# EMC TEST REPORT

Report No.: 15070965-FCC-E

Supersede Report No.:N/A

| | |
|---|---|
| Applicant | AZUMI S.A |
| Product Name | Mobile phone |
| Model No. | L3GA Lite |
| Serial No. | N/A |
| Test Standard | FCC Part 15 Subpart B Class B:2014, ANSI C63.4: 2014 |
| Test Date | October 22 to December 08, 2015 |
| Issue Date | December 24, 2015 |
| Test Result | ☑ Pass ☐ Fail |
| Equipment complied with the specification | ☑ |
| Equipment did not comply with the specification | ☐ |

| | | |
|---|---|---|
| Winnie Zhang | David Huang | |
| Winnie Zhang<br>Test Engineer | David Huang<br>Checked By | |

This test report may be reproduced in full only

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

# 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 |

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 ..... 8

6. MEASUREMENTS, EXAMINATION AND DERIVED RESULTS ..... 9

6.1 AC POWER LINE CONDUCTED EMISSIONS ..... 9

6.2 RADIATED EMISSIONS ..... 15

ANNEX A. TEST INSTRUMENT ..... 20

ANNEX B. EUT AND TEST SETUP PHOTOGRAPHS ..... 21

ANNEX C. TEST SETUP AND SUPPORTING EQUIPMENT ..... 26

ANNEX D. USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PARTLIST ..... 29

ANNEX E. DECLARATION OF SIMILARITY ..... 30

# 1. Report Revision History

| Report No. | Report Version | Description | Issue Date |
|---|---|---|---|
| 15070965-FCC-E | NONE | Original | December 08,2015 |
| 15070965-FCC-E | V1 | Change EUT Photos | December 19, 2015 |
| 15070965-FCC-E | V2 | Delete calibration date | December 24, 2015 |
| | | | |
| | | | |
| | | | |
| | | | |

# 2. Customer information

| | |
|---|---|
| Applicant Name | AZUMI S.A |
| Applicant Add | Avenida Aquilino de la Guardia con Calle 47, PH Ocean Plaza, Piso 16 of. 16-01, Marbella, Ciudad de Panamá City, Rep. Panamá |
| Manufacturer | Shenzhen Haierhea Telecom Co.,Ltd. |
| Manufacturer Add | Room 418,Block M-3,Middle of Hi-Tech Park,Nanshan,Shenzhen,China 518057 |

# 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 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: | Mobile phone |
| Main Model: | L3GA Lite |
| Serial Model: | N/A |
| Antenna Gain: | GSM850: -3dBi<br>PCS1900: -3 dBi<br>UMTS-FDD Band V: -3 dBi<br>UMTS-FDD Band II: -3 dBi<br>Bluetooth: -1 dBi<br>GPS:-1 dBi |
| Input Power: | Adapter:<br>Model: L3GA Lite<br>Input: AC 100-240V; 50/60Hz;0.2A<br>Output: DC 5.0V,500mA<br>Battery:<br>Model: L3GA Lite<br>Spec:3.7V,600mAh,2.22Wh |
| Equipment Category： | JBP |
| Type of Modulation: | GSM / GPRS: GMSK<br>UMTS-FDD: QPSK, 16QAM<br>Bluetooth: GFSK, π /4DQPSK, 8DPSK<br>GPS:BPSK |
| RF Operating Frequency (ies): | GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz<br>PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz<br>UMTS-FDD Band V TX: 826.4 ~ 846.6 MHz; RX: 871.4 ~ 891.6 MHz<br>UMTS-FDD Band II TX:1852.4 ~ 1907.6 MHz;<br>RX: 1932.4 ~ 1987.6 MHz<br>Bluetooth: 2402-2480 MHz<br>GPS RX:1575.42 MHz |

| | |
| --- | --- |
| Number of Channels: | GSM 850: 124CH<br>PCS1900: 299CH<br>UMTS-FDD Band V : 102CH<br>UMTS-FDD Band II : 277CH<br>Bluetooth: 79CH<br>GPS:1CH |
| Port: | Power Port, Earphone Port, USB Port |
| Trade Name : | AZUMI |
| FCC ID: | QRP-AZUMIL3GALITE |
| Date EUT received: | October 21, 2015 |
| Test Date(s): | October 22 to December 03, 2015 |

## 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**

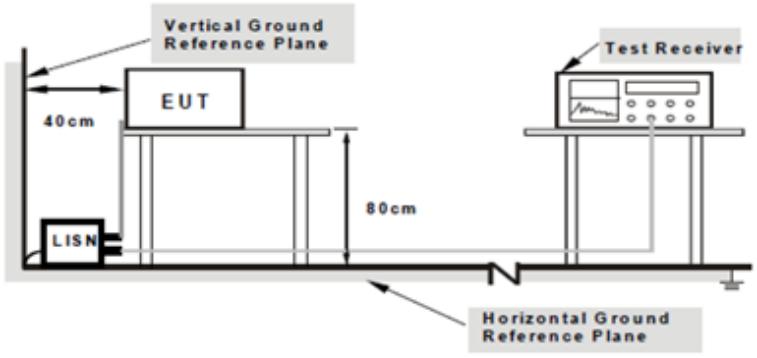
| Emissions | | |
|---|---|---|
| **Test Item** | **Description** | **Uncertainty** |
| Band Edge and Radiated Spurious Emissions | Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m) | +5.6dB/-4.5dB |
| - | -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

# 6. Measurements, Examination And Derived Results

## 6.1 AC Power Line Conducted Emissions

| | |
|---|---|
| Temperature | 28℃ |
| Relative Humidity | 52% |
| Atmospheric Pressure | 1028mbar |
| Test date : | November 28, 2015 |
| Tested By : | Winnie Zhang |

**Requirement(s):**

<table>
<tr><th>Spec</th><th>Item</th><th>Requirement</th><th>Applicable</th></tr>
<tr><td>47CFR§15.107</td><td>a)</td><td>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.
<table>
<tr><th rowspan="2">Frequency ranges (MHz)</th><th colspan="2">Limit (dBμV)</th></tr>
<tr><th>QP</th><th>Average</th></tr>
<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>
</table>
</td><td>☑</td></tr>
<tr><td>Test Setup</td><td colspan="3"> 

