
FCC Test Report

Report No.: AGC01P110401F1

FCC ID : ZE6-VZ219
PRODUCT DESIGNATION : Mobile Phone
BRAND NAME : BESS
MODEL NAME : VZ219
CLIENT : Bess Mobile HK, Limited
DATE OF ISSUE : May 7,2011
STANDARD(S) : FCC Part 15 Rules

Attestation of **Global Compliance Co., Ltd.**

1. CAUTION: This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.

TABLE OF CONTENTS

| | |
|--|-----------|
| 1. VERIFICATION OF COMPLIANCE | 2 |
| 2. PRODUCT INFORMATION | 3 |
| 3. TEST FACILITY | 4 |
| 4. SUPPORT EQUIPMENT LIST | 5 |
| 5. SYSTEM DESCRIPTION | 5 |
| 6 SUMMARY OF TEST RESULTS | 6 |
| 7. FCC LINE CONDUCTED EMISSION TEST | 7 |
| 7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST..... | 7 |
| 7.2. LIMITS OF LINE CONDUCTED EMISSION TEST | 7 |
| 7.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST | 7 |
| 7.4. PROCEDURE OF LINE CONDUCTED EMISSION TEST | 8 |
| 7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST..... | 9 |
| 8. FCC RADIATED EMISSION TEST | 11 |
| 8.1. TEST EQUIPMENT OF RADIATED EMISSION | 11 |
| 8.2. LIMITS OF RADIATED EMISSION TEST | 11 |
| 8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST..... | 11 |
| 8.4 PROCEDURE OF RADIATED EMISSION TEST | 11 |
| 8.4 PROCEDURE OF RADIATED EMISSION TEST | 12 |
| 8.5 TEST RESULT OF RADIATED EMISSION TEST | 13 |
| APPENDIX 1 | 15 |
| PHOTOGRAPHS OF TEST SETUP | 15 |
| APPENDIX 2..... | 16 |
| PHOTOGRAPHS OF EUT | 16 |

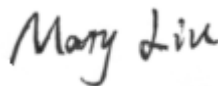
1. VERIFICATION OF COMPLIANCE

| | |
|---------------------------|--|
| Applicant: | Bess Mobile HK, Limited |
| | Unit 21 15/F Tuen Mun Central Square 22 Hoi Wing Rd., Tuen Mun New Territories, Hong Kong |
| Manufacturer: | Mastone Communication & Electronics Development Co., Ltd |
| | Unit B, 14F, Zhongke Bldg., South Dist., Shenzhen Hi-Tech Industrial Park, Shenzhen, China |
| Product Designation: | Mobile Phone |
| Brand name: | BESS |
| Model Name: | VZ219 |
| FCC ID: | ZE6-VZ219 |
| Measurement Procedure: | ANSI C63.4 |
| Report Number: | AGC01P110401F1 |
| Date of test: | May 3, 2011 to May 6, 2011 |
| Deviation: | None |
| Condition of Test Sample: | Normal |

The above equipment was tested by Attestation Of Global Compliance Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2003. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

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

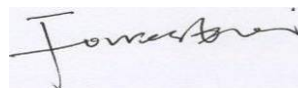
Checked By :



Mary Liu

May 7, 2011

Authorized By :



Forrest Lei

May 7, 2011

2. PRODUCT INFORMATION

Housing Type: Plastic

EUT Rating Voltage: DC 3.7V by battery(Charging by adapter)

Adapter Input AC100~240V,50/60Hz

Adapter Output DC4.2V,500mA

I/O Port Information (☒Applicable ☐Not Applicable)

| I/O Port of EUT | | | |
|-----------------|------|-------|-------------|
| I/O Port Type | Q'TY | Cable | Tested with |
| USB | 1 | N/A | 1 |
| DC Input | 1 | N/A | 1 |

3. TEST FACILITY

| | |
|------------------------------|--|
| Facility | Attestation of Global Compliance Co., Ltd. |
| Location: | 1F, No.2 Building, Huafeng No.1 Technical, Industrial Park, Sanwei, Xixiang, Baoan District, Shenzhen, China |
| Description: | The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2003. |
| Site Filing: | The FCC Registration Number is 259865 |
| Instrument Tolerance: | All measuring equipment is in accord with ANSI C63.4 requirements that meet industry regulatory agency and accreditation agency requirement. |

4. SUPPORT EQUIPMENT LIST

| Device Type | Manufacturer | Model Name | Serial No. | Data Cable | Power Cable |
|-------------|--------------|------------|------------|------------|--------------------|
| PC | Lenovo | X63H | N/A | N/A | 1.5m unshielded |

**Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

5. SYSTEM DESCRIPTION

EUT test procedure:

1. Connect EUT and peripheral devices
2. Power on the EUT, the EUT begins to work.
3. Make sure the EUT operates normally during the test.

Test Mode

1 USB

2 Charging

Note: Other function have been performed according to verification procedure except for Bluetooth,USB and MS function.

