

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: P182454

Luminaire Tested: **LDSQA4A09827D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182454
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: LDSQA4A09827D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1210.8 lumens
Efficiency: N/A
Efficacy: 87.5 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

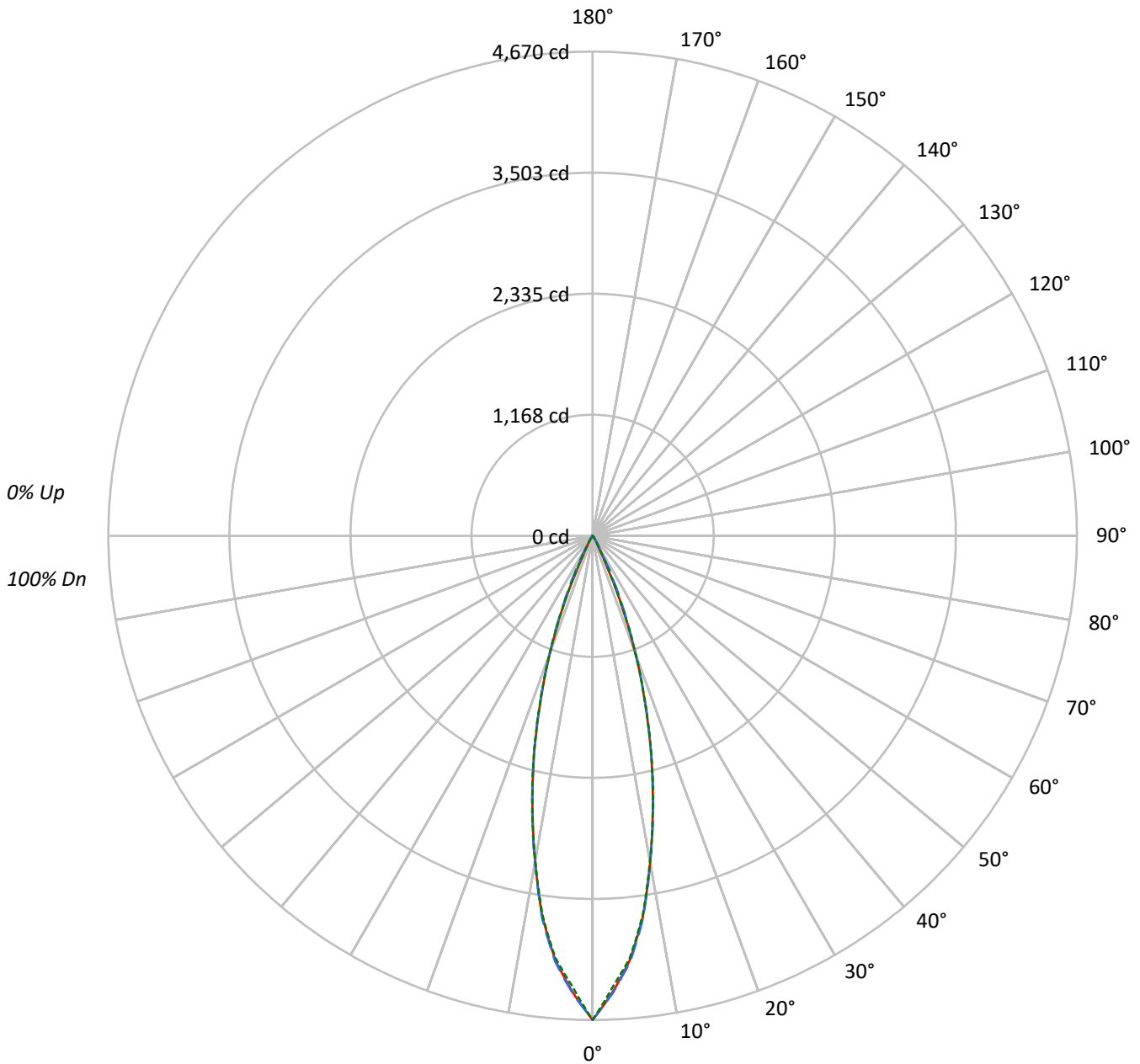
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	452389	452389	452389
5°	399883	401254	397860
10°	314302	314656	313328
15°	218789	219421	219571
20°	124124	124928	125361
25°	33457	50634	37636
30°	8289	11320	8524
35°	2472	5180	2649
40°	986	1720	986
45°	507	712	425
50°	316	316	151
55°	270	169	84
60°	194	97	97
65°	115	115	115
70°	142	142	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	366.4	30.3
10°-20°	595.8	49.2
20°-30°	221.4	18.3
30°-40°	22.0	1.8
40°-50°	3.7	0.3
50°-60°	1.0	0.1
60°-70°	0.5	0.0
70°-80°	0.1	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°	1183.6	97.8
0°-40°	1205.5	99.6
0°-60°	1210.2	100.0
0°-90°	1210.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1210.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4670	4670	4670	4670	4670	
5°	4112	4153	4126	4175	4091	364
15°	2182	2206	2188	2224	2189	590
25°	313	460	474	442	352	196
35°	21	26	44	27	22	17
45°	4	4	5	4	3	3
55°	2	1	1	1	0	1
65°	0	0	0	0	0	1
75°	0	0	0	0	0	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°	4669.8	4669.8	4669.8	4669.8	4669.8
2.5°	4406.9	4430.3	4415.7	4454.9	4360.4
5°	4112.1	4153.3	4126.2	4174.7	4091.3
7.5°	3707.3	3750.1	3722.5	3769.4	3694.8
10°	3195.1	3226.9	3198.7	3244.1	3185.2
12.5°	2682.8	2714.6	2693.8	2735.5	2688.6
15°	2181.5	2206.0	2187.8	2223.8	2189.3
17.5°	1672.4	1695.9	1679.2	1708.4	1682.3
20°	1204.0	1224.3	1211.8	1236.3	1216.0
22.5°	747.5	801.8	810.6	812.7	753.8
25°	313.0	459.6	473.7	442.4	352.1
27.5°	128.8	169.0	225.4	177.9	135.6
30°	74.1	86.1	101.2	88.7	76.2
32.5°	37.0	48.0	66.2	50.6	39.1
35°	20.9	26.1	43.8	27.1	22.4
37.5°	12.5	15.1	21.9	15.6	13.0
40°	7.8	9.4	13.6	9.9	7.8
42.5°	5.2	6.3	8.3	6.3	5.2
45°	3.7	4.2	5.2	4.2	3.1
47.5°	2.6	2.6	3.1	2.6	2.1
50°	2.1	2.1	2.1	1.6	1.0
52.5°	1.6	1.6	1.6	1.0	1.0
55°	1.6	1.0	1.0	1.0	0.5
57.5°	1.0	1.0	1.0	0.5	0.5
60°	1.0	1.0	0.5	0.5	0.5
62.5°	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5
67.5°	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.5	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)