

TEST REPORT

REPORT NUMBER: B17W00112-EMC_Rev2

ON

Type of Equipment: 4G TLE mobile phone

Type of Designation: A1-901

Manufacturer: SHENZHENFUTAIHONGPRECISIONINDUSTRY

CO.,LTD

ACCORDING TO
Subpart B, PART 15, RADIO FREQUENCY DEVICES , April 16, 2017

Chongqing Institute of Telecommunications

Month date, year Jun, 2, 2016

Signature

Zhang Yan Director

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Institute of Telecommunications.



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FCC ID: 2AK9KA1

Report Date: 2017-06-02

Test Firm Name: Chongqing Institute of Telecommunications

Registration Number: 428018

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 15. The sample tested was found to comply with the requirements defined in the applied rules.



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1 General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part15.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

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quipment: A1-901 REPORT NO.: B17W00112-EMC_Rev2

1.2 Testers

Name: Bai Qingqing

Position: Engineer

Department: Department of EMC test

Date: 2017-06-02

Signature:

Editor of this test report:

Name: Zhang Luyang

Position: Engineer

Department: Department of EMC test

Date: 2017-06-02

Signature:

张陆洋

Technical responsibility for area of testing:

Name: Zhang Yan

Position: Manager

Department: Department of EMC test

Date: 2017-06-02

Signature:



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1.3 Testing Laboratory information

1.3	. 1	Location
1.0		Location

Name: Chongqing Institute of Telecommunications

Address: No. 8, Yuma Road, Chayuan New City, Nan'an District

Chongqing

P. R. CHINA, 401336

Tel: +86 23 88069965

Fax: +86 23 88608777

Email: songweiwei@chinattl.com

1.3.2 Details of accreditation status

Accredited by: -----

Registration number: -----

Standard: -----

1.3.3 Test location, where different from section 1.3.1

Name: -----

Address: -----



FCC Part15B
Equipment: A1-901 REPORT NO.: B17W00112-EMC_Rev2

1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: CloudMinds(Shenzhen) Holdings Co., Ltd

Address: Room 201 Building A No.1 Qian hai shengang

Corporation Zone Qian hai Road 1st Shenzhen (Stay

by Shenzhen Qianhai Commerce Secretariat Co., Ltd)

Country: China

Telephone: --

Fax: --

Contact: andy.xu

Telephone: 13426155325

Email: andy.xu@cloudminds.com

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: SHENZHENFUTAIHONGPRECISIONINDUSTRY CO.,LTD

Address: Office Address Floor 2.Building 3. Zone K1. Foxcon

Technology park, 2ND DONGHUAN RD NO.2.LONGHUA

Agency. LONGHUA NEW DISTRICT SHENZHEN

City: Shenzhen

Country: China

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: SHENZHENFUTAIHONGPRECISIONINDUSTRY CO.,LTD

Address: Office Address Floor 2.Building 3. Zone K1. Foxcon

Technology park, 2ND DONGHUAN RD NO.2.LONGHUA

Agency. LONGHUA NEW DISTRICT SHENZHEN

City: Shenzhen

Country: China



FCC Part15B
Equipment: A1-901 REPORT NO.: B17W00112-EMC_Rev2

2 Test Item

2.1 General Information

Manufacturer: SHENZHEN FUTAIHONG PRECISION INDUSTRY

CO.,LTD

Name: 4G TLE mobile phone

Model Number: A1-901

Serial Number: 862851030000163/862851030020161

Production Status: Product
Receipt date of test item: 2017-02-21

2.2 Outline of EUT

The EUT, A1-901 is a model supporting EDGE/GPRS/GSM 850/1900 bands, UMTS/HSDPA/HSUPA, FDDII/V bands, FDD LTE BAND VII/XLI, CDMA 2000 BC0/1, EVDO BC0/1.

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment Configuration

Equipment configuration list:

Item	Generic Description	Manufacturer	Туре	Serial No.	Remarks
А	Battery	SCUD(Fujian) Electronics Co., Ltd	DT-A1-3000	FMTDTA11 L70412005 17	None
В	Adaptor	Jiangsu Chen Yang Electronics Co., Ltd	CQ18W01U	643000051	None
С	Computer	Lenovo group Co., Ltd	M4390	BA008686 38	None
D	Displayer	Lenovo group Co., Ltd	D186wAB	6M05440D 1156856	None

2.5 Other Information

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3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

	3	
Configuration1		
Specification Clause	Name of Test	Result
15.109(a)	Radiated Emission	Pass
15.107(a)	Conducted Emission	Pass

