THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

EMC TEST REPORT

For

Power Bank

Test Model: UP-9114

Prepared for	:	
Address	:	

Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	:	Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, 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	:	October 11, 2018
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	October 11, 2018 ~ October 15, 2018
Date of Report	:	October 23, 2018

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

EMC TEST REPORT
EN 55032: 2015
Electromagnetic compatibility of multimedia equipment - Emission requirements
EN 55024: 2010+A1: 2015
Information technology equipment-Immunity characteristics-Limits and methods of measurement

Report Reference No. .....:	**LCS181010009AE**
Date Of Issue.....:	October 23, 2018
Testing Laboratory Name.....:	**Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address.....:	Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, 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 55024: 2010+A1: 2015
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.....:	**Power Bank**
Trade Mark.....:	N/A
Test Model.....:	UP-9114
Ratings .....:	Input: MICRO USB 5V/2A; TYPEC 5V/2A, 9V/2A Output: USBA: 5V/2.4A USBA QC3.0: 5V/3A(MAX), 9V/2A, 12V/1.5A TYPE-C PD: 5V/3A(MAX), 9V/2A, 12V/1.5A
Result .....:	**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Skylly Shen	Davey.xu	
Skylly Shen/ File administrators	Davey Xu/ Technique principal	Leo Lee/ Manager

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

EMC -- TEST REPORT

Test Report No. : LCS181010009AE	October 23, 2018 Date of issue

Test Model.....	: UP-9114
EUT.....	: Power Bank
Applicant.....	**:**
Address.....	:
Telephone.....	: /
Fax.....	: /
Manufacturer.....	**:**
Address.....	:
Telephone.....	: /
Fax.....	: /
Factory.....	**:**
Address.....	:
Telephone.....	: /
Fax.....	: /

Test Result according to the standards on page 6: **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

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

Revision History

Revision	Issue Date	Revisions	Revised By
000	October 23, 2018	Initial Issue	Leo Lee

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. 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 CONTENT

Test Report Description Page

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

1. SUMMARY OF STANDARDS AND RESULTS

1.1.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 55024: 2010+A1: 2015)			
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		B	N/A
Voltage interruptions		C	N/A
N/A is an abbreviation for Not Applicable.			

Test mode:		
Mode 1	Discharging(5V/3A, 9V/2A, 12V/1.5A)	Record
Mode 2	Charging	Pre-scan
***Note: All test modes were tested, but we only recorded the worst case in this report.		

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

1.2.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;
— tests of all peripheral access (hard disks, floppy disks, printers, keyboard, mouse, etc.);
— quality of software execution;
— quality of data display and transmission;
— quality of speech transmission.

1.2.1.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 deliver from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

1.2.2.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 deliver from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

1.2.3.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 loss.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

EUT	:	Power Bank
Trade Mark	:	N/A
Test Model	:	UP-9114
Differences describe	:	When USB-A port and TYPE C port are output simultaneously, total current : 3A (Max) Remark:If Insert two ports at the same time, ordinary 5V output, without QC and PD function. USB-A port can charge ipad (output support intelligent identification IC) .
Power Supply	:	Input: MICRO USB 5V/2A; TYPEC 5V/2A, 9V/2A Output: USBA: 5V/2.4A USBA QC3.0: 5V/3A(MAX), 9V/2A, 12V/1.5A TYPE-C PD: 5V/3A(MAX), 9V/2A, 12V/1.5A
EUT Clock Frequency	:	≤ 108MHz

2.2.Description of Test Facility

Site Description

EMC Lab. : FCC Registration Number. is 254912.
Industry Canada Registration Number. is 9642A-1.
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.

2.3.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.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

2.4.Measurement Uncertainty

Test	**Parameters**	**Expanded uncertainty (U_{lab})**	**Expanded uncertainty (U_{cispr})**
Conducted Emission	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	± 2.63 dB ± 2.35 dB	± 4.0 dB ± 3.6 dB
Power disturbance	Level accuracy (30MHz to 300MHz)	± 2.90dB	± 4.5 dB
Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	± 3.60 dB	± 2.63 dB
Radiated Emission	Level accuracy (9kHz to 30MHz)	± 3.68 dB	± 2.63 dB
Radiated Emission	Level accuracy (30MHz to 1000MHz)	± 3.48 dB	± 2.63 dB
Radiated Emission	Level accuracy (above 1000MHz)	± 3.90 dB	N/A
Mains Harmonic	Voltage	± 0.510%	N/A
Voltage Fluctuations & Flicker	Voltage	± 0.510%	N/A
EMF		± 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%.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1.Radiated Disturbance (Electric Field)

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2018-06-16
2	EMI Test Receiver	ROHDE & SCHWARZ	ESR 7	101181	2018-06-16
3	By-Log Antenna	SCHWARZBECK	VULB9163	9163-470	2018-05-01
4	EMI Test Software	AUDIX	E3	N/A	2018-06-16
5	Positioning Controller	MF	MF-7082	/	2018-06-16

3.2.Electrostatic Discharge

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ESD Simulator	SCHLODER	SESD 230	604035	2018-06-16

3.3.RF Field Strength Susceptibility

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	RF POWER AMPLIFIER	OPHIR	5225R	1052	NCR
2	RF POWER AMPLIFIER	OPHIR	5273F	1019	NCR
3	Stacked Broadband Log Periodic Antenna	SCHWARZBECK	STLP 9128	9128ES-145	NCR
4	Stacked Mikrowellen Log.-Per Antenna	SCHWARZBECK	STLP 9149	9149-484	NCR
5	Signal Generator	Agilent	E4438C	MY42081396	2017-11-17
6	Electric field probe	Narda S.TS./PMM	EP601	611WX80208	2018-03-26
7	Power Meter	Agilent	E4419B	MY45104493	2018-06-16
8	Power Sensor	Agilent	E9301H	MY41495234	2018-06-16
9	Power Sensor	Agilent	E4412A	MY41500229	2018-06-16
Note: NCR means no calibration requirement					

