

# NORTHWEST EMC

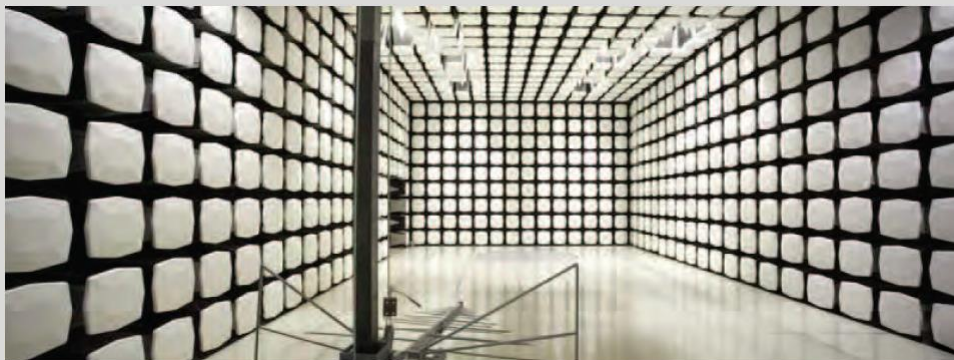
**Masimo Corporation**

**MWM1**

**FCC 15.407:2015**

**802.11a Radio**

**Report # MASI0274.2**



NVLAP Lab Code: 200676-0

*This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America. This Report may only be duplicated in its entirety*

# CERTIFICATE OF TEST

Last Date of Test: August 13, 2015  
Masimo Corporation  
Model: MWM1

## Radio Equipment Testing

### Standards

Specification	Method
FCC 15.407:2015	ANSI C63.10:2013

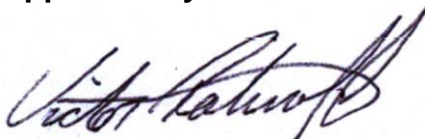
### Results

Method Clause	Test Description	Applied	Results	Comments
6.2	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	N/A	
12.4.1	Emission Bandwidth	Yes	Pass	
12.4.2	Occupied Bandwidth	Yes	Pass	
12.6	Peak Transmit Power	Yes	Pass	
12.5	Peak Power Spectral Density	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:



Victor Ratinoff, 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

Revision Number		Description	Date	Page Number
00		None		

# ACCREDITATIONS AND AUTHORIZATIONS

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## 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

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## Canada

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

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## European Union

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

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## Australia/New Zealand

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

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## Korea

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

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## Japan

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

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## 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.

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## Singapore

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

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## Israel

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

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## Hong Kong

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

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## Vietnam

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

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## 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

## Measurement Uncertainty

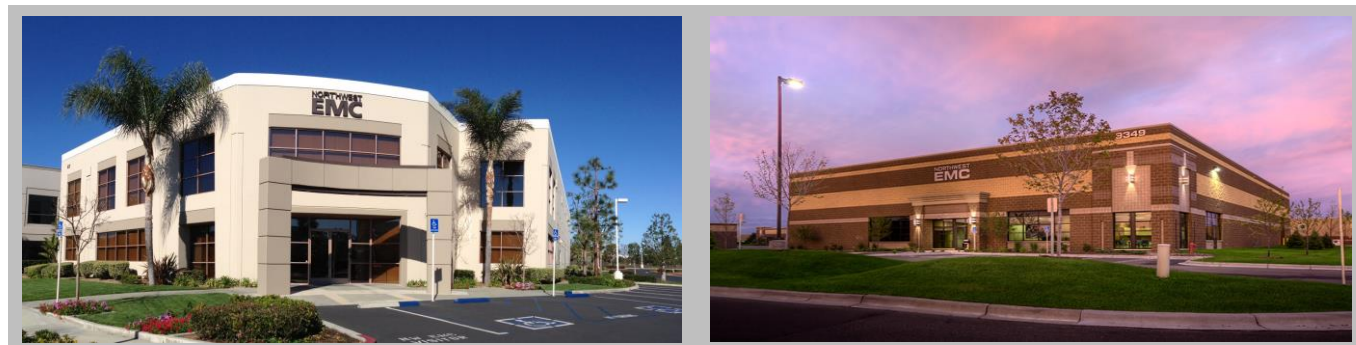
When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement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

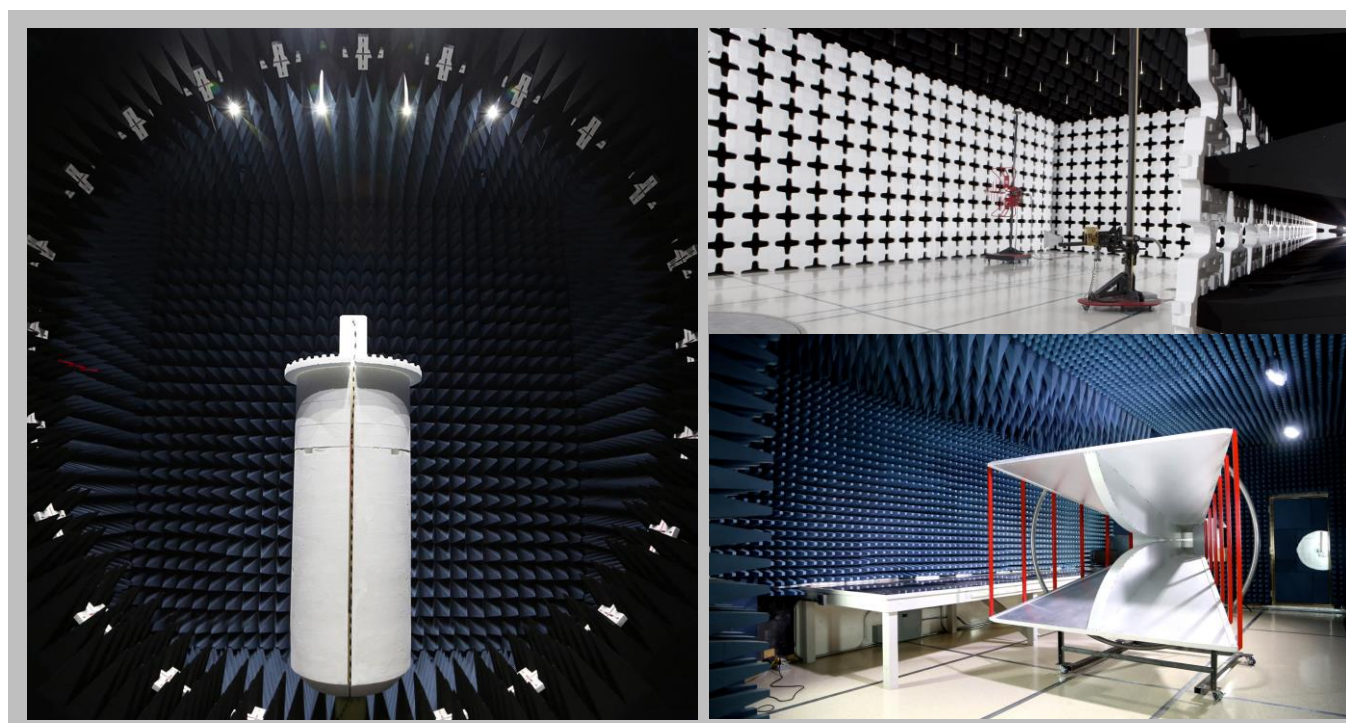
The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

<b>Test</b>	<b>+ MU</b>	<b>- MU</b>
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



<b>California</b> Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	<b>Minnesota</b> Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	<b>New York</b> Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	<b>Oregon</b> Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	<b>Texas</b> Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	<b>Washington</b> Labs NC01-05 19201 120 <sup>th</sup> Ave NE Bothell, WA 9801 (425)984-6600
<b>NVLAP</b>					
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
<b>Industry Canada</b>					
2834B-1, 2834B-3	2834E-1	N/A	2834D-1, 2834D-2	2834G-1	2834F-1
<b>BSMI</b>					
SL2-IN-E-1154R	SL2-IN-E-1152R	N/A	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
<b>VCCI</b>					
A-0029	A-0109	N/A	A-0108	A-0201	A-0110
<b>Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRR, MIC, MOC, NCC, OFCA</b>					
US0158	US0175	N/A	US0017	US0191	US0157



# PRODUCT DESCRIPTION

## Client and Equipment Under Test (EUT) Information

<b>Company Name:</b>	Masimo Corporation
<b>Address:</b>	40 Parker
<b>City, State, Zip:</b>	Irvine, CA 92618
<b>Test Requested By:</b>	Michael Clark
<b>Model:</b>	MWM1
<b>First Date of Test:</b>	August 06, 2015
<b>Last Date of Test:</b>	August 13, 2015
<b>Receipt Date of Samples:</b>	August 06, 2015
<b>Equipment Design Stage:</b>	Production
<b>Equipment Condition:</b>	No Damage

## Information Provided by the Party Requesting the Test

<b>Functional Description of the EUT:</b>
Limited modular wireless radio that can be installed in multiple Masimo devices. Root is a docking station for the Radical-7 handheld monitor. RDS7A/ROOT V2 is a general floor monitor and docking station that the RAD7A/Radical 7 can dock too.
<b>Testing Objective:</b>
To demonstrate compliance of the 802.11 radio under FCC 15.407 for operation in the 5.2 GHz and 5.8 GHz band(s).



# CONFIGURATIONS

## Configuration MASI0274- 1

EUT					
Description	Manufacturer	Model/Part Number	Serial Number		
Wireless Radio	Masimo Corporation	MWM1/Azurewave AW-AH634	36235C		
Peripherals in test setup boundary					
Description	Manufacturer	Model/Part Number	Serial Number		
Pulse Co-Oximeter	Masimo Corporation	RAD7A	1000000349		
Charging and Docking Station	Masimo Corporation	RDS-1	147484		
Laptop	HP	HSTNN-I27N	CNU7300W4L		
Laptop Power Supply	HP	PPP014H-S	F3-08080097580E		
Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8m	No	Charging and Docking Station	AC Mains
USB Cable	No	2.0m	No	Wireless Radio	Laptop
AC Cable	No	1.8m	No	AC Mains	Laptop Power Supply
DC Cable	No	2.0m	Yes	Laptop	Laptop Power Supply

## Configuration MASI0274- 2

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Wireless Radio	Masimo Corporation	MWM1/Azurewave AW-AH634	36235C

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Pulse Co-Oximeter	Masimo Corporation	RAD7A	1000000349
Charging and Docking Station	Masimo Corporation	RDS-1	147484
Finger Sensor	Masimo Corporation	DCI-DC12	9J042
Laptop	HP	HSTNN-I27N	CNU7300W4L
Laptop Power Supply	HP	PPP014H-S	F3-08080097580E

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8m	No	Charging and Docking Station	AC Mains
RS 232	No	1.8m	Yes	Charging and Docking Station	Unterminated
Vue Link Cable	No	1.8m	Yes	Charging and Docking Station	Unterminated
Nursecall Cable	No	1.0m	Yes	Charging and Docking Station	Unterminated
Sp02 Cable	Yes	3.0m	No	Pulse Co-Oximeter	Finger Sensor
Ground Cable	Yes	1.8m	No	Charging and Docking Station	Ground
USB Cable	No	2.0m	No	Wireless Radio	Laptop



# CONFIGURATIONS

## Configuration MASI0275- 1

Software/Firmware Running during test	
Description	Version
RAD7A Software	V 1.1.6.3 i-dm
putty	0.62.0.0

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Wireless Radio	Masimo Corporation	MWM1	1521639422

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Pulse Co-Oximeter	Masimo Corporation	RAD7A	1000000349
Charging and Docking Station	Masimo Corporation	RDS-1	147484
Laptop	HP	HSTNN-I27N	CNU7300W4L
Laptop Power Supply	HP	PPP014H-S	F3-08080097580E

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8m	No	Charging and Docking Station	AC Mains
USB Cable	No	2.0m	No	Wireless Radio	Laptop
AC Cable	No	1.8m	No	AC Mains	Laptop Power Supply
DC Cable	No	2.0m	Yes	Laptop	Laptop Power Supply

# CONFIGURATIONS

## Configuration MASI0275- 2

Software/Firmware Running during test	
Description	Version
RAD7A Software	V 1.1.6.3 i-dm
putty	0.62.0.0

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Wireless Radio	Masimo Corporation	MWM1	1521639422

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Pulse Co-Oximeter	Masimo Corporation	RAD7A	1000000349
Charging and Docking Station	Masimo Corporation	RDS-1	147484
Finger Sensor	Masimo Corporation	DCI-DC12	9J042
Laptop	HP	HSTNN-I27N	CNU7300W4L
Laptop Power Supply	HP	PPP014H-S	F3-08080097580E

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8m	No	Charging and Docking Station	AC Mains
RS 232	No	1.8m	Yes	Charging and Docking Station	Unterminated
Vue Link Cable	No	1.8m	Yes	Charging and Docking Station	Unterminated
Nursecall Cable	No	1.0m	Yes	Charging and Docking Station	Unterminated
Sp02 Cable	Yes	3.0m	No	Pulse Co-Oximeter	Finger Sensor
Ground Cable	Yes	1.8m	No	Charging and Docking Station	Ground
USB Cable	No	2.0m	No	Wireless Radio	Laptop
AC Cable	No	1.8m	No	AC Mains	Laptop Power Supply
DC Cable	No	2.0m	Yes	Laptop	Laptop Power Supply

# MODIFICATIONS

## Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	8/6/2015	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	8/12/2015	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.
3	8/12/2015	Frequency Stability	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	8/12/2015	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.
5	8/12/2015	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	8/12/2015	Peak Transmit 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	8/12/2015	Peak Power Spectral Density	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
8	8/13/2015	Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

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

## MODES OF OPERATION

Operating Continuous Transmit 802.11 a: Low Channel 36 (5180 MHz)  
 Operating Continuous Transmit 802.11 a: High Channel 48 (5240 MHz)  
 Operating Continuous Transmit 802.11 a: Low Channel 149 (5745 MHz)  
 Operating Continuous Transmit 802.11 a: Mid Channel 157 (5785 MHz)  
 Operating Continuous Transmit 802.11 a: High Channel 165 (5825 MHz)

## POWER SETTINGS INVESTIGATED

110VAC/60Hz

## CONFIGURATIONS INVESTIGATED

MASI0275 - 2

## SAMPLE CALCULATIONS

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

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
LISN	Solar Electronics	9252-50-24-BNC	LIA	3/4/2015	12 mo
Attenuator	Pasternack	6N10W-20	AWC	NCR	0 mo
Filter - High Pass	TTE	H97-100K-50-720B	HFP	NCR	0 mo
Cable - Conducted Cable	Northwest EMC	None	OCP	NCR	0 mo
Receiver	Rohde & Schwarz	ESCI	ARG	6/1/2015	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

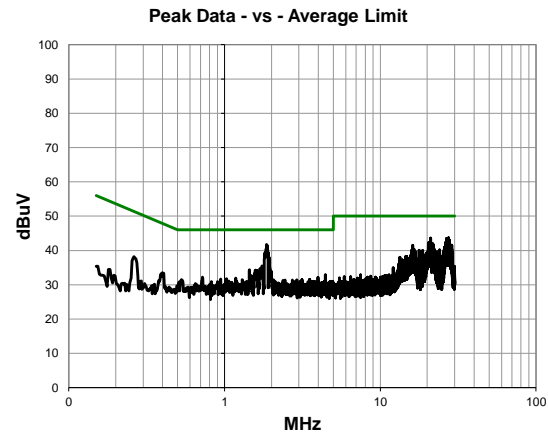
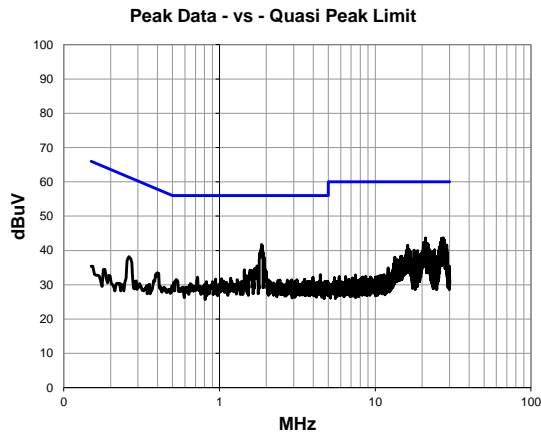
Measurements were made using the bandwidths and detectors specified. No video filter was used.

## TEST DESCRIPTION

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

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: Low Channel 36 (5180 MHz)			
Deviations:	None			
Comments:	Tx Power set to 90.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			
Run #	10	Line:	High Line	Ext. Attenuation:	0	Results	Pass




Peak Data - vs - Quasi Peak Limit

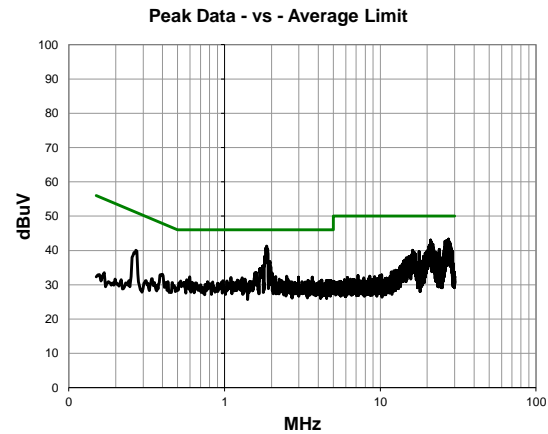
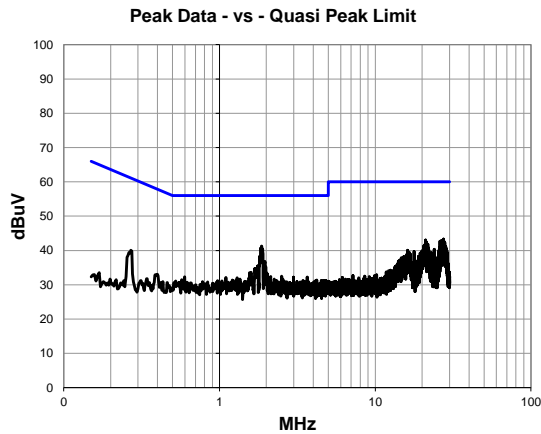
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.862	21.5	20.2	41.7	56.0	-14.3
27.366	21.8	21.9	43.7	60.0	-16.3
21.020	22.4	21.2	43.6	60.0	-16.4
26.642	21.8	21.7	43.5	60.0	-16.5
27.191	21.7	21.8	43.5	60.0	-16.5
27.400	21.2	21.9	43.1	60.0	-16.9
27.127	21.2	21.8	43.0	60.0	-17.0
27.679	21.1	21.9	43.0	60.0	-17.0
27.538	21.1	21.9	43.0	60.0	-17.0
27.474	21.0	21.9	42.9	60.0	-17.1
26.915	21.0	21.8	42.8	60.0	-17.2
26.430	20.8	21.7	42.5	60.0	-17.5
26.862	20.7	21.8	42.5	60.0	-17.5
26.575	20.7	21.7	42.4	60.0	-17.6
20.479	21.2	21.1	42.3	60.0	-17.7
21.087	21.1	21.2	42.3	60.0	-17.7
21.039	21.1	21.2	42.3	60.0	-17.7
26.344	20.5	21.7	42.2	60.0	-17.8
21.128	21.0	21.2	42.2	60.0	-17.8
27.254	20.3	21.9	42.2	60.0	-17.8
20.602	21.0	21.1	42.1	60.0	-17.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.862	21.5	20.2	41.7	46.0	-4.3
27.366	21.8	21.9	43.7	50.0	-6.3
21.020	22.4	21.2	43.6	50.0	-6.4
26.642	21.8	21.7	43.5	50.0	-6.5
27.191	21.7	21.8	43.5	50.0	-6.5
27.400	21.2	21.9	43.1	50.0	-6.9
27.127	21.2	21.8	43.0	50.0	-7.0
27.679	21.1	21.9	43.0	50.0	-7.0
27.538	21.1	21.9	43.0	50.0	-7.0
27.474	21.0	21.9	42.9	50.0	-7.1
26.915	21.0	21.8	42.8	50.0	-7.2
26.430	20.8	21.7	42.5	50.0	-7.5
26.862	20.7	21.8	42.5	50.0	-7.5
26.575	20.7	21.7	42.4	50.0	-7.6
20.479	21.2	21.1	42.3	50.0	-7.7
21.087	21.1	21.2	42.3	50.0	-7.7
21.039	21.1	21.2	42.3	50.0	-7.7
26.344	20.5	21.7	42.2	50.0	-7.8
21.128	21.0	21.2	42.2	50.0	-7.8
27.254	20.3	21.9	42.2	50.0	-7.8
20.602	21.0	21.1	42.1	50.0	-7.9

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
EUT:		MWM1		
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: Low Channel 36 (5180 MHz)			
Deviations:	None			
Comments:	Tx Power set to 90.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			
Run #	11	Line:	Neutral	Ext. Attenuation:	0	Results	Pass




Peak Data - vs - Quasi Peak Limit

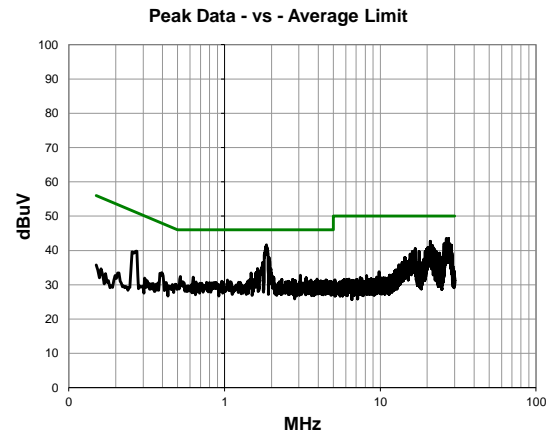
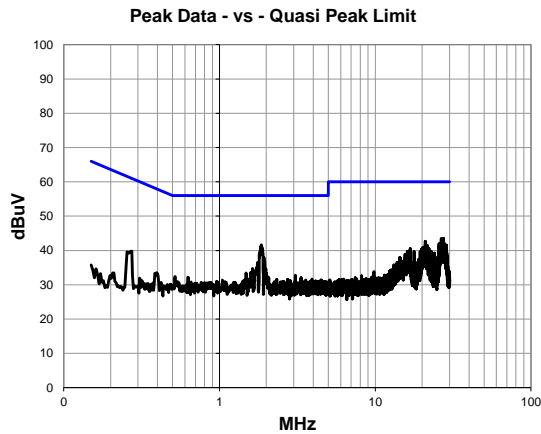
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.862	21.1	20.2	41.3	56.0	-14.7
27.471	21.4	21.9	43.3	60.0	-16.7
21.057	21.9	21.2	43.1	60.0	-16.9
27.329	21.0	21.9	42.9	60.0	-17.1
26.631	21.1	21.7	42.8	60.0	-17.2
26.847	21.0	21.8	42.8	60.0	-17.2
26.568	21.0	21.7	42.7	60.0	-17.3
26.083	21.0	21.6	42.6	60.0	-17.4
21.072	21.4	21.2	42.6	60.0	-17.4
26.709	20.8	21.8	42.6	60.0	-17.4
27.194	20.7	21.8	42.5	60.0	-17.5
27.661	20.6	21.9	42.5	60.0	-17.5
27.541	20.6	21.9	42.5	60.0	-17.5
26.366	20.8	21.7	42.5	60.0	-17.5
21.225	21.3	21.2	42.5	60.0	-17.5
27.702	20.4	21.9	42.3	60.0	-17.7
27.956	20.3	22.0	42.3	60.0	-17.7
26.773	20.5	21.8	42.3	60.0	-17.7
27.224	20.4	21.9	42.3	60.0	-17.7
21.281	21.0	21.2	42.2	60.0	-17.8
21.147	21.0	21.2	42.2	60.0	-17.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.862	21.1	20.2	41.3	46.0	-4.7
27.471	21.4	21.9	43.3	50.0	-6.7
21.057	21.9	21.2	43.1	50.0	-6.9
27.329	21.0	21.9	42.9	50.0	-7.1
26.631	21.1	21.7	42.8	50.0	-7.2
26.847	21.0	21.8	42.8	50.0	-7.2
26.568	21.0	21.7	42.7	50.0	-7.3
26.083	21.0	21.6	42.6	50.0	-7.4
21.072	21.4	21.2	42.6	50.0	-7.4
26.709	20.8	21.8	42.6	50.0	-7.4
27.194	20.7	21.8	42.5	50.0	-7.5
27.661	20.6	21.9	42.5	50.0	-7.5
27.541	20.6	21.9	42.5	50.0	-7.5
26.366	20.8	21.7	42.5	50.0	-7.5
21.225	21.3	21.2	42.5	50.0	-7.5
27.702	20.4	21.9	42.3	50.0	-7.7
27.956	20.3	22.0	42.3	50.0	-7.7
26.773	20.5	21.8	42.3	50.0	-7.7
27.224	20.4	21.9	42.3	50.0	-7.7
21.281	21.0	21.2	42.2	50.0	-7.8
21.147	21.0	21.2	42.2	50.0	-7.8

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: High Channel 48 (5240 MHz)			
Deviations:	None			
Comments:	Tx Power set to 90.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			
Run #	12	Line:	Neutral	Ext. Attenuation:	0	Results	Pass




Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.855	21.4	20.2	41.6	56.0	-14.4
27.400	21.6	21.9	43.5	60.0	-16.5
26.568	21.7	21.7	43.4	60.0	-16.6
27.194	21.0	21.8	42.8	60.0	-17.2
27.441	20.8	21.9	42.7	60.0	-17.3
20.949	21.5	21.2	42.7	60.0	-17.3
27.250	20.7	21.9	42.6	60.0	-17.4
27.347	20.5	21.9	42.4	60.0	-17.6
27.146	20.5	21.8	42.3	60.0	-17.7
27.053	20.5	21.8	42.3	60.0	-17.7
26.937	20.5	21.8	42.3	60.0	-17.7
27.541	20.3	21.9	42.2	60.0	-17.8
26.280	20.5	21.7	42.2	60.0	-17.8
26.780	20.4	21.8	42.2	60.0	-17.8
26.351	20.4	21.7	42.1	60.0	-17.9
26.862	20.3	21.8	42.1	60.0	-17.9
27.814	20.0	22.0	42.0	60.0	-18.0
26.079	20.3	21.6	41.9	60.0	-18.1
1.930	17.7	20.2	37.9	56.0	-18.1
25.691	20.3	21.6	41.9	60.0	-18.1
27.956	19.8	22.0	41.8	60.0	-18.2

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.855	21.4	20.2	41.6	46.0	-4.4
27.400	21.6	21.9	43.5	50.0	-6.5
26.568	21.7	21.7	43.4	50.0	-6.6
27.194	21.0	21.8	42.8	50.0	-7.2
27.441	20.8	21.9	42.7	50.0	-7.3
20.949	21.5	21.2	42.7	50.0	-7.3
27.250	20.7	21.9	42.6	50.0	-7.4
27.347	20.5	21.9	42.4	50.0	-7.6
27.146	20.5	21.8	42.3	50.0	-7.7
27.053	20.5	21.8	42.3	50.0	-7.7
26.937	20.5	21.8	42.3	50.0	-7.7
27.541	20.3	21.9	42.2	50.0	-7.8
26.280	20.5	21.7	42.2	50.0	-7.8
26.780	20.4	21.8	42.2	50.0	-7.8
26.351	20.4	21.7	42.1	50.0	-7.9
26.862	20.3	21.8	42.1	50.0	-7.9
27.814	20.0	22.0	42.0	50.0	-8.0
26.079	20.3	21.6	41.9	50.0	-8.1
1.930	17.7	20.2	37.9	46.0	-8.1
25.691	20.3	21.6	41.9	50.0	-8.1
27.956	19.8	22.0	41.8	50.0	-8.2

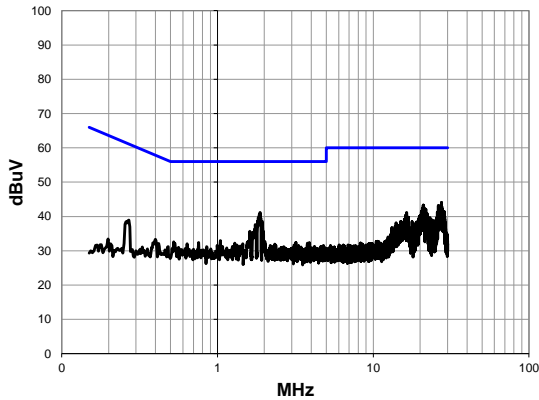


Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: High Channel 48 (5240 MHz)			
Deviations:	None			
Comments:	Tx Power set to 90.			

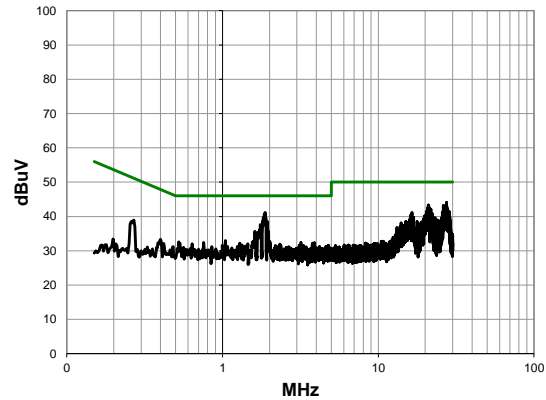
Test Specifications	Test Method
FCC 15.407:2015	ANSI C63.10:2013

Run #	13	Line:	High Line	Ext. Attenuation:	0	Results	Pass
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Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit




Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.874	21.0	20.2	41.2	56.0	-14.8
27.471	22.2	21.9	44.1	60.0	-15.9
20.949	22.2	21.2	43.4	60.0	-16.6
27.168	21.5	21.8	43.3	60.0	-16.7
26.198	21.5	21.7	43.2	60.0	-16.8
21.065	22.0	21.2	43.2	60.0	-16.8
20.998	22.0	21.2	43.2	60.0	-16.8
21.020	21.7	21.2	42.9	60.0	-17.1
27.224	21.0	21.9	42.9	60.0	-17.1
27.545	20.9	21.9	42.8	60.0	-17.2
26.295	21.1	21.7	42.8	60.0	-17.2
27.370	20.9	21.9	42.8	60.0	-17.2
1.937	18.4	20.2	38.6	56.0	-17.4
20.699	21.3	21.1	42.4	60.0	-17.6
26.862	20.6	21.8	42.4	60.0	-17.6
21.225	21.2	21.2	42.4	60.0	-17.6
26.571	20.6	21.7	42.3	60.0	-17.7
27.665	20.3	21.9	42.2	60.0	-17.8
26.344	20.5	21.7	42.2	60.0	-17.8
21.139	21.0	21.2	42.2	60.0	-17.8
21.774	20.9	21.2	42.1	60.0	-17.9

Peak Data - vs - Average Limit

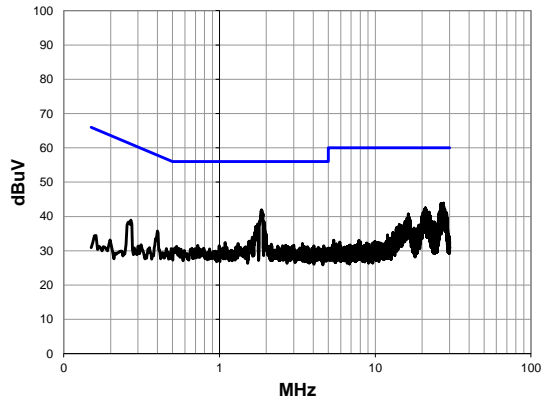
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.874	21.0	20.2	41.2	46.0	-4.8
27.471	22.2	21.9	44.1	50.0	-5.9
20.949	22.2	21.2	43.4	50.0	-6.6
27.168	21.5	21.8	43.3	50.0	-6.7
26.198	21.5	21.7	43.2	50.0	-6.8
21.065	22.0	21.2	43.2	50.0	-6.8
20.998	22.0	21.2	43.2	50.0	-6.8
21.020	21.7	21.2	42.9	50.0	-7.1
27.224	21.0	21.9	42.9	50.0	-7.1
27.545	20.9	21.9	42.8	50.0	-7.2
26.295	21.1	21.7	42.8	50.0	-7.2
27.370	20.9	21.9	42.8	50.0	-7.2
1.937	18.4	20.2	38.6	46.0	-7.4
20.699	21.3	21.1	42.4	50.0	-7.6
26.862	20.6	21.8	42.4	50.0	-7.6
21.225	21.2	21.2	42.4	50.0	-7.6
26.571	20.6	21.7	42.3	50.0	-7.7
27.665	20.3	21.9	42.2	50.0	-7.8
26.344	20.5	21.7	42.2	50.0	-7.8
21.139	21.0	21.2	42.2	50.0	-7.8
21.774	20.9	21.2	42.1	50.0	-7.9

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: Low Channel 149 (5745 MHz)			
Deviations:	None			
Comments:	Tx Power set to 25.			

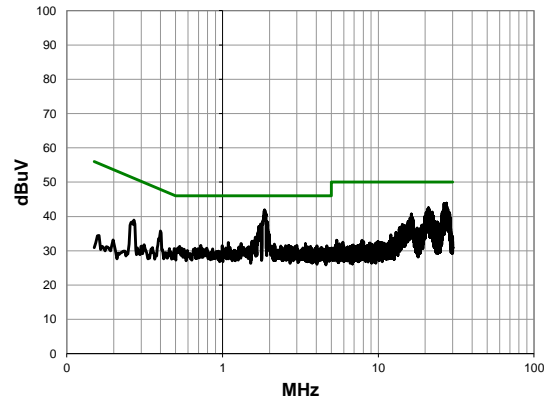
Test Specifications	Test Method
FCC 15.407:2015	ANSI C63.10:2013

Run #	14	Line:	Neutral	Ext. Attenuation:	0	Results	Pass
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Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit




Peak Data - vs - Quasi Peak Limit

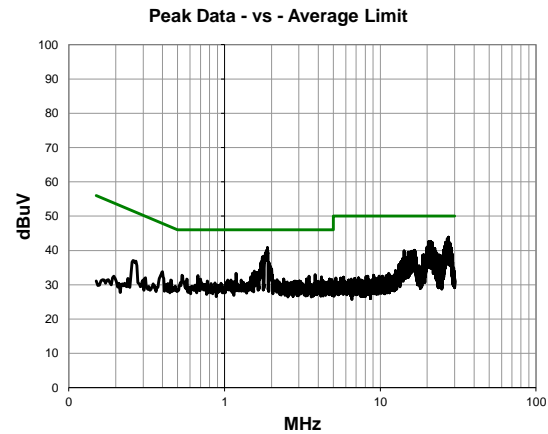
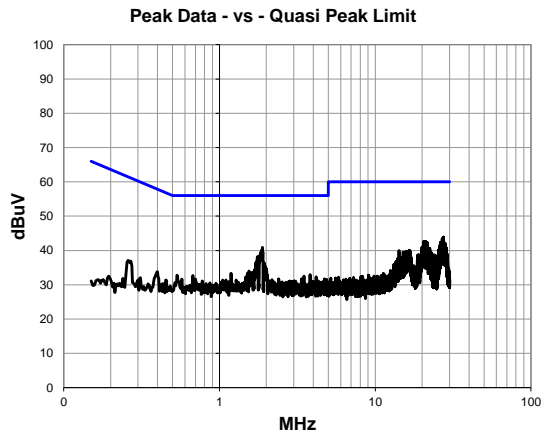
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.859	21.7	20.2	41.9	56.0	-14.1
27.471	22.0	21.9	43.9	60.0	-16.1
26.706	22.0	21.8	43.8	60.0	-16.2
26.359	22.0	21.7	43.7	60.0	-16.3
27.366	21.3	21.9	43.2	60.0	-16.8
26.930	21.1	21.8	42.9	60.0	-17.1
27.594	20.9	21.9	42.8	60.0	-17.2
1.930	18.3	20.2	38.5	56.0	-17.5
26.874	20.7	21.8	42.5	60.0	-17.5
21.001	21.3	21.2	42.5	60.0	-17.5
20.949	21.3	21.2	42.5	60.0	-17.5
27.146	20.6	21.8	42.4	60.0	-17.6
21.076	21.2	21.2	42.4	60.0	-17.6
26.963	20.5	21.8	42.3	60.0	-17.7
27.262	20.4	21.9	42.3	60.0	-17.7
26.646	20.5	21.7	42.2	60.0	-17.8
26.564	20.4	21.7	42.1	60.0	-17.9
27.549	20.2	21.9	42.1	60.0	-17.9
27.956	20.1	22.0	42.1	60.0	-17.9
21.158	20.9	21.2	42.1	60.0	-17.9
20.632	20.9	21.1	42.0	60.0	-18.0

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.859	21.7	20.2	41.9	46.0	-4.1
27.471	22.0	21.9	43.9	50.0	-6.1
26.706	22.0	21.8	43.8	50.0	-6.2
26.359	22.0	21.7	43.7	50.0	-6.3
27.366	21.3	21.9	43.2	50.0	-6.8
26.930	21.1	21.8	42.9	50.0	-7.1
27.594	20.9	21.9	42.8	50.0	-7.2
1.930	18.3	20.2	38.5	46.0	-7.5
26.874	20.7	21.8	42.5	50.0	-7.5
21.001	21.3	21.2	42.5	50.0	-7.5
20.949	21.3	21.2	42.5	50.0	-7.5
27.146	20.6	21.8	42.4	50.0	-7.6
21.076	21.2	21.2	42.4	50.0	-7.6
26.963	20.5	21.8	42.3	50.0	-7.7
27.262	20.4	21.9	42.3	50.0	-7.7
26.646	20.5	21.7	42.2	50.0	-7.8
26.564	20.4	21.7	42.1	50.0	-7.9
27.549	20.2	21.9	42.1	50.0	-7.9
27.956	20.1	22.0	42.1	50.0	-7.9
21.158	20.9	21.2	42.1	50.0	-7.9
20.632	20.9	21.1	42.0	50.0	-8.0

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: Low Channel 149 (5745 MHz)			
Deviations:	None			
Comments:	Tx Power set to 25.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			
Run #	15	Line:	High Line	Ext. Attenuation:	0	Results	Pass




Peak Data - vs - Quasi Peak Limit

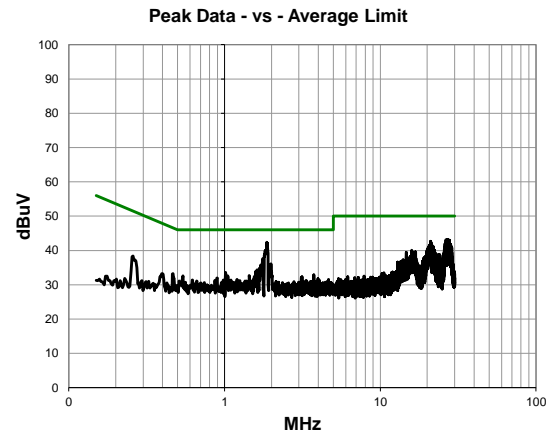
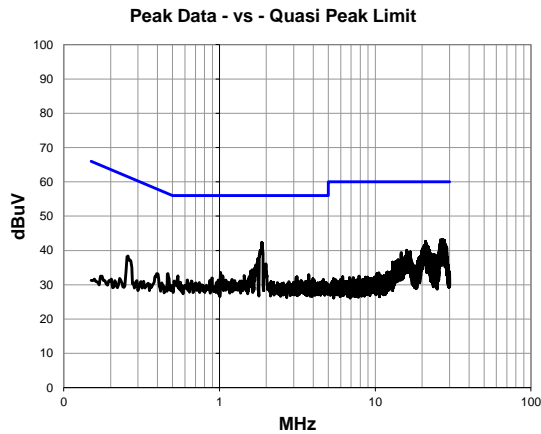
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.885	20.6	20.2	40.8	56.0	-15.2
27.441	22.0	21.9	43.9	60.0	-16.1
27.400	21.6	21.9	43.5	60.0	-16.5
26.911	21.6	21.8	43.4	60.0	-16.6
27.194	21.5	21.8	43.3	60.0	-16.7
27.235	21.4	21.9	43.3	60.0	-16.7
21.087	21.5	21.2	42.7	60.0	-17.3
20.464	21.5	21.1	42.6	60.0	-17.4
27.515	20.7	21.9	42.6	60.0	-17.4
21.143	21.3	21.2	42.5	60.0	-17.5
20.949	21.3	21.2	42.5	60.0	-17.5
27.004	20.6	21.8	42.4	60.0	-17.6
26.295	20.7	21.7	42.4	60.0	-17.6
26.702	20.6	21.8	42.4	60.0	-17.6
1.762	18.1	20.2	38.3	56.0	-17.7
21.576	21.1	21.2	42.3	60.0	-17.7
26.847	20.5	21.8	42.3	60.0	-17.7
26.642	20.5	21.7	42.2	60.0	-17.8
26.568	20.5	21.7	42.2	60.0	-17.8
27.605	20.3	21.9	42.2	60.0	-17.8
20.598	21.0	21.1	42.1	60.0	-17.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.885	20.6	20.2	40.8	46.0	-5.2
27.441	22.0	21.9	43.9	50.0	-6.1
27.400	21.6	21.9	43.5	50.0	-6.5
26.911	21.6	21.8	43.4	50.0	-6.6
27.194	21.5	21.8	43.3	50.0	-6.7
27.235	21.4	21.9	43.3	50.0	-6.7
21.087	21.5	21.2	42.7	50.0	-7.3
20.464	21.5	21.1	42.6	50.0	-7.4
27.515	20.7	21.9	42.6	50.0	-7.4
21.143	21.3	21.2	42.5	50.0	-7.5
20.949	21.3	21.2	42.5	50.0	-7.5
27.004	20.6	21.8	42.4	50.0	-7.6
26.295	20.7	21.7	42.4	50.0	-7.6
26.702	20.6	21.8	42.4	50.0	-7.6
1.762	18.1	20.2	38.3	46.0	-7.7
21.576	21.1	21.2	42.3	50.0	-7.7
26.847	20.5	21.8	42.3	50.0	-7.7
26.642	20.5	21.7	42.2	50.0	-7.8
26.568	20.5	21.7	42.2	50.0	-7.8
27.605	20.3	21.9	42.2	50.0	-7.8
20.598	21.0	21.1	42.1	50.0	-7.9

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: Mid Channel 157 (5785 MHz)			
Deviations:	None			
Comments:	Tx Power set to 25.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			
Run #	16	Line:	High Line	Ext. Attenuation:	0	Results	Pass




