

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: P208784

Luminaire Tested: **LDSQA6A10927D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208784
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: LDSQA6A10927D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 998.5 lumens
Efficiency: N/A
Efficacy: 72.7 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

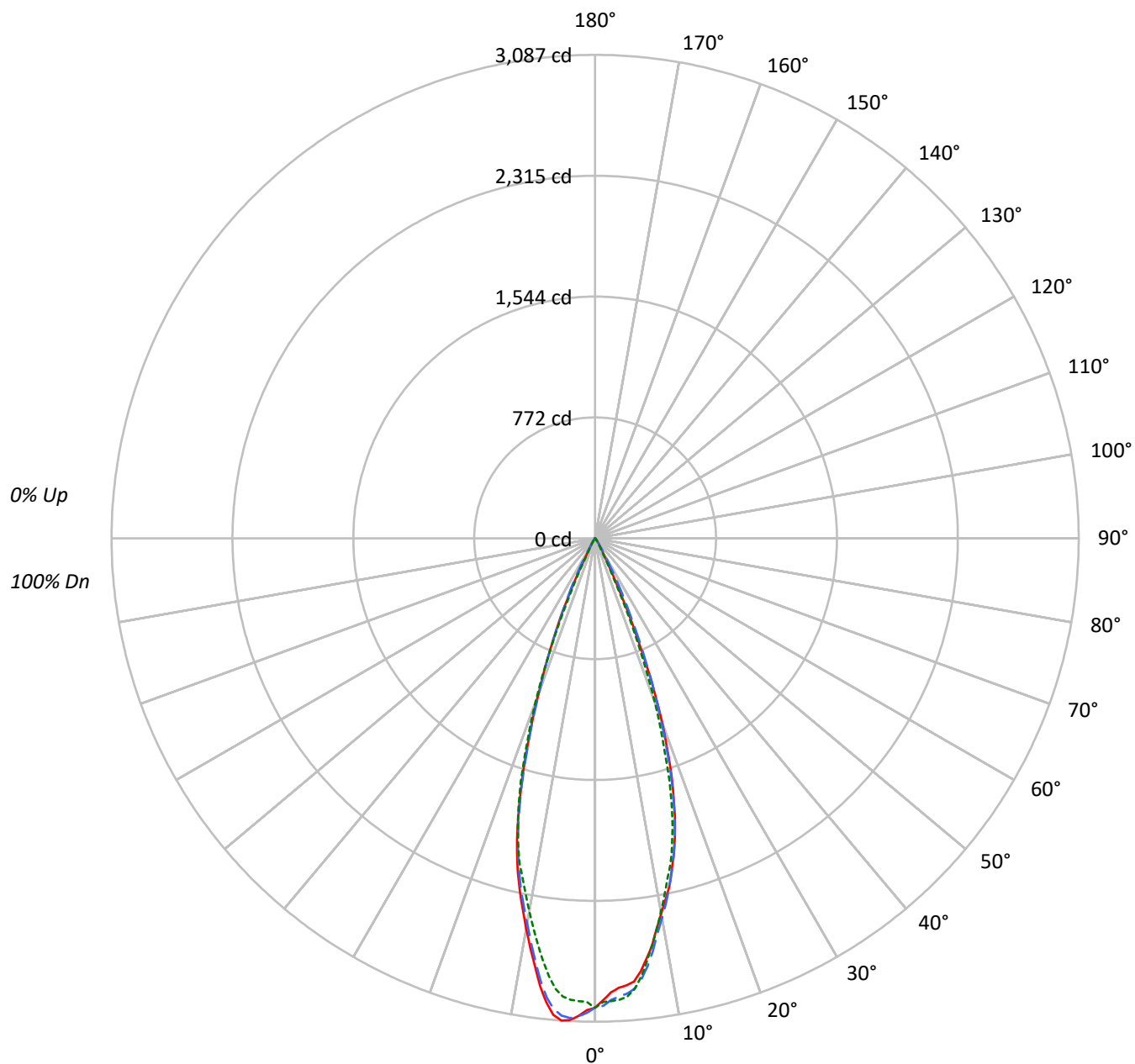
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	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°	129077	129077	129077
5°	122793	124923	132046
10°	106388	105811	110725
15°	87847	85093	85445
20°	57136	50905	48518
25°	17174	13126	17478
30°	3749	2724	2893
35°	1335	820	904
40°	393	259	309
45°	110	73	91
50°	20	20	40
55°	23	0	45
60°	26	0	0
65°	31	0	0
70°	38	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°	264.1	26.4
10°-20°	512.6	51.3
20°-30°	202.5	20.3
30°-40°	16.6	1.7
40°-50°	2.3	0.2
50°-60°	0.3	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°	979.2	98.1
0°-40°	995.8	99.7
0°-60°	998.4	100.0
0°-90°	998.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	998.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2998	2998	2998	2998	2998	
5°	2841	2886	2890	3020	3055	257
15°	1971	1966	1909	1893	1917	527
25°	362	489	276	405	368	203
35°	25	26	16	22	17	19
45°	2	4	1	3	2	2
55°	0	0	0	0	1	0
65°	0	0	0	0	0	0
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°	2997.9	2997.9	2997.9	2997.9	2997.9	2997.9	2997.9	2997.9	2997.9
1°	2949.5	2915.8	2986.3	2983.5	2961.5	3023.6	3030.1	3070.2	3013.2
2°	2902.0	2875.4	2949.5	2957.2	2957.2	3034.7	3054.9	3105.1	3052.7
3°	2874.5	2852.4	2929.6	2949.8	2952.0	3038.3	3068.1	3124.4	3081.5
4°	2862.5	2842.3	2915.5	2931.1	2934.2	3025.5	3056.7	3121.0	3087.4
5°	2841.1	2818.4	2886.4	2888.9	2890.4	2983.8	3020.3	3084.0	3055.2
6°	2780.4	2768.5	2830.7	2817.2	2812.9	2912.8	2949.8	3009.2	2980.1
7°	2701.1	2693.1	2751.6	2731.1	2720.4	2813.5	2847.8	2904.2	2881.2
8°	2619.9	2600.6	2656.4	2638.6	2620.5	2700.8	2730.8	2782.9	2761.4
9°	2518.5	2508.7	2550.1	2544.3	2519.8	2602.1	2613.2	2664.0	2646.6
