

## EMC TEST REPORT

For

Powerbank with earbuds

Test Model:

Prepared for :  
Address :

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.  
Address : Room 101, 201, Building A and Room 301, Building C, Juji  
Industrial Park, Yabianxueziwei, Shajing Street, Bao'an  
District, Shenzhen, Guangdong, China

Tel : (+86)755-82591330  
Fax : (+86)755-82591332  
Web : www.LCS-cert.com  
Mail : webmaster@LCS-cert.com

Date of receipt of test sample : June 12, 2020  
Number of tested samples : 1  
Serial number : Prototype  
Date of Test : June 12, 2020 ~ June 19, 2020  
Date of Report : June 22, 2020



**EMC TEST REPORT****EN 55032: 2015**

Electromagnetic compatibility of multimedia equipment - Emission Requirements

**EN 55035: 2017**

Electromagnetic compatibility of multimedia equipment – Immunity requirements

**Report Reference No. .... : LCS200608113AE****Date of Issue..... : June 22, 2020****Testing Laboratory Name..... : Shenzhen LCS Compliance Testing Laboratory Ltd.****Address..... : Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao' an District, Shenzhen, Guangdong, China****Testing Location/ Procedure.... : Full application of Harmonised standards ■  
Partial application of Harmonised standards □  
Other standard testing method □****Applicant's Name..... :****Address..... :****Test Specification****Standard..... : EN 55032: 2015  
EN 55035: 2017****Test Report Form No..... : LCSEMC-1.0****TRF Originator..... : Shenzhen LCS Compliance Testing Laboratory Ltd.****Master TRF..... : Dated 2011-03****Shenzhen LCS Compliance Testing Laboratory Ltd. All rights reserved.**

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen LCS Compliance Testing Laboratory Ltd. is acknowledged as copyright owner and source of the material. Shenzhen LCS Compliance Testing Laboratory Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

**Test Item Description..... : Powerbank with earbuds****Trade Mark..... : N/A****Test Model..... :****Ratings ..... : Please Refer to Page 9****Result ..... : Positive****Compiled by:**

Cindy Nie

**Supervised by:**

Jason Deng

**Approved by:**

Cindy Nie/ File administrators

Jason Deng / Technique principal

Gavin Liang/ Manager

## EMC -- TEST REPORT

**Test Report No. : LCS200608113AE**June 20, 2020  
Date of issue

Test Model..... : XO-9873

EUT..... : Powerbank with earbuds

**Applicant**..... :

Address..... :

Telephone..... :

Fax..... :

**Manufacturer**.....

Address..... :

Telephone..... :

Fax..... :

**Factory**.....

Address..... :

Telephone..... :

Fax..... :

**Test Result****Positive**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Revision	Issue Date	Revisions	Revised By
000	June 22, 2020	Initial Issue	Gavin Liang

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2020-07-10. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

TABLE OF CONTENTS

Test Report Description	Page
<b>1. TEST STANDARDS.....</b>	<b>6</b>
<b>2.SUMMARY OF STANDARDS AND RESULTS.....</b>	<b>7</b>
2.1. DESCRIPTION OF STANDARDS AND RESULTS.....	7
2.2. DESCRIPTION OF PERFORMANCE CRITERIA.....	8
<b>3. GENERAL INFORMATION.....</b>	<b>9</b>
3.1. DESCRIPTION OF DEVICE (EUT).....	9
3.2. DESCRIPTION OF TEST FACILITY.....	9
3.3. SUPPORT EQUIPMENT LIST.....	9
3.4. STATEMENT OF THE MEASUREMENT UNCERTAINTY.....	10
3.5. MEASUREMENT UNCERTAINTY.....	10
<b>4. MEASURING DEVICES AND TEST EQUIPMENT.....</b>	<b>11</b>
<b>5.TEST RESULTS.....</b>	<b>12</b>
5.1. RADIATED EMISSION MEASUREMENT.....	12
5.2. ELECTROSTATIC DISCHARGE IMMUNITY TEST.....	14
5.3. RF FIELD STRENGTH SUSCEPTIBILITY TEST.....	16
<b>ANNEX A.....</b>	<b>19</b>
<b>ANNEX B.....</b>	<b>21</b>
<b>ANNEX C.....</b>	<b>26</b>

## 1. TEST STANDARDS

The tests were performed according to following standards:

EN 55032: 2015 Electromagnetic compatibility of multimedia equipment - Emission Requirements

EN 55035: 2017 Electromagnetic compatibility of multimedia equipment – Immunity requirements

## 2.SUMMARY OF STANDARDS AND RESULTS

### 2.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

Emission (EN 55032: 2015)			
Description of Test Item	Standard	Limits	Results
Conducted disturbance at mains terminals	EN 55032: 2015	Class B	N/A
Conducted disturbance at telecommunication port	EN 55032: 2015	Class B	N/A
Radiated disturbance	EN 55032: 2015	Class B	PASS
Harmonic current emissions	EN 61000-3-2: 2014	Class A	N/A
Voltage fluctuations & flicker	EN 61000-3-3: 2013	-----	N/A
Immunity (EN 55035: 2017)			
Description of Test Item	Basic Standard	Performance Criteria	Results
Electrostatic Discharge (ESD)	EN 61000-4-2: 2009	B	PASS
Radio-frequency, Continuous Radiated Disturbance	EN 61000-4-3: 2006+A2: 2010	A	PASS
Electrical Fast Transient (EFT)	EN 61000-4-4: 2012	B	N/A
Surge (Input a.c. Power Ports)	EN 61000-4-5: 2014+A1: 2017	B	N/A
Surge (Telecommunication Ports)		B	N/A
Radio-frequency, Continuous Conducted Disturbance	EN 61000-4-6: 2014	A	N/A
Power Frequency Magnetic Field	EN 61000-4-8: 2010	A	PASS
Voltage Dips, >95% Reduction	EN 61000-4-11: 2004+A1: 2017	B	N/A
Voltage Dips, 30% Reduction		C	N/A
Voltage Interruptions		C	N/A
***Note: N/A is an abbreviation for Not Applicable.			

**Test mode:**

Mode 1	Discharging	Record
Mode 2	Charging	Pre-scan

\*\*\*Note: All test modes were tested, but we only recorded the worst case in this report.

## 2.2. Description of Performance Criteria

### General Performance Criteria

Examples of functions defined by the manufacturer to be evaluated during testing include, but are not limited to, the following:

- essential operational modes and states;

#### 2.2.1. Performance criterion A

The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacture when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

#### 2.2.2. Performance criterion B

After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacture, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance.

During the test, degradation of performance is allowed. However, no change of operation state or stored data is allowed to persist after the test.

If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

#### 2.2.3. Performance criterion C

Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacture's instructions.

Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.



