

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-003

ISSUE DATE

31 December 2025

REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251110010GZU-003

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. MDPC79327XXX

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 MDPC79327XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-007.
<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>	01 December 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:	MDPC79327XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For MDPC79327XXX

Criteria	Result
Total Lumen Output	926.7 lm
Total Power	15.1 W
Luminaire Efficacy	61.3 lm/W
S/MH(C0/180)	1.27
S/MH(C90/270)	1.69
Correlated Color Temperature (CCT)	2514 K
Color Rendering Index (CRI)	93
R9	61
Chromaticity Coordinate (x)	0.4743
Chromaticity Coordinate (y)	0.4111
Chromaticity Coordinate (u')	0.2716
Chromaticity Coordinate (v')	0.5297

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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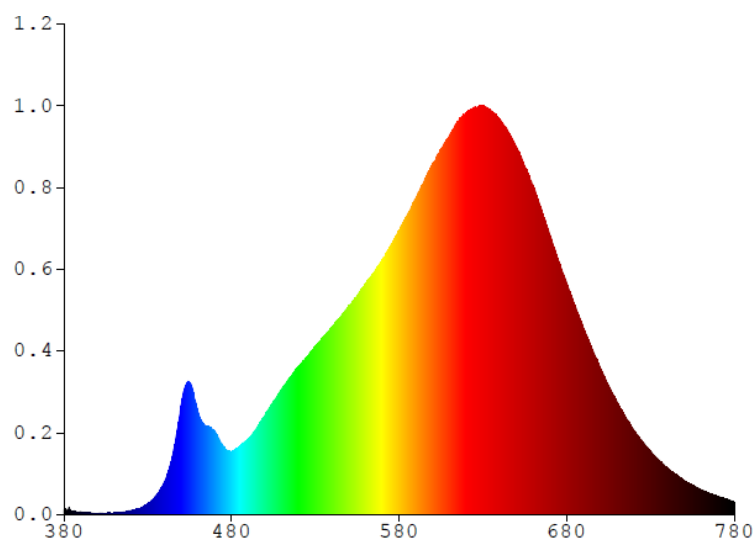
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For MDPC79327XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	1.0900	480	17.1940	580	77.2570	680	62.9390	780	3.3752
385	0.8533	485	18.7030	585	81.6020	685	56.6860		
390	0.7033	490	20.6630	590	86.1020	690	50.6690		
395	0.3826	495	23.4050	595	90.5740	695	45.0770		
400	0.3644	500	27.0300	600	95.5930	700	39.9710		
405	0.2917	505	30.7610	605	99.2440	705	35.1170		
410	0.4325	510	34.1050	610	102.970	710	30.5330		
415	0.6124	515	37.3630	615	106.830	715	26.5380		
420	1.0528	520	40.4050	620	109.240	720	22.9260		
425	1.7725	525	42.7840	625	110.530	725	19.9480		
430	2.9266	530	45.7110	630	111.160	730	17.1850		
435	5.1174	535	48.3160	635	109.540	735	14.7550		
440	8.9384	540	50.9810	640	107.580	740	12.6190		
445	16.4360	545	53.6330	645	104.130	745	10.8630		
450	30.0340	550	56.6860	650	99.8550	750	9.3185		
455	35.9160	555	59.4560	655	94.4790	755	7.9465		
460	27.7500	560	62.8590	660	89.2050	760	6.7886		
465	24.0440	565	65.7260	665	82.8490	765	5.7971		
470	22.6630	570	69.2710	670	75.9100	770	4.9785		
475	18.5430	575	73.1570	675	67.9580	775	4.2577		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79327XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

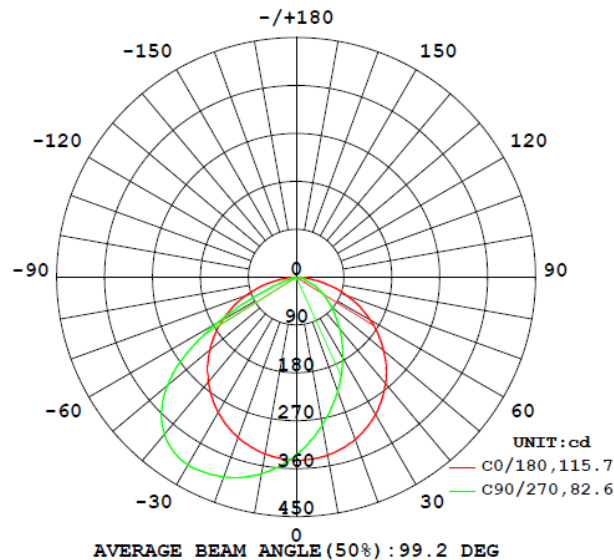
Photometric Measurements at 25°C – Distribution Method