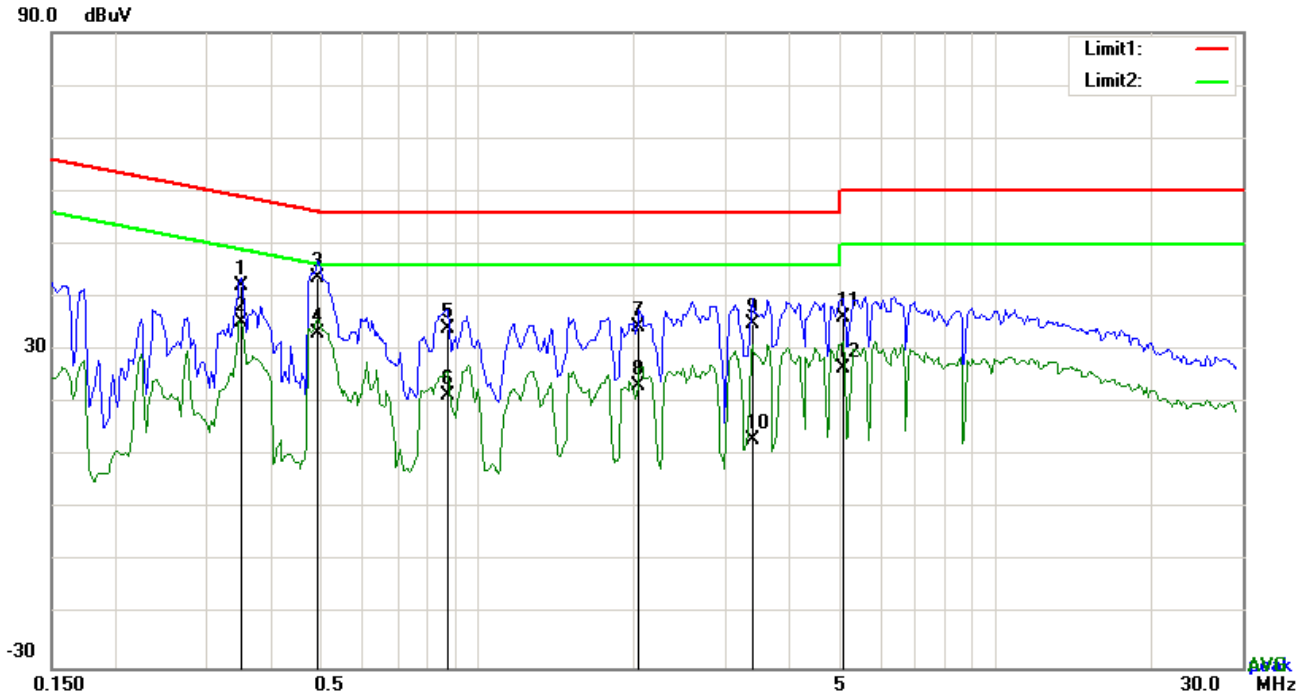
Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.</td></tr>
<tr><td>Procedure</td><td colspan="3">1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.<br>2. The power supply for the EUT was fed through a 50Ω /50mH EUT LISN, connected to filtered mains.</td></tr>
</table>

| | |
|---|---|
| | 3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable.<br>4. All other supporting equipment were powered separately from another main supply.<br>5. The EUT was switched on and allowed to warm up to its normal operating condition.<br>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.<br>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.<br>8. Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power). |
| Remark | |
| Result | ☑ Pass ☐ Fail |

**Test Data** ☑ Yes ☐ N/A

**Test Plot** ☑ Yes (See below) ☐ N/A

| Test Mode : | USB Mode |
|---|---|

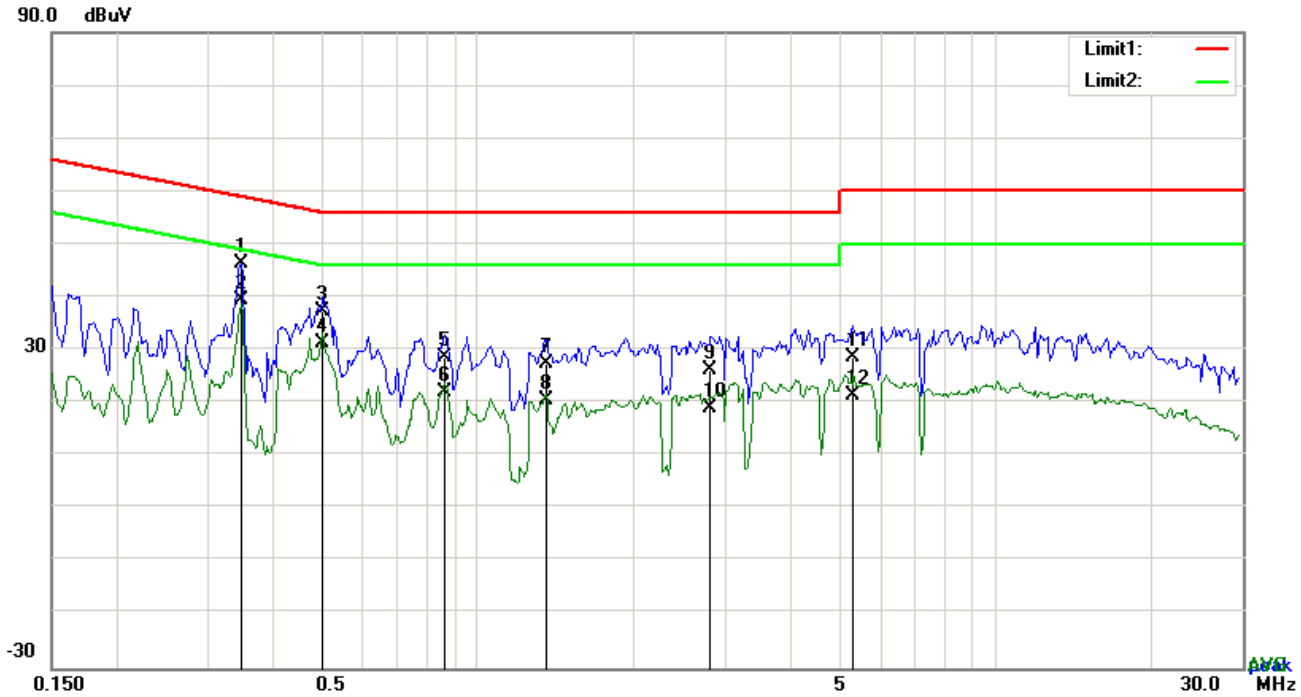



*Test Data*

## Phase Line Plot at 120Vac, 60Hz

| No. | P/L | Frequency | Reading | Detector | Corrected | Result | Limit | Margin |
|---|---|---|---|---|---|---|---|---|
| | | (MHz) | (dBuV) | | (dB} | (dBuV) | (dBuV) | (dB) |
| 1 | L1 | 0.3489 | 32.25 | QP | 10.03 | 42.28 | 58.99 | -16.71 |
| 2 | L1 | 0.3489 | 25.22 | AVG | 10.03 | 35.25 | 48.99 | -13.74 |
| 3 | L1 | 0.4893 | 33.53 | QP | 10.03 | 43.56 | 56.18 | -12.62 |
| 4 | L1 | 0.4893 | 23.04 | AVG | 10.03 | 33.07 | 46.18 | -13.11 |
| 5 | L1 | 0.8754 | 23.88 | QP | 10.03 | 33.91 | 56.00 | -22.09 |
| 6 | L1 | 0.8754 | 11.48 | AVG | 10.03 | 21.51 | 46.00 | -24.49 |
| 7 | L1 | 2.0493 | 24.26 | QP | 10.04 | 34.30 | 56.00 | -21.70 |
| 8 | L1 | 2.0493 | 13.15 | AVG | 10.04 | 23.19 | 46.00 | -22.81 |
| 9 | L1 | 3.3861 | 24.99 | QP | 10.06 | 35.05 | 56.00 | -20.95 |
| 10 | L1 | 3.3861 | 3.01 | AVG | 10.06 | 13.07 | 46.00 | -32.93 |
| 11 | L1 | 5.0631 | 26.14 | QP | 10.08 | 36.22 | 60.00 | -23.78 |
| 12 | L1 | 5.0631 | 16.39 | AVG | 10.08 | 26.47 | 50.00 | -23.53 |

