

FCC Part15 Subpart B

TEST REPORT

For

LED Vanity Light

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

FCC ID: 2AYFP-VAN-FP

REPORT NUMBER: 4790343735-F02-00

ISSUE DATE: April 18, 2022

Prepared for

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

Prepared by

UL-CCIC Company Limited Electronic Building, Parage Electronic Industrial Park, No. 8 Nanyun Er Road, Guangzhou Science Park, Guangzhou, 510670 China Website: www.ul.com

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification.



Revision History

Rev.	Issue Date	Revisions	Revised By
	04/18/2022	Initial Issue	



Summary of Test Results						
Standard	Limit	Result	Remark			
	Conducted Disturbance	Class B	PASS			
FCC PART 15, Subpart B (October 01, 2020)	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.



CONTENTS

1.	ATTESTATION OF TEST RESULTS5			
2.	TEST N	IETHODOLOGY	.6	
3.	FACILI	TIES AND ACCREDITATION	.6	
4.	CALIB	RATION AND UNCERTAINTY	.6	
4	4.1.	Measuring Instrument Calibration	.6	
4	4.2.	Measurement Uncertainty	.6	
5.	EQUIPI	MENT UNDER TEST	.7	
5	5.1.	Description of EUT	.7	
5	5.2.	Test Mode	.7	
5	5.3.	EUT Accessory	.7	
5	5.4.	Block Diagram Showing the Configuration of System Tested	.8	
6.	MEASU	IRING EQUIPMENT AND SOFTWARE USED	.9	
7.	EMISSI	ON TEST1	0	
7	7.1. 7.1.1. 7.1.2. 7.1.3. 7.1.4. 7.1.5.	Conducted Disturbance Measurement1Limits of conducted disturbance voltage1Test Procedure1Test Setup1Test Environment1	10 10 11	
	7.1.6.	Test Mode	11	
7	7.1.6. 7.2.1. 7.2.2. 7.2.3. 7.2.4. 7.2.5. 7.2.6.	Test Mode1	11 12 14 15 15 16	
	7.2. 7.2.1. 7.2.2. 7.2.3. 7.2.4. 7.2.5. 7.2.6.	Test Mode	11 12 14 15 16 16	
Ар	7.2. 7.2.1. 7.2.2. 7.2.3. 7.2.4. 7.2.5. 7.2.6. pendix I:	Test Mode	11 12 14 15 15 16 17	



1. ATTESTATION OF TEST RESULTS

Applicant Info	ormation
----------------	----------

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: Model Name:	LED Vanity Light VAN-FP-xxxxxxx
Brand Name: Sample Status: Sample ID: Sample Received Date:	(x can be any character or blank for commercial use only) Artika Normal 210714095-2 March 22, 2022
Date of Tested:	March 23, 2022~ March 28, 2022

APPLICABLE STANDARDS				
STANDARDS TEST RESULTS				
FCC PART 15, Subpart B	PASS			

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

Prepared By:

Ryon Pary

Ryan Pang Project Engineer

Approved By:

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

Accreditation Certificate	A2LA (Certificate No.: 3870.01) Dongguan Dongdian Testing Service Co., Ltd. has been assessed and proved to be in compliance with A2LA. CNAS (Registration No.: L6451) Dongguan Dongdian Testing Service Co., Ltd. has been assessed and proved to be in compliance with CNAS.
	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 Dongguan Dongdian Testing Service Co., Ltd.

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	3.32 dB		
Radiated disturbance Test	Below 1GHz	2	4.70 dB (Antenna Polarize: V)		
Radiated disturbance rest		2	4.84 dB (Antenna Polarize: H)		
Radiated disturbance Test		2	4.10dB (1-6GHz)		
Radiated disturbance rest	1GHz-18GHz	2	4.40dB (6GHz-18Gz)		
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 Vanity Light	
EUT Description	This product is a LED lamp for indoor use.	
Model	VAN-FP-xxxxxxx	
Model Difference	 x can be any character or blank for commercial use only. All models are identical except for the model name. All models use same built-in LED driver BQE20-0600-39-TDB. 	
Rated Input	AC 120V,60Hz,25W	
Test Model	VAN-FP	
Test Power Supply	AC 120V 60Hz	

5.2. Test Mode

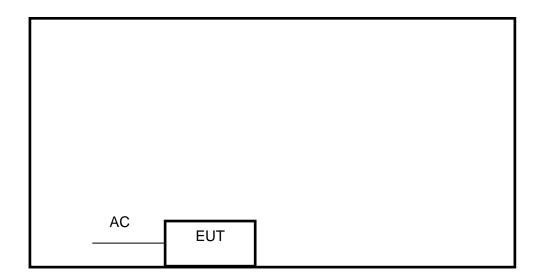
Test Mode	Description
Mode 1	Lighting mode.

