

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: P182567

Luminaire Tested: **LDSQA4A28830D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182567
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: LDSQA4A28830D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2886.0 lumens
Efficiency: N/A
Efficacy: 64.9 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

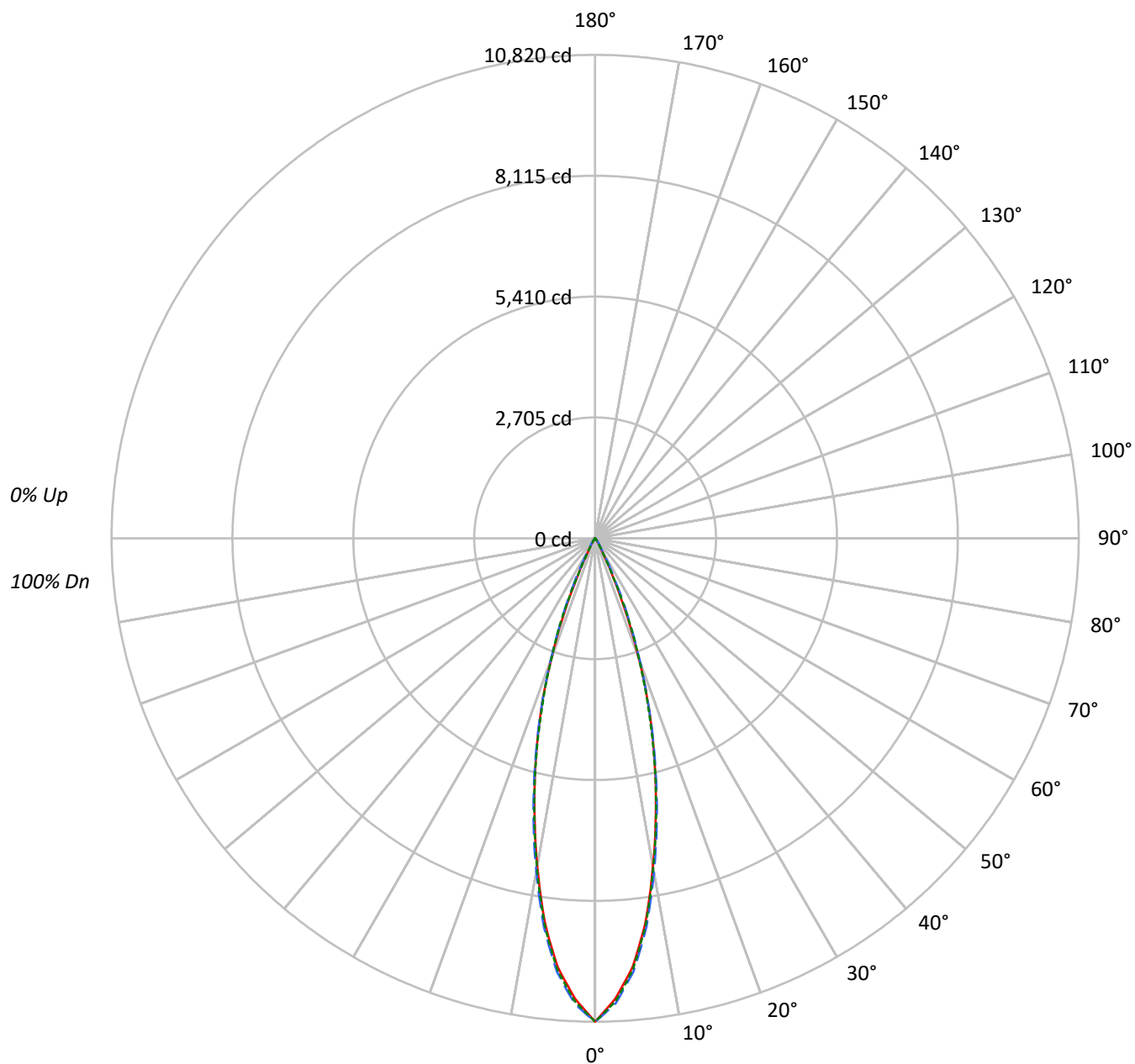
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96
2	111	107	104	102	109	106	103	101	103	100	99	100	98	96	97	96	94	93	93	93
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	95	93	91	90	90	90
4	104	99	95	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87	87	87
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84	84	84
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82	81	81	81
7	95	88	84	81	94	88	84	81	87	83	80	85	82	80	85	82	80	79	79	79
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	76	76	76
9	89	83	78	76	89	82	78	76	81	78	75	81	77	75	80	77	75	74	74	74
10	87	80	76	73	86	80	76	73	79	76	73	78	75	73	78	75	73	72	72	72

