

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027068GZU-003

ISSUE DATE

02 December 2025

REVISION DATE

None

NUMBER OF PAGES

14

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251027068GZU-003

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOCH77830XXX

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

RENDERED TO

Visual Comfort & Co.

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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: QGZ251023107.
<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 SLOCH77830XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027068-003.
<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>	14 November 2025
<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:	SLOCH77830XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOCH77830XXX

Criteria	Result
Total Lumen Output	4159.1 lm
Total Power	79.3 W
Luminaire Efficacy	52.5 lm/W
S/MH(C0/180)	1.29
S/MH(C90/270)	1.63
Correlated Color Temperature (CCT)	2940 K
Color Rendering Index (CRI)	94
R9	65
Chromaticity Coordinate (x)	0.4399
Chromaticity Coordinate (y)	0.4028
Chromaticity Coordinate (u')	0.2530
Chromaticity Coordinate (v')	0.5213

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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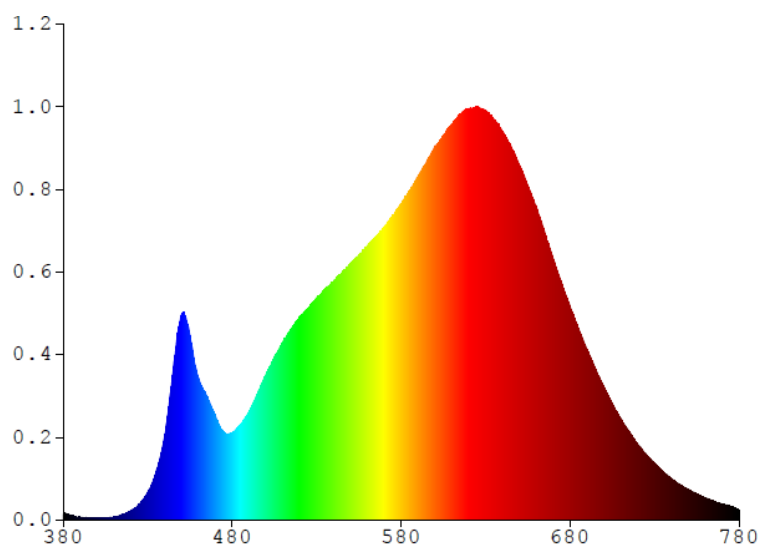
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOCH77830XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	3.2173	480	51.9750	580	188.930	680	127.4000	780	5.8085
385	2.2304	485	57.1630	585	196.640	685	114.0800		
390	1.6879	490	64.7410	590	205.380	690	101.6500		
395	1.1379	495	75.3670	595	213.510	695	90.0460		
400	1.2346	500	86.8530	600	223.440	700	79.4850		
405	1.4887	505	97.3020	605	229.500	705	69.5530		
410	1.9618	510	106.2600	610	235.920	710	60.4150		
415	3.1078	515	113.9000	615	242.610	715	52.4720		
420	5.4250	520	121.6200	620	245.210	720	45.3280		
425	9.4994	525	126.6100	625	246.070	725	39.1950		
430	16.5430	530	132.4700	630	244.460	730	33.5980		
435	28.6770	535	137.8400	635	238.960	735	28.9800		
440	50.4060	540	142.4900	640	231.950	740	24.5690		
445	88.7920	545	147.7100	645	223.170	745	21.1690		
450	122.600	550	153.3600	650	211.930	750	18.2170		
455	109.670	555	158.1900	655	199.660	755	15.5580		
460	84.7680	560	163.8500	660	186.520	760	13.1200		
465	74.0130	565	169.1500	665	171.560	765	11.2060		
470	62.0860	570	175.1600	670	155.950	770	9.6070		
475	52.4560	575	182.1300	675	137.930	775	8.2009		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77830XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

