TEST REPORT

Report No.....	:	ZHT-251017110E02
Product.....	:	Led display
Trademark.....	:	/
Model(s).....	:	For detailed information, please refer to the model list in Chapter 3.1
Model Difference.....	:	P2.604 is the test model, while other models are derivative models. These models are the same on the circuit, only with different model names. Therefore, the test data of P2.604 can represent the remaining models.
Applicant.....	:	SHENZHEN LINSN LED CO., LTD
Address.....	:	Building 2, Hongfa High-tech Park, Shiyan Street, Baoan District, Shenzhen, China.
Manufacturer.....	:	SHENZHEN LINSN LED CO., LTD
Address.....	:	Building 2, Hongfa High-tech Park, Shiyan Street, Baoan District, Shenzhen, China.
Prepared by.....	:	Guangdong Zhonghan Testing Technology Co., Ltd.
Address.....	:	Room 104/201, Building 1, Yibaolai Industrial Park, Qiaotou, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Date of Receipt.....	:	Oct. 17, 2025
Date of Test(s).....	:	Oct. 17, 2025 - Oct. 24, 2025
Date of Issue.....	:	Oct. 27, 2025
Test Standard(s).....	:	47CFR Part 15 Subpart B ANSI C63.4:2014

In the configuration tested, the EUT complied with the standards specified above.

Prepared by:	Reviewed by:	Approved by:
Eric Jiang	Baret.Wu	
Eric Jiang/ Engineer	Baret Wu/ Director	Levi Lee/ Manager

Note: The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report shall not be reproduced except in full, without prior written approval of ZHT. This document may be altered or revised by ZHT, personnel only, and shall be noted in the revision of the document.

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1. Revision History

Report No.	Issue Date	Description	Approved
ZHT-251017110E02	Oct. 27, 2025	Original	Valid

2. Test Summary

Emission			
Requirement - Test	Test Method	Limit	Result
Conducted Emission	47CFR Part 15 Subpart B ANSI C63.4:2014	Class A	PASS
Radiated Emission	47CFR Part 15 Subpart B ANSI C63.4:2014	Class A	PASS

Remark: N/A is abbreviation for Not Applicable.

3. General Information

3.1. Description of EUT

Product:	Led display
Model Name:	P2.604
Rated Power Supply:	AC 100 - 240 V, 50 / 60 Hz
Normal Testing Voltage:	AC 120 V/ 60 Hz
DC Line	/
I/O Ports	AC input port, Wired network port (without network data transmission function)
Highest Frequency Generated	Below 108 MHz

Model List

P2.604 P0.625, P0.78, P0.9, P0.9375, P1.25, P1.538, P1.5625, P1.667, P1.86, P1.875, P1.953, P2, P2.5, P2.604, P2.976, P3, P3.076, P3.125, P3.33, P3.6, P3.79, P3.84, P3.91, P4, P4.44, P4.8, P4.81, P5, P5.71, P5.926, P5.95, P6, P6.25, P6.67, P6.94, P7.81, P8, P8.33, P10, P10.41, P12, P13.33, P15.56, P15.625, P20, P25, P31.25, P50

Note:

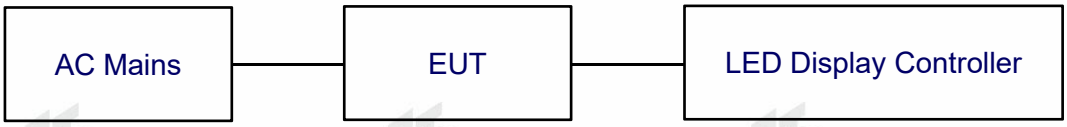
1) Other Accessory Device List and Details

Description	Manufacturer	Model	Note
LED Display Controller	Xi'an NovaStar Tech Co.,Ltd.	MCTRL600	AE
/	/	/	/

2) The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

3.2. Block diagram of EUT configuration

Mode 1



3.3. Test Mode

Pretest mode	Mode 1: Working mode		
Worst-case Test mode	Conducted Emission		Mode 1
	Radiated Emission	Below 1 GHz	Mode 1
		Above 1 GHz	N/A

* Only the Worst-case test mode is shown in the report

3.4. Test Site Environment

Test Item	Required		Actual
Conducted Emission	Temperature (°C)	15-35	23.8
	Humidity (%RH)	25-75	53.5
	Barometric pressure (mbar)	860-1060	1014
Radiated Emission	Temperature (°C)	15-35	24.0
	Humidity (%RH)	25-75	54
	Barometric pressure (mbar)	860-1060	1014

4. Facilities

4.1. Test Facility and Test Instrument Used

Test site : Guangdong Zhonghan Testing Technology Co., Ltd.
Room 104/201, Building 1, Yibaolai Industrial Park, Qiaotou, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

4.2. Test Instruments

Conducted emissions Test

Equipment	Manufacturer	Model	Last Cal.	Next Cal.
Receiver	R&S	ESCI	May 6, 2025	May 5, 2026
LISN	R&S	ENV216	May 6, 2025	May 5, 2026

Radiated emissions Test (966 chamber)

Equipment	Manufacturer	Model	Last Cal.	Next Cal.
Receiver	R&S	ESCI	May 6, 2025	May 5, 2026
Amplifier	Schwarzbeck	BBV 9743 B	May 6, 2025	May 5, 2026
Amplifier	Schwarzbeck	BBV 9718 B	May 7, 2025	May 6, 2026
Bilog Antenna	Schwarzbeck	VULB9162	May 15, 2025	May 14, 2026
Horn Antenna	Schwarzbeck	BBHA9120D	May 15, 2025	May 14, 2026

4.3. Testing software

Project	Software name	Edition
Conducted Emission	EZ-EMC	EMC-CON 3A1.1+
Radiated Emission	EZ-EMC	FA-03A2 RE+

4.4. Measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Value (dB)
Conducted Emission (150kHz-30MHz)	0.92
Radiated Emission(30MHz~1GHz)	5.10
Radiated Emission(1GHz~18GHz)	3.90

