

## REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G103961645

Date: June 3, 2019

REPORT NO. 103961645LAX-001

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-300W-LV-30K-T5  
LED MODEL NO. GWP9LR34.PM-M2M3  
DRIVER MODEL NO. EUD-320S670DT  
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

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number ALD-R-300W-LV-30K-T5. 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 3, 2019

## SUMMARY

Model No.: ALD-R-300W-LV-30K-T5 Description: LED Luminaire
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Criteria	Result
Total Lumen Output (Lumens)	36181
Total Power (W)	297.8
Luminaire Efficacy (LPW)	121.5
Power Factor	0.999
BUG Rating	B5-U0-G4
IES Classification	Type VS
Longitudinal Classification	Short

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	06/03/19
AC Source	CW1251P	000944	VBU	VBU	06/03/19
Power Analyzer	WT210	000945	11/28/18	11/28/19	06/03/19
Thermometer	DPI8-C24	001782	09/21/18	09/21/19	06/03/19
Temp. & RH Meter	971	001177	01/29/19	01/29/20	06/03/19

## TEST METHODS

### Seasoning in Sample Orientation – LED Products

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

### Photometric and Electrical Measurements – Distribution Method

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample 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.

Some graphics were created with Photometrics Plus software.

### BUG Ratings (Backlight, Uplight, Glare) – for Outdoor Fixtures Only

Zonal Lumens were calculated and grouped using the formula in IESNA TM-15-11 for each zone as defined in the BUG addendum. The maximum lumen rating in each zone was compared against the BUG zonal requirements of Energy Star. Photometric Toolbox software was used to calculate results.

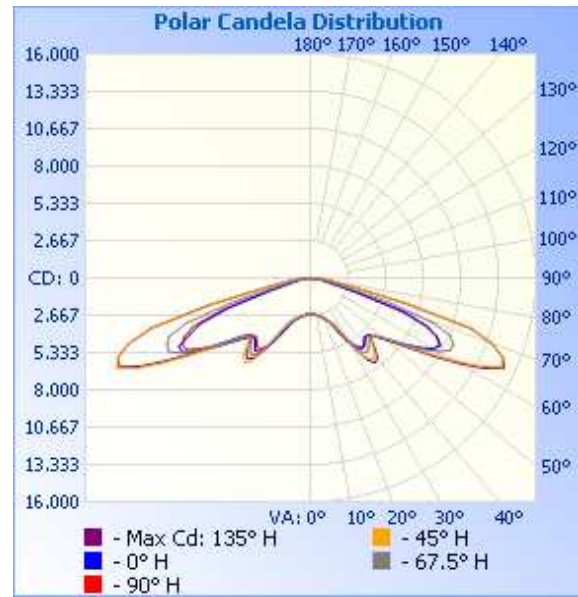
## RESULTS OF TEST

### Photometric and Electrical Measurements at Ambient Temperature (25°C +/- 1°C) – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage {Vac}	Input Current (mA)	Input Power (Watts)	Input Power Factor	Current ATHD	Absolute Luminous Flux (Lumens)	Lumen Efficacy (LPW)
LAN1903191345-010	UP	120.0	2485	297.8	0.999	4.8	36181	121.5
		277.0	1109	292.4	0.952	11.55		

### Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	25	45	67.5	90
0	2576	2576	2576	2576	2576
5	2600	2601	2597	2604	2605
10	2686	2690	2689	2697	2698
15	2844	2849	2845	2860	2869
20	3119	3104	3095	3124	3143
25	3728	3604	3507	3619	3762
30	5051	4895	4796	4990	5130
35	6044	6504	6931	6451	6159
40	6000	6719	7116	6464	5940
45	5746	5962	5930	5976	5760
50	6640	6539	6505	6599	6724
55	8263	8292	8544	8336	8483
60	10070	10662	11768	10516	10190
65	9892	11833	14968	11209	9888
70	7077	9865	13766	9186	6774
75	2003	3340	7479	3133	1937
80	876	1380	2287	1299	908
85	346	634	1014	659	380
90	0	0	0	0	0



## RESULTS OF TEST (cont'd)

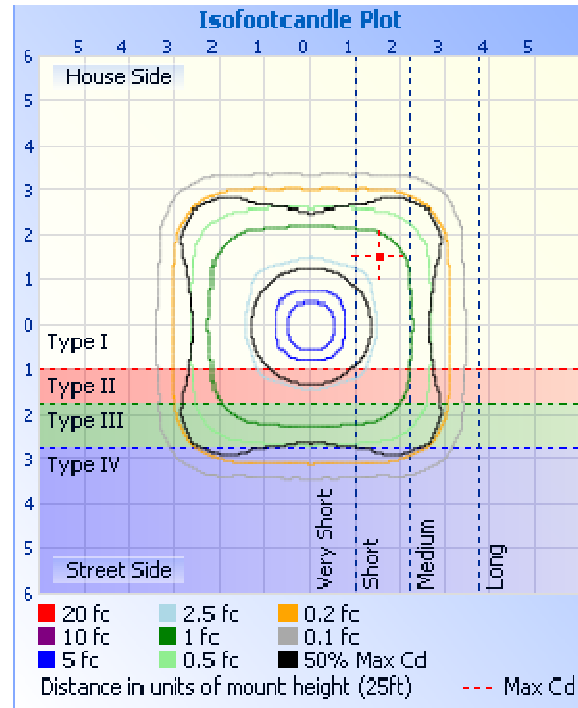
### Illumination Plots

Mounting Height: 25 ft.

Illuminance - Cone of Light



Isoillumination Plot



### Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	2867	7.9
0-40	6834	18.9
0-60	19432	53.7
60-90	16750	46.3
0-90	36181	100.0
90-180	0.0	0.0
0-180	36181	100.0

### Luminaire Classification System (LCS)

LCS	Zone	Lumens	% Luminaire
FL	(0-30)	1426.3	3.9
FM	(30-60)	8172.9	22.6
FH	(60-80)	8034.5	22.2
FVH	(80-90)	361.5	1.0
BL	(0-30)	1437.6	4.0
BM	(30-60)	8385.1	23.2
BH	(60-80)	8012.1	22.1
BVH	(80-90)	344.4	1.0
UL	(90-100)	0.0	0.0
UH	(100-180)	0.0	0.0

### Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	251.9	0.7
10-20	824.5	2.3
20-30	1791	4.9
30-40	3967	11.0
40-50	4829	13.3
50-60	7769	21.5
60-70	11222	31.0
70-80	4822	13.3
80-90	705.8	2.0

BUG Rating: B5-U0-G4

IES Classification: Type VS

Longitudinal Classification: Short

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:

A handwritten signature in black ink, appearing to read 'Erik Linares'.

Erik Linares  
Associate Engineer  
Lighting Division

Attachment: None

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Vladimir Kozak'.

Vladimir Kozak  
Engineering Supervisor  
Lighting Division