REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G103961645 Date: June 6, 2019

REPORT NO. 103961645LAX-005

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-300W-LV-40K-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-40K-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 6, 2019

SUMMARY

Model No.:	ALD-R-300W-LV-40K-T4
Description:	LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	35459
Total Power (W)	301.3
Luminaire Efficacy (LPW)	117.7
Power Factor at 120Vac	0.999
Power Factor at 277Vac	0.950
Current ATHD % at 120Vac	4.74
Current ATHD % at 277Vac	8.81
Correlated Color Temperature (CCT - K)	3994
Color Rendering Index (CRI - Ra)	71.6
Color Rendering Index (CRI - R9)	-35.6
DUV	0.001
Chromaticity Coordinate (x)	0.381
Chromaticity Coordinate (y)	0.379
Chromaticity Coordinate (u')	0.225
Chromaticity Coordinate (v')	0.503

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	06/06/19
Spectrometer	CDS-3020-T	000834	VBU	VBU	06/06/19
Power Supply (AC 3P / DC)	CSW5550-208-LAN	001339	VBU	VBU	06/06/19
Power Meter	WT330	001319	08/13/18	08/13/19	06/06/19
Temp. & RH Meter	971	001177	01/29/19	01/29/20	06/06/19
DC Power Supply	LPS-100-0833	000832	01/31/19	01/31/20	06/06/19
Network TC Reader	iSD-TC	000824	02/01/19	02/01/20	06/06/19

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

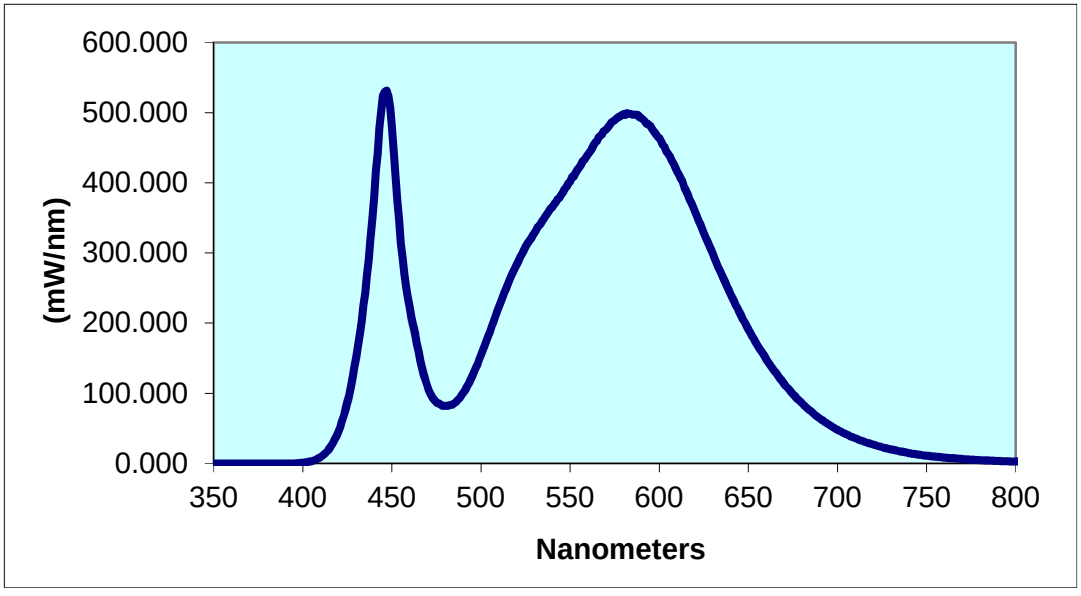
Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Current ATHD (%)	Luminous Flux (Lumens)	Lumen Efficacy (LPW)
LAN1903191345-010	Up	120.0	2515	301.3	0.999	4.74	35459	117.7
		277.1	1145	301.4	0.950	8.81		

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')
3994	71.6	-35.6	0.001	0.381	0.379	0.225	0.503

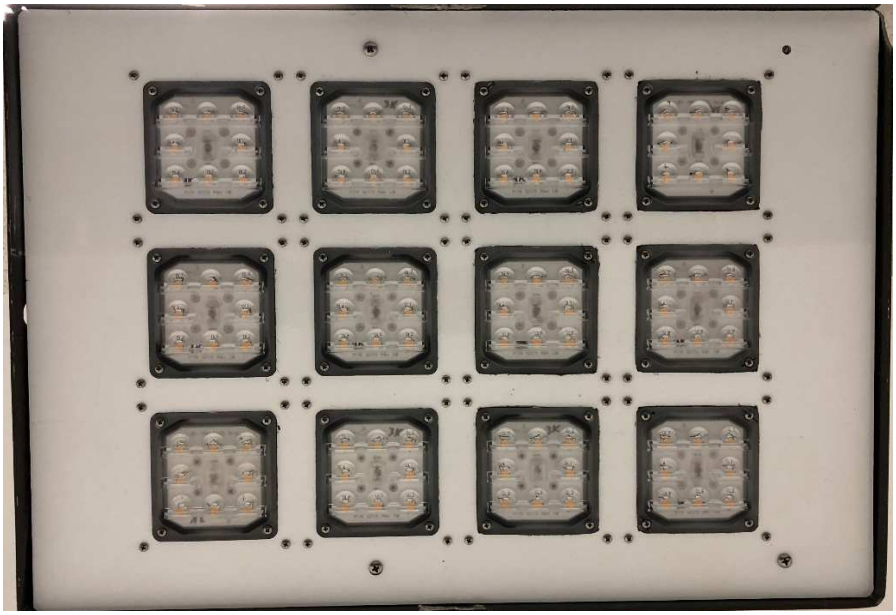
Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
350	0.000	440	380.3	530	328.2	620	359.6	710	35.89
355	0.000	445	524.1	535	347.8	625	328.2	715	30.92
360	0.000	450	480.5	540	364.8	630	299.0	720	26.85
365	0.000	455	314.0	545	382.8	635	269.1	725	23.23
370	0.000	460	222.1	550	401.5	640	241.7	730	19.98
375	0.000	465	159.2	555	421.5	645	215.6	735	17.25
380	0.000	470	109.0	560	440.4	650	190.9	740	14.58
385	0.015	475	87.22	565	459.3	655	168.8	745	12.73
390	0.116	480	81.93	570	475.8	660	148.8	750	10.96
395	0.000	485	85.49	575	488.8	665	130.5	755	9.588
400	0.618	490	100.1	580	497.9	670	113.8	760	8.199
405	3.209	495	123.9	585	497.2	675	98.81	765	7.523
410	8.975	500	154.8	590	492.2	680	86.26	770	6.192
415	21.50	505	187.8	595	481.2	685	74.67	775	5.361
420	45.18	510	222.6	600	463.9	690	64.12	780	4.645
425	87.35	515	254.7	605	441.4	695	55.63		
430	151.8	520	283.3	610	416.4	700	48.02		
435	243.1	525	308.1	615	389.0	705	41.38		

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