



# **FCC 47 CFR PART 15 SUBPART C**

## **TEST REPORT**

*For*

**Applicant : Graco Children's products Inc**

**Address : 150 Oaklands Boulevard, Exton PA 19341.**

**Product Name : Baby monitor**

**Model Name : 2L01, PD141818**

**Brand Name : Graco**

**FCC ID : M6YPD141818**

**Report No. : MOST100504F1**

**Date of Issue : May. 8, 2010**

**Issued by : Most Technology Service Co., Ltd.**

**Address : No.5, 2nd Langshan Road, North District, Hi-tech Industrial  
Park, Nanshan, Shenzhen, Guangdong, China**

**Tel : 86-755-8617 0306**

**Fax : 86-755-8617 0310**

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**1. VERIFICATION OF CONFORMITY**

**Equipment Under Test:** Baby monitor  
**Brand Name:** Graco  
**Model Number:** 2L01, PD141818  
**FCC ID:** M6YPD141818  
**Applicant:** Graco Children's products Inc.  
150 Oaklands Boulevard, Exton PA 19341.  
**Manufacturer:** HonorTone LIMITED  
Lot No.15-16, Western District of Science & Technology park, Daya Bay  
Economy and Technology Development District, Huizhou City, Guangdong  
Province, PRC.  
**Technical Standards:** 47 CFR Part 15 Subpart C  
**File Number:** MOST100504F1  
**Date of test:** May. 5, 2010– May. 8, 2010  
**Deviation:** None  
**Condition of Test Sample:** Normal  
**Test Result:** PASS

The above equipment was tested by Most Technology Service Co., Ltd. for compliance with the requirements set forth in FCC rules and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Tested by (+ signature):



Candy Zhang

May. 8, 2010

Review by (+ signature):



Sam Zhong

May. 8, 2010

Approved by (+ signature):



Yvette Zhou

May. 8, 2010



## 2. GENERAL INFORMATION

### 2.1 Product Information

|   |  |
|---|--|
| <b>Product</b>                              | Baby monitor                                   |
| <b>Brand Name</b>                           | Graco  |
| <b>Model Number</b>                         | 2L01   |
| <b>Series Model Name:</b>                   | PD141818                                       |
| <b>Series Model Difference description:</b> | Only the model name is different.              |
| <b>Power Supply</b>                         | DC 12V by AC Adapter 120V/60Hz                 |
| <b>Frequency Range</b>                      | 49.83MHz – 49.875 MHz                          |
| <b>Modulation Technique</b>                 | FM   |
| <b>Channel Number</b>                       | 4 (49.830MHz, 49.845MHz, 49.860MHz, 49.875MHz) |
| <b>Antenna Gain</b>                         | 1.0 dBi  |
| <b>Temperature Range</b>                    | -20°C -55°C                                    |

**NOTE:**

1. Please refer to Appendix I for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

## 2.2 OBJECTIVE

The objective of the report is to perform tests according to 47 CFR Part 15 Subpart C for the EUT FCC ID Certification:

| No. | Identity                            | Document Title          |
|-----|-------------------------------------|-------------------------|
| 1   | 47 CFR Part 15<br>(10-1-05 Edition) | Radio Frequency Devices |

## 2.3 Test Standards and Results

Test items and the results are as bellow:

| No. | Section | Description                        | Result | Date of Test |
|-----|---------|------------------------------------|--------|--------------|
| 1   | 15.235  | Radiated Emission                  | PASS   | 2010-5-6     |
| 2   | 15.235  | Band Edge                          | PASS   | 2010-5-6     |
| 3   | 15.203  | Antenna Requirement                | PASS   | 2010-5-6     |
| 4   | 15.207  | Power Line Conducted Emission Test | PASS   | 2010-5-6     |

*Note:* 1. The test result judgment is decided by the limit of measurement standard  
2. The information of measurement uncertainty is available upon the customer's request.

## 2.4 Environmental Conditions

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

- Temperature: 15-35°C
- Humidity: 30-60 %
- Atmospheric pressure: 86-106 kPa

### 3. TEST METHODOLOGY

#### 3.1 TEST FACILITY

|                       |  |
|-----------------------|--|
| Test Site:            | Most Technology Service Co., Ltd   |
| Location:             | No.5, Langshan 2nd Rd., North Hi-Tech Industrial park, Nanshan, Shenzhen, Guangdong, China   |
| Description:          | <p>There is one 3m semi-anechoic an area test sites and two line conducted labs for final test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2003 and CISPR 16 requirements.</p> <p>The FCC Registration Number is <b>490827</b>.</p>  |
| Site Filing:          | <p>The site description is on file with the Federal Communications Commission, 7435 Oakland Mills Road, Columbia, MD 21046.</p>  |
| Instrument Tolerance: | All measuring equipment is in accord with ANSI C63.4:2003 and CISPR 16 requirements that meet industry regulatory agency and accreditation agency requirement.   |
| Ground Plane:         | <p>Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna.</p> |

#### 3.2 GENERAL TEST PROCEDURES

##### Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4:2003, Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

##### Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4:2003.

## 4 SETUP OF EQUIPMENT UNDER TEST

### 4.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

### 4.2 SUPPORT EQUIPMENT

| Device Type | Brand | Model | FCC ID | Series No. | Audio Cable | Power Cord |
|-------------|-------|-------|--------|------------|-------------|------------|
| ---         | ---   | ---   | ---    | ---        | ---         | ---        |

*Remark:*

*All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*

### 4. 3 TEST EQUIPMENT LIST

**Instrumentation:** The following list contains equipment used at Most for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10 kHz to 1.0 GHz or above.

| No. | Equipment                            | Manufacturer      | Model No.      | S/N         | Calculator due date |
|-----|--------------------------------------|-------------------|----------------|-------------|---------------------|
| 1   | Test Receiver                        | Rohde & Schwarz   | ESCI           | 100492      | 2011/03/14          |
| 2   | L.I.S.N.                             | Rohde & Schwarz   | ENV216         | 100093      | 2011/03/14          |
| 3   | Coaxial Switch                       | Anritsu Corp      | MP59B          | 6200283933  | 2011/03/14          |
| 4   | Terminator                           | Hubersuhner       | 50Ω            | No.1        | 2011/03/14          |
| 5   | RF Cable                             | SchwarzBeck       | N/A            | No.1        | 2011/03/14          |
| 6   | Test Receiver                        | Rohde & Schwarz   | ESPI           | 101202      | 2011/03/14          |
| 7   | Bilog Antenna                        | Sunol             | JB3            | A121206     | 2011/03/14          |
| 8   | Test Antenna - Horn                  | Schwarzbeck       | BBHA 9120C     | --          | 2011/03/14          |
| 9   | Test Antenna - Bi-Log                | Schwarzbeck       | VULB 9163      | --          | 2011/03/14          |
| 10  | Cable                                | Resenberger       | N/A            | NO.1        | 2011/03/14          |
| 11  | Cable                                | SchwarzBeck       | N/A            | NO.2        | 2011/03/14          |
| 12  | Cable                                | SchwarzBeck       | N/A            | NO.3        | 2011/03/14          |
| 13  | DC Power Filter                      | DuoJi             | DL2×30B        | N/A         | 2011/03/14          |
| 14  | Single Phase Power Line Filter       | DuoJi             | FNF 202B30     | N/A         | 2011/03/14          |
| 15  | 3 Phase Power Line Filter            | DuoJi             | FNF 402B30     | N/A         | 2011/03/14          |
| 16  | Test Receiver                        | Rohde & Schwarz   | ESCI           | 100492      | 2011/03/14          |
| 17  | Absorbing Clamp                      | Luthi             | MDS21          | 3635        | 2011/03/14          |
| 18  | Coaxial Switch                       | Anritsu Corp      | MP59B          | 6200283933  | 2011/03/14          |
| 19  | AC Power Source                      | Kikusui           | AC40MA         | LM003232    | 2011/03/14          |
| 20  | Test Analyzer                        | Kikusui           | KHA1000        | LM003720    | 2011/03/14          |
| 21  | Line Impedence Network               | Kikusui           | LIN40MA-PCR-L  | LM002352    | 2011/03/14          |
| 22  | ESD Tester                           | Kikusui           | KES4021        | LM003537    | 2011/03/14          |
| 23  | EMC PRO System                       | EM Test           | UCS-500-M4     | V0648102026 | 2011/03/14          |
| 24  | Signal Generator                     | IFR               | 2032           | 203002/100  | 2011/03/14          |
| 25  | Amplifier                            | A&R               | 150W1000       | 301584      | 2011/03/14          |
| 26  | CDN                                  | FCC               | FCC-801-M2-25  | 47          | 2011/03/14          |
| 27  | CDN                                  | FCC               | FCC-801-M3-25  | 107         | 2011/03/14          |
| 28  | EM Injection Clamp                   | FCC               | F-203I-23mm    | 403         | 2011/03/14          |
| 29  | RF Cable                             | MIYAZAKI          | N/A            | No.1/No.2   | 2011/03/14          |
| 30  | Universal Radio Communication Tester | ROHDE&SCHWARZ     | CMU200         | 0304789     | 2011/03/14          |
| 31  | Telecommunication Antenna            | European Antennas | PSA 75301R/170 | 0304213     | 2011/03/14          |

**NOTE:** Equipments listed above have been calibrated and are in the period of validation.



## 5. 47 CFR Part 15 C Requirements

### 5.1 RADIATED EMISSION

#### 5.1.1 Definition

The field strength of any emission within this band shall not exceed 10000 micro volts /meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in section 15.35 for limiting peak emissions apply.

