

TEST REPORT

REPORT NUMBER: B15X50050-FCC-BLE_Rev2

ON

Type of Equipment: Ilium X400 Smart Phone
Model Number: Ilium X400
Manufacturer: Shenzhen fortuneship technology.LTD

ACCORDING TO

FCC Part 15, Subpart C, 2015:

15.205 Restricted bands of operation,
15.209 Radiated emission limits; general requirements,
15.247 Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and
5725–5850 MHz

ANSI C63.10 2013:American National Standard of Procedures for
Compliance Testing of Unlicensed Wireless Devices

China Telecommunication Technology Labs.

Month date, year
APR 09, 2015

Signature



He Guili
Director

FCC ID: ZC4X400
Report Date: 2015-04-09

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 Parts 15, subpart C. 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 Parts 15, subpart C and ANSI C63.10-2013.

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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1.3 Testing Laboratory information

1.3.1 Location

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1.3.2 Details of accreditation status

Accredited by: China National Accreditation Service for Conformity
Assessment (CNAS)
Registration number: CNAL Registration No.L0570
Standard: ISO/IEC 17025:2005

1.3.3 Test location, where different from section 1.3.1

Name: -----
Street: -----
City: -----
Country: -----
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1.4 Details of applicant or manufacturer

1.4.1 Applicant

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1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: Shenzhen fortuneship technology.,LTD
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Park,No.1Chuangsheng Road, Nanshan District, Shen.P.R.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, Shen.P.R.China

2 Test Item

2.1 General Information

Manufacturer: Shenzhen fortuneship technology.LTD
Name: Ilium X400 Smart Phone
Model Number: Ilium X400
Serial Number: --
Production Status: Production
Receipt date of test item: 2015-02-02

2.2 Outline of EUT

E.U.T. is a GSM850/ PCS1900 bands and UMTS/HSDPA/HSUPA/HSPA+ FDD II/V bands Terminal Equipment with Bluetooth and Wifi.

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 X400	--	None
B	Battery	None	None	--	None
C	Adaptor	None	None	--	None

2.5 Other Information

--

3 Summary of Test Results

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

	Name of Test	Result
1、	Maximum Peak Output Power	Pass
2、	Peak Power Spectral Density	Pass
3、	6dB Occupied Bandwidth	Pass
4、	Band Edges Compliance	Pass
5、	Transmitter Spurious Emission-Conducted	Pass
6、	Radiated Emission	Pass
7、	Power line Conducted Emissions	Pass
Note: none		

4 Test Results

4.1 Peak Output Power-Conducted

Date of Tests		2015-03-30				
Test conditions:		Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa				
Test Results:		Pass				
Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	Spectrum Analyzer	R/S	FSQ26	201137/026	2016-03-05	Normal
2	Wireless Connectivity Test Set	R/S	CMW500	152395	2016-01-28	Normal

4.1.1 Measurement Limit

Standard	Limit (dBm)
FCC Part 15.247(b)(1)	< 30

4.1.2 Test Condition:

Hopping Mode	RBW	VBW	Span	Sweptime
Hopping OFF	3MHz	10MHz	9MHz	Auto

4.1.3 Test procedure

The measurement is according to ANSI C63.10 clause 7.8.5.

1. The output power of EUT was connected to the spectrum analyzer by cable. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Measure the conducted output power and record the results it.

4.1.4 Measurement Results:

For GFSK

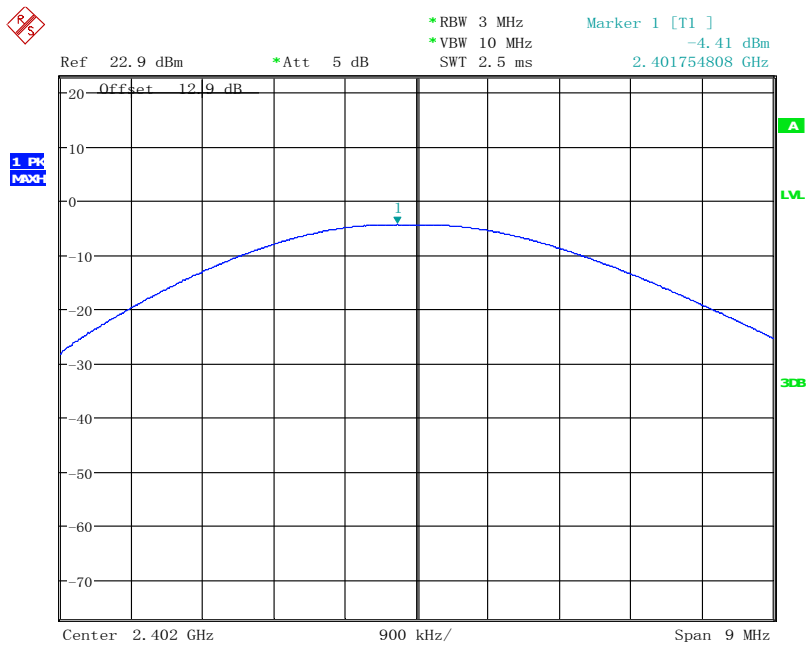
Channel	Ch0 2402MHz	Ch19 2440 MHz	CH39 2480MHz	Conclusion
Peak Conducted Output Power (dBm)	-4.41	-3.95	-3.61	Pass
	Fig.1	Fig.2	Fig.3	

Conclusion: PASS

FCC Parts 15 subpart C, ANSI C63.10-2013
Equipment: Ilium X400

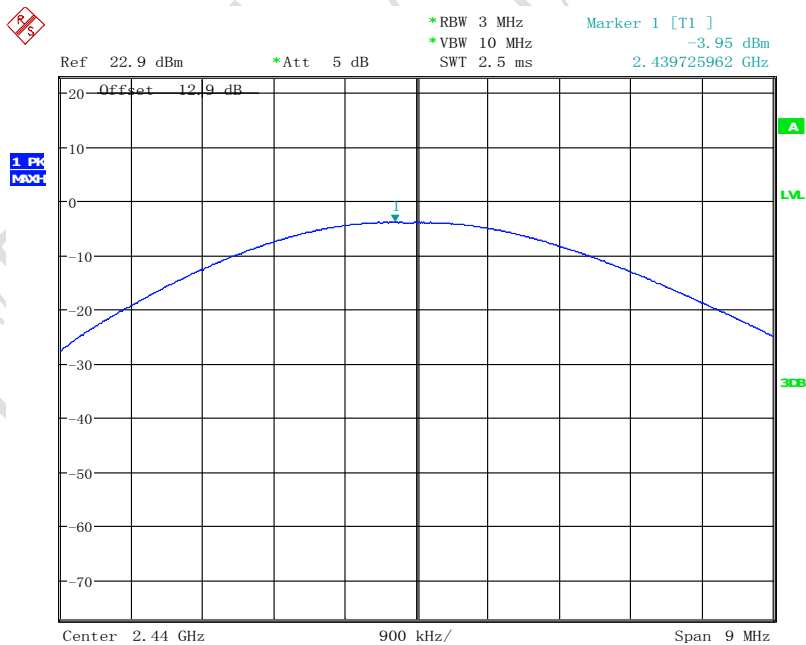
REPORT NO.: B15X50050-FCC-BLE_Rev2

Test figure as below:



