

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: P1191760

Luminaire Tested: **LDA4A25940D010TE 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: P1191760
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: LDA4A25940D010TE LAR35FL 4LLWW1
Description: PORTFOLIO 4" Lensed Wall Wash, Self-flanged, 35° Flood Optic, at 30° tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

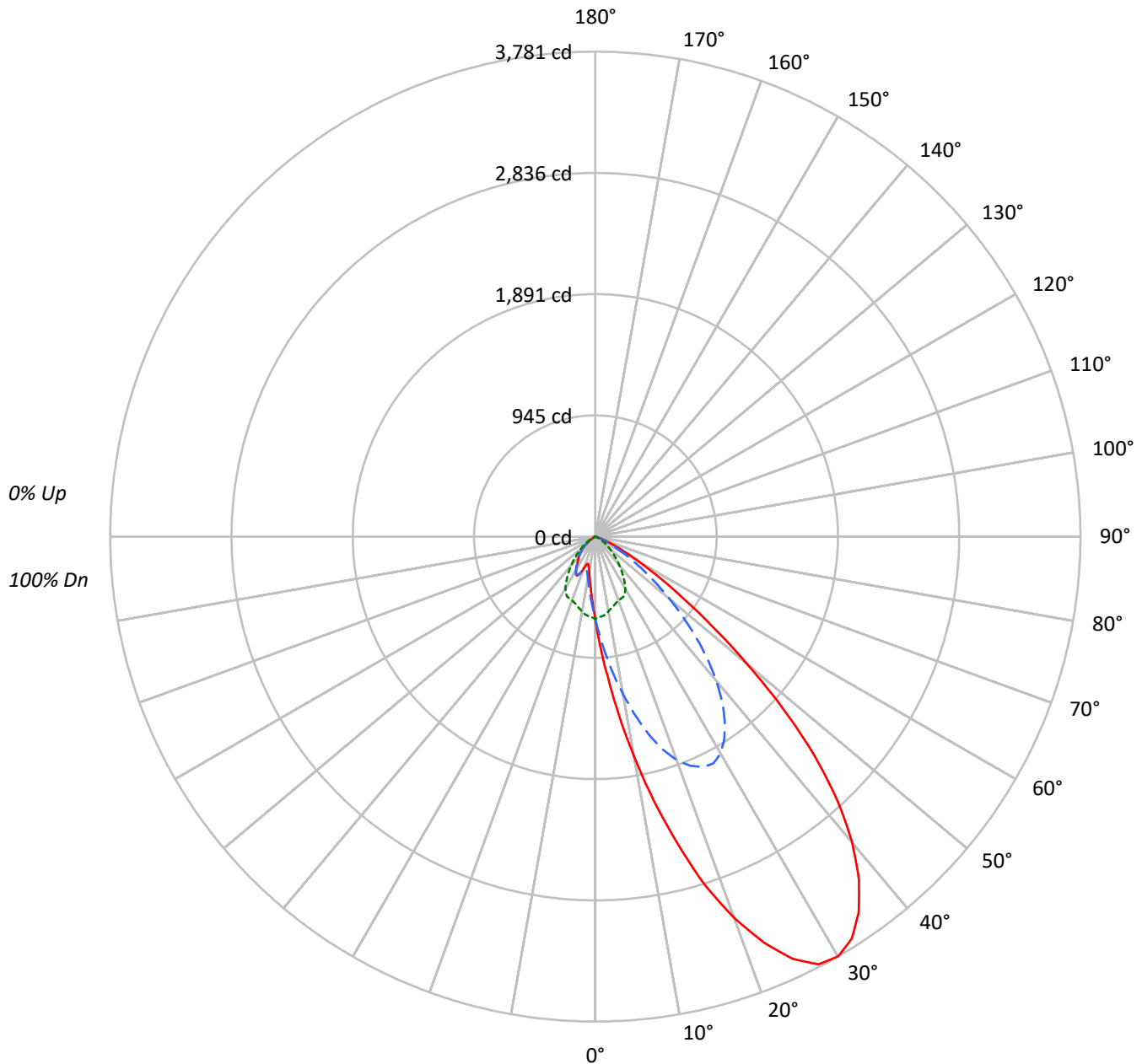
Lumens per Lamp: N/A
Luminaire Lumens: 2400.3 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 2.19 / 1.11 / 1.55
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: LDA4A25940D010TE LAR35FL 4LLWW1

