

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250918184GZU-001

ISSUE DATE

09 October 2025

REVISION DATE

None

NUMBER OF PAGES

14

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250918184GZU-001

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. MDOWS73327XX

Remark: "XX" 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: 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 MDOWS73327XX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250918184-001.
<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>	22 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:	MDOWS73327XX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For MDOWS73327XX

Criteria	Result
Total Lumen Output	236.5 lm
Total Power	12.3 W
Luminaire Efficacy	19.3 lm/W
S/MH(C0/180)	1.20
S/MH(C90/270)	1.09
Correlated Color Temperature (CCT)	2702 K
Color Rendering Index (CRI)	94
R9	63
Chromaticity Coordinate (x)	0.4603
Chromaticity Coordinate (y)	0.4117
Chromaticity Coordinate (u')	0.2623
Chromaticity Coordinate (v')	0.5278

Remark:

Modification 1: Based on and superseded the previous report 250625080GZU-004 issued on 26 August 2025.

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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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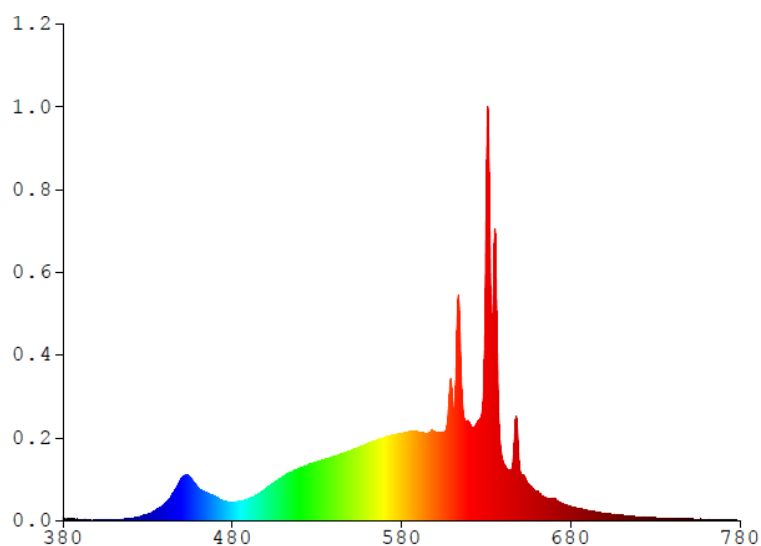
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For MDOWS73327XX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0133	480	0.0720	580	0.3396	680	0.0552	780	0.0007
385	0.0068	485	0.0767	585	0.3467	685	0.0470		
390	0.0034	490	0.0863	590	0.3451	690	0.0404		
395	0.0041	495	0.1034	595	0.3381	695	0.0345		
400	0.0023	500	0.1261	600	0.3425	700	0.0294		
405	0.0019	505	0.1500	605	0.3445	705	0.0249		
410	0.0021	510	0.1718	610	0.4860	710	0.0214		
415	0.0051	515	0.1894	615	0.6332	715	0.0183		
420	0.0096	520	0.2062	620	0.3836	720	0.0157		
425	0.0155	525	0.2187	625	0.3851	725	0.0131		
430	0.0257	530	0.2292	630	1.2200	730	0.0115		
435	0.0408	535	0.2385	635	1.1233	735	0.0102		
440	0.0646	540	0.2503	640	0.2317	740	0.0086		
445	0.1071	545	0.2601	645	0.1991	745	0.0073		
450	0.1645	550	0.2727	650	0.2016	750	0.0063		
455	0.1696	555	0.2853	655	0.1435	755	0.0056		
460	0.1283	560	0.2984	660	0.1152	760	0.0045		
465	0.1094	565	0.3130	665	0.0900	765	0.0044		
470	0.0942	570	0.3239	670	0.0885	770	0.0037		
475	0.0776	575	0.3339	675	0.0637	775	0.0032		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS73327XX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

