

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027068GZU-001

ISSUE DATE

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REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251027068GZU-001

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOCH77630XXX

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: 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 SLOCH77630XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027068-001.
<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>	10 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:	SLOCH77630XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOCH77630XXX

Criteria	Result
Total Lumen Output	2028.4 lm
Total Power	40.3 W
Luminaire Efficacy	50.3 lm/W
S/MH(C0/180)	1.28
S/MH(C90/270)	1.21
Correlated Color Temperature (CCT)	2950 K
Color Rendering Index (CRI)	94
R9	67
Chromaticity Coordinate (x)	0.4371
Chromaticity Coordinate (y)	0.3984
Chromaticity Coordinate (u')	0.2532
Chromaticity Coordinate (v')	0.5192

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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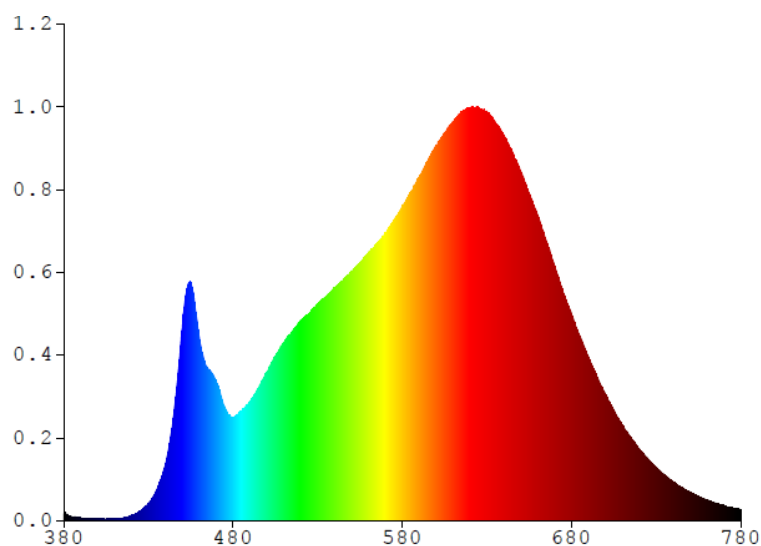
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOCH77630XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	1.4823	480	23.2500	580	70.6080	680	46.4300	780	2.4725
385	0.7647	485	24.7270	585	73.6910	685	41.3930		
390	0.6432	490	26.7850	590	77.2070	690	36.7720		
395	0.4052	495	29.8860	595	80.8090	695	32.2890		
400	0.3780	500	33.4380	600	84.2820	700	28.4150		
405	0.3946	505	36.8820	605	87.0410	705	24.7960		
410	0.3651	510	40.1130	610	89.6030	710	21.4620		
415	0.6266	515	42.4310	615	91.9050	715	18.6840		
420	1.1431	520	45.0250	620	92.8190	720	16.1590		
425	2.1479	525	46.5630	625	92.9330	725	13.9890		
430	3.8366	530	48.7560	630	92.0060	730	12.0110		
435	6.9835	535	50.3110	635	89.5030	735	10.2760		
440	12.6120	540	52.3060	640	86.6440	740	8.7544		
445	23.9230	545	54.0510	645	82.8770	745	7.4719		
450	43.6120	550	55.9510	650	78.6140	750	6.4320		
455	53.3610	555	58.0040	655	73.5480	755	5.4887		
460	41.1770	560	60.2780	660	68.5680	760	4.6540		
465	34.3000	565	62.2480	665	62.9160	765	4.0051		
470	31.1700	570	64.6560	670	57.2270	770	3.3785		
475	25.4950	575	67.4600	675	50.3920	775	2.9226		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77630XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

