

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: P1191706

Luminaire Tested: **LDA4A25927D010TE LAR35FL 4LLWW1**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14
Report Number: P1191706
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26103)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA4A25927D010TE LAR35FL 4LLWW1
Description: PORTFOLIO 4" Lensed Wall Wash, Self-flanged, 35° Flood Optic, at 30° tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

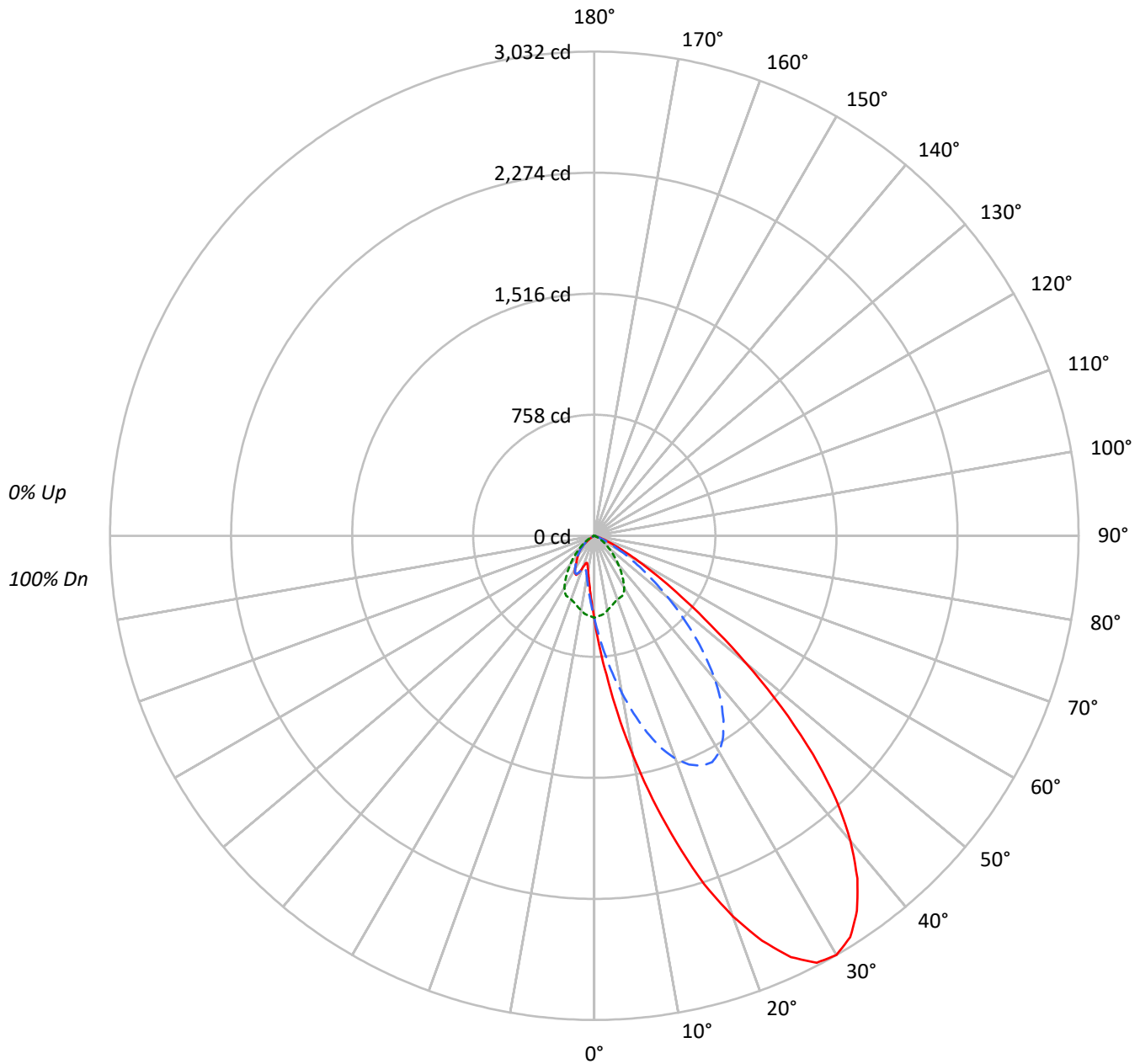
Lumens per Lamp: N/A
Luminaire Lumens: 1924.4 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Spacing Criteria (0/90/45): 2.19 / 1.11 / 1.55
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 30.9
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80		
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70		
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62		
5	83	72	64	59	81	71	64	59	69	63	58	67	62	57	65	61	57	55		
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49		
7	72	60	52	46	70	59	52	46	57	51	46	56	50	46	55	50	45	44		
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39		
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35		
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	63387	63387	63387
5°	108179	61834	40377
10°	174834	59393	27580
15°	254027	57017	22436
20°	332670	55773	27959
25°	396192	56507	36841
30°	431768	53296	34282
35°	431825	45489	29001
40°	401881	37597	25183
45°	337553	29393	21630
50°	236929	21933	15946
55°	142597	15784	8795
60°	78670	10090	3281
65°	37942	4932	350
70°	15183	1731	433
75°	4575	1144	0
80°	1705	1705	0
85°	5095	3397	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	2.9
10°-20°	218.4	11.4
20°-30°	443.0	23.0
30°-40°	538.3	28.0
40°-50°	424.7	22.1
50°-60°	192.4	10.0
60°-70°	45.4	2.4
70°-80°	4.9	0.3
80°-90°	2.2	0.1
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°	716.6	37.2
0°-40°	1254.8	65.2
0°-60°	1871.9	97.3
0°-90°	1924.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1924.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	514	514	514	514	514	
5°	874	735	499	366	326	100
