

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: P281778

Luminaire Tested: **LDA2B109024D010 EU2B10SP159024 2LBALSQC1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281778  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B109024D010 EU2B10SP159024 2LBALSQC1MB  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 776.3 lumens  
Efficiency: N/A  
Efficacy: 77.6 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

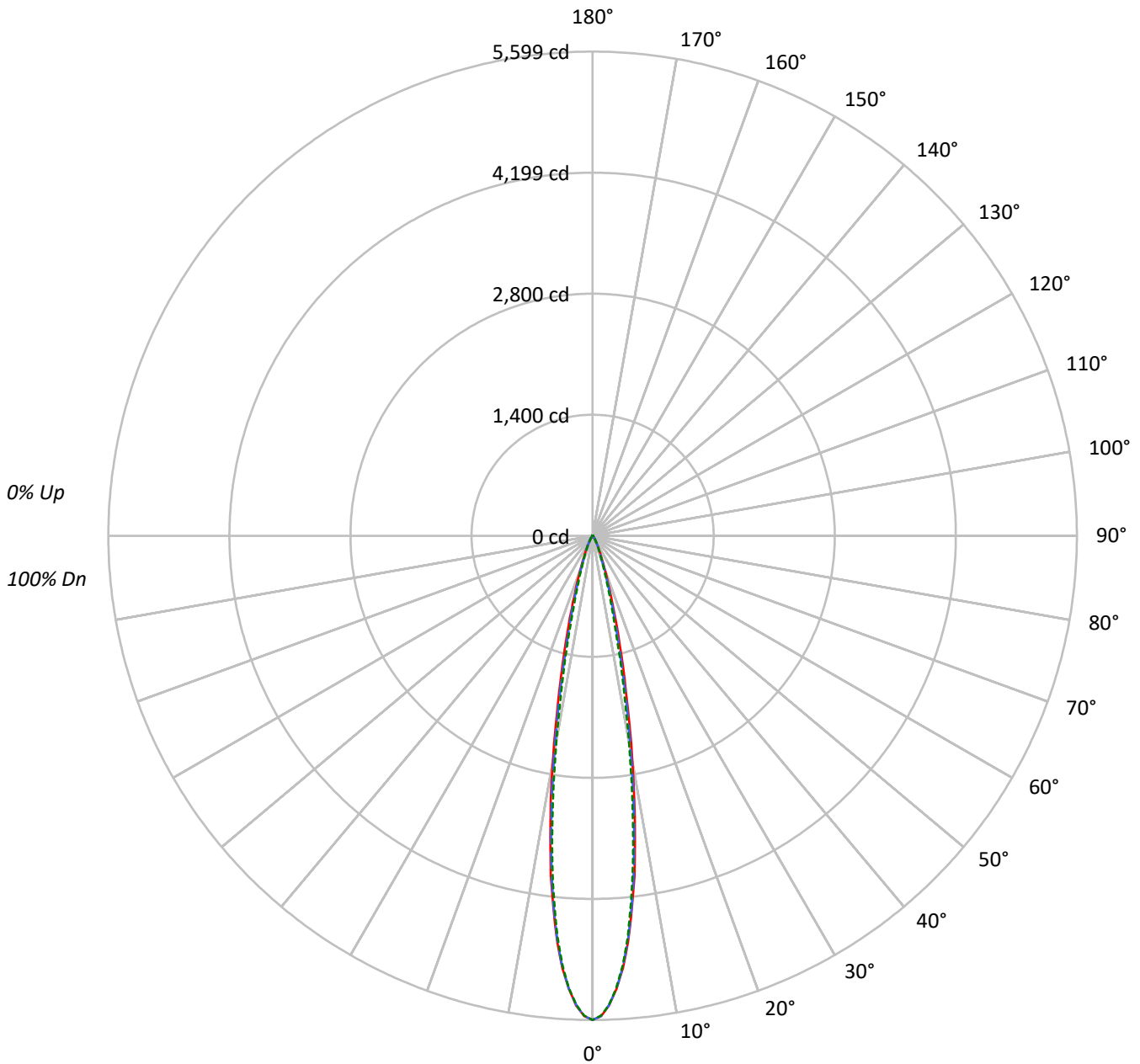
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97				97															
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95				95															
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92				92															
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90				90															
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88				88															
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86				86															
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84				84															
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82				82															
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80				80															
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79				79															

