

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: P208797

Luminaire Tested: **LDSQA6A20830D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208797
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: LDSQA6A20830D010TE 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: 2301.0 lumens
Efficiency: N/A
Efficacy: 79.9 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

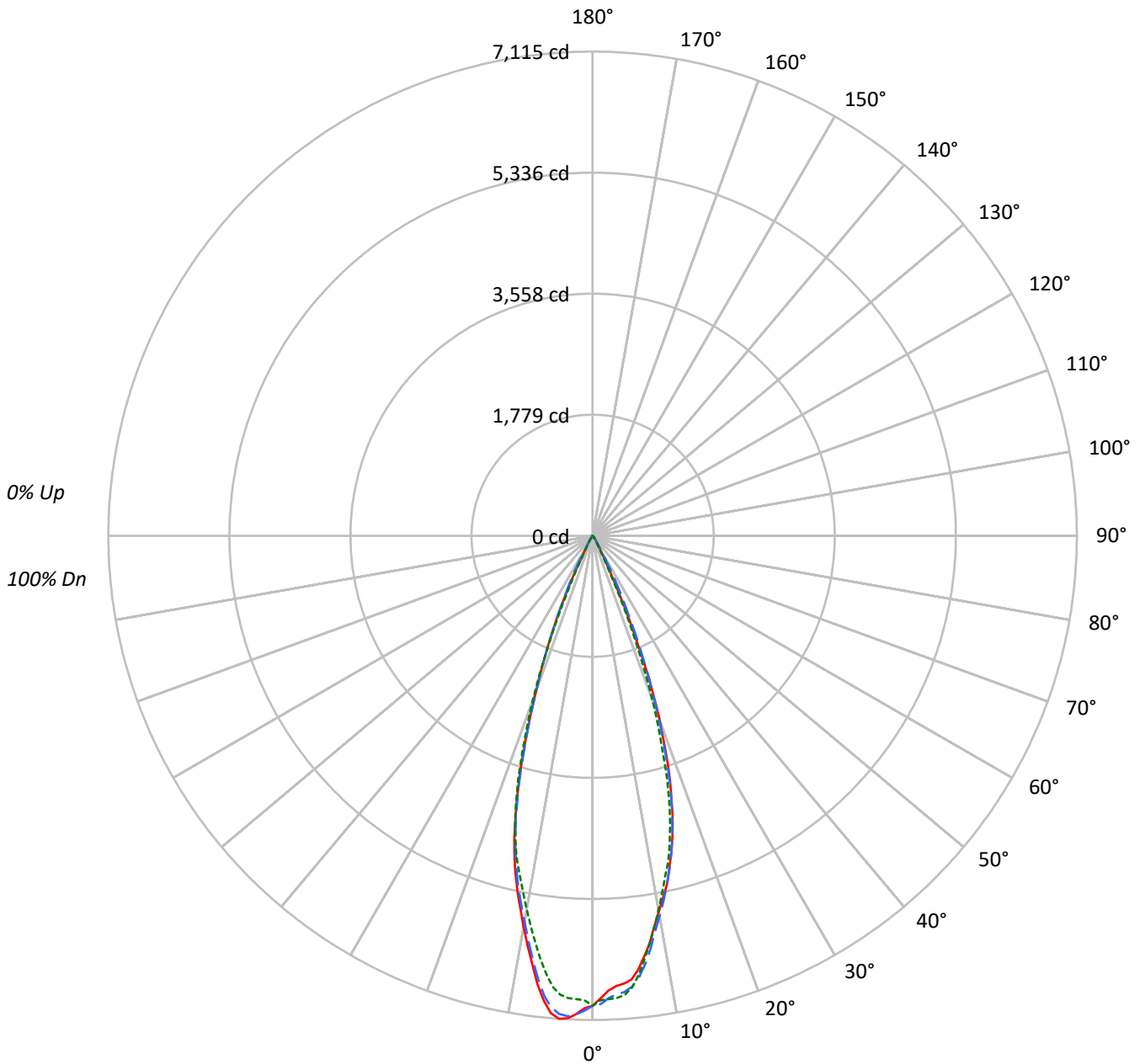
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	100	100					
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96					
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93	93	93	93					
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91	90	90	90	90					
4	104	98	94	91	102	97	94	91	95	92	90	93	91	89	92	89	88	86	86	86	86					
5	101	94	90	87	99	94	90	87	92	89	86	90	88	85	89	87	85	83	83	83	83					
6	97	91	87	84	96	90	86	83	89	85	83	88	85	82	87	84	82	81	81	81	81					
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78	78	78	78					
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76	75	75	75	75					
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74	73	73	73	73					
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71	71	71	71					

