

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: P182477

Luminaire Tested: **LDSQA4A28940D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182477
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: LDSQA4A28940D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2800.9 lumens
Efficiency: N/A
Efficacy: 63.0 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

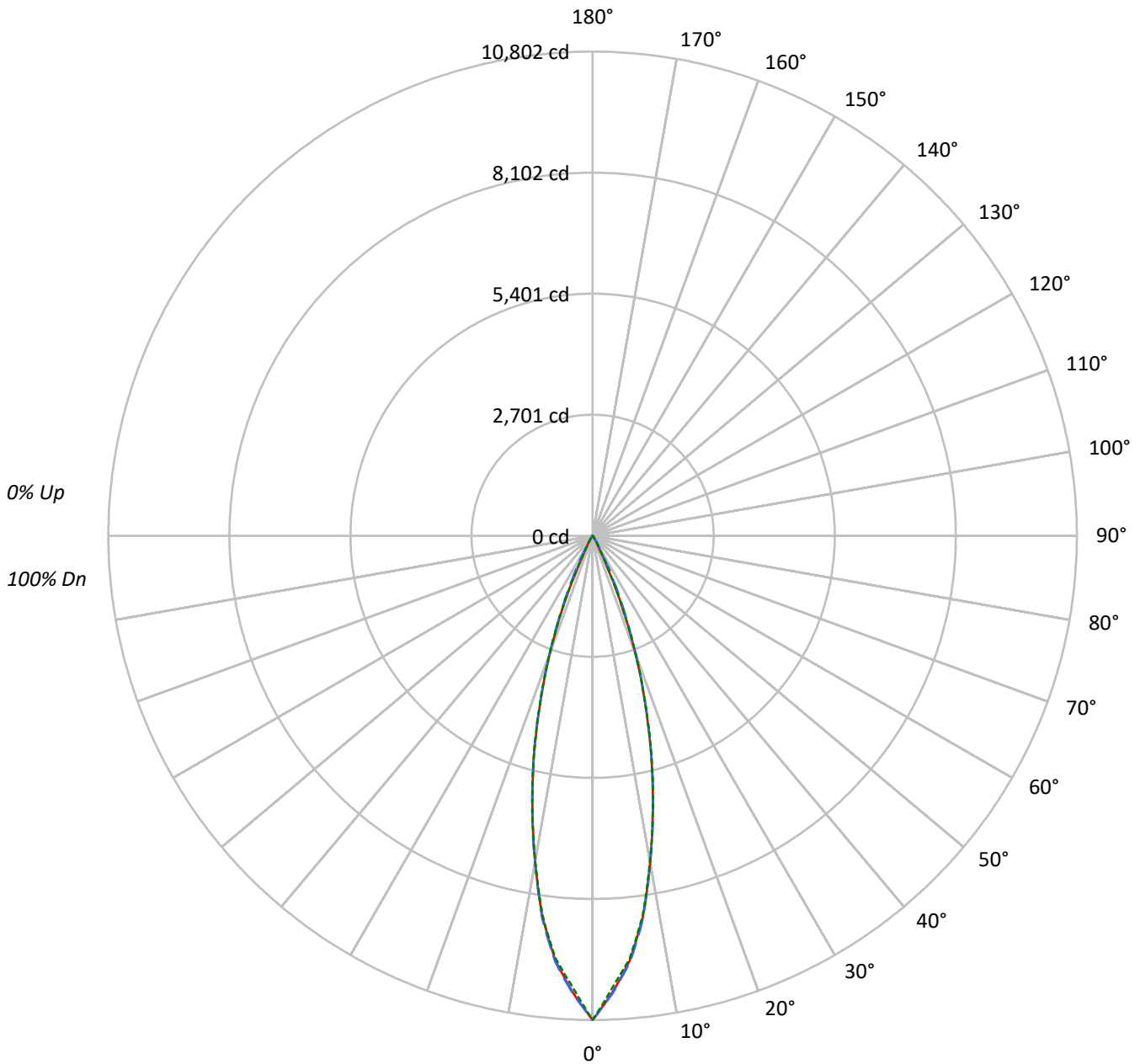
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1046477	1046477	1046477
5°	925028	928198	920341
10°	727052	727878	724799
15°	506118	507572	507933
20°	287113	288979	289979
25°	77389	117120	87062
30°	19173	26187	19710
35°	5712	11992	6138
40°	2289	3971	2289
45°	1151	1658	986
50°	723	723	362
55°	608	405	203
60°	465	233	233
65°	275	275	275
70°	340	340	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	847.5	30.3
10°-20°	1378.1	49.2
20°-30°	512.3	18.3
30°-40°	50.8	1.8
40°-50°	8.5	0.3
50°-60°	2.3	0.1
60°-70°	1.2	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°	2737.8	97.7
0°-40°	2788.7	99.6
0°-60°	2799.5	99.9
0°-90°	2800.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2800.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10802	10802	10802	10802	10802	
5°	9512	9608	9545	9657	9464	842
15°	5046	5103	5061	5144	5064	1365
25°	724	1063	1096	1023	814	453
35°	48	60	101	63	52	39
45°	8	10	12	10	7	7
55°	4	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°	10802.3	10802.3	10802.3	10802.3	10802.3
2.5°	10194.1	10248.4	10214.6	10305.1	10086.7
5°	9512.3	9607.7	9544.9	9657.1	9464.1
7.5°	8576.0	8674.9	8610.9	8719.5	8547.0
10°	7391.0	7464.6	7399.4	7504.4	7368.1
12.5°	6206.0	6279.6	6231.4	6327.9	6219.3
15°	5046.4	5103.1	5060.9	5144.1	5064.5
17.5°	3868.7	3923.0	3884.3	3951.9	3891.6
20°	2785.0	2832.1	2803.1	2859.9	2812.8
22.5°	1729.2	1854.7	1875.2	1880.0	1743.7
25°	724.0	1063.1	1095.7	1023.3	814.5
27.5°	298.1	391.0	521.3	411.5	313.7
30°	171.4	199.1	234.1	205.1	176.2
32.5°	85.7	111.0	153.2	117.0	90.5
35°	48.3	60.3	101.4	62.7	51.9
37.5°	29.0	35.0	50.7	36.2	30.2
40°	18.1	21.7	31.4	22.9	18.1
42.5°	12.1	14.5	19.3	14.5	12.1
45°	8.4	9.7	12.1	9.7	7.2
47.5°	6.0	6.0	7.2	6.0	4.8
50°	4.8	4.8	4.8	3.6	2.4
52.5°	3.6	3.6	3.6	2.4	2.4
55°	3.6	2.4	2.4	2.4	1.2
57.5°	2.4	2.4	2.4	1.2	1.2
60°	2.4	2.4	1.2	1.2	1.2
62.5°	1.2	1.2	1.2	1.2	1.2
65°	1.2	1.2	1.2	1.2	1.2
67.5°	1.2	1.2	1.2	1.2	1.2
70°	1.2	1.2	1.2	1.2	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	1.2	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)