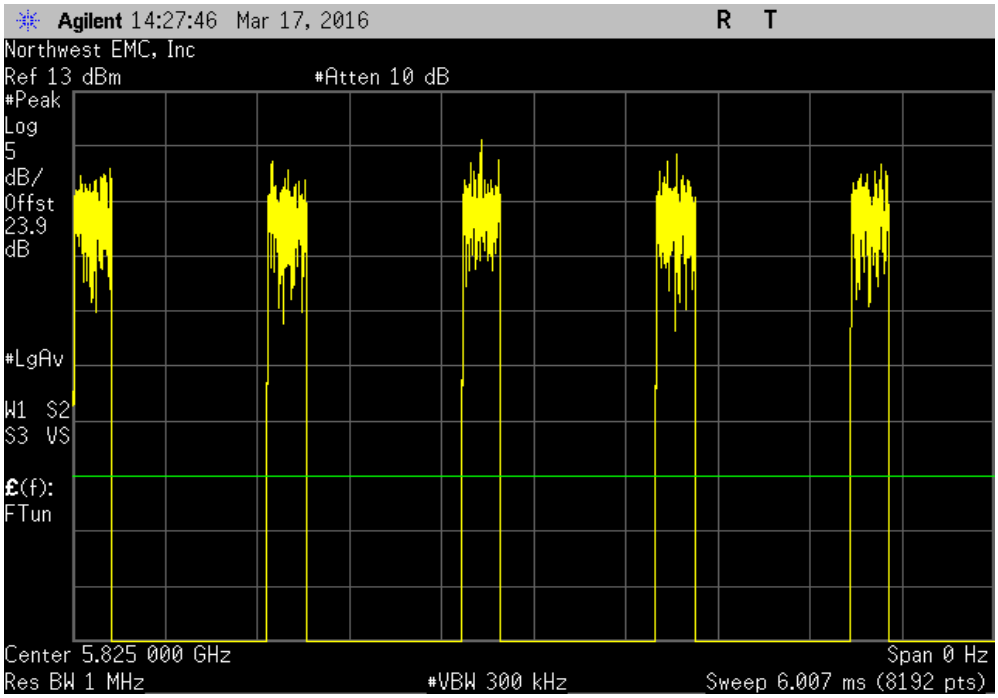
DUTY CYCLE

XMit 2015.01.14

5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	248.7 us	1.267 ms	1	19.6	N/A	N/A



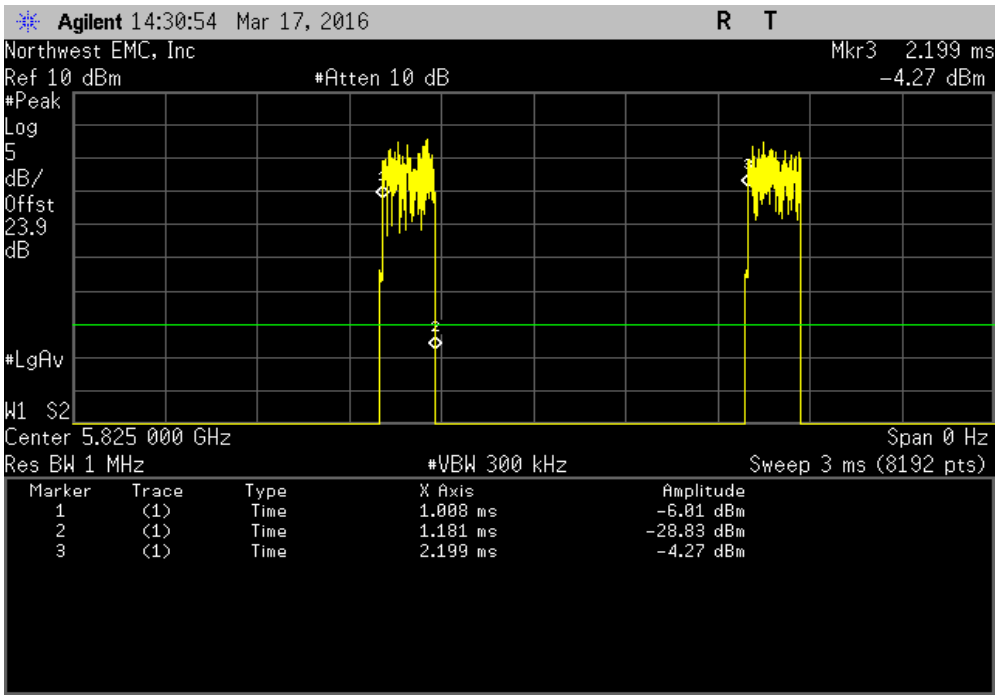
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 36 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



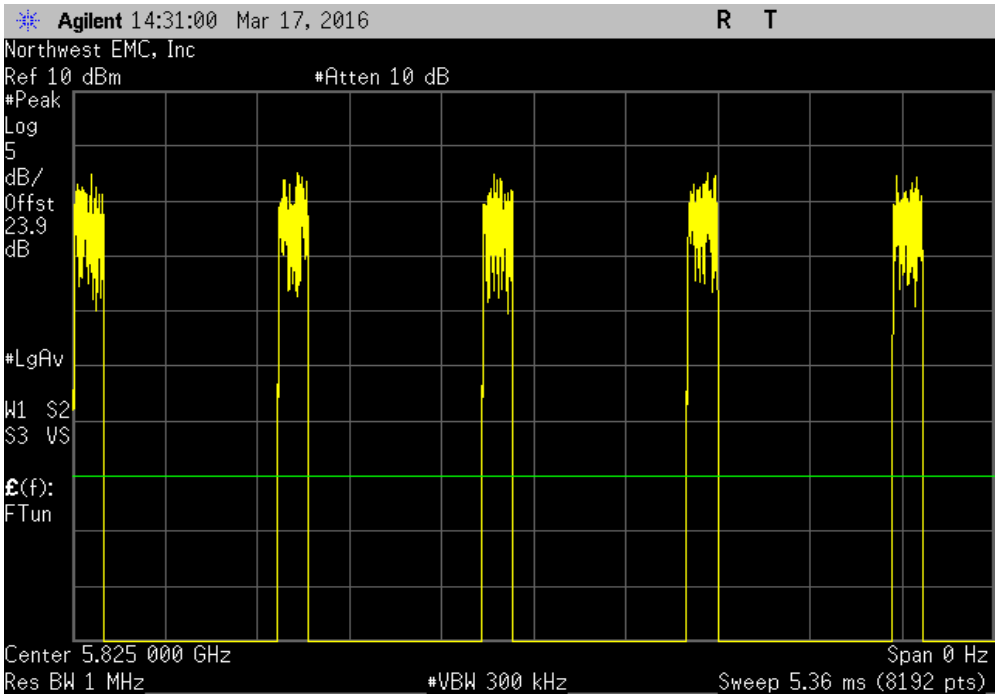
DUTY CYCLE

XMit 2015.01.14

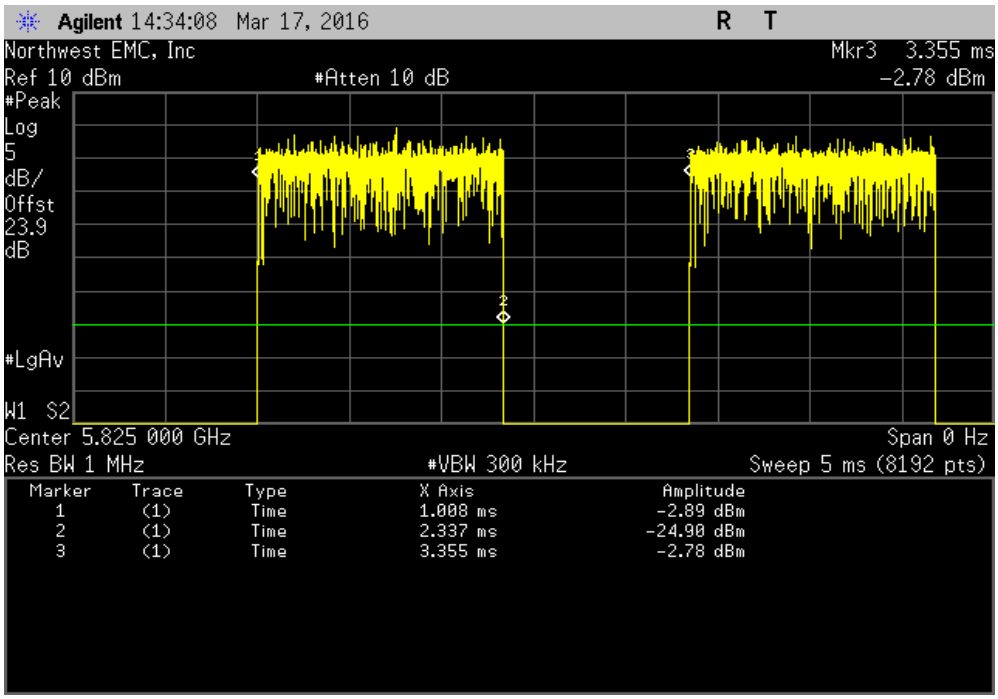
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	172.9 us	1.191 ms	1	14.5	N/A	N/A



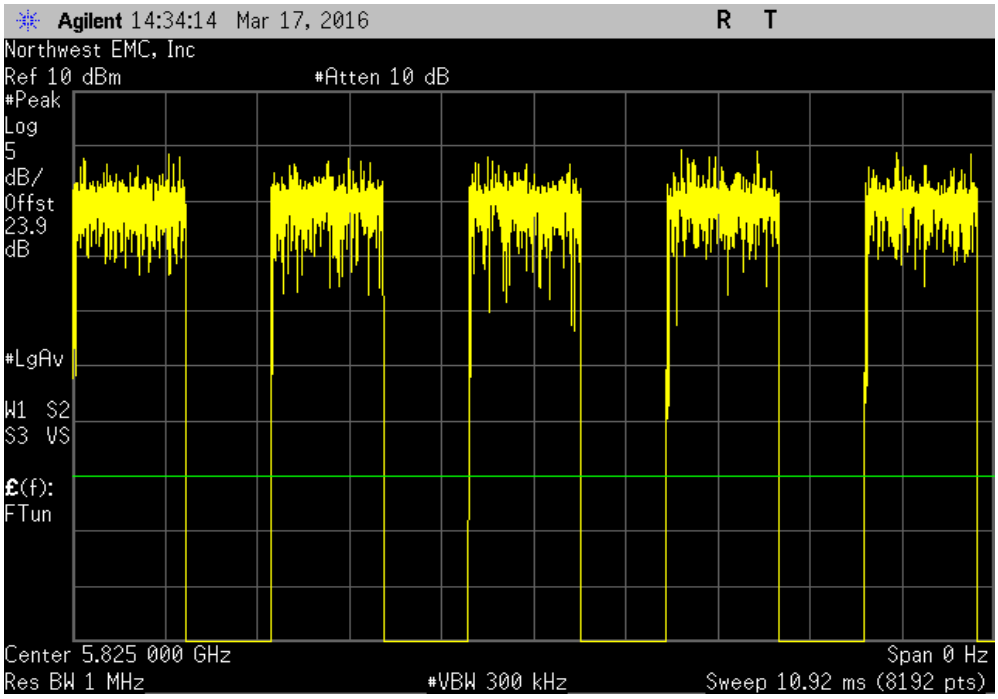
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 54 Mbps						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



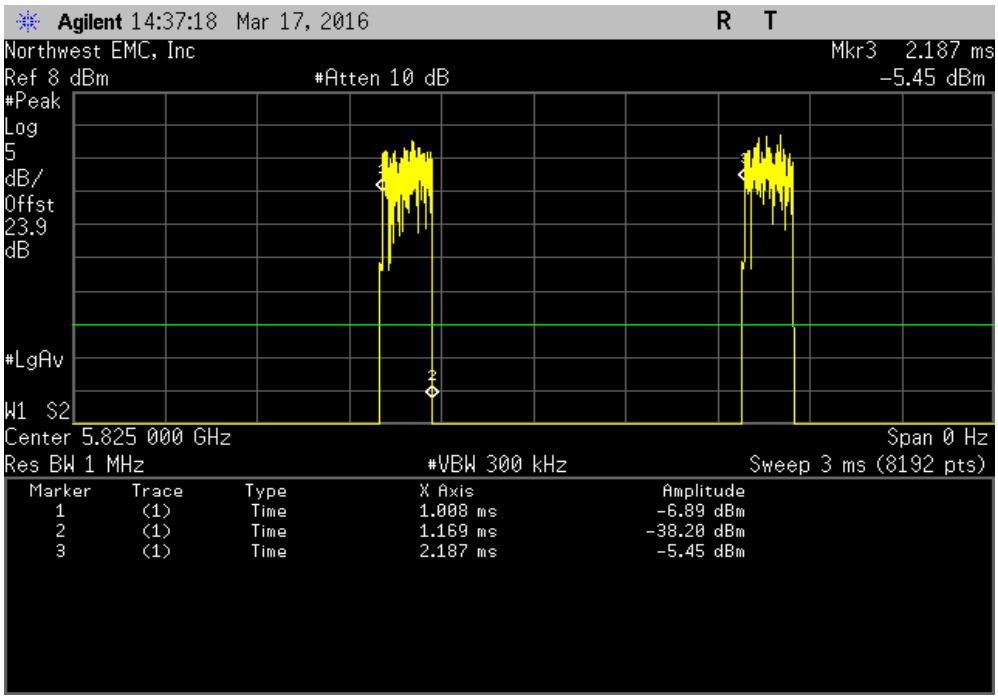
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.329 ms	2.347 ms	1	56.6	N/A	N/A



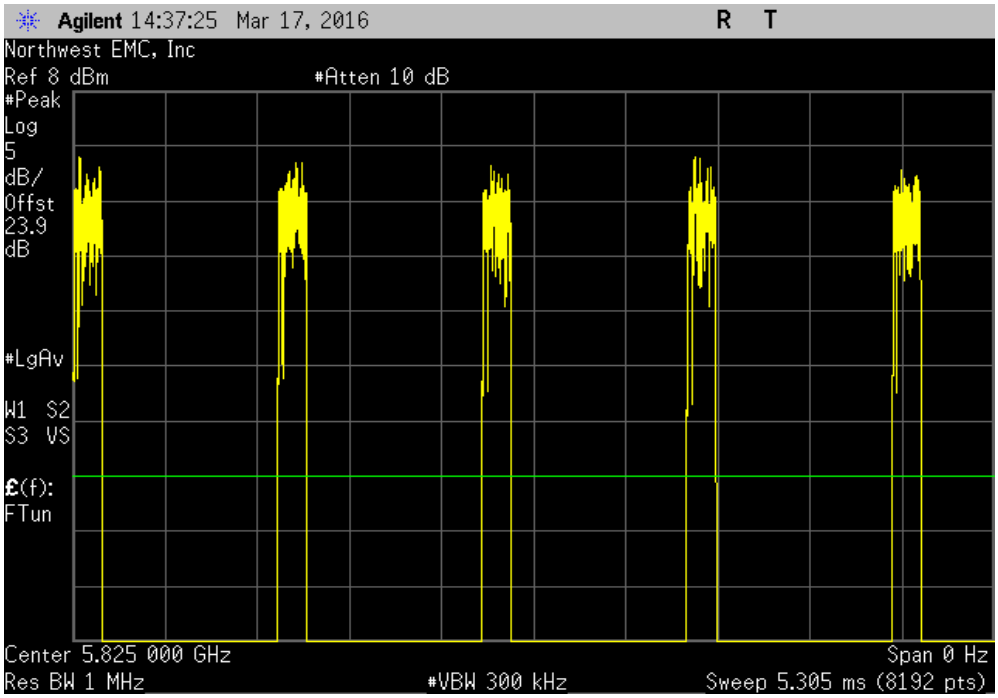
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS0						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	161.2 us	1.179 ms	1	13.7	N/A	N/A



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS7						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



MAXIMUM CONDUCTED OUTPUT POWER

NORTHWEST EMC

XMit 2015.01.14

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 (mo)
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	4/20/2015	12

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section C was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

Prior to measuring peak transmit power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep) was used for this test.

MAXIMUM CONDUCTED OUTPUT POWER

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0179
Serial Number:	0216M00003			**Date:**	03/18/16
Customer:	Zoll Medical Corp.			**Temperature:**	22.4°C
Attendees:	Adam Ford			**Humidity:**	27%
Project:	None			**Barometric Pres.:**	991.5
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

Peak detector was used in order to ensure power didn't exceed the original grant.

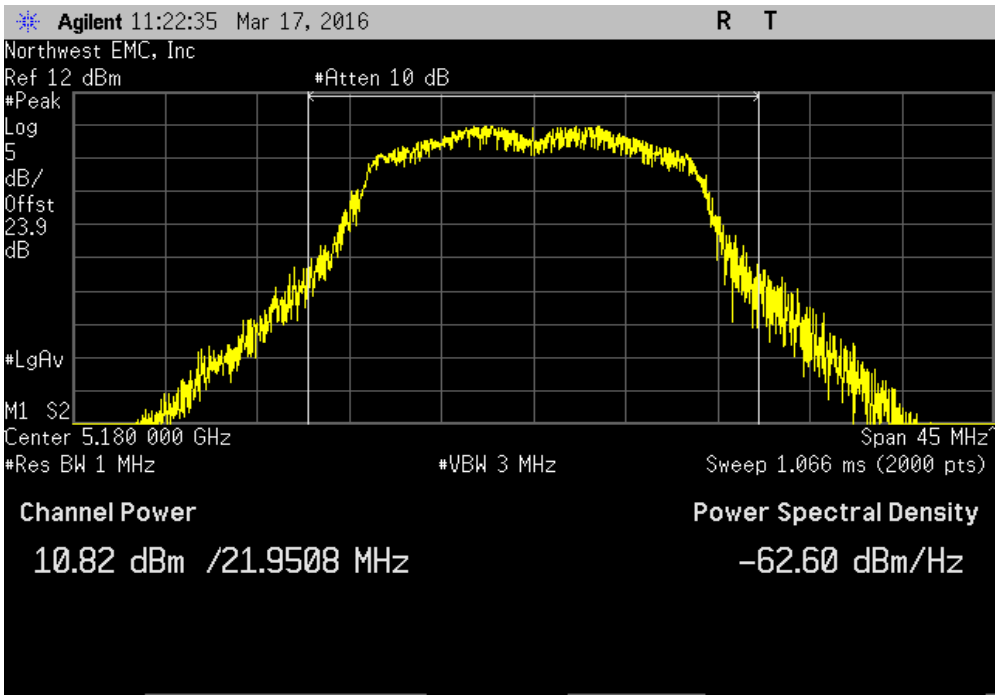
DEVIATIONS FROM TEST STANDARD

None

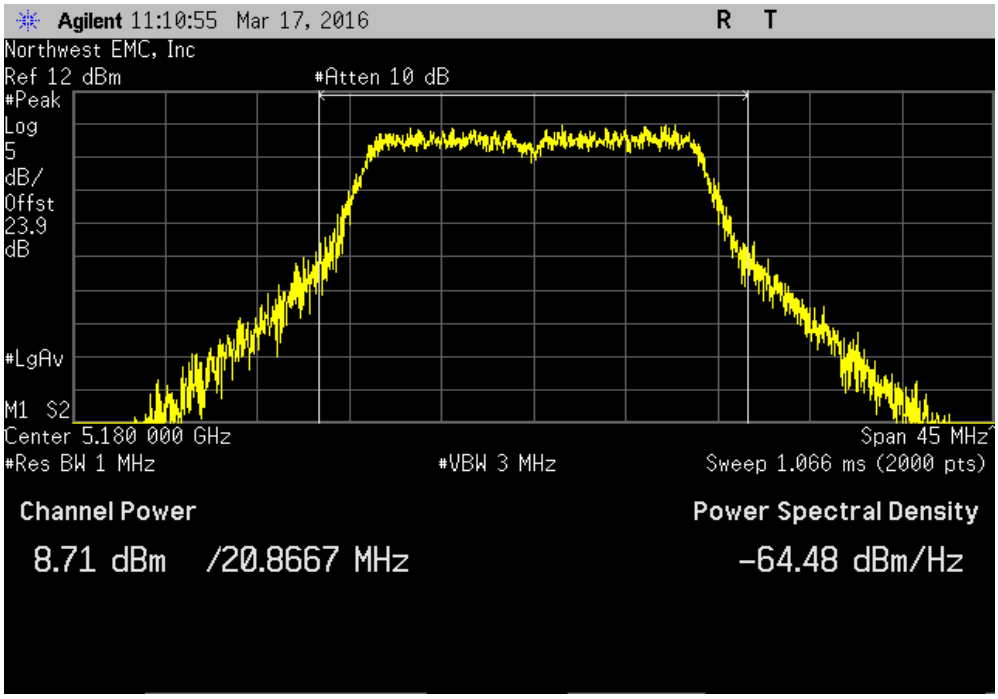
Configuration #	1	Signature

		Value	Limit (<)	Result
5150 - 5250 MHz Band				
	Low Channel, Ch 36 - 5180 MHz			
	802.11(a) 6 Mbps	10.817 dBm	24 dBm	Pass
	802.11(a) 36 Mbps	8.712 dBm	24 dBm	Pass
	802.11(a) 54 Mbps	7.151 dBm	24 dBm	Pass
	802.11(n) MCS0	11.083 dBm	24 dBm	Pass
	802.11(n) MCS7	5.424 dBm	24 dBm	Pass
	High Channel, Ch 48 - 5240 MHz			
	802.11(a) 6 Mbps	10.398 dBm	24 dBm	Pass
	802.11(a) 36 Mbps	8.779 dBm	24 dBm	Pass
	802.11(a) 54 Mbps	5.195 dBm	24 dBm	Pass
	802.11(n) MCS0	11.1 dBm	24 dBm	Pass
	802.11(n) MCS7	10.839 dBm	24 dBm	Pass
5250 - 5350 MHz Band				
	Low Channel, Ch 52 - 5260 MHz			
	802.11(a) 6 Mbps	9.267 dBm	24 dBm	Pass
	802.11(a) 36 Mbps	3.939 dBm	24 dBm	Pass
	802.11(a) 54 Mbps	2.289 dBm	24 dBm	Pass
	802.11(n) MCS0	8.554 dBm	24 dBm	Pass
	802.11(n) MCS7	2.984 dBm	24 dBm	Pass
	High Channel, Ch 64 - 5320 MHz			
	802.11(a) 6 Mbps	10.107 dBm	24 dBm	Pass
	802.11(a) 36 Mbps	7.053 dBm	24 dBm	Pass
	802.11(a) 54 Mbps	4.404 dBm	24 dBm	Pass
	802.11(n) MCS0	10.142 dBm	24 dBm	Pass
	802.11(n) MCS7	2.584 dBm	24 dBm	Pass
5470 - 5725 MHz Band				
	Low Channel, Ch 100 - 5500 MHz			
	802.11(a) 6 Mbps	8.825 dBm	24 dBm	Pass
	802.11(a) 36 Mbps	4.94 dBm	24 dBm	Pass
	802.11(a) 54 Mbps	2.419 dBm	24 dBm	Pass
	802.11(n) MCS0	8.695 dBm	24 dBm	Pass
	802.11(n) MCS7	3.532 dBm	24 dBm	Pass
	Mid Channel, Ch 120 - 5600 MHz			
	802.11(a) 6 Mbps	10.999 dBm	24 dBm	Pass
	802.11(a) 36 Mbps	9.829 dBm	24 dBm	Pass
	802.11(a) 54 Mbps	5.424 dBm	24 dBm	Pass
	802.11(n) MCS0	10.97 dBm	24 dBm	Pass
	802.11(n) MCS7	4.123 dBm	24 dBm	Pass
	High Channel, Ch 140 - 5700 MHz			
	802.11(a) 6 Mbps	11.339 dBm	24 dBm	Pass
	802.11(a) 36 Mbps	9.073 dBm	24 dBm	Pass
	802.11(a) 54 Mbps	5.942 dBm	24 dBm	Pass
	802.11(n) MCS0	11.438 dBm	24 dBm	Pass
	802.11(n) MCS7	4.716 dBm	24 dBm	Pass
5725 - 5785 MHz Band				
	Low Channel, Ch 149 - 5745 MHz			
	802.11(a) 6 Mbps	11.226 dBm	30 dBm	Pass
	802.11(a) 36 Mbps	7.074 dBm	30 dBm	Pass
	802.11(a) 54 Mbps	5.701 dBm	30 dBm	Pass
	802.11(n) MCS0	11.358 dBm	30 dBm	Pass
	802.11(n) MCS7	4.326 dBm	30 dBm	Pass
	Mid Channel, Ch 157 - 5785 MHz			
	802.11(a) 6 Mbps	11.098 dBm	30 dBm	Pass
	802.11(a) 36 Mbps	9.549 dBm	30 dBm	Pass
	802.11(a) 54 Mbps	4.692 dBm	30 dBm	Pass
	802.11(n) MCS0	11.555 dBm	30 dBm	Pass
	802.11(n) MCS7	4.282 dBm	30 dBm	Pass
	High Channel, Ch 165 - 5825 MHz			
	802.11(a) 6 Mbps	10.265 dBm	30 dBm	Pass
	802.11(a) 36 Mbps	10.372 dBm	30 dBm	Pass
	802.11(a) 54 Mbps	5.202 dBm	30 dBm	Pass
	802.11(n) MCS0	11.155 dBm	30 dBm	Pass
	802.11(n) MCS7	4.263 dBm	30 dBm	Pass

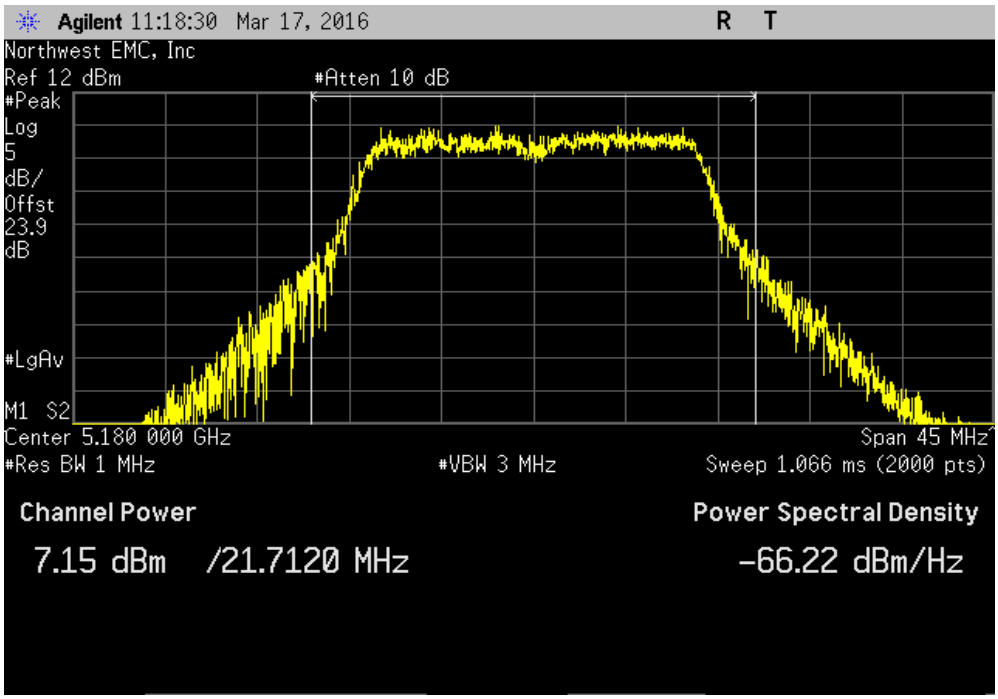
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				10.817 dBm	24 dBm	Pass



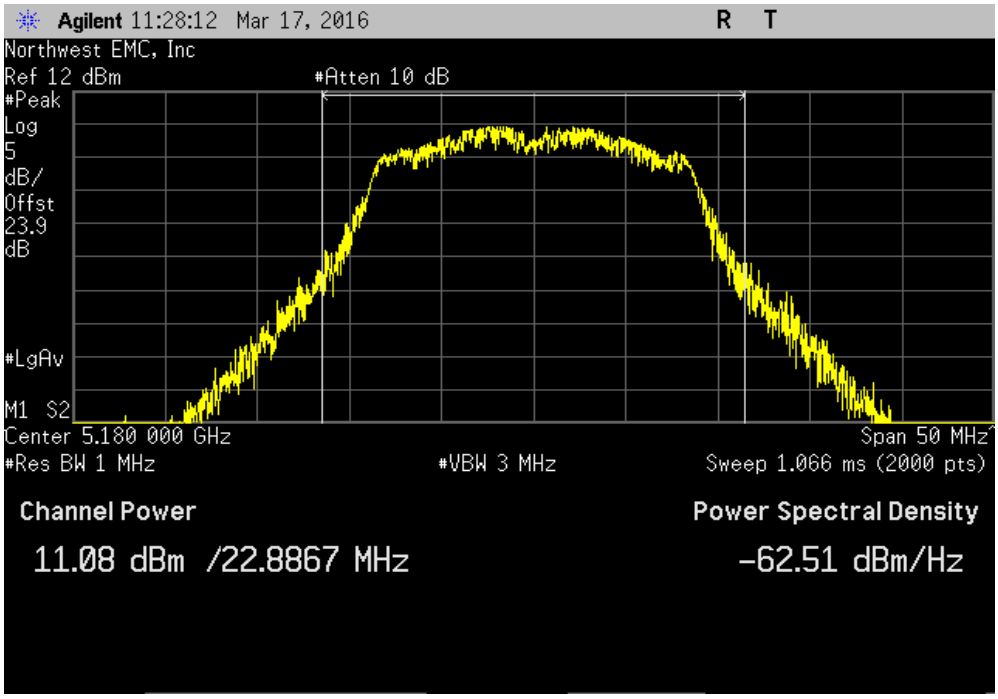
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				8.712 dBm	24 dBm	Pass



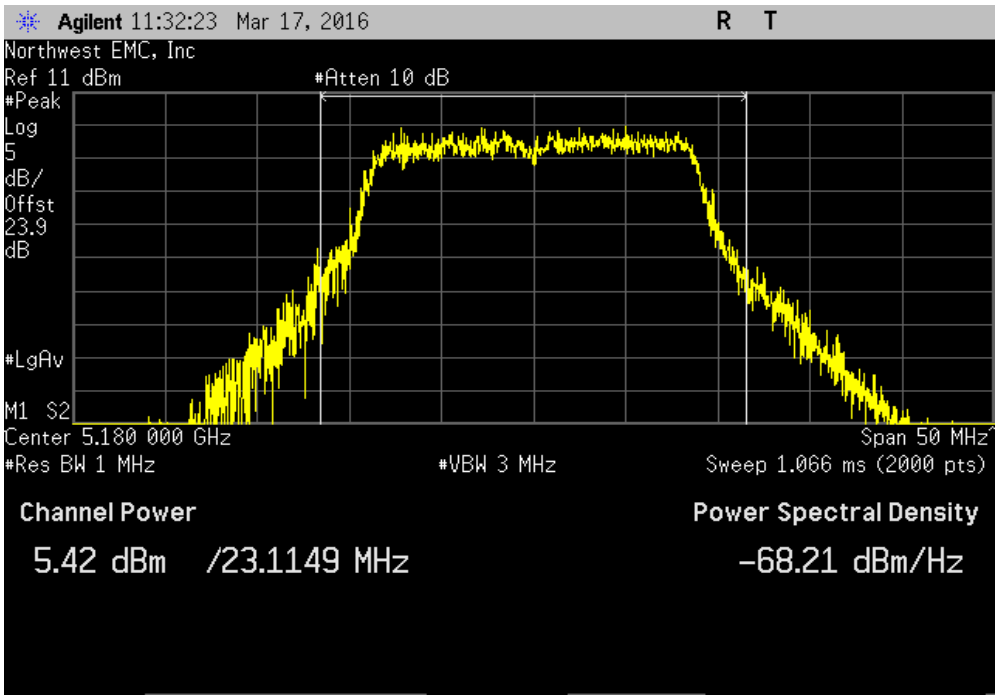
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				7.151 dBm	24 dBm	Pass



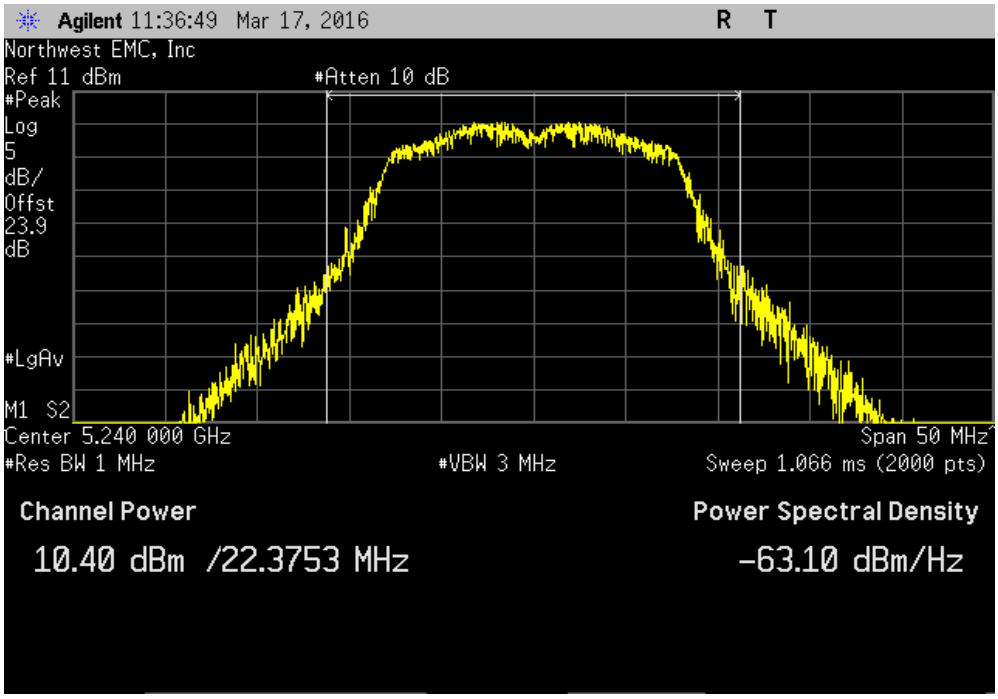
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				11.083 dBm	24 dBm	Pass



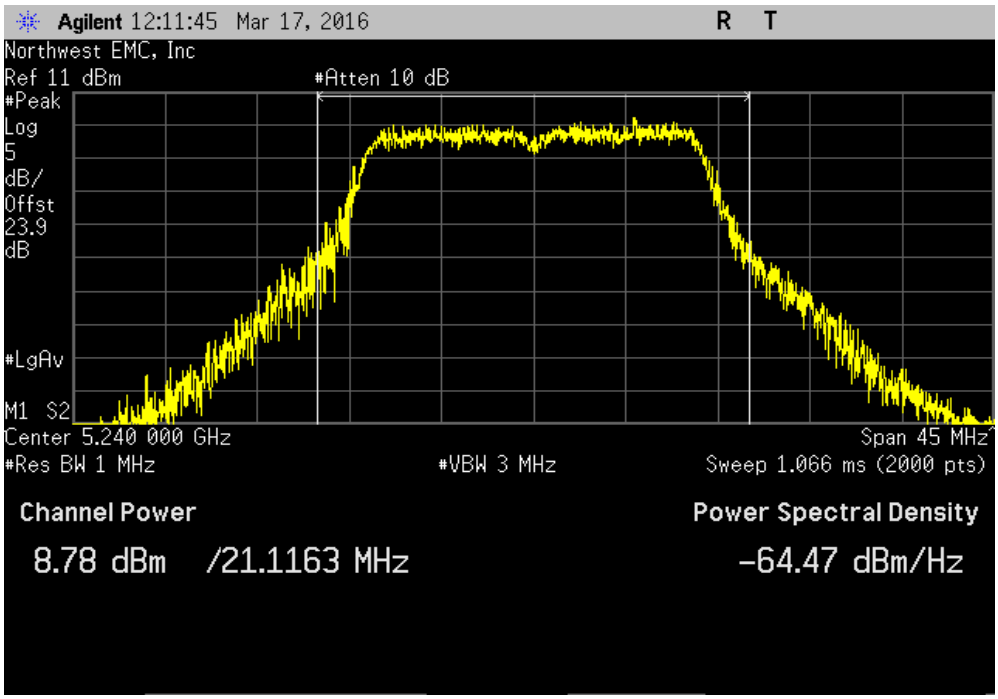
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				5.424 dBm	24 dBm	Pass



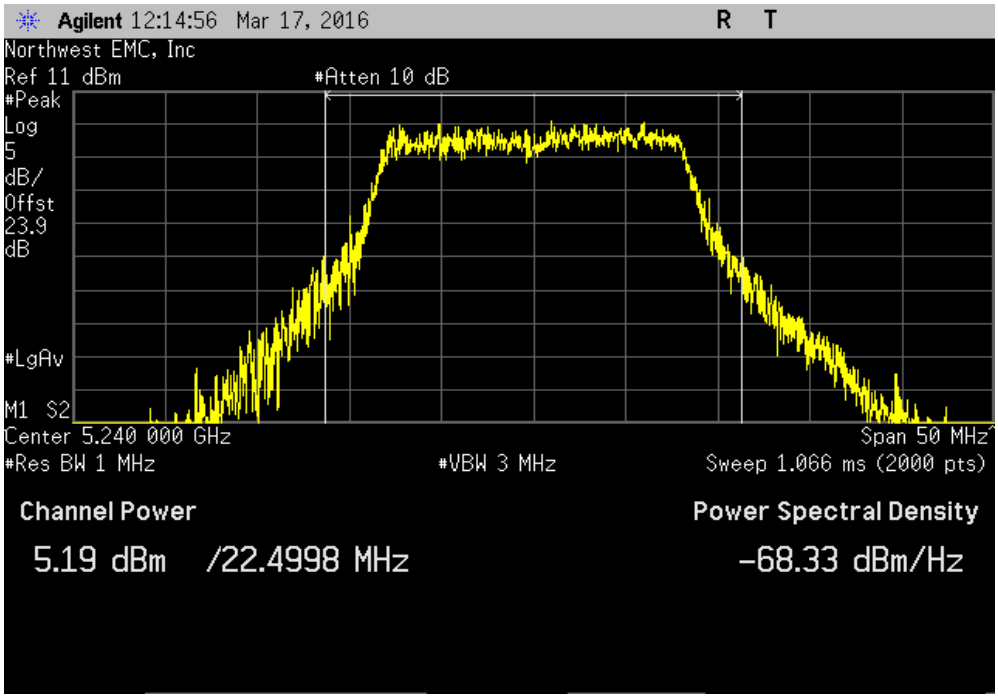
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				10.398 dBm	24 dBm	Pass



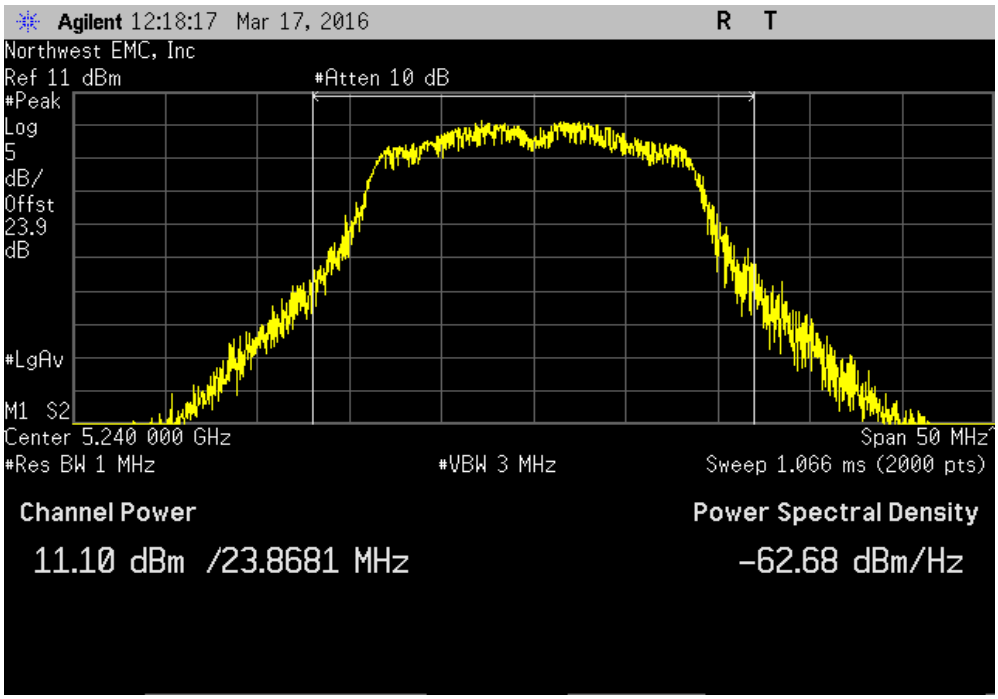
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				8.779 dBm	24 dBm	Pass



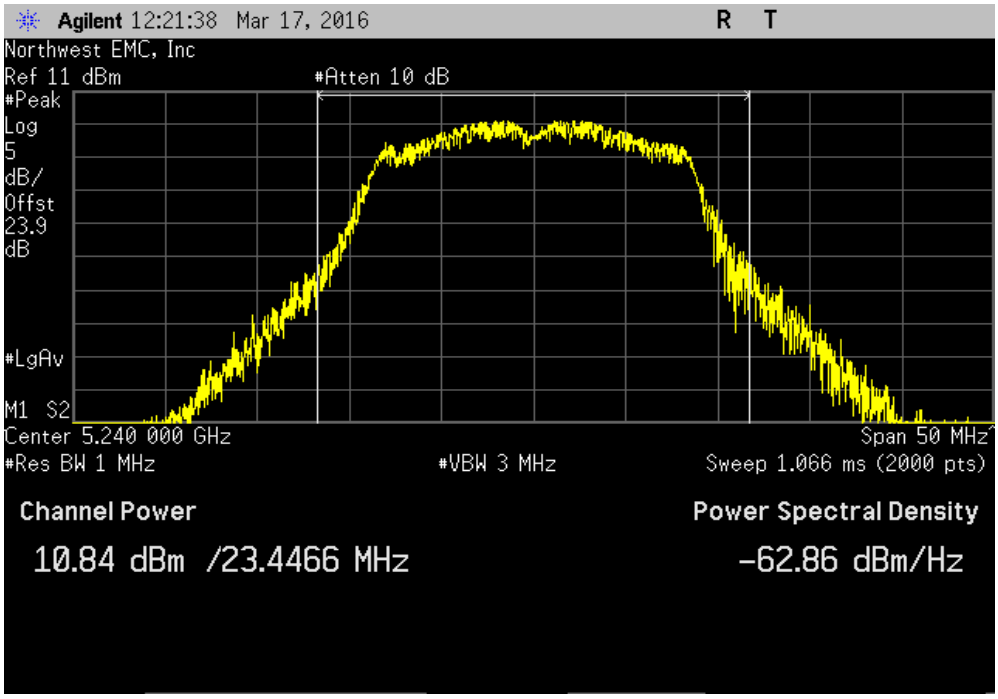
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				5.195 dBm	24 dBm	Pass



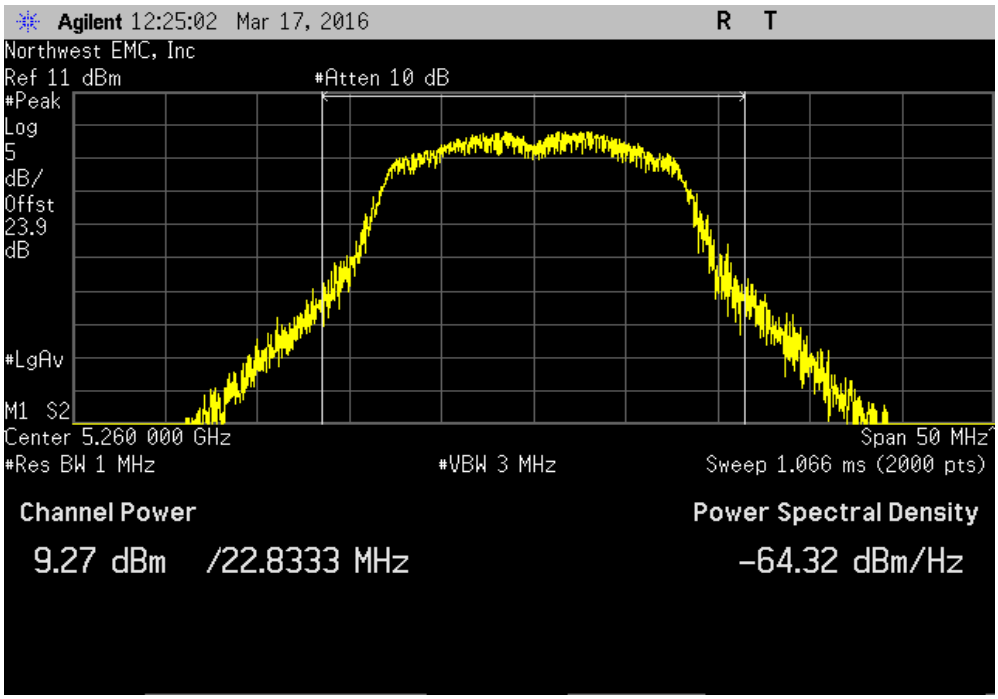
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				11.1 dBm	24 dBm	Pass



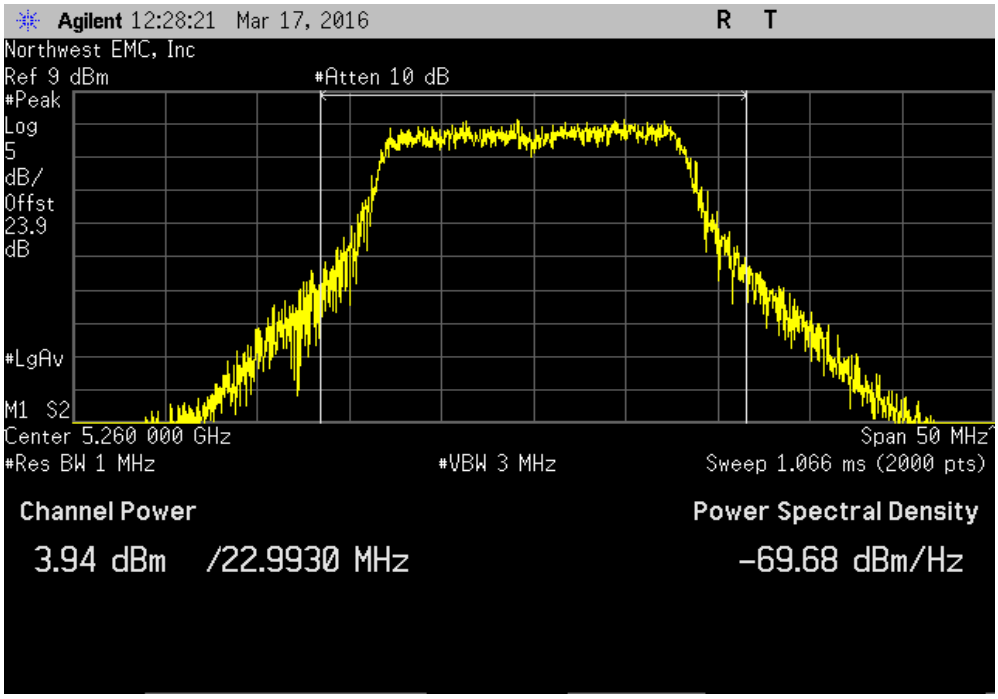
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				10.839 dBm	24 dBm	Pass



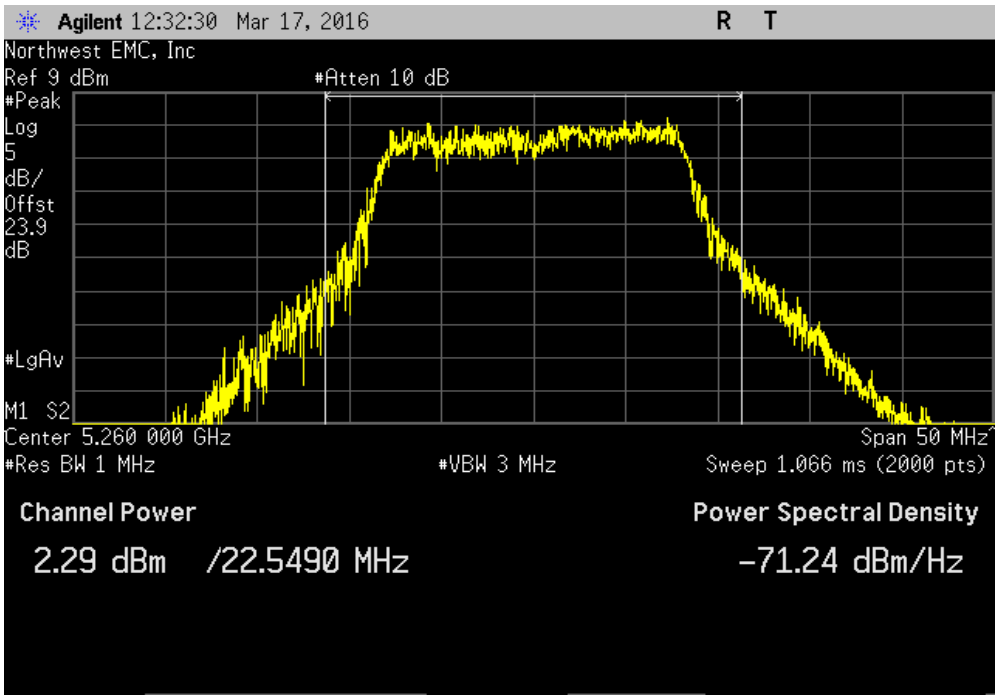
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				9.267 dBm	24 dBm	Pass