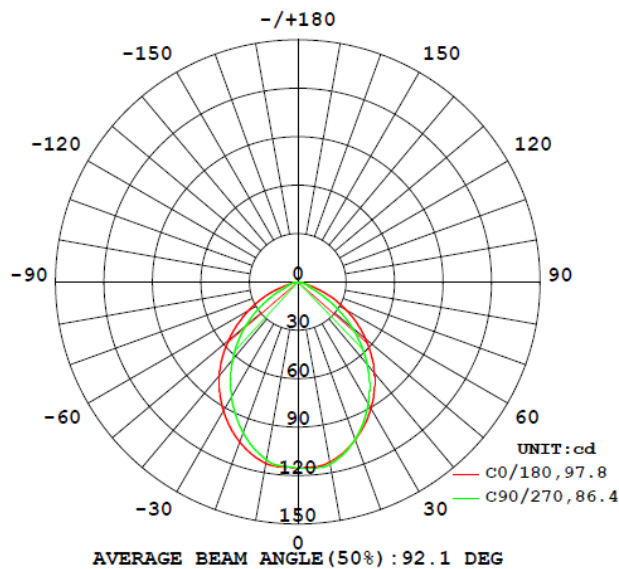
Photometric Measurements at 25°C – Distribution Method

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')
MDOWS73327XX								
S2509181 84-001	base-up	2702	94	63	0.4603	0.4117	0.2623	0.5278

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)
MDOWS73327XX							
S2509181 84-001	base-up	120.1	103.4	12.3	0.988	236.5	19.3

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS73327XX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	115.2	115.2	115.2	115.2	115.2
5	114.9	115.1	115.3	115.5	115.6
10	113.5	114.1	115.4	114.9	114.7
15	109.3	110.5	111.4	110.9	110.1
20	104.0	105.6	105.1	105.1	103.8
25	97.7	98.8	97.3	97.5	96.0
30	90.5	90.8	88.3	88.4	87.1
35	82.5	81.9	78.5	78.4	77.4
40	73.7	72.1	67.9	67.6	66.8
45	64.5	61.7	56.8	56.2	55.6
50	54.7	50.9	45.5	44.4	43.8
55	44.8	40.1	34.1	32.5	31.8
60	34.5	29.5	23.4	20.9	20.0
65	24.2	19.4	13.6	10.6	9.7
70	13.4	9.8	6.1	5.8	6.8
75	4.5	3.2	2.8	3.6	4.0
80	2.5	1.5	1.3	1.7	1.8
85	1.0	0.5	0.4	0.5	0.5
90	0.1	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	0.0	0.0
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	0.1	0.1	0.1	0.1	0.1
150	0.1	0.1	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

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS73327XX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
MDOWS73327XX		
0-30	86.5	36.6
0-40	136.0	57.5
0-60	214.3	90.6
0-90	236.1	99.9
60-90	21.8	9.3
0-180	236.5	100.0

Beam Angle

Total Beam Angle(°)

