

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-022

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None

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Report format for LM-79_G

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Report No.: 250623168GZU-022

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLTS75527XXXXX

Remark: "XXXXX" 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: QGZ250619128.
<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 SLTS75527XXXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-019.
<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>	15 July 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:	SLTS75527XXXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLTS75527XXXXX

Criteria	Result
Total Lumen Output	425.5 lm
Total Power	7.5 W
Luminaire Efficacy	56.9 lm/W
S/MH(C0/180)	1.17
S/MH(C90/270)	1.24
Correlated Color Temperature (CCT)	2745 K
Color Rendering Index (CRI)	91
R9	68
Chromaticity Coordinate (x)	0.4561
Chromaticity Coordinate (y)	0.4096
Chromaticity Coordinate (u')	0.2605
Chromaticity Coordinate (v')	0.5264

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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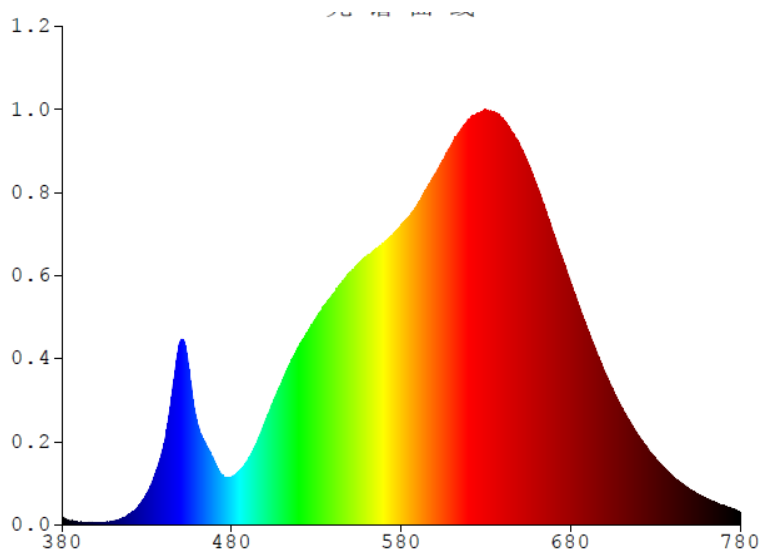
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLTS75527XXXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.2840	480	1.7226	580	10.7580	680	8.6775	780	0.4570
385	0.1404	485	1.9581	585	11.0690	685	7.8419		
390	0.0683	490	2.3758	590	11.5080	690	7.0158		
395	0.0812	495	2.9428	595	12.0450	695	6.2403		
400	0.0654	500	3.7292	600	12.5950	700	5.4910		
405	0.0889	505	4.4750	605	13.1020	705	4.8470		
410	0.1291	510	5.1690	610	13.6710	710	4.2094		
415	0.2133	515	5.8395	615	14.1440	715	3.6950		
420	0.3856	520	6.4329	620	14.5260	720	3.1944		
425	0.6599	525	6.9413	625	14.7650	725	2.7741		
430	1.1202	530	7.4354	630	14.8750	730	2.3856		
435	1.8126	535	7.8741	635	14.8310	735	2.0504		
440	2.8435	540	8.2754	640	14.5820	740	1.7593		
445	4.7030	545	8.6829	645	14.1160	745	1.5119		
450	6.5997	550	9.0551	650	13.6470	750	1.2930		
455	5.4966	555	9.3657	655	12.9690	755	1.1172		
460	3.6145	560	9.6770	660	12.1910	760	0.9432		
465	2.8650	565	9.8751	665	11.3310	765	0.8185		
470	2.2505	570	10.1290	670	10.4280	770	0.6974		
475	1.7775	575	10.3980	675	9.4017	775	0.5989		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTS75527XXXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

