

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: P182564

Luminaire Tested: **LDSQA4A13935D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182564
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: LDSQA4A13935D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1405.0 lumens
Efficiency: N/A
Efficacy: 63.1 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

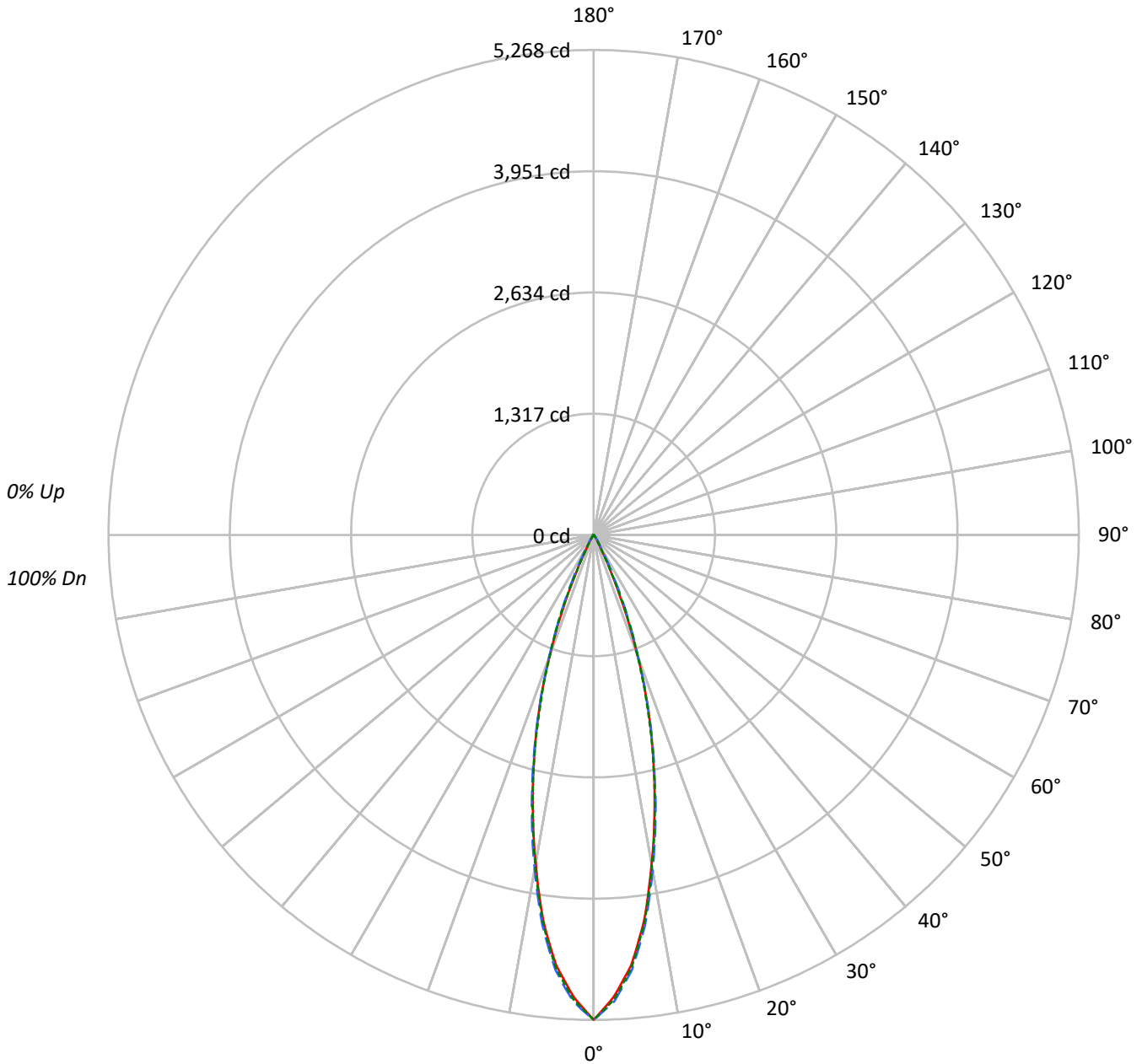
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	510301	510301	510301
5°	455741	461478	458610
10°	356748	363132	358686
15°	250521	252357	249137
20°	143783	146752	143649
25°	45514	59869	46989
30°	12092	15023	11656
35°	4104	7439	4187
40°	1821	2985	1821
45°	986	1343	808
50°	588	693	392
55°	338	338	220
60°	252	252	136
65°	160	160	160
70°	198	198	198
75°	0	262	262
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	417.8	29.7
10°-20°	681.2	48.5
20°-30°	263.9	18.8
30°-40°	32.3	2.3
40°-50°	6.8	0.5
50°-60°	1.8	0.1
60°-70°	0.7	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°	1362.9	97.0
0°-40°	1395.3	99.3
0°-60°	1403.9	99.9
0°-90°	1405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1405.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5268	5268	5268	5268	5268	
5°	4686	4755	4746	4717	4716	414
15°	2498	2531	2516	2498	2484	677
25°	426	533	560	550	440	239
35°	35	42	63	41	35	26
45°	7	8	10	7	6	6
55°	2	2	2	1	1	2
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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5267.6	5267.6	5267.6	5267.6	5267.6
2.5°	5021.3	5091.4	5075.0	5042.3	5050.8
5°	4686.5	4754.7	4745.5	4716.7	4716.0
7.5°	4214.2	4281.0	4273.2	4238.5	4235.2
10°	3626.6	3687.5	3691.5	3641.0	3646.3
12.5°	3052.7	3102.5	3104.5	3069.8	3062.6
15°	2497.9	2531.3	2516.2	2497.9	2484.1
17.5°	1950.9	1958.1	1954.8	1927.9	1918.1
20°	1394.7	1426.1	1423.5	1400.6	1393.4
22.5°	868.7	925.6	951.9	930.9	942.0
25°	425.8	533.2	560.1	550.3	439.6
27.5°	172.9	226.0	281.7	222.7	167.0
30°	108.1	117.9	134.3	113.3	104.2
32.5°	57.0	71.4	91.1	69.4	57.0
35°	34.7	41.9	62.9	41.3	35.4
37.5°	22.3	26.2	36.7	26.2	22.9
40°	14.4	17.0	23.6	17.0	14.4
42.5°	9.8	11.1	15.1	11.1	9.2
45°	7.2	7.9	9.8	7.2	5.9
47.5°	5.2	5.9	6.6	4.6	3.9
50°	3.9	3.9	4.6	3.3	2.6
52.5°	2.6	3.3	3.3	2.0	2.0
55°	2.0	2.0	2.0	1.3	1.3
57.5°	2.0	1.3	1.3	1.3	1.3
60°	1.3	1.3	1.3	0.7	0.7
62.5°	0.7	0.7	0.7	0.7	0.7
65°	0.7	0.7	0.7	0.7	0.7
67.5°	0.7	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.7	0.7	0.7
72.5°	0.7	0.7	0.7	0.7	0.0
75°	0.0	0.7	0.7	0.7	0.7
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)