CE

# EMC TEST REPORT

## For

**SHENZHEN LISAIER TRONICS CO., LTD.**

Headphone & Earphone

Model No.: HP-2850

| | | |
|---|---|---|
| Prepared for | : | **SHENZHEN LISAIER TRONICS CO., LTD.** |
| Address | : | **NO.22, XIHU INDUSTRIAL PARK, XIKENG, HENGGANG TOWN, LONGGANG DISTRICT, SHENZHEN CITY, GUANGDONG, CHINA** |
| Prepared by | : | **Shenzhen BEL Technology Co., Ltd.** |
| Address | : | **415# ChuangYe Building, No.7 ChuangYe 2 Road, 24 District Bao'an , Shenzhen Guangdong China** |

| | | |
|---|---|---|
| Report Number | : | BEL201000008478 |
| Date of Test | : | May. 25-May. 31 , 2010 |
| Date of Report | : | May. 31 , 2010 |

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# TEST REPORT DECLARATION

Applicant : SHENZHEN LISAIER TRONICS CO., LTD.

Manufacturer : SHENZHEN LISAIER TRONICS CO., LTD.

EUT Description : HEADPHONE & EARPHONE

MODEL No. : **HP-2850**

Test Procedure Used:

EMC : EN55013:2001+A1:2003+A2:2006
EN 61000-3-2 (2006);
EN 61000-3-3 (1995) + A1 (2001)+A2(2005)
EN55020:2007

The device described above is tested by Shenzhen BEL Technology Co., Ltd.. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and EUT is performance criterion. The test results are contained in this test report. Shenzhen BEL Technology Co., Ltd.. is assumed of full responsibility for the accuracy and completeness of these teBEL. Also, this report shows that the EUT is technically compliant with the EN55013, EN61000-3-2, EN61000-3-3 and EN55020.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen BEL Technology Co., Ltd..

Date of Test: May. 25-May. 31 , 2010

Prepared by(Engineer) : Allen

Reviewer(Quality Manager) : Randy

SHENZHEN BEL TECHNOLOGY CO. LTD. APPROVED

Approved&Authorized Signer(Manager) : Davis

# 1.GENERAL INFORMATION

## 1.1 Description of Device (EUT)

| | | |
|---|---|---|
| EUT | : | **HEADPHONE & EARPHONE** |
| Model Number | : | HP-2850 |
| Power Supply | : | N/A |
| Applicant | : | SHENZHEN LISAIER TRONICS CO., LTD. |
| Address | : | NO.22, XIHU INDUSTRIAL PARK, XIKENG, HENGGANG TOWN, LONGGANG DISTRICT, SHENZHEN CITY, GUANGDONG, CHINA |
| Manufacturer | : | SHENZHEN LISAIER TRONICS CO., LTD. |
| Address | : | NO.22, XIHU INDUSTRIAL PARK, XIKENG, HENGGANG TOWN, LONGGANG DISTRICT, SHENZHEN CITY, GUANGDONG, CHINA |
| Date of receiver | : | May.31 , 2010 |
| Date of Test | : | May. 25-May.31 , 2010 |

## 1.2 Test Facility

Site Description

Chamber &Shielded room : Certificated by FCC
Registration Number: 248337
December 07, 2006

Certificated by VCCI
Registration Number: R-2482
February 9, 2004
Certificated by TUV Rheinland
Registration Number: N/A
January 16, 2007
Certificated by IC
Registration Number: 117715
November 07, 2006
Certificated by Intertek
Registration Number: TMPSHA031
November 10, 2006

Name of Firm : Shenzhen BEL Technology Co., Ltd

Site Location : 415# ChuangYe Building, No.7 ChuangYe 2 Road, 24 District Bao ' an ,Shenzhen Guangdong China

## 1.3Test Uncertainty

Conducted Emission Uncertainty ： ±2.66dB

Radiated Emission Uncertainty ： ±4.26dB

## 1.4The EUT were investigated with one operation mode as below:

(1) Working Mode

(2) The worst test mode of EMC test is Working Mode

And the final test data were shown on this test report.

