

FCC Test Report

For

Artika For Living Inc

EUT Name: LED wall lamp

Model No: VAN-HGC

Brand Name: ARTIKA

Prepared By:

Dongguan Yaxu (AiT) Technology Limited

Date of Receipt: Aug.01, 2023

Date of Test: Aug.01, 2023 to Aug.02, 2023

Date of Issue: Aug.04, 2023

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of Dongguan Yaxu (AiT) Technology Limited

Client Information:

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

EUT Information:

EUT Name: LED wall lamp
Model No: VAN-HGC
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

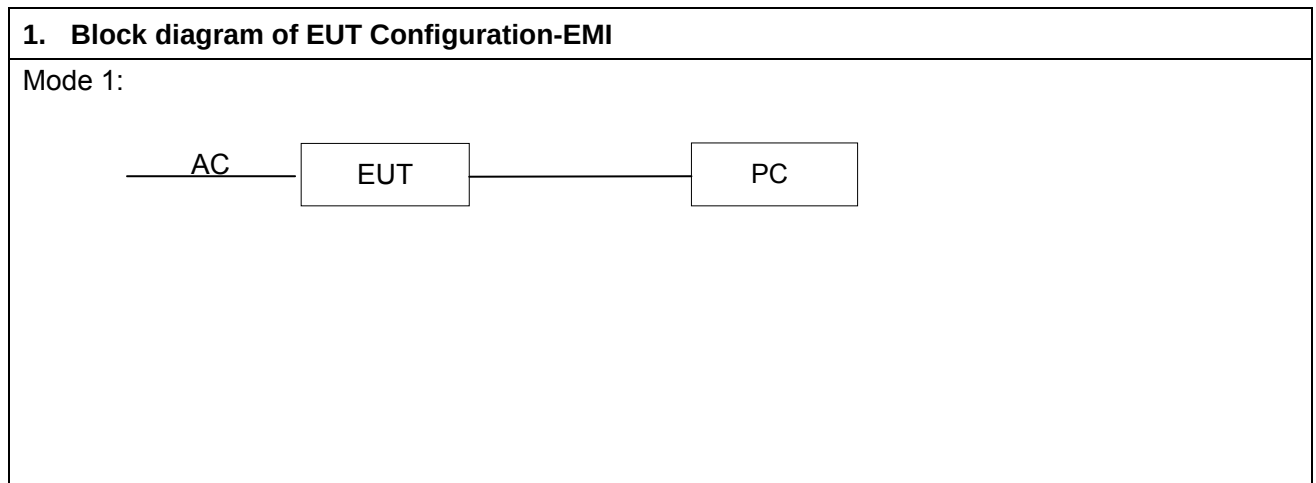
Manufacturer:	DongGuan City Rising Stars Lighting Co.,LTD
Manufacturer Address:	YuanQuan No.6 Bai Hao Village HouJie Town DongGuanCity Guangdong Province China
EUT Name:	LED wall lamp
Model No:	VAN-HGC; followed by up to ten characters
Brand Name:	ARTIKA
Power Range:	AC120V 60Hz 29W
Test Supply:	AC120V 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

☒ 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

☒ 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)	☐ Class A (dBμV)		☒ Class B (dBμV)	
	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:

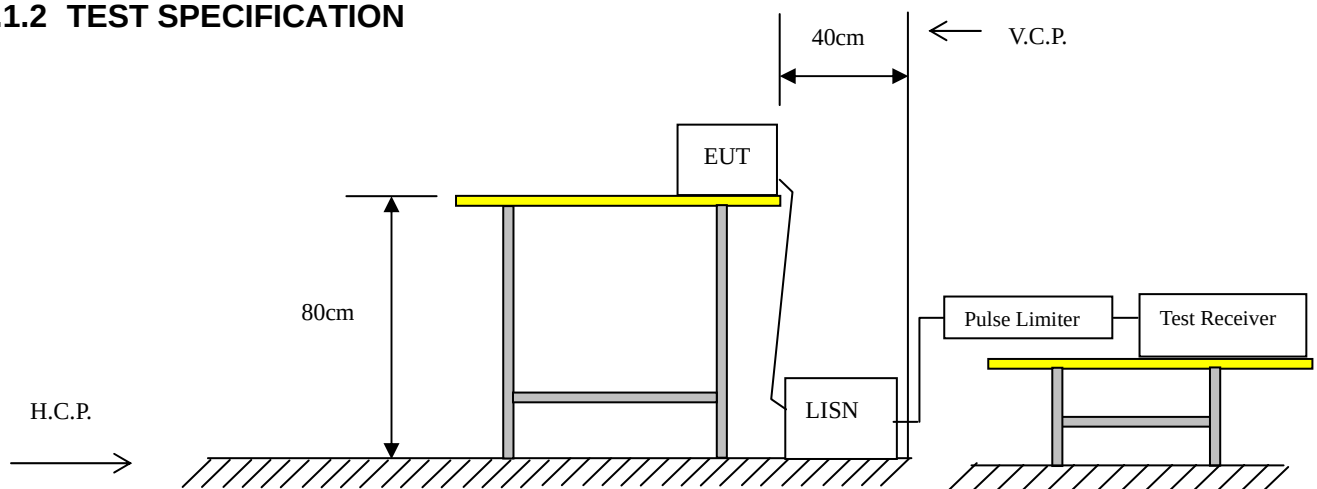
Peak for pre-scan (9kHz Resolution Bandwidth)

