



TEST REPORT

Applicant:	ARTIKA FOR LIVING INC.
Address of Applicant:	1756 50th Avenue Lachine, Quebec H8T 2V5 Canada.
Manufacturer:	ZHONGSHAN MATAI TECHNOLOGY CO.,LTD.
Address of Manufacturer:	No. 12, Fuqing 2nd Road, Yongxing Industrial Zone, Henglan Town, Zhongshan City, Guangdong, China.
Product name:	LED Ceiling Mounted Luminaire
Model:	PDT-AL5C-XXXXXXXX("-XXXXXXXXXXX" represent A to Z and/or 0 to 9 and/or blank, means commercial code.)
Rating(s):	AC120V, 60Hz, 32W.
Trademark:	ARTIKA
Standards:	FCC Part15 subpart B
FCC ID:	2AUHG-PDT-AL5C
Date of Receipt:	2023-06-06
Date of Test:	2023-06-06~2023-07-05
Date of Issue:	2023-07-05
Test Result	Pass*

^{*} In the configuration tested, the test item complied with the standards specified above.

Authorized for issue by:

Test by:

Jul.05, 2023 Chivas Tsang

Project Engineer

Date Name/Position Signature

Reviewed by:

Jul.05, 2023

Date

Victor Meng

Project Manager

Name/Position

Signature

Report. No.: D230704007



Page 2 of 22 Report. No.: D230704007

Testing Laboratory information:

Testing Laboratory Name: ITL Co., LTD

China.

 Testing location
 : Same as above

 Tel.
 : 0086-769-39001678

 Fax
 : 0086-20-62824387

 E-mail
 : itl@i-testlab.com

Possible test case verdicts:

test case does not apply to the test object..: N/A
test object does meet the requirement.......: P (Pass)
test object does not meet the requirement .: F (Fail)

General remarks:

The test results presented in this report relate only to the object tested.

The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.

This report would be invalid test report without all the signatures of testing technician and approver.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

General product information:

All modes are identical to each other except for the model.

All tests were performed on the model PDT-AL5C-HD2BW as representatives.



Page 3 of 22 Report. No.: D230704007

Test Summary:

The following standards have been applied to ensure the product conforms with the protection requirements of the council directive FCC part 15B.

Electromagnetic Emissions									
Test Item	Test Standard Test Method		Class/Severity	Result					
Conducted Emission(0.15-30MHz)	FCC part 15.107	ANSI C63.4:2014	Class B	PASS					
Radiated Emission(30-1000MHz)	FCC part 15.109	ANSI C63.4:2014	Class B	PASS					

Test Facility

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

CNAS Lab code:L9342

• FCC Designation No.:CN5035

IC Registration NO.: 12593A

• NVLAP LAB CODE: 600199-0

Test Location:

All the tests were performed in ITL Co., LTD. Where is located at at No.8, Jinqianling Street 5, Huangjiang, Dongguan, Guangdong, China.

Tel: 0086-769-39001678, Fax: 0086-20-62824387

No test is subcontracted



Report. No.: D230704007



TABLE OF CONTENTS TEST REPORT....... 1 Test Facility......3 Test Location: 3 Section 1 General Information and Equipment Used......5 1.1 Client Information......5 1.2 EUT General and Technical Descriptions......5 1.3 Support Equipment(s) and Test Configuration......5 1.3.1 Details of Support Equipment(s)5 1.3.2 Working State of EUT......5 1.3.3 Block Diagram of Test Configuration5 1.4 Equipment Used during Test6 Section 2 Emission Test Results......7 2.1 Conducted Emission at Mains Terminals, 150 kHz to 30MHz......7 2.1.1 E.U.T. Operation......7 2.1.2 Test Setup and Procedure.....8 2.1.3 Measurement Data......8 2.2 Radiated Emissions, 30MHz to 1GHz11 2.2.1 E.U.T. Operation......11 2.2.2 Test Setup and Procedure......12 2.2.3 Measurement Data......13 Section 3 Photographs......15 3.1 Conducted Emissions Mains Terminals Test Setup.......15 3.2 Radiated Emissions, 30MHz to 1GHz Test Setup15





Section 1 General Information and Equipment Used

1.1 Client Information

Applicant: ARTIKA FOR LIVING INC.

