

Issue Date: Jun. 06, 2013

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### ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

# UN-INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART B REQUIREMENT

OF

**Product Name: PDA Phone** 

**Brand Name:** Sony

Model No.: C1905

Type No.: PM-0490-BV

**Model Difference:** N/A

FCC ID: PY7PM-0490

**Report No.:** EI/2013/30012

**Issue Date:** Jun. 06, 2013

**FCC Rule Part:** FCC Part 15:2010, Subpart B, Class B

**Sony Mobile Communications AB** Prepared for:

Nya Vattentornet 22188 Lund/SWEDEN

SGS Taiwan Ltd.

Electronics & Communication Laboratory

No.134, Wu Kung Road, New Taipei Industrial Prepared by:

Park, Wuku District, New Taipei City, Taiwan

24803

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### VERIFICATION OF COMPLIANCE

**Applicant:** Sony Mobile Communications AB

Nya Vattentornet 22188 Lund/SWEDEN

Product Name: Nicki

**Brand Name:** Sony

Model No.: C1905

**Type No.:** PM-0490-BV

**Model Difference:** N/A

**FCC ID:** PY7PM-0490

**File Number:** EI/2013/30012

**Date of EUT Received:** May 10, 2013

**Date of test:** Mar.  $29 \sim \text{May } 23, 2013$ 

**Issue Date:** Jun. 06, 2013

Standards : FCC Part 15:2010, Subpart B, Class B

### We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15B, Class B. and ICES-003,issue 5. The test results of this report relate only to the tested sample identified in this

report.

| Test By:     | J. J.                | Date: | Jun. 06, 2013 |  |
|--------------|----------------------|-------|---------------|--|
| -            | Jimmy Liu / Engineer |       |               |  |
| Prepared By: | Anna Huang           | Date: | Jun. 06, 2013 |  |
| -            | Anna Huang / Clerk   | _     |               |  |
| Approved By: | Tim Chang            | Date: | Jun. 06, 2013 |  |
|              |                      |       |               |  |

Jim Chang / Supervisor

-1 in )in

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# **Revision History**

| Report Number | Revision | Description  | Issue Date   |
|---------------|----------|--|--------------|
| EI/2013/30012 | Rev.01   | Initial Version  | May 30 2013  |
|               |          | Update Product Description "Marketing     Name" into "Model No." and update "Model | Jun. 06 2013 |
|               |          | No." into "Type No." on Page 1, 2 and 5.   |              |

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### 1. General Information

### 1.1 Product description

### General:

| Product Name:                  | PDA Phone   |   |  |
|--------------------------------|---|---|--|
| Brand Name:                    | Sony  |   |  |
| Model No.:                     | C1905   |   |  |
| Type No.:                      | PM-0490-BV  |   |  |
| Model Difference:              | N/A   |   |  |
| Data Cable (USB):              | 1   | 50, Supplier: K-one<br>5715.3, Length: 100 cm                   |  |
| Simple Hands-Free (SHF-White): | Model No.: MH4<br>Type No.: AG-11   | 10c, Supplier: Foster Electric<br>.00                           |  |
| Simple Hands-Free (SHF-Black): | Model No.: MH410c, Supplier: Foster Electric Type No.: CCA-0004017  |   |  |
| Car Charger:                   | Model No.: AN400, Supplier: Salcomp Type No.: CAA-0003013   |   |  |
| Hi-Fi Wireless Headset:        | Model No.: MW600, Supplier: BALDA Type No.: DDA-0002029.B coupling with Simple Hands Free (Model No.: MH755, Supplier: BALDA Type No.: AG-0502) |   |  |
| Hardware Version:              | A   |   |  |
| Software Version:              | 15.1.A.1.3  |   |  |
|                                | 3.7Vdc  |   |  |
| Power Supply:                  | Battery:  | Model No.: BA900, Supplier: Sony<br>Type No.: AB-0500           |  |
|                                | Adapter:  | Model No.: EP800, Supplier: Salcomp<br>Type No.: CAA-0002016-US |  |
| IMEI:                          | 004402146696632   |   |  |

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### Bluetooth BR+EDR:

| Bluetooth Version:   | V3.0+HS                           |
|----------------------|-----------------------------------|
| Channel number:      | 79 channels                       |
| Modulation type:     | Frequency Hopping Spread Spectrum |
| Transmit Power:      | 9.22dBm                           |
| Frequency Range:     | 2.402GHz – 2.480GHz               |
| Dwell Time:          | <= 0.4s                           |
| Antenna Designation: | PIFA Antenna, Gain: 2.55dBi       |

The EUT is compliance for Bluetooth function.

