

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250821045GZU-006

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REVISION DATE

None

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Report No.: 250821045GZU-006

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLCH56127CCXXX

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

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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TEST: Electrical and Photometric as required to the IES LM-79 test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number: QGZ250818132.

STANDARDS USED: 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

DESCRIPTION OF SAMPLE: The client submitted one sample of model SLCH56127CCXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250821045-003.

MANUFACTURER /FACTORY & ADDRESS: Guangzhou Xiongyi Precision Metalworking Co., Ltd
Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450

DATES OF TESTS: 11 September 2025

ISSUED BY: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

TEST LOCATION: 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:	SLCH56127CCXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLCH56127CCXXX

Criteria	Result
Total Lumen Output	2101.4 lm
Total Power	36.4 W
Luminaire Efficacy	57.7 lm/W
S/MH(C0/180)	1.09
S/MH(C90/270)	1.15
Correlated Color Temperature (CCT)	2710 K
Color Rendering Index (CRI)	97
R9	98
Chromaticity Coordinate (x)	0.4564
Chromaticity Coordinate (y)	0.4057
Chromaticity Coordinate (u')	0.2625
Chromaticity Coordinate (v')	0.5250

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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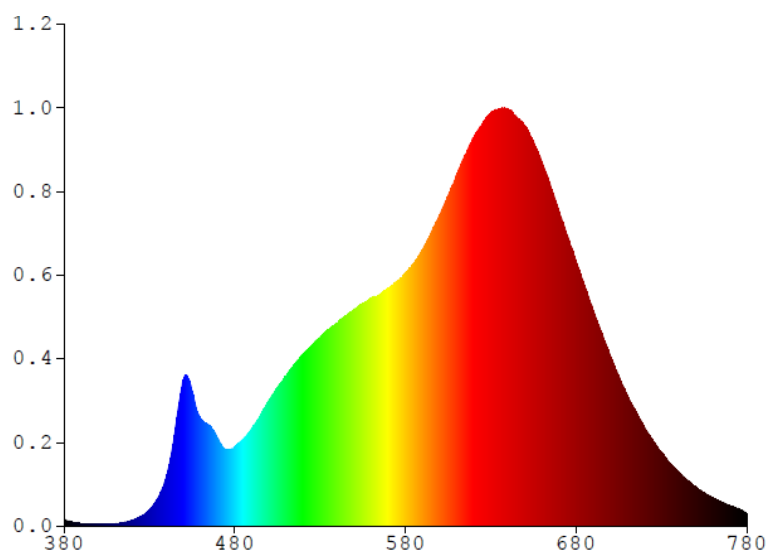
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLCH56127CCXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	1.2331	480	15.3190	580	48.9590	680	51.1890	780	2.4618
385	0.7112	485	16.8290	585	50.8550	685	46.3780		
390	0.4646	490	18.7940	590	53.3410	690	41.6590		
395	0.3241	495	21.4040	595	56.8110	695	37.4070		
400	0.3433	500	24.2700	600	60.0440	700	32.9260		
405	0.3562	505	26.8420	605	63.7350	705	29.0210		
410	0.4389	510	29.0520	610	67.8990	710	25.2060		
415	0.7255	515	31.1570	615	71.7230	715	22.1110		
420	1.1381	520	33.2310	620	75.1590	720	19.1330		
425	1.8850	525	34.8060	625	77.6720	725	16.5450		
430	3.1282	530	36.4540	630	79.7010	730	14.2260		
435	5.4032	535	37.9820	635	80.6030	735	12.2040		
440	9.6305	540	39.2690	640	80.6670	740	10.4790		
445	18.2620	545	40.7250	645	79.1470	745	8.9470		
450	28.2790	550	41.9130	650	77.3340	750	7.5774		
455	25.9780	555	43.0080	655	74.3520	755	6.5079		
460	20.7290	560	44.0920	660	70.4180	760	5.5135		
465	19.4520	565	44.7260	665	65.7440	765	4.6864		
470	16.9690	570	46.0040	670	60.7870	770	3.9875		
475	14.7470	575	47.2650	675	55.0910	775	3.4350		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH56127CCXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

