

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: P281551

Luminaire Tested: **LDA2B159035D010 EU2B15SP159035 2LBASQC1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B159035D010 EU2B15SP159035 2LBASQC1MB  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1205.5 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

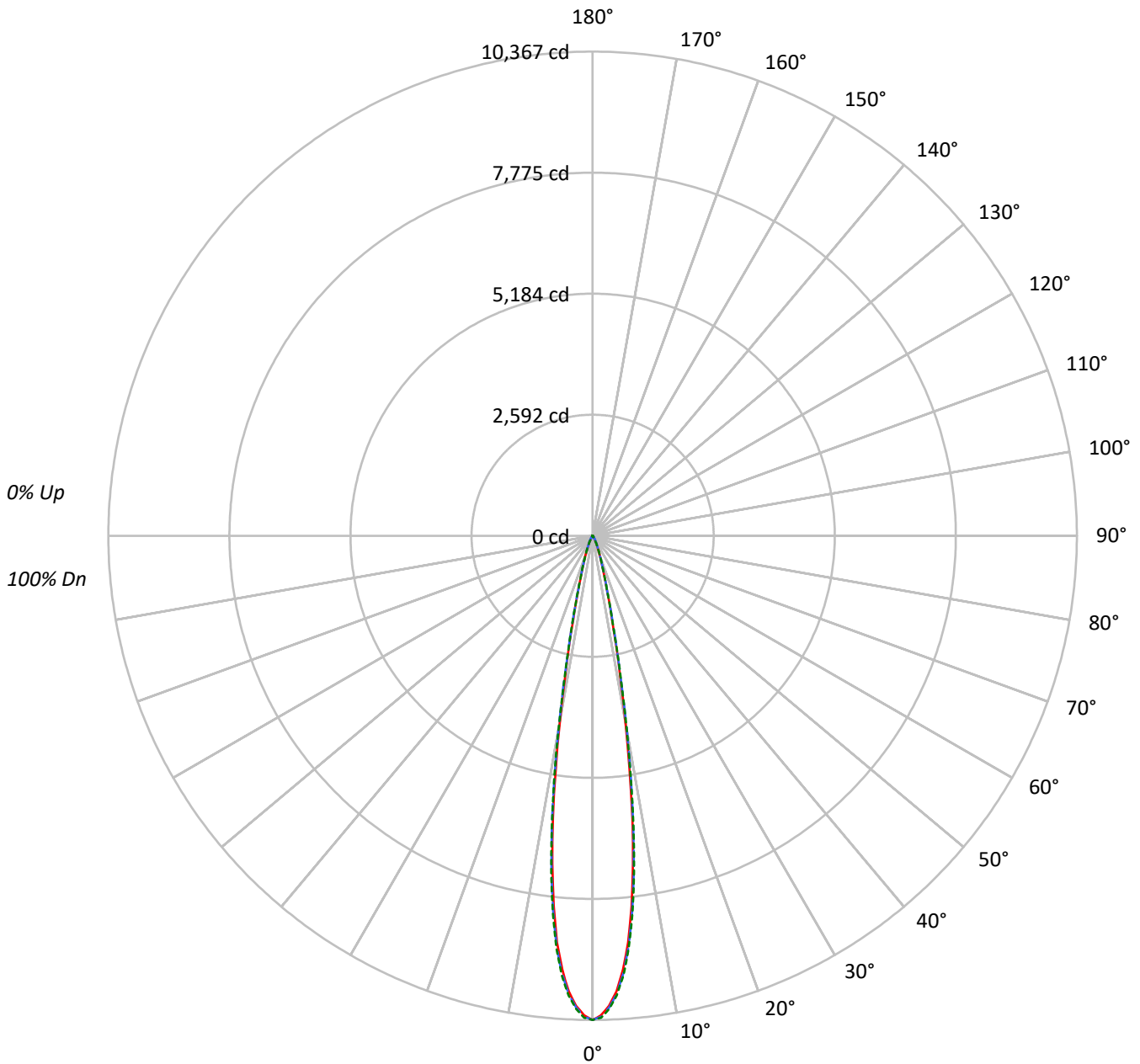
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281551

CATALOG NUMBER: LDA2B159035D010 EU2B15SP159035 2LBASQC1MB

### Luminous Intensity Polar Plot





TEST NUMBER: P281551

CATALOG NUMBER: LDA2B159035D010 EU2B15SP159035 2LBASQC1MB

**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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	98	99	98																
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	96	97	96																
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	94	95	94																
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	92	93	92																
5	105	100	96	94	103	99	96	93	97	95	93	96	94	92	95	93	91	90	90	91	90																
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	89	90	89																
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	87	88	87																
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	86	86	87	86																
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	84	85	84																
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	83	84	83																