### 3. GENERAL INFORMATION

#### 3.1. Description of Device (EUT)

EUT : Powerbank with earbuds

Trade Mark : N/A

Test Model : XO-9873

Power Supply : DC 5V

Highest internal frequency (Fx)	Highest measured frequency
$F_x \leq 108 \text{ MHz}$ $108 \text{ MHz} < F_x \leq 500 \text{ MHz}$ $500 \text{ MHz} < F_x \leq 1 \text{ GHz}$ $F_x > 1 \text{ GHz}$	1 GHz 2 GHz 5 GHz $5 \times F_x$ up to a maximum of 6 GHz
NOTE 1 For FM and TV broadcast receivers, Fx is determined from the highest frequency generated or used excluding the local oscillator and tuned frequencies. Where Fx is unknown, the radiated emission measurements shall be performed up to 6 GHz.	

#### 3.2. Description of Test Facility

FCC Registration Number is 254912.

Industry Canada Registration Number is 9642A.

ESMD Registration Number is ARCB0108.

UL Registration Number is 100571-492.

TUV SUD Registration Number is SCN1081.

TUV RH Registration Number is UA 50296516-001

NVLAP Registration Code is 600167-0.

#### 3.3. Support Equipment List

Manufacturer	Description	Model	Serial Number	Certificate
/	/	/	/	/

### 3.4. Statement of The Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

### 3.5. Measurement Uncertainty

Test	Parameters	Expanded Uncertainty ( $U_{lab}$ )	Expanded Uncertainty ( $U_{cisp}$ )
Conducted Emission	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	$\pm 2.63$ dB $\pm 2.35$ dB	$\pm 3.8$ dB $\pm 3.4$ dB
Power Disturbance	Level accuracy (30MHz to 300MHz)	$\pm 2.90$ dB	$\pm 4.5$ dB
Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	$\pm 3.60$ dB	$\pm 3.3$ dB
Radiated Emission	Level accuracy (9kHz to 30MHz)	$\pm 3.68$ dB	N/A
Radiated Emission	Level accuracy (30MHz to 1000MHz)	$\pm 3.48$ dB	$\pm 5.3$ dB
Radiated Emission	Level accuracy (above 1000MHz)	$\pm 3.90$ dB	$\pm 5.2$ dB
Mains Harmonic	Voltage	$\pm 0.510\%$	N/A
Voltage Fluctuations & Flicker	Voltage	$\pm 0.510\%$	N/A
EMF	/	$\pm 21.59\%$	N/A
1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus. 2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.			

## 4. MEASURING DEVICES AND TEST EQUIPMENT

### Radiated Disturbance

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Software	EZ	ZE-EMC	/	N/A	N/A
2	3m Fully Anechoic Chamber	MRDIANZI	FAC-3M	MR009	2019-09-27	2020-09-26
3	Positioning Controller	MF	MF-7082	/	2020-06-11	2021-06-10
4	By-log Antenna	SCHWARZBE	VULB9163	9163-470	2019-07-25	2020-07-24
5	Horn Antenna	SCHWARZBE	BBHA 9120D	9120D-1925	2019-07-01	2020-06-30
6	EMI Test Receiver	R&S	ESR 7	101181	2020-06-11	2021-06-10
7	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2019-11-14	2020-11-13
8	Broadband Preamplifier	phx	BP-01M18G	P190501	2019-07-01	2020-06-30
9	RF Cable-R03m	Jye Bao	RG142	CB021	2020-06-11	2021-06-10
10	RF Cable-HIGH	SUHNER	SUCOFLEX	03CH03-HY	2020-06-11	2021-06-10
11	WIDEBAND RADIO	R&S	CMW 500	103818	2020-06-10	2021-06-09

### RF ELECTROMAGNETIC FIELD

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	RS Test Software	Tonscend	/	/	N/A	N/A
2	ESG Vector Signal Generator	Agilent	E4438C	MY4208139	2019-11-14	2020-11-13
3	3m Fully Anechoic Chamber	MRDIANZI	FAC-3M	MR009	2019-09-27	2020-09-26
4	RF POWER AMPLIFIER	OPHIR	5225R	1052	NCR	NCR
5	RF POWER AMPLIFIER	OPHIR	5273F	1019	NCR	NCR
6	RF POWER AMPLIFIER	SKET	HAP_0306G-5	--	NCR	NCR
7	Stacked Broadband Log Periodic	SCHWARZBE	STLP 9128	9128ES-145	NCR	NCR
8	Stacked Mikrowellen Log.-Per	SCHWARZBE	STLP 9149	9149-484	NCR	NCR
9	Electric field probe	Narda	EP601	611WX8020	2020-03-24	2021-03-23

### ELECTROSTATIC DISCHARGE

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	ESD Simulator	SCHLODER	SESD 230	604035	2020-06-12	2021-06-11
2	WIDEBAND RADIO	R&S	CMW 500	103818	2020-06-10	2021-06-09

### MAGNETIC FIELD SUSCEPTIBILITY TEST

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Power frequency mag-field generator System	EVERFINE	EMS61000-8K	906003	2020-06-10	2021-06-09

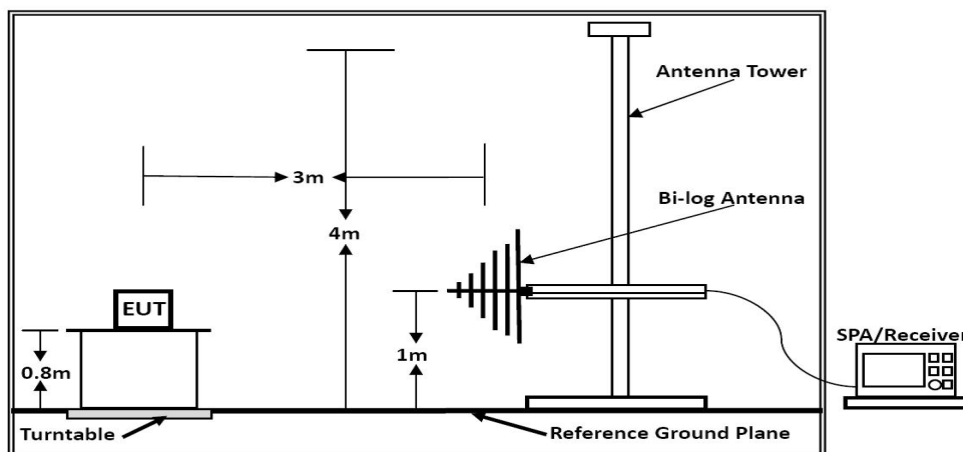
Note: All equipment is calibrated through CHINA CEPREI LABORATORY and GUANGZHOU LISAI CALIBRATION AND TEST CO., LTD.

NCR --- No calibration requirement.

