

## REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G103961645

Date: July 9, 2019

REPORT NO. 103961645LAX-012

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-300W-HV-30K-TF  
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

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number ALD-R-300W-HV-30K-TF. 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 8, 2019

## SUMMARY

Model No.: ALD-R-300W-HV-30K-TF Description: LED Luminaire
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Criteria	Result
Total Lumen Output (Lumens)	37660
Total Power (W)	297.4
Luminaire Efficacy (LPW)	126.6
Power Factor	0.994
BUG Rating	B5-U0-G1
IES Classification	Type VS
Longitudinal Classification	Very Short

## EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date	Date Used
Goniophotometer	6440T	000943	VBU	VBU	07/08/19
AC Source	CW1251P	001334	02/19/19	02/19/20	07/08/19
Power Analyzer	WT210	000945	11/28/18	11/28/19	07/08/19
Thermometer	DPI8-C24	001782	09/21/18	09/21/19	07/08/19
Temp. & RH Meter	971	001177	01/29/19	01/29/20	07/08/19
Variac 3 phase	6020E-3Y	001096	VBU	VBU	07/08/19
Power Meter	WT333	001322	11/28/2018	11/28/2019	07/08/19

## 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.

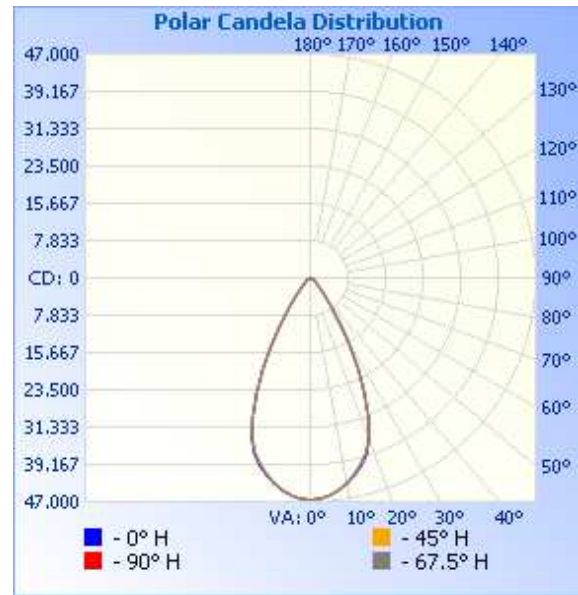
## RESULTS OF TEST

### 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	277.1	1080	297.4	0.994	7.56	37660	126.6
		479.9	652.9	302.1	0.964	10.69		

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

Angle	0	25	45	67.5	90
0	46555	46555	46555	46555	46555
5	45815	45782	45749	45783	45817
10	43809	43745	43639	43607	43690
15	40824	40689	40451	40328	40580
20	35835	35694	35622	35606	35656
25	26481	26499	26586	26621	26751
30	16623	16506	16435	16409	16557
35	8602	8535	8520	8430	8422
40	4317	4331	4318	4276	4298
45	2336	2346	2302	2335	2341
50	1582	1579	1593	1591	1604
55	1191	1167	1209	1236	1255
60	929	884	929	940	1003
65	691	672	751	736	752
70	523	574	632	636	615
75	435	510	541	554	512
80	265	387	422	362	258
85	70	162	182	169	92
90	0	0	0	0	0