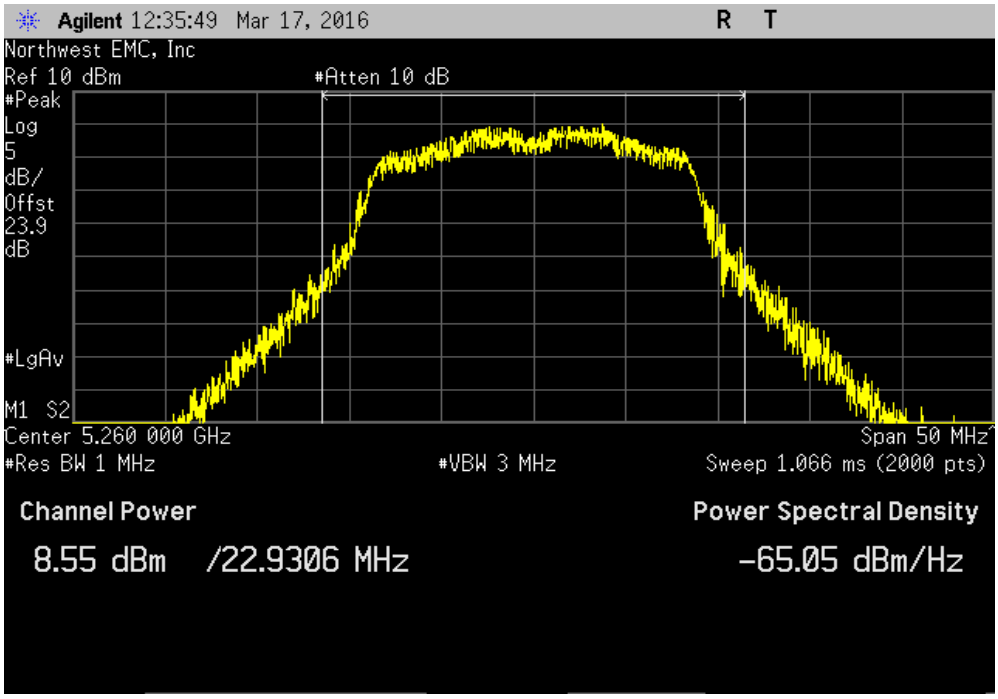
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				3.939 dBm	24 dBm	Pass



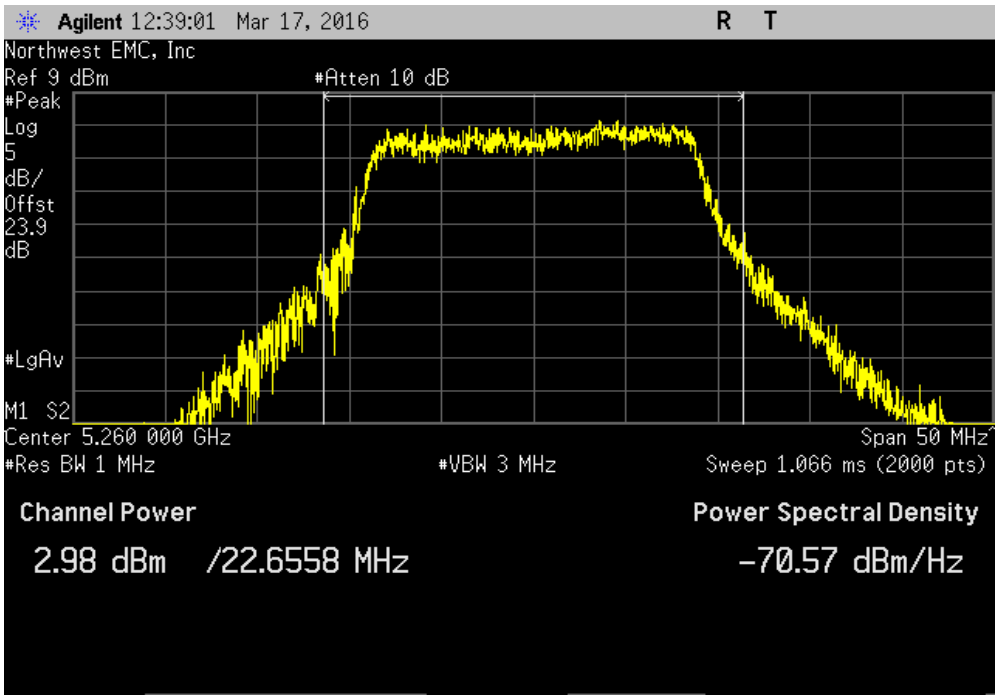
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				2.289 dBm	24 dBm	Pass



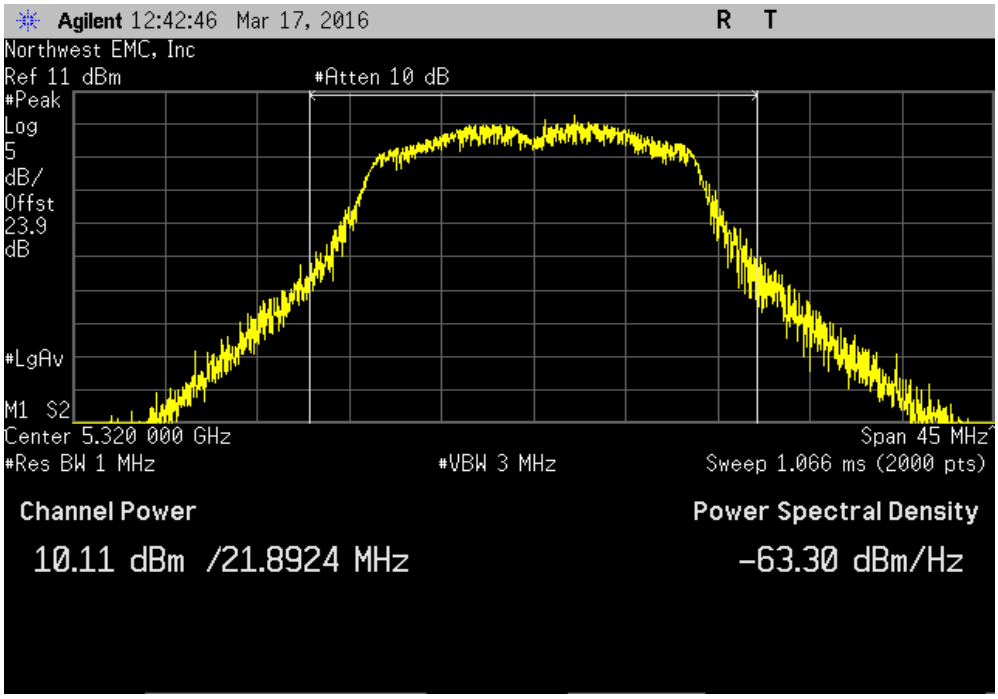
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				8.554 dBm	24 dBm	Pass



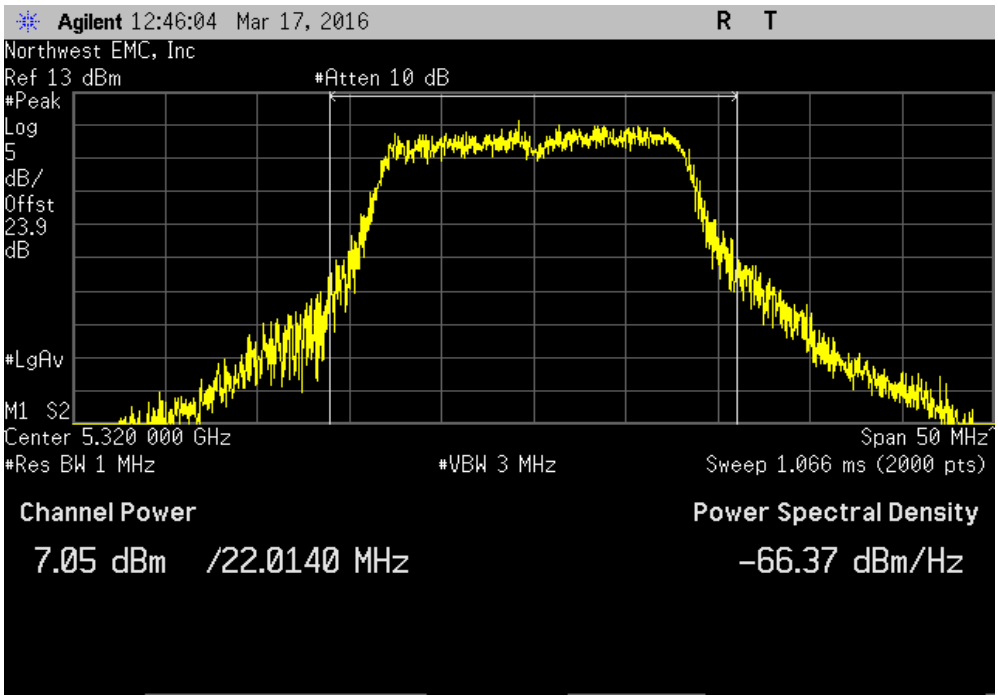
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				2.984 dBm	24 dBm	Pass



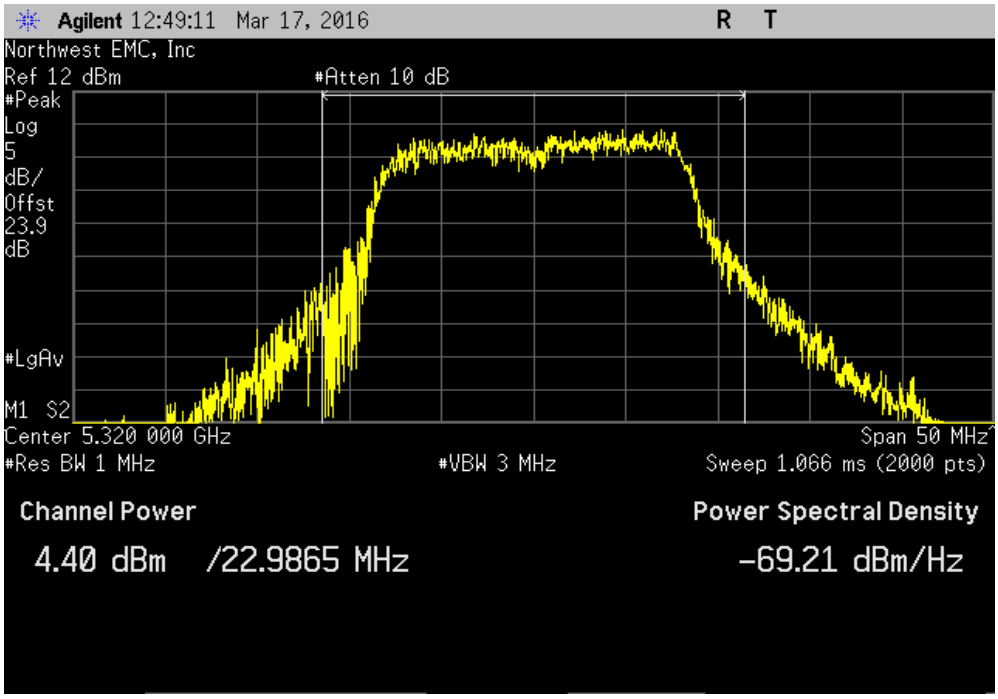
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				10.107 dBm	24 dBm	Pass



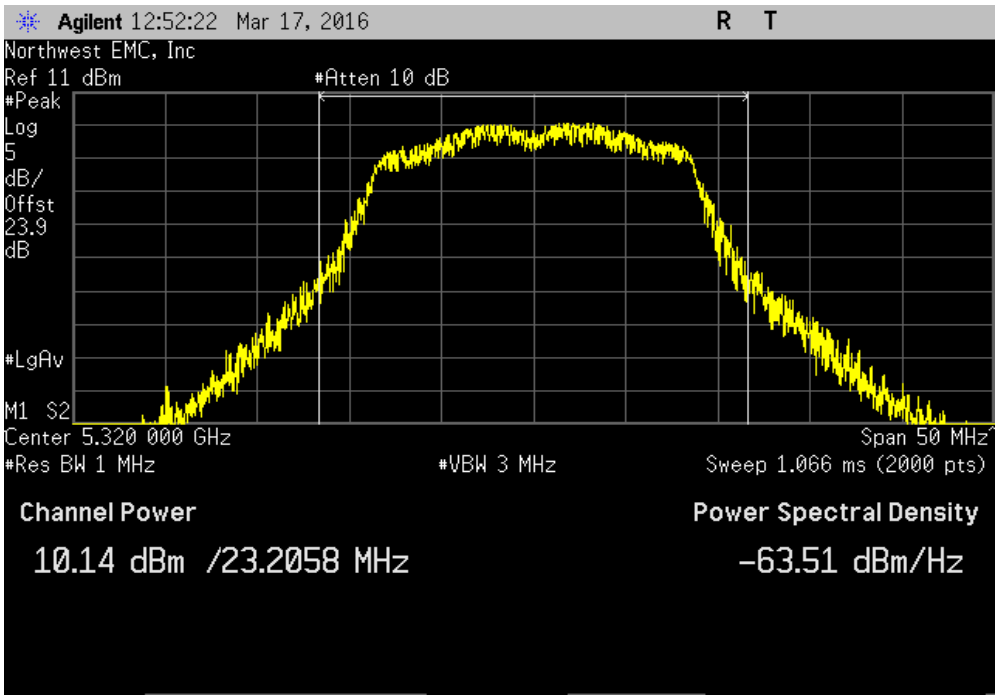
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				7.053 dBm	24 dBm	Pass



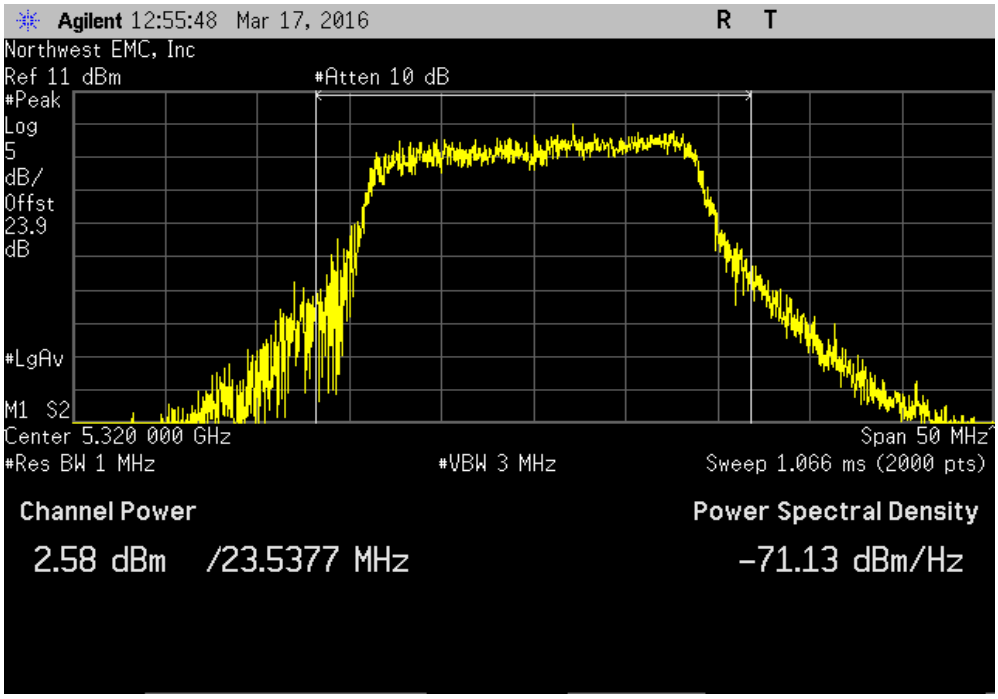
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				4.404 dBm	24 dBm	Pass



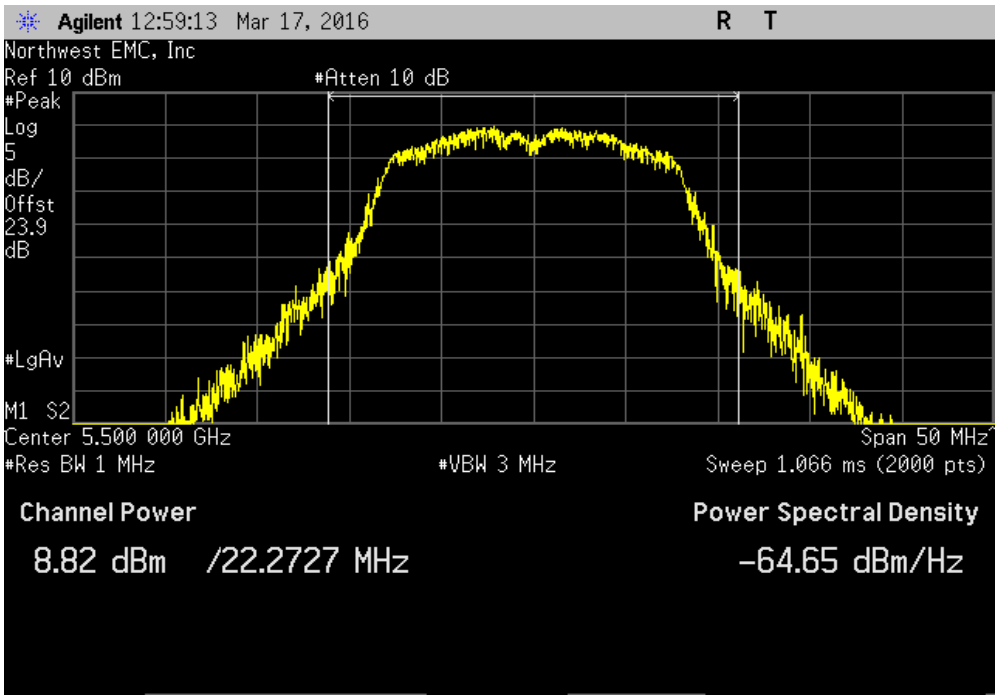
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				10.142 dBm	24 dBm	Pass



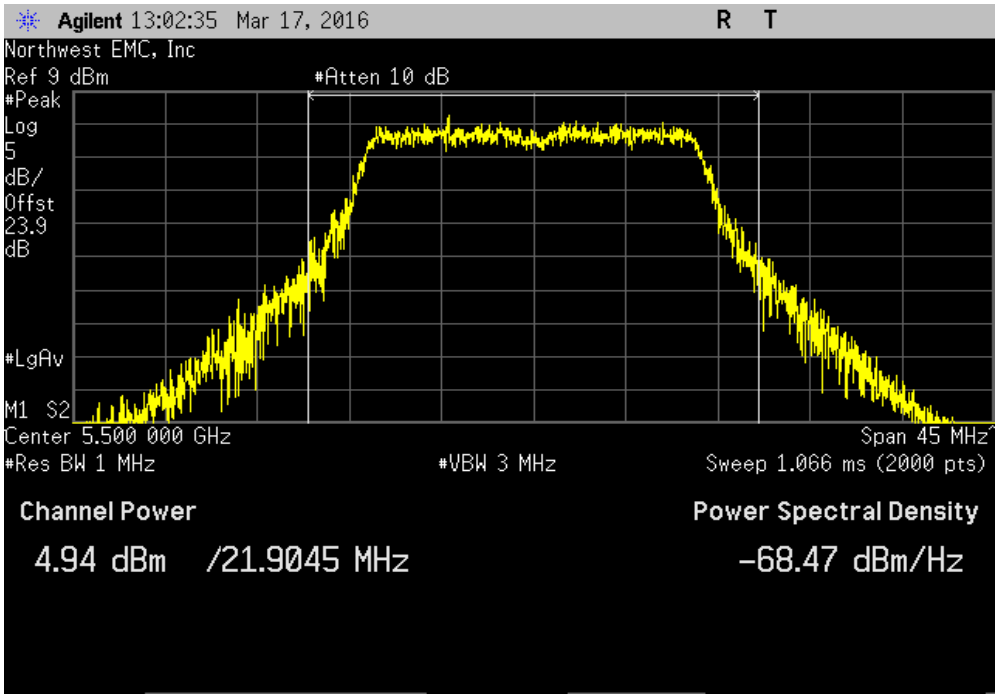
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				2.584 dBm	24 dBm	Pass



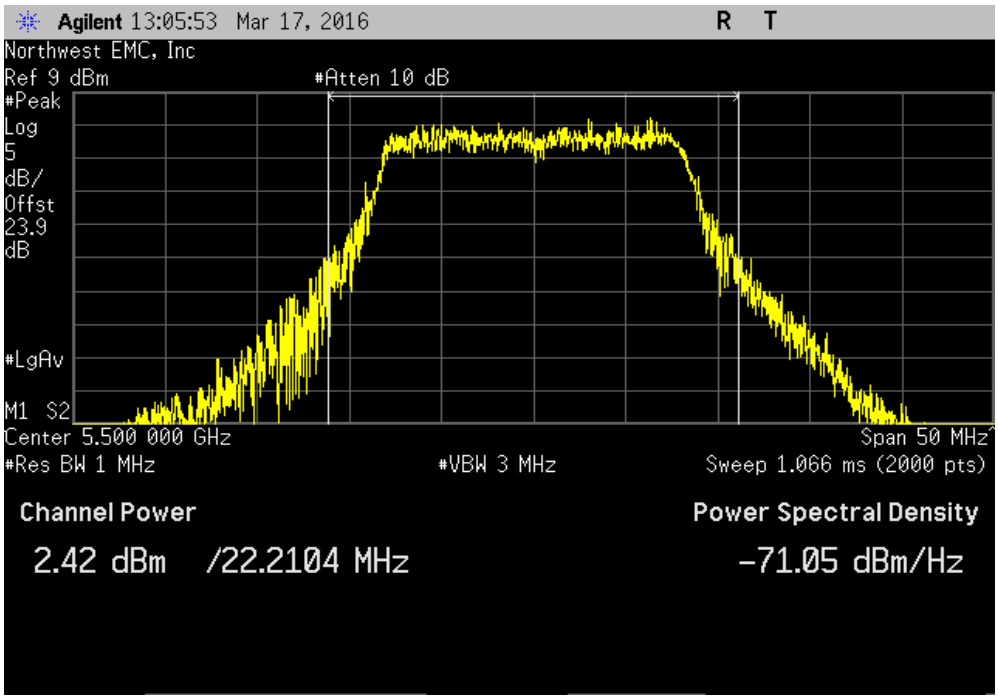
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				8.825 dBm	24 dBm	Pass



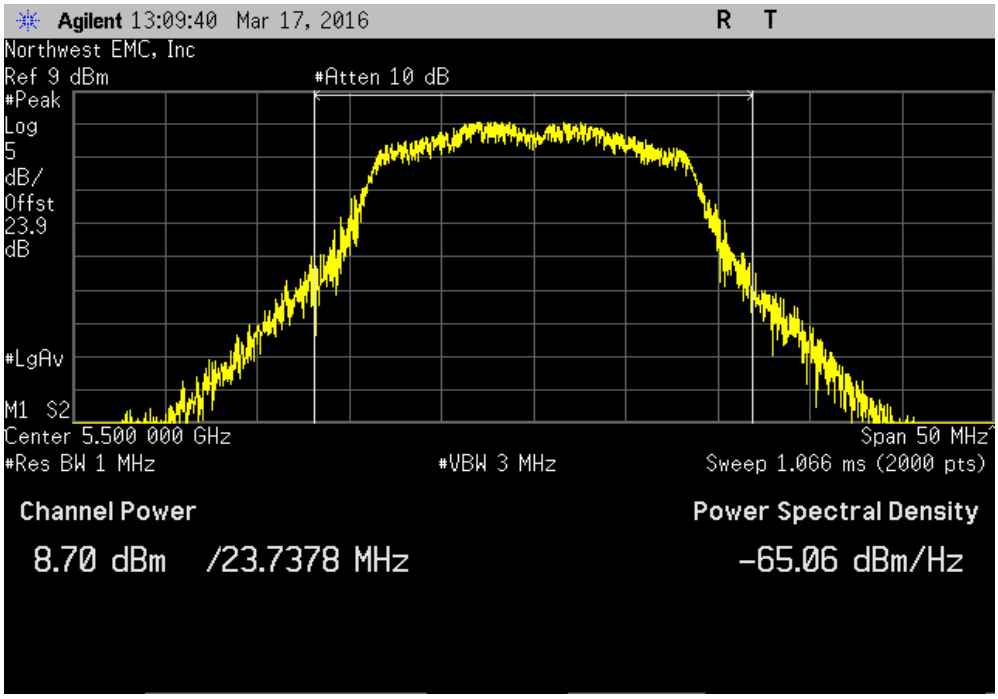
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				4.94 dBm	24 dBm	Pass



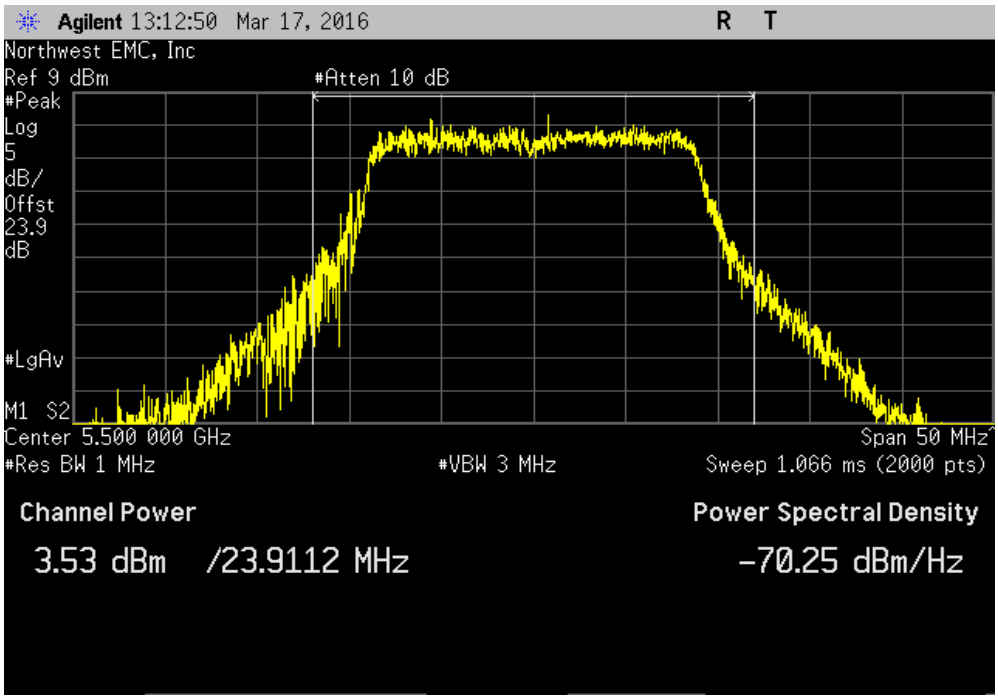
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				2.419 dBm	24 dBm	Pass



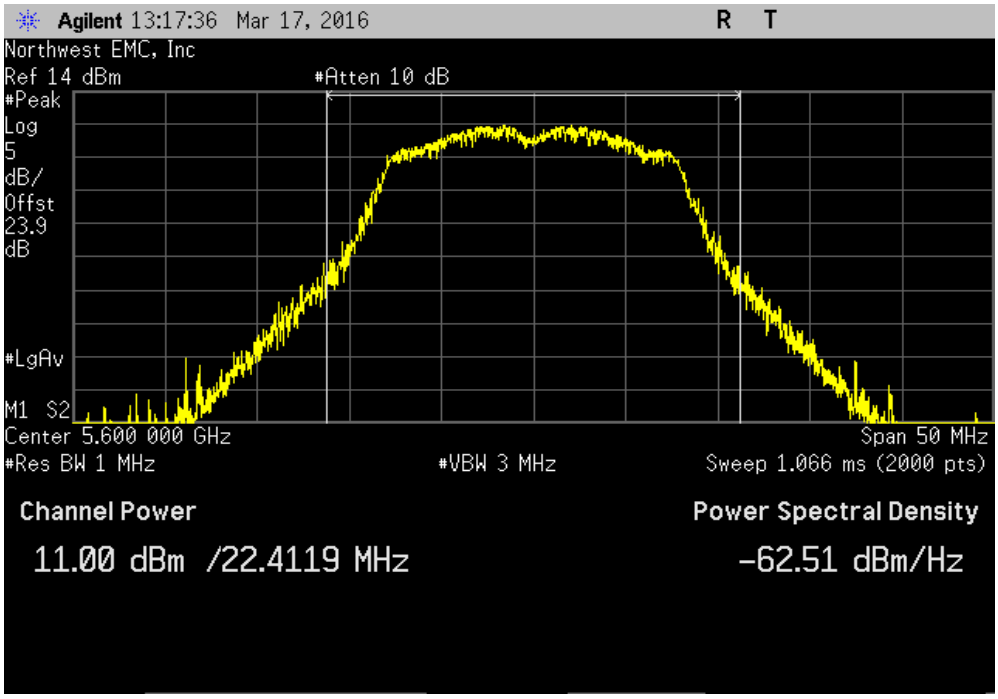
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				8.695 dBm	24 dBm	Pass



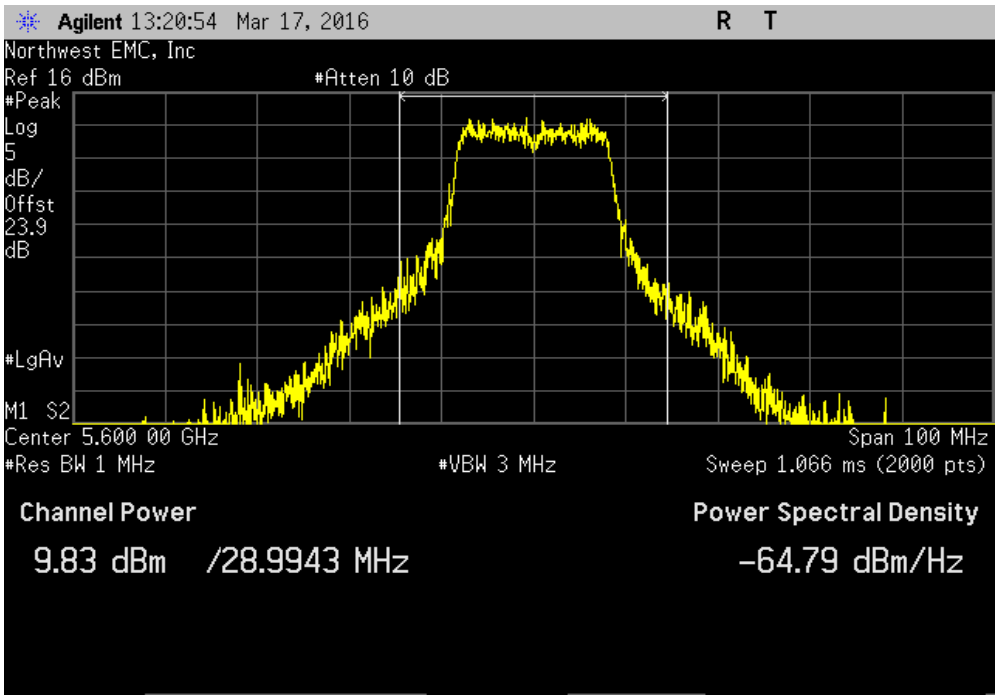
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				3.532 dBm	24 dBm	Pass



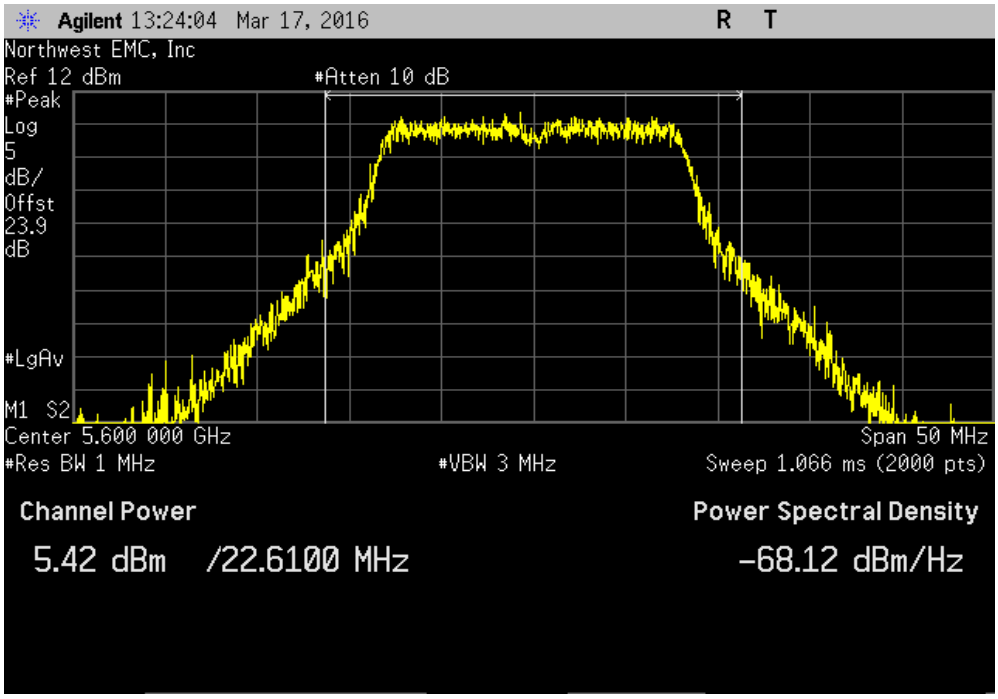
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				10.999 dBm	24 dBm	Pass



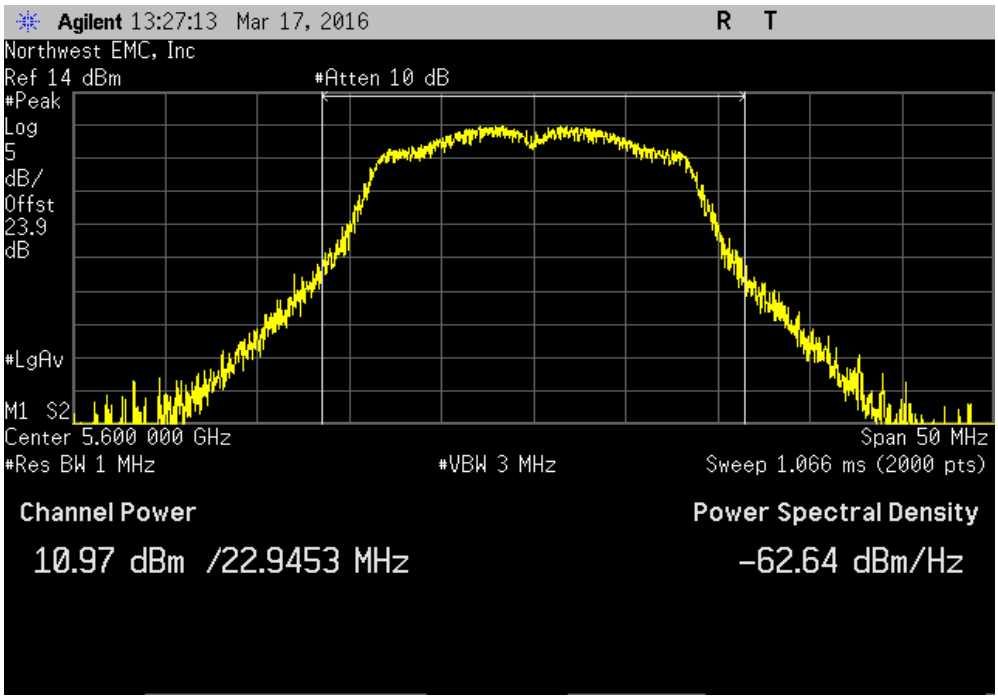
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				9.829 dBm	24 dBm	Pass



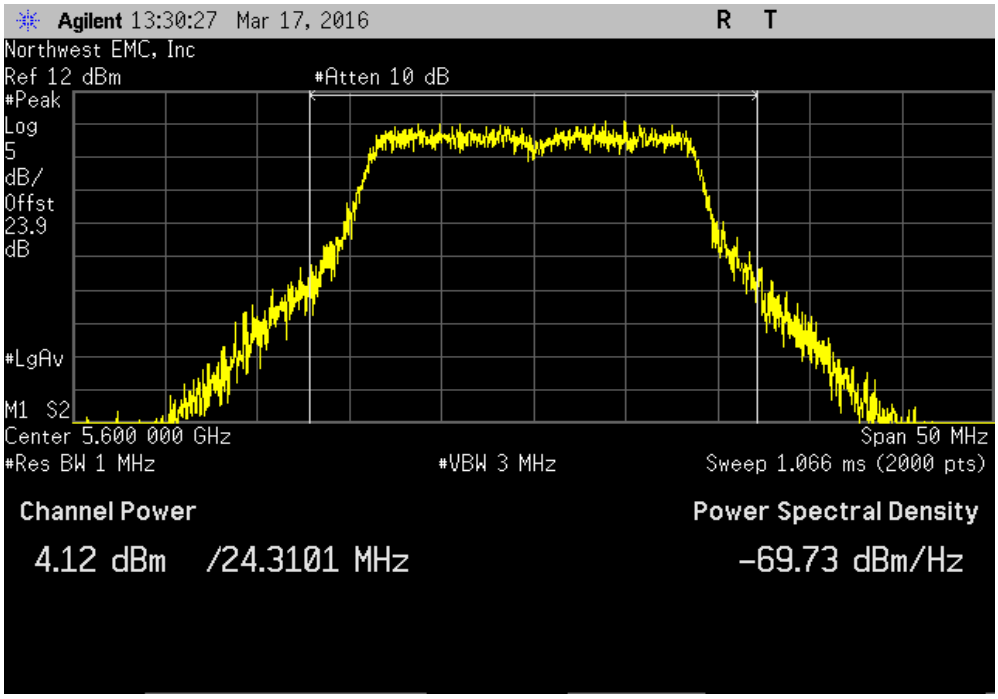
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				5.424 dBm	24 dBm	Pass



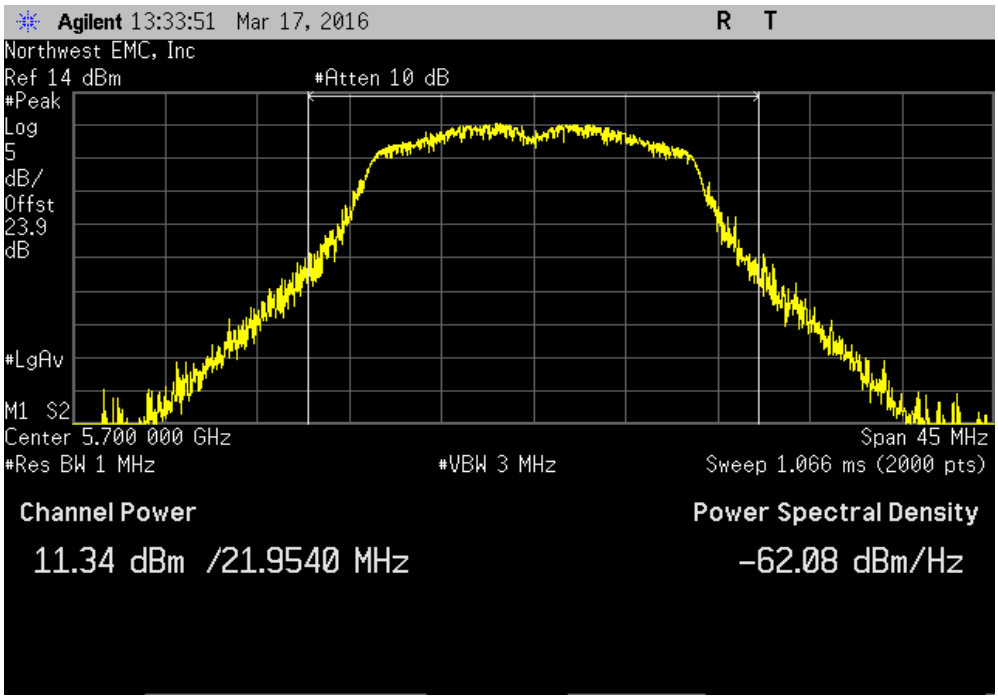
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				10.97 dBm	24 dBm	Pass



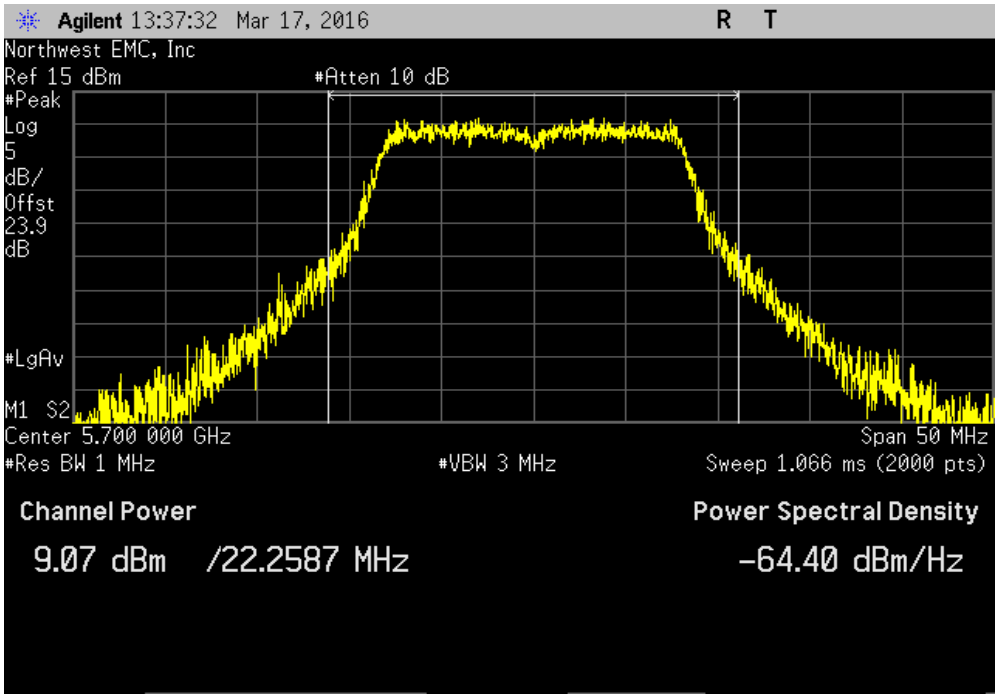
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				4.123 dBm	24 dBm	Pass



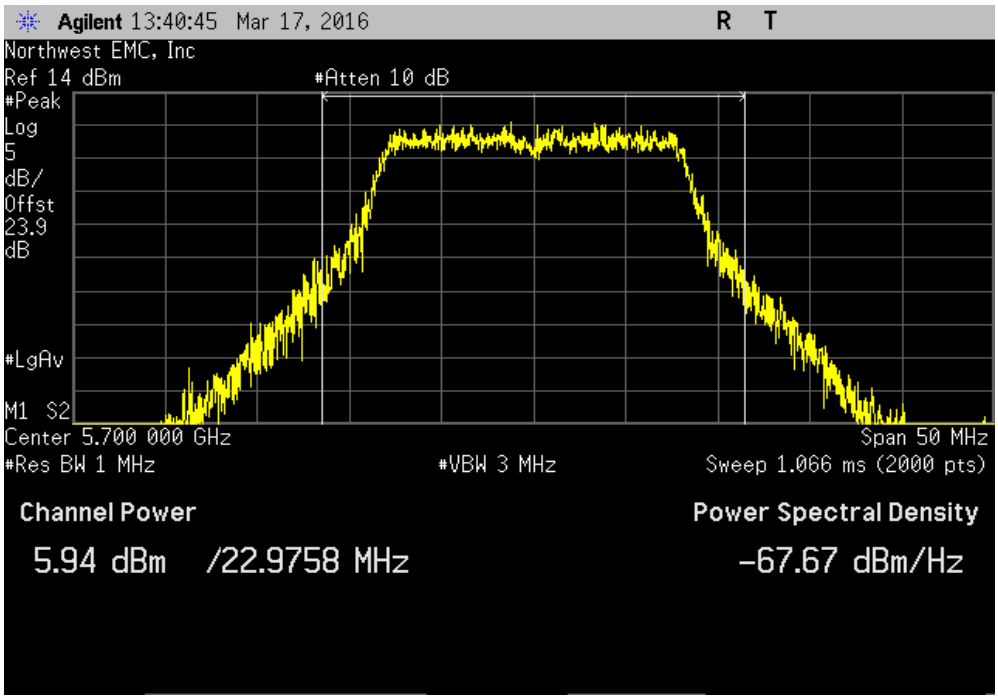
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				11.339 dBm	24 dBm	Pass



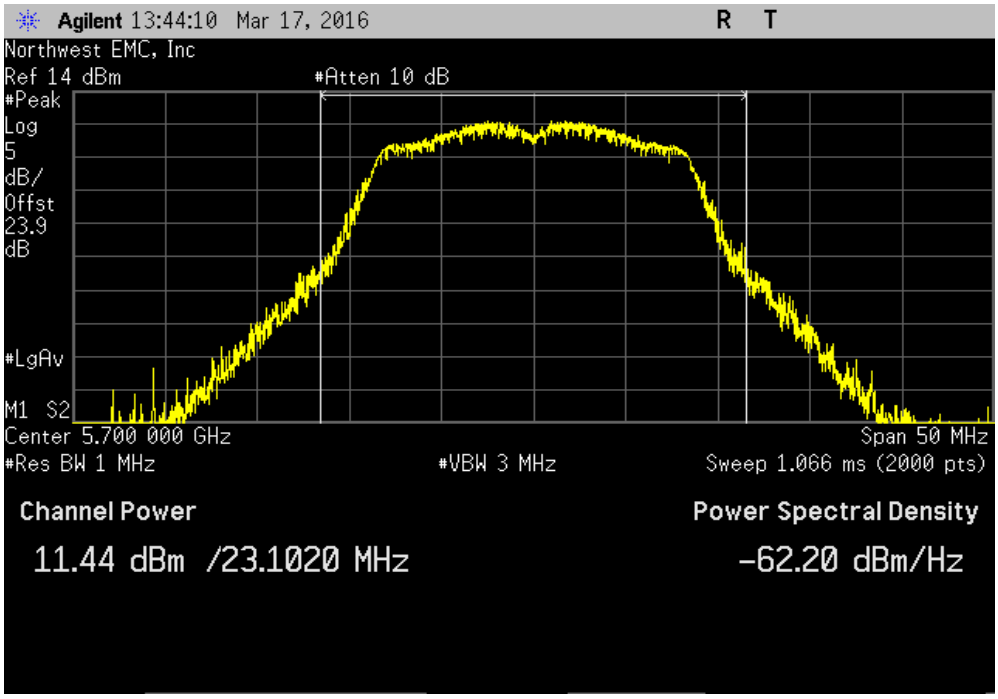
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				9.073 dBm	24 dBm	Pass



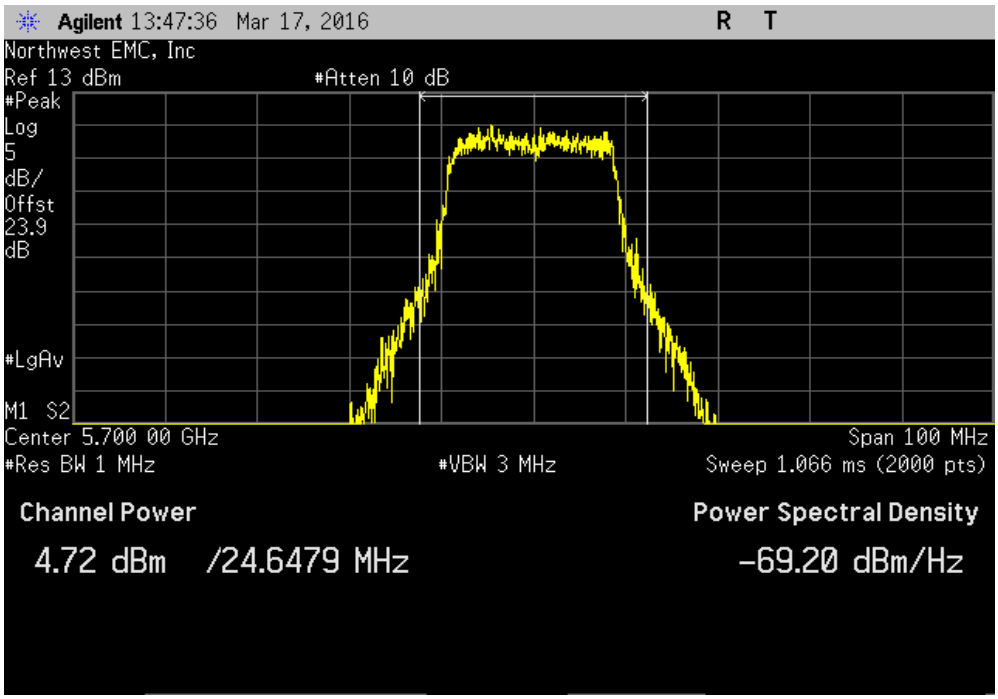
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				5.942 dBm	24 dBm	Pass



