

# **TEST REPORT**

REPORT NUMBER: B15X50050-FCC-EMC

## ON

**Type of Equipment:** Ilium X400 Smart Phone

Type of Designation: IliumX400

Manufacturer: Shenzhen fortuneshiptechnology,LTD

**ACCORDING TO** 

Subpart B, PART15, RADIO FREQUENCY DEVICES, Mar17,

2015

China Telecommunication Technology Labs.

Month date, year March, 17, 2015

Signature

He Guili Director



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FCC ID: ZC4X400

**Report Date:** 2015-03-17

**Test Firm Name:** China Telecommunication Technology Labs

**Registration Number:** 840587

#### 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 Part15B.

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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Equipment: I liumX400 REPORT NO.: B15X50050-FCC-EMC

#### 1.2 Testers

Name: Li Guoqing

Position: Engineer

Department: Department of EMC test

Date: 2015-03-17

Signature:

季国庆

Editor of this test report:

Name: Li Guoqing

Position: Engineer

Department: Department of EMC test

Date: 2015-03-17

Signature:

季国庆

Technical responsibility for area of testing:

Name: Zou Dongyi

Position: Manager

Department: Department of EMC test

Date: 2015-03-17

Signature: 27-1,12



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## 1.3 Testing Laboratory information

#### 1.3.1 Location

Name: China Telecommunication Technology Labs.

Address: No. 11, Yue Tan Nan Jie, Xi Cheng District

**BEIJING** 

P. R. CHINA, 100083

Tel: +86 10 68094078

Fax: +86 10 68011404

Email: emc@chinattl.com

#### 1.3.2 Details of accreditation status

Accredited by: China National Accreditation Service for Conformity

Assessment (CNAS)

Registration number: CNAS Registration No. CNAS L0570

Standard: ISO/IEC 17025: 2005

## 1.3.3 Test location, where different from section 1.3.1

Name: -----

Address: -----



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## 1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: CoroporativoLanix S.A. de C.V

Address: Carrtererainternacional Hermosillo-Nogales Km 8.5

Country: Mexico

Telephone: 6621090811

Fax: --

Contact: Oscar Guzman

Telephone: 6621090811

Email: Oguzman@lanix.ciim

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: Shenzhen fortuneshiptechnology.,LTD

Address: 6th Floor, Kingson Building, New Energ Innovation

Industrial Park, No. 1 Chuangsheng Road, Nanshan

District, Shenzhen P.R. China

City: Shenzhen

Country: China

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: Shenzhen fortuneshiptechnology.,LTD

Address: 6th Floor, Kingson Building, New Energ Innovation

Industrial Park, No. 1 Chuangsheng Road, Nanshan

District, Shenzhen P.R.China

City: Shenzhen

Country: China



Equipment: I lium X400 REPORT NO.: B15X50050-FCC-EMC

## 2 Test Item

## 2.1 General Information

Manufacturer: Shenzhen fortuneshiptechnology,LTD

Name: Ilium X400 Smart Phone

Model Number: IliumX400

Serial Number: --

Production Status: Product
Receipt date of test item: 2015-02-02

## 2.2 Outline of EUT

The EUT, Ilium X400 is a model supportingGSM850/ PCS1900 bandsand UMTS/HSDPA/HSUPA FDDII/V bands.

## 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	Type	Serial No.	Remarks
А	Mobile Phone	Shenzhen fortuneship technology, LTD	Ilium X400		None
В	Battery	None	None		None
С	Adaptor	None	None		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.

