

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250722187GZU-009

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 250722187GZU-009

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLCH63327XXX

Remark: "XXX" represents the color of the appearance.

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: QGZ250722038.
<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-79-24	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 SLCH63327XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250722187-008.
<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>	03 November 2025, 12 January 2026
<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:	SLCH63327XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLCH63327XXX

Criteria	Result
Total Lumen Output	2136.1 lm
Total Power	44.5 W
Luminaire Efficacy	48.0 lm/W
S/MH(C0/180)	3.72
S/MH(C90/270)	0.47
Correlated Color Temperature (CCT)	2454 K
Color Rendering Index (CRI)	94
R9	91
Chromaticity Coordinate (x)	0.4733
Chromaticity Coordinate (y)	0.4016
Chromaticity Coordinate (u')	0.2755
Chromaticity Coordinate (v')	0.5259

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: 3.958A DC

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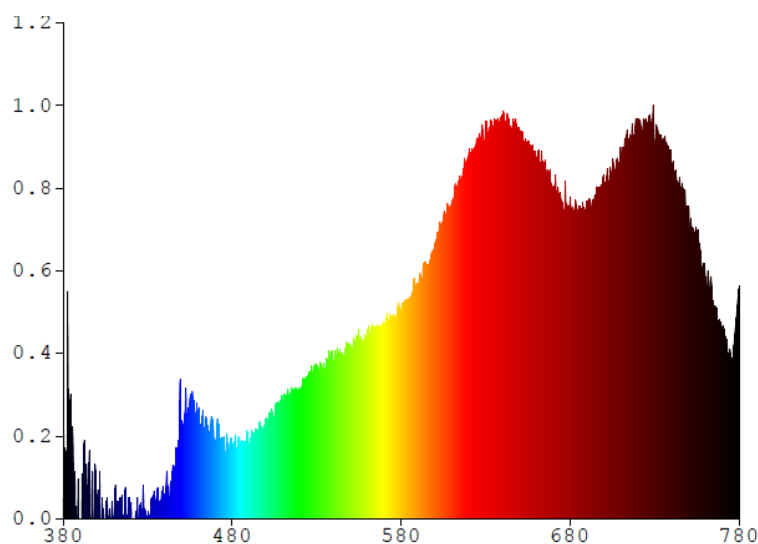
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLCH63327XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0000	480	0.0542	580	0.1591	680	0.2474	780	0.1809
385	0.0129	485	0.0511	585	0.1704	685	0.2408		
390	0.0000	490	0.0528	590	0.1802	690	0.2469		
395	0.0241	495	0.0664	595	0.1965	695	0.2426		
400	0.0000	500	0.0767	600	0.2132	700	0.2582		
405	0.0000	505	0.0783	605	0.2330	705	0.2705		
410	0.0000	510	0.0806	610	0.2436	710	0.2779		
415	0.0000	515	0.0966	615	0.2631	715	0.2884		
420	0.0128	520	0.0995	620	0.2819	720	0.3015		
425	0.0073	525	0.1116	625	0.2955	725	0.3110		
430	0.0034	530	0.1188	630	0.3072	730	0.2910		
435	0.0145	535	0.1133	635	0.3076	735	0.2951		
440	0.0189	540	0.1214	640	0.3049	740	0.2707		
445	0.0381	545	0.1279	645	0.2999	745	0.2632		
450	0.0700	550	0.1345	650	0.3029	750	0.2374		
455	0.0934	555	0.1447	655	0.2900	755	0.2224		
460	0.0821	560	0.1467	660	0.2790	760	0.1884		
465	0.0700	565	0.1495	665	0.2708	765	0.1639		
470	0.0566	570	0.1493	670	0.2573	770	0.1470		
475	0.0636	575	0.1573	675	0.2405	775	0.1250		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63327XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

