

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: P282411

Luminaire Tested: **LDA2B209030D010 EU2B20NFL259030 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282411  
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: LDA2B209030D010 EU2B20NFL259030 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1465.6 lumens  
Efficiency: N/A  
Efficacy: 71.1 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

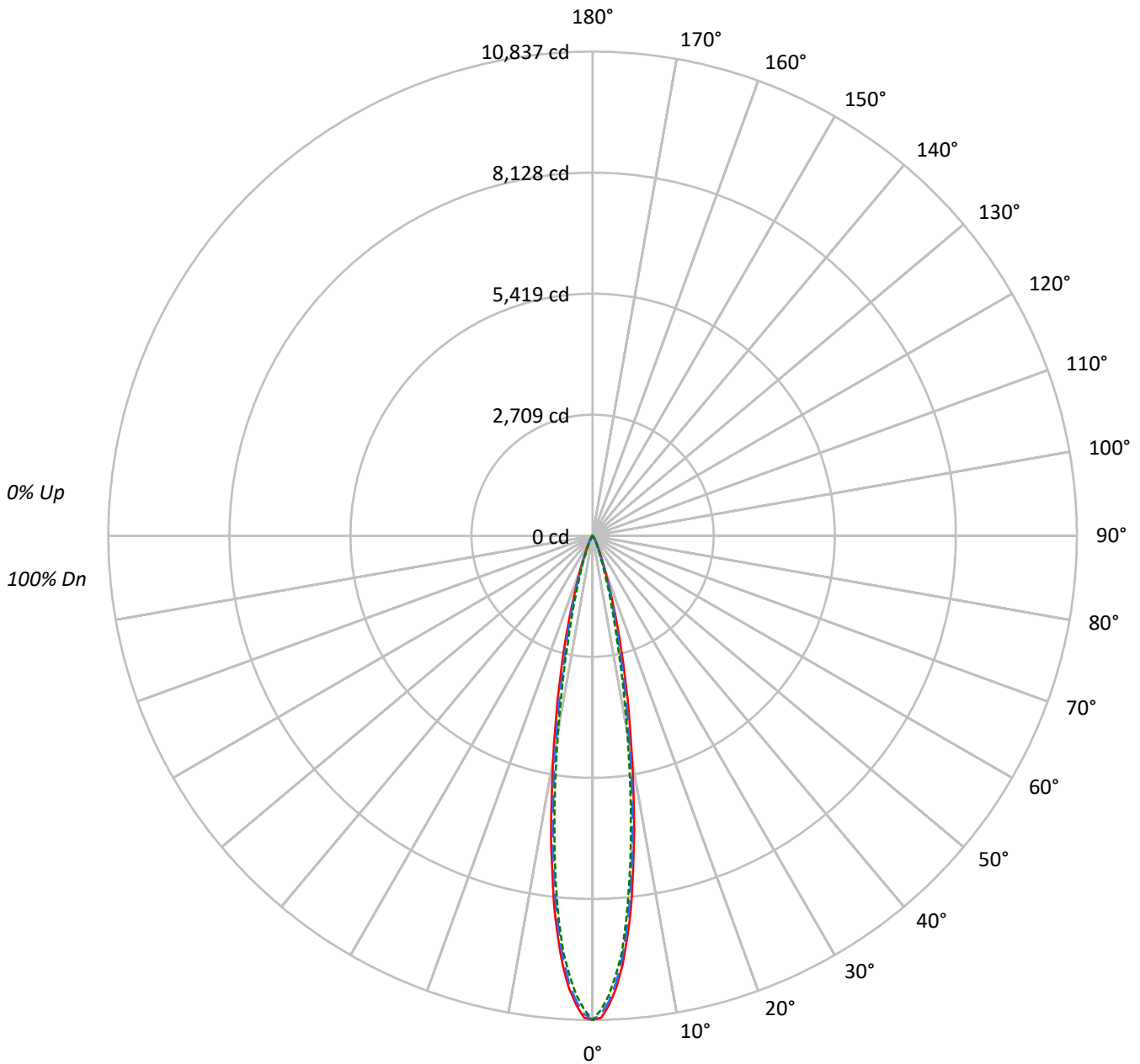
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					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	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°	5346512	5346512	5346512
5°	4448847	4367330	4279176
10°	2548298	2391243	2231733
15°	1133389	1006617	843530
20°	411147	386576	306299
25°	157866	147414	126946
30°	68077	63349	56171
35°	32222	32222	26681
40°	16165	16681	13460
45°	9349	8721	8163
50°	6447	5757	5757
55°	5075	3613	4301
60°	4144	2467	3256
65°	2918	1985	2918
70°	2452	1154	2452
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	704.8	48.1
10°-20°	570.4	38.9
20°-30°	137.5	9.4
30°-40°	35.1	2.4
40°-50°	10.5	0.7
50°-60°	4.5	0.3
60°-70°	2.2	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°	1412.8	96.4
0°-40°	1447.8	98.8
0°-60°	1462.7	99.8
0°-90°	1465.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1465.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10837	10837	10837	10837	10837	
5°	8983	8900	8818	8742	8640	726
15°	2219	2166	1971	1775	1652	633
25°	290	292	271	246	233	150
35°	54	54	54	48	44	37
45°	13	13	12	12	12	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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10836.9	10836.9	10836.9	10836.9	10836.9