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(Intentional Radiators general limit), as below.

| Frequency (MHz) | Field Strength ( $\mu\text{V/m}$ ) | Measurement Distance (m) |
|-----------------|------------------------------------|--------------------------|
| 1.705 - 30.0    | 30                                 | 30                       |
| 30 - 88         | 100                                | 3                        |
| 88 - 216        | 150                                | 3                        |
| 216 - 960       | 200                                | 3                        |
| Above 960       | 500                                | 3                        |

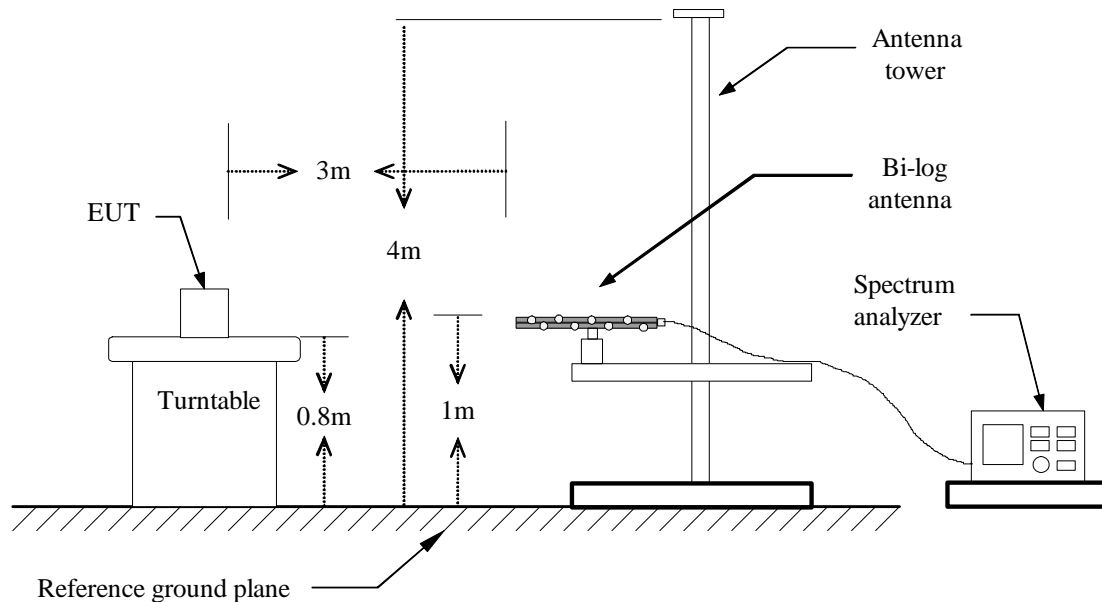
**Remark:** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

2. In the above emission table, the tighter limit applies at the band edges.

| Frequency (Hz) | Field Strength ( $\mu\text{V/m}$ at 3-meter) | Test Distance (m) | Field Strength (dB $\mu\text{V/m}$ at 3-meter) |
|----------------|--|-------------------|--|
| 1.705-30       | 30   | 3                 | 69.54  |
| 30-88          | 100  | 3                 | 40   |
| 88-216         | 150  | 3                 | 43.5   |
| 216-960        | 200  | 3                 | 46   |
| Above 960      | 500  | 3                 | 54   |
| Fundamental    | 250  | 3                 | 48   |

### 5.1.2 Test Configuration

#### Test Setup:



### 5.1.3 Test Description

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. Set the spectrum analyzer in the following setting as:  
 Below 1GHz: RBW=100 kHz / VBW=300 kHz / Sweep=AUTO  
 Above 1GHz : ( a ) PEAK: RBW=VBW=1MHz / Sweep=AUTO  
               (b ) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
7. Repeat above procedures until the measurements for all frequencies are complete.

## 5.1.4 Test Result



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

## Radiated Emission Measurement



Site: site MOST 3M

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part15 B 3M Radiation

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Baby monitor

Distance:

M/N: 2L01

Mode: Normal Working

Note: 49.875MHz

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|-------------------------|---------------------------|---------|
| 1   | I   | 41.6400      | 18.51                    | 15.75                   | 34.26                      | 40.00           | -5.74      | peak                    |                           |         |
| 2   | *   | 49.8750      | 61.29                    | 11.58                   | 72.87                      | 80.00           | -7.13      | peak                    | Fundamental               |         |
| 3   | I   | 68.7999      | 22.48                    | 11.61                   | 34.09                      | 40.00           | -5.91      | peak                    |                           |         |
| 4   | I   | 81.4099      | 23.42                    | 11.37                   | 34.79                      | 40.00           | -5.21      | peak                    |                           |         |
| 5   |     | 86.2600      | 15.78                    | 11.33                   | 27.11                      | 40.00           | -12.89     | peak                    |                           |         |
| 6   |     | 118.2699     | 11.12                    | 17.33                   | 28.45                      | 43.50           | -15.05     | peak                    |                           |         |
| 7   |     | 132.8989     | 12.00                    | 17.56                   | 29.56                      | 43.50           | -13.94     | QP                      |                           |         |
| 8   | I   | 136.7000     | 26.08                    | 16.37                   | 42.45                      | 43.50           | -1.05      | peak                    |                           |         |
| 9   |     | 146.4000     | 13.05                    | 16.79                   | 29.84                      | 43.50           | -13.66     | peak                    |                           |         |
| 10  |     | 178.4100     | 18.16                    | 16.78                   | 34.94                      | 43.50           | -8.56      | peak                    |                           |         |
| 11  |     | 203.6299     | 12.27                    | 17.22                   | 29.49                      | 43.50           | -14.01     | peak                    |                           |         |
| 12  |     | 221.0900     | 18.50                    | 16.32                   | 34.82                      | 46.00           | -11.18     | peak                    |                           |         |
| 13  |     | 231.7599     | 12.83                    | 16.63                   | 29.46                      | 46.00           | -16.54     | peak                    |                           |         |

\*:Maximum data x:Over limit I:over margin

|                                  |                               |                 |
|----------------------------------|-------------------------------|-----------------|
| Site: site MOST 3M               | Polarization: <b>Vertical</b> | Temperature: 26 |
| Limit: FCC Part15 B 3M Radiation | Power: AC 120V/60Hz           | Humidity: 60 %  |
| EUT: Baby monitor                | Distance:                     |                 |
| M/N: 2L01                        |                               |                 |
| Mode: Normal Working             |                               |                 |
| Note: 49.875MHz                  |                               |                 |

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 14  |     | 247.2800 | 8.94          | 17.40          | 26.34       | 46.00  | -19.66 | peak           |              |        |
| 15  |     | 269.5899 | 9.36          | 18.85          | 28.21       | 46.00  | -17.79 | peak           |              |        |
| 16  |     | 284.1399 | 8.36          | 19.44          | 27.80       | 46.00  | -18.20 | peak           |              |        |
| 17  |     | 333.6099 | 11.57         | 17.04          | 28.61       | 46.00  | -17.39 | peak           |              |        |

