

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250417136GZU-005

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 250417136GZU-005

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. KWWS61427HAB

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: 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 KWWS61427HAB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250417136-005.

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: 29 April 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:	KWWS61427HAB
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For KWWS61427HAB

Criteria	Result
Total Lumen Output	338.8 lm
Total Power	8.6 W
Luminaire Efficacy	39.4 lm/W
S/MH(C0/180)	1.29
S/MH(C90/270)	1.20
Correlated Color Temperature (CCT)	2664 K
Color Rendering Index (CRI)	94
R9	66
Chromaticity Coordinate (x)	0.4629
Chromaticity Coordinate (y)	0.4114
Chromaticity Coordinate (u')	0.2641
Chromaticity Coordinate (v')	0.5281

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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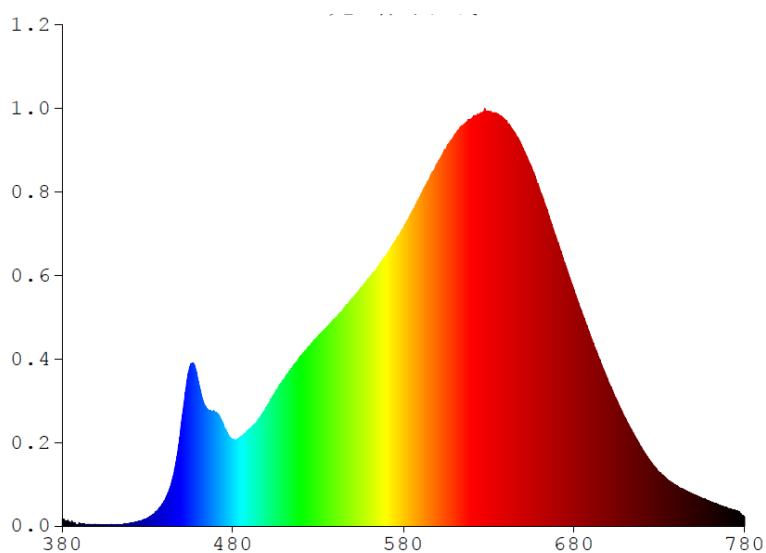
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For KWWS61427HAB

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.5465	480	6.3468	580	22.0410	680	17.4190	780	0.6412
385	0.2196	485	6.5858	585	23.2120	685	15.6230		
390	0.2519	490	7.1970	590	24.3980	690	13.9220		
395	0.1237	495	7.8844	595	25.6510	695	12.3280		
400	0.1009	500	8.8300	600	26.8360	700	10.6720		
405	0.0755	505	9.9033	605	27.8750	705	9.2861		
410	0.0981	510	10.8790	610	28.9130	710	7.9939		
415	0.1320	515	11.7190	615	29.6410	715	6.7873		
420	0.2084	520	12.6060	620	30.1090	720	5.6898		
425	0.3518	525	13.3150	625	30.4730	725	4.7372		
430	0.5941	530	14.0310	630	30.6500	730	3.9703		
435	1.0646	535	14.6880	635	30.4580	735	3.4100		
440	1.8772	540	15.3540	640	29.9830	740	2.9955		
445	3.6629	545	16.0720	645	29.1250	745	2.6493		
450	7.6477	550	16.8010	650	27.9320	750	2.3475		
455	11.8380	555	17.5930	655	26.5190	755	2.0476		
460	10.5510	560	18.3050	660	24.8080	760	1.7879		
465	8.6088	565	19.1290	665	23.0030	765	1.5511		
470	8.4561	570	20.0390	670	21.0890	770	1.3174		
475	7.2758	575	21.0400	675	18.8720	775	1.1295		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61427HAB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

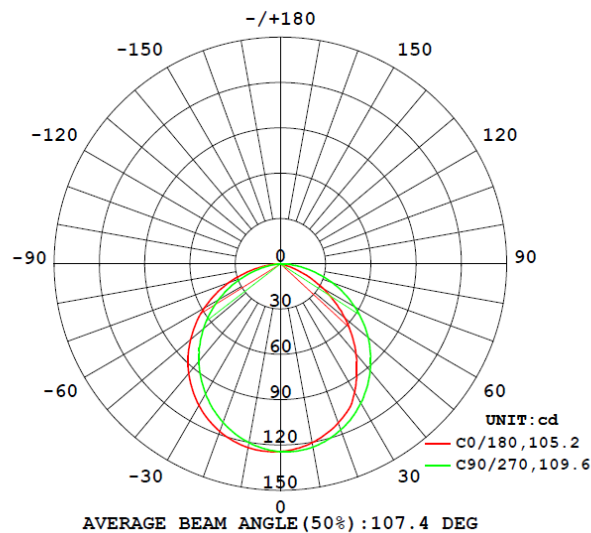
Photometric Measurements at 25°C – Distribution Method

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')
KWWS61427HAB								
S2504171 36-005	base-up	2664	94	66	0.4629	0.4114	0.2641	0.5281