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



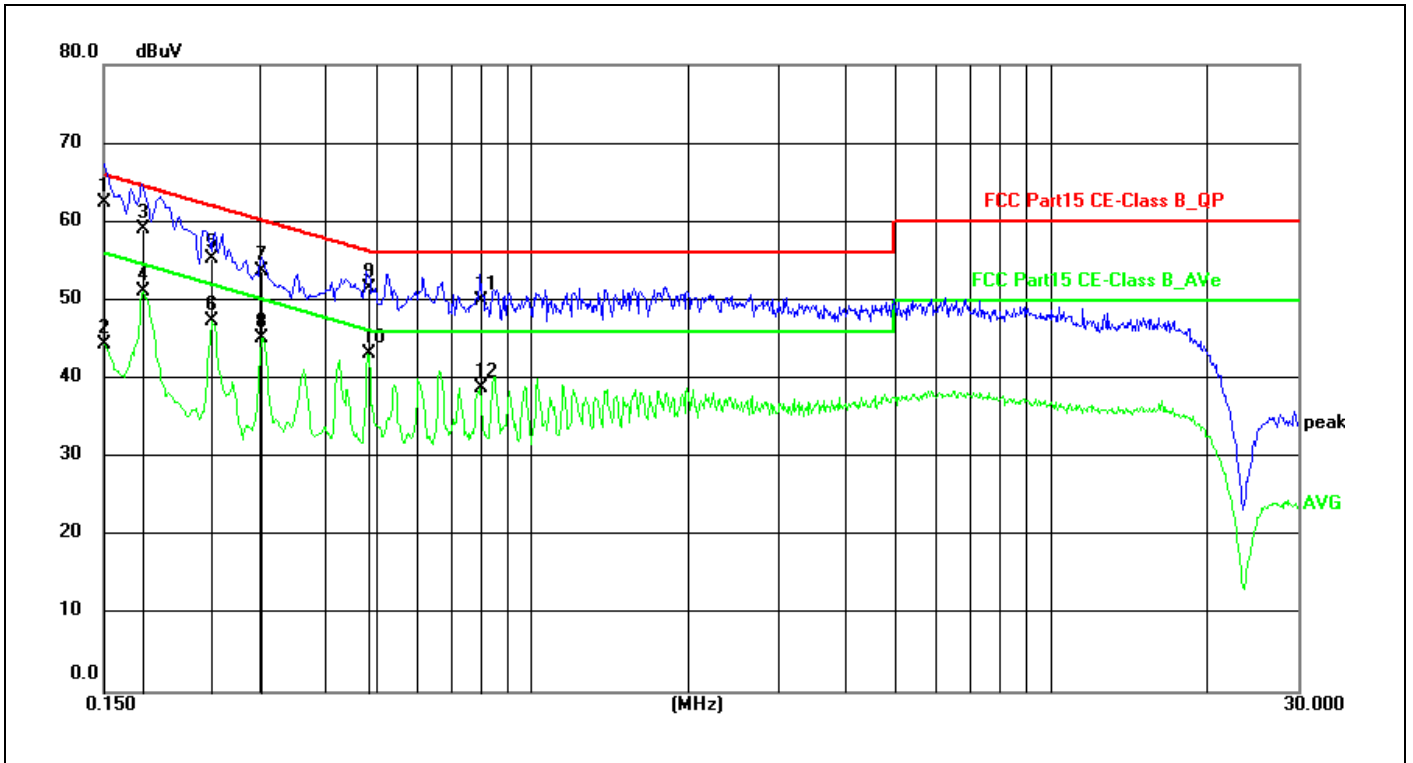
EUT was placed upon a wooden test table 0.8m above the horizontal metal reference plane and 0.4m from the vertical ground plane, and it was connected to an AMN. The closest distance between the boundary of the EUT and the surface of the AMN is 0.8m. All peripherals were connected to another AMN, and 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.