# 2. TEST INSTRUMENT USED

## 2.1 For Conducted Emission Test

| **Conducted Emission Test** ( A --- site) | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **MODEL#** | **SERIAL#** | **LASTCAL.** | **NEXT CAL.** |
| EMI Receiver | Schwarzbeck | PCKL1528 | 1528-194 | Jul 05,2009 | Jul 05, 2010 |
| LISN | Kyoritsu | KNW407 | 8-1789-4 | Feb 26,2010 | Feb 26, 2011 |
| Spectrum Analyzer | ADVANTENT | R3132 | 160400093 | Feb 17,2010 | Feb 17, 2011 |
| 50Ω coaxial switch | Anritsu | MP59B | 6200264417 | Feb 15,2010 | Feb 15,2011 |
| Pulse Limiter | R&S | ESH3-Z2 | 100681 | Jul 07,2009 | Jul 07,2010 |

## 2.2 For Radiated Emission Test

| **Radiation Emission Test** (966 chamber) | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **MODEL#** | **SERIAL#** | **LASTCAL.** | **NEXT CAL.** |
| Spectrum Analyzer | ADVANTENT | R3132 | 160400005 | Feb 12, 2010 | Feb 12, 2011 |
| Headphone & Earphone | Tsj | MLA-10K-B01-27 | 1205323 | Feb 12, 2010 | Feb 12, 2011 |
| Antenna | Schwarzbeck | VULB9160 | 9160-3206 | Jul 05, 2009 | Jul 05, 2010 |
| EMI Receiver | Schaffner | SCR3501 | 235 | Jul 20,2009 | Jul 20,2010 |
| Regulated Power supply | Schaffner | NT41 | 16216 | Jul 20,2009 | Jul 20,2010 |
| 50Ω coaxial switch | Anritsu | MP59B | 6200264416 | Feb 15,2010 | Feb 15,2011 |

## 2.3 For Harmonic & Flicker Test

| For Harmonic / Flicker Test ( A --- site) |
|---|

| Equipment | Manufacturer | MODEL# | SERIAL# | LASTCAL. | NEXT CAL. |
|---|---|---|---|---|---|
| Harmonic / Flicker Tester | Schaffner | CCN 1000-1 | 72472 | Jul 23, 2009 | Jul 23, 2010 |
| Power source | Schaffner | NSG 1007-5-208-413 | 57227 | Jul 23, 2009 | Jul 23, 2010 |

## 2.4 For Electrostatic Discharge Immunity Test

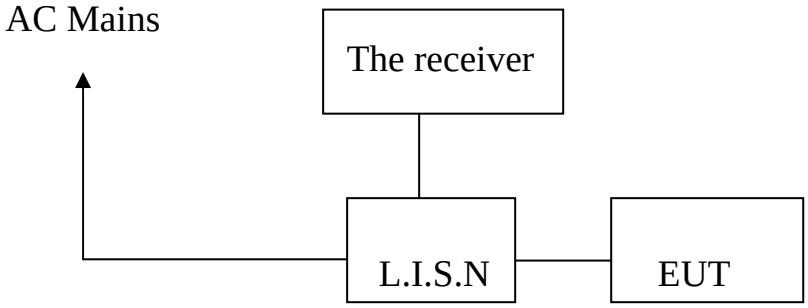
| For Electrostatic Discharge Immunity Test ( A --- site ) | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **MODEL#** | **SERIAL#** | **LASTCAL.** | **NEXT CAL.** |
| ESD Simulator | SCHAFFNER | NSG 435 | 5866 | Feb 08, 2010 | Feb 08, 2011 |

## 2.5 For RF Field Strength Susceptibility Test

| For RF Field Strength Susceptibility Test ( A --- site ) | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **MODEL#** | **SERIAL#** | **LASTCAL.** | **NEXT CAL.** |
| Signal Generator | HP | 8648A | 3625U00573 | May 29, 2010 | May 29, 2011 |
| Headphone & Earphone | A&R | 500A100 | 17034 | NCR | NCR |
| Headphone & Earphone | A&R | 100W/1000M1 | 17028 | NCR | NCR |
| Audio Analyzer (20Hz~1000KHz) | Panasonic | 2023B | 202301/428 | May 29, 2010 | May 29, 2011 |
| Isotropic Field Probe | A&R | FP2000 | 16755 | May 29, 2010 | May 29, 2011 |
| Antenna | EMCO | 3108 | 9507-2534 | NCR | NCR |
| Log-periodic Antenna | A&R | AT1080 | 16812 | NCR | NCR |

# 3. POWER LINE CONDUCTED EMISSION TEST

## 3.1.Block Diagram of Test Setup




## 3.2.Test Standard

EN55013:2006

## 3.3.Power Line Conducted Emission Limit

| Frequency MHz | Limits dB(μV) | |
|---|---|---|
| | Quasi-peak Level | Average Level |
| 0.15 ~ 0.50 | 66 ~ 56* | 56 ~ 46* |
| 0.50 ~ 5.00 | 56 | 46 |
| 5.00 ~ 30.00 | 60 | 50 |

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

## 3.4.EUT Configuration on Test

The following equipments are installed on conducted emission test to meet EN55013 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1 Headphone & Earphone(EUT)

Model Number : HP-2850

Serial Number : N/A

## 3.5.Operating Condition of EUT

3.5.1 Setup the EUT and simulators as shown in Section 3.1.
3.5.2 Turn on the power of all equipments.
3.5.3 Let the EUT work in test modes (On) and test it.

