

Masimo Corporation

MWM1

FCC 15.207:2015

FCC 15.247:2015

802.11bg Radio

Report # MASI0274.1





NVLAP Lab Code: 200676-0

CERTIFICATE OF TEST



Last Date of Test: August 18, 2015
Masimo Corporation
Model: MWM1

Radio Equipment Testing

Standards

| Specification | Method |
|-----------------|------------------|
| FCC 15.207:2015 | ANSI C63.10:2013 |
| FCC 15.247:2015 | 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 | |
| 6.10.4 | Band Edge Compliance | Yes | Pass | |
| 11.6 | Duty Cycle | Yes | N/A | |
| 11.8.2 | Occupied Bandwidth | Yes | Pass | |
| 11.9 | Output Power | Yes | Pass | |
| 11.10 | Power Spectral Density | Yes | Pass | |
| 11.11 | Spurious Conducted Emissions | 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.

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REVISION HISTORY



| Revision Number | Description | Date | Page Number |
|--------------------|-------------|------|-------------|
| 00 | None | | |

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ACCREDITATIONS AND AUTHORIZATIONS



United States

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

A2LA - Accredited by A2LA to ISO / IEC 17065 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

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

European Union

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

Australia/New Zealand

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

Korea

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

Japan

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

Taiwan

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

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

Singapore

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

Israel

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

Hong Kong

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

Vietnam

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

SCOPE

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

http://www.nwemc.com/accreditations/ http://gsi.nist.gov/global/docs/cabs/designations.html

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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.

| Test | + MU | <u>- MU</u> |
|---------------------------------------|---------|-------------|
| 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 |

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FACILITIES





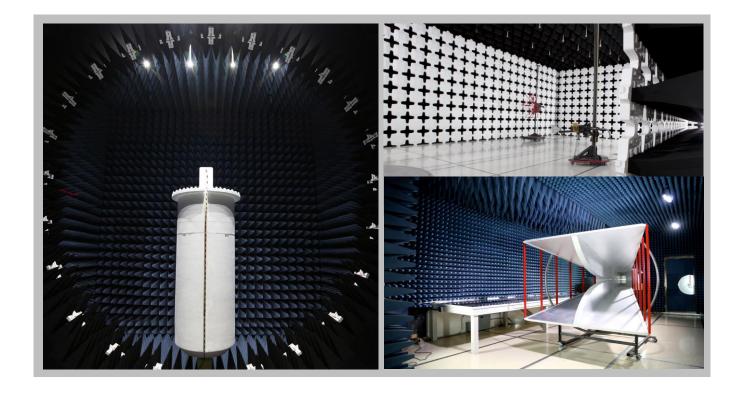


| California | | | | | |
|------------------|--|--|--|--|--|
| Labs OC01-13 | | | | | |
| 41 Tesla | | | | | |
| Irvine, CA 92618 | | | | | |
| (949) 861-8918 | | | | | |

Minnesota Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136 New York Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214 Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066 **Texas**Labs TX01-09
3801 E Plano Pkwy
Plano, TX 75074
(469) 304-5255

WashingtonLabs NC01-05
19201 120th Ave NE
Bothell, WA 9801
(425)984-6600

| (949) 861-8918 | (612)-638-5136 | (315) 554-8214 | (503) 844-4066 | (469) 304-5255 | (425)984-6600 | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--|--|
| | NVLAP | | | | | | |
| NVLAP Lab Code: 200676-0 | NVLAP Lab Code: 200881-0 | NVLAP Lab Code: 200761-0 | NVLAP Lab Code: 200630-0 | NVLAP Lab Code:201049-0 | NVLAP Lab Code: 200629-0 | | |
| | | Industry | Canada | | | | |
| 2834B-1, 2834B-3 | 2834E-1 | N/A | 2834D-1, 2834D-2 | 2834G-1 | 2834F-1 | | |
| | BSMI | | | | | | |
| SL2-IN-E-1154R | SL2-IN-E-1152R | N/A | SL2-IN-E-1017 | SL2-IN-E-1158R | SL2-IN-E-1153R | | |
| | VCCI | | | | | | |
| A-0029 | A-0109 | N/A | A-0108 | A-0201 | A-0110 | | |
| Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA | | | | | | | |
| US0158 | US0175 | N/A | US0017 | US0191 | US0157 | | |



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PRODUCT DESCRIPTION



Client and Equipment Under Test (EUT) Information

| Company Name: | Masimo Corporation | |
|--------------------------------|--------------------|--|
| Address: | 40 Parker | |
| City, State, Zip: | Irvine, CA 92618 | |
| Test Requested By: | Michael Clark | |
| Model: | MWM1 | |
| First Date of Test: | August 07, 2015 | |
| Last Date of Test: | August 18, 2015 | |
| Receipt Date of Samples: | August 06, 2015 | |
| Equipment Design Stage: | Production | |
| Equipment Condition: | No Damage | |

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

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.

Testing Objective:

To demonstrate compliance of the 802.11 radio under FCC 15.247 for operation in the 2.4 GHz band.

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CONFIGURATIONS



Configuration MASI0274- 2

| EUT | | | |
|--------------|--------------------|-------------------------|---------------|
| Description | Manufacturer | Model/Part Number | Serial Number |
| 802.11 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 | 802.11 radio | Laptop |

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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 | | |

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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 | Cables | | | | | | | |
|------------------------------|--------|------------|---------|------------------------------|---------------------|--|--|--|
| Cable Type Shield Length (m) | | 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 | | | |

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MODIFICATIONS



Equipment Modifications

| Item | Date | Test | Modification | Note | Disposition of EUT |
|------|-----------|-------------------------------------|--------------------------------------|---|---|
| 1 | 8/7/2015 | Spurious Radiated Emissions | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | Scheduled testing was completed. |
| 2 | 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. |
| 3 | 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. |
| 4 | 8/12/2015 | Output Power | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 5 | 8/12/2015 | 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. |
| 6 | 8/12/2015 | Band Edge Compliance | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 7 | 8/12/2015 | Spurious Conducted Emissions | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 8 | 8/18/2015 | Powerline Conducted Emissions | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | Scheduled testing was completed. |

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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 bg: High Channel 11 (2462 MHz)

Operating Continuous Transmit 802.11 bg: Mid Channel 6 (2437 MHz)

Operating Continuous Transmit 802.11 bg: Low Channel 1 (2412 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 Assembly | Northwest EMC | None | OCP | NCR | 0 mo |
| Receiver | Rohde & Schwarz | ESCI | ARG | 6/1/2015 | 12 mo |

MEASUREMENT BANDWIDTHS

| Frequency Range | Peak Data | Quasi-Peak Data | Average Data |
|-----------------|-----------|-----------------|--------------|
| (MHz) | (kHz) | (kHz) | (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.

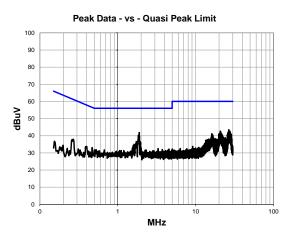
TEST DESCRIPTION

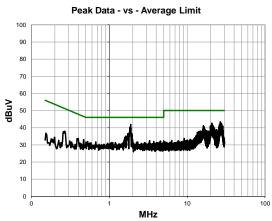
The EUT will be powered either directly or indirectly from the AC power line. Therefore, conducted emissions measurements were made on the AC input of the EUT, or on the AC input of the device used to power the EUT. The AC power line conducted emissions were measured with the EUT operating at the lowest, 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.

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| Wo | rk Order: | MASI0275 | Date: | 08/18/15 | | 1 / | | | |
|------------|------------|---|--------------------|--------------|-------------|-----------------------|------|--|--|
| | Project: | | Temperature: | 23.9 °C | | 11/6 | 5 | | |
| | Job Site: | | Humidity: | 44.9% RH | | | | | |
| Serial | Number: | 1521639422 | Barometric Pres.: | 1011 mbar | | Tested by: Mark Bayta | n | | |
| | EUT: | MWM1 | | | | | | | |
| Confi | guration: | 2 | | | | | | | |
| С | ustomer: | Masimo Corporation | lasimo Corporation | | | | | | |
| A | ttendees: | None | | | | | | | |
| EU | T Power: | 110VAC/60Hz | | | | | | | |
| Operati | ng Mode: | Operating Continuous Transmit 802.11 bg: Low Channel 1 (2412 MHz) | | | | | | | |
| De | eviations: | None | | | | | | | |
| Co | mments: | Tx Power set to 90. | | | | | | | |
| Test Speci | fications | | | Test | Method | | | | |
| FCC 15.24 | | | | ANS | C63.10:2013 | | | | |
| | | | | | | | | | |
| Run # | 4 | Line: | High Line | Ext. Attenua | tion: 0 | Results | Pass | | |



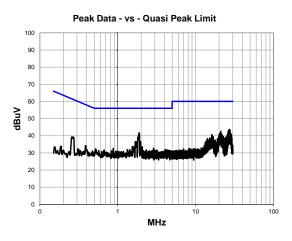


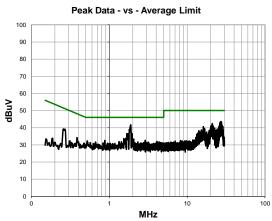
| | Peak Data - vs - Quasi Peak Limit | | | | | | |
|---------------|-----------------------------------|----------------|--------------------|-----------------------|------------------------------|--|--|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | | |
| 1.885 | 21.6 | 20.2 | 41.8 | 56.0 | -14.2 | | |
| 26.635 | 21.7 | 21.7 | 43.4 | 60.0 | -16.6 | | |
| 27.194 | 20.9 | 21.8 | 42.7 | 60.0 | -17.3 | | |
| 20.740 | 21.4 | 21.1 | 42.5 | 60.0 | -17.5 | | |
| 27.526 | 20.6 | 21.9 | 42.5 | 60.0 | -17.5 | | |
| 26.370 | 20.6 | 21.7 | 42.3 | 60.0 | -17.7 | | |
| 27.452 | 20.3 | 21.9 | 42.2 | 60.0 | -17.8 | | |
| 20.953 | 21.0 | 21.2 | 42.2 | 60.0 | -17.8 | | |
| 20.923 | 20.9 | 21.2 | 42.1 | 60.0 | -17.9 | | |
| 27.657 | 20.1 | 21.9 | 42.0 | 60.0 | -18.0 | | |
| 26.713 | 20.2 | 21.8 | 42.0 | 60.0 | -18.0 | | |
| 27.224 | 20.1 | 21.9 | 42.0 | 60.0 | -18.0 | | |
| 27.359 | 20.0 | 21.9 | 41.9 | 60.0 | -18.1 | | |
| 21.069 | 20.7 | 21.2 | 41.9 | 60.0 | -18.1 | | |
| 26.071 | 20.1 | 21.6 | 41.7 | 60.0 | -18.3 | | |
| 26.568 | 20.0 | 21.7 | 41.7 | 60.0 | -18.3 | | |
| 27.262 | 19.8 | 21.9 | 41.7 | 60.0 | -18.3 | | |
| 27.679 | 19.6 | 21.9 | 41.5 | 60.0 | -18.5 | | |
| 27.075 | 19.7 | 21.8 | 41.5 | 60.0 | -18.5 | | |
| 26.885 | 19.7 | 21.8 | 41.5 | 60.0 | -18.5 | | |
| 27.329 | 19.6 | 21.9 | 41.5 | 60.0 | -18.5 | | |

| Peak Data - vs - Average Limit | | | | | | |
|--------------------------------|---------------------|----------------|--------------------|-----------------------|------------------------------|--|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | |
| 1.885 | 21.6 | 20.2 | 41.8 | 46.0 | -4.2 | |
| 26.635 | 21.7 | 21.7 | 43.4 | 50.0 | -6.6 | |
| 27.194 | 20.9 | 21.8 | 42.7 | 50.0 | -7.3 | |
| 20.740 | 21.4 | 21.1 | 42.5 | 50.0 | -7.5 | |
| 27.526 | 20.6 | 21.9 | 42.5 | 50.0 | -7.5 | |
| 26.370 | 20.6 | 21.7 | 42.3 | 50.0 | -7.7 | |
| 27.452 | 20.3 | 21.9 | 42.2 | 50.0 | -7.8 | |
| 20.953 | 21.0 | 21.2 | 42.2 | 50.0 | -7.8 | |
| 20.923 | 20.9 | 21.2 | 42.1 | 50.0 | -7.9 | |
| 27.657 | 20.1 | 21.9 | 42.0 | 50.0 | -8.0 | |
| 26.713 | 20.2 | 21.8 | 42.0 | 50.0 | -8.0 | |
| 27.224 | 20.1 | 21.9 | 42.0 | 50.0 | -8.0 | |
| 27.359 | 20.0 | 21.9 | 41.9 | 50.0 | -8.1 | |
| 21.069 | 20.7 | 21.2 | 41.9 | 50.0 | -8.1 | |
| 26.071 | 20.1 | 21.6 | 41.7 | 50.0 | -8.3 | |
| 26.568 | 20.0 | 21.7 | 41.7 | 50.0 | -8.3 | |
| 27.262 | 19.8 | 21.9 | 41.7 | 50.0 | -8.3 | |
| 27.679 | 19.6 | 21.9 | 41.5 | 50.0 | -8.5 | |
| 27.075 | 19.7 | 21.8 | 41.5 | 50.0 | -8.5 | |
| 26.885 | 19.7 | 21.8 | 41.5 | 50.0 | -8.5 | |
| 27.329 | 19.6 | 21.9 | 41.5 | 50.0 | -8.5 | |



| Wo | rk Order: | MASI0275 | Date: | 08/18/15 | 11 | | | | |
|-------------|-----------|----------------------|-----------------------|--------------------|------------|--------------|--|--|--|
| | Project: | | Temperature: | 23.9 °C | 1 | 6 5,+- | | | |
| | Job Site: | OC06 | Humidity: | 44.9% RH | | | | | |
| Serial | Number: | 1521639422 | Barometric Pres.: | 1011 mbar | Tested by: | Mark Baytan | | | |
| | EUT: | MWM1 | | | | | | | |
| | guration: | | | | | | | | |
| C | ustomer: | Masimo Corporation | imo Corporation | | | | | | |
| At | tendees: | None | | | | | | | |
| EU. | T Power: | 110VAC/60Hz | | | | | | | |
| Operatir | ng Mode: | Operating Continuous | Transmit 802.11 bg: L | ow Channel 1 (2412 | MHz) | | | | |
| De | viations: | None | | | | | | | |
| Со | mments: | Tx Power set to 90. | | | | | | | |
| Test Specif | ications | | | Test Met | nod | | | | |
| FCC 15.247 | | | | ANSI C63 | .10:2013 | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Run # | 5 | Line: | Neutral | Ext. Attenuation | 0 | Results Pass | | | |



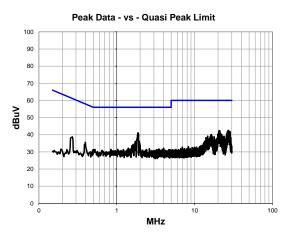


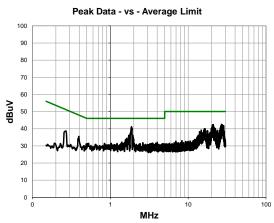
| | Peak Data - vs - Quasi Peak Limit | | | | | |
|---------------|-----------------------------------|----------------|--------------------|-----------------------|------------------------------|--|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | |
| 1.889 | 21.5 | 20.2 | 41.7 | 56.0 | -14.3 | |
| 27.150 | 21.8 | 21.8 | 43.6 | 60.0 | -16.4 | |
| 27.474 | 21.5 | 21.9 | 43.4 | 60.0 | -16.6 | |
| 27.191 | 21.5 | 21.8 | 43.3 | 60.0 | -16.7 | |
| 26.639 | 21.5 | 21.7 | 43.2 | 60.0 | -16.8 | |
| 27.519 | 21.2 | 21.9 | 43.1 | 60.0 | -16.9 | |
| 26.359 | 21.1 | 21.7 | 42.8 | 60.0 | -17.2 | |
| 27.448 | 20.9 | 21.9 | 42.8 | 60.0 | -17.2 | |
| 27.228 | 20.9 | 21.9 | 42.8 | 60.0 | -17.2 | |
| 21.087 | 21.3 | 21.2 | 42.5 | 60.0 | -17.5 | |
| 27.254 | 20.4 | 21.9 | 42.3 | 60.0 | -17.7 | |
| 26.273 | 20.3 | 21.7 | 42.0 | 60.0 | -18.0 | |
| 27.679 | 19.9 | 21.9 | 41.8 | 60.0 | -18.2 | |
| 21.020 | 20.6 | 21.2 | 41.8 | 60.0 | -18.2 | |
| 20.927 | 20.4 | 21.2 | 41.6 | 60.0 | -18.4 | |
| 27.556 | 19.6 | 21.9 | 41.5 | 60.0 | -18.5 | |
| 27.926 | 19.5 | 22.0 | 41.5 | 60.0 | -18.5 | |
| 26.810 | 19.7 | 21.8 | 41.5 | 60.0 | -18.5 | |
| 27.310 | 19.6 | 21.9 | 41.5 | 60.0 | -18.5 | |
| 26.713 | 19.7 | 21.8 | 41.5 | 60.0 | -18.5 | |
| 20.602 | 20.3 | 21.1 | 41.4 | 60.0 | -18.6 | |

| | Peak Data - vs - Average Limit | | | | | | |
|---------------|--------------------------------|----------------|--------------------|-----------------------|------------------------------|--|--|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | | |
| 1.889 | 21.5 | 20.2 | 41.7 | 46.0 | -4.3 | | |
| 27.150 | 21.8 | 21.8 | 43.6 | 50.0 | -6.4 | | |
| 27.474 | 21.5 | 21.9 | 43.4 | 50.0 | -6.6 | | |
| 27.191 | 21.5 | 21.8 | 43.3 | 50.0 | -6.7 | | |
| 26.639 | 21.5 | 21.7 | 43.2 | 50.0 | -6.8 | | |
| 27.519 | 21.2 | 21.9 | 43.1 | 50.0 | -6.9 | | |
| 26.359 | 21.1 | 21.7 | 42.8 | 50.0 | -7.2 | | |
| 27.448 | 20.9 | 21.9 | 42.8 | 50.0 | -7.2 | | |
| 27.228 | 20.9 | 21.9 | 42.8 | 50.0 | -7.2 | | |
| 21.087 | 21.3 | 21.2 | 42.5 | 50.0 | -7.5 | | |
| 27.254 | 20.4 | 21.9 | 42.3 | 50.0 | -7.7 | | |
| 26.273 | 20.3 | 21.7 | 42.0 | 50.0 | -8.0 | | |
| 27.679 | 19.9 | 21.9 | 41.8 | 50.0 | -8.2 | | |
| 21.020 | 20.6 | 21.2 | 41.8 | 50.0 | -8.2 | | |
| 20.927 | 20.4 | 21.2 | 41.6 | 50.0 | -8.4 | | |
| 27.556 | 19.6 | 21.9 | 41.5 | 50.0 | -8.5 | | |
| 27.926 | 19.5 | 22.0 | 41.5 | 50.0 | -8.5 | | |
| 26.810 | 19.7 | 21.8 | 41.5 | 50.0 | -8.5 | | |
| 27.310 | 19.6 | 21.9 | 41.5 | 50.0 | -8.5 | | |
| 26.713 | 19.7 | 21.8 | 41.5 | 50.0 | -8.5 | | |
| 20.602 | 20.3 | 21.1 | 41.4 | 50.0 | -8.6 | | |



| Wo | ork Order: | MASI0275 | Date: | 08/18/15 | | | 11 | | | |
|------------|------------|----------------------|-----------------------|-----------------|----------|---------|-----------|-------------|------|--|
| | Project: | None | Temperature: | 23.9 °C | | | 4 | | 2 | |
| | Job Site: | OC06 | Humidity: | 44.9% RF | | | | | | |
| Serial | Number: | 1521639422 | Barometric Pres.: | 1011 mba | ır | | ested by: | Mark Baytar |) | |
| | EUT: | MWM1 | | | | | | | | |
| Confi | iguration: | 2 | | | | | | | | |
| C | Customer: | Masimo Corporation | imo Corporation | | | | | | | |
| Α | ttendees: | None | | | | | | | | |
| EU | JT Power: | 110VAC/60Hz | | | | | | | | |
| Operati | ing Mode: | Operating Continuous | Transmit 802.11 bg: I | Mid Channel 6 (| 2437 M | IHz) | | | | |
| D | eviations: | None | | | | | | | | |
| Co | omments: | Tx Power set to 90. | | | | | | | | |
| Test Speci | ifications | | | Tes | t Metho | od | | | | |
| FCC 15.24 | | | | ANS | SI C63.1 | 10:2013 | | | | |
| | | | | | | | | | | |
| Run # | 6 | Line: | High Line | Ext. Attenu | ation: | 0 | | Results | Pass | |



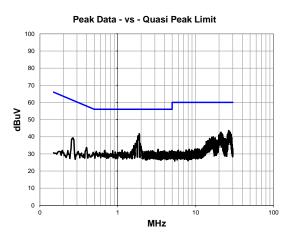


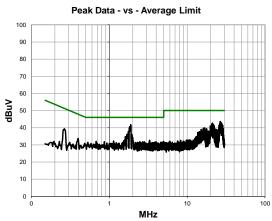
| | Peak | Data - vs - | Quasi Peal | c Limit | |
|---------------|---------------------|----------------|--------------------|-----------------------|------------------------------|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) |
| 1.874 | 21.0 | 20.2 | 41.2 | 56.0 | -14.8 |
| 26.915 | 20.7 | 21.8 | 42.5 | 60.0 | -17.5 |
| 21.069 | 21.2 | 21.2 | 42.4 | 60.0 | -17.6 |
| 20.531 | 21.1 | 21.1 | 42.2 | 60.0 | -17.8 |
| 27.538 | 20.3 | 21.9 | 42.2 | 60.0 | -17.8 |
| 26.575 | 20.3 | 21.7 | 42.0 | 60.0 | -18.0 |
| 27.463 | 20.1 | 21.9 | 42.0 | 60.0 | -18.0 |
| 26.847 | 20.2 | 21.8 | 42.0 | 60.0 | -18.0 |
| 27.198 | 20.1 | 21.8 | 41.9 | 60.0 | -18.1 |
| 20.949 | 20.7 | 21.2 | 41.9 | 60.0 | -18.1 |
| 20.923 | 20.7 | 21.2 | 41.9 | 60.0 | -18.1 |
| 27.877 | 19.8 | 22.0 | 41.8 | 60.0 | -18.2 |
| 21.024 | 20.6 | 21.2 | 41.8 | 60.0 | -18.2 |
| 27.224 | 19.9 | 21.9 | 41.8 | 60.0 | -18.2 |
| 28.441 | 19.7 | 22.0 | 41.7 | 60.0 | -18.3 |
| 26.639 | 19.8 | 21.7 | 41.5 | 60.0 | -18.5 |
| 26.422 | 19.7 | 21.7 | 41.4 | 60.0 | -18.6 |
| 20.636 | 20.1 | 21.1 | 41.2 | 60.0 | -18.8 |
| 27.377 | 19.3 | 21.9 | 41.2 | 60.0 | -18.8 |
| 26.777 | 19.4 | 21.8 | 41.2 | 60.0 | -18.8 |
| 21.225 | 19.9 | 21.2 | 41.1 | 60.0 | -18.9 |

| | 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 | | |
| 26.915 | 20.7 | 21.8 | 42.5 | 50.0 | -7.5 | | |
| 21.069 | 21.2 | 21.2 | 42.4 | 50.0 | -7.6 | | |
| 20.531 | 21.1 | 21.1 | 42.2 | 50.0 | -7.8 | | |
| 27.538 | 20.3 | 21.9 | 42.2 | 50.0 | -7.8 | | |
| 26.575 | 20.3 | 21.7 | 42.0 | 50.0 | -8.0 | | |
| 27.463 | 20.1 | 21.9 | 42.0 | 50.0 | -8.0 | | |
| 26.847 | 20.2 | 21.8 | 42.0 | 50.0 | -8.0 | | |
| 27.198 | 20.1 | 21.8 | 41.9 | 50.0 | -8.1 | | |
| 20.949 | 20.7 | 21.2 | 41.9 | 50.0 | -8.1 | | |
| 20.923 | 20.7 | 21.2 | 41.9 | 50.0 | -8.1 | | |
| 27.877 | 19.8 | 22.0 | 41.8 | 50.0 | -8.2 | | |
| 21.024 | 20.6 | 21.2 | 41.8 | 50.0 | -8.2 | | |
| 27.224 | 19.9 | 21.9 | 41.8 | 50.0 | -8.2 | | |
| 28.441 | 19.7 | 22.0 | 41.7 | 50.0 | -8.3 | | |
| 26.639 | 19.8 | 21.7 | 41.5 | 50.0 | -8.5 | | |
| 26.422 | 19.7 | 21.7 | 41.4 | 50.0 | -8.6 | | |
| 20.636 | 20.1 | 21.1 | 41.2 | 50.0 | -8.8 | | |
| 27.377 | 19.3 | 21.9 | 41.2 | 50.0 | -8.8 | | |
| 26.777 | 19.4 | 21.8 | 41.2 | 50.0 | -8.8 | | |
| 21.225 | 19.9 | 21.2 | 41.1 | 50.0 | -8.9 | | |



| Wo | rk Order: | MASI0275 | Date: | 08/18/15 | 11 | | | | |
|-------------|------------|----------------------|-----------------------|---------------------|------------|--------------|--|--|--|
| | Project: | | Temperature: | 23.9 °C | 1 | 6 6,+- | | | |
| | Job Site: | OC06 | Humidity: | 44.9% RH | | | | | |
| Serial | Number: | 1521639422 | Barometric Pres.: | 1011 mbar | Tested by: | Mark Baytan | | | |
| | EUT: | MWM1 | | | | | | | |
| | guration: | | | | | | | | |
| C | ustomer: | Masimo Corporation | mo Corporation | | | | | | |
| At | tendees: | None | | | | | | | |
| EU | T Power: | 110VAC/60Hz | | | | | | | |
| Operation | ng Mode: | Operating Continuous | Transmit 802.11 bg: N | Mid Channel 6 (2437 | MHz) | | | | |
| De | eviations: | None | | | | | | | |
| Co | mments: | Tx Power set to 90. | | | | | | | |
| Test Specif | fications | | | Test Met | nod | | | | |
| FCC 15.247 | | | | ANSI C63 | .10:2013 | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Run # | 7 | Line: | Neutral | Ext. Attenuation: | 0 | Results Pass | | | |