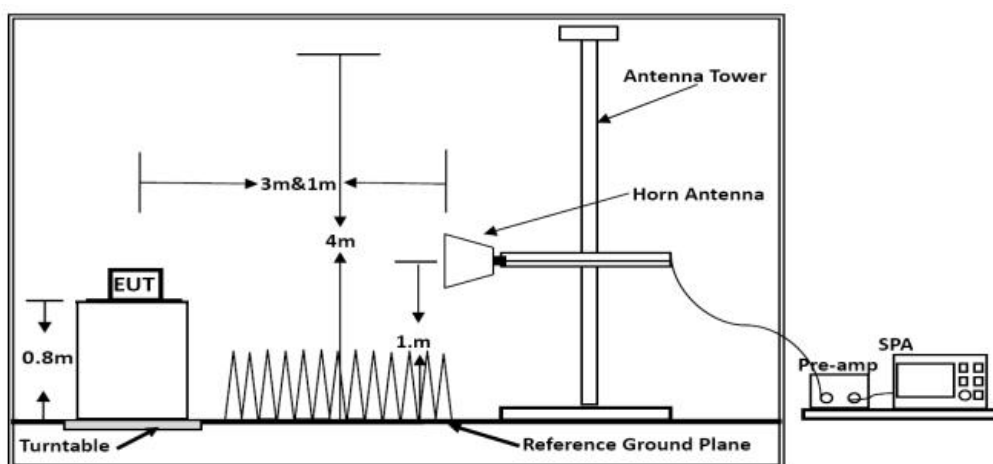
## 5. TEST RESULTS

### 5.1. RADIATED EMISSION MEASUREMENT

#### 5.1.1. Block Diagram of Test Setup



Below 1GHz



Above 1GHz

### 5.1.2. Test Standard

EN 55032: 2015 Class B

All emanations from a class B device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Limits for Radiated Emission Below 1GHz			
Frequency (MHz)	Distance (Meters)	Field Strengths Limit (dBμV/m)	
30 ~ 230	3	40	
230 ~ 1000	3	47	
***Note: (1) The smaller limit shall apply at the combination point between two frequency bands. (2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.			
Limits for Radiated Emission Above 1GHz			
Frequency (MHz)	Distance (Meters)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)
1000 ~ 3000	3	70	50
3000 ~ 6000	3	74	54
***Note: The lower limit applies at the transition frequency.			

### 5.1.3. EUT Configuration on Test

The EN 55032 regulations test method must be used to find the maximum emission during emission measurement.

### 5.1.4. Operating Condition of EUT

5.1.4.1. Turn on the power.

5.1.4.2. Let the EUT work in the test mode 1 and measure it.

### 5.1.5. Test Procedure

The EUT is placed on a turntable, which is 0.8 meter high above the ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. By-log antenna is used as a receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.

The bandwidth of the EMI test receiver is set at RBW/VBW=120kHz/300kHz.

The frequency range from 30MHz to 1000MHz is checked.

The bandwidth of the Spectrum analyzer is set at RBW/VBW=1MHz/3MHz.

The frequency range from 1GHz to the frequency which about 5th carrier harmonic or 6GHz is checked.

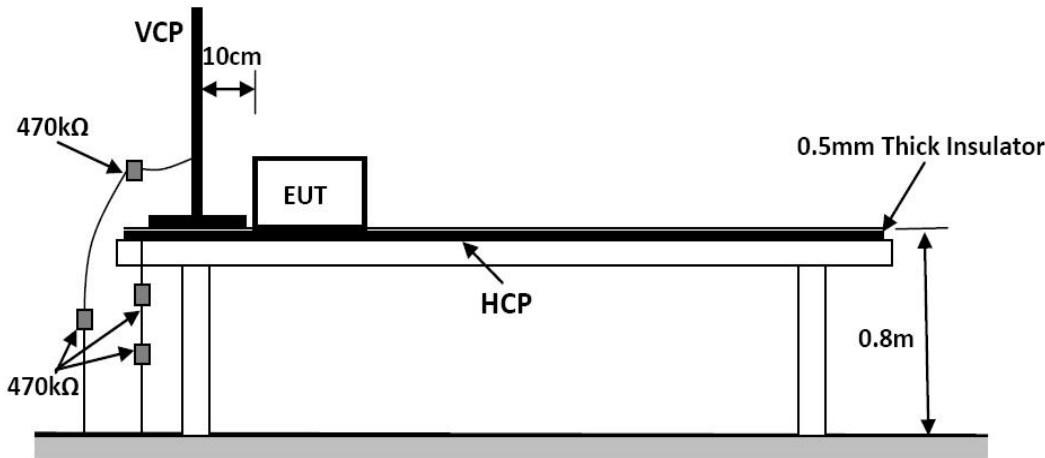
### 5.1.6. Test Results

**PASS.**

Refer to attached Annex B.1

5.2. ELECTROSTATIC DISCHARGE IMMUNITY TEST

5.2.1. Block Diagram of Test Setup



5.2.2. Test Standard

EN 55035: 2017 (EN 61000-4-2: 2009, Severity Level: 3 / Air Discharge: ±8KV, Level: 2 / Contact Discharge: ±4KV)

5.2.3. Severity Levels and Performance Criterion

5.2.3.1. 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

5.2.3.2. Performance Criterion

Performance Criterion: B

5.2.4. EUT Configuration on Test

The configuration of EUT is listed in Section 5.2.1.

5.2.5. Operating Condition of EUT

Same as radiated emission measurement, which is listed in Section 5.1.4. Except the test set up replaced by Section 5.2.1.

### 5.2.6. Test Procedure

#### 5.2.6.1. Air Discharge

This test is done on a non-conductive surfaces. The round discharge tip of the Electrostatic Discharge simulator shall be approached as fast as possible then to touch the EUT. After each discharge, the simulator shall be removed from the EUT. The simulator 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

#### 5.2.6.2. Contact Discharge

All the procedure shall be same as air discharge, except using the acute discharge tip. The top end of the Electrostatic Discharge simulator is touch the EUT all the time when the simulator is re-triggered for a new single discharge and repeated 10 times for each pre-selected test point.

#### 5.2.6.3. Indirect Discharge For Horizontal Coupling Plane

The vertical coupling plane(VCP) is placed 0.1m away from EUT. The top end of Electrostatic Discharge simulator should aim at the center of one border of the VCP for at least 25 times discharge.

#### 5.2.6.4. Indirect Discharge For Vertical Coupling Plane

The top end of Electrostatic Discharge simulator should place at the point 0.1m away from EUT on the horizontal coupling plane(HCP). At least 25 times discharge should be done for every pre-selected point around EUT.

Record any performance degradation of the EUT during the test and judge the test result according to ce criterion.

