

## CE/EMC COMPLIANCE REPORT For

Dongguan Jingheng Electron Co., Ltd.

LINE ARRAY SPEAKER SYSTEMS

Prepared for : Dongguan Jingheng Electron Co., Ltd.

Address : Room 101, Building 1, No.15, Shenle 1st Road, Hengli  
Town, Dongguan City, 523465 Guangdong, P.R. China

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Report Number : ESTE-E2507068

Date of Report : Jul. 21, 2025

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**Applicant:** Dongguan Jingheng Electron Co., Ltd.  
**Address:** Room 101, Building 1, No.15, Shenle 1st Road, Hengli Town, Dongguan City, 523465 Guangdong, P.R. China

**Manufacturer:** Dongguan Jingheng Electron Co., Ltd.  
**Address:** Room 101, Building 1, No.15, Shenle 1st Road, Hengli Town, Dongguan City, 523465 Guangdong, P.R. China

**Factory:** Dongguan Jingheng Electron Co., Ltd.  
**Address:** No.15, Shenle 1st Road, Hengli Town, Dongguan City, 523465 Guangdong, P.R. China

**E.U.T:** LINE ARRAY SPEAKER SYSTEMS

**Model Number:** L-ARRAY 28HA, L-ARRAY 18SA, FLX 28HA, FLX 18SA

**Trade Name:** TOPP PRO, SHOW      **Serial No:** -----

**Date of Receipt:** Jun. 13, 2025      **Date of Test:** Jul. 12, 2025~  
Jul. 14, 2025

**Test Specification:** EN 55032:2015+A1:2020/ BS EN 55032:2015+A1:2020  
EN 55035:2017+A11:2020/ BS EN 55035:2017+A11:2020  
EN IEC 61000-3-2:2019+A1:2021+A2:2024/  
BS EN IEC 61000-3-2:2019+A1:2021+A2:2024  
EN 61000-3-3:2013+A1:2019+A2:2021/  
BS EN 61000-3-3:2013+A1:2019+A2:2021


**Test Result:** The equipment under test was found to be compliance with the requirements of the standards applied.

**Issue Date:** Jul. 21, 2025

Prepared by:

Reviewed by:

Approved by:



Yana Wang / Assistant



Bible Hu / Engineer



Iceman Hu / Manager

**Other Aspects:**  
None.

Abbreviations: OK/P=passed      fail/F=failed      n.a/N=not applicable      E.U.T=equipment under tested

This test report is based on a single evaluation of one sample of above mentioned products, It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd. The statement of compliance in this report is based on the limit in the test standard, the measurement uncertainty is not considered.

## 1. GENERAL PRODUCT INFORMATION

### 1.1. Product Function

Refer to Technical Construction Form and User Manual.

### 1.2. Description of Device (EUT)

Description	: LINE ARRAY SPEAKER SYSTEMS
Model No.	: L-ARRAY 28HA, L-ARRAY 18SA
System Input Voltage	: 110-240V~ 50/60Hz
Work Freq.	: 120MHz
Power	: 11A MAX

### 1.3. Difference between Model Numbers

Note: 1. L-ARRAY 18SA: 500W+500W-DIP, subwoofer.

L-ARRAY 28HA: 500W+500W-DIP, mid-high speaker.

2. L-ARRAY 18SA and L-ARRAY 28HA have different appearances and sizes.

3. L-ARRAY 28HA, L-ARRAY 18SA and FLX 28HA, FLX 18SA are different in trademark and model, but the same in other aspects.

### 1.4. Independent Operation Modes

The basic operation modes are:

#### 1.4.1. AUDIO INPUT

### 1.5. Test Supporting System



## 2. TEST SITES

### 2.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

No EUT have been tested according to the applicable standards as referenced below:

EMISSION				
Description of Test Item	Standard	Limits		Results
Conducted emissions (AC mains power ports)	EN 55032:2015+A1:2020	Class B	PASS	
		Minimum passing margin is 2.95dB at 10.02MHz		
Asymmetric mode conducted emissions	EN 55032:2015+A1:2020	Class B	PASS	
		More than 10 dB below the limit line.		
Conducted differential voltage emissions	EN 55032:2015+A1:2020	Class B	N/A	
		More than ** dB below the limit line.		
Radiated Emission	EN 55032:2015+A1:2020	Class B	PASS	
		Minimum passing margin is 6.16dB at 147.37MHz		
Radiated Emission Test (above 1GHz)	EN 55032:2015+A1:2020	Class B	PASS	
		Minimum passing margin is 15.42dB at 4445MHz		
Harmonic current emissions	EN IEC 61000-3-2:2019+ A1:2021+A2:2024	Class A	N/A	
Voltage fluctuations & flicker	EN 61000-3-3:2013+A1:2019 +A2:2021	Section 4.6	PASS	
IMMUNITY (EN 55035:2017+A11:2020)				
Description of Test Item	Basic Standard	Performance Criteria	Observation Criteria	Results
Electrostatic discharge (ESD)	EN 61000-4-2:2009	B	B	PASS
Radio-frequency,Continuous radiated disturbance	EN IEC 61000-4-3:2020	A	A	PASS
Electrical fast transient (EFT)	EN 61000-4-4:2012	B	B	PASS
Surge (Input a.c. power port)	EN 61000-4-5:2014+A1:2017	B	B	PASS
Radio-frequency, Continuous conducted disturbance	EN IEC 61000-4-6:2023	A	A	PASS
Power frequency magnetic field	EN 61000-4-8:2010	A	A	PASS
Voltage dips, >95% reduction	EN IEC 61000-4-11:2020	B	A	PASS
Voltage dips, 30% reduction		C	A	PASS
Voltage interruptions		C	B	PASS
N/A is an abbreviation for Not Applicable.				

## 2.2. Test Facilities

EMC Lab : Accredited by CNAS, CHINA  
Registration No.: L5288  
This Accreditation is valid until: November 12, 2029

Recognized by FCC, USA  
Designation Number: CN1215  
This Recognition is valid until: January 31, 2026

Accredited by A2LA, USA  
Registration No.: 4366.01  
This Accreditation is valid until: January 31, 2026

Recognized by Industry Canada  
CAB identifier No.: CN0035  
This Recognition is valid until: January 31, 2026

Recognized by VCCI, Japan  
Registration No.: C-14103; T-20073; R-13663;  
R-20103; G-20097  
Date of registration: Apr. 20, 2020  
This Recognition is valid until: Apr. 19, 2026

Recognized by TUV Rheinland, Germany  
Registration No.: UA 50413872 0001  
Date of registration: July 31, 2018

Recognized by Intertek  
Registration No.: 2011-RTL-L2-64  
Date of registration: November 08, 2018

Name of Firm : EST Technology Co., Ltd.

Site Location : Chilingxiang, Qishantou, Santun, Houjie, Dongguan,  
Guangdong, China

## 2.3.List of Test and Measurement Instruments

### 2.3.1.For conducted emission at the mains terminals test (1# conduction)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESCI3	EST-E035	Jun. 11, 2025	Jun. 10, 2026
Artificial Mains Network	Rohde & Schwarz	ENV216	EST-E002	Jun. 11, 2025	Jun. 10, 2026
Artificial Mains Network	SCHWARZBECK	NSLK 8128	EST-E029	Jun. 11, 2025	Jun. 10, 2026
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	EST-E003	Jun. 11, 2025	Jun. 10, 2026
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A

### 2.3.2.For asymmetric mode conducted emissions test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESCI3	EST-E071	Jun. 11, 2025	Jun. 10, 2026
ISN	Teseq	T8	EST-E041	Jun. 11, 2025	Jun. 10, 2026
ISN	Teseq	ISN T8-Cat6	EST-E124	Jun. 11, 2025	Jun. 10, 2026
Current Transformer	SCHWARZBECK	SW9605	EST-E045	Jun. 11, 2025	Jun. 10, 2026
Voltage Probe	SCHWARZBECK	TK9420	EST-E046	Jun. 11, 2025	Jun. 10, 2026
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A

### 2.3.3.For radiated emission test (1# 966 radiation)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	Jun. 11, 2025	Jun. 10, 2026
Bilog Antenna	Teseq	CBL 6111D	EST-E034	Jun. 11, 2025	Jun. 10, 2026

### 2.3.4.For radiated emission test (above 1GHz ) (1# 966 radiation)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	Jun. 11, 2025	Jun. 10, 2026
Horn Antenna	SCHWARZBECK	BBHA 9120 D	EST-E031	Jun. 11, 2025	Jun. 10, 2026
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A

### 2.3.5.For harmonic current emissions and voltage fluctuations/flicker test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Analyzer	California Instruments	3001IX-208-CTS	EST-E011	Jun. 11, 2025	Jun. 10, 2026
Voltage Source	California Instruments	5001i-400	EST-E164	Jun. 11, 2025	Jun. 10, 2026
Test Software	California Instruments	CTS	N/A	N/A	N/A

### 2.3.6.For electrostatic discharge immunity test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
ESD Generator	Teseq	NSG437	EST-E132	Jun. 11, 2025	Jun. 10, 2026

### 2.3.7.For electrical fast transient/burst immunity test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EFT Generator	EMC PARTNER	TRANSIENT 2000	EST-E074	Jun. 11, 2025	Jun. 10, 2026
Compact Immunity Test System	3ctest	CCS 500	EST-E129	Jun. 11, 2025	Jun. 10, 2026
Capacitive Coupling Clamp	HAEFELY	IP4A	EST-E040	Jun. 11, 2025	Jun. 10, 2026

### 2.3.8. Radio Frequency Electromagnetic Field Immunity (R/S) Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Signal Generator	Agilent	N5181A	EST-E060	Jun. 11, 2025	Jun. 10, 2026
Power Amplifier	SKET	HAP801000M-250W	EST-E061	N/A	N/A
Power Amplifier	SKET	HAP0103G-75W	EST-E062	N/A	N/A
Power Amplifier	SKET	HAP0306G-50W	EST-E063	N/A	N/A
Power Meter	Agilent	E4419B	EST-E064	Jun. 11, 2025	Jun. 10, 2026
Power sensor	Agilent	E9301A	EST-E065	Jun. 11, 2025	Jun. 10, 2026
Power sensor	HP	E9301A	EST-E066	Jun. 11, 2025	Jun. 10, 2026
Antenna	Schwarzbeck	STLP 9129	EST-E059	N/A	N/A
E-Field Probe	Narda	EP-601	EST-E067	Jun. 11, 2025	Jun. 10, 2026
Audio Analyzer	Rohde & Schwarz	UPV	EST-E024	Jun. 11, 2025	Jun. 10, 2026
Test Software	SKET	EMC-S	V1.2.0.48	N/A	N/A

### 2.3.9. For surge immunity test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Surge Controller	HAEFELY	PSURGE8000	EST-E015	Jun. 11, 2025	Jun. 10, 2026
Surge Impulse Module	HAEFELY	PIM100	EST-E016	Jun. 11, 2025	Jun. 10, 2026
Surge Coupling Network	HAEFELY	PCD100	EST-E017	Jun. 11, 2025	Jun. 10, 2026

### 2.3.10. For injected currents susceptibility test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Signal Generator	Rohde & Schwarz	SMB100A	EST-E025	Jun. 11, 2025	Jun. 10, 2026
Power Amplifier	FRANKONIA	CIT-10	EST-E021	N/A	N/A
Power Meter	Rohde & Schwarz	NRVS	EST-E027	Jun. 11, 2025	Jun. 10, 2026
Audio Analyzer	Rohde & Schwarz	UPV	EST-E024	Jun. 11, 2025	Jun. 10, 2026
CDN	FRANKONIA	CDN-M2+M3	EST-E022	Jun. 11, 2025	Jun. 10, 2026
EM-Clamp	FRANKONIA	EMCL-20	EST-E042	Jun. 11, 2025	Jun. 10, 2026
Test Software	SKET	EMC-S	V1.2.0.80	N/A	N/A

### 2.3.11. For power frequency magnetic field immunity test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Magnetic Field Tester	HAEFELY	MFS 100	EST-E018	Jun. 11, 2025	Jun. 10, 2026

### 2.3.12. For voltage dips and short interruptions immunity test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Fail Simulator	3ctest	PFS 2216SD	EST-E136	Jun. 11, 2025	Jun. 10, 2026

Note: All calibration reports of the equipment were provided by LiSai calibration and Testing

### 3. TEST SET-UP AND OPERATION MODES

#### 3.1. Principle of Configuration Selection

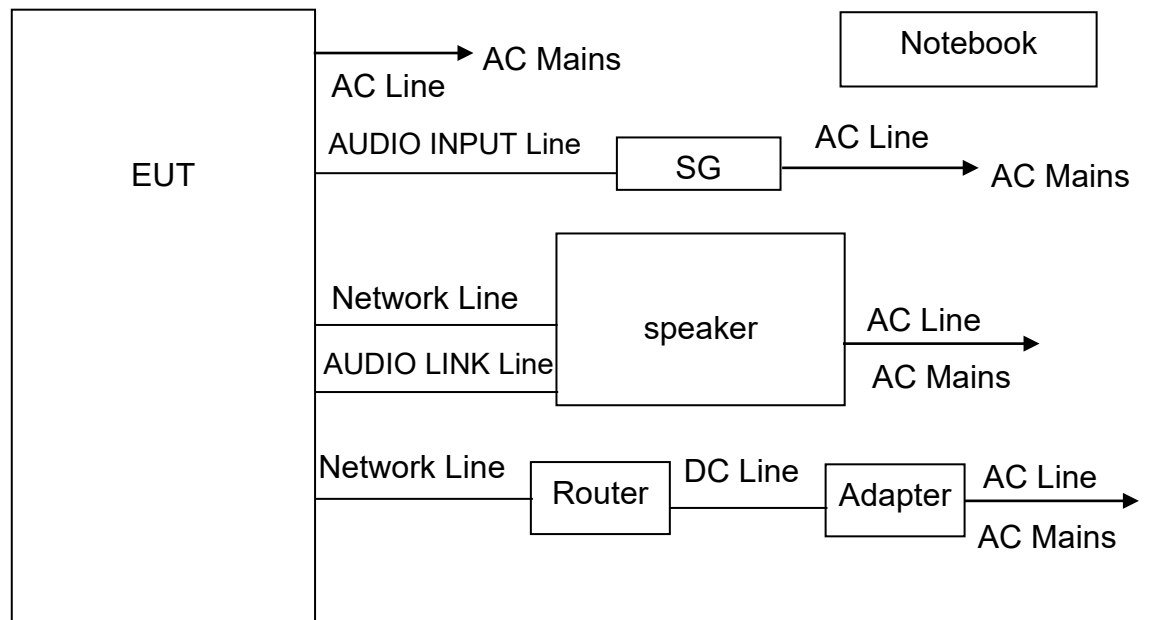
**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the Operating Instructions.

**Immunity:** The equipment under test (EUT) was configured to the representative operating mode and conditions.

#### 3.2. Block Diagram of Test Set-up

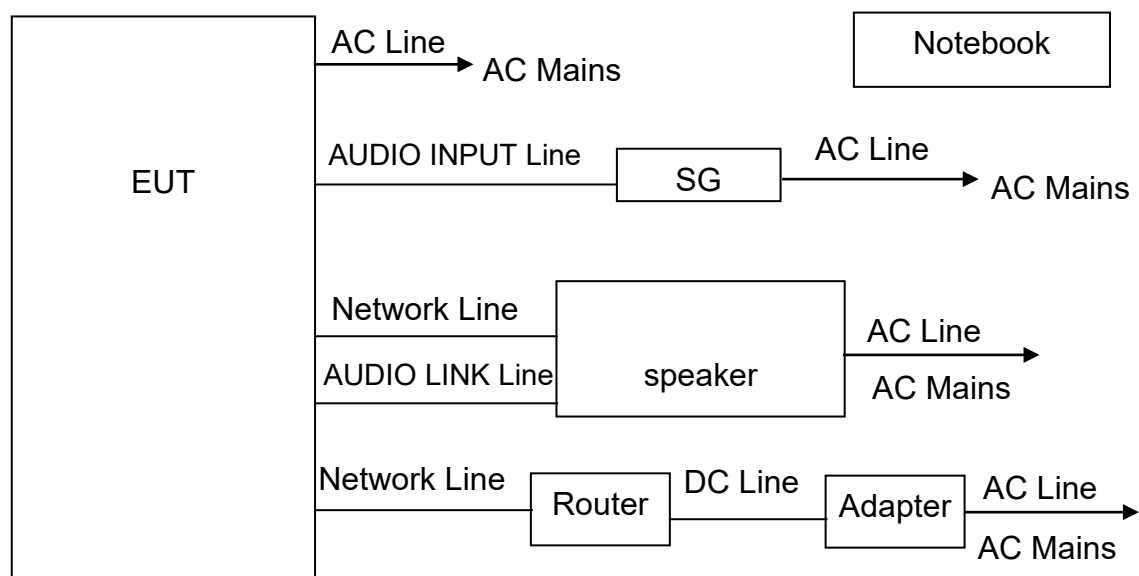
System Diagram of Connections Between EUT and Auxiliary equipment

##### 3.2.1. For emission test





### 3.2.2. For immunity test



(EUT: LINE ARRAY SPEAKER SYSTEMS)

### 3.3. Test Operation Mode and Test Software

Refer to Test Setup in clause 4 & 5.

### 3.4. Special Accessories and Auxiliary Equipment

#### 3.4.1. Notebook

M / N : Thinkpad X280  
 S / N : SL10P97711  
 Manufacturer : Lenovo

#### 3.4.2. Signal Generator

M / N : TAG-101  
 S / N : EST017-001T  
 Manufacturer : Tronson

#### 3.4.3. Router

M / N : CL-4  
 Manufacturer : TOPP PRO

### 3.5. Countermeasures to Achieve EMC Compliance

None.

## 4. EMISSION TEST RESULTS

### 4.1. Conducted Emission at the Mains Terminals Test

**RESULT** : **Pass**  
 Test procedure : EN 55032:2015+A1:2020  
 Frequency range : 0.15 ~ 30MHz  
 Test Site : 1# CE Shielded Room  
 Limits : EN 55032:2015+A1:2020 Class B

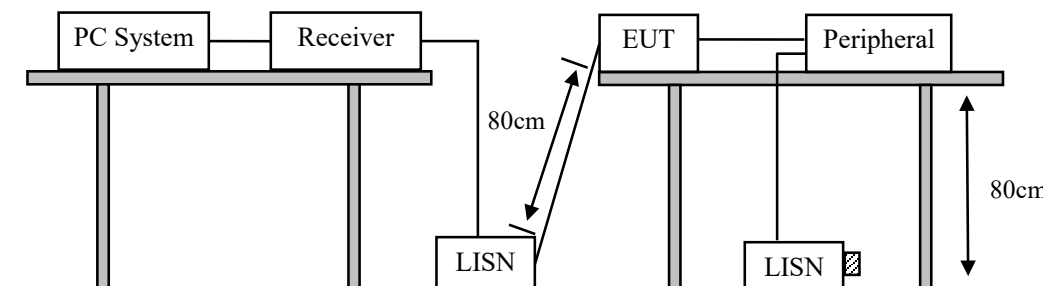
#### Test Setup

Date of test : Jul. 12, 2025  
 Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
 Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
 Operation Mode : AUDIO INPUT

The bandwidth of the test receiver was set at 9kHz.

The frequency range from 150 kHz to 30 MHz was investigated.

The test data of the worst case condition(s) was reported on the following page.



**Note: Test uncertainty:  $\pm 3.44$ dB at a level of confidence of 95%.(1#CE)**

## Test Data

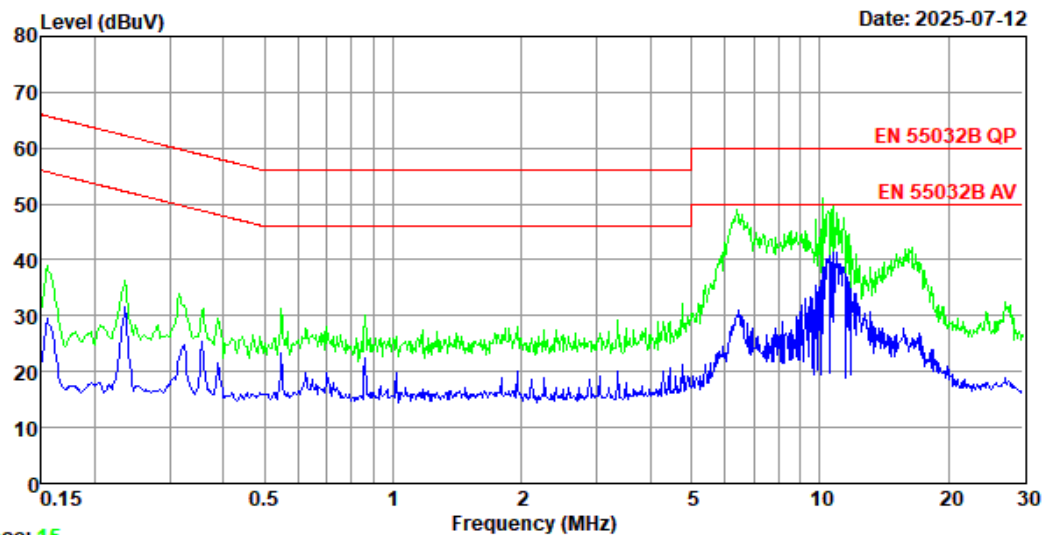
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Data: 36

File: \\EMC-CE1\Test Data\2025\JJing heng.EM6 (74)

Date: 2025-07-12



Trace: 15

Site no : 1#CE Shield Room Data no. : 36  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : NEUTRAL  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

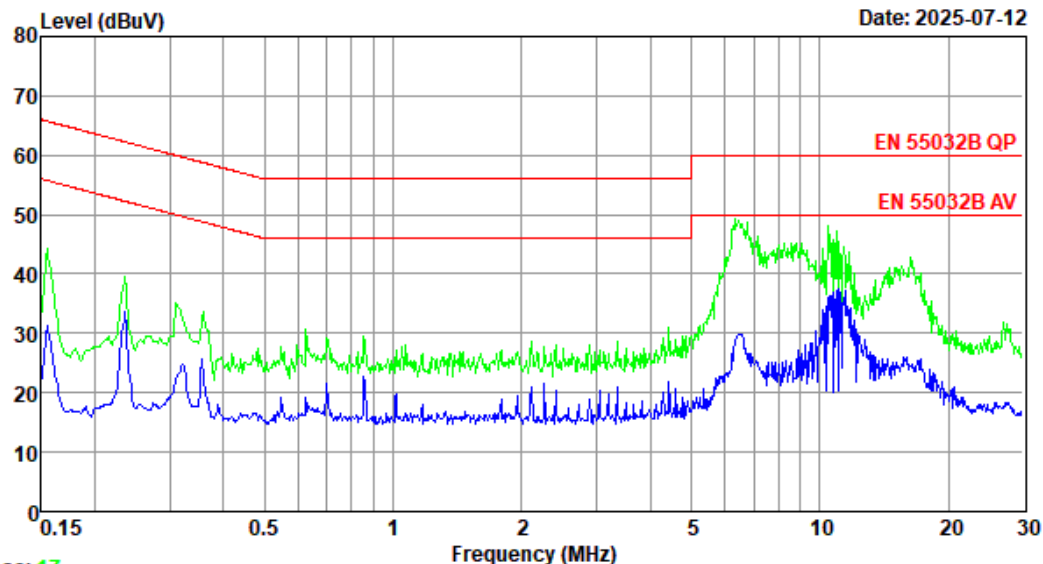
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Data: 38

File: \\EMC-CE1\Test Data\2025\JJing heng.EM6 (74)

Date: 2025-07-12



Trace: 17

Site no : 1#CE Shield Room Data no. : 38  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : LINE  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

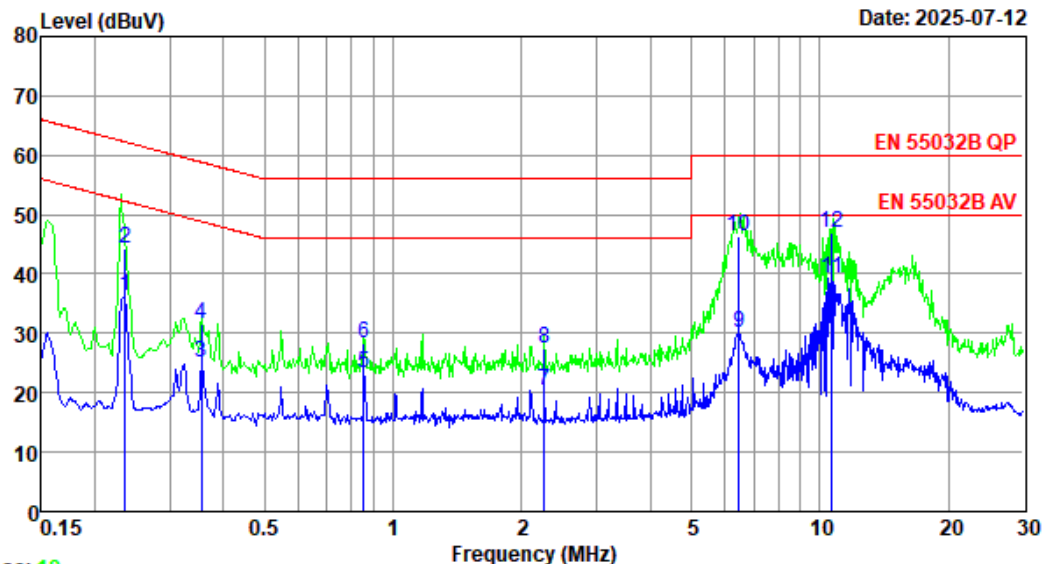
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Data: 40

File: \\EMC-CE1\Test Data\2025\JJing heng.EM6 (74)

Date: 2025-07-12



Trace: 19

Site no : 1#CE Shield Room Data no. : 40  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : LINE  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.24	10.11	9.87	16.32	36.30	52.26	15.96	Average
2	0.24	10.11	9.87	24.24	44.22	62.26	18.04	QP
3	0.36	10.14	9.87	4.97	24.98	48.83	23.85	Average
4	0.36	10.14	9.87	11.52	31.53	58.83	27.30	QP
5	0.85	10.15	9.88	3.34	23.37	46.00	22.63	Average
6	0.85	10.15	9.88	8.21	28.24	56.00	27.76	QP
7	2.26	10.15	9.89	0.26	20.30	46.00	25.70	Average
8	2.26	10.15	9.89	7.37	27.41	56.00	28.59	QP
9	6.45	10.14	9.92	10.04	30.10	50.00	19.90	Average
10	6.45	10.14	9.92	26.26	46.32	60.00	13.68	QP
11	10.68	10.14	9.95	19.25	39.34	50.00	10.66	Average
12	10.68	10.14	9.95	26.86	46.95	60.00	13.05	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. If the average limit is met when using a quasi-peak detector,  
the EUT shall be deemed to meet both limits and measurement  
with average detector is unnecessary.



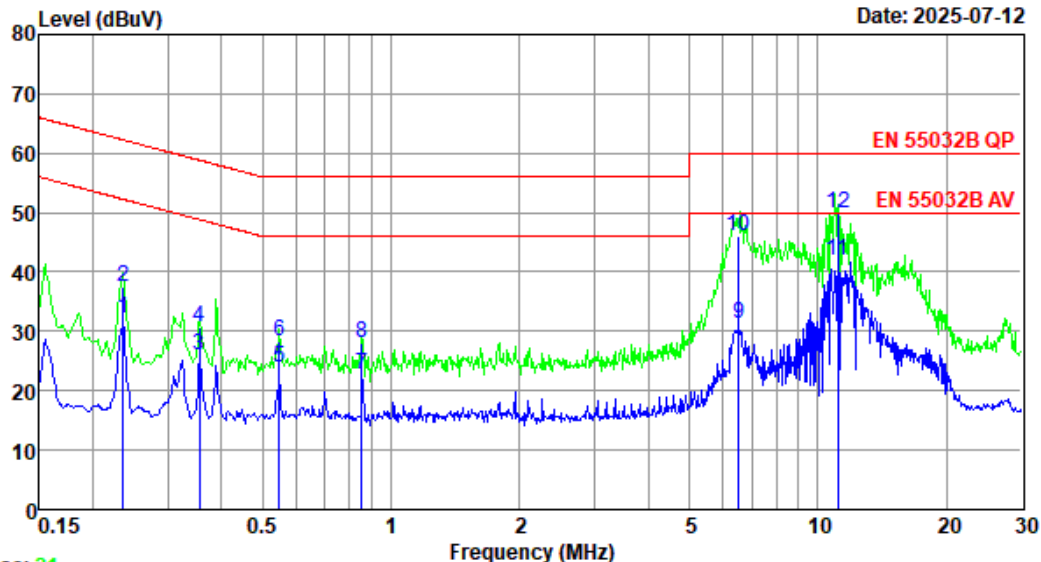
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Data: 42

File: \\EMC-CE1\Test Data\2025\JJing heng.EM6 (74)

Date: 2025-07-12



Trace: 21

Site no : 1#CE Shield Room Data no. : 42  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : NEUTRAL  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.24	10.09	9.87	12.17	32.13	52.26	20.13	Average
2	0.24	10.09	9.87	17.55	37.51	62.26	24.75	QP
3	0.36	10.12	9.87	5.99	25.98	48.83	22.85	Average
4	0.36	10.12	9.87	10.62	30.61	58.83	28.22	QP
5	0.55	10.14	9.87	3.90	23.91	46.00	22.09	Average
6	0.55	10.14	9.87	8.23	28.24	56.00	27.76	QP
7	0.85	10.20	9.88	2.68	22.76	46.00	23.24	Average
8	0.85	10.20	9.88	7.95	28.03	56.00	27.97	QP
9	6.52	10.20	9.92	11.05	31.17	50.00	18.83	Average
10	6.52	10.20	9.92	25.83	45.95	60.00	14.05	QP
11	11.14	10.14	9.95	21.78	41.87	50.00	8.13	Average
12	11.14	10.14	9.95	29.73	49.82	60.00	10.18	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. If the average limit is met when using a quasi-peak detector,  
the EUT shall be deemed to meet both limits and measurement  
with average detector is unnecessary.

