

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: P170383

Luminaire Tested: **LDA6A30835D010TE LAR40FL 6LA1 30° Tilt**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P170383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25662)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA6A30835D010TE LAR40FL 6LA1 30° Tilt
Description: PORTFOLIO 6" Adjustable Reflector, Self-flange Trim Ring, 40° Flood Optic, at 30° tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3563.8 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 2.7 / 0.55 / 1.38
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

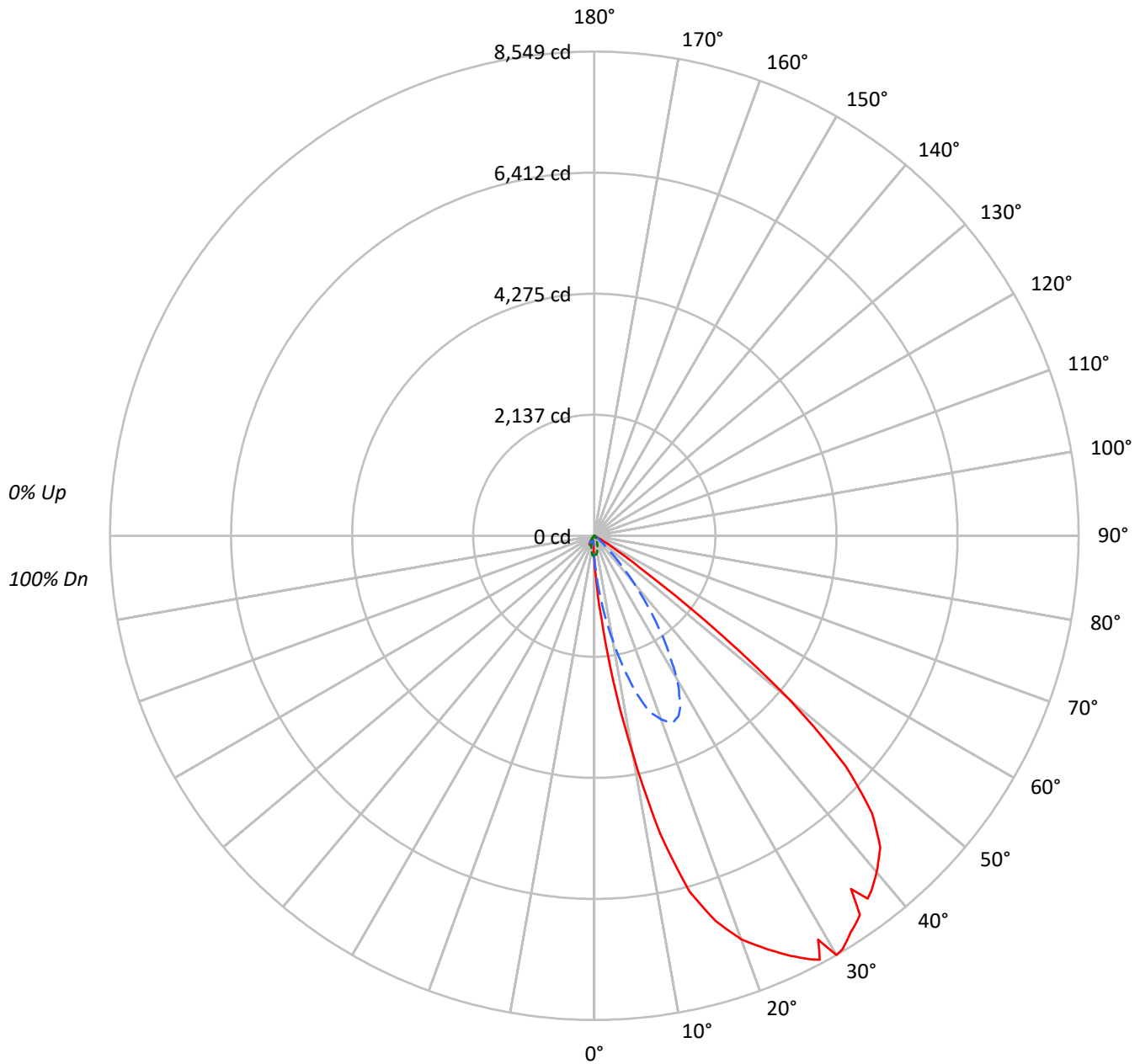
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	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
1	112	109	106	103	110	107	104	102		103	100	98		99	97	95		95	94	93
2	105	99	94	90	103	97	93	89		94	90	87		91	88	85		88	85	83
3	98	90	84	79	96	89	83	78		86	81	77		83	79	76		81	77	74
4	91	82	75	70	89	81	74	69		78	73	68		76	71	67		74	70	67
5	85	74	67	62	83	73	67	61		71	65	61		70	64	60		68	63	60
6	79	68	60	55	77	67	60	55		65	59	54		64	58	54		62	57	54
7	74	62	55	49	72	61	54	49		60	54	49		59	53	49		57	52	48
8	69	57	49	44	67	56	49	44		55	49	44		54	48	44		53	48	44
9	64	52	45	40	63	52	45	40		51	44	40		50	44	40		49	43	39
10	60	48	41	36	59	48	41	36		47	40	36		46	40	36		45	40	36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	20514	20514	20514
5°	81939	18782	8530
10°	217370	15776	4704
15°	369310	12174	4535
20°	442275	8675	5846
25°	494938	6533	9091
30°	541153	6147	10900
35°	546761	4611	7857
40°	554968	2691	4258
45°	538226	1582	1822
50°	384311	802	665
55°	92183	602	0
60°	17334	515	0
65°	3450	610	0
70°	497	1010	0
75°	0	1334	0
80°	0	1989	0
85°	0	3963	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	2.0
10°-20°	465.4	13.1
20°-30°	920.0	25.8
30°-40°	1092.9	30.7
40°-50°	834.3	23.4
50°-60°	163.6	4.6
60°-70°	8.6	0.2