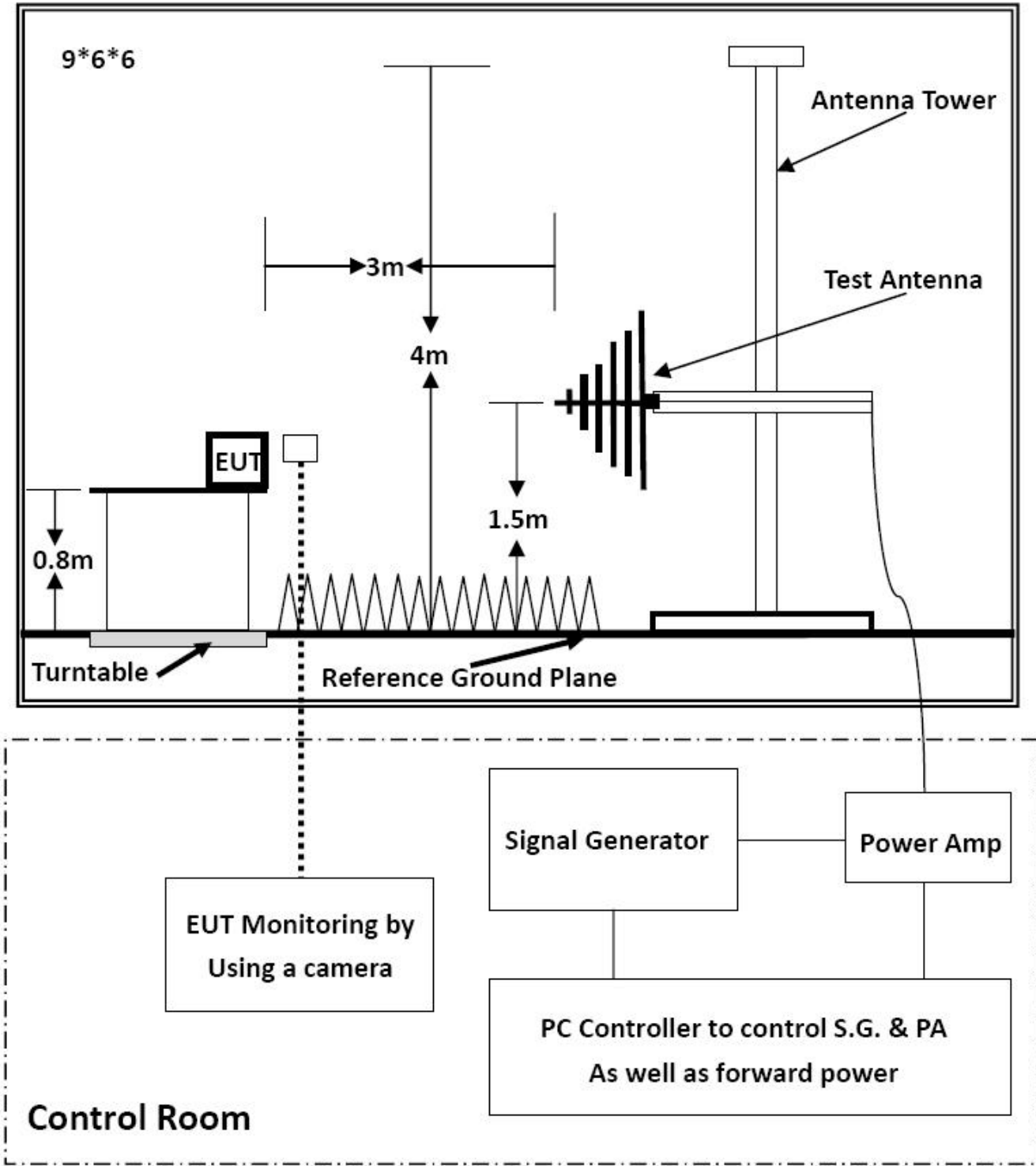
### 5.2.7. Test Results

**PASS.**

Refer to attached Annex B.2

5.3. RF FIELD STRENGTH SUSCEPTIBILITY TEST

5.3.1. Block Diagram of Test Setup





### 5.3.2. Test Standard

EN 55035: 2017 (EN 61000-4-3: 2006+A2: 2010 Severity Level: 2, 3V/m)

### 5.3.3. Severity Levels and Performance Criterion

#### 5.3.3.1. Severity level

Level	Field Strength (V/m)
1	1
2	3
3	10
X	Special

#### 5.3.3.2. Performance Criterion

Performance Criterion: A

### 5.3.4. EUT Configuration on Test

The configuration of EUT is listed in Section 5.3.1.

### 5.3.5. Operating Condition of EUT

Same as radiated emission measurement, which is listed in Section 5.1.4, except the test setup replaced as Section 5.3.1.

### 5.3.6. Test Procedure

The EUT are placed on a table, which is 0.8 meter high above the ground. The EUT is set 3 meters away from the transmitting antenna, which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna is set on test. Each of the four sides of the EUT must be faced this transmitting antenna and measured individually. In order to judge the EUT performance, a CCD Recording is used to monitor its screen. All the scanning conditions are as following:

Condition of Test	Remark
Fielded Strength	3 V/m (Severity Level 2)
Radiated Signal	Unmodulated
Test Frequency Range (Swept Test)	80-1000MHz
Test Frequency (spot test)	1800MHz, 2600MHz, 3500MHz, 5000MHz
Dwell Time of Radiated	0.0015 decade/s
Waiting Time	3 Sec.

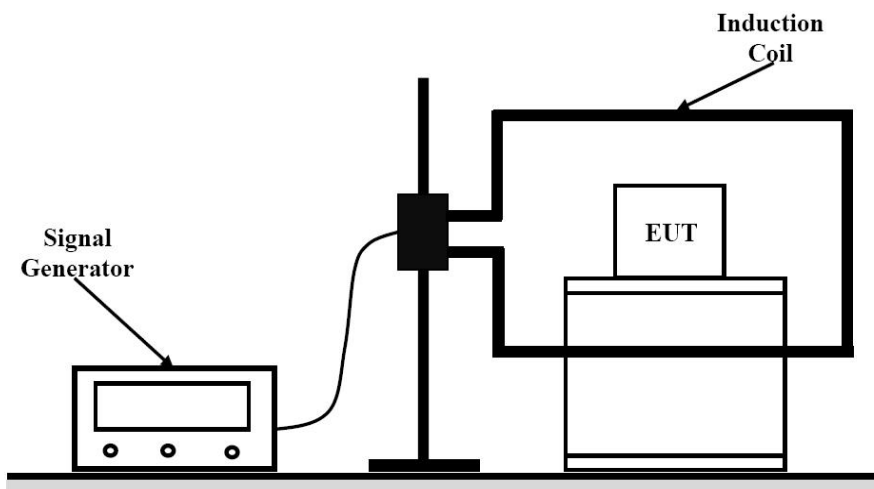
### 5.3.7. Test Results

**PASS.**

Refer to attached Annex B.3

## 5.4. MAGNETIC FIELD SUSCEPTIBILITY TEST

### 5.4.1. Block Diagram of Test Setup



### 5.4.2. Test Standard

EN 55035: 2017 (EN 61000-4-8: 2010, Severity Level: Level 1, 1A/m)

### 5.4.3. Severity Levels and Performance Criterion

#### 5.4.3.1. Severity level

Level	Field Strength (A/m)
1	1
2	3
3	10
4	30
5	100
X	Special

#### 5.4.3.2. Performance Criterion

Performance Criterion: A

### 5.4.4. EUT Configuration on Test

The configuration of EUT is listed in Section 5.4.1.

### 5.4.5. Test Procedure

EUT is placed on an insulating support of 0.1m high above a table of 0.8m high. There is a minimum 1m\*1m ground metallic plane put on this table. EUT is put in the center of the magnetic coil then two orientations of the magnetic coil, horizontal and vertical, shall be rotated in order to expose the EUT to the difference polarization magnetic field.

Record any performance degradation of the EUT during the test and judge the test result according to performance criterion.