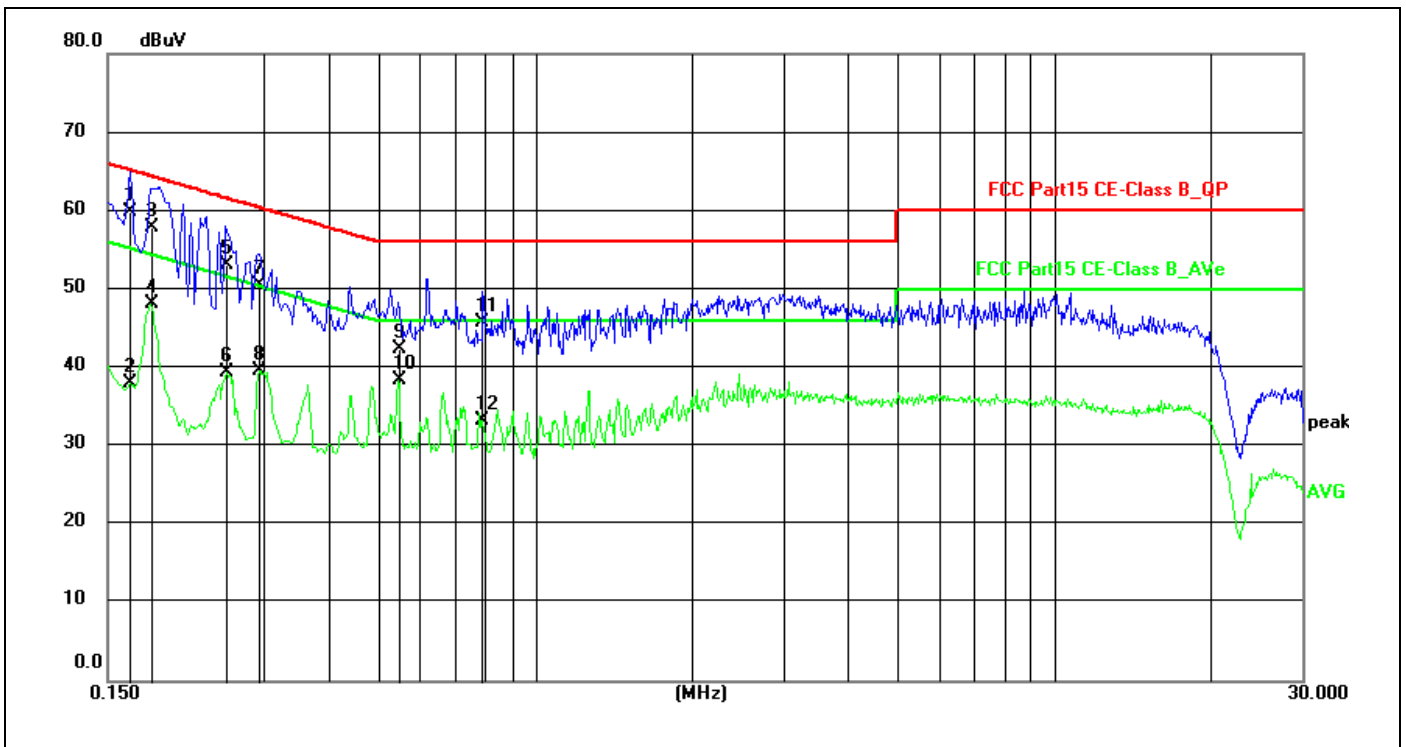
Quasi-peak or average measurements were performed at the frequency which maximum peak emissions were detected.

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 **Humidity(%):** 63%
EUT: LED wall lamp **Test Time:** 2023/8/2 15:30:49
M/N.: VAN-HGC **Power Rating:** AC120/60Hz
Mode: Lighting **Test Engineer:**
Note:

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1	0.1505	51.34	11.15	62.49	65.97	-3.48	QP	
2	0.1505	33.28	11.15	44.43	55.97	-11.54	AVG	
3	0.1780	47.92	11.16	59.08	64.58	-5.50	QP	
4	0.1785	40.04	11.16	51.20	54.56	-3.36	AVG	
5	0.2420	44.13	11.19	55.32	62.03	-6.71	QP	
6	0.2420	36.10	11.19	47.29	52.03	-4.74	AVG	
7	0.3020	42.53	11.24	53.77	60.19	-6.42	QP	
8	0.3020	33.98	11.24	45.22	50.19	-4.97	AVG	
9	0.4860	40.28	11.31	51.59	56.24	-4.65	QP	
10*	0.4860	31.95	11.31	43.26	46.24	-2.98	AVG	
11	0.7980	38.70	11.24	49.94	56.00	-6.06	QP	
12	0.7980	27.66	11.24	38.90	46.00	-7.10	AVG	



Site:	844LAB	Phase:	L1	Temperature(C):	24(C)
Limit:	FCC Part15 CE-Class B_QP			Humidity(%):	63%
EUT:	LED wall lamp	Test Time:	2023/8/2 15:40:33		
M/N.:	VAN-HGC	Power Rating:	AC120/60Hz		
Mode:	Lighting	Test Engineer:			
Note:					

