

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: P1191526

Luminaire Tested: **LDA4A15927D010TE LAR35FL 4LLWW1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1191526
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: LDA4A15927D010TE 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

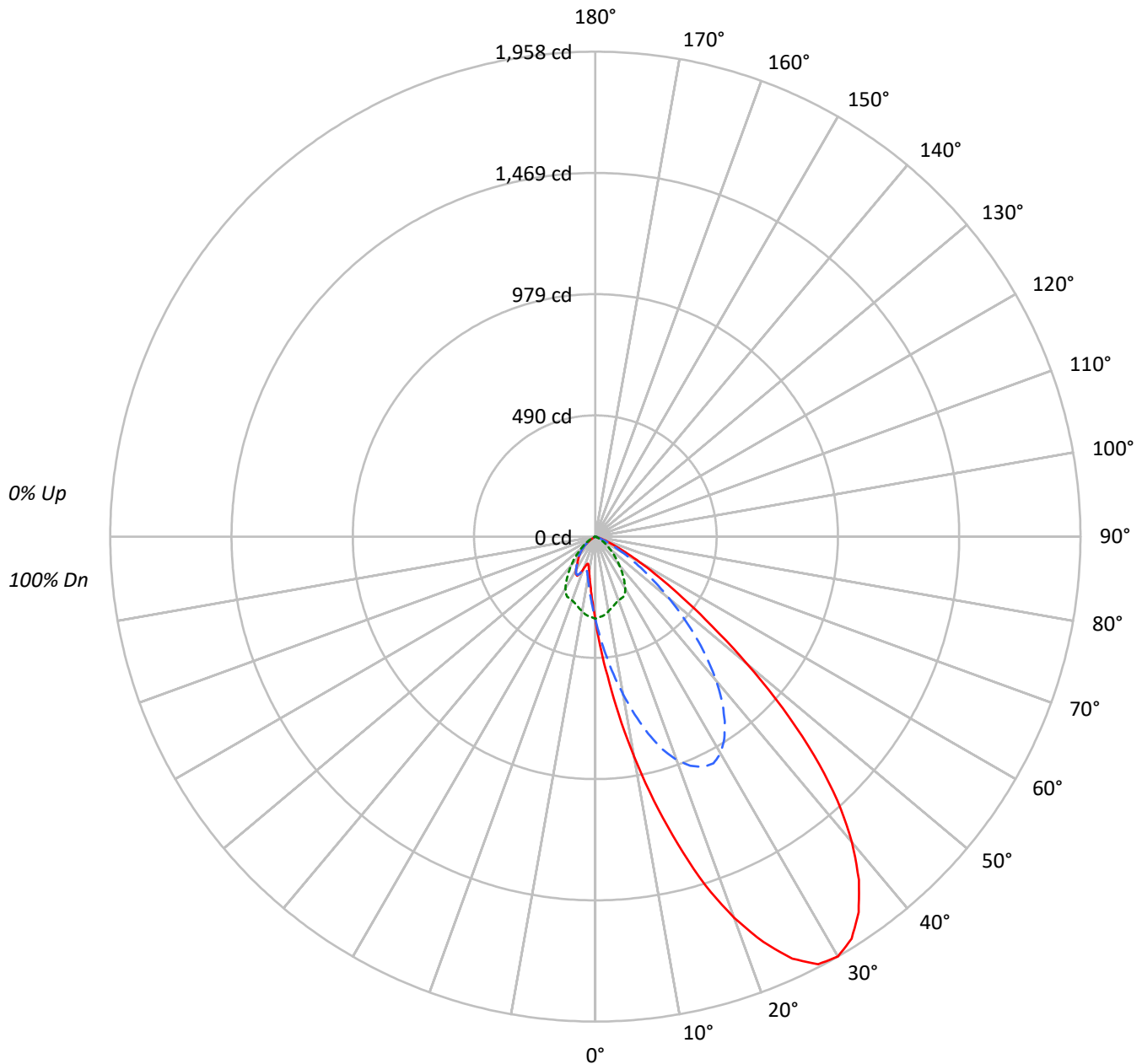
Lumens per Lamp: N/A
Luminaire Lumens: 1242.7 lumens
Efficiency: N/A
Efficacy: 60.9 lumens/watt
Spacing Criteria (0/90/45): 2.19 / 1.11 / 1.55
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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