| Test Mode : | USB Mode |
|---|---|

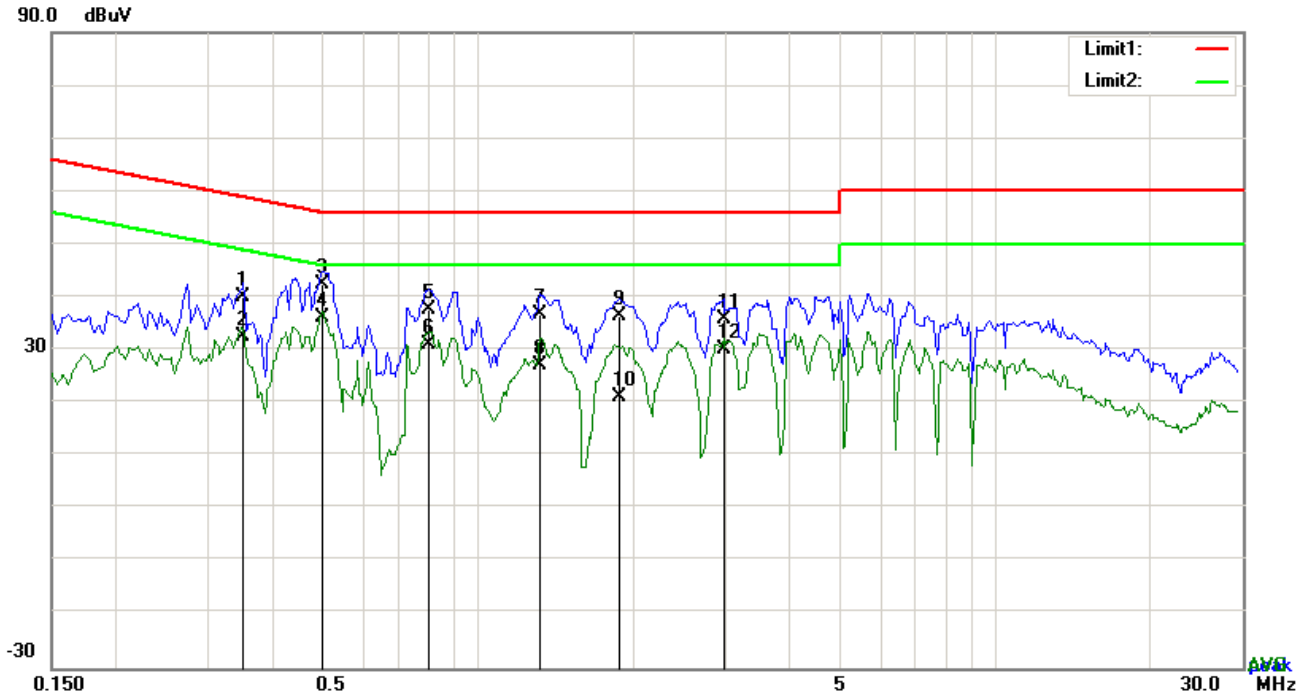



*Test Data*

## Phase Neutral Plot at 120Vac, 60Hz

| No. | P/L | Frequency | Reading | Detector | Corrected | Result | Limit | Margin |
|---|---|---|---|---|---|---|---|---|
| | | (MHz) | (dBuV) | | (dB} | (dBuV) | (dBuV) | (dB) |
| 1 | N | 0.3489 | 36.32 | QP | 10.02 | 46.34 | 58.99 | -12.65 |
| 2 | N | 0.3489 | 29.38 | AVG | 10.02 | 39.40 | 48.99 | -9.59 |
| 3 | N | 0.5010 | 27.44 | QP | 10.02 | 37.46 | 56.00 | -18.54 |
| 4 | N | 0.5010 | 21.37 | AVG | 10.02 | 31.39 | 46.00 | -14.61 |
| 5 | N | 0.8637 | 18.72 | QP | 10.03 | 28.75 | 56.00 | -27.25 |
| 6 | N | 0.8637 | 12.14 | AVG | 10.03 | 22.17 | 46.00 | -23.83 |
| 7 | N | 1.3551 | 17.38 | QP | 10.03 | 27.41 | 56.00 | -28.59 |
| 8 | N | 1.3551 | 10.38 | AVG | 10.03 | 20.41 | 46.00 | -25.59 |
| 9 | N | 2.8137 | 16.26 | QP | 10.05 | 26.31 | 56.00 | -29.69 |
| 10 | N | 2.8137 | 9.01 | AVG | 10.05 | 19.06 | 46.00 | -26.94 |
| 11 | N | 5.2854 | 18.57 | QP | 10.07 | 28.64 | 60.00 | -31.36 |
| 12 | N | 5.2854 | 11.30 | AVG | 10.07 | 21.37 | 50.00 | -28.63 |

