

# TEST REPORT

REPORT NUMBER: B15X50034-FCC-EMC\_Rev1

ON

**Type of Equipment:** Ilium X100 Smart Phone  
**Type of Designation:** Ilium X100  
**Manufacturer:** Shenzhen fortuneship technology.LTD

ACCORDING TO

Subpart B, PART 15, RADIO FREQUENCY DEVICES , Mar 6, 2015

China Telecommunication Technology Labs.

*Month date, year*  
*April, 14, 2015*

*Signature*

A handwritten signature in black ink, appearing to be 'He Guili'.

He Guili  
Director

FCC Part15B  
Equipment: Ilium X100

REPORT NO.: B15X50034-FCC-EMC\_Rev1

**FCC ID:** ZC4X100

**Report Date:** 2015-04-14

**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 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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## 1.2 Testers

Name: Li Guoqing  
Position: Engineer  
Department: Department of EMC test  
Date: 2015-04-14  
Signature: 李国庆

Editor of this test report:

Name: Li Guoqing  
Position: Engineer  
Department: Department of EMC test  
Date: 2015-04-14  
Signature: 李国庆

Technical responsibility for area of testing:

Name: Zou Dongyi  
Position: Manager  
Department: Department of EMC test  
Date: 2015-04-14  
Signature: 邹东屹

### 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: -----

## 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 fortuneship technology.,LTD  
Address: 6th Floor,Kingson Building,New Energ Innovation  
Industrial Park,No.1Chuangsheng 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 fortuneship technology.,LTD  
Address: 6th Floor,Kingson Building,New Energ Innovation  
Industrial Park,No.1Chuangsheng Road,Nanshan  
District,Shenzhen P.R.China  
City: Shenzhen  
Country: China

## 2 Test Item

### 2.1 General Information

Manufacturer: Shenzhen fortuneshiptechnology.LTD  
Name: Ilium X100 Smart Phone  
Model Number: Ilium X100  
Serial Number: --  
Production Status: Product  
Receipt date of test item: 2015-01-14

### 2.2 Outline of EUT

The EUT, Ilium X100 is a model supporting EDGE/GPRS/GSM 850/1900 bands, 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
A	Mobile Phone	Shenzhen fortuneship technology.LTD	Ilium X100 Smart Phone	--	None
B	Battery	None	None	--	None
C	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.

Configuration1		
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

## 4 Test Results

### 4.1 Radiated Emission

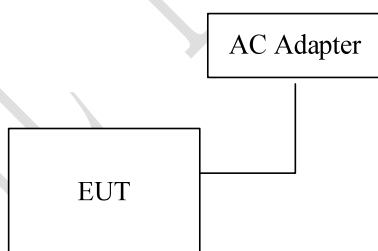
Specifications:	15.109(a)
Date of Tests	2015-01-17-2015-01-28
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	Normal
Test Results:	Pass