TEST NUMBER: P1191526

CATALOG NUMBER: LDA4A15927D010TE LAR35FL 4LLWW1

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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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°	40926	40926	40926
5°	69845	39931	26063
10°	112911	38339	17810
15°	164027	36815	14494
20°	214823	36018	18062
25°	255848	36488	23790
30°	278816	34410	22147
35°	278869	29363	18732
40°	259526	24281	16263
45°	217977	18979	13955
50°	152995	14162	10285
55°	92083	10215	5699
60°	50794	6537	2122
65°	24487	3181	233
70°	9773	1118	289
75°	3002	715	0
80°	1065	1065	0
85°	3255	2123	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.6	2.9
10°-20°	141.1	11.4
20°-30°	286.0	23.0
30°-40°	347.6	28.0
40°-50°	274.3	22.1
50°-60°	124.3	10.0
60°-70°	29.3	2.4
70°-80°	3.2	0.3
80°-90°	1.4	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°	462.7	37.2
0°-40°	810.3	65.2
0°-60°	1208.8	97.3
0°-90°	1242.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1242.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	332	332	332	332	332	
5°	564	475	322	236	210	64
15°	1284	823	288	137	114	374
25°	1880	1026	268	171	175	860
35°	1852	910	195	127	124	1144
45°	1250	574	109	79	80	945
55°	428	235	48	32	26	404
65°	84	50	11	2	1	95
75°	6	3	2	1	0	10
85°	2	2	2	1	0	2
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°	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8
2.5°	440.6	429.8	429.8	422.0	428.2	415.8	418.1	417.3	425.0	422.7	415.8
5°	564.1	554.9	554.0	544.0	551.7	535.5	536.2	533.9	542.5	533.9	523.8
7.5°	723.5	707.2	706.4	694.8	702.5	681.5	680.7	676.1	683.9	667.5	652.8
10°	901.5	878.2	876.5	862.6	871.2	844.0	841.6	833.9	839.3	813.7	792.7
12.5°	1091.9	1066.2	1063.1	1048.4	1056.1	1023.5	1017.3	1007.2	1009.5	972.1	944.2
15°	1284.5	1262.9	1259.7	1244.2	1252.0	1211.6	1201.5	1189.0	1186.6	1137.0	1101.1
17.5°	1476.5	1432.2	1446.3	1430.7	1437.7	1390.2	1377.1	1361.6	1353.0	1291.6	1246.5
20°	1636.6	1598.6	1608.7	1594.6	1600.9	1546.5	1530.1	1510.8	1496.0	1422.1	1370.0
22.5°	1771.9	1732.2	1726.8	1726.8	1730.7	1671.7	1649.9	1628.0	1607.0	1519.4	1466.5
25°	1879.9	1836.4	1830.1	1828.6	1829.3	1767.1	1741.5	1717.5	1690.2	1594.0	1536.4
27.5°	1946.7	1900.9	1893.8	1893.1	1889.2	1825.5	1796.7	1770.3	1737.7	1639.0	1574.5
30°	1957.6	1915.6	1907.9	1907.9	1897.8	1835.6	1803.7	1775.7	1739.2	1639.8	1570.6
32.5°	1924.9	1882.2	1873.6	1874.5	1858.1	1799.9	1765.6	1736.9	1698.8	1600.9	1529.5