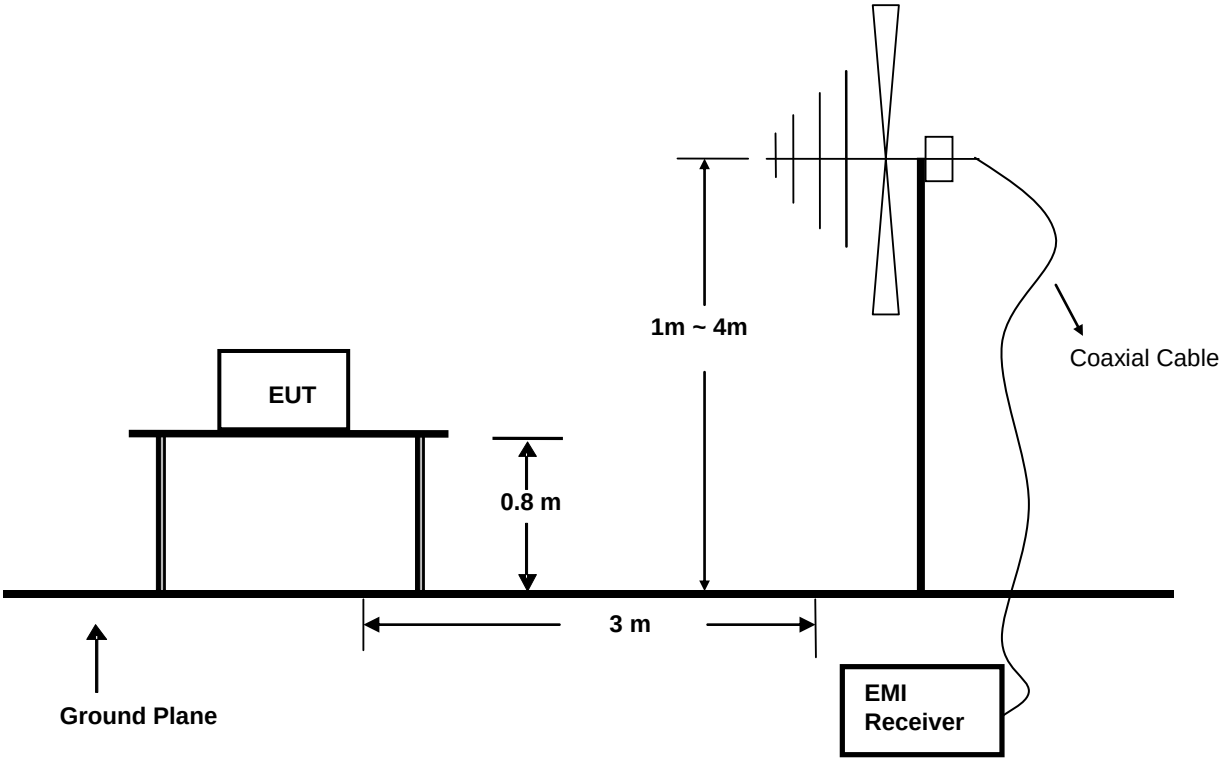
3.4.Power Frequency Magnetic Field Susceptibility

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Power frequency mag-field generator System	EVERFINE	EMS61000-8K	906003	2018-06-16

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

4. RADIATED EMISSION MEASUREMENT

4.1.Block Diagram of Test Setup



4.2.Measuring Standard

EN 55032: 2015

4.3.Radiated Emission Limits

EN 55032 Limits:

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:

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.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

4.4.EUT Configuration on Test

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

4.5.Operating Condition of EUT

4.5.1 Turn on the power.

4.5.2 After that, let the EUT work in test mode Mode 1 and measure it.

4.6.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 Receiver is set at 120kHz.

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

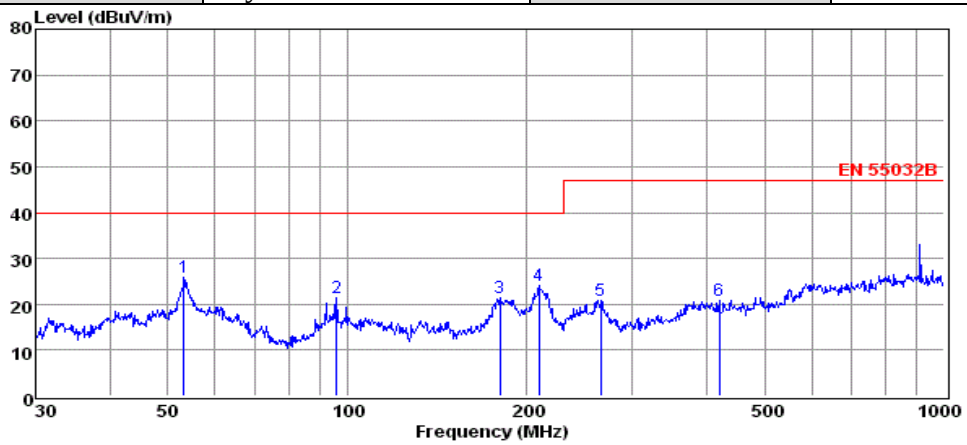
4.7.Test Results

PASS.