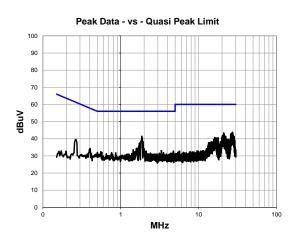


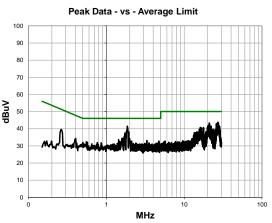
| | Peak Data - vs - Quasi Peak Limit | | | | | | |
|---------------|-----------------------------------|----------------|--------------------|-----------------------|------------------------------|--|--|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | | |
| 1.889 | 21.6 | 20.2 | 41.8 | 56.0 | -14.2 | | |
| 26.568 | 21.9 | 21.7 | 43.6 | 60.0 | -16.4 | | |
| 27.194 | 21.2 | 21.8 | 43.0 | 60.0 | -17.0 | | |
| 27.280 | 21.0 | 21.9 | 42.9 | 60.0 | -17.1 | | |
| 26.926 | 21.0 | 21.8 | 42.8 | 60.0 | -17.2 | | |
| 27.221 | 20.9 | 21.9 | 42.8 | 60.0 | -17.2 | | |
| 26.847 | 20.8 | 21.8 | 42.6 | 60.0 | -17.4 | | |
| 21.158 | 21.4 | 21.2 | 42.6 | 60.0 | -17.4 | | |
| 26.639 | 20.8 | 21.7 | 42.5 | 60.0 | -17.5 | | |
| 26.351 | 20.8 | 21.7 | 42.5 | 60.0 | -17.5 | | |
| 27.747 | 20.5 | 21.9 | 42.4 | 60.0 | -17.6 | | |
| 27.814 | 20.4 | 22.0 | 42.4 | 60.0 | -17.6 | | |
| 26.706 | 20.6 | 21.8 | 42.4 | 60.0 | -17.6 | | |
| 27.519 | 20.3 | 21.9 | 42.2 | 60.0 | -17.8 | | |
| 26.777 | 20.4 | 21.8 | 42.2 | 60.0 | -17.8 | | |
| 21.020 | 21.0 | 21.2 | 42.2 | 60.0 | -17.8 | | |
| 20.878 | 21.0 | 21.1 | 42.1 | 60.0 | -17.9 | | |
| 20.703 | 20.9 | 21.1 | 42.0 | 60.0 | -18.0 | | |
| 26.198 | 20.3 | 21.7 | 42.0 | 60.0 | -18.0 | | |
| 26.124 | 20.3 | 21.7 | 42.0 | 60.0 | -18.0 | | |
| 27.120 | 20.1 | 21.8 | 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) |
| 1.889 | 21.6 | 20.2 | 41.8 | 46.0 | -4.2 |
| 26.568 | 21.9 | 21.7 | 43.6 | 50.0 | -6.4 |
| 27.194 | 21.2 | 21.8 | 43.0 | 50.0 | -7.0 |
| 27.280 | 21.0 | 21.9 | 42.9 | 50.0 | -7.1 |
| 26.926 | 21.0 | 21.8 | 42.8 | 50.0 | -7.2 |
| 27.221 | 20.9 | 21.9 | 42.8 | 50.0 | -7.2 |
| 26.847 | 20.8 | 21.8 | 42.6 | 50.0 | -7.4 |
| 21.158 | 21.4 | 21.2 | 42.6 | 50.0 | -7.4 |
| 26.639 | 20.8 | 21.7 | 42.5 | 50.0 | -7.5 |
| 26.351 | 20.8 | 21.7 | 42.5 | 50.0 | -7.5 |
| 27.747 | 20.5 | 21.9 | 42.4 | 50.0 | -7.6 |
| 27.814 | 20.4 | 22.0 | 42.4 | 50.0 | -7.6 |
| 26.706 | 20.6 | 21.8 | 42.4 | 50.0 | -7.6 |
| 27.519 | 20.3 | 21.9 | 42.2 | 50.0 | -7.8 |
| 26.777 | 20.4 | 21.8 | 42.2 | 50.0 | -7.8 |
| 21.020 | 21.0 | 21.2 | 42.2 | 50.0 | -7.8 |
| 20.878 | 21.0 | 21.1 | 42.1 | 50.0 | -7.9 |
| 20.703 | 20.9 | 21.1 | 42.0 | 50.0 | -8.0 |
| 26.198 | 20.3 | 21.7 | 42.0 | 50.0 | -8.0 |
| 26.124 | 20.3 | 21.7 | 42.0 | 50.0 | -8.0 |
| 27.120 | 20.1 | 21.8 | 41.9 | 50.0 | -8.1 |



| Wo | ork Order: | MASI0275 | Date: | 08/18/15 | | 1 1 | | | | |
|-----------|------------|----------------------|-----------------------|--------------------|-------------|------------------------|------|--|--|--|
| | Project: | | Temperature: | 23.9 °C | | 146 | 2/- | | | |
| | Job Site: | | Humidity: | 44.9% RH | | | | | | |
| Seria | I Number: | 1521639422 | Barometric Pres.: | 1011 mbar | | Tested by: Mark Baytar | า | | | |
| | EUT: | MWM1 | | | | | | | | |
| Conf | iguration: | 2 | | | | | | | | |
| | Customer: | Masimo Corporation | mo Corporation | | | | | | | |
| Α | ttendees: | None | | | | | | | | |
| EU | JT Power: | 110VAC/60Hz | | | | | | | | |
| Operati | ing Mode: | Operating Continuous | Transmit 802.11 bg: I | High Channel 11 (2 | 462 MHz) | | | | | |
| D | eviations: | None | | | | | | | | |
| Ce | omments: | Tx Power set to 90. | | | | | | | | |
| Test Spec | ifications | | | Test M | ethod | | | | | |
| FCC 15.24 | | | | ANSI C | 63.10:2013 | | | | | |
| | | | | | | | | | | |
| D # | 0 | Lina | High Line | Fyt Attamusti | l | Deculta | Door | | | |
| Run # | 8 | Line: | High Line | Ext. Attenuation | n: 0 | Results | Pass | | | |



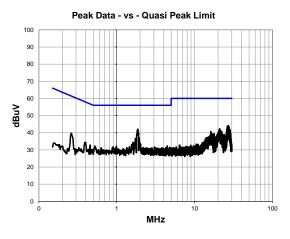


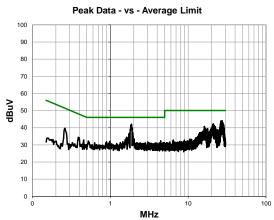
| Peak Data - vs - Quasi Peak Limit | | | | | | |
|-----------------------------------|---------------------|----------------|--------------------|-----------------------|------------------------------|--|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | |
| 1.866 | 21.3 | 20.2 | 41.5 | 56.0 | -14.5 | |
| 27.194 | 21.8 | 21.8 | 43.6 | 60.0 | -16.4 | |
| 21.020 | 22.2 | 21.2 | 43.4 | 60.0 | -16.6 | |
| 26.706 | 21.4 | 21.8 | 43.2 | 60.0 | -16.8 | |
| 27.541 | 21.1 | 21.9 | 43.0 | 60.0 | -17.0 | |
| 27.471 | 21.1 | 21.9 | 43.0 | 60.0 | -17.0 | |
| 26.586 | 21.2 | 21.7 | 42.9 | 60.0 | -17.1 | |
| 26.381 | 21.2 | 21.7 | 42.9 | 60.0 | -17.1 | |
| 26.280 | 21.2 | 21.7 | 42.9 | 60.0 | -17.1 | |
| 21.139 | 21.7 | 21.2 | 42.9 | 60.0 | -17.1 | |
| 25.833 | 21.2 | 21.6 | 42.8 | 60.0 | -17.2 | |
| 27.366 | 20.8 | 21.9 | 42.7 | 60.0 | -17.3 | |
| 21.065 | 21.4 | 21.2 | 42.6 | 60.0 | -17.4 | |
| 20.949 | 21.3 | 21.2 | 42.5 | 60.0 | -17.5 | |
| 26.154 | 20.7 | 21.7 | 42.4 | 60.0 | -17.6 | |
| 26.799 | 20.5 | 21.8 | 42.3 | 60.0 | -17.7 | |
| 27.008 | 20.4 | 21.8 | 42.2 | 60.0 | -17.8 | |
| 20.707 | 21.0 | 21.1 | 42.1 | 60.0 | -17.9 | |
| 26.083 | 20.4 | 21.6 | 42.0 | 60.0 | -18.0 | |
| 20.669 | 20.9 | 21.1 | 42.0 | 60.0 | -18.0 | |
| 1.948 | 17.8 | 20.2 | 38.0 | 56.0 | -18.0 | |

| Peak Data - vs - Average Limit | | | | | |
|--------------------------------|---------------------|----------------|--------------------|-----------------------|------------------------------|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) |
| 1.866 | 21.3 | 20.2 | 41.5 | 46.0 | -4.5 |
| 27.194 | 21.8 | 21.8 | 43.6 | 50.0 | -6.4 |
| 21.020 | 22.2 | 21.2 | 43.4 | 50.0 | -6.6 |
| 26.706 | 21.4 | 21.8 | 43.2 | 50.0 | -6.8 |
| 27.541 | 21.1 | 21.9 | 43.0 | 50.0 | -7.0 |
| 27.471 | 21.1 | 21.9 | 43.0 | 50.0 | -7.0 |
| 26.586 | 21.2 | 21.7 | 42.9 | 50.0 | -7.1 |
| 26.381 | 21.2 | 21.7 | 42.9 | 50.0 | -7.1 |
| 26.280 | 21.2 | 21.7 | 42.9 | 50.0 | -7.1 |
| 21.139 | 21.7 | 21.2 | 42.9 | 50.0 | -7.1 |
| 25.833 | 21.2 | 21.6 | 42.8 | 50.0 | -7.2 |
| 27.366 | 20.8 | 21.9 | 42.7 | 50.0 | -7.3 |
| 21.065 | 21.4 | 21.2 | 42.6 | 50.0 | -7.4 |
| 20.949 | 21.3 | 21.2 | 42.5 | 50.0 | -7.5 |
| 26.154 | 20.7 | 21.7 | 42.4 | 50.0 | -7.6 |
| 26.799 | 20.5 | 21.8 | 42.3 | 50.0 | -7.7 |
| 27.008 | 20.4 | 21.8 | 42.2 | 50.0 | -7.8 |
| 20.707 | 21.0 | 21.1 | 42.1 | 50.0 | -7.9 |
| 26.083 | 20.4 | 21.6 | 42.0 | 50.0 | -8.0 |
| 20.669 | 20.9 | 21.1 | 42.0 | 50.0 | -8.0 |
| 1.948 | 17.8 | 20.2 | 38.0 | 46.0 | -8.0 |



| Work | k Order: | MASI0275 | Date: | 08/1 | 2/15 | | | | | | | | | | |
|---------------|-----------|----------------------|---|----------|-----------|---------|------------|-------------|------|--|--|--|--|--|--|
| | Project: | None | Temperature: | 23.9 | | | 4 | | 5./- | | | | | | |
| | ob Site: | OC06 | Humidity: | 44.9% | | | | | 7 | | | | | | |
| | lumber: | 1521639422 | Barometric Pres.: | 1011 | | | Tested by: | Mark Baytar |) | | | | | | |
| | EUT: | MWM1 | | - | | | | | | | | | | | |
| Config | uration: | 2 | | | | | | | | | | | | | |
| Cu | stomer: | Masimo Corporation | | | | | | | | | | | | | |
| Atte | endees: | None | | | | | | | | | | | | | |
| EUT | Power: | 110VAC/60Hz | | | | | | | | | | | | | |
| Operating | g Mode: | Operating Continuous | erating Continuous Transmit 802.11 bg: High Channel 11 (2462 MHz) | | | | | | | | | | | | |
| Dev | riations: | None | one | | | | | | | | | | | | |
| Con | nments: | iol | | | | | | | | | | | | | |
| Test Specific | cations | | | | Test Meth | od | | | | | | | | | |
| FCC 15.247: | | | | | ANSI C63. | 10:2013 | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Run # | 9 | Line: | Neutral | Ext. Att | enuation: | 0 | | Results | Pass | | | | | | |





| | Peak | Data - vs - | Quasi Peal | c Limit | |
|---------------|---------------------|----------------|--------------------|-----------------------|------------------------------|
| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) |
| 1.870 | 21.9 | 20.2 | 42.1 | 56.0 | -13.9 |
| 27.191 | 22.3 | 21.8 | 44.1 | 60.0 | -15.9 |
| 26.359 | 22.2 | 21.7 | 43.9 | 60.0 | -16.1 |
| 27.332 | 21.6 | 21.9 | 43.5 | 60.0 | -16.5 |
| 26.642 | 21.3 | 21.7 | 43.0 | 60.0 | -17.0 |
| 27.657 | 21.1 | 21.9 | 43.0 | 60.0 | -17.0 |
| 27.474 | 21.0 | 21.9 | 42.9 | 60.0 | -17.1 |
| 27.881 | 20.9 | 22.0 | 42.9 | 60.0 | -17.1 |
| 26.426 | 21.1 | 21.7 | 42.8 | 60.0 | -17.2 |
| 26.150 | 21.1 | 21.7 | 42.8 | 60.0 | -17.2 |
| 26.702 | 20.9 | 21.8 | 42.7 | 60.0 | -17.3 |
| 26.847 | 20.8 | 21.8 | 42.6 | 60.0 | -17.4 |
| 27.209 | 20.7 | 21.9 | 42.6 | 60.0 | -17.4 |
| 26.568 | 20.7 | 21.7 | 42.4 | 60.0 | -17.6 |
| 27.165 | 20.5 | 21.8 | 42.3 | 60.0 | -17.7 |
| 26.937 | 20.5 | 21.8 | 42.3 | 60.0 | -17.7 |
| 27.515 | 20.3 | 21.9 | 42.2 | 60.0 | -17.8 |
| 21.087 | 21.0 | 21.2 | 42.2 | 60.0 | -17.8 |
| 20.998 | 21.0 | 21.2 | 42.2 | 60.0 | -17.8 |
| 26.012 | 20.5 | 21.6 | 42.1 | 60.0 | -17.9 |
| 26.493 | 20.4 | 21.7 | 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) | | | | | | | |
| 1.870 | 21.9 | 20.2 | 42.1 | 46.0 | -3.9 | | | | | | | |
| 27.191 | 22.3 | 21.8 | 44.1 | 50.0 | -5.9 | | | | | | | |
| 26.359 | 22.2 | 21.7 | 43.9 | 50.0 | -6.1 | | | | | | | |
| 27.332 | 21.6 | 21.9 | 43.5 | 50.0 | -6.5 | | | | | | | |
| 26.642 | 21.3 | 21.7 | 43.0 | 50.0 | -7.0 | | | | | | | |
| 27.657 | 21.1 | 21.9 | 43.0 | 50.0 | -7.0 | | | | | | | |
| 27.474 | 21.0 | 21.9 | 42.9 | 50.0 | -7.1 | | | | | | | |
| 27.881 | 20.9 | 22.0 | 42.9 | 50.0 | -7.1 | | | | | | | |
| 26.426 | 21.1 | 21.7 | 42.8 | 50.0 | -7.2 | | | | | | | |
| 26.150 | 21.1 | 21.7 | 42.8 | 50.0 | -7.2 | | | | | | | |
| 26.702 | 20.9 | 21.8 | 42.7 | 50.0 | -7.3 | | | | | | | |
| 26.847 | 20.8 | 21.8 | 42.6 | 50.0 | -7.4 | | | | | | | |
| 27.209 | 20.7 | 21.9 | 42.6 | 50.0 | -7.4 | | | | | | | |
| 26.568 | 20.7 | 21.7 | 42.4 | 50.0 | -7.6 | | | | | | | |
| 27.165 | 20.5 | 21.8 | 42.3 | 50.0 | -7.7 | | | | | | | |
| 26.937 | 20.5 | 21.8 | 42.3 | 50.0 | -7.7 | | | | | | | |
| 27.515 | 20.3 | 21.9 | 42.2 | 50.0 | -7.8 | | | | | | | |
| 21.087 | 21.0 | 21.2 | 42.2 | 50.0 | -7.8 | | | | | | | |
| 20.998 | 21.0 | 21.2 | 42.2 | 50.0 | -7.8 | | | | | | | |
| 26.012 | 20.5 | 21.6 | 42.1 | 50.0 | -7.9 | | | | | | | |
| 26.493 | 20.4 | 21.7 | 42.1 | 50.0 | -7.9 | | | | | | | |



SPURIOUS RADIATED EMISSIONS

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

MODES OF OPERATION

Continuous Transmit 802.11bg: Low Channel 1 (2412 MHz) & High Channel 11 (2462 MHz)

Continuous Transmit 802.11bg: Low Channel 1 (2412 MHz), Mid Channel 6 (2437 MHz), High Channel 11 (2462 MHz)

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

MASI0274 - 2

FREQUENCY RANGE INVESTIGATED

| Start Frequency 30 MHz | Stop Frequency | 26 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 |
| Attenuator, 20db, 'SMA' | Weinschel Corp | 4H-20 | AWB | 3/5/2015 | 12 mo |
| High Pass Filter, 2.8 - 18 GHz | Micro-Tronics | HPM50111 | HGC | 3/5/2015 | 12 mo |
| Cable | D-Coax | None | OC4 | 12/16/2014 | 12 mo |
| Pre-Amplifier | Miteq | SDWK42-18004000-60-5P-H | PAN | 12/16/2014 | 12 mo |
| Antenna, Double Ridge Guide | A.H. Systems, Inc. | SAS-574 | AXV | 4/9/2014 | 24 mo |
| Horn | | | | | |
| 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

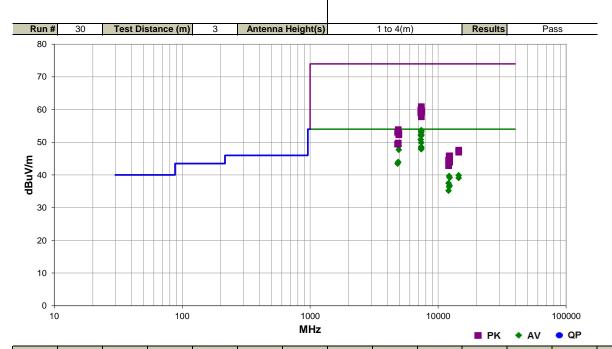
The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify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

Report No. MASI0274.1 19/102



SPURIOUS RADIATED EMISSIONS

| Work Order: | MASI0274 | Date: | 08/07/15 | 11111 |
|---------------------|---------------------|----------------------|-----------------------|--|
| Project: | None | Temperature: | 21.4 °C | for dillen |
| Job Site: | OC07 | Humidity: | 47.9% RH | O |
| Serial Number: | 1521639422 | Barometric Pres.: | 1012.6 mbar | Tested by: Mike Tran & Johnny Candelas |
| EUT: | BCM4334 802.11abg/ | /BT radio | | |
| Configuration: | 2 | | | |
| Customer: | Masimo Corporation | | | |
| Attendees: | None | | | |
| EUT Power: | 110VAC/60Hz | | | |
| Operating Mode: | Continuous Transmit | 802.11bg: Low Channe | l 1 (2412 MHz), Mid (| Channel 6 (2437 MHz), High Channel 11 (2462 MHz) |
| Deviations: | None | | | |
| Comments: | TX Power = 75 | | | |
| Test Specifications | | | Test Meth | od |
| FCC 15.247:2015 | | | ANSI C63. | 10:2013 |



| 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 |
|---------------|---------------------|----------------|-------------------------|-------------------|---------------------------|---------------------------------|---------------------------------|----------|--------------------------------|----------------------|-------------------------|------------------------------|-----------------------------|
| 7386.817 | 40.5 | 13.2 | 1.2 | 265.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 53.7 | 54.0 | -0.3 | EUT Horz, High Ch, 1Mbps |
| 7386.842 | 40.2 | 13.2 | 1.1 | 276.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 53.4 | 54.0 | -0.6 | EUT on Side, High Ch, 1Mbps |
| 7385.158 | 39.9 | 13.2 | 1.7 | 272.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 53.1 | 54.0 | -0.9 | EUT Horz, High Ch, 1Mbps |
| 7385.058 | 39.2 | 13.2 | 1.2 | 242.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 52.4 | 54.0 | -1.6 | EUT on Side, High Ch, 1Mbps |
| 7310.067 | 39.3 | 12.9 | 1.1 | 281.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 52.2 | 54.0 | -1.8 | EUT Horz, Mid Ch, 1Mbps |
| 7386.992 | 38.8 | 13.2 | 1.2 | 240.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 52.0 | 54.0 | -2.0 | EUT Vert, High Ch, 1Mbps |
| 7311.850 | 37.9 | 12.9 | 1.2 | 280.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 50.8 | 54.0 | -3.2 | EUT Horz, Mid Ch, 1Mbps |
| 7386.958 | 36.7 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 49.9 | 54.0 | -4.1 | EUT Horz, High Ch, 11Mbps |
| 4873.942 | 44.7 | 5.1 | 1.5 | 166.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 49.8 | 54.0 | -4.2 | EUT Horz, Mid Ch, 1Mbps |
| 4823.958 | 44.3 | 4.8 | 1.6 | 168.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 49.1 | 54.0 | -4.9 | EUT Horz, Low Ch, 1Mbps |
| 4923.950 | 43.5 | 5.3 | 1.8 | 162.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 48.8 | 54.0 | -5.2 | EUT Horz, High Ch, 1Mbps |
| 7385.033 | 35.4 | 13.2 | 1.2 | 232.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 48.6 | 54.0 | -5.4 | EUT Vert, High Ch, 1Mbps |
| 7388.167 | 35.1 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 48.3 | 54.0 | -5.7 | EUT Horz, High Ch, 6Mbps |
| 7388.175 | 34.7 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 47.9 | 54.0 | -6.1 | EUT Horz, High Ch, 36Mbps |
| 7386.117 | 34.7 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 47.9 | 54.0 | -6.1 | EUT Horz, High Ch, 54Mbps |
| 4923.992 | 42.4 | 5.3 | 1.9 | 195.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 47.7 | 54.0 | -6.3 | EUT Horz, High Ch, 1Mbps |
| 4873.975 | 38.9 | 5.1 | 1.2 | 277.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 44.0 | 54.0 | -10.0 | EUT Horz, Mid Ch, 1Mbps |
| 4823.950 | 38.6 | 4.8 | 3.0 | 247.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 43.4 | 54.0 | -10.6 | EUT Horz, Low Ch, 1Mbps |
| 7385.525 | 47.7 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 60.9 | 74.0 | -13.1 | EUT Horz, High Ch, 11Mbps |
| 14471.810 | 37.2 | 2.7 | 2.7 | 170.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 39.9 | 54.0 | -14.1 | EUT Horz, Low Ch, 1Mbps |
| 7309.717 | 46.9 | 12.9 | 1.1 | 281.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 59.8 | 74.0 | -14.2 | EUT Horz, Mid Ch, 1Mbps |
| 7384.525 | 46.6 | 13.2 | 1.2 | 264.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 59.8 | 74.0 | -14.2 | EUT Horz, High Ch, 1Mbps |
| 7386.417 | 46.5 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 59.7 | 74.0 | -14.3 | EUT Horz, High Ch, 36Mbps |
| 7385.908 | 46.5 | 13.2 | 1.1 | 276.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 59.7 | 74.0 | -14.3 | EUT on Side, High Ch, 1Mbps |
| 12185.990 | 45.8 | -6.1 | 1.4 | 225.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 39.7 | 54.0 | -14.3 | EUT Horz, Mid Ch, 1Mbps |
| 7386.125 | 46.4 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 59.6 | 74.0 | -14.4 | EUT Horz, High Ch, 54Mbps |
| 7386.192 | 46.3 | 13.2 | 1.2 | 274.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 59.5 | 74.0 | -14.5 | EUT Horz, High Ch, 6Mbps |
| | | | | | | | | | | | | | |

