

# Global United Technology Services Co., Ltd.

Report No.: GTSL2023090113F01

# **TEST REPORT**

ARTIKA FOR LIVING INC Applicant:

1756 50th avenue, Lachine, Quebec, H8T2V5 Canada **Address of Applicant:** 

Manufacturer/Factory: Foshan Topday Optoelectronics Technology Co.,Ltd.

Huansheng Road, Guicheng Eastern Industrial Zone Address of

Manufacturer/Factory: B, Sanshan Nanhai District, Foshan, China

**Equipment Under Test (EUT)** 

**Product Name:** Dorado 1-Light LED Indoor/Outdoor Wall Sconce

Model No.: SCO-DOC-XXXXXX

(The suffix "XXXXXX" can be A to Z and/or 0 to 9 and/or blank

denotes commercial code.)

Trade Mark: **ARTIKA** 

FCC ID: 2AUHG-SCO-DOC

Applicable standards: FCC CFR Title 47 Part 15 Subpart B

July 28, 2023 Date of sample receipt:

Date of Test: August 30, 2023

September 06, 2023 Date of report issued:

Test Result: Pass \*

Authorized Signature:

Robinson Luo **Laboratory Manager** 

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



# Version

Version No.	Date	Description
00	September 06, 2023	Original

Prepared by:	LAS 20mg	Date:	September 06, 2023

Project Engineer

objusor Lut Date: Reviewed by: September 06, 2023

Reviewer



# 3 Contents

1	cov	ER PAGE	1
2	VER	SION	2
3	CON	NTENTS	3
4	TES	T SUMMARY	. 4
5		NERAL INFORMATION	
	5.1 5.2 5.3 5.4 5.5 5.6 5.7	GENERAL DESCRIPTION OF EUT TEST MODE AND TEST VOLTAGE DESCRIPTION OF SUPPORT UNITS DEVIATION FROM STANDARDS ABNORMALITIES FROM STANDARD CONDITIONS TEST FACILITY TEST LOCATION	5
6	TES	T INSTRUMENTS LIST	7
7	TES	T RESULTS AND MEASUREMENT DATA	
	7.1 7.2	RADIATED EMISSION	13
8	TES	T SETUP PHOTO	16
9	EUT	CONSTRUCTIONAL DETAILS	17



# 4 Test Summary

Test Item	Test Item Test Requirement		Class / Severity	Result	
Conducted Emission	FCC Part15.107	ANSI C63.4	Class B	PASS	
Radiated Emissions #	FCC Part15.109	ANSI C63.4	Class B	PASS	

#### Remark:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- 2. # Refer to FCC Part 15.33 (b)(1) conditional testing procedure :

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

#### **Measurement Uncertainty**

Test Item	Frequency Range Measurement Uncertainty		Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)
Note (1): The measurement unce	ertainty is for coverage factor of k	=2 and a level of confidence of 9	95%.



#### 5 General Information

5.1 General Description of EUT

Product Name:	Dorado 1-Light LED Indoor/Outdoor Wall Sconce				
Model No.:	SCO-DOC-XXXXXX (The suffix "XXXXXX" can be A to Z and/or 0 to 9 and/or blank denotes commercial code.)				
Remark: All above models are identi	cal in the same PCB layout, interior structure and electrical circuits.				
The difference is model name for commercial purpose.					
Power supply:	AC120V, 60Hz, 15W				

Remark: The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

5.2 Test mode and Test voltage

Test mode:	
Operation mode	Keep the EUT in the operation status.
Test voltage:	
AC 120V/60Hz	

# 5.3 Description of Support Units

None.

# 5.4 Deviation from Standards

None.

# 5.5 Abnormalities from Standard Conditions

None.



# 5.6 Test Facility

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

• FCC —Registration No.: 381383

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

• ISED —Registration No.: 9079A

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing.

• NVLAP (LAB CODE:600179-0)