6 SUMMARY OF TEST RESULTS

| FCC Rules | Description Of Test | Result |
|-----------|---------------------|-----------|
| §15.107 | Conduction Emission | Compliant |
| §15.109 | Radiated Emission | Compliant |

7. FCC LINE CONDUCTED EMISSION TEST

7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST

| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
|-------------------|--------------|--------|------------|------------|------------|
| Spectrum Analyzer | Agilent | E4440A | N/A | 06/29/2010 | 06/28/2011 |
| EMI Test Receiver | H.P. | 8546A | N/A | 06/29/2010 | 06/28/2011 |
| LISN | EMCO | 3825/2 | N/A | 06/29/2010 | 06/28/2011 |

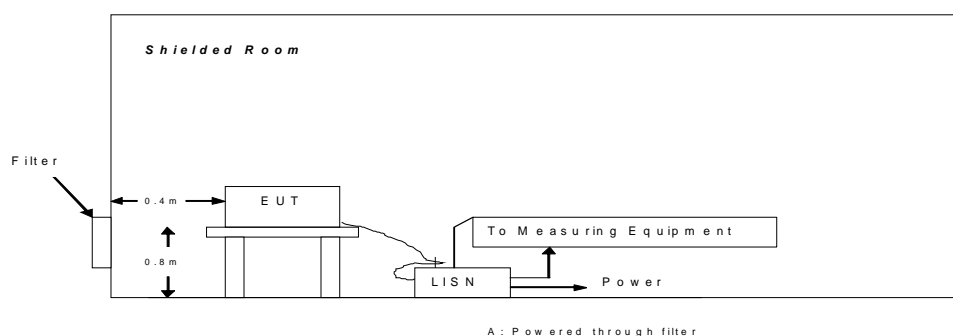
7.2 .LIMITS OF LINE CONDUCTED EMISSION TEST

| 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

7.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



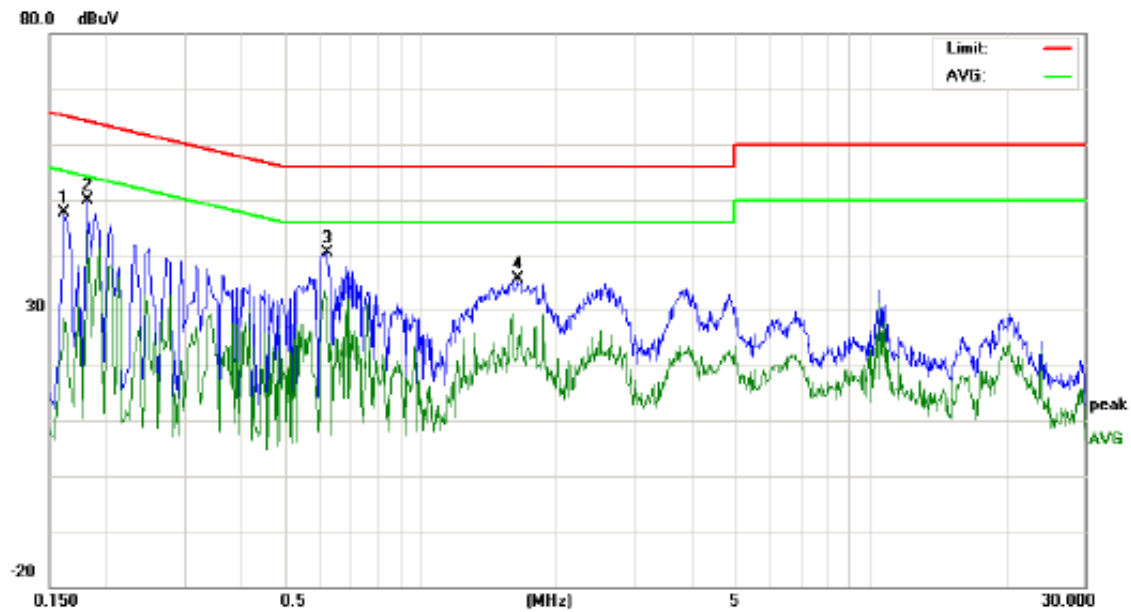
7.4. PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 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 ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a 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 ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V power by PC. All support equipments received AC 120V/60Hz power from socket under the turntable, if any.
- 5) 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.
- 6) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 7) During the above scans, the emissions were maximized by cable manipulation.
- 8) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.
- 9) 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.