Peak Data - vs - Quasi Peak Limit

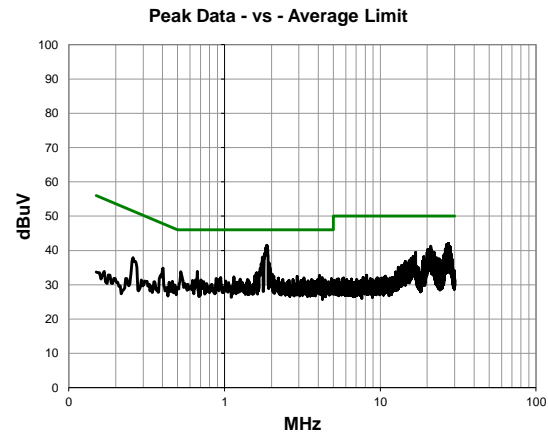
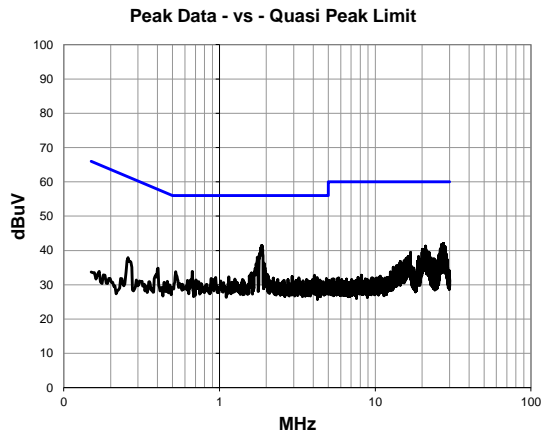
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.866	22.2	20.2	42.4	56.0	-13.6
27.232	21.3	21.9	43.2	60.0	-16.8
26.348	21.4	21.7	43.1	60.0	-16.9
26.885	21.3	21.8	43.1	60.0	-16.9
27.456	21.1	21.9	43.0	60.0	-17.0
27.400	21.1	21.9	43.0	60.0	-17.0
27.817	21.0	22.0	43.0	60.0	-17.0
21.016	21.5	21.2	42.7	60.0	-17.3
27.564	20.5	21.9	42.4	60.0	-17.6
21.158	21.1	21.2	42.3	60.0	-17.7
27.262	20.4	21.9	42.3	60.0	-17.7
26.646	20.5	21.7	42.2	60.0	-17.8
27.053	20.4	21.8	42.2	60.0	-17.8
26.568	20.4	21.7	42.1	60.0	-17.9
21.091	20.9	21.2	42.1	60.0	-17.9
26.422	20.3	21.7	42.0	60.0	-18.0
27.888	20.0	22.0	42.0	60.0	-18.0
21.039	20.8	21.2	42.0	60.0	-18.0
26.721	20.2	21.8	42.0	60.0	-18.0
26.057	20.3	21.6	41.9	60.0	-18.1
27.676	20.0	21.9	41.9	60.0	-18.1

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.866	22.2	20.2	42.4	46.0	-3.6
27.232	21.3	21.9	43.2	50.0	-6.8
26.348	21.4	21.7	43.1	50.0	-6.9
26.885	21.3	21.8	43.1	50.0	-6.9
27.456	21.1	21.9	43.0	50.0	-7.0
27.400	21.1	21.9	43.0	50.0	-7.0
27.817	21.0	22.0	43.0	50.0	-7.0
21.016	21.5	21.2	42.7	50.0	-7.3
27.564	20.5	21.9	42.4	50.0	-7.6
21.158	21.1	21.2	42.3	50.0	-7.7
27.262	20.4	21.9	42.3	50.0	-7.7
26.646	20.5	21.7	42.2	50.0	-7.8
27.053	20.4	21.8	42.2	50.0	-7.8
26.568	20.4	21.7	42.1	50.0	-7.9
21.091	20.9	21.2	42.1	50.0	-7.9
26.422	20.3	21.7	42.0	50.0	-8.0
27.888	20.0	22.0	42.0	50.0	-8.0
21.039	20.8	21.2	42.0	50.0	-8.0
26.721	20.2	21.8	42.0	50.0	-8.0
26.057	20.3	21.6	41.9	50.0	-8.1
27.676	20.0	21.9	41.9	50.0	-8.1

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: Mid Channel 157 (5785 MHz)			
Deviations:	None			
Comments:	Tx Power set to 25.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			
Run #	17	Line:	Neutral	Ext. Attenuation:	0	Results	Pass




Peak Data - vs - Quasi Peak Limit

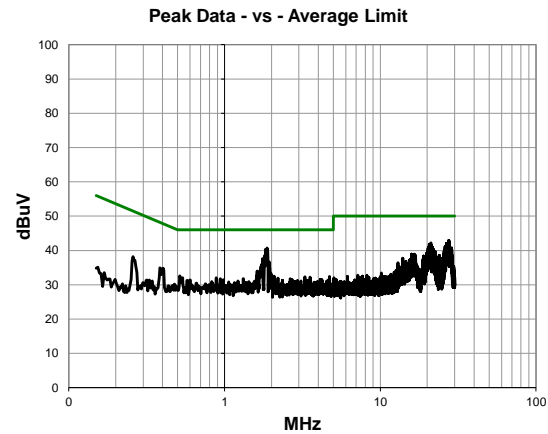
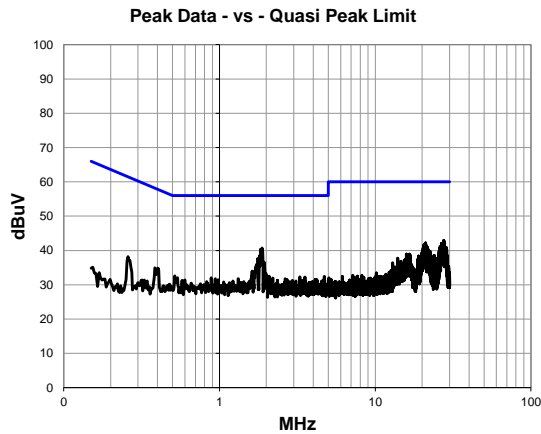
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.855	21.3	20.2	41.5	56.0	-14.5
27.482	20.1	21.9	42.0	60.0	-18.0
1.751	17.8	20.2	38.0	56.0	-18.0
26.639	20.0	21.7	41.7	60.0	-18.3
27.415	19.4	21.9	41.3	60.0	-18.7
21.087	20.1	21.2	41.3	60.0	-18.7
27.515	19.3	21.9	41.2	60.0	-18.8
28.030	19.1	22.0	41.1	60.0	-18.9
26.736	19.3	21.8	41.1	60.0	-18.9
26.847	19.2	21.8	41.0	60.0	-19.0
27.952	18.8	22.0	40.8	60.0	-19.2
27.239	18.7	21.9	40.6	60.0	-19.4
26.348	18.8	21.7	40.5	60.0	-19.5
26.150	18.8	21.7	40.5	60.0	-19.5
27.194	18.6	21.8	40.4	60.0	-19.6
20.845	19.3	21.1	40.4	60.0	-19.6
28.094	18.4	22.0	40.4	60.0	-19.6
20.117	19.3	21.1	40.4	60.0	-19.6
1.930	16.1	20.2	36.3	56.0	-19.7
21.158	19.1	21.2	40.3	60.0	-19.7
20.636	19.1	21.1	40.2	60.0	-19.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.855	21.3	20.2	41.5	46.0	-4.5
27.482	20.1	21.9	42.0	50.0	-8.0
1.751	17.8	20.2	38.0	46.0	-8.0
26.639	20.0	21.7	41.7	50.0	-8.3
27.415	19.4	21.9	41.3	50.0	-8.7
21.087	20.1	21.2	41.3	50.0	-8.7
27.515	19.3	21.9	41.2	50.0	-8.8
28.030	19.1	22.0	41.1	50.0	-8.9
26.736	19.3	21.8	41.1	50.0	-8.9
26.847	19.2	21.8	41.0	50.0	-9.0
27.952	18.8	22.0	40.8	50.0	-9.2
27.239	18.7	21.9	40.6	50.0	-9.4
26.348	18.8	21.7	40.5	50.0	-9.5
26.150	18.8	21.7	40.5	50.0	-9.5
27.194	18.6	21.8	40.4	50.0	-9.6
20.845	19.3	21.1	40.4	50.0	-9.6
28.094	18.4	22.0	40.4	50.0	-9.6
20.117	19.3	21.1	40.4	50.0	-9.6
1.930	16.1	20.2	36.3	46.0	-9.7
21.158	19.1	21.2	40.3	50.0	-9.7
20.636	19.1	21.1	40.2	50.0	-9.8

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: High Channel 165 (5825 MHz)			
Deviations:	None			
Comments:	Tx Power set to 25.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			
Run #	18	Line:	Neutral	Ext. Attenuation:	0	Results	Pass




Peak Data - vs - Quasi Peak Limit

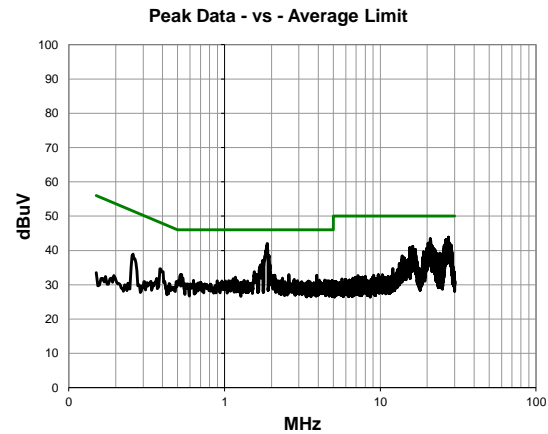
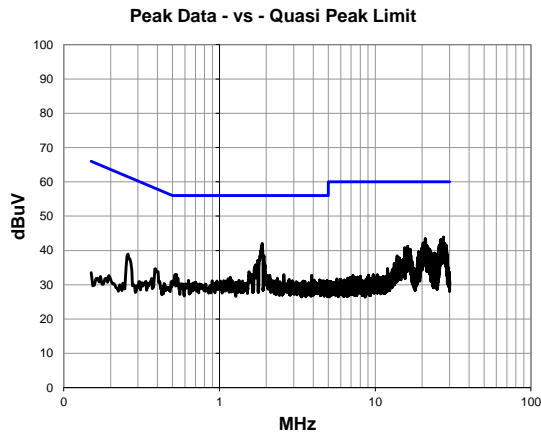
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.877	20.5	20.2	40.7	56.0	-15.3
1.836	20.1	20.2	40.3	56.0	-15.7
27.515	21.0	21.9	42.9	60.0	-17.1
1.810	18.3	20.2	38.5	56.0	-17.5
27.732	20.5	21.9	42.4	60.0	-17.6
27.538	20.5	21.9	42.4	60.0	-17.6
21.091	21.0	21.2	42.2	60.0	-17.8
27.403	20.2	21.9	42.1	60.0	-17.9
26.709	20.3	21.8	42.1	60.0	-17.9
26.650	20.3	21.7	42.0	60.0	-18.0
27.124	20.1	21.8	41.9	60.0	-18.1
21.020	20.7	21.2	41.9	60.0	-18.1
20.636	20.7	21.1	41.8	60.0	-18.2
20.602	20.6	21.1	41.7	60.0	-18.3
27.329	19.8	21.9	41.7	60.0	-18.3
27.243	19.8	21.9	41.7	60.0	-18.3
1.758	17.4	20.2	37.6	56.0	-18.4
27.295	19.7	21.9	41.6	60.0	-18.4
21.225	20.3	21.2	41.5	60.0	-18.5
27.568	19.5	21.9	41.4	60.0	-18.6
27.079	19.5	21.8	41.3	60.0	-18.7

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.877	20.5	20.2	40.7	46.0	-5.3
1.836	20.1	20.2	40.3	46.0	-5.7
27.515	21.0	21.9	42.9	50.0	-7.1
1.810	18.3	20.2	38.5	46.0	-7.5
27.732	20.5	21.9	42.4	50.0	-7.6
27.538	20.5	21.9	42.4	50.0	-7.6
21.091	21.0	21.2	42.2	50.0	-7.8
27.403	20.2	21.9	42.1	50.0	-7.9
26.709	20.3	21.8	42.1	50.0	-7.9
26.650	20.3	21.7	42.0	50.0	-8.0
27.124	20.1	21.8	41.9	50.0	-8.1
21.020	20.7	21.2	41.9	50.0	-8.1
20.636	20.7	21.1	41.8	50.0	-8.2
20.602	20.6	21.1	41.7	50.0	-8.3
27.329	19.8	21.9	41.7	50.0	-8.3
27.243	19.8	21.9	41.7	50.0	-8.3
1.758	17.4	20.2	37.6	46.0	-8.4
27.295	19.7	21.9	41.6	50.0	-8.4
21.225	20.3	21.2	41.5	50.0	-8.5
27.568	19.5	21.9	41.4	50.0	-8.6
27.079	19.5	21.8	41.3	50.0	-8.7

Work Order:	MASI0275	Date:	08/18/15	
Project:	None	Temperature:	23.9 °C	
Job Site:	OC06	Humidity:	44.9% RH	
Serial Number:	1521639422	Barometric Pres.:	1011 mbar	
		Tested by: Mark Baytan		
EUT:	MWM1			
Configuration:	2			
Customer:	Masimo Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Operating Continuous Transmit 802.11 a: High Channel 165 (5825 MHz)			
Deviations:	None			
Comments:	Tx Power set to 25.			

Test Specifications				Test Method			
FCC 15.407:2015				ANSI C63.10:2013			



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.877	21.8	20.2	42.0	56.0	-14.0
27.400	22.0	21.9	43.9	60.0	-16.1
27.362	21.6	21.9	43.5	60.0	-16.5
20.945	22.3	21.2	43.5	60.0	-16.5
26.362	21.4	21.7	43.1	60.0	-16.9
26.269	21.4	21.7	43.1	60.0	-16.9
26.784	21.3	21.8	43.1	60.0	-16.9
21.020	21.8	21.2	43.0	60.0	-17.0
26.859	21.1	21.8	42.9	60.0	-17.1
27.161	21.0	21.8	42.8	60.0	-17.2
26.489	21.1	21.7	42.8	60.0	-17.2
27.444	20.9	21.9	42.8	60.0	-17.2
26.303	21.0	21.7	42.7	60.0	-17.3
27.262	20.8	21.9	42.7	60.0	-17.3
27.194	20.8	21.8	42.6	60.0	-17.4
21.072	21.4	21.2	42.6	60.0	-17.4
26.571	20.8	21.7	42.5	60.0	-17.5
1.930	18.3	20.2	38.5	56.0	-17.5
26.870	20.6	21.8	42.4	60.0	-17.6
27.329	20.5	21.9	42.4	60.0	-17.6
27.612	20.4	21.9	42.3	60.0	-17.7

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.877	21.8	20.2	42.0	46.0	-4.0
27.400	22.0	21.9	43.9	50.0	-6.1
27.362	21.6	21.9	43.5	50.0	-6.5
20.945	22.3	21.2	43.5	50.0	-6.5
26.362	21.4	21.7	43.1	50.0	-6.9
26.269	21.4	21.7	43.1	50.0	-6.9
26.784	21.3	21.8	43.1	50.0	-6.9
21.020	21.8	21.2	43.0	50.0	-7.0
26.859	21.1	21.8	42.9	50.0	-7.1
27.161	21.0	21.8	42.8	50.0	-7.2
26.489	21.1	21.7	42.8	50.0	-7.2
27.444	20.9	21.9	42.8	50.0	-7.2
26.303	21.0	21.7	42.7	50.0	-7.3
27.262	20.8	21.9	42.7	50.0	-7.3
27.194	20.8	21.8	42.6	50.0	-7.4
21.072	21.4	21.2	42.6	50.0	-7.4
26.571	20.8	21.7	42.5	50.0	-7.5
1.930	18.3	20.2	38.5	46.0	-7.5
26.870	20.6	21.8	42.4	50.0	-7.6
27.329	20.5	21.9	42.4	50.0	-7.6
27.612	20.4	21.9	42.3	50.0	-7.7



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

## MODES OF OPERATION

Receive Mode 802.11a: High Channel 165 (5825 MHz)

Receive Mode 802.11a: Mid Channel 157 (5785 MHz)

Receive Mode 802.11a: Low Channel 149 (5745 MHz)

## CONFIGURATIONS INVESTIGATED

MASI0274 - 2

## SAMPLE CALCULATIONS

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

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
LISN	Solar Electronics	9252-50-24-BNC	LIA	3/4/2015	12 mo
Filter - High Pass	TTE	H97-100K-50-720B	HFP	1/27/2015	12 mo
Cable	Northwest EMC	None	OCP	NCR	0 mo
Attenuator	Pasternack	6N10W-20	AWC	12/4/2014	12 mo
Receiver	Rohde & Schwarz	ESCI	ARG	6/1/2015	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

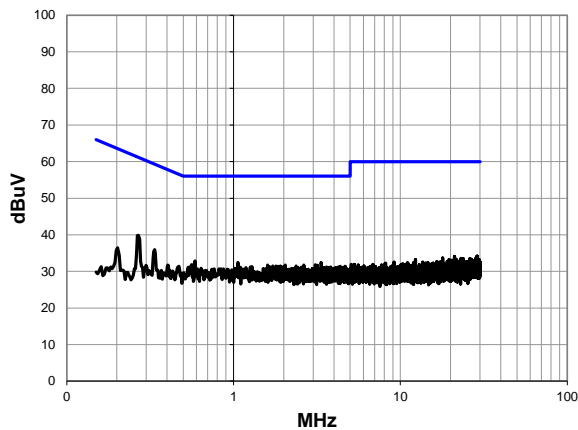
Measurements were made using the bandwidths and detectors specified. No video filter was used.

## TEST DESCRIPTION

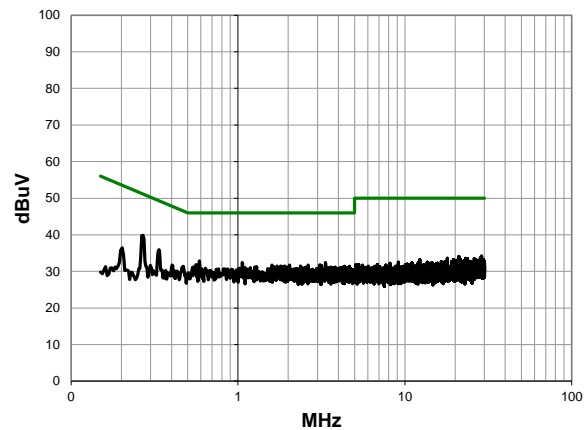
The EUT will be powered either directly or indirectly from the AC power line. Therefore, conducted emissions measurements were made on the AC input of the EUT, or on the AC input of the device used to power the EUT. The AC power line conducted emissions were measured with the EUT operating at the lowest,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

<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/13/15				
<b>Project:</b>	None	<b>Temperature:</b>	23.7 °C				
<b>Job Site:</b>	OC06	<b>Humidity:</b>	43.4% RH				
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar				
<b>EUT:</b>	MWM1						
<b>Configuration:</b>	2						
<b>Customer:</b>	Masimo Corporation						
<b>Attendees:</b>	None						
<b>EUT Power:</b>	230VAC/50Hz						
<b>Operating Mode:</b>	Receive Mode 802.11a: Low Channel 149 (5745 MHz)						
<b>Deviations:</b>	None						
<b>Comments:</b>	TX Power = 25						
<b>Test Specifications</b>		<b>Test Method</b>					
FCC 15.407:2015		ANSI C63.10:2013					
<b>Run #</b>	1	<b>Line:</b>	High Line	<b>Ext. Attenuation:</b>	0	<b>Results</b>	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit




Peak Data - vs - Quasi Peak Limit

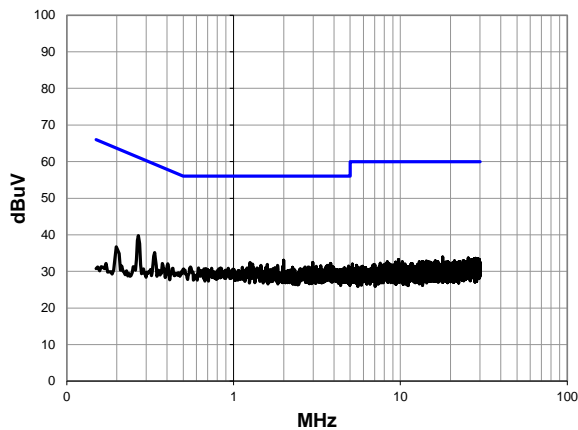
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	19.8	20.1	39.9	61.1	-21.2
0.587	12.8	20.0	32.8	56.0	-23.2
0.337	15.9	20.1	36.0	59.3	-23.3
1.060	12.4	20.1	32.5	56.0	-23.5
3.351	12.1	20.3	32.4	56.0	-23.6
0.564	11.8	20.0	31.8	56.0	-24.2
3.097	11.5	20.3	31.8	56.0	-24.2
2.638	11.5	20.2	31.7	56.0	-24.3
1.598	11.5	20.2	31.7	56.0	-24.3
2.038	11.5	20.2	31.7	56.0	-24.3
3.176	11.3	20.3	31.6	56.0	-24.4
1.721	11.3	20.2	31.5	56.0	-24.5
1.799	11.3	20.2	31.5	56.0	-24.5
1.911	11.3	20.2	31.5	56.0	-24.5
2.374	11.3	20.2	31.5	56.0	-24.5
4.355	11.1	20.3	31.4	56.0	-24.6
4.657	11.1	20.3	31.4	56.0	-24.6
1.855	11.2	20.2	31.4	56.0	-24.6
1.646	11.1	20.2	31.3	56.0	-24.7
1.292	11.2	20.1	31.3	56.0	-24.7

Peak Data - vs - Average Limit

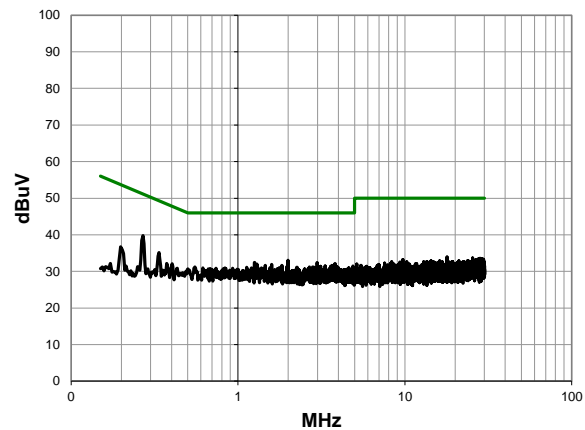
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	19.8	20.1	39.9	51.1	-11.2
0.587	12.8	20.0	32.8	46.0	-13.2
0.337	15.9	20.1	36.0	49.3	-13.3
1.060	12.4	20.1	32.5	46.0	-13.5
3.351	12.1	20.3	32.4	46.0	-13.6
0.564	11.8	20.0	31.8	46.0	-14.2
3.097	11.5	20.3	31.8	46.0	-14.2
2.638	11.5	20.2	31.7	46.0	-14.3
1.598	11.5	20.2	31.7	46.0	-14.3
2.038	11.5	20.2	31.7	46.0	-14.3
3.176	11.3	20.3	31.6	46.0	-14.4
1.721	11.3	20.2	31.5	46.0	-14.5
1.799	11.3	20.2	31.5	46.0	-14.5
1.911	11.3	20.2	31.5	46.0	-14.5
2.374	11.3	20.2	31.5	46.0	-14.5
4.355	11.1	20.3	31.4	46.0	-14.6
4.657	11.1	20.3	31.4	46.0	-14.6
1.855	11.2	20.2	31.4	46.0	-14.6
1.646	11.1	20.2	31.3	46.0	-14.7
1.292	11.2	20.1	31.3	46.0	-14.7

<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/13/15				
<b>Project:</b>	None	<b>Temperature:</b>	23.7 °C				
<b>Job Site:</b>	OC06	<b>Humidity:</b>	43.4% RH				
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar				
<b>EUT:</b>	MWM1	<b>Tested by:</b> Mark Baytan					
<b>Configuration:</b>	2						
<b>Customer:</b>	Masimo Corporation						
<b>Attendees:</b>	None						
<b>EUT Power:</b>	230VAC/50Hz						
<b>Operating Mode:</b>	Receive Mode 802.11a: Low Channel 149 (5745 MHz)						
<b>Deviations:</b>	None						
<b>Comments:</b>	TX Power = 25						
<b>Test Specifications</b>		<b>Test Method</b>					
FCC 15.407:2015		ANSI C63.10:2013					
<b>Run #</b>	2	<b>Line:</b>	Neutral	<b>Ext. Attenuation:</b>	0	<b>Results</b>	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit




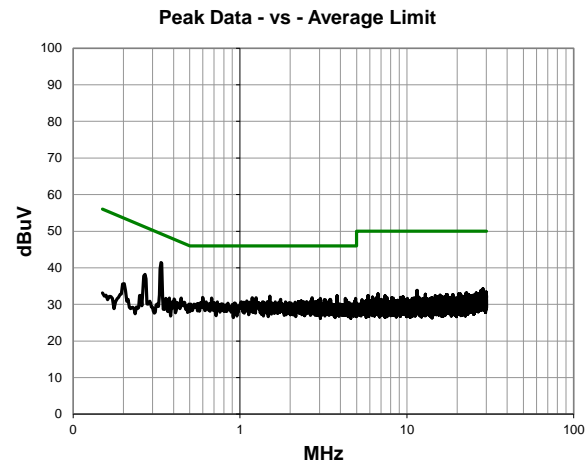
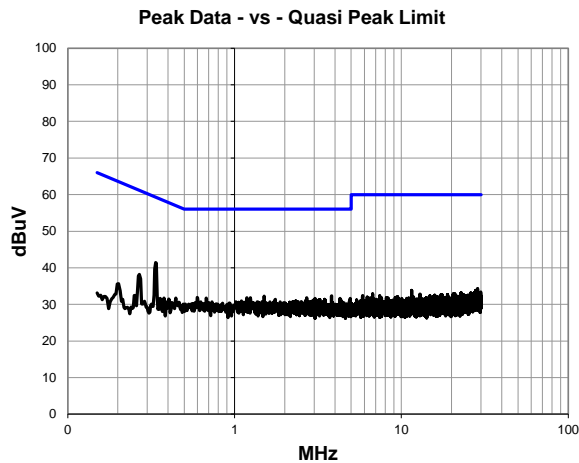
Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	19.7	20.1	39.8	61.1	-21.3
1.997	12.8	20.2	33.0	56.0	-23.0
1.254	12.3	20.1	32.4	56.0	-23.6
2.985	12.1	20.3	32.4	56.0	-23.6
3.825	11.9	20.3	32.2	56.0	-23.8
1.299	11.9	20.1	32.0	56.0	-24.0
1.590	11.7	20.2	31.9	56.0	-24.1
0.337	15.1	20.1	35.2	59.3	-24.1
3.761	11.4	20.3	31.7	56.0	-24.3
1.456	11.5	20.1	31.6	56.0	-24.4
3.646	11.3	20.3	31.6	56.0	-24.4
1.836	11.4	20.2	31.6	56.0	-24.4
3.329	11.2	20.3	31.5	56.0	-24.5
3.720	11.2	20.3	31.5	56.0	-24.5
4.899	11.2	20.3	31.5	56.0	-24.5
3.127	11.1	20.3	31.4	56.0	-24.6
1.967	11.2	20.2	31.4	56.0	-24.6
3.907	11.0	20.3	31.3	56.0	-24.7
2.687	11.0	20.2	31.2	56.0	-24.8
0.553	11.2	20.0	31.2	56.0	-24.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	19.7	20.1	39.8	51.1	-11.3
1.997	12.8	20.2	33.0	46.0	-13.0
1.254	12.3	20.1	32.4	46.0	-13.6
2.985	12.1	20.3	32.4	46.0	-13.6
3.825	11.9	20.3	32.2	46.0	-13.8
1.299	11.9	20.1	32.0	46.0	-14.0
1.590	11.7	20.2	31.9	46.0	-14.1
0.337	15.1	20.1	35.2	49.3	-14.1
3.761	11.4	20.3	31.7	46.0	-14.3
1.456	11.5	20.1	31.6	46.0	-14.4
3.646	11.3	20.3	31.6	46.0	-14.4
1.836	11.4	20.2	31.6	46.0	-14.4
3.329	11.2	20.3	31.5	46.0	-14.5
3.720	11.2	20.3	31.5	46.0	-14.5
4.899	11.2	20.3	31.5	46.0	-14.5
3.127	11.1	20.3	31.4	46.0	-14.6
1.967	11.2	20.2	31.4	46.0	-14.6
3.907	11.0	20.3	31.3	46.0	-14.7
2.687	11.0	20.2	31.2	46.0	-14.8
0.553	11.2	20.0	31.2	46.0	-14.8

<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/13/15				
<b>Project:</b>	None	<b>Temperature:</b>	23.7 °C				
<b>Job Site:</b>	OC06	<b>Humidity:</b>	43.4% RH				
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar				
<b>EUT:</b>	MWM1	<b>Tested by:</b> Mark Baytan					
<b>Configuration:</b>	2						
<b>Customer:</b>	Masimo Corporation						
<b>Attendees:</b>	None						
<b>EUT Power:</b>	230VAC/50Hz						
<b>Operating Mode:</b>	Receive Mode 802.11a: Mid Channel 157 (5785 MHz)						
<b>Deviations:</b>	None						
<b>Comments:</b>	TX Power = 25						
<b>Test Specifications</b>		<b>Test Method</b>					
FCC 15.407:2015		ANSI C63.10:2013					
<b>Run #</b>	3	<b>Line:</b>	Neutral	<b>Ext. Attenuation:</b>	0	<b>Results</b>	Pass




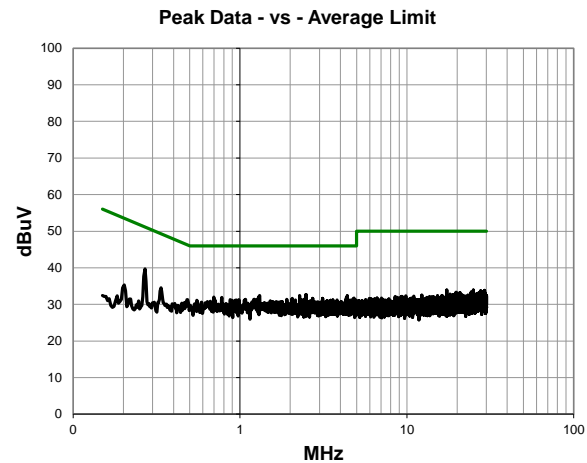
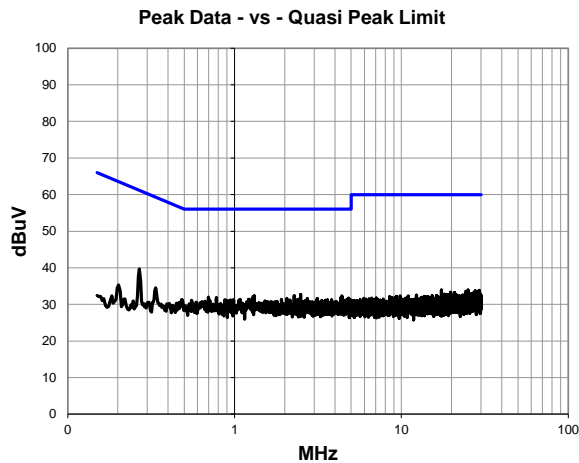
**Peak Data - vs - Quasi Peak Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.337	21.4	20.1	41.5	59.3	-17.8
0.269	18.1	20.1	38.2	61.1	-22.9
3.814	12.0	20.3	32.3	56.0	-23.7
1.508	12.1	20.2	32.3	56.0	-23.7
0.598	11.9	20.0	31.9	56.0	-24.1
2.709	11.6	20.2	31.8	56.0	-24.2
1.183	11.7	20.1	31.8	56.0	-24.2
1.247	11.7	20.1	31.8	56.0	-24.2
0.676	11.7	20.1	31.8	56.0	-24.2
3.030	11.3	20.3	31.6	56.0	-24.4
4.291	11.3	20.3	31.6	56.0	-24.4
4.925	11.3	20.3	31.6	56.0	-24.4
3.470	11.1	20.3	31.4	56.0	-24.6
1.754	11.2	20.2	31.4	56.0	-24.6
3.243	11.0	20.3	31.3	56.0	-24.7
3.202	10.9	20.3	31.2	56.0	-24.8
3.493	10.9	20.3	31.2	56.0	-24.8
2.959	10.8	20.3	31.1	56.0	-24.9
2.672	10.8	20.2	31.0	56.0	-25.0
4.884	10.6	20.3	30.9	56.0	-25.1

**Peak Data - vs - Average Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.337	21.4	20.1	41.5	49.3	-7.8
0.269	18.1	20.1	38.2	51.1	-12.9
3.814	12.0	20.3	32.3	46.0	-13.7
1.508	12.1	20.2	32.3	46.0	-13.7
0.598	11.9	20.0	31.9	46.0	-14.1
2.709	11.6	20.2	31.8	46.0	-14.2
1.183	11.7	20.1	31.8	46.0	-14.2
1.247	11.7	20.1	31.8	46.0	-14.2
0.676	11.7	20.1	31.8	46.0	-14.2
3.030	11.3	20.3	31.6	46.0	-14.4
4.291	11.3	20.3	31.6	46.0	-14.4
4.925	11.3	20.3	31.6	46.0	-14.4
3.470	11.1	20.3	31.4	46.0	-14.6
1.754	11.2	20.2	31.4	46.0	-14.6
3.243	11.0	20.3	31.3	46.0	-14.7
3.202	10.9	20.3	31.2	46.0	-14.8
3.493	10.9	20.3	31.2	46.0	-14.8
2.959	10.8	20.3	31.1	46.0	-14.9
2.672	10.8	20.2	31.0	46.0	-15.0
4.884	10.6	20.3	30.9	46.0	-15.1

<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/13/15			
<b>Project:</b>	None	<b>Temperature:</b>	23.7 °C			
<b>Job Site:</b>	OC06	<b>Humidity:</b>	43.4% RH			
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar			
<b>EUT:</b>	MWM1	<b>Tested by:</b> Mark Baytan				
<b>Configuration:</b>	2					
<b>Customer:</b>	Masimo Corporation					
<b>Attendees:</b>	None					
<b>EUT Power:</b>	230VAC/50Hz					
<b>Operating Mode:</b>	Receive Mode 802.11a: Mid Channel 157 (5785 MHz)					
<b>Deviations:</b>	None					
<b>Comments:</b>	TX Power = 25					
<b>Test Specifications</b>		<b>Test Method</b>				
FCC 15.407:2015		ANSI C63.10:2013				
<b>Run #</b>	4	<b>Line:</b>	High Line	<b>Ext. Attenuation:</b> 0	<b>Results</b>	Pass




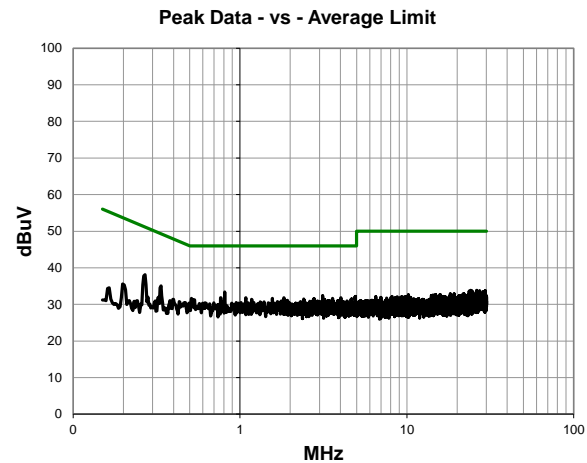
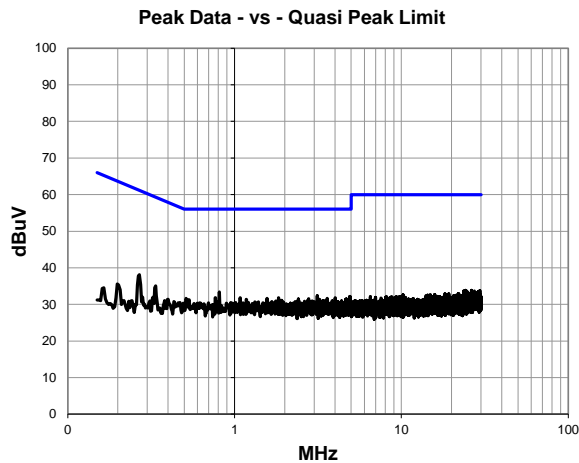
**Peak Data - vs - Quasi Peak Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	19.6	20.1	39.7	61.1	-21.4
2.489	12.5	20.2	32.7	56.0	-23.3
1.310	12.3	20.1	32.4	56.0	-23.6
2.277	12.2	20.2	32.4	56.0	-23.6
4.392	12.0	20.3	32.3	56.0	-23.7
1.292	12.0	20.1	32.1	56.0	-23.9
0.698	11.9	20.1	32.0	56.0	-24.0
0.781	11.8	20.1	31.9	56.0	-24.1
4.347	11.5	20.3	31.8	56.0	-24.2
4.817	11.4	20.3	31.7	56.0	-24.3
2.728	11.4	20.3	31.7	56.0	-24.3
3.127	11.3	20.3	31.6	56.0	-24.4
2.056	11.4	20.2	31.6	56.0	-24.4
4.429	11.2	20.3	31.5	56.0	-24.5
1.273	11.4	20.1	31.5	56.0	-24.5
1.911	11.2	20.2	31.4	56.0	-24.6
2.415	11.2	20.2	31.4	56.0	-24.6
1.079	11.3	20.1	31.4	56.0	-24.6
0.986	11.3	20.0	31.3	56.0	-24.7
4.328	11.0	20.3	31.3	56.0	-24.7

**Peak Data - vs - Average Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	19.6	20.1	39.7	51.1	-11.4
2.489	12.5	20.2	32.7	46.0	-13.3
1.310	12.3	20.1	32.4	46.0	-13.6
2.277	12.2	20.2	32.4	46.0	-13.6
4.392	12.0	20.3	32.3	46.0	-13.7
1.292	12.0	20.1	32.1	46.0	-13.9
0.698	11.9	20.1	32.0	46.0	-14.0
0.781	11.8	20.1	31.9	46.0	-14.1
4.347	11.5	20.3	31.8	46.0	-14.2
4.817	11.4	20.3	31.7	46.0	-14.3
2.728	11.4	20.3	31.7	46.0	-14.3
3.127	11.3	20.3	31.6	46.0	-14.4
2.056	11.4	20.2	31.6	46.0	-14.4
4.429	11.2	20.3	31.5	46.0	-14.5
1.273	11.4	20.1	31.5	46.0	-14.5
1.911	11.2	20.2	31.4	46.0	-14.6
2.415	11.2	20.2	31.4	46.0	-14.6
1.079	11.3	20.1	31.4	46.0	-14.6
0.986	11.3	20.0	31.3	46.0	-14.7
4.328	11.0	20.3	31.3	46.0	-14.7

<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/13/15				
<b>Project:</b>	None	<b>Temperature:</b>	23.7 °C				
<b>Job Site:</b>	OC06	<b>Humidity:</b>	43.4% RH				
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar				
<b>EUT:</b>	MWM1	<b>Tested by:</b> Mark Baytan					
<b>Configuration:</b>	2						
<b>Customer:</b>	Masimo Corporation						
<b>Attendees:</b>	None						
<b>EUT Power:</b>	230VAC/50Hz						
<b>Operating Mode:</b>	Receive Mode 802.11a: High Channel 165 (5825 MHz)						
<b>Deviations:</b>	None						
<b>Comments:</b>	TX Power = 25						
<b>Test Specifications</b>		<b>Test Method</b>					
FCC 15.407:2015		ANSI C63.10:2013					
<b>Run #</b>	5	<b>Line:</b>	High Line	<b>Ext. Attenuation:</b>	0	<b>Results</b>	Pass




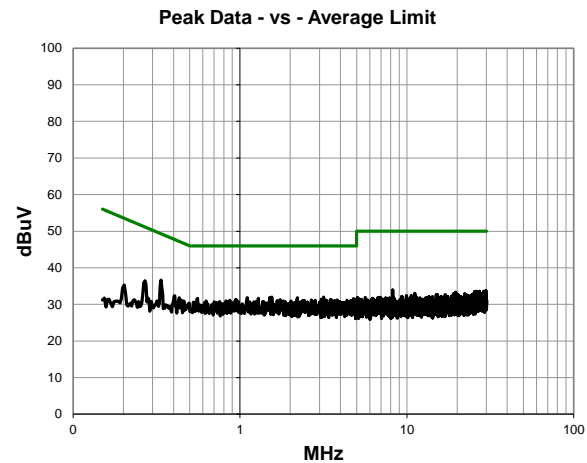
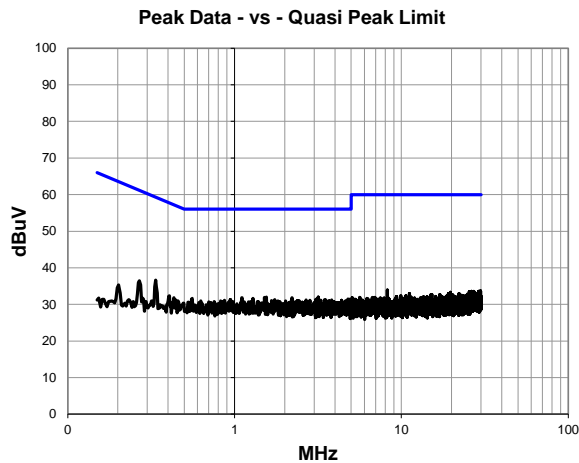
**Peak Data - vs - Quasi Peak Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.810	13.3	20.1	33.4	56.0	-22.6
0.269	18.0	20.1	38.1	61.1	-23.0
3.131	12.0	20.3	32.3	56.0	-23.7
4.910	11.9	20.3	32.2	56.0	-23.8
1.836	11.6	20.2	31.8	56.0	-24.2
4.019	11.5	20.3	31.8	56.0	-24.2
0.766	11.7	20.1	31.8	56.0	-24.2
1.083	11.7	20.1	31.8	56.0	-24.2
0.337	15.0	20.1	35.1	59.3	-24.2
0.512	11.6	20.0	31.6	56.0	-24.4
3.597	11.3	20.3	31.6	56.0	-24.4
1.564	11.4	20.2	31.6	56.0	-24.4
2.776	11.3	20.3	31.6	56.0	-24.4
2.415	11.3	20.2	31.5	56.0	-24.5
4.683	11.2	20.3	31.5	56.0	-24.5
3.213	11.1	20.3	31.4	56.0	-24.6
4.634	11.1	20.3	31.4	56.0	-24.6
1.176	11.3	20.1	31.4	56.0	-24.6
2.747	10.9	20.3	31.2	56.0	-24.8
1.851	10.9	20.2	31.1	56.0	-24.9

**Peak Data - vs - Average Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.810	13.3	20.1	33.4	46.0	-12.6
0.269	18.0	20.1	38.1	51.1	-13.0
3.131	12.0	20.3	32.3	46.0	-13.7
4.910	11.9	20.3	32.2	46.0	-13.8
1.836	11.6	20.2	31.8	46.0	-14.2
4.019	11.5	20.3	31.8	46.0	-14.2
0.766	11.7	20.1	31.8	46.0	-14.2
1.083	11.7	20.1	31.8	46.0	-14.2
0.337	15.0	20.1	35.1	49.3	-14.2
0.512	11.6	20.0	31.6	46.0	-14.4
3.597	11.3	20.3	31.6	46.0	-14.4
1.564	11.4	20.2	31.6	46.0	-14.4
2.776	11.3	20.3	31.6	46.0	-14.4
2.415	11.3	20.2	31.5	46.0	-14.5
4.683	11.2	20.3	31.5	46.0	-14.5
3.213	11.1	20.3	31.4	46.0	-14.6
4.634	11.1	20.3	31.4	46.0	-14.6
1.176	11.3	20.1	31.4	46.0	-14.6
2.747	10.9	20.3	31.2	46.0	-14.8
1.851	10.9	20.2	31.1	46.0	-14.9

<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/13/15				
<b>Project:</b>	None	<b>Temperature:</b>	23.7 °C				
<b>Job Site:</b>	OC06	<b>Humidity:</b>	43.4% RH				
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar				
<b>EUT:</b>	MWM1	<b>Tested by:</b> Mark Baytan					
<b>Configuration:</b>	2						
<b>Customer:</b>	Masimo Corporation						
<b>Attendees:</b>	None						
<b>EUT Power:</b>	230VAC/50Hz						
<b>Operating Mode:</b>	Receive Mode 802.11a: High Channel 165 (5825 MHz)						
<b>Deviations:</b>	None						
<b>Comments:</b>	TX Power = 25						
<b>Test Specifications</b>		<b>Test Method</b>					
FCC 15.407:2015		ANSI C63.10:2013					
<b>Run #</b>	6	<b>Line:</b>	Neutral	<b>Ext. Attenuation:</b>	0	<b>Results</b>	Pass



