

# EMC TEST REPORT



Report No.: 16070785-FCC-E

Supersede Report No.:N/A

|  |  |                                     |
|--|--|-------------------------------------|
| Applicant  | SHENZHEN BESTVIEW ELECTRONICS CO., LIMITED   |                                     |
| Product Name   | DVD/MP3G/CDG KARAOKE & BLUETOOTH MEDIA PLAYER  |                                     |
| Model No.  | GF842  |                                     |
| Serial No.   | GF829S;GF839.GF839S;GF840;GF840S;GF842S;GF845; GF846;GF847;GF848.GF755;GF756;GF758;GF758S;GF759; GP975;GP978;GP979;GP980 |                                     |
| Test Standard  | FCC Part 15 Subpart B Class B:2015, ANSI C63.4: 2014   |                                     |
| Test Date  | July 02 to 17, 2016  |                                     |
| Issue Date   | July 18, 2016  |                                     |
| Test Result  | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail   |                                     |
| Equipment complied with the specification  |  | <input checked="" type="checkbox"/> |
| Equipment did not comply with the specification  |  | <input type="checkbox"/>            |
| Loren Luo  | David Huang  |                                     |
| Loren Luo<br>Test Engineer   | David Huang<br>Checked By  |                                     |
| This test report may be reproduced in full only<br>Test result presented in this test report is applicable to the tested sample only |  |                                     |

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park

South Side of Zhoushi Road, Bao'an District, Shenzhen, Guangdong China 518108

Phone: +86 0755 2601 4629801 Email: [China@siemic.com.cn](mailto:China@siemic.com.cn)

## Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

### Accreditations for Conformity Assessment

| Country/Region | Scope                              |
|----------------|------------------------------------|
| USA            | EMC, RF/Wireless, SAR, Telecom     |
| Canada         | EMC, RF/Wireless, SAR, Telecom     |
| Taiwan         | EMC, RF, Telecom, SAR, Safety      |
| Hong Kong      | RF/Wireless, SAR, Telecom          |
| Australia      | EMC, RF, Telecom, SAR, Safety      |
| Korea          | EMI, EMS, RF, SAR, Telecom, Safety |
| Japan          | EMI, RF/Wireless, SAR, Telecom     |
| Singapore      | EMC, RF, SAR, Telecom              |
| Europe         | EMC, RF, SAR, Telecom, Safety      |

|             |                |
|-------------|----------------|
| Test Report | 16070785-FCC-E |
| Page        | 3 of 33        |

This page has been left blank intentionally.

## CONTENTS

|  |    |
|--|----|
| 1. REPORT REVISION HISTORY .....                                   | 5  |
| 2. CUSTOMER INFORMATION .....                                      | 5  |
| 3. TEST SITE INFORMATION.....                                      | 5  |
| 4. EQUIPMENT UNDER TEST (EUT) INFORMATION .....                    | 6  |
| 5. TEST SUMMARY .....  | 7  |
| 6. MEASUREMENTS, EXAMINATION AND DERIVED RESULTS .....             | 8  |
| 6.1 AC POWER LINE CONDUCTED EMISSIONS.....                         | 8  |
| 6.2 RADIATED EMISSIONS.....  | 14 |
| ANNEX A. TEST INSTRUMENT.....                                      | 20 |
| ANNEX B. EUT AND TEST SETUP PHOTOGRAPHS.....                       | 21 |
| ANNEX C. TEST SETUP AND SUPPORTING EQUIPMENT.....                  | 28 |
| ANNEX D. USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PARTLIST ..... | 32 |
| ANNEX E. DECLARATION OF SIMILARITY .....                           | 33 |

## 1. Report Revision History

| Report No.     | Report Version | Description | Issue Date    |
|----------------|----------------|-------------|---------------|
| 16070785-FCC-E | NONE           | Original    | July 18, 2016 |
|                |                |             |               |
|                |                |             |               |
|                |                |             |               |
|                |                |             |               |
|                |                |             |               |

## 2. Customer information

|                  |  |
|------------------|--|
| Applicant Name   | SHENZHEN BESTVIEW ELECTRONICS CO., LIMITED   |
| Applicant Add    | 6th,1st Building,No.9 Shilong Road,No.2 Shuitian Industrial Zone, Shiyan Town ,Bao'an , Shenzhen,China |
| Manufacturer     | SHENZHEN BESTVIEW ELECTRONICS CO., LIMITED   |
| Manufacturer Add | 6th,1st Building,No.9 Shilong Road,No.2 Shuitian Industrial Zone, Shiyan Town ,Bao'an , Shenzhen,China |

## 3. Test site information

|                      |  |
|----------------------|--|
| Lab performing tests | SIEMIC (Shenzhen-China) LABORATORIES   |
| Lab Address          | Zone A, Floor 1, Building 2 Wan Ye Long Technology Park<br>South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China<br>518108 |
| FCC Test Site No.    | 718246   |
| IC Test Site No.     | 4842E-1  |
| Test Software        | Radiated Emission Program-To Shenzhen v2.0   |

#### **4. Equipment under Test (EUT) Information**

Description of EUT: DVD/MP3G/CDG KARAOKE & BLUETOOTH MEDIA PLAYER

Main Model: GF842  
 GF829S;GF839.GF839S;GF840;GF840S;GF842S;GF845;  
 Serial Model: GF846;GF847;GF848.GF755;GF756;GF758;GF758S;GF759;  
 GP975;GP978;GP979;GP980

Equipment Category : JBP

Date EUT received: July 01, 2016

Test Date(s): July 02 to 17, 2016

Antenna Gain: 0dBi

Antenna Type: PCB antenna

Type of Modulation: GFSK, π /4DQPSK,8DPSK

RF Operating Frequency (ies): 2402-2480 MHz

Number of Channels: 79CH

Input Power:  
 Power requirements: DC 12V/2A  
 Power Consumption: 25 Watts  
 Adapter:  
 Model: RS18-SP1202000  
 Input: 100-240V~50/60Hz, 0.6Max  
 Output: 12V,2000mA

Port:  
 USB Port, Power Port, Microphone Port, Headphone Port, SD Card Port, Audio Port, DISC Port, AUX IN, CD Port

Trade Name : Karaoke USA

## 5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

| FCC Rules                 | Description of Test               | Result     |
|---------------------------|-----------------------------------|------------|
| §15.107; ANSI C63.4: 2014 | AC Power Line Conducted Emissions | Compliance |
| §15.109; ANSI C63.4: 2014 | Radiated Emissions                | Compliance |

### Measurement Uncertainty

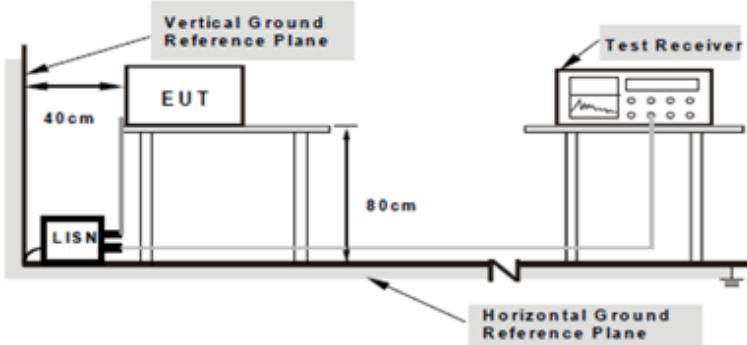
| Emissions                                 |   |               |
|---|---|---------------|
| Test Item                                 | Description   | Uncertainty   |
| Band Edge and Radiated Spurious Emissions | Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m) | +5.6dB/-4.5dB |
| -   | -   | -             |

## 6. Measurements, Examination And Derived Results

### 6.1 AC Power Line Conducted Emissions

|                      |               |
|----------------------|---------------|
| Temperature          | 24°C          |
| Relative Humidity    | 57%           |
| Atmospheric Pressure | 1015mbar      |
| Test date :          | July 15, 2016 |
| Tested By :          | Loren Luo     |

#### Requirement(s):

| Spec                   | Item  | Requirement   | Applicable             |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |
|------------------------|---|---|------------------------|--------------------|--|----|---------|------------|---------|---------|---------|----|----|--------|----|----|-------------------------------------|
| 47CFR§15.107           | a)  | <p>For Low-power radio-frequency devices that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 [mu] H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges.</p> <table border="1"> <thead> <tr> <th rowspan="2">Frequency ranges (MHz)</th> <th colspan="2">Limit (dB<math>\mu</math>V)</th> </tr> <tr> <th>QP</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15 ~ 0.5</td> <td>66 – 56</td> <td>56 – 46</td> </tr> <tr> <td>0.5 ~ 5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5 ~ 30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> | Frequency ranges (MHz) | Limit (dB $\mu$ V) |  | QP | Average | 0.15 ~ 0.5 | 66 – 56 | 56 – 46 | 0.5 ~ 5 | 56 | 46 | 5 ~ 30 | 60 | 50 | <input checked="" type="checkbox"/> |
| Frequency ranges (MHz) | Limit (dB $\mu$ V)  |   |                        |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |
|                        | QP  | Average   |                        |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |
| 0.15 ~ 0.5             | 66 – 56   | 56 – 46   |                        |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |
| 0.5 ~ 5                | 56  | 46  |                        |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |
| 5 ~ 30                 | 60  | 50  |                        |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |
| Test Setup             |  <p>The diagram illustrates the test setup. An EUT (Equipment Under Test) is placed on a table. A LISN (Line Impedance Stabilization Network) is connected between the EUT and the power source. A Test Receiver is connected to the LISN. The setup is positioned on a horizontal ground reference plane. The distance between the LISN and the EUT is 40 cm, and the distance between the LISN and the Test Receiver is 80 cm. A vertical ground reference plane is also indicated.</p> <p><b>Note:</b><br/>   1. Support units were connected to second LISN.<br/>   2. Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.</p> |   |                        |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |
| Procedure              | <ol style="list-style-type: none"> <li>The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.</li> <li>The power supply for the EUT was fed through a 50Ω /50mH EUT LISN, connected to filtered mains.</li> </ol>  |   |                        |                    |  |    |         |            |         |         |         |    |    |        |    |    |                                     |

|        |  |
|--------|--|
|        | <ol style="list-style-type: none"> <li>3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable.</li> <li>4. All other supporting equipment were powered separately from another main supply.</li> <li>5. The EUT was switched on and allowed to warm up to its normal operating condition.</li> <li>6. A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power) over the required frequency range using an EMI test receiver.</li> <li>7. High peaks, relative to the limit line, The EMI test receiver was then tuned to the selected frequencies and the necessary measurements made with a receiver bandwidth setting of 10 kHz.</li> <li>8. Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power).</li> </ol> |
| Remark |  |
| Result | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail   |

