

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: P208798

Luminaire Tested: **LDSQA6A20835D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208798
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: LDSQA6A20835D010TE 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: 2342.4 lumens
Efficiency: N/A
Efficacy: 81.3 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

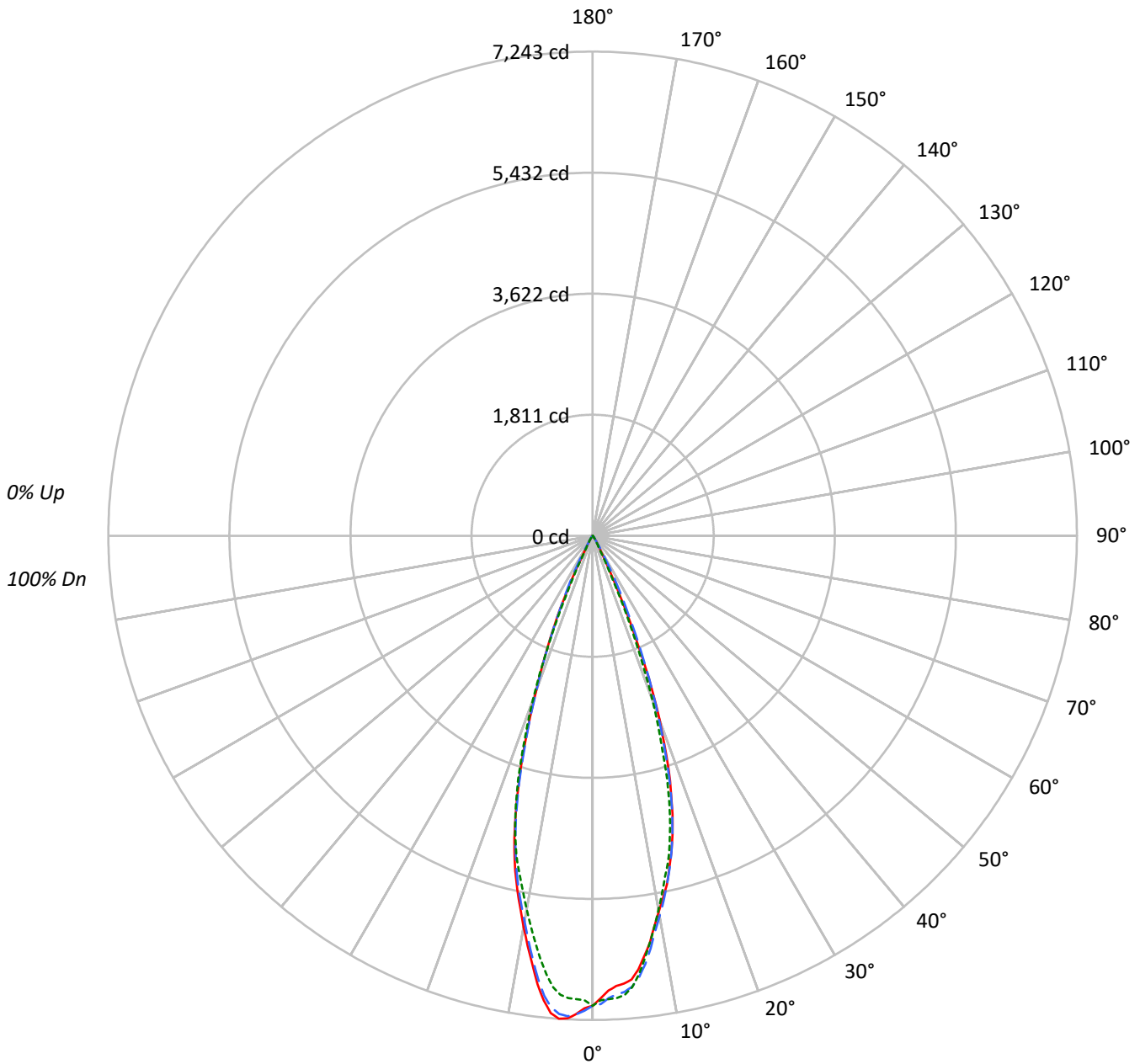
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96				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°	302810	302810	302810
5°	288066	293063	309776
10°	249579	248228	259757
15°	206090	199618	200452
20°	134039	119422	113823
25°	40286	30794	40998
30°	8790	6394	6786
35°	3133	1924	2113
40°	927	607	725
45°	262	177	219
50°	47	47	94
55°	53	0	105
60°	60	0	0
65°	71	0	0
70°	88	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°	619.5	26.4
10°-20°	1202.5	51.3
20°-30°	475.1	20.3
30°-40°	39.1	1.7
40°-50°	5.3	0.2
50°-60°	0.6	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°	2297.2	98.1
0°-40°	2336.2	99.7
0°-60°	2342.2	100.0
0°-90°	2342.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2342.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7033	7033	7033	7033	7033	
5°	6665	6771	6781	7085	7167	603
15°	4624	4611	4478	4442	4497	1236
25°	848	1146	648	950	863	476
35°	60	60	37	51	40	45
45°	4	10	3	8	4	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°	7033.0	7033.0	7033.0	7033.0	7033.0	7033.0	7033.0	7033.0	7033.0
1°	6919.4	6840.4	7005.7	6999.2	6947.5	7093.3	7108.4	7202.6	7068.9
2°	6808.1	6745.5	6919.4	6937.4	6937.4	7119.2	7166.6	7284.5	7161.6
3°	6743.4	6691.6	6872.7	6920.2	6925.2	7127.8	7197.5	7329.8	7229.2
4°	6715.4	6667.9	6839.7	6876.3	6883.5	7097.7	7170.9	7321.9	7242.8
5°	6665.1	6611.9	6771.4	6777.2	6780.7	6999.9	7085.4	7234.9	7167.4
6°	6522.8	6494.7	6640.6	6609.0	6598.9	6833.2	6920.2	7059.6	6991.3
7°	6336.6	6318.0	6455.2	6407.1	6381.9	6600.4	6680.9	6813.1	6759.2
8°	6146.2	6100.9	6231.7	6190.1	6147.7	6335.9	6406.4	6528.5	6478.2
9°	5908.4	5885.4	5982.4	5968.7	5911.2	6104.5	6130.4	6249.7	6208.7
