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FCC PART 15 SUBPART C and RSS-210 TEST REPORT

FCC Part 15.249 and RSS-210 Section A2.9

Compiled by

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Approved by

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Testing Laboratory Name Shenzhen Huatongwei International Inspection Co., Ltd

Address...... Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China

Applicant's name...... Activision Publishing,Inc.

Test specification:

Standard FCC Part 15.249: Operation within the bands 920-928 MHz,

2400-2483.5 MHz, 5725-5850 MHz and 24.0 - 24.25 GHz.

RSS-210 Issue 7 Section A2.9 902-928, 2400-2483.5 and 5725-

5875 MHz

Master TRF...... Dated 2006-06

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Test item description: Dongle for Wii"Tony Hawk:Ride" skatebord controller

Trade Mark:

Model/Type reference...... 83787.505

Listed Models /
Serial Number /

Modulation: MSK

Result...... Positive

TEST REPORT

| Test Report No. : | WE09070018 | Jul 24, 2009 | |
|-------------------|------------|---------------|--|
| l rest Report No | WE09070018 | Date of issue | |

Equipment under Test : Dongle for Wii"Tony Hawk:Ride" skatebord controller

Model /Type : 83787.505

Listed Models : /

Applicant : Activision Publishing,Inc.

Address : 3100 Ocean Park Blvd., Santa Monica, CA 90405, U.S.A.

Manufacturer Honey Bee Electronic International Ltd.

Address Flat L,12/F,Phase 4,Kwun Tong Industrial Centre,436-446

Kwun Tong Road, Kowloon, Hong Kong

| Test Result according to the standards on page 4: | Positive |
|---|----------|
|---|----------|

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. TEST STANDARDS

The tests were performed according to following standards:

<u>FCC Rules Part 15.249:</u> Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, 5725-5850 MHz and 24.0 - 24.25 GHz.

RSS-210 Issue 7 June 2007: Spectrum Management and Telecommunications Radio Standards Specification Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment

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2. <u>SUMMAR</u>Y

2.1. General Remarks

Date of receipt of test sample : Jul 17, 2009

Testing commenced on : Jul 18, 2009

Testing concluded on : Jul 24, 2009

2.2. Equipment Under Test

Power supply system utilised

Power supply voltage o 115V / 60Hz

o Other (specified in blank below)

DC 5V from USB

2.3. Short description of the Equipment under Test (EUT)

2.4GHz (Dongle for Wii"Tony Hawk:Ride" skatebord controller)

For more details, refer to the user's manual of the EUT.

Serial number: Prototype

2.4. EUT operation mode

The EUT has been tested under typical operating condition.

2.5. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

o - supplied by the manufacturer

o - supplied by the lab

Length (m): / o Power Cable

> Shield: / Detachable: /

Manufacturer: /

o Multimeter

Model No.: /

TV

M/N : TLM19V68 Serial : IRE9T10089 Manufacturer : Hisense

Power cord : Unshielded, Undetectable, 1.8m

RVT-R Reader (Wireless)

Manufacturer: SANSHIN ELECTRONICS CO.,LTD.

M/N : RVT-002

2.6. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **XLU83787505** and IC: **7293B-83787505** filing to comply with Section 15.249 of the FCC Part 15, Subpart C Rules and RSS-210.

2.7. Modifications

No modifications were implemented to meet testing criteria.

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3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen Huatongwei International Inspection Co., Ltd Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China Phone: 86-755-26715686 Fax: 86-755-26748089

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 (2003) and CISPR Publication 22.

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: August 02, 2007. Valid time is until March 29, 2012.

A2LA-Lab Cert. No. 2243.01

Shenzhen Huatongwei International Inspection Co., Ltd, EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is from Aug 24, 2005 to Sept 30, 2009.

FCC-Registration No.: 662850

Shenzhen Huatongwei International Inspection Co., Ltd, EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 662850, Renewal date July 01, 2009.

IC-Registration No.: 5377

The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377 on February 13th, 2009.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd, EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

NEMKO-Aut. No.: ELA125

Shenzhen Huatongwei International Inspection Co., Ltd has been assessed the quality assurance system, the testing facilities, qualifications and testing practices of the relevant parts of the organization. The quality assurance system of the Laboratory has been validated against ISO/IEC 17025:2005 or equivalent. The laboratory also fulfils the conditions described in Nemko Document NLA-10, the Authorization is valid through April 25, 2009.

