



REPORT

545 E. Algonquin Rd., Arlington Heights, IL 60005

Project No. G101651563

Date: May 13, 2014

REPORT NO. 101651563CHI-002

TEST OF ONE 13" DIA. EXTRUDED ALUMINUM LED CYLINDER WITH PRISMATIC LENS

MODEL NO. SXCLR4325
LED MODEL NO. CREE CXA2540
DRIVER MODEL NO. ACE ELECTRONICS AC-60CD1.4UV -TS

RENDERED TO

ESCO LIGHTING, INC.
3254 N. KILBOURN
CHICAGO, IL 60641

TEST: Electrical and Photometric tests as required to the IESNA test standard.

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

AUTHORIZATION: The testing performed was authorized by signed quote number 500526666.

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 prototype sample of model number SXCLR4325. The sample was received by Intertek on May 8, 2014, in undamaged condition and one sample was tested as received. The sample designation was 05082014081606.



SUMMARY

Model No.:	SXCLR4325
Description:	13" dia. Extruded Aluminum LED Cylinder with Prismatic Lens

Criteria	Result
Total Lumen Output (Lumens)	9840
Total Power (W)	125.8
Luminaire Efficacy (LPW)	78.22
Power Factor	0.997

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Date Calibrated	Calibration Due Date
Yokogawa Power Meter	WT210	146919	09/06/13	09/06/14
Omega Newport Thermometer	DPI8-C24	146920	12/04/13	12/04/14
LSI High Speed Mirror Goniometer	6440T	146928	VBV	VBV
Newport Hygrometer	iServer	146956	01/02/14	01/02/15
Elgar, AC Power Supply	CW1251P	146918	VBV	VBV
Cole-Parmer Triple Timer	94440-00	CHI0041	04/01/14	04/01/15

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.



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	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)	Current ATHD (%)
05082014081606	UP	120.0	1051	125.8	0.997	9840	78.22	4.98
		277.0	487.9	132.6	0.981			10.37

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	36234	36234	36234	36234	36234
5	33788	34340	34640	34446	34940
10	23959	25661	26252	24179	24568
15	14188	15563	15983	13624	12706
20	7849	8599	7940	7311	7049
25	4368	4505	4270	3963	3804
30	2374	2294	2098	2048	2026
35	1154	1140	1010	1001	971
40	545	501	486	399	396
45	259	234	222	169	151
50	120	125	115	96	89
55	68	83	74	69	66
60	56	116	61	54	51
65	49	91	50	44	43
70	39	50	42	33	35
75	27	37	30	24	26
80	18	22	18	15	16
85	7	9	8	7	8
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

<u>Zone</u>	<u>Lumens</u>	<u>% Luminaire</u>
0-30	8802	89.5
0-40	9489	96.4
0-60	9743	99.0
60-90	97.5	1.0
0-90	9840	100.0
90-180	0.0	0.0
0-180	9840	100.0

Zonal Lumens and Percentages at 25°C

<u>Zone</u>	<u>Lumens</u>	<u>% Luminaire</u>
0-10	2927	29.7
10-20	3950	40.1
20-30	1925	19.6
30-40	686.4	7.0
40-50	182.3	1.9
50-60	71.5	0.7
60-70	55.1	0.6
70-80	32.2	0.3
80-90	10.2	0.1



PICTURE (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 "Tim Quigley".

Tim Quigley
Engineer
Lighting Division

Attachment: None

Report Reviewed By:

A handwritten signature in black ink, appearing to read "Joe Schledorn".

Joe Schledorn
Engineering Team Lead
Lighting Division

