

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: P281109

Luminaire Tested: **LDA2B108027D010 EU2B10SP158027 2LBALD1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281109  
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: LDA2B108027D010 EU2B10SP158027 2LBALD1B  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, B  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1061.4 lumens  
Efficiency: N/A  
Efficacy: 106.1 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

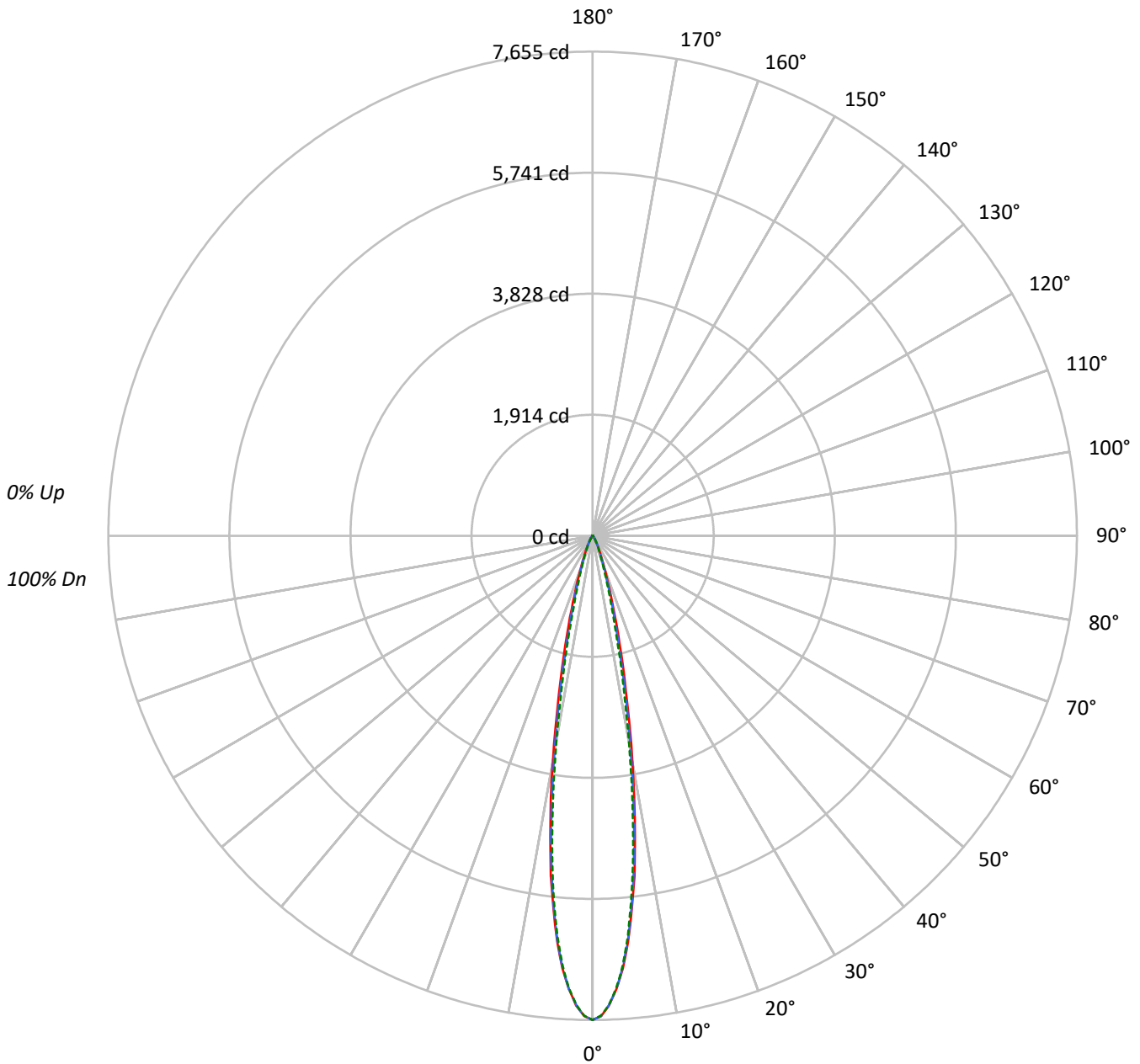
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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																			
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	89	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°	3776783	3776783	3776783
5°	3191021	3173984	3150559
10°	1816276	1736321	1648000
15°	752154	666243	586870
20°	286138	250542	229383
25°	126401	121393	107947
30°	58507	64602	51443
35°	30777	36257	28789
40°	13525	15586	9017
45°	5233	4117	6000
50°	2456	2917	4145
55°	0	1806	0
60°	0	0	1085
65°	0	0	0
70°	0	721	0
75°	0	0	0
80°	3125	0	0
85°	30568	27171	11887



