

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: P182472

Luminaire Tested: **LDSQA4A28835D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182472
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: LDSQA4A28835D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3179.0 lumens
Efficiency: N/A
Efficacy: 71.5 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

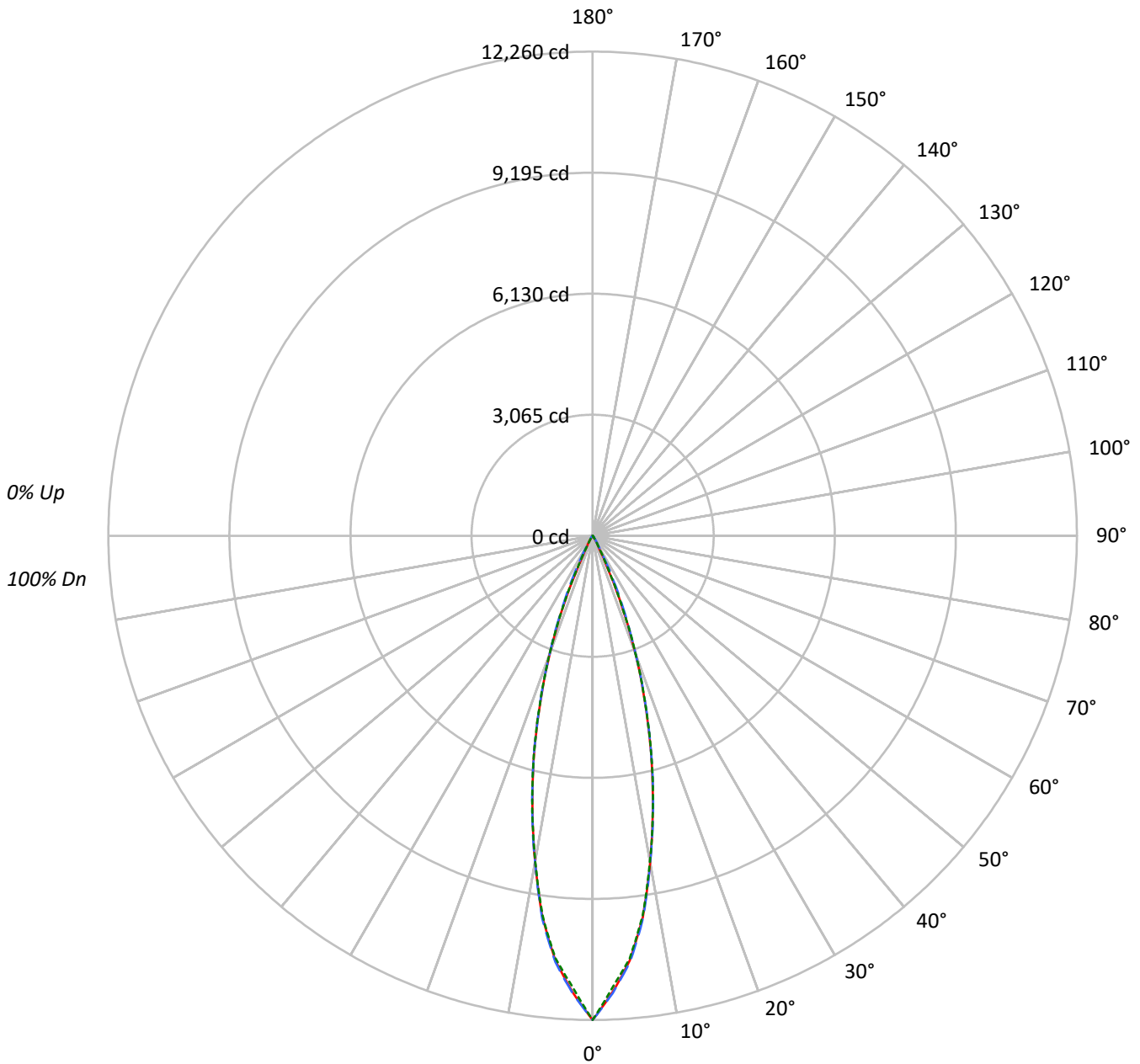
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	1187712	1187712	1187712
5°	1049882	1053470	1044553
10°	825176	826120	822618
15°	574427	576072	576483
20°	325866	327989	329113
25°	87832	132929	98809
30°	21757	29722	22372
35°	6481	13600	6966
40°	2592	4502	2592
45°	1315	1877	1123
50°	829	829	407
55°	692	456	236
60°	523	271	271
65°	321	321	321
70°	397	397	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	961.9	30.3
10°-20°	1564.1	49.2
20°-30°	581.4	18.3
30°-40°	57.7	1.8
40°-50°	9.6	0.3
50°-60°	2.6	0.1
60°-70°	1.4	0.0
70°-80°	0.3	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°	3107.4	97.7
0°-40°	3165.1	99.6
0°-60°	3177.3	99.9
0°-90°	3179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12260	12260	12260	12260	12260	
5°	10796	10904	10833	10960	10741	956
15°	5728	5792	5744	5838	5748	1550
25°	822	1207	1244	1161	924	514
35°	55	68	115	71	59	44
45°	10	11	14	11	8	8
55°	4	3	3	3	1	3
65°	1	1	1	1	1	2
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°	12260.2	12260.2	12260.2	12260.2	12260.2
2.5°	11570.0	11631.6	11593.2	11696.0	11448.1
5°	10796.2	10904.4	10833.1	10960.5	10741.4
7.5°	9733.4	9845.7	9773.1	9896.4	9700.5
10°	8388.5	8472.0	8398.1	8517.2	8362.5
12.5°	7043.6	7127.1	7072.4	7181.9	7058.7
15°	5727.5	5791.8	5743.9	5838.4	5748.0
17.5°	4390.8	4452.4	4408.6	4485.3	4416.8
20°	3160.9	3214.3	3181.5	3245.8	3192.4
22.5°	1962.6	2105.0	2128.3	2133.8	1979.0
25°	821.7	1206.6	1243.6	1161.4	924.4
27.5°	338.3	443.7	591.6	467.0	356.1
30°	194.5	226.0	265.7	232.8	200.0
32.5°	97.2	126.0	173.9	132.8	102.7
35°	54.8	68.5	115.0	71.2	58.9
37.5°	32.9	39.7	57.5	41.1	34.2
40°	20.5	24.7	35.6	26.0	20.5
42.5°	13.7	16.4	21.9	16.4	13.7
45°	9.6	11.0	13.7	11.0	8.2
47.5°	6.8	6.8	8.2	6.8	5.5
50°	5.5	5.5	5.5	4.1	2.7
52.5°	4.1	4.1	4.1	2.7	2.7
55°	4.1	2.7	2.7	2.7	1.4
57.5°	2.7	2.7	2.7	1.4	1.4
60°	2.7	2.7	1.4	1.4	1.4
62.5°	1.4	1.4	1.4	1.4	1.4
65°	1.4	1.4	1.4	1.4	1.4
67.5°	1.4	1.4	1.4	1.4	1.4
70°	1.4	1.4	1.4	1.4	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	1.4	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)