# **TEST REPORT**

**Reference No.** : WTS16S0961014E V1

FCC ID ..... : 2AJVK-SP5034

Applicant.....: Foto Electric Supply Co., INC.

Address...... 1 Rewe St. Brooklyn, New York, 11211, USA

Manufacturer .....: Foto Electric Supply Co., INC.

Address...... 1 Rewe St. Brooklyn, New York, 11211, USA

Product Name.....: Smart Phone

Model No. ..... : SP5034, CBP4305

Brand.....: SLIDE, COBY

Standards .....: FCC PART15 SUBPART B: 2015

Date of Receipt sample .... : Sep. 19, 2016

**Date of Test** ...... : Sep. 20, 2016 –Nov. 10, 2016

**Date of Issue**.....: Nov. 11, 2016

Test Result..... Pass

#### Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

#### Prepared By:

## Waltek Services (Shenzhen) Co., Ltd.

Address: 1/F., Fukangtai Building, West Baima Road, Songgang Street, Baoan District, Shenzhen, Guangdong, China

Tel:+86-755-83551033 Fax:+86-755-83552400

Compiled by:

Zero Zhou / Test Engineer

Philo Zhong / Manager

oved by:

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#### 2 Laboratories Introduction

Waltek Services Test Group Ltd is a professional third-party testing and certification organization with multi-year product testing and certification experience, established strictly in accordance with ISO/IEC 17025 requirements, and accredited by CNAS (China National Accreditation Service for Conformity Assessment) AQSIQ, CMA and IECEE for CBTL. Meanwhile, Waltek has got recognition as registration and accreditation laboratory from EMSD (Electrical and Mechanical Services Department), and American Energy star, FCC(The Federal Communications Commission), CPSC(Consumer Product Safety Commission), CEC(California energy efficiency), IC(Industry Canada) and ELI(Efficient Lighting Initiative). It's the strategic partner and data recognition laboratory of international authoritative organizations, such as UL, Intertek(ETL-SEMKO), CSA, TÜV Rheinland, TÜV SÜD, etc.



Waltek Services Test Group Ltd. is one of the largest and the most comprehensive third party testing organizations in China, our headquarter located in Shenzhen and have branches in Foshan, Dongguan, Zhongshan, Suzhou,Ningbo and Hong Kong, Our test capability covered four large fields: safety test. ElectroMagnetic Compatibility(EMC), reliablity and energy performance, Chemical test. As a professional, comprehensive, justice international test organization, we still keep the scientific and rigorous work attitude to help each client satisfy the international standards and assist their product enter into globe market smoothly.

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# 4 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTS16S0961014E	Sep. 19, 2016	Sep. 20 –Nov. 10, 2016	Nov. 11, 2016	original	-	Replaced
WTS16S0961014E V1	Sep. 19, 2016	Sep. 20 –Nov. 10, 2016	Nov. 30, 2016	Version 1	Updated	Valid

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#### 5 General Information

## 5.1 General Description of E.U.T.

Product Name: Smart Phone

Model No.: SP5034, CBP4305

Model Description: Only the model names and brand names are different.

GSM Band(s): GSM 850/900/1800/1900MHz

GPRS/EGPRS Class: 12

WCDMA Band(s): FDD Band II/ V

LTE Band(s): FDD Band 2/4/5/7/17

Wi-Fi Specification: 2.4G-802.11b/g/n HT20/n HT40

Bluetooth Version: Bluetooth v4.0 with BLE

GPS: Support

NFC: N/A

Hardware Version: HCT-T823MB-A2

Software Version: R01

Highest frequency

26MHz

(Exclude Radio):

Storage Location: Internal Storage

This EUT has two SIM card slots, and use same one RF module. We

found that RF parameters are the same, when we insert the card 1 and

card 2. So we usually performed the test under main card slot 1.

## 5.2 Details of E.U.T.

Note:

Technical Data: Battery DC 3.7V, 2400mAh

DC 5V, 1.0A, charging from adapter (Adapter Input: 100-240V~50/60Hz 0.2A

Adapter: Manufacture: XINYU EAGLETRON ELECTRONIC CO.LTD.

Model No.: SWN006S050100U1

## 5.3 Standards Applicable for Testing

The tests were performed according to following standards:

FCC PART 15, SUBPART B: Electronic Code of Federal Regulations- Unintentional Radiators 2015

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## 5.4 Test Facility

The test facility has a test site registered with the following organizations:

#### IC – Registration No.: 7760A-1

Waltek Services (Shenzhen) Co., Ltd. has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration 7760A-1, October 15, 2015.