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)
KWWS61427HAB							
S2504171 36-005	base-up	120.1	73.1	8.6	0.978	338.8	39.4

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61427HAB

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	124.2	124.3	124.3	124.3	124.3
5	122.8	123.2	123.6	124.0	124.4
10	120.3	120.9	121.7	122.4	123.2
15	116.7	117.5	118.5	119.6	120.7
20	112.1	113.1	114.3	115.6	117.0
25	106.6	107.7	109.1	110.7	112.2
30	98.2	101.3	103.1	104.7	106.5
35	88.4	92.0	96.3	98.0	100.0
40	78.0	82.5	88.5	90.6	92.6
45	67.1	72.7	79.5	82.5	84.5
50	55.8	62.9	70.4	73.9	75.8
55	44.2	53.1	61.6	64.8	66.6
60	32.5	43.5	52.8	55.1	56.8
65	21.1	34.6	43.4	45.2	46.7
70	10.3	26.8	33.5	35.0	36.3
75	0.9	18.7	23.0	24.7	25.8
80	0.2	10.5	13.2	14.8	15.6
85	0.2	3.7	5.2	6.3	6.7
90	0.0	0.2	0.6	0.9	1.0
95	0.0	0.0	0.0	0.0	0.1
100	0.0	0.0	0.0	0.0	0.1
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	0.1	0.1
120	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1
130	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.2
140	0.1	0.1	0.1	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2
150	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.3
160	0.2	0.2	0.2	0.2	0.3
165	0.2	0.2	0.2	0.3	0.3
170	0.2	0.2	0.2	0.2	0.3
175	0.2	0.2	0.2	0.2	0.2
180	0.2	0.2	0.2	0.2	0.2

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61427HAB

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
KWWS61427HAB		
0-30	95.7	28.3
0-40	155.8	46.0
0-60	270.8	79.9
0-90	336.8	99.4
60-90	66.0	19.5
0-180	338.8	100.0

Beam Angle

Total Beam Angle(°)

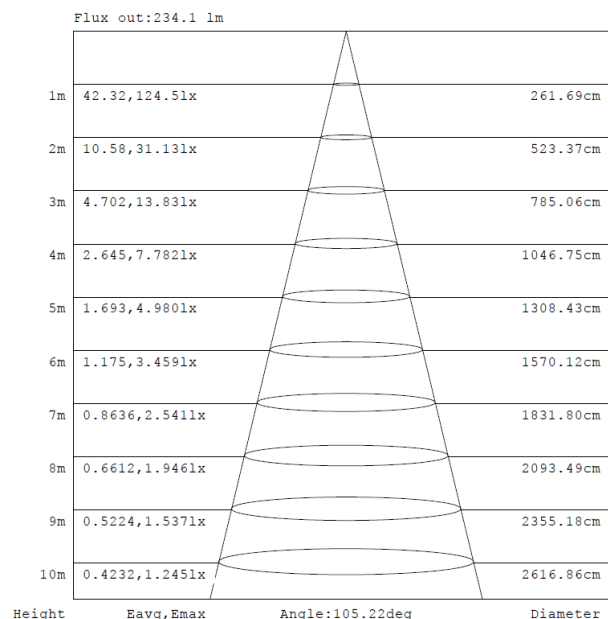
107.4

Illumination Plots

Model No.: KWWS61427HAB

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

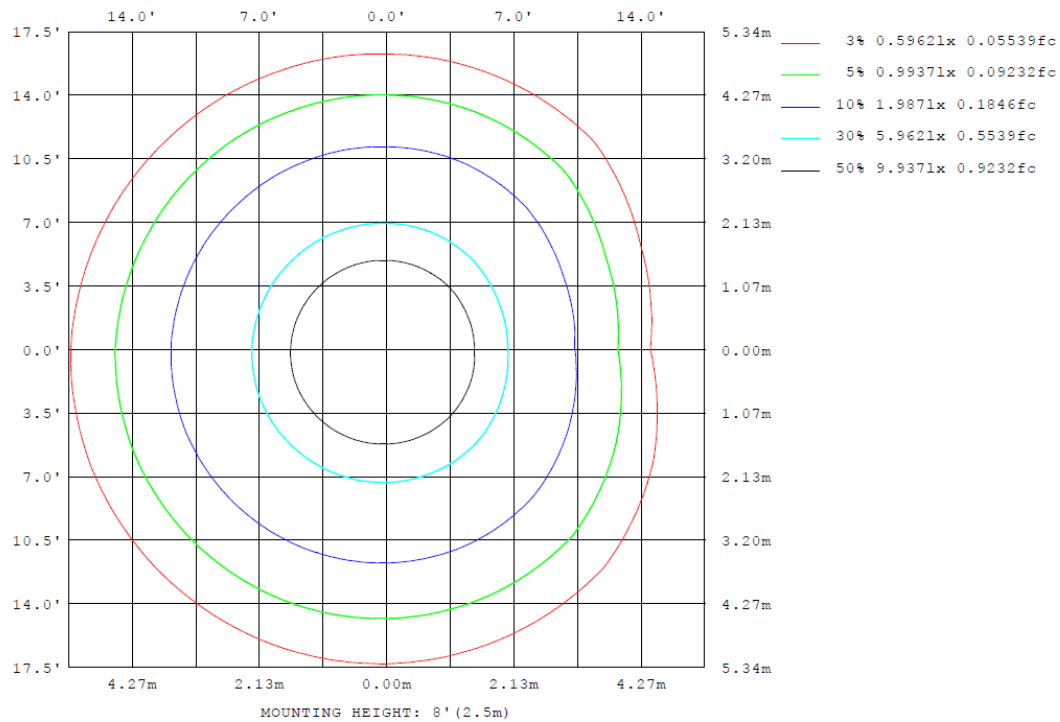
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61427HAB