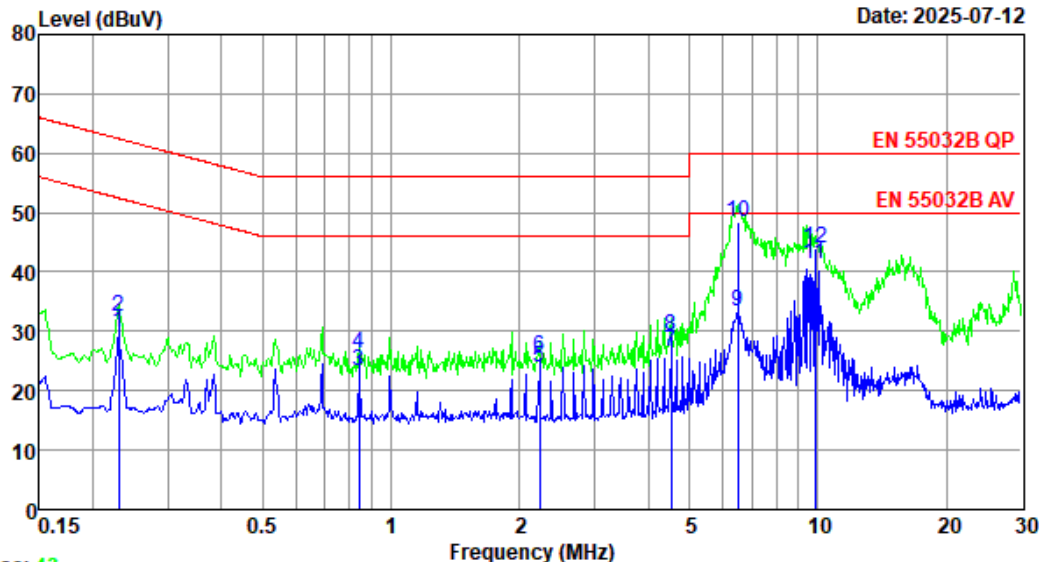
## EST Technology

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Data: 44

File: \\EMC-CE1\Test Data\2025\JJing heng.EM6 (74)

Date: 2025-07-12



Trace: 43

Site no : 1#CE Shield Room Data no. : 44  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : LINE  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.23	10.11	9.87	9.89	29.87	52.44	22.57	Average
2	0.23	10.11	9.87	12.52	32.50	62.44	29.94	QP
3	0.84	10.15	9.88	3.24	23.27	46.00	22.73	Average
4	0.84	10.15	9.88	6.19	26.22	56.00	29.78	QP
5	2.22	10.15	9.89	3.96	24.00	46.00	22.00	Average
6	2.22	10.15	9.89	5.58	25.62	56.00	30.38	QP
7	4.53	10.15	9.91	6.48	26.54	46.00	19.46	Average
8	4.53	10.15	9.91	9.29	29.35	56.00	26.65	QP
9	6.49	10.14	9.92	13.30	33.36	50.00	16.64	Average
10	6.49	10.14	9.92	28.44	48.50	60.00	11.50	QP
11	9.86	10.14	9.94	21.25	41.33	50.00	8.67	Average
12	9.86	10.14	9.94	23.99	44.07	60.00	15.93	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. If the average limit is met when using a quasi-peak detector,  
the EUT shall be deemed to meet both limits and measurement  
with average detector is unnecessary.

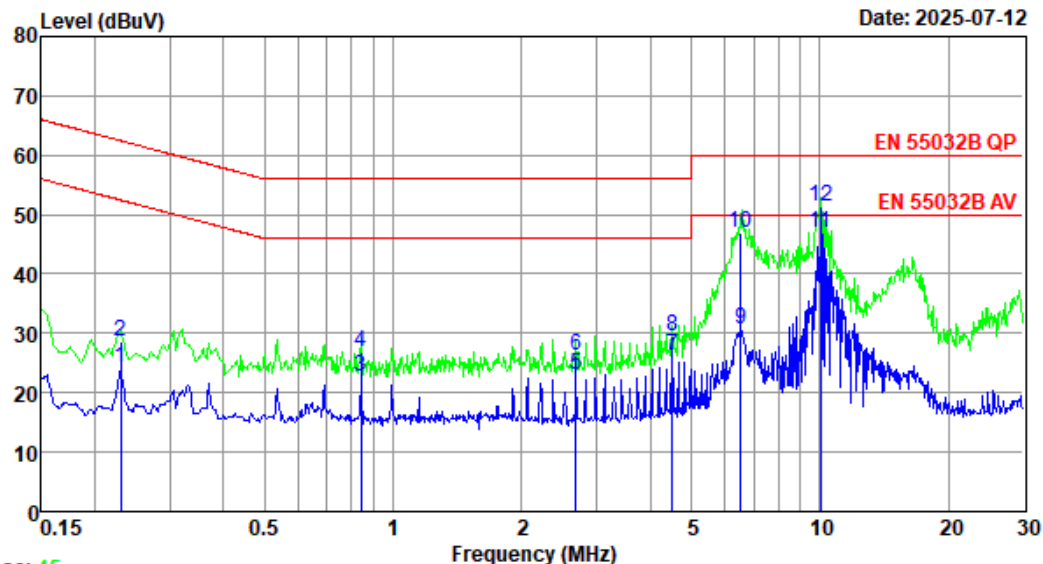
## EST Technology

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Data: 46

File: \\EMC-CE1\Test Data\2025\JJing heng.EM6 (74)

Date: 2025-07-12



Trace: 45

Site no : 1#CE Shield Room Data no. : 46  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : NEUTRAL  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.23	10.11	9.87	4.32	24.30	52.44	28.14	Average
2	0.23	10.11	9.87	8.59	28.57	62.44	33.87	QP
3	0.84	10.20	9.88	2.61	22.69	46.00	23.31	Average
4	0.84	10.20	9.88	6.86	26.94	56.00	29.06	QP
5	2.68	10.05	9.89	2.94	22.88	46.00	23.12	Average
6	2.68	10.05	9.89	6.31	26.25	56.00	29.75	QP
7	4.50	10.17	9.91	6.11	26.19	46.00	19.81	Average
8	4.50	10.17	9.91	9.54	29.62	56.00	26.38	QP
9	6.52	10.20	9.92	10.65	30.77	50.00	19.23	Average
10	6.52	10.20	9.92	26.89	47.01	60.00	12.99	QP
11	10.02	10.17	9.94	26.94	47.05	50.00	2.95	Average
12	10.02	10.17	9.94	31.13	51.24	60.00	8.76	QP

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. If the average limit is met when using a quasi-peak detector,  
the EUT shall be deemed to meet both limits and measurement  
with average detector is unnecessary.

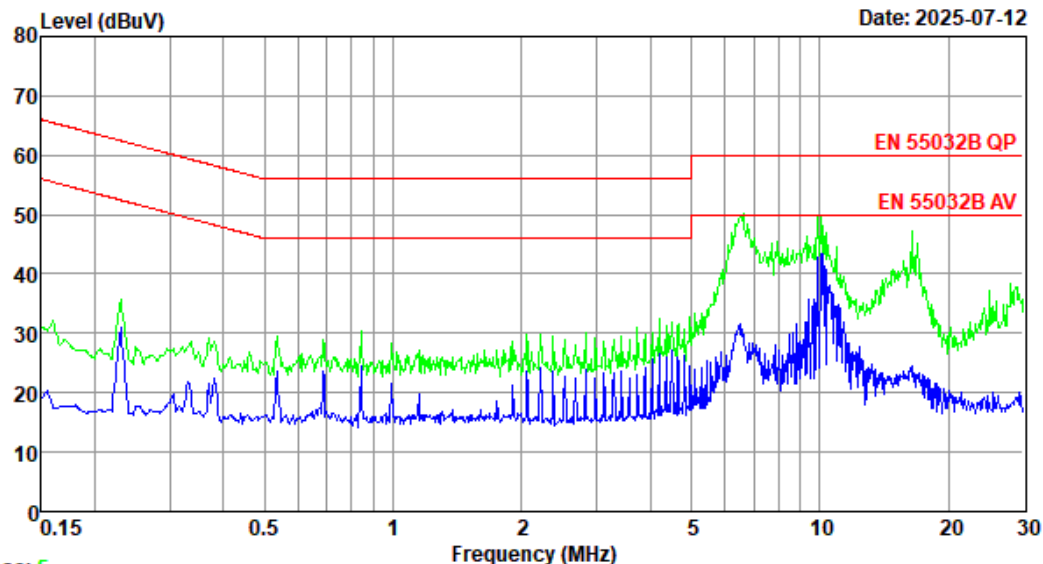
# EST Technology

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Fax: +86-769-83081878

Data: 48

File: \\EMC-CE1\Test Data\2025\JJing heng.EM6 (74)

Date: 2025-07-12

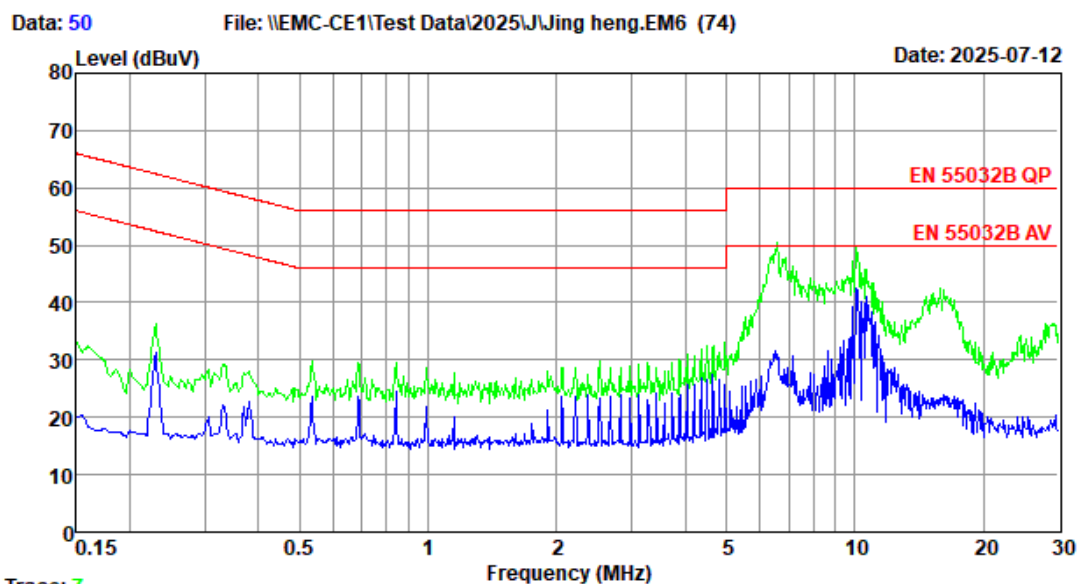


Trace: 5

Site no : 1#CE Shield Room Data no. : 48  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : LINE  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

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Site no : 1#CE Shield Room Data no. : 50  
Env. / Ins. : Temp:24.6°C;Humi:52%;Press:101.10kPa LINE Phase : NEUTRAL  
Limit : EN 55032B QP  
Engineer : Micheal Huang  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT



## 4.2. Asymmetric Mode Conducted Emissions Test

**RESULT** : **Pass**  
 Test procedure : EN 55032:2015+A1:2020  
 Frequency range : 0.15 ~ 30MHz  
 Test Site : Shielded Room  
 Limits : EN 55032:2015+A1:2020

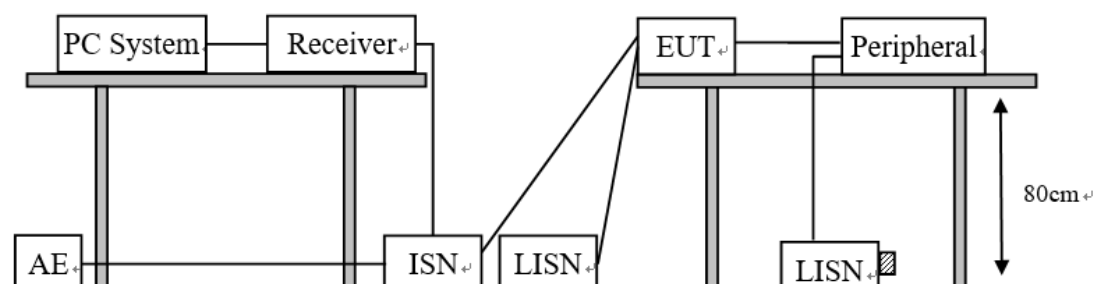
### Test Setup

Date of test : Jul. 12, 2025  
 Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
 Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
 Operation Mode : AUDIO INPUT

The frequency range from 150 kHz to 30 MHz was investigated.

The bandwidth of the test receiver was set at 9 kHz.

The test data of the worst case condition(s) was reported on the following page.



**Note: Test uncertainty:  $\pm 4.32\text{dB}$  at a level of confidence of 95%.**

## Test Data

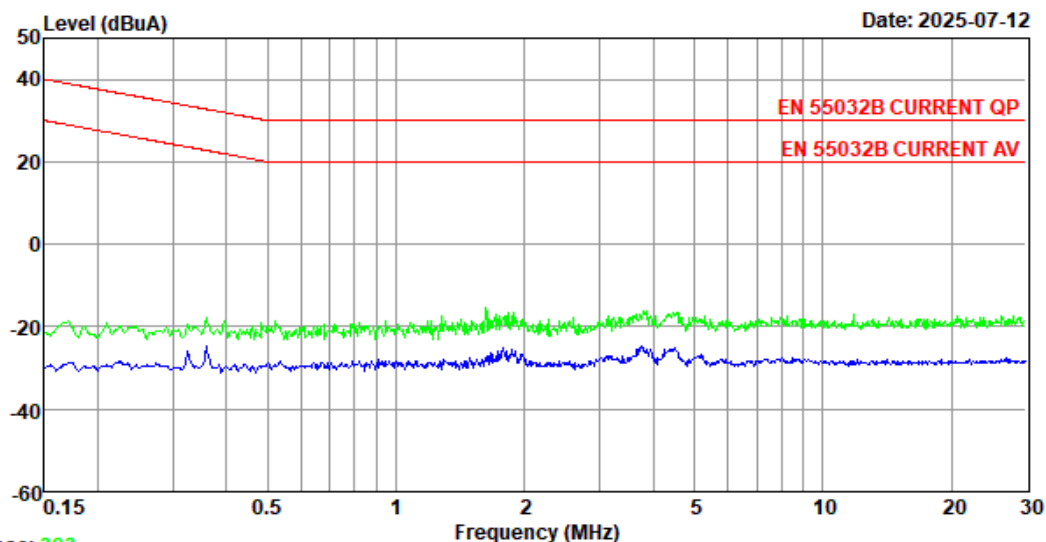
EST Technology

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Data: 304

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Trace: 303

Site no : 2#CE Shield Room Data no. : 304  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT  
DATA INPUT

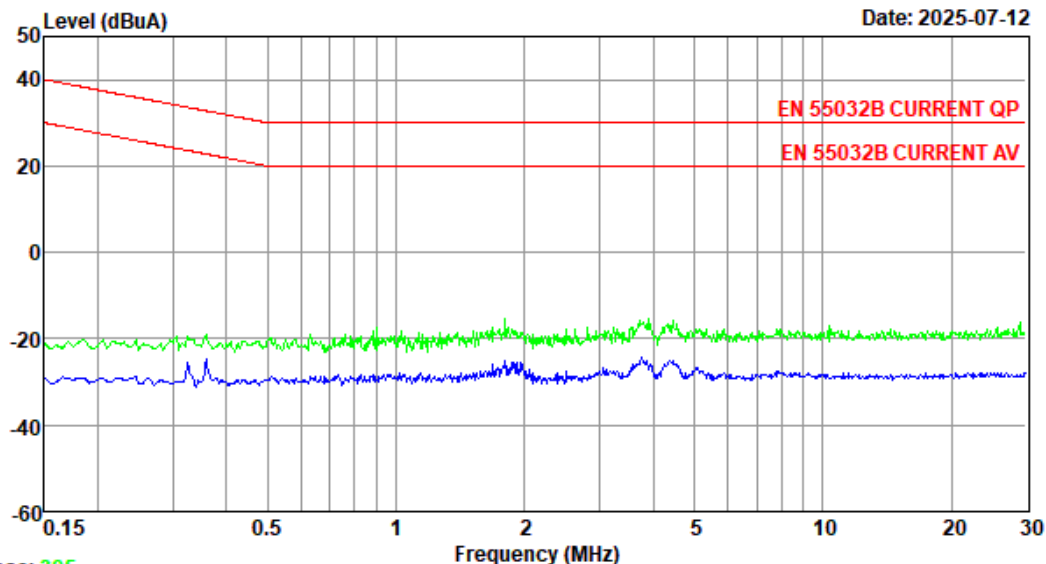
# EST Technology

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Data: 306

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Trace: 305

Site no : 2#CE Shield Room Data no. : 306  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT  
DATA INPUT

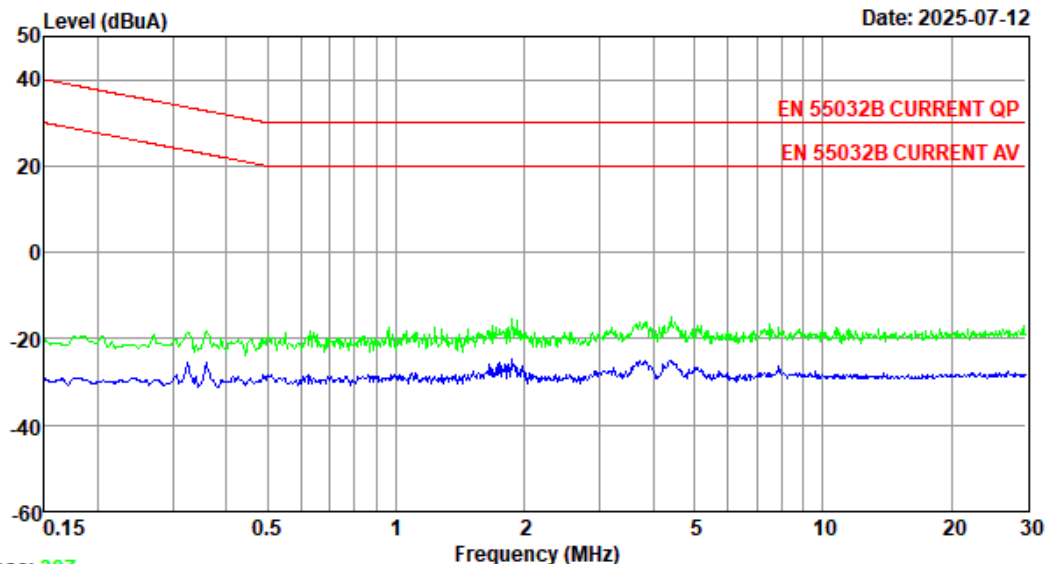
# EST Technology

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Data: 308

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Site no : 2#CE Shield Room Data no. : 308  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT  
DATA LINK

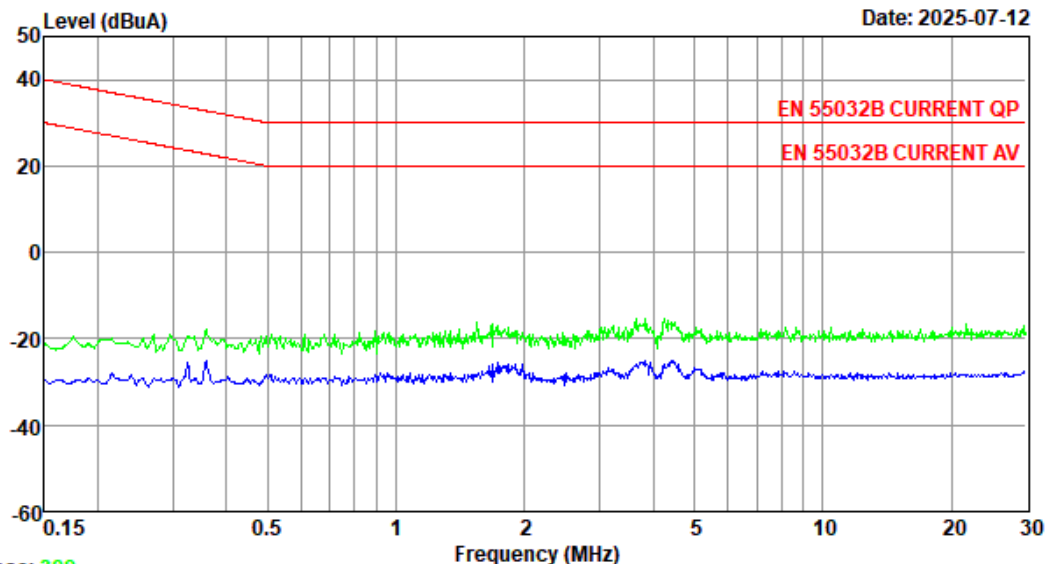
# EST Technology

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Data: 310

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Trace: 309

Site no : 2#CE Shield Room Data no. : 310  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT  
DATA LINK



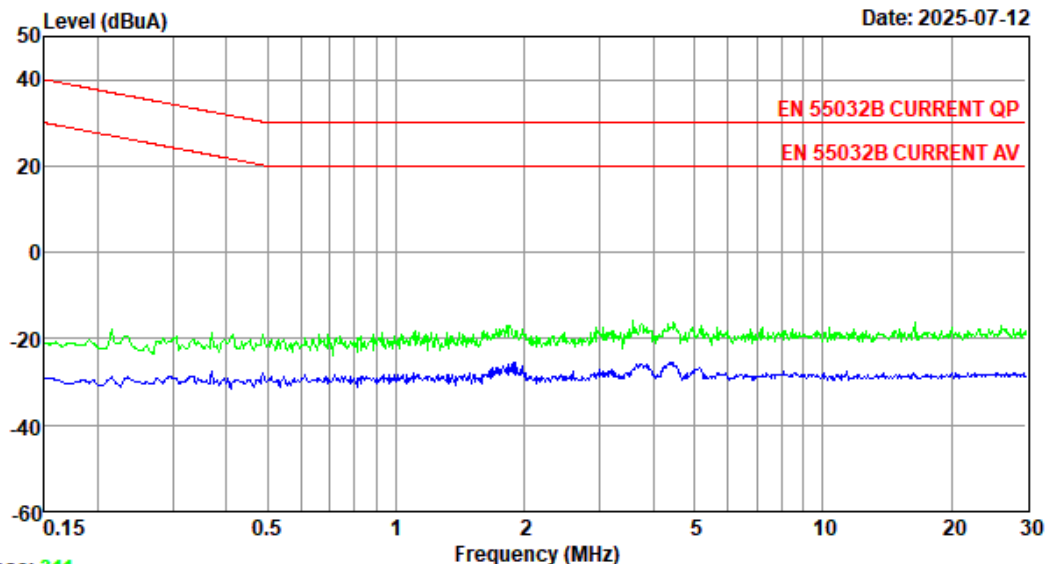
# EST Technology

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Data: 312

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Trace: 311

Site no : 2#CE Shield Room Data no. : 312  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT  
DATA LINK

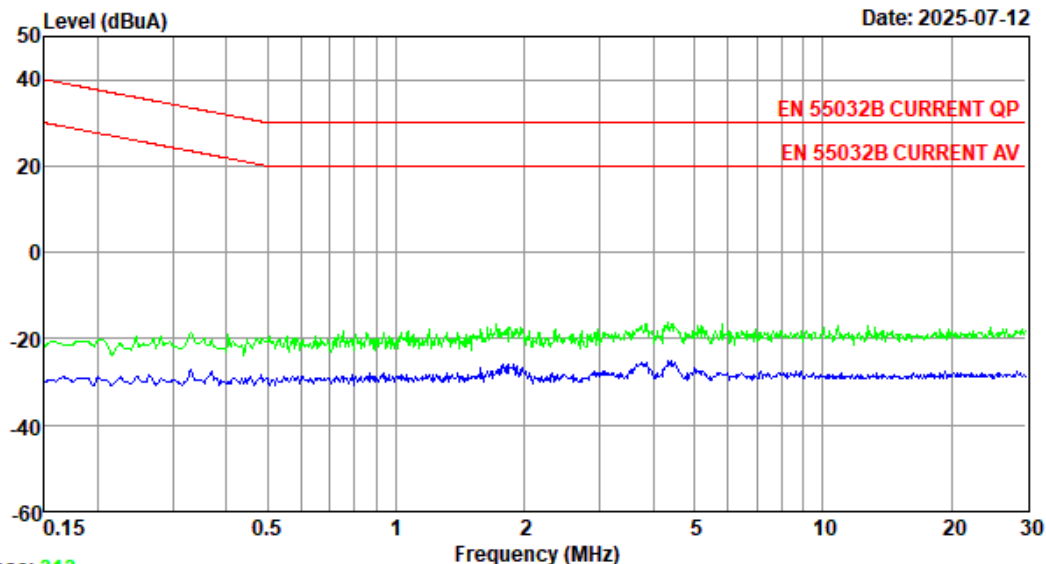
# EST Technology

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Data: 314

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Trace: 313

Site no : 2#CE Shield Room Data no. : 314  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT  
DATA LINK

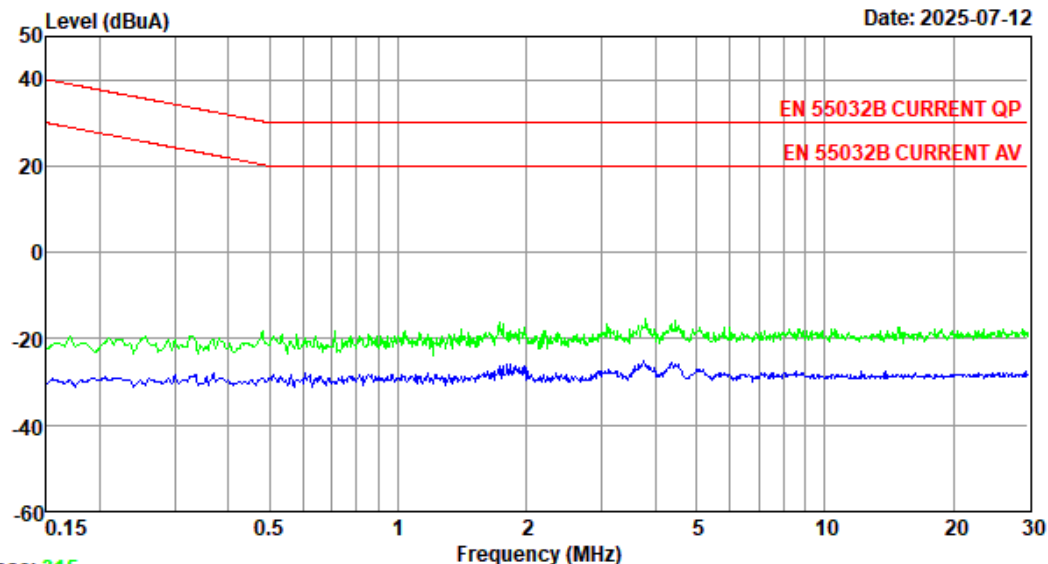
## EST Technology

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Data: 316

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Trace: 315

Site no : 2#CE Shield Room Data no. : 316  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT  
DATA INPUT

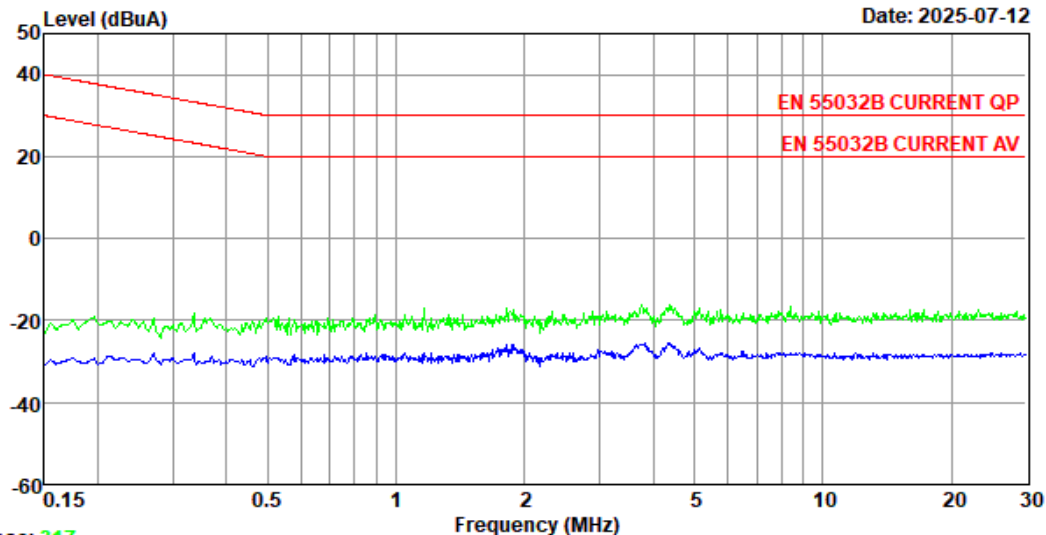
# EST Technology

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Data: 318

File: \\EMC-CE-2\Test Data\2025\Jjingheng.EM6 (326)

Date: 2025-07-12



Trace: 317

Site no : 2#CE Shield Room Data no. : 318  
Env. / Ins. : Temp:23.7°C Humi:53% Press:101.10kPa LINE Phase :  
Limit : EN 55032B CURRENT QP  
Engineer : Dylan Cai  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT  
DATA INPUT

### 4.3. Radiated Emission Test

**RESULT : Pass**  
 Test procedure : EN 55032:2015+A1:2020  
 Frequency range : 30 ~ 1000MHz  
 Test Site : 1#966 Chamber  
 Limits : EN 55032:2015+A1:2020 Class B

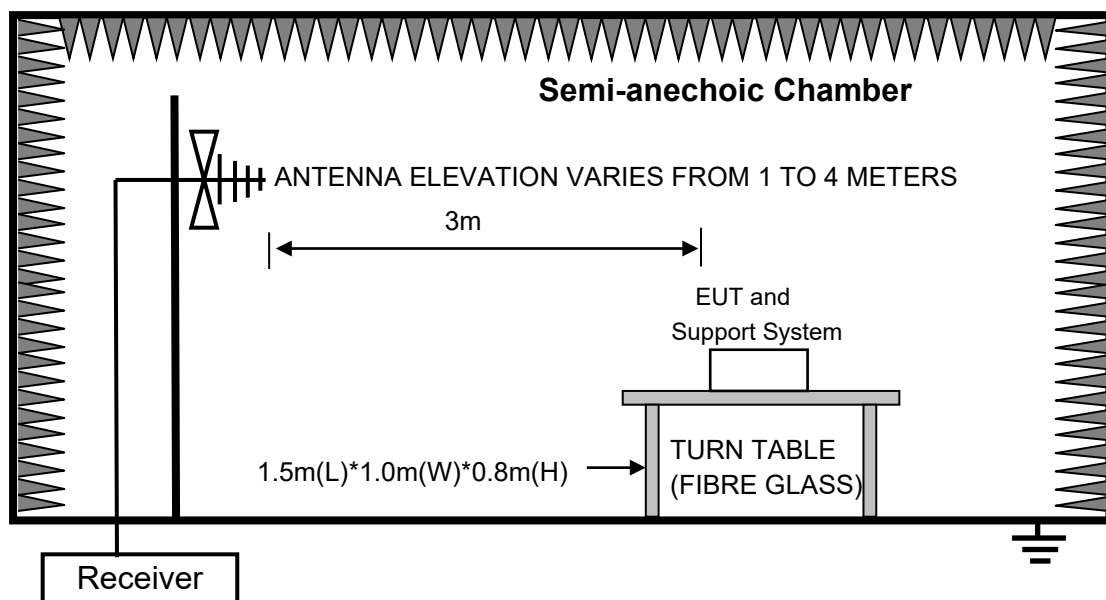
#### Test Setup

Date of test : Jul. 12, 2025  
 Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
 Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
 Operation Mode : AUDIO INPUT

The EUT was placed on a turn table which was 0.8 m above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 m away from the receiving antenna which was mounted on an antenna tower. The measuring antenna moved up and down to find out the maximum emission level. It moved from 1 m to 4 m for both horizontal and vertical polarizations.

