

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: P282695

Luminaire Tested: **LDA2B109727D010 EU2B10NFL259727 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282695  
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: LDA2B109727D010 EU2B10NFL259727 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 636.5 lumens  
Efficiency: N/A  
Efficacy: 63.7 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

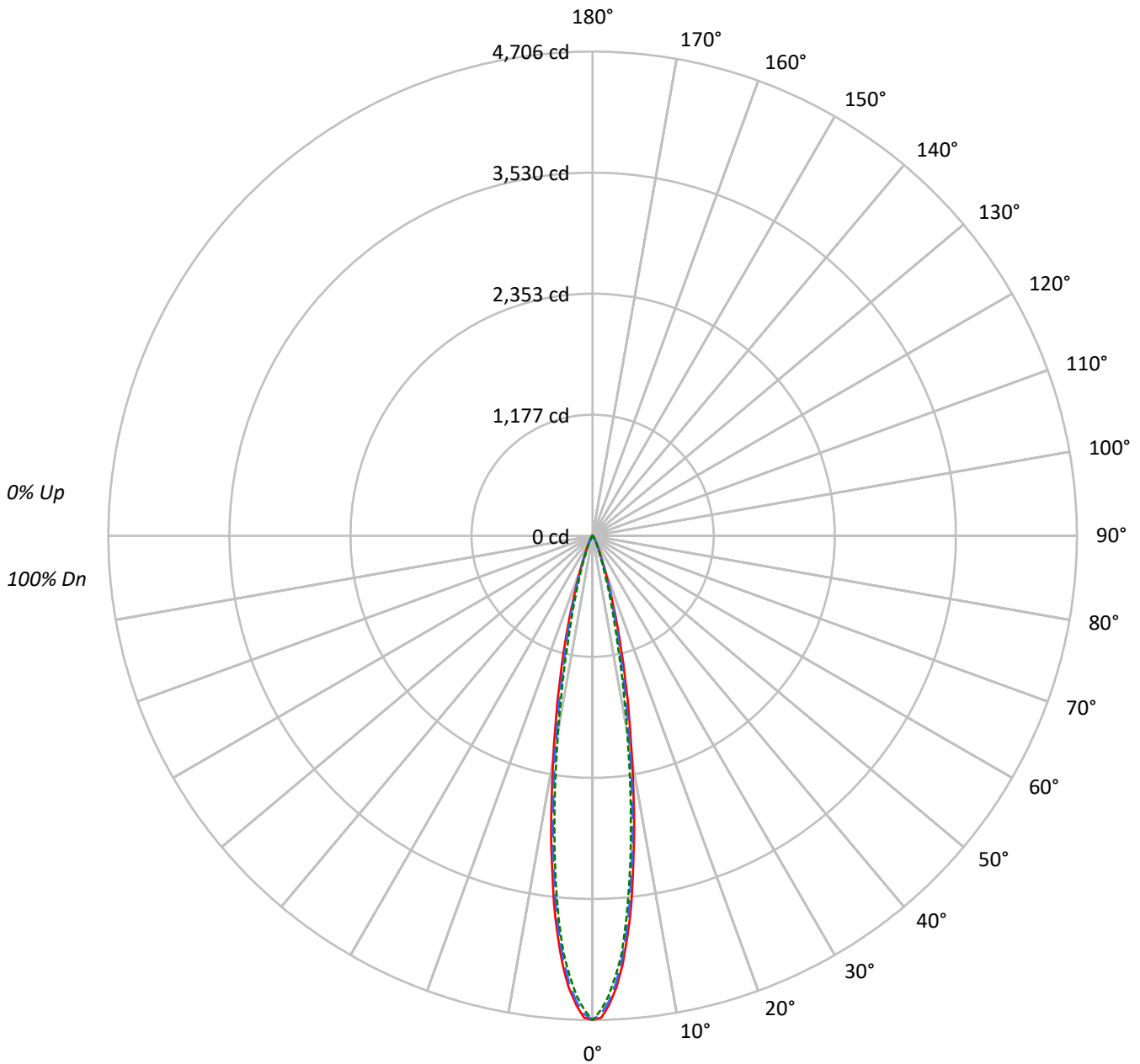
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P282695

CATALOG NUMBER: LDA2B109727D010 EU2B10NFL259727 2LBALPINSQ1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P282695

