

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: P282477

Luminaire Tested: **LDA2B059035D010 EU2B05SP159035 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282477  
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: LDA2B059035D010 EU2B05SP159035 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 666.8 lumens  
Efficiency: N/A  
Efficacy: 95.3 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

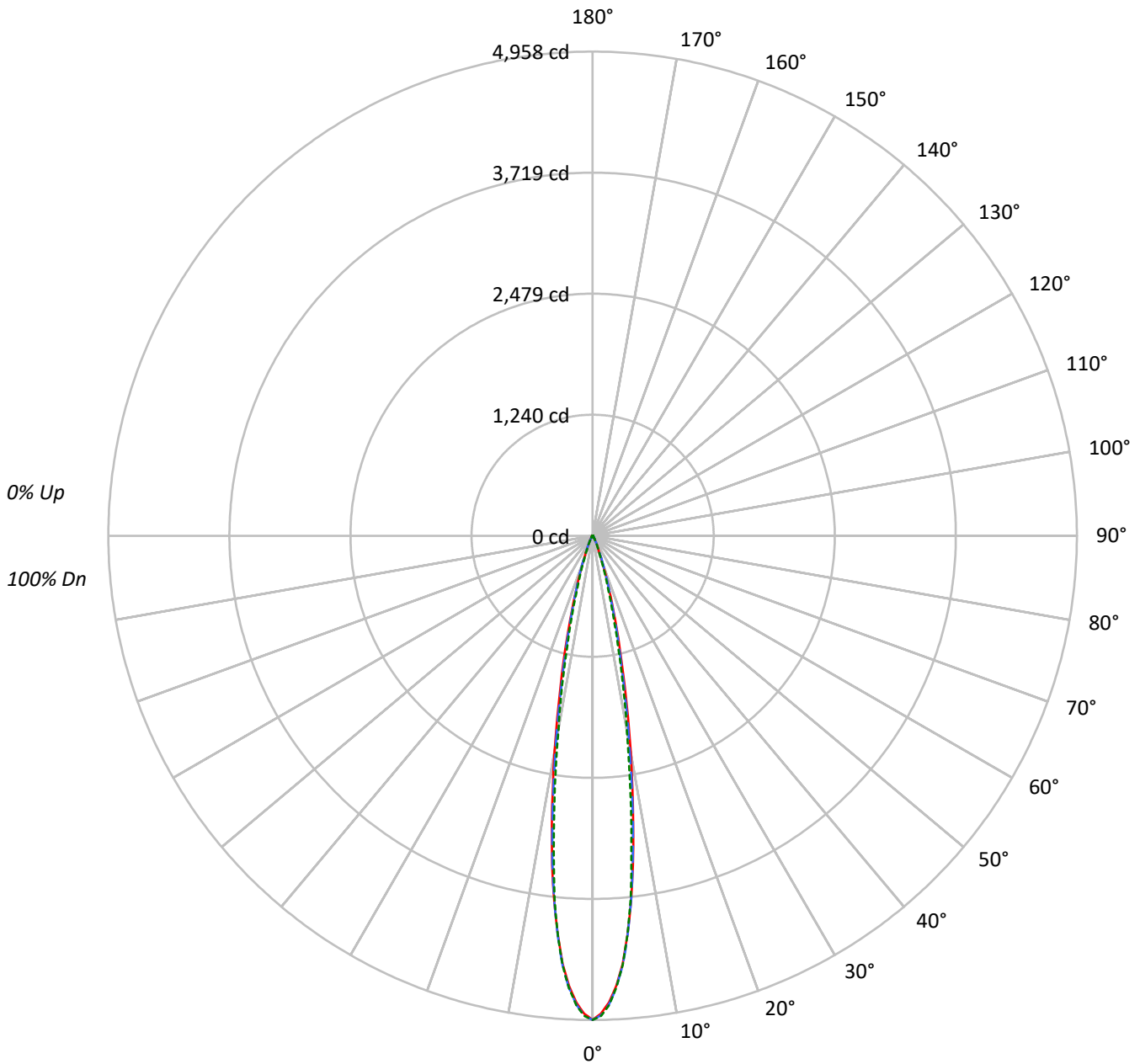
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	98	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	96	94	92	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