For more detail please refer to report No.: EH/2013/40021

### Bluetooth Low Energy:

| Frequency Range:     | 2402 – 2480MHz              |
|----------------------|-----------------------------|
| Bluetooth Version:   | V4.0 Dual mode              |
| Channel number:      | 40 channels                 |
| Modulation type:     | GFSK                        |
| Transmit Power:      | 1.46dBm (Peak)              |
| Antenna Designation: | PIFA Antenna, Gain: 2.55dBi |

The EUT is compliance for Bluetooth V4.0 function.

For more detail please refer to report No.: EH/2013/50032

#### NFC:

| Operating Frequency | 13.56MHz           |
|---------------------|--------------------|
| Transmit Power      | < 123dBuV/m at 3m. |
| Number of Channels  | 1                  |
| Antenna Type        | Loop Antenna       |
| Modulation Type     | ASK, BPSK          |

The EUT is compliance for NFC Standard.

For more detail please refer to report No.: EH/2013/40020

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### WLAN 2.4GHz+5.7GHz:

| Wi-Fi            | Frequency<br>Range   | Channels                                     | Rated Power   | Modulation<br>Technology |  |
|------------------|----------------------|--|---|--------------------------|--|
| 11b/g            | 2412-2462            | 11   | b: 17.37dBm<br>g: 21.00dBm  | DSSS, OFDM               |  |
| 11n              | HT20 2412-2462       | 11   | HT20: 21.11dBm  | OFDM                     |  |
| 11a              | 5725-5850            | 5  | a: 20.12dBm   |                          |  |
| 11n<br>(5GHz)    | HT20<br>5725-5850    | 5  | HT20: 20.13dBm  | OFDM                     |  |
| 11n<br>(5GHz)    | HT40<br>5725-5850    | 2  | HT40: 19.66dBm  |                          |  |
| Antenna          | Antenna Designation: |  | PIFA Antenna,<br>2.4GHz Gain: 2.55dBi<br>5GHz Gain: 1.66dBi (5725MHz-5850MHz)   |                          |  |
| Modulat          | Modulation type:     |  | CCK, DQPSK, DBPSK for DSSS<br>64QAM, 16QAM, QPSK, BPSK for OFDM   |                          |  |
| Transition Rate: |                      | 802.11 a<br>802.11 b<br>802.11 c<br>802.11 r | 802.11 a: 6/9/12/18/24/36/48/54 Mbps<br>802.11 b: 1/2/5.5/11 Mbps<br>802.11 g: 6/9/12/18/24/36/48/54 Mbps<br>802.11 n_20MHz: 6.5 – 65.0Mbps<br>802.11 n_40MHz: 13.5 – 135.0Mbps |                          |  |

The EUT is compliance for IEEE 802.11 a/b/g/n Standard For more detail please refer to report No.: EH/2013/40022

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#### WLAN 5GHz

|                     |                    | -  |   | -                     |                          |
|---------------------|--------------------|--|---|-----------------------|--------------------------|
| Wi-Fi               | Frequency<br>Range | Channels   | Rated Power<br>(Avg)  | Rated Power<br>(EIRP) | Modulation<br>Technology |
|                     | 5150~5250          | 4  | 12.85dBm  | 12.11dBm              |                          |
| 11a                 | 5250~5350          | 4  | 12.81dBm  | 13.82dBm              | OFDM                     |
|                     | 5470~5725          | 11   | 12.94dBm  | 15.67dBm              |                          |
|                     | HT20<br>5150~5250  | 4  | HT20:<br>12.87dBm   | HT20:<br>12.13dBm     |                          |
| 11n                 | HT20<br>5250~5350  | 4  | HT20:<br>12.87dBm   | HT20:<br>13.88dBm     | OFDM                     |
|                     | HT20<br>5470~5725  | 11   | HT20:<br>12.94dBm   | HT20:<br>15.64dBm     |                          |
|                     | HT40<br>5150~5250  | 2  | HT40:<br>11.77dBm   | HT40:<br>11.73dBm     |                          |
| 11n                 | HT40<br>5250~5350  | 2  | HT40:<br>11.83dBm   | HT40:<br>12.84dBm     | OFDM                     |
|                     | HT40<br>5470~5725  | 5  | HT40:<br>11.88dBm   | HT40:<br>14.58dBm     |                          |
| Antenna Designation |                    | PIFA Antenna,<br>5GHz Gain: -0.74dBi (5150MHz-5250MHz)<br>5GHz Gain: 1.01dBi (5250MHz-5350MHz)<br>5GHz Gain: 2.70dBi (5470MHz-5725MHz) |   |                       |                          |
| Modulation type     |                    | CCK, DQI   | CCK, DQPSK, DBPSK for DSSS<br>64QAM, 16QAM, QPSK, BPSK for OFDM |                       |                          |
| Transition Rate:    |                    | 802.11 a: 6/9/12/18/24/36/48/54 Mbps<br>802.11 n_20MHz: 6.5 – 65.0Mbps<br>802.11 n_40MHz: 13.5 – 135.0Mbps                             |   |                       |                          |