VCCI

The 3m Semi-anechoic chamber $(12.2m\times7.95m\times6.7m)$ and Shielded Room $(8m\times4m\times3m)$ of Shenzhen Huatongwei International Inspection Co., Ltd has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2484. Date of Registration: December 20, 2006. Valid time is until December 19, 2009.

Main Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-2726. Date of Registration: December 20, 2006. Valid time is until December 19, 2009.

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DNV

Shenzhen Huatongwei International Inspection Co Ltd has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups according to relevant parts of ISO/IEC Guide 17025(2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until 09 July, 2010.

3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature: 15-35 ° C

Humidity: 30-60 %

Atmospheric pressure: 950-1050mbar

3.4. Configuration of Tested System

Fig. 2-1 Configuration of Tested System

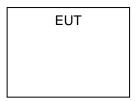


Table 2-1 Equipment Used in Tested System

| No. | Product Manufacturer | | Model No. | Serial No. | |
|-----|----------------------|------|-----------|------------|--|
| | Notebook PC | ASUS | I9100L | 59NP00972 | |

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods — Part 4: Uncertainty in EMC Measurements" and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

| Test | Range | Measurement Uncertainty | Notes |
|-----------------------|------------|----------------------------|-------|
| Radiated Emission | 30~1000MHz | 4.22dB | (1) |
| Radiated Emission | 1~12.75GHz | 4.35dB | (1) |
| Conducted Disturbance | 0.15~30MHz | 3.29dB | (1) |

⁽¹⁾ This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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3.6. Equipments Used during the Test

| AC Po | AC Power Conducted Emission | | | | | | | |
|-------|-----------------------------|-----------------|------------|------------|-----------|--|--|--|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | | | |
| 1 | EMI TEST RECEIVER | ROHDE & SCHWARZ | ESCS30 | 100038 | 2008/11 | | | |
| 2 | ARTIFICIAL MAINS | ROHDE & SCHWARZ | ESH2-Z5 | 100028 | 2008/11 | | | |
| 3 | PULSE LIMITER | ROHDE & SCHWARZ | ESHSZ2 | 100044 | 2008/11 | | | |
| 4 | EMI TEST SOFTWARE | ROHDE & SCHWARZ | ES-K1 1.71 | N/A | 2008/11 | | | |

| Radia | Radiated Emissions | | | | | | |
|-------|----------------------------|-----------------|-----------|--------------|-----------|--|--|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | | |
| 1 | ULTRA-BROADBAND ANTENNA | ROHDE & SCHWARZ | HL562 | 100015 | 2008/11 | | |
| 2 | EMI TEST RECEIVER | ROHDE & SCHWARZ | ESI 26 | 100009 | 2008/11 | | |
| 3 | RF TEST PANEL | ROHDE & SCHWARZ | TS / RSP | 335015/ 0017 | 2008/11 | | |
| 4 | TURNTABLE | ETS | 2088 | 2149 | 2008/11 | | |
| 5 | ANTENNA MAST | ETS | 2075 | 2346 | 2008/11 | | |
| 6 | EMI TEST SOFTWARE | ROHDE & SCHWARZ | ESK1 | N/A | 2008/11 | | |

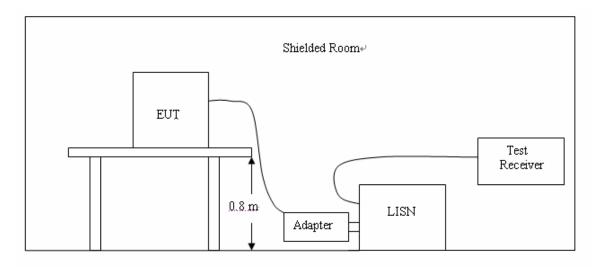
| Е | Bandwidth / Band Edge Measurement | | | | | | | |
|---|-----------------------------------|-------------------|-----------------|-----------|------------|-----------|--|--|
| ŀ | tem | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | | |
| | 1 | EMI TEST RECEIVER | ROHDE & SCHWARZ | ESCI | 100106 | 2008/11 | | |

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4. TEST CONDITIONS AND RESULTS

4.1. Conducted Emissions Test

TEST CONFIGURATION



TEST PROCEDURE

- 1 The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4.
- 2 Support equipment, if needed, was placed as per ANSI C63.4.
- 3 All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4 If a EUT received DC power from the adapter, the adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5 All support equipments received AC power from a second LISN, if any.
- 6 The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7 Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
- 8 During the above scans, the emissions were maximized by cable manipulation.