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 without other necessary accessories or support units.

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	Test Receiver	R&S	ESC		100551	2021.09.02	2022.09.01			
\checkmark	LISN 1	R&S	ENV2	216	101109	2021.09.07	2022.09.06			
			Softwa	are						
Used	Des	cription		Man	ufacturer	Name	Version			
\checkmark	Test Software for	Conducted Emis	sions		Audix	E3	V 6.11111b			
		Rad	iated Dis	sturba	nce					
Used	Equipment	Manufacturer	Model	No.	Serial No.	Last Cal.	Next Cal.			
\checkmark	Test Receiver	R&S	ESU	18	100316	2021.09.02	2022.09.01			
	Trilog Broadband Antenna	Schwarzbeck	VULBS	VULB9163 9163-46		2021.11.13	2022.11.12			
Software										
Used	Des	cription		Man	ufacturer	Name	Version			
\checkmark	Test Software for	r Radiated Emiss	sions		Audix	E3	V 6.11111b			



7. EMISSION TEST

7.1. Conducted Disturbance Measurement

7.1.1. Limits of conducted disturbance voltage

FREQUENCY		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

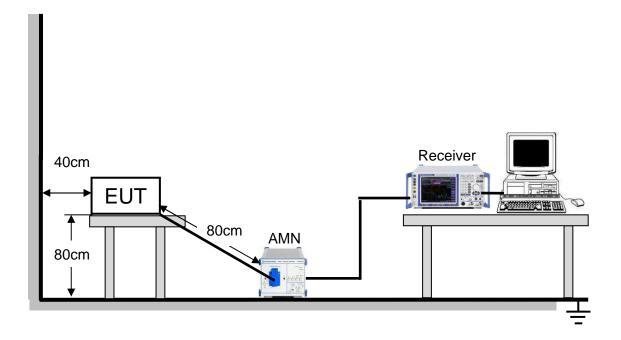
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

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:	24.5°C
Humidity:	55.5%
ATM pressure:	101kPa

7.1.5. Test Mode

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

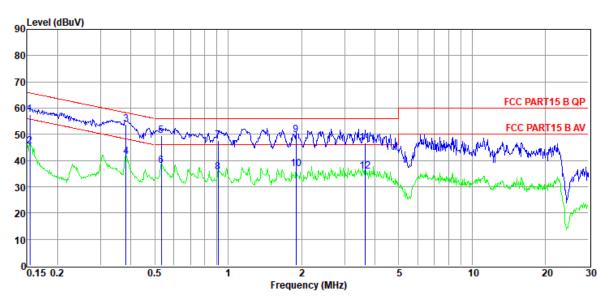
Note: According to pre-test results, the final test mode is each independent function's worst case and only shown in the report.



7.1.6. Test Results

EUT	: LED VANITY LIGHT	Model Number	: VAN-FP
Power Supply	: AC 120V/60Hz	Test Mode	: Mode 1
Condition	: Temp:24.5°C,Humi:55.5%,Press:100.1kPa	LISN	: ENV216 2#/LINE

Data: 14



ltem	Freq.	Read	LISN	Cable	Pulse	Result	Limit	Over	Detector	Phase
		Level	Factor	Loss	Limiter	Level	Line	Limit		
(Mark)	(MHz)		(dB)	(dD)	Factor	(dBµV)	(dBµV)	(dD)		
(IVIAIK)	\ /	(dBµV)		(dB)	(dB)			(dB)		
1	0.15	38.03	9.42	0.03	10.01	57.49	65.78	-8.29	QP	LINE
2	0.15	25.95	9.42	0.03	10.01	45.41	55.78	-10.37	Average	LINE
3	0.38	34.30	9.39	0.04	10.01	53.74	58.25	-4.51	QP	LINE
4	0.38	21.93	9.39	0.04	10.01	41.37	48.25	-6.88	Average	LINE
5	0.53	30.08	9.34	0.05	10.01	49.48	56.00	-6.52	QP	LINE
6	0.53	18.72	9.34	0.05	10.01	38.12	46.00	-7.88	Average	LINE
7	0.91	28.21	9.35	0.07	10.01	47.64	56.00	-8.36	QP	LINE
8	0.91	16.09	9.35	0.07	10.01	35.52	46.00	-10.48	Average	LINE
9	1.90	30.46	9.30	0.08	10.01	49.85	56.00	-6.15	QP	LINE
10	1.90	17.35	9.30	0.08	10.01	36.74	46.00	-9.26	Average	LINE
11	3.64	27.09	9.39	0.09	10.01	46.58	56.00	-9.42	QP	LINE
12	3.64	16.34	9.39	0.09	10.01	35.83	46.00	-10.17	Average	LINE

Note: 1. Result Level = Read Level +LISN Factor + Pulse Limiter Factor + Cable loss.