Address of Applicant: 1756 50th Avenue Lachine, Quebec H8T 2V5 Canada.

1.2 EUT General and Technical Descriptions

EUT Name: LED Ceiling Mounted Luminaire

EUT Model: PDT-AL5C-HD2BW.

EUT Trademark: ARTIKA
Input Voltage: 120V~
Frequency: 60Hz
Input Power/Current: 32W.
Output rated: /
Power Cable Description: /

Other Cables Description: /
I/O Ports: /
Function(s) Description: /

Accessories information:

1.3 Support Equipment(s) and Test Configuration

1.3.1 Details of Support Equipment(s)

Description	Manufacturer	Model No.	Connection	Working state
/	/	/	/	/

1.3.2 Working State of EUT

Power Supply of EUT: 120V~ 60Hz

EUT Status: Pre-test the EUT in On Mode with each mode to find the worst

case, Compliance test the EUT in On Mode with brightest white

light as the worst case was found.

.

1.3.3 Block Diagram of Test Configuration

/



Report. No.: D230704007



1.4 Equipment Used during Test

Conducted Emission									
No.	Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due			
DGITL-303a	EMI Test receiver	R&S	ESCI	100910	2023.04.07	2024.04.07			
DGITL-304	L.I.S.N.#1	R&S	ESH3-Z5	100272	2023.04.07	2024.04.07			
DGITL-302	Shielded Room	ETS•Lindgren	8*4*3	CT09010	2020.08.03	2023.08.03			
DGITL-316	Pulse Limiter	R&S	ESH3-Z2	100327	2023.04.07	2024.04.07			

Radiated Emission									
No.	Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due			
DGITL- 301	Semi-Anecho ic chamber	ETS•Lindgren	9*6*6	CT000874- 1181	2020.08.03	2023.08.03			
DGITL- 307	EMI test receiver	R&S	ESVS10	833616 /003	2023.04.07	2024.04.07			
DGITL- 306	Spectrum Analyzer	Agilent Technologies	N9010A	MY5420033 4	2023.04.07	2024.04.07			
DGITL- 308 Bilog Antenna		ETS•Lindgren	3142E	156975	2023.05.14	2025.05.14			
DGITL- 352 Pre Amplifier		MInI-CIrcuits	ZFC-1000 HX	SN2928011 10	2023.04.07	2024.04.07			



Page 7 of 22 Report. No.: D230704007

Section 2 Emission Test Results

2.1 Conducted Emission at Mains Terminals, 150 kHz to 30MHz

Test Requirement: FCC part 15.107
Test Method: ANSI C63.4:2014
Test Voltage: 120V AC, 60Hz
Frequency Range: 150 kHz to 30MHz
Detector: Peak for pre-scan

Quasi-Peak and Average at frequency with maximum peak

(9 kHz resolution bandwidth)

Uncertainty: 2Uc(V) = 2.3dB

Class / Limit: Class B

Frequency range	Class B Limits dB (μV)				
MHz	Quasi-peak	Average			
0.15 to 0.50	66 to 56	56 to 46			
0.50 to 5	56	46			
5 to 30	60	50			

NOTE 1: The limit decreases linearly with the logarithm of the frequency in the range

0.15 MHz to 0.50 MHz.

NOTE 2: The lower limit is applicable at the transition frequency.

2.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 49 % RH Atmospheric Pressure: 101 kPa

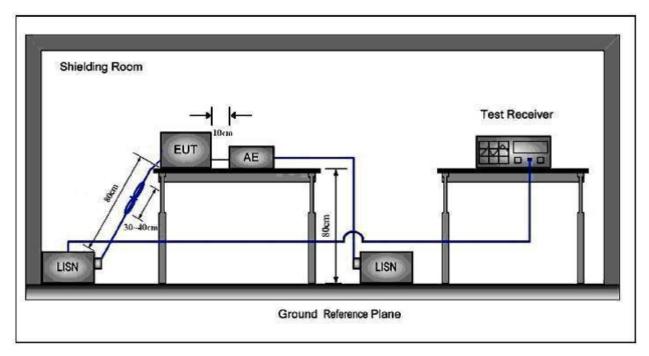
EUT Operation: Pre-test the EUT in On Mode with each mode to find the worst case, Compliance

test the EUT in On Mode with brightest white light as the worst case was found.

