

REPORT

25800 COMMERCE DRIVE, LAKE FOREST, CA 92630

Project No. G103961645

Date: July 9, 2019

REPORT NO. 103961645LAX-009

TEST OF ONE LED LUMINAIRE

MODEL NO. ALD-R-300W-HV-30K-T5
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-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: July 8, 2019

SUMMARY

Model No.: ALD-R-300W-HV-30K-T5 Description: LED Luminaire

Criteria	Result
Total Lumen Output (Lumens)	37120
Total Power (W)	297.3
Luminaire Efficacy (LPW)	124.9
Power Factor	0.994
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	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.

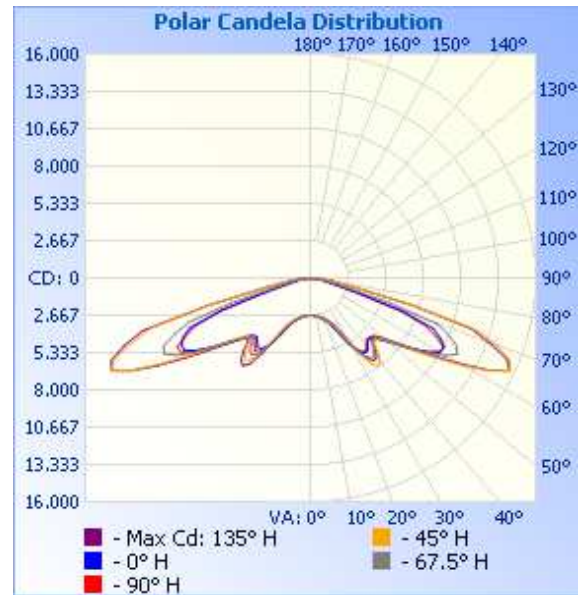
RESULTS OF TEST

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	277.0	1079	297.3	0.994	7.56	37120	124.9
		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	2651	2651	2651	2651	2651
5	2688	2694	2687	2686	2678
10	2797	2802	2794	2790	2774
15	2991	2989	2972	2968	2949
20	3294	3279	3247	3246	3233
25	3914	3767	3681	3764	3869
30	5414	5194	4973	5146	5261
35	6528	7023	7446	6845	6435
40	6314	7052	7663	7054	6204
45	6058	6338	6246	6303	5973
50	6984	6953	6923	6949	6984
55	8773	8781	9087	8767	8810
60	10595	11158	12458	11080	10594
65	10204	12068	15569	11424	9818
70	7082	10244	14072	9597	6804
75	1953	3343	7570	2945	1901
80	937	1387	2228	1240	855
85	392	707	978	547	326
90	0	0	0	0	0

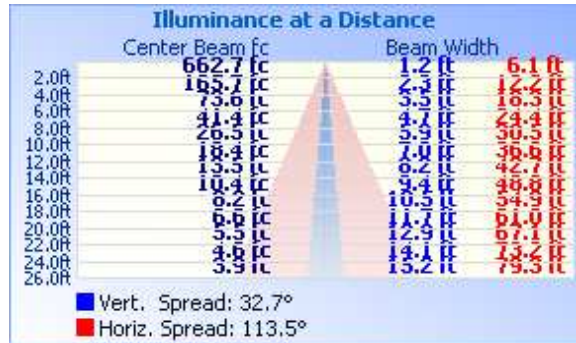


RESULTS OF TEST (cont'd)

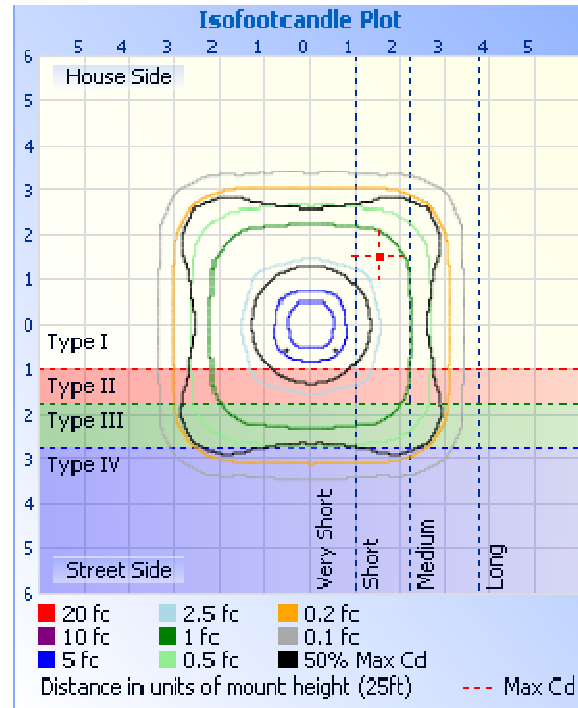
Illumination Plots

Mounting Height: 25 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-40	6999	18.9
0-60	19967	53.8
60-90	17153	46.2
0-90	37120	100.0
90-180	0.0	0.0
0-180	37120	100.0

Luminaire Classification System (LCS)

LCS	Zone	Lumens	% Luminaire
FL	(0-30)	1487.2	4.0
FM	(30-60)	8652.7	23.3
FH	(60-80)	8266.1	22.3
FVH	(80-90)	352.0	0.9
BL	(0-30)	1442.4	3.9
BM	(30-60)	8374.7	22.6
BH	(60-80)	8176.4	22.0
BVH	(80-90)	361.6	1.0
UL	(90-100)	0.0	0.0
UH	(100-180)	0.0	0.0

Zonal Lumens and Percentages at 25°C

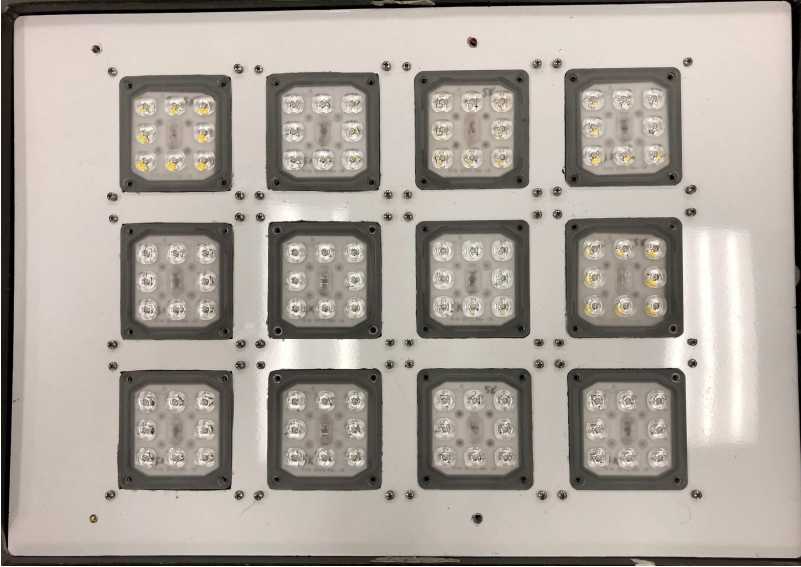
Zone	Lumens	% Luminaire
0-10	259.0	0.7
10-20	847.0	2.3
20-30	1827	4.9
30-40	4066	11.0
40-50	4964	13.4
50-60	8004	21.6
60-70	11520	31.0
70-80	4920	13.3
80-90	713.5	1.9

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