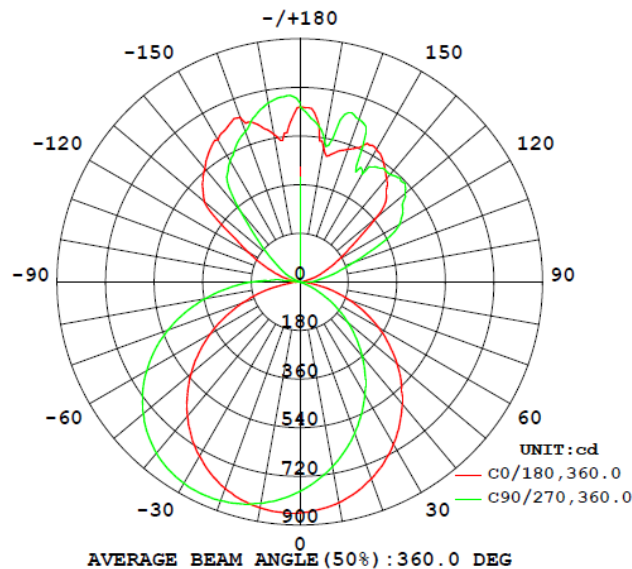
Photometric Measurements at 25°C – Distribution Method

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')
SLOCH77830XXX								
S2510270 68-003	base-up	2940	94	65	0.4399	0.4028	0.2530	0.5213

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)
SLOCH77830XXX							
S2510270 68-003	base-up	120.0	662.2	79.3	0.998	4159.1	52.5

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77830XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	854.2	824.8	783.5	772.8	775.2
5	845.1	798.4	747.3	734.6	737.4
10	829.7	766.1	705.4	691.5	694.9
15	806.4	727.3	658.4	643.6	646.8
20	775.6	682.3	607.6	591.3	595.4
25	738.3	632.2	552.5	536.4	540.6
30	693.8	579.0	494.7	478.4	482.7
35	644.8	521.7	434.5	417.9	422.2
40	591.0	461.4	372.4	356.5	360.4
45	532.6	398.0	308.9	293.6	296.7
50	470.6	332.4	244.6	230.2	232.7
55	404.6	266.3	180.5	167.1	169.3
60	336.0	199.8	118.6	107.0	108.3
65	266.0	134.7	61.6	52.5	53.3
70	195.8	73.8	15.0	9.7	10.0
75	126.7	22.3	1.6	1.3	1.7
80	63.7	2.4	8.6	9.0	9.9
85	14.5	8.3	12.4	12.8	13.6
90	0.9	11.7	33.0	35.7	33.6
95	9.4	32.1	60.5	59.7	57.2
100	16.4	53.5	98.6	96.6	92.2
105	34.8	96.1	142.7	143.5	143.4
110	73.5	141.3	206.4	203.9	211.4
115	114.3	205.6	306.6	314.8	326.0
120	169.1	311.0	411.3	409.4	426.2
125	239.6	418.7	455.6	462.1	467.5
130	367.5	466.3	494.3	500.2	512.9
135	456.0	508.5	531.1	513.8	529.6
140	500.2	535.8	504.6	507.3	520.1
145	540.4	523.5	496.2	492.8	515.1
150	567.6	498.4	476.6	464.4	460.8
155	558.1	483.1	491.2	571.1	548.5
160	525.4	492.5	629.4	640.0	641.8
165	495.1	623.3	647.2	655.7	642.0
170	507.2	644.6	544.9	553.2	531.9
175	628.9	541.3	606.9	606.7	601.3
180	648.3	577.7	644.5	661.9	650.8

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77830XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOCH77830XXX		
0-30	624.8	15.0
0-40	1027.9	24.7
0-60	1836.6	44.2
0-90	2473.1	59.5
60-90	636.5	15.3
0-180	4159.1	100.0