35°	1852.0	1810.8	1803.0	1803.7	1783.5	1729.1	1693.4	1665.4	1625.0	1531.8	1458.7
37.5°	1747.0	1708.1	1700.3	1702.0	1677.0	1628.0	1591.6	1565.2	1524.0	1437.7	1366.2
40°	1611.8	1574.5	1567.5	1568.3	1541.0	1498.4	1462.5	1437.7	1396.5	1319.6	1251.1
42.5°	1447.8	1412.0	1406.6	1405.8	1379.5	1340.6	1305.5	1284.5	1242.7	1181.2	1116.0
45°	1249.6	1219.4	1195.2	1211.6	1184.3	1153.2	1120.6	1103.6	1063.9	1020.4	962.0
47.5°	1026.5	1000.2	976.1	991.6	966.8	943.5	914.7	903.8	868.1	845.5	796.5
50°	797.3	774.8	753.0	766.2	746.9	731.3	708.7	703.4	673.8	670.6	632.6
52.5°	592.2	575.9	558.8	568.9	554.0	544.0	526.9	525.4	502.8	510.5	484.1
55°	428.2	416.6	403.4	411.1	400.2	394.0	381.5	382.4	365.3	376.9	358.2
57.5°	303.1	293.7	284.5	289.1	282.1	277.5	268.9	270.4	266.6	270.4	257.2
60°	205.9	200.5	193.5	197.5	191.2	188.9	183.4	184.2	174.8	187.2	178.0
62.5°	135.3	131.3	131.3	129.0	124.4	122.7	119.7	119.7	114.3	123.5	117.4
65°	83.9	82.4	81.5	80.0	76.9	76.2	73.8	73.8	70.0	76.9	72.3
67.5°	49.8	49.0	48.1	47.5	45.1	44.3	43.5	42.7	40.4	45.1	42.0
70°	27.1	27.1	26.5	25.6	24.1	24.1	23.3	23.3	21.8	24.1	21.8
72.5°	13.2	13.2	12.4	12.4	11.6	11.6	10.9	10.9	10.1	11.6	10.1
75°	6.3	6.3	5.5	5.5	5.5	5.5	4.6	4.6	4.6	5.5	4.6
77.5°	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	1.5	1.5
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
85°	2.3	2.3	2.3	2.3	3.1	2.3	3.1	3.1	3.1	3.1	3.1
87.5°	3.1	3.1	3.1	3.1	3.1	3.8	3.8	3.8	3.1	3.8	3.1
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°	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8	331.8
2.5°	418.1	411.8	414.3	407.2	401.7	399.4	399.4	398.7	362.2	325.6	300.0
5°	523.0	511.4	512.9	500.5	495.0	487.2	484.9	474.8	395.6	322.5	272.7
7.5°	647.3	630.3	620.2	608.5	601.5	587.5	580.5	560.3	426.7	316.2	246.4
10°	781.0	757.0	740.6	721.9	715.0	693.1	680.0	645.8	453.8	306.1	221.5
12.5°	925.5	892.9	863.5	843.1	834.7	792.7	784.1	735.1	478.8	296.9	201.3
15°	1074.0	1032.8	995.5	966.8	955.9	914.7	888.3	823.0	500.5	288.3	185.7
17.5°	1206.1	1161.8	1116.7	1079.5	1063.9	1005.5	980.7	899.9	516.8	279.8	177.1
20°	1323.4	1269.8	1222.4	1171.1	1153.2	1087.2	1046.9	959.7	526.1	274.4	178.0
22.5°	1412.9	1351.5	1297.1	1239.5	1217.0	1144.8	1098.8	1000.9	529.2	270.4	183.4
25°	1478.0	1409.7	1349.0	1286.2	1259.7	1182.8	1132.2	1026.5	528.4	268.1	185.7
27.5°	1511.6	1438.5	1373.2	1305.5	1276.8	1197.5	1143.1	1032.0	517.6	258.8	185.7
30°	1506.8	1429.9	1361.6	1291.6	1260.5	1182.0	1126.1	1011.0	494.3	241.6	172.5