Test e	quipment Used	d:				
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU	100367	2018-03-03	Normal
2	Ultra Broadband Antenna	R/S	VULB 9163	vulb9163-544	2017-12-01	Normal
3	Double-Ridged Horn Antenna	R/S	HF907	100357	2017-12-01	Normal
4	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6. 3m	-	2017-08-19	Normal
5	AMN	R/S	ENV216	101128	2018-03-03	Normal



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4 Test Results

4.1 Radiated Emission

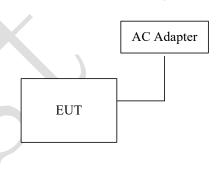
Specifications:	15.109(a)	
Date of Tests	2017-02-14-2017-02-28	
Test conditions:	Ambient Temperature:15℃-35℃	
	Relative Humidity:30%-60%	
	Air pressure: 86-106kPa	
Operation Mode	Normal	
Test Results:	Pass	

Limit Level Construction:

Frequency Range (MHz)	Quasi-Peak (dBuV/m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Frequency Range (MHz)	Peak (dBuV/m)	Average (dBuV/m)
Above 1000	74	54

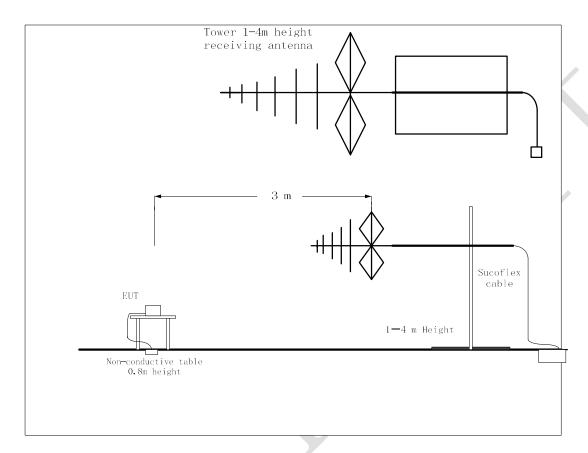
EUT Setup:





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Test Setup:



Test Method:

For 30-1000MHz, the EUT was placed on the top of a rotating 0.8-m table above the ground at a semi-anechoic chamber. The distance between the EUT and the received antenna was 3 meters. The table was rotated 360 degree and the received antenna mounted on a variable-height antenna tower was varied from 1m to 4m to find the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement. Tested in accordance with the procedures of ANSI C63.4-2014, section 8.3.

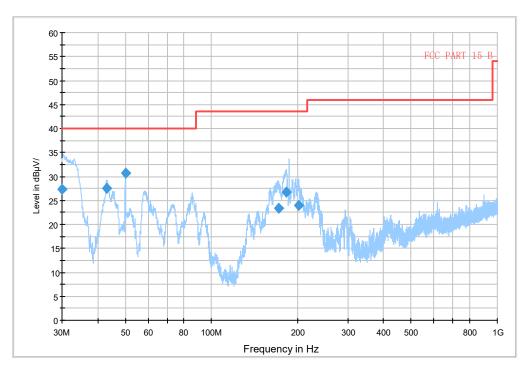
For 1000-12750MHz, the maximal emission value was acquired by adjusting the antenna height, and the table was rotated 360 degree to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement.



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Test Data

RE 30MHz-1GHz

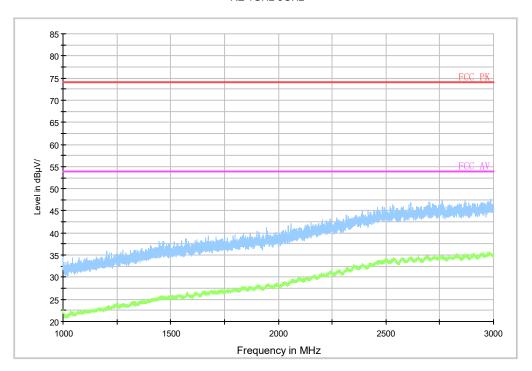


Frequency	QP	Mea.Time	RBW	Height	Polarity	Azimuth	Margin	Limit
MHz	dBuV/m	ms	KHz	cm		deg	dB	dBuV/m
30.110000	27.4	1000.0	120.0	100.0	V	180.0	12.6	40.0
43.151000	27.5	1000.0	120.0	100.0	V	90.0	12.5	40.0
50.002000	30.7	1000.0	120.0	100.0	V	90.0	9.3	40.0
171.328000	23.4	1000.0	120.0	185.0	Н	270.0	20.1	43.5
182.283000	26.8	1000.0	120.0	185.0	Н	270.0	16.7	43.5
201.204000	23.9	1000.0	120.0	185.0	Н	270.0	19.6	43.5