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

#### 5.7 Test Location

Tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan

District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960



# 6 Test Instruments list

Radiated Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	June 23, 2021	June 22, 2024	
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A	
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	April 14, 2023	April 13, 2024	
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 19, 2023	March 18, 2025	
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	April 17, 2023	April 16, 2025	
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
7	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 14, 2023	April 13, 2024	
8	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov. 29, 2022	Nov. 28, 2023	
9	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 14, 2023	April 13, 2024	
10	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 14, 2023	April 13, 2024	
11	Horn Antenna (18- 26.5GHz)		UG-598A/U	GTS664	Oct. 30, 2022	Oct. 29, 2023	
12	Horn Antenna (26.5-40GHz)	A.H Systems	SAS-573	GTS665	Oct. 30, 2022	Oct. 29, 2023	
13	FSV-Signal Analyzer (10Hz- 40GHz)	Keysight	FSV-40-N	GTS666	March 13, 2023	March 12, 2024	
14	Amplifier	1	LNA-1000-30S	GTS650	April 14, 2023	April 13, 2024	
15	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS668	Dec. 20, 2022	Dec.19, 2023	
16	Wideband Amplifier	1	WDA-01004000-15P35	GTS602	April 14, 2023	April 13, 2024	
17	Thermo meter	JINCHUANG	GSP-8A	GTS643	April 19, 2023	April 18, 2024	
18	RE cable 1	GTS	N/A	GTS675	July 31. 2023	July 30. 2024	
19	RE cable 2	GTS	N/A	GTS676	July 31. 2023	July 30. 2024	
20	RE cable 3	GTS	N/A	GTS677	July 31. 2023	July 30. 2024	
21	RE cable 4	GTS	N/A	GTS678	July 31. 2023	July 30. 2024	
22	RE cable 5	GTS	N/A	GTS679	July 31. 2023	July 30. 2024	
23	RE cable 6	GTS	N/A	GTS680	July 31. 2023	July 30. 2024	
24	RE cable 7	GTS	N/A	GTS681	July 31. 2023	July 30. 2024	
25	RE cable 8	GTS	N/A	GTS682	July 31. 2023	July 30. 2024	



Con	Conducted Emission							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	July 12, 2022	July 11, 2027		
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 14, 2023	April 13, 2024		
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	April 14, 2023	April 13, 2024		
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A		
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
6	Thermo meter	JINCHUANG	GSP-8A	GTS642	April 19, 2023	April 18, 2024		
7	Absorbing clamp	Elektronik- Feinmechanik	MDS21	GTS229	April 14, 2023	April 13, 2024		
8	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 14, 2023	April 13, 2024		
9	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 14, 2023	April 13, 2024		
10	Antenna end assembly	Weinschel	1870A	GTS560	April 14, 2023	April 13, 2024		

Ge	General used equipment:					
Iter	n Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	April 19, 2023	April 18, 2024



#### **Test Results and Measurement Data** 7

# 7.1 Radiated Emission

					The second secon	
Test Requirement:	FCC Part15 B Section 15.109					
Test Method:	ANSI C63.4:2014					
Test Frequency Range:	30MHz to 1GHz					
Class / Severity:	Class B					
Test site:	Measurement Dist	ance: 3m (Sem	i-Anechoic (	Chamber)		
Receiver setup:						
	Frequency	Detector	RBW	VBW	Value	
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak	
Limit:						
	Frequency	Limit (dB)	uV/m @3m)		Value	
	30MHz-88MHz		0.00	Qu	asi-peak	
	88MHz-216MHz		3.50		asi-peak	
	216MHz-960MH		6.00		asi-peak	
	960MHz-1GHz	54	4.00	Qu	asi-peak	
	Antenna Tower  A E EUT  Antenna Antenna Tower  Ground Reference Plane  Test Receiver  Angelier Controlles					
Test Procedure:	<ol> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and</li> </ol>					

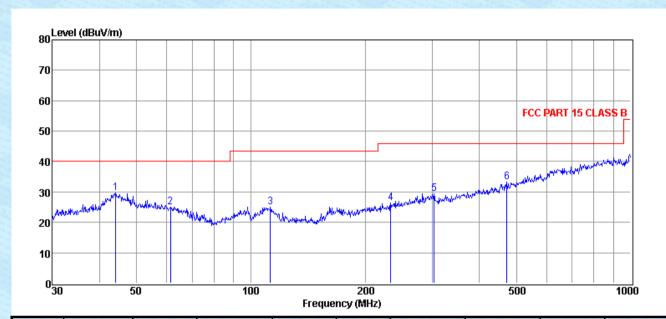


	Specified Bandwidth with Maximum Hold Mode.  6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.						
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar					1 012mbar	
Test Instruments:	Refer to section 6 for details						
Test mode:	Refer to section 5.2 for details						
Test results:	Pass						



#### **Measurement Data**

Test mode:	Operation mode	Antenna Polarity:	Horizontal



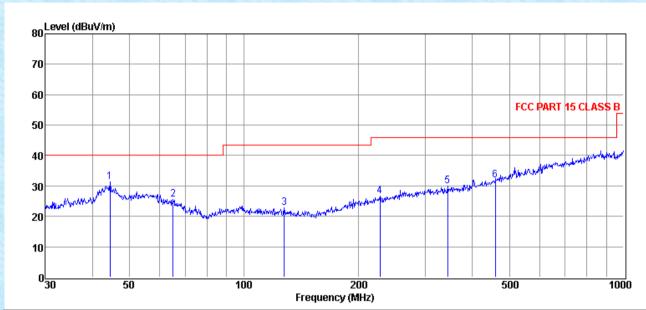
Item	Freq	Read	Antenna	PRM	Cable	Result	Limit	Over	Detector
		Level	Factor	Factor	Loss	Level	Line	Limit	
(Mark)	(MHz)	(dBµV)	(dB/m)	dB	dB	(dBµV/m)	(dBµV/m)	(dB)	
1	44.12	12.17	16.84	0.00	0.68	29.69	40.00	-10.31	Peak
2	61.35	12.09	12.38	0.00	0.63	25.10	40.00	-14.90	Peak
3	112.52	12.41	11.57	0.00	1.05	25.03	43.50	-18.47	Peak
4	233.35	12.82	11.93	0.00	1.72	26.47	46.00	-19.53	Peak
5	303.54	13.31	14.06	0.00	2.12	29.49	46.00	-16.51	Peak
6	472.18	12.57	17.24	0.00	3.37	33.18	46.00	-12.82	Peak

