

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: P170531

Luminaire Tested: **LDA4A09935D010TE LAR25NF 4LAL1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P170531  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26145)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA4A09935D010TE LAR25NF 4LAL1  
Description: PORTFOLIO 4" Lensed Adjustable, Self-flange Trim Ring, 25° Narrow Flood Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 841.2 lumens  
Efficiency: N/A  
Efficacy: 60.8 lumens/watt  
Spacing Criteria (0/90/45): 0.41 / 0.41 / 0.45  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

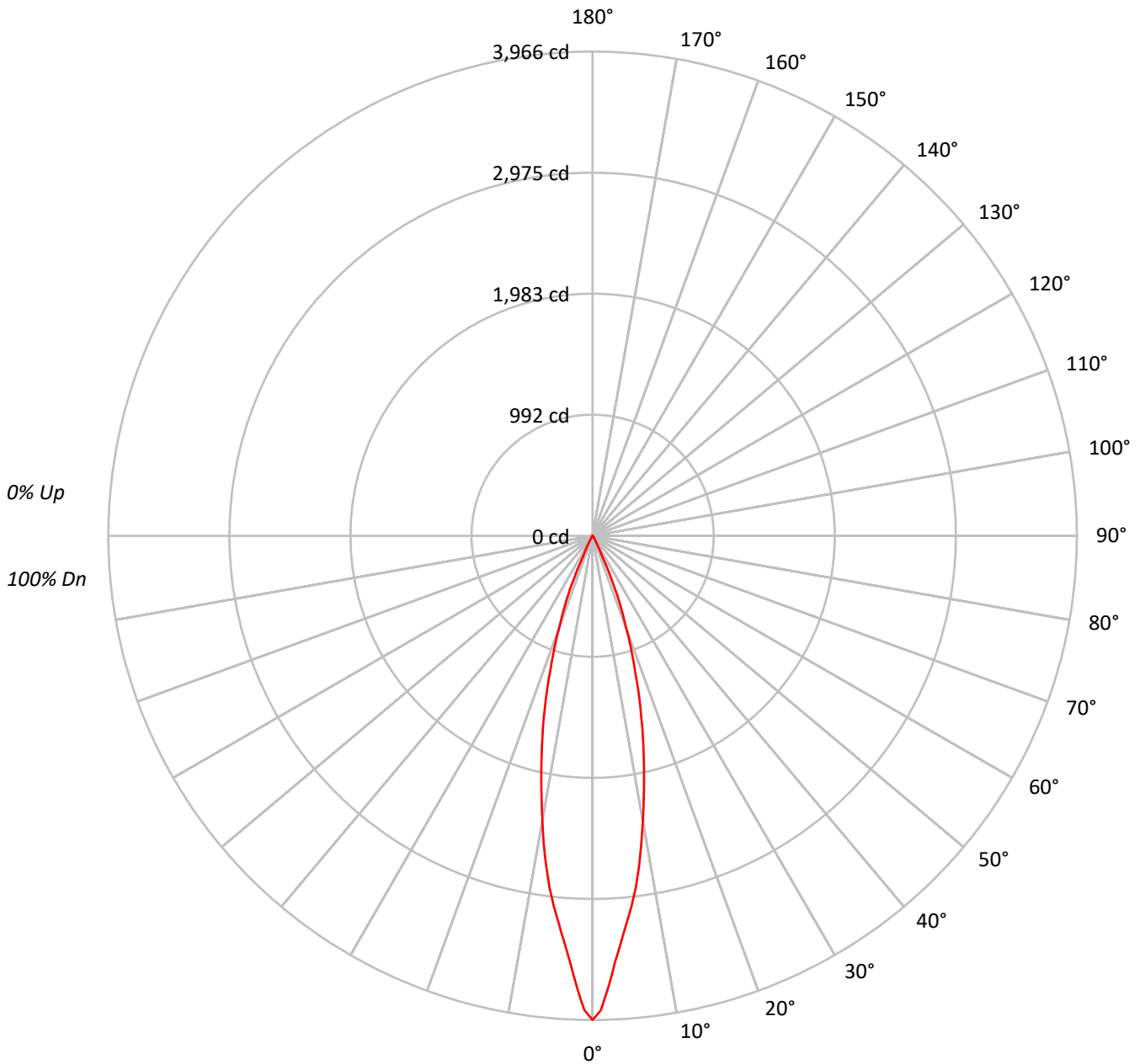
Input Watts (W): 13.84  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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	108	107	106	104	103	102	101	100	99	98	97	97	97	97																
2	111	108	105	103	109	106	104	101	103	101	99	100	99	97	98	96	95	94	94	94	94																
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	94	92	91	91	91	91																
4	105	100	96	93	103	98	95	92	97	94	91	95	92	90	93	91	89	88	88	88	88																
5	102	96	92	89	100	95	91	89	94	90	88	92	89	87	91	88	87	85	85	85	85																
6	99	93	89	86	98	92	88	86	91	87	85	90	87	84	88	86	84	83	83	83	83																
7	96	90	86	83	95	89	85	83	88	85	82	87	84	82	86	84	82	81	81	81	81																
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78	78	78	78																
9	91	85	81	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76	76	76	76																
10	89	82	78	76	88	82	78	76	81	78	76	81	78	75	80	77	75	74	74	74	74																

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

	0°
0°	489238
5°	394616
10°	296601
15°	197138
20°	105744
25°	26757
30°	6352
35°	2078
40°	853
45°	384
50°	173
55°	86
60°	99
65°	117
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	280.1	33.3
10°-20°	417.5	49.6
20°-30°	130.4	15.5
30°-40°	10.7	1.3
40°-50°	1.8	0.2
50°-60°	0.4	0.0
60°-70°	0.2	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°	828.0	98.4
0°-40°	838.7	99.7
0°-60°	840.9	100.0
0°-90°	841.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	841.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3966	
5°	3187	280
15°	1544	417
25°	197	130
35°	14	11
45°	2	2
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3966.4
1°	3887.9
2°	3698.4
3°	3499.6
4°	3335.6
5°	3187.1
6°	3048.4
7°	2899.1
8°	2729.7
9°	2554.0
10°	2368.1
11°	2190.3
12°	2023.1
13°	1861.7
14°	1702.1
15°	1543.8
17.5°	1151.1
20°	805.6
22.5°	522.0
25°	196.6
27.5°	78.5
30°	44.6
32.5°	23.6
35°	13.8
37.5°	8.5
40°	5.3
42.5°	3.1
45°	2.2
47.5°	1.3
50°	0.9
52.5°	0.4
55°	0.4
57.5°	0.4
60°	0.4
62.5°	0.4
65°	0.4
67.5°	0.0
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)