
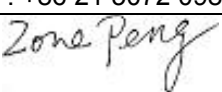
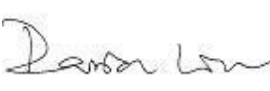


FCC Test Report

FCC EVALUATION REPORT FOR CERTIFICATION	
Project Reference No.	241076
Product	Wireless Studio Headphones
Brand Name	N/A
Model	RF850
Alternate Model	URG-13203
Tested according to	FCC Rules and Regulations Part 15 Subpart B Class B 2013, ANSI C63.4-2009

Tested in period	2013-07-22 to 2013-07-26
Issued date	2013-07-29
Name and address of the Test House	 Nemko Hong Kong Ltd Unit 1-5, 15/F , CCT Telecom Building, 11 Wo Shing Street, FoTan, Shatin, N.T., Hong Kong Phone : +86 21 5072 0988 Fax : +86 21 5072 0950
Tested by	 2013-07-29 Susan Zhou date
Verified by	 2013-07-29 Daria Liu date

This form is only for use by Nemko, or by others according to special agreement with Nemko. The report may be reproduced in full. Partial reproduction may only be made with the written content of Nemko Shanghai. This report applies only to the sample(s) tested. It is the manufacturer's responsibility to assure the additional production units of this product are manufactured with identical electrical and mechanical components.

Contents of This Report

1. Client Information	3
1.1 Applicant	3
1.2 Manufacturer.....	3
1.3 Scope.....	3
2. Equipment under Test (EUT).....	4
2.1 Identification of EUT	4
2.2 Detail spec:	4
2.3 Additional Information Related to Testing	4
3. General Test Conditions.....	5
3.1 Location	5
3.2 Operating Environment.....	5
3.3 Operating During Test.....	5
3.4 Test Equipment	5
4. Measurement Uncertainty	5
5. Conducted Emission (150 KHz to 30 MHz)	6
5.1 Test Procedure.....	6
5.2 Measurement Equipment.....	6
5.3 Test Result	6
5.3.1 Diagram 001	7
5.3.2 Diagram 002	8
6. Radiated Electromagnetic Disturbances.....	9
6.1 Test Procedure.....	9
6.2 Measurement Equipment.....	9
6.3 Test Result	9
6.3.1 Diagram 003	10
6.3.2 Diagram 004	11
6.3.3 Diagram 005	12
6.3.4 Diagram 006	13
Appendix B Test Setup Photographs of EUT	15



1. Client Information

1.1 Applicant

Company Name: Camelot SI. LLC
Company Address: 27725 Stansbury Blvd., Ste. 175, Farmington
Hills, Michigan, 48334, USA

1.2 Manufacturer

Company Name: Camelot SI. LLC
Company Address: 27725 Stansbury Blvd., Ste. 175, Farmington
Hills, Michigan, 48334, USA

1.3 Scope

• Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission under FCC part 15B.



2. Equipment under Test (EUT)

2.1 Identification of EUT

Name:	Wireless Studio Headphones
Model Name:	RF850
Alternate model:	URG-13203
Brand name:	N/A
Power:	3Vdc battery (2XLR03 AAA, NiMH)
Remark:	Headphone

2.2 Detail spec:

Receiver Frequency Range : 914-915MHz

Channel Number or List : 3 [914MHz , 914.5MHz , 915MHz]

Remark : Model RF850 and URG-13203 are electrically identical.

2.3 Additional Information Related to Testing

Receiver mode

AE equipment :

Wireless Studio Headphones- Charging base (FCC ID 2AALB-201771-01T)

With

	Model:FD06SU-050-0500
Adapter :	Input;100-240VAC 50-60Hz 0.2A
	Output:5.0VDC 0.5A

IPOD –FCCDOC

3. General Test Conditions

3.1 Location

These measurement tests were conducted at Global United Technology Services Co., Ltd.
2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China
FCC Registration No.:600491
IC Registration No.9079A-1
Note: all test are witnessed by NEMKO engineer

3.2 Operating Environment

All tests and measurements were performed in a shielded enclosure or a controlled environment suitable for the tests conducted. The climatic conditions in the test area are automatically controlled and recorded continuously.

