

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: P182562

Luminaire Tested: **LDSQA4A13927D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182562
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: LDSQA4A13927D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, 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: 1330.0 lumens
Efficiency: N/A
Efficacy: 59.7 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

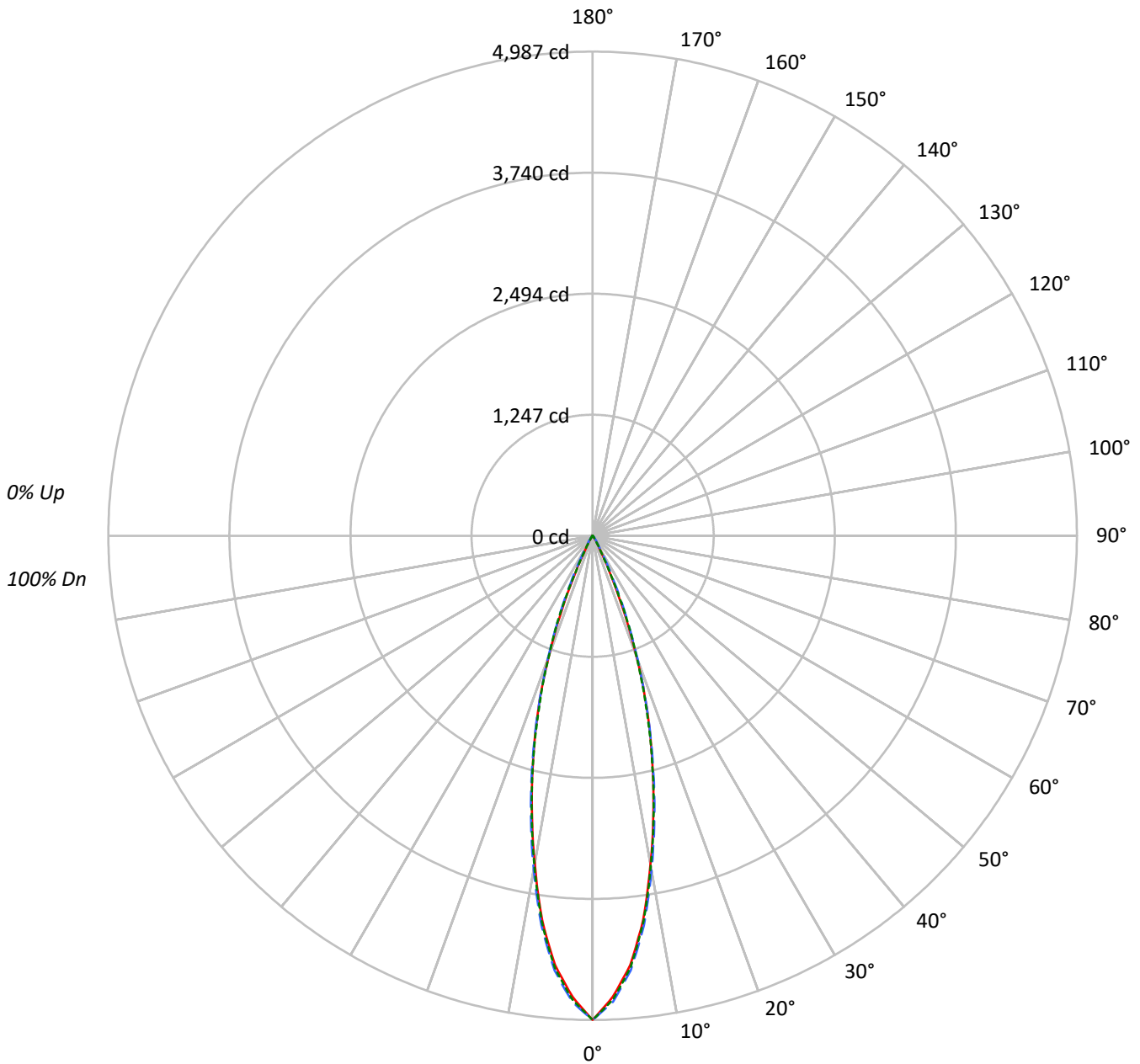
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	98	96				
2	111	107	104	102	109	106	103	101	103	100	99	100	98	96	97	96	94	93	94	96	94	93				
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	95	93	91	90	91	93	91	90				
4	104	99	95	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87	89	87	85	84				
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84	87	84	82	81				
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82	81	85	82	80	79				
7	95	88	84	81	94	88	84	81	87	83	80	85	82	80	85	82	80	79	83	80	77	76				
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	76	81	77	75	74				
9	89	83	78	76	89	82	78	76	81	78	75	81	77	75	80	77	75	74	79	75	73	72				
10	87	80	76	73	86	80	76	73	79	76	73	78	75	73	78	75	73	72	77	73	71	70				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	483089	483089	483089
5°	431439	436866	434152
10°	337724	343763	339553
15°	237162	238898	235849
20°	136113	138928	135990
25°	43087	56673	44477
30°	11443	14218	11030
35°	3891	7037	3962
40°	1720	2820	1720
45°	932	1274	767
50°	558	648	377
55°	321	321	203
60°	233	233	116
65°	138	138	138
70°	170	170	170
75°	0	225	225
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.5	29.7
10°-20°	644.9	48.5
20°-30°	249.8	18.8
30°-40°	30.6	2.3
40°-50°	6.4	0.5
50°-60°	1.7	0.1
60°-70°	0.6	0.0
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°	1290.2	97.0
0°-40°	1320.9	99.3
0°-60°	1329.0	99.9
0°-90°	1330.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1330.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4987	4987	4987	4987	4987	
5°	4437	4501	4492	4465	4464	392
15°	2365	2396	2382	2365	2352	641
25°	403	505	530	521	416	226
35°	33	40	60	39	34	25
45°	7	7	9	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°	4986.7	4986.7	4986.7	4986.7	4986.7
2.5°	4753.5	4819.9	4804.4	4773.4	4781.4
5°	4436.6	4501.1	4492.4	4465.2	4464.5
7.5°	3989.5	4052.7	4045.3	4012.4	4009.3
10°	3433.2	3490.9	3494.6	3446.9	3451.8
12.5°	2889.9	2937.1	2938.9	2906.1	2899.3
15°	2364.7	2396.3	2382.0	2364.7	2351.6
17.5°	1846.8	1853.7	1850.6	1825.1	1815.8
20°	1320.3	1350.1	1347.6	1325.9	1319.1
22.5°	822.3	876.3	901.1	881.2	891.8
25°	403.1	504.8	530.2	520.9	416.1
27.5°	163.7	214.0	266.7	210.9	158.1
30°	102.3	111.6	127.1	107.3	98.6
32.5°	54.0	67.6	86.2	65.7	54.0
35°	32.9	39.7	59.5	39.1	33.5
37.5°	21.1	24.8	34.7	24.8	21.7
40°	13.6	16.1	22.3	16.1	13.6
42.5°	9.3	10.5	14.3	10.5	8.7
45°	6.8	7.4	9.3	6.8	5.6
47.5°	5.0	5.6	6.2	4.3	3.7
50°	3.7	3.7	4.3	3.1	2.5
52.5°	2.5	3.1	3.1	1.9	1.9
55°	1.9	1.9	1.9	1.2	1.2
57.5°	1.9	1.2	1.2	1.2	1.2
60°	1.2	1.2	1.2	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	0.6
72.5°	0.6	0.6	0.6	0.6	0.0
75°	0.0	0.6	0.6	0.6	0.6
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)