

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-015

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None

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Report format for LM-79_G

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Report No.: 251027067GZU-015

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLCH836SCTXXX

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 SLCH836SCTXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-018.
<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>	27 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:	SLCH836SCTXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLCH836SCTXXX

Criteria	Result
Total Lumen Output	916.9 lm
Total Power	12.5 W
Luminaire Efficacy	73.6 lm/W
S/MH(C0/180)	1.09
S/MH(C90/270)	0.79
Correlated Color Temperature (CCT)	2978 K
Color Rendering Index (CRI)	95
R9	73
Chromaticity Coordinate (x)	0.4361
Chromaticity Coordinate (y)	0.3996
Chromaticity Coordinate (u')	0.2519
Chromaticity Coordinate (v')	0.5195

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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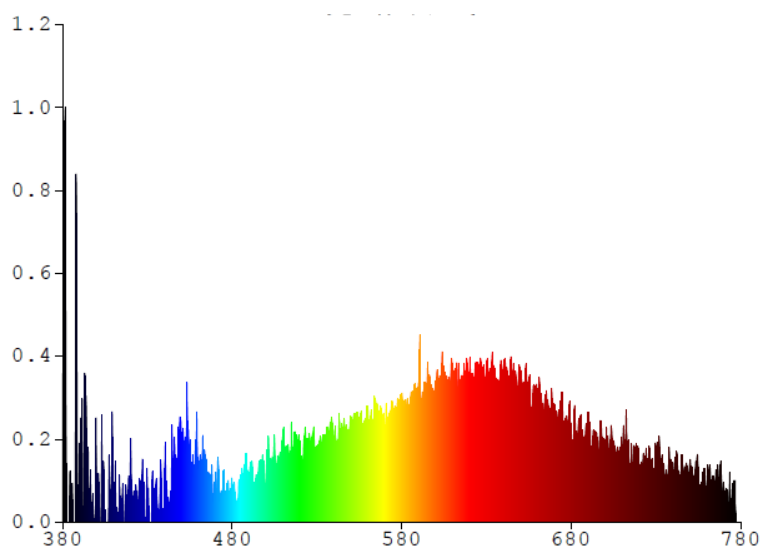
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLCH836SCTXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0194	480	0.0148	580	0.0456	680	0.0360	780	0.0000
385	0.0000	485	0.0170	585	0.0455	685	0.0356		
390	0.0272	490	0.0153	590	0.0521	690	0.0433		
395	0.0295	495	0.0190	595	0.0545	695	0.0352		
400	0.0000	500	0.0188	600	0.0560	700	0.0250		
405	0.0042	505	0.0309	605	0.0542	705	0.0316		
410	0.0079	510	0.0356	610	0.0602	710	0.0305		
415	0.0072	515	0.0377	615	0.0570	715	0.0175		
420	0.0325	520	0.0313	620	0.0528	720	0.0227		
425	0.0048	525	0.0275	625	0.0632	725	0.0251		
430	0.0096	530	0.0291	630	0.0590	730	0.0294		
435	0.0148	535	0.0337	635	0.0610	735	0.0185		
440	0.0112	540	0.0300	640	0.0613	740	0.0087		
445	0.0211	545	0.0334	645	0.0605	745	0.0196		
450	0.0301	550	0.0397	650	0.0567	750	0.0232		
455	0.0313	555	0.0415	655	0.0547	755	0.0169		
460	0.0208	560	0.0452	660	0.0498	760	0.0030		
465	0.0200	565	0.0428	665	0.0425	765	0.0109		
470	0.0111	570	0.0370	670	0.0468	770	0.0140		
475	0.0205	575	0.0425	675	0.0392	775	0.0123		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH836SCTXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

