

# FCC TEST REPORT

For

Shenzhen Big Master Technology Co., Ltd

Product Name: Tablet PC

Model No.: A7-3D

Prepared for : Shenzhen Big Master Technology Co., Ltd

Address : Blog 6-7, Caifa Technology Industrial Park, Guanlan Town,

Longhua New District, Shenzhen City, Guangdong, China

: SHENZHEN POCE TECHNOLOGY CO., LTD. Prepared by

Address : H Building, Hongfa Science And Technology Park, Tangtou,

Shiyan, Bao'An District, Shenzhen, China

Date of receipt of test sample : July 08, 2015

Number of tested samples : 1

Serial number : Prototype

Date of Test July 08, 2015 – August 7, 2015

Date of Report : August 7, 2015

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen POCE Technology Co., Ltd.



	FCC TEST REPORT				
	FCC Part 15B: 2014				
Report Reference No	: POCE15072104QCT				
Date of Issue	: August 7, 2015				
Testing Laboratory Name	: SHENZHEN POCE TECHNOLOGY CO., LTD.				
Address	: H Building, Hongfa Science And Technology Park, Tangtou, Shiyan, Bao'An District, Shenzhen, China				
Testing Location/ Procedure	: Full application of Harmonised standards				
	Partial application of Harmonised standards $\square$				
	Other standard testing method $\Box$				
Applicant's Name	: Shenzhen Big Master Technology Co., Ltd				
Address	: Blog 6-7, Caifa Technology Industrial Park, Guanlan Town, Longhua New District, Shenzhen City, Guangdong, China				
Test Specification					
Standard	: FCC Part 15B: 2014				
Test Report Form No	: POCEEMC-1.0				
TRF Originator	: SHENZHEN POCE TECHNOLOGY CO., LTD.				
Master TRF	: Dated 2015-06-11				
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Test Item Description. : Tablet PC

Trade Mark :: N/A

Model/ Type Reference ..... : A7-3D

Ratings..... : DC 5V from adapter input AC 120V/60Hz

Result ..... : Positive

Compiled by:	Supervised by:	Approved by:	
Heyew	Alan	Machael M3	
Hellen Hu/ File administrators	Alan Cao/ Technique principal	Machael Yang/ Manager	



Traceability of Device					
EUT	: Tablet PC				
Type / Model	: A7-3D				
Applicant	: Shenzhen Big Master Technology Co., Ltd				
Address	: Blog 6-7, Caifa Technology Industrial Park, Guanlan Town, Longhua New District, Shenzhen City, Guangdong, China				
Telephone	: /				
Fax	: /				
Manufacturer	: Shenzhen Big Master Technology Co., Ltd				
Address	: Blog 6-7, Caifa Technology Industrial Park, Guanlan Town, Longhua New District, Shenzhen City, Guangdong, China				
Telephone	: /				
Fax	: /				
Factory	: Shenzhen Big Master Technology Co., Ltd				
Address	: Blog 6-7, Caifa Technology Industrial Park, Guanlan Town,				
	Longhua New District, Shenzhen City, Guangdong, China				
Telephone	: /				
Fax	: /				

Test Result: Positive
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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.



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### 1. GENERAL INFORMATION

### 1.1.Description of test facility

All measurement required was performed at laboratory of Shenzhen POCE Technology Co., Ltd. H Building, Hongfa Science and Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, China

The test facility is recognized, certified, or accredited by the following organizations:

FCC – Registration No.: 222278

Shenzhen POCE Technology Co., Ltd.EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 222278, June 08, 2010.

### 1.2.Test Standards

The following Declaration of Conformity report of EUT is prepared in accordance with 47CFR Part 15(2014): Radio Frequency Device: Subpart B; Unintentional radiators Class B ANSI C63.4(2009): Interim Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9KHz to 40GHz.