Decision Rule

☒ Uncertainty is not included

☐ Uncertainty is included

5. Emission

5.1. Conducted Emission

5.1.1. Limit

For Class B devices:

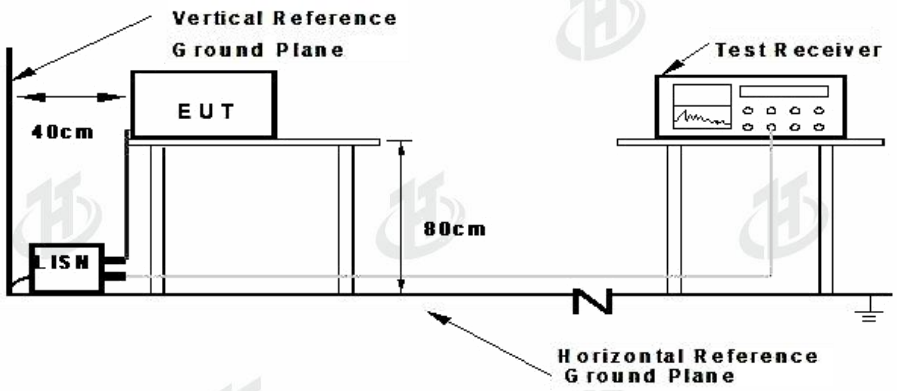
Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

For Class A devices:

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	79	66
0.5-30	73	60

5.1.2. Test setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

The setup of EUT is according with ANSI C63.4 measurement procedure. Specification used with 47CFR Part 15 Subpart B limits.

5.1.3. Test procedure

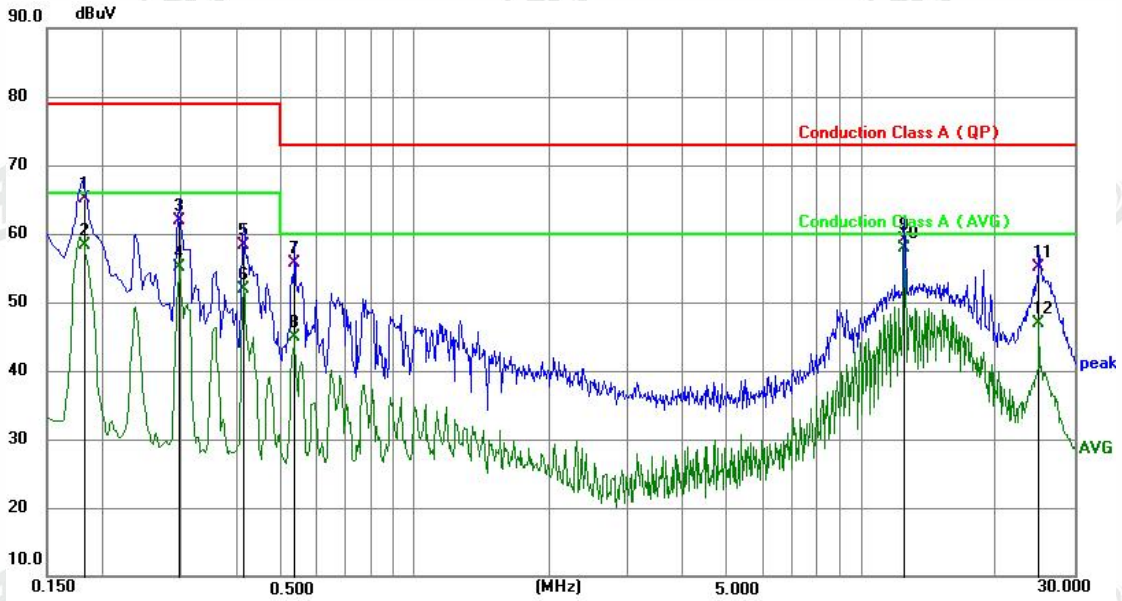
Measurement was performed in shielded room, and instruments used were followed clause 4 of ANSI C63.4.
Detailed test procedure was following clause 7 of ANSI C63.4.
Frequency range 150kHz – 30MHz was checked and EMI receiver measurement bandwidth was set to 9 kHz.

5.1.4. Test results

PASS

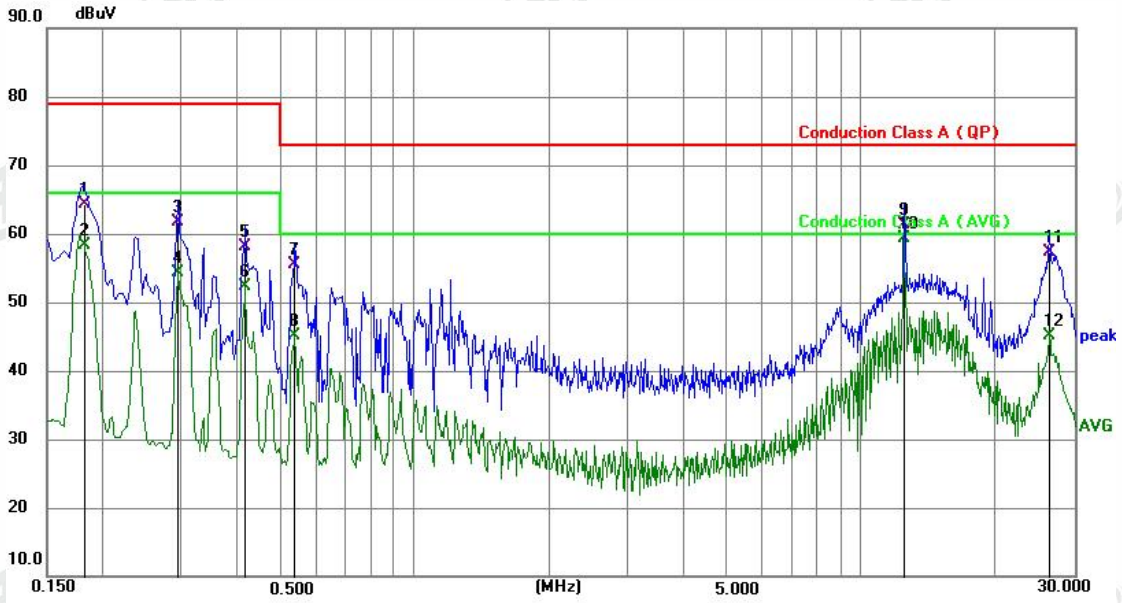
Please refer to pages 11 - 12 for data.