The test result please refer to the next page.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

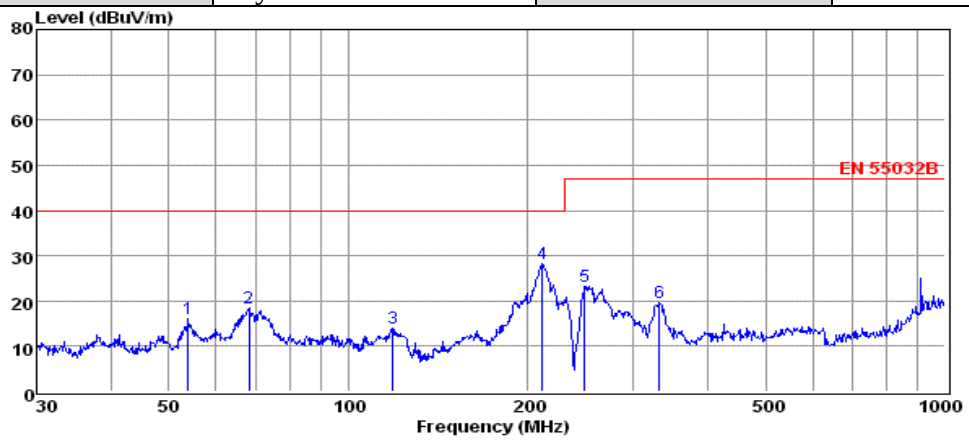
Test Model	UP-9114	**Test Mode**	Mode 1(12V/1.5A)
Environmental Conditions	23.4℃, 53.6% RH	**Detector Function**	Quasi-peak
Pol	Vertical	**Distance**	3m
Test Engineer	Jay Li		



	Freq MHz	Reading dBuV	CabLos dB	Antfac dB/m	Measured dBuV/m	Limit dBuV/m	Over dB	Remark
1	53.13	12.30	0.46	13.11	25.87	40.00	-14.13	QP
2	95.76	7.82	0.58	12.89	21.29	40.00	-18.71	QP
3	180.02	10.73	0.89	9.68	21.30	40.00	-18.70	QP
4	209.31	12.28	0.86	10.86	24.00	40.00	-16.00	QP
5	265.68	7.53	1.03	12.23	20.79	47.00	-26.21	QP
6	420.58	4.03	1.33	15.47	20.83	47.00	-26.17	QP

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

Test Model	UP-9114	**Test Mode**	Mode 1(12V/1.5A)
Environmental Conditions	23.4℃, 53.6% RH	**Detector Function**	Quasi-peak
Pol	Horizontal	**Distance**	3m
Test Engineer	Jay Li		



	Freq MHz	Reading dBuV	CabLos dB	Antfac dB/m	Measured dBuV/m	Limit dBuV/m	Over dB	Remark
1	53.88	2.47	0.46	13.07	16.00	40.00	-24.00	QP
2	68.15	8.62	0.51	9.41	18.54	40.00	-21.46	QP
3	118.60	2.65	0.64	10.73	14.02	40.00	-25.98	QP
4	211.53	16.54	0.93	10.93	28.40	40.00	-11.60	QP
5	248.55	10.04	1.02	12.07	23.13	47.00	-23.87	QP
6	332.52	4.55	1.11	13.82	19.48	47.00	-27.52	QP

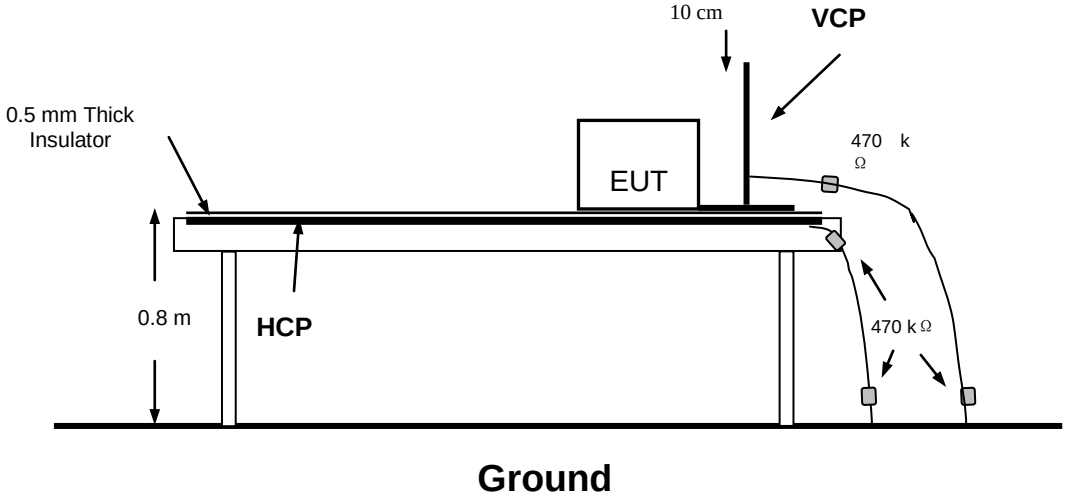
Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that ate 20db blow the offficial limit are not reported

Note: Pre-Scan all mode, Thus record worse case mode result in this report.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

5. ELECTROSTATIC DISCHARGE IMMUNITY TEST

5.1.Block Diagram of Test Setup



5.2.Test Standard

EN 55024: 2010+A1: 2015,

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

5.3.Severity Levels and Performance Criterion

5.3.1.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

5.3.2.Performance Criterion: **B**

5.4.EUT Configuration on Test

The configuration of EUT is listed in Section 2.1.