The EUT was tested in the Chamber Site. It was pre-scanned with a Peak detector from the spectrum, and all the final readings from the test receiver were measured with the Quasi-Peak detector.

The bandwidth setting on the test receiver was 120 kHz.



**Note: Test uncertainty:  $\pm 4.36$  dB (H);  $\pm 4.72$  dB (V) at a level of confidence of 95%.(1#966)**

## Test Data

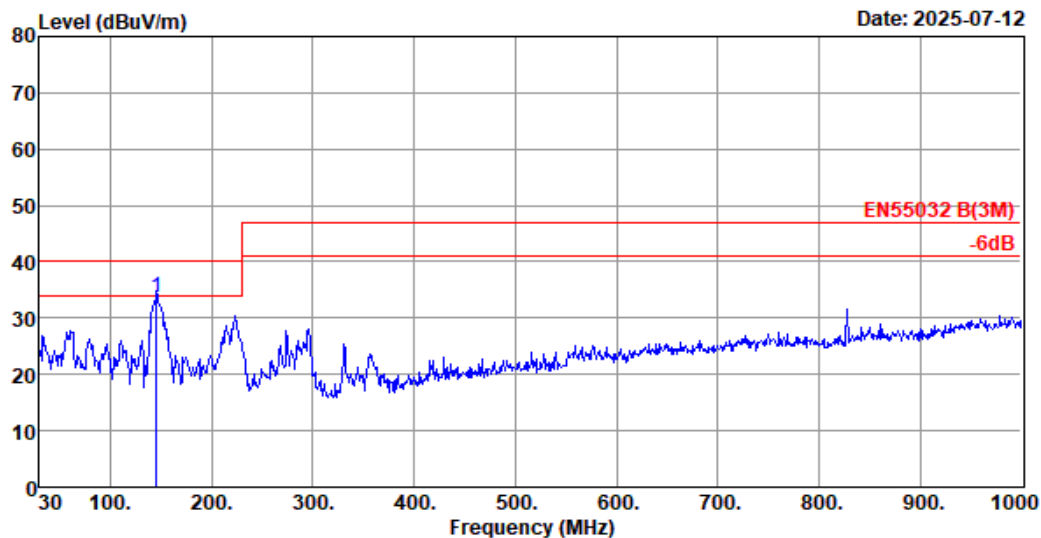
EST Technology

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Data: 369

File: \\EMC-966-1\\test data\\2025\\JJing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 369  
Dis. / Ant. : 3m 37062 Ant. pol. : VERTICAL  
Limit : EN55032 B(3M)  
Env. / Ins. : Temp:22.4°C.Humi:55%;Press:101.1KPa  
Engineer : Aiden Yan  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	145.43	12.20	1.73	19.63	33.56	40.00	6.44	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. The emission levels that are 20dB below the official limit are not reported.

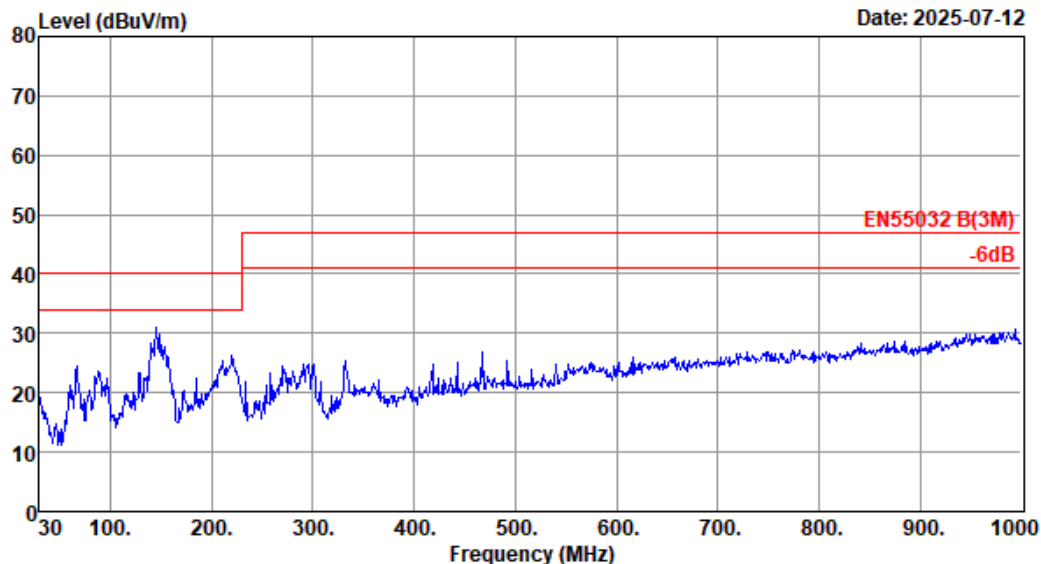
# EST Technology

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Data: 370

File: \\EMC-966-1\test data\2025\JJing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 370  
Dis. / Ant. : 3m 37062 Ant. pol. : HORIZONTAL  
Limit : EN55032 B(3M)  
Env. / Ins. : Temp:22.4°C.Humi:55%;Press:101.1KPa  
Engineer : Aiden Yan  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT



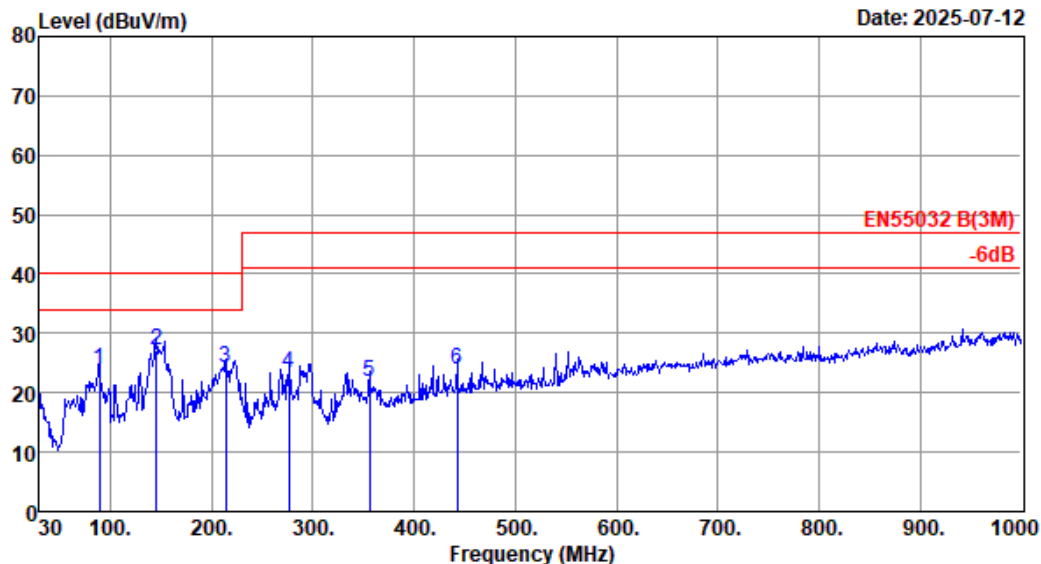
## EST Technology

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Data: 371

File: \\EMC-966-1\\test data\\2025\\JJing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 371  
Dis. / Ant. : 3m 37062 Ant. pol. : HORIZONTAL  
Limit : EN55032 B(3M)  
Env. / Ins. : Temp:22.4°C.Humi:55%;Press:101.1KPa  
Engineer : Aiden Yan  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	89.17	8.50	1.32	14.21	24.03	40.00	15.97	QP
2	145.43	12.20	1.73	13.11	27.04	40.00	12.96	QP
3	214.30	9.06	2.14	13.12	24.32	40.00	15.68	QP
4	276.38	12.70	2.46	8.25	23.41	47.00	23.59	QP
5	355.92	14.72	2.85	4.26	21.83	47.00	25.17	QP
6	442.25	17.00	3.21	3.69	23.90	47.00	23.10	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. The emission levels that are 20dB below the official limit are not reported.

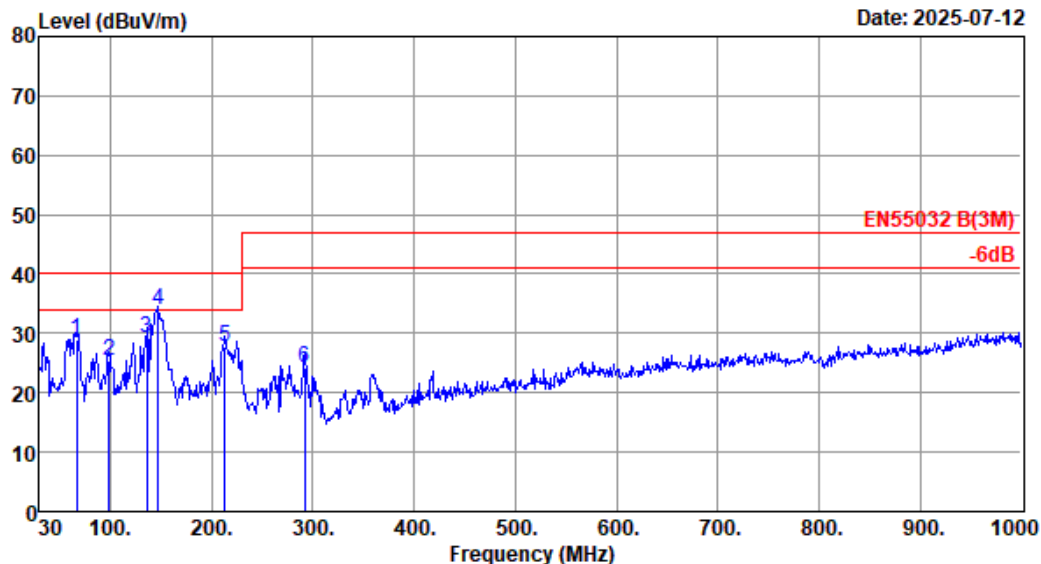
## EST Technology

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Data: 372

File: \\EMC-966-1\\test data\\2025\\JJing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 372  
Dis. / Ant. : 3m 37062 Ant. pol. : VERTICAL  
Limit : EN55032 B(3M)  
Env. / Ins. : Temp:22.4°C.Humi:55%;Press:101.1KPa  
Engineer : Aiden Yan  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	66.86	6.30	1.13	21.53	28.96	40.00	11.04	QP
2	98.87	10.40	1.40	13.69	25.49	40.00	14.51	QP
3	135.73	12.40	1.66	15.11	29.17	40.00	10.83	QP
4	147.37	11.00	1.75	21.09	33.84	40.00	6.16	QP
5	213.33	9.12	2.13	16.42	27.67	40.00	12.33	QP
6	291.90	13.38	2.54	8.26	24.18	47.00	22.82	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. The emission levels that are 20dB below the official limit are not reported.

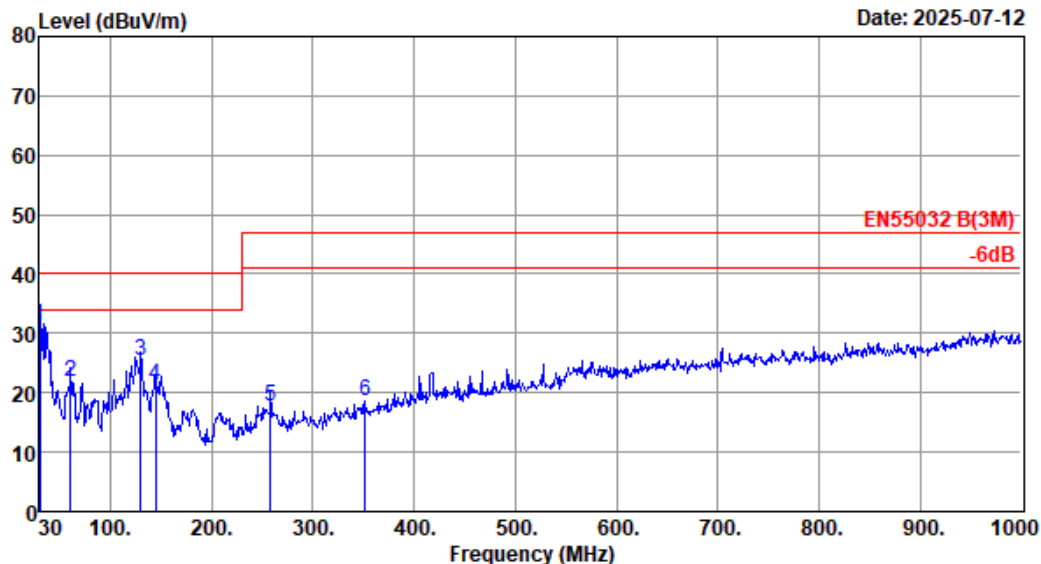
## EST Technology

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Data: 373

File: \\EMC-966-1\\test data\\2025\\JJing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 373  
Dis. / Ant. : 3m 37062 Ant. pol. : VERTICAL  
Limit : EN55032 B(3M)  
Env. / Ins. : Temp:22.4°C,Humi:55%;Press:101.1KPa  
Engineer : Aiden Yan  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.00	19.30	0.73	11.26	31.29	40.00	8.71	QP
2	61.04	6.00	1.08	14.73	21.81	40.00	18.19	QP
3	129.91	12.80	1.62	11.06	25.48	40.00	14.52	QP
4	144.46	12.10	1.73	7.43	21.26	40.00	18.74	QP
5	257.95	14.12	2.37	1.19	17.68	47.00	29.32	QP
6	352.04	14.70	2.83	1.11	18.64	47.00	28.36	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. The emission levels that are 20dB below the official limit are not reported.

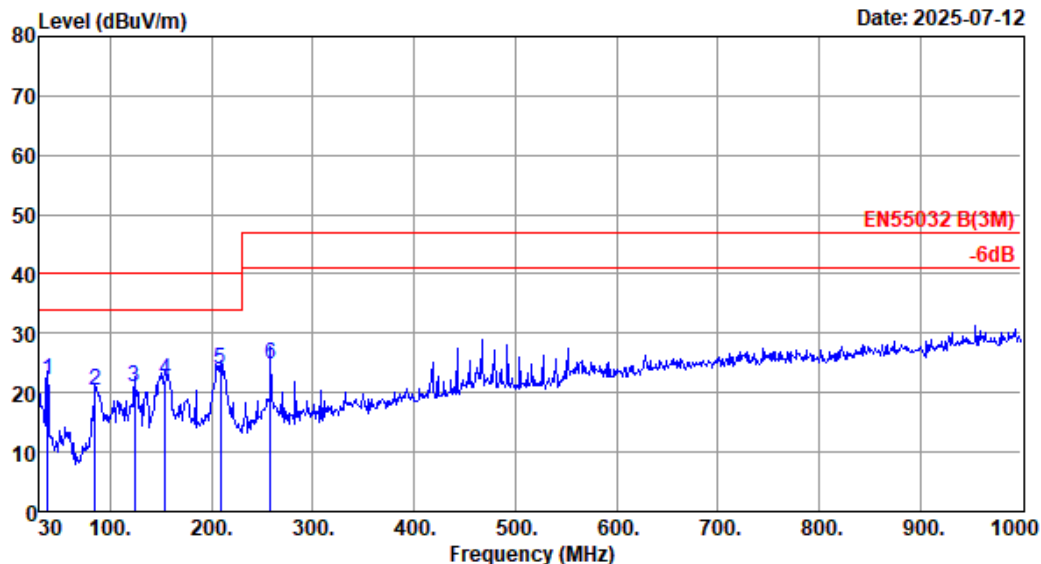
## EST Technology

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Fax: +86-769-83081878

Data: 374

File: \\EMC-966-1\\test data\\2025\\JJing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 374  
Dis. / Ant. : 3m 37062 Ant. pol. : HORIZONTAL  
Limit : EN55032 B(3M)  
Env. / Ins. : Temp:22.4°C,Humi:55%;Press:101.1KPa  
Engineer : Aiden Yan  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	37.76	15.20	0.83	5.96	21.99	40.00	18.01	QP
2	85.29	8.00	1.29	11.02	20.31	40.00	19.69	QP
3	124.09	12.50	1.58	6.97	21.05	40.00	18.95	QP
4	154.16	11.10	1.78	9.19	22.07	40.00	17.93	QP
5	208.48	9.30	2.11	12.45	23.86	40.00	16.14	QP
6	257.95	14.12	2.37	8.42	24.91	47.00	22.09	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. The emission levels that are 20dB below the official limit are not reported.

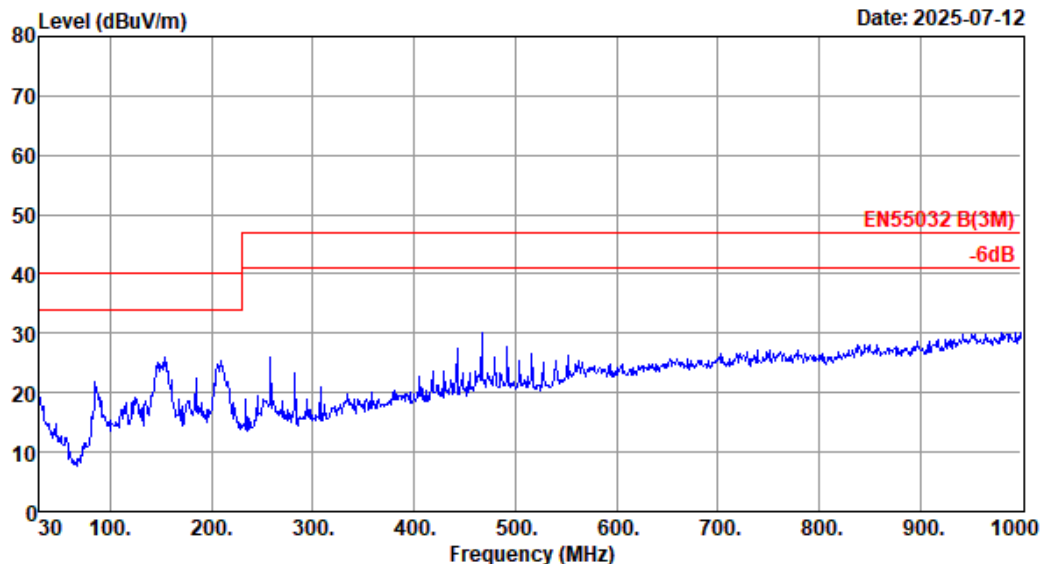
# EST Technology

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Tel: +86-769-83081888  
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Data: 375

File: \\EMC-966-1\test data\2025\JJing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 375  
 Dis. / Ant. : 3m 37062 Ant. pol. : HORIZONTAL  
 Limit : EN55032 B(3M)  
 Env. / Ins. : Temp:22.4°C.Humi:55%;Press:101.1KPa  
 Engineer : Aiden Yan  
 EUT : LINE ARRAY SPEAKER SYSTEMS  
 Power : AC 230V/50Hz  
 M/N : L-ARRAY 28HA  
 Test Mode : AUDIO INPUT

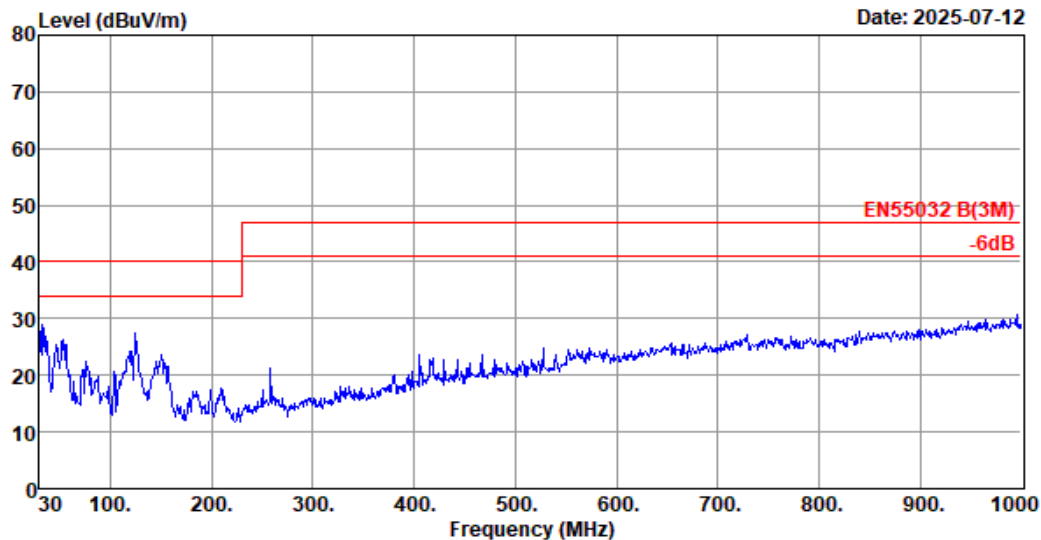
# EST Technology

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Data: 376

File: \\EMC-966-1\test data\2025\J\Jing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 376  
Dis. / Ant. : 3m 37062 Ant. pol. : VERTICAL  
Limit : EN55032 B(3M)  
Env. / Ins. : Temp:22.4°C.Humi:55%;Press:101.1KPa  
Engineer : Aiden Yan  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

#### 4.4. Radiated Emission Test (above 1GHz)

**RESULT** : **Pass**  
Test procedure : EN 55032:2015+A1:2020  
Frequency range : 1GHz-6GHz  
Test Site : 1#966 Chamber  
Limits : EN 55032:2015+A1:2020 Class B

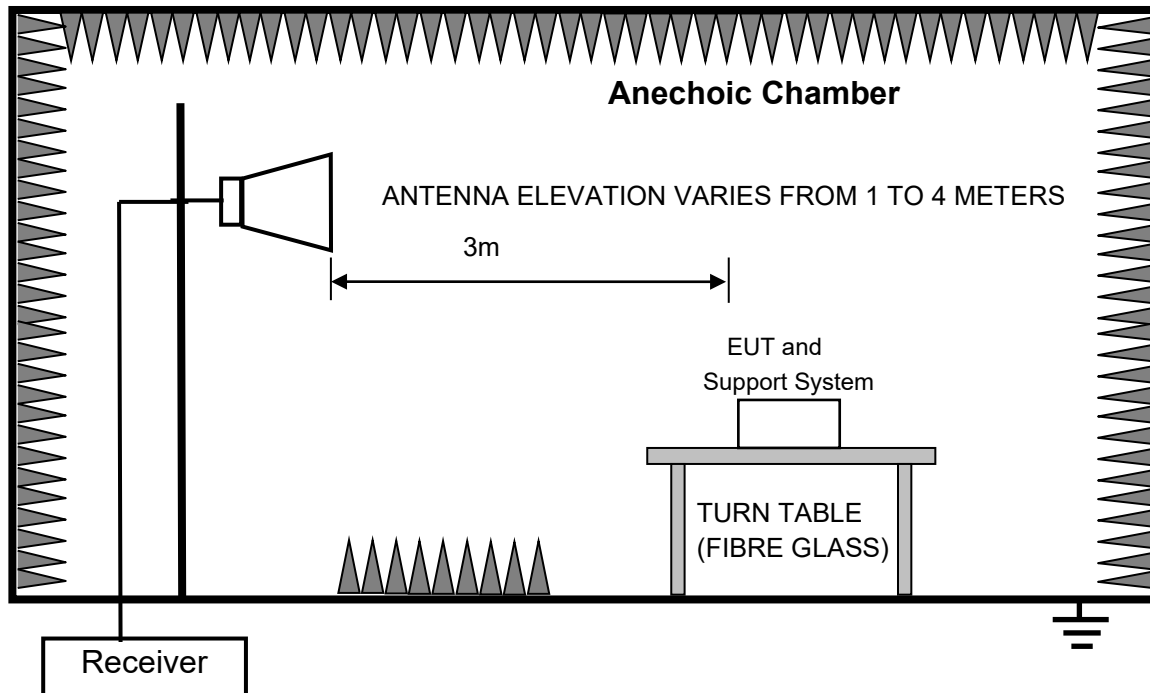
##### Test Setup

Date of test : Jul. 12, 2025  
Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
Operation Mode : AUDIO INPUT

The EUT was placed on a turn table which was 0.8 m above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 m away from the receiving antenna which was mounted on an antenna tower. The measuring antenna moved up and down to find out the maximum emission level. It moved from 1 m to 4 m for both horizontal and vertical polarizations.

The EUT was tested in the Chamber Site. It was pre-scanned with a Peak detector and Average detector from the spectrum, and all the final readings from the test receiver were measured with the Peak detector and Average detector.

The bandwidth setting on the test receiver was 1MHz(above 1GHz).



**Note: Test uncertainty:  $\pm 4.78\text{dB}$  at a level of confidence of 95%(1#966).**

## Test Data

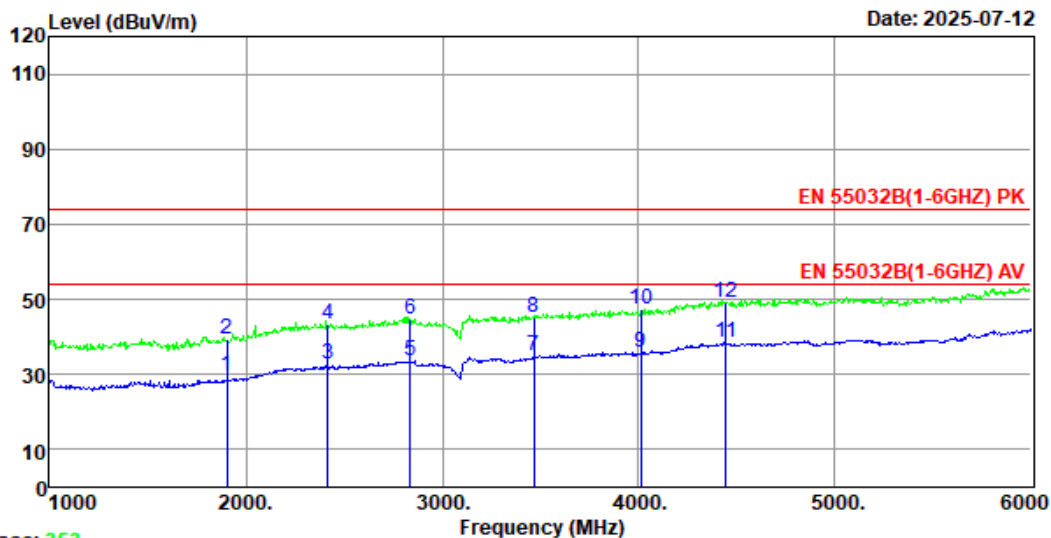
EST Technology

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Data: 354

File: \\EMC-966-1\\test data\\2025\\J\\Jing Heng.EM6 (412)

Date: 2025-07-12



Site no. : 1# 966 Chamber Data no. : 354  
Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : VERTICAL  
Limit : EN 55032B(1-6GHZ) PK  
Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
Engineer : Ted Deng  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 18SA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1905.00	26.00	3.05	0.72	29.77	54.00	24.23	Average
2	1905.00	26.00	3.05	10.26	39.31	74.00	34.69	Peak
3	2415.00	28.10	3.71	0.88	32.69	54.00	21.31	Average
4	2415.00	28.10	3.71	11.47	43.28	74.00	30.72	Peak
5	2835.00	28.57	4.32	0.93	33.82	54.00	20.18	Average
6	2835.00	28.57	4.32	11.95	44.84	74.00	29.16	Peak
7	3465.00	29.17	4.59	1.29	35.05	54.00	18.95	Average
8	3465.00	29.17	4.59	11.55	45.31	74.00	28.69	Peak
9	4010.00	30.37	4.63	0.88	35.88	54.00	18.12	Average
10	4010.00	30.37	4.63	12.39	47.39	74.00	26.61	Peak
11	4445.00	31.50	4.87	2.21	38.58	54.00	15.42	Average
12	4445.00	31.50	4.87	12.66	49.03	74.00	24.97	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. Margin= Limit - Emission Level.  
3. The emission levels that are 20dB below the official limit are not reported.



