

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-002

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REVISION DATE

None

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DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251110010GZU-002

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. MDPC79527XXX

Remark: "XXX" 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: QGZ251106008.
<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 MDPC79527XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-001.
<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>	24 November 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:	MDPC79527XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For MDPC79527XXX

Criteria	Result
Total Lumen Output	792.9 lm
Total Power	11.7 W
Luminaire Efficacy	67.6 lm/W
S/MH(C0/180)	1.30
S/MH(C90/270)	1.92
Correlated Color Temperature (CCT)	2538 K
Color Rendering Index (CRI)	93
R9	61
Chromaticity Coordinate (x)	0.4723
Chromaticity Coordinate (y)	0.4110
Chromaticity Coordinate (u')	0.2704
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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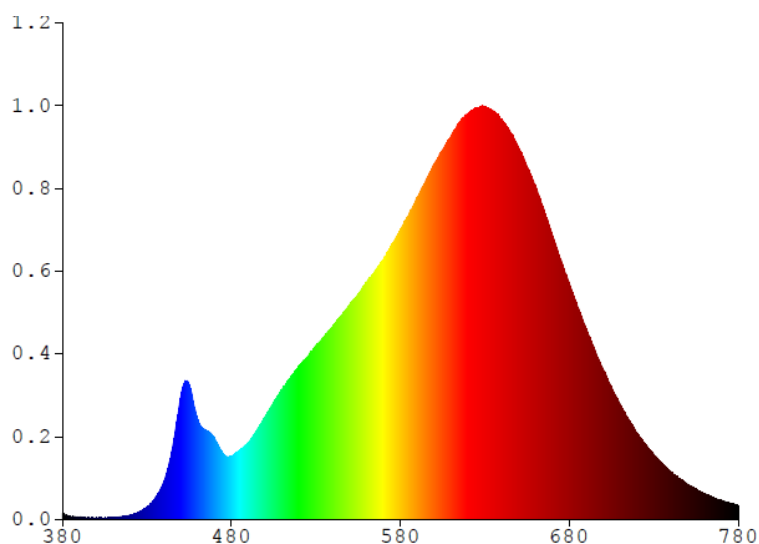
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For MDPC79527XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	1.4803	480	15.8970	580	73.3710	680	59.9170	780	3.5576
385	0.6034	485	17.5460	585	77.1840	685	53.8120		
390	0.5364	490	19.5870	590	81.6170	690	48.3110		
395	0.3295	495	22.4670	595	85.7050	695	42.9790		
400	0.4034	500	26.0510	600	90.1890	700	37.9240		
405	0.3038	505	29.5700	605	93.5240	705	33.4940		
410	0.4701	510	32.9020	610	97.0950	710	29.1400		
415	0.6415	515	35.8230	615	100.720	715	25.4250		
420	1.1493	520	39.0090	620	102.920	720	22.0010		
425	1.8499	525	41.1660	625	104.340	725	19.0410		
430	3.1436	530	43.9710	630	104.620	730	16.4230		
435	5.4579	535	46.4850	635	103.440	735	14.1320		
440	9.5884	540	48.8780	640	101.350	740	12.0760		
445	17.7470	545	51.6500	645	98.2750	745	10.4130		
450	31.0130	550	54.3320	650	94.2440	750	8.9445		
455	34.0280	555	57.0420	655	89.3670	755	7.6990		
460	25.3810	560	60.2250	660	84.4410	760	6.5744		
465	22.5180	565	62.8730	665	78.5130	765	5.7014		
470	20.4110	570	65.9060	670	71.9330	770	4.7936		
475	16.7000	575	69.7950	675	64.5590	775	4.1587		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79527XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

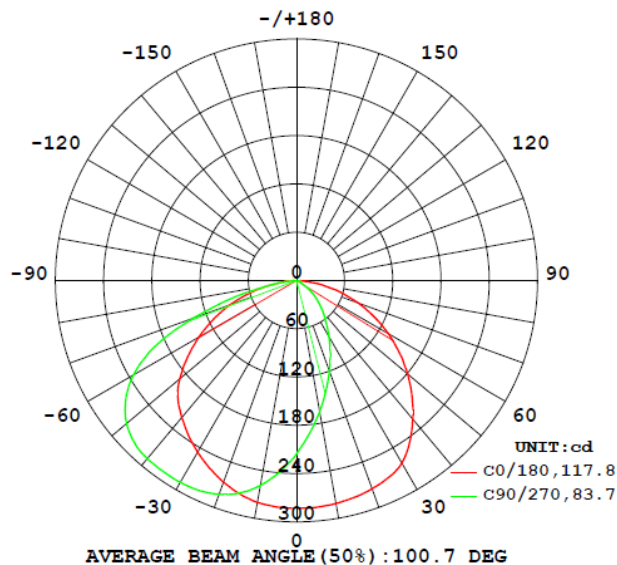
Photometric Measurements at 25°C – Distribution Method