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

	0°	45°	90°
0°	2445841	2445841	2445841
5°	2029074	2035661	2027935
10°	1123030	1082452	1008358
15°	454633	434815	386037
20°	152310	161498	130731
25°	57975	58138	55035
30°	25978	25579	24667
35°	12588	11202	8914
40°	8308	10498	7342
45°	2093	3419	3210
50°	614	844	1151
55°	5247	4559	7225
60°	7499	6019	9769
65°	3502	9339	8872
70°	3318	2741	3318
75°	1525	3622	10103
80°	17331	23866	21593
85°	0	10755	13020



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	324.7	48.7
10°-20°	245.9	36.9
20°-30°	55.9	8.4
30°-40°	16.5	2.5
40°-50°	5.5	0.8
50°-60°	4.8	0.7
60°-70°	5.8	0.9
70°-80°	3.7	0.6
80°-90°	3.9	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°	626.5	94.0
0°-40°	643.1	96.4
0°-60°	653.4	98.0
0°-90°	666.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	666.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4958	4958	4958	4958	4958	
5°	4097	4129	4110	4057	4095	329
15°	890	902	851	771	756	259
25°	106	114	107	106	101	56
35°	21	23	19	22	15	16
45°	3	9	5	9	5	5
55°	6	9	5	8	8	3
65°	3	6	8	8	8	3
75°	1	3	2	3	5	2
85°	0	0	2	2	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4957.5	4957.5	4957.5	4957.5	4957.5
1°	4893.6	4913.4	4911.5	4903.5	4917.6
2°	4781.1	4805.0	4802.8	4785.3	4810.4
3°	4616.1	4637.4	4633.9	4608.9	4636.2
4°	4395.6	4419.9	4410.4	4372.7	4407.7
5°	4097.1	4129.4	4110.4	4056.8	4094.8
6°	3766.3	3793.7	3763.7	3692.6	3729.8
7°	3396.0	3413.1	3373.6	3282.3	3257.2
8°	2991.8	3014.3	2959.1	2852.7	2825.3
9°	2605.6	2613.2	2546.2	2432.9	2398.3
10°	2241.7	2236.0	2160.7	2045.9	2012.8
11°	1896.8	1889.2	1809.8	1703.7	1714.3
12°	1583.2	1598.0	1505.6	1409.4	1411.3
13°	1325.4	1326.9	1247.5	1155.8	1150.5
14°	1085.1	1099.2	1031.1	949.0	933.8
15°	890.1	902.2	851.3	771.4	755.8
16°	712.5	727.7	691.2	619.0	598.4
17°	573.7	593.1	569.2	508.7	485.1
18°	458.9	473.7	468.0	405.7	386.3
19°	362.3	382.9	384.4	332.3	309.1
20°	290.1	308.7	307.6	267.3	249.0
22.5°	166.5	176.4	176.8	157.8	147.1
25°	106.5	114.4	106.8	105.7	101.1
26°	92.4	98.9	90.5	90.5	86.3
27°	74.9	80.6	72.6	76.0	70.3
28°	63.1	69.2	62.4	61.6	60.8
29°	52.5	58.2	49.4	53.2	50.9
30°	45.6	49.8	44.9	50.6	43.3
32.5°	35.4	38.8	30.0	38.0	28.5
35°	20.9	23.2	18.6	21.7	14.8
37.5°	21.7	22.4	20.2	22.4	20.9
40°	12.9	13.3	16.3	16.3	11.4
42.5°	12.2	11.8	7.2	11.4	9.1
45°	3.0	8.7	4.9	8.7	4.6
47.5°	2.3	3.0	3.0	6.1	6.1
50°	0.8	3.0	1.1	2.3	1.5
52.5°	0.0	7.2	1.5	5.3	4.6
55°	6.1	8.7	5.3	8.0	8.4
57.5°	0.8	6.1	3.0	6.5	4.6
60°	7.6	10.3	6.1	11.0	9.9
62.5°	0.8	6.8	8.0	6.1	5.3
65°	3.0	6.5	8.0	7.6	7.6
67.5°	3.8	6.5	4.9	4.9	6.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.8	2.7	1.9	3.4	5.3
77.5°	0.8	3.0	2.7	6.1	4.6
80°	6.1	6.8	8.4	11.0	7.6
82.5°	5.3	5.3	8.4	6.1	4.6
85°	0.0	0.0	1.9	1.9	2.3
87.5°	0.0	1.5	3.8	3.0	5.3
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.3	0.8	1.9	1.9	2.3
72.5°	0.8	3.4	3.0	1.9	3.8



(END OF REPORT)