

FCC Test Report

For

Artika For Living Inc

EUT Name: LED wall lamp

Model No: FM-LU

Brand Name: ARTIKA

Prepared By:

Dongguan Yaxu (AiT) Technology Limited

Date of Receipt: Aug.18, 2023

Date of Test: Aug.18, 2023 to Aug.31, 2023

Date of Issue: Aug.31, 2023

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Client Information:

Applicant: Artika For Living Inc
Applicant add.: 1756 50th avenue, Lachine, Quebec, Canada H8T 2V5
FCC ID 2AUHG-FM-LU

EUT Information:

EUT Name: LED wall lamp
Model No: FM-LU
Brand Name: ARTIKA

Test standard used: FCC Part 15 Subpart B

This device described above has been tested by Dongguan Yaxu (AiT) Technology Limited and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Reviewed by:



Test director

Approved by:



Technical director

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2 TEST SUMMARY

Test	Test Requirement	Test Method	Criterion	Result
Mains Terminals Disturbance Voltage, 150kHz to 30MHz	FCC Part 15 Subpart B	FCC Part 15 Subpart B ANSI C63.4: 2014	Limits	PASS
Radiated Emissions 30MHz to 1GHz 1GHz to 18GHz	FCC Part 15 Subpart B	FCC Part 15 Subpart B ANSI C63.4: 2014	Limits	PASS
Note: N/A				

2.1 MEASUREMENT UNCERTAINTY

The report uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty Multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95% .

No.	Item	Frequency Range	U , Value
1	Power Line Conducted Emission	150KHz~30MHz	1.20 dB
2	Disturbance Power Emission	30MHz~300MHz	2.96 dB
3	Radiated Emission Test	30MHz~1GHz	3.75 dB
4	Radiated Emission Test	1GHz~18GHz	3.88 dB

3 TEST FACILITY

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

. CNAS- Registration No: L6177

Dongguan Yaxu (AiT) technology Limited is accredited to ISO/IEC 17025:2017 general Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the competence of testing and calibration laboratories) on April 18, 2020

FCC-Registration No.: 703111 Designation Number: CN1313

Dongguan Yaxu (AiT) technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 6819A CAB identifier: CN0122

The 3m Semi-anechoic chamber of Dongguan Yaxu (AiT) technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6819A

A2LA-Lab Cert. No.: 6317.01

Dongguan Yaxu (AiT) technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

3.1 DEVIATION FROM STANDARD

None

3.2 ABNORMALITIES FROM STANDARD CONDITIONS

None

4 GENERAL INFORMATION

4.1 GENERAL DESCRIPTION OF EUT

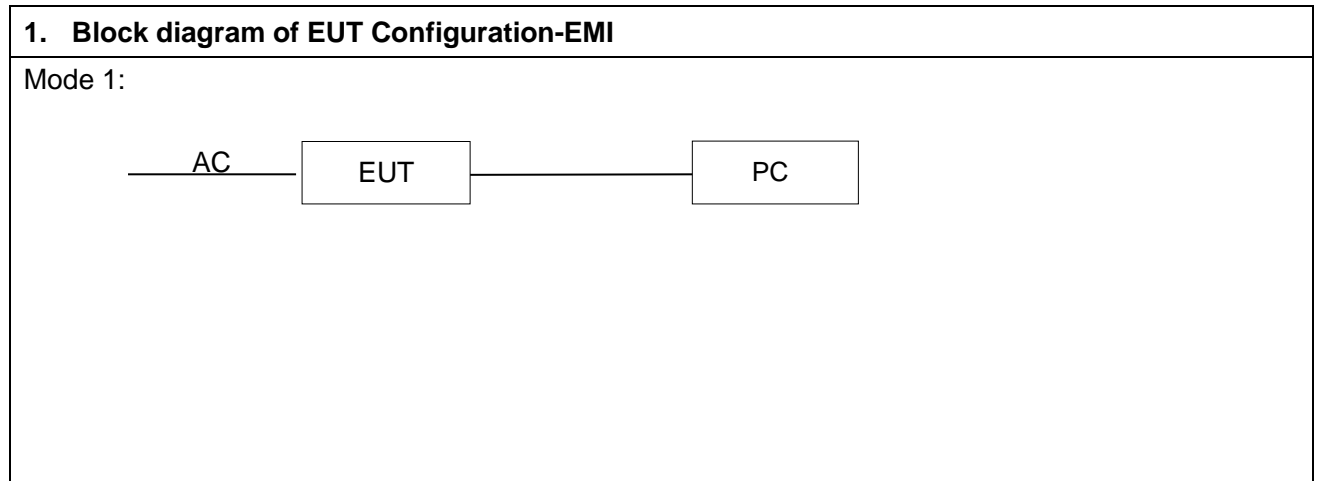
Manufacturer:	DongGuan City Rising Stars Lighting Co.,LTD
Manufacturer Address:	YuanQuan No.6 Bai Hao Village HouJie Town DongGuanCity Guangdong Province China
EUT Name:	LED wall lamp
Model No:	FM-LU; followed by up to ten characters
Brand Name:	ARTIKA
Power Range:	AC120V 60Hz 26W
Test Supply:	AC120V 60Hz

4.2 EUT TEST MODE

Mode 1	The EUT lights up normally mode
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4.3 DESCRIPTION OF TEST SETUP

EUT was tested in normal Configuration (Please See following Block diagrams)



4.4 TEST PERIPHERAL LIST

No.	Equipment	Manufacturer	EMC Compliance	Model No.	Serial No.	Power cord	signal cable
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

4.5 EUT PERIPHERAL LIST

No.	Equipment	Manufacturer	EMC Compliance	Model No.	Serial No.	Power cord	signal cable
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

