

# FCC 47 CFR PART 15 SUBPART B TEST REPORT

For

Applicant: Ambitio LLC, The Owner of unnecto

Address: 1315 N.W 98th ct Unit 11 United States

**Product Name: GSM Mobile Phone** 

Model Name: U-600-2

Brand Name: unnecto ™

FCC ID: ZU3UNNECTOPRO

Report No.: STS120304F1

Date of Issue: March 26, 2012

Issued by: Shenzhen Super Test Service Technology Co., Ltd.

No.5, Langshan 2nd Rd., North Hi-Tech Industrial park, Nanshan, Address:

Shenzhen, Guangdong, China

Tel: 86-755-2795 8522

Fax: 86-755-2795 8022

The report consists 41 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by STS. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver.

### **TABLE OF CONTENTS**

1. VERIFICATION OF CONFORMITY	3
2. GENERAL INFORMATION	4
2.1 PRODUCT INFORMATION	4
2.2 OBJECTIVE	5
2.3 TEST STANDARDS AND RESULTS	5
2.4 ENVIRONMENTAL CONDITIONS	5
3. TEST FACILITY	6
4. TEST EQUIPMENT LIST	7
5. 47 CFR PART 15B REQUIREMENTS	8
5.1 GENERAL INFORMATION	8
6. LINE CONDUCTED EMISSION TEST	9
6.1. LIMITS OF LINE CONDUCTED EMISSION TEST	9
6.2. BLOCK DIAGRAM OF TEST SETUP	9
6.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST	10
6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST	10
6.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST	11
7. RADIATED EMISSION TEST	17
7.1. LIMITS OF RADIATED DISTURBANCES AT 3M DISTANCES FOR CLASS B	17
7.2 TEST DESCRIPTION	17
7.3 TEST RESULT	19
APPENDIX 1	27
PHOTOGRAPHS OF TEST SETUP	27
APPENDIX 2	31
PHOTOGRAPHS OF FUT	21

Report No.: STS120304F1

### 1. VERIFICATION OF CONFORMITY

**Equipment Under Test:** GSM Mobile Phone

Brand Name: unnecto ™
Model Number: U-600-2
Series Model Name: N/A
Difference description: N/A

FCC ID: ZU3UNNECTOPRO

**Applicant:** Ambitio LLC, The Owner of unnecto

1315 N.W 98th ct Unit 11 United States

Manufacturer: Shenzhen Xiangyue Perfect Digital Science & Technology Co., Ltd.

Building A1, Jiujiutongxin Industrial Zone 11, Xinbu, Tongle, Longgang,

Shenzhen, China

**Technical Standards:** FCC Part 15 B **File Number:** STS120304F1

**Date of test:** March. 15,2012 ~ March. 22, 2012

Deviation: None
Condition of Test Sample: Normal
Test Result: PASS

The above equipment was tested by Shenzhen Super Test Service Technology Co., Ltd. for compliance with the requirements set forth in FCC Part 15 and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

Zhang Ling

The test results of this report relate only to the tested sample identified in this report.

Tested by (+ signature):

March. 26, 2012

Review by (+ signature):

July Wen March. 26, 2012

Zlay ling

Approved by (+ signature):

Terry Yang March. 26, 2012

### 2. GENERAL INFORMATION

### 2.1 PRODUCT INFORMATION

EUT1- Mobile Phone	
Description:	GSM Mobile Phone
Model Name:	U-600-2
Serial No.:	N/A
Model Difference description:	N/A
IMEI No.:	861587562954788/861587562954887
Frequency:	GSM 850MHz/1900MHz
Hardware Version:	V2.0
Software Version:	AAM855E_USA_EN_1_00_2206
EUT2- Battery	
Description:	Lithium-ion Battery
Model Name:	BU-600
Brand Name:	unnecto ™
Manufacturer:	Shenzhen EAST Electronics Co., Ltd.
Capacitance:	1000 mAh
Rated Voltage:	3.7V
Charge Limit:	4.2V
EUT3 – Power Supply	
Description:	Travel Charger
Model Name:	CU-600
Brand Name:	unnecto ™
Manufacturer:	Shenzhen ZhongTian Electronic Co., Ltd.
Rated Input:	AC 100-240V, 50/60Hz, 0.15A
Rated Output:	DC 5V, 0.5A
Length of USB cable:	1.0m

### **NOTE:**

- 1. The EUT is a model of GSM Portable Mobile Station (MS). It consists of **hand telephone set**, **Lithium battery**, **USB cable**, **headphone** and **Charger** as listed above.
- 2. Please refer to Appendix 2 for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

### 2.2 OBJECTIVE

Perform FCC Part 15 Subpart B tests for FCC Marking.

### 2.3 TEST STANDARDS AND RESULTS

Test items and the results are as bellow:

		EMISSION		
Standard		Item	Result	Remarks
FCC 47 CFR Part 15 Subpart B	§15.107	Conducted Emission	PASS	Meet Class B limit
(10-1-05 Edition)	§15.109	Radiated Emission	PASS	Meet Class B limit

Note:

- 1. The test result judgment is decided by the limit of measurement standard
- 2. The information of measurement uncertainty is available upon the customer's request.

### 2.4 ENVIRONMENTAL CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35°C - Humidity: 30-60 %

- Atmospheric pressure: 86-106 kPa

### 3. TEST FACILITY

Test Site: Most Technology Service Co., Ltd.