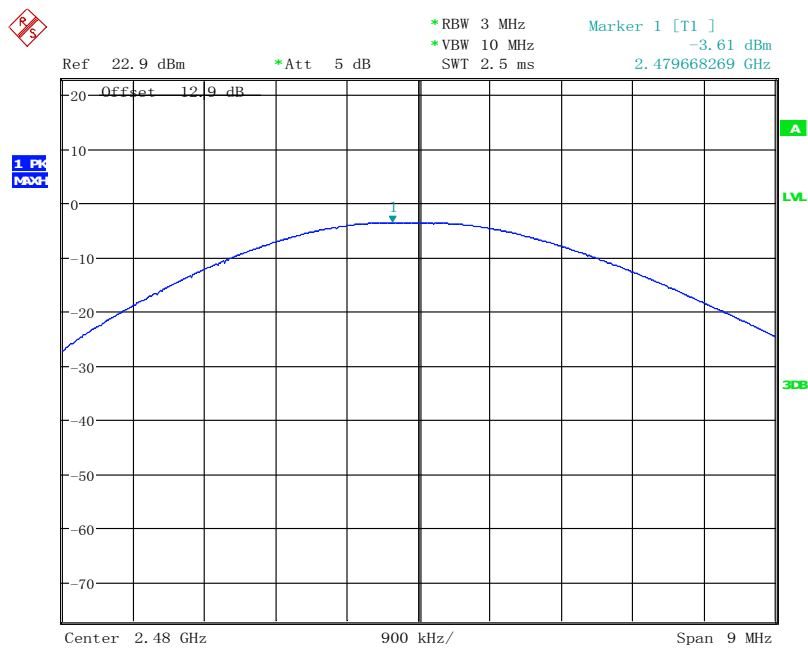
Date: 30. MAR. 2015 16:05:50

Fig.1 Peak Conducted Output Power CH0, DH1



Date: 30. MAR. 2015 16:07:45

Fig.2 Peak Conducted Output Power CH19, DH1



Date: 30.MAR.2015 16:06:55

Fig.3 Peak Conducted Output Power CH39, DH1

4.2 Peak Power Spectral Density

Date of Tests	2015-02-12					
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa					
Test Results:	Pass					
Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU40	100350	2015-03-07	Normal
2	Wireless Connectivity Test Set	Agilent	N4010A	MY52070357	2015-03-05	Normal

4.2.1 Measurement Limit:

Standard	Limit
FCC CFR Part 15.247(e)	< 8dBm/3 KHz

4.2.2 Test procedures

The measurement is according to ANSI C63.10 clause 11.10.

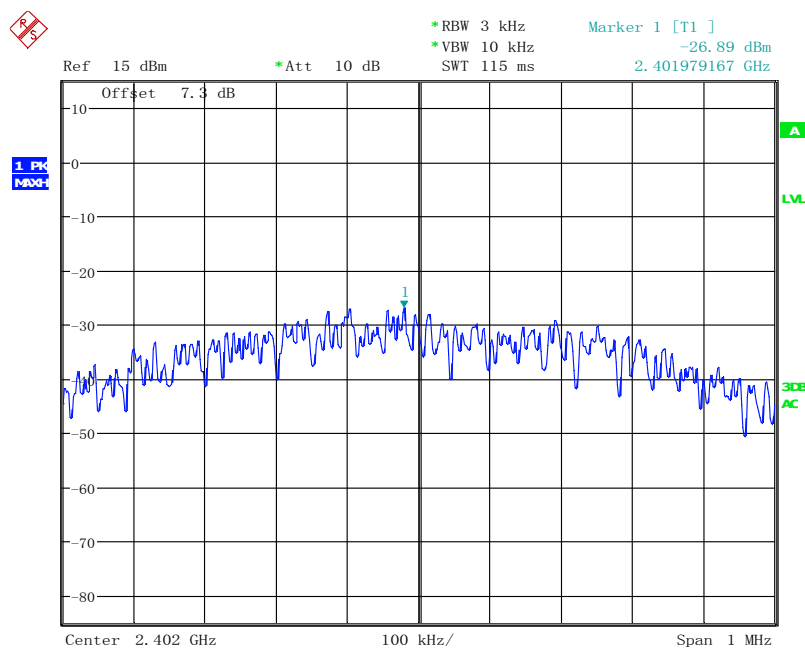
1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set analyzer center frequency to DTS channel center frequency.
4. Set the span to 1.5 times the DTS bandwidth.
5. Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
6. Set the VBW $\geq [3 \times \text{RBW}]$.
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum amplitude level within the RBW.
12. If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

4.2.3 Measurement Results:

For GFSK

Mode	Channel	Power Spectral Density(dBm/3kHz)		Conclusion
BT4.0	0	Fig.4	-26.89	Pass
	19	Fig.5	-24.11	Pass
	39	Fig.6	-24.21	Pass

Test figure as below:

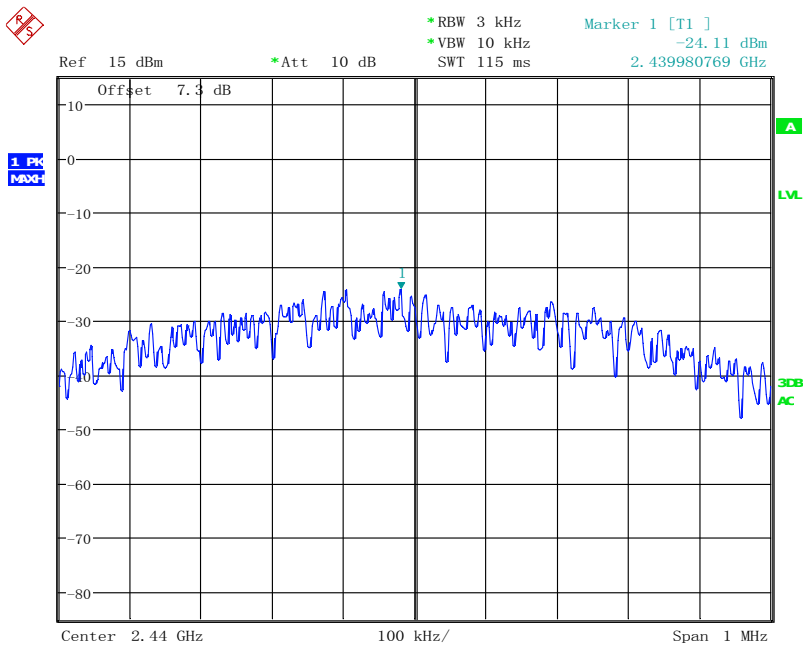


Date: 12. FEB. 2015 16:03:14

Fig.4 Power spectral density: CH0

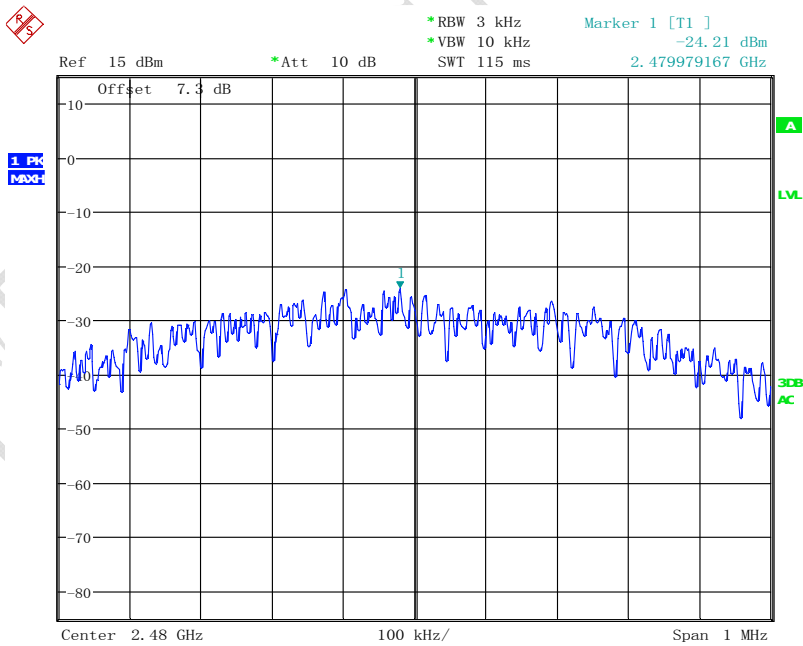
FCC Parts 15 subpart C, ANSI C63.10-2013
Equipment: Ilium X400

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Date: 12.FEB.2015 16:02:49

Fig.5 Power spectral density: CH19



Date: 12.FEB.2015 16:02:24

Fig.6 Power spectral density: CH39

4.3 6dB Bandwidth

Date of Test		2015-02-12				
Test conditions:		Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa				
Test Results:		Pass				
Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU40	100350	2015-03-07	Normal
2	Wireless Connectivity Test Set	Agilent	N4010A	MY52070357	2015-03-05	Normal

4.3.1 Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (a) (1)	N/A

4.3.2 Test procedures

The measurement is according to ANSI C63.10 clause 7.8.7

1. Connect the EUT through cable and divide with CBT32 and spectrum analyzer.
2. Enable the EUT transmit maximum power.
3. Set the spectrum analyzer as
4. Span: two or five times of OBW
5. RBW=1% to 5% of the OBW; VBW≥3RBW; Max Hold.
6. Select the max peak, and N DB DOWN=20dB.
7. Record the results.