Test Data  Yes  N/A

Test Plot  Yes (See below)  N/A

**Test Mode 1:** DVD Mode

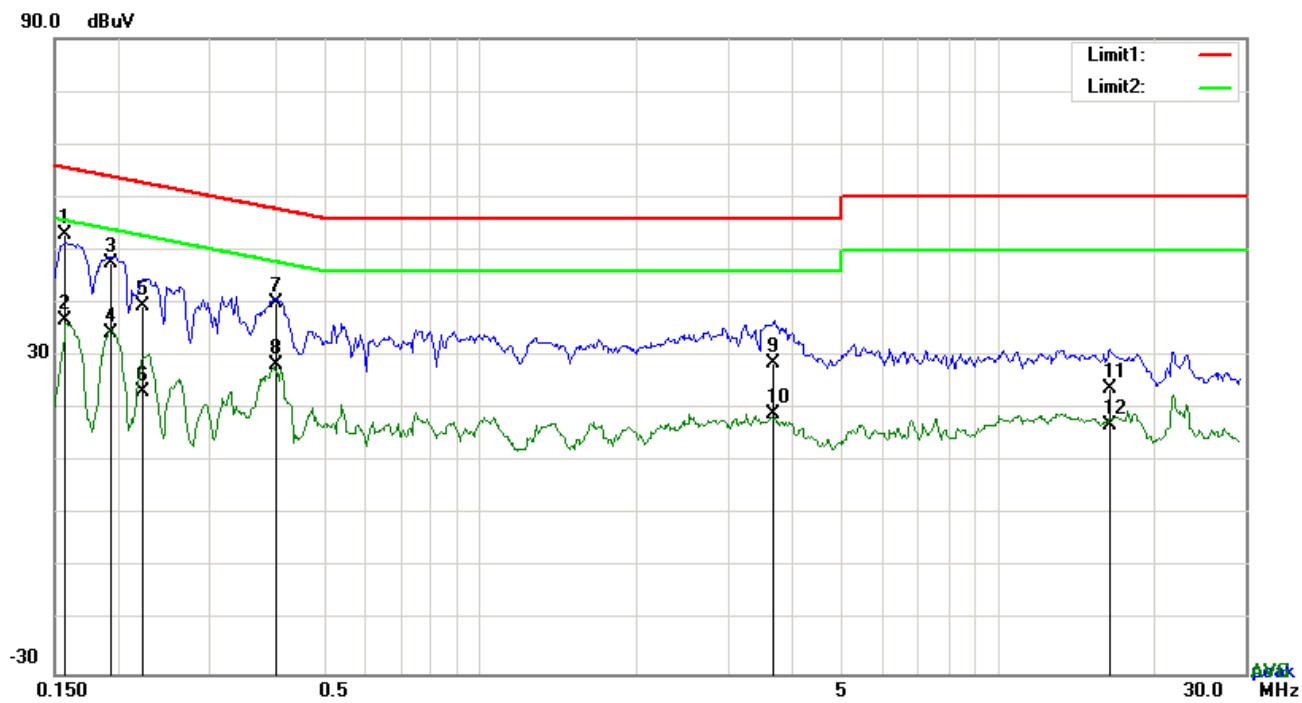
**Test Mode 2:** USB Player Mode

**Test Mode 3:** SD Card Player Mode

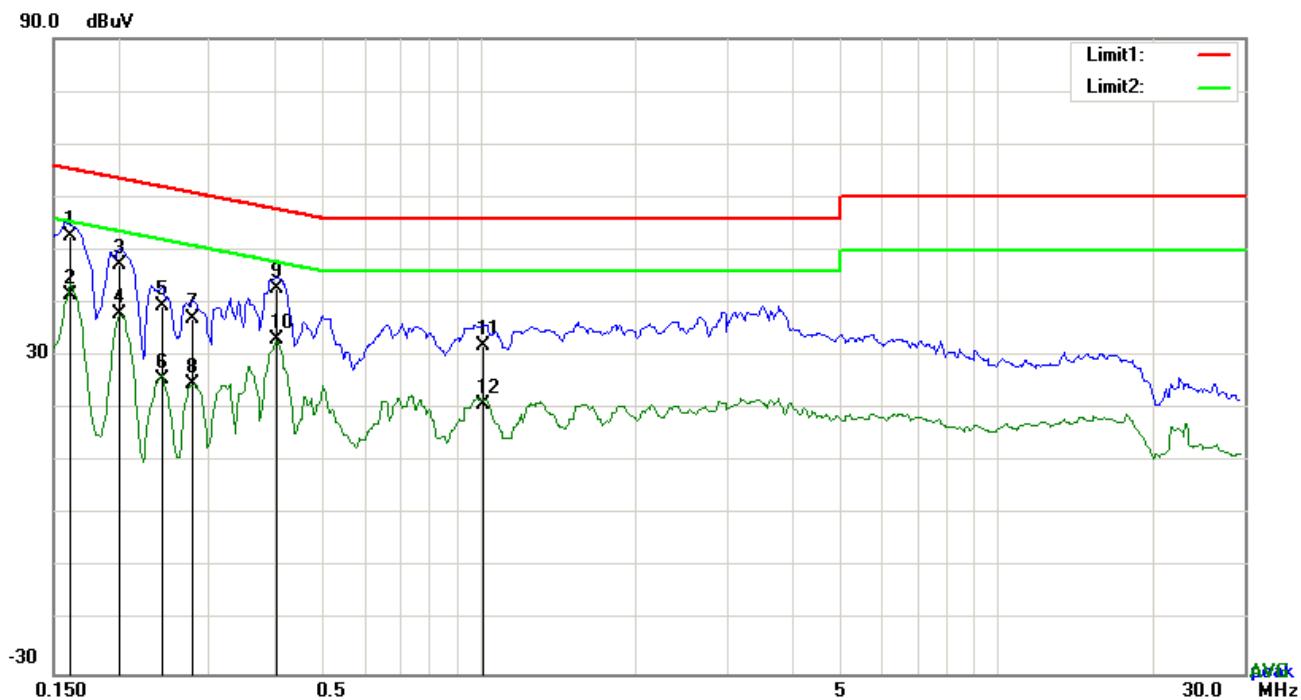
**Test Mode 4:** USB Mode

**Test Mode 5:** AUX IN Mode

All modes were investigated. The results below show only the worst case (USB mode).

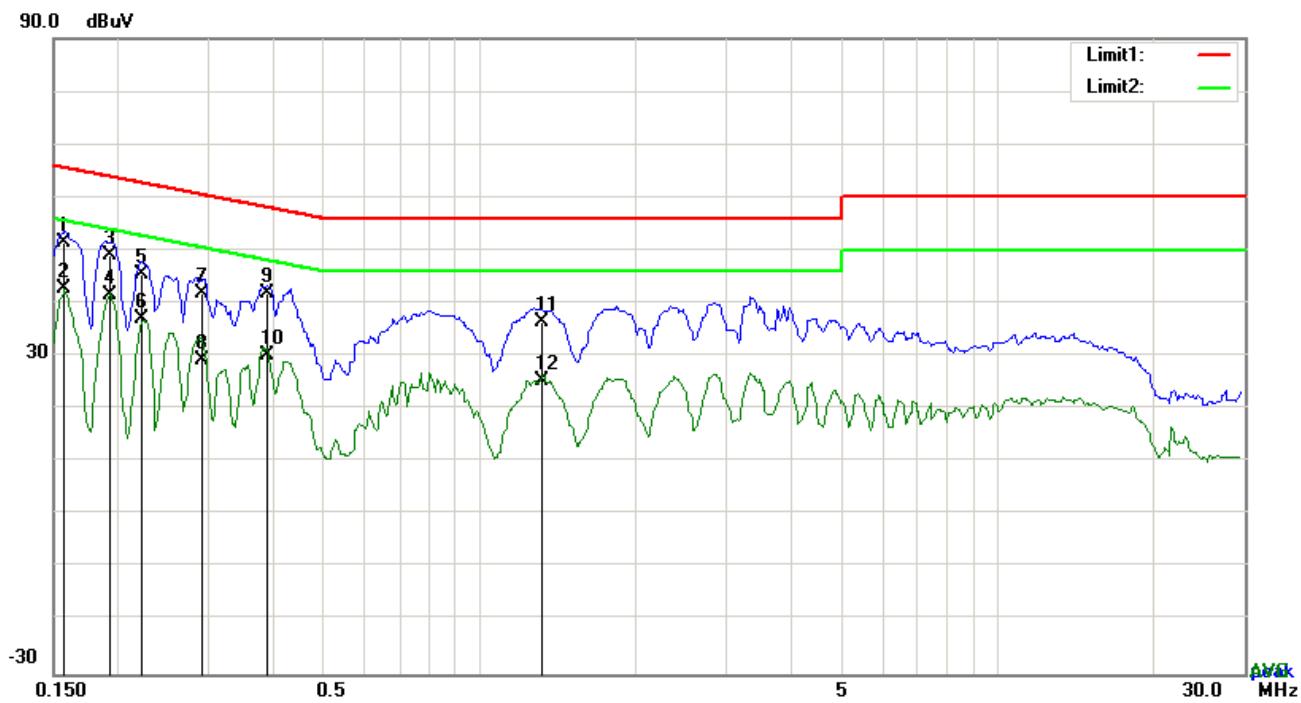
**Test Mode 4 : USB Mode**

**Test Data**
**Phase Line Plot at 120Vac, 60Hz**

| No. | P/L | Frequency<br>(MHz) | Reading<br>(dBuV) | Detector | Corrected<br>(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) |
|-----|-----|--------------------|-------------------|----------|-------------------|------------------|-----------------|----------------|
| 1   | L1  | 0.1578             | 42.85             | QP       | 10.03             | 52.88            | 65.58           | -12.70         |
| 2   | L1  | 0.1578             | 26.57             | AVG      | 10.03             | 36.60            | 55.58           | -18.98         |
| 3   | L1  | 0.1929             | 37.65             | QP       | 10.03             | 47.68            | 63.91           | -16.23         |
| 4   | L1  | 0.1929             | 24.29             | AVG      | 10.03             | 34.32            | 53.91           | -19.59         |
| 5   | L1  | 0.2220             | 29.36             | QP       | 10.03             | 39.39            | 62.74           | -23.35         |
| 6   | L1  | 0.2220             | 13.12             | AVG      | 10.03             | 23.15            | 52.74           | -29.59         |
| 7   | L1  | 0.4035             | 30.01             | QP       | 10.03             | 40.04            | 57.78           | -17.74         |
| 8   | L1  | 0.4035             | 18.23             | AVG      | 10.03             | 28.26            | 47.78           | -19.52         |
| 9   | L1  | 3.6611             | 18.70             | QP       | 10.06             | 28.76            | 56.00           | -27.24         |
| 10  | L1  | 3.6611             | 9.04              | AVG      | 10.06             | 19.10            | 46.00           | -26.90         |
| 11  | L1  | 16.4082            | 13.66             | QP       | 10.25             | 23.91            | 60.00           | -36.09         |
| 12  | L1  | 16.4082            | 6.56              | AVG      | 10.25             | 16.81            | 50.00           | -33.19         |