Conducted Power Line Emission Limit

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following:

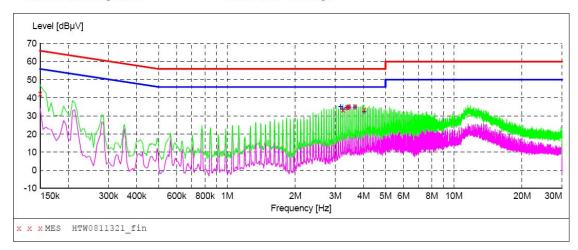
| F===================================== | Maximum RF Line Voltage (dBμV) | | | | | |
|--|--------------------------------|------|---------|--------|--|--|
| Frequency (MHz) | CLAS | SS A | CLASS B | | | |
| (141112) | Q.P. | Ave. | Q.P. | Ave. | | |
| 0.15 - 0.50 | 79 | 66 | 66-56* | 56-46* | | |
| 0.50 - 5.00 | 73 | 60 | 56 | 46 | | |
| 5.00 - 30.0 | 73 | 60 | 60 | 50 | | |

^{*} Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

TEST RESULTS

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



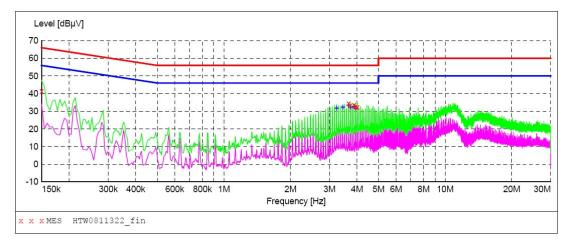
MEASUREMENT RESULT: "HTW0811321 fin"

| 8/12/2009 9:2 Frequency MHz | 1AM Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|-----------------------------------|----------------------|--------------|---------------|--------------|----------|------|-----|
| 0.150000 | 42.20 | 10.6 | 66 | 23.8 | QP | N | GND |
| 3.241500 | 33.50 | 10.6 | 56 | 22.5 | QP | N | GND |
| 3.381000 | 35.00 | 10.6 | 56 | 21.0 | QP | N | GND |
| 3.448500 | 35.30 | 10.6 | 56 | 20.7 | QP | N | GND |
| 3.660000 | 35.20 | 10.6 | 56 | 20.8 | QP | N | GND |
| 4.015500 | 33.60 | 10.6 | 56 | 22.4 | QP | N | GND |

MEASUREMENT RESULT: "HTW0811321_fin2"

| 8/12/2009 | 9:21AM | | | | | | |
|-----------|--------|-----------|-------|--------|----------|------|-----|
| Frequen | cy Lev | el Transd | Limit | Margin | Detector | Line | PE |
| M | Hz dB | uV dB | dBµV | dB | | | |
| | | | | | | | |
| 3.1695 | 00 35. | 10 10.6 | 46 | 10.9 | AV | N | GND |
| 3.2370 | 00 33. | 70 10.6 | 46 | 12.3 | AV | N | GND |
| 3.3810 | 00 34. | 50 10.6 | 46 | 11.5 | AV | N | GND |
| 3.4485 | 00 34. | 90 10.6 | 46 | 11.1 | AV | N | GND |
| 3.6600 | 00 34. | 80 10.6 | 46 | 11.2 | AV | N | GND |
| 4.0155 | 00 32. | 20 10.6 | 46 | 13.8 | AV | N | GND |

SCAN TABLE: "Voltage (9K-30M)FIN" Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "HTW0811322_fin"

| 8/12/2009 9: | 24AM | | | | | | |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
| 0.150000 | 41.40 | 10.6 | 66 | 24.6 | QP | L1 | GND |
| 3.660000 | 34.30 | 10.6 | 56 | 21.7 | QP | L1 | GND |
| 3.732000 | 33.10 | 10.6 | 56 | 22.9 | QP | L1 | GND |
| 3.871500 | 33.50 | 10.6 | 56 | 22.5 | QP | L1 | GND |
| 3.943500 | 32.70 | 10.6 | 56 | 23.3 | QP | L1 | GND |
| 4.011000 | 32.40 | 10.6 | 56 | 23.6 | QP | L1 | GND |

