

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: P182557

Luminaire Tested: **LDSQA4A09940D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182557
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: LDSQA4A09940D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1024.4 lumens
Efficiency: N/A
Efficacy: 74.0 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

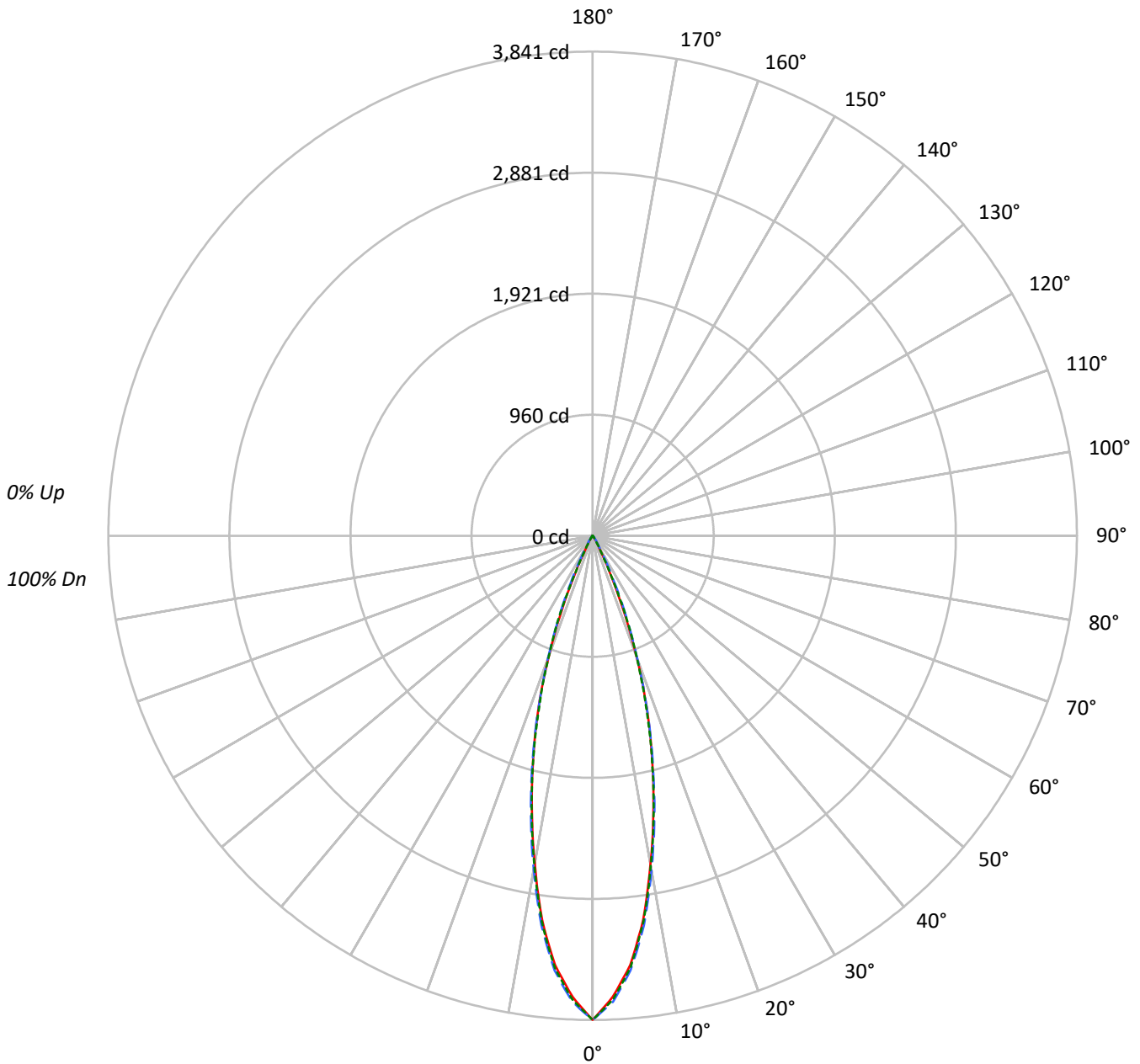
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	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°	372060	372060	372060
5°	332278	336460	334369
10°	260100	264753	261507
15°	182653	183987	181640
20°	104835	107000	104732
25°	33189	43654	34258
30°	8815	10951	8490
35°	2992	5428	3051
40°	1328	2175	1328
45°	726	986	589
50°	437	497	286
55°	236	236	169
60°	194	194	97
65°	115	115	115
70°	142	142	142
75°	0	187	187
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.6	29.7
10°-20°	496.7	48.5
20°-30°	192.4	18.8
30°-40°	23.6	2.3
40°-50°	5.0	0.5
50°-60°	1.3	0.1
60°-70°	0.5	0.1
70°-80°	0.3	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°	993.7	97.0
0°-40°	1017.3	99.3
0°-60°	1023.6	99.9
0°-90°	1024.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1024.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3841	3841	3841	3841	3841	
5°	3417	3467	3460	3439	3438	302
15°	1821	1846	1834	1821	1811	494
25°	310	389	408	401	320	174
35°	25	31	46	30	26	19
45°	5	6	7	5	4	4
55°	1	1	1	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°	3840.6	3840.6	3840.6	3840.6	3840.6
2.5°	3661.0	3712.1	3700.1	3676.3	3682.5
5°	3416.9	3466.6	3459.9	3438.9	3438.4
7.5°	3072.5	3121.3	3115.5	3090.2	3087.8
10°	2644.1	2688.5	2691.4	2654.6	2658.4
12.5°	2225.7	2262.0	2263.5	2238.1	2232.9
15°	1821.2	1845.5	1834.5	1821.2	1811.1
17.5°	1422.4	1427.6	1425.2	1405.6	1398.5
20°	1016.9	1039.8	1037.9	1021.2	1015.9
22.5°	633.3	674.9	694.0	678.7	686.8
25°	310.5	388.8	408.4	401.2	320.5
27.5°	126.1	164.8	205.4	162.4	121.8
30°	78.8	86.0	97.9	82.6	75.9
32.5°	41.6	52.1	66.4	50.6	41.6
35°	25.3	30.6	45.9	30.1	25.8
37.5°	16.2	19.1	26.7	19.1	16.7
40°	10.5	12.4	17.2	12.4	10.5
42.5°	7.2	8.1	11.0	8.1	6.7
45°	5.3	5.7	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	1.4	1.0	1.0
57.5°	1.4	1.0	1.0	1.0	1.0
60°	1.0	1.0	1.0	0.5	0.5
62.5°	0.5	0.5	0.5	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	0.0
75°	0.0	0.5	0.5	0.5	0.5
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)