**Peak Data - vs - Quasi Peak Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.337	16.6	20.1	36.7	59.3	-22.6
3.176	11.7	20.3	32.0	56.0	-24.0
1.553	11.8	20.2	32.0	56.0	-24.0
1.512	11.7	20.2	31.9	56.0	-24.1
2.209	11.6	20.2	31.8	56.0	-24.2
1.105	11.7	20.1	31.8	56.0	-24.2
0.557	11.6	20.0	31.6	56.0	-24.4
1.288	11.5	20.1	31.6	56.0	-24.4
4.776	11.2	20.3	31.5	56.0	-24.5
3.075	11.1	20.3	31.4	56.0	-24.6
3.123	11.1	20.3	31.4	56.0	-24.6
4.866	11.1	20.3	31.4	56.0	-24.6
0.269	16.4	20.1	36.5	61.1	-24.6
0.941	11.3	20.0	31.3	56.0	-24.7
1.743	11.1	20.2	31.3	56.0	-24.7
3.474	11.0	20.3	31.3	56.0	-24.7
2.679	11.0	20.2	31.2	56.0	-24.8
3.523	10.9	20.3	31.2	56.0	-24.8
3.825	10.9	20.3	31.2	56.0	-24.8
0.870	11.1	20.1	31.2	56.0	-24.8

**Peak Data - vs - Average Limit**

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.337	16.6	20.1	36.7	49.3	-12.6
3.176	11.7	20.3	32.0	46.0	-14.0
1.553	11.8	20.2	32.0	46.0	-14.0
1.512	11.7	20.2	31.9	46.0	-14.1
2.209	11.6	20.2	31.8	46.0	-14.2
1.105	11.7	20.1	31.8	46.0	-14.2
0.557	11.6	20.0	31.6	46.0	-14.4
1.288	11.5	20.1	31.6	46.0	-14.4
4.776	11.2	20.3	31.5	46.0	-14.5
3.075	11.1	20.3	31.4	46.0	-14.6
3.123	11.1	20.3	31.4	46.0	-14.6
4.866	11.1	20.3	31.4	46.0	-14.6
0.269	16.4	20.1	36.5	51.1	-14.6
0.941	11.3	20.0	31.3	46.0	-14.7
1.743	11.1	20.2	31.3	46.0	-14.7
3.474	11.0	20.3	31.3	46.0	-14.7
2.679	11.0	20.2	31.2	46.0	-14.8
3.523	10.9	20.3	31.2	46.0	-14.8
3.825	10.9	20.3	31.2	46.0	-14.8
0.870	11.1	20.1	31.2	46.0	-14.8



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

Continuous Transmit 802.11a: Low Channel 149 (5745 MHz), High Channel 165 (5825 MHz)

Continuous Transmit 802.11a: Low Channel 149 (5745 MHz), Mid Channel 157 (5785 MHz), High Channel 165 (5825 MHz)

## POWER SETTINGS INVESTIGATED

110VAC/60Hz

## CONFIGURATIONS INVESTIGATED

MASI0274 - 2

## FREQUENCY RANGE INVESTIGATED

Start Frequency | 30 MHz

Stop Frequency | 40 GHz

## SAMPLE CALCULATIONS

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


## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Low Pass Filter, 0 - 1000 MHz	Micro-Tronics	LPM50004	LFC	11/14/2014	12 mo
Notch Filter, 5.725-5.875 GHz	Micro-Tronics	BRC50705	HFQ	3/4/2015	12 mo
Cable	D-Coax	None	OC4	12/16/2014	12 mo
Pre-Amplifier	Miteq	JSDWK42-18004000-60-5P-HS	PAN	12/16/2014	12 mo
Antenna, Double Ridge Guide Horn	A.H. Systems, Inc.	SAS-574	AXV	4/9/2014	24 mo
OC Floating Cable	Northwest EMC	18-26GHz RE Cables	OCK	2/27/2015	12 mo
OC07 Cables	ESM Cable Corp.	8-18GHz cables	OCY	5/28/2015	12 mo
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVP	9/15/2014	12 mo
Antenna, Horn	EMCO	3160-08	AHK	NCR	0 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVL	9/15/2014	12 mo
Antenna, Horn	ETS Lindgren	3160-07	AHX	NCR	0 mo
OC07 Cables	ESM Cable Corp.	1-8GHz cables	OCX	5/28/2015	12 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVJ	9/15/2014	12 mo
Antenna, Horn (DRG)	ETS Lindgren	3115	AIR	6/4/2014	24 mo
OC07 Cables	ESM Cable Corp.	30-1GHz cables	OCW	6/23/2015	12 mo
Pre-Amplifier	Miteq	AM-1402	AOZ	6/23/2015	12 mo
Antenna, Biconilog	EMCO	3142	AXA	11/25/2013	24 mo
Spectrum Analyzer	Agilent	E4446A	AAY	10/27/2014	12 mo

## TEST DESCRIPTION

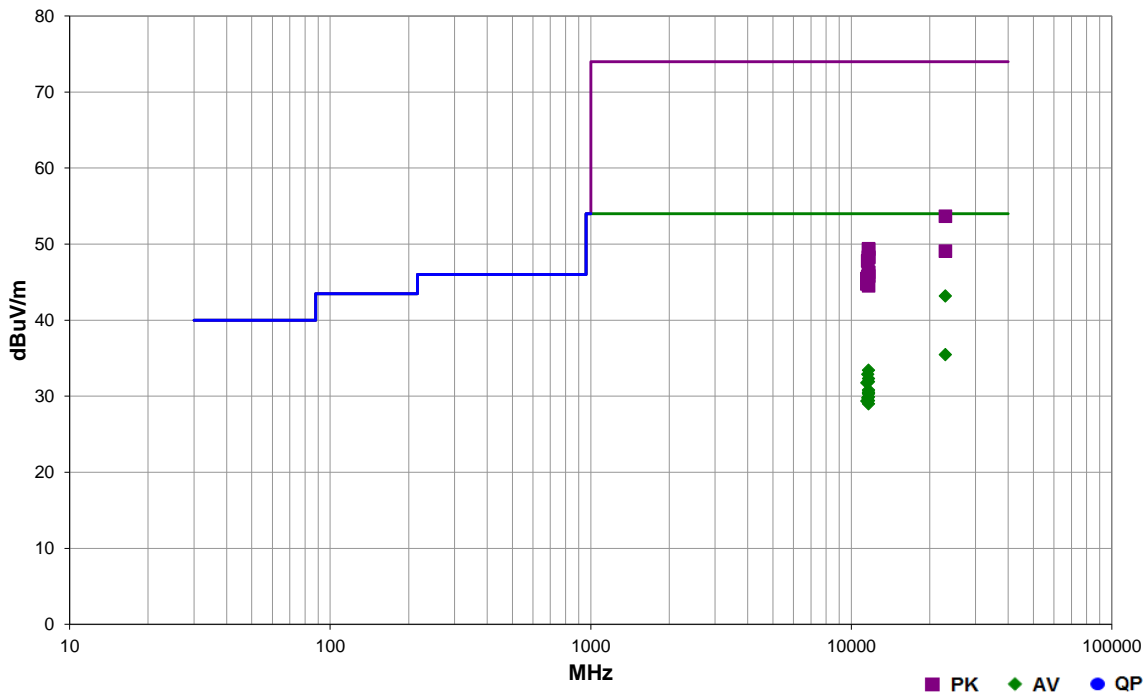
The highest gain antenna of each type to be used with the EUT were tested. The EUT was configured for the lowest, a middle, and the highest transmit frequency in each operational band. For each configuration, the spectrum was scanned throughout the specified range. Measurements were made to satisfy the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

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

Work	MASI0274	Date:	08/06/15	
Project:	None	Temperat	22.5 °C	
Job Site:	OC07	Humidity	51.3% RH	
Serial	521639422	Barometric Pres.:	1011 mbar	
EUT:	MWM1			Tested Mark
Configur	2			
Customer:	Masimo			
Attendee	None			
EUT Power:	110VAC/6			
Operating Mode:	Continuous Transmit 802.11a: Low Channel 149 (5745 MHz), Mid Channel 157 (5785 MHz), High Channel 165 (5825 MHz)			
Deviations:	None			
Comments:	TX Power = 25			

Test	Test
FCC 15.209:2015	ANSI C63.10:2013


Run #	9	Test	3	Antenna	1 to 4(m)	Results	Pass
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Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
22979.990	53.9	-10.7	1.3	186.0	3.0	0.0	Horz	AV	0.0	43.2	54.0	-10.8	Low Ch, 6 Mbps, EUT Horz
22980.100	46.2	-10.7	1.3	139.0	3.0	0.0	Vert	AV	0.0	35.5	54.0	-18.5	Low Ch, 6 Mbps, EUT Horz
22979.860	64.4	-10.7	1.3	186.0	3.0	0.0	Horz	PK	0.0	53.7	74.0	-20.3	Low Ch, 6 Mbps, EUT Horz
11649.970	42.0	-8.6	1.0	221.0	3.0	0.0	Vert	AV	0.0	33.4	54.0	-20.6	High Ch, 6 Mbps, EUT Horz
11569.970	41.7	-8.8	1.0	215.0	3.0	0.0	Vert	AV	0.0	32.9	54.0	-21.1	Mid Ch, 6 Mbps, EUT Horz
11650.040	40.9	-8.6	1.0	227.0	3.0	0.0	Vert	AV	0.0	32.3	54.0	-21.7	High Ch, 6 Mbps, EUT Vert
11650.040	40.5	-8.6	1.0	212.0	3.0	0.0	Vert	AV	0.0	31.9	54.0	-22.1	High Ch, 36 Mbps, EUT Horz
11489.970	40.8	-9.0	1.2	210.0	3.0	0.0	Vert	AV	0.0	31.8	54.0	-22.2	Low Ch, 6 Mbps, EUT Horz
11649.880	39.4	-8.6	1.0	185.0	3.0	0.0	Horz	AV	0.0	30.8	54.0	-23.2	High Ch, 6 Mbps, EUT on Side
11649.980	39.1	-8.6	1.0	159.0	3.0	0.0	Horz	AV	0.0	30.5	54.0	-23.5	High Ch, 6 Mbps, EUT Vert
11649.960	39.0	-8.6	3.5	249.0	3.0	0.0	Horz	AV	0.0	30.4	54.0	-23.6	High Ch, 54 Mbps, EUT Horz
11649.920	38.9	-8.6	1.0	210.0	3.0	0.0	Vert	AV	0.0	30.3	54.0	-23.7	High Ch, 54 Mbps, EUT Horz
11650.100	38.5	-8.6	2.3	298.0	3.0	0.0	Horz	AV	0.0	29.9	54.0	-24.1	High Ch, 6 Mbps, EUT Horz
11569.990	38.6	-8.8	3.7	297.0	3.0	0.0	Horz	AV	0.0	29.8	54.0	-24.2	Mid Ch, 6 Mbps, EUT Horz
11650.520	58.0	-8.6	1.0	227.0	3.0	0.0	Vert	PK	0.0	49.4	74.0	-24.6	High Ch, 6 Mbps, EUT Vert
11648.760	38.0	-8.6	3.5	280.0	3.0	0.0	Horz	AV	0.0	29.4	54.0	-24.6	High Ch, 36 Mbps, EUT Horz
11490.030	38.4	-9.0	1.2	46.0	3.0	0.0	Horz	AV	0.0	29.4	54.0	-24.6	Low Ch, 6 Mbps, EUT Horz
11652.040	57.9	-8.6	1.0	212.0	3.0	0.0	Vert	PK	0.0	49.3	74.0	-24.7	High Ch, 36 Mbps, EUT Horz
22979.320	59.8	-10.7	1.3	139.0	3.0	0.0	Vert	PK	0.0	49.1	74.0	-24.9	Low Ch, 6 Mbps, EUT Horz
11649.950	37.6	-8.6	1.0	307.0	3.0	0.0	Vert	AV	0.0	29.0	54.0	-25.0	High Ch, 6 Mbps, EUT on Side
11650.280	56.9	-8.6	1.0	221.0	3.0	0.0	Vert	PK	0.0	48.3	74.0	-25.7	High Ch, 6 Mbps, EUT Horz

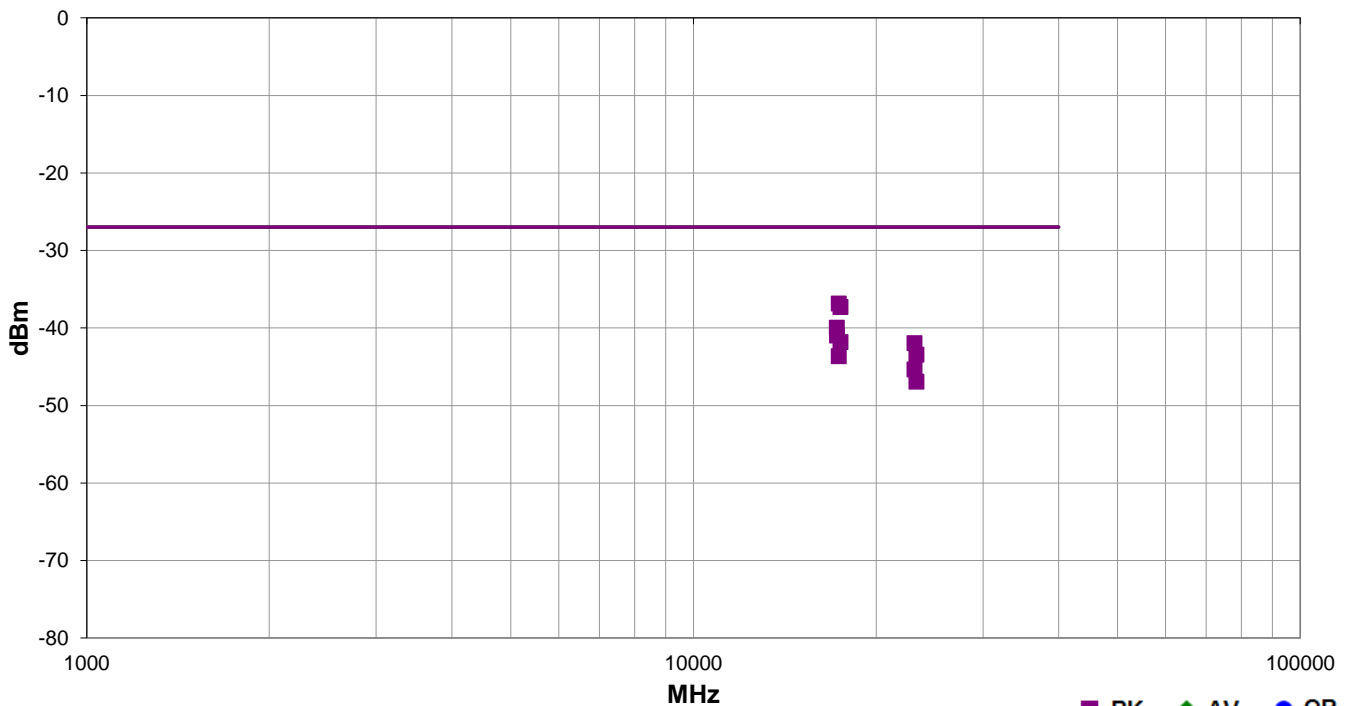
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
11649.380	56.9	-8.6	1.0	210.0	3.0	0.0	Vert	PK	0.0	48.3	74.0	-25.7	High Ch, 54 Mbps, EUT Horz
11650.070	56.8	-8.6	3.5	249.0	3.0	0.0	Horz	PK	0.0	48.2	74.0	-25.8	High Ch, 54 Mbps, EUT Horz
11569.830	56.6	-8.8	1.0	215.0	3.0	0.0	Vert	PK	0.0	47.8	74.0	-26.2	Mid Ch, 6 Mbps, EUT Horz
11650.230	54.9	-8.6	2.3	298.0	3.0	0.0	Horz	PK	0.0	46.3	74.0	-27.7	High Ch, 6 Mbps, EUT Horz
11649.130	54.9	-8.6	1.0	185.0	3.0	0.0	Horz	PK	0.0	46.3	74.0	-27.7	High Ch, 6 Mbps, EUT on Side
11650.400	54.4	-8.6	1.0	159.0	3.0	0.0	Horz	PK	0.0	45.8	74.0	-28.2	High Ch, 6 Mbps, EUT Vert
11650.270	54.4	-8.6	3.5	280.0	3.0	0.0	Horz	PK	0.0	45.8	74.0	-28.2	High Ch, 36 Mbps, EUT Horz
11569.660	54.5	-8.8	3.7	297.0	3.0	0.0	Horz	PK	0.0	45.7	74.0	-28.3	Mid Ch, 6 Mbps, EUT Horz
11489.440	54.5	-9.0	1.2	210.0	3.0	0.0	Vert	PK	0.0	45.5	74.0	-28.5	Low Ch, 6 Mbps, EUT Horz
11489.180	53.8	-9.0	1.2	46.0	3.0	0.0	Horz	PK	0.0	44.8	74.0	-29.2	Low Ch, 6 Mbps, EUT Horz
11650.460	53.1	-8.6	1.0	307.0	3.0	0.0	Vert	PK	0.0	44.5	74.0	-29.5	High Ch, 6 Mbps, EUT on Side

## SPURIOUS RADIATED EMISSIONS


<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/06/15	
<b>Project:</b>	None	<b>Temperature:</b>	22.5 °C	
<b>Job Site:</b>	OC07	<b>Humidity:</b>	51.3% RH	
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar	
<b>EUT:</b>	MWM1	<b>Tested by:</b> Mark Baytan		
<b>Configuration:</b>	2			
<b>Customer:</b>	Masimo Corporation			
<b>Attendees:</b>	None			
<b>EUT Power:</b>	110VAC/60Hz			
<b>Operating Mode:</b>	Continuous Transmit 802.11a: Low Channel 149 (5745 MHz), Mid Channel 157 (5785 MHz), High Channel 165 (5825 MHz)			
<b>Deviations:</b>	None			
<b>Comments:</b>	TX Power = 25			

Test Specifications	Test Method
FCC 15.407:2015	ANSI C63.10:2013

Run #	12	Test Distance (m)	3	Antenna Height(s)	1 to 4(m)	Results	Pass
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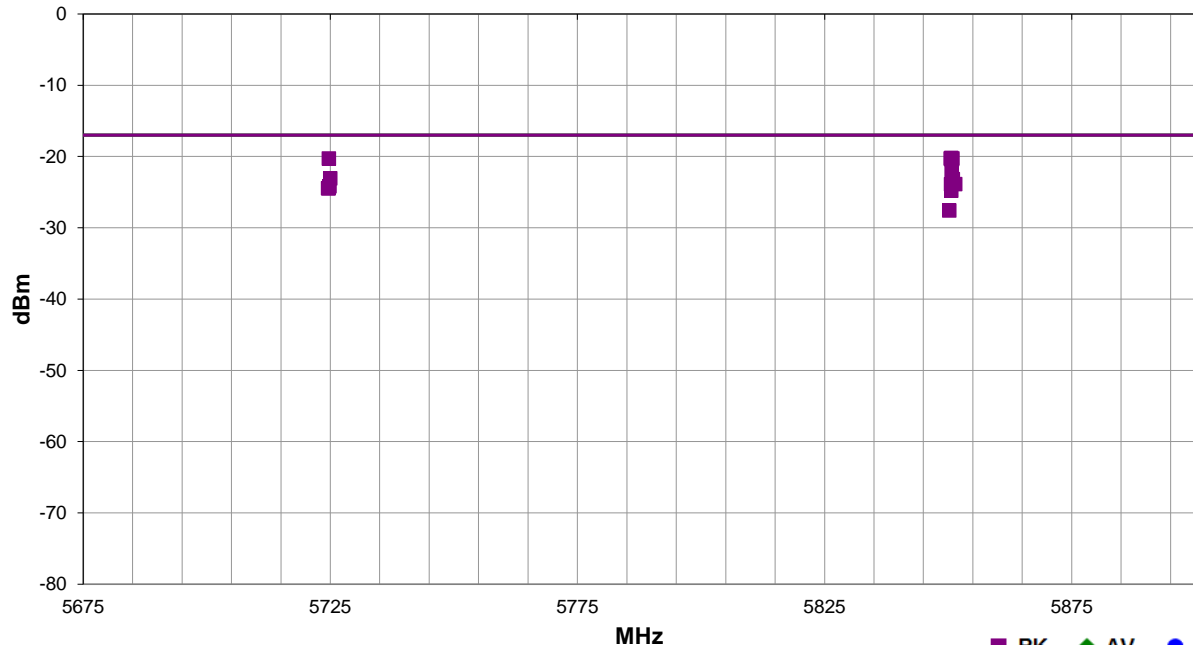


	Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
	17355.980	1.6	222.0	Vert	PK	2.07E-07	-36.8	-27.0	-9.8	Mid Ch, 6 Mbps, EUT Horz
	17476.070	1.0	232.0	Vert	PK	1.86E-07	-37.3	-27.0	-10.3	High Ch, 6 Mbps, EUT Horz
	17235.310	1.0	221.0	Vert	PK	1.01E-07	-40.0	-27.0	-13.0	Low Ch, 6 Mbps, EUT Horz
	17235.740	3.5	254.0	Horz	PK	8.02E-08	-41.0	-27.0	-14.0	Low Ch, 6 Mbps, EUT Horz
	17475.150	1.2	164.0	Horz	PK	6.61E-08	-41.8	-27.0	-14.8	High Ch, 6 Mbps, EUT Horz
	23140.010	1.3	170.0	Horz	PK	6.38E-08	-42.0	-27.0	-15.0	Mid Ch, 6 Mbps, EUT Horz
	23300.090	1.3	204.0	Horz	PK	4.54E-08	-43.4	-27.0	-16.4	High Ch, 6 Mbps, EUT Horz
	17354.040	1.4	54.0	Horz	PK	4.33E-08	-43.6	-27.0	-16.6	Mid Ch, 6 Mbps, EUT Horz
	23140.010	1.3	191.0	Vert	PK	2.92E-08	-45.4	-27.0	-18.4	Mid Ch, 6 Mbps, EUT Horz
	23300.110	1.3	144.0	Vert	PK	2.03E-08	-46.9	-27.0	-19.9	High Ch, 6 Mbps, EUT Horz

<b>Work Order:</b>	MASI0274	<b>Date:</b>	08/07/15	
<b>Project:</b>	None	<b>Temperature:</b>	23.3 °C	
<b>Job Site:</b>	OC07	<b>Humidity:</b>	42.9% RH	
<b>Serial Number:</b>	521639422	<b>Barometric Pres.:</b>	1011 mbar	
<b>EUT:</b>	MWM1			
<b>Configuration:</b>	2			
<b>Customer:</b>	Masimo Corporation			
<b>Attendees:</b>	None			
<b>EUT Power:</b>	110VAC/60Hz			
<b>Operating Mode:</b>	Continuous Transmit 802.11a: Low Channel 149 (5745 MHz), High Channel 165 (5825 MHz)			
<b>Deviations:</b>	None			
<b>Comments:</b>	TX Power = 25			

Test Specifications	Test Method
FCC 15.407:2015	ANSI C63.10:2013

Run #	43	Test Distance (m)	1	Antenna Height(s)	1 (m)	Results	Pass
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Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
5850.640	1.0	140.0	Horz	PK	9.59E-06	-20.2	-17.0	-3.2	High Ch, 6 Mbps, EUT on Side
5724.697	1.0	95.0	Horz	PK	9.41E-06	-20.3	-17.0	-3.3	Low Ch, 6 Mbps, EUT on Side
5850.885	1.0	94.0	Horz	PK	9.37E-06	-20.3	-17.0	-3.3	High Ch, 6 Mbps, EUT Horz
5850.505	1.0	148.0	Vert	PK	9.37E-06	-20.3	-17.0	-3.3	High Ch, 36 Mbps, EUT Horz
5850.755	1.0	148.0	Vert	PK	8.95E-06	-20.5	-17.0	-3.5	High Ch, 6 Mbps, EUT Horz
5850.720	1.0	192.0	Horz	PK	5.91E-06	-22.3	-17.0	-5.3	High Ch, 6 Mbps, EUT Vert
5724.970	1.0	95.0	Horz	PK	4.94E-06	-23.1	-17.0	-6.1	Low Ch, 54 Mbps, EUT on Side
5850.935	1.0	148.0	Vert	PK	4.81E-06	-23.2	-17.0	-6.2	High Ch, 54 Mbps, EUT Horz
5851.450	1.0	315.0	Vert	PK	4.09E-06	-23.9	-17.0	-6.9	High Ch, 6 Mbps, EUT Vert
5850.590	1.0	214.0	Vert	PK	4.09E-06	-23.9	-17.0	-6.9	High Ch, 6 Mbps, EUT on Side
5724.803	1.0	207.0	Vert	PK	3.83E-06	-24.2	-17.0	-7.2	Low Ch, 6 Mbps, EUT Horz
5724.767	1.0	95.0	Horz	PK	3.83E-06	-24.2	-17.0	-7.2	Low Ch, 36 Mbps, EUT on Side
5724.663	1.0	207.0	Vert	PK	3.58E-06	-24.5	-17.0	-7.5	Low Ch, 54 Mbps, EUT Horz
5724.537	1.0	207.0	Vert	PK	3.58E-06	-24.5	-17.0	-7.5	Low Ch, 36 Mbps, EUT Horz
5850.640	1.0	140.0	Horz	PK	3.32E-06	-24.8	-17.0	-7.8	High Ch, 36 Mbps, EUT on Side
5850.220	1.0	140.0	Horz	PK	1.75E-06	-27.6	-17.0	-10.6	High Ch, 54 Mbps, EUT on Side

# FREQUENCY STABILITY

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

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo)
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Block - DC	Aeroflex	INMET 8535	AMO	4/8/2015	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 modulation.

The primary supply voltage was varied from 3.7 VDC to 4.0 VDC of the nominal voltage. Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range (0 ° to +50° C) and at 10°C intervals.

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



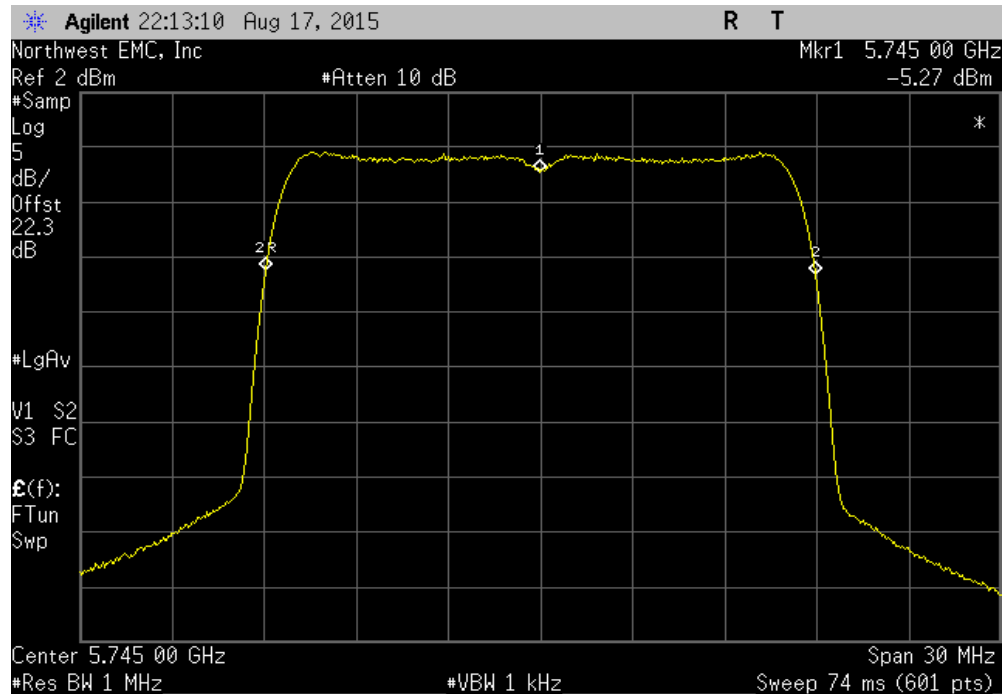
XMR 2015.01.14

EUT: MWM1		Work Order: MASI0274	
Serial Number: 521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mark Baytan		Power: 110VAC/60Hz	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 25			
DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.47dB total offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Measured Value (MHz)	Assigned Value (MHz)
		Error (ppm)	Limit (ppm)
			Results
Voltage: 3.7 VDC			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5745	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5785	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5825	5825
Voltage: 4.0 VDC			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5745	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5785	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5825	5825
Temperature: +50°			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5745	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5785	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5825	5825
Temperature: +40°			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5744.98	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5784.98	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5824.98	5825
Temperature: +30°			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5744.98	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5784.98	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5824.98	5825
Temperature: +20°			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5744.98	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5785	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5825	5825
Temperature: +10°			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5745	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5785	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5825	5825
Temperature: 0°			
	5725 MHz - 5825 MHz - Low Channel, 5745 MHz	5745	5745
	5725 MHz - 5825 MHz - Mid Channel, 5785 MHz	5785	5785
	5725 MHz - 5825 MHz - High Channel, 5825 MHz	5825	5825

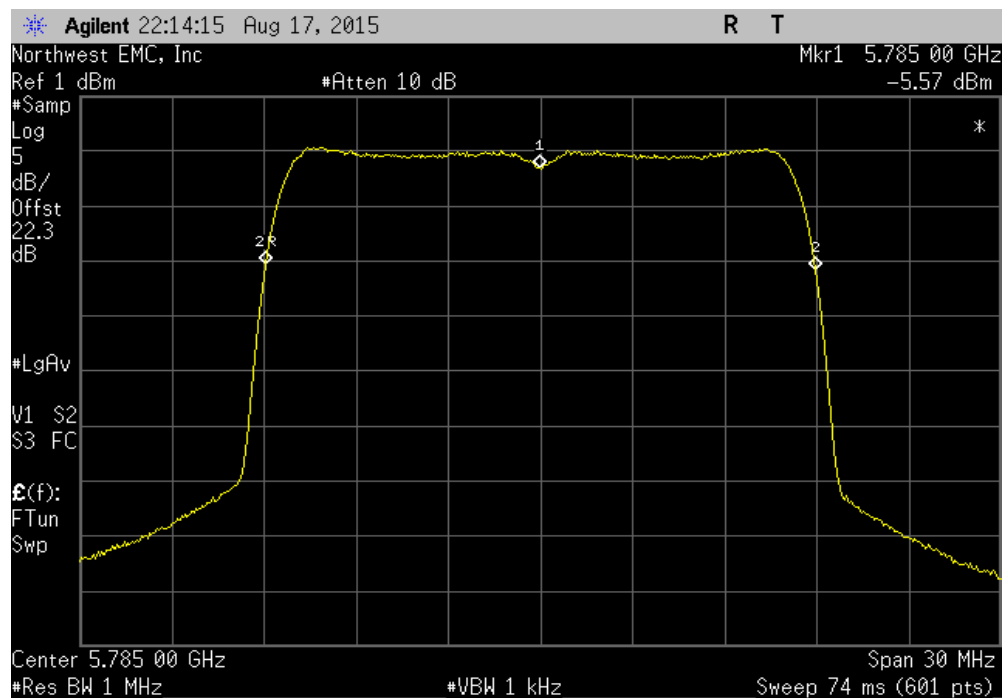


# FREQUENCY STABILITY

Voltage: 3.7 VDC, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5745	5745	0	100	Pass	

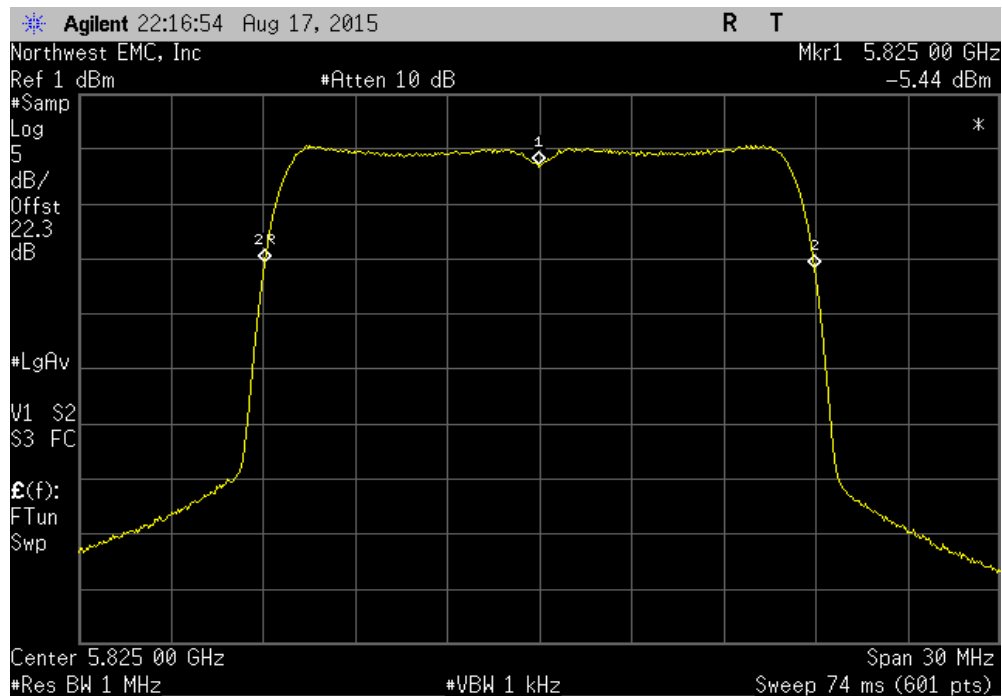


Voltage: 3.7 VDC, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5785	5785	0	100	Pass	

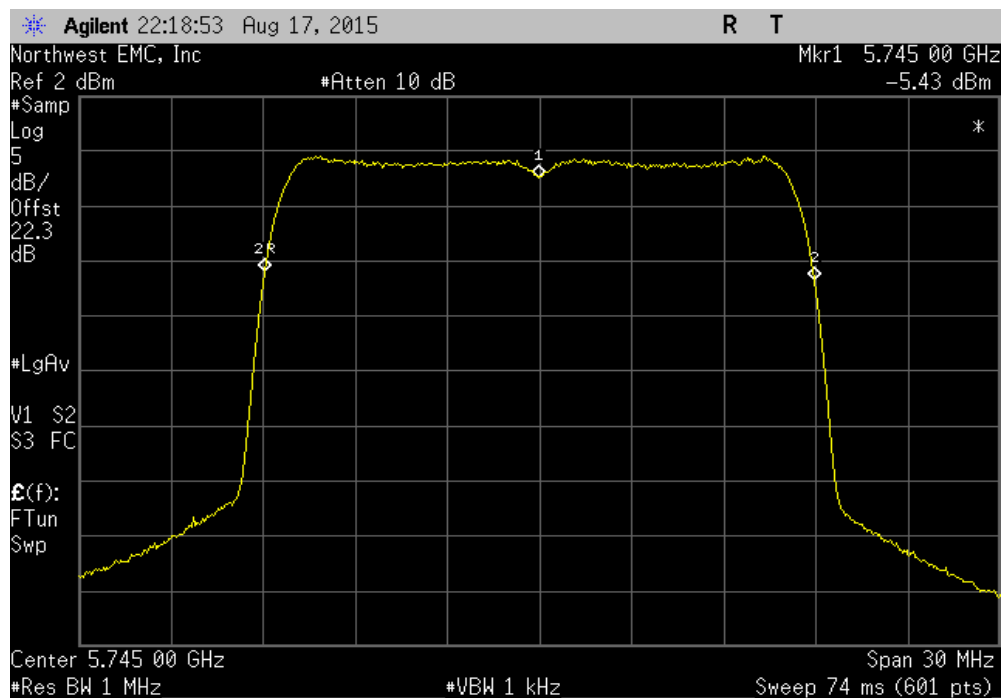


# FREQUENCY STABILITY

Voltage: 3.7 VDC, 5725 MHz - 5825 MHz - High Channel, 5825 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5825	5825	0	100	Pass	

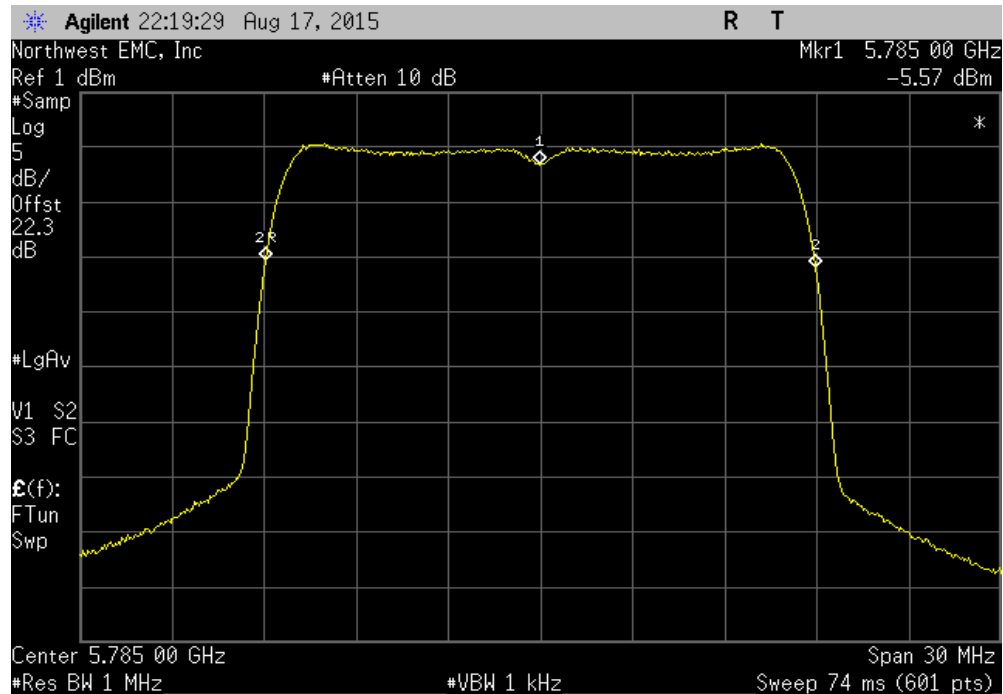


Voltage: 4.0 VDC, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5745	5745	0	100	Pass	

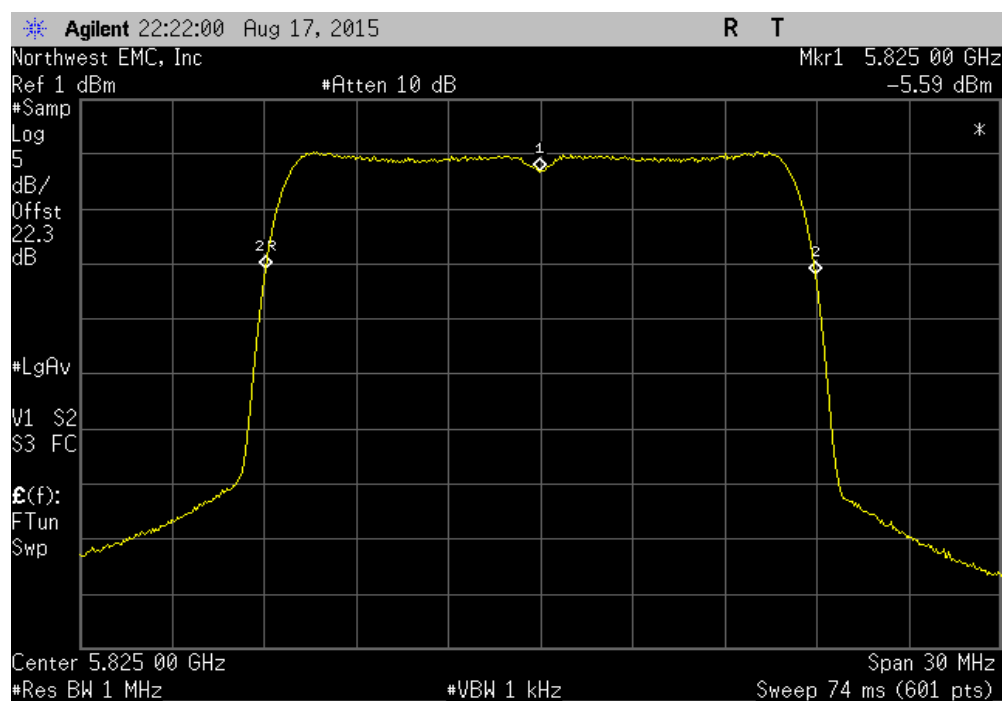


# FREQUENCY STABILITY

Voltage: 4.0 VDC, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5785	5785	0	100	Pass	

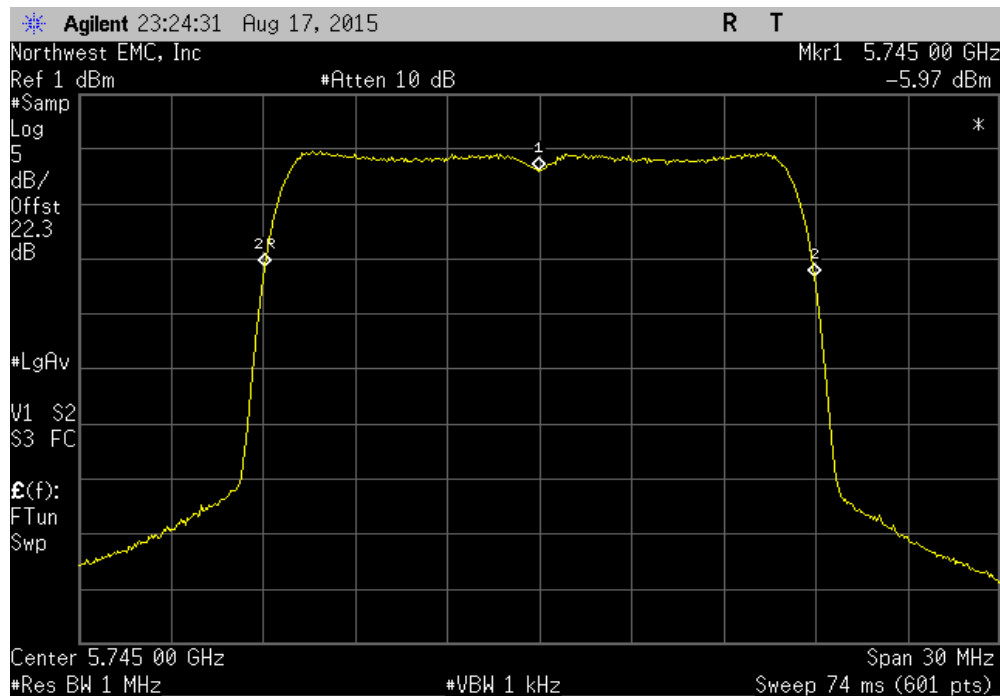


Voltage: 4.0 VDC, 5725 MHz - 5825 MHz - High Channel, 5825 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5825	5825	0	100	Pass	

