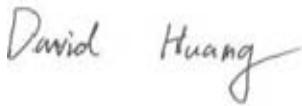


EMC TEST REPORT



Report No.: 16071212-FCC-E

Supersede Report No.:N/A

Applicant	NEG TECHNOLOGY CO., LIMITED		
Product Name	Mobile Phone		
Model No.	F1015		
Serial No.	N/A		
Test Standard	FCC Part 15 Subpart B Class B:2015, ANSI C63.4: 2014		
Test Date	December 15 to December 31, 2015		
Issue Date	October 19, 2016		
Test Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		
Equipment complied with the specification <input checked="" type="checkbox"/>			
Equipment did not comply with the specification <input type="checkbox"/>			
			
Winnie Zhang Test Engineer		David Huang Checked By	
This test report may be reproduced in full only			
Test result presented in this test report is applicable to the tested sample only			

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park

South Side of Zhoushi Road, Bao'an District, Shenzhen, Guangdong China 518108

Phone: +86 0755 2601 4629801 Email: China@siemic.com.cn

Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

Test Report	16071212-FCC-E
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1. Report Revision History

Report No.	Report Version	Description	Issue Date
16071212-FCC-E	NONE	Original	October 19, 2016

2. Customer information

Applicant Name	NEG TECHNOLOGY CO., LIMITED
Applicant Add	Rm 1406, Block B, Jinsejiali, Jingtian south road, Futian district, Shenzhen, China
Manufacturer	NEG TECHNOLOGY CO., LIMITED
Manufacturer Add	Rm 1406, Block B, Jinsejiali, Jingtian south road, Futian district, Shenzhen, China

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES
Lab Address	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park South Side of Zhoushi Road, Bao'an District, Shenzhen, Guangdong China 518108
FCC Test Site No.	718246
IC Test Site No.	4842E-1
Test Software	Radiated Emission Program-To Shenzhen v2.0

4. Equipment under Test (EUT) Information

Description of EUT: Mobile Phone

Main Model: F1015

Serial Model: N/A

Date EUT received: December 14,2015

Test Date(s): December 15 to December 31, 2015

GSM850: 0dBi

Antenna Gain: PCS1900: 0dBi

Bluetooth: 0dBi

Type of Modulation: GSM / GPRS: GMSK

Bluetooth: GFSK, π /4DQPSK, 8DPSK

GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz

RF Operating Frequency (ies): PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz

Bluetooth: 2402-2480 MHz

GSM 850: 124CH

Number of Channels: PCS1900: 299CH

Bluetooth: 79CH

Battery:

Model : F1015

Sepc:DC3.7V, 650mAh,2.41Wh

Input Power: Voltage limited of charging:4.2V

Adapter:

Model:F1015

Input: AC100-240V,50/60Hz,150mA

Output: DC 5.0V,500mA

Port: Power Port, Earphone Port, USB Port

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GRPS/EGPRS Multi-slot class 8/10/12

Trade Name : OWN

FCC ID: 2AAZ8-F1015

5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§15.107; ANSI C63.4: 2014	AC Power Line Conducted Emissions	Compliance
§15.109; ANSI C63.4: 2014	Radiated Emissions	Compliance

Measurement Uncertainty

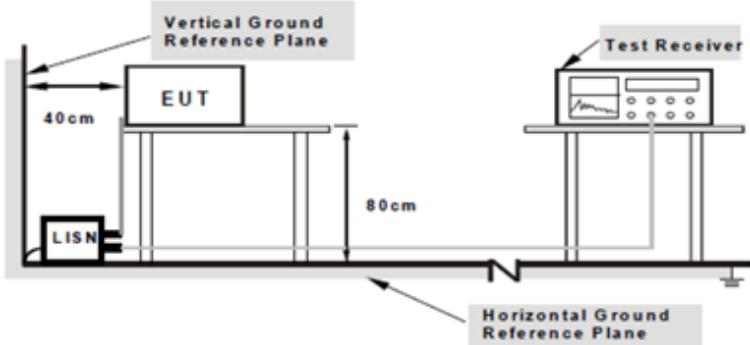
Emissions		
Test Item	Description	Uncertainty
Band Edge and Radiated Spurious Emissions	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	+5.6dB/-4.5dB
-	-	-

6. Measurements, Examination And Derived Results

6.1 AC Power Line Conducted Emissions

Temperature	25°C
Relative Humidity	52%
Atmospheric Pressure	1028mbar
Test date :	December 28, 2015
Tested By :	Winnie Zhang

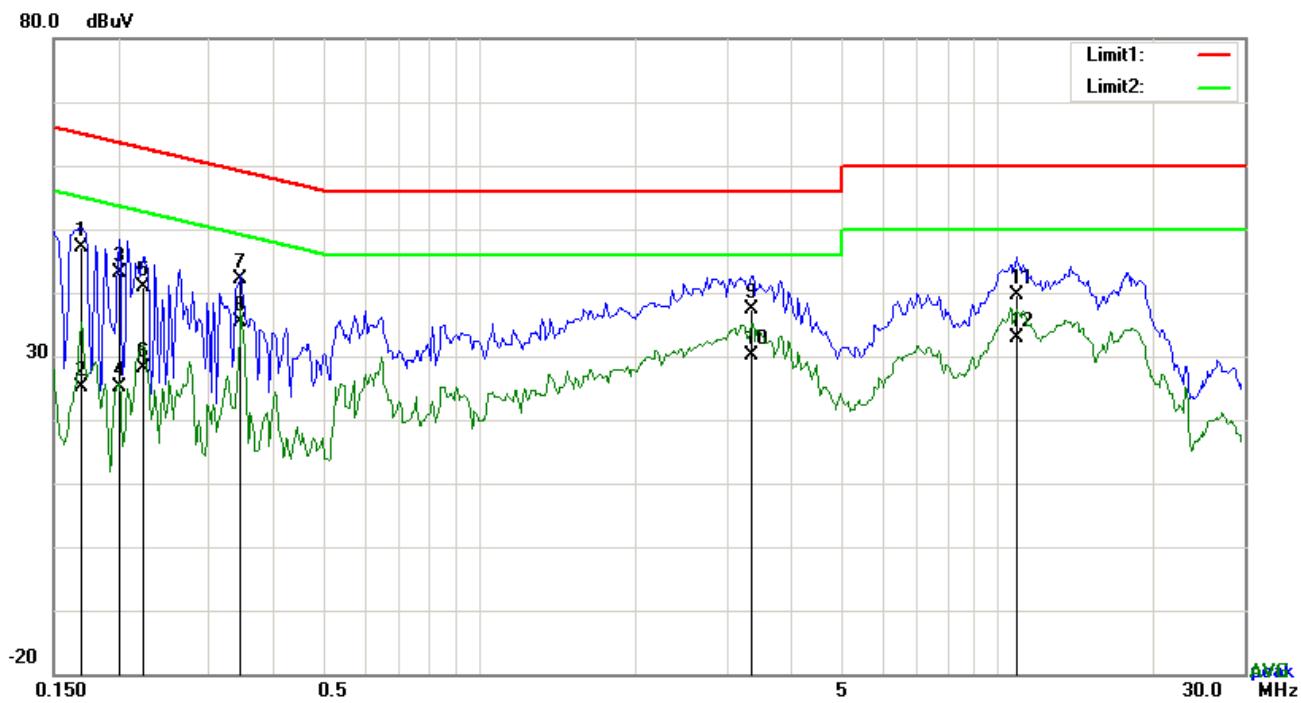
Requirement(s):

