

Page 1 of 17 FCC ID: 2AYFP-TRK3-OX Report No.: LCSA111122127E

## FCC Part 15, Subpart B, Class B ARTIKA FOR LIVING INC OXION 3 TRACK LIGHT

Test Model: TRK3-OX-HD1BG

Additional Model No.: TRK3-OX-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

Lachine Canada

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd. Address : 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park

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

Mail : webmaster@LCS-cert.com

Date of receipt of test sample : November 23, 2022

Number of tested samples : 2

Sample No. : A111122127 Serial number : Prototype

Date of Test : November 23, 2022 ~ November 25, 2022

Date of Report : November 26, 2022



of 17 FCC ID: 2AYFP-TRK3-OX

Report No.: LCSA111122127E

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

Report Reference No. ......: LCSA111122127E

Date Of Issue .....: : November 26, 2022

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

Address .....:: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park

Yabianxueziwei, Shajing Street, Baoan District, Shenzhen,

518000, 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

Canada

**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.....: : OXION 3 TRACK LIGHT

Test Model .....: TRK3-OX-HD1BG

Trade Mark .....: : Artika

Ratings .....: Input: AC 120V, 60Hz, 16W

Result .....: : Positive

Compiled by:

Supervised by:

Approved by:

Nova Mary

Vera Deng/ Administrator Cary Luo/

Cary Luo/ Technique principal

Gavin Liang/ Manager





#### FCC -- TEST REPORT

Report No.: LCSA111122127E

November 26, 2022 **Test Report No.:** LCSA111122127E Date of issue

Test Model .....: TRK3-OX-HD1BG EUT.....: : OXION 3 TRACK LIGHT Applicant.....: : ARTIKA FOR LIVING INC 1756 50th avenue, Lachine, Qc, CanadaH8T 2V5 Address..... Lachine Canada Telephone.....:: : / Fax.....: : / Manufacturer.....: ZHONGSHAN C5 LIGHTING CO. LTD 1# Henglong Road, Tongyi Industrial Area, Cao San, Address..... Guzhen, Zhongshan, Guangdong, China. Telephone..... Fax.....: : / Factory.....:: ZHONGSHAN C5 LIGHTING CO. LTD 1# Henglong Road, Tongyi Industrial Area, Cao San, Address..... Guzhen, Zhongshan, Guangdong, 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.



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#### Report No.: LCSA111122127E

# Revision History

Report Version Issue Date		Revision Content	Revised By
000	November 26, 2022	Initial Issue	







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#### 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	Limits	Results				
Conducted disturbance at mains terminals	FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4 -2014	Class B	PASS				
Radiated disturbance	FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4 -2014	Class B	PASS				

Test mode:		
Mode 1	Lighting	Record



## 2. GENERAL INFORMATION

#### 2.1. Description of Device (EUT)

EUT : OXION 3 TRACK LIGHT

Trade Mark : Artika

Test Model : TRK3-OX-HD1BG

Additional Model No.: TRK3-OX-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

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Power Supply : Input: AC 120V, 60Hz, 16W

Highest internal frequency (Fx)

ternal : Fx ≤ 108 MHz

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 4 E. EM LTV/L Local			

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

Manufacturer	Description	Model	Serial Number	Certificate

#### 2.3 External I/O Cable

I/O Port Description	Quantity	Cable
		-

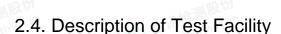












Site Description

EMC Lab. : NVLAP Accreditation Code is 600167-0. FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

FCC Test Firm Registration Number: 254912.

