

APPLICATION CERTIFICATION FCC Part 15B  
On Behalf of  
HONG KONG NATURAL SOUND ELECTRONICS LIMITED

MP4  
Model No.: ID1851, Eclipse-Replay

FCC ID: PWK-ID1851

Prepared for : HONG KONG NATURAL SOUND ELECTRONICS  
LIMITED  
Address : FLAT/RM M 4/F CONTINENTAL MANSION 300  
KING'S ROAD HONG KONG

Prepared by : ACCURATE TECHNOLOGY CO. LTD  
Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.  
Science & Industry Park, Nanshan, Shenzhen, Guangdong  
P.R. China

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Report Number : ATE20122474  
Date of Test : October 29-November 5, 2012  
Date of Report : November 5, 2012

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## Test Report Certification

Applicant : HONG KONG NATURAL SOUND ELECTRONICS LIMITED  
Manufacturer : Shenzhen Natural Sound Electronics Co., Ltd.  
EUT Description : MP4  
(A) MODEL NO.: ID1851, Eclipse-Replay  
(B) SERIAL NO.: N/A  
(C) POWER SUPPLY: DC 3.7V (Li-polymer battery) & DC 5V (Power by PC)

Measurement Procedure Used:

### **FCC Rules and Regulations Part 15 Subpart B ANSI C63.4: 2009**

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : October 29-November 5, 2012

Prepared by : Apple Lv  
(Apple Lv, Engineer)

Approved & Authorized Signer : Sean Liu  
(Sean Liu, Manager)

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

|   |   |  |
|---|---|--|
| EUT                                     | : | MP4  |
| Model Number                            | : | ID1851, Eclipse-Replay<br>(Note: These samples are same except for the appearance is difference. So we prepare the ID1851 for FCC test.) |
| Power Supply                            | : | DC 3.7V (Li-polymer battery) & DC 5V (Power by PC)   |
| Highest operation frequency of the EUT: | : | 96MHz  |
| Applicant                               | : | HONG KONG NATURAL SOUND ELECTRONICS LIMITED  |
| Address                                 | : | FLAT/RM M 4/F CONTINENTAL MANSION 300 KING'S ROAD HONG KONG  |
| Manufacturer                            | : | Shenzhen Natural Sound Electronics Co., Ltd.   |
| Address                                 | : | 4 <sup>th</sup> Building, Xinyuan Industrial Zone, Gushu Village, Bao'an District, Shenzhen, China                                       |
| Date of sample received                 | : | October 29, 2012   |
| Date of Test                            | : | October 29-November 5, 2012  |

## 1.2. Accessory and Auxiliary Equipment

### 1.2.1. PC

Notebook PC : Manufacturer: SONY  
M/N: PCG-663P  
S/N: 28123170 7202526

### 1.2.2. Printer

Printer : Manufacturer: Canon  
M/N: BJC-1000SP  
S/N: N/A

## 1.3. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen

Listed by FCC  
The Registration Number is 752051

Listed by Industry Canada  
The Registration Number is 5077A-2

Accredited by China National Accreditation Committee  
for Laboratories  
The Certificate Registration Number is L3193

Name of Firm : ACCURATE TECHNOLOGY CO. LTD  
Site Location : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.  
Science & Industry Park, Nanshan, Shenzhen, Guangdong  
P.R. China

## 1.4. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2  
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2  
(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2  
(Above 1GHz)

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

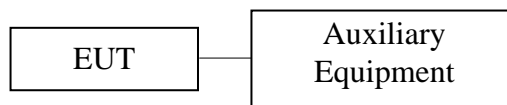
| Kind of equipment | Manufacturer  | Type               | S/N        | Calibrated date | Calibrated until |
|-------------------|---------------|--------------------|------------|-----------------|------------------|
| EMI Test Receiver | Rohde&Schwarz | ESCS30             | 100307     | Jan. 8, 2012    | Jan. 7, 2013     |
| EMI Test Receiver | Rohde&Schwarz | ESPI3              | 101526/003 | Jan. 8, 2012    | Jan. 7, 2013     |
| Spectrum Analyzer | Agilent       | E7405A             | MY45115511 | Jan. 8, 2012    | Jan. 7, 2013     |
| Pre-Amplifier     | Rohde&Schwarz | CBLU118354<br>0-01 | 3791       | Jan. 8, 2012    | Jan. 7, 2013     |
| Loop Antenna      | Schwarzbeck   | FMZB1516           | 1516131    | Jan. 8, 2012    | Jan. 7, 2013     |
| Bilog Antenna     | Schwarzbeck   | VULB9163           | 9163-323   | Jan. 8, 2012    | Jan. 7, 2013     |
| Horn Antenna      | Schwarzbeck   | BBHA9120D          | 9120D-655  | Jan. 8, 2012    | Jan. 7, 2013     |
| Horn Antenna      | Schwarzbeck   | BBHA9170           | 9170-359   | Jan. 8, 2012    | Jan. 7, 2013     |
| LISN              | Rohde&Schwarz | ESH3-Z5            | 100305     | Jan. 8, 2012    | Jan. 7, 2013     |
| LISN              | Schwarzbeck   | NSLK8126           | 8126431    | Jan. 8, 2012    | Jan. 7, 2013     |

### 3. OPERATION OF EUT DURING TESTING

#### 3.1. Operating Mode

- The modes are used:
- 1) Playing
  - 2) Transfer data
  - 3) Recording playing
  - 4) Charging

#### 3.2. Configuration and peripherals



(EUT: MP4)

#### 4. TEST PROCEDURES AND RESULTS

| <b>FCC Rules</b> | <b>Description of Test</b> | <b>Result</b> |
|------------------|----------------------------|---------------|
| Section 15.107   | Conducted Emission Test    | Compliant     |
| Section 15.109   | Radiated Emission Test     | Compliant     |



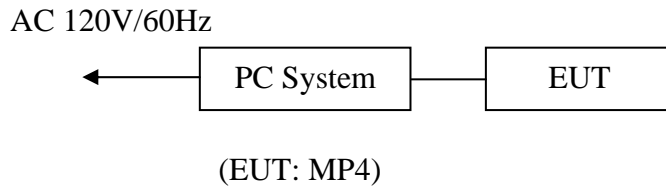
## 5. CONDUCTED EMISSION FOR FCC PART 15 SECTION

### 15.107(A)

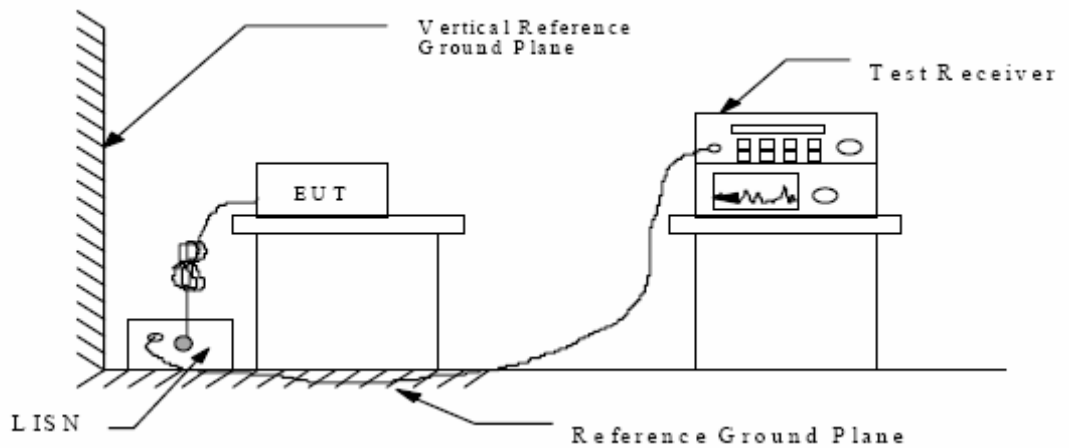
#### 5.1. Block Diagram of Test Setup

##### 5.1.1. Block diagram of connection between the EUT and simulators

###### 5.1.1.1. For Transfer data and Charging



##### 5.1.2. Shielding Room Test Setup Diagram



(EUT: MP4)

## 5.2.The Emission Limit

### 5.2.1.Conducted Emission Measurement Limits According to Section 15.107(a)

| Frequency<br>(MHz) | Limit dB( $\mu$ V) |               |
|--------------------|--------------------|---------------|
|                    | Quasi-peak Level   | Average Level |
| 0.15 - 0.50        | 66.0 – 56.0 *      | 56.0 – 46.0 * |
| 0.50 - 5.00        | 56.0               | 46.0          |
| 5.00 - 30.00       | 60.0               | 50.0          |

\* Decreases with the logarithm of the frequency.