Spec	Item	Requirement	Applicable														
47CFR§15. 107	a)	<p>For Low-power radio-frequency devices 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, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 [mu] H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges.</p> <table border="1"> <thead> <tr> <th rowspan="2">Frequency ranges (MHz)</th> <th colspan="2">Limit (dBμV)</th> </tr> <tr> <th>QP</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15 ~ 0.5</td> <td>66 – 56</td> <td>56 – 46</td> </tr> <tr> <td>0.5 ~ 5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5 ~ 30</td> <td>60</td> <td>50</td> </tr> </tbody> </table>	Frequency ranges (MHz)	Limit (dB μ V)		QP	Average	0.15 ~ 0.5	66 – 56	56 – 46	0.5 ~ 5	56	46	5 ~ 30	60	50	<input checked="" type="checkbox"/>
Frequency ranges (MHz)	Limit (dB μ V)																
	QP	Average															
0.15 ~ 0.5	66 – 56	56 – 46															
0.5 ~ 5	56	46															
5 ~ 30	60	50															
Test Setup	 <p>The diagram illustrates the test setup. An EUT (Equipment Under Test) is placed on a table. A LISN (Line Impedance Stabilization Network) is connected between the EUT and the power source. A Test Receiver is connected to the LISN. The setup is positioned on a horizontal ground reference plane. The distance between the LISN and the EUT is 40 cm, and the distance between the LISN and the Test Receiver is 80 cm. A vertical ground reference plane is also indicated.</p> <p>Note: 1. Support units were connected to second LISN. 2. Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.</p>																
Procedure	<ol style="list-style-type: none"> The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table. The power supply for the EUT was fed through a 50Ω /50mH EUT LISN, connected to filtered mains. 																

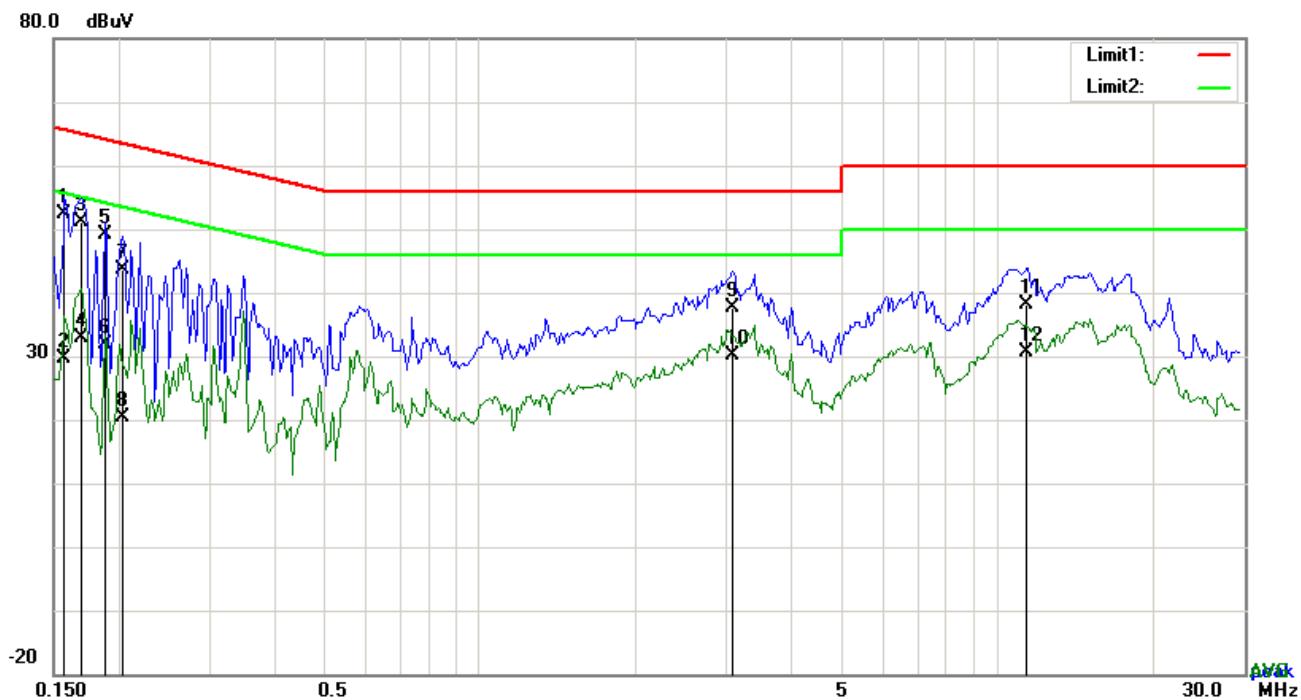
	<ol style="list-style-type: none"> 3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable. 4. All other supporting equipment were powered separately from another main supply. 5. The EUT was switched on and allowed to warm up to its normal operating condition. 6. A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power) over the required frequency range using an EMI test receiver. 7. High peaks, relative to the limit line, The EMI test receiver was then tuned to the selected frequencies and the necessary measurements made with a receiver bandwidth setting of 10 kHz. 8. Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power).
Remark	
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