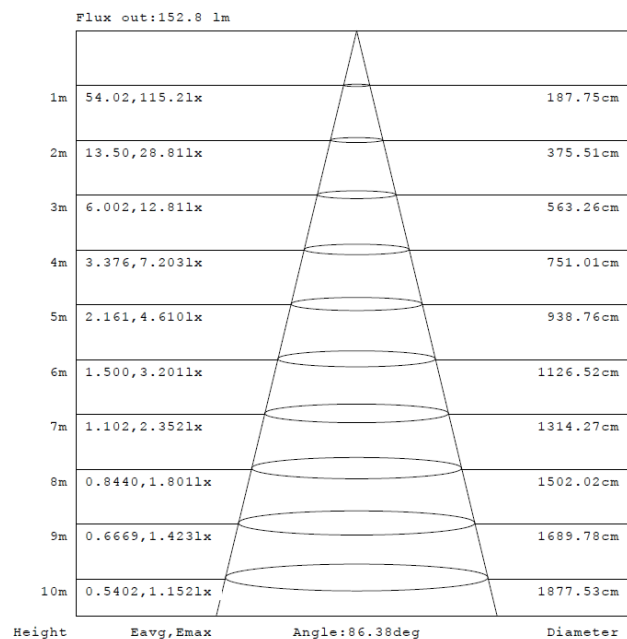
92.1

Illumination Plots

Model No.: MDOWS73327XX

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

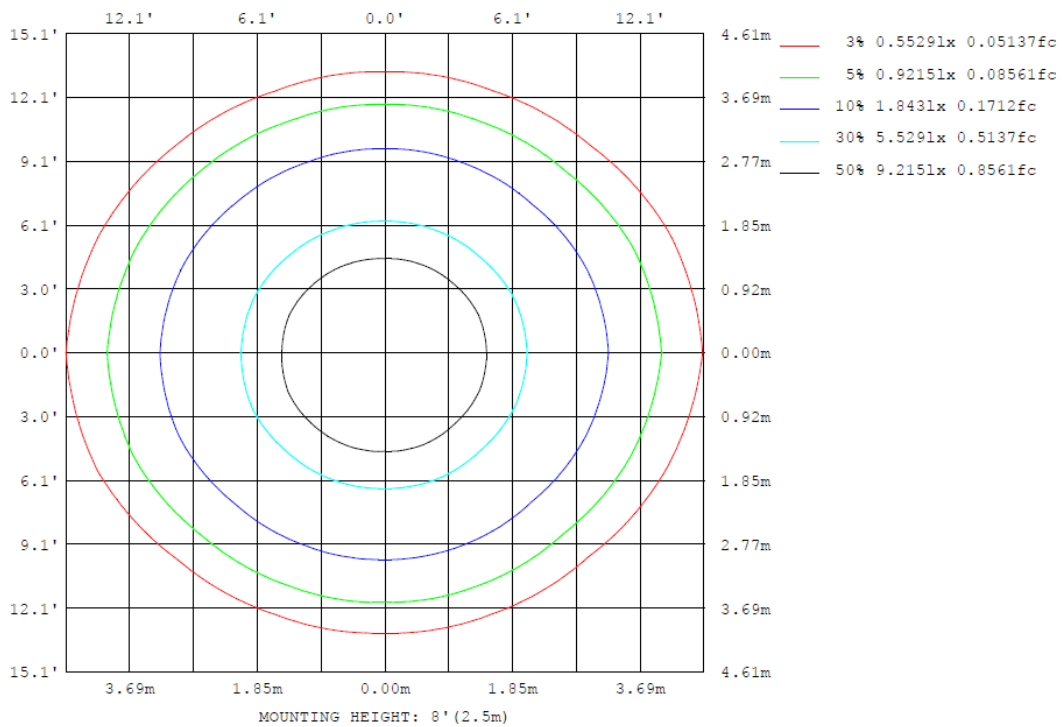
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS73327XX

Model No.: MDOWS73327XX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS73327XX