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1 *	0.1655	48.78	11.14	59.92	65.18	-5.26	QP	
2	0.1655	26.81	11.14	37.95	55.18	-17.23	AVG	
3	0.1819	46.73	11.14	57.87	64.40	-6.53	QP	
4	0.1819	37.06	11.14	48.20	54.40	-6.20	AVG	
5	0.2547	41.91	11.15	53.06	61.60	-8.54	QP	
6	0.2547	28.34	11.15	39.49	51.60	-12.11	AVG	
7	0.2939	39.38	11.16	50.54	60.41	-9.87	QP	
8	0.2939	28.40	11.16	39.56	50.41	-10.85	AVG	
9	0.5460	31.09	11.21	42.30	56.00	-13.70	QP	
10	0.5460	27.20	11.21	38.41	46.00	-7.59	AVG	
11	0.7900	34.49	11.25	45.74	56.00	-10.26	QP	
12	0.7900	21.99	11.25	33.24	46.00	-12.76	AVG	

6.1.4 Test Setup Photograph



6.2 RADIATED EMISSION MEASUREMENT

Limits of Radiated Emission Measurement

Frequency (MHz)	☐ ICES-003 Class B (3m)	☒ FCC Part 15 Class B (3m)
	Quasi-Peak dB(μ V/m)	Quasi-Peak dB(μ V/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

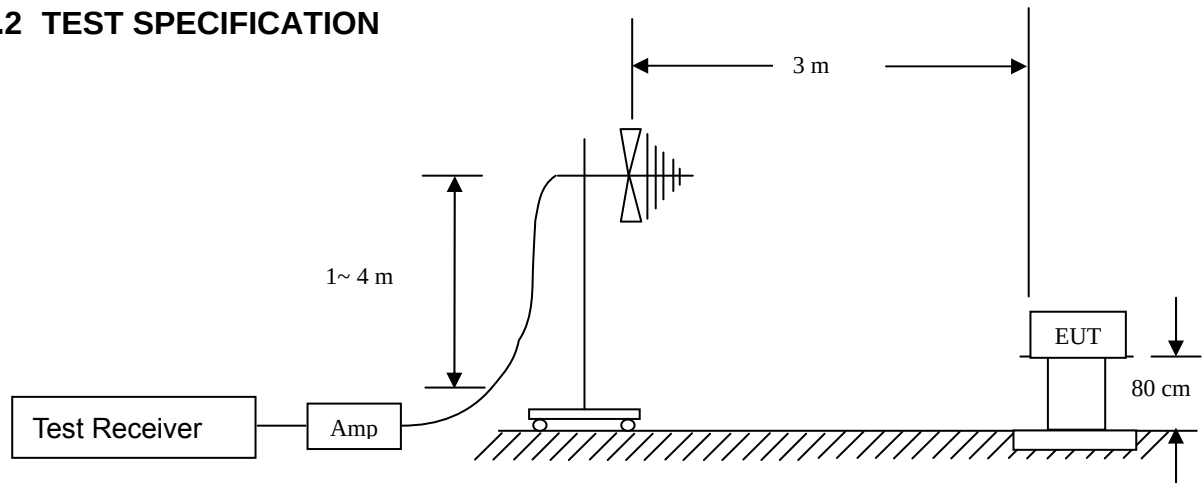
Detector:

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



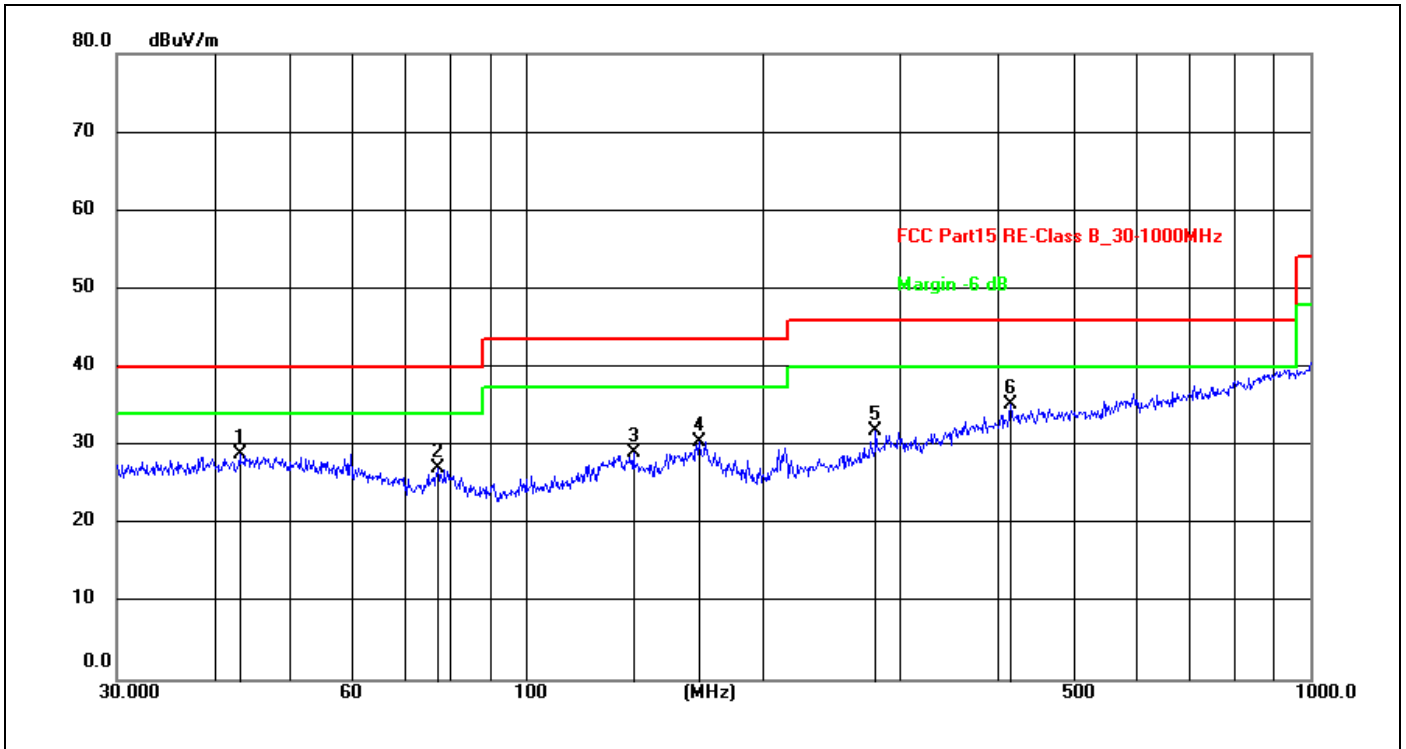
EUT was placed upon a wooden test table which was placed on the turn table 0.8m above the horizontal metal ground plane, and operating in the mode as mentioned above. A receiving antenna was placed 3m away from the EUT. During testing, turn around the turn table and move the antenna from 1m to 4m to 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.