## 3.6.Test Procedure

The EUT is put on the ground and connected to the AC mains through a Artificial Mains Network (AMN). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the EN55013 regulations during conducted emission test.

The bandwidth of the test receiver (Schwarzbeck Test Receiver PCKL1528) is set at 10KHz.

The frequency range from 150 KHz to 30 MHz is investigated.
The test data and the scanning waveform are listed in Section 3.7 .

## 3.7.Power Line Conducted Emission Test Results

**PASSED.**

The frequency range 150KHz to 30MHz is investigated.

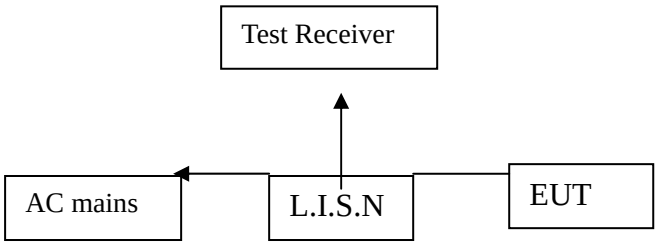
| | | | |
|---|---|---|---|
| EUT: | HEADPHONE & EARPHONE | Temperature: | 24℃ |
| M/N: | HP-2850 | Humidity: | 50% |
| Test Mode: | Working Mode | Test Engineer: | Allen |

Radiated emission test

# 4. CONDUCTION TEST

## 4.1 Block Diagram of Test Setup

### 4.1.1 Block Diagram of EUT Test Setup




## 4.2 Test Standard

EN55013:2006

## 4.3EUT Configuration on Test

The EN55013 regulations test method must be used to find the maximum emission during radiated emission test.

The configuration of EUT is the same as used in conducted emission test.
Please refer to Section 3.4.

## 4.4 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 3.5 except the test set up replaced as Section 4.1.

## 4.5 Test Procedure

The EUT is placed on the ground and away from other metallic surface at least0.4m. It is connected to the power mains through an extension cord of 6m min.The absorber clamps the cord and moves from the far end to the EUT to measure the disturbing energy emitted from the cord.
The bandwidth of the test receiver(R&S ESVS30) is set at 120kHz

All the test results are listed in Section 4.6.

## 4.6 Disturbance Power Test Result

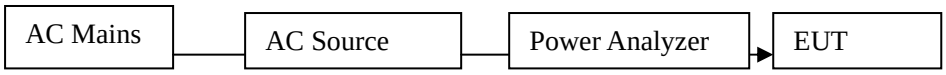
**PASSED.**

The frequency spectrum from 30 MHz to 300MHz is investigated.

| | | | |
|---|---|---|---|
| EUT: | HEADPHONE & EARPHONE | Temperature: | 24℃ |
| M/N: | HP-2850 | Humidity: | 50% |
| Test Mode: | Working Mode | Test Engineer: | Allen |

# 5.HARMONIC CURRENT EMISSION TEST

## 5.1 Block Diagram of Test Setup




(EUT:Headphone & Earphone)

## 5.2 Harmonics Test Standard

EN 61000-3-2:2006

## 5.3 EUT Configuration on Test

The following equipments are installed on Harmonics test to meet EN61000-3-2：2006, requirement and operating in a manner which tends to maximize its emission characteristics in a normal application

The configuration of EUT is the same as used in conducted emission test.
Please refer to Section 3.4.

## 5.4 Operating Condition of EUT

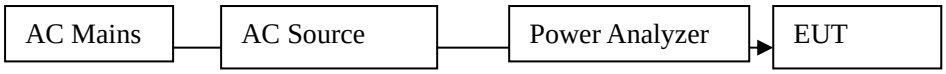
Same as conducted emission test, which is listed in Section 3.5 except the test set up replaced as Section 5.1.