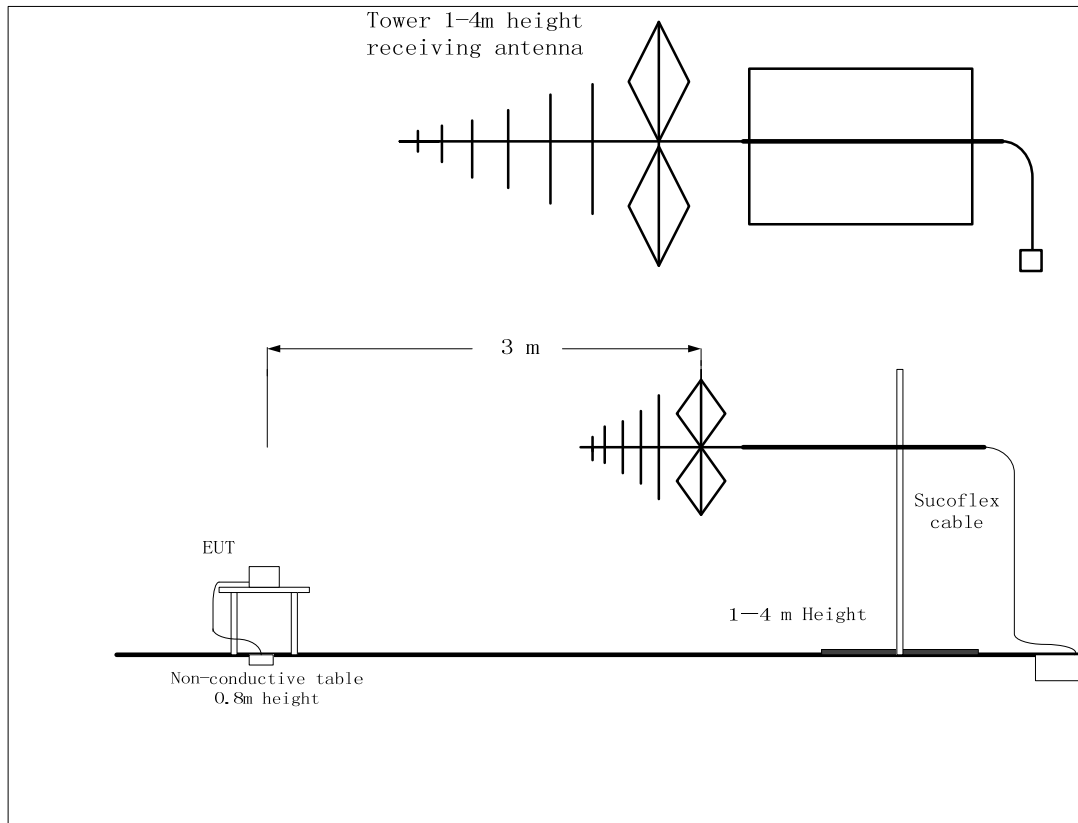
#### Limit Level Construction:

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:



**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.

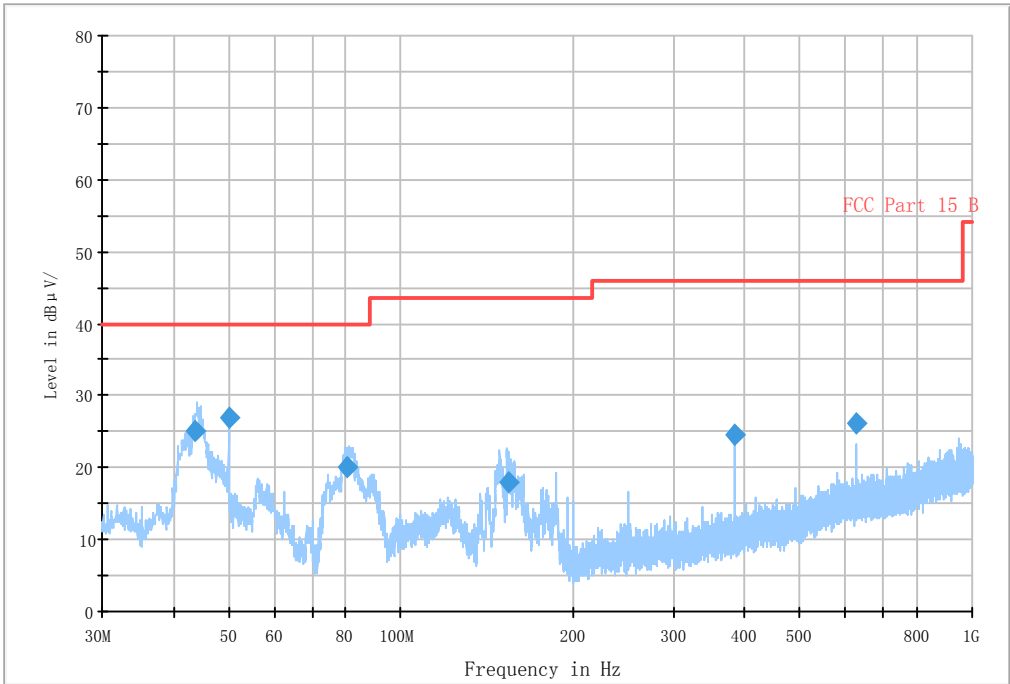
For 1000-12750MHz, the maximal emission value was acquired by adjusting the antenna height, and the table was rotated 360 degree to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement.

