



| Product Name | ASUS Tablet |
|--------------|-------------|
| Model No | TF810C |
| FCC ID. | MSQTF810C |

| Applicant | ASUSTeK COMPUTER INC. |
|-----------|---|
| Address | No. 15, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C. |

| Date of Receipt | June. 08, 2012 |
|-----------------|--------------------|
| Issue Date | July. 17, 2012 |
| Report No. | 126213R-RFUSP42V01 |
| Report Version | V1.0 |





The test results relate only to the samples tested.

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Test Report Certification

Issue Date: July. 17, 2012

Report No.: 126213R-RFUSP42V01



Accredited by NIST (NVLAP) NVLAP Lab Code: 200533-0

| Product Name | ASUS Tablet | | |
|---------------------|---|--|--|
| Applicant | ASUSTeK COMPUTER INC. | | |
| Address | No. 15, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C. | | |
| Manufacturer | 1. PEGATRON CORPORATION Taoyuan Mfg | | |
| | 2. Protek (Shanghai) Limited. | | |
| | 3. Tech-Com(Shanghai) Computer Co.Ltd. | | |
| | 4. Wistron InfoComm(Kunshan) Co., Ltd. | | |
| Model No. | TF810C | | |
| FCC ID. | MSQTF810C | | |
| EUT Rated Voltage | AC 100-240V, 50-60Hz | | |
| EUT Test Voltage | AC 120V/60Hz | | |
| Trade Name | ASUS | | |
| Applicable Standard | ble Standard FCC CFR Title 47 Part 15 Subpart C: 2010 | | |
| | ANSI C63.4: 2003 | | |
| Test Result | Complied | | |

The test results relate only to the samples tested.

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Documented By: Leven Huang

(Senior Adm. Specialist / Leven Huang)

Tested By : Lank

(Engineer / Henk Huang)

Approved By :

(Manager / Vincent Lin)



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Attachment 1: EUT Test Photographs
Attachment 2: EUT Detailed Photographs



1. GENERAL INFORMATION

1.1. EUT Description

| Product Name | ASUS Tablet | |
|-------------------------------|---|--|
| Trade Name | ASUS | |
| Model No. | TF810C | |
| FCC ID. | MSQTF810C | |
| Frequency Range | 2412-2462MHz for 802.11b/g/n-20BW | |
| Number of Channels | 802.11b/g/n-20MHz: 11 | |
| Data Speed | 802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 72.2Mbps | |
| Type of Modulation | 802.11b:DSSS (DBPSK, DQPSK, CCK) | |
| | 802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM) | |
| Antenna Type | PIFA Antenna | |
| Antenna Gain | Refer to the table "Antenna List" | |
| Channel Control | Auto | |
| Power Adapter | MFR: DELTA, M/N: ADP-18BW A | |
| Input: 100-240V~0.5A, 50-60Hz | | |
| | Output: 15V==1.2A or 5V==2A | |
| USB Cable | Shielded, 1.5m | |
| Contain Module | Azurewave / AW-NH665 | |

Antenna List

| No. | Manufacturer | Part No. | Antenna Type | Peak Gain |
|-----|--------------|----------------|--------------|---------------------|
| 1 | INPAQ | WA-P-LB-02-036 | PIFA | 0.93dBi for 2.4 GHz |

Note:

1. The antenna of EUT is conforming to FCC 15.203.



802.11b/g/n-20MHz Center Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| Channel 01: | 2412 MHz | Channel 02: | 2417 MHz | Channel 03: | 2422 MHz | Channel 04: | 2427 MHz |
| Channel 05: | 2432 MHz | Channel 06: | 2437 MHz | Channel 07: | 2442 MHz | Channel 08: | 2447 MHz |
| Channel 09: | 2452 MHz | Channel 10: | 2457 MHz | Channel 11: | 2462 MHz | | |

- 1. The EUT is an ASUS Pad with a built-in WLAN · Bluetooth and NFC transceiver, this report for WLAN.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- 3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps > 802.11g is 6Mbps > 802.11n(20M-BW) is 7.2Mbps and)
- 4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
- 5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

| Test Mode: | Mode 1: Transmit (802.11b 1Mbps) |
|------------|--|
| | Mode 2: Transmit (802.11g 6Mbps) |
| | Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) |



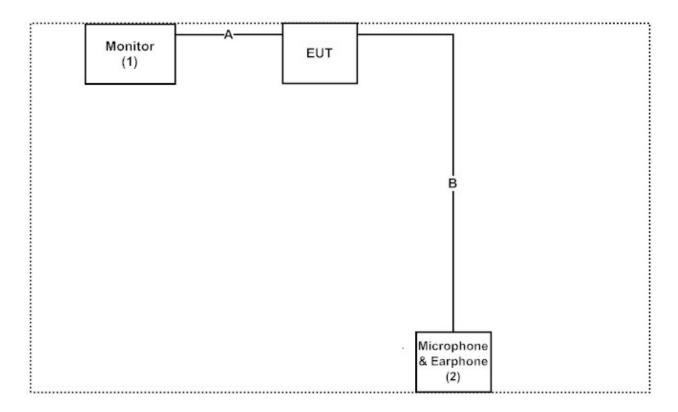
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

| | Product | Manufacturer | Model No. | Serial No. | Power Cord |
|---|--------------|--------------|-----------|--------------|--------------------|
| 1 | Monitor | LG | W2261VT | 907YHPB07296 | Non-Shielded, 1.8m |
| 2 | Microphone & | PCHOME | N/A | N/A | N/A |
| _ | Earphone | | | | |

| Signa | al Cable Type | Signal cable Description |
|-------|-----------------------------|--------------------------|
| A | HDMI Cable | Shielded, 1.7m |
| В | Microphone & Earphone Cable | Non-Shielded, 2.0m |

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute software on the EUT.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press "OK" to start the continuous Transmit.
- (5) Verify that the EUT works properly.



1.6. Test Facility

Ambient conditions in the laboratory:

| Items | Required (IEC 68-1) | Actual |
|----------------------------|---------------------|----------|
| Temperature (°C) | 15-35 | 20-35 |
| Humidity (%RH) | 25-75 | 50-65 |
| Barometric pressure (mbar) | 860-1060 | 950-1000 |

The related certificate for our laboratories about the test site and management system can be downloaded from

QuieTek Corporation's Web Site: http://www.quietek.com/tw/ctg/cts/accreditations.htm

The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site: http://www.quietek.com/

Site Description: File on

Federal Communications Commission

FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046

Registration Number: 92195

Accreditation on NVLAP NVLAP Lab Code: 200533-0

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E-Mail: service@quietek.com

FCC Accreditation Number: TW1014



2. Conducted Emission

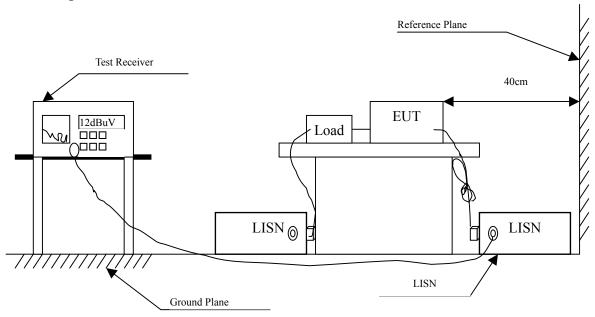
2.1. Test Equipment

| | Equipment | Manufacturer | Model No. / Serial No. | Last Cal. | Remark |
|---|--------------------------|--------------|------------------------|------------|-------------|
| X | Test Receiver | R & S | ESCS 30 / 825442/018 | Sep., 2011 | |
| X | Artificial Mains Network | R & S | ENV4200 / 848411/10 | Feb., 2012 | Peripherals |
| X | LISN | R & S | ESH3-Z5 / 825562/002 | Feb., 2012 | EUT |
| | DC LISN | Schwarzbeck | 8226 / 176 | Mar, 2012 | EUT |
| X | Pulse Limiter | R & S | ESH3-Z2 / 357.8810.52 | Feb., 2012 | |
| | No.1 Shielded Room | | | | |

