

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: P208810

Luminaire Tested: **LDSQA6A30935D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208810
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: LDSQA6A30935D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2659.4 lumens
Efficiency: N/A
Efficacy: 59.6 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

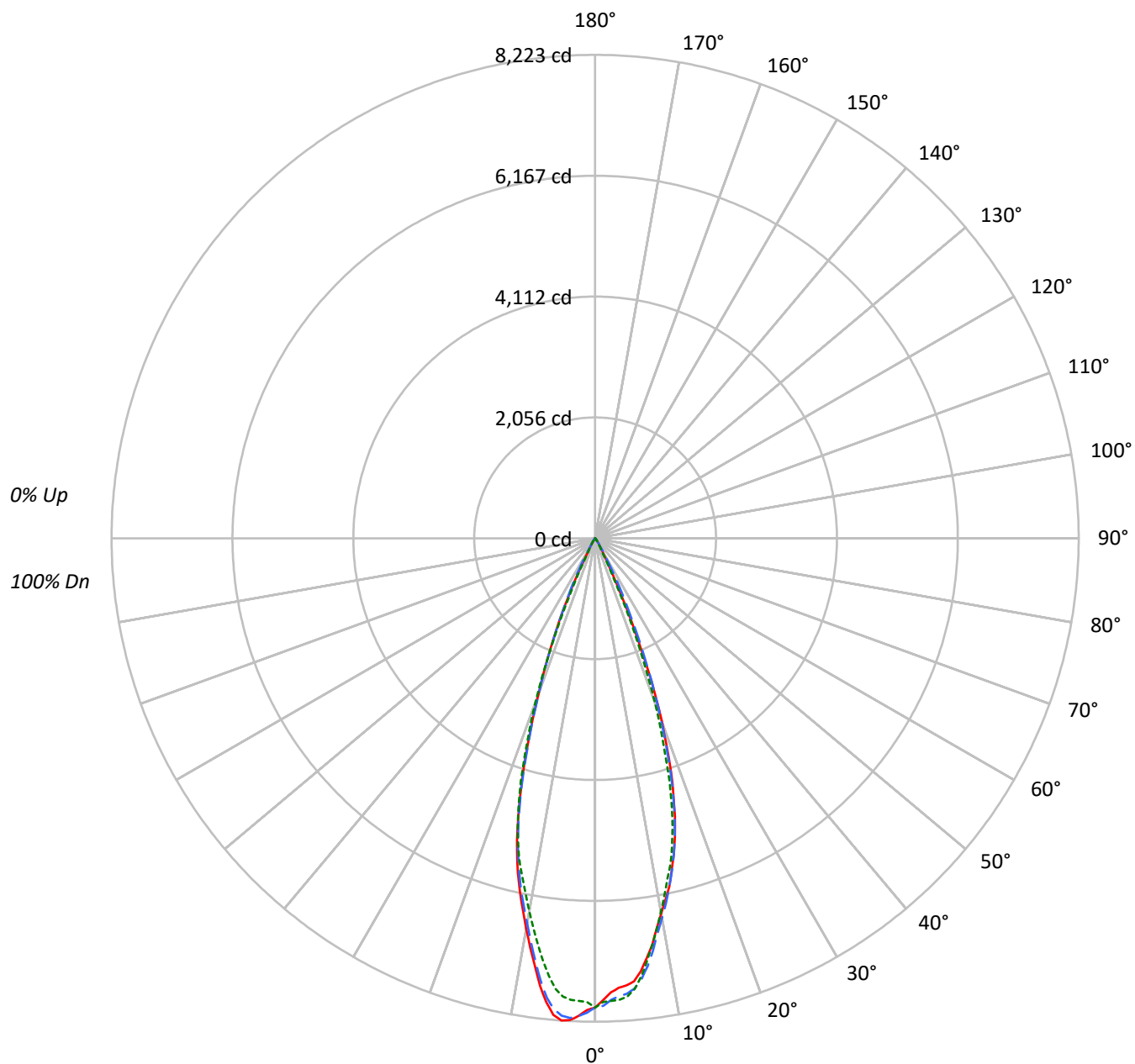
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	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°	343791	343791	343791
5°	327051	332730	351699
10°	283357	281823	294912
15°	233985	226639	227584
20°	152183	135583	129228
25°	45735	34960	46552
30°	9978	7259	7706
35°	3558	2187	2402
40°	1057	686	826
45°	298	201	250
50°	54	54	107
55°	60	0	120
60°	69	0	0
65°	82	0	0
70°	101	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°	703.4	26.4
10°-20°	1365.3	51.3
20°-30°	539.4	20.3
30°-40°	44.4	1.7
40°-50°	6.1	0.2
50°-60°	0.7	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°	2608.1	98.1
0°-40°	2652.4	99.7
0°-60°	2659.2	100.0
0°-90°	2659.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2659.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7985	7985	7985	7985	7985	
5°	7567	7688	7698	8044	8137	684
15°	5249	5235	5084	5043	5106	1403
25°	963	1301	736	1079	980	541
35°	68	68	42	58	46	51
45°	5	11	3	9	4	5
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°	7984.8	7984.8	7984.8	7984.8	7984.8	7984.8	7984.8	7984.8	7984.8
1°	7855.9	7766.2	7953.8	7946.5	7887.8	8053.4	8070.5	8177.4	8025.6
2°	7729.5	7658.5	7855.9	7876.3	7876.3	8082.7	8136.6	8270.4	8130.9
3°	7656.1	7597.3	7802.9	7856.8	7862.5	8092.5	8171.7	8321.8	8207.6
4°	7624.2	7570.4	7765.4	7807.0	7815.1	8058.3	8141.5	8312.8	8223.1
5°	7567.1	7506.7	7687.9	7694.4	7698.5	7947.3	8044.4	8214.1	8137.4
6°	7405.6	7373.8	7539.4	7503.5	7492.1	7758.0	7856.8	8015.0	7937.5
7°	7194.3	7173.1	7328.9	7274.2	7245.7	7493.7	7585.1	7735.2	7674.0
8°	6978.1	6926.7	7075.2	7027.8	6979.7	7193.5	7273.4	7412.1	7355.0
9°	6708.0	6681.9	6792.1	6776.6	6711.3	6930.7	6960.1	7095.6	7049.0
