

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-012

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 251027067GZU-012

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLCH835SCTXXX

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 SLCH835SCTXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-019.
<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>	22 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:	SLCH835SCTXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLCH835SCTXXX

Criteria	Result
Total Lumen Output	866.3 lm
Total Power	12.4 W
Luminaire Efficacy	69.9 lm/W
S/MH(C0/180)	4.33
S/MH(C90/270)	0.28
Correlated Color Temperature (CCT)	2698 K
Color Rendering Index (CRI)	93
R9	64
Chromaticity Coordinate (x)	0.4577
Chromaticity Coordinate (y)	0.4065
Chromaticity Coordinate (u')	0.2630
Chromaticity Coordinate (v')	0.5254

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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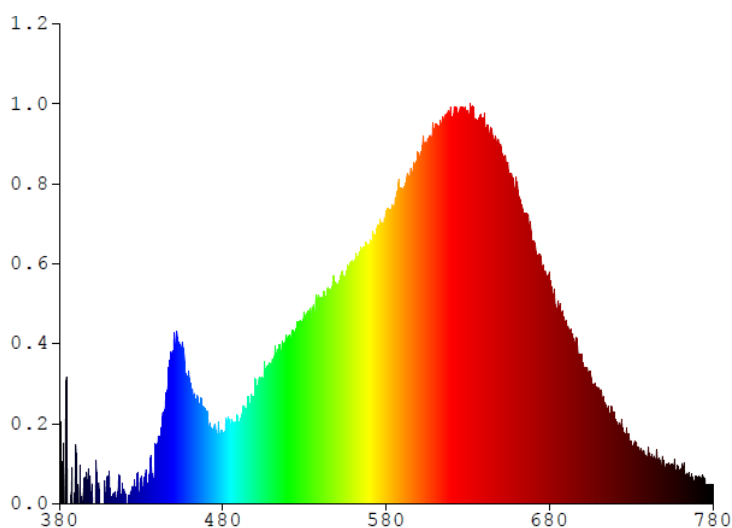
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLCH835SCTXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0000	480	0.0806	580	0.3273	680	0.2595	780	0.0223
385	0.0000	485	0.0873	585	0.3378	685	0.2273		
390	0.0677	490	0.0934	590	0.3604	690	0.2081		
395	0.0240	495	0.1168	595	0.3840	695	0.1888		
400	0.0223	500	0.1413	600	0.3949	700	0.1629		
405	0.0000	505	0.1412	605	0.4107	705	0.1482		
410	0.0000	510	0.1573	610	0.4303	710	0.1322		
415	0.0069	515	0.1779	615	0.4409	715	0.1088		
420	0.0000	520	0.1919	620	0.4397	720	0.0959		
425	0.0170	525	0.2005	625	0.4503	725	0.0867		
430	0.0299	530	0.2140	630	0.4506	730	0.0718		
435	0.0323	535	0.2199	635	0.4401	735	0.0565		
440	0.0633	540	0.2345	640	0.4416	740	0.0507		
445	0.1200	545	0.2416	645	0.4226	745	0.0471		
450	0.1808	550	0.2482	650	0.4106	750	0.0478		
455	0.1817	555	0.2571	655	0.3727	755	0.0447		
460	0.1247	560	0.2757	660	0.3598	760	0.0307		
465	0.1146	565	0.2865	665	0.3301	765	0.0285		
470	0.1010	570	0.2967	670	0.2997	770	0.0294		
475	0.0910	575	0.3175	675	0.2717	775	0.0275		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH835SCTXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