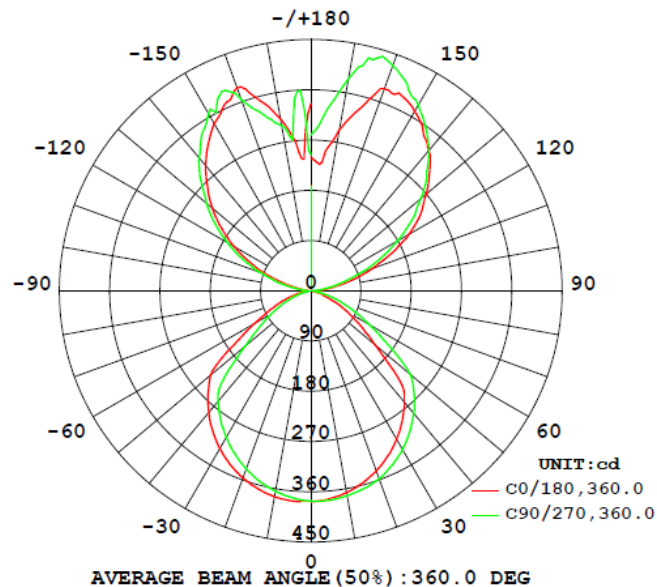
Photometric Measurements at 25°C – Distribution Method

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')
SLOCH77630XXX								
S2510270 68-001	base-up	2950	94	67	0.4371	0.3984	0.2532	0.5192

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
						Flux (Lumens)	Efficacy (Lumens Per Watt)
SLOCH77630XXX							
S2510270 68-001	base-up	120.1	337.4	40.3	0.995	2028.4	50.3

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77630XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	377.8	377.9	377.7	377.4	376.5
5	373.9	376.0	376.3	376.3	376.3
10	366.7	370.5	371.2	371.9	372.7
15	356.3	361.7	362.7	364.2	366.7
20	342.9	349.5	351.2	353.1	357.8
25	326.2	334.0	336.0	338.5	344.6
30	306.9	315.7	317.8	320.6	327.9
35	285.0	294.8	296.9	300.0	308.4
40	260.5	271.1	273.4	276.8	286.3
45	221.9	245.1	247.7	251.1	261.3
50	149.0	179.8	193.7	209.3	231.8
55	107.6	123.7	132.2	145.4	168.8
60	74.3	89.1	94.2	102.6	120.6
65	47.6	61.8	63.1	69.3	84.8
70	26.4	38.0	40.5	42.8	54.3
75	11.3	18.1	20.0	20.8	29.3
80	3.6	4.7	5.9	6.4	10.6
85	1.3	4.1	5.5	6.1	3.6
90	2.0	0.8	0.9	0.9	1.8
95	15.4	6.9	11.0	12.2	4.5
100	42.0	27.8	34.6	39.6	26.2
105	77.5	61.3	70.1	69.9	56.8
110	116.2	97.2	107.8	112.1	96.0
115	159.2	146.1	152.3	152.3	137.5
120	203.1	187.1	192.6	186.6	178.7
125	239.4	224.1	231.7	231.2	220.8
130	270.0	261.7	269.1	272.4	257.4
135	300.4	295.0	301.3	306.4	293.8
140	328.9	323.4	328.9	339.1	328.7
145	350.6	349.0	350.7	366.8	358.4
150	371.6	366.2	378.2	387.3	385.3
155	385.9	385.5	394.4	414.9	408.5
160	385.0	394.6	410.9	418.0	429.4
165	337.1	381.5	403.2	429.8	428.5
170	292.0	326.4	343.9	365.7	385.2
175	232.1	271.9	285.6	294.0	325.0
180	239.5	221.2	215.8	228.1	279.6

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77630XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOCH77630XXX		
0-30	289.8	14.3
0-40	474.1	23.4
0-60	783.3	38.6
0-90	880.8	43.4
60-90	97.5	4.8
0-180	2028.4	100.0

