

### FCC Part15 Subpart B

#### **TEST REPORT**

For

#### **LED Pendant Lamp**

MODEL NUMBER: PDT-BM-xxxxxxxx (x can be any character or blank for commercial use only)

#### FCC ID: 2AUHG-PDT-BM

#### REPORT NUMBER: 4790323297-F01-00

#### ISSUE DATE: March 21, 2022

Prepared for

#### ARTIKA FOR LIVING INC. 1756, 50th Avenue Montreal (Lachine), Quebec Canada, H8T 2V5

Prepared by

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Form No.: Form ULID-008361 1.0 Form Issued: 2021-11-1



### **Revision History**

Rev.	Issue Date	Revisions	Revised By
	03/21/2022	Initial Issue	



Summary of Test Results							
Standard	Test Item	Limit	Result	Remark			
	Conducted Disturbance	Class B	PASS				
FCC PART 15, Subpart B	Radiated Disturbance below 1 GHz	Class B	PASS				
	Radiated Disturbance above 1 GHz	Class B	N/A	NOTE (1) NOTE (2)			

Note:

(1) "N/A" denotes test is not applicable in this Test Report

(2) If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.

(2) The highest frequency of the internal sources of the EUT is less than 108 MHz.

(3) There is no any wireless function using in this products.

(4) Base on the difference of all models, PDT-BM-BL was selected as a typical model for all necessary test performed.



# CONTENTS

1.	ATTESTATION OF TEST RESULTS
2.	TEST METHODOLOGY6
3.	FACILITIES AND ACCREDITATION6
4.	CALIBRATION AND UNCERTAINTY
4	1. Measuring Instrument Calibration
4	2. Measurement Uncertainty6
5.	EQUIPMENT UNDER TEST7
5	1. Description of EUT
5	2. Test Mode7
5	3. EUT Accessory
5	4. Block Diagram Showing the Configuration of System Tested
6.	MEASURING EQUIPMENT AND SOFTWARE USED9
7.	EMISSION TEST
7	1.Conducted Disturbance Measurement107.1.1.Limits of conducted disturbance voltage107.1.2.Test Procedure107.1.3.Test Setup117.1.4.Test Environment117.1.5.Test Mode117.1.6.Test Results12
	1.Conducted Disturbance Measurement107.1.1.Limits of conducted disturbance voltage107.1.2.Test Procedure107.1.3.Test Setup117.1.4.Test Environment117.1.5.Test Mode11
7	1.Conducted Disturbance Measurement107.1.1.Limits of conducted disturbance voltage107.1.2.Test Procedure107.1.3.Test Setup117.1.4.Test Environment117.1.5.Test Mode117.1.6.Test Results122.Radiated Disturbance Measurement147.2.1.Limits of radiated disturbance measurement147.2.2.Test Procedure157.2.3.Test Setup157.2.4.Test Environment167.2.5.Test Mode16
7 Apj	1.       Conducted Disturbance Measurement       10         7.1.1.       Limits of conducted disturbance voltage       10         7.1.2.       Test Procedure       10         7.1.3.       Test Setup       11         7.1.4.       Test Environment       11         7.1.5.       Test Mode       11         7.1.6.       Test Results       12         2.       Radiated Disturbance Measurement       14         7.2.1.       Limits of radiated disturbance measurement       14         7.2.2.       Test Procedure       15         7.2.3.       Test Setup       15         7.2.4.       Test Environment       16         7.2.5.       Test Mode       16         7.2.6.       Test Results – below 1GHz       17



## **1. ATTESTATION OF TEST RESULTS**

#### **Applicant Information**

Company Name: Address:	ARTIKA FOR LIVING INC. 1756, 50th Avenue Montreal (Lachine), Quebec Canada, H8T 2V5
Manufacturer Information Company Name: Address:	DongGuan City Rising Stars Lighting Co., LTD YuanQuan Road No.6, BaiHao Village, HouJie town , DongGuan City, GuangDong Province, China
EUT Information	
Product Name:	LED Pendant Lamp
Model name:	PDT-BM-xxxxxxx
	(x can be any character or blank for commercial use only)
Sample Status:	Normal
Sample ID:	210715021-1
Sample Received Date:	March 10, 2022
Date of Tested:	March 11, 2022~ March 18, 2022