Parameters	Recording during test	Accepted deviation
Ambient temperature	20-25°C	15 – 35 °C
Relative humidity	45-55%	30 - 60%
Atmospheric pressure	101.2 kPa -101.3kPa	86-106kPa

3.3 Operating During Test

TM1 : AC 120V 60Hz Charging mode.

TM2 : Receiver mode (full charged).

Remark: 3 channel receiver mode all have been pretested, only list worse case in report.

3.4 Test Equipment

The test equipments used in testing are calibrated on a regular basis. For most of the testing equipments accredited calibration is conducted once a year. For certain equipment the calibration interval is longer. Between the calibrations all test equipment are controlled and verified on a regular basis. The test equipments used are defined in each test section of this report.

4. Measurement Uncertainty

The Measurement Uncertainties stated were calculated in accordance with the requirements of NIST Technical Note 1297 with the confidence level of 95 %.

Conducted Emission : 0.15~30MHz	3.45dB
Radiated Emission: 30MHz~1000MHz	4.50dB
1GHz-18GHz	4.70dB

5. Conducted Emission (150 KHz to 30 MHz)

5.1 Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network. This provided a 50-ohm coupling impedance for the EUT (Please refer to the test setup photographs). The other peripheral devices power cord connected to the power mains through another line impedance stabilization network.

Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2009 on conducted Emission test.

The bandwidth of test receiver is set at 9kHz. The frequency range from 150kHz to 30MHz is checked. The test result are reported as below.

5.2 Measurement Equipment

	Equipment	Last Calibration	Type	Serial No.	Manufacturer
<input checked="" type="checkbox"/>	Shielding Room	Jul. 04 2013	7.0(L)x3.0(W) x3.0(H)	GTS252	ZhongYu Electron
<input checked="" type="checkbox"/>	EMI Test Receiver	Jul. 04 2013	ESCS30	1102.4500K30	Rohde & Schwarz
<input checked="" type="checkbox"/>	10dB Pulse Limit	Jul. 04 2013	N/A	GTS224	Rohde & Schwarz
<input checked="" type="checkbox"/>	LISN	Jul. 04 2013	NSLK 8127	8127549	SCHWARZBECK MESS-ELEKTRONIK
<input checked="" type="checkbox"/>	Coaxial Cable	Apr. 01 2013	N/A	N/A	GTS
<input checked="" type="checkbox"/>	EMI Test Software	Jul. 04 2013	E3	N/A	AUDIX

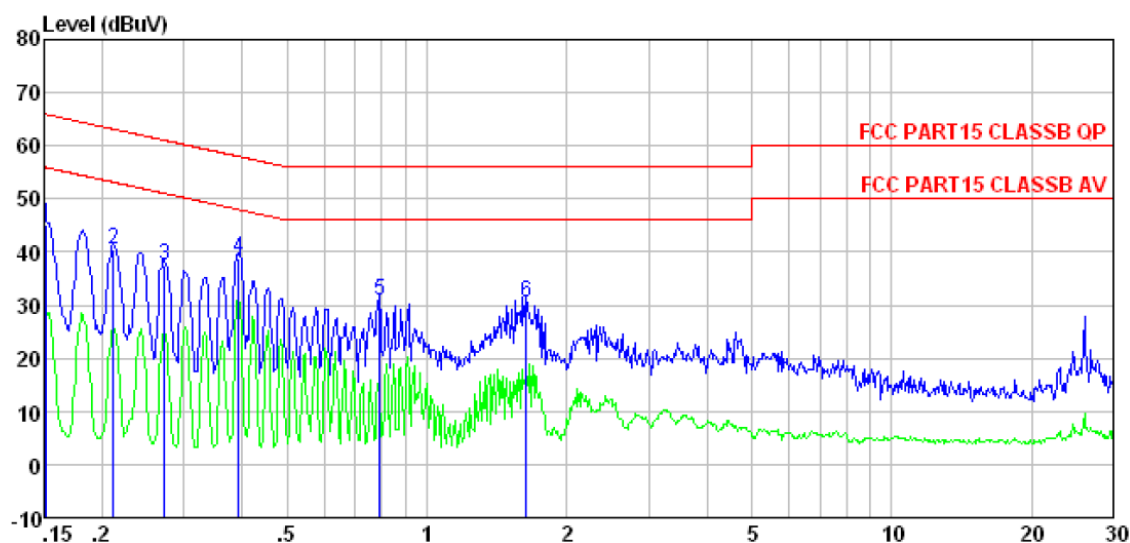
5.3 Test Result

Connect mode	Power Line	Test Data	Test Result
TM1	Line	Diagram 001	Pass
	Neutral	Diagram 002	Pass