5.5.Operating Condition of EUT

Same as conducted emission measurement, which is listed in Section 4.5. Except the test set up replaced by Section 5.1.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

5.6.Test Procedure

5.6.1.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

5.6.2.Contact Discharge

All the procedure shall be same as Section 5.6.1. Except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

5.6.3.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.

5.6.4.Indirect Discharge For Vertical Coupling Plane

At least 10 single discharge (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.

5.7.Test Results

PASS.

Please refer to the following pages

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

Electrostatic Discharge Test Results

Standard	☐ IEC 61000-4-2 ☑ EN 61000-4-2		
Applicant	SHENZHEN UNIWINS TECHNOLOGY CO., LTD		
EUT	Power Bank	**Temperature**	23.8℃
M/N	UP-9114	**Humidity**	53.1%
Criterion	B	**Pressure**	1021mbar
Test Mode	Mode 1	**Test Engineer**	Jay Li

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

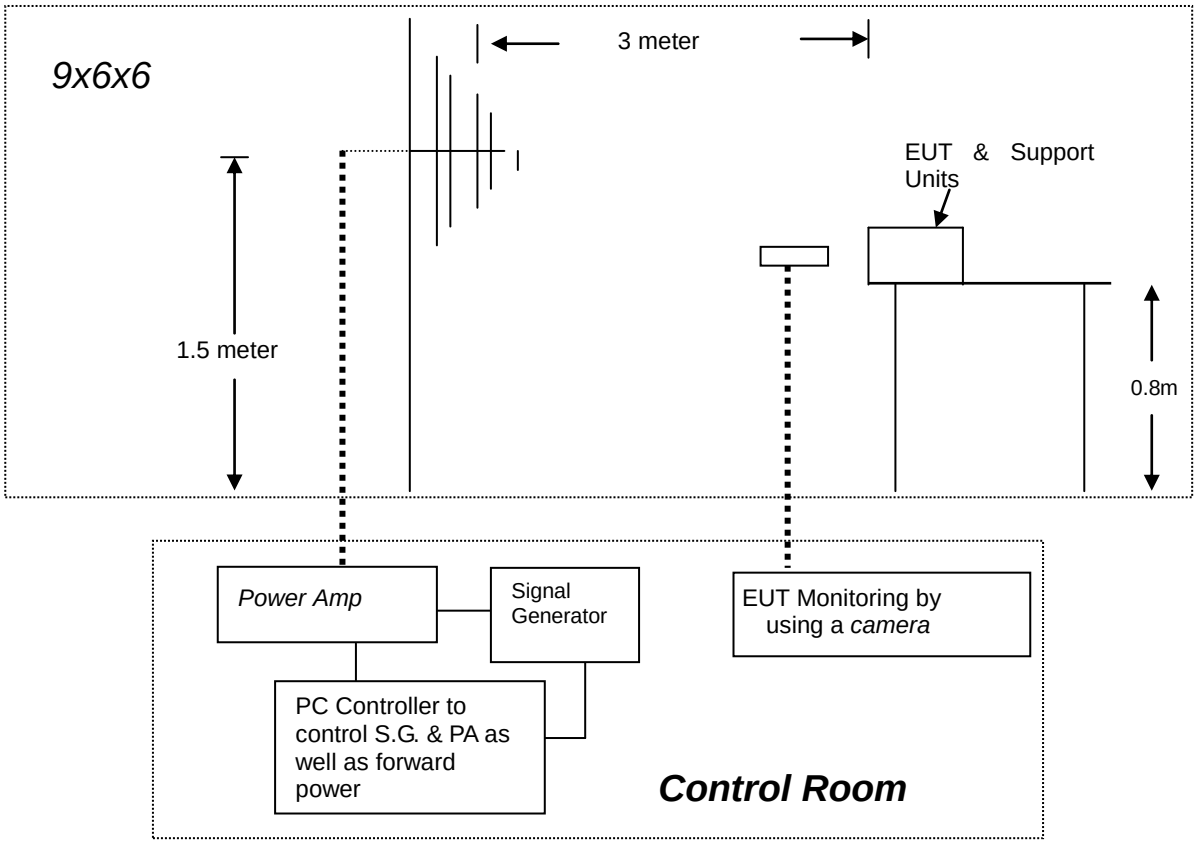
Side of EUT	Test Levels		Results		
	± 2 kV	± 4 kV	Passed	Fail	Performance Criterion
Front	☒	☒	☒	☐	☐A ☒B
Back	☒	☒	☒	☐	☐A ☒B
Left	☒	☒	☒	☐	☐A ☒B
Right	☒	☒	☒	☐	☐A ☒B

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

6. RF FIELD STRENGTH SUSCEPTIBILITY TEST

6.1.Block Diagram of Test



6.2.Test Standard

EN 55024: 2010+A1: 2015,

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

6.3.Severity Levels and Performance Criterion

6.3.1.Severity Levels

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

6.3.2.Performance Criterion: **A**

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

6.4.EUT Configuration on Test

The configuration of the EUT is same as Section 2.1.

6.5.Operating Condition of EUT

Same as radiated emission measurement, which is listed in Section 4.5, except the test setup replaced as Section 6.1.

6.6.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
1.	Fielded Strength	3V/m (Severity Level 2)
2.	Radiated Signal	Unmodulated
3.	Scanning Frequency	80-6000MHz
4.	Sweep time of radiated	0.0015 Decade/s
5.	Dwell Time	3 Sec.

6.7.Test Results

PASS.