#### FCC Test Site 1# Registration No.: 880581

Waltek Services(Shenzhen) 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 880581, April 29, 2014.

## FCC Test Site 2# Registration No.: 328995

Waltek Services(Shenzhen) 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 328995, December 3, 2014.

## 5.5 Subcontracted

Whether parts	of tests for the product have been subcontracted to other labs:
☐ Yes If Yes, list the	⊠ No related test items and lab information:
Test Lab:	N/A
Lab address:	N/A
Test items:	N/A

#### 5.6 Abnormalities from Standard Conditions

None.

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## 6 Test Summary

Test Item	Test Requirement	Class	Test Method	Test Result
Power Line Conducted Emission (150kHz to 30MHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2014	Pass
Radiated Emission 30MHz to 1GHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2014	Pass
Radiated Emission (Above 1GHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2014	Pass

## Remark:

Pass Test item meets the requirement

Fail Test item does not meet the requirement N/A Test case does not apply to the test object

# 7 Equipment Used during Test

# 7.1 Equipment List

ipment  st Receiver LISN sable ssions Test s ipment st Receiver LISN miter sable oic Chamber ipment	Manufacturer  R&S  SCHWARZBECK  York  LARGE  for Radiation Emis	Model No.  ESCI ENV216 TYPE16(3.5M)  Model No.  ESCI NSLK 8128  MTS-IMP-136  RF300  ssions Test site	Serial No.  100947 101215 -  Serial No.  101155 8128-289 261115-001- 0024 - 1#	Last Calibration Date Sep.12,2016 Sep.12,2016 Sep.12,2016  Last Calibration Date Sep.12,2016 Sep.12,2016 Sep.12,2016 Sep.12,2016 Sep.12,2016	Sep.11,2017 Sep.11,2017  Calibration Due Date  Sep.11,2017 Sep.11,2017 Sep.11,2017							
ipment st Receiver ISN miter cable	R&S Top Site 2# Manufacturer R&S SCHWARZBECK York LARGE for Radiation Emis	ENV216 TYPE16(3.5M)  Model No.  ESCI NSLK 8128  MTS-IMP-136  RF300	101215  - Serial No.  101155 8128-289 261115-001- 0024 -	Sep.12,2016 Sep.12,2016  Last Calibration Date Sep.12,2016 Sep.12,2016 Sep.12,2016	Due Date Sep.11,2017 Sep.11,2017 Sep.11,2017							
ipment st Receiver LISN miter cable cic Chamber	Top  Site 2#  Manufacturer  R&S  SCHWARZBECK  York  LARGE  for Radiation Emis	Model No.  ESCI  NSLK 8128  MTS-IMP-136  RF300	Serial No.  101155 8128-289 261115-001- 0024	Sep.12,2016  Last Calibration Date  Sep.12,2016  Sep.12,2016  Sep.12,2016	Sep.11,2017  Calibration Due Date  Sep.11,2017  Sep.11,2017  Sep.11,2017							
ipment st Receiver LISN miter cable pic Chamber	Manufacturer  R&S  SCHWARZBECK  York  LARGE  for Radiation Emis	Model No.  ESCI  NSLK 8128  MTS-IMP-136  RF300	101155 8128-289 261115-001- 0024	Last Calibration Date Sep.12,2016 Sep.12,2016 Sep.12,2016	Calibration Due Date Sep.11,2017 Sep.11,2017 Sep.11,2017							
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st Receiver LISN miter cable pic Chamber	R&S SCHWARZBECK York LARGE for Radiation Emis	ESCI NSLK 8128 MTS-IMP-136 RF300	101155 8128-289 261115-001- 0024	Calibration Date Sep.12,2016 Sep.12,2016 Sep.12,2016	Due Date Sep.11,2017 Sep.11,2017 Sep.11,2017							
IISN miter cable <b>Dic Chamber</b>	SCHWARZBECK York LARGE for Radiation Emis	NSLK 8128 MTS-IMP-136 RF300	8128-289 261115-001- 0024	Sep.12,2016 Sep.12,2016	Sep.11,2017 Sep.11,2017 Sep.11,2017 Sep.11,2017							
miter cable <b>Dic Chamber</b>	York  LARGE  for Radiation Emis	MTS-IMP-136 RF300	261115-001- 0024 -	Sep.12,2016	Sep.11,2017							
cable Dic Chamber	LARGE for Radiation Emis	RF300	0024		•							
oic Chamber	for Radiation Emis		- 1#	Sep.12,2016	Sen 11 2017							
		ssions Test site	1#		JCP. 11,2017							
ipment	Manufactura		117	3m Semi-anechoic Chamber for Radiation Emissions Test site 1#								
	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date							
m Analyzer	R&S	FSP	100091	Apr.29, 2016	Apr.28, 2017							
oop Antenna	Beijing Dazhi	ZN30900A	-	Apr.09,2016	Apr.08,2017							
Broadband Itenna	SCHWARZBECK	VULB9163	336	Apr.09,2016	Apr.08,2017							
ial Cable w 1GHz)	Тор	TYPE16(13M)	-	Sep.12,2016	Sep.11,2017							
band Horn tenna	SCHWARZBECK	BBHA 9120 D	667	Apr.09,2016	Apr.08,2017							
band Horn tenna	SCHWARZBECK	BBHA 9170	335	Apr.09,2016	Apr.08,2017							
adband Implifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Apr.13,2016	Apr.12,2017							
ial Cable re 1GHz)	Тор	1GHz-25GHz	EW02014-7	Apr.13,2016	Apr.12,2017							
sal Radio nunication ester	R&S	CMU 200	112461	Apr.13,2016	Apr.12,2017							
Generator	R&S	SMR20	100046	Sep.12,2016	Sep.11,2017							
. At.a	SCHWARZBECK	HA08	-	Apr.09,2016	Apr.08,2017							
Antenna	R&S	CMW 500	127818	Apr.13,2016	Apr.12,2017							
(	Generator Antenna sal Radio unication	unication R&S ester  Generator R&S  Antenna SCHWARZBECK sal Radio	unication ester  Generator R&S CMU 200  Antenna SCHWARZBECK HA08  sal Radio unication ester  CMU 200  CMU 200	unication ester         R&S         CMU 200         112461           Generator         R&S         SMR20         100046           Antenna         SCHWARZBECK         HA08         -           sal Radio unication         R&S         CMW 500         127818	unication ester         R&S         CMU 200         112461         Apr.13,2016           Generator         R&S         SMR20         100046         Sep.12,2016           Antenna         SCHWARZBECK         HA08         -         Apr.09,2016           sal Radio unication ester         R&S         CMW 500         127818         Apr.13,2016							

