

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250625080GZU-010

ISSUE DATE

26 August 2025

REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

© 2024 INTERTEK



Report No.: 250625080GZU-010

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. MDPD73427XX

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

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

7400 LINDER AVE. SKOKIE, IL, 60077

Email: jrivero@visualcomfort.com

Phone No.: 847-410-4552

<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: QGZ250611134.
<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 MDPD73427XX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250625080-009.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	Shao Guan Weng Yuan Pearly Gates Furniture Manufacturing Co., Ltd. GuanYing Industrial Park, GuanDu Economic Development Experimental Zone, Weng Yuan County, Guang Dong Province, PRC. 512625.
<u>DATES OF TESTS:</u>	15 August 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

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

TEST REPORT

SUMMARY

Model Number:	MDPD73427XX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For MDPD73427XX

Criteria	Result
Total Lumen Output	1162.2 lm
Total Power	12.7 W
Luminaire Efficacy	91.7 lm/W
S/MH(C0/180)	0.56
S/MH(C90/270)	0.53
Correlated Color Temperature (CCT)	2463 K
Color Rendering Index (CRI)	92
R9	54
Chromaticity Coordinate (x)	0.4815
Chromaticity Coordinate (y)	0.4160
Chromaticity Coordinate (u')	0.2740
Chromaticity Coordinate (v')	0.5327

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

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

When determining for test conclusion, measurement uncertainty of tests has been considered.

Throughout this report a ☐ comma ☒ point is used as the decimal separator.

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

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

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

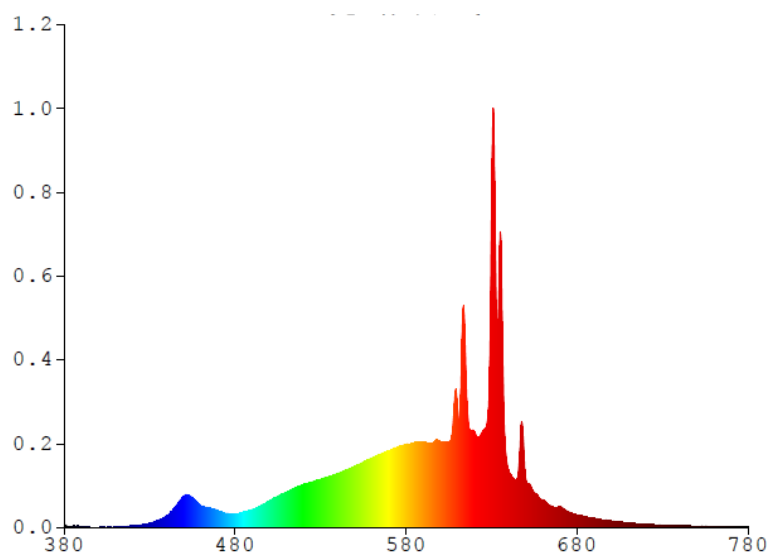
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For MDPD73427XX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	2.2312	480	23.7560	580	142.730	680	22.1910	780	1.1349
385	1.3204	485	26.5100	585	146.190	685	18.9410		
390	1.2766	490	30.6620	590	146.100	690	16.0320		
395	0.8533	495	37.3950	595	144.450	695	13.6050		
400	0.1993	500	45.6220	600	146.840	700	11.4830		
405	0.4901	505	53.5290	605	146.720	705	9.7587		
410	1.0368	510	60.9950	610	207.630	710	8.1483		
415	1.5006	515	68.1180	615	268.280	715	6.9197		
420	2.5651	520	73.7870	620	164.720	720	6.0412		
425	4.5426	525	78.1770	625	165.570	725	5.0100		
430	7.5956	530	82.9070	630	551.600	730	4.3514		
435	12.2110	535	87.5150	635	503.900	735	3.7000		
440	20.2210	540	92.6520	640	97.5430	740	3.1688		
445	34.7610	545	98.5400	645	83.8180	745	2.7372		
450	53.8880	550	104.9200	650	85.0740	750	2.3200		
455	50.6790	555	112.8400	655	59.8530	755	2.1521		
460	37.9920	560	119.2600	660	47.6080	760	1.6674		
465	33.6920	565	125.2400	665	36.7600	765	1.5790		
470	28.7120	570	132.9000	670	36.5060	770	1.2882		
475	24.0870	575	138.0000	675	25.6560	775	1.1577		



