

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: P281280

Luminaire Tested: **LDA2B159030D010 EU2B15SP159030 2LBALD1WHH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281280  
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: LDA2B159030D010 EU2B15SP159030 2LBALD1WHH  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, WHH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1161.2 lumens  
Efficiency: N/A  
Efficacy: 82.4 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

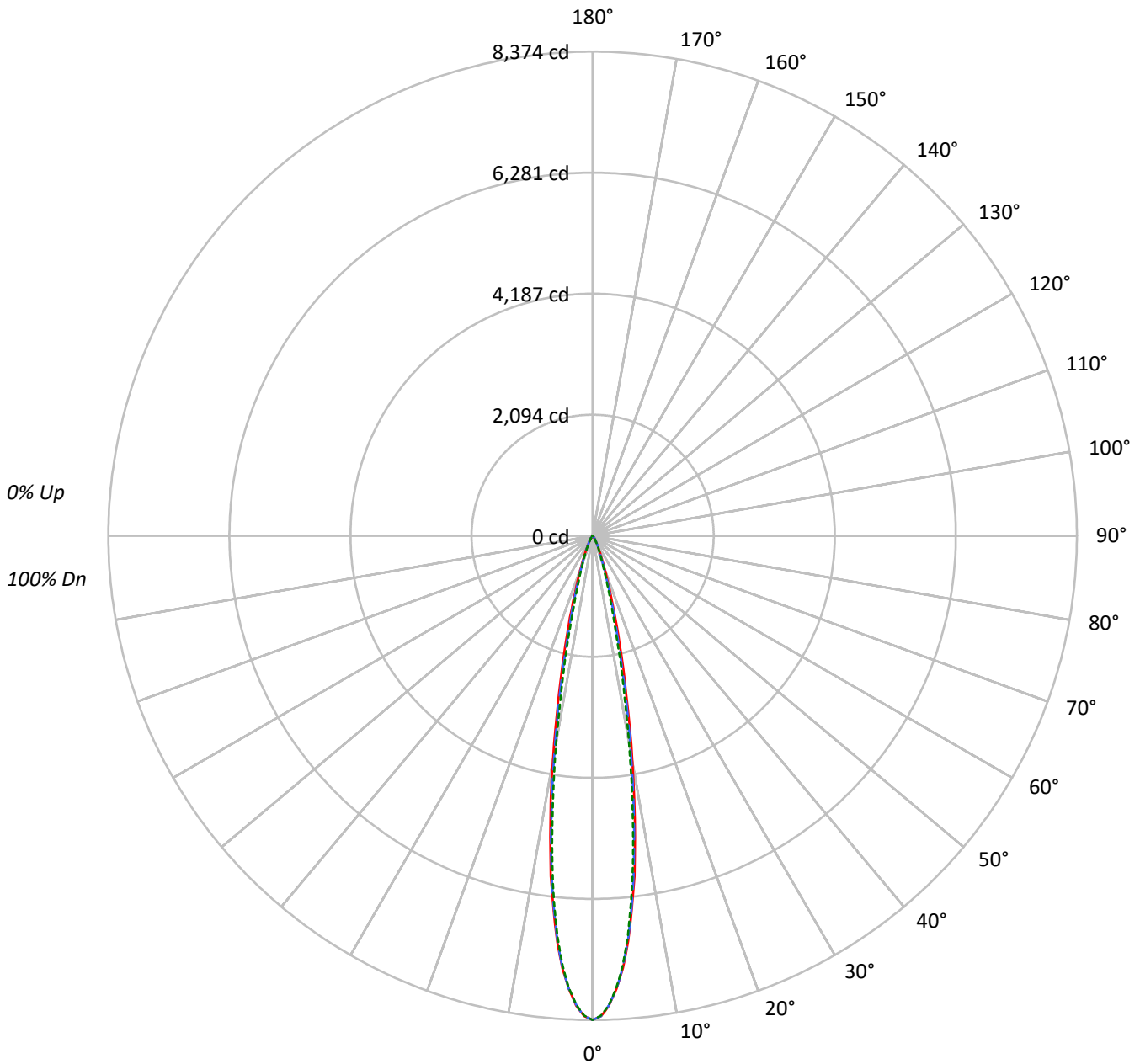
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4131658	4131658	4131658
5°	3490843	3472222	3446617
10°	1986958	1899488	1802850
15°	822792	728812	642032
20°	313020	274115	250962
25°	138269	132825	118073
30°	63976	70698	56285
35°	33668	39630	31499
40°	14748	17067	9854
45°	5721	4535	6559
50°	2686	3147	4528
55°	0	2064	0
60°	0	0	1184
65°	0	0	0
70°	0	865	0
75°	0	0	0
80°	3409	0	0
85°	33398	30002	13586



