

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250625080GZU-001

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 250625080GZU-001

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. MDFM73527XX

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

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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TEST: Electrical and Photometric as required to the IES LM-79 test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number: QGZ250611134.

STANDARDS USED: 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

DESCRIPTION OF SAMPLE: The client submitted one sample of model MDFM73527XX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250625080-002.

MANUFACTURER /FACTORY & ADDRESS: 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.

DATES OF TESTS: 05 August 2025

ISSUED BY: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

TEST LOCATION: 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:	MDFM73527XX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For MDFM73527XX

Criteria	Result
Total Lumen Output	809.5 lm
Total Power	12.5 W
Luminaire Efficacy	65.0 lm/W
S/MH(C0/180)	0.68
S/MH(C90/270)	0.56
Correlated Color Temperature (CCT)	2531 K
Color Rendering Index (CRI)	92
R9	57
Chromaticity Coordinate (x)	0.4744
Chromaticity Coordinate (y)	0.4136
Chromaticity Coordinate (u')	0.2705
Chromaticity Coordinate (v')	0.5307

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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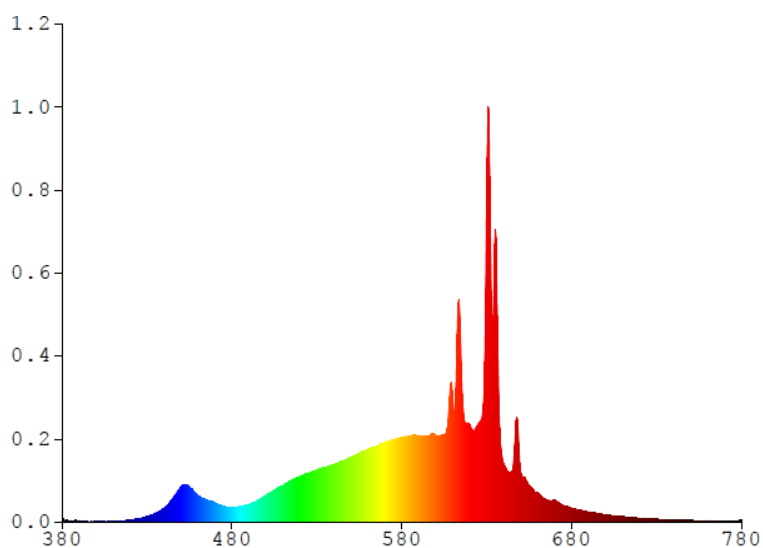
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For MDFM73527XX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	1.7868	480	13.0370	580	75.5660	680	12.6030	780	1.7608
385	0.4674	485	14.0390	585	77.2450	685	10.7230		
390	1.1825	490	15.9220	590	77.2620	690	9.3004		
395	0.5720	495	19.2230	595	76.3610	695	7.9158		
400	0.4378	500	23.7490	600	77.2890	700	6.7079		
405	0.5071	505	28.5120	605	77.8760	705	5.7364		
410	0.6120	510	32.7090	610	109.910	710	4.9168		
415	1.2832	515	37.1080	615	142.140	715	4.1744		
420	1.9806	520	40.9800	620	87.0410	720	3.5768		
425	2.8034	525	43.5820	625	87.5050	725	3.0567		
430	4.8219	530	46.3770	630	282.690	730	2.6557		
435	7.9548	535	49.2220	635	259.290	735	2.2495		
440	12.2530	540	51.5090	640	52.2560	740	1.9376		
445	20.6730	545	54.8240	645	44.8720	745	1.7135		
450	31.5830	550	58.2340	650	45.8840	750	1.4005		
455	31.5560	555	61.4070	655	32.3410	755	1.2832		
460	23.7730	560	64.9990	660	26.1810	760	1.1053		
465	19.9050	565	67.8150	665	20.2260	765	0.9350		
470	17.1680	570	71.0640	670	20.1490	770	0.9026		
475	13.9980	575	73.3650	675	14.5930	775	0.7283		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDFM73527XX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