APPLICABLE STANDARDS				
STANDARDS TEST RESULTS				
FCC PART 15, Subpart B	PASS <sup>*</sup>			

""=Decision rule for statement(s) of conformity is based on IEC Guide 115:2007 Clause 4.4.3 Procedure 2" Accuracy Method"

Prepared By:

Approved By:

Ryon Pary

Ryan Pang Project Engineer

Een Shan

Yam Shan Project Engineer



# 2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC Part15 Subpart B and ANSI C63.4-2014.

# 3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4338.01)
	Shenzhen STS Test Services Co., Ltd.
Accreditation	has been assessed and proved to be in compliance with A2LA.
Certificate	CNAS (Registration No.: L7649)
	Shenzhen STS Test Services Co., Ltd.
	has been assessed and proved to be in compliance with CNAS.

Note: All tests measurement facilities use to collect the measurement data are located at A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

# 4. CALIBRATION AND UNCERTAINTY

## 4.1. Measuring Instrument Calibration

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

## 4.2. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Measurement Frequency Range	к	U(dB)		
Conducted disturbance at mains terminals ports	0.15MHz ~ 30MHz	2	2.80 dB		
Radiated disturbance Test	30MHz ~ 1000MHz	2	4.39 dB		
Radiated disturbance Test	1GHz ~ 6 GHz	2	5.10 dB		
Radiated disturbance Test	6GHz ~ 18GHz	2	5.48 dB		
Note: This uncertainty represents an expanded uncertainty expressed at approximately the $95\%$ confidence level using a coverage factor of k=2.					

# 5. EQUIPMENT UNDER TEST

# 5.1. Description of EUT

EUT Name	LED Pendant Lamp		
EUT Description	This devices are LED lamp use at indoor.		
Model	PDT-BM-xxxxxxx		
Model Difference	<ol> <li>x can be any character or blank for commercial use only.</li> <li>All models are identical except for the model name.</li> </ol>		
Rated Input	AC 120V, 60Hz, 11W		
Test Model	PDT-BM-BL		
Test Power Supply	AC 120V, 60Hz		

### 5.2. Test Mode

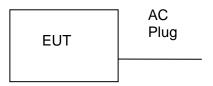
Test Mode	Description
Mode 1	Lighting mode

## 5.3. EUT Accessory

Item	Accessory	Brand Name	Model Name	Description	
1	N/A	N/A	N/A	N/A	



### 5.4. Block Diagram Showing the Configuration of System Tested



The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A



# 6. MEASURING EQUIPMENT AND SOFTWARE USED

Conducted Disturbance								
Used	Equipment	Manufacturer	Model No.		Serial No.	Last Cal.	Next Cal.	
$\checkmark$	EMI Test Receiver	R&S	ESC		101427	2021.10.10	2022.10.09	
$\checkmark$	LISN	R&S	ENV216		101242	2021.10.10	2022.10.09	
	Software							
Used	Description Manufacturer Name Version				Version			
$\checkmark$	Test Software for	Conducted Emis	sions		Farad	EZ-EMC	Ver. UL-3A1	
	Radiated Disturbance							
Used	Equipment	Manufacturer	Model	Model No. Serial No		Last Cal.	Next Cal.	
$\checkmark$	EMI Test Receiver	R&S	ESC	ESCI		2021.10.10	2022.10.09	
$\checkmark$	Bi-log Antenna	TESEQ	CBL61	11D	34678	2021.10.10	2022.10.09	
	Pre-amplifier(0.1M- 3GHz)	EM	EM330		060665	2021.10.10	2022.10.09	
Software								
Used	Des	cription	Ma		ufacturer	Name	Version	
$\checkmark$	Test Software for Radiated Emissions				Farad	EZ-EMC	Ver. UL-3A1	



## 7. EMISSION TEST

### 7.1. Conducted Disturbance Measurement

#### 7.1.1. Limits of conducted disturbance voltage

FREQUENCY	□Class A (dBµV)		⊠Class B (dBµV)		
(MHz)	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	
0.50 -5.0	73.00	60.00	56.00	46.00	
5.0 -30.0	73.00	60.00	60.00	50.00	

Note:

(1) The tighter limit applies at the band edges.

- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

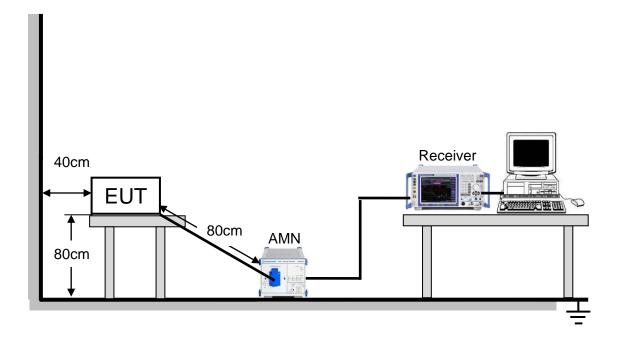
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

### 7.1.2. Test Procedure

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item:EUT Test Photos.



### 7.1.3. Test Setup



For the actual test configuration, please refer to Appendix I: Photographs of the Test Configuration.

### 7.1.4. Test Environment

Temperature:	23.2°C
Humidity:	44%
ATM pressure:	101kPa

#### 7.1.5. Test Mode

Pre-test Mode:	Mode 1
Final Test Mode:	Mode 1

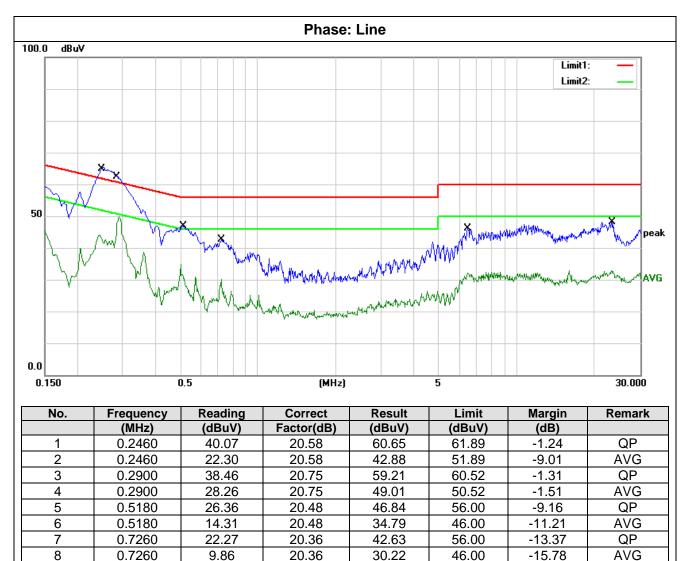
Note: According to pre-test results, the final test mode is each independent function's worst case and only shown in the report.



