

# 6. Radiated Emission

# **6.1.** Test Equipment

The following test equipments are used during the radiated emission test:

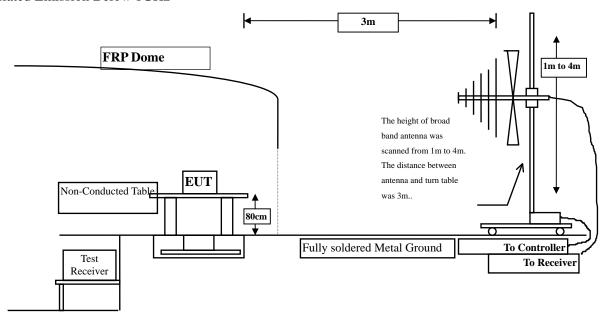
| Test Site |   | Equipment         | Manufacturer    | Model No./Serial No.           | Last Cal.  |
|-----------|---|-------------------|-----------------|--------------------------------|------------|
| ⊠Site # 3 | X | Loop Antenna      | Teseq           | HLA6120 / 26739                | Jul., 2012 |
|           | X | Bilog Antenna     | Schaffner Chase | CBL6112B/2673                  | Sep., 2012 |
|           | X | Horn Antenna      | Schwarzbeck     | BBHA9120D/D305                 | Sep., 2012 |
|           | X | Horn Antenna      | Schwarzbeck     | BBHA9170/208                   | Jul., 2012 |
|           | X | Pre-Amplifier     | QTK             | QTK-AMP-03 / 0003              | May, 2013  |
|           | X | Pre-Amplifier     | QTK             | AP-180C / CHM_0906076          | Sep., 2012 |
|           | X | Pre-Amplifier     | MITEQ           | AMF-4D-180400-45-6P/<br>925975 | Mar, 2013  |
|           | X | Spectrum Analyzer | Agilent         | E4407B / US39440758            | May, 2013  |
|           | X | Test Receiver     | R & S           | ESCS 30/ 825442/018            | Sep., 2012 |
|           | X | Coaxial Cable     | QuieTek         | QTK-CABLE/ CAB5                | Feb., 2013 |
|           | X | Controller        | QuieTek         | QTK-CONTROLLER/ CTRL3          | N/A        |
|           | X | Coaxial Switch    | Anritsu         | MP59B/6200265729               | N/A        |

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. The test instruments marked with "X" are used to measure the final test results.

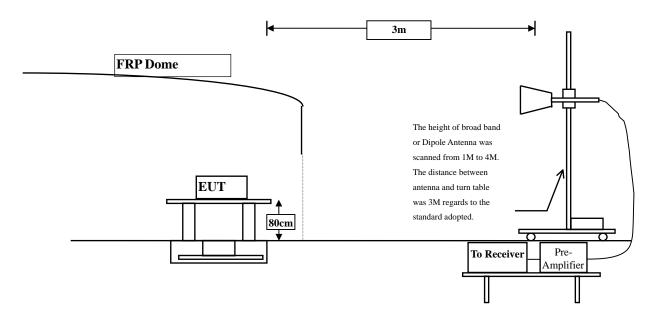
# 6.2. Test Setup

Radiated Emission Below 1GHz





Radiated Emission Above 1GHz



# 6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

| FCC Part 15 Subpart C Paragraph 15,209(a) Limits |                    |                      |  |  |  |  |  |
|--|--------------------|----------------------|--|--|--|--|--|
| Frequency<br>MHz                                 | Field strength     | Measurement distance |  |  |  |  |  |
| WHIZ   | (microvolts/meter) | (meter)              |  |  |  |  |  |
| 0.009-0.490                                      | 2400/F(kHz)        | 300                  |  |  |  |  |  |
| 0.490-1.705                                      | 24000/F(kHz)       | 30                   |  |  |  |  |  |
| 1.705-30   | 30                 | 30                   |  |  |  |  |  |
| 30-88  | 100                | 40                   |  |  |  |  |  |
| 88-216   | 150                | 43.5                 |  |  |  |  |  |
| 216-960  | 200                | 46                   |  |  |  |  |  |
| Above 960  | 500                | 54                   |  |  |  |  |  |

Remarks: E field strength  $(dBuV/m) = 20 \log E$  field strength (uV/m)



#### **6.4.** Test Procedure

The EUT was setup according to ANSI C63.10, 2009 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2009 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 30MHz - 10th Harmonic of fundamental was investigated.

# 6.5. Uncertainty

- ± 3.8 dB below 1GHz
- ± 3.9 dB above 1GHz



### 6.6. Test Result of Radiated Emission

Product : TABLET PC

Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5180MHz)

| Frequency        | Correct | Reading | Measurement | Margin  | Limit  |
|------------------|---------|---------|-------------|---------|--------|
|                  | Factor  | Level   | Level       |         |        |
| MHz              | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal       |         |         |             |         |        |
| Peak Detector:   |         |         |             |         |        |
| 10360.000        | 12.930  | 38.330  | 51.260      | -22.740 | 74.000 |
| 15540.000        | *       | *       | *           | *       | 74.000 |
| 20720.000        | *       | *       | *           | *       | 74.000 |
| 25900.000        | *       | *       | *           | *       | 74.000 |
| 31080.000        | *       | *       | *           | *       | 74.000 |
| 36260.000        | *       | *       | *           | *       | 74.000 |
| Average          |         |         |             |         |        |
| <b>Detector:</b> |         |         |             |         |        |
|                  |         |         |             |         |        |
| Vertical         |         |         |             |         |        |
| Peak Detector:   |         |         |             |         |        |
| 10360.000        | 13.724  | 37.710  | 51.434      | -22.566 | 74.000 |
| 15540.000        | *       | *       | *           | *       | 74.000 |
| 20720.000        | *       | *       | *           | *       | 74.000 |
| 25900.000        | *       | *       | *           | *       | 74.000 |
| 31080.000        | *       | *       | *           | *       | 74.000 |
| 36260.000        | *       | *       | *           | *       | 74.000 |
| Average          |         |         |             |         |        |
| <b>Detector:</b> |         |         |             |         |        |
|                  |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5220MHz)

| Frequency             | Correct<br>Factor | Reading<br>Level | Measurement<br>Level | Margin  | Limit  |
|-----------------------|-------------------|------------------|----------------------|---------|--------|
| MHz                   | dB                | dBuV             | dBuV/m               | dB      | dBuV/m |
| Horizontal            |                   |                  |                      |         |        |
| <b>Peak Detector:</b> |                   |                  |                      |         |        |
| 10440.000             | 13.322            | 37.200           | 50.522               | -23.478 | 74.000 |
| 15660.000             | *                 | *                | *                    | *       | 74.000 |
| 20880.000             | *                 | *                | *                    | *       | 74.000 |
| 26100.000             | *                 | *                | *                    | *       | 74.000 |
| Average               |                   |                  |                      |         |        |
| <b>Detector:</b>      |                   |                  |                      |         |        |
|                       |                   |                  |                      |         |        |
|                       |                   |                  |                      |         |        |
| Vertical              |                   |                  |                      |         |        |
| Peak Detector:        |                   |                  |                      |         |        |
| 10440.000             | 14.245            | 38.100           | 52.345               | -21.655 | 74.000 |
| 15660.000             | *                 | *                | *                    | *       | 74.000 |
| 20880.000             | *                 | *                | *                    | *       | 74.000 |
| 26100.000             | *                 | *                | *                    | *       | 74.000 |
| Average               |                   |                  |                      |         |        |
| <b>Detector:</b>      |                   |                  |                      |         |        |
|                       |                   |                  |                      |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5240MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 10480.000             | 13.693  | 36.280  | 49.974      | -24.026 | 74.000 |
| 15720.000             | *       | *       | *           | *       | 74.000 |
| 20960.000             | *       | *       | *           | *       | 74.000 |
| 26200.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10480.000             | 14.620  | 37.250  | 51.871      | -22.129 | 74.000 |
| 15720.000             | *       | *       | *           | *       | 74.000 |
| 20960.000             | *       | *       | *           | *       | 74.000 |
| 26200.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss -Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5260MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 10520.000             | 14.015  | 36.440  | 50.455      | -23.545 | 74.000 |
| 15780.000             | *       | *       | *           | *       | 74.000 |
| 21040.000             | *       | *       | *           | *       | 74.000 |
| 26300.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10520.000             | 14.818  | 37.340  | 52.158      | -21.842 | 74.000 |
| 15780.000             | *       | *       | *           | *       | 74.000 |
| 21040.000             | *       | *       | *           | *       | 74.000 |
| 26300.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5300MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10600.000             | 14.550  | 36.110  | 50.659      | -23.341 | 74.000 |
| 15900.000             | *       | *       | *           | *       | 74.000 |
| 21200.000             | *       | *       | *           | *       | 74.000 |
| 26500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10600.000             | 14.881  | 37.160  | 52.041      | -21.959 | 74.000 |
| 15900.000             | *       | *       | *           | *       | 74.000 |
| 21200.000             | *       | *       | *           | *       | 74.000 |
| 26500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



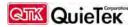
Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5320MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10640.000             | 14.690  | 36.100  | 50.790      | -23.210 | 74.000 |
| 15960.000             | *       | *       | *           | *       | 74.000 |
| 21280.000             | *       | *       | *           | *       | 74.000 |
| 26600.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 10640.000             | 15.083  | 37.450  | 52.533      | -21.467 | 74.000 |
| 15960.000             | *       | *       | *           | *       | 74.000 |
| 21280.000             | *       | *       | *           | *       | 74.000 |
| 26600.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5500MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11000.000             | 16.399  | 36.130  | 52.529      | -21.471 | 74.000 |
| 16500.000             | *       | *       | *           | *       | 74.000 |
| 22000.000             | *       | *       | *           | *       | 74.000 |
| 27500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 11000.000             | 17.132  | 36.800  | 53.932      | -20.068 | 74.000 |
| 16500.000             | *       | *       | *           | *       | 74.000 |
| 22000.000             | *       | *       | *           | *       | 74.000 |
| 27500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



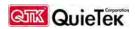
Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5580MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11160.000             | 16.664  | 35.450  | 52.115      | -21.885 | 74.000 |
| 16800.000             | *       | *       | *           | *       | 74.000 |
| 22400.000             | *       | *       | *           | *       | 74.000 |
| 28000.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 11160.000             | 17.643  | 35.960  | 53.603      | -20.397 | 74.000 |
| 16800.000             | *       | *       | *           | *       | 74.000 |
| 22400.000             | *       | *       | *           | *       | 74.000 |
| 28000.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