7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION - L

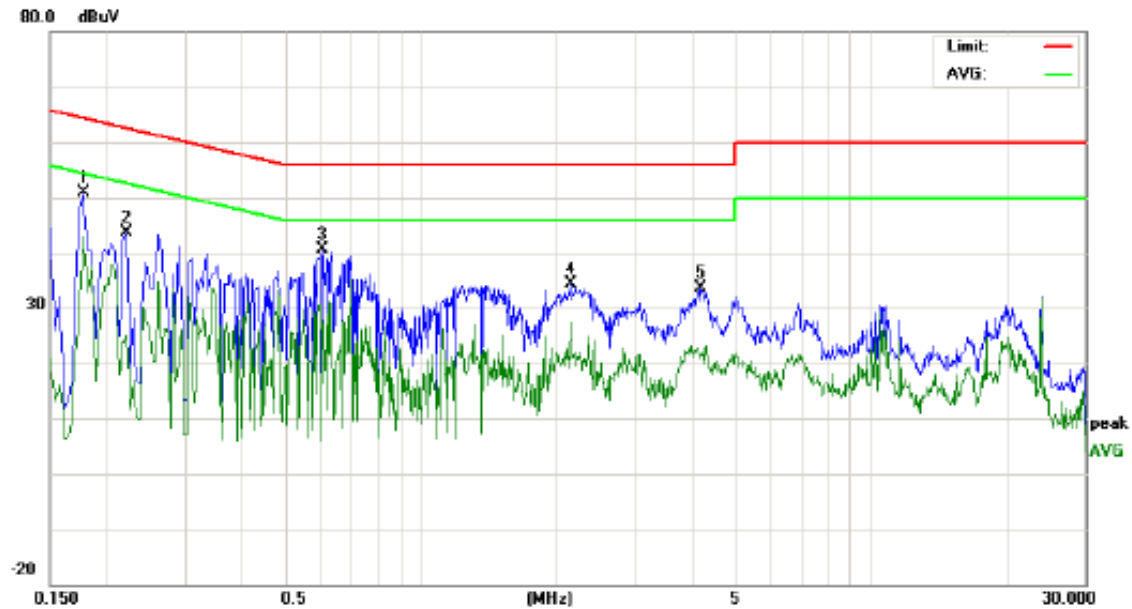


Site: Conduction
Limit: FCC Class B Conduction(QP)
EUT: Mobile Phone
M/N: VZ219
Mode:
Note:

Phase: **L1**
Power:
Temperature: 26
Humidity: 60 %

| No. | Freq. (MHz) | Reading_Level (dBuV) | | | Correct Factor | Measurement (dBuV) | | | Limit (dBuV) | | Margin (dB) | | P/F | Comment |
|-----|-------------|----------------------|----|-------|----------------|--------------------|----|-------|--------------|-------|-------------|--------|-----|---------|
| | | Peak | QP | AVG | | Peak | QP | AVG | QP | AVG | QP | AVG | | |
| 1 | 0.1620 | 37.37 | | 18.43 | 10.17 | 47.54 | | 28.60 | 65.36 | 55.36 | -17.82 | -26.76 | P | |
| 2 | 0.1819 | 39.72 | | 34.20 | 10.20 | 49.92 | | 44.40 | 64.39 | 54.39 | -14.47 | -9.99 | P | |
| 3 | 0.6220 | 30.00 | | 21.66 | 10.32 | 40.32 | | 31.98 | 56.00 | 46.00 | -15.68 | -14.02 | P | |
| 4 | 1.6460 | 25.34 | | 14.78 | 10.33 | 35.67 | | 25.11 | 56.00 | 46.00 | -20.33 | -20.89 | P | |

LINE CONDUCTED EMISSION – N



Site: Conduction
Limit: FCC Class B Conduction(QP)
EUT: Mobile Phone
M/N: VZ219
Mode:
Note:

Phase: **N**
Power:
Temperature: 26
Humidity: 60 %

| No. | Freq. (MHz) | Reading_Level (dBuV) | | | Correct Factor | Measurement (dBuV) | | | Limit (dBuV) | | Margin (dB) | | P/F | Comment |
|-----|----------------|-------------------------|----|-------|-------------------|-----------------------|----|-------|-----------------|-------|----------------|--------|-----|---------|
| | | Peak | QP | AVG | | Peak | QP | AVG | QP | AVG | QP | AVG | | |
| 1 | 0.1780 | 40.72 | | 32.59 | 10.19 | 50.91 | | 42.78 | 64.57 | 54.57 | -13.66 | -11.79 | P | |
| 2 | 0.2220 | 33.49 | | 14.83 | 10.24 | 43.73 | | 25.07 | 62.74 | 52.74 | -19.01 | -27.67 | P | |
| 3 | 0.6060 | 30.42 | | 16.18 | 10.31 | 40.73 | | 28.49 | 56.00 | 46.00 | -15.27 | -19.51 | P | |
| 4 | 2.1660 | 24.08 | | 17.07 | 10.29 | 34.37 | | 27.36 | 56.00 | 46.00 | -21.63 | -18.64 | P | |
| 5 | 4.2180 | 23.42 | | 10.48 | 10.33 | 33.75 | | 20.81 | 56.00 | 46.00 | -22.25 | -25.19 | P | |

