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 | | | | |
| Spectrum Analyzer | Agilent | E4440A | AAX | 10/1/2007 | 12 | | | | |

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

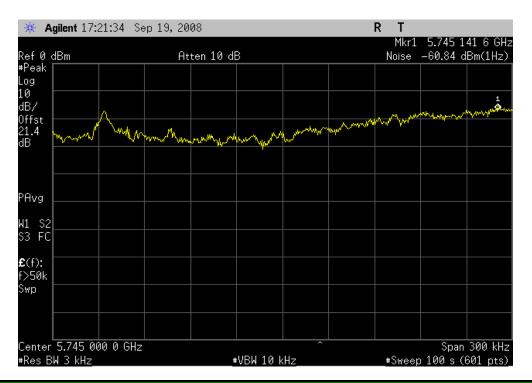
The peak power spectral density measurements were measured with the EUT set to low, mid, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate for each modulation type available. Per the procedure outlined in FCC KDB 558074, March 23, 2005, the spectrum analyzer was used as follows:

The emission peak(s) were located and zoom in on within the passband. The resolution bandwidth was set to 3 kHz, the video bandwidth was set to greater than or equal to the resolution bandwidth. The sweep speed was set equal to the span divided by 3 kHz (sweep = (SPAN/3 kHz)). For example, given a span of 1.5 MHz, the sweep should be 1.5 x $10^6 \div 3 \times 10^3 = 500$ seconds. External attenuation was used and added to the reading. The following FCC procedure was used for modifying the power spectral density measurements:

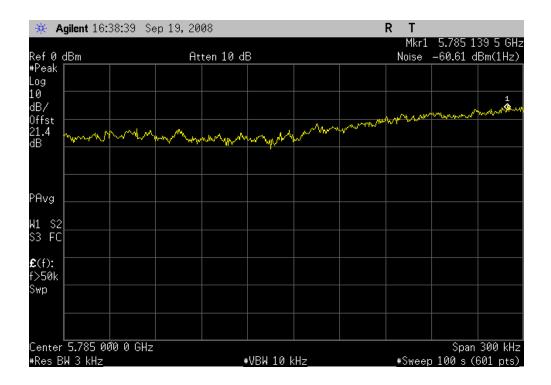
"If the spectrum line spacing cannot be resolved on the available spectrum analyzer, the noise density function on most modern conventional spectrum analyzers will directly measure the noise power density normalized to a 1 Hz noise power bandwidth. Add 35 dB for correction to 3 kHz."

| NORTHWEST | | Bower Speet | ol Donoity | | | XMIT 2007.06.13 |
|--------------------|--------------------|--------------|--------------------------------------|-------------------|--------------------|-----------------|
| EMC | | Power Specti | al Delisity | | | |
| EUT: | Rad-87 | | | Work Order: | MASI0009 |) |
| Serial Number: | J00073 | | | Date: | 09/17/08 | |
| Customer: | Masimo Corporation | | | Temperature: | 21.88°C | |
| | Eugene Kim | | | Humidity: | | |
| Project: | | | | Barometric Pres.: | | |
| | Jaemi Suh | | Power: 120V/60Hz | Job Site: | OC11 | |
| TEST SPECIFICAT | | | Test Method | | | |
| FCC 15.247 (DTS): | 2007 | | ANSI C63.4:2003 KDB No. 55807 | 4 | | |
| COMMENTS | | | | | | |
| None | | | | | | |
| DEVIATIONS FROM | M TEST STANDARD | | | | | |
| No deviations. | | | | | | |
| | | ange | | | | |
| Configuration # | 2 | Signature | | | | |
| | | | Value | Li | mit | Results |
| 802.11(a), 6 Mbps | | | | | | |
| | Low Channel | | -25.84 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| | Mid Channel | | -25.61 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| | High Channel | | -25.35 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| 802.11(a), 36 Mbps | | | | | | |
| | Low Channel | | -25.24 dBm / 3 k | | / 3 kHz | Pass |
| | Mid Channel | | -26.79 dBm / 3 k | | / 3 kHz | Pass |
| 202 44() 54 14 | High Channel | | -25.09 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| 802.11(a), 54 Mbps | Low Channel | | -27.53 dBm / 3 k | Uz 0 dDm | / 2 LU- | Pass |
| | Mid Channel | | | | / 3 kHz | |
| | High Channel | | -25.86 dBm / 3 k -26.36 dBm / 3 k | | / 3 kHz / 3 kHz | Pass Pass |
| 802.11(b), 1 Mbps | rigii Channei | | -20.30 UBIII / 3 K | 1Z 6 UDIII | / 3 KHZ | F d 5 5 |
| 002.11(b), 1 Mbps | Low Channel | | -27.68 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| | Mid Channel | | -28.16 dBm / 3 k | | / 3 kHz | Pass |
| | High Channel | | -20.47 dBm / 3 k | | / 3 kHz | Pass |
| 802.11(b), 11 Mbps | | | | | | |
| (1) | Low Channel | | -22.94 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| | Mid Channel | | -23.36 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| | High Channel | | -21.38 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| 802.11(g), 6 Mbps | | | | | | |
| | Low Channel | | -21.51 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| | Mid Channel | | -28.56 dBm / 3 k | | / 3 kHz | Pass |
| | High Channel | | -23.29 dBm / 3 k | Hz 8 dBm | / 3 kHz | Pass |
| 802.11(g), 36 Mbps | | | | | | |
| | Low Channel | | -27.31 dBm / 3 k | | / 3 kHz | Pass |
| | Mid Channel | | -27.95 dBm / 3 k | | / 3 kHz | Pass |
| 000 44(=) 54 54 | High Channel | | -17.67 dBm / 3 k | HZ 8 dBm | / 3 kHz | Pass |
| 802.11(g), 54 Mbps | Low Channel | | -27.37 dBm / 3 k | II= 0 -ID | / 3 kHz | Pass |
| | Mid Channel | | -27.37 dBm / 3 k -21.66 dBm / 3 k | | / 3 kHz | Pass |
| | High Channel | | -21.00 dBi1/ 3 k | | / 3 kHz | Pass |
| | riigii Olialiiloi | | - 11.22 UDIII / 3 K | , i_ UDIII | , O KI IZ | 1 433 |

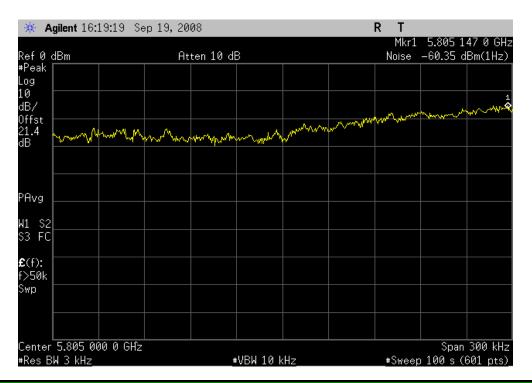
Result: Pass Value: -25.84 dBm / 3 kHz Limit: 8 dBm / 3 kHz



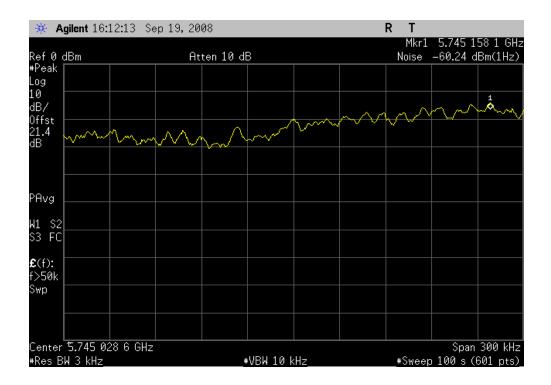
802.11(a), 6 Mbps, Mid Channel **Result:** Pass **Value:** -25.61 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz



Result: Pass Value: -25.35 dBm / 3 kHz Limit: 8 dBm / 3 kHz

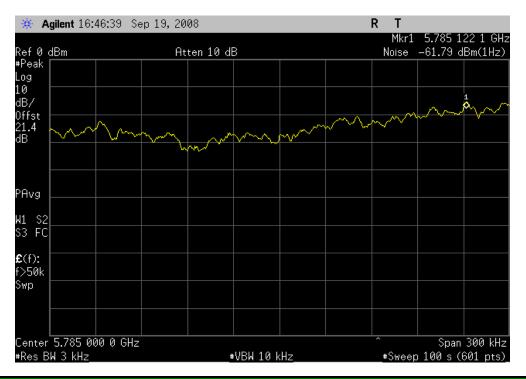


802.11(a), 36 Mbps, Low Channel **Result:** Pass **Value:** -25.24 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz

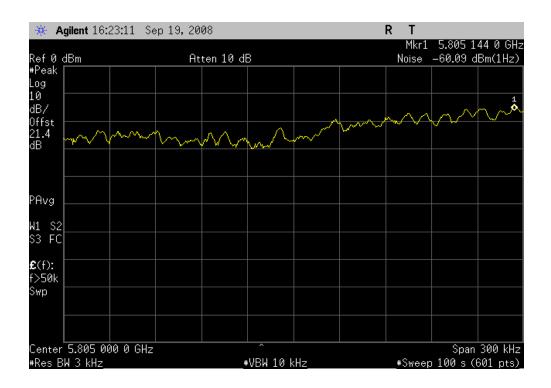


802.11(a), 36 Mbps, Mid Channel

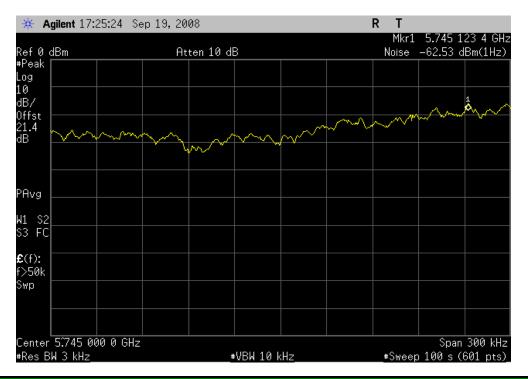
Result: Pass Value: -26.79 dBm / 3 kHz Limit: 8 dBm / 3 kHz



802.11(a), 36 Mbps, High Channel **Result:** Pass **Value:** -25.09 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz

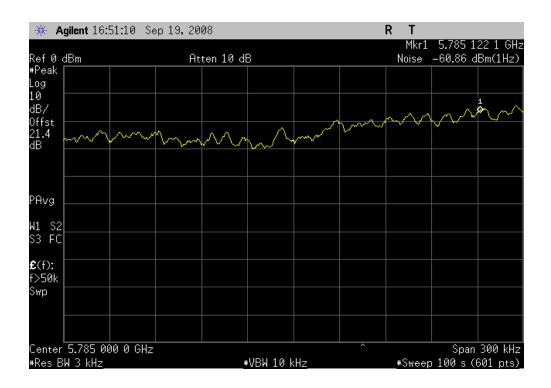


802.11(a), 54 Mbps, Low Channel **Result:** Pass **Value:** -27.53 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz

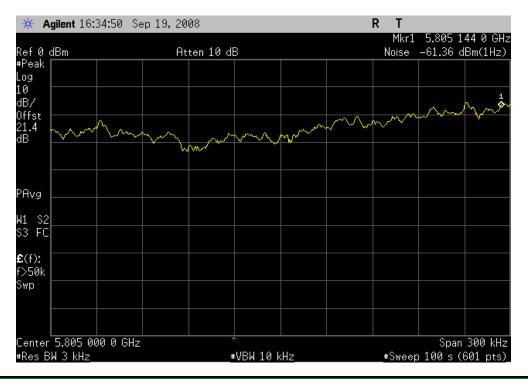


802.11(a), 54 Mbps, Mid Channel

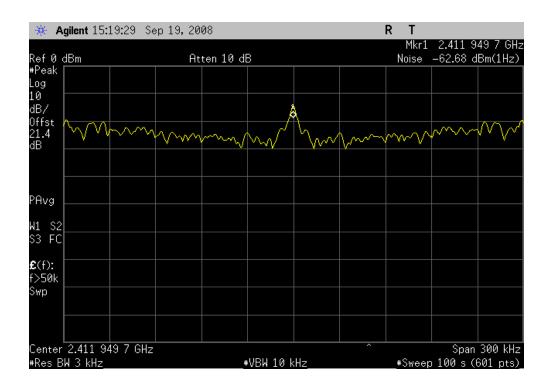
Result: Pass Value: -25.86 dBm / 3 kHz Limit: 8 dBm / 3 kHz



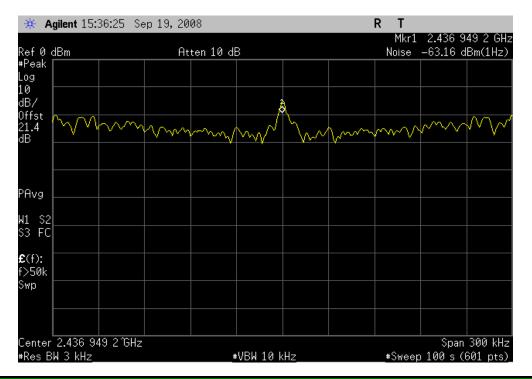
Result: Pass Value: -26.36 dBm / 3 kHz Limit: 8 dBm / 3 kHz