Model No.: KWWS61427HAB

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For KWWS61427HAB

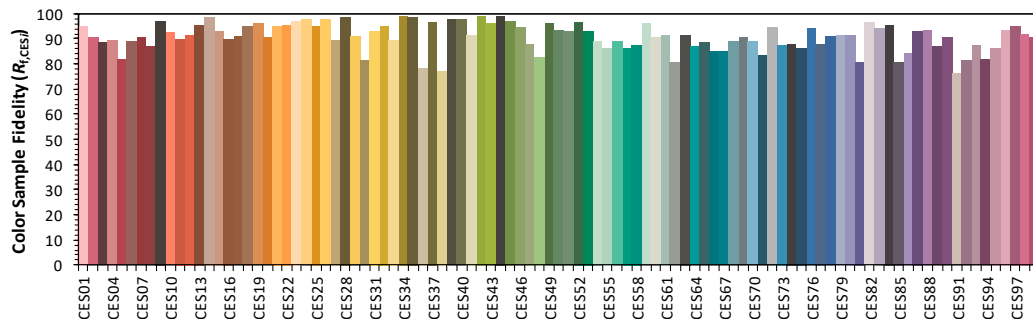
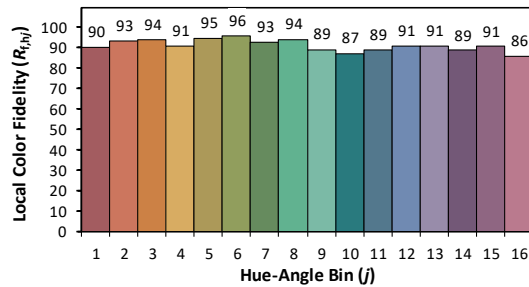
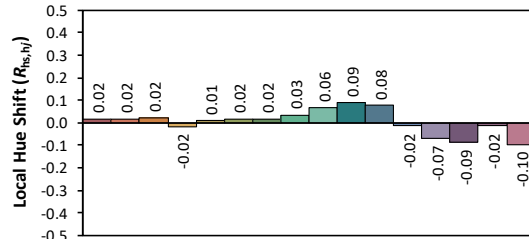
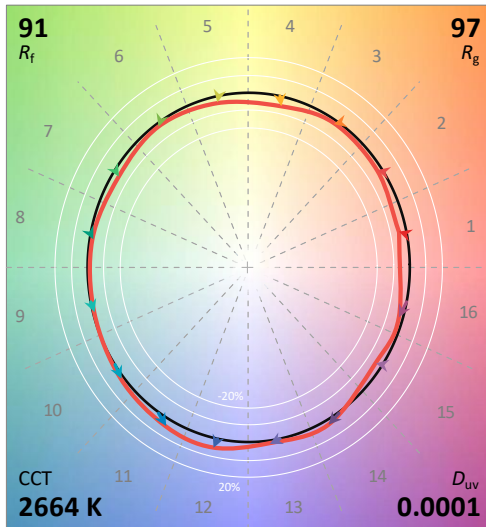
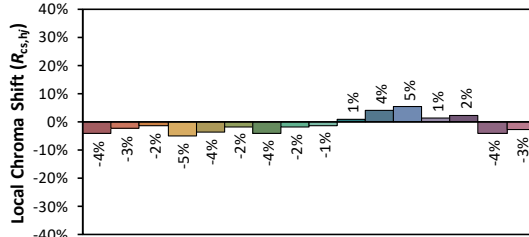
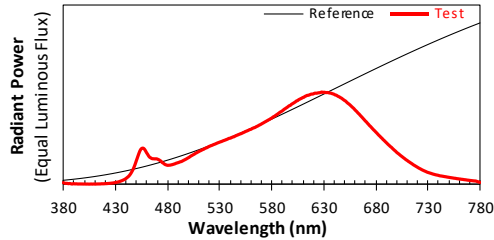
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/4/29

Model: KWWS61427HAB



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

x 0.4629
 y 0.4114
 u' 0.2641
 v' 0.5281

CIE 13.3-1995
(CRI)

R_a 94

R_g 66

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 KWWS61427HAB



View of LED driver DS12W24VMB1UD-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 *****