## FCC Part 15 Subpart B, Class B

### ARTIKA FOR LIVING INC

27" Vanity Light

Test Model: 27VAN-SU-MB

Additional Model No.: 27VAN-SU-XXXXXX ("XXXXXX" can be A to Z and/or 0

to 9 and/or blank (commercial code))

Prepared for : ARTIKA FOR LIVING INC

Address : 1756 50th avenue, Lachine, Qc, CanadaH8T 2V5

: Shenzhen LCS Compliance Testing Laboratory Ltd. Prepared by Address : Room 101, 201, Building A and Room 301, Building C,

Juji Industrial Park, Yabianxueziwei, Shajing Street,

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Tel : (+86)755-82591330 Fax : (+86)755-82591332 Web : www.LCS-cert.com

: webmaster@LCS-cert.com Mail

Date of receipt of test sample : November 13, 2020

Number of tested samples

Sample number : 201013128A Serial number : Prototype

Date of Test : November 13, 2020 ~ November 17, 2020

Date of Report : November 20, 2020



# **FCC TEST REPORT** FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4 -2014

Report Reference No. .....: LCS201013128AE

Date Of Issue .....: November 20, 2020

Testing Laboratory Name.....: Shenzhen LCS Compliance Testing Laboratory Ltd.

Address.....: Room 101, 201, Building A and Room 301, Building C, Juji

Industrial Park, Yabianxueziwei, Shajing Street, Bao'an

District, Shenzhen, Guangdong, China

Testing Location/ Procedure ...: Full application of Harmonised standards

Partial application of Harmonised standards

Other standard testing method

Applicant's Name ...... ARTIKA FOR LIVING INC

Address....: 1756 50th avenue, Lachine, Qc, CanadaH8T 2V5

**Test Specification** 

Standard ...... FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4

-2014

Test Report Form No. ...... LCSEMC-1.0

TRF Originator .....: Shenzhen LCS Compliance Testing Laboratory Ltd.

Master TRF .....: Dated 2011-03

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Test Item Description.....: 27" Vanity Light

Test Model .....: 27VAN-SU-MB

Trade Mark.....: Artika

Ratings.....: 120Vac, 60Hz, 25W

Result .....: Positive

Supervised by:

Approved by:

Linda He/ File administrators

Jin Wang/ Technique principal

Gavin Liang/ Manager

## **FCC -- TEST REPORT**

Test Report No.: LCS201013128AE November 20, 2020 Date of issue

Test Model .....: : 27VAN-SU-MB EUT.....: : 27" Vanity Light Applicant.....:: : ARTIKA FOR LIVING INC Address......: 1756 50th avenue, Lachine, Qc, CanadaH8T 2V5 Telephone.....:: : / Fax.....:: : / ZHONGSHAN ODEER ELECTRONICS LIGHTING CO., Manufacturer.....: LTD Address.....: : No.4, North Industrial Road, Xiaolan Town, Zhongshan City, G.D. China Telephone.....:: : / Fax.....:: : / ZHONGSHAN ODEER ELECTRONICS LIGHTING CO., Factory..... LTD Address.....: : No.4, North Industrial Road, Xiaolan Town, Zhongshan City, G.D. China Telephone.....:: : / Fax.....: : /

## **Test Result** according to the standards on page 6: **Positive**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

# **Revision History**

Revision	Issue Date	Revisions	Revised By
000	November 20, 2020	Initial Issue	Gavin Liang

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# 1. SUMMARY OF STANDARDS AND RESULTS

# 1.1. Description of Standards and Results

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

EMISSION						
Description of Test Item	Standard	Test sample	Limits	Results		
Conducted disturbance at mains terminals	FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4 -2014	201013128A	Class B	PASS		
Radiated disturbance	FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4 -2014	201013128A	Class B	PASS		

N/A is an abbreviation for Not Applicable.

Test mode:					
Mode 1	Lighting	Record			
Mode 2	Idle Mode	Pre-scan			
***Note: All test modes were tested, but we only recorded the worst case in this					
report.					