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	559.9	48.2
10°-20°	428.1	36.9
20°-30°	119.0	10.3
30°-40°	38.7	3.3
40°-50°	8.5	0.7
50°-60°	2.6	0.2
60°-70°	1.5	0.1
70°-80°	0.9	0.1
80°-90°	1.9	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°	1107.1	95.3
0°-40°	1145.8	98.7
0°-60°	1156.9	99.6
0°-90°	1161.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1161.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8374	8374	8374	8374	8374	
5°	7049	6997	7011	6959	6959	570
15°	1611	1555	1427	1317	1257	470
25°	254	257	244	230	217	127
35°	56	61	66	50	52	37
45°	8	12	6	6	9	8
55°	0	4	2	1	0	2
65°	0	2	0	0	0	2
75°	0	0	0	1	0	0
85°	6	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°	8374.5	8374.5	8374.5	8374.5	8374.5
1°	8310.4	8279.3	8309.3	8291.6	8301.6
2°	8129.9	8091.1	8122.3	8097.6	8118.2
3°	7848.9	7818.9	7846.6	7815.4	7831.9
4°	7496.7	7453.2	7480.9	7439.1	7449.1
5°	7048.7	6997.0	7011.1	6958.8	6959.4
6°	6484.3	6448.4	6456.7	6375.0	6369.1
7°	5932.2	5847.6	5838.8	5745.3	5727.1
8°	5262.0	5185.0	5159.7	5049.8	5011.0
9°	4619.4	4523.6	4471.8	4344.2	4299.0
10°	3966.2	3869.2	3791.6	3647.5	3598.7
11°	3361.8	3274.2	3177.8	3023.7	2976.1
12°	2800.9	2732.1	2626.3	2477.5	2427.6
13°	2342.9	2263.5	2150.1	2011.9	1969.0
14°	1946.1	1860.8	1747.3	1629.2	1545.7
15°	1610.9	1555.1	1426.9	1317.0	1257.0
16°	1316.4	1268.8	1158.2	1063.0	1020.7
17°	1079.4	1041.2	947.2	872.5	837.2
18°	890.7	843.1	769.0	720.2	692.6
19°	722.6	685.5	631.4	593.8	566.2
20°	596.2	565.6	522.1	488.6	478.0
22.5°	385.1	379.8	351.6	333.4	324.5
25°	254.0	256.9	244.0	229.9	216.9
26°	216.9	218.7	207.0	198.7	182.3
27°	185.8	186.4	186.4	171.1	155.2
28°	151.7	158.2	152.3	145.2	129.9
29°	129.9	138.2	135.2	128.2	113.5
30°	112.3	118.2	124.1	112.9	98.8
32.5°	78.8	84.1	90.5	84.7	72.9
35°	55.9	60.6	65.8	50.0	52.3
37.5°	38.2	46.4	44.7	40.6	34.7
40°	22.9	24.1	26.5	28.2	15.3
42.5°	16.5	19.4	17.6	20.0	7.1
45°	8.2	11.8	6.5	6.5	9.4
47.5°	5.9	10.0	3.5	3.5	1.2
50°	3.5	7.6	4.1	1.8	5.9
52.5°	5.9	7.1	4.7	5.3	1.2
55°	0.0	3.5	2.4	1.2	0.0
57.5°	2.4	4.1	2.4	1.2	2.4
60°	0.0	0.0	0.0	0.6	1.2
62.5°	0.0	1.2	0.0	1.8	2.4
65°	0.0	2.4	0.0	0.0	0.0
67.5°	3.5	4.1	2.4	4.7	7.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.2	0.0
77.5°	0.0	5.9	1.8	1.8	2.4
80°	1.2	0.0	0.0	0.6	0.0
82.5°	0.0	4.7	0.6	2.4	3.5
85°	5.9	2.9	5.3	2.9	2.4
87.5°	0.0	0.6	1.2	0.6	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	0.6	0.6	0.0
72.5°	1.2	0.0	0.0	0.0	0.0



(END OF REPORT)