

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: P282424

Luminaire Tested: **LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282424  
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 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1554.8 lumens  
Efficiency: N/A  
Efficacy: 75.5 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

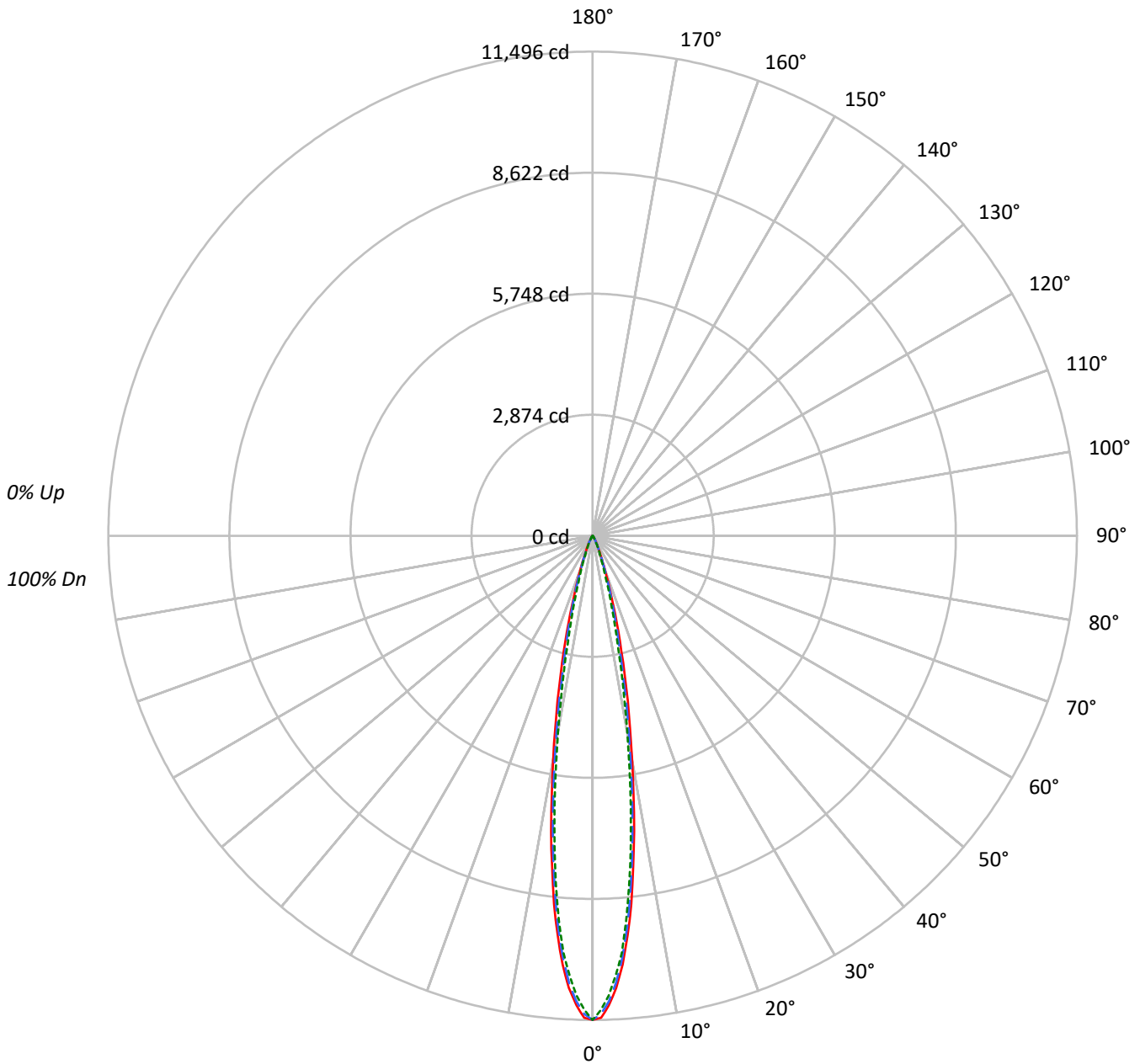
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5671835	5671835	5671835
5°	4719549	4633030	4539527
10°	2703299	2536725	2367497
15°	1202342	1067858	894862
20°	436190	410097	324938
25°	167501	156396	134676
30°	72236	67166	59589
35°	34149	34149	28307
40°	17131	17711	14298
45°	9908	9280	8652
50°	6831	6140	6140
55°	5333	3785	4559
60°	4342	2664	3454
65°	3152	2101	3152
70°	2596	1298	2596
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	747.7	48.1
10°-20°	605.1	38.9
20°-30°	145.9	9.4
30°-40°	37.2	2.4
40°-50°	11.1	0.7
50°-60°	4.7	0.3
60°-70°	2.3	0.1
70°-80°	0.8	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°	1498.7	96.4
0°-40°	1535.9	98.8
0°-60°	1551.7	99.8
0°-90°	1554.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1554.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11496	11496	11496	11496	11496	
5°	9530	9442	9355	9273	9166	771
15°	2354	2298	2091	1883	1752	671
25°	308	309	287	261	247	159
35°	57	58	57	51	47	39
45°	14	14	13	12	12	12
55°	6	5	4	4	5	5
65°	3	3	2	2	3	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°	11496.3	11496.3	11496.3	11496.3	11496.3
1°	11444.8	11365.0	11355.3	11404.9	11258.6
2°	11152.2	11095.5	11062.7	11092.0	10926.2
3°	10750.6	10695.6	10636.2	10637.1	10451.8