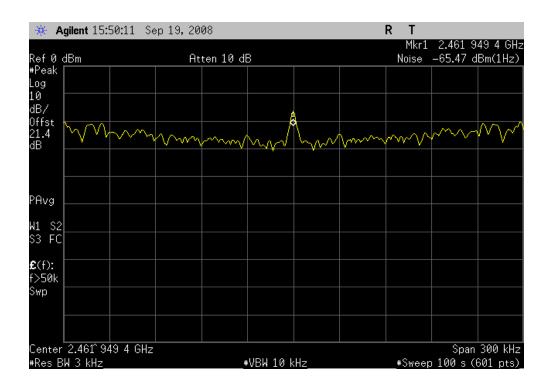
802.11(b), 1 Mbps, Low Channel **Result:** Pass **Value:** -27.68 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz



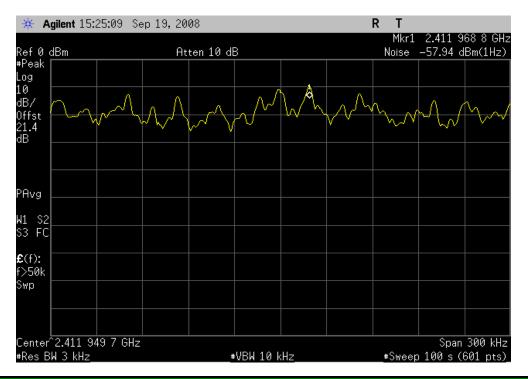
Result: Pass Value: -28.16 dBm / 3 kHz Limit: 8 dBm / 3 kHz



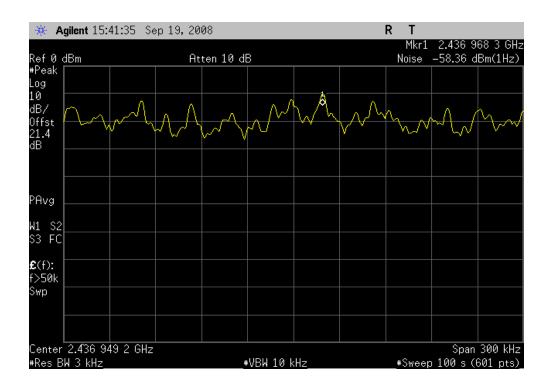
802.11(b), 1 Mbps, High Channel **Result:** Pass **Value:** -20.47 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz



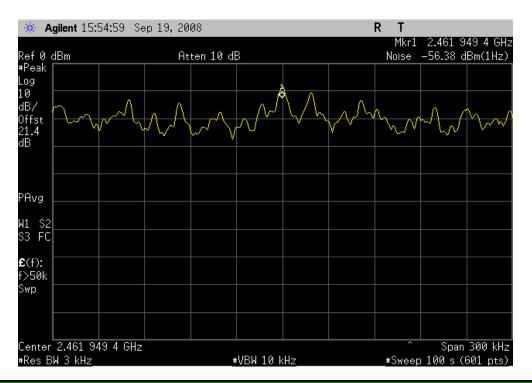
802.11(b), 11 Mbps, Low Channel **Result:** Pass **Value:** -22.94 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz



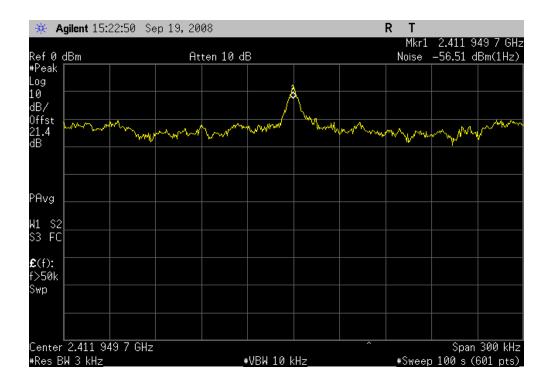
802.11(b), 11 Mbps, Mid Channel **Result:** Pass **Value:** -23.36 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz



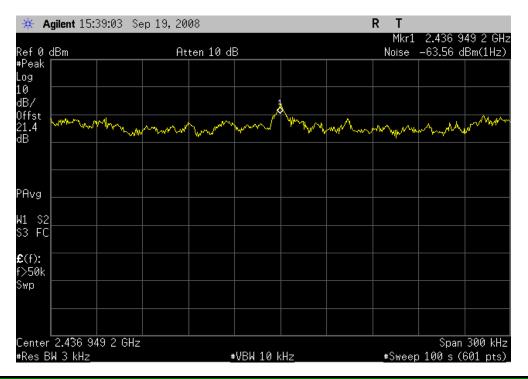
802.11(b), 11 Mbps, High Channel **Result:** Pass **Value:** -21.38 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz



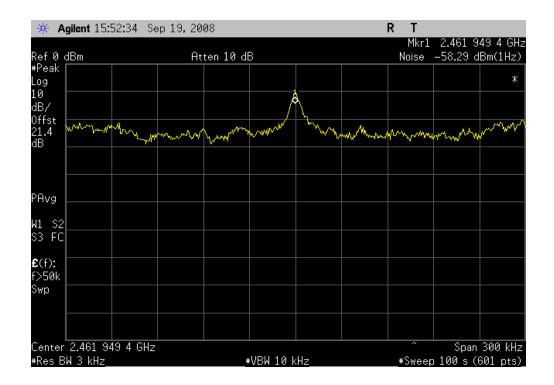
Result: Pass Value: -21.51 dBm / 3 kHz Limit: 8 dBm / 3 kHz



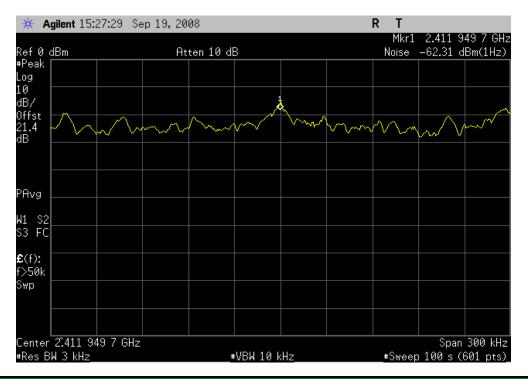
802.11(g), 6 Mbps, Mid Channel **Result:** Pass **Value:** -28.56 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz

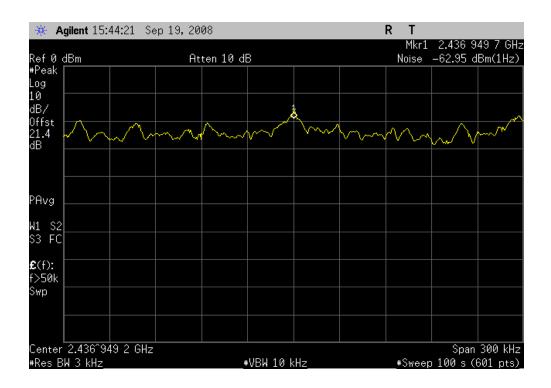


Result: Pass Value: -23.29 dBm / 3 kHz Limit: 8 dBm / 3 kHz

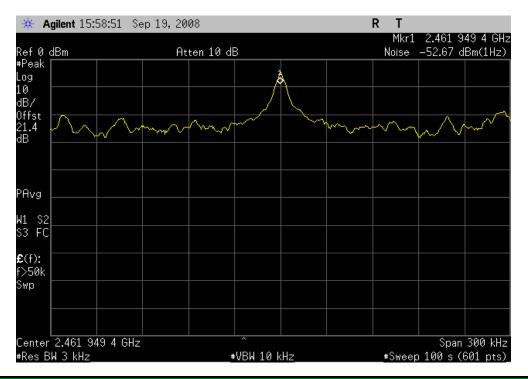


802.11(g), 36 Mbps, Low Channel **Result:** Pass **Value:** -27.31 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz

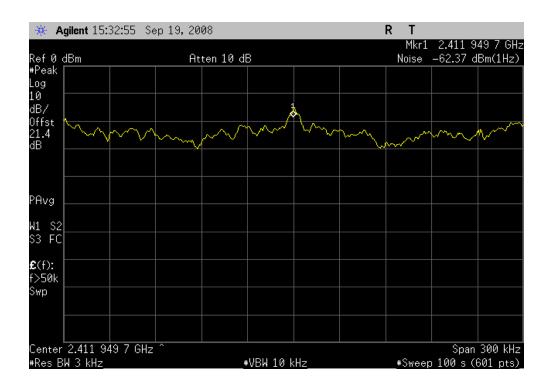




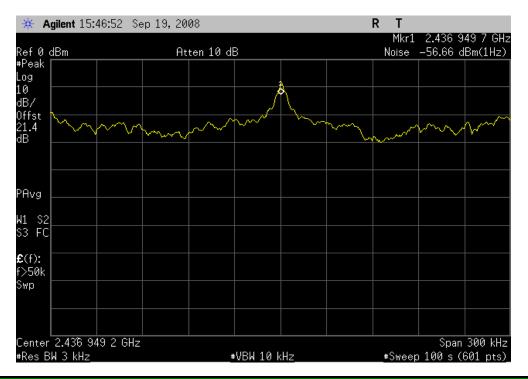
Result: Pass Value: -17.67 dBm / 3 kHz Limit: 8 dBm / 3 kHz



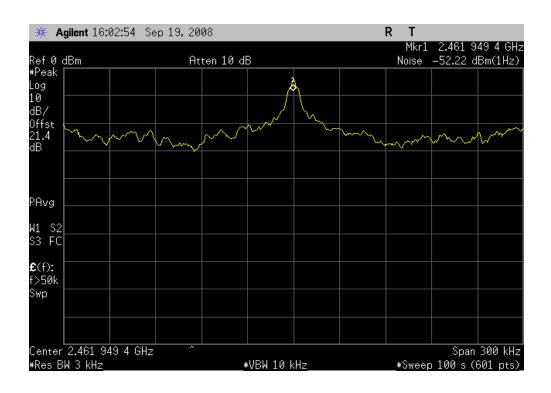
Result: Pass Value: -27.37 dBm / 3 kHz Limit: 8 dBm / 3 kHz

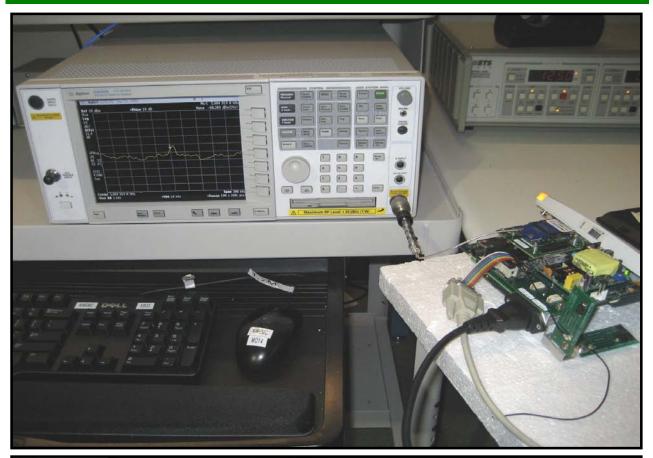


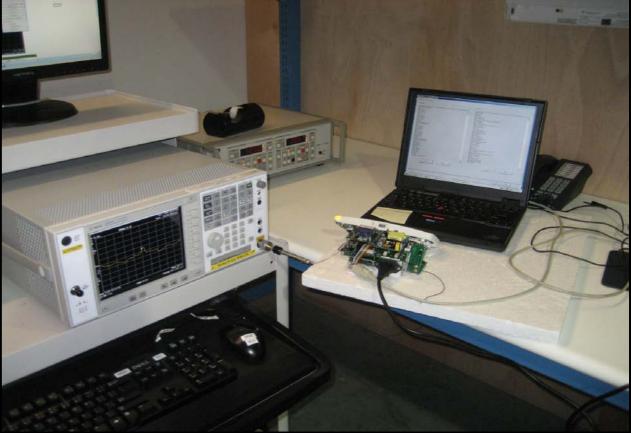
802.11(g), 54 Mbps, Mid Channel **Result:** Pass **Value:** -21.66 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz

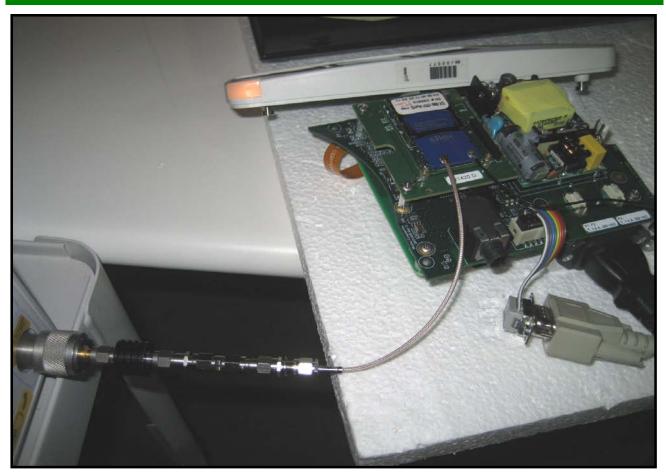


802.11(g), 54 Mbps, High Channel **Result:** Pass **Value:** -17.22 dBm / 3 kHz **Limit:** 8 dBm / 3 kHz