Note:

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

2.2. Test Setup





2.3. Limits

| FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit | | | | | | | | |
|---|--------|-------|--|--|--|--|--|--|
| Frequency | Limits | | | | | | | |
| MHz | QP | AVG | | | | | | |
| 0.15 - 0.50 | 66-56 | 56-46 | | | | | | |
| 0.50-5.0 | 56 | 46 | | | | | | |
| 5.0 - 30 | 60 | 50 | | | | | | |

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB



2.6. Test Result of Conducted Emission

Product : ASUS Tablet

Test Item : Conducted Emission Test

Power Line : Line 1

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dΒμV | $dB\mu V$ | dB | dBμV |
| Line 1 | | | | | |
| Quasi-Peak | | | | | |
| 0.224 | 9.670 | 42.340 | 52.010 | -11.876 | 63.886 |
| 0.298 | 9.640 | 36.570 | 46.210 | -15.561 | 61.771 |
| 0.338 | 9.640 | 35.340 | 44.980 | -15.649 | 60.629 |
| 0.451 | 9.640 | 35.230 | 44.870 | -12.530 | 57.400 |
| 1.423 | 9.670 | 29.550 | 39.220 | -16.780 | 56.000 |
| 13.560 | 9.840 | 30.170 | 40.010 | -19.990 | 60.000 |
| | | | | | |
| Average | | | | | |
| 0.224 | 9.670 | 34.730 | 44.400 | -9.486 | 53.886 |
| 0.298 | 9.640 | 20.460 | 30.100 | -21.671 | 51.771 |
| 0.338 | 9.640 | 30.150 | 39.790 | -10.839 | 50.629 |
| 0.451 | 9.640 | 28.620 | 38.260 | -9.140 | 47.400 |
| 1.423 | 9.670 | 19.240 | 28.910 | -17.090 | 46.000 |
| 13.560 | 9.840 | 23.260 | 33.100 | -16.900 | 50.000 |

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



Test Item : Conducted Emission Test

Power Line : Line 2

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|------------|---------|-----------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | $dB\mu V$ | $dB\mu V$ | dB | dΒμV |
| Line 2 | | | | | _ |
| Quasi-Peak | | | | | |
| 0.224 | 9.670 | 42.200 | 51.870 | -12.016 | 63.886 |
| 0.338 | 9.650 | 39.740 | 49.390 | -11.239 | 60.629 |
| 0.451 | 9.650 | 39.990 | 49.640 | -7.760 | 57.400 |
| 0.541 | 9.650 | 36.950 | 46.600 | -9.400 | 56.000 |
| 0.916 | 9.690 | 35.530 | 45.220 | -10.780 | 56.000 |
| 13.560 | 9.940 | 30.560 | 40.500 | -19.500 | 60.000 |
| | | | | | |
| Average | | | | | |
| 0.224 | 9.670 | 33.890 | 43.560 | -10.326 | 53.886 |
| 0.338 | 9.650 | 26.800 | 36.450 | -14.179 | 50.629 |
| 0.451 | 9.650 | 27.410 | 37.060 | -10.340 | 47.400 |
| 0.541 | 9.650 | 22.520 | 32.170 | -13.830 | 46.000 |
| 0.916 | 9.690 | 24.130 | 33.820 | -12.180 | 46.000 |
| 13.560 | 9.940 | 23.020 | 32.960 | -17.040 | 50.000 |

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



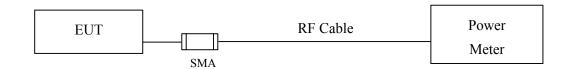
3. Peak Power Output

3.1. Test Equipment

| | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|-------|--------------|--------------|----------------------|-----------|
| X | Power Meter | Anritsu | ML2495A/6K00003357 | May, 2012 |
| X | Power Sensor | Anritsu | MA2411B/0738448 | Jun, 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.

3.2. Test Setup



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB



3.6. Test Result of Peak Power Output

Product : ASUS Tablet

Test Item : Peak Power Output Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11b 1Mbps)

| Channel No. | Frequency | For d | · | e Power ata Rate (N | Лbps) | Peak Power | Required | D agult |
|-------------|------------|-------|-------|------------------------|-----------|---------------|----------|---------|
| Channel No | (MHz) | 1 | 2 | 5.5 | 11 | 1 | Limit | Result |
| | Measuremen | | | | vel (dBm) | | | |
| 01 | 2412 | 15.18 | | | | 18.18 | <30dBm | Pass |
| 06 | 2437 | 15.07 | 15.01 | 14.93 | 14.86 | 18.07 | <30dBm | Pass |
| 11 | 2462 | 14.31 | | | | 17.55 | <30dBm | Pass |

Note: Peak Power Output Value = Reading value on peak power meter + cable loss



Test Item : Peak Power Output Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11g 6Mbps)

| | Eraguanav | | Average Power Peak For different Data Rate (Mbps) Power | | | | | | | | Required | |
|------------|-------------------------|-------|---|-------|-------|-------|-------|-------|-------|-------|----------|--------|
| Channel No | Frequency (MHz) | 6 | 9 | 12 | 18 | 24 | 36 | 48 | 54 | 6 | Limit | Result |
| | Measurement Level (dBm) | | | | | | | | | | | |
| 01 | 2412 | 12.84 | | 1 | | 1 | 1 | | | 20.49 | <30dBm | Pass |
| 06 | 2437 | 12.52 | 12.41 | 12.26 | 12.01 | 11.89 | 11.68 | 11.42 | 11.26 | 20.06 | <30dBm | Pass |
| 11 | 2462 | 12.09 | | | | | | | | 19.42 | <30dBm | Pass |

Note: Peak Power Output Value = Reading value on peak power meter + cable loss



Test Item : Peak Power Output Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

| | Γ | | Average Power Peak For different Data Rate (Mbps) Power | | | | | | | | De maine d | |
|------------|-----------------|-------|---|-------|------|------|------|------|------|-------|-------------------|--------|
| Channel No | Frequency (MHz) | 7.2 | 14.4 | 21.7 | 28.9 | 43.3 | 57.8 | 65 | 72.2 | 7.2 | Required Limit | Result |
| | | | Measurement Level (dBm) | | | | | | | | | |
| 01 | 2412 | 11.38 | ! | | | | | | - | 20.14 | <30dBm | Pass |
| 06 | 2437 | 11.04 | 10.66 | 10.21 | 9.84 | 9.45 | 8.99 | 8.44 | 7.91 | 19.88 | <30dBm | Pass |
| 11 | 2462 | 10.63 | | | | | | | | 19.28 | <30dBm | Pass |

Note: Peak Power Output Value = Reading value on peak power meter + cable loss



4. Radiated Emission

4.1. Test Equipment

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

| Test Site | | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|-----------|---|-------------------|-----------------|-----------------------|------------|
| ⊠Site # 3 | X | Bilog Antenna | Schaffner Chase | CBL6112B/2673 | Sep., 2011 |
| | X | Horn Antenna | Schwarzbeck | BBHA9120D/D305 | Sep., 2011 |
| | X | Horn Antenna | Schwarzbeck | BBHA9170/208 | Jul., 2012 |
| | X | Pre-Amplifier | Agilent | 8447D/2944A09549 | Sep., 2011 |
| | X | Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2012 |
| | X | Test Receiver | R & S | ESCS 30/ 825442/018 | Sep., 2011 |
| | X | Coaxial Cable | QuieTek | QTK-CABLE/ CAB5 | Feb., 2012 |
| | X | Controller | QuieTek | QTK-CONTROLLER/ CTRL3 | N/A |
| | X | Coaxial Switch | Anritsu | MP59B/6200265729 | N/A |

