REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G103961645 Date: June 7, 2019

REPORT NO. 103961645LAX-006

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-300W-LV-50K-T4
LED MODEL NO. GWP9LR34.PM-M2M3
DRIVER MODEL NO. EUD-320S670DT
Select Model No. Type LITHONIA KAD CONTOUR SERIES

RENDERED TO

SIMPLYLEDS LLC
111 W. 34TH STREET
GARDEN CITY, IDAHO, 83714

TEST: Electrical and Photometric tests as required to the IESNA test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number Qu-00983281.

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:

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

ANSI NEMA ANSLG C78.377: 2015: Specifications of the Chromaticity of Solid State Lighting Products

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number ALD-R-300W-LV-50K-T4. The sample was received by Intertek on March 19, 2019, in undamaged condition and one sample was tested as received. The sample designation was LAN1903191345-010.

DATES OF TESTS: June 7, 2019

SUMMARY

Model No.:	ALD-R-300W-LV-50K-T4
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	36501
Total Power (W)	300.8
Luminaire Efficacy (LPW)	121.3
Power Factor at 120Vac	0.999
Power Factor at 277Vac	0.953
Current ATHD % at 120Vac	4.49
Current ATHD % at 277Vac	11.92
Correlated Color Temperature (CCT - K)	5085
Color Rendering Index (CRI - Ra)	70.8
Color Rendering Index (CRI - R9)	-36.6
DUV	0.001
Chromaticity Coordinate (x)	0.343
Chromaticity Coordinate (y)	0.352
Chromaticity Coordinate (u')	0.210
Chromaticity Coordinate (v')	0.485

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
3m Sphere	CSTM-LMS-3M-3020	000830	VBU	VBU	06/07/19
Spectrometer	CDS-3020-T	000834	VBU	VBU	06/07/19
Power Supply (AC 3P / DC)	CSW5550-208-LAN	001339	VBU	VBU	06/07/19
Power Meter	WT330	001319	08/13/18	08/13/19	06/07/19
Temp. & RH Meter	971	001177	01/29/19	01/29/20	06/07/19
DC Power Supply	LPS-100-0833	000832	01/31/19	01/31/20	06/07/19
Network TC Reader	iSD-TC	000824	02/01/19	02/01/20	06/07/19

TEST METHODS

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IESNA LM-79.

Photometric and Electrical Measurements – Integrating Sphere Method

A Labsphere Model CDS-3020 High Sensitivity Multi Channel Spectrometer and Two Meter or Three Meter Sphere was used to measure correlated color temperature, chromaticity coordinates, and the color rendering index for each SSL unit.

Ambient temperature was measured at a position inside the sphere. Each SSL unit was operated on the client provided driver at the rated input voltage in its designated orientation. Each SSL unit was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Xitron or Yokogawa Power Analyzer.

The calibration of the sphere photometer-spectroradiometer system is traceable to the National Institute of Standards and Technology.

RESULTS OF TEST

Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) - Integrating Sphere Method

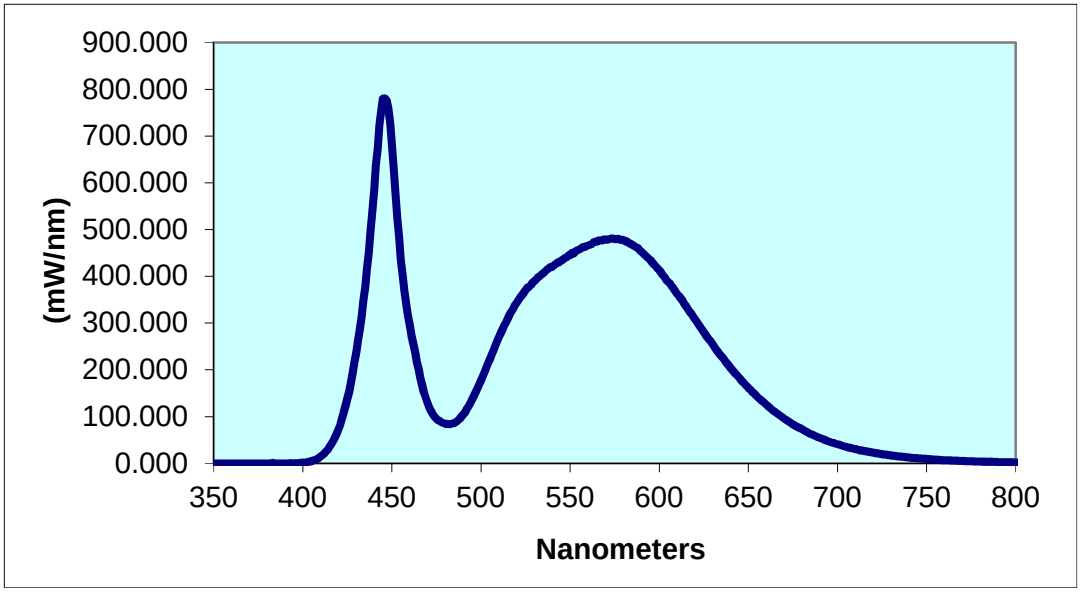
Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Current ATHD (%)	Luminous Flux (Lumens)	Lumen Efficacy (LPW)
LAN1903191345-010	Up	119.9	2511	300.8	0.999	4.49	36501	121.3
		277.0	1110	292.8	0.953	11.92		