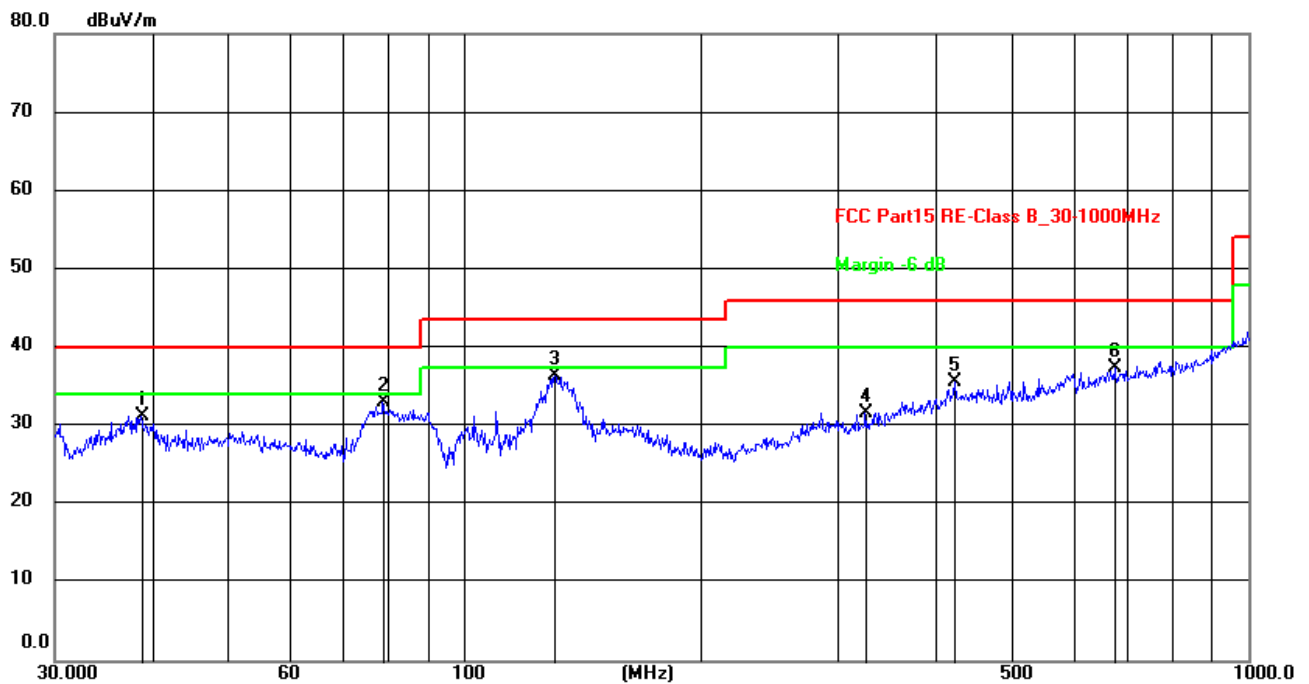
The following quasi-peak measurements were performed on the EUT.