MEASUREMENT RESULT: "HTW0811322_fin2"

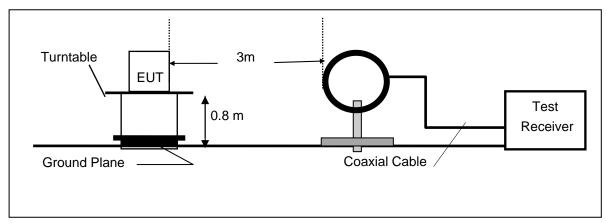
| 8/12/2009 9:3 | 24AM | | | | | | |
|---------------|-------|--------|-------|--------|----------|------|-----|
| Frequency | Level | Transd | Limit | Margin | Detector | Line | PE |
| MHz | dΒμV | dB | dΒμV | dB | | | |
| | | | | | | | |
| 3.237000 | 31.90 | 10.6 | 46 | 14.1 | AV | L1 | GND |
| 3.448500 | 32.50 | 10.6 | 46 | 13.5 | AV | L1 | GND |
| 3.660000 | 33.60 | 10.6 | 46 | 12.4 | AV | L1 | GND |
| 3.732000 | 32.30 | 10.6 | 46 | 13.7 | AV | L1 | GND |
| 3.871500 | 32.60 | 10.6 | 46 | 13.4 | AV | L1 | GND |
| 3.943500 | 31.70 | 10.6 | 46 | 14.3 | AV | L1 | GND |

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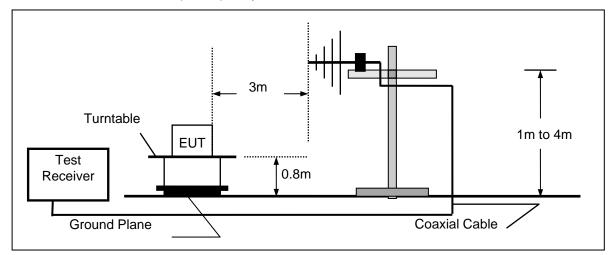
4.2. Radiated Emission Test

TEST CONFIGURATION

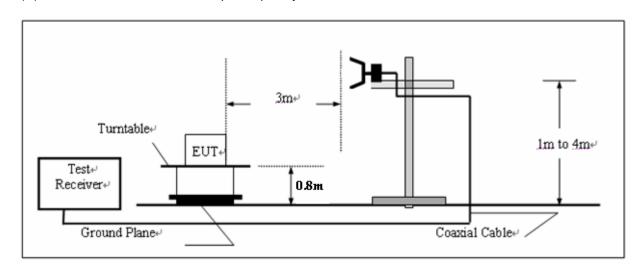
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



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TEST PROCEDURE

- 1 The EUT was placed on a turn table which is 0.8m above ground plane.
- 2 Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360°C to acquire the highest emissions from EUT
- 3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 4. Repeat above procedures until all frequency measurements have been completed.

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

| Where FS = Field Strength | CL = Cable Attenuation Factor (Cable Loss) | | |
|---------------------------|--|--|--|
| RA = Reading Amplitude | AG = Amplifier Gain | | |
| AF = Antenna Factor | | | |

RADIATION LIMIT

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Frequency (MHz) | Distance (Meters) | Radiated (dBµV/m) | Radiated (μV/m) |
|--------------------|----------------------|----------------------|--------------------|
| 30-88 | 3 | 40.0 | 100 |
| 88-216 | 3 | 43.5 | 150 |
| 216-960 | 3 | 46.0 | 200 |
| Above 960 | 3 | 54.0 | 500 |

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

Fundamental and Harmonics Emission Limits

| Frequency | Field Strength | of Fundamental | Field Strengt | h of Harmonics |
|-------------|----------------|----------------|---------------|-----------------|
| MHz | (mV/m @3m) | (dBuV/m @3m) | (uV/m @3m) | $(dBuV/m\ @3m)$ |
| 2400-2483.5 | 50 | 94 (Average) | 500 | 54 (Average) |
| | | 114 (Peak) | | 74 (Peak) |

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Test Procedure

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.