\*:Maximum data    x:Over limit    !:over margin



Address: No. 5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

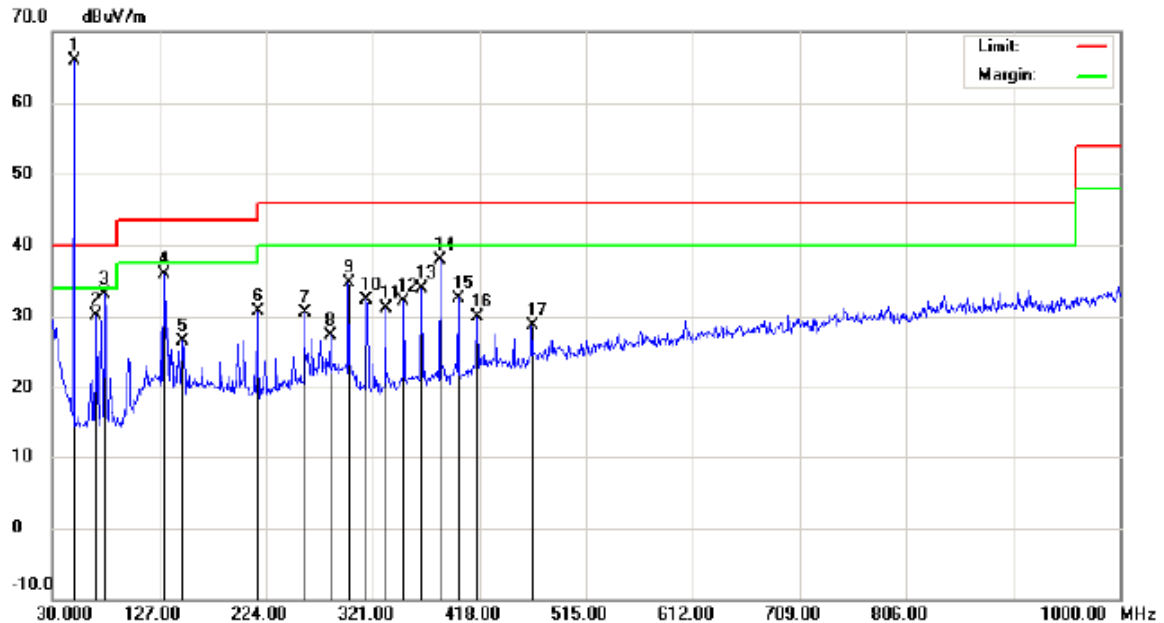
### Radiated Emission Measurement

File: 2L01

Data: #7

Date: 2010-5-6

Time: 19:55:51



Site: site MOST 3M

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part15 B 3M Radiation

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Baby monitor

Distance:

M/N: 2L01

Mode: Normal Working

Note: 49.875MHz

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|-------------------------|---------------------------|---------|
| 1   | *   | 49.8750      | 54.29                    | 11.58                   | 65.87                      | 80.00           | -24.13     | peak     | Fundamental             |                           |         |
| 2   |     | 69.7699      | 18.38                    | 11.69                   | 30.07                      | 40.00           | -9.93      | peak     |                         |                           |         |
| 3   |     | 77.5300      | 21.66                    | 11.52                   | 33.18                      | 40.00           | -6.82      | peak     |                         |                           |         |
| 4   |     | 130.8800     | 18.20                    | 17.66                   | 35.86                      | 43.50           | -7.64      | peak     |                         |                           |         |
| 5   |     | 148.3400     | 9.92                     | 16.63                   | 26.55                      | 43.50           | -16.95     | peak     |                         |                           |         |
| 6   |     | 216.2400     | 14.57                    | 16.14                   | 30.71                      | 46.00           | -15.29     | peak     |                         |                           |         |
| 7   |     | 258.9200     | 12.96                    | 17.56                   | 30.52                      | 46.00           | -15.48     | peak     |                         |                           |         |
| 8   |     | 282.1999     | 7.95                     | 19.42                   | 27.37                      | 46.00           | -18.63     | peak     |                         |                           |         |
| 9   |     | 298.6900     | 15.46                    | 19.30                   | 34.76                      | 46.00           | -11.24     | peak     |                         |                           |         |
| 10  |     | 315.1800     | 15.45                    | 16.81                   | 32.26                      | 46.00           | -13.74     | peak     |                         |                           |         |
| 11  |     | 332.6399     | 14.14                    | 17.03                   | 31.17                      | 46.00           | -14.83     | peak     |                         |                           |         |
| 12  |     | 349.1298     | 14.32                    | 17.73                   | 32.05                      | 46.00           | -13.95     | peak     |                         |                           |         |
| 13  |     | 365.6200     | 15.59                    | 18.24                   | 33.83                      | 46.00           | -12.17     | peak     |                         |                           |         |

\*:Maximum data    x:Over limit    !:over margin

|                                  |                                 |                 |
|----------------------------------|---------------------------------|-----------------|
| Site site MOST 3M                | Polarization: <i>Horizontal</i> | Temperature: 26 |
| Limit: FCC Part15 B 3M Radiation | Power: AC 120V/60Hz             | Humidity: 60 %  |
| EUT: Baby monitor                | Distance:                       |                 |
| M/N: 2L01                        |                                 |                 |
| Mode: Normal Working             |                                 |                 |
| Note: 49.875MHz                  |                                 |                 |

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   | Antenna<br>Height | Table<br>Degree |        |
|-----|-----|----------|------------------|-------------------|------------------|--------|--------|-------------------|-----------------|--------|
|     |     | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector          | cm              | degree |
| 14  |     | 382.1099 | 19.70            | 18.14             | 37.84            | 46.00  | -8.16  | peak              |                 |        |
| 15  |     | 398.6000 | 13.94            | 18.66             | 32.60            | 46.00  | -13.40 | peak              |                 |        |
| 16  |     | 416.0600 | 10.38            | 19.57             | 29.95            | 46.00  | -16.05 | peak              |                 |        |
| 17  |     | 465.5299 | 7.79             | 20.98             | 28.77            | 46.00  | -17.23 | peak              |                 |        |

\*:Maximum data    x:Over limit    !:over margin



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

### Radiated Emission Measurement

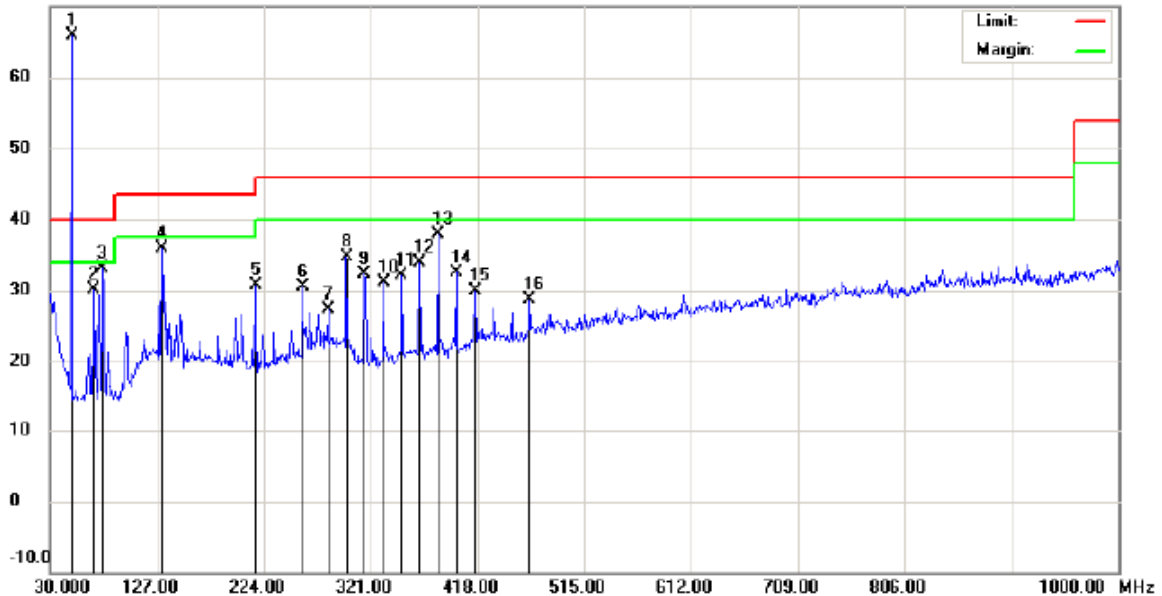
File: 2L01

Data: #8

Date: 2010-5-6

Time: 19:55:51

70.0 dBuV/m



Site: site MOST 3M

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part15 B 3M Radiation

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Baby monitor

Distance:

M/N: 2L01

Mode: Normal Working

Note: 49.83MHz

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|-------------------------|---------------------------|---------|
| 1   | *   | 49.8300      | 54.29                    | 11.58                   | 65.87                      | 80.00           | -14.13     | peak     | Fundamental             |                           |         |
| 2   |     | 69.7699      | 18.38                    | 11.69                   | 30.07                      | 40.00           | -9.93      | peak     |                         |                           |         |
| 3   |     | 77.5300      | 21.66                    | 11.52                   | 33.18                      | 40.00           | -6.82      | peak     |                         |                           |         |
| 4   |     | 130.8800     | 18.20                    | 17.66                   | 35.86                      | 43.50           | -7.64      | peak     |                         |                           |         |
| 5   |     | 216.2400     | 14.57                    | 16.14                   | 30.71                      | 46.00           | -15.29     | peak     |                         |                           |         |
| 6   |     | 258.9200     | 12.96                    | 17.56                   | 30.52                      | 46.00           | -15.48     | peak     |                         |                           |         |
| 7   |     | 282.1999     | 7.95                     | 19.42                   | 27.37                      | 46.00           | -18.63     | peak     |                         |                           |         |
| 8   |     | 298.6900     | 15.46                    | 19.30                   | 34.76                      | 46.00           | -11.24     | peak     |                         |                           |         |
| 9   |     | 315.1800     | 15.45                    | 16.81                   | 32.26                      | 46.00           | -13.74     | peak     |                         |                           |         |
| 10  |     | 332.6399     | 14.14                    | 17.03                   | 31.17                      | 46.00           | -14.83     | peak     |                         |                           |         |
| 11  |     | 349.1298     | 14.32                    | 17.73                   | 32.05                      | 46.00           | -13.95     | peak     |                         |                           |         |
| 12  |     | 365.6200     | 15.59                    | 18.24                   | 33.83                      | 46.00           | -12.17     | peak     |                         |                           |         |
| 13  |     | 382.1099     | 19.70                    | 18.14                   | 37.84                      | 46.00           | -8.16      | peak     |                         |                           |         |

\*:Maximum data x:Over limit !:over margin

|                                  |                                 |                 |
|----------------------------------|---------------------------------|-----------------|
| Site: site MOST 3M               | Polarization: <i>Horizontal</i> | Temperature: 26 |
| Limit: FCC Part15 B 3M Radiation | Power: AC 120V/60Hz             | Humidity: 60 %  |
| EUT: Baby monitor                | Distance:                       |                 |
| M/N: 2L01                        |                                 |                 |
| Mode: Normal Working             |                                 |                 |
| Note: 49.83MHz                   |                                 |                 |

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 14  |     | 398.6000 | 13.94         | 18.66          | 32.60       | 46.00  | -13.40 | peak           |              |        |
| 15  |     | 416.0600 | 10.38         | 19.57          | 29.95       | 46.00  | -16.05 | peak           |              |        |
| 16  |     | 465.5298 | 7.79          | 20.98          | 28.77       | 46.00  | -17.23 | peak           |              |        |

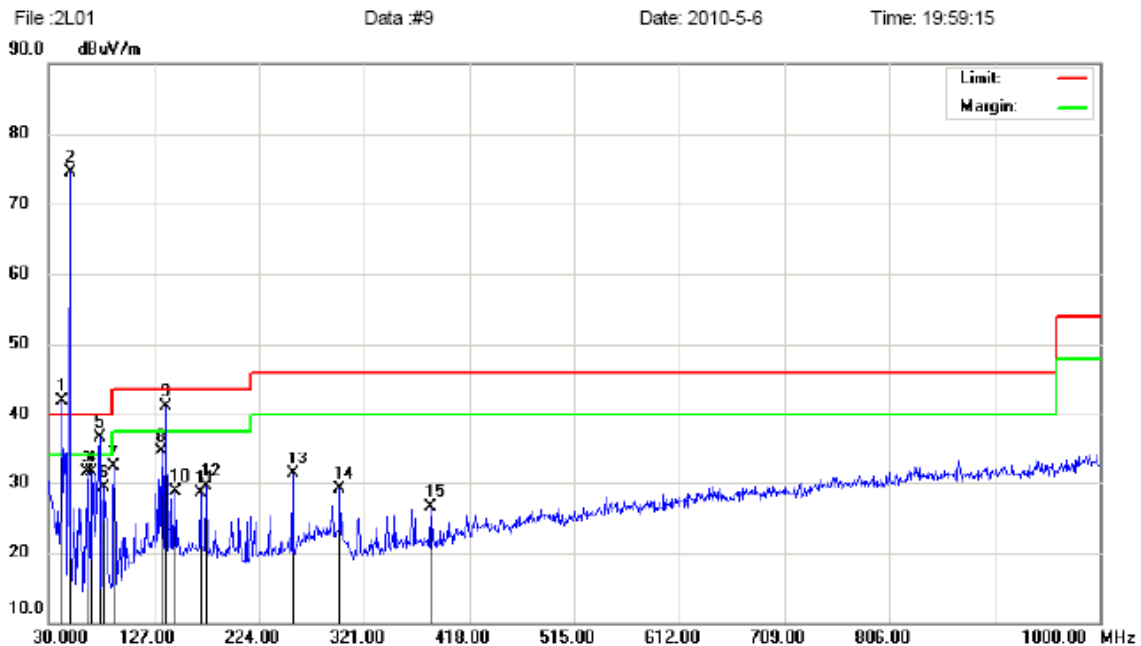
\*:Maximum data    x:Over limit    !:over margin





Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

### Radiated Emission Measurement



Site: site MOST 3M

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part15 B 3M Radiation

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Baby monitor

Distance:

M/N: 2L01

Mode: Normal

Note: 49.83MHz

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|-------------------------|-----------------|---------|
| 1   | X   | 42.6099      | 26.77                    | 15.13                   | 41.90                      | 40.00           | 1.90       | peak                    |                 |         |
| 2   | *   | 49.8300      | 62.92                    | 11.58                   | 74.50                      | 80.00           | -5.50      | peak                    | Fundamental     |         |
| 3   |     | 65.8900      | 20.11                    | 11.37                   | 31.48                      | 40.00           | -8.52      | peak                    |                 |         |
| 4   |     | 69.7699      | 19.86                    | 11.69                   | 31.55                      | 40.00           | -8.45      | peak                    |                 |         |
| 5   | !   | 76.5600      | 25.07                    | 11.57                   | 36.64                      | 40.00           | -3.36      | peak                    |                 |         |
| 6   |     | 80.4399      | 17.87                    | 11.39                   | 29.26                      | 40.00           | -10.74     | peak                    |                 |         |
| 7   |     | 90.1400      | 20.96                    | 11.42                   | 32.38                      | 43.50           | -11.12     | peak                    |                 |         |
| 8   |     | 133.7899     | 17.16                    | 17.51                   | 34.67                      | 43.50           | -8.83      | peak                    |                 |         |
| 9   | !   | 137.6699     | 23.81                    | 17.32                   | 41.13                      | 43.50           | -2.37      | peak                    |                 |         |
| 10  |     | 147.3700     | 12.07                    | 16.71                   | 28.78                      | 43.50           | -14.72     | peak                    |                 |         |
| 11  |     | 169.6799     | 11.40                    | 17.20                   | 28.60                      | 43.50           | -14.90     | peak                    |                 |         |
| 12  |     | 175.5000     | 12.54                    | 16.92                   | 29.46                      | 43.50           | -14.04     | peak                    |                 |         |
| 13  |     | 255.0399     | 13.92                    | 17.40                   | 31.32                      | 46.00           | -14.68     | peak                    |                 |         |

\*:Maximum data x:Over limit !:over margin

|                                  |                               |                 |
|----------------------------------|-------------------------------|-----------------|
| Site site MOST 3M                | Polarization: <b>Vertical</b> | Temperature: 26 |
| Limit: FCC Part15 B 3M Radiation | Power: AC 120V/60Hz           | Humidity: 60 %  |
| EUT: Baby monitor                | Distance:                     |                 |
| M/N: 2L01                        |                               |                 |
| Mode: Normal Working             |                               |                 |
| Note: 49.83MHz                   |                               |                 |

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 14  |     | 298.6899 | 9.83          | 19.30          | 29.13       | 46.00  | -16.87 | peak           |              |        |
| 15  |     | 382.1099 | 8.31          | 18.14          | 26.45       | 46.00  | -19.55 | peak           |              |        |