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

	0°	45°	90°
0°	5114484	5114484	5114484
5°	4328800	4374065	4393083
10°	2024230	2100929	2104987
15°	592897	601478	601222
20°	238099	238414	238676
25°	106151	116929	108710
30°	45119	62039	41131
35°	20658	28729	19273
40°	6762	11271	5990
45°	0	4047	0
50°	0	0	0
55°	1978	1032	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	3409	0	0
85°	6793	0	0



TEST NUMBER: P281551

CATALOG NUMBER: LDA2B159035D010 EU2B15SP159035 2LBASQC1MB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	685.1	56.8
10°-20°	388.3	32.2
20°-30°	101.4	8.4
30°-40°	26.1	2.2
40°-50°	2.6	0.2
50°-60°	0.8	0.1
60°-70°	0.1	0.0
70°-80°	0.9	0.1
80°-90°	0.2	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°	1174.8	97.5
0°-40°	1200.9	99.6
0°-60°	1204.4	99.9
0°-90°	1205.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1205.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10367	10367	10367	10367	10367	
5°	8741	8819	8832	8776	8870	676
15°	1161	1176	1178	1164	1177	381
25°	195	211	215	205	200	97
35°	34	37	48	33	32	23
45°	0	2	6	1	0	2
55°	2	3	1	1	0	2
65°	0	0	0	0	0	1
75°	0	1	0	0	0	2
85°	1	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P281551

CATALOG NUMBER: LDA2B159035D010 EU2B15SP159035 2LBASQC1MB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10366.6	10366.6	10366.6	10366.6	10366.6
1°	10269.3	10310.1	10297.9	10283.3	10324.1
2°	10071.4	10111.0	10107.5	10088.3	10136.0
3°	9766.4	9821.7	9821.7	9793.2	9852.5
4°	9311.7	9396.1	9404.3	9364.1	9438.1
5°	8740.7	8818.7	8832.1	8776.2	8870.5
6°	7967.0	8073.6	8103.8	8039.2	8135.8
7°	7078.1	7189.9	7235.9	7163.7	7272.0
8°	6119.3	6199.7	6255.0	6172.3	6282.3
9°	5046.5	5162.3	5213.0	5132.6	5239.7
10°	4040.6	4147.1	4193.7	4174.4	4201.8
11°	3138.3	3232.6	3264.0	3237.8	3250.6
12°	2457.2	2495.0	2515.4	2497.9	2506.6
13°	1865.7	1916.4	1925.7	1918.1	1922.2
14°	1457.1	1481.5	1492.0	1488.5	1490.3
15°	1160.8	1176.5	1177.6	1164.3	1177.1
16°	934.9	947.1	952.4	938.4	955.3
17°	766.1	776.0	781.8	767.8	774.8
18°	630.4	638.0	646.2	633.9	644.4
19°	529.2	533.8	534.4	530.9	533.8
20°	453.5	451.2	454.1	447.7	454.6
22.5°	298.6	304.5	311.4	303.9	306.8
25°	195.0	211.3	214.8	204.9	199.7
26°	160.7	181.6	190.9	175.2	158.3
27°	133.3	148.4	160.7	139.7	126.3
28°	117.0	129.8	142.0	122.2	106.5
29°	97.8	110.6	131.6	108.9	99.0
30°	79.2	88.5	108.9	82.7	72.2
32.5°	44.8	52.4	70.4	48.9	40.2
35°	34.3	36.7	47.7	32.6	32.0
37.5°	29.7	26.8	37.3	26.8	21.5
40°	10.5	15.7	17.5	11.6	9.3
42.5°	4.7	4.7	7.6	2.3	2.3
45°	0.0	2.3	5.8	0.6	0.0
47.5°	0.0	0.0	1.2	0.0	0.0
50°	0.0	1.2	0.0	0.0	0.0
52.5°	1.2	0.0	0.0	0.0	0.0
55°	2.3	2.9	1.2	0.6	0.0
57.5°	3.5	2.9	1.2	1.2	1.2
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	1.2	0.6	0.0	0.0	0.0



TEST NUMBER: P281551

CATALOG NUMBER: LDA2B159035D010 EU2B15SP159035 2LBASQC1MB

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.6	0.0	0.0	0.0
77.5°	5.8	1.2	1.7	1.2	2.3
80°	1.2	0.0	0.0	0.0	0.0
82.5°	2.3	0.0	0.0	0.0	0.0
85°	1.2	0.0	0.0	0.0	0.0
87.5°	0.0	0.6	0.0	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093







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







70°	0.0	0.0	0.0	0.0	0.0
72.5°	2.3	1.7	0.0	0.0	2.3



(END OF REPORT)