Report No. MASI0274.1 20/102

| 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 |
|---------------|---------------------|----------------|-------------------------|-------------------|---------------------------|---------------------------------|---------------------------------|----------|--------------------------------|----------------------|-------------------------|------------------------------|-----------------------------|
| 7387.433 | 46.1 | 13.2 | 1.2 | 240.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 59.3 | 74.0 | -14.7 | EUT Vert, High Ch, 1Mbps |
| 7384.700 | 46.1 | 13.2 | 1.2 | 242.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 59.3 | 74.0 | -14.7 | EUT on Side, High Ch, 1Mbps |
| 12310.810 | 44.6 | -5.4 | 1.4 | 217.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 39.2 | 54.0 | -14.8 | EUT Horz, High Ch, 1Mbps |
| 7385.733 | 45.9 | 13.2 | 1.7 | 271.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 59.1 | 74.0 | -14.9 | EUT Horz, High Ch, 1Mbps |
| 14471.830 | 36.4 | 2.7 | 2.9 | 177.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 39.1 | 54.0 | -14.9 | EUT Horz, Low Ch, 1Mbps |
| 7310.775 | 46.1 | 12.9 | 1.2 | 280.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 59.0 | 74.0 | -15.0 | EUT Horz, Mid Ch, 1Mbps |
| 7385.792 | 44.6 | 13.2 | 1.2 | 232.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 57.8 | 74.0 | -16.2 | EUT Vert, High Ch, 1Mbps |
| 12060.860 | 44.3 | -6.8 | 2.5 | 226.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 37.5 | 54.0 | -16.5 | EUT Horz, Low Ch, 1Mbps |
| 12310.880 | 42.2 | -5.4 | 1.1 | 89.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 36.8 | 54.0 | -17.2 | EUT Horz, High Ch, 1Mbps |
| 12185.820 | 42.5 | -6.1 | 1.1 | 274.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 36.4 | 54.0 | -17.6 | EUT Horz, Mid Ch, 1Mbps |
| 12060.880 | 42.0 | -6.8 | 3.4 | 203.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 35.2 | 54.0 | -18.8 | EUT Horz, Low Ch, 1Mbps |
| 4873.900 | 48.8 | 5.1 | 1.5 | 166.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 53.9 | 74.0 | -20.1 | EUT Horz, Mid Ch, 1Mbps |
| 4824.025 | 48.2 | 4.8 | 1.6 | 168.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 53.0 | 74.0 | -21.0 | EUT Horz, Low Ch, 1Mbps |
| 4923.742 | 47.4 | 5.3 | 1.8 | 162.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 52.7 | 74.0 | -21.3 | EUT Horz, High Ch, 1Mbps |
| 4923.992 | 47.0 | 5.3 | 1.9 | 195.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 52.3 | 74.0 | -21.7 | EUT Horz, High Ch, 1Mbps |
| 4874.183 | 44.7 | 5.1 | 1.2 | 277.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 49.8 | 74.0 | -24.2 | EUT Horz, Mid Ch, 1Mbps |
| 4823.992 | 44.6 | 4.8 | 3.0 | 247.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 49.4 | 74.0 | -24.6 | EUT Horz, Low Ch, 1Mbps |
| 14472.180 | 44.9 | 2.7 | 2.7 | 170.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 47.6 | 74.0 | -26.4 | EUT Horz, Low Ch, 1Mbps |
| 14471.980 | 44.3 | 2.7 | 2.9 | 177.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 47.0 | 74.0 | -27.0 | EUT Horz, Low Ch, 1Mbps |
| 12309.980 | 51.3 | -5.5 | 1.4 | 217.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 45.8 | 74.0 | -28.2 | EUT Horz, High Ch, 1Mbps |
| 12184.190 | 51.9 | -6.1 | 1.4 | 225.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 45.8 | 74.0 | -28.2 | EUT Horz, Mid Ch, 1Mbps |
| 12059.750 | 51.3 | -6.8 | 2.5 | 226.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 44.5 | 74.0 | -29.5 | EUT Horz, Low Ch, 1Mbps |
| 12185.890 | 50.3 | -6.1 | 1.1 | 274.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 44.2 | 74.0 | -29.8 | EUT Horz, Mid Ch, 1Mbps |
| 12309.890 | 49.4 | -5.5 | 1.1 | 89.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 43.9 | 74.0 | -30.1 | EUT Horz, High Ch, 1Mbps |
| 12058.870 | 49.7 | -6.8 | 3.4 | 203.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 42.9 | 74.0 | -31.1 | EUT Horz, Low Ch, 1Mbps |

Report No. MASI0274.1 21/102

■ PK ◆ AV • QP



SPURIOUS RADIATED EMISSIONS

| Work Order: | MASI0274 | Date: | 08/07/15 | Se S. Colle |
|---------------------|---------------------|-----------------------|---------------------|--|
| Project: | None | Temperature: | 21.4 °C | Je W. Lather |
| Job Site: | OC07 | Humidity: | 47.9% RH | |
| Serial Number: | 1521639422 | Barometric Pres.: | 1012.6 mbar | Tested by: Mike Tran & Johnny Candelas |
| EUT: | BCM4334 802.11abg/ | /BT radio | | |
| Configuration: | 2 | | | |
| Customer: | Masimo Corporation | | | |
| Attendees: | None | | | |
| EUT Power: | 110VAC/60Hz | | | |
| Operating Mode: | Continuous Transmit | 802.11bg: Low Channel | 1 (2412 MHz) & High | n Channel 11 (2462 MHz) |
| Deviations: | None | | | |
| Comments: | TX Power = 75 | | | |
| Test Specifications | | | Test Meth | od |
| FCC 15.247:2015 | | | ANSI C63. | 10:2013 |

| Run # | 34 | Test Distance (m) | 3 | Antenna Height(s) | 1 to 4(m) | Results | Pass |
|-------|----|-------------------|---|-------------------|-----------|---------|------|
| 80 — | | \ /1 | | | | | |
| | | | | _ | | | |
| 70 | | | | | | | |
| | | | | • | | | |
| 60 | | | | | | | |
| | | | | •• | | | |
| 50 | | | | | | | |
| | | | | | | | |
| 40 | | | | •• | | | |
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| 30 | | | | | | | |
| | | | | | | | |
| 20 | | | | | | | |
| | | | | | | | |
| 10 | | | | | | | |
| | | | | | | | |

MHz

| 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) | |
|---------------|---------------------|----------------|-------------------------|-------------------|---------------------------|---------------------------------|---------------------------------|----------|--------------------------------|----------------------|-------------------------|------------------------------|------------------------------|
| (IVITZ) | (GDGV) | (db) | (moters) | (deglees) | (moters) | (db) | | | (GB) | , | (GDGV/III) | (db) | Comments |
| 2483.518 | 58.0 | -4.3 | 3.5 | 300.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 73.7 | 74.0 | -0.3 | EUT Horz, High Ch, 6Mbps |
| 2483.640 | 56.4 | -4.3 | 2.3 | 258.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 72.1 | 74.0 | -1.9 | EUT on Side, High Ch, 6Mbps |
| 2483.588 | 56.2 | -4.3 | 1.2 | 296.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 71.9 | 74.0 | -2.1 | EUT on Side, High Ch, 6Mbps |
| 2483.712 | 55.8 | -4.3 | 1.2 | 193.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 71.5 | 74.0 | -2.5 | EUT Horz, High Ch, 6Mbps |
| 2483.623 | 55.7 | -4.3 | 2.8 | 297.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 71.4 | 74.0 | -2.6 | EUT Horz, High Ch, 36Mbps |
| 2483.533 | 55.4 | -4.3 | 2.8 | 297.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 71.1 | 74.0 | -2.9 | EUT Horz, High Ch, 54Mbps |
| 2483.590 | 55.3 | -4.3 | 1.2 | 311.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 71.0 | 74.0 | -3.0 | EUT Vert, High Ch, 6Mbps |
| 2483.515 | 35.1 | -4.3 | 3.5 | 300.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 50.8 | 54.0 | -3.2 | EUT Horz, High Ch, 6Mbps |
| 2389.970 | 55.6 | -4.9 | 2.4 | 175.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 70.7 | 74.0 | -3.3 | EUT on Side, Low Ch, 6Mbps |
| 2483.500 | 34.5 | -4.3 | 1.2 | 193.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 50.2 | 54.0 | -3.8 | EUT Horz, High Ch, 6Mbps |
| 2483.500 | 34.1 | -4.3 | 2.3 | 258.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 49.8 | 54.0 | -4.2 | EUT on Side, High Ch, 6Mbps |
| 2390.000 | 34.6 | -4.9 | 2.4 | 175.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 49.7 | 54.0 | -4.3 | EUT on Side, Low Ch, 6Mbps |
| 2483.522 | 33.8 | -4.3 | 1.2 | 311.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 49.5 | 54.0 | -4.5 | EUT Vert, High Ch, 6Mbps |
| 2483.507 | 33.8 | -4.3 | 1.2 | 296.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 49.5 | 54.0 | -4.5 | EUT on Side, High Ch, 6Mbps |
| 2389.633 | 54.3 | -4.9 | 1.8 | 302.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 69.4 | 74.0 | -4.6 | EUT Horz, Low Ch, 6Mbps |
| 2483.507 | 33.4 | -4.3 | 2.8 | 297.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 49.1 | 54.0 | -4.9 | EUT Horz, High Ch, 36Mbps |
| 2390.000 | 33.6 | -4.9 | 1.8 | 302.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 48.7 | 54.0 | -5.3 | EUT Horz, Low Ch, 6Mbps |
| 2483.508 | 32.9 | -4.3 | 2.8 | 297.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 48.6 | 54.0 | -5.4 | EUT Horz, High Ch, 54Mbps |
| 2483.503 | 31.5 | -4.3 | 2.0 | 234.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 47.2 | 54.0 | -6.8 | EUT Vert, High Ch, 6Mbps |
| 2483.537 | 50.3 | -4.3 | 2.0 | 234.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 66.0 | 74.0 | -8.0 | EUT Vert, High Ch, 6Mbps |
| 2484.007 | 29.1 | -4.3 | 3.5 | 300.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 44.8 | 54.0 | -9.2 | EUT Horz, High Ch, 11Mbps |
| 2484.083 | 28.9 | -4.3 | 2.3 | 258.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 44.6 | 54.0 | -9.4 | EUT on Side, High Ch, 11Mbps |
| 2483.507 | 28.9 | -4.3 | 2.3 | 258.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 44.6 | 54.0 | -9.4 | EUT on Side, High Ch, 1Mbps |
| 2484.498 | 28.8 | -4.3 | 3.5 | 300.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 44.5 | 54.0 | -9.5 | EUT Horz, High Ch, 1Mbps |
| 2388.817 | 29.2 | -4.9 | 1.2 | 268.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 44.3 | 54.0 | -9.7 | EUT Horz, Low Ch, 1Mbps |
| 2388.370 | 29.2 | -4.9 | 1.2 | 324.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 44.3 | 54.0 | -9.7 | EUT on Side, Low Ch, 1Mbps |
| 2483.995 | 42.3 | -4.3 | 3.5 | 300.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 58.0 | 74.0 | -16.0 | EUT Horz, High Ch, 1Mbps |
| 2483.773 | 42.2 | -4.3 | 2.3 | 258.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 57.9 | 74.0 | -16.1 | EUT on Side, High Ch, 11Mbps |
| 2484.173 | 42.1 | -4.3 | 2.3 | 258.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 57.8 | 74.0 | -16.2 | EUT on Side, High Ch, 1Mbps |
| 2389.337 | 42.6 | -4.9 | 1.2 | 324.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 57.7 | 74.0 | -16.3 | EUT on Side, Low Ch, 1Mbps |
| 2483.767 | 41.9 | -4.3 | 3.5 | 300.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 57.6 | 74.0 | -16.4 | EUT Horz, High Ch, 11Mbps |
| 2389.600 | 42.5 | -4.9 | 1.2 | 268.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 57.6 | 74.0 | -16.4 | EUT Horz, Low Ch, 1Mbps |

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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

| | | | | | Interval |
|------------------------------|--------------------|------------|-----|------------|----------|
| Description | Manufacturer | Model | ID | Last Cal. | (mos) |
| 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 | E4446A | AAY | 10/27/2014 | 12 |

TEST DESCRIPTION

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

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

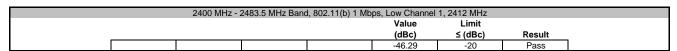
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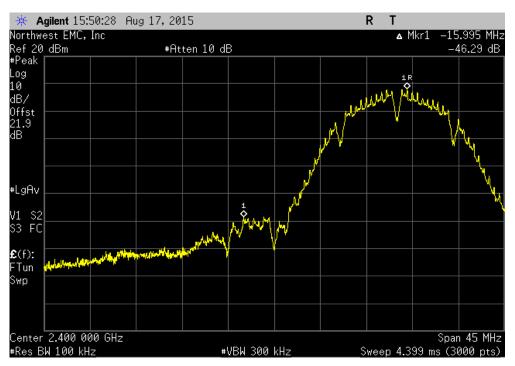


| EUT: MWM1 | Work Order: | | |
|---|--|---|--|
| Serial Number: 1521639422 | | 08/12/15 | |
| Customer: Masimo Corporation | Temperature: | | |
| Attendees: Mike Clark | Humidity: | | |
| Project: None | Barometric Pres.: | | |
| Tested by: Mark Baytan Power: 110VAC/60Hz | Job Site: | OC13 | |
| TEST SPECIFICATIONS Test Method | | | |
| FCC 15.247:2015 ANSI C63.10:2013 | | | |
| | | | |
| COMMENTS | | | |
| TX Power = 90. DC Block/20dB Attenuator + coax cable + client provided patch cable = 21.9dB total offset | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| None | | | |
| Configuration # 1 Signature | | | |
| Signature | | | |
| | Value (dBc) | Limit ≤ (dBc) | Result |
| 2400 MHz - 2483.5 MHz Band | | | Result |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps | (dBc) | ≤ (dBc) | |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz | | | Result Pass Pass |
| 2400 MHz - 2483,5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz | (dBc) -46.29 | ≤ (dBc) | Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz | (dBc) -46.29 | ≤ (dBc) | Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps | (dBc) -46.29 -56.55 | ≤ (dBc) -20 -20 | Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz | -46.29 -56.55 | ≤ (dBc) -20 -20 -20 | Pass Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz | -46.29 -56.55 | ≤ (dBc) -20 -20 -20 | Pass Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz High Channel 1, 2412 MHz 802.11(g) 6 Mbps 802.11(g) 6 Mbps | -46.29 -56.55 -46.83 -55.84 | -20 -20 -20 -20 -20 | Pass Pass Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz High Channel 1, 2462 MHz 802.11(g) 6 Mbps Low Channel 1, 2412 MHz | -46.29 -56.55 -46.83 -55.84 | -20 -20 -20 -20 -20 -20 | Pass Pass Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(g) 6 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz High Channel 11, 2462 MHz | -46.29 -56.55 -46.83 -55.84 | -20 -20 -20 -20 -20 -20 | Pass Pass Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz High Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(g) 6 Mbps Low Channel 1, 2412 MHz High Channel 1, 2412 MHz High Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(g) 36 Mbps | -46.29 -56.55 -46.83 -55.84 -25.96 -34.86 | -20 -20 -20 -20 -20 -20 -20 -20 | Pass Pass Pass Pass Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(g) 6 Mbps Low Channel 1, 2412 MHz High Channel 1, 2412 MHz High Channel 1, 2412 MHz Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(g) 36 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz | -46.29 -56.55 -46.83 -55.84 -25.96 -34.86 | -20 -20 -20 -20 -20 -20 -20 -20 -20 | Pass Pass Pass Pass Pass Pass Pass Pass |
| 2400 MHz - 2483.5 MHz Band 802.11(b) 1 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(b) 11 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(g) 6 Mbps Low Channel 1, 2412 MHz High Channel 11, 2462 MHz 802.11(g) 36 Mbps Low Channel 11, 2462 MHz 802.11(g) 36 Mbps Low Channel 11, 2462 MHz 802.11(g) 136 Mbps Low Channel 11, 2424 MHz High Channel 11, 2462 MHz | -46.29 -56.55 -46.83 -55.84 -25.96 -34.86 | -20 -20 -20 -20 -20 -20 -20 -20 -20 | Pass Pass Pass Pass Pass Pass Pass Pass |

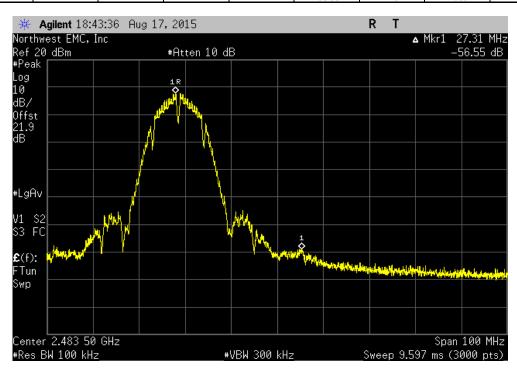
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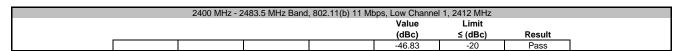


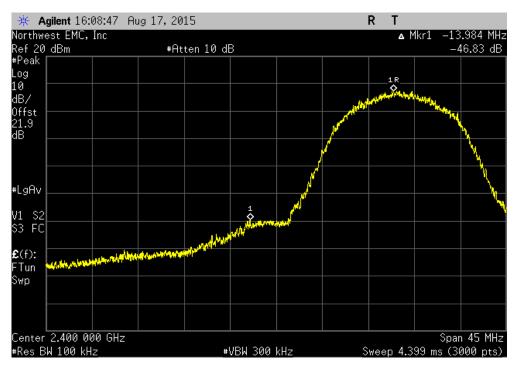
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz | | | | | | | | |
|---|--|--|--|--------|---------|--------|--|--|
| | | | | Value | Limit | | | |
| | | | | (dBc) | ≤ (dBc) | Result | | |
| | | | | -56.55 | -20 | Pass | | |



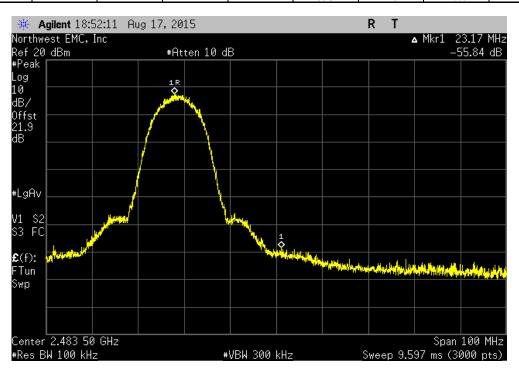
Report No. MASI0274.1 25/102





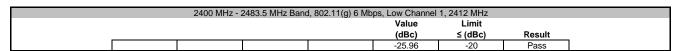


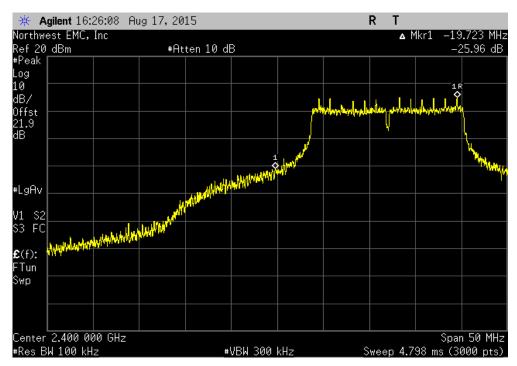
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz | | | | | | | | |
|--|--|--|--|--------|---------|--------|--|--|
| | | | | Value | Limit | | | |
| | | | | (dBc) | ≤ (dBc) | Result | | |
| | | | | -55.84 | -20 | Pass | | |



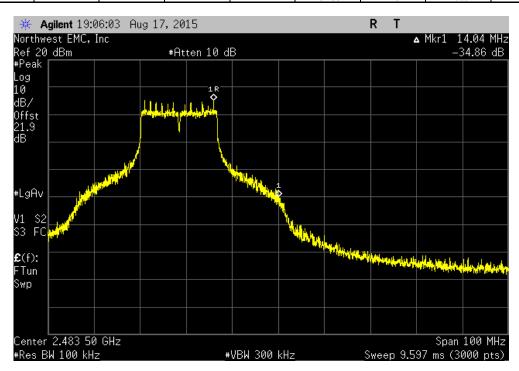
Report No. MASI0274.1 26/102





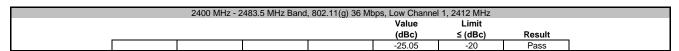


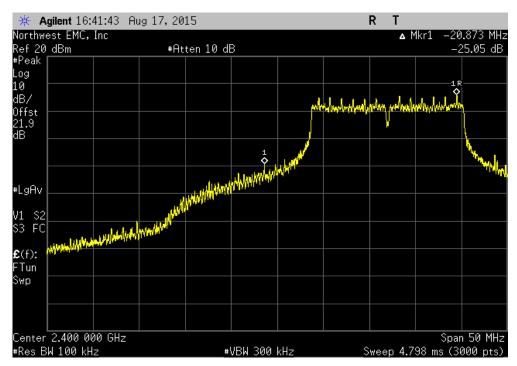
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz | | | | | | | | |
|---|--|--|--|--------|---------|--------|--|--|
| | | | | Value | Limit | | | |
| | | | | (dBc) | ≤ (dBc) | Result | | |
| | | | | -34.86 | -20 | Pass | | |



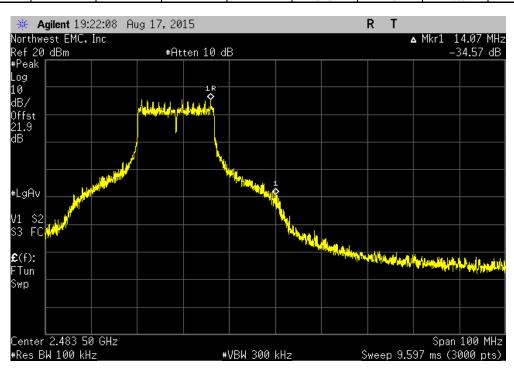
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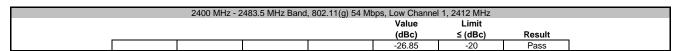


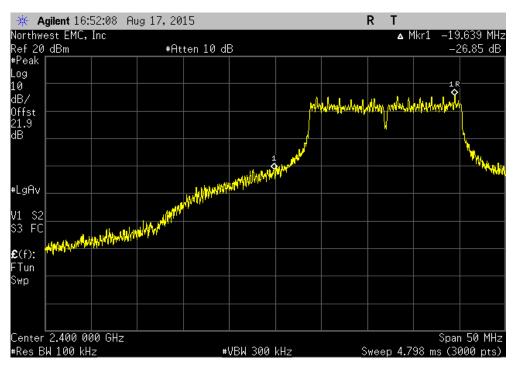
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz | | | | | | | | |
|--|--|--|--|--------|---------|--------|--|--|
| | | | | Value | Limit | | | |
| | | | | (dBc) | ≤ (dBc) | Result | | |
| | | | | -34.57 | -20 | Pass | | |



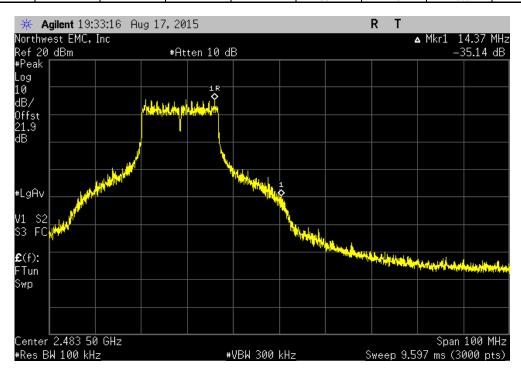
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| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz | | | | | | | | |
|--|--|--|--|--------|---------|--------|--|--|
| | | | | Value | Limit | | | |
| | | | | (dBc) | ≤ (dBc) | Result | | |
| | | | | -35.14 | -20 | Pass | | |



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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

| | | | | | Interval |
|------------------------------|--------------------|------------|-----|------------|----------|
| Description | Manufacturer | Model | ID | Last Cal. | (mos) |
| 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 | E4446A | AAY | 10/27/2014 | 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.

