

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: P282730

Luminaire Tested: **LDA2B159035D010 EU2B15NFL259035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282730  
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: LDA2B159035D010 EU2B15NFL259035 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: 1022.0 lumens  
Efficiency: N/A  
Efficacy: 72.5 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

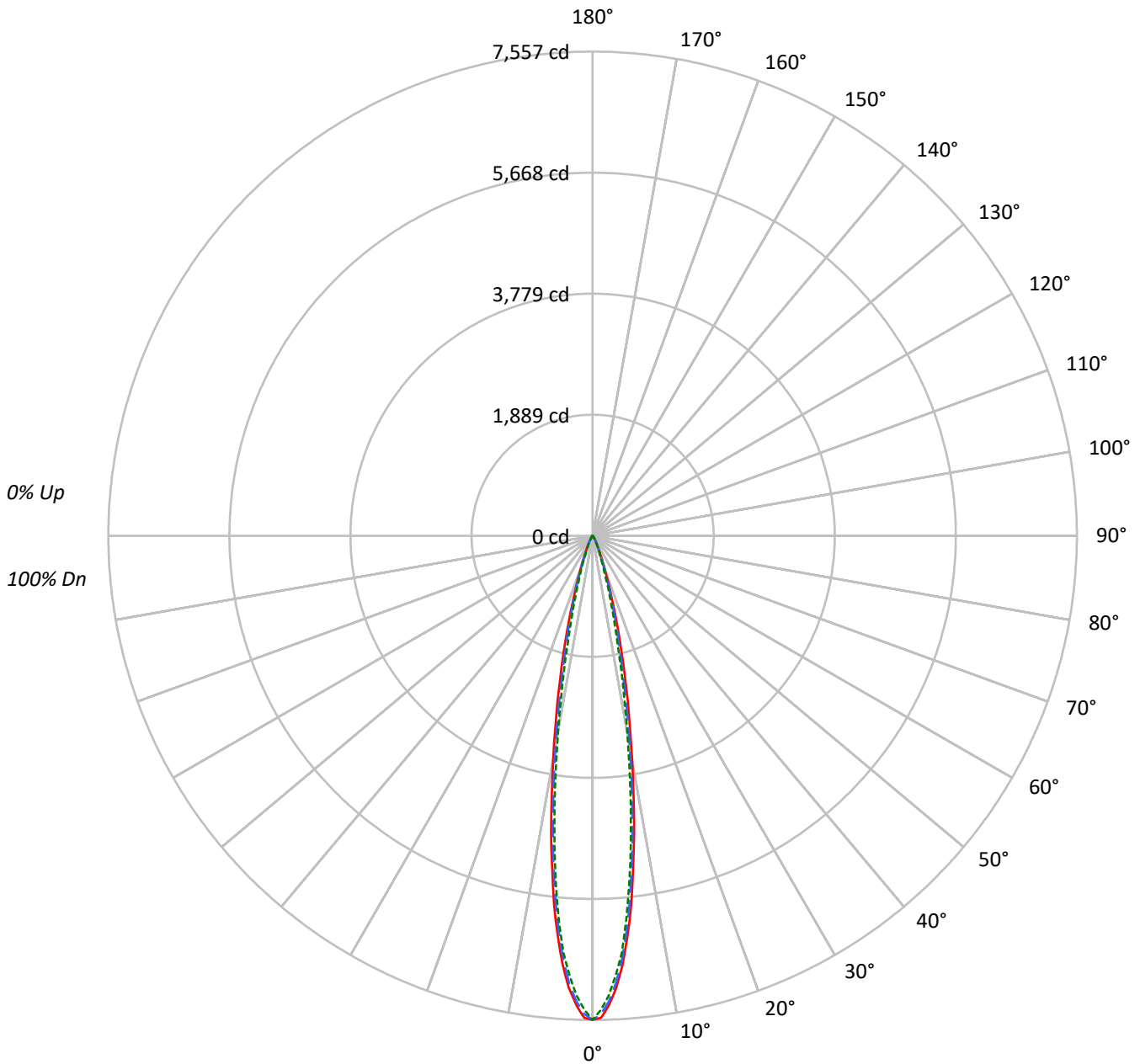
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3728138	3728138	3728138
5°	3102223	3045369	2983859
10°	1776900	1667437	1556171
15°	790308	701945	588198
20°	286716	269548	213580
25°	110071	102776	88514
30°	47455	44151	39194
35°	22465	22465	18611
40°	11271	11657	9403
45°	6489	6070	5721
50°	4452	3991	3991
55°	3527	2494	3011
60°	2861	1677	2269
65°	1985	1401	1985
70°	1731	865	1731
75°	1144	1144	1144
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	491.5	48.1
10°-20°	397.7	38.9
20°-30°	95.9	9.4
30°-40°	24.4	2.4
40°-50°	7.3	0.7
50°-60°	3.1	0.3
60°-70°	1.5	0.1
70°-80°	0.5	0.1
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°	985.1	96.4
0°-40°	1009.6	98.8
0°-60°	1019.9	99.8
0°-90°	1022.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1022.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7557	7557	7557	7557	7557	
5°	6264	6206	6149	6096	6025	507
15°	1547	1511	1374	1238	1152	441
25°	202	203	189	171	163	104
35°	37	38	37	34	31	26
45°	9	9	9	8	8	8
55°	4	4	3	3	4	4
65°	2	2	1	1	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7556.6	7556.6	7556.6	7556.6	7556.6
1°	7522.8	7470.4	7464.0	7496.6	7400.4
2°	7330.5	7293.2	7271.6	7290.9	7181.9