## 2. GENERAL INFORMATION

2.1. Description of Device (EUT)

**EUT** : 27" Vanity Light

Trade Mark : Artika

Test Model : 27VAN-SU-MB

Additional Model : 27VAN-SU-XXXXXX ("XXXXXX" can be A to Z and/or 0

to 9 and/or blank (commercial code))

Model Declaration : PCB board, structure and internal of these model(s) are

the same, So no additional models were tested

Power Supply : 120Vac, 60Hz, 25W

Highest internal frequency (Fx)	Highest measured frequency
Fx ≤ 108 MHz	1 GHz
108 MHz < Fx ≤ 500 MHz	2 GHz
500 MHz < Fx ≤ 1 GHz	5 GHz
Fx > 1 GHz	5 x Fx up to a maximum of 6 GHz

NOTE 1 For FM and TV broadcast receivers, Fx is determined from the highest frequency generated or used excluding the local oscillator and tuned frequencies.

Where Fx is unknown, the radiated emission measurements shall be performed up to 6 GHz.

# 2.2. Support Equipment List

Name	Manufacturers	M/N	S/N

# 2.3. Description of Test Facility

Site Description

EMC Lab. : NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

## 2.4. Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

## 2.5. Measurement Uncertainty

Test	Parameters	Expanded Uncertainty (Ulab)	Expanded Uncertainty (Ucispr)
Conducted Emission	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	± 2.63 dB ± 2.35 dB	± 3.8 dB ± 3.4 dB
Radiated Emission	Level accuracy (30MHz to 1000MHz)	± 3.48 dB	± 5.3 dB
Radiated Emission	Level accuracy (above 1000MHz)	± 3.90 dB	± 5.2 dB

- (1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.
- (2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

#### 3. TEST RESULTS

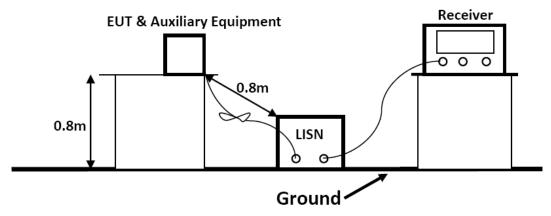
## 3.1. POWER LINE CONDUCTED EMISSION MEASUREMENT

## 3.1.1. Test Equipment

The following test equipments are used during the power line conducted measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Software	EZ	EZ-EMC	/	N/A	N/A
2	EMI Test Receiver	R&S	ESPI	101840	2020-06-22	2021-06-21
3	Artificial Mains	R&S	ENV216	101288	2020-06-22	2021-06-21
4	10dB Attenuator	SCHWARZBE CK	MTS-IMP-136	261115-001- 0032	2020-06-22	2021-06-21
5	Impedance Stabilization Network	TESEQ	ISN T800	45130	2020-10-20	2021-10-19

## 3.1.2.Block Diagram of Test Setup



#### 3.1.3.Test Standard

Power Line Conducted Emission Limits (Class B)

Frequency			Limit (dB <sub>µ</sub> V)	
(MHz)		Quasi-peak Level Average Level		
0.15	~	0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50	~	5.00	56.0	46.0
5.00	~	30.00	60.0	50.0

NOTE1-The lower limit shall apply at the transition frequencies.

NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

## 3.1.4.EUT Configuration on Test

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

### 3.1.5. Operating Condition of EUT

- 3.1.5.1. Setup the EUT as shown on Section 3.1.2
- 3.1.5.2. Turn on the power of all equipments.
- 3.1.5.3.Let the EUT work in measuring Mode 1 and measure it.