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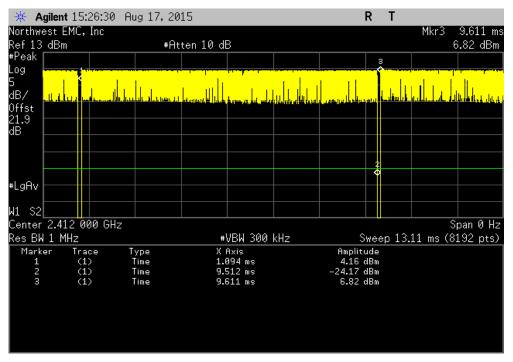


| | MWM1 | | | | Work Order: | | |
|-------------------------------|--|--------------------------------------|-------------------|---------------------|-------------------|--------------|------------|
| Serial Number: | | | | | | 08/12/15 | |
| | Masimo Corporation | | | | Temperature: | | |
| Attendees: | | | | | Humidity: | | |
| Project: | | | | | Barometric Pres.: | | |
| | Mark Baytan | Power: 110VAC/60Hz | | | Job Site: | OC13 | |
| ST SPECIFICATION | ONS | Test Method | | | | | |
| CC 15.247:2015 | | ANSI C63.10:2013 | | | | | |
| | | | | | | | |
| OMMENTS (Power = 90. DC I | Block/20dB Attenuator + coax cable + client provide | ed patch cable = 21.9dB total offset | | | | | |
| VIATIONS FROM | TEST STANDARD | | | | | | |
| one | | | | | | | |
| onfiguration # | 1 Signature | M+B+ | | | | | |
| | | Pulse Width | Period | Number of Pulses | Value (%) | Limit (%) | Results |
| 100 MHz - 2483.5 N | | | | | | | |
| | 802.11(b) 1 Mbps | 0.440 | 8.517 ms | | 00.0 | NI/A | N1/0 |
| | Low Channel 1, 2412 MHz | 8.418 ms N/A | 8.517 ms N/A | 1 6 | 98.8 N/A | N/A N/A | N/A N/A |
| | Low Channel 1, 2412 MHz | | 8.517 ms | 0 | 98.9 | | |
| | Mid Channel 6, 2437 MHz Mid Channel 6, 2437 MHz | 8.422 ms N/A | 8.517 ms N/A | 6 | 98.9 N/A | N/A N/A | N/A N/A |
| | High Channel 11, 2462 MHz | 8.422 ms | 8.517 ms | 1 | 98.9 | N/A N/A | N/A N/A |
| | | 8.422 IIIS N/A | 0.517 IIIS N/A | 6 | 96.9 N/A | N/A N/A | N/A N/A |
| | High Channel 11, 2462 MHz 802.11(b) 11 Mbps | IN/A | IN/A | 0 | IN/A | IN/A | IN/A |
| | Low Channel 1, 2412 MHz | 847.9 us | 943.5 us | 1 | 89.9 | N/A | N/A |
| | Low Channel 1, 2412 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | Mid Channel 6, 2437 MHz | 847.9 us | 943.1 us | 1 | 89.9 | N/A | N/A |
| | Mid Channel 6, 2437 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | High Channel 11, 2462 MHz | 842.8 us | 943.1 us | 5 1 | 89.4 | N/A N/A | N/A N/A |
| | High Channel 11, 2462 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | 802.11(g) 6 Mbps | IN/A | IV/A | <u></u> | IN/A | IVA | IN/A |
| 1 | Low Channel 1, 2412 MHz | 1.39 ms | 1.496 ms | 1 | 92.9 | N/A | N/A |
| | Low Channel 1, 2412 MHz | N/A | 1.496 ms N/A | 5 | 92.9 N/A | N/A N/A | N/A N/A |
| | Mid Channel 6, 2437 MHz | 1.39 ms | 1.496 ms | 5 1 | 92.9 | N/A N/A | N/A N/A |
| | Mid Channel 6, 2437 MHz | N/A | N/A | 5 | 92.9 N/A | N/A | N/A |
| | High Channel 11, 2462 MHz | 1.389 ms | 1.495 ms | 1 | 92.9 | N/A | N/A |
| | High Channel 11, 2462 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | 802.11(q) 36 Mbps | IVA | 13/73 | | 13//3 | 19// 1 | 13/75 |
| 1 | Low Channel 1, 2412 MHz | 245.3 us | 351.3 us | 1 | 69.8 | N/A | N/A |
| | Low Channel 1, 2412 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | Mid Channel 6, 2437 MHz | 244.9 us | 351.4 us | 1 | 69.7 | N/A | N/A |
| | Mid Channel 6, 2437 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | High Channel 11, 2462 MHz | 244.9 us | 351.3 us | 1 | 69.7 | N/A | N/A |
| | High Channel 11, 2462 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | 802.11(g) 54 Mbps | | . 971 | | | | |
| 1 | Low Channel 1, 2412 MHz | 169 us | 275.9 us | 1 | 61.3 | N/A | N/A |
| | Low Channel 1, 2412 MHz | N/A | N/A | 5 | N/A | N/A | N/A |
| | Mid Channel 6, 2437 MHz | 169.7 us | 276 us | 1 | 61.5 | N/A | N/A |
| | | | N/A | 5 | N/A | N/A | N/A |
| | Mid Channel 6, 2437 MHz | N/A | | | | | |
| | Mid Channel 6, 2437 MHz High Channel 11, 2462 MHz | N/A 169.3 us | 276 us | 1 | 61.3 | N/A | N/A |

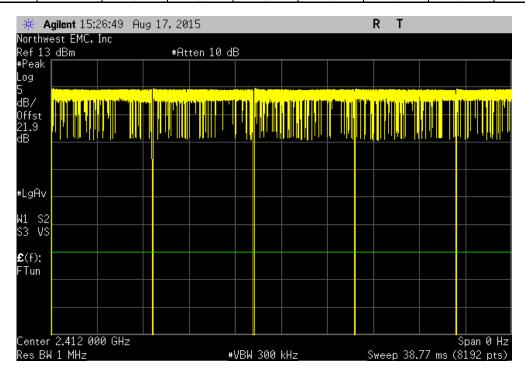
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| | 2400 MHz - 2 | 2483.5 MHz Band | I, 802.11(b) 1 Mb | ps, Low Channel | 1, 2412 MHz | | |
|--|--------------|-----------------|-------------------|-----------------|-------------|---------|--|
| | | | Number of | Value | Limit | | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results | |
| | 8.418 ms | 8.517 ms | 1 | 98.8 | N/A | N/A | |



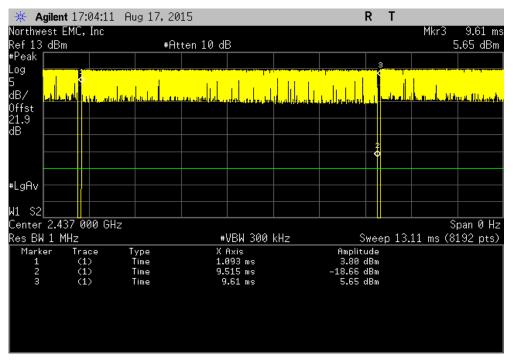
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz | | | | | | | |
|---|--------|-----------|-------|-------|---------|--|--|
| | | Number of | Value | Limit | | | |
| Pulse Width | Period | Pulses | (%) | (%) | Results | | |
| N/A | N/A | 6 | N/A | N/A | N/A | | |



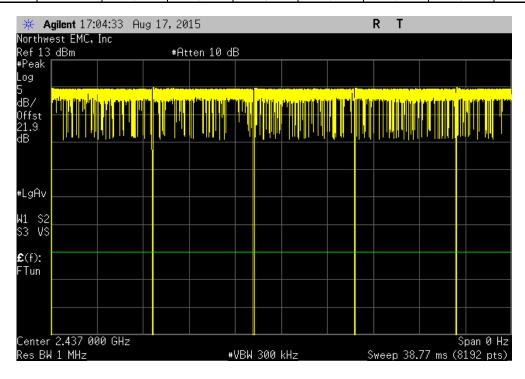
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| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz | | | | | | | | |
|---|----------|-----------|-------|-------|---------|--|--|--|
| | | Number of | Value | Limit | | | | |
| Pulse Width | Period | Pulses | (%) | (%) | Results | | | |
| 8.422 ms | 8.517 ms | 1 | 98.9 | N/A | N/A | | | |



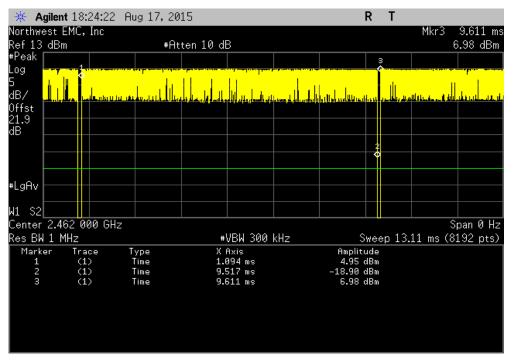
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz | | | | | | | | |
|---|--------|-----------|-------|-------|---------|--|--|--|
| | | Number of | Value | Limit | | | | |
| Pulse Width | Period | Pulses | (%) | (%) | Results | | | |
| N/A | N/A | 6 | N/A | N/A | N/A | | | |



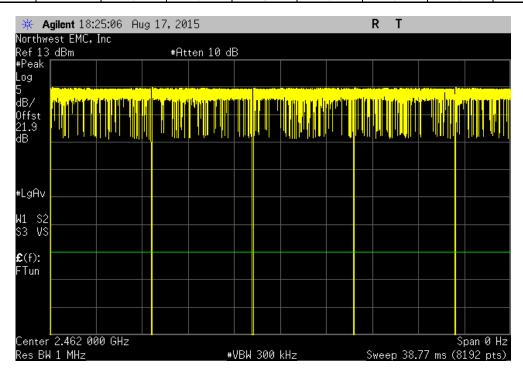
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| 2400 MHz - 24 | 483.5 MHz Band, | 802.11(b) 1 Mbp | s, High Channel | 11, 2462 MHz | |
|---------------|-----------------|-----------------|-----------------|--------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| 8.422 ms | 8.517 ms | 1 | 98.9 | N/A | N/A |



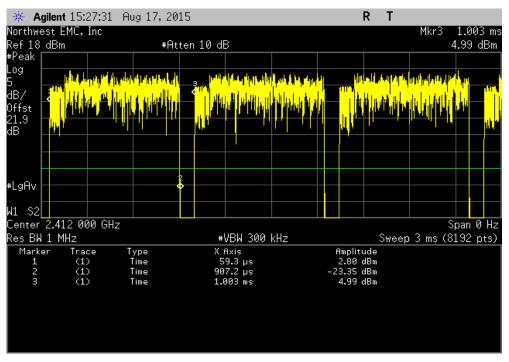
| 2400 MHz - 2 | 483.5 MHz Band | , 802.11(b) 1 Mbp | s, High Channel | 11, 2462 MHz | |
|-----------------|----------------|-------------------|-----------------|--------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| N/A | N/A | 6 | N/A | N/A | N/A |



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| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(b) 11 Mb | ps, Low Channel | l 1, 2412 MHz | |
|--|--------------|----------------|-------------------|-----------------|---------------|---------|
| | | | Number of | Value | Limit | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results |
| | 847.9 us | 943.5 us | 1 | 89.9 | N/A | N/A |



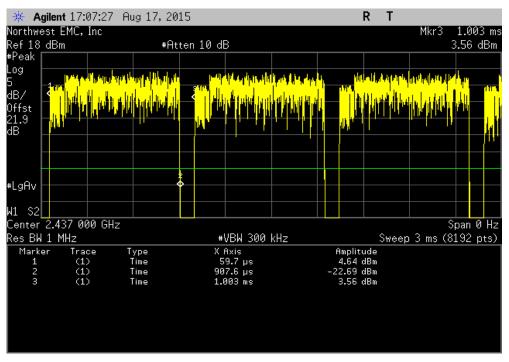
| 2400 MHz - 2 | 483.5 MHz Band | l, 802.11(b) 11 Mi | ops, Low Channe | 1, 2412 MHz | |
|-----------------|----------------|--------------------|-----------------|-------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| N/A | N/A | 5 | N/A | N/A | N/A |



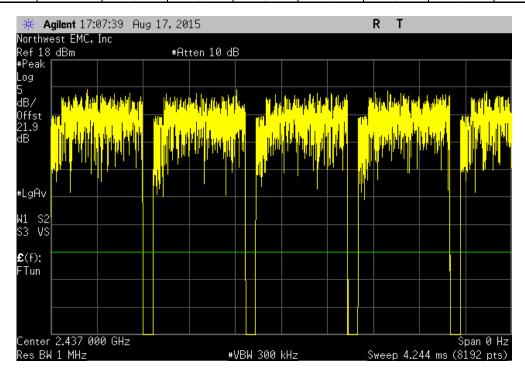
Report No. MASI0274.1 35/102



| 2 | 400 MHz - 2 | 483.5 MHz Band | , 802.11(b) 11 MI | pps, Mid Channel | 6, 2437 MHz | |
|----|-------------|----------------|-------------------|------------------|-------------|---------|
| | | | Number of | Value | Limit | |
| Pu | Ise Width | Period | Pulses | (%) | (%) | Results |
| 8 | 347.9 us | 943.1 us | 1 | 89.9 | N/A | N/A |



| 2400 MHz - 2 | 2483.5 MHz Band | l, 802.11(b) 11 MI | bps, Mid Channel | 6, 2437 MHz | |
|-----------------|-----------------|--------------------|------------------|-------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| N/A | N/A | 5 | N/A | N/A | N/A |

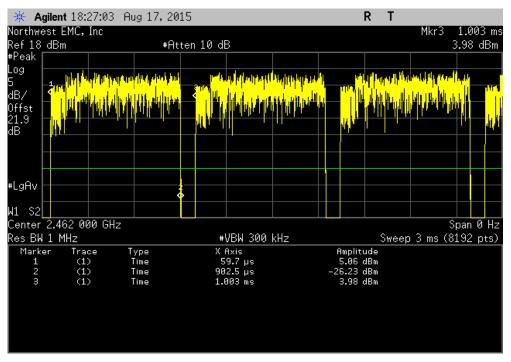


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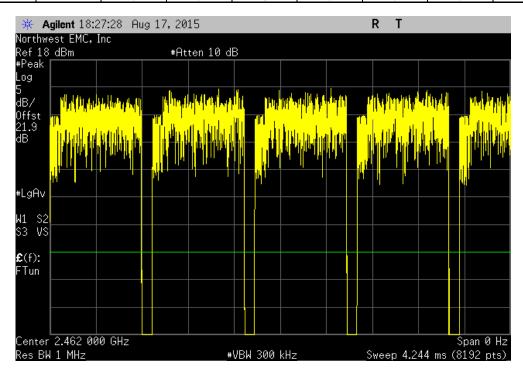
DUTY CYCLE



| | 2400 MHz - 24 | 83.5 MHz Band, | 802.11(b) 11 Mb | ps, High Channel | 11, 2462 MHz | | |
|--|---------------|----------------|-----------------|------------------|--------------|---------|--|
| | | | Number of | Value | Limit | | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results | |
| | 842.8 us | 943.1 us | 1 | 89.4 | N/A | N/A | |



| 2400 MHz - 24 | 183.5 MHz Band, | 802.11(b) 11 Mb | ps, High Channel | 11, 2462 MHz | |
|-----------------|-----------------|-----------------|------------------|--------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| N/A | N/A | 5 | N/A | N/A | N/A |

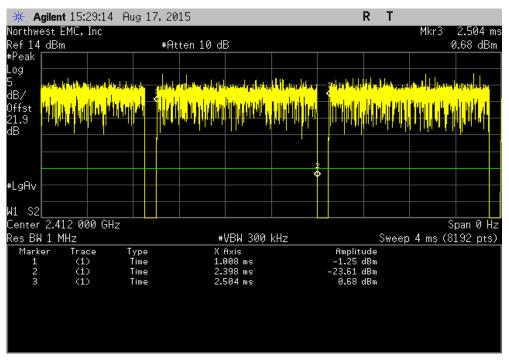


Report No. MASI0274.1 37/102

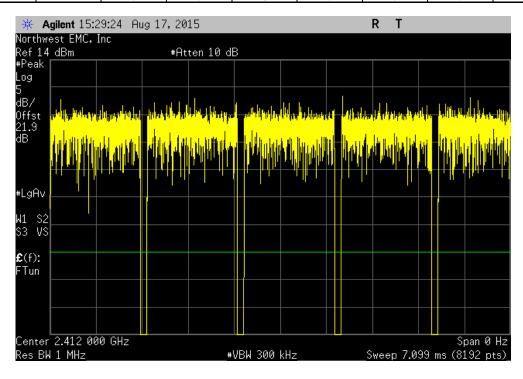
DUTY CYCLE



| | | 2400 MHz - 2 | 2483.5 MHz Band | l, 802.11(g) 6 Mb | ps, Low Channel | 1, 2412 MHz | | |
|---|---|--------------|-----------------|-------------------|-----------------|-------------|---------|---|
| | | | | Number of | Value | Limit | | |
| | | Pulse Width | Period | Pulses | (%) | (%) | Results | |
| i | - | 1.39 ms | 1.496 ms | 1 | 92.9 | N/A | N/A | İ |



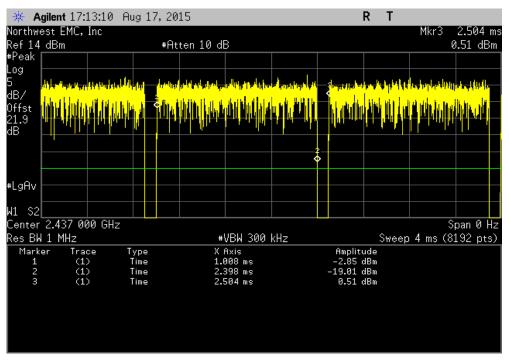
| | 2400 MHz - 2 | 2483.5 MHz Band | l, 802.11(g) 6 Mb | ps, Low Channel | 1, 2412 MHz | |
|-----|--------------|-----------------|-------------------|-----------------|-------------|---------|
| | | | Number of | Value | Limit | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results |
| I [| N/A | N/A | 5 | N/A | N/A | N/A |



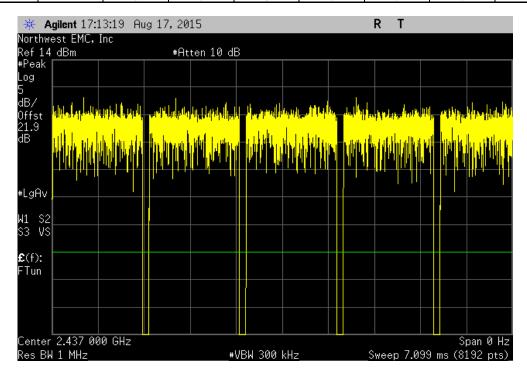
Report No. MASI0274.1 38/102



| 2400 MHz - | 2483.5 MHz Band | d, 802.11(g) 6 Mb | ps, Mid Channel | 6, 2437 MHz | |
|-------------|-----------------|-------------------|-----------------|-------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| 1.39 ms | 1.496 ms | 1 | 92.9 | N/A | N/A |



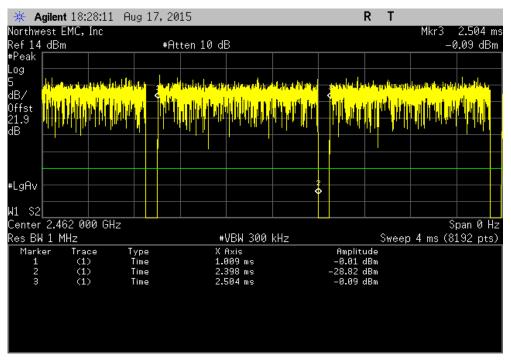
| 2400 MHz - : | 2483.5 MHz Band | d, 802.11(g) 6 Mb | ps, Mid Channel | 6, 2437 MHz | |
|-----------------|-----------------|-------------------|-----------------|-------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| N/A | N/A | 5 | N/A | N/A | N/A |



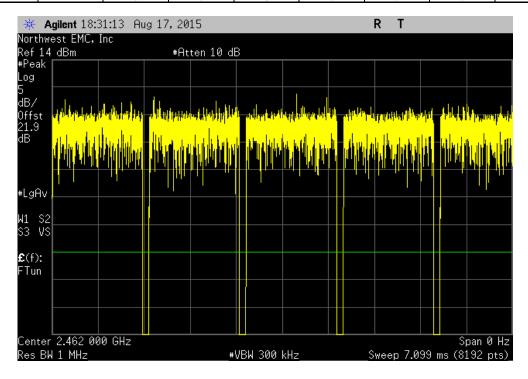
Report No. MASI0274.1 39/102



| 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz | | | | | | | | |
|---|-------------|----------|-----------|-------|-------|---------|--|--|
| | | | Number of | Value | Limit | | | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results | | |
| | 1.389 ms | 1.495 ms | 1 | 92.9 | N/A | N/A | | |



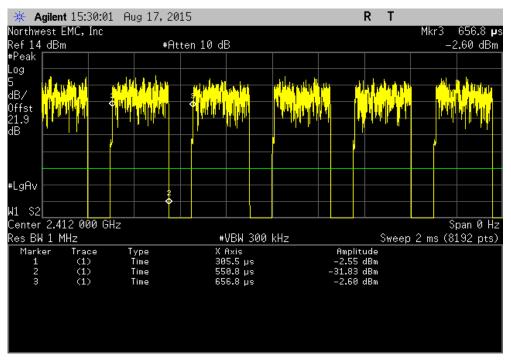
| 2400 MHz - 2 | 483.5 MHz Band | , 802.11(g) 6 Mbp | os, High Channel | 11, 2462 MHz | |
|-----------------|----------------|-------------------|------------------|--------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| N/A | N/A | 5 | N/A | N/A | N/A |



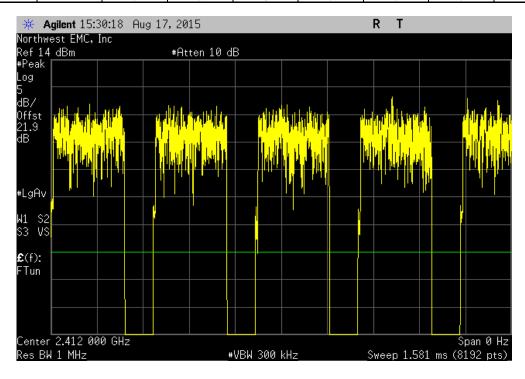
Report No. MASI0274.1 40/102



| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(g) 36 Mb | ops, Low Channel | 1, 2412 MHz | |
|--|--------------|----------------|-------------------|------------------|-------------|---------|
| | | | Number of | Value | Limit | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results |
| | 245.3 us | 351.3 us | 1 | 69.8 | N/A | N/A |



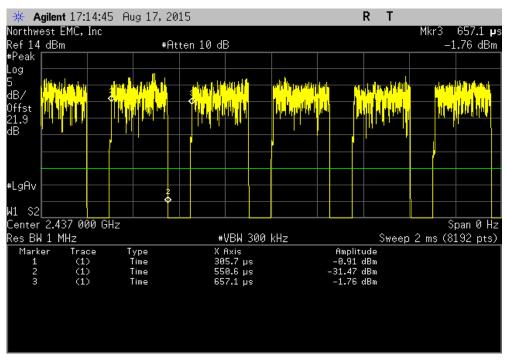
| 2400 MHz - 2 | 483.5 MHz Band | l, 802.11(g) 36 Mi | ops, Low Channe | 1, 2412 MHz | |
|-----------------|----------------|--------------------|-----------------|-------------|---------|
| | | Number of | Value | Limit | |
| Pulse Width | Period | Pulses | (%) | (%) | Results |
| N/A | N/A | 5 | N/A | N/A | N/A |



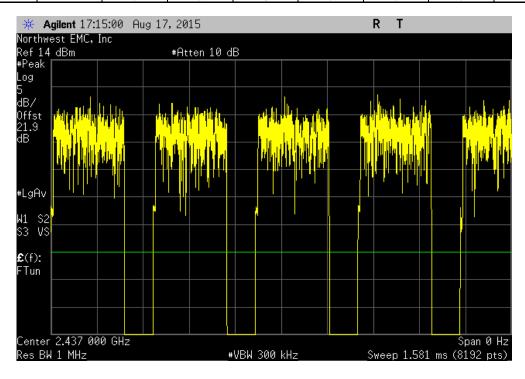
Report No. MASI0274.1 41/102



| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(g) 36 MI | pps, Mid Channel | 6, 2437 MHz | |
|--|--------------|----------------|-------------------|------------------|-------------|---------|
| | | | Number of | Value | Limit | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results |
| | 244.9 us | 351.4 us | 1 | 69.7 | N/A | N/A |



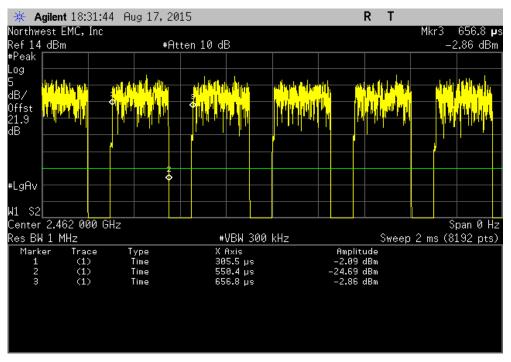
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz | | | | | | | | |
|--|--------|-----------|-------|-------|---------|--|--|--|
| | | Number of | Value | Limit | | | | |
| Pulse Width | Period | Pulses | (%) | (%) | Results | | | |
| N/A | N/A | 5 | N/A | N/A | N/A | | | |



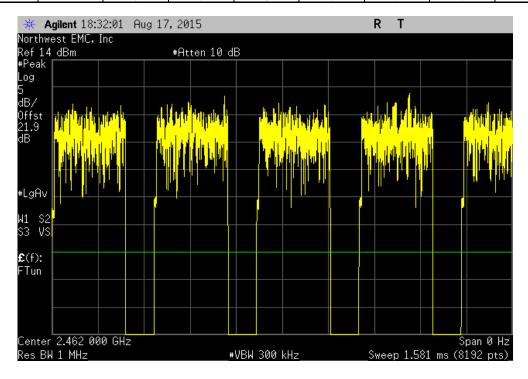
Report No. MASI0274.1 42/102



| 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz | | | | | | | | | |
|--|-----------------------|----------|--------|------|-----|---------|--|--|--|
| | Number of Value Limit | | | | | | | | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results | | | |
| 1 | 244.9 us | 351.3 us | 1 | 69.7 | N/A | N/A | | | |



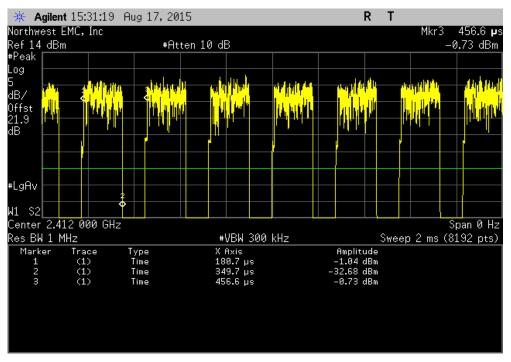
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz | | | | | | | | | |
|--|--|-----------------------|--------|--------|-----|-----|---------|--|--|
| | | Number of Value Limit | | | | | | | |
| <u> </u> | | Pulse Width | Period | Pulses | (%) | (%) | Results | | |
| | | N/A |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