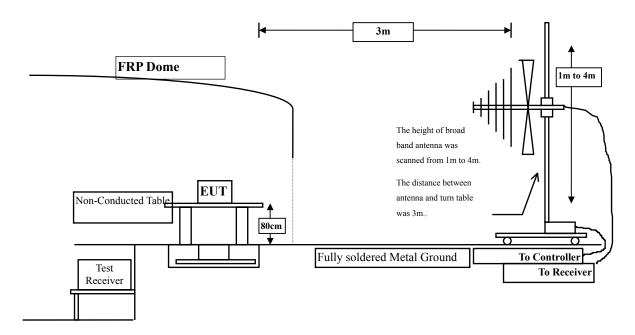
Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

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

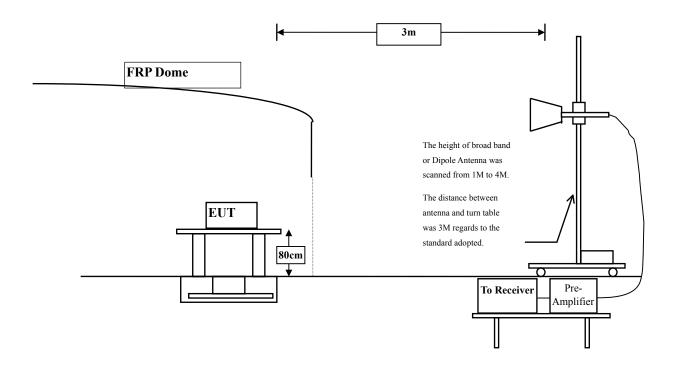


4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



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



4.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2003 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 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 between 1 meter and 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 C63.4: 2003 on radiated measurement.

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

Radiated emission measurements below 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 frequency range from 30MHz to 10th harminics is checked.

4.5. Uncertainty

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



4.6. Test Result of Radiated Emission

Product : ASUS Tablet

Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 3.261 | 40.110 | 43.371 | -30.629 | 74.000 |
| 7236.000 | 10.650 | 37.030 | 47.680 | -26.320 | 74.000 |
| 9648.000 | 13.337 | 34.820 | 48.156 | -25.844 | 74.000 |
| Average Detector: | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 6.421 | 42.210 | 48.631 | -25.369 | 74.000 |
| 7236.000 | 11.495 | 40.770 | 52.265 | -21.735 | 74.000 |
| 9648.000 | 13.807 | 34.760 | 48.566 | -25.434 | 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 1: Transmit (802.11b 1Mbps) (2437 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4874.000 | 3.038 | 39.510 | 42.547 | -31.453 | 74.000 |
| 7311.000 | 11.795 | 37.900 | 49.694 | -24.306 | 74.000 |
| 9748.000 | 12.635 | 36.810 | 49.445 | -24.555 | 74.000 |
| Average Detector: | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4874.000 | 5.812 | 42.270 | 48.081 | -25.919 | 74.000 |
| 7311.000 | 12.630 | 39.640 | 52.269 | -21.731 | 74.000 |
| 9748.000 | 13.126 | 36.000 | 49.126 | -24.874 | 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.

74.000



Product : ASUS Tablet

Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|--------------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4924.000 | 2.858 | 38.850 | 41.707 | -32.293 | 74.000 |
| 7386.000 | 12.127 | 36.720 | 48.848 | -25.152 | 74.000 |
| 9848.000 | 12.852 | 36.030 | 48.883 | -25.117 | 74.000 |
| | | | | | |
| Average Detector: | | | | | |
| | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4924.000 | 5.521 | 42.080 | 47.600 | -26.400 | 74.000 |
| 7386.000 | 13.254 | 39.110 | 52.364 | -21.636 | 74.000 |

Average Detector:

9848.000

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Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

49.657

-24.343

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

36.290

4. Measurement Level = Reading Level + Correct Factor.

13.367

- 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 (802.11g 6Mbps) (2412MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 3.261 | 37.200 | 40.461 | -33.539 | 74.000 |
| 7236.000 | 10.650 | 36.100 | 46.750 | -27.250 | 74.000 |
| 9648.000 | 13.337 | 35.970 | 49.306 | -24.694 | 74.000 |
| Average Detector: | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 6.421 | 38.600 | 45.021 | -28.979 | 74.000 |
| 7236.000 | 11.495 | 39.120 | 50.615 | -23.385 | 74.000 |
| 9648.000 | 13.807 | 36.720 | 50.526 | -23.474 | 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 (802.11g 6Mbps) (2437 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|--------------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4874.000 | 3.038 | 36.630 | 39.667 | -34.333 | 74.000 |
| 7311.000 | 11.795 | 35.500 | 47.294 | -26.706 | 74.000 |
| 9748.000 | 12.635 | 35.690 | 48.325 | -25.675 | 74.000 |
| | | | | | |
| Average Detector: | | | | | |
| | | | | | |
| | | | | | |
| Peak Detector: | | | | | |
| 4874.000 | 5.812 | 39.060 | 44.871 | -29.129 | 74.000 |
| 7311.000 | 12.630 | 38.360 | 50.989 | -23.011 | 74.000 |
| 9748.000 | 13.126 | 35.600 | 48.726 | -25.274 | 74.000 |

Average Detector:

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- 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.

-23.983

74.000



Product : ASUS Tablet

Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4924.000 | 2.858 | 36.650 | 39.507 | -34.493 | 74.000 |
| 7386.000 | 12.127 | 36.740 | 48.868 | -25.132 | 74.000 |
| 9848.000 | 12.852 | 35.690 | 48.543 | -25.457 | 74.000 |
| Average Detector: | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4924.000 | 5.521 | 40.090 | 45.610 | -28.390 | 74.000 |
| 7386.000 | 13.254 | 38.780 | 52.034 | -21.966 | 74.000 |

Average Detector:

9848.000

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Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

50.017

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

36.650

4. Measurement Level = Reading Level + Correct Factor.

13.367

- 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 MCS0 7.2Mbps 20M-BW)(2412MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 3.261 | 37.130 | 40.391 | -33.609 | 74.000 |
| 7236.000 | 10.650 | 35.960 | 46.610 | -27.390 | 74.000 |
| 9648.000 | 13.337 | 34.700 | 48.036 | -25.964 | 74.000 |
| Average Detector: | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 6.421 | 38.390 | 44.811 | -29.189 | 74.000 |
| 7236.000 | 11.495 | 37.770 | 49.265 | -24.735 | 74.000 |
| 9648.000 | 13.807 | 35.110 | 48.916 | -25.084 | 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 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|--------------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4874.000 | 3.038 | 37.130 | 40.167 | -33.833 | 74.000 |
| 7311.000 | 11.795 | 34.770 | 46.564 | -27.436 | 74.000 |
| 9748.000 | 12.635 | 36.800 | 49.435 | -24.565 | 74.000 |
| | | | | | |
| Average Detector: | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4874.000 | 5.812 | 38.110 | 43.921 | -30.079 | 74.000 |
| 7311.000 | 12.630 | 38.380 | 51.009 | -22.991 | 74.000 |
| 9748.000 | 13.126 | 36.530 | 49.656 | -24.344 | 74.000 |
| | | | | | |

Average Detector:

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- 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 MCS0 7.2Mbps 20M-BW) (2462 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4924.000 | 2.858 | 36.300 | 39.157 | -34.843 | 74.000 |
| 7386.000 | 12.127 | 35.350 | 47.478 | -26.522 | 74.000 |
| 9848.000 | 12.852 | 36.190 | 49.043 | -24.957 | 74.000 |
| Average Detector: | | | | | |
| | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4924.000 | 5.521 | 38.070 | 43.590 | -30.410 | 74.000 |
| 7386.000 | 13.254 | 37.500 | 50.754 | -23.246 | 74.000 |
| 9848.000 | 13.367 | 35.630 | 48.997 | -25.003 | 74.000 |

Average Detector:

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- 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 Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| 198.780 | -10.661 | 29.135 | 18.474 | -25.026 | 43.500 |
| 371.440 | -1.097 | 25.871 | 24.774 | -21.226 | 46.000 |
| 532.460 | 1.957 | 24.339 | 26.296 | -19.704 | 46.000 |
| 689.600 | 3.628 | 23.073 | 26.701 | -19.299 | 46.000 |
| 899.120 | 5.433 | 25.545 | 30.978 | -15.022 | 46.000 |
| 968.960 | 6.981 | 22.575 | 29.556 | -24.444 | 54.000 |
| | | | | | |
| Vertical | | | | | |
| 371.440 | -2.737 | 25.871 | 23.134 | -22.866 | 46.000 |
| 520.820 | -0.298 | 23.844 | 23.546 | -22.454 | 46.000 |
| 604.240 | -1.740 | 23.261 | 21.521 | -24.479 | 46.000 |
| 689.600 | 2.538 | 23.073 | 25.611 | -20.389 | 46.000 |
| 924.340 | 5.550 | 23.622 | 29.172 | -16.828 | 46.000 |
| 967.020 | 8.071 | 22.795 | 30.866 | -23.134 | 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.



