

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: P170503

Luminaire Tested: **LDA4A13835D010TE LAR15SP 4LAL1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P170503  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26144)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA4A13835D010TE LAR15SP 4LAL1  
Description: PORTFOLIO 4" Lensed Adjustable, Self-flange Trim Ring, 15° Spot  
Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

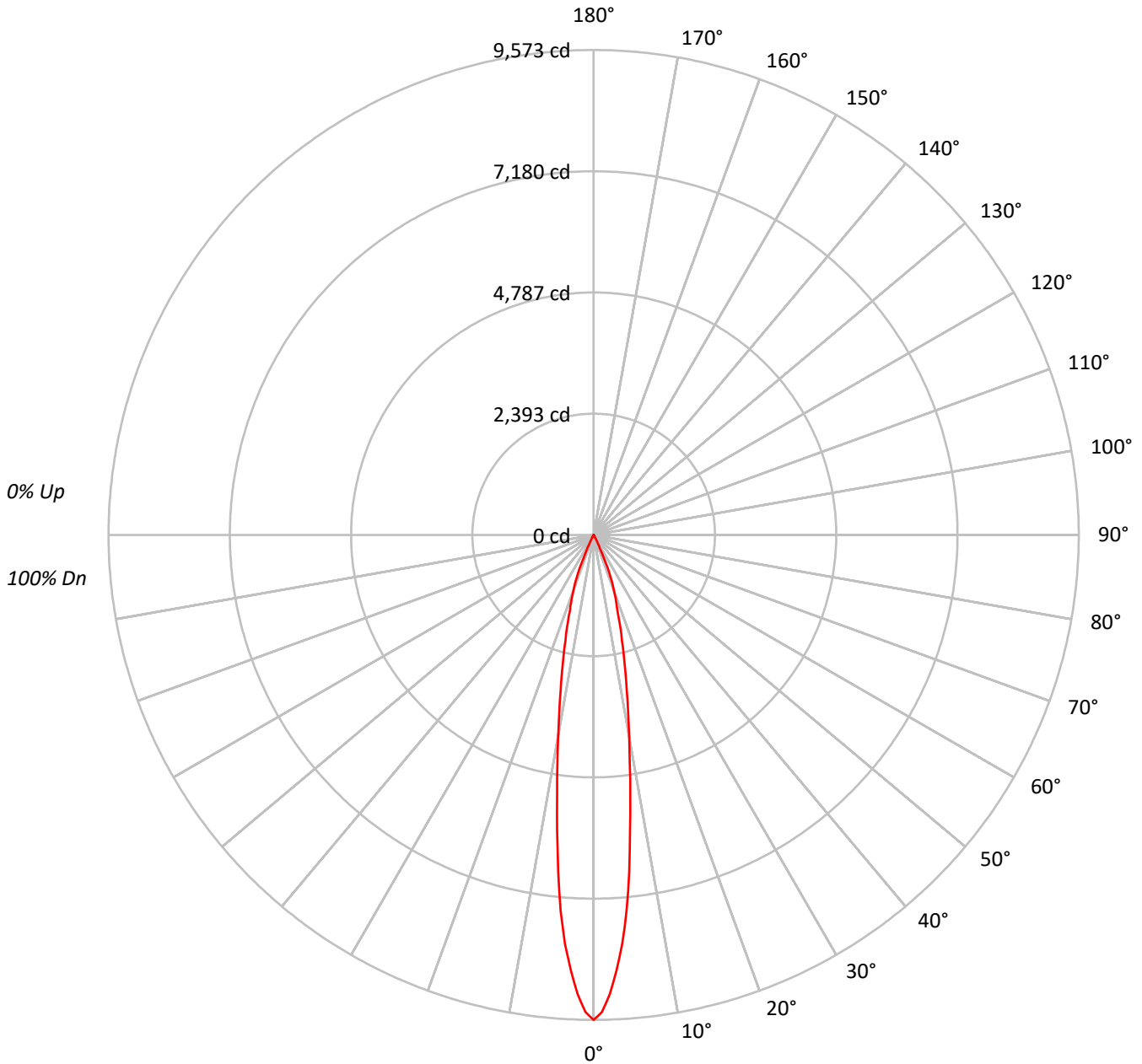
Lumens per Lamp: N/A  
Luminaire Lumens: 1411.7 lumens  
Efficiency: N/A  
Efficacy: 63.4 lumens/watt  
Spacing Criteria (0/90/45): 0.29 / 0.29 / 0.34  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 22.27  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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			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	100	100
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97	97	97	97
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95	95	95	95
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92	92	92	92
4	106	101	97	94	104	100	96	94	98	95	93	96	94	92	94	92	91	90	90	90	90
5	103	97	94	91	102	97	93	90	95	92	90	94	91	89	92	90	88	87	87	87	87
6	100	95	91	88	99	94	90	88	93	89	87	91	89	87	90	88	86	85	85	85	85
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	83	83
8	95	89	86	83	95	89	85	83	88	85	83	87	84	82	86	84	82	81	81	81	81
9	93	87	83	81	92	87	83	81	86	83	81	85	82	80	85	82	80	79	79	79	79
10	91	85	81	79	90	85	81	79	84	81	79	83	81	79	83	80	78	78	78	78	78

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	1180788
5°	922881
10°	503987
15°	275276
20°	154941
25°	39332
30°	7477
35°	2680
40°	1304
45°	698
50°	154
55°	172
60°	197
65°	233
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	589.2	41.7
10°-20°	612.4	43.4
20°-30°	192.1	13.6
30°-40°	13.5	1.0
40°-50°	3.1	0.2
50°-60°	0.7	0.1
60°-70°	0.7	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°	1393.6	98.7
0°-40°	1407.2	99.7
0°-60°	1411.0	100.0
0°-90°	1411.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1411.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	9573	
5°	7454	589
15°	2156	612
25°	289	192
35°	18	14
45°	4	3
55°	1	1
65°	1	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	9573.0
1°	9420.4
2°	9072.4
3°	8609.0
4°	8096.3
5°	7453.6
6°	6693.1
7°	5897.8
8°	5182.5
9°	4560.0
10°	4023.9
11°	3554.9
12°	3143.1
13°	2779.0
14°	2451.2
15°	2155.7
17.5°	1556.6
20°	1180.4
22.5°	803.3
25°	289.0
27.5°	96.9
30°	52.5
32.5°	29.1
35°	17.8
37.5°	12.1
40°	8.1
42.5°	5.7
45°	4.0
47.5°	2.4
50°	0.8
52.5°	0.8
55°	0.8
57.5°	0.8
60°	0.8
62.5°	0.8
65°	0.8
67.5°	0.8
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°		0.0
87.5°		0.0



(END OF REPORT)