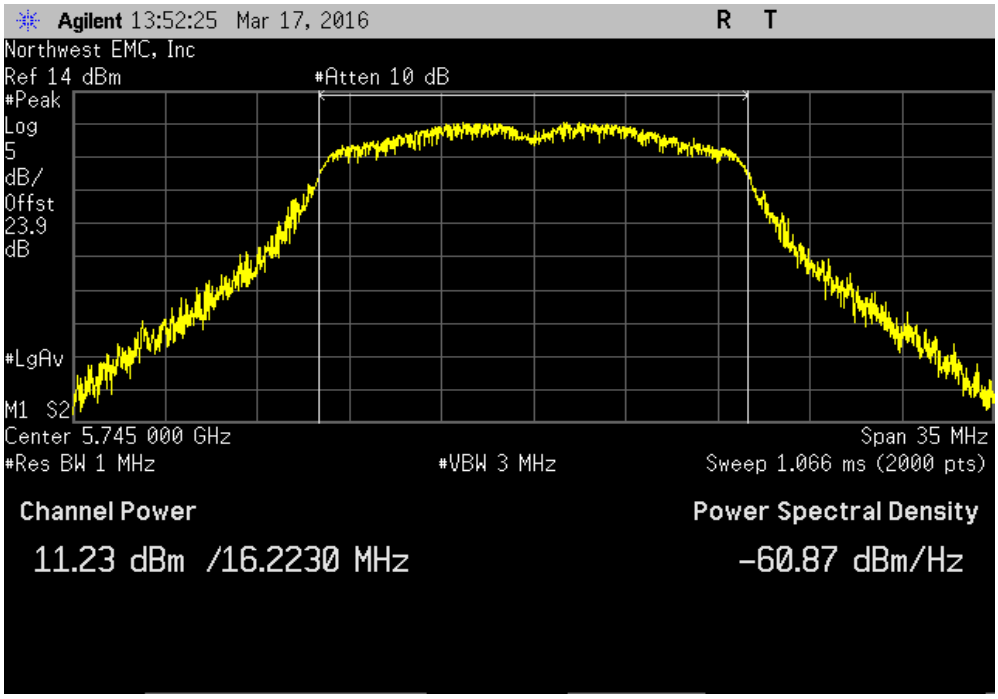
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				11.438 dBm	24 dBm	Pass



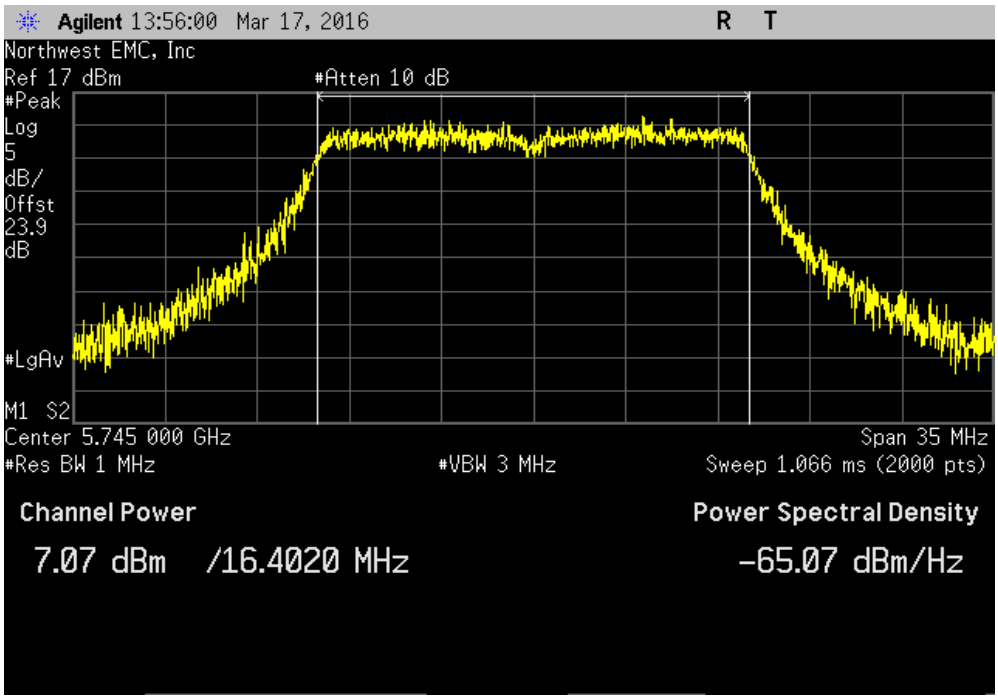
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				4.716 dBm	24 dBm	Pass



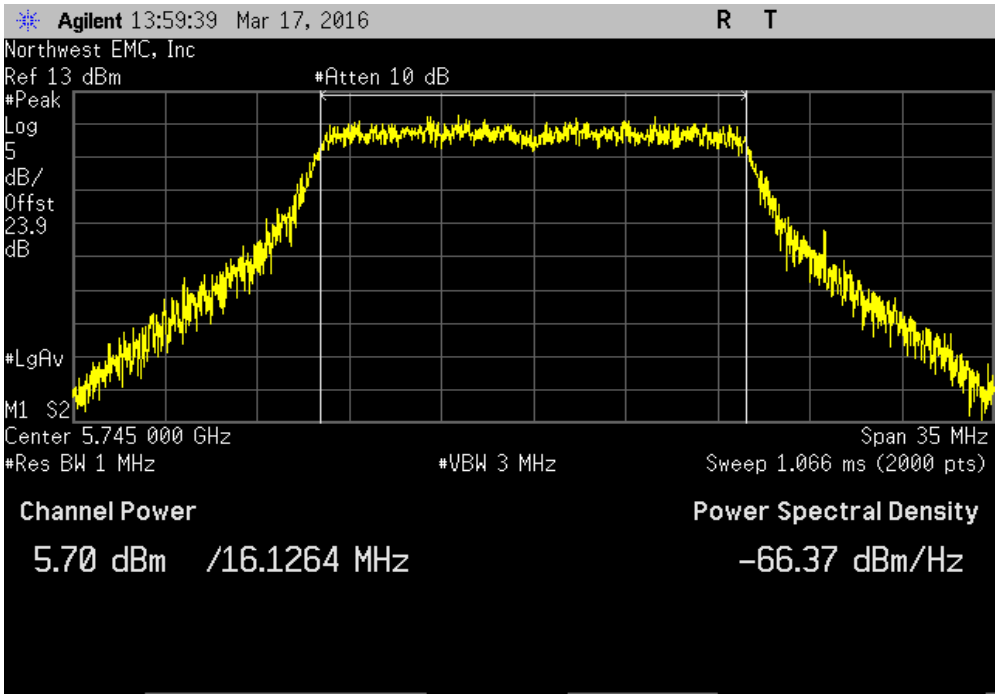
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				11.226 dBm	30 dBm	Pass



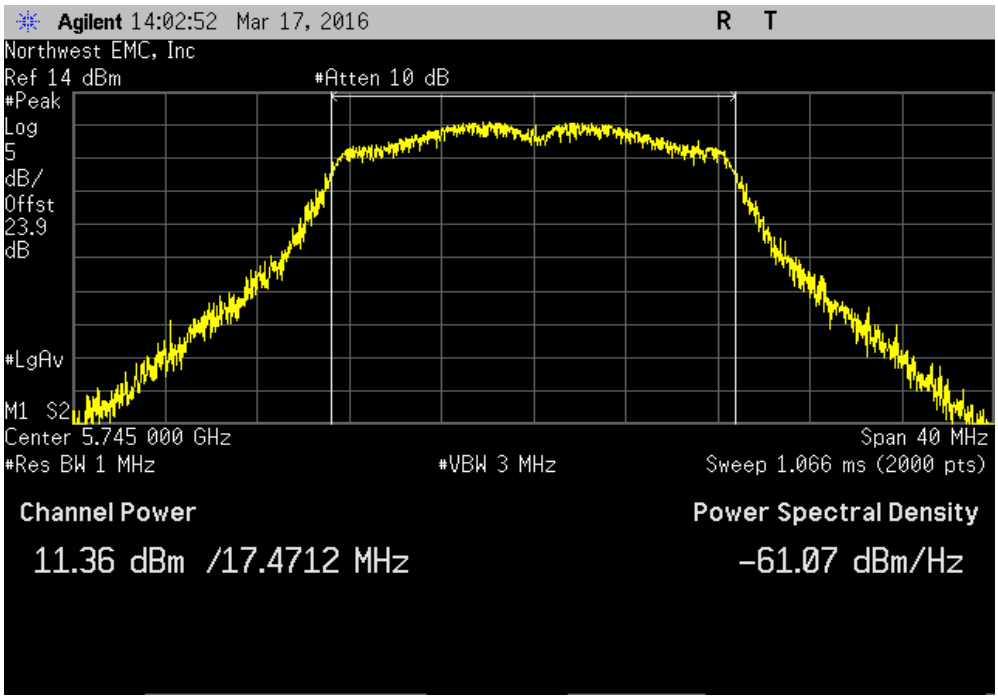
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				7.074 dBm	30 dBm	Pass



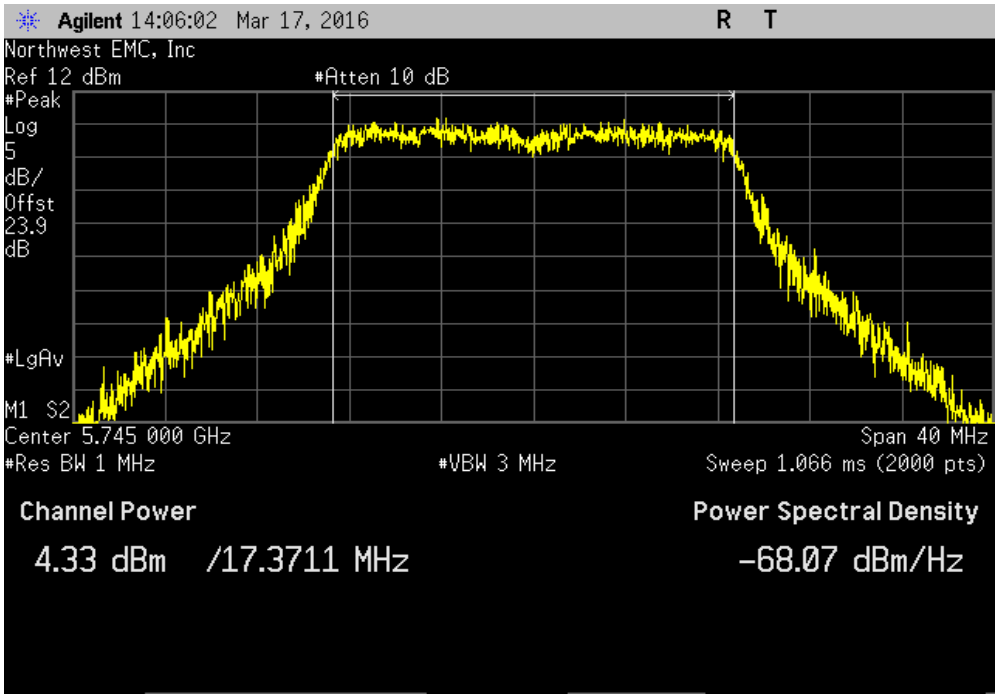
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				5.701 dBm	30 dBm	Pass



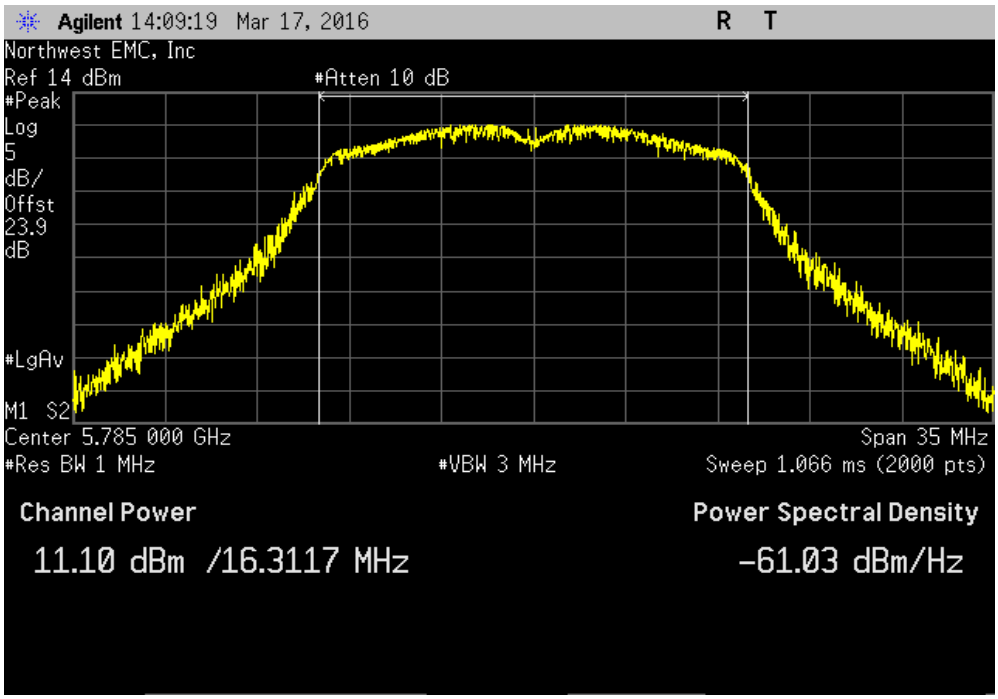
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				11.358 dBm	30 dBm	Pass



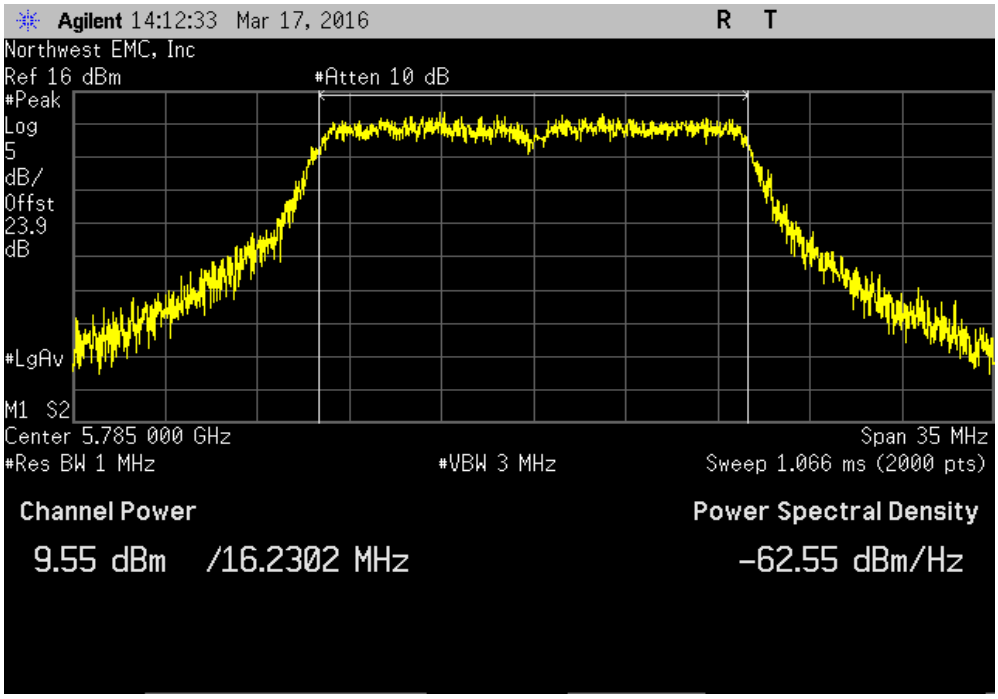
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				4.326 dBm	30 dBm	Pass



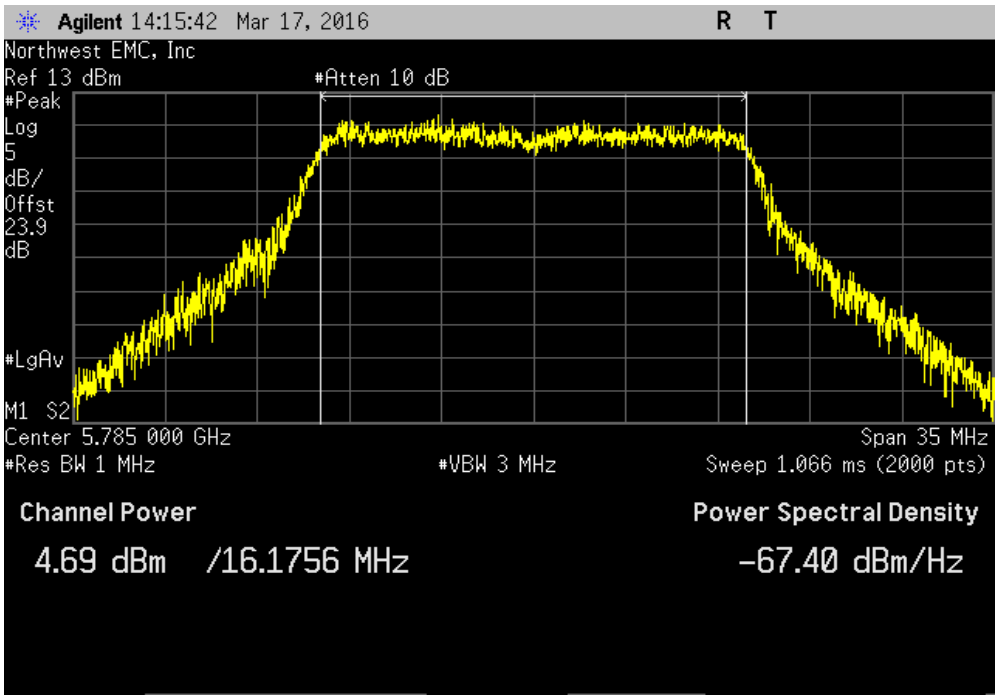
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				11.098 dBm	30 dBm	Pass



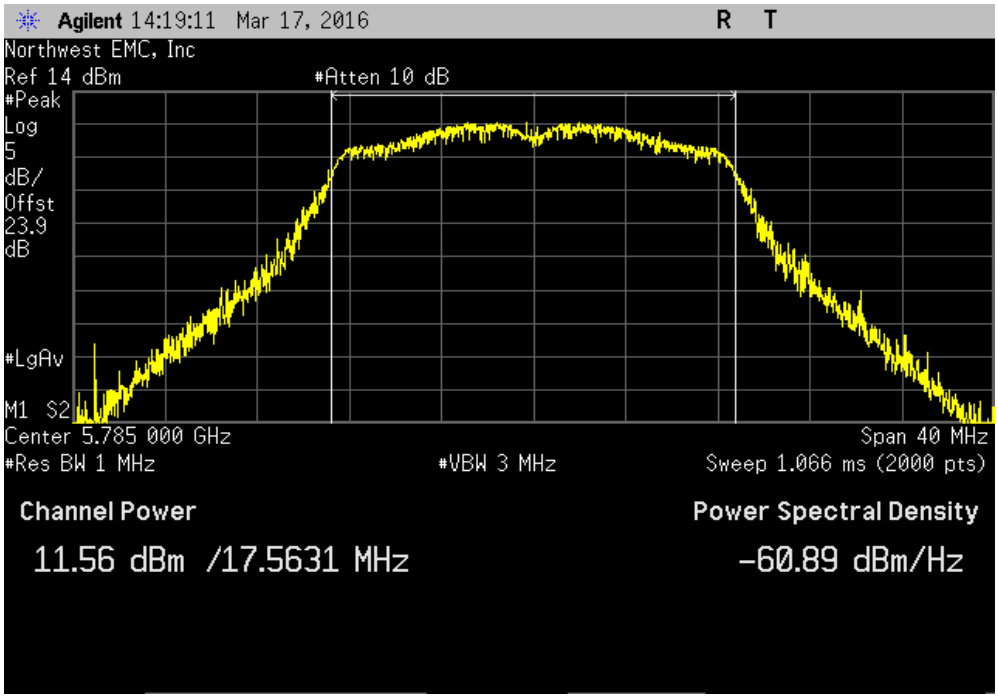
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				9.549 dBm	30 dBm	Pass



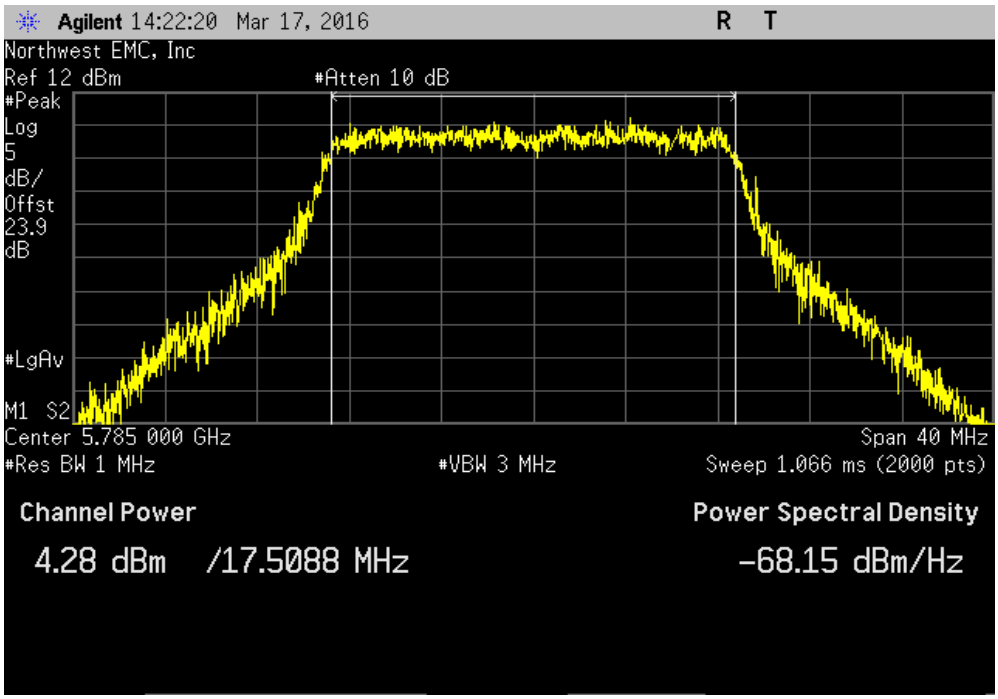
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				4.692 dBm	30 dBm	Pass



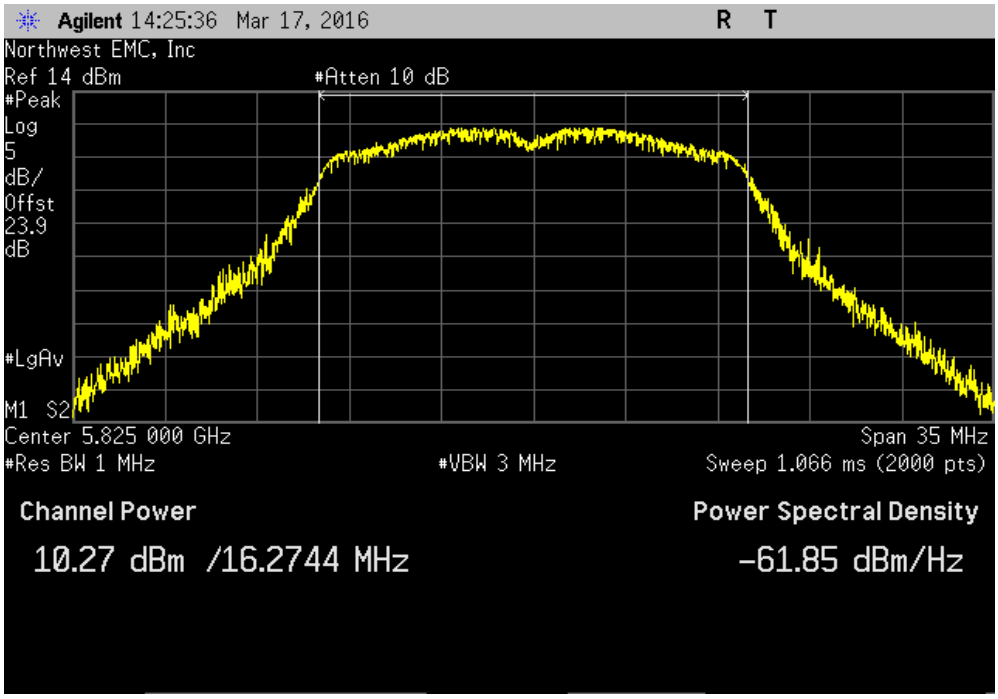
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				11.555 dBm	30 dBm	Pass



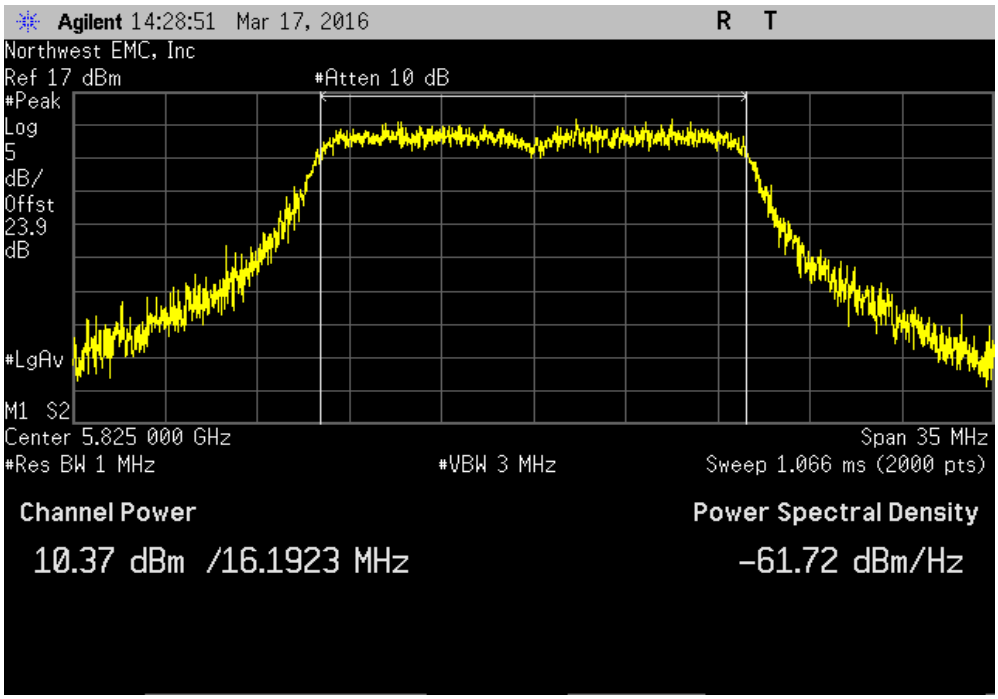
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				4.282 dBm	30 dBm	Pass



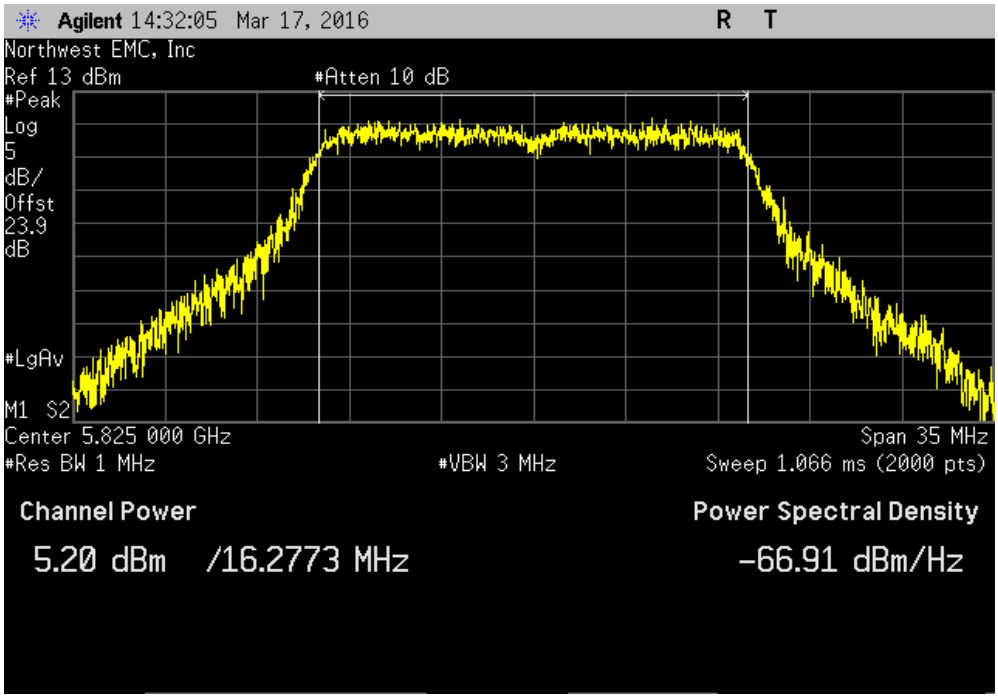
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 6 Mbps						
				Value	Limit (<)	Result
				10.265 dBm	30 dBm	Pass



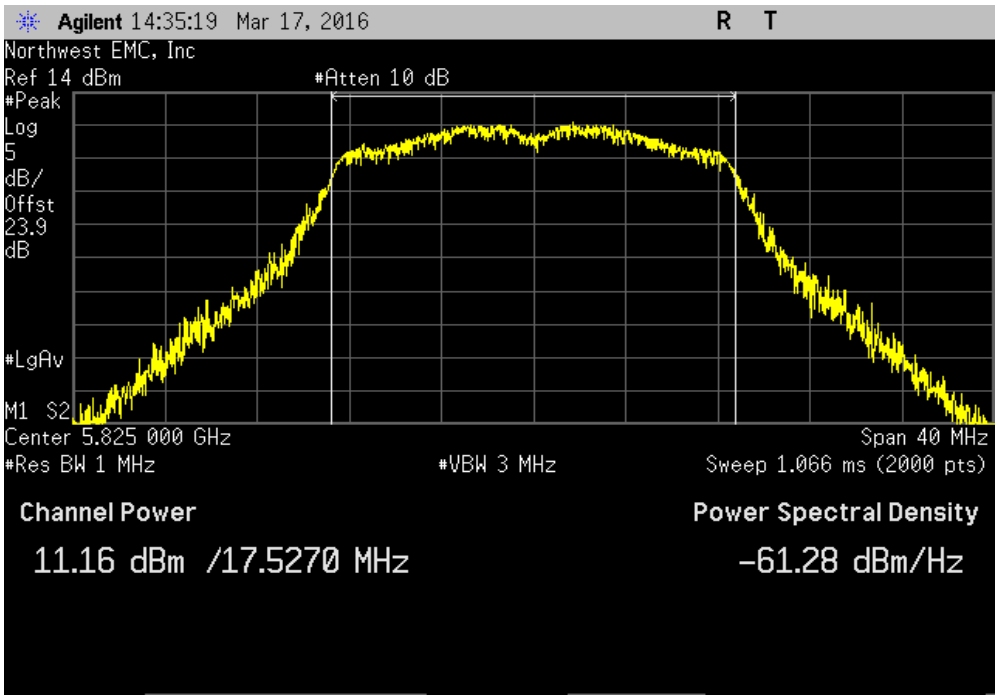
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 36 Mbps						
				Value	Limit (<)	Result
				10.372 dBm	30 dBm	Pass



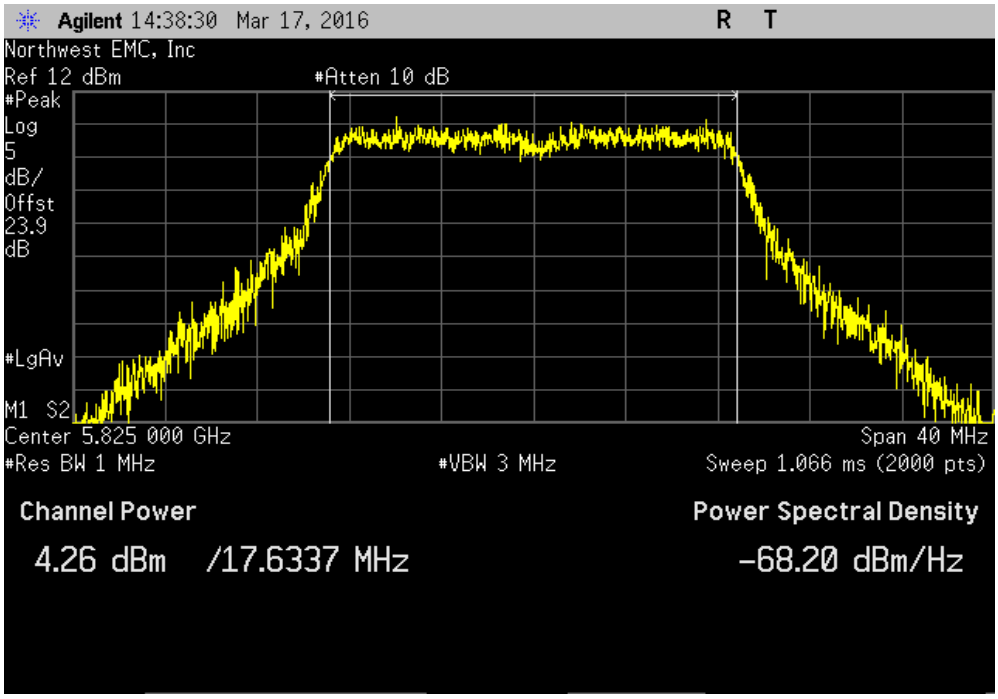
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 54 Mbps						
				Value	Limit (<)	Result
				5.202 dBm	30 dBm	Pass



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS0						
				Value	Limit (<)	Result
				11.155 dBm	30 dBm	Pass



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS7						
				Value	Limit (<)	Result
				4.263 dBm	30 dBm	Pass



EMISSION BANDWIDTH

XMit 2015.01.14

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 (mo)
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	4/20/2015	12

TEST DESCRIPTION

The transmit frequencies and data rates listed in the datasheet were measured in each band utilized by the radio. 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.

Per ANSI C63.10, the spectrum analyzer settings were as follows:

-RBW = Approx. 1% of the emission bandwidth (B).

-VBW = > RBW

-Detector = Peak
-
-Trace mode = max hold

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

There is no required limit to be met in the rule part for this test. The purpose of the test is to both report the results as required and to utilize the emission bandwidth for setting the channel power integration bandwidth during conducted output power testing.

EMISSION BANDWIDTH

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0179
Serial Number:	0216M00003			**Date:**	03/18/16
Customer:	Zoll Medical Corp.			**Temperature:**	22.4°C
Attendees:	Adam Ford			**Humidity:**	27%
Project:	None			**Barometric Pres.:**	991.5
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

None

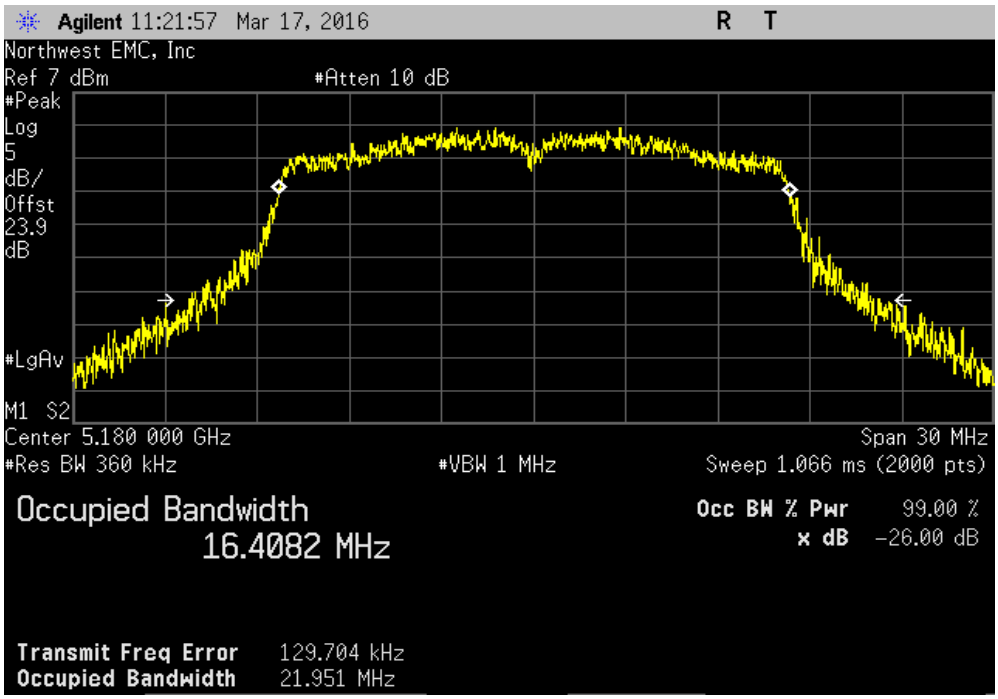
DEVIATIONS FROM TEST STANDARD

None

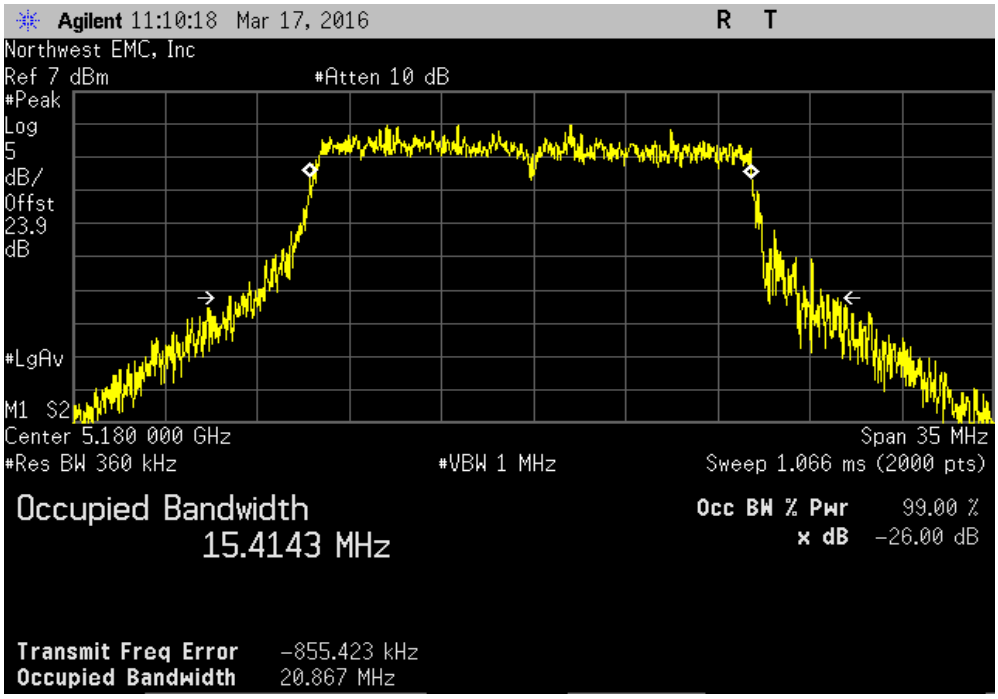
Configuration #	1	Signature

	Value	Limit (>)	Result
5150 - 5250 MHz Band			
Low Channel, Ch 36 - 5180 MHz			
802.11(a) 6 Mbps	21.951 MHz	N/A	N/A
802.11(a) 36 Mbps	20.867 MHz	N/A	N/A
802.11(a) 54 Mbps	21.712 MHz	N/A	N/A
802.11(n) MCS0	22.887 MHz	N/A	N/A
802.11(n) MCS7	23.115 MHz	N/A	N/A
High Channel, Ch 48 - 5240 MHz			
802.11(a) 6 Mbps	22.375 MHz	N/A	N/A
802.11(a) 36 Mbps	21.116 MHz	N/A	N/A
802.11(a) 54 Mbps	22.5 MHz	N/A	N/A
802.11(n) MCS0	23.868 MHz	N/A	N/A
802.11(n) MCS7	23.447 MHz	N/A	N/A
5250 - 5350 MHz Band			
Low Channel, Ch 52 - 5260 MHz			
802.11(a) 6 Mbps	22.833 MHz	N/A	N/A
802.11(a) 36 Mbps	22.993 MHz	N/A	N/A
802.11(a) 54 Mbps	22.549 MHz	N/A	N/A
802.11(n) MCS0	22.931 MHz	N/A	N/A
802.11(n) MCS7	22.656 MHz	N/A	N/A
High Channel, Ch 64 - 5320 MHz			
802.11(a) 6 Mbps	21.892 MHz	N/A	N/A
802.11(a) 36 Mbps	22.014 MHz	N/A	N/A
802.11(a) 54 Mbps	22.987 MHz	N/A	N/A
802.11(n) MCS0	23.206 MHz	N/A	N/A
802.11(n) MCS7	23.538 MHz	N/A	N/A
5470 - 5725 MHz Band			
Low Channel, Ch 100 - 5500 MHz			
802.11(a) 6 Mbps	22.273 MHz	N/A	N/A
802.11(a) 36 Mbps	21.905 MHz	N/A	N/A
802.11(a) 54 Mbps	22.21 MHz	N/A	N/A
802.11(n) MCS0	23.738 MHz	N/A	N/A
802.11(n) MCS7	23.911 MHz	N/A	N/A
Mid Channel, Ch 120 - 5600 MHz			
802.11(a) 6 Mbps	22.412 MHz	N/A	N/A
802.11(a) 36 Mbps	28.994 MHz	N/A	N/A
802.11(a) 54 Mbps	22.61 MHz	N/A	N/A
802.11(n) MCS0	22.945 MHz	N/A	N/A
802.11(n) MCS7	24.31 MHz	N/A	N/A
High Channel, Ch 140 - 5700 MHz			
802.11(a) 6 Mbps	21.954 MHz	N/A	N/A
802.11(a) 36 Mbps	22.259 MHz	N/A	N/A
802.11(a) 54 Mbps	22.976 MHz	N/A	N/A
802.11(n) MCS0	23.102 MHz	N/A	N/A
802.11(n) MCS7	24.648 MHz	N/A	N/A

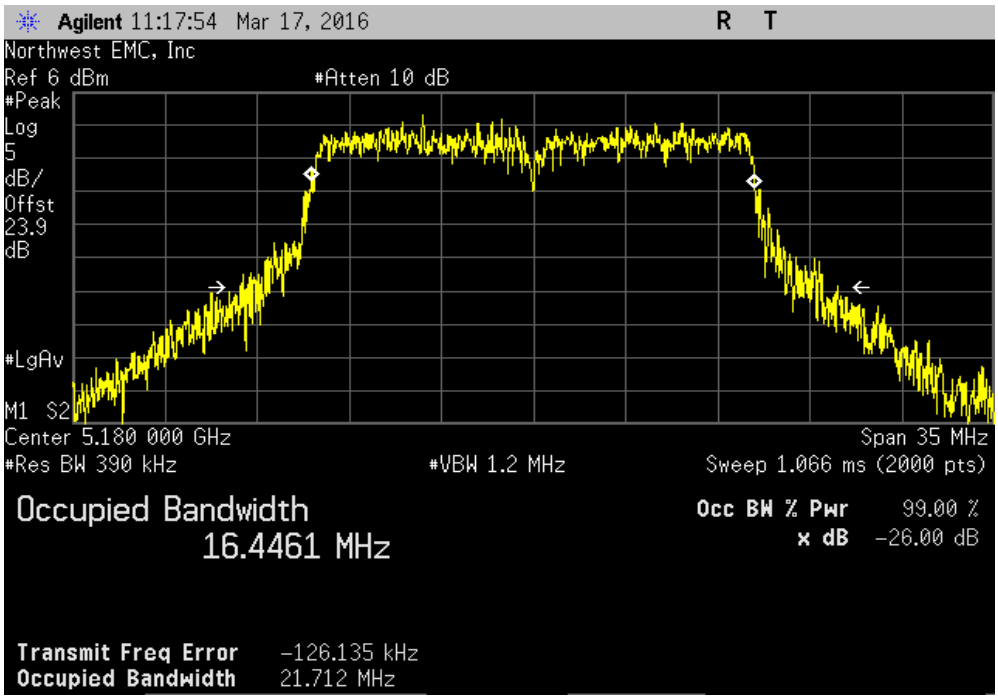
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				21.951 MHz	N/A	N/A



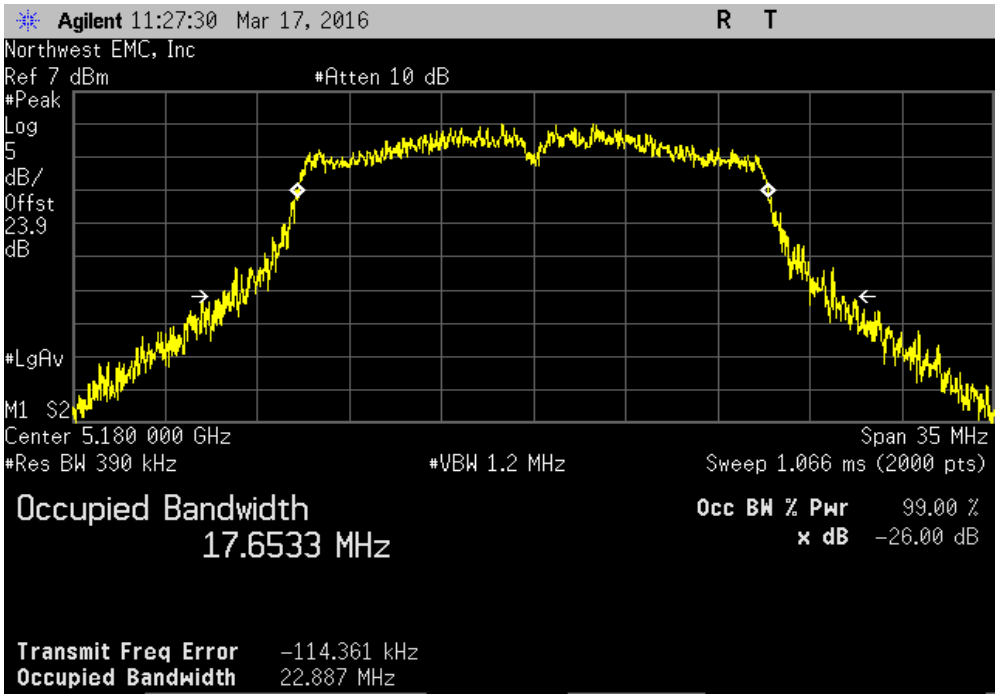
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				20.867 MHz	N/A	N/A



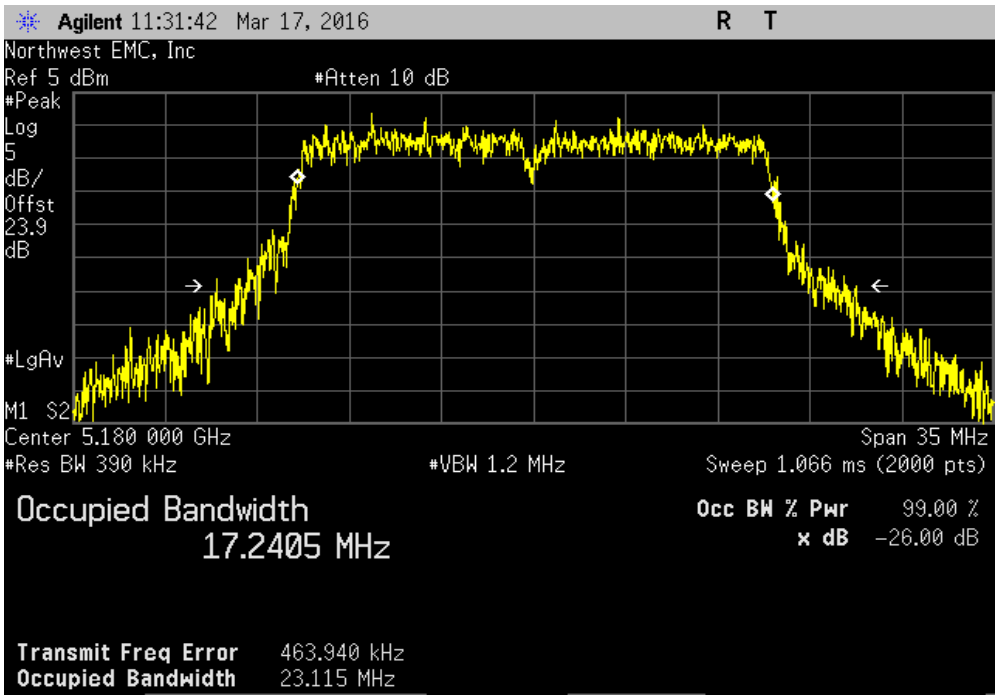
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				21.712 MHz	N/A	N/A