## 5.5 Block Diagram of Test Setup

**PASSED.**

# 6. VOLTAGE FLUCTUATIONS & FLICKER TEST

## 6.1.Block Diagram of EUT Test Setup




(EUT:Headphone & Earphone)

## 6.2.Voltage Fluctuations & Flicker Test Standard

**EN 61000-3-3:1995 + A1: 2001+A2:2005**

## 6.3.EUT Configuration on Test

The following equipments are installed on Voltage Fluctuations & Flicker test to meet EN 61000-3-3:1995 + A1: 2001+A2:2005, requirement and operating in a manner which tends to maximize its emission characteristics in a normal application

The configuration of EUT is the same as used in conducted emission test.
Please refer to Section 3.4.

## 6.4.Operating Condition of EUT

Same as conducted emission test, which is listed in Section 3.5 except the test set up replaced as Section 6.1.

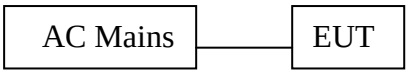
## 6.5.Test Results

**PASSED.**

# 7. ELECTROSTATIC DISCHARGE IMMUNITY TEST

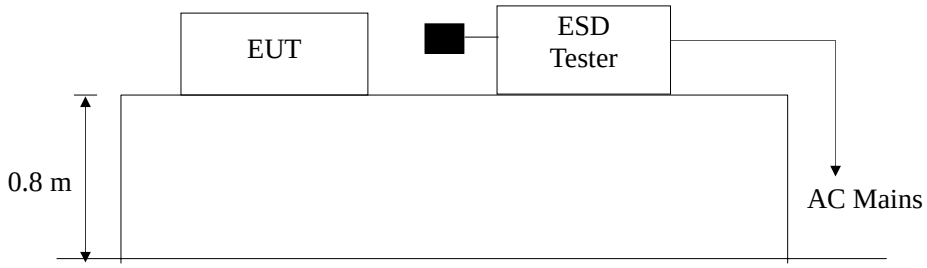
## 7.1 Block Diagram of Test Setup

### 7.1.1.Block Diagram of the EUT and the simulators




(EUT:Headphone & Earphone)

### 7.1.2. Test Setup




## 7.2 Test Standard

EN55020: 1997+A1: 2001+A2: 2007, (IEC 61000-4-2: 2001)

Severity Level: 3 / Air Discharge:±8KV
Level: 2 / Contact Discharge:±4KV

## 7.3 Severity Levels and Performance Criterion

### 7.3.1 Severity level

| Level | Test Voltage Contact Discharge (KV) | Test Voltage Air Discharge (KV) |
|---|---|---|
| 1. | ±2 | ±2 |
| 2. | ±4 | ±4 |
| 3. | ±6 | ±8 |

| | | |
|---|---|---|
| 4. | ±8 | ±15 |
| X | Special | Special |

7.3.2 Performance criterion **: B**

The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.

The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.

Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

## 7.4 EUT Configuration

The following equipments are installed on Electrostatic Discharge Immunity test to meet EN55020: 1997+A1: 2001+A2: 2003, (IEC 61000-4-2: 2001), requirement and operating in a manner which tends to maximize its emission characteristics in a normal application

The configuration of EUT is the same as used in conducted emission test.
Please refer to Section 3.4.

## 7.5 Operating Condition of EUT

Same as conducted emission measurement, which is listed in Section3.5 except the test set up replaced by Section 7.1.

## 7.6 Test Procedure

### 7.6.1 Air Discharge**:**

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

### 7.6.2 Contact Discharge**:**

All the procedure shall be same as Section 7.6.1. Except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

### 7.6.3 Indirect discharge for horizontal coupling plane

At least 10 single discharges (in the most sensitive polarity) shall be applied at the front edge of

each HCP opposite the center point of each unit (if applicable) of the EUT and 0.1m from the front of the EUT. The long axis of the discharge electrode shall be in the plane of the HCP and perpendicular to its front edge during the discharge.

### 7.6.4 Indirect discharge for vertical coupling plane

At least 10 single discharges (in the most sensitive polarity) shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

## 7.7 Test Results

**PASSED.**

Please refer to the following pages.