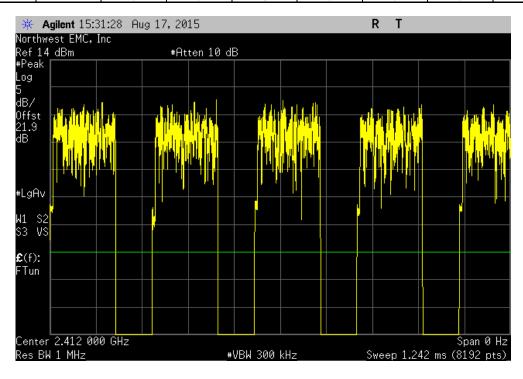
Report No. MASI0274.1 43/102



| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz | | | | | | | | | |
|--|-----------------------|-------------|----------|--------|------|-----|---------|--|--|
| | Number of Value Limit | | | | | | | | |
| | | Pulse Width | Period | Pulses | (%) | (%) | Results | | |
| | | 169 us | 275.9 us | 1 | 61.3 | N/A | N/A | | |



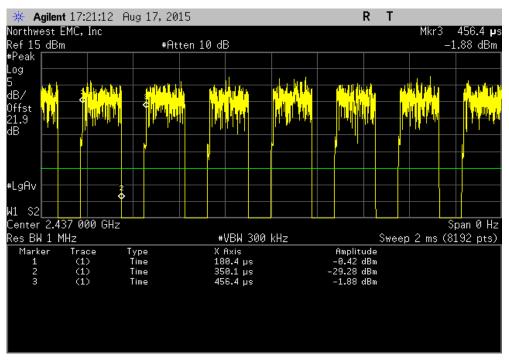
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz | | | | | | | | | |
|--|-----------------------|--------|--------|-----|-----|---------|--|--|--|
| | Number of Value Limit | | | | | | | | |
| | Pulse Width | Period | Pulses | (%) | (%) | Results | | | |
| | N/A | N/A | 5 | N/A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



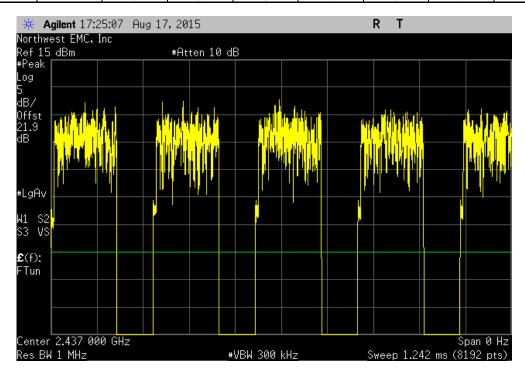
Report No. MASI0274.1 44/102



| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz | | | | | | | | | |
|--|--------|--------|------|-----|---------|--|--|--|--|
| Number of Value Limit | | | | | | | | | |
| Pulse Width | Period | Pulses | (%) | (%) | Results | | | | |
| 169.7 us | 276 us | 1 | 61.5 | N/A | N/A | | | | |



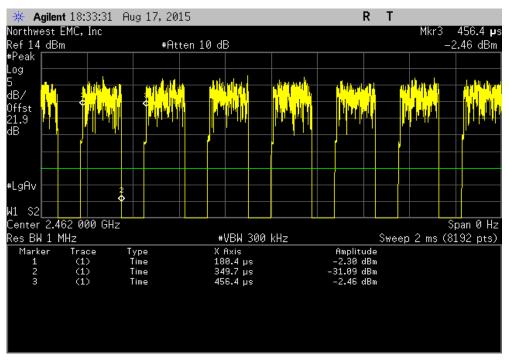
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz | | | | | | | | |
|--|--------|--------|-----|-----|---------|--|--|--|
| Number of Value Limit | | | | | | | | |
| Pulse Width | Period | Pulses | (%) | (%) | Results | | | |
| N/A | N/A | 5 | N/A | N/A | N/A | | | |



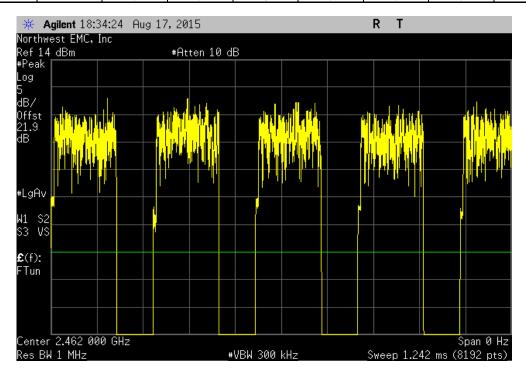
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| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz | | | | | | | | | |
|--|-----------------------|-------------|--------|--------|------|-----|---------|--|--|
| | Number of Value Limit | | | | | | | | |
| | | Pulse Width | Period | Pulses | (%) | (%) | Results | | |
| | | 169.3 us | 276 us | 1 | 61.3 | N/A | N/A | | |



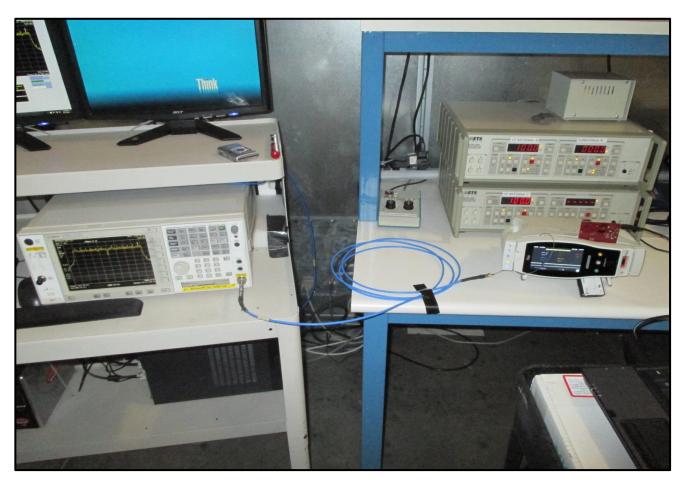
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz | | | | | | | | | |
|--|--|-----------------------|--------|--------|-----|-----|---------|--|--|
| | | Number of Value Limit | | | | | | | |
| | | Pulse Width | Period | Pulses | (%) | (%) | Results | | |
| | | N/A | N/A | 5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



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DUTY CYCLE





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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

| | | | | | Interval |
|------------------------------|--------------------|------------|-----|------------|----------|
| Description | Manufacturer | Model | ID | Last Cal. | (mos) |
| 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 | E4446A | AAY | 10/27/2014 | 12 |

TEST DESCRIPTION

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

The EUT was set to the channels and modes listed in the datasheet. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer.

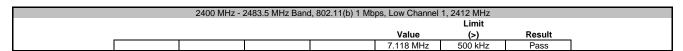
Report No. MASI0274.1 48/102



| EUT: | : MWM1 | | | Work O | der: MASI0275 | |
|-------------------|--|-----------------------|------------------|--------------|---------------|--------|
| Serial Number: | | | | | ate: 08/12/15 | |
| Customer | : Masimo Corporation | | | Tempera | ure: 23°C | |
| | : Mike Clark | | | Humi | dity: 48% | |
| Project: | None | | | Barometric P | es.: 1015 | |
| | : Mark Baytan | Power: | 110VAC/60Hz | Job | Site: OC13 | |
| TEST SPECIFICAT | TONS | | Test Method | | | |
| FCC 15.247:2015 | | | ANSI C63.10:2013 | | | |
| | | | | | | |
| COMMENTS | | | | | | |
| | CBlock/20dB Attenuator + coax cable + client provided patch ca | ible = 21.9dB total o | offset | | | |
| DEVIATIONS FROM | M TEST STANDARD | | | | | |
| None | | | | | | |
| Configuration # | 1 Signature | 46,4 | | | | |
| | | | | | Limit | |
| | | | | Value | (>) | Result |
| 2400 MHz - 2483.5 | MHz Band | | | | | |
| | 802.11(b) 1 Mbps | | | | | |
| | Low Channel 1, 2412 MHz | | | 7.118 MH | 500 kHz | Pass |
| | Mid Channel 6, 2437 MHz | | | 8.668 MH | 500 kHz | Pass |
| | High Channel 11, 2462 MHz | | | 8.42 MHz | 500 kHz | Pass |
| | 802.11(b) 11 Mbps | | | | | |
| | Low Channel 1, 2412 MHz | | | 8.439 MH | | Pass |
| | Mid Channel 6, 2437 MHz | | | 8.619 MH | | Pass |
| | High Channel 11, 2462 MHz | | | 8.627 MH | 500 kHz | Pass |
| | 802.11(g) 6 Mbps | | | | | |
| | Low Channel 1, 2412 MHz | | | 16.377 MH | | Pass |
| | Mid Channel 6, 2437 MHz | | | 16.387 MH | | Pass |
| | High Channel 11, 2462 MHz | | | 16.402 MH | z 500 kHz | Pass |
| | 802.11(g) 36 Mbps | | | | | |
| | Low Channel 1, 2412 MHz | | | 16.47 MH | | Pass |
| | Mid Channel 6, 2437 MHz | | | 16.457 MH | | Pass |
| | High Channel 11, 2462 MHz | | | 16.476 MH | z 500 kHz | Pass |
| | 802.11(g) 54 Mbps | | | | | |
| | Low Channel 1, 2412 MHz | | | 16.442 MH | | Pass |
| | Mid Channel 6, 2437 MHz | | | 16.472 MH | | Pass |
| | High Channel 11, 2462 MHz | | | 16.47 MH | 500 kHz | Pass |

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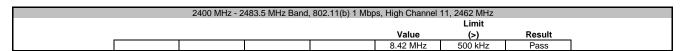


| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz | | | | | | | | | | |
|---|-------|--|--|--|-----------|---------|--------|--|--|--|
| | Limit | | | | | | | | | |
| _ | | | | | Value | (>) | Result | | | |
| Г | | | | | 8.668 MHz | 500 kHz | Pass | | | |



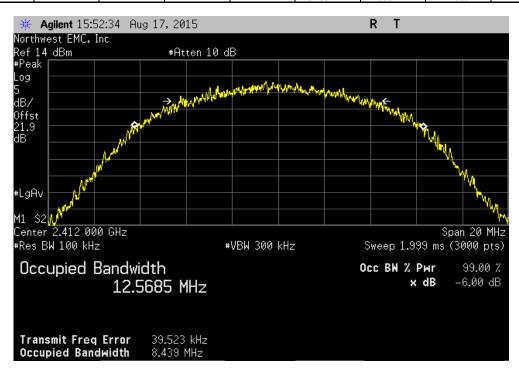
Report No. MASI0274.1 50/102





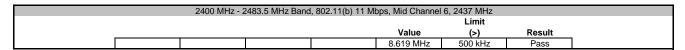


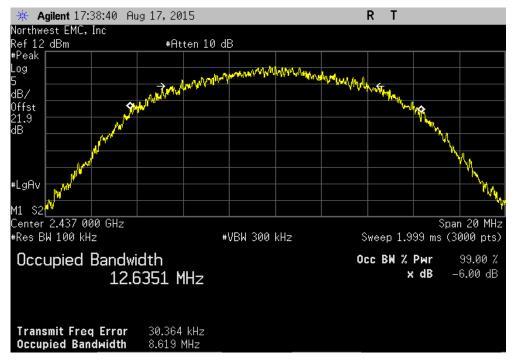
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz | | | | | | | | | | |
|--|-------|--|--|--|-----------|---------|--------|--|--|--|
| | Limit | | | | | | | | | |
| _ | | | | | Value | (>) | Result | | | |
| | | | | | 8.439 MHz | 500 kHz | Pass | | | |



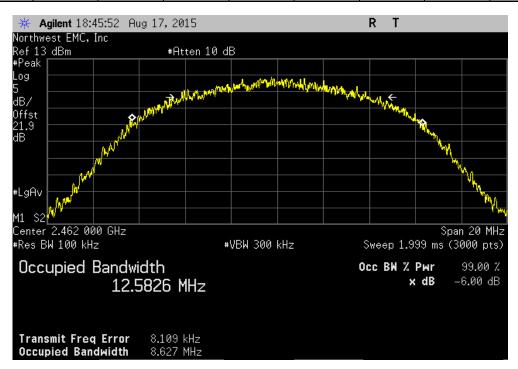
Report No. MASI0274.1 51/102





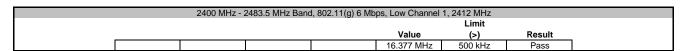


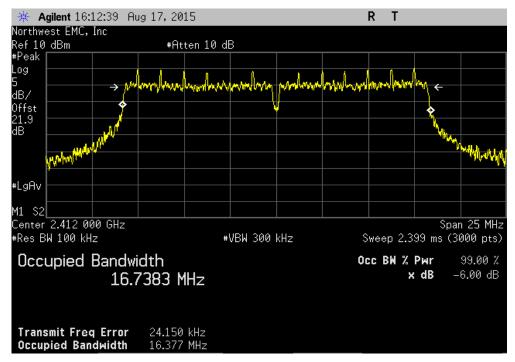
| | 2400 MHz - 24 | 183.5 MHz Band, | 802.11(b) 11 Mb | ps, High Channel | 11, 2462 MHz | |
|--|---------------|-----------------|-----------------|------------------|--------------|--------|
| | | | | | Limit | |
| | | | | Value | (>) | Result |
| | | | | 8.627 MHz | 500 kHz | Pass |



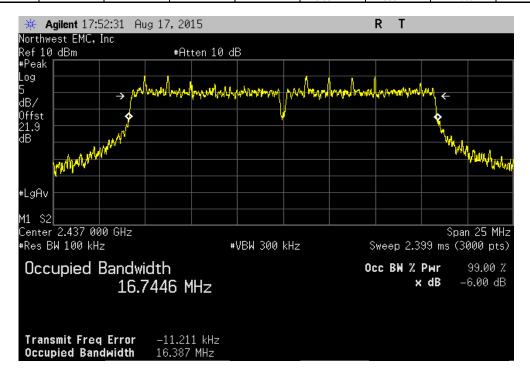
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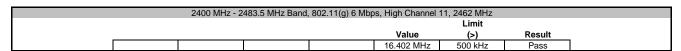


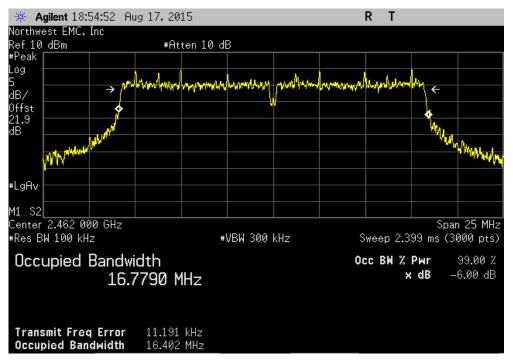
| | 2400 MHz - | 2483.5 MHz Band | d, 802.11(g) 6 Mb | ps, Mid Channel | 6, 2437 MHz | |
|--|------------|-----------------|-------------------|-----------------|-------------|--------|
| | | | | | Limit | |
| | | | | Value | (>) | Result |
| | | | | 16.387 MHz | 500 kHz | Pass |



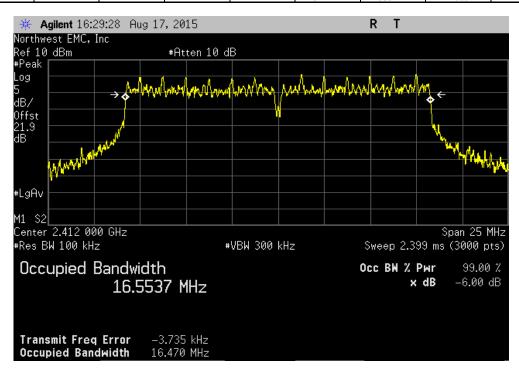
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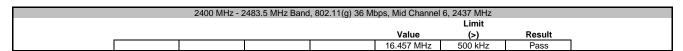


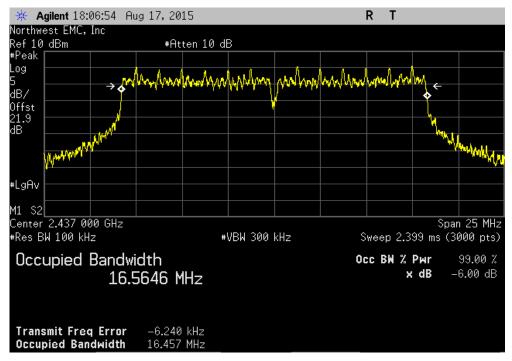
| | 2400 MHz - 2 | 2483.5 MHz Band | , 802.11(g) 36 Mi | ps, Low Channel | l 1, 2412 MHz | | |
|---|--------------|-----------------|-------------------|-----------------|---------------|--------|---|
| | | | | | Limit | | |
| _ | | | | Value | (>) | Result | _ |
| | | | | 16.47 MHz | 500 kHz | Pass | |



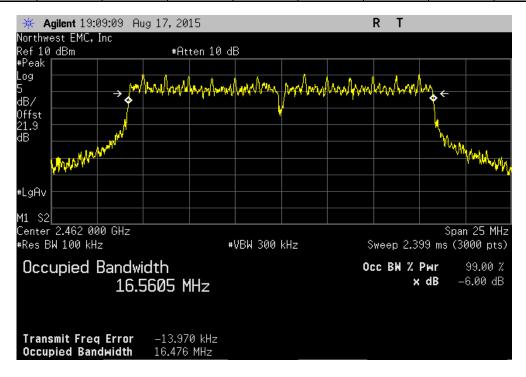
Report No. MASI0274.1 54/102





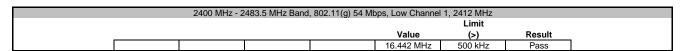


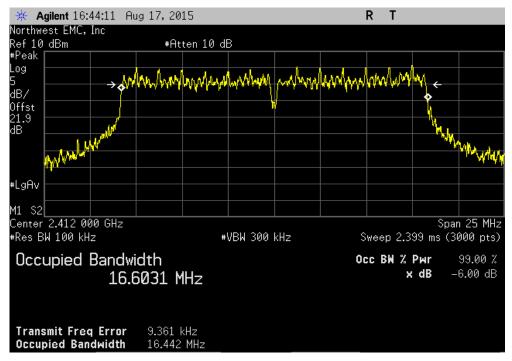
| | 2400 MHz - 24 | 183.5 MHz Band, | 802.11(g) 36 Mb | os, High Channel | 11, 2462 MHz | |
|----------|---------------|-----------------|-----------------|------------------|--------------|--------|
| | | | | | Limit | |
| <u> </u> | | | | Value | (>) | Result |
| l | | | | 16.476 MHz | 500 kHz | Pass |



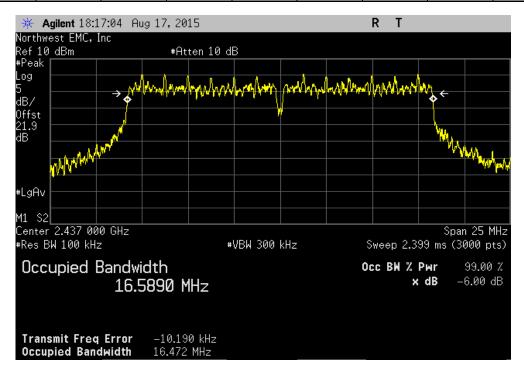
Report No. MASI0274.1 55/102







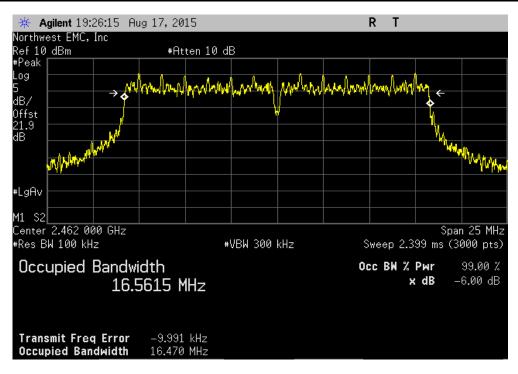
| | 2400 MHz - 2 | 2483.5 MHz Band | , 802.11(g) 54 MI | bps, Mid Channel | 6, 2437 MHz | |
|---|--------------|-----------------|-------------------|------------------|-------------|--------|
| | | | | | Limit | |
| | | | | Value | (>) | Result |
| l | | | | 16.472 MHz | 500 kHz | Pass |



Report No. MASI0274.1 56/102



| | 2400 MHz - 24 | 83.5 MHz Band, | 802.11(g) 54 Mb | ps, High Channel | 11, 2462 MHz | | |
|--|---------------|----------------|-----------------|------------------|--------------|--------|--|
| | | | | | Limit | | |
| | | | | Value | (>) | Result | |
| | | | | 16.47 MHz | 500 kHz | Pass | |



Report No. MASI0274.1 57/102



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

| | | | | | Interval |
|------------------------------|--------------------|------------|-----|------------|----------|
| Description | Manufacturer | Model | ID | Last Cal. | (mos) |
| 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 | E4446A | AAY | 10/27/2014 | 12 |

TEST DESCRIPTION

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

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

The method found in KDB 558074 DTS D01 Measurement Section 9.2.1 was used because the RBW on the analyzer was not greater than the DTS Bandwidth of the radio.

De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36 dBm.

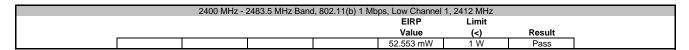
Report No. MASI0274.1

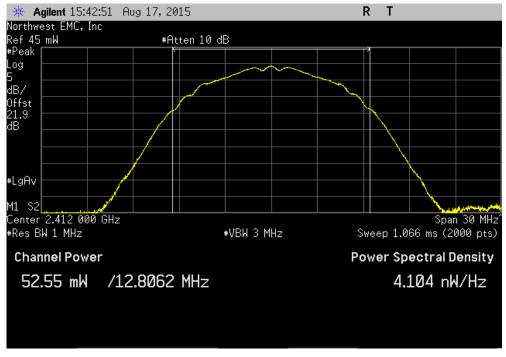


| EUT: | MWM1 | | | | Work Order: | MASI0275 | |
|-------------------|-------------------------|--|---------------------|------------------|-------------------|----------|--------|
| Serial Number: | | | | | Date: | 08/12/15 | |
| Customer: | Masimo Corporation | | | | Temperature: | 23°C | |
| Attendees: | Mike Clark | | | | Humidity: | 48% | |
| Project: | | | | | Barometric Pres.: | 1015 | |
| | Mark Baytan | | Power: | 110VAC/60Hz | Job Site: | OC13 | |
| TEST SPECIFICAT | IONS | | | Test Method | | | |
| FCC 15.247:2015 | | | | ANSI C63.10:2013 | | | |
| | | | | | | | |
| COMMENTS | | | | | | | |
| TX Power = 90. DC | Block/20dB Attenuator + | coax cable + client provided patch cab | le = 21.9dB total o | offset | | | |
| | | | | | | | |
| | M TEST STANDARD | | | | | | |
| None | | | | | | | |
| Configuration # | 1 | MI | 6,- | | | | |
| Configuration # | 1 | Signature | Of- | | | | |
| | | Signature | 50 | | EIRP | Limit | |
| | | | | | Value | (<) | Result |
| 2400 MHz - 2483.5 | MHz Band | | | | ¥ didC | () | resuit |
| 2100111112 2100.0 | 802.11(b) 1 Mbps | | | | | | |
| | | l 1. 2412 MHz | | | 52.553 mW | 1 W | Pass |
| | | 6, 2437 MHz | | | 53.947 mW | 1 W | Pass |
| | High Channe | el 11, 2462 MHz | | | 53.323 mW | 1 W | Pass |
| | 802.11(b) 11 Mbps | | | | | | |
| | Low Channel | I 1, 2412 MHz | | | 49.135 mW | 1 W | Pass |
| | Mid Channel | 6, 2437 MHz | | | 52.047 mW | 1 W | Pass |
| | High Channe | el 11, 2462 MHz | | | 49.355 mW | 1 W | Pass |
| | 802.11(g) 6 Mbps | | | | | | |
| | | l 1, 2412 MHz | | | 48.738 mW | 1 W | Pass |
| | Mid Channel | 6, 2437 MHz | | | 50.94 mW | 1 W | Pass |
| | | el 11, 2462 MHz | | | 50.57 mW | 1 W | Pass |
| | 802.11(g) 36 Mbps | | | | | | |
| | | l 1, 2412 MHz | | | 53.199 mW | 1 W | Pass |
| | Mid Channel | 6, 2437 MHz | | | 51.3 mW | 1 W | Pass |
| | | el 11, 2462 MHz | | | 51.693 mW | 1 W | Pass |
| | 802.11(g) 54 Mbps | | | | | | |
| | Low Channel | l 1, 2412 MHz | | | 53.732 mW | 1 W | Pass |
| | Mid Channel | 6, 2437 MHz | | | 52.815 mW | 1 W | Pass |
| | High Channe | el 11, 2462 MHz | | | 53.318 mW | 1 W | Pass |
| | | | | | | | |