#### 7.1.6. Test Results

Model	Nama.	רחס	-BM-BL
wouer	iname.	PDI	-DIVI-DL

Test Mode:	Mode 1
Test Voltage:	AC 120V/60Hz



Remark Result = Reading +Correct Margin = Result - Limit

6.4780

6.4780

23.4500

23.4500

25.59

11.71

25.43

10.12

9

10

11

12

20.56

20.56

22.78

22.78

46.15

32.27

48.21

32.90

60.00

50.00

60.00

50.00

-13.85

-17.73

-11.79

-17.10

QP

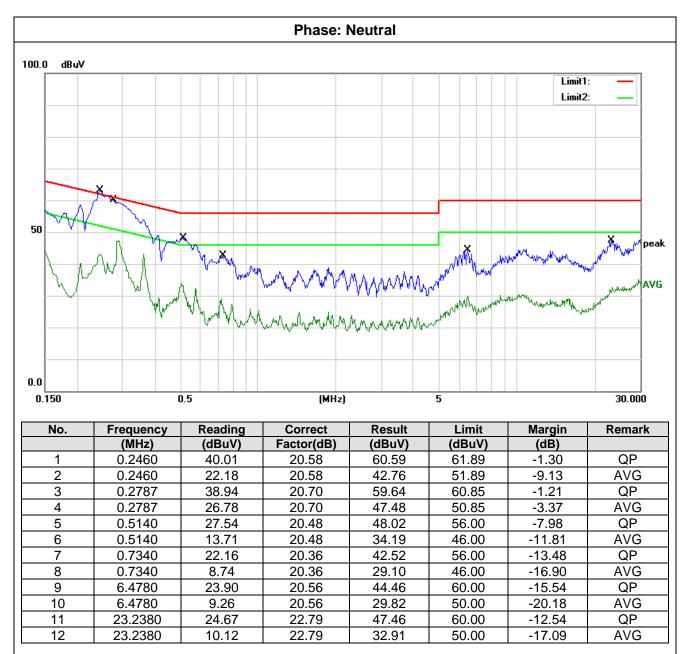
AVG

QP

AVG



Test Mode:	Mode 1
Test Voltage:	AC 120V/60Hz



Remark Result = Reading +Correct Margin = Result – Limit



### 7.2. Radiated Disturbance Measurement

#### 7.2.1. Limits of radiated disturbance measurement

#### Below 1 GHz

Measurement Method and Applied Limits: ANSI C63.4:

	Ľ	⊠Class B	
Frequency (MHz)	Field strength (dBuV/m) ( at 10m)	Field strength (dBuV/m) (at 3m)	Field strength (dBuV/m) (at 3m)
30 - 88	39	49.5	40
88 - 216	43.5	54	43.5
216 - 960	46.4	56.9	46
Above 960	49.5	60	54

#### Above 1 GHz Measurement Method and Applied Limits: ANSI C63.4:

Frequency	Class A					ass B
Frequency (MHz)	(dBuV/m) (at 3m)		(dBuV/m) (at 10m)		(dBuV/m) (at 3m)	
	Peak	Average	Peak	Average	Peak	Average
Above 1000	80	60	69.5	49.5	74	54
Frequency Range of Radiated Disturbance Measurement						

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)	
Below 1.705	30	
1.705 - 108	1000	
108 - 500	2000	
500 - 1000	5000	
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower	

NOTE:

- (1) The limit for radiated test was performed according to FCC Part 15, Subpart B;
- (2) The tighter limit applies at the band edges;
- (3) Emission level (dBuV/m) = 20log Emission level (uV/m), 3m Emission level = 10m Emission level + 20log(10m/3m);
- (4) The test result calculated as following: Measurement Value = Reading Level + Correct Factor, Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use), Margin Level = Measurement Value - Limit Value.

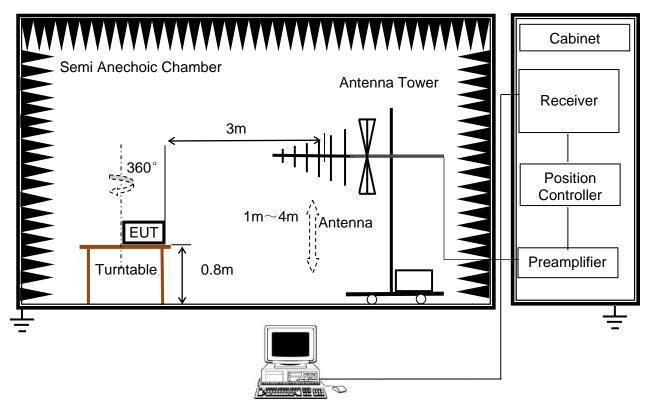


### 7.2.2. Test Procedure

- a. The measuring distance of at 3m shall be used for measurements at frequency up to 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For the actual test configuration, please refer to the related Item:EUT Test Photos.

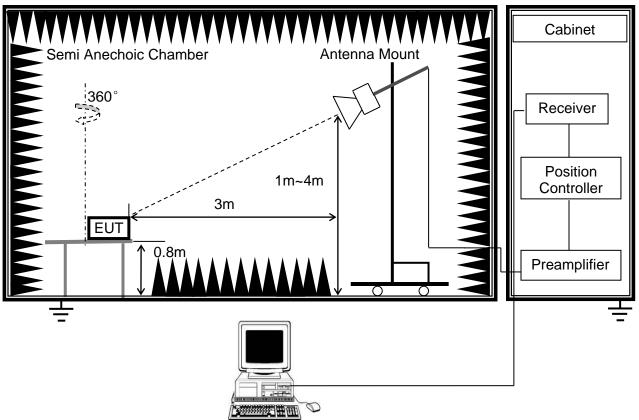
### 7.2.3. Test Setup

(a) Radiated Disturbance Test Set-Up Frequency 30MHz - 1GHz





(b) Radiated Disturbance Test Set-Up Frequency above 1GHz



For the actual test configuration, please refer to Appendix I: Photographs of the Test Configuration.