Location: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park, Nanshan, Shenzhen,

Guangdong, China

Description: There is one 3m semi-anechoic an area test sites and two line conducted labs for final

test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009 and CISPR

16 requirements. The FCC Registration Number is 490827.

The CNAS Registration Number is CNAS L3573.

Site Filing: The site description is on file with the Federal Communications

Commission, 7435 Oakland Mills Road, Columbia, MD 21046.

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4:2009 and CISPR 16

requirements that meet industry regulatory agency and accreditation agency

requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted

planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated

Emission, one in vertical and the other in horizontal. The dimensions of these ground

Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal

dimensions larger than one-tenth of a wavelength at the highest frequency of

measurement up to 1GHz.

### 4. TEST EQUIPMENT LIST

**Instrumentation:** The following list contains equipment used at MOST for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2 Specifications for Electromagnetic Interference and Field Strength

Instrumentation from 10 kHz to 1.0 GHz or above.

No.	mentation from 10 kHz to 1  Equipment	Manufacturer	Model No.	S/N	Calibration date	Calibration due date
1	Test Receiver	Rohde & Schwarz	ESCI	100492	2012/03/14	2013/03/14
2	L.I.S.N.	Rohde & Schwarz	ENV216	100093	2012/03/14	2013/03/14
3	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2012/03/14	2013/03/14
4	Terminator	Hubersuhner	50Ω	No.1	2012/03/14	2013/03/14
5	RF Cable	SchwarzBeck	N/A	No.1	2012/03/14	2013/03/14
6	Test Receiver	Rohde & Schwarz	ESPI	101202	2012/03/14	2013/03/14
7	Bilog Antenna	Sunol	JB3	A121206	2012/03/14	2013/03/14
8	Test Antenna - Horn	Schwarzbeck	BBHA 9120C		2012/03/14	2013/03/14
9	Test Antenna - LOOP	Schwarzbeck	VULB 9163		2012/03/14	2013/03/14
10	Cable	Resenberger	N/A	NO.1	2012/03/14	2013/03/14
11	Cable	SchwarzBeck	N/A	NO.2	2012/03/14	2013/03/14
12	Cable	SchwarzBeck	N/A	NO.3	2012/03/14	2013/03/14
13	DC Power Filter	DuoJi	DL2×30B	N/A	2012/03/14	2013/03/14
14	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	2012/03/14	2013/03/14
15	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	2012/03/14	2013/03/14
16	Spectrum Analyzer	Agilent	4408B	MY41440460	2012/03/14	2013/03/14
17	Absorbing Clamp	Luthi	MDS21	3635	2012/03/14	2013/03/14
18	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2012/03/14	2013/03/14
19	AC Power Source	Kikusui	AC40MA	LM003232	2012/03/14	2013/03/14
20	Test Analyzer	Kikusui	KHA1000	LM003720	2012/03/14	2013/03/14
21	Line Impendence Network	Kikusui	LIN40MA- PCR-L	LM002352	2012/03/14	2013/03/14
22	ESD Tester	Kikusui	KES4021	LM003537	2012/03/14	2013/03/14
23	EMCPRO System	EM Test	UCS-500-M4	V064810202 6	2012/03/14	2013/03/14
24	Signal Generator	IFR	2032	203002/100	2012/03/14	2013/03/14
25	Amplifier	A&R	150W1000	301584	2012/03/14	2013/03/14
26	CDN	FCC	FCC-801-M2-25	47	2012/03/14	2013/03/14
27	CDN	FCC	FCC-801-M3-25	107	2012/03/14	2013/03/14
28	EM Injection Clamp	FCC	F-203I-23mm	403	2012/03/14	2013/03/14
	RF Cable	MIYAZAKI	N/A	No.1/No.2	2012/03/14	2013/03/14
29				1		
30	Universal Radio Communication Tester	ROHDE&SCHWARZ	CMU200	0304789	2012/03/14	2013/03/14
	Universal Radio	ROHDE&SCHWARZ  European Antennas	CMU200 PSA 75301R/170	0304789 0304213	2012/03/14	2013/03/14

**NOTE:** Equipments listed above have been calibrated and are in the period of validation.

### 5. 47 CFR PART 15B REQUIREMENTS

### 5.1 GENERAL INFORMATION

### **EUT Function and Test Mode**

### Mode 1: Idle Mode

The MS was registered to the base station simulator but no call was set up.

The EUT configuration of the emission test was **MS** + **Battery**+ **Charger**.

### Mode 2: Call Mode

Before the measurement, the lithium battery was completely discharge.

During the measurement, the lithium battery and the charger were installed, and the MS were in charging state. A communication link was established between the MS and a System Simulator (SS). The MS operated at GSM 850/1900MHz mid ARFCN and maximum output power.

The EUT configuration of the emission test was MS + Battery+ Charger.

### Mode 3: GPRS Mode

During the test, the MS was playing the GPRS function continuously.

The EUT configuration of the emission test was MS + Battery+ Charger.

### Mode 4: Bluetooth Mode

During the test, the MS was playing the Bluetooth function continuously.

The EUT configuration of the emission test was MS + Battery+ Charger.

### Mode 5: MP3/MP4 Mode

During the test, the MS was playing the MP3/MP4 function continuously.

The EUT configuration of the emission test was MS + Battery + Charger.

