

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P182511

Luminaire Tested: **LDSQA4A18830D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26796)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18830D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1908.7 lumens
Efficiency: N/A
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

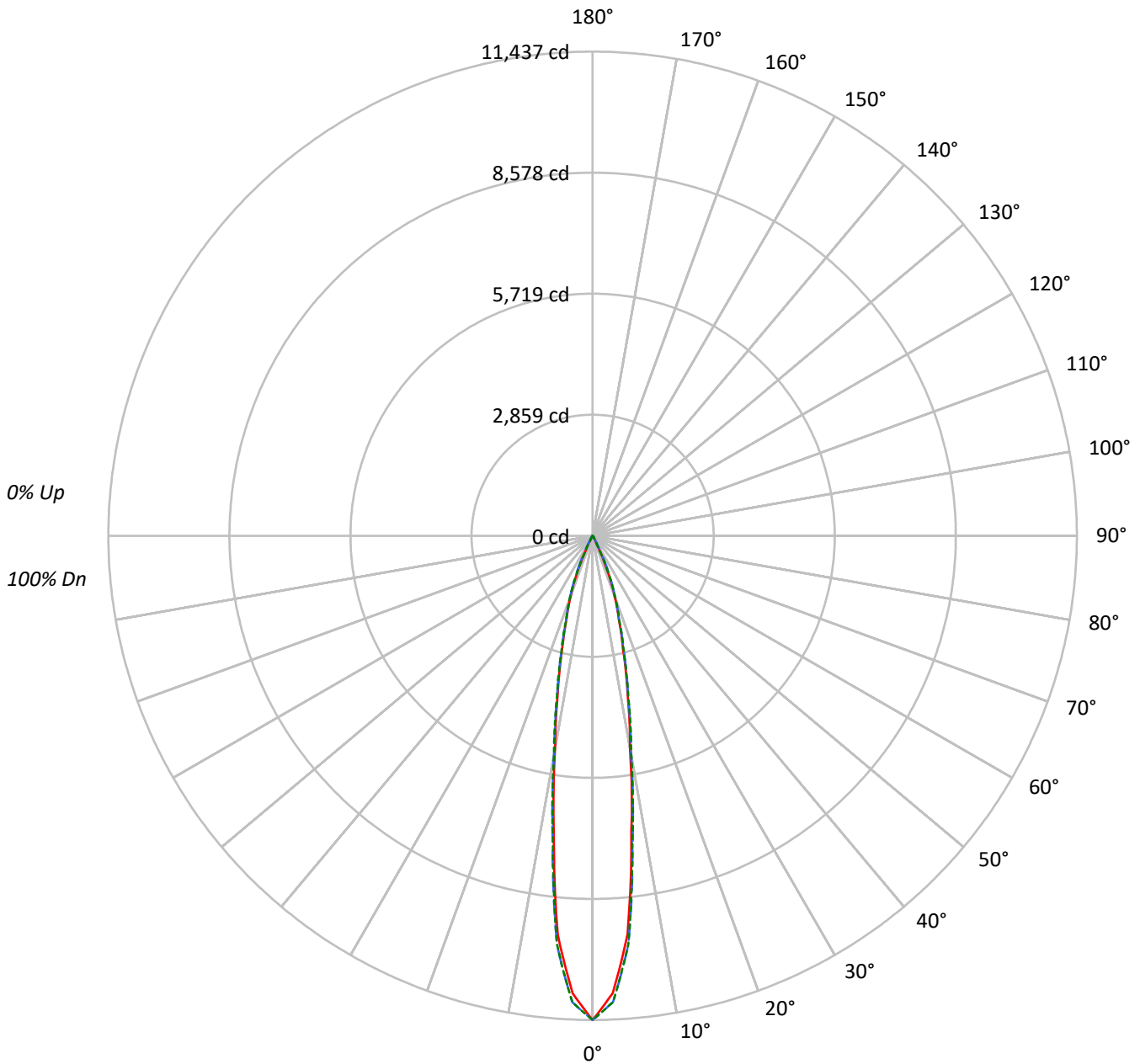
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182511

