

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

241212122GZU-003

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None

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Report format for LM-79_G

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Report No.: 241212122GZU-003

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLPD395XX

Remark: "XX" are denoted appearance color.

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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<u>TEST:</u>	Electrical and Photometric as required to the IES LM-79 test standard.
<u>AUTHORIZATION:</u>	The testing performed was authorized by signed quote number: QGZ241210128.
<u>STANDARDS USED:</u>	The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:
IES LM-79-19	Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI C78.377-2017 (R2022)	Specifications of the Chromaticity of Solid State Lighting Products
<u>DESCRIPTION OF SAMPLE:</u>	The client submitted one sample of model SLPD395XX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S241212122-003.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	Guangzhou Xiongyi Precision Metalworking Co., Ltd Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450
<u>DATES OF TESTS:</u>	20 December 2024
<u>ISSUED BY:</u>	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
<u>TEST LOCATION:</u>	Room101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China

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TEST REPORT

SUMMARY

Model Number:	SLPD395XX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLPD395XX

Criteria	Result
Total Lumen Output	161.7 lm
Total Power	7.0 W
Luminaire Efficacy	23.1 lm/W
S/MH(C0/180)	2.11
S/MH(C90/270)	2.09
Correlated Color Temperature (CCT)	2608 K
Color Rendering Index (CRI)	93
R9	58
Chromaticity Coordinate (x)	0.4644
Chromaticity Coordinate (y)	0.4067
Chromaticity Coordinate (u')	0.2672
Chromaticity Coordinate (v')	0.5265

Remark:

N/A

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TEST REPORT

EQUIPMENT LIST

Equipment Used	Model Number	Control Number
Goniophotometer System	Go-R5000	SA063-16
KONICA MINOLTA - Illuminance meter	CX-2B_WL	SA063-16-01
Standard Lamp	D215S	SA063-16-06
Digital Power Meter	PLM3000	SA063-16-09
AC power source for Goniophotometer	PCR-1000WH	SA063-16-10
Temperature Meter	S500-TH	SA047-182

GENERAL REMARK

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When determining for test conclusion, measurement uncertainty of tests has been considered.

Throughout this report a ☐ comma ☒ point is used as the decimal separator.

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TEST REPORT

TEST METHOD

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IES LM-79

Light Distribution and Output Measurements

Light Distribution and total light output (luminous flux) were measured using a Go-R5000 Type-C Rotating Mirror Goniophotometer. Temperature 25°C and relative humidity of 60% was measured at a position in the testing laboratory.

The lamp rotates only around the fixed vertical axle in the prescribed burning position. The lamp and mirror permit the measurement of luminous intensity at the direction of any horizontal or vertical angle without tilting the lamp. The lamp was allowed to stabilize before measurements were made.

Chromaticity Measurements

Chromaticity was measured using a 2 meters integrating sphere spectral lamp measurement system, 4 π geometry, with an interior coating reflectance no less than 95 %. Temperature was measured at a position inside the sphere shielded from direct light. Relative humidity of 65% was measured at a position in the testing laboratory.

Spectral radiant flux measurements were made using spectroradiometer attached to the detector port of the integrating sphere. Each lamp was allowed to stabilise before measurements were made. The calibration of the integrating sphere spectroradiometer system is by the reference/standard lamps which are traceable to National Institute of Metrology P.R. CHINA. Lamp efficacy (lumens per watt) for each lamp model was then computed based on the luminous flux result. Electrical measurements including voltage, power and power factor were measured using YOKOGAWA - Digital Power Meter., model WT310E.

Correction factor (self-absorption) has been considered when doing measurement.