10°	2433.4	2421.4	2463.1	2452.1	2420.2	2492.2	2499.8	2548.5	2532.6
11°	2350.7	2335.0	2370.6	2356.5	2320.6	2385.3	2390.5	2435.8	2419.6
12°	2274.7	2249.3	2277.1	2260.3	2222.3	2279.3	2281.7	2324.3	2309.3
13°	2174.2	2157.4	2179.4	2161.4	2137.2	2169.3	2164.4	2204.9	2191.1
14°	2077.4	2056.3	2076.5	2054.8	2029.3	2050.8	2036.7	2071.9	2061.2
15°	1970.8	1949.7	1965.6	1939.0	1909.0	1916.9	1893.3	1926.1	1916.9
16°	1846.8	1825.6	1839.4	1807.0	1771.4	1766.8	1735.6	1764.4	1754.9
17°	1706.8	1691.5	1701.0	1660.2	1622.9	1606.9	1565.6	1591.0	1581.5
18°	1573.5	1543.5	1547.5	1502.2	1445.2	1435.4	1388.8	1413.0	1403.5
19°	1398.9	1384.9	1387.0	1335.8	1278.3	1260.2	1213.9	1235.4	1224.6
20°	1247.0	1225.6	1223.7	1168.3	1111.0	1092.0	1047.3	1069.3	1058.9
21°	1073.3	1086.5	1063.5	1005.0	934.3	936.1	896.6	898.7	905.8
22°	877.9	926.0	906.4	837.2	748.6	789.4	753.8	756.3	762.4
23°	684.6	734.5	752.3	668.4	572.2	653.4	625.2	627.0	631.0
24°	508.2	578.6	610.5	514.3	412.0	525.6	509.7	511.9	507.6
25°	361.5	444.2	488.6	379.8	276.3	408.3	404.9	408.3	367.9
26°	244.1	334.8	385.3	266.5	170.9	301.7	322.2	314.9	238.6
27°	156.2	254.5	296.2	174.3	108.4	207.7	240.5	238.3	136.9
28°	110.0	176.7	218.7	107.2	83.6	130.5	171.8	156.8	87.6
29°	92.8	114.9	152.5	76.3	68.0	77.2	115.2	91.6	71.7
30°	75.4	76.3	100.2	61.6	54.8	55.1	73.5	60.0	58.2
32.5°	45.9	45.6	43.2	36.1	32.2	32.2	35.8	34.6	34.3
35°	25.4	27.9	25.7	21.7	15.6	19.3	21.7	20.5	17.2
37.5°	13.8	16.2	17.8	11.9	8.6	11.3	14.7	11.9	9.8
40°	7.0	8.9	12.6	6.7	4.6	6.4	10.1	6.7	5.5
42.5°	3.7	4.9	8.0	3.7	2.1	3.7	6.4	3.7	2.8
45°	1.8	2.5	4.3	1.8	1.2	1.8	3.4	2.1	1.5
47.5°	0.9	1.2	2.1	0.9	0.3	0.9	1.8	0.9	0.9
50°	0.3	0.6	1.2	0.3	0.3	0.3	0.9	0.6	0.6
52.5°	0.3	0.3	0.6	0.3	0.0	0.3	0.6	0.3	0.6
55°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.6
57.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.3	0.6
60°	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.3	0.3	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°







62.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)