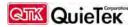
Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5700MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11400.000             | 16.530  | 35.200  | 51.731      | -22.269 | 74.000 |
| 17100.000             | *       | *       | *           | *       | 74.000 |
| 22800.000             | *       | *       | *           | *       | 74.000 |
| 28500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 11400.000             | 17.138  | 36.700  | 53.838      | -20.162 | 74.000 |
| 17100.000             | *       | *       | *           | *       | 74.000 |
| 22800.000             | *       | *       | *           | *       | 74.000 |
| 28500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5180MHz)

| Frequency             | Correct<br>Factor | Reading<br>Level | Measurement<br>Level | Margin  | Limit  |
|-----------------------|-------------------|------------------|----------------------|---------|--------|
| MHz                   | dB                | dBuV             | dBuV/m               | dB      | dBuV/m |
| Horizontal            |                   |                  |                      |         |        |
| <b>Peak Detector:</b> |                   |                  |                      |         |        |
| 10360.000             | 12.930            | 36.260           | 49.190               | -24.810 | 74.000 |
| 15540.000             | *                 | *                | *                    | *       | 74.000 |
| 20720.000             | *                 | *                | *                    | *       | 74.000 |
| 25900.000             | *                 | *                | *                    | *       | 74.000 |
| Average Detector:     |                   |                  |                      |         |        |
| Detector.             |                   |                  |                      |         |        |
|                       |                   |                  |                      |         |        |
| Vertical              |                   |                  |                      |         |        |
| <b>Peak Detector:</b> |                   |                  |                      |         |        |
| 10360.000             | 13.724            | 37.850           | 51.574               | -22.426 | 74.000 |
| 15540.000             | *                 | *                | *                    | *       | 74.000 |
| 20720.000             | *                 | *                | *                    | *       | 74.000 |
| 25900.000             | *                 | *                | *                    | *       | 74.000 |
| Average               |                   |                  |                      |         |        |
| <b>Detector:</b>      |                   |                  |                      |         |        |
|                       |                   |                  |                      |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5220MHz)

| Frequency             | Correct<br>Factor | Reading<br>Level | Measurement<br>Level | Margin  | Limit     |
|-----------------------|-------------------|------------------|----------------------|---------|-----------|
| MHz                   | dB                | dBuV             | dBuV/m               | dB      | dBuV/m    |
| -                     | uБ                | ubu v            | dDu V/III            | uБ      | ubu v/III |
| Horizontal            |                   |                  |                      |         |           |
| <b>Peak Detector:</b> |                   |                  |                      |         |           |
| 10440.000             | 13.322            | 35.790           | 49.112               | -24.888 | 74.000    |
| 15660.000             | *                 | *                | *                    | *       | 74.000    |
| 20880.000             | *                 | *                | *                    | *       | 74.000    |
| 26100.000             | *                 | *                | *                    | *       | 74.000    |
| Average               |                   |                  |                      |         |           |
| <b>Detector:</b>      |                   |                  |                      |         |           |
|                       |                   |                  |                      |         |           |
|                       |                   |                  |                      |         |           |
| Vertical              |                   |                  |                      |         |           |
| <b>Peak Detector:</b> |                   |                  |                      |         |           |
| 10440.000             | 14.245            | 36.970           | 51.215               | -22.785 | 74.000    |
| 15660.000             | *                 | *                | *                    | *       | 74.000    |
| 20880.000             | *                 | *                | *                    | *       | 74.000    |
| 26100.000             | *                 | *                | *                    | *       | 74.000    |
| Average               |                   |                  |                      |         |           |
| <b>Detector:</b>      |                   |                  |                      |         |           |
|                       |                   |                  |                      |         |           |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



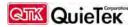
Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5240MHz)

| Frequency             | Correct<br>Factor | Reading<br>Level | Measurement<br>Level | Margin  | Limit  |
|-----------------------|-------------------|------------------|----------------------|---------|--------|
| MHz                   | dB                | dBuV             | dBuV/m               | dB      | dBuV/m |
| Horizontal            |                   |                  |                      |         |        |
| Peak Detector:        |                   |                  |                      |         |        |
| 10480.000             | 13.693            | 35.920           | 49.614               | -24.386 | 74.000 |
| 15720.000             | *                 | *                | *                    | *       | 74.000 |
| 20960.000             | *                 | *                | *                    | *       | 74.000 |
| 26200.000             | *                 | *                | *                    | *       | 74.000 |
| Average Detector:     |                   |                  |                      |         |        |
|                       |                   |                  |                      |         |        |
| Vertical              |                   |                  |                      |         |        |
| <b>Peak Detector:</b> |                   |                  |                      |         |        |
| 10480.000             | 14.620            | 37.300           | 51.921               | -22.079 | 74.000 |
| 15720.000             | *                 | *                | *                    | *       | 74.000 |
| 20960.000             | *                 | *                | *                    | *       | 74.000 |
| 26200.000             | *                 | *                | *                    | *       | 74.000 |
| Average Detector:     |                   |                  |                      |         |        |
|                       |                   |                  |                      |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5260MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10520.000             | 14.015  | 36.500  | 50.515      | -23.485 | 74.000 |
| 15780.000             | *       | *       | *           | *       | 74.000 |
| 21040.000             | *       | *       | *           | *       | 74.000 |
| 26300.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 10520.000             | 14.818  | 37.620  | 52.438      | -21.562 | 74.000 |
| 15780.000             | *       | *       | *           | *       | 74.000 |
| 21040.000             | *       | *       | *           | *       | 74.000 |
| 26300.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5300MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10600.000             | 14.550  | 36.280  | 50.829      | -23.171 | 74.000 |
| 15900.000             | *       | *       | *           | *       | 74.000 |
| 21200.000             | *       | *       | *           | *       | 74.000 |
| 26500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10600.000             | 14.881  | 37.690  | 52.571      | -21.429 | 74.000 |
| 15900.000             | *       | *       | *           | *       | 74.000 |
| 21200.000             | *       | *       | *           | *       | 74.000 |
| 26500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5320MHz)

| Frequency         | Correct<br>Factor | Reading<br>Level | Measurement<br>Level | Margin  | Limit  |
|-------------------|-------------------|------------------|----------------------|---------|--------|
| MHz               | dB                | dBuV             | dBuV/m               | dB      | dBuV/m |
| Horizontal        |                   |                  |                      |         |        |
| Peak Detector:    |                   |                  |                      |         |        |
| 10640.000         | 14.690            | 36.440           | 51.130               | -22.870 | 74.000 |
| 15960.000         | *                 | *                | *                    | *       | 74.000 |
| 21280.000         | *                 | *                | *                    | *       | 74.000 |
| 26600.000         | *                 | *                | *                    | *       | 74.000 |
| Average Detector: |                   |                  |                      |         |        |
|                   |                   |                  |                      |         |        |
| Vertical          |                   |                  |                      |         |        |
| Peak Detector:    |                   |                  |                      |         |        |
| 10640.000         | 15.083            | 37.890           | 52.973               | -21.027 | 74.000 |
| 15960.000         | *                 | *                | *                    | *       | 74.000 |
| 21280.000         | *                 | *                | *                    | *       | 74.000 |
| 26600.000         | *                 | *                | *                    | *       | 74.000 |
| Average Detector: |                   |                  |                      |         |        |
|                   |                   |                  |                      |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5500MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11000.000             | 16.399  | 36.150  | 52.549      | -21.451 | 74.000 |
| 16500.000             | *       | *       | *           | *       | 74.000 |
| 22000.000             | *       | *       | *           | *       | 74.000 |
| 27500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11000.000             | 17.132  | 36.260  | 53.392      | -20.608 | 74.000 |
| 16500.000             | *       | *       | *           | *       | 74.000 |
| 22000.000             | *       | *       | *           | *       | 74.000 |
| 27500.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



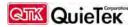
Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5580MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 11160.000             | 16.664  | 35.660  | 52.325      | -21.675 | 74.000 |
| 16800.000             | *       | *       | *           | *       | 74.000 |
| 22400.000             | *       | *       | *           | *       | 74.000 |
| 28000.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11160.000             | 17.643  | 35.930  | 53.573      | -20.427 | 74.000 |
| 16800.000             | *       | *       | *           | *       | 74.000 |
| 22400.000             | *       | *       | *           | *       | 74.000 |
| 28000.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



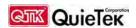
Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5700MHz)

| Frequency        | Correct | Reading | Measurement | Margin  | Limit  |
|------------------|---------|---------|-------------|---------|--------|
|                  | Factor  | Level   | Level       |         |        |
| MHz              | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal       |         |         |             |         | _      |
| Peak Detector:   |         |         |             |         |        |
| 11400.000        | 16.530  | 35.150  | 51.681      | -22.319 | 74.000 |
| 17100.000        | *       | *       | *           | *       | 74.000 |
| 22800.000        | *       | *       | *           | *       | 74.000 |
| 28500.000        | *       | *       | *           | *       | 74.000 |
| Average          |         |         |             |         |        |
| <b>Detector:</b> |         |         |             |         |        |
|                  |         |         |             |         |        |
| Vertical         |         |         |             |         |        |
| Peak Detector:   |         |         |             |         |        |
| 11400.000        | 17.138  | 36.170  | 53.308      | -20.692 | 74.000 |
| 17100.000        | *       | *       | *           | *       | 74.000 |
| 22800.000        | *       | *       | *           | *       | 74.000 |
| 28500.000        | *       | *       | *           | *       | 74.000 |
| Average          |         |         |             |         |        |
| <b>Detector:</b> |         |         |             |         |        |
|                  |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10380.000             | 12.939  | 36.230  | 49.169      | -24.831 | 74.000 |
| 15570.000             | *       | *       | *           | *       | 74.000 |
| 20760.000             | *       | *       | *           | *       | 74.000 |
| 25950.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10380.000             | 13.796  | 37.300  | 51.096      | -22.904 | 74.000 |
| 15570.000             | *       | *       | *           | *       | 74.000 |
| 20760.000             | *       | *       | *           | *       | 74.000 |
| 25950.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5230MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10460.000             | 13.508  | 36.390  | 49.898      | -24.102 | 74.000 |
| 15690.000             | *       | *       | *           | *       | 74.000 |
| 20920.000             | *       | *       | *           | *       | 74.000 |
| 26150.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10460.000             | 14.433  | 37.940  | 52.373      | -21.627 | 74.000 |
| 15690.000             | *       | *       | *           | *       | 74.000 |
| 20920.000             | *       | *       | *           | *       | 74.000 |
| 26150.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5270MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 10540.000             | 14.151  | 36.290  | 50.440      | -23.560 | 74.000 |
| 15810.000             | *       | *       | *           | *       | 74.000 |
| 21080.000             | *       | *       | *           | *       | 74.000 |
| 26350.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10540.000             | 14.829  | 37.420  | 52.248      | -21.752 | 74.000 |
| 15810.000             | *       | *       | *           | *       | 74.000 |
| 21080.000             | *       | *       | *           | *       | 74.000 |
| 26350.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5310MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10620.000             | 14.623  | 35.890  | 50.513      | -23.487 | 74.000 |
| 15930.000             | *       | *       | *           | *       | 74.000 |
| 21240.000             | *       | *       | *           | *       | 74.000 |
| 26550.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 10620.000             | 14.970  | 36.240  | 51.210      | -22.790 | 74.000 |
| 15930.000             | *       | *       | *           | *       | 74.000 |
| 21240.000             | *       | *       | *           | *       | 74.000 |
| 26550.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5510MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11020.000             | 16.474  | 35.680  | 52.153      | -21.847 | 74.000 |
| 15930.000             | *       | *       | *           | *       | 74.000 |
| 21240.000             | *       | *       | *           | *       | 74.000 |
| 26550.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 11020.000             | 17.224  | 36.410  | 53.634      | -20.366 | 74.000 |
| 15930.000             | *       | *       | *           | *       | 74.000 |
| 21240.000             | *       | *       | *           | *       | 74.000 |
| 26550.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5550MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11180.000             | 16.657  | 35.950  | 52.606      | -21.394 | 74.000 |
| 16770.000             | *       | *       | *           | *       | 74.000 |
| 22360.000             | *       | *       | *           | *       | 74.000 |
| 27950.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| Peak Detector:        |         |         |             |         |        |
| 11180.000             | 17.681  | 36.050  | 53.730      | -20.270 | 74.000 |
| 16770.000             | *       | *       | *           | *       | 74.000 |
| 22360.000             | *       | *       | *           | *       | 74.000 |
| 27950.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5670MHz)