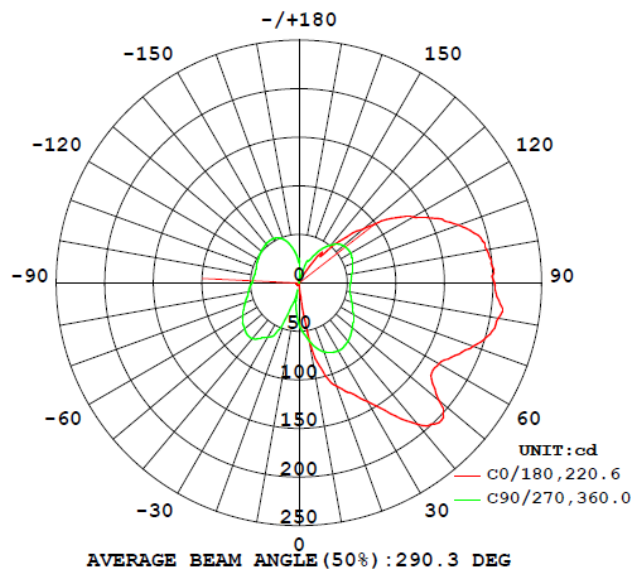
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit y	Chromaticit y	Chromaticit y	Chromaticit y
					Coordinate (x)	Coordinate (y)	Coordinate (u')	Coordinate (v')
SLCH835SCTXXX								
S2510270 67-019	base-up	2698	93	64	0.4577	0.4065	0.2630	0.5254

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)
SLCH835SCTXXX							
S2510270 67-019	base-up	120.2	104.4	12.4	0.987	866.3	69.9

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH835SCTXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	0.3	58.9	61.9	55.2	42.9
5	1.6	82.9	78.2	66.4	51.5
10	54.4	97.9	87.8	76.0	60.4
15	93.2	111.0	97.9	84.7	69.4
20	113.0	120.1	105.6	91.3	75.5
25	124.8	126.5	112.0	96.6	79.2
30	140.9	129.3	114.8	99.5	80.9
35	164.4	130.1	117.3	100.1	80.5
40	190.0	130.8	119.3	100.4	78.5
45	203.9	128.8	119.5	99.5	75.6
50	188.1	128.4	118.8	97.6	71.9
55	165.9	129.6	117.9	95.5	68.1
60	166.5	132.5	116.2	93.8	64.5
65	177.3	135.7	114.7	92.4	61.1
70	191.0	137.8	113.9	91.0	58.0
75	203.8	139.8	112.8	89.9	55.4
80	208.6	142.0	111.6	89.0	53.4
85	206.6	144.9	110.9	88.1	52.6
90	201.6	149.1	109.5	87.7	53.1
95	200.0	152.9	108.2	87.2	54.2
100	196.4	156.0	106.7	86.4	55.4
105	190.9	158.4	105.7	85.1	56.8
110	175.0	158.5	103.9	83.1	58.3
115	157.9	151.3	99.7	80.2	60.3
120	136.1	138.4	92.7	75.9	61.5
125	116.2	121.2	84.0	70.8	61.3
130	86.2	101.6	74.2	65.0	59.9
135	64.0	83.1	63.5	58.3	56.7
140	37.6	62.8	53.1	50.8	51.3
145	33.6	40.9	44.2	42.8	44.0
150	12.5	21.7	38.3	34.4	35.3
155	1.9	10.8	24.4	30.5	26.2
160	0.6	5.7	10.3	16.0	23.5
165	0.4	0.2	0.1	2.5	5.2
170	0.2	0.0	0.2	0.2	0.0
175	0.0	1.9	8.2	12.7	11.0
180	0.0	7.7	16.3	20.8	25.7

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH835SCTXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLCH835SCTXXX		
0-30	45.0	5.2
0-40	93.4	10.8
0-60	231.9	26.8
0-90	477.2	55.1
60-90	245.3	28.3
0-180	866.3	100.0