#### 2.5. 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.

## 2.6. 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%.



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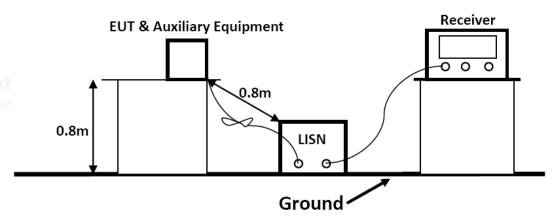
#### 3.1. POWER LINE CONDUCTED EMISSION MEASUREMENT

#### 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	Farad	EZ	/	N/A	N/A
2	EMI Test Receiver	R&S	ESR3	102312	2022-02-18	2023-02-17
3	Artificial Mains	R&S	ENV216	101288	2022-06-16	2023-06-15
4	Pulse Limiter	R&S	ESH3-Z2	102750-NB	2022-08-17	2023-08-16
5	Impedance Stabilization Network	TESEQ	ISN T800	45130	2022-10-29	2023-10-28

#### 3.1.2.Block Diagram of Test Setup



#### 3.1.3.Test Standard

Power Line Conducted Emission Limits (Class B)

Frequency			Limit (dBμV)		
一世讯检测	(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	٠	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.



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#### 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.

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#### 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 Lighting 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.



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**Test Model** TRK3-OX-HD1BG **Test Mode** Lighting **Environmental Conditions** 23.5°C, 53.3% RH **Test Engineer** Nick Peng AC 120V/60Hz Pol Line **Test Voltage** 80.0 dBuV 70 60 50 40 30 20 10 0 -10 -20 30.000 0.150 (MHz) 5.000 Reading Correct Measure-No. Mk. Limit Margin Freq. Level Factor ment MHz dBuV dB dBuV dBuV dΒ Detector Comment 0.1635 41.07 19.63 60.70 65.28 -4.58 QΡ 1 2 0.1641 27.50 19.63 47.13 55.25 -8.12 **AVG** 3 0.6720 24.65 19.65 44.30 56.00 -11.70 QΡ 0.7440 7.87 -18.48 **AVG** 4 19.65 27.52 46.00 5 1.5000 18.82 19.66 38.48 56.00 -17.52 QP 23.64 6 1.5765 3.97 19.67 46.00 -22.36 AVG 7 21.47 19.70 -18.83 QΡ 6.0541 41.17 60.00 8 6.0541 6.60 19.70 26.30 50.00 -23.70 **AVG** 9 11.4226 23.68 19.85 43.53 60.00 -16.47 QΡ 11.4226 9.82 19.85 29.67 50.00 -20.33 AVG 10



11

12

22.2181

23.6266





-13.41

-19.39

QP

AVG





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26.50

10.56

20.09

20.05

46.59

30.61

60.00

50.00



Test Model	TRK3-OX-HD1BG	Test Mode	Lighting
<b>Environmental Conditions</b>	23.5℃, 53.3% RH	Test Engineer	Nick Peng
Pol	Neutral	Test Voltage	AC 120V/60Hz
80.0 dBuV  70 60 50 40 2		FCC PART 15B Condu	
0.150 0.500	0.800 (MHz)	5.000	30.000
No. Mk. Freq. Lev	el Factor ment <sup>Li</sup>	imit Margin BuV dB Detector	Comment
1 0.1500 33.6		6.00 -12.70 QP	- Comment
2 0.1545 18.9		5.75 -17.16 AVG	I LCS Testi
3 0.5191 21.	19 19.65 40.84 56	6.00 -15.16 QP	
4 0.5235 9.1	5 19.65 28.80 46	3.00 -17.20 AVG	
5 3.6466 13.8		6.00 -22.41 QP	
6 4.0921 7.8		3.00 -18.32 AVG	
7 12.9391 34.0 8 * 13.0786 29.4		0.00 -6.15 QP 0.00 -0.71 AVG	
9 16.9126 33.7		0.00 -0.71 AVG	
10 17.0565 28.8		0.00 -1.10 AVG	<b>运</b> 份
11 27.3301 22.7		0.00 -17.20 QP	<sup>18</sup> Fap
12 27.3301 18.9	92 20.05 38.97 50	0.00 -11.03 AVG	

<sup>\*\*\*</sup>Note: 1) Pre-scan all modes and recorded the worst case results in this report.