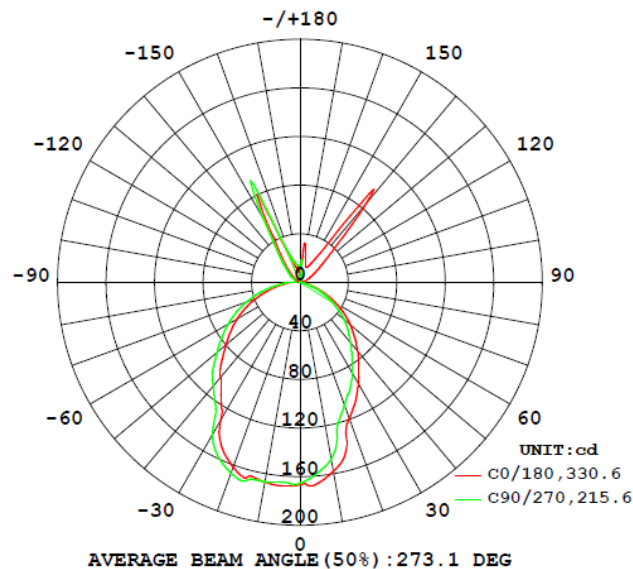
Photometric Measurements at 25°C – Distribution Method

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')
SLTS75527XXXXX								
S2506231 68-019	base-up	2745	91	68	0.4561	0.4096	0.2605	0.5264

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)
SLTS75527XXXXX							
S2506231 68-019	base-up	120.0	63.4	7.5	0.982	425.5	56.9

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTS75527XXXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	166.5	164.2	163.0	164.1	165.1
5	166.2	155.4	154.2	156.4	158.2
10	158.0	139.1	136.7	144.3	147.7
15	145.3	116.3	113.9	117.6	121.0
20	119.4	103.6	101.9	105.0	107.4
25	108.3	93.0	93.4	95.3	97.7
30	96.3	81.8	81.4	84.7	86.3
35	84.9	71.2	70.1	73.4	75.0
40	74.1	61.3	60.3	63.4	65.0
45	63.8	51.9	51.1	54.3	56.5
50	54.3	42.2	41.4	44.9	47.5
55	44.5	32.1	31.8	35.3	38.0
60	34.1	22.7	22.6	26.0	28.6
65	24.2	14.4	14.5	17.5	19.7
70	15.5	7.2	7.5	9.9	12.2
75	7.9	2.6	2.9	4.3	5.8
80	2.9	1.7	1.7	1.2	1.5
85	1.8	1.4	1.6	0.7	0.4
90	1.5	1.3	1.4	0.5	0.3
95	1.3	0.9	0.7	0.3	0.2
100	0.3	1.1	0.8	0.4	0.1
105	0.9	6.1	6.1	0.8	0.1
110	5.9	7.7	5.4	1.4	0.4
115	8.2	7.2	6.2	1.4	0.6
120	11.8	4.5	6.9	0.8	0.4
125	16.9	5.6	7.3	0.4	0.3
130	25.2	13.9	4.2	0.4	0.4
135	41.5	41.9	1.6	0.2	0.3
140	84.6	33.2	1.7	0.3	0.2
145	32.9	17.4	2.2	0.6	0.6
150	17.8	13.6	3.4	1.1	1.3
155	14.0	12.9	6.0	1.9	2.5
160	13.7	14.7	9.0	2.7	7.7
165	16.9	17.8	6.8	2.2	5.5
170	27.8	3.1	0.2	0.2	0.2
175	14.7	1.1	9.5	13.6	15.5
180	0.2	13.1	13.4	14.7	16.7

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTS75527XXXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLTS75527XXXXX		
0-30	115.8	27.2
0-40	178.9	42.1
0-60	291.4	68.5
0-90	359.8	84.6
60-90	68.4	16.1
0-180	425.4	100.0

Beam Angle

Total Beam Angle(°)