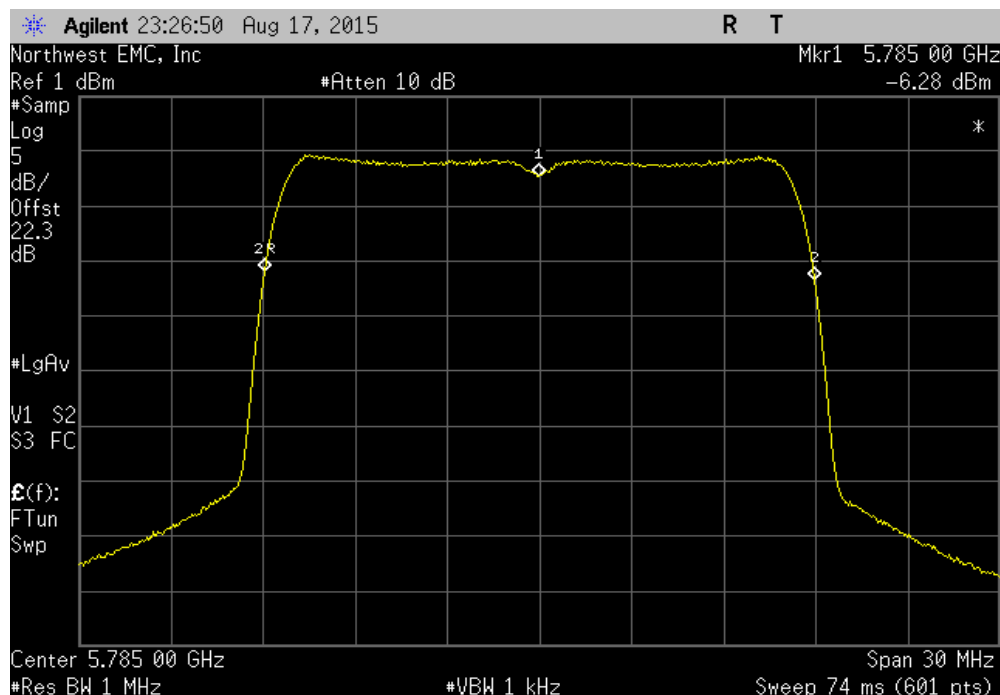


# FREQUENCY STABILITY

Temperature: +50°, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5745	5745	0	100	Pass	

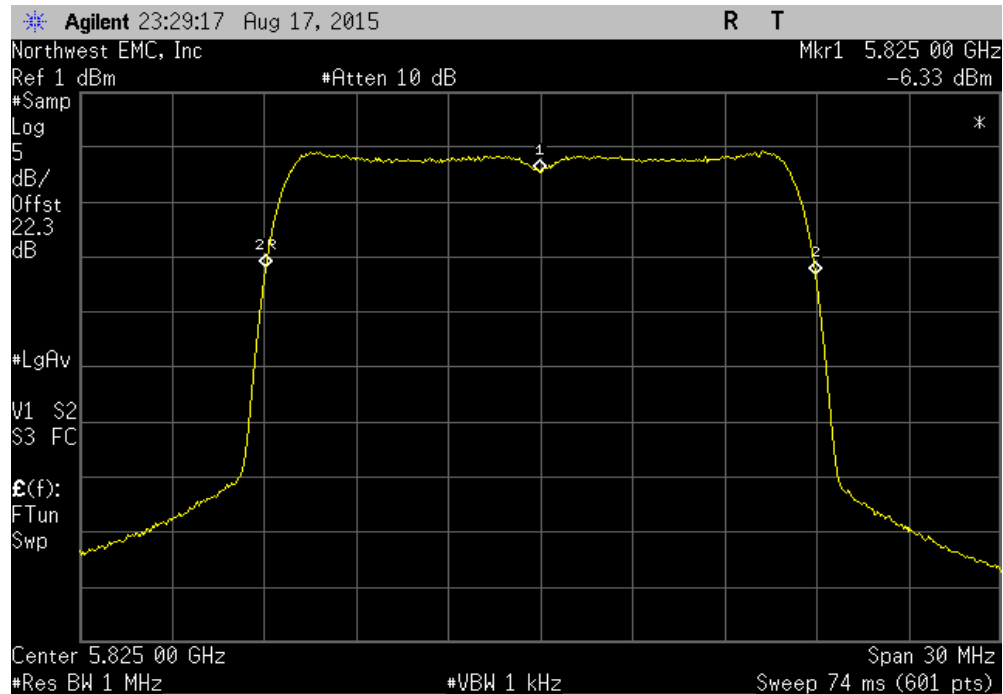


Temperature: +50°, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5785	5785	0	100	Pass	

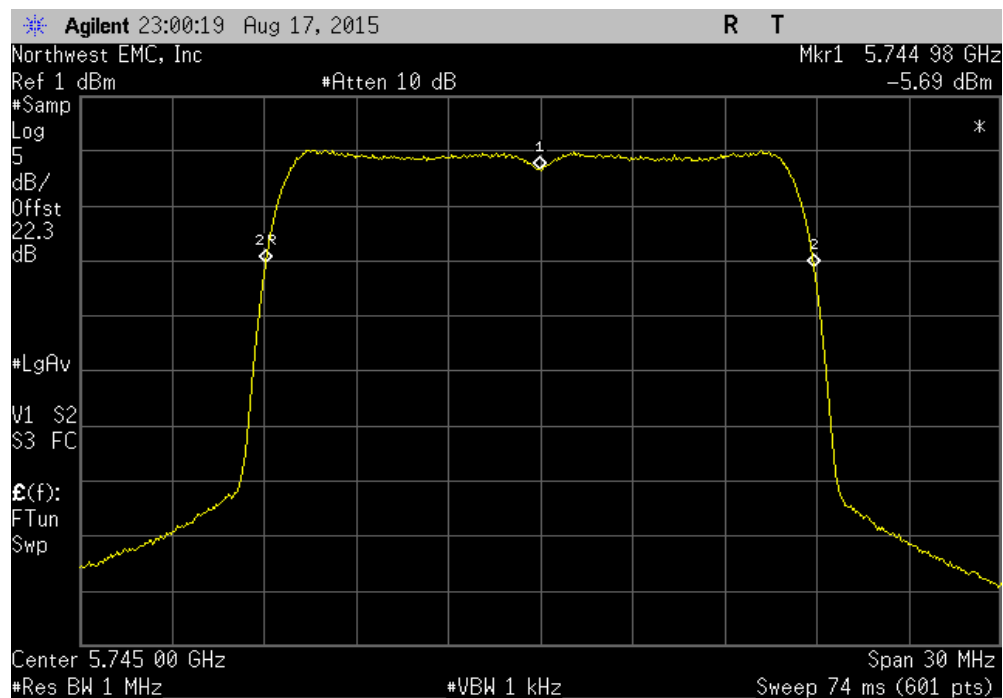


# FREQUENCY STABILITY

Temperature: +50°, 5725 MHz - 5825 MHz - High Channel, 5825 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5825	5825	0	100	Pass	

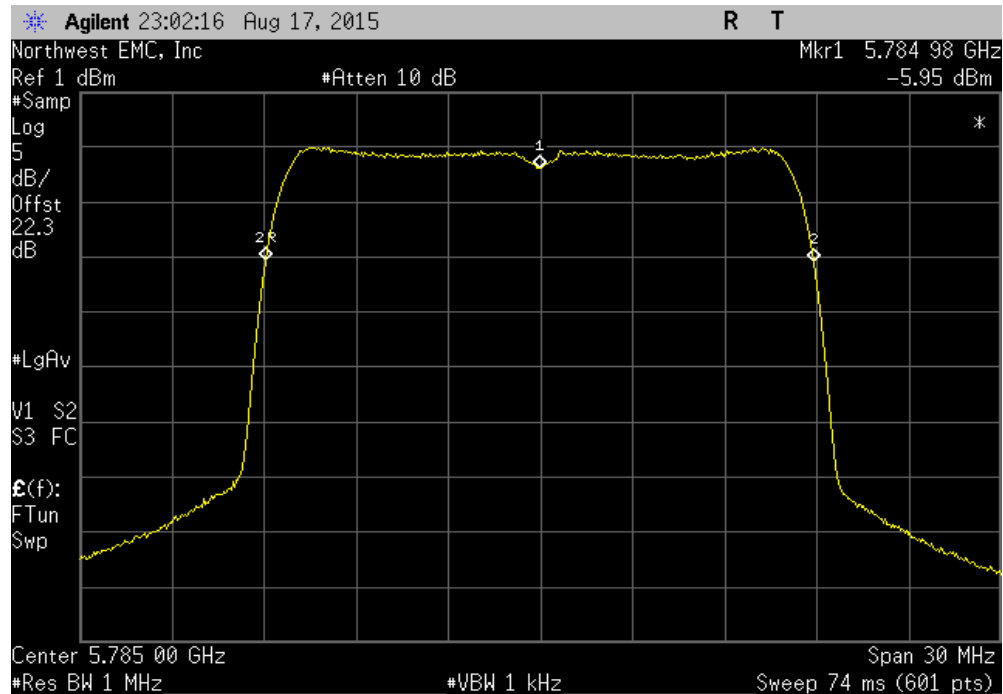


Temperature: +40°, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5744.98	5745	3.5	100	Pass	

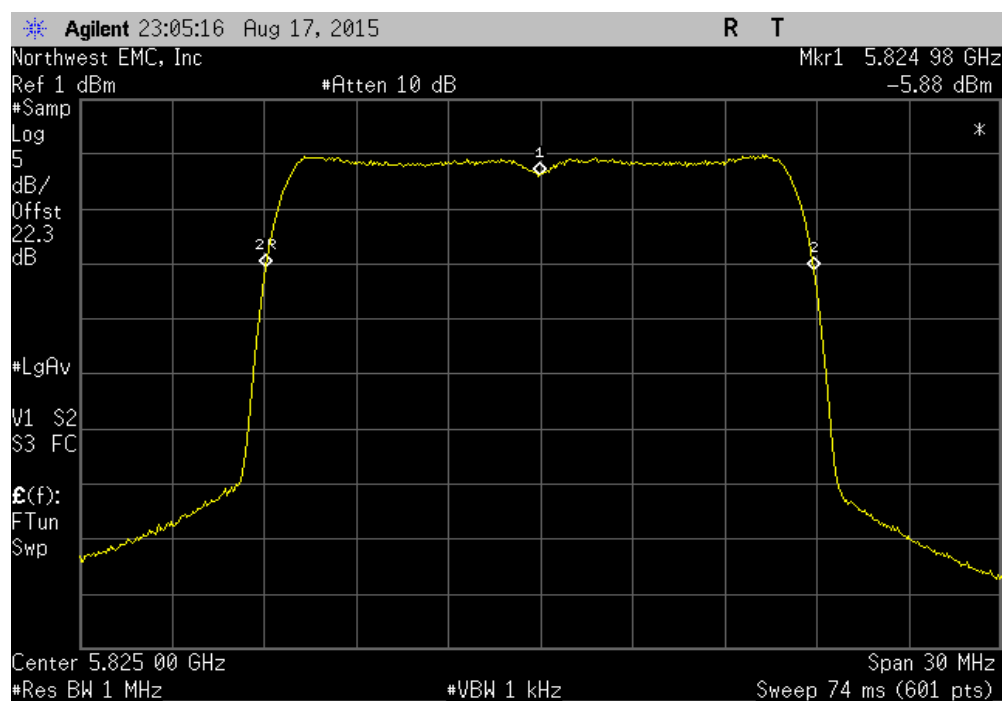


# FREQUENCY STABILITY

Temperature: +40°, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5784.98	5785	3.5	100	Pass	

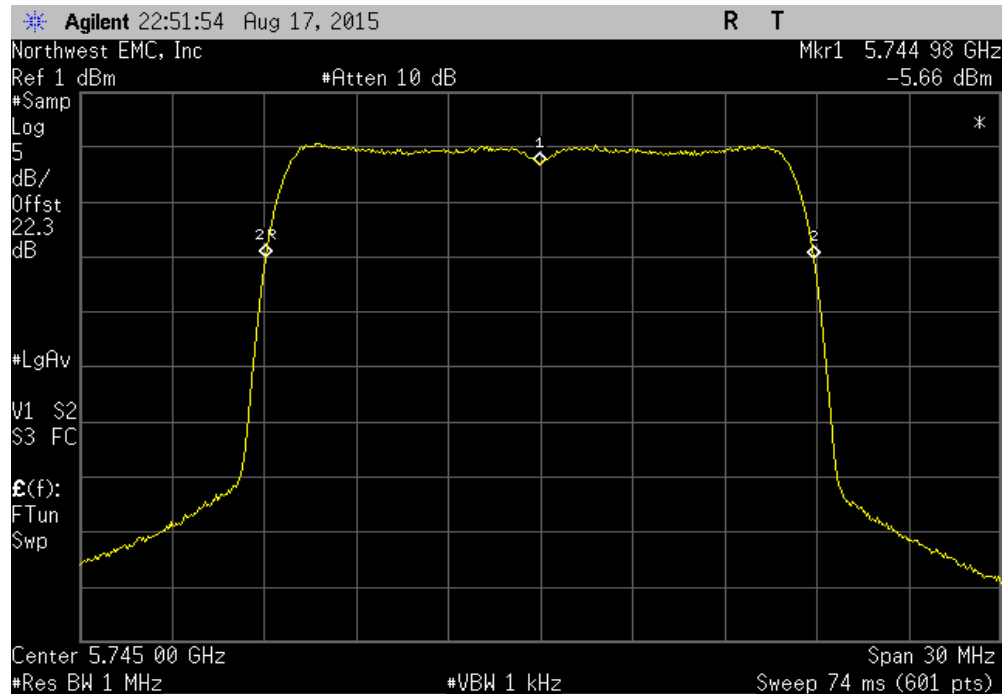


Temperature: +40°, 5725 MHz - 5825 MHz - High Channel, 5825 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5824.98	5825	3.4	100	Pass	

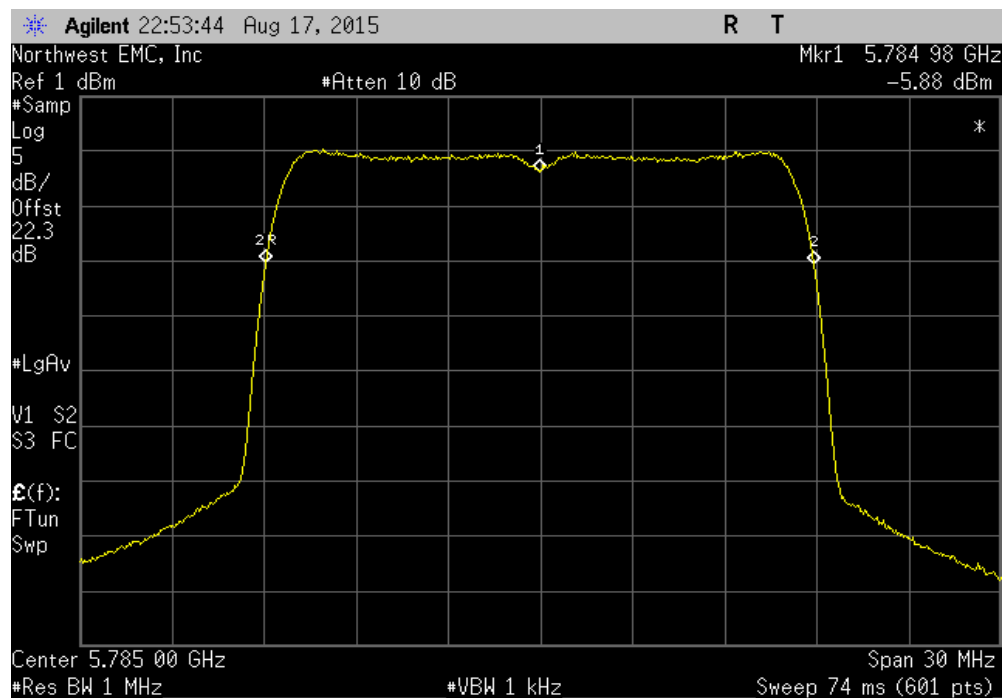


# FREQUENCY STABILITY

Temperature: +30°, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5744.98	5745	3.5	100	Pass	

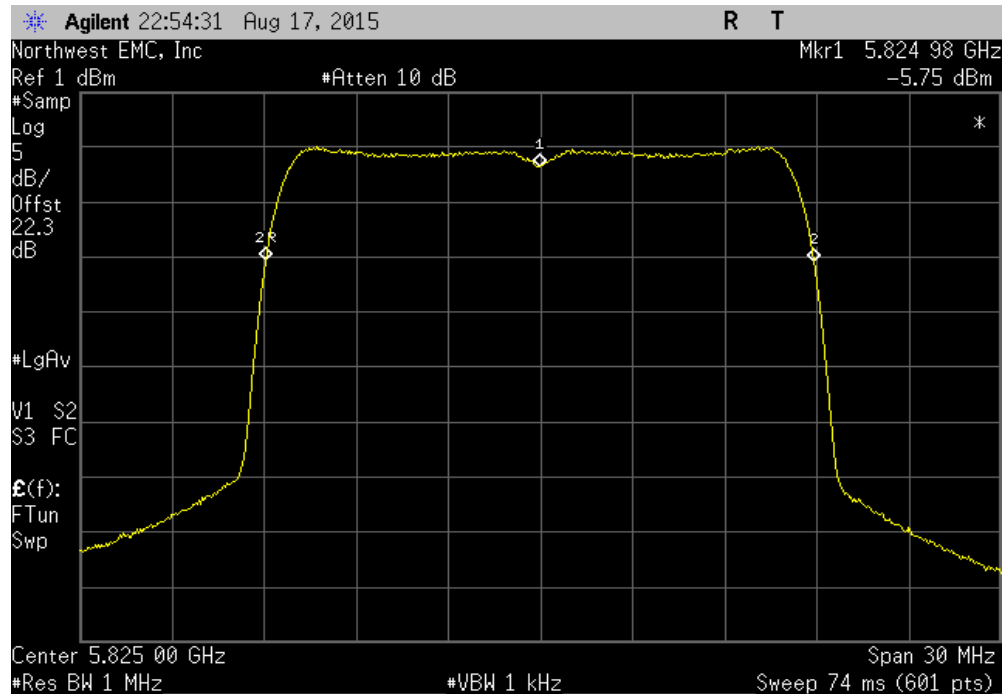


Temperature: +30°, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5784.98	5785	3.5	100	Pass	

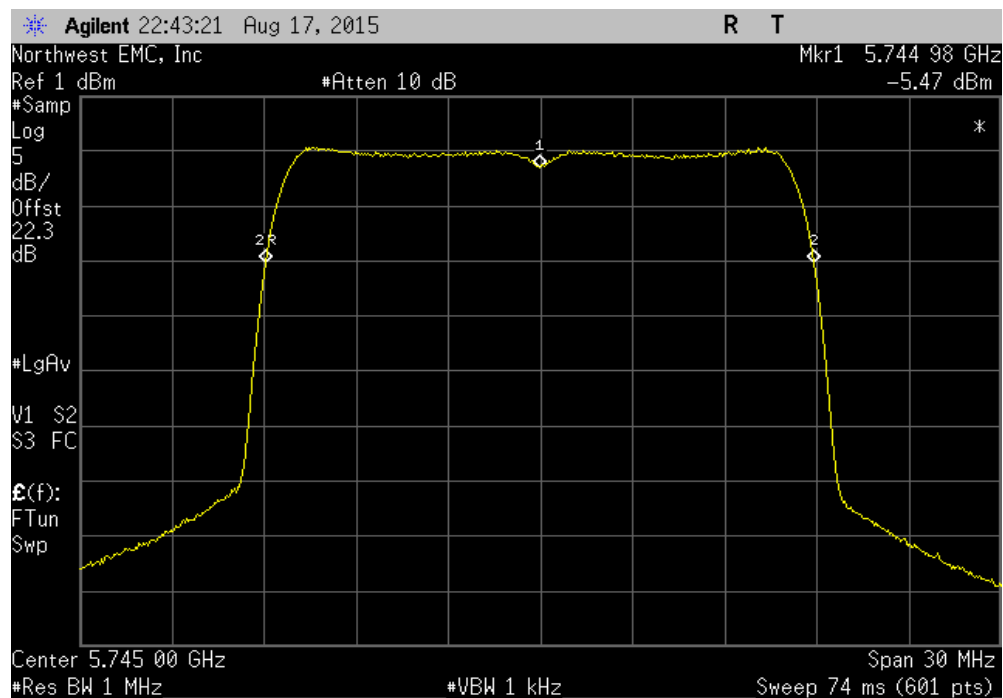


# FREQUENCY STABILITY

Temperature: +30°, 5725 MHz - 5825 MHz - High Channel, 5825 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5824.98	5825	3.4	100	Pass	



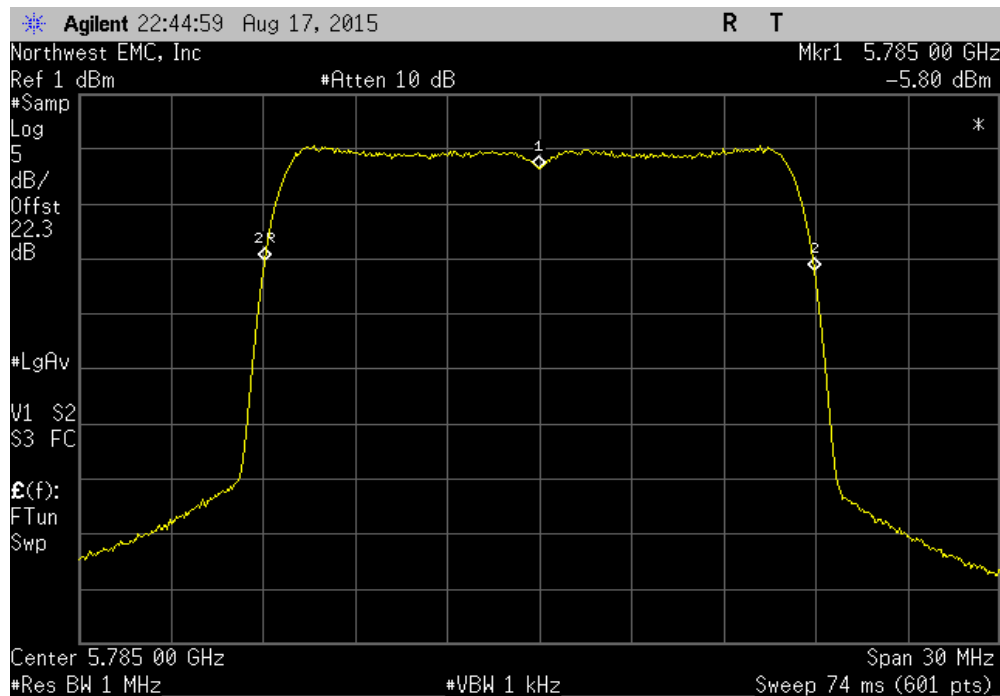
Temperature: +20°, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5744.98	5745	3.5	100	Pass	



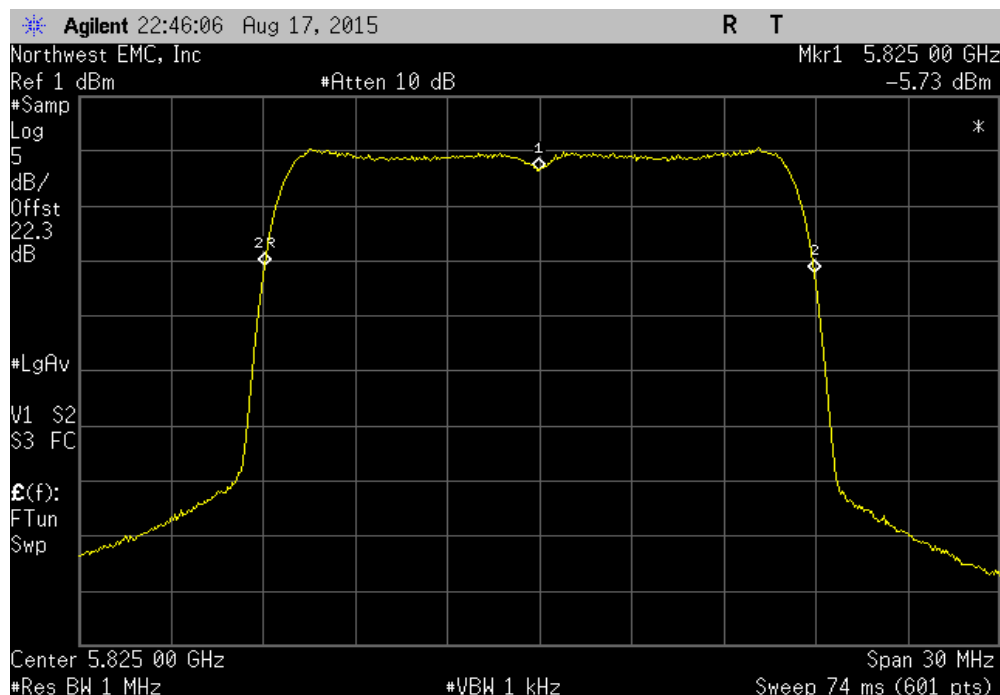


# FREQUENCY STABILITY

Temperature: +20°, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5785	5785	0	100	Pass	

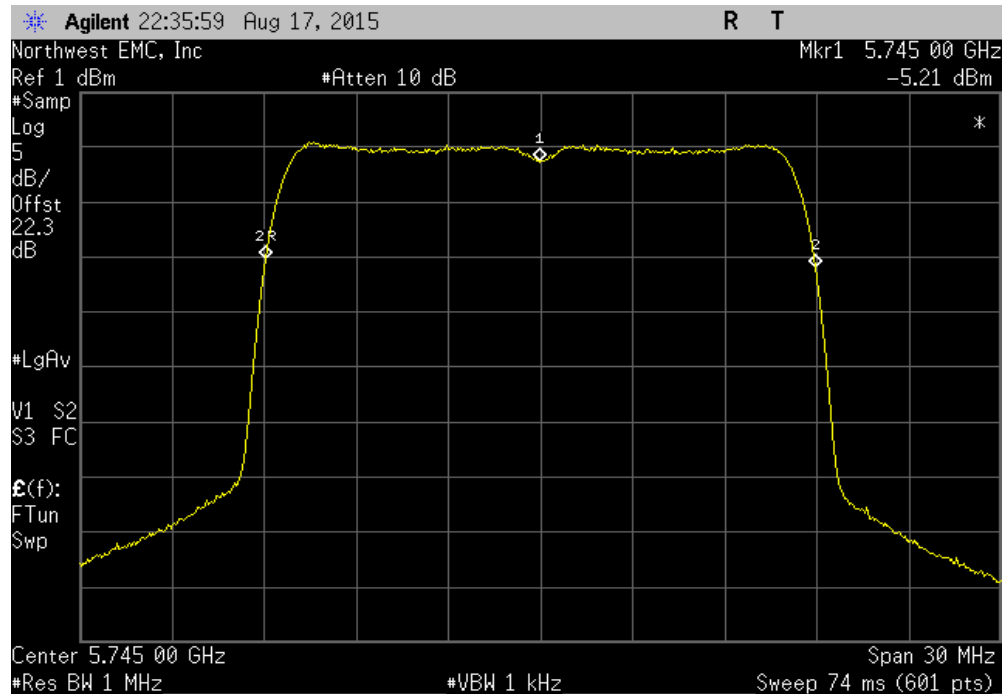


Temperature: +20°, 5725 MHz - 5825 MHz - High Channel, 5825 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5825	5825	0	100	Pass	

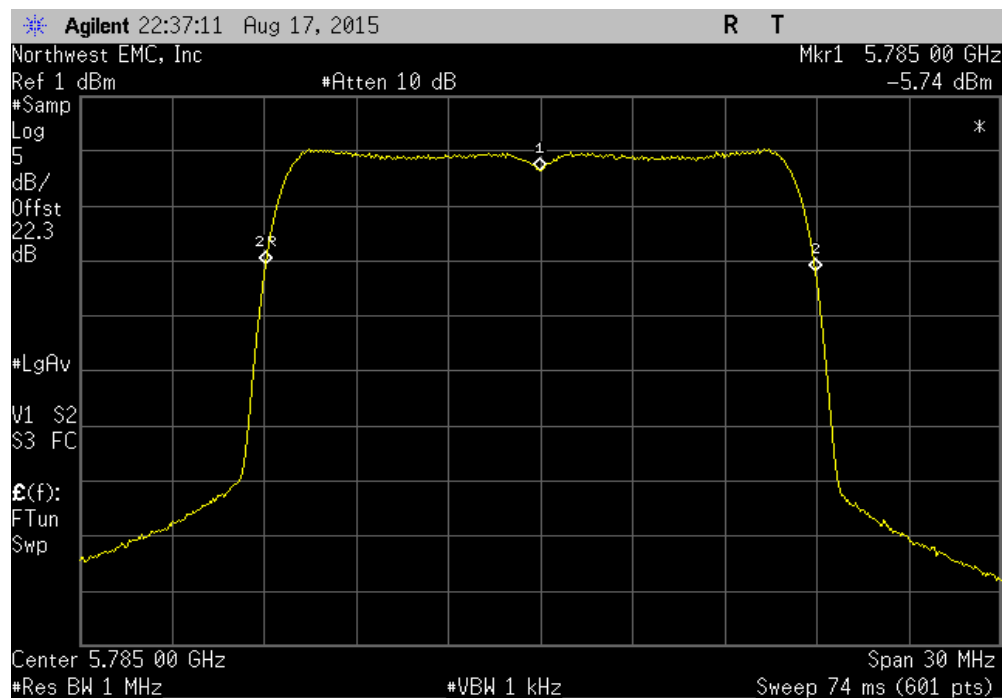


# FREQUENCY STABILITY

Temperature: +10°, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5745	5745	0	100	Pass	

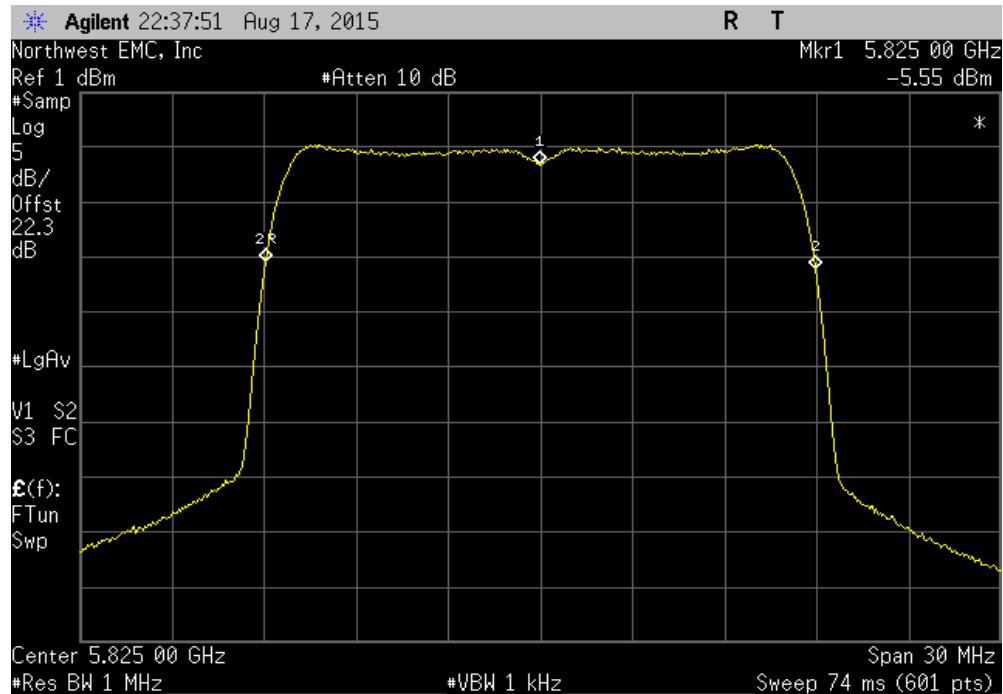


Temperature: +10°, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5785	5785	0	100	Pass	

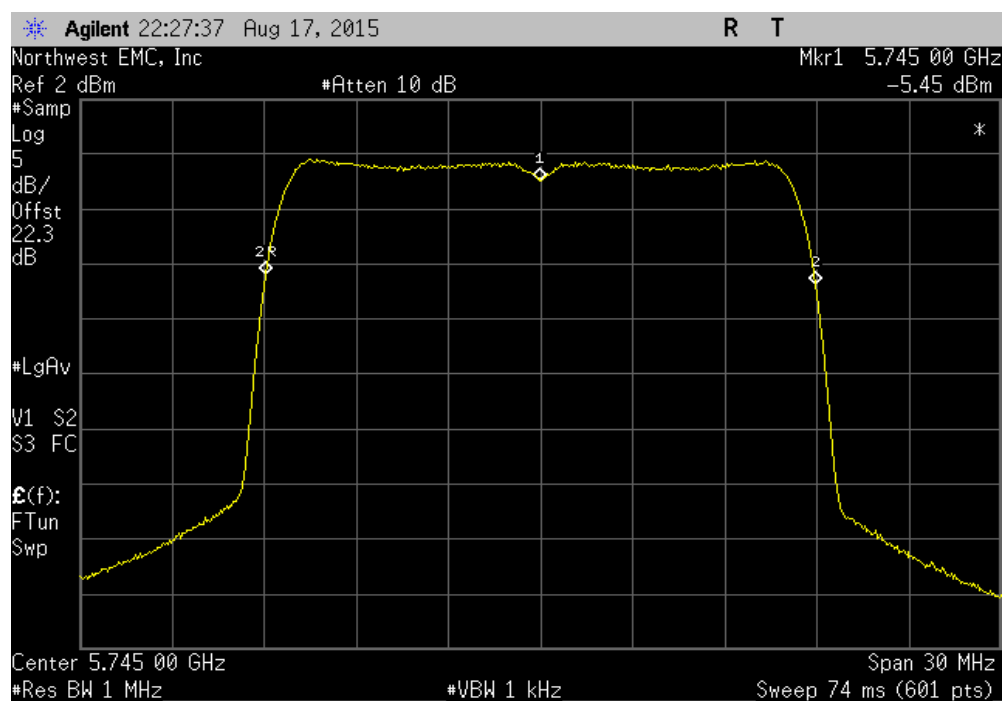


# FREQUENCY STABILITY

Temperature: +10°, 5725 MHz - 5825 MHz - High Channel, 5825 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5825	5825	0	100	Pass	

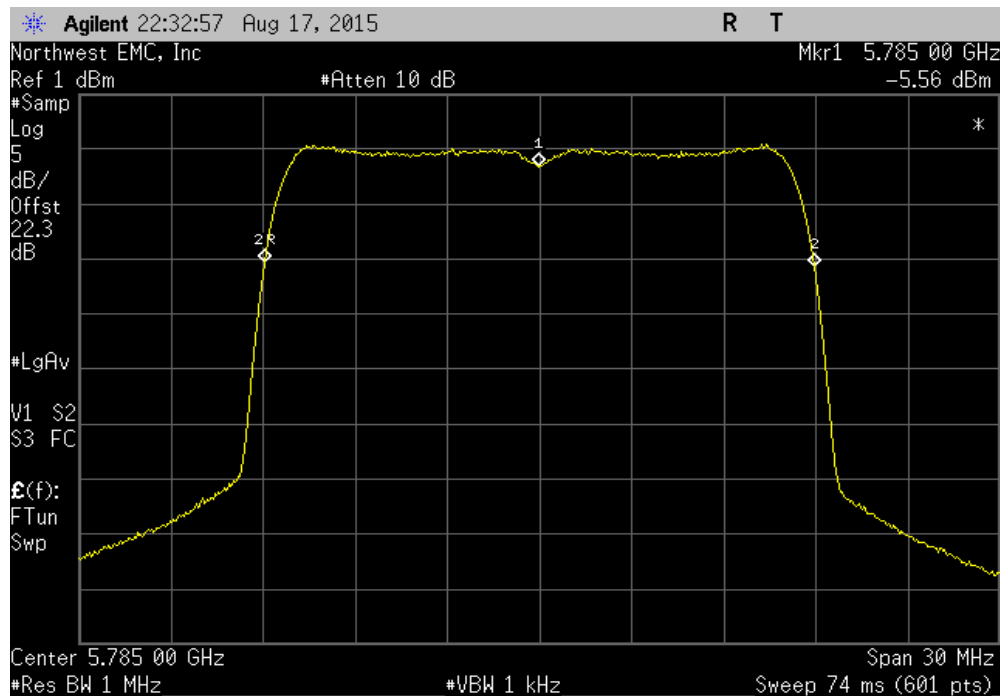


Temperature: 0°, 5725 MHz - 5825 MHz - Low Channel, 5745 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5745	5745	0	100	Pass	

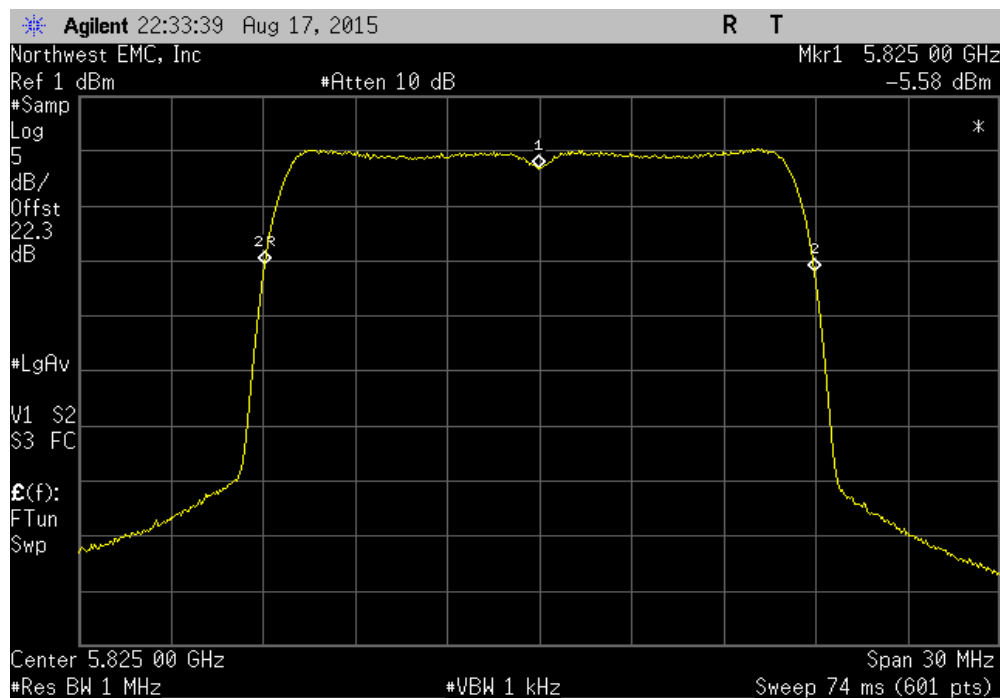


# FREQUENCY STABILITY

Temperature: 0°, 5725 MHz - 5825 MHz - Mid Channel, 5785 MHz						
	Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	5785	5785	0	100	Pass	



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



# DUTY CYCLE - 5.2GHz

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 (mos)
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Block - DC	Aeroflex	INMET 8535	AMO	4/8/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12

## TEST DESCRIPTION

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


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

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

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

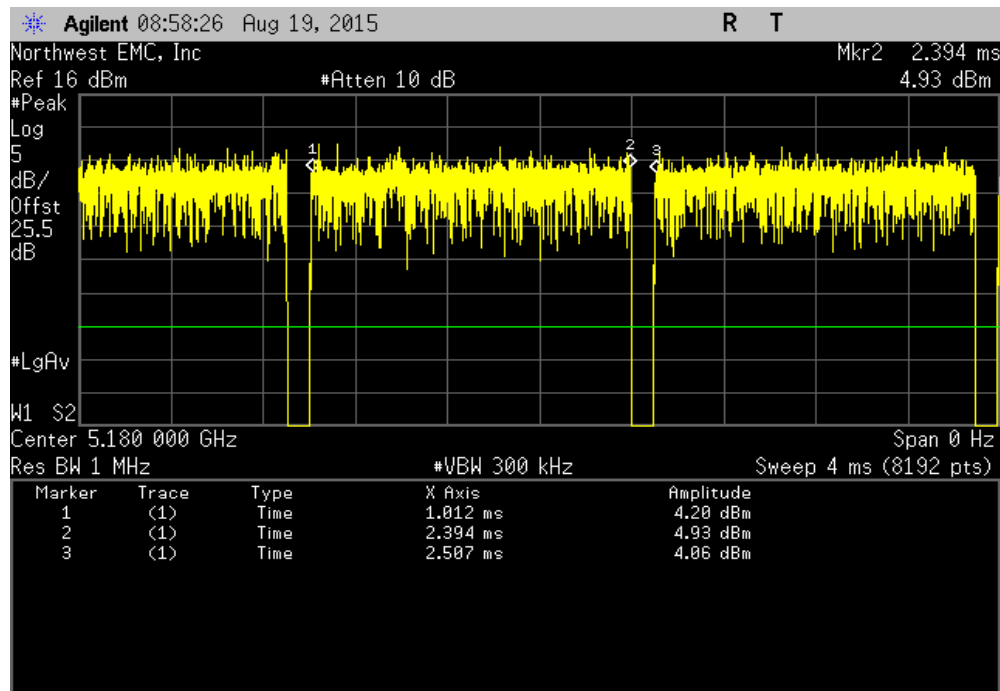
$$10 * \text{LOG} (1/x) = \text{dB}$$

# DUTY CYCLE - 5.2GHz

EUT: MWM1		Work Order: MASI0275	
Serial Number: 1521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mark Baytan		Power: 110VAC/60Hz	
		Job Site: OC13	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 90. DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.5dB total offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Pulse Width	Period
		Number of Pulses	Value (%)
		Limit N/A (N/A)	Results
5150 - 5250 MHz Band			
802.11(a) 6 Mbps			
	Channel 36, Low Channel	1.381 ms	1.494 ms
	Channel 36, Low Channel	N/A	N/A
	Channel 48, High Channel	1.384 ms	1.496 ms
	Channel 48, High Channel	N/A	N/A
802.11(a) 36 Mbps			
	Channel 36, Low Channel	240.817 us	350.2 us
	Channel 36, Low Channel	N/A	N/A
	Channel 48, High Channel	242.502 us	350.944 us
	Channel 48, High Channel	N/A	N/A
802.11(a) 54 Mbps			
	Channel 36, Low Channel	165.526 us	274.112 us
	Channel 36, Low Channel	N/A	N/A
	Channel 48, High Channel	163.84 us	274.7 us
	Channel 48, High Channel	N/A	N/A

# DUTY CYCLE - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 36, Low Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	1.381 ms	1.494 ms	1	92.5	N/A	N/A

