

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: P170507

Luminaire Tested: **LDA4A13935D010TE LAR15SP 4LAL1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P170507  
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: LDA4A13935D010TE LAR15SP 4LAL1  
Description: PORTFOLIO 4" Lensed Adjustable, Self-flange Trim Ring, 15° Spot  
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: 1157.3 lumens  
Efficiency: N/A  
Efficacy: 52.0 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

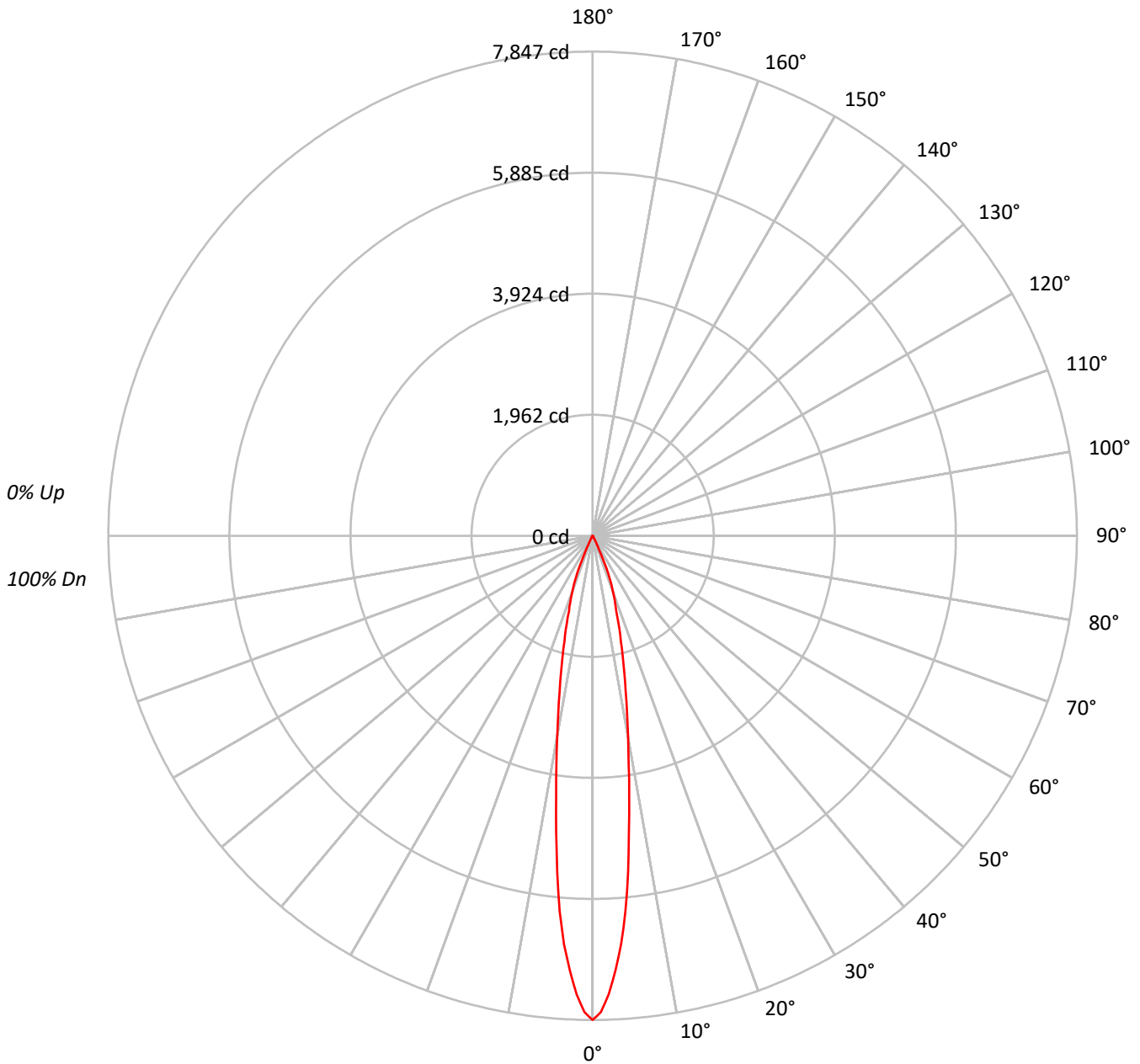
Input Watts (W): 22.27  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P170507

CATALOG NUMBER: LDA4A13935D010TE LAR15SP 4LAL1

### Luminous Intensity Polar Plot





TEST NUMBER: P170507

CATALOG NUMBER: LDA4A13935D010TE LAR15SP 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	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97			97																
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95			95																
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92			92																
4	106	101	97	94	104	100	96	94	98	95	93	96	94	92	94	92	91	90			90																
5	103	97	94	91	102	97	93	90	95	92	90	94	91	89	92	90	88	87			87																
6	100	95	91	88	99	94	90	88	93	89	87	91	89	87	90	88	86	85			85																
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83			83																
8	95	89	86	83	95	89	85	83	88	85	83	87	84	82	86	84	82	81			81																
9	93	87	83	81	92	87	83	81	86	83	81	85	82	80	85	82	80	79			79																
10	91	85	81	79	90	85	81	79	84	81	79	83	81	79	83	80	78	78			78																

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

	0°
0°	967918
5°	756508
10°	413132
15°	225653
20°	127009
25°	32241
30°	6124
35°	2198
40°	1063
45°	576
50°	134
55°	151
60°	173
65°	204
70°	0
75°	0
80°	0
85°	0



TEST NUMBER: P170507

CATALOG NUMBER: LDA4A13935D010TE LAR15SP 4LAL1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	483.0	41.7
10°-20°	502.0	43.4
20°-30°	157.5	13.6
30°-40°	11.1	1.0
40°-50°	2.6	0.2
50°-60°	0.6	0.1
60°-70°	0.6	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°	1142.4	98.7
0°-40°	1153.5	99.7
0°-60°	1156.7	99.9
0°-90°	1157.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1157.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7847	
5°	6110	483
15°	1767	502
25°	237	157
35°	15	11
45°	3	3
55°	1	1
65°	1	1
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P170507

CATALOG NUMBER: LDA4A13935D010TE LAR15SP 4LAL1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	7847.2
1°	7722.1
2°	7436.8
3°	7057.0
4°	6636.7
5°	6109.9
6°	5486.5
7°	4834.6
8°	4248.2
9°	3737.9
10°	3298.5
11°	2914.0
12°	2576.5
13°	2278.0
14°	2009.3
15°	1767.1
17.5°	1276.0
20°	967.6
22.5°	658.5
25°	236.9
27.5°	79.4
30°	43.0
32.5°	23.8
35°	14.6
37.5°	9.9
40°	6.6
42.5°	4.6
45°	3.3
47.5°	2.0
50°	0.7
52.5°	0.7
55°	0.7
57.5°	0.7
60°	0.7
62.5°	0.7
65°	0.7
67.5°	0.7
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0



TEST NUMBER: P170507

CATALOG NUMBER: LDA4A13935D010TE LAR15SP 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)