The EUT is compliance for IEEE 802.11 a/n\_HT20M/n\_HT40M Standard. For more detail please refer to report No.: EH/2013/40023

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### GSM:

|                            | Operating Frequency   | Rated Power              |       |
|----------------------------|---|--------------------------|-------|
| Cellular Phone             | GSM/GPRS 850, Class 12  | 824.2 MHz- 848.8 MHz     | 33dBm |
| Standards                  | EDGE 850, Class 12  | 824.2 MHz- 848.8 MHz     | 27dBm |
| Frequency Range and Power. | GSM/GPRS 1900, Class 12   | 1850.2MHz –<br>1909.8MHz | 30dBm |
|                            | EDGE 1900, Class 12   | 1850.2MHz –<br>1909.8MHz | 26dBm |
| Type of Emission:          | GSM 850: 248KGXW, GSM 1<br>GPRS 850: 246KGXW, GPRS<br>EDGE 850: 249KG7W, EDGE |                          |       |

The EUT is compliance for 850/1900 GSM/GPRS/EDGE

For more detail please refer to report No.: EH/2013/40024

#### 1.2 Test Plan

#### Test Plan:

| C1905                         | Config 1   | Config 2                     |
|-------------------------------|--|------------------------------|
| Applicable standard (FCC 15B) |  |                              |
| Accessories                   | UE<br>+ Battery(BA 900)<br>+ USB Cable (EC450)<br>+SHF (MH410C)<br>UE<br>+ Battery(BA 900)<br>+ AC Adaptor (EP 800)<br>+USB Cable (EC450)<br>+ SHF(MH410C) |                              |
|                               | DATA Link  | CAMERA                       |
|                               | DATA Link + Idle   | FULL SYSTEM + Idle           |
| Description                   |  |                              |
| radiated emission             | DATA Link  | Recording&play recording&MP3 |
| conducted emission (DC Power) | NA   | N/A                          |
| conducted emission (AC Power) | DATA Link  | Recording&play recording&MP3 |

<sup>\*</sup> Test configuration by client

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### 1.3 Operation Procedure

- 1. Set down EUT with support units and turn on the power of all equipment.
- 2. Pre-test the EUT in all modes by each model, then figure the worst case out.
- 3. Tests under the normal operation due to unintentional radiation mode.

### 1.4 Description of Support Units

| PRODUCT  | MANUFACTURER | MODEL NO.       | SERIAL NO. |
|----------|--------------|-----------------|------------|
| NOTEBOOK | IBM          | L412            | LR-ZYMYC   |
| Printer  | HP           | DJ3820          | CN34L181B1 |
| Mouse    | Lenovo       | LXB MO28UOA USB | 45J48881   |

### 1.5 Modification List

No modification by SGS Taiwan Electronics & Communication Laboratory.

#### 1.6 Cable List

| Cable Type                                    | Length | Shield/Non-shield |
|---|--------|-------------------|
| USB cable with 2 cores near EUT, near Adapter | 1.0m   | Non-shielding     |
| Earphone                                      | 1.8m   | Non-shielding     |

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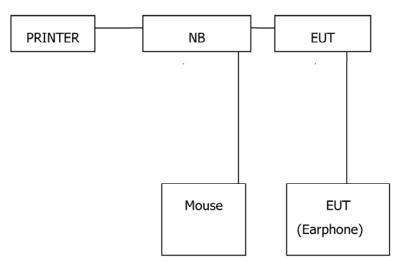