Item	Equipment	Manufacturer	Model No.	Serial No	Last Calibration Date	Calibration Due Date
1	Test Receiver	R&S	ESCI	101296	Apr.13,2016	Apr.12,2017
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	Apr.09,2016	Apr.08,2017
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	Apr.13,2016	Apr.12,2017
4	Cable	HUBER+SUHNER	CBL2	525178	Apr.13,2016	Apr.12,2017

## 7.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
MacBook Air	APPLE	A1465	C17KTQDNF5N7
Daniel Oriente	LPS DELTA ELECTRNICS	ADD 450D	
Power Supply	UIANG CO,.LTD	ADP-45GD	-

# 7.3 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Conduction disturbance	150kHz~30MHz	±3.64dB	(1)
Dadiation Envisore	30MHz~1000MHz	±5.03dB	(1)
Radiation Emission	1GHz~18GHz	±5.47dB	(1)

<sup>(1)</sup>This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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### 8 Emission Test Results

## 8.1 Power Line Conducted Emission, 150kHz to 30MHz

Test Requirement .....: FCC PART 15, SUBPART B

Test Method ..... : ANSI C63.4 2014

Test Result.....: Pass

Frequency Range ..... : 150kHz to 30MHz

Class .....: Class B

Limit .....: :

Fraguency (MHz)	Limit (dBμV)		
Frequency (MHz)	Quasi-peak	Average	
0.15 to 0.5	66 to 56*	56 to 46*	
0.5 to 5	56	60	
5 to 30	60	50	

## 8.1.1 E.U.T. Operation

Operating Environment:

Temperature .....: 23°C

Humidity ...... : 53.6%RH

Atmospheric Pressure ......: 101kPa

**EUT Operation**:

Input Voltage.....: DC 5V by PC

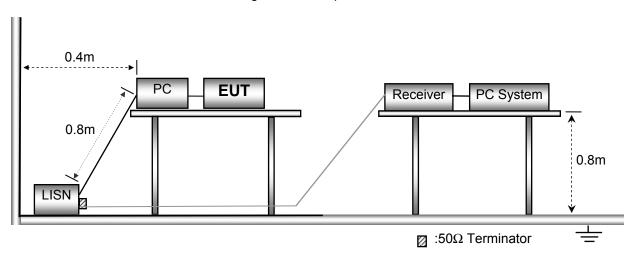
Operating Mode .....: Data transmitting mode, Earphone mode, Adapter mode

Remark .....: The worse case Data transmitting mode is under the condition of

AC 120V/60Hz adapter input and the data is shown as follow.

#### 8.1.2 Block Diagram of Test Setup

The Mains Terminals Disturbance Voltage tests were performed in accordance with the ANSI C63.4.

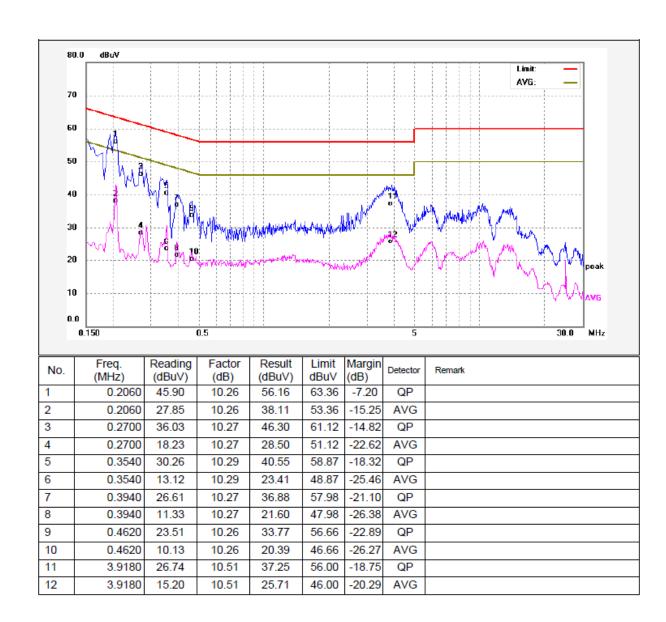


#### 8.1.3 Measurement Data

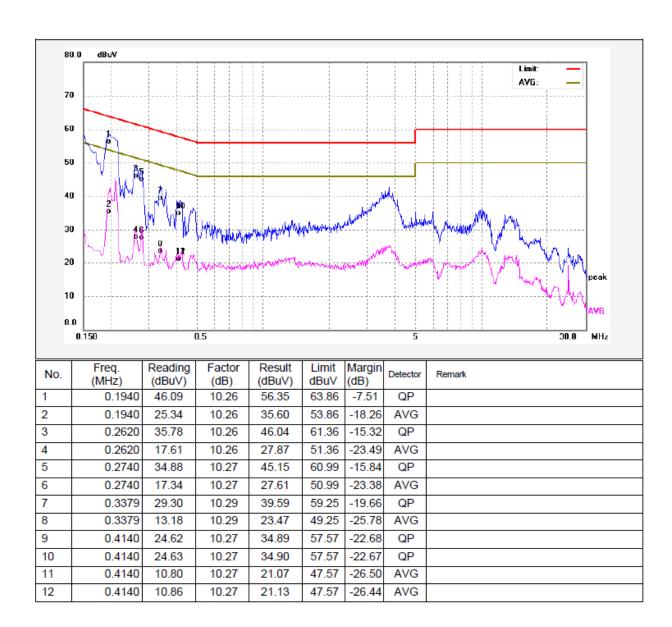
The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line. According to the data in below section 6.1.4, the EUT complied with the FCC PART 15, SUBPART B standards.