70°-80°	3.8	0.1
80°-90°	3.4	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°	1457.3	40.9
0°-40°	2550.3	71.6
0°-60°	3548.1	99.6
0°-90°	3563.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3563.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	374	374	374	374	374	
5°	1489	975	341	199	155	220
15°	6507	2884	214	84	80	1808
25°	8182	3514	108	125	150	3766
35°	8170	1973	69	103	117	5101
45°	6942	423	20	24	24	5111
55°	964	44	6	3	0	1328
65°	27	5	5	3	0	41
75°	0	3	6	5	0	0
85°	0	3	6	5	0	0
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°	22.5°	45°	67.5°
0°	374.2	374.2	374.2	374.2	374.2	374.2	374.2	374.2	374.2	374.2	374.2
2.5°	804.8	809.5	775.0	760.9	770.3	770.3	767.2	737.5	718.7	601.2	476.0
5°	1489.0	1539.1	1482.7	1456.1	1402.9	1460.8	1457.7	1374.7	1316.8	975.4	590.3
7.5°	2589.7	2632.0	2544.3	2495.8	2473.8	2462.9	2444.1	2268.7	2160.7	1412.3	707.7
10°	3904.9	4069.3	3950.3	3914.3	3820.4	3724.9	3742.1	3477.5	3266.1	1877.3	753.1
12.5°	5400.2	5608.4	5447.2	5428.4	5221.7	5166.9	5132.5	4860.0	4499.9	2394.0	781.3
15°	6507.2	6712.3	6604.2	6574.5	6432.0	6345.9	6319.3	6040.6	5636.6	2884.1	764.1
17.5°	7133.4	7327.6	7239.9	7202.3	7039.5	6967.5	6984.7	6707.6	6421.0	3264.5	701.4
20°	7581.2	7747.2	7700.2	7658.0	7501.4	7423.1	7438.8	7139.7	6801.5	3446.2	602.8
22.5°	7888.1	8040.0	8016.5	7942.9	7783.2	7473.2	7712.8	7434.1	7113.1	3587.1	493.2
25°	8182.5	8314.0	8295.2	8204.4	8043.1	7924.1	7939.8	7637.6	7321.3	3513.5	399.3
26°	8287.4	8423.6	8390.7	8307.7	8132.4	8005.6	8008.7	7708.1	7291.6	3438.3	366.4
27°	8393.9	8761.8	8487.8	8392.3	8212.2	8072.9	8072.9	7758.2	7427.8	3352.2	336.6
28°	8478.4	8592.7	8559.8	8456.5	8270.2	8118.3	8116.7	7789.5	7454.4	3186.3	310.0
29°	8152.7	8660.0	8606.8	8494.1	8303.0	8146.5	8140.2	7806.7	7460.7	3076.7	288.1
30°	8548.9	8683.5	8617.8	8500.3	8306.2	8148.0	8146.5	7803.6	7445.0	2904.4	267.7
31°	8511.3	8647.5	8584.9	8473.7	8285.8	8129.2	8127.7	7784.8	7413.7	2727.5	250.5