# Electrostatic Discharge Test Results

## Shenzhen BEL Technology Co., Ltd.

| | | | |
|---|---|---|---|
| Applicant : | **SHENZHEN LISAIER TRONICS CO., LTD.** | Test Date : | May. 27, 2010 |
| EUT : | HEADPHONE & EARPHONE | Temperature: | 24℃ |
| M/N : | HP-2850 | Humidity : | 49% |
| Power Supply : | N/A | | |
| Test Engineer : | Allen | | |

Air Discharge: ± 8KV

Contact Discharge: ± 4KV # For each point positive 25 times and negative 25 times discharge

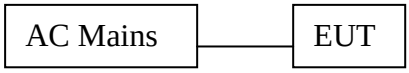
| Test Points | Air Discharge | Contact Discharge | Performance Criterion | Result |
|---|---|---|---|---|
| Others Slot of the EUT | ±2,4,8KV | N/A | A | PASSED |
| Panel | ±2,4,8KV | N/A | A | PASSED |
| Screw | ±2,4,8KV | N/A | A | PASSED |
| Case | ±2,4,8KV | ±2,4 KV | A | PASSED |
| VCP | N/A | ±2,4 KV | A | PASSED |
| HCP | N/A | ±2,4 KV | A | PASSED |

Note:N/A

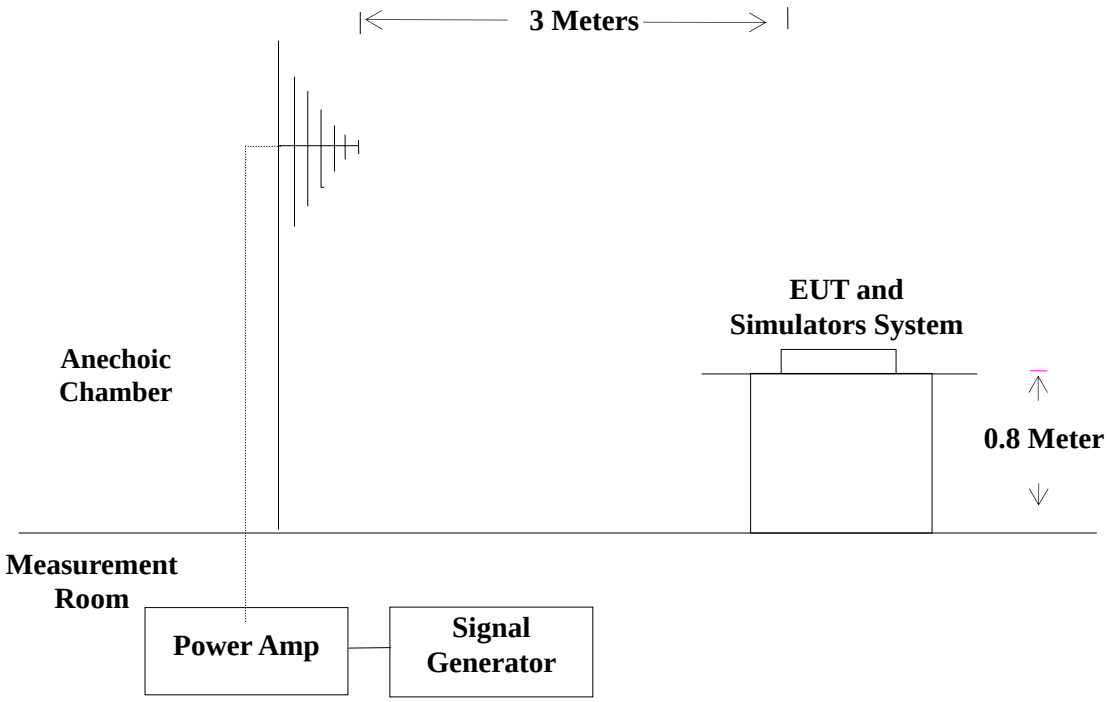
# 8.RF EM FIELD (KEY CARRIER) TEST

## 8.1 Block Diagram of Test Setup

### 8.1.1.Block Diagram of the EUT and the simulators




### 8.1.2. R/S Test Setup




## 8.2 Test Standard

EN55013:2001+A1:2003+A2:2006 (IEC 61000-4-3/A1:1998,A2:2002),
Severity Level2, 3V / m

## 8.3 Severity Levels and Performance Criterion

### 8.3.1.Severity level

| Level | Field Strength V/m |
|---|---|
| 1. | 1 |
| 2. | 3 |
| 3. | 10 |
| X. | Special |

### 8.3.2. **Performance criterion: A**

The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.

The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.

A、 Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

## 8.4 Operating Condition of EUT

Same as conducted emission measurement, which is listed in Section3.5 except the test set up replaced by Section 8.1.

## 8.5 Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. EUT is set 3 meter away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.