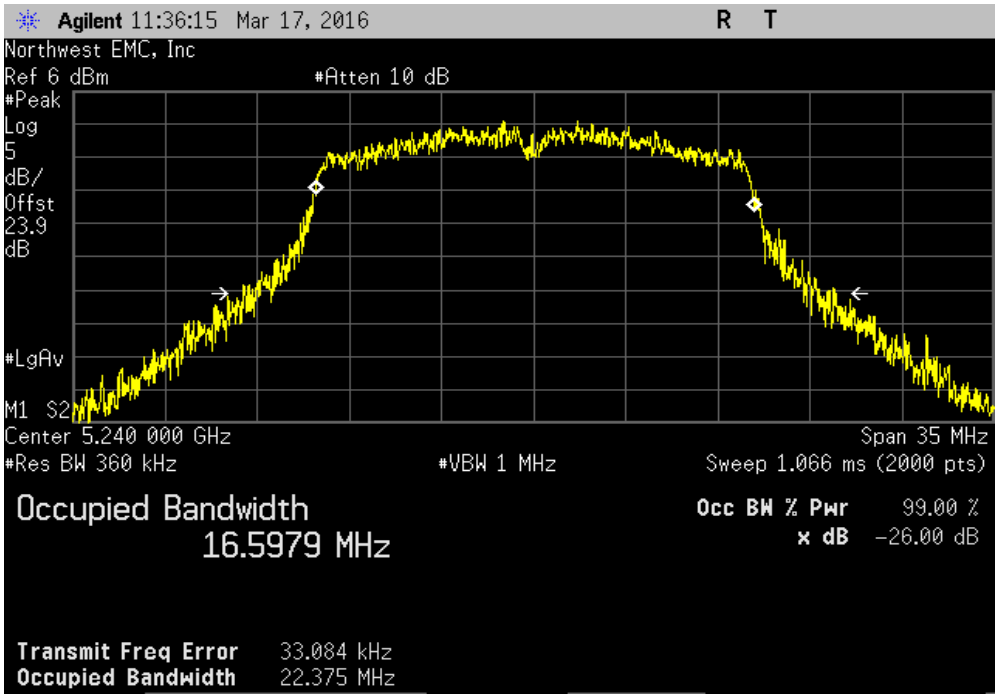
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				22.887 MHz	N/A	N/A



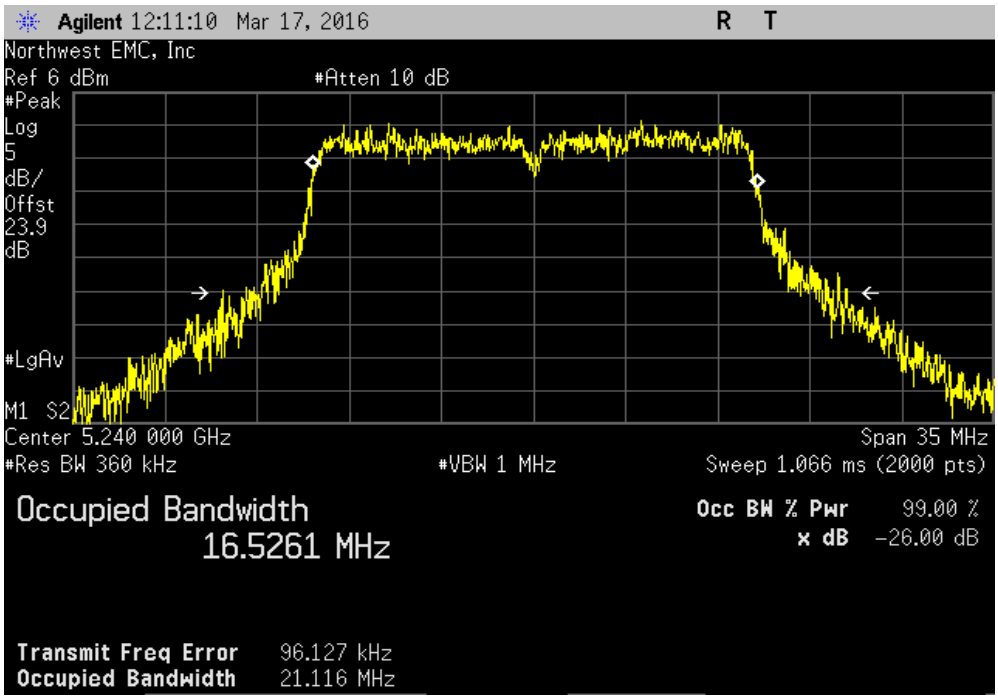
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				23.115 MHz	N/A	N/A



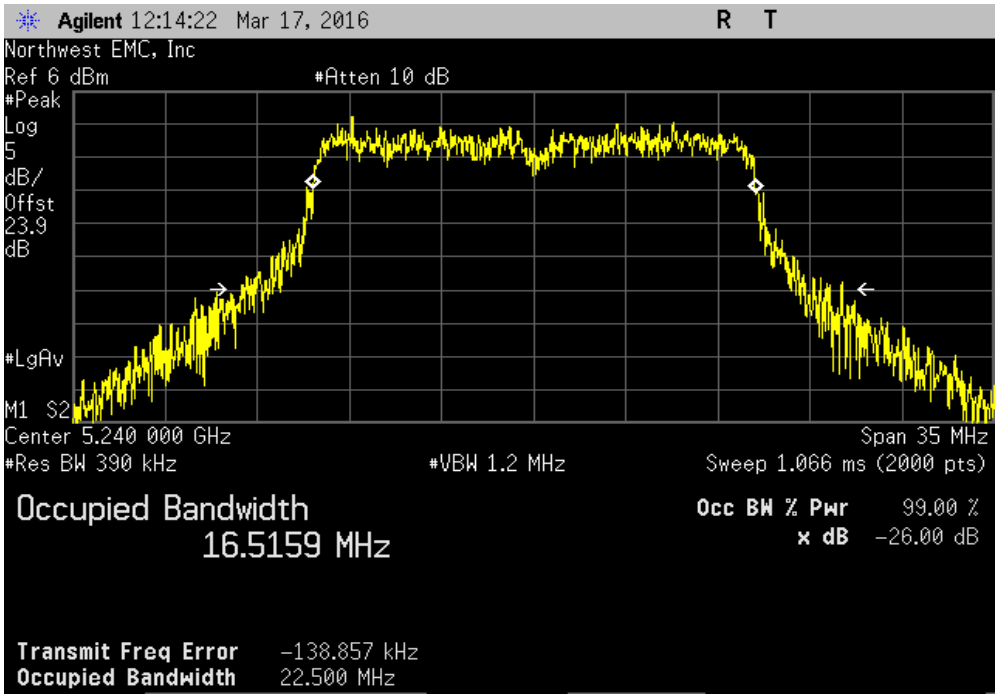
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				22.375 MHz	N/A	N/A



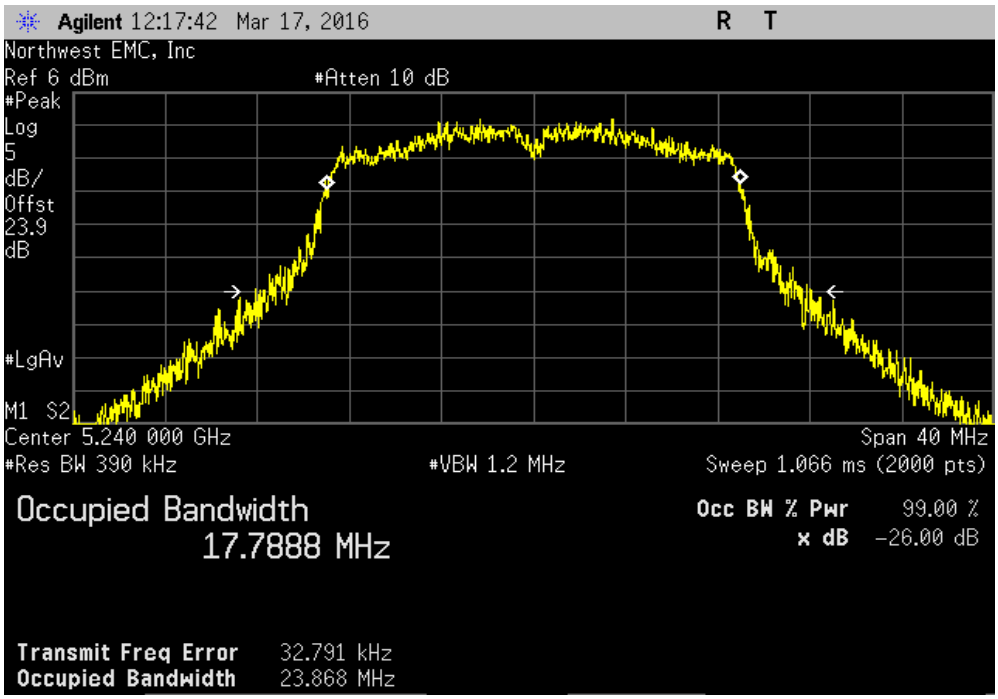
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				21.116 MHz	N/A	N/A



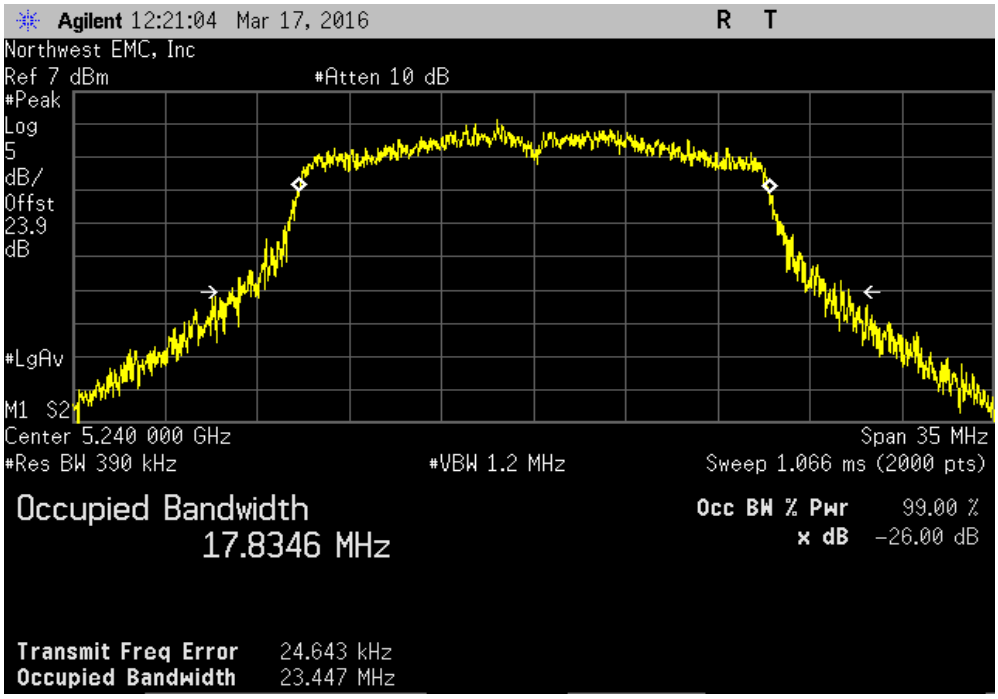
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				22.5 MHz	N/A	N/A



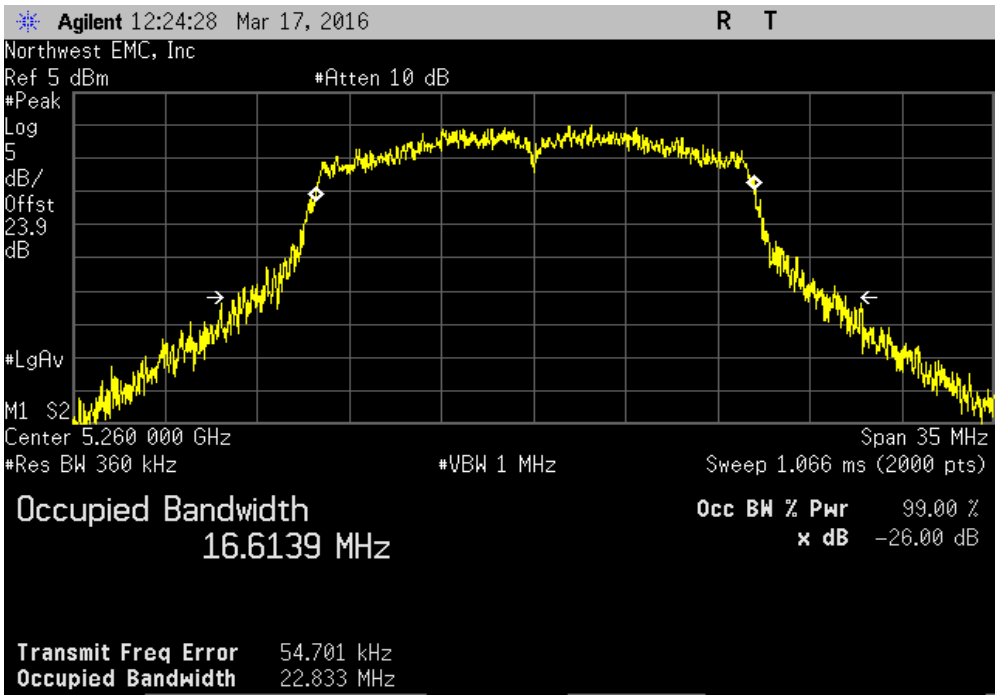
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				23.868 MHz	N/A	N/A



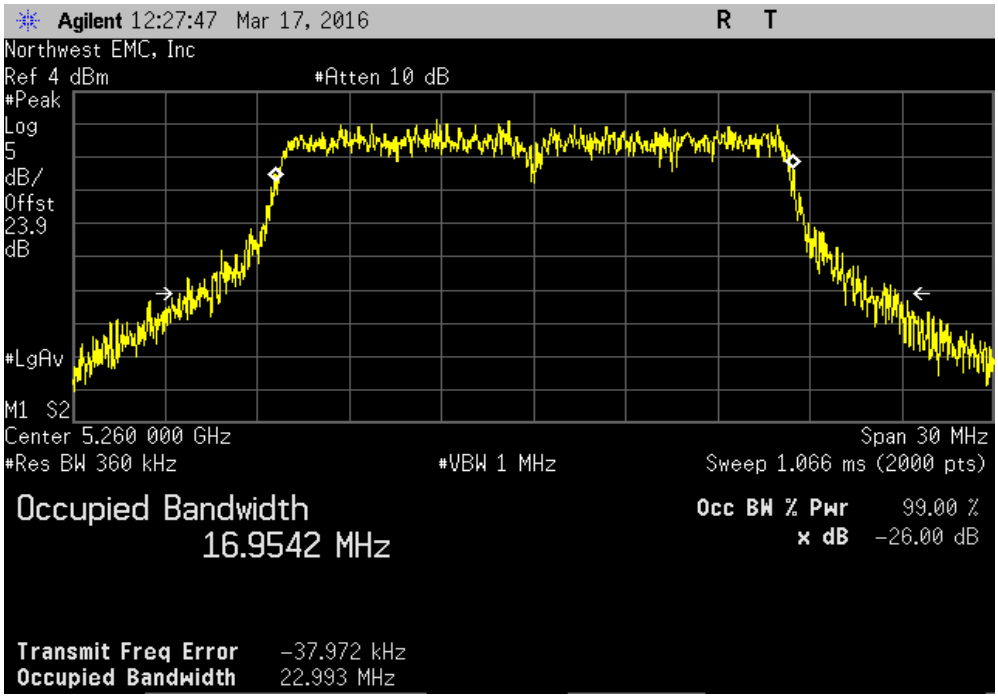
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				23.447 MHz	N/A	N/A



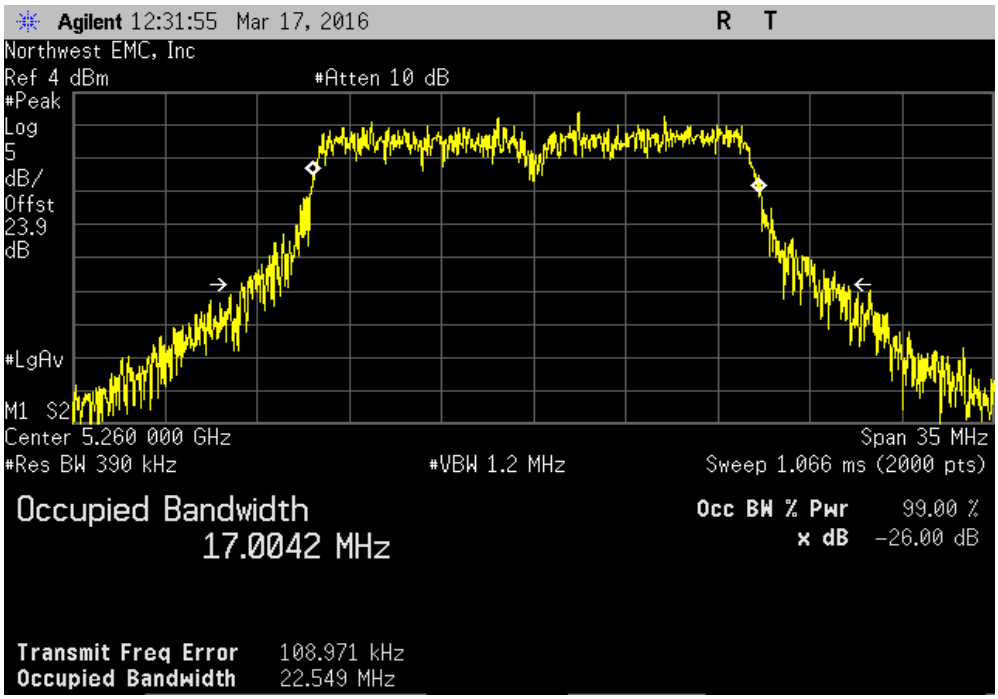
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				22.833 MHz	N/A	N/A



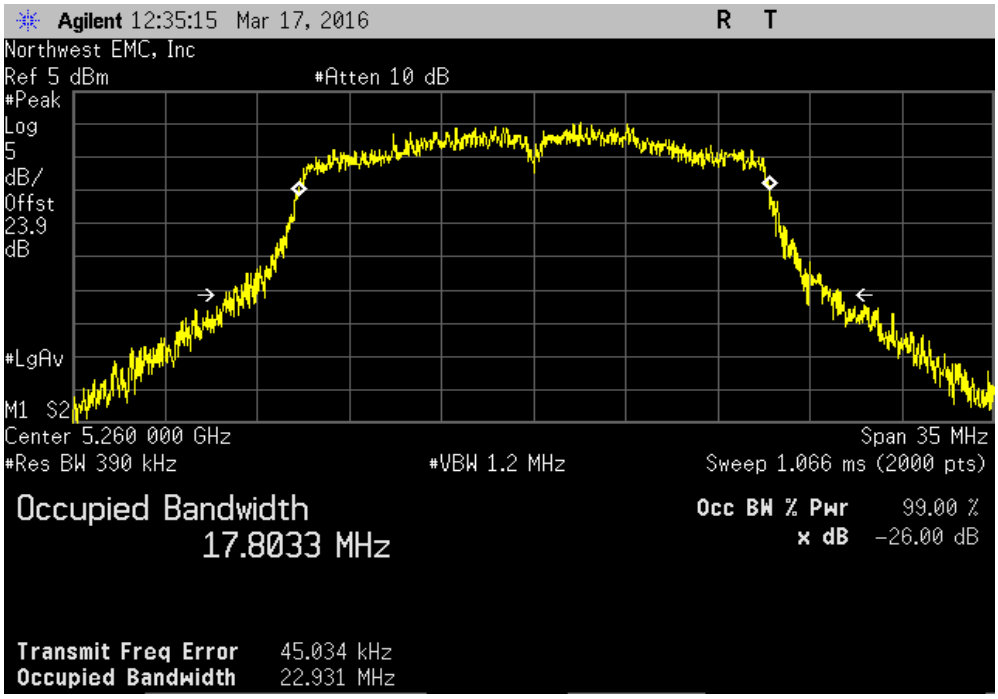
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				22.993 MHz	N/A	N/A



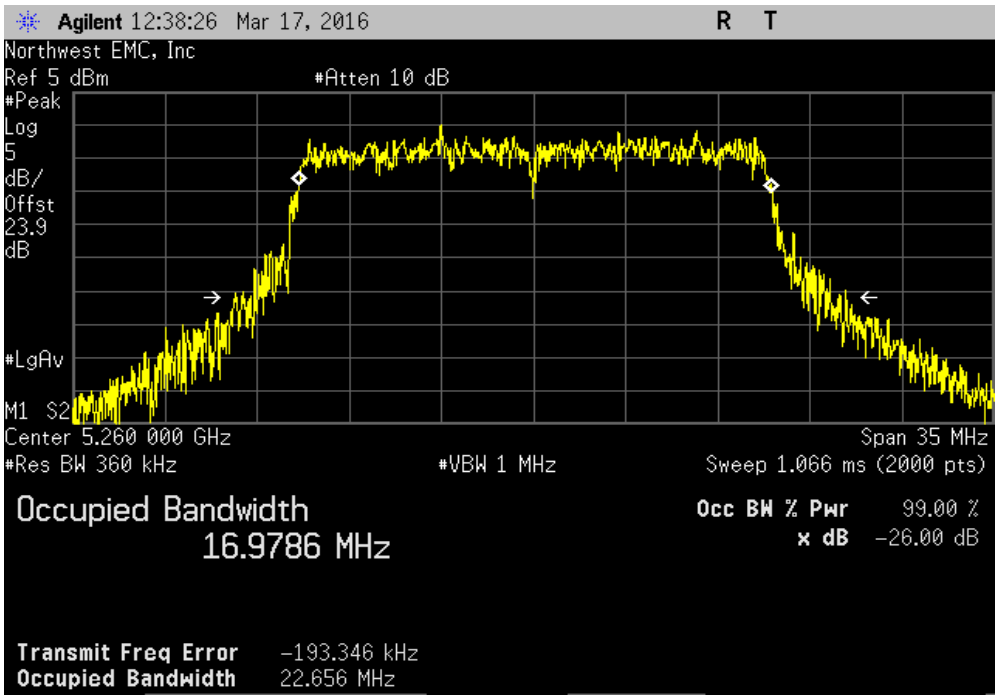
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				22.549 MHz	N/A	N/A



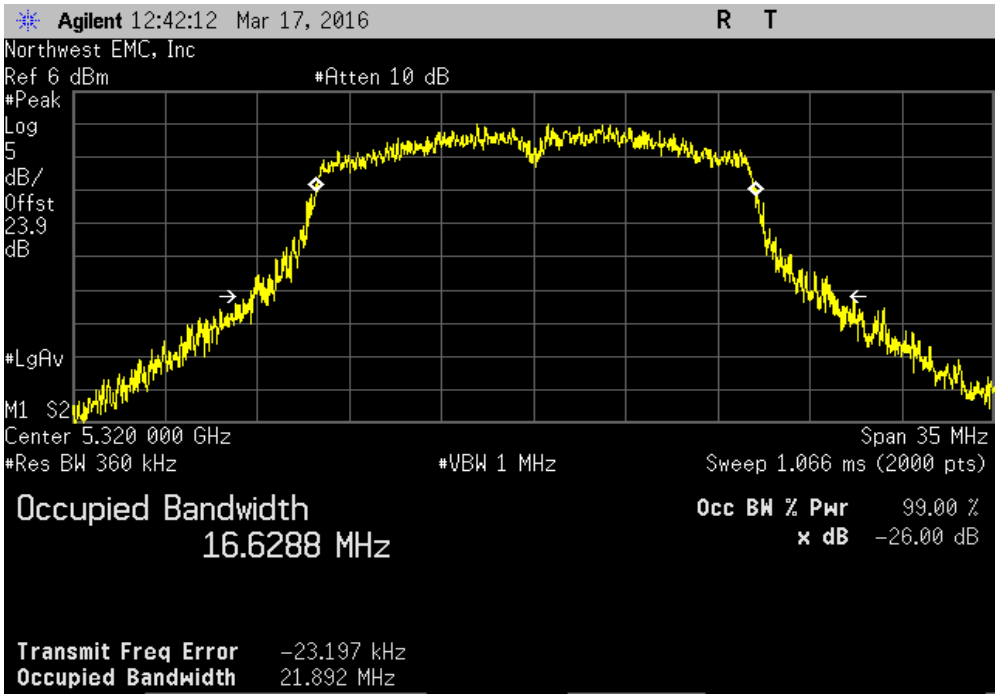
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				22.931 MHz	N/A	N/A



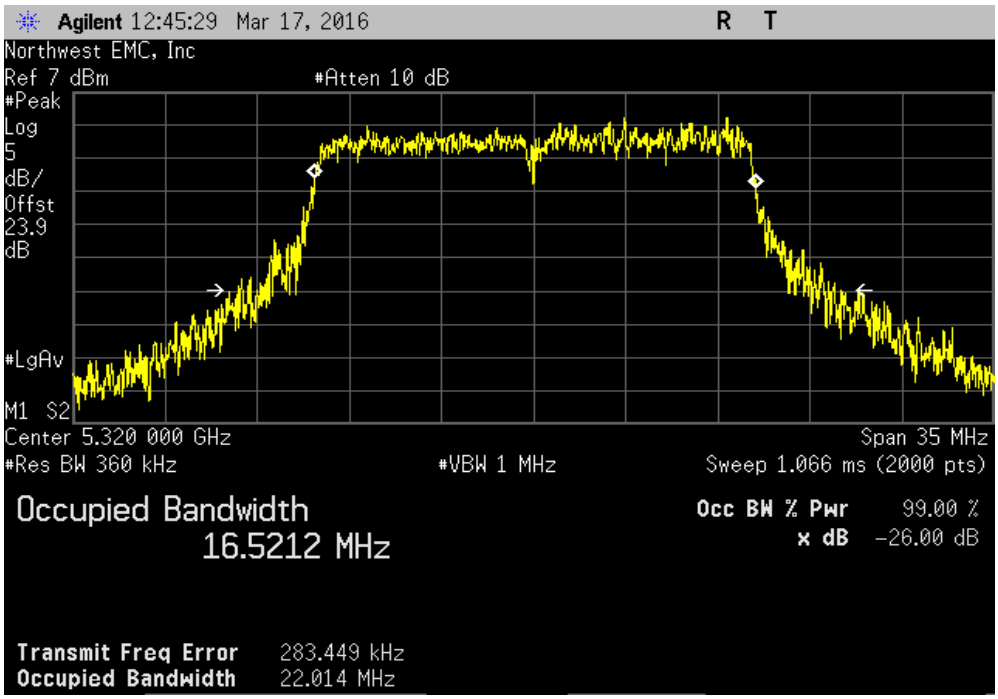
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				22.656 MHz	N/A	N/A



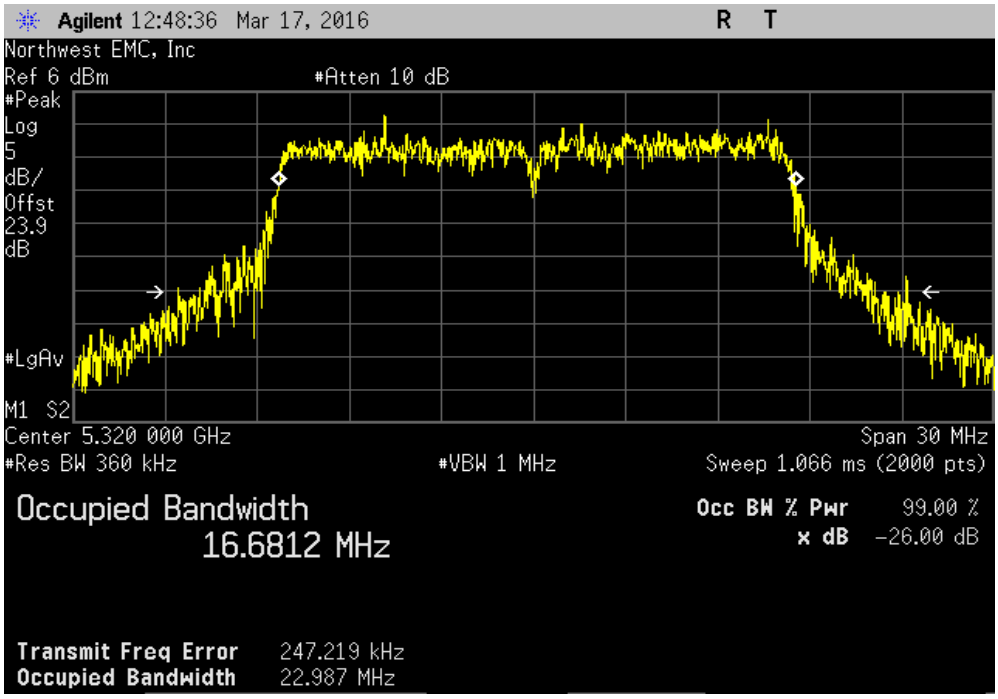
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				21.892 MHz	N/A	N/A



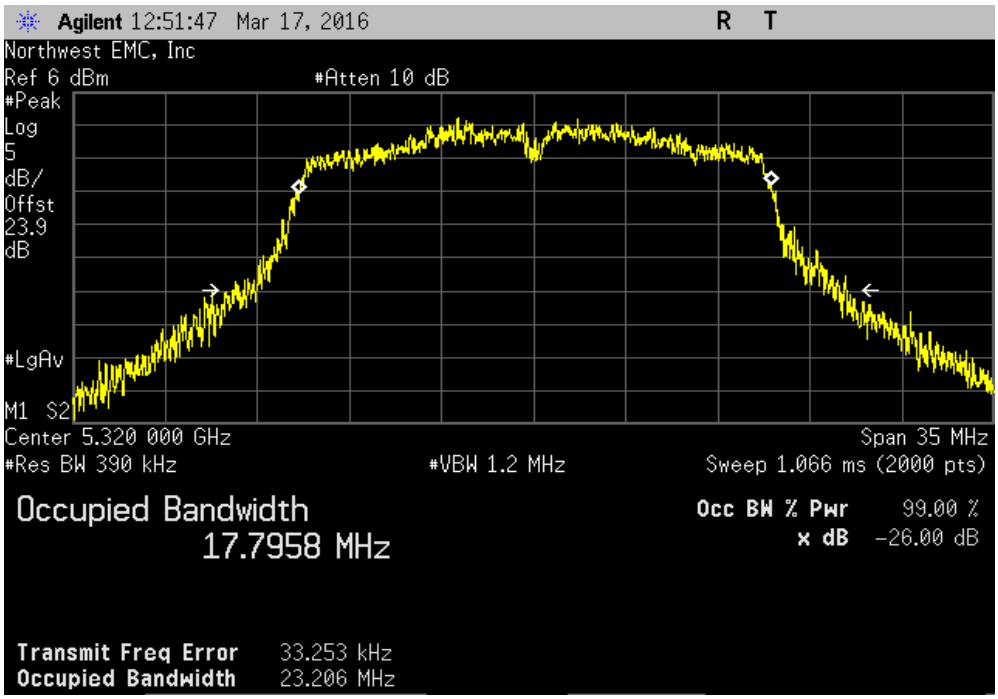
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				22.014 MHz	N/A	N/A



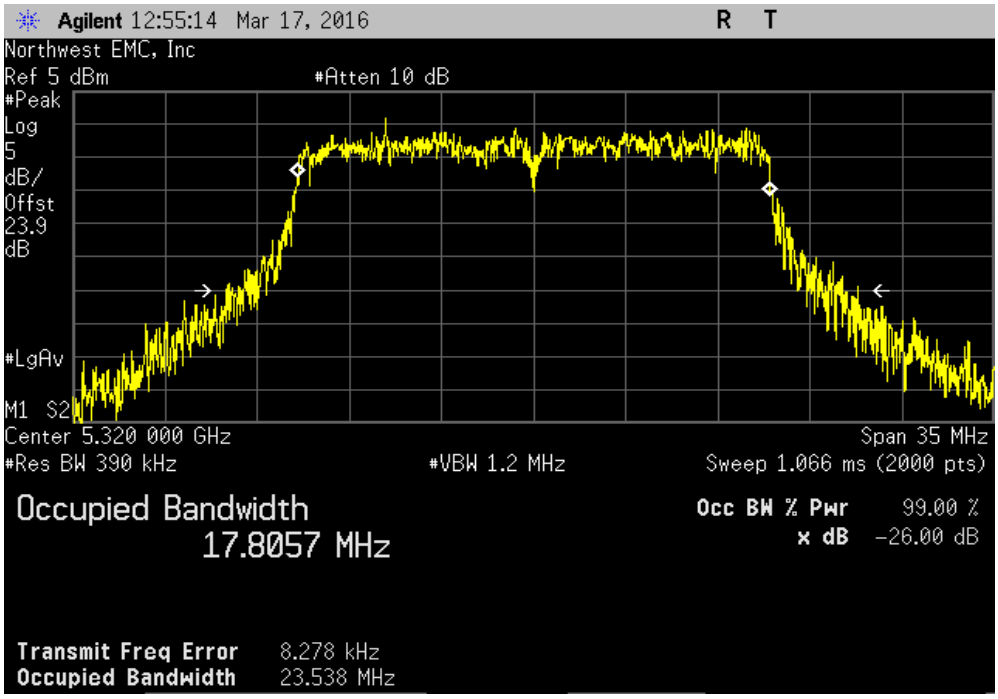
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				22.987 MHz	N/A	N/A



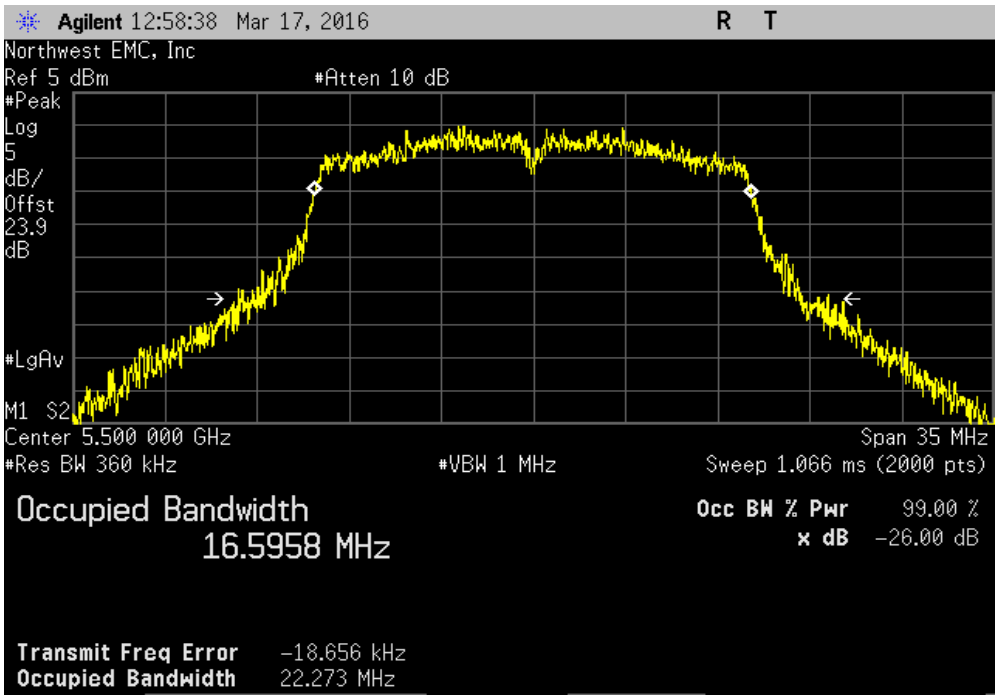
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				23.206 MHz	N/A	N/A



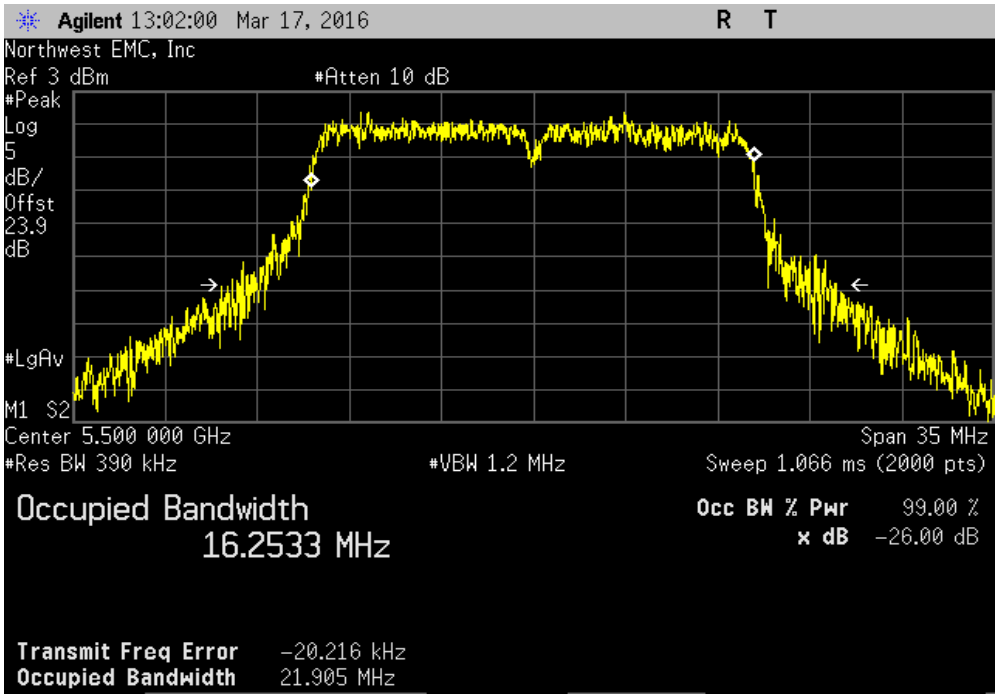
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				23.538 MHz	N/A	N/A



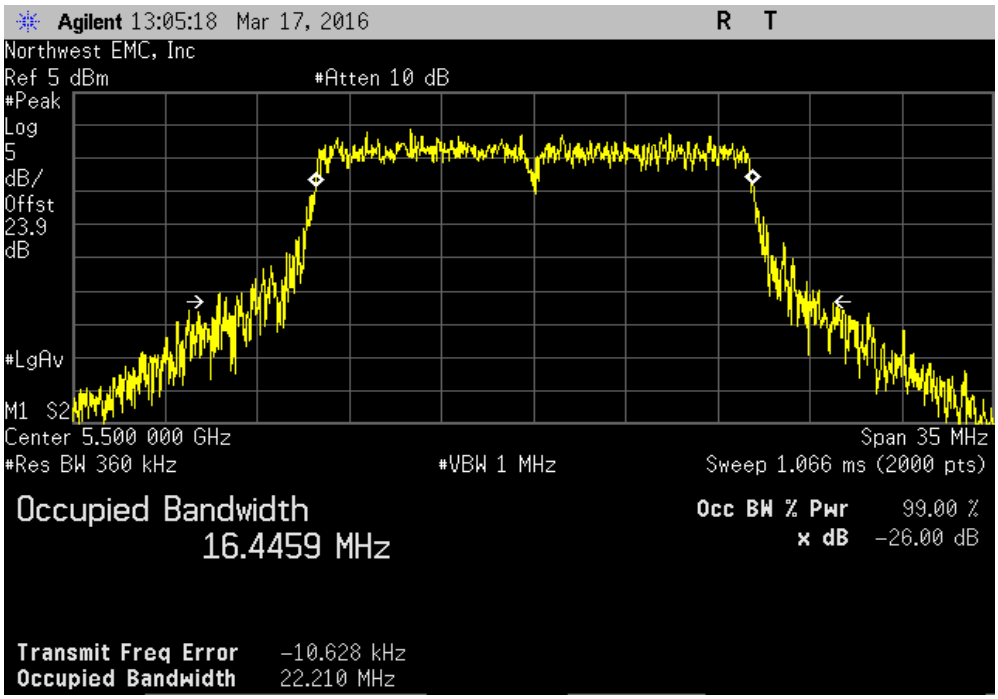
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				22.273 MHz	N/A	N/A



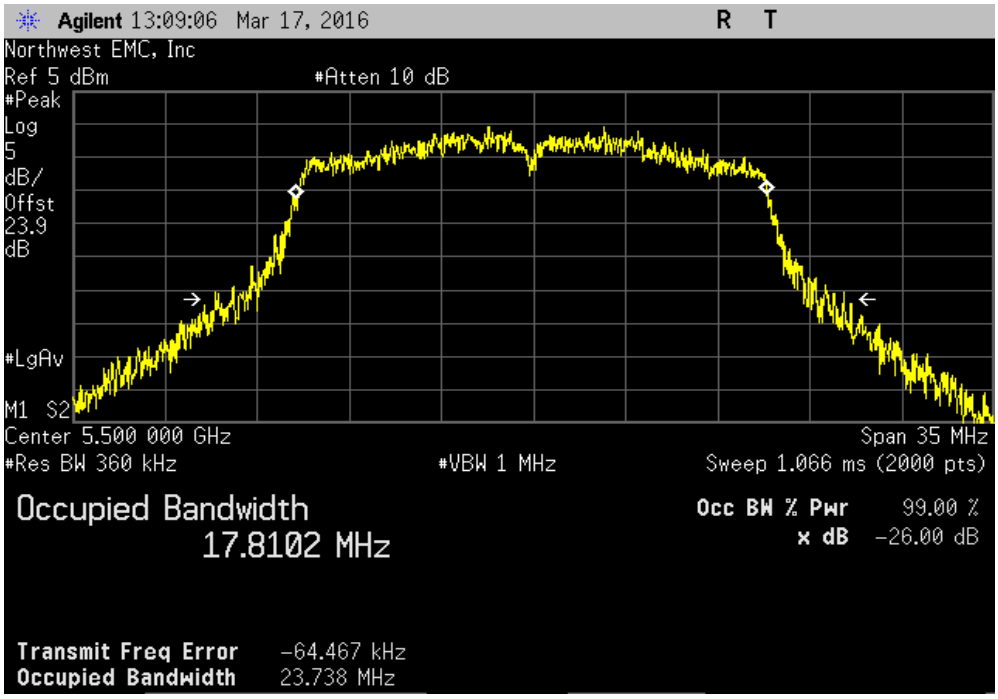
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				21.905 MHz	N/A	N/A



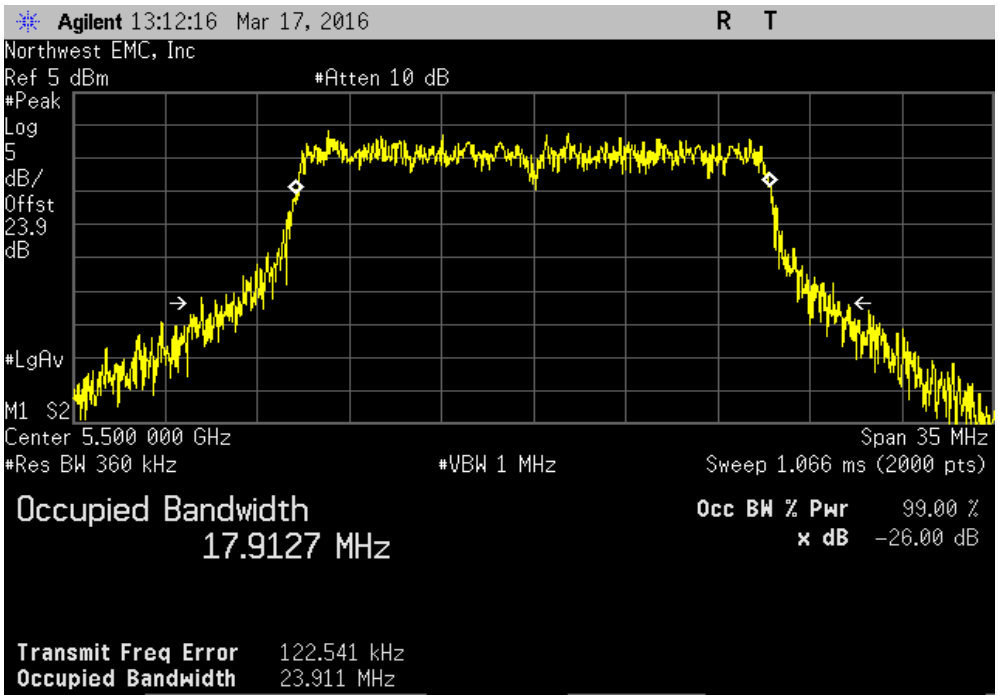
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				22.21 MHz	N/A	N/A



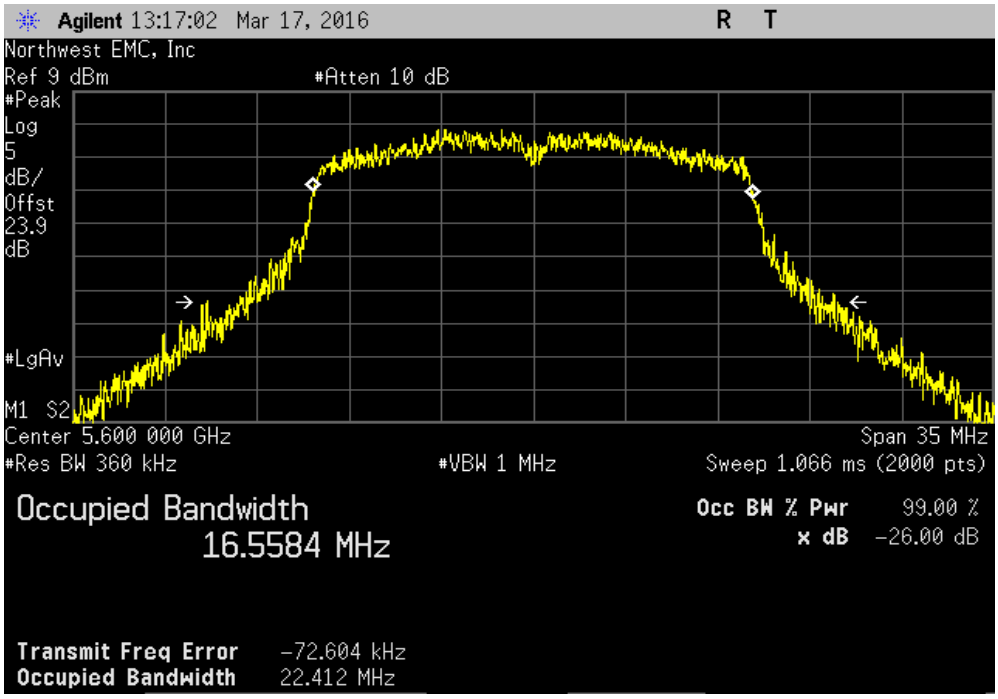
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				23.738 MHz	N/A	N/A



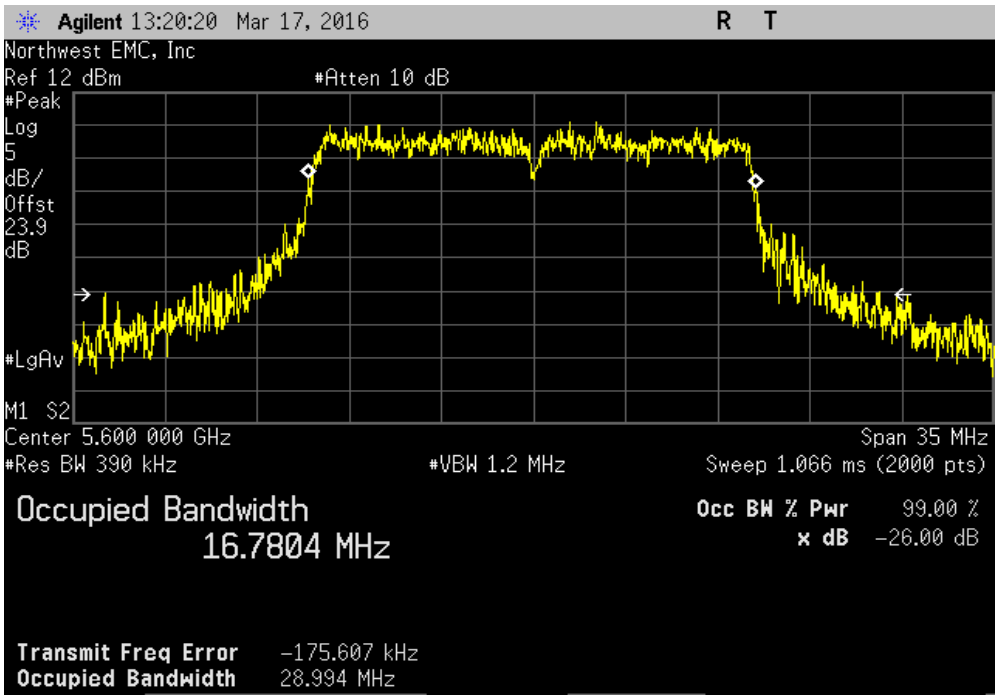
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				23.911 MHz	N/A	N/A



