

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: P208790

Luminaire Tested: **LDSQA6A15835D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208790
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: LDSQA6A15835D010TE 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: 1933.5 lumens
Efficiency: N/A
Efficacy: 88.7 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

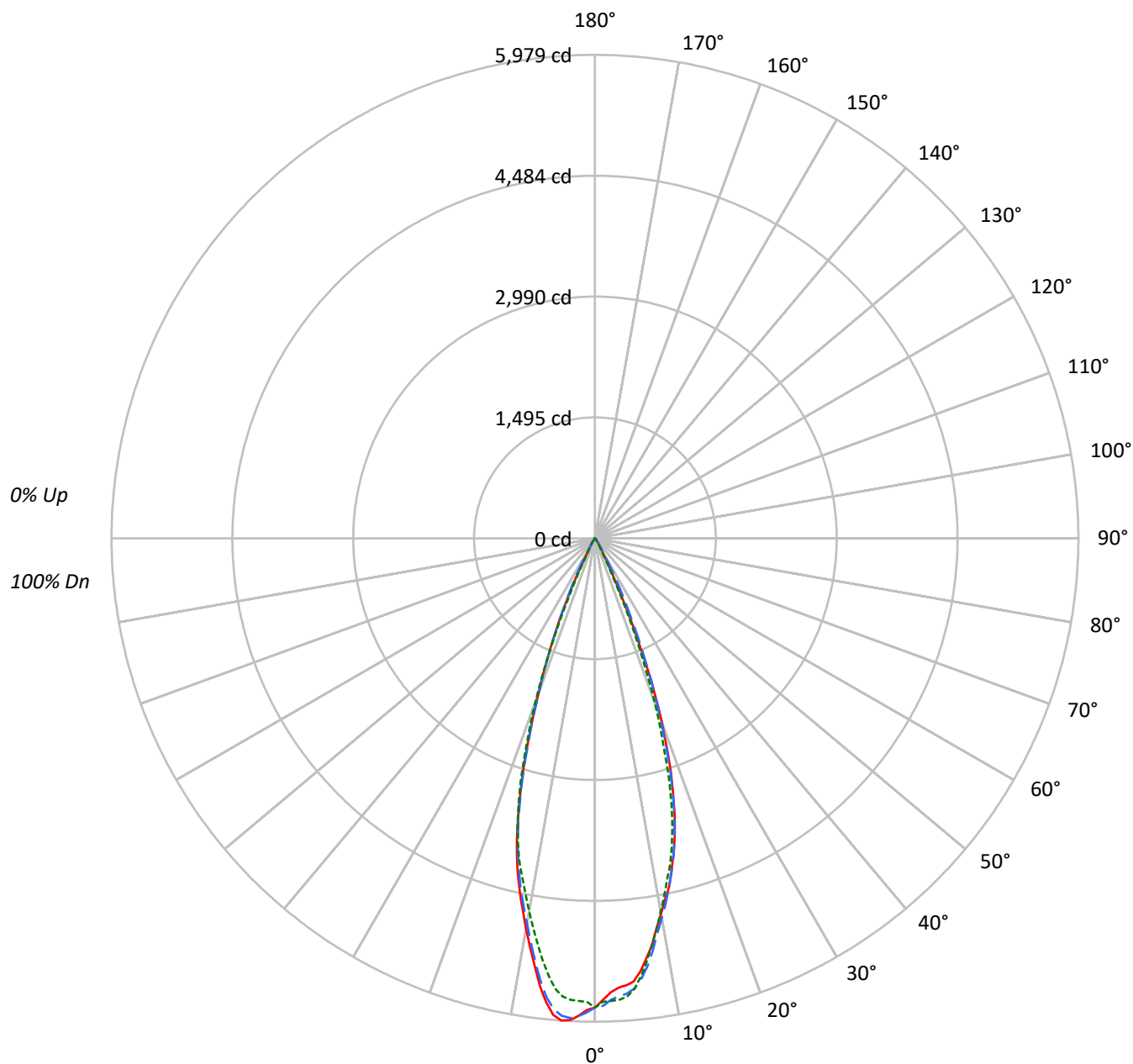
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	249955	249955	249955
5°	237784	241912	255703
10°	206012	204898	214415
15°	170119	164774	165465
20°	110643	98575	93956
25°	33250	25416	33844
30°	7254	5280	5603
35°	2586	1593	1745
40°	764	500	601
45°	219	146	183
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°	511.4	26.4
10°-20°	992.6	51.3
20°-30°	392.2	20.3
30°-40°	32.2	1.7
40°-50°	4.4	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°	1896.2	98.1
0°-40°	1928.4	99.7
0°-60°	1933.4	100.0
0°-90°	1933.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5805	5805	5805	5805	5805	
5°	5502	5589	5597	5849	5916	497
15°	3816	3806	3697	3666	3712	1020
25°	700	946	535	784	712	393
35°	49	50	30	42	33	37
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	5805.4	5805.4	5805.4	5805.4	5805.4	5805.4	5805.4	5805.4	5805.4
1°	5711.6	5646.4	5782.8	5777.5	5734.8	5855.2	5867.6	5945.3	5835.0
2°	5619.7	5568.1	5711.6	5726.5	5726.5	5876.5	5915.7	6013.0	5911.5
3°	5566.3	5523.6	5673.1	5712.2	5716.4	5883.7	5941.2	6050.3	5967.3
4°	5543.2	5504.0	5645.8	5676.0	5682.0	5858.7	5919.2	6043.8	5978.6
5°	5501.7	5457.8	5589.4	5594.2	5597.2	5778.1	5848.7	5972.0	5916.3
6°	5384.2	5361.1	5481.5	5455.4	5447.1	5640.5	5712.2	5827.3	5771.0
7°	5230.6	5215.1	5328.4	5288.7	5267.9	5448.3	5514.7	5623.8	5579.4
8°	5073.4	5036.0	5144.0	5109.6	5074.6	5230.0	5288.1	5388.9	5347.4