Page 8 of 22 Report. No.: D230704007



2.1.2 Test Setup and Procedure



- 1. The mains terminal disturbance voltage test was conducted in a shielded room.
- 2. The EUT was connected to nominal power supply through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH+5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
- 4. The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

2.1.3 Measurement Data

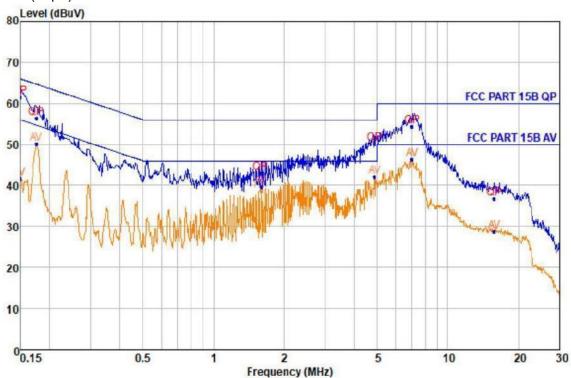
Pre-scan was performed with peak detected on both live and neutral cable. Quasi-peak & average measurements were performed at the frequencies which maximum peak emission level was detected. Please see the attached Quasi-peak and Average test results.

Page 9 of 22

Report. No.: D230704007



Live Line: Peak Scan: Level (dBµV)



Quasi-peak and Average measurement

NO.	Freq	Level dBuV	Remark	LISN Factor	Cable Loss dB	Limit Line dBuV	Over Limit
1	0.150	61.56	QP	10.21	0.20	66.00	-4.44
2	0.150	41.57	Average	10.21	0.20	56.00	-14.43
3	0.176	56.45	QP	10.12	0.21	64.68	-8.23
4	0.176	50.21	Average	10.12	0.21	54.68	-4.47
5	1.598	43.05	QP	10.00	0.33	56.00	-12.95
6	1.598	39.69	Average	10.00	0.33	46.00	-6.31
7	4.874	50.18	QP	9.88	0.40	56.00	-5.82
8	4.874	42.15	Average	9.88	0.40	46.00	-3.85
9	7.044	54.32	QP	9.81	0.42	60.00	-5.68
10	7.044	46.43	Average	9.81	0.42	50.00	-3.57
11	15.768	36.80	QP	9.53	0.46	60.00	-23.20
12	15.768	28.65	Average	9. 53	0.46	50.00	-21.35

Page 10 of 22

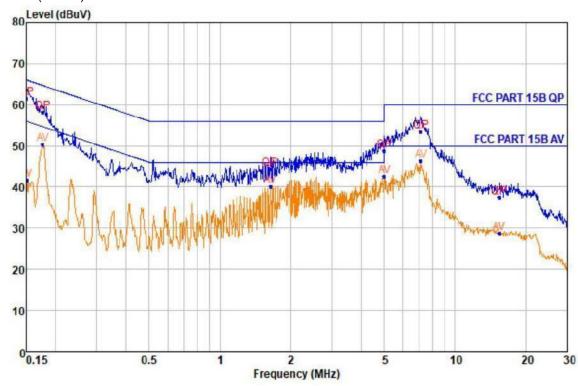
Report. No.: D230704007



Neutral Line:

Peak Scan:

Level (dB µ V)



Quasi-peak and Average measurement

NO.	Freq MHz	Level dBuV	Remark	LISN Factor	Cable Loss dB	Limit Line dBuV	Over Limit dB
1	0.150	61.60	QP	10.02	0.20	65, 98	-4.38
2	0.151	41.60	Average	10.02	0.20	55. 96	-14.36
3	0.177	58. 13	QP	9.97	0.21	64.64	-6.51
4	0.177	50.36	Average	9.97	0.21	54.64	-4.28
5	1.641	44.29	QP	9.92	0.34	56.00	-11.71
6	1.641	40.08	Average	9.92	0.34	46.00	-5.92
7	5.000	48.80	QP	9.81	0.40	56.00	-7.20
8	5.000	42.50	Average	9.81	0.40	46.00	-3.50
9	7.161	53.57	QP	9.75	0.42	60.00	-6.43
10	7.161	46.42	Average	9.75	0.42	50.00	-3.58
11	15. 432	37.52	QP	9.63	0.46	60.00	-22.48
12	15, 432	28.76	Average	9.63	0.46	50.00	-21.24





