

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-020

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 251027067GZU-020

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. PBL80827XXXEG

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: QGZ251023107.

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 PBL80827XXXEG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-026.

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 February 2026

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:	PBLS80827XXXEG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For PBLS80827XXXEG

Criteria	Result
Total Lumen Output	763.6 lm
Total Power	13.1 W
Luminaire Efficacy	58.2 lm/W
S/MH(C0/180)	1.40
S/MH(C90/270)	1.67
Correlated Color Temperature (CCT)	2650 K
Color Rendering Index (CRI)	96
R9	70
Chromaticity Coordinate (x)	0.4653
Chromaticity Coordinate (y)	0.4139
Chromaticity Coordinate (u')	0.2646
Chromaticity Coordinate (v')	0.5294

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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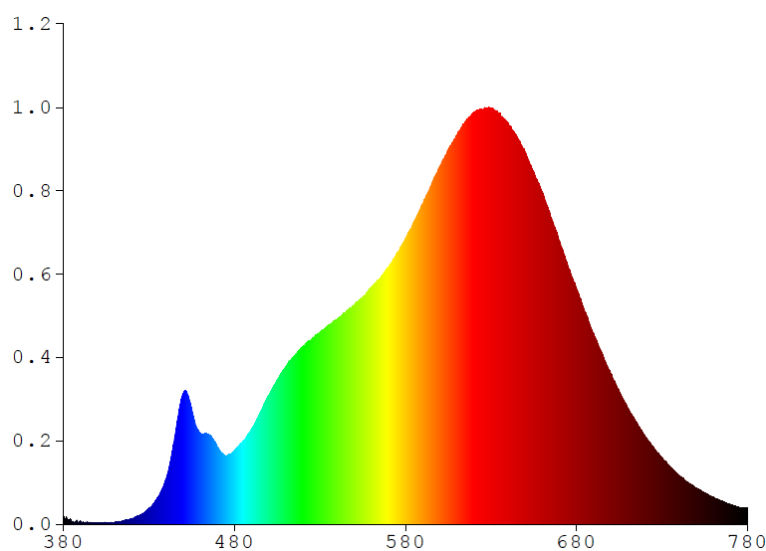
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For PBL80827XXXEG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.5419	480	7.2080	580	27.8470	680	22.9570	780	1.6110
385	0.1773	485	8.1309	585	29.4940	685	20.6480		
390	0.3296	490	9.2591	590	31.1970	690	18.5790		
395	0.1928	495	10.9050	595	33.0280	695	16.5750		
400	0.1509	500	12.5650	600	34.7720	700	14.6900		
405	0.2050	505	14.0850	605	36.4710	705	12.9450		
410	0.1935	510	15.3500	610	37.8890	710	11.3470		
415	0.3769	515	16.4180	615	39.2050	715	9.9350		
420	0.5704	520	17.3580	620	40.1490	720	8.6271		
425	0.9440	525	18.0150	625	40.3450	725	7.5248		
430	1.5309	530	18.6980	630	40.5070	730	6.4765		
435	2.5725	535	19.3830	635	39.9150	735	5.5659		
440	4.4587	540	20.0080	640	39.0710	740	4.7521		
445	8.3518	545	20.6110	645	37.7650	745	4.1105		
450	12.7690	550	21.3430	650	36.2420	750	3.5674		
455	11.1820	555	22.0810	655	34.3470	755	3.0487		
460	8.8795	560	23.0910	660	32.3710	760	2.6451		
465	8.7852	565	23.9580	665	29.9150	765	2.2500		
470	7.5394	570	25.0540	670	27.6160	770	1.9421		
475	6.7101	575	26.4710	675	24.7130	775	1.6550		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL80827XXXEG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