| Test Mode : | USB Mode |
|---|---|

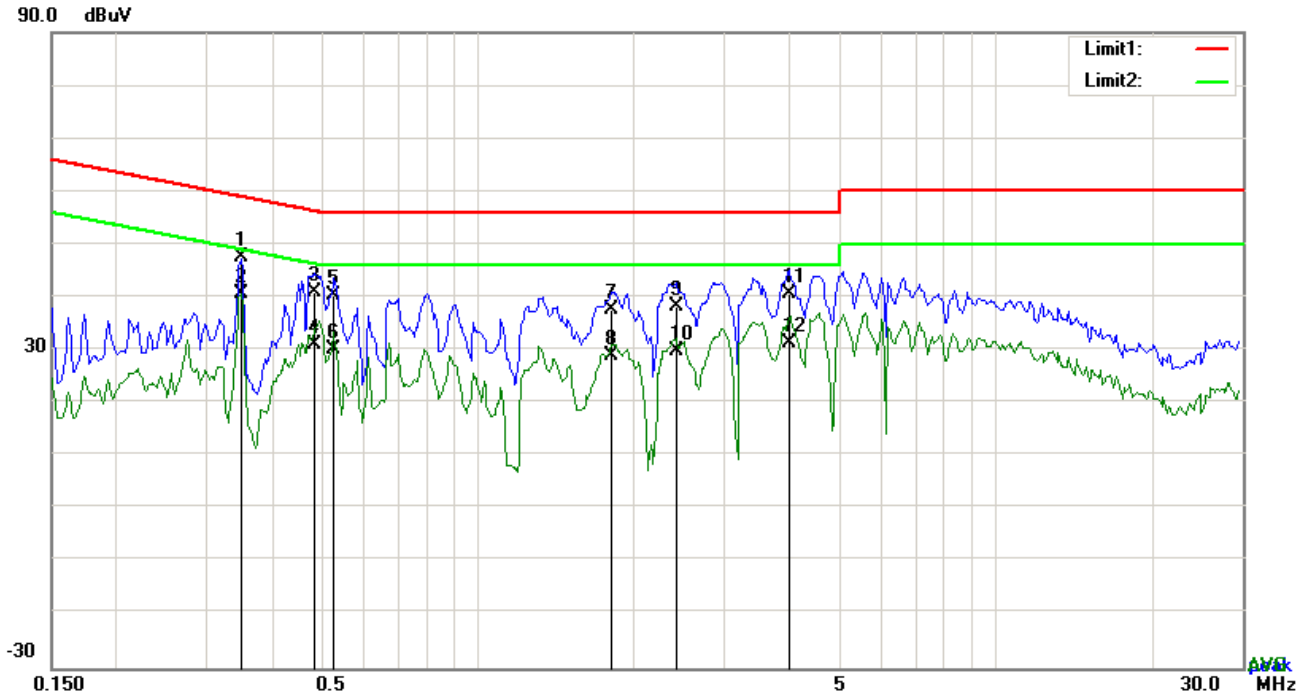



*Test Data*

## Phase Line Plot at 240Vac, 60Hz

| No. | P/L | Frequency | Reading | Detector | Corrected | Result | Limit | Margin |
|---|---|---|---|---|---|---|---|---|
| | | (MHz) | (dBuV) | | (dB} | (dBuV) | (dBuV) | (dB) |
| 1 | L1 | 0.3528 | 29.97 | QP | 10.03 | 40.00 | 58.90 | -18.90 |
| 2 | L1 | 0.3528 | 22.44 | AVG | 10.03 | 32.47 | 48.90 | -16.43 |
| 3 | L1 | 0.5010 | 32.32 | QP | 10.03 | 42.35 | 56.00 | -13.65 |
| 4 | L1 | 0.5010 | 26.05 | AVG | 10.03 | 36.08 | 46.00 | -9.92 |
| 5 | L1 | 0.8013 | 27.71 | QP | 10.03 | 37.74 | 56.00 | -18.26 |
| 6 | L1 | 0.8013 | 20.99 | AVG | 10.03 | 31.02 | 46.00 | -14.98 |
| 7 | L1 | 1.3200 | 26.57 | QP | 10.03 | 36.60 | 56.00 | -19.40 |
| 8 | L1 | 1.3200 | 17.04 | AVG | 10.03 | 27.07 | 46.00 | -18.93 |
| 9 | L1 | 1.8738 | 26.30 | QP | 10.04 | 36.34 | 56.00 | -19.66 |
| 10 | L1 | 1.8738 | 11.18 | AVG | 10.04 | 21.22 | 46.00 | -24.78 |
| 11 | L1 | 2.9814 | 25.84 | QP | 10.05 | 35.89 | 56.00 | -20.11 |
| 12 | L1 | 2.9814 | 20.06 | AVG | 10.05 | 30.11 | 46.00 | -15.89 |

| Test Mode : | USB Mode |
|---|---|




*Test Data*

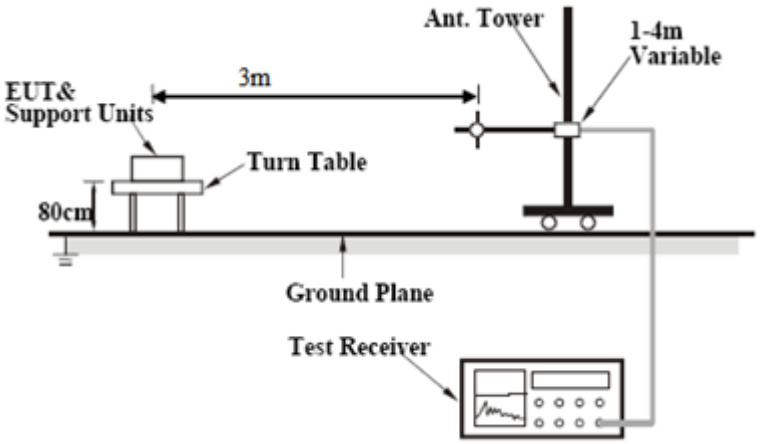
## Phase Neutral Plot at 240Vac, 60Hz

| No. | P/L | Frequency | Reading | Detector | Corrected | Result | Limit | Margin |
|---|---|---|---|---|---|---|---|---|
| | | (MHz) | (dBuV) | | (dB} | (dBuV) | (dBuV) | (dB) |
| 1 | N | 0.3489 | 37.54 | QP | 10.02 | 47.56 | 58.99 | -11.43 |
| 2 | N | 0.3489 | 30.57 | AVG | 10.02 | 40.59 | 48.99 | -8.40 |
| 3 | N | 0.4815 | 30.79 | QP | 10.02 | 40.81 | 56.31 | -15.50 |
| 4 | N | 0.4815 | 21.18 | AVG | 10.02 | 31.20 | 46.31 | -15.11 |
| 5 | N | 0.5283 | 30.48 | QP | 10.02 | 40.50 | 56.00 | -15.50 |
| 6 | N | 0.5283 | 20.05 | AVG | 10.02 | 30.07 | 46.00 | -15.93 |
| 7 | N | 1.8153 | 27.47 | QP | 10.04 | 37.51 | 56.00 | -18.49 |
| 8 | N | 1.8153 | 18.90 | AVG | 10.04 | 28.94 | 46.00 | -17.06 |
| 9 | N | 2.4120 | 28.34 | QP | 10.04 | 38.38 | 56.00 | -17.62 |
| 10 | N | 2.4120 | 19.72 | AVG | 10.04 | 29.76 | 46.00 | -16.24 |
| 11 | N | 3.9867 | 30.68 | QP | 10.06 | 40.74 | 56.00 | -15.26 |
| 12 | N | 3.9867 | 21.33 | AVG | 10.06 | 31.39 | 46.00 | -14.61 |

## 6.2 Radiated Emissions

| | |
|---|---|
| Temperature | 28℃ |
| Relative Humidity | 52% |
| Atmospheric Pressure | 1028mbar |
| Test date : | November 28, 2015 |
| Tested By : | Winnie Zhang |

**Requirement(s):**

<table>
<tr><th>Spec</th><th>Item</th><th>Requirement</th><th>Applicable</th></tr>
<tr><td>47CFR§15.109(d)</td><td>a)</td><td>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
<table>
<tr><th>Frequency range (MHz)</th><th>Field Strength (μV/m)</th></tr>
<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>
</table></td><td>☑</td></tr>
<tr><td>Test Setup</td><td colspan="3"> 
</td></tr>
<tr><td>Procedure</td><td colspan="3">1. The EUT was switched on and allowed to warm up to its normal operating condition.<br>2. 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:<br>a. Vertical or horizontal polarization (whichever gave the higher emission level</td></tr>
</table>

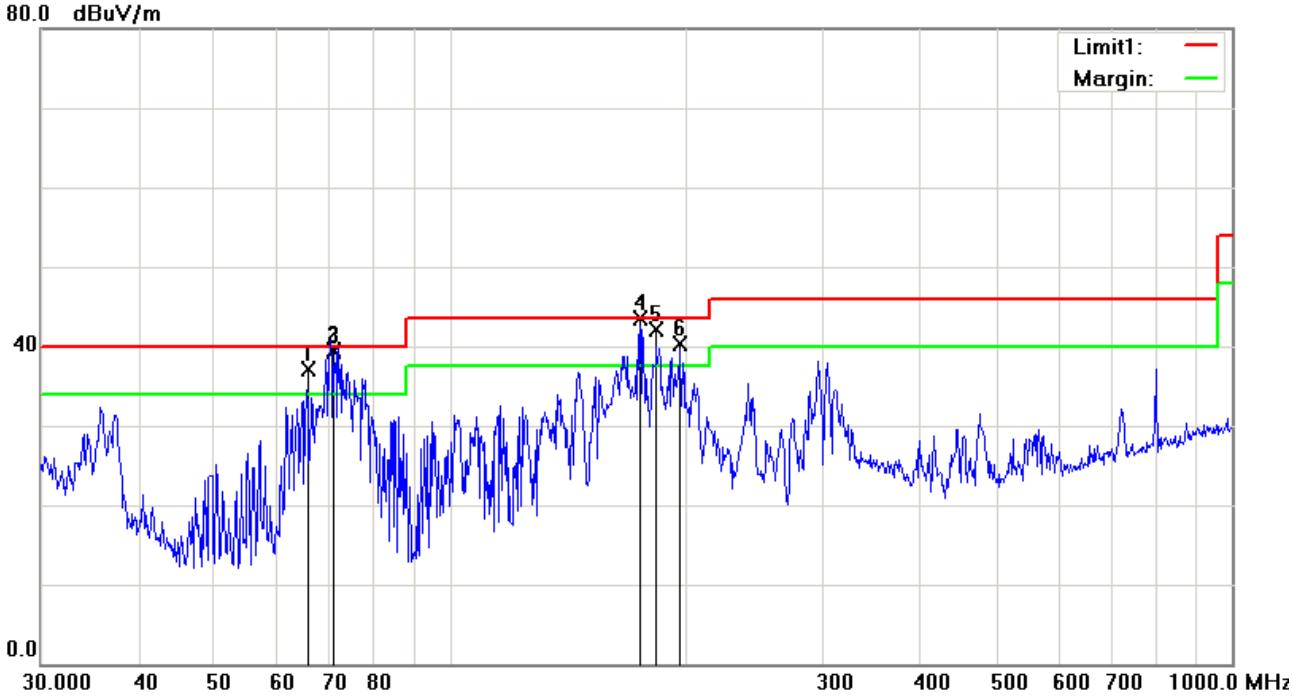
| | |
|---|---|
| | over a full rotation of the EUT) was chosen.<br>b. The EUT was then rotated to the direction that gave the maximum emission.<br>c. Finally, the antenna height was adjusted to the height that gave the maximum emission.<br>3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz.<br>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.<br>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.<br>■ 1 kHz (Duty cycle < 98%) □ 10 Hz (Duty cycle > 98%)<br>5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured. |
| Remark | |
| Result | ☑ Pass ☐ Fail |

