

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: P182552

Luminaire Tested: **LDSQA4A09835D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182552
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: LDSQA4A09835D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1162.6 lumens
Efficiency: N/A
Efficacy: 84.0 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

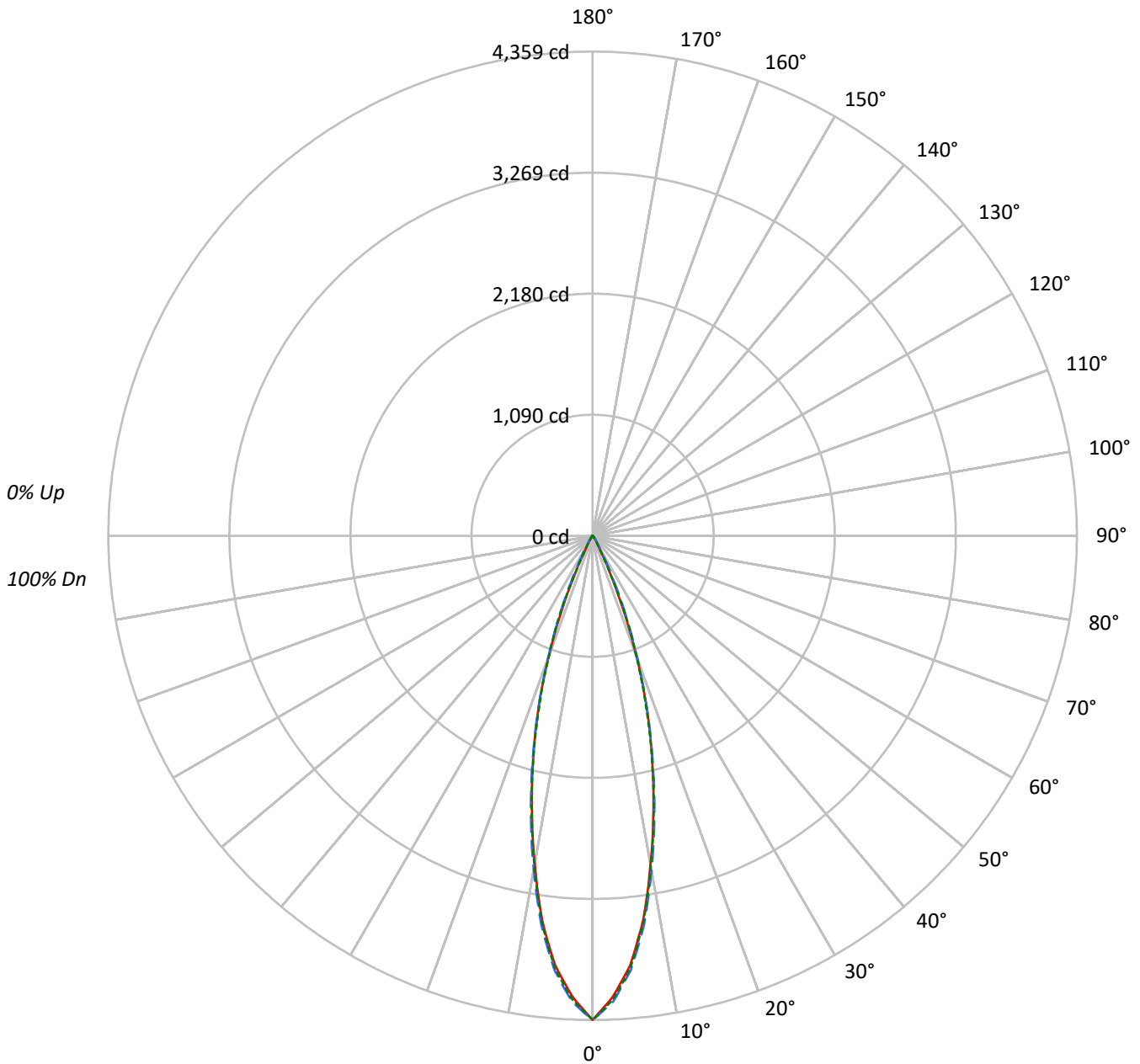
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	422270	422270	422270
5°	377128	381873	379500
10°	295208	300481	296802
15°	207305	208820	206162
20°	118979	121433	118866
25°	37668	49544	38876
30°	10000	12428	9643
35°	3394	6150	3465
40°	1505	2466	1505
45°	822	1110	671
50°	497	573	332
55°	270	270	186
60°	213	213	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°	345.7	29.7
10°-20°	563.7	48.5
20°-30°	218.3	18.8
30°-40°	26.8	2.3
40°-50°	5.6	0.5
50°-60°	1.5	0.1
60°-70°	0.5	0.0
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°	1127.8	97.0
0°-40°	1154.6	99.3
0°-60°	1161.7	99.9
0°-90°	1162.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1162.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4359	4359	4359	4359	4359	
5°	3878	3934	3927	3903	3902	343
15°	2067	2095	2082	2067	2056	561
25°	352	441	464	455	364	198
35°	29	35	52	34	29	22
45°	6	6	8	6	5	5
55°	2	2	2	1	1	2
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°	4358.9	4358.9	4358.9	4358.9	4358.9
2.5°	4155.1	4213.1	4199.5	4172.4	4179.5
5°	3878.1	3934.4	3926.9	3903.0	3902.5
7.5°	3487.2	3542.5	3536.0	3507.3	3504.6
10°	3001.0	3051.4	3054.6	3012.9	3017.2
12.5°	2526.1	2567.3	2568.9	2540.2	2534.2
15°	2067.0	2094.6	2082.1	2067.0	2055.6
17.5°	1614.3	1620.3	1617.6	1595.4	1587.2
20°	1154.1	1180.1	1177.9	1159.0	1153.0
22.5°	718.8	766.0	787.6	770.3	779.5
25°	352.4	441.3	463.5	455.4	363.7
27.5°	143.1	187.0	233.1	184.3	138.2
30°	89.4	97.6	111.1	93.8	86.2
32.5°	47.2	59.1	75.3	57.5	47.2
35°	28.7	34.7	52.0	34.2	29.3
37.5°	18.4	21.7	30.4	21.7	19.0
40°	11.9	14.1	19.5	14.1	11.9
42.5°	8.1	9.2	12.5	9.2	7.6
45°	6.0	6.5	8.1	6.0	4.9
47.5°	4.3	4.9	5.4	3.8	3.3
50°	3.3	3.3	3.8	2.7	2.2
52.5°	2.2	2.7	2.7	1.6	1.6
55°	1.6	1.6	1.6	1.1	1.1
57.5°	1.6	1.1	1.1	1.1	1.1
60°	1.1	1.1	1.1	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)