TEST RESULTS

Operation Mode: TX on Top Channel Temperature: 20 C Humidity: 70 % RH Polarity: Ver. / Hor.

| Freq. | Ant.Pol. | DetectorMode | Reading | Ant./CL/ | Actual FS | Limit3m | Safe Margin | Note |
|--------|----------|--------------|---------|------------|-----------|----------|-------------|------|
| (MHz) | H/V | _(PK/AV)_ | (dBuV) | Amp. CF(dB | (dBuV/m) | (dBuV/m) | (dB) | |
| 2479 | V | Peak | 85.20 | -3.30 | 81.90 | 93.98 | -12.08 | F |
| 2479 | Н | Peak | 77.20 | -3.30 | 73.90 | 93.98 | -20.08 | F |
| 4958 | V | Peak | 45.60 | 3.90 | 49.50 | 73.98 | -24.48 | H |
| 4958 | Н | Peak | 45.00 | 3.90 | 48.90 | 73.98 | -25.08 | H |
| 7437 | V | | | | | | | Н |
| 7437 | Н | | | | | | | Н |
| | | | | | | | | |
| 440.16 | Н | Peak | 14.30 | 20.20 | 34.50 | 46.00 | -11.50 | |
| 440.16 | V | Peak | 16.50 | 20.20 | 36.70 | 46.00 | -9.30 | |
| Others | | | | | | | | |

Remark:

- (1) Measuring frequencies from 30 MHz to the 25 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) The IF bandwidth of EMI Test Receiver was 120KHz for measuring from 30 MHz to 1 GHz and 1 MHz for measuring above 1 GHz

Operation Mode: TX on Mid Channel

Temperature: 20 C Humidity: 70 % RH

Polarity: Ver. / Hor.

| Freq. | Ant.Pol. | DetectorMode | e Reading | Ant./CL/ | Actual FS | Limit3m | Safe Margin | Note |
|--------|----------|--------------|-----------|------------|-----------|----------|-------------|------|
| (MHz) | H/V | _(PK/AV)_ | (dBuV) | Amp. CF(dB | (dBuV/m) | (dBuV/m) | (dB) | |
| 2441 | V | Peak | 88.50 | -3.40 | 85.10 | 93.98 | -8.88 | F |
| 2441 | Н | Peak | 92.80 | -3.40 | 89.40 | 93.98 | -4.58 | F |
| 4882 | V | Peak | 44.50 | 3.70 | 48.20 | 73.98 | -25.78 | Н |
| 4882 | Н | Peak | 46.30 | 3.70 | 50.00 | 73.98 | -23.98 | Н |
| 7323 | V | | | | | | | Н |
| 7323 | Н | | | | | | | Н |
| | | | | | | | | |
| 957.23 | Н | Peak | 6.20 | 25.90 | 32.10 | 46.00 | -13.90 | |
| 755.07 | V | Peak | 7.70 | 23.60 | 31.30 | 46.00 | -14.70 | |
| Others | | | | | | | | |

Remark:

- (1) Measuring frequencies from 30 MHz to the 25 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) The IF bandwidth of EMI Test Receiver was 120KHz for measuring from 30 MHz to 1 GHz and 1 MHz for measuring above 1 GHz

Operation Mode: TX on Bot Channel

Temperature: 20 C Humidity: 70 % RH

Polarity: Ver. / Hor.

| Freq. | Ant.Pol. | DetectorMode | Reading | Ant./CL/ | Actual FS | Limit3m | Safe Margin | Note |
|--------|----------|--------------|---------|-------------|-----------|----------|-------------|------|
| (MHz) | H/V | (PK/AV) | (dBuV) | Amp. CF(dB) | (dBuV/m) | (dBuV/m) | (dB) | |
| 2404 | V | Peak | 90.50 | -3.50 | 87.00 | 93.98 | -6.98 | F |
| 2404 | Н | Peak | 89.90 | -3.50 | 86.40 | 93.98 | -7.58 | F |
| 4808 | V | Peak | 44.60 | 3.80 | 48.40 | 73.98 | -25.58 | Н |
| 4808 | Н | Peak | 39.10 | 3.80 | 42.90 | 73.98 | -31.08 | Н |
| 7212 | V | | | | | | | Н |
| 7212 | Н | | | | | | | Н |
| | | | | | | | | |
| 931.97 | Н | Peak | 6.20 | 26.10 | 32.30 | 46.00 | -13.70 | |
| 755.07 | V | Peak | 9.40 | 23.60 | 33.00 | 46.00 | -13.00 | |
| Others | | | | | | | | |

