

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: P282679

Luminaire Tested: **LDA2B109024D010 EU2B10NFL259024 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282679  
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: LDA2B109024D010 EU2B10NFL259024 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1000 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: 658.2 lumens  
Efficiency: N/A  
Efficacy: 65.8 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

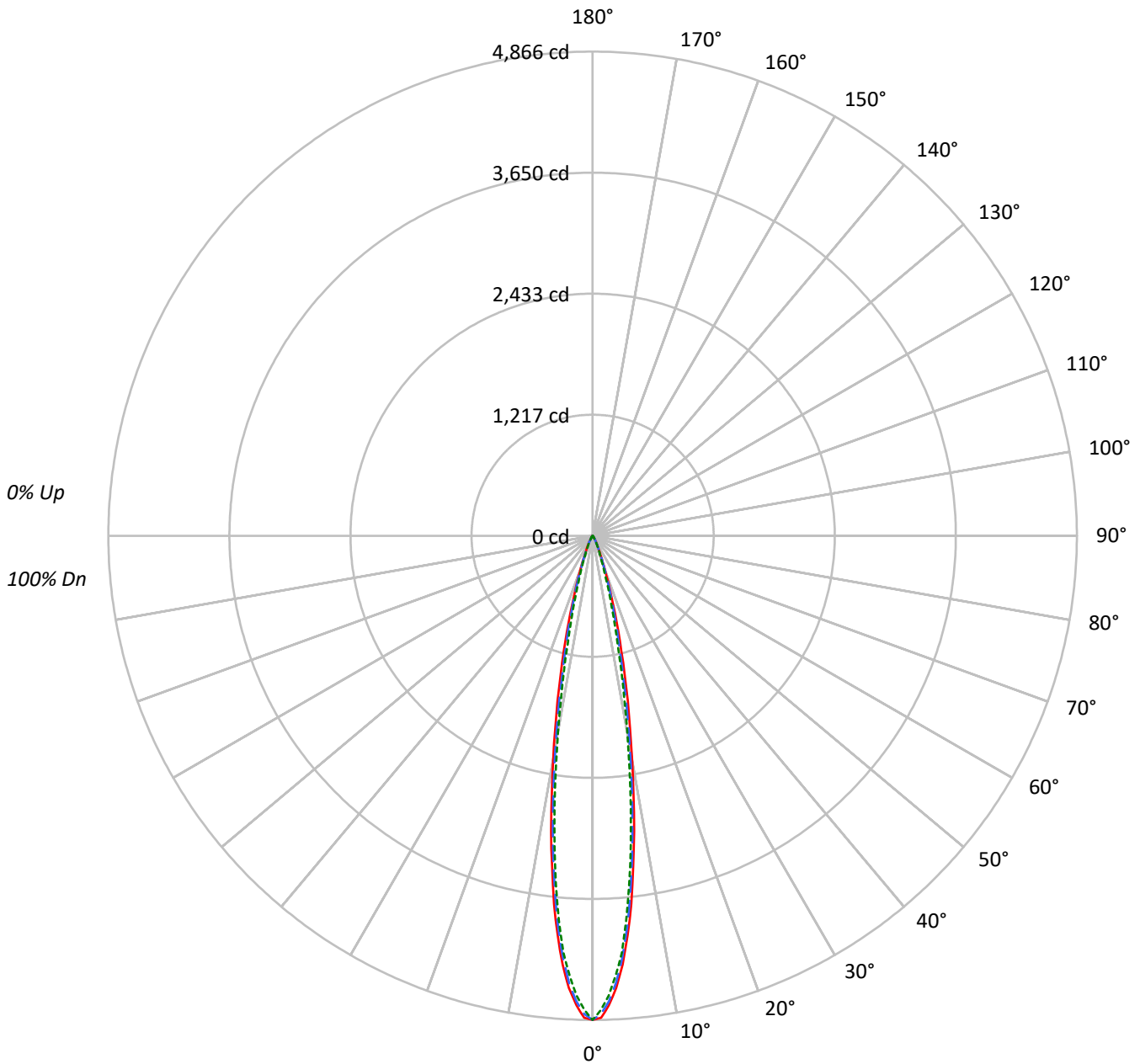
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	84	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°	2400797	2400797	2400797
5°	1997725	1961126	1921506
10°	1144272	1073785	1002146
15°	508927	452028	378784
20°	184651	173573	137556
25°	70876	66195	56995
30°	30592	28427	25237
35°	14455	14455	11985
40°	7278	7471	6054
45°	4186	3907	3698
50°	2917	2610	2610
55°	2236	1634	1978
60°	1875	1085	1480
65°	1284	934	1284
70°	1154	577	1154
75°	762	762	762
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	316.5	48.1
10°-20°	256.1	38.9
20°-30°	61.8	9.4
30°-40°	15.8	2.4
40°-50°	4.7	0.7
50°-60°	2.0	0.3
60°-70°	1.0	0.1
70°-80°	0.3	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°	634.4	96.4
0°-40°	650.1	98.8
0°-60°	656.8	99.8
0°-90°	658.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	658.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4866	4866	4866	4866	4866	
5°	4034	3997	3960	3925	3880	326
15°	996	973	885	797	742	284
25°	130	131	122	110	105	67
35°	24	24	24	22	20	17
45°	6	6	6	5	5	5
55°	3	2	2	2	2	2
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
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°	4866.2	4866.2	4866.2	4866.2	4866.2
