

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: P182568

Luminaire Tested: **LDSQA4A28835D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182568
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: LDSQA4A28835D010TE 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: 2938.0 lumens
Efficiency: N/A
Efficacy: 66.0 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

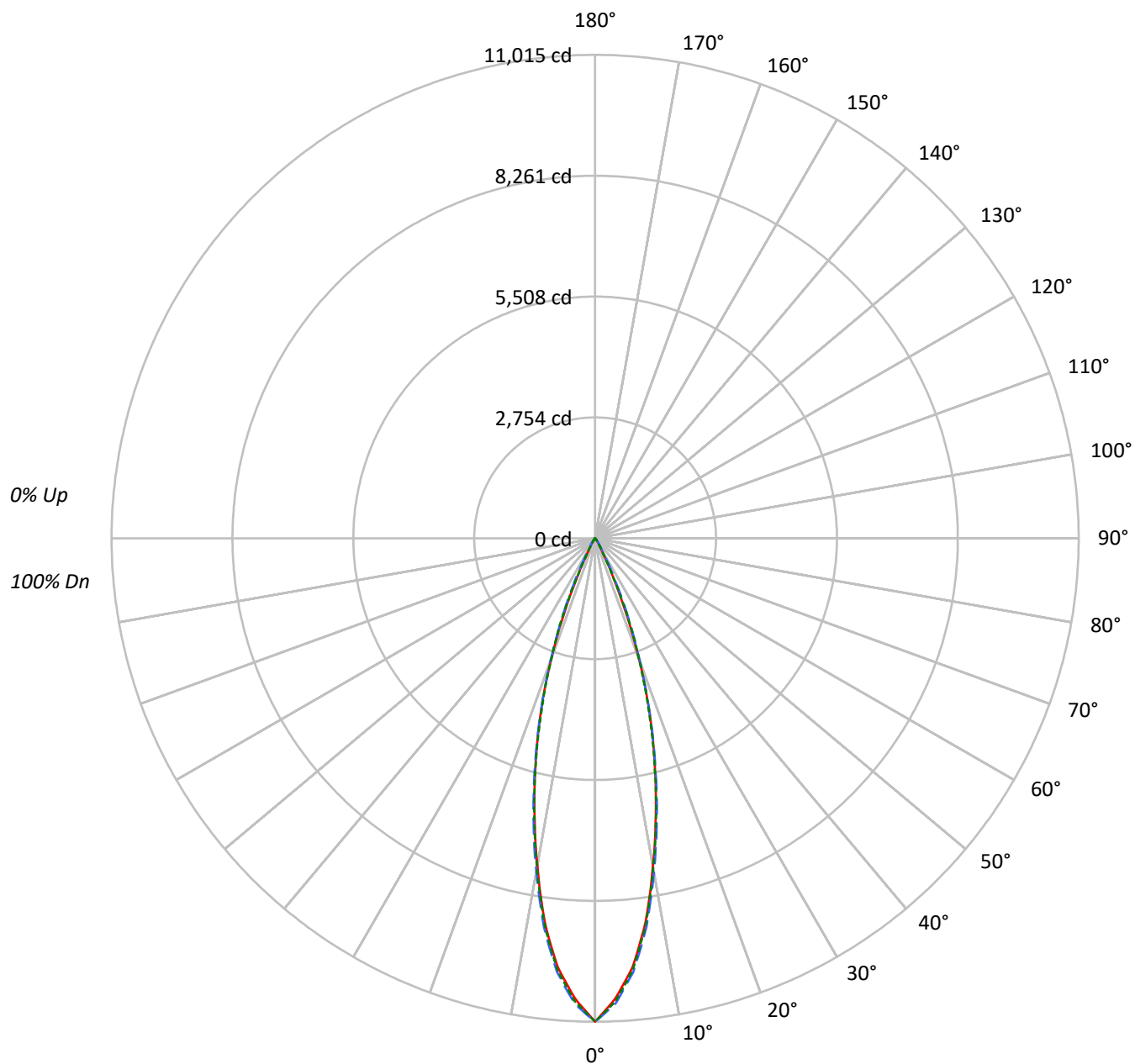
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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	96	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°	1067093	1067093	1067093
5°	953006	964996	958996
10°	745998	759337	750031
15°	523860	527701	520971
20°	300659	306876	300381
25°	95175	125190	98253
30°	25281	31411	24364
35°	8586	15552	8751
40°	3807	6235	3807
45°	2069	2809	1685
50°	1236	1447	829
55°	692	692	456
60°	523	523	271
65°	321	321	321
70°	397	397	397
75°	0	524	524
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	873.7	29.7
10°-20°	1424.6	48.5
20°-30°	551.8	18.8
30°-40°	67.6	2.3
40°-50°	14.2	0.5
50°-60°	3.8	0.1
60°-70°	1.5	0.1
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°	2850.0	97.0
0°-40°	2917.6	99.3
0°-60°	2935.6	99.9
0°-90°	2938.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2938.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11015	11015	11015	11015	11015	
5°	9800	9942	9923	9863	9862	866
15°	5223	5293	5262	5223	5194	1417
25°	890	1115	1171	1151	919	499
35°	73	88	132	86	74	55
45°	15	16	20	15	12	13
55°	4	4	4	3	3	4
65°	1	1	1	1	1	2
75°	0	1	1	1	1	1
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°	11015.1	11015.1	11015.1	11015.1	11015.1
2.5°	10500.0	10646.6	10612.3	10543.8	10561.6
5°	9800.0	9942.5	9923.3	9863.0	9861.6
7.5°	8812.3	8952.0	8935.6	8863.0	8856.2
10°	7583.6	7711.0	7719.2	7613.7	7624.6
12.5°	6383.6	6487.7	6491.8	6419.2	6404.1
15°	5223.3	5293.1	5261.6	5223.3	5194.5
17.5°	4079.4	4094.5	4087.7	4031.5	4011.0
20°	2916.4	2982.2	2976.7	2928.8	2913.7
22.5°	1816.4	1935.6	1990.4	1946.6	1969.9
25°	890.4	1115.1	1171.2	1150.7	919.2
27.5°	361.6	472.6	589.0	465.8	349.3
30°	226.0	246.6	280.8	237.0	217.8
32.5°	119.2	149.3	190.4	145.2	119.2
35°	72.6	87.7	131.5	86.3	74.0
37.5°	46.6	54.8	76.7	54.8	47.9
40°	30.1	35.6	49.3	35.6	30.1
42.5°	20.5	23.3	31.5	23.3	19.2
45°	15.1	16.4	20.5	15.1	12.3
47.5°	11.0	12.3	13.7	9.6	8.2
50°	8.2	8.2	9.6	6.8	5.5
52.5°	5.5	6.8	6.8	4.1	4.1
55°	4.1	4.1	4.1	2.7	2.7
57.5°	4.1	2.7	2.7	2.7	2.7
60°	2.7	2.7	2.7	1.4	1.4
62.5°	1.4	1.4	1.4	1.4	1.4
65°	1.4	1.4	1.4	1.4	1.4
67.5°	1.4	1.4	1.4	1.4	1.4
70°	1.4	1.4	1.4	1.4	1.4
72.5°	1.4	1.4	1.4	1.4	0.0
75°	0.0	1.4	1.4	1.4	1.4
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)