Phase: Live



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1814	55.25	9.90	65.15	79.00	-13.85	QP	P	
2	0.1814	48.50	9.90	58.40	66.00	-7.60	AVG	P	
3	0.2970	51.92	9.95	61.87	79.00	-17.13	QP	P	
4	0.2970	45.19	9.95	55.14	66.00	-10.86	AVG	P	
5	0.4110	48.27	9.99	58.26	79.00	-20.74	QP	P	
6	0.4110	41.93	9.99	51.92	66.00	-14.08	AVG	P	
7	0.5370	45.71	10.02	55.73	73.00	-17.27	QP	P	
8	0.5370	34.84	10.02	44.86	60.00	-15.14	AVG	P	
9	12.4980	49.06	10.09	59.15	73.00	-13.85	QP	P	
10 *	12.4980	47.82	10.09	57.91	60.00	-2.09	AVG	P	
11	24.9990	44.86	10.24	55.10	73.00	-17.90	QP	P	
12	24.9990	36.76	10.24	47.00	60.00	-13.00	AVG	P	

Phase: Neutral



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1815	54.32	9.90	64.22	79.00	-14.78	QP	P	
2	0.1815	48.41	9.90	58.31	66.00	-7.69	AVG	P	
3	0.2940	51.85	9.95	61.80	79.00	-17.20	QP	P	
4	0.2940	44.42	9.95	54.37	66.00	-11.63	AVG	P	
5	0.4153	48.18	9.99	58.17	79.00	-20.83	QP	P	
6	0.4153	42.38	9.99	52.37	66.00	-13.63	AVG	P	
7	0.5370	45.46	10.02	55.48	73.00	-17.52	QP	P	
8	0.5370	35.13	10.02	45.15	60.00	-14.85	AVG	P	
9	12.5024	51.18	10.09	61.27	73.00	-11.73	QP	P	
10 *	12.5024	49.13	10.09	59.22	60.00	-0.78	AVG	P	
11	26.4120	46.99	10.29	57.28	73.00	-15.72	QP	P	
12	26.4120	34.90	10.29	45.19	60.00	-14.81	AVG	P	

Note: Level=Reading + Factor
Margin=Level – Limit

5.2. Radiated emissions

5.2.1. Limit

For Class B devices (at 3m):

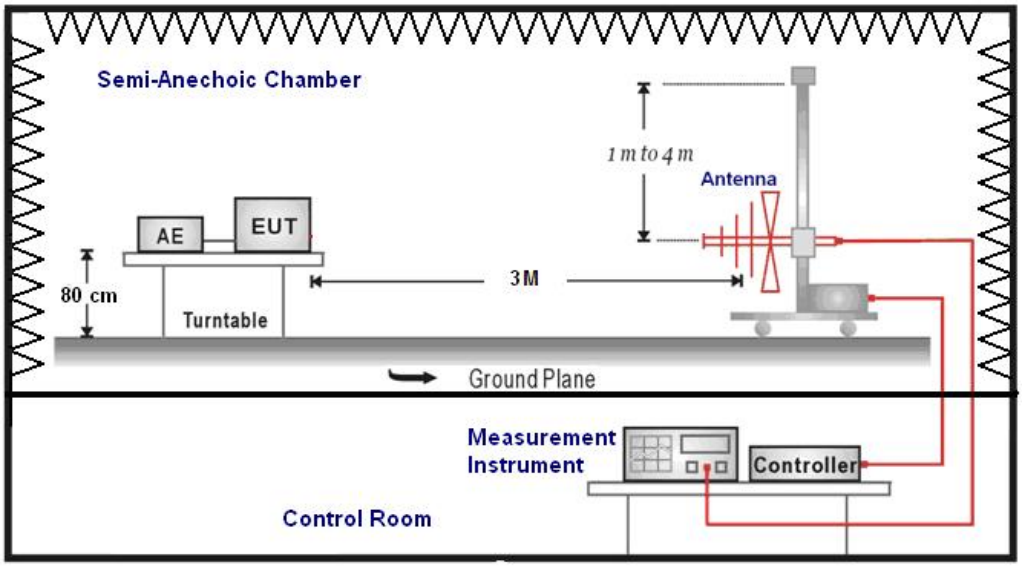
Frequency of emission (MHz)	(microvolts/meter)	(dBμV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

For Class A devices (at 10m):

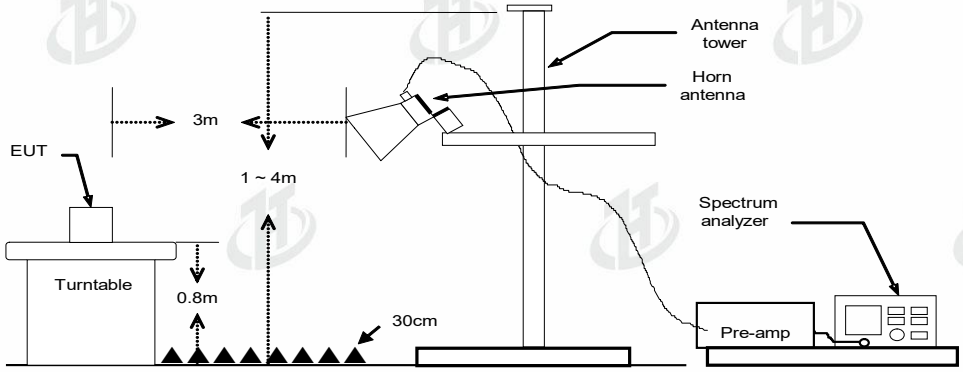
Frequency of emission (MHz)	(microvolts/meter)	(dBμV/m)
30-88	90	39
88-216	150	43.5
216-960	210	46.4
Above 960	300	49.5

5.2.2. Test setup

Radiated Emission Test Set-Up Frequency Below 1 GHz



Radiated Emission Test Set-Up Frequency Above 1GHz



The radiated tests were performed in semi-anechoic(3m) test site, using the setup accordance with the ANSI C63.4:2014.