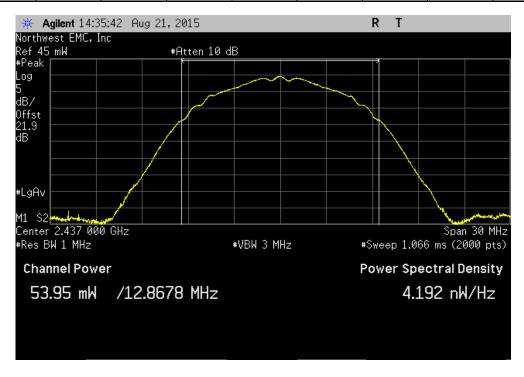
Report No. MASI0274.1 59/102







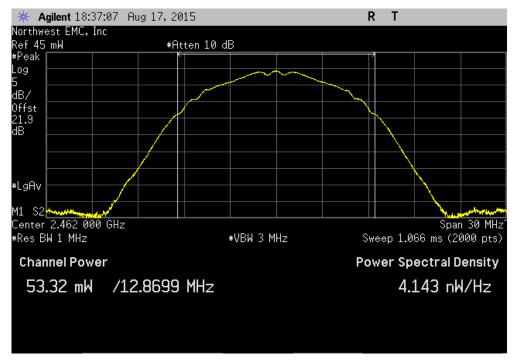
| | 2400 MHz - | 2483.5 MHz Band | d, 802.11(b) 1 Mb | ps, Mid Channel | 6, 2437 MHz | |
|--|------------|-----------------|-------------------|-----------------|-------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 53.947 mW | 1 W | Pass |



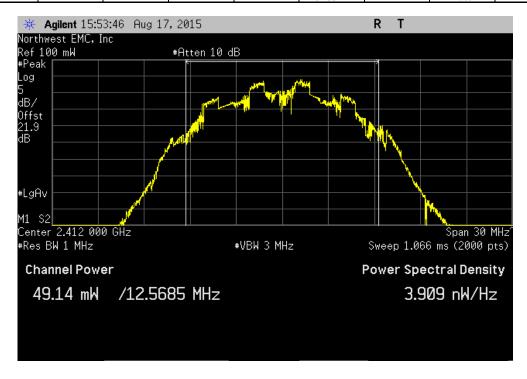
Report No. MASI0274.1 60/102



| | 2400 MHz - 2 | 483.5 MHz Band, | , 802.11(b) 1 Mbp | s, High Channel | 11, 2462 MHz | |
|--|--------------|-----------------|-------------------|-----------------|--------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 53.323 mW | 1 W | Pass |

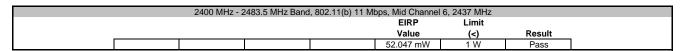


| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(b) 11 Mb | ps, Low Channel | 1, 2412 MHz | |
|--|--------------|----------------|-------------------|-----------------|-------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 49.135 mW | 1 W | Pass |



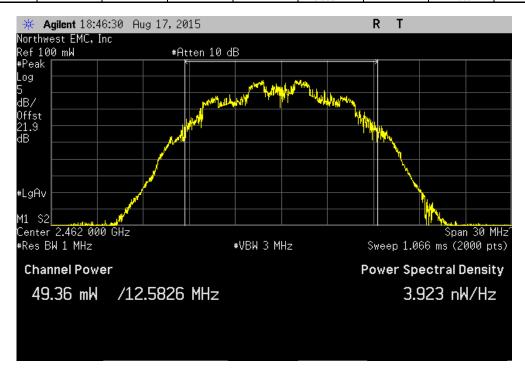
Report No. MASI0274.1 61/102





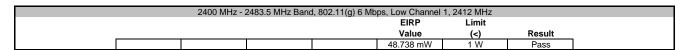


| | 2400 MHz - 24 | 483.5 MHz Band, | 802.11(b) 11 Mb | os, High Channel | 11, 2462 MHz | |
|--|---------------|-----------------|-----------------|------------------|--------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 49.355 mW | 1 W | Pass |



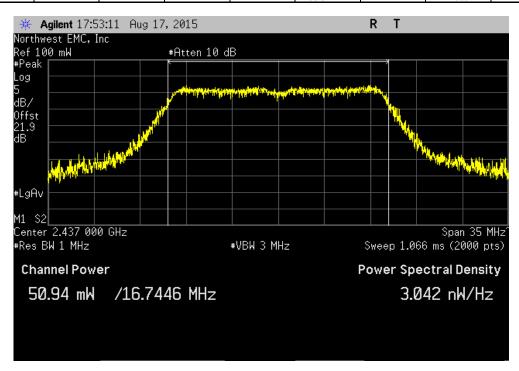
Report No. MASI0274.1 62/102







| | 2400 MHz - | 2483.5 MHz Band | d, 802.11(g) 6 Mb | ps, Mid Channel | 6, 2437 MHz | |
|--|------------|-----------------|-------------------|-----------------|-------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 50.94 mW | 1 W | Pass |



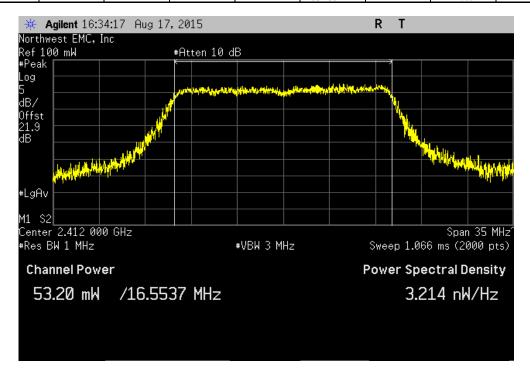
Report No. MASI0274.1 63/102



| | 2400 MHz - 2 | 483.5 MHz Band. | 802.11(a) 6 Mbp | s, High Channel 1 | 1. 2462 MHz | |
|---|--------------|---|-----------------|-------------------|-------------|--------|
| | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | (g)p | EIRP | Limit | |
| | | | | Value | (<) | Result |
| [| | | | 50.57 mW | 1 W | Pass |

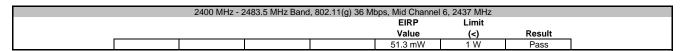


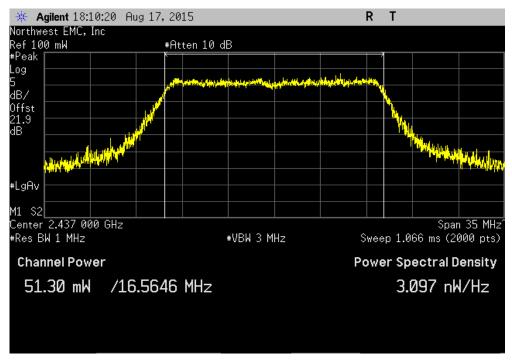
| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(g) 36 Mb | ps, Low Channel | 1, 2412 MHz | | |
|--|--------------|----------------|-------------------|-----------------|-------------|--------|--|
| | | | | EIRP | Limit | | |
| | | | | Value | (<) | Result | |
| | | | | 53.199 mW | 1 W | Pass | |



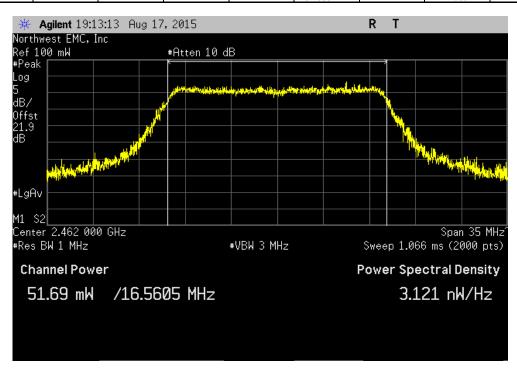
Report No. MASI0274.1 64/102





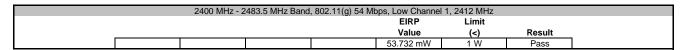


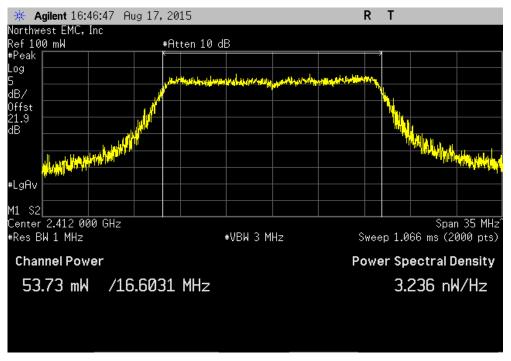
| | 2400 MHz - 24 | 483.5 MHz Band, | 802.11(g) 36 Mb | os, High Channel | 11, 2462 MHz | |
|--|---------------|-----------------|-----------------|------------------|--------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 51.693 mW | 1 W | Pass |



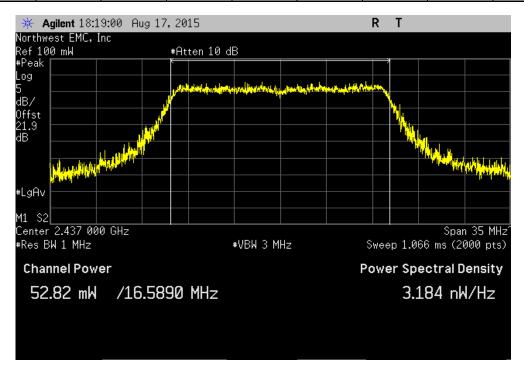
Report No. MASI0274.1 65/102







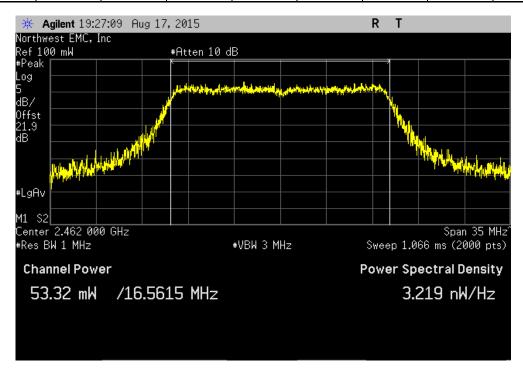
| | 2400 MHz - 2 | 2483.5 MHz Band | , 802.11(g) 54 Mi | ops, Mid Channel | 6, 2437 MHz | |
|--|--------------|-----------------|-------------------|------------------|-------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 52.815 mW | 1 W | Pass |



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| | 2400 MHz - 24 | 83.5 MHz Band, | 802.11(g) 54 Mb | os, High Channel | 11, 2462 MHz | |
|--|---------------|----------------|-----------------|------------------|--------------|--------|
| | | | | EIRP | Limit | |
| | | | | Value | (<) | Result |
| | | | | 53.318 mW | 1 W | Pass |



Report No. MASI0274.1 67/102



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) |
|------------------------------|--------------------|------------|-----|------------|-------------------|
| 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 | E4446A | AAY | 10/27/2014 | 12 |

TEST DESCRIPTION

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

Per the procedure outlined in FCC KDB 558074 D01 DTS Measurement Section 10.2, the spectrum analyzer was used as follows:

≻RBW = 100 kHz

> VBW = 300 kHz

> Detector = Peak (to match method used for power measurement)

>Trace = Max hold

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

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

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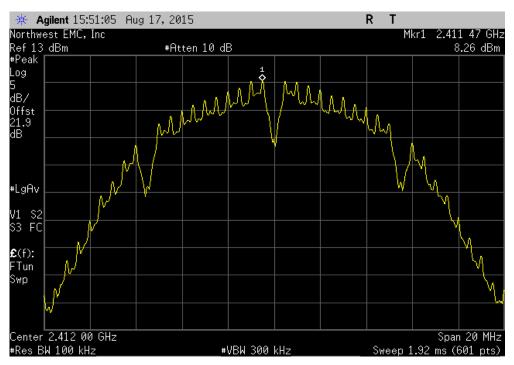


| FIIT- | IMWM1 | | | | | | Work Order: | MASI0275 | |
|-------------------|---------------------------------|------------------------------------|----------------------|------------------|---------------------|---------------------------|-------------------|-------------------|---------|
| Serial Number: | | | | | | | | 08/12/15 | |
| | Masimo Corporation | | | | | | Temperature: | | |
| | Mike Clark | | | | | | Humidity: | | |
| Project: | | | | | | | Barometric Pres.: | | |
| | Mark Baytan | | Power | 110VAC/60Hz | | | Job Site: | | |
| TEST SPECIFICAT | | | | Test Method | | | | 77.7 | |
| FCC 15.247:2015 | | | | ANSI C63.10:2013 | | | | | |
| | | | | | | | | | |
| COMMENTS | | | | | | | | | |
| | | coax cable + client provided patch | cable = 21.9dB total | offset | | | | | |
| | II TEST STANDARD | | | | | | | | |
| None | | | | | | | | | |
| Configuration # | 1 | Signature | 46,4 | | | | | | |
| | | | | | Value dBm/100kHz | dBm/100kHz To dBm/3kHz | Value dBm/3kHz | Limit dBm/3kHz | Results |
| 2400 MHz - 2483.5 | MHz Band | | | | | | | | |
| | 802.11(b) 1 Mbps | | | | | | | | |
| | Low Channel | | | | 8.262 | -15.2 | -6.938 | 8 | Pass |
| | Mid Channel | | | | 7.885 | -15.2 | -7.315 | 8 | Pass |
| | | l 11, 2462 MHz | | | 8.02 | -15.2 | -7.18 | 8 | Pass |
| | 802.11(b) 11 Mbps | | | | | | | | |
| | Low Channel | | | | 8.201 | -15.2 | -6.999 | 8 | Pass |
| | Mid Channel | | | | 8.95 | -15.2 | -6.25 | 8 | Pass |
| | | l 11, 2462 MHz | | | 8.119 | -15.2 | -7.081 | 8 | Pass |
| | 802.11(g) 6 Mbps Low Channel | 4 2442 MH= | | | 5.113 | -15.2 | -10.087 | 8 | Pass |
| | Mid Channel | | | | 5.365 | -15.2 | -10.067 | 8 | Pass |
| | | I 11, 2462 MHz | | | 5.239 | -15.2 | -9.961 | 8 | Pass |
| | 802.11(g) 36 Mbps | 1 11, 2402 MHZ | | | 5.239 | -13.2 | -9.901 | 0 | rass |
| | Low Channel | 1 2/12 MHz | | | 5.8 | -15.2 | -9.4 | 8 | Pass |
| | Mid Channel | | | | 5.438 | -15.2 | -9.762 | 8 | Pass |
| | | I 11, 2462 MHz | | | 5.434 | -15.2 | -9.766 | 8 | Pass |
| | 802.11(g) 54 Mbps | , 2 | | | 304 | .5.2 | 3.700 | 3 | . 335 |
| | Low Channel | 1, 2412 MHz | | | 5.807 | -15.2 | -9.393 | 8 | Pass |
| | Mid Channel | | | | 5.485 | -15.2 | -9.715 | 8 | Pass |
| | | I 11, 2462 MHz | | | 5.499 | -15.2 | -9.701 | 8 | Pass |

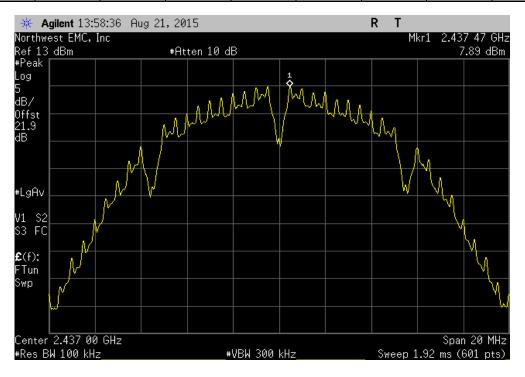
Report No. MASI0274.1 69/102



| | 2400 MHz - 2 | 2483.5 MHz Band | d, 802.11(b) 1 Mb | ps, Low Channel | 1, 2412 MHz | | |
|--|--------------|-----------------|-------------------|-----------------|-------------|---------|---|
| | | Value | dBm/100kHz | Value | Limit | | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results | |
| | | 8.262 | -15.2 | -6.938 | 8 | Pass | ı |

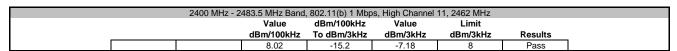


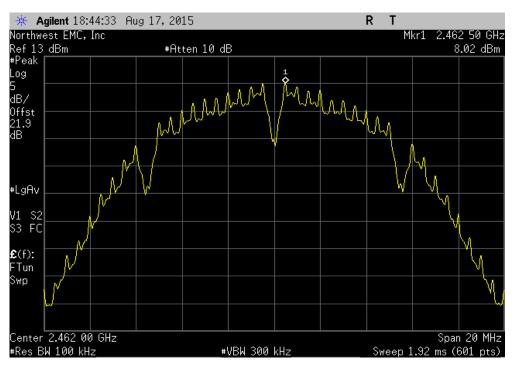
| | 2400 MHz - : | 2483.5 MHz Band | d, 802.11(b) 1 Mb | ps, Mid Channel | 6, 2437 MHz | |
|--|--------------|-----------------|-------------------|-----------------|-------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | 7.885 | -15.2 | -7.315 | 8 | Pass |



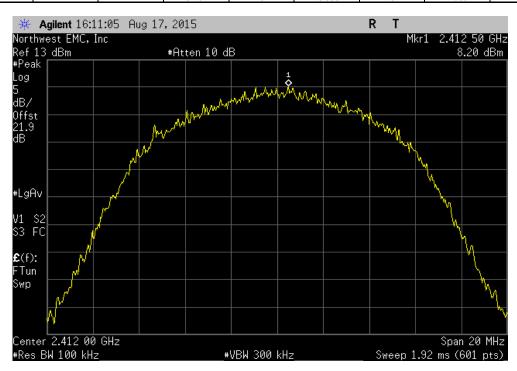
Report No. MASI0274.1 70/102







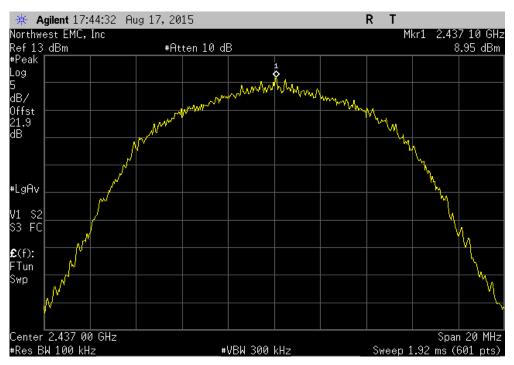
| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(b) 11 Mb | ps, Low Channel | 1, 2412 MHz | |
|---|--------------|----------------|-------------------|-----------------|-------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| ĺ | | 8.201 | -15.2 | -6.999 | 8 | Pass |



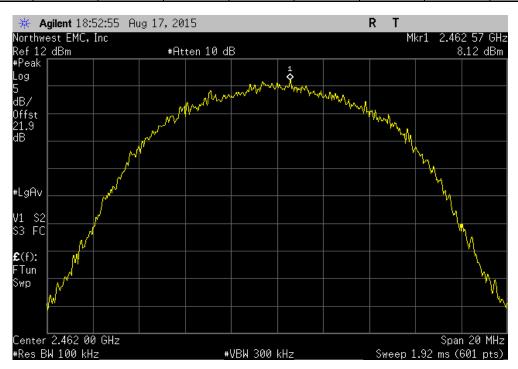
Report No. MASI0274.1 71/102



| | 2400 MHz - 2 | 483 5 MHz Band | , 802.11(b) 11 Mb | ons Mid Channel | 6 2437 MHz | |
|--|--------------|----------------|-------------------|-----------------|------------|---------|
| | 2100111112 | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | 8.95 | -15.2 | -6.25 | 8 | Pass |



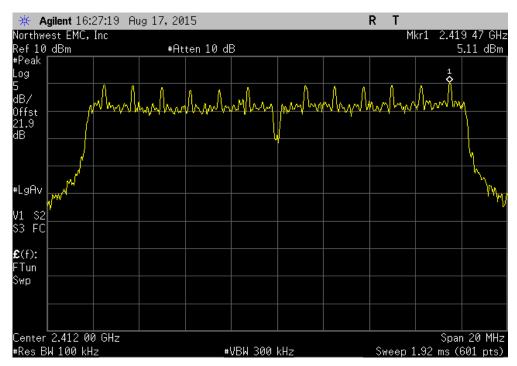
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz | | | | | | | |
|--|--|--|------------|-------------|----------|----------|---------|
| | | | Value | dBm/100kHz | Value | Limit | |
| | | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | | 8.119 | -15.2 | -7.081 | 8 | Pass |



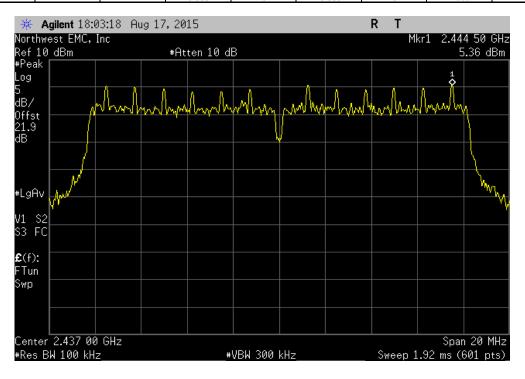
Report No. MASI0274.1 72/102



| | 2400 MHz - 2 | 2483.5 MHz Band | l, 802.11(g) 6 Mb | ps, Low Channel | 1, 2412 MHz | |
|--|--------------|-----------------|-------------------|-----------------|-------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | 5.113 | -15.2 | -10.087 | 8 | Pass |



| | 2400 MHz - : | 2483.5 MHz Band | d, 802.11(g) 6 Mb | ps, Mid Channel | 6, 2437 MHz | |
|--|--------------|-----------------|-------------------|-----------------|-------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | 5.365 | -15.2 | -9.835 | 8 | Pass |



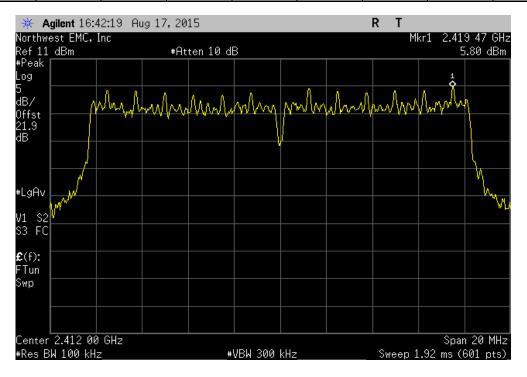
Report No. MASI0274.1 73/102



| | 2400 MHz - 2 | 483.5 MHz Band, | 802.11(g) 6 Mbp | s, High Channel | 11, 2462 MHz | |
|--|--------------|-----------------|-----------------|-----------------|--------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | 5.239 | -15.2 | -9.961 | 8 | Pass |



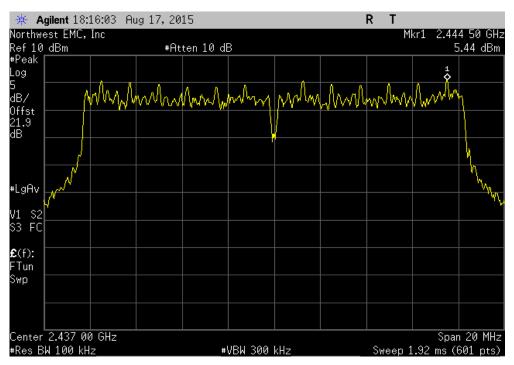
| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(g) 36 Mb | ps, Low Channel | 1, 2412 MHz | |
|---|--------------|----------------|-------------------|-----------------|-------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| 1 | | 5.8 | -15.2 | -9.4 | 8 | Pass |



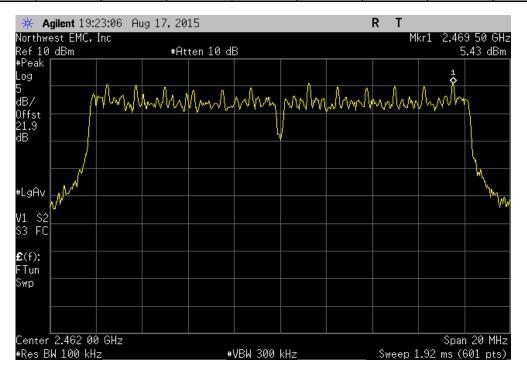
Report No. MASI0274.1 74/102



| | 2400 MHz - 2 | 2483.5 MHz Band | , 802.11(g) 36 Mb | ops, Mid Channel | 6, 2437 MHz | |
|--|--------------|-----------------|-------------------|------------------|-------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | 5.438 | -15.2 | -9.762 | 8 | Pass |



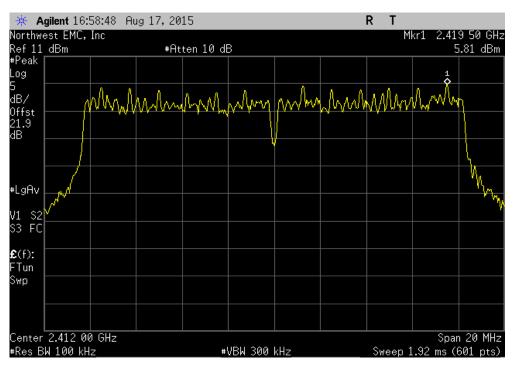
| | 2400 MHz - 24 | 183.5 MHz Band, | 802.11(g) 36 Mb _l | os, High Channel | 11, 2462 MHz | |
|--|---------------|-----------------|------------------------------|------------------|--------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| | | 5.434 | -15.2 | -9.766 | 8 | Pass |



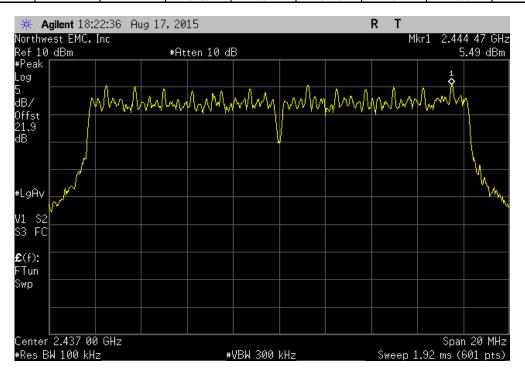
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| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(g) 54 Mb | ps, Low Channel | 1, 2412 MHz | | |
|---|--------------|----------------|-------------------|-----------------|-------------|---------|---|
| | | Value | dBm/100kHz | Value | Limit | | |
| _ | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results | _ |
| | | 5.807 | -15.2 | -9.393 | 8 | Pass | ł |