Test Data Yes N/A

Test Plot Yes (See below) N/A

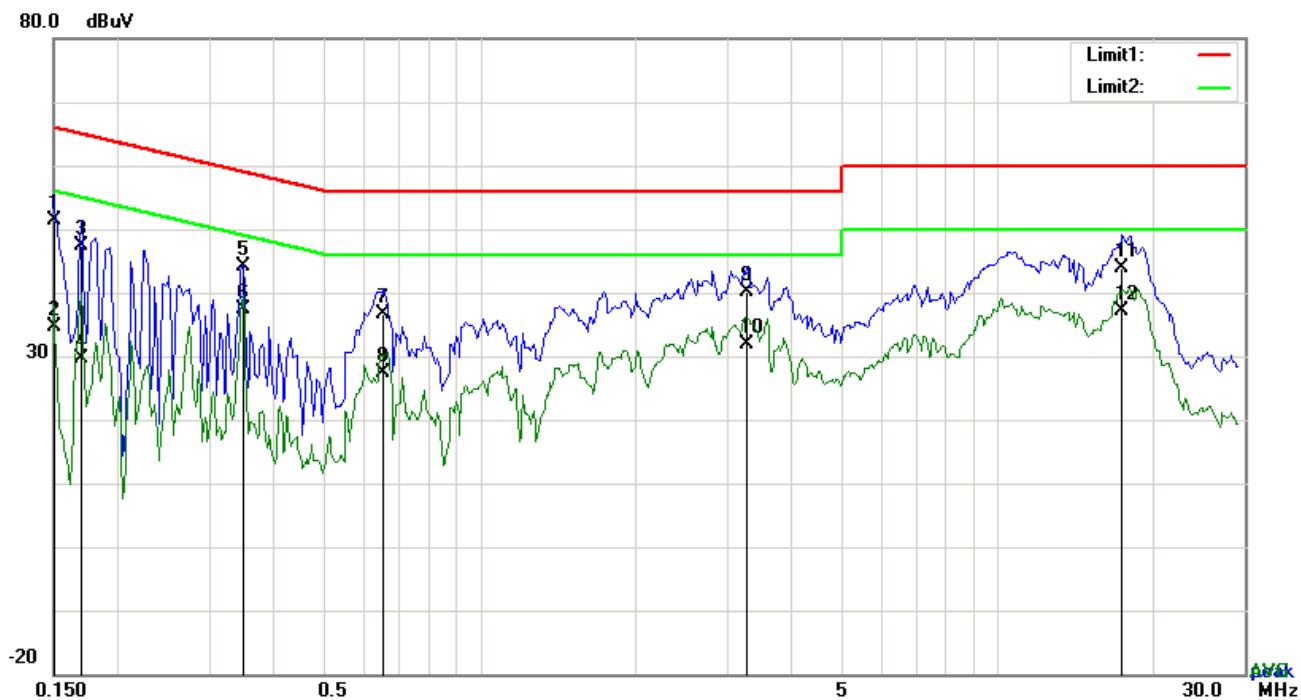
Test Mode 1 : USB Mode

Test Data
Phase Line Plot at 120Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBuV)	Detector	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	L1	0.1695	37.04	QP	10.03	47.07	64.98	-17.91
2	L1	0.1695	15.13	AVG	10.03	25.16	54.98	-29.82
3	L1	0.2007	33.05	QP	10.03	43.08	63.58	-20.50
4	L1	0.2007	15.12	AVG	10.03	25.15	53.58	-28.43
5	L1	0.2241	30.94	QP	10.03	40.97	62.67	-21.70
6	L1	0.2241	18.22	AVG	10.03	28.25	52.67	-24.42
7	L1	0.3450	32.19	QP	10.03	42.22	59.08	-16.86
8	L1	0.3450	25.28	AVG	10.03	35.31	49.08	-13.77
9	L1	3.3627	27.43	QP	10.06	37.49	56.00	-18.51
10	L1	3.3627	20.13	AVG	10.06	30.19	46.00	-15.81
11	L1	10.8663	29.47	QP	10.16	39.63	60.00	-20.37
12	L1	10.8663	22.78	AVG	10.16	32.94	50.00	-17.06

Test Mode : USB Mode

Phase Neutral Plot at 120Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBuV)	Detector	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	N	0.1578	42.24	QP	10.02	52.26	65.58	-13.32
2	N	0.1578	19.50	AVG	10.02	29.52	55.58	-26.06
3	N	0.1695	41.10	QP	10.02	51.12	64.98	-13.86
4	N	0.1695	22.85	AVG	10.02	32.87	54.98	-22.11
5	N	0.1890	39.14	QP	10.02	49.16	64.08	-14.92
6	N	0.1890	21.96	AVG	10.02	31.98	54.08	-22.10
7	N	0.2046	33.52	QP	10.02	43.54	63.42	-19.88
8	N	0.2046	10.33	AVG	10.02	20.35	53.42	-33.07
9	N	3.0858	27.70	QP	10.05	37.75	56.00	-18.25
10	N	3.0858	20.01	AVG	10.05	30.06	46.00	-15.94
11	N	11.4318	28.01	QP	10.16	38.17	60.00	-21.83
12	N	11.4318	20.42	AVG	10.16	30.58	50.00	-19.42

Test Mode : USB Mode

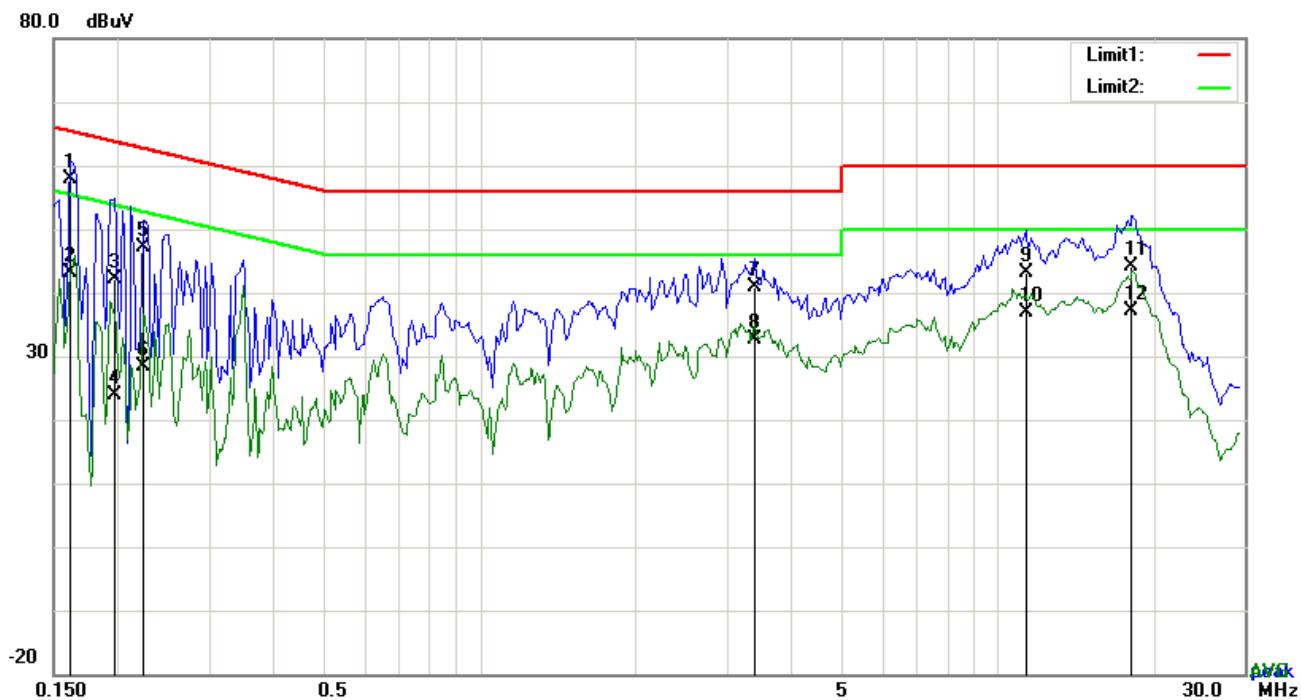


Test Data

Phase Line Plot at 240Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBuV)	Detector	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	L1	0.1500	41.28	QP	10.03	51.31	66.00	-14.69
2	L1	0.1500	24.67	AVG	10.03	34.70	56.00	-21.30
3	L1	0.1695	37.24	QP	10.03	47.27	64.98	-17.71
4	L1	0.1695	19.49	AVG	10.03	29.52	54.98	-25.46
5	L1	0.3489	34.21	QP	10.03	44.24	58.99	-14.75
6	L1	0.3489	27.47	AVG	10.03	37.50	48.99	-11.49
7	L1	0.6531	26.50	QP	10.03	36.53	56.00	-19.47
8	L1	0.6531	17.37	AVG	10.03	27.40	46.00	-18.60
9	L1	3.2886	30.08	QP	10.06	40.14	56.00	-15.86
10	L1	3.2886	21.92	AVG	10.06	31.98	46.00	-14.02
11	L1	17.4183	33.55	QP	10.26	43.81	60.00	-16.19
12	L1	17.4183	26.84	AVG	10.26	37.10	50.00	-12.90