| Frequency             | Correct | Reading | Measurement | Margin  | Limit  |
|-----------------------|---------|---------|-------------|---------|--------|
|                       | Factor  | Level   | Level       |         |        |
| MHz                   | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal            |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11340.000             | 16.408  | 35.760  | 52.167      | -21.833 | 74.000 |
| 17010.000             | *       | *       | *           | *       | 74.000 |
| 22680.000             | *       | *       | *           | *       | 74.000 |
| 28350.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |
|                       |         |         |             |         |        |
| Vertical              |         |         |             |         |        |
| <b>Peak Detector:</b> |         |         |             |         |        |
| 11340.000             | 17.167  | 36.030  | 53.197      | -20.803 | 74.000 |
| 17010.000             | *       | *       | *           | *       | 74.000 |
| 22680.000             | *       | *       | *           | *       | 74.000 |
| 28350.000             | *       | *       | *           | *       | 74.000 |
| Average               |         |         |             |         |        |
| <b>Detector:</b>      |         |         |             |         |        |
|                       |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5220MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         | _      |
| <b>Peak Detector</b> |         |         |             |         |        |
| 239.520              | -6.851  | 38.261  | 31.411      | -14.589 | 46.000 |
| 359.800              | -1.680  | 32.331  | 30.651      | -15.349 | 46.000 |
| 480.080              | -0.329  | 35.210  | 34.881      | -11.119 | 46.000 |
| 580.960              | 3.505   | 29.026  | 32.531      | -13.469 | 46.000 |
| 720.640              | 3.511   | 30.842  | 34.353      | -11.647 | 46.000 |
| 961.200              | 6.450   | 26.871  | 33.321      | -20.679 | 54.000 |
|                      |         |         |             |         |        |
| Vertical             |         |         |             |         |        |
| Peak Detector        |         |         |             |         |        |
| 359.800              | -3.810  | 32.331  | 28.521      | -17.479 | 46.000 |
| 400.540              | -5.156  | 30.789  | 25.634      | -20.366 | 46.000 |
| 528.580              | -0.462  | 24.548  | 24.086      | -21.914 | 46.000 |
| 600.360              | -2.833  | 27.969  | 25.136      | -20.864 | 46.000 |
| 749.740              | 2.510   | 28.130  | 30.640      | -15.360 | 46.000 |
| 920.460              | 5.517   | 23.676  | 29.193      | -16.807 | 46.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5300MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 274.440              | -5.718  | 30.574  | 24.856      | -21.144 | 46.000 |
| 359.800              | -1.680  | 32.331  | 30.651      | -15.349 | 46.000 |
| 480.080              | -0.329  | 35.210  | 34.881      | -11.119 | 46.000 |
| 600.360              | 3.977   | 27.969  | 31.946      | -14.054 | 46.000 |
| 749.740              | 3.320   | 28.130  | 31.450      | -14.550 | 46.000 |
| 961.200              | 6.450   | 26.987  | 33.437      | -20.563 | 54.000 |
| Vertical             |         |         |             |         |        |
| Peak Detector        |         |         |             |         |        |
| 299.660              | -6.855  | 34.360  | 27.505      | -18.495 | 46.000 |
| 480.080              | -4.359  | 34.737  | 30.378      | -15.622 | 46.000 |
| 600.360              | -2.833  | 28.748  | 25.915      | -20.085 | 46.000 |
| 720.640              | -0.099  | 31.148  | 31.049      | -14.951 | 46.000 |
| 901.060              | 3.331   | 26.338  | 29.669      | -16.331 | 46.000 |
| 951.500              | 6.621   | 25.952  | 32.573      | -13.427 | 46.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11a-6Mbps) (5580MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 198.780              | -10.661 | 36.325  | 25.664      | -17.836 | 43.500 |
| 359.800              | -1.680  | 29.129  | 27.449      | -18.551 | 46.000 |
| 480.080              | -0.329  | 34.737  | 34.408      | -11.592 | 46.000 |
| 646.920              | 1.793   | 28.599  | 30.392      | -15.608 | 46.000 |
| 749.740              | 3.320   | 27.639  | 30.959      | -15.041 | 46.000 |
| 961.200              | 6.450   | 30.229  | 36.679      | -17.321 | 54.000 |
|                      |         |         |             |         |        |
| Vertical             |         |         |             |         |        |
| Peak Detector        |         |         |             |         |        |
| 198.780              | -8.221  | 36.325  | 28.104      | -15.396 | 43.500 |
| 375.320              | -2.029  | 28.772  | 26.743      | -19.257 | 46.000 |
| 480.080              | -4.359  | 34.737  | 30.378      | -15.622 | 46.000 |
| 613.940              | -1.687  | 28.059  | 26.372      | -19.628 | 46.000 |
| 720.640              | -0.099  | 31.148  | 31.049      | -14.951 | 46.000 |
| 961.200              | 7.260   | 30.229  | 37.489      | -16.511 | 54.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5220MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 105.660              | -6.673  | 28.833  | 22.160      | -21.340 | 43.500 |
| 299.660              | -3.585  | 34.360  | 30.775      | -15.225 | 46.000 |
| 400.540              | -2.276  | 33.333  | 31.057      | -14.943 | 46.000 |
| 600.360              | 3.977   | 28.748  | 32.725      | -13.275 | 46.000 |
| 720.640              | 3.511   | 31.148  | 34.659      | -11.341 | 46.000 |
| 901.060              | 5.591   | 26.338  | 31.929      | -14.071 | 46.000 |
|                      |         |         |             |         |        |
| Vertical             |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 109.540              | -0.418  | 29.979  | 29.561      | -13.939 | 43.500 |
| 299.660              | -6.855  | 34.360  | 27.505      | -18.495 | 46.000 |
| 480.080              | -4.359  | 34.737  | 30.378      | -15.622 | 46.000 |
| 600.360              | -2.833  | 28.748  | 25.915      | -20.085 | 46.000 |
| 749.740              | 2.510   | 27.639  | 30.149      | -15.851 | 46.000 |
| 951.500              | 6.621   | 25.952  | 32.573      | -13.427 | 46.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



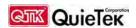
Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5300MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 256.980              | -5.073  | 26.768  | 21.695      | -24.305 | 46.000 |
| 365.620              | -1.329  | 28.007  | 26.678      | -19.322 | 46.000 |
| 499.480              | 0.048   | 28.330  | 28.378      | -17.622 | 46.000 |
| 600.360              | 3.977   | 28.748  | 32.725      | -13.275 | 46.000 |
| 709.000              | 3.458   | 31.690  | 35.148      | -10.852 | 46.000 |
| 961.200              | 6.450   | 30.229  | 36.679      | -17.321 | 54.000 |
|                      |         |         |             |         |        |
| Vertical             |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 128.940              | -4.128  | 30.511  | 26.383      | -17.117 | 43.500 |
| 359.800              | -3.810  | 29.537  | 25.727      | -20.273 | 46.000 |
| 499.480              | -0.852  | 28.330  | 27.478      | -18.522 | 46.000 |
| 613.940              | -1.687  | 28.059  | 26.372      | -19.628 | 46.000 |
| 804.060              | 3.587   | 24.417  | 28.004      | -17.996 | 46.000 |
| 968.960              | 8.191   | 24.938  | 33.129      | -20.871 | 54.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



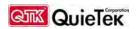
Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) (5580MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         | _      |
| <b>Peak Detector</b> |         |         |             |         |        |
| 249.220              | -6.014  | 28.416  | 22.402      | -23.598 | 46.000 |
| 375.320              | -1.209  | 28.772  | 27.563      | -18.437 | 46.000 |
| 528.580              | 1.848   | 27.301  | 29.149      | -16.851 | 46.000 |
| 646.920              | 1.793   | 28.599  | 30.392      | -15.608 | 46.000 |
| 804.060              | 5.027   | 24.417  | 29.444      | -16.556 | 46.000 |
| 932.100              | 6.922   | 22.889  | 29.811      | -16.189 | 46.000 |
|                      |         |         |             |         |        |
| Vertical             |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 61.040               | -4.316  | 28.554  | 24.238      | -15.762 | 40.000 |
| 359.800              | -3.810  | 29.537  | 25.727      | -20.273 | 46.000 |
| 499.480              | -0.852  | 28.330  | 27.478      | -18.522 | 46.000 |
| 600.360              | -2.833  | 28.748  | 25.915      | -20.085 | 46.000 |
| 749.740              | 2.510   | 27.639  | 30.149      | -15.851 | 46.000 |
| 951.500              | 6.621   | 25.952  | 32.573      | -13.427 | 46.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5190MHz)

| Frequency     | Correct | Reading | Measurement | Margin  | Limit  |
|---------------|---------|---------|-------------|---------|--------|
|               | Factor  | Level   | Level       |         |        |
| MHz           | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal    |         |         |             |         |        |
| Peak Detector |         |         |             |         |        |
| 198.780       | -10.661 | 31.952  | 21.291      | -22.209 | 43.500 |
| 299.660       | -3.585  | 31.536  | 27.951      | -18.049 | 46.000 |
| 400.540       | -2.276  | 30.029  | 27.753      | -18.247 | 46.000 |
| 580.960       | 3.505   | 27.766  | 31.271      | -14.729 | 46.000 |
| 709.000       | 3.458   | 33.273  | 36.731      | -9.269  | 46.000 |
| 901.060       | 5.591   | 24.293  | 29.884      | -16.116 | 46.000 |
|               |         |         |             |         |        |
| Vertical      |         |         |             |         |        |
| Peak Detector |         |         |             |         |        |
| 198.780       | -8.221  | 31.952  | 23.731      | -19.769 | 43.500 |
| 359.800       | -3.810  | 32.386  | 28.576      | -17.424 | 46.000 |
| 480.080       | -4.359  | 35.832  | 31.473      | -14.527 | 46.000 |
| 613.940       | -1.687  | 24.917  | 23.230      | -22.770 | 46.000 |
| 749.740       | 2.510   | 28.653  | 31.163      | -14.837 | 46.000 |
| 924.340       | 5.550   | 23.373  | 28.923      | -17.077 | 46.000 |
|               |         |         |             |         |        |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5270MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         |        |
| Peak Detector        |         |         |             |         |        |
| 55.220               | -13.109 | 33.179  | 20.070      | -19.930 | 40.000 |
| 239.520              | -6.851  | 37.166  | 30.316      | -15.684 | 46.000 |
| 400.540              | -2.276  | 30.029  | 27.753      | -18.247 | 46.000 |
| 580.960              | 3.505   | 27.766  | 31.271      | -14.729 | 46.000 |
| 689.600              | 3.628   | 31.501  | 35.129      | -10.871 | 46.000 |
| 918.520              | 6.396   | 24.124  | 30.520      | -15.480 | 46.000 |
|                      |         |         |             |         |        |
| Vertical             |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 55.220               | -4.699  | 33.179  | 28.480      | -11.520 | 40.000 |
| 113.420              | -1.849  | 29.149  | 27.300      | -16.200 | 43.500 |
| 499.480              | -0.852  | 28.490  | 27.638      | -18.362 | 46.000 |
| 600.360              | -2.833  | 25.472  | 22.639      | -23.361 | 46.000 |
| 720.640              | -0.099  | 31.048  | 30.949      | -15.051 | 46.000 |
| 961.200              | 7.260   | 28.334  | 35.594      | -18.406 | 54.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



Product : TABLET PC

Test Item : General Radiated Emission

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) (5550MHz)

| Frequency            | Correct | Reading | Measurement | Margin  | Limit  |
|----------------------|---------|---------|-------------|---------|--------|
|                      | Factor  | Level   | Level       |         |        |
| MHz                  | dB      | dBuV    | dBuV/m      | dB      | dBuV/m |
| Horizontal           |         |         |             |         |        |
| <b>Peak Detector</b> |         |         |             |         |        |
| 249.220              | -6.014  | 30.221  | 24.207      | -21.793 | 46.000 |
| 365.620              | -1.329  | 28.717  | 27.388      | -18.612 | 46.000 |
| 528.580              | 1.848   | 32.961  | 34.809      | -11.191 | 46.000 |
| 600.360              | 3.977   | 25.472  | 29.449      | -16.551 | 46.000 |
| 709.000              | 3.458   | 33.273  | 36.731      | -9.269  | 46.000 |
| 961.200              | 6.450   | 28.334  | 34.784      | -19.216 | 54.000 |
|                      |         |         |             |         |        |
| Vertical             |         |         |             |         |        |
| Peak Detector        |         |         |             |         |        |
| 109.540              | -0.418  | 27.712  | 27.294      | -16.206 | 43.500 |
| 249.220              | -7.634  | 30.221  | 22.587      | -23.413 | 46.000 |
| 365.620              | -2.179  | 28.717  | 26.538      | -19.462 | 46.000 |
| 499.480              | -0.852  | 28.490  | 27.638      | -18.362 | 46.000 |
| 689.600              | 2.538   | 31.501  | 34.039      | -11.961 | 46.000 |
| 961.200              | 7.260   | 28.334  | 35.594      | -18.406 | 54.000 |