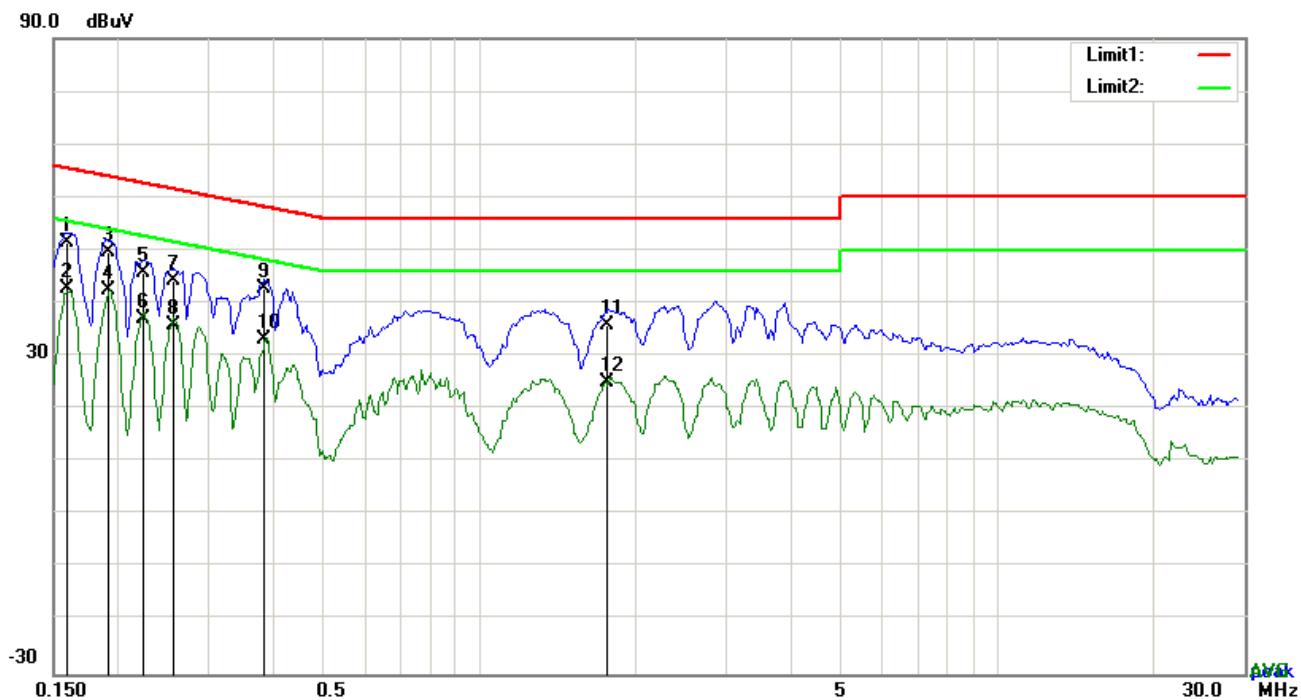
**Test Mode 4 : USB Mode**


Phase Neutral Plot at 120Vac, 60Hz

| No. | P/L | Frequency<br>(MHz) | Reading<br>(dBuV) | Detector | Corrected<br>(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) |
|-----|-----|--------------------|-------------------|----------|-------------------|------------------|-----------------|----------------|
| 1   | N   | 0.1617             | 42.50             | QP       | 10.02             | 52.52            | 65.38           | -12.86         |
| 2   | N   | 0.1617             | 31.62             | AVG      | 10.02             | 41.64            | 55.38           | -13.74         |
| 3   | N   | 0.2007             | 37.36             | QP       | 10.02             | 47.38            | 63.58           | -16.20         |
| 4   | N   | 0.2007             | 28.00             | AVG      | 10.02             | 38.02            | 53.58           | -15.56         |
| 5   | N   | 0.2436             | 29.39             | QP       | 10.02             | 39.41            | 61.97           | -22.56         |
| 6   | N   | 0.2436             | 15.64             | AVG      | 10.02             | 25.66            | 51.97           | -26.31         |
| 7   | N   | 0.2787             | 26.90             | QP       | 10.02             | 36.92            | 60.85           | -23.93         |
| 8   | N   | 0.2787             | 14.85             | AVG      | 10.02             | 24.87            | 50.85           | -25.98         |
| 9   | N   | 0.4040             | 32.88             | QP       | 10.02             | 42.90            | 57.77           | -14.87         |
| 10  | N   | 0.4040             | 23.19             | AVG      | 10.02             | 33.21            | 47.77           | -14.56         |
| 11  | N   | 1.0157             | 22.03             | QP       | 10.03             | 32.06            | 56.00           | -23.94         |
| 12  | N   | 1.0157             | 10.95             | AVG      | 10.03             | 20.98            | 46.00           | -25.02         |

**Test Mode 4: USB Mode**

**Test Data**
**Phase Line Plot at 240Vac, 60Hz**

| No. | P/L | Frequency<br>(MHz) | Reading<br>(dBuV) | Detector | Corrected<br>(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) |
|-----|-----|--------------------|-------------------|----------|-------------------|------------------|-----------------|----------------|
| 1   | L1  | 0.1578             | 41.37             | QP       | 10.03             | 51.40            | 65.58           | -14.18         |
| 2   | L1  | 0.1578             | 32.70             | AVG      | 10.03             | 42.73            | 55.58           | -12.85         |
| 3   | L1  | 0.1929             | 38.91             | QP       | 10.03             | 48.94            | 63.91           | -14.97         |
| 4   | L1  | 0.1929             | 31.54             | AVG      | 10.03             | 41.57            | 53.91           | -12.34         |
| 5   | L1  | 0.2220             | 35.39             | QP       | 10.03             | 45.42            | 62.74           | -17.32         |
| 6   | L1  | 0.2220             | 26.91             | AVG      | 10.03             | 36.94            | 52.74           | -15.80         |
| 7   | L1  | 0.2909             | 31.97             | QP       | 10.03             | 42.00            | 60.50           | -18.50         |
| 8   | L1  | 0.2909             | 19.37             | AVG      | 10.03             | 29.40            | 50.50           | -21.10         |
| 9   | L1  | 0.3879             | 31.68             | QP       | 10.03             | 41.71            | 58.11           | -16.40         |
| 10  | L1  | 0.3879             | 19.98             | AVG      | 10.03             | 30.01            | 48.11           | -18.10         |
| 11  | L1  | 1.3168             | 26.51             | QP       | 10.03             | 36.54            | 56.00           | -19.46         |
| 12  | L1  | 1.3168             | 15.37             | AVG      | 10.03             | 25.40            | 46.00           | -20.60         |

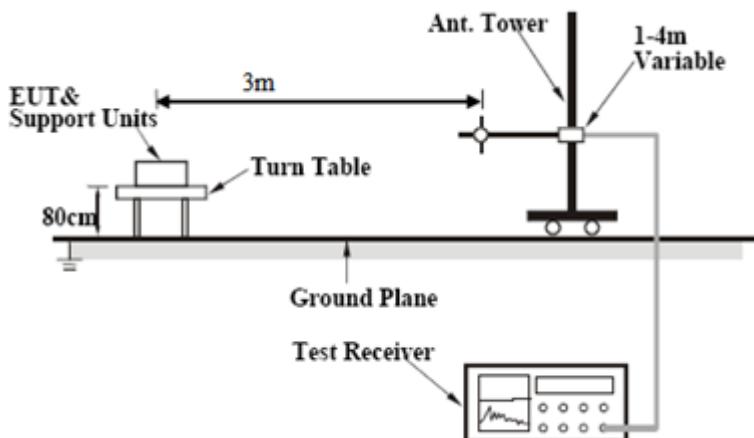
**Test Mode 4: USB Mode**

**Test Data**
**Phase Neutral Plot at 240Vac, 60Hz**

| No. | P/L | Frequency<br>(MHz) | Reading<br>(dBuV) | Detector | Corrected<br>(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) |
|-----|-----|--------------------|-------------------|----------|-------------------|------------------|-----------------|----------------|
| 1   | N   | 0.1590             | 41.56             | QP       | 10.02             | 51.58            | 65.52           | -13.94         |
| 2   | N   | 0.1590             | 32.61             | AVG      | 10.02             | 42.63            | 55.52           | -12.89         |
| 3   | N   | 0.1914             | 39.78             | QP       | 10.02             | 49.80            | 63.98           | -14.18         |
| 4   | N   | 0.1914             | 32.29             | AVG      | 10.02             | 42.31            | 53.98           | -11.67         |
| 5   | N   | 0.2241             | 35.88             | QP       | 10.02             | 45.90            | 62.67           | -16.77         |
| 6   | N   | 0.2241             | 27.07             | AVG      | 10.02             | 37.09            | 52.67           | -15.58         |
| 7   | N   | 0.2553             | 34.31             | QP       | 10.02             | 44.33            | 61.58           | -17.25         |
| 8   | N   | 0.2553             | 25.77             | AVG      | 10.02             | 35.79            | 51.58           | -15.79         |
| 9   | N   | 0.3840             | 32.77             | QP       | 10.02             | 42.79            | 58.19           | -15.40         |
| 10  | N   | 0.3840             | 23.04             | AVG      | 10.02             | 33.06            | 48.19           | -15.13         |
| 11  | N   | 1.7685             | 25.77             | QP       | 10.04             | 35.81            | 56.00           | -20.19         |
| 12  | N   | 1.7685             | 14.91             | AVG      | 10.04             | 24.95            | 46.00           | -21.05         |

## 6.2 Radiated Emissions

|                      |               |
|----------------------|---------------|
| Temperature          | 24°C          |
| Relative Humidity    | 57%           |
| Atmospheric Pressure | 1015mbar      |
| Test date :          | July 15, 2016 |
| Tested By :          | Loren Luo     |

