

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: P208789

Luminaire Tested: **LDSQA6A15830D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29057)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A15830D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1899.4 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.55
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

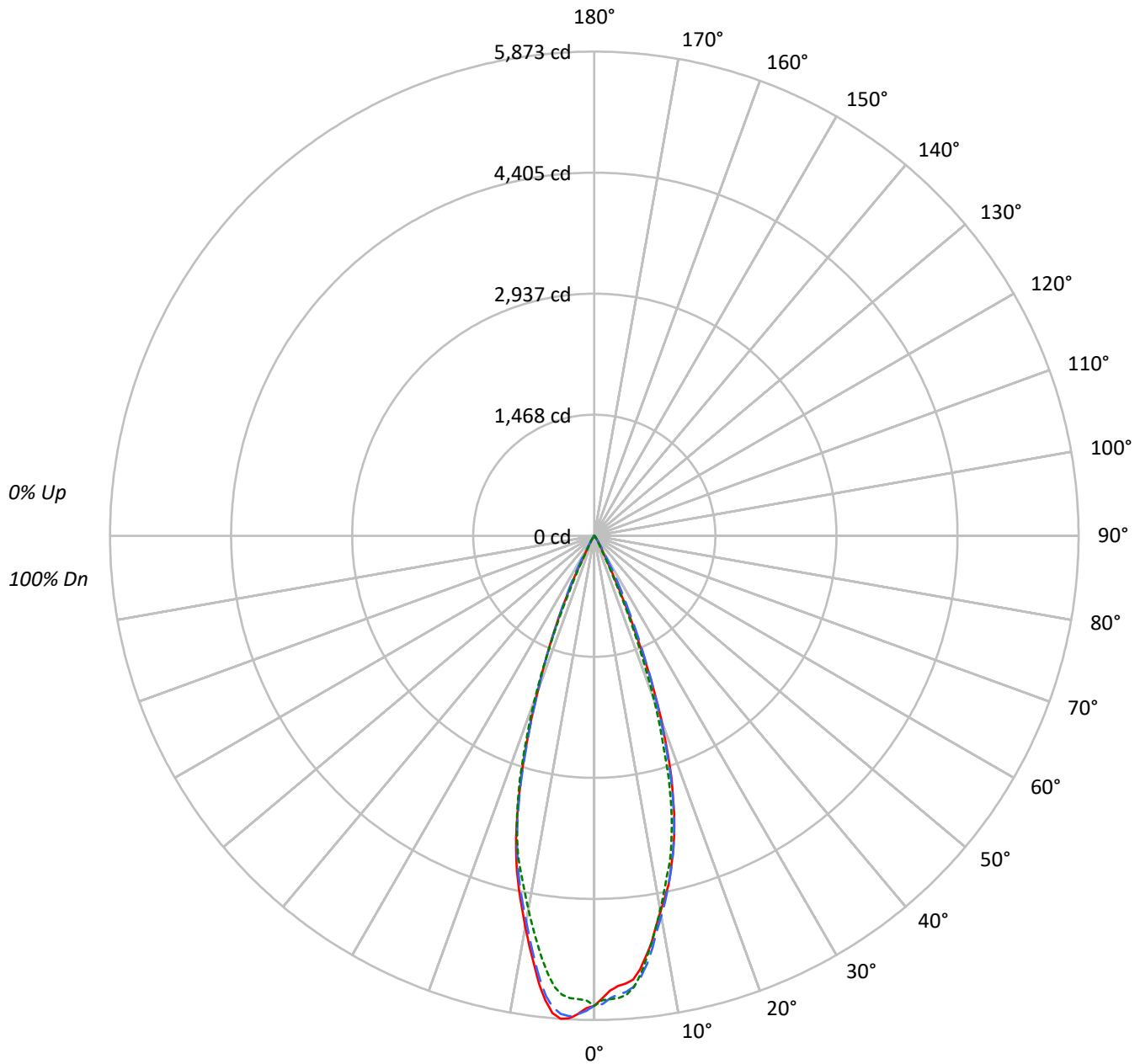
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	245538	245538	245538
5°	233583	237637	251187
10°	202375	201278	210629
15°	167110	161863	162541
20°	108687	96834	92298
25°	32666	24970	33245
30°	7124	5185	5504
35°	2544	1561	1713
40°	753	489	590
45°	213	140	177
50°	40	40	80
55°	45	0	90
60°	52	0	0
65°	61	0	0
70°	76	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	502.3	26.4
10°-20°	975.1	51.3
20°-30°	385.3	20.3
30°-40°	31.7	1.7
40°-50°	4.3	0.2
50°-60°	0.5	0.0
60°-70°	0.1	0.0
70°-80°	0.0	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°	1862.7	98.1
0°-40°	1894.4	99.7
0°-60°	1899.2	100.0
0°-90°	1899.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1899.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5703	5703	5703	5703	5703	
5°	5404	5491	5498	5745	5812	489
15°	3749	3739	3631	3602	3646	1002
25°	688	929	526	770	700	386
35°	48	49	30	41	33	36
45°	4	8	2	6	3	4
55°	1	1	0	1	1	1
65°	1	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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	5702.8	5702.8	5702.8	5702.8	5702.8	5702.8	5702.8	5702.8	5702.8
1°	5610.7	5546.6	5680.7	5675.4	5633.5	5751.7	5764.0	5840.3	5731.9
2°	5520.4	5469.7	5610.7	5625.3	5625.3	5772.7	5811.2	5906.7	5807.1
3°	5468.0	5426.0	5572.9	5611.3	5615.4	5779.7	5836.2	5943.5	5861.9
4°	5445.3	5406.8	5546.1	5575.8	5581.6	5755.2	5814.7	5937.0	5872.9
5°	5404.5	5361.3	5490.7	5495.4	5498.3	5676.0	5745.3	5866.5	5811.8
6°	5289.1	5266.4	5384.7	5359.0	5350.9	5540.8	5611.3	5724.4	5669.0
7°	5138.2	5123.0	5234.3	5195.3	5174.9	5352.0	5417.3	5524.5	5480.8
8°	4983.8	4947.1	5053.1	5019.3	4984.9	5137.6	5194.7	5293.8	5253.0