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



### 7. Band Edge

## 7.1. Test Equipment

#### **RF** Conducted Measurement

The following test equipments are used during the band edge tests:

|   | Equipment         | Manufacturer | Model No./Serial No. | Last Cal.  |
|---|-------------------|--------------|----------------------|------------|
|   | Spectrum Analyzer | R&S          | FSP40 / 100170       | Jun, 2011  |
|   | Spectrum Analyzer | Agilent      | E4407B / US39440758  | Jun, 2011  |
| X | Spectrum Analyzer | Agilent      | N9010A / MY48030495  | Apr., 2012 |

#### Note:

- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

#### **RF Radiated Measurement:**

The following test equipments are used during the band edge tests:

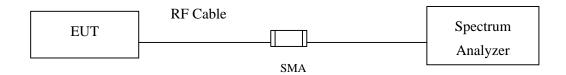
| Test Site |                 | Equipment         | Manufacturer                         | Model No./Serial No.  | Last Cal.  |
|-----------|-----------------|-------------------|--------------------------------------|-----------------------|------------|
| ⊠Site # 3 |                 | Bilog Antenna     | Schaffner Chase                      | CBL6112B/2673         | Sep., 2012 |
|           | X               | Horn Antenna      | Schwarzbeck                          | BBHA9120D/D305        | Sep., 2012 |
|           |                 | Horn Antenna      | Schwarzbeck                          | BBHA9170/208          | Jul., 2012 |
|           |                 | Pre-Amplifier     | QTK                                  | QTK-AMP-03 / 0003     | May, 2013  |
|           | X Pre-Amplifier |                   | QTK                                  | AP-180C / CHM_0906076 | Sep., 2012 |
|           | Pre-Amplifier   |                   | MITEQ AMF-4D-180400-45-6P/<br>925975 |                       | Mar, 2013  |
|           | X               | Spectrum Analyzer | Agilent                              | E4407B / US39440758   | May, 2013  |
|           |                 | Test Receiver     | R & S                                | ESCS 30/ 825442/018   | Sep., 2012 |
|           | X               | Coaxial Cable     | QuieTek                              | QTK-CABLE/ CAB5       | Feb., 2013 |
|           | X               | Controller        | QuieTek                              | QTK-CONTROLLER/ CTRL3 | N/A        |
|           | X               | Coaxial Switch    | Anritsu                              | MP59B/6200265729      | N/A        |

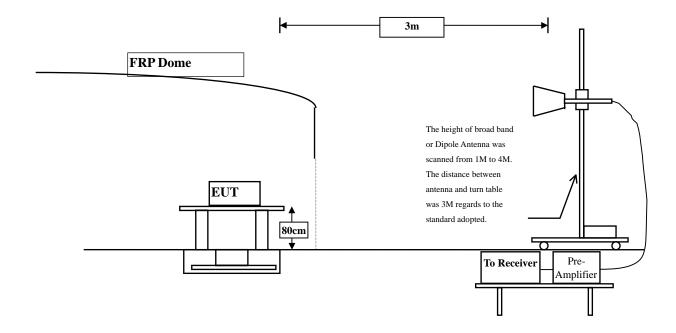
- 1. All instruments are calibrated every one year.
- 2. The test instruments marked by "X" are used to measure the final test results.



## 7.2. Test Setup

### **RF Conducted Measurement**







#### 7.3. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

| FCC Part 15 Subpart C Paragraph 15.209 Limits |          |           |  |  |  |  |  |
|---|----------|-----------|--|--|--|--|--|
| Frequency<br>MHz                              | uV/m @3m | dBuV/m@3m |  |  |  |  |  |
| 30-88   | 100      | 40        |  |  |  |  |  |
| 88-216  | 150      | 43.5      |  |  |  |  |  |
| 216-960                                       | 200      | 46        |  |  |  |  |  |
| Above 960                                     | 500      | 54        |  |  |  |  |  |

- Remarks: 1. RF Voltage  $(dBuV) = 20 \log RF Voltage (uV)$ 
  - 2. In the Above Table, the tighter limit applies at the band edges.
  - 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

#### 7.4. **Test Procedure**

emission level.

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2009 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

#### 7.5. Uncertainty

- ± 3.8 dB below 1GHz
- ± 3.9 dB above 1GHz



### 7.6. Test Result of Band Edge

Product : TABLET PC
Test Item : Band Edge Data
Test Site : No.3 OATS

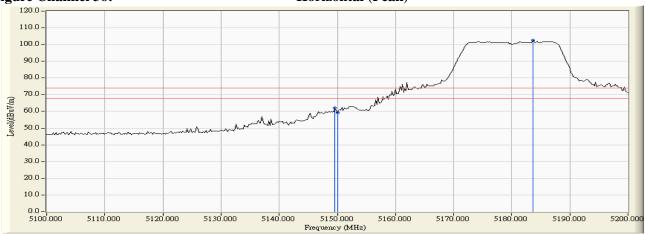
Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36

### RF Radiated Measurement (Horizontal):

| Channel No.  | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
|              | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 36 (Peak)    | 5149.600  | 3.342          | 58.883        | 62.225         | 74.00      | 54.00         | Pass   |
| 36 (Peak)    | 5150.000  | 3.340          | 55.720        | 59.060         | 74.00      | 54.00         | Pass   |
| 36 (Peak)    | 5183.600  | 3.221          | 99.304        | 102.525        |            |               | Pass   |
| 36 (Average) | 5150.000  | 3.340          | 39.491        | 42.831         | 74.00      | 54.00         | Pass   |
| 36 (Average) | 5186.800  | 3.210          | 88.766        | 91.976         |            |               | Pass   |

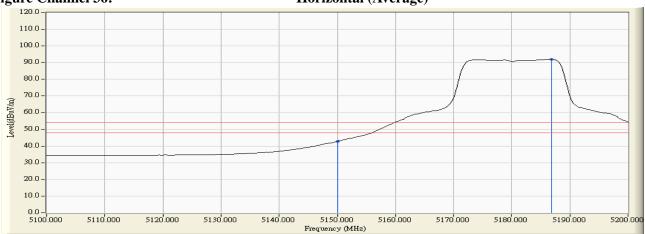
#### **Figure Channel 36:**

#### Horizontal (Peak)



#### **Figure Channel 36:**

### **Horizontal (Average)**



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



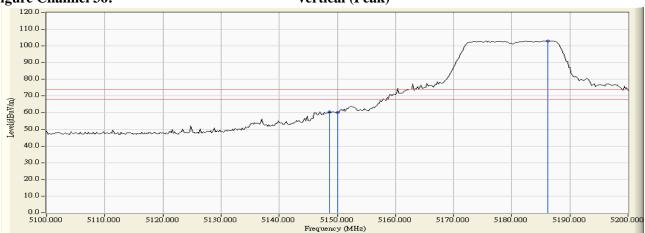
Test Mode : Mode 1: Transmit (802.11a-6Mbps)-Channel 36

### RF Radiated Measurement (Vertical):

|              | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit |        |
|--------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
| Channel No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Result |
| 36 (Peak)    | 5148.600  | 5.256          | 55.158        | 60.414                | 74.00      | 54.00         | Pass   |
| 36 (Peak)    | 5150.000  | 5.260          | 54.971        | 60.231                | 74.00      | 54.00         | Pass   |
| 36 (Peak)    | 5186.200  | 5.360          | 97.708        | 103.067               |            |               | Pass   |
| 36 (Average) | 5150.000  | 5.260          | 38.468        | 43.728                | 74.00      | 54.00         | Pass   |
| 36 (Average) | 5186.800  | 5.360          | 88.032        | 93.393                |            |               | Pass   |

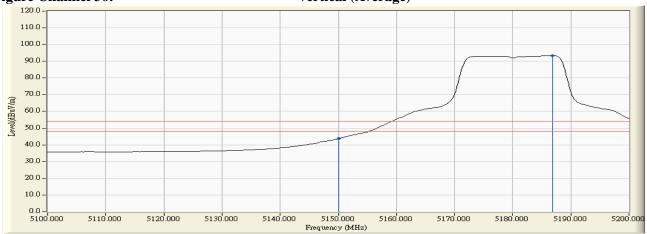


### Vertical (Peak)



#### **Figure Channel 36:**

#### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



**TABLET PC** Product Test Item Band Edge Data Test Site No.3 OATS

Test Mode Mode 1: Transmit (802.11a-6Mbps) -Channel 64

#### **RF Radiated Measurement (Horizontal):**

| Channel No.  | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
|              | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Result |
| 64 (Peak)    | 5314.400  | 3.831          | 100.776       | 104.606        | -          |               | Pass   |
| 64 (Peak)    | 5350.000  | 3.716          | 52.225        | 55.942         | 74.00      | 54.00         | Pass   |
| 64 (Peak)    | 5350.400  | 3.714          | 54.003        | 57.718         | 74.00      | 54.00         | Pass   |
| 64 (Average) | 5314.000  | 3.832          | 90.870        | 94.702         |            |               | Pass   |
| 64 (Average) | 5350.000  | 3.716          | 38.624        | 42.341         | 74.00      | 54.00         | Pass   |

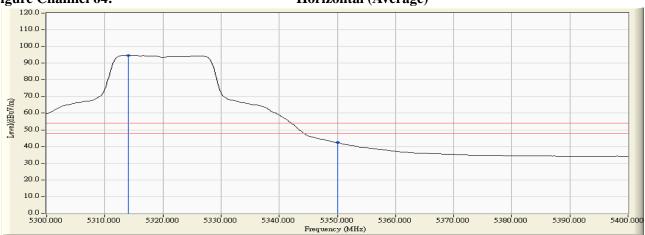
#### **Figure Channel 64:**

#### Horizontal (Peak)



#### **Figure Channel 64:**

### Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. 1.
- Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection.