Beam Angle

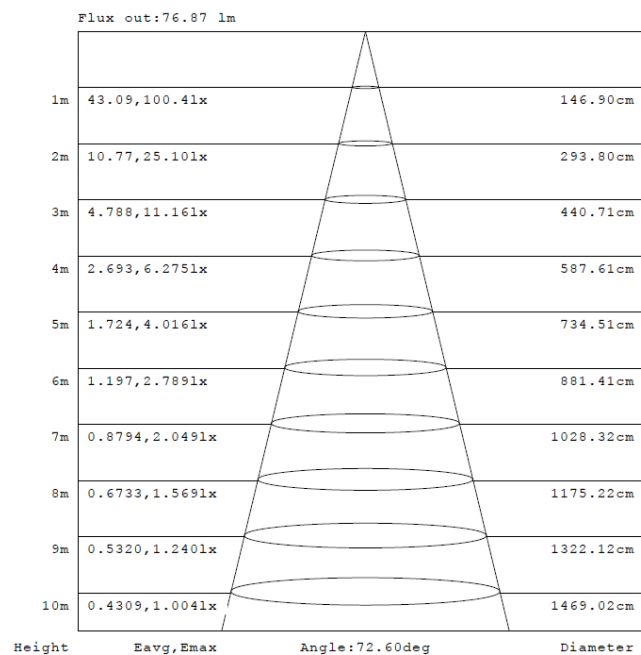
Total Beam Angle(°)
290.3

Illumination Plots

Model No.: SLCH835SCTXXX

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

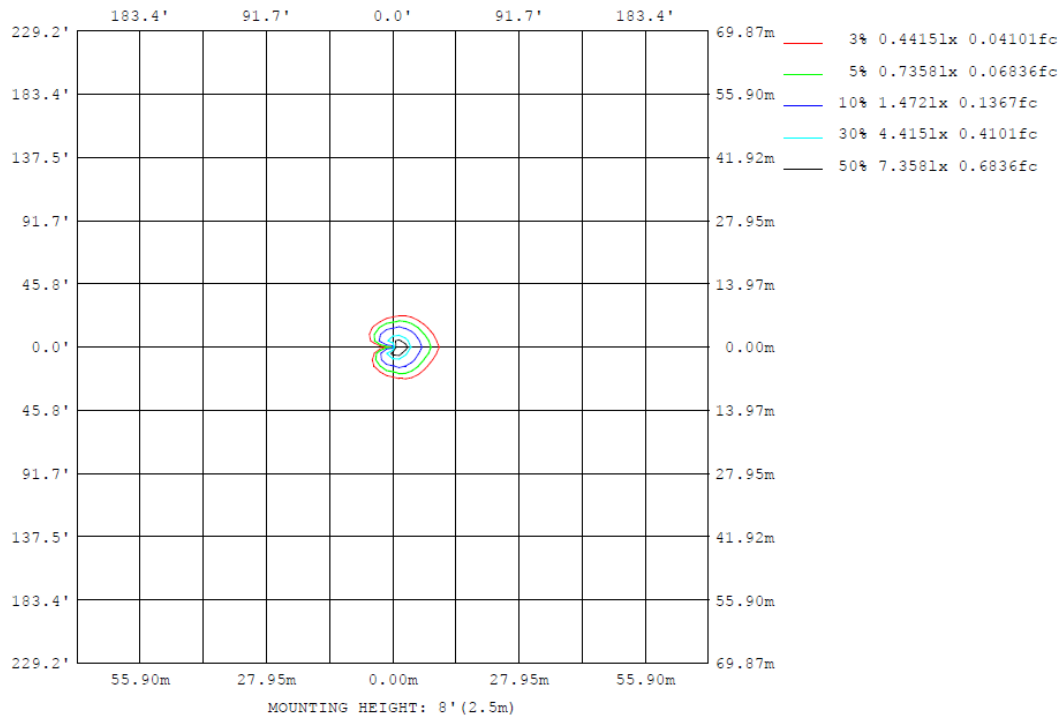
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH835SCTXXX

Model No.: SLCH835SCTXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH835SCTXXX