#### 3.1.6.Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC/ANSI C63.4-2014 on Conducted Emission Measurement.

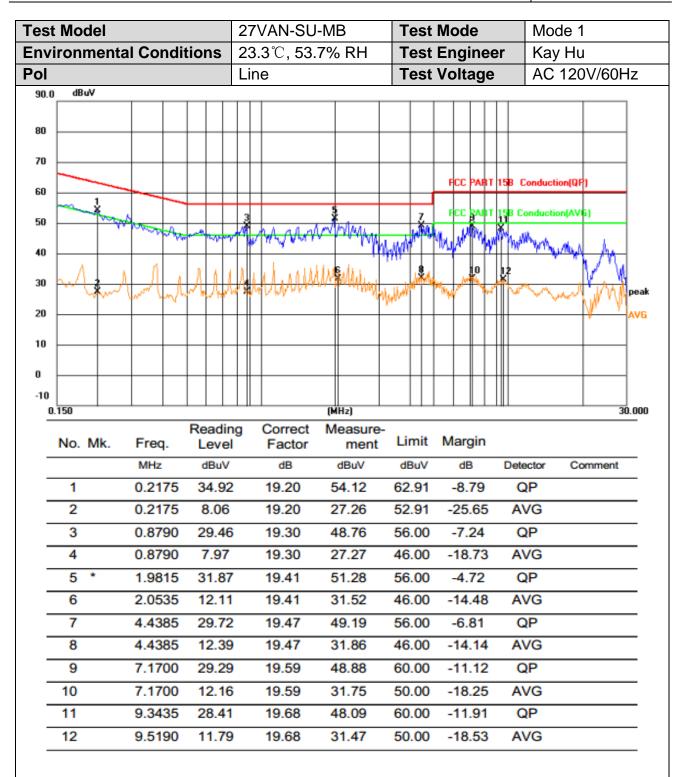
The bandwidth of the test receiver is set at 9kHz.

The frequency range from 150kHz to 30MHz is investigated

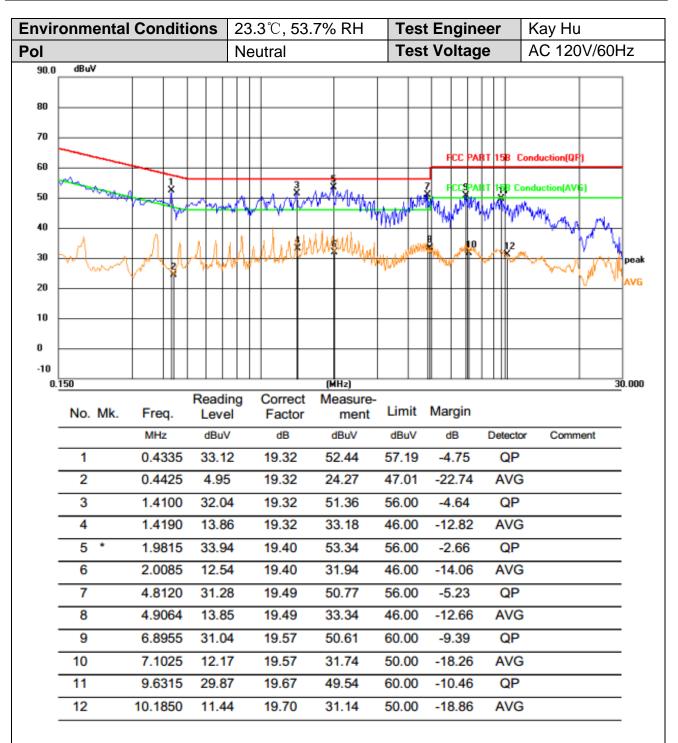
#### 3.1.7.Test Results

#### PASS.

The test result please refer to the next page.



Test Model	27VAN-SU-MB	Test Mode	Mode 1



Note: Pre-Scan all mode, Thus record worse case mode result in this report.

Margin=Reading level + Correct - Limit

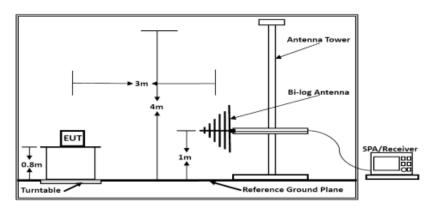
## 3.2. Radiated emission Measurement

## 3.2.1. Test Equipment

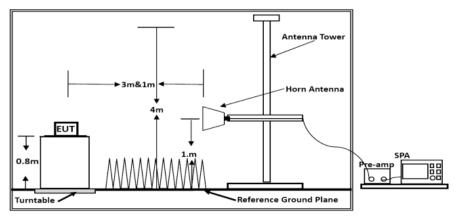
The following test equipments are used during the radiated emission measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Software	AUDIX	E3	/	N/A	N/A
2	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2018-07-26	2021-07-25
3	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2018-07-02	2021-07-01
4	EMI Test Receiver	R&S	ESR 7	101181	2020-06-22	2021-06-21
5	Broadband Preamplifier	1	BP-01M18G	P190501	2020-06-22	2021-06-21

# 3.2.2. Block Diagram of Test Setup



Below 1GHz



Above 1GHz

#### 3.2.3. Radiated Emission Limit (Class B)

### Limits for Radiated Disturbance Below 1GHz

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMIT	
MHz	Meters	μV/m	dB(μV)/m
30 ~ 88	3	100	40
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46
960 ~ 1000	3	500	54