**Test Data** ☑ Yes ☐ N/A

**Test Plot** ☑ Yes (See below) ☐ N/A

| Test Mode : | USB Mode |
|---|---|

*Below 1GHz*

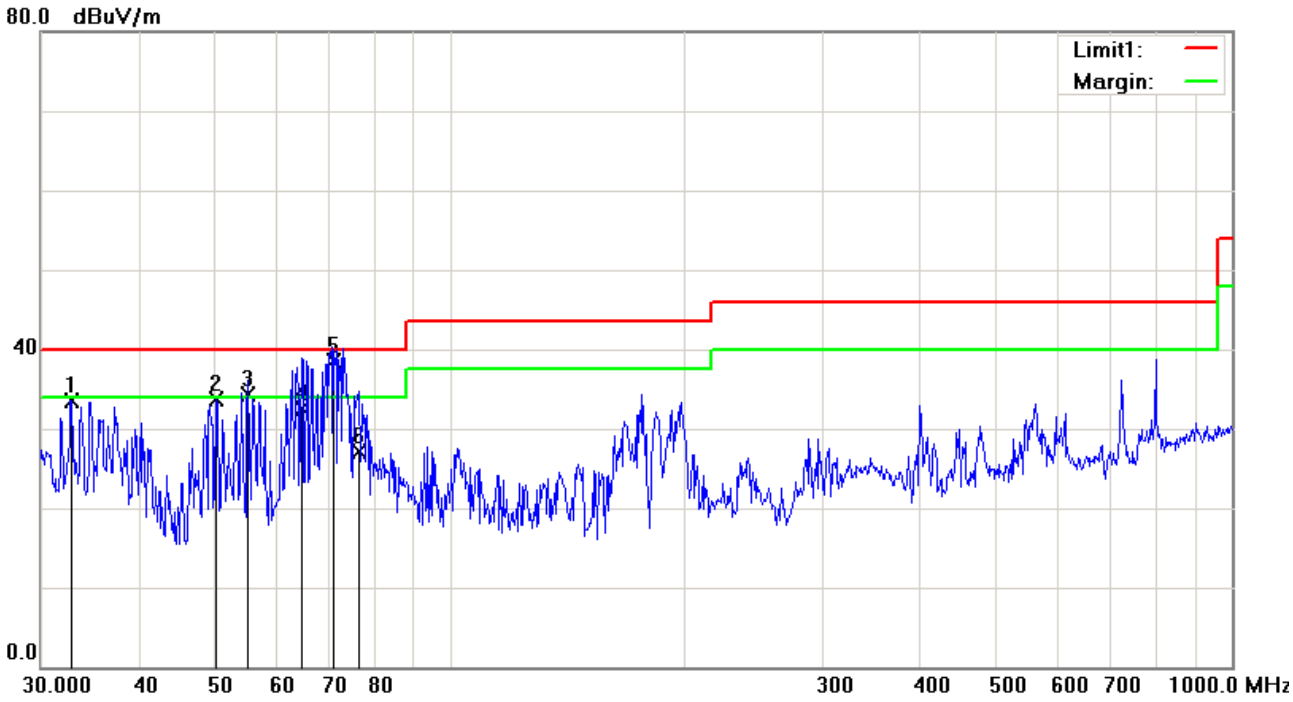



*Test Data*

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 | 65.8085 | 50.96 | QP | -13.90 | 37.06 | 40.00 | -2.94 | 100 | 102 |
| 2 | H | 71.2511 | 53.23 | QP | -13.65 | 39.58 | 40.00 | -0.42 | 100 | 102 |
| 3 | H | 71.2516 | 52.94 | QP | -13.65 | 39.29 | 40.00 | -0.71 | 100 | 102 |
| 4 | H | 175.1627 | 52.98 | QP | -9.50 | 43.48 | 43.50 | -0.02 | 100 | 154 |
| 5 | H | 183.8700 | 51.80 | QP | -9.64 | 42.16 | 43.50 | -1.34 | 100 | 166 |
| 6 | H | 196.4508 | 49.23 | QP | -8.92 | 40.31 | 43.50 | -3.19 | 100 | 154 |

## *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 | 32.8637 | 35.92 | peak | -2.37 | 33.55 | 40.00 | -6.45 | 100 | 261 |
| 2 | V | 50.2325 | 46.82 | peak | -13.21 | 33.61 | 40.00 | -6.39 | 100 | 73 |
| 3 | V | 55.3126 | 48.02 | QP | -13.80 | 34.22 | 40.00 | -5.78 | 100 | 191 |
| 4 | V | 64.8352 | 46.44 | QP | -13.98 | 32.46 | 40.00 | -7.54 | 100 | 259 |
| 5 | V | 71.2509 | 52.18 | QP | -13.65 | 38.53 | 40.00 | -1.47 | 100 | 176 |
| 6 | V | 76.4502 | 40.82 | QP | -13.75 | 27.07 | 40.00 | -12.93 | 100 | 305 |

## *Above 1GHz*

| Frequency (MHz) | Amplitude (dBμV/m) | Azimuth | Height (cm) | Polarity (H/V) | Factors (dB) | Limit (dBμV/m) | Margin (dB) | Detector (PK/AV) |
|---|---|---|---|---|---|---|---|---|
| 1420.01 | 48.46 | 46 | 180 | V | -21.23 | 74 | -25.44 | PK |
| 2852.12 | 46.12 | 125 | 160 | V | -22.75 | 74 | -27.88 | PK |
| 1764.25 | 50.45 | 75 | 210 | V | -23.12 | 74 | -23.55 | PK |
| 2677.38 | 49.98 | 65 | 230 | H | -23.33 | 74 | -24.02 | PK |
| 2984.15 | 50.63 | 96 | 150 | H | -22.86 | 74 | -23.37 | PK |
| 2188.02 | 50.12 | 85 | 170 | H | -22.46 | 74 | -23.88 | 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 |
|---|---|---|---|---|---|
| **AC Line Conducted Emissions** | | | | | |
| EMI test receiver | ESCS30 | 8471241027 | 09/17/2015 | 09/16/2016 | ☑ |
| Line Impedance Stabilization Network | LI-125A | 191106 | 09/25/2015 | 09/24/2016 | ☑ |
| Line Impedance Stabilization Network | LI-125A | 191107 | 09/25/2015 | 09/24/2016 | ☑ |
| LISN | ISN T800 | 34373 | 09/25/2015 | 09/24/2016 | ☑ |
| Transient Limiter | LIT-153 | 531118 | 09/01/2015 | 08/31/2016 | ☑ |
| **Radiated Emissions** | | | | | |
| EMI test receiver | ESL6 | 100262 | 09/17/2015 | 09/16/2016 | ☑ |
| OPT 010 AMPLIFIER (0.1-1300MHz) | 8447E | 2727A02430 | 09/01/2015 | 08/31/2016 | ☑ |
| Microwave Preamplifier (1 ~ 26.5GHz) | 8449B | 3008A02402 | 03/25/2015 | 03/24/2016 | ☑ |
| Bilog Antenna (30MHz~6GHz) | JB6 | A110712 | 09/21/2015 | 09/20/2016 | ☑ |
| Double Ridge Horn Antenna | AH-118 | 71259 | 09/24/2015 | 09/23/2016 | ☑ |