32.5°	1465.6	1387.2	1317.3	1247.3	1216.2	1139.3	1083.3	968.3	460.8	219.1	154.6
35°	1397.3	1319.6	1250.5	1182.0	1150.9	1076.3	1021.9	910.1	422.7	195.0	138.3
37.5°	1307.9	1232.6	1165.6	1103.6	1067.7	997.8	945.0	840.8	380.9	173.3	124.4
40°	1196.7	1125.3	1062.4	1004.9	966.8	902.3	854.0	759.3	336.5	150.8	111.1
42.5°	1068.5	1001.7	950.5	892.9	850.2	793.5	751.5	669.1	291.4	130.5	97.1
45°	923.2	864.1	819.8	769.4	725.0	676.9	641.2	574.4	245.6	108.8	83.9
47.5°	767.0	718.1	683.9	641.9	598.4	559.5	531.5	478.0	202.1	91.0	71.5
50°	613.1	574.4	549.4	517.6	478.0	448.4	426.7	391.0	160.1	73.8	59.9
52.5°	471.7	443.7	426.7	403.4	368.3	348.1	332.6	307.8	122.0	59.9	48.1
55°	352.1	331.8	321.0	304.6	274.4	260.3	250.2	234.7	91.0	47.5	37.4
57.5°	254.2	241.0	233.9	223.1	198.1	189.7	182.6	173.3	66.0	36.5	27.1
60°	177.1	167.9	163.9	157.0	136.8	131.3	122.0	122.0	46.6	26.5	18.7
62.5°	117.4	111.1	109.6	104.2	88.6	85.5	83.2	81.5	31.9	17.9	10.9
65°	73.1	68.5	67.6	64.5	53.6	52.1	49.8	49.8	20.2	10.9	5.5
67.5°	42.0	39.7	38.9	37.4	29.6	28.8	27.1	28.8	11.6	5.5	2.3
70°	22.5	20.2	20.2	19.4	14.7	14.0	13.2	14.0	6.3	3.1	1.5
72.5°	10.9	9.3	9.3	8.6	6.3	6.3	5.5	7.0	3.1	1.5	1.5
75°	4.6	4.6	3.8	3.8	2.3	2.3	2.3	3.1	1.5	1.5	1.5
77.5°	2.3	2.3	2.3	2.3	0.8	0.8	0.8	1.5	1.5	1.5	1.5
80°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	1.5	1.5	1.5	1.5
82.5°	1.5	0.8	0.8	0.8	0.0	0.0	0.0	0.8	1.5	1.5	1.5
85°	2.3	2.3	2.3	2.3	1.5	1.5	1.5	2.3	1.5	1.5	1.5
87.5°	3.1	3.1	3.1	3.1	2.3	2.3	2.3	3.8	2.3	1.5	1.5
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°	331.8	331.8	331.8
2.5°	278.2	262.0	263.5
5°	236.2	213.0	210.5
7.5°	199.8	174.8	171.7
10°	171.0	146.0	142.2
12.5°	150.0	127.5	123.5
15°	136.8	116.6	113.5
17.5°	134.5	118.9	117.4
20°	143.7	136.0	137.6
22.5°	160.1	157.8	161.6
25°	171.0	170.2	174.8
27.5°	168.7	167.0	170.2
30°	156.1	153.8	155.5
32.5°	141.4	137.6	139.1
35°	126.7	123.5	124.4
37.5°	114.3	112.0	112.0
40°	103.4	101.0	101.0
42.5°	91.6	90.1	91.0
45°	79.2	78.5	80.0
47.5°	66.8	66.0	67.6
50°	55.2	53.6	53.6
52.5°	43.5	41.2	39.7
55°	31.9	28.0	26.5
57.5°	21.8	17.9	16.4
60°	12.4	10.1	8.6
62.5°	6.3	3.8	3.1
65°	2.3	1.5	0.8
67.5°	1.5	0.8	0.8
70°	1.5	0.8	0.8
72.5°	0.8	0.8	0.8
75°	0.8	0.8	0.0
77.5°	0.8	0.8	0.8
80°	0.8	0.8	0.0
82.5°	0.8	0.8	0.0
85°	0.8	0.8	0.0
87.5°	0.8	0.8	0.0
90°	0.0	0.0	0.0

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180° - - 45°-225° - - - 90°-270°

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(END OF REPORT)