Beam Angle

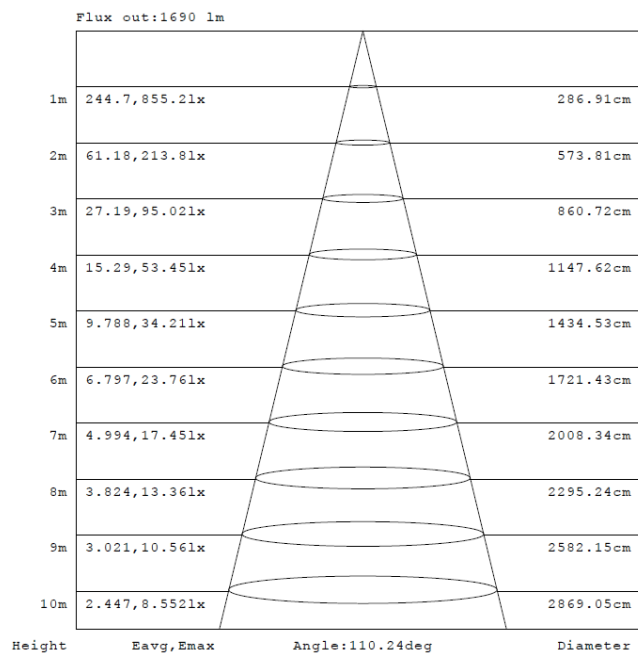
Total Beam Angle(°)
360.0

Illumination Plots

Model No.: SLOCH77830XXX

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

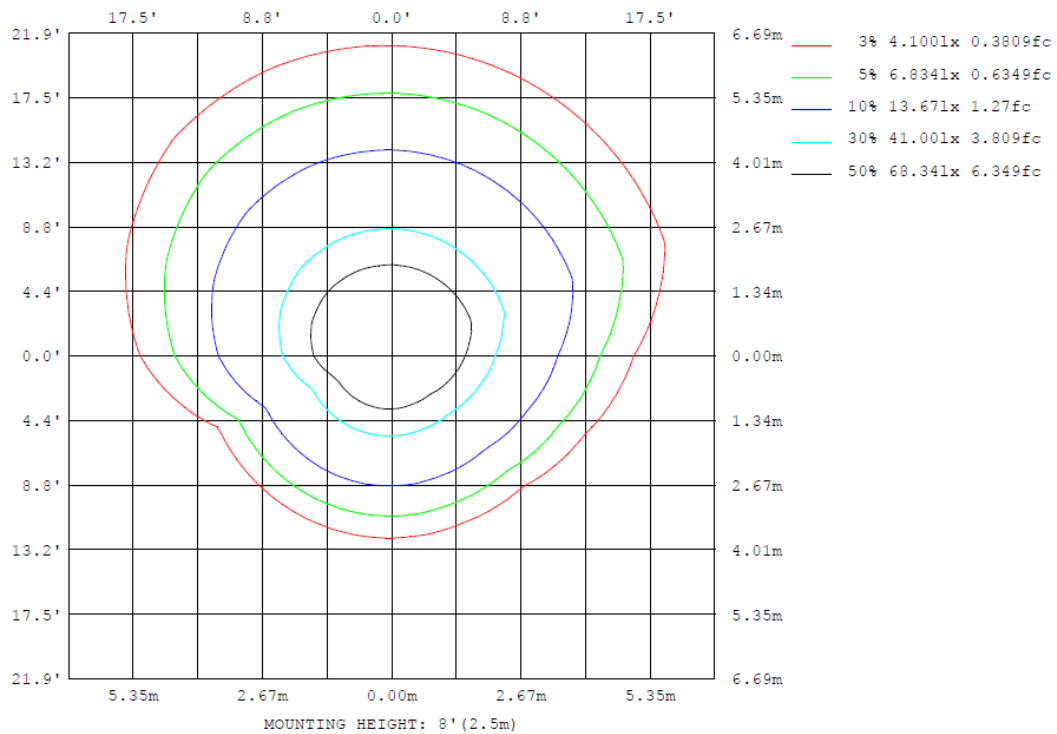
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77830XXX

Model No.: SLOCH77830XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77830XXX