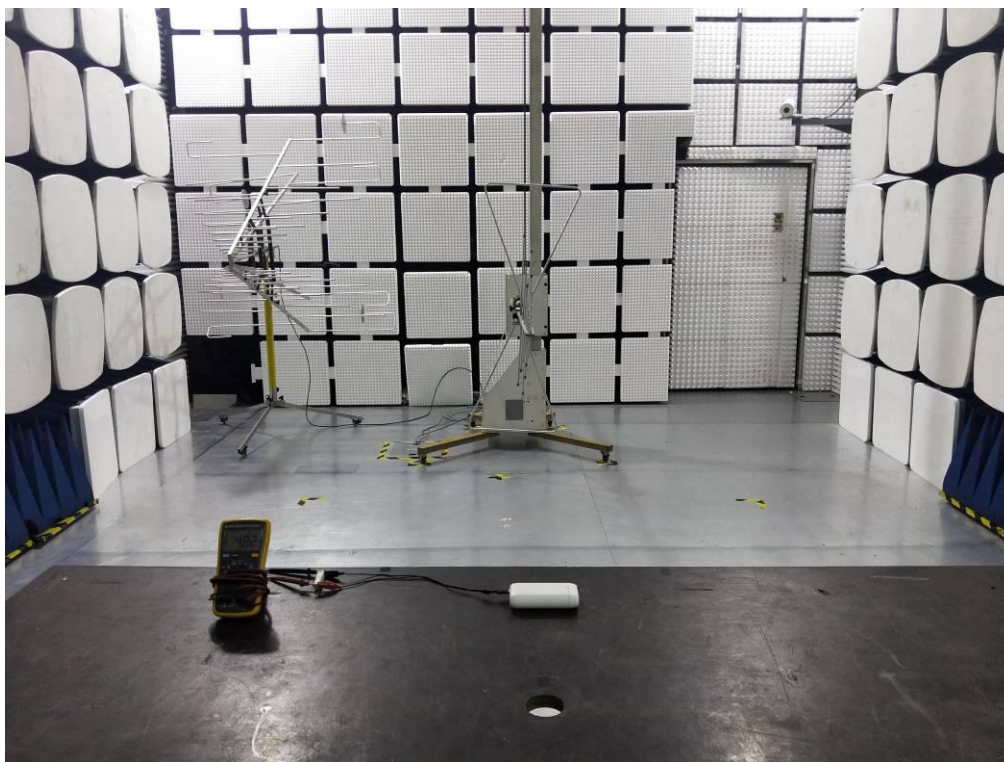
### 5.4.6. Test Results

**PASS.**

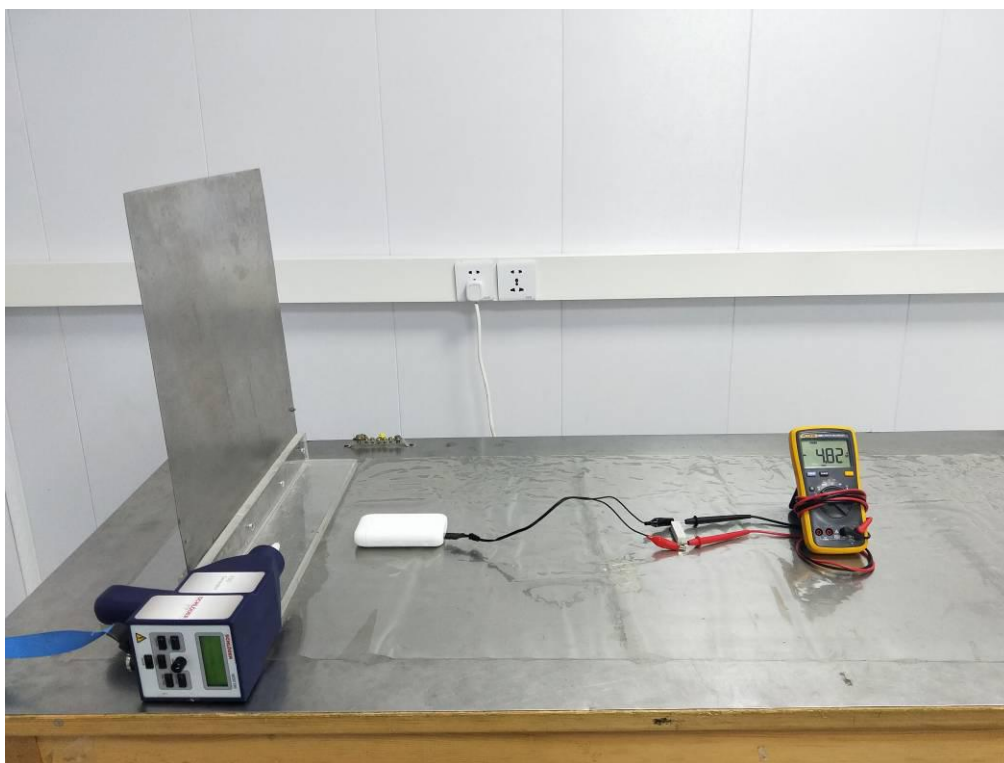
Refer to attached Annex B.4

## ANNEX A

(Test photograph)



Test Setup Photo of Radiated Measurement (30MHz~1GHz)



Test Setup Photo of Electrostatic Discharge Test



Test Setup Photo of Magnetic Field Immunity Test

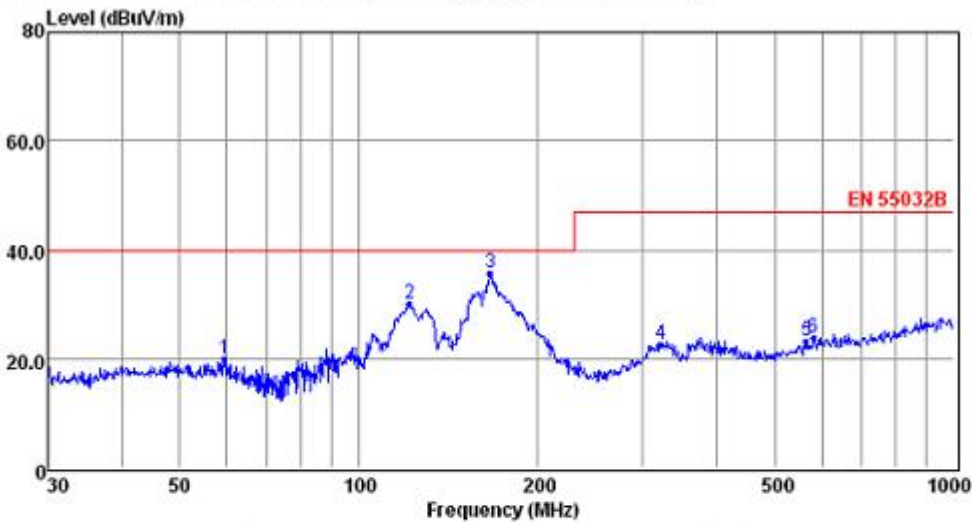
ANNEX B

(Emission and Immunity test results)

B.1 Radiated Disturbance Test Results (30MHz to 1000MHz)

Environmental Conditions:	22.6℃, 53.1% RH
Test Voltage:	DC 5V
Test Model:	XO-9873
Test Mode:	Mode 1
Test Engineer:	Daiwei Dai
Pol:	Vertical