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	297459	297459	297459
5°	282975	287889	304300
10°	245168	243843	255171
15°	202448	196092	196912
20°	131674	117310	111812
25°	39573	30247	40276
30°	8636	6284	6667
35°	3080	1892	2076
40°	911	596	714
45°	256	170	213
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°	608.6	26.4
10°-20°	1181.3	51.3
20°-30°	466.7	20.3
30°-40°	38.4	1.7
40°-50°	5.2	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°	2256.6	98.1
0°-40°	2295.0	99.7
0°-60°	2300.8	100.0
0°-90°	2301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2301.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6909	6909	6909	6909	6909	
5°	6547	6652	6661	6960	7041	592
15°	4542	4530	4399	4363	4418	1214
25°	833	1126	637	933	848	468
35°	59	59	36	50	40	44
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°	6908.7	6908.7	6908.7	6908.7	6908.7	6908.7	6908.7	6908.7	6908.7
1°	6797.2	6719.6	6881.9	6875.6	6824.7	6968.0	6982.9	7075.3	6944.0
2°	6687.8	6626.4	6797.2	6814.9	6814.9	6993.4	7040.0	7155.8	7035.1
3°	6624.3	6573.4	6751.3	6797.9	6802.9	7001.9	7070.4	7200.3	7101.5
4°	6596.7	6550.1	6718.8	6754.9	6761.9	6972.3	7044.3	7192.5	7114.9
5°	6547.3	6495.1	6651.8	6657.4	6661.0	6876.3	6960.3	7107.1	7040.7
6°	6407.5	6380.0	6523.3	6492.3	6482.4	6712.5	6797.9	6934.9	6867.8
7°	6224.7	6206.4	6341.2	6293.9	6269.2	6483.8	6562.8	6692.7	6639.8
8°	6037.6	5993.2	6121.7	6080.7	6039.1	6224.0	6293.2	6413.2	6363.8
9°	5804.0	5781.4	5876.7	5863.3	5806.8	5996.7	6022.1	6139.3	6099.1
10°	5607.7	5580.2	5676.2	5650.8	5577.4	5743.3	5760.9	5873.2	5836.5
11°	5417.2	5381.2	5463.0	5430.6	5348.0	5496.9	5508.9	5613.4	5576.0
12°	5242.1	5183.5	5247.7	5208.9	5121.4	5252.7	5258.3	5356.4	5321.9
13°	5010.5	4971.7	5022.5	4980.9	4925.1	4999.3	4988.0	5081.1	5049.4
14°	4787.5	4738.8	4785.4	4735.2	4676.7	4726.1	4693.6	4774.8	4750.1
15°	4541.8	4493.1	4529.8	4468.4	4399.2	4417.6	4363.2	4438.8	4417.6
16°	4255.9	4207.2	4239.0	4164.2	4082.3	4071.7	3999.7	4066.0	4044.2
17°	3933.3	3898.0	3919.9	3826.0	3739.9	3703.2	3607.9	3666.5	3644.6
18°	3626.3	3557.1	3566.3	3461.8	3330.5	3307.9	3200.6	3256.4	3234.5
19°	3223.9	3191.4	3196.4	3078.5	2945.8	2904.1	2797.5	2846.9	2822.2
20°	2873.8	2824.3	2820.1	2692.3	2560.3	2516.6	2413.5	2464.3	2440.3
21°	2473.5	2503.9	2450.9	2316.1	2153.0	2157.3	2066.2	2071.1	2087.4
22°	2023.1	2134.0	2088.8	1929.3	1725.2	1819.1	1737.2	1742.9	1757.0
23°	1577.7	1692.8	1733.7	1540.3	1318.6	1505.7	1440.8	1445.0	1454.2
24°	1171.1	1333.5	1406.9	1185.2	949.4	1211.3	1174.6	1179.6	1169.7
25°	833.0	1023.6	1125.9	875.3	636.7	941.0	933.2	941.0	847.8
26°	562.6	771.6	888.0	614.1	393.9	695.3	742.6	725.7	549.9
27°	360.0	586.6	682.6	401.7	249.9	478.6	554.1	549.2	315.5
28°	253.4	407.3	504.0	247.1	192.7	300.7	396.0	361.4	201.9
29°	213.9	264.7	351.5	175.8	156.7	177.9	265.4	211.1	165.2
30°	173.7	175.8	230.8	141.9	126.4	127.1	169.4	138.4	134.1
32.5°	105.9	105.2	99.5	83.3	74.1	74.1	82.6	79.8	79.1
35°	58.6	64.2	59.3	50.1	36.0	44.5	50.1	47.3	39.5
37.5°	31.8	37.4	40.9	27.5	19.8	26.1	33.9	27.5	22.6
40°	16.2	20.5	28.9	15.5	10.6	14.8	23.3	15.5	12.7
42.5°	8.5	11.3	18.4	8.5	4.9	8.5	14.8	8.5	6.4
45°	4.2	5.6	9.9	4.2	2.8	4.2	7.8	4.9	3.5
47.5°	2.1	2.8	4.9	2.1	0.7	2.1	4.2	2.1	2.1
50°	0.7	1.4	2.8	0.7	0.7	0.7	2.1	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
65°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)