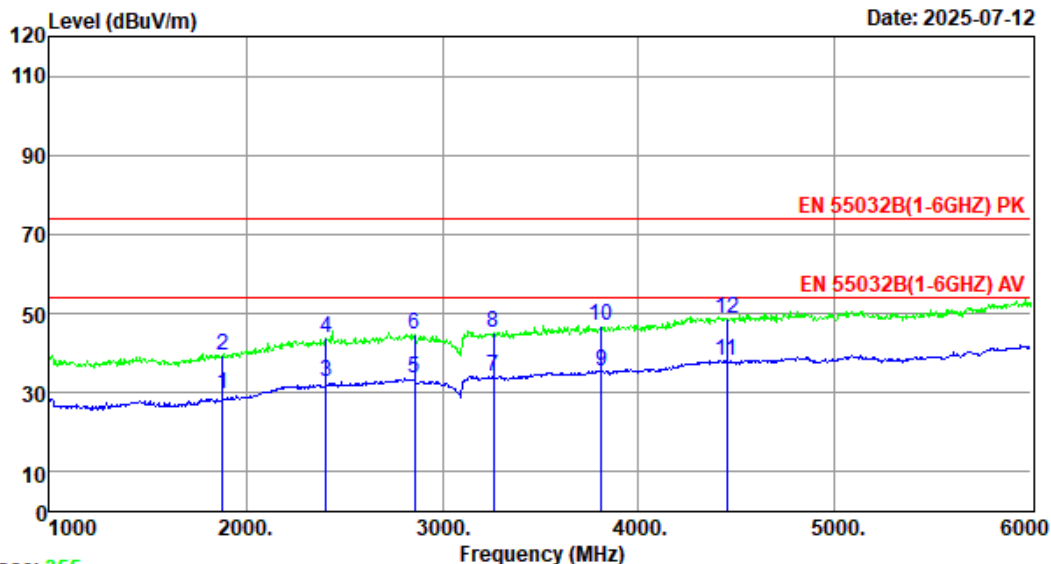
EST Technology

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Data: 356

File: \\EMC-966-1\\test data\\2025\\J\\Jing Heng.EM6 (412)

Date: 2025-07-12



Trace: 355

Site no. : 1# 966 Chamber Data no. : 356  
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : HORIZONTAL  
 Limit : EN 55032B(1-6GHZ) PK  
 Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
 Engineer : Ted Deng  
 EUT : LINE ARRAY SPEAKER SYSTEMS  
 Power : AC 110V/60Hz  
 M/N : L-ARRAY 18SA  
 Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Remark
1	1880.00	25.90	3.03	0.89	29.82	54.00	24.18	Average
2	1880.00	25.90	3.03	10.33	39.26	74.00	34.74	Peak
3	2410.00	28.10	3.71	0.96	32.77	54.00	21.23	Average
4	2410.00	28.10	3.71	11.92	43.73	74.00	30.27	Peak
5	2860.00	28.60	4.34	0.53	33.47	54.00	20.53	Average
6	2860.00	28.60	4.34	11.75	44.69	74.00	29.31	Peak
7	3260.00	29.03	4.58	0.65	34.26	54.00	19.74	Average
8	3260.00	29.03	4.58	11.52	45.13	74.00	28.87	Peak
9	3810.00	30.10	4.61	0.73	35.44	54.00	18.56	Average
10	3810.00	30.10	4.61	12.25	46.96	74.00	27.04	Peak
11	4450.00	31.50	4.87	1.78	38.15	54.00	15.85	Average
12	4450.00	31.50	4.87	12.37	48.74	74.00	25.26	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. Margin= Limit - Emission Level.

3. The emission levels that are 20dB below the official limit are not reported.

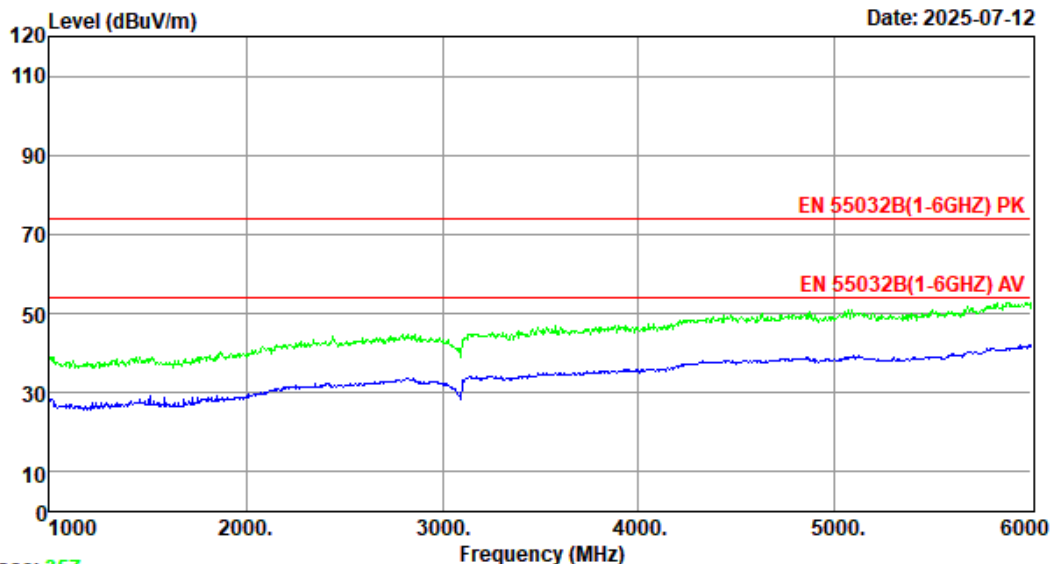
# EST Technology

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Data: 358

File: \\EMC-966-1\test data\2025\J\Jing Heng.EM6 (412)

Date: 2025-07-12



Trace: 357

Site no. : 1# 966 Chamber Data no. : 358  
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : HORIZONTAL  
 Limit : EN 55032B(1-6GHZ) PK  
 Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
 Engineer : Ted Deng  
 EUT : LINE ARRAY SPEAKER SYSTEMS  
 Power : AC 230V/50Hz  
 M/N : L-ARRAY 18SA  
 Test Mode : AUDIO INPUT

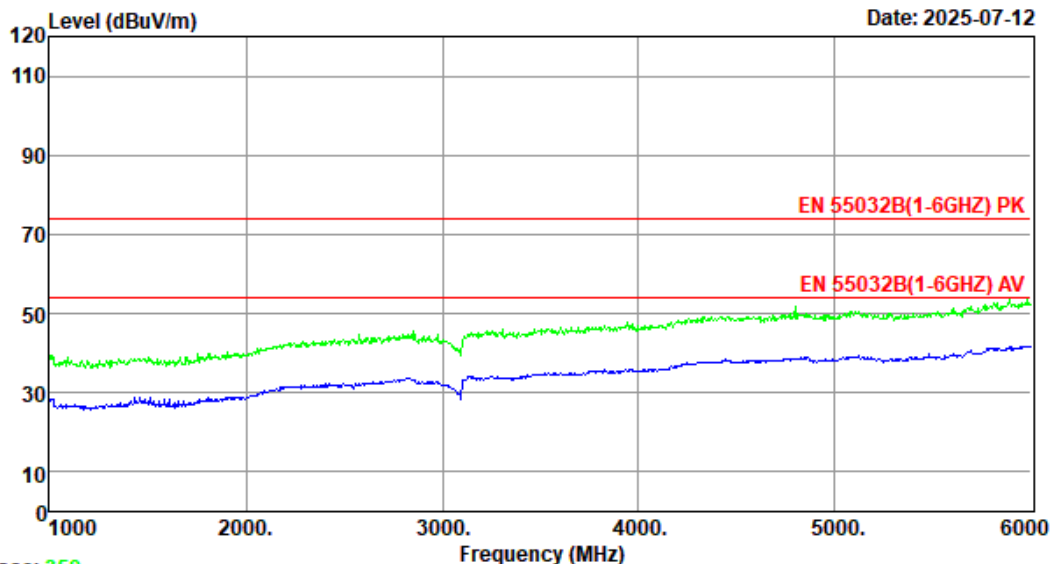
# EST Technology

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Data: 360

File: \\EMC-966-1\test data\2025\JJing Heng.EM6 (412)

Date: 2025-07-12



Trace: 359

Site no. : 1# 966 Chamber Data no. : 360  
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : VERTICAL  
 Limit : EN 55032B(1-6GHZ) PK  
 Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
 Engineer : Ted Deng  
 EUT : LINE ARRAY SPEAKER SYSTEMS  
 Power : AC 230V/50Hz  
 M/N : L-ARRAY 18SA  
 Test Mode : AUDIO INPUT

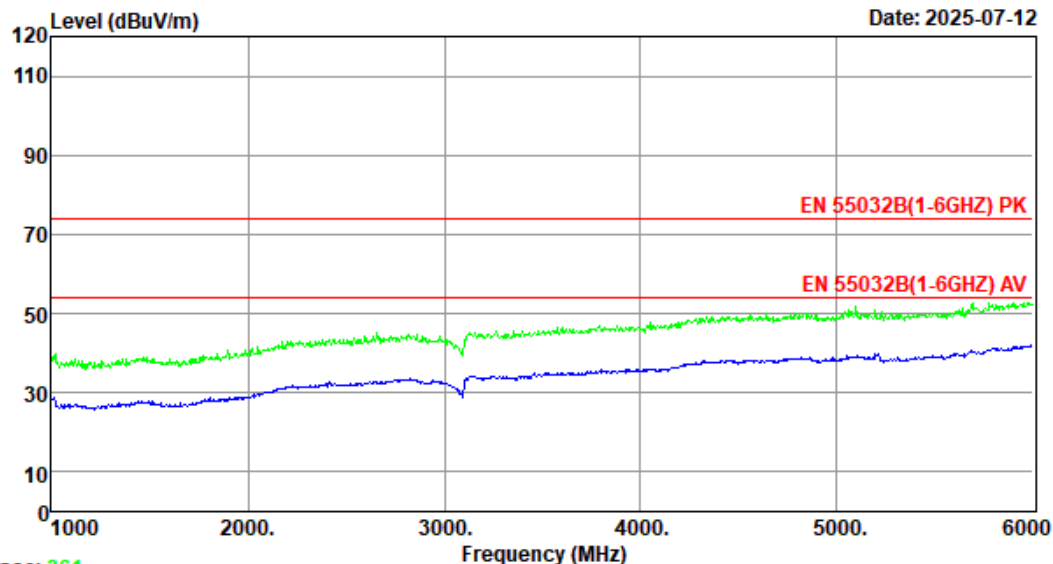
# EST Technology

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Data: 362

File: \\EMC-966-1\test data\2025\JJing Heng.EM6 (412)

Date: 2025-07-12



Trace: 361

Site no. : 1# 966 Chamber Data no. : 362  
Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : VERTICAL  
Limit : EN 55032B(1-6GHZ) PK  
Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
Engineer : Ted Deng  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 230V/50Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

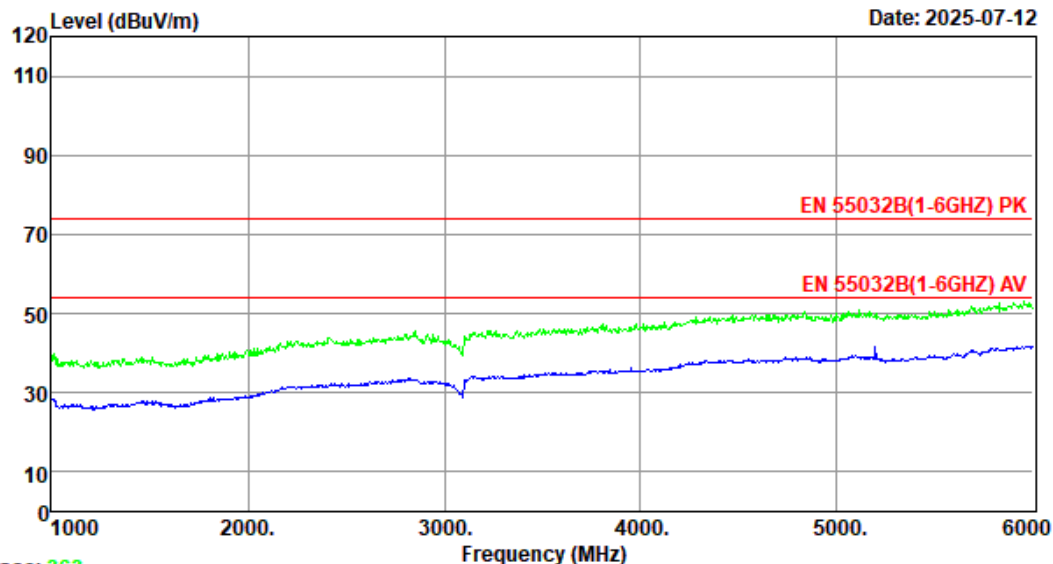
# EST Technology

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Data: 364

File: \\EMC-966-1\test data\2025\J\Jing Heng.EM6 (412)

Date: 2025-07-12



Trace: 363

Site no. : 1# 966 Chamber Data no. : 364  
 Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : HORIZONTAL  
 Limit : EN 55032B(1-6GHZ) PK  
 Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
 Engineer : Ted Deng  
 EUT : LINE ARRAY SPEAKER SYSTEMS  
 Power : AC 230V/50Hz  
 M/N : L-ARRAY 28HA  
 Test Mode : AUDIO INPUT

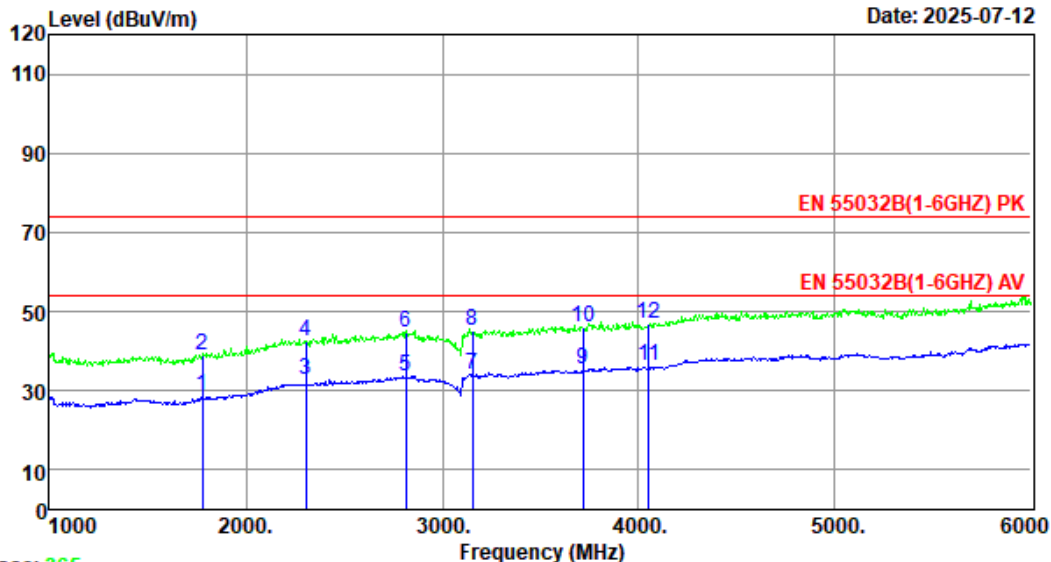
EST Technology

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Data: 366

File: \\EMC-966-1\\test data\\2025\\J\\Jing Heng.EM6 (412)

Date: 2025-07-12



Trace: 365

Site no. : 1# 966 Chamber Data no. : 366  
Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : HORIZONTAL  
Limit : EN 55032B(1-6GHZ) PK  
Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
Engineer : Ted Deng  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1780.00	25.60	2.95	0.07	28.62	54.00	25.38	Average
2	1780.00	25.60	2.95	10.26	38.81	74.00	35.19	Peak
3	2305.00	28.27	3.57	0.95	32.79	54.00	21.21	Average
4	2305.00	28.27	3.57	10.81	42.65	74.00	31.35	Peak
5	2815.00	28.53	4.29	0.79	33.61	54.00	20.39	Average
6	2815.00	28.53	4.29	11.70	44.52	74.00	29.48	Peak
7	3155.00	29.20	4.57	0.35	34.12	54.00	19.88	Average
8	3155.00	29.20	4.57	11.23	45.00	74.00	29.00	Peak
9	3715.00	29.97	4.60	0.67	35.24	54.00	18.76	Average
10	3715.00	29.97	4.60	11.32	45.89	74.00	28.11	Peak
11	4050.00	30.50	4.65	1.18	36.33	54.00	17.67	Average
12	4050.00	30.50	4.65	11.99	47.14	74.00	26.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. Margin= Limit - Emission Level.

3. The emission levels that are 20dB below the official limit are not reported.

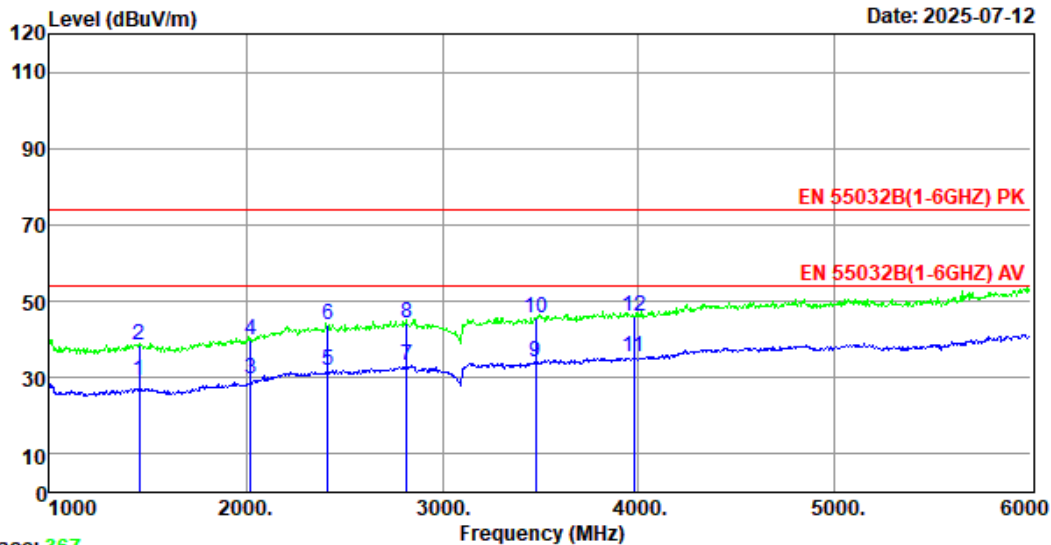
EST Technology

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Tel: +86-769-83081888  
Fax: +86-769-83081878

Data: 368

File: \\EMC-966-1\test data\2025\JJing Heng.EM6 (412)

Date: 2025-07-12



Trace: 367

Site no. : 1# 966 Chamber Data no. : 368  
Dis. / Ant. : 3m 9120D 1-18G Ant. pol. : VERTICAL  
Limit : EN 55032B(1-6GHZ) PK  
Env. / Ins. : Temp:22.4°C.Humi:53%;Press:101.1KPa  
Engineer : Ted Deng  
EUT : LINE ARRAY SPEAKER SYSTEMS  
Power : AC 110V/60Hz  
M/N : L-ARRAY 28HA  
Test Mode : AUDIO INPUT

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1455.00	26.30	2.69	0.28	29.27	54.00	24.73	Average
2	1455.00	26.30	2.69	9.35	38.34	74.00	35.66	Peak
3	2025.00	26.50	3.15	0.18	29.83	54.00	24.17	Average
4	2025.00	26.50	3.15	10.22	39.87	74.00	34.13	Peak
5	2415.00	28.10	3.71	0.04	31.85	54.00	22.15	Average
6	2415.00	28.10	3.71	11.93	43.74	74.00	30.26	Peak
7	2820.00	28.53	4.29	0.38	33.20	54.00	20.80	Average
8	2820.00	28.53	4.29	11.29	44.11	74.00	29.89	Peak
9	3475.00	29.33	4.59	0.12	34.04	54.00	19.96	Average
10	3475.00	29.33	4.59	11.63	45.55	74.00	28.45	Peak
11	3975.00	30.35	4.62	0.26	35.23	54.00	18.77	Average
12	3975.00	30.35	4.62	10.87	45.84	74.00	28.16	Peak

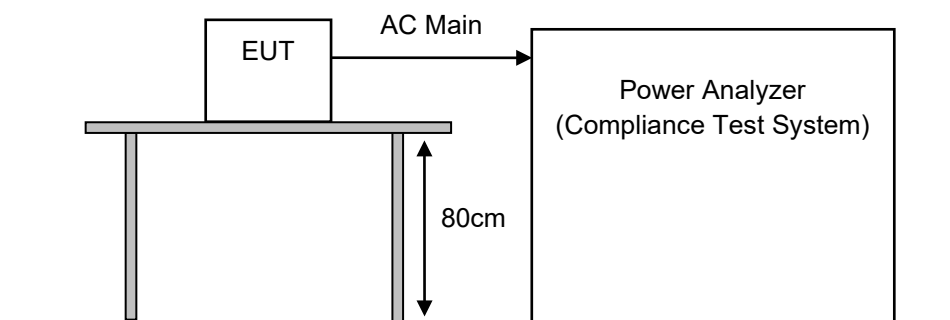
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. Margin= Limit - Emission Level.

3. The emission levels that are 20dB below the official limit are not reported.

#### 4.5. Harmonic Current Emissions on AC Mains Test

**RESULT** : **N/A**  
Test procedure : EN IEC 61000-3-2:2019+A1:2021+A2:2024  
Measured harmonics : 1 ~ 40<sup>th</sup>  
Limits : EN IEC 61000-3-2:2019+A1:2021+A2:2024



There is no need for Harmonics test to be performed on this product (More than 1000 w professional equipment) in accordance with EN IEC 61000-3-2:2019+A1:2021+A2:2024.

For further details, please refer to Clause 7 of EN IEC 61000-3-2:2019+A1:2021+A2:2024 which states:

“For the following categories of equipment, limits are not specified in this edition of the standard:

- professional equipment with a total rated power greater than 1 kW.

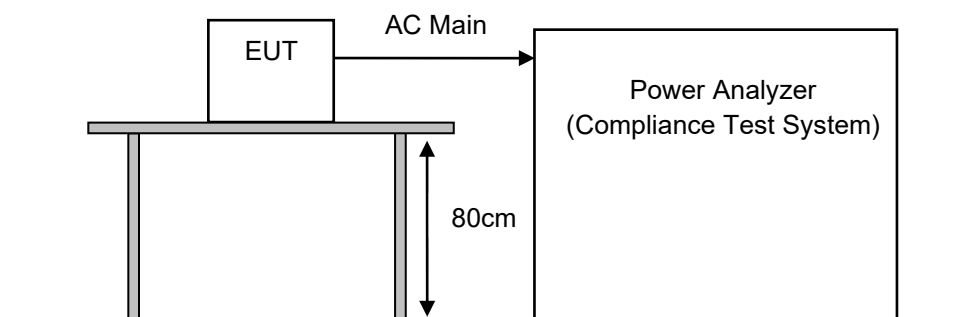


#### 4.6. Voltage Fluctuations and Flicker on AC Mains Test

**RESULT** : **Pass**(Please refer to the following page)

Test procedure : EN 61000-3-3:2013+A1:2019+A2:2021

Limits : EN 61000-3-3:2013+A1:2019+A2:2021



## Test Data

### Flicker Test Summary per IEC61000-3-3:2013/AMD1:2017 (Run time)

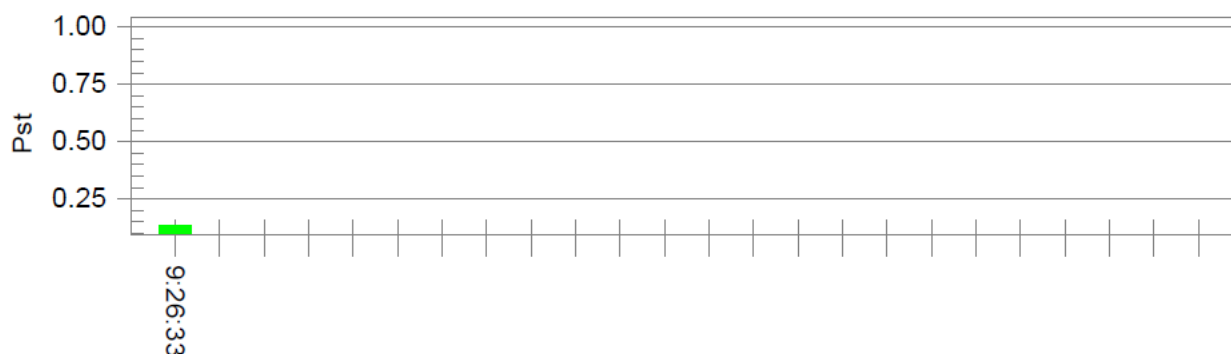
**EUT: LINE ARRAY SPEAKER SYSTEMS M/N: L-ARRAY 28HA**      Tested by: Fog Li  
**Test category: All parameters (European limits)**      Test Margin: 100  
**Test date: 2025/7/14**      Start time: 9:16:12      End time: 9:26:39  
**Test duration (min): 10**      Data file name: F-000307.cts\_data  
**Comment: AUDIO INPUT**  
**Customer: Dongguan Jingheng Electron Co.,Ltd**

Test Result: Pass

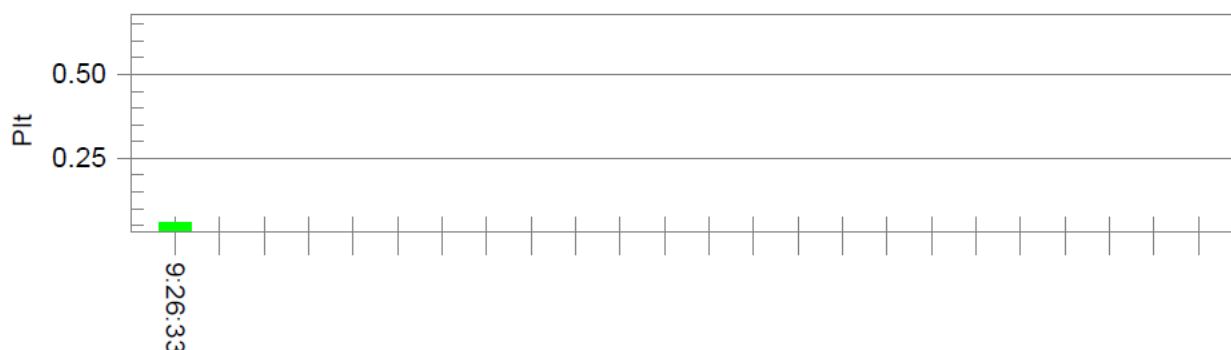
Status: Test Completed

Pst<sub>i</sub> and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	230.27		
T-max (mS):	0	Test limit (mS):	500.0      Pass
Highest dc (%):	0.00	Test limit (%):	3.30      Pass
Highest dmax (%):	0.00	Test limit (%):	4.00      Pass
Highest Pst (10 min. period):	0.136	Test limit:	1.000      Pass
Highest Plt (2 hr. period):	0.059	Test limit:	0.650      Pass

## Flicker Test Summary per IEC61000-3-3:2013/AMD1:2017 (Run time)

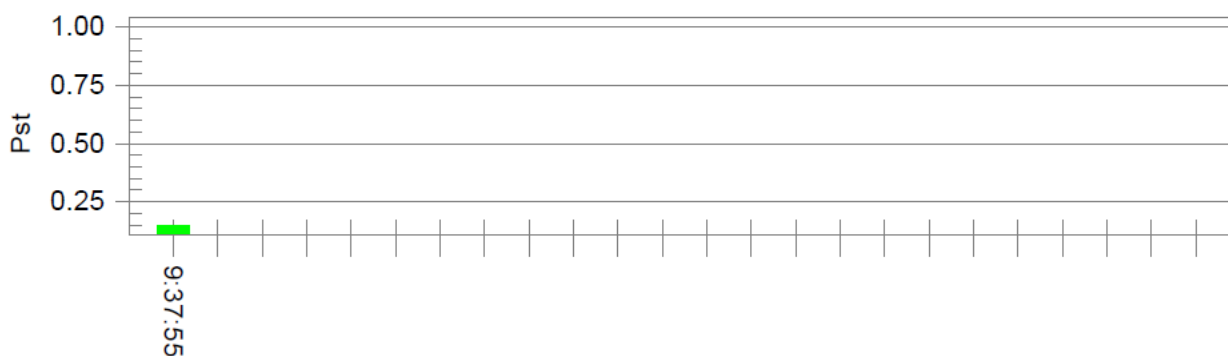
**EUT: LINE ARRAY SPEAKER SYSTEMS M/N: L-ARRAY 18SA**      Tested by: Fog Li  
**Test category: All parameters (European limits)**      Test Margin: 100  
**Test date: 2025/7/14**      Start time: 9:27:34      End time: 9:38:02  
**Test duration (min): 10**      Data file name: F-000308.cts\_data  
**Comment: AUDIO INPUT**  
**Customer: Dongguan Jingheng Electron Co.,Ltd**

**Test Result: Pass**

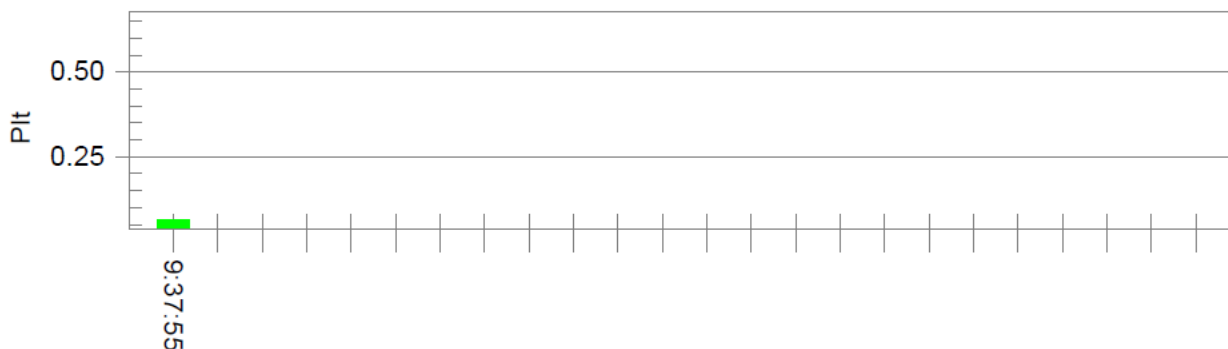
**Status: Test Completed**

**Pst<sub>i</sub> and limit line**

**European Limits**



**Plt and limit line**



**Parameter values recorded during the test:**

**Vrms at the end of test (Volt):** 230.23

**T-max (mS):** 0

**Highest dc (%):** 0.00

**Highest dmax (%):** 0.00

**Highest Pst (10 min. period):** 0.149

**Highest Plt (2 hr. period):** 0.065

**Test limit (mS):** 500.0      **Pass**

**Test limit (%):** 3.30      **Pass**

**Test limit (%):** 4.00      **Pass**

**Test limit:** 1.000      **Pass**

**Test limit:** 0.650      **Pass**

## 5. IMMUNITY TEST RESULT

### 5.1. Description of Performance Criteria:

#### **Performance criteria A**

The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

For audio output device: The measured acoustic interference ratio and/or the measured electrical interference during the test shall be -20dB or better (see note1)

#### **Performance criteria B**

During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test.

