

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: P1191739

Luminaire Tested: **LDA4A25935D010TE LAR35FL 4LAL1 30° Tilt**

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: P1191739
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26106)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA4A25935D010TE LAR35FL 4LAL1 30° Tilt
Description: PORTFOLIO 4" Lensed Adjustable, Self-flanged, 35° Flood Optic, at 30° tilt. --- 27.9W
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

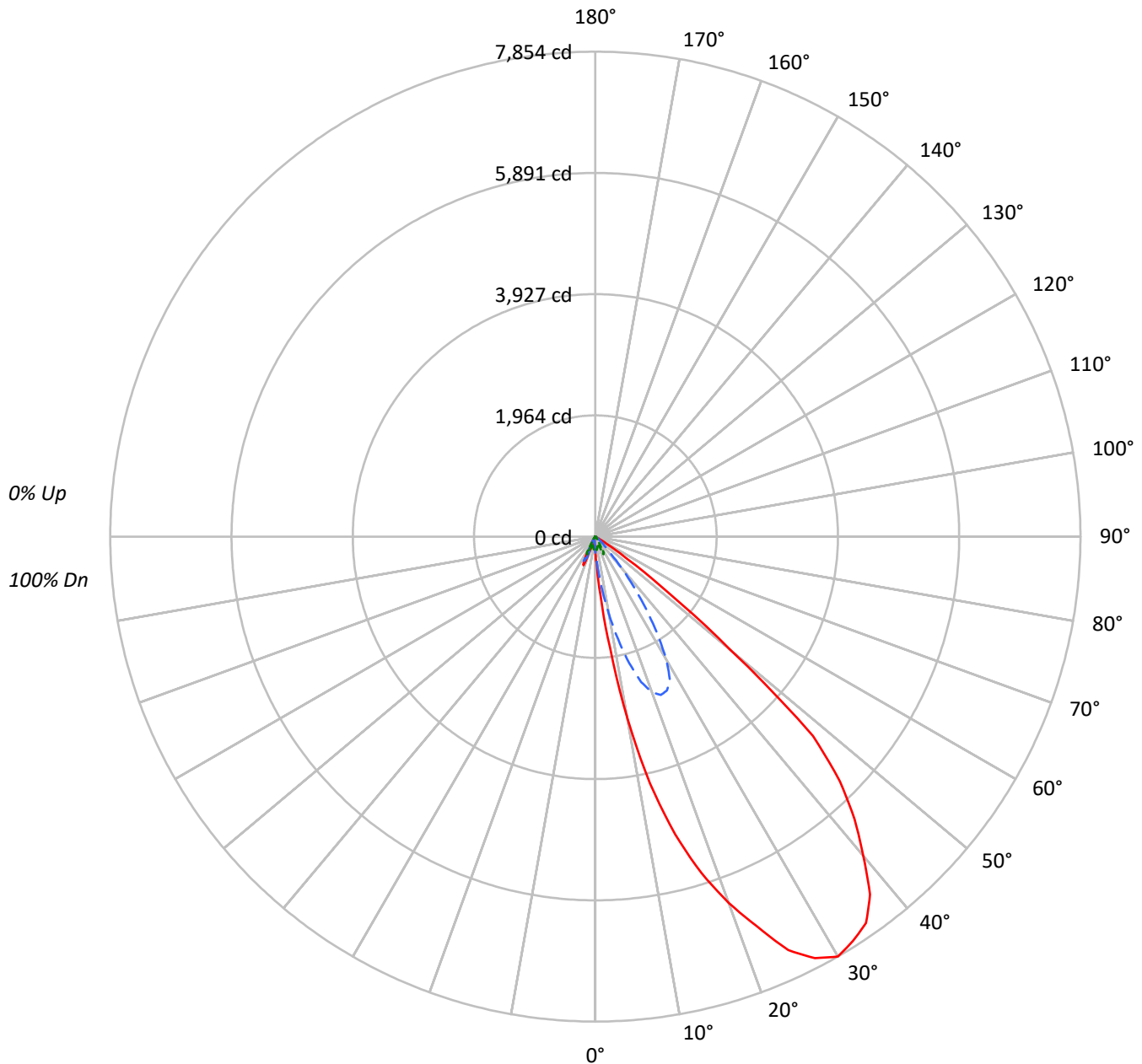
Lumens per Lamp: N/A
Luminaire Lumens: 2854.3 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 2.71 / 1.11 / 1.33
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91		
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82		
3	98	90	84	79	96	89	83	79	86	81	77	84	79	76	81	78	75	73		
4	91	82	75	70	89	81	75	70	79	73	69	77	72	68	75	70	67	65		
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58		
6	79	68	61	56	78	67	60	55	66	60	55	64	59	55	63	58	54	52		
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47		
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42		
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38		
10	60	48	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	28949	28949	28949
5°	116586	27339	12803
10°	375833	22920	7352
15°	637552	18197	5708
20°	828629	16316	17235
25°	1005538	42966	61026
30°	1118567	15112	16109
35°	1150591	9050	7574
40°	1086409	3816	2705
45°	976411	2180	715
50°	549520	1343	0
55°	136383	882	0
60°	21018	1011	0
65°	4903	1197	0
70°	1010	1479	0
75°	0	1954	0
80°	0	3978	0
85°	0	7925	1981