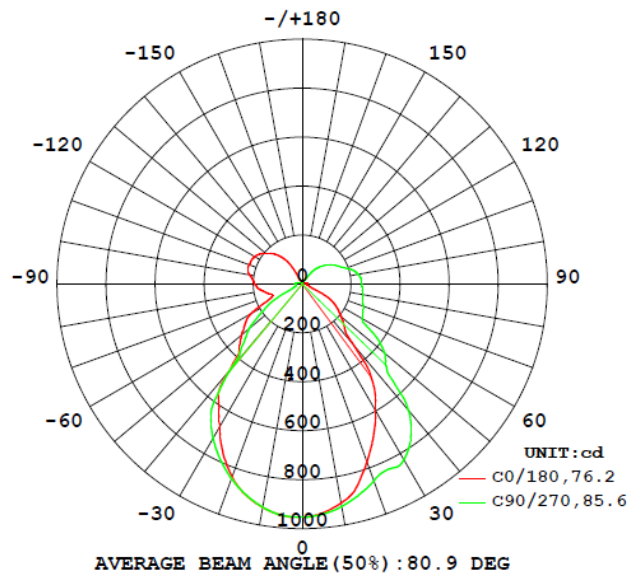
Photometric Measurements at 25°C – Distribution Method

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')
SLCH56127CCXXX								
S2508210 45-003	base-up	2710	97	98	0.4564	0.4057	0.2625	0.5250

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)
SLCH56127CCXXX							
S2508210 45-003	base-up	120.2	312.4	36.4	0.969	2101.4	57.7

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH56127CCXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	953.9	953.3	953.5	953.6	953.8
5	939.9	937.9	939.6	942.2	944.6
10	909.4	905.7	910.5	917.6	923.3
15	858.5	862.3	867.4	881.5	892.6
20	773.6	808.1	814.3	836.7	856.0
25	687.9	742.5	750.3	799.1	834.5
30	601.4	665.0	673.7	744.1	829.7
35	509.1	565.8	581.2	722.2	771.8
40	332.1	364.2	433.2	625.6	675.5
45	241.4	233.8	207.9	452.8	488.3
50	207.6	183.9	86.4	285.2	438.5
55	175.9	92.9	61.0	262.6	358.1
60	140.7	47.2	82.9	243.1	283.9
65	70.3	30.4	109.8	235.2	274.3
70	31.4	23.6	117.7	231.0	266.3
75	24.1	26.4	122.1	230.3	255.3
80	18.3	26.9	121.5	227.0	250.8
85	17.8	25.5	112.3	216.5	246.2
90	20.9	23.8	102.3	206.8	242.5
95	23.2	23.4	86.7	198.1	241.5
100	22.4	17.8	54.9	182.9	232.2
105	16.3	9.9	23.8	159.7	216.8
110	5.8	6.6	18.4	129.0	191.4
115	4.0	6.1	15.4	106.7	170.4
120	2.9	6.1	13.2	87.3	153.9
125	1.6	6.2	11.2	69.0	137.0
130	1.2	6.4	9.2	50.8	118.5
135	1.5	6.7	7.6	23.6	98.8
140	2.6	5.6	6.3	15.4	74.5
145	3.7	5.2	5.0	11.4	32.7
150	4.2	4.7	4.0	7.7	17.9
155	3.5	4.0	3.3	5.9	14.0
160	2.5	2.8	2.7	4.8	9.2
165	1.6	1.7	2.4	3.4	4.8
170	1.4	1.4	2.1	2.3	2.4
175	1.4	1.4	1.5	1.9	1.9
180	1.9	1.9	1.9	1.8	1.6

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH56127CCXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLCH56127CCXXX		
0-30	691.4	32.9
0-40	1074.0	51.1
0-60	1460.3	69.5
0-90	1755.9	83.6
60-90	295.6	14.1
0-180	2101.4	100.0

Beam Angle

Total Beam Angle(°)