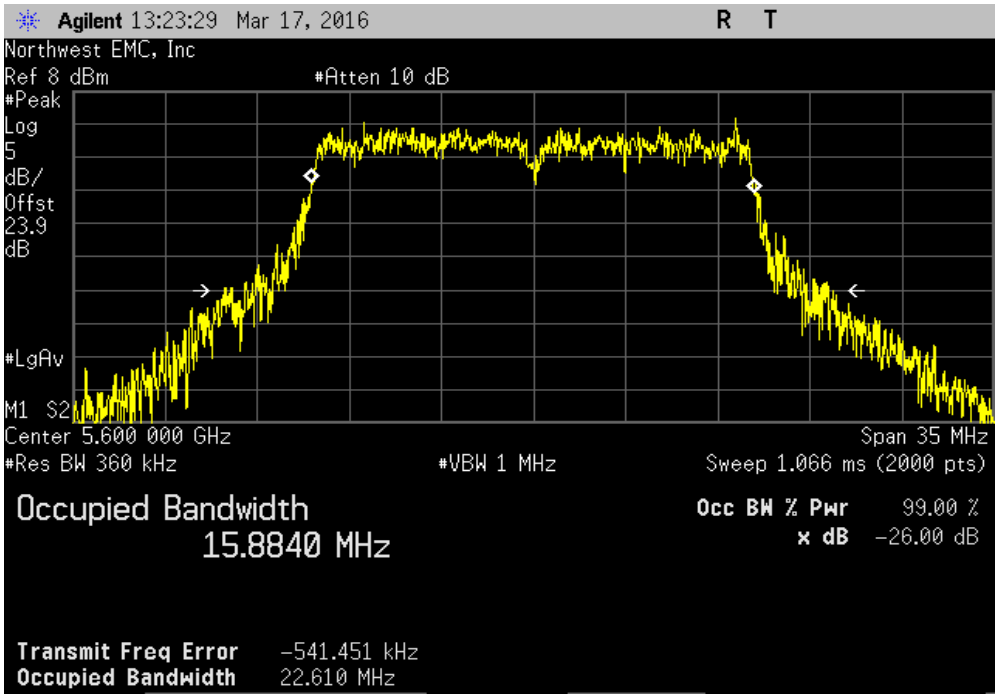
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				22.412 MHz	N/A	N/A



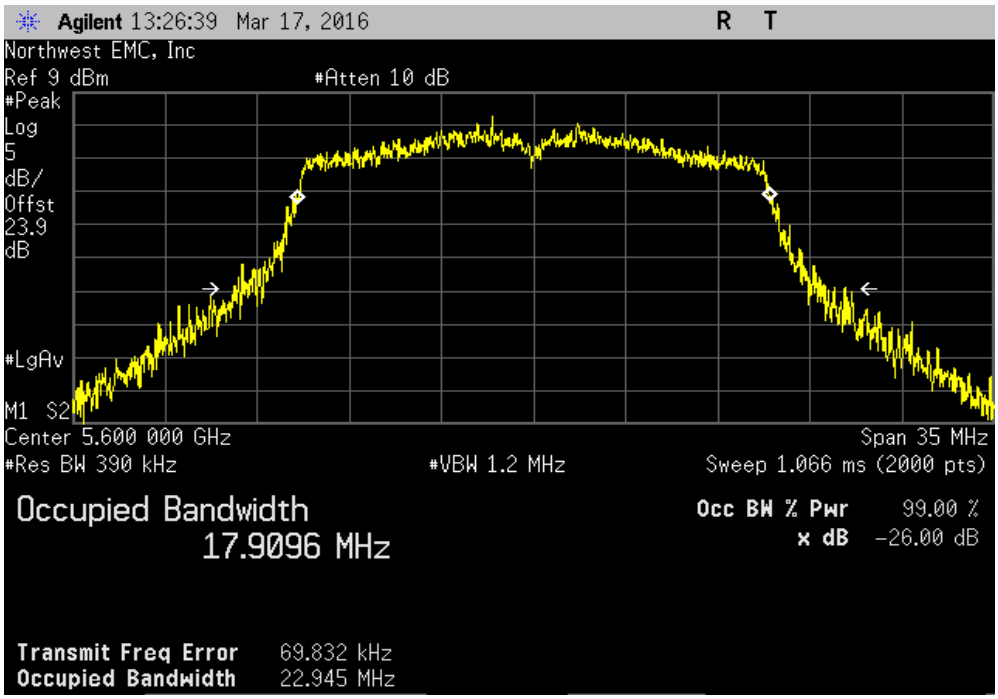
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				28.994 MHz	N/A	N/A



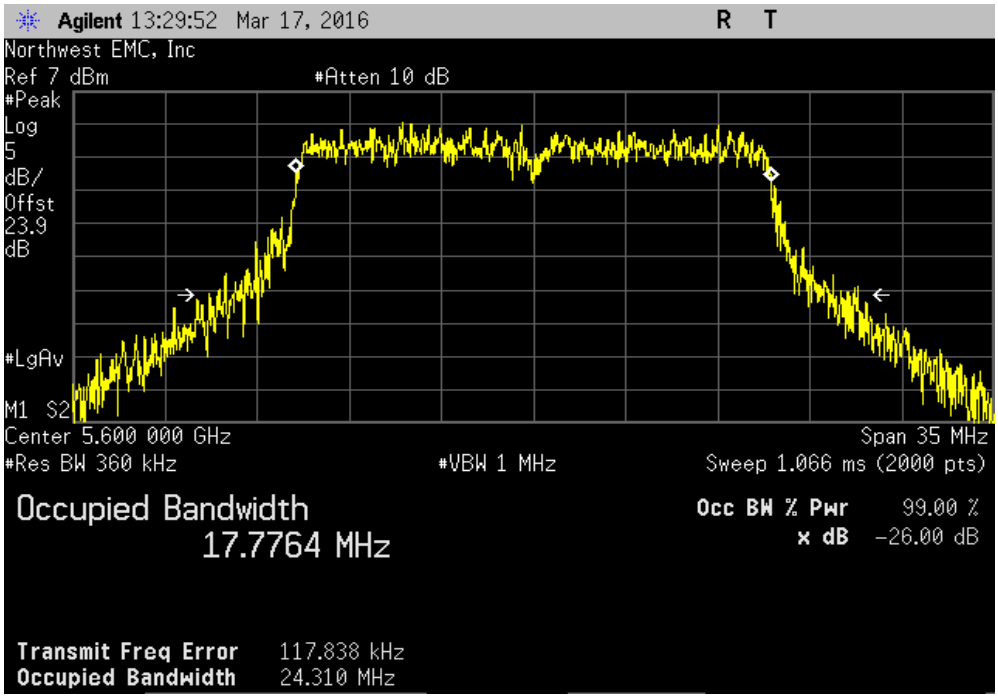
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				22.61 MHz	N/A	N/A



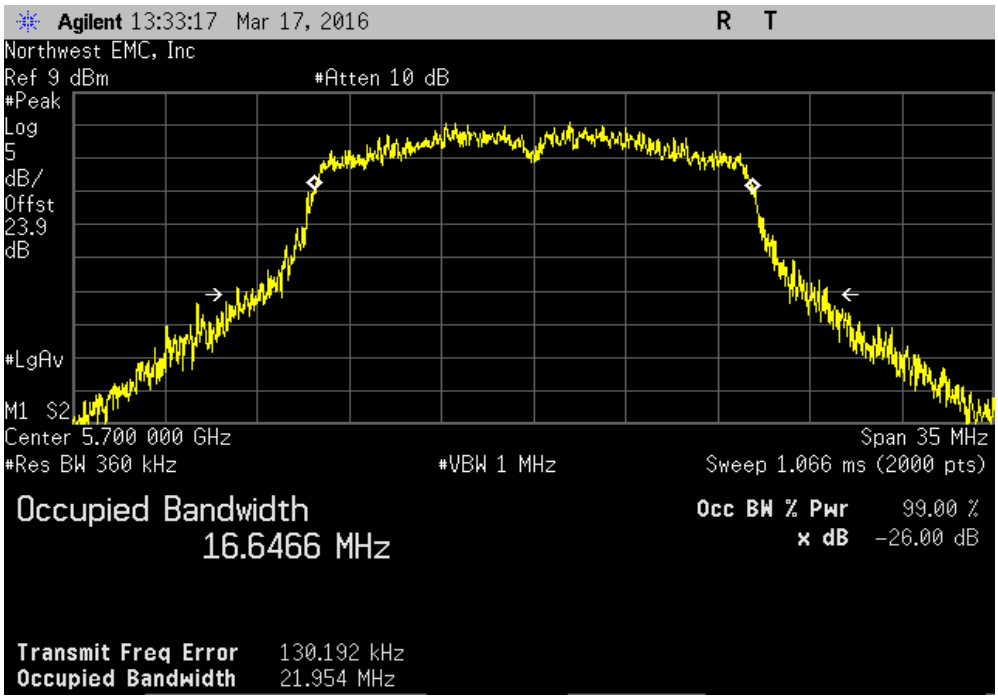
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				22.945 MHz	N/A	N/A



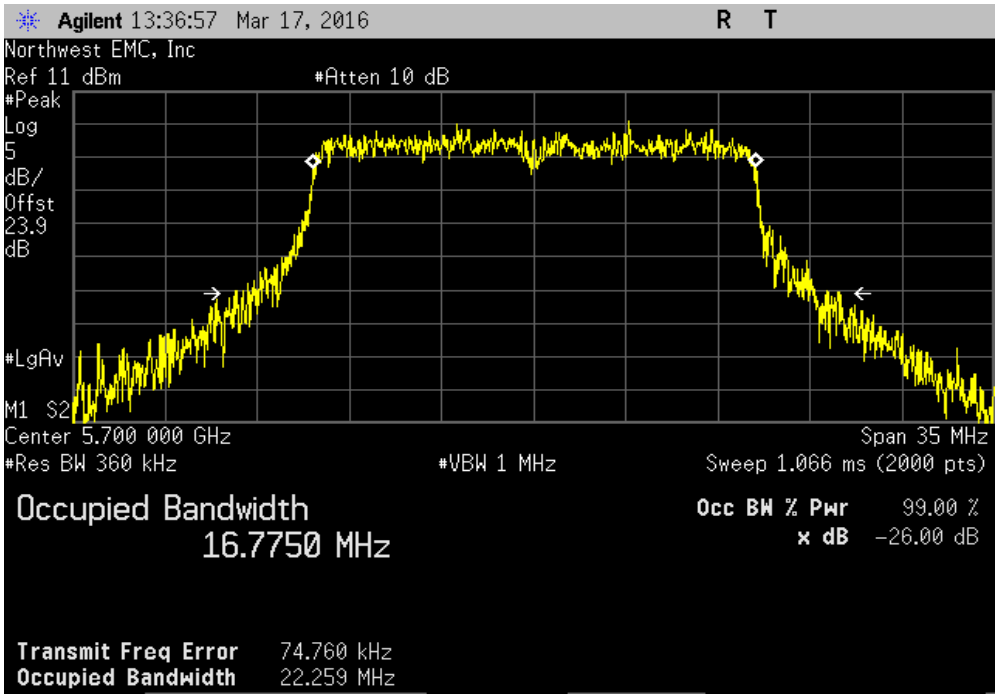
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				24.31 MHz	N/A	N/A



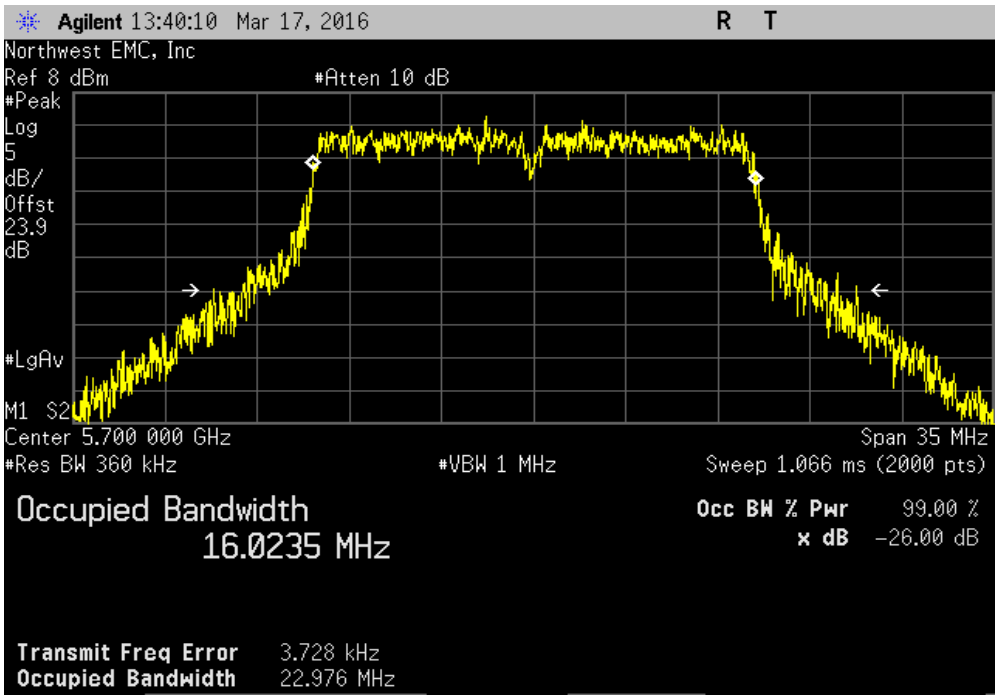
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				21.954 MHz	N/A	N/A



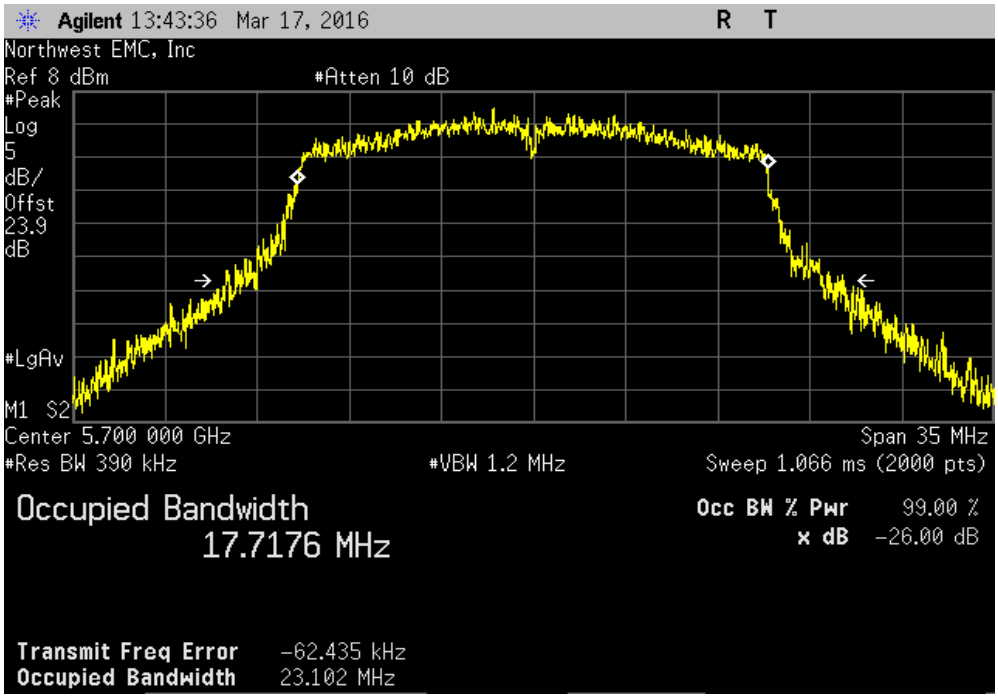
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				22.259 MHz	N/A	N/A



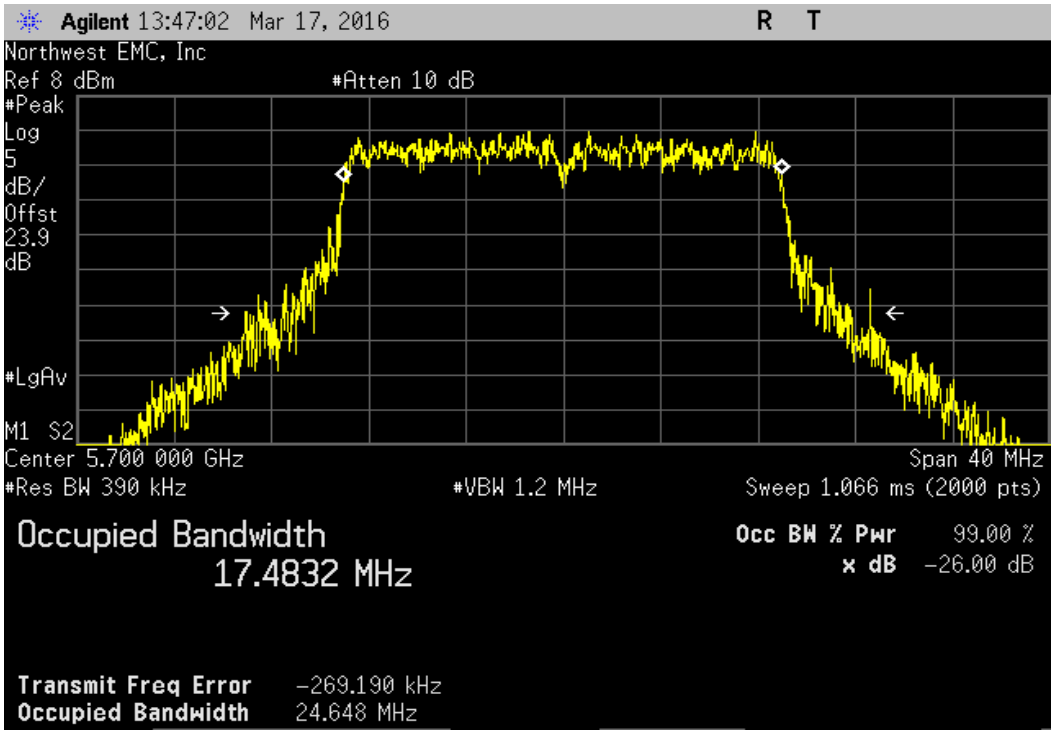
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				22.976 MHz	N/A	N/A



5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				23.102 MHz	N/A	N/A



5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				24.648 MHz	N/A	N/A



OCCUPIED BANDWIDTH

NORTHWEST EMC

XMit 2015.01.14

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 (mo)
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	4/20/2015	12

TEST DESCRIPTION

The transmit frequencies and data rates listed in the datasheet were measured in each band utilized by the radio. 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.

Per ANSI C63.10, the spectrum analyzer settings were as follows:

-RBW = 100 kHz

-VBW = ≥ 3x RBW

-Detector = Peak

-Trace mode = max hold

The spectrum analyzer occupied bandwidth measurement function was then used to measure the 6 dB emission bandwidth.

The 99.9% (approximate 26 dB) emission bandwidth (EBW) was also measured at the same time to be used for setting the channel power integration bandwidth during conducted output power testing.

OCCUPIED BANDWIDTH

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0179
Serial Number:	0216M00003			**Date:**	03/18/16
Customer:	Zoll Medical Corp.			**Temperature:**	22.4°C
Attendees:	Adam Ford			**Humidity:**	27%
Project:	None			**Barometric Pres.:**	991.5
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

None

DEVIATIONS FROM TEST STANDARD

None

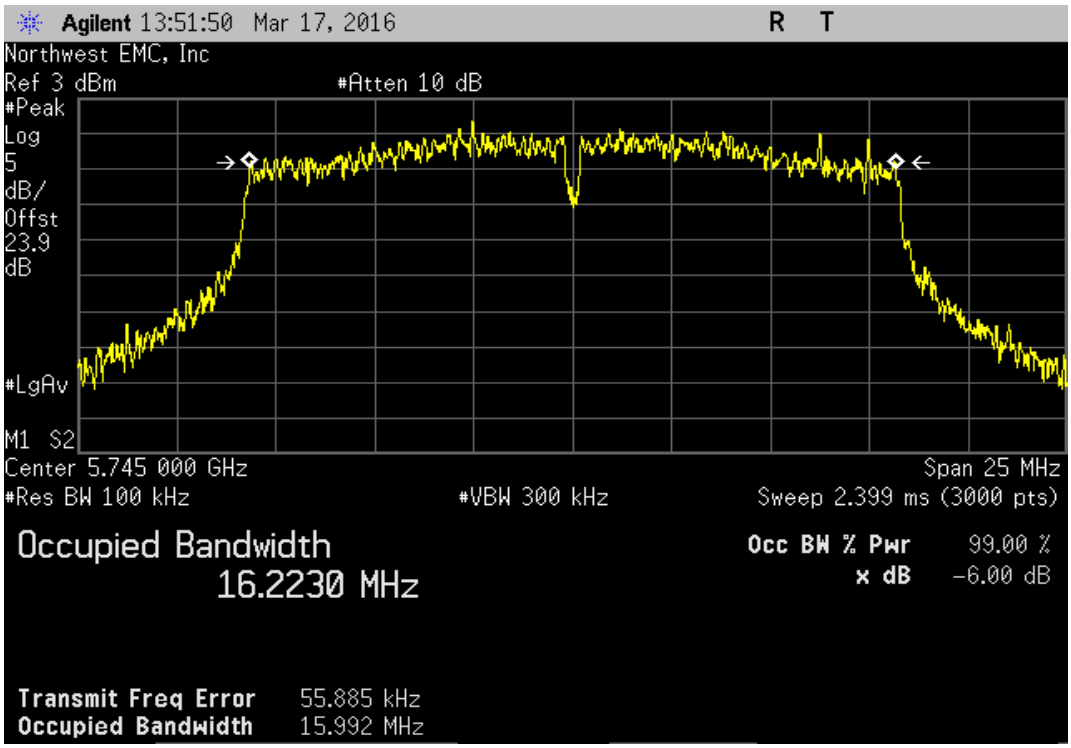
Configuration #	1	Signature

	Value	Limit (>)	Result
5725 - 5785 MHz Band			
Low Channel, Ch 149 - 5745 MHz			
802.11(a) 6 Mbps	15.992 MHz	500 kHz	Pass
802.11(a) 36 Mbps	16.319 MHz	500 kHz	Pass
802.11(a) 54 Mbps	16.08 MHz	500 kHz	Pass
802.11(n) MCS0	13.726 MHz	500 kHz	Pass
802.11(n) MCS7	16.965 MHz	500 kHz	Pass
Mid Channel, Ch 157 - 5785 MHz			
802.11(a) 6 Mbps	15.194 MHz	500 kHz	Pass
802.11(a) 36 Mbps	15.981 MHz	500 kHz	Pass
802.11(a) 54 Mbps	16.105 MHz	500 kHz	Pass
802.11(n) MCS0	14.605 MHz	500 kHz	Pass
802.11(n) MCS7	17.143 MHz	500 kHz	Pass
High Channel, Ch 165 - 5825 MHz			
802.11(a) 6 Mbps	16.226 MHz	500 kHz	Pass
802.11(a) 36 Mbps	16.171 MHz	500 kHz	Pass
802.11(a) 54 Mbps	16.198 MHz	500 kHz	Pass
802.11(n) MCS0	13.169 MHz	500 kHz	Pass
802.11(n) MCS7	17.326 MHz	500 kHz	Pass

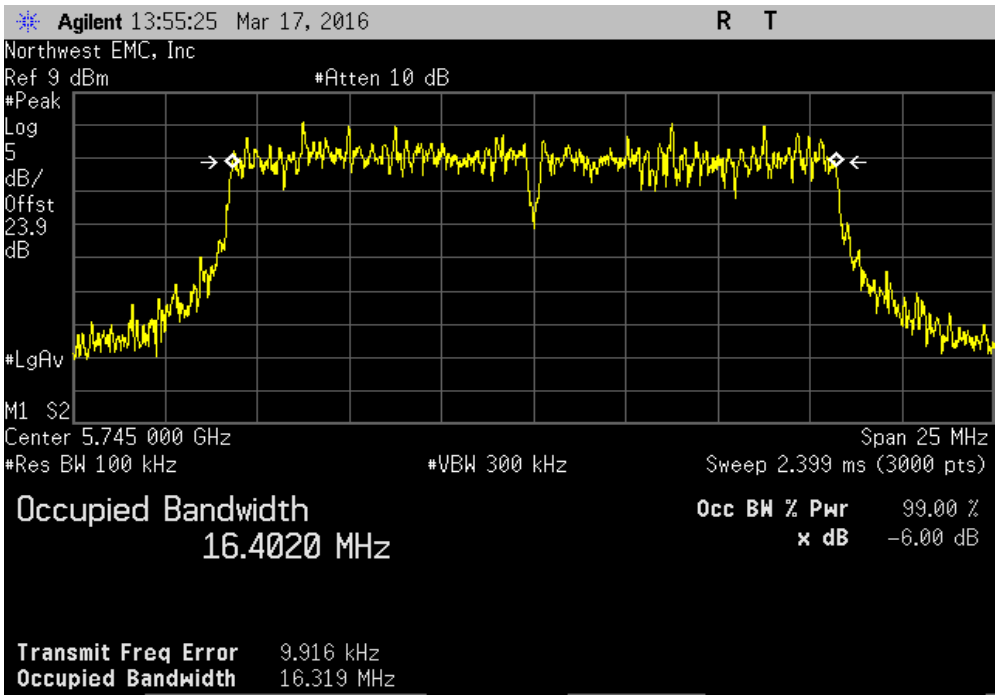
OCCUPIED BANDWIDTH

XMit 2015.01.14

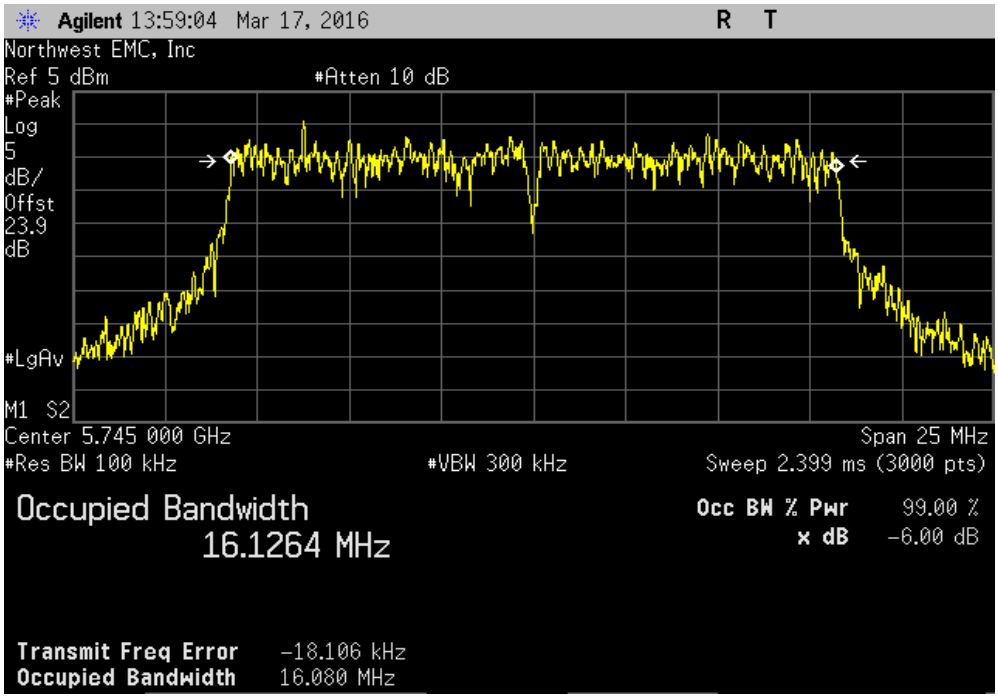
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				15.992 MHz	500 kHz	Pass



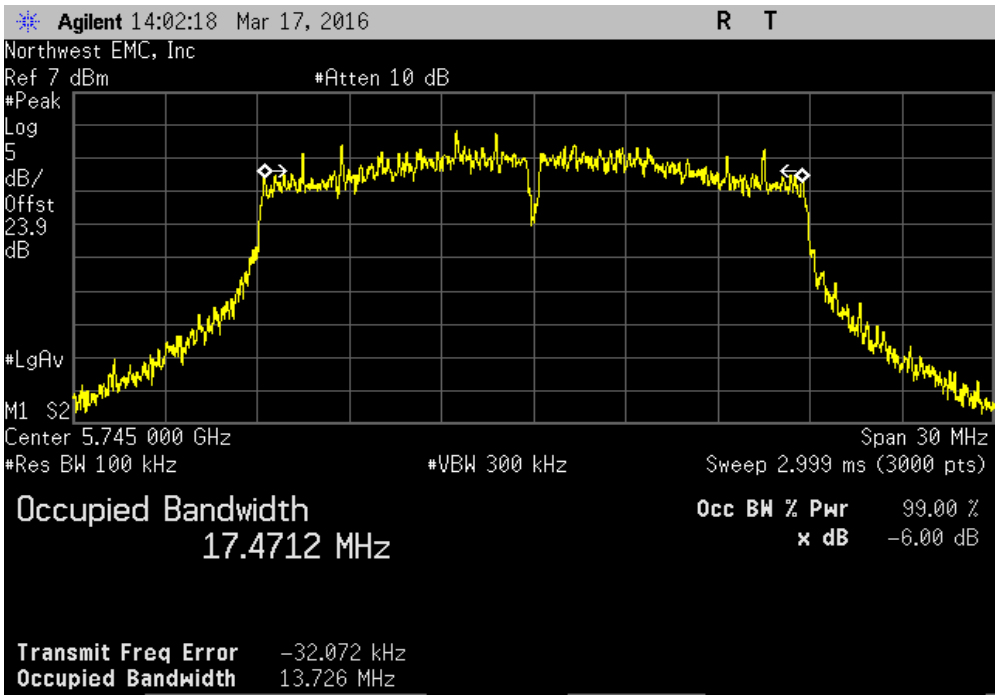
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				16.319 MHz	500 kHz	Pass



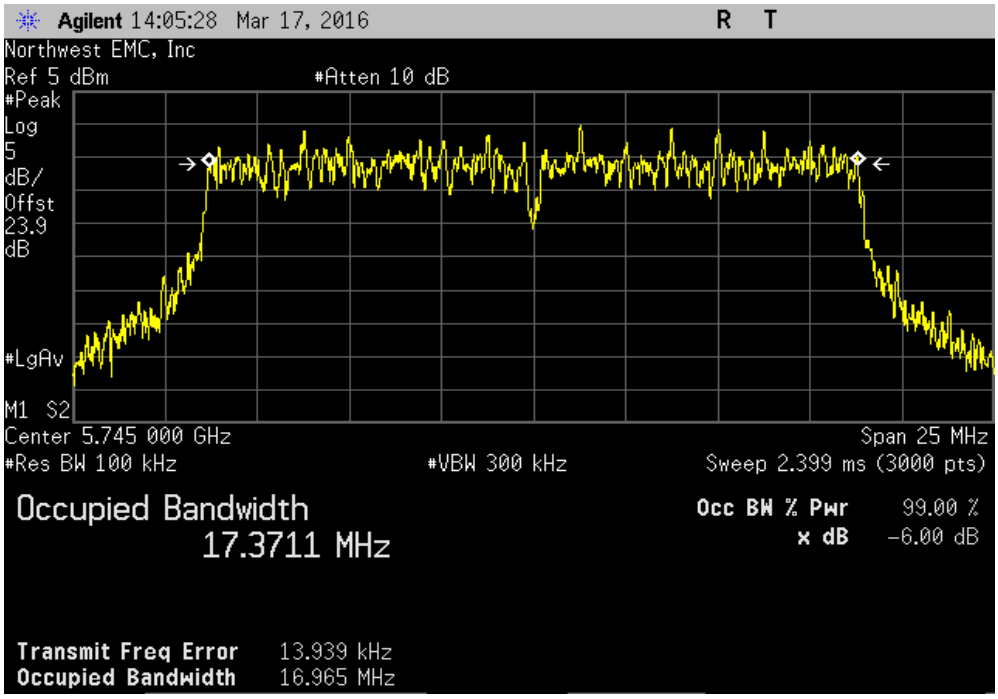
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				16.08 MHz	500 kHz	Pass



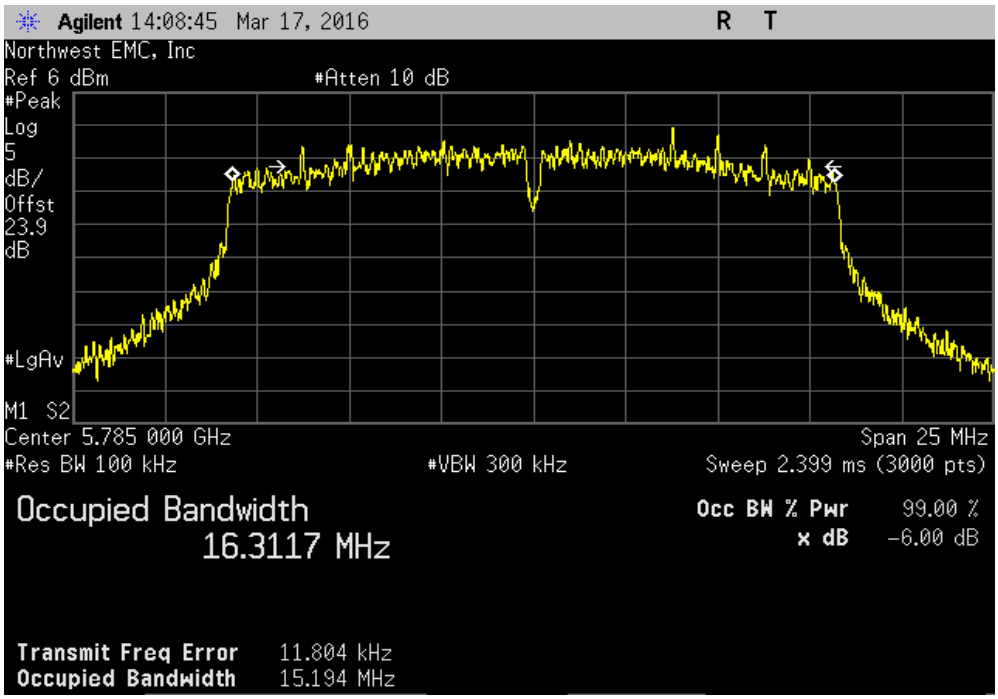
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				13.726 MHz	500 kHz	Pass



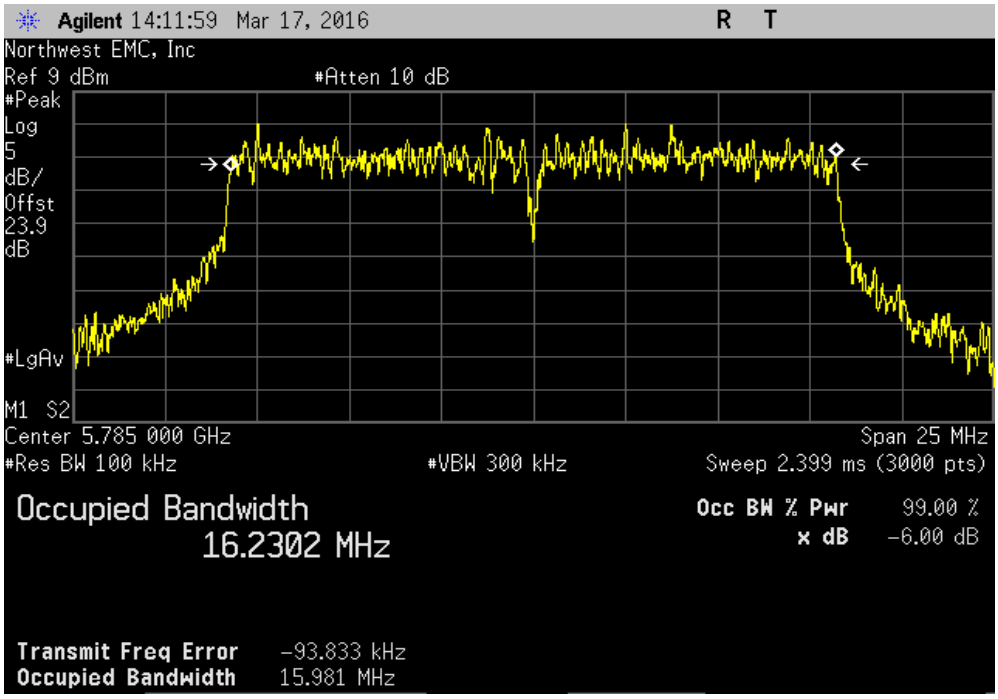
5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				16.965 MHz	500 kHz	Pass



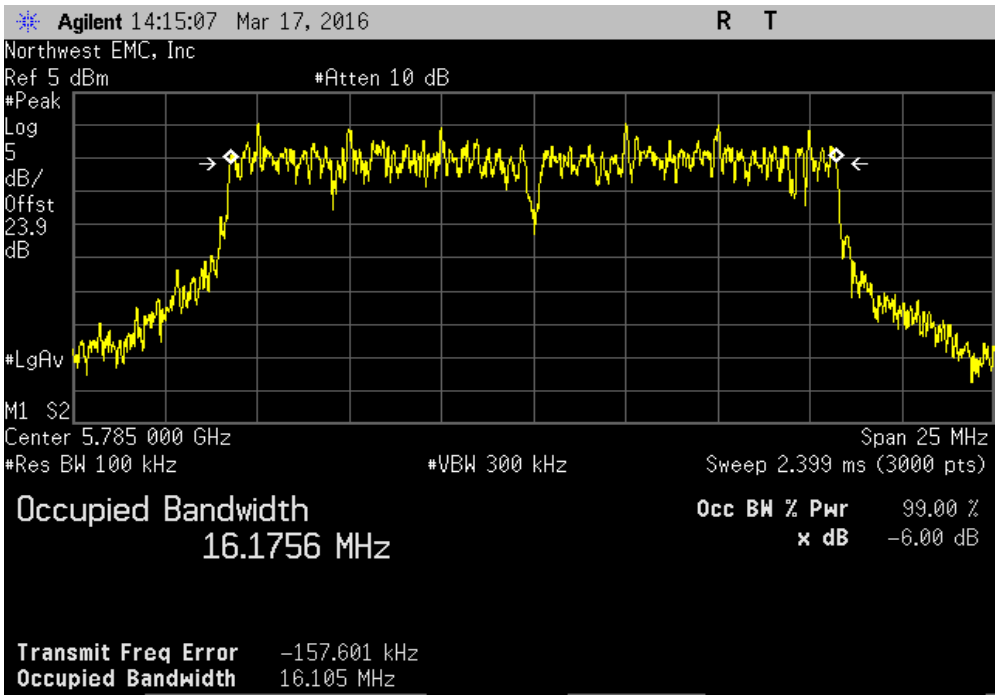
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				15.194 MHz	500 kHz	Pass



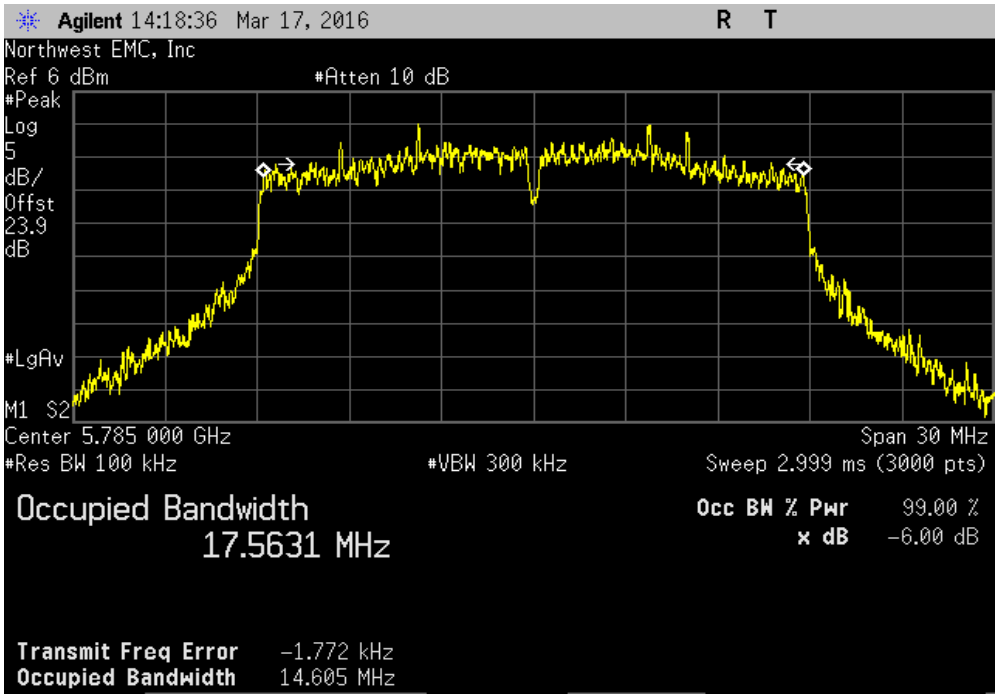
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				15.981 MHz	500 kHz	Pass



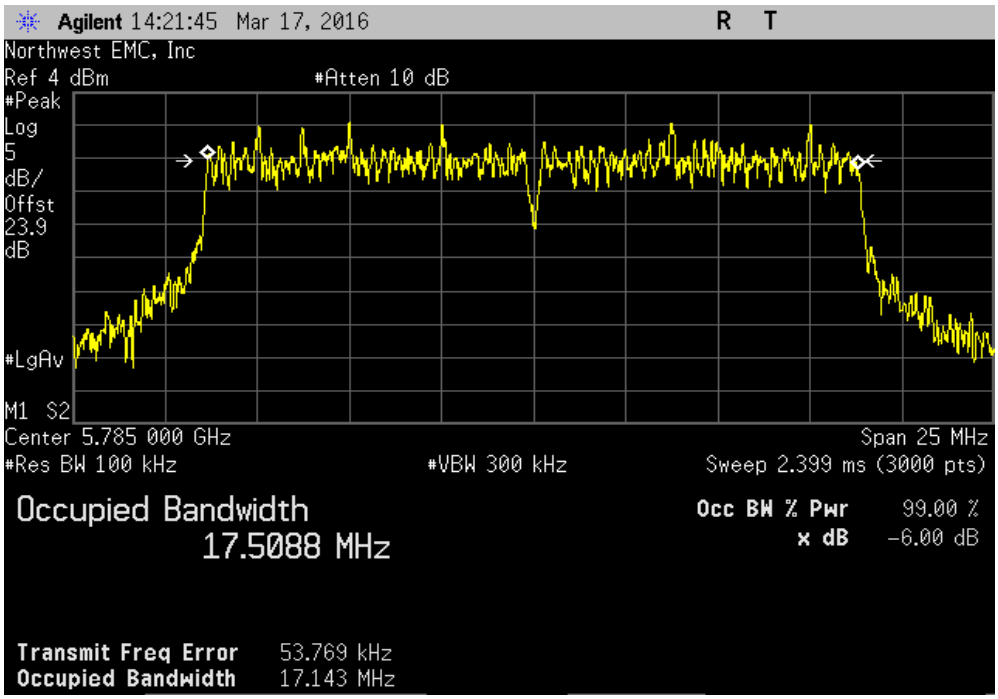
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				16.105 MHz	500 kHz	Pass



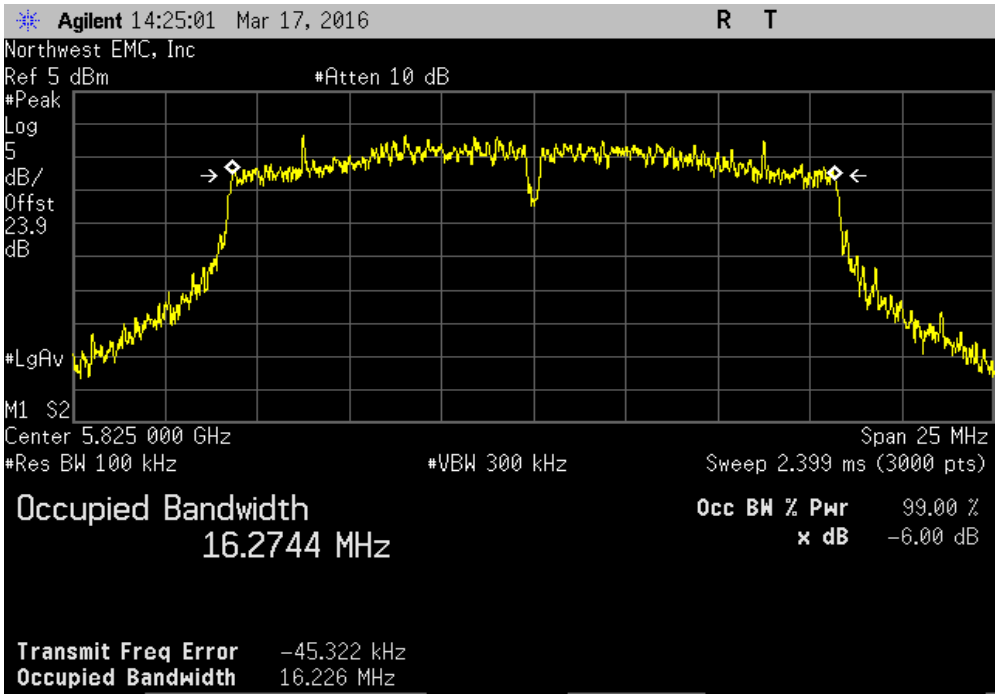
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				14.605 MHz	500 kHz	Pass



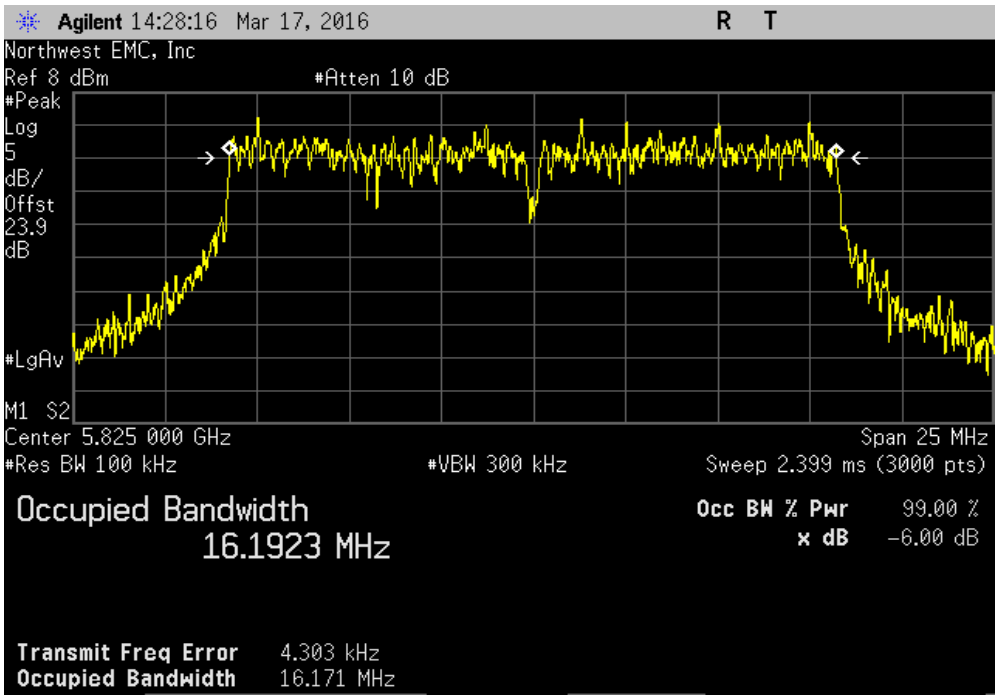
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				17.143 MHz	500 kHz	Pass



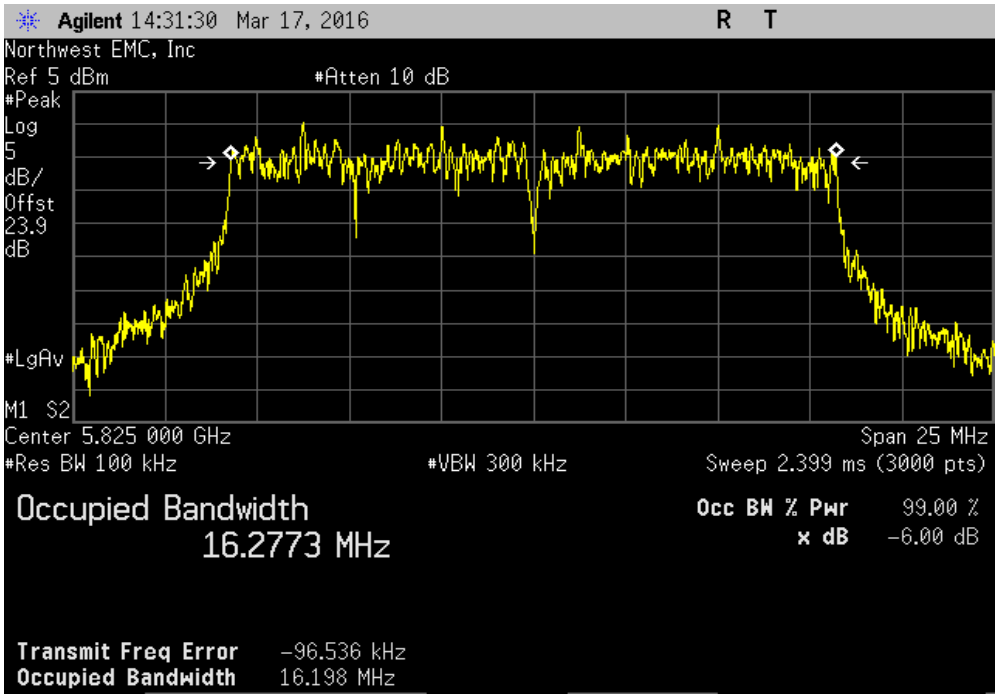
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 6 Mbps						
				Value	Limit (>)	Result
				16.226 MHz	500 kHz	Pass



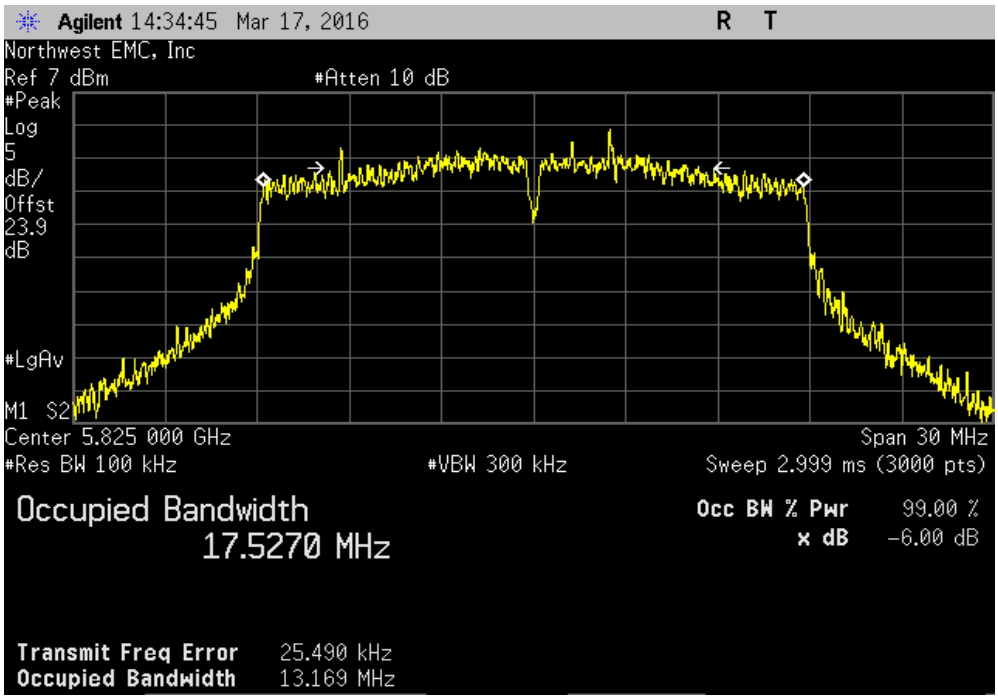
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 36 Mbps						
				Value	Limit (>)	Result
				16.171 MHz	500 kHz	Pass



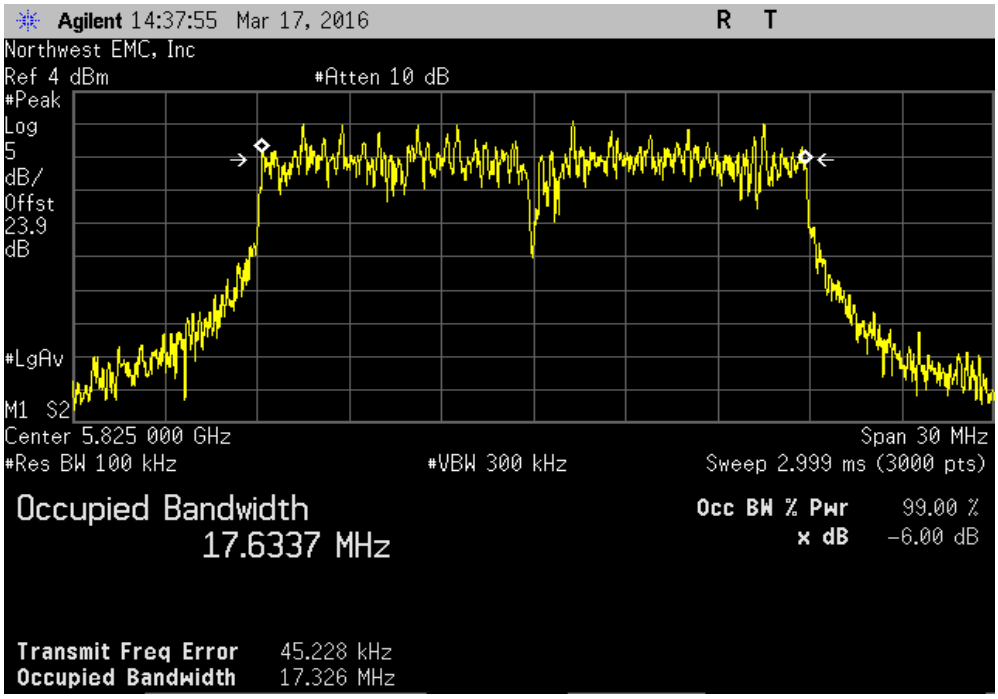
5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 54 Mbps						
				Value	Limit (>)	Result
				16.198 MHz	500 kHz	Pass



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS0						
				Value	Limit (>)	Result
				13.169 MHz	500 kHz	Pass



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS7						
				Value	Limit (>)	Result
				17.326 MHz	500 kHz	Pass



BAND EDGE

NORTHWEST EMC

XMit 2015.01.14

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 (mo)
Meter - Multimeter	Fluke	117	MLS	1/20/2014	36
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	3/24/2016	12

TEST DESCRIPTION

The 99% emission bandwidth of the carrier was measured to ensure that no part of the emission of the carrier operating in a non-DFS band was operating in a band where DFS testing is required. This test is done with the U-NII-1 band (5.2 GHz band) to ensure no portion of the carrier is contained within the U-NII-2A band and with the U-NII-3 band (5.8 GHz band) to ensure no portion of the carrier is contained in the U-NII-2C band.