Test Mode : **USB Mode**



Test Data

Phase Neutral Plot at 240Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBuV)	Detector	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)
1	N	0.1617	47.94	QP	10.02	57.96	65.38	-7.42
2	N	0.1617	33.23	AVG	10.02	43.25	55.38	-12.13
3	N	0.1968	32.18	QP	10.02	42.20	63.74	-21.54
4	N	0.1968	13.82	AVG	10.02	23.84	53.74	-29.90
5	N	0.2241	37.02	QP	10.02	47.04	62.67	-15.63
6	N	0.2241	18.27	AVG	10.02	28.29	52.67	-24.38
7	N	3.3861	30.73	QP	10.05	40.78	56.00	-15.22
8	N	3.3861	22.68	AVG	10.05	32.73	46.00	-13.27
9	N	11.3343	33.01	QP	10.16	43.17	60.00	-16.83
10	N	11.3343	26.76	AVG	10.16	36.92	50.00	-13.08
11	N	18.1749	33.88	QP	10.24	44.12	60.00	-15.88
12	N	18.1749	26.97	AVG	10.24	37.21	50.00	-12.79

6.2 Radiated Emissions

Temperature	22°C
Relative Humidity	53%
Atmospheric Pressure	1029mbar
Test date :	December 29, 2015
Tested By :	Winnie Zhang

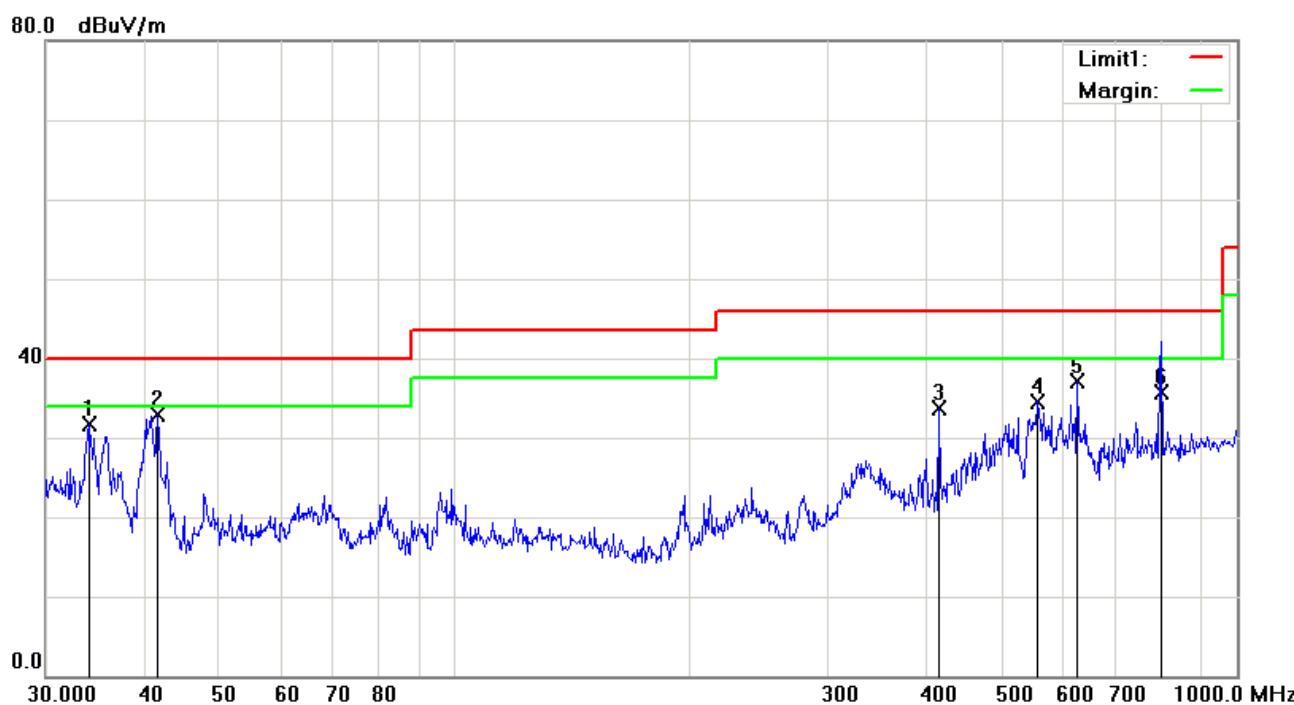
Requirement(s):

Spec	Item	Requirement	Applicable										
47CFR§15.109(d)	a)	<p>Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges</p> <table border="1"> <thead> <tr> <th>Frequency range (MHz)</th> <th>Field Strength (μV/m)</th> </tr> </thead> <tbody> <tr> <td>30 – 88</td> <td>100</td> </tr> <tr> <td>88 – 216</td> <td>150</td> </tr> <tr> <td>216 – 960</td> <td>200</td> </tr> <tr> <td>Above 960</td> <td>500</td> </tr> </tbody> </table>	Frequency range (MHz)	Field Strength (μ V/m)	30 – 88	100	88 – 216	150	216 – 960	200	Above 960	500	<input checked="" type="checkbox"/>
Frequency range (MHz)	Field Strength (μ V/m)												
30 – 88	100												
88 – 216	150												
216 – 960	200												
Above 960	500												
Test Setup		 <p>The diagram illustrates the test setup. A 'Turn Table' is positioned on a 'Ground Plane'. An 'EUT & Support Units' is mounted on the turn table, with a vertical distance of '80cm' indicated. A '3m' horizontal distance is marked between the EUT and an 'Ant. Tower'. The 'Ant. Tower' is a vertical mast mounted on a base, with a '1-4m Variable' height adjustment mechanism. A 'Test Receiver' is connected to the base of the antenna tower, showing a waveform on its screen.</p>											
Procedure		<ol style="list-style-type: none"> 1. The EUT was switched on and allowed to warm up to its normal operating condition. 2. The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: <ol style="list-style-type: none"> a. Vertical or horizontal polarization (whichever gave the higher emission level) 											

	<p>over a full rotation of the EUT) was chosen.</p> <p>b. The EUT was then rotated to the direction that gave the maximum emission.</p> <p>c. Finally, the antenna height was adjusted to the height that gave the maximum emission.</p> <p>3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz.</p> <p>4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with Peak detection for Peak measurement at frequency above 1GHz.</p> <p>The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth with Peak detection for Average Measurement as below at frequency above 1GHz.</p> <ul style="list-style-type: none"> ■ 1 kHz (Duty cycle < 98%) <input type="checkbox"/> 10 Hz (Duty cycle > 98%) <p>5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.</p>
Remark	
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

