FCC PART 15B, CLASS B

TEST REPORT

For

Advanced Mobile Payment Inc.

Units 401-403, 15 Wertheim Court. Richmond Hill, Ontario L4B 3H7 Canada

FCC ID: 2AKJB-AMP7000-3

Report Type:	**Product Type:**
Original Report	POS Payment Terminal

Report Number:	RSZ170511007-00A
Report Date:	2017-05-25
Reviewed By:	Oscar Ye Engineer
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu province, China Tel: +86-0512-86175000 Fax: +86-0512-88934268 www.baclcorp.com.cn

Note: This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Advanced Mobile Payment Inc.'s* product, model number: *AMP 7000-FA (FCC ID: 2AKJB-AMP7000-3) in* this report is a *POS Payment Terminal*, which was measured approximately: 190 mm (L) * 89.5 mm (W) *56 mm (H), rated with input voltage: DC 7.4V battery or DC 9.5V from adapter. The highest operating frequency is 1990MHz.

Adapter Information:
Model: ADS-25SG-12-2 09524E
Input: AC 100-240V, 50/60Hz, 0.7A max
Output: DC 9.5V, 2.5A

** All measurement and test data in this report was gathered from production sample serial number: 1700957 (Assigned by BACL, Kunshan). The EUT supplied by the applicant was received on 2017-05-11.*

Objective

This test report is prepared on behalf of *Advanced Mobile Payment Inc.* in accordance with Part 2-Subpart J, Part 15-Subparts A and B of the Federal Communication Commissions rules.

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

Related Submittal(s)/Grant(s)

FCC 15.225 DXX and Part 22H & 24E PCB submissions with FCC ID: 2AKJB-AMP7000-3.

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 emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		±3.26 dB
Radiated emission	30MHz~1GHz	±5.91dB
	Above 1G	±4.92dB
Occupied Bandwidth		±0.5kHz
Temperature		±1.0℃
Humidity		±6%

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Test site at Bay Area Compliance Laboratories Corp. (Kunshan) 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 November 06, 2014. 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.: 815570. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a manufacturer testing fashion.

EUT operation mode: communication with computer

EUT Exercise Software

No exercise software was used

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

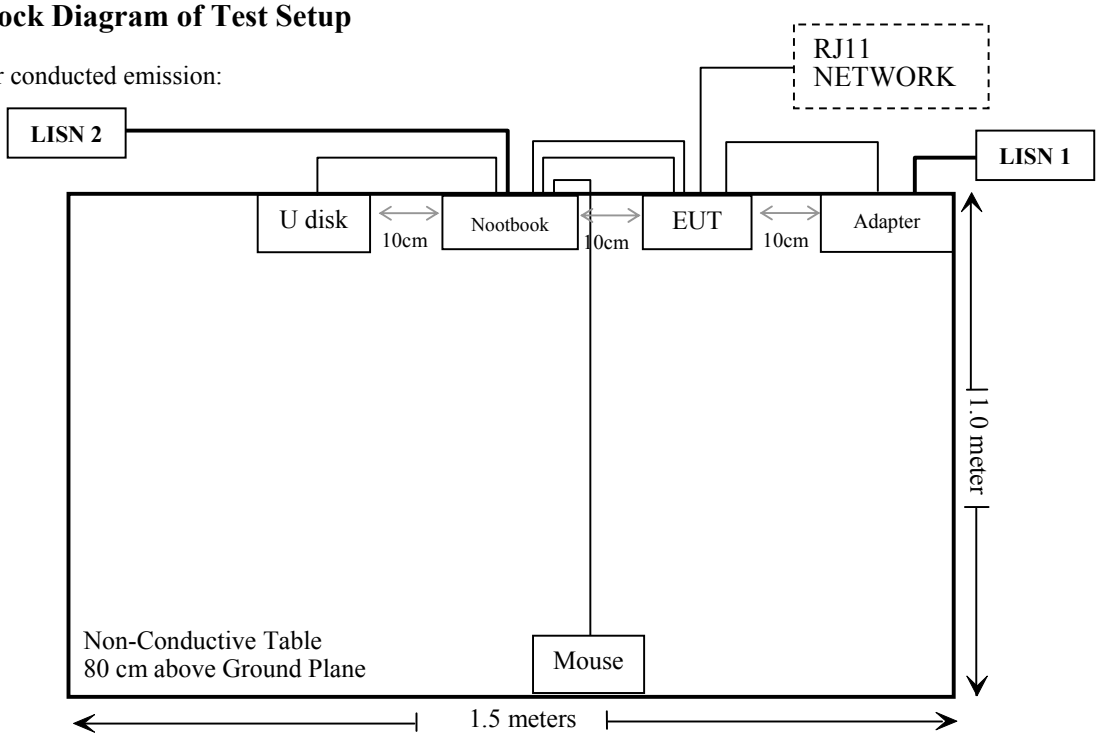
Manufacturer	Description	Model	Serial Number
Lenovo	Nootbook	T400	R8-LXAXE 09/12
DELL	Mouse	MOC5UO	G1900NKD
Lenovo	Adapter	92P1158	PA-1650-161
Kingston	U disk	4 GB	N/A

