

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-001

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 251110010GZU-001

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. MDPC79427XXX

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 MDPC79427XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-002.
<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>	26 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:	MDPC79427XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For MDPC79427XXX

Criteria	Result
Total Lumen Output	741.5 lm
Total Power	8.1 W
Luminaire Efficacy	91.6 lm/W
S/MH(C0/180)	1.25
S/MH(C90/270)	2.89
Correlated Color Temperature (CCT)	2486 K
Color Rendering Index (CRI)	93
R9	62
Chromaticity Coordinate (x)	0.4772
Chromaticity Coordinate (y)	0.4121
Chromaticity Coordinate (u')	0.2731
Chromaticity Coordinate (v')	0.5305

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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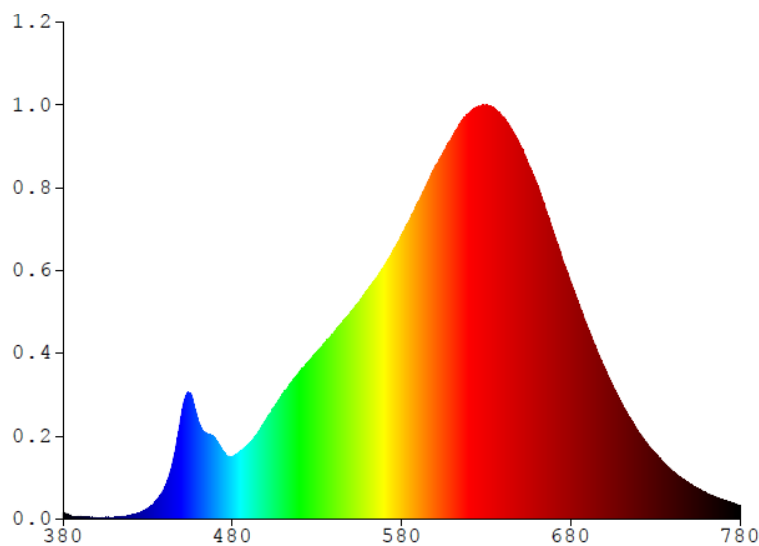
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For MDPC79427XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.9420	480	11.1230	580	50.4590	680	42.1020	780	2.3299
385	0.3883	485	12.0880	585	53.3050	685	38.0320		
390	0.4179	490	13.4000	590	56.3900	690	34.0250		
395	0.2350	495	15.2690	595	59.5330	695	30.2700		
400	0.2611	500	17.6400	600	62.8160	700	26.8170		
405	0.2448	505	20.0020	605	65.3850	705	23.5250		
410	0.2512	510	22.3070	610	67.7960	710	20.6110		
415	0.4579	515	24.3150	615	70.5030	715	17.9610		
420	0.6858	520	26.2820	620	72.2420	720	15.4600		
425	1.0692	525	27.9080	625	73.2450	725	13.4540		
430	1.8815	530	29.6480	630	73.5610	730	11.6190		
435	3.2454	535	31.4650	635	72.8440	735	9.9712		
440	5.5513	540	33.0760	640	71.3970	740	8.5033		
445	10.2970	545	34.8860	645	69.3440	745	7.3981		
450	18.6010	550	36.7410	650	66.4450	750	6.3107		
455	22.2980	555	38.6240	655	63.0160	755	5.4304		
460	17.3030	560	40.7720	660	59.5130	760	4.6474		
465	15.1680	565	42.8860	665	55.1600	765	3.9982		
470	14.1650	570	45.0800	670	50.6870	770	3.3818		
475	11.8300	575	47.6650	675	45.3390	775	2.9221		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79427XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

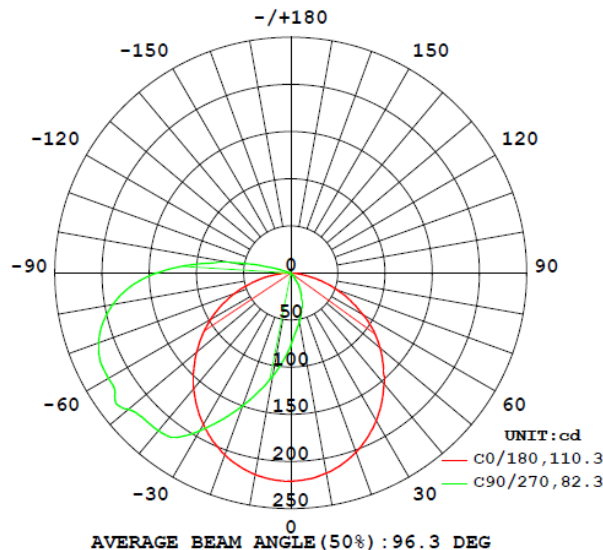
Photometric Measurements at 25°C – Distribution Method