After the test, the equipment shall continue to operate as intended without operator intervention; no degradation of performance or loss of function is allowed, below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance.

If the minimum performance level (or the permissible performance loss), or recovery time, is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

#### **Performance criteria C**

Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. A reboot or re-start operation is allowed.

Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

**Note:** This performance criterion only using for Continuous inducted RF disturbances and Continuous RF electromagnetic field disturbances item.

## 5.2. Electrostatic Discharge Immunity Test

<b>RESULT</b>	<b>: Pass</b>
Test procedure	: EN 55035:2017+A11:2020
Basic standard	: EN 61000-4-2:2009
Test specification	: +/-4.0kV(Contact discharge) +/-8.0kV(Air discharge)
Number of discharges	: ≥10(Air discharge for single polarity discharge) ≥10 (Contact discharge for single polarity discharge)
Polarity	: Positive/Negative
Performance criterion	: B

### Test Setup

Date of test	: Jul. 14, 2025
Model No.	: L-ARRAY 28HA, L-ARRAY 18SA
Input Voltage	: AC 230V/50Hz, AC 110V/60Hz
Operation Mode	: AUDIO INPUT
Temperature	: 25.1°C
Humidity	: 43%
Pressure	: 101.10kPa

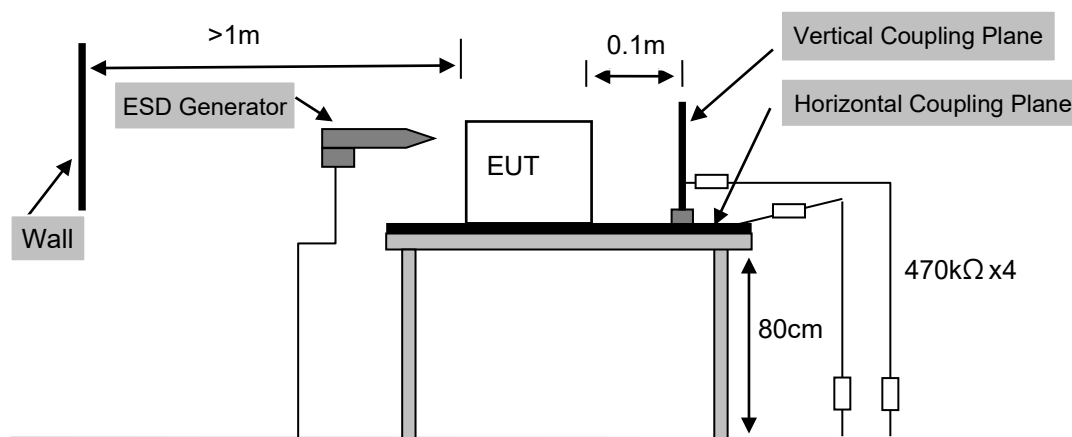


Table 1: Electrostatic Discharge Immunity Test Result

Discharge Location		Type of discharge	Result
HCP	4 points	Contact	Pass
VCP	4 points	Contact	Pass
AUDIO INPUT	1 point	Contact	Pass
AUDIO LINK	1 point	Contact	Pass
DATA INPUT	1 point	Contact	Pass
DATA LINK	1 point	Contact	Pass
AC MAINS	1 point	Contact	Pass
SCREW	26 points	Contact	Pass
MRTAL	8 points	Contact	Pass
LIGHT	5 points	Air	Pass
SLOT	8 points	Air	Pass

Remark: 1. The Voice appeared noise during the test, but self-recoverable after the test.

2. Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

### 5.3. Radio Frequency Electromagnetic Field Immunity(R/S) Test

**RESULT : Pass**

Test procedure : EN 55035:2017+A11:2020  
 Basic standard : EN IEC 61000-4-3:2020  
 Frequency Range : 80-1000MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz  
 Performance criterion : A  
 Test site : 866 Chamber

#### Test Setup

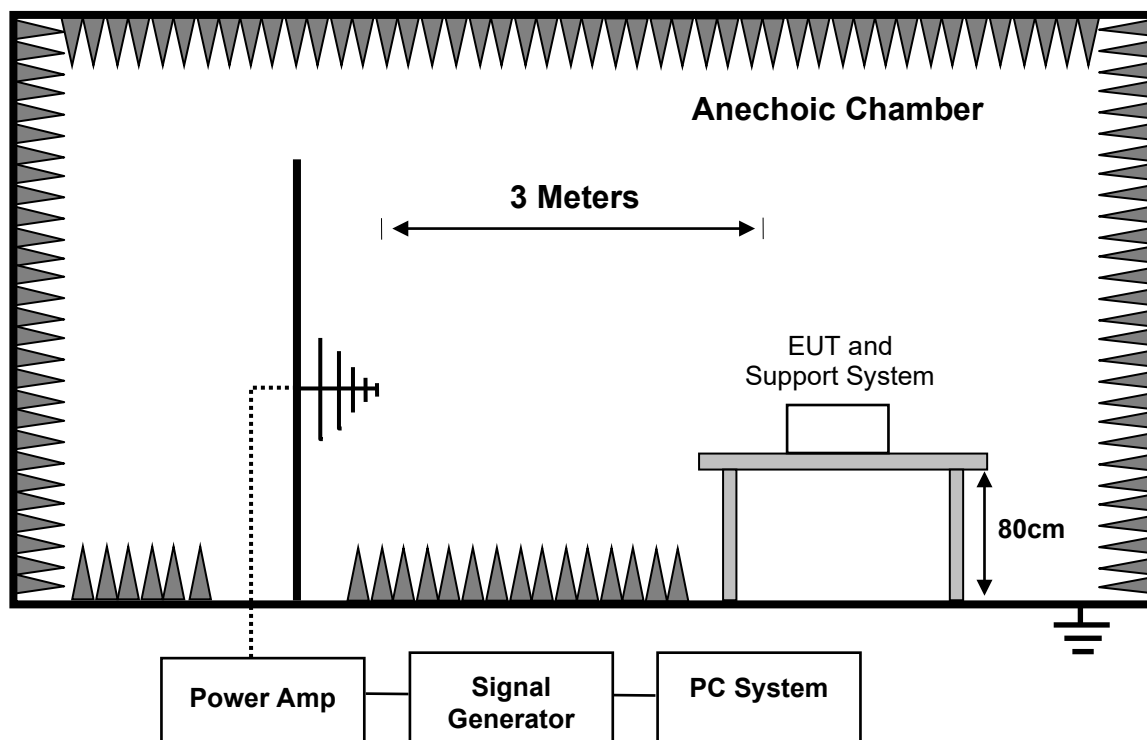
Date of test : Jul. 14, 2025  
 Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
 Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
 Operation Mode : AUDIO INPUT  
 Temperature : 25.4°C  
 Humidity : 52%  
 Pressure : 101.10kPa

The EUT and its auxiliary equipment were placed on a turn table which was 0.8 meter above the ground. The EUT was set 3 m away from the transmitting antenna which was mounted on an antenna tower. Both horizontal and vertical polarization of the antenna were set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.

In order to judge the EUT performance, a CCD camera was used to monitor EUT screen.

All the scanning conditions were as follows:

Condition of Test	Remarks
1. Field Strength	3 V/m (Severity Level 2)
2. Radiated Signal	1 kHz, 80% AM sine wave
3. Scanning Frequency	80 - 1000 MHz
4. Step size	1%
5. Dwell Time	3 seconds



#### Condition of Test

#### Remarks

- |                       |                                       |
|-----------------------|---------------------------------------|
| 6. Field Strength     | 3 V/m (Severity Level 2)              |
| 7. Radiated Signal    | 1 kHz, 80% AM sine wave               |
| 8. Scanning Frequency | 1800MHz, 2600MHz, 3500MHz,<br>5000MHz |
| 9. Step size          | 1%                                    |
| 10. Dwell Time        | at least 3 seconds                    |

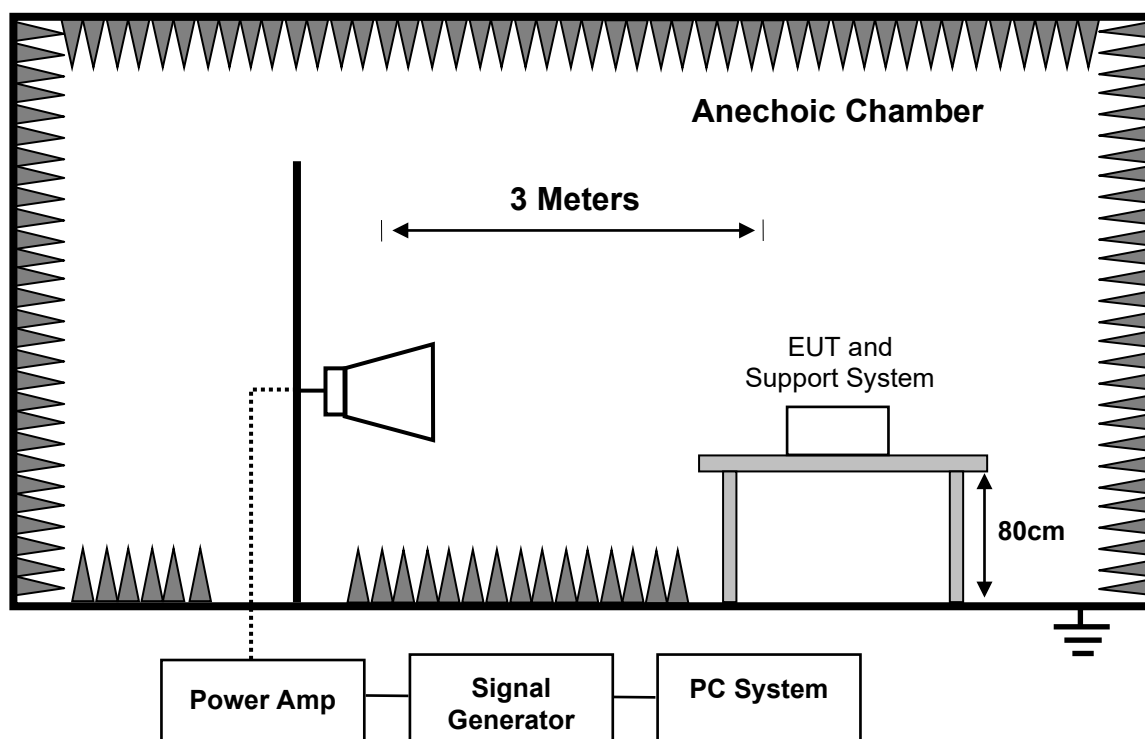




Table 2: Radio Frequency Electromagnetic Field Immunity Test Result

Field Strength (V/m)	Test Frequency (MHz)	Test mode	Polarization of antenna	Reference Level	Audio output	Limit	Interference Ratio (worst case)
3	80-1000MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz	AUDIO INPUT	H	75dBSPL	Speaker	≤ -20dB	-65.3 dB
			V	75dBSPL	Speaker		-61.6 dB

#### 5.4. Electrical Fast Transient/Burst Immunity Test

**RESULT : Pass**

Test procedure : EN 55035:2017+A11:2020  
 Basic standard : EN 61000-4-4:2012  
 Pulse form : Tr/Th = 5/50ns  
 Repetition Frequency : 5 kHz ; (100 kHz : only for single lines of xDSL equipment)  
 Test Duration : 120s  
 Performance criterion : B

#### Test Setup

Date of test : Jul. 14, 2025  
 Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
 Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
 Operation Mode : AUDIO INPUT  
 Temperature : 25.5°C  
 Humidity : 52%  
 Pressure : 101.10kPa

The EUT and its auxiliary equipment were placed 0.1 m high above the ground reference plane which was a min. 2m\*2m metallic sheet with 0.65mm minimum thickness. This reference ground plane shall project beyond the EUT by at least 0.1 m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

#### 1. For power input port:

The EUT was connected to the power mains by using a coupling device which coupled the EFT interference signal to AC power lines. Both polarities of the test voltage were applied during compliance test and the duration of the test were 2mins.

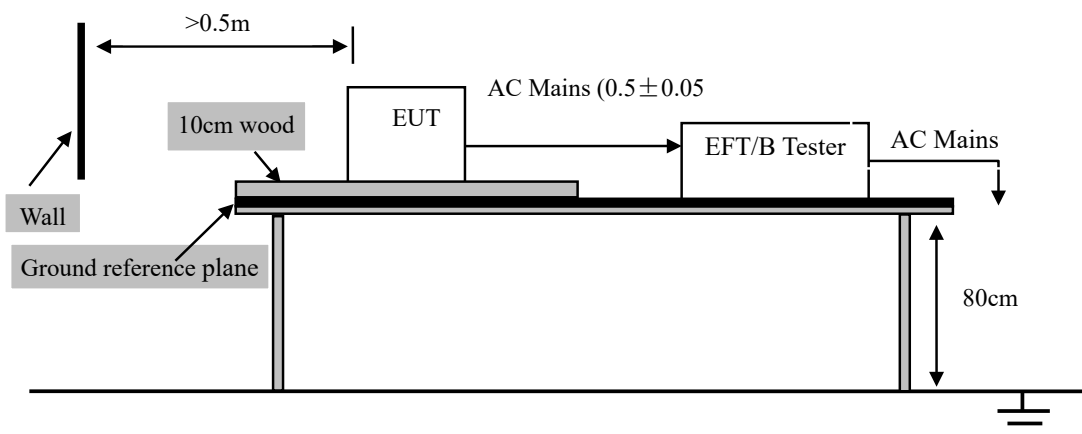


Table 5: Electrical Fast Transient/Burst Immunity Test Result

Coupling Ports		Coupling Voltage	Inject Method	Result
AC Power Ports	L	$\pm 1$ kV	Direct	Pass
	N	$\pm 1$ kV		Pass
	PE	$\pm 1$ kV		Pass
	L-N	$\pm 1$ kV		Pass
	L-PE	$\pm 1$ kV		Pass
	N-PE	$\pm 1$ kV		Pass
	L-N-PE	$\pm 1$ kV		Pass

Remark: The Voice appeared noise during the test, but self-recoverable after the test.

## 5.5. Surge Immunity Test

**RESULT** : **Pass**

Test procedure : EN 55035:2017+A11:2020

Basic standard : EN 61000-4-5:2014+A1:2017

Pulse form :  $T_r/T_d = 1.2/50\mu s$

Test Duration : 60s

Performance criterion : B

### Test Setup

Date of test : Jul. 14, 2025

Model No. : L-ARRAY 28HA, L-ARRAY 18SA

Input Voltage : AC 230V/50Hz, AC 110V/60Hz

Operation Mode : AUDIO INPUT

Temperature : 25.3°C

Humidity : 52%

Pressure : 101.10kPa

2 $\Omega$  effective output impedance of the generator was used for L-N test. 12 $\Omega$  effective output impedance of the generator was used for L-PE, N-PE test.

5 positive and 5 negative (polarity) tests were applied successively synchronized to the voltage phase 90°, 270° to L-N respectively. The repetition rate was 1 per minute during test.

#### 1. For input and AC power ports:

The EUT was connected to the power mains by using a coupling device which coupled the surge interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration was 1 minute.

#### 2. For signal lines and control lines ports:

None.

#### 3. For DC input and DC output power ports:

None.

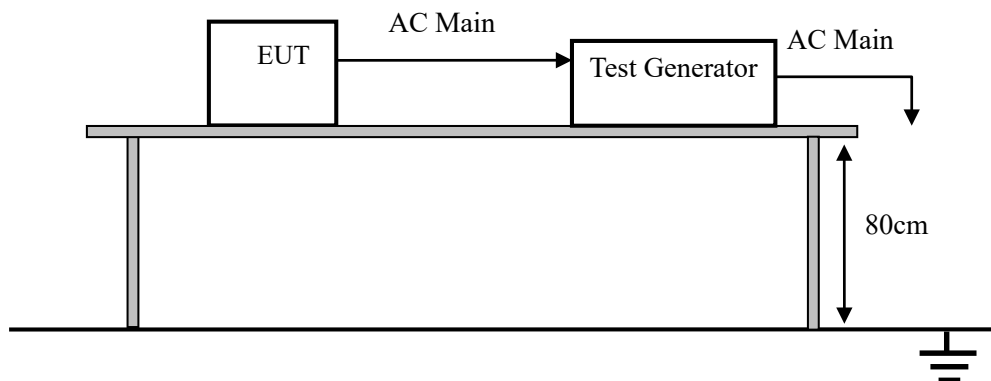


Table 4: Surge Immunity Test Result

Coupling Ports		Coupling Voltage	Coupling Phase / Result			
			0°	90°	180°	270°
AC power ports	L-N	+/-1kV Direct	/	Pass	/	Pass
	L-PE	+/-2kV Direct	/	Pass	/	Pass
	N-PE	+/-2kV Direct	/	Pass	/	Pass

Remark: The Voice appeared noise during the test, but self-recoverable after the test.

## 5.6. Injected Currents Susceptibility Test

<b>RESULT</b>	<b>: Pass</b>
Test procedure	: EN 55035:2017+A11:2020
Basic standard	: EN IEC 61000-4-6:2023
Test specification	: 3 Vr.m.s, 3 Vr.m.s - 1Vr.m.s, 1Vr.m.s, AM 80%, 0.15 MHz - 10 MHz, 10 MHz – 30 MHz, 30 MHz – 80MHz
Performance criterion	: A

### Test Setup

Date of test	: Jul. 14, 2025
Model No.	: L-ARRAY 28HA, L-ARRAY 18SA
Input Voltage	: AC 230V/50Hz, AC 110V/60Hz
Operation Mode	: AUDIO INPUT
Temperature	: 25.4°C
Humidity	: 53%
Pressure	: 101.10kPa

The EUT were placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) was placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT were as short as possible, and their height above the ground reference plane were between 30 and 50 mm (where possible).

The frequency range was swept from 0.15 MHz - 10 MHz, 10 MHz – 30 MHz and 30 MHz – 80MHz using 3V, 3 V - 1V, 1V signal level, and with the disturbance signal 80% amplitude modulated with a 1KHz sine wave.

The rate of sweep shall not exceed  $1.5 \cdot 10^{-3}$  decades/s. Where the frequency was swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.

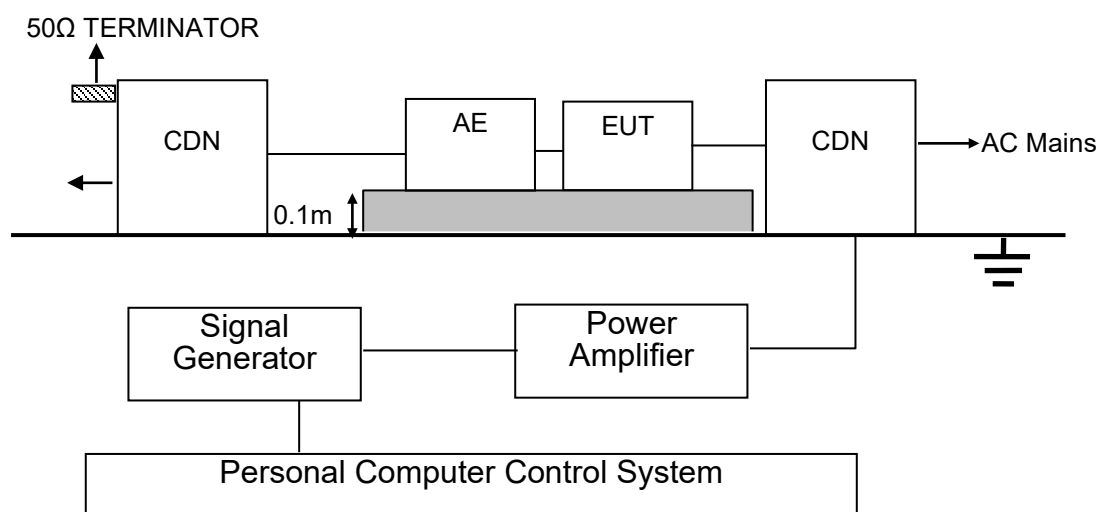


Table 5: Injected Currents Susceptibility Test Result

Voltage (V)	Test Frequency (MHz)	Test mode	Injection Method	Reference Level	Audio output	Limit	Interference Ratio (worst case)
3	0.15 –10 MHz	AUDIO INPUT	CDN-M2	75dBSPL	Speaker	$\leq$ -20dB	-71.2 dB
3 -1	10 –30 MHz						-59.2 dB
1	30 –80 MHz						-63.7 dB

## 5.7. Power Frequency Magnetic Field Immunity Test

**RESULT** : **Pass**  
 Test procedure : EN 55035:2017+A11:2020  
 Basic standard : EN 61000-4-8:2010  
 Test specification : 1 A/m  
 Performance criterion : A

### Test Setup

Date of test : Jul. 14, 2025  
 Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
 Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
 Operation Mode : AUDIO INPUT  
 Temperature : 25.4°C  
 Humidity : 55%  
 Pressure : 101.10kPa

The EUT was subjected to the test magnetic field by using the induction coil of standard dimensions (1m\*1m). The induction coil then was rotated by 90° in order to expose the EUT to the test field with different orientations.

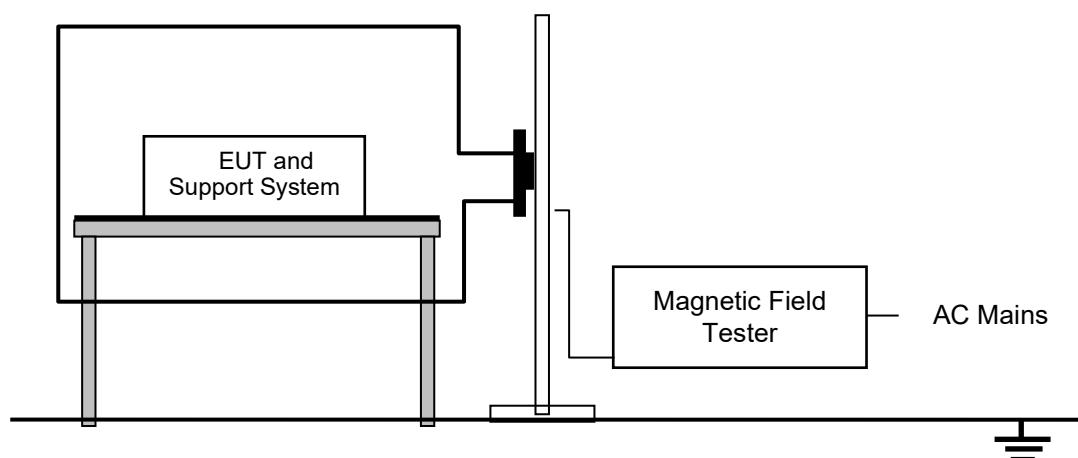


Table 6: Power Frequency Magnetic Field Immunity Test Result

Test Level	Testing Duration	Coil Orientation	Criterion	Result
1A/m	5 mins	X	A	Pass
1A/m	5 mins	Y	A	Pass
1A/m	5 mins	Z	A	Pass

Remark: There was no change compared with initial operation during the test.



## 5.8. Voltage Dips and Short Interruptions Immunity Test

**RESULT** : **Pass**  
Test procedure : EN 55035:2017+A11:2020  
Basic standard : EN IEC 61000-4-11:2020  
Test specification : 0%UT ; 0.5P, Criterion: B  
70%UT; 25P/30P, Criterion: C  
0%UT; 250P/300P, Criterion: C

### Test Setup

Date of test : Jul. 14, 2025  
Model No. : L-ARRAY 28HA, L-ARRAY 18SA  
Input Voltage : AC 230V/50Hz, AC 110V/60Hz  
Operation Mode : AUDIO INPUT  
Temperature : 25.3°C  
Humidity : 51%  
Pressure : 101.10kPa

The interruptions was introduced at selected phase angles with specified duration.

Recorded any degradation of performance.

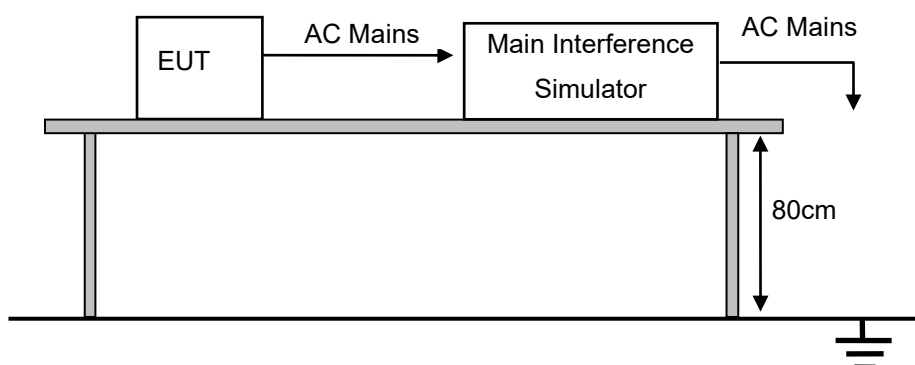


Table 7: Voltage Dips and Short Interruptions Immunity Test Result AC 230V/50Hz

Test Level % UT	Voltage Dips & Short Interruptions % UT	Duration (in period)	Criterion	Result
0	100	0.5P	B	PASS
70	30	25P	C	PASS
0	100	250P	C	PASS

Remark: The EUT was Stopped during the test, but self-recoverable after the test.

Table 8: Voltage Dips and Short Interruptions Immunity Test Result AC 110V/60Hz

Test Level % UT	Voltage Dips & Short Interruptions % UT	Duration (in period)	Criterion	Result
0	100	0.5P	B	PASS
70	30	30P	C	PASS
0	100	300P	C	PASS

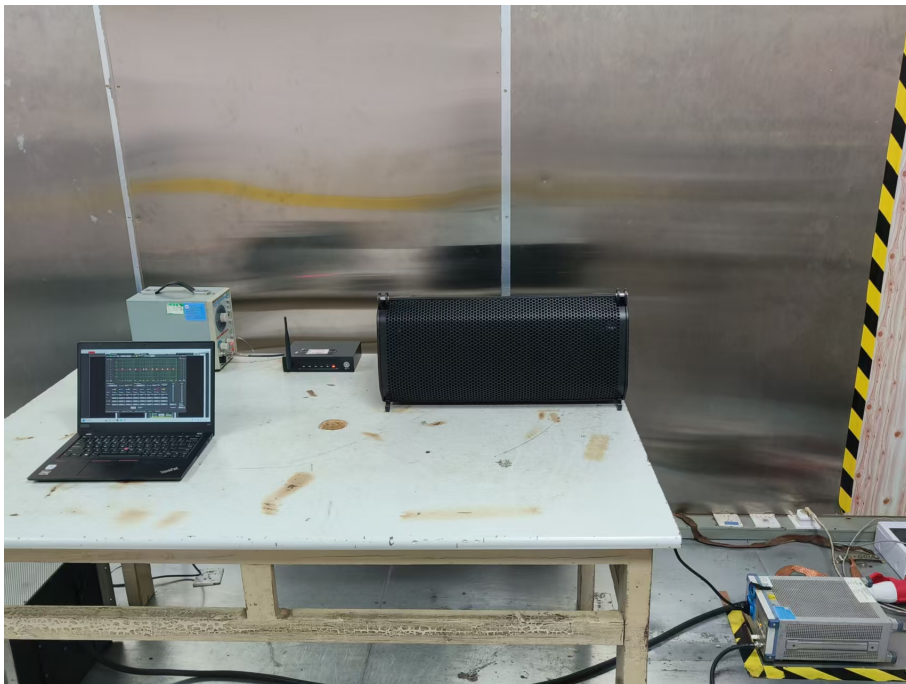
Remark: The EUT was Stopped during the test, but self-recoverable after the test.