NOTES:

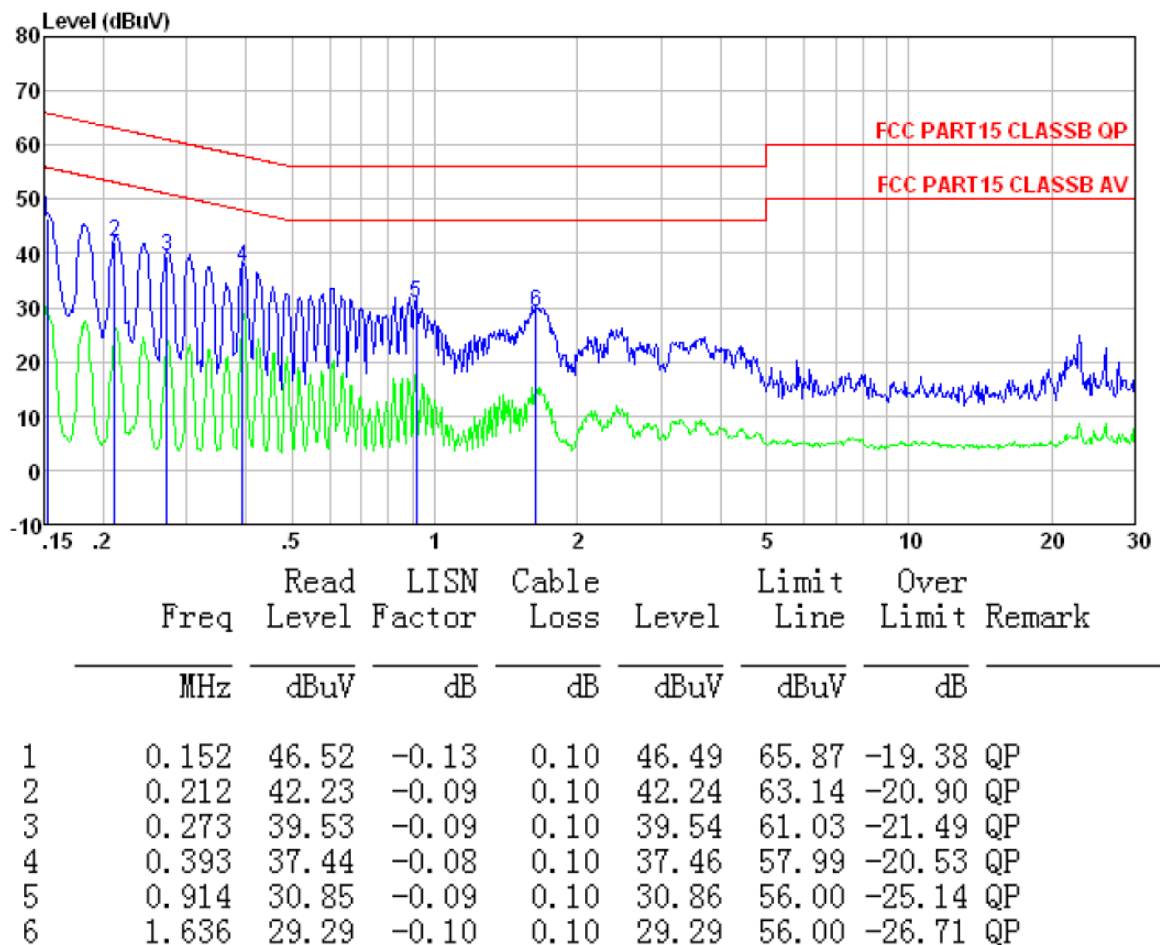
1. Measurements using CISPR quasi-peak mode & average mode.
2. All modes of operation were investigated and the worst -case emission are reported. See attached Plots.
3. Emission level = LISN Factor + Cable Loss + Reading
4. LINE: L =Line, N = Neutral
5. The limit for Class B device is on the FCC Part section 15.107.
- 6: If PK value is lower than AV limit then no reading value listed in report .If QP value is Lower than AV limit ,then AV value don't listed in report.