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

<sup>2.</sup> If Peak Result comply with QP limit, QP Result is deemed to comply with QP limit



Test mode:	Operation mode	Antenna Polarity:	Vertical
Tool Mode.	oporation mode	7 antorma i olamity.	Volution



Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector
(Mark)	(MHz)	(dBµV)	(dB/m)	dB	dB	(dBµV/m)	(dBµV/m)	(dB)	
1	44.43	13.87	16.70	0.00	0.67	31.24	40.00	-8.76	Peak
2	65.11	13.51	11.46	0.00	0.69	25.66	40.00	-14.34	Peak
3	127.67	13.22	8.49	0.00	1.06	22.77	43.50	-20.73	Peak
4	228.49	13.22	11.74	0.00	1.67	26.63	46.00	-19.37	Peak
5	344.39	12.86	14.69	0.00	2.50	30.05	46.00	-15.95	Peak
6	459.11	11.58	16.96	0.00	3.32	31.86	46.00	-14.14	Peak

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

<sup>2.</sup> If Peak Result comply with QP limit, QP Result is deemed to comply with QP limit



# 7.2 Conducted Emissions

			and the second s					
Test Requirement:	FCC Part15 B Section 15.107							
Test Method:	ANSI C63.4:2014							
Test Frequency Range:	150kHz to 30MHz							
Class / Severity:	Class B							
Receiver setup:	RBW=9kHz, VBW=30kHz							
Limit:	Limit (dBµV)							
	Frequency range (MHz)	Quasi-peak	Average					
	0.15-0.5	66 to 56*	56 to 46*					
	0.5-5	56	46					
	5-30 * Decreases with the logarithm	60	50					
Test setup:	Reference F							
Test procedure	AUX Equipment  Test table/Insulation plane  Remark E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m							
rest procedure	<ol> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.</li> </ol>							
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar							
Test Instruments:	Refer to section 6 for details							
Test mode:	Refer to section 5.2 for details							
Test results:	Pass							

