

EMC TEST REPORT
for
Azlan Logistics Limited

Techaudio Ceiling Loudspeaker
Model No. : CS 1800

Applicant : Azlan Logistics Limited
Redwood 2, Chineham Business Park, Crockford Lane,
Basingstoke, Hampshire, RG24 8WQ, United Kingdom

Prepared By : Shenzhen Anbotek Compliance Laboratory Limited
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Report Number : R011604204I
Date of Test : Apr. 07~18, 2016
Date of Report : Apr. 19, 2016

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TEST REPORT VERIFICATION

Applicant : Azlan Logistics Limited
Manufacturer : Azlan Logistics Limited
EUT : Techaudio Ceiling Loudspeaker

MODEL NO.: CS 1800

SERIAL NO.: N.A.

TRADE MARK: VISION

RATING: 35W RMS.

Measurement Procedure Used:

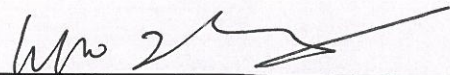
AS/NZS CISPR 13:2009+A1:2015

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the AS/NZS CISPR 13 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited

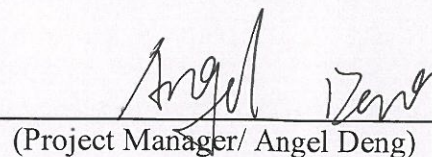
Test Date: Apr. 07~18, 2016

Prepared by :



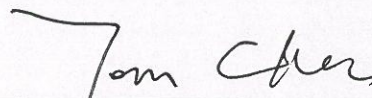
(Engineer/ Kebo Zhang)

Reviewer :



(Project Manager/ Angel Deng)

Approved & Authorized Signer :



(Manager/Tom Chen)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT : Techaudio Ceiling Loudspeaker

Model Number : CS 1800

Test Power Supply : DC 0.9V

Applicant : Azlan Logistics Limited
Redwood 2, Chineham Business Park, Crockford Lane,
Basingstoke, Hampshire, RG24 8WQ, United Kingdom

Manufacturer : Azlan Logistics Limited
Address : Redwood 2, Chineham Business Park, Crockford Lane,
Basingstoke, Hampshire, RG24 8WQ, United Kingdom

Factory : Azlan Logistics Limited
Address : Redwood 2, Chineham Business Park, Crockford Lane,
Basingstoke, Hampshire, RG24 8WQ, United Kingdom

Date of receipt : Apr. 07, 2016

Date of Test : Apr. 07~18, 2016

1.2. Description of Test Facility

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

CNAS - LAB Code: L3503

Shenzhen Anbotek Compliance Laboratory Limited., Laboratory has been assessed and in compliance with CNAS/CL01: 2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

FCC-Registration No.: 752021

Shenzhen Anbotek Compliance Laboratory Limited, 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 752021, July 10, 2013

IC-Registration No.: 8058A-1

Shenzhen Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A-1, Feb. 22, 2013

Test Location

All Emissions tests were performed:

Shenzhen Anbotek Compliance Laboratory Limited. at 1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China

1.3. Measurement Uncertainty

Radiation Uncertainty : Ur = 4.1dB (Horizontal)

Ur = 4.3dB (Vertical)

Conduction Uncertainty : Uc = 3.4dB

1.4. Test Summary

For the EUT described above. The standards used were AS/NZS CISPR 13:2009+A1:2015.

Tests Carried Out Under AS/NZS CISPR 13:2009+A1:2015

Standard	Test Items	Status
AS/NZS CISPR 13:2009+A1:2015	Power Line Conducted Emission Test (150kHz To 30MHz)	x
AS/NZS CISPR 13:2009+A1:2015	Power disturbance(30MHz To 300MHz)	√
AS/NZS CISPR 13:2009+A1:2015	Radiated Emission Test(FM) (30MHz To 300MHz)	x

√ Indicates that the test is applicable

x Indicates that the test is not applicable

2. MEASURING DEVICES AND TEST EQUIPMENT

Test equipments list of Shenzhen Anbotek Compliance Laboratory Limited.

