

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G103961645

Date: July 9, 2019

REPORT NO. 103961645LAX-011

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-300W-HV-30K-T3
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-T3. 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-T3 Description: LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	35516
Total Power (W)	297.4
Luminaire Efficacy (LPW)	119.4
Power Factor	0.994
BUG Rating	B3-U0-G4
IES Classification	Type III
Longitudinal Classification	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.

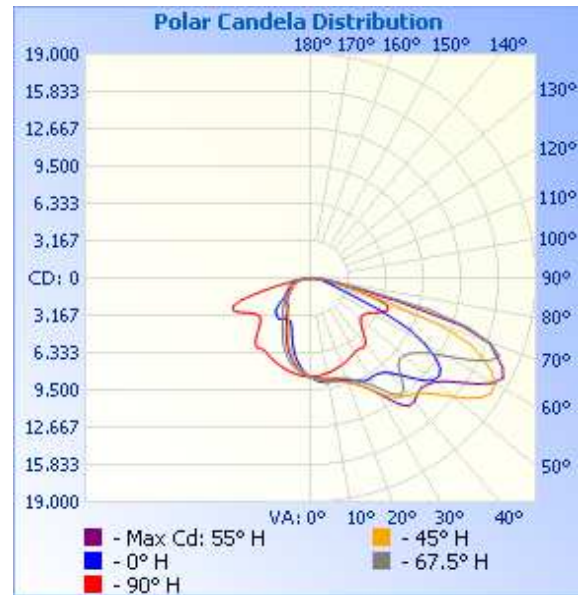
RESULTS OF TEST

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	7.6	35516	119.4
		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	8396	8396	8396	8396	8396
5	8808	8775	8692	8549	8319
10	8979	8971	8889	8646	8184
15	9044	9091	9091	8794	8010
20	9195	9314	9428	9096	7809
25	9624	9825	10034	9636	7594
30	9880	10372	11124	10522	7341
35	9902	10461	12345	12005	7300
40	10512	10820	12937	12245	7223
45	11939	11990	13792	10468	6210
50	13474	13892	15642	10247	5518
55	13380	14642	17639	11024	5428
60	11085	13327	18005	13209	5912
65	6598	10430	16031	16616	6801
70	2466	5307	11552	16114	6956
75	1555	3957	4269	10470	4184
80	983	2465	2178	2693	1465
85	488	832	1100	1046	492
90	0	0	0	0	0



RESULTS OF TEST (cont'd)

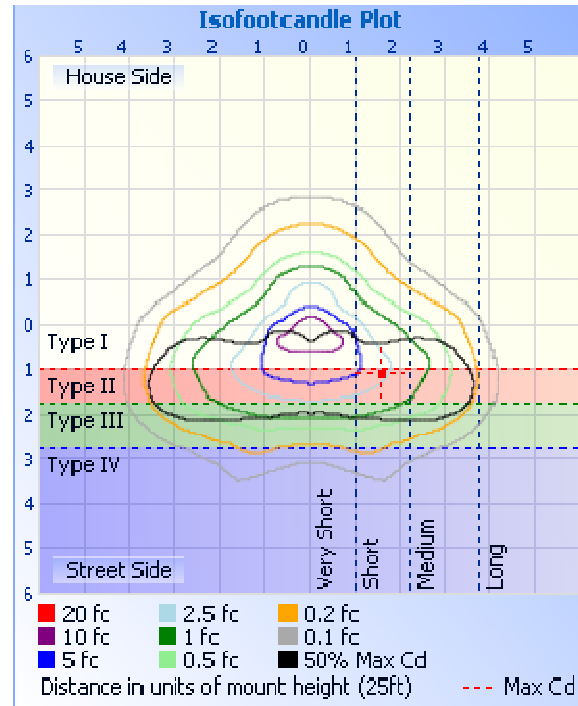
Illumination Plots

Mounting Height: 25 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	6341	17.9
0-40	11072	31.2
0-60	24052	67.7
60-90	11464	32.3
0-90	35516	100.0
90-180	0.0	0.0
0-180	35516	100.0

Luminaire Classification System (LCS)

LCS	Zone	Lumens	% Luminaire
FL	(0-30)	3911.3	11.0
FM	(30-60)	13732.4	38.7
FH	(60-80)	8736.3	24.6
FVH	(80-90)	501.8	1.4
BL	(0-30)	2431.4	6.8
BM	(30-60)	3976.6	11.2
BH	(60-80)	1958.3	5.5
BVH	(80-90)	270.0	0.8
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	785.8	2.2
10-20	2185	6.2
20-30	3371	9.5
30-40	4731	13.3
40-50	5913	16.6
50-60	7066	19.9
60-70	6994	19.7
70-80	3698	10.4
80-90	771.6	2.2

BUG Rating: B3-U0-G4

IES Classification: Type III

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:

Erik Linares
Associate Engineer
Lighting Division

Attachment: None

Report Reviewed By:

Vladimir Kozak
Engineering Supervisor
Lighting Division