

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250417136GZU-006

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None

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Report format for LM-79_G

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Report No.: 250417136GZU-006

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. KWWS61327HAB

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

7400 LINDER AVE. SKOKIE, IL, 60077

Email: jrivero@visualcomfort.com

Phone No.: 847-410-4552

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

AUTHORIZATION: The testing performed was authorized by signed quote number: QGZ250416085.

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 KWWS61327HAB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250417136-007.

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: 08 May 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:	KWWS61327HAB
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For KWWS61327HAB

Criteria	Result
Total Lumen Output	169.9 lm
Total Power	5.8 W
Luminaire Efficacy	29.1 lm/W
S/MH(C0/180)	1.26
S/MH(C90/270)	1.21
Correlated Color Temperature (CCT)	2661 K
Color Rendering Index (CRI)	94
R9	67
Chromaticity Coordinate (x)	0.4630
Chromaticity Coordinate (y)	0.4112
Chromaticity Coordinate (u')	0.2643
Chromaticity Coordinate (v')	0.5280

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: 3.948A DC

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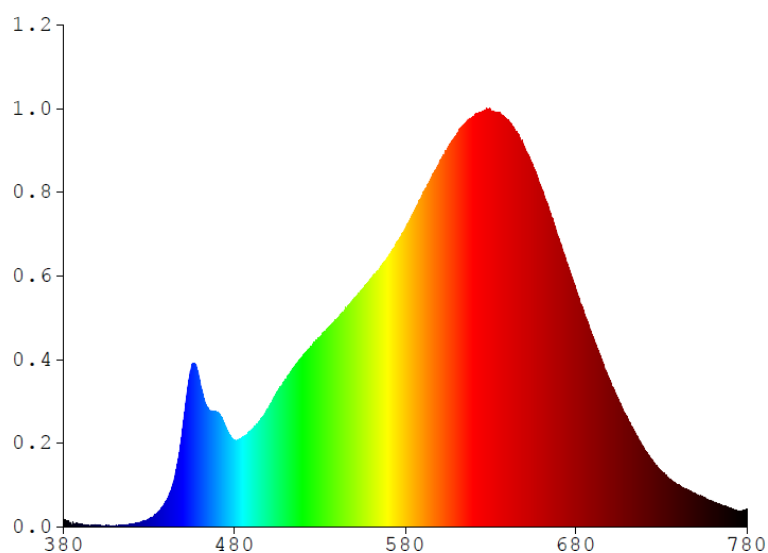
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For KWWS61327HAB

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.1107	480	3.1986	580	11.0800	680	8.8002	780	0.6586
385	0.0579	485	3.2947	585	11.6740	685	7.8808		
390	0.1160	490	3.6228	590	12.3250	690	7.0555		
395	0.0277	495	3.9494	595	12.9610	695	6.2240		
400	0.0630	500	4.4387	600	13.5440	700	5.4304		
405	0.0621	505	5.0029	605	14.0860	705	4.6968		
410	0.0440	510	5.4882	610	14.5220	710	4.0569		
415	0.0788	515	5.9575	615	14.9660	715	3.4471		
420	0.1055	520	6.3375	620	15.2350	720	2.8934		
425	0.1659	525	6.6917	625	15.4260	725	2.4575		
430	0.3074	530	7.0397	630	15.4790	730	2.0648		
435	0.5349	535	7.3850	635	15.3780	735	1.7876		
440	0.9817	540	7.7300	640	15.1160	740	1.5748		
445	1.8455	545	8.1045	645	14.6810	745	1.3857		
450	3.8552	550	8.4742	650	14.0870	750	1.2322		
455	5.9821	555	8.8327	655	13.3480	755	1.0929		
460	5.3090	560	9.2310	660	12.5380	760	0.9626		
465	4.3302	565	9.5919	665	11.6490	765	0.8160		
470	4.2646	570	10.0330	670	10.6970	770	0.7066		
475	3.7056	575	10.5620	675	9.5747	775	0.6034		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61327HAB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