CATALOG NUMBER: LDA2B109727D010 EU2B10NFL259727 2LBALPINSQ1MW

**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°	2321909	2321909	2321909
5°	1932055	1896645	1858362
10°	1106699	1038466	969232
15°	492225	437164	366321
20°	178561	167903	133041
25°	68590	64017	55144
30°	29567	27516	24383
35°	13973	13973	11564
40°	7020	7278	5861
45°	4047	3768	3558
50°	2763	2533	2533
55°	2150	1548	1892
60°	1776	1085	1480
65°	1284	817	1284
70°	1010	577	1010
75°	762	762	762
80°	0	0	0
85°	0	0	0



TEST NUMBER: P282695

CATALOG NUMBER: LDA2B109727D010 EU2B10NFL259727 2LBALPINSQ1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.1	48.1
10°-20°	247.7	38.9
20°-30°	59.7	9.4
30°-40°	15.2	2.4
40°-50°	4.5	0.7
50°-60°	1.9	0.3
60°-70°	0.9	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°	613.5	96.4
0°-40°	628.8	98.8
0°-60°	635.3	99.8
0°-90°	636.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	636.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4706	4706	4706	4706	4706	
5°	3901	3865	3830	3796	3752	315
15°	964	941	856	771	717	275
25°	126	127	118	107	101	65
35°	23	24	23	21	19	16
45°	6	6	5	5	5	5
55°	2	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



TEST NUMBER: P282695

CATALOG NUMBER: LDA2B109727D010 EU2B10NFL259727 2LBALPINSQ1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4706.3	4706.3	4706.3	4706.3	4706.3
1°	4685.3	4652.6	4648.6	4668.9	4609.0
2°	4565.5	4542.3	4528.8	4540.8	4472.9
3°	4401.1	4378.6	4354.2	4354.6	4278.7
4°	4177.1	4159.3	4118.3	4106.0	4062.0
5°	3901.2	3865.3	3829.7	3796.3	3752.4
6°	3596.3	3549.9	3499.1	3449.3	3404.3
7°	3237.7	3206.9	3139.7	3071.9	3033.7
8°	2900.5	2850.8	2772.4	2687.5	2655.2
9°	2537.9	2502.3	2412.3	2313.6	2281.3
10°	2209.1	2172.0	2072.9	1963.0	1934.7
11°	1900.5	1865.7	1762.6	1647.2	1617.1
12°	1639.6	1590.2	1471.9	1371.7	1342.3
13°	1379.7	1345.9	1233.7	1134.7	1077.7
14°	1158.6	1130.7	1029.0	941.9	881.7
15°	963.7	940.8	855.9	771.0	717.2
16°	790.6	776.4	709.3	627.2	583.3
17°	641.4	628.3	585.5	510.0	473.0
18°	518.0	516.1	480.6	415.2	382.2
19°	426.1	425.4	392.7	337.9	310.7
20°	340.1	344.8	319.8	271.9	253.4
21°	277.3	279.9	259.9	223.6	206.9
22°	225.8	227.6	214.5	184.8	175.7
23°	185.1	186.2	175.3	153.2	145.2
24°	152.4	153.2	143.4	127.8	120.9
25°	126.0	126.7	117.6	106.7	101.3
26°	104.5	105.3	97.3	89.7	84.2
27°	86.8	88.2	80.2	75.5	69.7
28°	74.0	74.4	67.2	64.2	58.8
29°	60.6	62.8	56.6	54.1	50.1
30°	51.9	53.0	48.3	46.5	42.8
32.5°	34.5	35.2	33.0	31.6	28.7
35°	23.2	23.6	23.2	21.1	19.2
37.5°	16.0	16.0	16.3	13.8	13.1
40°	10.9	10.9	11.3	9.4	9.1
42.5°	8.0	8.0	7.6	6.5	6.5
45°	5.8	5.8	5.4	5.1	5.1
47.5°	4.7	4.4	4.0	4.0	4.0
50°	3.6	3.6	3.3	2.9	3.3
52.5°	2.9	2.9	2.5	2.5	2.5
55°	2.5	2.2	1.8	1.8	2.2
57.5°	1.8	1.8	1.5	1.5	1.8
60°	1.8	1.5	1.1	1.5	1.5



TEST NUMBER: P282695

CATALOG NUMBER: LDA2B109727D010 EU2B10NFL259727 2LBALPINSQ1MW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.1	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.4	0.4	0.7
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



Report Generated By E9808895 / USPTCWHP6082093







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







62.5°	1.5	1.1	1.1	1.1	1.1
65°	1.1	1.1	0.7	0.7	1.1



(END OF REPORT)