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:** 2023/8/2 9:09:21
M/N.: VAN-HGC **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	43.0504	14.53	14.30	28.83	40.00	-11.17	peak	200	148	
2	77.0505	17.25	9.92	27.17	40.00	-12.83	peak	100	93	
3	136.9391	15.27	13.76	29.03	43.50	-14.47	peak	200	28	
4	166.0680	15.90	14.65	30.55	43.50	-12.95	peak	100	154	
5	279.0436	17.69	14.15	31.84	46.00	-14.16	peak	100	83	
6 *	414.7223	18.16	17.16	35.32	46.00	-10.68	peak	200	320	



Site: 966LAB **Antenna::**Vertical **Temperature(C):**24(C)
Limit: FCC Part15 RE-Class B_30-1000MHz **Humidity(%):**60%
EUT: LED wall lamp **Test Time:** 2023/8/2 9:11:57
M/N.: VAN-HGC **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	38.7518	16.77	14.52	31.29	40.00	-8.71	peak	200	190	
2 *	78.6888	22.63	10.39	33.02	40.00	-6.98	peak	200	14	
3	130.3789	22.34	14.04	36.38	43.50	-7.12	peak	100	316	
4	324.4561	16.53	15.20	31.73	46.00	-14.27	peak	200	97	
5	422.0577	18.22	17.35	35.57	46.00	-10.43	peak	200	225	
6	675.2080	15.12	22.24	37.36	46.00	-8.64	peak	100	129	

TEST SETUP PHOTOGRAPH



7 APPENDIX-Photographs of EUT Constructional Details



Fig.1(Model: VAN-HGC)



Fig.2(Model: VAN-HGC)



Fig.3(Model: VAN-HGC)

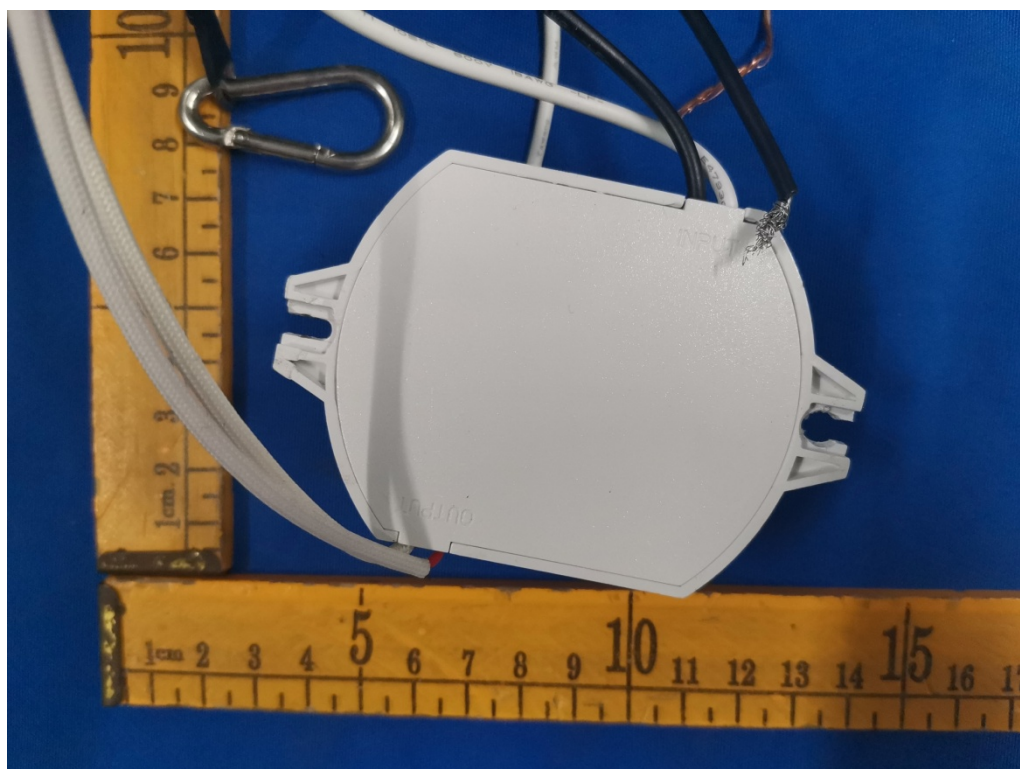


Fig.4(Model: VAN-HGC)