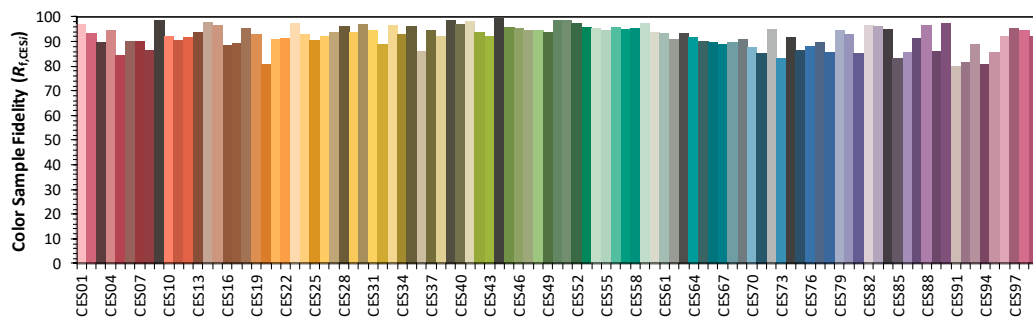
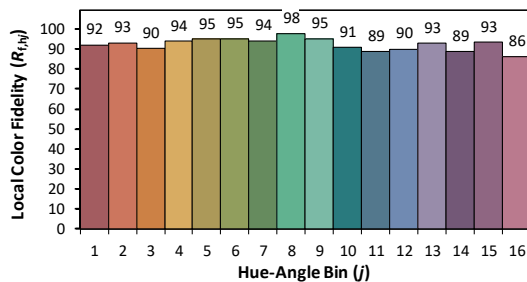
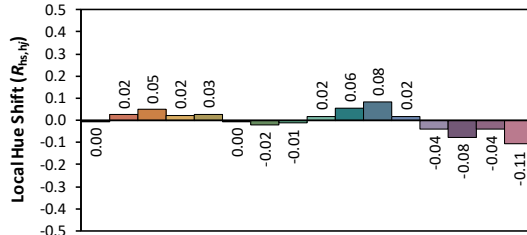
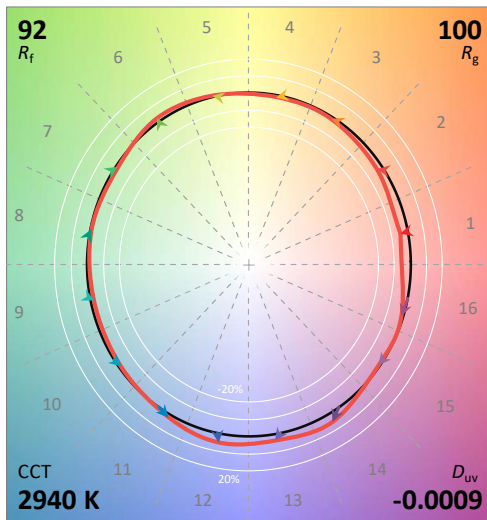
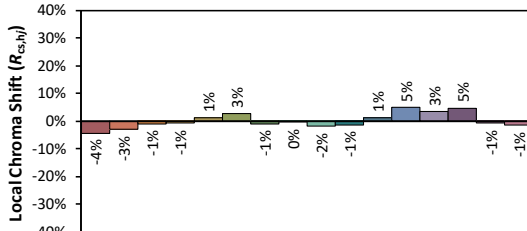
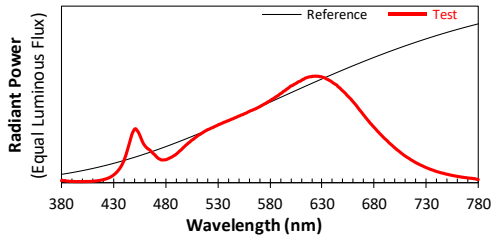
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/14

Model: SLOCH77830XXX



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

x 0.4399
 y 0.4028
 u' 0.2530
 v' 0.5213

CIE 13.3-1995
(CRI)
 R_a 94
 R_g 65

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 SLOCH77830XXX

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

TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLOCH77830XXX

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

TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver DA45W1200C2036-3001



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 *****