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPD73427XX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

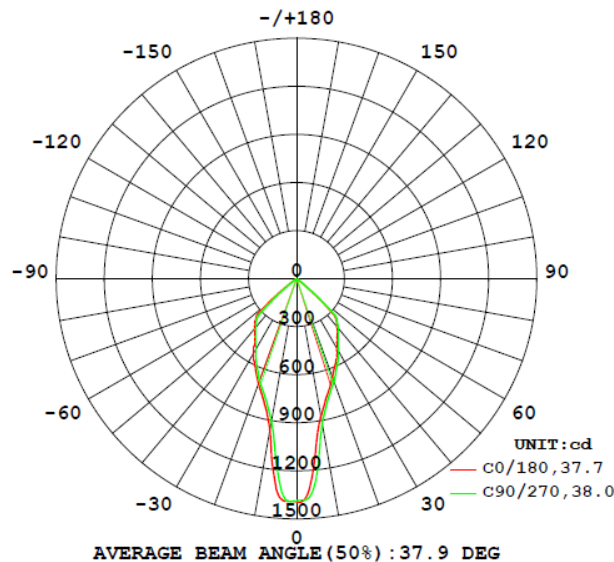
Photometric Measurements at 25°C – Distribution Method

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')
MDPD73427XX								
S2506250 80-009	base-up	2463	92	54	0.4815	0.4160	0.2740	0.5327

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	Lumen
						Flux (Lumens)	Efficacy (Lumens Per Watt)
MDPD73427XX							
S2506250 80-009	base-up	120.1	106.6	12.7	0.990	1162.2	91.7

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPD73427XX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	329.3	329.6	329.3	328.7	328.1
5	284.8	275.1	288.6	300.0	306.5
10	207.1	202.5	206.0	213.0	218.6
15	176.9	173.2	175.5	179.9	182.7
20	155.2	152.7	155.8	159.1	161.8
25	136.8	135.1	137.4	139.5	141.8
30	118.4	116.0	117.9	121.5	123.9
35	104.4	103.0	104.4	106.2	108.0
40	93.0	91.8	93.0	94.5	95.8
45	81.3	78.9	81.1	82.8	83.9
50	21.1	15.3	19.8	25.3	30.7
55	2.2	2.0	2.1	2.3	2.4
60	1.7	1.6	1.6	1.8	1.9
65	1.3	1.2	1.3	1.4	1.5
70	0.9	0.9	0.9	1.0	1.1
75	0.5	0.4	0.5	0.6	0.6
80	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0
125	0.1	0.1	0.1	0.1	0.1
130	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1
140	0.1	0.1	0.1	0.1	0.1
145	0.2	0.2	0.2	0.2	0.2
150	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2
160	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2
170	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2
180	0.2	0.2	0.2	0.2	0.2

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPD73427XX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
MDPD73427XX		
0-30	597.5	51.4
0-40	881.6	75.9
0-60	1151.9	99.1
0-90	1160.7	99.9
60-90	8.8	0.8
0-180	1162.2	100.0

Beam Angle

Total Beam Angle(°)