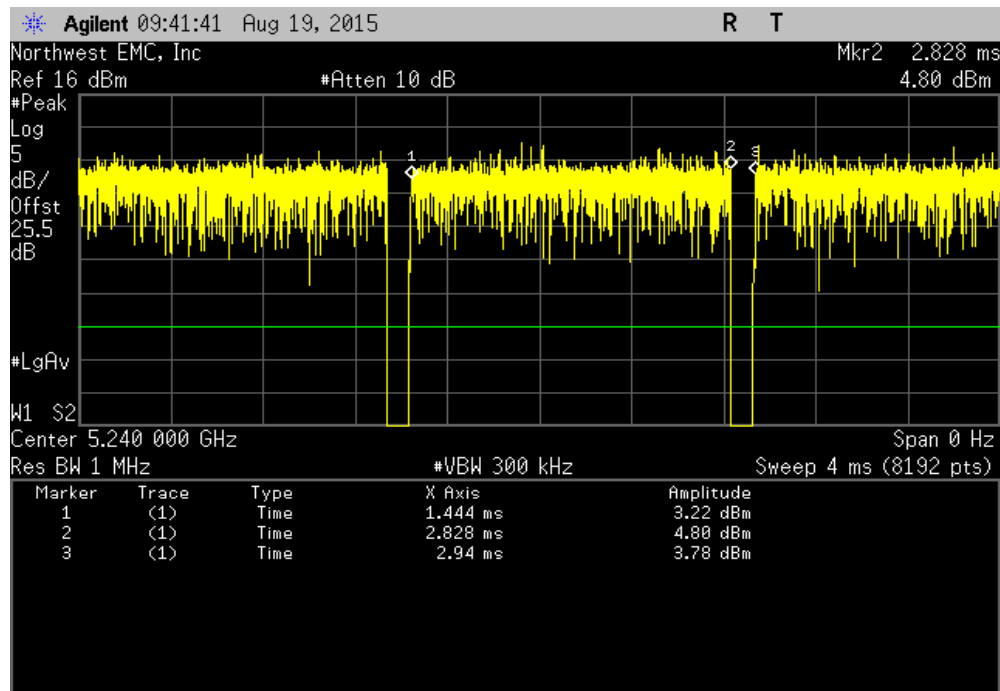


5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 36, Low Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	N/A	N/A	5	N/A	N/A	N/A

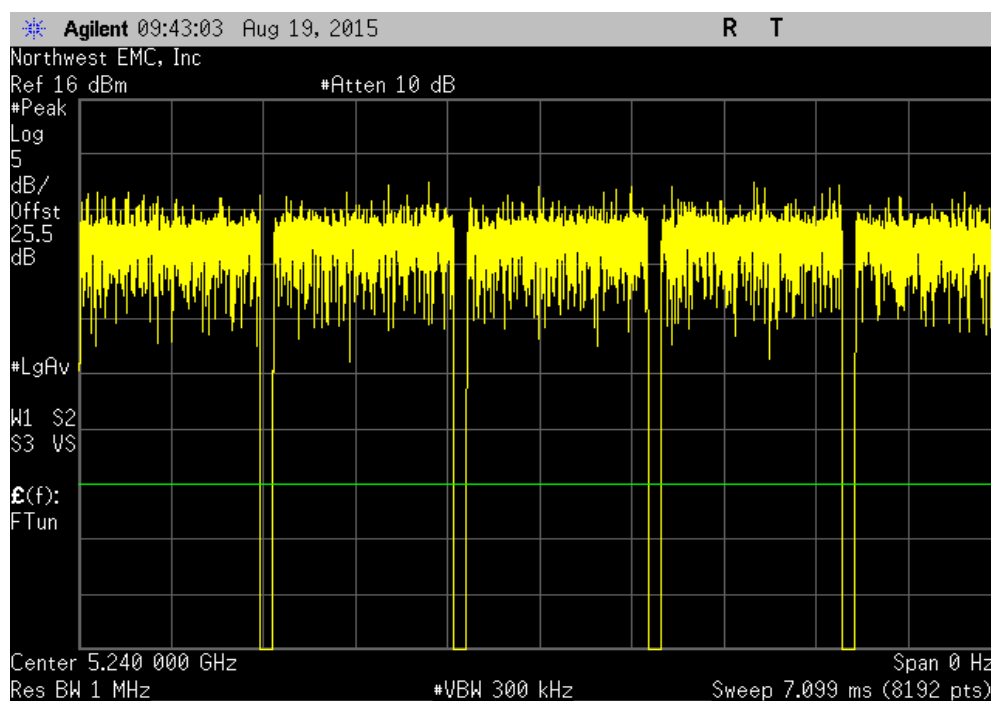


# DUTY CYCLE - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 48, High Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	1.384 ms	1.496 ms	1	92.5	N/A	N/A



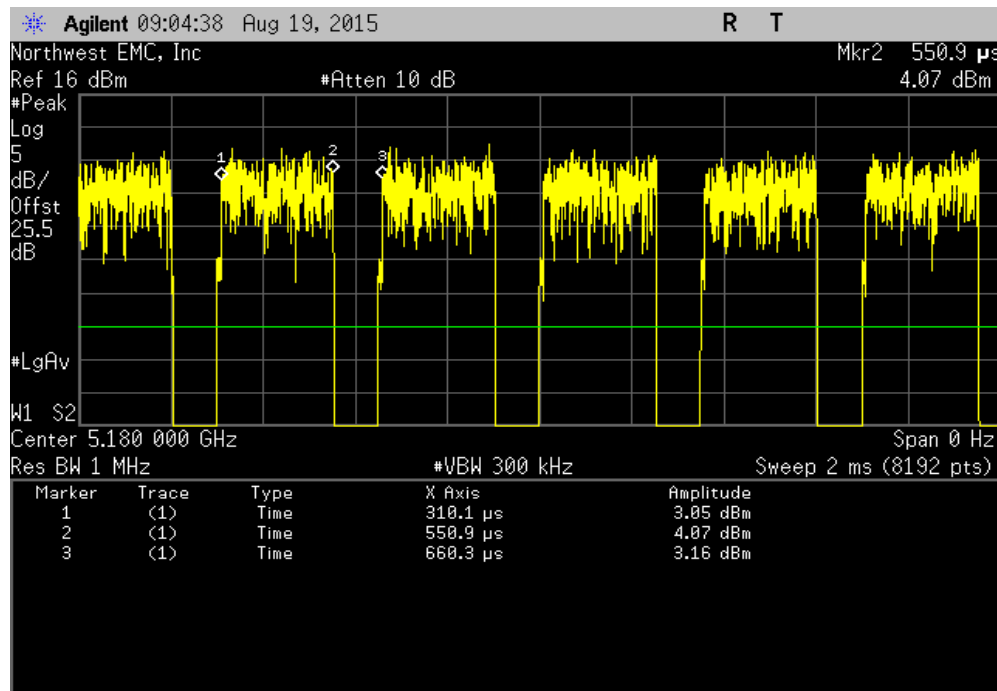
5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 48, High Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	N/A	N/A	5	N/A	N/A	N/A



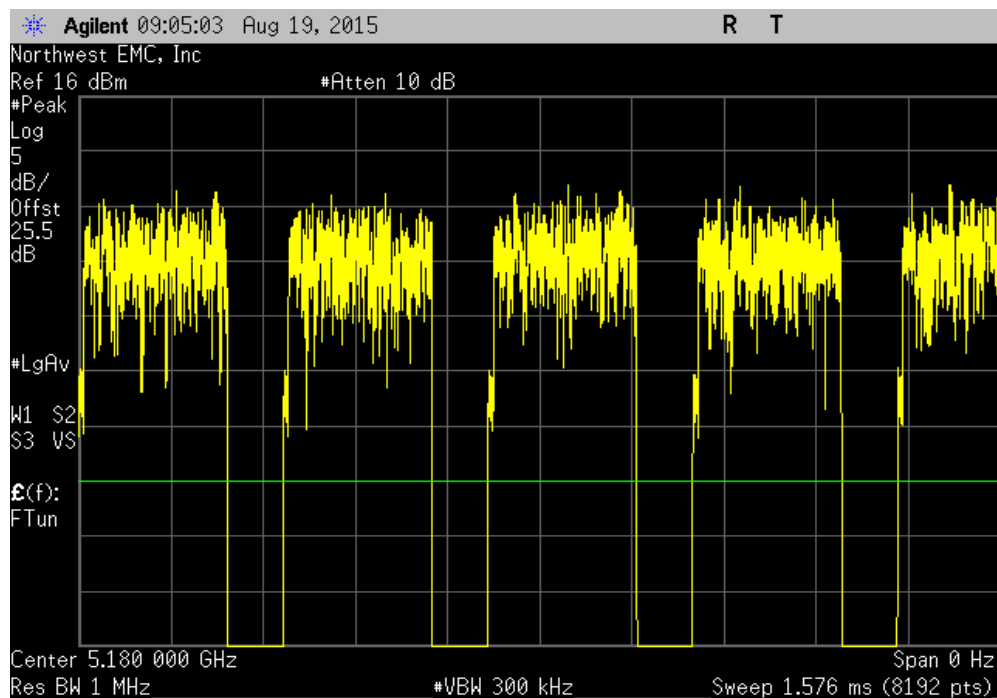


# DUTY CYCLE - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 36, Low Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	240.817 us	350.2 us	1	68.8	N/A	N/A

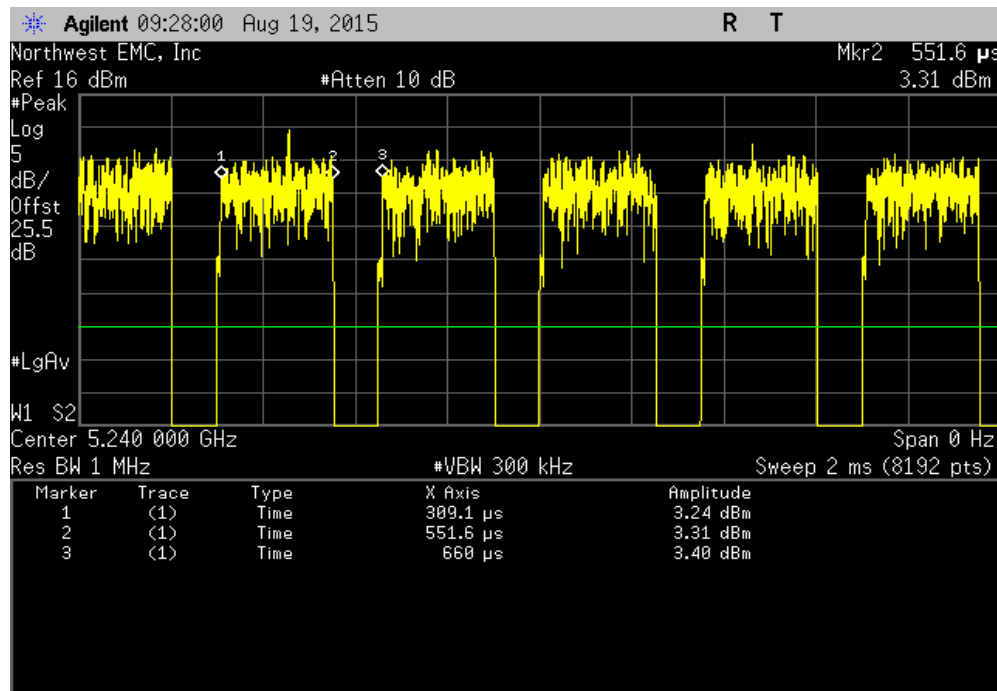


5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 36, Low Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	N/A	N/A	5	N/A	N/A	N/A

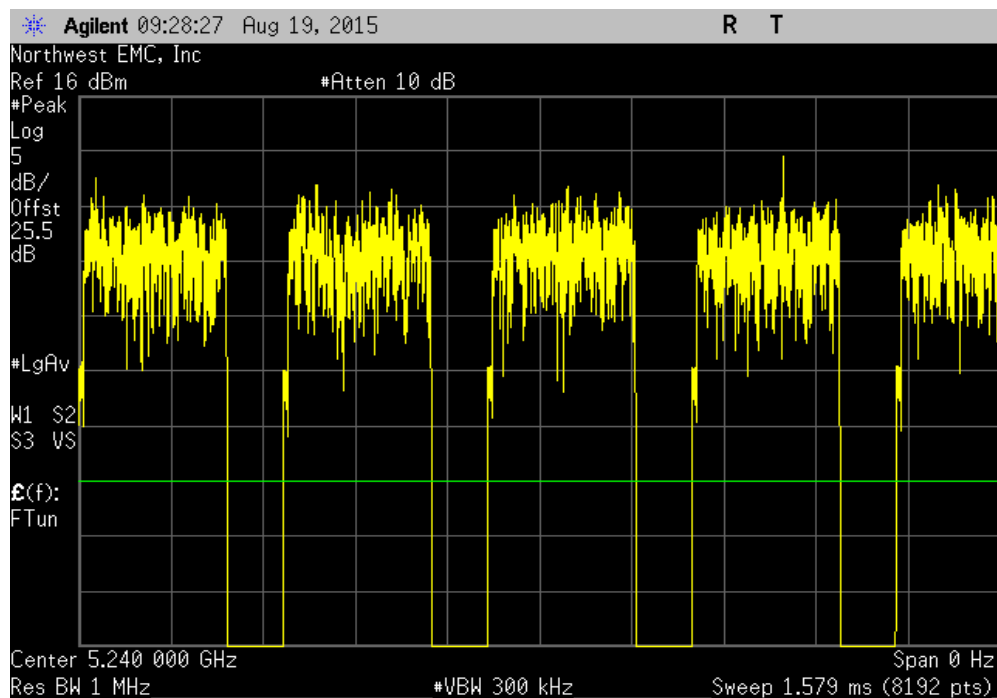


# DUTY CYCLE - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 48, High Channel						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Results	
242.502 us	350.944 us	1	69.1	N/A (N/A)	N/A	

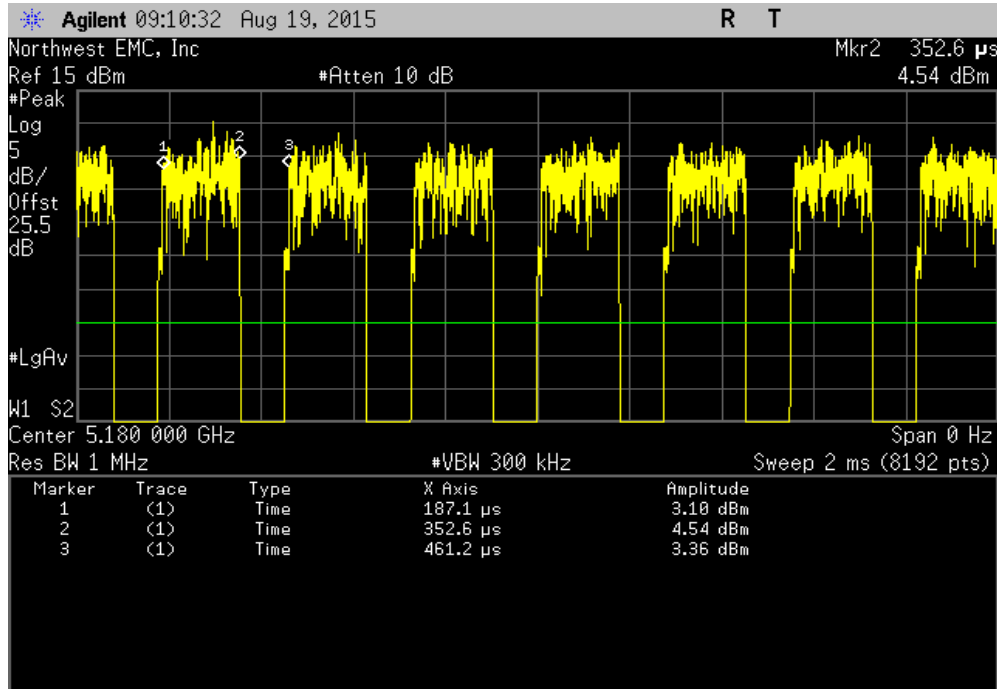


5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 48, High Channel						
Pulse Width	Period	Number of Pulses	Value (%)	Limit	Results	
N/A	N/A	5	N/A	N/A (N/A)	N/A	

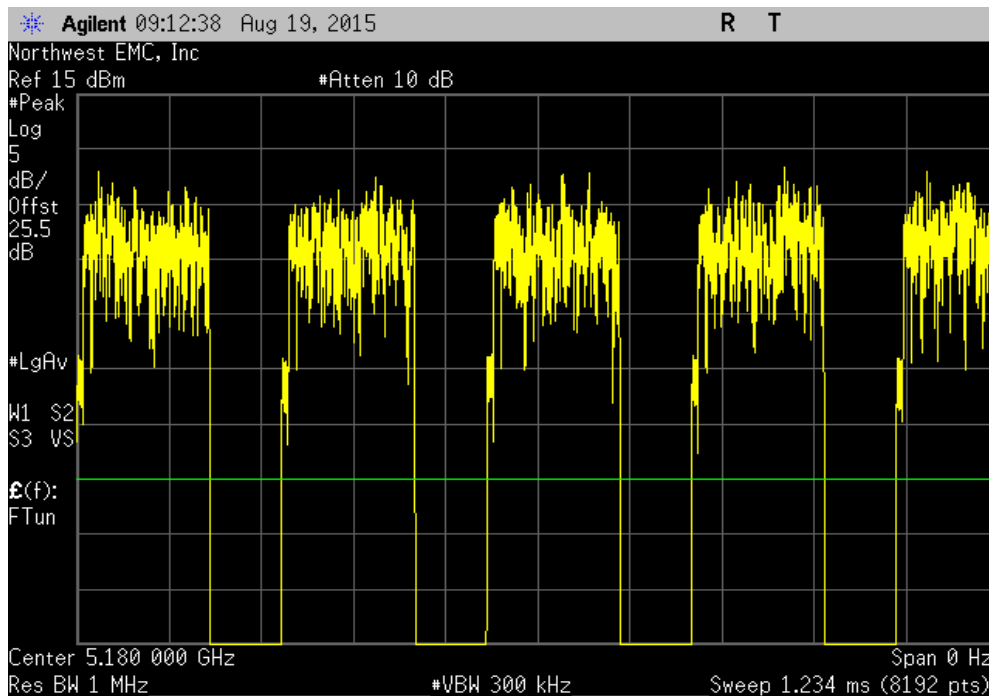


# DUTY CYCLE - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 54 Mbps, Channel 36, Low Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	165.526 us	274.112 us	1	60.4	N/A	N/A

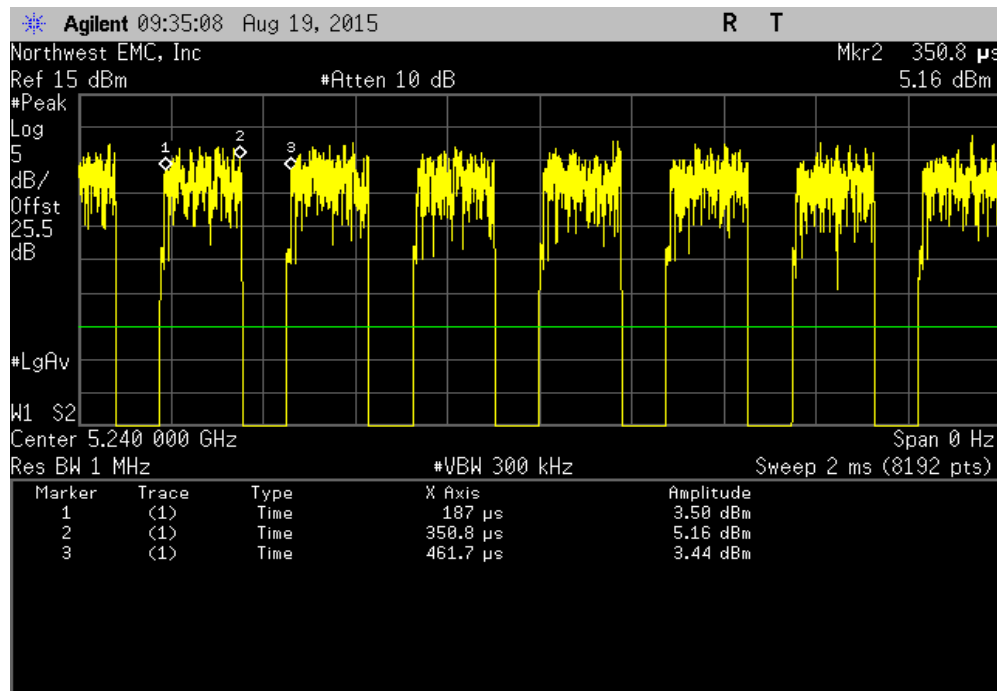


5150 - 5250 MHz Band, 802.11(a) 54 Mbps, Channel 36, Low Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	N/A	N/A	5	N/A	N/A	N/A

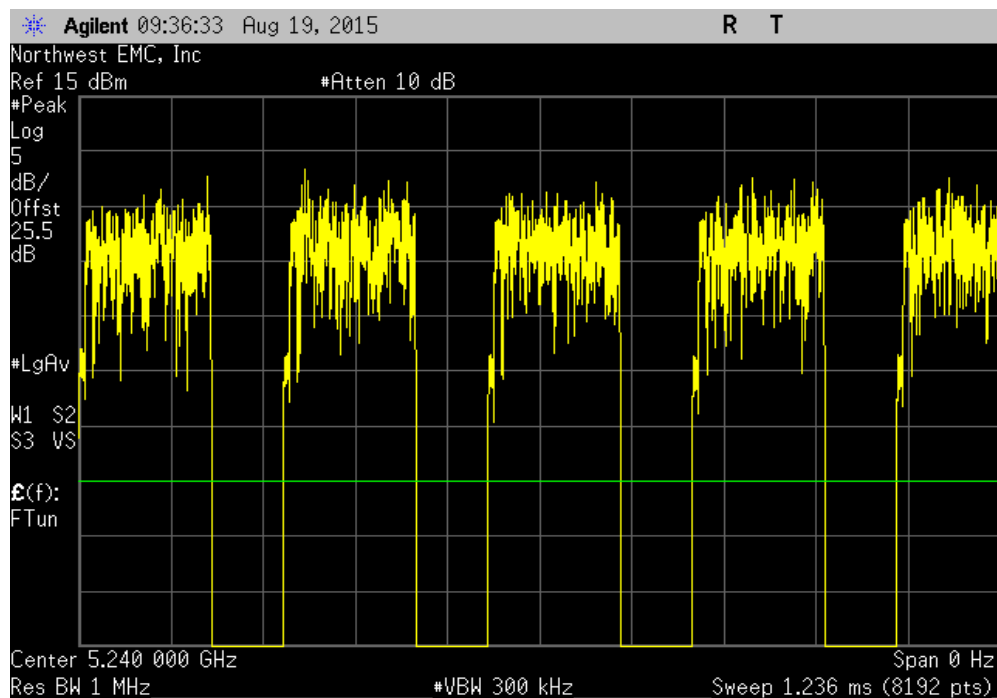


# DUTY CYCLE - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 54 Mbps, Channel 48, High Channel						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit N/A (N/A)	Results
	163.84 us	274.7 us	1	59.6	N/A	N/A



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



# DUTY CYCLE - 5.8GHz

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	Aeroflex	INMET 8535	AMO	4/8/2015	12
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12


## TEST DESCRIPTION

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

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

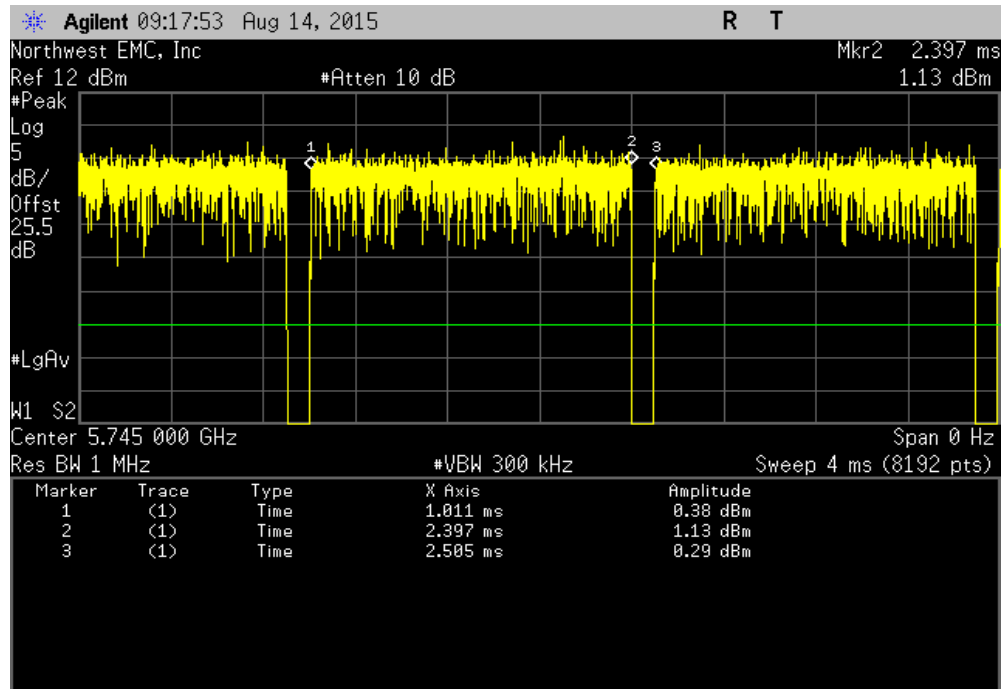
The test software provided for operation in a fixed, single channel mode allows the EUT to operate continuously at 100% Duty Cycle.

**NORTHWEST  
EMC**

EUT: MWM1			Work Order: MASI0274				
Serial Number: 521639422			Date: 08/12/15				
Customer: Masimo Corporation			Temperature: 23°C				
Attendees: Mike Clark			Humidity: 48%				
Project: None			Barometric Pres.: 1015				
Tested by: Mike Tran		Power: 110VAC/60Hz	Job Site: OC13				
TEST SPECIFICATIONS			Test Method				
FCC 15.407:2015			ANSI C63.10:2013				
COMMENTS							
TX Power = 25							
DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.47dB total offset							
DEVIATIONS FROM TEST STANDARD							
None							
Configuration #	1	Signature 					
		Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
802.11(a) 6 Mbps							
	Low Channel 149, 5745 MHz	1.386 ms	1.494 ms	1	92.7	N/A	N/A
	Low Channel 149, 5745 MHz	N/A	N/A	5	N/A	N/A	N/A
	Mid Channel 157, 5785 MHz	1.381 ms	1.494 ms	1	92.4	N/A	N/A
	Mid Channel 157, 5785 MHz	N/A	N/A	5	N/A	N/A	N/A
	High Channel 165, 5825 MHz	1.386 ms	1.503 ms	1	92.2	N/A	N/A
	High Channel 165, 5825 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 36 Mbps							
	Low Channel 149, 5745 MHz	239.596 us	350.2 us	1	68.4	N/A	N/A
	Low Channel 149, 5745 MHz	N/A	N/A	5	N/A	N/A	N/A
	Mid Channel 157, 5785 MHz	240.472 us	350.356 us	1	68.6	N/A	N/A
	Mid Channel 157, 5785 MHz	N/A	N/A	5	N/A	N/A	N/A
	High Channel 165, 5825 MHz	241.205 us	350.656 us	1	68.8	N/A	N/A
	High Channel 165, 5825 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(a) 54 Mbps							
	Low Channel 149, 5745 MHz	165.005 us	274.644 us	1	60.1	N/A	N/A
	Low Channel 149, 5745 MHz	N/A	N/A	5	N/A	N/A	N/A
	Mid Channel 157, 5785 MHz	164.517 us	274.156 us	1	60	N/A	N/A
	Mid Channel 157, 5785 MHz	N/A	N/A	5	N/A	N/A	N/A
	High Channel 165, 5825 MHz	160.71 us	274.256 us	1	58.6	N/A	N/A
	High Channel 165, 5825 MHz	N/A	N/A	5	N/A	N/A	N/A

# DUTY CYCLE - 5.8GHz

802.11(a) 6 Mbps, Low Channel 149, 5745 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.386 ms	1.494 ms	1	92.7	N/A	N/A

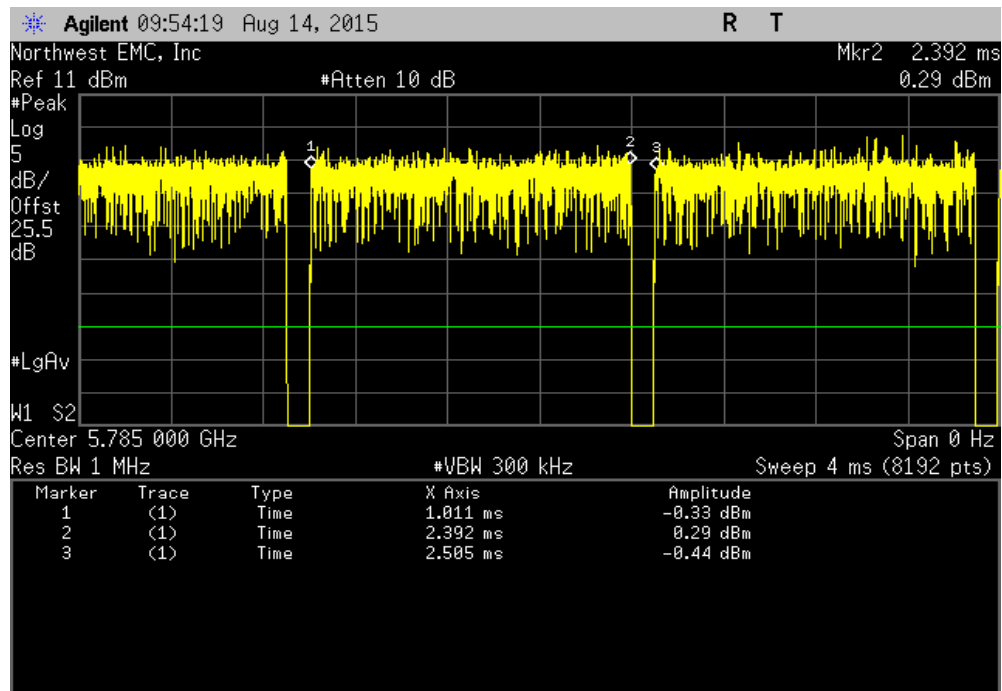


802.11(a) 6 Mbps, Low Channel 149, 5745 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A

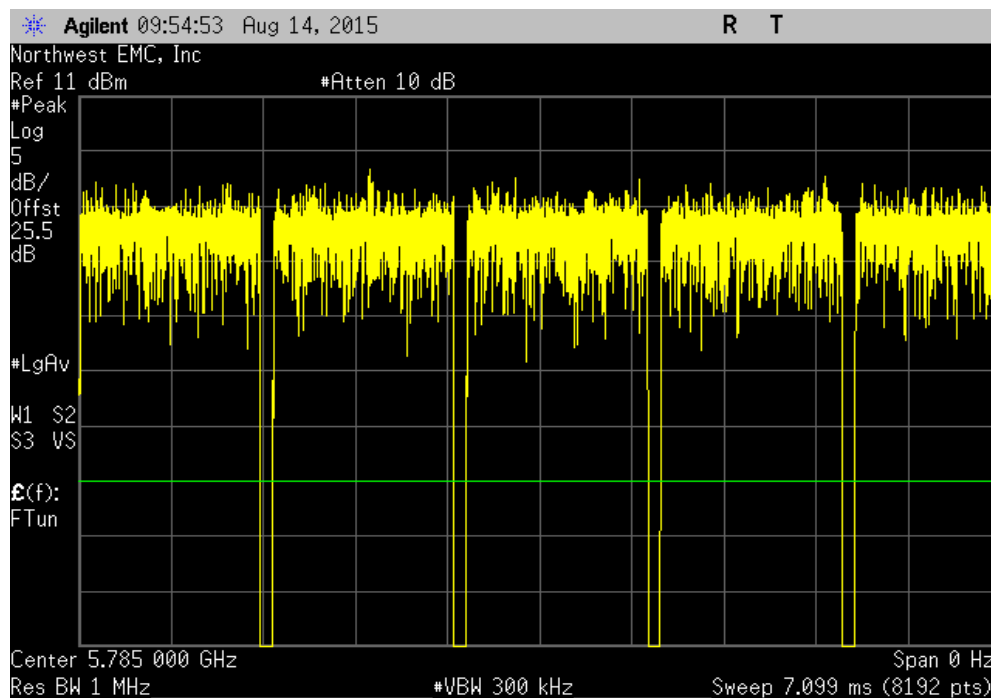


# DUTY CYCLE - 5.8GHz

802.11(a) 6 Mbps, Mid Channel 157, 5785 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
1.381 ms	1.494 ms	1	92.4	N/A	N/A	



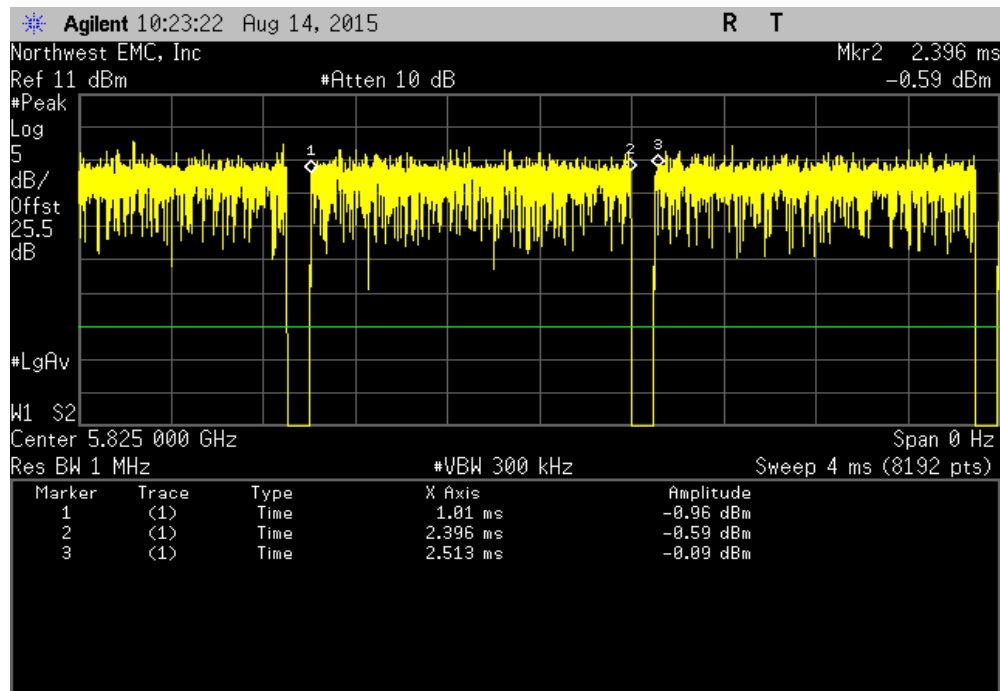
802.11(a) 6 Mbps, Mid Channel 157, 5785 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
N/A	N/A	5	N/A	N/A	N/A	





# DUTY CYCLE - 5.8GHz

802.11(a) 6 Mbps, High Channel 165, 5825 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.386 ms	1.503 ms	1	92.2	N/A	N/A

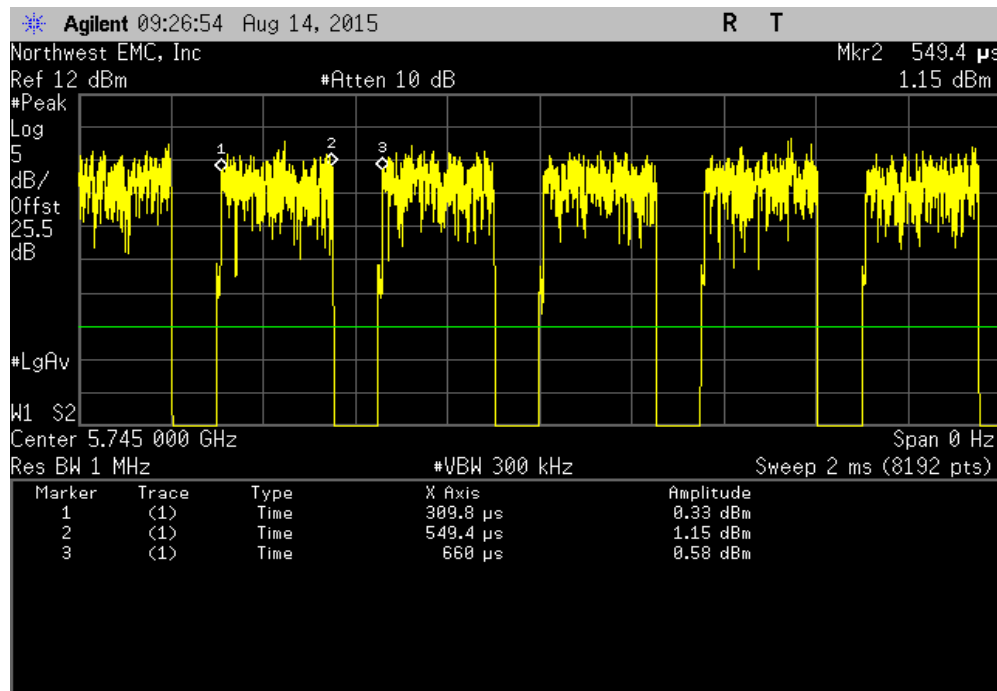


802.11(a) 6 Mbps, High Channel 165, 5825 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A

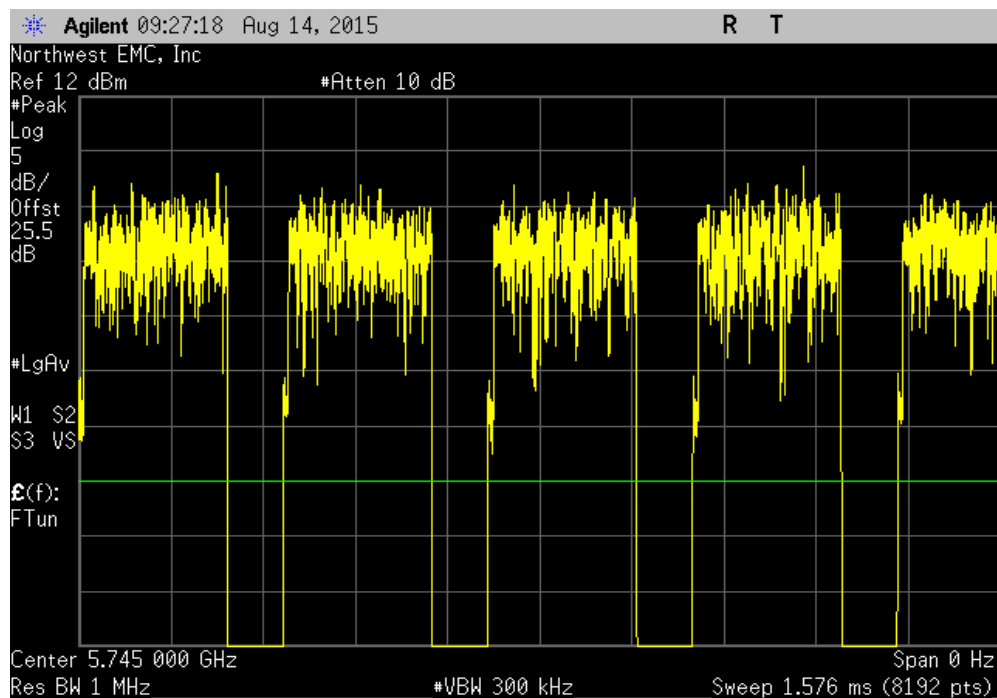


# DUTY CYCLE - 5.8GHz

802.11(a) 36 Mbps, Low Channel 149, 5745 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
239.596 us	350.2 us	1	68.4	N/A	N/A	

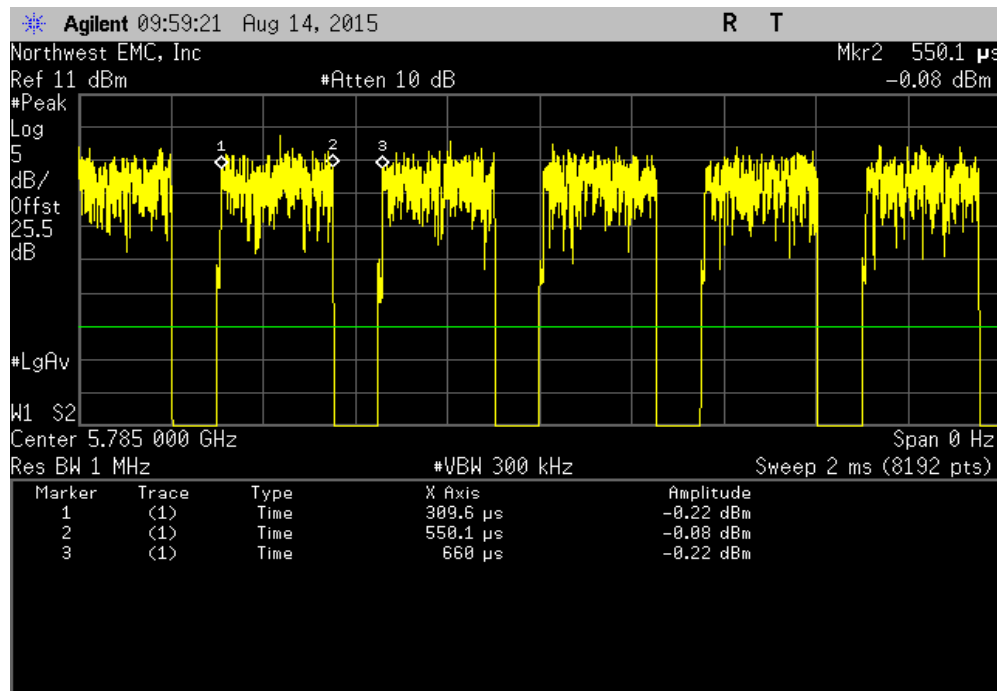


802.11(a) 36 Mbps, Low Channel 149, 5745 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
N/A	N/A	5	N/A	N/A	N/A	

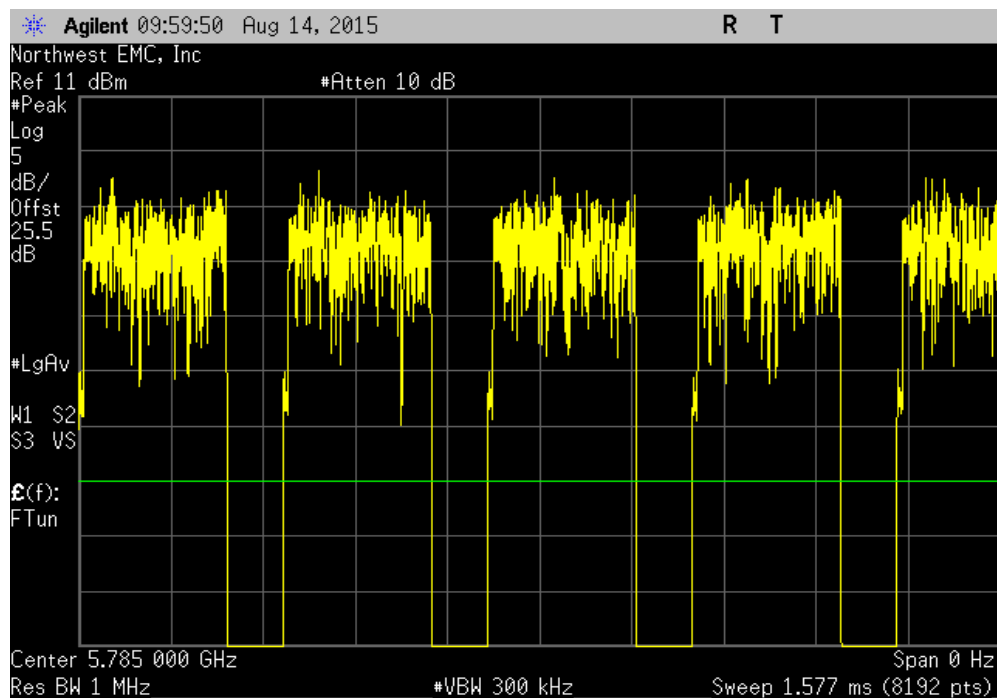


# DUTY CYCLE - 5.8GHz

802.11(a) 36 Mbps, Mid Channel 157, 5785 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
240.472 us	350.356 us	1	68.6	N/A	N/A	