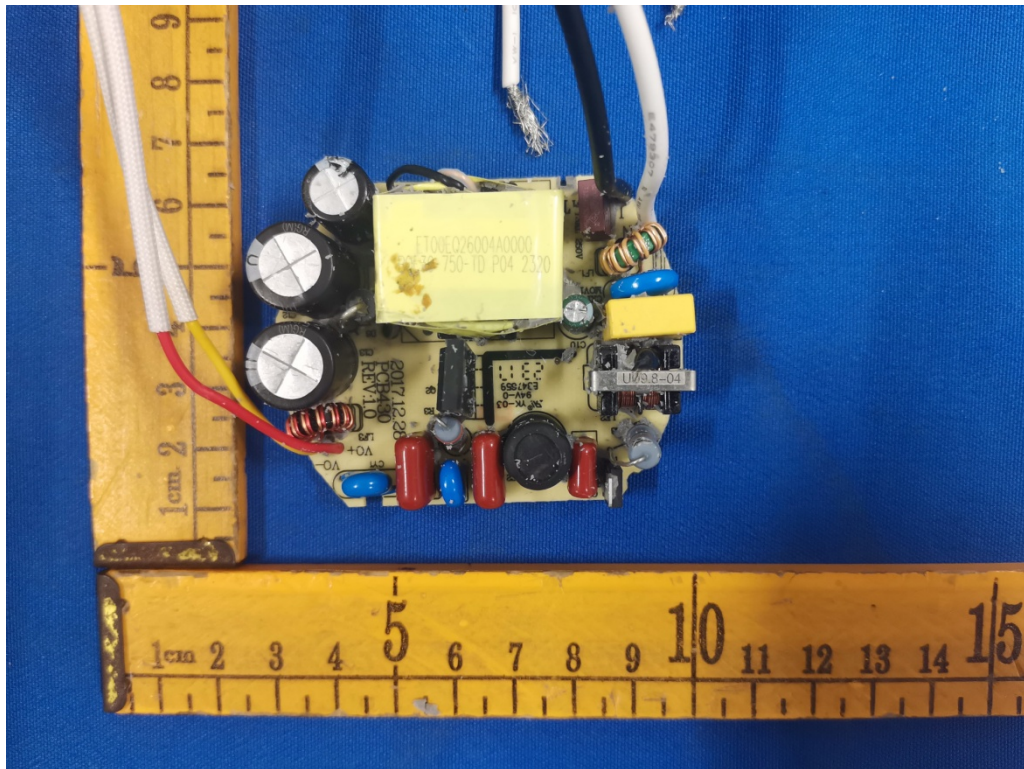


Fig.5(Model: VAN-HGC)

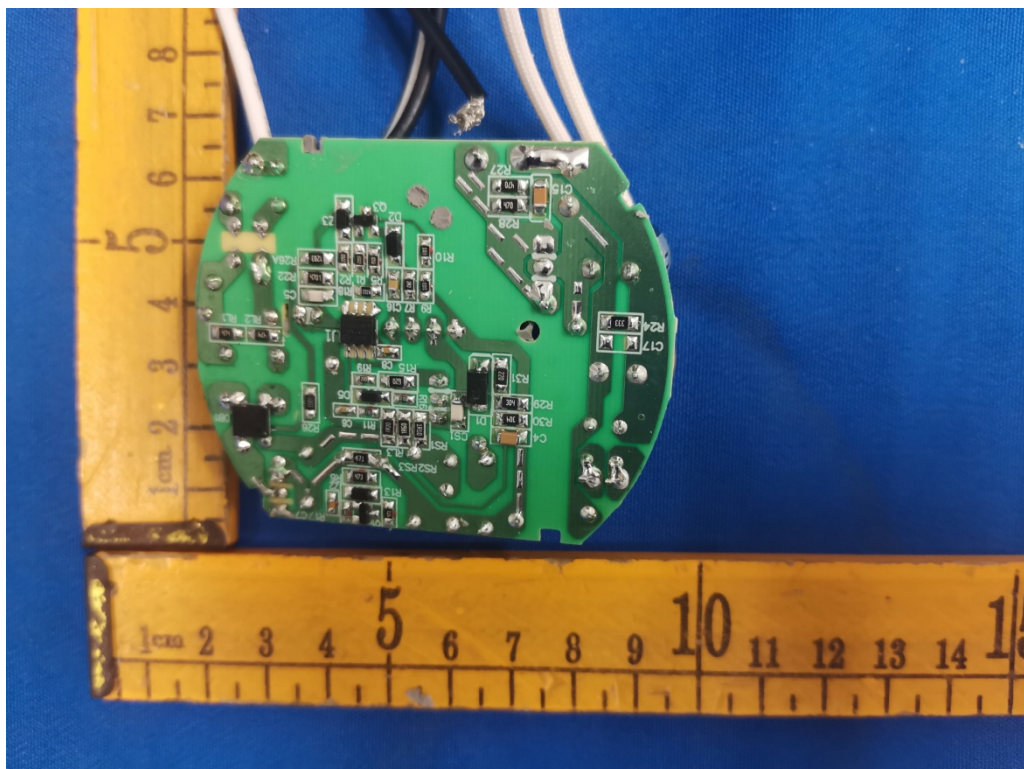


Fig.6(Model: VAN-HGC)