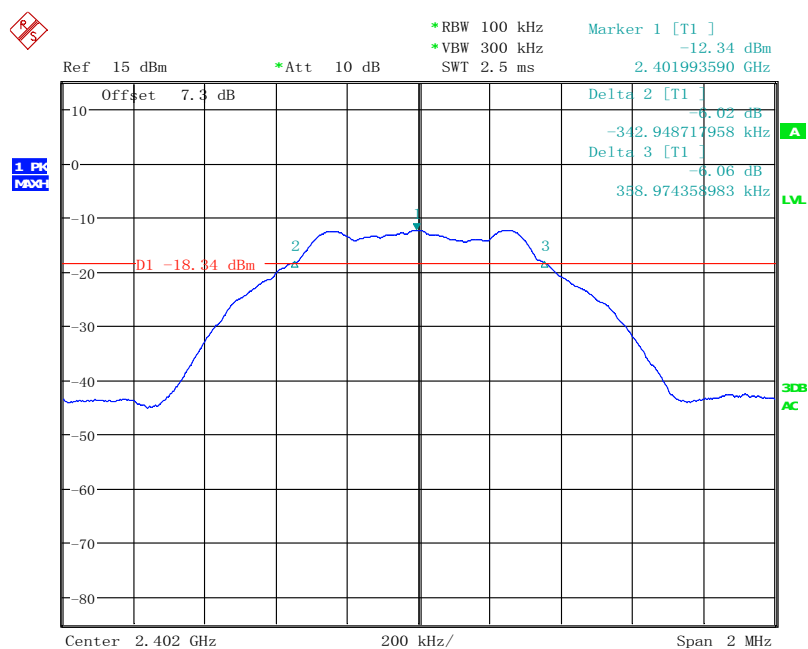
4.3.3 Measurement Result:

For GFSK

Channel	20dB Bandwidth (KHz)		Conclusion
0	Fig.7	701.922	Pass
19	Fig.8	708.333	Pass
39	Fig.9	708.333	Pass

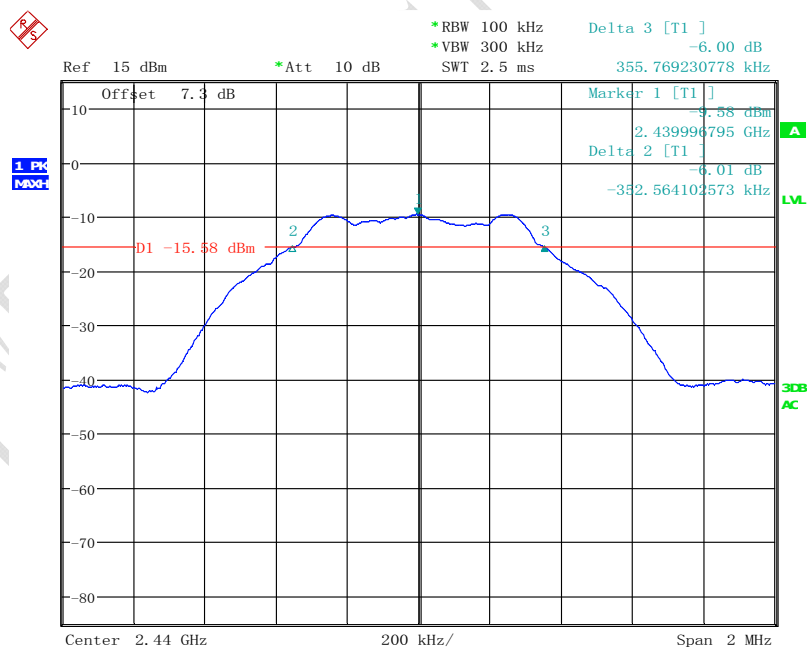
Conclusion: PASS

Test figure as below:



Date: 12.FEB.2015 16:05:17

Fig.7 6dB Bandwidth: Ch0

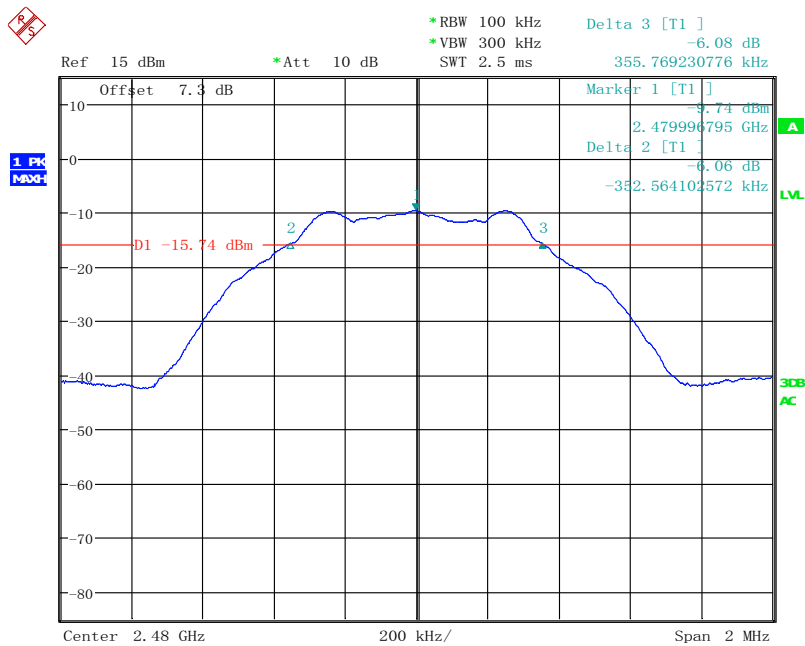


Date: 12.FEB.2015 16:06:25

Fig.8 6dB Bandwidth: Ch19

FCC Parts 15 subpart C, ANSI C63.10-2013
Equipment: Ilium X400

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Date: 12.FEB.2015 16:07:17

Fig.9 6dB Bandwidth: Ch39

4.4 Frequency Band Edges

Date of Test	2015-04-09					
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa					
Test Results:	Pass					
Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU40	100350	2016-03-05	Normal
2	Wireless Connectivity Test Set	R/S	CMW500	152395	2016-01-28	Normal

4.4.1 Measurement Limit:

Standard	Limited(dBuV/m)	
FCC 47 CFR Part 15.247(d)	Peak	74
	Average	54

4.4.2 Test procedure

The measurement is according to ANSI C63.10 clause11.13.

- Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation.
- Reference level offset: Corrected for gains and losses of test antenna factor, preamp gain and cable loss, so as to indicate field strength, in units of dBμV/m at 3 m, directly on the instrument display. Alternatively, the reference level offset may be set to zero and calculations shall be provided showing the conversion of raw measured data to the field strength in dBμV/m at 3 m.
- Reference level: As required to keep the signal from exceeding the maximum spectrum analyzer input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2..
- Attenuation: Auto (at least 10 dB preferred).
- Sweep time: Coupled.
- Resolution bandwidth: Above 1 GHz: 1 MHz
- Video bandwidth: VBW for Peak, Quasi-peak, or Average Detector Function: $3 \times RBW$
- Detector (unless specified otherwise): Peak and average above 1 GHz
- Trace: Max hold for final measurement; a combination of two traces, clear-write and max hold, is recommended for maximizing the emission.

