

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: P26603

Luminaire Tested: **LDA4A18835D010TE LAR15SP 4LFC1 H LSL20**

Test Date: 08/21/15

Test Information

Test Method: LM-41-14
Report Number: P26603
Test Lab: INNOVATION CENTER-P2
Test Date: 08/21/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA4A18835D010TE LAR15SP 4LFC1 H LSL20
Description: PORTFOLIO 4" FLAT CONE HAZE 23Z TRIM, LINEAR SPREAD LENS, 15 DEG SPOT OPTIC, AT 0 DEG TILT.
Light Source: [1] CITIZEN 3500K LED
CLU034-1208B8-353M1A2
Ballast/Driver: [1] ERP ELECTRONIC DRIVER
ELM030W-0700-42, 700mA

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1406.8 lumens
Efficiency: N/A
Efficacy: 49.2 lumens/watt
Spacing Criteria (0/90/45): 0.37 / 0.74 / 0.5
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

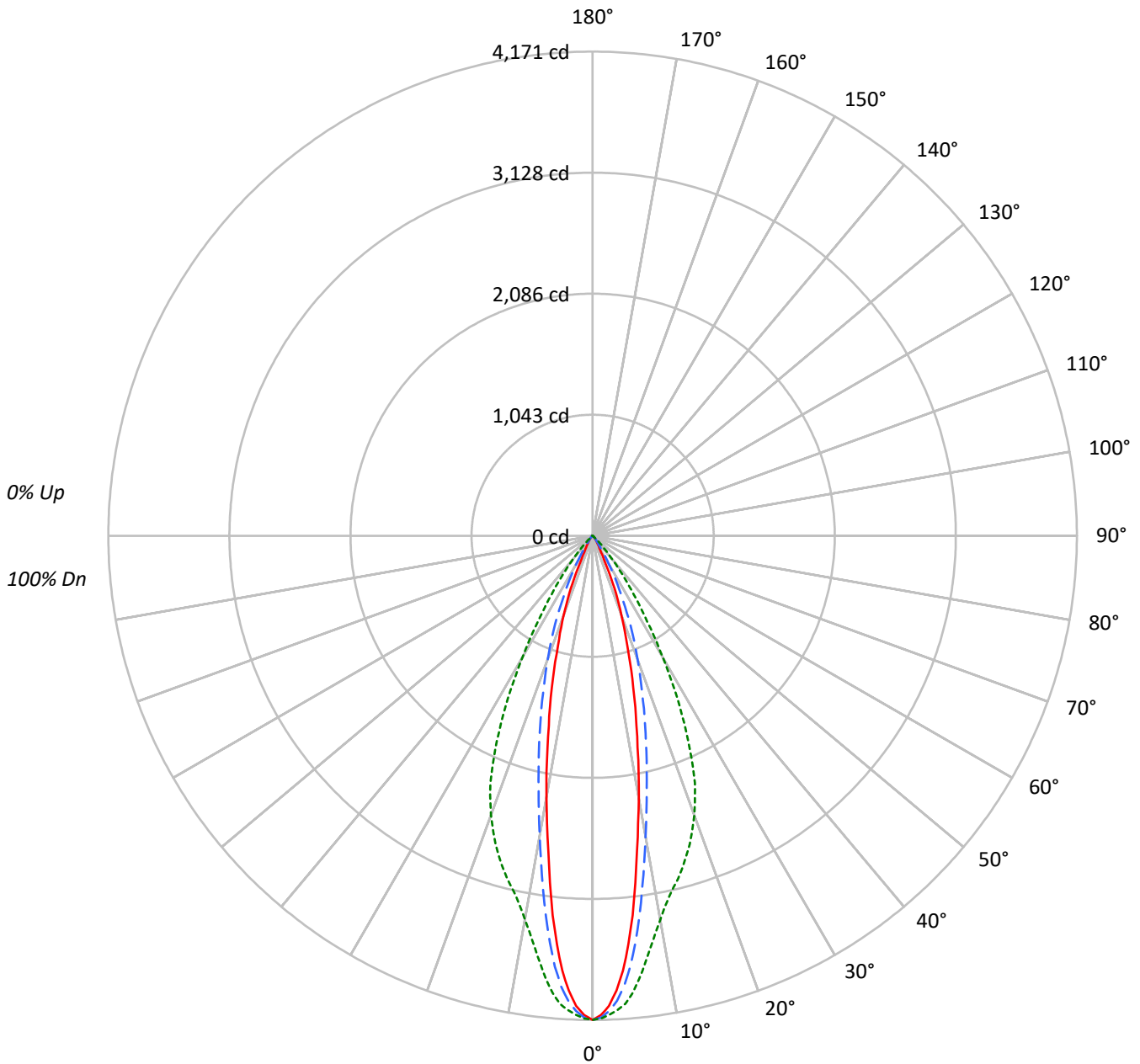
Input Watts (W): 28.6
Input Voltage (V): 119.97
Input Current (A_{in}): 0.24091
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 7.22%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	103	100	108	104	101	99	101	99	96	98	96	94	95	94	92	91																			
3	106	100	96	93	104	99	95	92	97	93	91	94	92	89	92	90	88	87																			
4	102	95	91	87	100	94	90	87	92	89	86	90	87	85	89	86	84	83																			
5	98	91	86	83	96	90	86	82	88	85	82	87	83	81	85	82	80	79																			
6	94	87	82	78	93	86	82	78	85	81	78	83	80	77	82	79	77	75																			
7	91	83	78	75	89	82	78	75	81	77	74	80	77	74	79	76	73	72																			
8	87	80	75	71	86	79	75	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	68	83	76	71	68	75	71	68	74	71	68	74	70	68	67																			
10	81	74	69	66	81	73	69	66	72	68	65	72	68	65	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	514475	514475	514475
5°	437197	461341	489448
10°	286443	328652	420334
15°	172774	224874	379643
20°	95296	148063	336030
25°	33208	84924	265253
30°	14670	39025	171482
35°	8733	12347	92906
