

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: P182548

Luminaire Tested: **LDSQA4A18935D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182548
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26797)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18935D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1750.3 lumens
Efficiency: N/A
Efficacy: 60.1 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.5
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

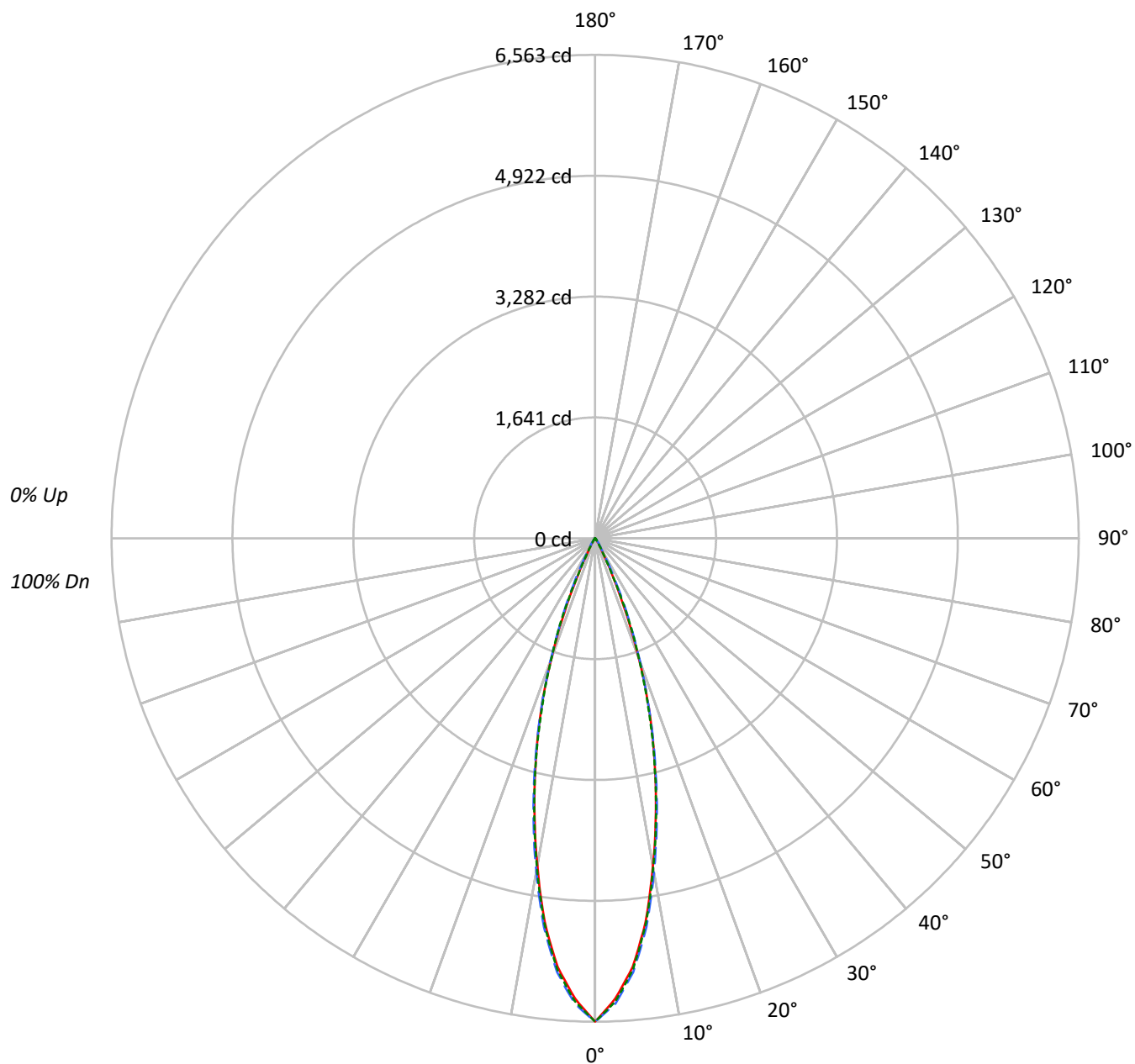
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	115	113	111	109	113	111	109	107	107	105	104		103	102	101		100
2	111	107	104	102	109	106	103	101	103	100	99		100	98	96		97
3	107	103	99	96	106	101	98	95	99	96	94		97	94	92		95
4	104	99	95	91	102	97	94	91	95	92	90		94	91	89		92
5	101	95	91	87	99	94	90	87	92	89	86		91	88	86		89
6	98	91	87	84	97	91	87	84	89	86	83		88	85	83		87
7	95	88	84	81	94	88	84	81	87	83	80		85	82	80		85
8	92	85	81	78	91	85	81	78	84	80	78		83	80	77		82
9	89	83	78	76	89	82	78	76	81	78	75		81	77	75		80
10	87	80	76	73	86	80	76	73	79	76	73		78	75	73		78