### Requirement(s):

| Spec                  | Item                        | Requirement   | Applicable            |                             |         |     |          |     |           |     |           |     |                                     |
|-----------------------|-----------------------------|---|-----------------------|-----------------------------|---------|-----|----------|-----|-----------|-----|-----------|-----|-------------------------------------|
| 47CFR§15.109(d)       | a)                          | <p>Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges</p> <table border="1"> <thead> <tr> <th>Frequency range (MHz)</th> <th>Field Strength (<math>\mu</math>V/m)</th> </tr> </thead> <tbody> <tr> <td>30 – 88</td> <td>100</td> </tr> <tr> <td>88 – 216</td> <td>150</td> </tr> <tr> <td>216 – 960</td> <td>200</td> </tr> <tr> <td>Above 960</td> <td>500</td> </tr> </tbody> </table> | Frequency range (MHz) | Field Strength ( $\mu$ V/m) | 30 – 88 | 100 | 88 – 216 | 150 | 216 – 960 | 200 | Above 960 | 500 | <input checked="" type="checkbox"/> |
| Frequency range (MHz) | Field Strength ( $\mu$ V/m) |   |                       |                             |         |     |          |     |           |     |           |     |                                     |
| 30 – 88               | 100                         |   |                       |                             |         |     |          |     |           |     |           |     |                                     |
| 88 – 216              | 150                         |   |                       |                             |         |     |          |     |           |     |           |     |                                     |
| 216 – 960             | 200                         |   |                       |                             |         |     |          |     |           |     |           |     |                                     |
| Above 960             | 500                         |   |                       |                             |         |     |          |     |           |     |           |     |                                     |
| Test Setup            |                             |  <p>The diagram illustrates the test setup. A 'Turn Table' is positioned on a 'Ground Plane'. An 'EUT &amp; Support Units' is mounted on the turn table at a height of 80cm. A vertical 'Ant. Tower' is connected to the turn table at a distance of 3m from the EUT. The antenna height is adjustable, indicated as '1-4m Variable'. A 'Test Receiver' is connected to the turn table to measure the emissions.</p>  |                       |                             |         |     |          |     |           |     |           |     |                                     |
| Procedure             |                             | <ol style="list-style-type: none"> <li>The EUT was switched on and allowed to warm up to its normal operating condition.</li> <li>The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:           <ol style="list-style-type: none"> <li>Vertical or horizontal polarization (whichever gave the higher emission level)</li> </ol> </li> </ol>   |                       |                             |         |     |          |     |           |     |           |     |                                     |

|        |   |
|--------|---|
|        | <p>over a full rotation of the EUT) was chosen.</p> <p>b. The EUT was then rotated to the direction that gave the maximum emission.</p> <p>c. Finally, the antenna height was adjusted to the height that gave the maximum emission.</p> <p>3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz.</p> <p>4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with Peak detection for Peak measurement at frequency above 1GHz.</p> <p>The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth with Peak detection for Average Measurement as below at frequency above 1GHz.</p> <ul style="list-style-type: none"> <li>■ 1 kHz (Duty cycle &lt; 98%) <input type="checkbox"/> 10 Hz (Duty cycle &gt; 98%)</li> </ul> <p>5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.</p> |
| Remark |   |
| Result | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail  |

Test Data  Yes  N/A

Test Plot  Yes (See below)  N/A

**Test Mode 1:** DVD Mode

**Test Mode 2:** USB Player Mode

**Test Mode 3:** SD Card Player Mode

**Test Mode 4:** USB Mode

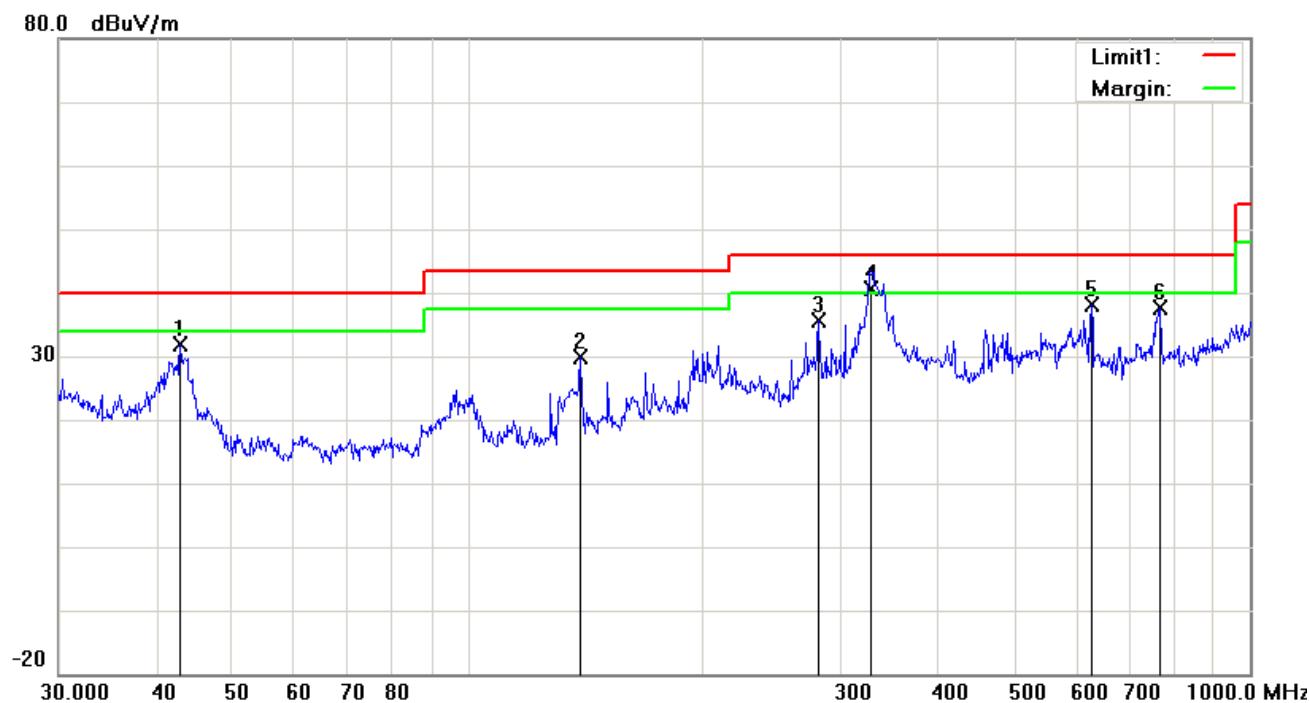
|             |                |
|-------------|----------------|
| Test Report | 16070785-FCC-E |
| Page        | 16 of 33       |

**Test Mode 5: AUX IN Mode**

All modes were investigated. The results below show only the worst case (USB mode).

**Test Mode 4: USB Mode**

**Below 1GHz**

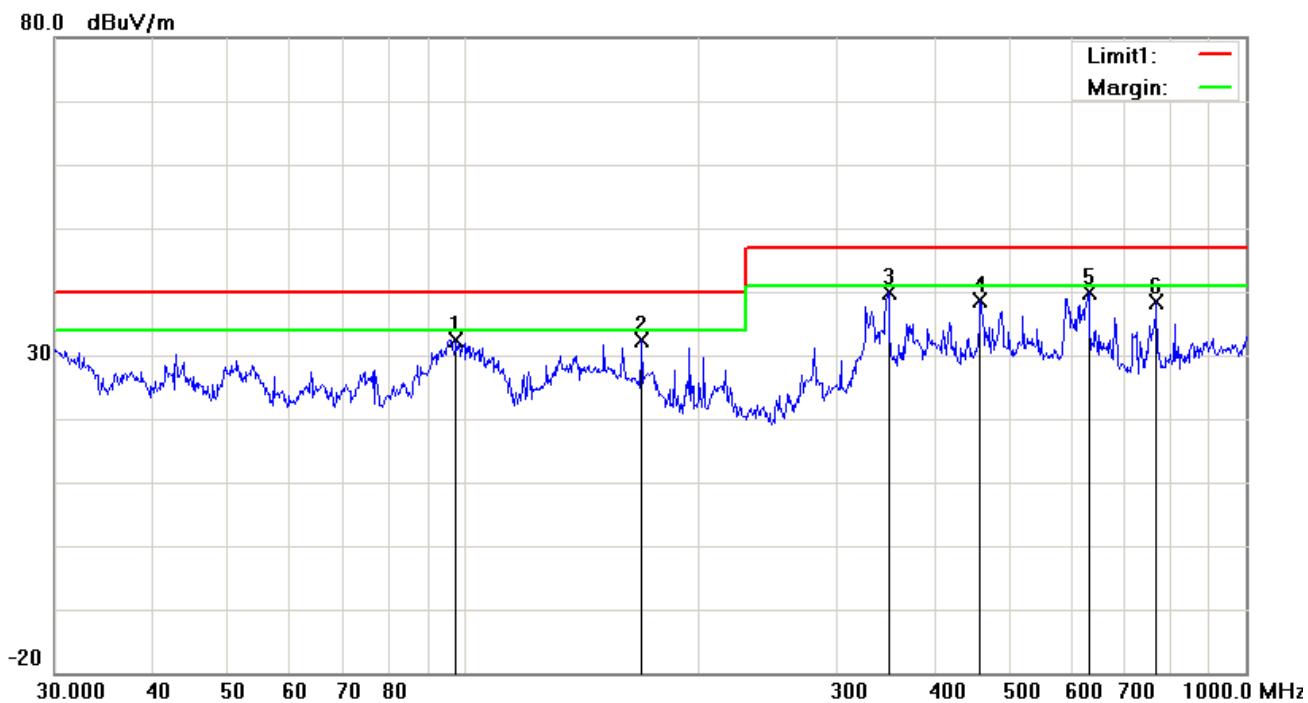


**Test Data**

**Horizontal Polarity Plot @3m**

| No. | P/L | Frequency | Reading  | Detector | Corrected | Result   | Limit    | Margin | Height | Degree |
|-----|-----|-----------|----------|----------|-----------|----------|----------|--------|--------|--------|
|     |     | (MHz)     | (dBuV/m) |          | (dB/m)    | (dBuV/m) | (dBuV/m) | (dB)   | (cm)   | ( ° )  |
| 1   | H   | 42.8998   | 41.31    | peak     | -9.53     | 31.78    | 40.00    | -8.22  | 100    | 134    |
| 2   | H   | 139.3613  | 38.34    | peak     | -8.50     | 29.84    | 43.50    | -13.66 | 100    | 159    |
| 3   | H   | 281.0075  | 43.32    | peak     | -7.77     | 35.55    | 46.00    | -10.45 | 100    | 176    |
| 4   | H   | 327.8873  | 46.74    | QP       | -6.09     | 40.65    | 46.00    | -5.35  | 100    | 251    |
| 5   | H   | 627.2738  | 37.66    | peak     | 0.45      | 38.11    | 46.00    | -7.89  | 100    | 89     |
| 6   | H   | 766.0572  | 35.06    | peak     | 2.67      | 37.73    | 46.00    | -8.27  | 100    | 60     |