Standard lamp used for Goniophotometer method:

Model: D215S

Current: 4.809A DC

Standard lamp used for integrating sphere:

Model: D204

Current: 3.948A DC

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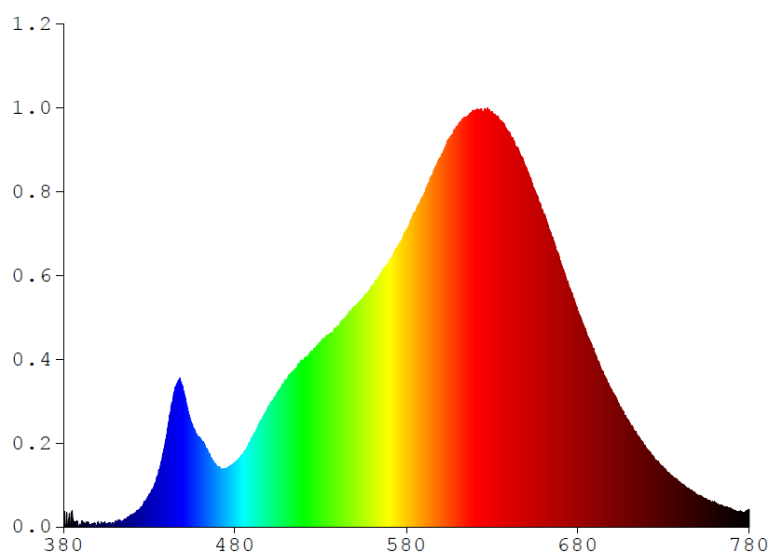
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLPD395XX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0159	480	0.7557	580	3.4879	680	2.5327	780	0.2080
385	0.1765	485	0.8658	585	3.7017	685	2.2778		
390	0.0000	490	1.0450	590	3.8855	690	2.0321		
395	0.0000	495	1.2442	595	4.1349	695	1.7874		
400	0.0596	500	1.4217	600	4.3383	700	1.5905		
405	0.0285	505	1.5854	605	4.5625	705	1.4014		
410	0.0643	510	1.7127	610	4.7181	710	1.2269		
415	0.0712	515	1.8586	615	4.8149	715	1.0733		
420	0.1406	520	1.9501	620	4.8875	720	0.9232		
425	0.2297	525	2.0637	625	4.8842	725	0.7942		
430	0.3832	530	2.1784	630	4.8806	730	0.6938		
435	0.5922	535	2.2632	635	4.7710	735	0.6009		
440	1.0557	540	2.3545	640	4.6335	740	0.5109		
445	1.6230	545	2.4743	645	4.4542	745	0.4412		
450	1.5960	550	2.5935	650	4.2264	750	0.3675		
455	1.2059	555	2.6929	655	3.9477	755	0.3270		
460	1.0304	560	2.8305	660	3.6754	760	0.2729		
465	0.8445	565	2.9824	665	3.4095	765	0.2399		
470	0.6996	570	3.1290	670	3.1063	770	0.2028		
475	0.6818	575	3.2966	675	2.7610	775	0.1840		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD395XX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

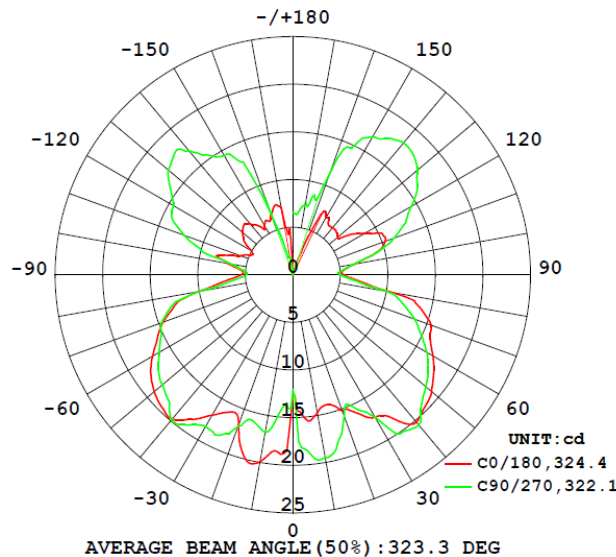
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit	Chromaticit	Chromaticit	Chromaticit
					y	y	y	y
					Coordinate	Coordinate	Coordinate	Coordinate
					(x)	(y)	(u')	(v')
SLPD395XX								
S2412121 22-003	base-up	2608	93	58	0.4644	0.4067	0.2672	0.5265

Photometric and Electrical Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous	Lumen Efficacy
						Flux (Lumens)	(Lumens Per Watt)
SLPD395XX							
S2412121 22-003	base-up	120.1	64.4	7.0	0.904	161.7	23.1