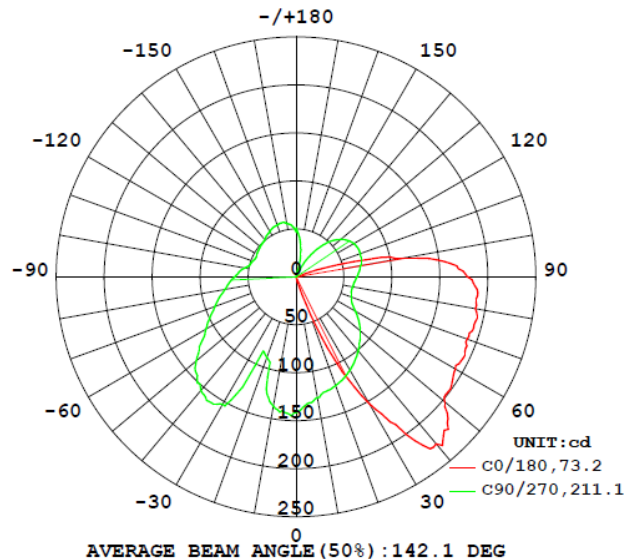
Photometric Measurements at 25°C – Distribution Method

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')
SLCH836SCTXXX								
S2510270 67-018	base-up	2978	95	73	0.4361	0.3996	0.2519	0.5195

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)
SLCH836SCTXXX							
S2510270 67-018	base-up	120.2	104.7	12.5	0.990	916.9	73.6

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH836SCTXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	0.2	166.4	164.9	156.1	141.2
5	0.3	178.6	165.9	149.6	132.7
10	0.4	181.5	154.7	140.5	127.8
15	0.6	184.3	147.3	137.1	123.3
20	30.3	166.3	142.4	133.5	120.7
25	95.5	148.4	138.2	131.3	117.0
30	152.6	145.0	135.0	128.1	112.3
35	200.3	138.2	133.6	123.6	106.9
40	227.1	141.2	134.2	119.5	100.8
45	224.4	138.7	133.7	115.6	94.3
50	202.0	138.2	132.4	111.1	87.4
55	197.6	136.5	130.8	106.0	79.9
60	191.6	133.2	127.5	99.7	71.5
65	194.1	128.4	123.0	94.1	64.6
70	189.9	123.8	119.9	90.6	61.2
75	192.1	119.6	116.5	87.8	59.6
80	189.8	113.8	112.6	86.1	60.0
85	190.3	105.0	108.4	85.2	61.2
90	178.8	101.1	103.7	84.9	63.5
95	161.7	92.9	98.6	85.2	66.0
100	114.1	83.4	92.9	85.7	68.3
105	63.2	73.5	87.4	85.3	70.2
110	16.4	63.0	82.5	83.8	71.3
115	2.9	54.0	76.7	80.9	71.2
120	1.5	47.3	70.3	77.3	69.7
125	0.8	40.8	63.0	71.6	66.5
130	0.4	34.6	54.4	64.1	61.2
135	0.2	26.9	43.0	54.9	53.6
140	0.2	20.8	31.4	43.5	43.5
145	0.2	14.4	19.6	30.0	31.4
150	0.2	8.1	9.2	16.1	17.8
155	0.2	2.5	0.7	3.7	4.9
160	0.3	0.3	0.7	0.3	0.2
165	0.3	0.5	10.4	12.0	13.4
170	0.3	3.7	20.2	25.8	28.8
175	0.3	10.0	30.3	37.5	41.5
180	0.3	16.3	39.6	47.1	51.4

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH836SCTXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLCH836SCTXXX		
0-30	72.8	7.9
0-40	147.6	16.1
0-60	334.7	36.5
0-90	601.4	65.6
60-90	266.7	29.1
0-180	916.9	100.0

Beam Angle

Total Beam Angle(°)