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°	79052	79052	79052
5°	134923	77125	50369
10°	218070	74072	34393
15°	316829	71114	27978
20°	414931	69556	34876
25°	494154	70471	45974
30°	538517	66485	42757
35°	538600	56722	36154
40°	501260	46888	31430
45°	421021	36649	26968
50°	295532	27364	19861
55°	177865	19677	10989
60°	98134	12606	4070
65°	47311	6129	438
70°	18970	2164	541
75°	5719	1430	0
80°	2131	2131	0
85°	6369	4246	0

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	2.9
10°-20°	272.4	11.4
20°-30°	552.5	23.0
30°-40°	671.3	28.0
40°-50°	529.7	22.1
50°-60°	240.0	10.0
60°-70°	56.6	2.4
70°-80°	6.1	0.3
80°-90°	2.7	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°	893.7	37.2
0°-40°	1565.1	65.2
0°-60°	2334.8	97.3
0°-90°	2400.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2400.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	641	641	641	641	641	
5°	1090	917	623	456	407	124
15°	2481	1590	557	264	219	722
25°	3631	1983	518	330	338	1662
35°	3577	1758	377	245	240	2209
45°	2414	1109	210	153	155	1826
55°	827	453	92	62	51	781
65°	162	96	21	4	2	183
75°	12	6	3	2	0	19
85°	4	4	3	2	0	4
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°	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9
2.5°	851.0	830.0	830.0	815.0	827.1	803.0	807.6	806.1	821.1	816.5	803.0
5°	1089.7	1071.7	1070.3	1050.7	1065.7	1034.2	1035.7	1031.2	1047.7	1031.2	1011.7
7.5°	1397.5	1365.9	1364.4	1341.8	1356.9	1316.4	1314.8	1305.9	1320.8	1289.4	1260.9
10°	1741.1	1696.2	1693.1	1666.1	1682.7	1630.1	1625.6	1610.6	1621.1	1571.5	1531.0
12.5°	2108.9	2059.4	2053.4	2024.9	2039.8	1976.8	1964.8	1945.3	1949.8	1877.7	1823.7
15°	2481.1	2439.1	2433.1	2403.1	2418.1	2340.0	2320.5	2296.5	2292.0	2196.0	2126.9
17.5°	2851.9	2766.3	2793.4	2763.4	2776.9	2685.3	2659.7	2629.8	2613.3	2494.7	2407.6
20°	3161.1	3087.5	3107.1	3080.0	3092.1	2987.0	2955.5	2917.9	2889.4	2746.8	2646.2
22.5°	3422.3	3345.7	3335.2	3335.2	3342.7	3228.6	3186.6	3144.6	3104.1	2934.5	2832.4
25°	3630.9	3546.9	3534.8	3531.9	3533.4	3413.2	3363.7	3317.2	3264.6	3078.6	2967.5
27.5°	3760.0	3671.4	3657.9	3656.4	3648.9	3525.9	3470.3	3419.3	3356.2	3165.6	3041.1
30°	3781.0	3699.9	3684.9	3684.9	3665.4	3545.4	3483.9	3429.8	3359.2	3167.1	3033.5
32.5°	3718.0	3635.4	3619.0	3620.4	3588.9	3476.4	3410.3	3354.8	3281.2	3092.1	2954.0
35°	3576.9	3497.4	3482.3	3483.9	3444.8	3339.7	3270.7	3216.6	3138.6	2958.4	2817.4
37.5°	3374.3	3299.3	3284.2	3287.2	3239.2	3144.6	3074.0	3023.0	2943.4	2776.9	2638.7