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 | | | | |
| Spectrum Analyzer | Agilent | E4440A | AAX | 10/1/2007 | 12 | | | | |

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

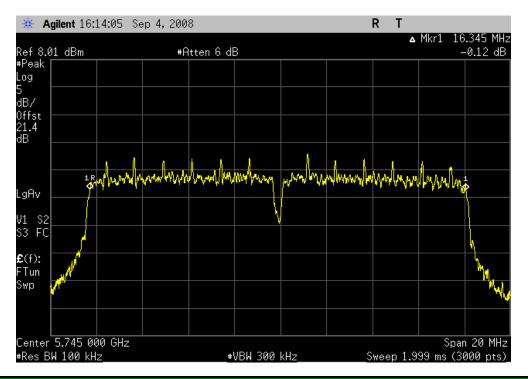
TEST DESCRIPTION

The occupied bandwidth was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode.

| NORTHWEST | | COCURIER | DANDMIDTH | | | XMit 2007.06.13 |
|--------------------|-------------------------|-----------|------------------------|-----------|------------------------|-----------------|
| EMC | | OCCUPIED | BANDWIDTH | | | |
| | Rad-87 | | | We | ork Order: MASI0009 |) |
| Serial Number: | | | | | Date: 09/04/08 | |
| Customer: | Masimo Corporation | | | Ten | perature: 21.88°C | |
| Attendees: | Eugene Kim | | | | Humidity: 53% | |
| Project: | None | | | Barome | tric Pres.: 1011.7 | |
| | Jaemi Suh | | Power: 120V/60Hz | | Job Site: OC11 | |
| TEST SPECIFICAT | | | Test Method | | | |
| FCC 15.247 (DTS):2 | 2006 | | ANSI C63.4:2003 KDB No | . 55807 | | |
| COMMENTS | | | | | | |
| None | | | | | | |
| DEVIATIONS FROM | M TEST STANDARD | | | | | |
| No Deviations | | | | | | |
| Configuration # | 2 | Signature | | | | |
| | <u> </u> | Gignature | Va | lue | Limit | Results |
| 802.11(a) 6 Mbps | | | | | | |
| | Low Channel | | 16.34 | | ≥ 500 kHz | Pass |
| | Mid Channel | | 16.259 | | ≥ 500 kHz | Pass |
| 000 44/ \ 00 14 | High Channel | | 16.379 | 9 MHz | ≥ 500 kHz | Pass |
| 802.11(a) 36 Mbps | Law Obarasi | | 40.404 | 2 MILI- | > 500 1-11- | D |
| | Low Channel Mid Channel | | 16.439 16.46 | | ≥ 500 kHz ≥ 500 kHz | Pass Pass |
| | High Channel | | 16.46 | | ≥ 500 kHz | Pass |
| 802.11(a) 54 Mbps | riigii Channei | | 10.40 | J IVII IZ | 2 300 KHZ | rass |
| 002.11(a) 04 Mbpo | Low Channel | | 16.48 | 5 MHz | ≥ 500 kHz | Pass |
| | Mid Channel | | 16.500 | | ≥ 500 kHz | Pass |
| | High Channel | | 16.479 | 9 MHz | ≥ 500 kHz | Pass |
| 802.11(b) 1 Mbps | • | | | | | |
| | Low Channel | | 12.024 | 4 MHz | ≥ 500 kHz | Pass |
| | Mid Channel | | 12.11 | 7 MHz | ≥ 500 kHz | Pass |
| | High Channel | | 12.104 | 4 MHz | ≥ 500 kHz | Pass |
| 802.11(b) 11 Mbps | | | | | | |
| | Low Channel | | 10.55 | | ≥ 500 kHz | Pass |
| | Mid Channel | | 10.55 | | ≥ 500 kHz | Pass |
| 900 11(a) 6 Mbns | High Channel | | 11.16 | 4 MHZ | ≥ 500 kHz | Pass |
| 802.11(g) 6 Mbps | Low Channel | | 16.16 | 5 M⊔- | ≥ 500 kHz | Pass |
| | Mid Channel | | 16.279 | | ≥ 500 kHz | Pass |
| | High Channel | | 16.279 | | ≥ 500 kHz | Pass |
| 802.11(g) 36 Mbps | riigii Channei | | 10.27 | J IVII IZ | = 300 KHZ | 1 433 |
| 002.1.1(g) 00 mapo | Low Channel | | 16.472 | 2 MHz | ≥ 500 kHz | Pass |
| | Mid Channel | | 16.48 | | ≥ 500 kHz | Pass |
| | High Channel | | 16.459 | | ≥ 500 kHz | Pass |
| 802.11(g) 54 Mbps | | | | | | |
| | Low Channel | | 16.492 | 2 MHz | ≥ 500 kHz | Pass |
| | Mid Channel | | 16.48 | 5 MHz | ≥ 500 kHz | Pass |
| | High Channel | | 16.50 | 6 MHz | ≥ 500 kHz | Pass |

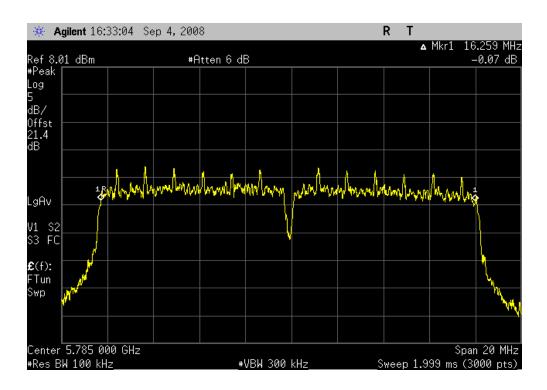
802.11(a) 6 Mbps, Low Channel

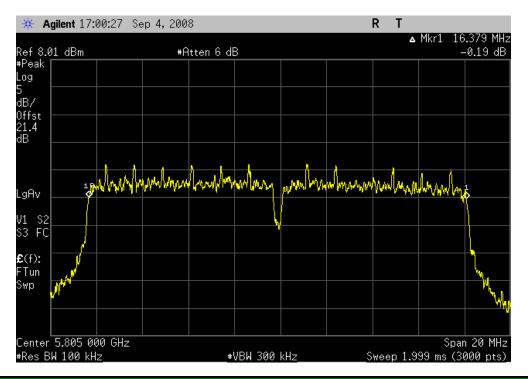
Result: Pass Value: 16.345 MHz Limit: ≥ 500 kHz



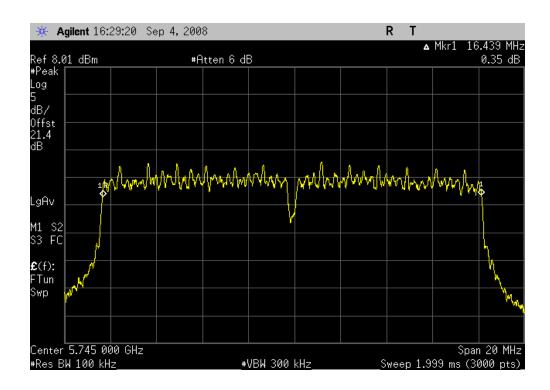
802.11(a) 6 Mbps, Mid Channel

Result: Pass Value: 16.259 MHz Limit: ≥ 500 kHz



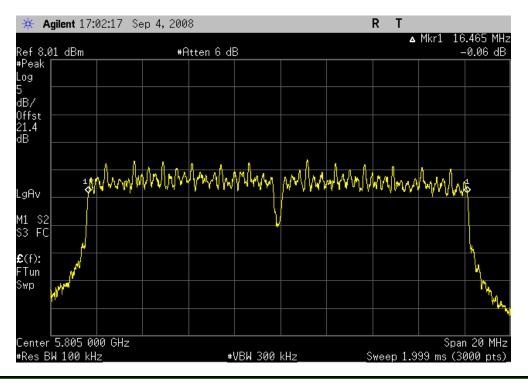


802.11(a) 36 Mbps, Low Channel **Result:** Pass **Value:** 16.439 MHz **Limit:** ≥ 500 kHz

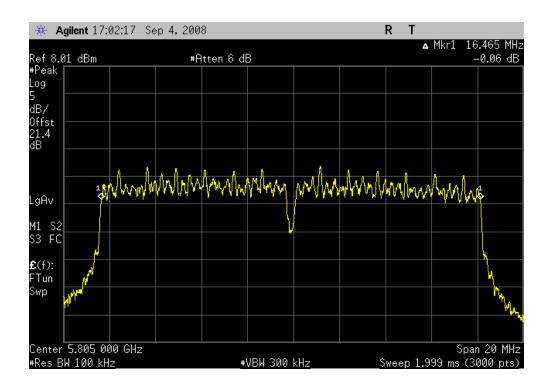


802.11(a) 36 Mbps, Mid Channel

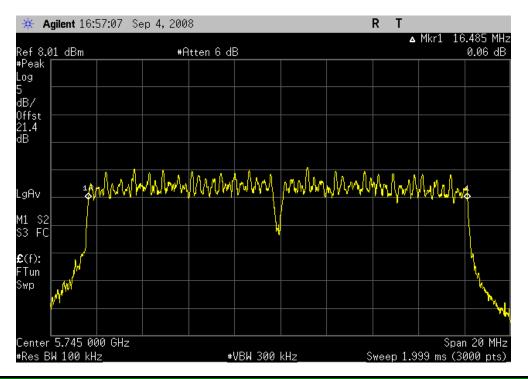
Result: Pass Value: 16.465 MHz Limit: ≥ 500 kHz



802.11(a) 36 Mbps, High Channel **Result:** Pass **Value:** 16.465 MHz **Limit:** ≥ 500 kHz

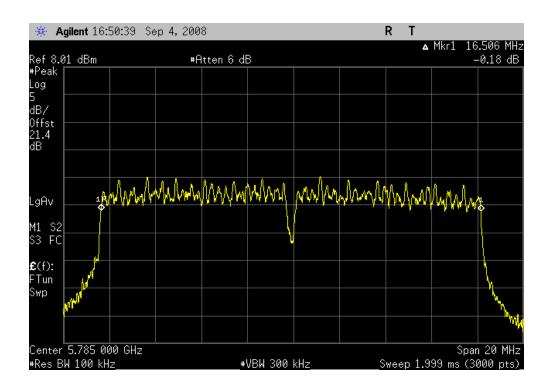


802.11(a) 54 Mbps, Low Channel **Result:** Pass **Value:** 16.485 MHz **Limit:** ≥ 500 kHz



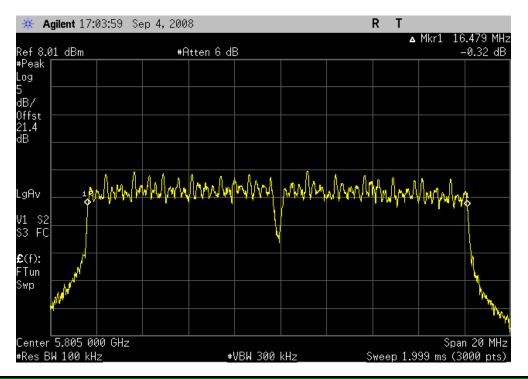
802.11(a) 54 Mbps, Mid Channel

Result: Pass Value: 16.506 MHz Limit: ≥ 500 kHz



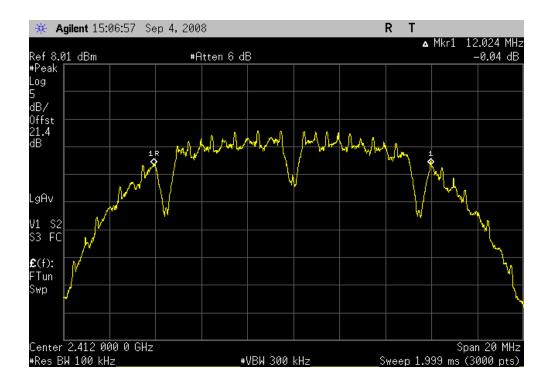
802.11(a) 54 Mbps, High Channel

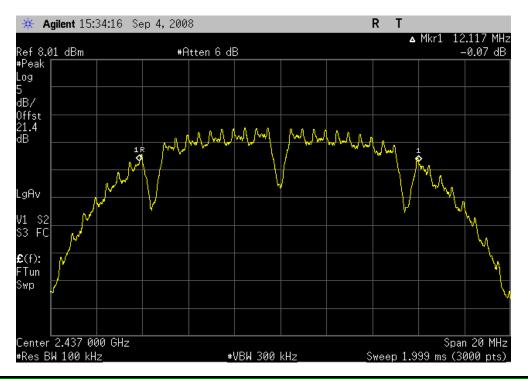
Result: Pass Value: 16.479 MHz Limit: ≥ 500 kHz