Detailed results are shown below

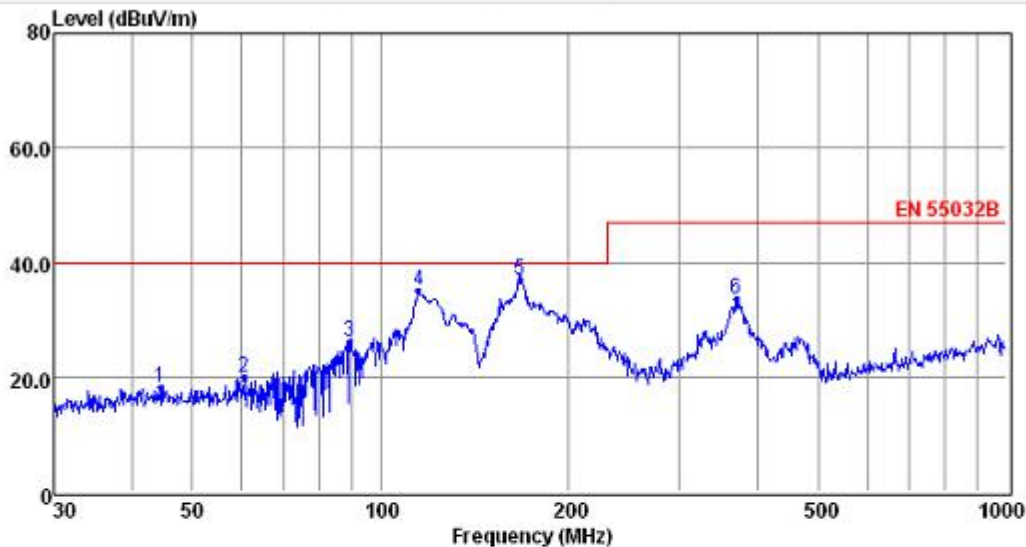


	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	59.44	6.57	0.49	12.73	19.79	40.00	-20.21	QP
2	121.55	19.05	0.70	10.24	29.99	40.00	-10.01	QP
3	166.65	26.16	0.77	8.87	35.80	40.00	-4.20	QP
4	322.19	8.13	1.16	13.42	22.71	47.00	-24.29	QP
5	566.62	3.84	1.48	17.83	23.15	47.00	-23.85	QP
6	582.74	4.19	1.54	18.13	23.86	47.00	-23.14	QP

Note: 1. All readings are Quasi-peak values.  
2. Measured= Reading + Antenna Factor + Cable Loss  
3. The emission that are 20db below the official limit are not reported



Environmental Conditions:	22.6℃, 53.1% RH
Test Voltage:	DC 5V
Test Model:	XO-9873
Test Mode:	Mode 1
Test Engineer:	Daiwei Dai
Pol:	Horizontal
Detailed results are shown below	



	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	44.43	4.28	0.41	13.55	18.24	40.00	-21.76	QP
2	60.49	6.96	0.49	12.50	19.95	40.00	-20.05	QP
3	89.28	13.70	0.68	11.67	26.05	40.00	-13.95	QP
4	114.92	23.00	0.68	11.38	35.06	40.00	-4.94	QP
5	167.24	27.16	0.77	8.89	36.82	40.00	-3.18	QP
6	370.70	17.77	1.20	14.52	33.49	47.00	-13.51	QP

- Note: 1. All readings are Quasi-peak values.  
2. Measured= Reading + Antenna Factor + Cable Loss  
3. The emission that are 20db below the official limit are not reported

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2020-07-10. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE BY THE DOCUMENT OWNER.

B.2 ELECTROSTATIC DISCHARGE IMMUNITY TEST

Electrostatic Discharge Test Results			
Standard	<input type="checkbox"/> IEC 61000-4-2 <input checked="" type="checkbox"/> EN 61000-4-2		
Applicant	Dongguan Xing Yue Electronic co., Ltd		
EUT	Powerbank with earbuds	Temperature	24.5℃
M/N	XO-9873	Humidity	54.4%
Criterion	B	Pressure	1021mbar
Test Mode	Mode 1	Test Engineer	Daiwei Dai

Air Discharge							
Test Points	Test Levels			Results			
	± 2kV	± 4kV	± 8kV	Passed	Fail	Performance Criterion	
Front	☒	☒	☒	☒	☐	☐ A	☒ B
Back	☒	☒	☒	☒	☐	☐ A	☒ B
Left	☒	☒	☒	☒	☐	☐ A	☒ B
Right	☒	☒	☒	☒	☐	☐ A	☒ B
Top	☒	☒	☒	☒	☐	☐ A	☒ B
Bottom	☒	☒	☒	☒	☐	☐ A	☒ B
Contact Discharge							
Test Points	Test Levels		Results				
	± 2 kV	±4 kV	Passed	Fail	Performance Criterion		
Front	☒	☒	☒	☐	☐ A	☒ B	
Back	☒	☒	☒	☐	☐ A	☒ B	
Left	☒	☒	☒	☐	☐ A	☒ B	
Right	☒	☒	☒	☐	☐ A	☒ B	
Top	☒	☒	☒	☐	☐ A	☒ B	
Bottom	☒	☒	☒	☐	☐ A	☒ B	
Discharge To Horizontal Coupling Plane							
Side of EUT	Test Levels		Results				
	± 2 kV	± 4 kV	Passed	Fail	Performance Criterion		
Front	☒	☒	☒	☐	☐ A	☒ B	
Back	☒	☒	☒	☐	☐ A	☒ B	
Left	☒	☒	☒	☐	☐ A	☒ B	
Right	☒	☒	☒	☐	☐ A	☒ B	
Discharge To Vertical Coupling Plane							
Side of EUT	Test Levels		Results				
	± 2 kV	± 4 kV	Passed	Fail	Performance Criterion		
Front	☒	☒	☒	☐	☐ A	☒ B	
Back	☒	☒	☒	☐	☐ A	☒ B	
Left	☒	☒	☒	☐	☐ A	☒ B	
Right	☒	☒	☒	☐	☐ A	☒ B	

## B.3 RF FIELD STRENGTH SUSCEPTIBILITY TEST

## RF Field Strength Susceptibility Test Results

Standard	<input type="checkbox"/> IEC 61000-4-3 <input checked="" type="checkbox"/> EN 61000-4-3		
Applicant	Dongguan Xing Yue Electronic co., Ltd		
EUT	Powerbank with earbuds	Temperature	23.3℃
M/N	XO-9873	Humidity	53.3%
Field Strength	3 V/m	Criterion	A
Test Mode	Mode 1	Test Engineer	Daiwei Dai
Test Frequency	80MHz to 1000MHz (Swept Test) 1800MHz, 2600MHz, 3500MHz, 5000MHz (spot test)		
Modulation	<input type="checkbox"/> None <input type="checkbox"/> Pulse <input checked="" type="checkbox"/> AM 1KHz 80%		
Steps	1%		