## 5.3.Configuration of EUT on Measurement

The following equipment are installed on the Conducted Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 5.3.1.MP4 (EUT)

Model Number : ID1851  
 Serial Number : N/A  
 Manufacturer : Shenzhen Natural Sound Electronics Co., Ltd.

## 5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in modes (Charging, Transfer data) and measure it.

## 5.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

## 5.6. Power Line Conducted Emission Measurement Results

**PASS.**

The frequency range from 150kHz to 30MHz is checked.

|               |                         |                |                     |
|---------------|-------------------------|----------------|---------------------|
| Date of Test: | <u>October 31, 2012</u> | Temperature:   | <u>25°C</u>         |
| EUT:          | <u>MP4</u>              | Humidity:      | <u>50%</u>          |
| Model No.:    | <u>ID1851</u>           | Power Supply:  | <u>AC 120V/60Hz</u> |
| Test Mode:    | <u>Charging</u>         | Test Engineer: | <u>PEI</u>          |

| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.150000         | 40.20         | 11.0         | 66            | 25.8         | QP       | N    | GND |
| 2.843398         | 29.70         | 11.6         | 56            | 26.3         | QP       | N    | GND |
| 3.030938         | 29.80         | 11.6         | 56            | 26.2         | QP       | N    | GND |
| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
| 0.184605         | 39.70         | 11.2         | 54            | 14.6         | AV       | N    | GND |
| 1.606633         | 29.30         | 11.7         | 46            | 16.7         | AV       | N    | GND |
| 2.532561         | 30.30         | 11.6         | 46            | 15.7         | AV       | N    | GND |
| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
| 0.150000         | 43.40         | 11.0         | 66            | 22.6         | QP       | L1   | GND |
| 0.183870         | 43.80         | 11.2         | 64            | 20.5         | QP       | L1   | GND |
| 1.052309         | 34.40         | 11.8         | 56            | 21.6         | QP       | L1   | GND |
| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
| 0.186085         | 42.10         | 11.2         | 54            | 12.1         | AV       | L1   | GND |
| 0.555583         | 35.00         | 12.0         | 46            | 11.0         | AV       | L1   | GND |
| 0.802141         | 34.70         | 11.9         | 46            | 11.3         | AV       | L1   | GND |

Emissions attenuated more than 20 dB below the permissible value are not reported.  
The spectral diagrams are attached as below.

|               |                  |                |              |
|---------------|------------------|----------------|--------------|
| Date of Test: | October 31, 2012 | Temperature:   | 25°C         |
| EUT:          | MP4              | Humidity:      | 50%          |
| Model No.:    | ID1851           | Power Supply:  | AC 120V/60Hz |
| Test Mode:    | Transfer data    | Test Engineer: | PEI          |

| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.150000         | 40.20         | 11.0         | 66            | 25.8         | QP       | N    | GND |
| 0.369752         | 30.60         | 11.7         | 59            | 27.9         | QP       | N    | GND |
| 3.960370         | 29.70         | 11.5         | 56            | 26.3         | QP       | N    | GND |
| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
| 0.185344         | 39.70         | 11.2         | 54            | 14.5         | AV       | N    | GND |
| 3.030938         | 30.00         | 11.6         | 46            | 16.0         | AV       | N    | GND |
| 3.527427         | 30.00         | 11.5         | 46            | 16.0         | AV       | N    | GND |
| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
| 0.150000         | 43.20         | 11.0         | 66            | 22.8         | QP       | L1   | GND |
| 0.371231         | 35.70         | 11.8         | 59            | 22.8         | QP       | L1   | GND |
| 1.300259         | 34.00         | 11.8         | 56            | 22.0         | QP       | L1   | GND |
| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Detector | Line | PE  |
| 0.185344         | 42.50         | 11.2         | 54            | 11.7         | AV       | L1   | GND |
| 0.555583         | 34.90         | 12.0         | 46            | 11.1         | AV       | L1   | GND |
| 1.052309         | 34.90         | 11.8         | 46            | 11.1         | AV       | L1   | GND |

Emissions attenuated more than 20 dB below the permissible value are not reported.  
The spectral diagrams are attached as below.

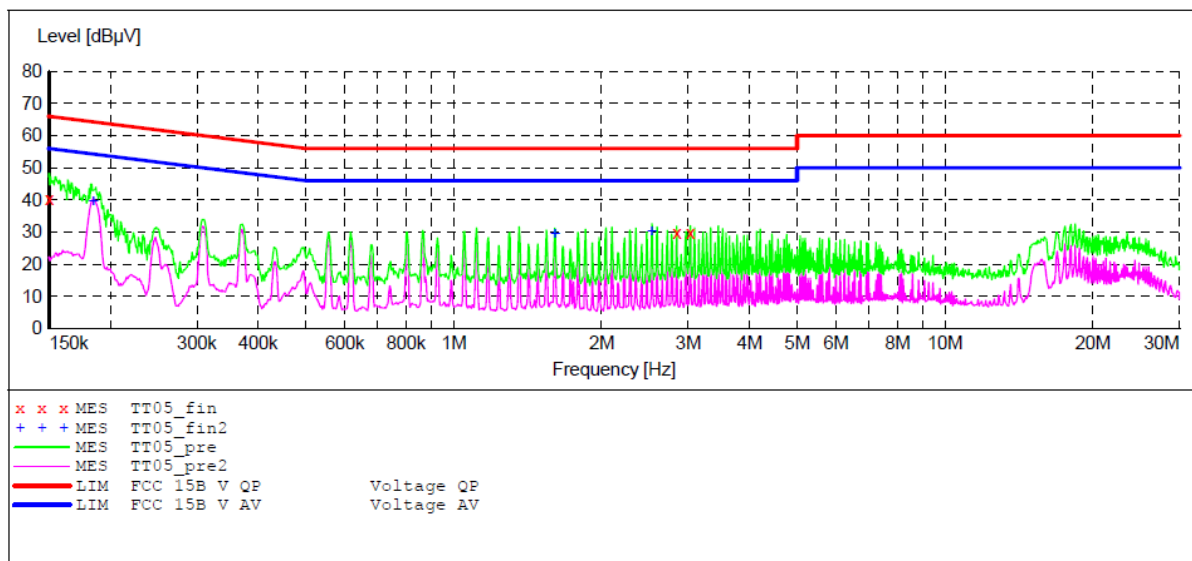
**ACCURATE TECHNOLOGY CO., LTD**

**CONDUCTED EMISSION STANDARD FCC PART 15 B**

EUT: MP4 M/N:ID1851  
 Manufacturer: Natural Sound  
 Operating Condition: Charging  
 Test Site: 1#Shielding Room  
 Operator: Alen  
 Test Specification: N 120V/60Hz  
 Comment: Report No.:ATE2012474  
 Start of Test: 10/31/2012 / 3:55:47AM