# Annex B. EUT And Test Setup Photographs

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

<table>
<tr><td>  </td><td> 
</td></tr>
<tr><td>Whole Package View</td><td>Adapter - Front View</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>EUT - Front View</td><td>EUT - Rear View</td></tr>
</table>

EUT - Top View

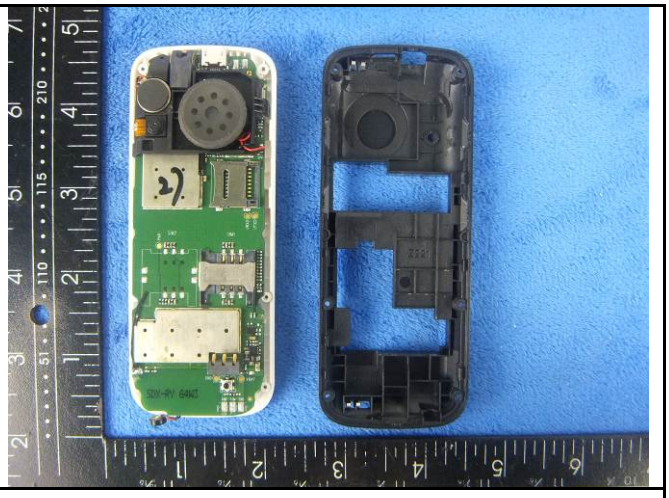
EUT - Bottom View

EUT - Left View

EUT - Right View

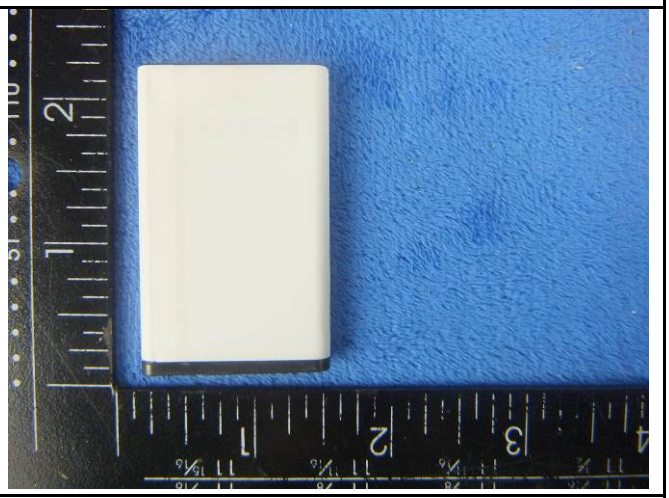
## Annex B.ii. Photograph: EUT Internal Photo