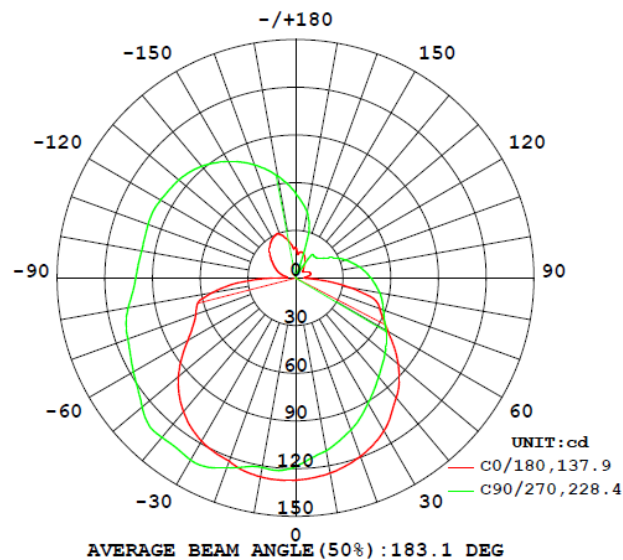
Photometric Measurements at 25°C – Distribution Method

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')
PBL80827XXXEG								
S2510270 67-026	base-up	2650	96	70	0.4653	0.4139	0.2646	0.5294

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)
PBL80827XXXEG							
S2510270 67-026	base-up	120.2	110.2	13.1	0.99	763.6	58.2

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL80827XXXEG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	127.2	123.1	119.7	119.9	118.5
5	126.2	120.1	119.0	115.6	113.8
10	124.6	117.2	115.5	111.5	110.4
15	122.3	115.0	110.9	107.8	106.1
20	119.4	112.2	106.5	102.6	101.8
25	115.7	107.7	101.3	97.5	96.8
30	111.1	101.7	94.4	91.3	91.1
35	104.9	94.5	86.9	85.5	86.0
40	98.5	87.8	78.9	80.6	81.3
45	92.2	79.6	71.9	75.9	77.2
50	84.2	69.5	65.9	71.7	73.6
55	75.7	58.8	60.0	67.9	69.8
60	67.2	49.0	54.9	63.8	65.7
65	60.8	40.8	50.6	59.7	61.7
70	56.4	34.3	46.5	56.2	58.7
75	51.1	28.9	42.8	53.7	56.5
80	34.7	24.1	40.0	51.2	53.8
85	17.4	20.8	37.9	48.4	50.5
90	5.7	19.3	35.9	45.5	47.4
95	5.9	18.8	34.0	42.7	44.3
100	8.3	18.5	32.0	39.5	40.8
105	9.9	18.0	29.7	36.2	37.2
110	9.8	17.3	27.2	32.8	33.5
115	9.0	16.4	24.5	29.3	29.7
120	7.6	15.3	21.9	25.6	25.7
125	6.6	14.6	19.5	22.2	22.1
130	6.2	14.8	17.8	19.5	19.4
135	6.6	15.3	17.3	18.2	18.3
140	7.7	15.9	17.3	18.0	18.0
145	9.7	13.3	18.0	18.5	18.4
150	12.0	6.5	11.8	8.9	6.6
155	14.1	4.7	4.7	4.4	4.5
160	15.7	4.6	4.8	9.5	2.6
165	16.8	7.6	12.9	18.6	32.8
170	16.6	16.0	20.5	34.7	42.3
175	15.2	18.6	31.8	45.4	47.9
180	18.9	24.7	43.2	51.2	53.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBLS80827XXXEG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
PBLS80827XXXEG		
0-30	97.7	12.8
0-40	165.0	21.6
0-60	318.7	41.7
0-90	519.5	68.0
60-90	200.8	26.3
0-180	763.6	100.0

Beam Angle

Total Beam Angle(°)