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1048241	1048241	1048241
5°	936172	947949	942056
10°	732816	745919	736790
15°	514602	518384	511774
20°	295350	301453	295072
25°	93497	122977	96511
30°	24833	30863	23938
35°	8432	15280	8598
40°	3743	6121	3743
45°	2028	2767	1658
50°	1221	1417	814
55°	676	676	456
60°	523	523	252
65°	298	298	298
70°	368	368	368
75°	0	487	487
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	858.3	29.7
10°-20°	1399.4	48.5
20°-30°	542.0	18.8
30°-40°	66.4	2.3
40°-50°	14.0	0.5
50°-60°	3.7	0.1
60°-70°	1.4	0.0
70°-80°	0.8	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°	2799.7	97.0
0°-40°	2866.1	99.3
0°-60°	2883.8	99.9
0°-90°	2886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2886.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10820	10820	10820	10820	10820	
5°	9627	9767	9748	9689	9687	851
15°	5131	5200	5169	5131	5103	1392
25°	875	1095	1150	1130	903	490
35°	71	86	129	85	73	54
45°	15	16	20	15	12	12
55°	4	4	4	3	3	4
65°	1	1	1	1	1	1
75°	0	1	1	1	1	1
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°	10820.5	10820.5	10820.5	10820.5	10820.5
2.5°	10314.5	10458.5	10424.9	10357.6	10375.1
5°	9626.9	9766.8	9748.0	9688.8	9687.4
7.5°	8656.7	8793.9	8777.8	8706.4	8699.7
10°	7449.6	7574.7	7582.8	7479.2	7490.0
12.5°	6270.8	6373.1	6377.1	6305.8	6291.0
15°	5131.0	5199.6	5168.7	5131.0	5102.8
17.5°	4007.4	4022.2	4015.5	3960.3	3940.1
20°	2864.9	2929.5	2924.1	2877.0	2862.2
22.5°	1784.3	1901.4	1955.2	1912.2	1935.1
25°	874.7	1095.4	1150.5	1130.4	902.9
27.5°	355.3	464.3	578.6	457.5	343.1
30°	222.0	242.2	275.9	232.8	214.0
32.5°	117.1	146.7	187.0	142.6	117.1
35°	71.3	86.1	129.2	84.8	72.7
37.5°	45.8	53.8	75.4	53.8	47.1
40°	29.6	35.0	48.4	35.0	29.6
42.5°	20.2	22.9	31.0	22.9	18.8
45°	14.8	16.1	20.2	14.8	12.1
47.5°	10.8	12.1	13.5	9.4	8.1
50°	8.1	8.1	9.4	6.7	5.4
52.5°	5.4	6.7	6.7	4.0	4.0
55°	4.0	4.0	4.0	2.7	2.7
57.5°	4.0	2.7	2.7	2.7	2.7
60°	2.7	2.7	2.7	1.3	1.3
62.5°	1.3	1.3	1.3	1.3	1.3
65°	1.3	1.3	1.3	1.3	1.3
67.5°	1.3	1.3	1.3	1.3	1.3
70°	1.3	1.3	1.3	1.3	1.3
72.5°	1.3	1.3	1.3	1.3	0.0
75°	0.0	1.3	1.3	1.3	1.3
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)