40°	5636	6280	40737
45°	3314	3489	13257
50°	1535	1919	2686
55°	430	645	645
60°	247	247	247
65°	292	292	292
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.9	22.9
10°-20°	542.7	38.6
20°-30°	380.6	27.1
30°-40°	131.0	9.3
40°-50°	26.2	1.9
50°-60°	3.6	0.3
60°-70°	0.8	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1245.2	88.5
0°-40°	1376.2	97.8
0°-60°	1406.0	99.9
0°-90°	1406.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1406.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4171	4171	4171	4171	4171	
5°	3531	3602	3726	3893	3953	294
15°	1353	1450	1761	2455	2973	375
25°	244	361	624	1182	1949	141
35°	58	62	82	295	617	38
45°	19	19	20	30	76	15
55°	2	3	3	3	3	3
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4171	4171	4171	4171	4171
1°	4129	4136	4150	4168	4159
2°	4052	4066	4097	4133	4128
3°	3923	3955	4012	4080	4090
4°	3754	3802	3889	4005	4042
5°	3531	3602	3726	3893	3953
6°	3289	3359	3527	3749	3839
7°	3012	3095	3302	3589	3710
8°	2742	2832	3068	3426	3583
9°	2507	2586	2839	3270	3462
10°	2287	2355	2624	3120	3356
11°	2080	2146	2424	2977	3259
12°	1864	1951	2240	2840	3174
13°	1680	1771	2069	2708	3106
14°	1521	1605	1911	2581	3042
15°	1353	1450	1761	2455	2973
17.5°	990	1117	1415	2133	2783
20°	726	858	1128	1812	2560
22.5°	494	628	877	1508	2303
25°	244	361	624	1182	1949
27.5°	142	174	433	900	1579
30°	103	114	274	654	1204
32.5°	77	83	145	452	877
35°	58	62	82	295	617
37.5°	45	46	56	171	416
40°	35	34	39	96	253
42.5°	26	26	28	54	148
45°	19	19	20	30	76
47.5°	13	13	14	18	31
50°	8	9	10	11	14
52.5°	5	5	6	6	7
55°	2	3	3	3	3
57.5°	2	2	2	2	2
60°	1	1	1	1	1
62.5°	1	1	1	1	1
65°	1	1	1	1	1
67.5°	1	1	1	0	0
70°	0	1	0	0	0
72.5°	0	0	0	0	0
75°	0	0	0	0	0
77.5°	0	0	0	0	0
80°	0	0	0	0	0
82.5°	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
90°	0	0	0	0	0



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— 0°-180° - - 45°-225° - - - - 90°-270°







85°	0	0	0	0	0
87.5°	0	0	0	0	0



(END OF REPORT)