

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: P281177

Luminaire Tested: **LDA2B109035D010 EU2B10SP159035 2LBALD1GPH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281177  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B109035D010 EU2B10SP159035 2LBALD1GPH  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, GPH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 906.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

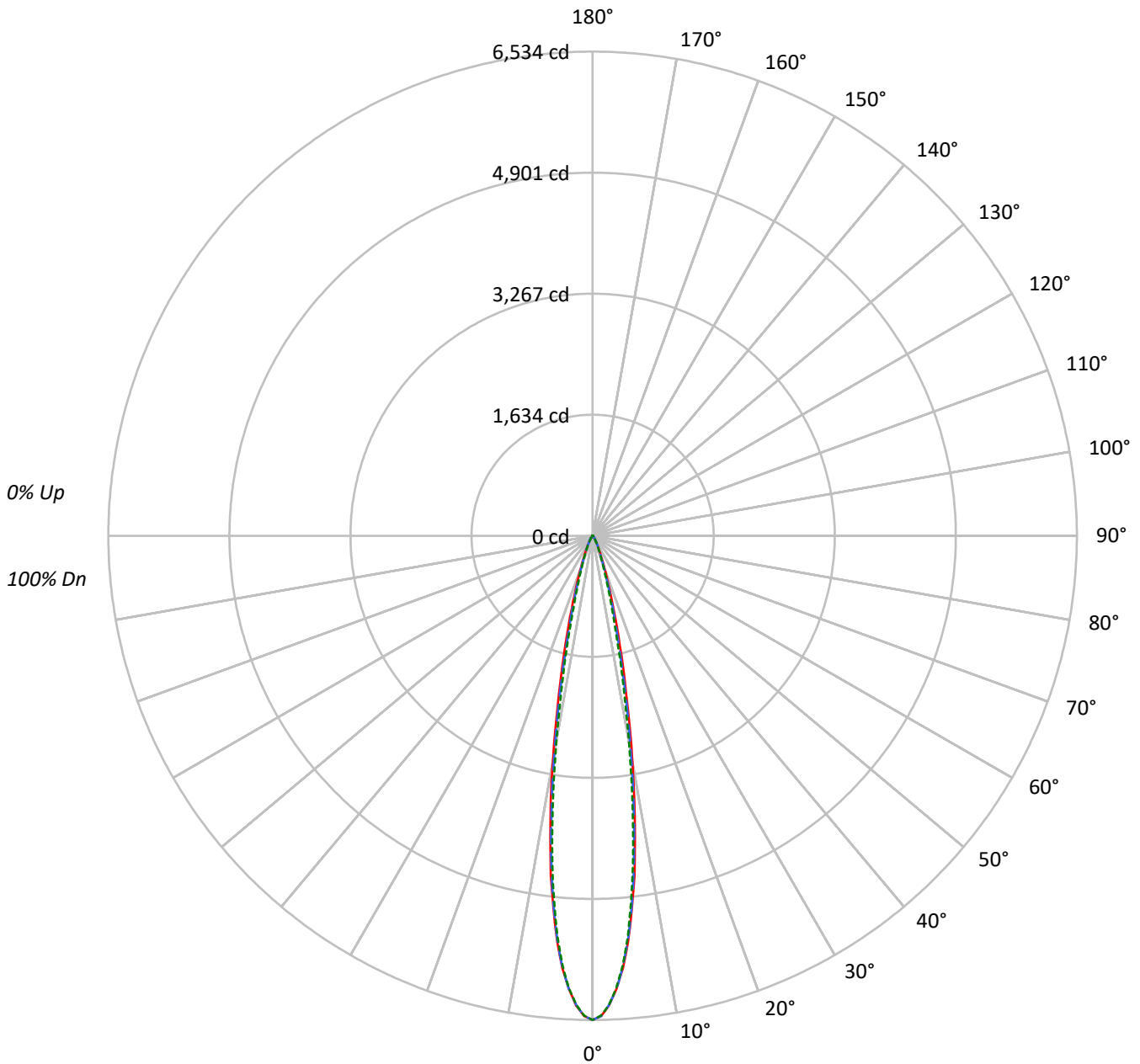
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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									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	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																											
1	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97																											
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95																											
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92																											
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90																											
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88																											
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86																											
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84																											
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82																											
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80																											
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79																											