### Below 1GHz



### Test Data

Vertical Polarity Plot @3m

| No. | P/L | Frequency | Reading  | Detector | Corrected | Result   | Limit    | Margin | Height | Degree |
|-----|-----|-----------|----------|----------|-----------|----------|----------|--------|--------|--------|
|     |     | (MHz)     | (dBuV/m) |          | (dB/m)    | (dBuV/m) | (dBuV/m) | (dB)   | (cm)   | (°)    |
| 1   | V   | 97.7983   | 43.87    | peak     | -11.39    | 32.48    | 40.00    | -7.52  | 100    | 253    |
| 2   | V   | 169.0054  | 41.32    | peak     | -9.02     | 32.30    | 40.00    | -7.70  | 100    | 129    |
| 3   | V   | 349.2500  | 45.24    | peak     | -5.48     | 39.76    | 47.00    | -7.24  | 100    | 341    |
| 4   | V   | 457.5073  | 41.40    | peak     | -2.87     | 38.53    | 47.00    | -8.47  | 100    | 157    |
| 5   | V   | 629.4772  | 39.35    | peak     | 0.47      | 39.82    | 47.00    | -7.18  | 100    | 169    |
| 6   | V   | 768.7482  | 35.58    | peak     | 2.70      | 38.28    | 47.00    | -8.72  | 100    | 78     |

### Above 1GHz

| Frequency (MHz) | Amplitude (dB $\mu$ V/m) | Azimuth | Height (cm) | Polarity (H/V) | Factors (dB) | Limit (dB $\mu$ V/m) | Margin (dB) | Detector (PK/AV) |
|-----------------|--------------------------|---------|-------------|----------------|--------------|----------------------|-------------|------------------|
| 1552.36         | 49.25                    | 50      | 120         | V              | -21.48       | 74                   | -24.75      | PK               |
| 2037.82         | 50.31                    | 135     | 110         | V              | -22.35       | 74                   | -23.69      | PK               |
| 1662.43         | 49.64                    | 87      | 170         | V              | -21.44       | 74                   | -24.36      | PK               |
| 2184.26         | 50.82                    | 63      | 180         | H              | -22.63       | 74                   | -23.18      | PK               |
| 2874.45         | 49.76                    | 120     | 120         | H              | -22.12       | 74                   | -24.24      | PK               |
| 1856.33         | 49.47                    | 48      | 160         | H              | -22.74       | 74                   | -24.53      | PK               |

*Note1: The highest frequency of the EUT is 2480 MHz, so the testing has been conformed to 5\*2480MHz=12,400MHz.*

*Note2: The frequency that above 3GHz is mainly from the environment noise.*

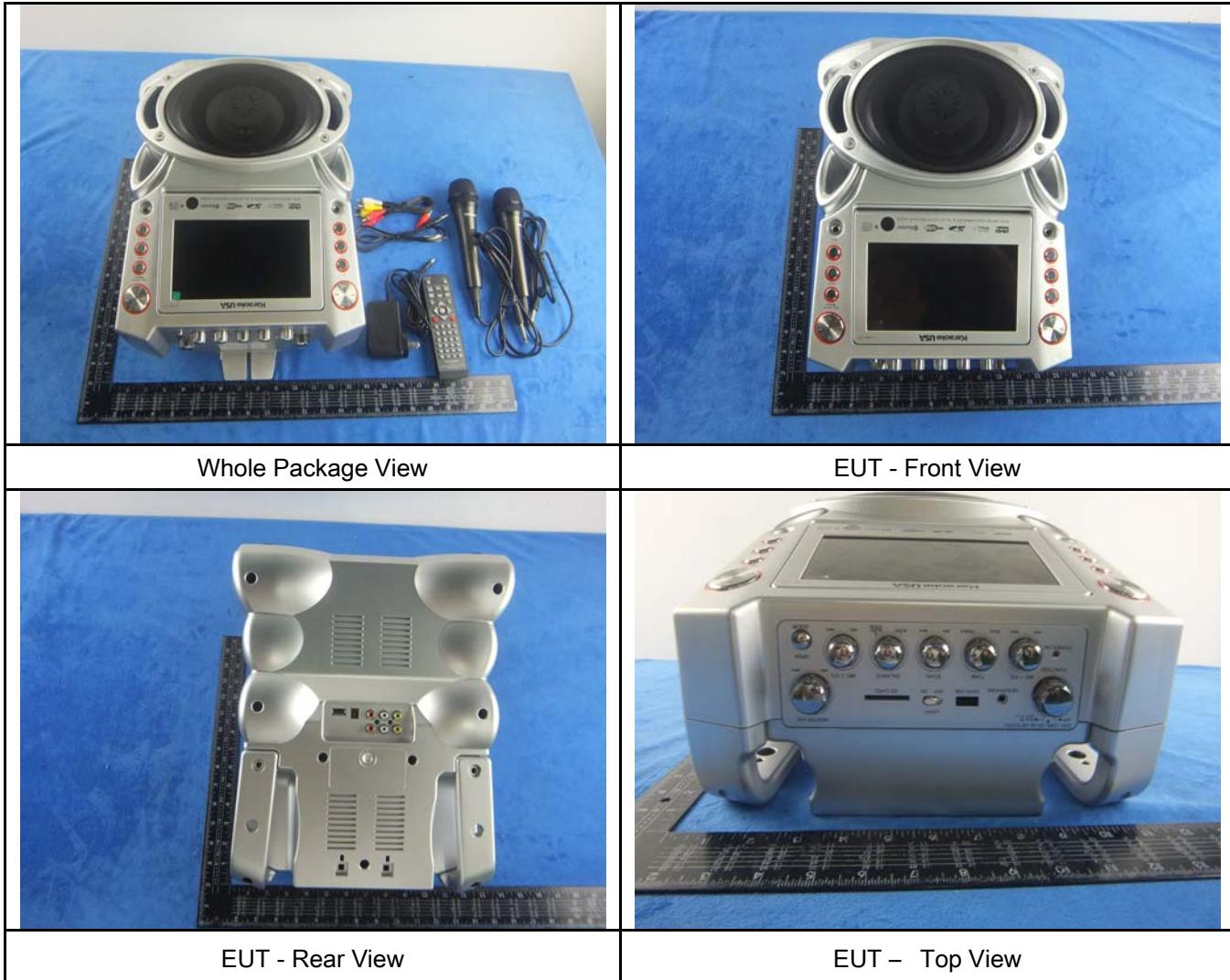
*Note3: The AV measurement performed, more than 20dB below limit so AV test data was not presented.*

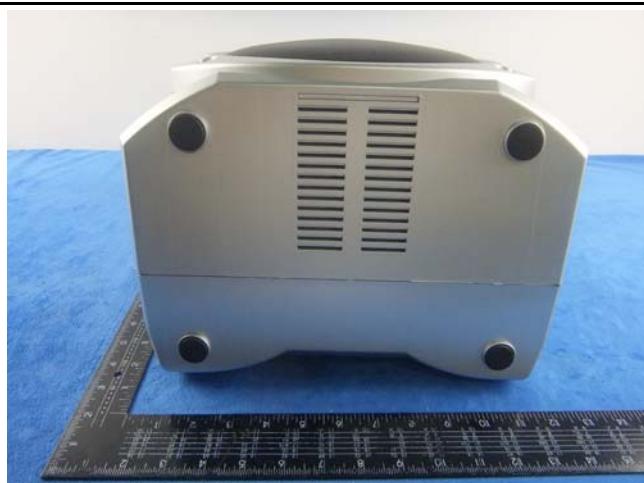
## Annex A. TEST INSTRUMENT

| Instrument                           | Model    | Serial #   | Cal Date   | Cal Due    | In use                              |
|--------------------------------------|----------|------------|------------|------------|-------------------------------------|
| <b>AC Line Conducted Emissions</b>   |          |            |            |            |                                     |
| EMI test receiver                    | ESCS30   | 8471241027 | 09/17/2015 | 09/16/2016 | <input checked="" type="checkbox"/> |
| Line Impedance Stabilization Network | LI-125A  | 191106     | 09/25/2015 | 09/24/2016 | <input checked="" type="checkbox"/> |
| Line Impedance Stabilization Network | LI-125A  | 191107     | 09/25/2015 | 09/24/2016 | <input checked="" type="checkbox"/> |
| LISN                                 | ISN T800 | 34373      | 09/25/2015 | 09/24/2016 | <input checked="" type="checkbox"/> |
| Transient Limiter                    | LIT-153  | 531118     | 09/01/2015 | 08/31/2016 | <input checked="" type="checkbox"/> |
| <b>Radiated Emissions</b>            |          |            |            |            |                                     |
| EMI test receiver                    | ESL6     | 100262     | 09/17/2015 | 09/16/2016 | <input checked="" type="checkbox"/> |
| OPT 010 AMPLIFIER (0.1-1300MHz)      | 8447E    | 2727A02430 | 09/01/2015 | 08/31/2016 | <input checked="" type="checkbox"/> |
| Microwave Preamplifier (1 ~ 26.5GHz) | 8449B    | 3008A02402 | 03/24/2016 | 03/23/2017 | <input checked="" type="checkbox"/> |
| Bilog Antenna (30MHz~6GHz)           | JB6      | A110712    | 09/21/2015 | 09/20/2016 | <input checked="" type="checkbox"/> |
| Double Ridge Horn Antenna            | AH-118   | 71259      | 09/24/2015 | 09/23/2016 | <input checked="" type="checkbox"/> |