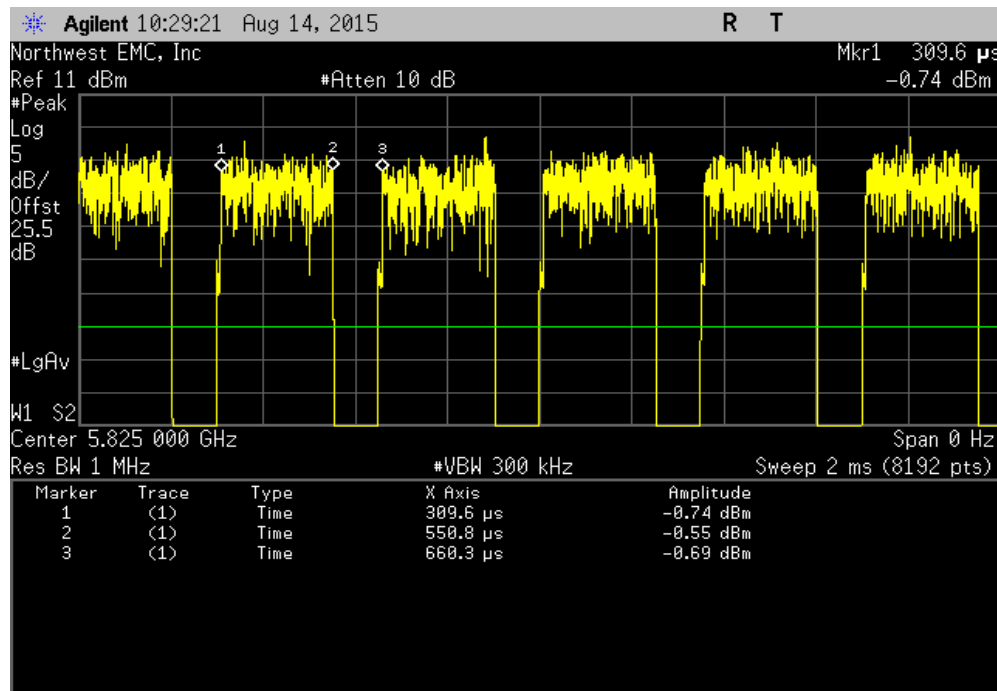


802.11(a) 36 Mbps, Mid Channel 157, 5785 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
N/A	N/A	5	N/A	N/A	N/A	

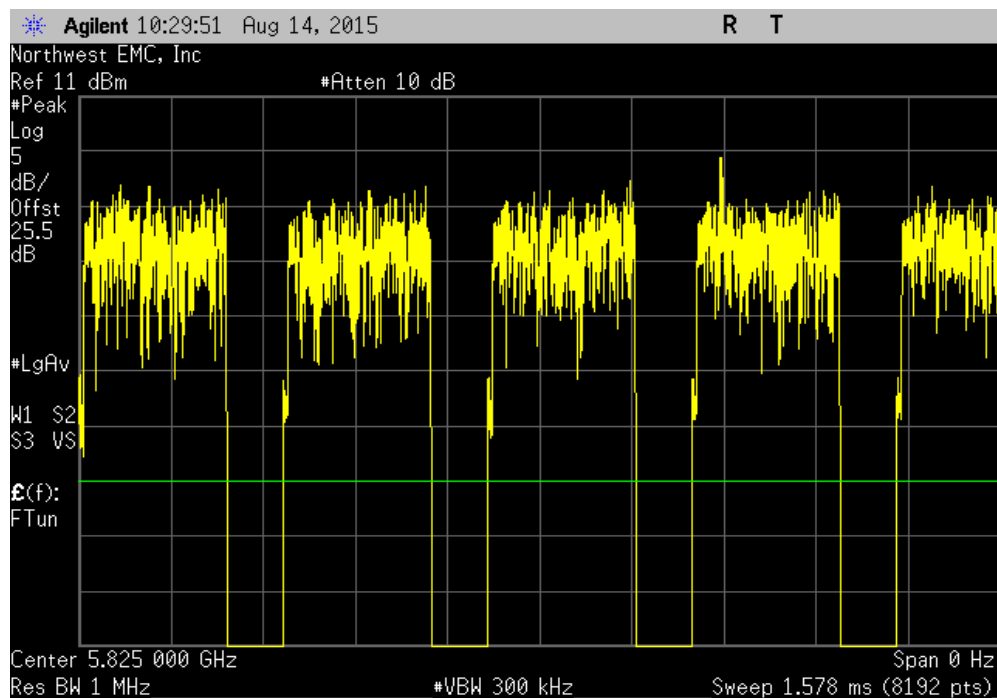


# DUTY CYCLE - 5.8GHz

802.11(a) 36 Mbps, High Channel 165, 5825 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
241.205 us	350.656 us	1	68.8	N/A	N/A	

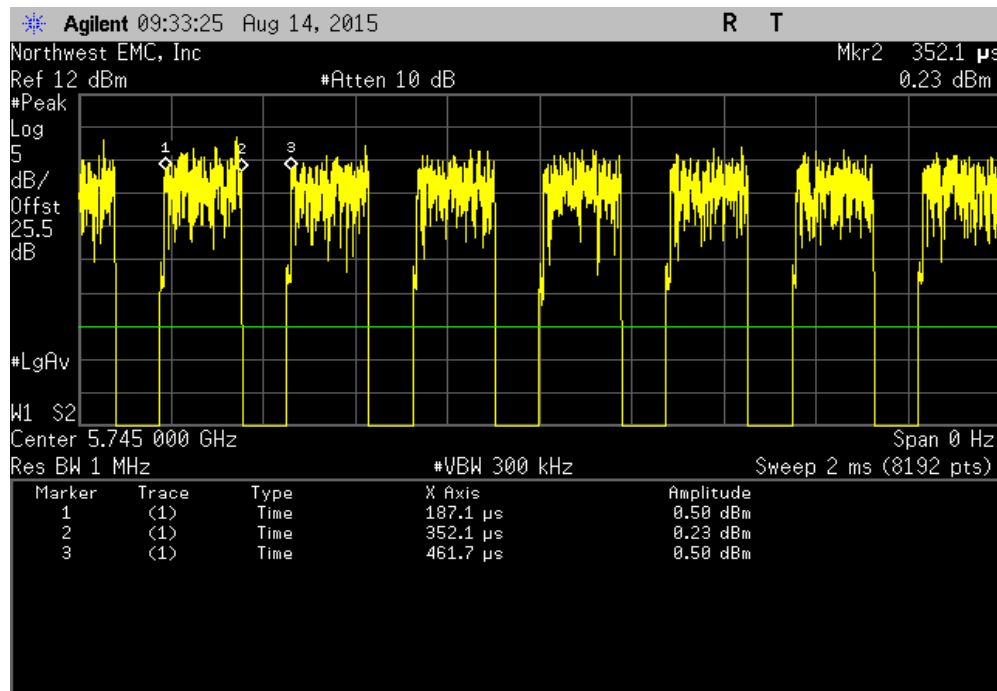


802.11(a) 36 Mbps, High Channel 165, 5825 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
N/A	N/A	5	N/A	N/A	N/A	

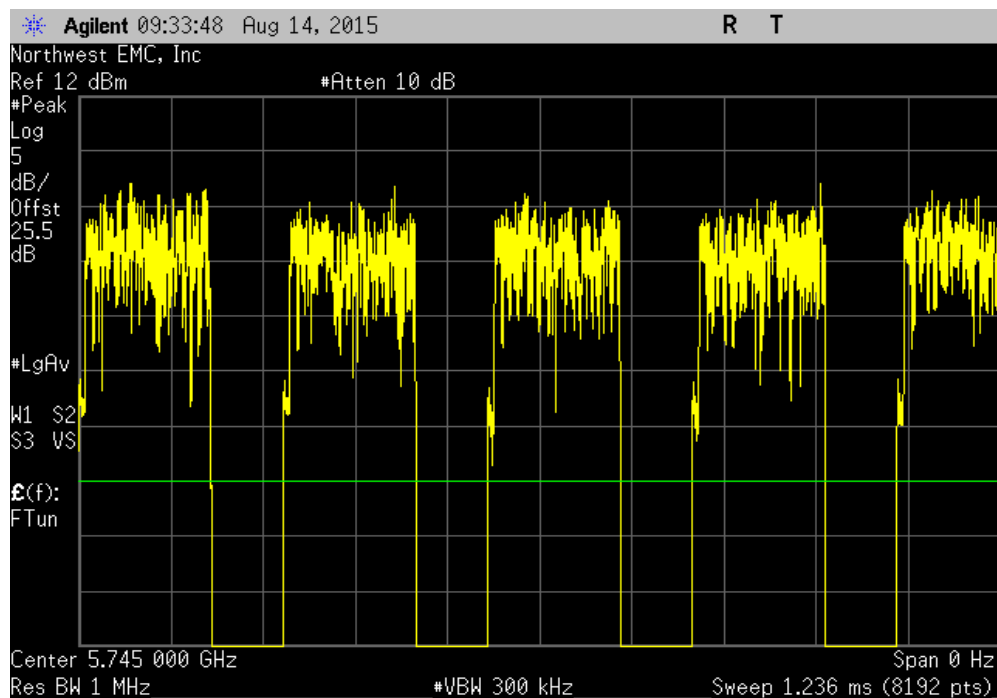


# DUTY CYCLE - 5.8GHz

802.11(a) 54 Mbps, Low Channel 149, 5745 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
165.005 us	274.644 us	1	60.1	N/A	N/A	

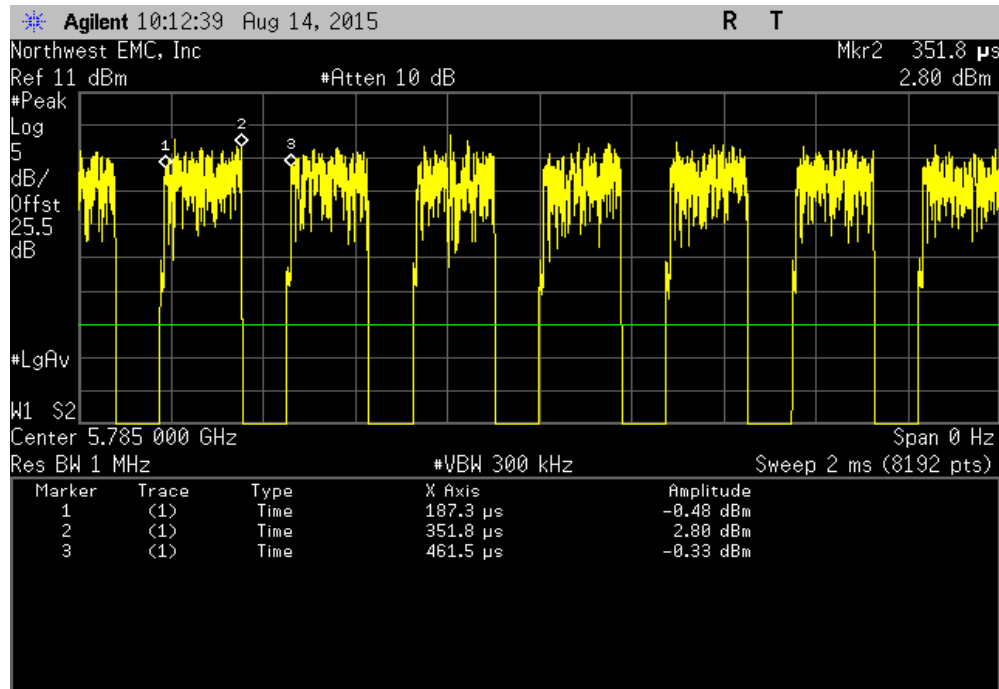


802.11(a) 54 Mbps, Low Channel 149, 5745 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
N/A	N/A	5	N/A	N/A	N/A	

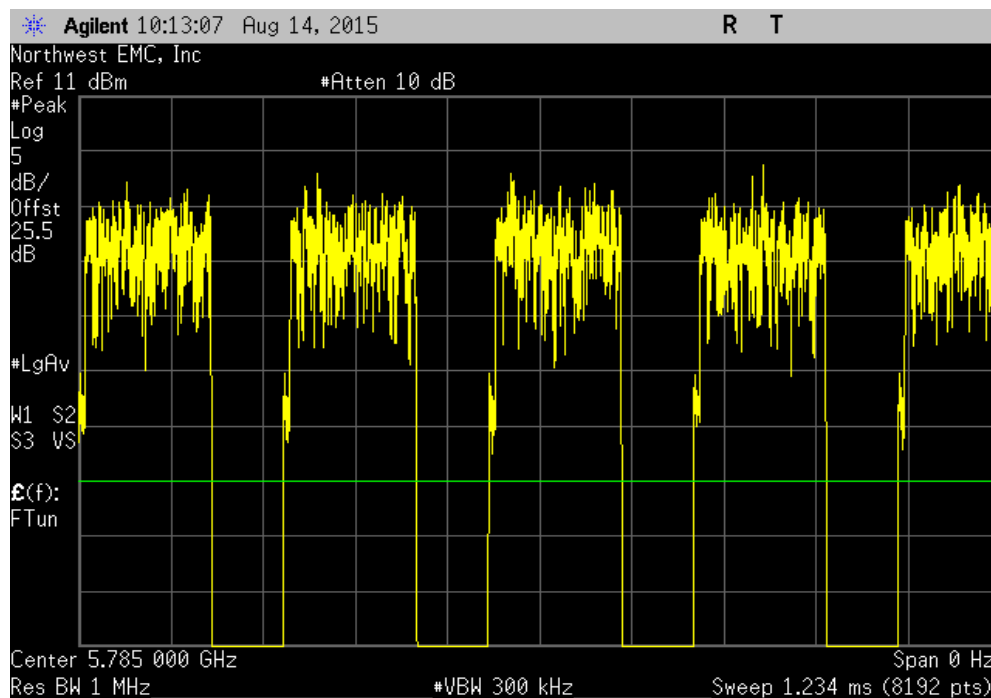


# DUTY CYCLE - 5.8GHz

802.11(a) 54 Mbps, Mid Channel 157, 5785 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
164.517 us	274.156 us	1	60	N/A	N/A	

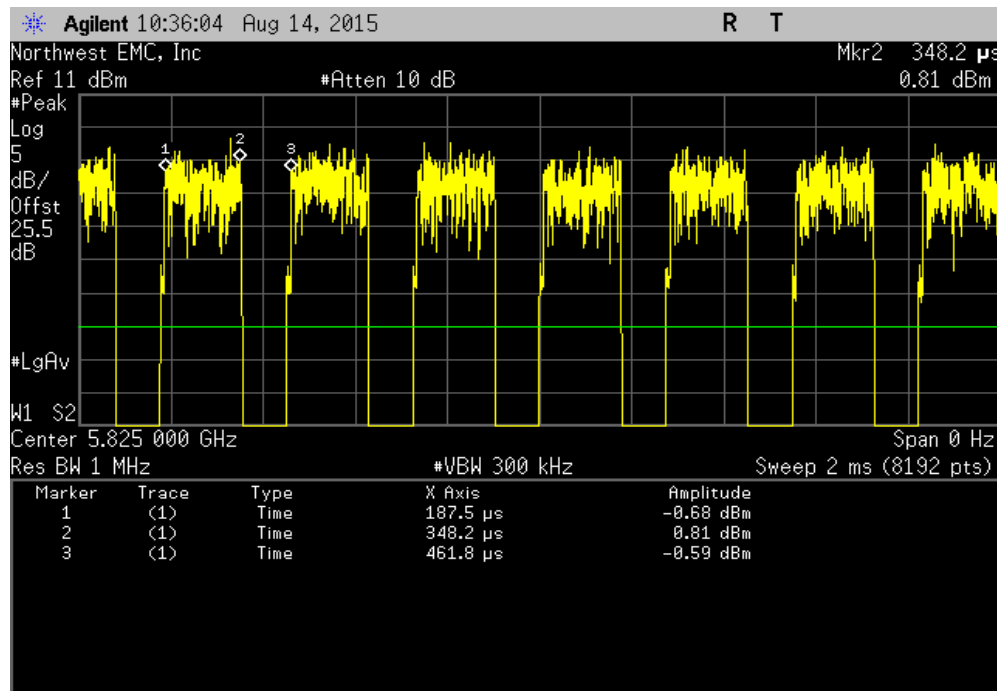


802.11(a) 54 Mbps, Mid Channel 157, 5785 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
N/A	N/A	5	N/A	N/A	N/A	

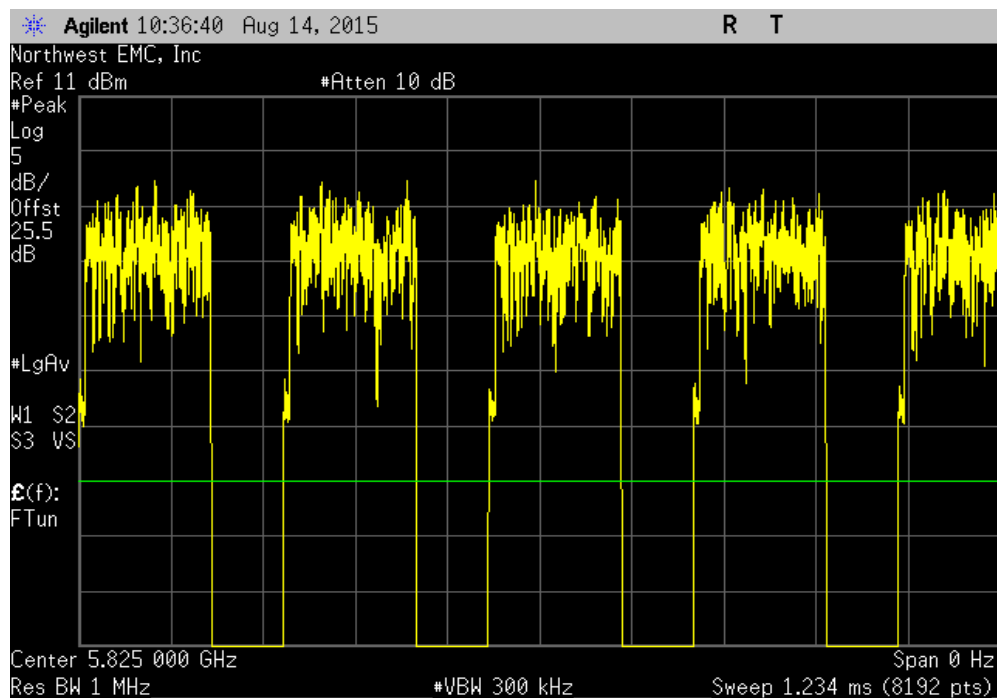


# DUTY CYCLE - 5.8GHz

802.11(a) 54 Mbps, High Channel 165, 5825 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
160.71 us	274.256 us	1	58.6	N/A	N/A	



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



# EMISSION BANDWIDTH

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

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mos)
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Block - DC	Aeroflex	INMET 8535	AMO	4/8/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12

## TEST DESCRIPTION

FCC KDB 789033 General UNII Test Procedures were followed.

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.

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 by the KDB, and to utilize the emission bandwidth for setting the channel power integration bandwidth during conducted output

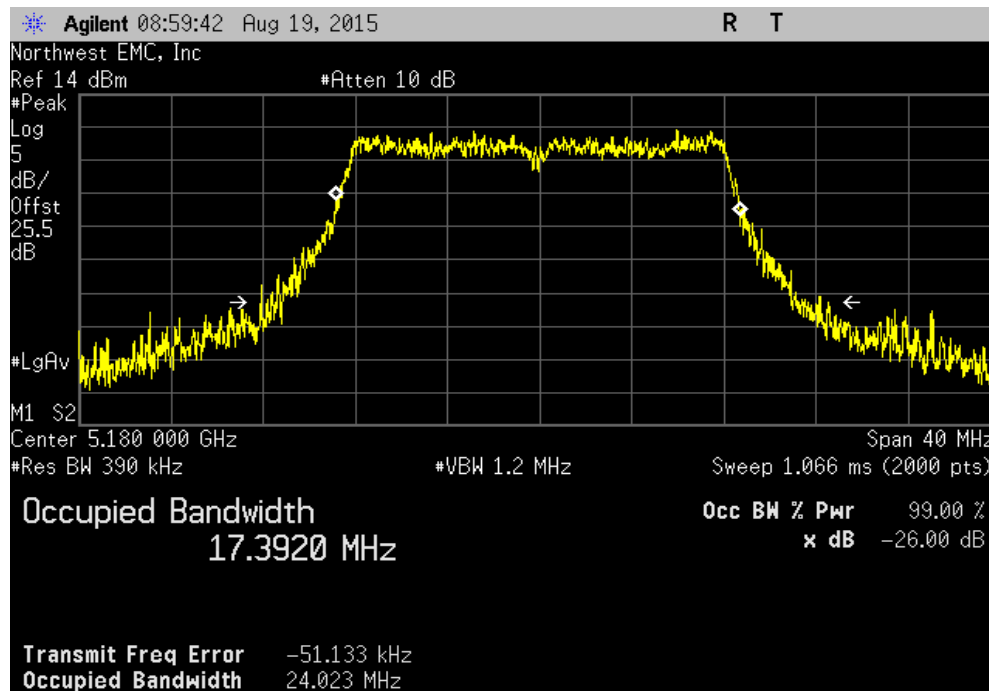


# EMISSION BANDWIDTH

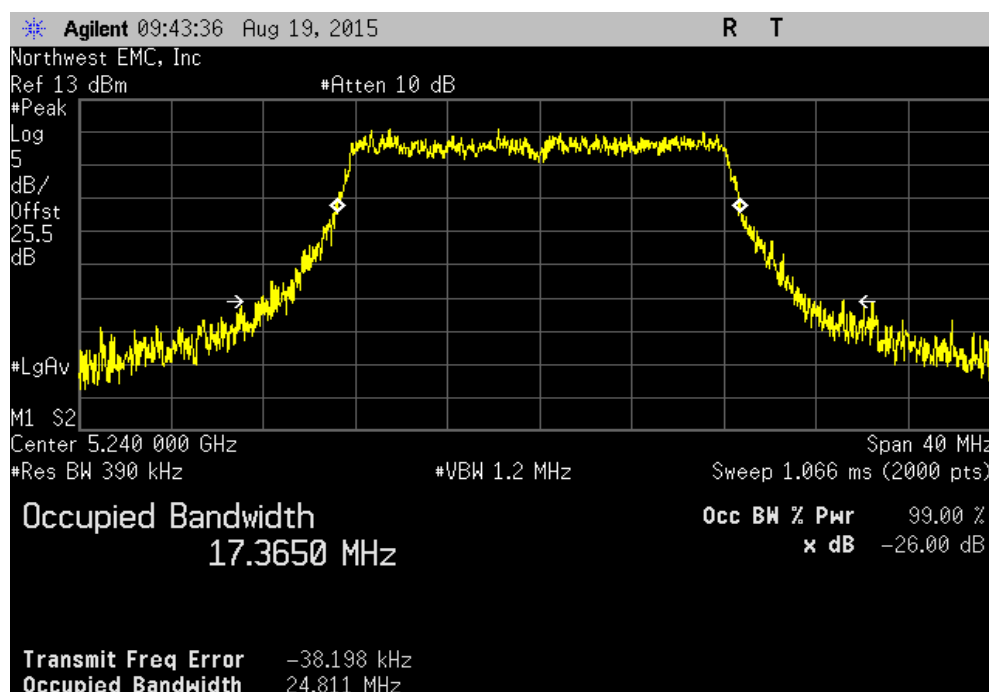
EUT: MWM1		Work Order: MASI0275	
Serial Number: 1521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mark Baytan	Power: 110VAC/60Hz	Job Site: OC13	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 90. DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.5dB total offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Value	Limit (N/A)
5150 - 5250 MHz Band			
802.11(a) 6 Mbps			
Channel 36, Low Channel		24.023 MHz	N/A N/A
Channel 48, High Channel		24.811 MHz	N/A N/A
802.11(a) 36 Mbps			
Channel 36, Low Channel		22.134 MHz	N/A N/A
Channel 48, High Channel		23.06 MHz	N/A N/A
802.11(a) 54 Mbps			
Channel 36, Low Channel		22.868 MHz	N/A N/A
Channel 48, High Channel		23.094 MHz	N/A N/A

# EMISSION BANDWIDTH

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

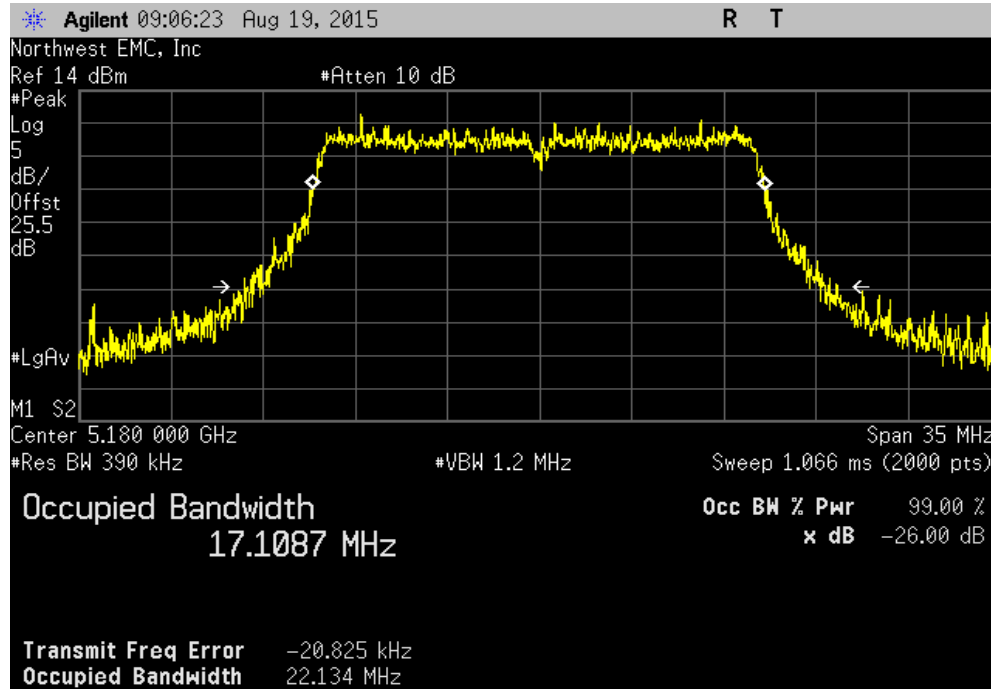


5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 48, High Channel						
				Value	Limit (N/A)	Result
				24.811 MHz	N/A N/A	N/A

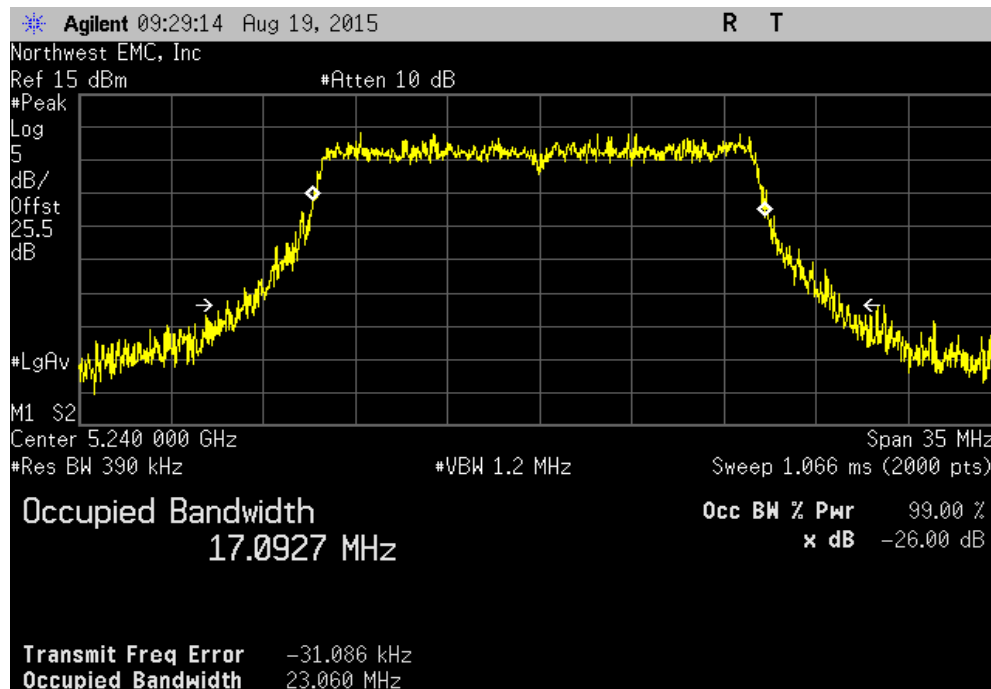


# EMISSION BANDWIDTH

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

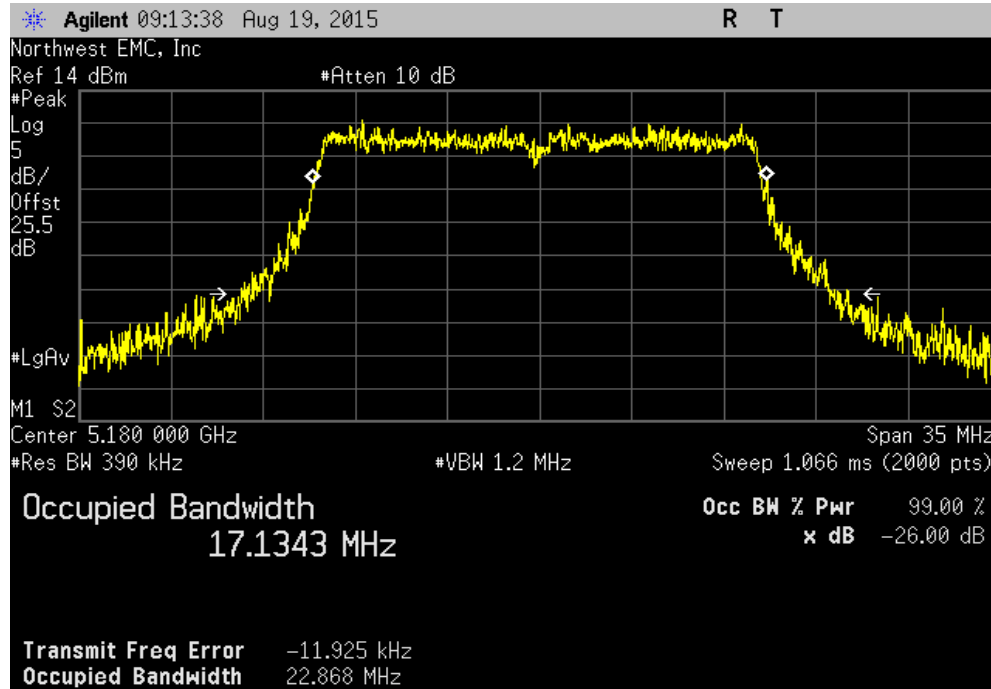


5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 48, High Channel						
				Value	Limit (N/A)	Result
				23.06 MHz	N/A N/A	N/A

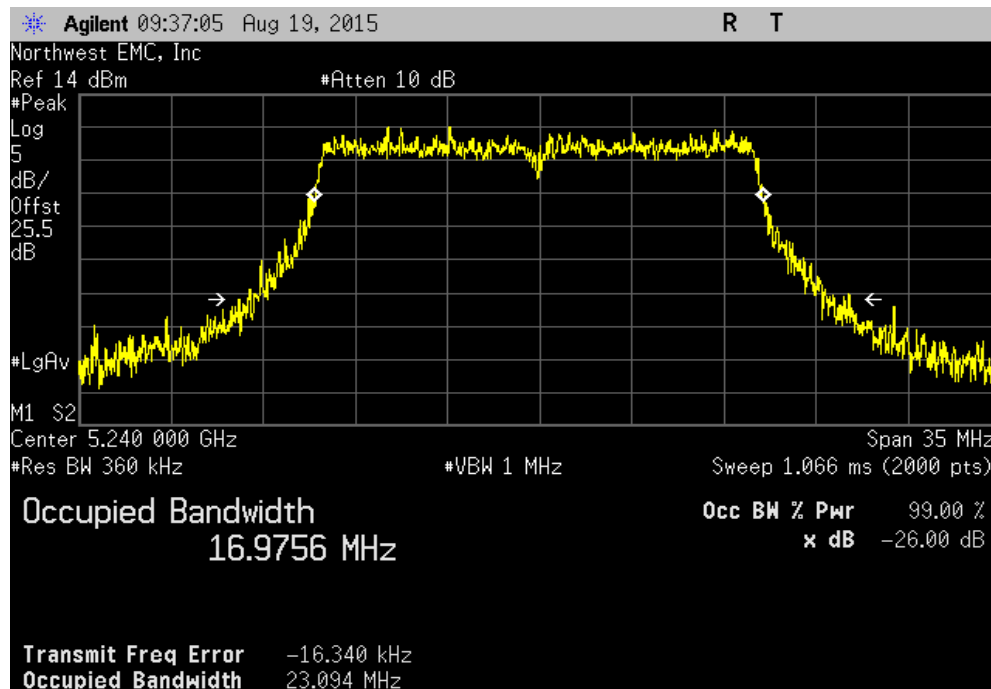


# EMISSION BANDWIDTH

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



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



# OCCUPIED BANDWIDTH

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

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo)
Block - DC	Aeroflex	INMET 8535	AMO	4/8/2015	12
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12

## TEST DESCRIPTION

FCC KDB 789033 General UNII Test Procedures were followed to measure the minimum emission bandwidth for the 5.725-5.85 GHz band.

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.


The spectrum analyzer settings were as follows:

- RBW = 100 kHz
- VBW =  $\geq 3 \times$  RBW
- Detector = Peak
- Trace mode = max hold

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

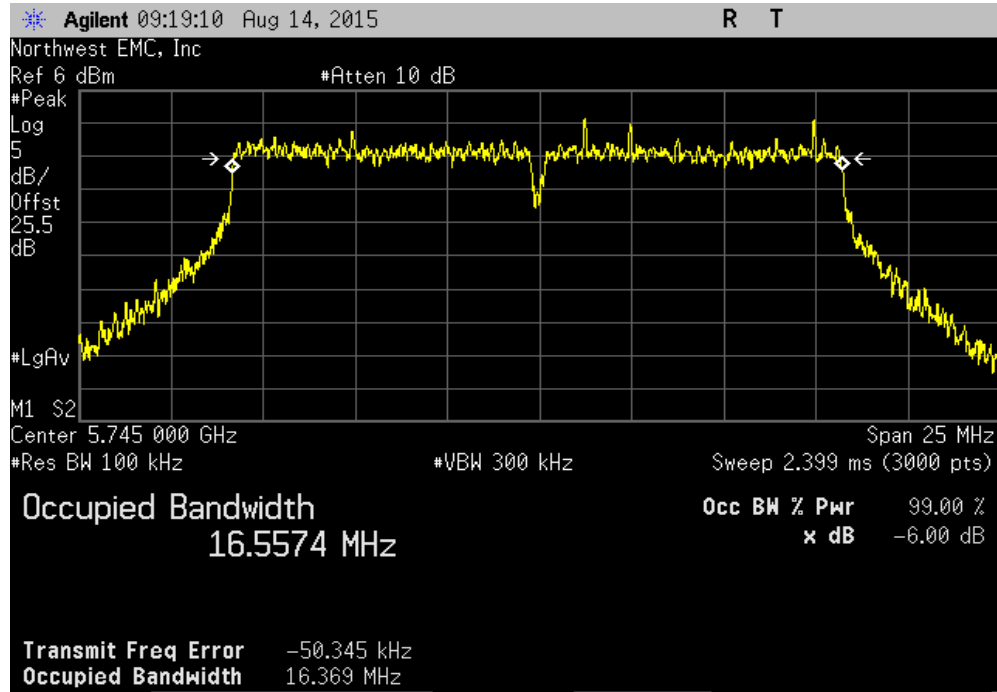
The 99.9% (approximate 26 dB) emission bandwidth (EBW) was also measured at the same time to be used for setting the channel power integration bandwidth during conducted output power testing.

# OCCUPIED BANDWIDTH

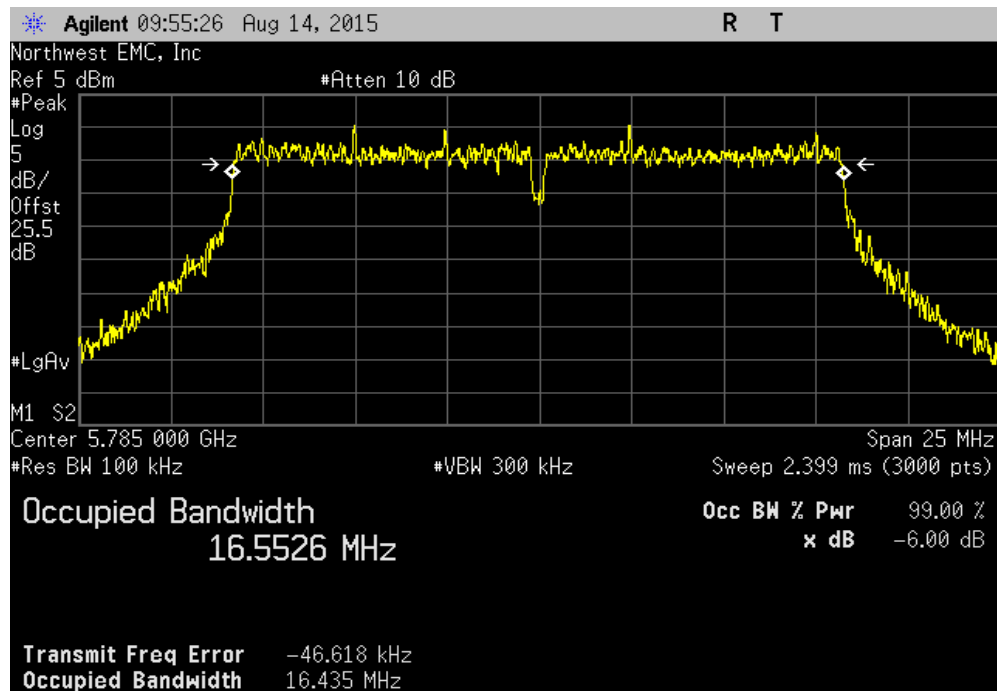
EUT: MWM1		Work Order: MASI0274	
Serial Number: 521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mike Tran	Power: 110VAC/60Hz	Job Site: OC13	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 25			
DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.47dB total offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Value	Limit (>)
802.11(a) 6 Mbps			
	Low Channel 149, 5745 MHz	16.369 MHz	500 kHz
	Mid Channel 157, 5785 MHz	16.435 MHz	500 kHz
	High Channel 165, 5825 MHz	16.437 MHz	500 kHz
802.11(a) 36 Mbps			
	Low Channel 149, 5745 MHz	16.406 MHz	500 kHz
	Mid Channel 157, 5785 MHz	16.463 MHz	500 kHz
	High Channel 165, 5825 MHz	16.421 MHz	500 kHz
802.11(a) 54 Mbps			
	Low Channel 149, 5745 MHz	16.413 MHz	500 kHz
	Mid Channel 157, 5785 MHz	16.45 MHz	500 kHz
	High Channel 165, 5825 MHz	16.397 MHz	500 kHz
			Result
			Pass
			Pass
			Pass
			Pass
			Pass
			Pass

# OCCUPIED BANDWIDTH

802.11(a) 6 Mbps, Low Channel 149, 5745 MHz						
				Value	Limit (>)	Result
				16.369 MHz	500 kHz	Pass

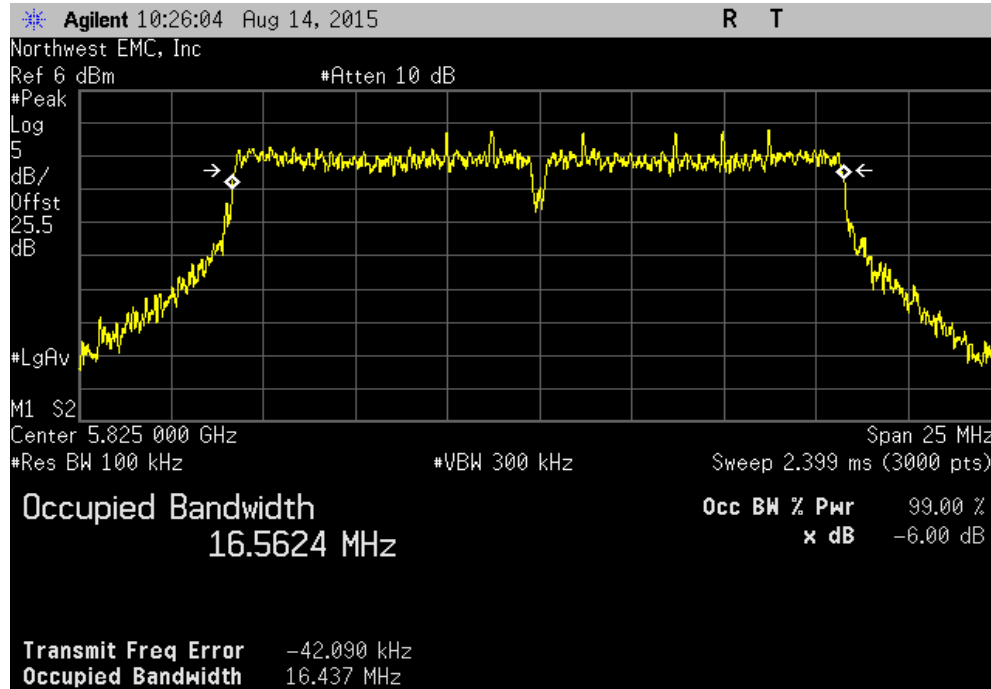


802.11(a) 6 Mbps, Mid Channel 157, 5785 MHz						
				Value	Limit (>)	Result
				16.435 MHz	500 kHz	Pass

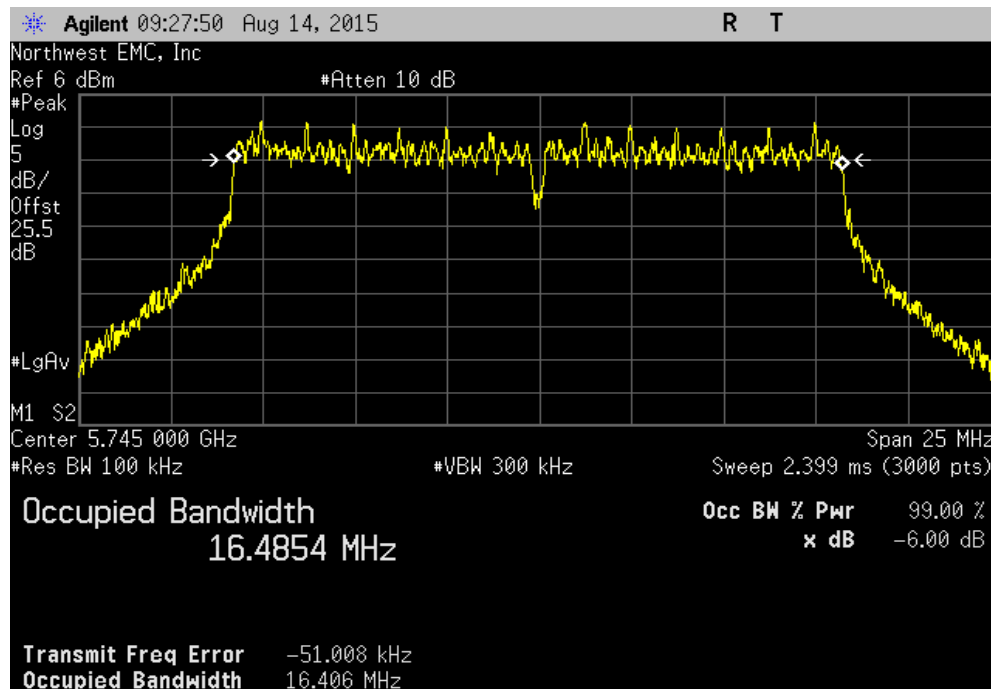


# OCCUPIED BANDWIDTH

802.11(a) 6 Mbps, High Channel 165, 5825 MHz						
				Value	Limit (>)	Result
				16.437 MHz	500 kHz	Pass