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Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.1	1.7
10°-20°	350.3	12.3
20°-30°	809.2	28.3
30°-40°	907.7	31.8
40°-50°	633.3	22.2
50°-60°	94.5	3.3
60°-70°	6.1	0.2
70°-80°	3.0	0.1
80°-90°	3.0	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°	1206.6	42.3
0°-40°	2114.3	74.1
0°-60°	2842.2	99.6
0°-90°	2854.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2854.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	235	235	235	235	235	
5°	942	550	221	129	103	156
15°	4993	2125	142	54	45	1427
25°	7388	2746	316	440	448	3378
35°	7641	1428	60	50	50	4700
45°	5598	215	12	7	4	4107
55°	634	28	4	3	0	833
65°	17	4	4	3	0	26
75°	0	3	4	4	0	1
85°	0	3	6	4	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7
2.5°	427.5	423.2	412.1	409.3	419.1	410.7	414.8	423.2	414.8	405.2	414.8
5°	941.6	965.3	941.6	937.3	954.1	938.8	945.7	961.1	940.2	920.6	934.5
7.5°	1817.4	1832.8	1765.7	1789.5	1783.9	1788.0	1792.3	1792.3	1779.7	1744.8	1764.3
10°	3000.7	3011.8	2922.4	2953.1	2912.6	2953.1	2946.1	2915.4	2922.4	2874.9	2900.1
12.5°	4098.6	4134.9	4045.6	4074.8	4026.0	4072.1	4053.9	4045.6	3974.3	3974.3	4000.8
15°	4992.7	5075.1	4994.0	5024.8	4968.9	5033.2	4982.9	5005.2	4941.0	4861.3	4931.2
17.5°	5716.3	5797.2	5721.8	5759.6	5707.9	5758.2	5699.5	5746.9	5664.5	5607.3	5654.7
20°	6312.8	6372.9	6283.4	6336.5	6275.0	6325.3	6261.1	6324.0	6227.5	6185.6	6213.6
22.5°	6832.4	6856.2	6810.0	6899.5	6779.3	6832.4	6755.6	6819.8	6705.3	6652.2	6659.1
25°	7388.4	7441.5	7353.5	7387.1	7303.2	7339.5	7252.9	7312.9	7170.4	7095.0	7079.6
27.5°	7697.1	7772.5	7694.3	7732.0	7646.9	7677.6	7590.9	7677.6	7532.3	7458.2	7441.5
30°	7853.6	7889.8	7839.6	7864.7	7768.4	7783.7	7694.3	7788.0	7642.6	7577.0	7568.6
32.5°	7762.8	7835.4	7769.8	7801.9	7712.5	7727.9	7641.2	7741.8	7596.6	7536.5	7507.1
35°	7641.2	7715.2	7653.9	7687.4	7605.0	7616.1	7523.9	7611.9	7444.3	7370.3	7307.4
37.5°	7304.5	7374.4	7322.7	7333.9	7254.2	7245.9	7146.7	7220.7	7057.3	6994.4	6952.5
40°	6747.2	6810.0	6768.1	6791.9	6712.3	6694.1	6627.0	6695.5	6568.4	6522.3	6463.6
42.5°	6213.6	6265.3	6226.1	6263.9	6174.4	6150.7	6090.6	6177.2	6033.3	5995.7	5953.8
45°	5597.5	5629.6	5598.9	5631.0	5545.8	5508.1	5453.7	5527.7	5386.6	5351.7	5260.9
47.5°	4783.2	4748.2	4742.6	4773.4	4667.1	4589.0	4538.7	4633.6	4429.7	4361.2	4256.5
50°	2863.7	2922.4	2947.5	2926.5	2853.9	2746.4	2665.4	2781.3	2672.4	2504.7	2337.1
52.5°	1475.2	1409.6	1423.5	1430.5	1343.8	1311.7	1285.1	1311.7	1226.5	1183.2	1077.0
55°	634.2	603.5	614.7	618.8	602.1	563.0	549.0	565.7	526.6	509.9	466.5
57.5°	234.7	234.7	227.7	230.4	224.9	211.0	208.1	215.1	202.6	198.3	181.6
60°	85.2	85.2	85.2	85.2	78.3	76.9	76.9	79.6	75.4	74.0	68.5
62.5°	36.4	37.7	34.9	36.4	34.9	33.5	34.9	33.5	33.5	32.1	32.1
65°	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	15.3	15.3
67.5°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	7.0	7.0	7.0
70°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
72.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
75°	0.0	0.0	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	0.0	0.0
80°	0.0	0.0	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	0.0	0.0
85°	0.0	0.0	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	0.0	0.0
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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CATALOG NUMBER: LDA4A25935D010TE LAR35FL 4LAL1 30° Tilt