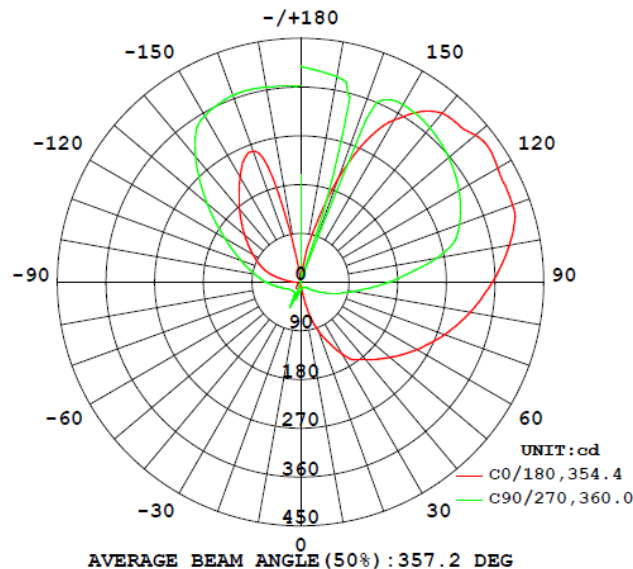
Photometric Measurements at 25°C – Distribution Method

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')
SLCH63327XXX								
S2507221 87-008	base-up	2454	94	91	0.4733	0.4016	0.2755	0.5259

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 Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
SLCH63327XXX							
S2507221 87-008	base-up	120.0	373.4	44.5	0.993	2136.1	48.0

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63327XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	0.9	56.4	51.9	32.6	15.7
5	1.0	68.8	62.6	36.3	14.1
10	13.6	85.1	75.8	41.5	12.9
15	59.5	105.4	91.7	47.7	12.1
20	95.0	128.6	110.1	54.7	11.5
25	123.3	146.7	126.5	63.8	11.1
30	153.3	161.5	140.6	74.5	10.9
35	175.2	177.0	154.5	86.4	11.2
40	187.7	193.3	169.2	97.6	12.1
45	201.4	210.4	184.5	108.9	14.6
50	216.2	228.2	200.6	120.7	18.5
55	232.2	246.5	217.4	133.6	25.2
60	248.8	265.2	235.1	147.6	35.0
65	265.8	284.2	253.5	163.4	46.2
70	283.4	303.6	272.4	181.2	59.9
75	301.3	322.9	292.0	201.2	77.2
80	319.0	342.0	312.0	223.9	99.3
85	336.5	360.9	332.4	248.4	127.9
90	354.8	379.5	352.7	274.9	163.7
95	373.5	397.4	373.4	302.1	202.7
100	391.8	415.0	393.6	325.8	254.8
105	409.2	431.7	410.5	361.5	295.2
110	417.2	447.7	427.0	389.5	312.7
115	418.7	462.7	450.3	413.0	326.4
120	421.3	475.9	466.6	417.8	338.5
125	427.3	486.0	475.6	418.4	349.0
130	422.1	485.8	468.1	417.6	358.0
135	411.9	500.3	458.4	415.4	365.9
140	407.0	485.4	446.5	411.9	372.1
145	384.2	466.6	432.4	406.2	376.7
150	345.5	445.3	406.6	397.5	378.6
155	288.9	415.2	366.1	366.9	372.1
160	202.9	249.5	76.5	88.9	44.4
165	109.6	66.7	222.5	315.2	353.6
170	45.0	49.5	337.4	369.8	385.2
175	3.5	270.3	343.9	365.4	391.2
180	0.3	323.3	329.8	362.0	398.3

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63327XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLCH63327XXX		
0-30	31.5	1.5
0-40	64.9	3.0
0-60	182.3	8.5
0-90	542.1	25.4
60-90	359.8	16.9
0-180	2136.1	100.0

Beam Angle

Total Beam Angle(°)

