

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250821045GZU-002

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None

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Report format for LM-79_G

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Report No.: 250821045GZU-002

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLFM56727CCXXX

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: QGZ250818132.
<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 SLFM56727CCXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250821045-001.
<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>	05 September 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:	SLFM56727CCXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLFM56727CCXXX

Criteria	Result
Total Lumen Output	2226.4 lm
Total Power	25.7 W
Luminaire Efficacy	86.6 lm/W
S/MH(C0/180)	1.17
S/MH(C90/270)	1.17
Correlated Color Temperature (CCT)	2713 K
Color Rendering Index (CRI)	93
R9	63
Chromaticity Coordinate (x)	0.4578
Chromaticity Coordinate (y)	0.4086
Chromaticity Coordinate (u')	0.2621
Chromaticity Coordinate (v')	0.5263

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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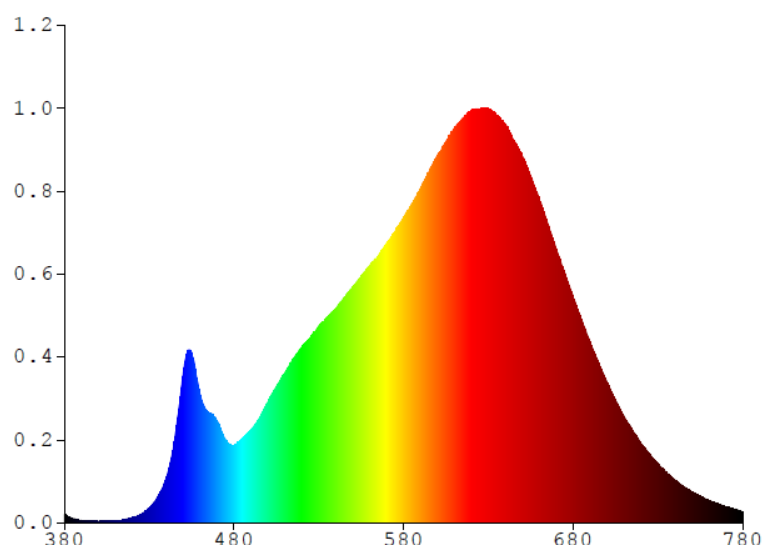
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLFM56727CCXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	3.7562	480	31.2960	580	123.780	680	91.5570	780	4.3892
385	1.6195	485	34.0680	585	129.480	685	82.2580		
390	1.0687	490	37.6600	590	135.580	690	73.3410		
395	0.7626	495	42.6490	595	142.250	695	64.8930		
400	0.5949	500	48.9300	600	148.900	700	56.8270		
405	0.6581	505	55.2500	605	154.550	705	49.7420		
410	0.8483	510	60.7640	610	159.910	710	43.0670		
415	1.3076	515	66.3500	615	164.030	715	37.5300		
420	2.1823	520	71.3780	620	167.240	720	32.3500		
425	3.5190	525	75.0530	625	167.760	725	27.8300		
430	6.0370	530	79.8030	630	168.030	730	23.9990		
435	10.4450	535	83.4360	635	164.940	735	20.4460		
440	18.1280	540	86.7360	640	161.620	740	17.3890		
445	33.6110	545	91.4070	645	155.020	745	14.7170		
450	60.5280	550	95.5550	650	148.800	750	12.5970		
455	68.5710	555	100.1000	655	140.280	755	10.7610		
460	51.9920	560	104.3200	660	131.730	760	9.1257		
465	44.7400	565	108.0500	665	121.320	765	7.8191		
470	41.3060	570	113.3800	670	111.150	770	6.6898		
475	33.6220	575	118.1500	675	99.2240	775	5.6632		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56727CCXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