The transmit frequencies and data rates listed in the datasheet were measured. 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.

BAND EDGE

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0179
Serial Number:	0216M00003			**Date:**	04/21/16
Customer:	Zoll Medical Corp.			**Temperature:**	22.4°C
Attendees:	Adam Ford			**Humidity:**	27%
Project:	None			**Barometric Pres.:**	991.5
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

None

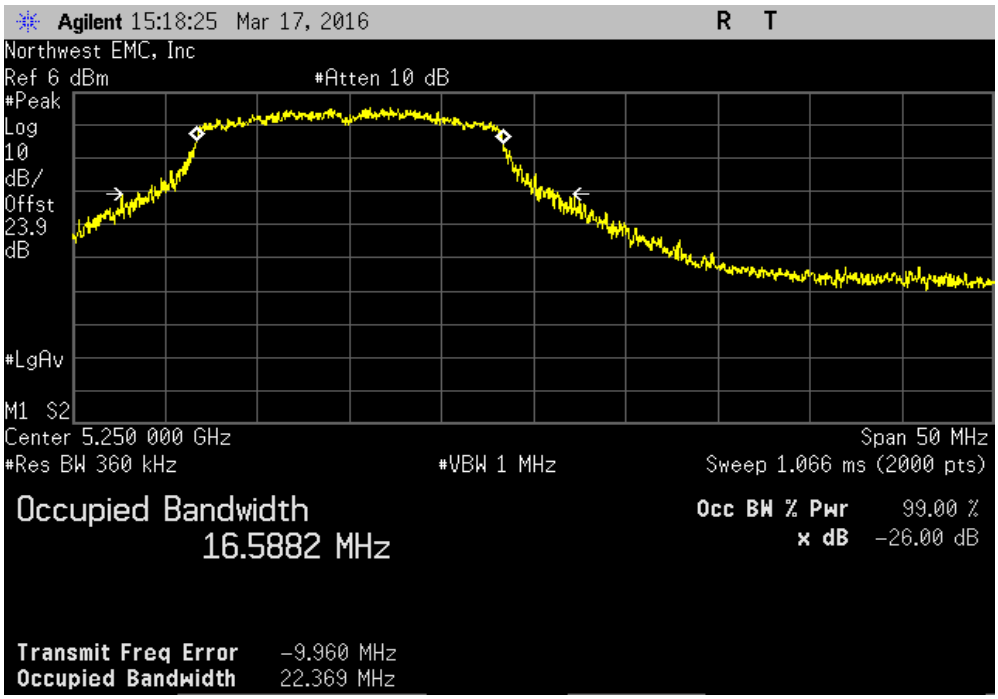
DEVIATIONS FROM TEST STANDARD

None

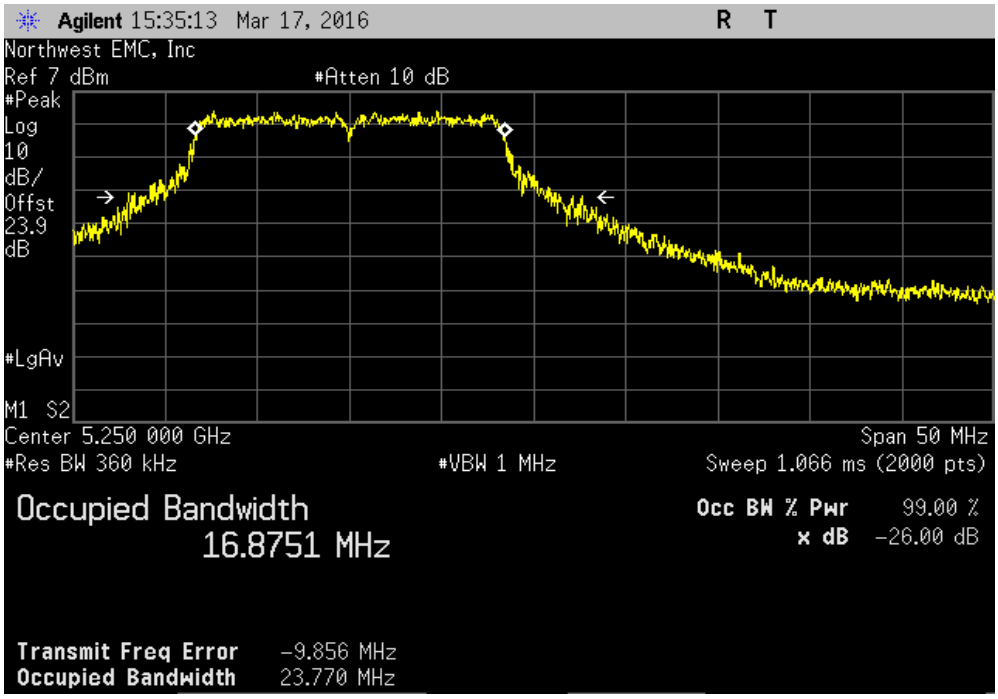
Configuration #	1	Signature

	OBW Within Band	Band Edge (MHz)	Result
5150 - 5250 MHz Band			
High Channel, Ch 48 - 5240 MHz			
802.11(a) 6 Mbps	Yes	5250	Pass
802.11(a) 36 Mbps	Yes	5250	Pass
802.11(a) 54 Mbps	Yes	5250	Pass
802.11(n) MCS0	Yes	5250	Pass
802.11(n) MCS7	Yes	5250	Pass
5725 - 5825 MHz Band			
Low Channel, Ch 149 - 5745 MHz			
802.11(a) 6 Mbps	Yes	5725	Pass
802.11(a) 36 Mbps	Yes	5725	Pass
802.11(a) 54 Mbps	Yes	5725	Pass
802.11(n) MCS0	Yes	5725	Pass
802.11(n) MCS7	Yes	5725	Pass

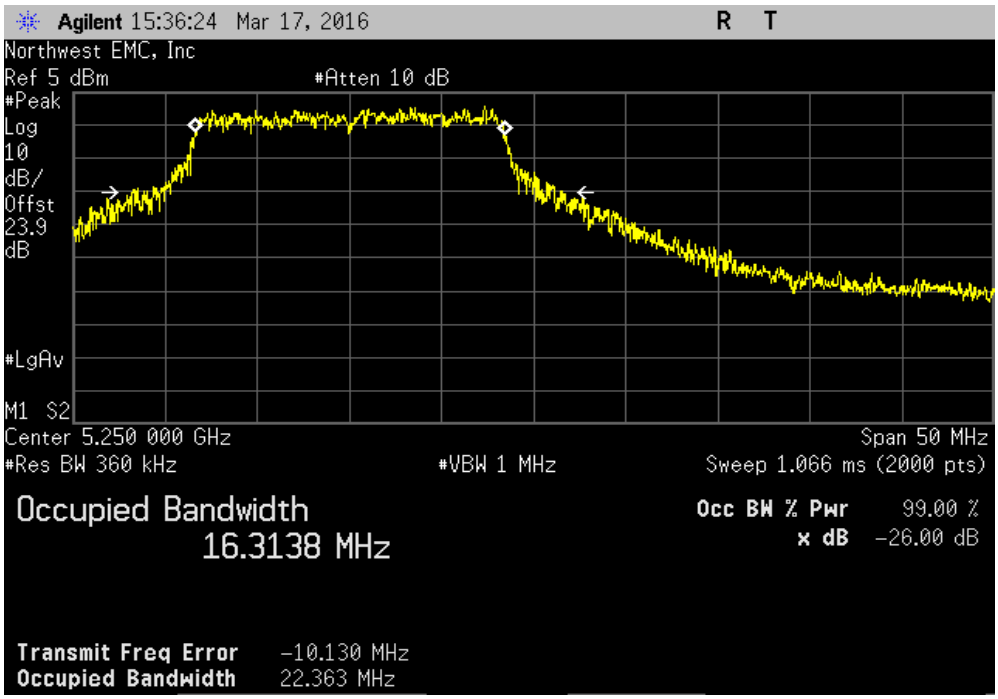
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 6 Mbps							
					OBW Within Band	Band Edge (MHz)	Result
					Yes	5250	Pass



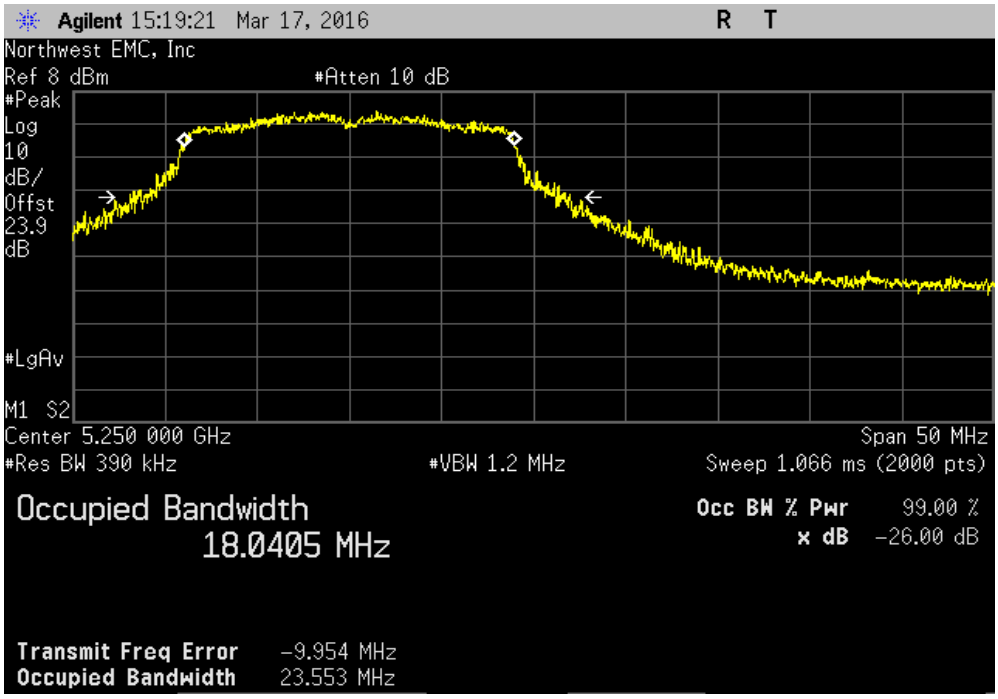
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 36 Mbps							
					OBW Within Band	Band Edge (MHz)	Result
					Yes	5250	Pass



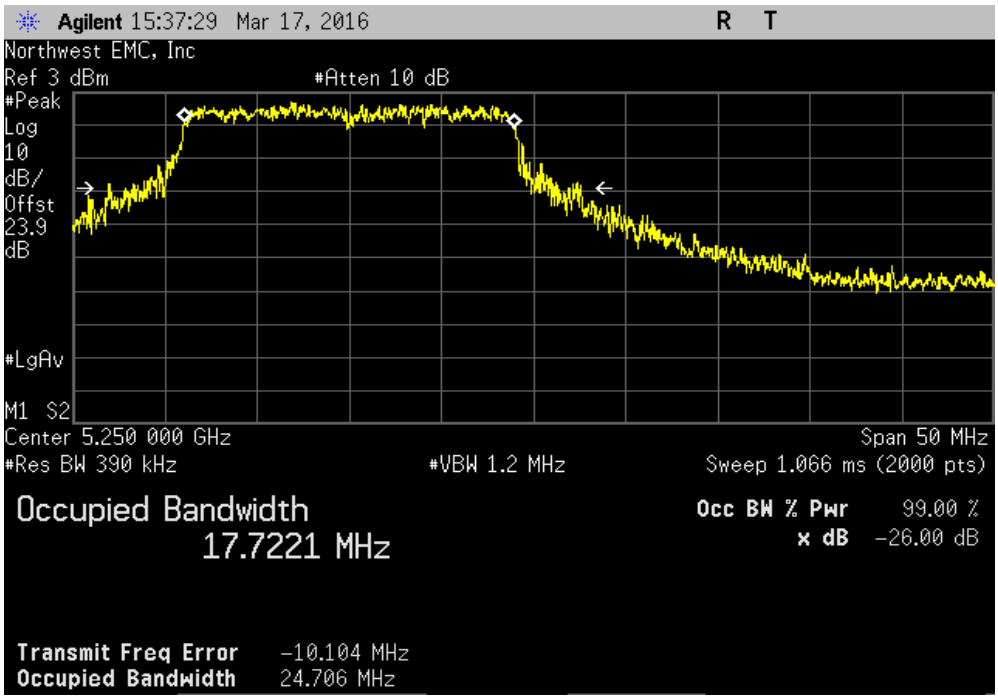
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 54 Mbps						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5250	Pass



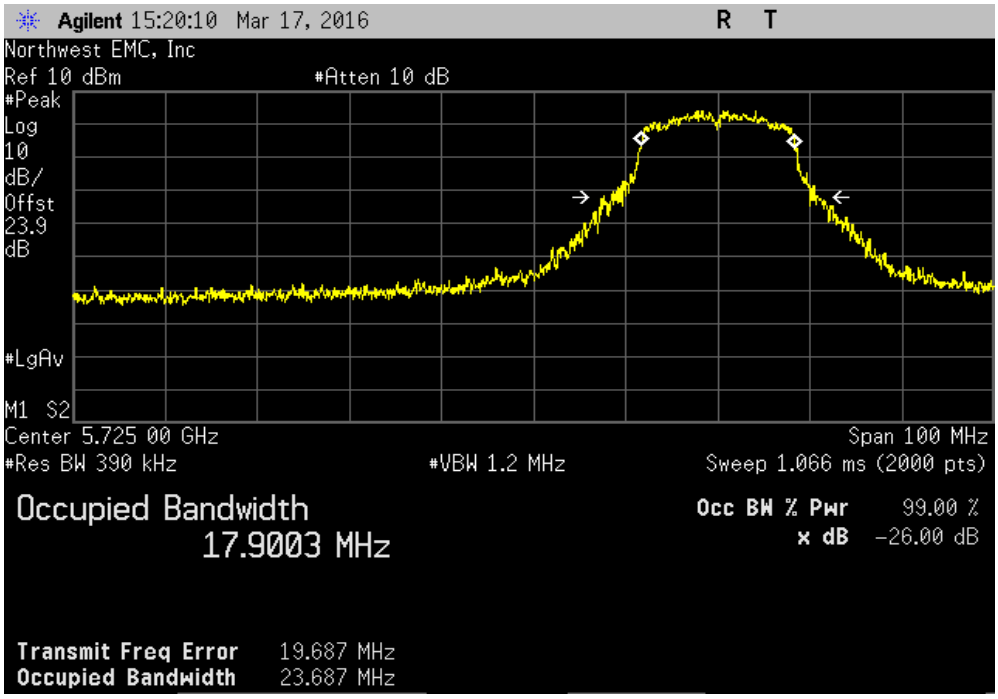
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS0						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5250	Pass



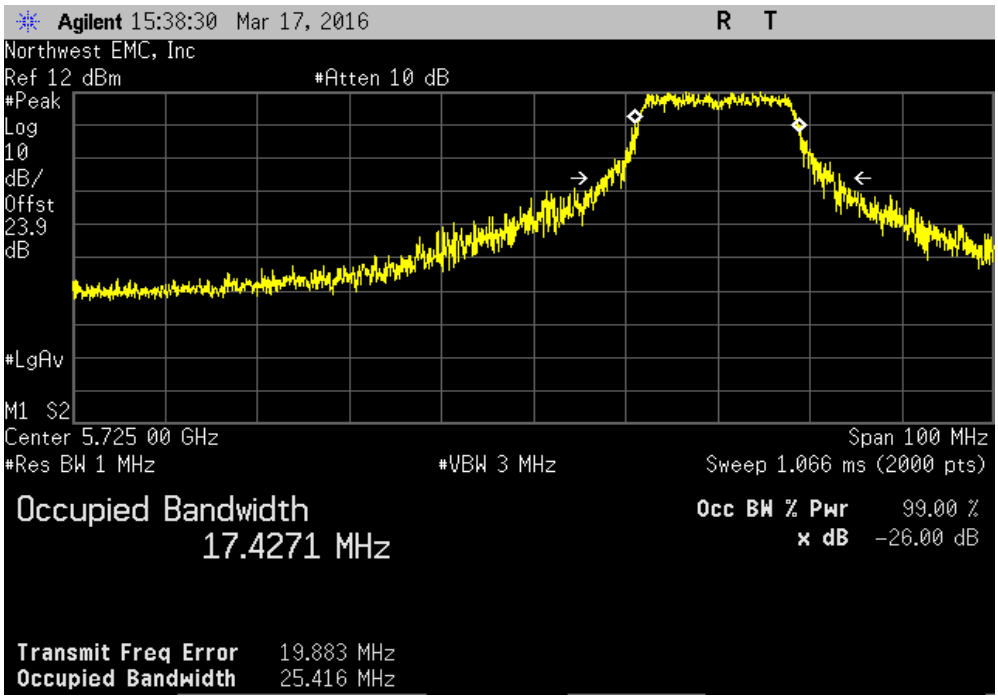
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS7						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5250	Pass



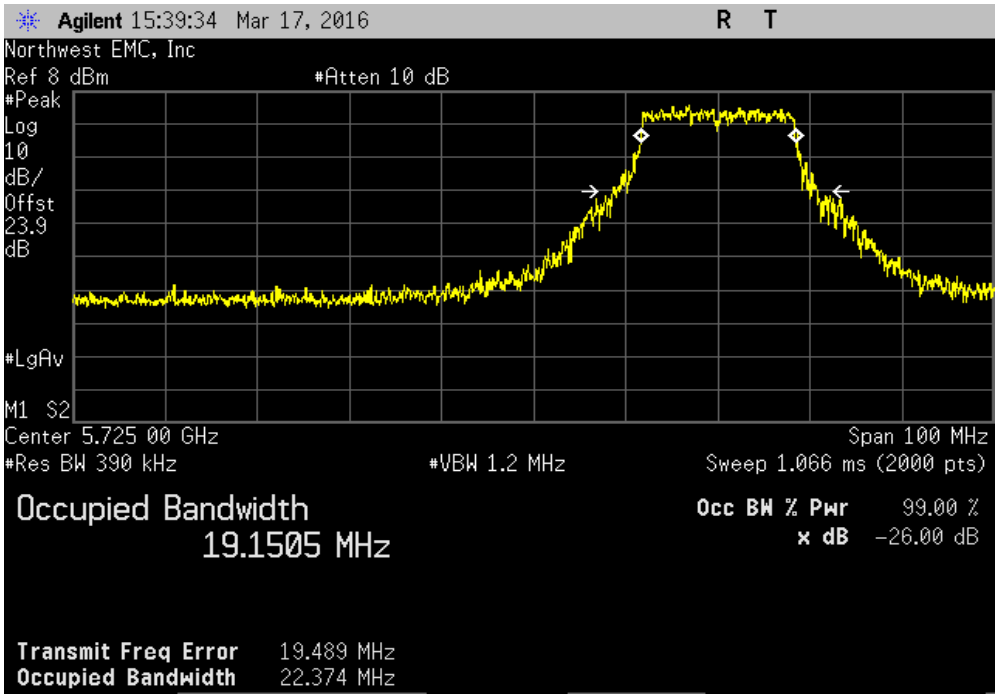
5725 - 5825 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 6 Mbps						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5725	Pass



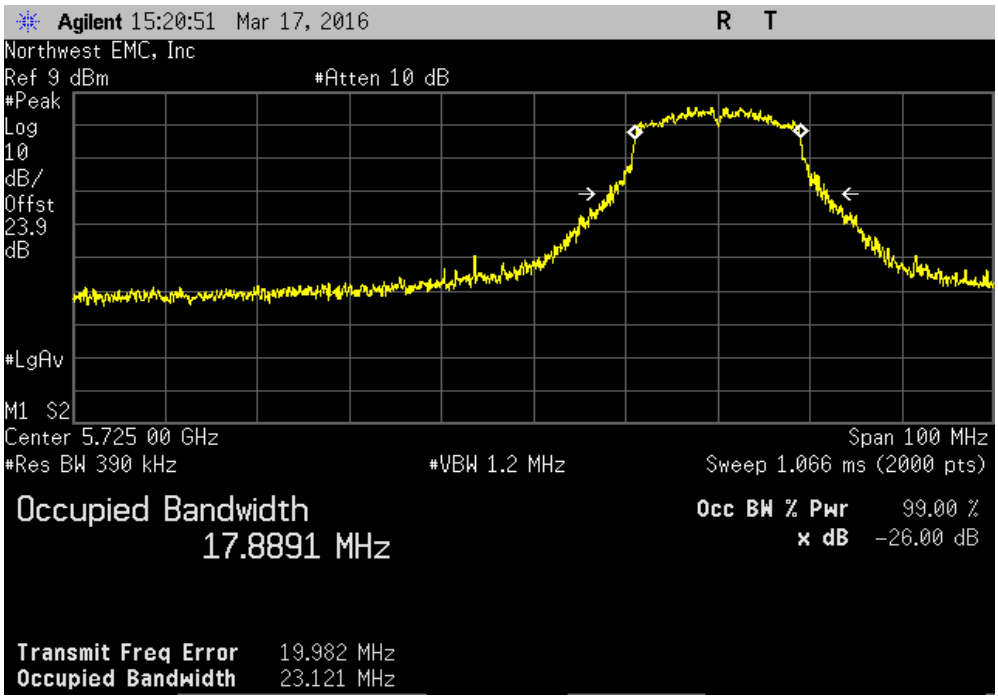
5725 - 5825 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 36 Mbps						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5725	Pass



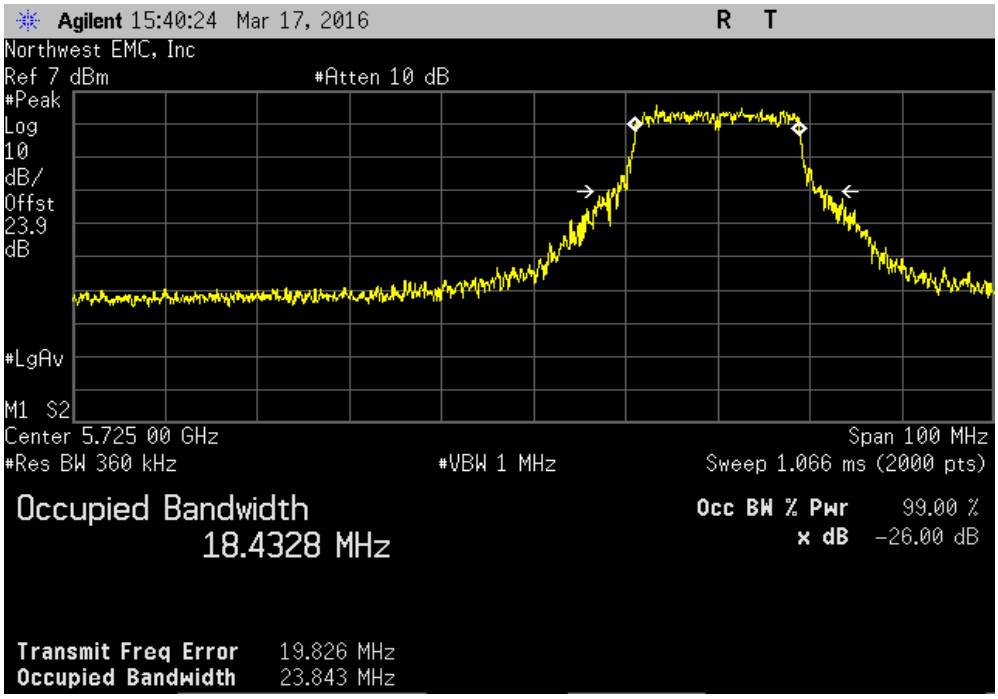
5725 - 5825 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 54 Mbps						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5725	Pass



5725 - 5825 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS0						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5725	Pass



5725 - 5825 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS7						
				OBW Within Band	Band Edge (MHz)	Result
				Yes	5725	Pass



MAXIMUM POWER SPECTRAL DENSITY (5.2, 5.3, 5.6 GHz Bands)

NORTHWEST EMC

XMit 2015.01.14

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 (mo)
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	2/10/2015	15

TEST DESCRIPTION

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The radio was operated in the modes as shown in the following data sheets.

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 maximum power spectral density, the emission bandwidth (B) was measured. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report

The maximum power spectral density was measured using ANSI C63.10, Method SA-2 (RMS detection and trace averaging across the on and off times of the EUT transmission and use of a duty cycle correction factor), consistent with the method used for maximum conducted output power.

The spectrum analyzer settings were set per the guidance as well as the following specifics:

-Resolution Bandwidth of 1 MHz

-RMS Detector

-Trace average 100 traces in power averaging mode

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).

A duty cycle correction factor was added to the measurement using the results of the formula of 10*LOG(1/D) where D is the duty cycle.

MAXIMUM POWER SPECTRAL DENSITY (5.2, 5.3, 5.6 GHz Bands)

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0179
Serial Number:	0216M00003			**Date:**	03/18/16
Customer:	Zoll Medical Corp.			**Temperature:**	22.4°C
Attendees:	Adam Ford			**Humidity:**	27%
Project:	None			**Barometric Pres.:**	991.5
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

None

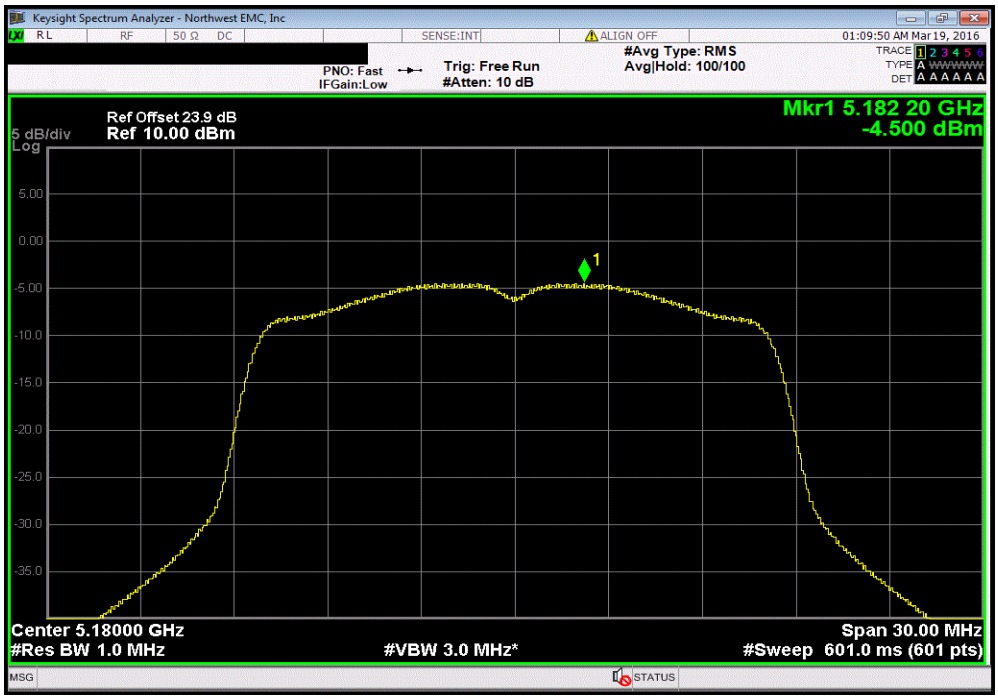
DEVIATIONS FROM TEST STANDARD

None

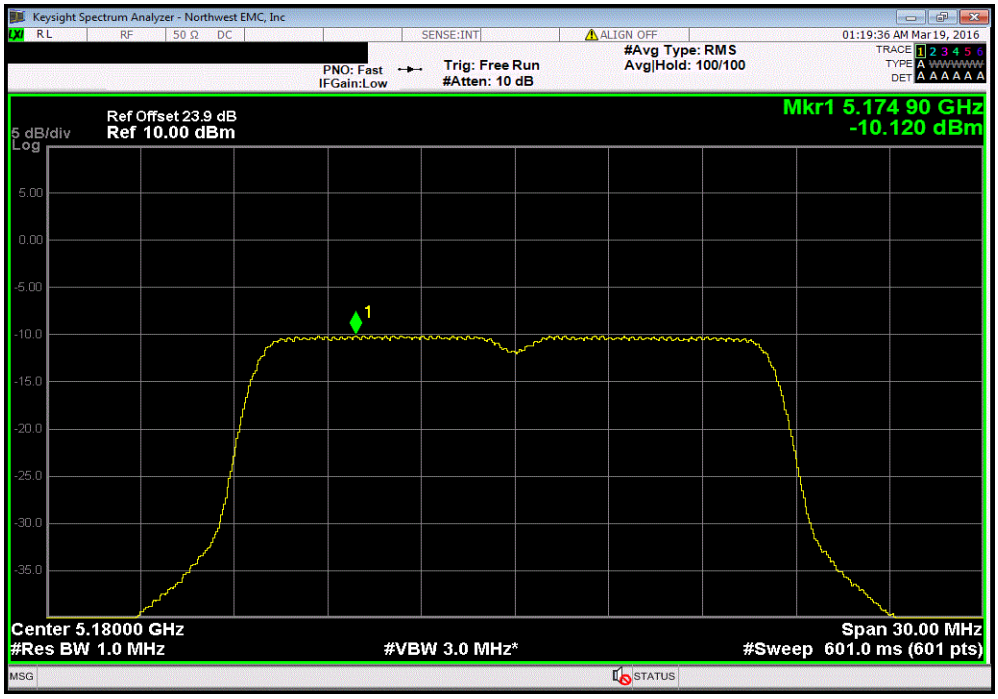
Configuration #	1	Signature

		Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit ≤ (dBm / Ref BW)	Results
5150 - 5250 MHz Band						
	Low Channel, Ch 36 - 5180 MHz					
	802.11(a) 6 Mbps	-4.5	2.3	-2.2	11	Pass
	802.11(a) 36 Mbps	-10.12	7.1	-3	11	Pass
	802.11(a) 54 Mbps	-11.335	8.4	-2.9	11	Pass
	802.11(n) MCS0	-5.059	2.5	-2.6	11	Pass
	802.11(n) MCS7	-12.684	8.7	-4	11	Pass
	High Channel, Ch 48 - 5240 MHz					
	802.11(a) 6 Mbps	-5.086	2.3	-2.7	11	Pass
	802.11(a) 36 Mbps	-9.972	7.1	-2.9	11	Pass
	802.11(a) 54 Mbps	-11.785	8.4	-3.4	11	Pass
	802.11(n) MCS0	-4.97	2.5	-2.5	11	Pass
	802.11(n) MCS7	-13.075	8.6	-4.4	11	Pass
5250 - 5350 MHz Band						
	Low Channel, Ch 52 - 5260 MHz					
	802.11(a) 6 Mbps	-6.19	2.3	-3.8	11	Pass
	802.11(a) 36 Mbps	-11.786	7.1	-4.7	11	Pass
	802.11(a) 54 Mbps	-12.956	8.4	-4.6	11	Pass
	802.11(n) MCS0	-6.775	2.5	-4.3	11	Pass
	802.11(n) MCS7	-13.126	8.7	-4.5	11	Pass
	High Channel, Ch 64 - 5320 MHz					
	802.11(a) 6 Mbps	-4.527	2.3	-2.2	11	Pass
	802.11(a) 36 Mbps	-8.297	7.1	-1.2	11	Pass
	802.11(a) 54 Mbps	-11.528	8.4	-3.1	11	Pass
	802.11(n) MCS0	-4.894	2.5	-2.4	11	Pass
	802.11(n) MCS7	-12.755	8.6	-4.1	11	Pass
5470 - 5725 MHz Band						
	Low Channel, Ch 100 - 5500 MHz					
	802.11(a) 6 Mbps	-6.386	2.3	-4	11	Pass
	802.11(a) 36 Mbps	-11.657	7.1	-4.6	11	Pass
	802.11(a) 54 Mbps	-12.714	8.4	-4.3	11	Pass
	802.11(n) MCS0	-6.608	2.5	-4.1	11	Pass
	802.11(n) MCS7	-13.158	8.7	-4.5	11	Pass
	Mid Channel, Ch 120 - 5600 MHz					
	802.11(a) 6 Mbps	-2.488	2.3	-0.1	11	Pass
	802.11(a) 36 Mbps	-4.411	7.1	2.7	11	Pass
	802.11(a) 54 Mbps	-9.389	8.4	-1	11	Pass
	802.11(n) MCS0	-2.681	2.5	-0.2	11	Pass
	802.11(n) MCS7	-10.773	8.7	-2.1	11	Pass
	High Channel, Ch 140 - 5700 MHz					
	802.11(a) 6 Mbps	-2.254	2.3	0.1	11	Pass
	802.11(a) 36 Mbps	-5.843	7.1	1.2	11	Pass
	802.11(a) 54 Mbps	-9.026	8.4	-0.6	11	Pass
	802.11(n) MCS0	-2.12	2.5	0.4	11	Pass
	802.11(n) MCS7	-10.402	8.7	-1.7	11	Pass

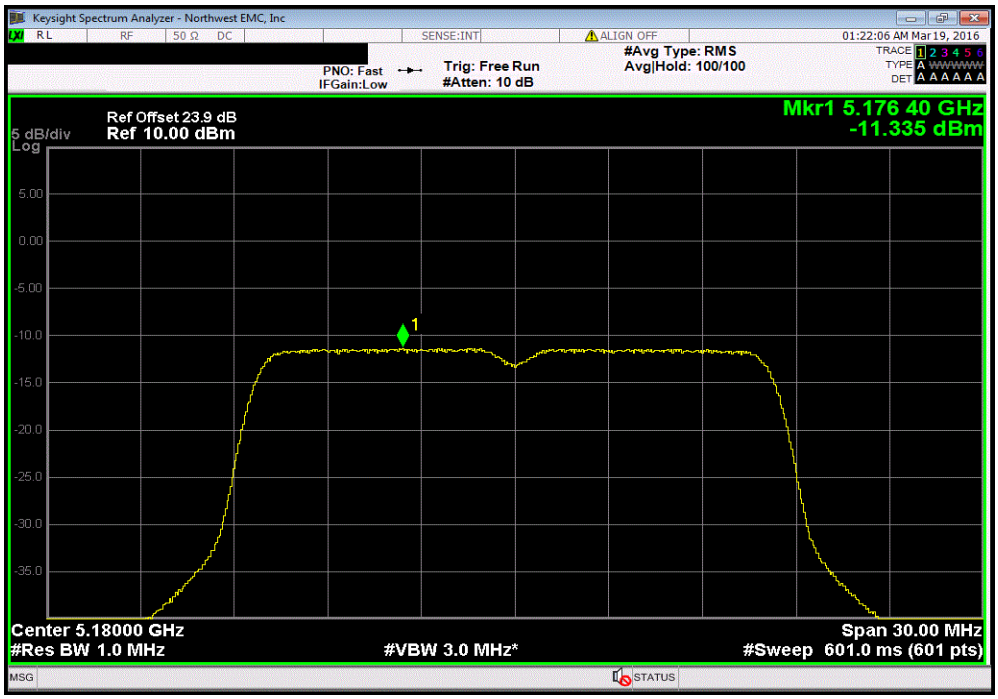
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-4.5	2.3		-2.2	11	Pass



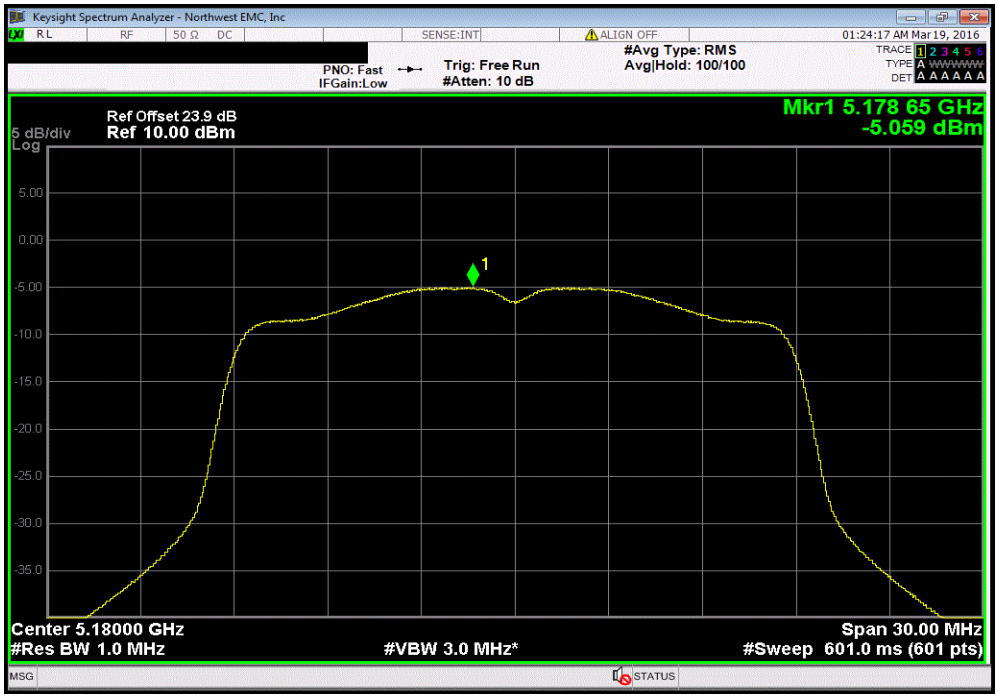
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-10.12	7.1		-3	11	Pass



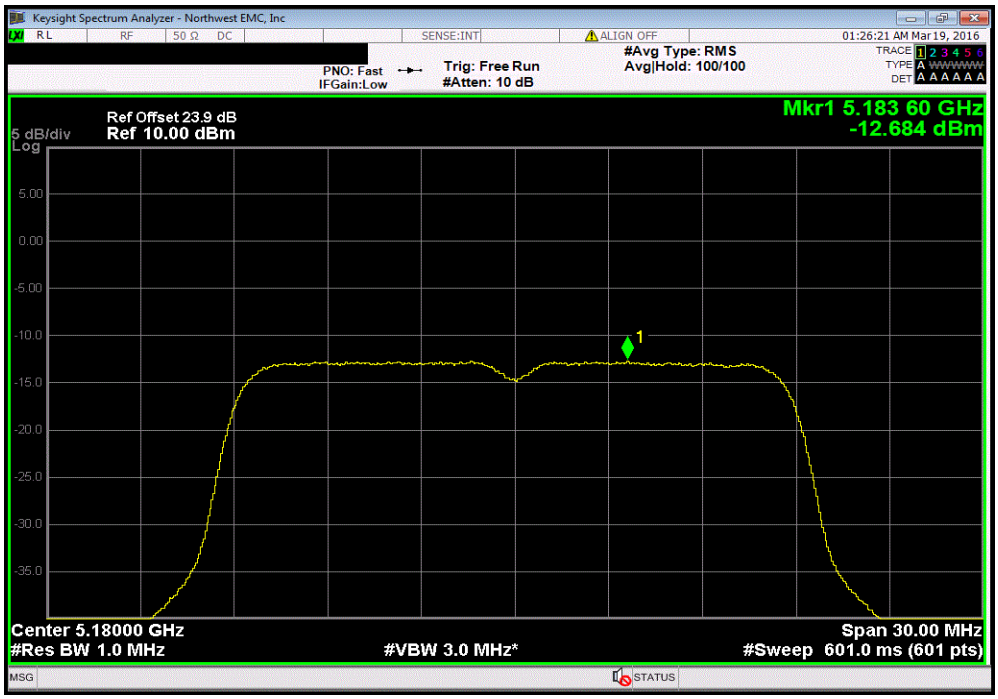
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.335	8.4		-2.9	11	Pass



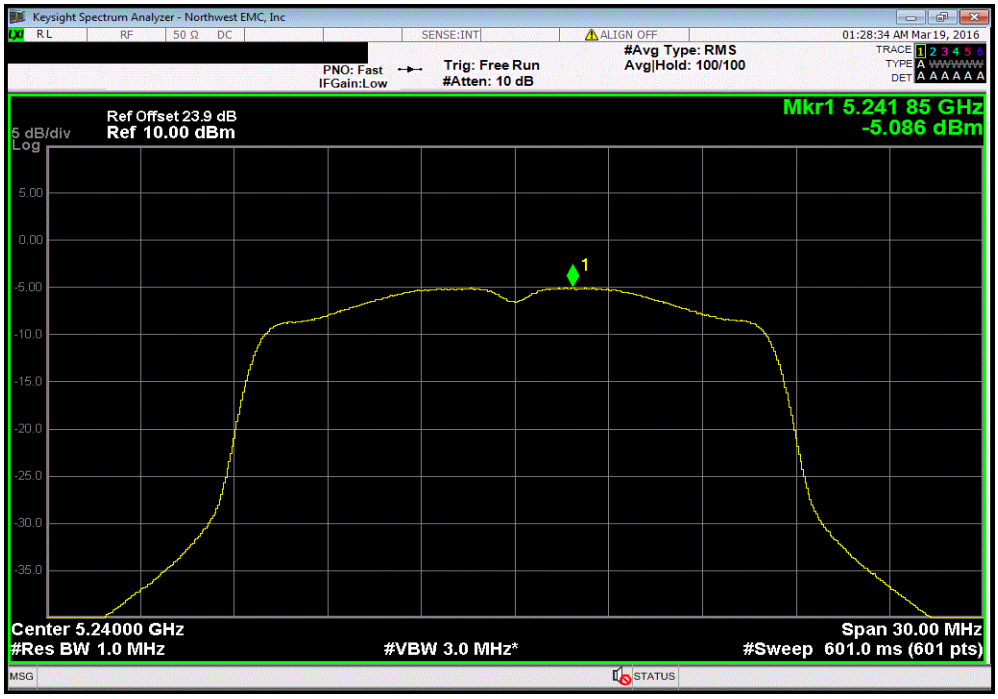
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-5.059	2.5		-2.6	11	Pass



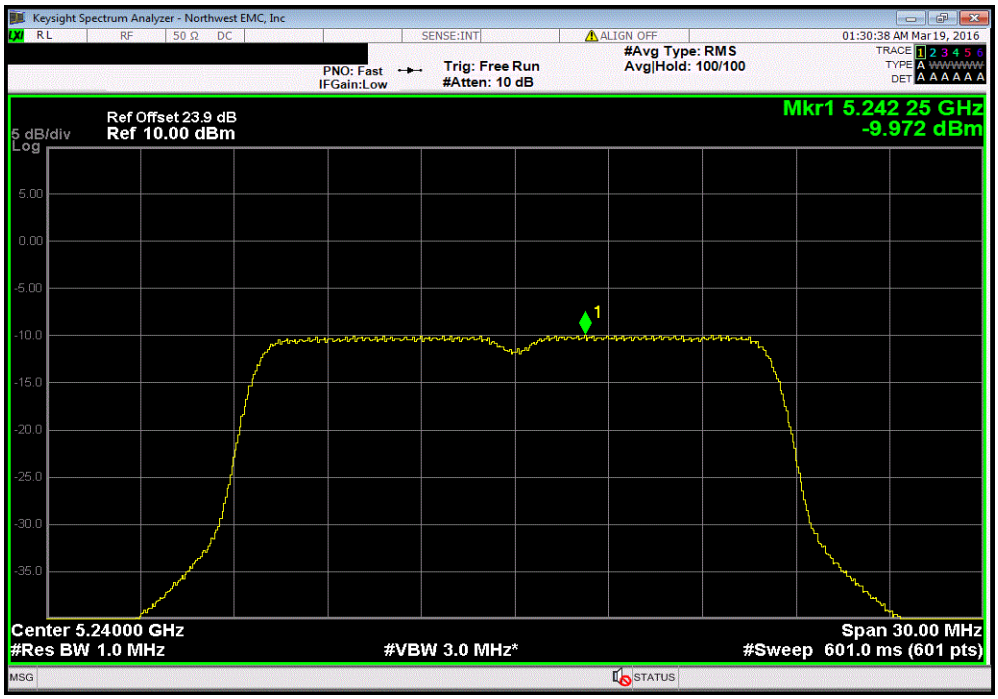
5150 - 5250 MHz Band, Low Channel, Ch 36 - 5180 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-12.684	8.7		-4	11	Pass