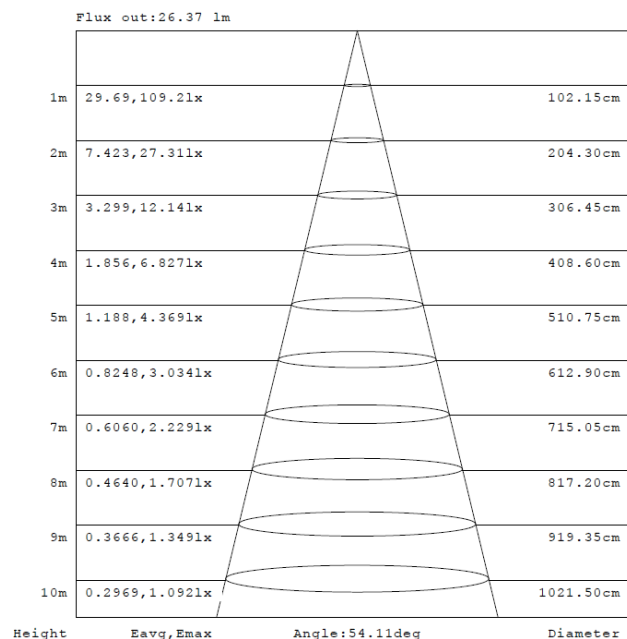
357.2

Illumination Plots

Model No.: SLCH63327XXX

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

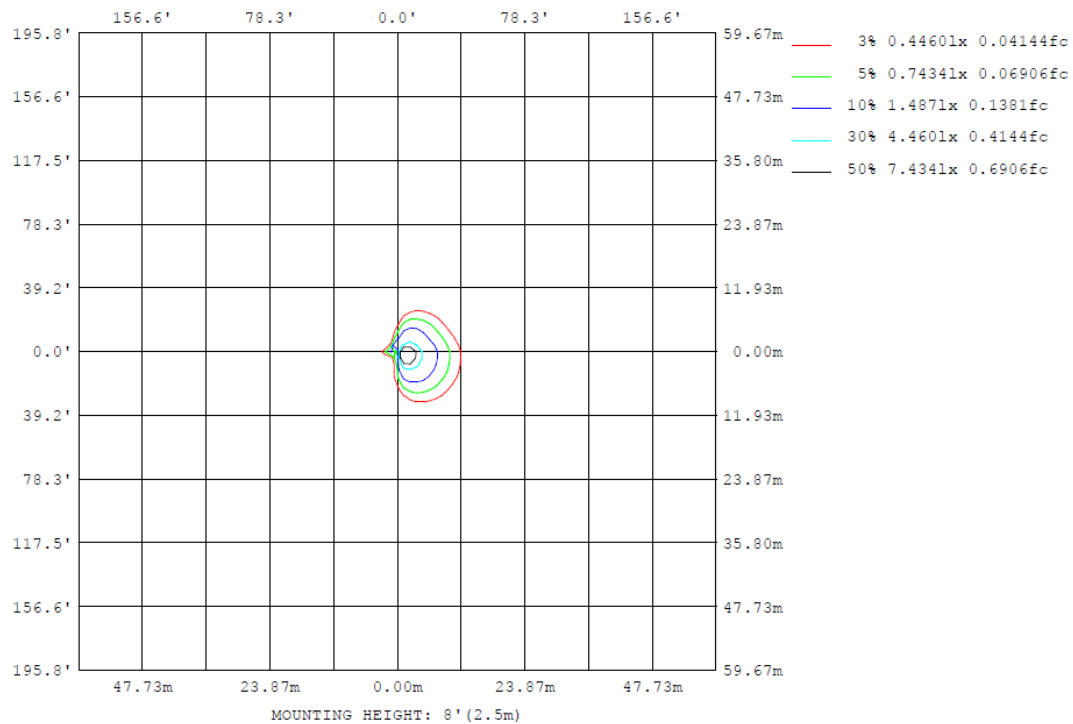
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63327XXX

Model No.: SLCH63327XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63327XXX