Cover Off - Top View 1

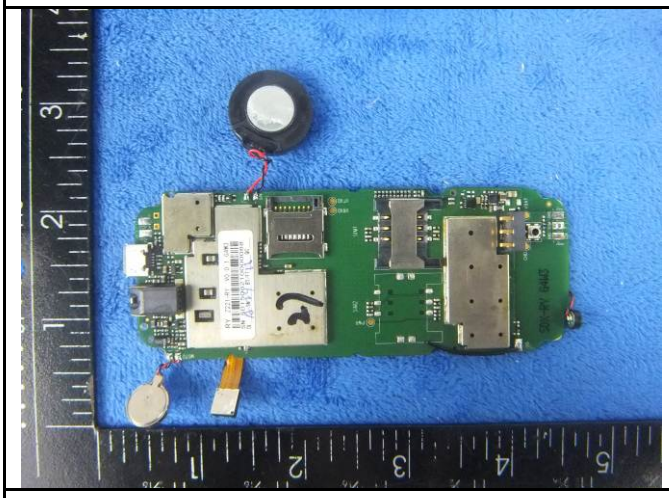


Cover Off - Top View 2

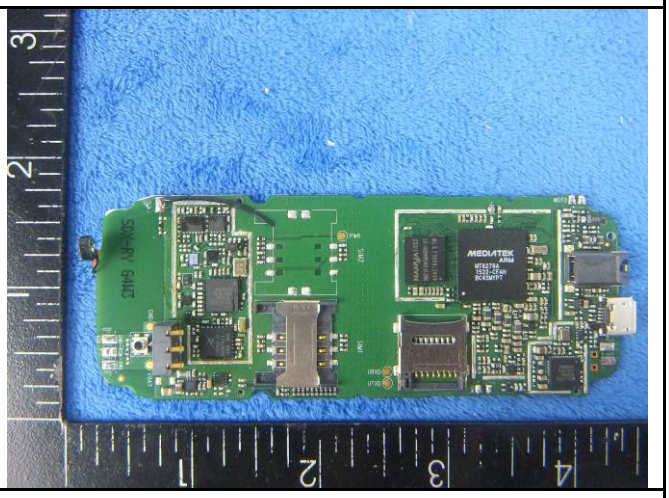

Battery - Front View



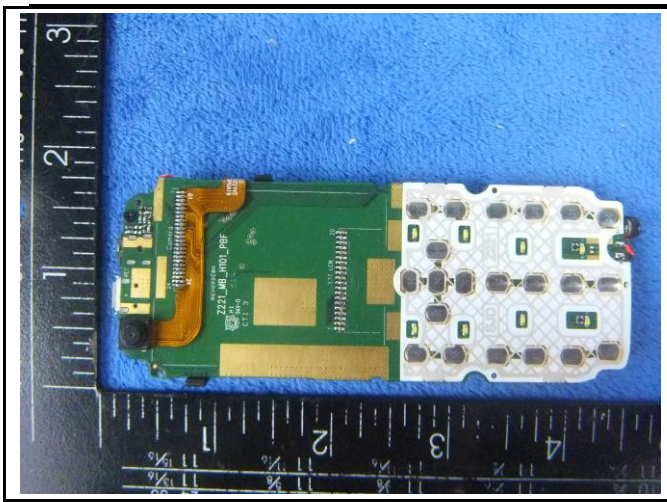
Battery - Rear View



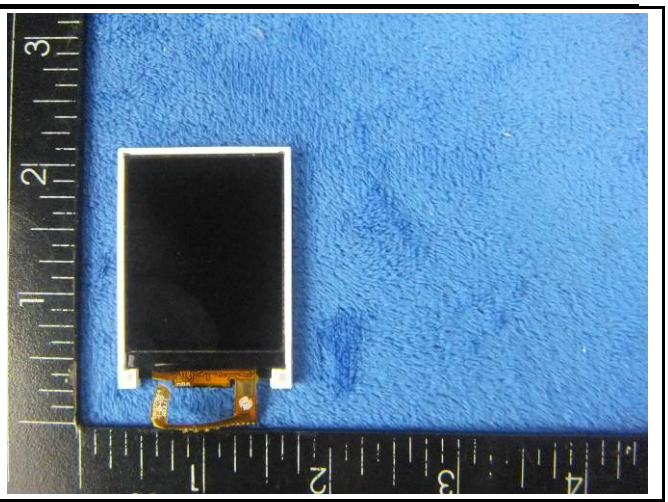
Mainbard with Shielding - Front View



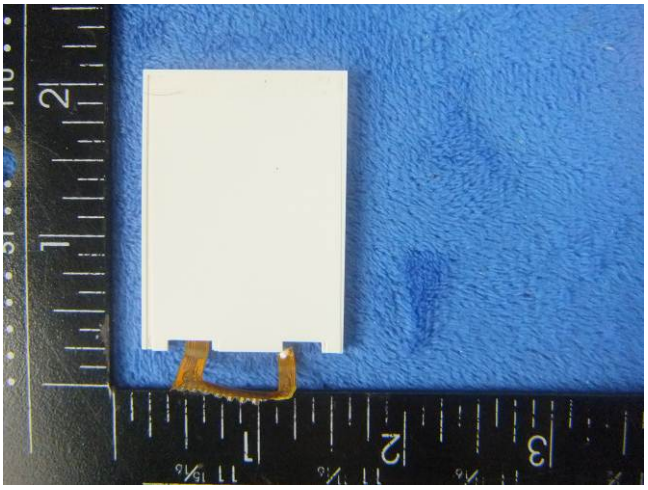
Mainbard without Shielding - Front View



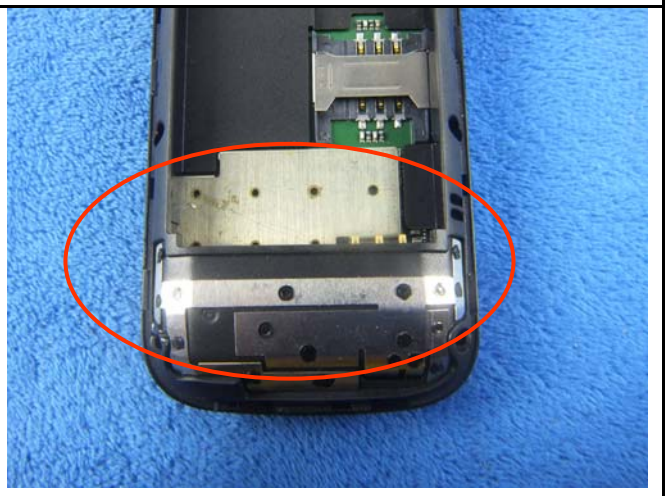
Mainbard – Rear View



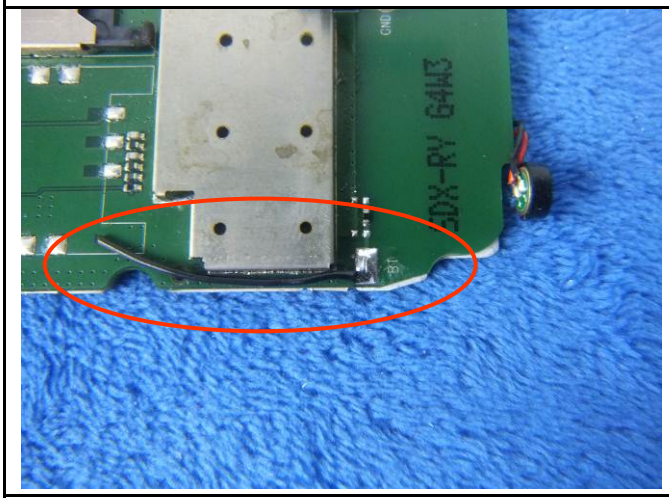
LCD – Front View



LCD – Rear View

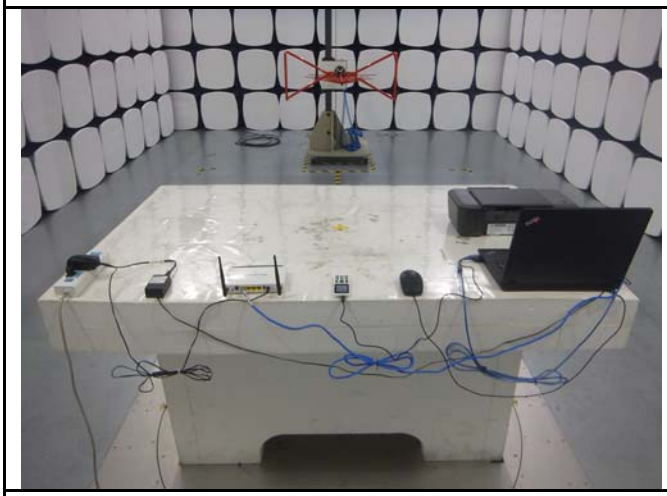
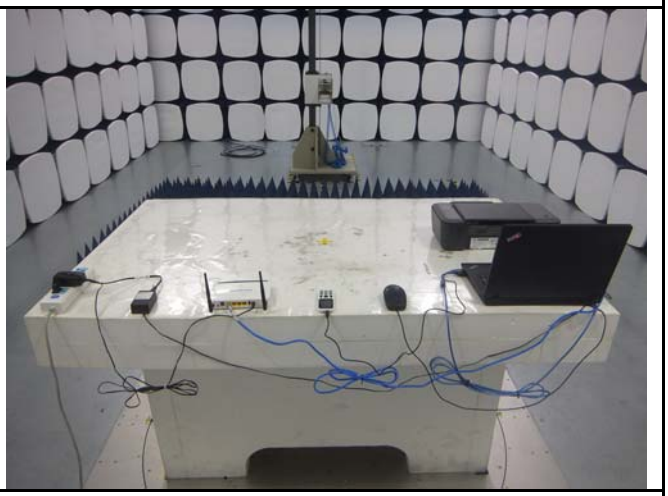