Beam Angle

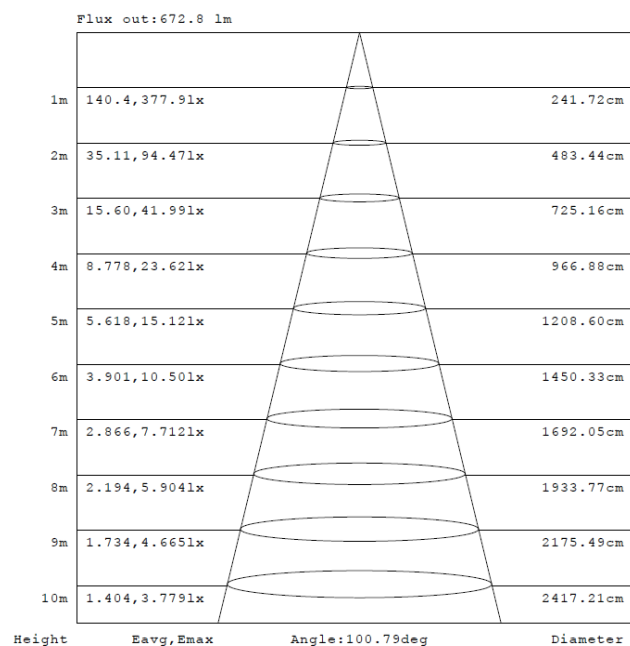
Total Beam Angle(°)
360.0

Illumination Plots

Model No.: SLOCH77630XXX

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

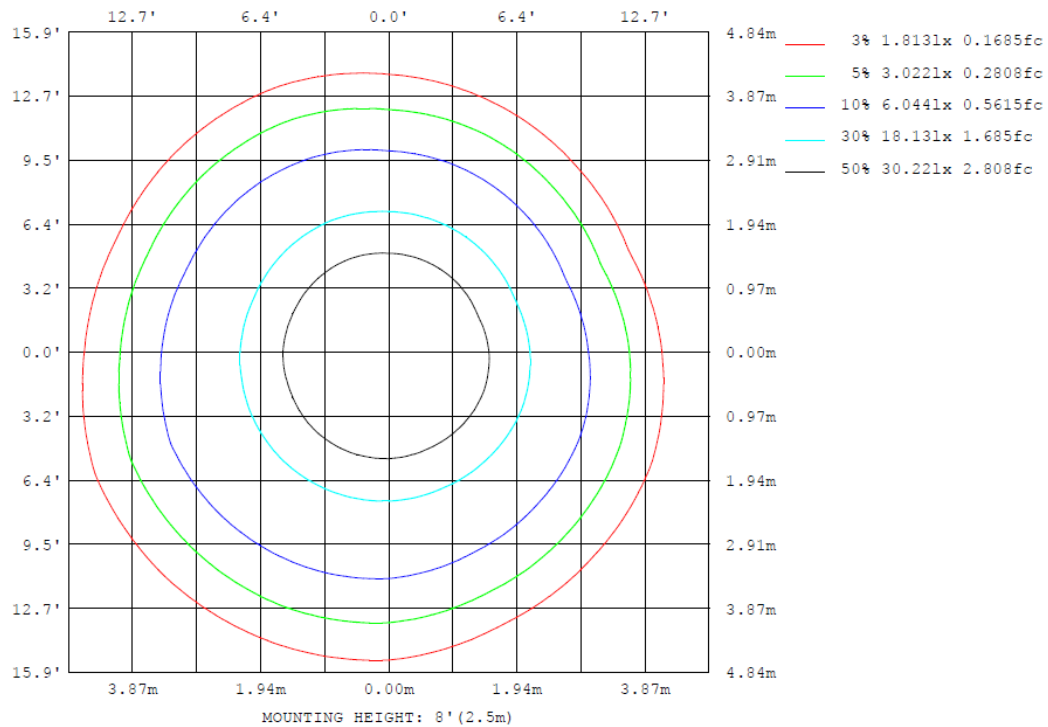
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77630XXX

Model No.: SLOCH77630XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77630XXX