5.3.1 Diagram 001



	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.152	45.14	-0.26	0.10	44.98	65.91	-20.93	QP
2	0.212	40.57	-0.23	0.10	40.44	63.14	-22.70	QP
3	0.273	37.73	-0.22	0.10	37.61	61.03	-23.42	QP
4	0.393	38.97	-0.22	0.10	38.85	57.99	-19.14	QP
5	0.792	31.08	-0.20	0.10	30.98	56.00	-25.02	QP
6	1.636	30.69	-0.23	0.10	30.56	56.00	-25.44	QP

5.3.2 Diagram 002



6. Radiated Electromagnetic Disturbances

6.1 Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast.

The EUT were rotated 0 to 360 degree and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. The test result are reported as below.

For below 1GHz

RBW=120 kHz; VBW=300KHz with QP detector .The frequency range from 30MHz to 1000MHz is checked.

For above 1GHz

RBW=1MHz ; VBW=1MHz,PK detector for peak emissions measurement above 1GHz

RBW=1MHz ; VBW=10Hz, PK detector for average emissions measure above 1GHz

6.2 Measurement Equipment

	Equipment	Last Calibration	Type	Serial No.	Manufacturer
<input checked="" type="checkbox"/>	EMI Test Receiver	Jul. 04 2013	ESU26	GTS203	R&S
<input checked="" type="checkbox"/>	BiConiLog Antenna	Feb. 26 2013	VULB9163	GTS214	SCHWARZBECK
<input checked="" type="checkbox"/>	Horn Antenna	Feb. 26 2013	BBHA9120D	GTS215	SCHWARZBECK
<input checked="" type="checkbox"/>	Horn Antenna	Feb. 26 2013	BBHA9170	GTS216	SCHWARZBECK
<input checked="" type="checkbox"/>	Coaxial Cable	Apr. 01 2013	N/A	GTS213	GTS
<input checked="" type="checkbox"/>	Coaxial Cable	Apr. 01 2013	N/A	GTS211	GTS
<input checked="" type="checkbox"/>	Coaxial cable	Apr. 01 2013	N/A	GTS210	GTS
<input checked="" type="checkbox"/>	Coaxial Cable	Apr. 01 2013	N/A	GTS212	GTS
<input checked="" type="checkbox"/>	Amplifier	Jul. 04 2013	8347A	GTS204	HP