### 1.3.Test Summary

TEST ITEMS	RESULT	NOTE
Disturbance voltage at a.c. mains terminal	PASS	
Radiated emission	PASS	

Notes: N/A=Not Applicable

### 1.4. Measurement Uncertainty

Radiation Uncertainty :  $Ur = \pm 3.84dB$ 

Conduction Uncertainty :  $Uc = \pm 2.72 dB$ 



# 2. POWER LINE CONDUCTED MEASUREMENT

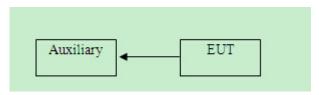
# 2.1.Test Equipment

The following test equipments are used during the power line conducted measurement:

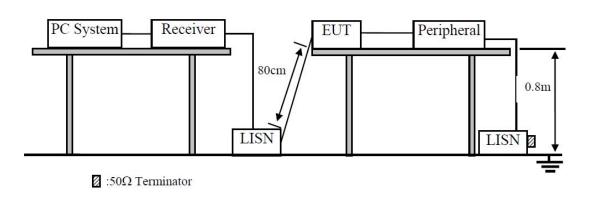
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI 3	101431	Nov. 09, 2014	1 Year
2.	L.I.S.N.	Rohde & Schwarz	ESH3-Z5	831.5518.52	Nov. 09, 2014	1 Year
1.	Pulse Limiter	SCHWARZ BECK	VTSD 9561-F	100006	Nov. 09, 2014	1 Year
3.	RF Cable	FUJIKURA	RG-55/U	LISN Cable	Nov. 09, 2014	1 Year

# 2.2.Block Diagram of Test Setup

2.2.1.Block diagram of connection between the EUT and simulators



### 2.2.2.Block diagram of test setup



# 2.3. Power Line Conducted Emission Measurement Limits (Class B)

Frequency	Limits dB(μV)				
MHz	Quasi-peak Level	Average Level			
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*			
0.50 ~ 5.00	56	46			
5.00 ~ 30.00	60	50			

Notes: 1. \*Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.



## 2.4. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission

Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

EUT : Tablet PC

Model Number : X6-7AGD41

# 2.5. Operating Condition of EUT

- 2.5.1. Setup the EUT and simulator as shown as Section 2.2.
- 2.5.2. Turn on the power of all equipment.
- 2.5.3. Let the EUT work in test mode (Normal) and measure it.

### 2.6. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides 50ohm-coupling impedance for the EUT system.

Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC/ANSI C63.4-2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCI 3) is set at 9KHz.

The frequency range from 150KHz to 30MHz is checked.

The test result is reported on Section 2.7.

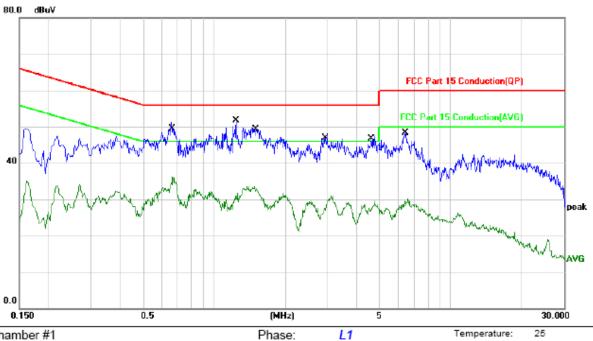
The frequency range from 150KHz to 30 MHz is investigated.

#### 2.7. Power Line Conducted Emission Measurement Results

**PASS** 

Please reference to the following pages





AC 120V/60Hz

Humidity:

45 %

Site Chamber #1

Limit: FCC Part 15 Conduction(QP)

EUT: 平板 M/N:

Mode: Running

Note:

