

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250821045GZU-001

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None

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Report No.: 250821045GZU-001

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLFM56527CCXXX

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 SLFM56527CCXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250821045-002.

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: 05 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:	SLFM56527CCXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLFM56527CCXXX

Criteria	Result
Total Lumen Output	2882.1 lm
Total Power	32.5 W
Luminaire Efficacy	88.6 lm/W
S/MH(C0/180)	1.14
S/MH(C90/270)	1.42
Correlated Color Temperature (CCT)	2716 K
Color Rendering Index (CRI)	94
R9	65
Chromaticity Coordinate (x)	0.4574
Chromaticity Coordinate (y)	0.4081
Chromaticity Coordinate (u')	0.2620
Chromaticity Coordinate (v')	0.5260

Remark:

N/A

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

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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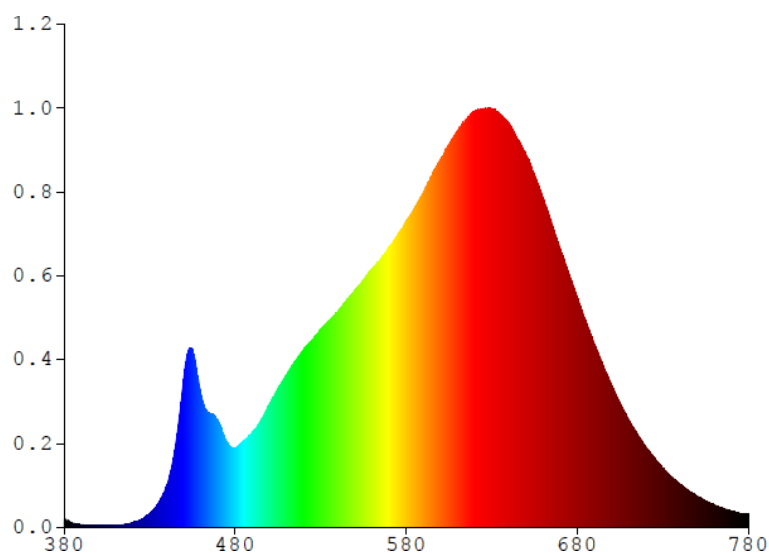
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLFM56527CCXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	3.7716	480	37.2100	580	143.040	680	107.3400	780	6.3183
385	1.8074	485	40.1190	585	149.160	685	96.3800		
390	1.1740	490	44.2830	590	156.030	690	85.4720		
395	1.0605	495	50.0070	595	163.800	695	75.8250		
400	0.8012	500	57.4360	600	171.420	700	66.4740		
405	0.8099	505	64.6550	605	178.530	705	58.1660		
410	1.0739	510	71.0220	610	184.960	710	50.2760		
415	1.3159	515	77.3220	615	190.240	715	43.7890		
420	2.1924	520	82.9470	620	193.880	720	37.6340		
425	3.7035	525	87.3950	625	195.370	725	32.5990		
430	6.3914	530	92.3030	630	195.340	730	27.7670		
435	11.1590	535	96.7440	635	192.360	735	23.7500		
440	19.5220	540	100.5000	640	188.600	740	20.1750		
445	37.4120	545	105.7700	645	181.160	745	17.1740		
450	70.2430	550	110.5500	650	173.980	750	14.6440		
455	82.4470	555	115.5200	655	164.160	755	12.3630		
460	61.8990	560	120.7500	660	153.750	760	10.6330		
465	53.2380	565	124.7500	665	141.990	765	9.0432		
470	49.5350	570	130.8500	670	130.060	770	7.6963		
475	39.9910	575	136.3100	675	116.230	775	6.5392		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56527CCXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

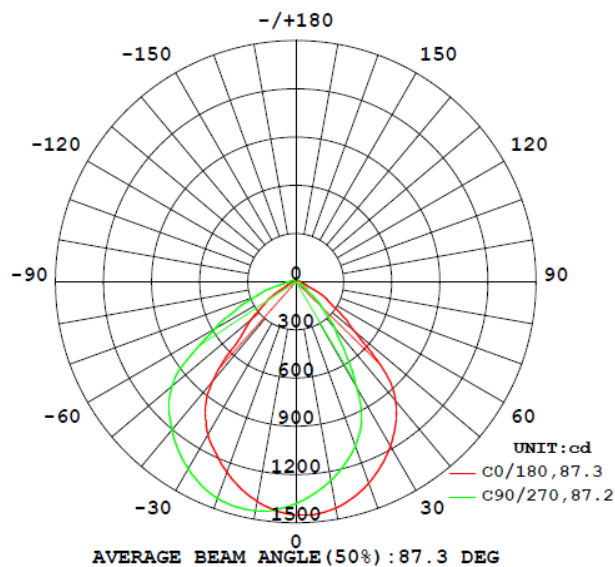
Photometric Measurements at 25°C – Distribution Method