15°	1989	1274	446	212	176	579
25°	2911	1590	415	265	271	1332
35°	2868	1409	302	196	193	1771
45°	1935	889	168	123	124	1464
55°	663	364	73	49	41	626
65°	130	77	17	4	1	146
75°	10	5	2	1	0	15
85°	4	4	2	1	0	3
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9
2.5°	682.3	665.5	665.5	653.5	663.1	643.9	647.5	646.3	658.2	654.6	643.9
5°	873.7	859.3	858.1	842.4	854.4	829.1	830.3	826.7	840.0	826.7	811.1
7.5°	1120.4	1095.2	1093.9	1075.9	1087.9	1055.4	1054.3	1047.0	1059.0	1033.8	1010.9
10°	1395.9	1359.9	1357.5	1335.9	1349.0	1306.9	1303.3	1291.3	1299.7	1260.0	1227.5
12.5°	1690.8	1651.1	1646.3	1623.4	1635.4	1584.9	1575.3	1559.7	1563.3	1505.5	1462.1
15°	1989.3	1955.6	1950.8	1926.7	1938.7	1876.2	1860.5	1841.3	1837.7	1760.6	1705.3
17.5°	2286.6	2217.9	2239.6	2215.5	2226.4	2152.9	2132.4	2108.4	2095.2	2000.1	1930.3
20°	2534.4	2475.4	2491.1	2469.5	2479.0	2394.9	2369.5	2339.5	2316.6	2202.3	2121.7
22.5°	2743.9	2682.5	2674.0	2674.0	2680.1	2588.5	2554.9	2521.2	2488.7	2352.8	2270.9
25°	2911.1	2843.7	2834.1	2831.7	2832.9	2736.6	2696.9	2659.6	2617.5	2468.3	2379.2
27.5°	3014.6	2943.6	2932.7	2931.5	2925.6	2826.8	2782.3	2741.5	2690.9	2538.0	2438.2
30°	3031.5	2966.5	2954.4	2954.4	2938.8	2842.5	2793.2	2749.9	2693.3	2539.2	2432.1
32.5°	2981.0	2914.8	2901.5	2902.7	2877.4	2787.2	2734.2	2689.7	2630.7	2479.0	2368.3
35°	2867.8	2804.0	2792.0	2793.2	2761.8	2677.7	2622.3	2579.0	2516.4	2371.9	2258.8
37.5°	2705.3	2645.2	2633.2	2635.6	2597.0	2521.2	2464.7	2423.7	2360.0	2226.4	2115.7
40°	2495.9	2438.2	2427.3	2428.5	2386.4	2320.2	2264.9	2226.4	2162.6	2043.4	1937.5
42.5°	2242.0	2186.7	2178.3	2177.0	2136.2	2076.0	2021.7	1989.3	1924.3	1829.2	1728.2
45°	1935.1	1888.2	1850.8	1876.2	1834.1	1785.9	1735.4	1708.9	1647.5	1580.1	1489.9
47.5°	1589.7	1548.8	1511.5	1535.6	1497.1	1460.9	1416.4	1399.6	1344.2	1309.3	1233.5
50°	1234.7	1199.8	1166.2	1186.6	1156.5	1132.4	1097.6	1089.1	1043.4	1038.6	979.6
52.5°	917.0	891.7	865.3	881.0	858.1	842.4	816.0	813.6	778.6	790.6	749.8
55°	663.1	645.1	624.6	636.6	619.8	610.1	590.9	592.1	565.6	583.7	554.8
57.5°	469.4	454.9	440.4	447.7	436.8	429.6	416.4	418.8	412.8	418.8	398.3