## 8.1.4 Power Line Conducted Emission Test Data

Live Line:



#### Neutral Line:



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## 8.2 Radiation Emission, 30MHz to 1000MHz

Test Requirement ..... : FCC PART 15, SUBPART B

Test Method ..... : ANSI C63.4 2014

Test Result .....: Pass

Frequency Range .....: 30MHz to 1000MHz

Class B: Class B

Limit.....::

Fraguenov (MHz)	Distance	Limit (dBµV/m)
Frequency (MHz)	(Meter)	Quas -peak
30 to 88	3	40
88 to 216	3	43.5
216 to 960	3	46
960 to 100	3	54

## 8.2.1 E.U.T. Operation

Operating Environment:

 Temperature
 : 22.5°C

 Humidity
 : 52.6%RH

 Atmospheric Pressure
 : 101.2kPa

**EUT Operation:** 

Input Voltage.....: DC 5V by PC

Operating Mode .....: Data transmitting with PC mode, Earphone mode, Adapter mode

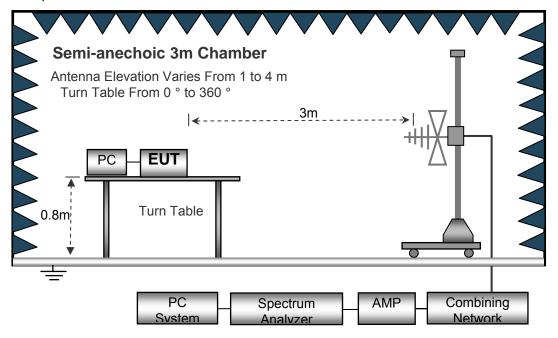
Remark .....: The worse case Data transmitting with PC mode is under the

condition of AC 120V/60Hz adapter input and the data is shown

as follow.

## 8.2.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.

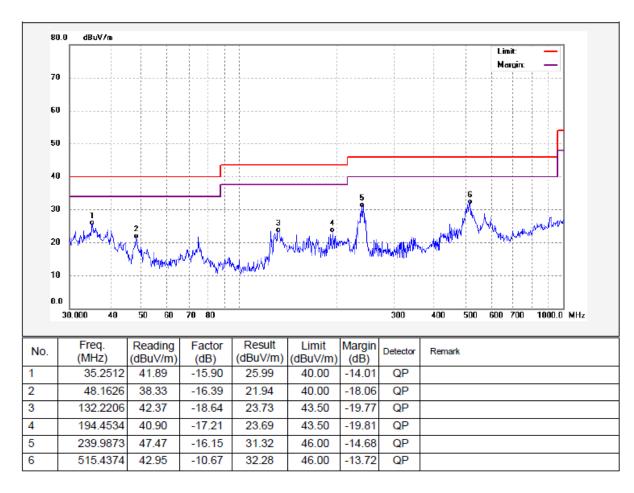


#### 8.2.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Quasi-peak measurements were performed if peak emissions were within 6dB of the Quasi-peak limit line.

## 8.2.4 Radiated Emission Test Data, 30MHz to 1000MHz

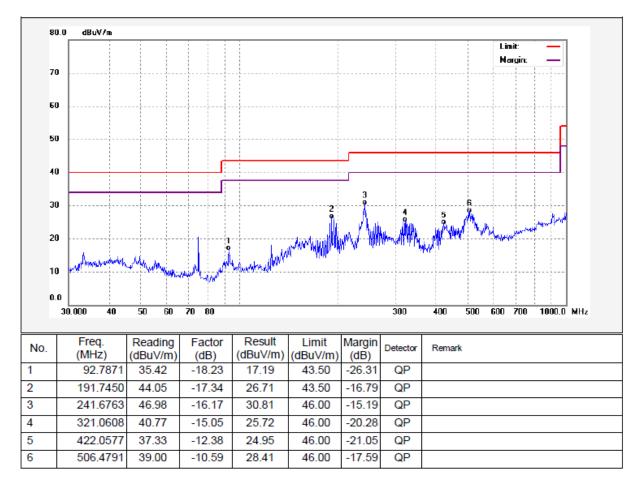
Antenna Polarization: Vertical



Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor

#### Antenna Polarization: Horizontal



Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor

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## 8.3 Radiation Emission, Above 1000MHz

Test Requirement .....: FCC PART 15, SUBPART B

Test Method ..... : ANSI C63.4 2014

Test Result.....: Pass

Frequency Range ..... : 1GHz~18GHz

Class B: Class B

Limit. .....