All the scanning conditions are as follows :

| Condition of Test | Remarks |
|---|---|
| Fielded Strength | 3 V/m (Severity Level 2) |
| Radiated Signal | Modulated |
| Scanning Frequency | 80 – 1000 MHz |
| Dwell time of radiated | 0.0015 decade/s |
| Waiting Time | 1 Sec. |

## 8.6Test Results

**PASSED.**

Please refer to the following page.

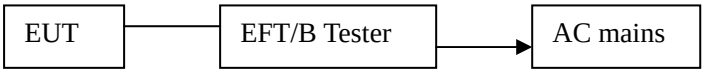
# RF EM Field (Key Carrier) Test Results

## Shenzhen BEL Technology Co., Ltd.

| | | | |
|---|---|---|---|
| | | | |
| Applicant: **SHENZHEN LISAIER TRONICS CO., LTD.** | | | Test Date : May. 27, 2010 |
| EUT : Headphone & Earphone | | | Temperature : 24℃ |
| M/N : HP-2850 | | | Humidity : 50% |
| Field Strength: 3 V/m | | | Criterion: A |
| Power Supply: N/A | | | Frequency Range: 80 MHz to 1000 MHz |
| Test Engineer: Allen | | | |
| Modulation: ☑ AM ☐ Pulse ☐none 1 KHz 80% | | | |
| Test Mode **:** working mode | | | |
| | Frequency Range : 80-1000MHz | | |
| Steps | 1 % | | |
| | Horizontal | Vertical | Result |
| Front | A | A | Passed |
| Right | A | A | Passed |
| Rear | A | A | Passed |
| Left | A | A | Passed |
| Note:N/A | | | |

# 9. ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST

## 9.1 Block Diagram of EUT Test Setup




## 9.2 Test Standard

EN55020: 1997+A1: 2007 (IEC 61000-4-4: 2004)

## 9.3 Severity Levels and Performance Criterion

Severity Level 2 at 1KV, Pulse Rise time & Duration: 5 nS / 50 nS
Severity Level:

| Open Circuit Output Test Voltage ±10% | | |
|---|---|---|
| Level | On Power Supply Lines | On I/O(Input/Output) Signal data and control lines |
| 1. | 0.5KV | 0.25KV |
| 2. | 1KV | 0.5KV |
| 3. | 2KV | 1KV |
| 4. | 4KV | 2KV |
| X. | Special | Special |

**Performance criterion: B**

A. The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.

B. The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however

allowed.

C. Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

## 9.4 EUT Configuration on Test

The configuration of EUT is the same as used in conducted emission test.
Please refer to Section 3.4.

## 9.5 Operating Condition of EUT

Same as conducted emission measurement, which is listed in Section3.5 except the test set up replaced by Section 9.1.

## 9.6 Test Procedure

EUT shall be placed 0.8m high above the ground reference plane which is a min.1m*1m metallic sheet with 0.65mm minimum thickness. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m

### 9.6.1. For input and output AC power ports:

The EUT is connected to the power mains by using a coupling device which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration of the test is 2 minutes.

### 9.6.2. For signal lines and control lines ports:

It's unnecessary to measure.