60°	318.9	310.5	299.7	305.7	296.1	292.4	284.0	285.2	270.7	290.0	275.6
62.5°	209.4	203.3	203.3	199.7	192.6	190.2	185.4	185.4	176.9	191.4	181.7
65°	130.0	127.6	126.4	124.0	119.1	117.9	114.3	114.3	108.3	119.1	111.9
67.5°	77.1	75.8	74.6	73.4	69.8	68.6	67.4	66.2	62.6	69.8	65.0
70°	42.1	42.1	40.9	39.7	37.3	37.3	36.1	36.1	33.7	37.3	33.7
72.5°	20.5	20.5	19.3	19.3	18.1	18.1	16.9	16.9	15.7	18.1	15.7
75°	9.6	9.6	8.4	8.4	8.4	8.4	7.2	7.2	7.2	8.4	7.2
77.5°	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	2.4	2.4	2.4	2.4	2.4	1.2	1.2	1.2	1.2	2.4	2.4
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
85°	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8	4.8	4.8	4.8
87.5°	4.8	4.8	4.8	4.8	4.8	6.0	6.0	6.0	4.8	6.0	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	67.5°	90°	112.5°
0°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9
2.5°	647.5	637.8	641.5	630.6	622.2	618.6	618.6	617.3	560.8	504.2	464.5
5°	809.9	791.9	794.3	775.0	766.5	754.6	751.0	735.3	612.5	499.4	422.4
7.5°	1002.4	976.0	960.3	942.2	931.5	909.8	898.9	867.7	660.6	489.8	381.5
10°	1209.5	1172.1	1146.9	1118.0	1107.2	1073.5	1053.1	1000.0	702.8	474.2	343.0
12.5°	1433.3	1382.8	1337.1	1305.7	1292.5	1227.5	1214.3	1138.5	741.3	459.7	311.6
15°	1663.2	1599.4	1541.6	1497.1	1480.2	1416.4	1375.5	1274.5	775.0	446.5	287.6
17.5°	1867.7	1799.1	1729.4	1671.6	1647.5	1557.3	1518.7	1393.5	800.3	433.2	274.4
20°	2049.5	1966.4	1893.0	1813.6	1785.9	1683.6	1621.1	1486.3	814.8	424.9	275.6
22.5°	2187.9	2092.8	2008.6	1919.5	1884.6	1772.7	1701.7	1550.1	819.6	418.8	284.0
25°	2289.0	2183.1	2089.1	1991.7	1950.8	1831.7	1753.4	1589.7	818.4	415.2	287.6
27.5°	2340.7	2227.6	2126.5	2021.7	1977.2	1854.5	1770.3	1598.2	801.5	400.7	287.6
30°	2333.5	2214.3	2108.4	2000.1	1952.0	1830.4	1743.7	1565.6	765.4	374.2	267.1
32.5°	2269.7	2148.1	2039.8	1931.5	1883.4	1764.2	1677.5	1499.5	713.6	339.4	239.5
35°	2163.8	2043.4	1936.3	1830.4	1782.3	1666.8	1582.5	1409.2	654.6	302.1	214.2
37.5°	2025.3	1908.6	1805.1	1708.9	1653.5	1545.2	1463.4	1302.1	589.7	268.3	192.6
40°	1853.3	1742.5	1645.1	1556.1	1497.1	1397.1	1322.6	1175.7	521.1	233.5	172.1
42.5°	1654.7	1551.3	1471.8	1382.8	1316.6	1228.7	1163.8	1036.2	451.3	202.1	150.4
