

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: P182553

Luminaire Tested: **LDSQA4A09840D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182553
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: LDSQA4A09840D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1219.2 lumens
Efficiency: N/A
Efficacy: 88.1 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

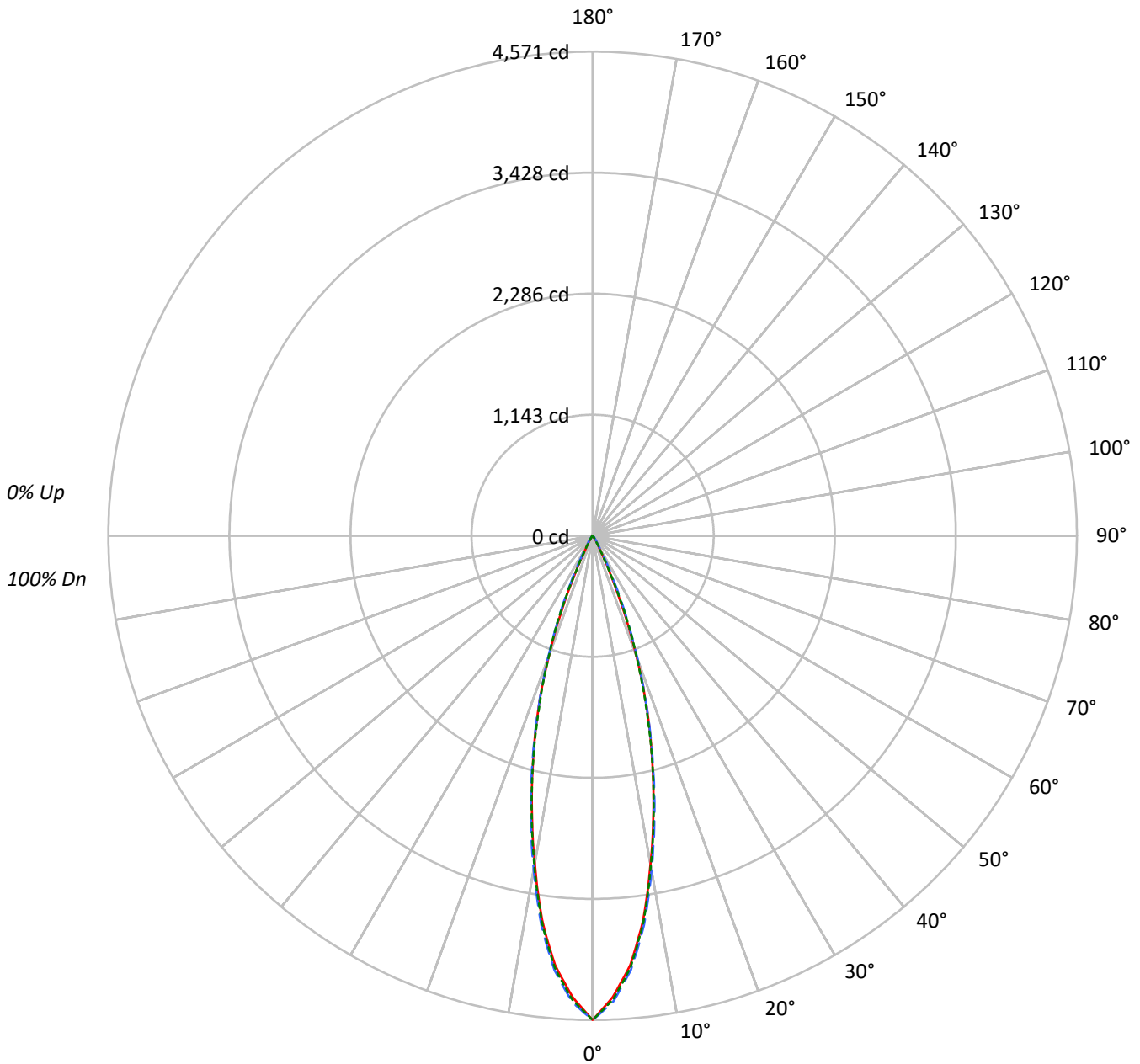
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	442827	442827	442827
5°	395488	400457	397977
10°	309580	315118	311252
15°	217395	218989	216201
20°	124773	127350	124649
25°	39496	51949	40768
30°	10493	13032	10112
35°	3560	6457	3631
40°	1581	2592	1581
45°	863	1165	699
50°	512	603	347
55°	287	287	186
60°	213	213	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°	362.6	29.7
10°-20°	591.2	48.5
20°-30°	229.0	18.8
30°-40°	28.1	2.3
40°-50°	5.9	0.5
50°-60°	1.6	0.1
60°-70°	0.6	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°	1182.7	97.0
0°-40°	1210.8	99.3
0°-60°	1218.2	99.9
0°-90°	1219.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1219.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4571	4571	4571	4571	4571	
5°	4067	4126	4118	4093	4092	359
15°	2168	2197	2184	2168	2156	588
25°	370	463	486	478	381	207
35°	30	36	55	36	31	23
45°	6	7	8	6	5	5
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°	4571.1	4571.1	4571.1	4571.1	4571.1
2.5°	4357.4	4418.2	4404.0	4375.6	4383.0
5°	4066.9	4126.0	4118.0	4093.0	4092.5
7.5°	3657.0	3715.0	3708.2	3678.0	3675.2
10°	3147.1	3200.0	3203.4	3159.6	3164.1
12.5°	2649.1	2692.3	2694.0	2663.9	2657.6
15°	2167.6	2196.6	2183.5	2167.6	2155.7
17.5°	1692.9	1699.2	1696.3	1673.0	1664.5
20°	1210.3	1237.6	1235.3	1215.4	1209.1
22.5°	753.8	803.3	826.0	807.8	817.5
25°	369.5	462.7	486.0	477.5	381.4
27.5°	150.1	196.1	244.4	193.3	145.0
30°	93.8	102.3	116.5	98.3	90.4
32.5°	49.5	62.0	79.0	60.3	49.5
35°	30.1	36.4	54.6	35.8	30.7
37.5°	19.3	22.7	31.8	22.7	19.9
40°	12.5	14.8	20.5	14.8	12.5
42.5°	8.5	9.7	13.1	9.7	8.0
45°	6.3	6.8	8.5	6.3	5.1
47.5°	4.5	5.1	5.7	4.0	3.4
50°	3.4	3.4	4.0	2.8	2.3
52.5°	2.3	2.8	2.8	1.7	1.7
55°	1.7	1.7	1.7	1.1	1.1
57.5°	1.7	1.1	1.1	1.1	1.1
60°	1.1	1.1	1.1	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)