	Horizontal	Vertical
Front	PASS	PASS
Right	PASS	PASS
Rear	PASS	PASS
Left	PASS	PASS

## Test Equipment:

1. Signal Generator: 2031 (MARCONI)
2. Power Amplifier: 500A100 & 100W/1000M1 (A&R)
3. Power Antenna: 3108 (EMCO) & AT1080 (A&R)
4. Field Monitor: FM2000 (A&R)

## Note:



## B.4 MAGNETIC FIELD SUSCEPTIBILITY TEST

## Magnetic Field Immunity Test Result

Standard	<input type="checkbox"/> IEC 61000-4-8 <input checked="" type="checkbox"/> EN 61000-4-8		
Applicant	Dongguan Xing Yue Electronic co., Ltd		
EUT	Powerbank with earbuds	Temperature	24.3℃
M/N	XO-9873	Humidity	54.1%
Test Mode	Mode 1	Criterion	A
Test Engineer	Daiwei Dai		

Test Level (A/M)	Testing Duration	Coil Orientation	Criterion	Result
1	5 mins	X	A	PASS
1	5 mins	Y	A	PASS
1	5 mins	Z	A	PASS

Note:

## ANNEX C

(External and internal photos of the EUT)



Fig. 1

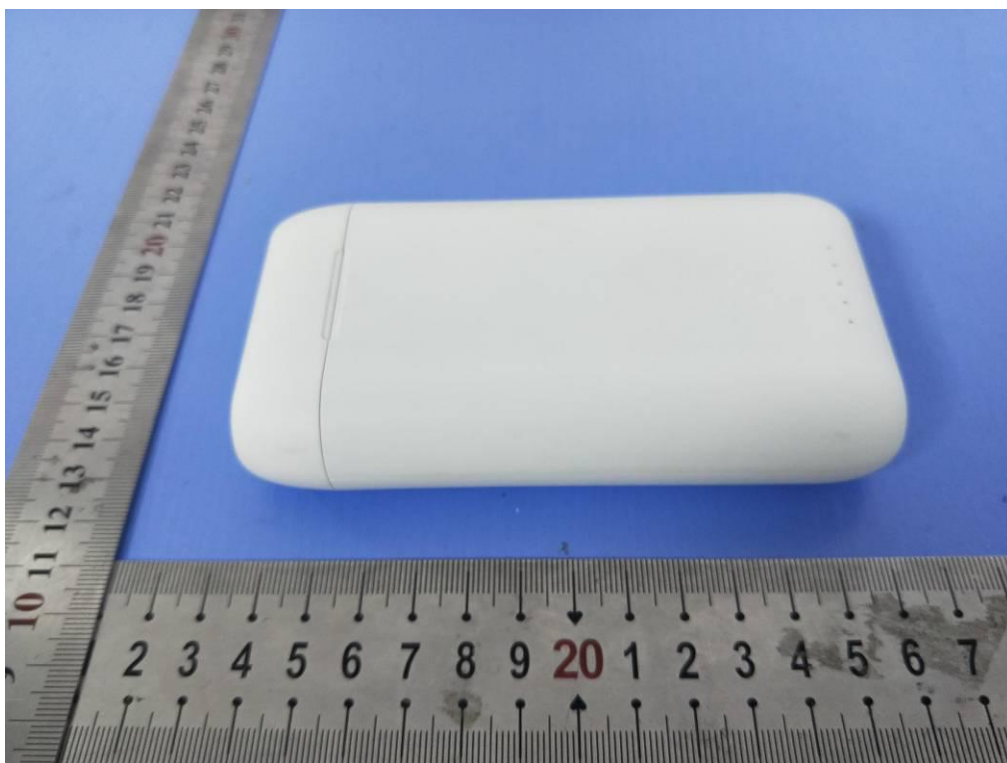


Fig. 2



Fig. 3

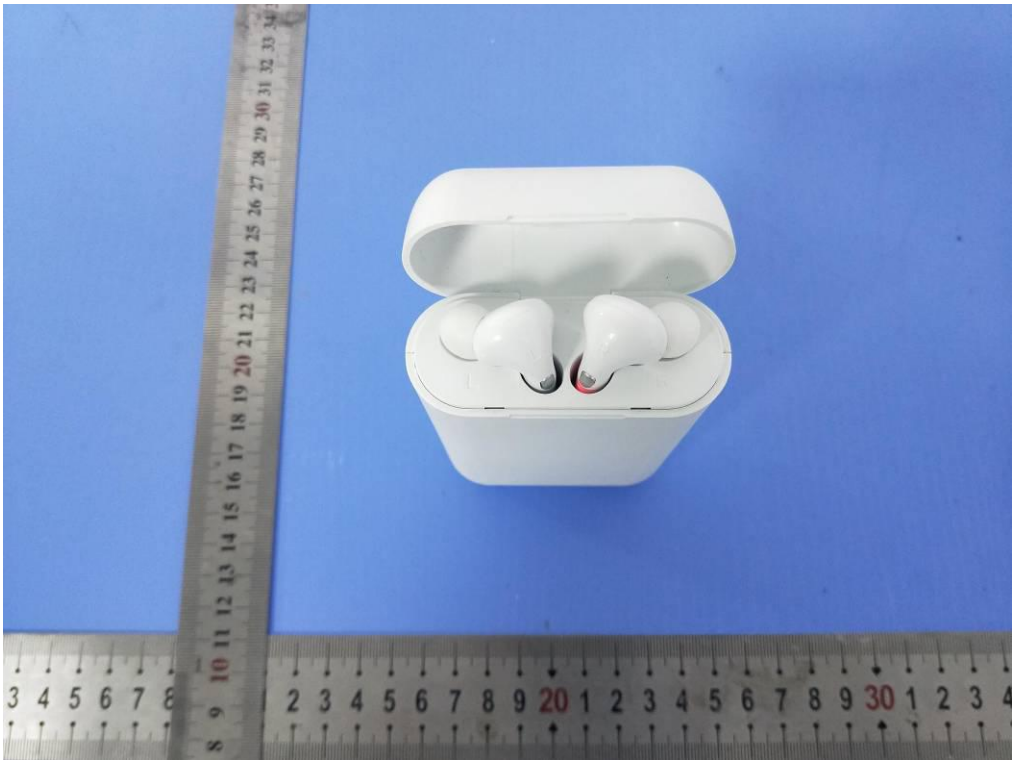


Fig. 4

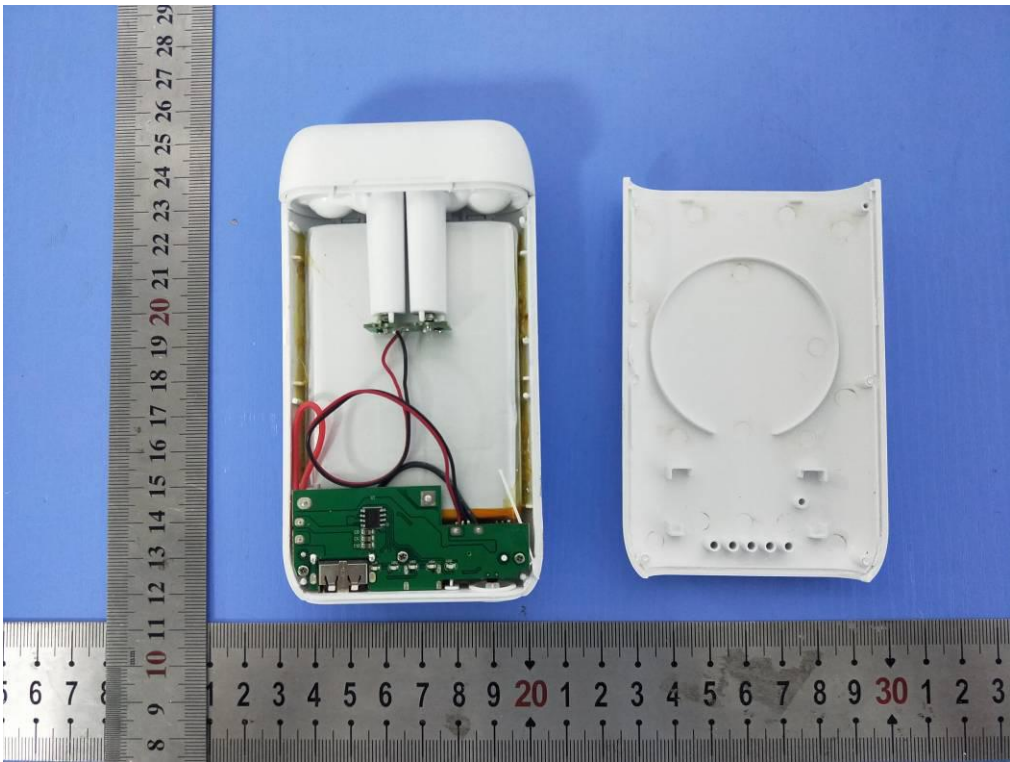


Fig. 5

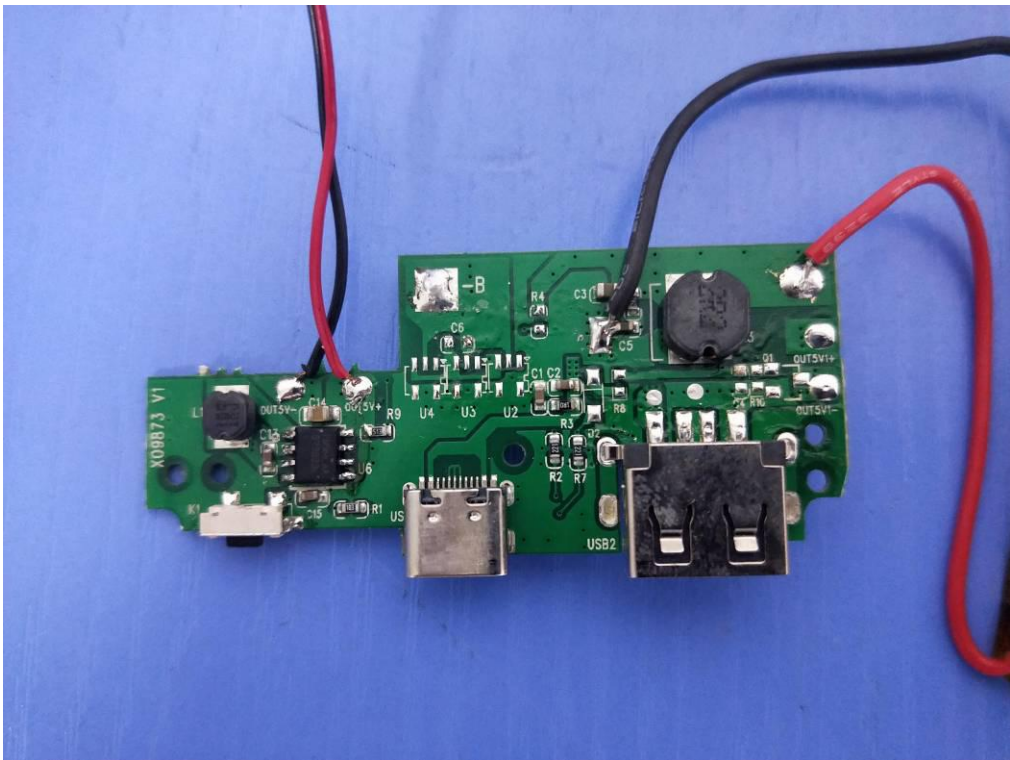


Fig. 6



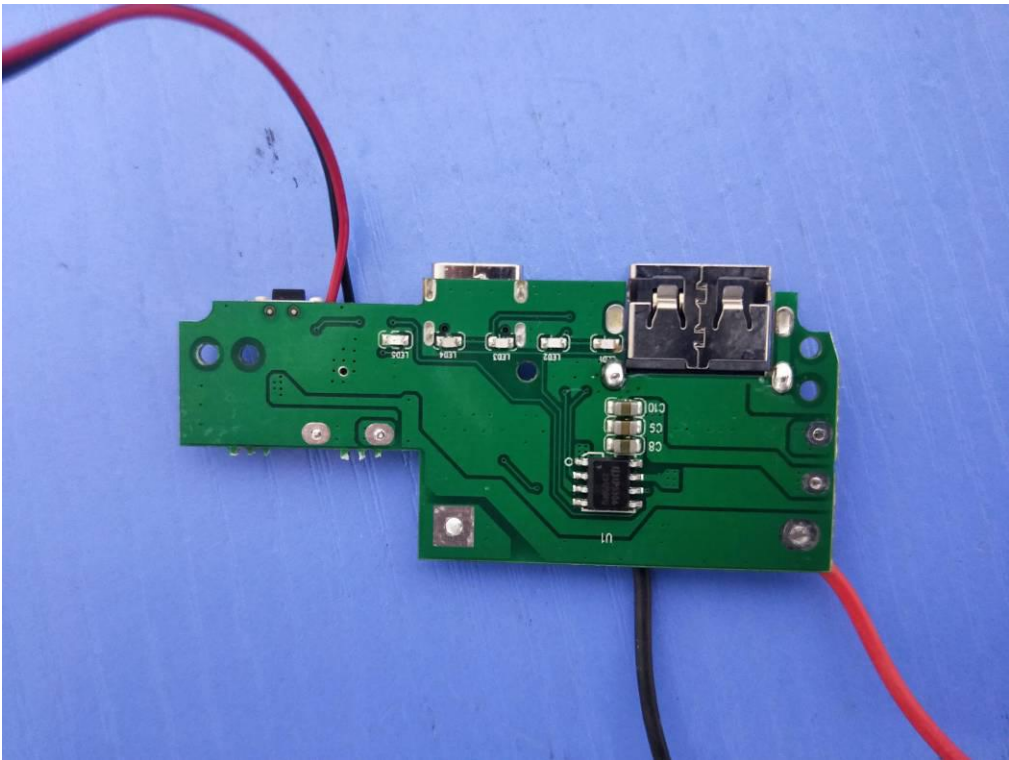


Fig. 7



Fig. 8

----- THE END OF TEST REPORT -----