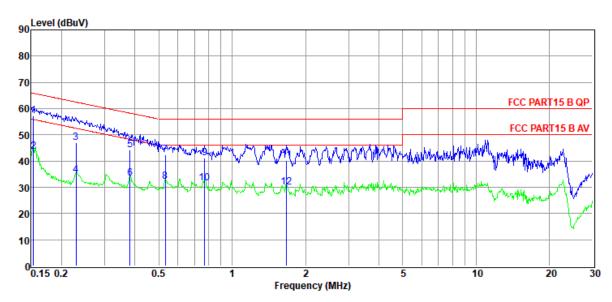
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
 Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



EUT	: LED VANITY LIGHT	Model Number	: VAN-FP
Power Supply	: AC 120V/60Hz	Test Mode	: Mode 1
Condition	: Temp:24.5°C,Humi:55.5%,Press:100.1kPa	LISN	: ENV216 2#/LINE

Data: 16



ltem	Freq.	Read	LISN	Cable	Pulse	Result	Limit	Over	Detector	Phase
		Level	Factor	Loss	Limiter	Level	Line	Limit		
(Mark)	(MHz)	(dBµV)	(dB)	(dB)	Factor (dB)	(dBµV)	(dBµV)	(dB)		
1	0.15	37.60	9.59	0.03	10.01	57.23	65.82	-8.59	QP	NEUTRAL
2	0.15	24.01	9.59	0.03	10.01	43.64	55.82	-12.18	Average	NEUTRAL
3	0.23	27.50	9.47	0.04	10.01	47.02	62.48	-15.46	QP	NEUTRAL
4	0.23	15.22	9.47	0.04	10.01	34.74	52.48	-17.74	Average	NEUTRAL
5	0.38	24.96	9.36	0.04	10.01	44.37	58.25	-13.88	QP	NEUTRAL
6	0.38	14.11	9.36	0.04	10.01	33.52	48.25	-14.73	Average	NEUTRAL
7	0.53	22.92	9.34	0.05	10.01	42.32	56.00	-13.68	QP	NEUTRAL
8	0.53	12.74	9.34	0.05	10.01	32.14	46.00	-13.86	Average	NEUTRAL
9	0.77	21.45	9.47	0.07	10.01	41.00	56.00	-15.00	QP	NEUTRAL
10	0.77	11.96	9.47	0.07	10.01	31.51	46.00	-14.49	Average	NEUTRAL
11	1.67	20.57	9.40	0.08	10.01	40.06	56.00	-15.94	QP	NEUTRAL
12	1.67	10.37	9.40	0.08	10.01	29.86	46.00	-16.14	Average	NEUTRAL

Note: 1. Result Level = Read Level +LISN Factor + Pulse Limiter Factor + Cable loss.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).

4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



7.2. Radiated Disturbance Measurement

7.2.1. Limits of radiated disturbance measurement

Below 1 GHz

Measurement Method and Applied Limits: ANSI C63.4:

	Γ	⊠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 (MHz)			Class B						
	(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 Denny	Frequency Dense of Dedicted Disturbance Measurement								

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 th 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.

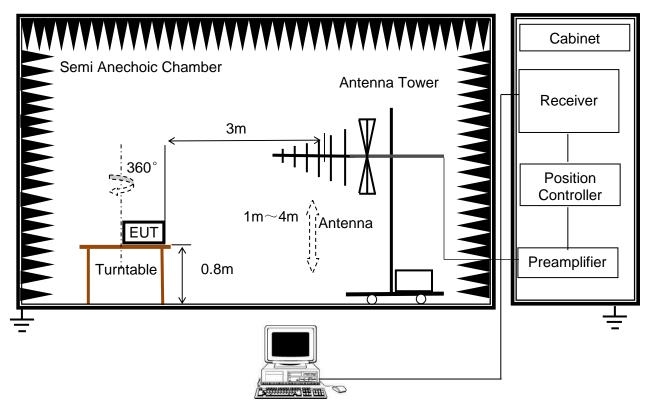


7.2.2. Test Procedure

- 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.