32°	8422.0	8563.0	8520.7	8429.9	8254.5	7856.8	8087.0	7751.9	7371.4	2516.1	220.8
33°	8325.0	8464.3	8462.7	8371.9	8201.3	8052.5	8051.0	7714.3	7321.3	2359.5	208.2
34°	8259.2	8397.0	8384.5	8303.0	7946.1	8007.1	8005.6	7670.5	7146.0	2179.5	178.5
35°	8170.0	8306.2	8306.2	8223.2	8072.9	7952.3	7946.1	7611.0	7167.9	1972.8	159.7
36°	7708.1	8223.2	8223.2	8151.2	8010.3	7891.3	7880.3	7520.2	6951.8	1781.8	140.9
37°	8021.2	8138.6	8155.9	8021.2	7947.6	7827.1	7808.3	7457.6	6945.6	1595.5	123.7
38°	7949.2	8055.7	8076.0	8010.3	7867.8	7745.6	7712.8	7348.0	6768.6	1427.9	108.0
39°	7852.1	7950.8	7969.5	7906.9	7637.6	7642.3	7587.5	7200.8	6602.7	1243.2	92.4
40°	7755.0	7834.9	7858.4	7792.6	7661.1	7515.5	7430.9	7027.0	6389.7	1074.1	84.5
42.5°	7471.6	7520.2	7529.6	7463.8	7277.5	7070.8	6917.4	6466.4	5445.6	693.6	61.1
45°	6942.4	6975.3	6947.1	6867.3	6632.4	6358.4	6095.4	5497.3	4369.9	422.7	43.8
47.5°	6024.9	6018.7	5935.7	5830.8	5456.6	5090.2	4758.2	4128.8	3114.2	245.8	31.3
50°	4506.2	4443.5	4321.4	4196.1	3909.6	3508.8	3214.4	2754.1	1955.6	142.5	21.9
51°	3701.4	3585.5	3502.5	3392.9	3133.0	2765.1	2508.3	2116.9	1420.1	111.2	18.8
52°	2885.6	2774.5	2694.6	2699.3	2401.8	2052.7	1831.9	1514.1	933.2	87.7	15.7
53°	2104.3	2005.7	1939.9	1916.4	1722.3	1429.5	1262.0	1014.6	629.4	70.5	14.1
54°	1424.8	1345.0	1298.0	1255.7	1143.0	945.7	858.0	698.3	474.4	54.8	11.0
55°	964.5	919.1	892.5	861.1	793.8	687.4	620.0	524.5	358.6	43.8	9.4
57.5°	389.9	385.2	375.8	364.8	341.3	305.3	266.2	231.7	151.9	26.6	6.3
60°	158.1	159.7	151.9	148.7	139.3	125.3	108.0	95.5	68.9	15.7	4.7
61°	106.5	108.0	103.3	101.8	92.4	86.1	76.7	65.8	50.1	12.5	4.7
62°	73.6	72.0	70.5	67.3	64.2	57.9	54.8	45.4	37.6	9.4	4.7
63°	51.7	50.1	50.1	47.0	48.5	43.8	40.7	34.4	26.6	7.8	4.7
64°	37.6	36.0	37.6	34.4	34.4	32.9	28.2	25.1	20.4	6.3	4.7
65°	26.6	26.6	26.6	25.1	25.1	23.5	21.9	18.8	15.7	4.7	4.7
66°	18.8	18.8	18.8	18.8	17.2	17.2	15.7	14.1	11.0	4.7	4.7