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD395XX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	12.4	12.5	12.7	12.7	12.1
5	15.2	16.4	17.6	18.7	18.6
10	14.8	16.4	18.5	19.2	19.5
15	14.1	15.8	16.7	18.1	18.2
20	15.3	15.9	15.7	16.7	15.9
25	16.0	15.9	15.8	15.8	15.4
30	17.3	17.3	17.3	17.2	17.2
35	18.4	18.6	18.0	18.1	20.1
40	20.2	19.7	19.0	19.3	20.6
45	19.6	18.9	18.4	18.5	19.2
50	19.0	18.3	17.9	18.0	18.3
55	18.1	17.5	17.1	17.3	17.4
60	17.0	16.5	16.0	16.2	16.3
65	15.9	15.3	14.7	14.9	14.9
70	15.5	14.7	13.5	13.7	13.6
75	14.0	13.4	11.7	12.0	12.0
80	10.4	10.2	9.0	9.7	9.8
85	6.8	7.3	6.2	6.2	6.4
90	5.3	5.7	5.0	5.0	5.0
95	5.3	5.5	5.3	5.1	5.1
100	6.6	6.7	6.7	6.4	6.4
105	9.1	9.6	9.7	8.9	9.2
110	10.3	11.3	11.6	11.1	11.3
115	10.3	13.2	13.2	13.0	13.1
120	8.7	14.2	14.3	14.2	14.4
125	7.4	15.6	15.7	15.9	16.0
130	6.2	16.5	16.6	16.9	17.1
135	6.4	17.3	17.1	17.7	17.9
140	6.5	17.4	17.0	17.8	18.1
145	6.5	16.3	16.4	17.3	17.5
150	6.9	15.5	16.3	17.0	16.7
155	7.0	11.6	12.4	15.6	14.8
160	2.5	2.9	1.2	8.8	11.3
165	0.3	0.0	0.0	1.4	8.7
170	0.0	0.0	0.0	1.9	7.6
175	0.0	0.1	2.5	4.5	6.6
180	0.0	0.0	0.0	0.0	6.5

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD395XX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLPD395XX		
0-30	14.0	8.7
0-40	25.9	16.0
0-60	56.6	35.0
0-90	92.7	57.3
60-90	36.1	22.3
0-180	161.7	100.0

Beam Angle

Total Beam Angle(°)

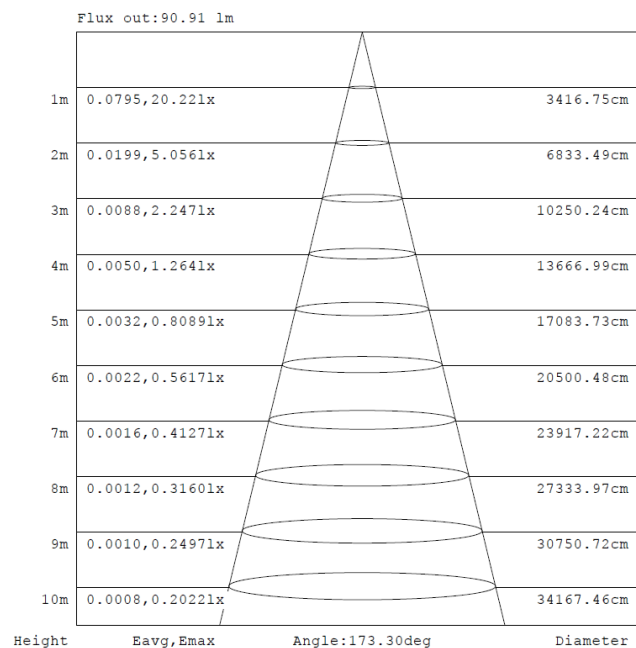
323.3

Illumination Plots

Model No.: SLPD395XX

Mount Height: 2.5 m

Illuminance - Cone of Light



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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TEST REPORT

