# **TEST REPORT**

**Reference No.** : WTS16S0653815E V1

FCC ID ..... 2ADTU-ZENGEAR1

Applicant..... : Acegame S.A

Address...... Gorriti 4539 - C.A.B.A. - Buenos Aires - Argentina

Manufacturer ...... : Acegame S.A

Address ...... Gorriti 4539 - C.A.B.A. - Buenos Aires - Argentina

Product Name:Mobile PhoneModel No:ZEN GEAR 1

Brand..... : X-VIEW

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

Date of Receipt sample .... : Jun. 21, 2016

**Date of Test** ...... : Jun. 22 – Jul. 06, 2016

**Date of Issue**.....: Jul. 13, 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

vicApproved by:

Reference No.: WTS16S0653815E V1 Page 2 of 19

# 1 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: 2009	Pass
Radiated Emission 30MHz to 1GHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2009	Pass
Radiated Emission (Above 1GHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2009	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

# 2 Contents

			Page
	COVE	ER PAGE·····	1
1 .	TEST	SUMMARY	2
2	CONT	TENTS	3
3	REPC	ORT REVISION HISTORY	4
4	GENE	ERAL INFORMATION	5
	4.1 4.2 4.3 4.4 4.5 4.6	GENERAL DESCRIPTION OF E.U.T.  DETAILS OF E.U.T.  STANDARDS APPLICABLE FOR TESTING  TEST FACILITY.  SUBCONTRACTED.  ABNORMALITIES FROM STANDARD CONDITIONS  PMENT USED DURING TEST	5 6 6
;	5.1 5.2 5.3	EQUIPMENT LISTDESCRIPTION OF SUPPORT UNITS	8
6	EMIS	SION TEST RESULTS	9
	6.1 6.2 6.3	Power Line Conducted Emission, 150kHz to 30MHzRadiation Emission, 30MHz to 1000MHzRadiation Emission, Above 1000MHz	12
7	РНОТ	OGRAPHS – TEST SETUP MODEL – ZEN GEAR 1	18
	7.1 7.2 7.3	PHOTOGRAPH –POWER LINE CONDUCTED EMISSION TEST SETUP AT TEST SITE 1#PHOTOGRAPH – RADIATED EMISSION TEST SETUP FOR 30~1000MHz AT TEST SITE 2#PHOTOGRAPH – RADIATED EMISSION TEST SETUP FOR ABOVE 1GHz AT TEST SITE 1#	18

Reference No.: WTS16S0653815E V1 Page 4 of 19

# 3 Report Revision History

Report No.	Report Version	Description	Issue Date
WTS16S0653815E	NONE	Original	Jul. 07, 2016
WTS16S0653815E	V1	Version 1	Jul. 13, 2016

Reference No.: WTS16S0653815E V1 Page 5 of 19

# 4 General Information

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

Product Name :Mobile Phone
Model No. : ZEN GEAR 1

Model Description : N/A

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

GPRS Class : 12

WCDMA Band(s) : FDD Band II/V

LTE Bnad(s) : N/A

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

Bluetooth Version : Bluetooth v4.0 with BLE

GPS : Support

NFC : N/A

Hardware Version : Z1\_MB\_V3.0

Software Version : Z1\_GQ3029DH\_Z13\_20160411

Storage Location : Internal Storage

## 4.2 Details of E.U.T.

Technical Data: : Battery DC 3.8V 2200mAh

DC 5V, 1A, charging from adapter

(Adapter Input: 100-300V~50/60Hz 0.15A)

Adapter: : Manufacture: Shenzhen Tianyin Electronics Co.,LTD.

Model No.: CLV-14

## 4.3 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

Reference No.: WTS16S0653815E V1 Page 6 of 19

## 4.4 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.

#### 4.5 Subcontracted

Whether	parts of	of tests t	for the	produ	ct have	been	subcont	tracted	to other	labs:

☐ Yes ☐ No
If Yes, list the related test items and lab information:

Test Lab: N/A
Lab address: N/A

Test items: N/A

#### 4.6 Abnormalities from Standard Conditions

None.