8. FCC RADIATED EMISSION TEST

8.1. TEST EQUIPMENT OF RADIATED EMISSION

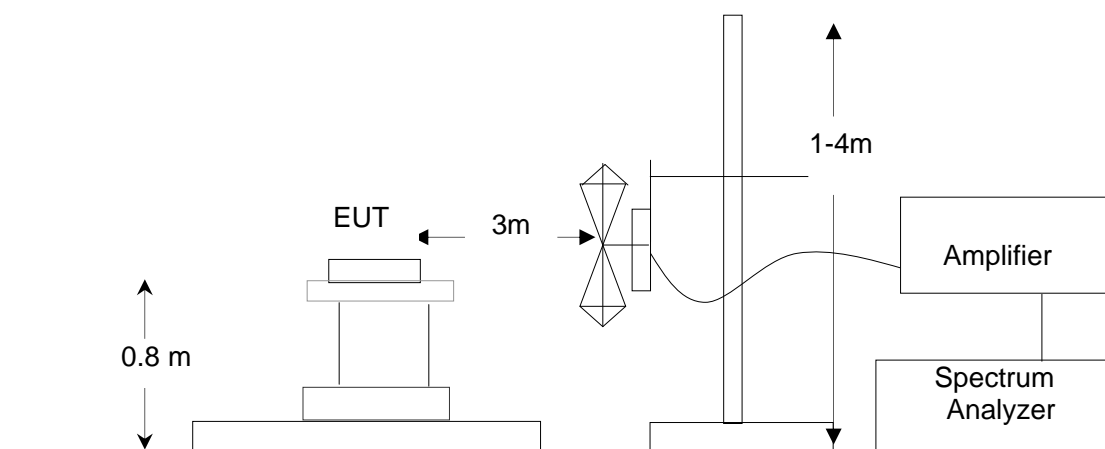
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
|---------------------------------|--------------|-------------|-------------|------------|------------|
| PSA SERIES SPECTRUM ANALYZER | AGILENT | E4440A | US41421290 | 06/29/2010 | 06/28/2011 |
| ANTENNA | A.H. | SAS-521-4 | 128 | 06/29/2010 | 06/28/2011 |
| HORN ANTENNA | EM | EM-AH-10180 | N/A | 06/29/2010 | 06/28/2011 |
| AMPLIFIER | EM | EM30180 | 0607030 | 06/29/2010 | 06/28/2011 |
| POSITIONING CONTROLLER | MF | MF-7802 | MF780208147 | 06/29/2010 | 06/28/2011 |

8.2. LIMITS OF RADIATED EMISSION TEST

| Frequency (MHz) | Distance (m) | Maximum Field Strength Limit (dBuV/m/ Q.P.) |
|--------------------|-----------------|--|
| 30~88 | 3 | 40.0 |
| 88~216 | 3 | 43.5 |
| 216~960 | 3 | 46.0 |
| Above 960 | 3 | 54.0 |