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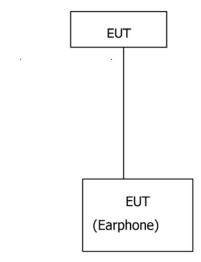
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### 1.7 Test Set-Up Configuration

Config1
Data Link mode



Config2 MP3 mode Recording mode Play recording



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### 1.8 Measurement Procedure

Conducted Emission Testing was performed according ANSI C63.4:2003 in a shielded room with peripherals placed on a table, 0.8m high over a metal floor. It was located more than required distance away from the shielded room wall. Radiated Emission Testing was performed according to ANSI C63.4:2003 at the 9\*6\*6 3m Semi-Anechoic chamber test site. The EUT was placed in a 0.8m high table along with the peripherals. The turn table was separated from the antenna distance 3meters. Cables were placed in a position to produce maximum emissions as determined by experimentation, and operation mode was selected for maximum. The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Reported are maximized emission levels.

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803 which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2003. FCC Registration Number: TW0513.

### 1.9 Standards Applicable for Testing

Table of tests to be carried out under FCC Part 15. Subpart B

| Test Standards          | Status       |
|-------------------------|--------------|
| FCC Part 15, Subpart B  | Applicable   |
| Deviation from Standard | No Deviation |

#### 1.10 Summary of Results

| Hightest Emission  |                    |                    |              |                    |             |
|--|--------------------|--------------------|--------------|--------------------|-------------|
| Standard   | Test Type          | Result             | Phase/Polar. | Frequency<br>(MHz) | Margin(dB)  |
| FCC Part 15 Subpart B<br>Class B/CISPR 22<br>ICES-003(Feb. 2004) | Conducted Emission | PASS Line 3.1836 - | -10.91(AVG)  |                    |             |
|  | Conducted Emission | PASS               | Neutral      | ,                  | -11.15(AVG) |
|  | Radiated Emission  | PASS               | Ver.         | 31.2000            | -9.47(QP)   |

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### 2. Radio Disturbance

#### 2.1 Test Results

|                    | Results |
|--------------------|---------|
| Conducted Emission | Pass    |
| Radiated Emission  | Pass    |

### 2.2 Frequency Range

: 150 kHz - 30 MHz Conducted Emission Radiated Emission : See below table

Highest frequency generated or Upper frequency of measurement used in the device or on which the range (MHz) device operates or tunes (MHz)

> Below 1.705 30 1000 1.705 - 108108 - 5002000 500 - 1000 5000

5th harmonic of the highest frequency or Above 1000

40 GHz, whichever is lower

### 2.3 Limits Of Conducted And Radiated Emission

### 2.3.1 Limit Of Conducted Emission Of FCC Part 15, Subpart B/CISPR 22

| FREQUENCY  | Class A (dBuV) |         | Class B      | (dBuV)  |
|------------|----------------|---------|--------------|---------|
| (MHz)      | Quasi - peak   | Average | Quasi - peak | Average |
| 0.15 - 0.5 | 79             | 66      | 66 - 56      | 56 - 46 |
| 0.50 - 5.0 | 73             | 60      | 56           | 46      |
| 5.0 - 30.0 | 73             | 60      | 60           | 50      |

Note: (1) The lower limit shall apply at the transition frequencies.

- (2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected there to, shall not exceed the level of field strengths specified above.

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### 2.3.2 Limit Of Radiated Emissions Of FCC Part 15, Subpart B/CISPR 22

#### FCC Limit:

Detector Function : Quasi – Peak

| 2 Detector Farretter Figure From |                  |                 |  |  |
|----------------------------------|------------------|-----------------|--|--|
| FREQUENCY                        | Class A (at 10m) | Class B (at 3m) |  |  |
| (MHz)                            | dBuV/m           | dBuV/m          |  |  |
| 30~88                            | 39               | 40              |  |  |
| 88~216                           | 43.5             | 43.5            |  |  |
| 216~960                          | 46.44            | 46              |  |  |
| Above 960                        | 49.54            | 54              |  |  |

Detector Function : Peak , Average

| FREQUENCY  | Class A (dBuV) (at 3m) |         | Class B (dBuV) (at 3m) |         |
|------------|------------------------|---------|------------------------|---------|
| (MHz)      | Peak                   | Average | Peak                   | Average |
| Above 1000 | 79.3                   | 59.3    | 73.9                   | 53.9    |