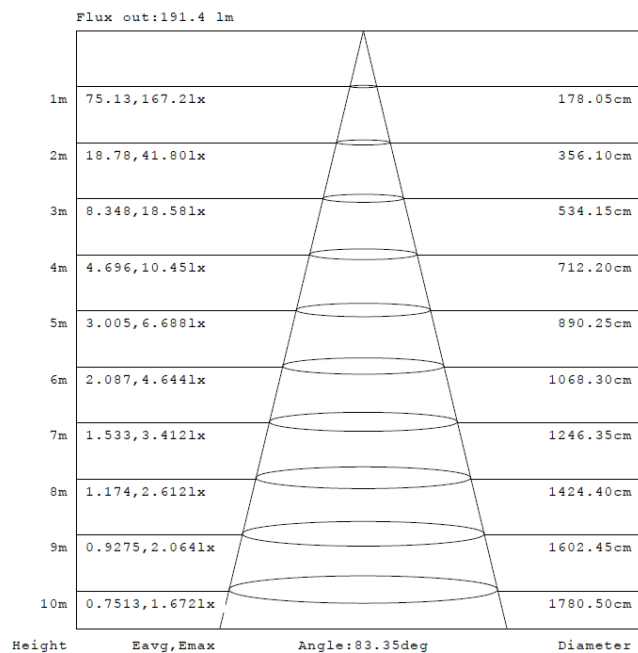
273.1

Illumination Plots

Model No.: SLTS75527XXXXX

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

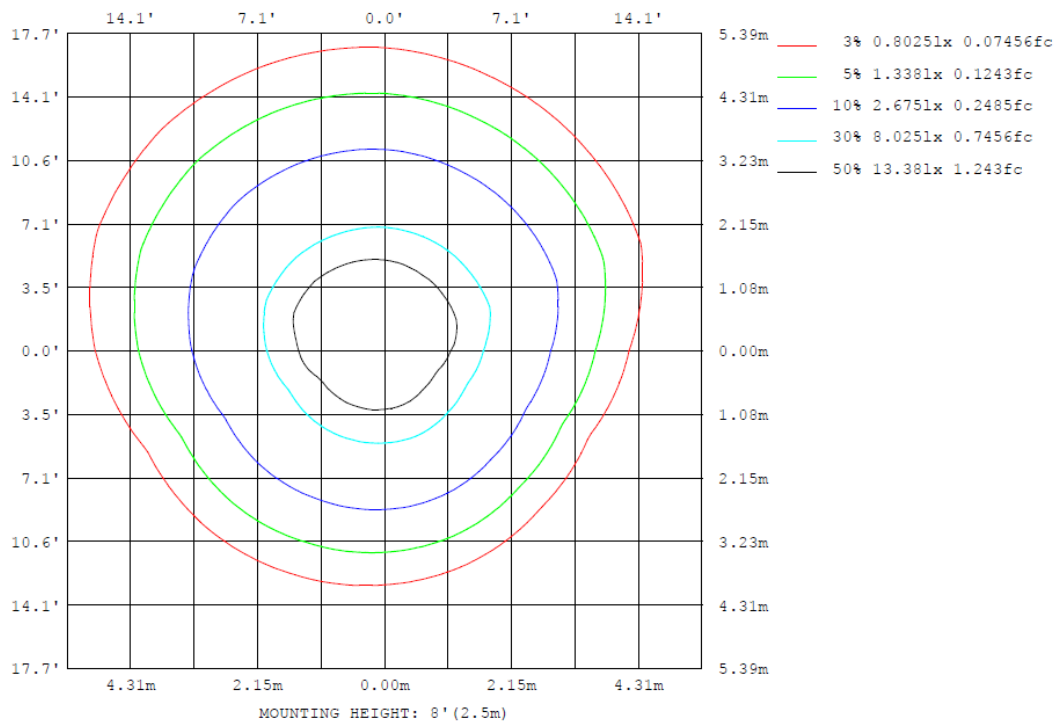
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTS75527XXXXX

Model No.: SLTS75527XXXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTS75527XXXXX