5 Equipments List for All Test Items

<input checked="" type="checkbox"/> Radiation Test Equipment						
No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	EMI Measuring Receiver	R&S	ESR	101160	2022.09.02	2023.09.01
2	Low Noise Pre Amplifier	HP	HP8447E	1205323	2022.09.02	2023.09.01
3	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9160	9160-3206	2021.08.28	2024.08.27
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2022.09.02	2023.09.01
5	Spectrum Analyzer	R&S	FSV40	101160	2022.09.02	2023.09.01
6	Low Noise Pre Amplifier	Tsj	MLA-0120-A02-34	2648A04738	2022.09.02	2023.09.01
7	Broadband Horn Antenna	Schwarzbeck	BBHA 9120D	452	2021.08.28	2024.08.27
8	RE Software	EZ	EZ-EMC_RE	Ver.AIT-03A	N/A	N/A

<input checked="" type="checkbox"/> Conduction Test equipment						
No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	EMI Test Receiver	R&S	ESCI	100124	2022.09.02	2023.09.01
2	LISN	Kyoritsu	KNW-242	8-837-4	2022.09.02	2023.09.01
3	LISN	R&S	ESH3-Z5	892785/016	2022.09.02	2023.09.01
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2022.09.02	2023.09.01
5	CE Software	EZ	EZ-EMC_CE	Ver.AIT-03A	N/A	N/A

Note:

1. is not applicable in this Test Report. is applicable in this Test Report.

6 EMISSION TEST RESULTS

6.1 MAINS TERMINALS DISTURBANCE VOLTAGE MEASUREMENT

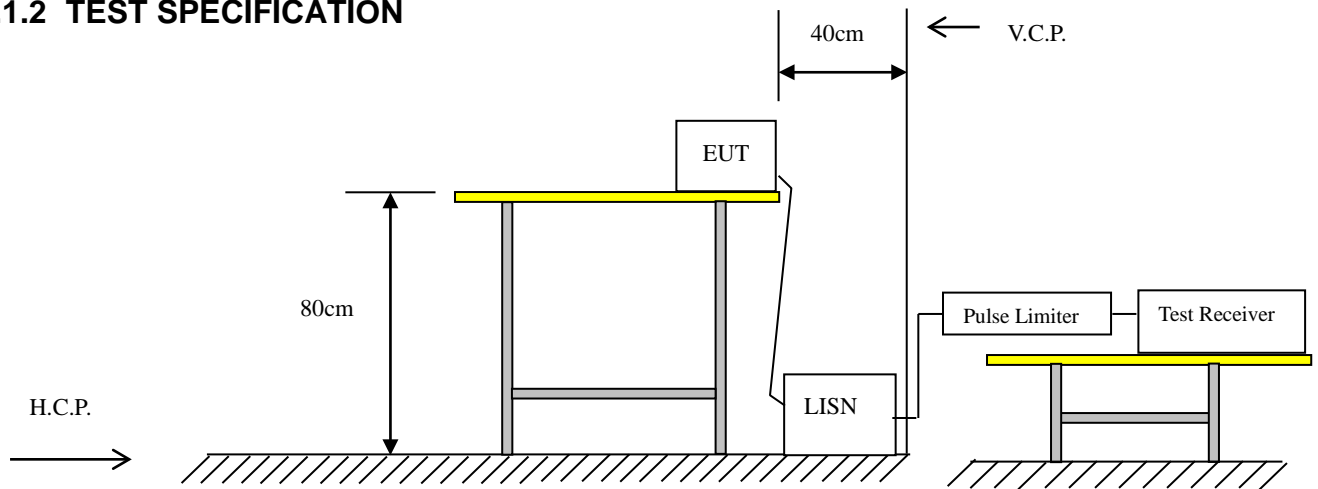
Frequency (MHz)	<input type="checkbox"/> Class A (dB μ V)		<input checked="" type="checkbox"/> Class B (dB μ V)	
	Q.P. (Quasi-Peak)	A.V. (Average)	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 ~ 0.50	79	66	66 to 56	56 to 46
0.50 ~ 5.0	73	60	56	46
5.0 ~ 30	73	60	60	50

Detector: Peak for pre-scan (9kHz Resolution Bandwidth)
 Quasi-Peak & Average if maximized peak within 6dB of Average Limit

6.1.1 E.U.T. OPERATION

Temperature:	26	Humidity:	50	Atmospheric Pressure:	1006	Kpa
Test Mode:	Mode 1-2		The worst mode		Mode 1	