#### **CISPR Limit:**

Detector Function : Quasi – Peak

| FREQUENCY | Class A (at 10m) | Class B (at 10m) |
|-----------|------------------|------------------|
| (MHz)     | dBuV/m           | dBuV/m           |
| 30-230    | 40               | 30               |
| 230-1000  | 47               | 37               |

Detector Function : Peak , Average – Class A

| Frequency<br>range<br>GHz | Average Limit<br>dB(µV/m) | Peak Limit<br>dB(μV/m) |
|---------------------------|---------------------------|------------------------|
| 1 to 3                    | 56                        | 76                     |
| 3 to 6                    | 60                        | 80                     |

Detector Function : Peak , Average – Class B

| Frequency range | Average Limit | Peak Limit |
|-----------------|---------------|------------|
| GHz             | dB(μV/m)      | dB(μV/m)   |
| 1 to 3          | 50            | 70         |
| 3 to 6          | 54            | 74         |

Note: The lower limit applies at the transition frequency.

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#### 2.4.Test of Conducted Emission

### 2.4.1 Test Equipments

| Description       | Manufacturer  | Model No.                   | Serial No. | Last Calibration<br>Date | Next Calibration<br>Date |
|-------------------|---------------|-----------------------------|------------|--------------------------|--------------------------|
| EMI Test Receiver | ROHDE&SCHWARZ | ESCS 30                     | 828985/004 | Sep. 22, 2012            | Sep. 21, 2013            |
| Coaxial Cables    | N/A           | WK CE Cable                 | N/A        | Nov. 26, 2012            | Nov. 25, 2013            |
| L.I.S.N           | Rolf-Heine    | NNB-2/16Z                   | 99012      | Mar. 22, 2013            | Mar. 21, 2014            |
| L.I.S.N           | FCC           | FCC-LISN-50/<br>250-25-2-01 | 04034      | Mar. 22, 2013            | Mar. 21, 2014            |
| Software          | Farad         | EZ-EMC-VER<br>2A1.1(USB)    | N/A        | N/A                      | N/A                      |

#### 2.4.2 Test Site

SGS Taiwan LTD. Electronics & Communication Laboratory NO.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803

### 2.4.3 Operating Environment

Temperature: 26 degree C Humidity: 60 %RH

Atmospheric Pressure: 996 mBar

### 2.4.3.1 Uncertainty of Conducted Emission

The SGS U<sub>lab</sub> is 0.98dB.(For 150kHz-30MHz)

This  $U_{lab}$  uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

#### 2.4.3.2 Measurement level and Factor calculate method

Factor = LISN insertion loss + Cable loss Measurement Level = Reading Level + Factor

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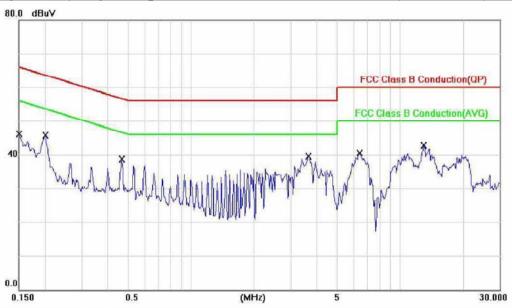


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#### 2.4.4 Measurement Data

| Operation Mode: | Config 1 Data Link Mode | Test Date: | Apr. 02, 2013 |
|-----------------|-------------------------|------------|---------------|
| Tested By:      | Eddy Cheng              | Pol.:      | L1            |



| No. Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|---------|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|         | MHz     | dBuV             | dВ                | dBuV             | dBuV  | αB     | Detector | Comment |
| 1       | 0.1500  | 45.84            | 0.25              | 46.09            | 66.00 | -19.91 | QP       |         |
| 2       | 0.2008  | 45.51            | 0.22              | 45.73            | 63.58 | -17.85 | QP       |         |
| 3       | 0.4664  | 38.40            | 0.22              | 38.62            | 56.58 | -17.96 | QP       |         |
| 4 *     | 3.6602  | 39.20            | 0.30              | 39.50            | 56.00 | -16.50 | QP       |         |
| 5       | 6.3906  | 40.20            | 0.35              | 40.55            | 60.00 | -19.45 | QP       |         |
| 6       | 12.9885 | 42.07            | 0.56              | 42.63            | 60.00 | -17.37 | QP       |         |