4.4.3 Measurement results**For GFSK**

Channel	Test Results(dBuV/m)			Conclusion
0	Peak	2338.794MHz	49.970	Pass
	Average	2338.962MHz	41.596	
	Fig.10			
39	Peak	2483.500MHz	41.279	Pass
	Average	2483.500MHz	30.731	
	Fig.11			

Conclusion: PASS

Test figure as below:

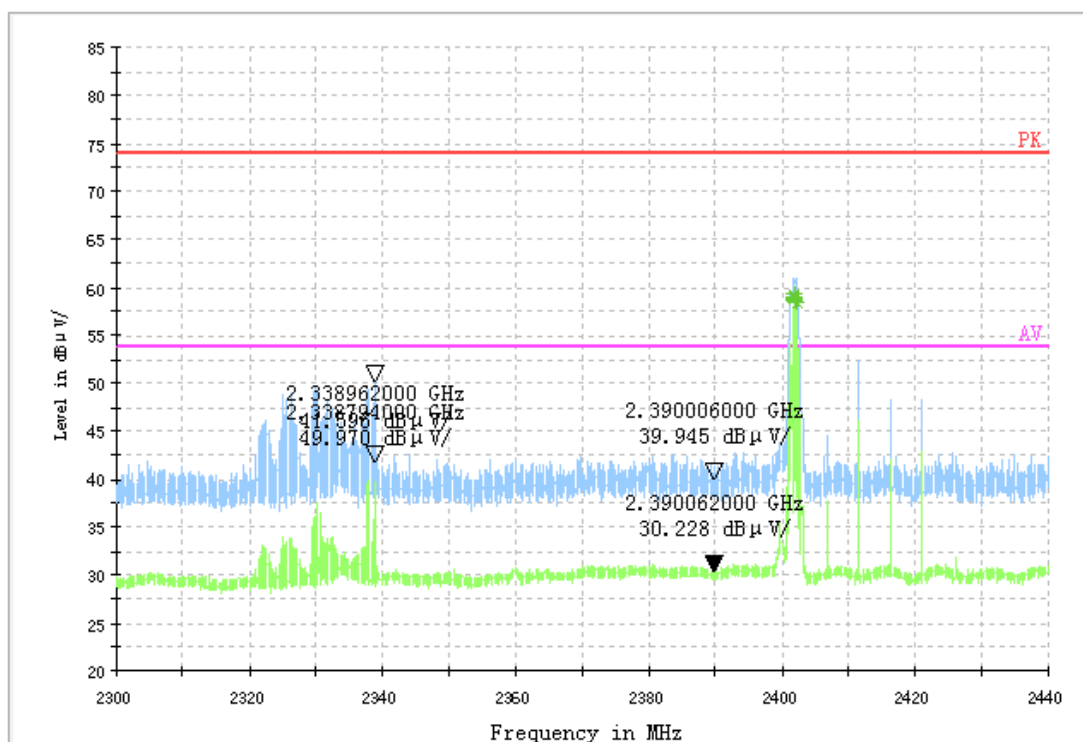


Fig.10 Frequency Band Edge: GFSK, Ch0

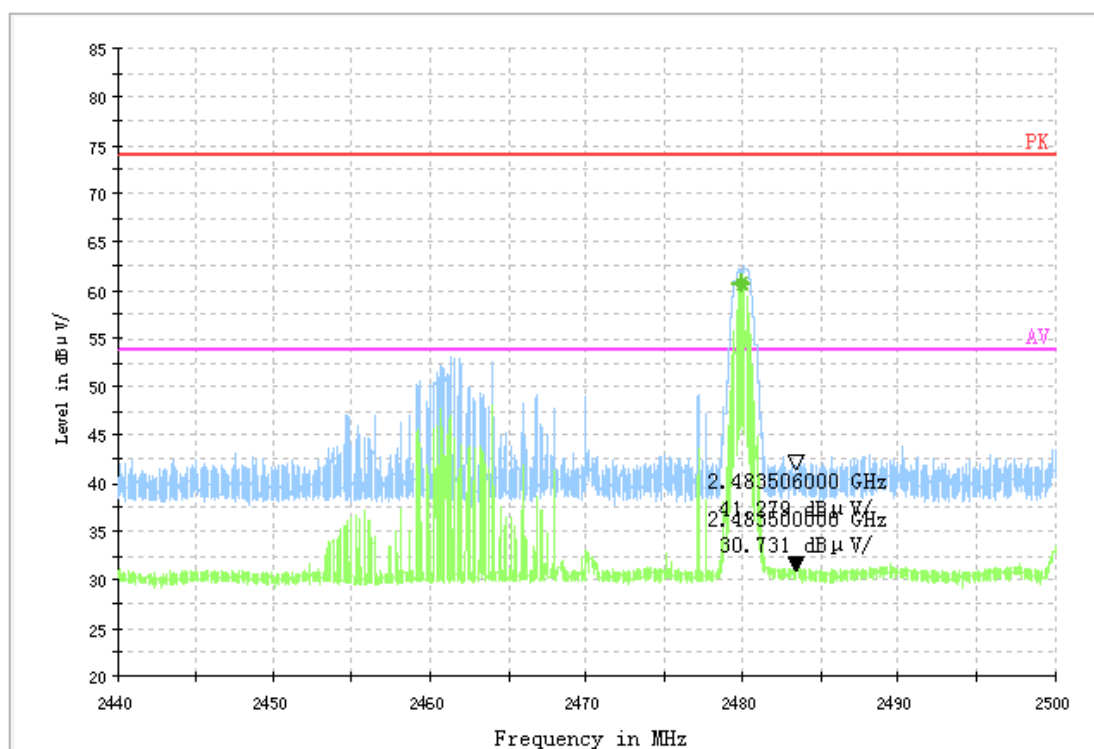


Fig.11 Frequency Band Edge: GFSK, Ch39

4.5 Transmitter Spurious Emission-Conducted

Date of Test		2015-02-12				
Test conditions:		Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa				
Test Results:		Pass				
Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU40	100350	2015-03-07	Normal
2	Wireless Connectivity Test Set	Agilent	N4010A	MY52070357	2015-03-05	Normal

4.5.1 Measurement Limit:

Standard	Limit
FCC 47 CFR Part15.247 (d)	20dB below peak output power in 100kHz bandwidth

4.5.2 Test procedures

The measurement is according to ANSI C63.10 clause 7.8.8.

1. Connect the EUT to spectrum analyzer.
2. Set RBW=100kHz, VBW=300kHz.
3. Detector =peak, sweep time=auto couple, trace mode=max hold.

4.5.3 Measurement Results:

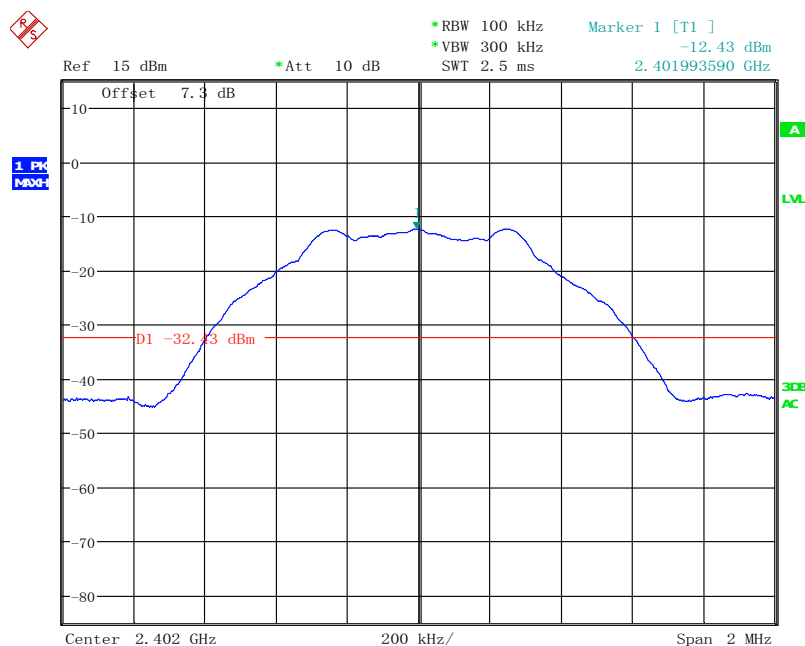
Channel	Frequency Range	Test Results	Conclusion
Ch0 2402MHz	Center Freq.	Fig.12	Pass
	30MHz-26GHz	Fig.13	Pass
Ch19 2440MHz	Center Freq.	Fig.14	Pass
	30MHz-26GHz	Fig.15	Pass
Ch39 2480MHz	Center Freq.	Fig.16	Pass
	30MHz-26GHz	Fig.17	Pass