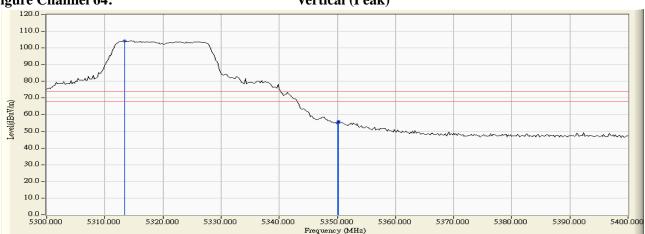
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 64

#### **RF Radiated Measurement (Vertical):**

| Channel No.  | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
| Chamilei No. | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 64 (Peak)    | 5313.400  | 5.738          | 98.473        | 104.211               |            |               | Pass   |
| 64 (Peak)    | 5350.000  | 5.691          | 49.395        | 55.087                | 74.00      | 54.00         | Pass   |
| 64 (Peak)    | 5350.200  | 5.691          | 50.179        | 55.870                | 74.00      | 54.00         | Pass   |
| 64 (Average) | 5313.200  | 5.738          | 88.557        | 94.295                |            |               | Pass   |
| 64 (Average) | 5350.000  | 5.691          | 35.520        | 41.212                | 74.00      | 54.00         | Pass   |

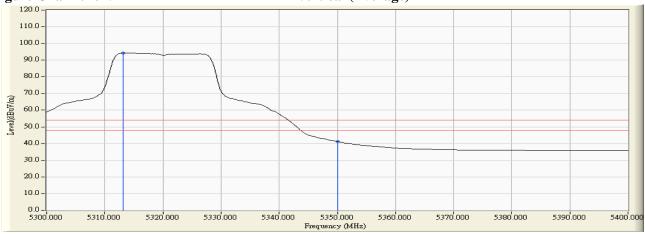


### Vertical (Peak)



#### Figure Channel 64:

#### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



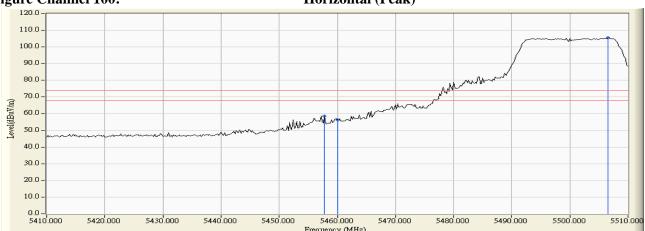
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100

### RF Radiated Measurement (Horizontal):

| Channel No.   | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit | Result |
|---------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
|               | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Resuit |
| 100 (Peak)    | 5457.800  | 4.325          | 54.214        | 58.538                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5460.000  | 4.354          | 51.798        | 56.152                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5506.600  | 4.837          | 100.548       | 105.384               |            |               | Pass   |
| 100 (Average) | 5460.000  | 4.354          | 34.792        | 39.146                | 74.00      | 54.00         | Pass   |
| 100 (Average) | 5506.600  | 4.837          | 90.532        | 95.368                |            |               | Pass   |

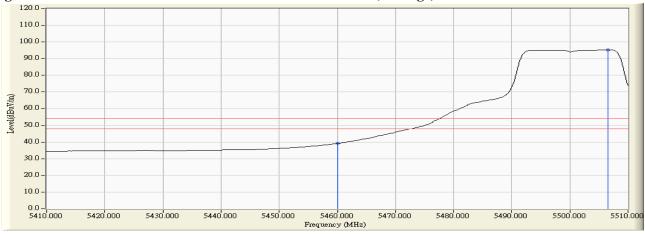
#### Figure Channel 100:

#### Horizontal (Peak)

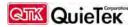


#### **Figure Channel 100:**

#### **Horizontal (Average)**



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



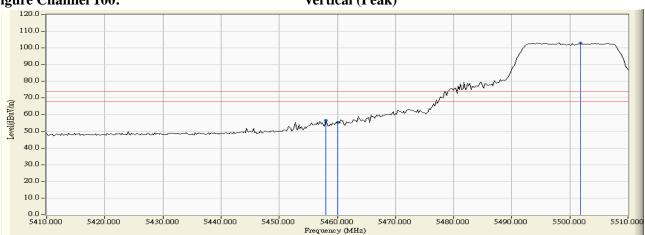
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100

#### **RF Radiated Measurement (Vertical):**

|               |           | , ,            |               |                       |            |               |        |
|---------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
| Channel No.   | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit | Result |
| Chamilei No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 100 (Peak)    | 5458.000  | 6.027          | 50.592        | 56.619                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5460.000  | 6.041          | 49.391        | 55.432                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5501.800  | 6.281          | 96.822        | 103.102               |            |               | Pass   |
| 100 (Average) | 5460.000  | 6.041          | 32.490        | 38.531                | 74.00      | 54.00         | Pass   |
| 100 (Average) | 5493.400  | 6.255          | 86.428        | 92.683                |            |               | Pass   |

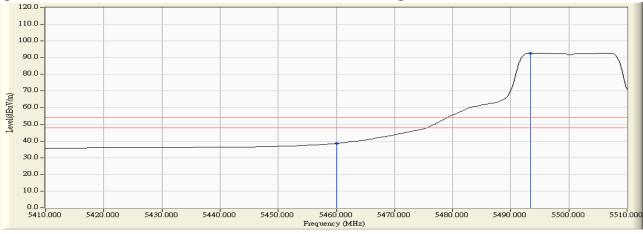
#### Figure Channel 100:

#### Vertical (Peak)



### Figure Channel 100:

### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 100

|            | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit (dBm/m) | Result |
|------------|-----------------|---------------------|---------------------|--------------------------|-------------|---------------|--------|
| Horizontal | 5470.000        | 18.334              | -72.120             | -53.786                  | -26.786     | -27.000       | Pass   |

|          | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit (dBm/m) | Result |
|----------|-----------------|---------------------|---------------------|--------------------------|-------------|---------------|--------|
| Vertical | 5470.000        | 19.335              | -71.730             | -52.395                  | -25.395     | -27.000       | Pass   |



Test Mode : Mode 1: Transmit (802.11a-6Mbps) -Channel 140

|            | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit (dBm/m) | Result |
|------------|-----------------|---------------------|---------------------|--------------------------|-------------|---------------|--------|
| Horizontal | 5725.000        | 18.649              | -73.900             | -55.251                  | -28.251     | -27.000       | Pass   |

|          | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit (dBm/m) | Result |
|----------|-----------------|---------------------|---------------------|--------------------------|-------------|---------------|--------|
| Vertical | 5725.000        | 19.372              | -72.810             | -53.438                  | -26.438     | -27.000       | Pass   |



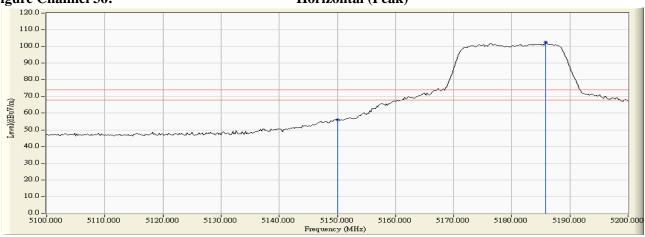
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 36

#### **RF Radiated Measurement (Horizontal):**

| Channel No.  | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
| Chainei No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 36 (Peak)    | 5150.000  | 3.340          | 52.506        | 55.846         | 74.00      | 54.00         | Pass   |
| 36 (Peak)    | 5185.800  | 3.214          | 99.379        | 102.593        |            |               | Pass   |
| 36 (Average) | 5150.000  | 3.340          | 36.825        | 40.165         | 74.00      | 54.00         | Pass   |
| 36 (Average) | 5173.800  | 3.256          | 85.925        | 89.182         |            |               | Pass   |

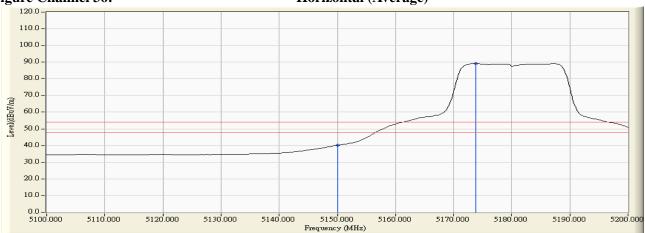
#### Figure Channel 36:

#### Horizontal (Peak)



#### **Figure Channel 36:**

### Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



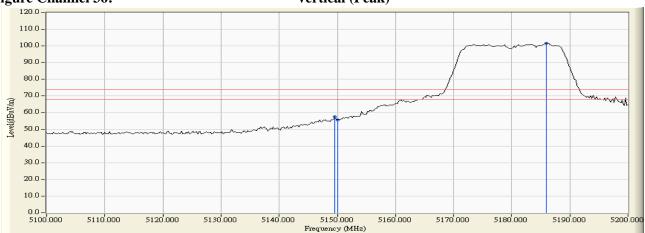
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 36

### RF Radiated Measurement (Vertical):

|              |           | ,              |               |                       |            |               |        |
|--------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
| Channel No.  | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit | Result |
| Chamilei No. | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 36 (Peak)    | 5149.600  | 5.259          | 52.343        | 57.602                | 74.00      | 54.00         | Pass   |
| 36 (Peak)    | 5150.000  | 5.260          | 50.504        | 55.764                | 74.00      | 54.00         | Pass   |
| 36 (Peak)    | 5186.000  | 5.359          | 96.233        | 101.591               |            |               | Pass   |
| 36 (Average) | 5150.000  | 5.260          | 35.294        | 40.554                | 74.00      | 54.00         | Pass   |
| 36 (Average) | 5187.400  | 5.362          | 83.575        | 88.937                |            |               | Pass   |

### Figure Channel 36:

### Vertical (Peak)

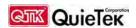


### Figure Channel 36:

#### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



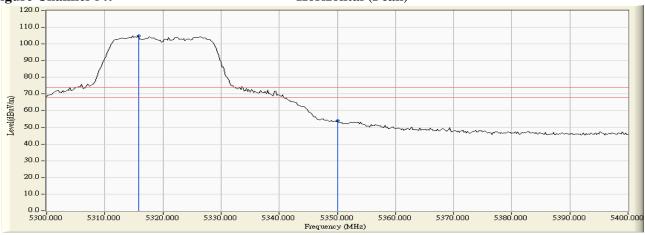
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 64

#### **RF Radiated Measurement (Horizontal):**

| Channel No.  | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
| Chamilei No. | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 64 (Peak)    | 5315.800  | 3.826          | 100.982       | 104.808        |            |               | Pass   |
| 64 (Peak)    | 5350.000  | 3.716          | 50.310        | 54.027         | 74.00      | 54.00         | Pass   |
| 64 (Average) | 5313.800  | 3.832          | 88.263        | 92.095         |            |               | Pass   |
| 64 (Average) | 5350.000  | 3.716          | 36.356        | 40.073         | 74.00      | 54.00         | Pass   |

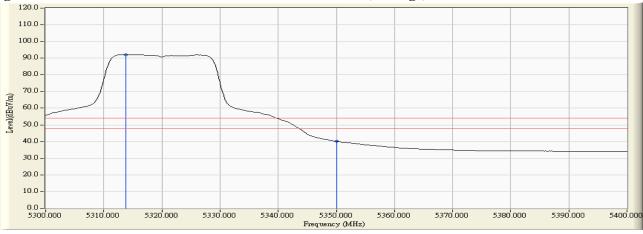
### Figure Channel 64:

### Horizontal (Peak)

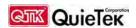


#### Figure Channel 64:

#### **Horizontal (Average)**



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



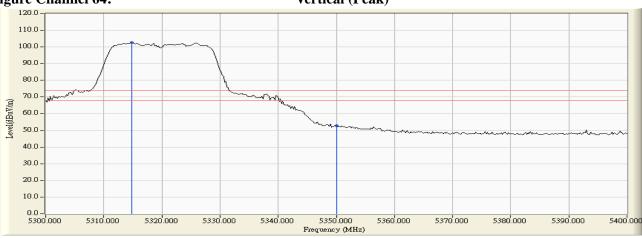
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 64

### RF Radiated Measurement (Vertical):

| Channel No.  | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|--------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 64 (Peak)    | 5314.800        | 5.736               | 97.042               | 102.778                 |                     |                        | Pass   |
| 64 (Peak)    | 5350.000        | 5.691               | 46.941               | 52.633                  | 74.00               | 54.00                  | Pass   |
| 64 (Average) | 5313.600        | 5.738               | 84.329               | 90.066                  |                     |                        | Pass   |
| 64 (Average) | 5350.000        | 5.691               | 33.202               | 38.894                  | 74.00               | 54.00                  | Pass   |

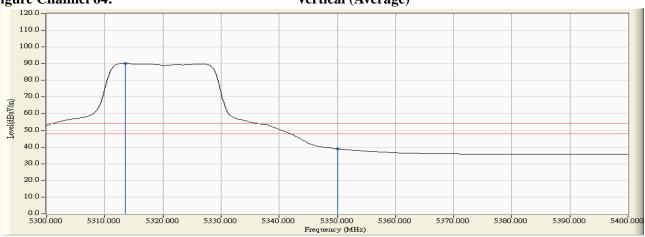


#### Vertical (Peak)



### Figure Channel 64:

### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



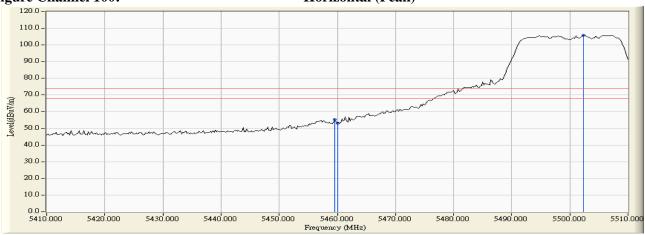
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