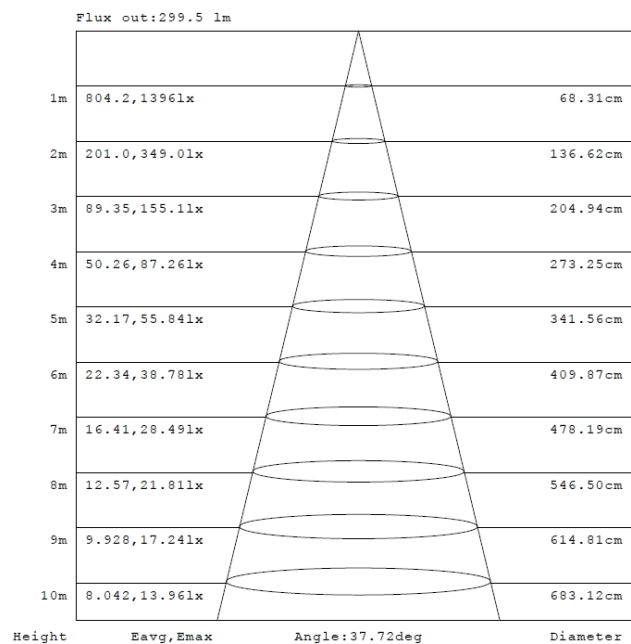
37.9

Illumination Plots

Model No.: MDPD73427XX

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.

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

TEST REPORT

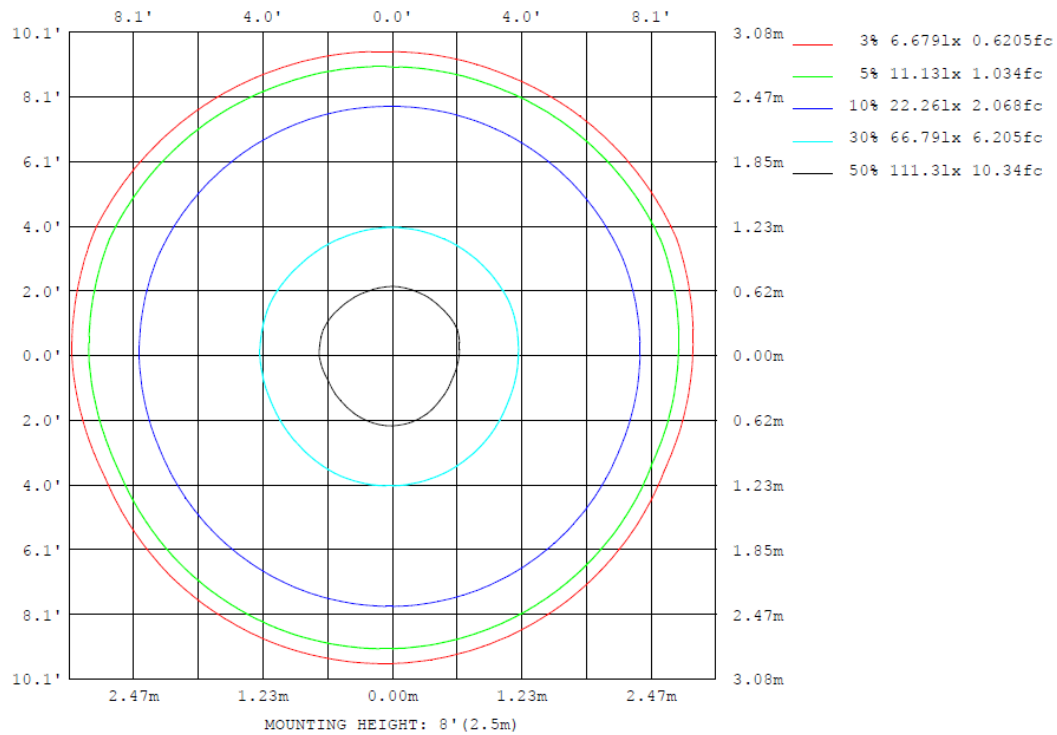
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPD73427XX