### Mode 6: Camera Mode

During the test, the MS was playing the camera function continuously.

The EUT configuration of the emission test was **MS** + **Battery**+ **Charger**.

### Mode 7: FM Mode

During the test, the MS was playing the FM function continuously.

The EUT configuration of the emission test was **MS** + **Battery** + **Earphone**.

### Mode 8: WIFI Mode

During the test, the MS was playing the WIFI function continuously.

The EUT configuration of the emission test was **MS** + **Battery**+ **Charger**.

### Mode 9: USB Mode

During the test, the MS was connected with the notebook and made the data transmission function continuously.

The EUT configuration of the emission test was MS + Battery + USB Cable + Notebook (MSi-MS-1224).

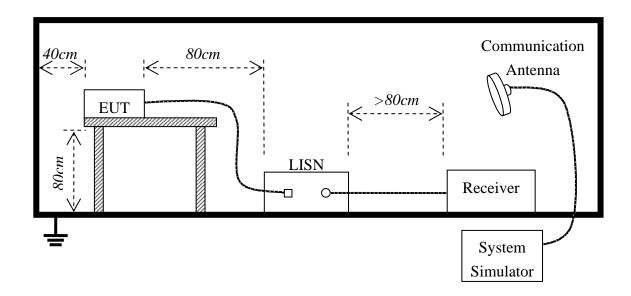
### 6. LINE CONDUCTED EMISSION TEST

### 6.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Fraguency	Maximum RF	Maximum RF Line Voltage						
Frequency	Q.P.( dBuV)	Average( dBuV)						
150kHz-500kHz	66-56	56-46						
500kHz-5MHz	56	46						
5MHz-30MHz	60	50						

<sup>\*\*</sup>Note: 1. the lower limit shall apply at the transition frequency.

### 6.2. BLOCK DIAGRAM OF TEST SETUP



<sup>2.</sup> The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

### 6.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per FCC Part 15 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per FCC Part 15.
- 3) All I/O cables were positioned to simulate typical actual usage as per FCC Part 15.
- 4) The EUT received DC 5V by AC/DC adapter which through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5) All support equipments received power from a second LISN supplying power of AC 120V/60Hz, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode(s) were scanned during the preliminary test:

	Preliminary Conducted Emission Test								
Frequency Range In	Frequency Range Investigated 150KHz TO 30 MHz								
Mode of operation	Date	Report No.	Data#	Worst Mode					
Idle Mode	2012-3-15	STS120304F1	U-600-2_1_(L, N)						
Call Mode	2012-3-15	STS120304F1	U-600-2_2_(L, N)						
GPRS Mode	2012-3-15	STS120304F1	U-600-2_3_(L, N)						
Bluetooth Mode	2012-3-15	STS120304F1	U-600-2_4_(L, N)						
MP3/MP4 Mode	2012-3-15	STS120304F1	U-600-2_5_(L, N)						
Camera Mode	2012-3-15	STS120304F1	U-600-2_6_(L, N)						
FM Mode	2012-3-15	STS120304F1	U-600-2_7_(L, N)						
WIFI Mode	2012-3-15	STS120304F1	U-600-2_8_(L, N)						
USB Mode	2012-3-15	STS120304F1	U-600-2_9_(L, N)	$\boxtimes$					

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

### 6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

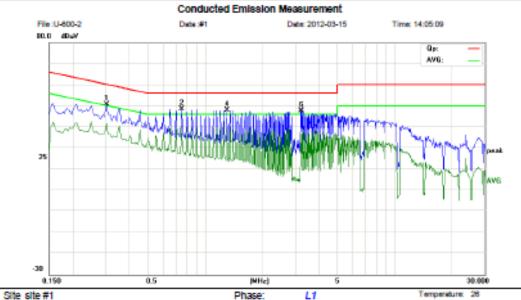
EUT and support equipment was set up on the test bench as per step 9 of the preliminary test. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector. The test data of the worst case condition(s) was reported on the Summary Data page.

### 6.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Power: AC 120V/80Hz

Limit: FCC Part15 B Class B QP

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: camera Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3020	39.29	11.32	50.61	60.19	-9.58	peak	
2		0.7540	38.64	10.00	48.64	56.00	-7.36	peak	
3	•	0.7540	30.36	10.00	40.36	46.00	-5.64	AVG	
4		1.3060	38.17	9.69	47.86	56.00	-8.14	peak	
5		1.3100	29.99	9.69	39.68	46.00	-6.32	AVG	
6		3.2140	37.35	10.21	47.56	56.00	-8.44	peak	
7		3.2260	26.59	10.23	36.82	46.00	-9.18	AVG	

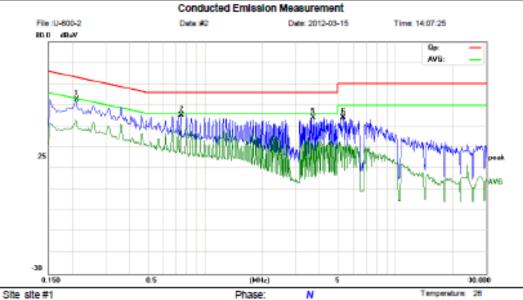
Engineer Signature: Sky

Humidity: 60 %

<sup>&</sup>quot;:Maximum data x:Over limit !:over margin



Address:No.5,Langshan 2nd Rd., North HI-Tech Industrial park Guangdong ,China Tel: 0755-86170306 Fax: 0755-86170310