## 6. PHOTOGRAPHS OF TEST SET-UP

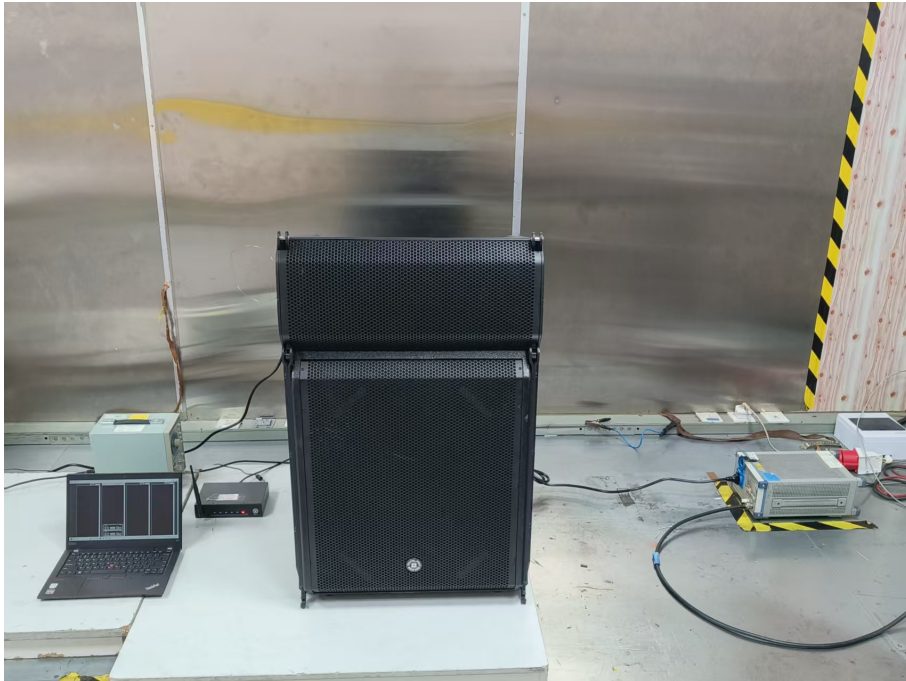
### 6.1.Set-up for Conducted Emission at the Mains Terminals Test



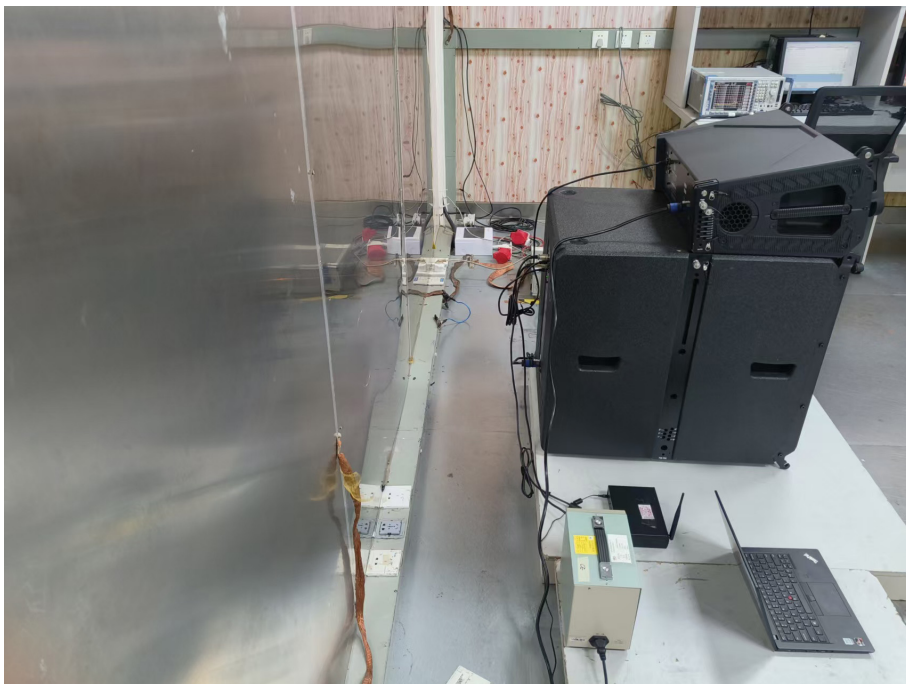
L-ARRAY 28HA



L-ARRAY 28HA



L-ARRAY 18SA



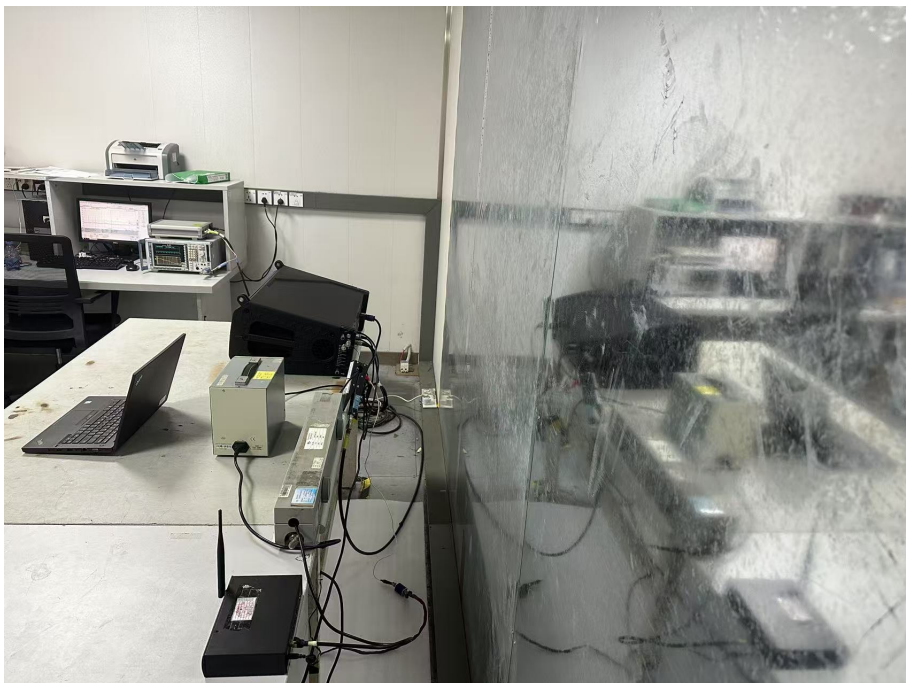
L-ARRAY 18SA



## 6.2.Set-up for Asymmetric Mode Conducted Emissions Test



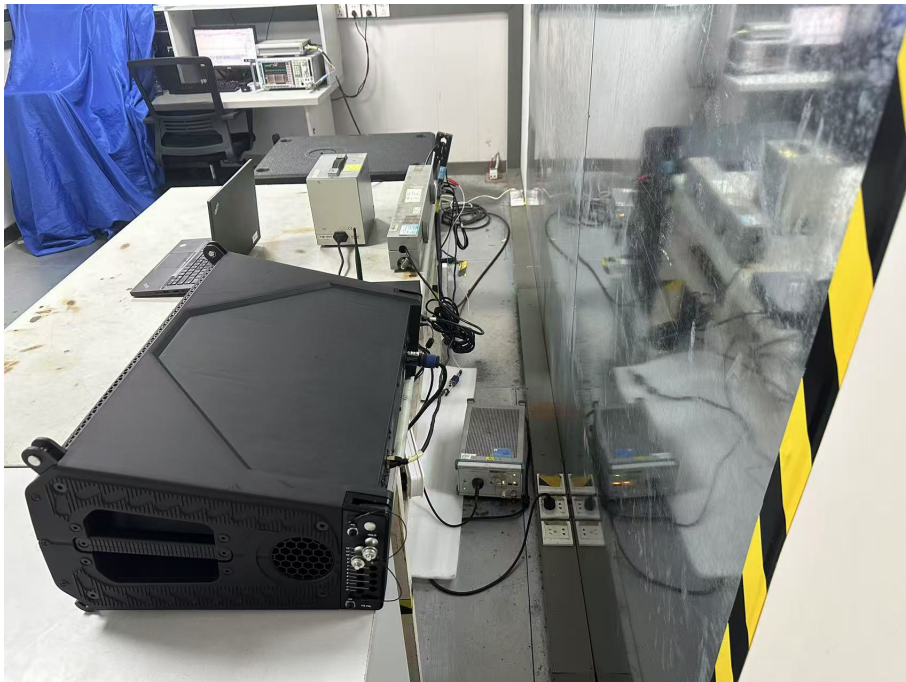
L-ARRAY 28HA



L-ARRAY 28HA



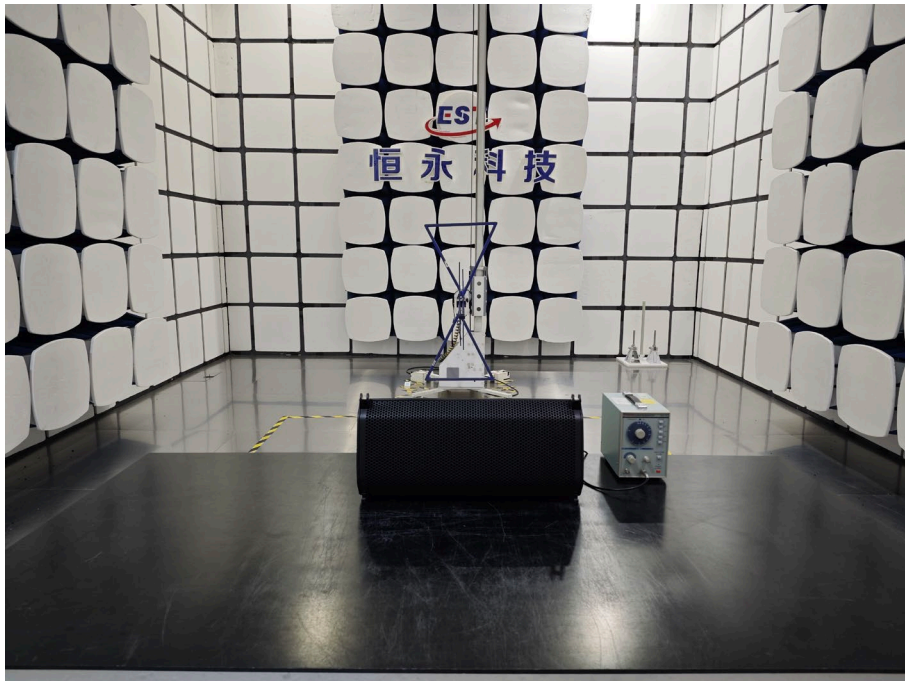
L-ARRAY 18SA



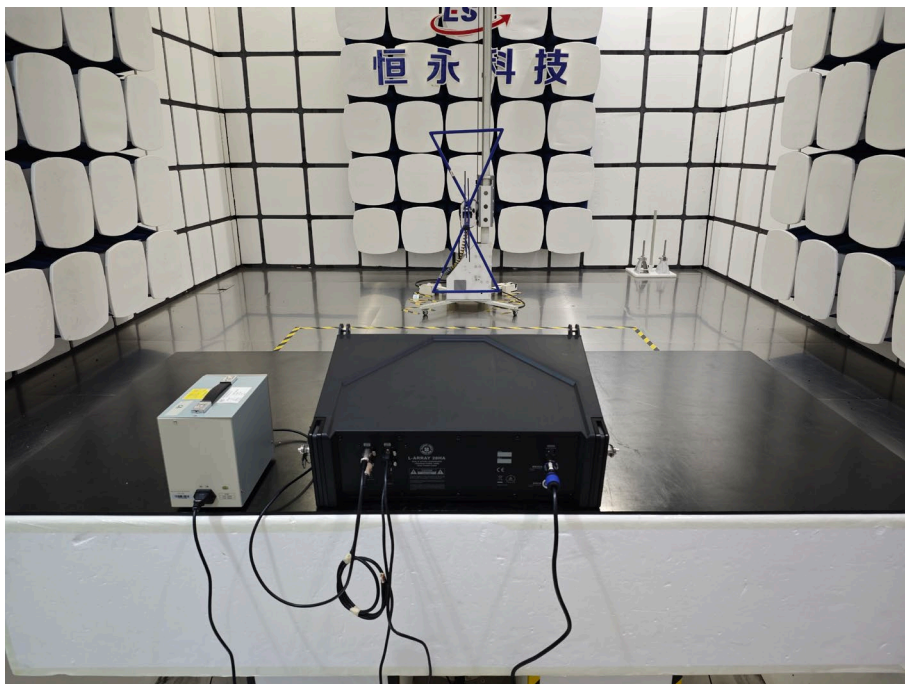
L-ARRAY 18SA



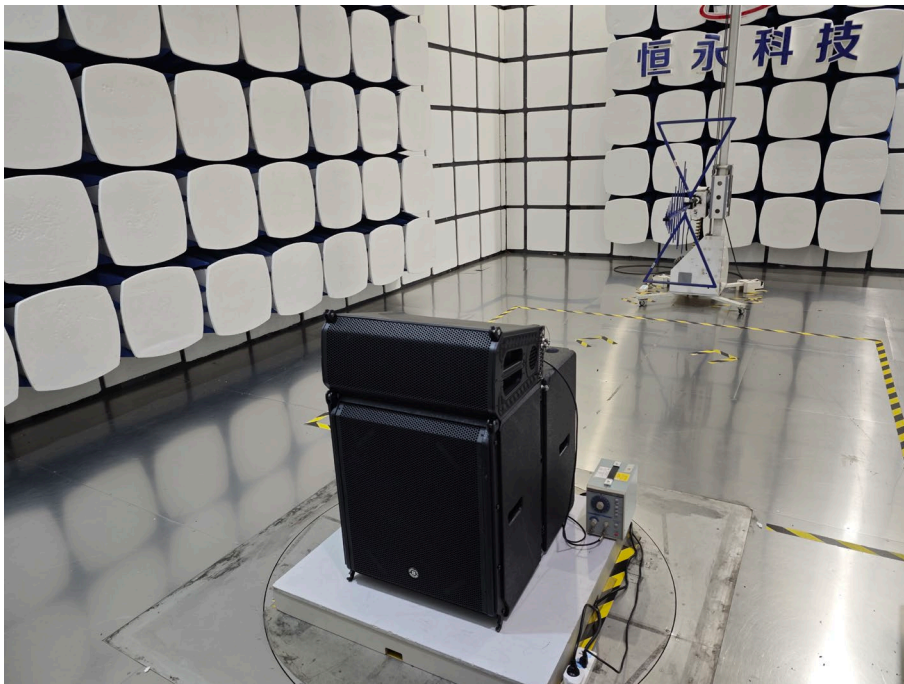
### 6.3.Set-up for Radiated Emission Test



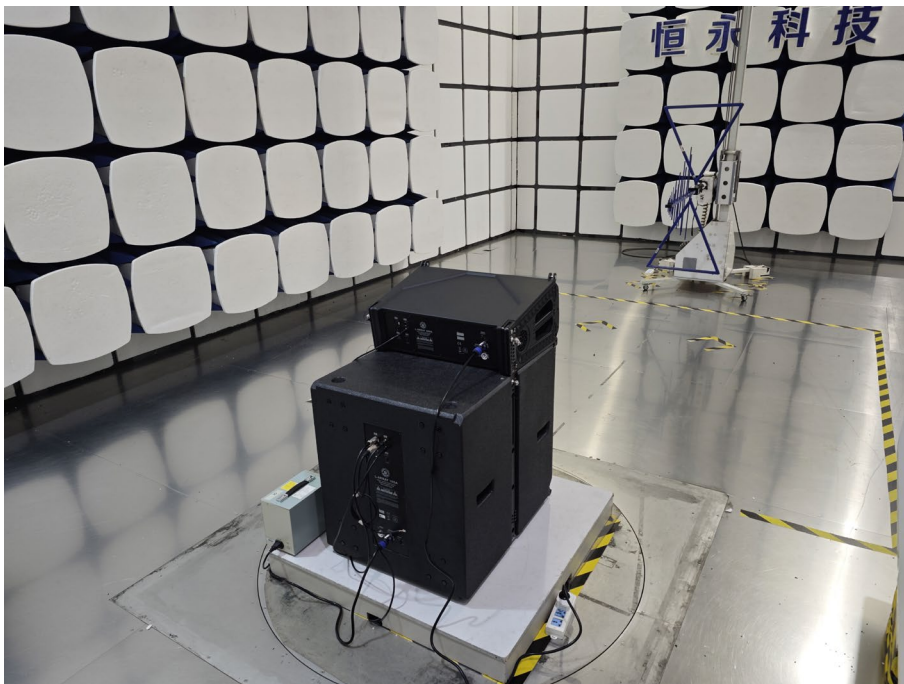
L-ARRAY 28HA



L-ARRAY 28HA



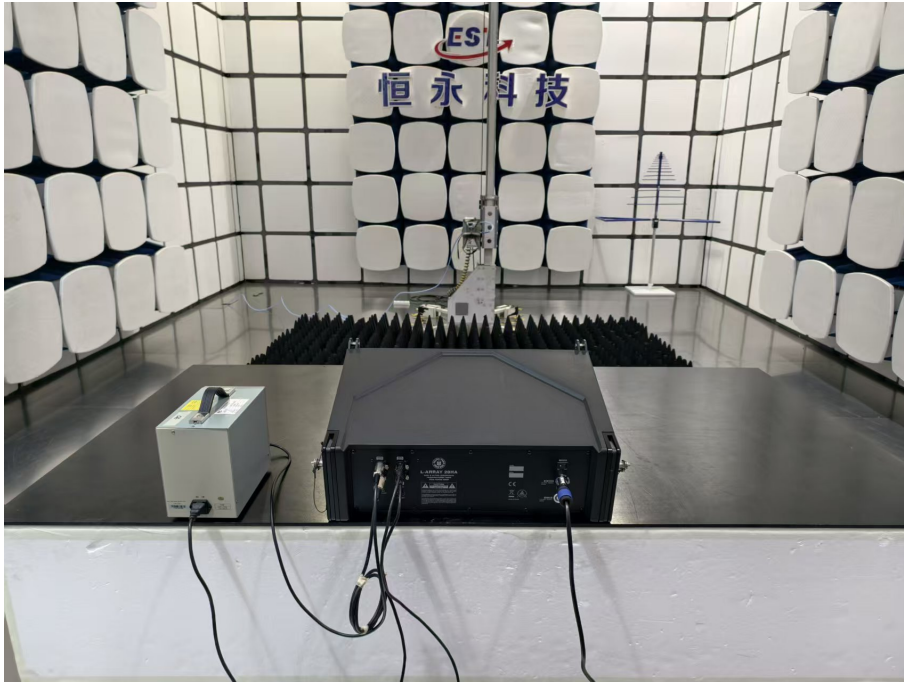
L-ARRAY 18SA



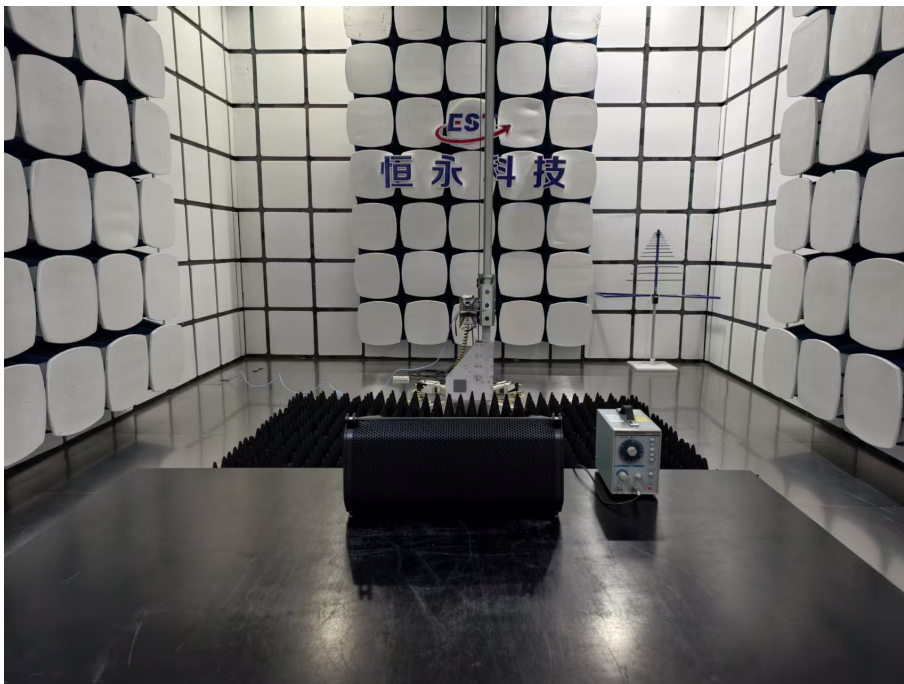
L-ARRAY 18SA



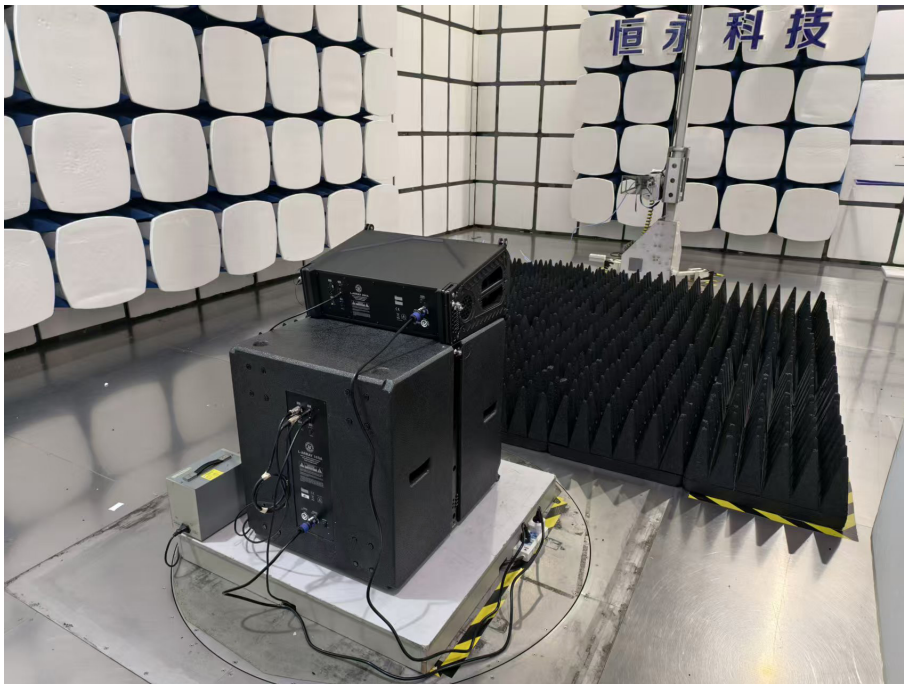
#### 6.4.Set-up for Radiated Emission Test(above 1GHz)