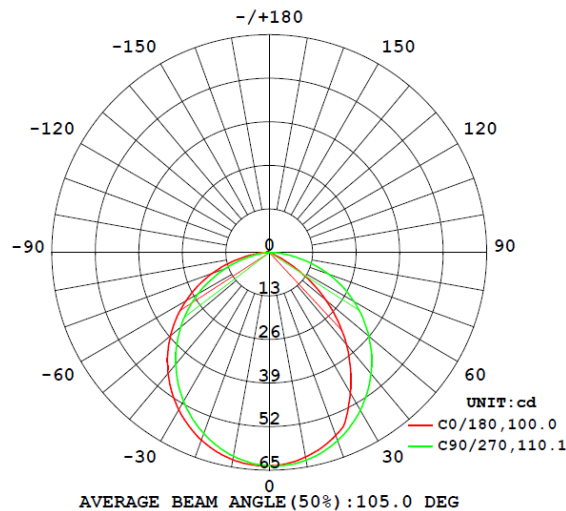
Photometric Measurements at 25°C – Distribution Method

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')
KWWS61327HAB								
S2504171 36-007	base-up	2661	94	67	0.4630	0.4112	0.2643	0.5280

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)
KWWS61327HAB							
S2504171 36-007	base-up	120.2	49.5	5.8	0.981	169.9	29.1

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61327HAB

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	63.7	63.7	63.7	63.7	63.7
5	63.2	63.3	63.4	63.6	63.7
10	62.0	62.2	62.4	62.8	63.0
15	60.3	60.5	60.8	61.4	61.6
20	58.1	58.3	58.6	59.4	59.7
25	54.4	55.6	56.0	56.9	57.3
30	48.5	50.5	52.9	54.0	54.4
35	42.3	44.9	49.2	50.6	51.0
40	35.9	39.4	44.2	46.8	47.3
45	29.1	33.8	39.5	42.7	43.2
50	22.1	28.4	35.0	38.3	38.8
55	15.0	23.1	30.7	33.6	34.1
60	8.1	18.3	26.5	28.7	29.2
65	1.5	14.2	21.8	23.6	24.1
70	0.0	11.2	16.3	18.4	18.8
75	0.0	7.8	10.8	13.1	13.4
80	0.0	4.1	5.9	7.9	8.3
85	0.0	1.3	2.1	3.4	3.7
90	0.0	0.1	0.2	0.5	0.6
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	0.1
110	0.0	0.0	0.0	0.0	0.1
115	0.0	0.0	0.0	0.0	0.1
120	0.0	0.0	0.0	0.0	0.1
125	0.0	0.0	0.0	0.1	0.1
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	0.2
150	0.1	0.1	0.1	0.1	0.2
155	0.1	0.1	0.1	0.1	0.2
160	0.1	0.1	0.1	0.2	0.2
165	0.1	0.1	0.1	0.2	0.2
170	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1
180	0.1	0.1	0.1	0.1	0.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61327HAB

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
KWWS61327HAB		
0-30	48.9	28.8
0-40	79.1	46.6
0-60	135.9	80.0
0-90	168.3	99.1
60-90	32.4	19.1
0-180	169.9	100.0

