

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: P282652

Luminaire Tested: **LDA2B059050D010 EU2B05NFL259050 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282652  
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: LDA2B059050D010 EU2B05NFL259050 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 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: 593.1 lumens  
Efficiency: N/A  
Efficacy: 84.7 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

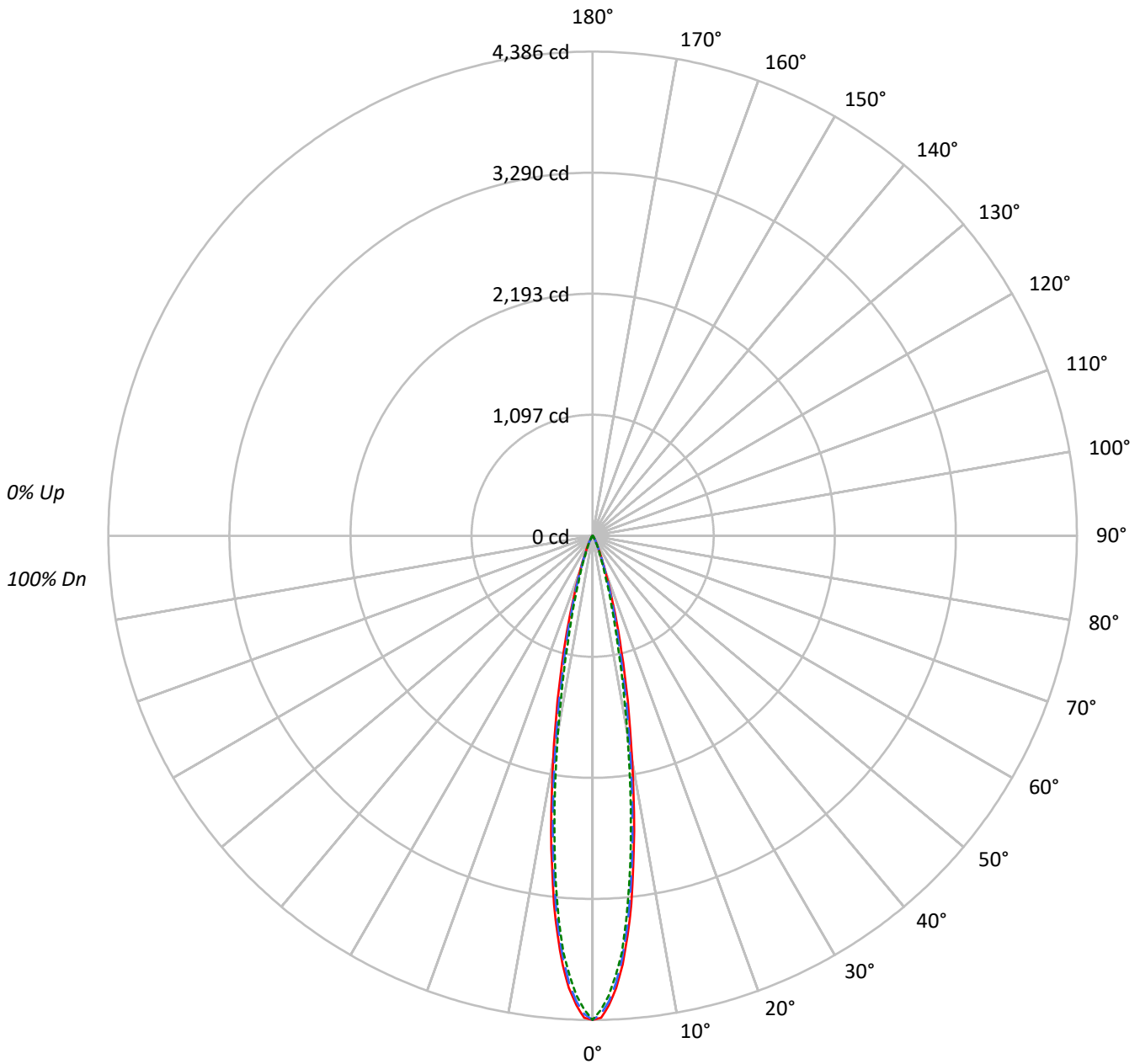
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2163835	2163835	2163835
5°	1800567	1767534	1731876
10°	1031352	967779	903204
15°	458719	407387	341396
20°	166433	156457	123958
25°	63908	59662	51388
30°	27573	25636	22730
35°	13009	13009	10781
40°	6505	6762	5474
45°	3768	3558	3279
50°	2610	2303	2303
55°	2064	1462	1720
60°	1677	987	1381
65°	1167	817	1167
70°	1010	433	1010
75°	572	572	572
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	285.3	48.1
10°-20°	230.8	38.9
20°-30°	55.7	9.4
30°-40°	14.2	2.4
40°-50°	4.2	0.7
50°-60°	1.8	0.3
60°-70°	0.9	0.1
70°-80°	0.3	0.0
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°	571.8	96.4
0°-40°	586.0	98.8
0°-60°	592.0	99.8
0°-90°	593.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	593.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4386	4386	4386	4386	4386	
5°	3636	3602	3569	3538	3497	294
15°	898	877	798	718	668	256
25°	117	118	110	99	94	61
35°	22	22	22	20	18	15
45°	5	5	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4385.9	4385.9	4385.9	4385.9	4385.9
1°	4366.3	4335.9	4332.2	4351.1	4295.3
2°	4254.7	4233.0	4220.5	4231.7	4168.4