Remark: (1) Emission level (dB) $\mu$ V = 20 log Emission level  $\mu$ V/m

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

Limits for Radiated Emission Above 1GHz						
Frequency	Distance	Peak Limit	Average Limit			
(MHz)	(Meters)	(dBµV/m)	(dBµV/m)			
Above 1000	3	74	54			
***Note: The lower limit applies at the transition frequency						

## 3.2.4. EUT Configuration on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

## 3.2.5. Operating Condition of EUT

- 3.2.5.1. Setup the EUT as shown in Section 3.2.2.
- 3.2.5.2.Let the EUT work in test Mode 1 and measure it.

#### 3.2.6. Test Procedure

EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated by-log antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2014 on radiated emission measurement.

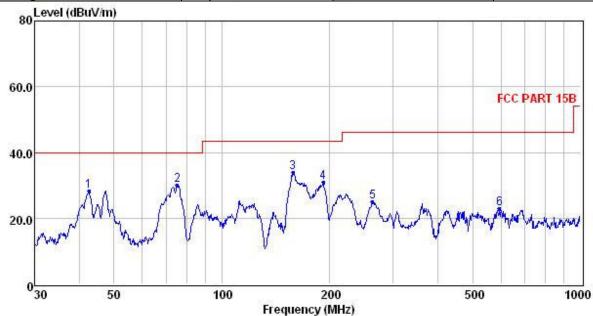
The bandwidth of the EMI test receiver is set at 120kHz, 300kHz. The frequency range from 30MHz to 1000MHz is checked.

#### 3.2.7. Radiated Emission Noise Measurement Result

#### PASS.

The scanning waveforms please refer to the next page.

Test Model	27VAN-SU-MB	Test Mode	Mode 1
<b>Environmental Conditions</b>	22.3℃, 53.4% RH	<b>Detector Function</b>	Quasi-peak
Pol	Vertical	Distance	3m
Test Engineer	Kay Hu	Test Voltage	AC 120V/60Hz
20 NOVE 20 NOV			



Freq Reading CabLos Antfac Measured Limit Over Remark

	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	42.60	44.22	0.50	13.56	28.30	40.00	-11.70	QP
2	75.18	51.71	0.54	7.83	29.99	40.00	-10.01	QP
3	158.11	54.74	0.83	8.59	33.89	43.50	-9.61	QP
4	191.75	49.98	0.86	10.56	31.06	43.50	-12.44	QP
5	262.90	42.36	0.96	12.14	25.01	46.00	-20.99	QP
6	595.13	34.22	1.51	18.36	22.99	46.00	-23.01	QP

Note: 1. All readings are Quasi-peak values.

- 2. Measured= Reading + Antenna Factor + Cable Loss
- 3. The emission that are 20db below the official limit are not reported

	del		27VAN-	SU-MB	Test Mo	de	Mo	de 1
Environ	mental Co	onditions	22.3℃, 5	53.4% RH	Detecto	r Function	on Qu	iasi-peak
Pol			Horizont	al	Distance	е	3m	)
Test En	gineer		Kay Hu		Test Vo	ltage	AC	120V/60Hz
60.0	Level (dBuV/t	n)						ART 15B
40.0 20.0		Myana way	Zan Wan	M	m 5 m	~~~	lana, and a second	twww.
1	DE SHEEKEE		A.					
C	30	50	100	200,000	00 MHz)	5	00	1000
C	30 Freq	50 Reading		Frequency (	5.74 cm			1000 Remark
C				Frequency (	MHz)			
200	Freq MHz	Reading dBuV	CabLos dB	Frequency( Antfac dB/m	MHz) Measured dBuV/m	Limit dBuV/m	Over dB	
200	Freq	Reading	CabLos	Frequency ( Antfac	MHz) Measured	Limit	Over	Remark
1 2 3	Freq MHz	Reading dBuV	CabLos dB	Frequency(AntfacdB/m	MHz) Measured dBuV/m 23.22 18.50	Limit dBuV/m	Over dB -16.78 -25.00	Remark ————————————————————————————————————
200	Freq MHz 74.40 89.90	Reading dBuV 44.86 36.05	CabLos dB 0.54 0.68	Frequency(AntfacdB/m7.9011.87	MHz) Measured dBuV/m 23.22 18.50 34.91	Limit dBuV/m 40.00 43.50	Over dB -16.78 -25.00 -8.59	Remark ————————————————————————————————————
1 2 3	Freq MHz 74.40 89.90 166.65	Reading dBuV 44.86 36.05 55.56	CabLos  dB  0.54  0.68  0.77	7.90 11.87 8.87	MHz) Measured dBuV/m 23.22 18.50 34.91 32.40	Limit dBuV/m 40.00 43.50 43.50	Over  dB  -16.78 -25.00 -8.59 -13.60	Remark  — QP  QP  QP