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')
MDPC79327XXX								
S2511100 10-007	base-up	2514	93	61	0.4743	0.4111	0.2716	0.5297

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)
MDPC79327XXX							
S2511100 10-007	base-up	120.1	127.2	15.1	0.99	926.7	61.3

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79327XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	343.8	342.0	337.2	335.0	334.2
5	343.0	332.1	319.2	311.9	309.1
10	339.5	319.5	298.8	286.7	282.3
15	333.3	304.5	276.7	260.6	254.9
20	324.4	287.4	253.4	234.5	227.8
25	312.5	268.1	229.4	208.4	201.4
30	298.1	247.0	204.9	182.9	175.7
35	280.8	224.4	180.2	158.0	150.9
40	261.0	200.4	155.7	134.0	127.3
45	238.9	175.3	131.4	111.2	105.4
50	214.7	149.4	107.5	90.5	86.0
55	188.5	123.1	85.3	72.0	68.7
60	160.8	96.6	65.2	55.9	53.6
65	132.1	71.1	47.7	40.5	39.0
70	101.8	48.0	31.5	21.8	19.7
75	70.6	28.4	16.1	15.1	15.8
80	40.2	12.8	10.5	13.3	14.2
85	13.5	4.2	7.8	7.4	6.9
90	0.6	1.4	0.8	0.2	0.0
95	0.1	0.1	0.1	0.1	0.1
100	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1
110	0.1	0.1	0.2	0.1	0.1
115	0.1	0.2	0.2	0.2	0.2
120	0.2	0.2	0.2	0.2	0.2
125	0.2	0.3	0.3	0.3	0.3
130	0.3	0.3	0.4	0.4	0.4
135	0.4	0.4	0.4	0.5	0.5
140	0.4	0.5	0.5	0.5	0.5
145	0.5	0.5	0.5	0.6	0.6
150	0.5	0.5	0.6	0.6	0.6
155	0.5	0.5	0.6	0.6	0.6
160	0.5	0.5	0.6	0.6	0.6
165	0.5	0.5	0.5	0.6	0.6
170	0.5	0.5	0.5	0.6	0.5
175	0.5	0.5	0.5	0.5	0.5
180	0.5	0.5	0.5	0.5	0.5

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79327XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
MDPC79327XXX		
0-30	263.9	28.5
0-40	436.0	47.1
0-60	775.6	83.7
0-90	924.7	99.8
60-90	149.1	16.1
0-180	926.7	100.0

Beam Angle

Total Beam Angle(°)

