

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: P26604

Luminaire Tested: **LDA4A18835D010TE LAR15SP 4LFC1 H OSL20**

Test Date: 08/21/15

Test Information

Test Method: LM-41-14
Report Number: P26604
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 OSL20
Description: PORTFOLIO 4" FLAT CONE HAZE 23Z TRIM, OVERALL 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: 1672.9 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 0.44 / 0.44 / 0.45
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

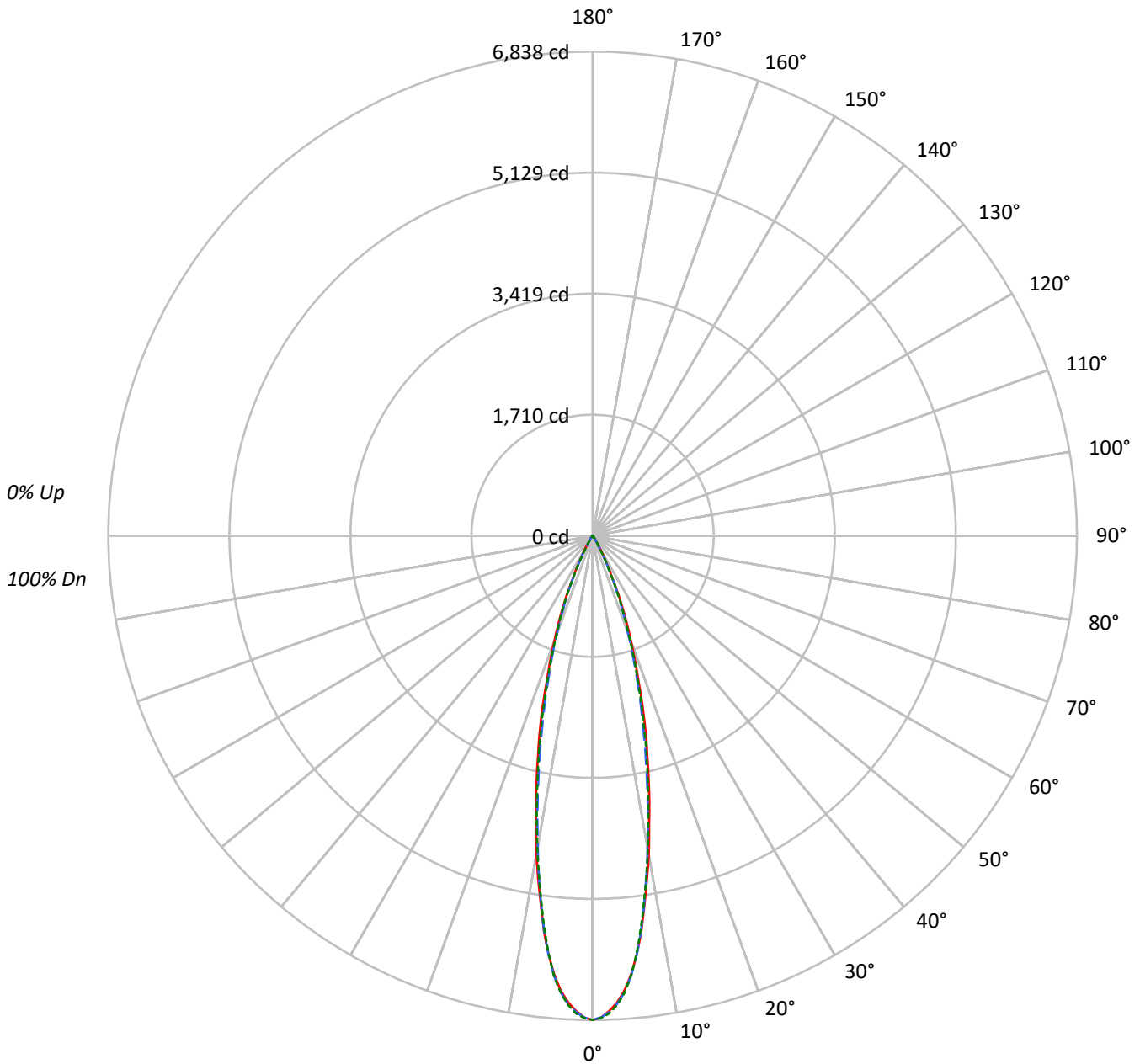
Input Watts (W): 28.6
Input Voltage (V): 119.97
Input Current (A_{in}): 0.24089
Voltage Rise (V): NR
Power Factor: 0.9919
Total Harmonic Distortion (THDi): 7.23%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	97	97	96	95	93															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93	95	93	91	90															
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	90	95	93	91	90															
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	87	92	90	88	87															
5	101	95	91	88	100	94	90	87	93	89	87	91	88	86	90	87	85	84	90	87	85	84															
6	98	92	87	84	97	91	87	84	90	86	84	88	85	83	87	85	83	82	87	85	83	82															
7	95	89	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80	79	85	82	80	79															
8	92	86	82	79	91	85	81	79	84	81	78	83	80	78	83	80	78	77	83	80	78	77															
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	81	78	75	75	81	78	75	75															
10	87	81	77	74	87	80	76	74	80	76	74	79	76	74	78	75	73	72	78	75	73	72															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	843437	843437	843437
5°	770140	772369	772617
10°	571258	559109	562365
15°	371215	348101	358700
20°	206606	191117	196499