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Test Data

RE - TX - GSM1900 +QP+PK 30M to 1G

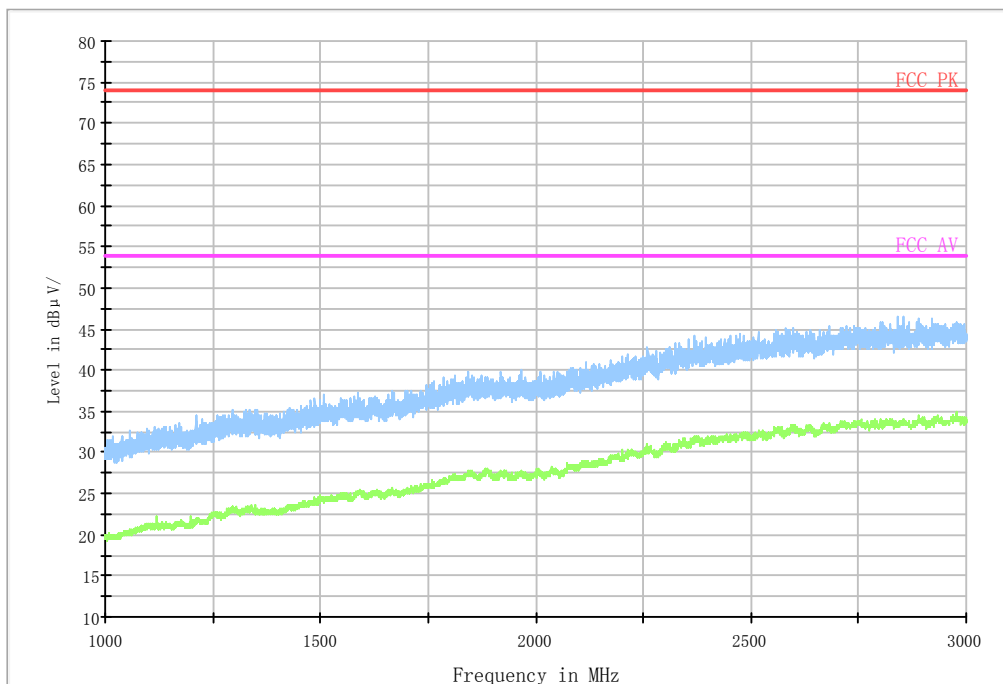


Frequency MHz	QP dBuV/m	Mea.Time ms	RBW KHz	Height cm	Polarity	Azimuth deg	Margin dB	Limit dBuV/m
43.745000	25.1	1000.0	120.0	99.0	V	265.0	14.9	40.0
50.022000	26.8	1000.0	120.0	126.0	V	5.0	13.2	40.0
80.596500	20.0	1000.0	120.0	228.0	H	175.0	20.0	40.0
153.892000	18.0	1000.0	120.0	175.0	H	175.0	25.5	43.5
384.001500	24.5	1000.0	120.0	99.0	H	270.0	21.5	46.0
625.046500	26.2	1000.0	120.0	99.0	V	180.0	19.8	46.0