## Annex B. EUT And Test Setup Photographs

### Annex B.i. Photograph: EUT External Photo





EUT - Bottom View

EUT - Left View

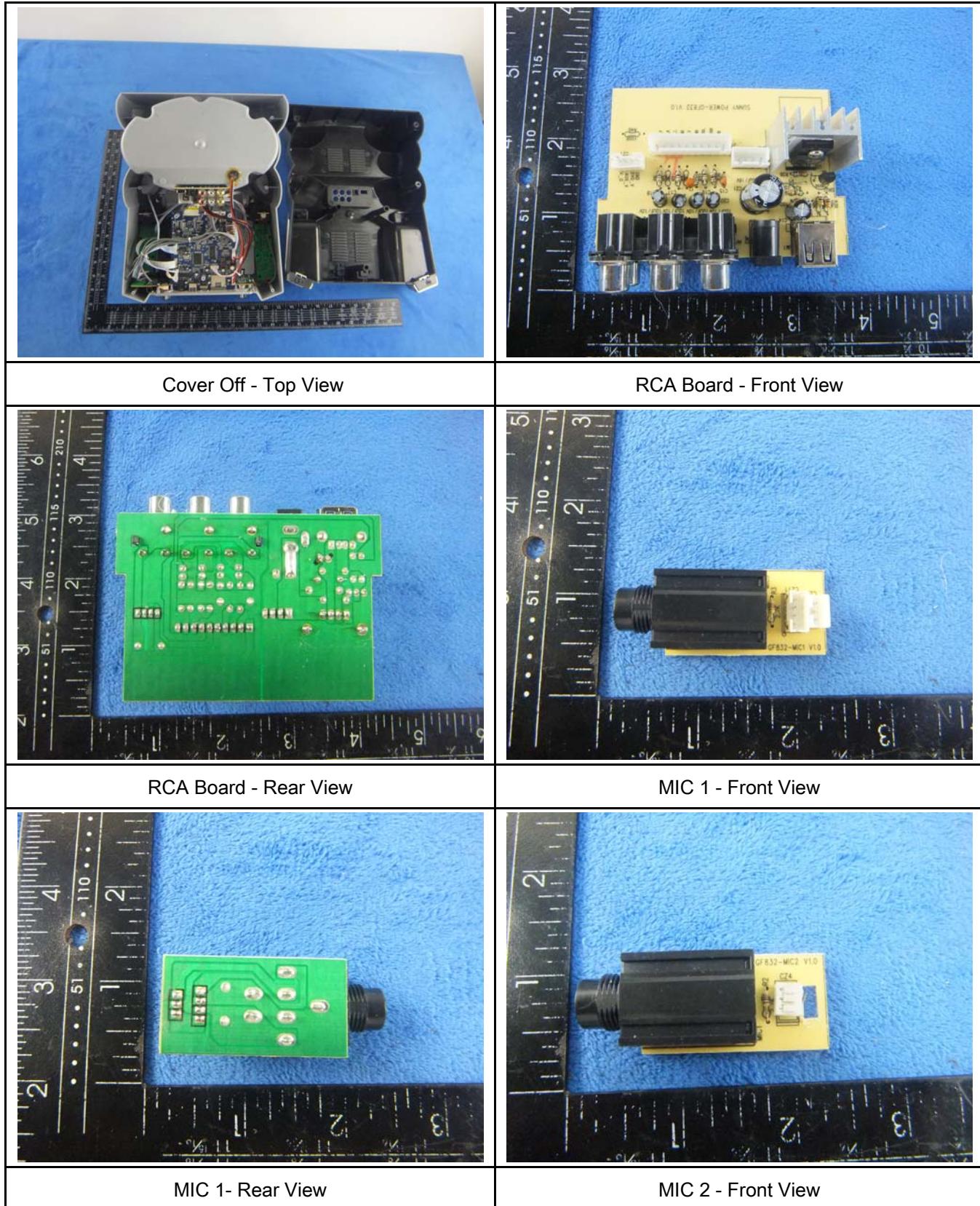


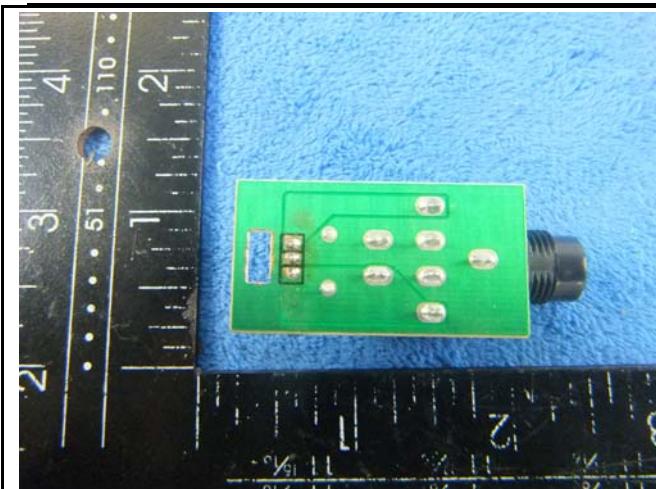
EUT - Right View



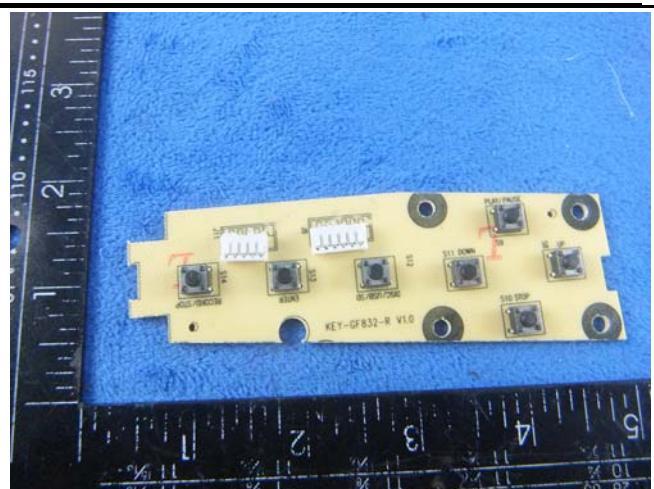
Adapter View

Annex B.ii. Photograph: EUT Internal Photo

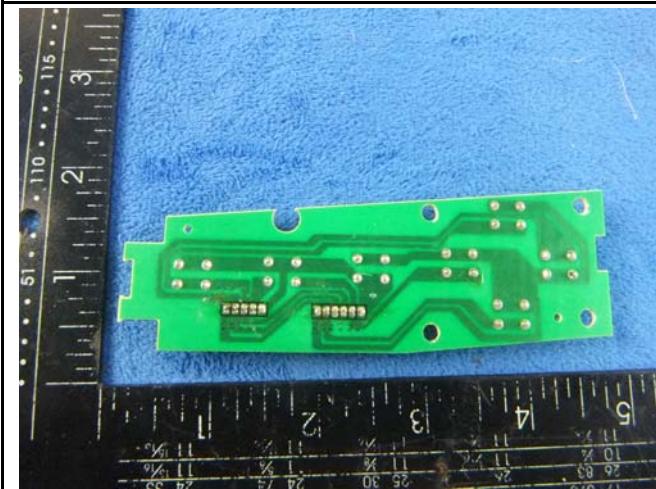




MIC 2- Rear View



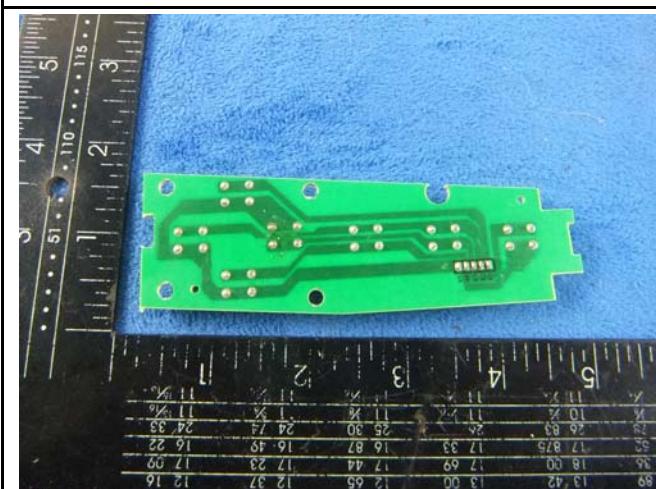
Key Board 1- Front View



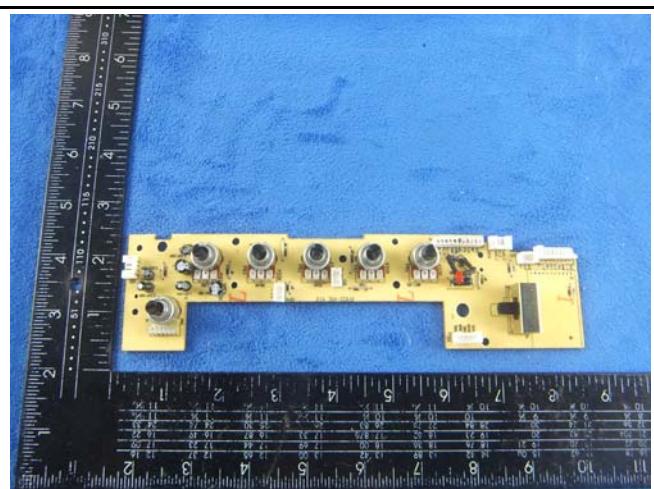
Key Board 1 - Rear View



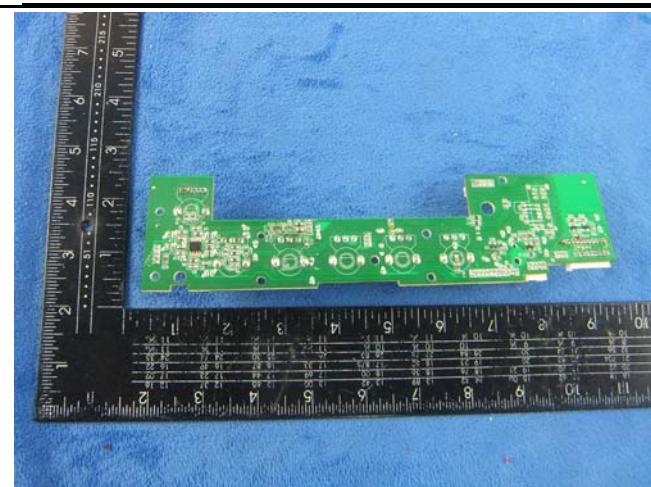
Key Board 2- Front View



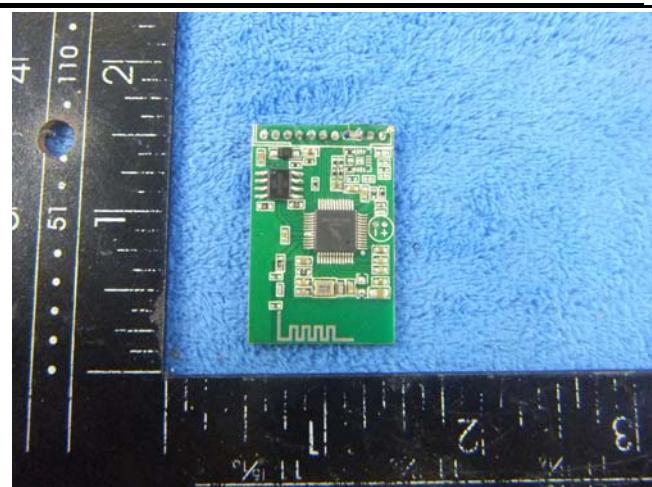
Key Board 2 - Rear View



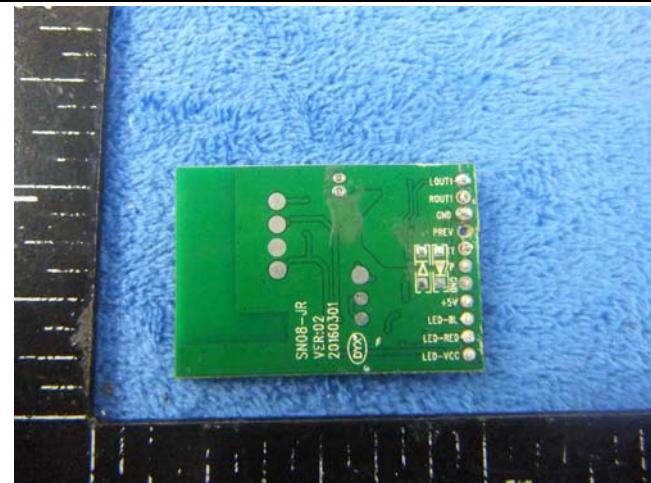
Key Board 3- Front View



Key Board 3 - Rear View



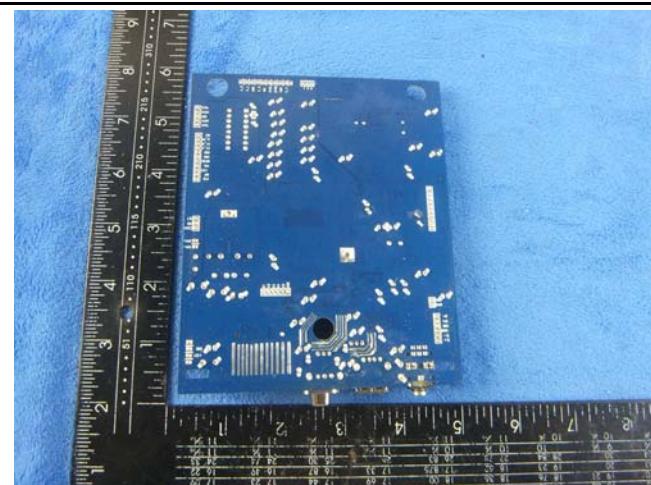
Antenna board - Front View



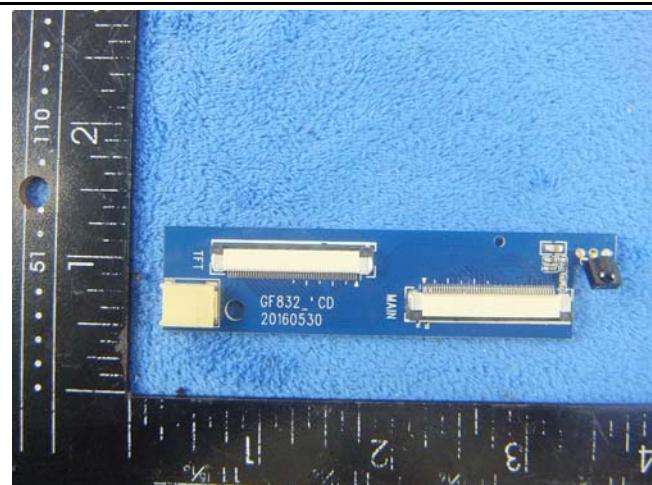
Antenna board - Rear View



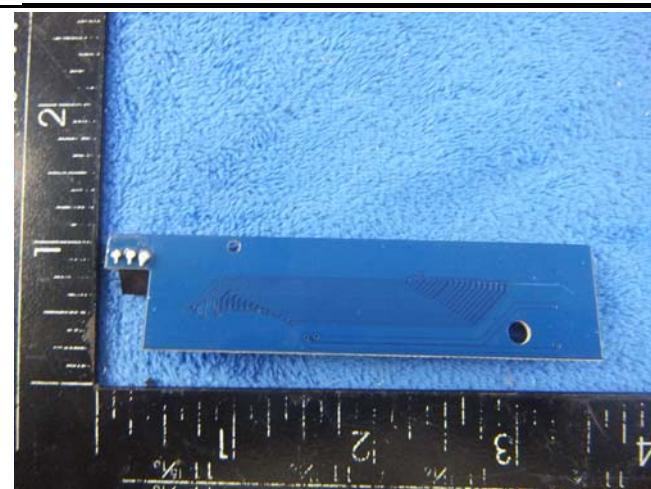
Main board- Front View



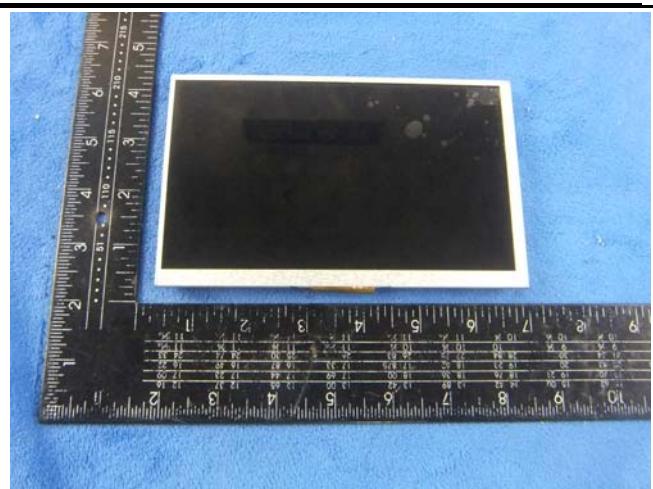
Main board- Rear View



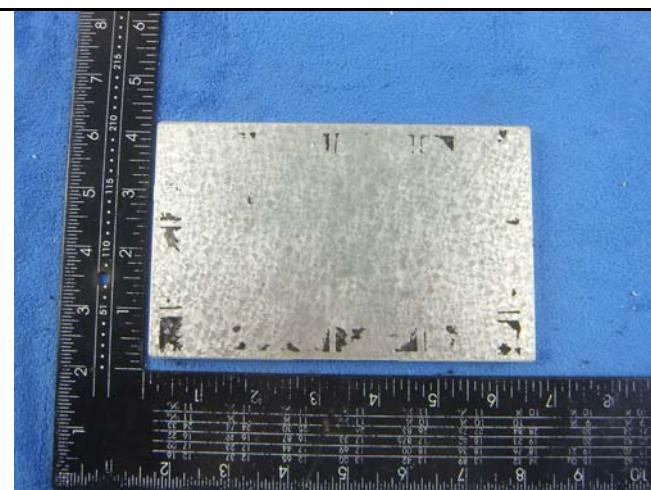
Small board - Front View



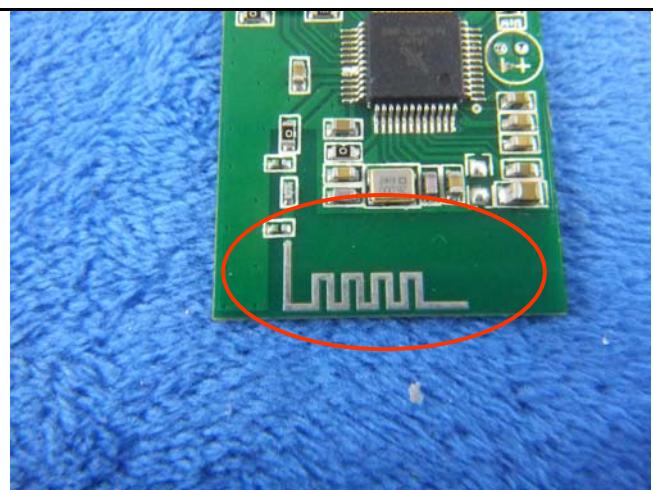
Small board- Rear View



LCD - Front View

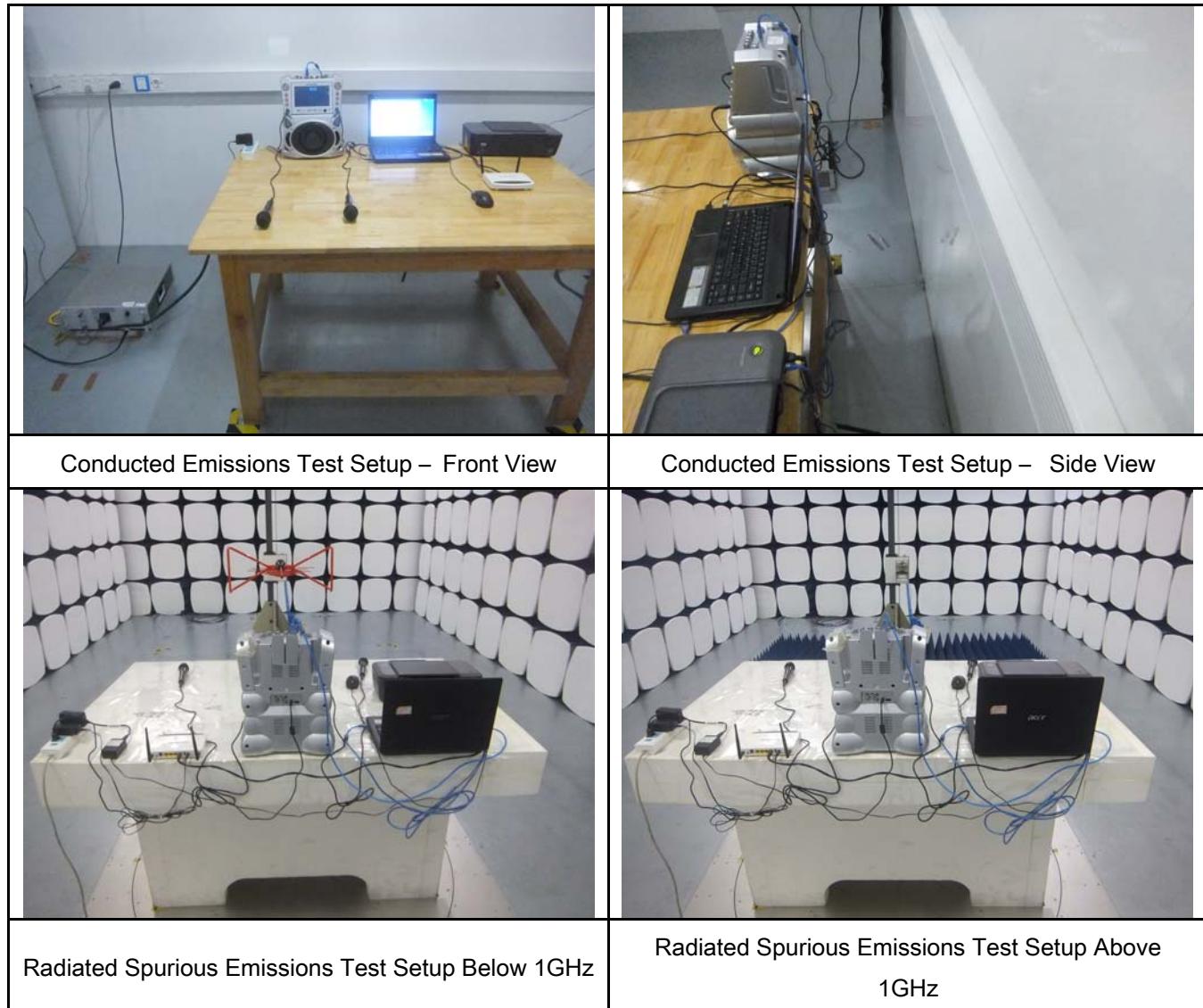


LCD - Rear View



BT – Antenna View

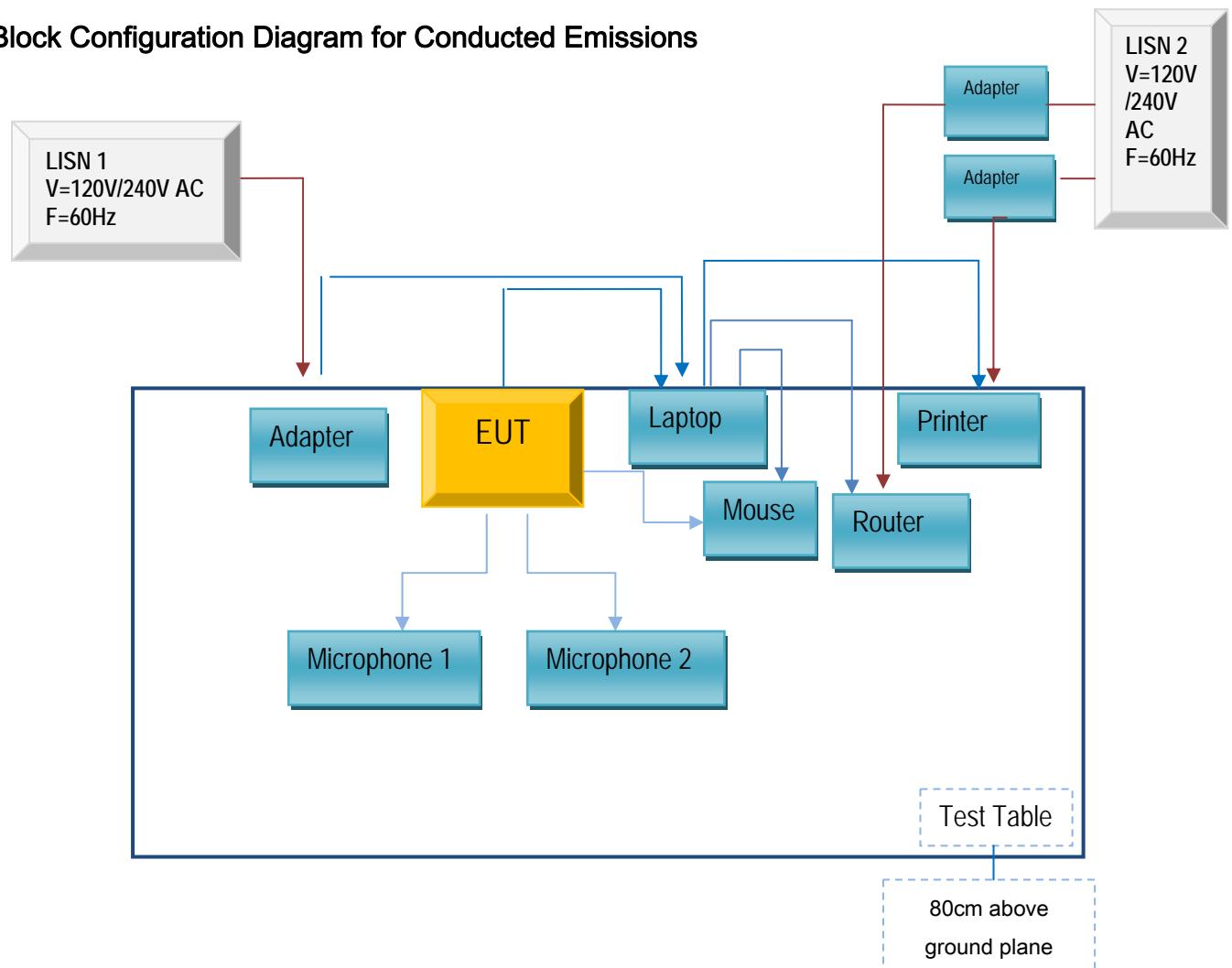
**Annex B.iii. Photograph: Test Setup Photo**



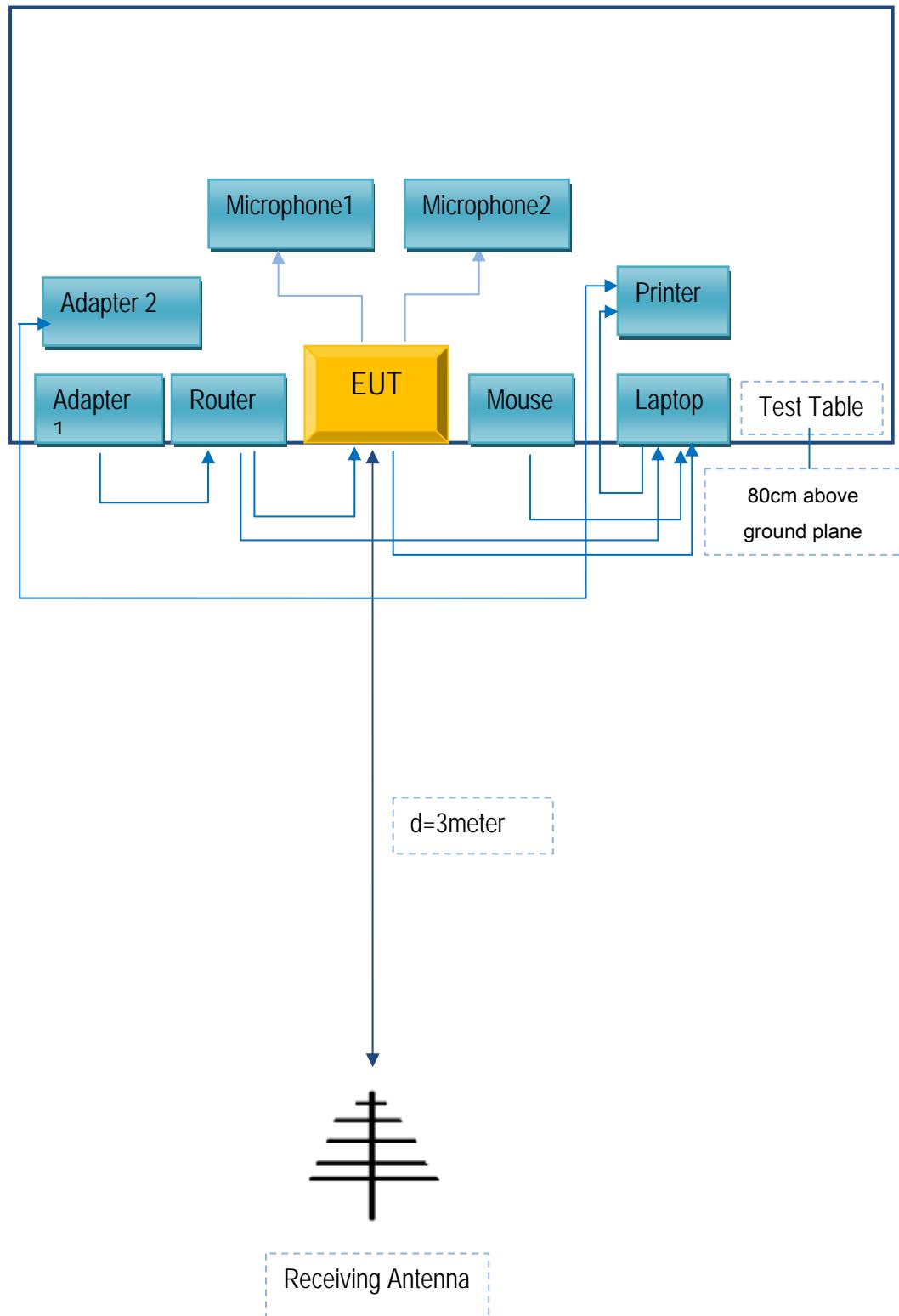
## Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

### Annex C.ii. TEST SET UP BLOCK

Block Configuration Diagram for Conducted Emissions