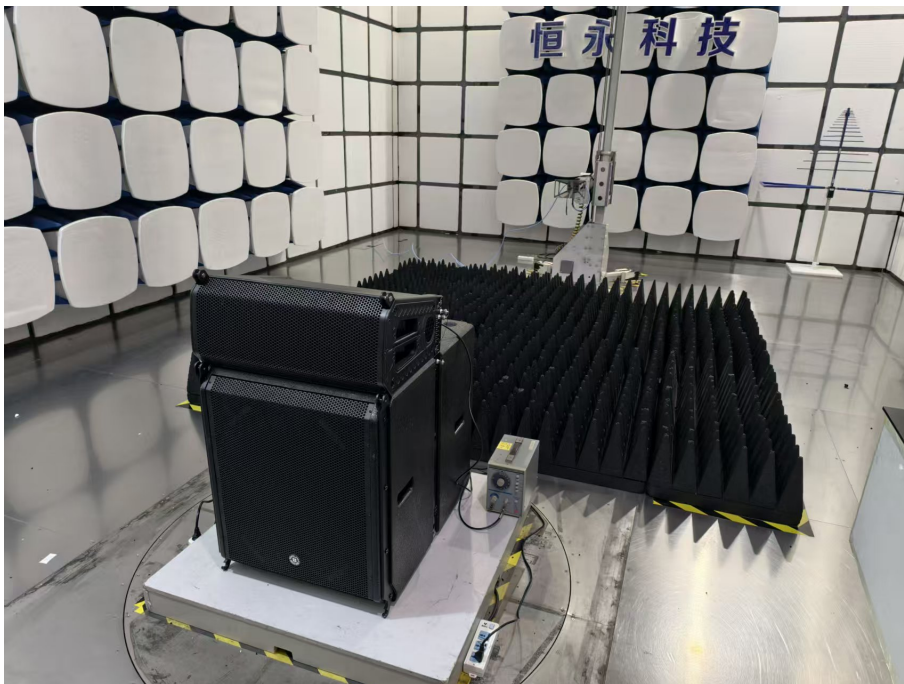
L-ARRAY 28HA



L-ARRAY 28HA



L-ARRAY 18SA

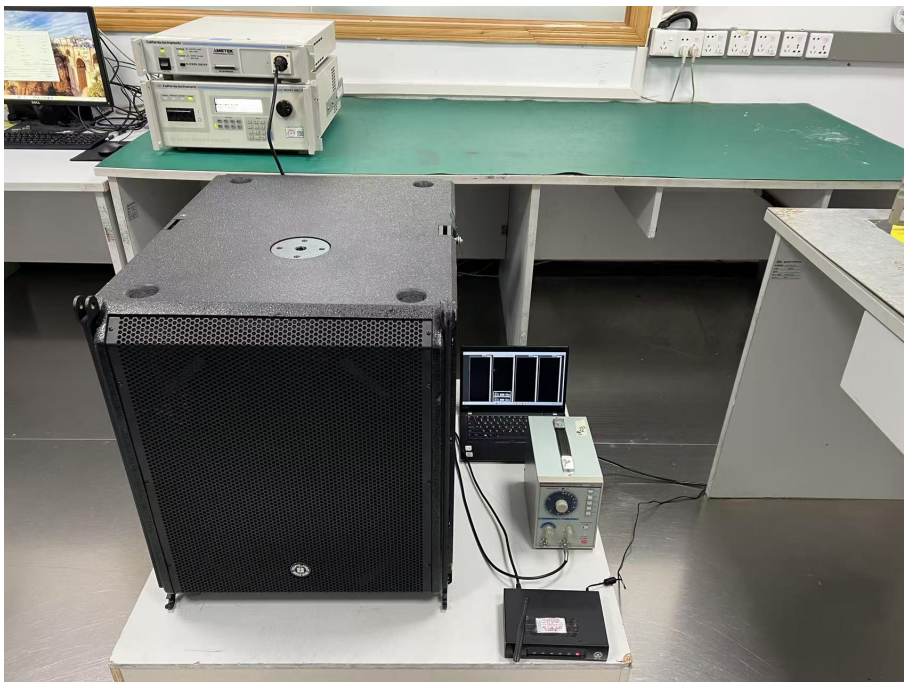


L-ARRAY 18SA

## 6.5.Set-up for Harmonic Current Emissions and Flicker on AC Mains Test



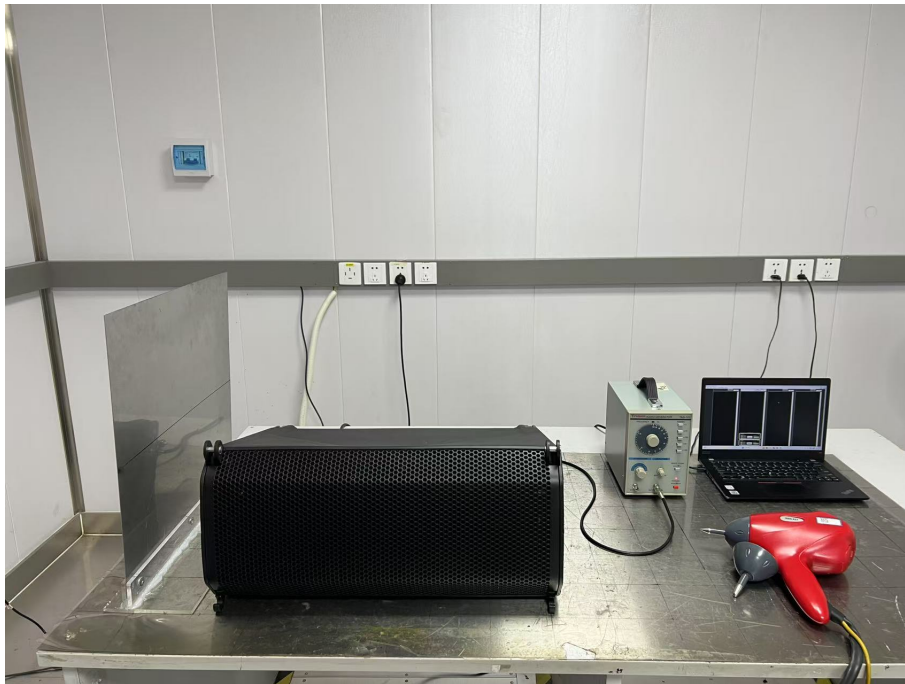
L-ARRAY 28HA



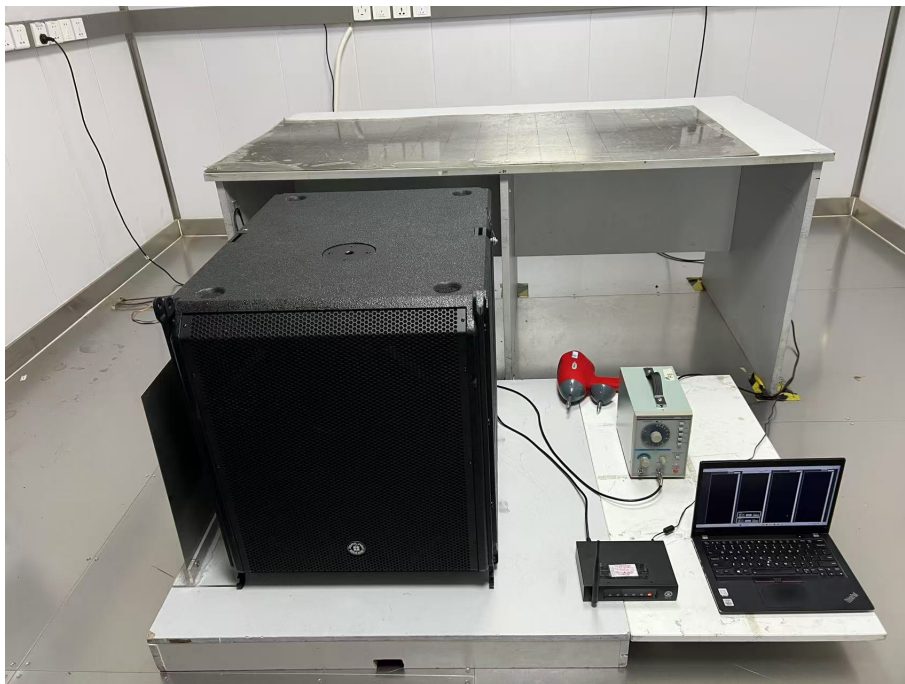
L-ARRAY 18SA



## 6.6.Set-up for Electrostatic Discharge Immunity Test

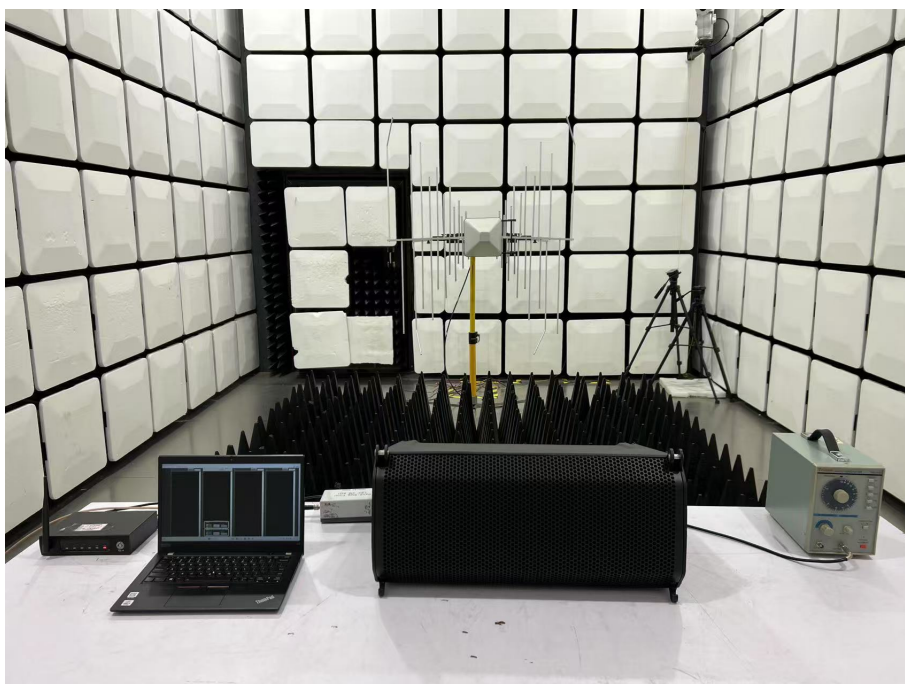


L-ARRAY 28HA



L-ARRAY 18SA

## 6.7.Set-up for Radio Frequency Electromagnetic Field Immunity(R/S) Test



L-ARRAY 28HA

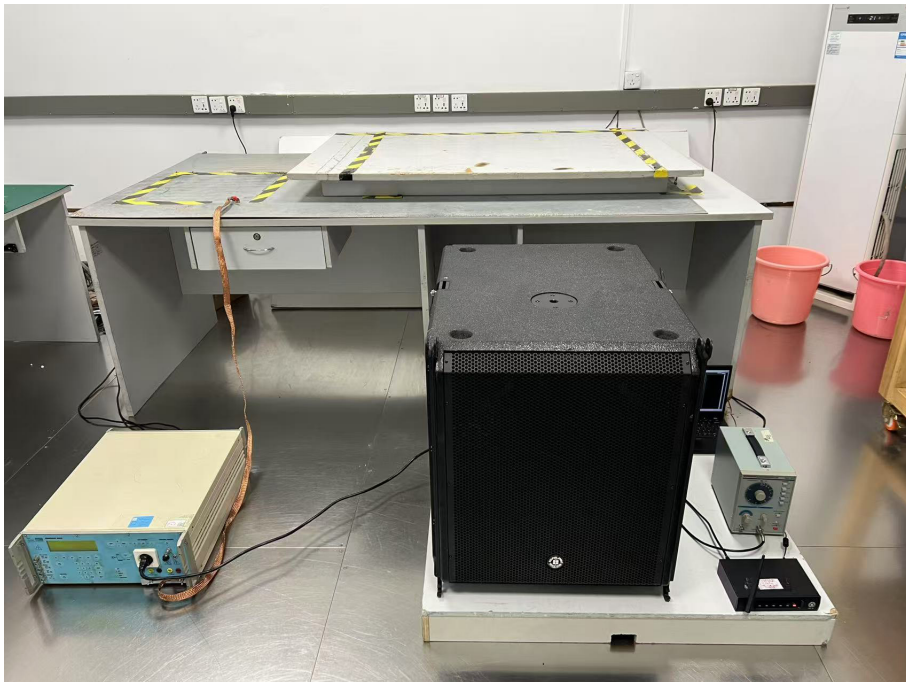


L-ARRAY 18SA

## 6.8.Set-up for Electrical Fast Transient/Burst Immunity Test



L-ARRAY 28HA



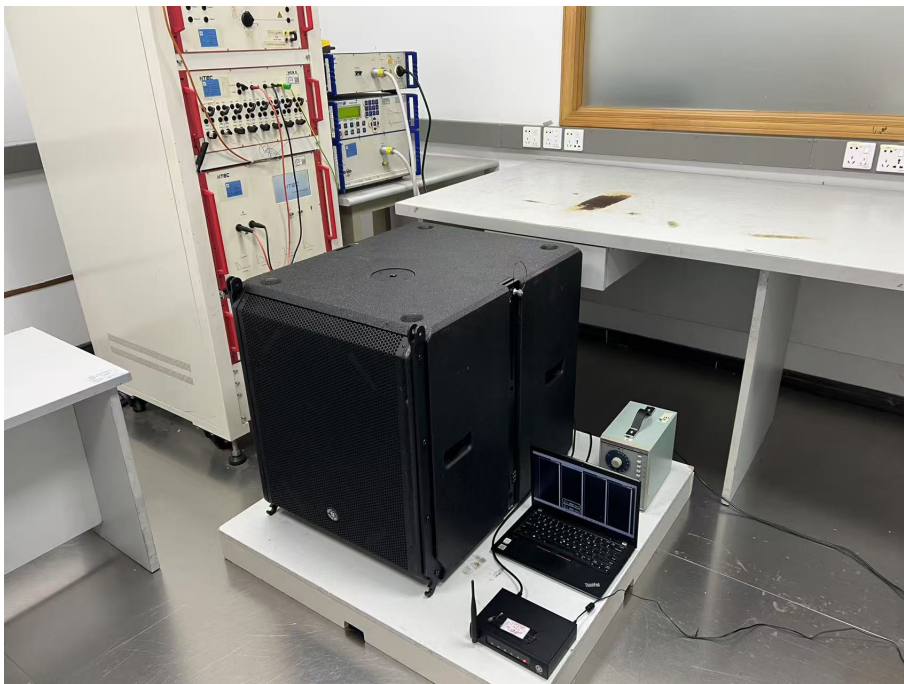
L-ARRAY 18SA



## 6.9.Set-up for Surge Immunity Test

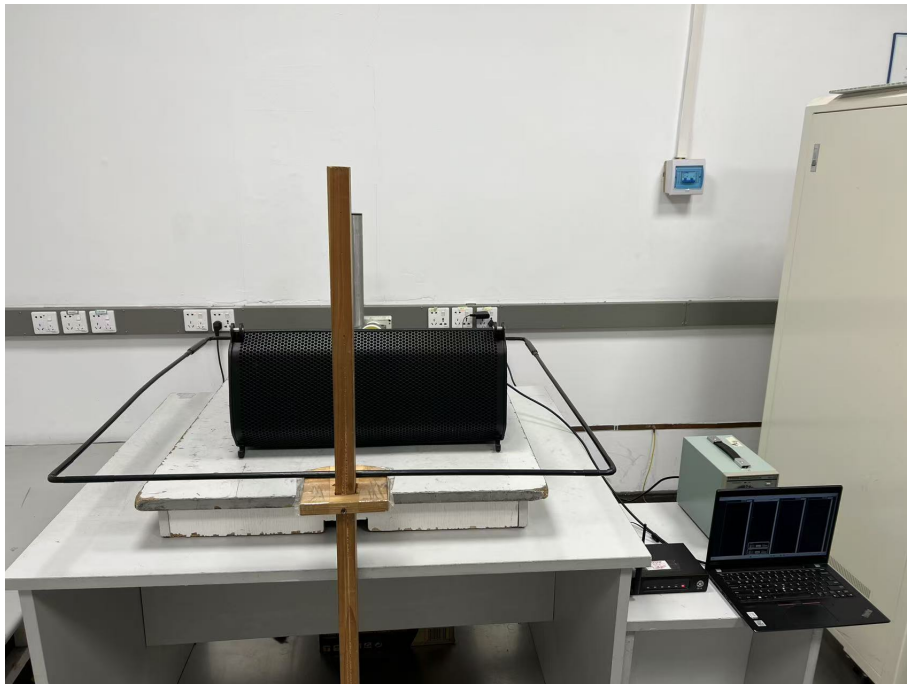


L-ARRAY 28HA

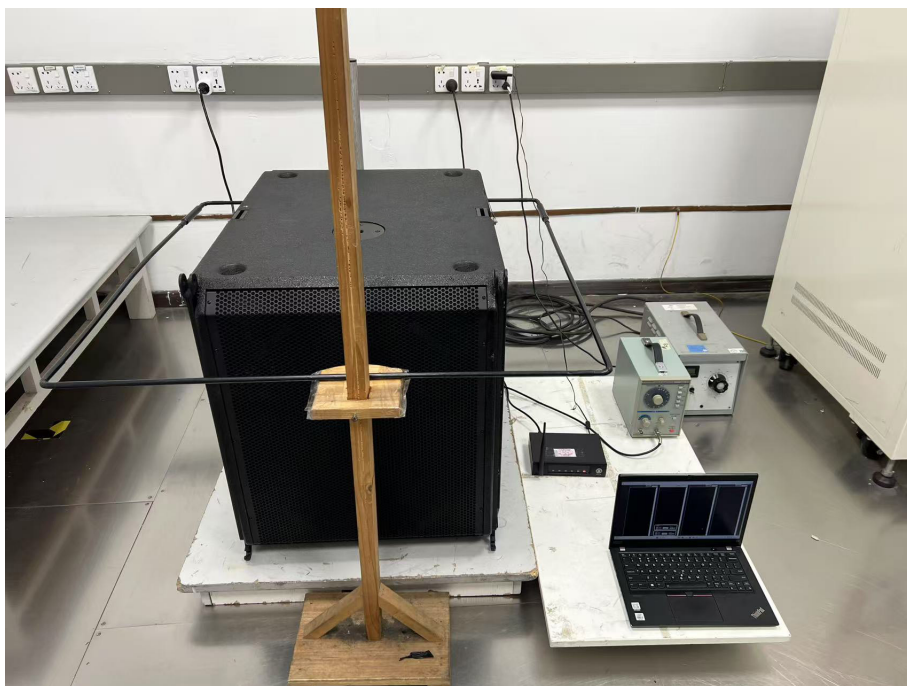


L-ARRAY 18SA

## 6.10.Set-up for Power Frequency Magnetic Field Immunity Test



L-ARRAY 28HA



L-ARRAY 18SA



## 6.11.Set-up for Injected Currents Susceptibility Test



L-ARRAY 28HA

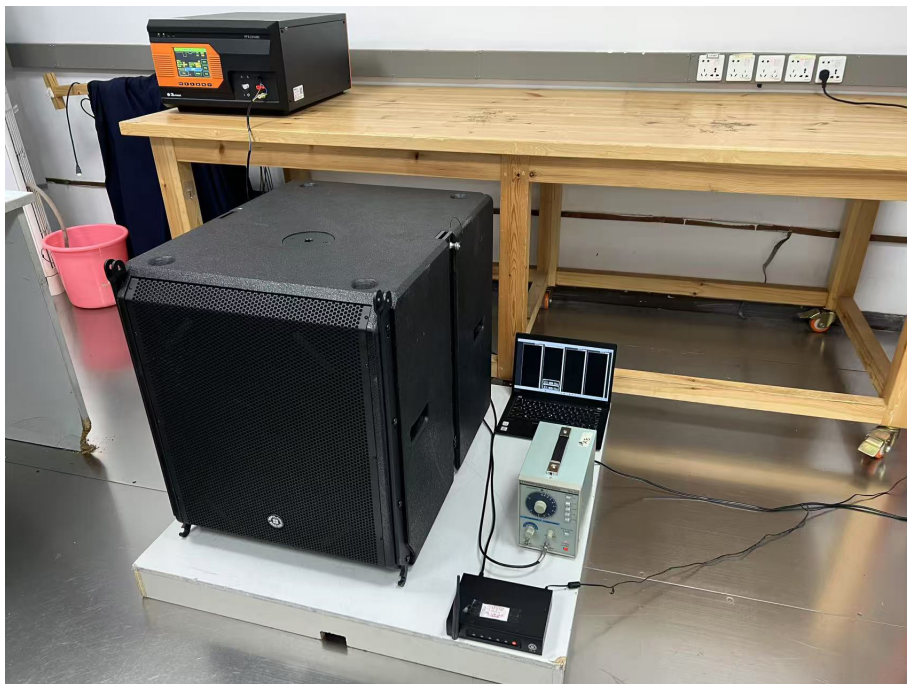


L-ARRAY 18SA

## 6.12.Set-up for Voltage Dips and Short Interruptions Immunity Test



L-ARRAY 28HA



L-ARRAY 18SA

## 7. PHOTOGRAPHS OF THE EUT

M/N: L-ARRAY 28HA

Figure 1

General Appearance of the EUT



Figure 2

General Appearance of the EUT





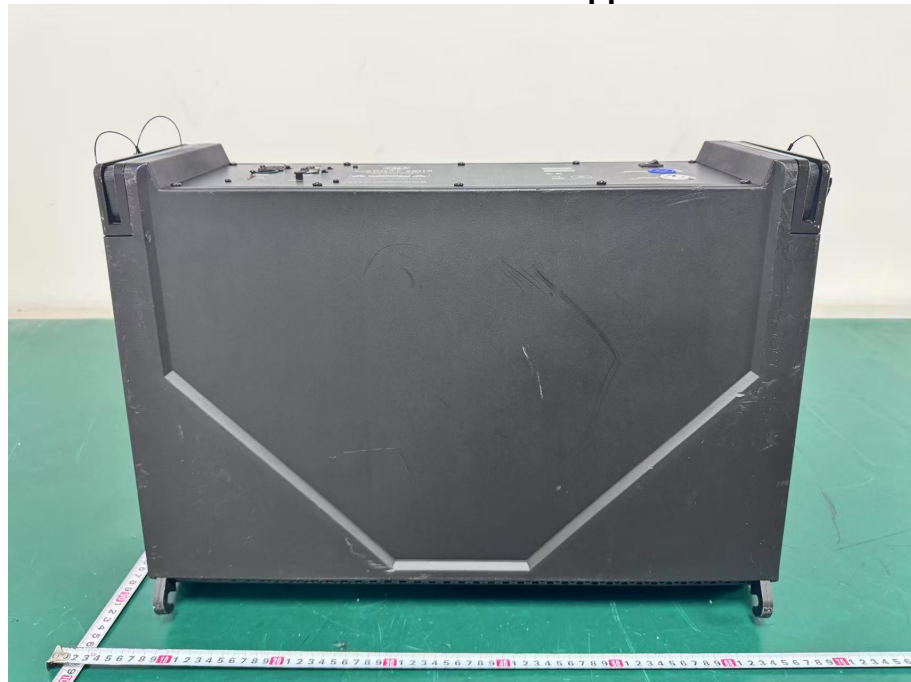
**Figure 3**  
**General Appearance of the EUT**



**Figure 4**  
**General Appearance of the EUT**



**Figure 5**  
**General Appearance of the EUT**



**Figure 6**  
**General Appearance of the EUT**



**Figure 7**  
**General Appearance of the EUT**



**Figure 8**  
**General Appearance of the EUT**

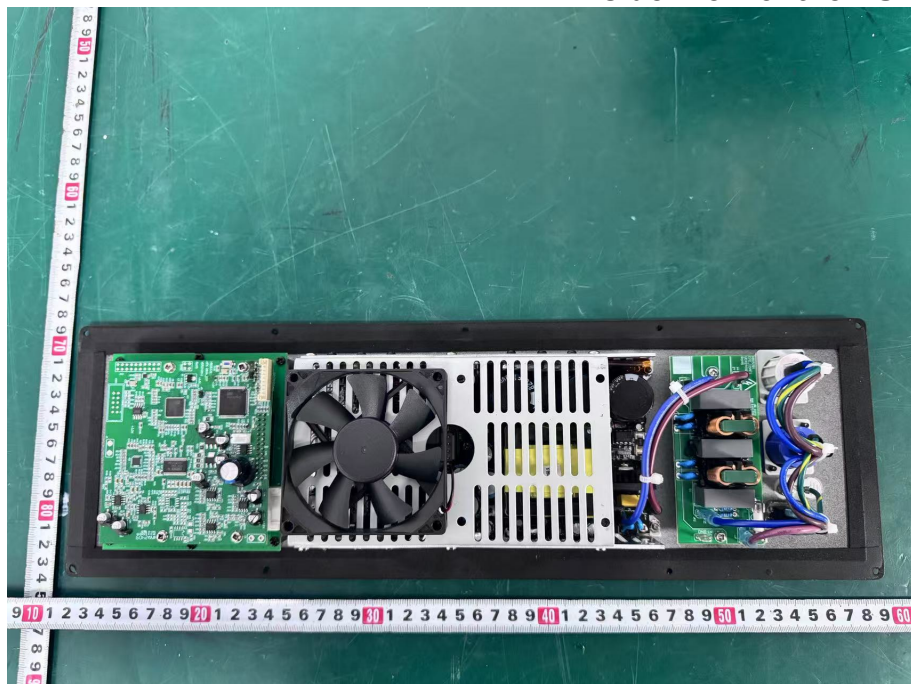




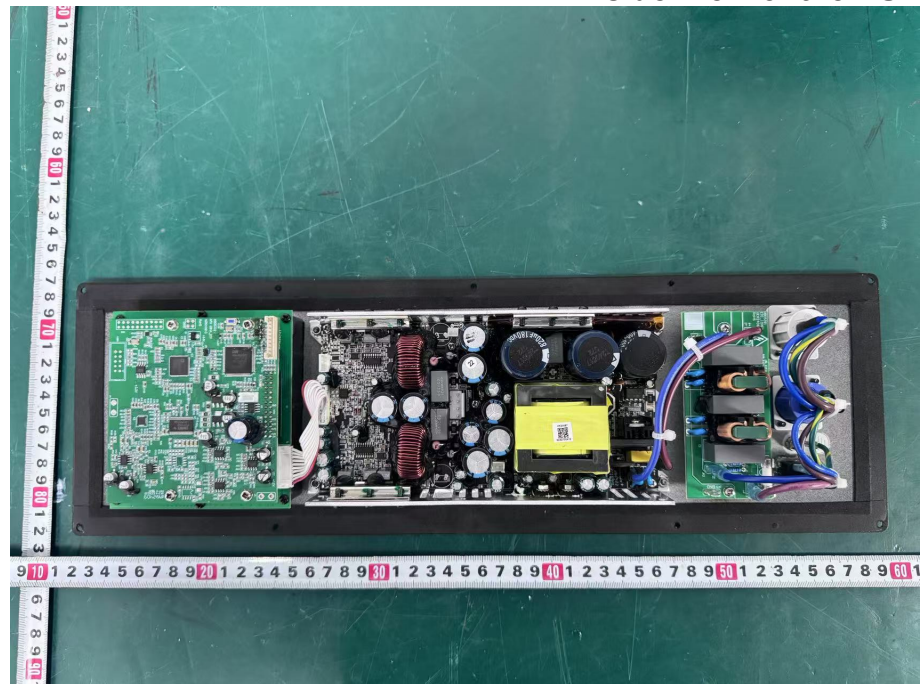
**Figure 9**  
**Inside View of the EUT**



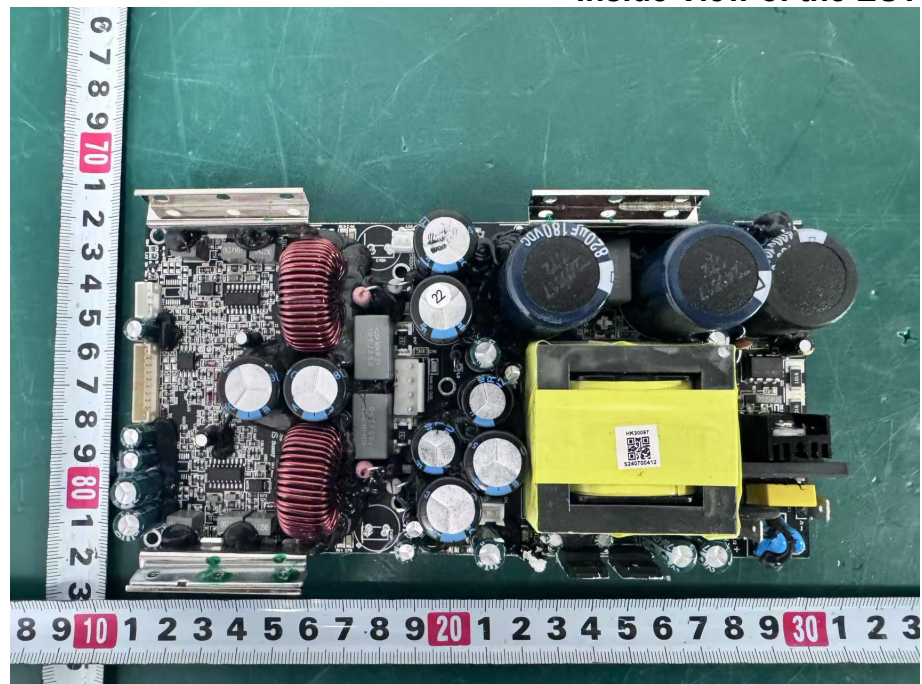
**Figure 10**  
**Inside View of the EUT**



**Figure 11**  
**Inside View of the EUT**

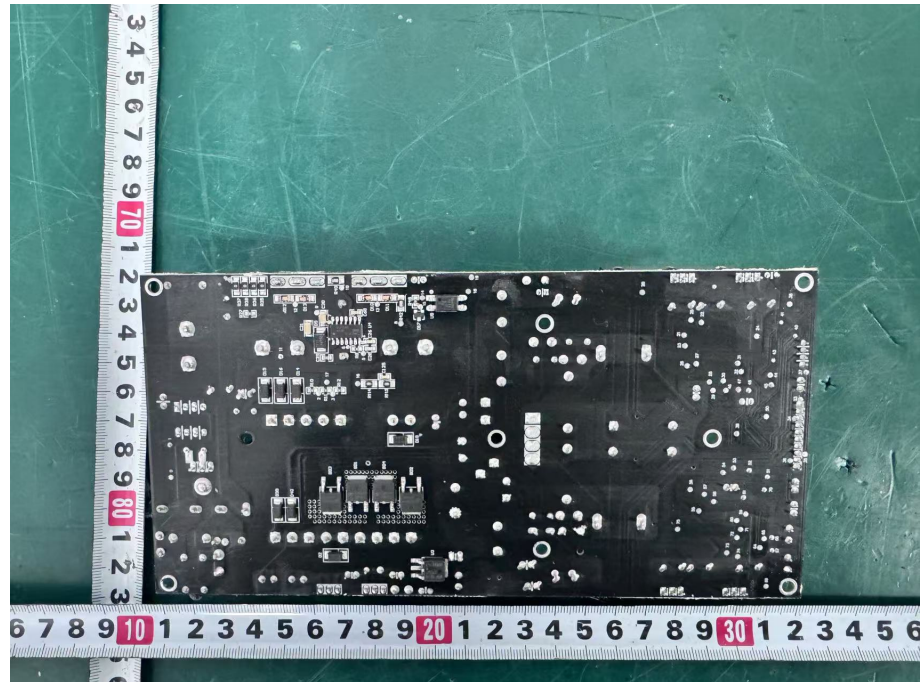


**Figure 12**  
**Inside View of the EUT**

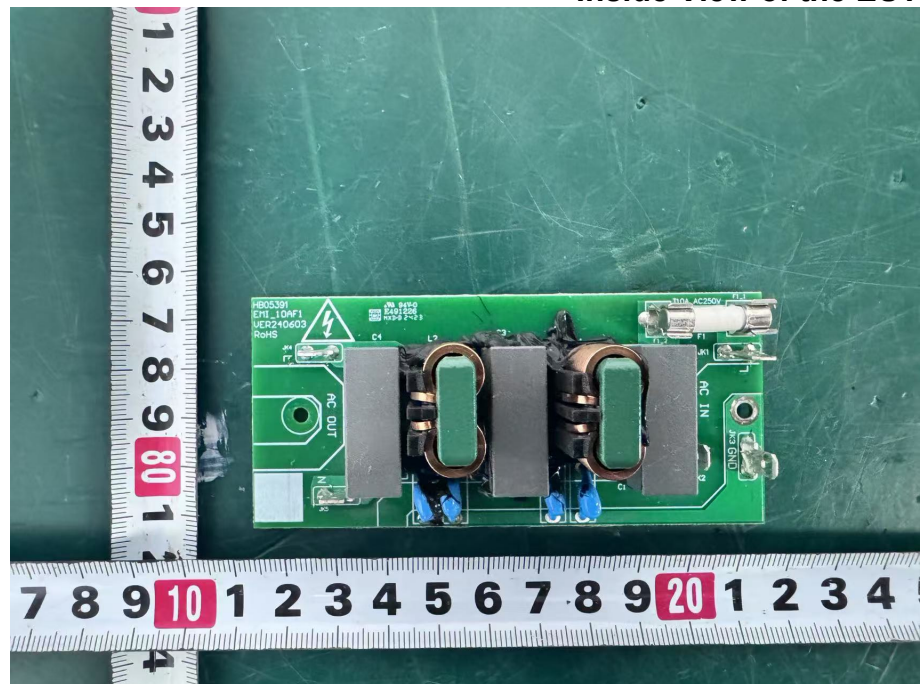




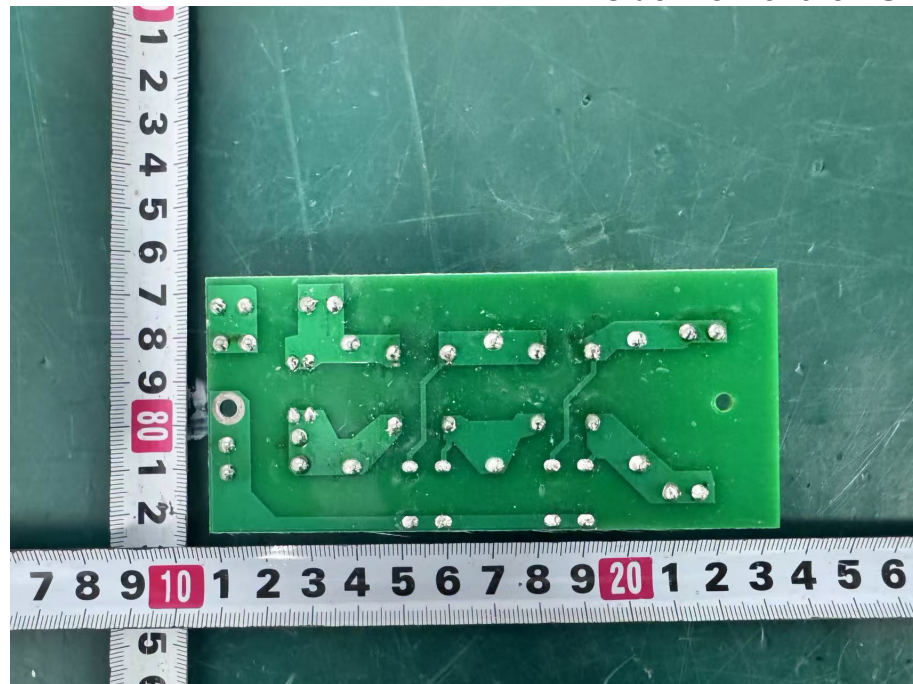
**Figure 13**  
**Inside View of the EUT**



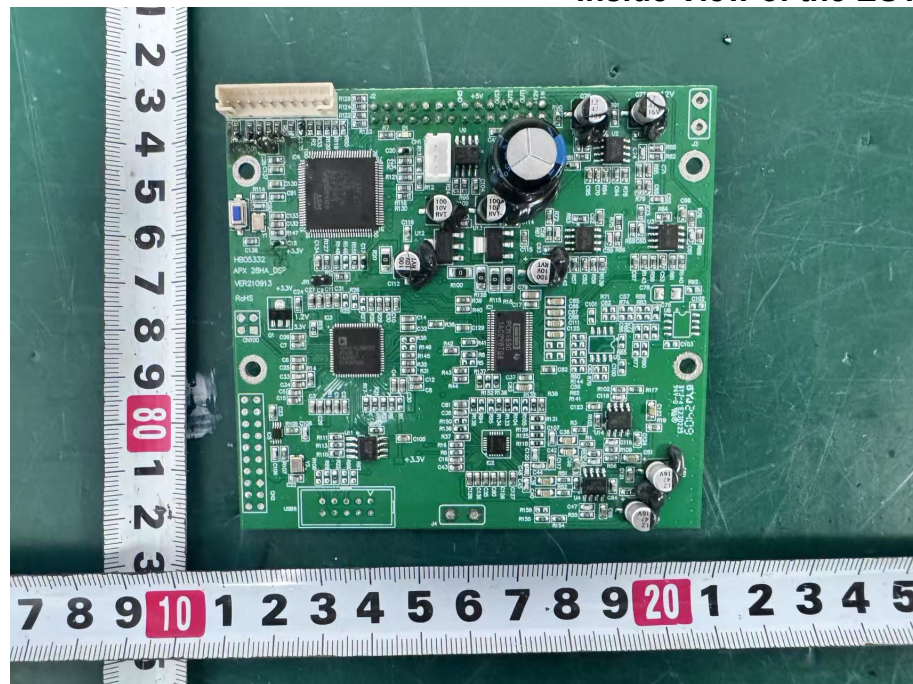
**Figure 14**  
**Inside View of the EUT**