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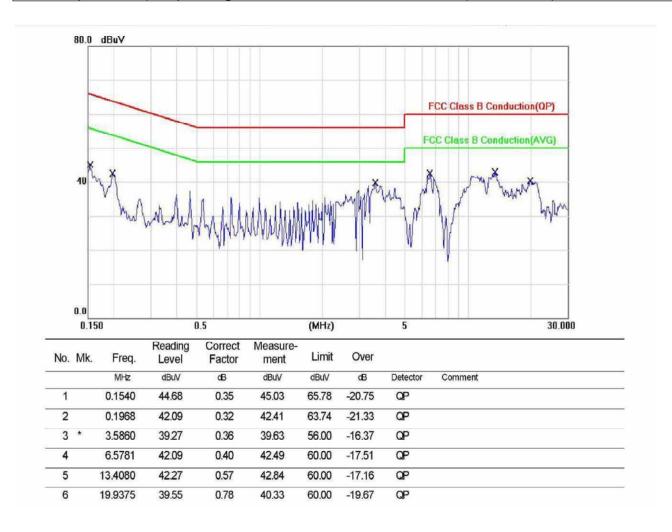
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| Operation Mode: | Config 1 Data Link Mode | Test Date: | Apr. 02, 2013 |
|-----------------|-------------------------|------------|---------------|
| Tested By:      | Eddy Cheng              | Pol.:      | N             |



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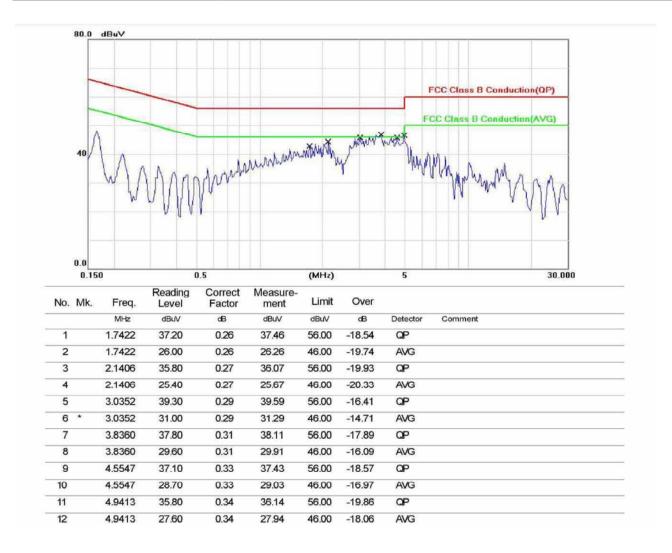
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| Operation Mode: | Config 2 Recording Mode | Test Date: | Apr. 02, 2013 |
|-----------------|-------------------------|------------|---------------|
| Tested By:      | Eddy Cheng              | Pol.:      | L1            |



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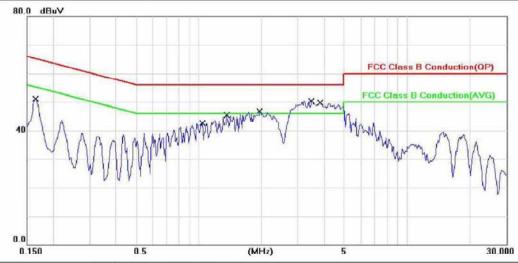
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| Operation Mode: | Config 2 Recording Mode | Test Date: | Apr. 02, 2013 |
|-----------------|-------------------------|------------|---------------|
| Tested By:      | Eddy Cheng              | Pol.:      | N             |



| No. | Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|--------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz    | dBuV             | dΒ                | dBuV             | dBuV  | dΒ     | Detector | Comment |
| 1   |     | 0.1655 | 47.40            | 0.34              | 47.74            | 65.18 | -17.44 | QP       |         |
| 2   |     | 0.1655 | 34.10            | 0.34              | 34.44            | 55.18 | -20.74 | AVG      |         |
| 3   |     | 1.0430 | 39.10            | 0.33              | 39.43            | 56.00 | -16.57 | QP       |         |
| 4   |     | 1.0430 | 26.10            | 0.33              | 26.43            | 46.00 | -19.57 | AVG      |         |
| 5   |     | 1.3594 | 41.60            | 0.33              | 41.93            | 56.00 | -14.07 | QP       |         |
| 6   |     | 1.3594 | 28.40            | 0.33              | 28.73            | 46.00 | -17.27 | AVG      |         |
| 7   |     | 1.9688 | 40.60            | 0.35              | 40.95            | 56.00 | -15.05 | QP       |         |
| 8   |     | 1.9688 | 30.20            | 0.35              | 30.55            | 46.00 | -15.45 | AVG      |         |
| 9   |     | 3.4883 | 43.60            | 0.35              | 43.95            | 56.00 | -12.05 | QP       |         |
| 10  | *   | 3.4883 | 34.50            | 0.35              | 34.85            | 46.00 | -11.15 | AVG      |         |
| 11  |     | 3.8603 | 43.30            | 0.36              | 43.66            | 56.00 | -12.34 | QP       |         |
| 12  |     | 3.8603 | 33.70            | 0.36              | 34.06            | 46.00 | -11.94 | AVG      |         |