**SCAN TABLE: "V 150K-30MHz fin"**

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



**MEASUREMENT RESULT: "TT05\_fin"**

10/31/2012 3:57AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.150000      | 40.20      | 11.0      | 66         | 25.8      | QP       | N    | GND |
| 2.843398      | 29.70      | 11.6      | 56         | 26.3      | QP       | N    | GND |
| 3.030938      | 29.80      | 11.6      | 56         | 26.2      | QP       | N    | GND |

**MEASUREMENT RESULT: "TT05\_fin2"**

10/31/2012 3:57AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.184605      | 39.70      | 11.2      | 54         | 14.6      | AV       | N    | GND |
| 1.606633      | 29.30      | 11.7      | 46         | 16.7      | AV       | N    | GND |
| 2.532561      | 30.30      | 11.6      | 46         | 15.7      | AV       | N    | GND |

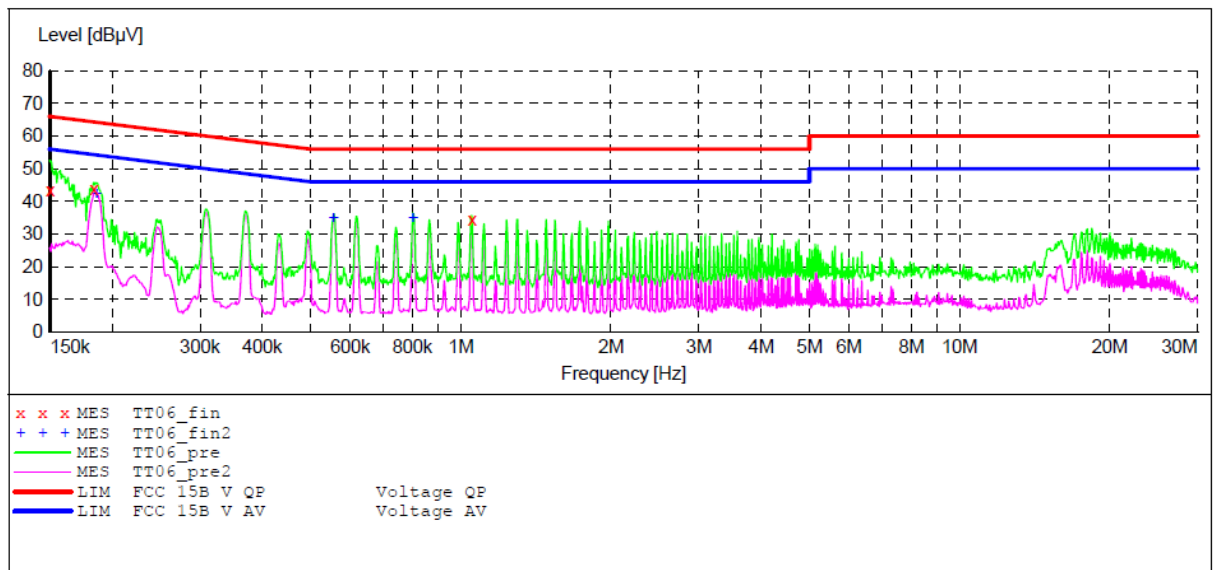
**ACCURATE TECHNOLOGY CO., LTD**

**CONDUCTED EMISSION STANDARD FCC PART 15 B**

EUT: MP4 M/N:ID1851  
 Manufacturer: Natural Sound  
 Operating Condition: Charging  
 Test Site: 1#Shielding Room  
 Operator: Alen  
 Test Specification: L 120V/60Hz  
 Comment: Report No.:ATE20122474  
 Start of Test: 10/31/2012 / 3:58:35AM

**SCAN TABLE: "V 150K-30MHz fin"**

| Short Description: |          | _SUB_STD_VTERM2 1.70 |           |            |           |               |
|--------------------|----------|----------------------|-----------|------------|-----------|---------------|
| Start              | Stop     | Step                 | Detector  | Meas. Time | IF Bandw. | Transducer    |
| 150.0 kHz          | 30.0 MHz | 0.8 %                | QuasiPeak | 1.0 s      | 9 kHz     | NSLK8126 2008 |
|                    |          |                      | Average   |            |           |               |



**MEASUREMENT RESULT: "TT06\_fin"**

10/31/2012 4:00AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.150000      | 43.40      | 11.0      | 66         | 22.6      | QP       | L1   | GND |
| 0.183870      | 43.80      | 11.2      | 64         | 20.5      | QP       | L1   | GND |
| 1.052309      | 34.40      | 11.8      | 56         | 21.6      | QP       | L1   | GND |

**MEASUREMENT RESULT: "TT06\_fin2"**

10/31/2012 4:00AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.186085      | 42.10      | 11.2      | 54         | 12.1      | AV       | L1   | GND |
| 0.555583      | 35.00      | 12.0      | 46         | 11.0      | AV       | L1   | GND |
| 0.802141      | 34.70      | 11.9      | 46         | 11.3      | AV       | L1   | GND |

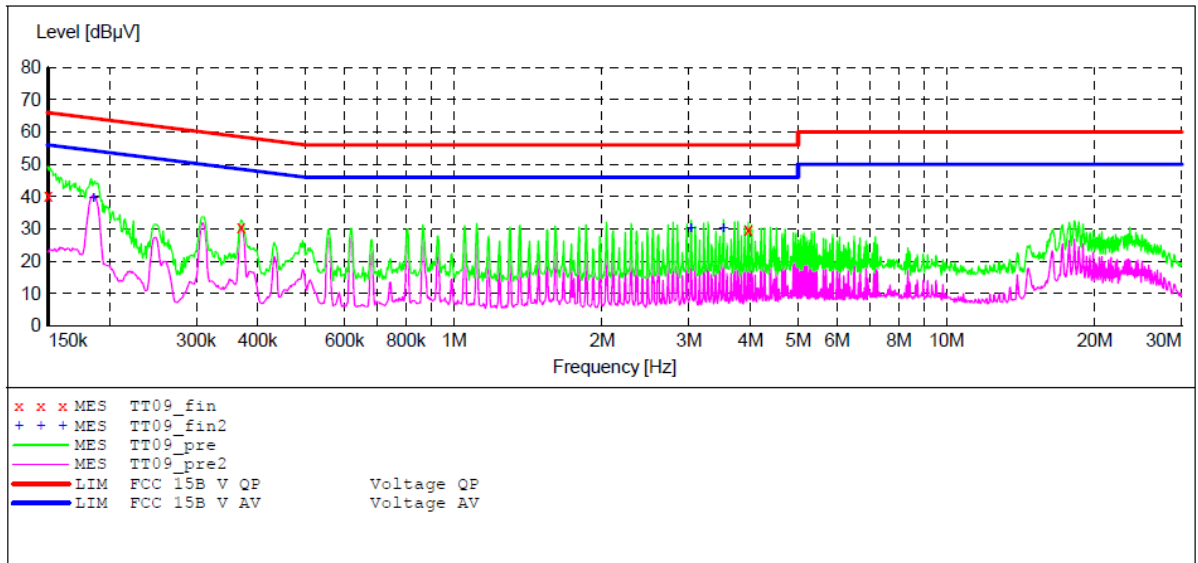
**ACCURATE TECHNOLOGY CO., LTD**

**CONDUCTED EMISSION STANDARD FCC PART 15 B**

EUT: MP4 M/N:ID1851  
 Manufacturer: Natural Sound  
 Operating Condition: Transfer data  
 Test Site: 1#Shielding Room  
 Operator: Alen  
 Test Specification: N 120V/60Hz  
 Comment: Report No.:ATE20122474  
 Start of Test: 10/31/2012 / 4:12:21AM