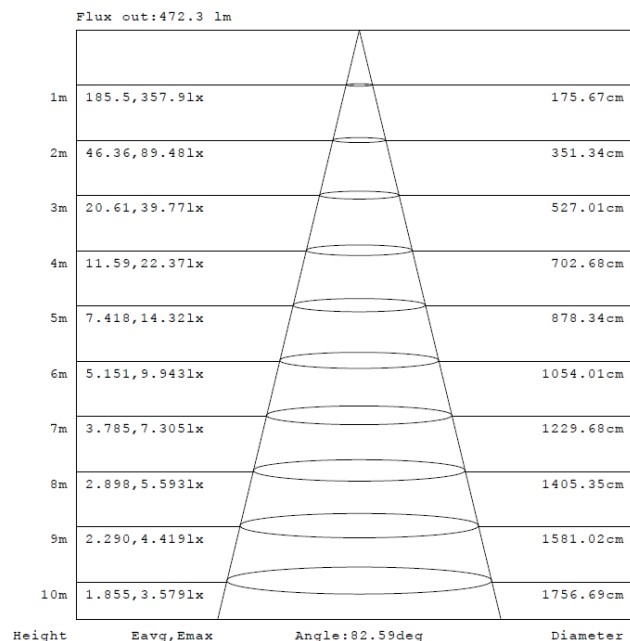
99.2

Illumination Plots

Model No.: MDPC79327XXX

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

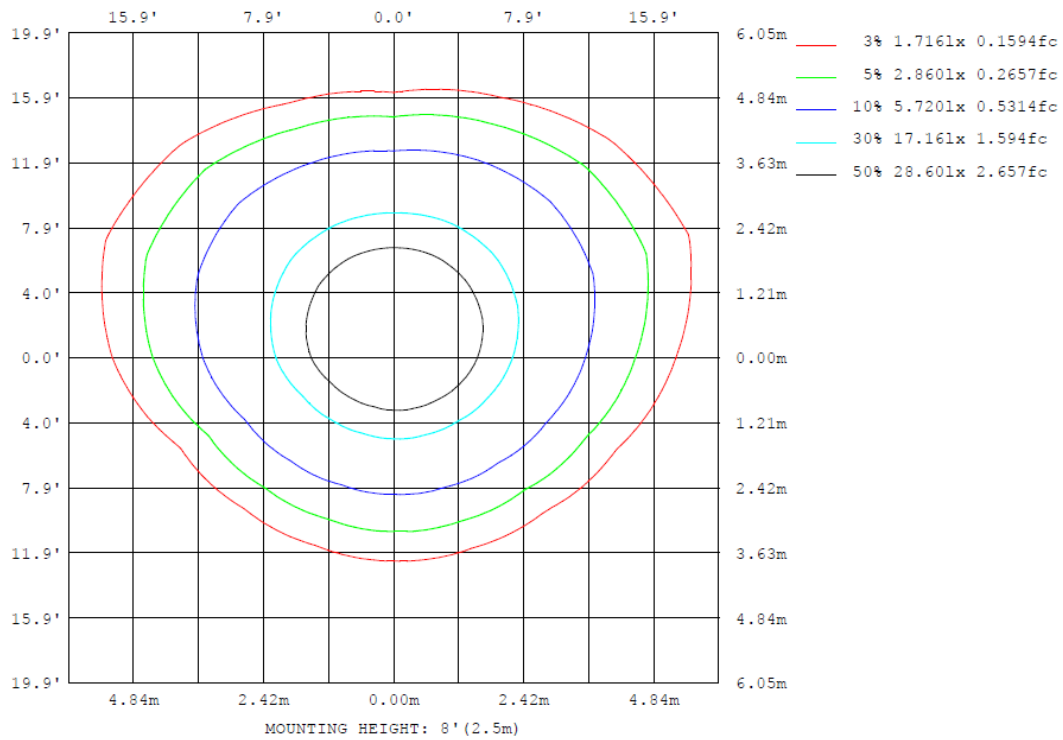
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79327XXX

Model No.: MDPC79327XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79327XXX

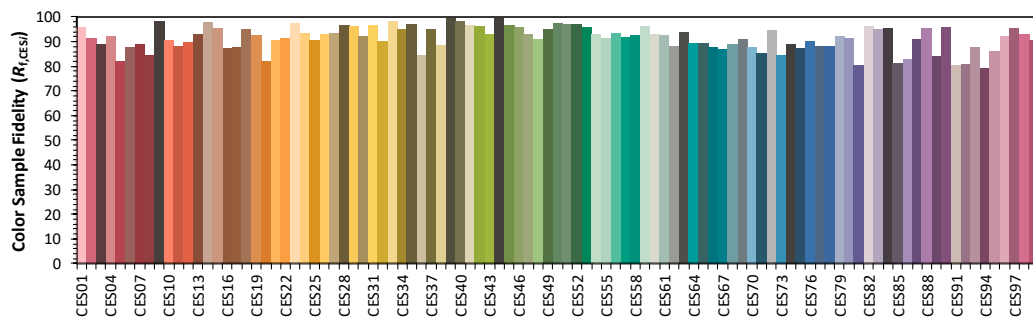
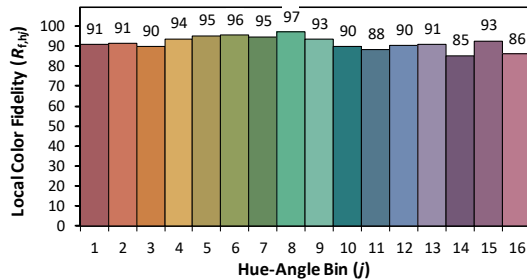
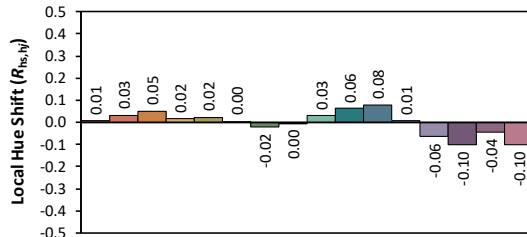
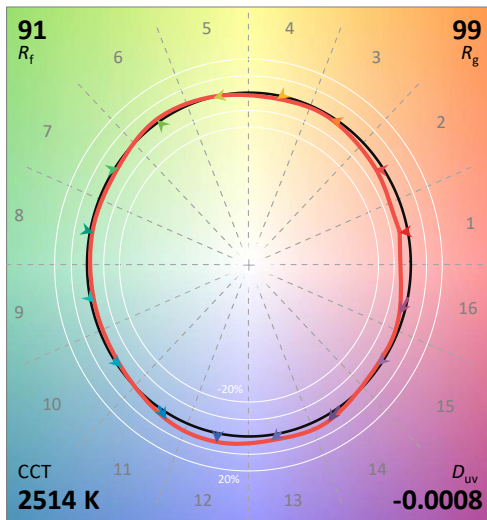
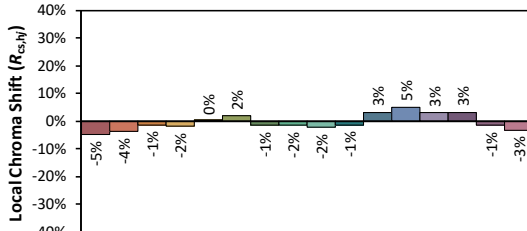
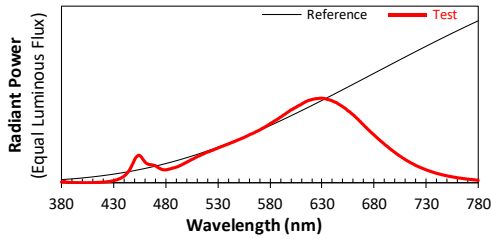
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/12/1