4°	10203.5	10160.1	10059.9	10029.8	9922.5
5°	9529.7	9441.9	9355.0	9273.4	9166.2
6°	8784.9	8671.4	8547.3	8425.8	8315.9
7°	7908.9	7833.5	7669.5	7503.7	7410.6
8°	7085.2	6963.7	6772.2	6564.7	6485.8
9°	6199.4	6112.5	5892.7	5651.5	5572.6
10°	5396.1	5305.7	5063.6	4795.0	4725.8
11°	4642.5	4557.4	4305.6	4023.6	3950.0
12°	4005.0	3884.4	3595.4	3350.6	3278.8
13°	3370.1	3287.7	3013.7	2771.7	2632.5
14°	2830.2	2761.9	2513.6	2300.8	2153.7
15°	2354.0	2298.2	2090.7	1883.2	1752.0
16°	1931.1	1896.5	1732.5	1532.1	1424.8
17°	1566.7	1534.8	1430.2	1245.7	1155.3
18°	1265.2	1260.8	1173.9	1014.3	933.6
19°	1040.9	1039.2	959.4	825.5	759.0
20°	830.8	842.3	781.1	664.1	618.9
21°	677.4	683.6	634.8	546.2	505.4
22°	551.5	555.9	524.0	451.3	429.1
23°	452.2	454.8	428.3	374.2	354.7
24°	372.4	374.2	350.2	312.1	295.3
25°	307.7	309.4	287.3	260.7	247.4
26°	255.4	257.1	237.6	219.0	205.7
27°	211.9	215.5	195.9	184.4	170.2
28°	180.9	181.8	164.0	156.9	143.6
29°	148.1	153.4	138.3	132.1	122.4
30°	126.8	129.5	117.9	113.5	104.6
32.5°	84.2	86.0	80.7	77.1	70.0
35°	56.7	57.6	56.7	51.4	47.0
37.5°	39.0	39.0	39.9	33.7	31.9
40°	26.6	26.6	27.5	23.1	22.2
42.5°	19.5	19.5	18.6	16.0	16.0
45°	14.2	14.2	13.3	12.4	12.4
47.5°	11.5	10.6	9.8	9.8	9.8
50°	8.9	8.9	8.0	7.1	8.0
52.5°	7.1	7.1	6.2	6.2	6.2
55°	6.2	5.3	4.4	4.4	5.3
57.5°	4.4	4.4	3.5	3.5	4.4
60°	4.4	3.5	2.7	3.5	3.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.7	1.8	1.8	1.8	1.8
70°	1.8	1.8	0.9	0.9	1.8
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.0	0.0	0.9
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°	3.5	2.7	2.7	2.7	2.7
65°	2.7	2.7	1.8	1.8	2.7



(END OF REPORT)