External I/O Cable

Cable Description	Length (m)	From/Port	To
Un-Shielding Detachable USB Cable	1.5	Nootbook	U disk
Un-Shielding Detachable USB Cable	1.5	Nootbook	Mouse
Un-shielding Detachable RJ11 exchange to USB Cable	1.0	EUT	Nootbook
Un-shielding Detachable USB Cable	1.0	EUT	Nootbook
Un-shielding Detachable AC Cable	0.9	Adapter	LISN 1
Un-shielding Un-detachable DC Cable	0.9	Adapter	EUT
Un-shielding Detachable RJ11 Cable	3.0	EUT	RJ11 NETWORK

Block Diagram of Test Setup

For conducted emission:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	AC Line Conducted Emissions	Compliance*
§15.109	Radiated Spurious Emissions	Compliance

Compliance*: The EUT is identical with the product which the Model named AMP 7000-FD and FCC ID is 2AKJB-AMP7000-2, the difference is the Wifi module was removed. So these test items please referred to FCC ID: 2AKJB-AMP7000-2 that has been certified on 2017-04-05, report No.: RSZ161123004-00A, which was tested by Bay Area Compliance Laboratories Corp.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Sonoma Instrunent	Amplifier	330	171377	2016-12-12	2017-12-12
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2016-11-25	2017-11-25
Sunol Sciences	Broadband Antenna	JB3	A090314-2	2016-01-09	2019-01-08
Narda	Pre-amplifier	AFS42-00101800	2001270	2016-09-08	2017-09-08
EMCO	Horn Antenna	3116	9510-2384	2015-11-07	2018-11-06
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2016-11-25	2017-11-25
ETS	Horn Antenna	3115	9311-4159	2016-01-11	2019-01-10
R&S	Auto test Software	EMC32	V 09.10.0	NCR	NCR
haojintech	Coaxial Cable	Cable-1	001	2016-12-12	2017-12-12
haojintech	Coaxial Cable	Cable-2	002	2016-12-12	2017-12-12
haojintech	Coaxial Cable	Cable-3	003	2016-12-12	2017-12-12
MICRO-COAX	Coaxial Cable	Cable-4	004	2016-12-12	2017-12-12
MICRO-COAX	Coaxial Cable	Cable-5	005	2016-12-12	2017-12-12

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI)

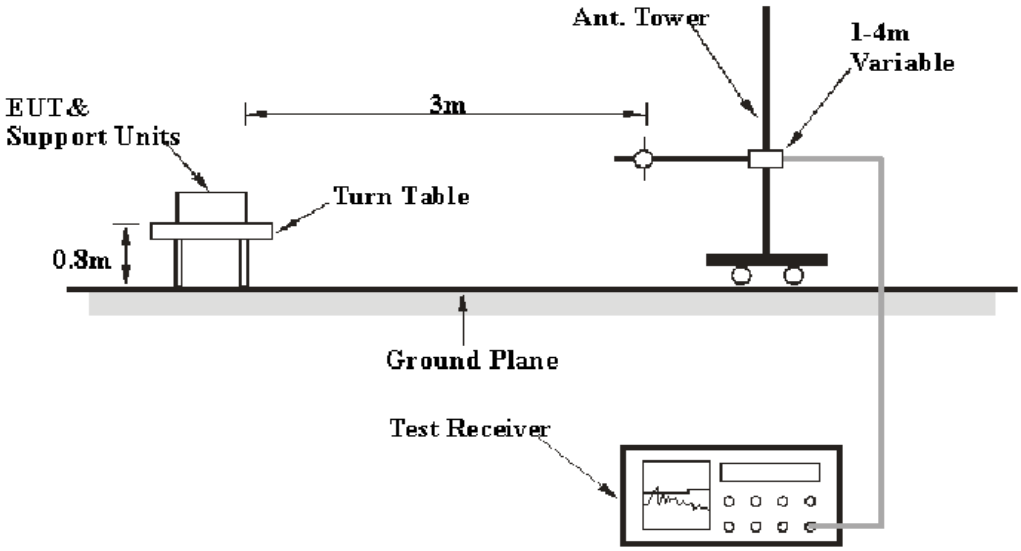
FCC §15.109 - RADIATED SPURIOUS EMISSIONS