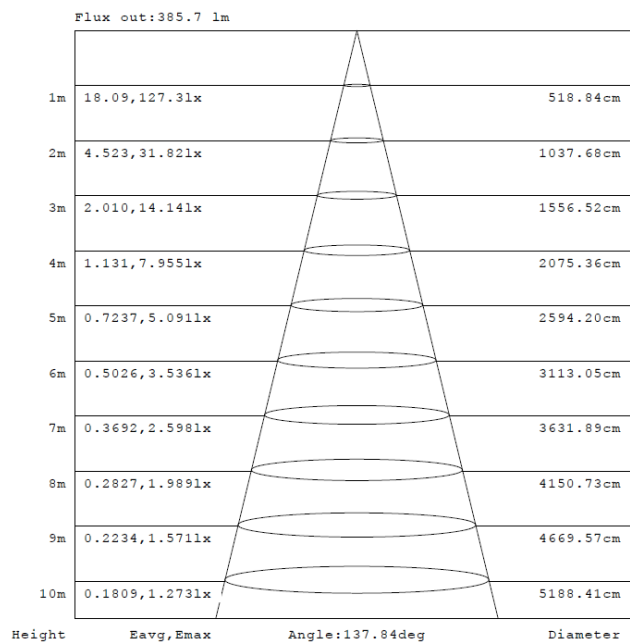
183.1

Illumination Plots

Model No.: PBLS80827XXXEG

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

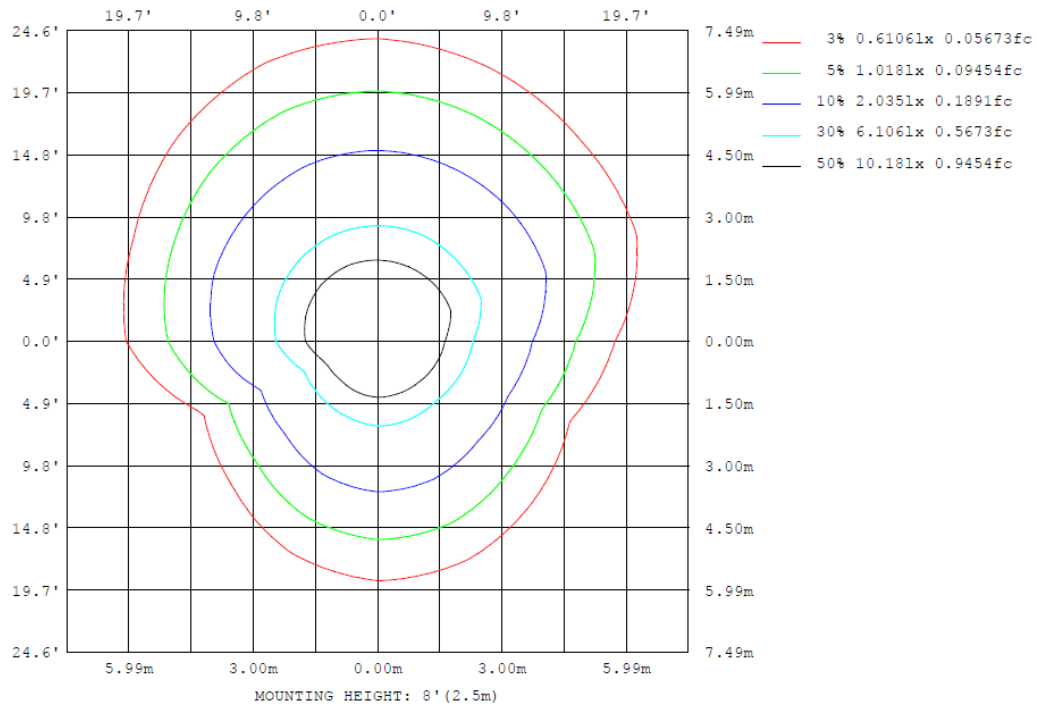
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL80827XXXEG

Model No.: PBL80827XXXEG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL80827XXXEG

