

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: P282527

Luminaire Tested: **LDA2B109727D010 EU2B10SP159727 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282527  
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: LDA2B109727D010 EU2B10SP159727 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 752.6 lumens  
Efficiency: N/A  
Efficacy: 75.3 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

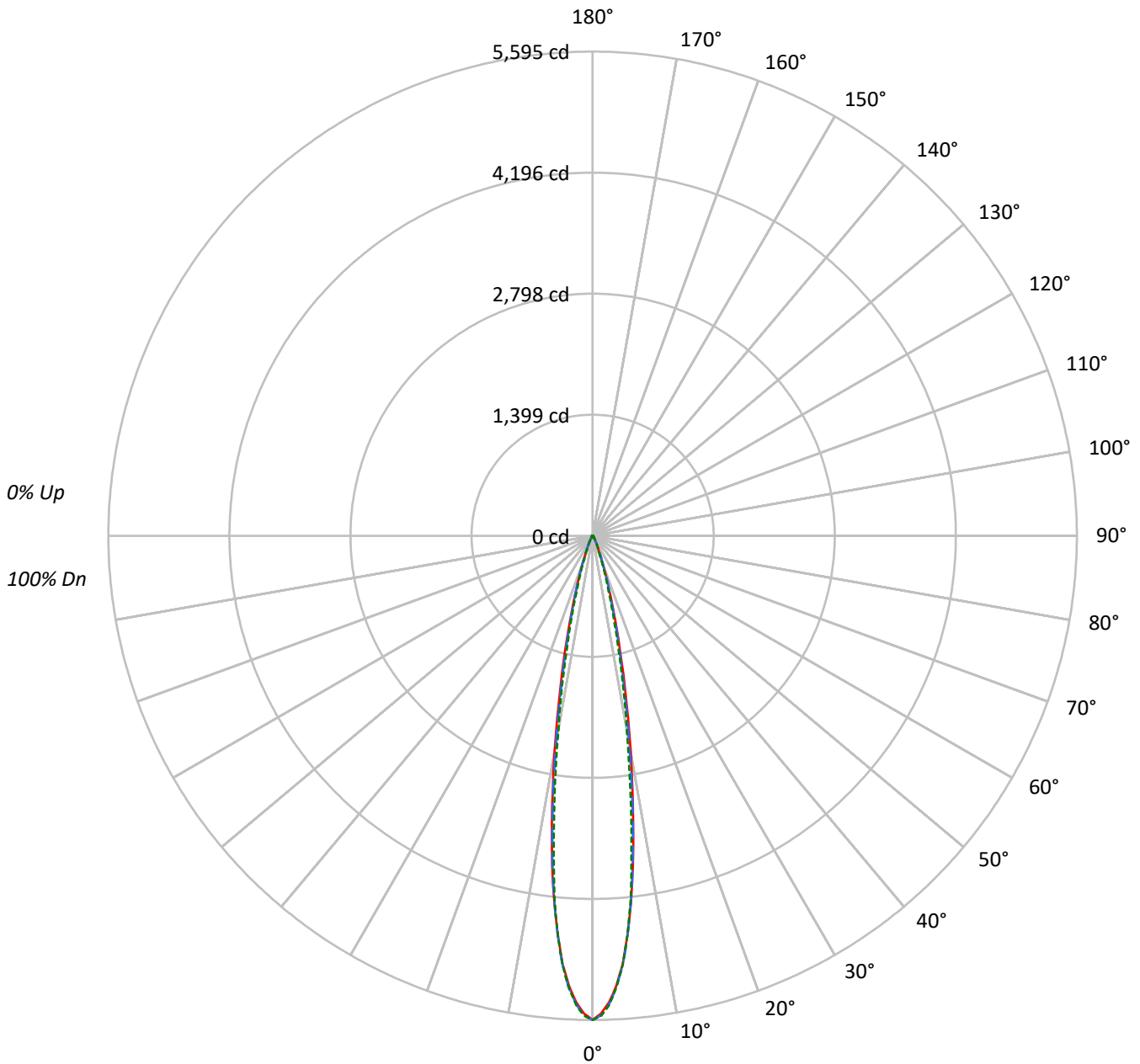
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					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	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	96	95	94	94	92	90	89	96								
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	96	94	92	91	91	89	88	87	94								
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	91	94	92	90	89	88	87	87	85	91								
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	92	89	88	87	87	90	88	86	85	84	83	82	81	88								
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	87	91	88	86	85	84	83	82	81	86								
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	92	89	87	86	85	84	83	82	81	86							
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	90	87	85	84	83	82	81	80	85								
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	88	85	83	82	81	80	79	84									
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	87	84	82	81	80	79	78	84									
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	78	85	82	80	79	78	77	76	75	80								