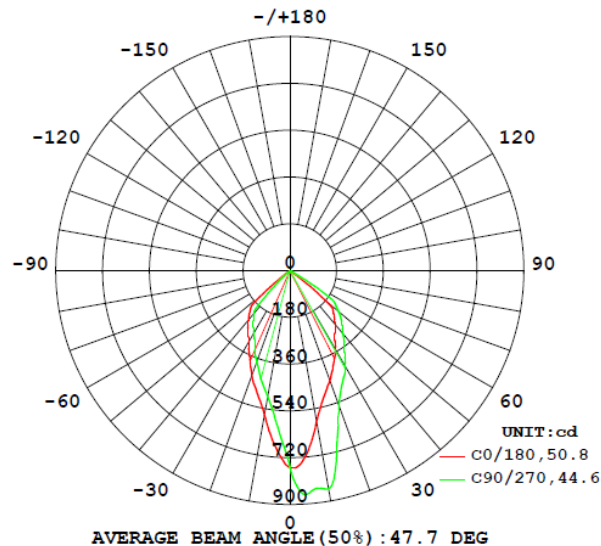
Photometric Measurements at 25°C – Distribution Method

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')
MDFM73527XX								
S2506250 80-002	base-up	2531	92	57	0.4744	0.4136	0.2705	0.5307

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)
MDFM73527XX							
S2506250 80-002	base-up	120.0	104.9	12.5	0.990	809.5	65.0

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDFM73527XX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	757.6	757.8	757.2	756.7	757.2
5	712.9	790.8	853.6	863.6	858.4
10	591.1	666.9	795.6	857.1	852.1
15	504.3	542.3	620.2	683.8	699.9
20	449.8	481.8	521.2	556.7	553.2
25	397.5	433.6	465.5	484.9	477.7
30	354.6	383.5	415.3	433.1	427.2
35	302.2	332.7	367.5	369.1	366.6
40	271.0	292.6	310.4	318.1	317.0
45	240.0	261.0	277.2	283.7	282.5
50	179.5	228.5	244.3	251.4	244.4
55	18.3	84.4	174.9	218.0	207.2
60	6.0	6.6	9.3	42.7	42.5
65	4.7	5.3	5.8	5.7	5.8
70	3.5	4.1	4.6	4.7	4.6
75	2.6	3.0	3.6	3.7	3.6
80	1.8	2.2	2.6	2.7	2.7
85	1.0	1.4	1.8	1.9	1.9
90	0.0	0.3	0.9	1.1	1.1
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	0.1	0.1	0.0	0.0	0.0
120	0.1	0.1	0.1	0.1	0.1
125	0.2	0.1	0.1	0.1	0.1
130	0.2	0.2	0.2	0.2	0.2
135	0.3	0.3	0.3	0.3	0.3
140	0.4	0.4	0.4	0.4	0.4
145	0.5	0.5	0.5	0.5	0.5
150	0.6	0.6	0.6	0.6	0.6
155	0.7	0.7	0.7	0.7	0.7
160	0.7	0.7	0.7	0.7	0.7
165	0.7	0.8	0.8	0.8	0.8
170	0.7	0.7	0.7	0.7	0.7
175	0.7	0.7	0.7	0.7	0.7
180	0.6	0.6	0.6	0.7	0.7

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDFM73527XX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
MDFM73527XX		
0-30	394.4	48.7
0-40	582.9	72.0
0-60	799.8	98.8
0-90	808.3	99.9
60-90	8.5	1.1
0-180	809.5	100.0