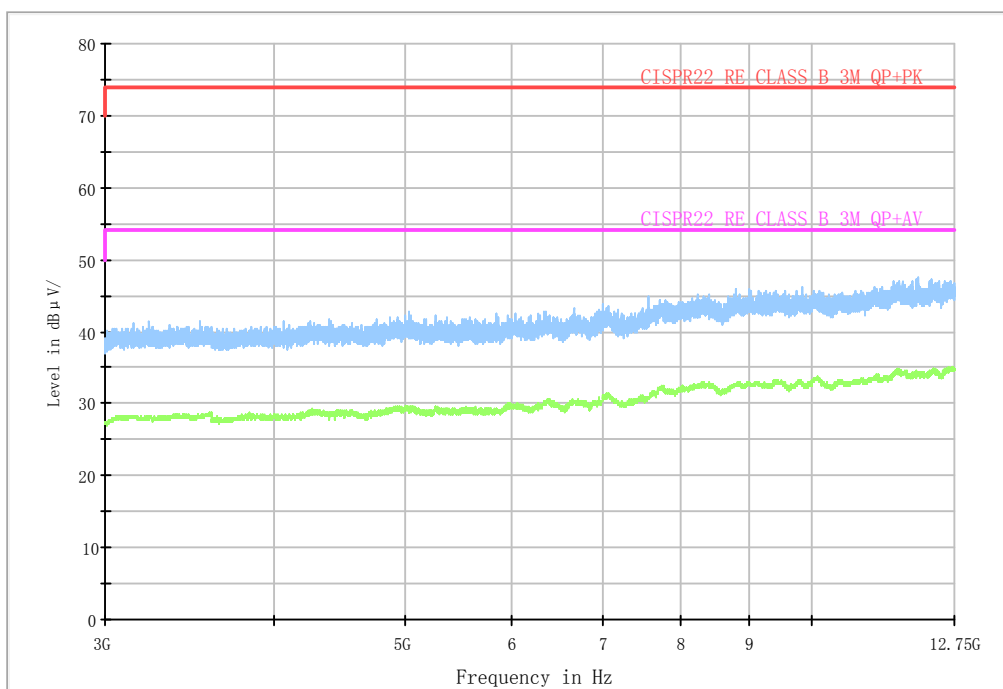
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RE 1GHz-3GHz



RE 3GHz-12.75GHz



### Test photo

See the Pic1~3 in document "Ilium X100 EMC Test Setup Photos\_Rev1".

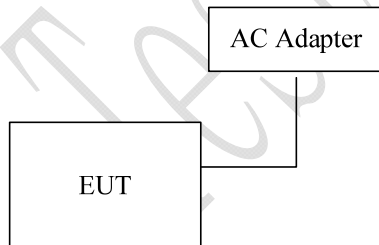
## 4.2 Conducted Emission

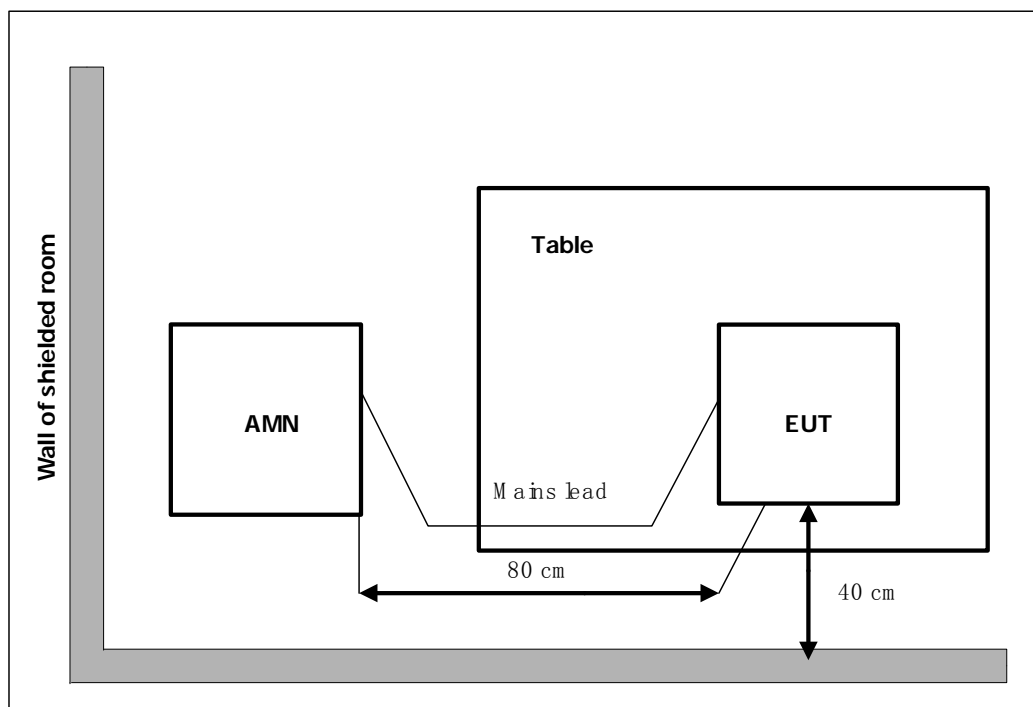
<b>Specifications:</b>	15.107(a)
<b>Date of Tests</b>	2015-01-17-2015-01-25
<b>Test conditions:</b>	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
<b>Operation Mode</b>	Normal
<b>Test Results:</b>	Pass