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')
MDPC79427XXX								
S2511100 10-002	base-up	2486	93	62	0.4772	0.4121	0.2731	0.5305

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)
MDPC79427XXX							
S2511100 10-002	base-up	120.2	68.6	8.1	0.98	741.5	91.6

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79427XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	220.8	176.3	106.1	79.8	76.7
5	219.3	157.8	88.4	64.2	62.3
10	215.7	138.1	71.6	53.4	52.7
15	209.9	118.5	56.3	43.7	43.4
20	202.1	99.4	44.5	34.7	34.8
25	192.4	81.1	34.2	26.5	27.1
30	180.9	63.6	24.9	18.6	19.4
35	167.9	47.0	16.7	9.0	9.9
40	153.5	30.9	7.2	4.6	5.4
45	138.5	19.7	2.5	1.9	1.9
50	123.5	10.5	1.6	1.2	1.0
55	107.3	3.4	0.0	0.0	0.0
60	88.1	1.1	0.0	0.0	0.0
65	69.9	0.0	0.0	0.0	0.0
70	52.2	0.0	0.0	0.0	0.0
75	34.1	0.0	0.0	0.0	0.0
80	16.1	0.0	0.0	0.0	0.0
85	3.5	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	0.0	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 MDPC79427XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
MDPC79427XXX		
0-30	101.1	13.6
0-40	177.3	23.9
0-60	367.0	49.5
0-90	647.3	87.3
60-90	280.3	37.8
0-180	741.5	100.0

Beam Angle

Total Beam Angle(°)