Beam Angle

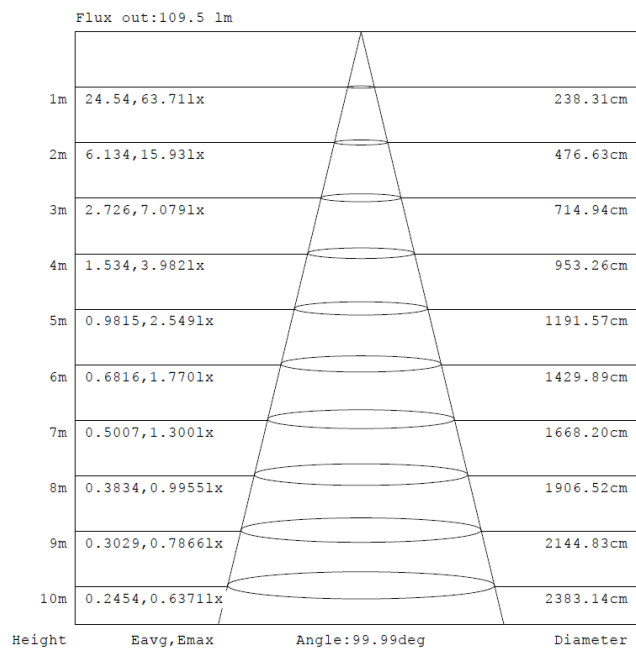
Total Beam Angle(°)
105.0

Illumination Plots

Model No.: KWWS61327HAB

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

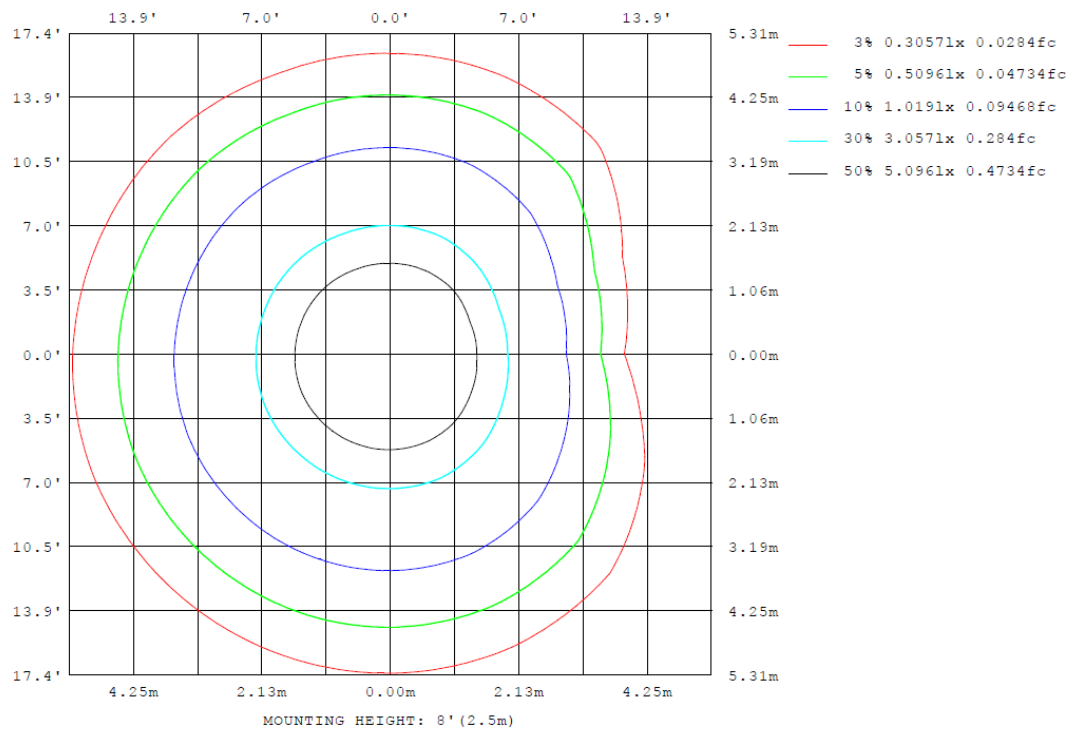
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61327HAB

