

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: P182544

Luminaire Tested: **LDSQA4A18835D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26797)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18835D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, 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: 2145.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.5
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

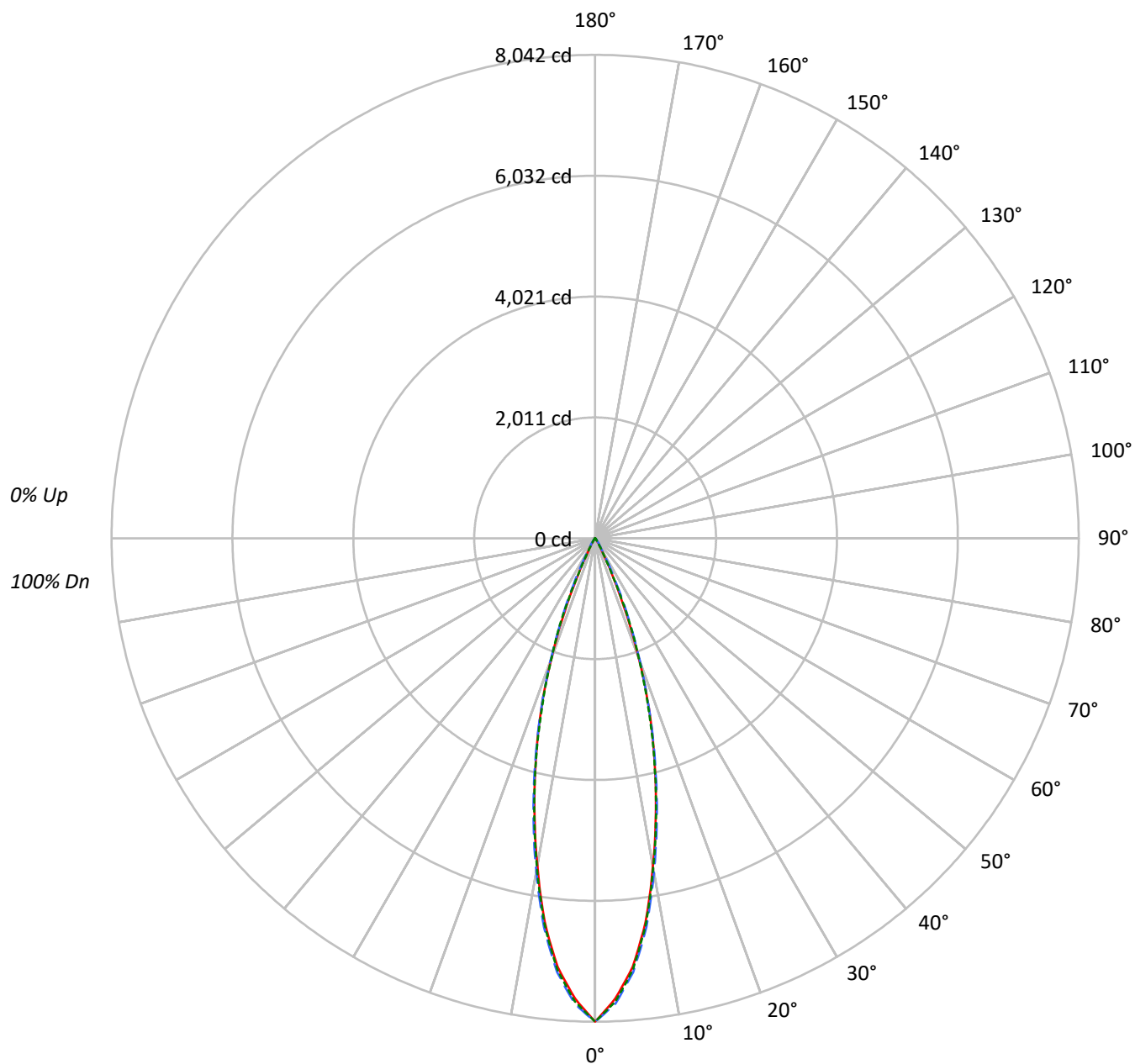
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96
2	111	107	104	102	109	106	103	101	103	100	99	100	98	96	97	96	94	93	93	93
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	95	93	91	90	90	90
4	104	99	95	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87	87	87
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84	84	84
6	98	91	87	84	96	91	87	84	89	86	83	88	85	83	87	84	82	81	81	81
7	95	88	84	81	94	88	84	81	87	83	80	85	82	80	85	82	80	79	79	79
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	76	76	76
9	89	83	78	76	89	82	78	76	81	78	75	81	77	75	80	77	75	74	74	74
10	87	80	76	73	86	80	76	73	79	76	73	78	75	73	78	75	73	72	72	72

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	779082	779082	779082
5°	695791	704543	700167
10°	544654	554393	547605
15°	382467	385275	380361
20°	219515	224051	219309
25°	69489	91402	71734
30°	18457	22932	17786
35°	6268	11353	6386
40°	2782	4553	2782
45°	1507	2055	1233
50°	904	1055	603
55°	507	507	338
60°	388	388	194
65°	229	229	229
70°	283	283	283
75°	0	374	374
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	637.9	29.7
10°-20°	1040.1	48.5
20°-30°	402.8	18.8
30°-40°	49.4	2.3
40°-50°	10.4	0.5
50°-60°	2.8	0.1
60°-70°	1.1	0.0
70°-80°	0.6	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°	2080.8	97.0
0°-40°	2130.2	99.3
0°-60°	2143.3	99.9
0°-90°	2145.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2145.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8042	8042	8042	8042	8042	
5°	7155	7259	7245	7201	7200	632
15°	3814	3864	3842	3814	3792	1034
25°	650	814	855	840	671	364
35°	53	64	96	63	54	40
45°	11	12	15	11	9	9
55°	3	3	3	2	2	3
65°	1	1	1	1	1	1
75°	0	1	1	1	1	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°	8042.1	8042.1	8042.1	8042.1	8042.1
2.5°	7666.1	7773.1	7748.1	7698.1	7711.1
5°	7155.0	7259.0	7245.0	7201.0	7200.0
7.5°	6433.9	6535.9	6523.9	6470.9	6465.9
10°	5536.8	5629.8	5635.8	5558.8	5566.8
12.5°	4660.7	4736.7	4739.7	4686.7	4675.7
15°	3813.5	3864.5	3841.5	3813.5	3792.5
17.5°	2978.4	2989.4	2984.4	2943.4	2928.4
20°	2129.3	2177.3	2173.3	2138.3	2127.3
22.5°	1326.2	1413.2	1453.2	1421.2	1438.2
25°	650.1	814.1	855.1	840.1	671.1
27.5°	264.0	345.0	430.1	340.0	255.0
30°	165.0	180.0	205.0	173.0	159.0
32.5°	87.0	109.0	139.0	106.0	87.0
35°	53.0	64.0	96.0	63.0	54.0
37.5°	34.0	40.0	56.0	40.0	35.0
40°	22.0	26.0	36.0	26.0	22.0
42.5°	15.0	17.0	23.0	17.0	14.0
45°	11.0	12.0	15.0	11.0	9.0
47.5°	8.0	9.0	10.0	7.0	6.0
50°	6.0	6.0	7.0	5.0	4.0
52.5°	4.0	5.0	5.0	3.0	3.0
55°	3.0	3.0	3.0	2.0	2.0
57.5°	3.0	2.0	2.0	2.0	2.0
60°	2.0	2.0	2.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	1.0	0.0
75°	0.0	1.0	1.0	1.0	1.0
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)