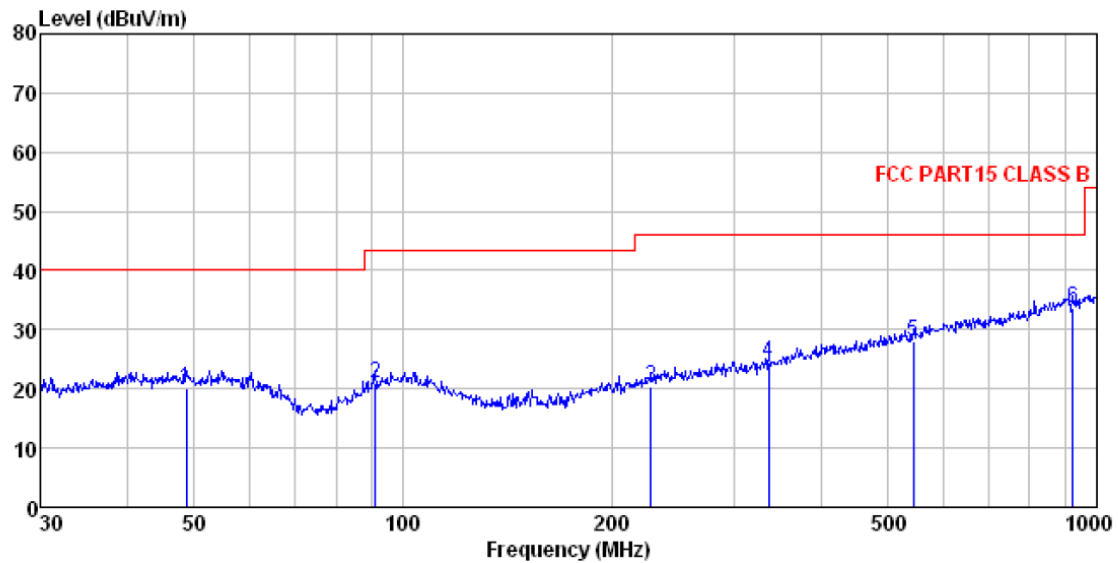
6.3 Test Result

Connect mode	Antenna Polarity	Test Data	Test Result
TM2 (below 1GHz) 3m test distance	Horizontal	Diagram 003	Pass
	Vertical	Diagram 004	Pass
TM2 (above 1GHz) 3m test distance	Horizontal	Diagram 005	Pass
	Vertical	Diagram 006	Pass

NOTES:

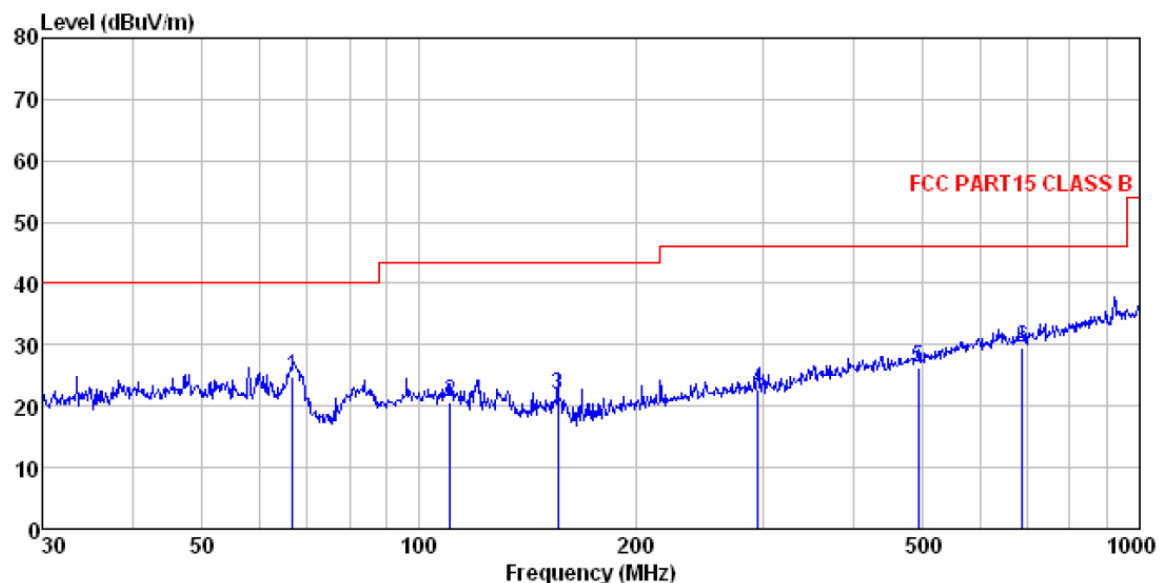
- 1.All modes were measured and the worst case emission was reported.
- 2.Measurements using CISPR quasi-peak mode for below 1GHz.
- 3.The limit for Class B device is on the FCC Part section 15.109.
4. For Above 1GHz , if Pk value is lower than AV limit , then AV Value deem to comply with AV limit .

