

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: P170500

Luminaire Tested: **LDA4A09940D010TE LAR15SP 4LAL1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P170500  
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: LDA4A09940D010TE LAR15SP 4LAL1  
Description: PORTFOLIO 4" Lensed Adjustable, Self-flange Trim Ring, 15° Spot  
Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 837.3 lumens  
Efficiency: N/A  
Efficacy: 60.5 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

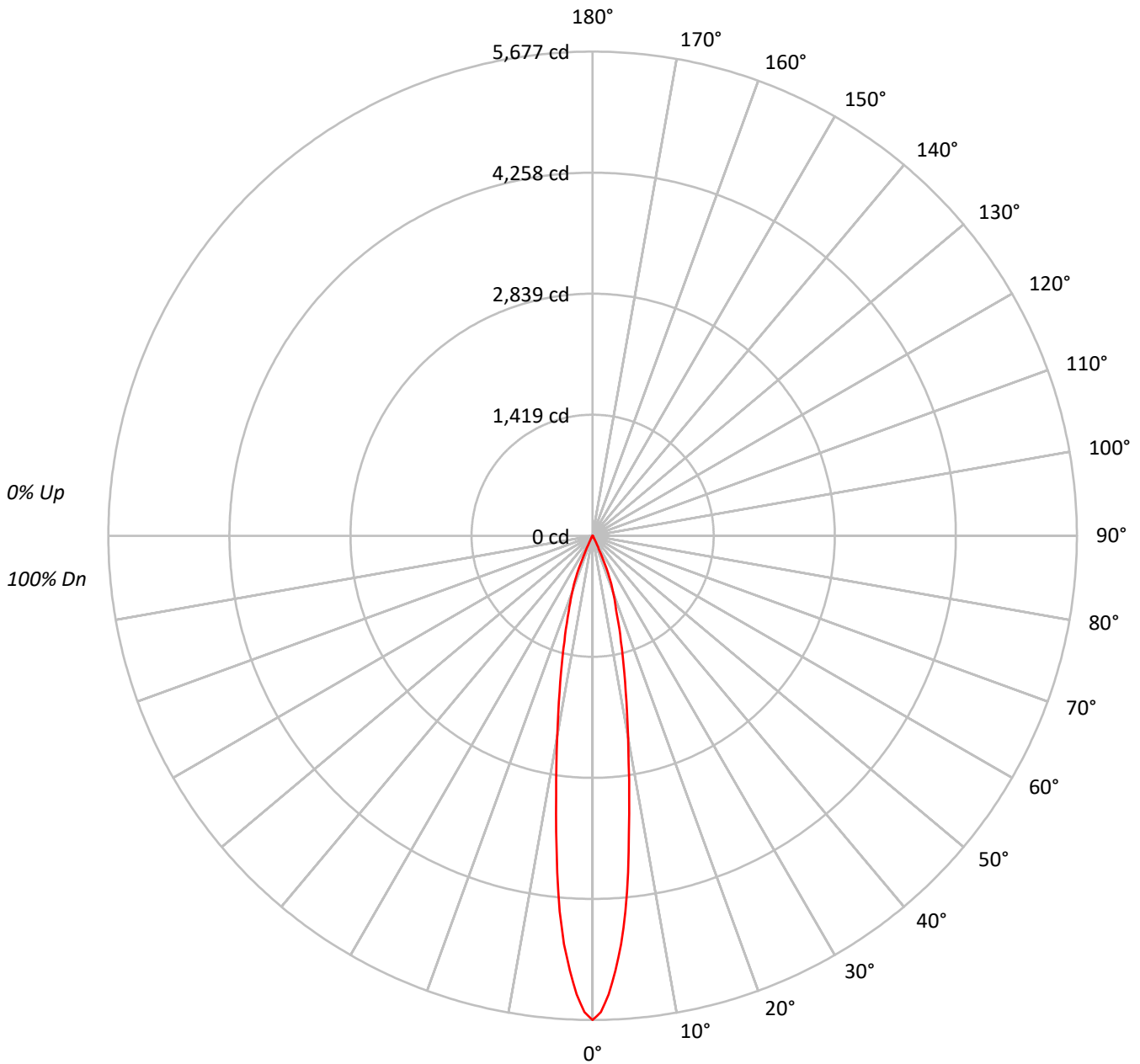
Input Watts (W): 13.84  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	700270
5°	547320
10°	298893
15°	163248
20°	91883
25°	23327
30°	4429
35°	1581
40°	773
45°	419
50°	96
55°	108
60°	123
65°	146
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	349.4	41.7
10°-20°	363.2	43.4
20°-30°	113.9	13.6
30°-40°	8.0	1.0
40°-50°	1.9	0.2
50°-60°	0.4	0.1
60°-70°	0.4	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°	826.5	98.7
0°-40°	834.5	99.7
0°-60°	836.8	99.9
0°-90°	837.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	837.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5677	
5°	4420	349
15°	1278	363
25°	171	114
35°	10	8
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°	5677.3
1°	5586.8
2°	5380.4
3°	5105.6
4°	4801.5
5°	4420.4
6°	3969.4
7°	3497.7
8°	3073.5
9°	2704.3
10°	2386.4
11°	2108.2
12°	1864.0
13°	1648.1
14°	1453.7
15°	1278.4
17.5°	923.2
20°	700.0
22.5°	476.4
25°	171.4
27.5°	57.5
30°	31.1
32.5°	17.2
35°	10.5
37.5°	7.2
40°	4.8
42.5°	3.4
45°	2.4
47.5°	1.4
50°	0.5
52.5°	0.5
55°	0.5
57.5°	0.5
60°	0.5
62.5°	0.5
65°	0.5
67.5°	0.5
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)