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

8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST

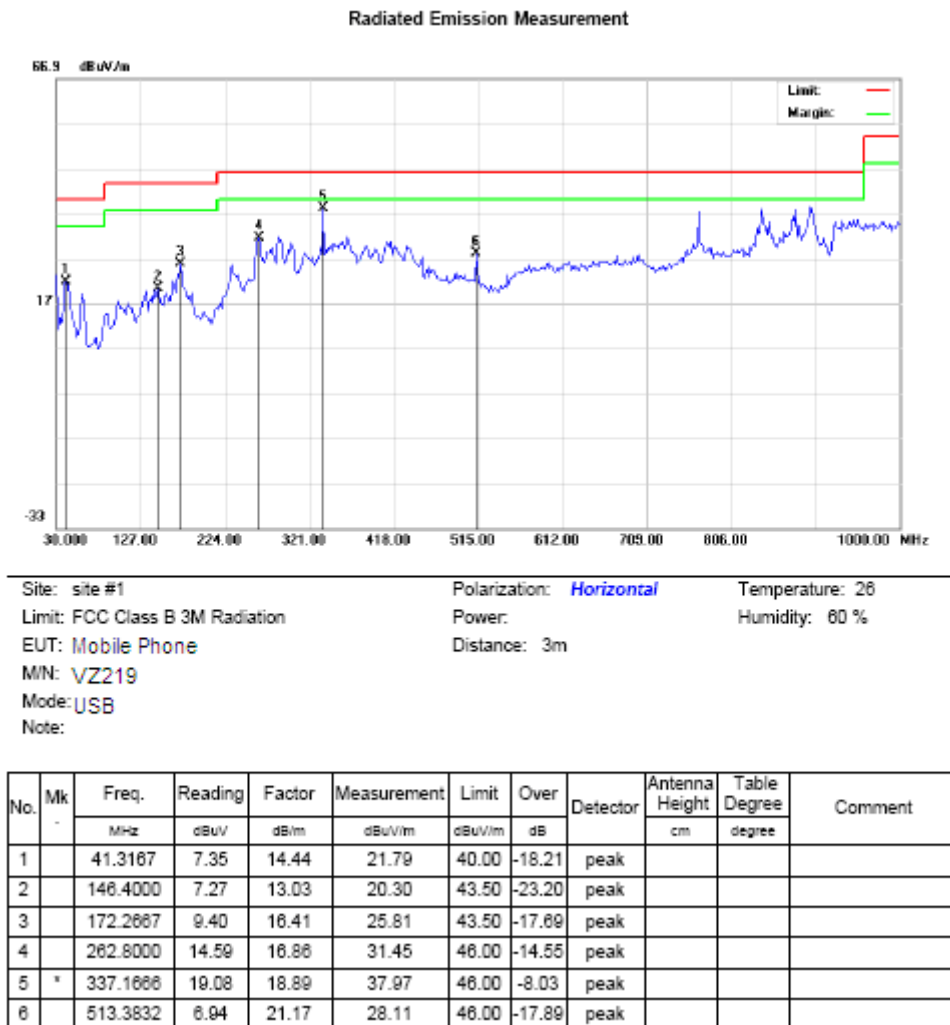


8.4 PROCEDURE OF RADIATED EMISSION TEST

- 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 turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (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 ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V by PC. All support equipments received AC 120V/60Hz power from socket under the turntable, if any.
- 5) The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 7) The test mode(s) were scanned during the test:
- 8) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and Q.P./Peak reading is presented.

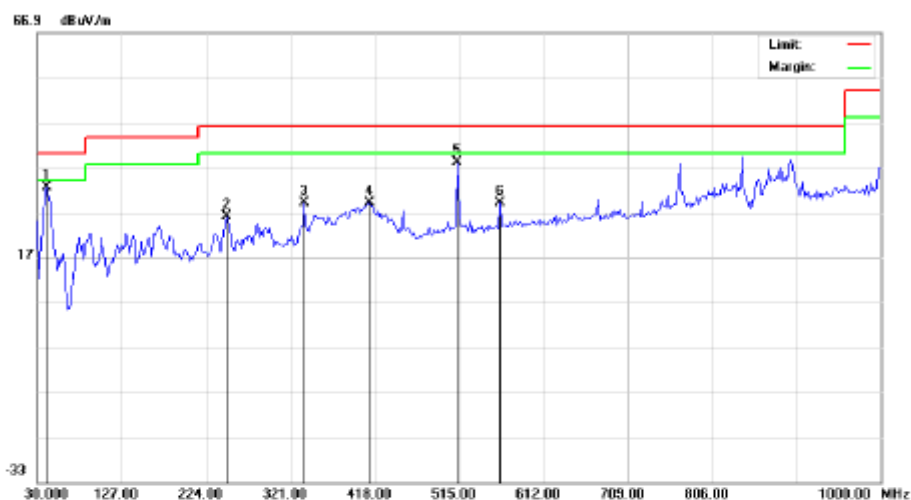
8.5 TEST RESULT OF RADIATED EMISSION TEST

Radiated Emission Test –Horizontal -3m



Radiated Emission Test –Vertical -3m

Radiated Emission Measurement



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: Mobile Phone
MN: VZ219
Mode: USB
Note:

Polarization: Vertical
Power:
Distance: 3m

Temperature: 26
Humidity: 60 %

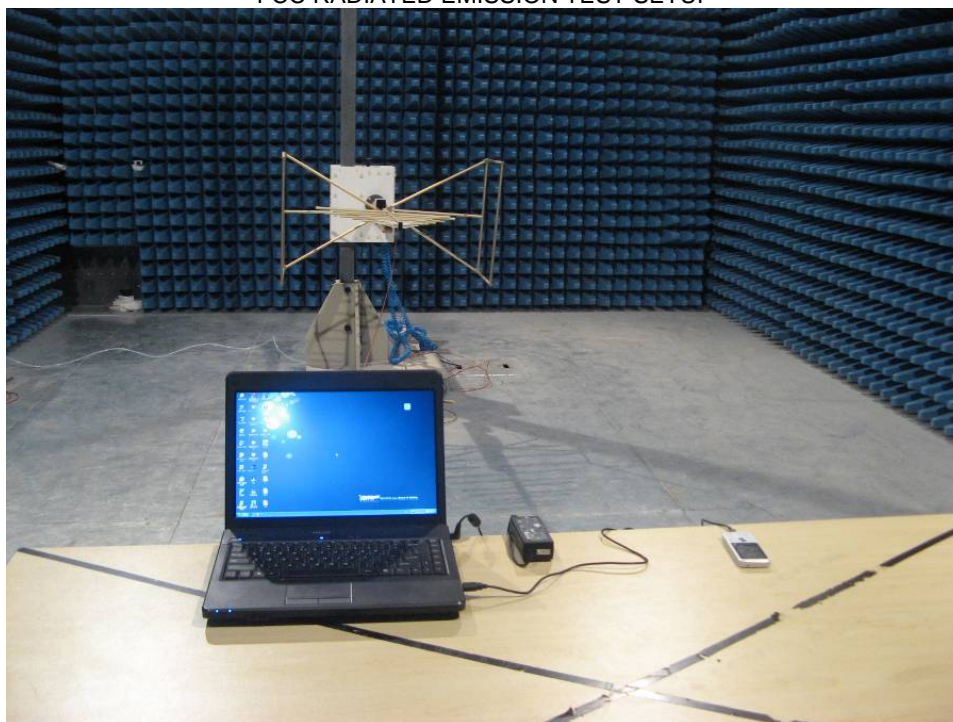
| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | | cm | degree | |
| 1 | * | 41.3167 | 22.44 | 10.21 | 32.65 | 40.00 | -7.35 | peak | | | |
| 2 | | 248.2500 | 8.86 | 17.23 | 26.09 | 46.00 | -19.91 | peak | | | |
| 3 | | 337.1666 | 10.07 | 18.89 | 28.96 | 46.00 | -17.04 | peak | | | |
| 4 | | 411.5333 | 7.73 | 21.18 | 28.91 | 46.00 | -17.09 | peak | | | |
| 5 | | 513.3832 | 14.86 | 23.18 | 38.04 | 46.00 | -7.96 | peak | | | |
| 6 | | 561.8832 | 4.88 | 24.07 | 28.95 | 46.00 | -17.05 | peak | | | |

