

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: P282546

Luminaire Tested: **LDA2B158040D010 EU2B15SP158040 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282546  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B158040D010 EU2B15SP158040 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1515.1 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

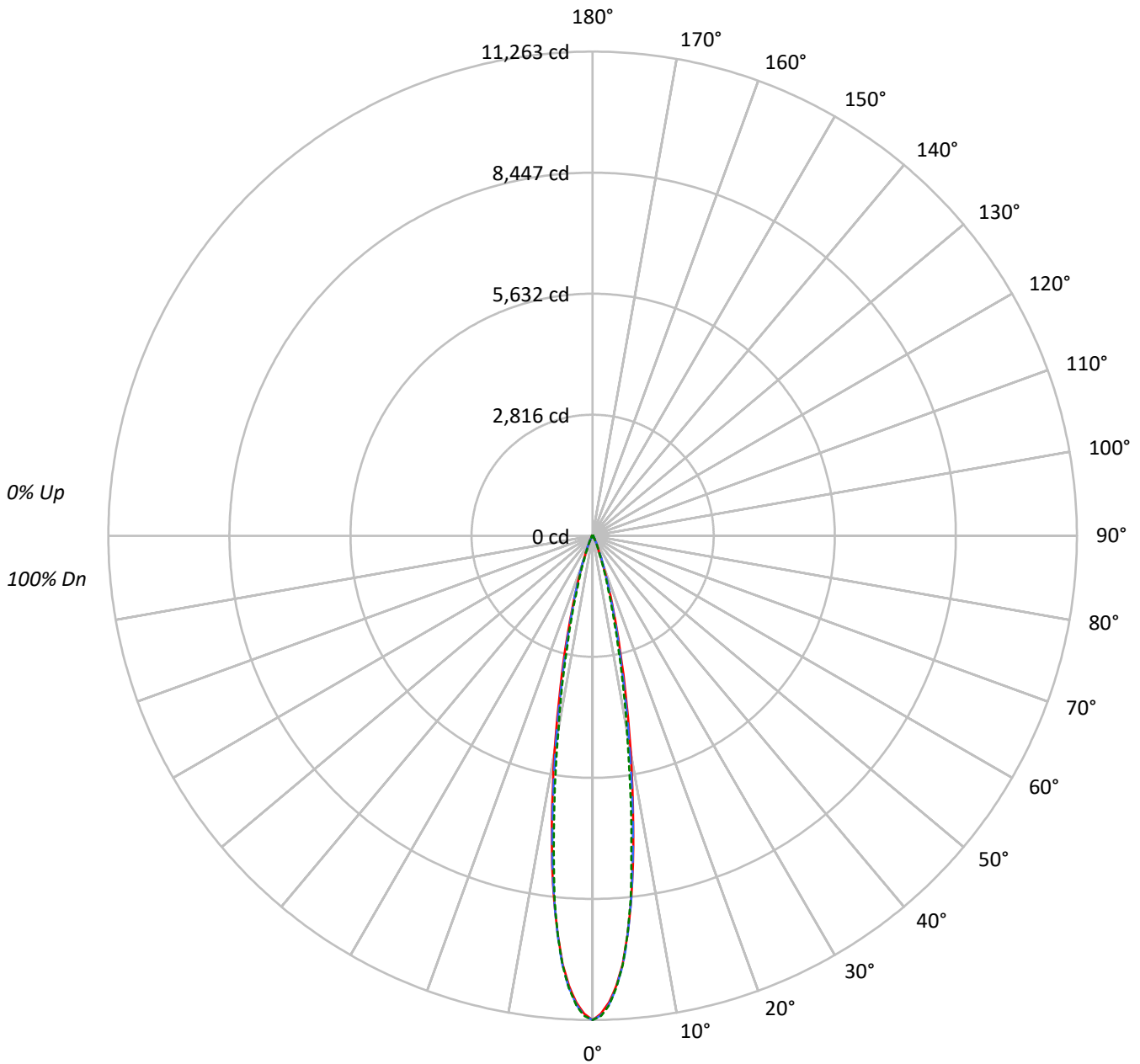
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					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	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			
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	98	98	98	98	96		
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	98	98	98	96	94		
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	94	94	94	94	92	91		
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	94	94	92	90	89		
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	92	92	90	88	87		
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	90	90	88	86	85		
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	88	88	86	84	83		
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	87	87	84	82	81		
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	85	85	82	81	80		
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	84	84	81	79	78		