# 5 Equipment Used during Test

# 5.1 Equipment List

Condu	cted Emissions Test S	Site 1#					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date	
1.	EMI Test Receiver	R&S	ESCI	100947	Sep.15,2015	Sep.14,2016	
2.	LISN	R&S	ENV216	101215	Sep.15,2015	Sep.14,2016	
3.	Cable	Тор	TYPE16(3.5M)	-	Sep.15,2015	Sep.14,2016	
Condu	cted Emissions Test	Site 2#					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date	
1.	EMI Test Receiver	R&S	ESCI	101155	Sep.15,2015	Sep.14,2016	
2.	LISN	SCHWARZBECK	NSLK 8128	8128-289	Sep.15,2015	Sep.14,2016	
3.	Limiter	York	MTS-IMP-136	261115-001- 0024	Sep.15,2015	Sep.14,2016	
4.	Cable	LARGE	RF300	-	Sep.15,2015	Sep.14,2016	
3m Sei	mi-anechoic Chamber	for Radiation Emis	ssions Test site	1#			
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date	
1	EMC Analyzer	Agilent	E7405A	MY45114943	Sep.15,2015	Sep.14,2016	
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	Sep.15,2015	Sep.14,2016	
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	Apr.19,2016	Apr.18,2017	
4	Coaxial Cable (below 1GHz)	Тор	TYPE16(13M)	-	Sep.15,2015	Sep.14,2016	
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	Apr.19,2016	Apr.18,2017	
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	Apr.19,2016	Apr.18,2017	
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Apr.19,2016	Apr.18,2017	
8	Coaxial Cable (above 1GHz)	Тор	1GHz-25GHz	EW02014-7	Apr.10,2016	Apr.09,2017	
3m Sei	3m Semi-anechoic Chamber for Radiation Emissions Test site 2#						
Item	Equipment	Manufacturer	Model No.	Serial No	Last Calibration Date	Calibration Due Date	
1	Test Receiver	R&S	ESCI	101296	Sep.15,2015	Sep.14,2016	
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	Sep.15,2015	Sep.14,2016	
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	Sep.15,2015	Sep.14,2016	

4	Cable	HUBER+SUHNER	CBL2	525178	Sep.15,2015	Sep.14,2016			
RF Co	RF Conducted Testing								
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date			
1.	EMC Analyzer (9k~26.5GHz)	Agilent	E7405A	MY45114943	Sep.15,2015	Sep.14,2016			
2.	Spectrum Analyzer (9k-6GHz)	R&S	FSL6	100959	Sep.15,2015	Sep.14,2016			
3.	Signal Analyzer (9k~26.5GHz)	Agilent	N9010A	MY50520207	Sep.15,2015	Sep.14,2016			

# 5.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.	
MacBook Air	APPLE	A1465	C17KTQDNF5N7	

# 5.3 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Conduction disturbance	150kHz~30MHz	±3.64dB	(1)
Dediction Fusionism	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.

Reference No.: WTS16S0653815E V1 Page 9 of 19

#### 6 Emission Test Results

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

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

Test Method ..... : ANSI C63.4 2009

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 o 56*	56 to 46*	
0.5 to 5	56	46	
5 to 30	60	50	

## 6.1.1 E.U.T. Operation

Operating Environment:

Temperature .....: 23°C

Humidity ...... : 53.6%RH

Atmospheric Pressure ......: 101kPa

**EUT Operation**:

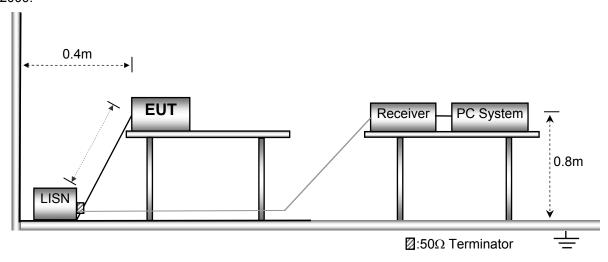
Input Voltage.....: DC 5V by Adapter Input AC 120V/60Hz

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.