Power: AC 120V/80Hz

LIMIT FCC Part15 B Class B QP

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: camera Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	0.2100	40.78	11.93	52.71	63.21	-10.50	peak		
2	0.7500	35.22	10.00	45.22	56.00	-10.78	peak		
3 .	0.7500	28.52	10.00	38.52	46.00	-7.48	AVG		
4	3.6420	21.17	10.64	31.81	46.00	-14.19	AVG		
5	3.6900	33.42	10.69	44.11	56.00	-11.89	peak		
6	5.3260	32.20	11.80	44.00	60.00	-16.00	peak		
7	5.3340	18.57	11.80	30.37	50.00	-19.63	AVG		

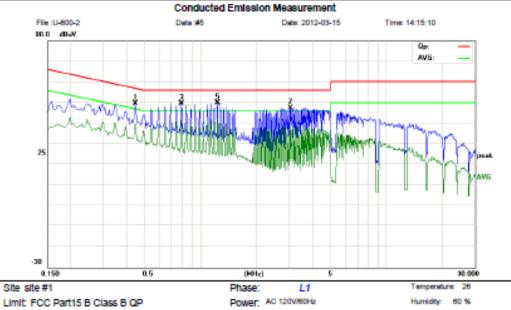
Engineer Signature: Sky

Humidity: 60 %

<sup>&</sup>quot;:Maximum data x:Over limit !:over margin



Address:No.5,Langshan 2nd Rd., North HI-Tech Industrial park Guangdong ,China Tel: 0755-86170306 Fax: 0755-86170310



LIMIT FCC Part15 B Class B QP

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: wifl Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	0.4460	39.20	10.36	49.56	56.95	-7.39	peak		
2	0.4460	29.73	10.36	40.09	46.95	-6.86	AVG		
3	0.7900	39.69	10.00	49.69	56.00	-6.31	peak		
4	0.7900	31.88	10.00	41.88	46.00	-4.12	AVG		
5	1.2340	40.20	9.77	49.97	56.00	-6.03	peak		
6 .	1.2340	32.22	9.77	41.99	46.00	-4.01	AVG		
7	3.0460	37.25	10.05	47.30	56.00	-8.70	peak		
8	3.0460	29.01	10.05	39.06	46.00	-6.94	AVG		

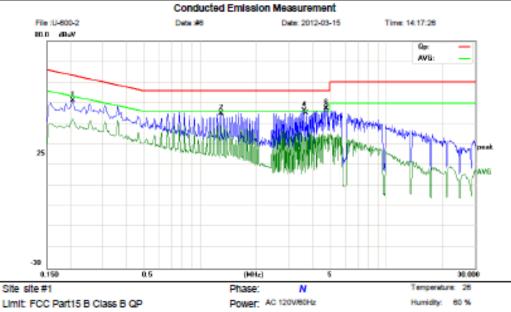
Engineer Signature: Sky

<sup>&</sup>quot;:Maximum data x:Over limit !:over margin



### Address:No.5,Langshan 2nd Rd., North HI-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part15 B Class B QP

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: wifi Note:

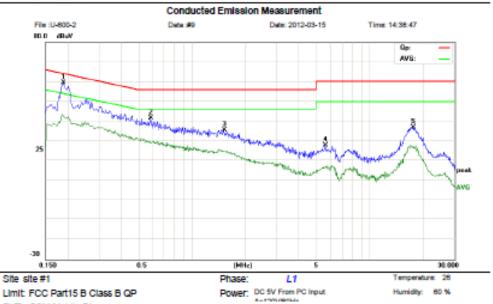
			Reading	Correct	Measure-					
No.	Mk.	Freq.	Level	Factor	ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1		0.2060	39.23	11.96	51.19	63.37	-12.18	peak		
2		1.2900	35.15	9.71	44.86	56.00	-11.14	peak		
3	•	1.2900	29.55	9.71	39.26	46.00	-6.74	AVG		
4		3.5940	35.80	10.59	46.39	56.00	-9.61	peak		
5		3.6460	23.02	10.65	33.67	46.00	-12.33	AVG		
6		4.7220	35.64	11.72	47.36	56.00	-8.64	peak		
7		4.7220	22.48	11.72	34.20	46.00	-11.80	AVG		

Engineer Signature: Sky

<sup>&</sup>quot;:Maximum data x:Over limit !:over margin



Address:No.5,Langshan 2nd Rd., North HI-Tech Industrial park Guangdong ,China Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part15 B Class B QP

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: USB Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	•	0.1900	48.03	11.40	59.43	64.04	-4.61	peak	
2		0.5860	31.71	10.00	41.71	56.00	-14.29	peak	
3		1.5260	26.11	9.47	35.58	56.00	-20.42	peak	
4		5.5980	16.26	11.64	27.90	60.00	-32.10	peak	
5		17.4780	27.98	9.00	36.98	60.00	-23.02	peak	