Applicable Standard

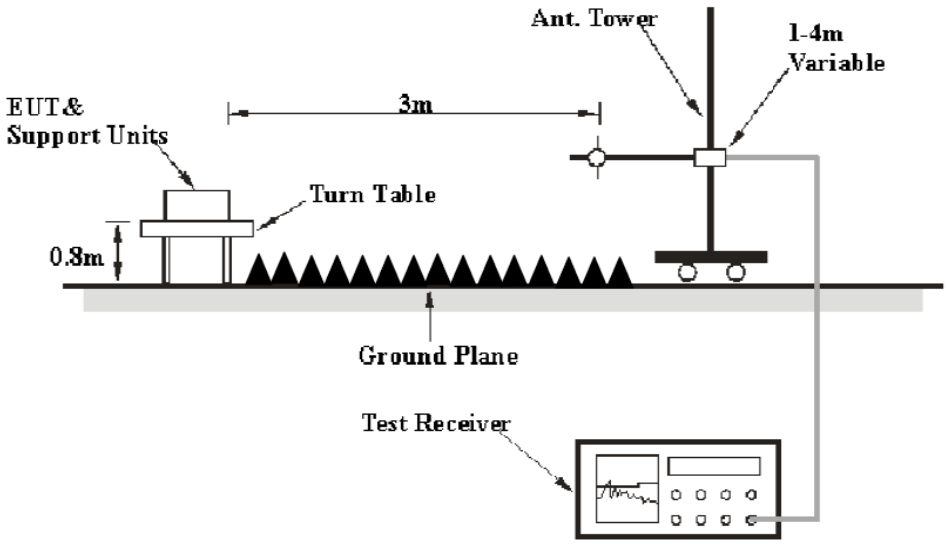
FCC §15.109

EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters 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.

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

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 10GHz.

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	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

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

All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.

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 Results Summary

According to the data in the following table, the EUT complied with the FCC §15.109 Class B.

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level is in compliance with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cispr}$$

In BACL, $U_{(Lm)}$ is less than U_{cispr}, if L_m is less than L_{lim}, it implies that the EUT complies with the limit.

Test Data

Environmental Conditions

Temperature:	24 ℃
Relative Humidity:	49 %
ATM Pressure:	101.0 kPa

The testing was performed by Layne Li on 2017-05-23.

EUT operation mode: communication with computer

30 MHz – 10GHz:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15B	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
31.19	41.08	QP	67.0	3.90	H	-4.98	36.10	40	3.9
199.88	43.57	QP	259.0	1.70	H	-12.15	31.42	43.5	12.08
207.47	47.48	QP	83.0	1.39	H	-12.40	35.08	43.5	8.42
698.17	34.44	QP	334.0	2.89	V	-3.74	30.70	46	15.3
799.84	33.33	QP	235.0	1.76	H	-2.02	31.31	46	14.69
916.01	31.41	QP	78.0	3.62	V	-0.86	30.55	46	15.45
2700.91	53.30	PK	27	2.1	H	-4.88	48.42	74	25.58
2700.91	37.16	Ave.	27	2.1	H	-4.88	32.28	54	21.72
1316.74	46.49	PK	326	1.5	V	-10.66	35.83	74	38.17
1316.74	31.41	Ave.	326	1.5	V	-10.66	20.75	54	33.25

Note:
1) Correction Factor=Antenna factor (RX) + cable loss – amplifier factor
2) Corrected Amplitude = Correction Factor + Reading
3) Margin = Limit - Corrected Amplitude

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