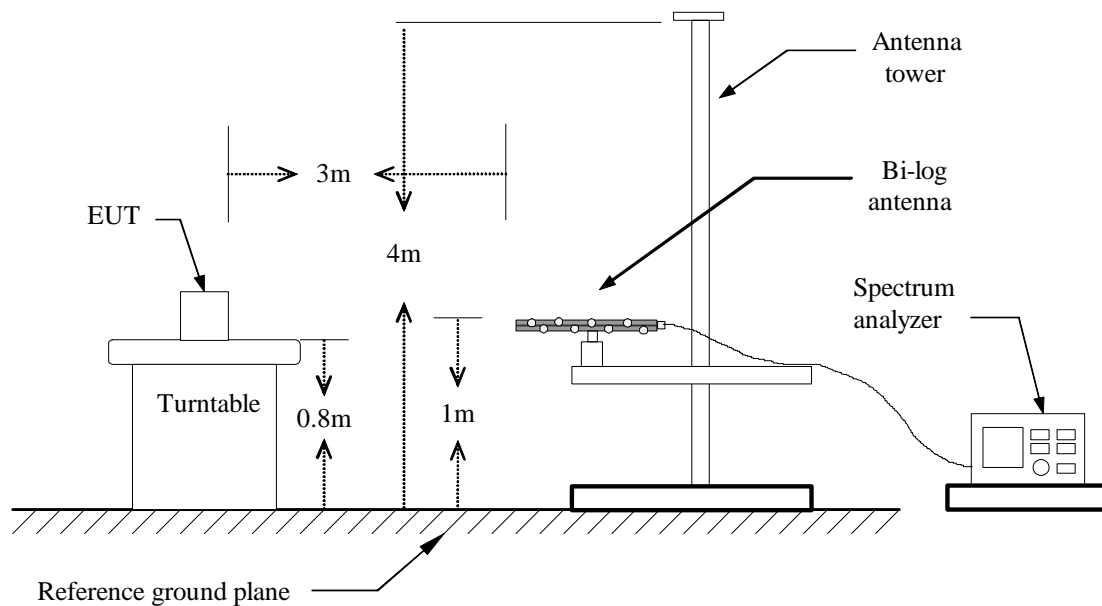
\*:Maximum data    x:Over limit    !:over margin

## 5.2 BAND EDGE

### 5.2.1 Requirement

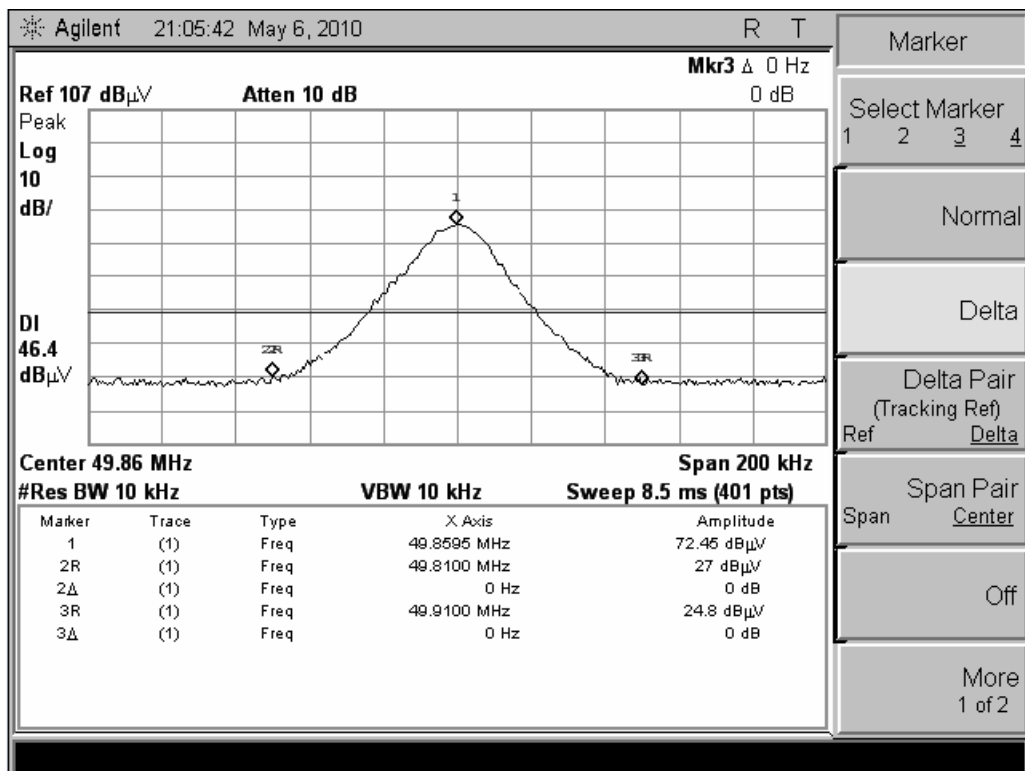
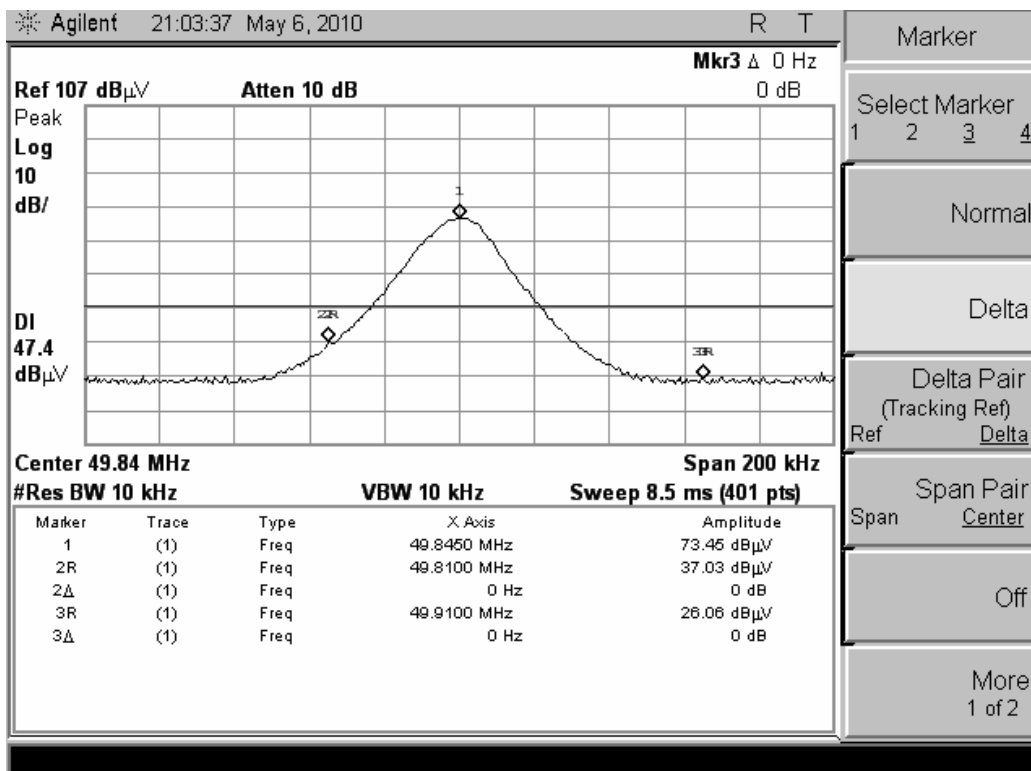
According to FCC section 15.235(b), the field strength of any emissions appearing between the band edges and up to 10 kHz above and below the band edges shall be attenuated at least 26 dB below the level of the unmodulated carrier or to the general limits in Section 15.209, whichever permits the higher emission levels.

### 5.2.2 Test Description



### 5.2.3 Test Result

Test Plot:



## **5.3 ANTENNA REQUIREMENT**

### **5.3.1 Definition**

An analysis of the 2L01 was performed to determine compliance with FCC Section 15.203. This section requires specific handling and control of antennas used for devices subject to regulations.

### **5.3.2 Evaluation Procedure**

The structure and application of the 2L01 was analyzed with respect to the rules. The antenna is an internal antenna, and is not accessible to the user. An auxiliary antenna port is not present.

### **5.3.3 Evaluation Criteria**

Section 15.203 of the rules states that the subject device must meet at least one of the following criteria:

- (a) Antenna must be permanently attached to the unit.
- (b) Antenna must use a unique type of connector to attach to the EUT.
- (c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

### **5.3.4 Evaluation Results**

The 2L01 meets the criteria of this rule by virtue of having an internal antenna inaccessible to the user. The EUT is therefore compliant.