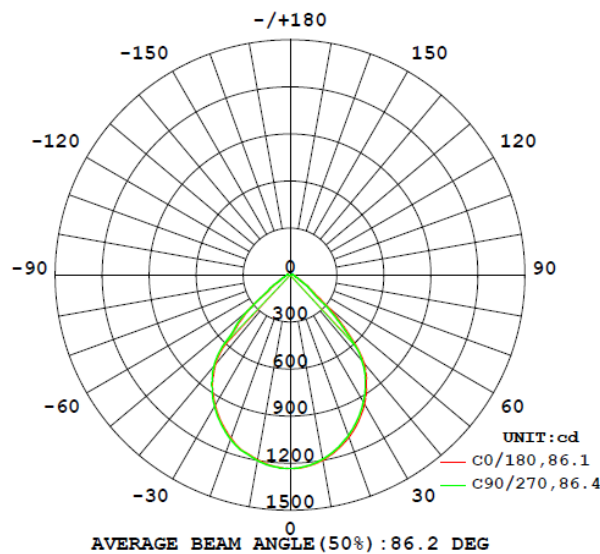
Photometric Measurements at 25°C – Distribution Method

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')
SLFM56727CCXXX								
S2508210 45-001	base-up	2713	93	63	0.4578	0.4086	0.2621	0.5263

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)
SLFM56727CCXXX							
S2508210 45-001	base-up	120.2	215.0	25.7	0.994	2226.4	86.6

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56727CCXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	1233.2	1233.0	1233.0	1232.4	1232.8
5	1224.2	1221.2	1221.1	1222.0	1221.2
10	1197.6	1190.5	1192.5	1192.4	1192.2
15	1153.9	1145.8	1147.9	1147.6	1146.6
20	1098.0	1088.7	1090.6	1090.1	1088.3
25	1029.6	1018.1	1021.9	1019.3	1018.0
30	948.7	936.4	941.7	938.1	935.6
35	855.3	839.4	845.9	842.6	838.8
40	734.3	705.8	721.2	720.0	716.1
45	526.4	499.4	501.4	466.7	492.8
50	315.6	312.7	324.7	310.5	253.4
55	164.9	192.1	214.3	174.0	153.7
60	96.6	96.5	144.9	89.5	85.6
65	62.7	63.7	75.8	57.6	58.4
70	44.0	42.2	50.7	41.5	43.0
75	33.5	28.1	32.9	30.6	32.7
80	26.0	25.4	25.6	28.9	27.9
85	25.4	27.1	23.7	27.4	25.1
90	27.7	25.8	26.4	25.2	22.3
95	26.8	24.9	26.0	22.7	21.6
100	20.2	25.5	25.4	23.0	15.5
105	15.7	16.8	21.5	17.5	16.9
110	7.5	8.6	8.2	7.5	8.5
115	1.1	0.5	0.8	0.6	0.8
120	0.7	0.5	0.5	0.6	0.7
125	0.8	0.7	0.6	0.7	0.8
130	0.9	0.8	0.8	0.9	0.9
135	1.0	1.0	1.0	1.1	1.1
140	1.2	1.2	1.2	1.3	1.3
145	1.4	1.4	1.4	1.4	1.4
150	1.6	1.6	1.6	1.6	1.6
155	1.7	1.7	1.7	1.7	1.7
160	1.8	1.8	1.8	1.8	1.8
165	1.9	1.9	1.9	1.9	1.9
170	1.8	1.8	1.8	1.8	1.8
175	1.8	1.7	1.7	1.7	1.7
180	1.7	1.7	1.7	1.7	1.7

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56727CCXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLFM56727CCXXX		
0-30	917.4	41.2
0-40	1452.9	65.3
0-60	2040.5	91.7
0-90	2175.3	97.7
60-90	134.8	6.0
0-180	2226.4	100.0