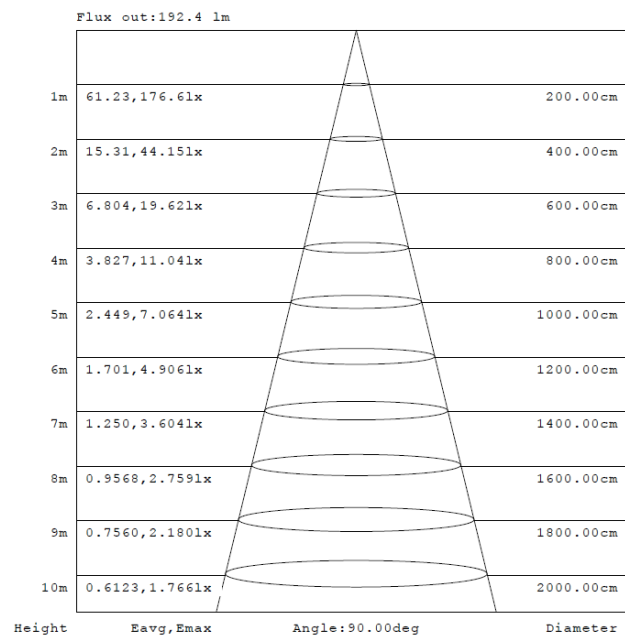
142.1

Illumination Plots

Model No.: SLCH836SCTXXX

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

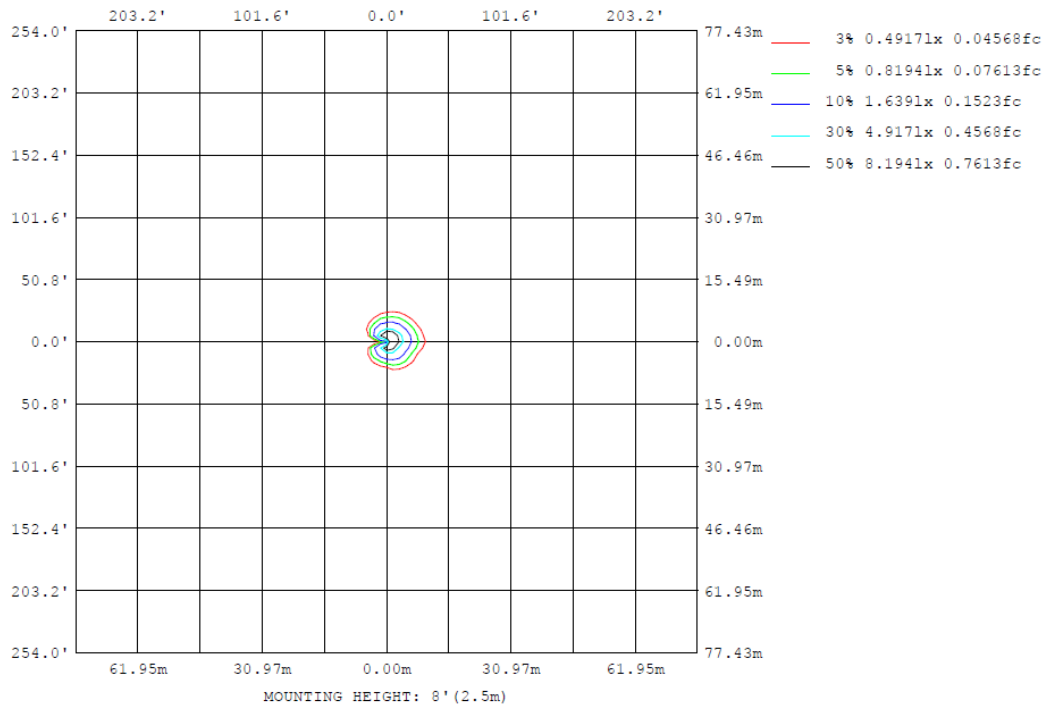
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH836SCTXXX

Model No.: SLCH836SCTXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH836SCTXXX