1°	10788.5	10713.2	10704.0	10750.8	10612.9
2°	10512.6	10459.2	10428.2	10455.8	10299.5
3°	10134.0	10082.2	10026.2	10027.0	9852.4
4°	9618.3	9577.4	9482.9	9454.5	9353.4
5°	8983.1	8900.4	8818.5	8741.6	8640.5
6°	8281.1	8174.1	8057.1	7942.6	7838.9
7°	7455.3	7384.3	7229.6	7073.3	6985.6
8°	6678.8	6564.3	6383.8	6188.2	6113.8
9°	5843.9	5762.0	5554.7	5327.4	5253.0
10°	5086.7	5001.4	4773.2	4520.0	4454.8
11°	4376.2	4296.0	4058.6	3792.8	3723.5
12°	3775.3	3661.6	3389.2	3158.5	3090.8
13°	3176.9	3099.1	2840.9	2612.7	2481.5
14°	2667.9	2603.5	2369.5	2168.9	2030.1
15°	2219.0	2166.4	1970.8	1775.2	1651.5
16°	1820.4	1787.8	1633.1	1444.3	1343.1
17°	1476.9	1446.8	1348.1	1174.3	1089.0
18°	1192.7	1188.5	1106.6	956.2	880.1
19°	981.2	979.6	904.3	778.1	715.4
20°	783.1	794.0	736.3	626.0	583.4
21°	638.5	644.4	598.4	514.9	476.4
22°	519.9	524.0	494.0	425.4	404.5
23°	426.3	428.8	403.7	352.7	334.3
24°	351.0	352.7	330.1	294.2	278.3
25°	290.0	291.7	270.8	245.7	233.2
26°	240.7	242.4	224.0	206.4	193.9
27°	199.8	203.1	184.7	173.8	160.5
28°	170.5	171.3	154.6	147.9	135.4
29°	139.6	144.6	130.4	124.5	115.3
30°	119.5	122.0	111.2	107.0	98.6
32.5°	79.4	81.1	76.1	72.7	66.0
35°	53.5	54.3	53.5	48.5	44.3
37.5°	36.8	36.8	37.6	31.8	30.1
40°	25.1	25.1	25.9	21.7	20.9
42.5°	18.4	18.4	17.6	15.0	15.0
45°	13.4	13.4	12.5	11.7	11.7
47.5°	10.9	10.0	9.2	9.2	9.2
50°	8.4	8.4	7.5	6.7	7.5
52.5°	6.7	6.7	5.9	5.9	5.9
55°	5.9	5.0	4.2	4.2	5.0
57.5°	4.2	4.2	3.3	3.3	4.2
60°	4.2	3.3	2.5	3.3	3.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.5	1.7	1.7	1.7	1.7
70°	1.7	1.7	0.8	0.8	1.7
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	2.5	2.5	2.5	2.5
65°	2.5	2.5	1.7	1.7	2.5



(END OF REPORT)