

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: P170504

Luminaire Tested: **LDA4A13840D010TE LAR15SP 4LAL1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P170504
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: LDA4A13840D010TE LAR15SP 4LAL1
Description: PORTFOLIO 4" Lensed Adjustable, Self-flange Trim Ring, 15° Spot
Optic, at 0° tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1447.8 lumens
Efficiency: N/A
Efficacy: 65.0 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

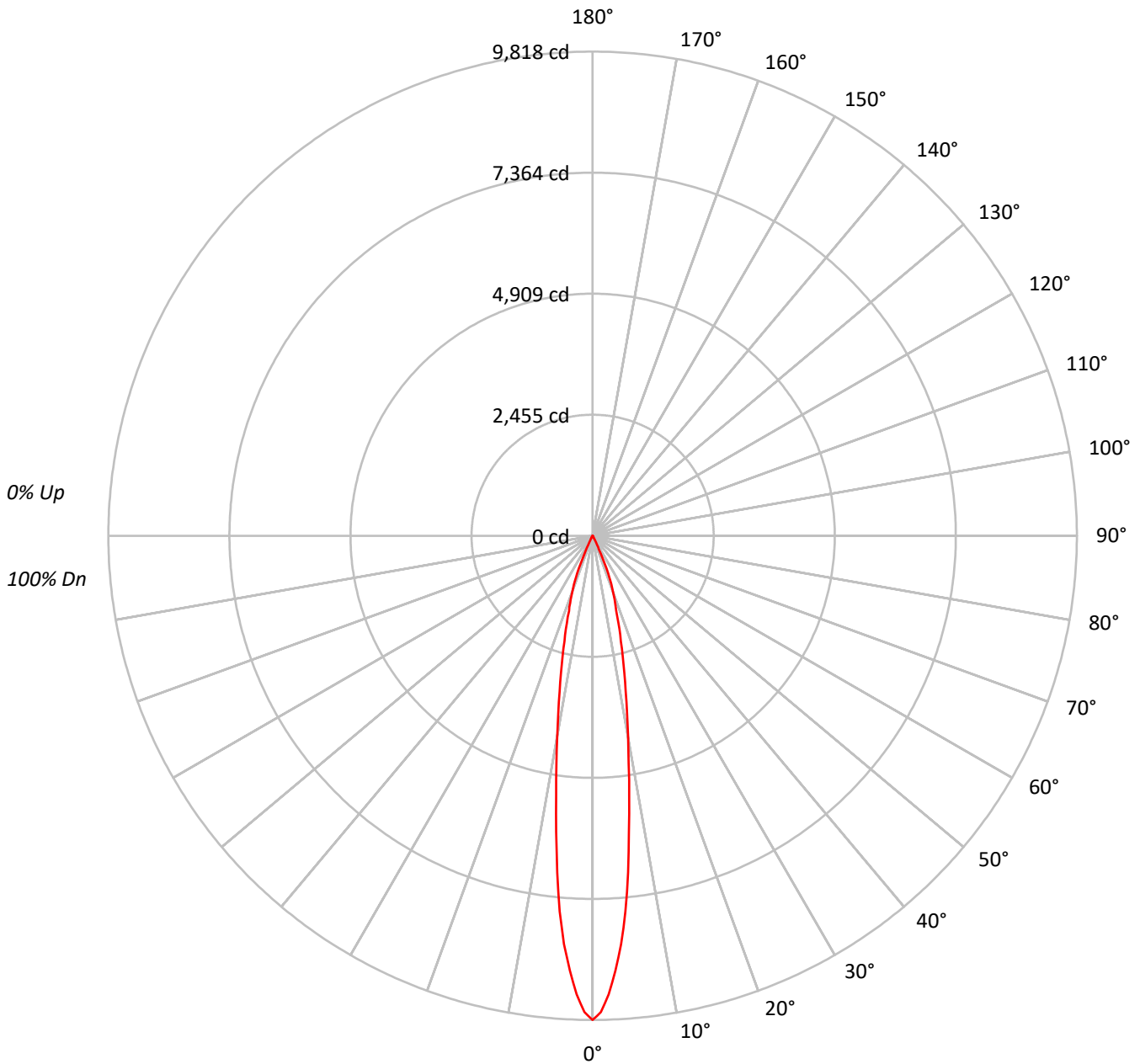
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	97
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97	97	96	95
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95	95	93	92
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92	92	91	90
4	106	101	97	94	104	100	96	94	98	95	93	96	94	92	94	92	91	90	88	87	87
5	103	97	94	91	102	97	93	90	95	92	90	94	91	89	92	90	88	87	86	85	85
6	100	95	91	88	99	94	90	88	93	89	87	91	89	87	90	88	86	85	84	83	83
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	82	81	81
8	95	89	86	83	95	89	85	83	88	85	83	87	84	82	86	84	82	81	80	79	79
9	93	87	83	81	92	87	83	81	86	83	81	85	82	80	85	82	80	79	78	78	78
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°	1211032
5°	946530
10°	516900
15°	282325
20°	158905
25°	40339
30°	7663
35°	2741
40°	1336
45°	715
50°	154
55°	172
60°	197
65°	233
70°	0
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.3	41.7
10°-20°	628.1	43.4
20°-30°	197.0	13.6
30°-40°	13.9	1.0
40°-50°	3.2	0.2
50°-60°	0.7	0.0
60°-70°	0.7	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°	1429.3	98.7
0°-40°	1443.2	99.7
0°-60°	1447.1	100.0
0°-90°	1447.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1447.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	9818	
5°	7645	604
15°	2211	628
25°	296	197
35°	18	14
45°	4	3
55°	1	1
65°	1	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	9818.2
1°	9661.7
2°	9304.8
3°	8829.5
4°	8303.7
5°	7644.6
6°	6864.6
7°	6048.9
8°	5315.3
9°	4676.8
10°	4127.0
11°	3645.9
12°	3223.6
13°	2850.2
14°	2514.0
15°	2210.9
17.5°	1596.5
20°	1210.6
22.5°	823.9
25°	296.4
27.5°	99.4
30°	53.8
32.5°	29.8
35°	18.2
37.5°	12.4
40°	8.3
42.5°	5.8
45°	4.1
47.5°	2.5
50°	0.8
52.5°	0.8
55°	0.8
57.5°	0.8
60°	0.8
62.5°	0.8
65°	0.8
67.5°	0.8
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)