Note: 1. All readings are Quasi-peak values.

- 2. Measured= Reading + Antenna Factor + Cable Loss
- 3. The emission that are 20db below the official limit are not reported

Note: Pre-Scan all mode, Thus record worse case mode result in this report.

Margin=Reading level + Factor - Limit

# 4. PHOTOGRAPH



Photo of Power Line Conducted Measurement

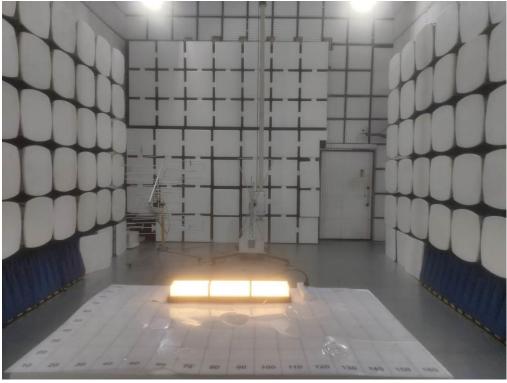


Photo of Radiated Measurement

# 5. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

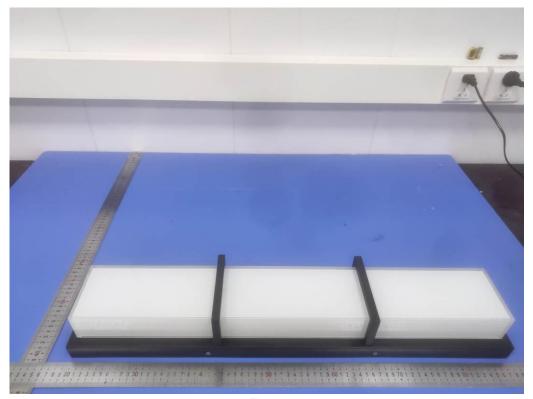


