

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: P170497

Luminaire Tested: **LDA4A09927D010TE LAR15SP 4LAL1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P170497  
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: LDA4A09927D010TE LAR15SP 4LAL1  
Description: PORTFOLIO 4" Lensed Adjustable, Self-flange Trim Ring, 15° Spot  
Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 671.3 lumens  
Efficiency: N/A  
Efficacy: 48.5 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

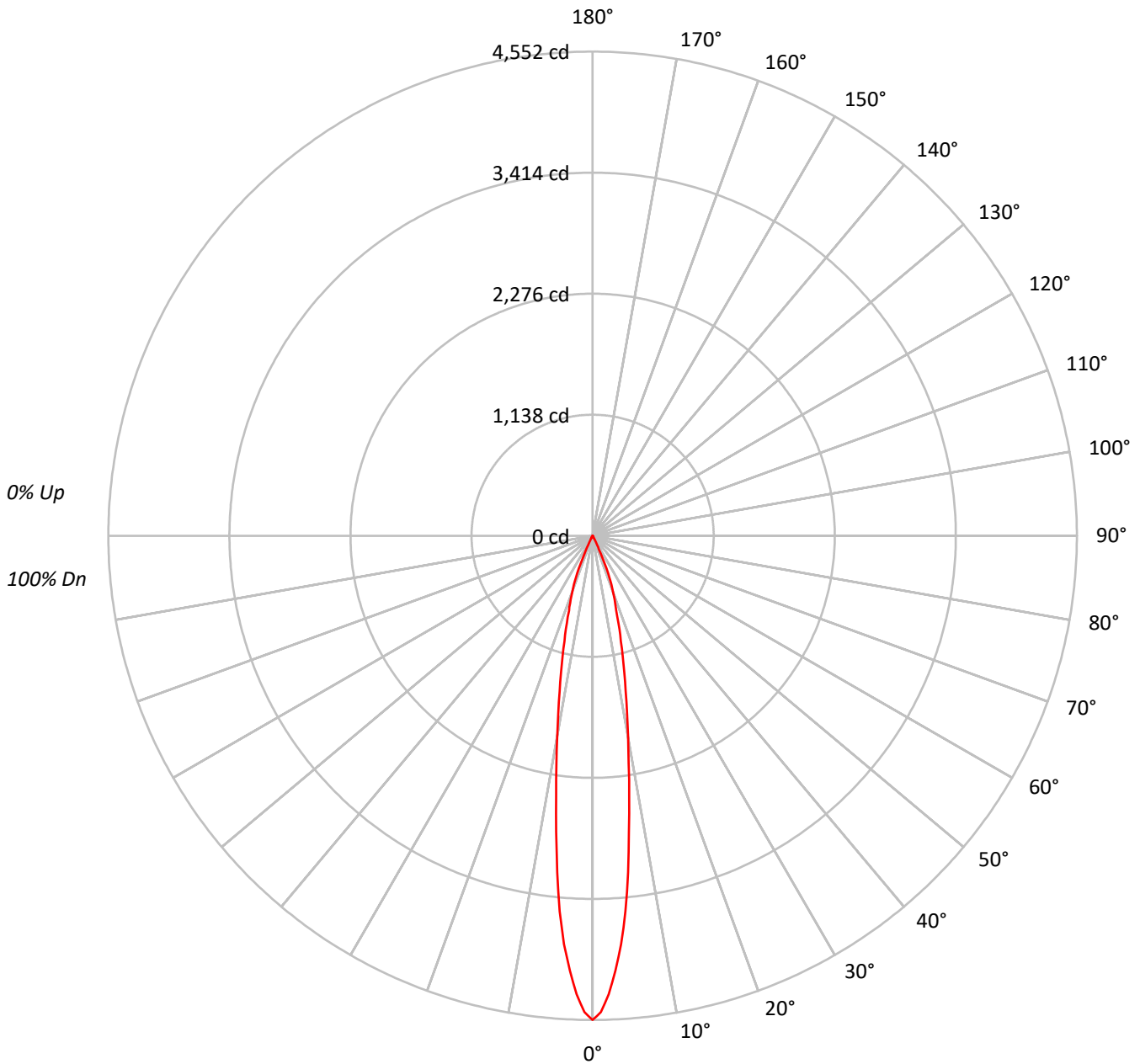
Input Watts (W): 13.84  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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°	561445
5°	438819
10°	239638
15°	130889
20°	73664
25°	18700
30°	3561
35°	1265
40°	612
45°	331
50°	77
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	41.7
10°-20°	291.2	43.4
20°-30°	91.3	13.6
30°-40°	6.4	1.0
40°-50°	1.5	0.2
50°-60°	0.4	0.1
60°-70°	0.3	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°	662.7	98.7
0°-40°	669.1	99.7
0°-60°	670.9	99.9
0°-90°	671.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	671.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4552	
5°	3544	280
15°	1025	291
25°	137	91
35°	8	6
45°	2	1
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4551.8
1°	4479.3
2°	4313.8
3°	4093.4
4°	3849.7
5°	3544.1
6°	3182.5
7°	2804.3
8°	2464.2
9°	2168.2
10°	1913.3
11°	1690.3
12°	1494.5
13°	1321.4
14°	1165.5
15°	1025.0
17.5°	740.1
20°	561.2
22.5°	382.0
25°	137.4
27.5°	46.1
30°	25.0
32.5°	13.8
35°	8.4
37.5°	5.8
40°	3.8
42.5°	2.7
45°	1.9
47.5°	1.2
50°	0.4
52.5°	0.4
55°	0.4
57.5°	0.4
60°	0.4
62.5°	0.4
65°	0.4
67.5°	0.4
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)