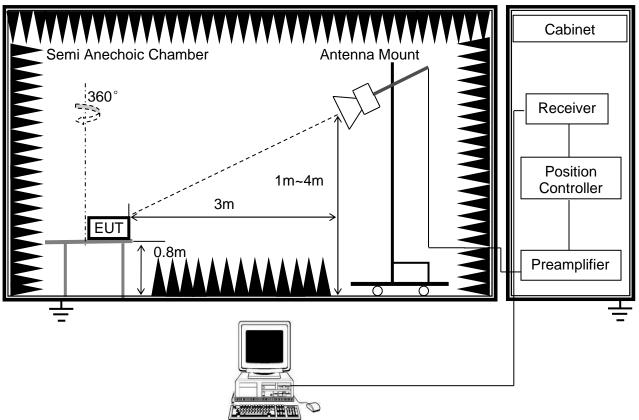
7.2.3. Test Setup

(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 Dist	urbance - below 1 GHz	Radiated Disturbance - above 1 GHz		
Temperature:	23.2°C	Temperature:	N/A	
Humidity:	49.4%	Humidity:	N/A	
ATM pressure:	101kPa	ATM pressure:	N/A	

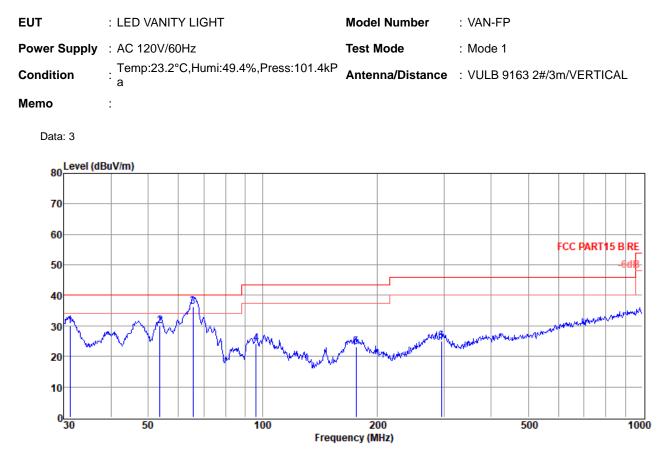
7.2.5. Test Mode

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



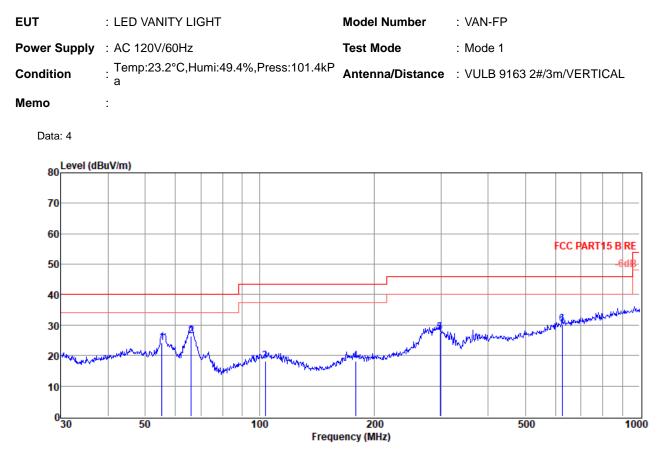
ltem	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBµV)	(dB/m)	dB	(dBµV/m)	(dBµV/m)	(dB)		
1	31.18	16.21	10.22	3.48	29.91	40.00	-10.09	QP	VERTICAL
2	53.69	13.00	13.20	3.72	29.92	40.00	-10.08	QP	VERTICAL
3	65.57	21.50	10.94	3.81	36.25	40.00	-3.75	QP	VERTICAL
4	96.10	9.48	10.60	4.05	24.13	43.50	-19.37	QP	VERTICAL
5	176.27	9.91	8.90	4.38	23.19	43.50	-20.31	QP	VERTICAL
6	295.15	7.19	13.11	4.84	25.14	46.00	-20.86	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.





ltem	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBµV)	(dB/m)	dB	(dBµV/m)	(dBµV/m)	(dB)		
1	55.42	7.77	12.76	3.73	24.26	40.00	-15.74	QP	HORIZONTAL
2	66.03	11.80	10.88	3.82	26.50	40.00	-13.50	QP	HORIZONTAL
3	103.44	2.73	11.24	4.09	18.06	43.50	-25.44	QP	HORIZONTAL
4	178.76	4.85	8.98	4.39	18.22	43.50	-25.28	QP	HORIZONTAL
5	298.27	9.34	13.23	4.85	27.42	46.00	-18.58	QP	HORIZONTAL
6	625.08	4.88	19.30	6.03	30.21	46.00	-15.79	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