10°	6481.2	6449.4	6560.3	6531.0	6446.1	6637.9	6658.3	6788.0	6745.5
11°	6260.9	6219.3	6314.0	6276.4	6181.0	6353.1	6367.0	6487.7	6444.5
12°	6058.6	5990.9	6065.1	6020.2	5919.1	6070.8	6077.4	6190.8	6150.8
13°	5791.0	5746.1	5804.9	5756.7	5692.3	5777.9	5764.9	5872.6	5835.9
14°	5533.2	5476.9	5530.7	5472.8	5405.1	5462.2	5424.7	5518.5	5489.9
15°	5249.3	5193.0	5235.4	5164.4	5084.5	5105.7	5042.8	5130.1	5105.7
16°	4918.8	4862.5	4899.3	4812.8	4718.1	4705.9	4622.7	4699.4	4674.1
17°	4546.0	4505.2	4530.5	4422.0	4322.4	4280.0	4169.9	4237.6	4212.3
18°	4191.1	4111.1	4121.7	4001.0	3849.2	3823.1	3699.1	3763.6	3738.3
19°	3726.0	3688.5	3694.2	3558.0	3404.6	3356.5	3233.3	3290.4	3261.8
20°	3321.4	3264.3	3259.4	3111.7	2959.1	2908.5	2789.4	2848.2	2820.4
21°	2858.8	2893.9	2832.7	2676.8	2488.4	2493.3	2388.0	2393.7	2412.5
22°	2338.3	2466.4	2414.1	2229.8	1994.0	2102.5	2007.8	2014.4	2030.7
23°	1823.5	1956.4	2003.8	1780.2	1524.0	1740.2	1665.2	1670.1	1680.7
24°	1353.5	1541.2	1626.0	1369.8	1097.3	1400.0	1357.6	1363.3	1351.9
25°	962.7	1183.0	1301.3	1011.7	735.9	1087.5	1078.6	1087.5	979.9
26°	650.2	891.7	1026.4	709.8	455.3	803.6	858.3	838.7	635.6
27°	416.1	678.0	788.9	464.2	288.8	553.2	640.5	634.7	364.7
28°	292.9	470.8	582.5	285.6	222.7	347.6	457.7	417.7	233.3
29°	247.2	305.9	406.3	203.1	181.1	205.6	306.8	243.9	190.9
30°	200.7	203.1	266.8	164.0	146.0	146.9	195.8	159.9	155.0
32.5°	122.4	121.6	115.0	96.3	85.7	85.7	95.5	92.2	91.4
35°	67.7	74.2	68.5	57.9	41.6	51.4	57.9	54.7	45.7
37.5°	36.7	43.2	47.3	31.8	22.8	30.2	39.2	31.8	26.1
40°	18.8	23.7	33.5	17.9	12.2	17.1	26.9	17.9	14.7
42.5°	9.8	13.1	21.2	9.8	5.7	9.8	17.1	9.8	7.3
45°	4.9	6.5	11.4	4.9	3.3	4.9	9.0	5.7	4.1
47.5°	2.4	3.3	5.7	2.4	0.8	2.4	4.9	2.4	2.4
50°	0.8	1.6	3.3	0.8	0.8	0.8	2.4	1.6	1.6
52.5°	0.8	0.8	1.6	0.8	0.0	0.8	1.6	0.8	1.6
55°	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	1.6
57.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.8	0.8	1.6
60°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.8	0.8	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°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)