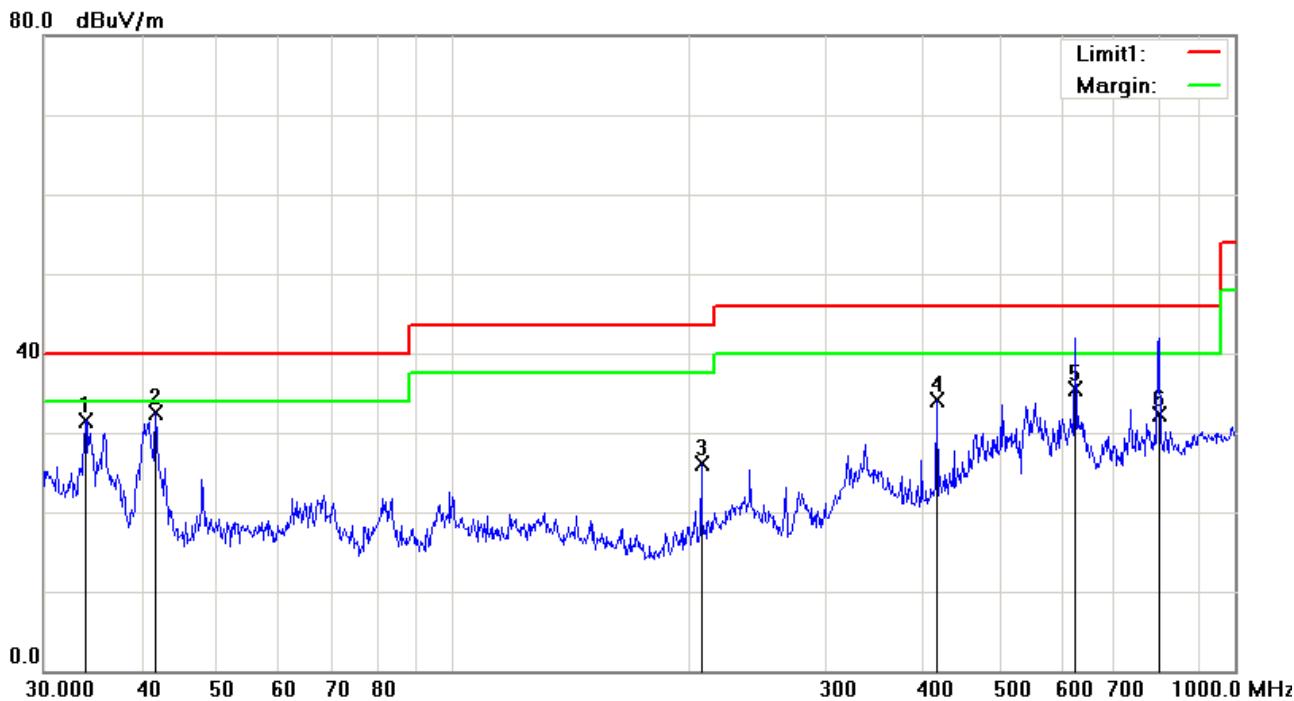
Test Data Yes N/A

Test Plot Yes (See below) N/A

Test Mode 1: USB Mode
Below 1GHz

Test Data
Horizontal Polarity Plot @3m

No.	P/L	Frequency (MHz)	Readin g (dBuV/ m)	Detector	Corrected (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	H	34.0365	34.92	peak	-3.24	31.68	40.00	-8.32	100	206
2	H	41.7130	41.59	peak	-8.73	32.86	40.00	-7.14	100	0
3	H	416.1791	37.63	peak	-3.91	33.72	46.00	-12.28	100	202
4	H	556.7744	35.31	peak	-0.71	34.60	46.00	-11.40	100	209
5	H	625.0780	36.76	peak	0.42	37.18	46.00	-8.82	100	0
6	H	798.6867	32.46	QP	3.19	35.65	46.00	-10.35	100	6

Below 1GHz



Test Data

Vertical Polarity Plot @3m

No.	P/L	Frequency (MHz)	Readin g (dBuV/ m)	Detector	Corrected (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	V	33.9174	34.65	peak	-3.15	31.50	40.00	-8.50	100	192
2	V	41.7130	41.21	peak	-8.73	32.48	40.00	-7.52	100	162
3	V	207.8501	34.84	peak	-8.81	26.03	43.50	-17.47	100	162
4	V	416.1791	38.10	peak	-3.91	34.19	46.00	-11.81	100	23
5	V	624.0890	35.11	QP	0.39	35.50	46.00	-10.50	100	338
6	V	799.6670	29.11	QP	3.21	32.32	46.00	-13.68	100	348

Above 1GHz

Frequency (MHz)	Amplitude (dB μ V/m)	Azimuth	Height (cm)	Polarity (H/V)	Factors (dB)	Limit (dB μ V/m)	Margin (dB)	Detector (PK/AV)
1573.52	55.43	58	157	V	-22.26	74	-18.57	PK
2044.53	57.66	49	244	V	-21.13	74	-16.34	PK
1631.40	54.54	123	186	V	-23.32	74	-19.46	PK
2154.73	53.22	96	230	H	-21.15	74	-20.78	PK
2853.62	53.27	133	306	H	-21.23	74	-20.73	PK
1819.88	52.46	101	159	H	-20.77	74	-21.54	PK

*Note1: The highest frequency of the EUT is 2480 MHz, so the testing has been conformed to 5*2480MHz=12,400MHz.*

Note2: The frequency that above 3GHz is mainly from the environment noise.

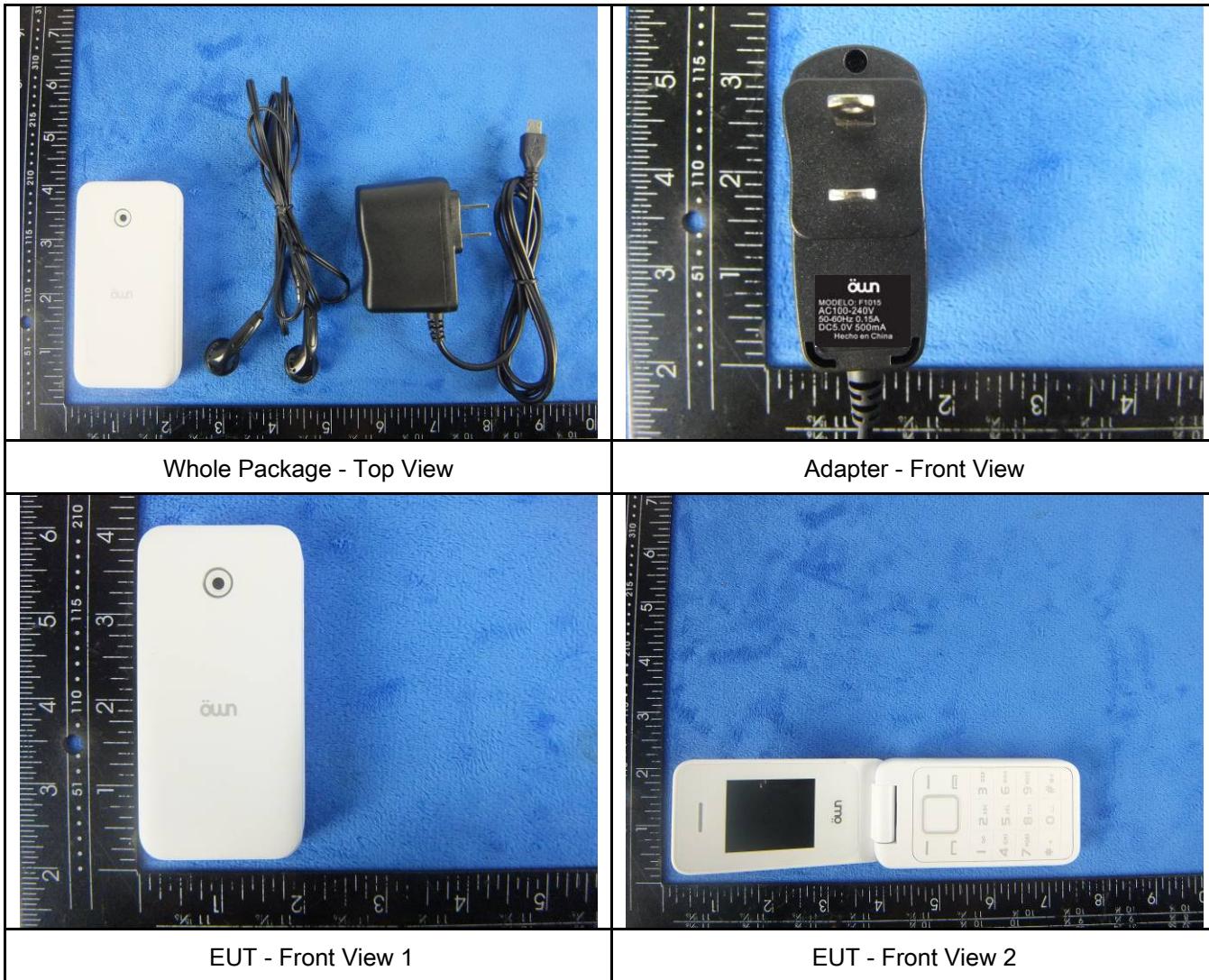
Note3: The AV measurement performed, more than 20dB below limit so AV test data was not presented.