#### 6.1.2 Block Diagram of Test Setup

The Mains Terminals Disturbance Voltage tests were performed in accordance with the ANSI C63.4 2009.

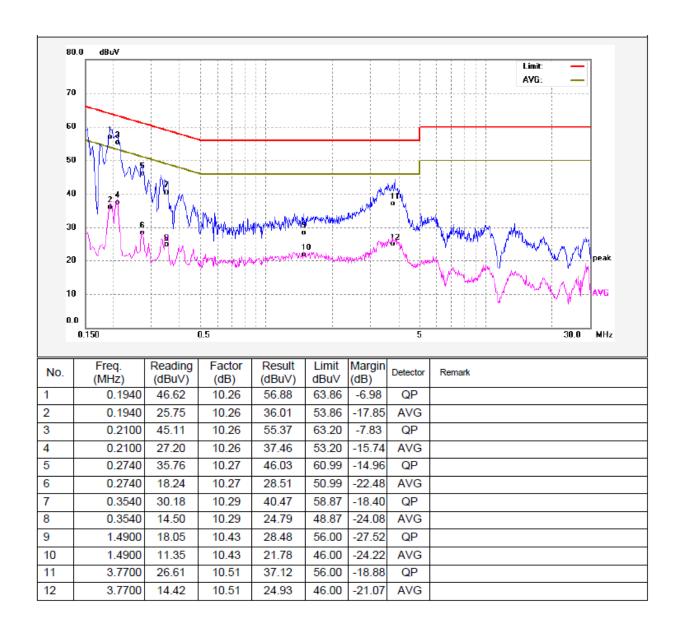


#### 6.1.3 Measurement Data

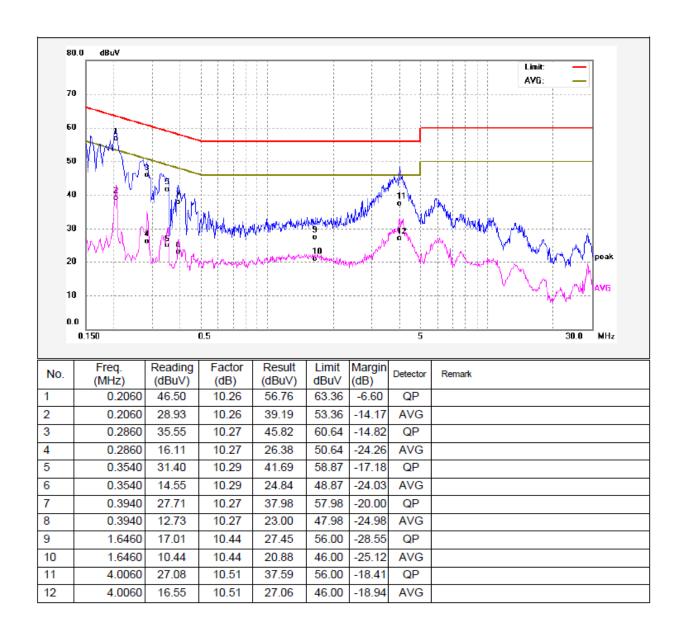
The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line. According to the data in below section 6.1.4, the EUT complied with the FCC PART 15, SUBPART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

## 6.1.4 Power Line Conducted Emission Test Data

Live Line:



#### Neutral Line:



Reference No.: WTS16S0653815E V1 Page 12 of 19

## 6.2 Radiation Emission, 30MHz to 1000MHz

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

Test Method ..... : ANSI C63.4 2009

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 21	3	43.5
216 to 960	3	46
960 to 1000	3	54