25°	89280	87646	85333
30°	27204	22076	23358
35°	8733	7981	8282
40°	3864	3703	3864
45°	1919	1919	2093
50°	959	959	959
55°	430	430	430
60°	247	247	247
65°	0	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°	536.4	32.1
10°-20°	767.8	45.9
20°-30°	315.2	18.8
30°-40°	41.5	2.5
40°-50°	9.5	0.6
50°-60°	2.0	0.1
60°-70°	0.6	0.0
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°	1619.4	96.8
0°-40°	1660.8	99.3
0°-60°	1672.3	100.0
0°-90°	1672.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1672.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6838	6838	6838	6838	6838	
5°	6220	6232	6238	6253	6240	538
15°	2907	2844	2726	2752	2809	791
25°	656	661	644	639	627	329
35°	58	57	53	54	55	45
45°	11	11	11	12	12	10
55°	2	2	2	2	2	2
65°	0	1	1	1	1	0
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°	6838	6838	6838	6838	6838
1°	6805	6801	6803	6800	6811
2°	6716	6722	6732	6740	6751
3°	6599	6612	6623	6636	6634
4°	6440	6452	6461	6473	6467
5°	6220	6232	6238	6253	6240
6°	5942	5954	5955	5967	5933
7°	5635	5626	5616	5601	5585
8°	5255	5263	5237	5221	5215
9°	4910	4887	4854	4840	4851
10°	4561	4512	4464	4463	4490
11°	4182	4151	4089	4094	4129
12°	3848	3802	3721	3740	3781
13°	3511	3465	3370	3397	3436
14°	3190	3149	3039	3066	3135
15°	2907	2844	2726	2752	2809
17.5°	2158	2139	2028	2065	2089
20°	1574	1532	1456	1478	1497
22.5°	1108	1078	1016	1035	1061
25°	656	661	644	639	627
27.5°	366	367	336	344	340
30°	191	177	155	159	164
32.5°	94	92	84	86	88
35°	58	57	53	54	55
37.5°	37	36	34	35	36
40°	24	24	23	24	24
42.5°	17	16	16	17	17
45°	11	11	11	12	12
47.5°	8	8	7	8	8
50°	5	5	5	5	5
52.5°	3	3	3	3	3
55°	2	2	2	2	2
57.5°	1	1	1	1	1
60°	1	1	1	1	1
62.5°	1	1	1	1	1
65°	0	1	1	1	1
67.5°	0	0	0	0	0
70°	0	0	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)