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')
SLFM56527CCXXX								
S2508210 45-002	base-up	2716	94	65	0.4574	0.4081	0.2620	0.5260

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)
SLFM56527CCXXX							
S2508210 45-002	base-up	120.0	273.0	32.5	0.993	2882.1	88.6

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56527CCXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	1450.7	1438.5	1401.6	1396.2	1380.2
5	1450.5	1403.2	1349.6	1343.0	1323.4
10	1429.8	1350.3	1283.6	1279.0	1257.2
15	1389.5	1282.4	1205.4	1203.6	1177.8
20	1332.9	1203.0	1112.5	1115.4	1086.1
25	1262.5	1108.8	999.2	1008.2	970.1
30	1180.8	996.5	815.1	829.7	758.8
35	1086.0	824.1	599.7	587.2	539.9
40	969.9	567.3	398.7	408.9	381.1
45	772.8	399.2	258.3	267.5	240.6
50	478.2	255.9	137.5	191.6	141.0
55	332.3	145.8	73.8	89.7	73.7
60	232.0	76.5	50.0	61.4	49.8
65	150.1	51.4	32.3	38.8	31.1
70	77.5	34.4	32.8	31.5	29.8
75	52.8	28.7	28.6	29.8	28.2
80	32.7	27.4	31.4	32.5	27.9
85	30.4	34.8	27.1	30.3	26.3
90	33.0	30.5	28.3	27.6	25.7
95	32.6	27.4	22.6	22.8	22.6
100	29.7	23.7	7.9	9.0	8.7
105	27.5	6.4	0.4	0.9	0.4
110	19.3	0.4	0.5	0.5	0.5
115	5.2	0.5	0.7	0.7	0.8
120	0.4	0.7	0.9	0.9	1.0
125	0.5	0.9	1.2	1.2	1.3
130	0.7	1.2	1.4	1.4	1.5
135	1.0	1.4	1.6	1.7	1.7
140	1.2	1.6	1.9	1.9	1.9
145	1.5	1.8	2.0	2.0	2.0
150	1.7	2.0	2.1	2.1	2.1
155	1.9	2.1	2.1	2.1	2.1
160	2.0	2.1	2.1	2.1	2.1
165	2.1	2.1	2.0	2.0	2.0
170	2.1	2.0	1.8	1.8	1.7
175	2.1	1.8	1.5	1.5	1.5
180	2.0	1.6	1.5	1.5	1.4

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56527CCXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLFM56527CCXXX		
0-30	1042.9	36.2
0-40	1619.0	56.2
0-60	2496.8	86.6
0-90	2816.3	97.7
60-90	319.5	11.1
0-180	2882.1	100.0