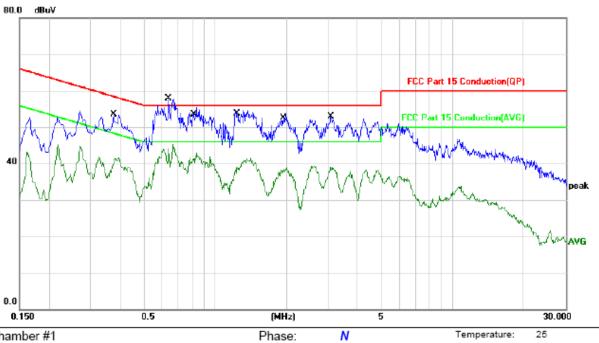
No. M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1 *	0.6739	34.49	9.95	44.44	56.00	-11.56	QP		
2	0.6739	24.31	9.95	34.26	46.00	-11.74	AVG		
3	1.2319	34.12	9.85	43.97	56.00	-12.03	QP		
4	1.2319	20.06	9.85	29.91	46.00	-16.09	AVG		
5	2.9533	29.31	9.82	39.13	56.00	-16.87	QP		
6	2.9533	16.82	9.82	26.64	46.00	-19.36	AVG		
7	4.6517	29.58	9.79	39.37	56.00	-16.63	QP		
8	4.6517	16.06	9.79	25.85	46.00	-20.15	AVG		
9	1.4906	34.57	9.81	44.38	56.00	-11.62	QP		
10	1.4906	21.81	9.81	31.62	46.00	-14.38	AVG		
11	6.4112	30.30	9.74	40.04	60.00	-19.96	QP		
12	6.4112	17.88	9.74	27.62	50.00	-22.38	AVG		

Power:

Humidity:

45 %





Site Chamber #1

Limit: FCC Part 15 Conduction(QP)

EUT: 平板 M/N:

Mode: Running

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3772	38.24	10.32	48.56	58.34	-9.78	QP	
2		0.3772	30.76	10.32	41.08	48.34	-7.26	AVG	
3		0.6341	39.16	10.33	49.49	56.00	-6.51	QP	
4	*	0.6341	31.20	10.33	41.53	46.00	-4.47	AVG	
5		0.8291	38.54	10.31	48.85	56.00	-7.15	QP	
6		0.8291	31.04	10.31	41.35	46.00	-4.65	AVG	
7		1.2466	38.84	10.26	49.10	56.00	-6.90	QP	
8		1.2466	28.24	10.26	38.50	46.00	-7.50	AVG	
9		1.9444	36.63	10.17	46.80	56.00	-9.20	QP	
10		1.9444	27.54	10.17	37.71	46.00	-8.29	AVG	
11		3.0873	36.87	9.98	46.85	56.00	-9.15	QP	
12		3.0873	28.25	9.98	38.23	46.00	-7.77	AVG	

Power:

AC 120V/60Hz



# 3. RADIATED EMISSION MEASUREMENT

# 3.1. Test Equipment

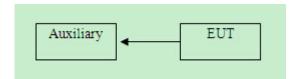
The following test equipments are used during the radiated emission measurement:

### 3.1.1. For Anechoic Chamber

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4408B	CFG006	Nov. 09, 2014	1 Year
2.	Test Receiver	R&S	ESCI	101431	Nov. 09, 2014	1 Year
3.	Bilog Antenna	Model JB6	CBL6111D	A090414	Nov. 09, 2014	1 Year
4.	50 Coaxial Switch	Anritsu Corp	MP59B	6100237248	Nov. 09, 2014	1 Year
5.	Cable	Schwarzbeck	AK9513	ACRX1	Nov. 09, 2014	1 Year
6.	Cable	Rosenberger	N/A	FP2RX2	Nov. 09, 2014	1 Year
7.	Cable	Schwarzbeck	AK9513	CRPX1	Nov. 09, 2014	1 Year
8.	Cable	Schwarzbeck	AK9513	CRRX2	Nov. 09, 2014	1 Year
9.	DC Power Filter	MPE	23872C	N/A	Nov. 09, 2014	1 Year
10.	Single Phase Power Line Filter	MPE	23332C	N/A	Nov. 09, 2014	1 Year
11.	3 Phase Power Line Filter	MPE	23333C	N/A	Nov. 09, 2014	1 Year
12.	Signal Generator	НР	8648A	3625U00573	Nov. 09, 2014	1 Year