40°	3113.1	3041.1	3027.6	3029.0	2976.5	2893.9	2824.9	2776.9	2697.3	2548.7	2416.7
42.5°	2796.4	2727.3	2716.8	2715.4	2664.3	2589.2	2521.7	2481.1	2400.1	2281.5	2155.4
45°	2413.6	2355.1	2308.6	2340.0	2287.6	2227.5	2164.5	2131.5	2054.8	1970.8	1858.2
47.5°	1982.8	1931.8	1885.2	1915.3	1867.3	1822.2	1766.7	1745.7	1676.6	1633.1	1538.5
50°	1540.1	1496.5	1454.5	1480.0	1442.4	1412.5	1368.9	1358.4	1301.3	1295.4	1221.8
52.5°	1143.7	1112.3	1079.2	1098.8	1070.3	1050.7	1017.7	1014.6	971.2	986.1	935.2
55°	827.1	804.5	779.1	794.0	773.0	761.0	736.9	738.5	705.5	728.0	692.0
57.5°	585.4	567.3	549.4	558.4	544.8	535.9	519.3	522.4	514.9	522.4	496.8
60°	397.8	387.3	373.7	381.2	369.2	364.8	354.2	355.7	337.8	361.7	343.8
62.5°	261.1	253.6	253.6	249.2	240.1	237.2	231.2	231.2	220.6	238.6	226.6
65°	162.1	159.1	157.6	154.6	148.6	147.1	142.6	142.6	135.1	148.6	139.6
67.5°	96.1	94.6	93.1	91.5	87.1	85.6	84.0	82.5	78.0	87.1	81.1
70°	52.6	52.6	51.1	49.5	46.5	46.5	45.1	45.1	42.0	46.5	42.0
72.5°	25.5	25.5	24.1	24.1	22.5	22.5	21.0	21.0	19.5	22.5	19.5
75°	12.0	12.0	10.6	10.6	10.6	10.6	9.0	9.0	9.0	10.6	9.0
77.5°	6.0	6.0	6.0	6.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
80°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	3.0	3.0
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	4.5	4.5	4.5	4.5	6.0	4.5	6.0	6.0	6.0	6.0	6.0
87.5°	6.0	6.0	6.0	6.0	6.0	7.5	7.5	7.5	6.0	7.5	6.0
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°	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9
2.5°	807.6	795.5	800.1	786.6	776.0	771.6	771.6	770.0	699.5	629.0	579.4
5°	1010.2	987.6	990.7	966.6	956.2	941.2	936.6	917.1	764.0	622.9	526.9
7.5°	1250.3	1217.3	1197.8	1175.3	1161.8	1134.8	1121.2	1082.2	824.0	610.9	475.8
10°	1508.5	1462.0	1430.5	1394.4	1380.9	1338.9	1313.3	1247.4	876.6	591.4	427.8
12.5°	1787.7	1724.7	1667.6	1628.6	1612.1	1531.0	1514.5	1420.0	924.6	573.3	388.7
15°	2074.4	1994.9	1922.8	1867.3	1846.3	1766.7	1715.6	1589.6	966.6	556.9	358.8
17.5°	2329.6	2244.0	2156.9	2084.9	2054.8	1942.3	1894.3	1738.2	998.2	540.4	342.2
20°	2556.2	2452.6	2361.0	2262.0	2227.5	2099.9	2021.9	1853.8	1016.2	529.9	343.8
22.5°	2728.9	2610.2	2505.2	2394.1	2350.6	2210.9	2122.4	1933.2	1022.1	522.4	354.2
25°	2854.9	2722.8	2605.7	2484.2	2433.1	2284.5	2187.0	1982.8	1020.7	517.8	358.8
27.5°	2919.5	2778.4	2652.2	2521.7	2466.2	2313.0	2208.0	1993.3	999.7	499.9	358.8
30°	2910.4	2761.8	2629.8	2494.7	2434.6	2283.0	2174.9	1952.8	954.6	466.8	333.2
32.5°	2830.9	2679.3	2544.2	2409.2	2349.1	2200.5	2092.4	1870.2	890.1	423.3	298.7