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<sup>2)</sup> Margin= Reading level + Correct factor - Limit Correct Factor= Lisn Factor+Cable Factor



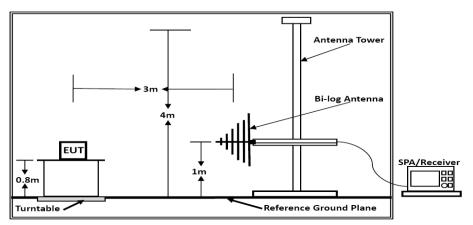
#### 3.2. Radiated emission Measurement

#### 3.2.1. Test Equipment

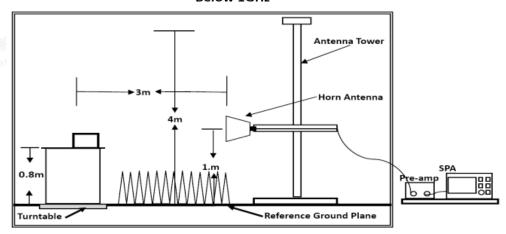
## The following test equipments are used during the radiated emission

Item	Test 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	2021-09-12	2024-09-11
3	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
4	EMI Test Receiver	R&S	ESR3	102311	2022-08-17	2023-08-16
5	Broadband Preamplifier	1 1	BP-01M18G	P190501	2022-06-16	2023-06-15
6	EMI Test Software	Farad	EZ	1	N/A	N/A
7	MXA Signal Analyzer	Agilent	N9020A	MY50510140	2022-10-29	2023-10-28
8	EMI Test Receiver	R&S	ESPI	101940	2022-08-17	2023-08-16

#### 3.2.2. Block Diagram of Test Setup



**Below 1GHz** 



Above 1GHz



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

#### Limits for Radiated Disturbance Below 1GHz

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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 Lighting 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.



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Report No.: LCSA111122127E



**Test Model** TRK3-OX-HD1BG **Test Mode** Lighting **Environmental Conditions** 23.8°C, 52.1% RH **Detector Function** Quasi-peak Pol Vertical **Distance** AC 120V/60Hz **Test Voltage** Nick Peng **Test Engineer** dBuV/m 70.0 60 FCC Part15 **RE-Clas** B\_30-1000MHz 50 40 30 20 10 0 -10 -20 -30 30.000 (MHz) 1000.000 60.00 300.00 Frequency Reading Factor Level Limit Margin No. Detector (MHz) (dBuV) (dB/m) (dBuV/m)|(dBuV/m) (dB) 1 32.5197 51.01 -18.1232.89 40.00 -7.11 QP 2 82.0705 45.77 -19.6726.10 40.00 -13.90QP 43.50 3 116.1321 50.55 -19.5930.96 -12.54QP 4 205.6750 48.87 -17.2431.63 43.50 -11.87QP 5 286.9823 -15.4848.16 32.68 46.00 -13.32 QP 382.5878 43.43 -14.6428.79 46.00 -17.21QP





**Test Model** TRK3-OX-HD1BG **Test Mode** Lighting **Environmental Conditions** 23.8℃, 52.1% RH **Detector Function** Quasi-peak Pol Horizontal **Distance** 3m AC 120V/60Hz **Test Engineer** Nick Peng **Test Voltage** dBuV/m 60 FCC Part15 RE-Clas s B\_30-1000**N**Hz 50 40 30 20 10 0 -10 -20 -30 30.000 (MHz) 60.00 300.00 1000.000 Frequency Reading Factor Level Limit Margin No. Detector (dB) (MHz) (dBuV) (dBuV/m)|(dBuV/m)(dB/m) 1 32.5197 44.87 -18.1226.75 40.00 -13.25QP QP 2 41.35 -19.8121.54 -18.4678.4133 40.00 3 172.5987 45.15 -19.31 25.84 43.50 -17.66QP 4 200.6879 45.70 -17.3728.33 43.50 -15.17QP 5 272.2776 48.95 -15.3933.56 46.00 -12.44 QP 6 351.7078 43.77 -14.8628.91 46.00 -17.09QP

Note:1).Pre-Scan all mode, Thus record worse case mode result in this report.

2) Margin= Reading level + Correct factor – Limit Correct Factor=Antenna Factor+Cable Factor- Pre-amplifier Factor



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4. TEST SETUP PHOTOGRAPHS OF EUT

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Please refer to separated files for Test Setup Photos of the EUT.

#### 5. EXTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for External Photos of the EUT.

#### 6. INTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for Internal Photos of the EUT.

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