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	635755	635755	635755
5°	567787	574925	571356
10°	444455	452403	446865
15°	312111	314398	310386
20°	179134	182835	178959
25°	56705	74588	58533
30°	15068	18715	14520
35°	5121	9260	5215
40°	2276	3718	2276
45°	1233	1671	1000
50°	738	859	497
55°	405	405	270
60°	310	310	155
65°	183	183	183
70°	227	227	227
75°	0	299	299
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	520.5	29.7
10°-20°	848.7	48.5
20°-30°	328.7	18.8
30°-40°	40.3	2.3
40°-50°	8.5	0.5
50°-60°	2.3	0.1
60°-70°	0.9	0.0
70°-80°	0.5	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°	1698.0	97.0
0°-40°	1738.3	99.3
0°-60°	1749.0	99.9
0°-90°	1750.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1750.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6563	6563	6563	6563	6563	
5°	5839	5924	5912	5876	5875	516
15°	3112	3154	3135	3112	3095	844
25°	530	664	698	686	548	297
35°	43	52	78	51	44	33
45°	9	10	12	9	7	7
55°	2	2	2	2	2	3
65°	1	1	1	1	1	1
75°	0	1	1	1	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6562.6	6562.6	6562.6	6562.6	6562.6
2.5°	6255.7	6343.1	6322.7	6281.9	6292.5
5°	5838.7	5923.6	5912.1	5876.2	5875.4
7.5°	5250.2	5333.5	5323.7	5280.4	5276.4
10°	4518.2	4594.1	4599.0	4536.1	4542.7
12.5°	3803.2	3865.3	3867.7	3824.4	3815.5
15°	3112.0	3153.6	3134.8	3112.0	3094.8
17.5°	2430.5	2439.5	2435.4	2401.9	2389.7
20°	1737.6	1776.7	1773.5	1744.9	1735.9
22.5°	1082.2	1153.2	1185.9	1159.7	1173.6
25°	530.5	664.3	697.8	685.6	547.6
27.5°	215.5	281.6	350.9	277.5	208.1
30°	134.7	146.9	167.3	141.2	129.8
32.5°	71.0	89.0	113.4	86.5	71.0
35°	43.3	52.2	78.3	51.4	44.1
37.5°	27.7	32.6	45.7	32.6	28.6
40°	18.0	21.2	29.4	21.2	18.0
42.5°	12.2	13.9	18.8	13.9	11.4
45°	9.0	9.8	12.2	9.0	7.3
47.5°	6.5	7.3	8.2	5.7	4.9
50°	4.9	4.9	5.7	4.1	3.3
52.5°	3.3	4.1	4.1	2.4	2.4
55°	2.4	2.4	2.4	1.6	1.6
57.5°	2.4	1.6	1.6	1.6	1.6
60°	1.6	1.6	1.6	0.8	0.8
62.5°	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.8
72.5°	0.8	0.8	0.8	0.8	0.0
75°	0.0	0.8	0.8	0.8	0.8
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



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— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)