Beam Angle

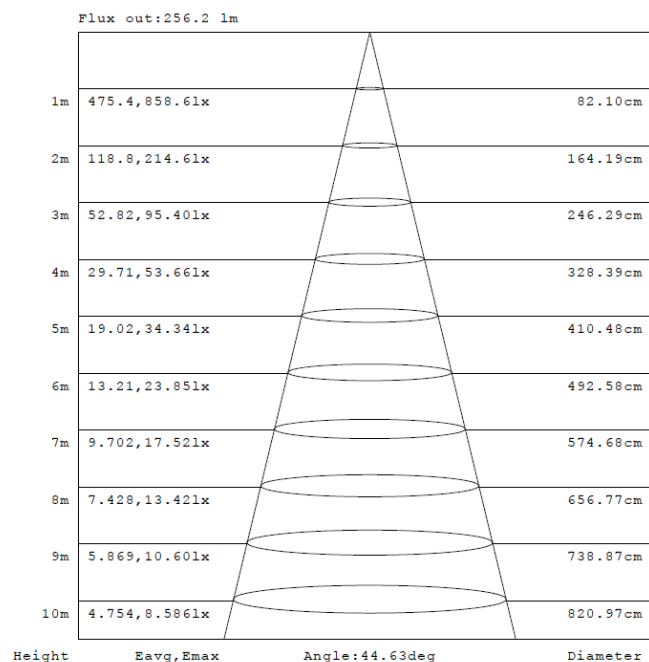
Total Beam Angle(°)
47.7

Illumination Plots

Model No.: MDFM73527XX

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

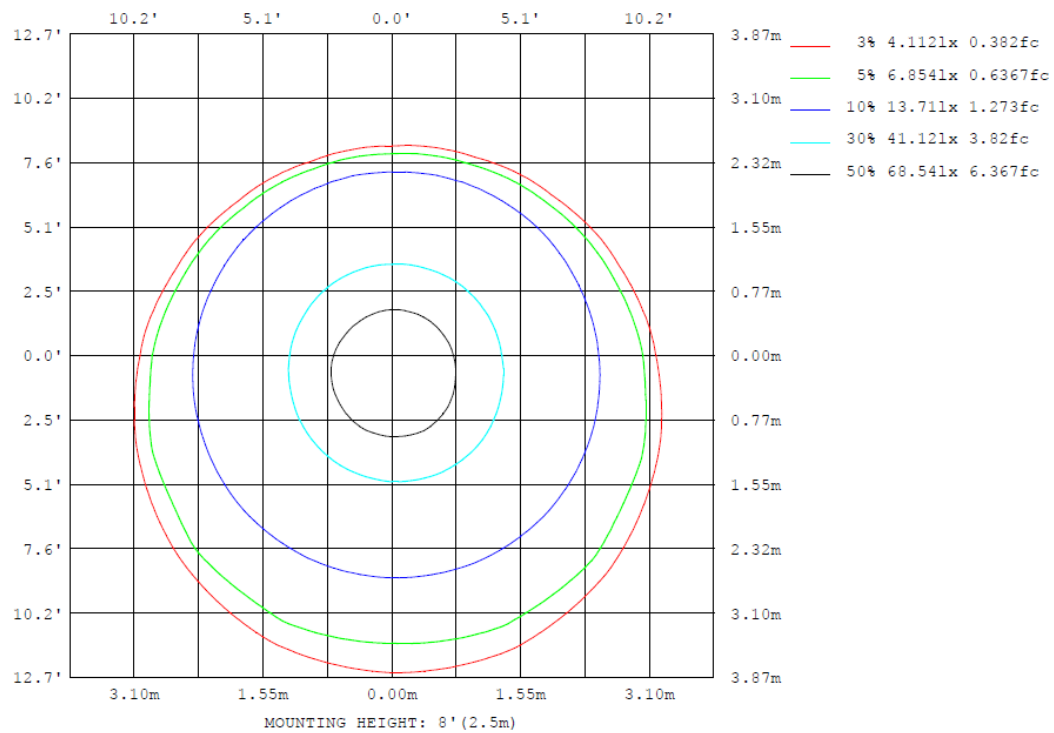
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDFM73527XX

Model No.: MDFM73527XX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDFM73527XX

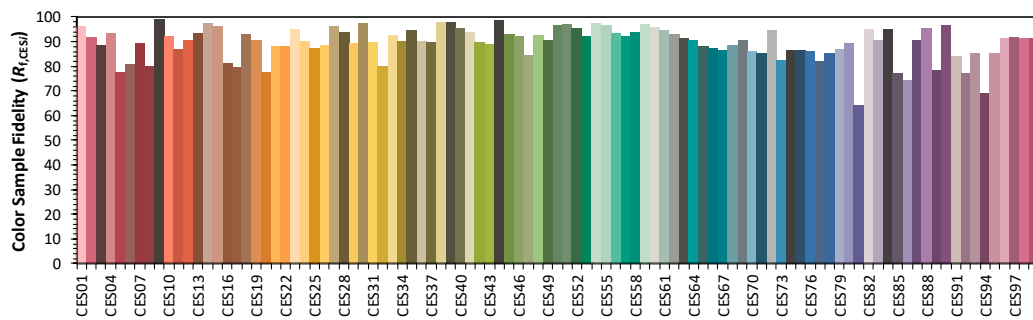
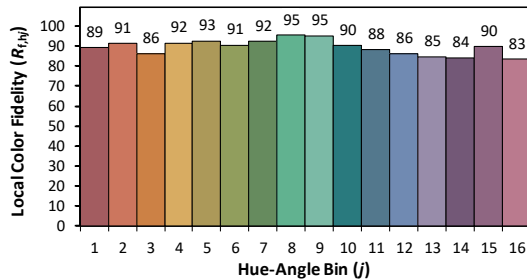
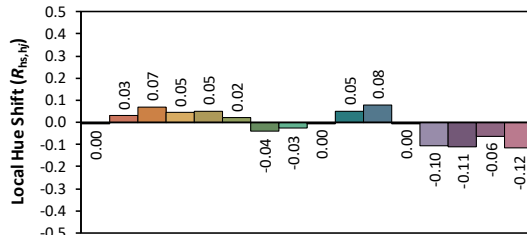
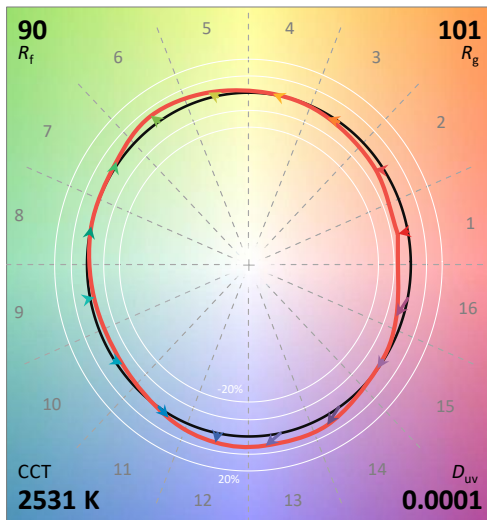
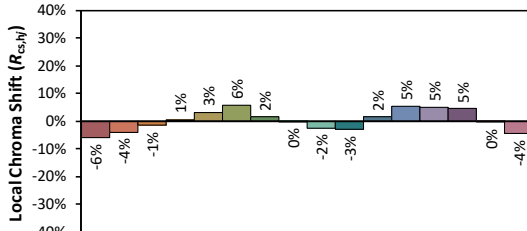
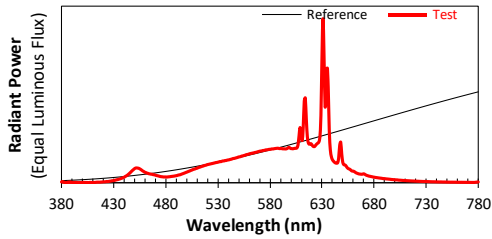
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/8/5