5.2.3. EMI Test Receiver Setup and Spectrum Analyzer Setup

During the radiated emission test, the EMI test receiver and Spectrum Analyzer were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz-1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	PK
	1 MHz	3 MHz	/	AVG

5.2.4. Test procedure

The measurement was performed in a 3m semi-anechoic chamber, and instruments used were followed clause 4 of ANSI C63.4.
Detailed test procedure was following clause 8 of ANSI C63.4.
Note: for the measurement distance other than 3m and 10m, the limit is varied according to 20dB/10 decades.

5.2.5. Corrected Amplitude & Margin Calculation

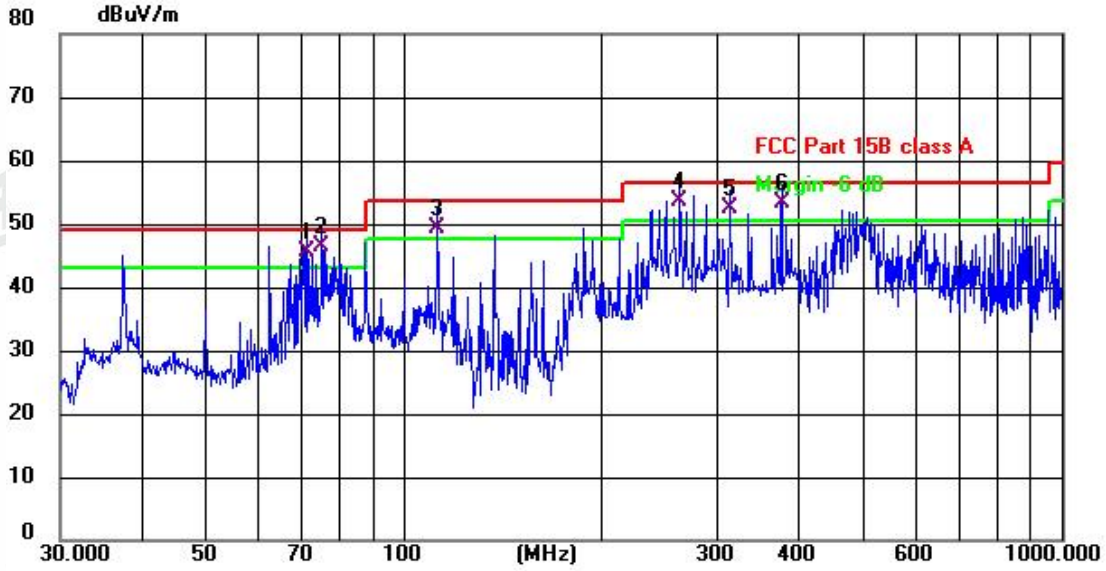
The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:
Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain
The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:
Margin = Limit – Corrected Amplitude

5.2.6. Test results

PASS

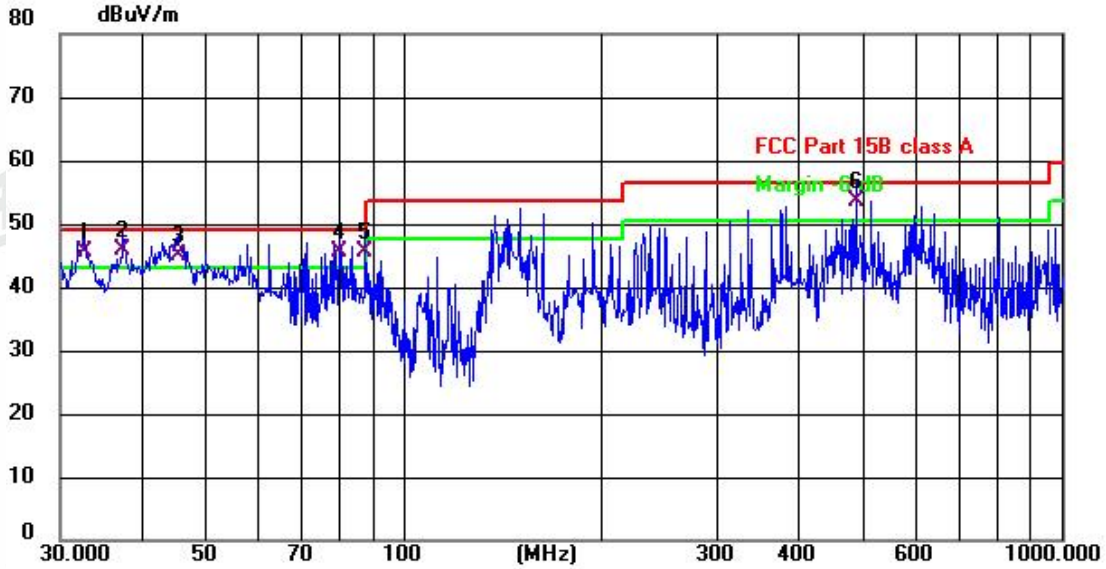
Please refer to pages 15 - 16 for data.

Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 !	71.0802	57.83	-12.18	45.65	49.00	-3.35	QP			P	
2 *	74.9191	59.02	-12.66	46.36	49.00	-2.64	QP			P	
3 !	112.5241	60.31	-10.98	49.33	53.50	-4.17	QP			P	
4 !	262.8955	61.43	-7.91	53.52	56.50	-2.98	QP			P	
5 !	312.1792	59.31	-6.94	52.37	56.50	-4.13	QP			P	
6 !	375.9384	58.84	-5.56	53.28	56.50	-3.22	QP			P	

Polarization: Vertical

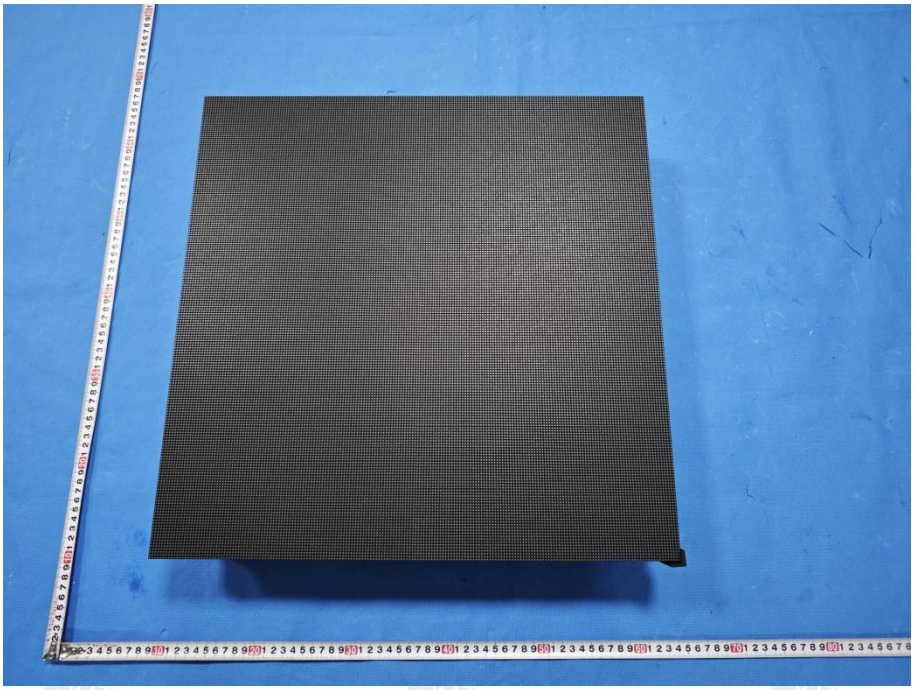


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 !	32.7486	55.39	-9.83	45.56	49.00	-3.44	QP			P	
2 !	37.4164	55.16	-9.32	45.84	49.00	-3.16	QP			P	
3 !	45.3753	53.81	-8.71	45.10	49.00	-3.90	QP			P	
4 !	79.5210	58.77	-13.22	45.55	49.00	-3.45	QP			P	
5 !	87.4175	57.55	-11.97	45.58	49.00	-3.42	QP			P	
6 *	487.3150	57.27	-3.57	53.70	56.50	-2.80	QP			P	

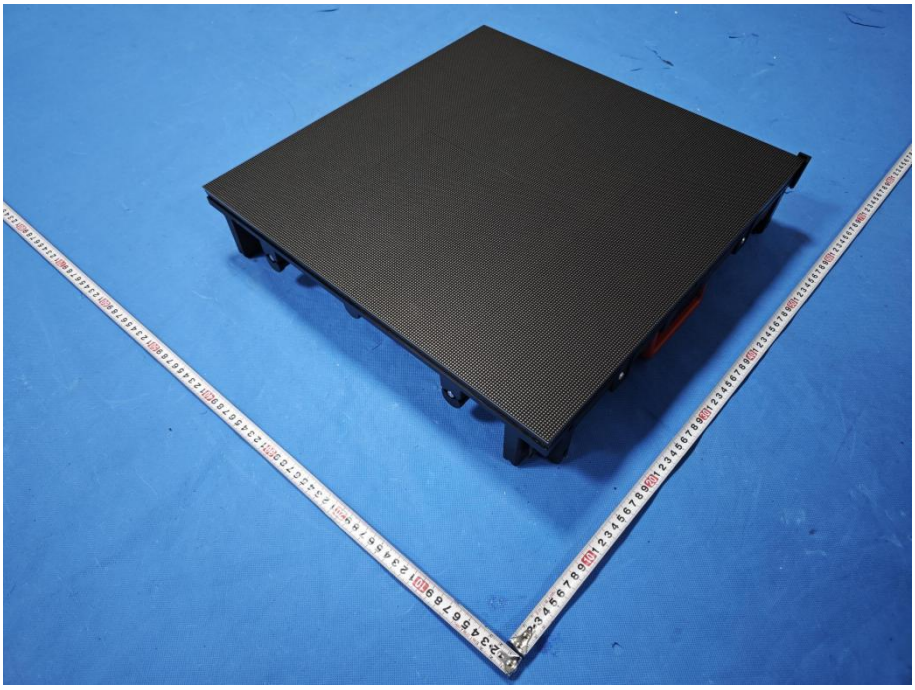
Note: Level=Reading + Factor
Margin=Level – Limit