# 6.2.1 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 Adapter Input AC 120V/60Hz

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

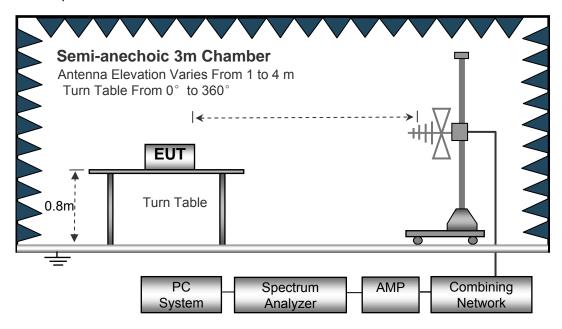
Remark .....: The worse case Data transmitting with PC mode is under the

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

as follow.

# 6.2.2 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.

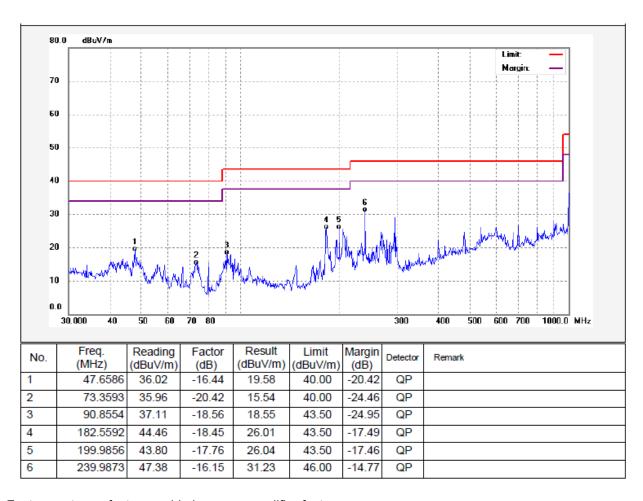


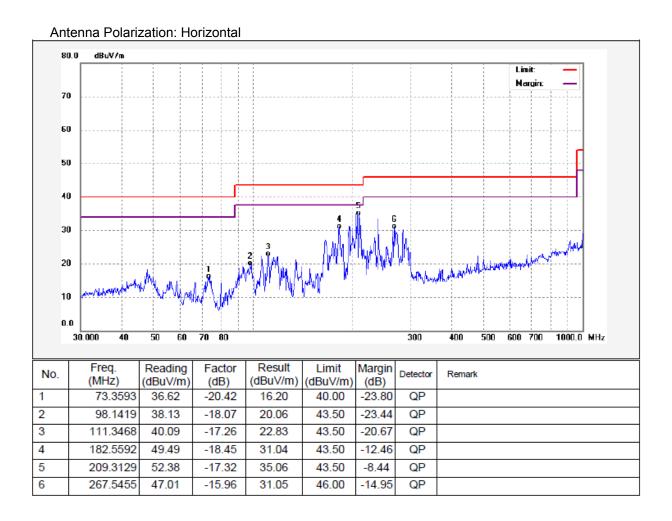
#### 6.2.3 Measurement Data

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.

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

Antenna Polarization: Vertical





Reference No.: WTS16S0653815E V1 Page 15 of 19

# 6.3 Radiation Emission, Above 1000MHz

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

Test Method ..... : ANSI C63.4 2009

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

# 6.3.1 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 Adapter Input AC 120V/60Hz

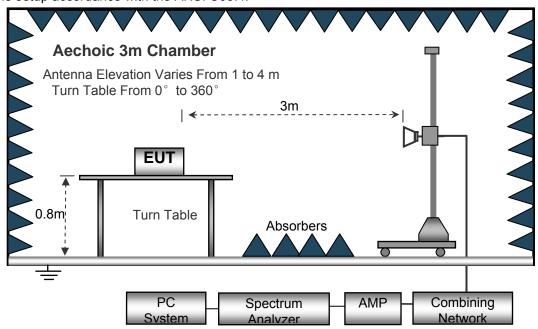
Operating Mode .....: Data transmitting with PC mode, Earphone mode