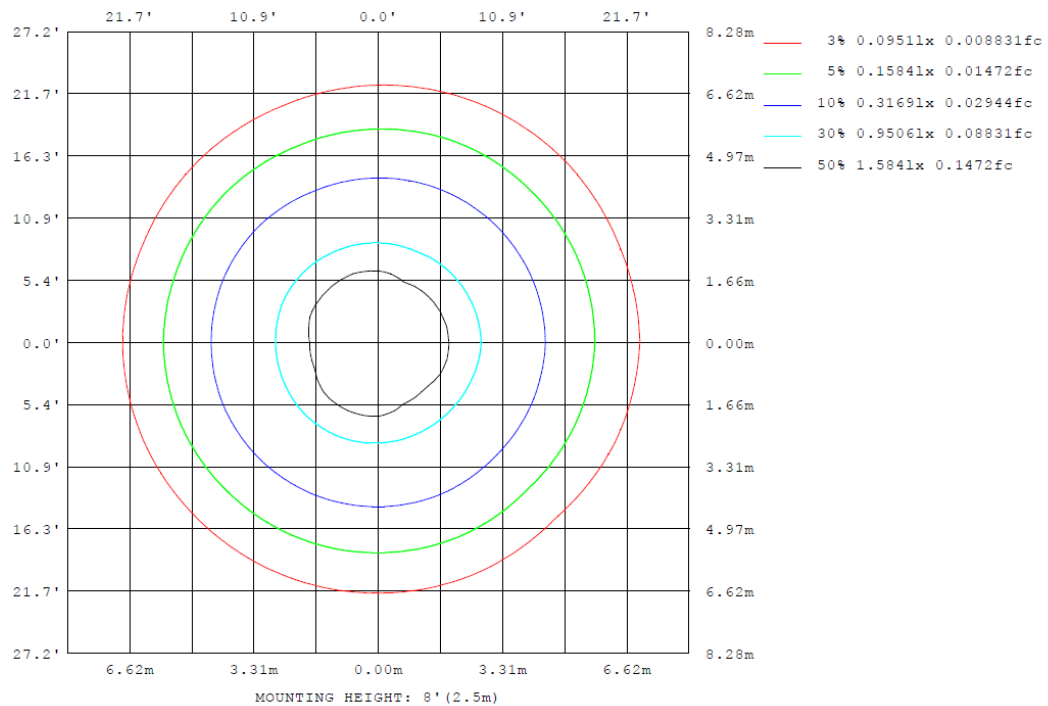
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD395XX