Beam Angle

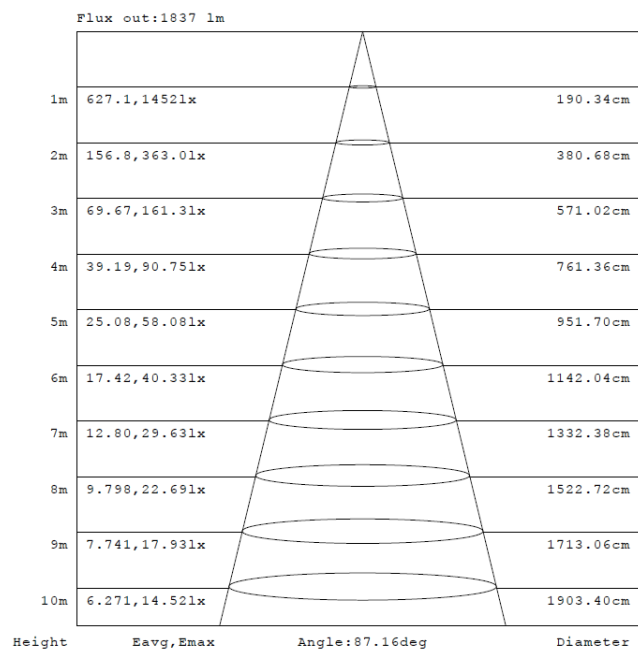
Total Beam Angle(°)
87.3

Illumination Plots

Model No.: SLFM56527CCXXX

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

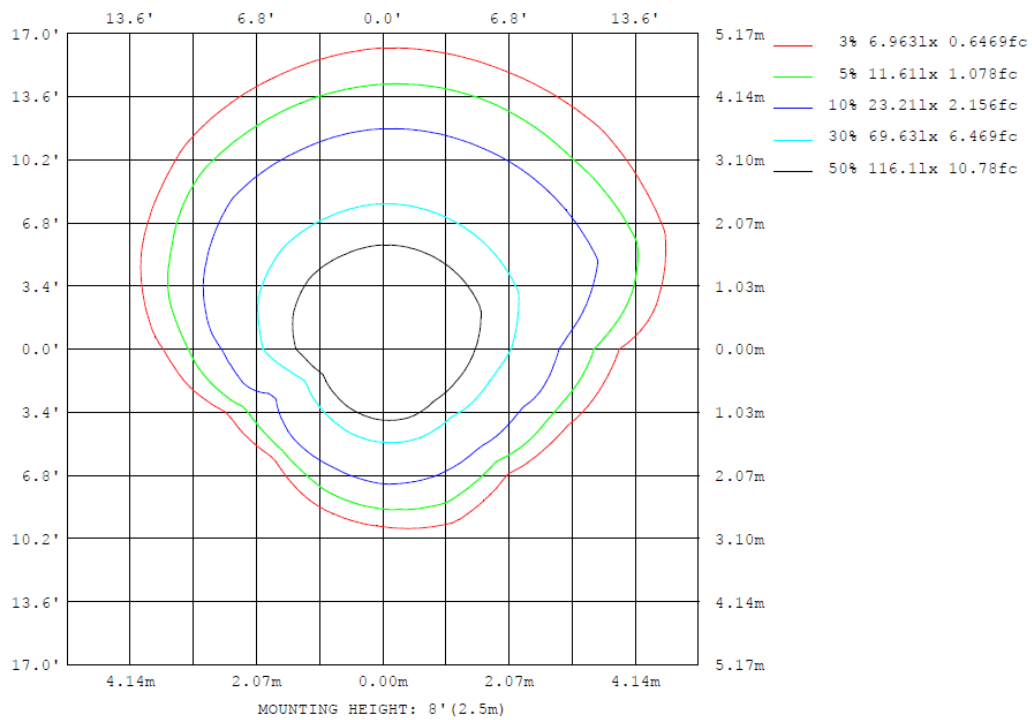
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56527CCXXX

Model No.: SLFM56527CCXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFM56527CCXXX

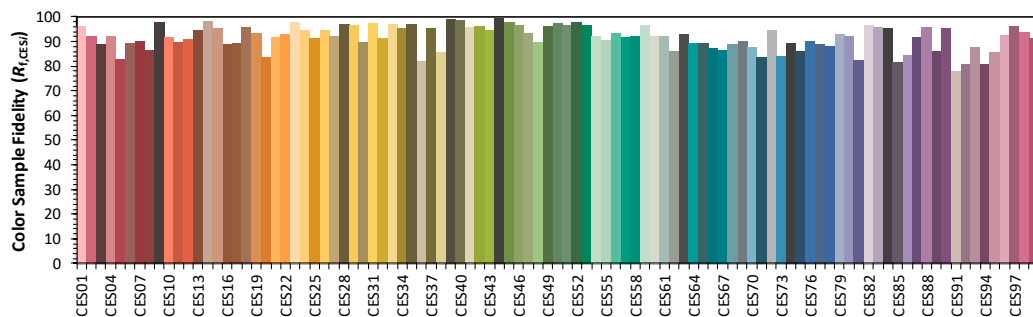
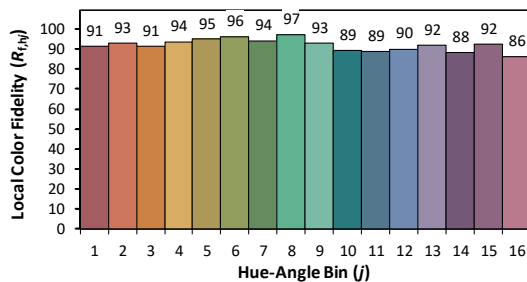
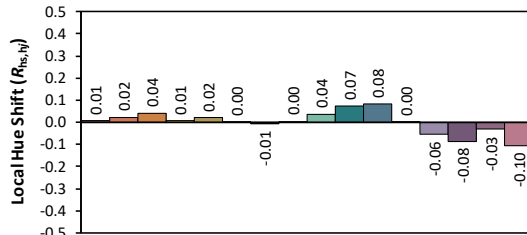
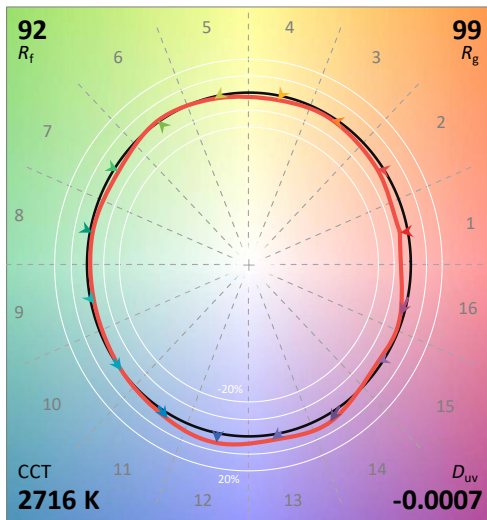
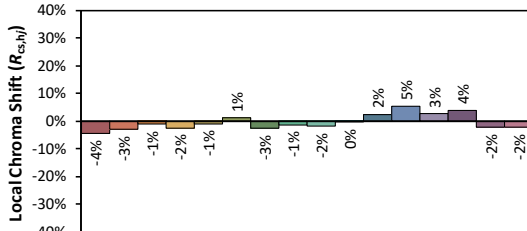
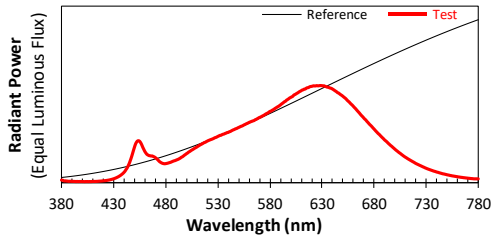
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/9/5