45°	1429.7	1338.3	1269.7	1191.4	1122.8	1048.2	992.9	889.3	380.3	168.5	130.0
47.5°	1187.8	1111.9	1059.0	994.1	926.7	866.5	823.2	740.1	312.8	140.7	110.7
50°	949.5	889.3	850.8	801.5	740.1	694.4	660.6	605.3	247.9	114.3	92.6
52.5°	730.5	687.2	660.6	624.6	570.4	539.2	515.1	476.6	189.0	92.6	74.6
55°	545.1	513.9	497.0	471.8	424.9	403.2	387.5	363.5	140.7	73.4	57.8
57.5°	393.5	373.0	362.3	345.4	306.9	293.7	282.8	268.3	102.3	56.6	42.1
60°	274.4	259.9	254.0	243.1	211.8	203.3	189.0	189.0	72.2	40.9	28.8
62.5°	181.7	172.1	169.7	161.2	137.2	132.4	128.8	126.4	49.3	27.6	16.9
65°	113.1	105.9	104.7	99.9	83.1	80.7	77.1	77.1	31.2	16.9	8.4
67.5°	65.0	61.4	60.2	57.8	45.7	44.5	42.1	44.5	18.1	8.4	3.6
70°	34.9	31.2	31.2	30.0	22.9	21.7	20.5	21.7	9.6	4.8	2.4
72.5°	16.9	14.5	14.5	13.3	9.6	9.6	8.4	10.8	4.8	2.4	2.4
75°	7.2	7.2	6.0	6.0	3.6	3.6	3.6	4.8	2.4	2.4	2.4
77.5°	3.6	3.6	3.6	3.6	1.2	1.2	1.2	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	0.0	0.0	0.0	2.4	2.4	2.4	2.4
82.5°	2.4	1.2	1.2	1.2	0.0	0.0	0.0	1.2	2.4	2.4	2.4
85°	3.6	3.6	3.6	3.6	2.4	2.4	2.4	3.6	2.4	2.4	2.4
87.5°	4.8	4.8	4.8	4.8	3.6	3.6	3.6	6.0	3.6	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	513.9	513.9	513.9
2.5°	430.8	405.6	408.0
5°	365.9	329.7	326.1
7.5°	309.3	270.7	265.9
10°	264.7	226.2	220.2
12.5°	232.3	197.4	191.4
15°	211.8	180.5	175.7
17.5°	208.2	184.1	181.7
20°	222.6	210.6	213.0
22.5°	247.9	244.3	250.4
25°	264.7	263.5	270.7
27.5°	261.1	258.7	263.5
30°	241.9	238.3	240.7
32.5°	219.0	213.0	215.4
35°	196.2	191.4	192.6
37.5°	176.9	173.3	173.3
40°	160.0	156.4	156.4
42.5°	142.1	139.6	140.7
45°	122.8	121.6	124.0
47.5°	103.5	102.3	104.7
50°	85.5	83.1	83.1
52.5°	67.4	63.8	61.4
55°	49.3	43.3	40.9
57.5°	33.7	27.6	25.3
60°	19.3	15.7	13.3
62.5°	9.6	6.0	4.8
65°	3.6	2.4	1.2
67.5°	2.4	1.2	1.2
70°	2.4	1.2	1.2
72.5°	1.2	1.2	1.2
75°	1.2	1.2	0.0
77.5°	1.2	1.2	1.2
80°	1.2	1.2	0.0
82.5°	1.2	1.2	0.0
85°	1.2	1.2	0.0
87.5°	1.2	1.2	0.0
90°	0.0	0.0	0.0

Classified

Scaled Data Report

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— 0°-180° - - 45°-225° - - - 90°-270°

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