

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: P208806

Luminaire Tested: **LDSQA6A30835D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208806
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: LDSQA6A30835D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3259.0 lumens
Efficiency: N/A
Efficacy: 73.0 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

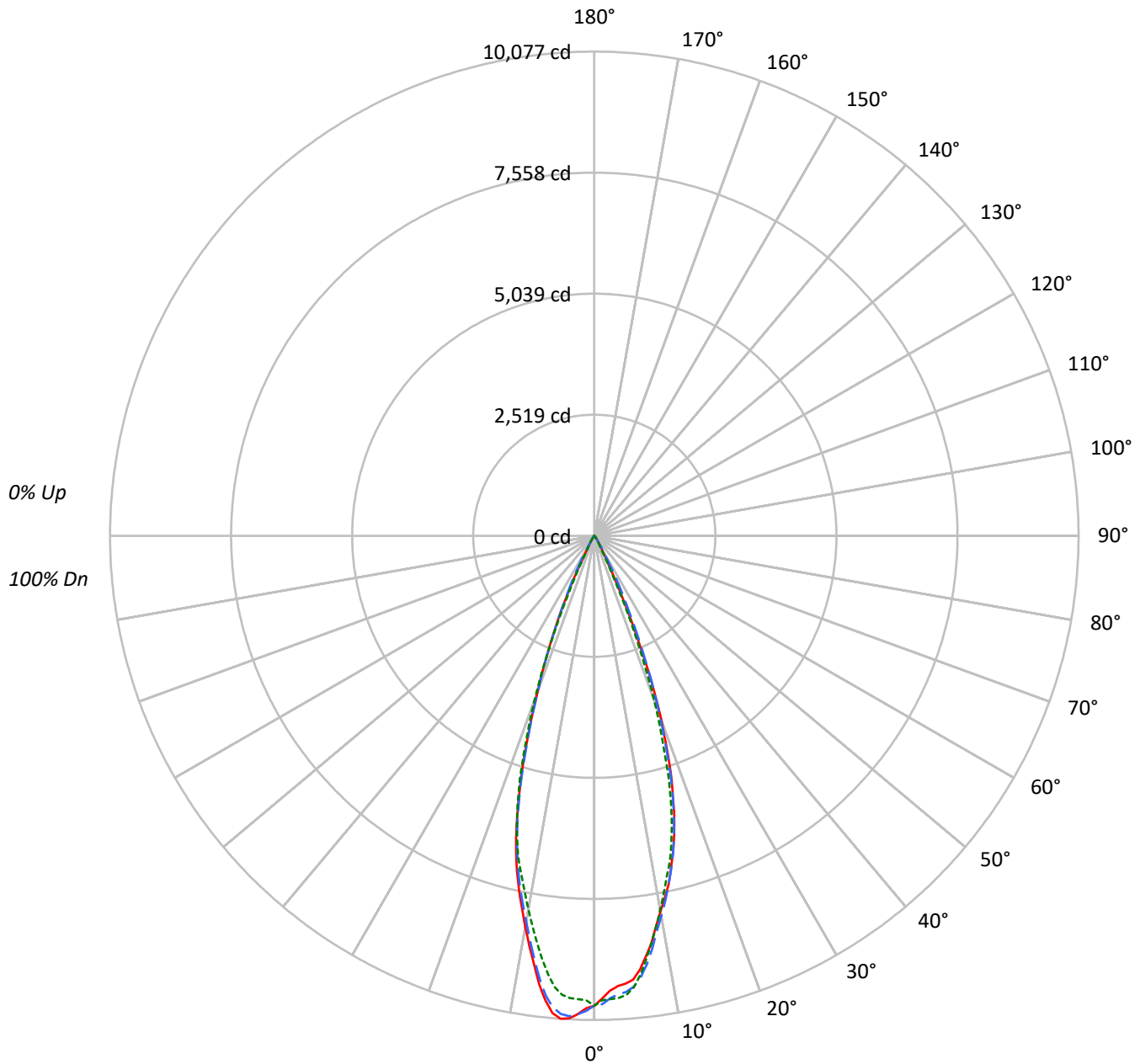
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96		
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93		
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91	90		
4	104	98	94	91	102	97	93	91	95	92	90	93	91	89	92	89	88	86		
5	101	94	90	87	99	94	90	87	92	89	86	90	88	85	89	87	85	83		
6	97	91	87	84	96	90	86	83	89	85	83	88	85	82	87	84	82	81		
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78		
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76	75		
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74	73		
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	421300	421300	421300
5°	400785	407743	430991
10°	347241	345361	361402
15°	286734	277730	278889
20°	186492	166153	158364
25°	56048	42842	57046
30°	12230	8899	9446
35°	4363	2681	2943
40°	1293	843	1012
45°	365	244	304
50°	67	67	134
55°	75	0	150
60°	86	0	0
65°	102	0	0
70°	126	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°	861.9	26.4
10°-20°	1673.1	51.3
20°-30°	661.1	20.3
30°-40°	54.4	1.7
40°-50°	7.4	0.2
50°-60°	0.9	0.0
60°-70°	0.2	0.0
70°-80°	0.1	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°	3196.1	98.1
0°-40°	3250.4	99.7
0°-60°	3258.7	100.0
0°-90°	3259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3259.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9785	9785	9785	9785	9785	
5°	9273	9421	9434	9858	9972	839
15°	6433	6416	6231	6180	6257	1719
25°	1180	1595	902	1322	1201	663
35°	83	84	51	71	56	62
45°	6	14	4	11	5	6
55°	1	1	0	1	2	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°	9785.0	9785.0	9785.0	9785.0	9785.0	9785.0	9785.0	9785.0	9785.0
1°	9627.0	9517.1	9747.0	9738.0	9666.0	9869.0	9890.0	10021.0	9835.0
2°	9472.1	9385.1	9627.0	9652.0	9652.0	9905.0	9971.0	10134.9	9964.0
3°	9382.1	9310.1	9562.1	9628.0	9635.0	9917.0	10014.0	10197.9	10058.0
4°	9343.1	9277.1	9516.1	9567.1	9577.1	9875.0	9977.0	10186.9	10077.0
5°	9273.1	9199.1	9421.1	9429.1	9434.1	9739.0	9858.0	10066.0	9972.0