802.11(b) 1 Mbps, Low Channel

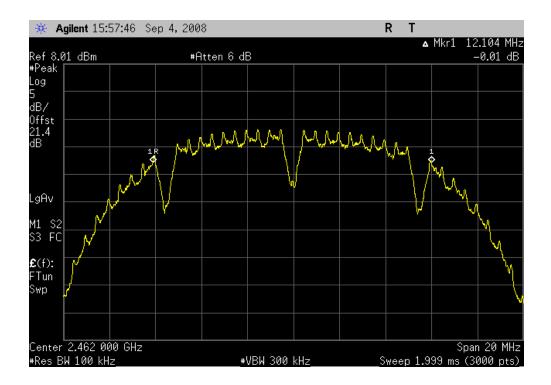
Result: Pass Value: 12.024 MHz Limit: ≥ 500 kHz





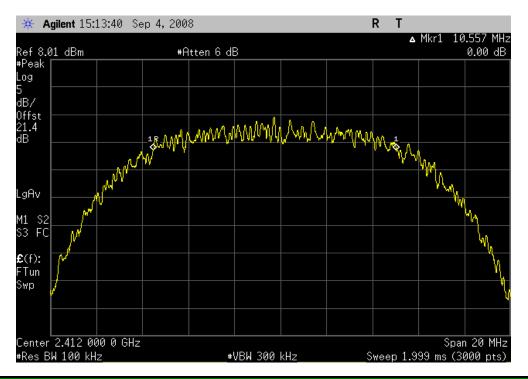
802.11(b) 1 Mbps, High Channel

Result: Pass Value: 12.104 MHz Limit: ≥ 500 kHz



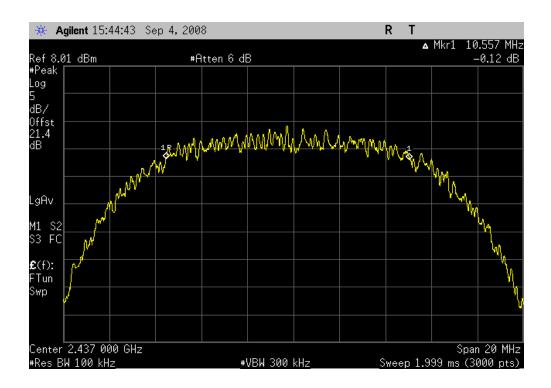
802.11(b) 11 Mbps, Low Channel

Result: Pass Value: 10.557 MHz Limit: ≥ 500 kHz



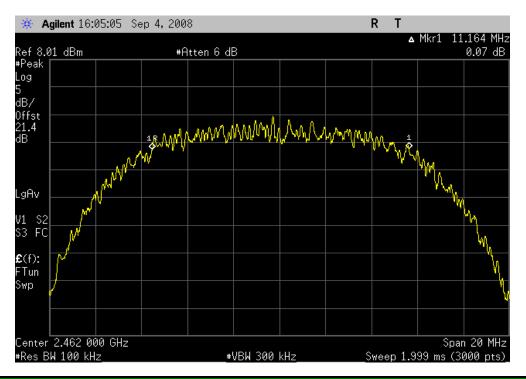
802.11(b) 11 Mbps, Mid Channel

Result: Pass Value: 10.557 MHz Limit: ≥ 500 kHz

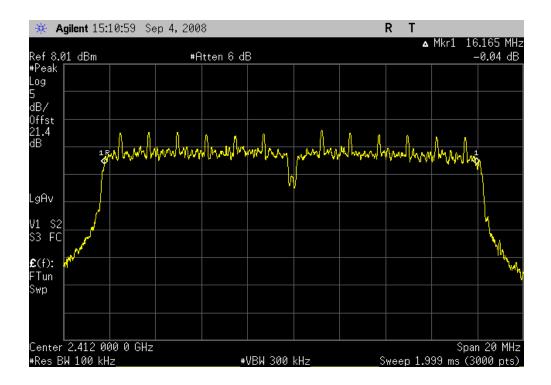


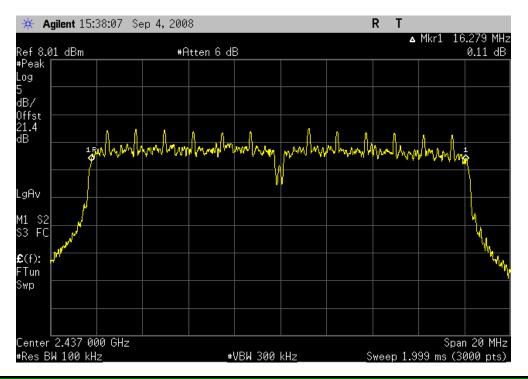
802.11(b) 11 Mbps, High Channel

Result: Pass Value: 11.164 MHz Limit: ≥ 500 kHz



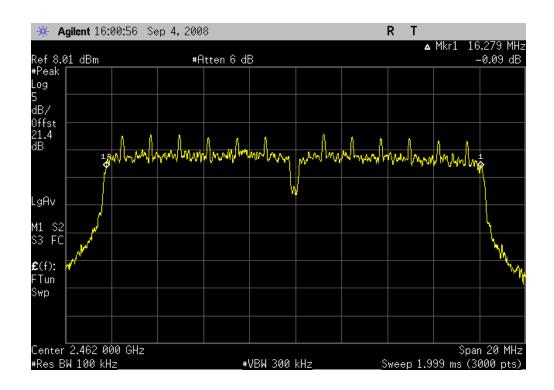
802.11(g) 6 Mbps, Low Channel **Result:** Pass **Value:** 16.165 MHz **Limit:** ≥ 500 kHz



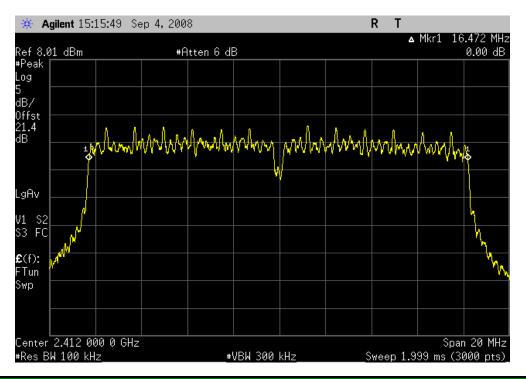


 802.11(g) 6 Mbps, High Channel

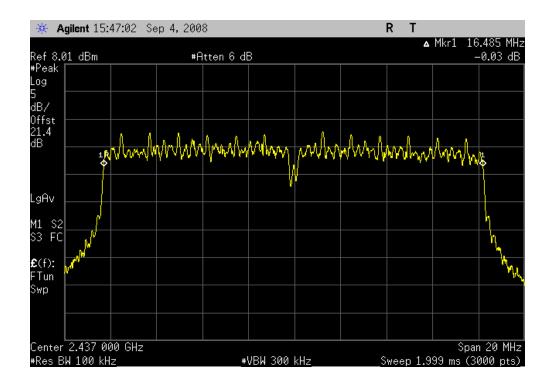
 Result: Pass
 Value: 16.279 MHz
 Limit: ≥ 500 kHz



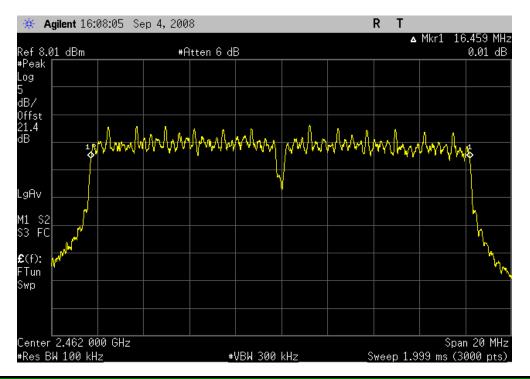
802.11(g) 36 Mbps, Low Channel **Result:** Pass **Value:** 16.472 MHz **Limit:** ≥ 500 kHz



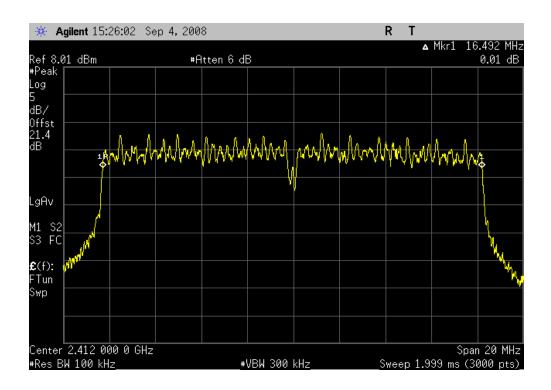
802.11(g) 36 Mbps, Mid Channel **Result:** Pass **Value:** 16.485 MHz **Limit:** ≥ 500 kHz



802.11(g) 36 Mbps, High Channel **Result:** Pass **Value:** 16.459 MHz **Limit:** ≥ 500 kHz

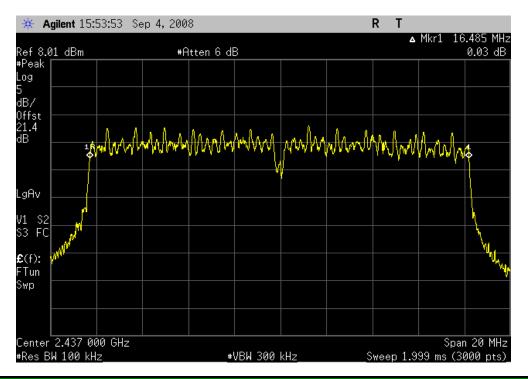


802.11(g) 54 Mbps, Low Channel **Result:** Pass **Value:** 16.492 MHz **Limit:** ≥ 500 kHz



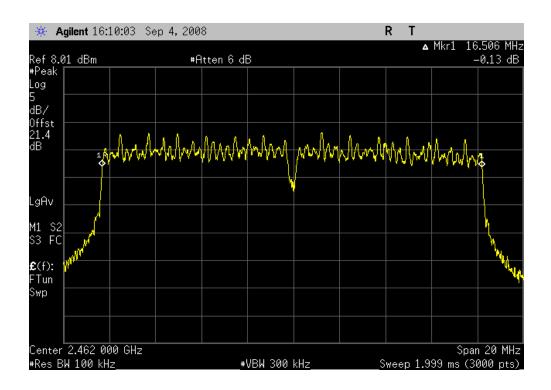
802.11(g) 54 Mbps, Mid Channel

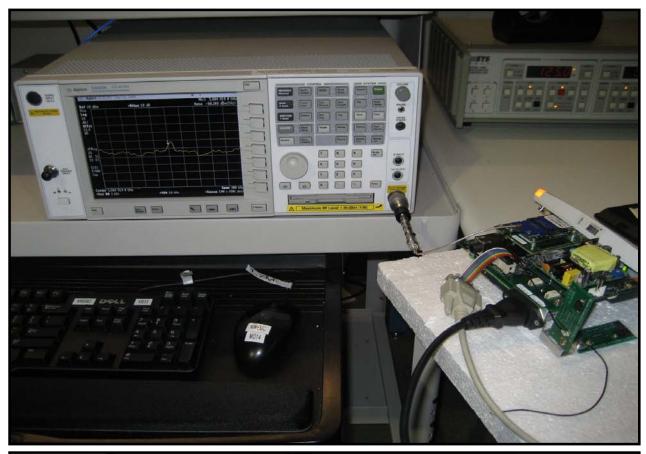
Result: Pass Value: 16.485 MHz Limit: ≥ 500 kHz

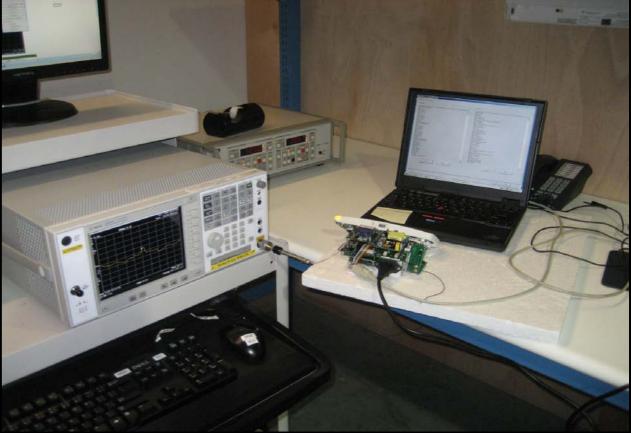


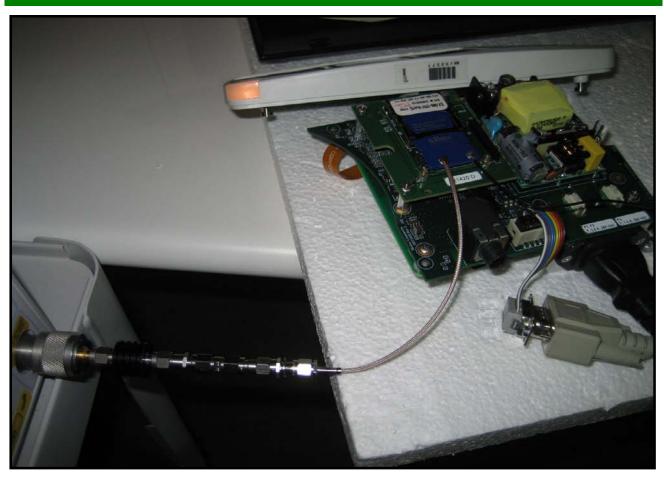
802.11(g) 54 Mbps, High Channel

Result: Pass Value: 16.506 MHz Limit: ≥ 500 kHz









Output Power

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

| TEST EQUIPMENT | | | | | | | | |
|-------------------|--------------|--------|-----|-----------|----------|--|--|--|
| Description | Manufacturer | Model | ID | Last Cal. | Interval | | | |
| Spectrum Analyzer | Agilent | E4440A | AAX | 10/1/2007 | 12 | | | |

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The peak output power was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode.