Remark:

- (1) Measuring frequencies from 30 MHz to the 25 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) The IF bandwidth of EMI Test Receiver was 120KHz for measuring from 30 MHz to 1 GHz and 1 MHz for measuring above 1 GHz

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4.3. Band Edge Measurement

TEST CONFIGURATION

Same as Section 4.2

TEST PROCEDURE

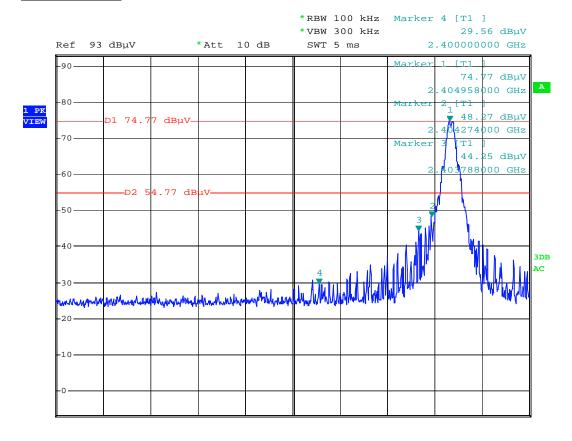
The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.4 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW to 100KHz and VBM to 300KHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength.

The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW to 100 KHz and VBM to 300 KHz, to measure the conducted peak band edge.

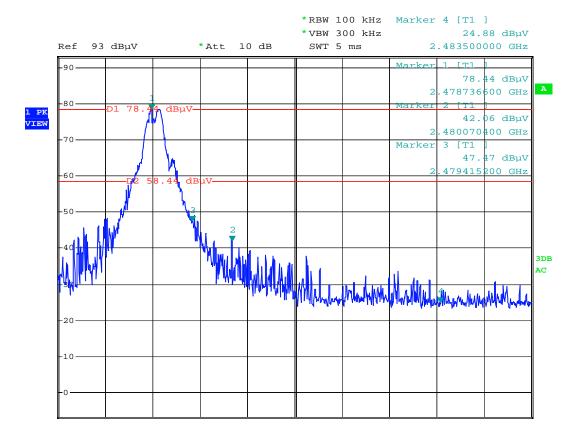
LIMIT

FCC PART 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

TEST RESULTS



Date: 17.JUL.2009 18:46:29



Date: 17.JUL.2009 18:59:26

Note:

- 1. The field strength of any emissions which appear outside of this band shall not exceed the general radiated emission limits in Section 15.209.
- 2. The average measurement was not performed when the peak measured data under the limit of average detection.

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4.4. 20dB Bandwidth Measurement

TEST CONFIGURATION



TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The spectrum analyzer center frequency is set to the transmitter frequency. The RBW is set to 30 KHz and VBW is set 300 KHz.

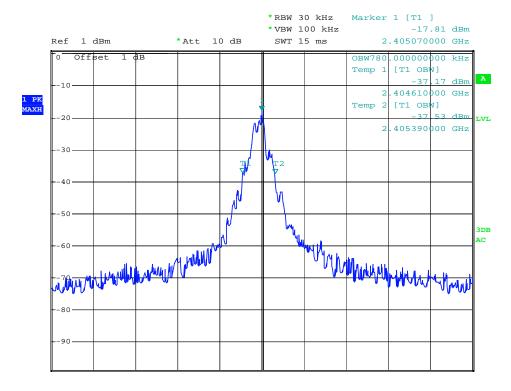
LIMIT

RSS-210 A1.1.3, For the purpose of Section A1.1, the 99% bandwidth shall be no wider than 0.25% of the centre frequency for devices operating between 70-900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the centre frequency.