Please refer to the following page.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

RF Field Strength Susceptibility Test Results

Standard	☐ IEC 61000-4-3 ☑ EN 61000-4-3		
Applicant	SHENZHEN UNIWINS TECHNOLOGY CO., LTD		
EUT	Power Bank	**Temperature**	24.3℃
M/N	UP-9114	**Humidity**	53.1%
Field Strength	3 V/m	**Criterion**	A
Test Mode	Mode 1	**Test Engineer**	Jay Li
Frequency Range	80 MHz to 6000MHz		
Modulation	☐None ☐ Pulse ☑AM 1KHz 80%		
Steps	1%		

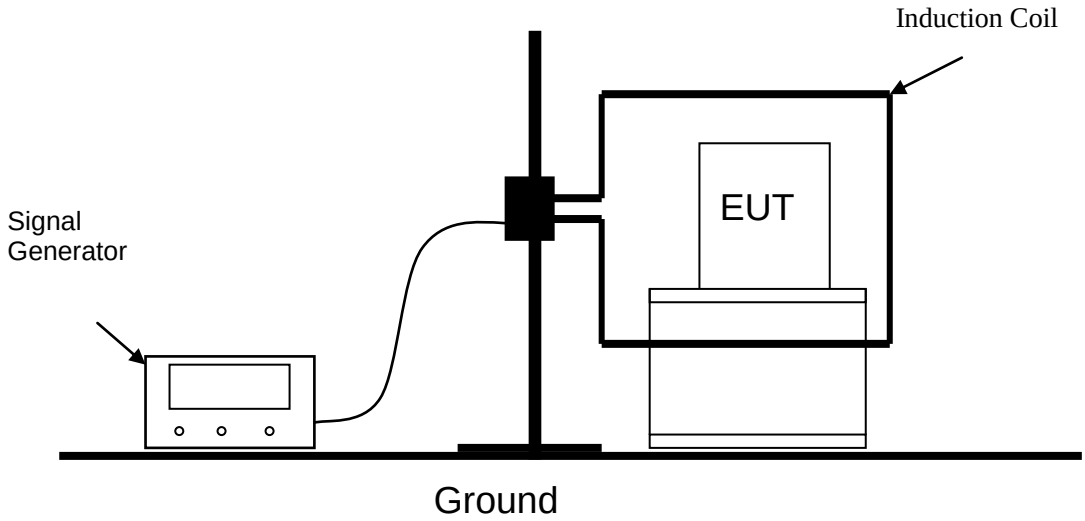
	Horizontal	**Vertical**
Front	PASS	PASS
Right	PASS	PASS
Rear	PASS	PASS
Left	PASS	PASS

Note:

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

7. MAGNETIC FIELD SUSCEPTIBILITY TEST

7.1.Block Diagram of Test Setup



7.2.Test Standard

EN 55024: 2010+A1: 2015,

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

7.3.Severity Levels and Performance Criterion

7.3.1.Severity Levels

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

7.3.2.Performance Criterion: **A**

7.4.EUT Configuration on Test

The configuration of the EUT is same as Section 2.1.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

7.5.Test Procedure

The EUT is placed in the middle of a induction coil (1*1m), under which is a 1*1*0.1m (high) table, this small table is also placed on a larger table, 0.8 m above the ground. Both horizontal and vertical polarization of the induction coil is set on test, so that each side of the EUT is affected by the magnetic field. Also can reach the same aim by change the position of the EUT.

7.6.Test Results

PASS.

Please refer to the following page.

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

Magnetic Field Immunity Test Result

Standard	☐ IEC 61000-4-8 ☑ EN 61000-4-8		
Applicant	SHENZHEN UNIWINS TECHNOLOGY CO., LTD		
EUT	Power Bank	**Temperature**	23.5℃
M/N	UP-9114	**Humidity**	53.2%
Test Mode	Mode 1	**Criterion**	A
Test Engineer	Jay Li		

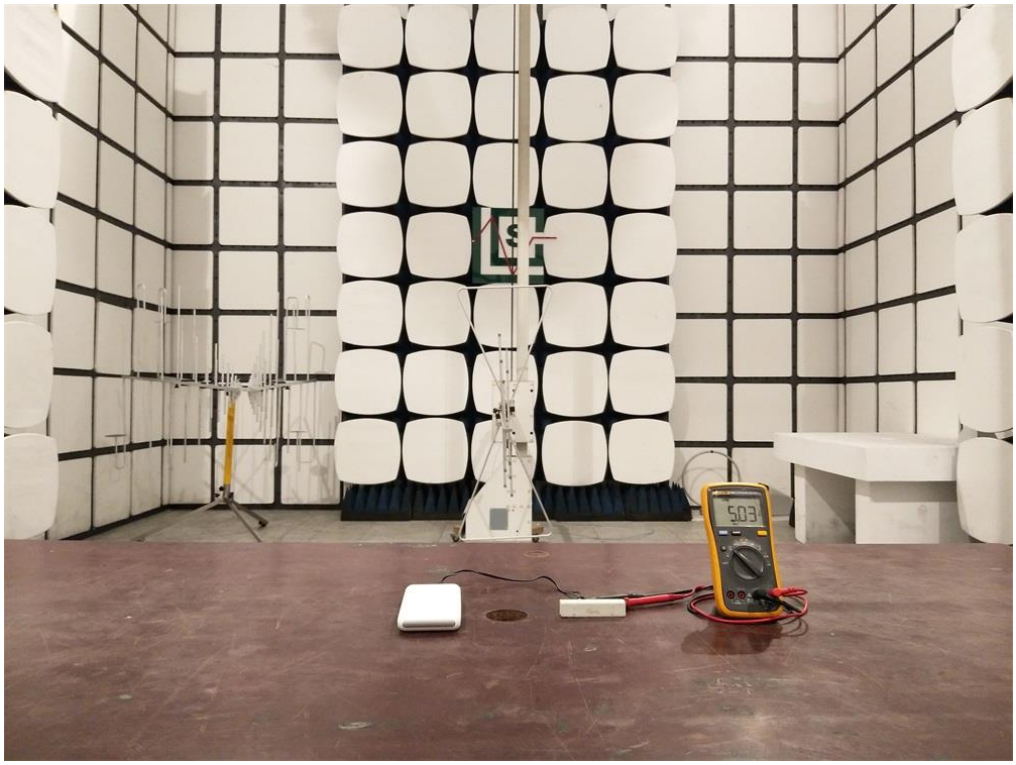
Test Level (A/M)	Testing Duration	Coil Orientation	Criterion	Result
1	5 mins	X	A	PASS
1	5 mins	Y	A	PASS
1	5 mins	Z	A	PASS