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	511.8	48.2
10°-20°	391.3	36.9
20°-30°	108.8	10.3
30°-40°	35.4	3.3
40°-50°	7.8	0.7
50°-60°	2.4	0.2
60°-70°	1.4	0.1
70°-80°	0.8	0.1
80°-90°	1.7	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°	1012.0	95.3
0°-40°	1047.3	98.7
0°-60°	1057.5	99.6
0°-90°	1061.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1061.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7655	7655	7655	7655	7655	
5°	6443	6396	6409	6361	6362	521
15°	1473	1422	1304	1204	1149	430
25°	232	235	223	210	198	117
35°	51	55	60	46	48	34
45°	8	11	6	6	9	8
55°	0	3	2	1	0	2
65°	0	2	0	0	0	2
75°	0	0	0	1	0	0
85°	5	3	5	3	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7655.2	7655.2	7655.2	7655.2	7655.2
1°	7596.6	7568.2	7595.6	7579.4	7588.6
2°	7431.7	7396.2	7424.7	7402.1	7420.9
3°	7174.8	7147.4	7172.6	7144.1	7159.2
4°	6852.8	6813.1	6838.3	6800.2	6809.3
5°	6443.3	6396.0	6408.9	6361.1	6361.6
6°	5927.4	5894.6	5902.1	5827.4	5822.0
7°	5422.7	5345.3	5337.3	5251.8	5235.2
8°	4810.0	4739.6	4716.5	4616.0	4580.6
9°	4222.6	4135.0	4087.7	3971.1	3929.7
10°	3625.5	3536.9	3465.9	3334.2	3289.6
11°	3073.1	2993.0	2904.8	2764.0	2720.5
12°	2560.3	2497.5	2400.7	2264.8	2219.1
13°	2141.7	2069.1	1965.4	1839.1	1799.9
14°	1778.9	1701.0	1597.3	1489.2	1412.9
15°	1472.6	1421.5	1304.4	1203.9	1149.0
16°	1203.3	1159.8	1058.7	971.7	933.0
17°	986.7	951.8	865.8	797.6	765.3
18°	814.2	770.7	703.0	658.4	633.1
19°	660.5	626.6	577.2	542.8	517.6
20°	545.0	517.0	477.2	446.6	436.9
22.5°	352.0	347.2	321.4	304.7	296.7
25°	232.2	234.9	223.0	210.1	198.3
26°	198.3	199.9	189.2	181.7	166.6
27°	169.8	170.4	170.4	156.4	141.9
28°	138.7	144.6	139.2	132.7	118.8
29°	118.8	126.3	123.6	117.2	103.7
30°	102.7	108.0	113.4	103.2	90.3
32.5°	72.0	76.9	82.8	77.4	66.6
35°	51.1	55.4	60.2	45.7	47.8
37.5°	34.9	42.5	40.8	37.1	31.7
40°	21.0	22.0	24.2	25.8	14.0
42.5°	15.0	17.7	16.1	18.3	6.4
45°	7.5	10.7	5.9	5.9	8.6
47.5°	5.4	9.1	3.2	3.2	1.1
50°	3.2	7.0	3.8	1.6	5.4
52.5°	5.4	6.4	4.3	4.8	1.1
55°	0.0	3.2	2.1	1.1	0.0
57.5°	2.1	3.8	2.1	1.1	2.1
60°	0.0	0.0	0.0	0.5	1.1
62.5°	0.0	1.1	0.0	1.6	2.1
65°	0.0	2.1	0.0	0.0	0.0
67.5°	3.2	3.8	2.1	4.3	6.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.1	0.0
77.5°	0.0	5.4	1.6	1.6	2.1
80°	1.1	0.0	0.0	0.5	0.0
82.5°	0.0	4.3	0.5	2.1	3.2
85°	5.4	2.7	4.8	2.7	2.1
87.5°	0.0	0.5	1.1	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°	1.1	0.0	0.0	0.0	0.0



(END OF REPORT)