

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: P282774

Luminaire Tested: **LDA2B209040D010 EU2B20NFL259040 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282774  
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: LDA2B209040D010 EU2B20NFL259040 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1428.0 lumens  
Efficiency: N/A  
Efficacy: 69.3 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

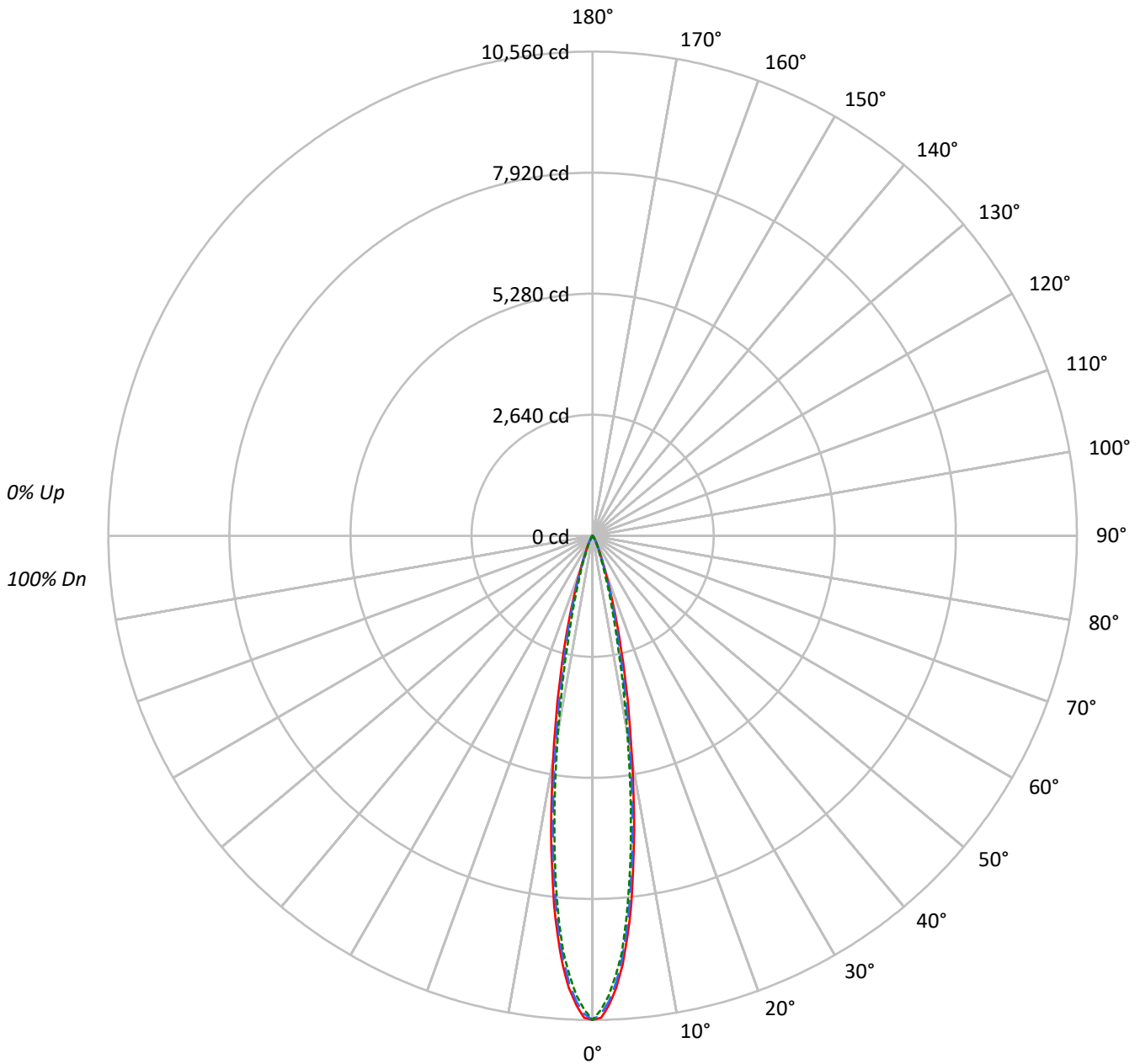
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5209654	5209654	5209654
5°	4334990	4255553	4169628
10°	2483021	2330024	2174622
15°	1104378	980874	821975
20°	400646	376705	298477
25°	153837	143658	123680
30°	66368	61697	54747
35°	31379	31379	26019
40°	15715	16230	13138
45°	9070	8512	7954
50°	6217	5603	5603
55°	4903	3527	4215
60°	4046	2368	3256
65°	2802	1868	2802
70°	2308	1154	2308
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	686.8	48.1
10°-20°	555.8	38.9
20°-30°	134.0	9.4
30°-40°	34.2	2.4
40°-50°	10.2	0.7
50°-60°	4.4	0.3
60°-70°	2.1	0.1
70°-80°	0.7	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°	1376.6	96.4
0°-40°	1410.7	98.8
0°-60°	1425.3	99.8
0°-90°	1428.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1428.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10560	10560	10560	10560	10560	
5°	8753	8673	8593	8518	8419	708
15°	2162	2111	1920	1730	1609	617
25°	283	284	264	239	227	146
35°	52	53	52	47	43	36
45°	13	13	12	11	11	11
55°	6	5	4	4	5	5
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
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°	10559.5	10559.5	10559.5	10559.5	10559.5
1°	10512.3	10439.0	10430.0	10475.6	10341.3