6.1.2 TEST SPECIFICATION



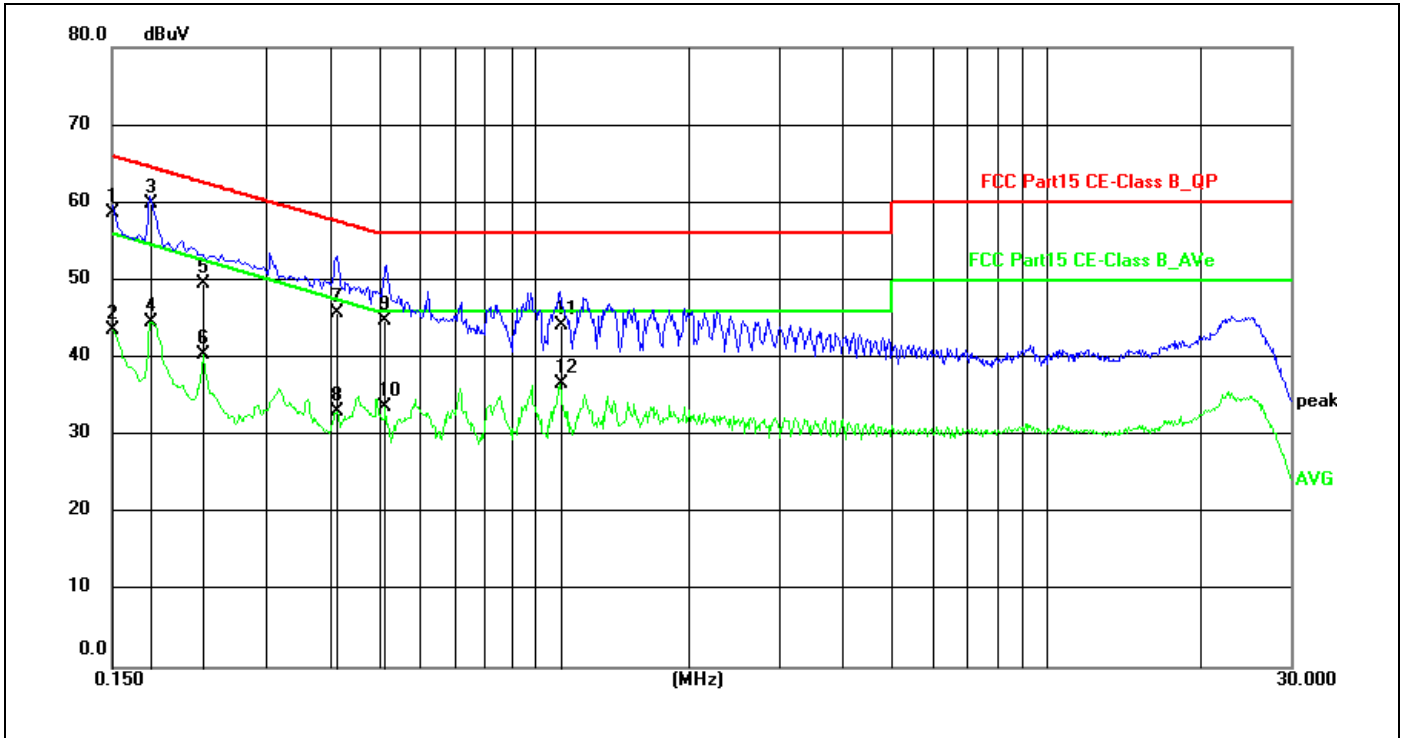
EUT was placed upon a wooden test table 0.8m above the horizontal metal reference plane and 0.4m from the vertical ground plane, and it was connected to an AMN. The closest distance between the boundary of the EUT and the surface of the AMN is 0.8m. All peripherals were connected to another AMN, and placed at a distance of 10cm from each other. A spectrum and receiver was connected to the RF output port of the AMN. Both average and quasi-peak value were detected.

6.1.3 MEASUREMENT DATA

An initial pre-scan was performed on the live and neutral lines.

Quasi-peak or average measurements were performed at the frequency which maximum peak emissions were detected.

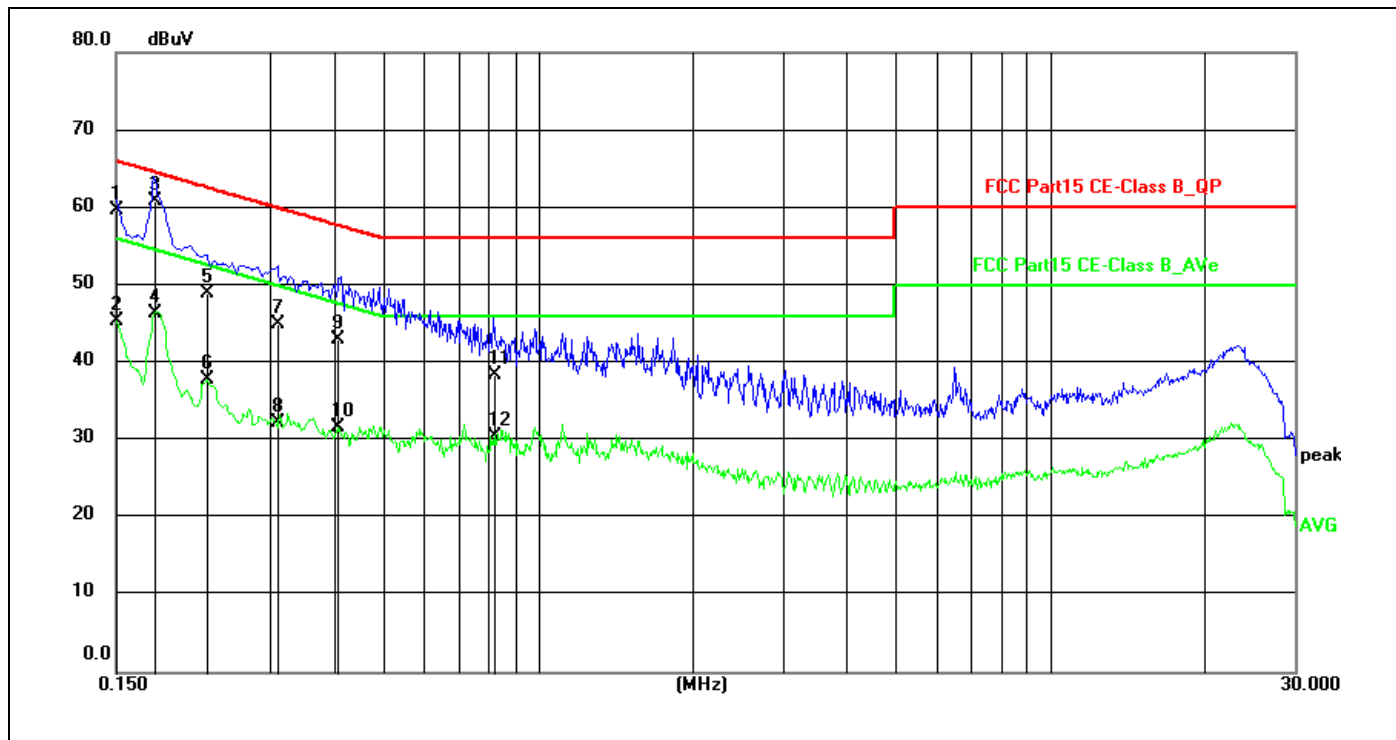
Please refer to the attached quasi-peak & average measurement data for reference.