**SCAN TABLE: "V 150K-30MHz fin"**

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



**MEASUREMENT RESULT: "TT09\_fin"**

10/31/2012 4:14AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.150000      | 40.20      | 11.0      | 66         | 25.8      | QP       | N    | GND |
| 0.369752      | 30.60      | 11.7      | 59         | 27.9      | QP       | N    | GND |
| 3.960370      | 29.70      | 11.5      | 56         | 26.3      | QP       | N    | GND |

**MEASUREMENT RESULT: "TT09\_fin2"**

10/31/2012 4:14AM

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.185344      | 39.70      | 11.2      | 54         | 14.5      | AV       | N    | GND |
| 3.030938      | 30.00      | 11.6      | 46         | 16.0      | AV       | N    | GND |
| 3.527427      | 30.00      | 11.5      | 46         | 16.0      | AV       | N    | GND |

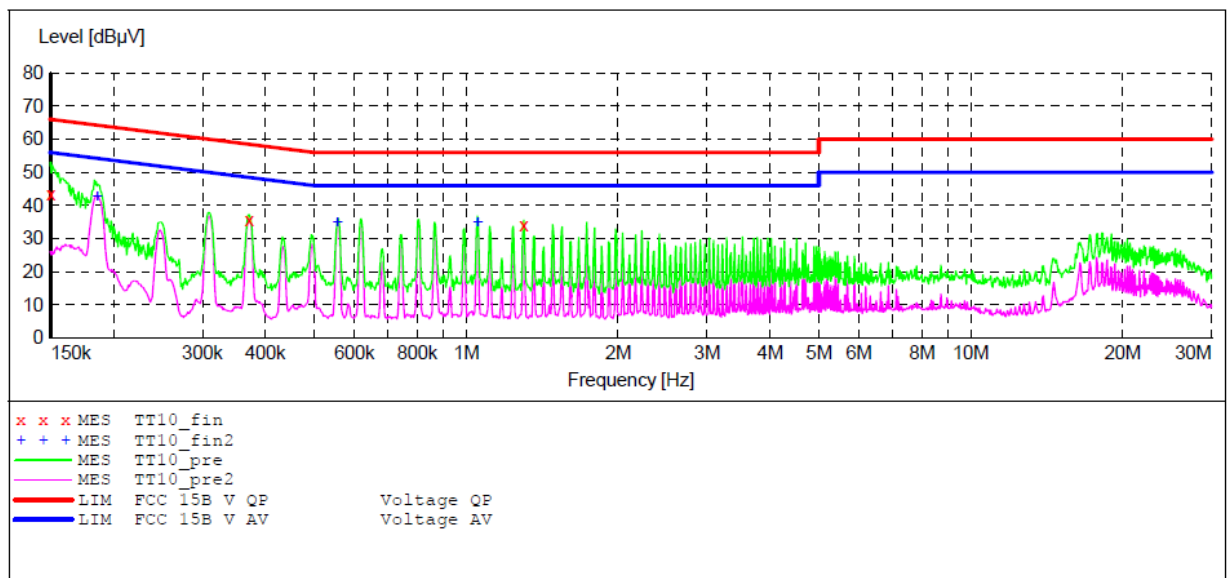
**ACCURATE TECHNOLOGY CO.,LTD**

**CONDUCTED EMISSION STANDARD FCC PART 15 B**

EUT: MP4 M/N:ID1851  
 Manufacturer: Natural Sound  
 Operating Condition: Transfer data  
 Test Site: 1#Shielding Room  
 Operator: Alen  
 Test Specification: L 120V/60Hz  
 Comment: Report No.:ATE20122474  
 Start of Test: 10/31/2012 / 4:15:38AM

**SCAN TABLE: "V 150K-30MHz fin"**

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



**MEASUREMENT RESULT: "TT10\_fin"**

10/31/2012 4:18AM

| Frequency MHz | Level dBuV | Transd dB | Limit dBuV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.150000      | 43.20      | 11.0      | 66         | 22.8      | QP       | L1   | GND |
| 0.371231      | 35.70      | 11.8      | 59         | 22.8      | QP       | L1   | GND |
| 1.300259      | 34.00      | 11.8      | 56         | 22.0      | QP       | L1   | GND |

**MEASUREMENT RESULT: "TT10\_fin2"**

10/31/2012 4:18AM

| Frequency MHz | Level dBuV | Transd dB | Limit dBuV | Margin dB | Detector | Line | PE  |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.185344      | 42.50      | 11.2      | 54         | 11.7      | AV       | L1   | GND |
| 0.555583      | 34.90      | 12.0      | 46         | 11.1      | AV       | L1   | GND |
| 1.052309      | 34.90      | 11.8      | 46         | 11.1      | AV       | L1   | GND |



## 6. RADIATED EMISSION FOR FCC PART 15 SECTION 15.109(A)

### 6.1. Block Diagram of Test Setup

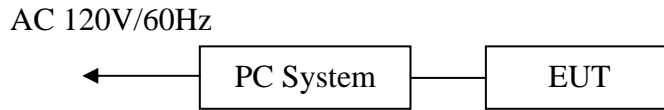
#### 6.1.1. Block diagram of connection between the EUT and simulators

##### 6.1.1.1. For playing & Recording



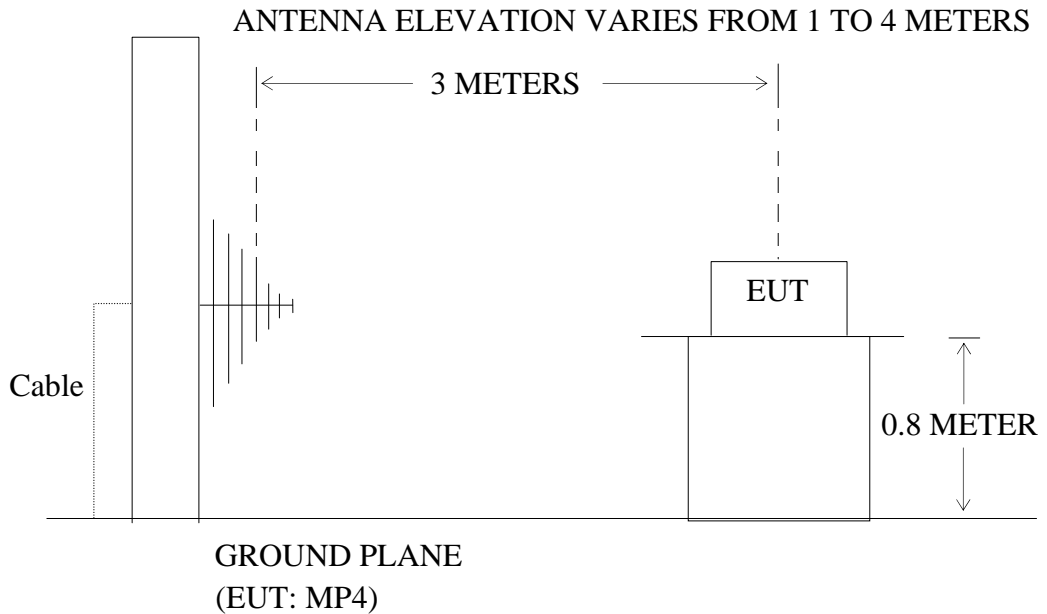
(EUT: MP4)

##### 6.1.1.2. For Transfer data & Charging



(EUT: MP4)

#### 6.1.2. Semi-Anechoic Chamber Test Setup Diagram



## 6.2.The Emission Limit For Section 15.109 (a)

### 6.2.1.Radiation Emission Measurement Limits According to Section 15.109 (a).

| Frequency<br>(MHz) | Limit   |   |
|--------------------|---|---|
|                    | Field Strength of Quasi-peak<br>Value<br>(microvolts/m) | Field Strength of Quasi-peak<br>Value<br>(dB $\mu$ V/m) |
| 30 - 88            | 100   | 40  |
| 88 - 216           | 150   | 43.5  |
| 216 - 960          | 200   | 46  |
| Above 960          | 500   | 54  |

## 6.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 6.3.1.MP4 (EUT)

Model Number : ID1851  
 Serial Number : N/A  
 Manufacturer : Shenzhen Natural Sound Electronics Co., Ltd.