Conclusion: PASS

FCC Parts 15 subpart C, ANSI C63.10-2013
Equipment: Ilium X400

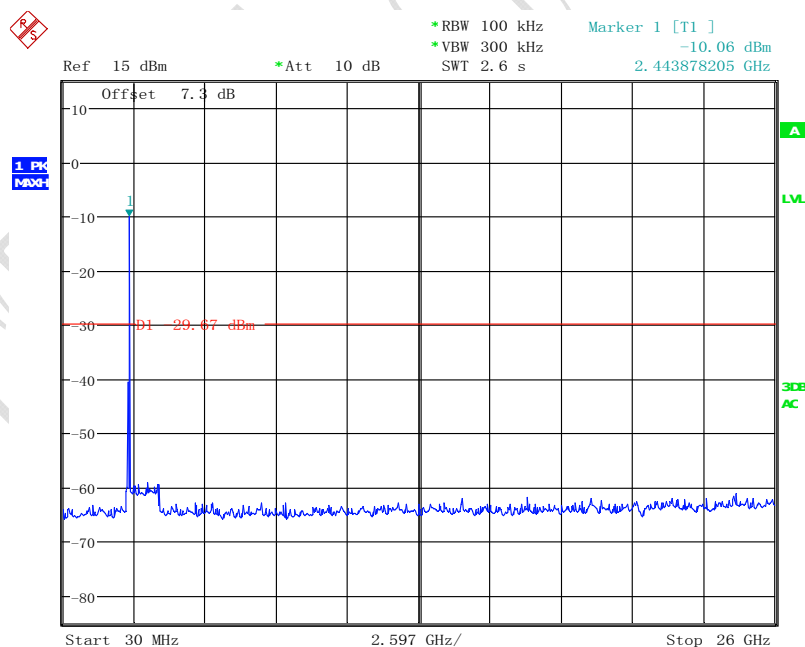
REPORT NO.: B15X50050-FCC-BLE_Rev2

Test figure as below:



Date: 12. FEB. 2015 16:10:53

Fig.12 Conducted spurious emission: Ch0, 2402MHz

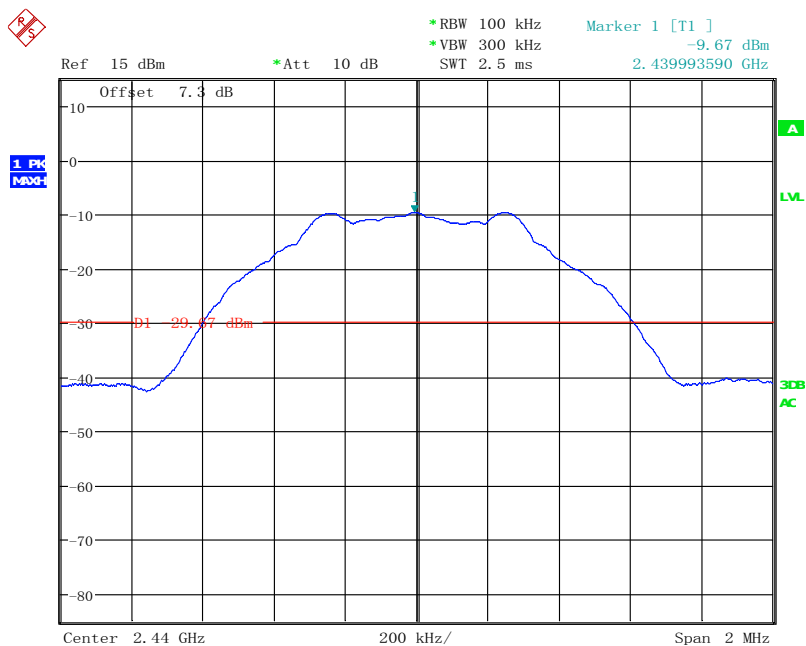


Date: 12. FEB. 2015 16:13:07

Fig.13 Conducted spurious emission: Ch0, 30MHz-26GHz

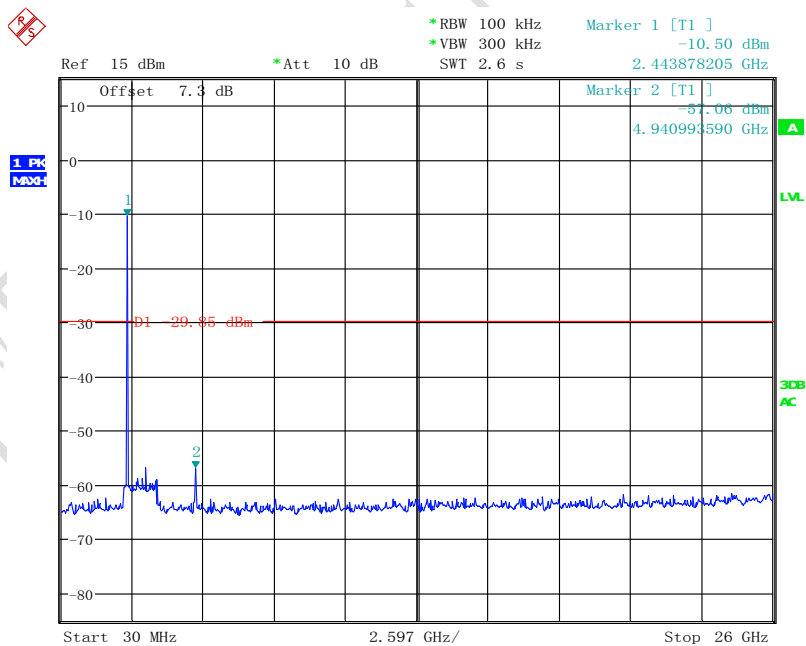
FCC Parts 15 subpart C, ANSI C63.10-2013
Equipment: Ilium X400

REPORT NO.: B15X50050-FCC-BLE_Rev2



Date: 12.FEB.2015 16:12:40

Fig.14 Conducted spurious emission: Ch19, 2441MHz

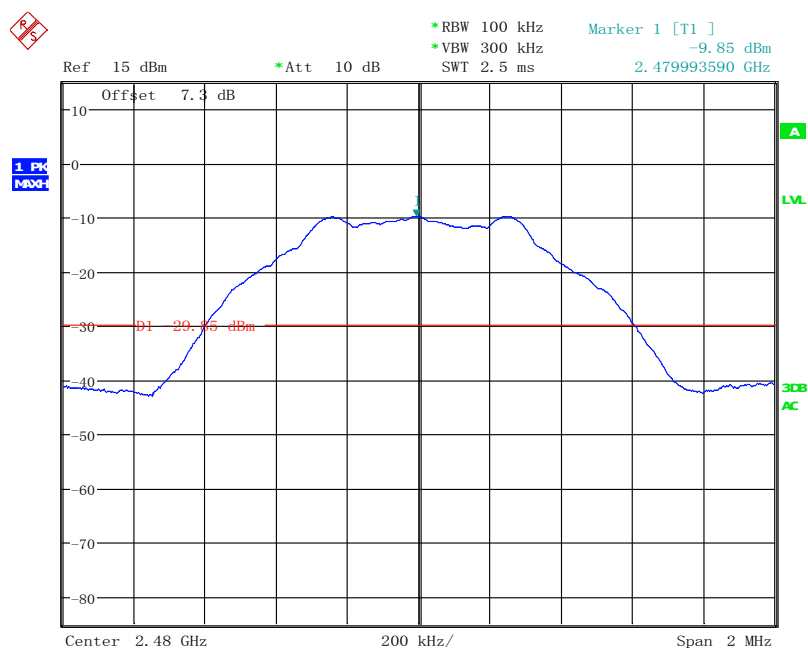


Date: 12.FEB.2015 16:14:20

Fig.15 Conducted spurious emission: Ch19, 30MHz-26GHz

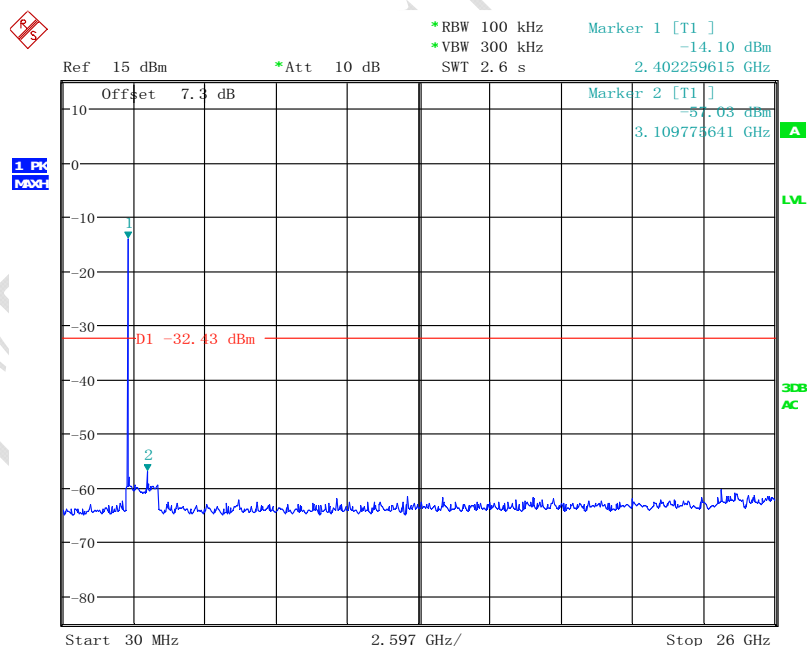
FCC Parts 15 subpart C, ANSI C63.10-2013
Equipment: Ilium X400