Model No.: SLPD395XX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD395XX

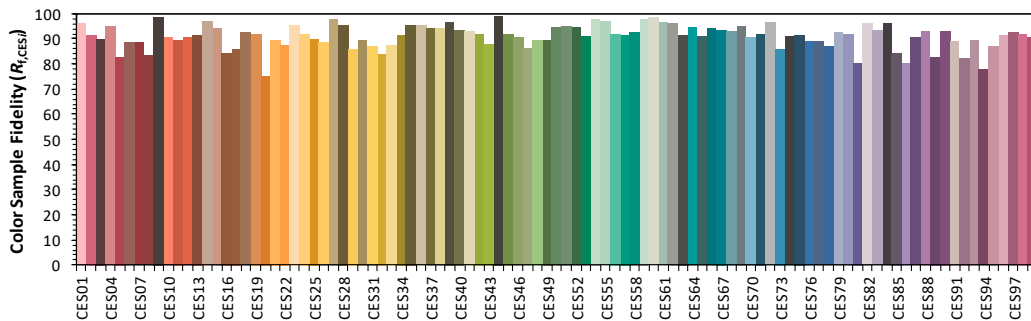
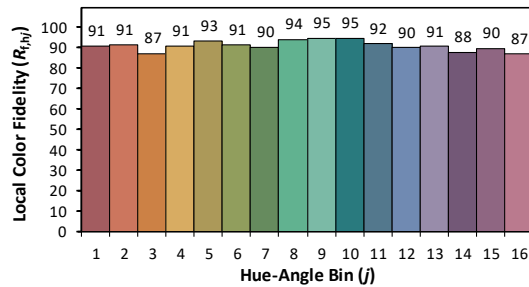
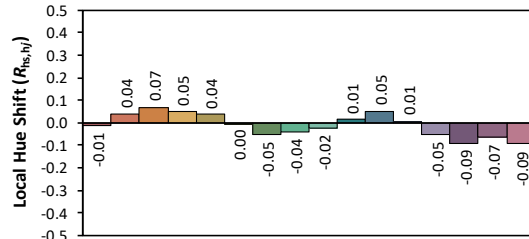
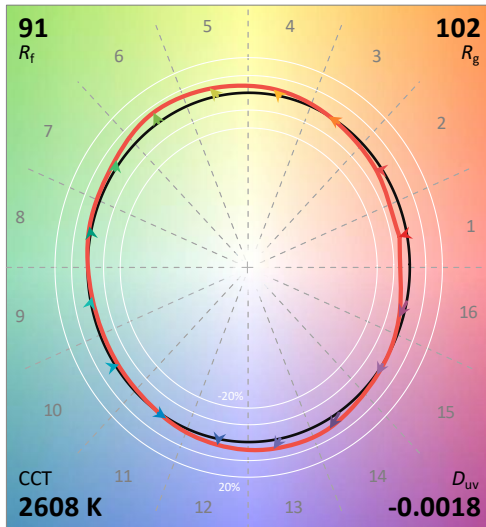
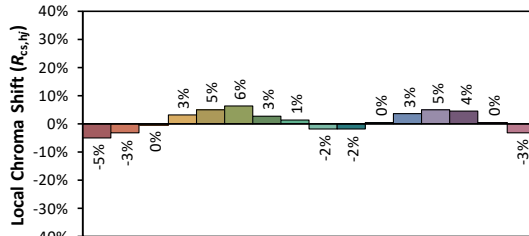
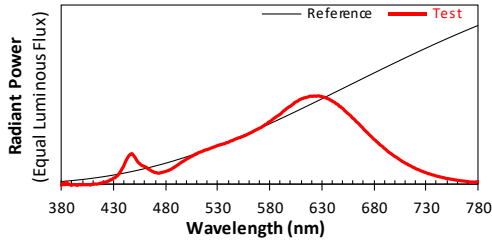
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2024/12/20

Model: SLPD395XX



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4644
 y 0.4067
 u' 0.2672
 v' 0.5265

CIE 13.3-1995
(CRI)

R_a 93

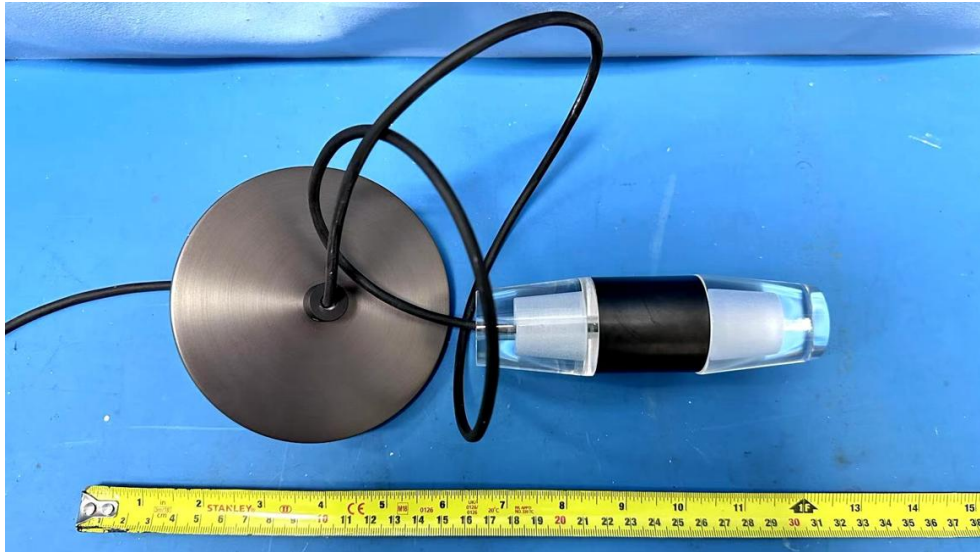
R_g 58

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLPD395XX



View of LED driver TA60WA12LED65B15-0000

***** End of Page *****

TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****