## 6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3. Let the EUT work in (Playing, Transfer data, Recording, Charging) mode measure it.

## 6.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz

The frequency range from 30MHz to 1000MHz is checked.

## 6.6.The Emission Measurement Result

**PASS.**

|               |                  |                |         |
|---------------|------------------|----------------|---------|
| Date of Test: | October 31, 2012 | Temperature:   | 25°C    |
| EUT:          | MP4              | Humidity:      | 50%     |
| Model No.:    | ID1851           | Power Supply:  | DC 3.7V |
| Test Mode:    | Playing          | Test Engineer: | PEI     |

| Frequency: 30-1000MHz |     |             |                  |             |                 |                |             |          |
|-----------------------|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|
| Polarization          |     |             |                  |             |                 |                |             |          |
| Horizontal            | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|                       | 1   | 105.1667    | 23.02            | 13.93       | 36.95           | 43.50          | -6.55       | QP       |
|                       | 2   | 231.0398    | 22.01            | 16.05       | 38.06           | 46.00          | -7.94       | QP       |
|                       | 3   | 349.7411    | 19.34            | 20.75       | 40.09           | 46.00          | -5.91       | QP       |
| Vertical              | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|                       | 1   | 112.0328    | 20.21            | 13.85       | 34.06           | 43.50          | -9.44       | QP       |
|                       | 2   | 221.5010    | 18.63            | 15.76       | 34.39           | 46.00          | -11.61      | QP       |
|                       | 3   | 342.4453    | 17.36            | 20.13       | 37.49           | 46.00          | -8.51       | QP       |

|               |                         |                |              |
|---------------|-------------------------|----------------|--------------|
| Date of Test: | <u>October 31, 2012</u> | Temperature:   | <u>25°C</u>  |
| EUT:          | <u>MP4</u>              | Humidity:      | <u>50%</u>   |
| Model No.:    | <u>ID1851</u>           | Power Supply:  | <u>DC 5V</u> |
| Test Mode:    | <u>Transfer data</u>    | Test Engineer: | <u>PEI</u>   |

| Frequency: 30-1000MHz |     |             |                  |             |                 |                |             |          |
|-----------------------|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|
| Polarization          |     |             |                  |             |                 |                |             |          |
|                       | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| Horizontal            | 1   | 101.5358    | 24.01            | 13.97       | 37.98           | 43.50          | -5.52       | QP       |
|                       | 2   | 233.4881    | 25.63            | 16.52       | 42.15           | 46.00          | -3.85       | QP       |
|                       | 3   | 478.1394    | 15.98            | 23.81       | 39.79           | 46.00          | -6.21       | QP       |
| Vertical              | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|                       | 1   | 100.4712    | 15.10            | 13.97       | 29.07           | 43.50          | -14.43      | QP       |
|                       | 2   | 235.1346    | 20.14            | 16.82       | 36.96           | 46.00          | -9.04       | QP       |
|                       | 3   | 582.1122    | 15.89            | 25.44       | 41.33           | 46.00          | -4.67       | QP       |

|               |                         |                |                |
|---------------|-------------------------|----------------|----------------|
| Date of Test: | <u>October 31, 2012</u> | Temperature:   | <u>25°C</u>    |
| EUT:          | <u>MP4</u>              | Humidity:      | <u>50%</u>     |
| Model No.:    | <u>ID1851</u>           | Power Supply:  | <u>DC 3.7V</u> |
| Test Mode:    | <u>Recording</u>        | Test Engineer: | <u>PEI</u>     |

| Frequency: 30-1000MHz |     |             |                  |             |                 |                |             |          |
|-----------------------|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|
| Polarization          |     |             |                  |             |                 |                |             |          |
| Horizontal            | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|                       | 1   | 289.2986    | 4.21             | 18.58       | 22.79           | 46.00          | -23.21      | QP       |
|                       | 2   | 427.2918    | 3.98             | 23.04       | 27.02           | 46.00          | -18.98      | QP       |
|                       | 3   | 552.2269    | 3.89             | 25.31       | 29.20           | 46.00          | -16.80      | QP       |
| Vertical              | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|                       | 1   | 266.8395    | 4.32             | 18.49       | 22.81           | 46.00          | -23.19      | QP       |
|                       | 2   | 359.7114    | 7.02             | 21.23       | 28.25           | 46.00          | -17.75      | QP       |
|                       | 3   | 741.8155    | 4.02             | 27.53       | 31.55           | 46.00          | -14.45      | QP       |

Date of Test: October 11, 2012      Temperature: 25°C  
 EUT: MP4      Humidity: 50%  
 Model No.: ID1851      Power Supply: DC 5V  
 Test Mode: Charging      Test Engineer: PEI

| Frequency: 30-1000MHz |     |             |                  |             |                 |                |             |          |
|-----------------------|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|
| Polarization          |     |             |                  |             |                 |                |             |          |
| Horizontal            | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|                       | 1   | 100.8248    | 25.34            | 13.97       | 39.31           | 43.50          | -4.19       | QP       |
|                       | 2   | 236.7927    | 23.41            | 16.80       | 40.21           | 46.00          | -5.79       | QP       |
|                       | 3   | 582.1122    | 13.69            | 25.44       | 39.13           | 46.00          | -6.87       | QP       |
| Vertical              | No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|                       | 1   | 117.6815    | 13.51            | 13.68       | 27.19           | 43.50          | -16.31      | QP       |
|                       | 2   | 240.1442    | 22.35            | 16.77       | 39.12           | 46.00          | -6.88       | QP       |
|                       | 3   | 582.1122    | 15.87            | 25.44       | 41.31           | 46.00          | -4.69       | QP       |

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams are attached as below display the measurement of peak values.



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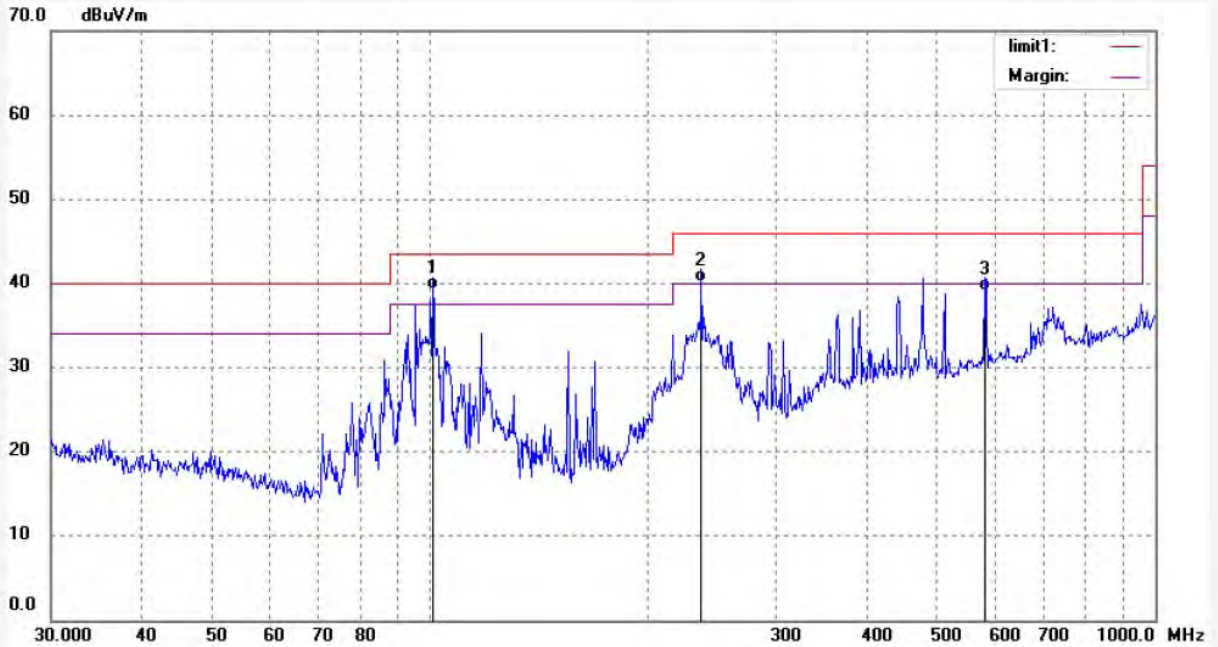
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: ALEN #451  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 49 %  
EUT: MP4  
Mode: Charging  
Model: ID1851  
Manufacturer: Natural Sound