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')
MDPC79527XXX								
S2511100 10-001	base-up	2538	93	61	0.4723	0.4110	0.2704	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	Lumen Efficacy
						Flux (Lumens)	(Lumens Per Watt)
MDPC79527XXX							
S2511100 10-001	base-up	120.1	98.5	11.7	0.99	792.9	67.6

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79527XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	283.0	262.8	241.5	221.5	215.2
5	282.7	253.1	223.7	198.1	190.3
10	281.3	239.9	203.6	174.3	165.5
15	278.9	220.6	180.6	151.1	141.9
20	275.3	199.0	156.3	129.0	119.9
25	270.4	175.1	132.6	108.0	99.5
30	262.2	149.9	110.0	88.3	81.1
35	245.5	124.5	88.7	70.4	65.0
40	225.1	99.6	68.9	55.4	51.6
45	203.2	75.5	52.0	42.0	39.5
50	180.2	53.3	37.1	30.2	28.7
55	156.2	33.5	24.1	19.5	19.0
60	131.8	18.1	13.4	8.7	7.4
65	106.7	6.9	5.9	5.6	5.4
70	81.3	3.1	3.9	6.3	6.4
75	56.2	0.0	0.1	0.0	0.1
80	31.8	0.1	0.0	0.0	0.0
85	9.9	0.0	0.0	0.0	0.0
90	0.2	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	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79527XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
MDPC79527XXX		
0-30	186.3	23.5
0-40	307.4	38.8
0-60	569.8	71.9
0-90	786.2	99.2
60-90	216.4	27.3
0-180	792.9	100.0

Beam Angle

Total Beam Angle(°)

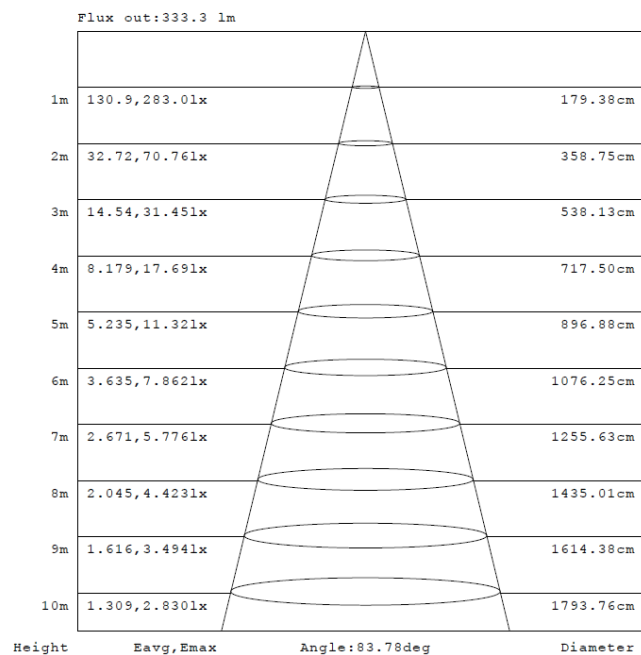
100.7

Illumination Plots

Model No.: MDPC79527XXX

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

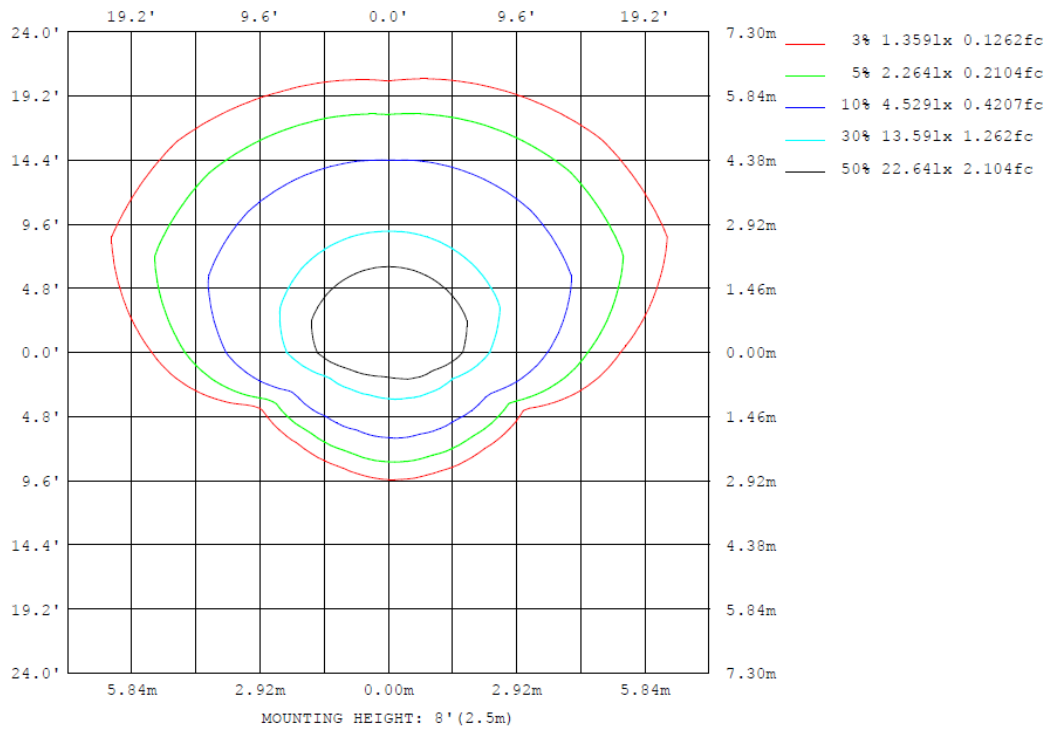
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79527XXX