Model No.: MDPD73427XX

Mount Height: 2.5 m

Isoillumination Plot



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPD73427XX

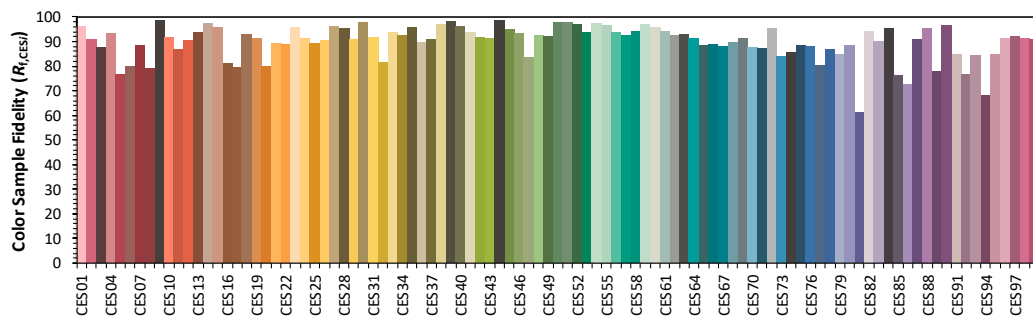
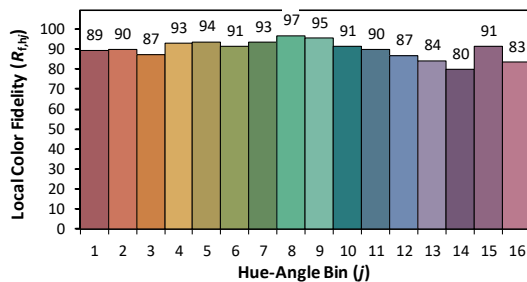
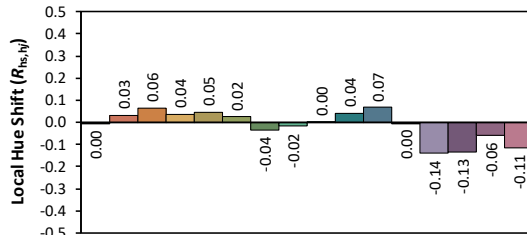
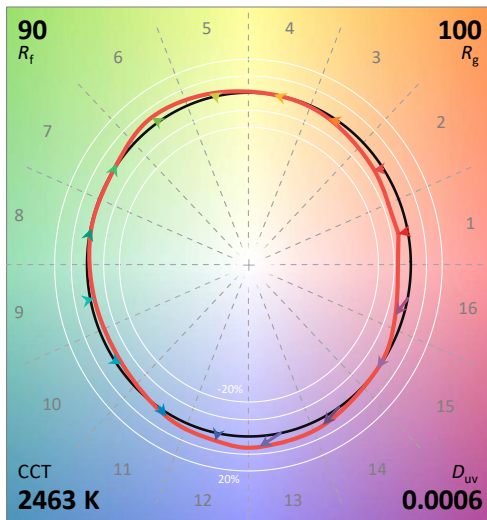
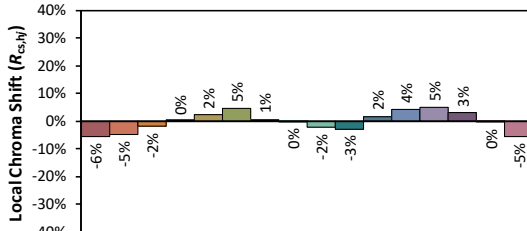
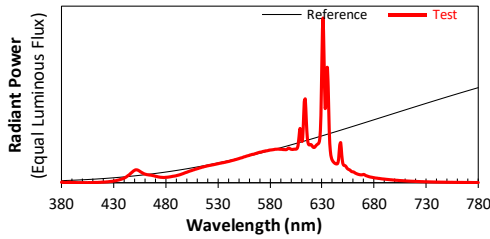
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/8/15

Model: MDPD73427XX



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

x 0.4815
 y 0.4160
 u' 0.2740
 v' 0.5327

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 54

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 MDPD73427XX

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

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 *****