GSM/PCS/UMTS-FDD Antenna View



BT - Antenna View

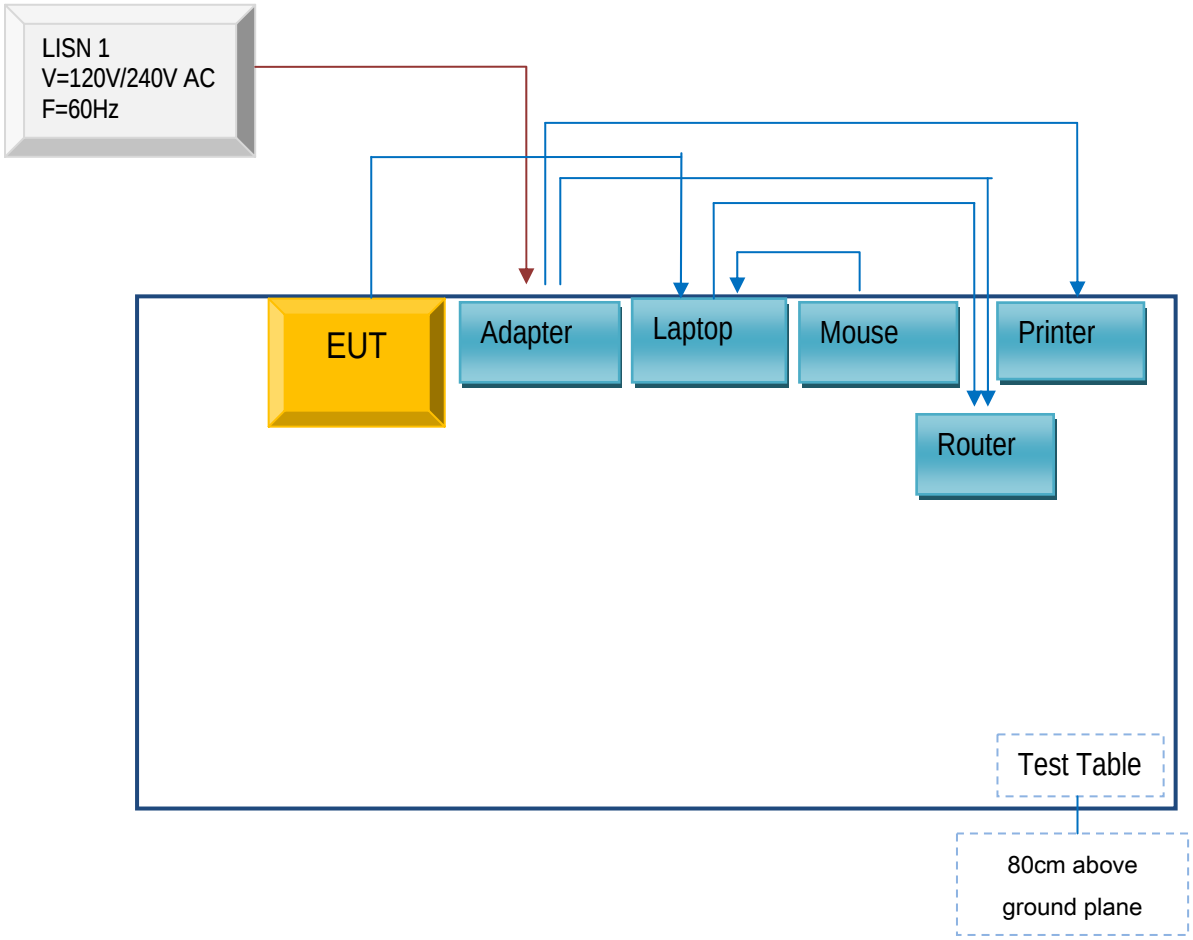
## Annex B.iii. Photograph: Test Setup Photo

| | |
|---|---|
|  |  |
| Conducted Emissions Test Setup – Front View | Conducted Emissions Test Setup – Side View |
|  |  |
| Radiated Emissions Test Setup Below 1GHz | Radiated Emissions Test Setup Above 1GHz |

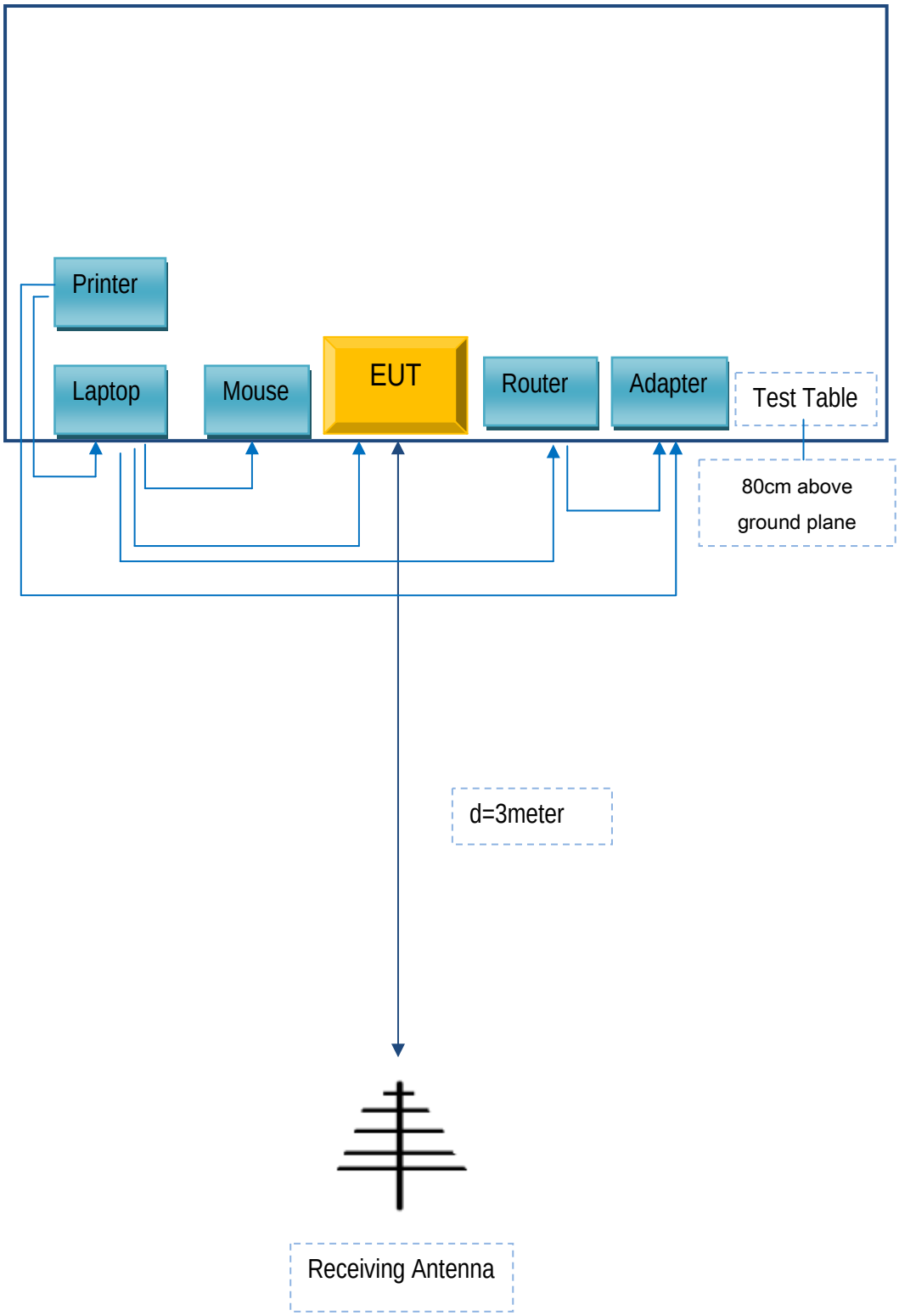
# Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

## Annex C.ii. TEST SET UP BLOCK

### Block Configuration Diagram for Conducted Emissions



## Block Configuration Diagram for Radiated Emissions



## Annex C. il. SUPPORTING EQUIPMENT DESCRIPTION

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

**Supporting Euquipment:**

| Manufacturer | Equipment Description | Model | Serial No |
|---|---|---|---|
| Lenovo | Laptop | E40 | LR-1EHRX |
| GOLDWEB | Router | R102 | 1202032094 |
| HP | Printer | VCVRA-1003 | CN36M19JWX |
| DELL | Mouse | E100 | 912NMTUT41481 |
| MACATE GROUP CORPORATION | Adapter | A88-502000 | CN15020403 |

**Supporting Cable:**

| Cable type | Shield Type | Ferrite Core | Length | Serial No |
|---|---|---|---|---|
| USB Cable | Un-shielding | No | 2m | JX120051274 |
| 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 | 0.8m | JX542214 |

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

Please see Attachment

# Annex E. DECLARATION OF SIMILARITY

N/A