

# **FCC Test Report**

## For

## **Artika For Living Inc**

EUT Name: LED wall lamp

Model No: CLGL

Brand Name: ARTIKA

## Prepared By:

Dongguan Yaxu (AiT) Technology Limited

Date of Receipt: Aug.18, 2023

Date of Test: Aug.18, 2023 to Aug.29, 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

Report No.: AIT23092206FE1

FCC ID

2AUHG-CLGL

### **EUT Information:**

**EUT Name:** 

LED wall lamp

Model No:

**CLGL** 

**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:



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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  $\mathbf{y} \pm \mathbf{U}$ , where expended uncertainty  $\mathbf{U}$  is based on a standard uncertainty Multiplied by a coverage factor of  $\mathbf{k=2}$ , providing a level of confidence of approximately 95%.

No.	Item	U , Value	
1	Power Line Conducted Emission	150KHz~30MHz	1.20 dB
2	Disturbance Power Emission	Power Emission 30MHz~300MHz	
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:	facturer: 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:	CLGL; followed by up to ten characters					
Brand Name:	ARTIKA					
Power Range:	AC120V 60Hz 22W					
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)

1. Block diagram of EUT Configuration-EMI	
Mode 1:	
AC EUT PC	



## 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



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## 5 Equipments List for All Test Items

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 SCHWARZBECK Antenna		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					

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date					
1	EMI Test Receiver		ESCI	100124	2022.09.02	2023.09.01					
2	LISN	LISN Kyoritsu		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		MP59B 6200264417		2022.09.02	2023.09.01					
5	CE Software	EZ	EZ-EMC_ CE	Ver.AIT-03A	N/A	N/A					

### Note:

1.  $\square$  is not applicable in this Test Report.  $\boxtimes$  is applicable in this Test Report.





## 6 EMISSION TEST RESULTS

### 6.1 MAINS TERMINALS DISTURBANCE VOLTAGE MEASUREMENT

Fraguency (MHz)	☐ Class /	A (dBμV)	⊠ Class B (dBμV)		
Frequency (MHz)	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	

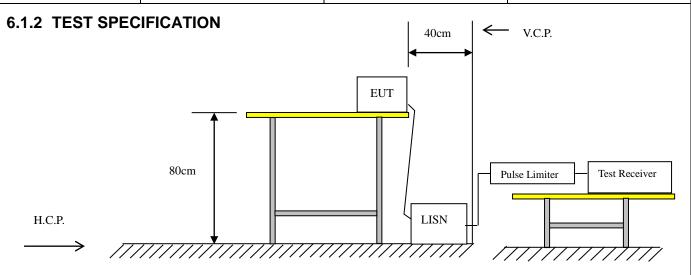
Detector:

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 Pres	sure:	1006	Kpa
Test Mode:	Mode 1-2		The worst mode			Mode	1	



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**

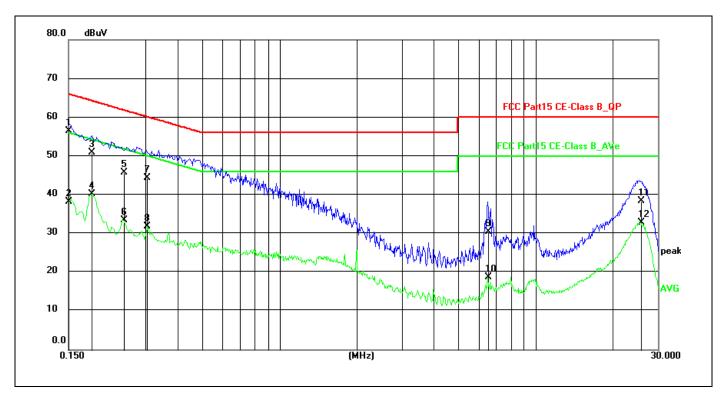
An initial pre-scan was performed on the live and neutral lines.

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.

**Humidity(%):63%** 





Site: 844LAB Phase:L1 Temperature(C):24(C)

Limit: FCC Part15 CE-Class B\_QP

EUT: Led wall lamp Test Time: 2023/8/22 9:15:56

M/N.: CLGL Power Rating: AC120/60Hz

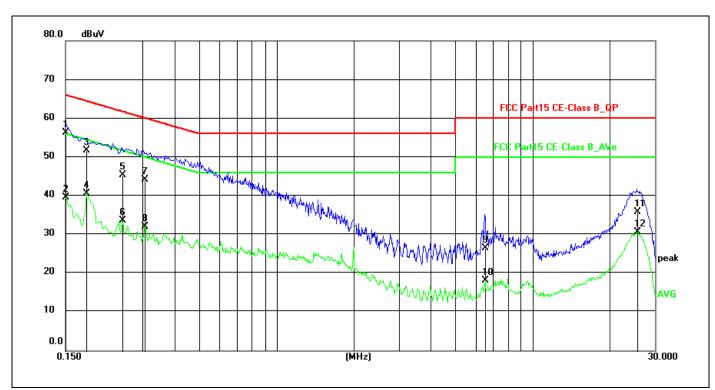
Mode: Lighting Test Engineer:

Note:

No.	Frequency	Reading	Factor	Measure-	Limit	Margin	Detector	Comment
	(MHz)	Level(dBuV)	(dB)	ment(dBuV)	(dBuV)	(dB)		
1 *	0.1503	45.24	11.14	56.38	65.98	-9.60	QP	
2	0.1503	26.99	11.14	38.13	55.98	-17.85	AVG	
3	0.1853	39.70	11.14	50.84	64.24	-13.40	QP	
4	0.1853	29.12	11.14	40.26	54.24	-13.98	AVG	
5	0.2458	34.54	11.14	45.68	61.90	-16.22	QP	
6	0.2458	22.40	11.14	33.54	51.90	-18.36	AVG	
7	0.3042	33.28	11.17	44.45	60.13	-15.68	QP	
8	0.3042	20.78	11.17	31.95	50.13	-18.18	AVG	
9	6.5140	19.32	11.19	30.51	60.00	-29.49	QP	
10	6.5140	7.64	11.19	18.83	50.00	-31.17	AVG	
11	25.7860	26.83	11.58	38.41	60.00	-21.59	QP	
12	25.7860	21.31	11.58	32.89	50.00	-17.11	AVG	

<sup>\*:</sup>Maximum data x:Over limit !:over margin





Site: 844LAB Phase:N Temperature(C):24(C)

Limit: FCC Part15 CE-Class B\_QP

EUT: Led wall lamp Test Time: 2023/8/22 9:20:06

M/N.: CLGL Power Rating: AC120/60Hz

Mode: Lighting Test Engineer:

Note:

No.	Frequency	Reading	Factor	Measure-	Limit	Margin	Detector	Comment
	(MHz)	Level(dBuV)	(dB)	ment(dBuV)	(dBuV)	(dB)		
1 *	0.1503	45.05	11.15	56.20	65.98	-9.78	QP	
2	0.1503	28.43	11.15	39.58	55.98	-16.40	AVG	
3	0.1811	40.48	11.16	51.64	64.44	-12.80	QP	
4	0.1811	29.43	11.16	40.59	54.44	-13.85	AVG	
5	0.2500	34.18	11.20	45.38	61.76	-16.38	QP	
6	0.2500	22.40	11.20	33.60	51.76	-18.16	AVG	
7	0.3060	32.90	11.25	44.15	60.08	-15.93	QP	
8	0.3060	20.82	11.25	32.07	50.08	-18.01	AVG	
9	6.5340	15.43	11.12	26.55	60.00	-33.45	QP	
10	6.5340	6.98	11.12	18.10	50.00	-31.90	AVG	
11	25.6979	24.18	11.57	35.75	60.00	-24.25	QP	
12	25.6979	19.01	11.57	30.58	50.00	-19.42	AVG	

<sup>\*:</sup>Maximum data x:Over limit !:over margin

**Humidity(%):63%** 



## 6.1.4 Test Setup Photograph





## **6.2 RADIATED EMISSION MEASUREMENT**

#### Limits of Radiated Emission Measurement

- (111)	☐ ICES-003 Class B (3m)				
Frequency (MHz)	Quasi-Peak dB(μV/m)	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:

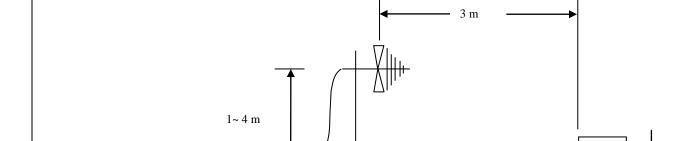
Peak for pre-scan (120kHz resolution bandwidth)

Quasi-Peak if maximum peak within 6dB of limit

#### 6.2.1 E.U.T. OPERATION

6.2.2 TEST SPECIFICATION

Temperature:	25°C	Humidity:	50% RH		Atmospheric Pres	sure:	1006	Kpa
Test Mode:	M	ode 1-2		Th	ne worst mode		Mode 1	



Test Receiver

Amp

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.

**EUT** 

80 cm



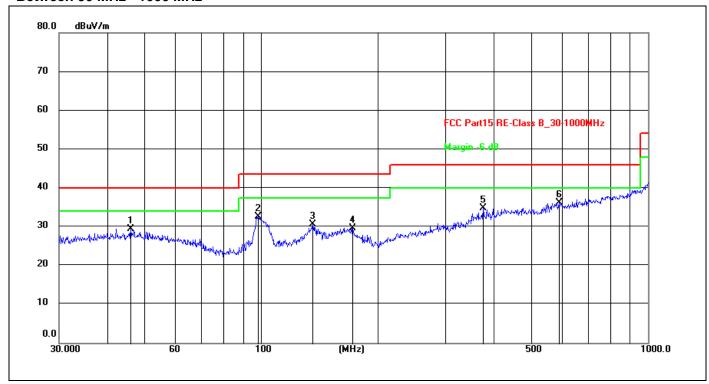
### 6.2.3 MEASUREMENT DATA

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 9:03:32 M/N.: CLGL Power Rating: AC 120V/60Hz