CATALOG NUMBER: LDSQA4A18830D010TE LAR15SP 4LSQAL1H

Luminous Intensity Polar Plot





TEST NUMBER: P182511

CATALOG NUMBER: LDSQA4A18830D010TE LAR15SP 4LSQAL1H

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	115	113	111	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97				97															
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94				94															
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91				91															
4	105	100	96	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89				89															
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86				86															
6	100	94	90	87	98	93	89	87	92	89	86	91	88	86	89	87	85	84				84															
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82				82															
8	95	88	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80				80															
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78				78															
10	90	84	80	78	89	84	80	78	83	80	77	82	79	77	82	79	77	76				76															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1108003	1108003	1108003
5°	919067	942853	941511
10°	500791	515586	518193
15°	278443	286426	287911
20°	156990	161443	163464
25°	47256	69628	47042
30°	8904	12752	8904
35°	3832	5925	3950
40°	1859	3111	1859
45°	1206	1617	945
50°	738	889	437
55°	490	490	338
60°	388	194	194
65°	229	229	229
70°	0	283	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P182511

CATALOG NUMBER: LDSQA4A18830D010TE LAR15SP 4LSQAL1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	761.5	39.9
10°-20°	811.7	42.5
20°-30°	296.0	15.5
30°-40°	28.2	1.5
40°-50°	7.8	0.4
50°-60°	2.3	0.1
60°-70°	1.0	0.1
70°-80°	0.2	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1869.2	97.9
0°-40°	1897.4	99.4
0°-60°	1907.5	99.9
0°-90°	1908.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1908.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11437	11437	11437	11437	11437	
5°	9451	9690	9696	9594	9682	747
15°	2776	2842	2856	2850	2871	794
25°	442	640	651	646	440	255
35°	32	39	50	39	33	23
45°	9	9	12	9	7	7
55°	3	3	3	2	2	3
65°	1	1	1	1	1	1
75°	0	1	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P182511

CATALOG NUMBER: LDSQA4A18830D010TE LAR15SP 4LSQAL1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11437.4	11437.4	11437.4	11437.4	11437.4
2.5°	10813.6	11041.5	11024.8	10973.7	11024.8
5°	9451.0	9689.7	9695.6	9594.4	9681.8
7.5°	7025.3	7210.0	7242.5	7143.2	7209.1
10°	5090.9	5256.0	5241.3	5221.6	5267.8
12.5°	3803.0	3886.5	3877.6	3899.3	3902.2
15°	2776.3	2842.2	2855.9	2850.0	2870.7
17.5°	2044.4	2079.8	2072.9	2083.7	2091.6
20°	1522.8	1578.8	1566.0	1575.8	1585.6
22.5°	1009.9	1113.1	1100.3	1116.0	1107.2
25°	442.1	639.6	651.4	645.5	440.1
27.5°	135.6	228.9	293.7	224.0	135.6
30°	79.6	95.3	114.0	93.3	79.6
32.5°	50.1	59.9	71.7	58.9	49.1
35°	32.4	39.3	50.1	39.3	33.4
37.5°	21.6	26.5	35.4	26.5	22.6
40°	14.7	17.7	24.6	18.7	14.7
42.5°	10.8	12.8	16.7	12.8	9.8
45°	8.8	8.8	11.8	8.8	6.9
47.5°	6.9	6.9	7.9	5.9	4.9
50°	4.9	4.9	5.9	3.9	2.9
52.5°	2.9	3.9	3.9	2.9	2.0
55°	2.9	2.9	2.9	2.0	2.0
57.5°	2.0	2.0	2.0	1.0	1.0
60°	2.0	2.0	1.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0
70°	0.0	1.0	1.0	0.0	0.0
72.5°	0.0	1.0	0.0	0.0	0.0
75°	0.0	1.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)