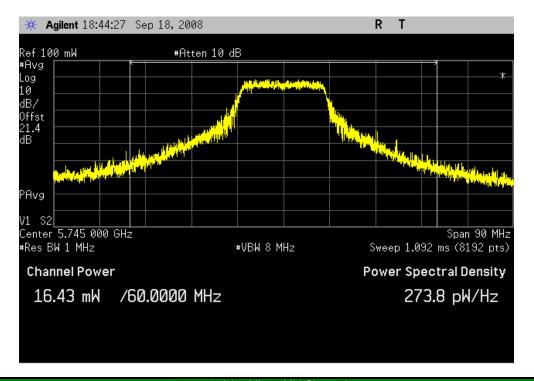
De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36dBm.

| NORTHWEST | | 0 | D | | | XMit 2007.06.13 |
|-------------------|-----------------------|-----------|-----------------------|----------------|---------------|-----------------|
| EMC | | Output | Power | | | |
| | Γ: Rad-87 | | | Work Ord | er: MASI000 | 9 |
| Serial Number | | | | | ite: 09/17/08 | |
| | r: Masimo Corporation | | | | re: 21.88°C | |
| | s: Eugene Kim | | | | ity: 53% | |
| | t: None | | | Barometric Pre | | |
| Tested by | /: Jaemi Suh | | Power: 120V/60Hz | Job S | ite: OC11 | |
| TEST SPECIFICAT | TIONS | | Test Method | | | |
| FCC 15.247 (DTS) | :2006 | | ANSI C63.4:2003 KDB N | o. 558074 | | |
| | | | | | | |
| COMMENTS | | | | | | |
| None | | | | | | |
| | | | | | | |
| | | | | | | |
| | OM TEST STANDARD | | | | | |
| No Deviations. | | | | | | |
| Cantinuvation # | 2 | ande | | | | |
| Configuration # | 2 | Cimpatura | | | | |
| | | Signature | | | | |
| | | | V | alue | Limit | Results |
| 802.11(a) 6 Mbps | | | | 1140 | | riodano |
| | Low Channel | | 16.4 | 13 mW | 1 Watt | Pass |
| | Mid Channel | | 19.1 | I3 mW | 1 Watt | Pass |
| | High Channel | | 19.3 | 38 mW | 1 Watt | Pass |
| 802.11(a) 36 Mbps | | | | | | |
| | Low Channel | | 17.6 | 69 mW | 1 Watt | Pass |
| | Mid Channel | | 16.5 | 56 mW | 1 Watt | Pass |
| | High Channel | | 17.3 | 38 mW | 1 Watt | Pass |
| 802.11(a) 54 Mbps | | | | | | |
| | Low Channel | | | | 1 Watt | Pass |
| | Mid Channel | | | | 1 Watt | Pass |
| 000 44(1) 4 14 | High Channel | | 13.4 | 14 mW | 1 Watt | Pass |
| 802.11(b) 1 Mbps | Low Channel | | 20.4 | 17 \ \ \ \ | 1 Watt | Pass |
| | Mid Channel | | | | 1 Watt | Pass |
| | High Channel | | | | 1 Watt | Pass |
| 802.11(b) 11 Mbps | | | 20.0 | OTIIVV | 1 Watt | 1 833 |
| 002.11(b) 11 Wbp0 | Low Channel | | 28.8 | 38 mW | 1 Watt | Pass |
| | Mid Channel | | | | 1 Watt | Pass |
| | High Channel | | | | 1 Watt | Pass |
| 802.11(g) 6 Mbps | - i | | | | | |
| | Low Channel | | 25.7 | 77 mW | 1 Watt | Pass |
| | Mid Channel | | 27.6 | 33 mW | 1 Watt | Pass |
| | High Channel | | 24.0 |)1 mW | 1 Watt | Pass |
| 802.11(g) 36 Mbps | | | | | | |
| | Low Channel | | | | 1 Watt | Pass |
| | Mid Channel | | | | 1 Watt | Pass |
| | High Channel | | 25.1 | I5 mW | 1 Watt | Pass |
| 802.11(g) 54 Mbps | | | | | | |
| | Low Channel | | | | 1 Watt | Pass |
| | Mid Channel | | | | 1 Watt | Pass |
| | High Channel | | 23.7 | 77 mW | 1 Watt | Pass |

Output Power

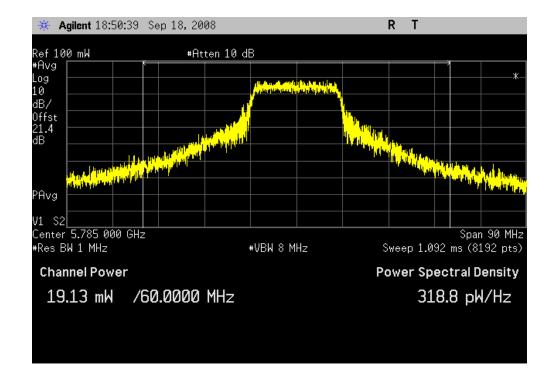
802.11(a) 6 Mbps, Low Channel

Result: Pass Value: 16.43 mW Limit: 1 Watt



802.11(a) 6 Mbps, Mid Channel

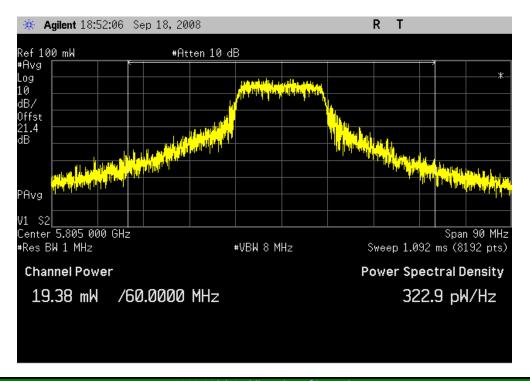
Result: Pass Value: 19.13 mW Limit: 1 Watt



