

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: P282742

Luminaire Tested: **LDA2B159730D010 EU2B15NFL259730 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282742  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B159730D010 EU2B15NFL259730 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 903.5 lumens  
Efficiency: N/A  
Efficacy: 64.1 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

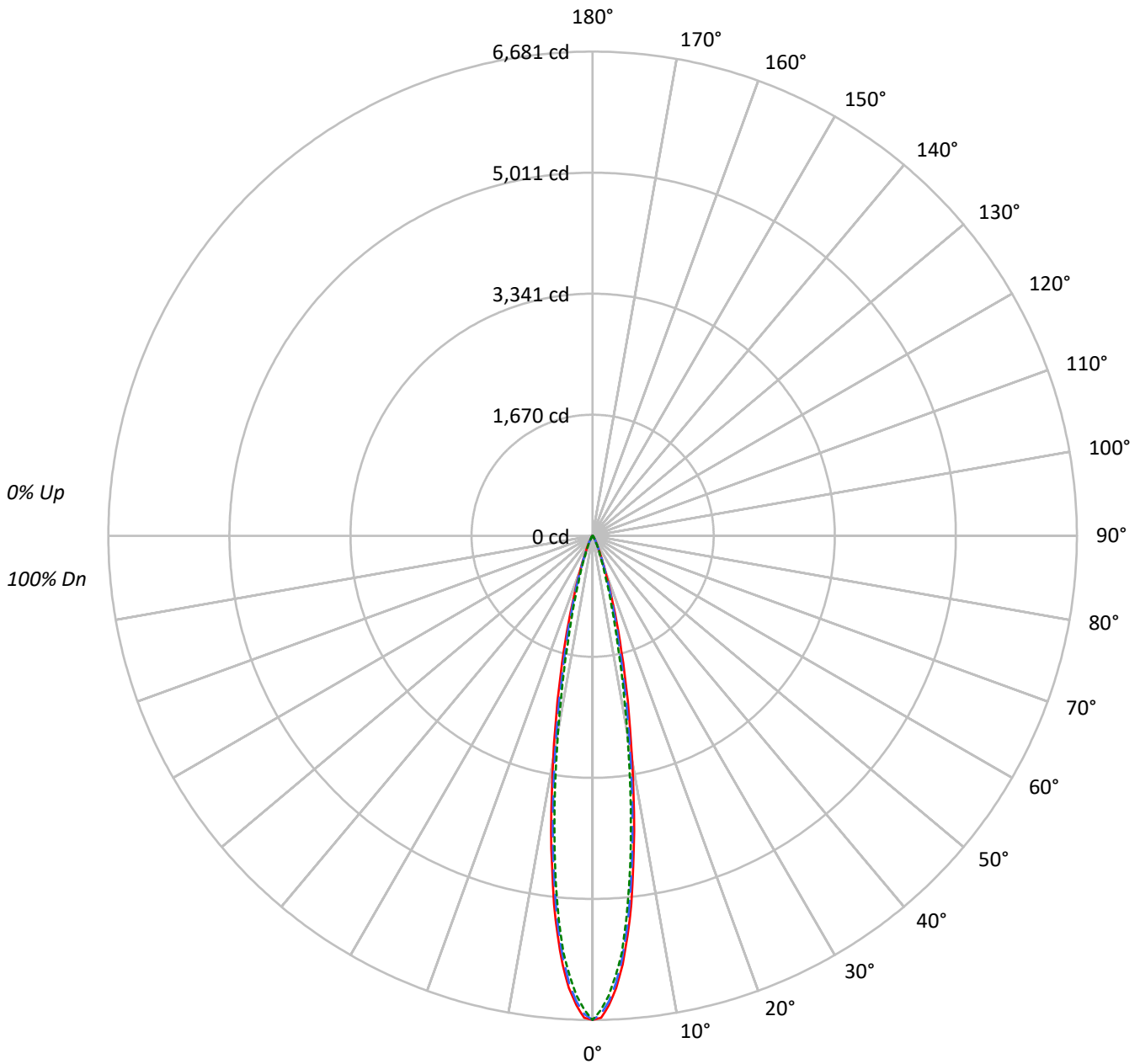
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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				100															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