Note:

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

9. PHOTOGRAPH

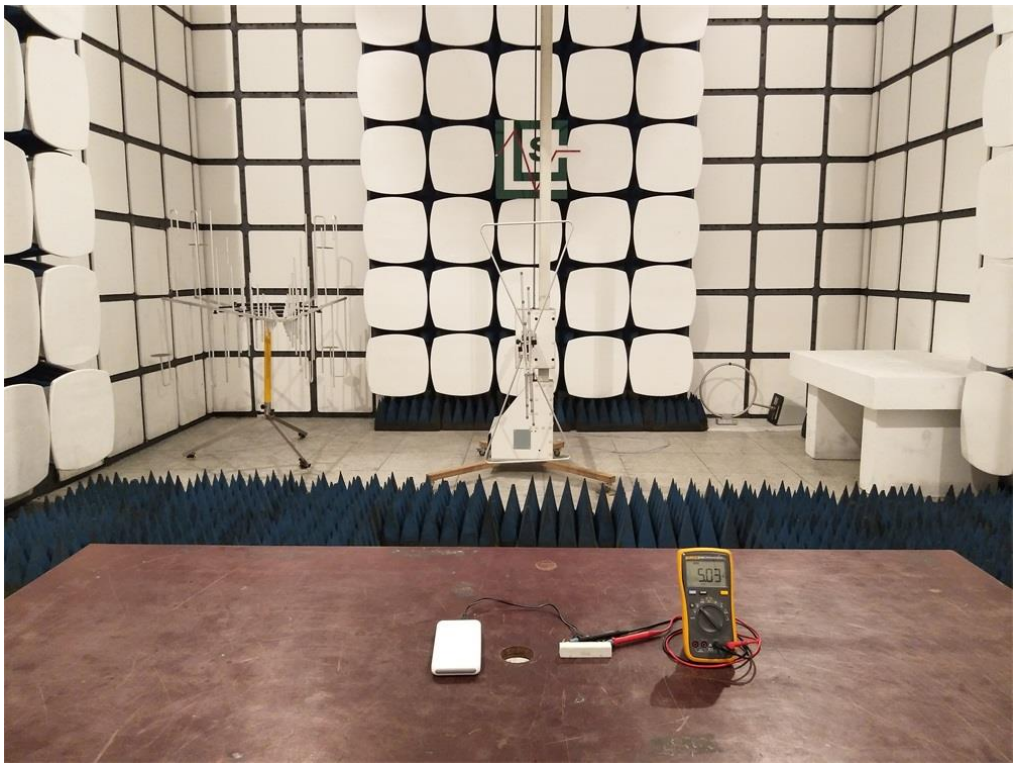
9.1.Photo of Radiated Measurement



9.2.Photo of Electrostatic Discharge Test

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

9.3.Photo of Radio-frequency, Continuous radiated disturbance



9.4.Photo of Magnetic Field Immunity Test

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

10. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

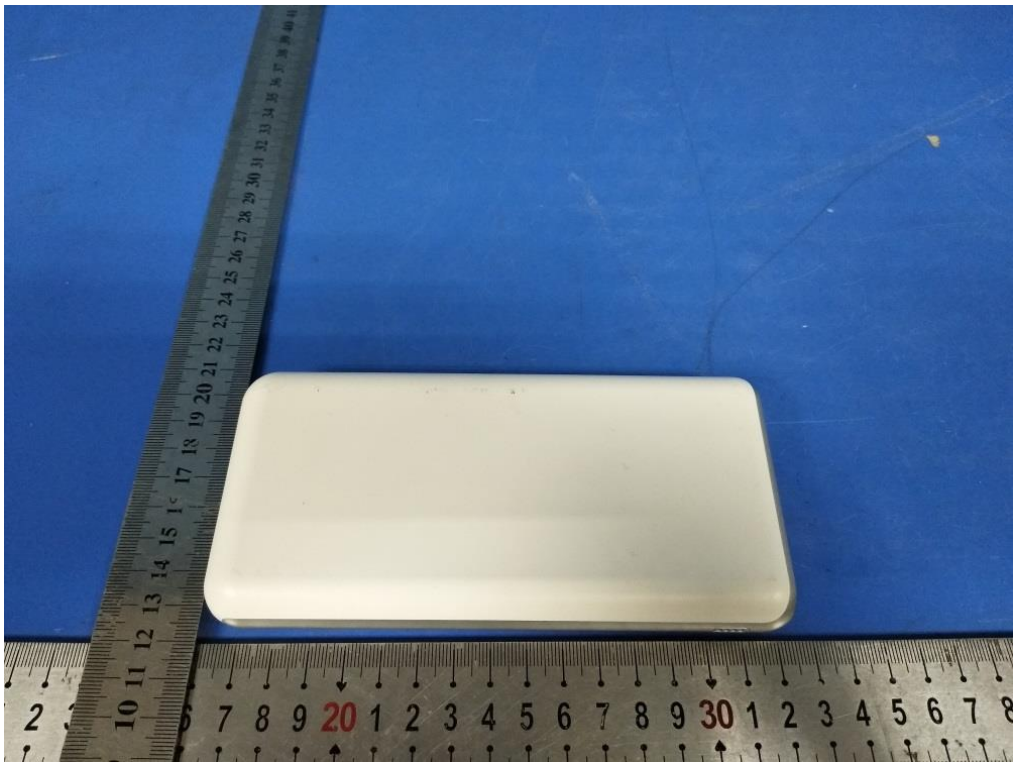


Fig. 1

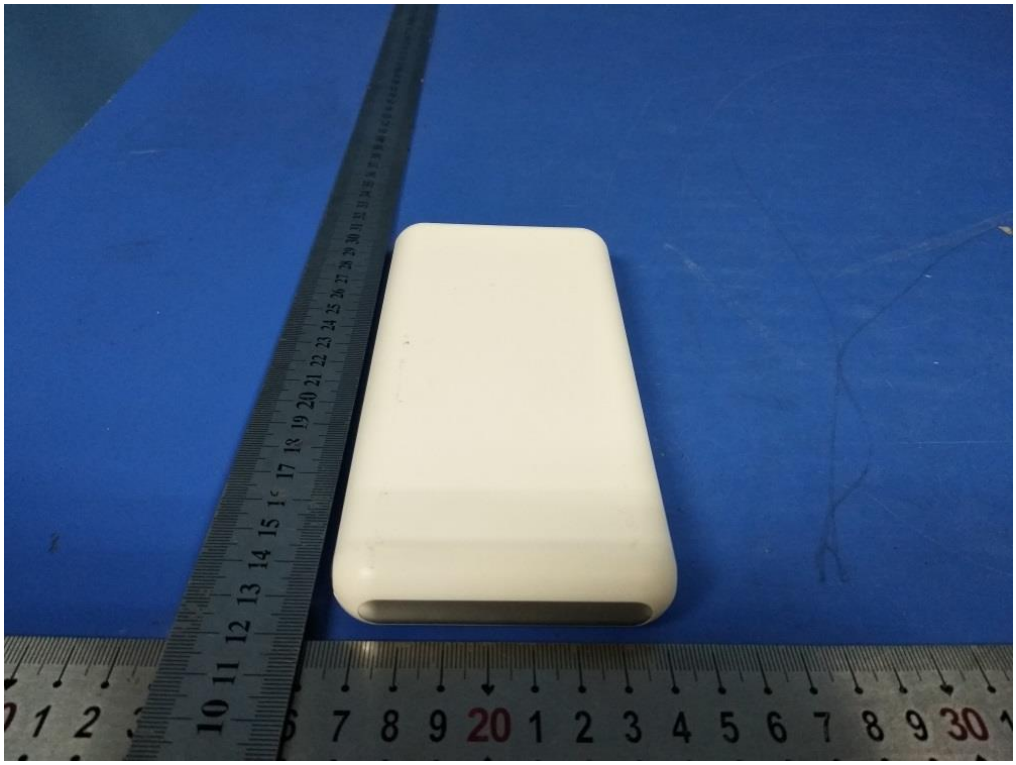


Fig. 2

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

Fig. 3

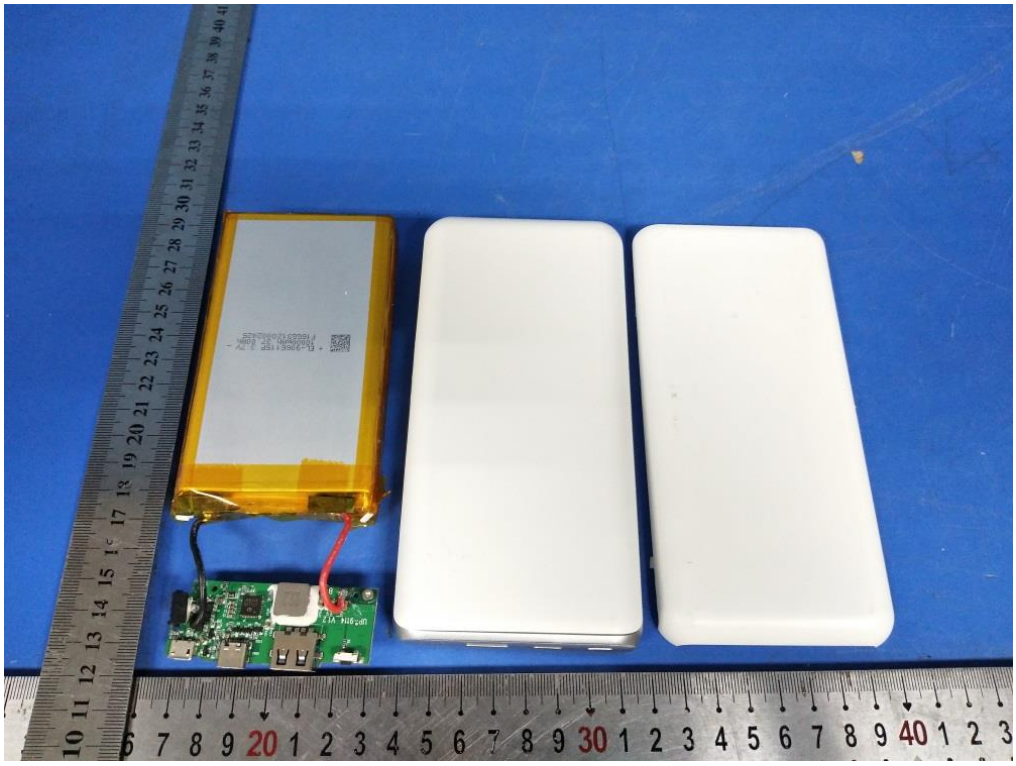


Fig. 4

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2018-11-01. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

