

# FCC ID TEST REPORT

Prepared for:	Shenzhen Langmei Technology Co.,ltd		
Address:	Block B2, Langmei Technology park, 2nd Industry Park Fenghuang 3th Industry Zone, Fuyong Town, Bao'an District, Shenzhen, China		
Equipment Under Test(E.U.T.):	Tablet PC		
Model:	27Ci		
FCC ID	2ACBS-27CI		
Applicable Standards:	FCC CFR Title 47 Part 15 Subpart B		
Test Date:	15 December 2014 to 26 December 2014		
Issued Date:	26 December 2014		
Report Number:	POCE14121334FRF-1		
Test Engineer:	Din Jing		
Reviewed By			
Prepared By:	Shenzhen POCE Technology Co., Ltd. H Building, Hongfa Science and Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, China Tel: 86-755-2911 3252 Fax: 86-755-2911 3135		

The results detailed in this test report relate only to the specific sample(s) tested. It is the Application's responsibility to ensure that all production units are manufactured with equivalent EMC characteristics. This report is not to be reproduced except in full, without written approval from Shenzhen POCE Technology Co., Ltd..

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## 1.0 General Information

#### 1.1 Client Details

Applicant:	Shenzhen Langmei Technology Co.,ltd			
Address:	Block B2, Langmei Technology park, 2nd Industry Park Fenghuang 3th Industry Zone,			
	Fuyong Town, Bao'an District, Shenzhen, China			
Manufacturer:	Shenzhen Langmei Technology Co.,ltd			
Address:	Block B2, Langmei Technology park, 2nd Industry Park Fenghuang 3th Industry Zo			
	Fuyong Town, Bao'an District, Shenzhen, China			

#### 1.2 Test Lab Details

Name:	Shenzhen POCE Technology Co.,Ltd.	
Address:	Room 502, Bldg. 1, Xinghua Garden, Baoan Road Xixiang, Baoan District, Shenzhen,	
	China	
Telephone:	86-755-29113252	
Fax:	86-755-29113135	

Site Listed with Federal Communication Commission

Registration Number: 222278

For 3m chamber

## 1.3 Description of E.U.T.

Product:	Tablet PC	
Model No.:	27Ci	
Additional Model No.	DW-UBT27Ci, T1	
Brand Name:	N.A.	
Power supply:	DC 3.7V via Battery or,	
	DC 5V from ADAPTER,	
	ADAPTER INFORMATION,	
MODEL: HT-001-050200		
	INPUT: 100-240VAC, 50/60Hz, OUTPUT: DC 5V, 2A	

#### 1.4 AE used during the test

Equipment type	Model	Manufacturer	FCC Approval	Remark
PC	VOSTRO 3900	DELL	DoC	N.A.
Monitor	Е1914Нс	DELL	DoC	N.A.
Keyboard	KB212-B	DELL	DoC	Shielding/1.5m
Mouse	MS111-L	DELL	DoC	Shielding/1.5m
Printer	P1108	HP	DoC	USB LINE: Shielding/1.5m

# 2.0 Test Summary

Section in CFR 47	Test Item	Result	
15.107(a)	AC Power Line Conducted Emission	Complies	
15.109	Radiated Emission	Complies	

## 3.0 E.U.T. Modification

No modification by Shenzhen POCE Technology Co., Ltd.

# **4.0 Measurement Uncertainty**

(95% confidence levels, k=2)

No.	Item	MU
1.	Radio Frequency	$\pm 1 \times 10^{-9}$
2.	Temperature	±0.1℃
3.	Humidity	±1.0%
4.	RF power, conducted	±0.34dB
5.	Spurious emissions, conducted	±2.72dB
6.	All emissions, radiated	±3.84dB

#### **5.0 Power Line Conducted Emission Test**

#### 5.1 Test Equipment

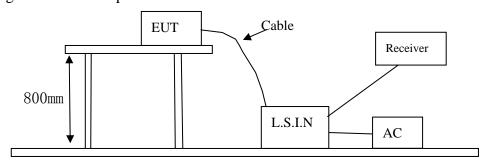
Instrument Type	Model	Serial No.	Manufacturer	Date of Cal.	Due Date
EMI Test Receiver	ESCI	1166.590.03	R&S	Nov. 09, 2014	Nov. 08, 2015
LISN	ESH3-Z5	831.5518.52	R&S	Nov. 09, 2014	Nov. 08, 2015

#### 5.2 Test Method and test Procedure

The E.U.T. was tested according to ANSI C63.4-2009. The Frequency spectrum From 0.15MHz to 30MHz was investigated.