## Block Configuration Diagram for Radiated Emissions



### Annex C. ii. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

#### Supporting Equipment:

| Manufacturer                               | Equipment Description | Model          | Serial No     |
|--|-----------------------|----------------|---------------|
| Lenovo                                     | Laptop                | E40            | LR-1EHRX      |
| GOLDWEB                                    | Router                | R102           | 1202032094    |
| SHENZHEN BESTVIEW ELECTRONICS CO., LIMITED | Adapter               | RS18-SP1202000 | CC00001       |
| Lenovo                                     | AC Adapter            | 42T4416        | 21D9JU        |
| HP   | Printer               | VCVRA-1003     | CN36M19JWX    |
| DELL                                       | Mouse                 | E100           | 912NMTUT41481 |
| BULL                                       | Socket                | GN-403         | GN201203      |

**Supporting Cable:**

| Cable type          | Shield Type  | Ferrite Core | Length | Serial No   |
|---------------------|--------------|--------------|--------|-------------|
| RCA Cable           | Un-shielding | No           | 0.8m   | TX01123     |
| Power Cable         | Un-shielding | No           | 2m     | S11021      |
| MIC Cable           | Un-shielding | No           | 2m     | TX021131    |
| MIC Cable           | Un-shielding | No           | 2m     | TX021131    |