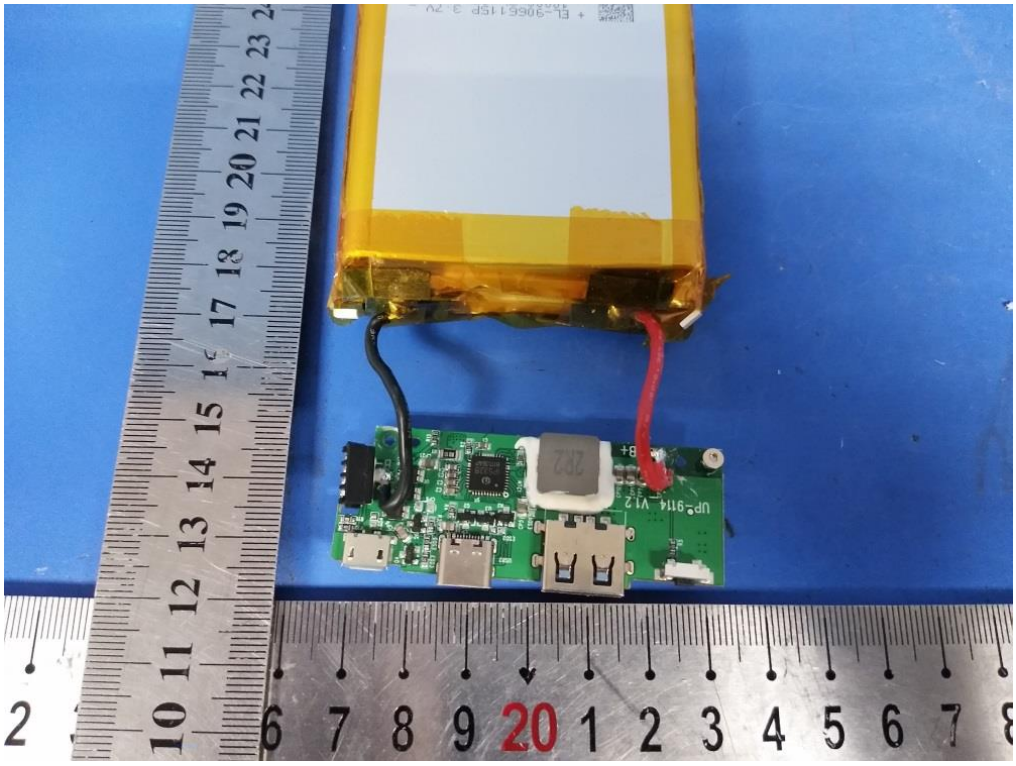


Fig. 5

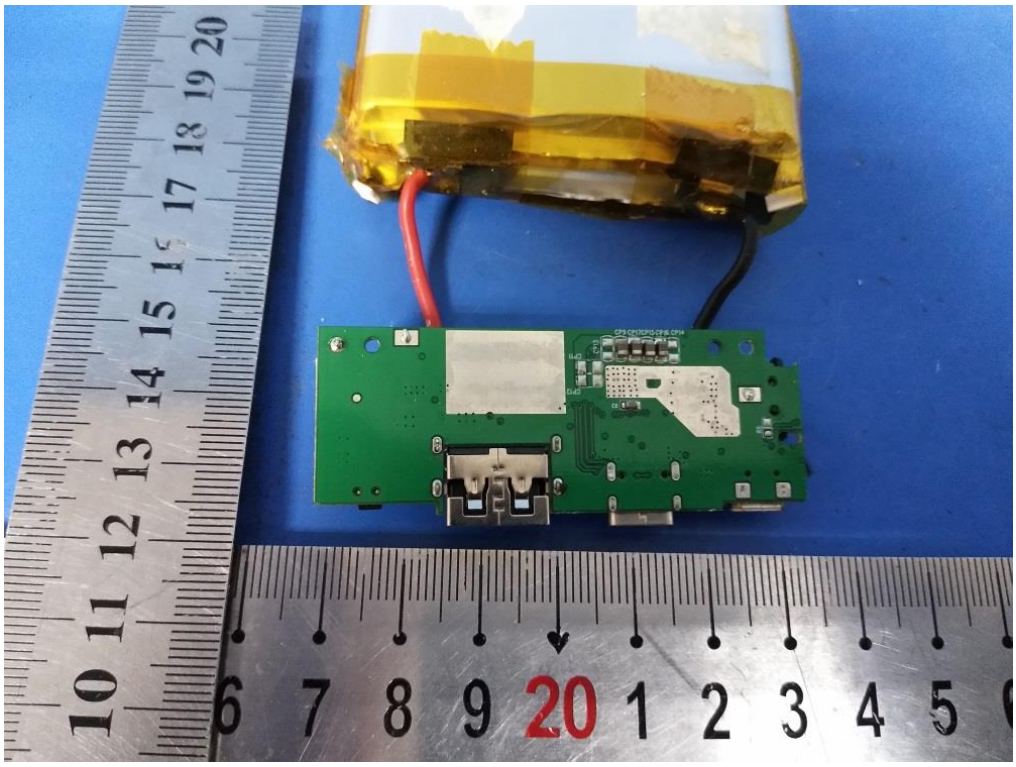


Fig. 6

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

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.