### 7.2.4. Test Environment

Radiated Disturbance - below 1 GHz		Radiated Disturbance - above 1 GHz	
Temperature:	21.5°C	Temperature:	N/A
Humidity:	55%	Humidity:	N/A
ATM pressure: 101kPa		ATM pressure:	N/A

### 7.2.5. Test Mode

Radiated Dist	urbance - below 1 GHz	Radiated Disturbance - above 1 GHz		
Pre-test Mode:	Mode 1	Pre-test Mode:	N/A	
Final Test Mode:	Mode 1	Final Test Mode:	N/A	

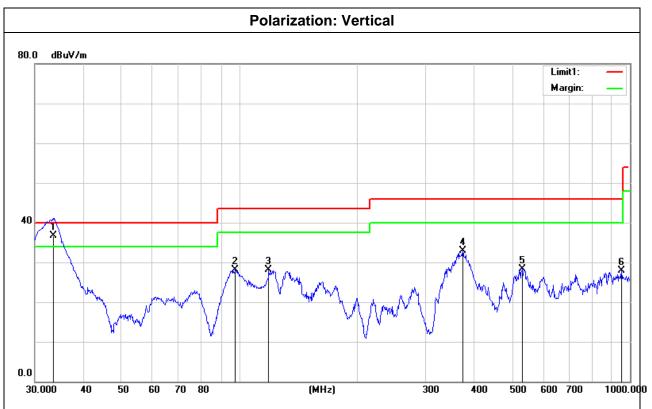
Note: According to pre-test results, the final test mode is each independent function's worst case and only shown in the report.



### 7.2.6. Test Results – below 1GHz

Model Name: PDT-BM-BL

Test Mode:	Mode 1
Test Voltage:	AC 120V/60Hz



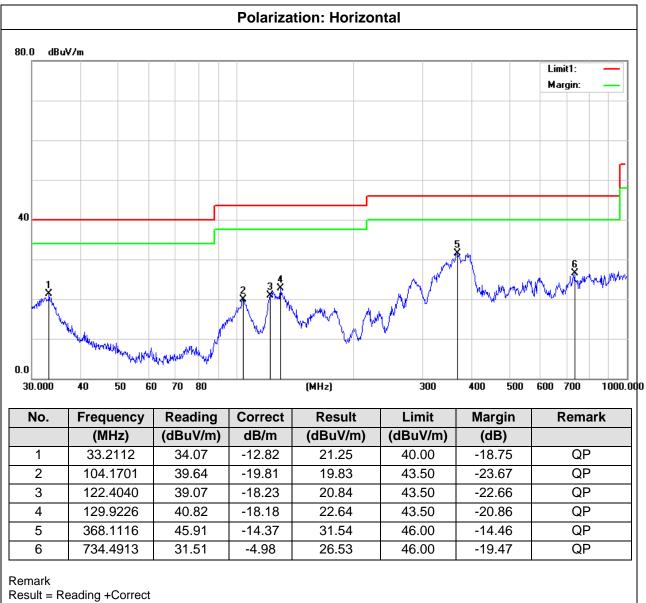
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	33.5041	49.65	-12.98	36.67	40.00	-3.33	QP
2	97.7983	48.36	-20.30	28.06	43.50	-15.44	QP
3	119.0180	46.43	-18.37	28.06	43.50	-15.44	QP
4	373.3112	47.33	-14.49	32.84	46.00	-13.16	QP
5	530.1014	38.34	-10.09	28.25	46.00	-17.75	QP
6	952.0937	29.98	-2.10	27.88	46.00	-18.12	QP