6. Photographs of EUT

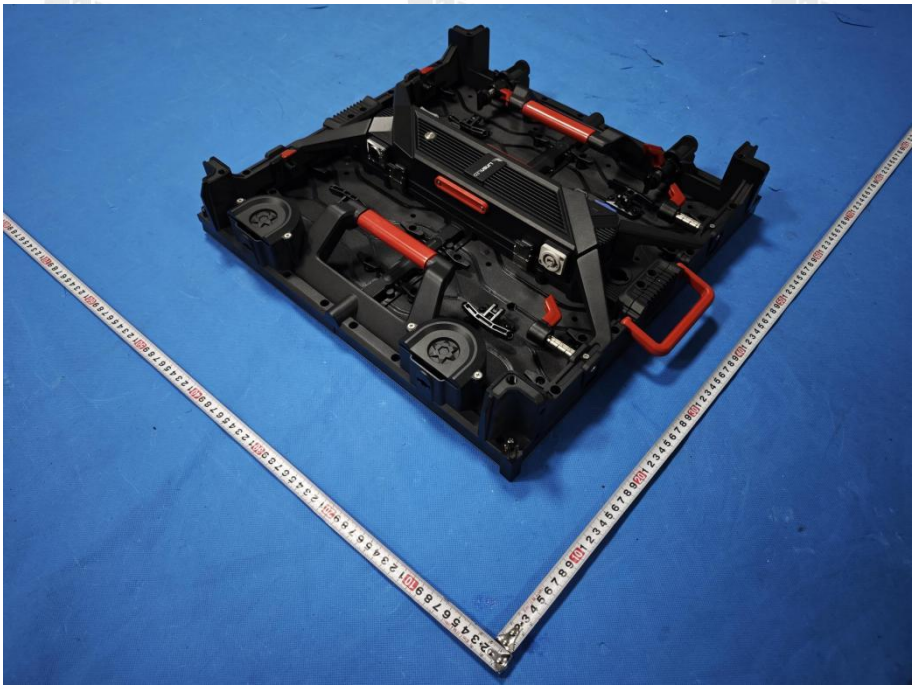
EUT Photo 1



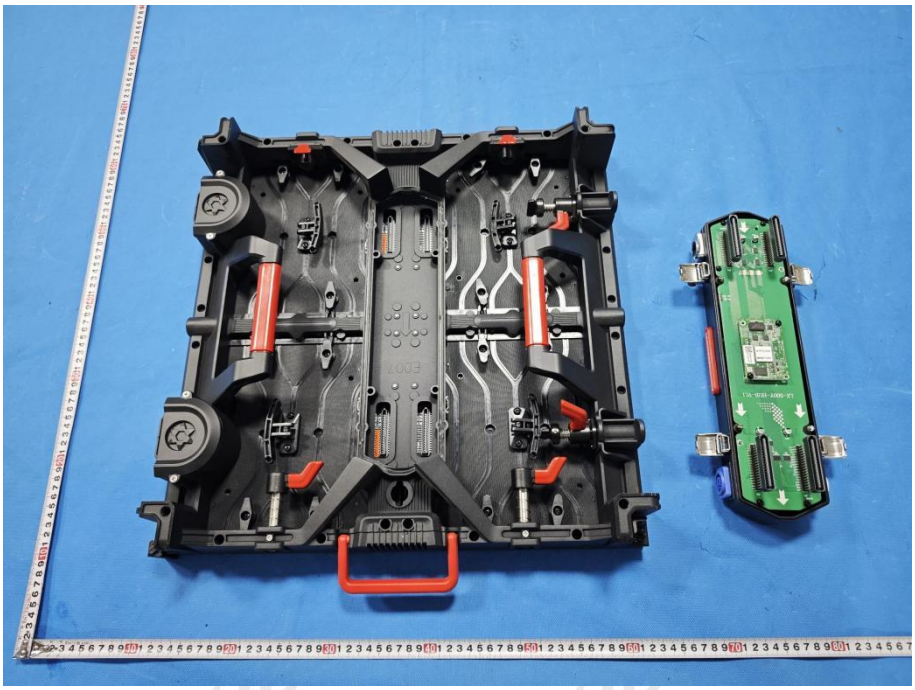
EUT Photo 2



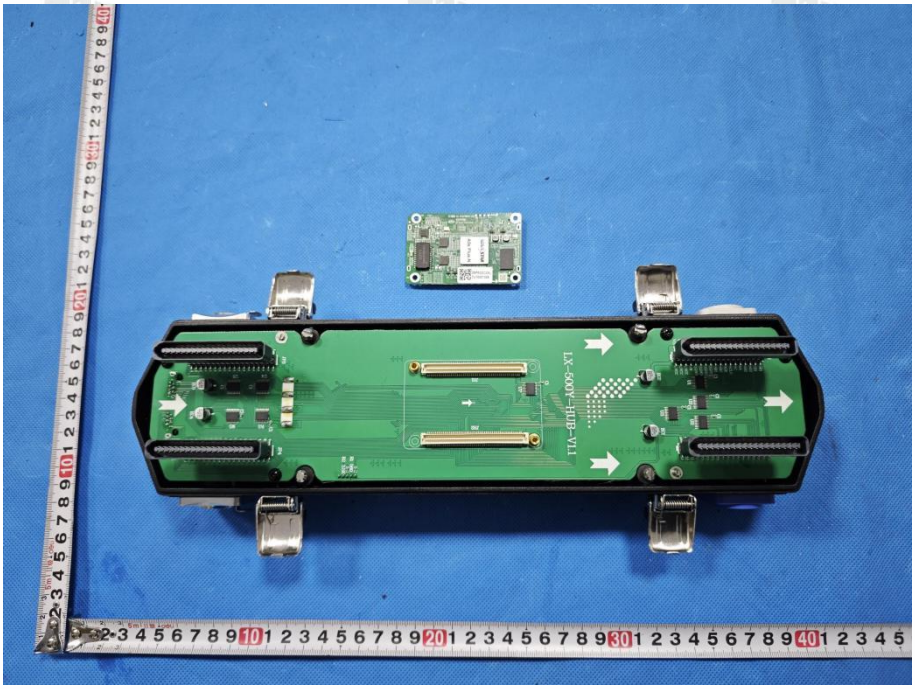
EUT Photo 3