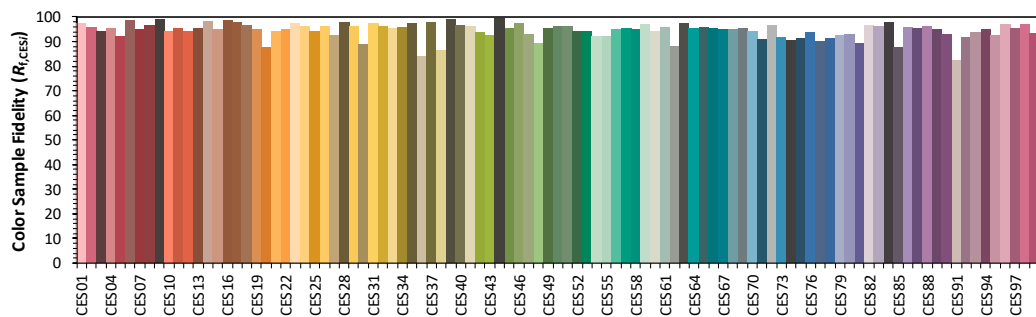
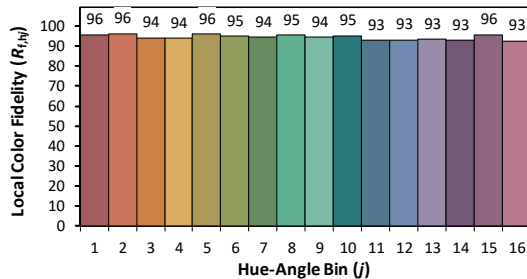
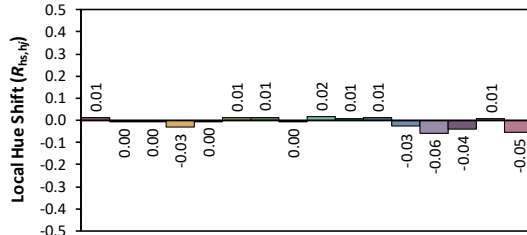
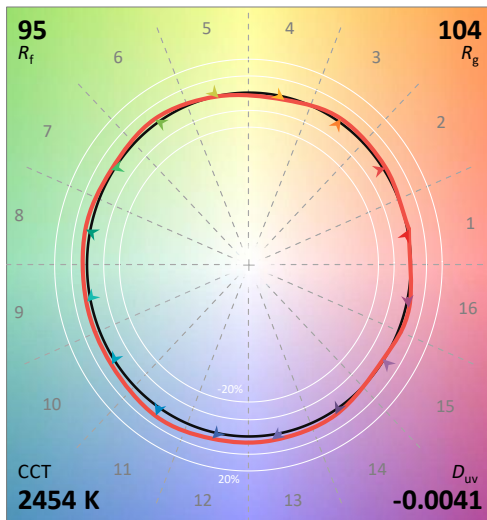
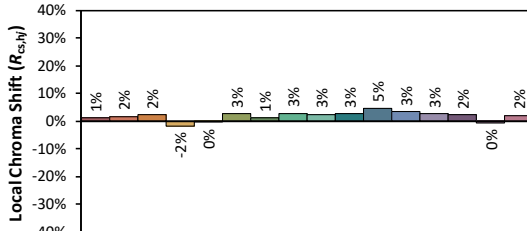
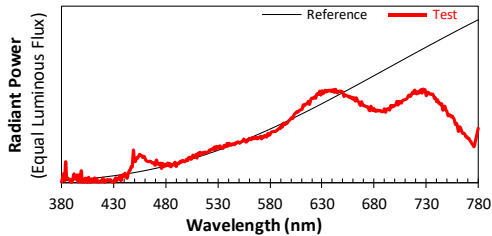
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/3

Model: SLCH63327XXX



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

x 0.4733
 y 0.4016
 u' 0.2755
 v' 0.5259

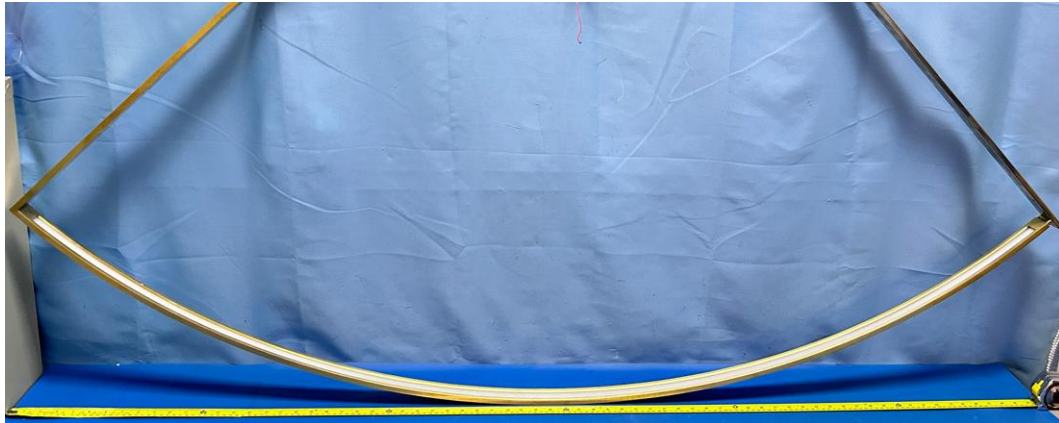
CIE 13.3-1995
(CRI)
 R_a 94
 R_g 91

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 SLCH63327XXX



View of LED driver MDR-608-24-60-LD



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 *****