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

	0°	45°	90°
0°	2760359	2760359	2760359
5°	2290019	2297448	2288731
10°	1267461	1221672	1138060
15°	513064	490744	435734
20°	171893	182236	147584
25°	65378	65650	62112
30°	29339	28826	27858
35°	14214	12648	10058
40°	9403	11915	8308
45°	2372	3907	3558
50°	691	998	1305
55°	5935	5161	8085
60°	8486	6808	11051
65°	3969	10507	10040
70°	3750	3029	3750
75°	1716	4003	11437
80°	19604	26707	24434
85°	0	11887	14718



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	366.4	48.7
10°-20°	277.6	36.9
20°-30°	63.1	8.4
30°-40°	18.7	2.5
40°-50°	6.2	0.8
50°-60°	5.5	0.7
60°-70°	6.6	0.9
70°-80°	4.2	0.6
80°-90°	4.4	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°	707.1	94.0
0°-40°	725.8	96.4
0°-60°	737.5	98.0
0°-90°	752.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	752.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5595	5595	5595	5595	5595	
5°	4624	4660	4639	4578	4621	371
15°	1004	1018	961	871	853	292
25°	120	129	121	119	114	63
35°	24	26	21	24	17	19
45°	3	10	6	10	5	5
55°	7	10	6	9	9	3
65°	3	7	9	9	9	4
75°	1	3	2	4	6	2
85°	0	0	2	2	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5595.0	5595.0	5595.0	5595.0	5595.0
1°	5522.9	5545.3	5543.1	5534.1	5550.0
2°	5395.9	5423.0	5420.4	5400.7	5429.0
3°	5209.7	5233.7	5229.9	5201.5	5232.4
4°	4960.8	4988.3	4977.6	4935.1	4974.6
5°	4624.0	4660.5	4639.0	4578.5	4621.4
6°	4250.7	4281.6	4247.7	4167.4	4209.5
7°	3832.7	3852.0	3807.4	3704.4	3676.1
8°	3376.6	3401.9	3339.7	3219.5	3188.6
9°	2940.6	2949.2	2873.7	2745.8	2706.8
10°	2530.0	2523.5	2438.6	2309.0	2271.7
11°	2140.8	2132.2	2042.5	1922.8	1934.8
12°	1786.8	1803.5	1699.2	1590.7	1592.8
13°	1495.8	1497.6	1407.9	1304.5	1298.5
14°	1224.7	1240.5	1163.7	1071.0	1053.9
15°	1004.5	1018.3	960.8	870.6	853.1
16°	804.1	821.3	780.1	698.6	675.4
17°	647.5	669.4	642.4	574.1	547.5
18°	517.9	534.7	528.2	457.8	436.0
19°	408.9	432.1	433.8	375.0	348.9
20°	327.4	348.4	347.1	301.7	281.1
22.5°	187.9	199.1	199.5	178.1	166.1
25°	120.1	129.2	120.6	119.3	114.1
26°	104.3	111.6	102.1	102.1	97.4
27°	84.5	91.0	82.0	85.8	79.4
28°	71.2	78.1	70.4	69.5	68.7
29°	59.2	65.7	55.8	60.1	57.5
30°	51.5	56.2	50.6	57.1	48.9
32.5°	39.9	43.8	33.9	42.9	32.2
35°	23.6	26.2	21.0	24.5	16.7
37.5°	24.5	25.3	22.7	25.3	23.6
40°	14.6	15.0	18.5	18.5	12.9
42.5°	13.7	13.3	8.2	12.9	10.3
45°	3.4	9.9	5.6	9.9	5.1
47.5°	2.6	3.4	3.4	6.9	6.9
50°	0.9	3.4	1.3	2.6	1.7
52.5°	0.0	8.2	1.7	6.0	5.1
55°	6.9	9.9	6.0	9.0	9.4
57.5°	0.9	6.9	3.4	7.3	5.1
60°	8.6	11.6	6.9	12.4	11.2
62.5°	0.9	7.7	9.0	6.9	6.0
65°	3.4	7.3	9.0	8.6	8.6
67.5°	4.3	7.3	5.6	5.6	7.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.9	3.0	2.1	3.9	6.0
77.5°	0.9	3.4	3.0	6.9	5.1
80°	6.9	7.7	9.4	12.4	8.6
82.5°	6.0	6.0	9.4	6.9	5.1
85°	0.0	0.0	2.1	2.1	2.6
87.5°	0.0	1.7	4.3	3.4	6.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.6	0.9	2.1	2.1	2.6
72.5°	0.9	3.9	3.4	2.1	4.3



(END OF REPORT)