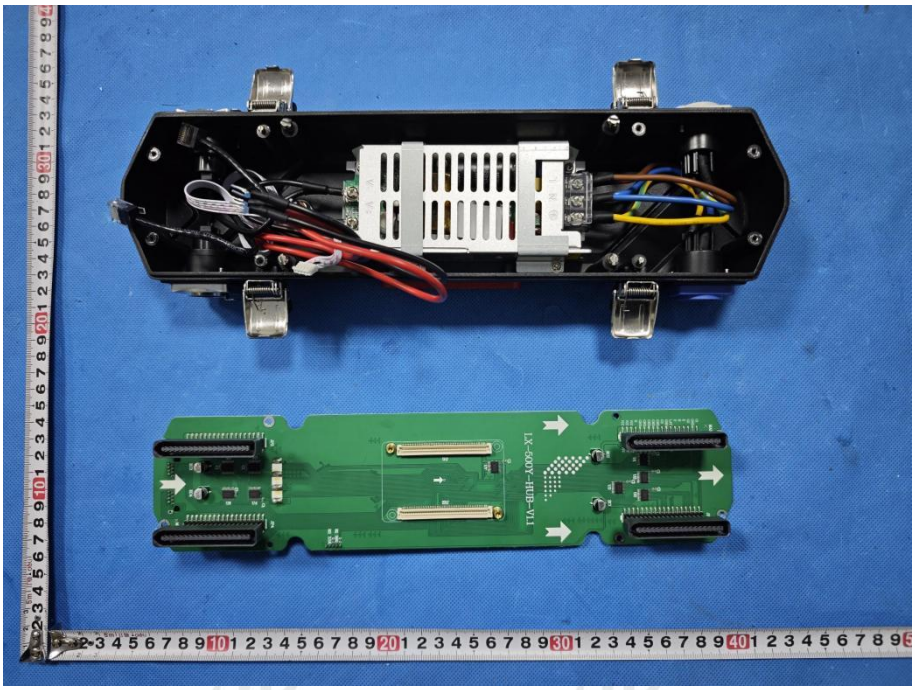
EUT Photo 4



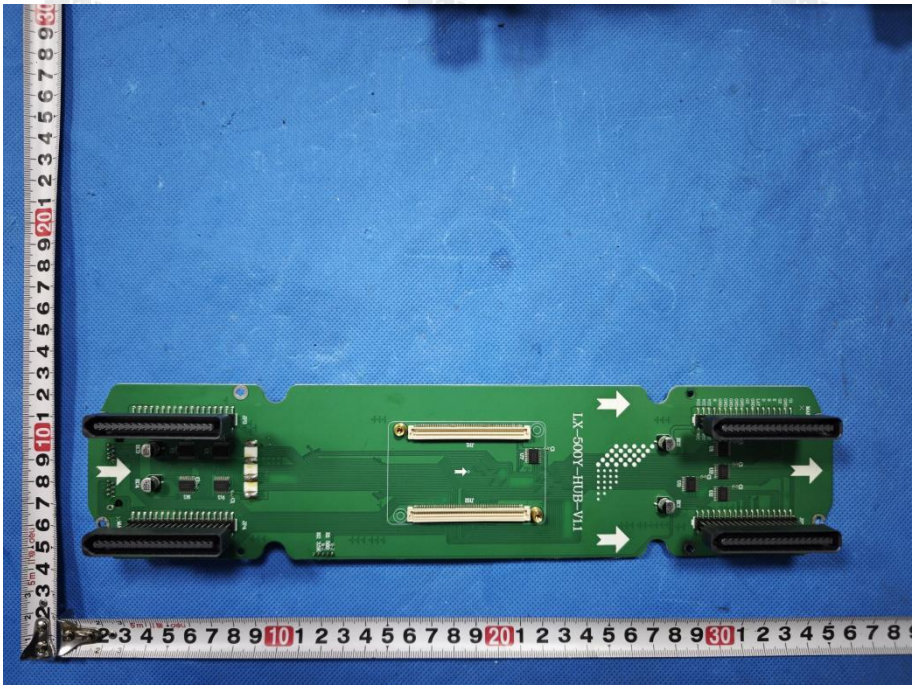
EUT Photo 5



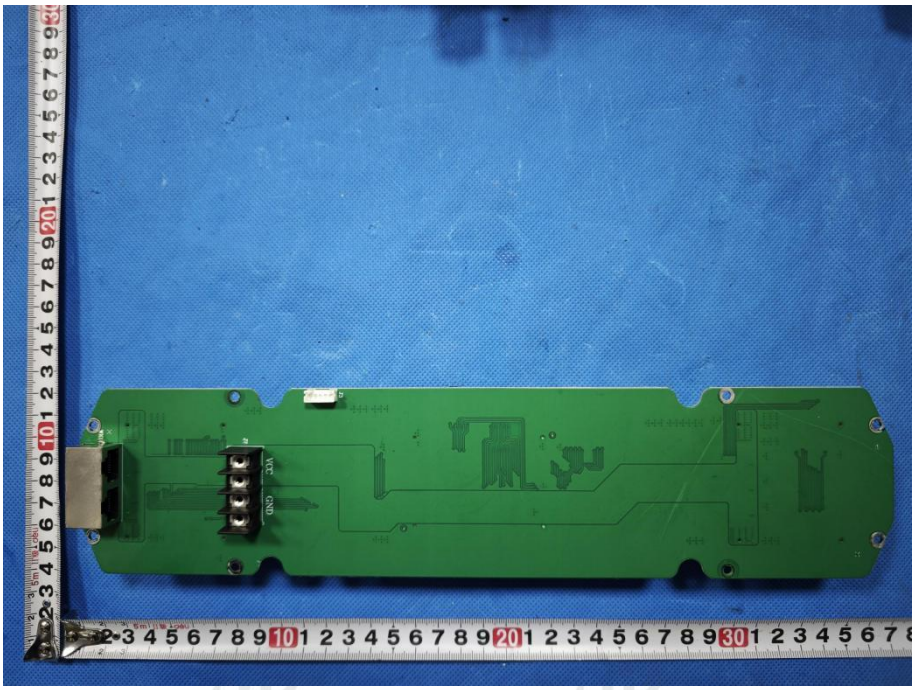
EUT Photo 6



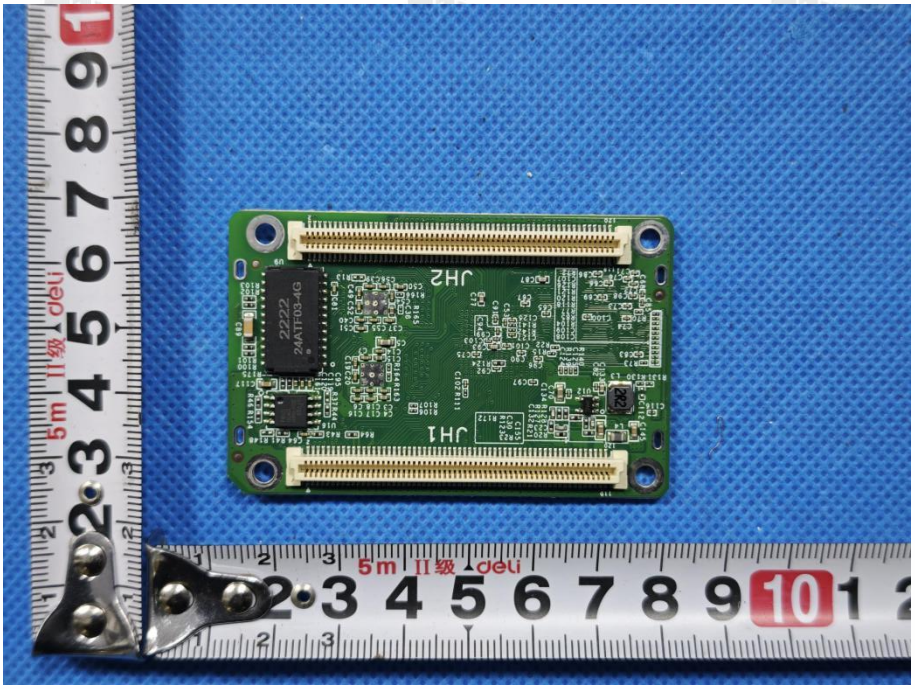
EUT Photo 7