1°	4844.5	4810.7	4806.6	4827.6	4765.7
2°	4720.6	4696.6	4682.7	4695.1	4624.9
3°	4550.6	4527.3	4502.2	4502.6	4424.1
4°	4319.0	4300.7	4258.2	4245.5	4200.1
5°	4033.8	3996.7	3959.9	3925.3	3879.9
6°	3718.6	3670.5	3618.0	3566.6	3520.0
7°	3347.8	3315.8	3246.4	3176.2	3136.8
8°	2999.1	2947.7	2866.6	2778.8	2745.4
9°	2624.2	2587.4	2494.3	2392.2	2358.8
10°	2284.1	2245.8	2143.4	2029.7	2000.4
11°	1965.1	1929.1	1822.5	1703.1	1672.0
12°	1695.3	1644.2	1521.9	1418.3	1387.9
13°	1426.5	1391.6	1275.7	1173.2	1114.3
14°	1198.0	1169.1	1064.0	973.9	911.6
15°	996.4	972.8	885.0	797.2	741.6
16°	817.4	802.8	733.4	648.5	603.1
17°	663.2	649.7	605.4	527.3	489.0
18°	535.6	533.7	496.9	429.4	395.2
19°	440.6	439.9	406.1	349.4	321.3
20°	351.7	356.5	330.6	281.1	262.0
21°	286.7	289.4	268.7	231.2	213.9
22°	233.4	235.3	221.8	191.0	181.6
23°	191.4	192.5	181.3	158.4	150.1
24°	157.6	158.4	148.2	132.1	125.0
25°	130.2	131.0	121.6	110.3	104.7
26°	108.1	108.8	100.6	92.7	87.1
27°	89.7	91.2	82.9	78.1	72.1
28°	76.6	76.9	69.4	66.4	60.8
29°	62.7	64.9	58.5	55.9	51.8
30°	53.7	54.8	49.9	48.0	44.3
32.5°	35.7	36.4	34.2	32.7	29.6
35°	24.0	24.4	24.0	21.8	19.9
37.5°	16.5	16.5	16.9	14.3	13.5
40°	11.3	11.3	11.6	9.8	9.4
42.5°	8.3	8.3	7.9	6.8	6.8
45°	6.0	6.0	5.6	5.3	5.3
47.5°	4.9	4.5	4.1	4.1	4.1
50°	3.8	3.8	3.4	3.0	3.4
52.5°	3.0	3.0	2.6	2.6	2.6
55°	2.6	2.3	1.9	1.9	2.3
57.5°	1.9	1.9	1.5	1.5	1.9
60°	1.9	1.5	1.1	1.5	1.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.1	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.4	0.4	0.8
72.5°	0.4	0.4	0.4	0.4	0.4
75°	0.4	0.4	0.4	0.4	0.4
77.5°	0.4	0.4	0.0	0.0	0.4
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°	1.5	1.1	1.1	1.1	1.1
65°	1.1	1.1	0.8	0.8	1.1



(END OF REPORT)