

REPORT

25800 COMMERCENTRE DRIVE, LAKE FOREST, CA 92630

Project No. G103924656

Date: May 13, 2019

REPORT NO. 103924656LAX-012

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-160W-HV-30K-T5
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-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 LAN1903191345-003A.

DATES OF TESTS: May 11, 2019

SUMMARY

Model No.: ALD-R-160W-HV-30K-T5
Description: LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	20278
Total Power (W)	158.8
Luminaire Efficacy (LPW)	127.7
Power Factor	0.994
BUG Rating	B4-U0-G3
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	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	VBU	VBU	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.

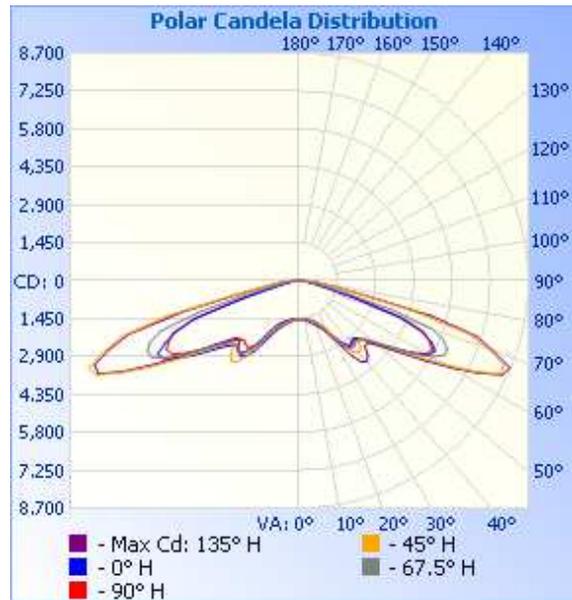
RESULTS OF TEST

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	277.1	576.0	158.8	0.994	7.80	20278	127.7
		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	1460	1460	1460	1460	1460
5	1458	1461	1464	1465	1467
10	1482	1490	1497	1505	1514
15	1543	1551	1561	1578	1599
20	1650	1652	1663	1696	1731
25	1862	1834	1827	1892	1974
30	2320	2264	2231	2382	2507
35	2921	2998	3126	3084	3081
40	3084	3383	3581	3256	3162
45	3083	3184	3169	3184	3167
50	3617	3546	3541	3613	3700
55	4555	4508	4630	4572	4616
60	5673	5924	6410	5790	5577
65	5542	6552	8418	6198	5462
70	4071	5537	7703	5368	4190
75	1232	2050	4553	1904	1260
80	532	837	1398	753	524
85	279	466	673	399	244
90	0	0	0	0	0



RESULTS OF TEST (cont'd)

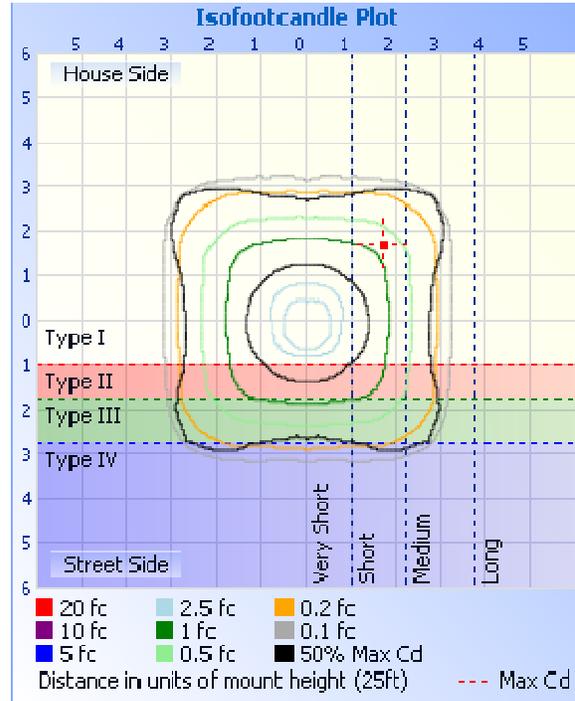
Illumination Plots

Mounting Height: 25 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	1536	7.6
0-40	3509	17.3
0-60	10451	51.5
60-90	9827	48.5
0-90	20278	100.0
90-180	0.0	0.0
0-180	20278	100.0

Luminaire Classification System (LCS)

LCS	Zone	Lumens	% Luminaire
FL	(0-30)	742.9	3.7
FM	(30-60)	4305.9	21.2
FH	(60-80)	4573.9	22.6
FVH	(80-90)	234.3	1.2
BL	(0-30)	791.2	3.9
BM	(30-60)	4605.8	22.7
BH	(60-80)	4782.6	23.6
BVH	(80-90)	237.8	1.2
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	142.4	0.7
10-20	460.3	2.3
20-30	932.8	4.6
30-40	1974	9.7
40-50	2655	13.1
50-60	4287	21.1
60-70	6336	31.2
70-80	3019	14.9
80-90	471.9	2.3

BUG Rating: B4-U0-G3
 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:

Erik Linares
Associate Engineer
Lighting Division

Attachment: None

Report Reviewed By:

Vladimir Kozak
Engineering Supervisor
Lighting Division