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	22.5°	45°	67.5°
72.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	3.1	4.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.1	4.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.1	4.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.1	4.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.1	4.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.1	4.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.1	4.7
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):

	90°	112.5°	135°	157.5°	180°
0°	374.2	374.2	374.2	374.2	374.2
2.5°	360.1	311.6	275.6	247.4	234.9
5°	341.3	256.8	198.8	167.5	155.0
7.5°	314.7	206.7	144.0	109.6	103.3
10°	283.4	164.4	106.5	89.2	84.5
12.5°	249.0	125.3	90.8	79.9	78.3
15°	214.5	104.9	84.5	79.9	79.9
17.5°	181.6	97.1	84.5	84.5	86.1
20°	148.7	92.4	90.8	97.1	100.2
22.5°	120.6	95.5	101.8	115.9	120.6
25°	108.0	103.3	125.3	142.5	150.3
26°	106.5	108.0	136.2	156.6	164.4
27°	106.5	114.3	145.6	166.0	172.2
28°	103.3	117.4	151.9	169.1	176.9
29°	100.2	119.0	151.9	167.5	176.9
30°	97.1	117.4	150.3	164.4	172.2
31°	93.9	112.7	144.0	158.1	166.0
32°	86.1	106.5	136.2	150.3	156.6
33°	81.4	101.8	126.8	137.8	145.6
34°	75.2	92.4	115.9	125.3	131.5
35°	68.9	83.0	103.3	111.2	117.4
36°	61.1	73.6	90.8	98.6	104.9
37°	54.8	64.2	79.9	86.1	92.4
38°	48.5	56.4	68.9	75.2	79.9
39°	43.8	50.1	61.1	65.8	68.9
40°	37.6	42.3	51.7	56.4	59.5
42.5°	26.6	29.7	36.0	37.6	39.1
45°	20.4	20.4	23.5	23.5	23.5
47.5°	14.1	14.1	14.1	14.1	14.1
50°	9.4	9.4	9.4	7.8	7.8
51°	7.8	7.8	6.3	6.3	4.7
52°	7.8	6.3	4.7	4.7	3.1
53°	6.3	6.3	4.7	3.1	1.6
54°	6.3	6.3	4.7	1.6	1.6
55°	6.3	4.7	3.1	1.6	0.0
57.5°	4.7	4.7	3.1	1.6	0.0
60°	4.7	4.7	3.1	0.0	0.0
61°	4.7	4.7	3.1	0.0	0.0
62°	4.7	4.7	3.1	0.0	0.0
63°	4.7	4.7	3.1	0.0	0.0
64°	4.7	4.7	3.1	0.0	0.0
65°	4.7	4.7	3.1	0.0	0.0
66°	4.7	4.7	3.1	1.6	0.0



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CANDELA DISTRIBUTION (continued):

	90°	112.5°	135°	157.5°	180°
72.5°	6.3	6.3	4.7	1.6	0.0
75°	6.3	7.8	4.7	1.6	0.0
77.5°	6.3	6.3	4.7	1.6	0.0
80°	6.3	6.3	4.7	1.6	0.0
82.5°	6.3	6.3	4.7	1.6	0.0
85°	6.3	6.3	4.7	1.6	0.0
87.5°	6.3	6.3	4.7	1.6	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°







67.5°	11.0	11.0	11.0	11.0	11.0	9.4	9.4	7.8	6.3	3.1	4.7
70°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.6	1.6	3.1	4.7





67.5°	4.7	4.7	3.1	1.6	0.0
70°	6.3	6.3	3.1	1.6	0.0



(END OF REPORT)