Model No.: MDPC79527XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79527XXX

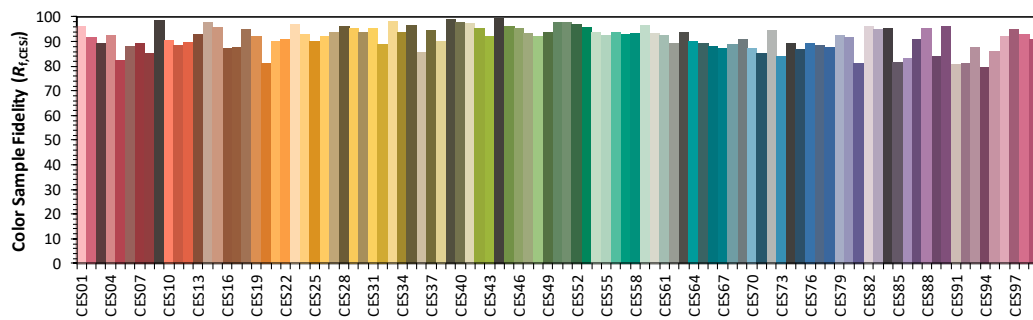
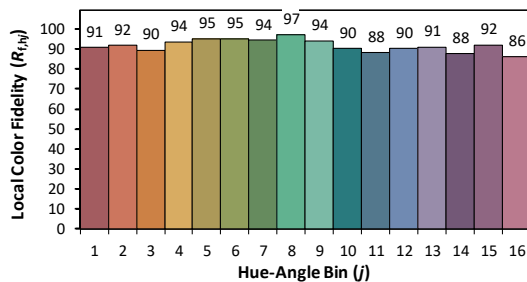
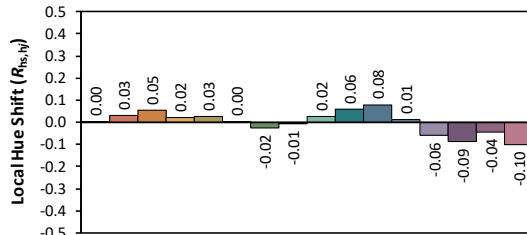
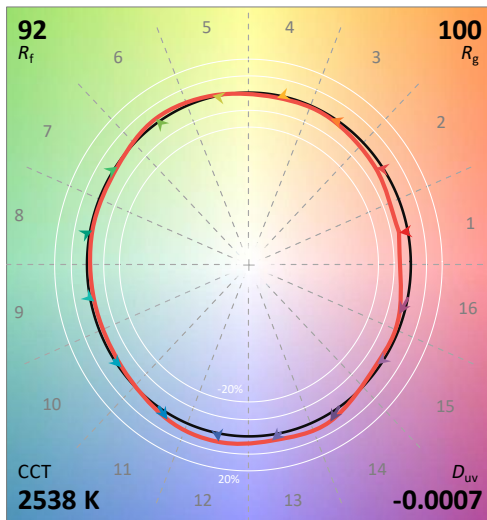
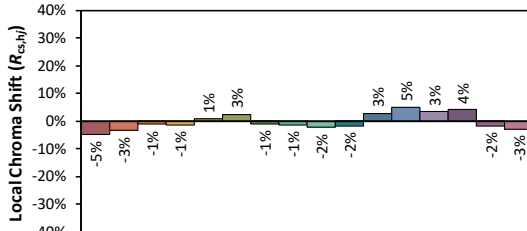
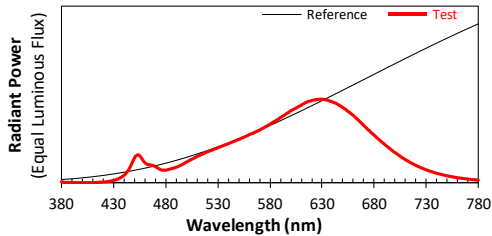
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/24

Model: MDPC79527XXX



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

x 0.4723
 y 0.4110
 u' 0.2704
 v' 0.5294

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 61

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 MDP79527XXX



External view of MDP79527XXX

***** 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 *****