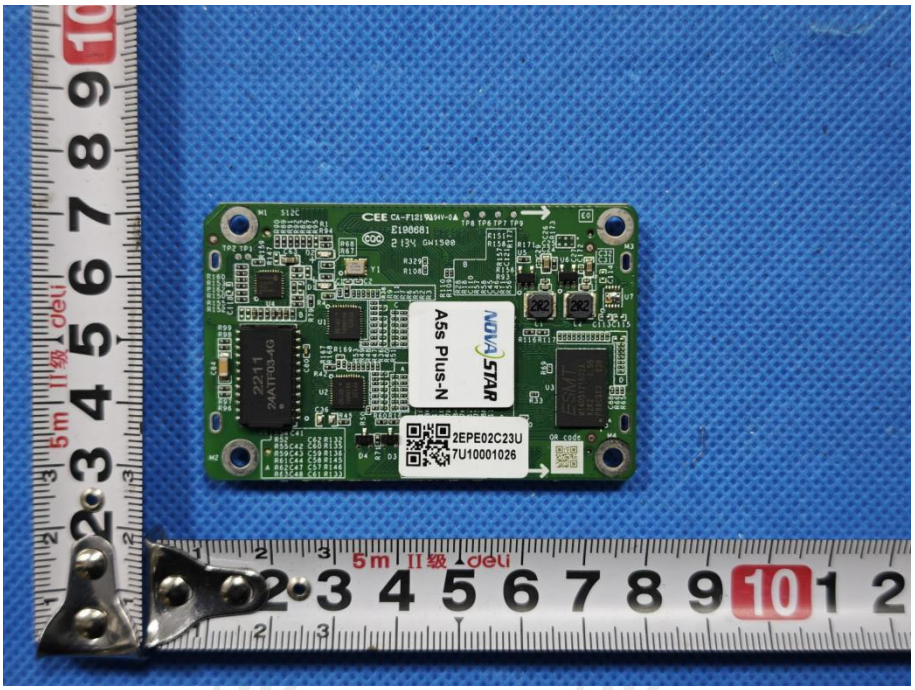
EUT Photo 8



EUT Photo 9



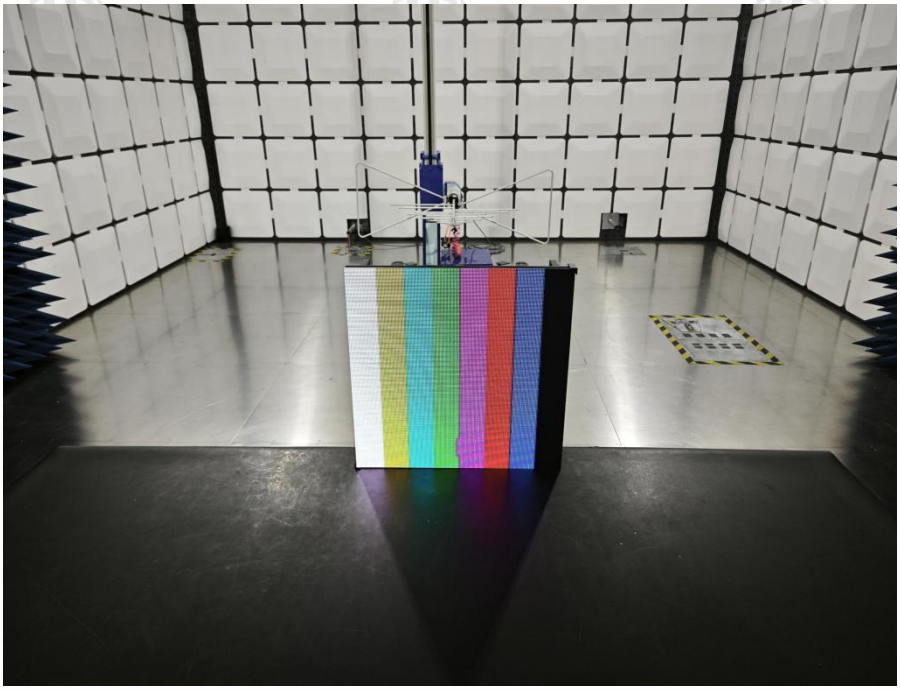
EUT Photo 10



7. Test Setup Photographs

Conducted Emission

Radiated Emission



End of report