

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: P182466

Luminaire Tested: **LDSQA4A13927D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182466
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: LDSQA4A13927D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1439.1 lumens
Efficiency: N/A
Efficacy: 64.6 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

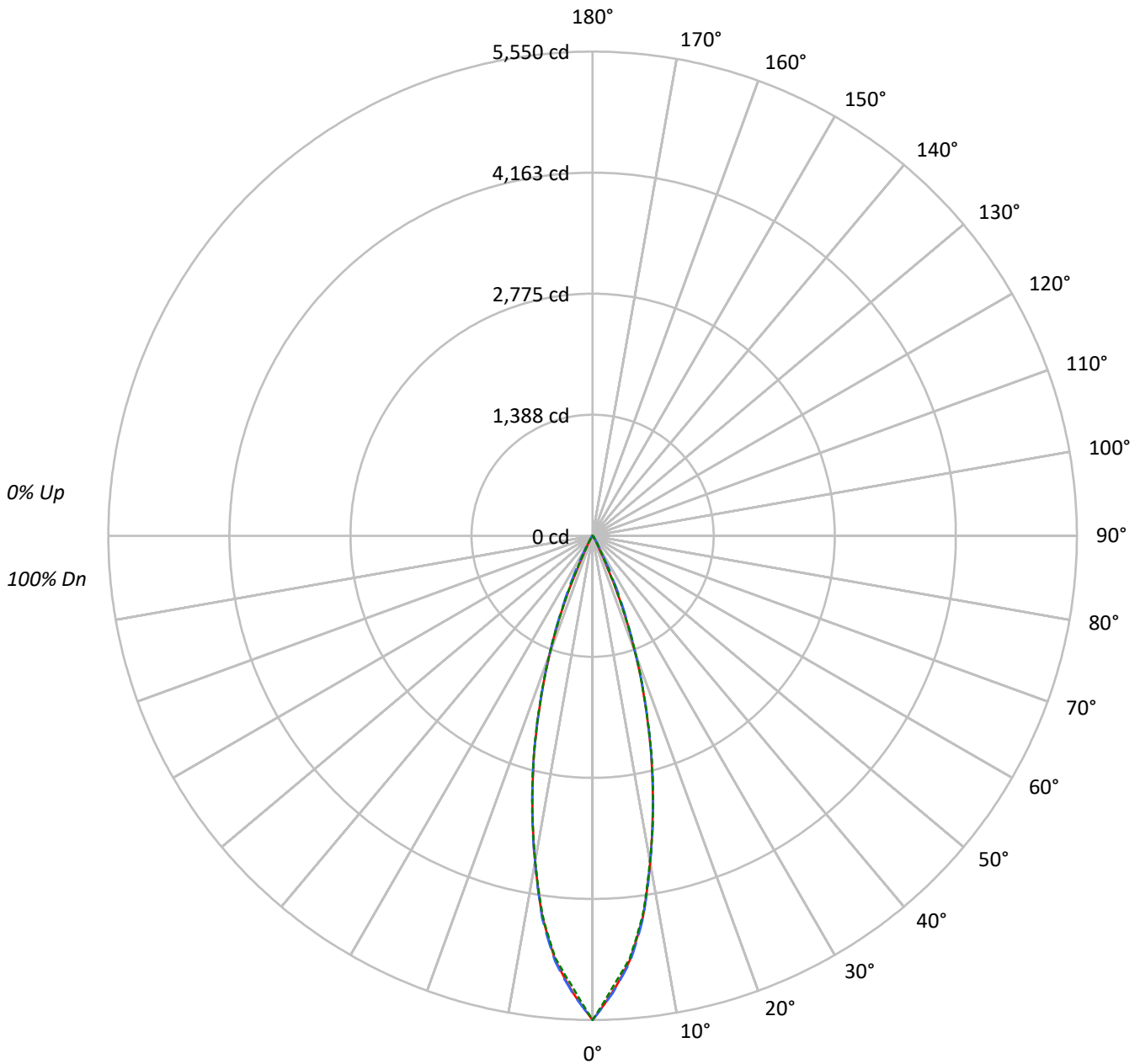
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	537697	537697	537697
5°	475297	476931	472885
10°	373569	374002	372409
15°	260049	260801	260982
20°	147526	148484	149000
25°	39763	60179	44734
30°	9844	13457	10124
35°	2933	6162	3158
40°	1176	2036	1176
45°	589	849	507
50°	377	377	181
55°	321	203	101
60°	233	116	116
65°	138	138	138
70°	170	170	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	435.4	30.3
10°-20°	708.1	49.2
20°-30°	263.2	18.3
30°-40°	26.1	1.8
40°-50°	4.4	0.3
50°-60°	1.2	0.1
60°-70°	0.6	0.0
70°-80°	0.1	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°	1406.8	97.7
0°-40°	1432.9	99.6
0°-60°	1438.4	99.9
0°-90°	1439.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1439.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5550	5550	5550	5550	5550	
5°	4888	4937	4904	4962	4863	433
15°	2593	2622	2600	2643	2602	702
25°	372	546	563	526	418	233
35°	25	31	52	32	27	20
45°	4	5	6	5	4	4
55°	2	1	1	1	1	2
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°	5550.4	5550.4	5550.4	5550.4	5550.4
2.5°	5237.9	5265.8	5248.5	5295.0	5182.7
5°	4887.6	4936.6	4904.4	4962.0	4862.8
7.5°	4406.5	4457.3	4424.5	4480.3	4391.6
10°	3797.6	3835.4	3802.0	3855.9	3785.8
12.5°	3188.8	3226.6	3201.8	3251.4	3195.6
15°	2592.9	2622.1	2600.4	2643.1	2602.2
17.5°	1987.8	2015.7	1995.8	2030.6	1999.6
20°	1431.0	1455.2	1440.3	1469.4	1445.3
22.5°	888.5	953.0	963.5	966.0	895.9
25°	372.0	546.2	563.0	525.8	418.5
27.5°	153.1	200.9	267.8	211.4	161.2
30°	88.0	102.3	120.3	105.4	90.5
32.5°	44.0	57.0	78.7	60.1	46.5
35°	24.8	31.0	52.1	32.2	26.7
37.5°	14.9	18.0	26.0	18.6	15.5
40°	9.3	11.2	16.1	11.8	9.3
42.5°	6.2	7.4	9.9	7.4	6.2
45°	4.3	5.0	6.2	5.0	3.7
47.5°	3.1	3.1	3.7	3.1	2.5
50°	2.5	2.5	2.5	1.9	1.2
52.5°	1.9	1.9	1.9	1.2	1.2
55°	1.9	1.2	1.2	1.2	0.6
57.5°	1.2	1.2	1.2	0.6	0.6
60°	1.2	1.2	0.6	0.6	0.6
62.5°	0.6	0.6	0.6	0.6	0.6
65°	0.6	0.6	0.6	0.6	0.6
67.5°	0.6	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.6	0.6	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.6	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)