### 9.6.3. For DC input and DC output power ports:

For DC ports .It's unnecessary to measure

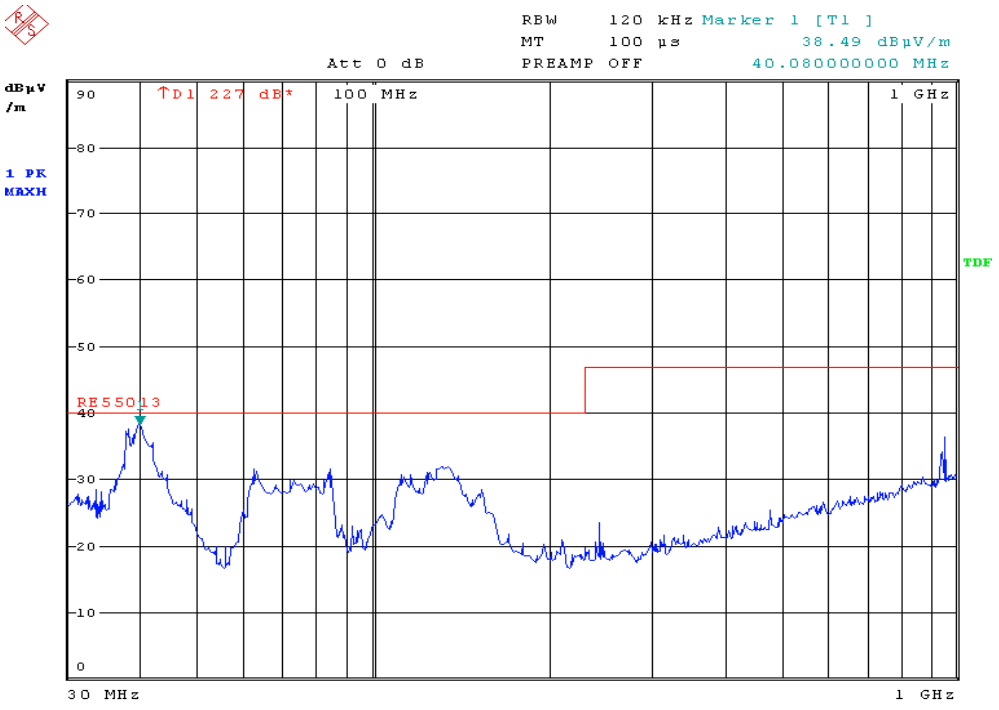
## 9.7 Test Results

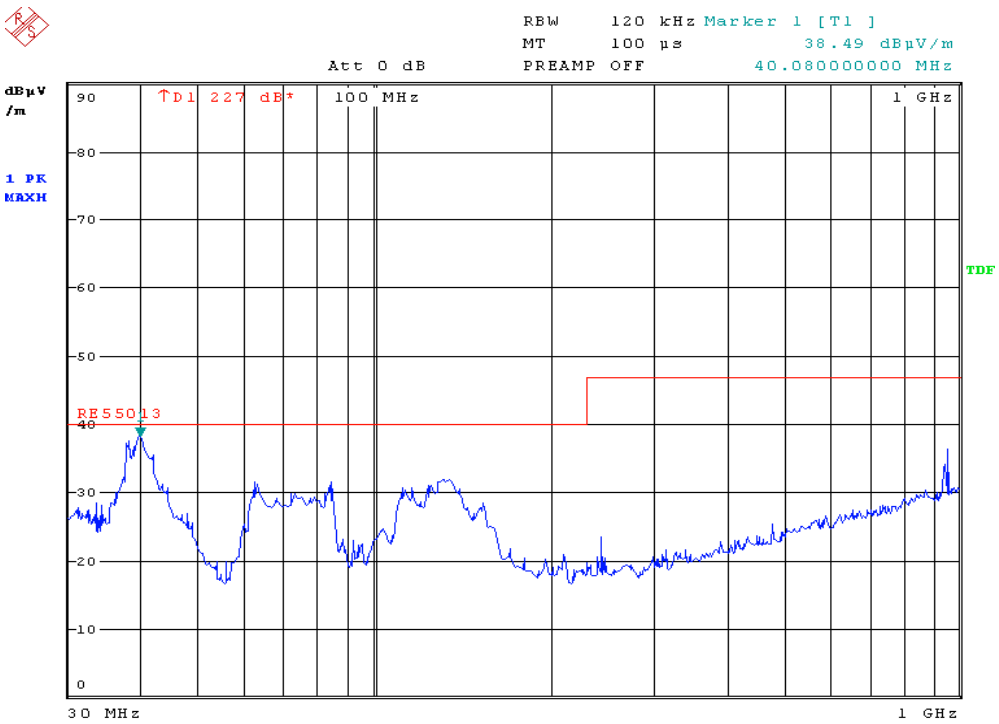
**N/A.**
Please refer to the following pages

| | | | |
|---|---|---|---|
| EUT**:** | HEADPHONE & EARPHONE | Temperature**:** | 24℃ |
| M/N**:** | HP-2850 | Humidity**:** | 52% |
| Test Mode**:** | Working Mode | Test Engineer**:** | Allen |