#### RF Radiated Measurement (Horizontal):

| Channel No.   | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit | Result |
|---------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
| Chamie No.    | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 100 (Peak)    | 5459.600  | 4.349          | 50.840        | 55.189                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5460.000  | 4.354          | 48.875        | 53.229                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5502.400  | 4.831          | 100.935       | 105.766               |            |               | Pass   |
| 100 (Average) | 5460.000  | 4.354          | 34.499        | 38.853                | 74.00      | 54.00         | Pass   |
| 100 (Average) | 5507.200  | 4.831          | 88.161        | 92.992                |            |               | Pass   |

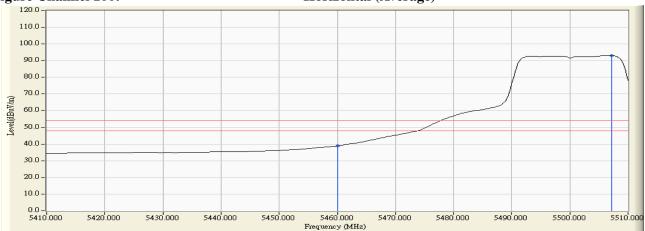
#### Figure Channel 100:

#### Horizontal (Peak)



### Figure Channel 100:

### **Horizontal (Average)**



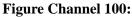
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



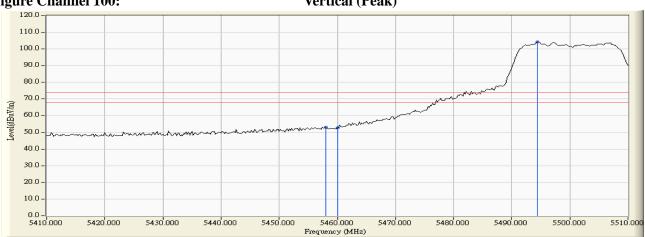
Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

#### **RF Radiated Measurement (Vertical):**

| Channel No.   | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit | Result |
|---------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
| Channel No.   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Result |
| 100 (Peak)    | 5458.000  | 6.027          | 46.905        | 52.932                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5460.000  | 6.041          | 46.628        | 52.669                | 74.00      | 54.00         | Pass   |
| 100 (Peak)    | 5494.400  | 6.258          | 97.915        | 104.173               |            |               | Pass   |
| 100 (Average) | 5460.000  | 6.041          | 32.811        | 38.852                | 74.00      | 54.00         | Pass   |
| 100 (Average) | 5493.800  | 6.256          | 85.198        | 91.454                |            |               | Pass   |

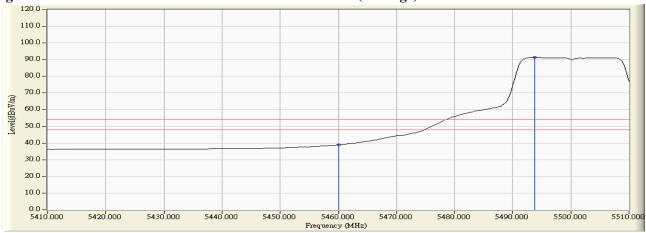


### Vertical (Peak)



#### Figure Channel 100:

#### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 100

|            | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit<br>(dBm/m) | Result |
|------------|-----------------|---------------------|---------------------|--------------------------|-------------|------------------|--------|
| Horizontal | 5470.000        | 18.334              | -68.690             | -50.356                  | -23.356     | -27.000          | Pass   |

|          | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit (dBm/m) | Result |
|----------|-----------------|---------------------|---------------------|--------------------------|-------------|---------------|--------|
| Vertical | 5470.000        | 19.335              | -70.910             | -51.575                  | -24.575     | -27.000       | Pass   |



Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps) -Channel 140

|            | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit<br>(dBm/m) | Result |
|------------|-----------------|---------------------|---------------------|--------------------------|-------------|------------------|--------|
| Horizontal | 5725.000        | 18.649              | -69.820             | -51.171                  | -24.171     | -27.000          | Pass   |

|          | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit (dBm/m) | Result |
|----------|-----------------|---------------------|---------------------|--------------------------|-------------|---------------|--------|
| Vertical | 5725.000        | 19.372              | -70.320             | -50.948                  | -23.948     | -27.000       | Pass   |



Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 38

#### **RF Radiated Measurement (Horizontal):**

| Channel No.  | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
| Chainei No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Result |
| 38 (Peak)    | 5150.000  | 3.340          | 56.401        | 59.741         | 74.00      | 54.00         | Pass   |
| 38 (Peak)    | 5183.400  | 3.222          | 94.957        | 98.179         | 74.00      | 54.00         | Pass   |
| 38 (Average) | 5150.000  | 3.340          | 41.822        | 45.162         | 74.00      | 54.00         | Pass   |
| 38 (Average) | 5192.800  | 3.184          | 81.774        | 84.958         |            |               | Pass   |

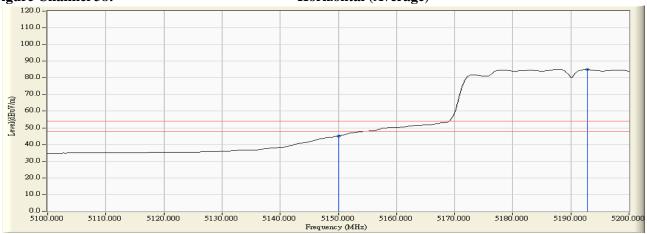
#### **Figure Channel 38:**

### Horizontal (Peak)



#### **Figure Channel 38:**

#### **Horizontal (Average)**



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



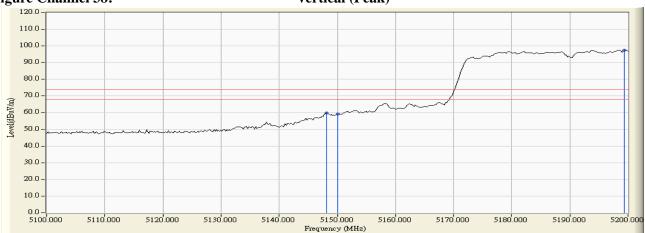
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 38

### RF Radiated Measurement (Vertical):

|              |           | · /            |               |                       |            |               |        |
|--------------|-----------|----------------|---------------|-----------------------|------------|---------------|--------|
| Channel No.  | Frequency | Correct Factor | Reading Level | <b>Emission Level</b> | Peak Limit | Average Limit | Result |
| Chainei No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)              | (dBuV/m)   | (dBuV/m)      | Result |
| 38 (Peak)    | 5148.200  | 5.255          | 54.520        | 59.775                | 74.00      | 54.00         | Pass   |
| 38 (Peak)    | 5150.000  | 5.260          | 53.971        | 59.231                | 74.00      | 54.00         | Pass   |
| 38 (Peak)    | 5199.400  | 5.386          | 92.216        | 97.601                |            |               | Pass   |
| 38 (Average) | 5150.000  | 5.260          | 38.876        | 44.136                | 74.00      | 54.00         | Pass   |
| 38 (Average) | 5198.800  | 5.383          | 78.657        | 84.040                |            |               | Pass   |

### Figure Channel 38:

### Vertical (Peak)

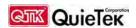


#### **Figure Channel 38:**

#### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



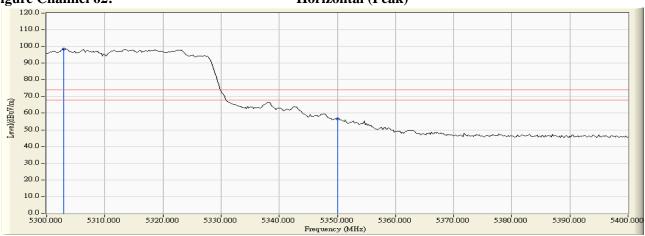
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 62

#### **RF Radiated Measurement (Horizontal):**

| Channel No.  | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
| Chamlel No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 62 (Peak)    | 5303.000  | 3.868          | 94.697        | 98.564         |            |               | Pass   |
| 62 (Peak)    | 5350.000  | 3.716          | 52.992        | 56.709         | 74.00      | 54.00         | Pass   |
| 62 (Average) | 5312.600  | 3.836          | 81.188        | 85.024         |            |               | Pass   |
| 62 (Average) | 5350.000  | 3.716          | 38.481        | 42.198         | 74.00      | 54.00         | Pass   |

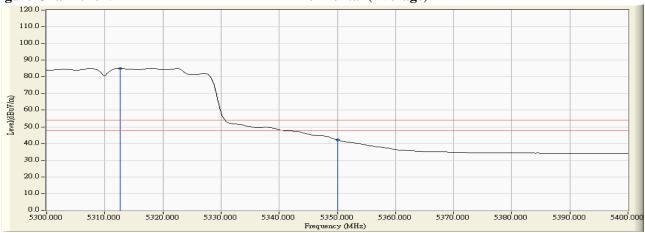
#### Figure Channel 62:

### Horizontal (Peak)



#### Figure Channel 62:

### Horizontal (Average)



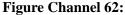
- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



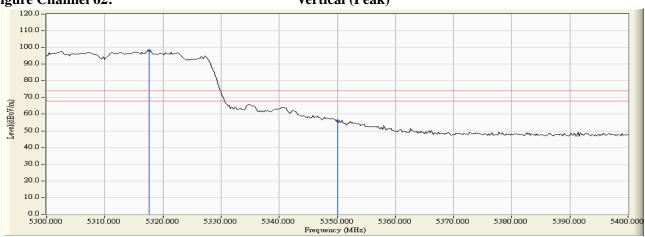
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 62

#### **RF** Radiated Measurement (Vertical):

| Channel No.  | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|--------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
| Chainei No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 62 (Peak)    | 5317.600  | 5.732          | 92.403        | 98.135         |            |               | Pass   |
| 62 (Peak)    | 5350.000  | 5.691          | 50.168        | 55.860         | 74.00      | 54.00         | Pass   |
| 62 (Average) | 5314.400  | 5.737          | 78.664        | 84.400         |            |               | Pass   |
| 62 (Average) | 5350.000  | 5.691          | 37.015        | 42.707         | 74.00      | 54.00         | Pass   |

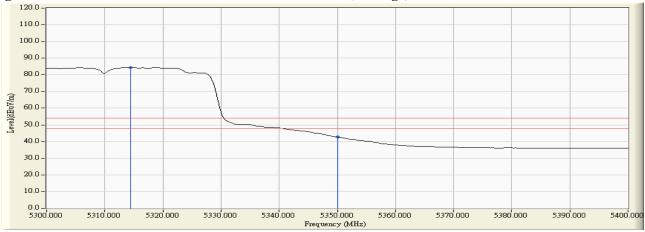






#### Figure Channel 62:

#### Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



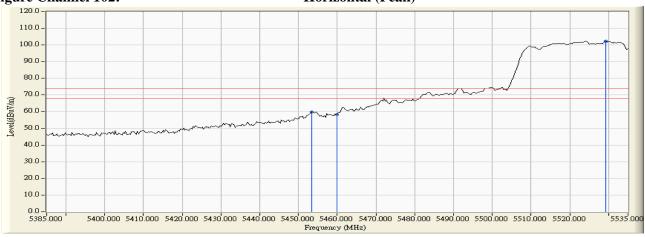
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 102