5.4 POWER LINE CONDUCTED EMISSION TEST

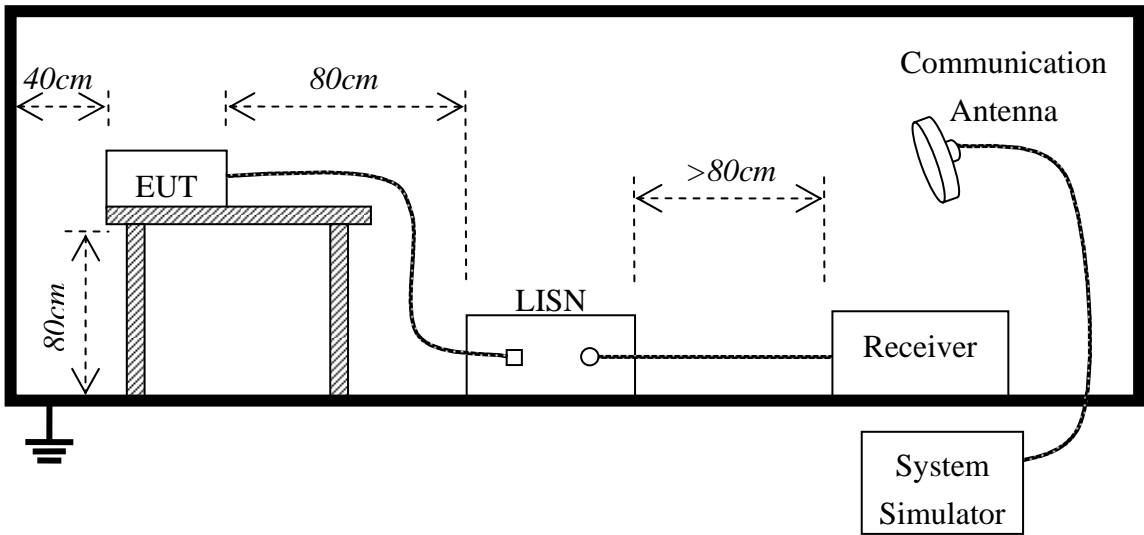
5.4.1 Limits of Line Conducted Emission Test

| Frequency     | Maximum RF Line Voltage |                |
|---------------|-------------------------|----------------|
|               | Q.P.( dBuV)             | Average( dBuV) |
| 150kHz-500kHz | 66-56                   | 56-46          |
| 500kHz-5MHz   | 56                      | 46             |
| 5MHz-30MHz    | 60                      | 50             |

**\*\*Note:** 1. the lower limit shall apply at the transition frequency.

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

5.4.2 BLOCK DIAGRAM OF TEST SETUP



### 5.4.3 Preliminary procedure of line conducted emission test

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When 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 FCC Part 15 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per FCC Part 15.
- 3) All I/O cables were positioned to simulate typical actual usage as per FCC Part 15.
- 4) The EUT 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 power from a second LISN supplying power of AC 120V/60Hz, 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 30 MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode(s) were scanned during the preliminary test:

| Preliminary Conducted Emission Test |          |                  |             |            |
|-------------------------------------|----------|------------------|-------------|------------|
| Frequency Range Investigated        |          | 150KHz TO 30 MHz |             |            |
| Mode of operation                   | Date     | Report No.       | Data#       | Worst Mode |
| Normal Working                      | 2010-5-6 | MOST100504F1     | 2L01_(L, N) | ■          |

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

### 5.4.4 Final procedure of line conducted emission test

EUT and support equipment was set up on the test bench as per step 9 of the preliminary test.

A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

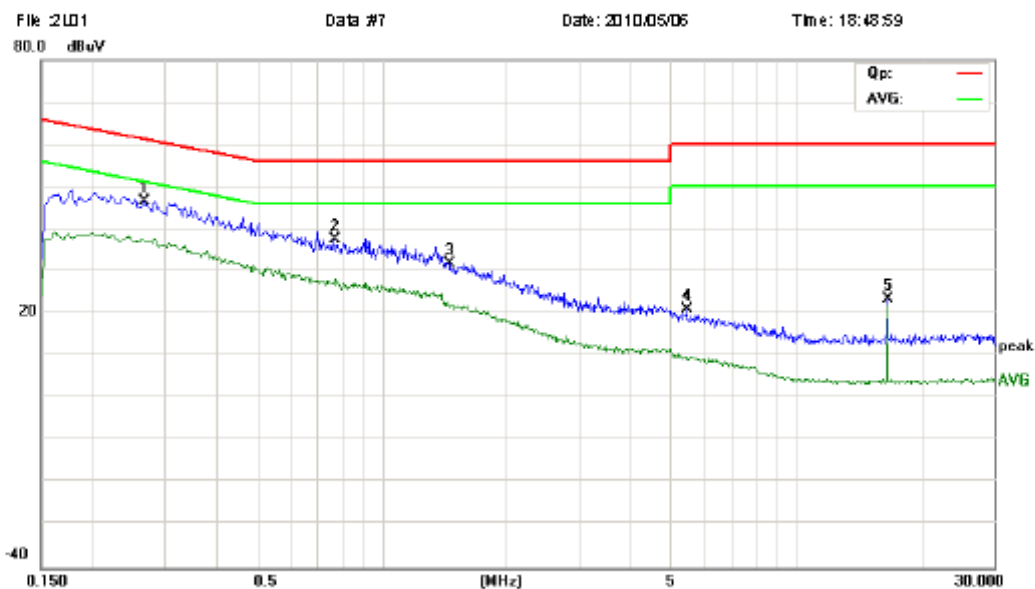
The test data of the worst case condition(s) was reported on the Summary Data page.

## 5.4.5 Test result of line conducted emission test



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

## Conducted Emission Measurement



Site site #1

Phase: **L1**

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Baby monitor

M/N: 2L01-TX

Mode: Normal Working

Note:

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   | *   | 0.2660       | 35.14                    | 11.56                   | 46.70                    | 61.24         | -14.54     | peak     |         |
| 2   |     | 0.7660       | 27.45                    | 10.00                   | 37.45                    | 56.00         | -18.55     | peak     |         |
| 3   |     | 1.4420       | 22.24                    | 9.56                    | 31.80                    | 56.00         | -24.20     | peak     |         |
| 4   |     | 5.4460       | 9.19                     | 11.73                   | 20.92                    | 60.00         | -39.08     | peak     |         |
| 5   |     | 16.6260      | 14.53                    | 9.00                    | 23.53                    | 60.00         | -36.47     | peak     |         |
| 6   |     | 16.6260      | 12.92                    | 9.00                    | 21.92                    | 50.00         | -28.08     | AVG      |         |

\*Maximum data x:Over limit !:over margin

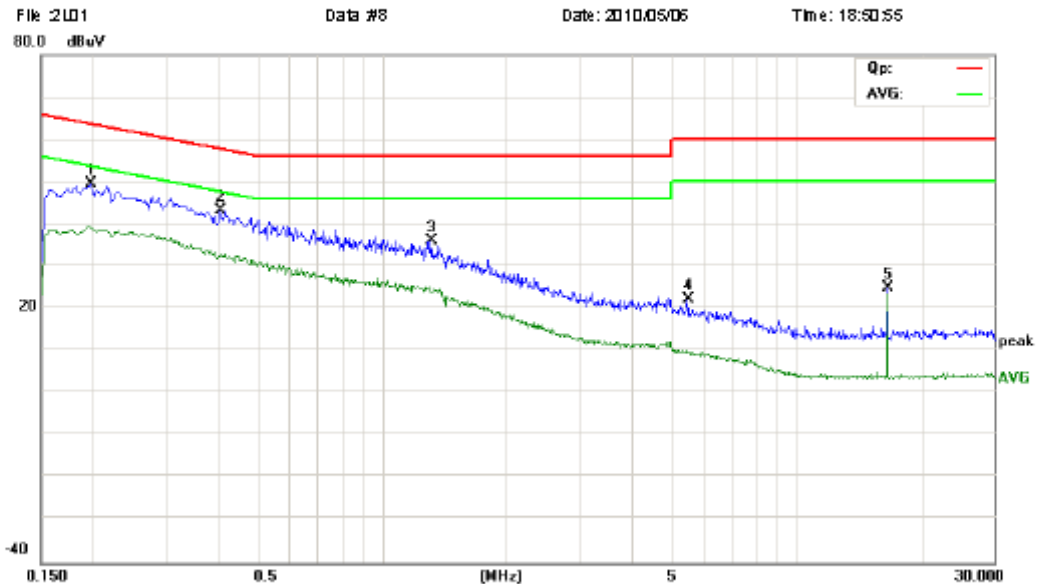
Engineer Signature:





Address: No. 5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

### Conducted Emission Measurement



Site site #1

Phase: **N**

Temperature: 26

Limit: FCC Part 15 B Class B QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Baby monitor

M/N: 2L01-TX

Mode: Normal Working

Note:

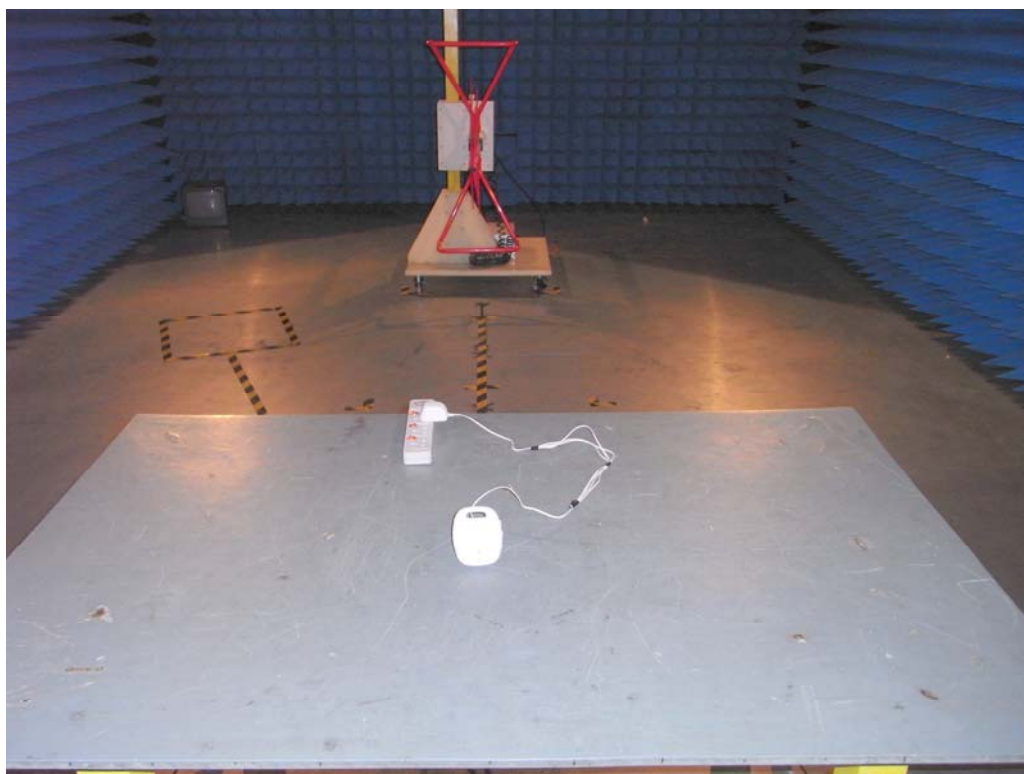
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBμV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBμV | Limit<br>dBμV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   | *   | 0.1980       | 37.59                    | 11.88                   | 49.47                    | 63.69         | -14.22     | peak     |         |
| 2   |     | 0.4060       | 32.64                    | 10.63                   | 43.27                    | 57.73         | -14.46     | peak     |         |
| 3   |     | 1.3140       | 26.23                    | 9.69                    | 35.92                    | 56.00         | -20.08     | peak     |         |
| 4   |     | 5.4740       | 10.65                    | 11.72                   | 22.37                    | 60.00         | -37.63     | peak     |         |
| 5   |     | 16.6260      | 16.04                    | 9.00                    | 25.04                    | 60.00         | -34.96     | peak     |         |
| 6   |     | 16.6260      | 14.38                    | 9.00                    | 23.38                    | 50.00         | -26.62     | AVG      |         |

\*: Maximum data x: Over limit !: over margin

Engineer Signature:

**APPENDIX 1**  
**PHOTOGRAPHS OF TEST SETUP**

RE TEST SETUP



CE TEST SETUP



**APPENDIX 2**  
**PHOTOGRAPHS OF EUT**

FRONT VIEW OF SAMPLE



BACK VIEW OF SAMPLE



LEFT VIEW OF SAMPLE



RIGHT VIEW OF SAMPLE



BOTTOM VIEW OF SAMPLE



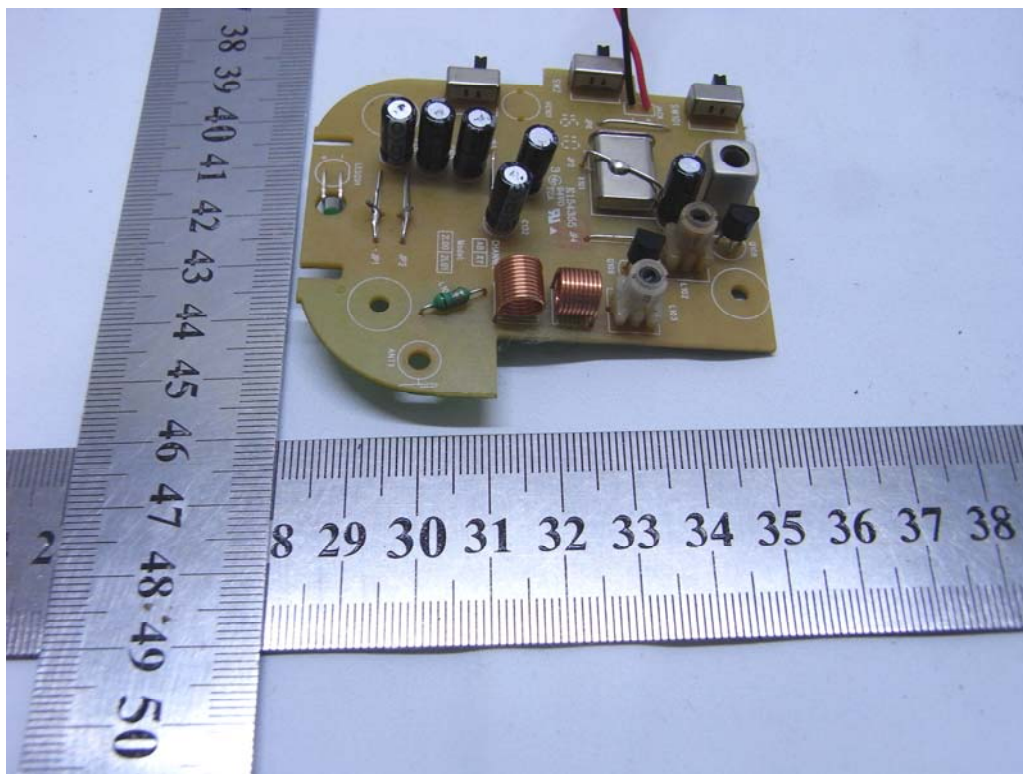
VIEW OF THE ADAPTER



VIEW OF ENTIRE SAMPLE

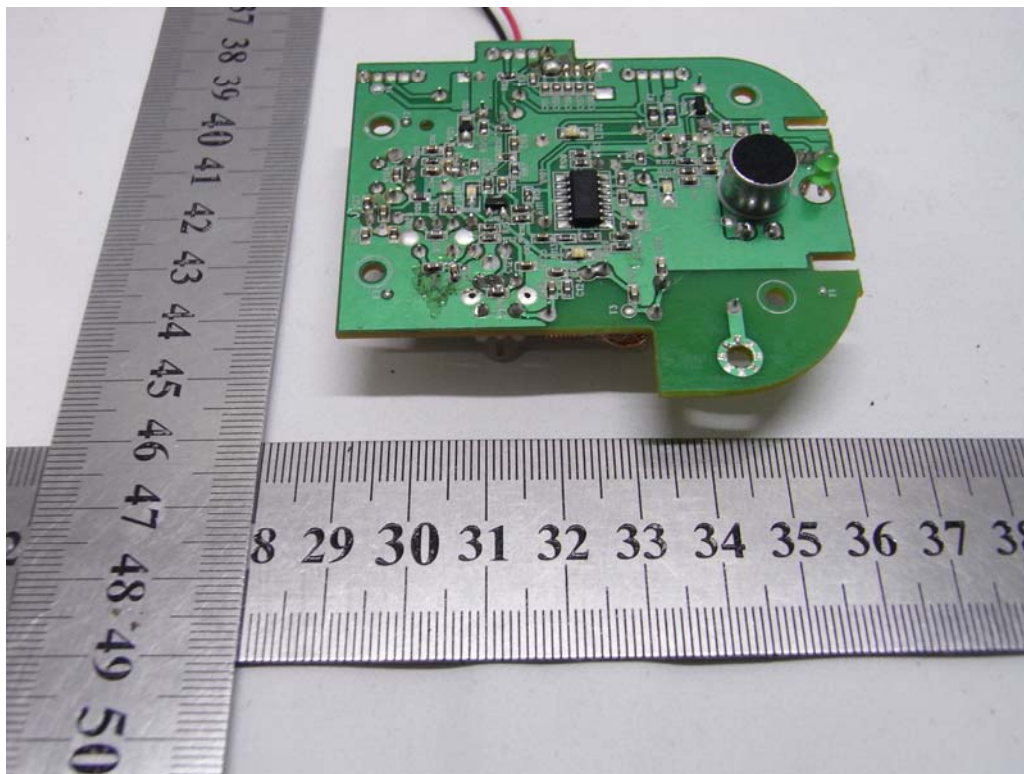


INTERNAL PHOTO OF SAMPLE - 1

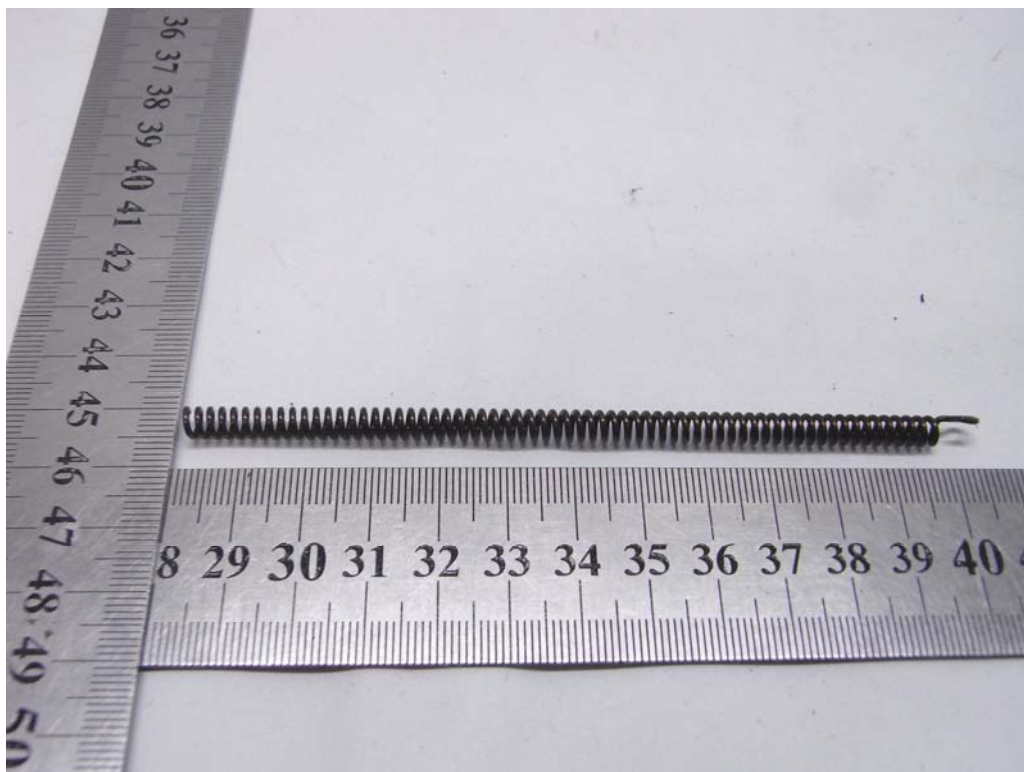




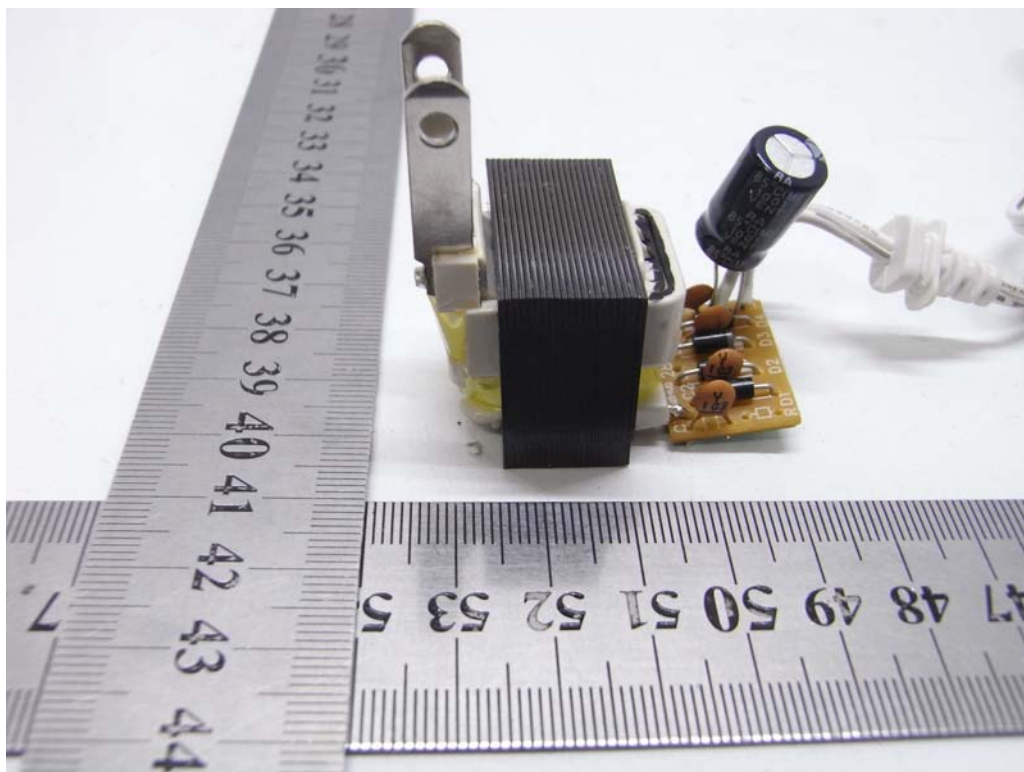
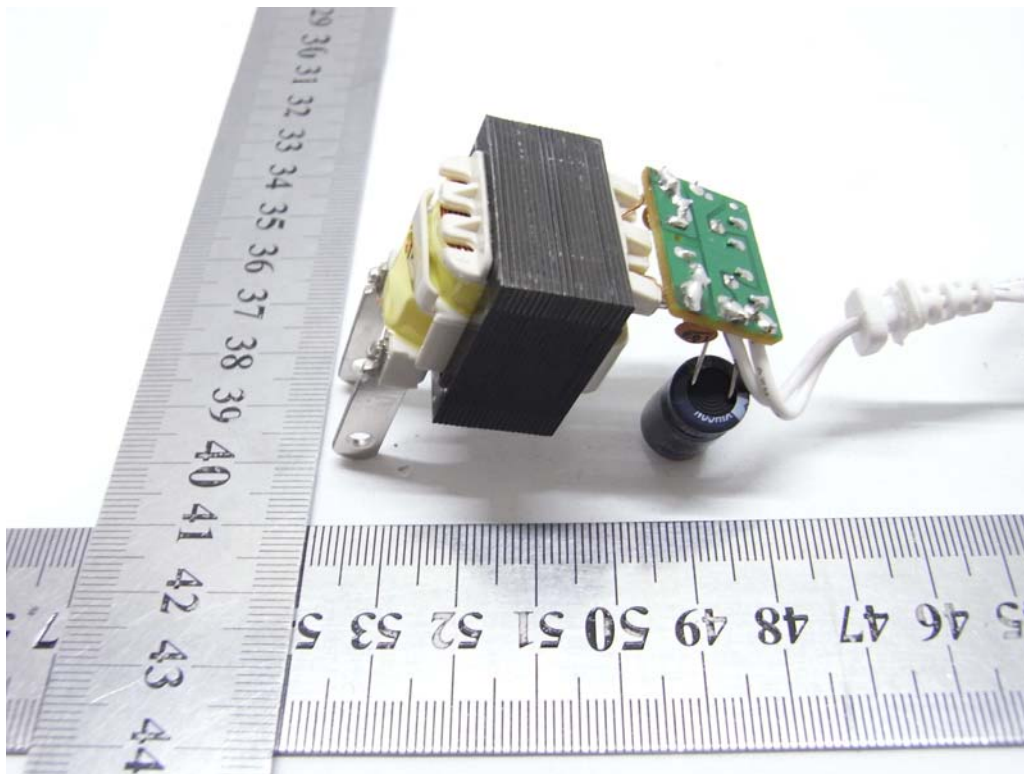
INTERNAL PHOTO OF SAMPLE - 2



ANTENNA PHOTO



INTERNAL PHOTO OF ADAPTER



-----END OF REPORT-----