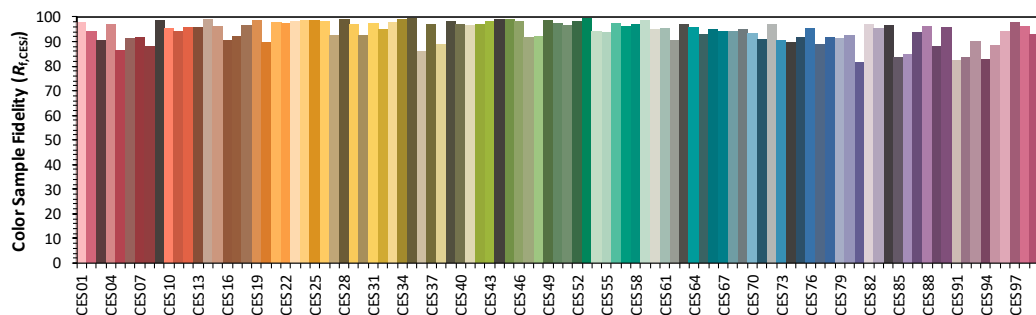
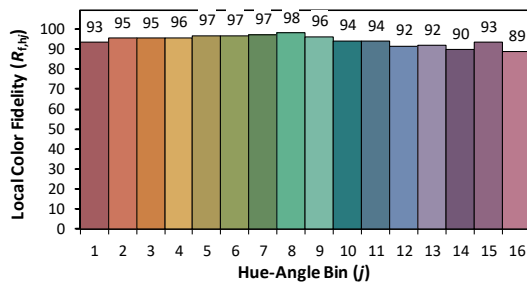
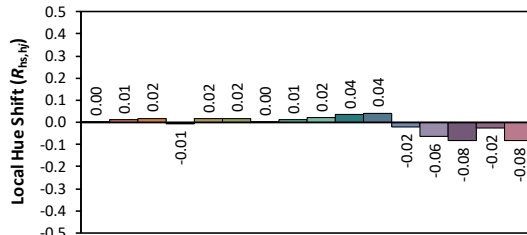
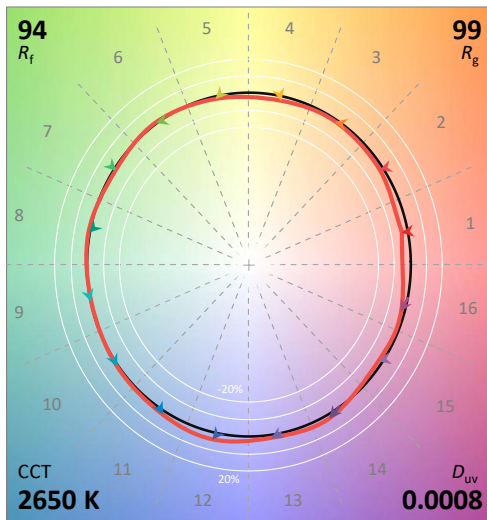
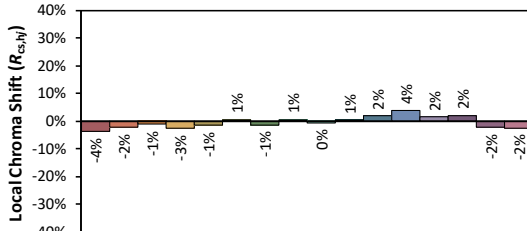
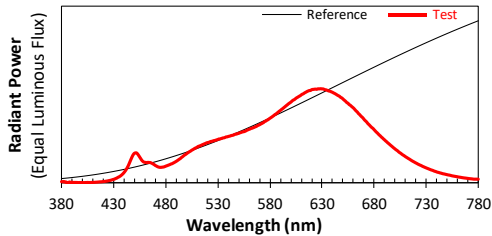
ANSI/IES+B3:X17 TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2026/2/5

Model: PBL80827XXXEG



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

x 0.4653
 y 0.4139
 u' 0.2646
 v' 0.5294

CIE 13.3-1995
(CRI)
 R_a 96
 R_g 70

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

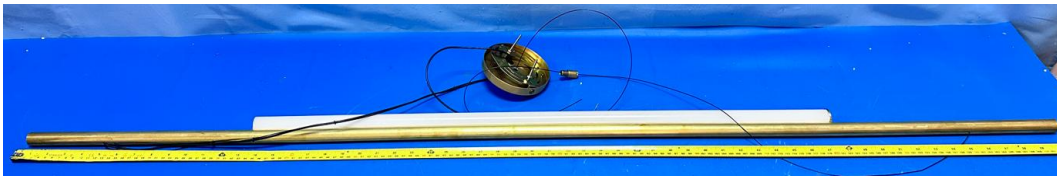
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of PBL80827XXXEG



External view of PBL80827XXXEG

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver 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 *****