#### **Measurement Data**

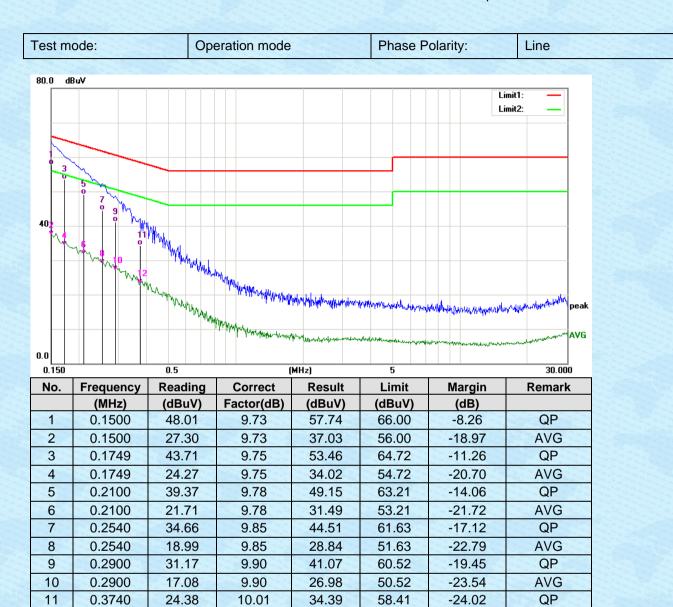


12

0.3740

13.05

Report No.: GTSL2023090113F01



23.06

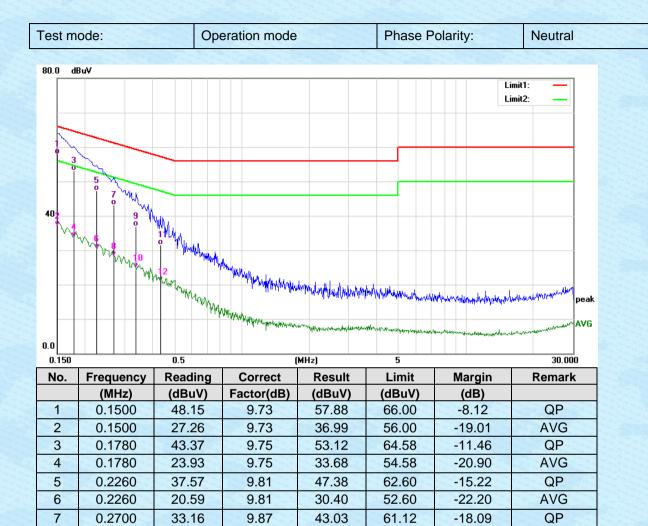
48.41

-25.35

**AVG** 

10.01





#### Notes:

8

9

10

11

12

0.2700

0.3380

0.3380

0.4340

0.4340

18.15

27.04

14.66

21.49

10.63

1. An initial pre-scan was performed on the live and neutral lines with peak detector.

9.87

9.96

9.96

10.07

10.07

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.

28.02

37.00

24.62

31.56

20.70

51.12

59.25

49.25

57.18

47.18

-23.10

-22.25

-24.63

-25.62

-26.48

**AVG** 

QP

**AVG** 

QP

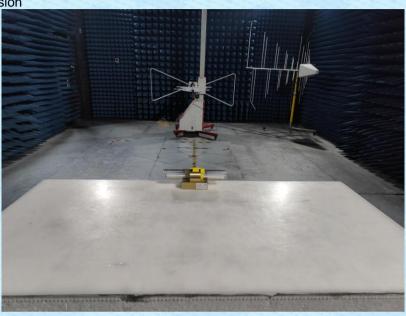
AVG

3. Final Level =Receiver Read level + LISN Factor + Cable Loss



# 8 Test Setup Photo

Radiated Emission



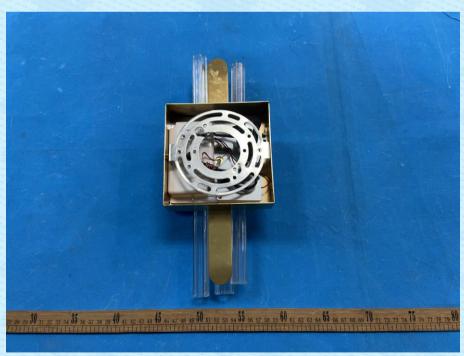
# Conducted Emission

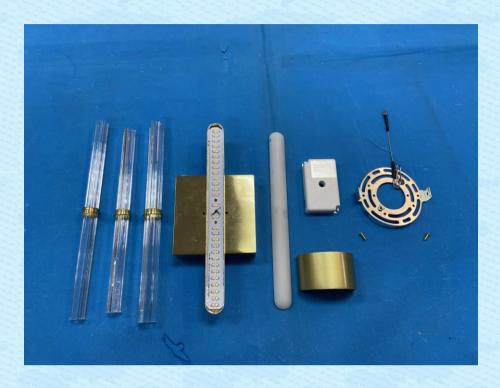


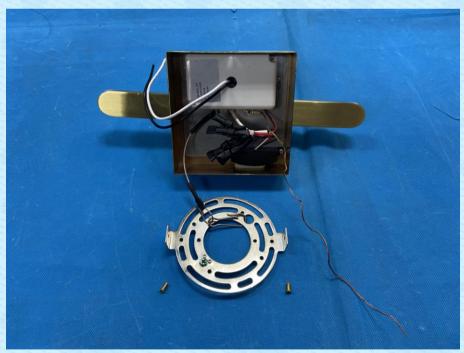


# 9 EUT Constructional Details



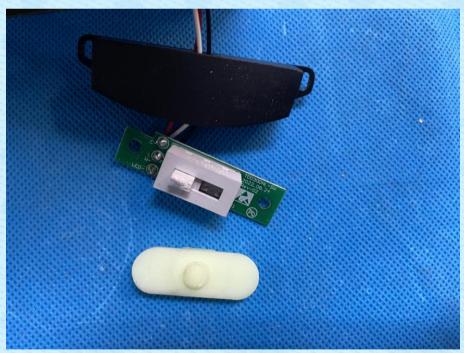






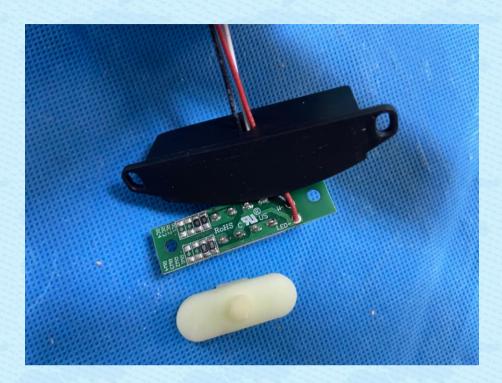
# **GTS**





# **GTS**

Report No.: GTSL2023090113F01



-----End-----