2.2 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC part 15.109
Test Method: ANSI C63.4:2014
Test Voltage: 120V AC, 60Hz
Frequency Range: 30MHz to 1GHz

Measurement Distance 3m

Detector: Peak for pre-scan

Quasi-Peak if maximised peak within 6dB of limit

Report. No.: D230704007

(120 kHz resolution bandwidth)

Uncertainty: 2Uc(V) = 3.35dB

Class / Limit: Class B

Frequency range	Quasi-peak limits
MHz	dB (μV/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
960 to 1000	54
At transitional frequencies the lower limit applies	

2.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 49 % RH Atmospheric Pressure: 101 kPa

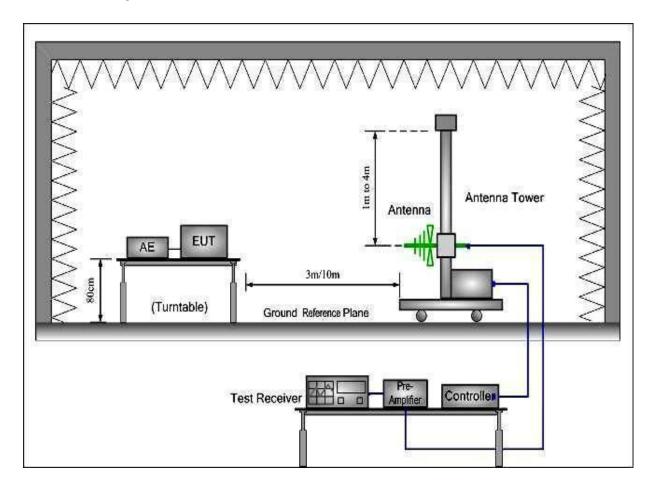
EUT Operation: Pre-test the EUT in On Mode with each mode to find the worst case, Compliance

test the EUT in On Mode with brightest white light as the worst case was found.

Page 12 of 22 Report. No.: D230704007



2.2.2 Test Setup and Procedure



- 1. The radiated emissions test was conducted in a semi-anechoic chamber.
- 2. Biconical and log periodic antenna was used for the frequency range from 30MHz to 1GHz
- 3. The EUT was connected to nominal power supply through a mains power outlet which was bonded to the ground reference plane; The mains cables were draped to the ground reference plane. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
- 4. Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT.
- 5. The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

This report is for the exclusive use of ITL's client and is provided pursuant to the agreement between ITL assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the ITL name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by ITL. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an ITL certification program. The test report only allows to be revised within the retention period unless further standard or the requirement was noticed.

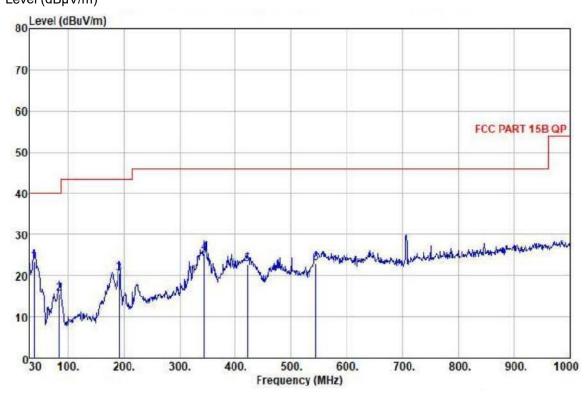
Report. No.: D230704007



2.2.3 Measurement Data

Horizontal:

Peak scan Level (dBµV/m)



Quasi-peak measurement

No.	Freq MHz	Read Level dBuV	Antenna Factor dB	Cable Loss dB	Preamp Factor dB	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Pol/Phase	Remark
-										
3	39. 700 84. 320 191. 990 344. 280	34. 73 34. 93 36. 84 36. 22	16. 01 7. 87 9. 66 14. 32	0.71 1.07 1.67 2.26	28. 13 28. 23 27. 66 27. 34	23. 32 15. 64 20. 51 25. 46	40.00 43.50	-16. 68 -24. 36 -22. 99 -20. 54	HORIZONTAL HORIZONTAL	QP QP
5	421.880 544.100	32. 30 31. 02	15. 91 17. 84	2. 53	28. 11 28. 83	22. 63 22. 93	46.00	-23. 37 -23. 07	HORIZONTAL	QP