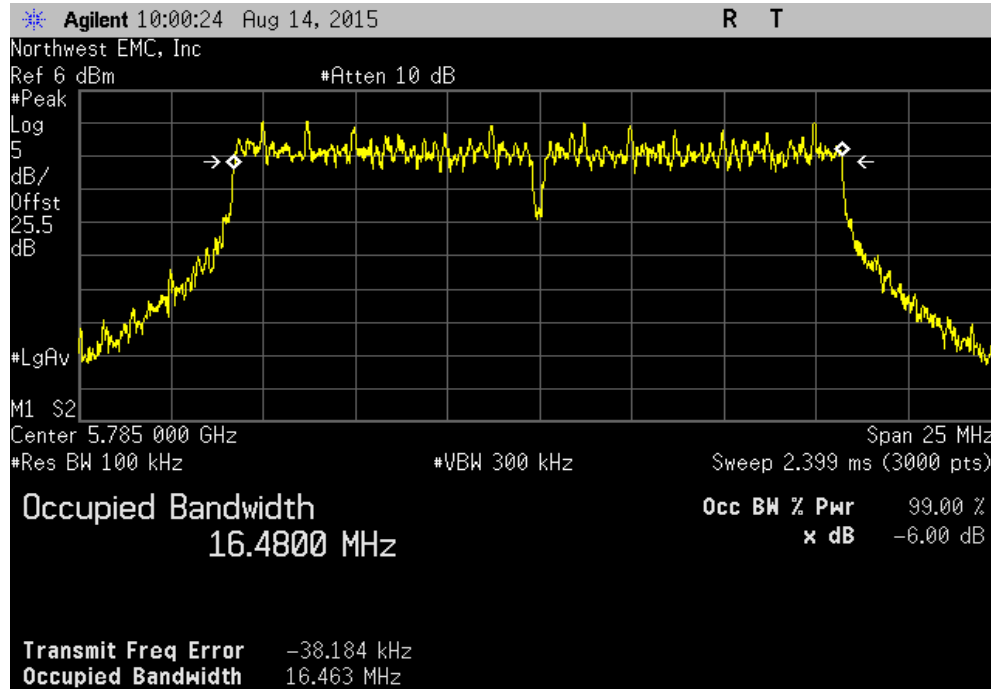
802.11(a) 36 Mbps, Low Channel 149, 5745 MHz						
				Value	Limit (>)	Result
				16.406 MHz	500 kHz	Pass



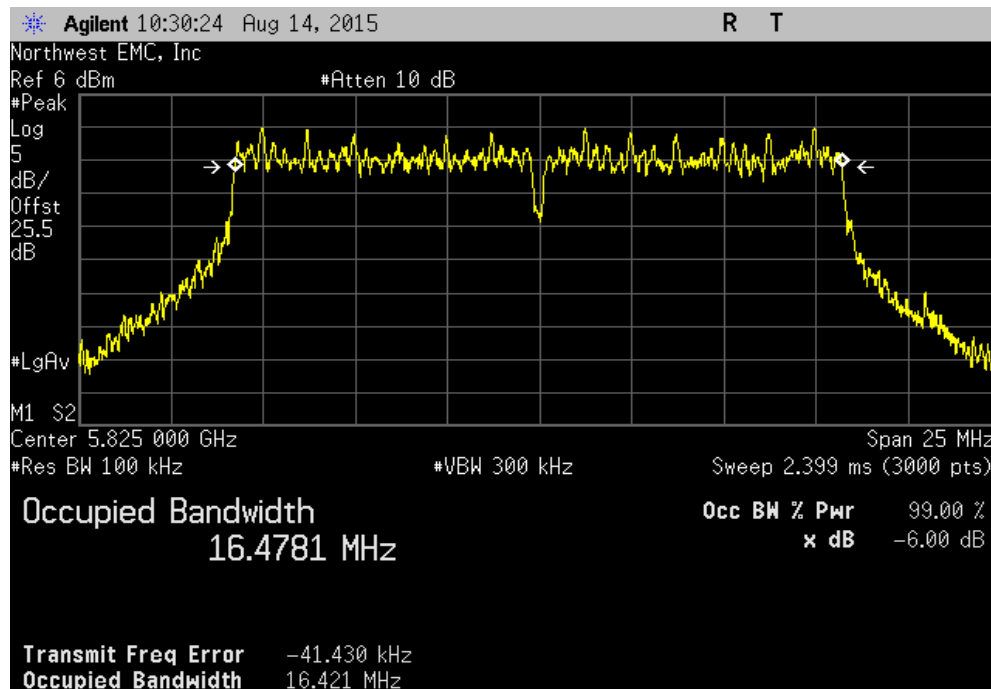


# OCCUPIED BANDWIDTH

802.11(a) 36 Mbps, Mid Channel 157, 5785 MHz						
				Value	Limit (>)	Result
				16.463 MHz	500 kHz	Pass

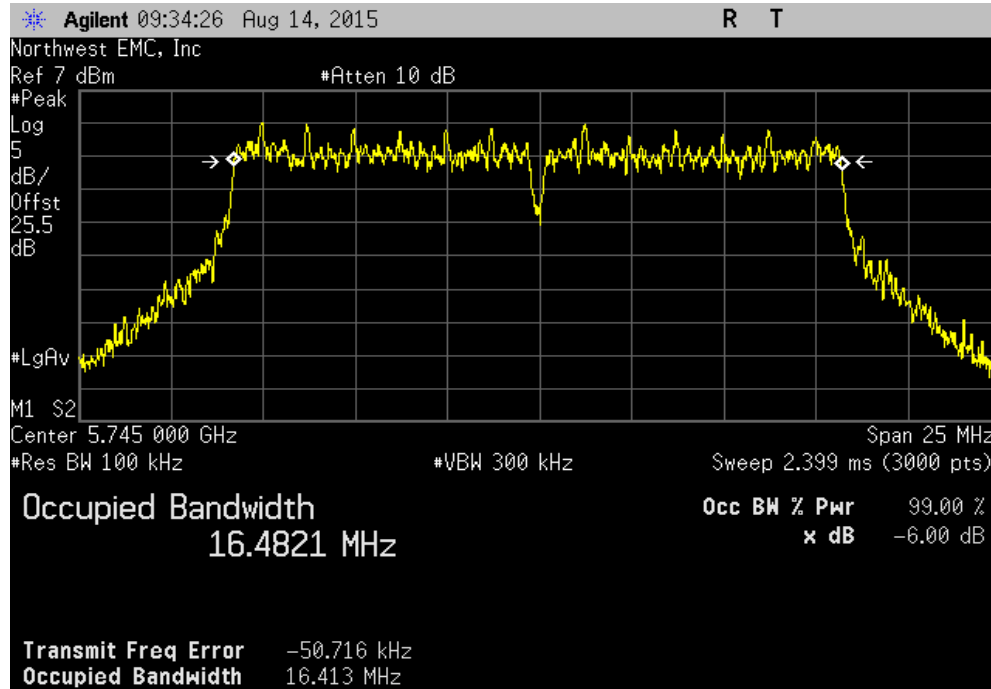


802.11(a) 36 Mbps, High Channel 165, 5825 MHz						
				Value	Limit (>)	Result
				16.421 MHz	500 kHz	Pass

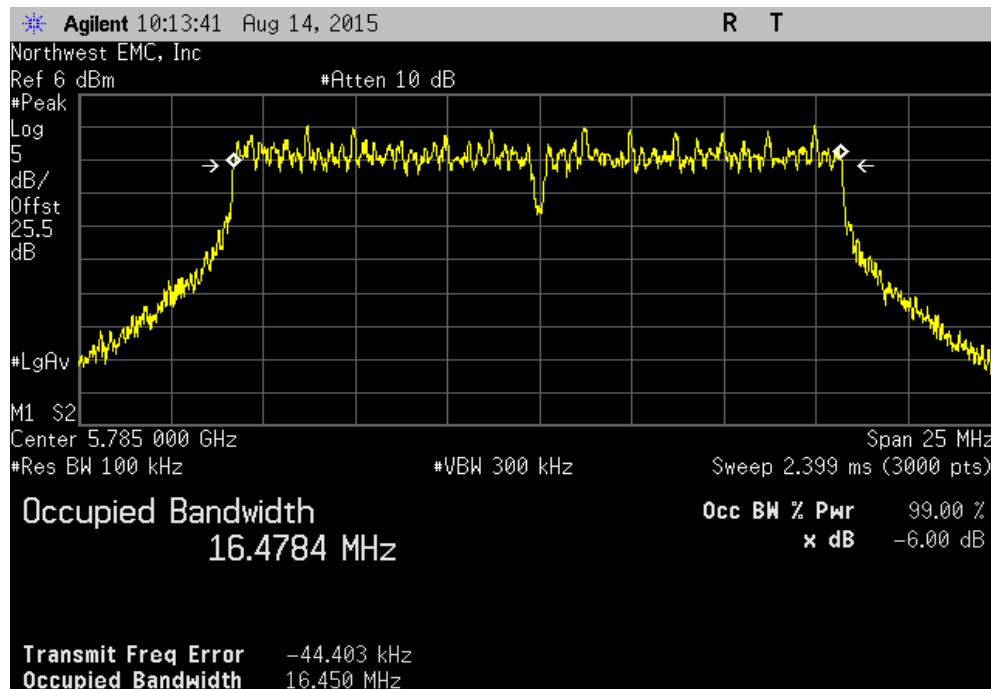


# OCCUPIED BANDWIDTH

802.11(a) 54 Mbps, Low Channel 149, 5745 MHz						
				Value	Limit (>)	Result
				16.413 MHz	500 kHz	Pass

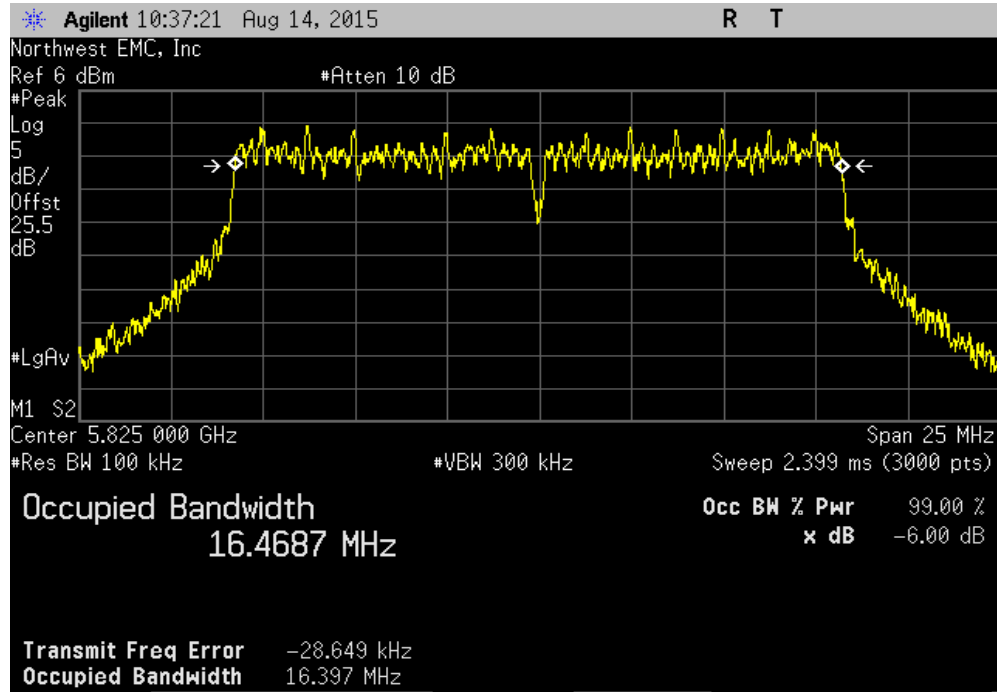


802.11(a) 54 Mbps, Mid Channel 157, 5785 MHz						
				Value	Limit (>)	Result
				16.45 MHz	500 kHz	Pass



# OCCUPIED BANDWIDTH

802.11(a) 54 Mbps, High Channel 165, 5825 MHz						
				Value	Limit (>)	Result
				16.397 MHz	500 kHz	Pass



# PEAK TRANSMIT POWER - 5.2GHz

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 (mos)
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Block - DC	Aeroflex	INMET 8535	AMO	4/8/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	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.

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

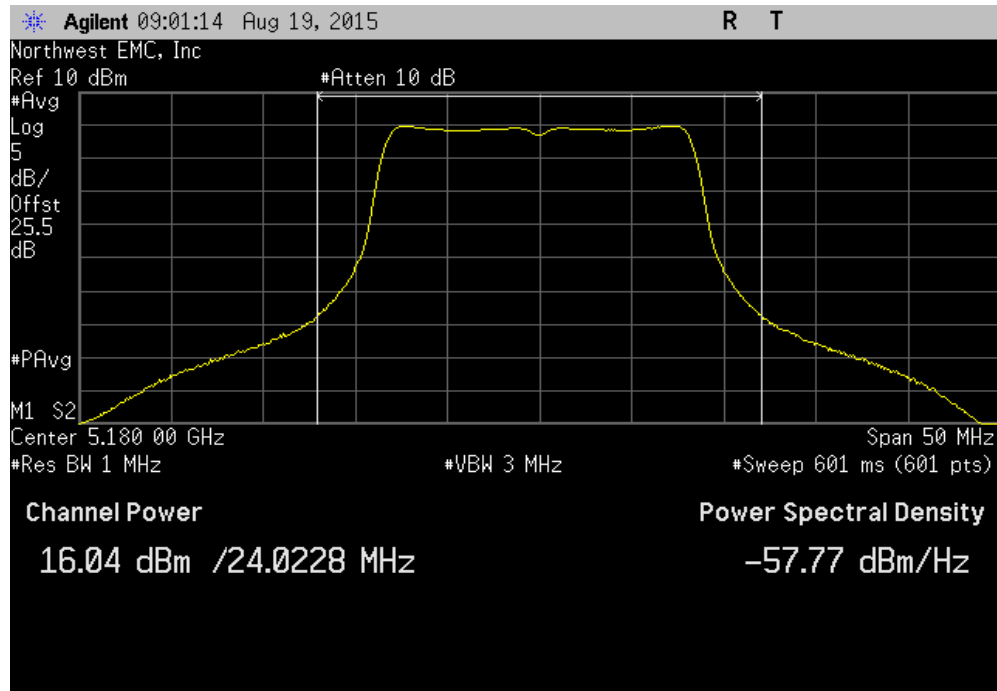
- RBW = 1 MHz, VBW = 3 MHz
- Sample Detector
- The number of points was set to 601. This satisfied the requirement of being  $> 2 * \text{span} / \text{RBW}$
- Trace average 100 traces in power averaging mode.
- Power was integrated across "B", by using the channel power function of the analyzer.

# PEAK TRANSMIT POWER - 5.2GHz

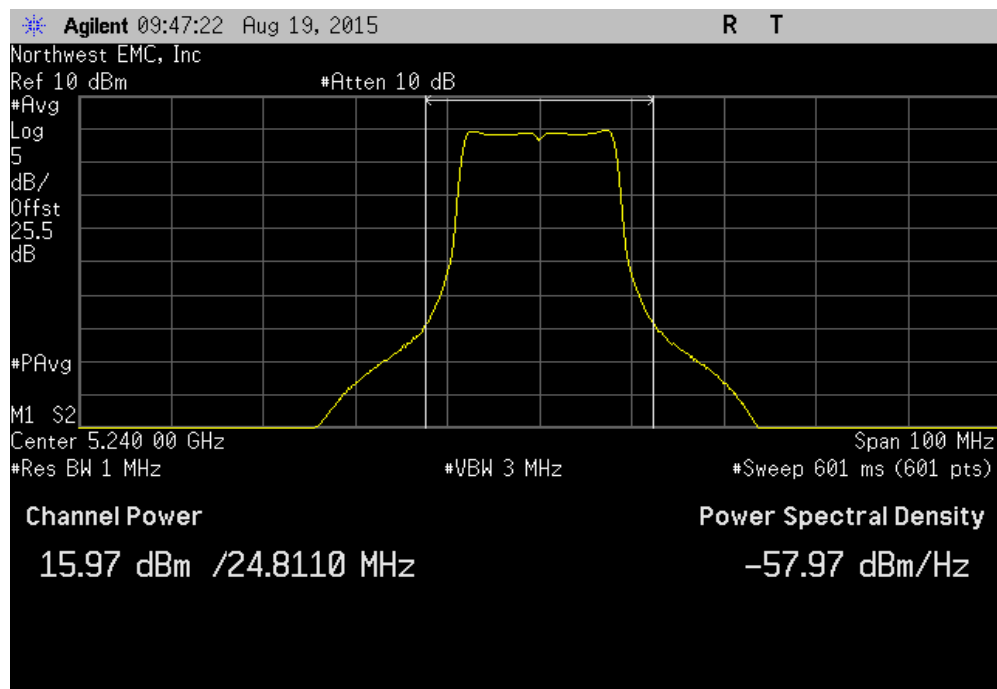
EUT: MWM1		Work Order: MASI0275	
Serial Number: 1521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mark Baytan		Power: 110VAC/60Hz	
		Job Site: OC13	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 90. DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.5dB total offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)
5150 - 5250 MHz Band		EIRP (dBm)	Limit (dBm)
802.11(a) 6 Mbps			Results
Channel 36, Low Channel		16.039	0.3
Channel 48, High Channel		15.971	0.3
802.11(a) 36 Mbps			
Channel 36, Low Channel		15.021	1.6
Channel 48, High Channel		15.013	1.6
802.11(a) 54 Mbps			
Channel 36, Low Channel		14.528	2.2
Channel 48, High Channel		14.471	2.2

# PEAK TRANSMIT POWER - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 36, Low Channel						
Avg Cond	Duty Cycle	EIRP	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
16.039	0.3	16.4	24	Pass		

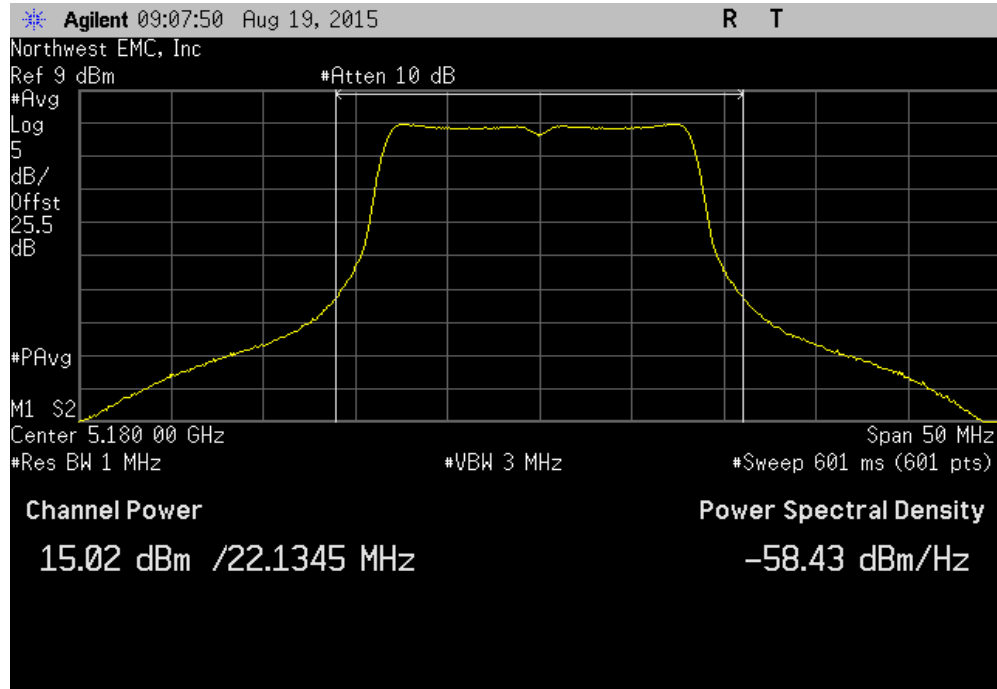


5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 48, High Channel						
Avg Cond	Duty Cycle	EIRP	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
15.971	0.3	16.3	24	Pass		

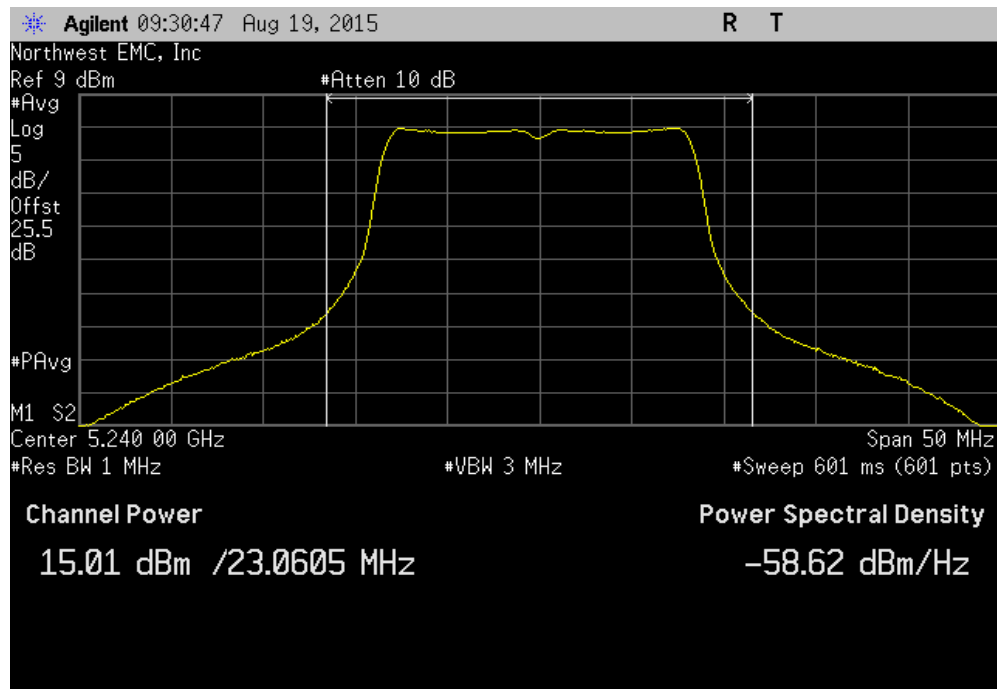


# PEAK TRANSMIT POWER - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 36, Low Channel					
Avg Cond	Duty Cycle	EIRP	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
15.021	1.6	16.6	24	Pass	

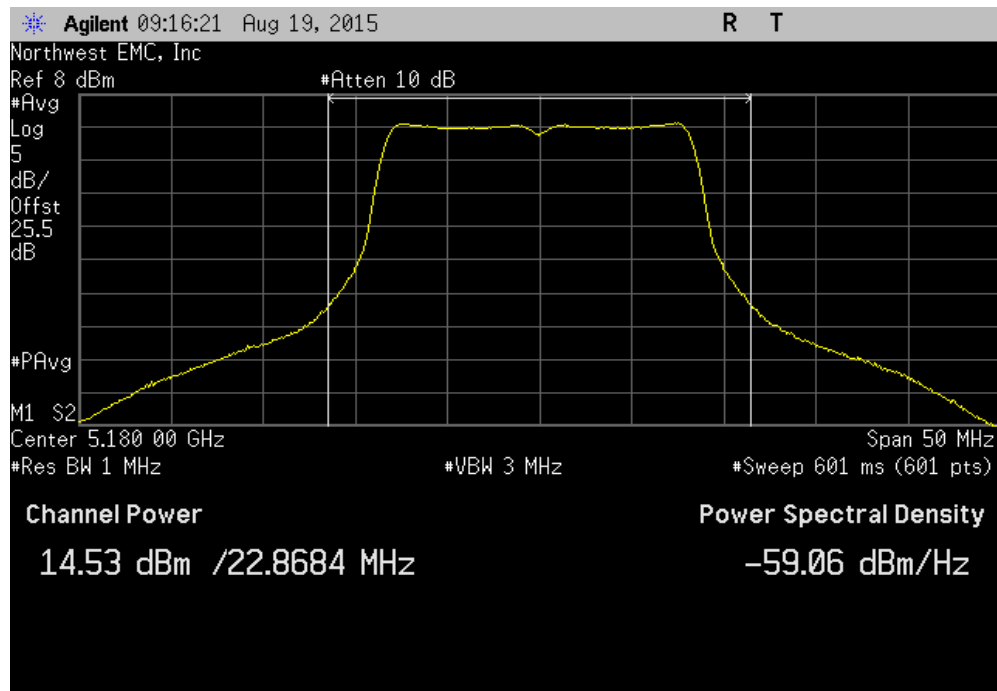


5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 48, High Channel					
Avg Cond	Duty Cycle	EIRP	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
15.013	1.6	16.6	24	Pass	

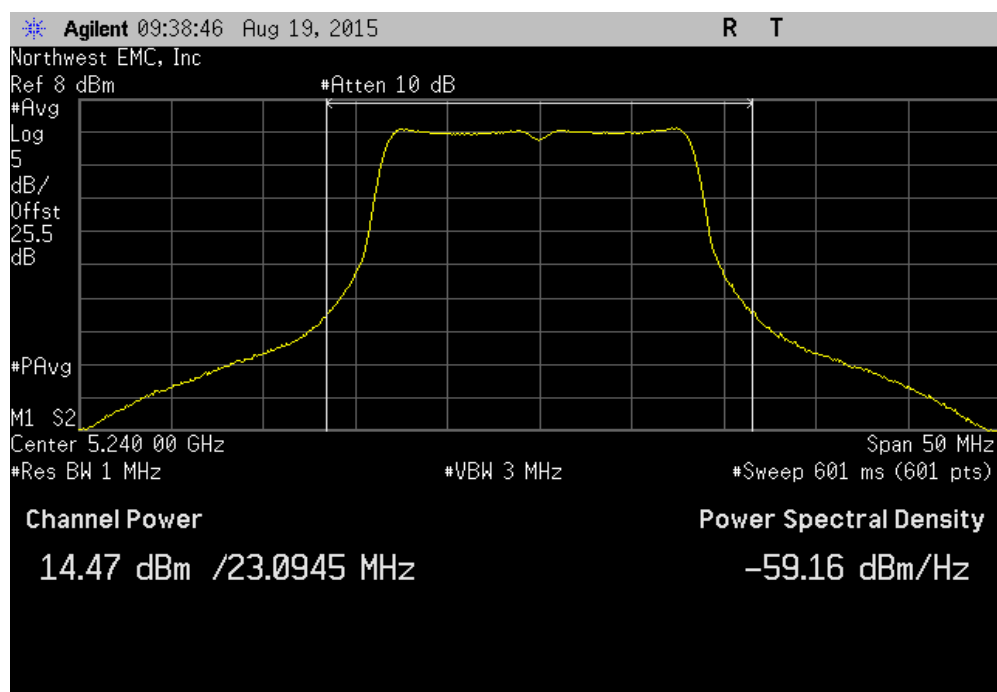


# PEAK TRANSMIT POWER - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 54 Mbps, Channel 36, Low Channel						
Avg Cond	Duty Cycle	EIRP	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
14.528	2.2	16.7	24	Pass		



5150 - 5250 MHz Band, 802.11(a) 54 Mbps, Channel 48, High Channel						
Avg Cond	Duty Cycle	EIRP	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
14.471	2.2	16.7	24	Pass		





# PEAK TRANSMIT POWER - 5.8GHz

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)
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Block - DC	Aeroflex	INMET 8535	AMO	4/8/2015	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.

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

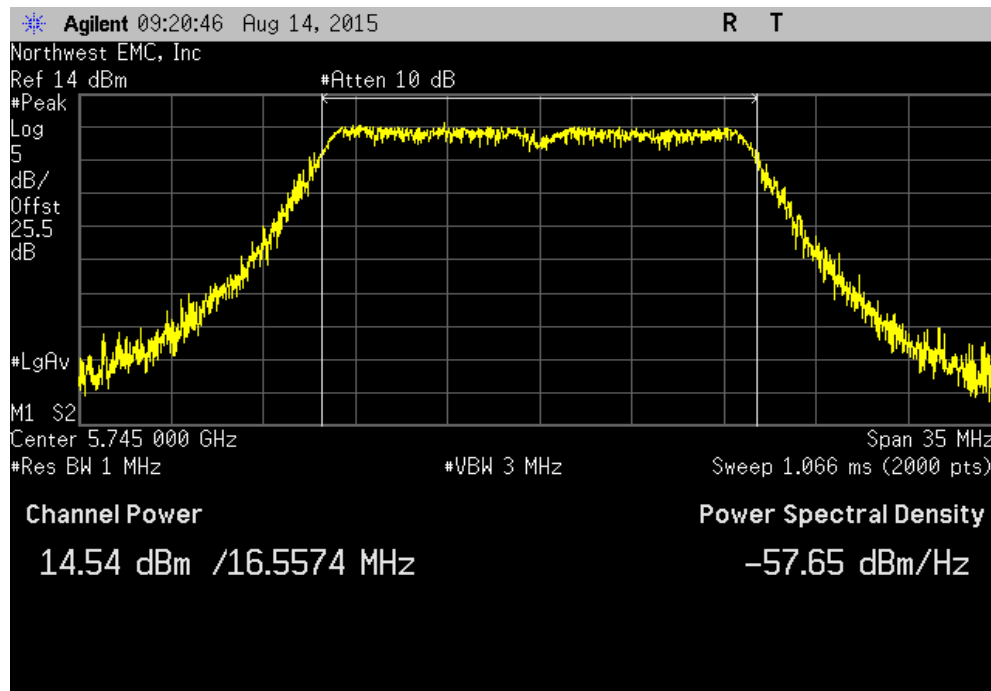
- RBW = 1 MHz, VBW = 3 MHz
- Sample Detector
- The number of points was set to 601. This satisfied the requirement of being  $> 2 * \text{span} / \text{RBW}$
- Trace average 100 traces in power averaging mode.
- Power was integrated across "B", by using the channel power function of the analyzer.

# PEAK TRANSMIT POWER - 5.8GHz

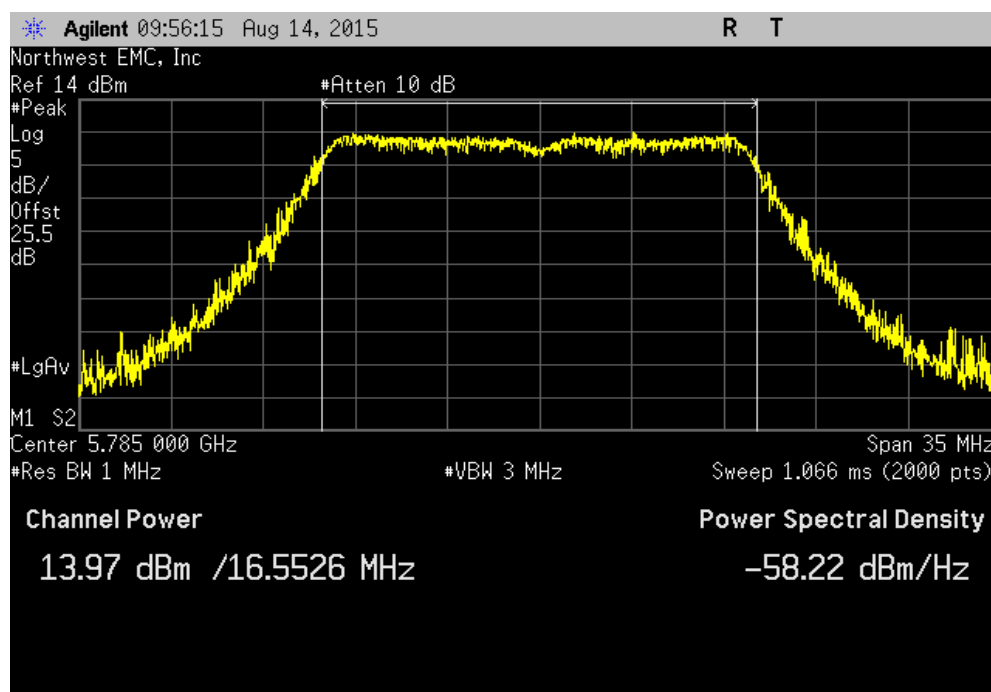
EUT: MWM1		Work Order: MASI0274	
Serial Number: 521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mike Tran	Power: 110VAC/60Hz	Job Site: OC13	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 25 DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.47dB total offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Value	Limit (<)
802.11(a) 6 Mbps			
	Low Channel 149, 5745 MHz	14.544 dBm	30 dBm
	Mid Channel 157, 5785 MHz	13.969 dBm	30 dBm
	High Channel 165, 5825 MHz	13.565 dBm	30 dBm
802.11(a) 36 Mbps			
	Low Channel 149, 5745 MHz	14.691 dBm	30 dBm
	Mid Channel 157, 5785 MHz	12.181 dBm	30 dBm
	High Channel 165, 5825 MHz	13.141 dBm	30 dBm
802.11(a) 54 Mbps			
	Low Channel 149, 5745 MHz	14.485 dBm	30 dBm
	Mid Channel 157, 5785 MHz	11.517 dBm	30 dBm
	High Channel 165, 5825 MHz	13.285 dBm	30 dBm
			Result
			Pass
			Pass
			Pass
			Pass
			Pass
			Pass

# PEAK TRANSMIT POWER - 5.8GHz

802.11(a) 6 Mbps, Low Channel 149, 5745 MHz						
				Value	Limit (<)	Result
				14.544 dBm	30 dBm	Pass

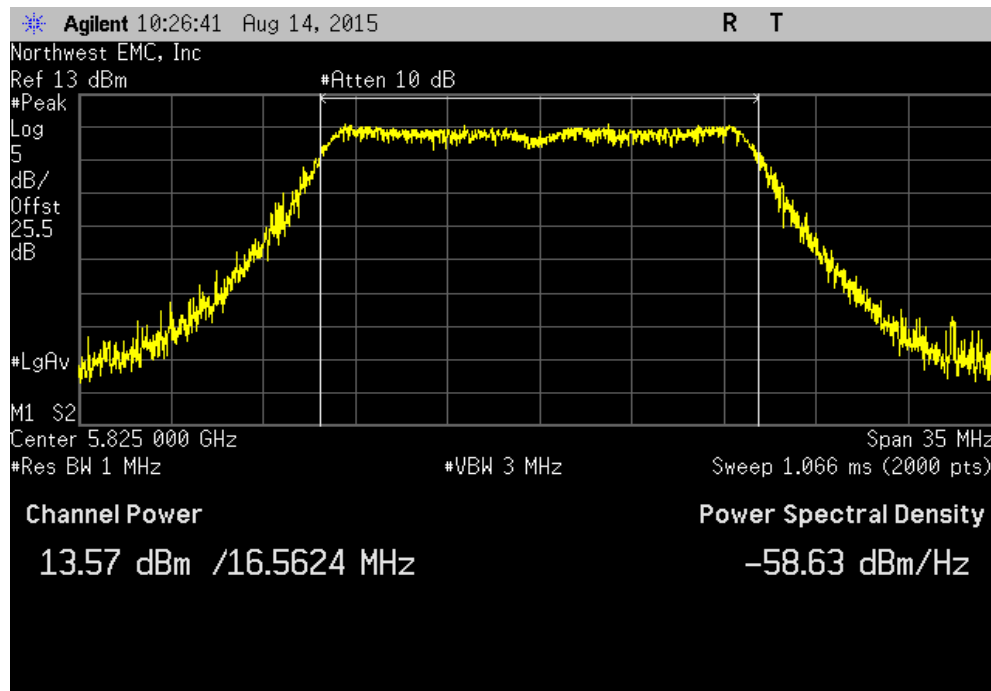


802.11(a) 6 Mbps, Mid Channel 157, 5785 MHz						
				Value	Limit (<)	Result
				13.969 dBm	30 dBm	Pass

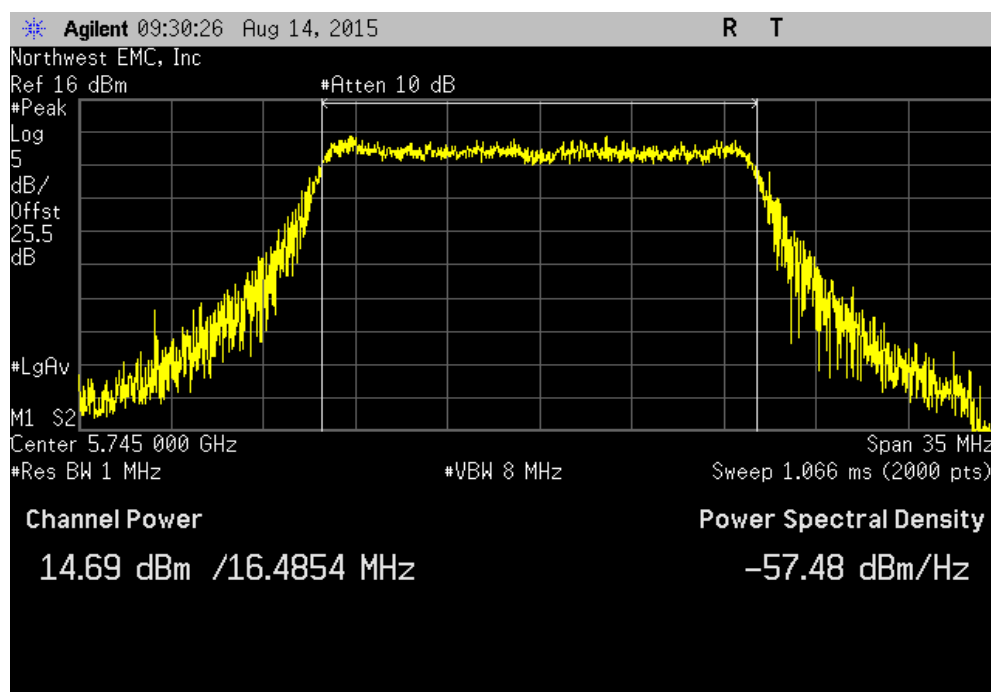


# PEAK TRANSMIT POWER - 5.8GHz

802.11(a) 6 Mbps, High Channel 165, 5825 MHz						
				Value	Limit (<)	Result
				13.565 dBm	30 dBm	Pass

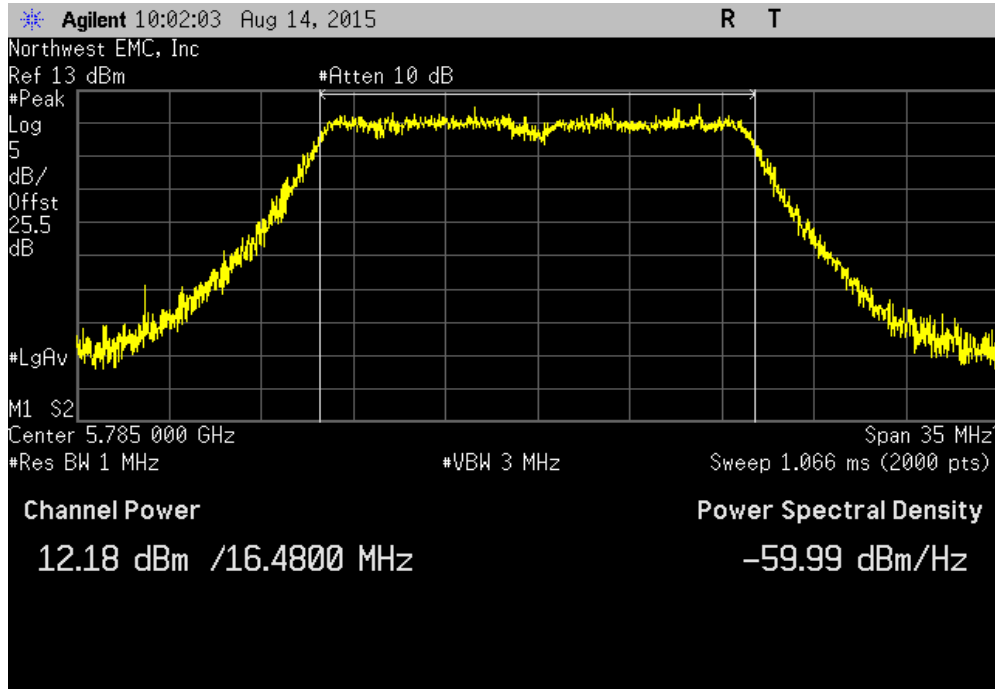


802.11(a) 36 Mbps, Low Channel 149, 5745 MHz						
				Value	Limit (<)	Result
				14.691 dBm	30 dBm	Pass

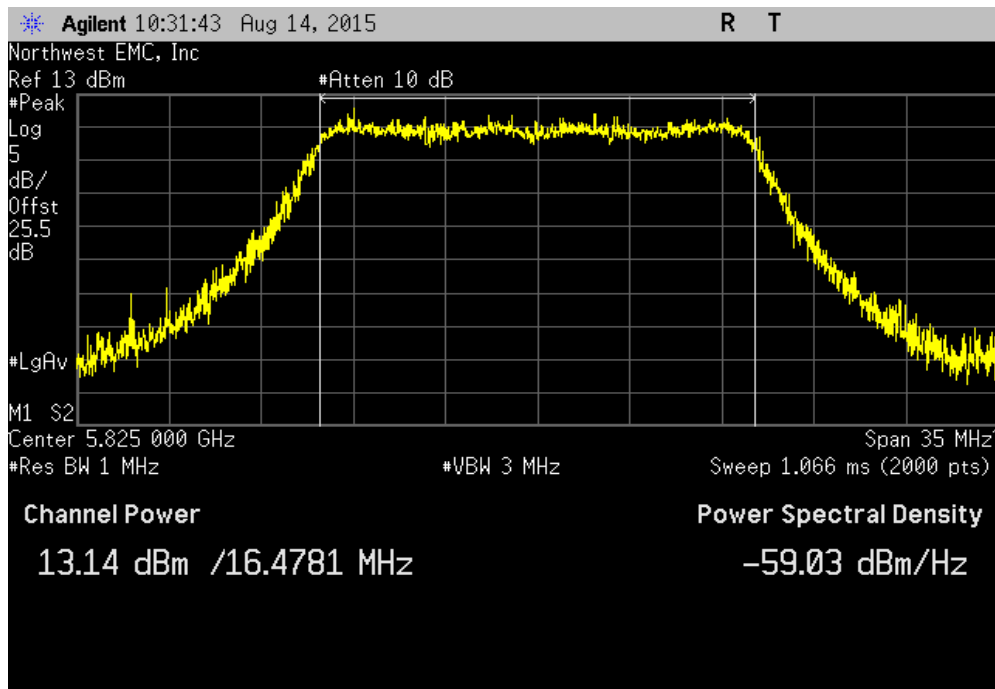


# PEAK TRANSMIT POWER - 5.8GHz

802.11(a) 36 Mbps, Mid Channel 157, 5785 MHz						
				Value	Limit (<)	Result
				12.181 dBm	30 dBm	Pass