REPORT NO.: B15X50050-FCC-BLE_Rev2



Date: 12.FEB.2015 16:13:43

Fig.16 Conducted spurious emission: Ch39, 2480MHz



Date: 12.FEB.2015 16:11:54

Fig.17 Conducted spurious emission: Ch39, 30MHz-26GHz

4.6 Radiated Emission Measurement

Date of Test	2015-02-12					
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa					
Test Results:	Pass					
Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R&S	ESIB26	100211	2016-01-12	Normal
2	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2015-11-16	Normal
3	BLUETOOTH TESTER	R/S	CBT	100657	2016-01-28	Normal
4	Loop Antenna	R&S	HFH2-Z2	836553/001	2015-08-23	Normal
5	Double-Ridged Horn Antenna	R&S	HF906	100037	2015-11-17	Normal
6	Ultra Broad Antenna	Schwarzbeck	Vulb9160	Vulb9160-3252	2015-11-24	Normal
7	Horn Antenna	ETS	3160-09	1247	2015-11-17	Normal
8	Biconical VHF-UHF test Antenna	Schwarzbeck	VUBA9117	Vulb9160-05	2015-11-24	Normal
9	Double-Ridged Horn Antenna	R/S	HF906	100036	2015-11-17	Normal
10	Signal Generator	R/S	SMR27	100003	2016-01-18	Normal

4.6.1 Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

4.6.2 Test Method

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m, but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2009 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time (s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

4.6.3 Measurement Results:

A "reference path loss" is established and A_{Rpi} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

$A_{Rpi} = \text{Cable loss} + \text{Antenna Gain} - \text{Preamplifier gain}$

$\text{Result} = P_{\text{Mea}} + A_{Rpi}$

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Channel	Frequency Range	Test Results	Conclusion
Ch0 2402MHz	30MH-1GHz	Fig.1	P
	1GHz-3GHz	Fig.2	P
	3GHz-18GHz	Fig.3	P

Channel	Frequency Range	Test Results	Conclusion
Ch19 2440MHz	30MH-1GHz	Fig.4	P
	1GHz-3GHz	Fig.5	P
	3GHz-18GHz	Fig.6	P

Channel	Frequency Range	Test Results	Conclusion
Ch39 2480MHz	30MH-1GHz	Fig.7	P
	1GHz-3GHz	Fig.8	P
	3GHz-18GHz	Fig.9	P
All channels	18GHz-26GHz	Fig.10	P

Ch0 30MHz-1GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
45.623000	27.8	-24.7	52.5	V
187.546000	18.8	-26.9	45.7	H
288.020000	23.5	-23.8	47.3	H

Ch0 1GHz-3GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
1967.000000	40.6	-4.6	45.2	V
2518.800000	45.7	1.0	44.7	H
2745.800000	46.7	2.7	44.0	H

Ch19 30MHz-1GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
45.614000	30.1	-24.7	54.8	V
182.014000	18.6	-27.5	46.1	H
187.154000	18.2	-27.0	45.2	H

Ch19 1GHz-3GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2158.600000	42.0	-2.6	44.3	V
2600.200000	46.2	1.7	43.7	V
2975.200000	46.7	3.3	43.8	V

Ch19 3GHz-18GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
7323.325000	56.4	1.7	54.7	V

Ch39 30MHz-1GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
45.626000	30.1	-24.7	54.8	V
184.430000	17.5	-27.2	34.7	H
187.510000	19.1	-26.9	46.0	H

Ch39 1GHz-3GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2183.000000	42.0	-2.3	44.3	H
2271.800000	42.7	-1.0	43.7	V
2861.600000	46.6	2.8	43.8	H

All Ch 18GHz-26.5GHz

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
19525.786000	49.0	6.97	42.03	V
20684.980000	47.7	6.97	40.73	H
22119.789000	45.3	3.05	42.05	V
23627.899000	43.8	3.05	40.75	H
24606.319000	43.4	3.05	40.35	V
25244.558000	43.6	3.05	40.55	H

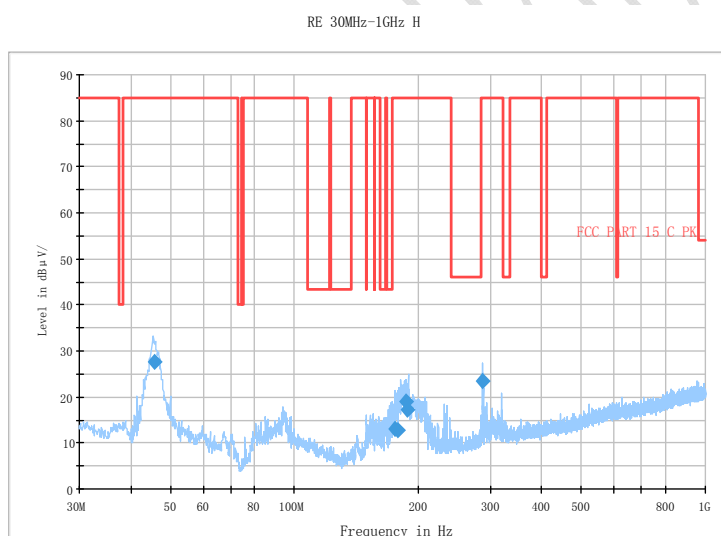
Note: all the test data shown was peak detected.**Conclusion: PASS****Test graphs as below:**