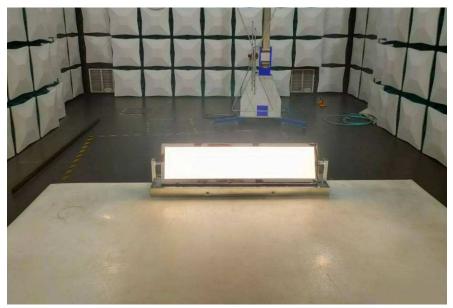


Appendix I: Photographs of Test Configuration

Conducted Disturbance

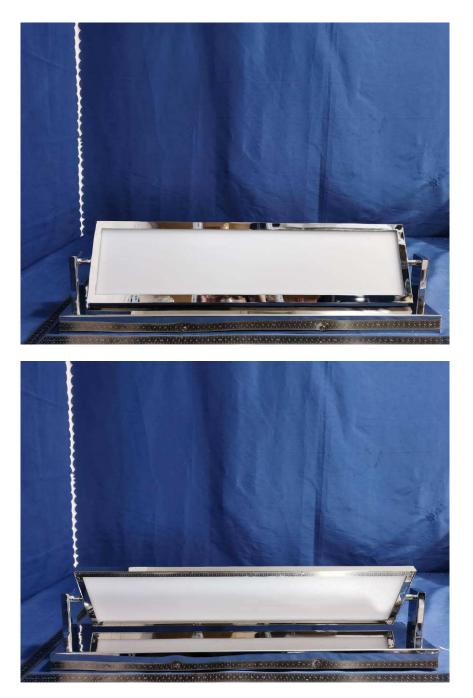


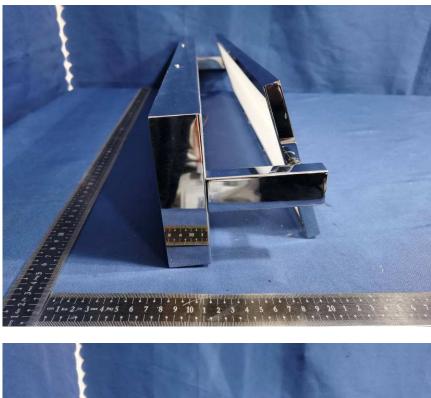
Radiated Disturbance below 1GHz

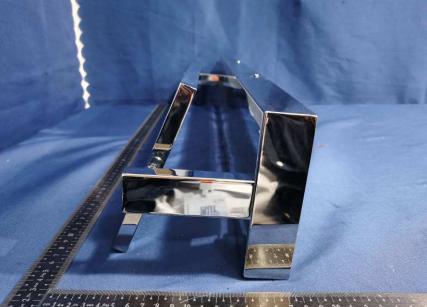


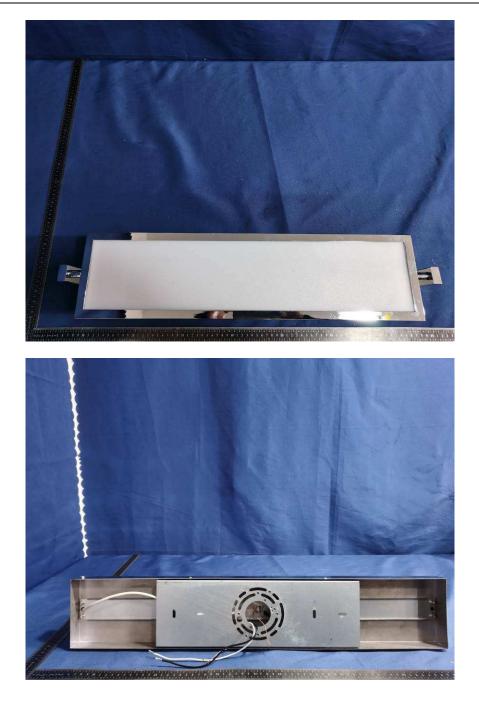


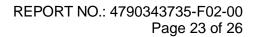
Appendix II: Photographs of the EUT



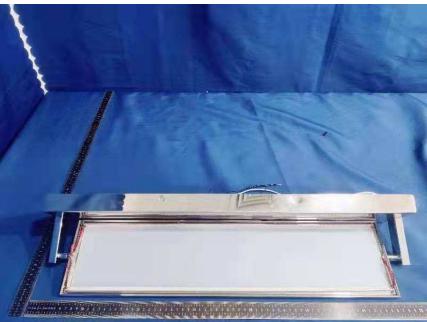




















Appendix III : FCC Compliance Statement

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