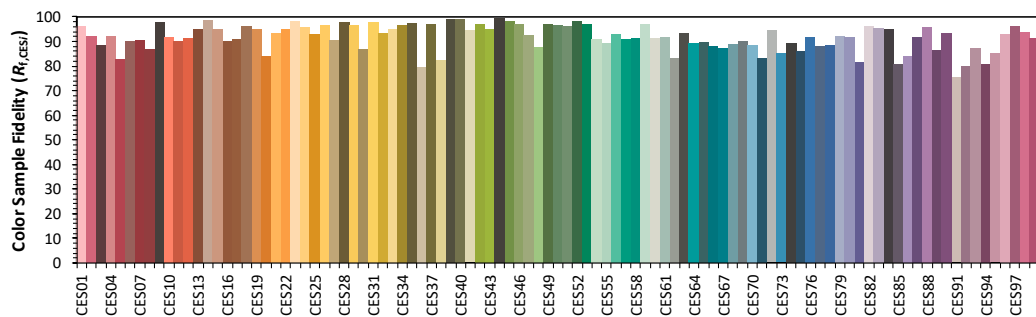
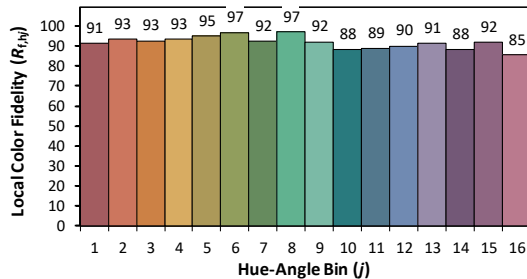
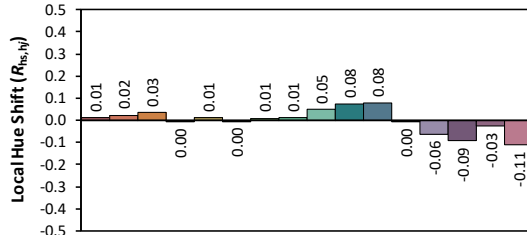
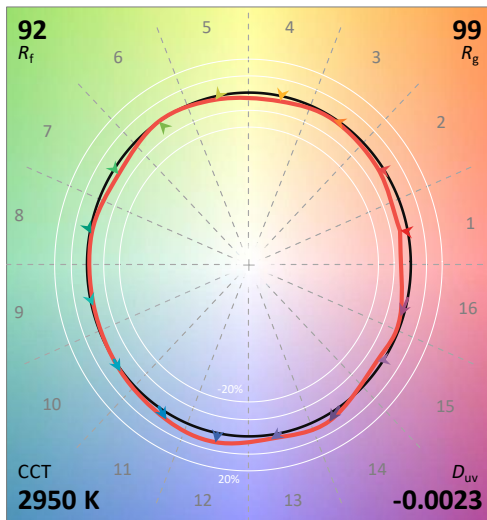
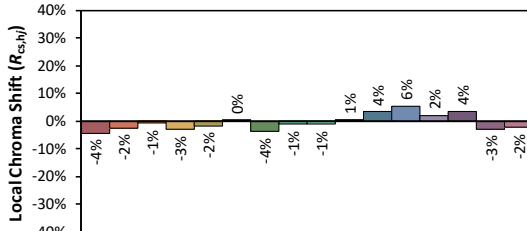
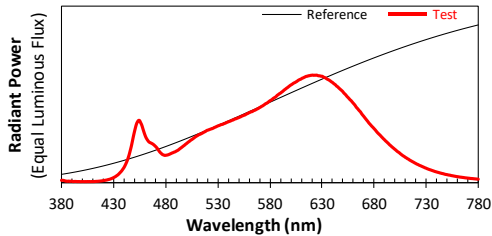
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/10

Model: SLOCH77630XXX



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

x 0.4371
 y 0.3984
 u' 0.2532
 v' 0.5192

CIE 13.3-1995
(CRI)
 R_a 94
 R_g 67

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 SLOCH77630XXX



External view of SLOCH77630XXX

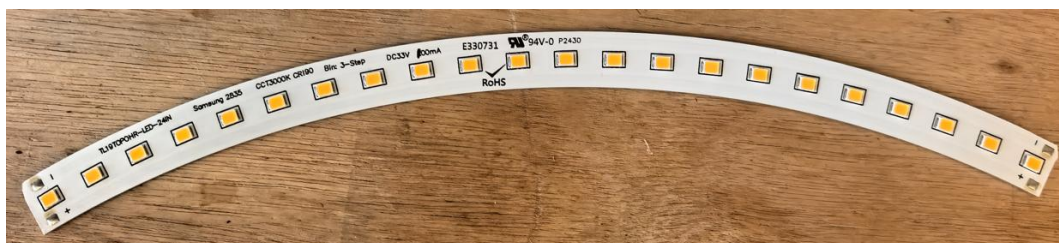
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TEST REPORT

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 *****