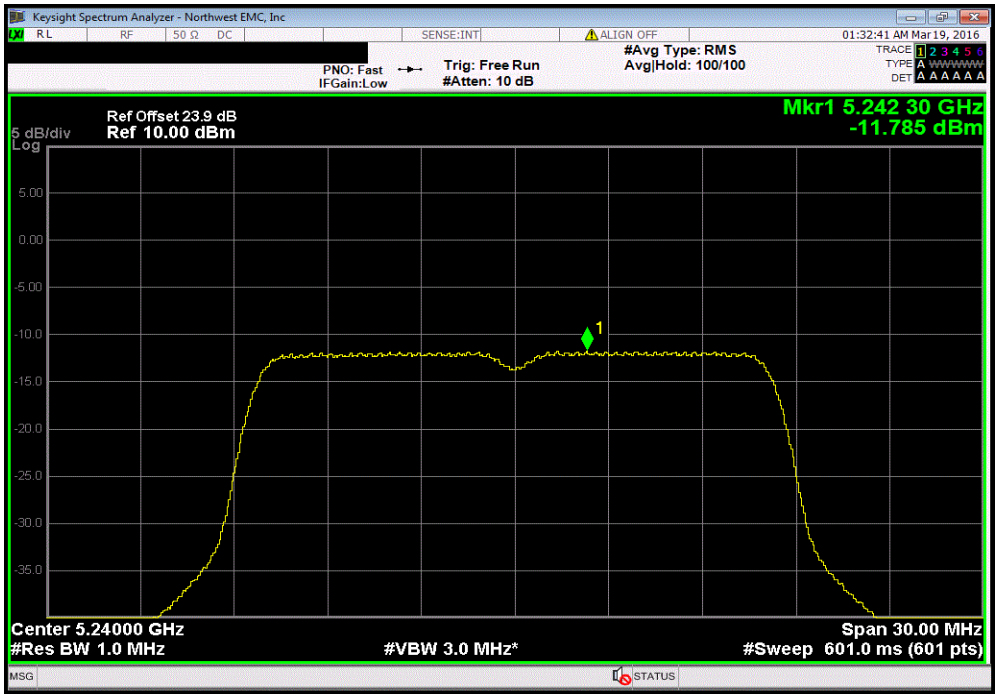
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-5.086	2.3		-2.7	11	Pass



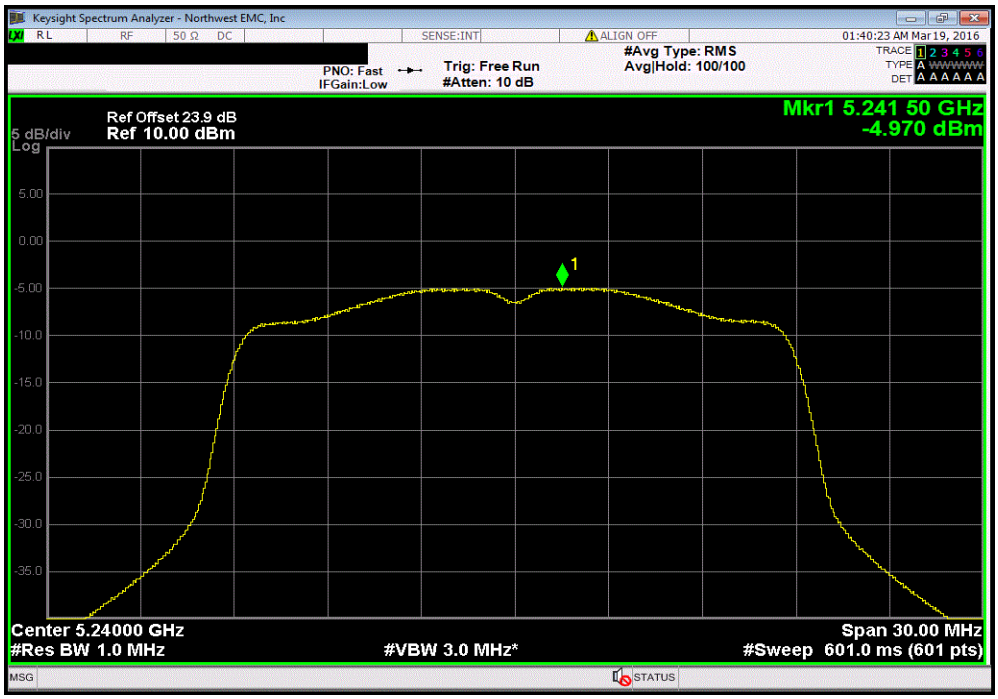
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-9.972	7.1		-2.9	11	Pass



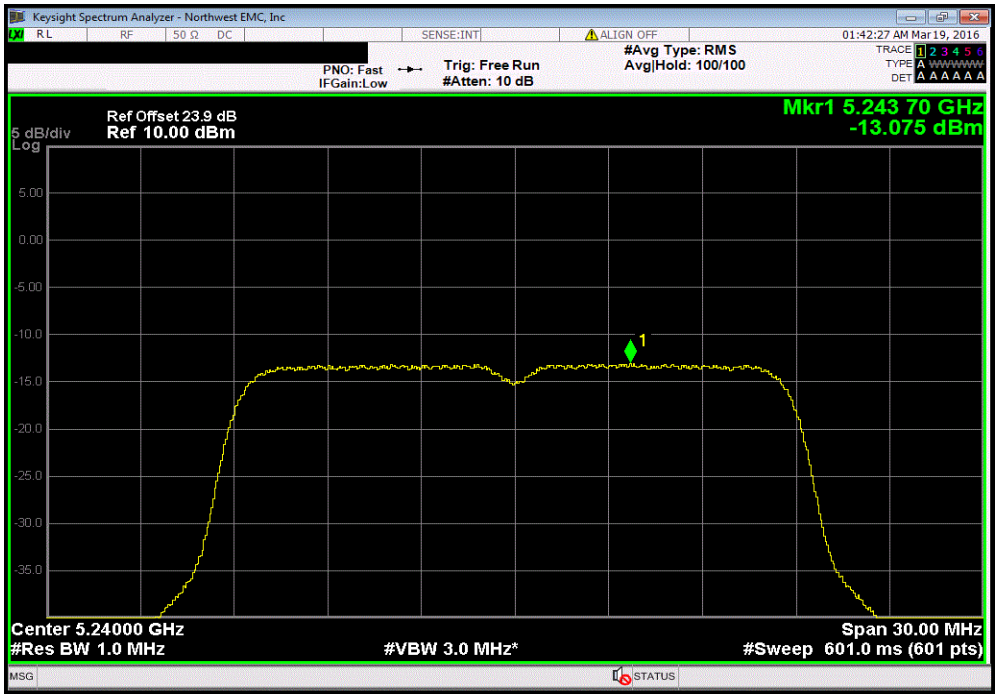
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.785	8.4		-3.4	11	Pass



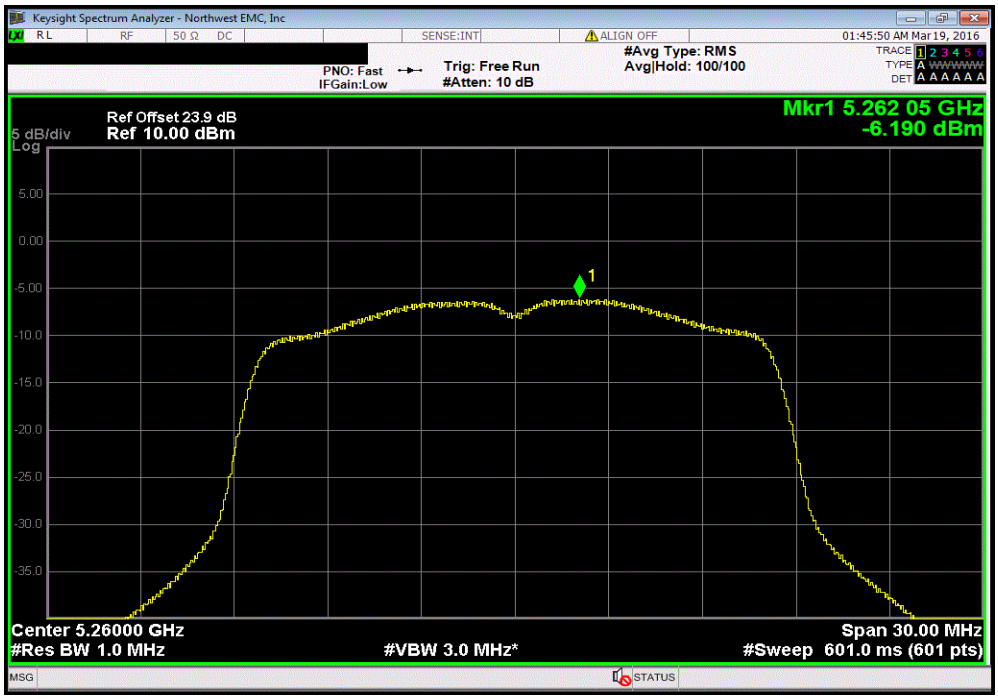
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-4.97	2.5		-2.5	11	Pass



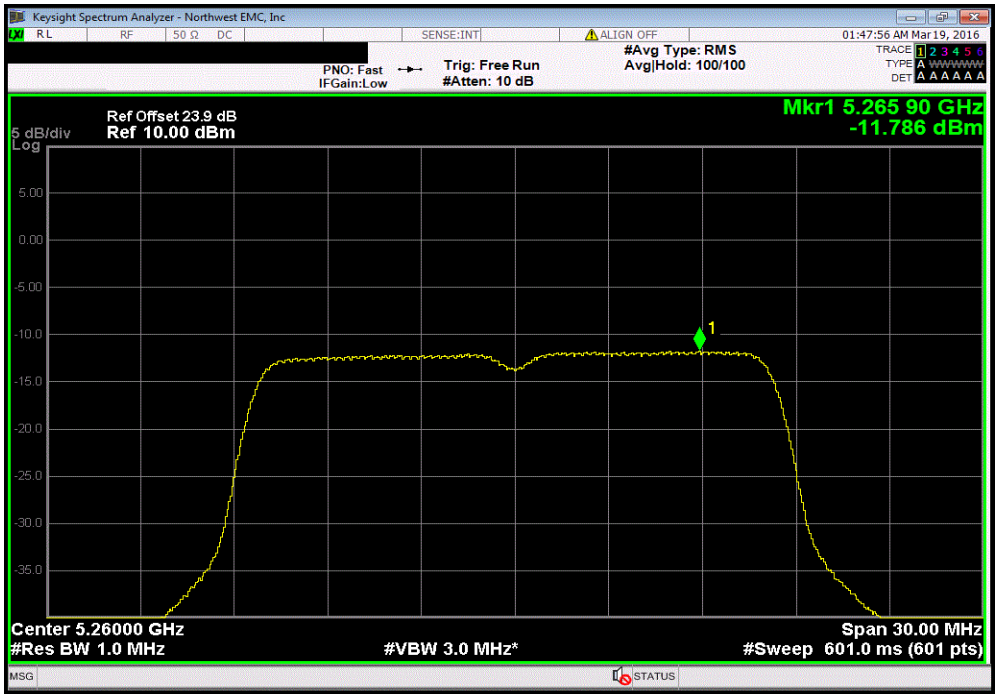
5150 - 5250 MHz Band, High Channel, Ch 48 - 5240 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-13.075	8.6		-4.4	11	Pass



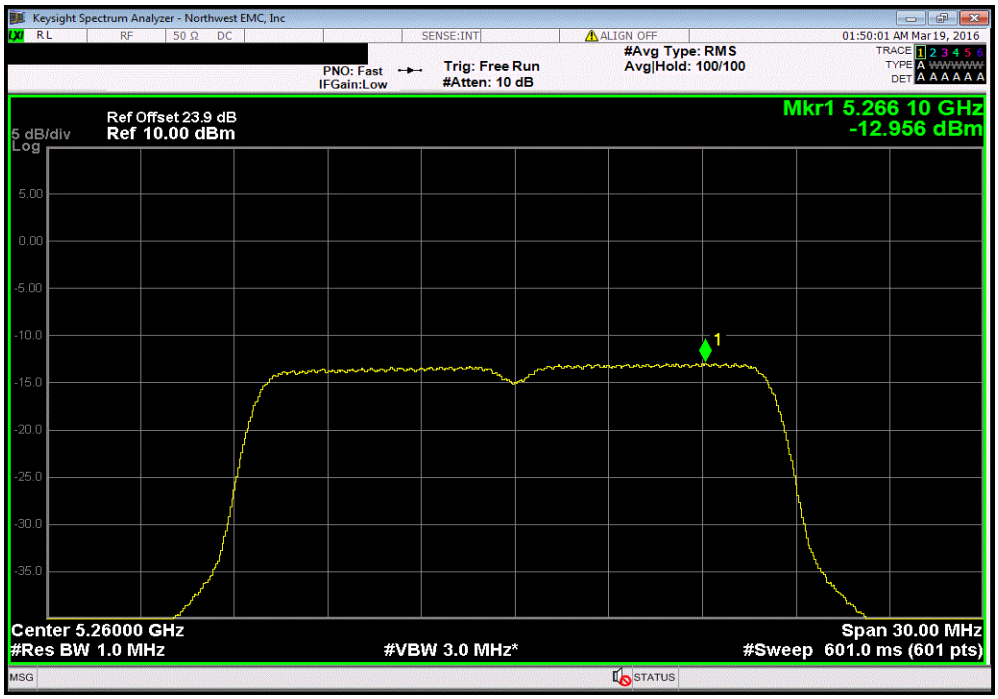
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-6.19	2.3		-3.8	11	Pass



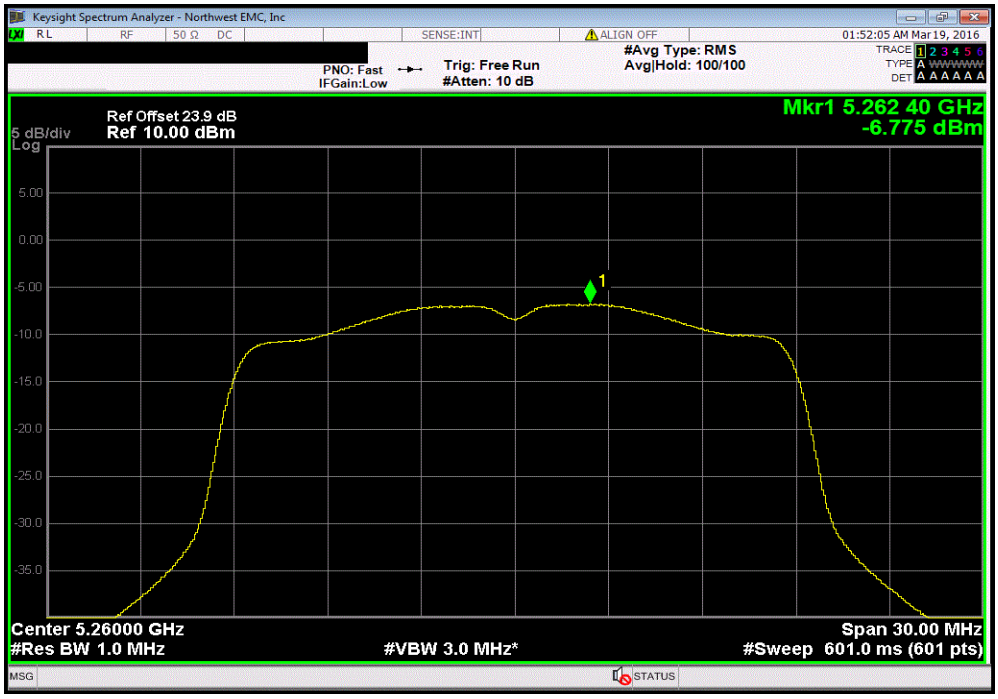
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.786	7.1		-4.7	11	Pass



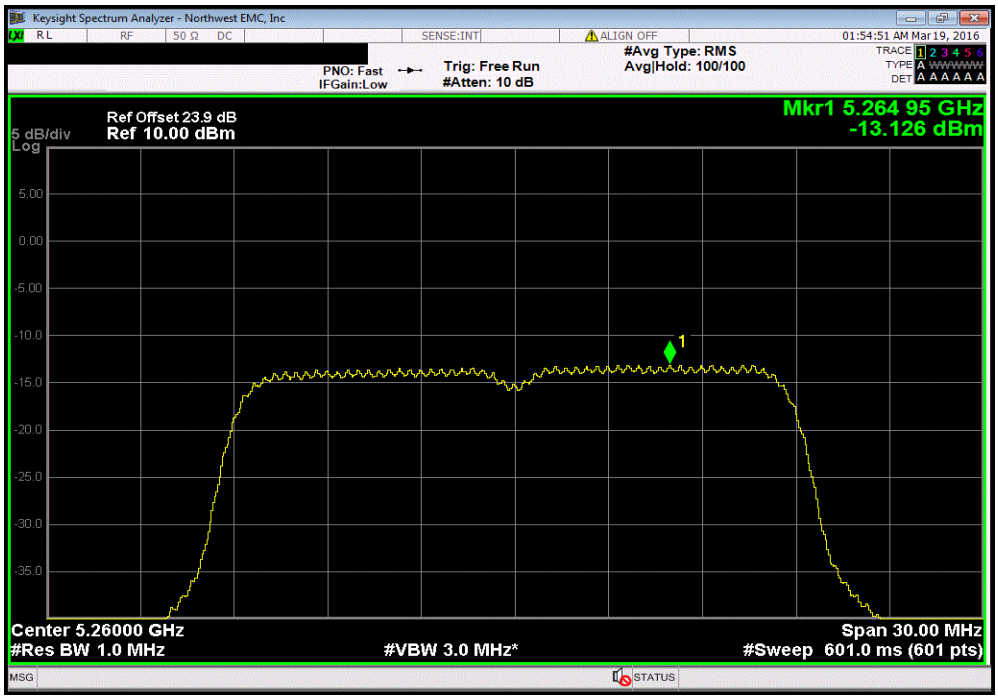
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-12.956	8.4		-4.6	11	Pass



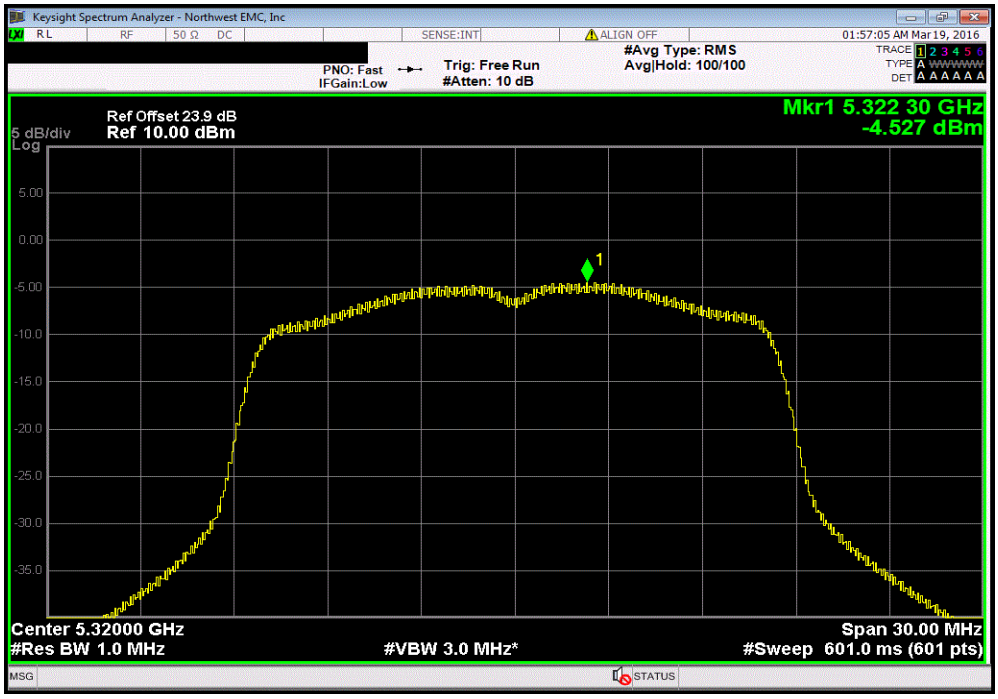
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-6.775	2.5		-4.3	11	Pass



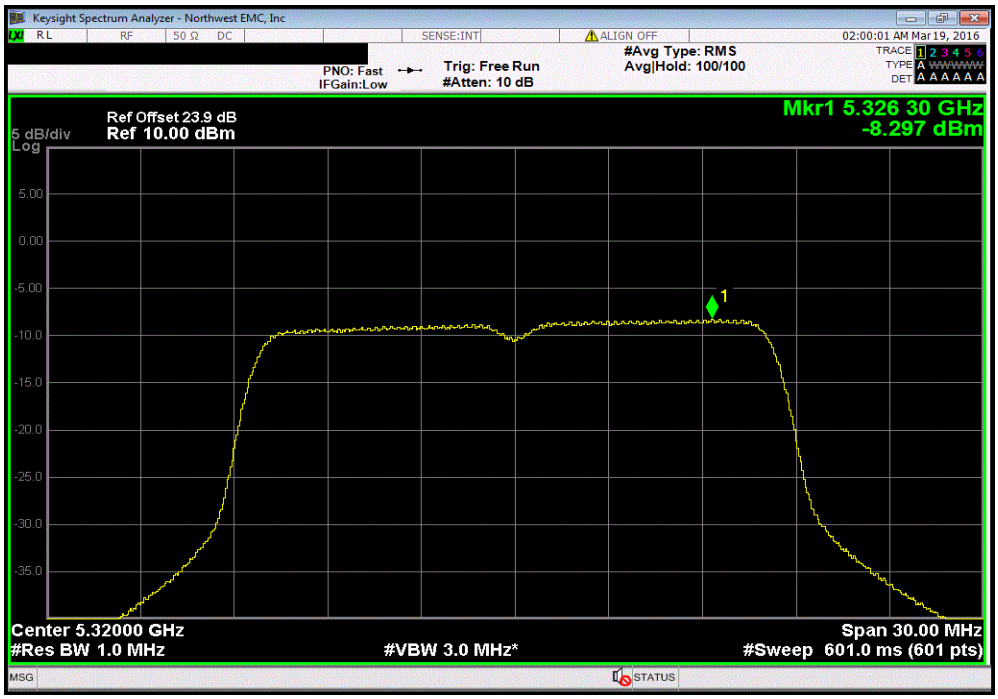
5250 - 5350 MHz Band, Low Channel, Ch 52 - 5260 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-13.126	8.7		-4.5	11	Pass



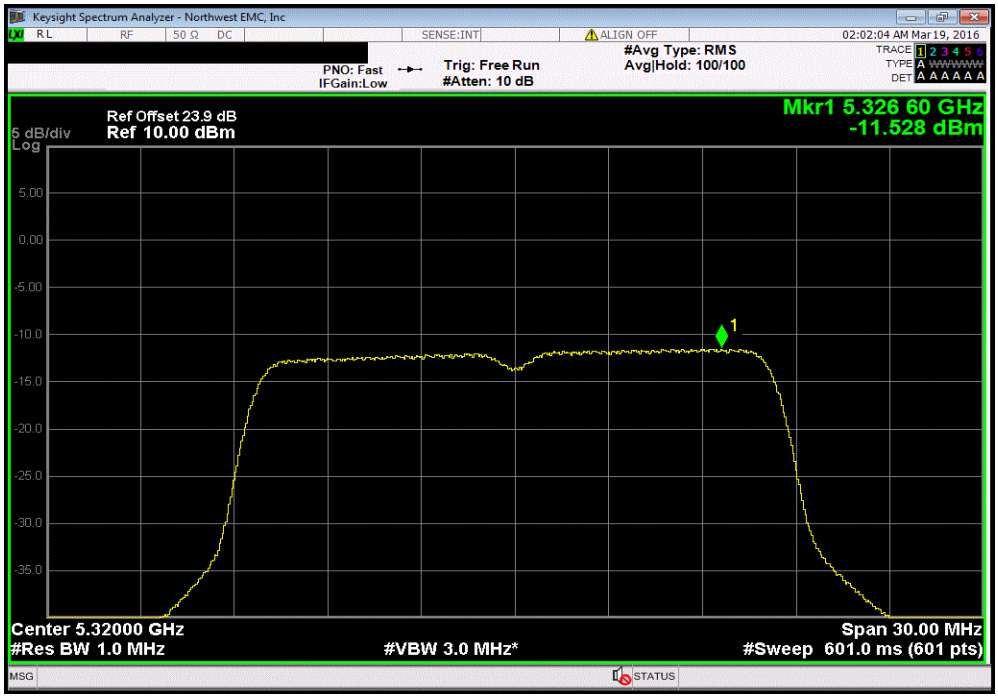
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-4.527	2.3		-2.2	11	Pass



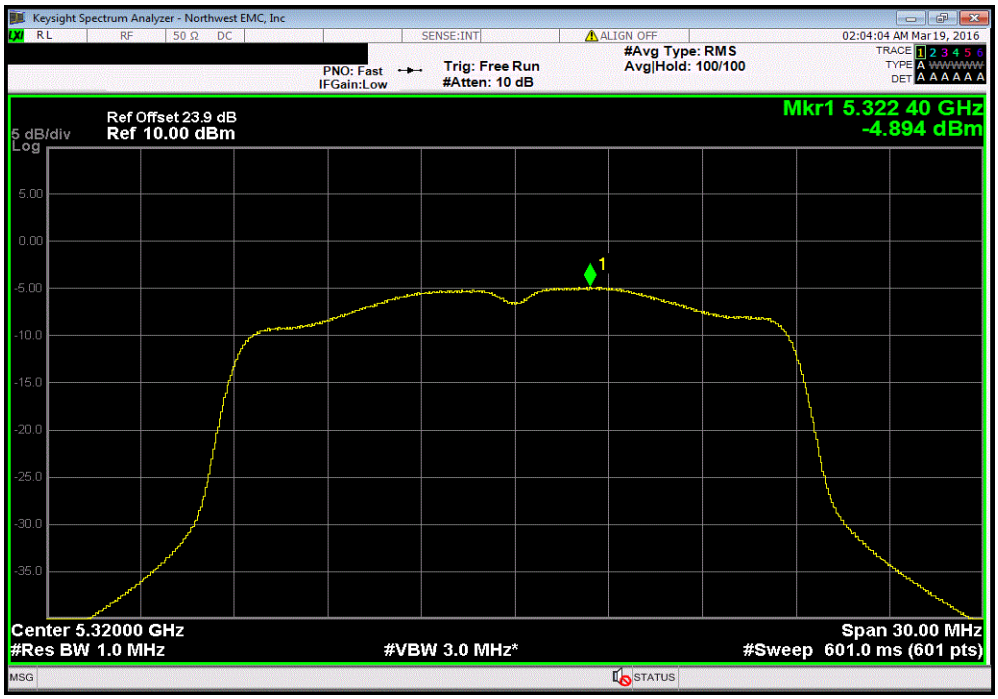
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-8.297	7.1		-1.2	11	Pass



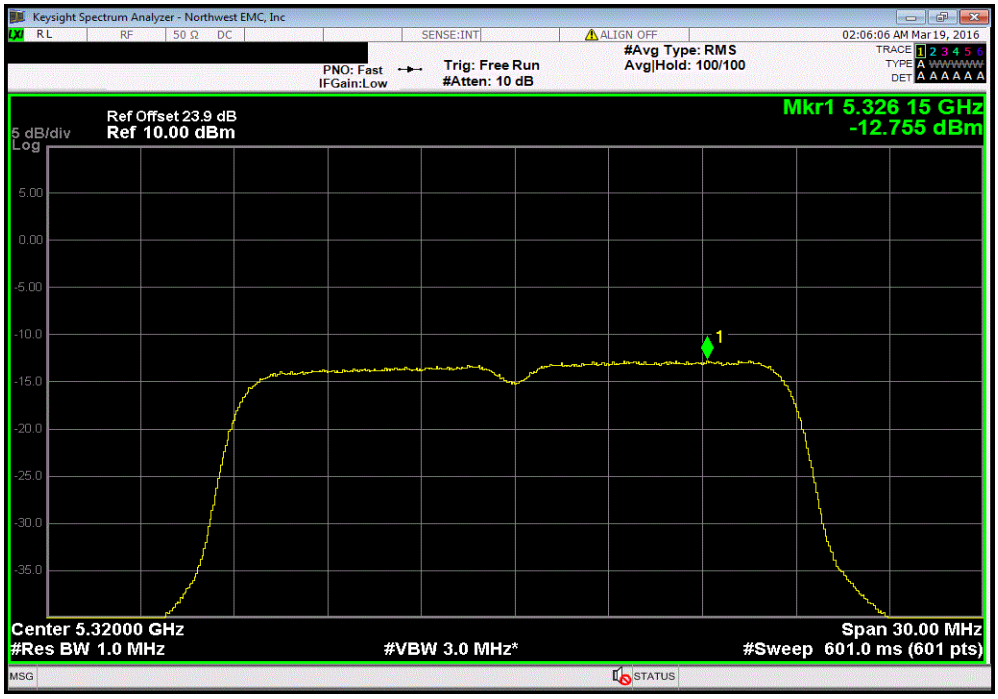
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.528	8.4		-3.1	11	Pass



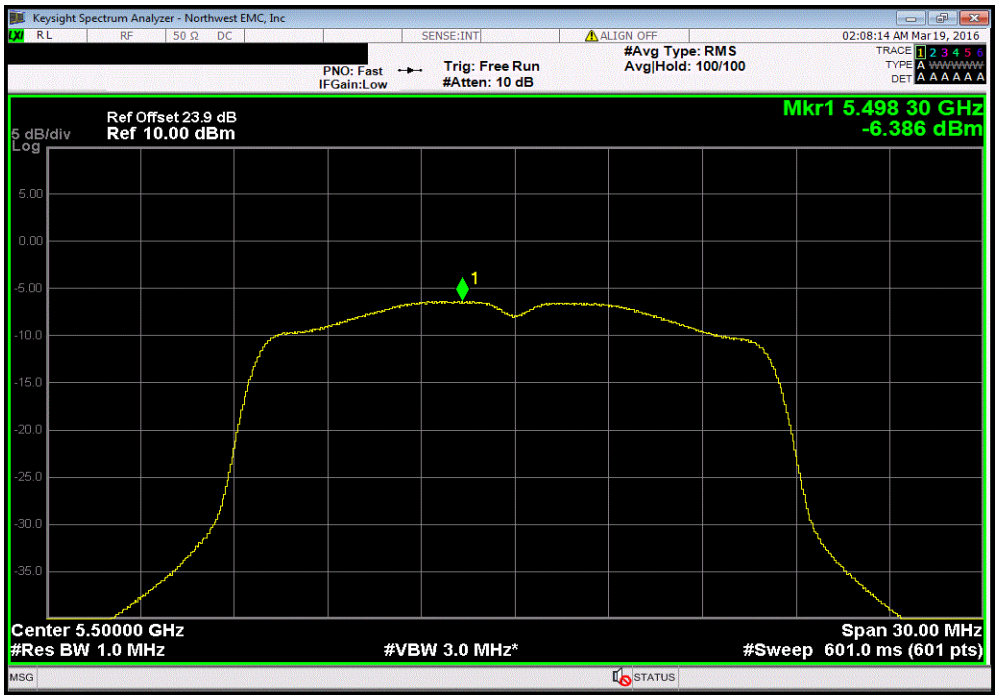
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-4.894	2.5		-2.4	11	Pass



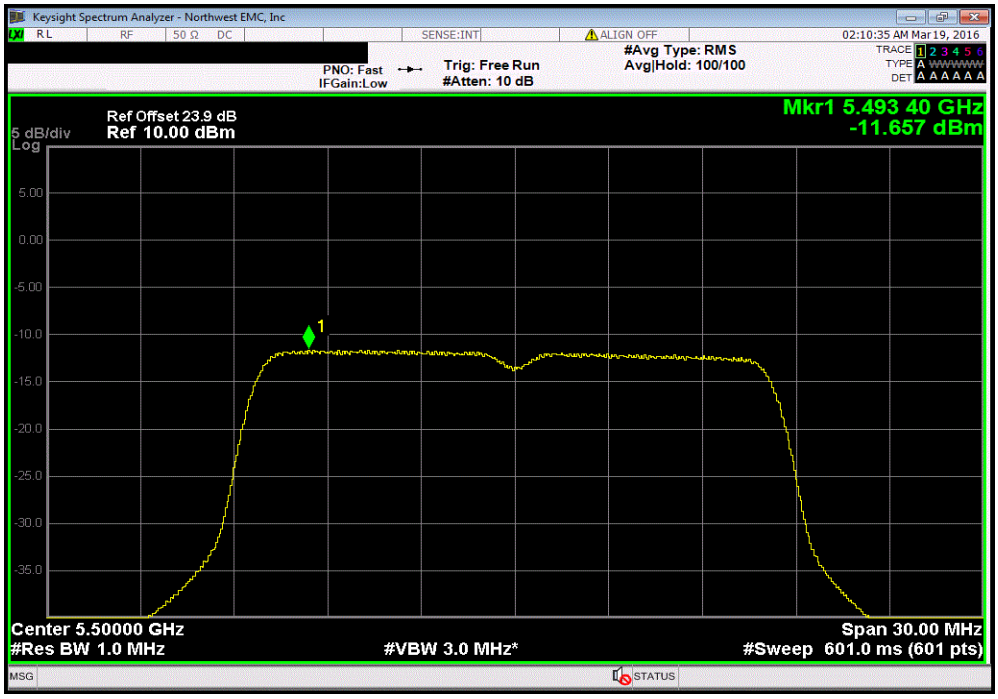
5250 - 5350 MHz Band, High Channel, Ch 64 - 5320 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-12.755	8.6		-4.1	11	Pass



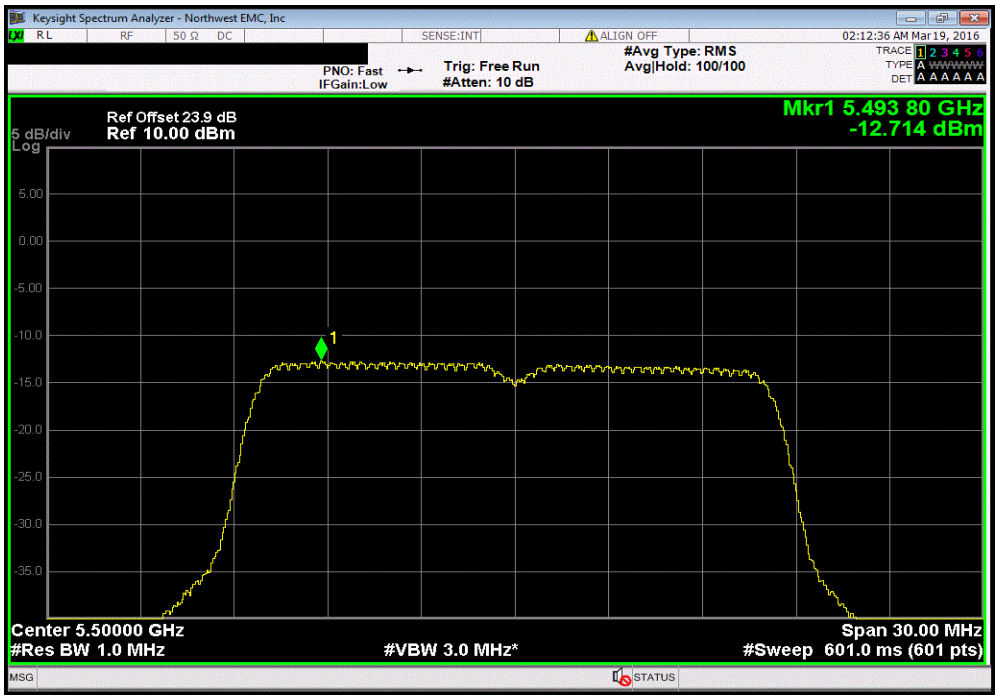
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-6.386	2.3		-4	11	Pass



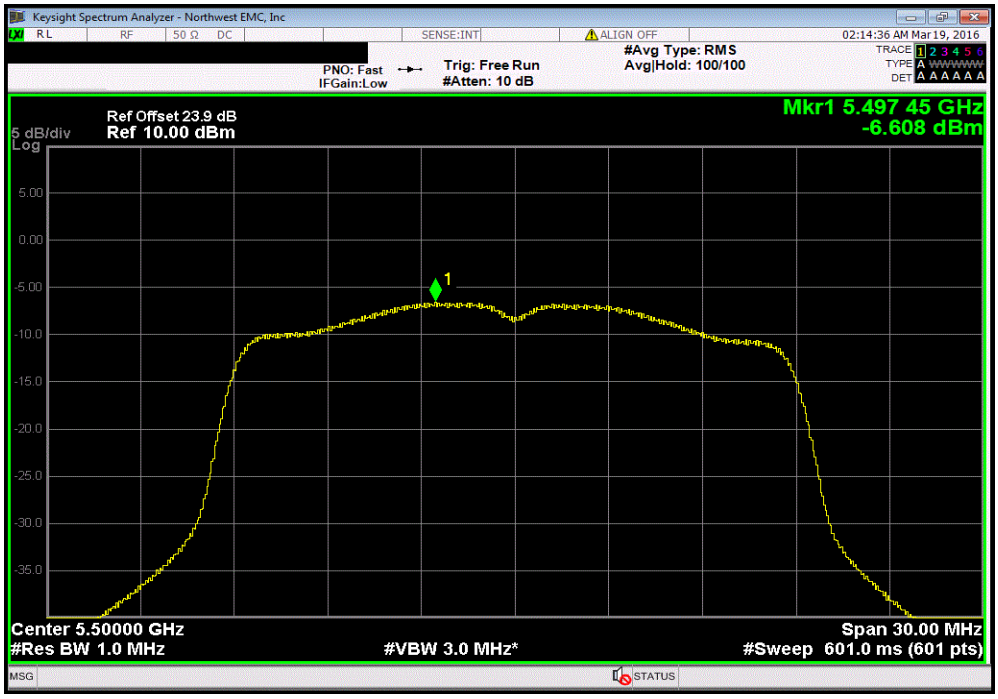
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.657	7.1		-4.6	11	Pass



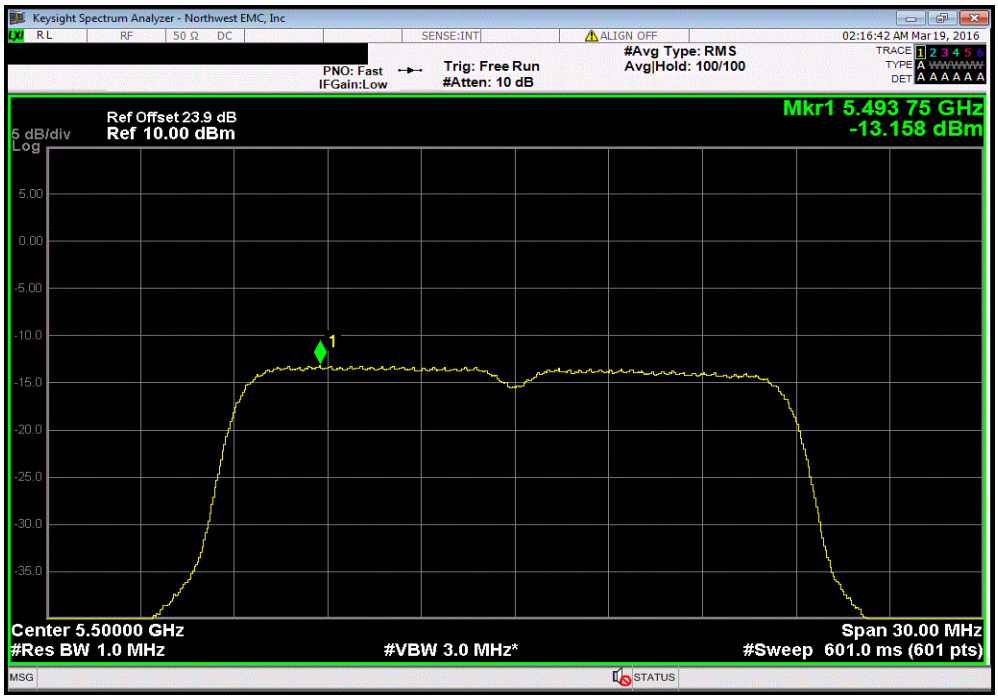
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-12.714	8.4		-4.3	11	Pass



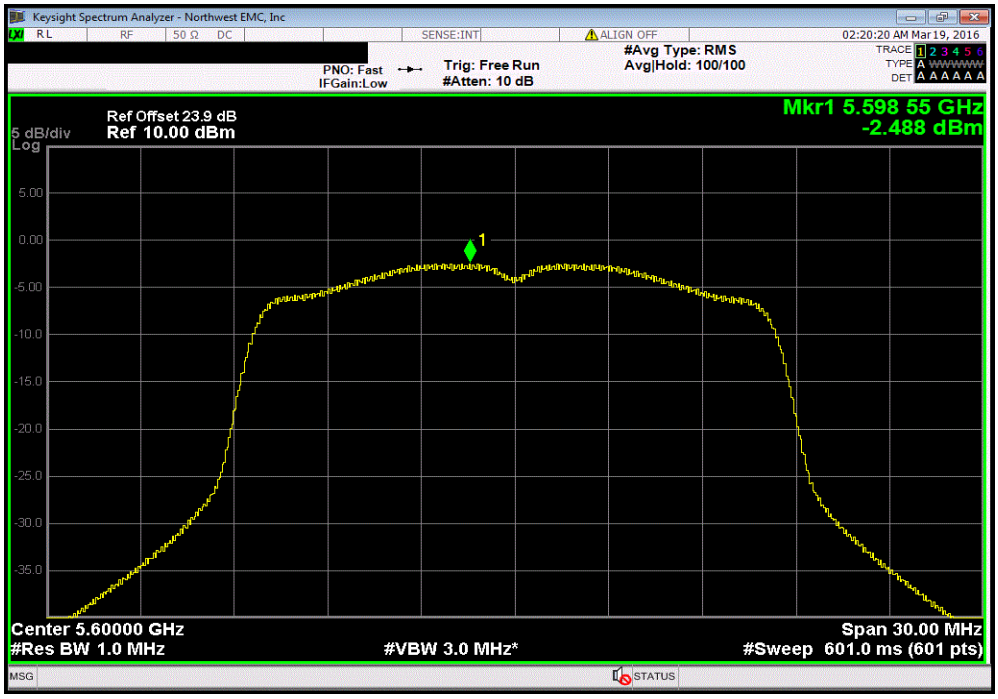
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-6.608	2.5		-4.1	11	Pass



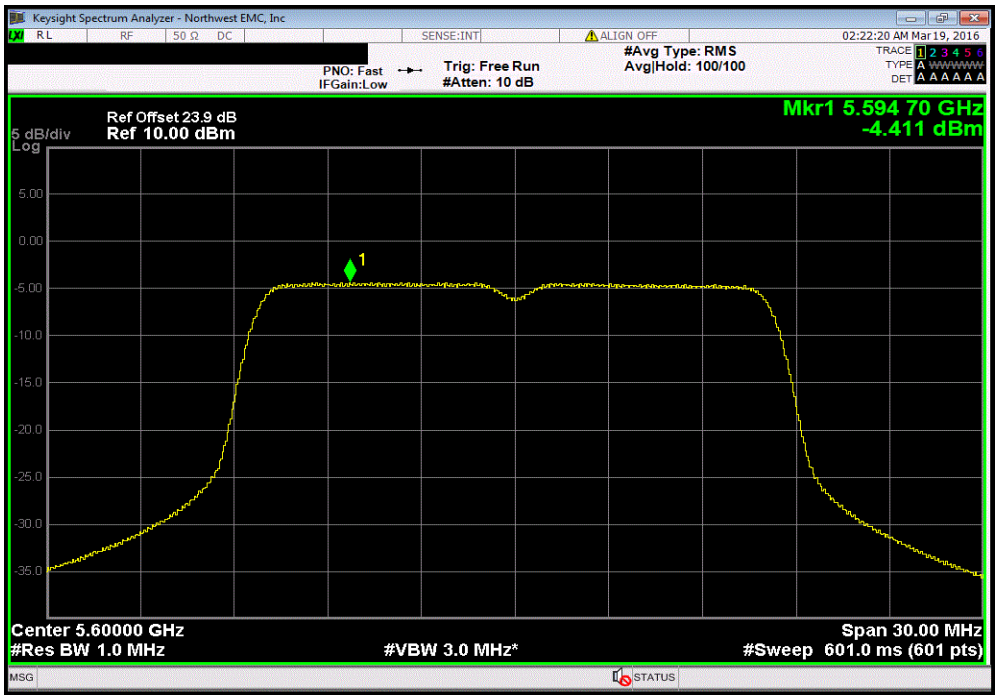
5470 - 5725 MHz Band, Low Channel, Ch 100 - 5500 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-13.158	8.7		-4.5	11	Pass



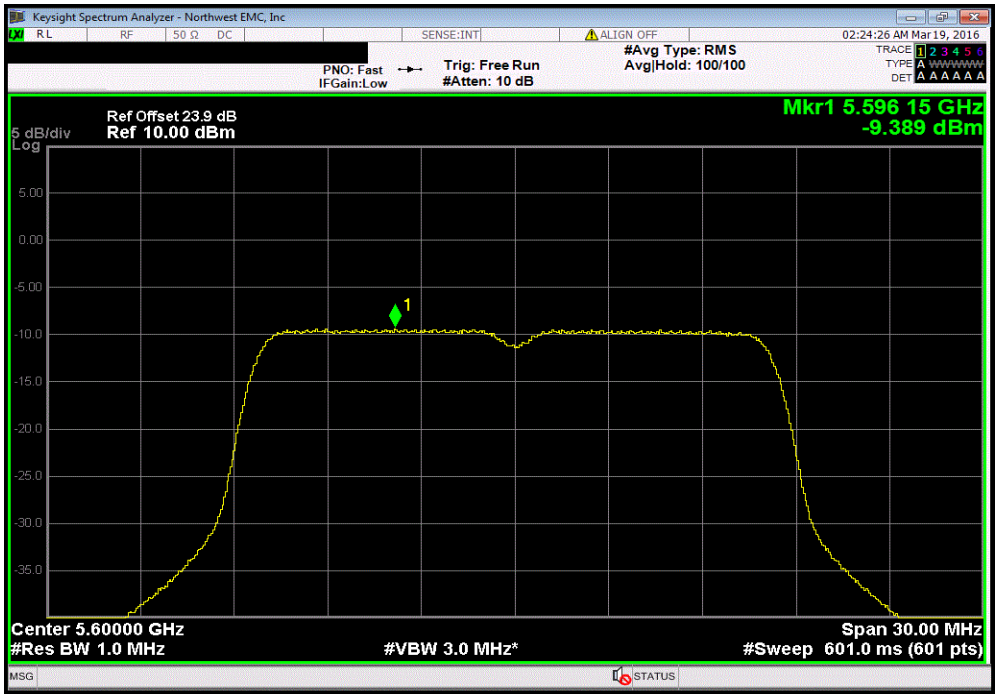
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-2.488	2.3		-0.1	11	Pass



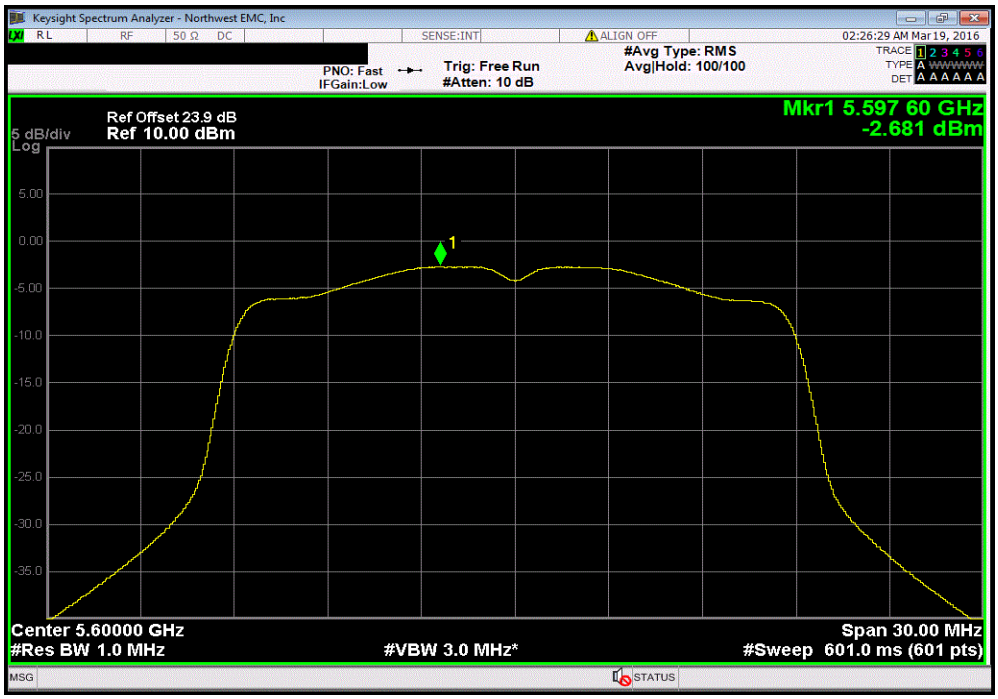
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-4.411	7.1		2.7	11	Pass



