

# FCC PART 15 B TEST REPORT

For

## **Sky Phone LLC**

1348 Washington Av. Suite 350 Miami Beach, FL, United States 33139

**FCC ID: 2ABOSSKYFUEPLA70** 

Report Type:		Product Name:				
Original Report		Tablet PC				
Test Engineer:	Lorin Biar	1	Lorin Dian			
Report Number:	RDG161025004A					
Report Date:	2016-11-25					
	Henry Dir	Honny Ding				
Reviewed By:	EMC Leader					
Test Laboratory:	No.5040, Jinniu Dis	strict, Chengdu, Sichua 65525123, Fax: 028-65	No.1, Shawan Road, an, China			

**Note**: This test report was prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Chengdu). Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This report was valid only with a valid digital signature.

## **TABLE OF CONTENTS**

GENERAL INFORMATION	
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) OBJECTIVE RELATED SUBMITTAL(S)/GRANT(S) TEST METHODOLOGY	3 3
TEST FACILITY	
SYSTEM TEST CONFIGURATION	
DESCRIPTION OF TEST CONFIGURATION EUT EXERCISE SOFTWARE EQUIPMENT MODIFICATIONS LOCAL SUPPORT EQUIPMENT LIST AND DETAILS	5 5
SUPPORT EQUIPMENT LIST AND DETAILS  SUPPORT CABLE LIST AND DETAILS  CONFIGURATION OF TEST SETUP	5
SUMMARY OF TEST RESULTS	7
FCC§15.107 - CONDUCTED EMISSIONS	
EUT SETUP	
EMI TEST RECEIVER SETUP	
TEST EQUIPMENT LIST AND DETAILS	9
Test Procedure	
CORRECTED AMPLITUDE & MARGIN CALCULATION	
TEST DATA	10
FCC §15.109 - RADIATED SPURIOUS EMISSIONS	12
EUT SETUP	12
EMI TEST RECEIVER SETUP	
Test Procedure	13
TEST PROCEDURETEST EQUIPMENT LIST AND DETAILS	13 13
Test Procedure	13 13 14

#### **GENERAL INFORMATION**

#### **Product Description for Equipment Under Test (EUT)**

The **Sky Phone LLC** 's product, model number: **Platinum 7.0+ (FCC ID: 2ABOSSKYFUEPLA70)** (the "EUT") in this report was a **Mobile Phone**, which was measured approximately:  $18.7 \text{ cm } (L) \times 10.8 \text{ cm } (W) \times 1.2 \text{ cm } (H)$ , rated input voltage: DC3.7V battery or DC5V from adapter. The highest operation frequency is 2480 MHz.

Adapter information:

MODEL: JK050100-S02USU

INPUT: 100-240V~ 50/60Hz 0.3A Max

OUTPUT: DC5V, 1000mA

Note: The series product, model Platinum 7.0+ and YS7 are electrically identical, the differences between them are the model name and color, we selected Platinum 7.0+ for fully testing, the details was explained in the attached declaration letter.

\*All measurement and test data in this report was gathered from final production sample, serial number: 161025004 (assigned by the BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2016-10-25, and EUT conformed to test requirement.

#### **Objective**

This test report is prepared on behalf of **Sky Phone LLC** in accordance with Part 2, Subpart J, and Part 15-Subparts A and B of the Federal Communications Commission's rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Rules Part 15 B Class B.

#### Related Submittal(s)/Grant(s)

FCC Part 15C DSS submissions with FCC ID: 2ABOSSKYFUEPLA70.

FCC Part 22H, 24E PCE submissions with FCC ID: 2ABOSSKYFUEPLA70.

FCC Part 15C DTS submissions with FCC ID: 2ABOSSKYFUEPLA70.

Report No.: RDG161025004A Page 3 of 16

#### **Test Methodology**

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All of the measurements detailed in this Test Report were performed by Bay Area Compliance Laboratories Corp. (Chengdu).

The Bay Area Compliance Laboratories Corp. Chengdu's measurement Uncertainties (calculated for a k=2 Coverage Factor corresponding to approximately 95% Coverage) were as follows:

-For all of the AC Line Conducted Emissions Tests reported herein: ±3.17 dB.

-For of all of the direct Radiated Emissions Tests reported herein are:

30 MHz to 200 MHz: ±4.7 dB; 200 MHz to 1 GHz: ±6.0 dB; 1 GHz to 6 GHz: ±5.13dB; and, 6 GHz to 40 GHz: ±5.47dB.

And the uncertainty will not be taken into consideration for all test data recorded in the report.