Output Power

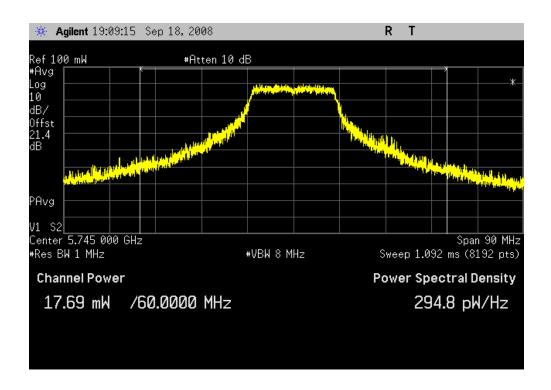
802.11(a) 6 Mbps, High Channel

Result: Pass Value: 19.38 mW Limit: 1 Watt

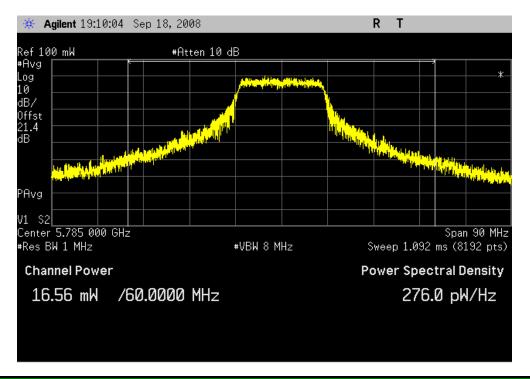


802.11(a) 36 Mbps, Low Channel

Result: Pass Value: 17.69 mW Limit: 1 Watt

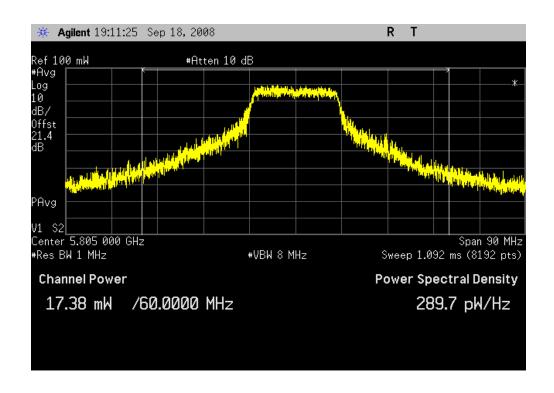


Result: Pass Value: 16.56 mW Limit: 1 Watt



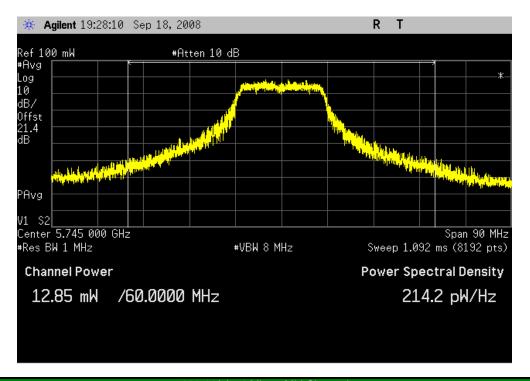
802.11(a) 36 Mbps, High Channel

Result: Pass Value: 17.38 mW Limit: 1 Watt



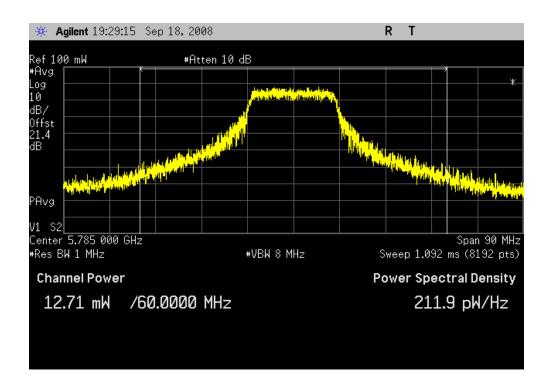
802.11(a) 54 Mbps, Low Channel

Result: Pass Value: 12.85 mW Limit: 1 Watt



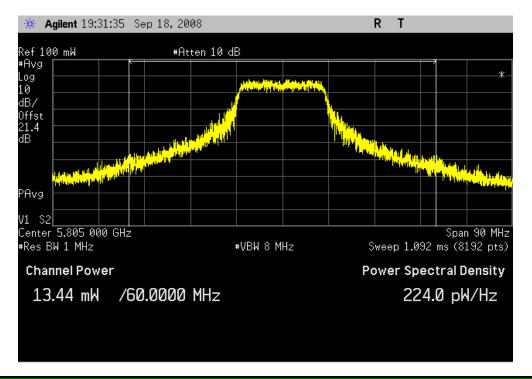
802.11(a) 54 Mbps, Mid Channel

Result: Pass Value: 12.71 mW Limit: 1 Watt



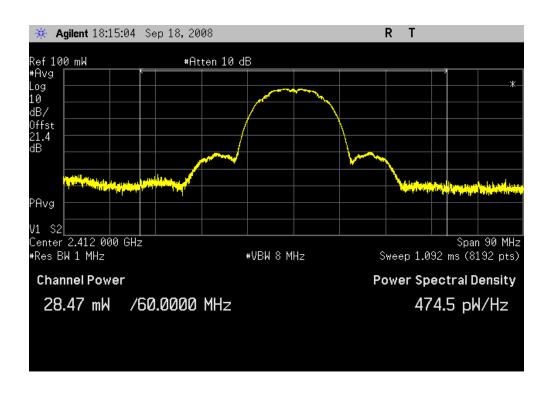
802.11(a) 54 Mbps, High Channel

Result: Pass Value: 13.44 mW Limit: 1 Watt



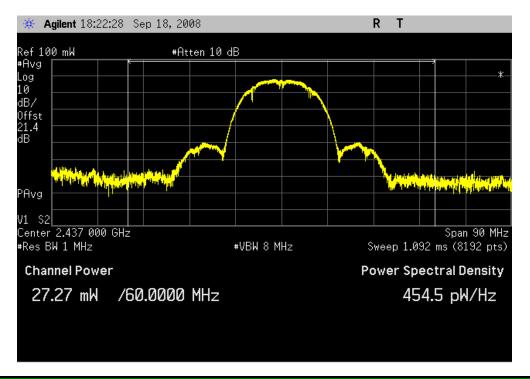
802.11(b) 1 Mbps, Low Channel

Result: Pass Value: 28.47 mW Limit: 1 Watt



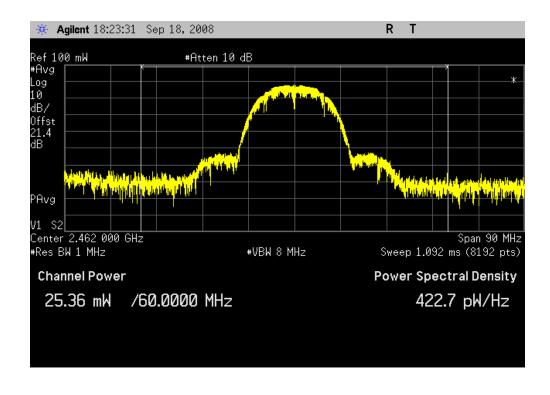
802.11(b) 1 Mbps, Mid Channel

Result: Pass Value: 27.27 mW Limit: 1 Watt



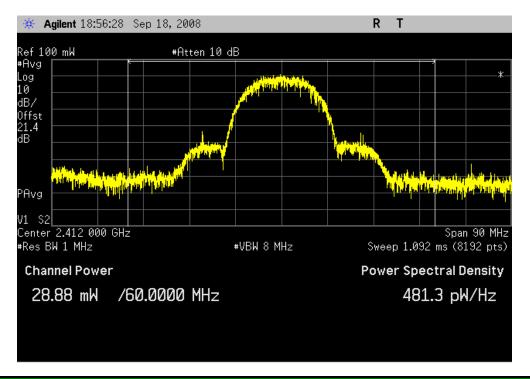
802.11(b) 1 Mbps, High Channel

Result: Pass Value: 25.36 mW Limit: 1 Watt



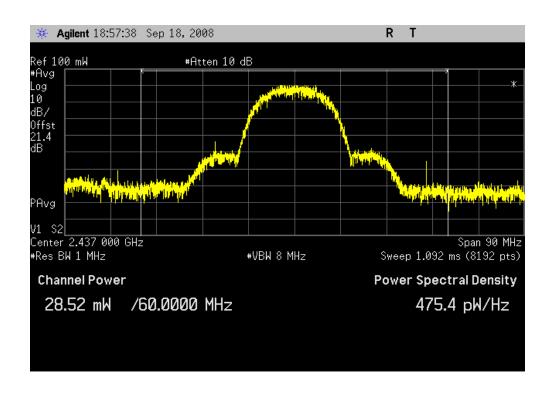
802.11(b) 11 Mbps, Low Channel

Result: Pass Value: 28.88 mW Limit: 1 Watt



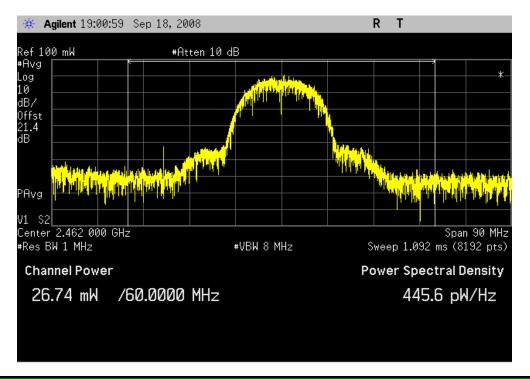
802.11(b) 11 Mbps, Mid Channel

Result: Pass Value: 28.52 mW Limit: 1 Watt



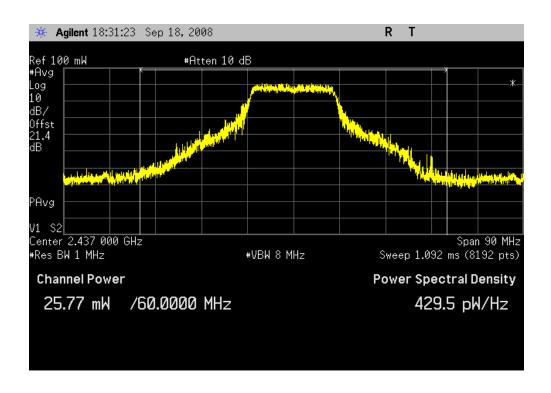
802.11(b) 11 Mbps, High Channel

Result: Pass Value: 26.74 mW Limit: 1 Watt



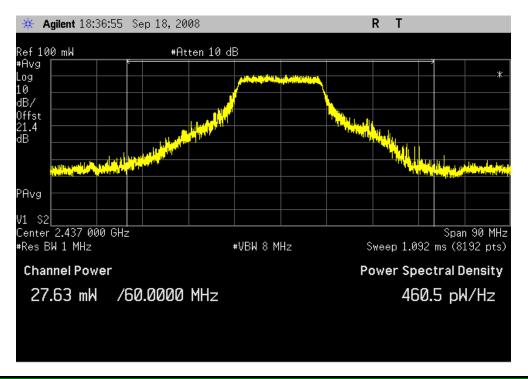
802.11(g) 6 Mbps, Low Channel

Result: Pass Value: 25.77 mW Limit: 1 Watt

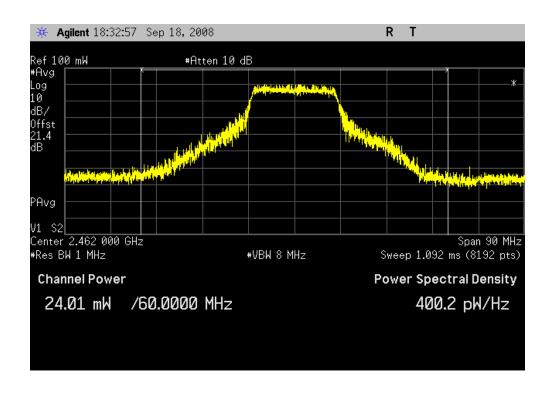


802.11(g) 6 Mbps, Mid Channel

Result: Pass Value: 27.63 mW Limit: 1 Watt

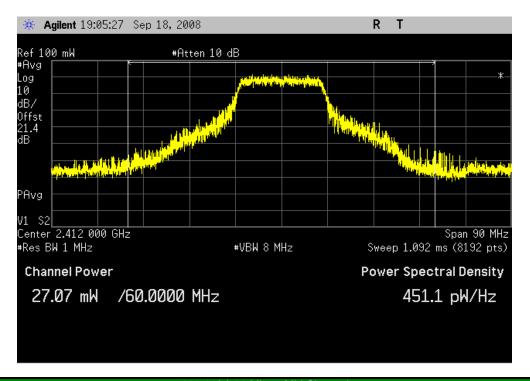


Result: Pass Value: 24.01 mW Limit: 1 Watt



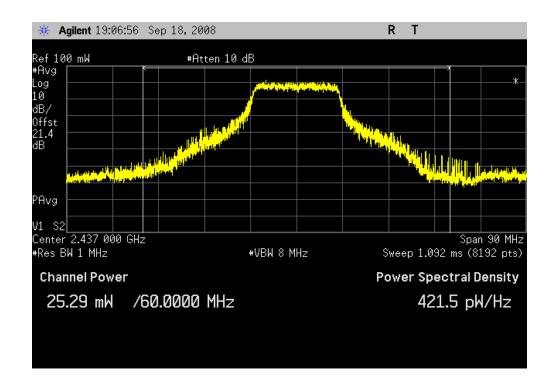
802.11(g) 36 Mbps, Low Channel

Result: Pass Value: 27.07 mW Limit: 1 Watt



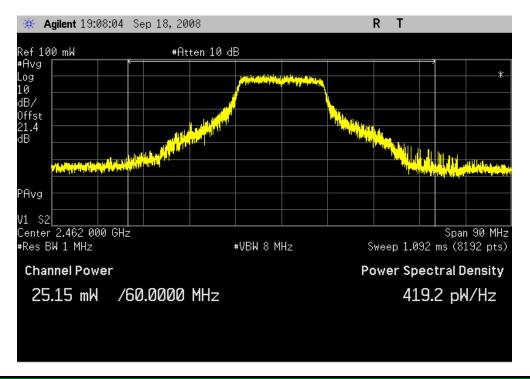
802.11(g) 36 Mbps, Mid Channel

Result: Pass Value: 25.29 mW Limit: 1 Watt



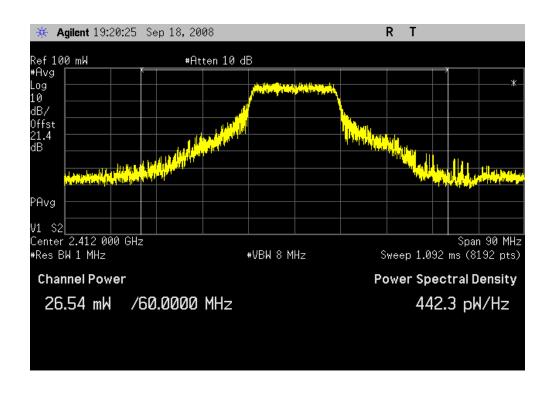
802.11(g) 36 Mbps, High Channel

Result: Pass Value: 25.15 mW Limit: 1 Watt

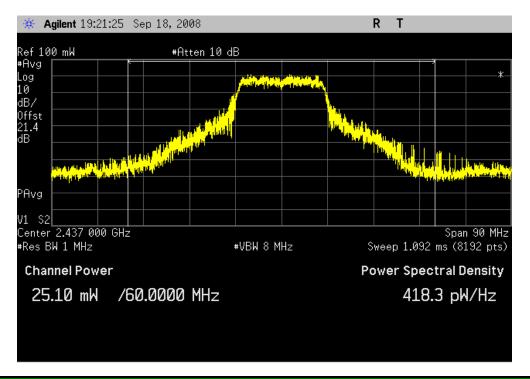


802.11(g) 54 Mbps, Low Channel

Result: Pass Value: 26.54 mW Limit: 1 Watt

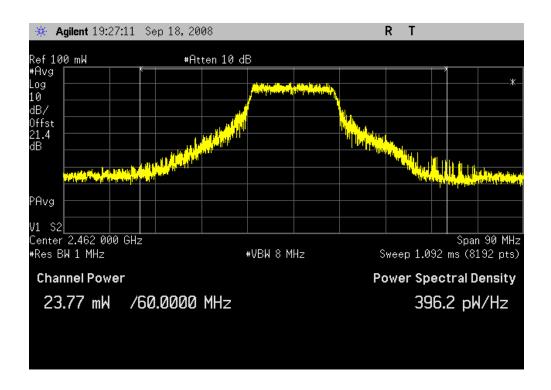


Result: Pass Value: 25.10 mW Limit: 1 Watt

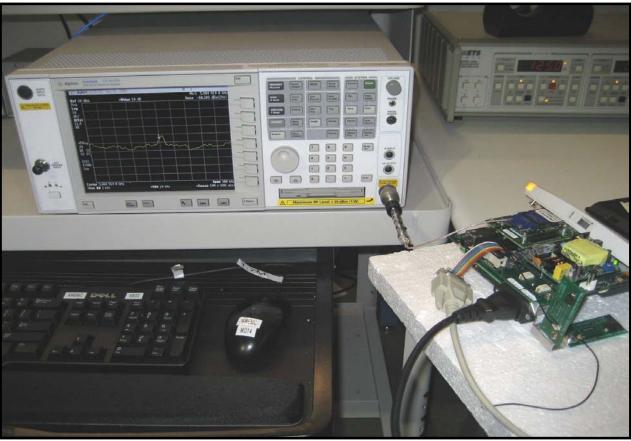


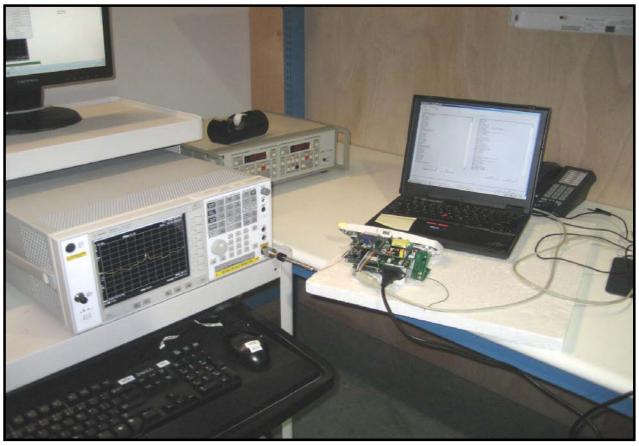
802.11(g) 54 Mbps, High Channel

Result: Pass Value: 23.77 mW Limit: 1 Watt

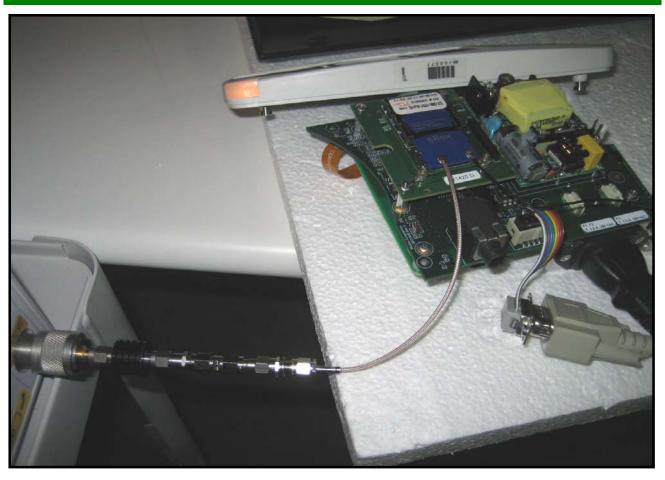








EMC



AC POWERLINE CONDUCTED EMISSIONS

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

| MODES OF OPERATION |
|---|
| Transmitting 802.11(a), 6 Mbps, Channel 149 |
| Transmitting 802.11(a), 6 Mbps, Channel 157 |
| Transmitting 802.11(a), 6 Mbps, Channel 161 |
| Transmitting 802.11(b), 11 Mbps, Channel 1 |
| Transmitting 802.11(b), 11 Mbps, Channel 11 |
| Transmitting 802.11(g), 11 Mbps, Channel 6 |
| Transmitting 802.11(g), 11 Mbps, Channel 36 |
| Transmitting 802.11(g), 11 Mbps, Channel 54 |