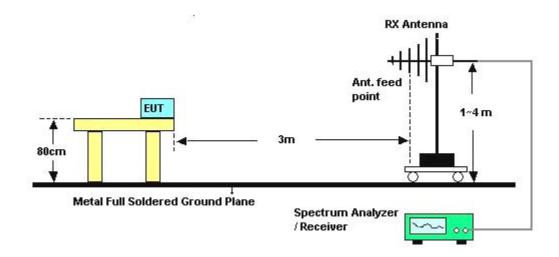
# 3.2. Block Diagram of Test Setup

# 3.2.1.Block diagram of connection between the EUT and simulators





### 3.2.2. Anechoic Chamber Test Setup Diagram



### 3.3. Radiated Emission Limit (Class B)

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMIT	
MHz	Meters	μV/m	$dB(\mu V)\!/m$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0

Remark: (1) Emission level (dB) $\mu$ V = 20 log Emission level  $\mu$ V/m

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

## 3.4.EUT Configuration on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

Tablet PC (EUT)

Model Number : X6-7AGD41

Serial Number : N/A



## 3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT as shown in Section 3.2.
- 3.5.2.Let the EUT work in test mode (Normal) and measure it.

#### 3.6. Test Procedure

EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission measurement.

The bandwidth of the EMI test receiver (R&S ESCI 3) is set at 120KHz.

The frequency range from 30MHz to 1000MHz is investigated.

### 3.7. Radiated Emission Measurement Results

**PASS** 

Please reference to the following pages





Site Chamber #1

Limit: FCC Class B 3M Radiation

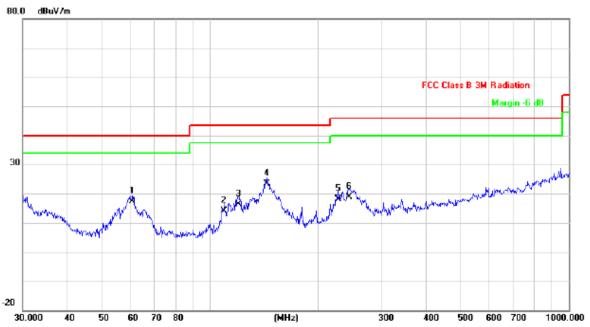
EUT:

M/N: Mode: Note: Polarization: Vertical Temperature: 25
Power: AC 120V/80Hz Humidity: 45 %

Distance: 3m

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		37.9450	45.12	-11.69	33.43	40.00	-6.57	QP			
2		53.8818	49.21	-20.07	29.14	40.00	-10.86	QP			
3		61.1316	52.14	-19.64	32.50	40.00	-7.50	QP			
4		119.8556	47.25	-14.73	32.52	43.50	-10.98	QP			
5	*	144.3348	50.01	-11.95	38.06	43.50	-5.44	QP			
6		294.1137	41.98	-11.65	30.33	46.00	-15.67	QP			





Site Chamber #1

Polarization: Horizontal

Temperature: 25

Limit: FCC Class B 3M Radiation

Power: AC 120V/60Hz

Distance: 3m

Humidity: 45 %

EUT: M/N:

Mode: Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		60.4919	37.10	-19.64	17.46	40.00	-22.54	QP			
2		109.4116	30.14	-16.00	14.14	43.50	-29.36	QP			
3		119.8556	31.05	-14.73	16.32	43.50	-27.18	QP			
4	*	143.8295	35.41	-12.03	23.38	43.50	-20.12	QP			
5		227.6906	31.89	-13.74	18.15	46.00	-27.85	QP			
6		244.2321	31.98	-13.05	18.93	46.00	-27.07	QP			



## 4. MANUFACTURER/ APPROVAL HOLDER DECLARATION

The following identical model(s):

A7-3D	X6-7AGD41	X6-7MGD41	M7
X6-8AGD41	X6-8MGD41	6-10AD21	7A42
9A42			

Note: All the models are identical except the model name or color.

Belong to the tested device:

Product description : Tablet PC

Model name : A7-3D

Remark: So no additional models were tested.

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