

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: P182589

Luminaire Tested: **LDSQA4A09940D010TE LAR35FL 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26798)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A09940D010TE LAR35FL 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1043.0 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Spacing Criteria (0/90/45): 0.63 / 0.63 / 0.57
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

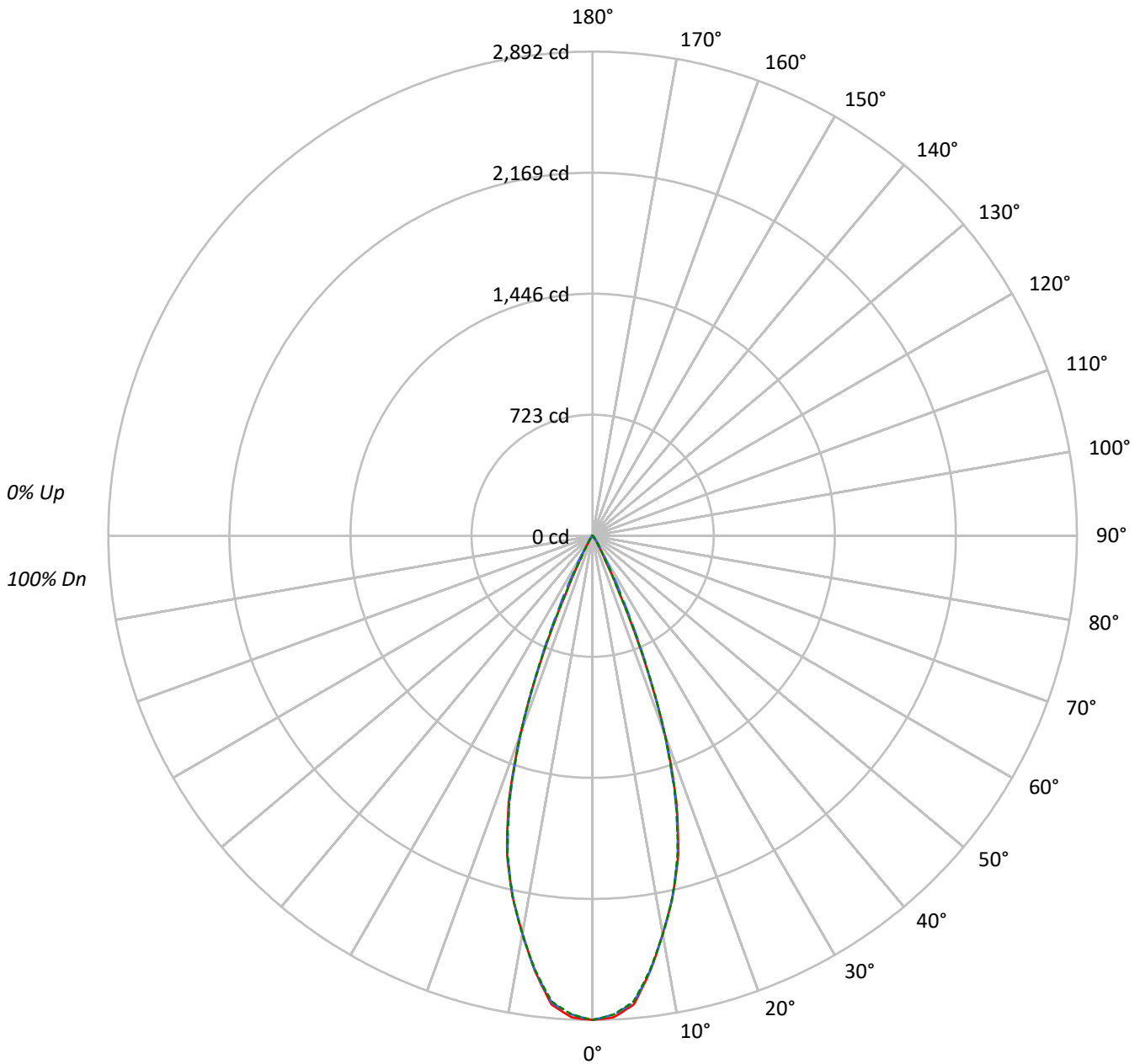
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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																			
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																			
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92																			
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	89																			
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	86																			
5	100	94	89	86	98	93	89	86	91	88	85	90	87	84	88	86	84	82																			
6	97	90	86	82	95	89	85	82	88	84	82	87	83	81	85	83	81	79																			
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77																			
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74																			
9	88	81	76	73	87	80	76	73	79	76	73	79	75	73	78	75	73	72																			
10	85	78	74	71	84	78	73	71	77	73	71	76	73	70	76	72	70	69																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	280154	280154	280154
5°	273376	272161	271655
10°	237396	237347	237632
15°	198018	196965	196865
20°	129886	128856	129990
25°	39720	50238	39560
30°	9933	12025	9721
35°	3217	4967	3158
40°	1505	2352	1328
45°	781	986	589
50°	437	497	286
55°	236	321	169
60°	194	194	194
65°	115	115	115
70°	142	142	142
75°	0	187	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.0	24.4
10°-20°	526.4	50.5
20°-30°	229.9	22.0
30°-40°	25.1	2.4
40°-50°	5.2	0.5
50°-60°	1.4	0.1
60°-70°	0.6	0.1
70°-80°	0.4	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°	1010.3	96.9
0°-40°	1035.4	99.3
0°-60°	1042.0	99.9
0°-90°	1043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2892	2892	2892	2892	2892	
5°	2811	2804	2799	2806	2794	254
15°	1974	1966	1964	1967	1963	528
25°	372	458	470	462	370	215
35°	27	32	42	32	27	21
45°	6	6	7	5	4	5
55°	1	1	2	1	1	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°	2891.9	2891.9	2891.9	2891.9	2891.9
2.5°	2879.0	2868.5	2862.7	2875.2	2862.7
5°	2811.2	2803.5	2798.7	2805.9	2793.5
7.5°	2625.4	2617.7	2624.4	2624.4	2618.2
10°	2413.3	2409.0	2412.8	2422.9	2415.7
12.5°	2207.5	2204.1	2205.6	2216.1	2207.9
15°	1974.4	1965.8	1963.9	1966.8	1962.9
17.5°	1664.0	1651.1	1642.9	1649.6	1651.5
20°	1259.9	1259.9	1249.9	1255.6	1260.9
22.5°	805.7	824.3	826.2	825.3	822.0
25°	371.6	458.0	470.0	462.3	370.1
27.5°	150.4	185.8	231.2	191.5	145.2
30°	88.8	93.6	107.5	92.2	86.9
32.5°	46.8	56.4	65.9	55.9	45.4
35°	27.2	32.5	42.0	32.0	26.7
37.5°	17.7	20.5	28.2	20.5	16.7
40°	11.9	13.4	18.6	12.9	10.5
42.5°	8.1	9.1	11.9	8.1	6.7
45°	5.7	6.2	7.2	5.3	4.3
47.5°	3.8	4.3	4.8	3.3	2.9
50°	2.9	2.9	3.3	2.4	1.9
52.5°	1.9	2.4	2.4	1.4	1.4
55°	1.4	1.4	1.9	1.0	1.0
57.5°	1.4	1.4	1.4	1.0	1.0
60°	1.0	1.0	1.0	1.0	1.0
62.5°	0.5	1.0	1.0	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	0.5
72.5°	0.5	0.5	0.5	0.5	0.5
75°	0.0	0.5	0.5	0.0	0.0
77.5°	0.0	0.5	0.5	0.5	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)