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

	0°	45°	90°
0°	5556832	5556832	5556832
5°	4609951	4624908	4607376
10°	2551454	2459275	2290948
15°	1032870	987872	877087
20°	346044	366887	297059
25°	131682	132117	125095
30°	59076	58051	56114
35°	28608	25477	20297
40°	18935	23894	16681
45°	4814	7814	7256
50°	1305	1996	2686
55°	11870	10408	16343
60°	17070	13617	22201
65°	8055	21130	20196
70°	7501	6203	7501
75°	3241	8197	23065
80°	39208	53982	49152
85°	0	24341	29436



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	737.7	48.7
10°-20°	558.8	36.9
20°-30°	127.0	8.4
30°-40°	37.5	2.5
40°-50°	12.5	0.8
50°-60°	11.0	0.7
60°-70°	13.2	0.9
70°-80°	8.5	0.6
80°-90°	8.8	0.6
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°	1423.5	94.0
0°-40°	1461.0	96.4
0°-60°	1484.5	98.0
0°-90°	1515.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1515.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11263	11263	11263	11263	11263	
5°	9308	9382	9339	9217	9303	746
15°	2022	2050	1934	1753	1717	588
25°	242	260	243	240	230	127
35°	48	53	42	49	34	37
45°	7	20	11	20	10	10
55°	14	20	12	18	19	6
65°	7	15	18	17	17	7
75°	2	6	4	8	12	4
85°	0	0	4	4	5	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11263.2	11263.2	11263.2	11263.2	11263.2
1°	11118.0	11163.0	11158.6	11140.5	11172.5
2°	10862.4	10916.8	10911.6	10871.9	10928.9
3°	10487.5	10535.8	10528.1	10471.1	10533.2
4°	9986.5	10041.7	10020.1	9934.6	10014.1
5°	9308.4	9381.8	9338.6	9216.8	9303.2
6°	8556.9	8619.1	8550.8	8389.3	8473.9
7°	7715.5	7754.4	7664.5	7457.2	7400.2
8°	6797.3	6848.3	6723.0	6481.1	6418.9
9°	5919.7	5936.9	5784.9	5527.5	5448.9
10°	5093.0	5080.0	4909.0	4648.1	4573.0
11°	4309.5	4292.3	4111.7	3870.7	3894.9
12°	3596.9	3630.6	3420.7	3202.1	3206.4
13°	3011.2	3014.7	2834.1	2626.0	2613.9
14°	2465.3	2497.3	2342.6	2156.1	2121.5
15°	2022.2	2049.8	1934.1	1752.7	1717.2
16°	1618.8	1653.3	1570.4	1406.3	1359.6
17°	1303.5	1347.5	1293.1	1155.8	1102.2
18°	1042.6	1076.3	1063.3	921.7	877.6
19°	823.2	869.9	873.3	755.0	702.3
20°	659.1	701.4	698.8	607.3	565.8
22.5°	378.3	400.8	401.7	358.5	334.3
25°	241.9	260.0	242.7	240.1	229.8
26°	209.9	224.6	205.6	205.6	196.1
27°	170.2	183.1	165.0	172.8	159.8
28°	143.4	157.2	141.7	139.9	138.2
29°	119.2	132.2	112.3	120.9	115.7
30°	103.7	113.2	101.9	114.9	98.5
32.5°	80.3	88.1	68.2	86.4	64.8
35°	47.5	52.7	42.3	49.2	33.7
37.5°	49.2	51.0	45.8	51.0	47.5
40°	29.4	30.2	37.1	37.1	25.9
42.5°	27.6	26.8	16.4	25.9	20.7
45°	6.9	19.9	11.2	19.9	10.4
47.5°	5.2	6.9	6.9	13.8	13.8
50°	1.7	6.9	2.6	5.2	3.5
52.5°	0.0	16.4	3.5	12.1	10.4
55°	13.8	19.9	12.1	18.1	19.0
57.5°	1.7	13.8	6.9	14.7	10.4
60°	17.3	23.3	13.8	25.1	22.5
62.5°	1.7	15.5	18.1	13.8	12.1
65°	6.9	14.7	18.1	17.3	17.3
67.5°	8.6	14.7	11.2	11.2	15.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.7	6.0	4.3	7.8	12.1
77.5°	1.7	6.9	6.0	13.8	10.4
80°	13.8	15.5	19.0	25.1	17.3
82.5°	12.1	12.1	19.0	13.8	10.4
85°	0.0	0.0	4.3	4.3	5.2
87.5°	0.0	3.5	8.6	6.9	12.1
90°	0.0	0.0	0.0	0.0	0.0



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







70°	5.2	1.7	4.3	4.3	5.2
72.5°	1.7	7.8	6.9	4.3	8.6



(END OF REPORT)