Site:	844LAB	Phase:	N	Temperature(C):	24(C)
Limit:	FCC Part15 CE-Class B_QP	Test Time:	2023/8/22 9:30:43	Humidity(%):	63%
EUT:	Led wall lamp	Power Rating:	AC120/60Hz	Test Engineer:	
M/N.:	FM-LU	Note:			
Mode:	Lighting				

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measurement(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1	0.1504	47.48	11.15	58.63	65.98	-7.35	QP	
2	0.1504	32.47	11.15	43.62	55.98	-12.36	AVG	
3 *	0.1778	48.74	11.16	59.90	64.59	-4.69	QP	
4	0.1778	33.42	11.16	44.58	54.59	-10.01	AVG	
5	0.2252	38.30	11.18	49.48	62.62	-13.14	QP	
6	0.2252	29.14	11.18	40.32	52.62	-12.30	AVG	
7	0.4126	34.55	11.28	45.83	57.60	-11.77	QP	
8	0.4126	21.85	11.28	33.13	47.60	-14.47	AVG	
9	0.5110	33.50	11.31	44.81	56.00	-11.19	QP	
10	0.5110	22.28	11.31	33.59	46.00	-12.41	AVG	
11	1.1260	33.00	11.23	44.23	56.00	-11.77	QP	
12	1.1260	25.30	11.23	36.53	46.00	-9.47	AVG	

*:Maximum data x:Over limit !:over margin



Site:	844LAB	Phase: L1	Temperature(C): 24(C)
Limit:	FCC Part15 CE-Class B_QP		Humidity(%): 63%
EUT:	Led wall lamp	Test Time:	2023/8/22 9:34:23
M/N.:	FM-LU	Power Rating:	AC120/60Hz
Mode:	Lighting	Test Engineer:	
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measurement(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1	0.1504	48.51	11.14	59.65	65.98	-6.33	QP	
2	0.1504	34.13	11.14	45.27	55.98	-10.71	AVG	
3 *	0.1780	49.71	11.14	60.85	64.58	-3.73	QP	
4	0.1780	35.31	11.14	46.45	54.58	-8.13	AVG	
5	0.2247	37.80	11.14	48.94	62.64	-13.70	QP	
6	0.2247	26.61	11.14	37.75	52.64	-14.89	AVG	
7	0.3102	33.73	11.17	44.90	59.97	-15.07	QP	
8	0.3102	21.14	11.17	32.31	49.97	-17.66	AVG	
9	0.4082	31.75	11.18	42.93	57.68	-14.75	QP	
10	0.4082	20.50	11.18	31.68	47.68	-16.00	AVG	
11	0.8189	27.14	11.25	38.39	56.00	-17.61	QP	
12	0.8189	19.32	11.25	30.57	46.00	-15.43	AVG	

*:Maximum data x:Over limit !:over margin

6.1.4 Test Setup Photograph



6.2 RADIATED EMISSION MEASUREMENT

Limits of Radiated Emission Measurement

Frequency (MHz)	<input type="checkbox"/> ICES-003 Class B (3m)	<input checked="" type="checkbox"/> FCC Part 15 Class B (3m)
	Quasi-Peak dB(μV/m)	
30 ~ 88	40.0	40.0
88 ~ 216	43.5	43.5
216 ~230	46.0	46.0
230 ~960	47.0	46.0
Above 960	54.0	54.0

Detector:

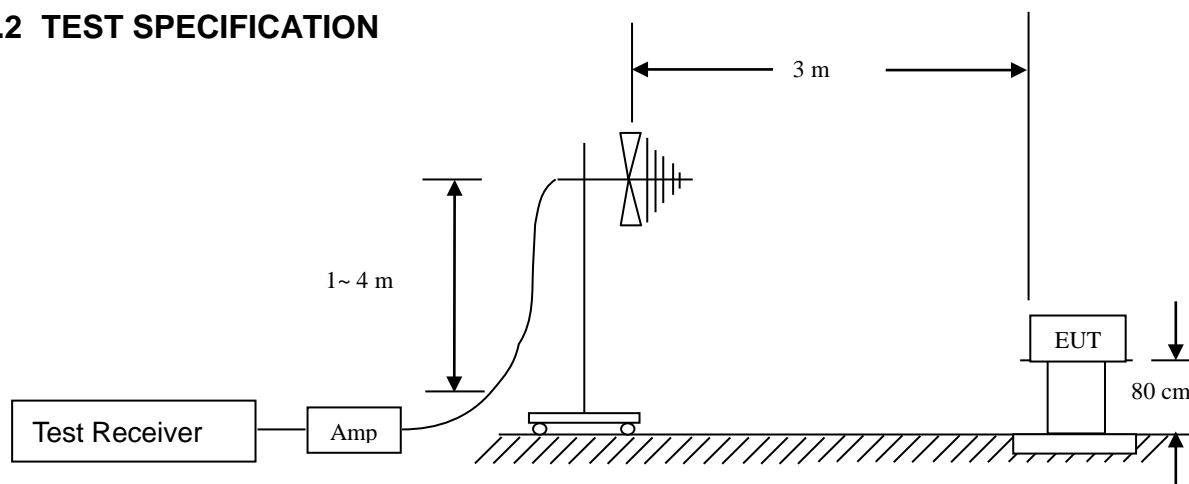
Peak for pre-scan (120kHz resolution bandwidth)