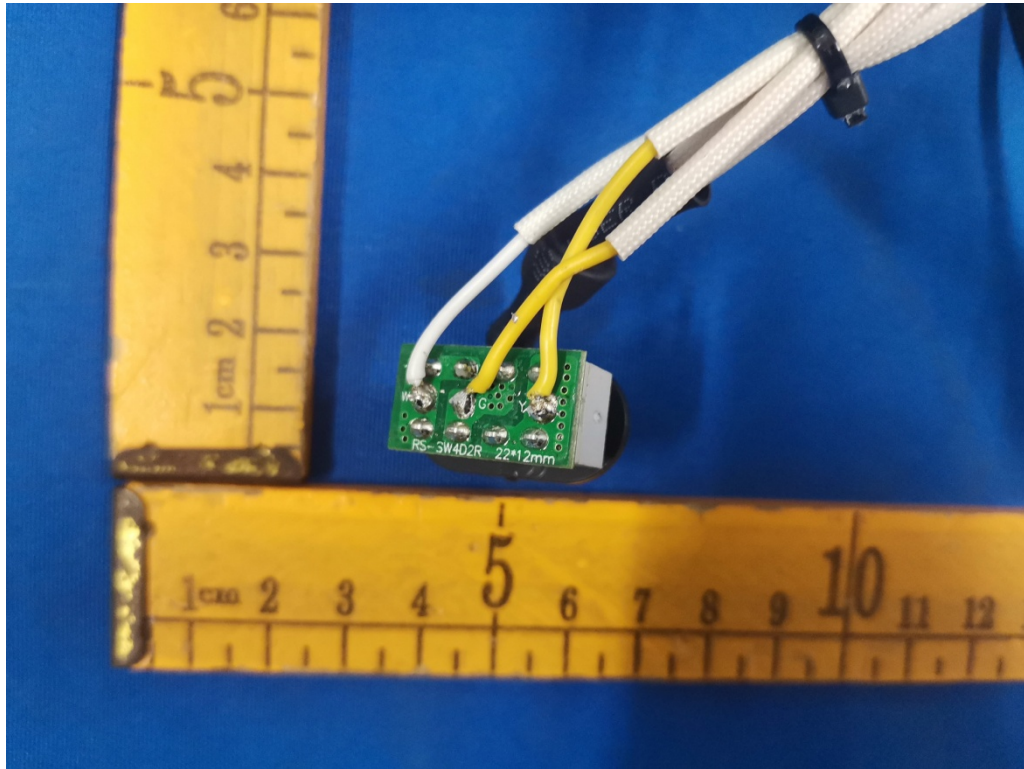


Fig.7(Model: VAN-HGC)

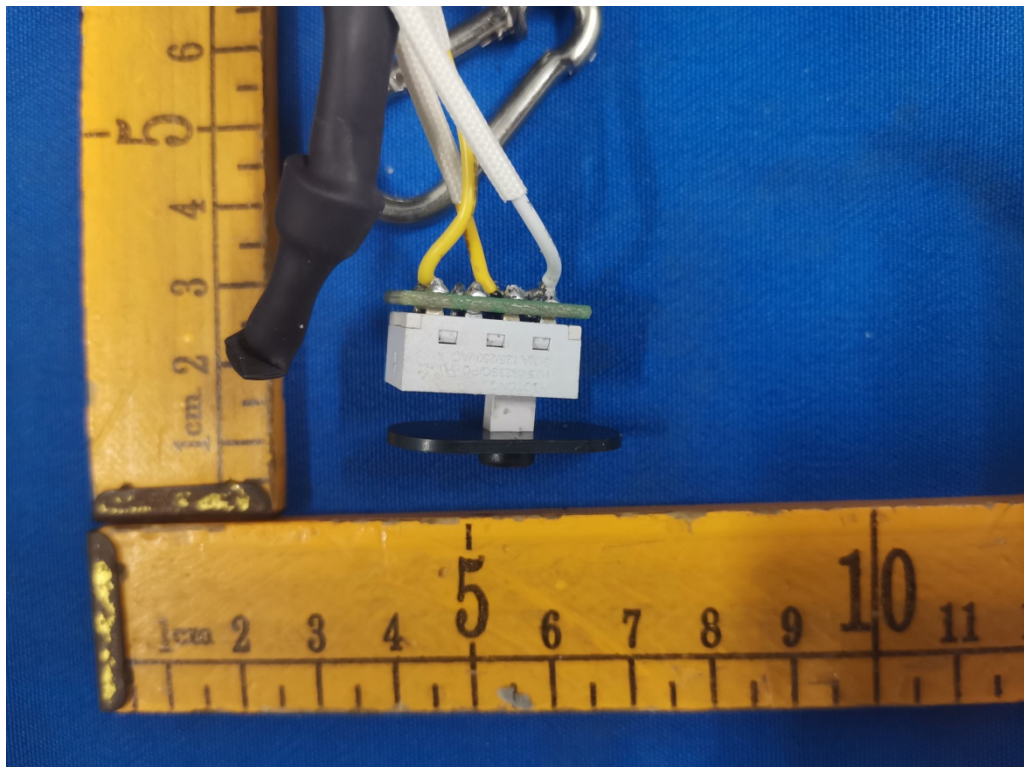


Fig.8(Model: VAN-HGC)



Fig.9(Model: VAN-HGC)

**** End of report ****