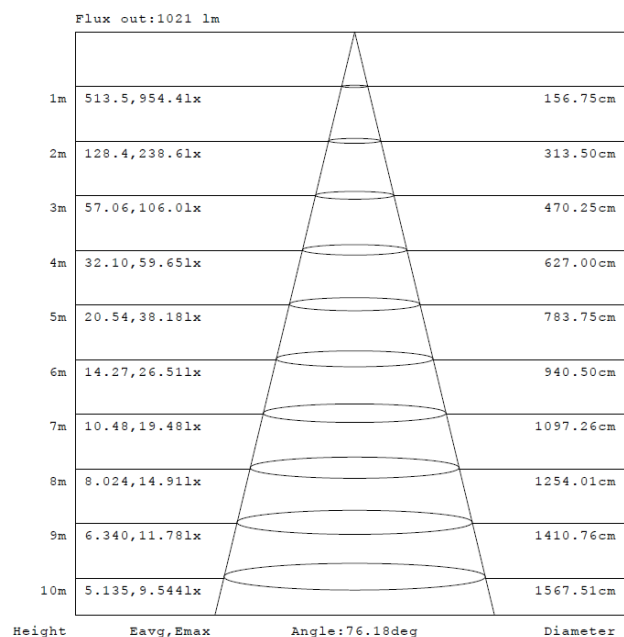
80.9

Illumination Plots

Model No.: SLCH56127CCXXX

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

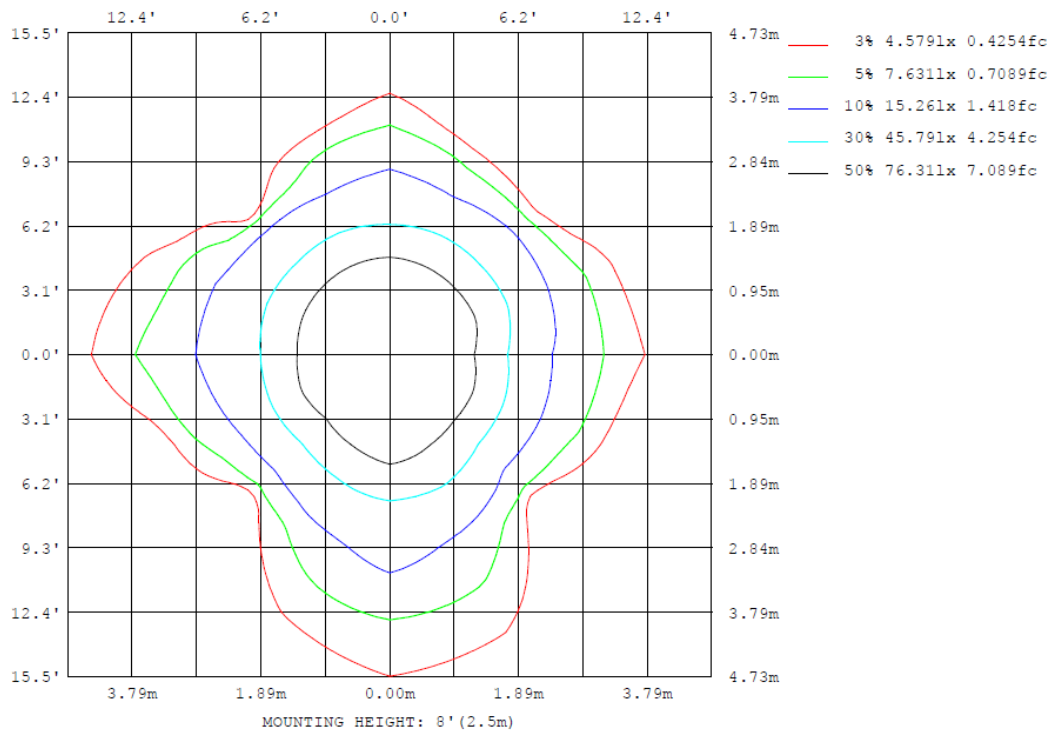
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH56127CCXXX

Model No.: SLCH56127CCXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH56127CCXXX