Remark

Result = Reading +Correct Margin = Result – Limit



Test Mode:	Mode 1
Test Voltage:	AC 120V/60Hz



Margin = Result – Limit

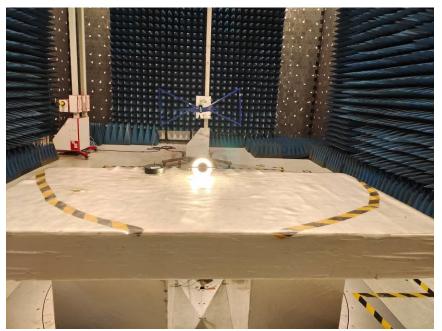
# **Appendix I: Photographs of Test Configuration**



### Conducted Disturbance



Radiated Disturbance below 1GHz





# Appendix II: Photographs of the EUT





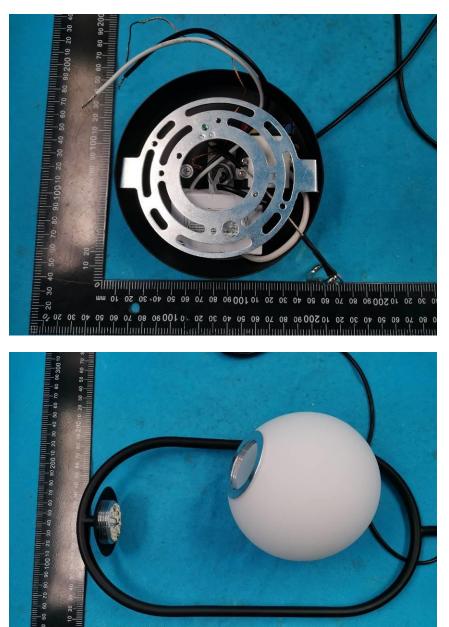






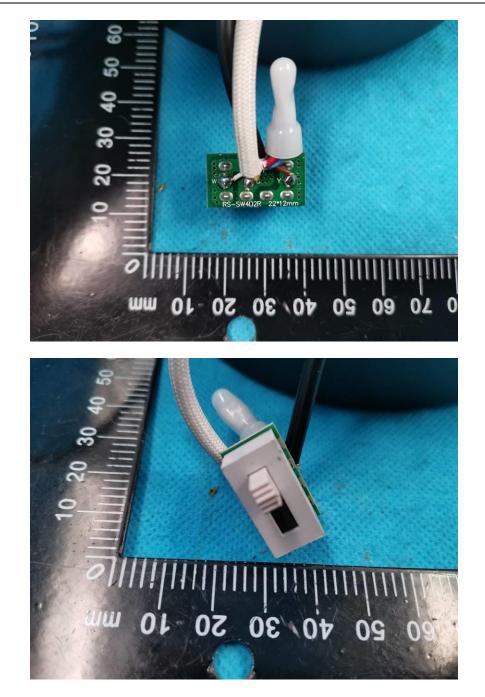


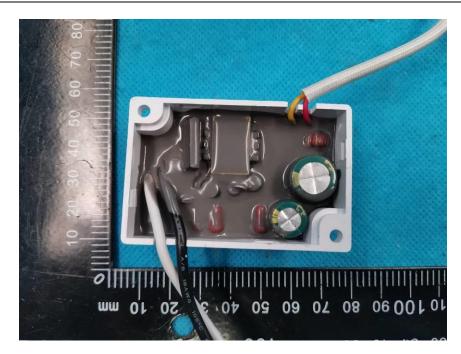














## **Appendix III : FCC Compliance Statement**

#### 1. Labeling requirements

Devices shall bear the following statement in a conspicuous location on the device. When the device is so small, and the device does not have a display that can show electronic labeling, then the information required by this paragraph shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### 2. User manual or instruction manual requirements

The user manual or instruction manual shall caution the user the following statement:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### 3. FCC logo

Devices authorized under the SDoC procedure have the option to use the FCC logo to indicate compliance with the FCC rules, and the logo may be included in the instruction materials or as part of an e-label.



The FCC logo shall only be used on a product that has been tested, evaluated, and found to be compliant in accordance with the SDoC procedures.

### End of Report