Model No.: KWWS61327HAB

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61327HAB

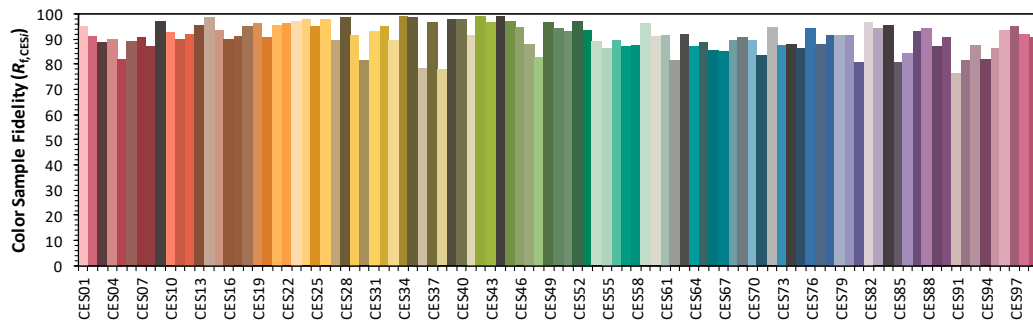
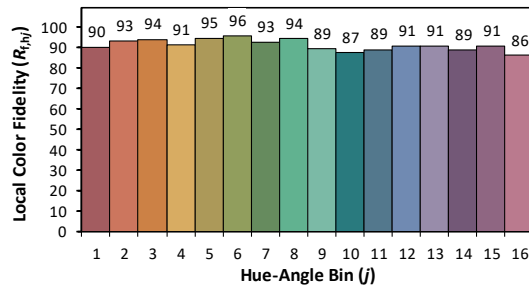
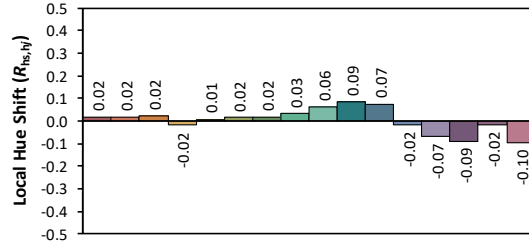
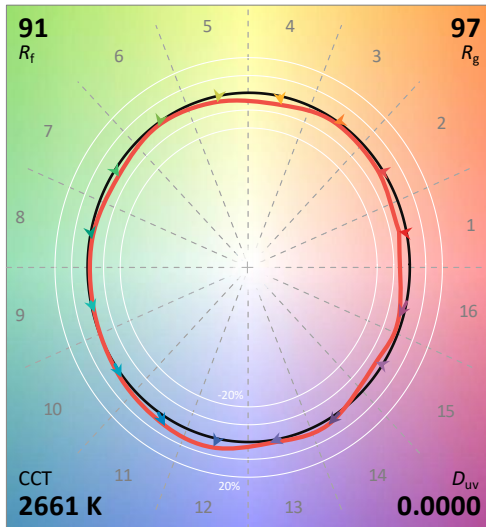
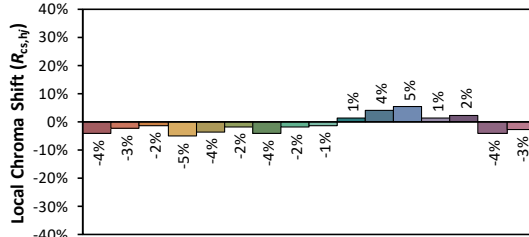
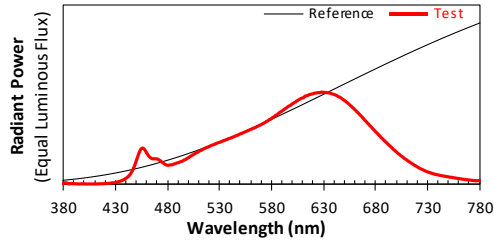
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/5/8

Model: KWWS61327HAB



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

x 0.4630
 y 0.4112
 u' 0.2643
 v' 0.5280

CIE 13.3-1995
(CRI)

R_a 94

R_g 67

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 KWWS61327HAB



View of LED driver DS8W24VMB1UD-0000

***** 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 *****