#### **Test Facility**

The test site used by BACL to collect test data is located in the No.5040, Huilongwan Plaza, No.1, Shawan Road, Jinniu District, Chengdu, Sichuan, China.

Test site at BACL has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on April 24, 2015. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 560332. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Report No.: RDG161025004A Page 4 of 16

## SYSTEM TEST CONFIGURATION

## **Description of Test Configuration**

The system was configured for testing in a typical fashion (as normally used by a typical user).

#### **EUT Exercise Software**

The software "winthrax.exe" was used during test.

## **Equipment Modifications**

No modification was made to the EUT tested.

## **Local Support Equipment List and Details**

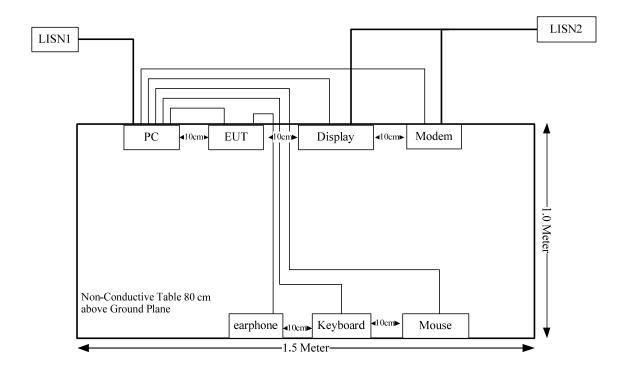
Manufacturer	Description	Model	Serial Number
IBM	PC	8176	99Y7315
DELL	DELL Display E157FPC		060229-11
ANTER	Modem	EGW802	0508350054-1B
Lenovo	Keyboard	KB-US19EB	IMHYX011071016460
Lenovo	Mouse	MO-5013U	IMJS011041409259

## **Support Cable List and Details**

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	То
Serial Cable	yes	No	1.6	Serial Port of PC	Modem
Mouse Cable	yes	No	1.4	USB Port of PC	Mouse
Keyboard Cable	yes	No	1.3	USB Port of PC	Keyboard
USB Cable	yes	No	1.0	USB Port of PC	EUT
VGA Cable	Yes	Yes	1.5	PC	Display
Earphone Cable	No	No	1.2	Audio Port of EUT	Earphone

Report No.: RDG161025004A Page 5 of 16

## **Configuration of Test Setup**



Report No.: RDG161025004A Page 6 of 16

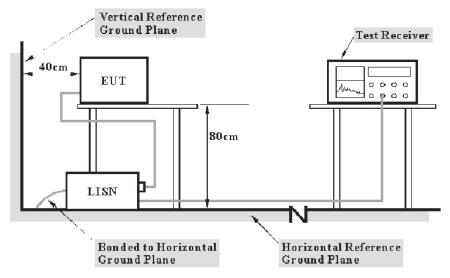
## **SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Results
§15.107	Conducted Emissions	Compliance
§15.109	Radiated Emissions	Compliance

Report No.: RDG161025004A Page 7 of 16

## FCC§15.107 - CONDUCTED EMISSIONS

#### **EUT Setup**



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The PC was connected to the main lisn with a 120V/60Hz AC power source.

#### **EMI Test Receiver Setup**

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Report No.: RDG161025004A Page 8 of 16

#### **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS 30	836858/0016	2015-12-02	2016-12-01
Rohde & Schwarz	L.I.S.N.	ENV216	100018	2015-12-02	2016-12-01
Rohde & Schwarz	PULSE LIMITER	ESH3Z2	DE14781	2016-10-31	2017-10-30
SOLAR ELECTRONICS	L.I.S.N.	9252-50-24 -BNC	984413	2015-12-02	2016-12-01
Unknown	Conducted Cable	Unknown	NO.5	2015-11-10	2016-11-09
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

<sup>\*</sup> Statement of Traceability: BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

#### **Test Procedure**

During the conducted emission test, the PC was connected to the outlet of the first LISN and the other support equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

#### **Corrected Amplitude & Margin Calculation**

The basic equation is as follows:

VC = VR + AC + VDF

Herein.