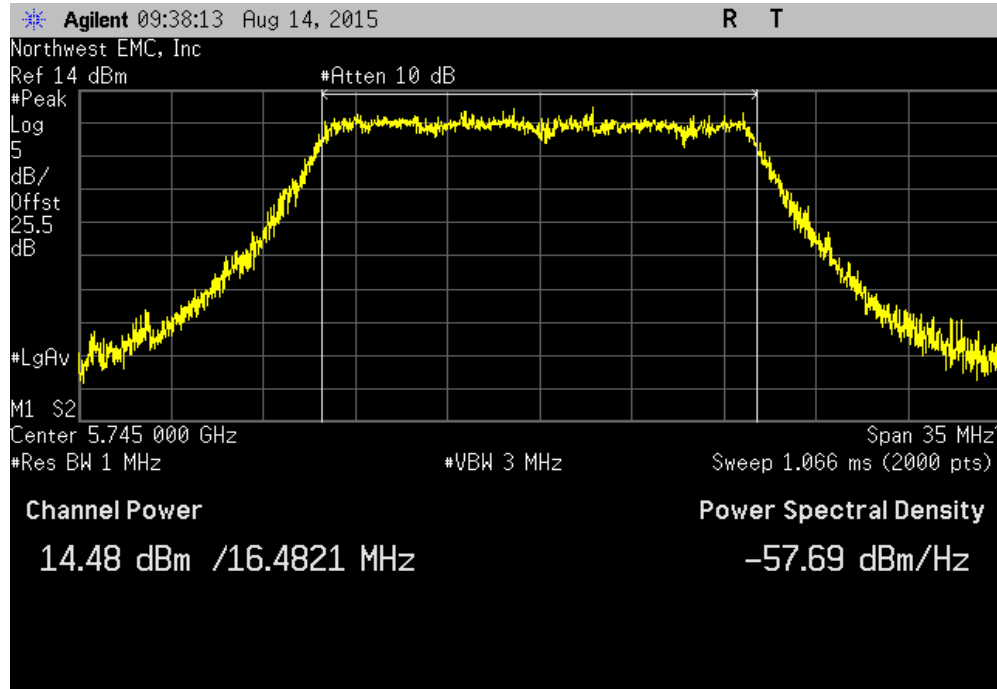


802.11(a) 36 Mbps, High Channel 165, 5825 MHz						
				Value	Limit (<)	Result
				13.141 dBm	30 dBm	Pass

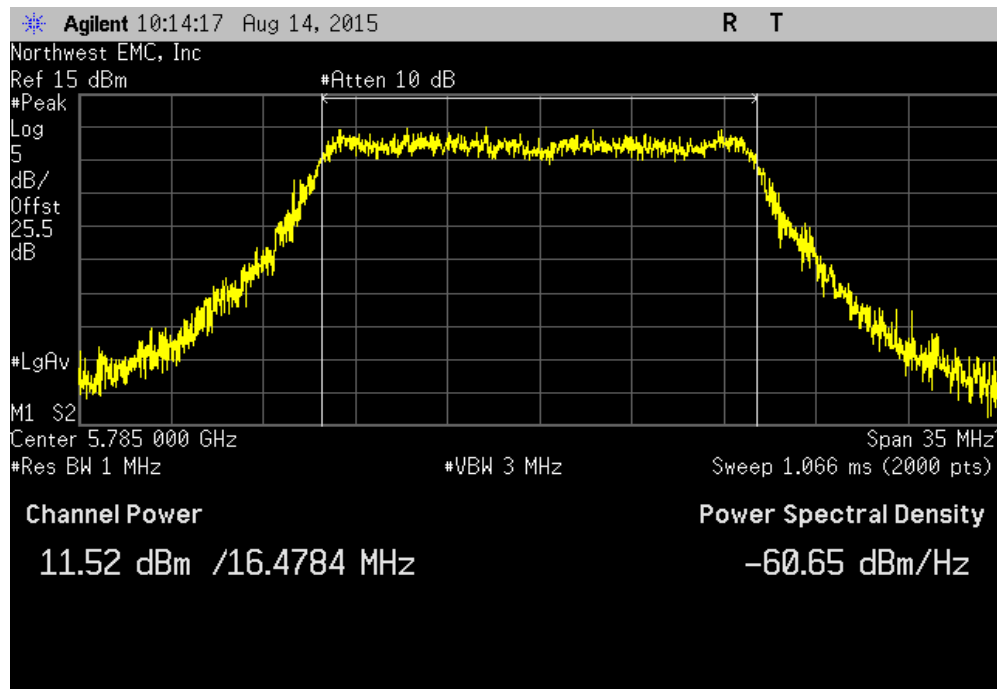


# PEAK TRANSMIT POWER - 5.8GHz

802.11(a) 54 Mbps, Low Channel 149, 5745 MHz						
				Value	Limit (<)	Result
				14.485 dBm	30 dBm	Pass

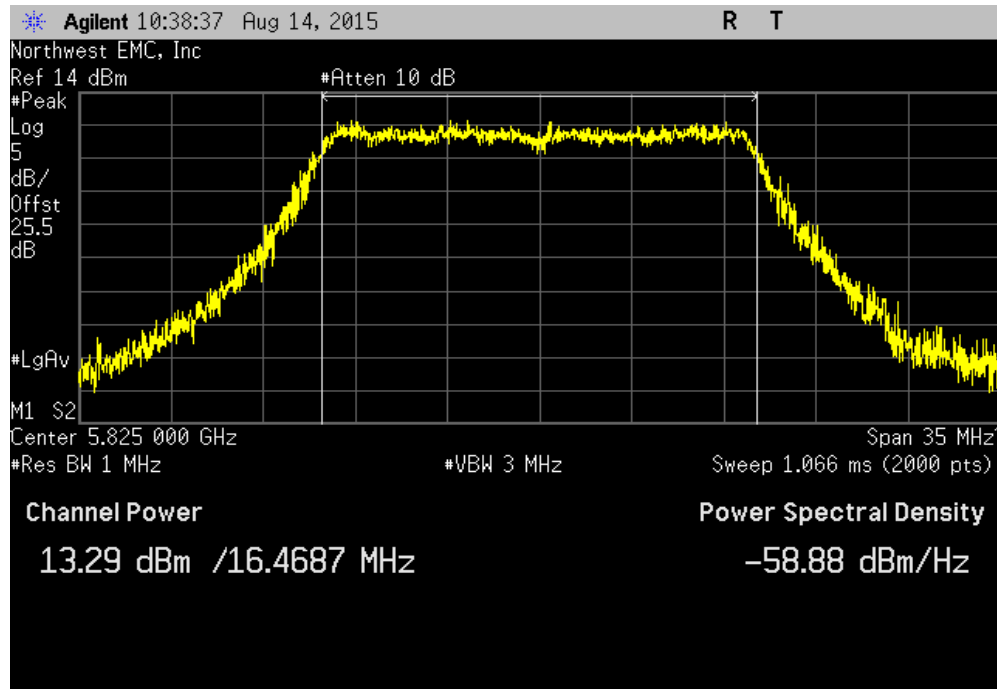


802.11(a) 54 Mbps, Mid Channel 157, 5785 MHz						
				Value	Limit (<)	Result
				11.517 dBm	30 dBm	Pass



# PEAK TRANSMIT POWER - 5.8GHz

802.11(a) 54 Mbps, High Channel 165, 5825 MHz						
				Value	Limit (<)	Result
				13.285 dBm	30 dBm	Pass



# PEAK POWER SPECTRAL DENSITY - 5.2GHz

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 (mos)
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Block - DC	Aeroflex	INMET 8535	AMO	4/8/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12

## TEST DESCRIPTION

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

Prior to measuring peak power spectral density, the transmission pulse duration (T) was measured. The transmission pulse duration and the associated data are found elsewhere in this test report.


The spectrum analyzer settings were as follows:

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

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

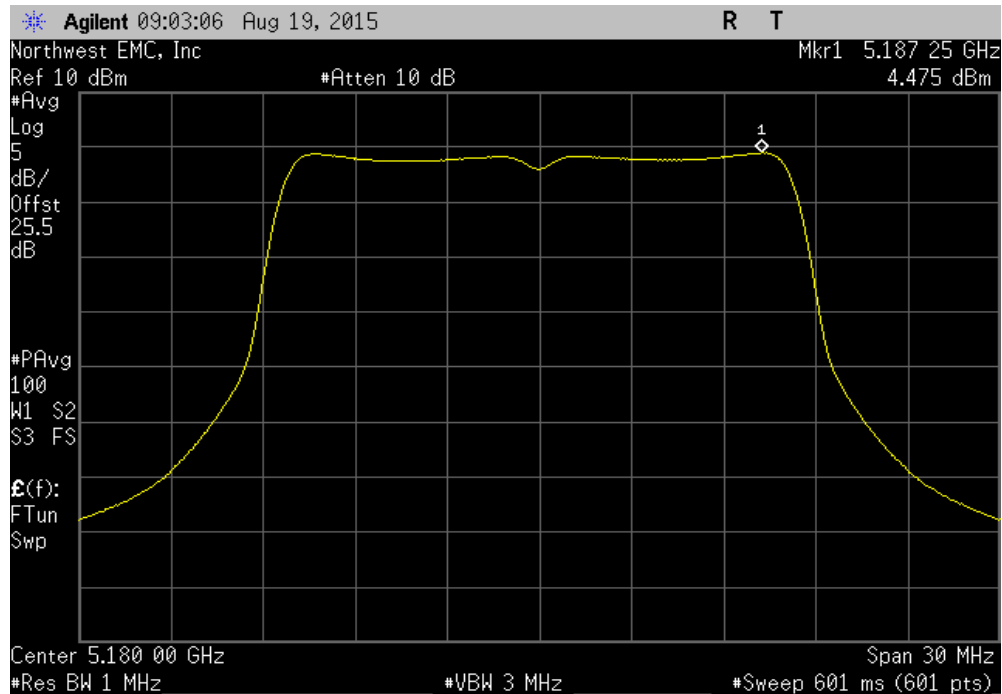


# PEAK POWER SPECTRAL DENSITY - 5.2GHz

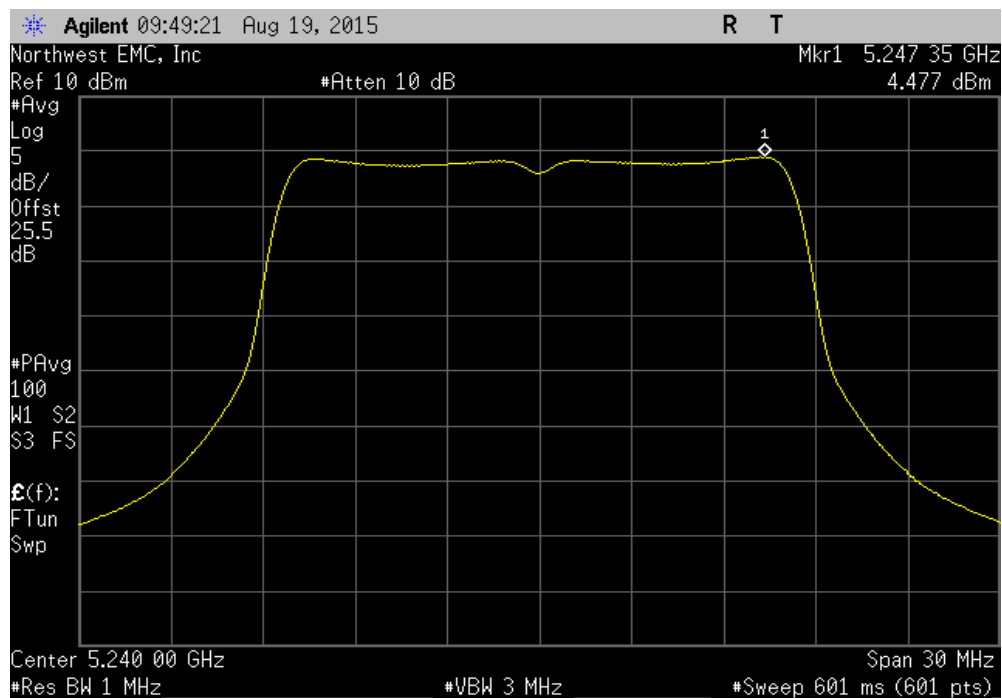
EUT: MWM1		Work Order: MASI0275	
Serial Number: 1521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mark Baytan		Power: 110VAC/60Hz	
		Job Site: OC13	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 90. DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.5dB total offset			
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			
802.11(a) 6 Mbps			
	Channel 36, Low Channel	4.475	0.3
	Channel 48, High Channel	4.477	0.3
802.11(a) 36 Mbps			
	Channel 36, Low Channel	3.492	1.6
	Channel 48, High Channel	3.553	1.6
802.11(a) 54 Mbps			
	Channel 36, Low Channel	3.019	2.2
	Channel 48, High Channel	3.035	2.2

# PEAK POWER SPECTRAL DENSITY - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 36, Low Channel						
Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit (dBm / Ref BW)	Results		
4.475	0.3	4.8	11	Pass		

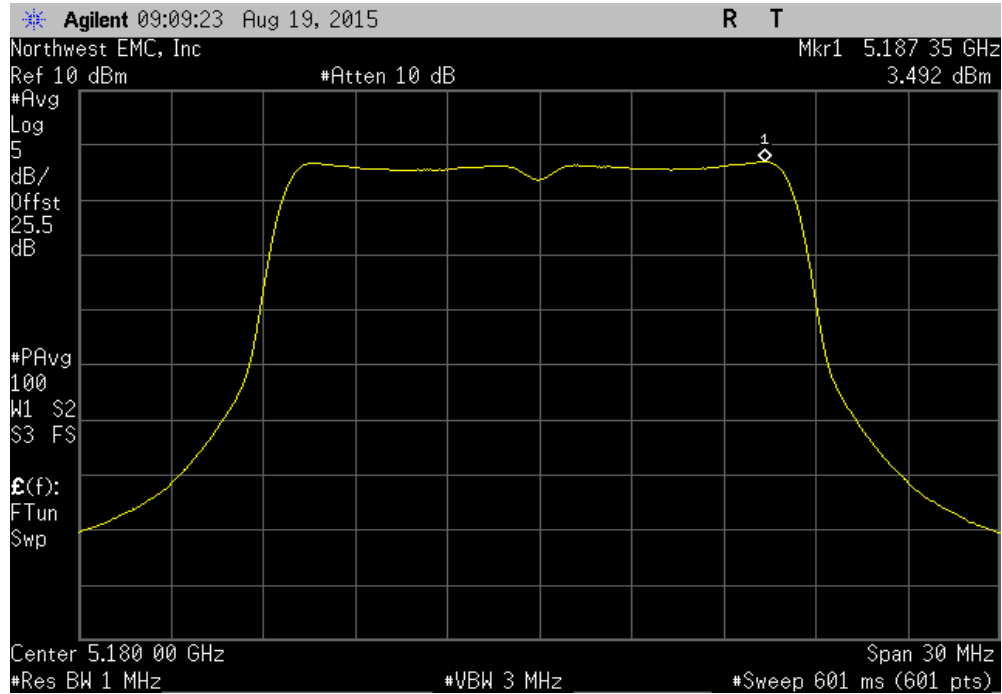


5150 - 5250 MHz Band, 802.11(a) 6 Mbps, Channel 48, High Channel						
Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit (dBm / Ref BW)	Results		
4.477	0.3	4.8	11	Pass		

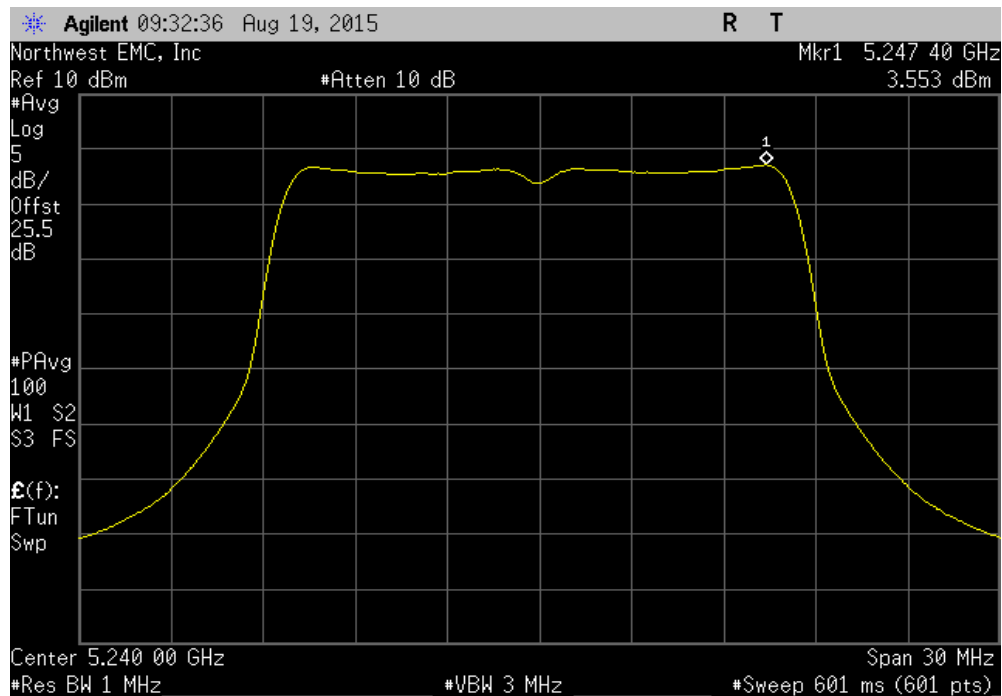


# PEAK POWER SPECTRAL DENSITY - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 36, Low Channel						
Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit (dBm / Ref BW)	Results		
3.492	1.6	5.1	11	Pass		

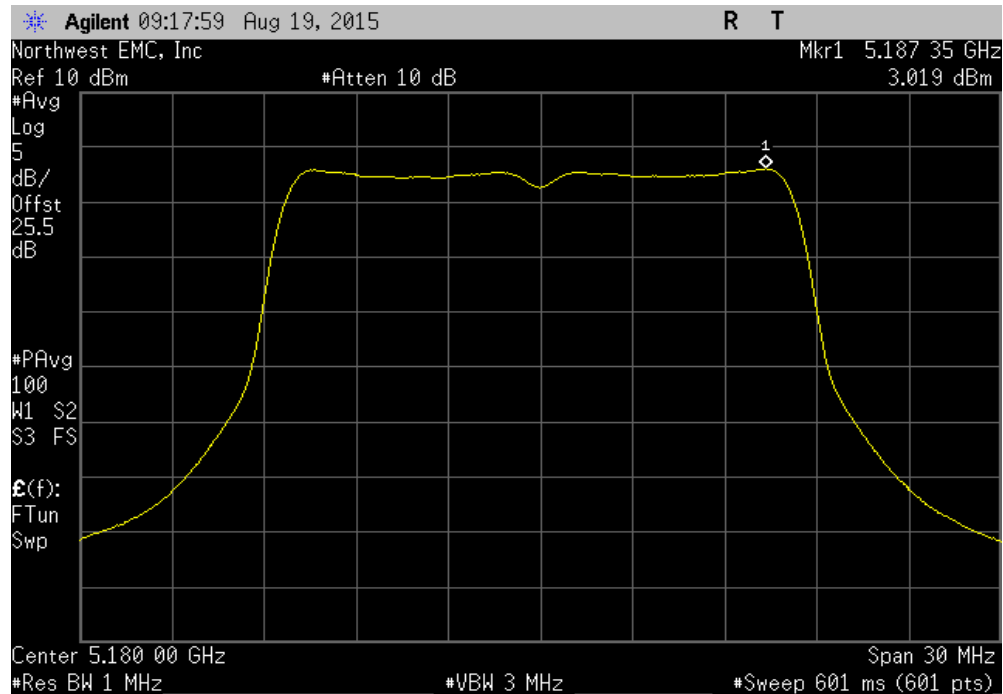


5150 - 5250 MHz Band, 802.11(a) 36 Mbps, Channel 48, High Channel						
Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit (dBm / Ref BW)	Results		
3.553	1.6	5.2	11	Pass		

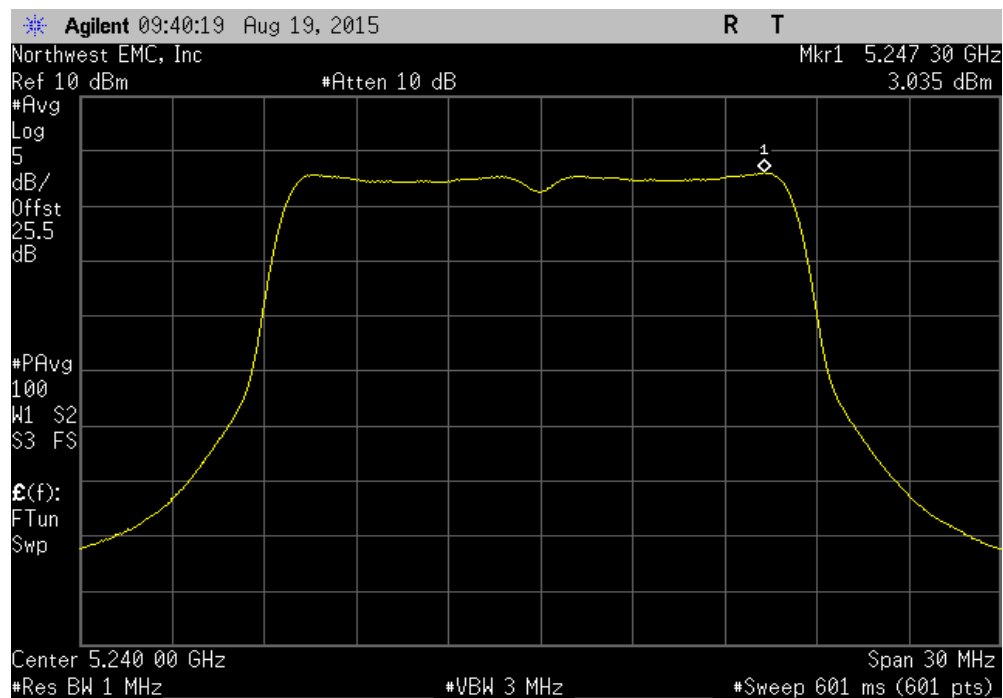


# PEAK POWER SPECTRAL DENSITY - 5.2GHz

5150 - 5250 MHz Band, 802.11(a) 54 Mbps, Channel 36, Low Channel						
Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit (dBm / Ref BW)	Results		
3.019	2.2	5.2	11	Pass		



5150 - 5250 MHz Band, 802.11(a) 54 Mbps, Channel 48, High Channel						
Power (dBm/MHz)	Duty Cycle Factor (dB)	Density (dBm/MHz)	Limit (dBm / Ref BW)	Results		
3.035	2.2	5.3	11	Pass		



# PEAK POWER SPECTRAL DENSITY - 5.8GHz

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	Aeroflex	INMET 8535	AMO	4/8/2015	12
Attenuator	Fairview Microwave	SA18H-20	TKR	4/8/2015	12
Generator - Signal	Agilent	E8257D	TGU	2/5/2015	36
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	8/28/2014	12

## TEST DESCRIPTION

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


Prior to measuring peak power spectral density, the transmission pulse duration (T) was measured. The transmission pulse duration and the associated data are found elsewhere in this test report.

The spectrum analyzer settings were as follows:

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

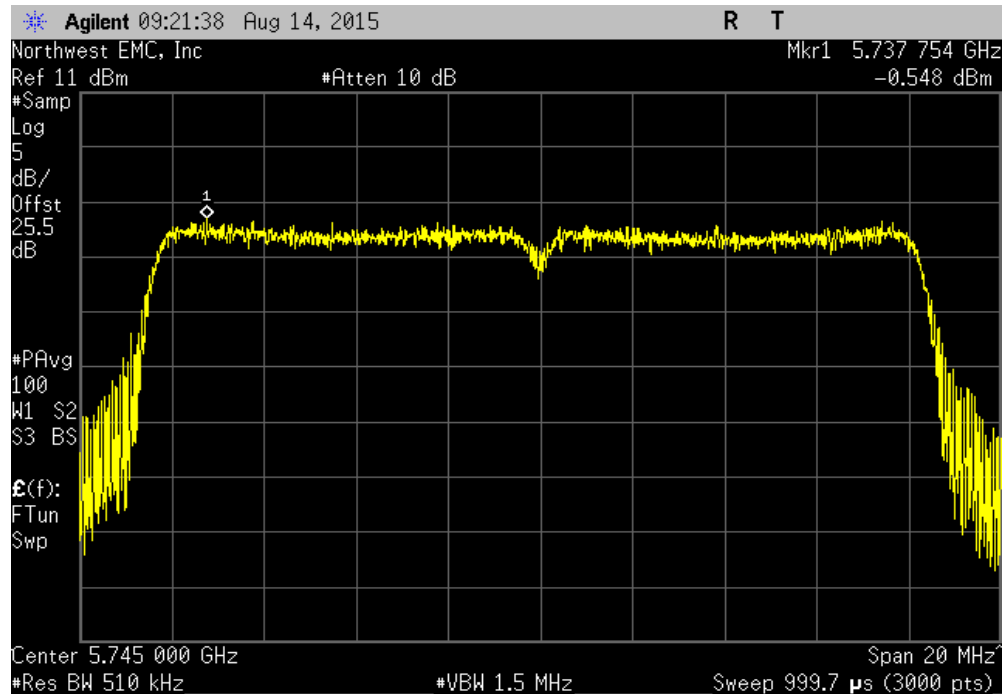
The peak power spectral density (PPSD) was determined to be the highest level found across the emission in any 1 MHz band after 100 sweeps of power averaging (not video averaging).

# PEAK POWER SPECTRAL DENSITY - 5.8GHz

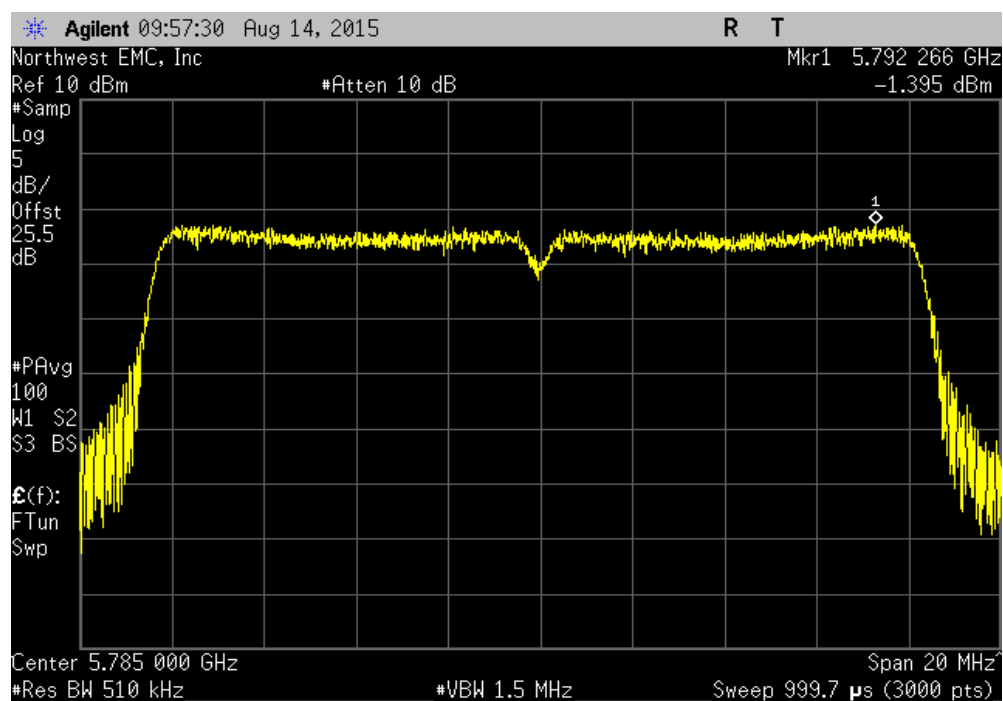
EUT: MWM1		Work Order: MASI0274	
Serial Number: 521639422		Date: 08/12/15	
Customer: Masimo Corporation		Temperature: 23°C	
Attendees: Mike Clark		Humidity: 48%	
Project: None		Barometric Pres.: 1015	
Tested by: Mike Tran	Power: 110VAC/60Hz	Job Site: OC13	
TEST SPECIFICATIONS		Test Method	
FCC 15.407:2015		ANSI C63.10:2013	
COMMENTS			
TX Power = 25			
DC Block/20dB Attenuator + coax cable + client provided patch cable = 25.47dB total offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Value (dBm / MHz)	Limit (dBm / Ref BW)
802.11(a) 6 Mbps			
	Low Channel 149, 5745 MHz	-0.548	30
	Mid Channel 157, 5785 MHz	-1.395	30
	High Channel 165, 5825 MHz	-1.548	30
802.11(a) 36 Mbps			
	Low Channel 149, 5745 MHz	-0.07	30
	Mid Channel 157, 5785 MHz	-2.392	30
	High Channel 165, 5825 MHz	-3.416	30
802.11(a) 54 Mbps			
	Low Channel 149, 5745 MHz	-2.386	30
	Mid Channel 157, 5785 MHz	-2.548	30
	High Channel 165, 5825 MHz	-2.719	30

# PEAK POWER SPECTRAL DENSITY - 5.8GHz

802.11(a) 6 Mbps, Low Channel 149, 5745 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-0.548	30	Pass			

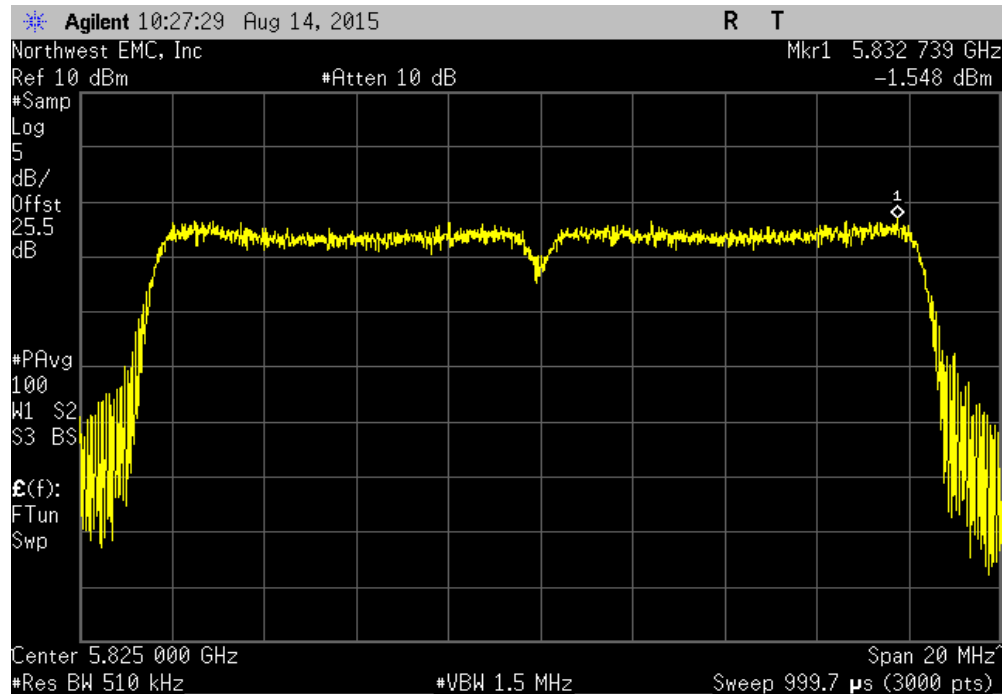


802.11(a) 6 Mbps, Mid Channel 157, 5785 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-1.395	30	Pass			

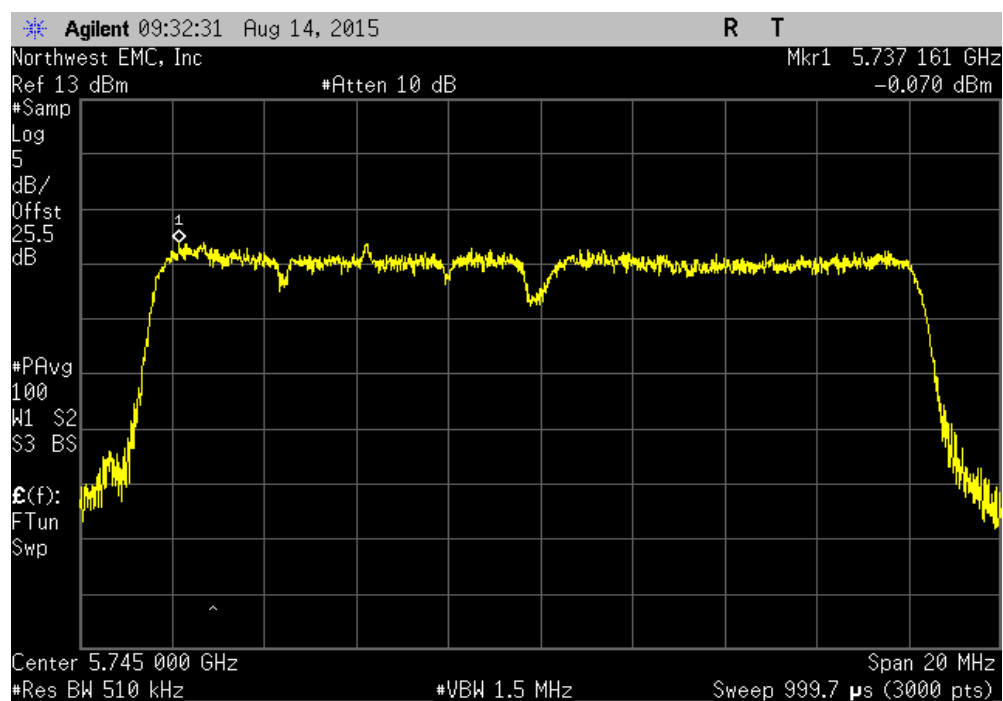


# PEAK POWER SPECTRAL DENSITY - 5.8GHz

802.11(a) 6 Mbps, High Channel 165, 5825 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-1.548	30	Pass			



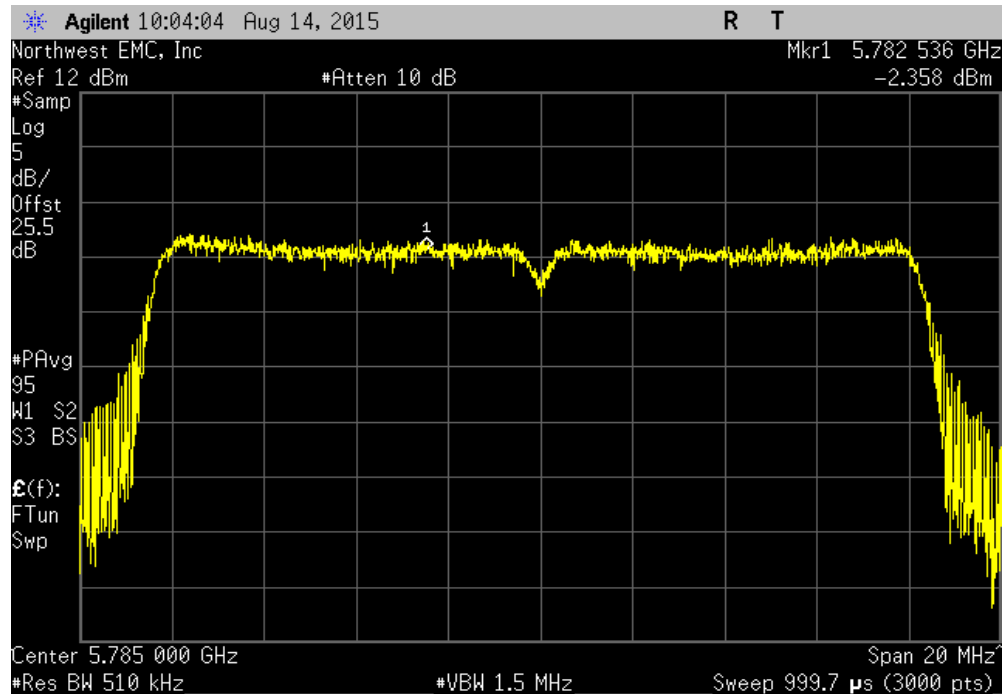
802.11(a) 36 Mbps, Low Channel 149, 5745 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-0.07	30	Pass			



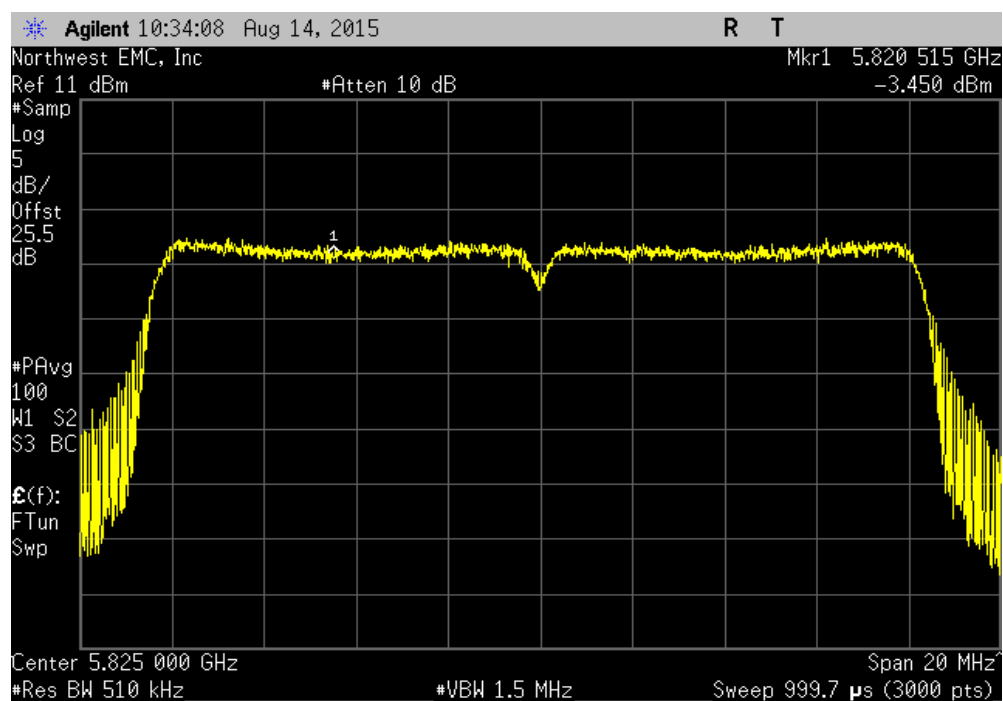


# PEAK POWER SPECTRAL DENSITY - 5.8GHz

802.11(a) 36 Mbps, Mid Channel 157, 5785 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-2.392	30	Pass			

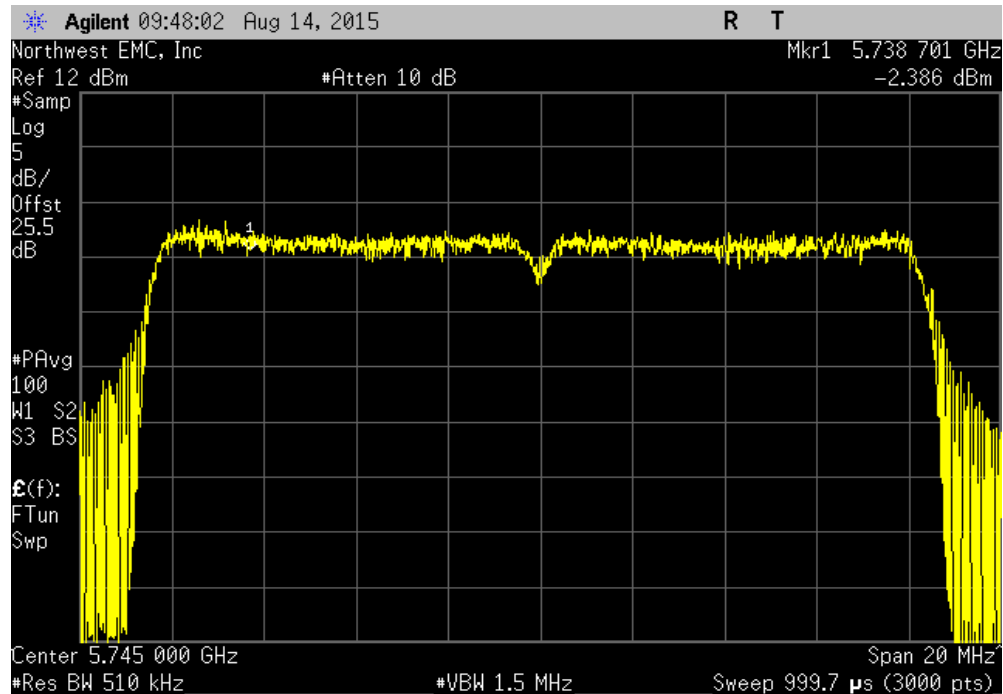


802.11(a) 36 Mbps, High Channel 165, 5825 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-3.416	30	Pass			

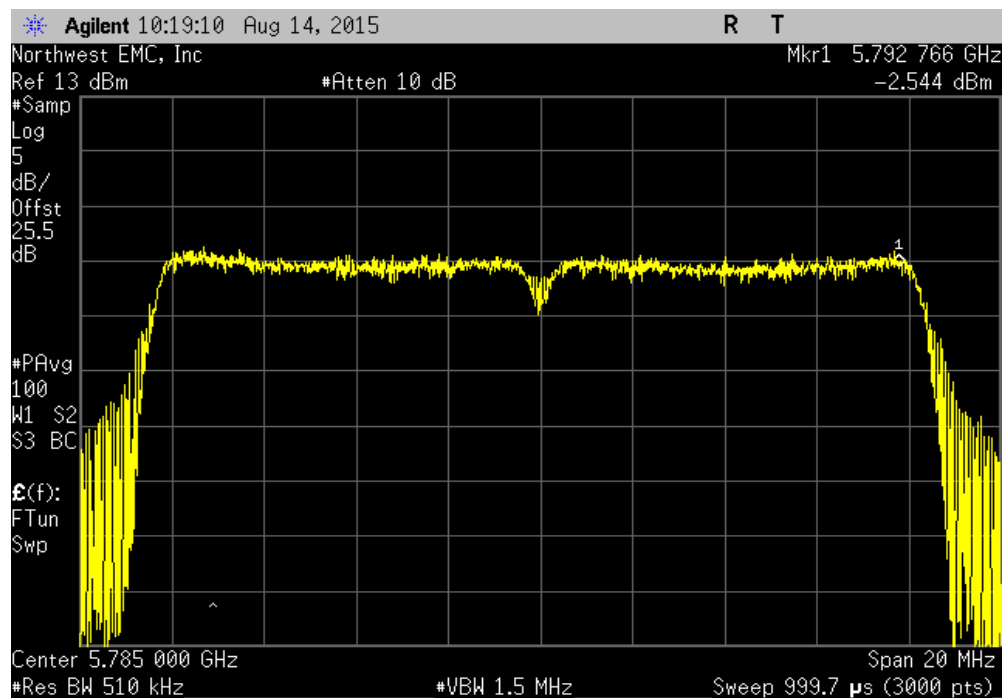


# PEAK POWER SPECTRAL DENSITY - 5.8GHz

802.11(a) 54 Mbps, Low Channel 149, 5745 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-2.386	30	Pass			



802.11(a) 54 Mbps, Mid Channel 157, 5785 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-2.548	30	Pass			



# PEAK POWER SPECTRAL DENSITY - 5.8GHz

802.11(a) 54 Mbps, High Channel 165, 5825 MHz						
	Value	Limit				
	(dBm / MHz)	(dBm / Ref BW)	Results			
	-2.719	30	Pass			