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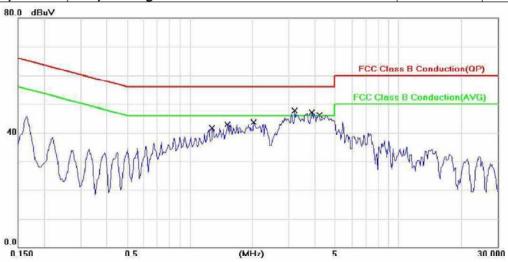
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| Operation Mode: | Config 2 Play Recording Mode | Test Date: | Apr. 02, 2013 |
|-----------------|------------------------------|------------|---------------|
| Tested By:      | Eddy Cheng                   | Pol.:      | L1            |



| No. | Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |  |
|-----|-----|--------|------------------|-------------------|------------------|-------|--------|----------|---------|--|
|     |     | MHz    | dBuV             | dВ                | dBuV             | dBuV  | dΒ     | Detector | Comment |  |
| 1   |     | 1.2891 | 36.10            | 0.25              | 36.35            | 56.00 | -19.65 | QP       |         |  |
| 2   |     | 1.2891 | 23.80            | 0.25              | 24.05            | 46.00 | -21.95 | AVG      |         |  |
| 3   |     | 1.5273 | 33.30            | 0.26              | 33.56            | 56.00 | -22.44 | QP       |         |  |
| 4   |     | 1.5273 | 22.50            | 0.26              | 22.76            | 46.00 | -23.24 | AVG      |         |  |
| 5   |     | 2.0273 | 35.50            | 0.27              | 35.77            | 56.00 | -20.23 | QP       |         |  |
| 6   |     | 2.0273 | 25.40            | 0.27              | 25.67            | 46.00 | -20.33 | AVG      |         |  |
| 7   |     | 3.1953 | 39.50            | 0.29              | 39.79            | 56.00 | -16.21 | QP       |         |  |
| 8   | *   | 3.1953 | 31.30            | 0.29              | 31.59            | 46.00 | -14.41 | AVG      |         |  |
| 9   |     | 3.8750 | 38.60            | 0.31              | 38.91            | 56.00 | -17.09 | QP       |         |  |
| 10  |     | 3.8750 | 30.20            | 0.31              | 30.51            | 46.00 | -15.49 | AVG      |         |  |
| 11  |     | 4.2031 | 38.00            | 0.31              | 38.31            | 56.00 | -17.69 | QP       |         |  |
| 12  |     | 4.2031 | 29.60            | 0.31              | 29.91            | 46.00 | -16.09 | AVG      |         |  |

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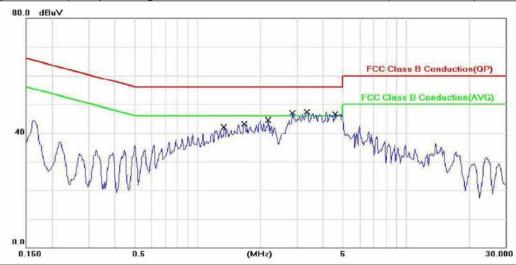
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| Operation Mode: | Config 2 Play Recording Mode | Test Date: | Apr. 02, 2013 |
|-----------------|------------------------------|------------|---------------|
| Tested By:      | Eddy Cheng                   | Pol.:      | N             |



| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|---------|--------|------------------|-------------------|------------------|-------|--------|----------|---------|
|         | MHz    | dBuV             | dВ                | dBuV             | dBuV  | dΒ     | Detector | Comment |
| 1       | 1.3438 | 35.90            | 0.33              | 36.23            | 56.00 | -19.77 | QP       |         |
| 2       | 1.3438 | 23.30            | 0.33              | 23.63            | 46.00 | -22.37 | AVG      |         |
| 3       | 1.6770 | 37.00            | 0.35              | 37.35            | 56.00 | -18.65 | QP       |         |
| 4       | 1.6770 | 25.70            | 0.35              | 26.05            | 46.00 | -19.95 | AVG      |         |
| 5       | 2.1836 | 36.20            | 0.35              | 36.55            | 56.00 | -19.45 | QP       |         |
| 6       | 2.1836 | 25.20            | 0.35              | 25.55            | 46.00 | -20.45 | AVG      |         |
| 7       | 2.8477 | 38.70            | 0.35              | 39.05            | 56.00 | -16.95 | QP       |         |
| 8       | 2.8477 | 30.20            | 0.35              | 30.55            | 46.00 | -15.45 | AVG      |         |
| 9       | 3.3594 | 39.40            | 0.35              | 39.75            | 56.00 | -16.25 | QP       |         |
| 10 *    | 3.3594 | 31.20            | 0.35              | 31.55            | 46.00 | -14.45 | AVG      |         |
| 11      | 4.5586 | 36.70            | 0.38              | 37.08            | 56.00 | -18.92 | QΡ       |         |
| 12      | 4.5586 | 28.50            | 0.38              | 28.88            | 46.00 | -17.12 | AVG      |         |

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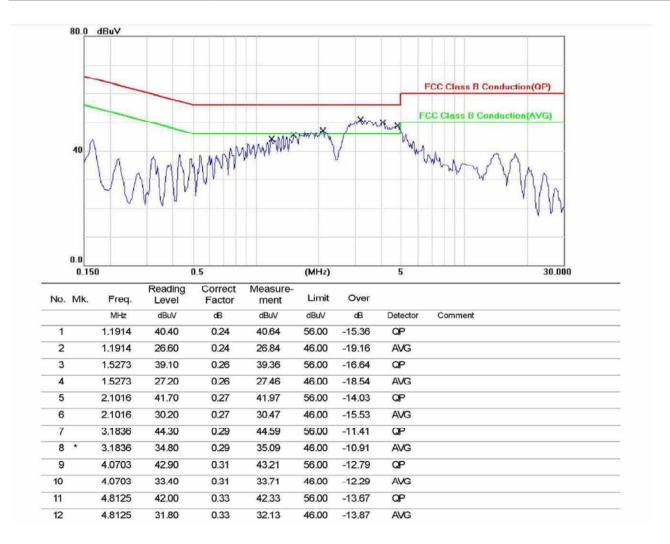
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| Operation Mode: | Config 2 MP3 Mode | Test Date: | Apr. 02, 2013 |
|-----------------|-------------------|------------|---------------|
| Tested By:      | Eddy Cheng        | Pol.:      | L1            |



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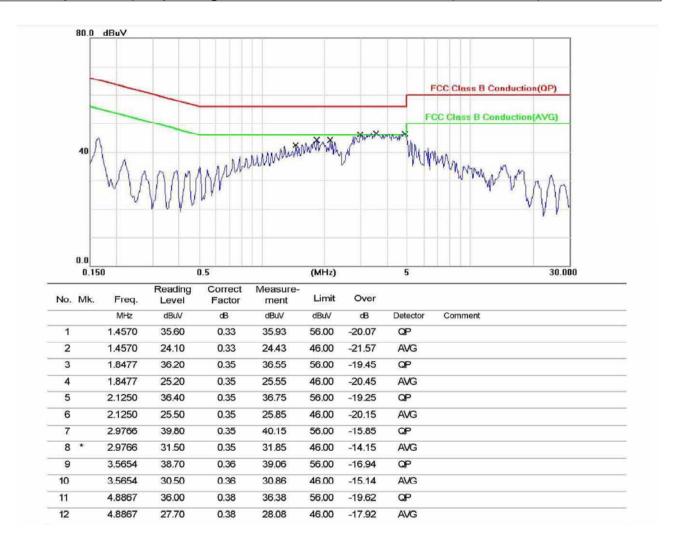
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| Operation Mode: | Config 2 MP3 Mode | Test Date: | Apr. 02, 2013 |
|-----------------|-------------------|------------|---------------|
| Tested By:      | Eddy Cheng        | Pol.:      | N             |



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