Correlated Color Temperature (K)	CRI -Ra	CRI -R9	DUV	CIE 31' Chromaticity Coordinate (x)	CIE 31' Chromaticity Coordinate (y)	CIE 76' Chromaticity Coordinate (u')	CIE 76' Chromaticity Coordinate (v')
5085	70.8	-36.6	0.001	0.343	0.352	0.210	0.485

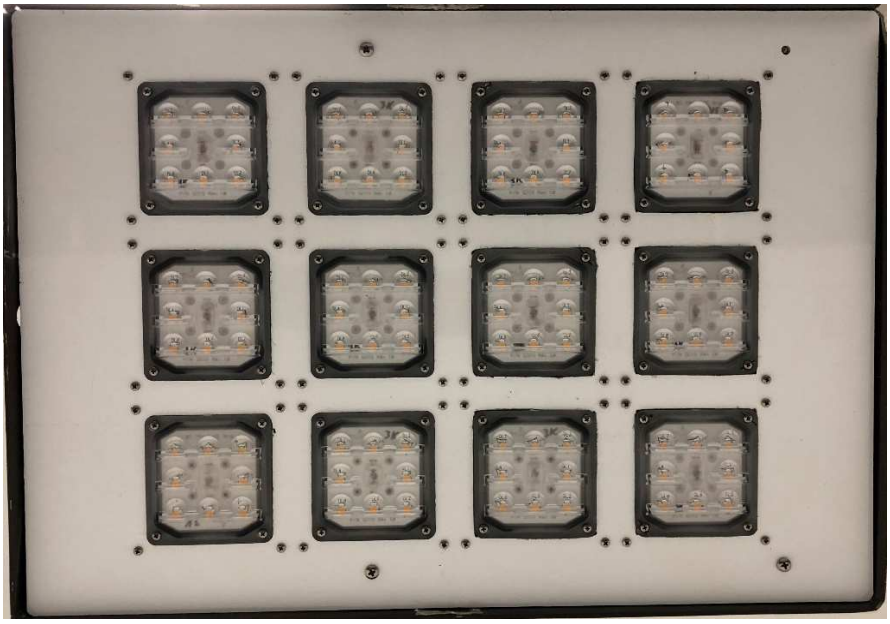
Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
350	0.028	440	584.8	530	389.8	620	308.9	710	30.50
355	0.000	445	780.1	535	407.0	625	280.4	715	26.42
360	0.000	450	683.5	540	420.1	630	254.4	720	22.95
365	0.000	455	434.9	545	433.5	635	228.4	725	20.01
370	0.000	460	296.3	550	445.5	640	204.7	730	17.14
375	0.045	465	200.7	555	456.9	645	182.5	735	14.57
380	0.000	470	128.7	560	466.1	650	161.3	740	12.80
385	0.000	475	95.63	565	474.2	655	142.5	745	10.88
390	0.150	480	84.94	570	479.0	660	125.8	750	9.306
395	0.112	485	86.07	575	479.3	665	110.3	755	8.229
400	1.596	490	104.5	580	477.5	670	96.23	760	6.999
405	4.715	495	136.1	585	467.1	675	83.47	765	6.076
410	14.61	500	177.8	590	452.8	680	73.52	770	5.332
415	35.19	505	223.3	595	435.4	685	63.04	775	4.438
420	72.43	510	269.4	600	413.2	690	54.51	780	3.858
425	138.8	515	309.3	605	388.5	695	47.13		
430	237.5	520	343.3	610	362.7	700	40.91		
435	376.8	525	370.0	615	336.4	705	35.35		

Spectral Data Over Visible Wavelengths



PICTURES (not to scale)



CONCLUSION

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

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Report Reviewed By:

Vladimir Kozak
Engineering Supervisor
Lighting Division

Attachment: None