Polarization: Horizontal  
Power Source: USB 5V  
Date: 2012/10/31  
Time: 21:04:18  
Engineer Signature:  
Distance: 3m

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 100.8248    | 25.34            | 13.97       | 39.31           | 43.50          | -4.19       | QP       |             |               |        |
| 2   | 236.7927    | 23.41            | 16.80       | 40.21           | 46.00          | -5.79       | QP       |             |               |        |
| 3   | 582.1122    | 13.69            | 25.44       | 39.13           | 46.00          | -6.87       | QP       |             |               |        |





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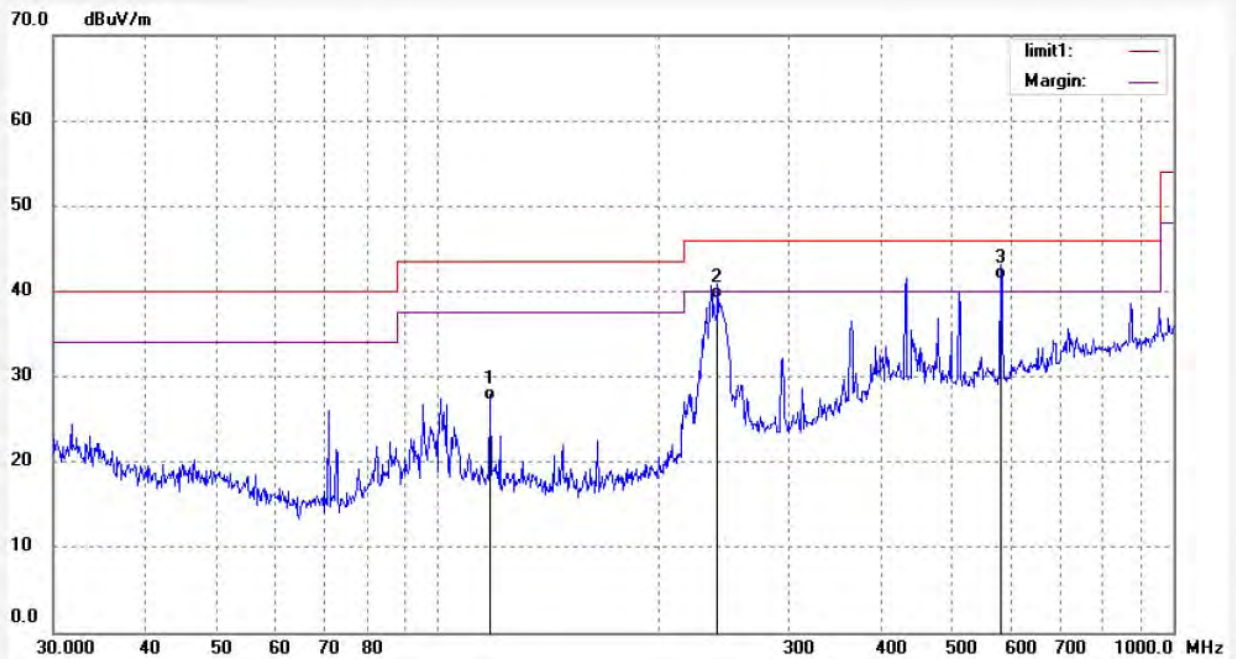
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: ALEN #452  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 49 %  
EUT: MP4  
Mode: Charging  
Model: ID1851  
Manufacturer: Natural Sound

Polarization: Vertical  
Power Source: USB 5V  
Date: 2012/10/31  
Time: 21:05:30  
Engineer Signature:  
Distance: 3m

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 117.6815    | 13.51            | 13.68       | 27.19           | 43.50          | -16.31      | QP       |             |               |        |
| 2   | 240.1442    | 22.35            | 16.77       | 39.12           | 46.00          | -6.88       | QP       |             |               |        |
| 3   | 582.1122    | 15.87            | 25.44       | 41.31           | 46.00          | -4.69       | QP       |             |               |        |



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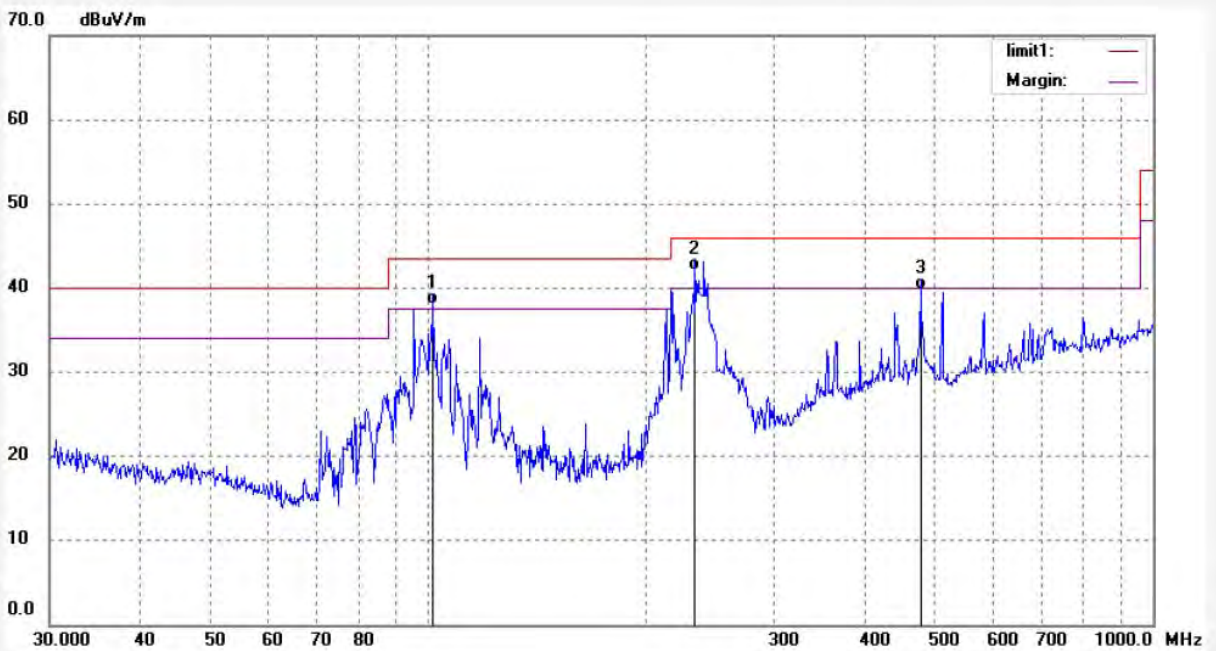
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: ALEN #454  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 49 %  
EUT: MP4  
Mode: Transfer data  
Model: ID1851  
Manufacturer: Natural Sound