6°	9075.2	9036.2	9239.1	9195.1	9181.1	9507.1	9628.0	9822.0	9727.0
7°	8816.2	8790.2	8981.2	8914.2	8879.2	9183.1	9295.1	9479.1	9404.1
8°	8551.3	8488.3	8670.2	8612.3	8553.3	8815.2	8913.2	9083.2	9013.2
9°	8220.3	8188.3	8323.3	8304.3	8224.3	8493.3	8529.3	8695.2	8638.2
10°	7942.4	7903.4	8039.4	8003.4	7899.4	8134.3	8159.3	8318.3	8266.3
11°	7672.4	7621.5	7737.4	7691.4	7574.5	7785.4	7802.4	7950.4	7897.4
12°	7424.5	7341.5	7432.5	7377.5	7253.5	7439.5	7447.5	7586.5	7537.5
13°	7096.6	7041.6	7113.6	7054.6	6975.6	7080.6	7064.6	7196.5	7151.5
14°	6780.6	6711.6	6777.6	6706.6	6623.7	6693.6	6647.6	6762.6	6727.6
15°	6432.7	6363.7	6415.7	6328.7	6230.7	6256.7	6179.7	6286.7	6256.7
16°	6027.8	5958.8	6003.8	5897.8	5781.8	5766.8	5664.8	5758.8	5727.8
17°	5570.9	5520.9	5551.9	5418.9	5296.9	5244.9	5110.0	5192.9	5162.0
18°	5136.0	5038.0	5051.0	4903.0	4717.0	4685.0	4533.1	4612.1	4581.1
19°	4566.1	4520.1	4527.1	4360.1	4172.2	4113.2	3962.2	4032.2	3997.2
20°	4070.2	4000.2	3994.2	3813.2	3626.3	3564.3	3418.3	3490.3	3456.3
21°	3503.3	3546.3	3471.3	3280.3	3049.4	3055.4	2926.4	2933.4	2956.4
22°	2865.4	3022.4	2958.4	2732.4	2443.5	2576.5	2460.5	2468.5	2488.5
23°	2234.5	2397.5	2455.5	2181.6	1867.6	2132.6	2040.6	2046.6	2059.6
24°	1658.7	1888.6	1992.6	1678.7	1344.7	1715.7	1663.7	1670.7	1656.7
25°	1179.8	1449.7	1594.7	1239.7	901.8	1332.7	1321.7	1332.7	1200.8
26°	796.8	1092.8	1257.7	869.8	557.9	984.8	1051.8	1027.8	778.8
27°	509.9	830.8	966.8	568.9	353.9	677.9	784.8	777.8	446.9
28°	358.9	576.9	713.9	349.9	272.9	425.9	560.9	511.9	285.9
29°	302.9	374.9	497.9	248.9	222.0	251.9	375.9	298.9	234.0
30°	246.0	248.9	326.9	201.0	179.0	180.0	240.0	196.0	190.0
32.5°	150.0	149.0	141.0	118.0	105.0	105.0	117.0	113.0	112.0
35°	83.0	91.0	84.0	71.0	51.0	63.0	71.0	67.0	56.0
37.5°	45.0	53.0	58.0	39.0	28.0	37.0	48.0	39.0	32.0
40°	23.0	29.0	41.0	22.0	15.0	21.0	33.0	22.0	18.0
42.5°	12.0	16.0	26.0	12.0	7.0	12.0	21.0	12.0	9.0
45°	6.0	8.0	14.0	6.0	4.0	6.0	11.0	7.0	5.0
47.5°	3.0	4.0	7.0	3.0	1.0	3.0	6.0	3.0	3.0
50°	1.0	2.0	4.0	1.0	1.0	1.0	3.0	2.0	2.0
52.5°	1.0	1.0	2.0	1.0	0.0	1.0	2.0	1.0	2.0
55°	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	2.0
57.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	2.0
60°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.0	1.0	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°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)