6.3.1 Diagram 003



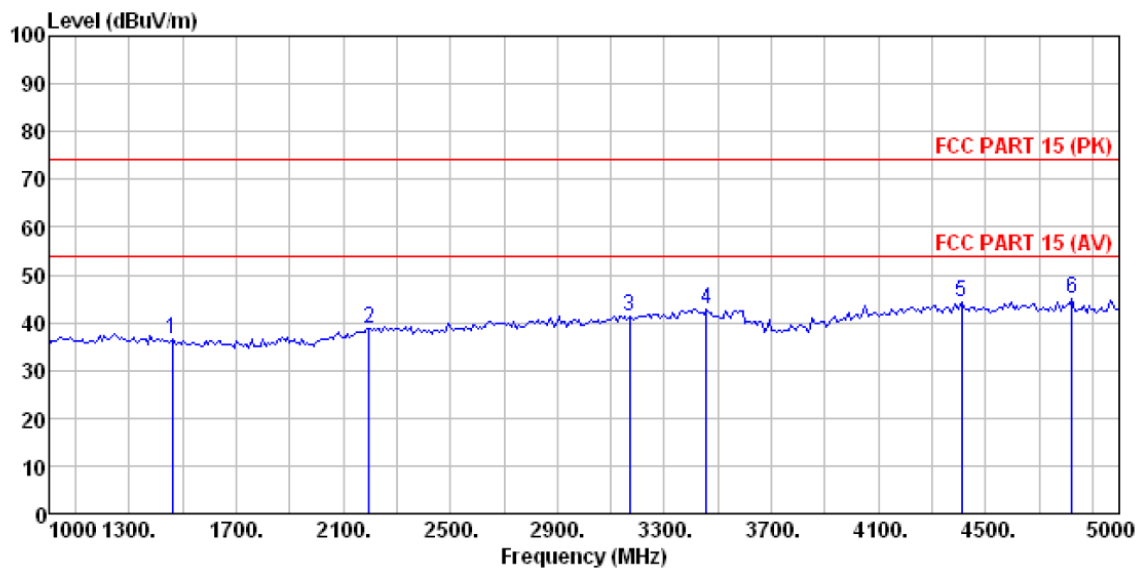
	Freq	ReadAntenna	Cable Preamp		Limit	Over	
		Level	Factor	Loss Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB
1	48.672	35.87	15.34	0.76	31.97	20.00	40.00
2	91.175	37.32	14.16	1.12	31.72	20.88	43.50
3	227.691	37.13	13.51	2.01	32.15	20.50	46.00
4	336.035	38.12	15.99	2.55	32.07	24.59	46.00
5	543.274	36.39	19.46	3.50	31.33	28.02	46.00
6	922.516	36.77	23.24	4.93	31.19	33.75	46.00

6.3.2 Diagram 004



	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	66.733	43.64	12.02	0.91	31.90	24.67	40.00	-15.33	QP
2	110.569	37.06	14.15	1.28	31.81	20.68	43.50	-22.82	QP
3	155.910	41.84	10.51	1.60	32.00	21.95	43.50	-21.55	QP
4	295.147	37.58	14.95	2.34	32.18	22.69	46.00	-23.31	QP
5	492.469	36.25	18.39	3.27	31.59	26.32	46.00	-19.68	QP
6	687.151	36.01	20.76	4.05	31.17	29.65	46.00	-16.35	QP