Polarization: Horizontal  
Power Source: USB 5V  
Date: 2012/10/31  
Time: 21:07:49  
Engineer Signature:  
Distance: 3m

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 101.5358    | 24.01            | 13.97       | 37.98           | 43.50          | -5.52       | QP       |             |               |        |
| 2   | 233.4881    | 25.63            | 16.52       | 42.15           | 46.00          | -3.85       | QP       |             |               |        |
| 3   | 478.1394    | 15.98            | 23.81       | 39.79           | 46.00          | -6.21       | QP       |             |               |        |





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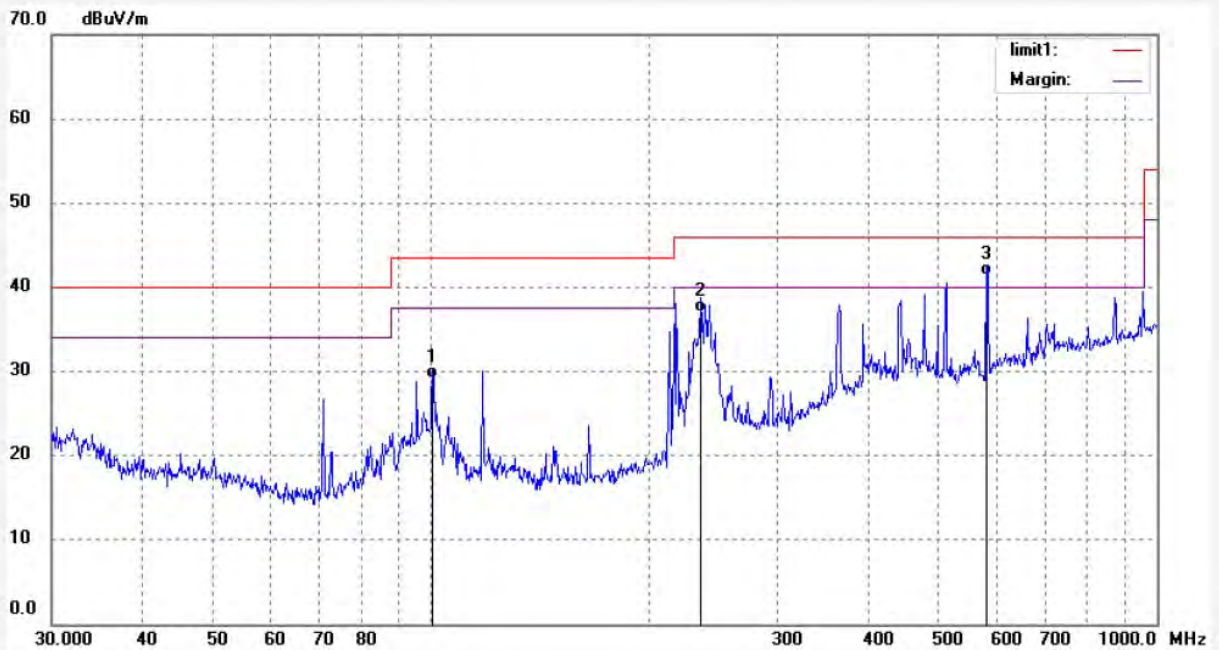
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: ALEN #453  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 49 %  
EUT: MP4  
Mode: Transfer data  
Model: ID1851  
Manufacturer: Natural Sound

Polarization: Vertical  
Power Source: USB 5V  
Date: 2012/10/31  
Time: 21:06:30  
Engineer Signature:  
Distance: 3m

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 100.4712    | 15.10            | 13.97       | 29.07           | 43.50          | -14.43      | QP       |             |               |        |
| 2   | 235.1346    | 20.14            | 16.82       | 36.96           | 46.00          | -9.04       | QP       |             |               |        |
| 3   | 582.1122    | 15.89            | 25.44       | 41.33           | 46.00          | -4.67       | QP       |             |               |        |



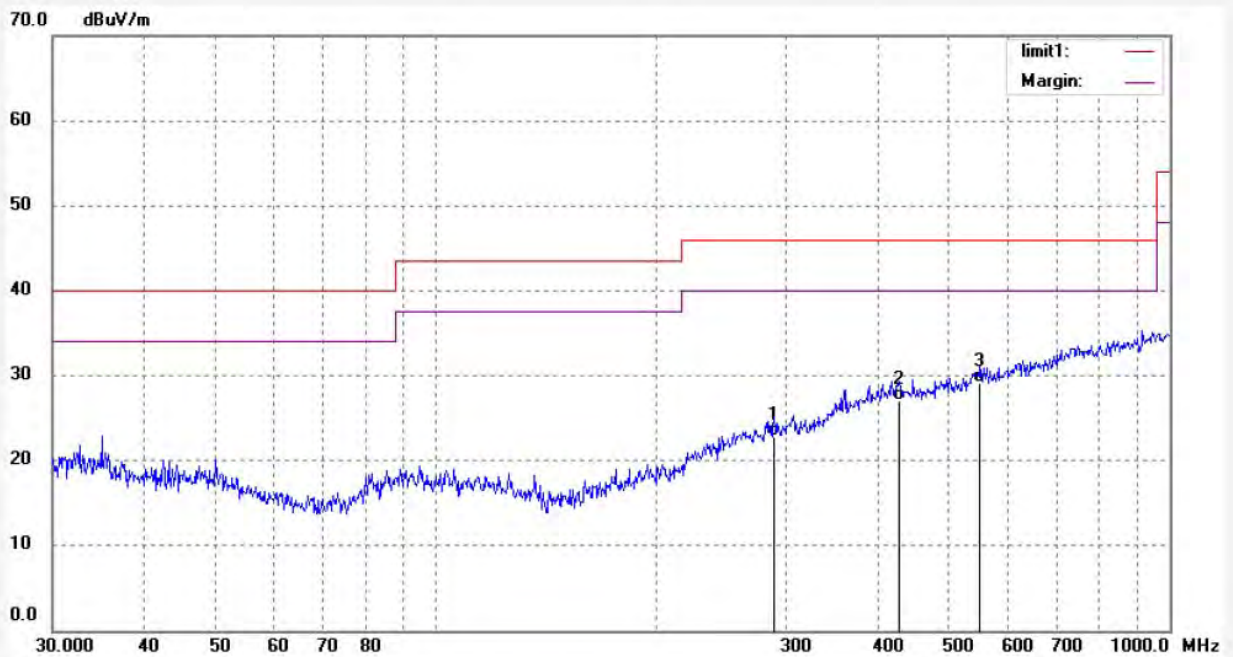
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F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

|                                   |                          |
|-----------------------------------|--------------------------|
| Job No.: ALEN #455                | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: DC 3.7V    |
| Test item: Radiation Test         | Date: 2012/10/31         |
| Temp.( C)/Hum.(%) 23 C / 49 %     | Time: 21:09:31           |
| EUT: MP4                          | Engineer Signature:      |
| Mode: Recording                   | Distance: 3m             |
| Model: ID1851                     |                          |
| Manufacturer: Natural Sound       |                          |

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 289.2986    | 4.21             | 18.58       | 22.79           | 46.00          | -23.21      | QP       |             |               |        |
| 2   | 427.2918    | 3.98             | 23.04       | 27.02           | 46.00          | -18.98      | QP       |             |               |        |
| 3   | 552.2269    | 3.89             | 25.31       | 29.20           | 46.00          | -16.80      | QP       |             |               |        |