Test Voltage: 120V~, 60Hz

#### 5.3 Block diagram of Test setup



#### 5.4 E.U.T. Operating Condition

Operating condition is according to ANSI C63.4 -2009

- 1) Setup the E.U.T. and simulators as shown on the following
- 2) Enable AF signal and confirm E.U.T. active to normal condition

#### 5.5 Power line conducted Emission Limit according to Paragraph 15.107

Eroguanov (MIIz)	Class A Limits (dB µ V)		Class B Limits (dB µ V)		
Frequency(MHz)	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level	
0.15 ~ 0.50	79.0	66.0	66.0~56.0*	56.0~46.0*	
$0.50 \sim 5.00$	73.0	60.0	56.0	46.0	
5.00 ~ 30.00	73.0	60.0	60.0	50.0	

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

2) The tighter limit shall apply at the transition frequencies

#### 5.6 Test specification

Environmental conditions: Temperature: 25° C Humidity: 50% Atmospheric pressure: 103kPa

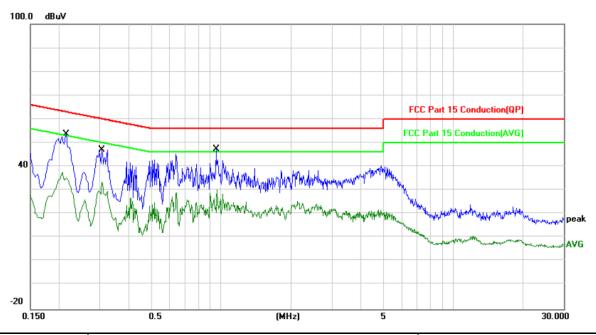
#### 5.7 Test Result

Pass.

Conducted Emission on Line Terminal of the power line (150kHz to 30MHz)

E.U.T. Description:	Tablet PC
Operation Mode:	Data transfer
Tested By:	Bill
Test Date:	17 December 2014

Start Frequency	Stop Frequency	Step	IF BW	Detector	Final M-Time
0.15MHz	30MHz	4.5KHz	10KHz	QP+AV	1s

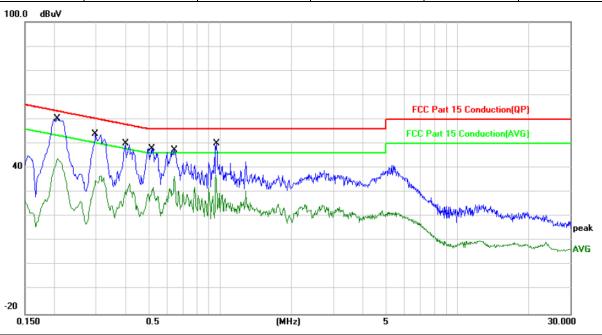


Frequency (MHz)	Reading(dB µ V)				Limit	
	Line		Neutral		$(dB \mu V)$	
(WITIZ)	Quasi-peak	Average	Quasi-peak Average		Quasi-peak	Average
0.2134	46.50	33.10			63.07	53.07
0.3027	42.19	31.07			60.17	50.17
0.9552	49.66	34.04			56.00	46.00

#### Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

E.U.T. Description:	Tablet PC
Operation Mode:	Data transfer
Tested By:	Bill
Test Date:	17 December 2014

Start Frequency	Stop Frequency	Step	IF BW	Detector	Final M-Time
0.15MHz	30MHz	4.5KHz	10KHz	QP+AV	1s