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	17.5°	20°	22.5°	45°	67.5°	90°
0°	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7	234.7
2.5°	402.3	400.9	406.5	400.9	391.1	385.6	392.5	378.6	324.1	269.6	229.1
5°	909.4	902.4	892.6	895.4	871.7	852.1	852.1	814.4	550.4	313.0	220.8
7.5°	1723.8	1707.0	1635.9	1687.5	1637.2	1598.1	1571.5	1494.7	889.9	359.0	204.0
10°	2847.0	2817.6	2767.3	2777.1	2694.7	2629.0	2549.4	2420.9	1279.6	399.5	183.0
12.5°	3954.8	3925.4	3791.3	3868.1	3757.7	3693.5	3559.4	3408.5	1700.1	419.1	163.4
15°	4894.8	4869.7	4723.1	4795.7	4660.1	4600.1	4426.9	4259.2	2124.7	412.1	142.5
17.5°	5625.5	5621.2	5452.3	5524.9	5375.4	5326.6	5124.0	4959.2	2468.4	381.3	128.6
20°	6188.5	6178.7	6008.2	6080.9	5917.4	5870.0	5612.8	5439.7	2686.3	339.4	124.3
22.5°	6632.7	6613.1	6430.1	6492.9	6309.9	6248.5	5964.9	5784.7	2775.7	313.0	153.7
25°	7032.2	6997.2	6789.1	6838.0	6636.8	6649.5	6223.4	6025.0	2746.4	352.0	315.7
27.5°	7384.2	7321.3	7111.8	7125.8	6889.7	6766.8	6400.7	6181.5	2612.3	392.5	293.4
30°	7515.5	7454.1	7231.9	7240.3	6994.4	6821.2	6430.1	6185.6	2290.9	245.9	106.1
32.5°	7442.9	7375.8	7144.0	7146.7	6893.8	6717.8	6328.1	6058.5	1863.5	162.1	81.0
35°	7231.9	7162.0	6931.6	6942.8	6698.3	6523.7	6142.3	5854.6	1427.6	128.6	60.1
37.5°	6875.8	6826.8	6607.5	6627.0	6418.9	6233.1	5846.2	5534.7	1007.2	92.2	37.7
40°	6417.5	6379.8	6167.4	6198.3	5971.9	5800.1	5385.2	5047.1	627.2	62.8	23.7
42.5°	5881.1	5840.6	5631.0	5654.7	5462.1	5216.2	4792.8	4410.1	328.3	44.7	16.8
45°	5211.9	5164.5	4952.1	4964.7	4737.0	4449.2	4010.6	3672.5	215.1	30.7	12.5
47.5°	4160.1	4074.8	3798.2	3787.1	3601.3	3130.5	2507.5	2029.8	142.5	20.9	8.4
50°	2286.8	2198.7	1955.7	1929.2	1722.4	1413.7	1044.9	813.0	82.4	13.9	7.0
52.5°	1040.8	994.6	881.5	863.3	775.3	642.6	494.5	406.5	47.5	9.8	5.6
55°	451.2	434.4	387.0	384.1	343.7	297.5	237.5	201.2	28.0	7.0	4.1
57.5°	177.4	171.8	162.1	155.0	139.7	124.3	103.4	86.6	18.2	5.6	4.1
60°	67.1	65.6	60.1	61.5	55.8	53.1	46.0	39.1	11.2	4.1	4.1
62.5°	30.7	30.7	29.3	29.3	28.0	25.1	22.3	20.9	7.0	4.1	4.1
65°	15.3	15.3	13.9	13.9	13.9	12.5	11.2	11.2	4.1	4.1	4.1
67.5°	7.0	7.0	7.0	7.0	7.0	5.6	5.6	5.6	2.8	4.1	4.1
70°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.1	4.1
72.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.1	4.1
75°	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	2.8	4.1	4.1
77.5°	0.0	0.0	0.0	0.0	1.4	1.4	1.4	1.4	2.8	4.1	5.6
80°	0.0	0.0	0.0	0.0	1.4	1.4	1.4	1.4	2.8	4.1	5.6
82.5°	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	2.8	4.1	5.6
85°	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	2.8	4.1	5.6
87.5°	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	2.8	4.1	5.6
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):