POWER SETTINGS INVESTIGATED

120V/60Hz

CONFIGURATIONS INVESTIGATED

1

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 | 9252-50-R-24-BNC | LIC | 2/6/2008 | 13 mo | | | | |
| OC06 Cables B and C | | | OCM | 1/10/2008 | 13 mo | | | | |
| Receiver | Rohde & Schwarz | ESCI | ARF | 12/14/2007 | 13 mo | | | | |

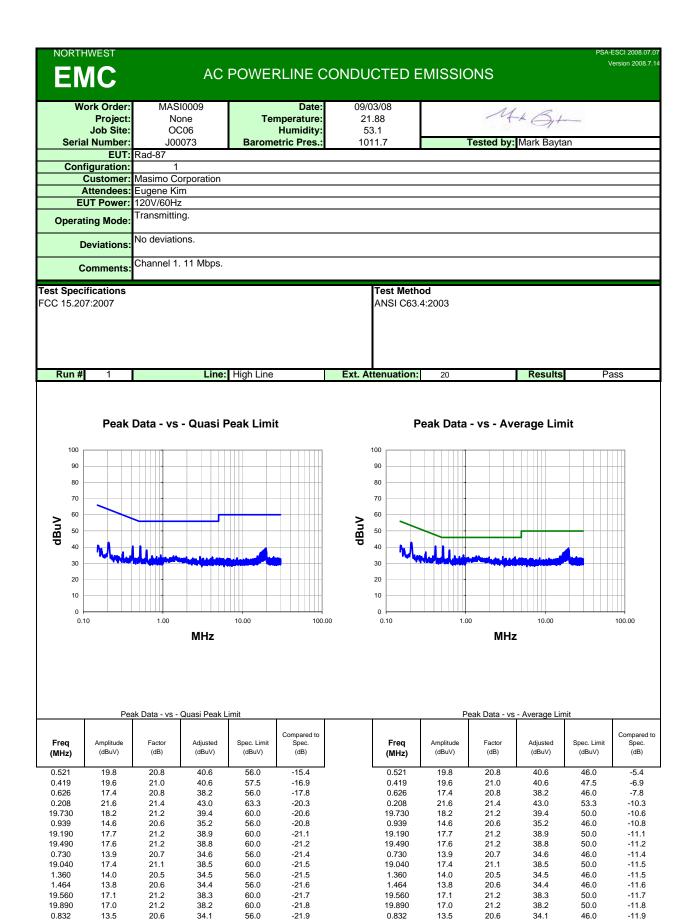
| MEASUREMENT BANDWIDTHS | | | | | | | |
|------------------------|--------------------|----------------------------|---------------------------------|--------------|--|--|--|
| Frequ | iency Range | Peak Data | Quasi-Peak Data | Average Data | | | |
| | (MHz) | (kHz) | (kHz) | (kHz) | | | |
| 0. | 01 - 0.15 | 1.0 | 0.2 | 0.2 | | | |
| 0. | 15 - 30.0 | 10.0 | 9.0 | 9.0 | | | |
| 30 | 0.0 - 1000 | 100.0 | 120.0 | 120.0 | | | |
| Ak | ove 1000 | 1000.0 | N/A | 1000.0 | | | |
| Measuremer | nts were made usin | g the bandwidths and detec | ctors specified. No video filto | er was used. | | | |

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50ohm measuring port is terminated by a 50ohm EMI meter or a 50ohm resistive load. All 50ohm measuring ports of the LISN are terminated by 50ohm.



