

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: P170542

Luminaire Tested: **LDA4A28830D010TE LAR25NF 4LAL1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P170542  
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: LDA4A28830D010TE LAR25NF 4LAL1  
Description: PORTFOLIO 4" Lensed Adjustable, Self-flange Trim Ring, 25° Narrow Flood Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2810.5 lumens  
Efficiency: N/A  
Efficacy: 63.2 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

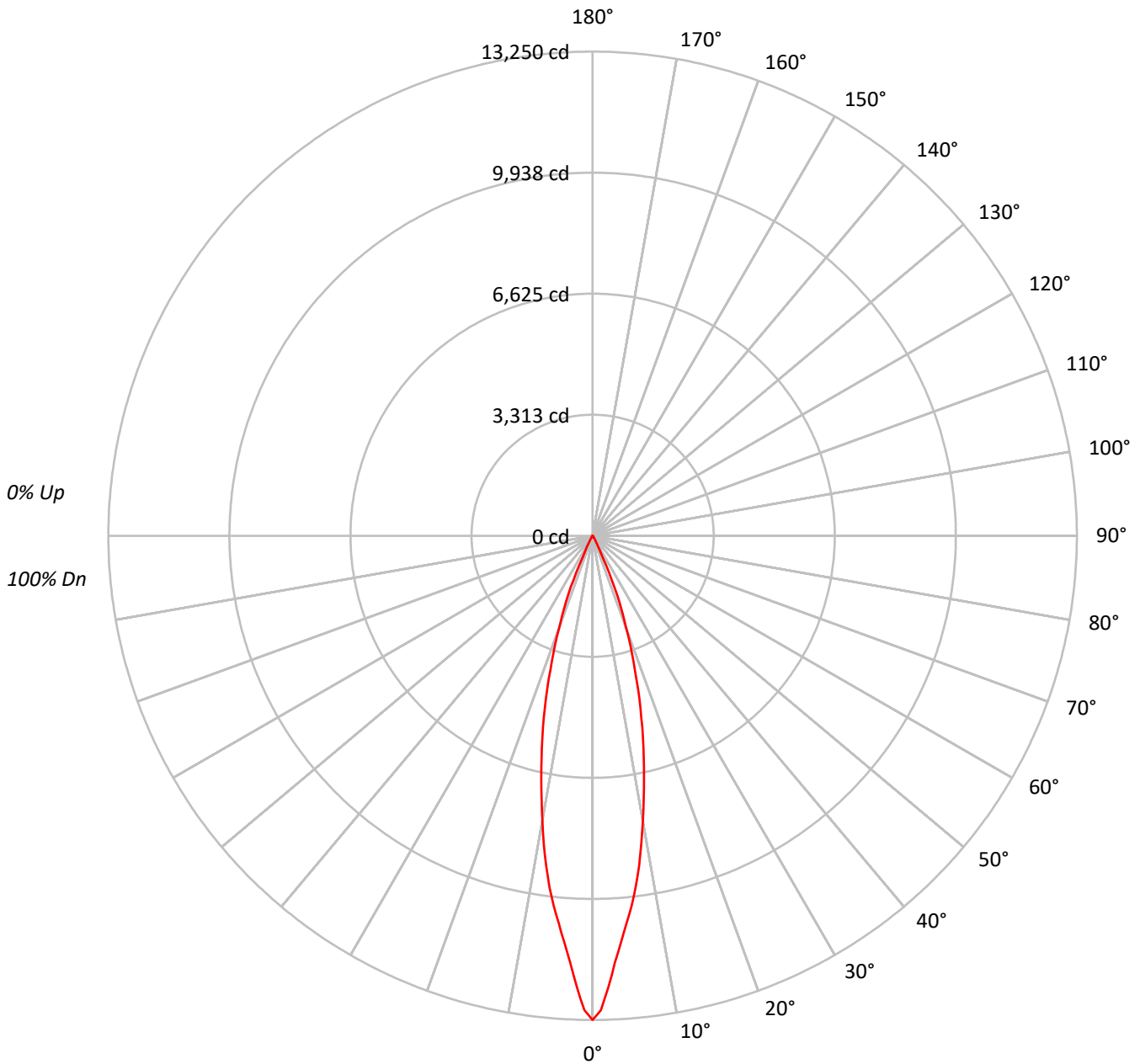
Input Watts (W): 44.49  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P170542

CATALOG NUMBER: LDA4A28830D010TE LAR25NF 4LAL1

### Luminous Intensity Polar Plot





TEST NUMBER: P170542

CATALOG NUMBER: LDA4A28830D010TE LAR25NF 4LAL1

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

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

	0°
0°	1634391
5°	1318290
10°	990878
15°	658596
20°	353251
25°	89388
30°	21207
35°	6957
40°	2882
45°	1291
50°	576
55°	323
60°	370
65°	438
70°	0
75°	0
80°	0
85°	0



TEST NUMBER: P170542

CATALOG NUMBER: LDA4A28830D010TE LAR25NF 4LAL1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	935.9	33.3
10°-20°	1394.6	49.6
20°-30°	435.7	15.5
30°-40°	35.7	1.3
40°-50°	6.2	0.2
50°-60°	1.5	0.1
60°-70°	0.9	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°	2766.1	98.4
0°-40°	2801.9	99.7
0°-60°	2809.6	100.0
0°-90°	2810.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2810.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	13250	
5°	10647	936
15°	5158	1395
25°	657	436
35°	46	36
45°	7	6
55°	2	2
65°	2	1
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P170542

CATALOG NUMBER: LDA4A28830D010TE LAR25NF 4LAL1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	13250.5
1°	12988.4
2°	12355.4
3°	11691.2
4°	11143.1
5°	10647.1
6°	10184.0
7°	9685.0
8°	9119.1
9°	8532.3
10°	7911.3
11°	7317.0
12°	6758.5
13°	6219.4
14°	5686.2
15°	5157.5
17.5°	3845.4
20°	2691.2
22.5°	1744.0
25°	656.8
27.5°	262.1
30°	148.9
32.5°	78.9
35°	46.2
37.5°	28.3
40°	17.9
42.5°	10.4
45°	7.4
47.5°	4.5
50°	3.0
52.5°	1.5
55°	1.5
57.5°	1.5
60°	1.5
62.5°	1.5
65°	1.5
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



TEST NUMBER: P170542

CATALOG NUMBER: LDA4A28830D010TE LAR25NF 4LAL1

**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







85°		0.0
87.5°		0.0



(END OF REPORT)