Quasi-Peak if maximum peak within 6dB of limit

6.2.1 E.U.T. OPERATION

Temperature:	25°C	Humidity:	50% RH	Atmospheric Pressure:	1006	Kpa
Test Mode:	Mode 1-2		The worst mode		Mode 1	

6.2.2 TEST SPECIFICATION



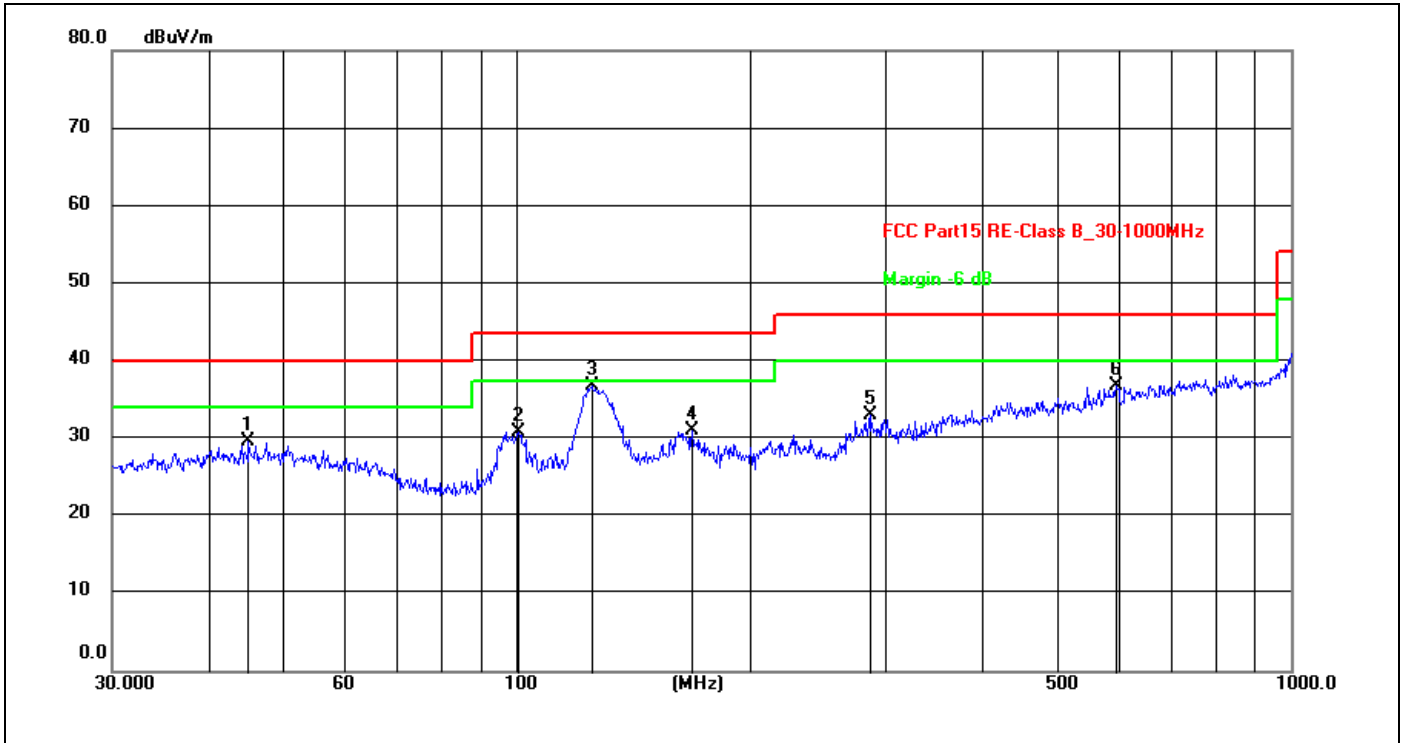
EUT was placed upon a wooden test table which was placed on the turn table 0.8m above the horizontal metal ground plane, and operating in the mode as mentioned above. A receiving antenna was placed 3m away from the EUT. During testing, turn around the turn table and move the antenna from 1m to 4m to find the maximum field-strength reading. All peripherals were placed at a distance of 10cm between each other. Both horizontal and vertical antenna polarities were tested.

6.2.3 MEASUREMENT DATA

An initial pre-scan was performed in the 3m chamber using the spectrum analyzers in peak detection mode. The EUT was measured by Biology antenna with 2 orthogonal polarities and peak emissions from the EUT were detected within 6dB of the class B limit line.

The following quasi-peak measurements were performed on the EUT.