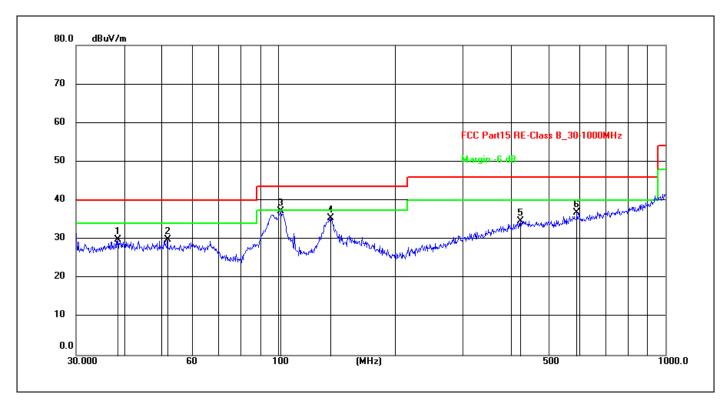
Mode: Lighting Test Engineer:

Note:

No.	Frequency	Reading	Factor	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(deg)	
1	46.0162	15.19	14.31	29.50	40.00	-10.50	peak	200	356	
2	98.1418	22.00	10.59	32.59	43.50	-10.91	peak	200	321	
3	135.9821	16.80	13.80	30.60	43.50	-12.90	peak	200	31	
4	172.5987	15.62	14.13	29.75	43.50	-13.75	peak	200	84	
5	374.6225	18.58	16.22	34.80	46.00	-11.20	peak	100	268	
6 *	588.9050	15.40	20.79	36.19	46.00	-9.81	peak	200	356	

<sup>\*:</sup>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 9:06:06

M/N.: CLGL Power Rating: AC 120V/60Hz

Mode: Lighting Test Engineer:

Note:

No.	Frequency	Reading	Factor	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(deg)	
1	38.4809	15.30	14.48	29.78	40.00	-10.22	peak	100	356	
2	51.6616	15.67	14.17	29.84	40.00	-10.16	peak	100	291	
3 *	101.6443	25.78	11.43	37.21	43.50	-6.29	peak	100	14	
4	136.4598	20.87	14.50	35.37	43.50	-8.13	peak	100	71	
5	422.0577	17.36	17.35	34.71	46.00	-11.29	peak	100	282	
6	590.9737	15.97	20.85	36.82	46.00	-9.18	peak	100	90	

<sup>\*:</sup>Maximum data x:Over limit !:over margin



## TEST SETUP PHOTOGRAPH





## **APPENDIX-Photographs of EUT Constructional Details**



Fig.1(Model: CLGL)



Fig.2(Model: CLGL)

Dongguan Yaxu (AiT) Technology Limited No.22, Jinqianling Third Street, Jitigang, Huangjiang, Dongguan, Guangdong, China.





Fig.3(Model: CLGL)

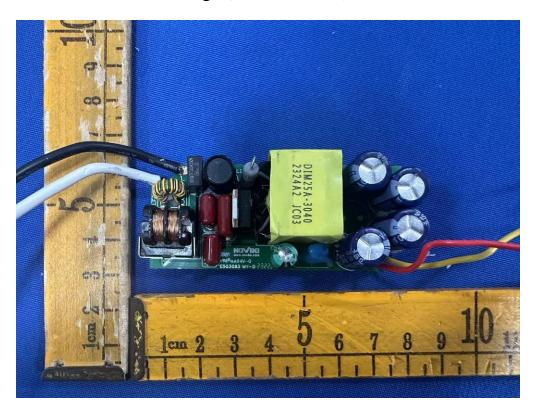


Fig.4(Model: CLGL)



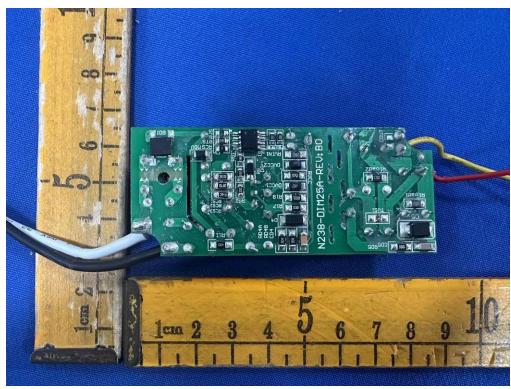


Fig.5(Model: CLGL)



Fig.6(Model: CLGL)

## \*\* End of report \*\*

Dongguan Yaxu (AiT) Technology Limited No.22, Jinqianling Third Street, Jitigang, Huangjiang, Dongguan, Guangdong, China.