Test Item : General Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2437 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| 256.980 | -5.073 | 26.711 | 21.638 | -24.362 | 46.000 |
| 315.180 | -4.186 | 25.982 | 21.796 | -24.204 | 46.000 |
| 394.720 | -2.304 | 24.597 | 22.293 | -23.707 | 46.000 |
| 472.320 | 0.637 | 25.783 | 26.420 | -19.580 | 46.000 |
| 584.840 | 3.391 | 24.532 | 27.923 | -18.077 | 46.000 |
| 695.420 | 3.438 | 23.241 | 26.679 | -19.321 | 46.000 |
| | | | | | |
| Vertical | | | | | |
| 138.640 | -5.795 | 29.989 | 24.194 | -19.306 | 43.500 |
| 344.280 | -3.171 | 24.724 | 21.554 | -24.446 | 46.000 |
| 472.320 | -4.613 | 25.783 | 21.170 | -24.830 | 46.000 |
| 538.280 | 0.020 | 23.550 | 23.570 | -22.430 | 46.000 |
| 689.600 | 2.538 | 23.073 | 25.611 | -20.389 | 46.000 |
| 883.600 | 2.566 | 22.218 | 24.783 | -21.217 | 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.



Test Item : General Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|------------|---------|---------|-------------|---------|--------|
| | Factor | Level | Level | | |
| MHz | dB | dBuV | dBuV/m | dB | dBuV/m |
| Horizontal | | | | | |
| 243.400 | -6.441 | 25.626 | 19.185 | -26.815 | 46.000 |
| 344.280 | -2.591 | 24.724 | 22.134 | -23.866 | 46.000 |
| 472.320 | 0.637 | 25.783 | 26.420 | -19.580 | 46.000 |
| 685.720 | 2.959 | 22.858 | 25.816 | -20.184 | 46.000 |
| 881.660 | 6.307 | 23.584 | 29.891 | -16.109 | 46.000 |
| 986.420 | 7.773 | 23.860 | 31.633 | -22.367 | 54.000 |
| | | | | | |
| Vertical | | | | | |
| 266.680 | -8.213 | 24.287 | 16.074 | -29.926 | 46.000 |
| 394.720 | -4.024 | 24.597 | 20.573 | -25.427 | 46.000 |
| 520.820 | -0.298 | 23.844 | 23.546 | -22.454 | 46.000 |
| 623.640 | -2.631 | 23.892 | 21.261 | -24.739 | 46.000 |
| 691.540 | 2.421 | 23.139 | 25.560 | -20.440 | 46.000 |
| 939.860 | 6.450 | 22.918 | 29.368 | -16.632 | 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.



5. RF antenna conducted test

5.1. Test Equipment

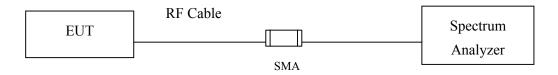
| | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---|-------------------|--------------|----------------------|------------|
| | Spectrum Analyzer | R&S | FSP40 / 100170 | Jun, 2012 |
| | Spectrum Analyzer | Agilent | E4407B / US39440758 | Jun, 2012 |
| X | Spectrum Analyzer | Agilent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

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.



5.5. Uncertainty

The measurement uncertainty

Conducted is defined as \pm 1.27dB



5.6. Test Result of RF antenna conducted test

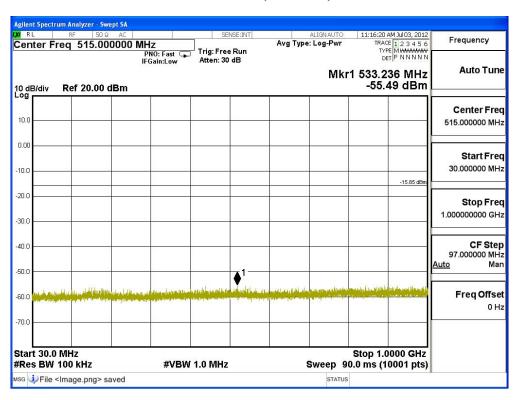
Product : ASUS Tablet

Test Item : RF antenna conducted test

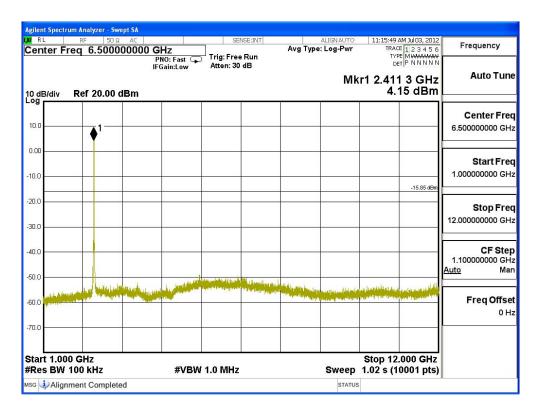
Test Site : No.3 OATS

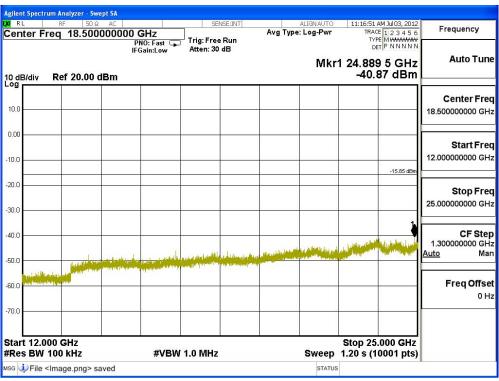
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel 01 (2412MHz)



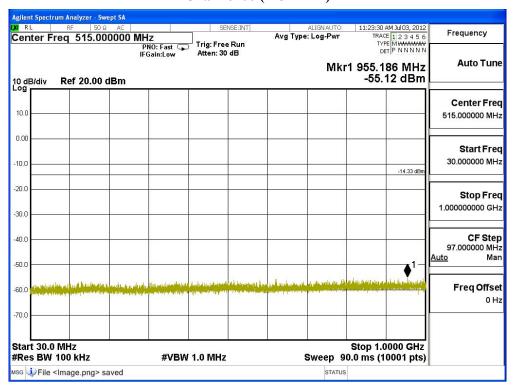


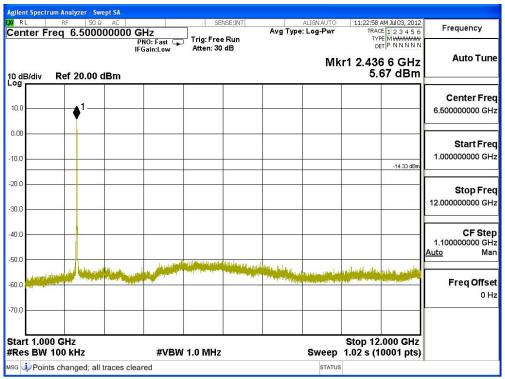




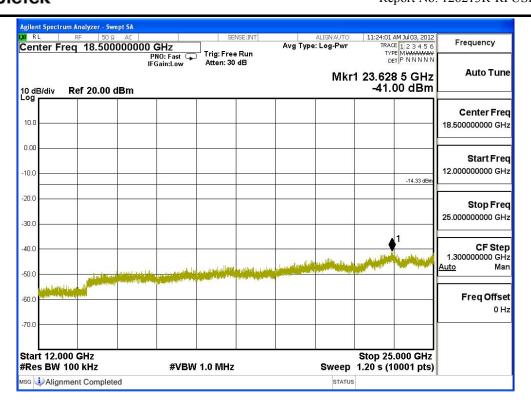


Channel 06 (2437MHz)