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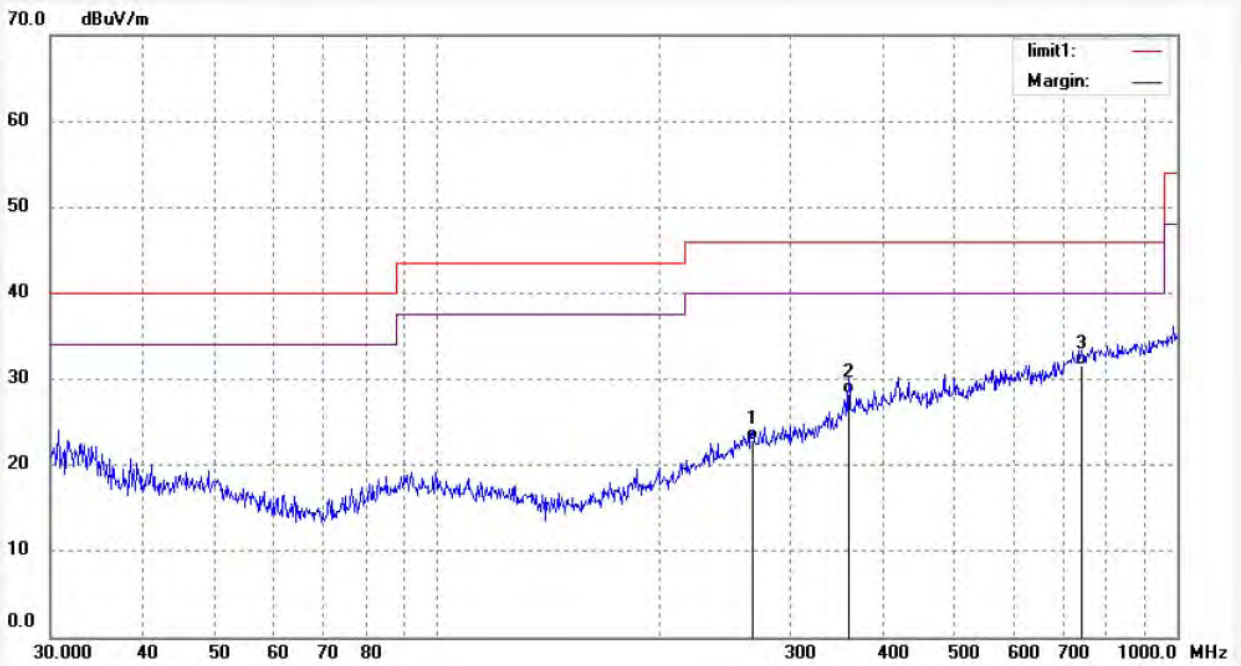
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: ALEN #456  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 49 %  
EUT: MP4  
Mode: Recording  
Model: ID1851  
Manufacturer: Natural Sound

Polarization: Vertical  
Power Source: DC 3.7V  
Date: 2012/10/31  
Time: 21:10:18  
Engineer Signature:  
Distance: 3m

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 266.8395    | 4.32             | 18.49       | 22.81           | 46.00          | -23.19      | QP       |             |               |        |
| 2   | 359.7114    | 7.02             | 21.23       | 28.25           | 46.00          | -17.75      | QP       |             |               |        |
| 3   | 741.8155    | 4.02             | 27.53       | 31.55           | 46.00          | -14.45      | QP       |             |               |        |





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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

|                                   |                          |
|-----------------------------------|--------------------------|
| Job No.: ALEN #457                | Polarization: Horizontal |
| Standard: FCC Class B 3M Radiated | Power Source: DC 3.7V    |
| Test item: Radiation Test         | Date: 2012/10/31         |
| Temp.( C)/Hum.(%) 23 C / 49 %     | Time: 21:13:39           |
| EUT: MP4                          | Engineer Signature:      |
| Mode: Playing                     | Distance: 3m             |
| Model: ID1851                     |                          |
| Manufacturer: Natural Sound       |                          |

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 105.1667    | 23.02            | 13.93       | 36.95           | 43.50          | -6.55       | QP       |             |               |        |
| 2   | 231.0398    | 22.01            | 16.05       | 38.06           | 46.00          | -7.94       | QP       |             |               |        |
| 3   | 349.7411    | 19.34            | 20.75       | 40.09           | 46.00          | -5.91       | QP       |             |               |        |



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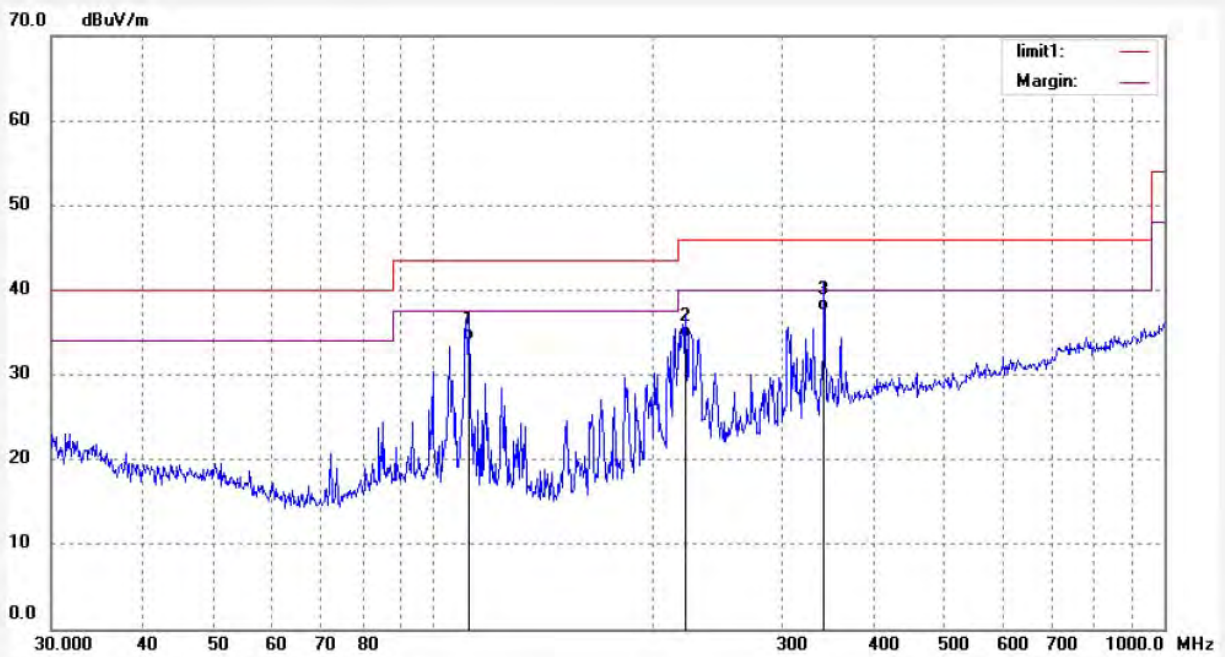
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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: ALEN #458  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 49 %  
EUT: MP4  
Mode: Playing  
Model: ID1851  
Manufacturer: Natural Sound

Polarization: Vertical  
Power Source: DC 3.7V  
Date: 2012/10/31  
Time: 21:15:33  
Engineer Signature:  
Distance: 3m

Note: Report No:ATE20122474



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 112.0328    | 20.21            | 13.85       | 34.06           | 43.50          | -9.44       | QP       |             |               |        |
| 2   | 221.5010    | 18.63            | 15.76       | 34.39           | 46.00          | -11.61      | QP       |             |               |        |
| 3   | 342.4453    | 17.36            | 20.13       | 37.49           | 46.00          | -8.51       | QP       |             |               |        |