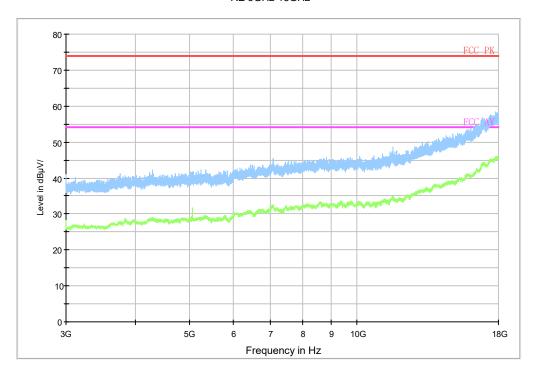


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RE 1GHz-3GHz



RE 3GHz-18GHz



Test photo

See the Pic1~9 in document" A1-901_EMC Test Setup Photos".



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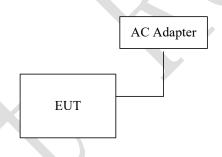
4.2 Conducted Emission

Specifications:	15.107(a)	
Date of Tests	2017-02-14-2017-02-28	
Test conditions:	Ambient Temperature:15℃-35℃	
	Relative Humidity:30%-60%	
	Air pressure: 86-106kPa	
Operation Mode	Normal	
Test Results:	Pass	

Limit Level Construction:

Frequency Range (MHz)	Conducted Limit (dBuV)			
	Quasi-peak Average			
0.15-0.5	66 to 56*	56 to 46*		
0.5-5	56	46		
5-30	60	50		
*Decreases with the logarithm of the frequency				

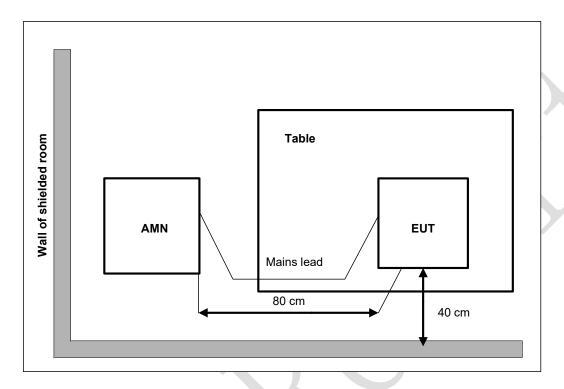
EUT Setup:





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Test Setup:



Test Method:

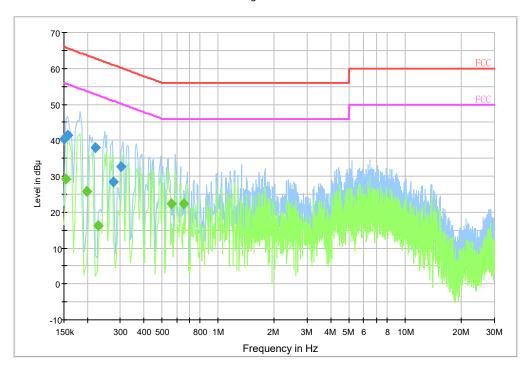
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies with the band 150 kHz to 30MHz shall not exceed the limits. Both lines of the power mains connected to the EUT were checked for maximum conducted interference. Tested in accordance with the procedures of ANSI C63.4-2014, section 7.3



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Test Data

CISPR N&L1 Voltage 150k to 30MHz-Class B



Frequency	QP	Mea.Time	Line	Margin	Limit
MHz	dBuV	ms		dB	dBuV
0.150000	40.3	1000.0	L1	25.7	66.0
0.157012	41.3	1000.0	L1	24.3	65.6
0.220444	38.1	1000.0	L1	24.7	62.8
0.276412	28.4	1000.0	L1	32.6	60.9
0.302531	32.7	1000.0	L1	27.5	60.2
0.310254	32.7	1000.0	L1	27.5	60.2

Frequency	AV	Mea.Time	Line	Margin	Limit
MHz	dBuV	ms		dB	dBuV
0.154000	29.1	1000.0	L1	26.7	55.8
0.199131	25.9	1000.0	L1	27.8	53.6
0.228444	16.2	1000.0	L1	36.3	52.5
0.560050	22.2	1000.0	L1	23.8	46.0
0.652288	22.3	1000.0	L1	23.7	46.0
0.663251	22.3	1000.0	L1	23.7	46.0



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Test photo

See the Pic10 in document"A1-901_EMC Test Setup Photos".



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Annex A External Photos

See the document"A1-901-External Photos".

Annex B Internal Photos

See the document" A1-901-Internal Photos".

ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