Beam Angle

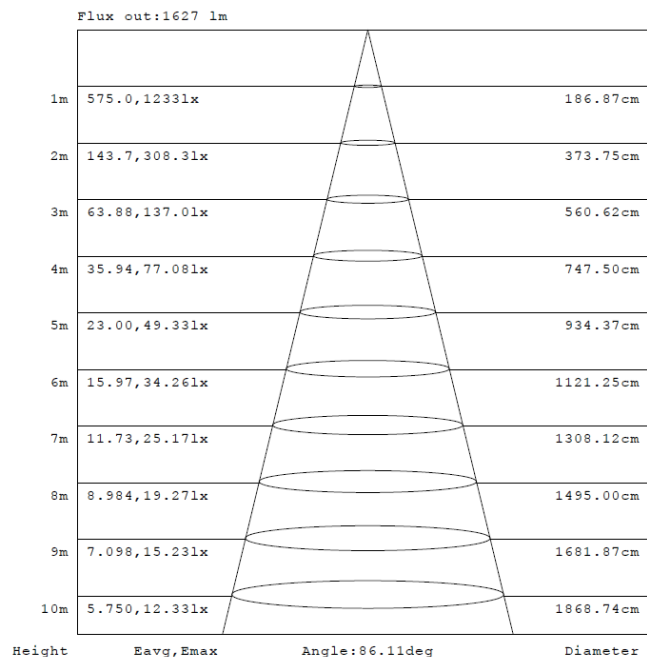
Total Beam Angle(°)
86.2

Illumination Plots

Model No.: SLFM56727CCXXX

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

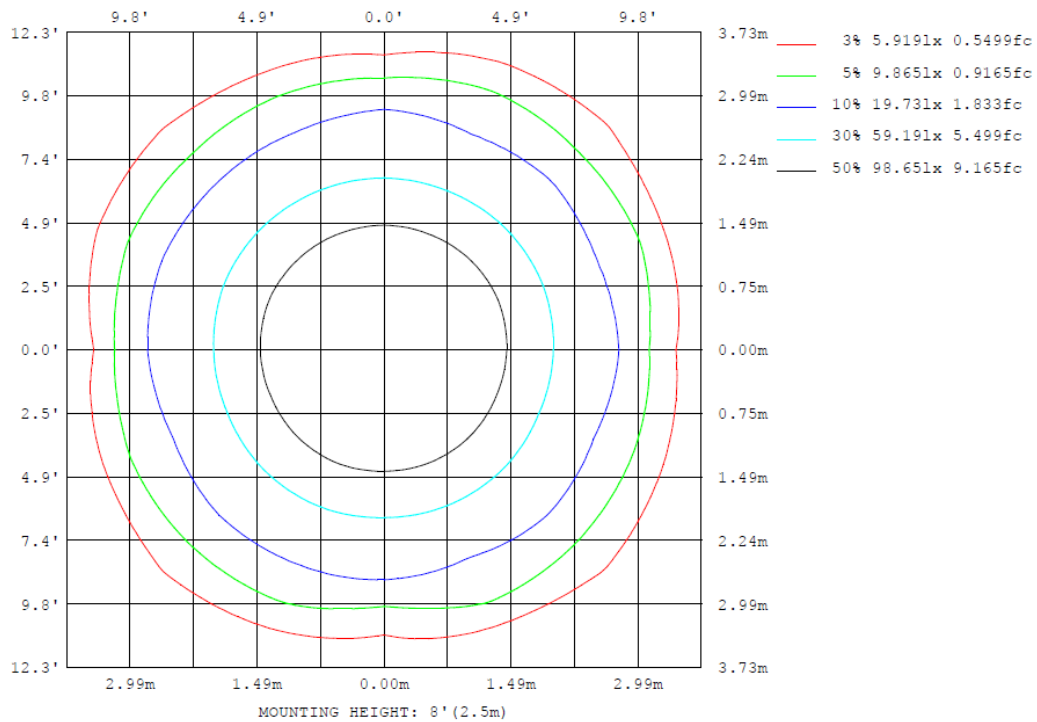
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56727CCXXX

Model No.: SLFM56727CCXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56727CCXXX