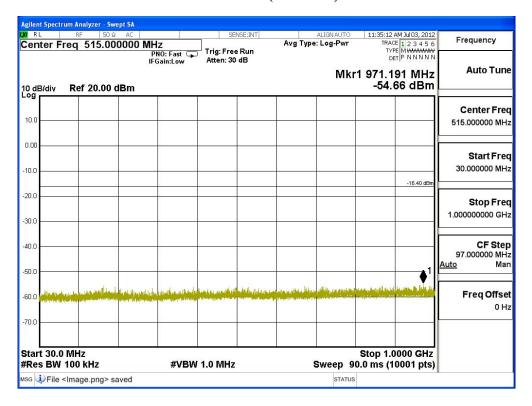


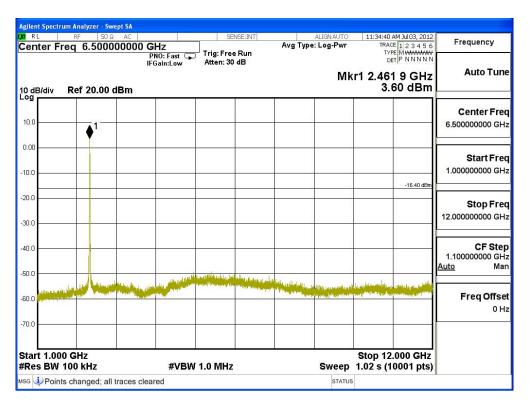




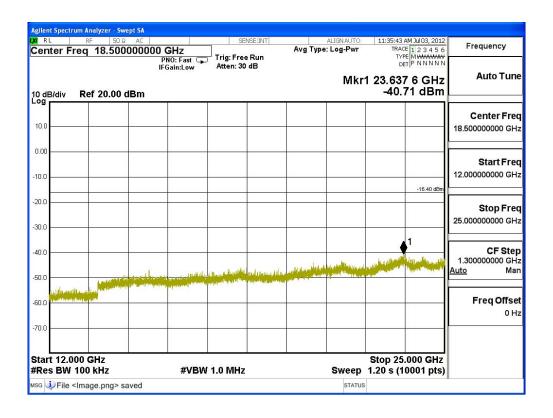


Channel 11 (2462MHz)











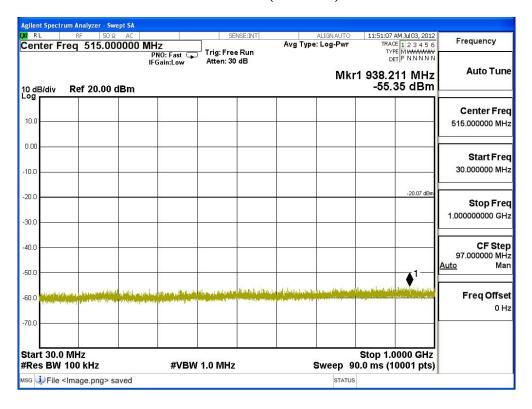
Product : ASUS Tablet

Test Item : RF Antenna Conducted Spurious

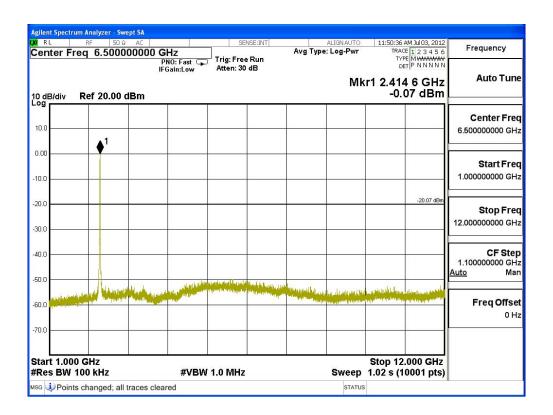
Test Site : No.3 OATS

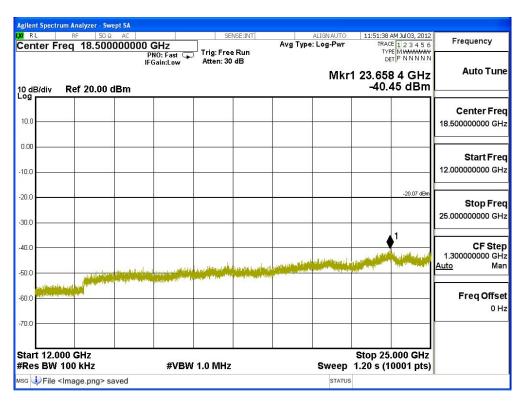
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel 01 (2412MHz)



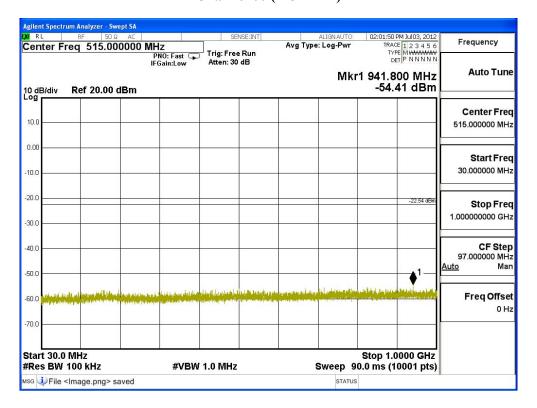


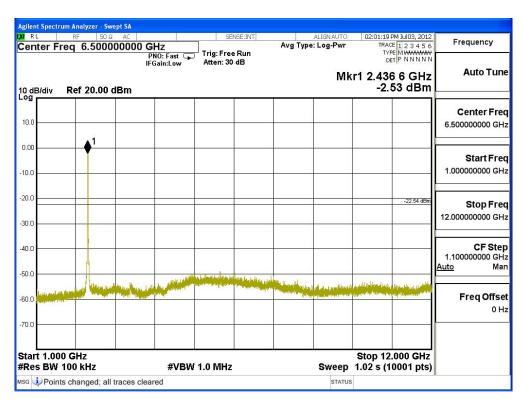




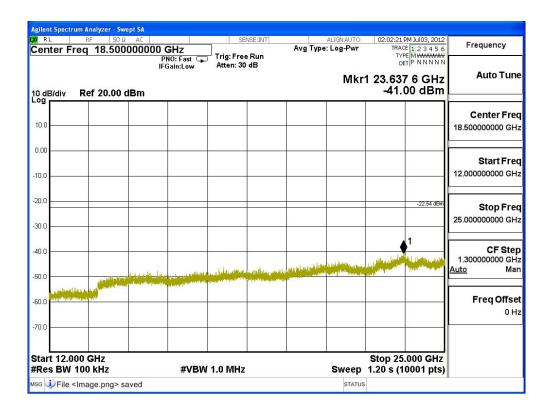


Channel 06 (2437MHz)