**Figure 15**  
**Inside View of the EUT**

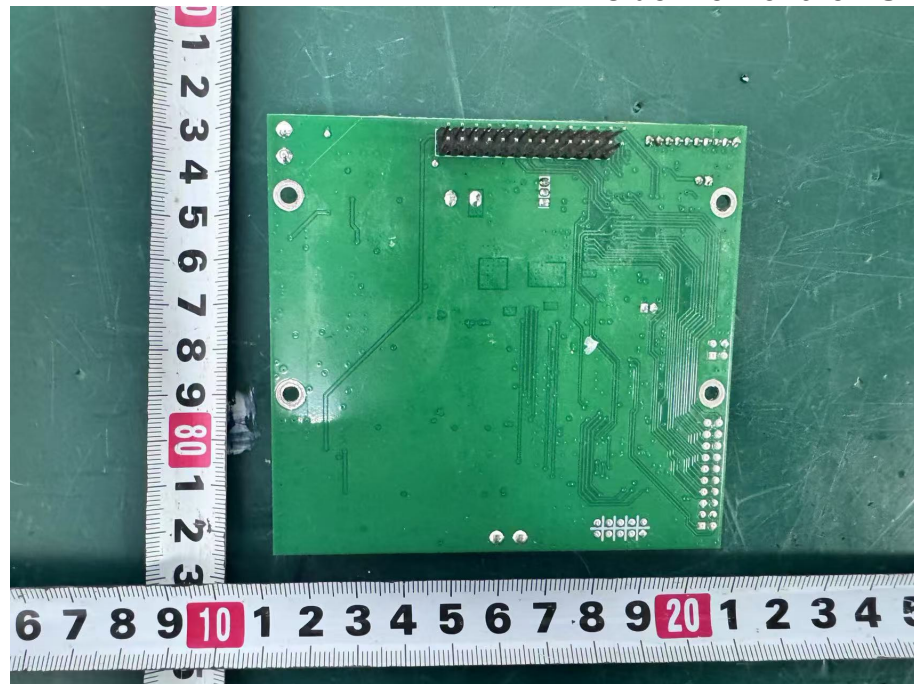


**Figure 16**  
**Inside View of the EUT**

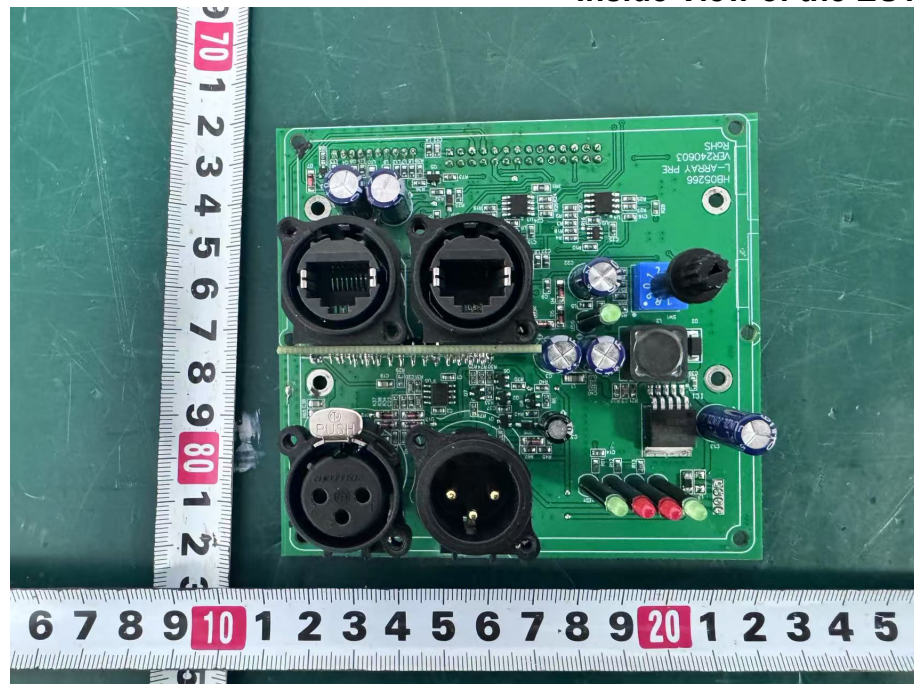




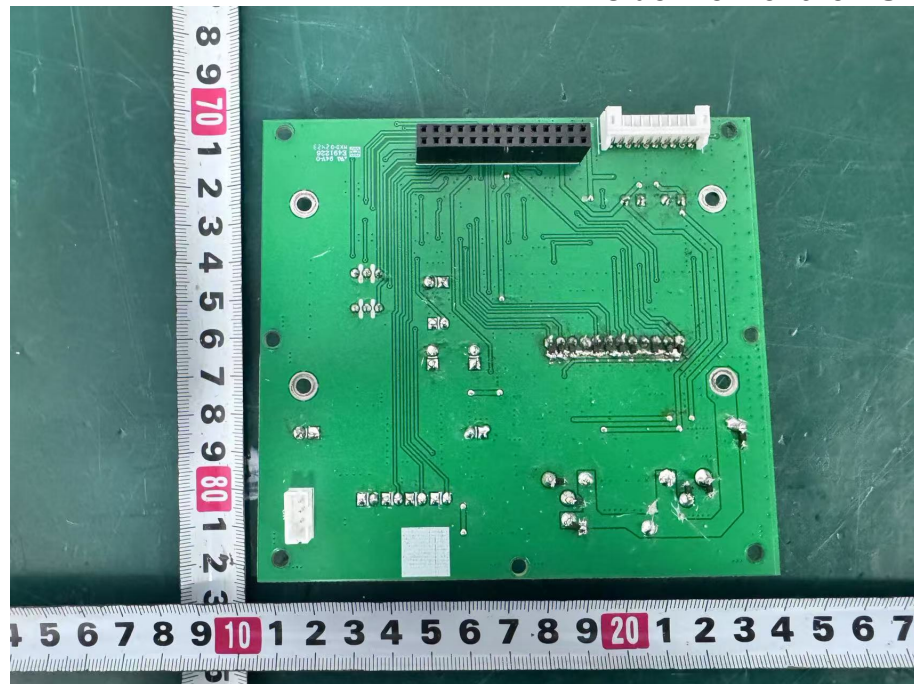
**Figure 17**  
**Inside View of the EUT**



**Figure 18**  
**Inside View of the EUT**



**Figure 19**  
**Inside View of the EUT**



**M/N: L-ARRAY 18SA**  
**Figure 20**  
**General Appearance of the EUT**



**Figure 21**  
**General Appearance of the EUT**





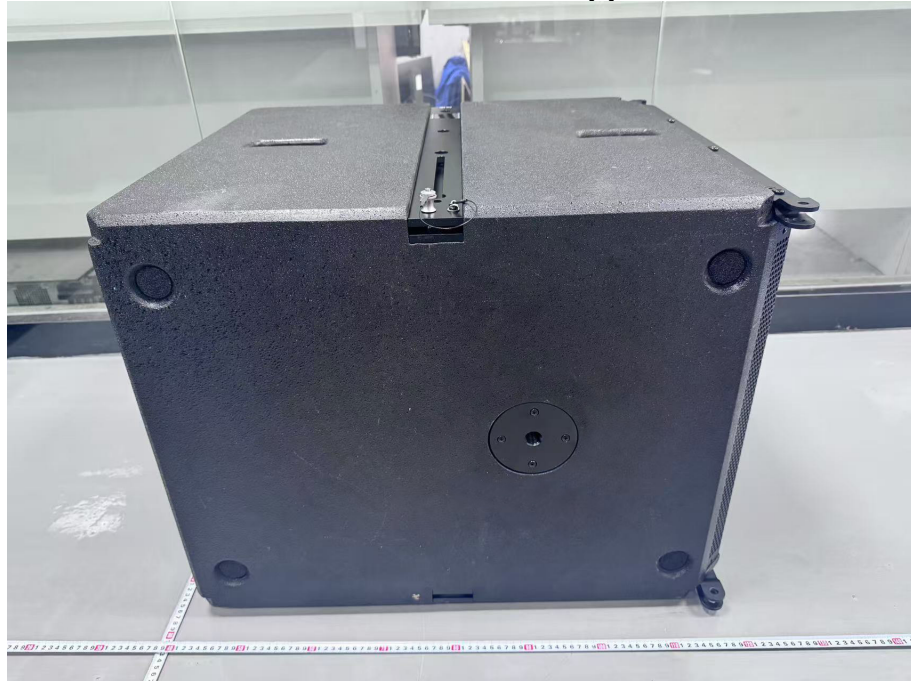
**Figure 22**  
**General Appearance of the EUT**



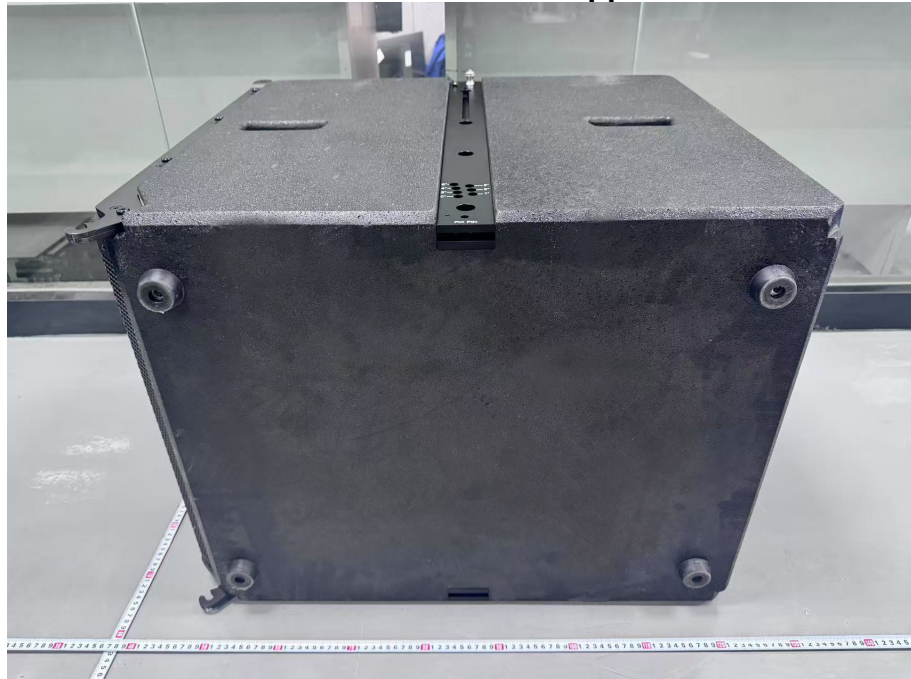
**Figure 23**  
**General Appearance of the EUT**



**Figure 24**  
**General Appearance of the EUT**



**Figure 25**  
**General Appearance of the EUT**



**Figure 26**  
**General Appearance of the EUT**



**Figure 27**  
**General Appearance of the EUT**

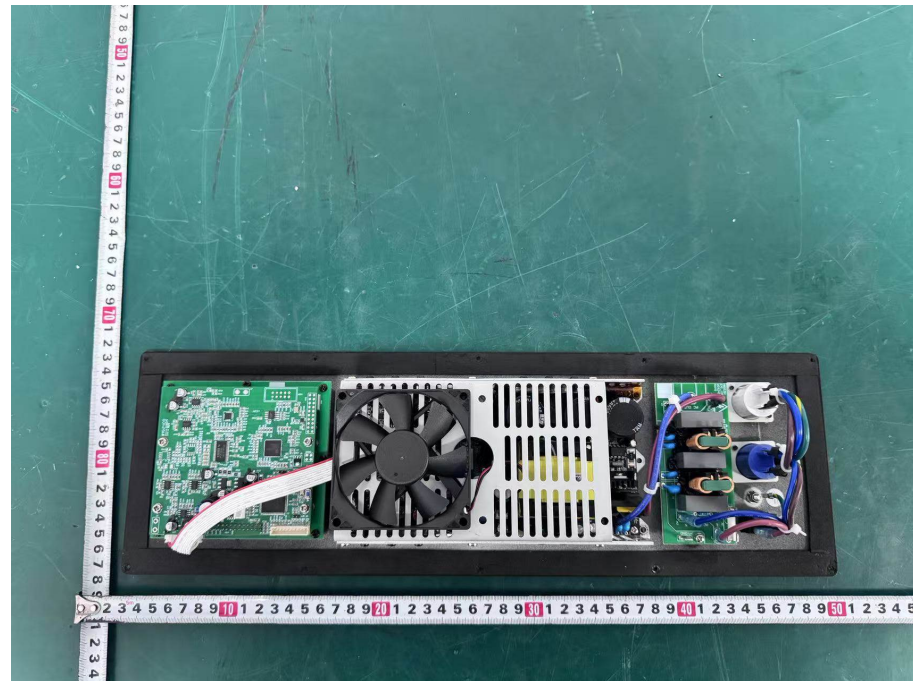




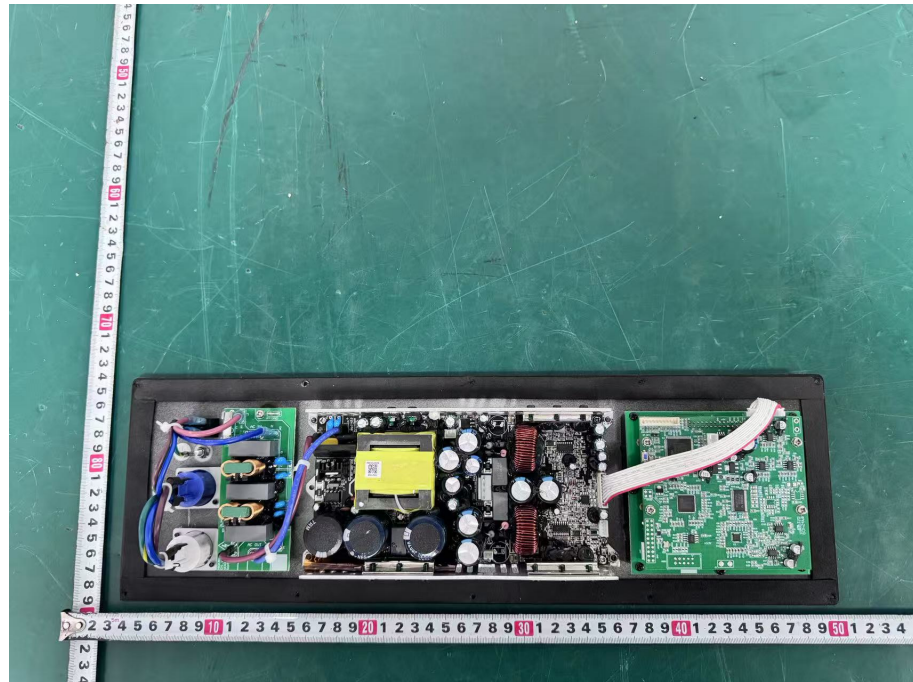
**Figure 28**  
**Inside View of the EUT**



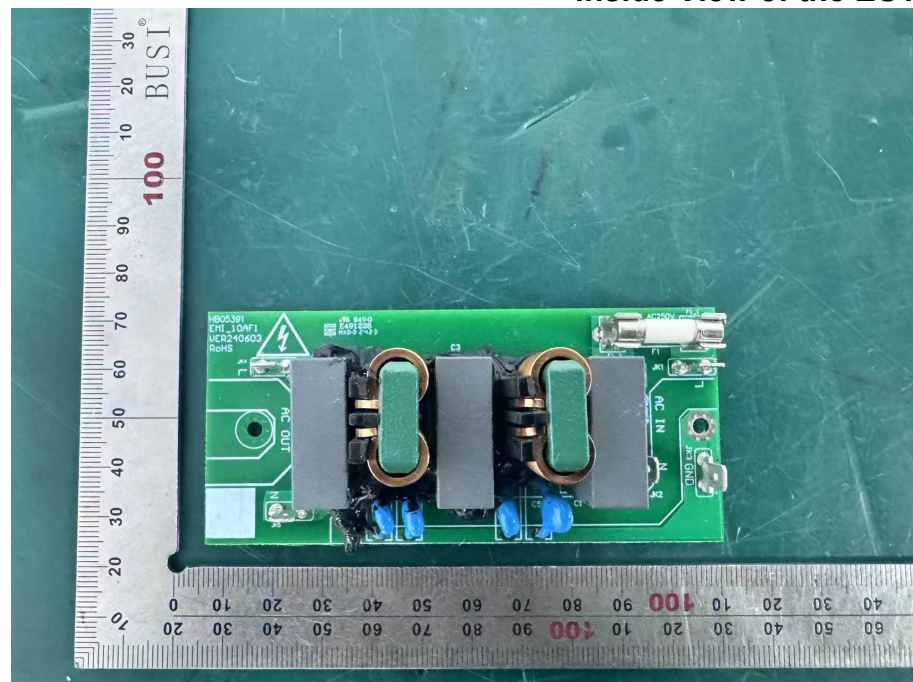
**Figure 29**  
**Inside View of the EUT**



**Figure 30**  
**Inside View of the EUT**

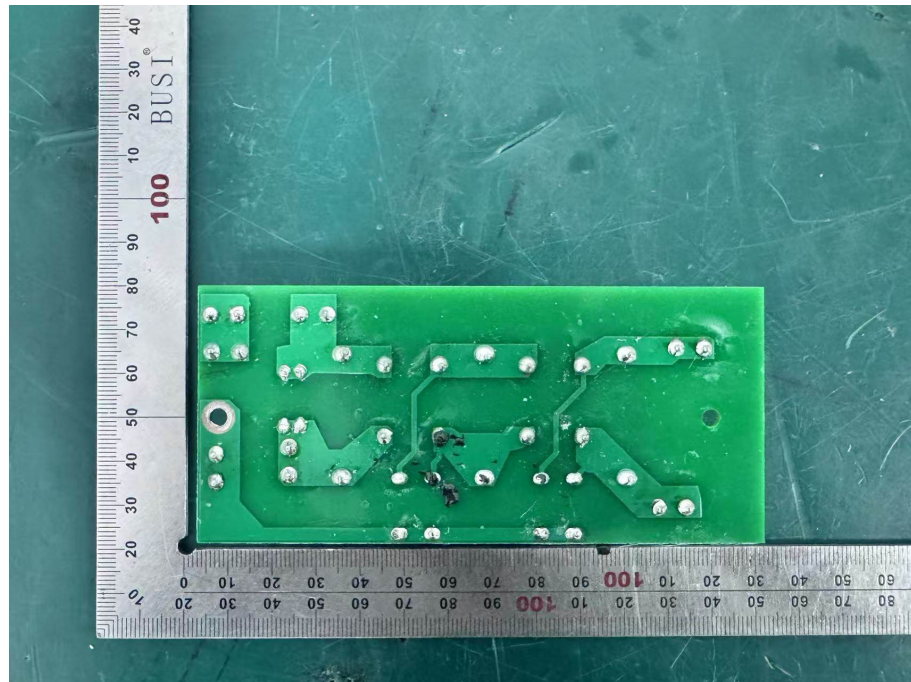


**Figure 31**  
**Inside View of the EUT**

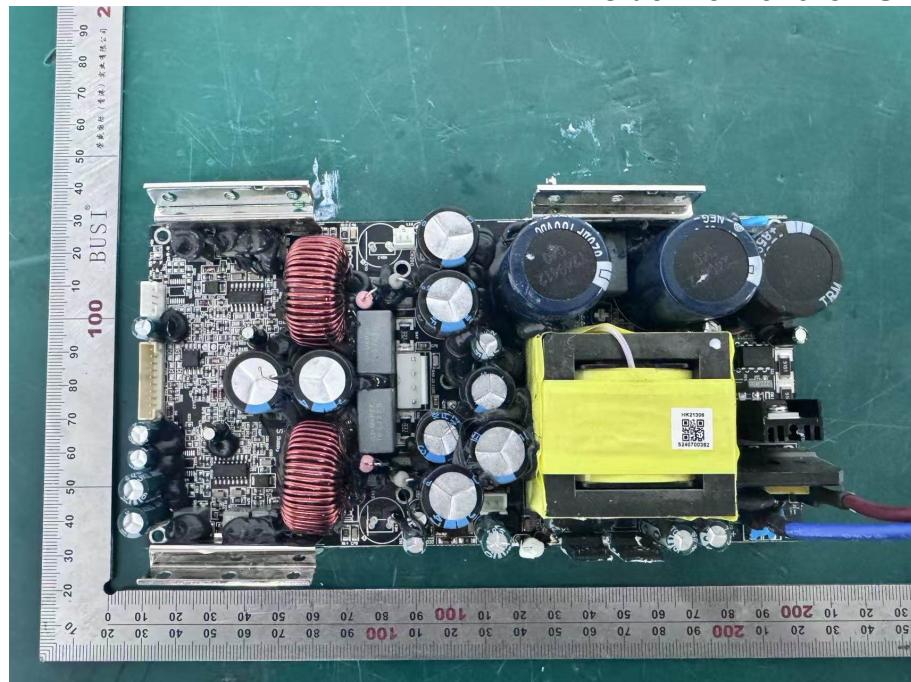




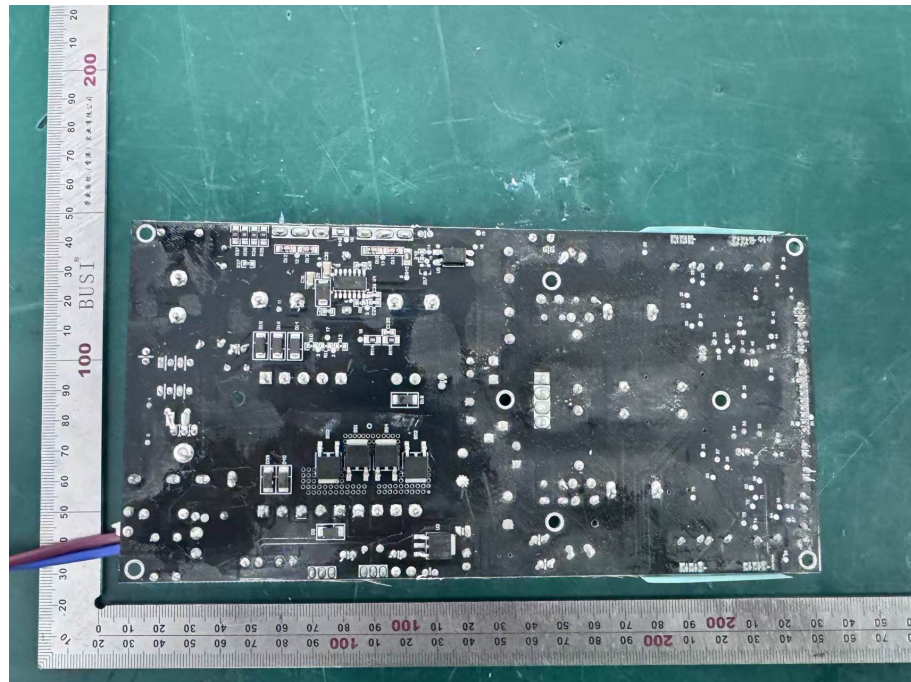
**Figure 32**  
**Inside View of the EUT**



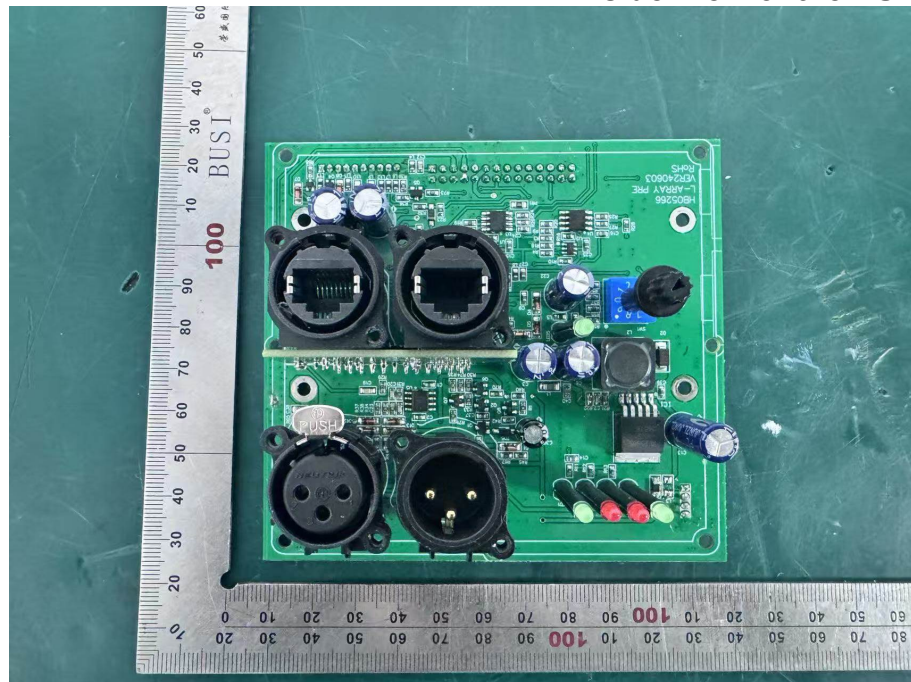
**Figure 33**  
**Inside View of the EUT**



**Figure 34**  
**Inside View of the EUT**

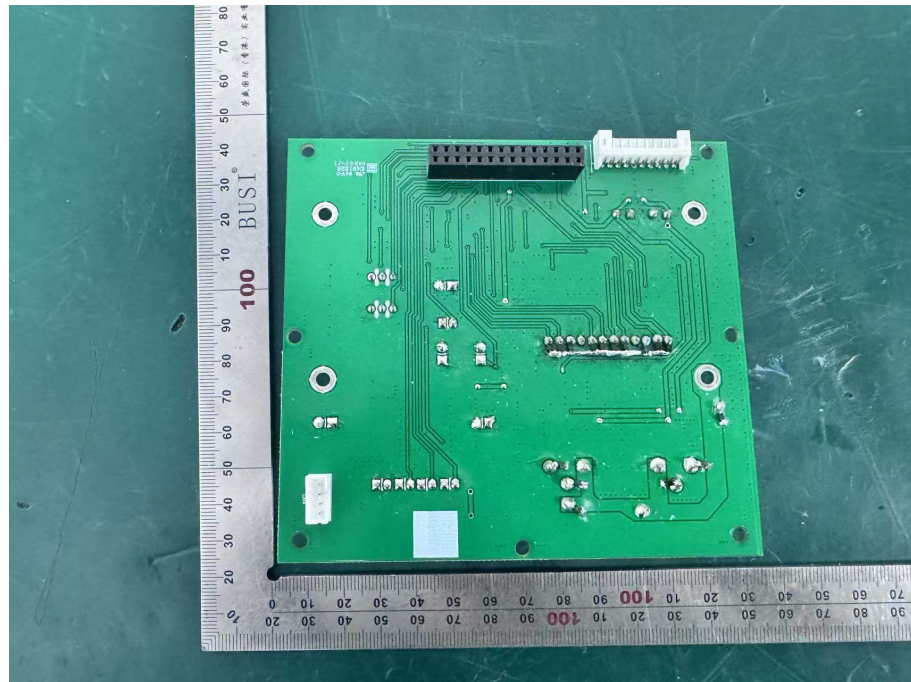


**Figure 35**  
**Inside View of the EUT**

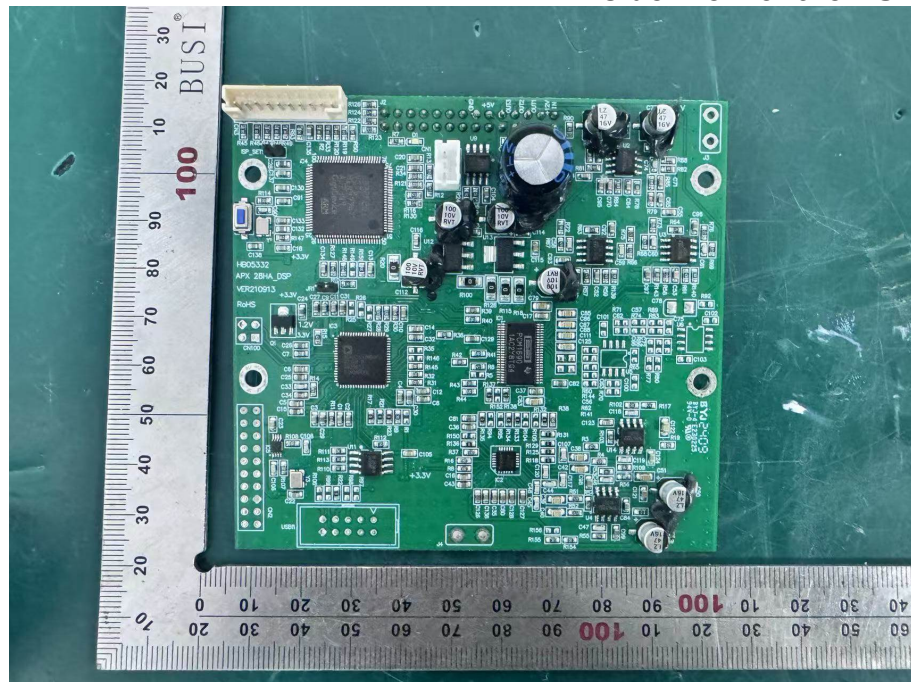




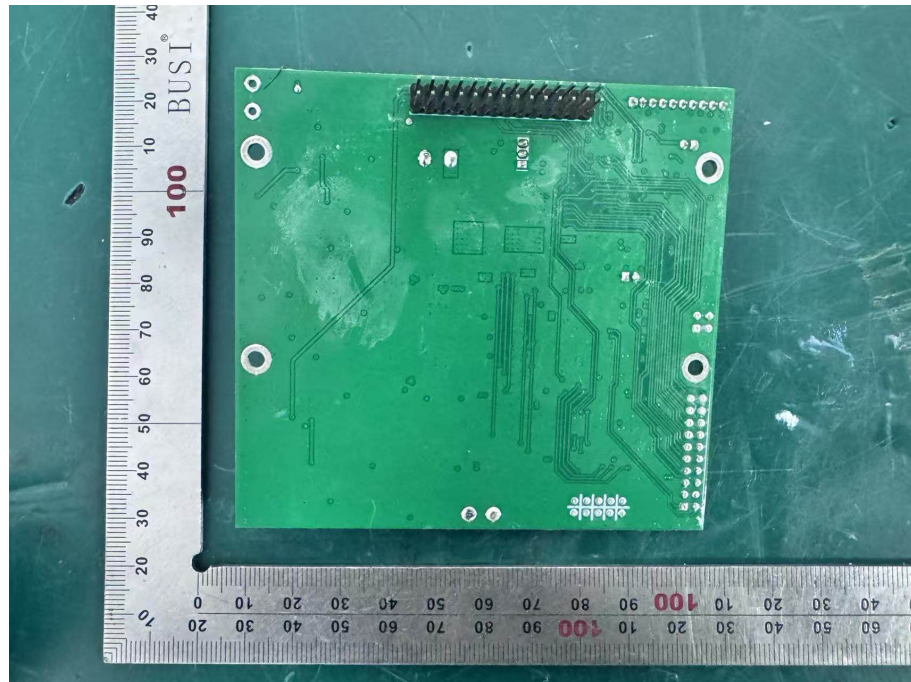
**Figure 36**  
**Inside View of the EUT**



**Figure 37**  
**Inside View of the EUT**



**Figure 38**  
**Inside View of the EUT**



**End of Test Report**