#### **RF Radiated Measurement (Horizontal):**

| Channel No.   | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|---------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
| Chainei No.   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 102 (Peak)    | 5453.400  | 4.266          | 55.667        | 59.933         | 74.00      | 54.00         | Pass   |
| 102 (Peak)    | 5460.000  | 4.354          | 53.848        | 58.202         | 74.00      | 54.00         | Pass   |
| 102 (Peak)    | 5529.300  | 4.653          | 97.754        | 102.407        |            |               | Pass   |
| 102 (Average) | 5460.000  | 4.354          | 41.185        | 45.539         | 74.00      | 54.00         | Pass   |
| 102 (Average) | 5531.400  | 4.636          | 84.362        | 88.999         |            |               | Pass   |

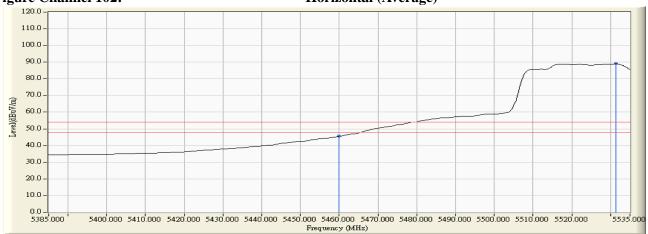
### Figure Channel 102:

#### Horizontal (Peak)



#### **Figure Channel 102:**

#### **Horizontal (Average)**



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



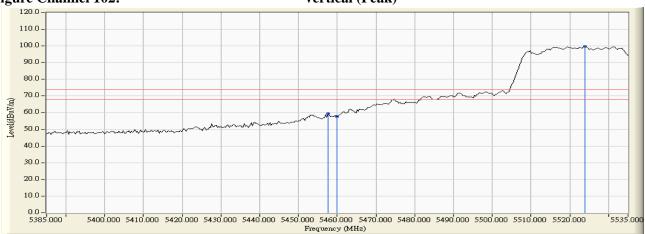
Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 102

#### RF Radiated Measurement (Vertical):

| Channel No.   | Frequency | Correct Factor | Reading Level | Emission Level | Peak Limit | Average Limit | Result |
|---------------|-----------|----------------|---------------|----------------|------------|---------------|--------|
| Chainlei No.  | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)       | (dBuV/m)   | (dBuV/m)      | Kesuit |
| 102 (Peak)    | 5457.600  | 6.024          | 53.562        | 59.586         | 74.00      | 54.00         | Pass   |
| 102 (Peak)    | 5460.000  | 6.041          | 51.637        | 57.678         | 74.00      | 54.00         | Pass   |
| 102 (Peak)    | 5523.900  | 6.170          | 93.692        | 99.861         |            |               | Pass   |
| 102 (Average) | 5460.000  | 6.041          | 38.354        | 44.395         | 74.00      | 54.00         | Pass   |
| 102 (Average) | 5518.200  | 6.205          | 80.278        | 86.484         |            |               | Pass   |



#### Vertical (Peak)

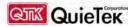


#### **Figure Channel 102:**

#### **Vertical (Average)**



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 102

|            | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit<br>(dBm/m) | Result |
|------------|-----------------|---------------------|---------------------|--------------------------|-------------|------------------|--------|
| Horizontal | 5470.000        | 18.334              | -64.190             | -45.856                  | -18.856     | -27.000          | Pass   |

|          | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | Measure Level<br>(dBm/m) | Margin (dB) | Limit<br>(dBm/m) | Result |
|----------|-----------------|---------------------|---------------------|--------------------------|-------------|------------------|--------|
| Vertical | 5470.000        | 19.335              | -63.210             | -43.875                  | -16.875     | -27.000          | Pass   |



Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps) -Channel 134

|            | Frequency (MHz) | cy Correct Factor Reading L<br>(dB) (dBm) |         | Measure Level<br>(dBm/m) | Margin (dB) | Limit (dBm/m) | Result |
|------------|-----------------|---|---------|--------------------------|-------------|---------------|--------|
| Horizontal | 5725.000        | 18.649                                    | -75.870 | -57.221                  | -30.221     | -27.000       | Pass   |

|          | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBm) | eading Level Measure Level (dBm) (dBm/m) |         | Limit (dBm/m) | Result |
|----------|-----------------|---------------------|---------------------|--|---------|---------------|--------|
| Vertical | 5725.000        | 19.372              | -75.480             | -56.108                                  | -29.108 | -27.000       | Pass   |



### 8. Frequency Stability

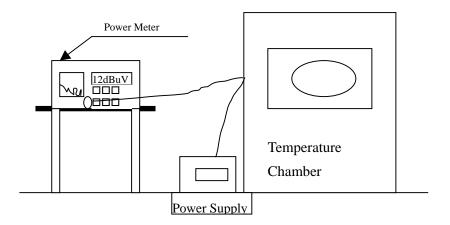
### 8.1. Test Equipment

|   | Equipment         | Manufacturer | Model No./Serial No. | Last Cal.  |  |
|---|-------------------|--------------|----------------------|------------|--|
|   | Spectrum Analyzer | R&S          | FSP40 / 100170       | Jun, 2013  |  |
|   | Spectrum Analyzer | Agilent      | E4407B / US39440758  | Jun, 2013  |  |
| X | Spectrum Analyzer | Agilent      | N9010A / MY48030495  | Apr., 2013 |  |

#### Note:

- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

## 8.2. Test Setup



#### 8.3. Limits

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified

#### **8.4.** Test Procedure

The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

### 8.5. Uncertainty

± 150 Hz



# 8.6. Test Result of Frequency Stability

Product : TABLET PC

Test Item : Frequency Stability
Test Site : Temperature Chamber

Test Mode : Carrier Wave

### Chain A

| Test C       | Test Conditions |     | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|--------------|-----------------|-----|-----------------|-----------------|----------|
|              |                 | 36  | 5180.0000       | 5180.0026       | -0.0026  |
|              |                 | 38  | 5190.0000       | 5190.0039       | -0.0039  |
|              |                 | 44  | 5220.0000       | 5220.0055       | -0.0055  |
|              |                 | 46  | 5230.0000       | 5230.0074       | -0.0074  |
|              |                 | 48  | 5240.0000       | 5240.0099       | -0.0099  |
|              |                 | 52  | 5260.0000       | 5260.0091       | -0.0091  |
|              |                 | 54  | 5270.0000       | 5270.0026       | -0.0026  |
| T (20) %C    |                 | 60  | 5300.0000       | 5300.0089       | -0.0089  |
| Tnom (20) °C | Vnom (120)V     | 62  | 5310.0000       | 5310.0012       | -0.0012  |
|              |                 | 64  | 5320.0000       | 5320.0100       | -0.0100  |
|              |                 | 100 | 5500.0000       | 5500.0006       | -0.0006  |
|              |                 | 102 | 5510.0000       | 5510.0100       | -0.0100  |
|              |                 | 110 | 5550.0000       | 5550.0100       | -0.0100  |
|              |                 | 116 | 5580.0000       | 5580.0084       | -0.0084  |
|              |                 | 134 | 5670.0000       | 5670.0100       | -0.0100  |
|              |                 | 140 | 5700.0000       | 5700.0066       | -0.0066  |



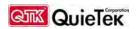
| Test Conditions       |             | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz)  |
|-----------------------|-------------|---------|-----------------|-----------------|---|
|                       |             | 36      | 5180.0000       | 5180.0062       | -0.0062   |
|                       |             | 38      | 5190.0000       | 5190.0039       | -0.0039   |
|                       |             | 44      | 5220.0000       | 5220.0047       | -0.0047   |
|                       |             | 46      | 5230.0000       | 5230.0088       | -0.0088   |
|                       |             | 48      | 5240.0000       | 5240.0063       | -0.0063   |
|                       |             | 52      | 5260.0000       | 5260.0026       | -0.0026   |
|                       |             | 54      | 5270.0000       | 5270.0047       | -0.0047   |
| T (40) <sup>9</sup> C | V (120)V    | 60      | 5300.0000       | 5300.0085       | -0.0085   |
| Tmax (40) °C          | Vmax (138)V | 62      | 5310.0000       | 5310.0025       | -0.0025   |
|                       |             | 64      | 5320.0000       | 5320.0033       | -0.0033   |
|                       |             | 100     | 5500.0000       | 5500.0045       | -0.0045   |
|                       |             | 102     | 5510.0000       | 5510.0029       | -0.0029   |
|                       |             | 110     | 5550.0000       | 5550.0039       | -0.0039   |
|                       |             | 116     | 5580.0000       | 5580.0063       | -0.0063   |
|                       |             | 134     | 5670.0000       | 5670.0099       | -0.0099   |
|                       |             | 140     | 5700.0000       | 5700.0055       | -0.0055   |
| Test Conditions       |             | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz)  |
|                       |             | 36      | 5180.0000       | 5180.0063       | -0.0063   |
|                       |             | 38      | 5190.0000       | 5190.0046       | -0.0046   |
|                       |             | 44      | 5220.0000       | 5220.0018       | -0.0018   |
|                       |             | 46      | 5230.0000       | 5230.0067       | -0.0067   |
|                       |             | 48      | 5240.0000       | 5240.0052       | -0.0062 -0.0039 -0.0047 -0.0088 -0.0063 -0.0026 -0.0047 -0.0085 -0.0025 -0.0033 -0.0045 -0.0029 -0.0039 -0.0063 -0.0099 -0.0055  △F (MHz) -0.0063 -0.0046 -0.0018 |
|                       |             | 52      | 5260.0000       | 5260.0032       |   |
| Tmax (40) °C          |             | 54      | 5270.0000       | 5270.0098       | -0.0098   |
|                       |             | 60      | 5300.0000       | 5300.0033       | -0.0033   |
|                       | Vmin (102)V | 62      | 5310.0000       | 5310.0028       | -0.0028   |
|                       |             | 64      | 5320.0000       | 5320.0011       | -0.0063 -0.0099 -0.0055  △F (MHz) -0.0063 -0.0046 -0.0018 -0.0052 -0.0032 -0.0098 -0.0033 -0.0028 -0.0011 -0.0075 -0.0100   |
|                       |             | 100     | 5500.0000       | 5500.0075       | -0.0075   |
|                       |             | 102     | 5510.0000       | 5510.0100       | -0.0100   |
|                       |             | 110     | 5550.0000       | 5550.0390       | -0.0390   |
|                       |             | 116     | 5580.0000       | 5580.0097       | -0.0097   |
|                       |             | 134     | 5670.0000       | 5670.0025       | -0.0025   |
|                       |             | 140     | 5700.0000       | 5700.0067       | -0.0067   |