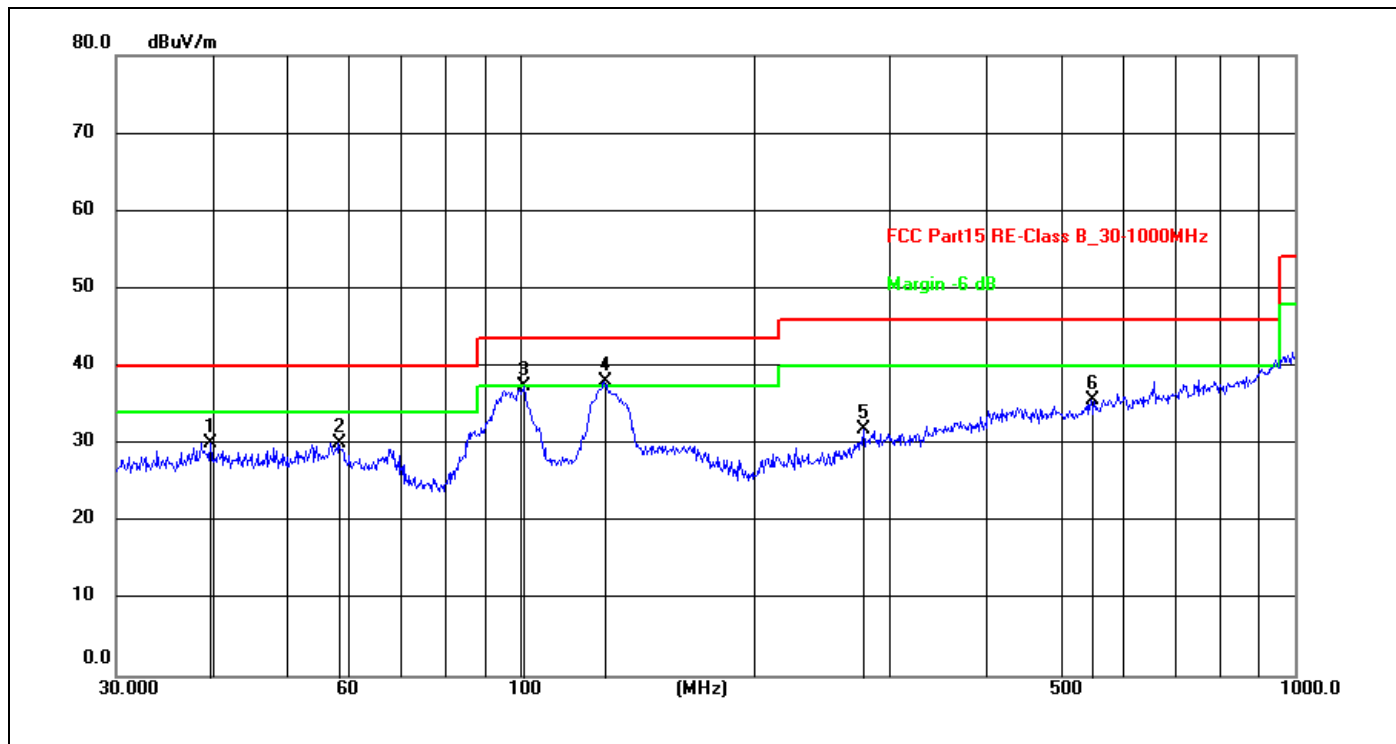
Between 30 MHz - 1000 MHz



Site:	966LAB	Antenna::Horizontal	Temperature(C):24(C)
Limit:	FCC Part15 RE-Class B_30-1000MHz		Humidity(%):60%
EUT:	Led wall lamp	Test Time:	2023/8/31 9:14:48
M/N.:	FM-LU	Power Rating:	AC 120V/60Hz
Mode:	Lighting	Test Engineer:	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	45.0583	15.37	14.35	29.72	40.00	-10.28	peak	200	29	
2	100.5806	19.96	10.95	30.91	43.50	-12.59	peak	200	319	
3 *	125.0065	23.50	13.25	36.75	43.50	-6.75	peak	200	299	
4	168.4137	16.42	14.58	31.00	43.50	-12.50	peak	200	118	
5	285.9777	18.83	14.26	33.09	46.00	-12.91	peak	200	253	
6	595.1327	15.79	20.95	36.74	46.00	-9.26	peak	200	207	

*:Maximum data x:Over limit !:over margin



Site:	966LAB	Antenna::Vertical	Temperature(C):24(C)
Limit:	FCC Part15 RE-Class B_30-1000MHz		Humidity(%):60%
EUT:	Led wall lamp	Test Time:	2023/8/31 9:17:24
M/N.:	FM-LU	Power Rating:	AC 120V/60Hz
Mode:	Lighting	Test Engineer:	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	39.7146	15.38	14.66	30.04	40.00	-9.96	peak	200	258	
2	58.2030	16.42	13.67	30.09	40.00	-9.91	peak	100	177	
3	100.9339	26.05	11.35	37.40	43.50	-6.10	peak	100	10	
4 *	128.1130	24.05	13.90	37.95	43.50	-5.55	peak	100	302	
5	277.0935	17.93	13.98	31.91	46.00	-14.09	peak	100	291	
6	545.1826	15.92	19.78	35.70	46.00	-10.30	peak	100	356	