Engineer Signature: Sky

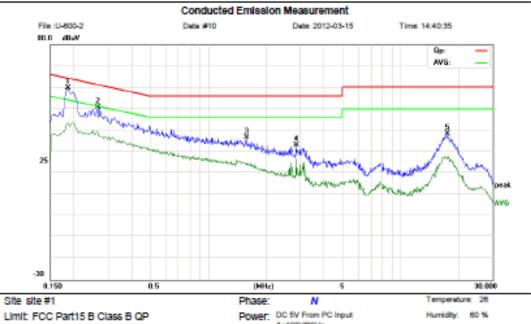
Humidity: 60 %

<sup>&</sup>quot;:Maximum data x:Over limit !:over margin



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part15 B Class B QP

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: USB Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 .	0.1860	48.52	11.16	59.68	64.21	-4.53	peak	
2	0.2660	39.10	11.56	50.66	61.24	-10.58	peak	
3	1.5740	27.15	9.43	36.58	56.00	-19.42	peak	
4	2.8620	23.27	9.86	33.13	56.00	-22.87	peak	
5	17.4100	29.46	9.00	38.46	60.00	-21.54	peak	

":Maximum data x:Over limit !:over margin

Engineer Signature: Sky

### 7. RADIATED EMISSION TEST

### 7.1. LIMITS OF RADIATED DISTURBANCES AT 3M DISTANCES FOR CLASS B

According to FCC section 15.109, except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

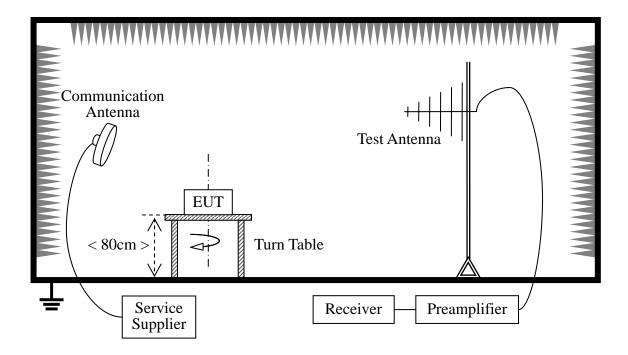
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

### NOTE:

- Field Strength (dBμV/m) = 20\*log[Field Strength (μV/m)].
- 2. In the emission tables above, the tighter limit applies at the band edges.

### 7.2 TEST DESCRIPTION

### **Test Setup:**



The EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply. The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading. During the measurement, the EUT is activated and transmitting with the other Bluetooth device (Supply by the Applicant) during the test.

### For the Test Antenna:

(a) In the frequency range of 9 kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.

(b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested.

	Preli	minary Radiated Emi	ssion Test				
Frequency	y Range Invest	igated	30 MHz TO 1000 MHz				
Mode of operation	Date	Report No.	Data#	Worst Mode			
Idle Mode	2012-3-17	STS120304F1	U-600-2_1_(H, V)				
Call Mode	2012-3-17	STS120304F1	U-600-2_2_(H, V)				
GPRS Mode	2012-3-17	STS120304F1	U-600-2_3_(H, V)				
Bluetooth Mode	2012-3-17	STS120304F1	U-600-2_4_(H, V)				
MP3/MP4 Mode	2012-3-17	STS120304F1	U-600-2_5_(H, V)				
Camera Mode	2012-3-17	STS120304F1	U-600-2_6_(H, V)				
FM Mode	2012-3-17	STS120304F1	U-600-2_7_(H, V)				
WIFI Mode	2012-3-17	STS120304F1	U-600-2_8_(H, V)				
USB Mode	2012-3-17	STS120304F1	U-600-2_9_(H, V)				

### **5.1.4 TEST RESULT**

### Form 9 KHz to 30MHz:

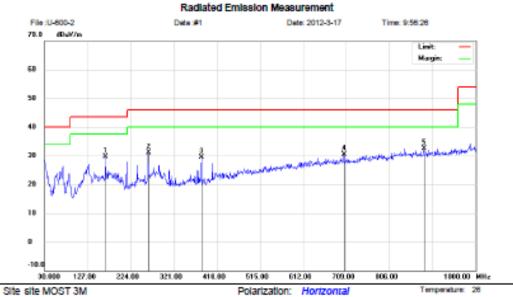
Freq. (MHz)	Ant. Pol H/V	Peak Reading	AV Reading	Ant. / CL CF	Actu	al Fs	Peak Limit	AV Limit	AV Margin
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	(dB)
		,		, ,	(dBuV/m)	(dBuV/m)	,		
N/A	Н								>20
N/A	V								>20

Note: No test data was detected in below 30MHz.



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Power: AC 120V/60Hz

Limit: FCC Part15 B 3M Radiation

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: CAMERA

Note:

No.	Mk	. Freq.	Reading Level		Measure- ment	Umit	Over		Antenna Helght		
		MHz	dBuV	dB	dBuWm	dBuV/m	dB	Detector	cm	degree	Comment
1		167.7400	12.50	17.20	29.70	43.50	-13.80	peak			
2		263.7700	13.08	18.09	31.17	46.00	-14.83	peak			
3		383.0799	11.25	18.16	29.41	46.00	-16.59	peak			
4		703.1800	5.86	24.67	30.53	46.00	-15.47	peak			
5		882.6300	5.38	27.13	32.51	46.00	-13.49	peak			

":Maximum data x:Over limit !:over margin

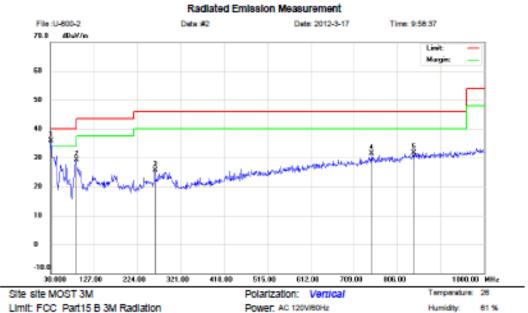
Engineer Signature: Allen

Humidity:

Distance:



Address:No.5,Langshan 2nd Rd., North HI-Tech Industrial park Guangdong ,China Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part15 B 3M Radiation

M/N: U-600-2 Mode: CAMERA

Note:

EUT: GSM Mobile Phone Distance:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuWm	dBuWm	dB	Detector	cm	degree	Comment
1	•	30.9700	11.77	24.05	35.82	40.00	-4.18	peak			
2		88.2000	17.90	11.36	29.26	43.50	-14.24	peak			
3		263.7700	7.59	18.09	25.68	46.00	-20.32	peak			
4		747.8000	5.68	25.80	31.48	46.00	-14.52	peak			
5		842.8600	4.67	27.13	31.80	46.00	-14.20	peak			

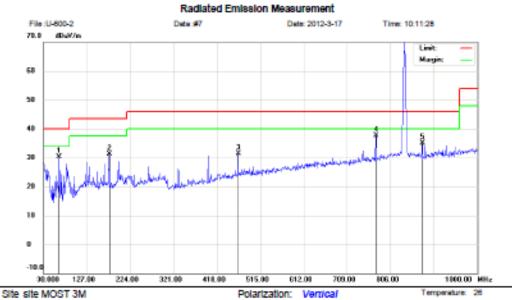
Engineer Signature: Allen

<sup>&</sup>quot;:Maximum data x:Over limit !:over margin



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China Tel: 0755-86170306 Fax: 0755-86170310

#### 161. 0100 00110000 1 tax. 0100 00110.



Limit: FCC Part15 B 3M Radiation

EUT: GSM Mobile Phone

MAI: U SOO O

M/N: U-600-2 Mode: CALL Note: Power: AC 120V/80Hz

Distance:

Humidity:

No.	Mk	Freq.	Reading Level		Measure- ment	Umit	Over		Antenna Height		
		MHz	dBuV	dB	dBuWm	dBuW/m	dB	Detector	cm	degree	Comment
1		65.8900	18.96	11.37	30.33	40.00	-9.67	peak			
2		176.4700	14.50	16.88	31.38	43.50	-12.12	peak			
3		465.5300	10.43	20.98	31.41	46.00	-14.59	peak			
4	•	773.0200	11.81	25.99	37.80	46.00	-8.20	peak			
5		876.8100	8.12	27.04	35.16	46.00	-10.84	peak			

":Maximum data x:Over limit !:over margin

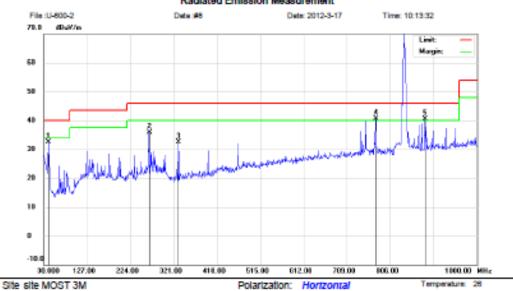
Engineer Signature:

Allen



Address:No.5,Langshan 2nd Rd., North HI-Tech Industrial park Guangdong ,China Tel: 0755-86170306 Fax: 0755-86170310

### Radiated Emission Measurement



Power: AC 120V/80Hz

Limit: FCC Part15 B 3M Radiation

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: CALL Note:

Distance:

Humidity:

No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		40.6699	16.11	16.37	32.48	40.00	-7.52	peak			
2		265.7100	17.64	18.35	35.99	46.00	-10.01	peak			
3		331.6700	15.56	17.02	32.58	46.00	-13.42	peak			
4		773.0200	14.73	25.99	40.72	46.00	-5.28	peak			
5	į	882.6300	13.29	27.13	40.42	46.00	-5.58	peak			

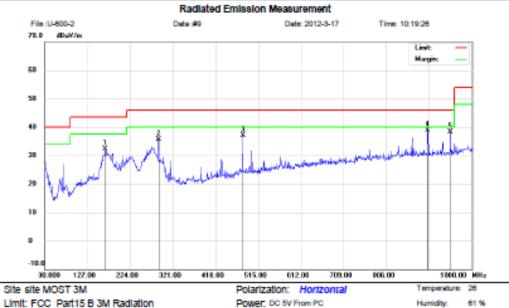
":Maximum data x:Over limit !:over margin

Engineer Signature: Allen



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part15 B 3M Radiation

EUT: GSM Mobile Phone

M/N: U-600-2 Mode: USB Note:

Distance:

No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		167.7400	15.10	17.20	32.30	43.50	-11.20	peak			
2		288.0200	16.26	19.42	35.68	46.00	-10.32	peak			
3		480.0800	15.36	21.70	37.06	46.00	-8.94	peak			
4	•	900.0900	11.45	27.40	38.85	46.00	-7.15	peak			
5		950.5300	10.48	27.92	38.40	46.00	-7.60	peak			