2.1. Disturbance Power Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Absorbing Clamp	FCC	F-201-23M M	08166	Apr. 17, 2015	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Apr. 17, 2015	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Apr. 17, 2015	1 Year

3. DISTURBANCE POWER TEST

3.1. Block Diagram of Test Setup



3.2. Measuring Standard

AS/NZS CISPR 13:2009+A1:2015

3.3. Disturbance Power Limits

All emanations from devices or system including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Frequency MHz	Limits dB(pW)	
	Quasi-peak Value	Average Value
30 ~ 300	45 Increasing Linearly with Frequency to 55	35 Increasing Linearly with Frequency to 45

3.4. EUT Configuration on Measurement

The AS/NZS CISPR 13 Regulations test method must be used to find the maximum emission during radiated emission measurement. The configuration of the EUT is the same as used in conducted emission measurement.

3.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulators as shown in Section 3.1.

4.5.2. Turn on the power of all equipments.

4.5.3. Let the EUT work in test mode (On) and test it.

3.6. Test Procedure

The EUT is placed on the table and away from other metallic surface at least 0.8m. It is connected to the power mains through an extension cord of 6m min. The absorber clamp clamps the cord and moves from the far end to the EUT to measure the disturbing energy emitted from the cord.

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

All the test results are listed in Section 3.7.

3.7. Disturbance Power Test Results

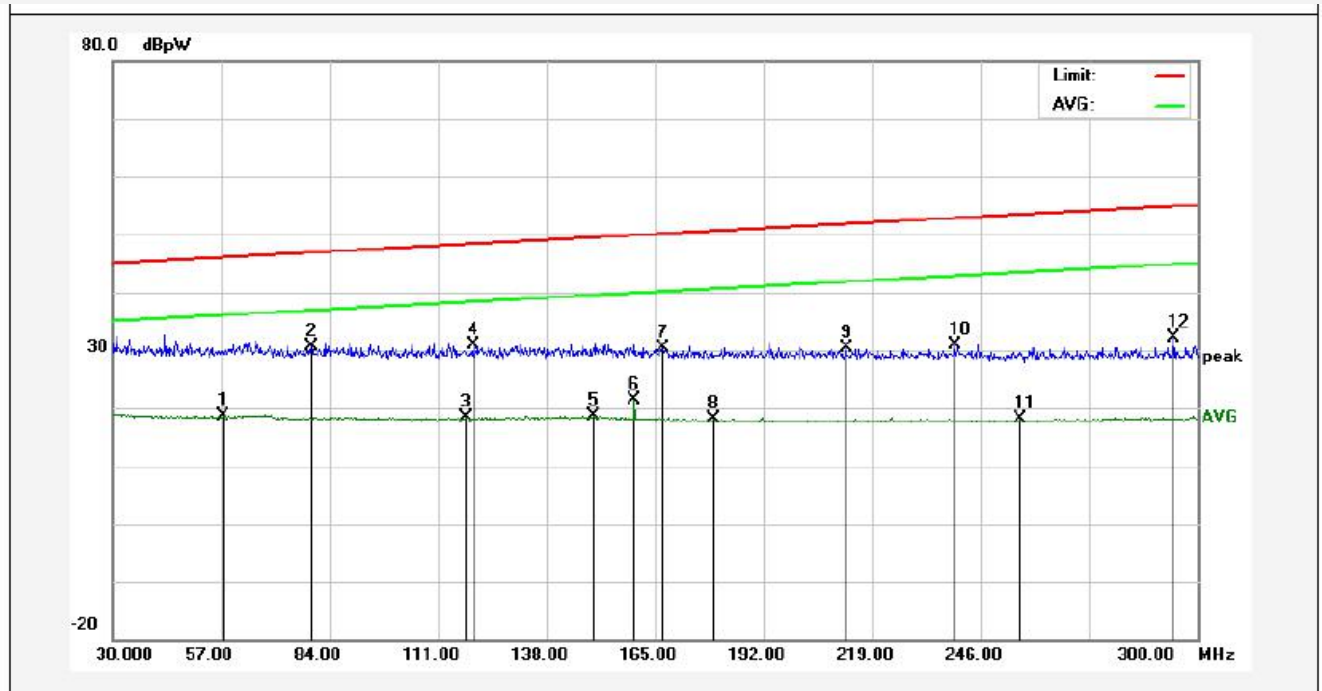
PASS.