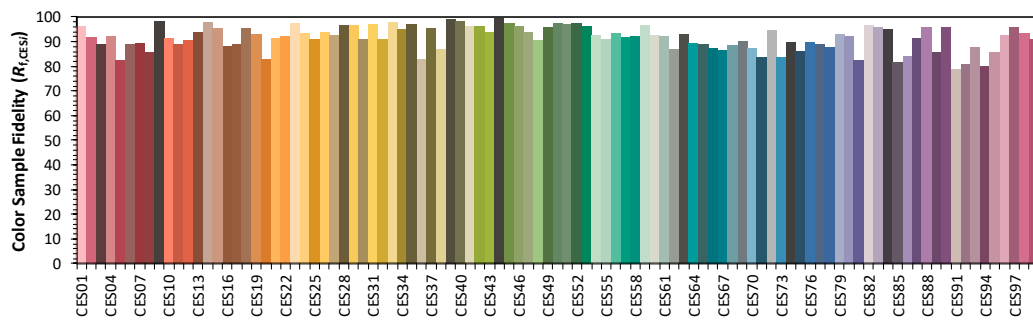
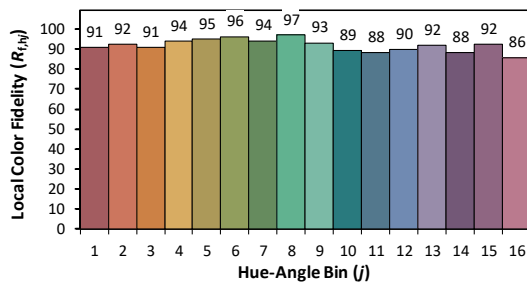
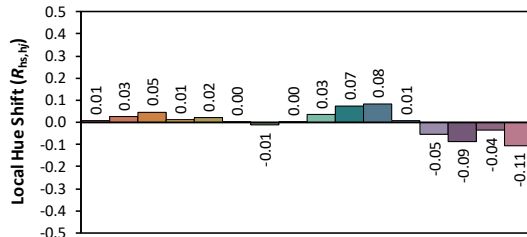
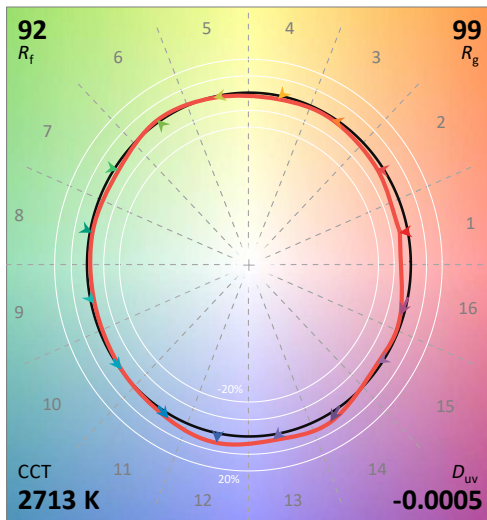
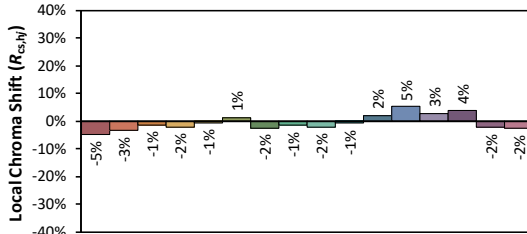
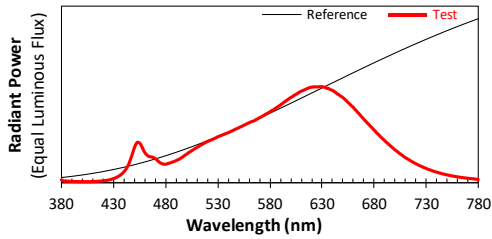
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/9/5

Model: SLFM56727CCXXX



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

x 0.4578
 y 0.4086
 u' 0.2621
 v' 0.5263

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 63

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 SLFM56727CCXXX



External view of SLFM56727CCXXX

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

TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PVD27-C070V38-UNV3-HE-P



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 *****