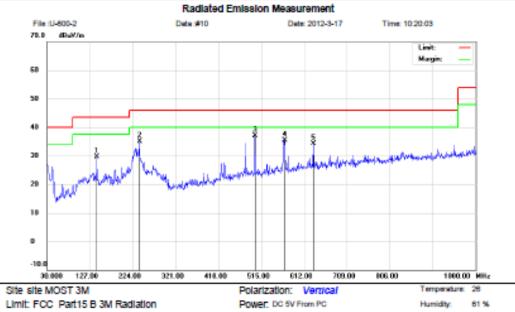
":Maximum data x:Over limit !:over margin

Engineer Signature: Allen



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



EUT: GSM Mobile Phone

M/N: U-600-2 Mode: USB Note:

No.	Mk.	Freq.	Reading Level		Measure- ment	Umit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	1	143.4900	12.78	16.99	29.77	43.50	-13.73	peak			
2	2	239.5200	17.92	17.17	35.09	46.00	-10.91	peak			
3		500.4500	15.72	21.40	37.12	46.00	-8.88	peak			
4		567.3800	12.73	22.82	35.55	46.00	-10.45	peak			
- 5	6	533.3400	10.53	23.80	34.33	46.00	-11.67	peak			

":Maximum data x:Over limit !:over margin

Engineer Signature: Allen

Distance:

**Notes:** The spikes which exceed the limit should be ignored because they are MS and SS carrier frequency.

### The worst test data above 1 GHz was showed as the follow:

Operation Mode: CALL(850MHz) Test Date: March.17, 2012

**Temperature:** 24°C **Tested by:** Habby Guo

**Humidity:** 70 % RH **Polarity:** Ver. / Hor.

Freq.	Ant. Pol H/V	Peak Reading	AV Reading	Ant./CL	Actu	Actual Fs		AV Limit	Peak Margin	AV Margin
		(dBuV)	(dBuV)	(dB)	Peak (dBuV/m)	AV (dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	(dB)
1717.50	Н	57.46	38.31	9.06	66.52	47.37	74.00	54.00	-7.48	-6.63
2765.50	Н	56.79	37.64	9.09	65.88	46.73	74.00	54.00	-8.12	-7.27
N/A										>20
4747.50		50.40	00.70	0.00	07.00	40.70	74.00	54.00	0.70	5.00
1717.50	V	58.16	39.72	9.06	67.22	48.78	74.00	54.00	-6.78	-5.22
2765.00	V	52.84	33.86	9.09	61.93	42.95	74.00	54.00	-12.07	-11.05
N/A										>20

### Notes:

- 1. Measuring frequencies from 1 GHz to 6GHz.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 3. The frequency that above 3GHz is mainly from the environment noise.

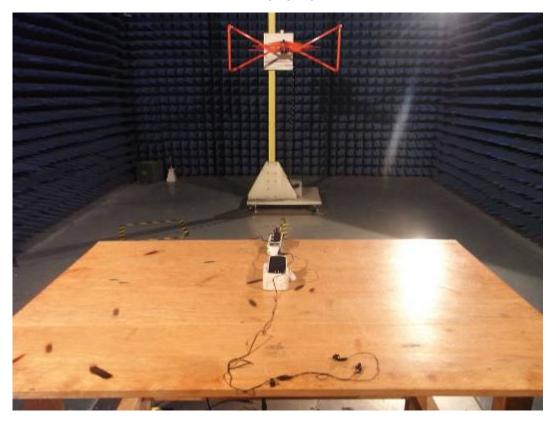
# APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