Model: MDFM73527XX



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

x 0.4744
 y 0.4136
 u' 0.2705
 v' 0.5307

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 57

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

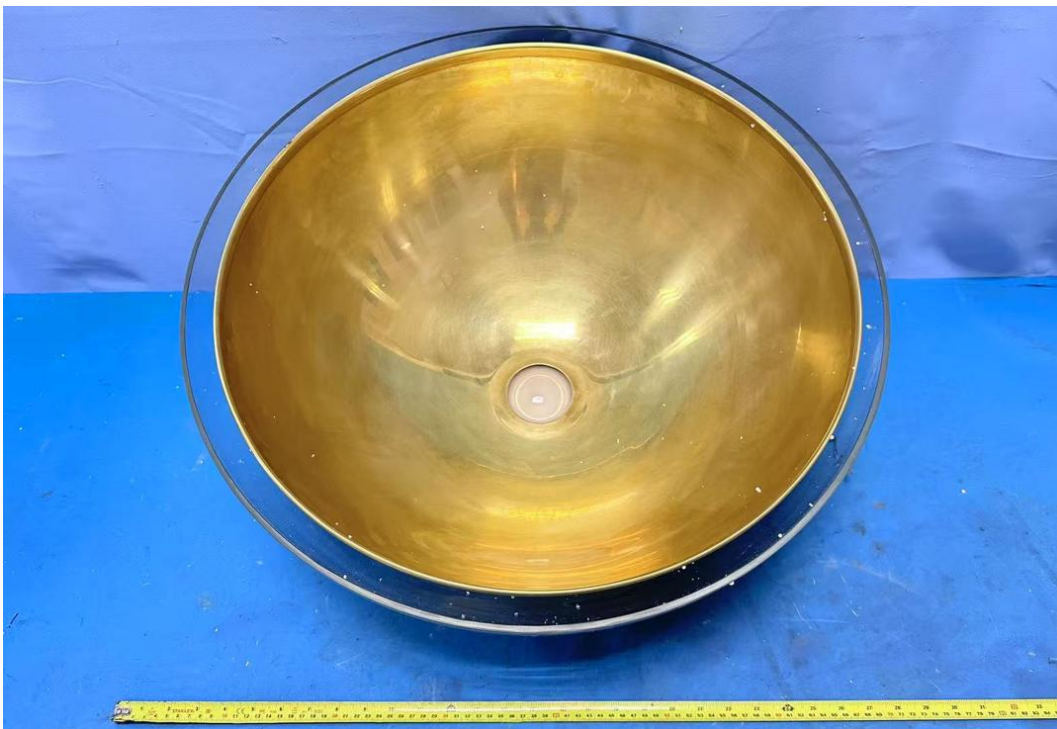
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of MDFM73527XX



External view of MDFM73527XX

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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 *****