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

Test equipment Used:							
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State	
1	EMI Test Receiver	R/S	ESU	100367	2016-03-06	Normal	
2	Ultra Broadband Antenna	R/S	VULB 9163	vulb9163-544	2015-12-13	Normal	
3	Double-Ridged Horn Antenna	R/S	HF907	100357	2015-12-13	Normal	
4	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6. 3m		2015-11-15	Normal	
5	AMN	R/S	ENV216	101128	2016-03-06	Normal	



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## **4 Test Results**

## 4.1 Radiated Emission

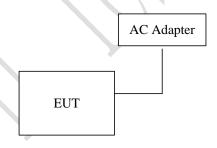
Specifications:	15.109(a)
Date of Tests	2015-02-15~2014-03-01
Test conditions:	Ambient Temperature: 15°C-35°C
	Relative Humidity: 30%-60%
	Air pressure: 86-106kPa
Operation Mode	Normal
Test Results:	Pass

#### **Limit Level Construction:**

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

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

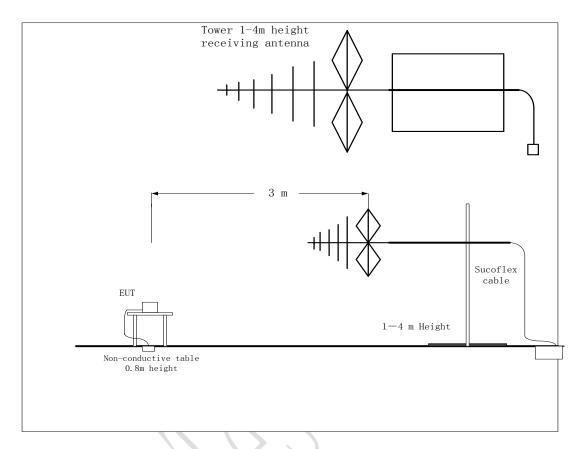
## **EUT Setup:**





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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.

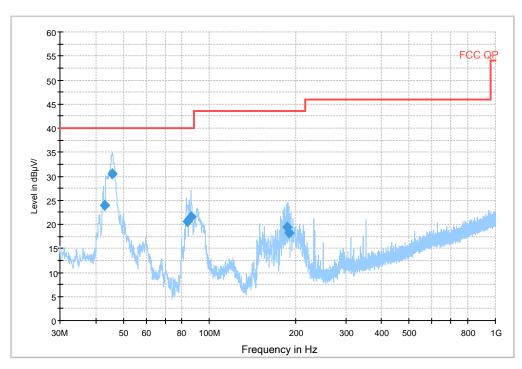
For 1000-12750MHz, the maximal emission value was acquired by adjusting the antenna height, and the table was rotated 360 degree to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement.



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# Test Data Configuration1

RE 30MHz-1GHz H

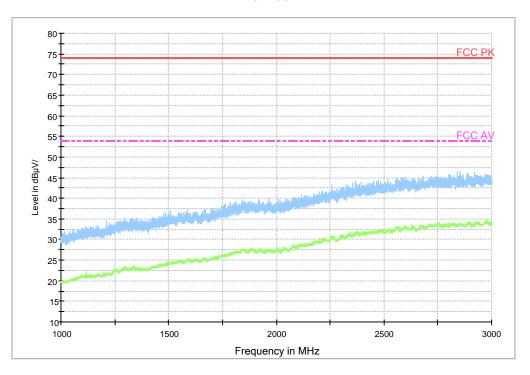


Frequency	QP	Mea.Time	RBW	Height	Polarity	Azimuth	Margin	Limit
MHz	dBuV/m	ms	KHz	cm		deg	dB	dBuV/m
43.113000	23.9	1000.0	120.0	116.0	V	97.0	16.1	40.0
45.811000	30.6	1000.0	120.0	116.0	V	-1.0	9.4	40.0
83.562000	20.7	1000.0	120.0	216.0	Н	179.0	19.3	40.0
85.969000	21.6	1000.0	120.0	198.0	Н	172.0	18.4	40.0
187.061000	19.3	1000.0	120.0	183.0	Н	269.0	20.7	40.0
189.486000	18.3	1000.0	120.0	216.0	Н	82.0	21.7	40.0

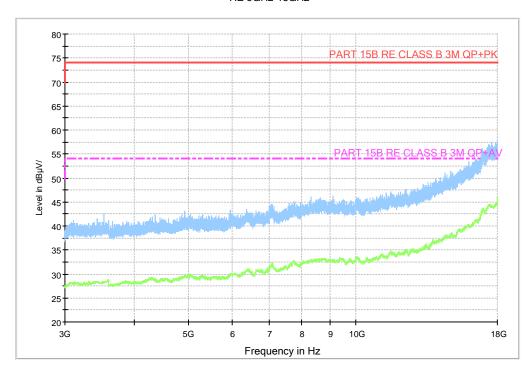


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RE 1GHz-3GHz



#### RE 3GHz-18GHz



## **Test photo**

See the Pic11 in document"Ilium X400- Test Setup Photos".