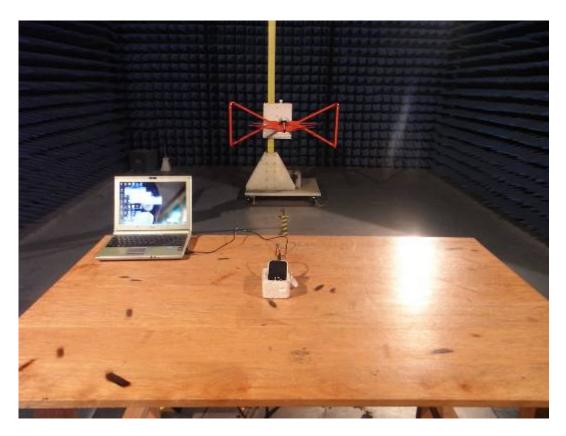
### CE TEST SETUP



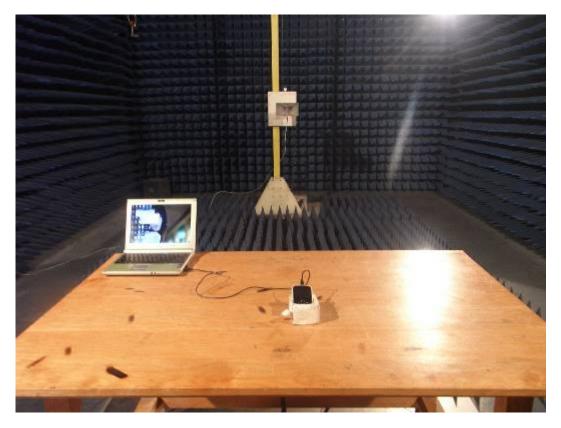


RE TEST SETUP









# APPENDIX 2 PHOTOGRAPHS OF EUT

### FRONT VIEW OF SAMPLE



BACK VIEW OF SAMPLE



### LEFT VIEW OF SAMPLE



RIGHT VIEW OF SAMPLE



TOP VIEW OF SAMPLE



BOTTOM VIEW OF SAMPLE



### PHOTO OF EARPHONE



PHOTO OF USB CABLE



### PHOTO OF POWER SUPPLY



PHOTO OF BATTERY



### PHOTO OF THE ENTIRE SAMPLE



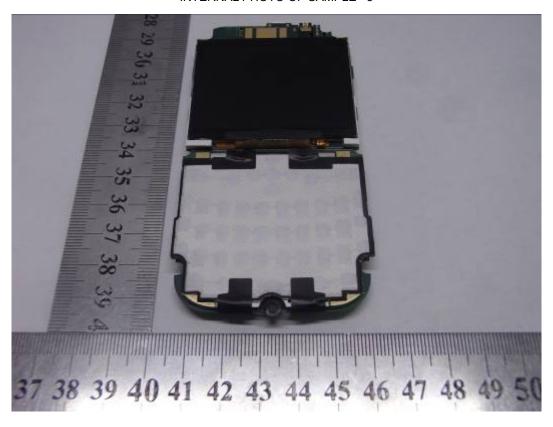
INTERNAL PHOTO OF SAMPLE - 1



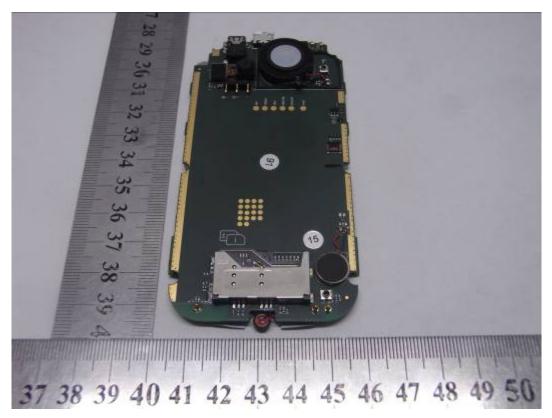
### INTERNAL PHOTO OF SAMPLE - 2



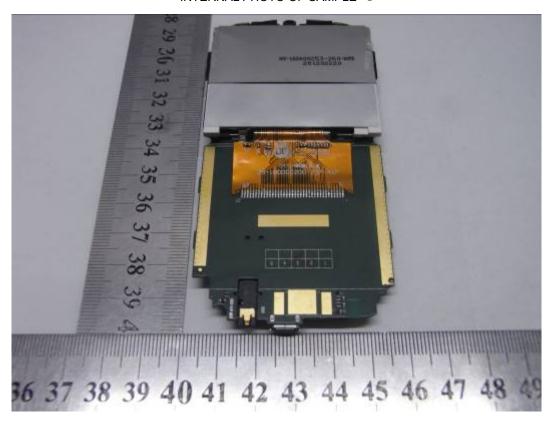
INTERNAL PHOTO OF SAMPLE -3



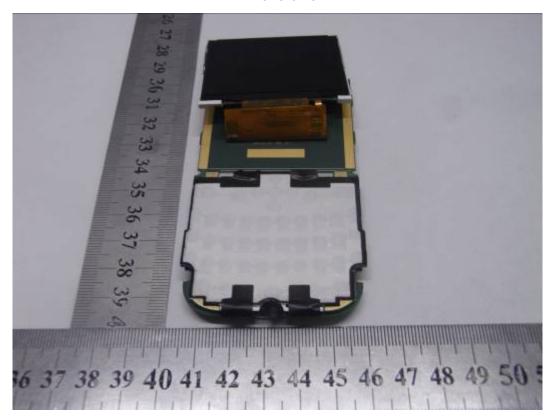
### INTERNAL PHOTO OF SAMPLE -4



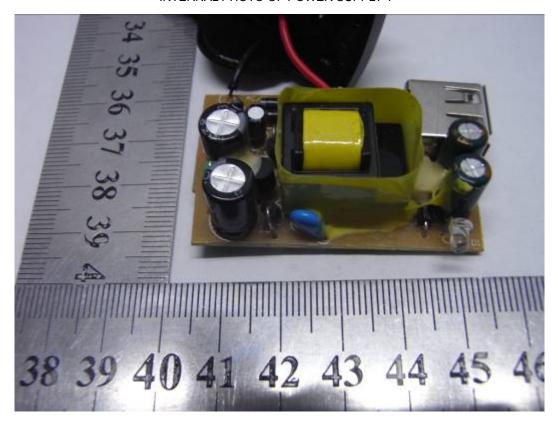
INTERNAL PHOTO OF SAMPLE -5



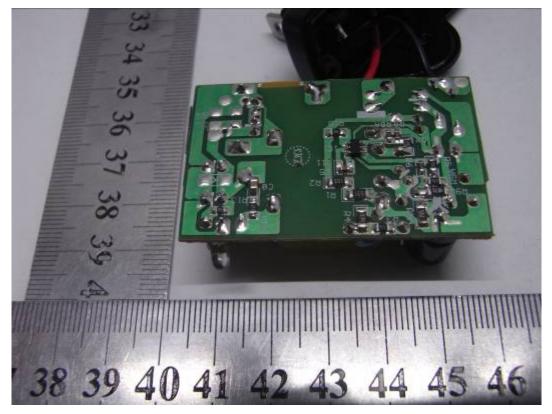
### INTERNAL PHOTO OF SAMPLE -6



INTERNAL PHOTO OF POWER SUPPLY-1



### INTERNAL PHOTO OF POWER SUPPLY-2



-----END OF REPORT-----