3°	4101.5	4080.5	4057.8	4058.2	3987.5
4°	3892.7	3876.2	3837.9	3826.4	3785.5
5°	3635.7	3602.2	3569.0	3537.9	3497.0
6°	3351.5	3308.2	3260.9	3214.5	3172.6
7°	3017.3	2988.6	2926.0	2862.7	2827.2
8°	2703.1	2656.7	2583.7	2504.5	2474.4
9°	2365.1	2332.0	2248.1	2156.1	2126.0
10°	2058.7	2024.2	1931.8	1829.3	1802.9
11°	1771.2	1738.7	1642.6	1535.0	1507.0
12°	1527.9	1481.9	1371.7	1278.3	1250.9
13°	1285.7	1254.3	1149.8	1057.4	1004.3
14°	1079.7	1053.7	959.0	877.8	821.6
15°	898.1	876.8	797.6	718.5	668.4
16°	736.7	723.5	661.0	584.5	543.6
17°	597.7	585.5	545.6	475.3	440.8
18°	482.7	481.0	447.9	387.0	356.2
19°	397.1	396.4	366.0	314.9	289.6
20°	317.0	321.4	298.0	253.4	236.1
21°	258.4	260.8	242.2	208.4	192.8
22°	210.4	212.1	199.9	172.2	163.7
23°	172.5	173.5	163.4	142.7	135.3
24°	142.1	142.7	133.6	119.1	112.6
25°	117.4	118.1	109.6	99.4	94.4
26°	97.4	98.1	90.7	83.6	78.5
27°	80.8	82.2	74.8	70.4	64.9
28°	69.0	69.3	62.6	59.9	54.8
29°	56.5	58.5	52.8	50.4	46.7
30°	48.4	49.4	45.0	43.3	39.9
32.5°	32.1	32.8	30.8	29.4	26.7
35°	21.6	22.0	21.6	19.6	17.9
37.5°	14.9	14.9	15.2	12.9	12.2
40°	10.1	10.1	10.5	8.8	8.5
42.5°	7.4	7.4	7.1	6.1	6.1
45°	5.4	5.4	5.1	4.7	4.7
47.5°	4.4	4.1	3.7	3.7	3.7
50°	3.4	3.4	3.0	2.7	3.0
52.5°	2.7	2.7	2.4	2.4	2.4
55°	2.4	2.0	1.7	1.7	2.0
57.5°	1.7	1.7	1.4	1.4	1.7
60°	1.7	1.4	1.0	1.4	1.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.0	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.3	0.3	0.7
72.5°	0.3	0.3	0.3	0.3	0.3
75°	0.3	0.3	0.3	0.3	0.3
77.5°	0.3	0.3	0.0	0.0	0.3
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°	1.4	1.0	1.0	1.0	1.0
65°	1.0	1.0	0.7	0.7	1.0



(END OF REPORT)