The frequency spectrum from 30 MHz to 300 MHz is investigated.

The test curves are shown in the following pages.

Power Clamp Test

Test Site: 1# Shielded Room
Operating Condition: On
Test Specification: DC 0.9V
Comment: AC LINE
Temp.:22.2°C Hum.:60%



No.	Freq. (MHz)	Reading (dBpW)	Factor (dB)	Result (dBpW)	Limit (dBpW)	Over Limit (dB)	Detector	Remark
1	57.7999	-7.29	26.00	18.71	36.03	-17.32	AVG	
2	79.5600	4.74	26.00	30.74	46.84	-16.10	QP	
3	118.0400	-7.64	26.00	18.36	38.26	-19.90	AVG	
4	119.6800	4.94	26.00	30.94	48.32	-17.38	QP	
5	149.8400	-7.39	26.00	18.61	39.44	-20.83	AVG	
6	160.0000	-4.51	26.00	21.49	39.81	-18.32	AVG	
7	167.0399	4.29	26.00	30.29	50.08	-19.79	QP	
8	179.6799	-7.93	26.00	18.07	40.54	-22.47	AVG	
9	212.5998	4.49	26.00	30.49	51.76	-21.27	QP	
10	239.7198	4.78	26.00	30.78	52.77	-21.99	QP	
11	255.9998	-7.84	26.00	18.16	43.37	-25.21	AVG	
12	294.0799	6.25	26.00	32.25	54.78	-22.53	QP	

4. PHOTOGRAPH

4.1. Photo of Disturbance Power Test



APPENDIX I (Photos of EUT)

Figure 1
The EUT- Front View

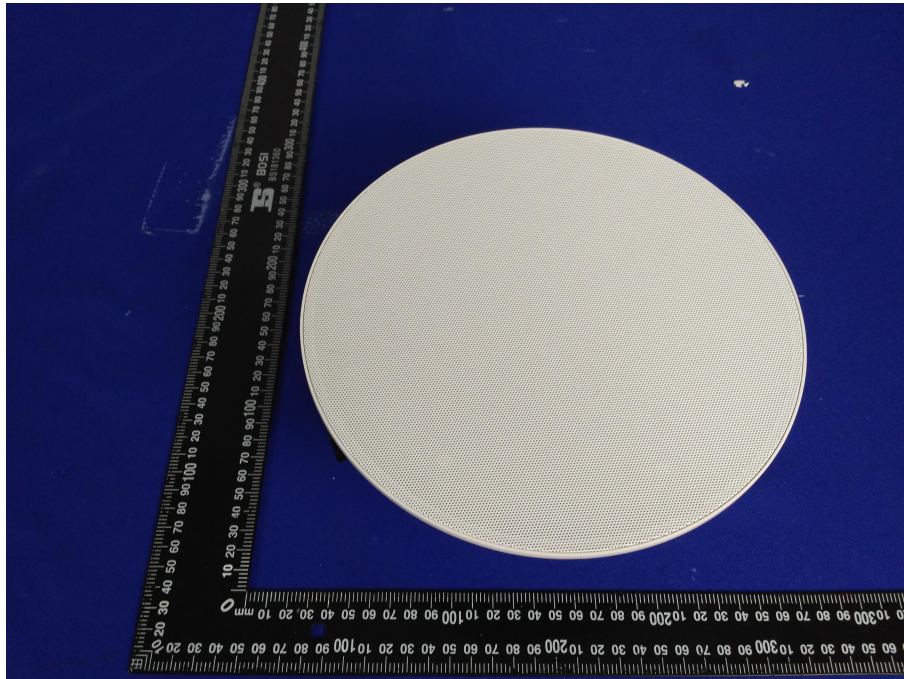


Figure 2
The EUT- Back View



Figure 3
The EUT-Side View