3°	7066.5	7030.4	6991.3	6991.9	6870.1
4°	6706.9	6678.3	6612.5	6592.7	6522.2
5°	6264.0	6206.3	6149.2	6095.5	6025.0
6°	5774.4	5699.8	5618.2	5538.4	5466.1
7°	5198.6	5149.1	5041.2	4932.3	4871.1
8°	4657.2	4577.3	4451.5	4315.1	4263.2
9°	4075.0	4017.8	3873.3	3714.8	3662.9
10°	3546.9	3487.5	3328.4	3151.8	3106.3
11°	3051.6	2995.6	2830.1	2644.8	2596.4
12°	2632.5	2553.3	2363.3	2202.4	2155.2
13°	2215.2	2161.0	1980.9	1821.8	1730.3
14°	1860.3	1815.4	1652.2	1512.4	1415.6
15°	1547.3	1510.6	1374.3	1237.9	1151.6
16°	1269.3	1246.6	1138.8	1007.1	936.6
17°	1029.8	1008.8	940.1	818.8	759.4
18°	831.7	828.7	771.6	666.7	613.7
19°	684.2	683.0	630.6	542.6	498.9
20°	546.1	553.7	513.4	436.5	406.8
21°	445.3	449.3	417.3	359.0	332.2
22°	362.5	365.4	344.4	296.6	282.1
23°	297.2	299.0	281.5	245.9	233.1
24°	244.8	245.9	230.2	205.1	194.1
25°	202.2	203.4	188.8	171.3	162.6
26°	167.8	169.0	156.2	144.0	135.2
27°	139.3	141.6	128.8	121.2	111.9
28°	118.9	119.5	107.8	103.2	94.4
29°	97.3	100.8	90.9	86.8	80.4
30°	83.3	85.1	77.5	74.6	68.8
32.5°	55.4	56.5	53.0	50.7	46.0
35°	37.3	37.9	37.3	33.8	30.9
37.5°	25.6	25.6	26.2	22.1	21.0
40°	17.5	17.5	18.1	15.2	14.6
42.5°	12.8	12.8	12.2	10.5	10.5
45°	9.3	9.3	8.7	8.2	8.2
47.5°	7.6	7.0	6.4	6.4	6.4
50°	5.8	5.8	5.2	4.7	5.2
52.5°	4.7	4.7	4.1	4.1	4.1
55°	4.1	3.5	2.9	2.9	3.5
57.5°	2.9	2.9	2.3	2.3	2.9
60°	2.9	2.3	1.7	2.3	2.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.7	1.2	1.2	1.2	1.2
70°	1.2	1.2	0.6	0.6	1.2
72.5°	0.6	0.6	0.6	0.6	0.6
75°	0.6	0.6	0.6	0.6	0.6
77.5°	0.6	0.6	0.0	0.0	0.6
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°	2.3	1.7	1.7	1.7	1.7
65°	1.7	1.7	1.2	1.2	1.7



(END OF REPORT)