Fig. 1

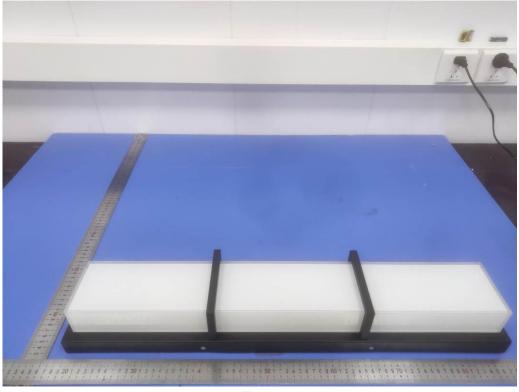


Fig. 2

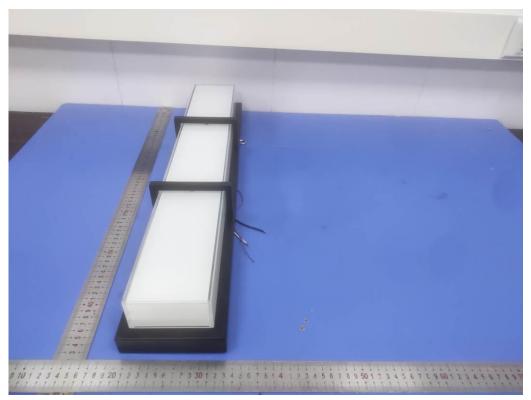


Fig. 3

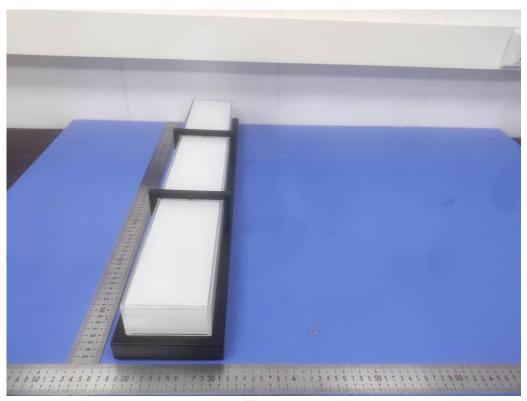


Fig. 4

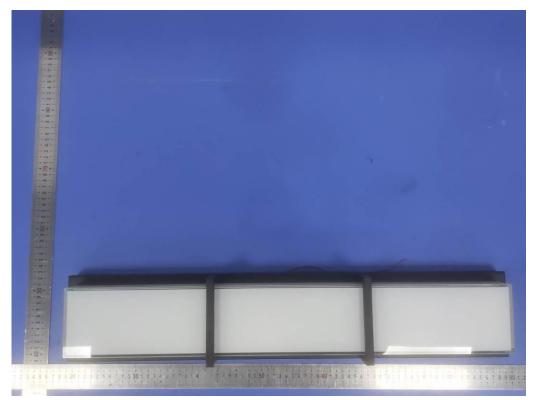


Fig. 5

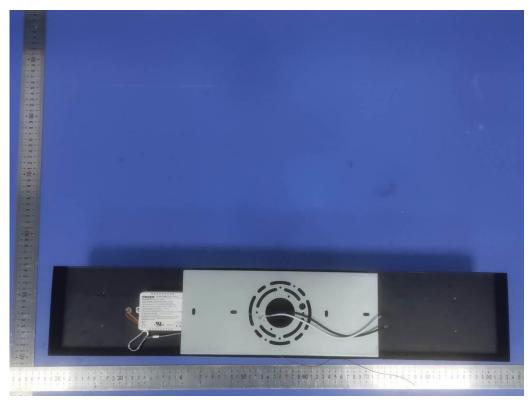


Fig. 6

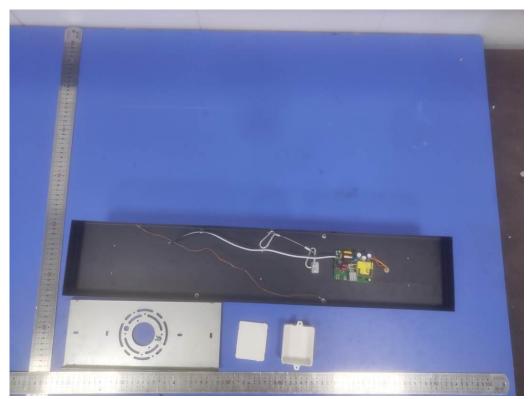


Fig. 7

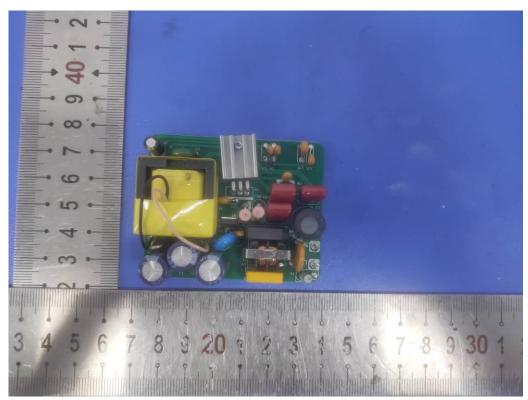


Fig. 8

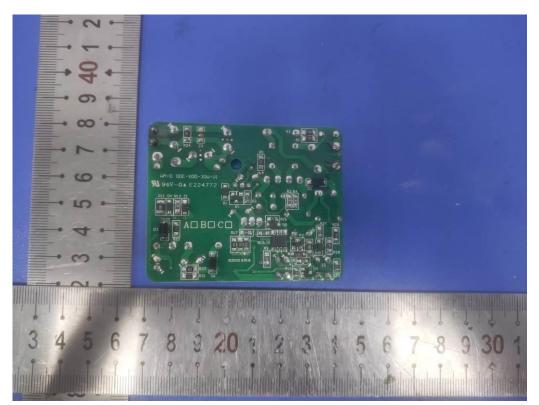


Fig. 9

# -----THE END OF TEST REPORT-----