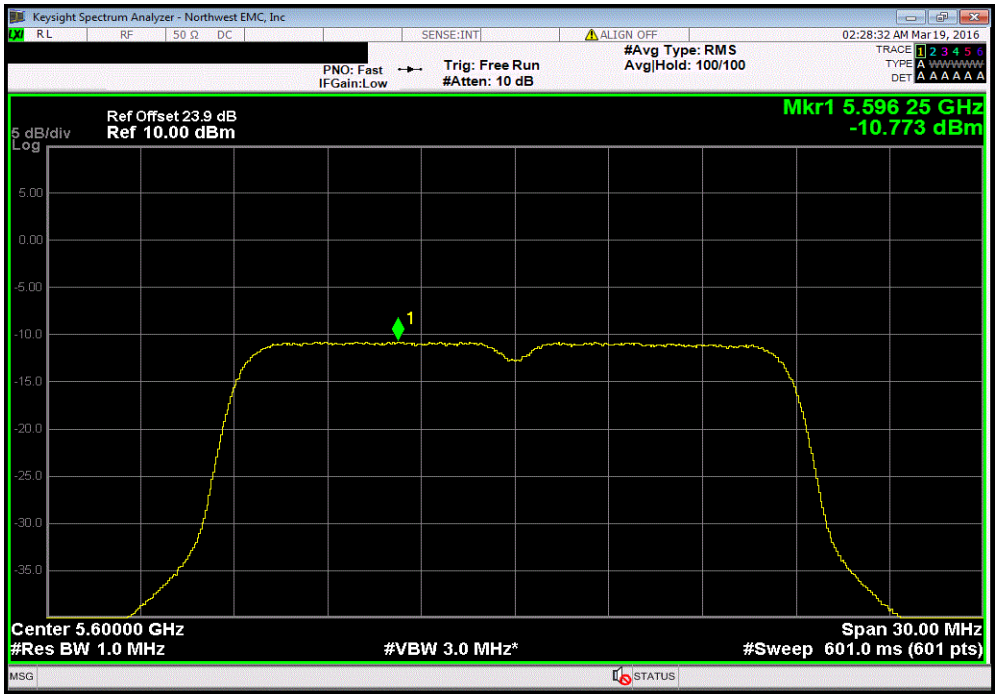
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-9.389	8.4		-1	11	Pass



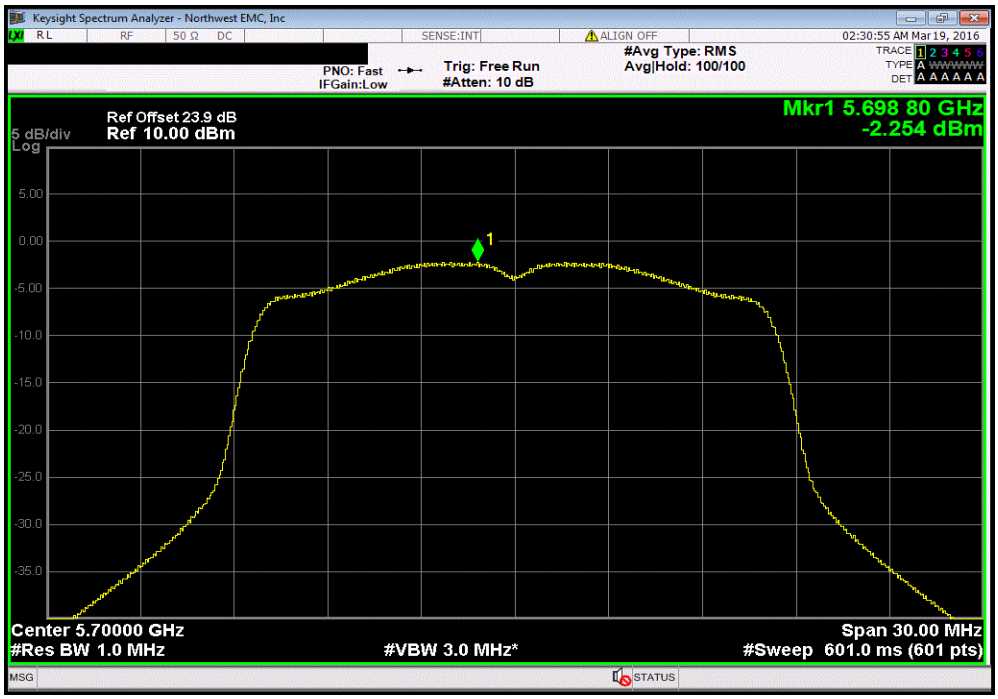
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-2.681	2.5		-0.2	11	Pass



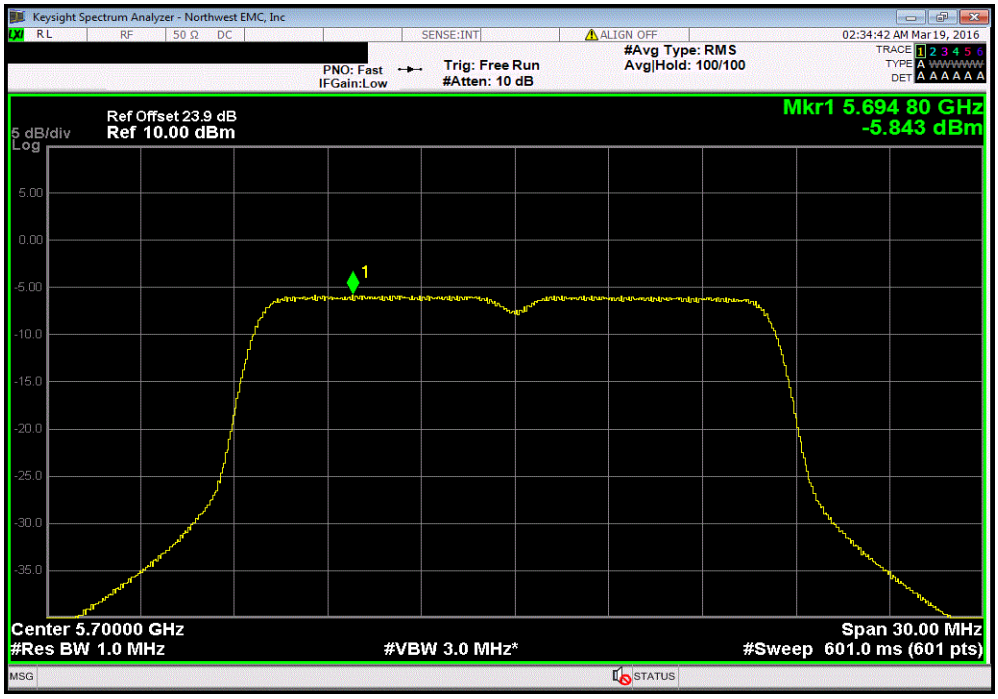
5470 - 5725 MHz Band, Mid Channel, Ch 120 - 5600 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-10.773	8.7		-2.1	11	Pass



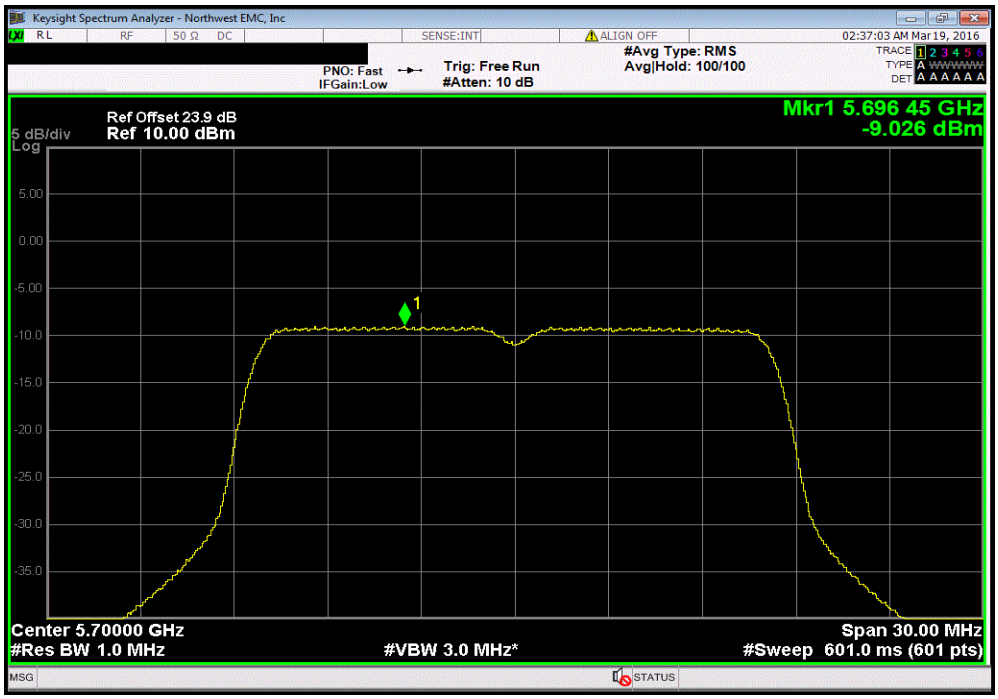
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-2.254	2.3		0.1	11	Pass



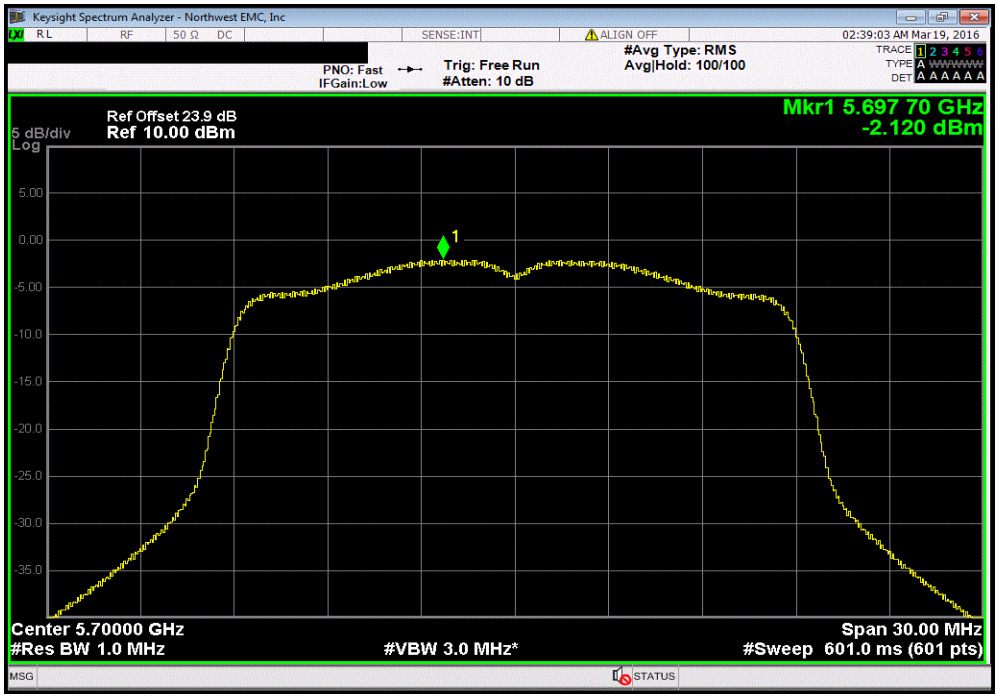
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-5.843	7.1		1.2	11	Pass



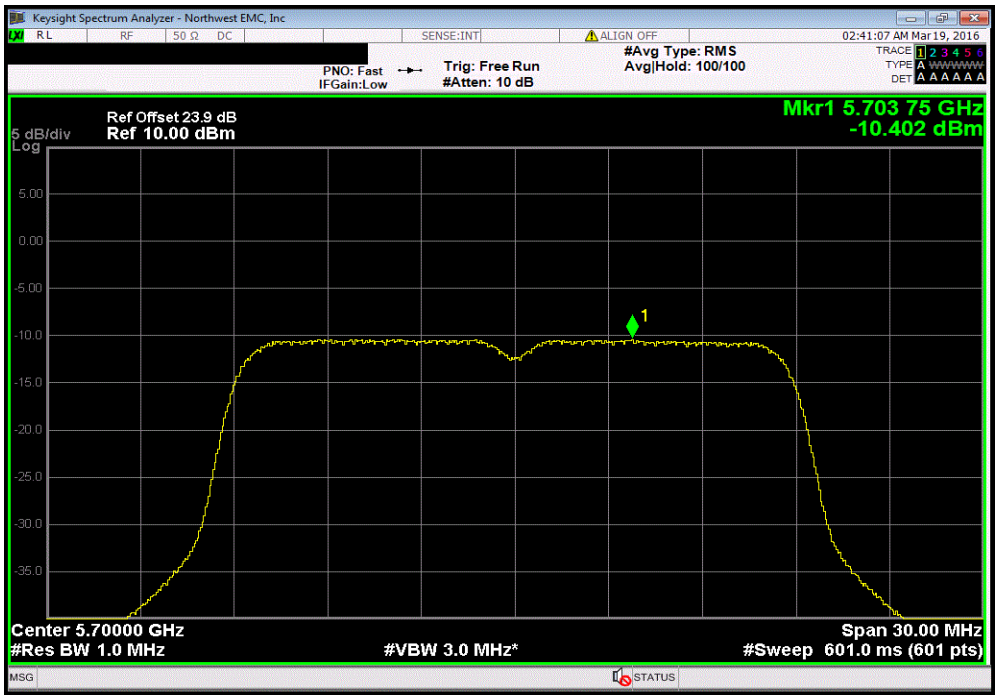
5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-9.026	8.4		-0.6	11	Pass



5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-2.12	2.5		0.4	11	Pass



5470 - 5725 MHz Band, High Channel, Ch 140 - 5700 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-10.402	8.7		-1.7	11	Pass



MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

XMit 2015.01.14

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 (mo)
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	12
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	12
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	4/20/2015	12

TEST DESCRIPTION

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The radio was operated in the modes as shown in the following data sheets.

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 maximum power spectral density, the emission bandwidth (B) was measured. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report

The maximum power spectral density was measured using ANSI C63.10, Method SA-2 (RMS detection and trace averaging across the on and off times of the EUT transmission and use of a duty cycle correction factor), consistent with the method used for maximum conducted output power.

The spectrum analyzer settings were set per the guidance as well as the following specifics:

-Resolution Bandwidth of 510 kHz

-RMS Detector

-Trace average 100 traces in power averaging mode

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).

A duty cycle correction factor was added to the measurement using the results of the formula of 10*LOG(1/D) where D is the duty cycle.

MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

NORTHWEST EMC

XMit 2015.01.14

EUT:	Zoll CF Card Module			**Work Order:**	LGPD0179
Serial Number:	0216M00003			**Date:**	03/18/16
Customer:	Zoll Medical Corp.			**Temperature:**	22.4°C
Attendees:	Adam Ford			**Humidity:**	27%
Project:	None			**Barometric Pres.:**	991.5
Tested by:	Jared Ison	**Power:**	5 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.407:2016	ANSI C63.10:2013

COMMENTS

None

DEVIATIONS FROM TEST STANDARD

None

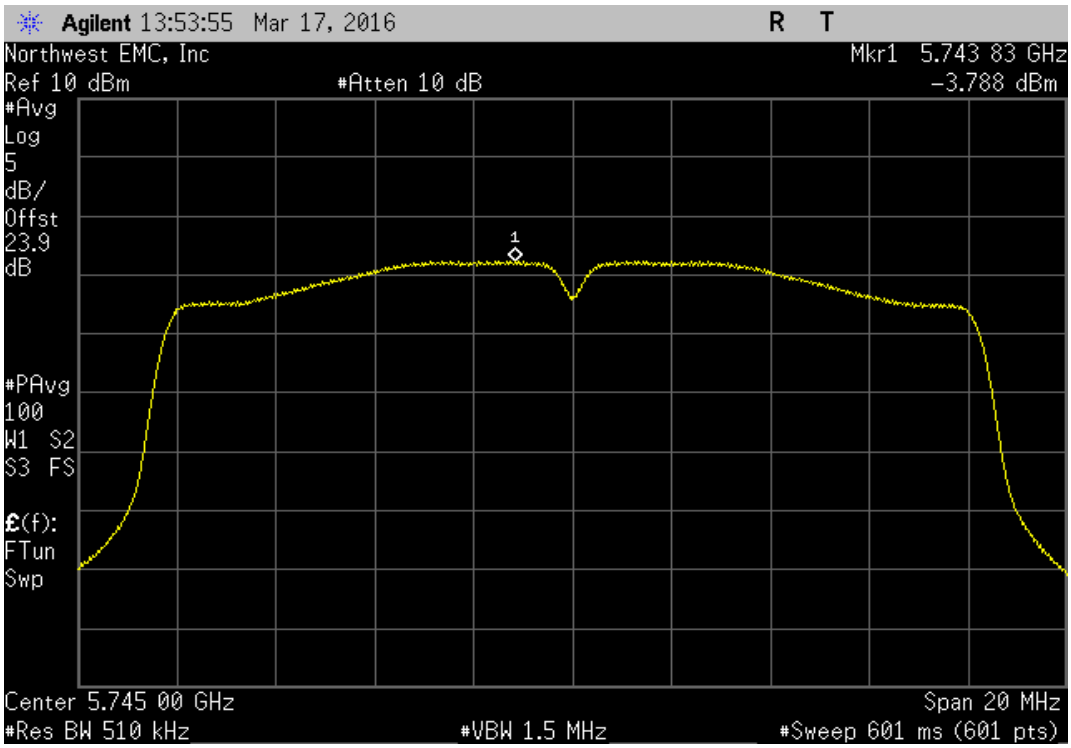
Configuration #	1	Signature

	Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit ≤ (dBm / Ref BW)	Results
5725 - 5785 MHz Band					
Low Channel, Ch 149 - 5745 MHz					
802.11(a) 6 Mbps	-3.788	2.3	-1.4	30	Pass
802.11(a) 36 Mbps	-5.41	7.1	1.7	30	Pass
802.11(a) 54 Mbps	-10.417	8.4	-2	30	Pass
802.11(n) MCS0	-3.716	2.5	-1.2	30	Pass
802.11(n) MCS7	-11.57	8.7	-2.9	30	Pass
Mid Channel, Ch 157 - 5785 MHz					
802.11(a) 6 Mbps	-3.752	2.4	-1.4	30	Pass
802.11(a) 36 Mbps	-5.377	7.1	1.7	30	Pass
802.11(a) 54 Mbps	-10.466	8.4	-2.1	30	Pass
802.11(n) MCS0	-3.916	2.5	-1.4	30	Pass
802.11(n) MCS7	-11.784	8.7	-3.1	30	Pass
High Channel, Ch 165 - 5825 MHz					
802.11(a) 6 Mbps	-4.617	2.4	-2.3	30	Pass
802.11(a) 36 Mbps	-5.674	7.1	1.4	30	Pass
802.11(a) 54 Mbps	-10.733	8.4	-2.3	30	Pass
802.11(n) MCS0	-4.002	2.5	-1.5	30	Pass
802.11(n) MCS7	-11.923	8.6	-3.3	30	Pass

MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-3.788	2.3		-1.4	30	Pass

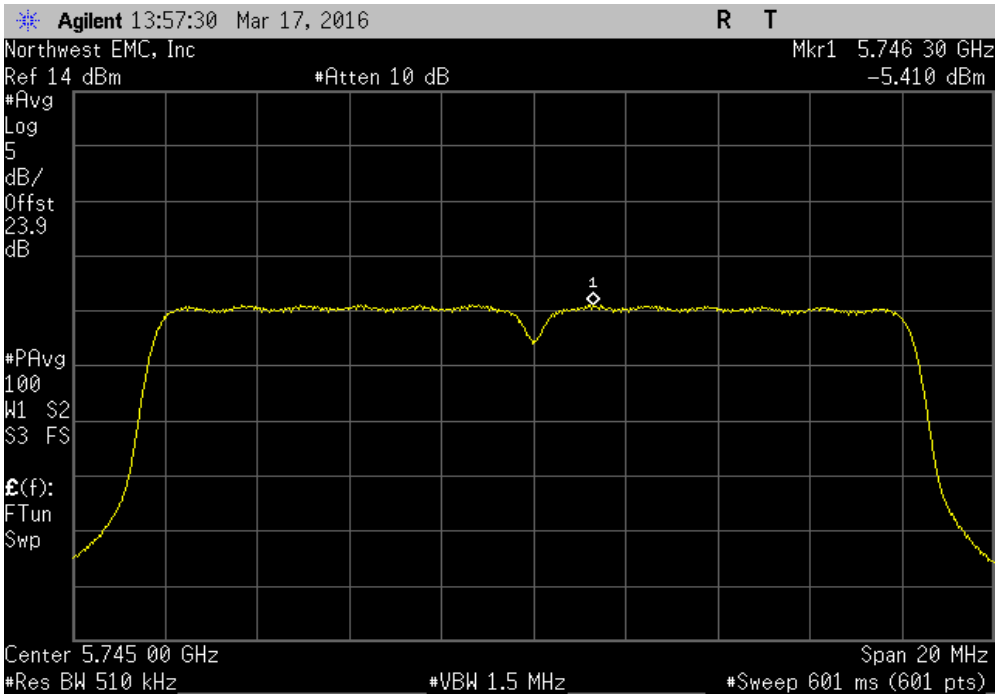


MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

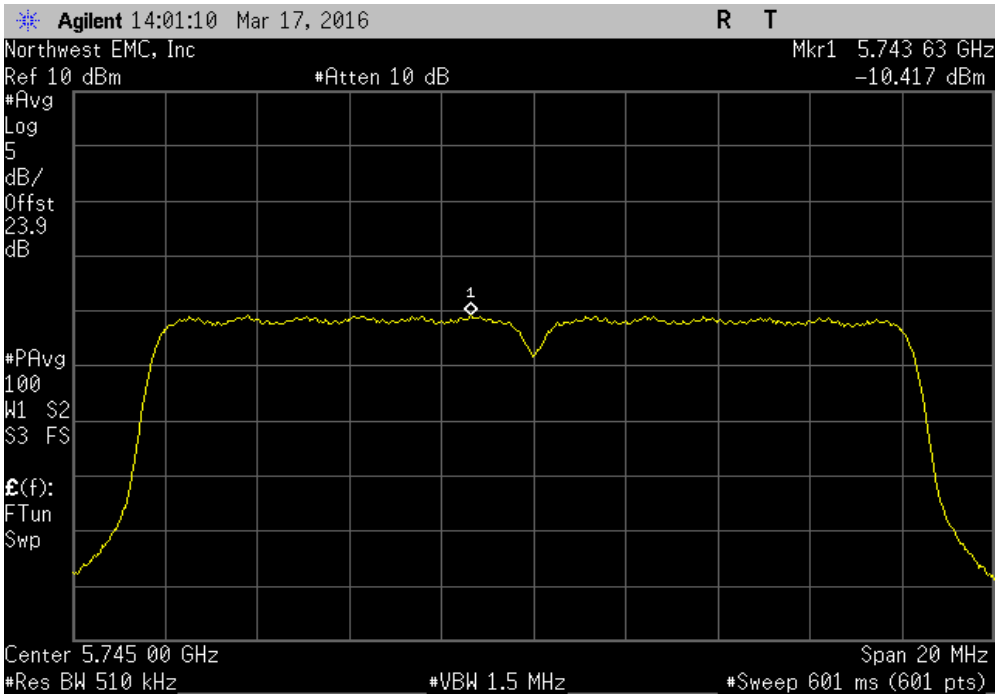
NORTHWEST EMC

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-5.41	7.1		1.7	30	Pass



5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-10.417	8.4		-2	30	Pass

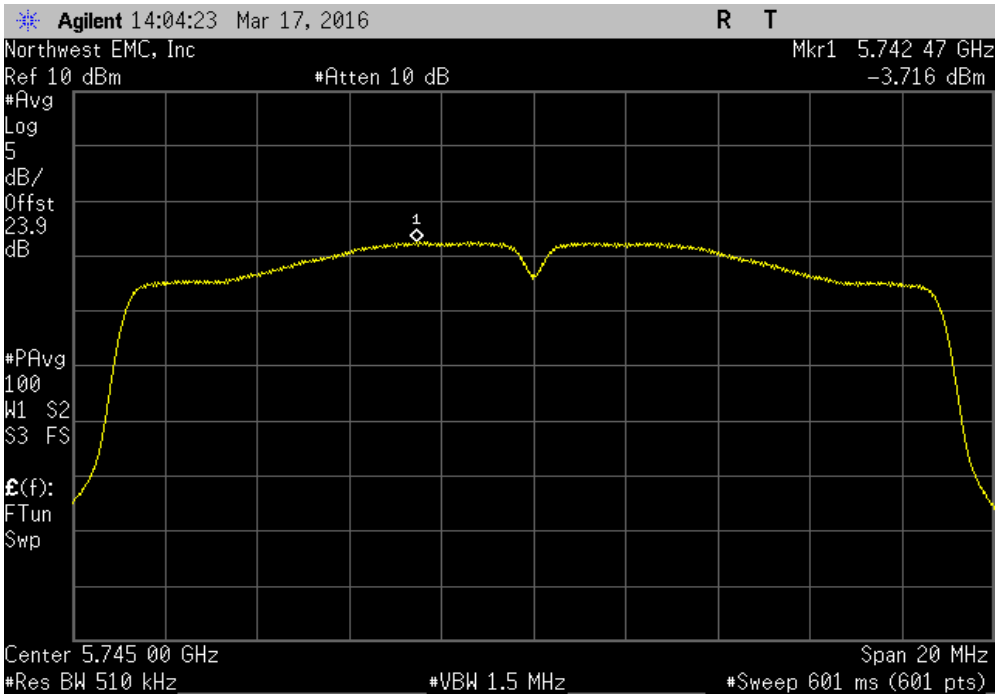


MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

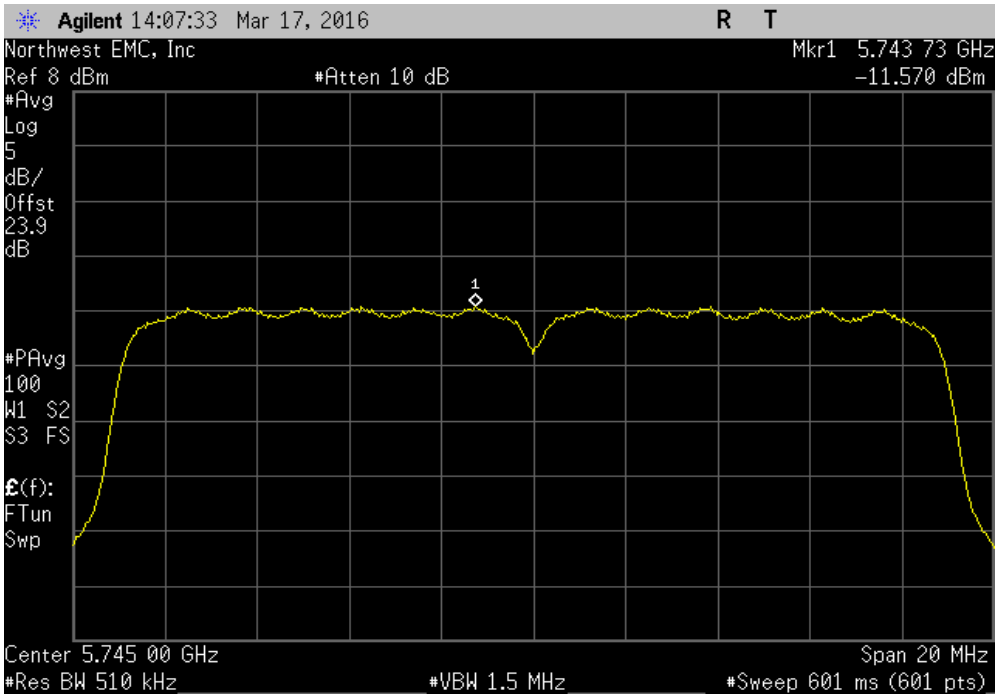
NORTHWEST EMC

XMit 2015.01.14

5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-3.716	2.5		-1.2	30	Pass



5725 - 5785 MHz Band, Low Channel, Ch 149 - 5745 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.57	8.7		-2.9	30	Pass

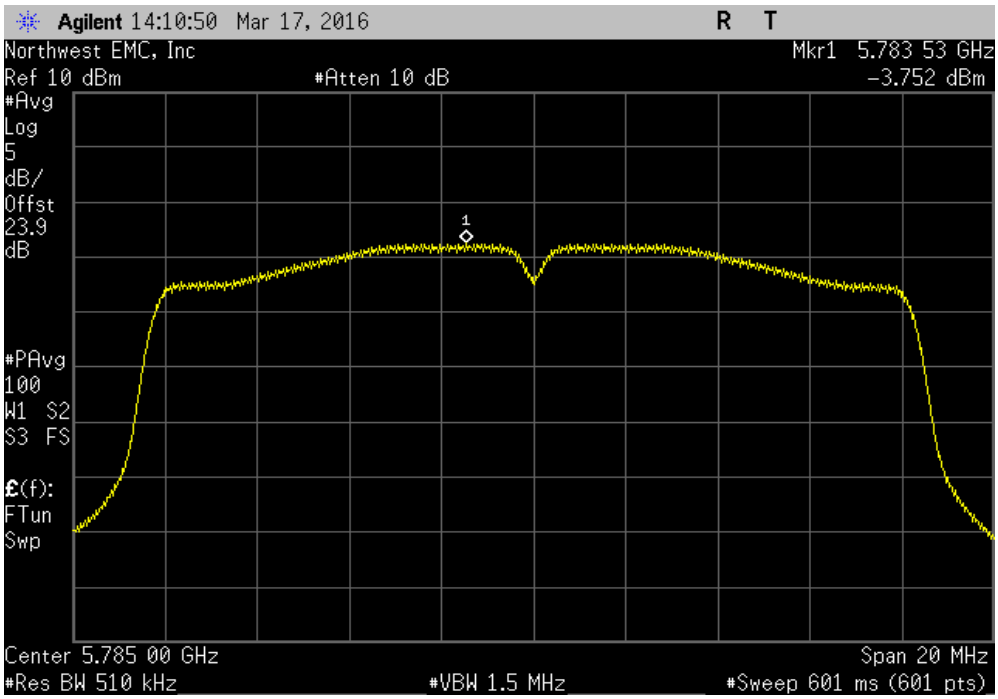


MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

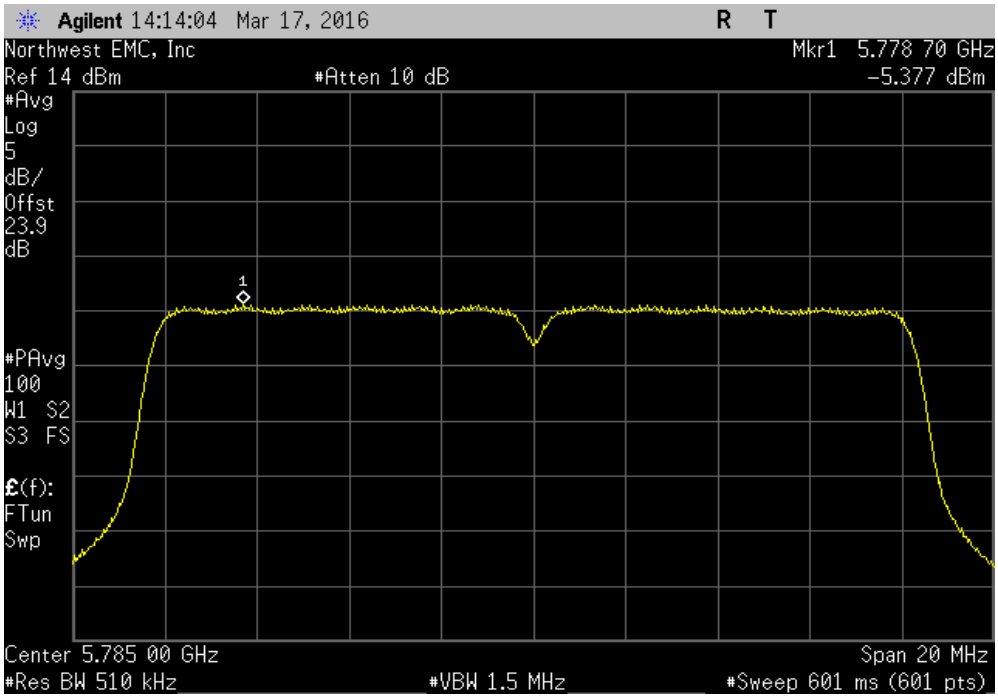
NORTHWEST EMC

XMit 2015.01.14

5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-3.752	2.4		-1.4	30	Pass



5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-5.377	7.1		1.7	30	Pass



MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

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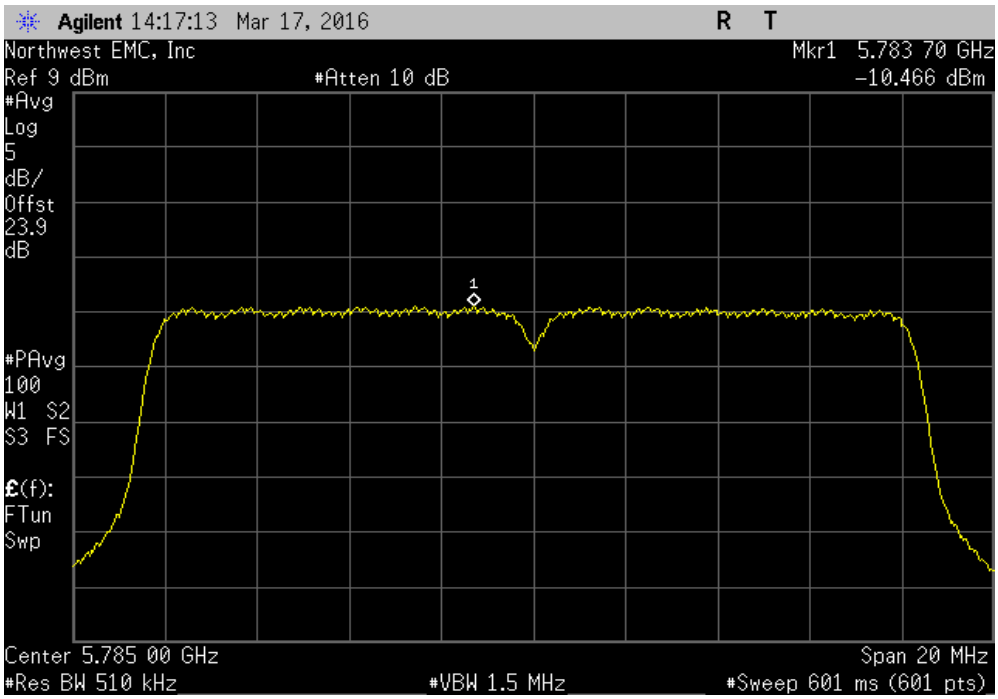
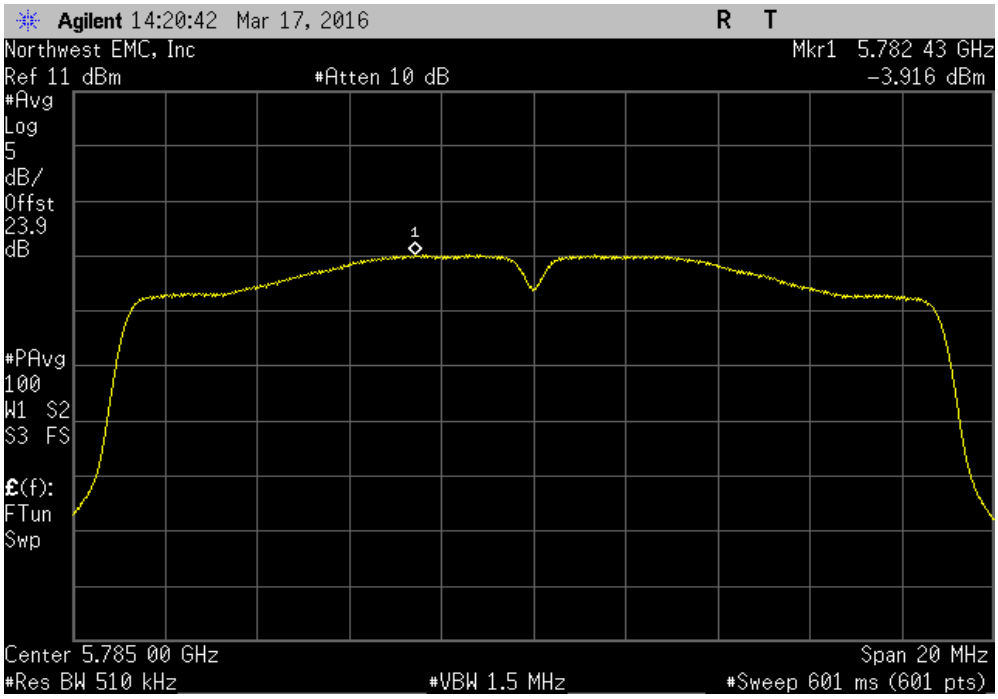
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-10.466	8.4		-2.1	30	Pass



5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-3.916	2.5		-1.4	30	Pass



MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

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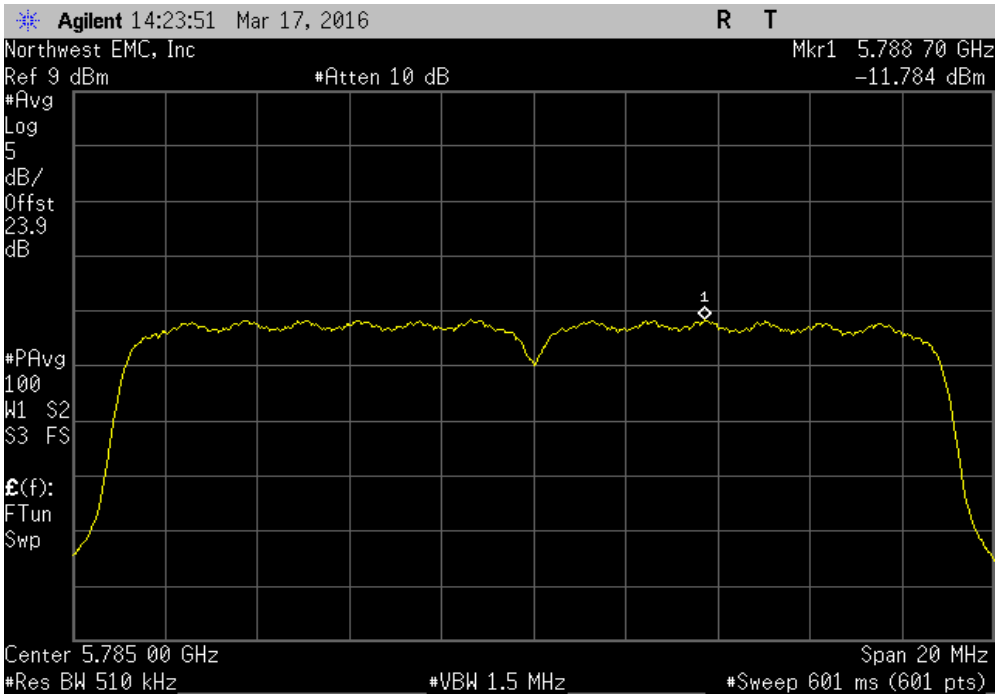
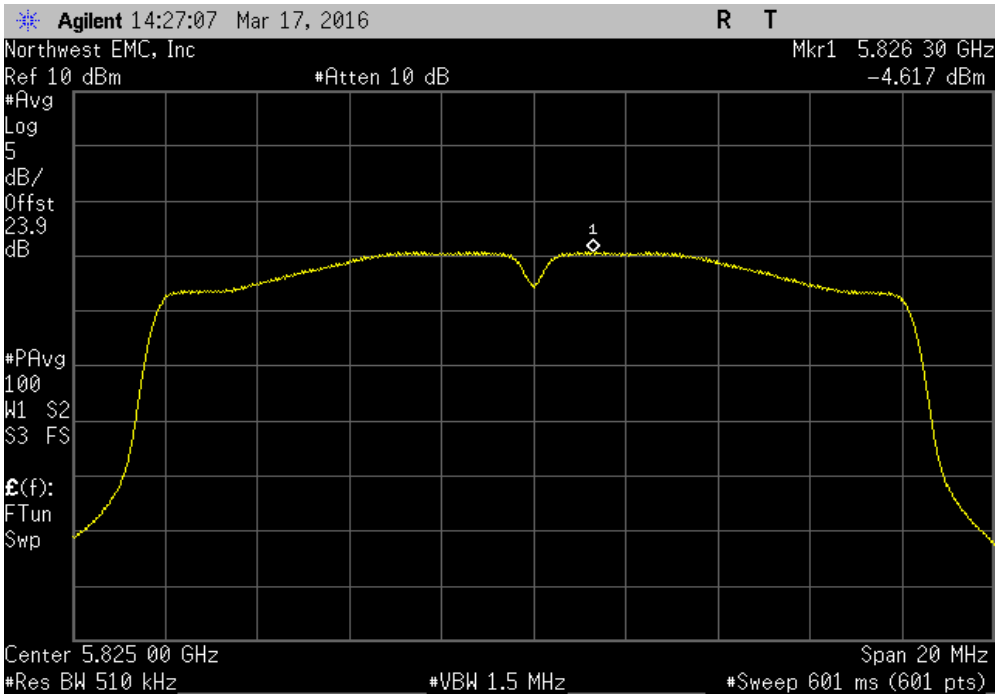
5725 - 5785 MHz Band, Mid Channel, Ch 157 - 5785 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.784	8.7		-3.1	30	Pass



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 6 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-4.617	2.4		-2.3	30	Pass

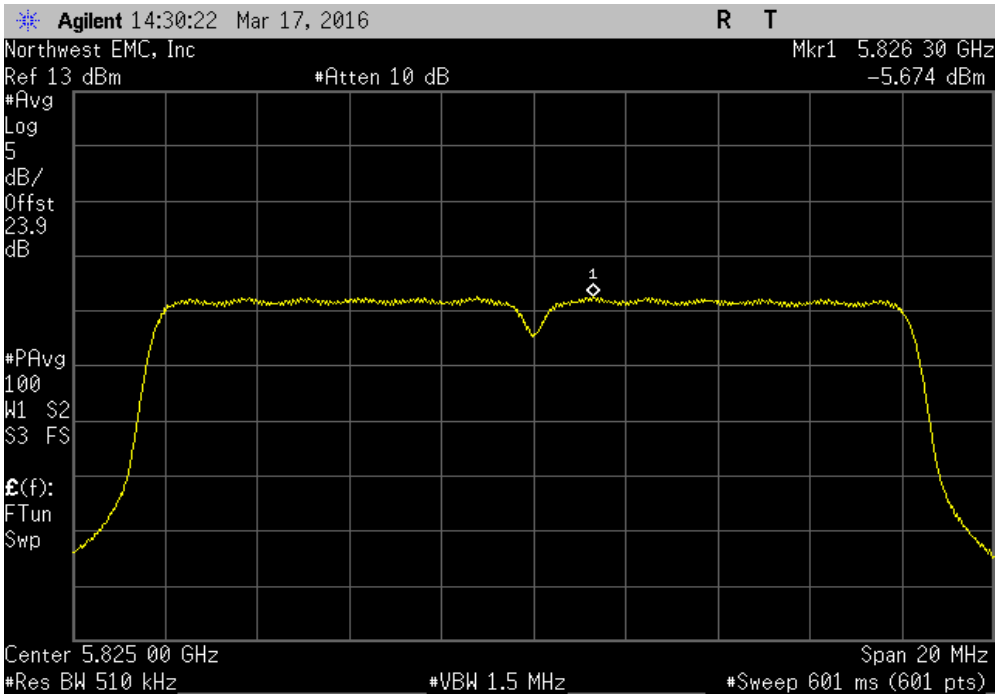


MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

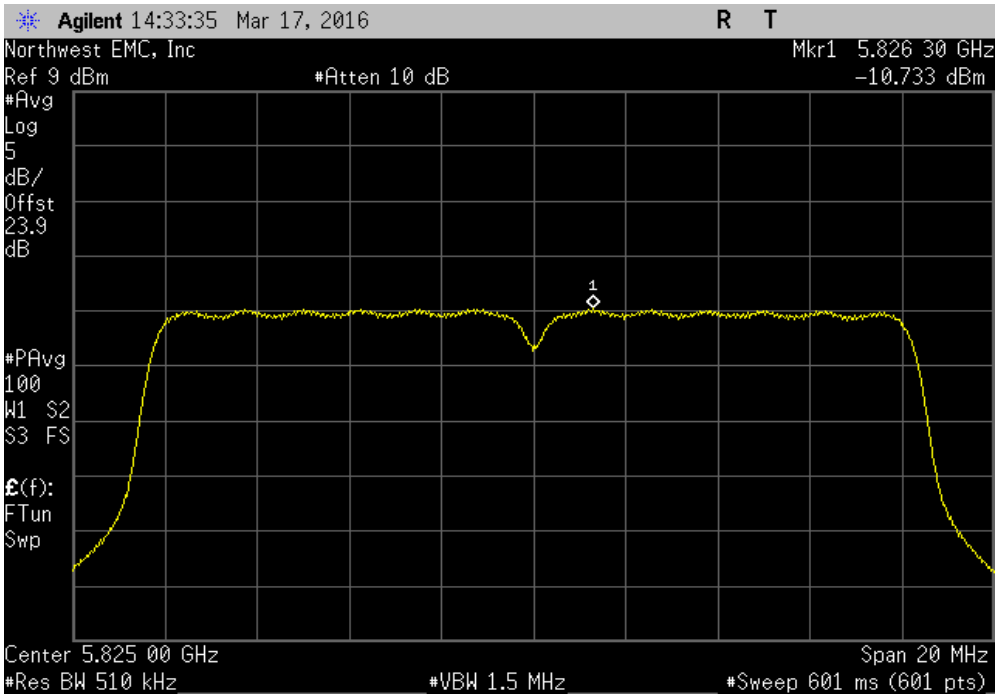
NORTHWEST EMC

XMit 2015.01.14

5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 36 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-5.674	7.1		1.4	30	Pass



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(a) 54 Mbps						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-10.733	8.4		-2.3	30	Pass

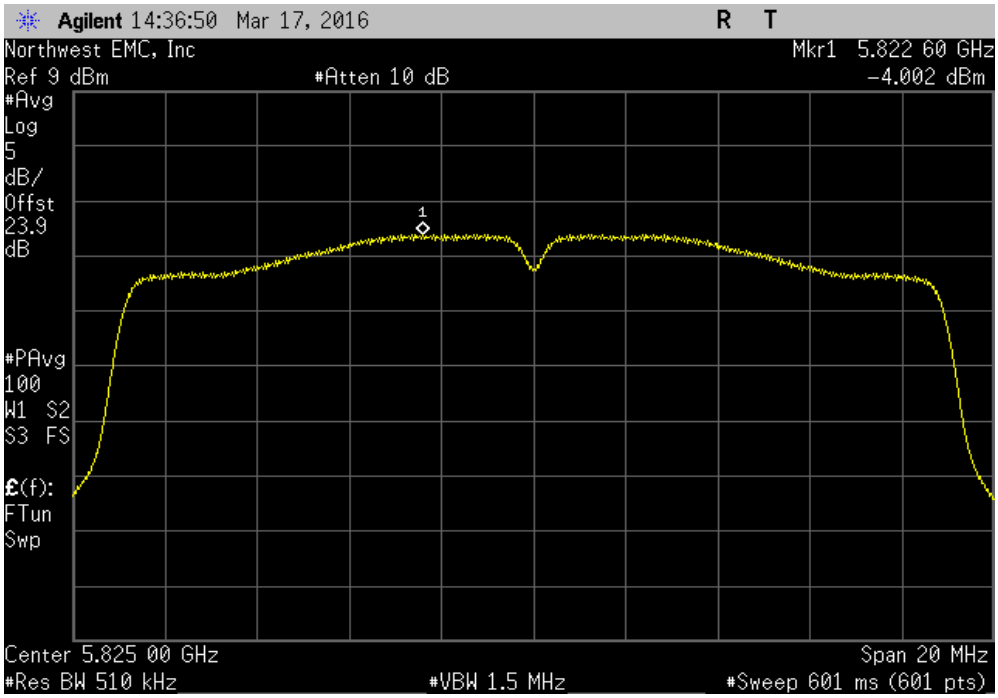


MAXIMUM POWER SPECTRAL DENSITY (5.8 GHz Band)

NORTHWEST EMC

XMit 2015.01.14

5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS0						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-4.002	2.5		-1.5	30	Pass



5725 - 5785 MHz Band, High Channel, Ch 165 - 5825 MHz, 802.11(n) MCS7						
	Power (dBm/MHz)	Duty Cycle Factor (dB)		Density (dBm/MHz)	Limit (dBm / Ref BW	Results
	-11.923	8.6		-3.3	30	Pass