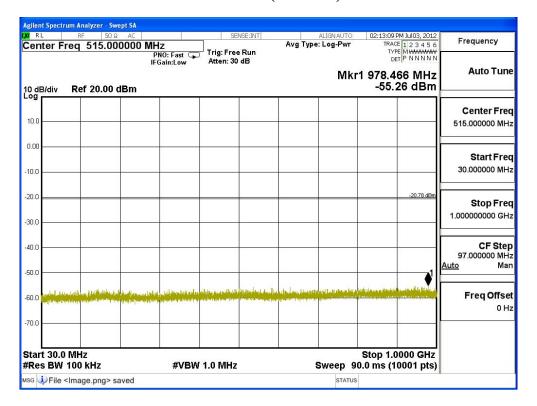


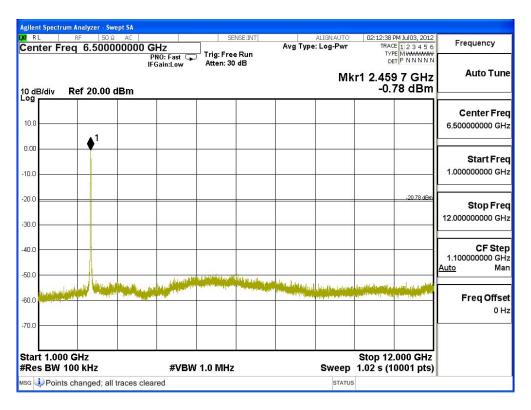




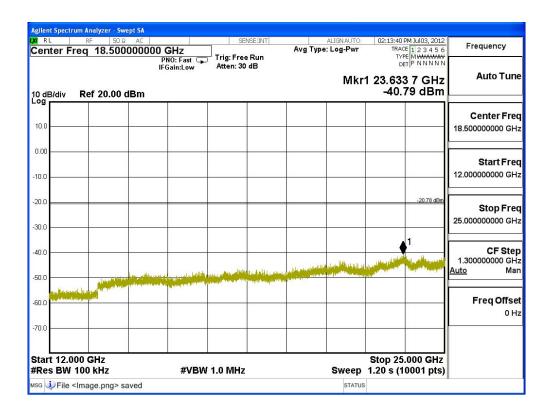


Channel 11 (2462MHz)











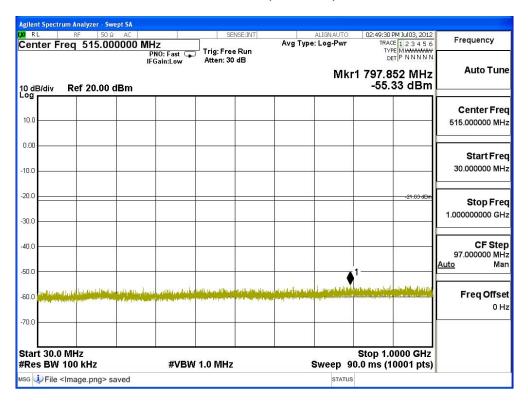
Product : ASUS Tablet

Test Item : RF Antenna Conducted Spurious

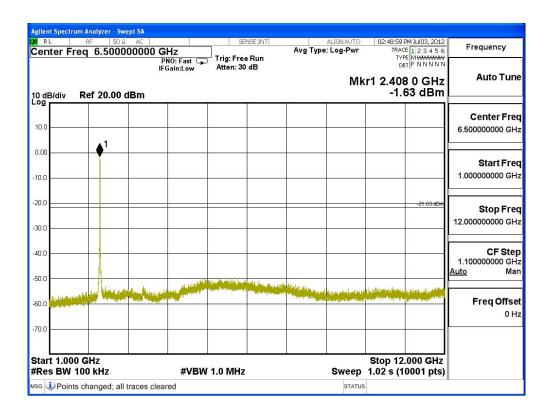
Test Site : No.3 OATS

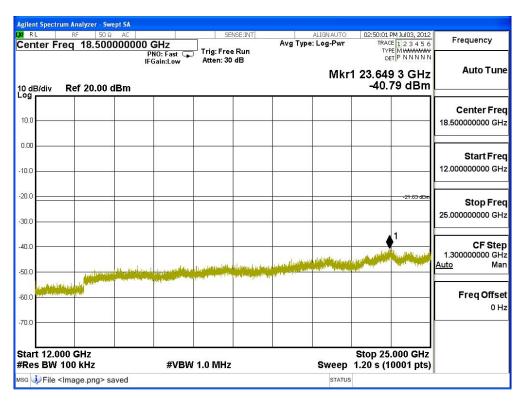
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel 01 (2412MHz)



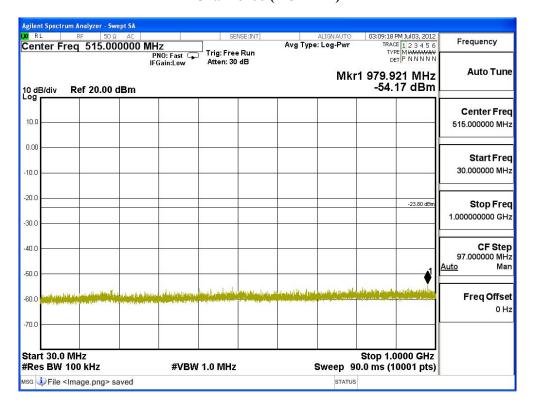


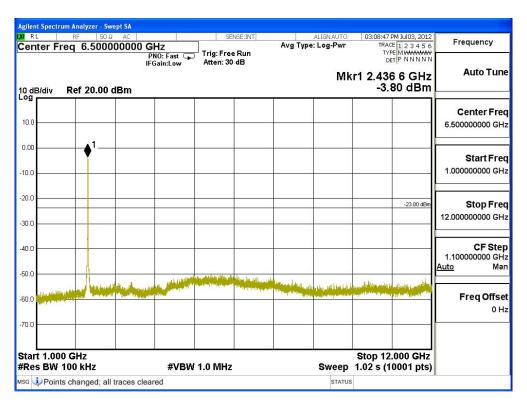




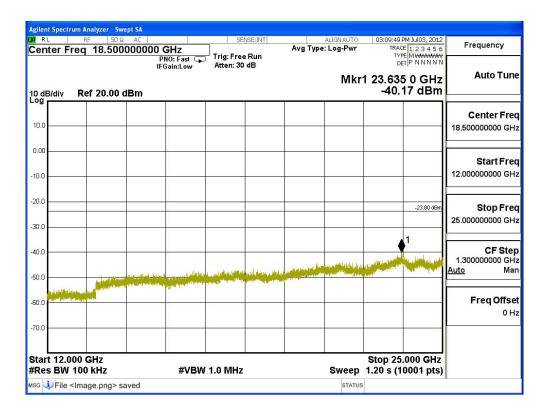


Channel 06 (2437MHz)



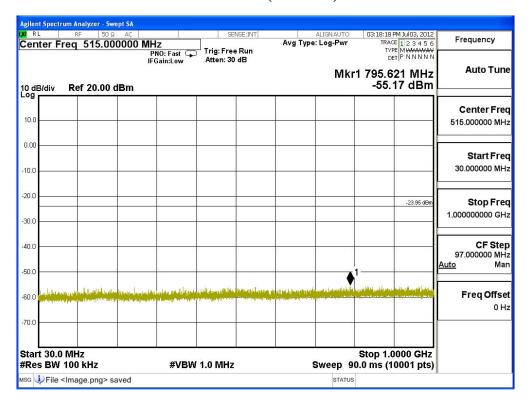


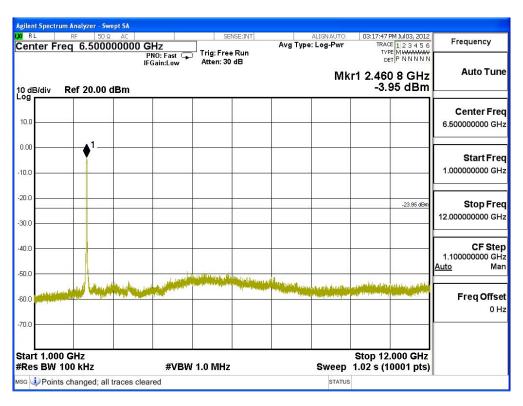




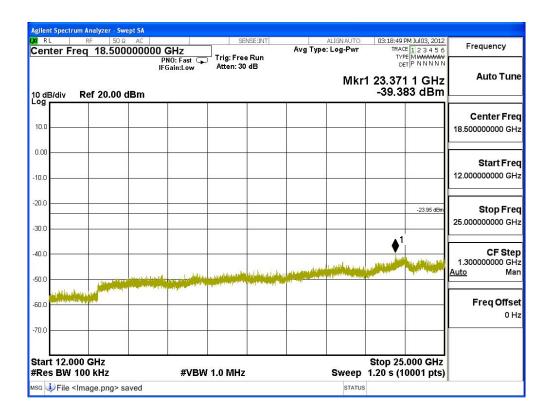


Channel 11 (2462MHz)