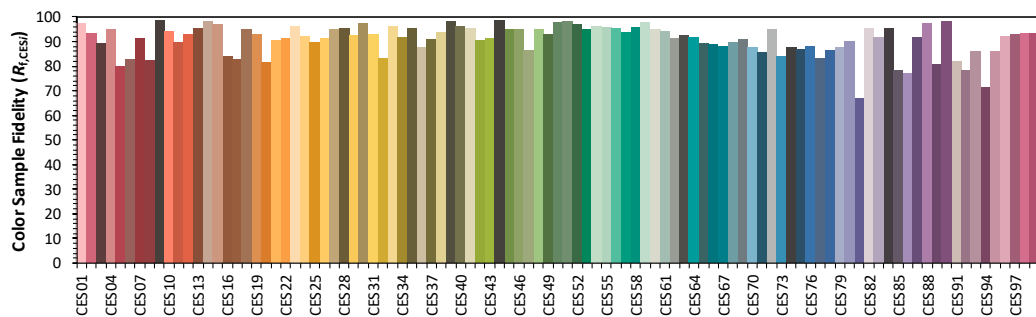
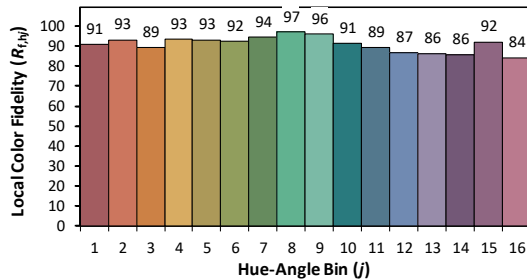
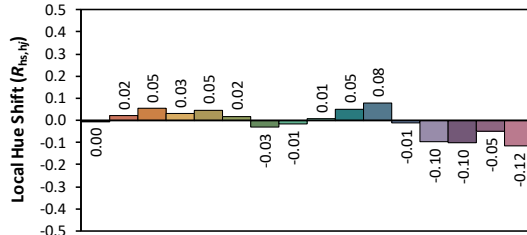
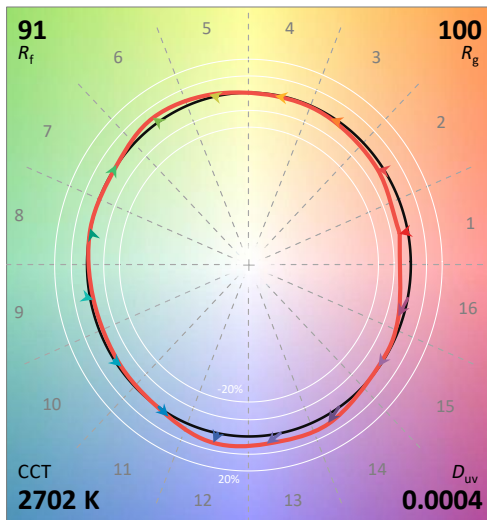
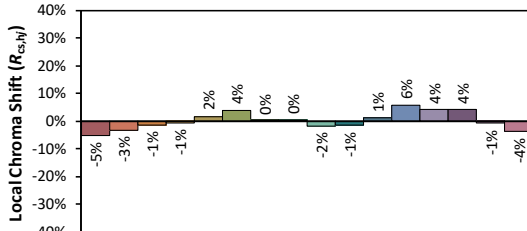
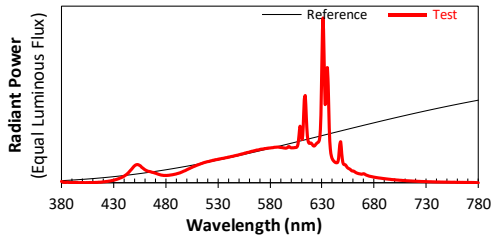
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/9/22

Model: MDOWS73327XX



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

x 0.4603
 y 0.4117
 u' 0.2623
 v' 0.5278

CIE 13.3-1995
(CRI)
 R_a 94
 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)

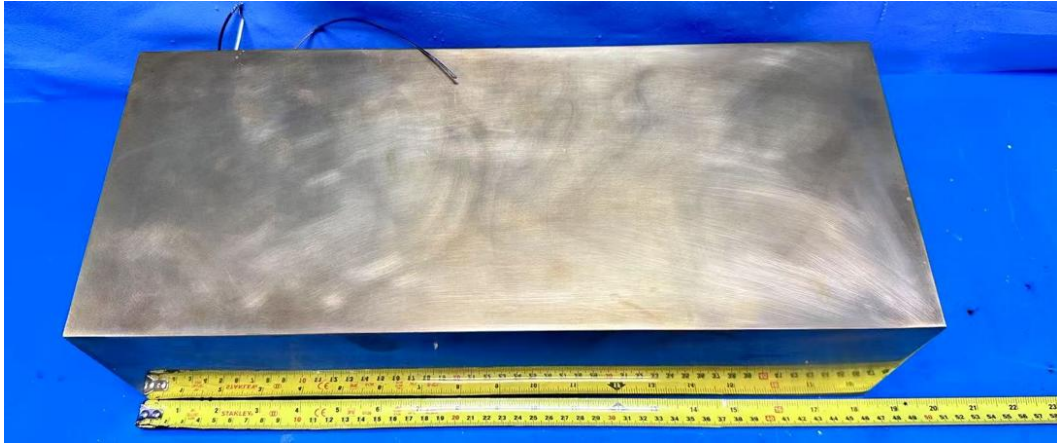


External view of MDOWS73327XX

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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of MDOWS73327XX



View of LED driver PTB15W-0300-38-VCC1 (AB0257)

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

TEST REPORT

PRODUCT PICTURE (not to scale)



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 *****