2°	10243.5	10191.4	10161.3	10188.2	10035.9
3°	9874.6	9824.1	9769.6	9770.4	9600.2
4°	9372.1	9332.2	9240.2	9212.5	9114.0
5°	8753.2	8672.6	8592.8	8517.8	8419.3
6°	8069.1	7964.8	7850.8	7739.3	7638.3
7°	7264.5	7195.2	7044.6	6892.3	6806.8
8°	6507.9	6396.3	6220.4	6029.8	5957.3
9°	5694.3	5614.5	5412.5	5191.0	5118.5
10°	4956.4	4873.4	4651.0	4404.3	4340.8
11°	4264.2	4186.0	3954.7	3695.8	3628.2
12°	3678.7	3567.9	3302.4	3077.6	3011.7
13°	3095.5	3019.8	2768.2	2545.8	2418.0
14°	2599.6	2536.9	2308.8	2113.4	1978.2
15°	2162.2	2110.9	1920.4	1729.8	1609.3
16°	1773.8	1742.0	1591.3	1407.3	1308.7
17°	1439.0	1409.7	1313.6	1144.2	1061.2
18°	1162.2	1158.1	1078.3	931.7	857.6
19°	956.1	954.5	881.2	758.2	697.1
20°	763.1	773.7	717.5	610.0	568.5
21°	622.2	627.9	583.1	501.7	464.2
22°	506.6	510.6	481.3	414.5	394.2
23°	415.3	417.8	393.4	343.7	325.8
24°	342.0	343.7	321.7	286.7	271.2
25°	282.6	284.2	263.9	239.4	227.2
26°	234.5	236.2	218.3	201.2	188.9
27°	194.6	197.9	180.0	169.4	156.4
28°	166.1	167.0	150.7	144.1	131.9
29°	136.0	140.9	127.0	121.3	112.4
30°	116.5	118.9	108.3	104.2	96.1
32.5°	77.4	79.0	74.1	70.9	64.3
35°	52.1	52.9	52.1	47.2	43.2
37.5°	35.8	35.8	36.6	30.9	29.3
40°	24.4	24.4	25.2	21.2	20.4
42.5°	17.9	17.9	17.1	14.7	14.7
45°	13.0	13.0	12.2	11.4	11.4
47.5°	10.6	9.8	9.0	9.0	9.0
50°	8.1	8.1	7.3	6.5	7.3
52.5°	6.5	6.5	5.7	5.7	5.7
55°	5.7	4.9	4.1	4.1	4.9
57.5°	4.1	4.1	3.3	3.3	4.1
60°	4.1	3.3	2.4	3.3	3.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.4	1.6	1.6	1.6	1.6
70°	1.6	1.6	0.8	0.8	1.6
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.0	0.0	0.8
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°	3.3	2.4	2.4	2.4	2.4
65°	2.4	2.4	1.6	1.6	2.4



(END OF REPORT)