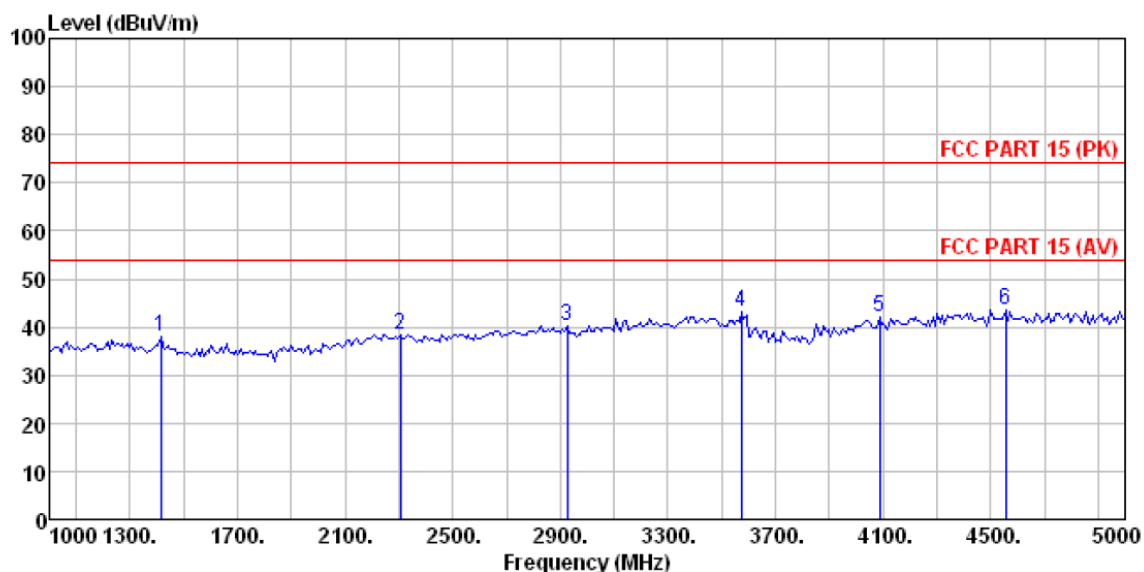
6.3.3 Diagram 005



	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1459.000	40.14	25.33	4.66	33.53	36.60	74.00	-37.40	Peak
2	2197.000	39.93	27.95	5.18	34.25	38.81	74.00	-35.19	Peak
3	3169.000	39.35	28.82	6.29	33.12	41.34	74.00	-32.66	Peak
4	3457.000	39.92	28.84	6.88	32.79	42.85	74.00	-31.15	Peak
5	4411.000	36.74	31.13	8.25	31.90	44.22	74.00	-29.78	Peak
6	4825.000	36.55	31.79	8.62	32.10	44.86	74.00	-29.14	Peak

Remark: Pk value is lower than AV limit 54dBuV/m, So AV value deem to comply with AV limit.

6.3.4 Diagram 006



	Freq	ReadAntenna	Cable	Preamp	Limit	Over	
		Level	Factor	Loss	Factor	Level	Line
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m
1	1414.000	41.30	25.51	4.62	33.45	37.98	74.00
2	2305.000	39.28	27.94	5.30	34.11	38.41	74.00
3	2926.000	39.43	28.44	5.86	33.41	40.32	74.00
4	3574.000	39.57	29.11	7.11	32.67	43.12	74.00
5	4087.000	36.29	29.86	7.95	32.07	42.03	74.00
6	4555.000	35.84	31.44	8.39	31.96	43.71	74.00

Remark: Pk value is lower than AV limit 54dBuV/m, So AV value deem to comply with AV limit.



FCC ID 2AALB-201771-01
Reference No.: 241076

Appendix A Sample Label

Labelling Requirements

The sample label shown shall be permanently affixed at a conspicuous location on the device and be readily visible to the user at the time of purchase.

*** The following FCC ID specified in the label.

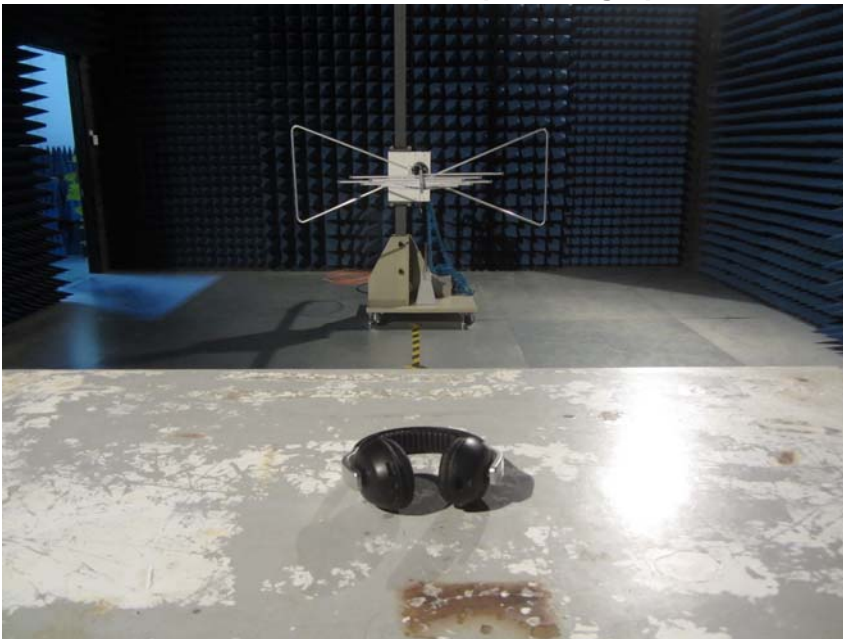
FCC ID: 2AALB-201771-01

Appendix B Test Setup Photographs of EUT

B.1 Conducted Emission Test Setup Photographs



B.2 Radiated Emission Test Setup Photographs



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