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP



APPENDIX 2 PHOTOGRAPHS OF EUT

TOP VIEW OF SAMPLE



BOTTOM VIEW OF SAMPLE



LEFT VIEW OF SAMPLE



RIGHT VIEW OF SAMPLE



FRONT VIEW OF SAMPLE



BACK VIEW OF SAMPLE



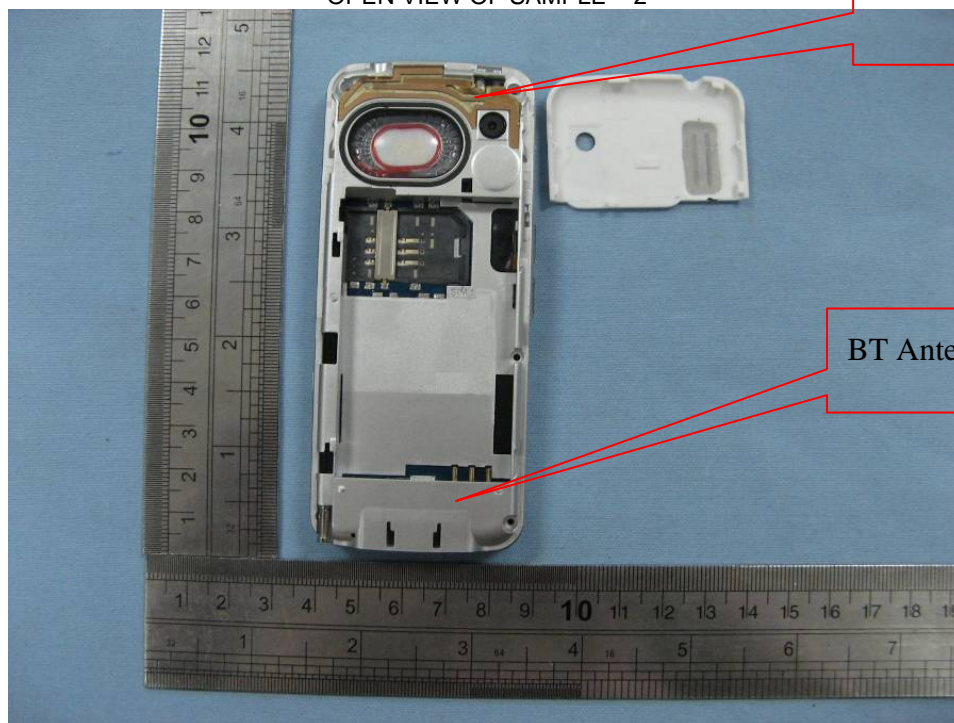