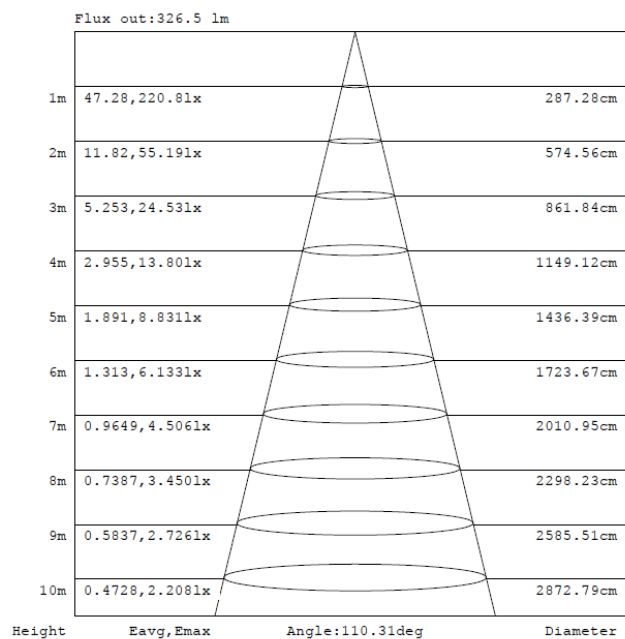
96.3

Illumination Plots

Model No.: MDPC79427XXX

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

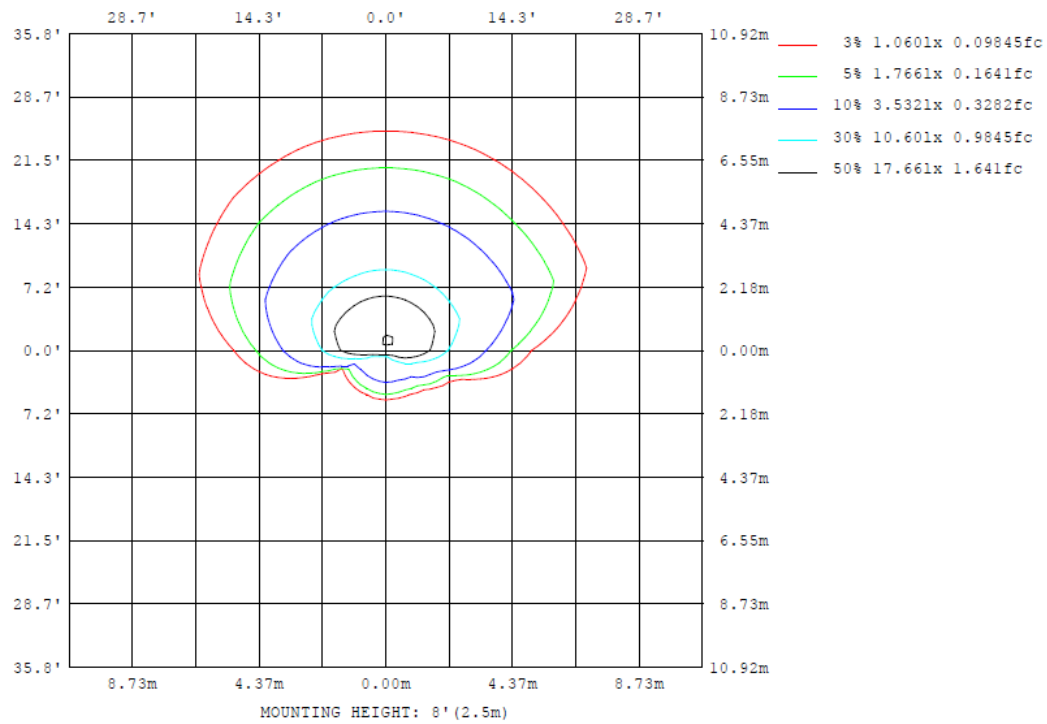
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79427XXX

Model No.: MDPC79427XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDPC79427XXX

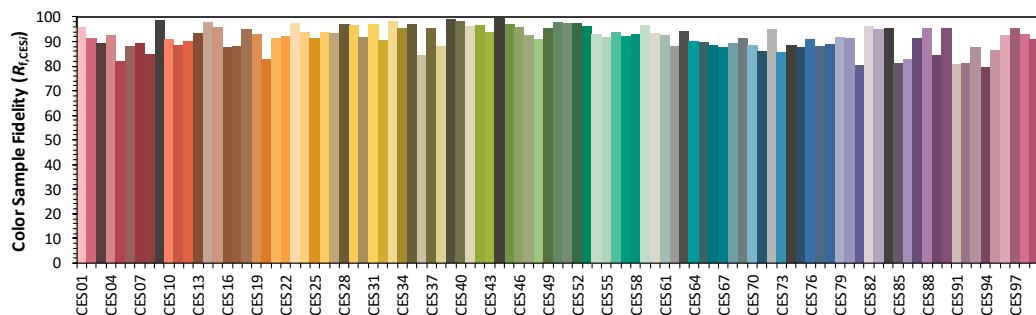
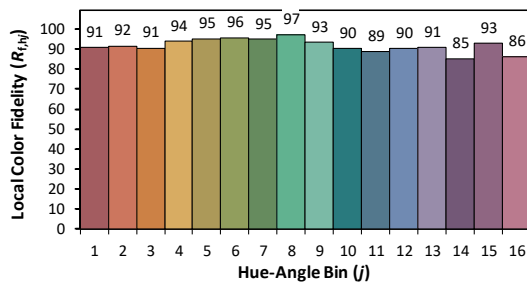
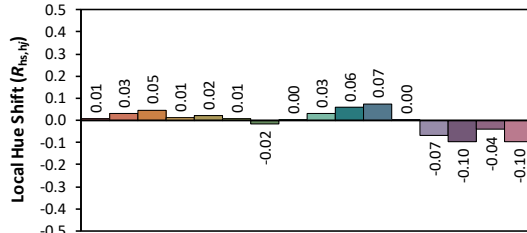
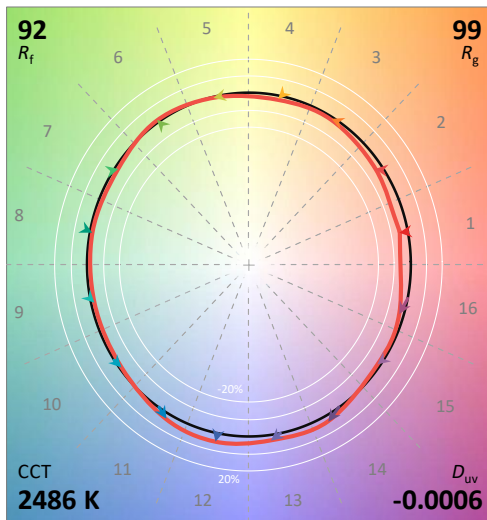
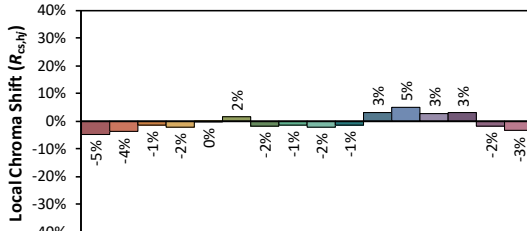
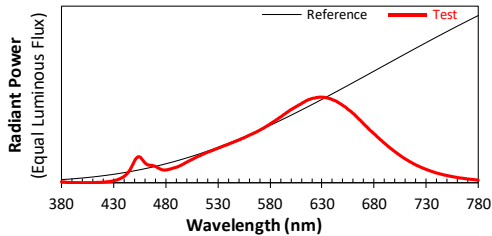
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/26