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

	0°	45°	90°
0°	3223626	3223626	3223626
5°	2723657	2709146	2689138
10°	1550260	1482028	1406631
15°	641981	568635	500908
20°	244189	213843	195782
25°	107893	103647	92161
30°	49904	55146	43923
35°	26260	30957	24573
40°	11528	13267	7664
45°	4465	3489	5093
50°	2149	2456	3531
55°	0	1548	0
60°	0	0	888
65°	0	0	0
70°	0	721	0
75°	0	0	0
80°	2557	0	0
85°	26039	23209	10189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	436.9	48.2
10°-20°	334.0	36.9
20°-30°	92.9	10.3
30°-40°	30.2	3.3
40°-50°	6.7	0.7
50°-60°	2.0	0.2
60°-70°	1.2	0.1
70°-80°	0.7	0.1
80°-90°	1.5	0.2
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°	863.7	95.3
0°-40°	893.9	98.7
0°-60°	902.6	99.6
0°-90°	906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	906.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6534	6534	6534	6534	6534	
5°	5500	5459	5470	5429	5430	445
15°	1257	1213	1113	1028	981	367
25°	198	200	190	179	169	99
35°	44	47	51	39	41	29
45°	6	9	5	5	7	6
55°	0	3	2	1	0	2
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	5	2	4	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6534.0	6534.0	6534.0	6534.0	6534.0
1°	6484.0	6459.7	6483.1	6469.3	6477.1
2°	6343.2	6312.9	6337.2	6318.0	6334.0
3°	6123.9	6100.5	6122.1	6097.8	6110.6
4°	5849.2	5815.2	5836.8	5804.2	5812.0
5°	5499.6	5459.2	5470.3	5429.4	5429.9
6°	5059.2	5031.3	5037.7	4973.9	4969.3
7°	4628.5	4562.4	4555.6	4482.6	4468.4
8°	4105.6	4045.5	4025.7	3940.0	3909.7
9°	3604.2	3529.4	3489.0	3389.5	3354.2
10°	3094.5	3018.8	2958.3	2845.9	2807.8
11°	2623.0	2554.6	2479.4	2359.2	2322.0
12°	2185.3	2131.7	2049.1	1933.1	1894.1
13°	1828.0	1766.1	1677.5	1569.7	1536.3
14°	1518.4	1451.9	1363.3	1271.1	1206.0
15°	1256.9	1213.3	1113.3	1027.5	980.7
16°	1027.1	989.9	903.7	829.4	796.3
17°	842.2	812.4	739.0	680.7	653.2
18°	695.0	657.8	600.0	561.9	540.4
19°	563.8	534.9	492.7	463.3	441.7
20°	465.1	441.3	407.3	381.2	372.9
22.5°	300.5	296.3	274.3	260.1	253.2
25°	198.2	200.5	190.4	179.4	169.3
26°	169.3	170.6	161.5	155.0	142.2
27°	145.0	145.4	145.4	133.5	121.1
28°	118.4	123.4	118.8	113.3	101.4
29°	101.4	107.8	105.5	100.0	88.5
30°	87.6	92.2	96.8	88.1	77.1
32.5°	61.5	65.6	70.6	66.1	56.9
35°	43.6	47.2	51.4	39.0	40.8
37.5°	29.8	36.2	34.9	31.7	27.1
40°	17.9	18.8	20.6	22.0	11.9
42.5°	12.8	15.1	13.8	15.6	5.5
45°	6.4	9.2	5.0	5.0	7.3
47.5°	4.6	7.8	2.8	2.8	0.9
50°	2.8	6.0	3.2	1.4	4.6
52.5°	4.6	5.5	3.7	4.1	0.9
55°	0.0	2.8	1.8	0.9	0.0
57.5°	1.8	3.2	1.8	0.9	1.8
60°	0.0	0.0	0.0	0.5	0.9
62.5°	0.0	0.9	0.0	1.4	1.8
65°	0.0	1.8	0.0	0.0	0.0
67.5°	2.8	3.2	1.8	3.7	5.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.9	0.0
77.5°	0.0	4.6	1.4	1.4	1.8
80°	0.9	0.0	0.0	0.5	0.0
82.5°	0.0	3.7	0.5	1.8	2.8
85°	4.6	2.3	4.1	2.3	1.8
87.5°	0.0	0.5	0.9	0.5	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







70°	0.0	0.0	0.5	0.5	0.0
72.5°	0.9	0.0	0.0	0.0	0.0



(END OF REPORT)