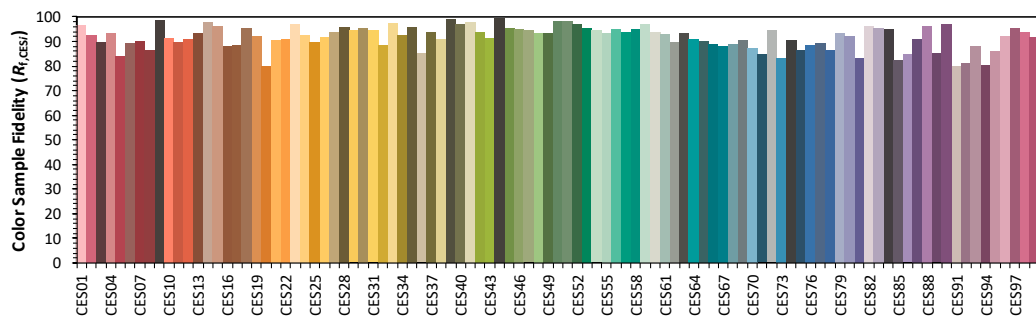
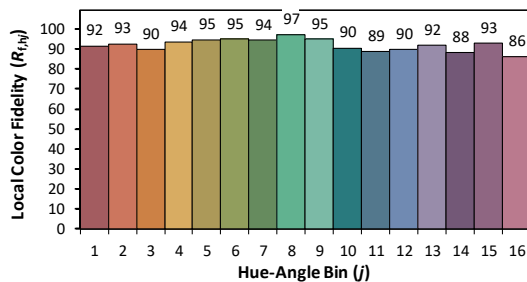
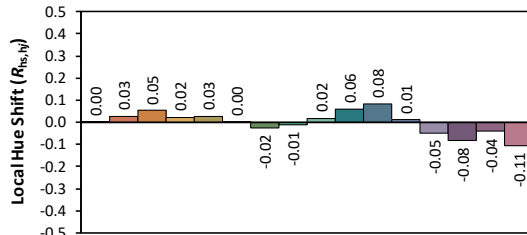
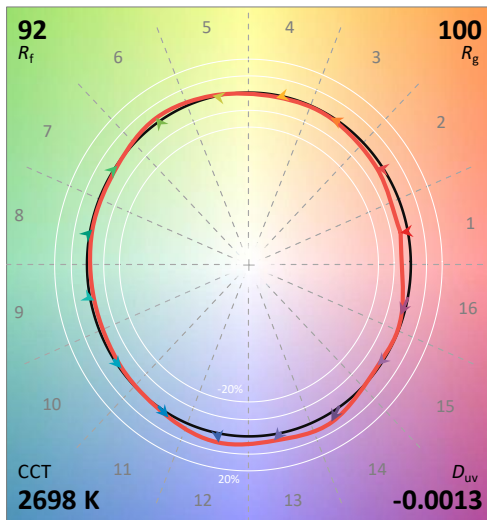
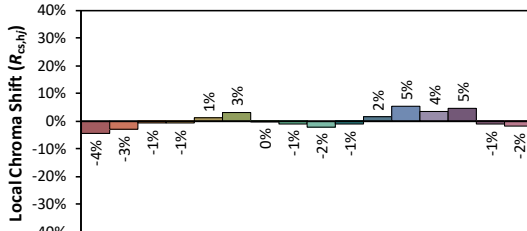
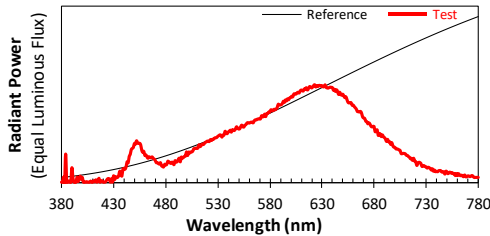
ANSI/IES+B3:X17 TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/22

Model: SLCH835SCTXXX



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

x 0.4577
 y 0.4065
 u' 0.2630
 v' 0.5254

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 64

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 SLCH835SCTXXX

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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 *****