9°	4877.0	4858.1	4938.1	4926.9	4879.4	5039.0	5060.3	5158.8	5125.0
10°	4712.1	4689.0	4769.7	4748.3	4686.6	4826.0	4840.9	4935.2	4904.3
11°	4552.0	4521.7	4590.5	4563.3	4493.9	4619.0	4629.1	4716.9	4685.4
12°	4404.9	4355.6	4409.6	4377.0	4303.4	4413.8	4418.5	4501.0	4471.9
13°	4210.3	4177.7	4220.4	4185.4	4138.5	4200.8	4191.3	4269.6	4242.9
14°	4022.9	3981.9	4021.1	3979.0	3929.8	3971.3	3944.0	4012.2	3991.4
15°	3816.5	3775.5	3806.4	3754.8	3696.6	3712.1	3666.4	3729.9	3712.1
16°	3576.2	3535.3	3562.0	3499.1	3430.3	3421.4	3360.9	3416.7	3398.3
17°	3305.1	3275.5	3293.9	3215.0	3142.6	3111.8	3031.7	3080.9	3062.5
18°	3047.1	2989.0	2996.7	2908.9	2798.6	2779.6	2689.4	2736.3	2717.9
19°	2709.0	2681.7	2685.9	2586.8	2475.3	2440.3	2350.7	2392.3	2371.5
20°	2414.8	2373.3	2369.7	2262.4	2151.4	2114.7	2028.0	2070.8	2050.6
21°	2078.5	2104.0	2059.5	1946.2	1809.2	1812.7	1736.2	1740.4	1754.0
22°	1700.0	1793.2	1755.2	1621.1	1449.7	1528.6	1459.8	1464.5	1476.4
23°	1325.7	1422.4	1456.8	1294.3	1108.0	1265.2	1210.7	1214.2	1221.9
24°	984.1	1120.5	1182.2	995.9	797.8	1017.9	987.0	991.2	982.9
25°	699.9	860.1	946.1	735.5	535.0	790.7	784.2	790.7	712.4
26°	472.8	648.3	746.2	516.1	331.0	584.3	624.0	609.8	462.1
27°	302.5	492.9	573.6	337.5	210.0	402.2	465.6	461.5	265.1
28°	212.9	342.3	423.5	207.6	161.9	252.7	332.8	303.7	169.6
29°	179.7	222.4	295.4	147.7	131.7	149.5	223.0	177.4	138.8
30°	145.9	147.7	194.0	119.2	106.2	106.8	142.4	116.3	112.7
32.5°	89.0	88.4	83.6	70.0	62.3	62.3	69.4	67.0	66.4
35°	49.2	54.0	49.8	42.1	30.3	37.4	42.1	39.7	33.2
37.5°	26.7	31.4	34.4	23.1	16.6	21.9	28.5	23.1	19.0
40°	13.6	17.2	24.3	13.0	8.9	12.5	19.6	13.0	10.7
42.5°	7.1	9.5	15.4	7.1	4.2	7.1	12.5	7.1	5.3
45°	3.6	4.7	8.3	3.6	2.4	3.6	6.5	4.2	3.0
47.5°	1.8	2.4	4.2	1.8	0.6	1.8	3.6	1.8	1.8
50°	0.6	1.2	2.4	0.6	0.6	0.6	1.8	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)