9°	4790.9	4772.2	4850.9	4839.8	4793.2	4950.0	4970.9	5067.7	5034.5
10°	4628.9	4606.2	4685.4	4664.4	4603.8	4740.8	4755.3	4848.0	4817.7
11°	4471.6	4441.9	4509.5	4482.6	4414.5	4537.4	4547.3	4633.6	4602.7
12°	4327.1	4278.7	4331.7	4299.7	4227.4	4335.8	4340.5	4421.5	4392.9
13°	4135.9	4103.9	4145.9	4111.5	4065.4	4126.6	4117.3	4194.2	4168.0
14°	3951.8	3911.6	3950.1	3908.7	3860.3	3901.1	3874.3	3941.3	3920.9
15°	3749.0	3708.8	3739.1	3688.4	3631.3	3646.5	3601.6	3664.0	3646.5
16°	3513.0	3472.8	3499.1	3437.3	3369.7	3361.0	3301.5	3356.3	3338.2
17°	3246.8	3217.6	3235.7	3158.2	3087.1	3056.8	2978.1	3026.5	3008.4
18°	2993.3	2936.2	2943.8	2857.5	2749.1	2730.5	2641.9	2688.0	2669.9
19°	2661.2	2634.3	2638.4	2541.1	2431.6	2397.2	2309.2	2350.0	2329.6
20°	2372.1	2331.3	2327.9	2222.4	2113.4	2077.3	1992.2	2034.2	2014.4
21°	2041.8	2066.8	2023.1	1911.8	1777.2	1780.7	1705.5	1709.6	1723.0
22°	1670.0	1761.5	1724.2	1592.5	1424.1	1501.6	1434.0	1438.7	1450.3
23°	1302.3	1397.3	1431.1	1271.4	1088.5	1242.9	1189.3	1192.8	1200.3
24°	966.7	1100.7	1161.3	978.3	783.7	999.9	969.6	973.7	965.5
25°	687.6	844.9	929.4	722.5	525.6	776.7	770.3	776.7	699.8
26°	464.4	636.9	733.0	506.9	325.1	574.0	613.0	599.0	453.9
27°	297.2	484.2	563.5	331.6	206.3	395.1	457.4	453.3	260.5
28°	209.2	336.2	416.0	203.9	159.1	248.2	326.9	298.3	166.6
29°	176.6	218.5	290.2	145.1	129.4	146.8	219.1	174.2	136.3
30°	143.3	145.1	190.5	117.1	104.3	104.9	139.8	114.2	110.7
32.5°	87.4	86.8	82.2	68.8	61.2	61.2	68.2	65.8	65.3
35°	48.4	53.0	48.9	41.4	29.7	36.7	41.4	39.0	32.6
37.5°	26.2	30.9	33.8	22.7	16.3	21.6	28.0	22.7	18.6
40°	13.4	16.9	23.9	12.8	8.7	12.2	19.2	12.8	10.5
42.5°	7.0	9.3	15.1	7.0	4.1	7.0	12.2	7.0	5.2
45°	3.5	4.7	8.2	3.5	2.3	3.5	6.4	4.1	2.9
47.5°	1.7	2.3	4.1	1.7	0.6	1.7	3.5	1.7	1.7
50°	0.6	1.2	2.3	0.6	0.6	0.6	1.7	1.2	1.2
52.5°	0.6	0.6	1.2	0.6	0.0	0.6	1.2	0.6	1.2
55°	0.6	0.6	0.6	0.0	0.0	0.6	0.6	0.6	1.2
57.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.6	0.6	1.2
60°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°







62.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)