6. Band Edge

6.1. 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, 2012 |
| | Spectrum Analyzer | Agilent | E4407B / US39440758 | Jun, 2012 |
| 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., 2011 |
| | X | Horn Antenna | Schwarzbeck | BBHA9120D/D305 | Sep., 2011 |
| | | Horn Antenna | Schwarzbeck | BBHA9170/208 | Jul., 2012 |
| | X | Pre-Amplifier | Agilent | 8447D/2944A09549 | Sep., 2011 |
| | X | Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2012 |
| | | Test Receiver | R & S | ESCS 30/ 825442/018 | Sep., 2011 |
| | X | Coaxial Cable | QuieTek | QTK-CABLE/ CAB5 | Feb., 2012 |
| | X | Controller | QuieTek | QTK-CONTROLLER/ CTRL3 | N/A |
| | X | Coaxial Switch | Anritsu | MP59B/6200265729 | N/A |

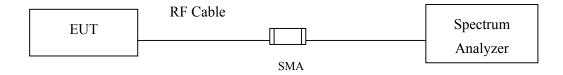
Note:

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

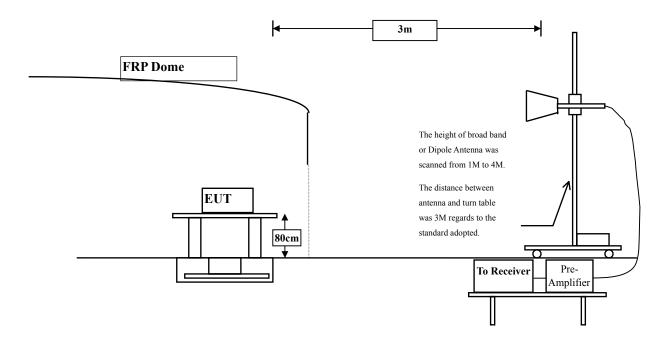


6.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



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.



6.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2003 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 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 C63.4: 2003 on radiated measurement.

6.5. Uncertainty

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



6.6. Test Result of Band Edge

Product : ASUS Tablet
Test Item : Band Edge Data
Test Site : No.3 OATS

Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Fundamental Filed Strength

| Antenna Pole | Frequency [MHz] | Correction Factor [dB/m] | Reading Level [dBuV] | Emission Level [dBuV/m] | Detector |
|-----------------|--------------------|--------------------------|-------------------------|----------------------------|----------|
| Horizontal | 2412 | 31.639 | 73.59 | 105.228 | Peak |
| Horizontal | 2412 | 31.639 | 69.58 | 101.218 | Average |
| Vertical | 2412 | 30.95 | 73.74 | 104.689 | Peak |
| Vertical | 2412 | 30.95 | 69.65 | 100.599 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Limit (dBuV/m) | Detector |
|-----------------|----------------------------|-------------------------|--------|---|----------------|----------|
| Horizontal | 2388.9 | 105.228 | 45.74 | 59.488 | 74.000 | Peak |
| Horizontal | 2389.2 | 101.218 | 50.08 | 51.138 | 54.000 | Average |
| Vertical | 2388.9 | 104.689 | 45.74 | 58.949 | 74.000 | Peak |
| Vertical | 2389.2 | 100.599 | 50.08 | 50.519 | 54.000 | Average |

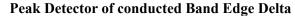
Note:

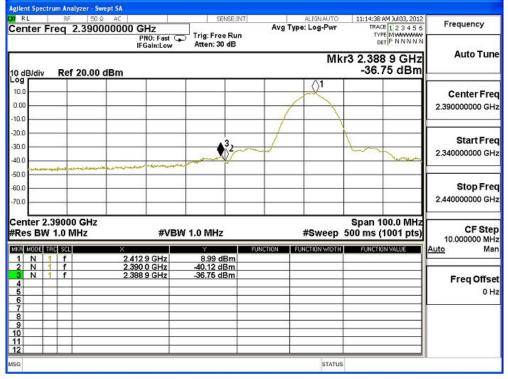
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

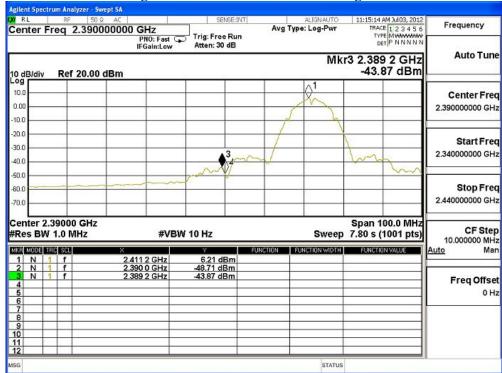
Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)











Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Fundamental Filed Strength

| Antenna | Frequency | Correction Factor | Reading Level | Emission Level | Detector |
|------------|-----------|--------------------------|---------------|-----------------------|----------|
| Pole | [MHz] | [dB/m] | [dBuV] | [dBuV/m] | |
| Horizontal | 2462 | 32.019 | 74.6 | 106.619 | Peak |
| Horizontal | 2462 | 32.019 | 70.8 | 102.819 | Average |
| Vertical | 2462 | 31.29 | 73.43 | 104.72 | Peak |
| Vertical | 2462 | 31.29 | 69.54 | 100.83 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Limit (dBuV/m) | Detector |
|-----------------|----------------------------|-------------------------|--------|---|----------------|----------|
| Horizontal | 2484.8 | 106.619 | 46.38 | 60.239 | 74.000 | Peak |
| Horizontal | 2488.8 | 102.819 | 50.21 | 52.609 | 54.000 | Average |
| Vertical | 2484.8 | 104.72 | 46.38 | 58.34 | 74.000 | Peak |
| Vertical | 2488.8 | 100.83 | 50.21 | 50.62 | 54.000 | Average |

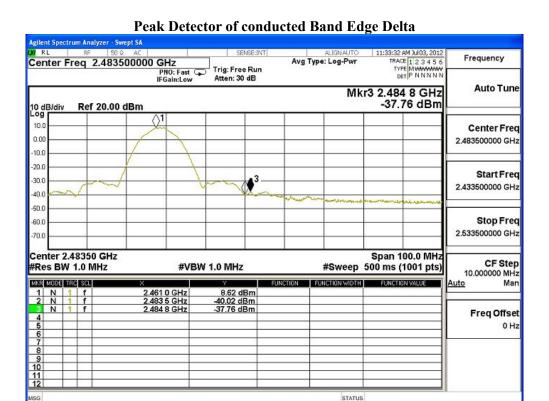
Note:

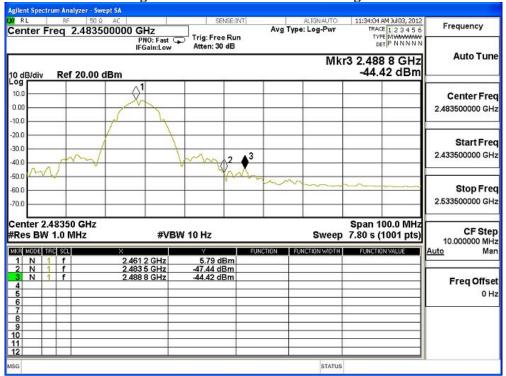
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)









Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Fundamental Filed Strength

| Antenna | Frequency | Correction Factor | Reading Level | Emission Level | Detector |
|------------|-----------|--------------------------|---------------|-----------------------|----------|
| Pole | [MHz] | [dB/m] | [dBuV] | [dBuV/m] | |
| Horizontal | 2412 | 31.639 | 73.5 | 105.138 | Peak |
| Horizontal | 2412 | 31.639 | 59.65 | 91.288 | Average |
| Vertical | 2412 | 30.95 | 74.73 | 105.679 | Peak |
| Vertical | 2412 | 30.95 | 60.26 | 91.209 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Limit (dBuV/m) | Detector |
|-----------------|----------------------------|-------------------------|--------|---|----------------|----------|
| Horizontal | 2389.9 | 105.138 | 33.08 | 72.058 | 74.000 | Peak |
| Horizontal | 2390 | 91.288 | 41.61 | 49.678 | 54.000 | Average |
| Vertical | 2389.9 | 105.679 | 33.08 | 72.599 | 74.000 | Peak |
| Vertical | 2390 | 91.209 | 41.61 | 49.599 | 54.000 | Average |