Model: MDPC79427XXX



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

x 0.4772
 y 0.4121
 u' 0.2731
 v' 0.5305

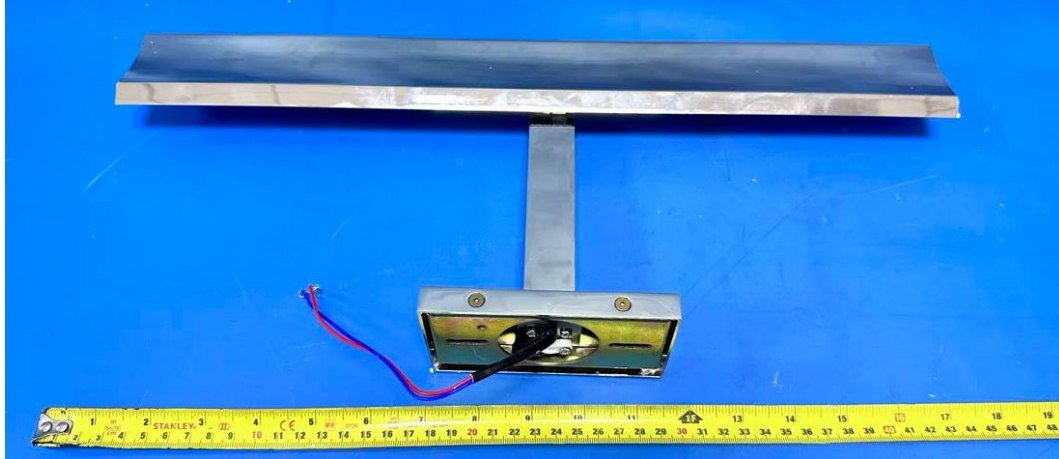
CIE 13.3-1995
(CRI)
 R_a 93
 R_g 62

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

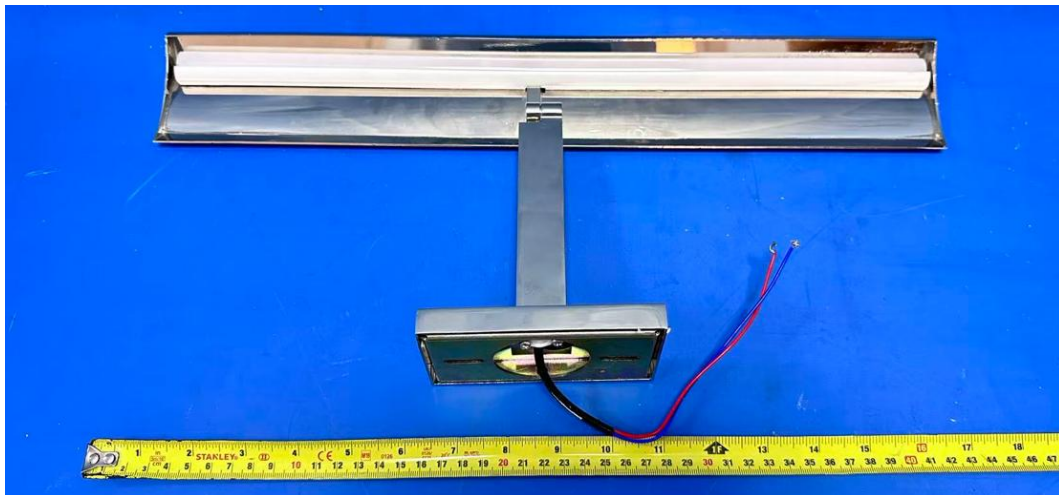
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of MDPC79427XXX



External view of MDPC79427XXX

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PTB10W-0200-38-VCC1 (AB2612)



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 *****