	112.5°	135°	157.5°	180°
0°	234.7	234.7	234.7	234.7
2.5°	196.9	174.6	155.0	150.9
5°	162.1	128.6	107.5	103.4
7.5°	131.3	93.6	78.3	75.4
10°	107.5	75.4	61.5	58.7
12.5°	89.4	61.5	48.9	46.0
15°	76.9	54.4	44.7	44.7
17.5°	74.0	60.1	57.3	58.7
20°	96.3	109.0	129.9	131.3
22.5°	223.5	363.2	480.6	502.9
25°	402.3	440.0	428.9	448.4
27.5°	212.4	166.2	169.1	173.2
30°	92.2	102.0	107.5	113.1
32.5°	76.9	79.6	81.0	85.2
35°	50.3	50.3	48.9	50.3
37.5°	30.7	29.3	28.0	28.0
40°	19.6	18.2	16.8	16.8
42.5°	13.9	11.2	9.8	9.8
45°	9.8	7.0	5.6	4.1
47.5°	7.0	4.1	2.8	1.4
50°	5.6	4.1	1.4	0.0
52.5°	4.1	2.8	1.4	0.0
55°	4.1	2.8	0.0	0.0
57.5°	4.1	2.8	0.0	0.0
60°	4.1	2.8	0.0	0.0
62.5°	4.1	2.8	0.0	0.0
65°	4.1	2.8	1.4	0.0
67.5°	4.1	2.8	1.4	0.0
70°	4.1	2.8	1.4	0.0
72.5°	4.1	2.8	1.4	0.0
75°	4.1	4.1	1.4	0.0
77.5°	5.6	4.1	1.4	0.0
80°	5.6	4.1	1.4	0.0
82.5°	5.6	4.1	1.4	0.0
85°	5.6	4.1	1.4	1.4
87.5°	5.6	4.1	1.4	0.0
90°	0.0	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)