-21.9

-21.9

-22.1

-22.1

-22.2

60.0

56.0

60.0

56.0

56.0

18.420

2.920

18.680

4.168

1.976

17.0

13.5

16.8

13.2

13.2

20.6

21.1

20.7

20.6

38.1

34.1

37.9

33.9

33.8

46.0

50.0

46.0

46.0

-11.9

-12.1

-12.1

-12.2

18.420

2.920

18.680

4.168

1.976

17.0

13.5

16.8

13.2

13.2

21.1

20.6

21.1

20.7

20.6

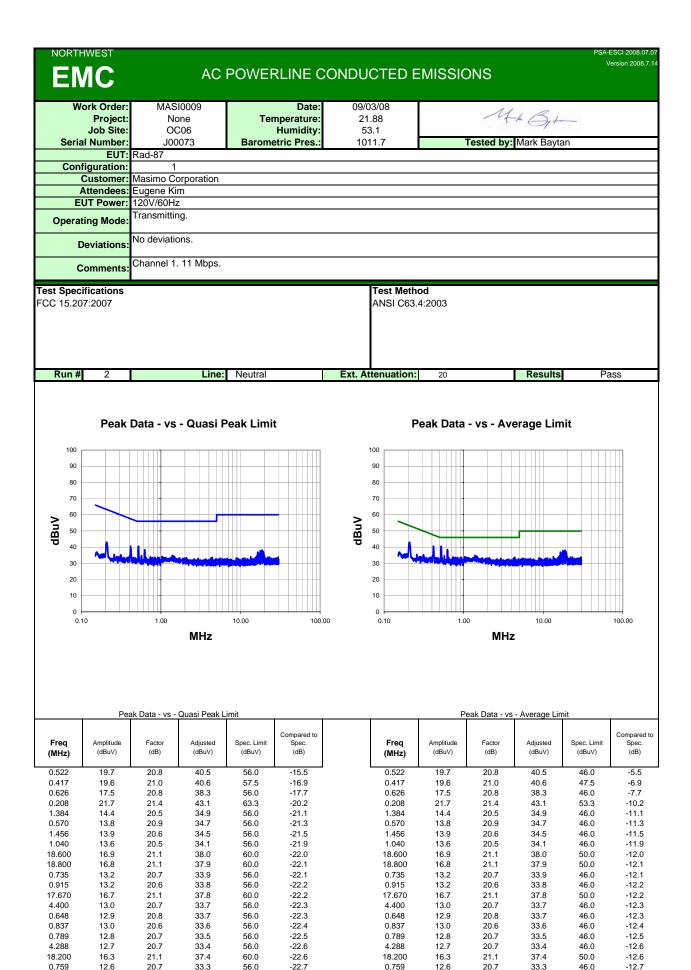
38.1

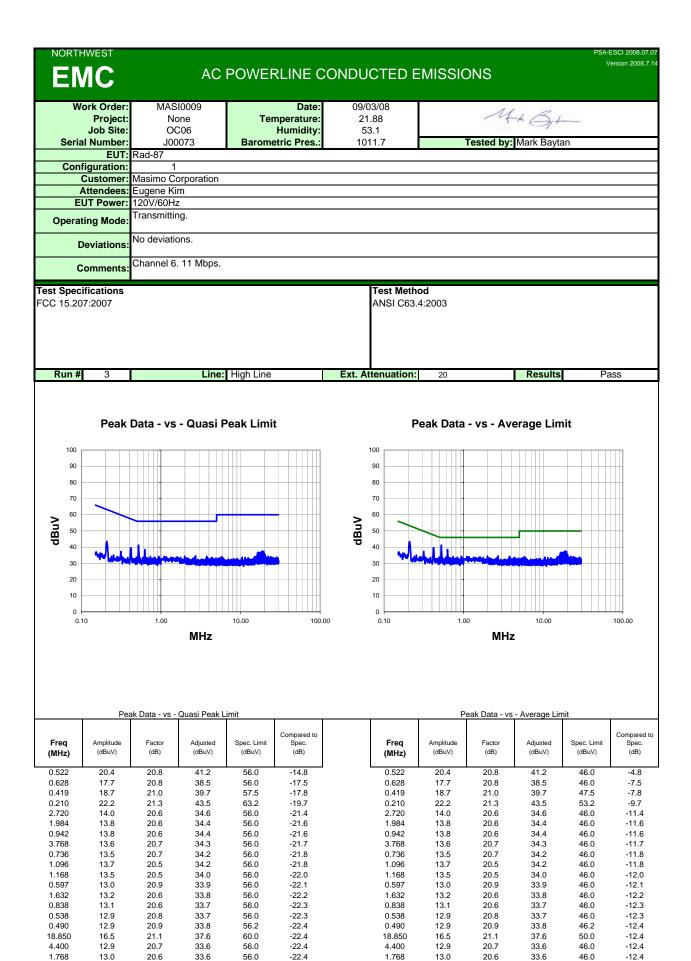
34.1

37.9

33.9

33.8





0.315

16.3

21.1

37.4

59.8

-22.4

0.315

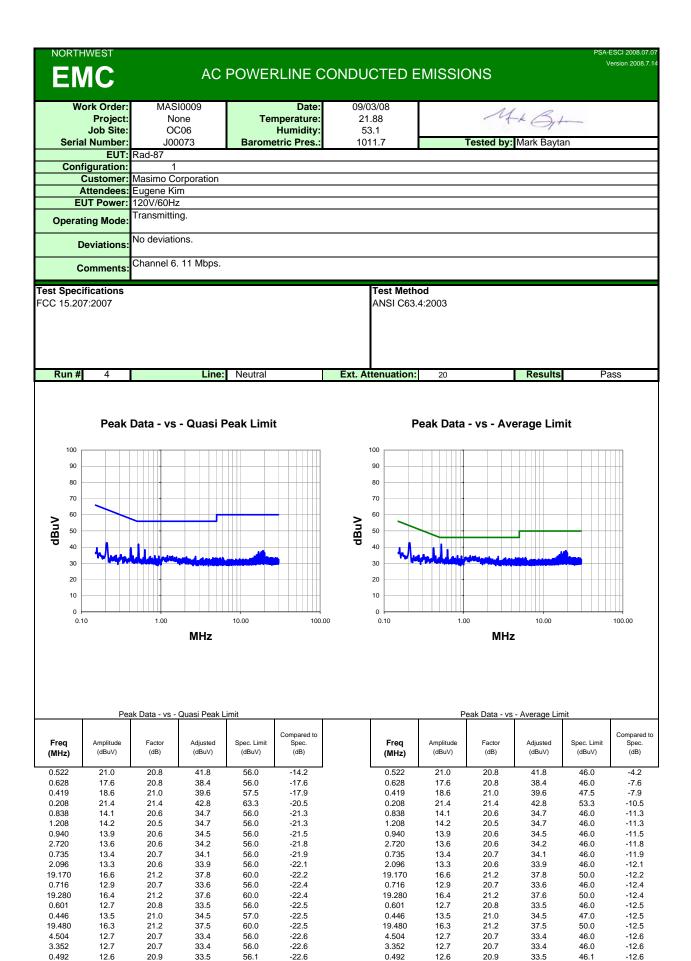
16.3

21.1

37.4

49.8

-12.4



19.060

16.2

21.1

37.3

60.0

-22.7

19.060

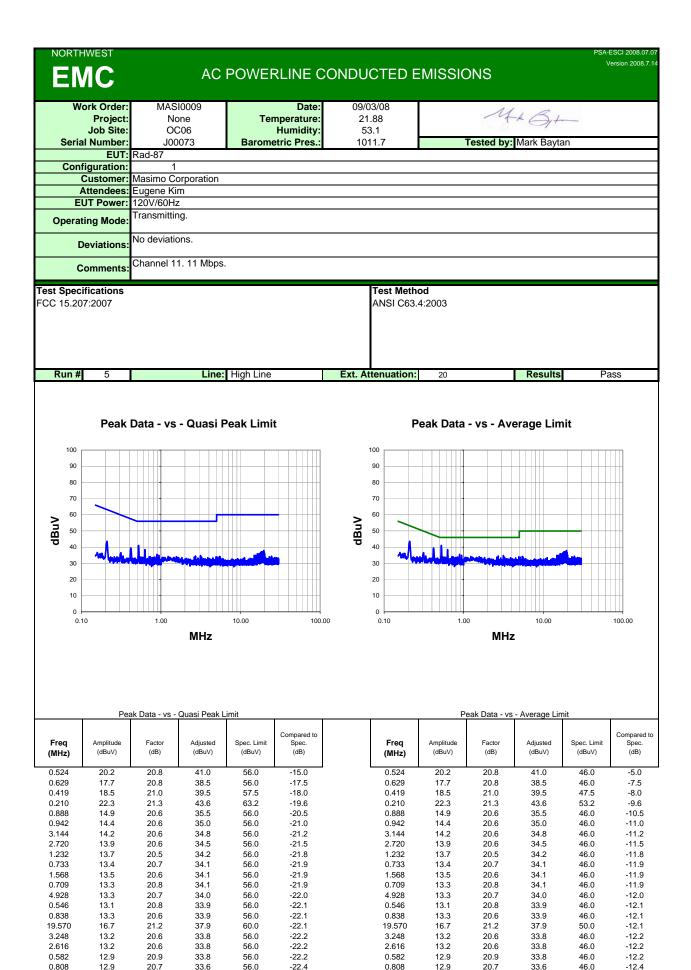
16.2

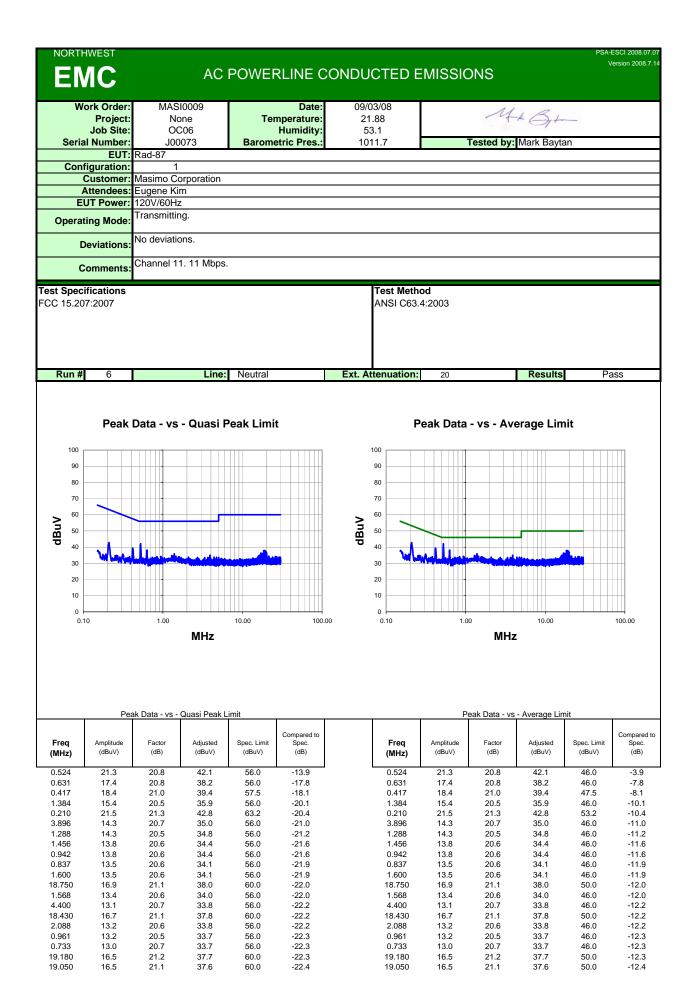
21.1

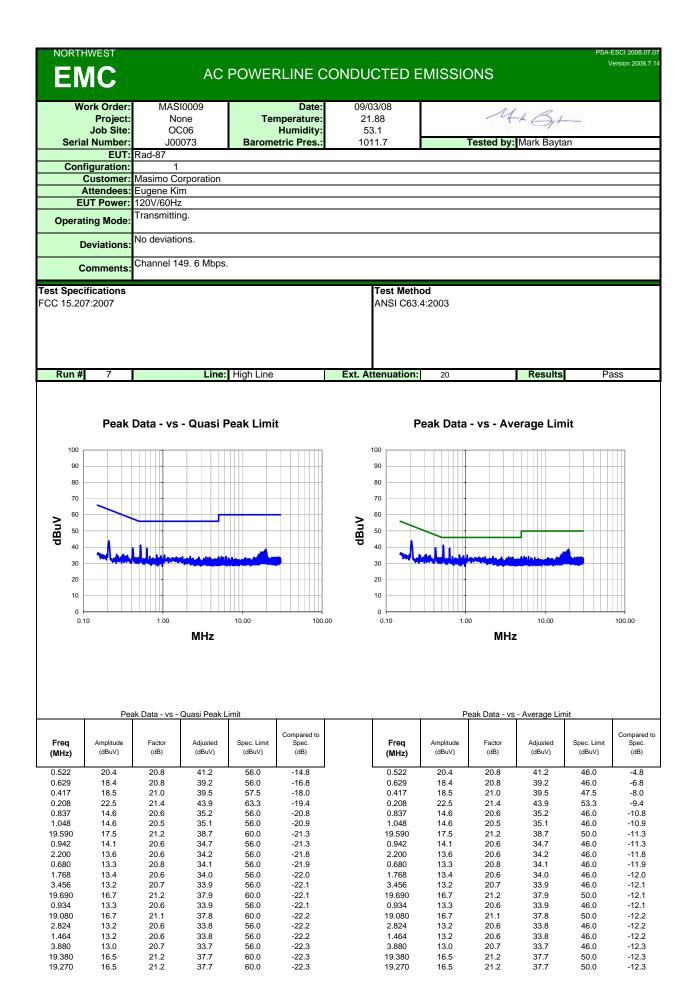
37.3

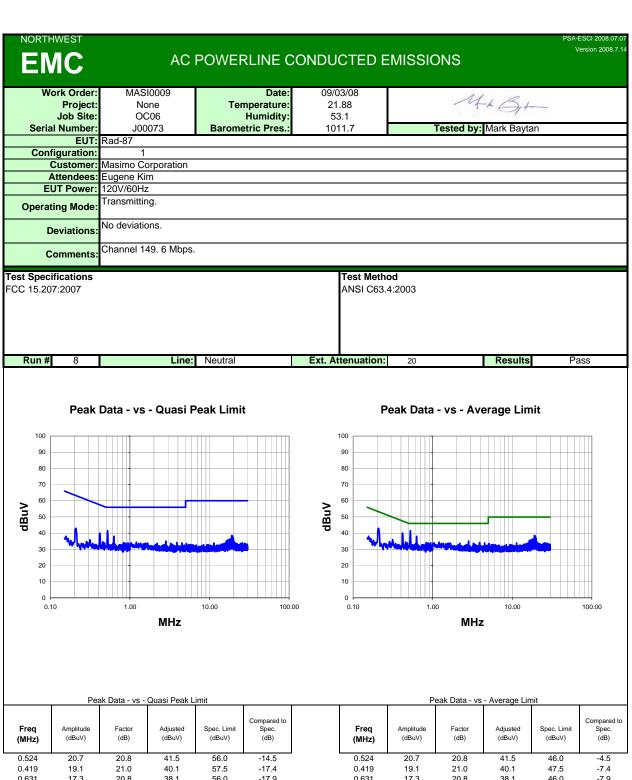
50.0

-12.7

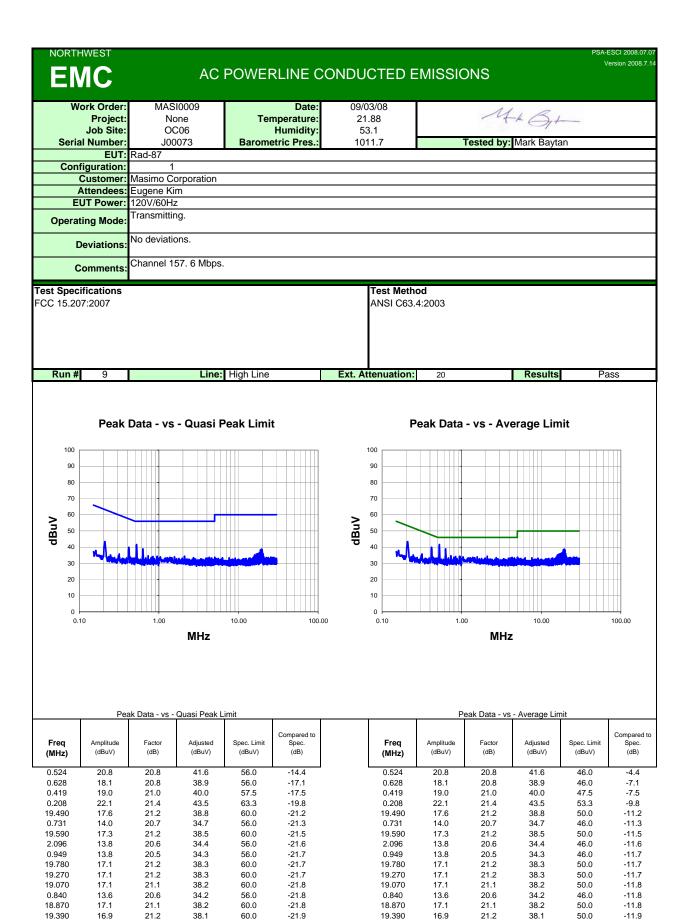








| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) | Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Compared to Spec. (dB) |
|---------------|---------------------|----------------|--------------------|-----------------------|------------------------------|---------------|---------------------|----------------|--------------------|-----------------------|------------------------------|
| 0.524 | 20.7 | 20.8 | 41.5 | 56.0 | -14.5 | 0.524 | 20.7 | 20.8 | 41.5 | 46.0 | -4.5 |
| 0.419 | 19.1 | 21.0 | 40.1 | 57.5 | -17.4 | 0.419 | 19.1 | 21.0 | 40.1 | 47.5 | -7.4 |
| 0.631 | 17.3 | 20.8 | 38.1 | 56.0 | -17.9 | 0.631 | 17.3 | 20.8 | 38.1 | 46.0 | -7.9 |
| 0.210 | 21.7 | 21.3 | 43.0 | 63.2 | -20.2 | 0.210 | 21.7 | 21.3 | 43.0 | 53.2 | -10.2 |
| 2.824 | 14.5 | 20.6 | 35.1 | 56.0 | -20.9 | 2.824 | 14.5 | 20.6 | 35.1 | 46.0 | -10.9 |
| 19.170 | 17.3 | 21.2 | 38.5 | 60.0 | -21.5 | 19.170 | 17.3 | 21.2 | 38.5 | 50.0 | -11.5 |
| 1.200 | 13.9 | 20.5 | 34.4 | 56.0 | -21.6 | 1.200 | 13.9 | 20.5 | 34.4 | 46.0 | -11.6 |
| 18.960 | 17.2 | 21.1 | 38.3 | 60.0 | -21.7 | 18.960 | 17.2 | 21.1 | 38.3 | 50.0 | -11.7 |
| 3.880 | 13.5 | 20.7 | 34.2 | 56.0 | -21.8 | 3.880 | 13.5 | 20.7 | 34.2 | 46.0 | -11.8 |
| 0.833 | 13.5 | 20.6 | 34.1 | 56.0 | -21.9 | 0.833 | 13.5 | 20.6 | 34.1 | 46.0 | -11.9 |
| 0.944 | 13.5 | 20.5 | 34.0 | 56.0 | -22.0 | 0.944 | 13.5 | 20.5 | 34.0 | 46.0 | -12.0 |
| 19.490 | 16.8 | 21.2 | 38.0 | 60.0 | -22.0 | 19.490 | 16.8 | 21.2 | 38.0 | 50.0 | -12.0 |
| 4.504 | 13.2 | 20.7 | 33.9 | 56.0 | -22.1 | 4.504 | 13.2 | 20.7 | 33.9 | 46.0 | -12.1 |
| 19.290 | 16.7 | 21.2 | 37.9 | 60.0 | -22.1 | 19.290 | 16.7 | 21.2 | 37.9 | 50.0 | -12.1 |
| 0.456 | 13.6 | 21.0 | 34.6 | 56.8 | -22.2 | 0.456 | 13.6 | 21.0 | 34.6 | 46.8 | -12.2 |
| 1.672 | 13.2 | 20.6 | 33.8 | 56.0 | -22.2 | 1.672 | 13.2 | 20.6 | 33.8 | 46.0 | -12.2 |
| 3.248 | 13.1 | 20.6 | 33.7 | 56.0 | -22.3 | 3.248 | 13.1 | 20.6 | 33.7 | 46.0 | -12.3 |
| 2.192 | 13.1 | 20.6 | 33.7 | 56.0 | -22.3 | 2.192 | 13.1 | 20.6 | 33.7 | 46.0 | -12.3 |
| 0.881 | 13.1 | 20.6 | 33.7 | 56.0 | -22.3 | 0.881 | 13.1 | 20.6 | 33.7 | 46.0 | -12.3 |
| 0.480 | 13.0 | 20.9 | 33.9 | 56.3 | -22.4 | 0.480 | 13.0 | 20.9 | 33.9 | 46.3 | -12.4 |



19.180

1.568

1.040

0.954

19.890

16.9

13.4

13.5

13.3

16.6

20.6

20.5

20.5

21.2

38.1

34.0

34.0

33.8

37.8

46.0

46.0

46.0

50.0

-12.0

-12.0

-12.2

-12.2

19.180

1.568

1.040

0.954

19.890

16.9

13.4

13.5

13.3

16.6

20.6

20.5

20.5

21.2

38.1

34.0

34.0

33.8

37.8

60.0

56.0

56.0

56.0

60.0

-22.0

-22.0

-22.2

-22.2