VC: corrected voltage amplitude

VR: reading voltage amplitude

Ac: attenuation caused by cable loss

VDF: voltage division factor of AMN or ISN

The "Margin" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the maximum limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Report No.: RDG161025004A Page 9 of 16

#### **Test Data**

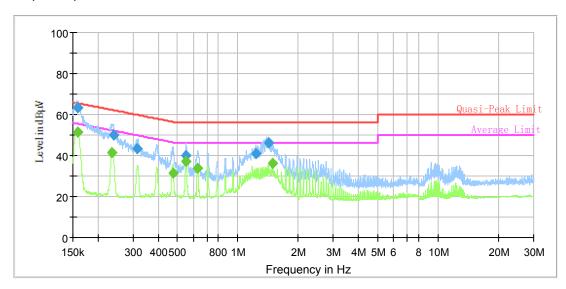
#### **Environmental Conditions**

Temperature:	28.2 °C	
Relative Humidity:	45 %	
ATM Pressure:	100.8 kPa	

The testing was performed by Lorin Bian on 2016-11-07.

Test Mode: Downloading

## AC120V, 60Hz, Line:

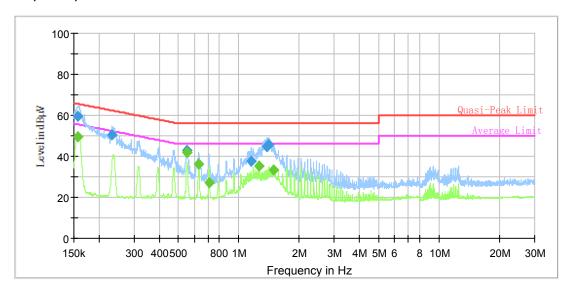


Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.157998	63.5	9.000	L1	18.8	2.1	65.6	Compliance
0.238930	50.1	9.000	L1	19.2	12.0	62.1	Compliance
0.314787	43.4	9.000	L1	19.6	16.4	59.8	Compliance
0.551882	40.1	9.000	L1	20.0	15.9	56.0	Compliance
1.229709	41.2	9.000	L1	20.0	14.8	56.0	Compliance
1.419967	46.1	9.000	L1	20.0	9.9	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.158948	51.5	9.000	L1	18.8	4.0	55.5	Compliance
0.236083	41.2	9.000	L1	19.1	11.0	52.2	Compliance
0.474132	31.5	9.000	L1	19.9	14.9	46.4	Compliance
0.551882	37.4	9.000	L1	20.0	8.6	46.0	Compliance
0.630933	33.9	9.000	L1	20.0	12.1	46.0	Compliance
1.495681	36.3	9.000	L1	20.0	9.7	46.0	Compliance

Report No.: RDG161025004A Page 10 of 16

## AC120V, 60Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.156741	59.7	9.000	N	18.8	5.9	65.6	Compliance
0.232804	50.3	9.000	N	19.1	12.0	62.3	Compliance
0.550780	42.9	9.000	N	19.9	13.1	56.0	Compliance
1.155854	37.7	9.000	N	20.0	18.3	56.0	Compliance
1.372546	44.6	9.000	N	20.0	11.4	56.0	Compliance
1.417133	45.7	9.000	N	20.0	10.3	56.0	Compliance

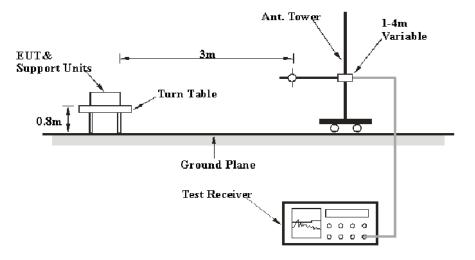
Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.157368	49.6	9.000	N	18.8	6.0	55.6	Compliance
0.551882	42.0	9.000	N	19.9	4.0	46.0	Compliance
0.629674	36.1	9.000	N	19.9	9.9	46.0	Compliance
0.708453	27.0	9.000	N	19.9	19.0	46.0	Compliance
1.262068	35.4	9.000	N	20.0	10.6	46.0	Compliance
1.495681	33.2	9.000	N	20.0	12.8	46.0	Compliance

Report No.: RDG161025004A Page 11 of 16

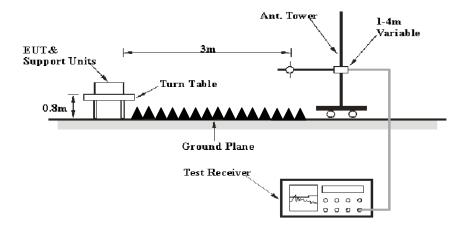
## FCC §15.109 - RADIATED SPURIOUS EMISSIONS

#### **EUT Setup**

#### **Below 1GHz:**



#### **Above 1GHz:**



The radiated emission tests were performed at the 3 meters in chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

Report No.: RDG161025004A Page 12 of 16

#### **EMI Test Receiver Setup**

The system was investigated from 30 MHz to 13.0 GHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range RBW		Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	1	Peak
	1 MHz	10 Hz	/	AVG

#### **Test Procedure**

During the radiated emissions, the PC was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The data was recorded in the Quasi-peak detection mode for below 1 GHz, peak and average detection mode above 1 GHz.