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

	0°	45°	90°
0°	3296199	3296199	3296199
5°	2742773	2692506	2638177
10°	1571050	1474262	1375871
15°	698779	620580	520062
20°	253482	238361	188851
25°	97332	90909	78280
30°	41986	39023	34637
35°	19875	19875	16442
40°	9983	10305	8308
45°	5721	5372	5024
50°	3991	3531	3531
55°	3097	2236	2666
60°	2565	1480	2072
65°	1751	1167	1751
70°	1442	721	1442
75°	953	953	953
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	434.5	48.1
10°-20°	351.6	38.9
20°-30°	84.8	9.4
30°-40°	21.6	2.4
40°-50°	6.4	0.7
50°-60°	2.8	0.3
60°-70°	1.3	0.1
70°-80°	0.4	0.0
80°-90°	0.0	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°	871.0	96.4
0°-40°	892.6	98.8
0°-60°	901.8	99.8
0°-90°	903.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	903.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6681	6681	6681	6681	6681	
5°	5538	5487	5437	5389	5327	448
15°	1368	1336	1215	1094	1018	390
25°	179	180	167	152	144	92
35°	33	34	33	30	27	23
45°	8	8	8	7	7	7
55°	4	3	3	3	3	3
65°	2	2	1	1	2	2
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6681.1	6681.1	6681.1	6681.1	6681.1
1°	6651.2	6604.9	6599.2	6628.0	6543.0
2°	6481.2	6448.2	6429.1	6446.1	6349.8
3°	6247.8	6215.8	6181.3	6181.8	6074.1
4°	5929.8	5904.6	5846.4	5828.8	5766.5
5°	5538.2	5487.2	5436.7	5389.3	5327.0
6°	5105.4	5039.4	4967.3	4896.7	4832.8
7°	4596.3	4552.5	4457.2	4360.8	4306.7
8°	4117.6	4047.0	3935.7	3815.1	3769.3
9°	3602.8	3552.3	3424.5	3284.4	3238.5
10°	3136.0	3083.4	2942.8	2786.6	2746.4
11°	2698.0	2648.5	2502.2	2338.3	2295.6
12°	2327.5	2257.4	2089.5	1947.2	1905.5
13°	1958.6	1910.7	1751.4	1610.8	1529.9
14°	1644.8	1605.1	1460.8	1337.2	1251.6
15°	1368.1	1335.6	1215.0	1094.5	1018.2
16°	1122.3	1102.2	1006.9	890.4	828.1
17°	910.5	891.9	831.1	724.0	671.4
18°	735.3	732.7	682.2	589.5	542.6
19°	604.9	603.9	557.5	479.7	441.1
20°	482.8	489.5	454.0	385.9	359.7
21°	393.7	397.3	368.9	317.4	293.7
22°	320.5	323.1	304.5	262.3	249.4
23°	262.8	264.3	248.9	217.4	206.1
24°	216.4	217.4	203.5	181.4	171.6
25°	178.8	179.8	167.0	151.5	143.8
26°	148.4	149.4	138.1	127.3	119.5
27°	123.2	125.2	113.9	107.2	98.9
28°	105.1	105.6	95.3	91.2	83.5
29°	86.1	89.1	80.4	76.8	71.1
30°	73.7	75.2	68.5	66.0	60.8
32.5°	49.0	50.0	46.9	44.8	40.7
35°	33.0	33.5	33.0	29.9	27.3
37.5°	22.7	22.7	23.2	19.6	18.6
40°	15.5	15.5	16.0	13.4	12.9
42.5°	11.3	11.3	10.8	9.3	9.3
45°	8.2	8.2	7.7	7.2	7.2
47.5°	6.7	6.2	5.7	5.7	5.7
50°	5.2	5.2	4.6	4.1	4.6
52.5°	4.1	4.1	3.6	3.6	3.6
55°	3.6	3.1	2.6	2.6	3.1
57.5°	2.6	2.6	2.1	2.1	2.6
60°	2.6	2.1	1.5	2.1	2.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.5	1.0	1.0	1.0	1.0
70°	1.0	1.0	0.5	0.5	1.0
72.5°	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.0	0.0	0.5
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	2.1	1.5	1.5	1.5	1.5
65°	1.5	1.5	1.0	1.0	1.5



(END OF REPORT)