Model: SLFM56527CCXXX



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

x 0.4574
 y 0.4081
 u' 0.2620
 v' 0.5260

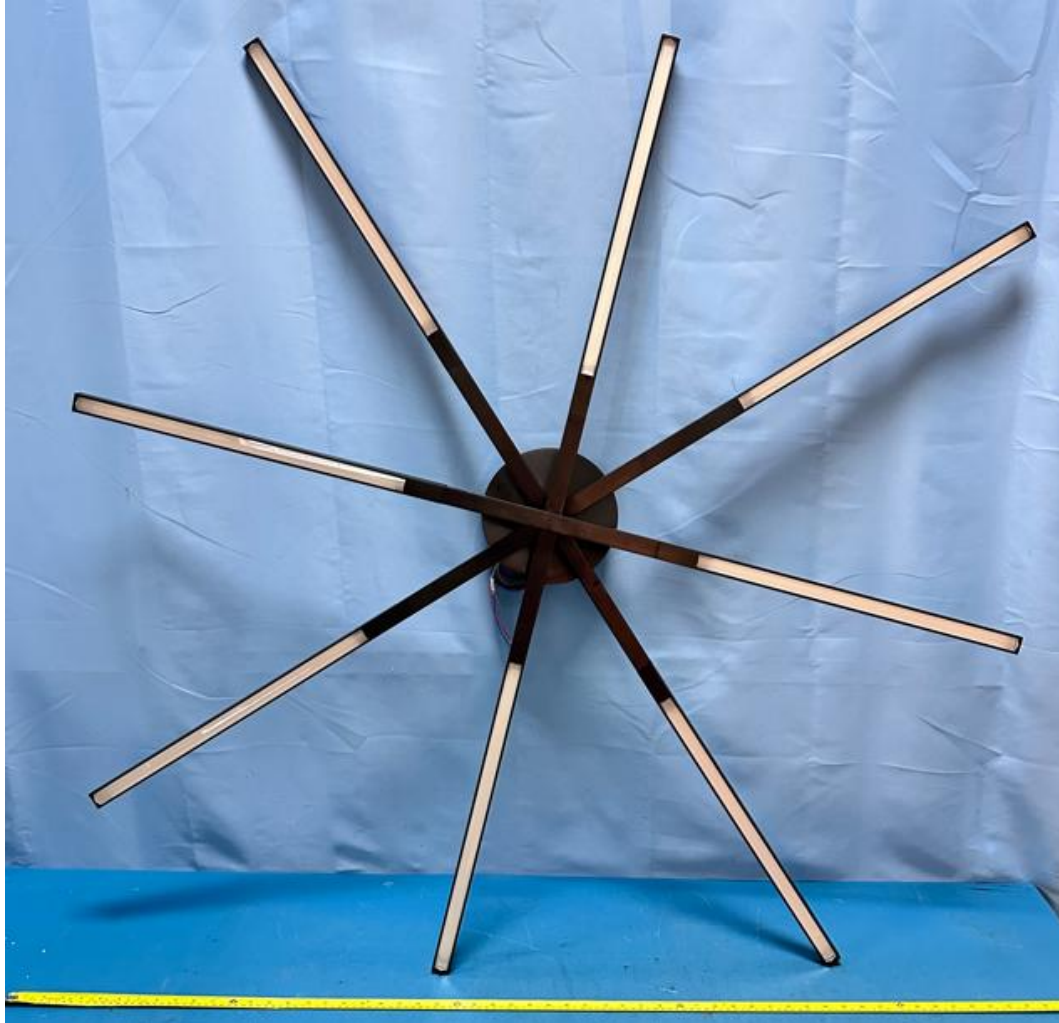
CIE 13.3-1995
(CRI)
 R_a 94
 R_g 65

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 SLFM56527CCXXX

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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLFM56527CCXXX

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

TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PVD36-C090V40-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 *****