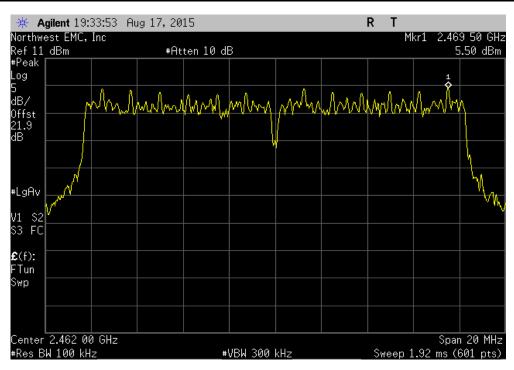
| | 2400 MHz - 2 | 483.5 MHz Band | , 802.11(g) 54 Mb | ps, Mid Channel | 6, 2437 MHz | |
|---|--------------|----------------|-------------------|-----------------|-------------|---------|
| | | Value | dBm/100kHz | Value | Limit | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results |
| i | | 5.485 | -15.2 | -9.715 | 8 | Pass |



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| | 2400 MHz - 24 | 83.5 MHz Band, | 802.11(g) 54 Mb _l | ps, High Channel | 11, 2462 MHz | | |
|--|---------------|----------------|------------------------------|------------------|--------------|---------|--|
| | | Value | dBm/100kHz | Value | Limit | | |
| | | dBm/100kHz | To dBm/3kHz | dBm/3kHz | dBm/3kHz | Results | |
| | | 5.499 | -15.2 | -9.701 | 8 | Pass | |



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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

| _ | | | | | | |
|---|------------------------------|--------------------|------------|-----|------------|----------|
| Ī | | | | | | Interval |
| | Description | Manufacturer | Model | ID | Last Cal. | (mos) |
| | 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 | E4446A | AAY | 10/27/2014 | 12 |

TEST DESCRIPTION

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

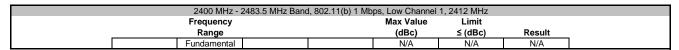
Report No. MASI0274.1 78/102

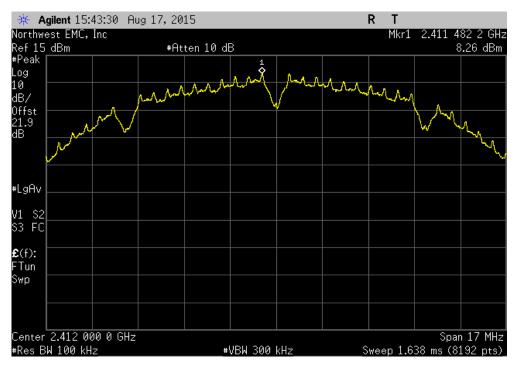


| FUT | 8884884 | | Wards Ondarr | MA 01007F | |
|---------------------|--|---|--------------------------------|------------|--------------|
| | : MWM1 | | Work Order: | | |
| Serial Number | | | | 08/12/15 | |
| | : Masimo Corporation | | Temperature: | | |
| | : Mike Clark | | Humidity: Barometric Pres.: | | |
| Project | | Power: 110VAC/60Hz | | | |
| ST SPECIFICAT | : Mark Baytan | Test Method | Job Site: | UC13 | |
| | IONS | | | | |
| CC 15.247:2015 | | ANSI C63.10:2013 | | | |
| | | | | | |
| OMMENTS | | | | | |
| K Power = 90. DC | Block/20dB Attenuator + coax cable + client prov | rided patch cable = 21.9dB total offset | | | |
| | | | | | |
| EVIATIONS EDO | M TEST STANDARD | | | | |
| one | MI TEST STANDARD | | | | |
| nie | | | | | |
| onfiguration # | 1 | 14BH | | | |
| Jilliguration # | Signature | | | | |
| | Signature | Frequency | Max Value | Limit | |
| | | Range | (dBc) | ≤ (dBc) | Result |
| 00 MHz - 2483.5 | MHz Band | Kange | (ubc) | 2 (ubc) | rtesuit |
| 00 IVII IZ * Z403.5 | 802.11(b) 1 Mbps | | | | |
| | Low Channel 1, 2412 MHz | Fundamental | N/A | N/A | N/A |
| | Low Channel 1, 2412 MHz Low Channel 1, 2412 MHz | 30 MHz - 12.5 GHz | -60.45 | -20 | Pass |
| | Low Channel 1, 2412 MHz | 12.5 GHz - 25 GHz | -55.61 | -20 -20 | Pass |
| | Mid Channel 6, 2437 MHz | 12.5 GHZ - 25 GHZ Fundamental | -55.61 N/A | -20 N/A | N/A |
| | Mid Channel 6, 2437 MHz | 30 MHz - 12.5 GHz | -59.92 | -20 | Pass |
| | Mid Channel 6, 2437 MHz | 12.5 GHz - 25 GHz | -59.92 -55.58 | -20 -20 | Pass |
| | High Channel 11, 2462 MHz | Fundamental | -55.56 N/A | -20 N/A | N/A |
| | High Channel 11, 2462 MHz | 30 MHz - 12.5 GHz | -60 | -20 | Pass |
| | High Channel 11, 2462 MHz | 12.5 GHz - 25 GHz | -54.85 | -20 | Pass |
| | 802.11(b) 11 Mbps | 12.3 GHZ = 23 GHZ | -04.80 | -20 | FdSS |
| | Low Channel 1, 2412 MHz | Friedomontel | N/A | N/A | N/A |
| | Low Channel 1, 2412 MHz | Fundamental 30 MHz - 12.5 GHz | -60.48 | -20 | Pass |
| | Low Channel 1, 2412 MHz | 12.5 GHz - 25 GHz | -55.27 | -20 | Pass |
| | Mid Channel 6, 2437 MHz | Fundamental | -55.27 N/A | -20 N/A | N/A |
| | Mid Channel 6, 2437 MHz | 30 MHz - 12.5 GHz | -60.05 | -20 | Pass |
| | Mid Channel 6, 2437 MHz | 12.5 GHz - 25 GHz | -60.05 -54.89 | -20 -20 | Pass |
| | | Fundamental | -54.69 N/A | -20 N/A | N/A |
| | High Channel 11, 2462 MHz High Channel 11, 2462 MHz | 30 MHz - 12.5 GHz | -60.54 | -20 | Pass |
| | High Channel 11, 2462 MHz | 12.5 GHz - 25 GHz | -55.94 | -20 -20 | Pass |
| | | 12.5 GHZ - 25 GHZ | -55.94 | -20 | Pass |
| | 802.11(g) 6 Mbps Low Channel 1, 2412 MHz | Friedomontel | N/A | N/A | N/A |
| | | Fundamental | -57.82 | | |
| | Low Channel 1, 2412 MHz | 30 MHz - 12.5 GHz | -57.62 -53.14 | -20 | Pass Pass |
| | Low Channel 1, 2412 MHz | 12.5 GHz - 25 GHz Fundamental | -53.14 N/A | -20 N/A | |
| | Mid Channel 6, 2437 MHz | | | | N/A |
| | Mid Channel 6, 2437 MHz | 30 MHz - 12.5 GHz | -57.74 | -20 | Pass |
| | Mid Channel 6, 2437 MHz High Channel 11, 2462 MHz | 12.5 GHz - 25 GHz Fundamental | -52.31 N/A | -20 N/A | Pass N/A |
| | | Fundamental 30 MHz - 12.5 GHz | -57.08 | -20 | |
| | High Channel 11, 2462 MHz High Channel 11, 2462 MHz | 30 MHz - 12.5 GHz 12.5 GHz - 25 GHz | -57.08 -52.67 | -20 -20 | Pass Pass |
| | | 12.0 GHZ = 20 GHZ | -52.07 | -20 | Pass |
| | 802.11(g) 36 Mbps | Fundamental | NI/A | NI/A | NI/A |
| | Low Channel 1, 2412 MHz | Fundamental 30 MHz - 12.5 GHz | N/A -57.95 | N/A -20 | N/A Pass |
| | Low Channel 1, 2412 MHz Low Channel 1, 2412 MHz | 30 MHz - 12.5 GHz 12.5 GHz - 25 GHz | -57.95 -53.26 | -20 -20 | Pass |
| | Mid Channel 6, 2437 MHz | 12.5 GHZ - 25 GHZ Fundamental | -53.26 N/A | -20 N/A | N/A |
| | Mid Channel 6, 2437 MHz | 30 MHz - 12.5 GHz | -57.92 | -20 | Pass |
| | Mid Channel 6, 2437 MHz Mid Channel 6, 2437 MHz | 30 MHZ - 12.5 GHZ 12.5 GHz | -57.92 -53.33 | -20 -20 | Pass |
| | High Channel 11, 2462 MHz | 12.5 GHZ - 25 GHZ Fundamental | -53.33 N/A | -20 N/A | N/A |
| | | | -57.79 | | Pass |
| | High Channel 11, 2462 MHz High Channel 11, 2462 MHz | 30 MHz - 12.5 GHz 12.5 GHz - 25 GHz | -57.79 -52.45 | -20 -20 | Pass |
| | 802.11(g) 54 Mbps | 12.3 GHZ = 23 GHZ | -52.45 | -20 | rass |
| | Low Channel 1, 2412 MHz | Fundamental | N/A | N/A | N/A |
| | Low Channel 1, 2412 MHz Low Channel 1, 2412 MHz | 30 MHz - 12.5 GHz | -57.59 | -20 | Pass |
| | Low Channel 1, 2412 MHz | 12.5 GHz - 25 GHz | -57.59 -53.04 | -20 -20 | Pass |
| | Mid Channel 6, 2437 MHz | 12.5 GHZ - 25 GHZ Fundamental | -53.04 N/A | -20 N/A | N/A |
| | Mid Channel 6, 2437 MHz | 30 MHz - 12.5 GHz | -58.19 | -20 | Pass |
| | Mid Channel 6, 2437 MHz Mid Channel 6, 2437 MHz | 30 MHz - 12.5 GHz 12.5 GHz - 25 GHz | -58.19 -52.53 | -20 -20 | Pass |
| | High Channel 11, 2462 MHz | 12.5 GHZ - 25 GHZ Fundamental | -52.53 N/A | -20 N/A | N/A |
| | | 30 MHz - 12.5 GHz | -56.97 | -20 | Pass |
| | High Channel 11, 2462 MHz | | | | |
| | High Channel 11, 2462 MHz | 12.5 GHz - 25 GHz | -53.34 | -20 | Pass |

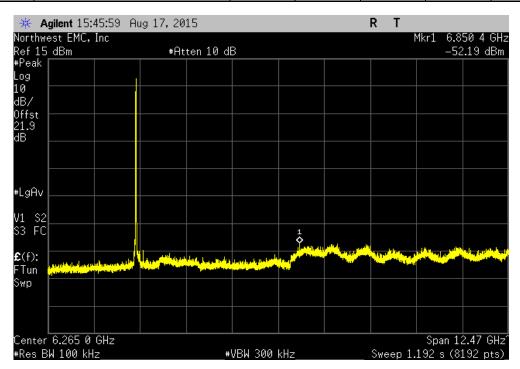
Report No. MASI0274.1 79/102







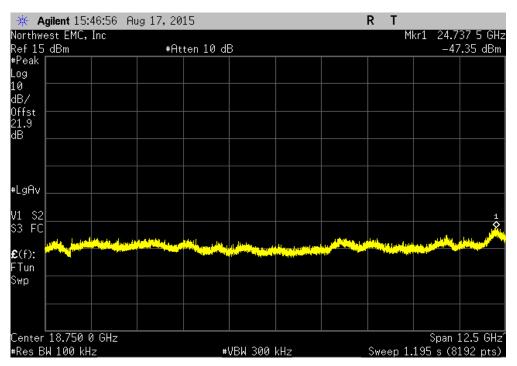
| | 2400 MHz - 2483.5 MHz Ban | d, 802.11(b) 1 Mb | ps, Low Channel | 1, 2412 MHz | |
|---|---------------------------|-------------------|-----------------|-------------|--------|
| | Frequency | | Max Value | Limit | |
| _ | Range | | (dBc) | ≤ (dBc) | Result |
| | 30 MHz - 12.5 GHz | | -60.45 | -20 | Pass |



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| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz | | | | | | | |
|---|-------------------|--|-----------|---------|--------|--|--|
| | Frequency | | Max Value | Limit | | | |
| | Range | | (dBc) | ≤ (dBc) | Result | | |
| | 12.5 GHz - 25 GHz | | -55.61 | -20 | Pass | | |



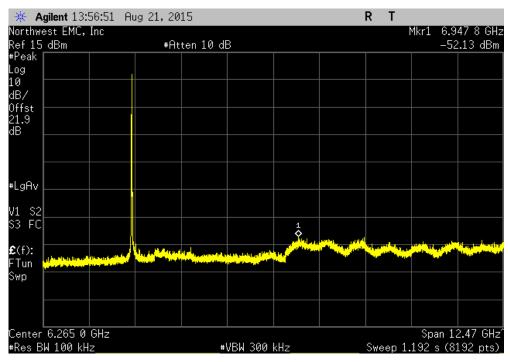
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz | | | | | | |
|---|-----------|---------|--------|--|--|--|
| Frequency | Max Value | Limit | | | | |
| Range | (dBc) | ≤ (dBc) | Result | | | |
| Fundamental | N/A | N/A | N/A | | | |



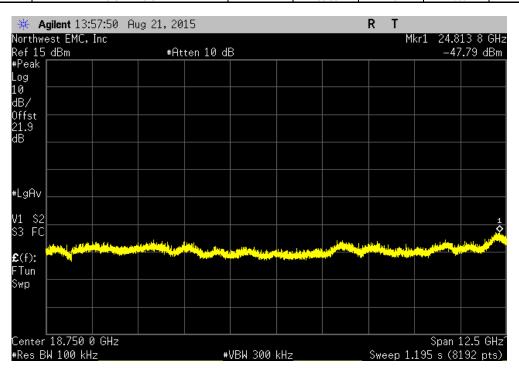
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| 2400 MHz - 2483.5 MHz Band, | . 802.11(b) 1 Mbps, Mid Chann | el 6. 2437 MHz | |
|--------------------------------|-------------------------------|----------------|--------|
| 210011112 210010 111112 20110, | . , , | , | |
| Frequency | Max Value | Limit | |
| Trequency | max value | | |
| Range | (dBc) | ≤ (dBc) | Result |
| Range | (ubc) | = (abc) | Nesuit |
| 30 MHz - 12.5 GHz | -59.92 | -20 | Door |
| 30 IVITZ - 12.3 GTZ | -59.92 | -20 | Pass |

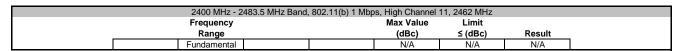


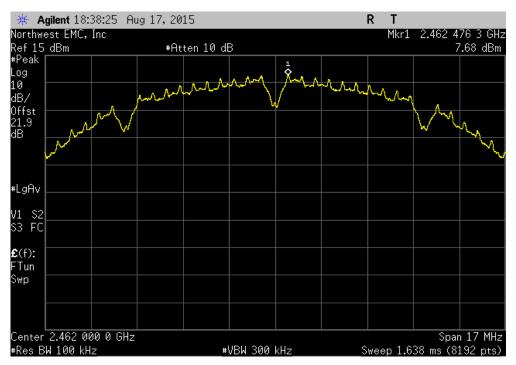
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz | | | | | | |
|---|--|-----------|---------|--------|--|--|
| Frequency | | Max Value | Limit | | | |
| Range | | (dBc) | ≤ (dBc) | Result | | |
| 12.5 GHz - 25 GHz | | -55.58 | -20 | Pass | | |



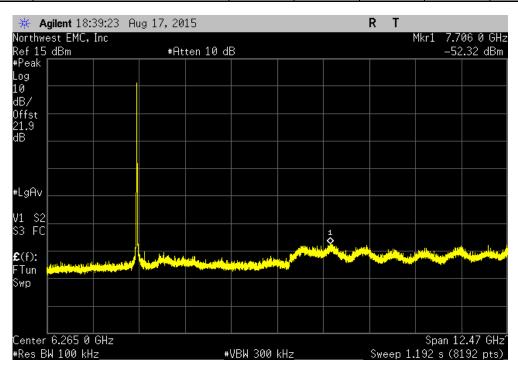
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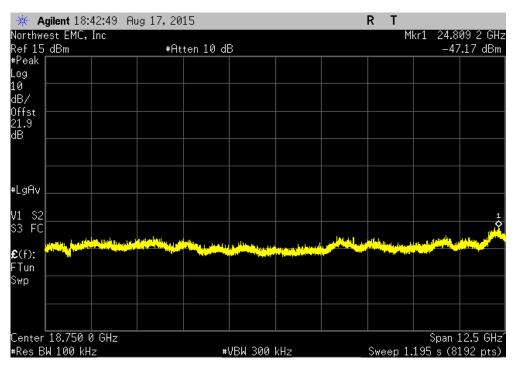
| | 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz | | | | | | |
|---|---|--|-----------|---------|--------|--|--|
| | Frequency | | Max Value | Limit | | | |
| _ | Range | | (dBc) | ≤ (dBc) | Result | | |
| ſ | 30 MHz - 12.5 GHz | | -60 | -20 | Pass | | |



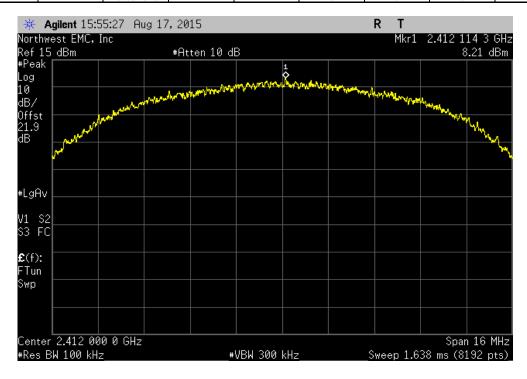
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| 2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz | | | | | | | |
|---|-------------------|--|-----------|---------|--------|--|--|
| | Frequency | | Max Value | Limit | | | |
| | Range | | (dBc) | ≤ (dBc) | Result | | |
| | 12.5 GHz - 25 GHz | | -54.85 | -20 | Pass | | |



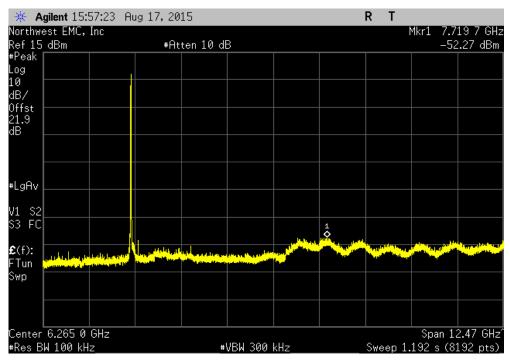
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz | | | | | |
|--|-----------|---------|--------|--|--|
| Frequency | Max Value | Limit | | | |
| Range | (dBc) | ≤ (dBc) | Result | | |
| Fundamental | N/A | N/A | N/A | | |



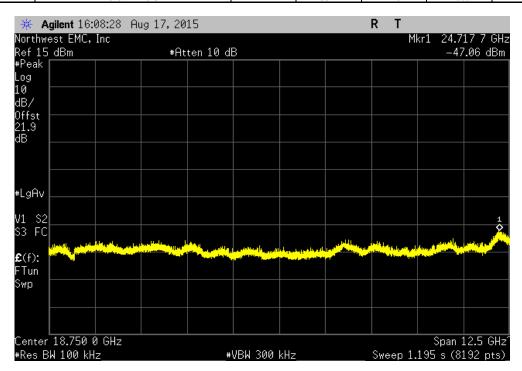
Report No. MASI0274.1 84/102



| 2400 MHz - 2483.5 MHz Band. | 802.11(b) 11 Mbps, Low Channel | el 1. 2412 MHz | | | |
|-----------------------------|--------------------------------|----------------|--------|--|--|
| Frequency | | | | | |
| Range | (dBc) | ≤ (dBc) | Result | | |
| 30 MHz - 12.5 GHz | -60.48 | -20 | Pass | | |



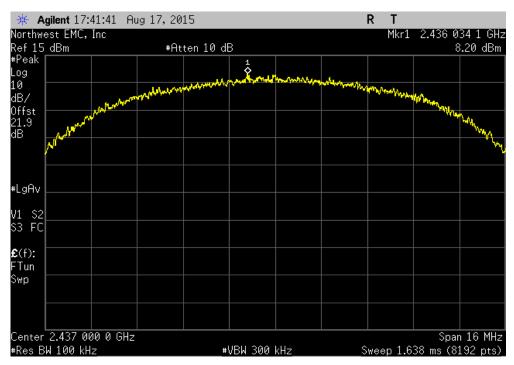
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz | | | | | | |
|--|--|--------|---------|--------|--|--|
| Frequency Max Value Lii | | | | | | |
| Range | | (dBc) | ≤ (dBc) | Result | | |
| 12.5 GHz - 25 GHz | | -55.27 | -20 | Pass | | |



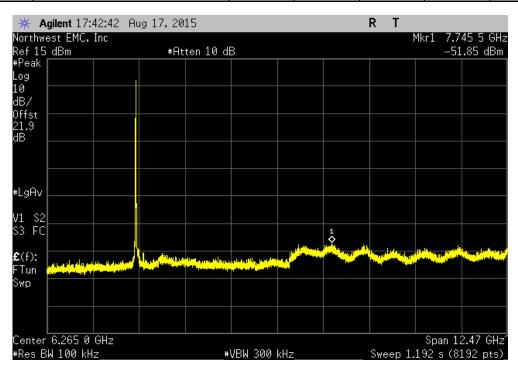
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| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz Frequency Max Value Limit | | | | | | | | |
|---|---------------|---|-----------|---------|--------|--|--|--|
| , (, , , | 2400 MHz - | 2400 MHz - 2483 5 MHz Band 802 11(b) 11 Mbps Mid Channel 6 2437 MHz | | | | | | |
| Frequency Max Value Limit | 2 100 1111 12 | 110010 IIII 12 Dania, 00211 1(b) 11 III | | , | | | | |
| | Frequency | | Max Value | Limit | | | | |
| · · | 1 | | | | | | | |
| Range (dBc) ≤(dBc) Result | Range | | (dBc) | < (dBc) | Result | | | |
| | 90 | | (/ | | | | | |
| Fundamental N/A N/A N/A | Fundamental | | N/A | N/A | N/A | | | |



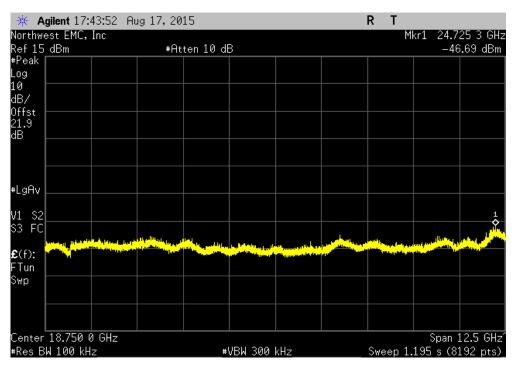
| | 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz | | | | | |
|---|--|--|-----------|---------|--------|--|
| | Frequency | | Max Value | Limit | | |
| _ | Range | | (dBc) | ≤ (dBc) | Result | |
| | 30 MHz - 12.5 GHz | | -60.05 | -20 | Pass | |



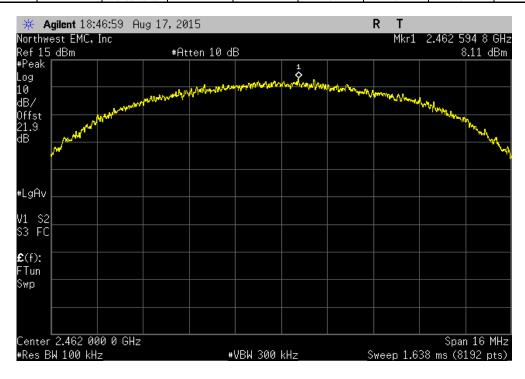
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| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz | | | | | | | |
|--|-------------------|--|-----------|---------|--------|--|--|
| | Frequency | | Max Value | Limit | | | |
| | Range | | (dBc) | ≤ (dBc) | Result | | |
| | 12.5 GHz - 25 GHz | | -54.89 | -20 | Pass | | |



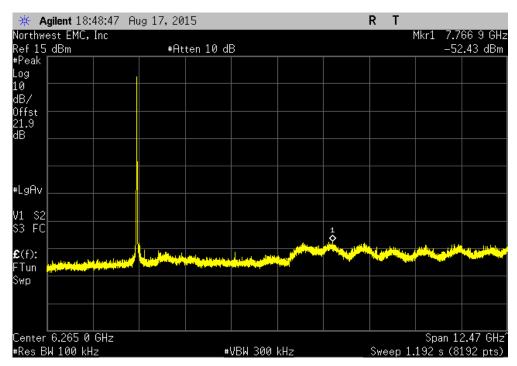
| 2400 MHz - 2483.5 MHz Band, 8 | 02.11(b) 11 Mbps, High Channel | 11, 2462 MHz | |
|-------------------------------|--------------------------------|--------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| Fundamental | N/A | N/A | N/A |