TEST RESULTS

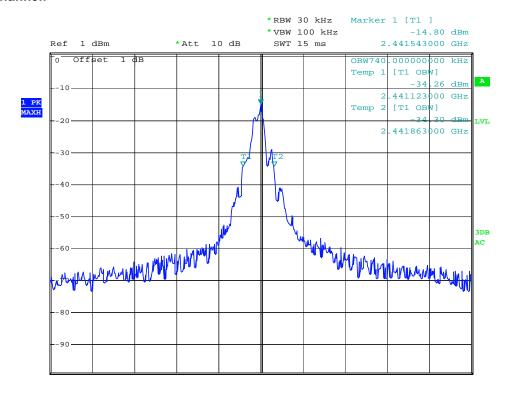
| 99% Bandwidth Measurement Result | | | | | | | | |
|----------------------------------|----------------|-------------|--------|--|--|--|--|--|
| Operating Frequency | Test Data(KHz) | Limits(KHz) | Result | | | | | |
| Bottom Channel | 780 | 1202 | PASS | | | | | |
| Middle Channel | 740 | 1221 | PASS | | | | | |
| Top Channel | 740 | 1240 | PASS | | | | | |

Bottom Channel:



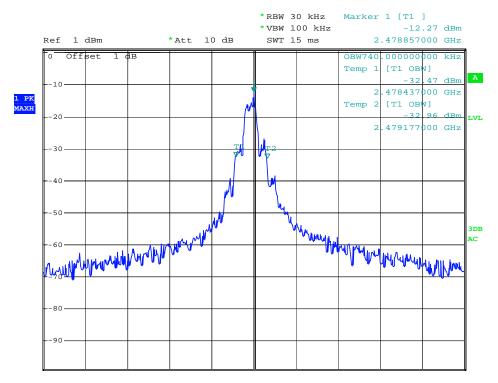
Date: 24.JUL.2009 17:25:19

Mid Channel:



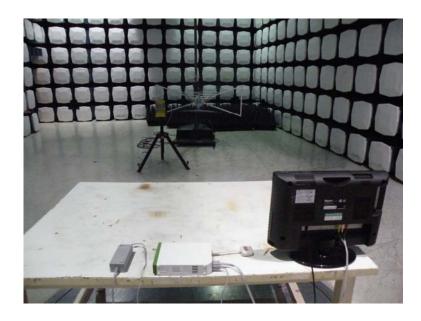
Date: 24.JUL.2009 17:26:23

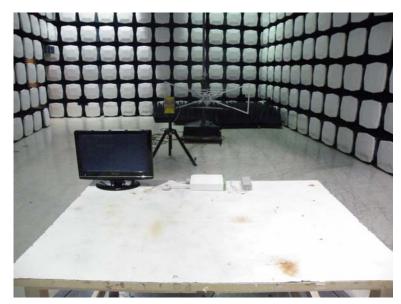
Top Channel:



Date: 24.JUL.2009 17:27:42

5. Test Setup Photos of the EUT

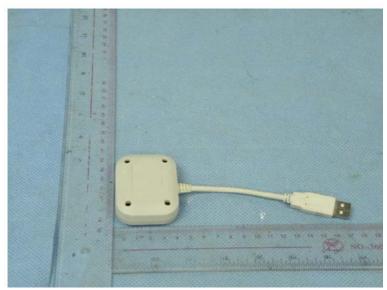






6. External and Internal Photos of the EUT





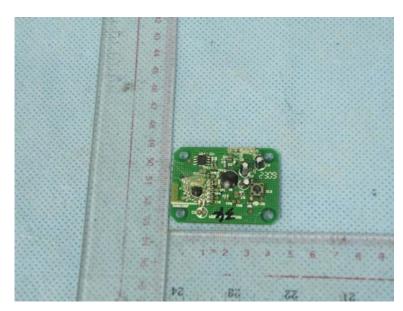


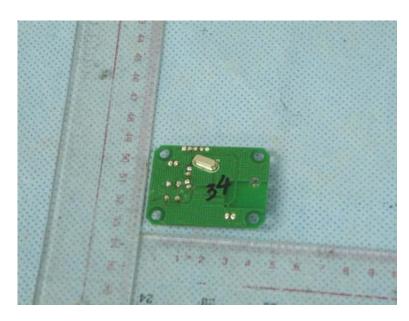












.....End of Report.....