Frequency Range (MHz)	Distance (Meter)	Average Limit dB(uV/m)	Peak Limit (dBuV/m)
Above 1GHz	3	54	74

## 8.3.1 E.U.T. Operation

Operating Environment:

Temperature : 22.4°C
Humidity : 52.3%RH
Atmospheric Pressure : 101.3kPa

**EUT Operation:** 

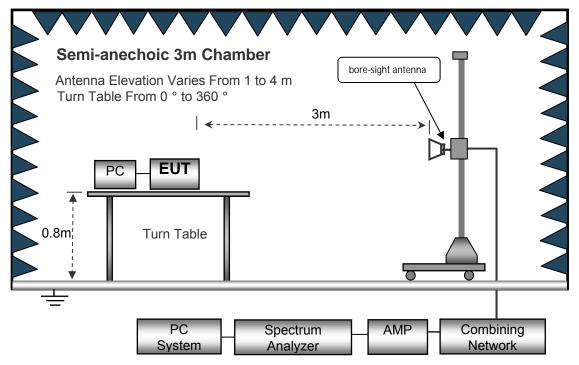
Input Voltage .....: DC 5V by PC

Operating Mode ...... : Data transmitting with PC mode, Earphone mode, Adapter mode

AC 120V/60Hz adapter input and the data is shown as follow.

## 8.3.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.

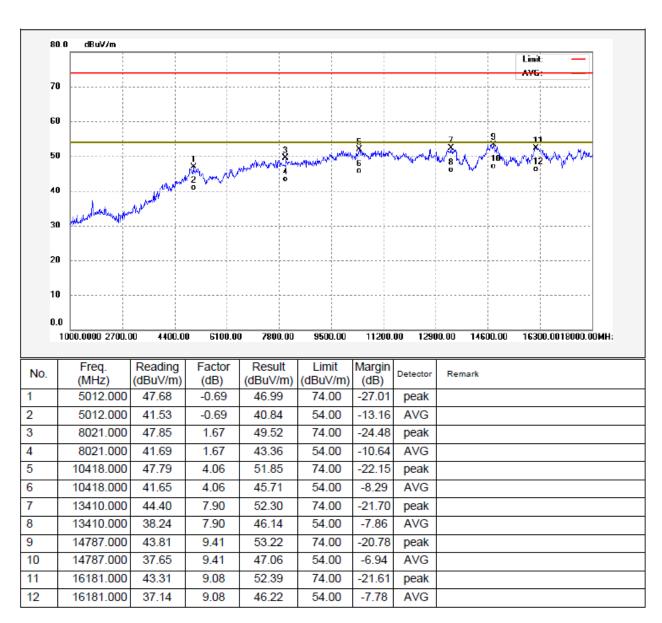


## 8.3.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Average measurements were performed if peak emissions were within 6dB of the average limit line

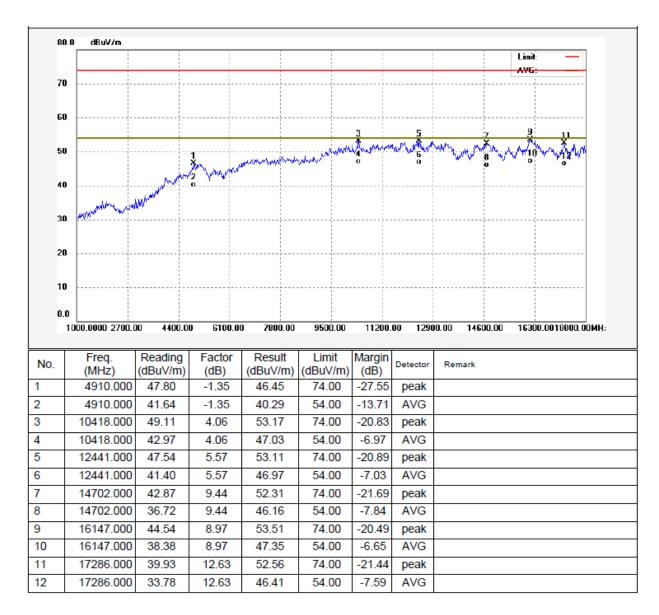
## 8.3.4 Radiated Emission Test Data, Above 1000MHz

Antenna Polarization: Vertical



Factor= antenna factor + cable loss - preamplifier factor Result = Reading + Factor

#### Antenna Polarization: Horizontal



Factor= antenna factor + cable loss - preamplifier factor Result = Reading + Factor

# 9 Photographs – Test Setup FCC ID 2AJVK-SP5034

# 9.1 Photograph -Power Line Conducted Emission Test Setup at Test Site 1#



## 9.2 Photograph – Radiated Emission Test Setup for 30~1000MHz at Test Site 2#



# 9.3 Photograph – Radiated Emission Test Setup for Above 1GHz at Test Site 1#



=====End of Report=====