

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G103924656

Date: May 13, 2019

REPORT NO. 103924656LAX-014

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-160W-HV-30K-T3
LED MODEL NO. GWP9LR34.PM-M2M3
DRIVER MODEL NO. ESD-150S350DT
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-00973316-1.

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-160W-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 LAN1903191345-003A.

DATES OF TESTS: May 11, 2019

SUMMARY

Model No.: ALD-R-160W-HV-30K-T3 Description: LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	19511
Total Power (W)	158.7
Luminaire Efficacy (LPW)	122.9
Power Factor	0.994
BUG Rating	B3-U0-G3
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	VBV	VBV	05/11/19
Power Analyzer	WT210	000945	11/28/18	11/28/19	05/11/19
Magnetic Level	581-9	001610	10/31/18	10/31/19	05/11/19
Thermometer	DPI8-C24	001782	09/21/18	09/21/19	05/11/19
Temp. & RH Meter	971	001177	01/29/19	01/29/20	05/11/19
Power Supply (AC 3P / DC)	CSW5550-208-LAN	001339	VBV	VBV	05/11/19

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.

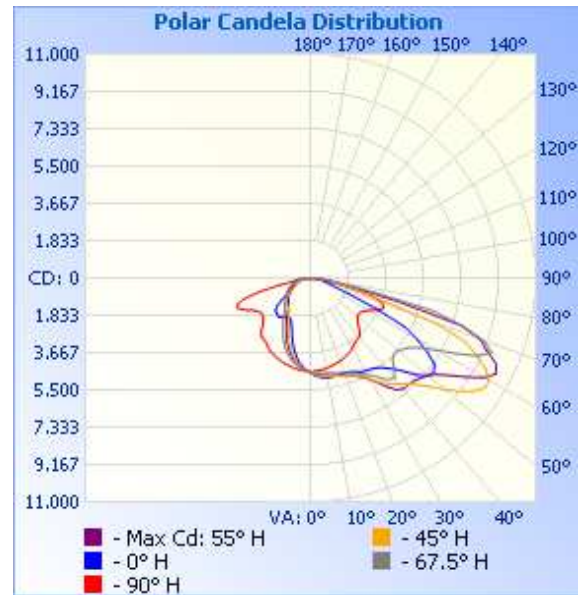
RESULTS OF TEST

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)
LAN1903191345-003A	UP	277.0	576.6	158.7	0.994	7.97	19511	122.9
		480.0	345.4	159.4	0.962	6.61		

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	25	45	67.5	90
0	4629	4629	4629	4629	4629
5	4865	4825	4796	4691	4555
10	4958	4926	4902	4746	4491
15	4957	4956	4988	4822	4408
20	4940	4982	5101	4951	4307
25	5067	5115	5289	5170	4190
30	5274	5410	5703	5481	4030
35	5402	5565	6284	5981	3816
40	5766	5860	6776	6397	3723
45	6496	6454	7410	5663	3316
50	7465	7575	8489	5566	3005
55	7396	8067	9687	5950	2954
60	6019	7238	10073	7063	3177
65	3553	5732	8906	9026	3664
70	1341	2860	6556	9044	3771
75	830	2165	2402	6202	2588
80	530	1329	1218	1558	878
85	348	524	675	637	326
90	0	0	0	0	0

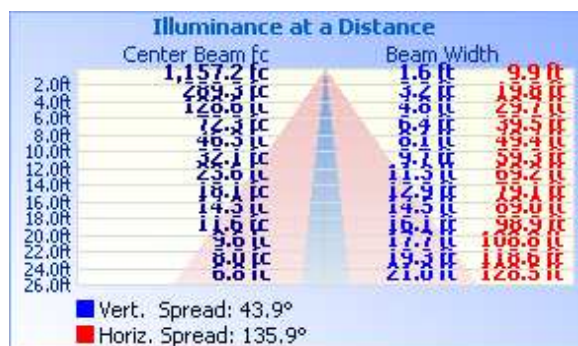


RESULTS OF TEST (cont'd)

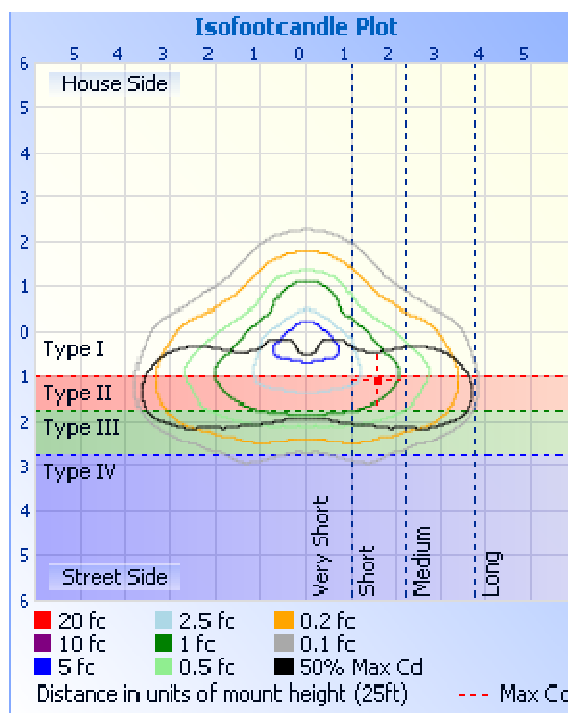
Illumination Plots

Mounting Height: 25 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	3476	17.8
0-40	5980	30.7
0-60	13081	67.0
60-90	6430	33.0
0-90	19511	100.0
90-180	0.0	0.0
0-180	19511	100.0

Luminaire Classification System (LCS)

LCS	Zone	Lumens	% Luminaire
FL	(0-30)	2101.0	10.8
FM	(30-60)	7380.2	37.8
FH	(60-80)	4842.6	24.8
FVH	(80-90)	306.0	1.6
BL	(0-30)	1376.1	7.1
BM	(30-60)	2223.4	11.4
BH	(60-80)	1074.8	5.5
BVH	(80-90)	208.4	1.1
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	434.9	2.2
10-20	1212	6.2
20-30	1829	9.4
30-40	2504	12.8
40-50	3213	16.5
50-60	3887	19.9
60-70	3830	19.6
70-80	2086	10.7
80-90	514.3	2.6

BUG Rating: B3-U0-G3

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