Fig.1 Radiated emission: Ch0, 30MHz-1GHz

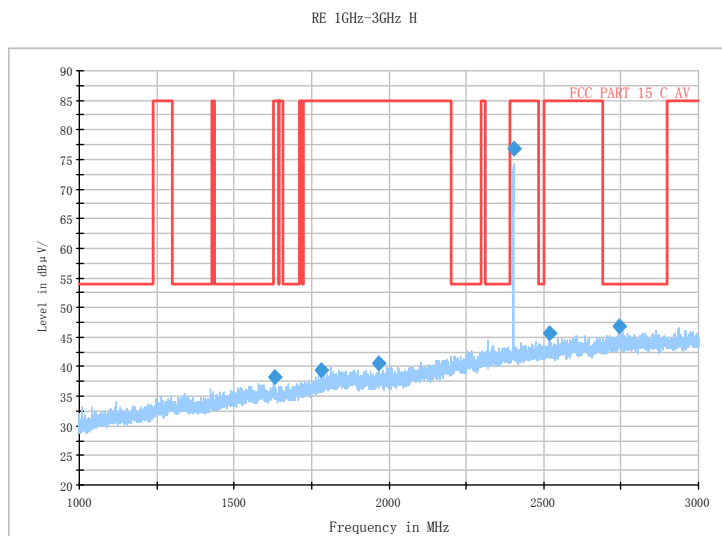


Fig.2 Radiated emission: Ch0, 1GHz-3GHz

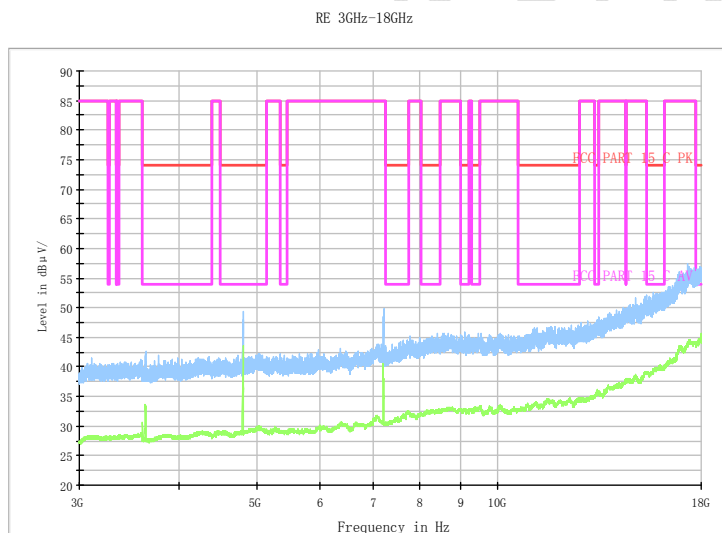


Fig.3 Radiated emission: Ch0, 3GHz-18GHz

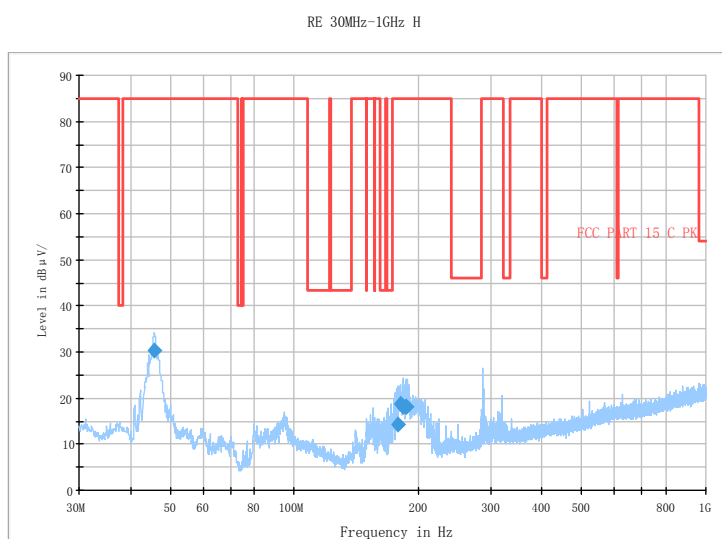


Fig.4 Radiated emission: Ch19, 30MHz-1GHz

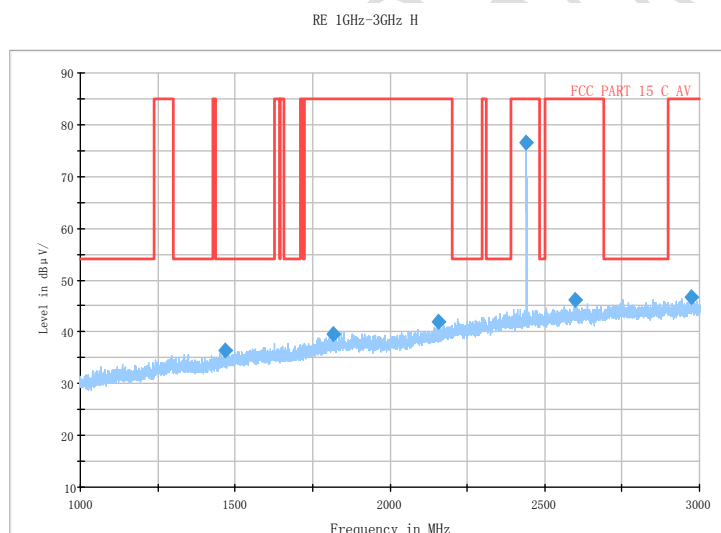


Fig.5 Radiated emission: Ch19, 1GHz-3GHz

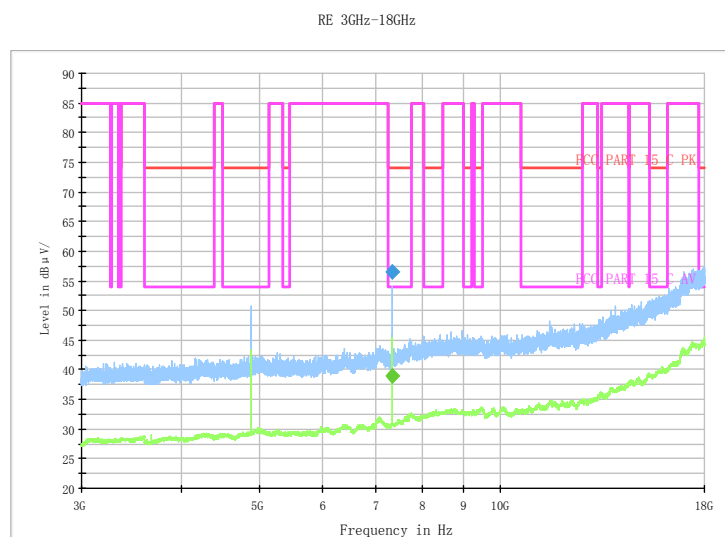


Fig.6 Radiated emission: Ch19, 3GHz-18GHz

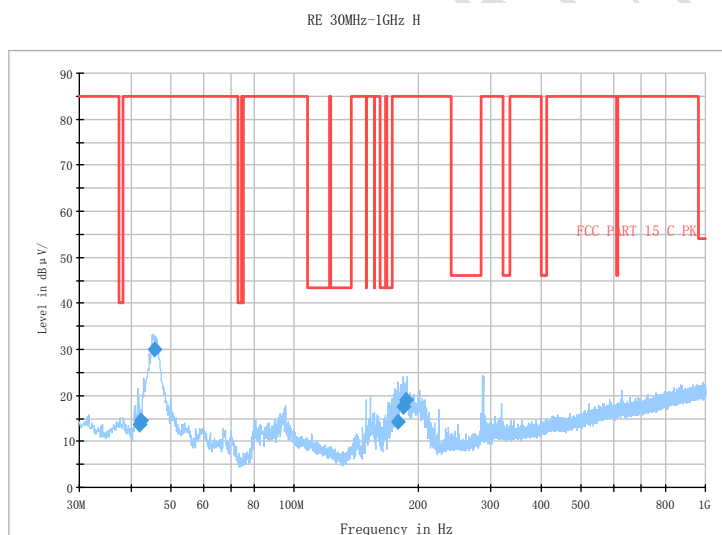


Fig.7 Radiated emission: Ch39, 30MHz-1GHz

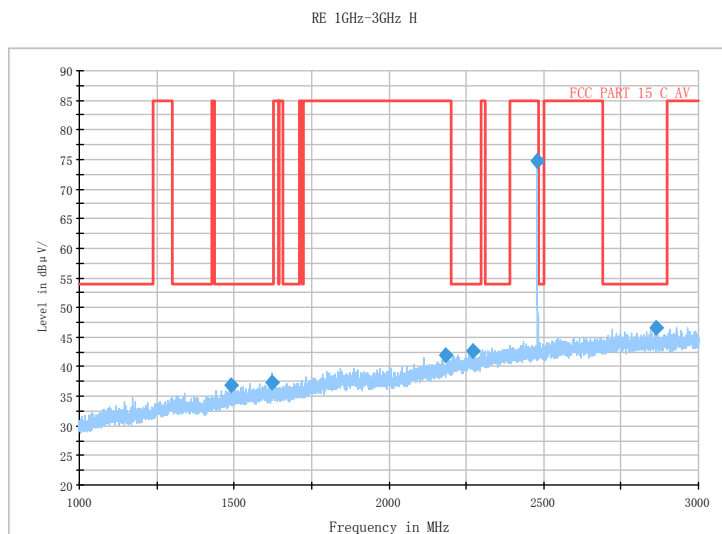


Fig.8 Radiated emission: Ch39, 1GHz-3GHz

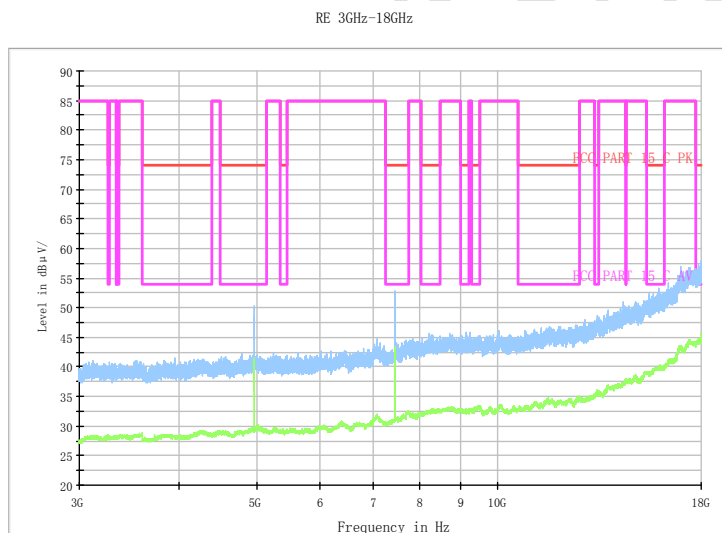


Fig.9 Radiated emission: Ch39, 3GHz-18GHz

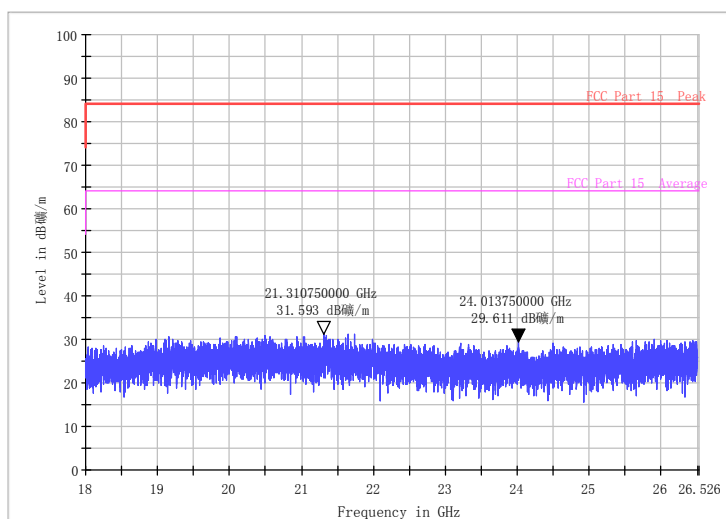


Fig.10 Radiated emission: 18 GHz - 26 GHz

Test photo

See the Pic1- Pic 6 in document "Ilium X400_Wifi_BT_Test Setup Photos_Rev2".

4.7 Power line Conducted Emissions

Specifications:	ANSI C63.4 voltage mains test					
Date of Test	2015-02-13					
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa					
Operation Mode	Hopping					
Test Results:	Pass					
Test equipment Used:						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESIB26	100211	2016-01-12	Normal
7330	Artificial Mains Network	R/S	ESH2-Z5	837480/002	2016-01-08	Normal
714	Shielding Room	ETS	--	19003	2015-11-16	Normal
7330	BLUETOOTH TESTER	R/S	CBT	100657	2016-01-28	Normal

LIMIT

For an intentional radiator which 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 within the band 150 kHz to 30 MHz shall not exceed 250 microvolt (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range are listed as follows:

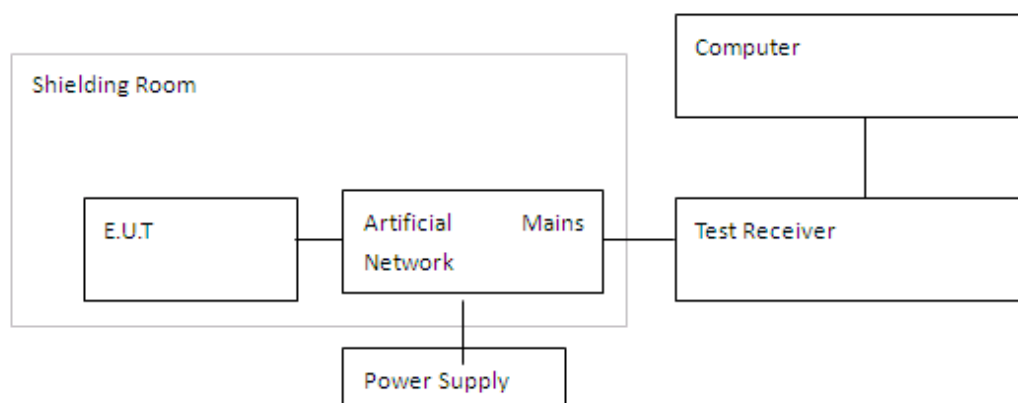
Limits of the conducted disturbance at the AC mains ports:

Frequency range	Limit(Quasi-peak)	Limit(Average)
0.15 MHz to 0.5 MHz	66 dB μ V – 56 dB μ V	56 dB μ V – 46 dB μ V
>0.5 MHz to 5MHz	56 dB μ V	46 dB μ V
>5 MHz to 30 MHz	60 dB μ V	50 dB μ V
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Setup

The EUT was placed in a shielding room. The BLUETOOTH TESTER was used to set the TX channel and power level. The ac adapter output is connected to Receiver through an AMN (Artificial Mains Network).



TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

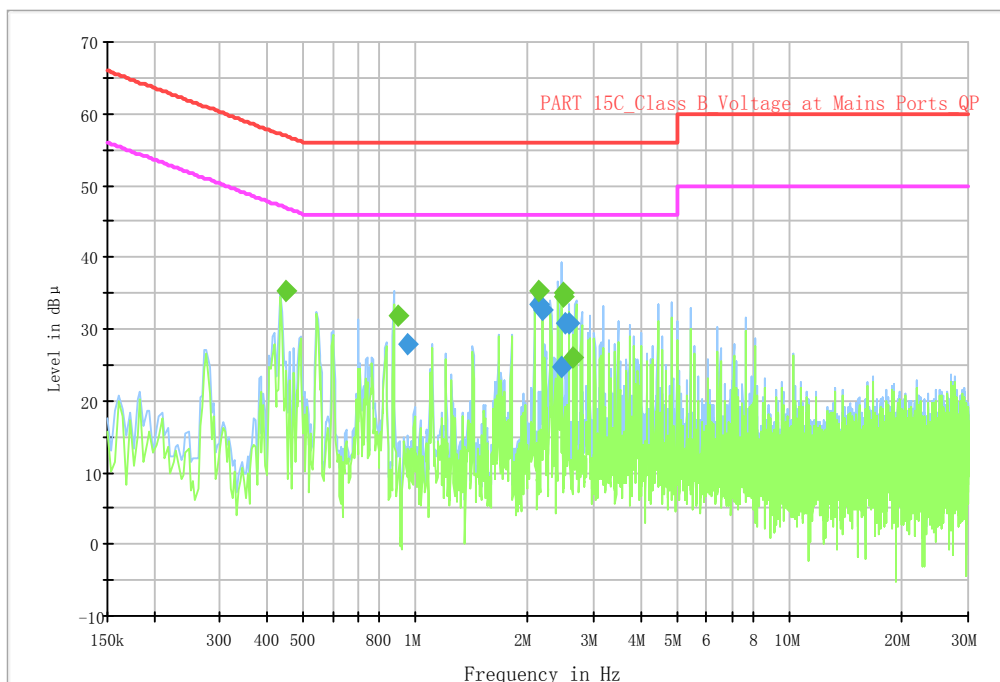
The measurement is made according to Public notice FCC Public Notice DA 00-705, March 2000, and ANSI C63.4-2014.

Test Result:

Line L&N					
Detector (QP)	Frequency (MHz)	Level (dBμV)	Limit (dBμV)	Line	PE
QP	0.949862	28.0	56.0	L1	FLO
QP	2.123056	33.4	56.0	L1	FLO
QP	2.187262	32.7	56.0	L1	FLO
QP	2.465138	24.7	56.0	N	FLO
QP	2.523375	30.8	56.0	L1	FLO
QP	2.581312	30.8	56.0	L1	FLO

Line L&N					
Detector (AV)	Frequency (MHz)	Level (dBμV)	Limit (dBμV)	Line	PE
AV	0.449306	35.4	46.9	L1	FLO
AV	0.897862	31.8	46.0	L1	FLO
AV	2.135056	35.2	46.0	L1	FLO
AV	2.473138	35.0	46.0	L1	FLO
AV	2.473375	34.6	46.0	L1	FLO
AV	2.643519	26.0	46.0	N	FLO

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



Line L & Line N

Test photo

See the Pic7 in document "Ilium X400_Wifi_BT_Test Setup Photos_Rev2".

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.

_____ The End of this Report _____