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
AC Line Conducted Emissions					
EMI test receiver	ESCS30	8471241027	09/17/2015	09/16/2016	<input checked="" type="checkbox"/>
Line Impedance Stabilization Network	LI-125A	191106	09/25/2015	09/24/2016	<input checked="" type="checkbox"/>
Line Impedance Stabilization Network	LI-125A	191107	09/25/2015	09/24/2016	<input checked="" type="checkbox"/>
LISN	ISN T800	34373	09/25/2015	09/24/2016	<input checked="" type="checkbox"/>
Transient Limiter	LIT-153	531118	09/01/2015	08/31/2016	<input checked="" type="checkbox"/>
Radiated Emissions					
EMI test receiver	ESL6	100262	09/17/2015	09/16/2016	<input checked="" type="checkbox"/>
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	09/01/2015	08/31/2016	<input checked="" type="checkbox"/>
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/25/2015	03/24/2016	<input checked="" type="checkbox"/>
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/21/2015	09/20/2016	<input checked="" type="checkbox"/>
Double Ridge Horn Antenna	AH-118	71259	09/24/2015	09/23/2016	<input checked="" type="checkbox"/>

Annex B. EUT And Test Setup Photographs

Annex B.i. Photograph: EUT External Photo



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EUT - Rear View



EUT - Top View



EUT - Bottom View

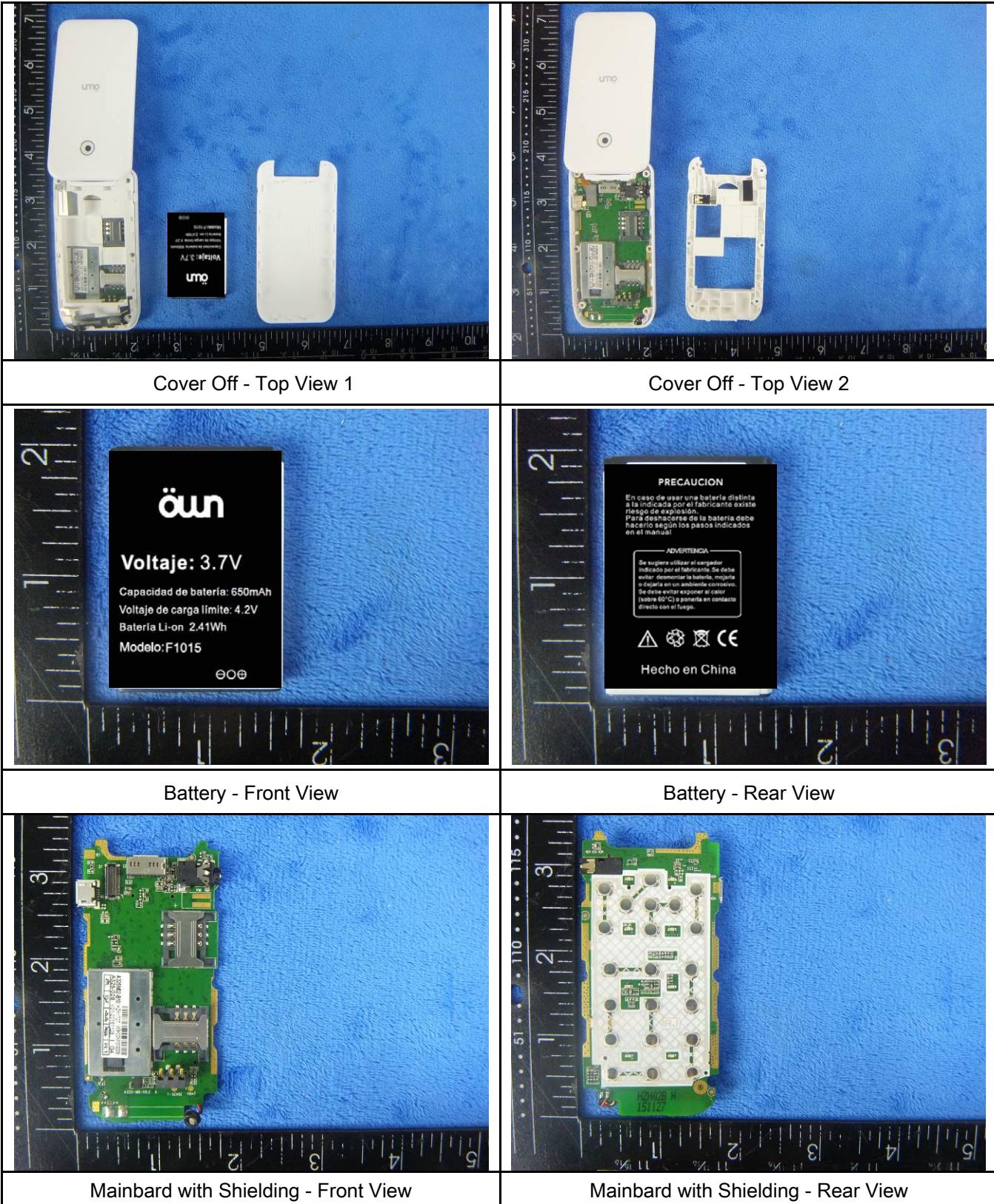


EUT - Left View



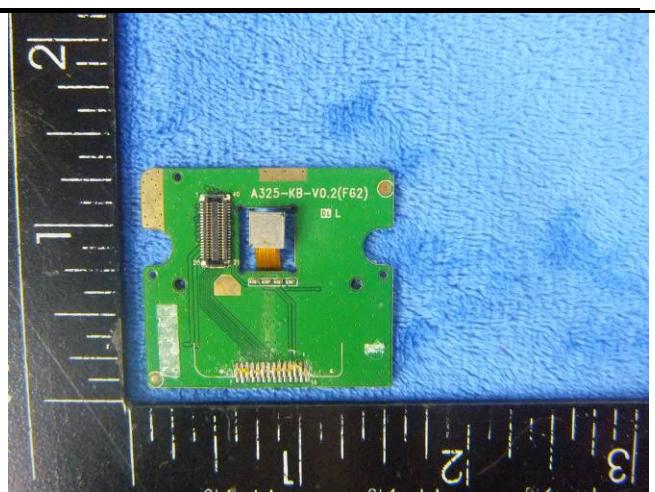
EUT - Right View

Annex B.ii. Photograph: EUT Internal Photo

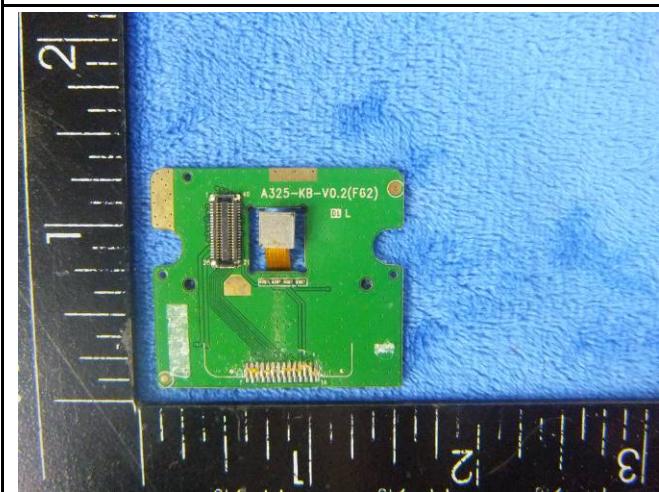




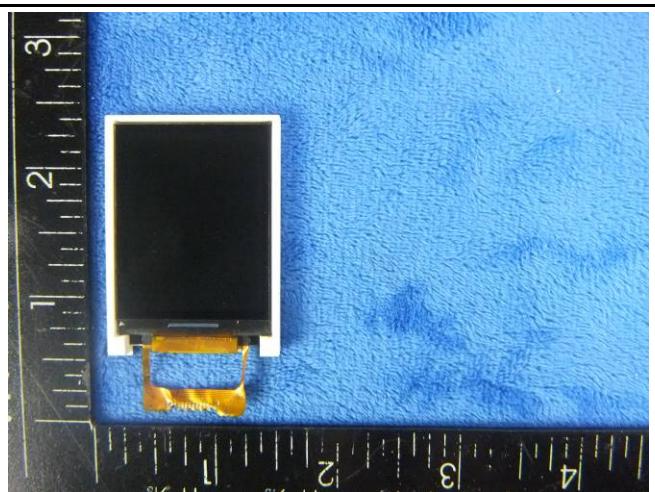
Mainboard without shielding - Front View



