REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G103961645 Date: July 10, 2019

REPORT NO. 103961645LAX-014

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-300W-HV-50K-T4
LED MODEL NO. GWP9LR34.PM-M2M3
DRIVER MODEL NO. ESD-320S620DT
RETROFIT MODEL NO. 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-HV-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: July 9, 2019

SUMMARY

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

Criteria	Result
Total Lumen Output (Lumens)	36493
Total Power (W)	298.8
Luminaire Efficacy (LPW)	122.1
Power Factor at 277Vac	0.994
Power Factor at 480Vac	0.964
Current ATHD % at 277Vac	7.95
Current ATHD % at 480Vac	11.19
Correlated Color Temperature (CCT - K)	5088
Color Rendering Index (CRI - Ra)	70.9
Color Rendering Index (CRI - R9)	-35.7
DUV	0.000
Chromaticity Coordinate (x)	0.343
Chromaticity Coordinate (y)	0.352
Chromaticity Coordinate (u')	0.210
Chromaticity Coordinate (v')	0.484

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	07/09/19
Spectrometer	CDS-3020-T	000834	VBU	VBU	07/09/19
Power Supply (AC 3P / DC)	CSW5550-208-LAN	001339	VBU	VBU	07/09/19
Power Meter	WT330	001319	07/02/19	07/02/20	07/09/19
Temp. & RH Meter	971	001177	01/29/19	01/29/20	07/09/19
DC Power Supply	LPS-100-0833	000832	01/31/19	01/31/20	07/09/19
Network TC Reader	iSD-TC	000824	02/01/19	02/01/20	07/09/19
Variac 3 phase	6020E-3Y	001096	VBU	VBU	07/09/19
Power Meter	WT333	001322	11/28/2018	11/28/2019	07/09/19

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

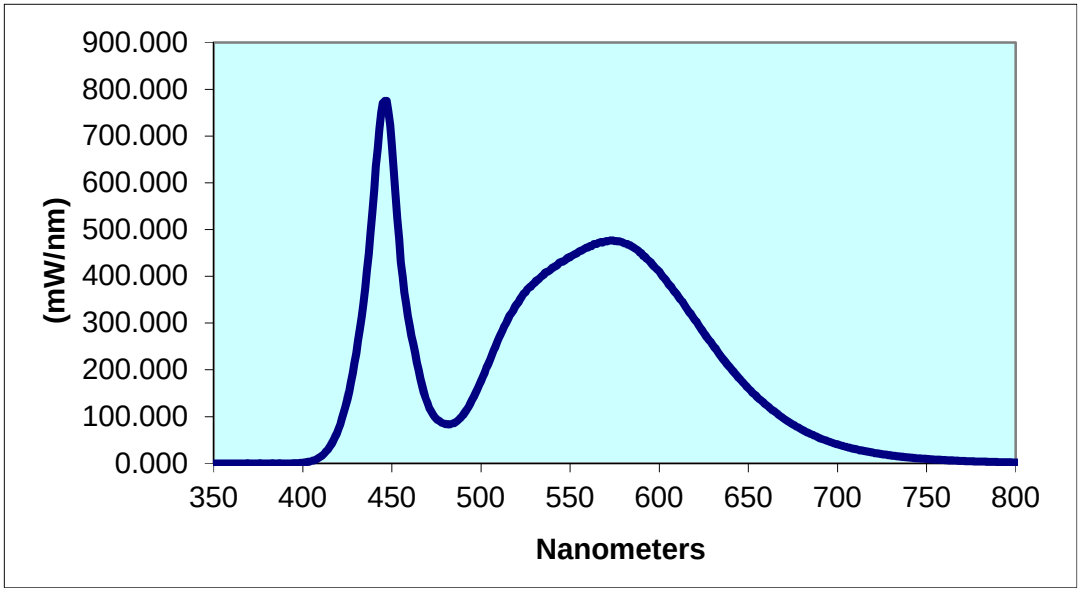
Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Current ATHD (%)	Luminous Flux (Lumens)	Lumen Efficacy (LPW)
LAN1903191345-010	Up	277.1	1085	298.8	0.994	7.95	36493	122.1
		480.0	653.5	302.4	0.964	11.19		

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')
5088	70.9	-35.7	0.000	0.343	0.352	0.210	0.484

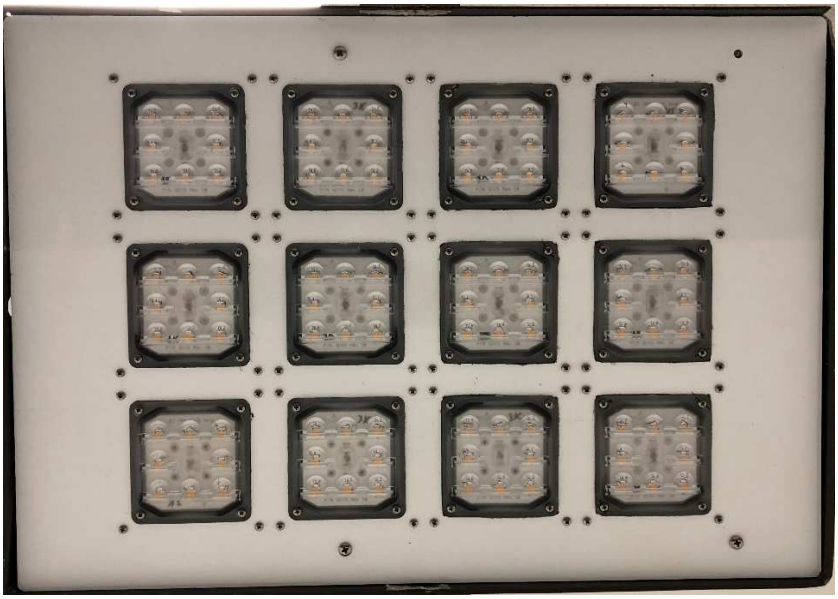
Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
350	0.000	440	584.1	530	385.7	620	306.8	710	30.54
355	0.116	445	770.8	535	402.9	625	279.2	715	26.47
360	0.175	450	680.6	540	417.6	630	253.1	720	23.13
365	0.000	455	430.3	545	430.7	635	227.3	725	19.95
370	0.000	460	293.4	550	440.4	640	203.7	730	17.07
375	0.000	465	198.9	555	453.2	645	181.3	735	14.69
380	0.000	470	128.4	560	461.7	650	160.8	740	12.71
385	0.000	475	95.06	565	469.5	655	141.7	745	11.00
390	0.000	480	84.17	570	475.2	660	125.4	750	9.417
395	0.196	485	85.98	575	475.4	665	109.7	755	8.124
400	0.997	490	103.7	580	471.1	670	95.88	760	7.124
405	5.059	495	135.6	585	462.9	675	83.41	765	6.025
410	14.37	500	176.3	590	449.3	680	72.36	770	5.183
415	34.88	505	221.8	595	430.6	685	62.79	775	4.473
420	72.77	510	267.3	600	410.2	690	54.11	780	3.820
425	136.9	515	306.8	605	385.1	695	47.01		
430	235.2	520	340.0	610	360.8	700	40.77		
435	375.8	525	365.8	615	333.5	705	35.38		

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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Lighting Division

Report Reviewed By:

Vladimir Kozak
Engineering Supervisor
Lighting Division

Attachment: None