| RJ45 Cable          | Un-shielding | No           | 2m     | KX156327541 |
| Router Power cable  | Un-shielding | No           | 2m     | 13274630Z   |
| Printer Power cable | Un-shielding | No           | 2m     | 127581031   |
| USB Cable           | Un-shielding | No           | 2m     | JX120051274 |
| USB Cable           | Un-shielding | No           | 2m     | JX110725002 |

|             |                |
|-------------|----------------|
| Test Report | 16070785-FCC-E |
| Page        | 32 of 33       |

## Annex D. User Manual / Block Diagram / Schematics / Partlist

N/A

## Annex E. DECLARATION OF SIMILARITY

BESTVIEW ELECTRONICS Technology Corp.

To: SIEMIC ,775 Montague Expressway, Milpitas, CA 95035,USA

### Declaration Letter

Dear Sir,

For our business issue and marketing requirement, we would like to list 2 model numbers on the **Fcc id and CE notify body** certificates and reports, as following:

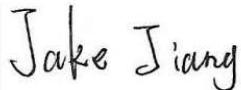
Model No.: GF842

We declare that the difference of these is listed as below:

| Main Model No | Serial Model No  | Difference  |
|---------------|--|---|
| GF842         | GF829S;GF839.GF839S;GF840;GF840S;<br>GF842S;GF845;GF846;GF847;GF848.GF7<br>55;GF756;GF758;GF758S;GF759;GP975;<br>GP978;GP979;GP980 | Model and color difference<br>pcb layout all same inside. |

Thank you!

Signature:



Printed name/title: Jake Jiang

Tel: 0755-29839666-806

Fax: 0755-29839080

Address: 6th,1st Building, No.9 Shilong Road, No.2 Shuitian Industrial Zone, Shenzhen  
Town, Bao'an, Shenzhen, China