*:Maximum data x:Over limit !:over margin

TEST SETUP PHOTOGRAPH



7 APPENDIX-Photographs of EUT Constructional Details

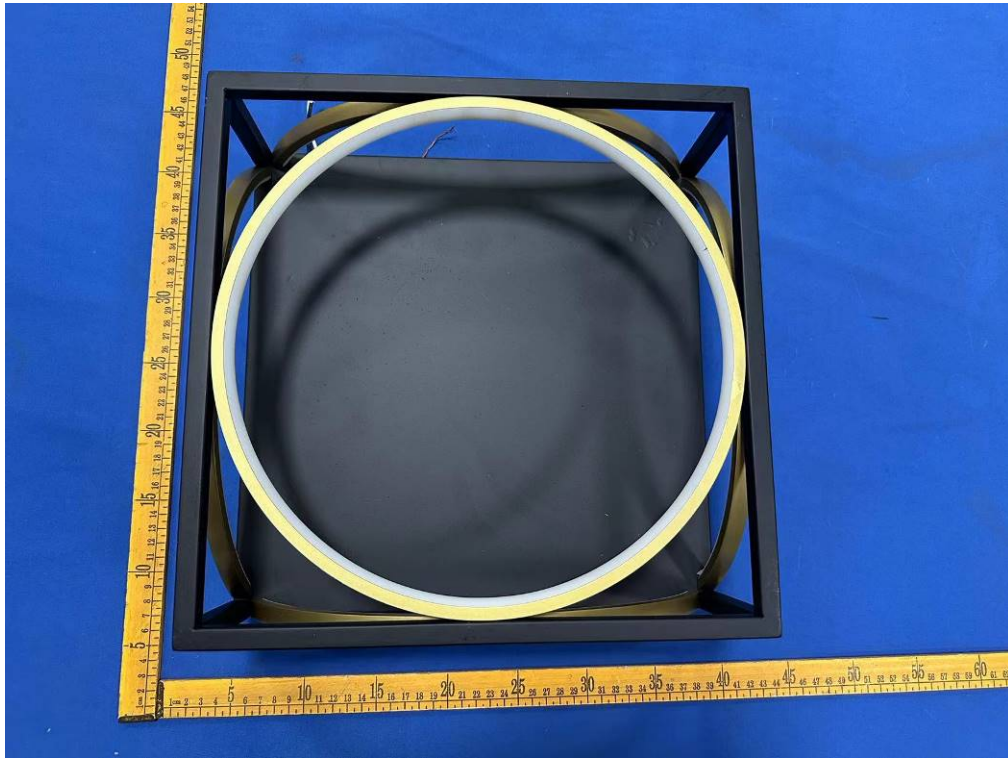


Fig.1(Model: FM-LU)



Fig.2(Model: FM-LU)

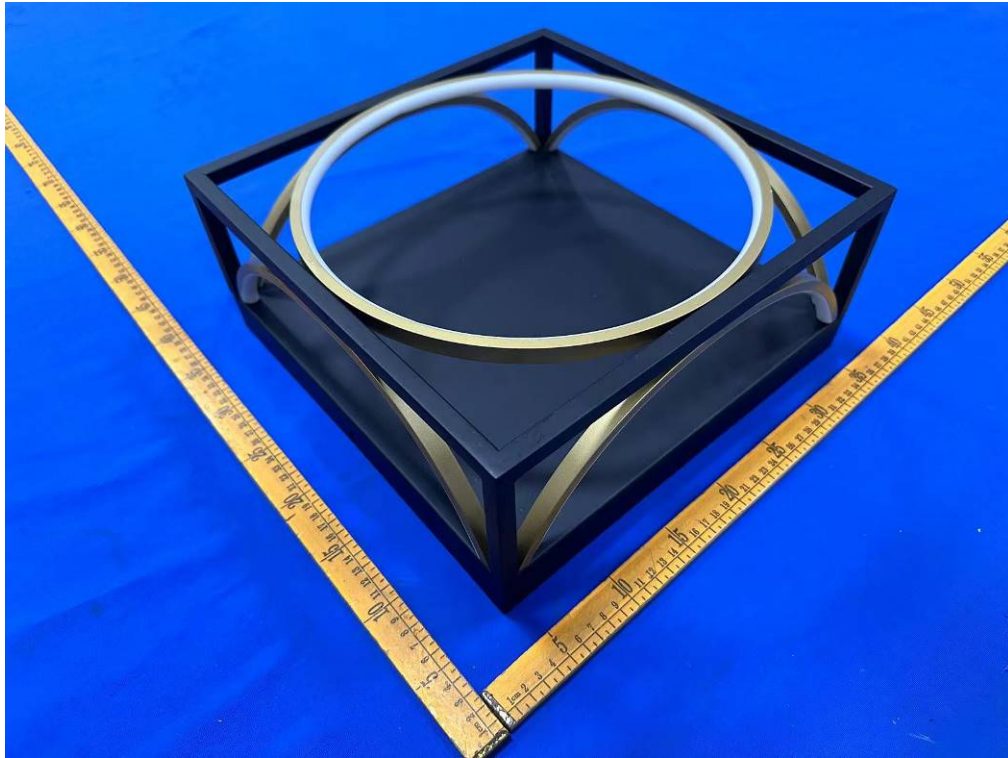


Fig.3(Model: FM-LU)

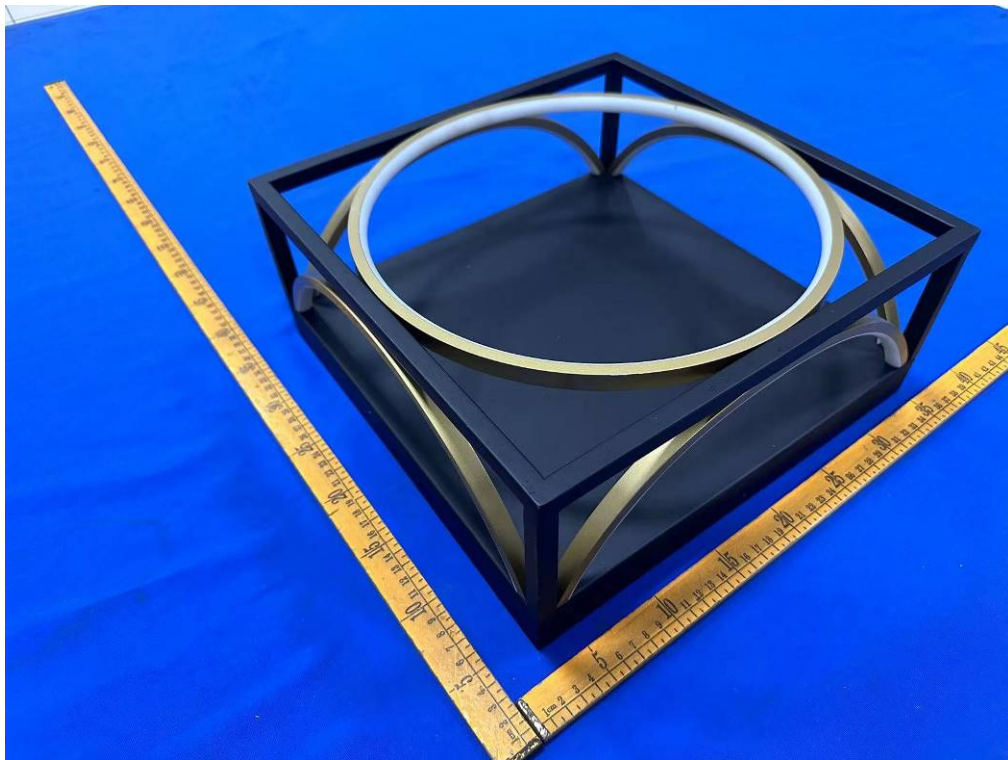


Fig.4(Model: FM-LU)