ALL VIEW OF SAMPLE



OPEN VIEW OF SAMPLE – 1



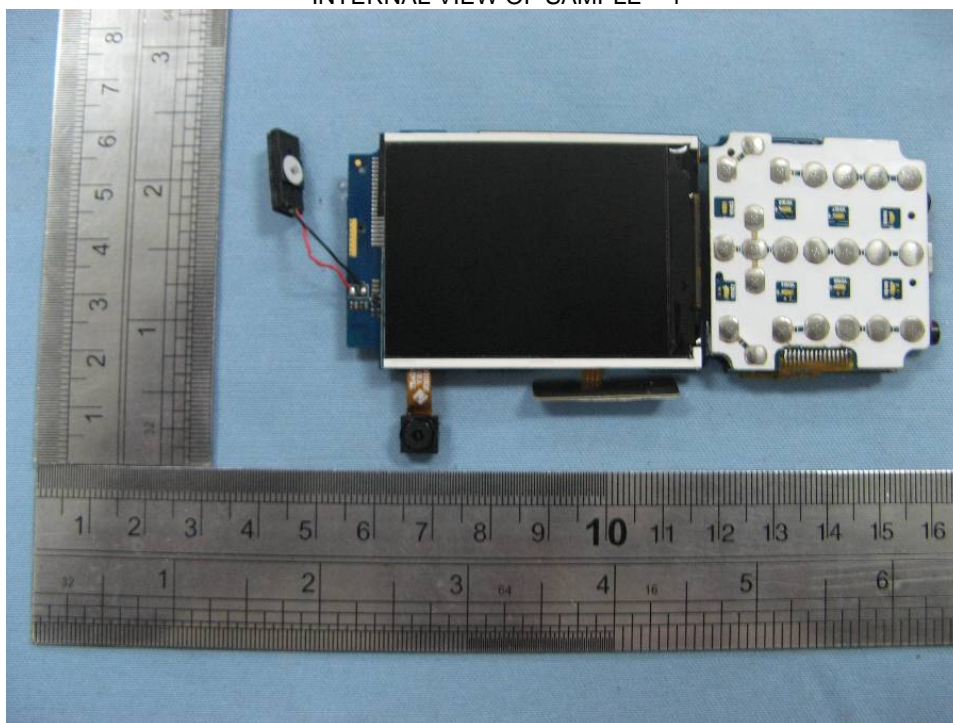
OPEN VIEW OF SAMPLE – 2



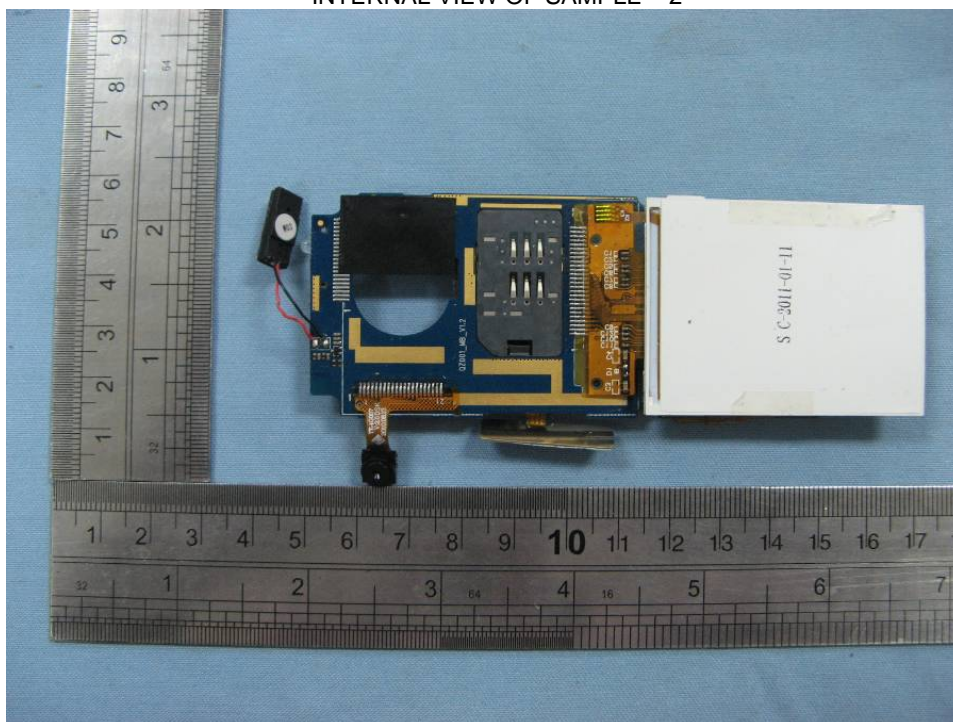
OPEN VIEW OF SAMPLE – 3



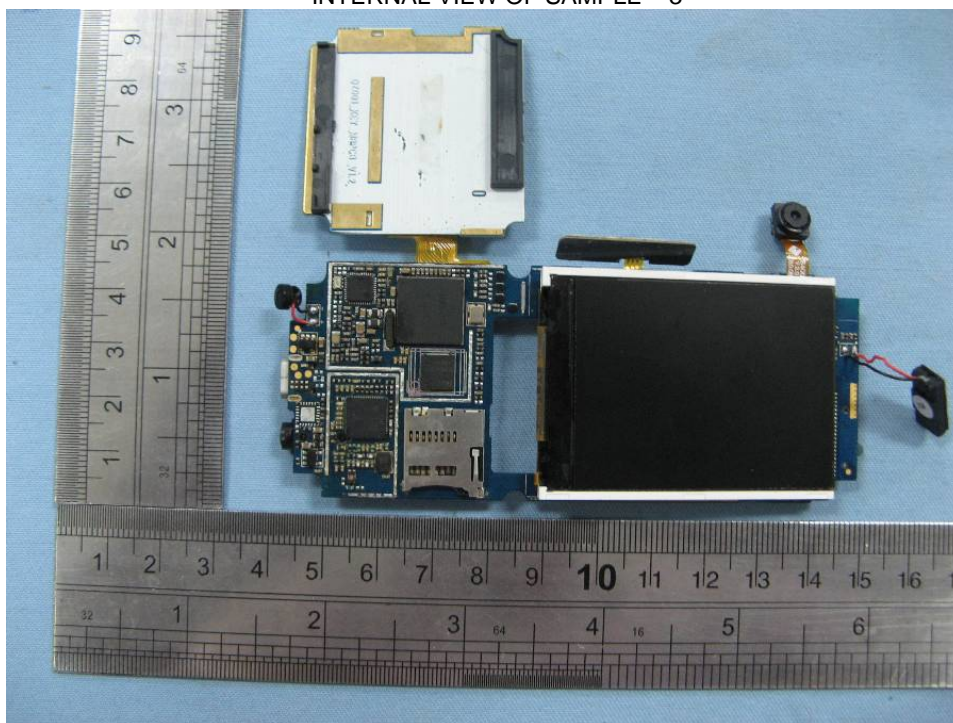
INTERNAL VIEW OF SAMPLE – 1