## **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	
Agilent	Amplifier	8447D	2944A10442	2015-12-02	2016-12-01	
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2015-12-02	2016-12-01	
Sunol Sciences	Broadband Antenna	JB3	A121808	2016-04-10	2019-04-09	
Rohde & Schwarz	Spectrum Analyzer	FSEM30	100018	2015-12-02	2016-12-01	
ETS	Horn Antenna	3115	003-6076	2015-12-02	2016-12-01	
Mini-circuits	Amplifier	ZVA-183-S+	771001215	2016-05-20	2017-05-19	
EMCT	Semi-Anechoic Chamber	966	966-1	2015-04-24	2018-04-23	
Unknown	RF Cable (below 1GHz)	Unknown	NO.1	2016-11-10	2017-11-09	
Unknown	RF Cable (below 1GHz)	Unknown	NO.4	2016-11-10	2017-11-09	
Unknown	Unknown RF Cable (above 1GHz)		NO.2	2016-11-10	2017-11-09	

<sup>\*</sup> Statement of Traceability: BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

Report No.: RDG161025004A Page 13 of 16

### **Corrected Amplitude & Margin Calculation**

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Margin = Limit - Corrected Amplitude

#### **Test Data**

#### **Environmental Conditions**

Temperature:	24.1 °C		
Relative Humidity:	37 %		
ATM Pressure:	101.5 kPa		

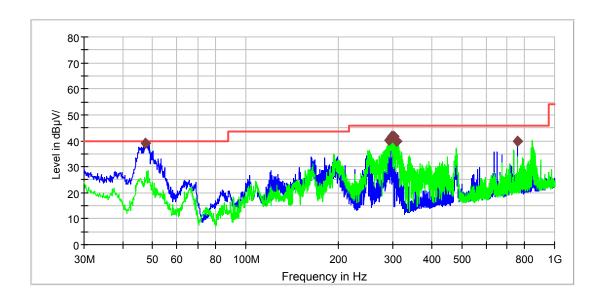
<sup>\*</sup> The testing was performed by Lorin Bian on 2016-11-10.

Test Result: Compliance

Report No.: RDG161025004A Page 14 of 16

Test Mode: Downloading

## 1) Below 1GHz:



Frequency (MHz)	QuasiPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
47.338750	39.1	100.0	V	147.0	-18.0	0.9	40.0
291.657500	40.2	100.0	Н	89.0	-12.4	5.8	46.0
296.871250	41.6	100.0	Н	98.0	-12.4	4.4	46.0
302.691250	41.7	100.0	Н	89.0	-12.3	4.3	46.0
307.541250	39.8	100.0	Н	108.0	-12.2	6.2	46.0
758.712500	39.9	100.0	V	32.0	-4.7	6.1	46.0

Report No.: RDG161025004A Page 15 of 16

## 2) 1GHz-13GHz:

Frequency	Rec	Receiver		Rx Antenna		Amplifier	Corrected	Limit	Margin
(MHz)	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)	loss (dB)	Gain (dB)	Amplitude (dBµV/m)	(dBµV/m)	(dB)
1096.19	43.46	PK	Н	23.05	2.11	26.72	41.90	74.00	32.10
1096.19	30.78	AV	Н	23.05	2.11	26.72	29.22	54.00	24.78
1192.38	43.83	PK	Н	23.30	2.25	26.63	42.75	74.00	31.25
1192.38	31.21	AV	Н	23.30	2.25	26.63	30.13	54.00	23.87
1529.06	39.75	PK	Н	24.15	2.69	26.36	40.23	74.00	33.77
1529.06	27.14	AV	Н	24.15	2.69	26.36	27.62	54.00	26.38
1192.38	46.76	PK	V	23.30	2.25	26.63	45.68	74.00	28.32
1192.38	34.11	AV	V	23.30	2.25	26.63	33.03	54.00	20.97
1721.44	45.64	PK	V	24.45	2.84	26.55	46.38	74.00	27.62
1721.44	33.2	AV	V	24.45	2.84	26.55	33.94	54.00	20.06
1817.64	47.57	PK	V	24.61	2.91	26.64	48.45	74.00	25.55
1817.64	35.03	AV	V	24.61	2.91	26.64	35.91	54.00	18.09

\*\*\*\*\* END OF REPORT \*\*\*\*\*

Report No.: RDG161025004A Page 16 of 16