Frequency (MHz)	Reading(dB µ V)				Limit	
	Live		Neutral		$(dB \mu V)$	
(WITIZ)	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.2070			54.76	40.36	63.32	53.32
0.2962			45.91	32.77	60.35	50.35
0.3936			40.46	25.48	57.99	47.99
0.5152			40.25	26.13	56.00	46.00
0.6378			43.41	34.80	56.00	46.00
0.9599			45.87	34.83	56.00	46.00

#### **6.0 Radiated emissions Measurement**

#### 6.1 Test Equipment

Instrument Type Model		Serial No. Manufacturer		Date of Cal.	Due Date
ESPI Test Receiver ESPI 3		100379	ROHDE&SCHWARZ	Nov. 09, 2014	Nov. 08, 2015
Spectrum Analyzer FSEM		848597/001	ROHDE&SCHWARZ	Nov. 09, 2014	Nov. 08, 2015
Pre-amplifier	8447D	83153007374	Agilent	Aug. 20, 2014	Aug. 19, 2015
Ultra Broadband ANT	HL562	100157	ROHDE&SCHWARZ	Aug. 20, 2014	Aug. 19, 2015

#### 6.2 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

Frequencies in restricted band are complied to limit on Paragraph 15.109.

Frequency Range (MHz)	Distance (m)	Field strength (dB µ V/m)		
30-88	3	40.0		
88-216	3	43.5		
216-960	3	46.0		
Above 960	3	54.0		

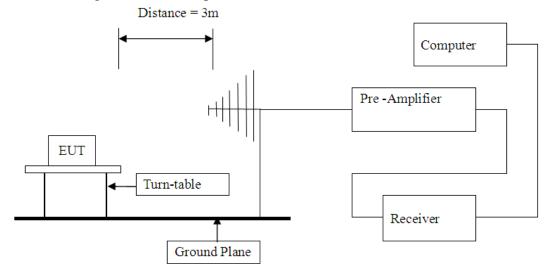
Note: 1) RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$ 

- 2) In the Above Table, the tighter limit applies at the band edges.
- 3) Distance refers to the distance in meters between the measuring instrument antenna and the E.U.T.
- 4) This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.
- 5) If measurement is made at 3m distance, then F.S Limitation at 3m distance is adjusted by using the formula Ld1 = Ld2 \* (d2/d1)

#### 6.3 E.U.T. Operating Condition

Operating condition is according to ANSI C63.4 -2009

#### 6.4 Block diagram of Test setup



#### 6.5 Test Method and test Procedure

- 1) The E.U.T. was tested according to ANSI C63.4 –2009.
- 2) The E.U.T., peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-2009.
- 3) The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz quasi-peak values with a resolution bandwidth of 120 kHz. Measurements were made at 3 meters.
- 4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- 5) The antenna polarization: Vertical polarization and Horizontal polarization.

#### 6.6 Test specification

Environmental conditions: Temperature 22° C Humidity: 51% Atmospheric pressure: 103kPa

#### 6.7 Test result

#### Shenzhen POCE Technology Co., Ltd.

Report No.: POCE14121334FRF-1 FCC ID: 2ACBS-27CI

#### Radiated Emission (30MHz-1000MHz)

Frequency	Read Level	Antenna Factor	Cable Loss	Preamp	Final Level	Limit	Antenna
(MHz)	(dBuV)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	Polarity
44.1352	42.51	13.22	0.35	26.68	29.40	40.00	Horizontal
94.6281	36.37	14.86	0.51	26.72	25.02	43.50	Horizontal
120.3194	38.85	15.24	0.58	26.81	27.86	43.50	Horizontal
241.9248	36.75	16.82	0.84	26.91	27.50	46.00	Horizontal
861.2482	43.69	19.67	1.76	26.75	38.37	46.00	Horizontal
43.1597	38.64	13.94	0.42	26.82	26.18	40.00	Vertical
102.8679	41.75	14.86	0.59	26.91	30.29	43.50	Vertical
240.2644	43.51	16.64	0.78	26.34	34.59	46.00	Vertical
600.2226	45.85	18.59	0.96	26.75	38.65	46.00	Vertical
871.1376	48.64	19.34	1.45	26.81	42.62	46.00	Vertical

#### Remark:

1) Final Level= Read Level+Antenna Factor+Cable Loss-Preamp

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