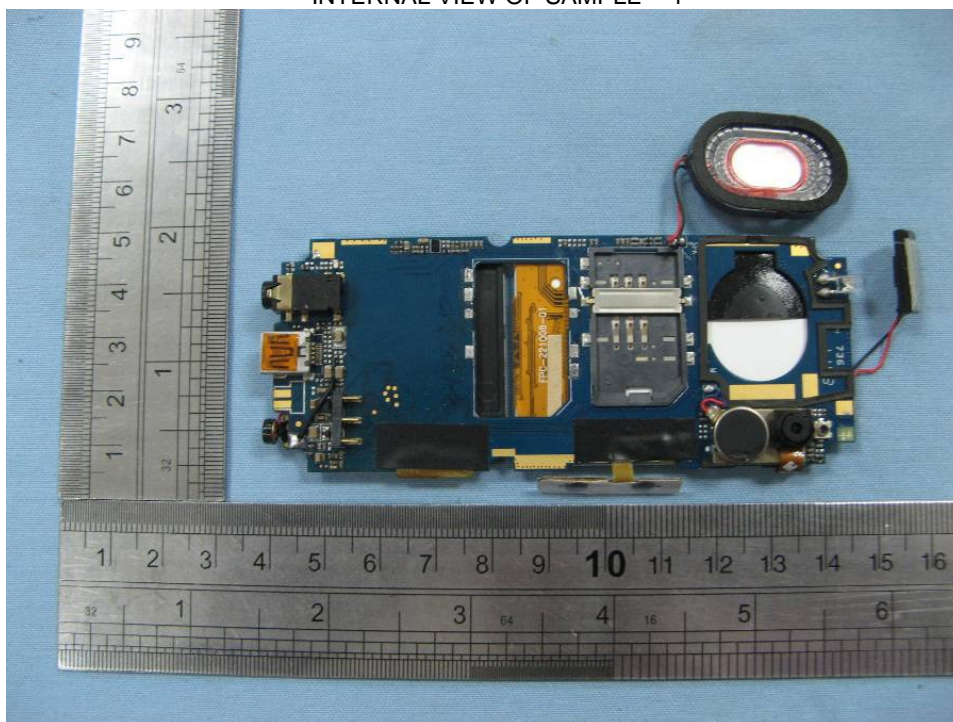
INTERNAL VIEW OF SAMPLE – 2



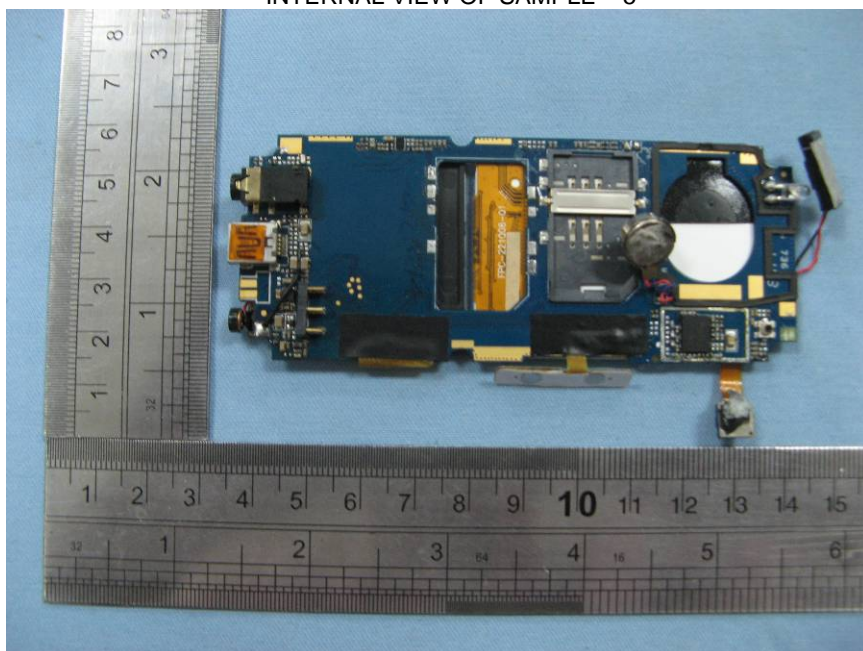
INTERNAL VIEW OF SAMPLE – 3



INTERNAL VIEW OF SAMPLE – 4



INTERNAL VIEW OF SAMPLE – 5



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