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

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

## 6.3.2 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.

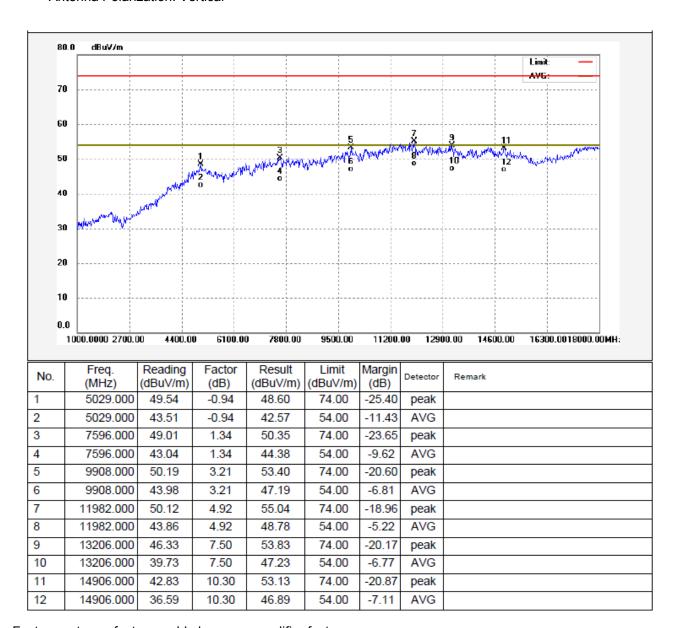


## 6.3.3 Measurement Data

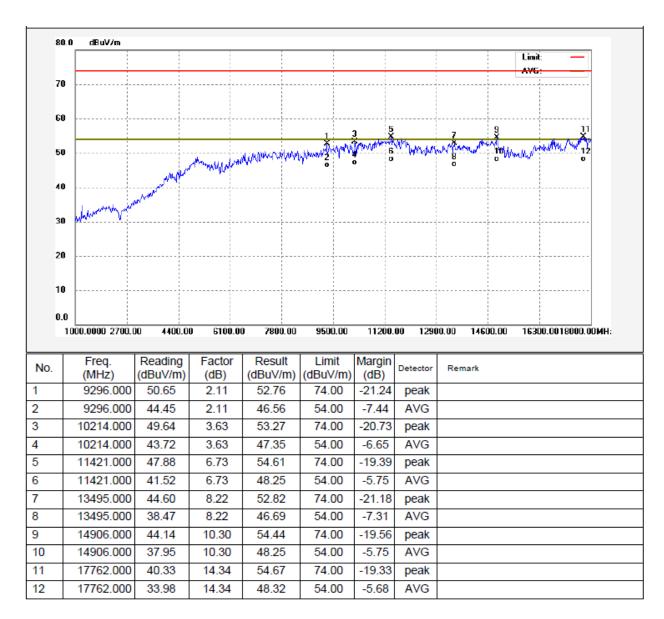
The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Average measurements were performed if peak emissions were within 6dB of the average limit line

## 6.3.4 Radiated Emission Test Data, Above 1000MHz

Antenna Polarization: Vertical



#### Antenna Polarization: Horizontal

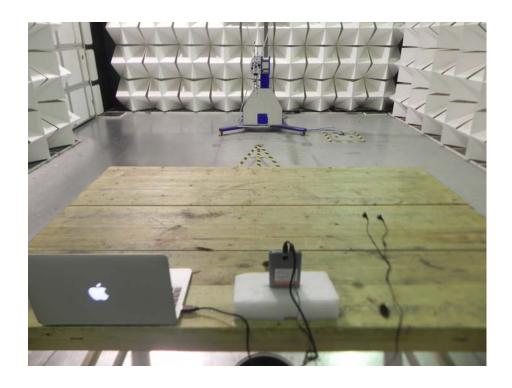


# 7 Photographs – Test Setup model – ZEN GEAR 1

# 7.1 Photograph –Power Line Conducted Emission Test Setup at Test Site 1#



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



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



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