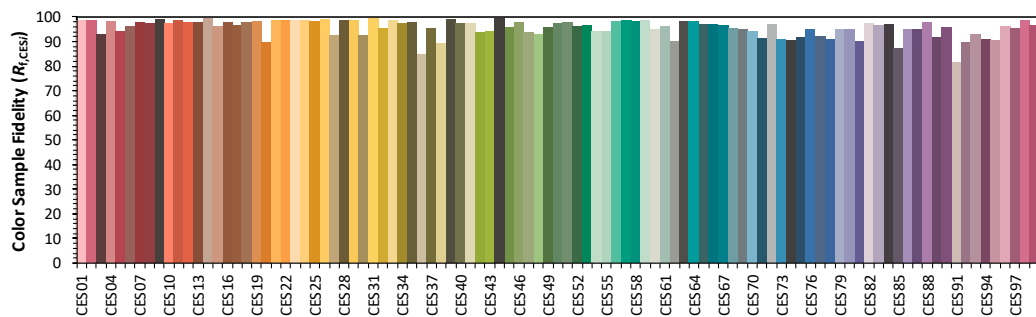
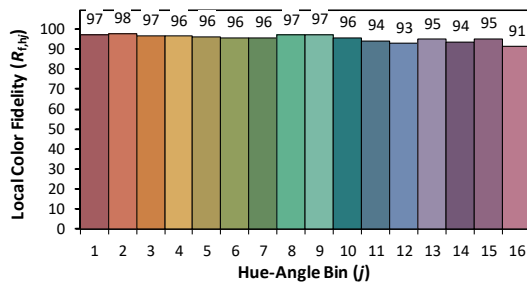
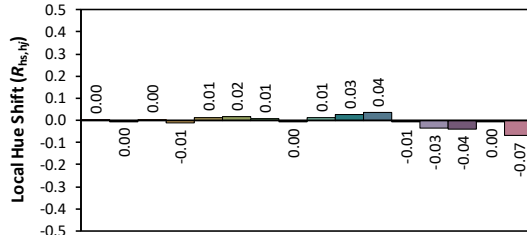
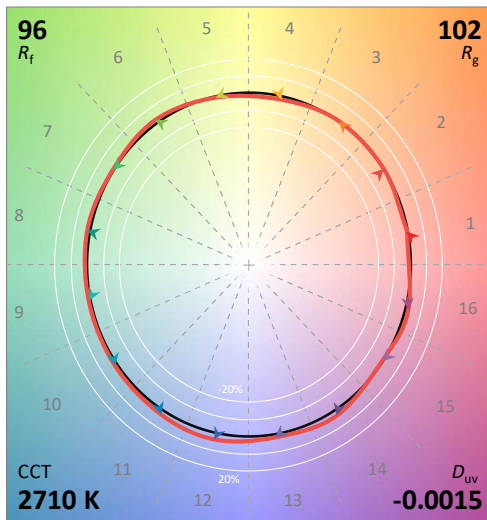
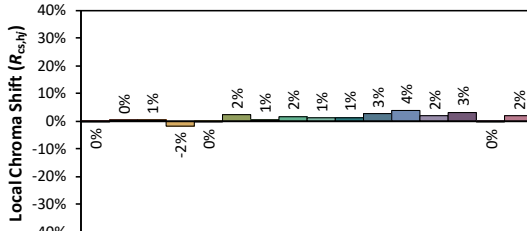
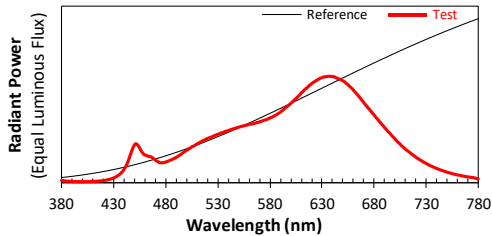
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/9/11

Model: SLCH56127CCXXX



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

x 0.4564
 y 0.4057
 u' 0.2625
 v' 0.5250

CIE 13.3-1995
(CRI)
 R_a 97
 R_g 98

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

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

TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLCH56127CCXXX

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver GBLD001



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 *****