35°	2698.8	2548.7	2415.1	2283.0	2223.0	2078.9	1973.8	1757.7	816.5	376.7	267.1
37.5°	2526.2	2380.6	2251.5	2131.5	2062.3	1927.3	1825.3	1624.1	735.5	334.7	240.1
40°	2311.5	2173.5	2051.9	1940.8	1867.3	1742.6	1649.6	1466.5	650.0	291.2	214.7
42.5°	2063.9	1934.8	1835.7	1724.7	1642.1	1532.6	1451.5	1292.3	562.9	252.2	187.7
45°	1783.1	1669.2	1583.6	1486.0	1400.4	1307.3	1238.3	1109.2	474.3	210.1	162.1
47.5°	1481.5	1386.9	1320.8	1239.8	1155.8	1080.7	1026.7	923.1	390.2	175.6	138.1
50°	1184.3	1109.2	1061.2	999.7	923.1	866.0	824.0	755.0	309.3	142.6	115.6
52.5°	911.1	857.1	824.0	779.1	711.5	672.5	642.5	594.3	235.7	115.6	93.1
55°	679.9	640.9	619.9	588.4	529.9	502.8	483.3	453.3	175.6	91.5	72.1
57.5°	490.8	465.4	451.9	430.7	382.7	366.3	352.7	334.7	127.6	70.5	52.6
60°	342.2	324.2	316.8	303.2	264.2	253.6	235.7	235.7	90.0	51.1	36.0
62.5°	226.6	214.7	211.6	201.2	171.1	165.1	160.6	157.6	61.5	34.5	21.0
65°	141.1	132.0	130.6	124.5	103.5	100.6	96.1	96.1	39.1	21.0	10.6
67.5°	81.1	76.5	75.0	72.1	57.0	55.5	52.6	55.5	22.5	10.6	4.5
70°	43.5	39.1	39.1	37.6	28.5	27.0	25.5	27.0	12.0	6.0	3.0
72.5°	21.0	18.0	18.0	16.5	12.0	12.0	10.6	13.5	6.0	3.0	3.0
75°	9.0	9.0	7.5	7.5	4.5	4.5	4.5	6.0	3.0	3.0	3.0
77.5°	4.5	4.5	4.5	4.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
80°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
82.5°	3.0	1.5	1.5	1.5	0.0	0.0	0.0	1.5	3.0	3.0	3.0
85°	4.5	4.5	4.5	4.5	3.0	3.0	3.0	4.5	3.0	3.0	3.0
87.5°	6.0	6.0	6.0	6.0	4.5	4.5	4.5	7.5	4.5	3.0	3.0
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°	640.9	640.9	640.9
2.5°	537.4	505.8	508.9
5°	456.3	411.3	406.8
7.5°	385.8	337.8	331.7
10°	330.3	282.1	274.6
12.5°	289.7	246.1	238.6
15°	264.2	225.1	219.1
17.5°	259.7	229.7	226.6
20°	277.7	262.7	265.7
22.5°	309.3	304.7	312.2
25°	330.3	328.7	337.8
27.5°	325.7	322.8	328.7
30°	301.7	297.2	300.2
32.5°	273.2	265.7	268.7
35°	244.7	238.6	240.1
37.5°	220.6	216.2	216.2
40°	199.6	195.2	195.2
42.5°	177.1	174.2	175.6
45°	153.0	151.6	154.6
47.5°	129.1	127.6	130.6
50°	106.6	103.5	103.5
52.5°	84.0	79.6	76.5
55°	61.5	54.0	51.1
57.5°	42.0	34.5	31.6
60°	24.1	19.5	16.5
62.5°	12.0	7.5	6.0
65°	4.5	3.0	1.5
67.5°	3.0	1.5	1.5
70°	3.0	1.5	1.5
72.5°	1.5	1.5	1.5
75°	1.5	1.5	0.0
77.5°	1.5	1.5	1.5
80°	1.5	1.5	0.0
82.5°	1.5	1.5	0.0
85°	1.5	1.5	0.0
87.5°	1.5	1.5	0.0
90°	0.0	0.0	0.0

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Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

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(END OF REPORT)