

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: P182473

Luminaire Tested: **LDSQA4A28840D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182473
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: LDSQA4A28840D010TE 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: 3333.7 lumens
Efficiency: N/A
Efficacy: 74.9 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

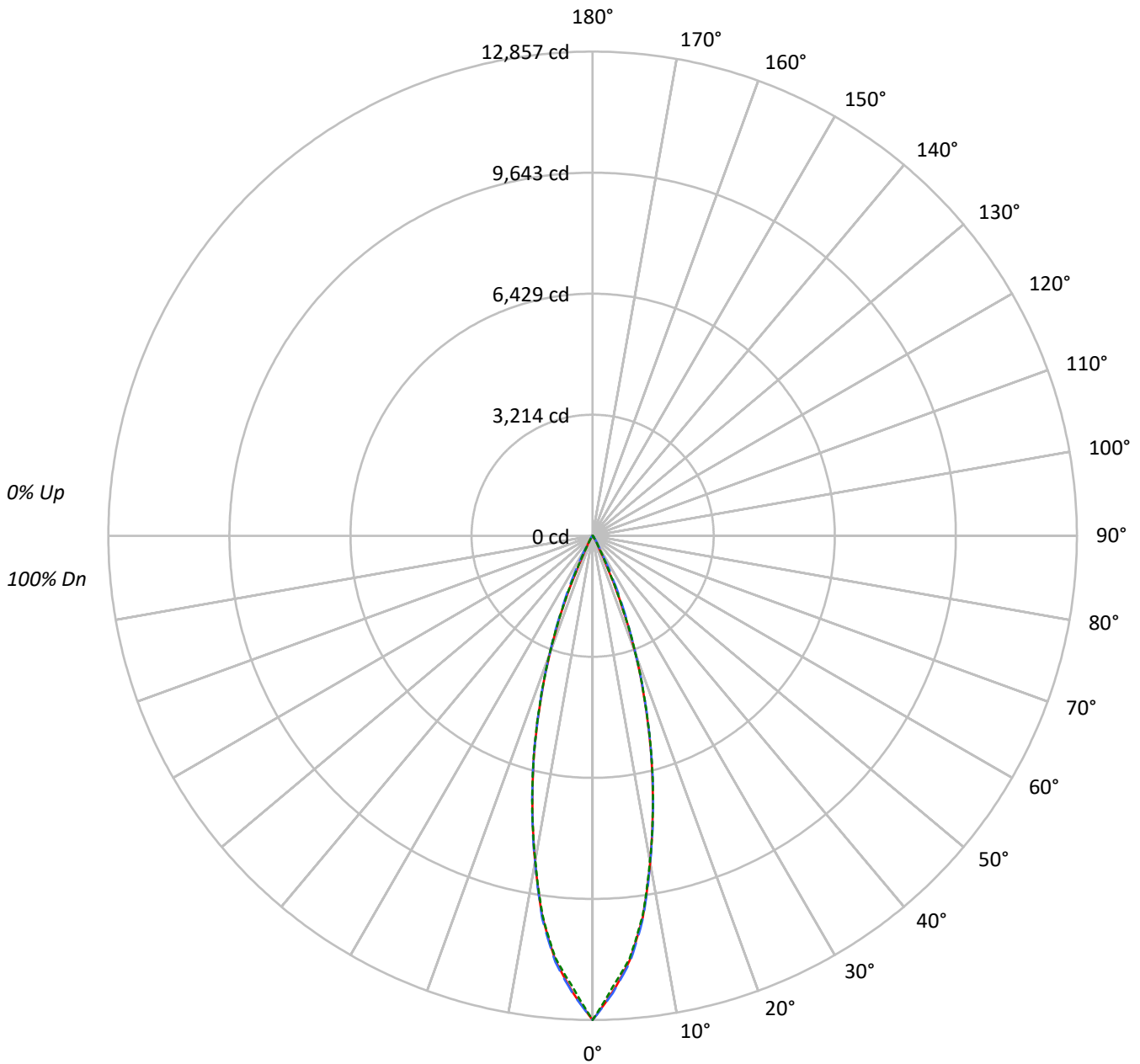
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1245537	1245537	1245537
5°	1100994	1104767	1095402
10°	865350	866334	862665
15°	602389	604114	604545
20°	341732	343958	345134
25°	92107	139396	103630
30°	22809	31165	23457
35°	6788	14263	7309
40°	2719	4717	2719
45°	1384	1973	1178
50°	859	859	437
55°	726	490	236
60°	562	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°	1008.7	30.3
10°-20°	1640.3	49.2
20°-30°	609.7	18.3
30°-40°	60.5	1.8
40°-50°	10.1	0.3
50°-60°	2.8	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°	3258.6	97.7
0°-40°	3319.1	99.6
0°-60°	3332.0	99.9
0°-90°	3333.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3333.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12857	12857	12857	12857	12857	
5°	11322	11435	11361	11494	11264	1003
15°	6006	6074	6024	6123	6028	1625
25°	862	1265	1304	1218	970	539
35°	57	72	121	75	62	46
45°	10	12	14	12	9	9
55°	4	3	3	3	1	4
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°	12857.1	12857.1	12857.1	12857.1	12857.1
2.5°	12133.3	12197.9	12157.7	12265.4	12005.4
5°	11321.8	11435.2	11360.6	11494.1	11264.3
7.5°	10207.3	10325.0	10248.9	10378.2	10172.8
10°	8796.9	8884.5	8806.9	8931.9	8769.6
12.5°	7386.5	7474.1	7416.7	7531.6	7402.3
15°	6006.3	6073.8	6023.5	6122.6	6027.8
17.5°	4604.5	4669.2	4623.2	4703.6	4631.8
20°	3314.8	3370.8	3336.4	3403.9	3347.8
22.5°	2058.1	2207.5	2231.9	2237.6	2075.3
25°	861.7	1265.3	1304.1	1217.9	969.5
27.5°	354.7	465.3	620.5	489.8	373.4
30°	203.9	237.0	278.6	244.2	209.7
32.5°	102.0	132.1	182.4	139.3	107.7
35°	57.4	71.8	120.6	74.7	61.8
37.5°	34.5	41.7	60.3	43.1	35.9
40°	21.5	25.9	37.3	27.3	21.5
42.5°	14.4	17.2	23.0	17.2	14.4
45°	10.1	11.5	14.4	11.5	8.6
47.5°	7.2	7.2	8.6	7.2	5.7
50°	5.7	5.7	5.7	4.3	2.9
52.5°	4.3	4.3	4.3	2.9	2.9
55°	4.3	2.9	2.9	2.9	1.4
57.5°	2.9	2.9	2.9	1.4	1.4
60°	2.9	2.9	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)