Model: MDPC79327XXX



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

x 0.4743
 y 0.4111
 u' 0.2716
 v' 0.5297

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.

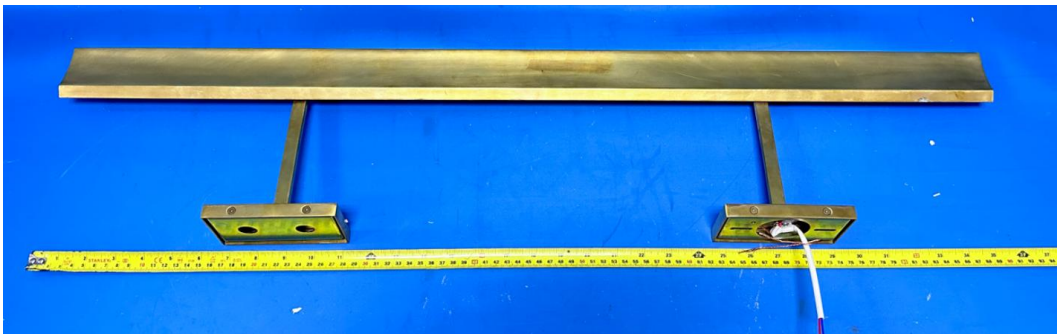
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of MDPC79327XXX

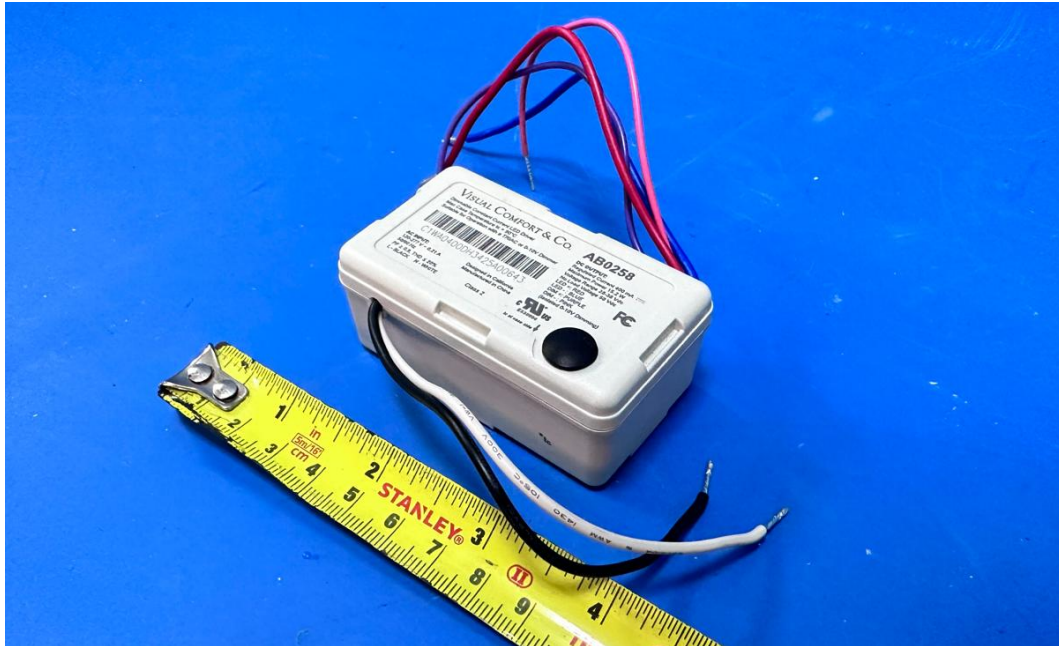


External view of MDPC79327XXX

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PTB20W-0400-38-VCC1 (AB0258)



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 *****