### 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:



**Test Setup:****Test Method:**

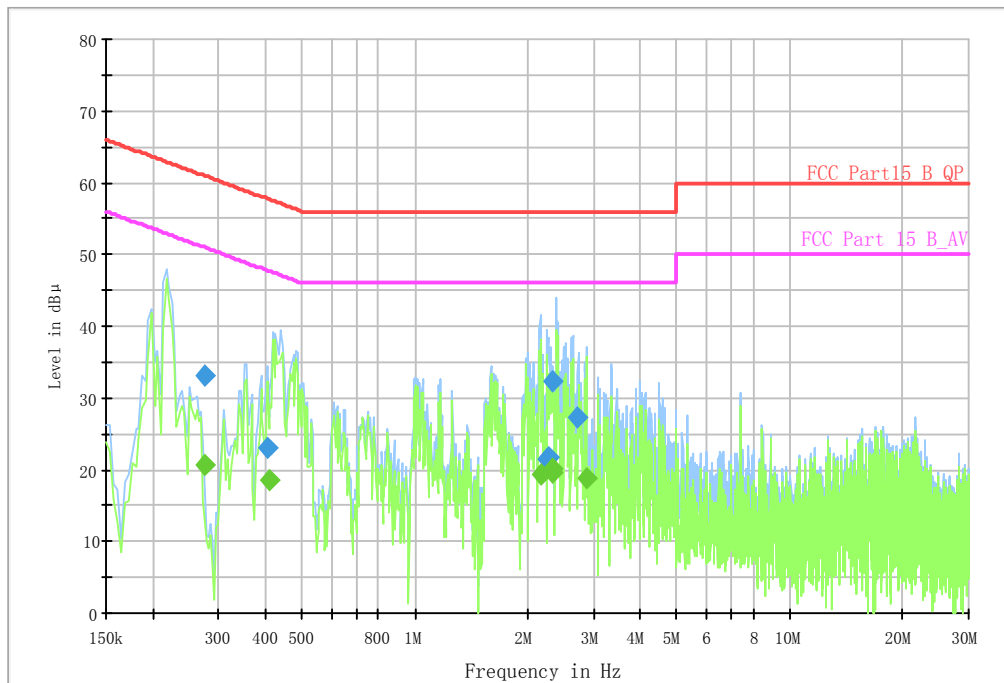
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies with the band 150 kHz to 30MHz shall not exceed the limits. Both lines of the power mains connected to the EUT 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&amp;L1 Voltage 150k to 30MHz-Class B



Frequency MHz	QP dBuV	Mea.Time ms	Line	Margin dB	Limit dBuV
0.274000	33.2	1000.0	L1	27.8	61.0
0.403306	23.1	1000.0	L1	34.6	57.8
2.245144	21.6	1000.0	L1	34.4	56.0
2.264156	21.8	1000.0	L1	34.2	56.0
2.319288	32.4	1000.0	L1	23.6	56.0
2.725012	27.2	1000.0	L1	28.8	56.0

Frequency MHz	AV dBuV	Mea.Time ms	Line	Margin dB	Limit dBuV
0.274000	20.6	1000.0	L1	30.4	51.0
0.410112	18.5	1000.0	L1	29.2	47.6
2.183144	19.3	1000.0	L1	26.7	46.0
2.318156	19.7	1000.0	L1	26.3	46.0
2.319019	20.1	1000.0	L1	26.0	46.0
2.864350	18.8	1000.0	L1	27.2	46.0

## Test photo

See the Pic4 in document" Ilium X100 EMC Test Setup Photos\_Rev1".



## **Annex A External Photos**

See the document "Ilium X100-External Photos".

## **Annex B Internal Photos**

See the document "Ilium X100-Internal Photos".

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

No deviation from Prescribed Test Methods.

\_\_\_\_\_ The End of this Report \_\_\_\_\_