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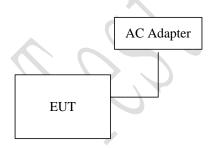
## 4.2Conducted Emission

Specifications:	15.107(a)				
Date of Tests	2015-02-15~2015-03-01				
Test conditions:	onditions: Ambient Temperature: 15°C-35°C				
	Relative Humidity: 30%-60%				
	Air pressure: 86-106kPa				
Operation Mode	Normal				
Test Results:	Pass				

#### **Limit Level Construction:**

FrequencyRange (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							

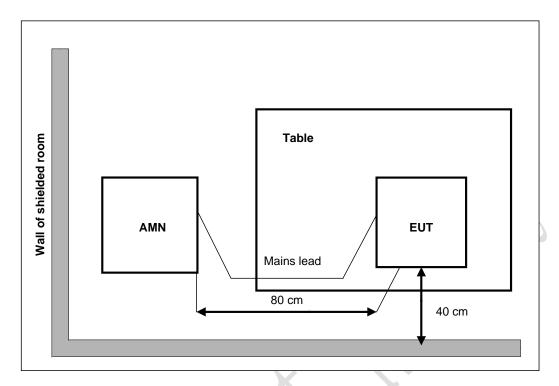
## **EUT Setup:**





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## **Test Setup:**



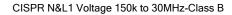
#### **Test Method:**

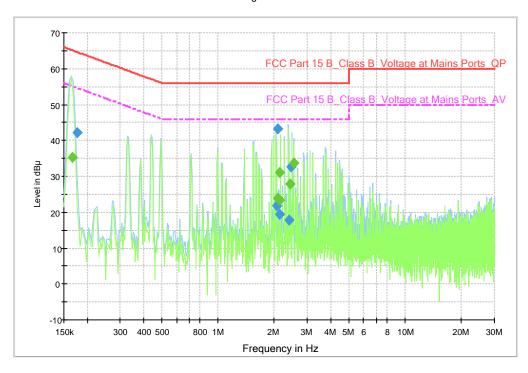
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies with the band 150 kHz to 30MHz shall not exceed the limits. Both lines of the power mains connected to the EUT 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**





Frequency	QP	Mea.Time	Line	Margin	Limit
MHz	dBuV	ms		dB	dBuV
0.176000	42.2	1000.0	L1	22.5	64.7
2.071506	21.7	1000.0	L1	34.3	56.0
2.087475	43.2	1000.0	L1	12.8	56.0
2.129412	19.3	1000.0	N	36.7	56.0
2.411556	17.8	1000.0	N	38.2	56.0
2.445225	32.6	1000.0	L1	23.4	56.0

Frequency	AV	Mea.Time	Line	Margin	Limit
MHz	dBuV	ms		dB	dBuV
0.166000	35.4	1000.0	L1	19.8	55.2
2.079506	23.9	1000.0	L1	22.1	46.0
2.135475	23.4	1000.0	L1	22.6	46.0
2.137412	30.9	1000.0	L1	15.1	46.0
2.419556	27.8	1000.0	L1	18.2	46.0
2.535225	33.8	1000.0	L1	12.2	46.0

## **Test photo**

See the Pic12 in document" Ilium X400-Test Setup Photos".



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## **Annex A External Photos**

See the document" Ilium X400-External Photos".

## **Annex B Internal Photos**

See the document"Ilium X400-Internal Photos".

# **ANNEX C Deviations from Prescribed Test Methods**

No deviation from Prescribed Test Methods.

