

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: P182449

Luminaire Tested: **LDSQA4A18840D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26785)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18840D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2433.9 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.49
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

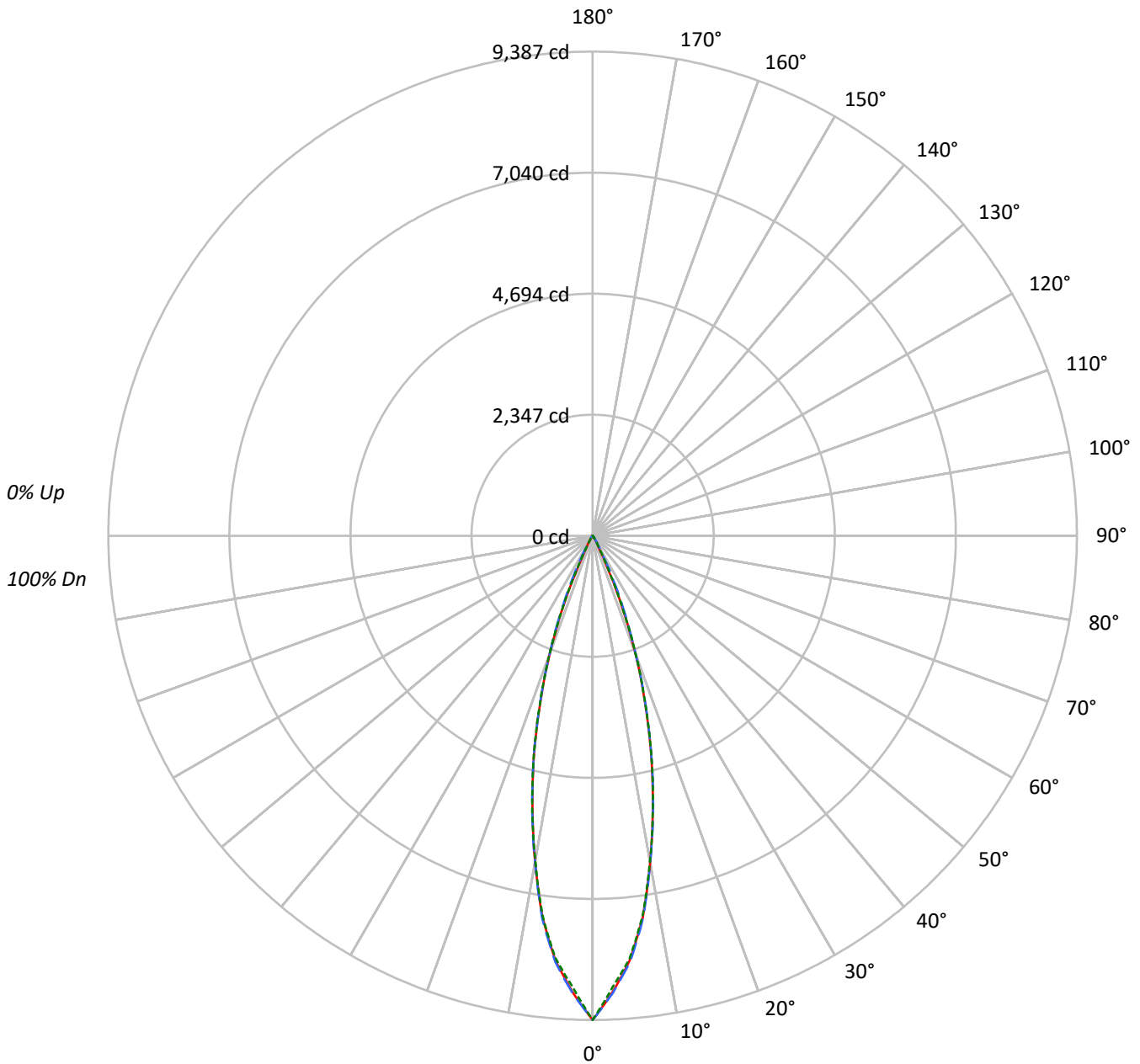
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	109	113	111	109	107	107	105	104	103	102	101	100	99	98	97	97	96	95	93															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93	95	93	91	90															
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	90	95	93	91	90															
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	87	92	90	88	87															
5	101	95	91	88	100	94	90	88	93	89	87	91	88	86	90	87	85	84	90	87	85	84															
6	98	92	88	84	97	91	87	84	90	86	84	88	85	83	87	85	83	82	87	85	83	82															
7	95	89	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80	79	85	82	80	79															
8	92	86	82	79	91	85	81	79	84	81	78	84	80	78	83	80	78	77	83	80	78	77															
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	80	78	75	74	80	78	75	74															
10	87	81	77	74	87	80	76	74	80	76	74	79	76	73	78	75	73	72	78	75	73	72															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	909370	909370	909370
5°	803841	806593	799757
10°	631790	632518	629833
15°	439804	441068	441389
20°	249505	251123	251989
25°	67255	101770	75657
30°	16656	22753	17126
35°	4955	10419	5334
40°	1985	3452	1985
45°	1000	1439	863
50°	633	633	316
55°	524	355	169
60°	407	194	194
65°	229	229	229
70°	283	283	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	736.4	30.3
10°-20°	1197.6	49.2
20°-30°	445.1	18.3
30°-40°	44.2	1.8
40°-50°	7.4	0.3
50°-60°	2.0	0.1
60°-70°	1.0	0.0
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°	2379.1	97.7
0°-40°	2423.3	99.6
0°-60°	2432.7	100.0
0°-90°	2433.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2433.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9387	9387	9387	9387	9387	
5°	8266	8349	8294	8392	8224	732
15°	4385	4434	4398	4470	4401	1186
25°	629	924	952	889	708	393
35°	42	52	88	54	45	34
45°	7	8	10	8	6	6
55°	3	2	2	2	1	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9387.0	9387.0	9387.0	9387.0	9387.0
2.5°	8858.5	8905.7	8876.4	8955.0	8765.2
5°	8266.1	8348.9	8294.4	8391.9	8224.1
7.5°	7452.4	7538.4	7482.8	7577.2	7427.2
10°	6422.6	6486.6	6430.0	6521.2	6402.7
12.5°	5392.9	5456.9	5414.9	5498.8	5404.5
15°	4385.2	4434.5	4397.8	4470.2	4401.0
17.5°	3361.8	3409.0	3375.4	3434.2	3381.7
20°	2420.2	2461.1	2435.9	2485.2	2444.3
22.5°	1502.6	1611.7	1629.5	1633.7	1515.2
25°	629.2	923.8	952.1	889.2	707.8
27.5°	259.0	339.7	453.0	357.6	272.6
30°	148.9	173.0	203.4	178.3	153.1
32.5°	74.5	96.5	133.2	101.7	78.6
35°	41.9	52.4	88.1	54.5	45.1
37.5°	25.2	30.4	44.0	31.5	26.2
40°	15.7	18.9	27.3	19.9	15.7
42.5°	10.5	12.6	16.8	12.6	10.5
45°	7.3	8.4	10.5	8.4	6.3
47.5°	5.2	5.2	6.3	5.2	4.2
50°	4.2	4.2	4.2	3.1	2.1
52.5°	3.1	3.1	3.1	2.1	2.1
55°	3.1	2.1	2.1	2.1	1.0
57.5°	2.1	2.1	2.1	1.0	1.0
60°	2.1	2.1	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°	1.0	1.0	1.0	1.0	0.0
72.5°	0.0	0.0	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



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







(END OF REPORT)