| TEST VOLTAGE | L | N | L+N |
|---|---|---|---|
| ±0.5KV | B | B | B |
| ±1KV | B | B | B |

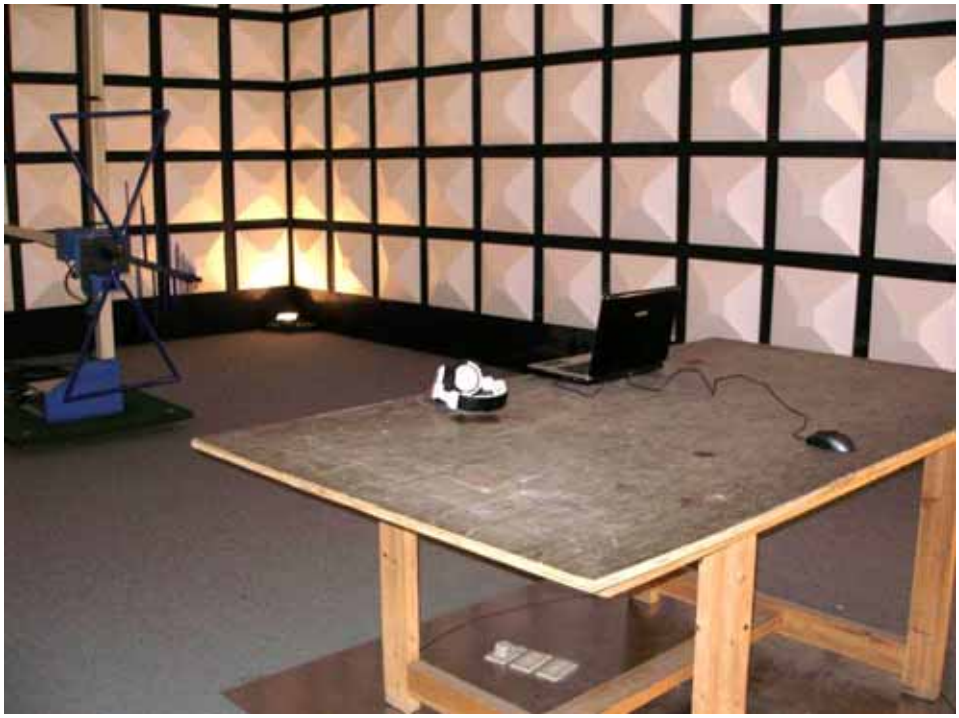
# 10.APPENDIX I Test Curves



# 11.APPENDIX II EUT PHOTO

# 12.EUT TEST PHOTO



# APPENDIX I
# MODEL NAME DESCRIPTION

Adding model:

| | | | | | |
|---|---|---|---|---|---|
| **HP2840V** | **HP2050** | **HP2060** | **HP-2070** | **HP-2080** | **HP-2390V** |
| **HP-2391V** | **HP-2392V** | **HP-2393V** | **HP-2394V** | **HP-2395V** | **HP-2396V** |
| **HP-2397V** | **HP-2398V** | **HP-2399V** | **HP-2370V** | **HP-2371** | **HP-2372V** |
| **HP-2373V** | **HP-2374V** | **HP-2375V** | **HP-2376V** | **HP-2377V** | **HP-2378V** |
| **HP-2379V** | **HP-2133V** | **HP-2134V** | **HP-2144V** | **HP-2155V** | **HP-2166V** |
| **HP-2177V** | **HP-2188V** | **HP-2199V** | **HP-2000V** | **HP-2020V** | **HP-2158** |
| **HP-2360V** | **HP-3200V** | **HP-2500V** | **HP-2600V** | **HP-2700V** | **HP-2800V** |
| **HP-2900V** | **HP-2889V** | **HP-2750V** | **HP-2338V** | **HP-2829V** | **HP-2819V** |
| **HP-8601V** | **HP-8602V** | **HP-8603V** | **HP-8604V** | **HP-8605V** | **HP-8606V** |
| **HP-8607V** | **HP-8608V** | **HP-8609V** | **HP-2133MV** | **HP-2134MV** | **HP-2144MV** |
| **HP-2020MV** | **HP-2371MV** | **HP-2415M** | **HP-2413M** | **HP-2188MV** | **HP-2199MV** |
| **HP-2829MV** | **HP-2750MV** | **HP-2630MV** | **HP-2640MV** | **HP-2650MV** | **HP-2660MV** |
| **HP-2670MV** | **HP-2680MV** | **HP-2690MV** | **HP-2751** | **HP-2752** | **HP-2753** |
| **HP-2754** | **HP-2755** | **HP-2756** | **HP-2757** | **HP-2758** | **HP-2759** |
| **HP-2761** | **HP-2762** | **HP-2763** | **HP-2764** | **HP-2765** | **HP-2766** |
| **HP-2767** | **HP-2768** | **HP-2769** | **HP-2771** | **HP-2772** | **HP-2773** |
| **HP-2774** | **HP-2775** | **HP-2776** | **HP-2777** | **HP-2778** | **HP-2779** |
| **HP-2780** | **HP-2781** | **HP-2782** | **HP-2783** | **HP-2784** | **HP-2785** |
| **HP-2786** | **HP-2787** | **HP-2788** | **HP-2789** | | |

**※※※※※ END OF REPORT ※※※※※**