Note:

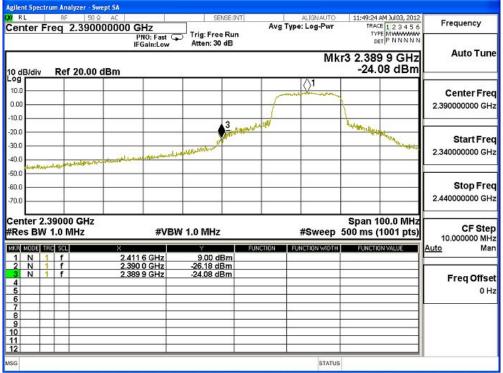
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

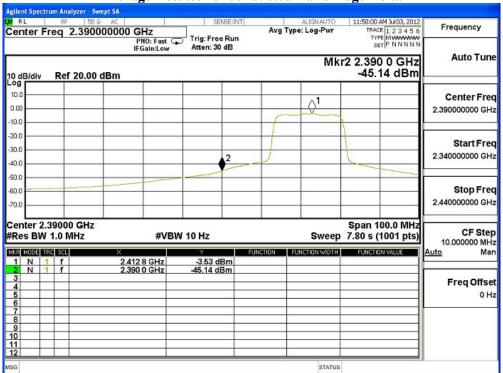
Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)











Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Fundamental Filed Strength

| Antenna | Frequency | Correction Factor | Reading Level | Emission Level | Detector |
|------------|-----------|--------------------------|---------------|-----------------------|----------|
| Pole | [MHz] | [dB/m] | [dBuV] | [dBuV/m] | |
| Horizontal | 2462 | 32.019 | 75.63 | 107.649 | Peak |
| Horizontal | 2462 | 32.019 | 60.88 | 92.899 | Average |
| Vertical | 2462 | 31.29 | 73.87 | 105.16 | Peak |
| Vertical | 2462 | 31.29 | 59.84 | 91.13 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Limit (dBuV/m) | Detector |
|-----------------|----------------------------|-------------------------|--------|---|----------------|----------|
| Horizontal | 2483.9 | 107.649 | 34.46 | 73.189 | 74.000 | Peak |
| Horizontal | 2483.5 | 92.899 | 41.37 | 51.529 | 54.000 | Average |
| Vertical | 2483.9 | 105.16 | 34.46 | 70.7 | 74.000 | Peak |
| Vertical | 2483.5 | 91.13 | 41.37 | 49.76 | 54.000 | Average |

Note:

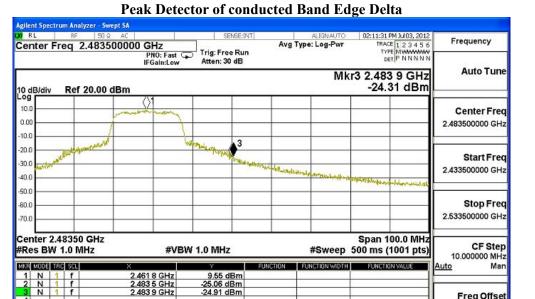
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)

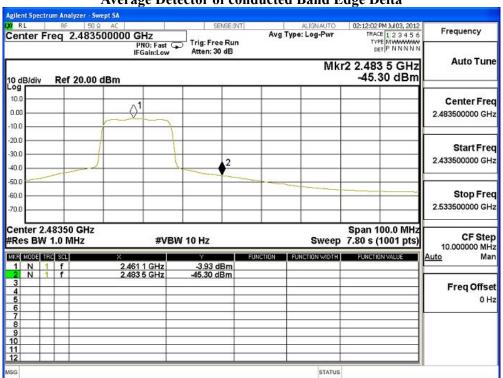
Freq Offset 0 Hz





Average Detector of conducted Band Edge Delta

STATUS





Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Fundamental Filed Strength

| Antenna | Frequency | Correction Factor | Reading Level | Emission Level | Detector |
|------------|-----------|--------------------------|---------------|-----------------------|----------|
| Pole | [MHz] | [dB/m] | [dBuV] | [dBuV/m] | |
| Horizontal | 2412 | 31.639 | 72.16 | 103.798 | Peak |
| Horizontal | 2412 | 31.639 | 54.35 | 85.988 | Average |
| Vertical | 2412 | 30.95 | 72.2 | 103.149 | Peak |
| Vertical | 2412 | 30.95 | 54.51 | 85.459 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Limit (dBuV/m) | Detector |
|-----------------|----------------------------|-------------------------|--------|---|----------------|----------|
| Horizontal | 2388.9 | 103.798 | 33.16 | 70.638 | 74.000 | Peak |
| Horizontal | 2390 | 85.988 | 38.36 | 47.628 | 54.000 | Average |
| Vertical | 2388.9 | 103.149 | 33.16 | 69.989 | 74.000 | Peak |
| Vertical | 2390 | 85.459 | 38.36 | 47.099 | 54.000 | Average |

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

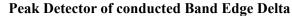
Band Edge field Strength = $F - \Delta$

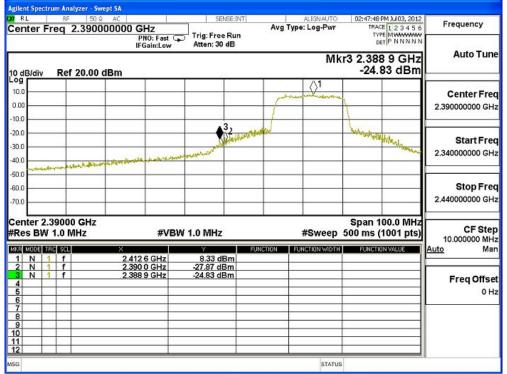
F = Fundamental field Strength (Peak or Average)

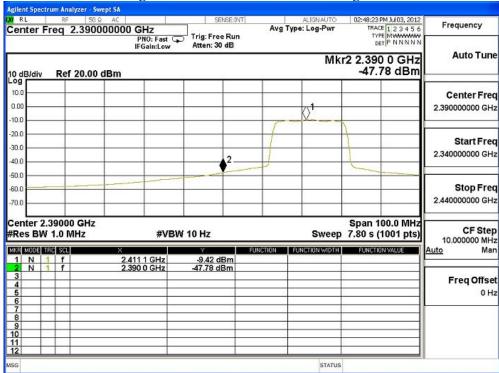
 Δ = Conducted Band Edge Delta (Peak or Average)

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Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Fundamental Filed Strength

| Antenna | Frequency | Correction Factor | Reading Level | Emission Level | Detector |
|------------|-----------|--------------------------|---------------|-----------------------|----------|
| Pole | [MHz] | [dB/m] | [dBuV] | [dBuV/m] | |
| Horizontal | 2462 | 32.019 | 73.02 | 105.039 | Peak |
| Horizontal | 2462 | 32.019 | 55.14 | 87.159 | Average |
| Vertical | 2462 | 31.29 | 72.57 | 103.86 | Peak |
| Vertical | 2462 | 31.29 | 54.25 | 85.54 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Limit (dBuV/m) | Detector |
|-----------------|----------------------------|-------------------------|--------|---|----------------|----------|
| Horizontal | 2484.4 | 105.039 | 32.81 | 72.229 | 74.000 | Peak |
| Horizontal | 2483.5 | 87.159 | 37.71 | 49.449 | 54.000 | Average |
| Vertical | 2484.4 | 103.86 | 32.81 | 71.05 | 74.000 | Peak |
| Vertical | 2483.5 | 85.54 | 37.71 | 47.83 | 54.000 | Average |

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)