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

	0°	45°	90°
0°	2762234	2762234	2762234
5°	2333799	2321368	2304233
10°	1328379	1269916	1205290
15°	550095	487270	429248
20°	209275	183234	167798
25°	92433	88786	78933
30°	42783	47227	37599
35°	22465	26500	21080
40°	9854	11399	6569
45°	3837	3000	4396
50°	1842	2149	2993
55°	0	1376	0
60°	0	0	789
65°	0	0	0
70°	0	577	0
75°	0	0	0
80°	2273	0	0
85°	22077	19812	9057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	374.3	48.2
10°-20°	286.2	36.9
20°-30°	79.6	10.3
30°-40°	25.9	3.3
40°-50°	5.7	0.7
50°-60°	1.8	0.2
60°-70°	1.0	0.1
70°-80°	0.6	0.1
80°-90°	1.3	0.2
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°	740.1	95.3
0°-40°	766.0	98.7
0°-60°	773.5	99.6
0°-90°	776.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5599	5599	5599	5599	5599	
5°	4712	4678	4687	4652	4653	381
15°	1077	1040	954	880	840	314
25°	170	172	163	154	145	85
35°	37	40	44	33	35	25
45°	6	8	4	4	6	6
55°	0	2	2	1	0	1
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	4	2	4	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5598.8	5598.8	5598.8	5598.8	5598.8
1°	5555.9	5535.1	5555.1	5543.3	5550.0
2°	5435.3	5409.3	5430.1	5413.6	5427.4
3°	5247.4	5227.3	5245.8	5225.0	5236.0
4°	5011.9	4982.8	5001.3	4973.4	4980.1
5°	4712.4	4677.8	4687.3	4652.3	4652.7
6°	4335.1	4311.1	4316.6	4262.0	4258.0
7°	3966.0	3909.4	3903.5	3841.0	3828.8
8°	3517.9	3466.4	3449.5	3376.0	3350.1
9°	3088.3	3024.2	2989.6	2904.3	2874.1
10°	2651.6	2586.7	2534.9	2438.6	2405.9
11°	2247.5	2189.0	2124.5	2021.5	1989.7
12°	1872.5	1826.6	1755.8	1656.4	1623.0
13°	1566.4	1513.3	1437.4	1345.1	1316.4
14°	1301.0	1244.0	1168.2	1089.2	1033.4
15°	1077.0	1039.6	954.0	880.5	840.4
16°	880.1	848.2	774.3	710.7	682.4
17°	721.7	696.1	633.2	583.3	559.7
18°	595.5	563.7	514.1	481.5	463.0
19°	483.1	458.3	422.1	397.0	378.5
20°	398.6	378.1	349.0	326.6	319.6
22.5°	257.5	253.9	235.1	222.9	217.0
25°	169.8	171.8	163.1	153.7	145.0
26°	145.0	146.2	138.4	132.9	121.8
27°	124.2	124.6	124.6	114.4	103.8
28°	101.4	105.7	101.8	97.1	86.9
29°	86.9	92.4	90.4	85.7	75.9
30°	75.1	79.0	82.9	75.5	66.0
32.5°	52.7	56.2	60.5	56.6	48.7
35°	37.3	40.5	44.0	33.4	35.0
37.5°	25.5	31.1	29.9	27.1	23.2
40°	15.3	16.1	17.7	18.9	10.2
42.5°	11.0	13.0	11.8	13.4	4.7
45°	5.5	7.9	4.3	4.3	6.3
47.5°	3.9	6.7	2.4	2.4	0.8
50°	2.4	5.1	2.8	1.2	3.9
52.5°	3.9	4.7	3.1	3.5	0.8
55°	0.0	2.4	1.6	0.8	0.0
57.5°	1.6	2.8	1.6	0.8	1.6
60°	0.0	0.0	0.0	0.4	0.8
62.5°	0.0	0.8	0.0	1.2	1.6
65°	0.0	1.6	0.0	0.0	0.0
67.5°	2.4	2.8	1.6	3.1	4.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.8	0.0
77.5°	0.0	3.9	1.2	1.2	1.6
80°	0.8	0.0	0.0	0.4	0.0
82.5°	0.0	3.1	0.4	1.6	2.4
85°	3.9	2.0	3.5	2.0	1.6
87.5°	0.0	0.4	0.8	0.4	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	0.4	0.4	0.0
72.5°	0.8	0.0	0.0	0.0	0.0



(END OF REPORT)