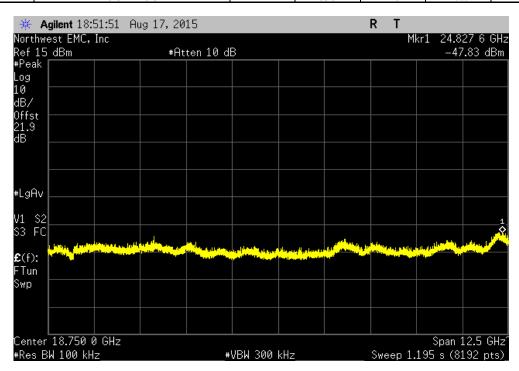
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| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz | | | |
|--|-----------|---------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | -60.54 | -20 | Pass |

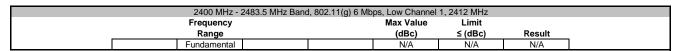


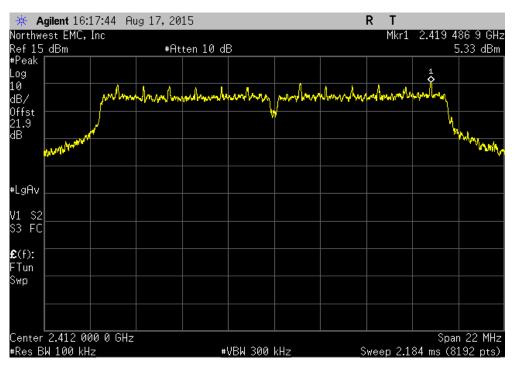
| 2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz | | | | |
|--|--|-----------|---------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| 12.5 GHz - 25 GHz | | -55.94 | -20 | Pass |



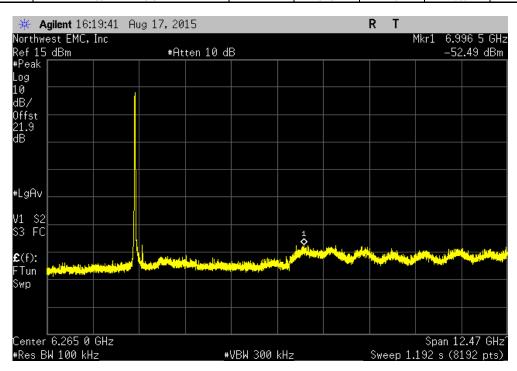
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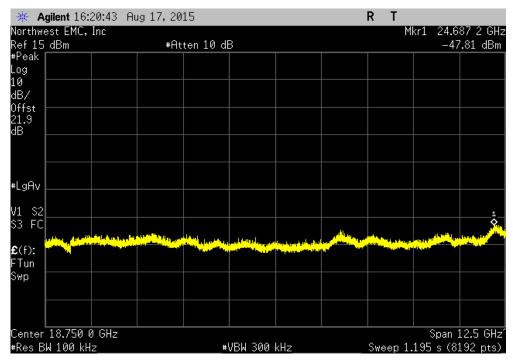
| 2400 MHz - 2483.5 MH | z Band, 802.11(g) 6 Mb | ps, Low Channel | 1, 2412 MHz | |
|----------------------|------------------------|-----------------|-------------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | | -57.82 | -20 | Pass |



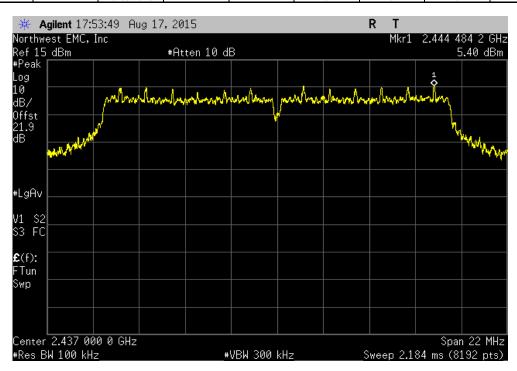
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| 2400 MHz - 2483.5 MHz Band | l, 802.11(g) 6 Mb | ps, Low Channel | 1, 2412 MHz | | |
|----------------------------|-------------------|-----------------|-------------|--------|--|
| Frequency | | Max Value | Limit | | |
| Range | | (dBc) | ≤ (dBc) | Result | |
| 12.5 GHz - 25 GHz | | -53.14 | -20 | Pass | |



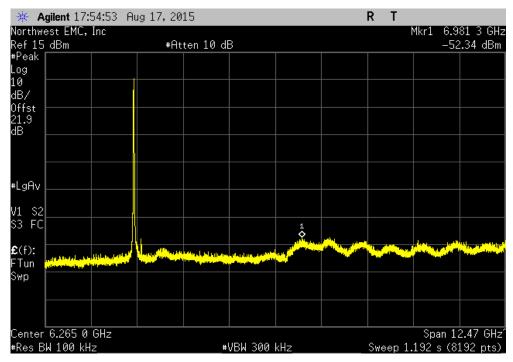
| 2400 MHz - | 2483.5 MHz Band, 802.11(g) 6 Mb | ps, Mid Channel | 6, 2437 MHz | |
|-------------|---------------------------------|-----------------|-------------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| Fundamental | | N/A | N/A | N/A |



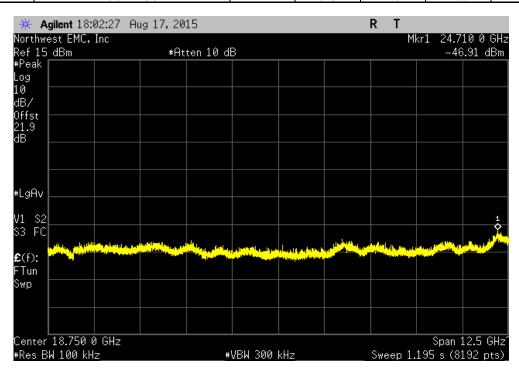
Report No. MASI0274.1 90/102



| 2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz | | | | | |
|---|-----------|---------|--------|--|--|
| Frequency | Max Value | Limit | | | |
| Range | (dBc) | ≤ (dBc) | Result | | |
| 30 MHz - 12.5 GHz | -57.74 | -20 | Pass | | |

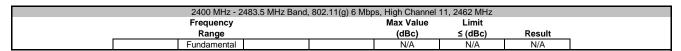


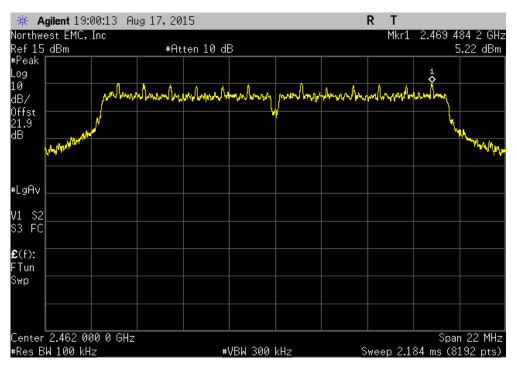
| 2400 MHz - 2483.5 MHz Ba | nd, 802.11(g) 6 Mb | ps, Mid Channel | 6, 2437 MHz | |
|--------------------------|--------------------|-----------------|-------------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| 12.5 GHz - 25 GHz | | -52.31 | -20 | Pass |



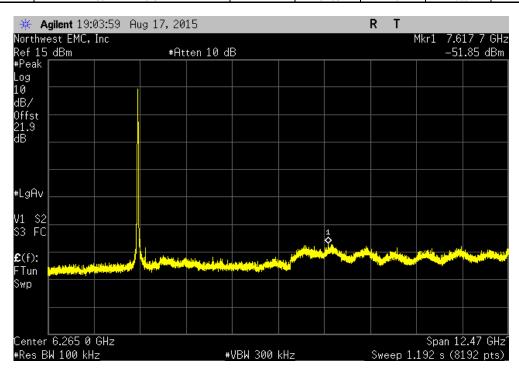
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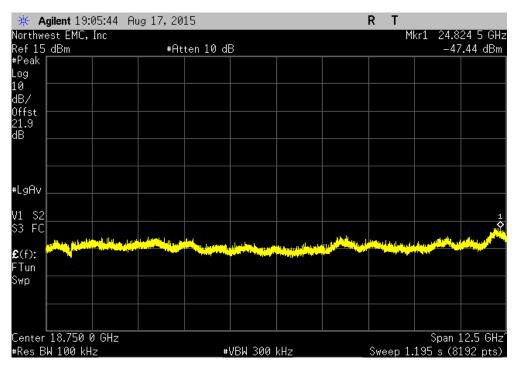
| 2400 MHz - 2483.5 MHz Band, 8 | 802.11(g) 6 Mbps, High Channel | 11, 2462 MHz | |
|-------------------------------|--------------------------------|--------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | -57.08 | -20 | Pass |



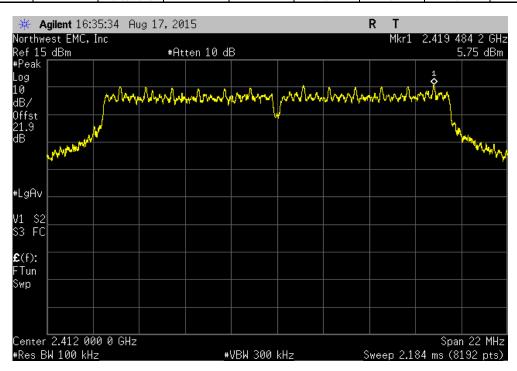
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| 2400 MHz - 2483.5 MHz Band, | 802.11(g) 6 Mbps, High Channel | 11, 2462 MHz | |
|-----------------------------|--------------------------------|--------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| 12.5 GHz - 25 GHz | -52.67 | -20 | Pass |



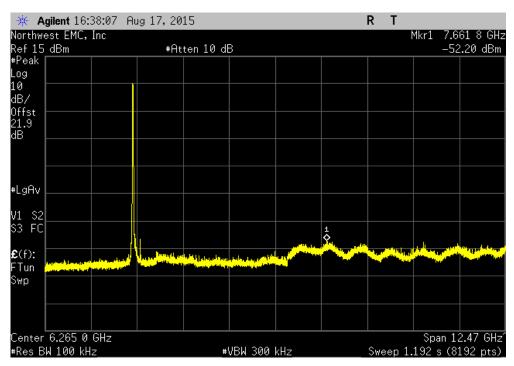
| 2400 | //Hz - 2483.5 MHz Band | l, 802.11(g) 36 MI | ops, Low Channel | 1, 2412 MHz | |
|--------|------------------------|--------------------|------------------|-------------|--------|
| Freque | ency | | Max Value | Limit | |
| Ran | je [*] | | (dBc) | ≤ (dBc) | Result |
| Fundan | ental | | N/A | N/A | N/A |



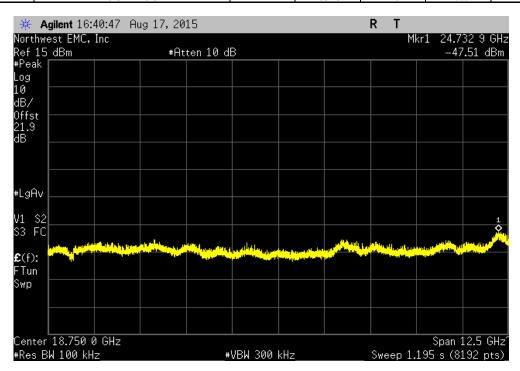
Report No. MASI0274.1 93/102



| 2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz | | | | |
|--|-------------------|-----------|---------|--------|
| _ | 002.11(g) 30 IVIL | | | |
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | | -57.95 | -20 | Pass |



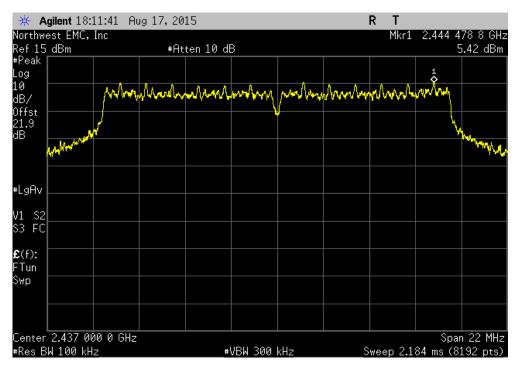
| | 2400 MHz - 2483.5 MHz Band | l, 802.11(g) 36 Mb | ps, Low Channel | 1, 2412 MHz | |
|---|----------------------------|--------------------|-----------------|-------------|--------|
| | Frequency | | Max Value | Limit | |
| _ | Range | | (dBc) | ≤ (dBc) | Result |
| ſ | 12.5 GHz - 25 GHz | | -53.26 | -20 | Pass |



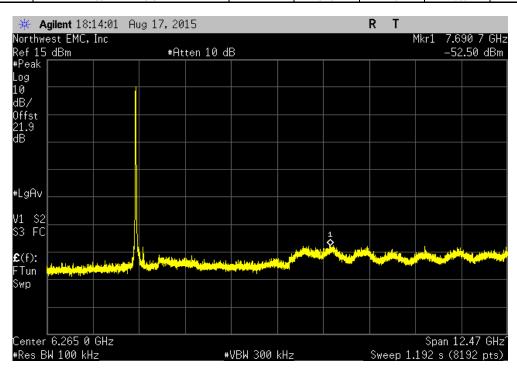
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| 2400 MHz - 2483.5 MHz Ba | nd. 802.11(a) 36 M | bps. Mid Channel | 6. 2437 MHz | |
|--------------------------|--------------------|------------------|-------------|--------|
| _ | ,(3) | | | |
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| Fundamental | | N/A | N/A | N/A |



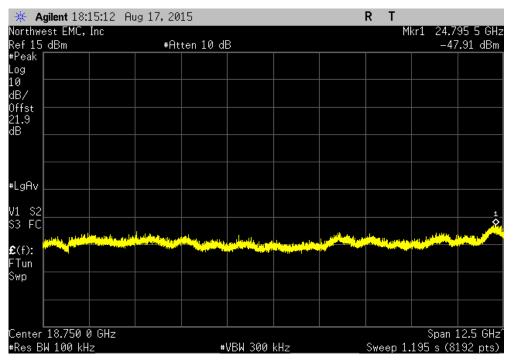
| 2400 MHz - 2483.5 MHz Band, | 802.11(g) 36 Mbps, Mid Channel | 6, 2437 MHz | |
|-----------------------------|--------------------------------|-------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | -57.92 | -20 | Pass |



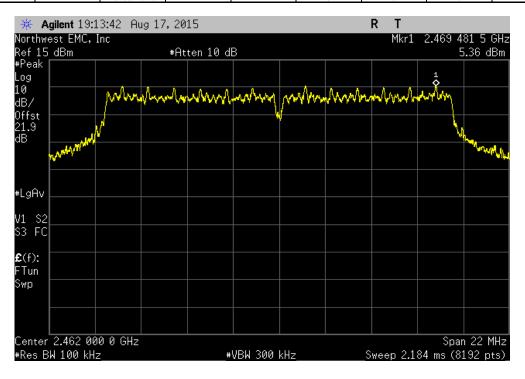
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| 2400 MHz - 2483.5 MHz Band, | 802.11(g) 36 Mbps, Mid Channel | 6, 2437 MHz | |
|-----------------------------|--------------------------------|-------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| 12.5 GHz - 25 GHz | -53.33 | -20 | Pass |



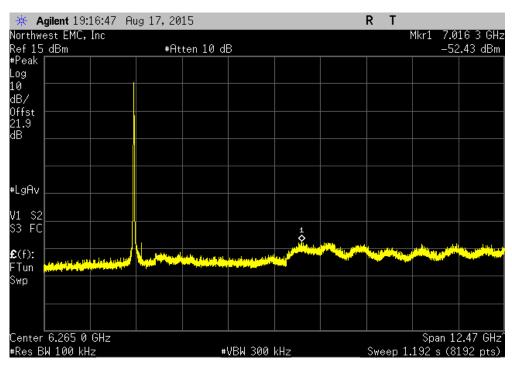
| 2400 MHz - 2483.5 MHz Band, | 802.11(g) 36 Mbps, High Chann | el 11, 2462 MHz | |
|-----------------------------|-------------------------------|-----------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| Fundamental | N/A | N/A | N/A |



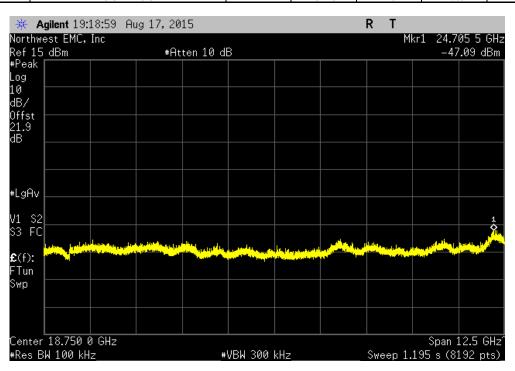
Report No. MASI0274.1 96/102



| 2400 MHz - 2483.5 MHz Band, 8 | 802.11(g) 36 Mbp | s, High Channel | 11, 2462 MHz | |
|-------------------------------|------------------|-----------------|--------------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | | -57.79 | -20 | Pass |

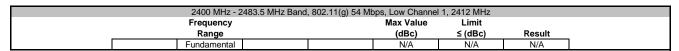


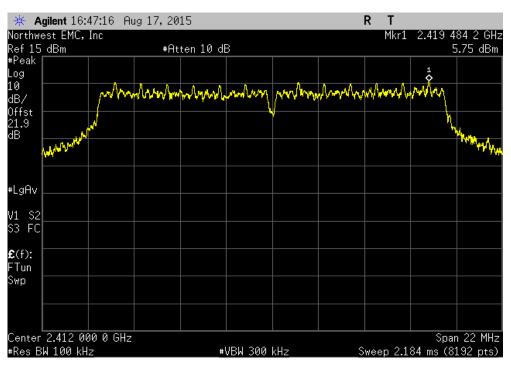
| 2400 MHz - 2483.5 MHz Band, | 802.11(g) 36 Mb _l | os, High Channel | 11, 2462 MHz | |
|-----------------------------|------------------------------|------------------|--------------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| 12.5 GHz - 25 GHz | | -52.45 | -20 | Pass |



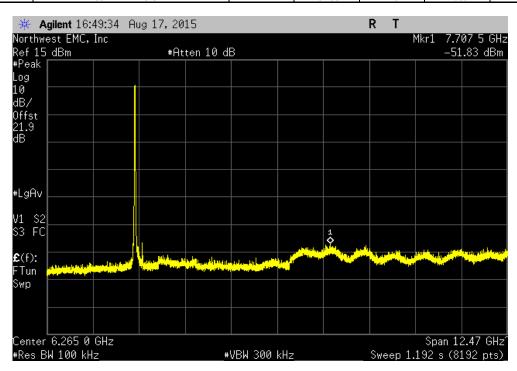
Report No. MASI0274.1 97/102







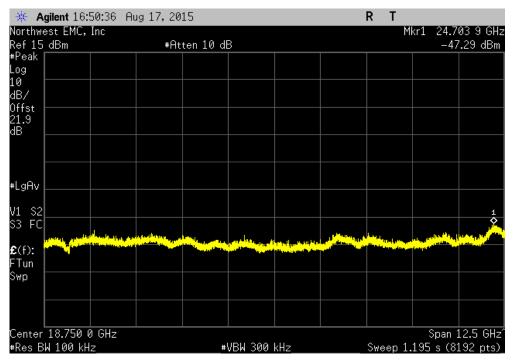
| 2400 MHz - 2483.5 MHz Band, 8 | 802.11(g) 54 Mbps, Low Channel | 1, 2412 MHz | |
|-------------------------------|--------------------------------|-------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | -57.59 | -20 | Pass |



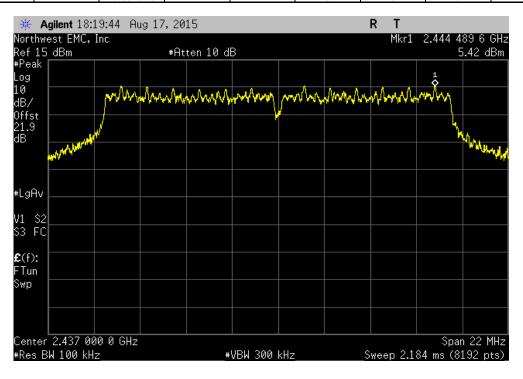
Report No. MASI0274.1 98/102



| 2400 MHz - 2483.5 MHz Band. | 802.11(g) 54 Mbps, Low Channel | 1. 2412 MHz | |
|-----------------------------|--------------------------------|-------------|--------|
| | | | |
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| | | | |
| 12.5 GHz - 25 GHz | -53.04 | -20 | Pass |



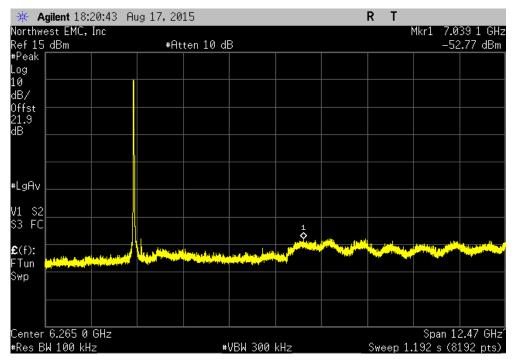
| 2400 MHz - 2483.5 | MHz Band, 802.11(g) 54 M | Mbps, Mid Channel | 6, 2437 MHz | |
|-------------------|--------------------------|-------------------|-------------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| Fundamental | | N/A | N/A | N/A |



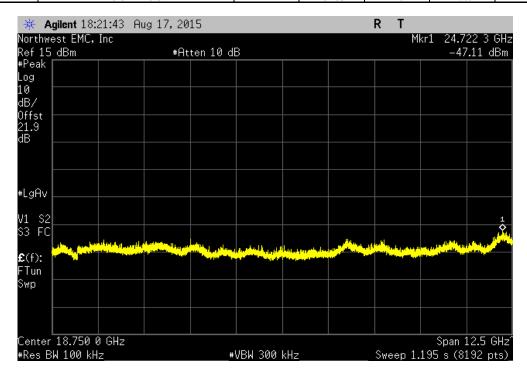
Report No. MASI0274.1 99/102



| 2400 MHz - 2483.5 MHz Band, | 802.11(g) 54 Mbps, Mid Channel | 6, 2437 MHz | |
|-----------------------------|--------------------------------|-------------|--------|
| Frequency | Max Value | Limit | |
| Range | (dBc) | ≤ (dBc) | Result |
| 30 MHz - 12.5 GHz | -58.19 | -20 | Pass |



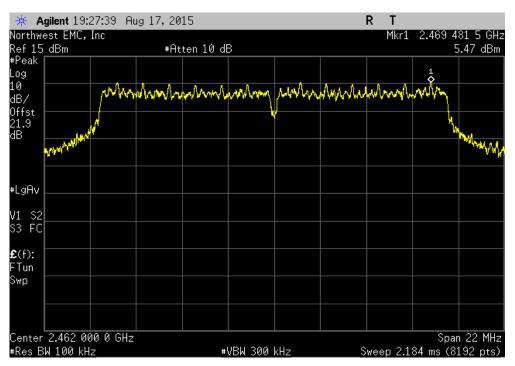
| 2400 MHz - 2483.5 MHz Ban | d, 802.11(g) 54 M | bps, Mid Channel | 6, 2437 MHz | |
|---------------------------|-------------------|------------------|-------------|--------|
| Frequency | | Max Value | Limit | |
| Range | | (dBc) | ≤ (dBc) | Result |
| 12.5 GHz - 25 GHz | | -52.53 | -20 | Pass |



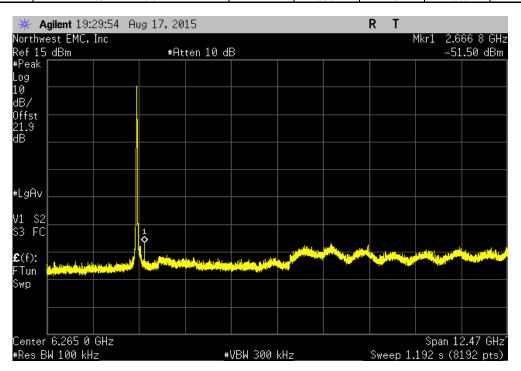
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| 2400 MHz - 2483.5 MHz Band, 802 | 2.11(g) 54 Mbps, High Channel | 11, 2462 MHz | |
|---------------------------------|-------------------------------|--------------|--------|
| Frequency | Max Value | Limit | |
| | | | Decul |
| Range | (dBc) | ≤ (dBc) | Result |
| Fundamental | N/A | N/A | N/A |



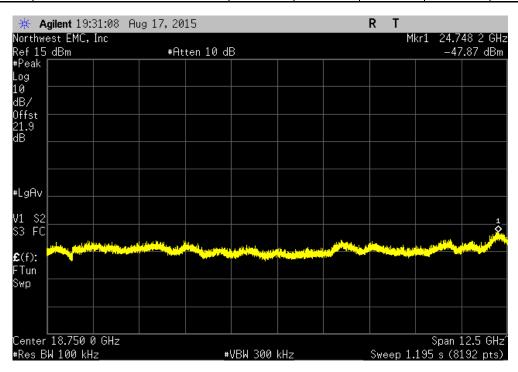
| 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz | | | | | |
|--|--|-----------|---------|--------|--|
| Frequency | | Max Value | Limit | | |
| Range | | (dBc) | ≤ (dBc) | Result | |
| 30 MHz - 12.5 GHz | | -56.97 | -20 | Pass | |



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| 2400 MHz - 2483.5 MHz Band, 8 | 2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz | | | | | | |
|-------------------------------|--|---------|--------|--|--|--|--|
| Frequency | Max Value | Limit | | | | | |
| Range | (dBc) | ≤ (dBc) | Result | | | | |
| 12.5 GHz - 25 GHz | -53.34 | -20 | Pass | | | | |



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