Fig.5(Model: FM-LU)

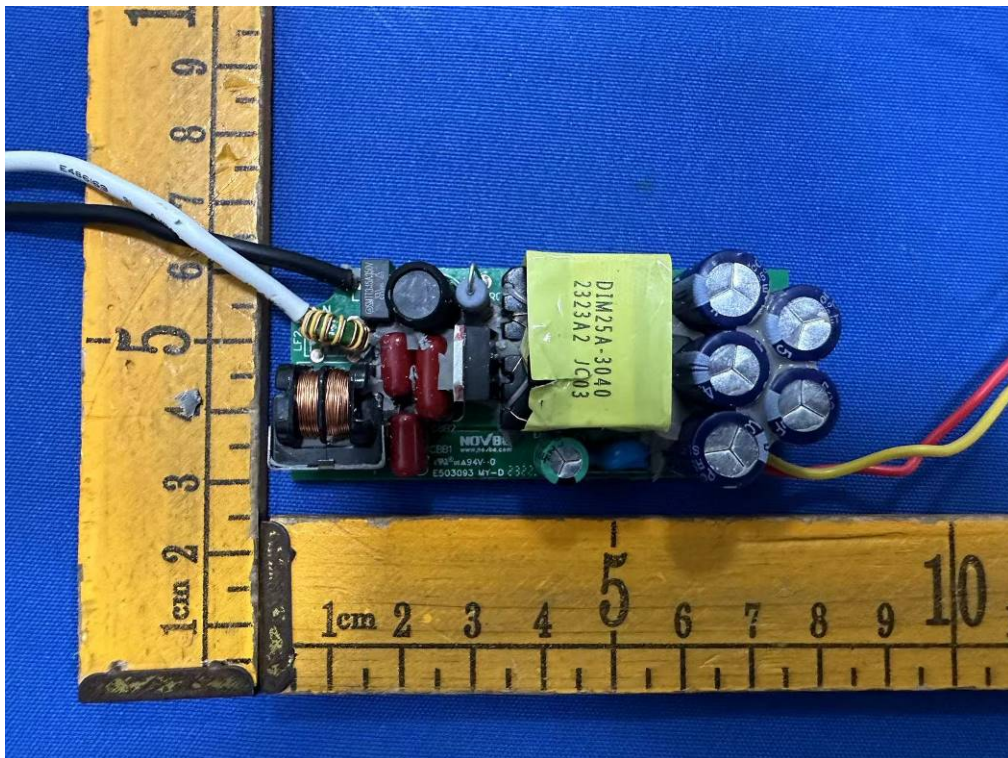


Fig.6(Model: FM-LU)

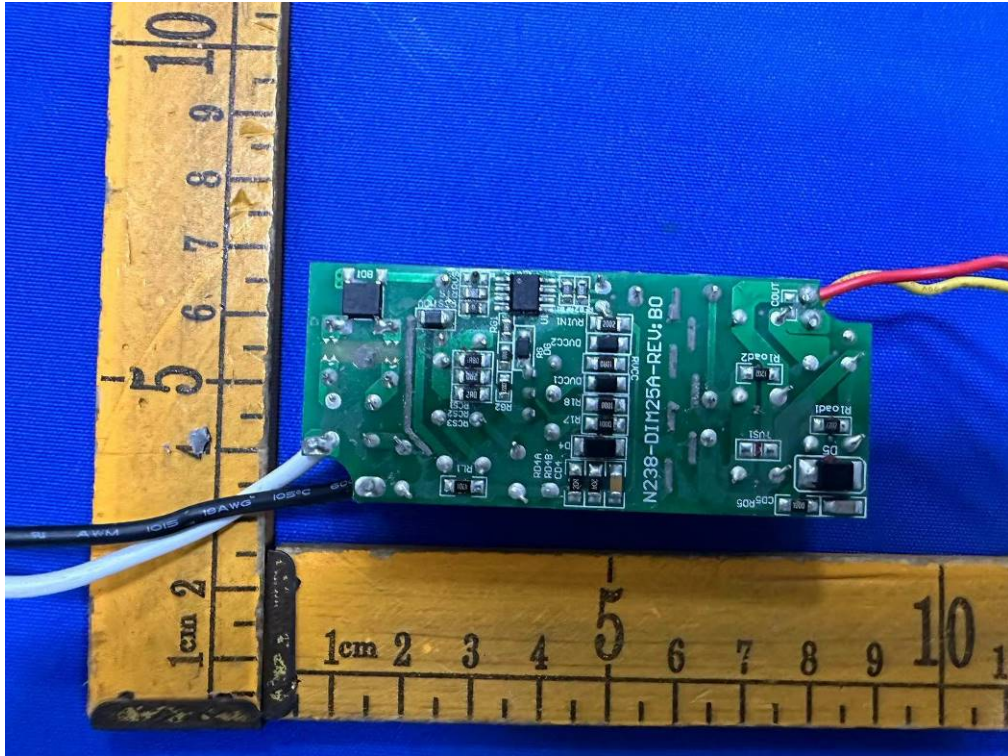


Fig.7(Model: FM-LU)



Fig.8(Model: FM-LU)

**** End of report ****