Page: 155 of 162



| Test Conditions        |             | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz)  |
|------------------------|-------------|---------|-----------------|-----------------|---|
|                        |             | 36      | 5180.0000       | 5180.0033       | -0.0033   |
|                        |             | 38      | 5190.0000       | 5190.0034       | -0.0034   |
|                        |             | 44      | 5220.0000       | 5220.0055       | -0.0033 -0.0034 -0.0055 -0.0023 -0.0069 -0.0046 -0.0033 -0.0020 -0.0044 -0.0085 -0.0033 -0.0027 -0.0088  △F (MHz) -0.0033 -0.0027 -0.0046 -0.0033 -0.0027 -0.0033 -0.0027 -0.0088 |
|                        |             | 46      | 5230.0000       | 5230.0023       |   |
|                        |             | 48      | 5240.0000       | 5240.0069       |   |
|                        |             | 52      | 5260.0000       | 5260.0046       | -0.0046   |
|                        |             | 54      | 5270.0000       | 5270.0098       | -0.0098   |
| T : (0) <sup>0</sup> C | V (120)V    | 60      | 5300.0000       | 5300.0033       | -0.0033   |
| Tmin (0) °C            | Vmax (138)V | 62      | 5310.0000       | 5310.0020       | -0.0055 -0.0023 -0.0069 -0.0046 -0.0098 -0.0033 -0.0020 -0.0044 -0.0085 -0.0016 -0.0100 -0.0033 -0.0027 -0.0088  △F (MHz) -0.0033 -0.0034 -0.0055 -0.0023 -0.0069 -0.0046 -0.0098 |
|                        |             | 64      | 5320.0000       | 5320.0044       |   |
|                        |             | 100     | 5500.0000       | 5500.0085       |   |
|                        |             | 102     | 5510.0000       | 5510.0016       | -0.0016   |
|                        |             | 110     | 5550.0000       | 5550.0100       |   |
|                        |             | 116     | 5580.0000       | 5580.0033       | -0.0033   |
|                        |             | 134     | 5670.0000       | 5670.0027       | -0.0027   |
|                        |             | 140     | 5700.0000       | 5700.0088       | -0.0088   |
| Test Conditions        |             | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz)  |
|                        |             | 36      | 5180.0000       | 5180.0033       | -0.0033   |
|                        |             | 38      | 5190.0000       | 5190.0034       | -0.0034   |
|                        |             | 44      | 5220.0000       | 5220.0055       | -0.0055   |
|                        |             | 46      | 5230.0000       | 5230.0023       | -0.0023   |
|                        |             | 48      | 5240.0000       | 5240.0069       | -0.0069   |
| Tmin (0) °C            |             | 52      | 5260.0000       | 5260.0046       | -0.0046   |
|                        |             | 54      | 5270.0000       | 5270.0098       | -0.0098   |
|                        | V (102)V    | 60      | 5300.0000       | 5300.0033       | -0.0033   |
|                        | Vmin (102)V | 62      | 5310.0000       | 5310.0020       | -0.0020   |
|                        |             | 64      | 5320.0000       | 5320.0044       | -0.0044   |
|                        |             | 100     | 5500.0000       | 5500.0085       | -0.0085   |
|                        |             | 102     | 5510.0000       | 5510.0016       | -0.0016   |
|                        |             | 110     | 5550.0000       | 5550.0100       | -0.0100   |
|                        |             | 116     | 5580.0000       | 5580.0033       | -0.0033   |
|                        |             | 134     | 5670.0000       | 5670.0027       | -0.0027   |
|                        |             | 140     | 5700.0000       | 5700.0088       | -0.0088   |

Page: 156 of 162

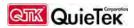


### Chain B

| Test Conditions |             | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz) |
|-----------------|-------------|---------|-----------------|-----------------|----------|
|                 |             | 36      | 5180.0000       | 5180.0041       | -0.0041  |
|                 |             | 38      | 5190.0000       | 5190.0037       | -0.0037  |
|                 |             | 44      | 5220.0000       | 5220.0088       | -0.0088  |
|                 |             | 46      | 5230.0000       | 5230.0064       | -0.0064  |
|                 |             | 48      | 5240.0000       | 5240.0128       | -0.0128  |
|                 |             | 52      | 5260.0000       | 5260.0058       | -0.0058  |
|                 |             | 54      | 5270.0000       | 5270.0163       | -0.0163  |
| T (20) °C       | M (120)M    | 60      | 5300.0000       | 5300.0090       | -0.0090  |
| Tnom (20) °C    | Vnom (120)V | 62      | 5310.0000       | 5310.0103       | -0.0103  |
|                 |             | 64      | 5320.0000       | 5320.0108       | -0.0108  |
|                 |             | 100     | 5500.0000       | 5500.0067       | -0.0067  |
|                 |             | 102     | 5510.0000       | 5510.0103       | -0.0103  |
|                 |             | 110     | 5550.0000       | 5550.0169       | -0.0169  |
|                 |             | 116     | 5580.0000       | 5580.0102       | -0.0102  |
|                 |             | 134     | 5670.0000       | 5670.0139       | -0.0139  |
|                 |             | 140     | 5700.0000       | 5700.0033       | -0.0033  |



| Test Conditions |                 | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz)  |
|-----------------|-----------------|---------|-----------------|-----------------|---|
|                 |                 | 36      | 5180.0000       | 5180.0034       | -0.0034   |
|                 |                 | 38      | 5190.0000       | 5190.0153       | -0.0153   |
|                 |                 | 44      | 5220.0000       | 5220.0076       | -0.0076   |
|                 |                 | 46      | 5230.0000       | 5230.0098       | -0.0034 -0.0153 -0.0076 -0.0098 -0.0100 -0.0028 -0.0111 -0.0038 -0.0144 -0.0163 -0.0070 -0.0174 -0.0033 -0.0046 -0.0188 -0.0054   |
|                 |                 | 48      | 5240.0000       | 5240.0100       |   |
|                 |                 | 52      | 5260.0000       | 5260.0028       |   |
|                 |                 | 54      | 5270.0000       | 5270.0111       | -0.0111   |
| T (40) %G       | V (120)V        | 60      | 5300.0000       | 5300.0038       | -0.0038   |
| Tmax (40) °C    | Vmax (138)V     | 62      | 5310.0000       | 5310.0144       | -0.0034 -0.0153 -0.0076 -0.0098 -0.0100 -0.0028 -0.0111 -0.0038 -0.0144 -0.0163 -0.0070 -0.0174 -0.0033 -0.0046 -0.0188 -0.0054  △F (MHz) -0.0063 -0.0176 -0.0044 -0.0056 -0.0033 -0.0047 -0.0168 -0.0086 -0.0163 -0.0102 |
|                 |                 | 64      | 5320.0000       | 5320.0163       | -0.0163   |
|                 |                 | 100     | 5500.0000       | 5500.0070       | -0.0070   |
|                 |                 | 102     | 5510.0000       | 5510.0174       | -0.0174   |
|                 |                 | 110     | 5550.0000       | 5550.0033       | -0.0100 -0.0028 -0.0111 -0.0038 -0.0144 -0.0163 -0.0070 -0.0174 -0.0033 -0.0046 -0.0188 -0.0054  △F (MHz) -0.0063 -0.0176 -0.0044 -0.0056 -0.0033 -0.0047 -0.0168   |
|                 |                 | 116     | 5580.0000       | 5580.0046       | -0.0046   |
|                 |                 | 134     | 5670.0000       | 5670.0188       | -0.0188   |
|                 |                 | 140     | 5700.0000       | 5700.0054       | -0.0054   |
| Test C          | Test Conditions |         | Frequency (MHz) | Frequency (MHz) | △F (MHz)  |
|                 |                 | 36      | 5180.0000       | 5180.0063       | -0.0063   |
|                 |                 | 38      | 5190.0000       | 5190.0176       | -0.0176   |
|                 |                 | 44      | 5220.0000       | 5220.0044       | -0.0044   |
|                 |                 | 46      | 5230.0000       | 5230.0056       | -0.0056   |
|                 |                 | 48      | 5240.0000       | 5240.0033       | -0.0033   |
|                 |                 | 52      | 5260.0000       | 5260.0047       | -0.0047   |
|                 |                 | 54      | 5270.0000       | 5270.0168       | -0.0168   |
| T (40) 0G       |                 | 60      | 5300.0000       | 5300.0086       | -0.0086   |
| Tmax (40) °C    | Vmin (102)V     | 62      | 5310.0000       | 5310.0163       | -0.0163   |
|                 |                 | 64      | 5320.0000       | 5320.0102       | -0.0102   |
|                 |                 | 100     | 5500.0000       | 5500.0047       | -0.0047   |
|                 |                 | 102     | 5510.0000       | 5510.0036       | -0.0076 -0.0098 -0.0100 -0.0028 -0.0111 -0.0038 -0.0144 -0.0163 -0.0070 -0.0174 -0.0033 -0.0046 -0.0188 -0.0054  △F (MHz) -0.0063 -0.0176 -0.0044 -0.0056 -0.0033 -0.0047 -0.0168 -0.0086 -0.0163 -0.0102 -0.0047         |
|                 |                 | 110     | 5550.0000       | 5550.0100       | -0.0100   |
|                 |                 | 116     | 5580.0000       | 5580.0032       | -0.0032   |
|                 |                 | 134     | 5670.0000       | 5670.0146       | -0.0146   |
|                 |                 | 140     | 5700.0000       | 5700.0037       | -0.0037   |



| Test Conditions        |                 | Channel | Frequency (MHz) | Frequency (MHz) | △F (MHz)   |
|------------------------|-----------------|---------|-----------------|-----------------|--|
|                        |                 | 36      | 5180.0000       | 5180.0102       | -0.0102  |
|                        |                 | 38      | 5190.0000       | 5190.0019       | -0.0019  |
|                        |                 | 44      | 5220.0000       | 5220.0084       | -0.0084  |
|                        |                 | 46      | 5230.0000       | 5230.0033       | -0.0033<br>-0.0077<br>-0.0066<br>-0.0046<br>-0.0028<br>-0.0103<br>-0.0025<br>-0.0071<br>-0.0026<br>-0.0102<br>-0.0033  |
|                        |                 | 48      | 5240.0000       | 5240.0077       | -0.0077  |
|                        |                 | 52      | 5260.0000       | 5260.0066       | -0.0066  |
|                        |                 | 54      | 5270.0000       | 5270.0046       | -0.0046  |
| T : (0) <sup>9</sup> C | V (120)V        | 60      | 5300.0000       | 5300.0028       | -0.0028  |
| Tmin (0) °C            | Vmax (138)V     | 62      | 5310.0000       | 5310.0103       | -0.0103  |
|                        |                 | 64      | 5320.0000       | 5320.0025       | -0.0025<br>-0.0071<br>-0.0026<br>-0.0102<br>-0.0033<br>-0.0027<br>-0.0066  |
|                        |                 | 100     | 5500.0000       | 5500.0071       |  |
|                        |                 | 102     | 5510.0000       | 5510.0026       |  |
|                        |                 | 110     | 5550.0000       | 5550.0102       | -0.0102  |
|                        |                 | 116     | 5580.0000       | 5580.0033       | -0.0033  |
|                        |                 | 134     | 5670.0000       | 5670.0027       | -0.0027  |
|                        |                 | 140     | 5700.0000       | 5700.0066       | -0.0066  |
| Test (                 | Test Conditions |         | Frequency (MHz) | Frequency (MHz) | △F (MHz)   |
|                        |                 | 36      | 5180.0000       | 5180.0046       | -0.0046  |
|                        |                 | 38      | 5190.0000       | 5190.0069       | -0.0069  |
|                        |                 | 44      | 5220.0000       | 5220.0082       | -0.0082  |
|                        |                 | 46      | 5230.0000       | 5230.0047       | -0.0047  |
|                        |                 | 48      | 5240.0000       | 5240.0068       | -0.0068  |
|                        |                 | 52      | 5260.0000       | 5260.0086       | -0.0086  |
|                        |                 | 54      | 5270.0000       | 5270.0054       | -0.0054  |
| T : (0) 0G             | . (102)11       | 60      | 5300.0000       | 5300.0730       | -0.0730  |
| Tmin (0) °C            | Vmin (102)V     | 62      | 5310.0000       | 5310.0033       | -0.0033  |
|                        |                 | 64      | 5320.0000       | 5320.0047       | -0.0047  |
|                        |                 | 100     | 5500.0000       | 5500.0081       | -0.0081  |
|                        |                 | 102     | 5510.0000       | 5510.0011       | -0.0011  |
|                        |                 | 110     | 5550.0000       | 5550.0037       | -0.0033 -0.0077 -0.0066 -0.0046 -0.0028 -0.0103 -0.0025 -0.0071 -0.0026 -0.0102 -0.0033 -0.0027 -0.0066  △F (MHz) -0.0046 -0.0069 -0.0082 -0.0047 -0.0068 -0.0086 -0.0086 -0.00730 -0.0033 -0.0047 -0.0081 |
|                        |                 | 116     | 5580.0000       | 5580.0100       | -0.0100  |
|                        |                 | 134     | 5670.0000       | 5670.0055       | -0.0055  |
|                        |                 | 140     | 5700.0000       | 5700.0047       | -0.0047  |



# 9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Page: 160 of 162