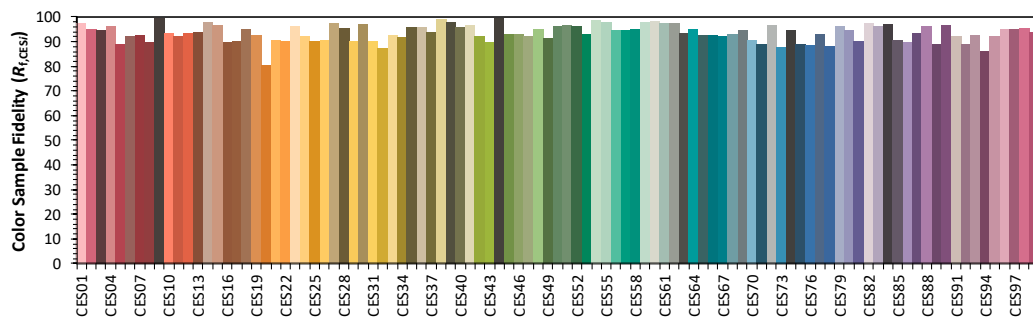
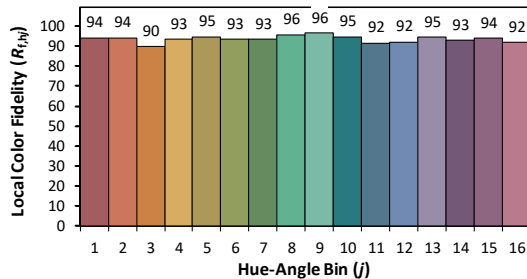
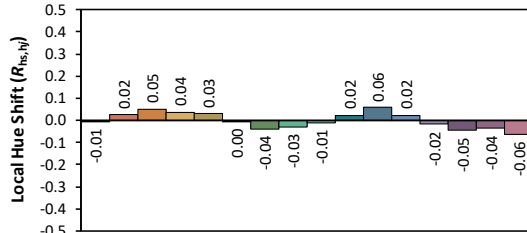
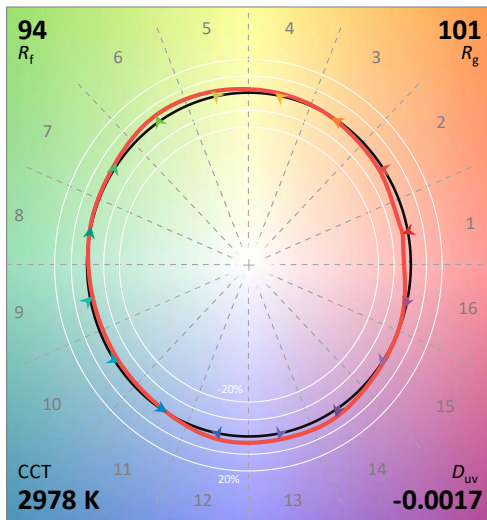
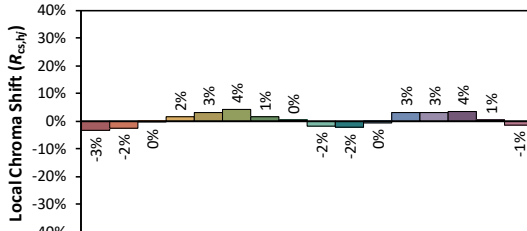
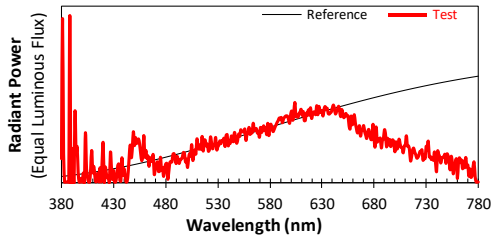
ANSI/IES+B3:X17 TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/27

Model: SLCH836SCTXXX



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

x 0.4361
 y 0.3996
 u' 0.2519
 v' 0.5195

CIE 13.3-1995
(CRI)
 R_a 95
 R_g 73

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 SLCH836SCTXXX

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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of PTB15W-0300-38-VCC1(AB0257)



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 *****