## RESULTS OF TEST (cont'd)

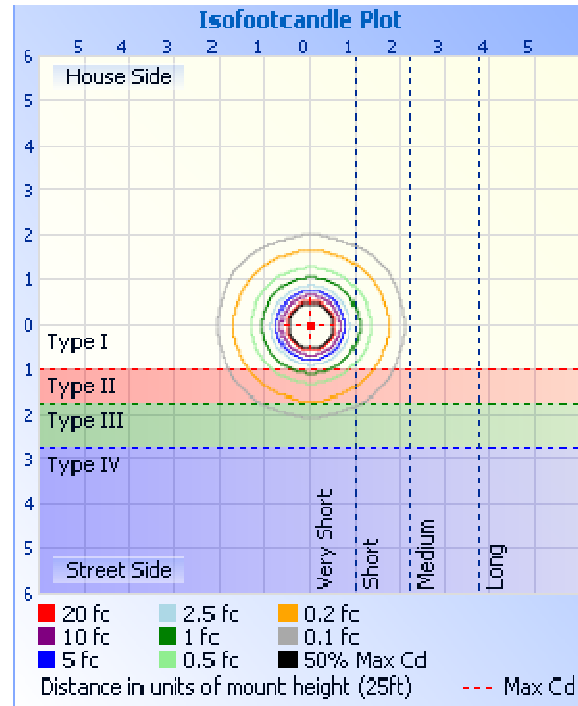
### Illumination Plots

Mounting Height: 25 ft.

Illuminance - Cone of Light



Isoillumination Plot



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

Zone	Lumens	% Luminaire
0-30	27532	73.1
0-40	33172	88.1
0-60	36227	96.2
60-90	1434	3.8
0-90	37660	100.0
90-180	0.0	0.0
0-180	37660	100.0

### Luminaire Classification System (LCS)

LCS	Zone	Lumens	% Luminaire
FL	(0-30)	13786.8	36.5
FM	(30-60)	4356.7	11.5
FH	(60-80)	631.0	1.7
FVH	(80-90)	86.0	0.2
BL	(0-30)	13786.8	36.5
BM	(30-60)	4356.7	11.5
BH	(60-80)	631.0	1.7
BVH	(80-90)	86.0	0.2
UL	(90-100)	0.0	0.0
UH	(100-180)	0.0	0.0

### Zonal Lumens and Percentages at 25°C

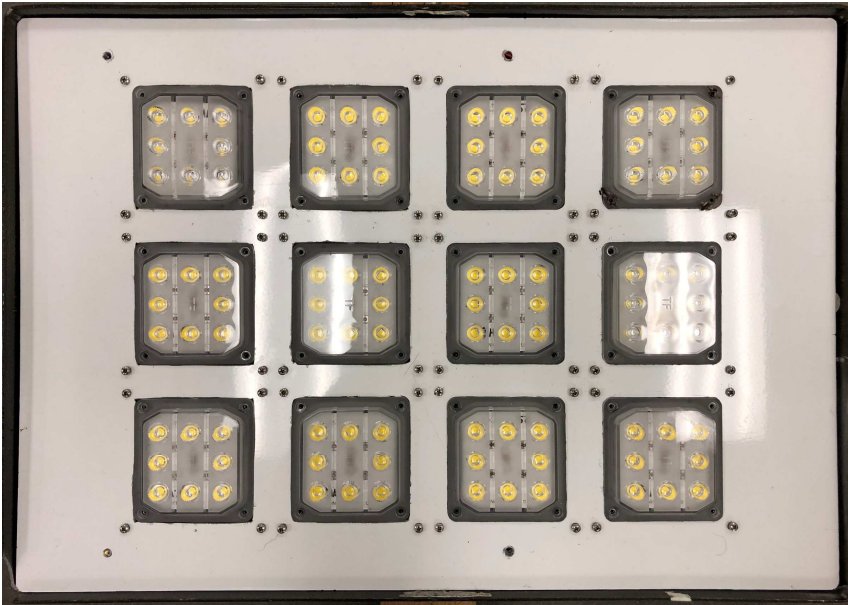
Zone	Lumens	% Luminaire
0-10	4300	11.4
10-20	11292	30.0
20-30	11940	31.7
30-40	5640	15.0
40-50	1961	5.2
50-60	1094	2.9
60-70	728.7	1.9
70-80	532.9	1.4
80-90	171.9	0.5

BUG Rating: B5-U0-G1

IES Classification: Type VS

Longitudinal Classification: Very 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:



Erik Linares  
Associate Engineer  
Lighting Division

Attachment: None

Report Reviewed By:



Vladimir Kozak  
Engineering Supervisor  
Lighting Division