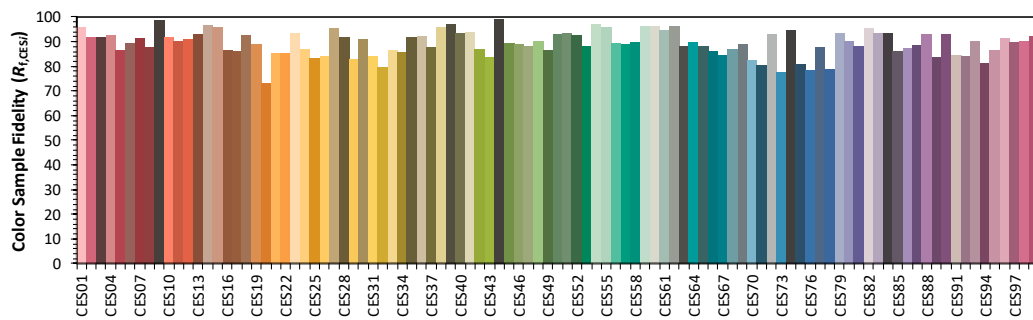
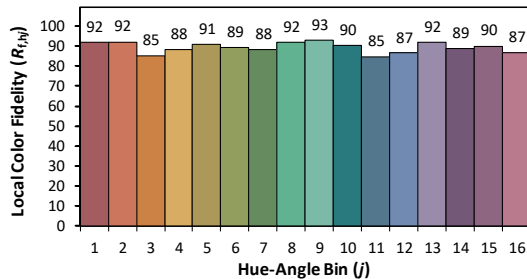
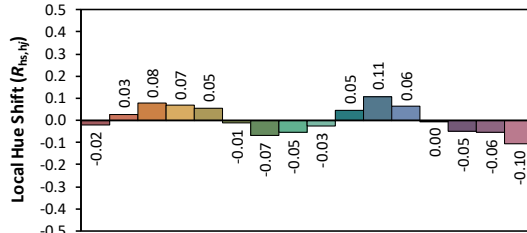
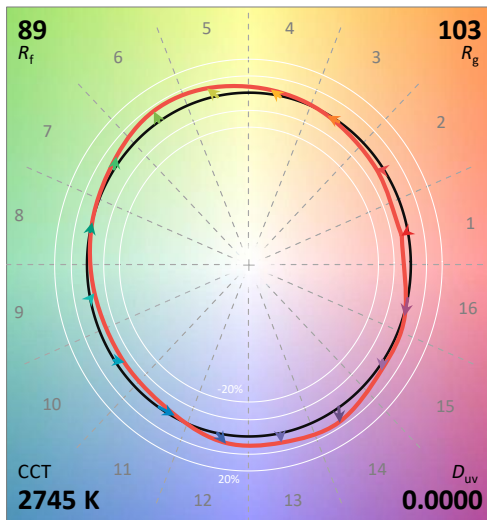
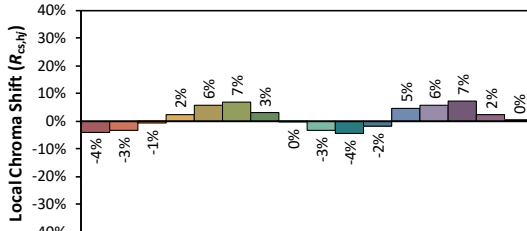
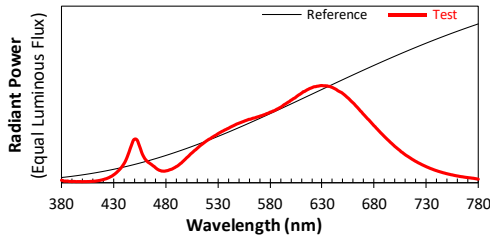
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/15

Model: SLTS75527XXXXX



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

x 0.4561
 y 0.4096
 u' 0.2605
 v' 0.5264

CIE 13.3-1995
(CRI)
 R_a 91
 R_g 68

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 SLTS75527XXXXX



View of LED

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PTB10W-0200-38-VCC1(AB2612)

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****