10°	5708.6	5680.6	5778.3	5752.4	5677.7	5846.6	5864.5	5978.8	5941.4
11°	5514.6	5477.9	5561.3	5528.2	5444.1	5595.8	5608.0	5714.3	5676.3
12°	5336.4	5276.7	5342.1	5302.6	5213.5	5347.1	5352.9	5452.8	5417.6
13°	5100.7	5061.1	5112.9	5070.5	5013.7	5089.2	5077.7	5172.5	5140.2
14°	4873.6	4824.0	4871.4	4820.4	4760.8	4811.1	4778.0	4860.6	4835.5
15°	4623.5	4573.9	4611.3	4548.8	4478.3	4497.0	4441.7	4518.6	4497.0
16°	4332.5	4282.9	4315.2	4239.0	4155.7	4144.9	4071.6	4139.2	4116.9
17°	4004.1	3968.1	3990.4	3894.8	3807.2	3769.8	3672.8	3732.4	3710.2
18°	3691.5	3621.0	3630.4	3524.0	3390.4	3367.4	3258.2	3314.9	3292.6
19°	3281.9	3248.8	3253.8	3133.8	2998.7	2956.3	2847.8	2898.1	2873.0
20°	2925.4	2875.1	2870.8	2740.8	2606.4	2561.8	2456.9	2508.6	2484.2
21°	2518.0	2548.9	2495.0	2357.7	2191.7	2196.1	2103.4	2108.4	2124.9
22°	2059.5	2172.3	2126.3	1963.9	1756.3	1851.8	1768.5	1774.2	1788.6
23°	1606.1	1723.2	1764.9	1568.0	1342.4	1532.8	1466.7	1471.0	1480.3
24°	1192.2	1357.4	1432.2	1206.5	966.5	1233.1	1195.8	1200.8	1190.7
25°	848.0	1042.0	1146.2	891.1	648.2	957.9	950.0	957.9	863.0
26°	572.7	785.4	904.0	625.2	401.0	707.8	756.0	738.7	559.8
27°	366.5	597.2	694.9	408.9	254.4	487.2	564.1	559.1	321.2
28°	258.0	414.6	513.1	251.5	196.2	306.1	403.1	367.9	205.5
29°	217.7	269.5	357.9	178.9	159.5	181.1	270.2	214.9	168.2
30°	176.8	178.9	235.0	144.4	128.6	129.3	172.5	140.8	136.5
32.5°	107.8	107.1	101.3	84.8	75.5	75.5	84.1	81.2	80.5
35°	59.6	65.4	60.4	51.0	36.6	45.3	51.0	48.1	40.2
37.5°	32.3	38.1	41.7	28.0	20.1	26.6	34.5	28.0	23.0
40°	16.5	20.8	29.5	15.8	10.8	15.1	23.7	15.8	12.9
42.5°	8.6	11.5	18.7	8.6	5.0	8.6	15.1	8.6	6.5
45°	4.3	5.7	10.1	4.3	2.9	4.3	7.9	5.0	3.6
47.5°	2.2	2.9	5.0	2.2	0.7	2.2	4.3	2.2	2.2
50°	0.7	1.4	2.9	0.7	0.7	0.7	2.2	1.4	1.4
52.5°	0.7	0.7	1.4	0.7	0.0	0.7	1.4	0.7	1.4
55°	0.7	0.7	0.7	0.0	0.0	0.7	0.7	0.7	1.4
57.5°	0.7	0.7	0.7	0.0	0.0	0.0	0.7	0.7	1.4
60°	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.7	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.7	0.7	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°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)