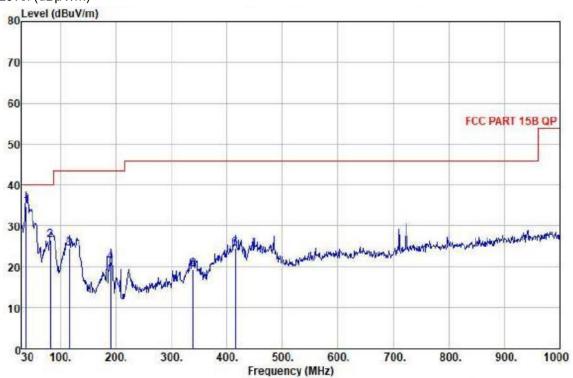
Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor

Report. No.: D230704007



Vertical:

Peak scan Level (dBµV/m)



Quasi-peak measurement

No.	Freq MHz	Read Level dBuV	Antenna Factor dB	Cable Loss dB	Preamp Factor dB	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Pol/Phase	Remark
-										
1	38.730	45. 53	16.70	0.71	28.22	34.72	40.00	-5. 28	VERTICAL	QP
2	82.380	45.81	7.80	1.06	28.17	26. 50	40.00	-13.50	VERTICAL	QP
3	116.330	42.69	9.13	1. 27	28.54	24.55	43.50	-18.95	VERTICAL	QP QP
4	190.050	37.50	9.65	1.66	27.60	21.21	43.50	-22. 29	VERTICAL	QP
5	338.460	30.32	14.18	2, 25	27.39	19.36	46.00	-26.64	VERTICAL	QP
6	415.090	34.44	15.81	2.51	28.14	24.62	16.00	-21.38	VERTICAL	QP

Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor

Page 15 of 22 Report. No.: D230704007

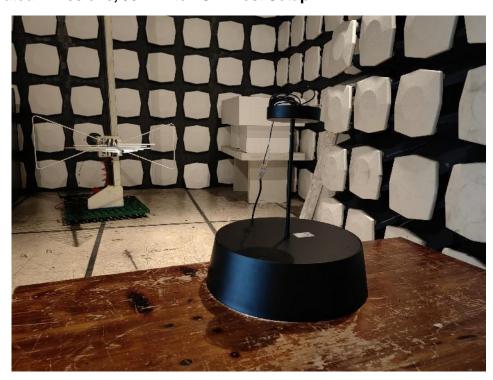


Section 3 Photographs

3.1 Conducted Emissions Mains Terminals Test Setup



3.2 Radiated Emissions, 30MHz to 1GHz Test Setup

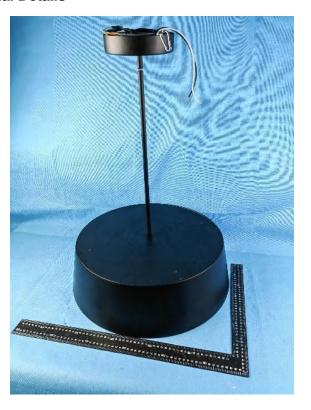


Page 16 of 22

Report. No.: D230704007

ITL

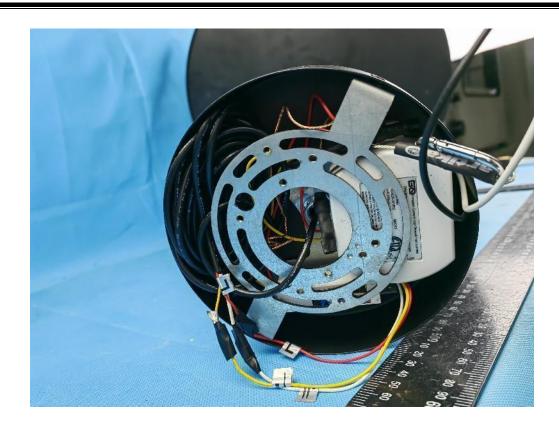
3.3 EUT Constructional Details





Page 17 of 22 Report. No.: D230704007







Page 18 of 22 Report. No.: D230704007

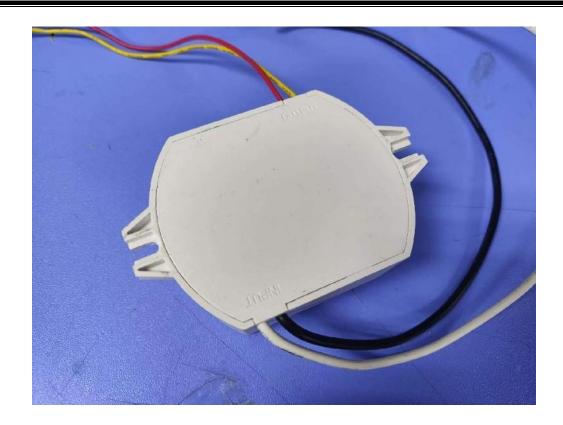


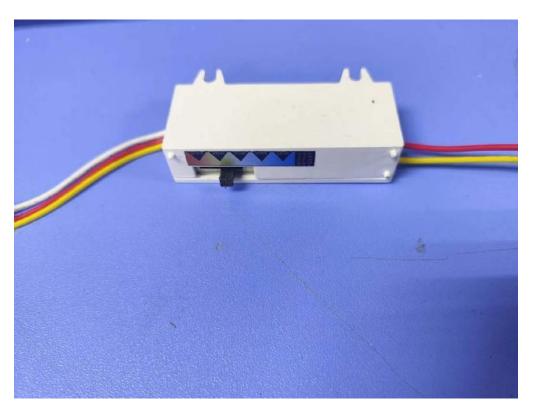




Page 19 of 22 Report. No.: D230704007



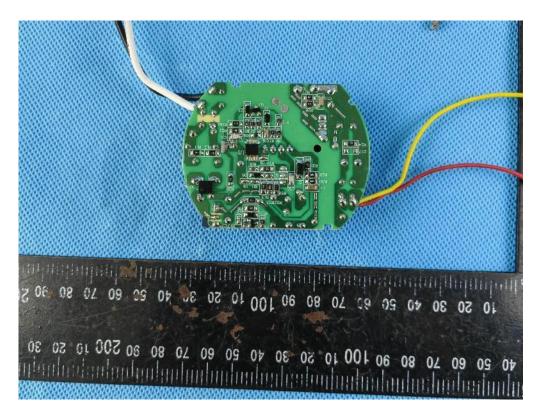




Page 20 of 22 Report. No.: D230704007

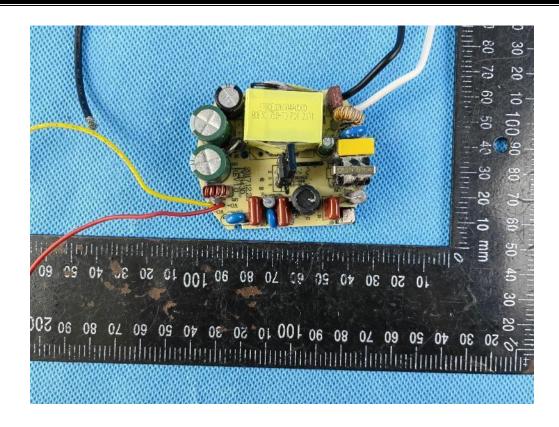


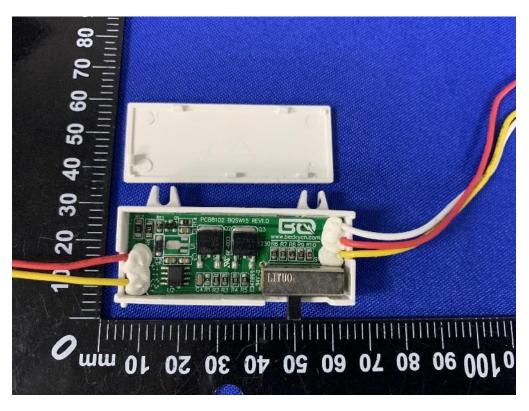




Page 21 of 22 Report. No.: D230704007







Page 22 of 22 Report. No.: D230704007





END OF THE TEST REPORT