Small Mainboard - Front View



Small Mainboard - Rear View



LCD – Front View



LCD – Rear View

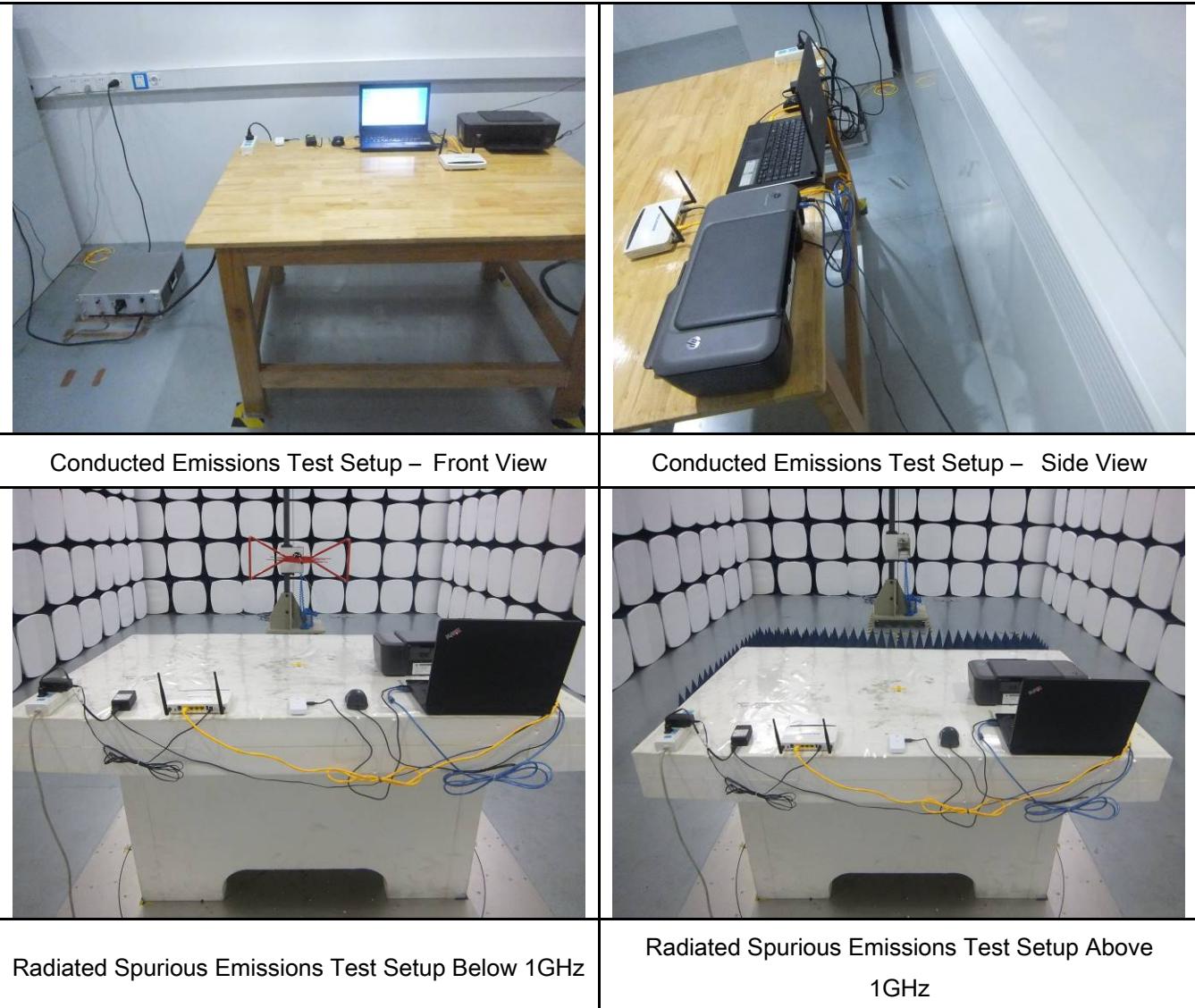


GSM/PCS - Antenna View



BT - Antenna View

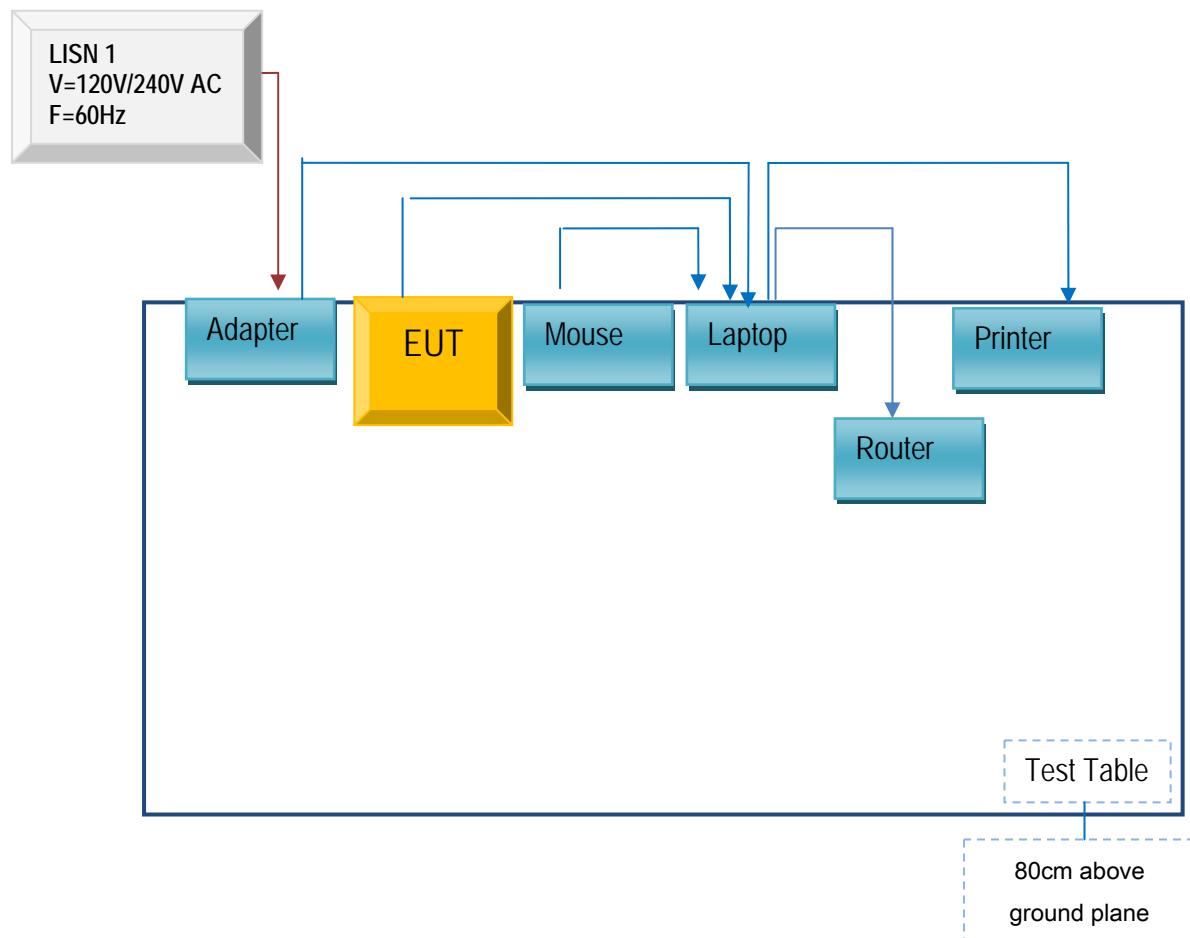
Annex B.iii. Photograph: Test Setup Photo



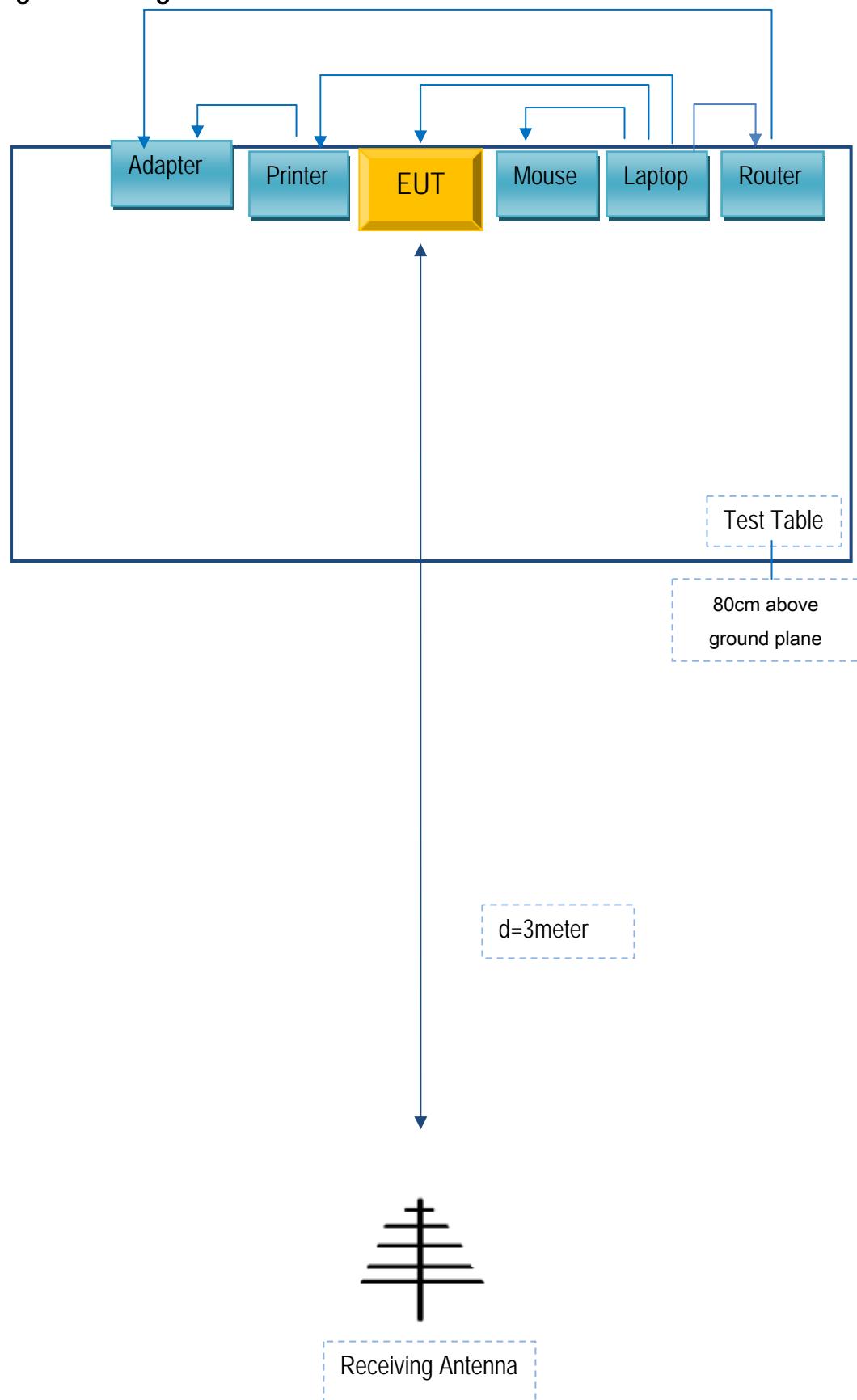
Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.ii. TEST SET UP BLOCK

Block Configuration Diagram for Conducted Emissions



Block Configuration Diagram for Radiated Emissions



Annex C. ii. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Supporting Equipment:

Manufacturer	Equipment Description	Model	Serial No
Lenovo	Lenovo Laptop	E40& 0579A52	LR-1EHRX
GOLDWEB	Router	R102	1202032094
Mouse	TENGE	DH-5033	JX10325
HP	Printer	VCVRA-1003	CN36M19JWX
DELL	Mouse	E100	912NMTUT41481
NEG TECHNOLOGY CO.,LIMITED	Adapter	F1015	C0705
BULL	Socket	GN-403	GN201203

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
USB Cable	Un-shielding	No	2m	JX120051274
USB Cable	Un-shielding	No	2m	CBA3000AH0C1
RJ45 Cable	Un-shielding	No	2m	KX156327541
Router Power cable	Un-shielding	No	2m	13274630Z
Printer Power cable	Un-shielding	No	2m	127581031
Power Cable	Un-shielding	No	0.8m	GT211032

Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see Attachment

Annex E. DECLARATION OF SIMILARITY

N/A