

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: P282386

Luminaire Tested: **LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282386  
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: LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1933.0 lumens  
Efficiency: N/A  
Efficacy: 93.8 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

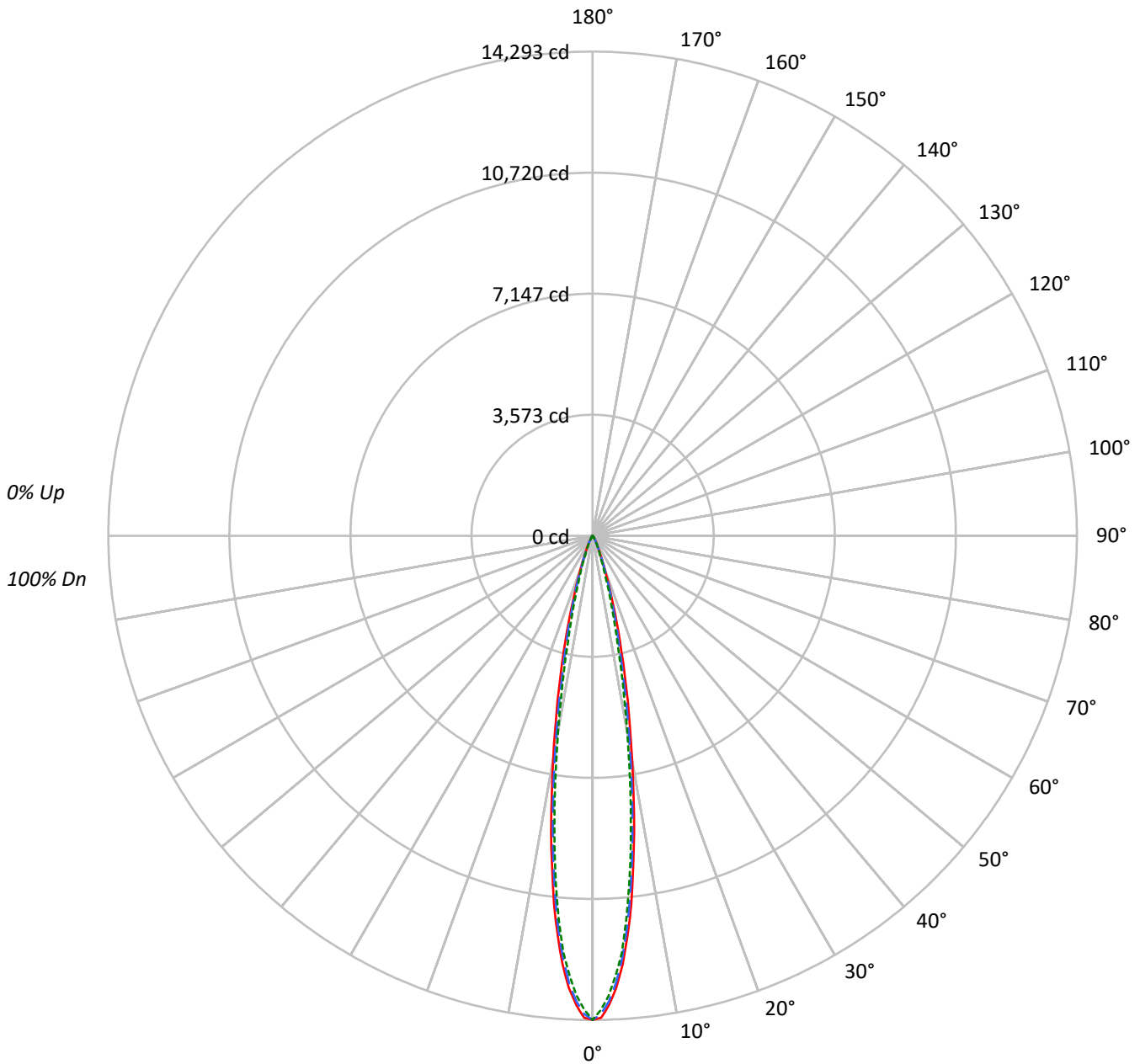
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97																			
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95																			
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92																			
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90																			
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88																			
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86																			
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84																			
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83																			
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81																			
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79																			

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

	0°	45°	90°
0°	7051620	7051620	7051620
5°	5867679	5760161	5643877
10°	3360976	3153874	2943465
15°	1494858	1327633	1112550
20°	542298	509904	403954
25°	208219	194447	167447
30°	89782	83516	74116
35°	42521	42521	35173
40°	21318	22026	17775
45°	12280	11512	10745
50°	8443	7599	7599
55°	6623	4731	5677
60°	5427	3256	4342
65°	3852	2568	3852
70°	3173	1587	3173
75°	2097	2097	2097
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	929.6	48.1
10°-20°	752.3	38.9
20°-30°	181.4	9.4
30°-40°	46.2	2.4
40°-50°	13.8	0.7
50°-60°	5.9	0.3
60°-70°	2.8	0.1
70°-80°	0.9	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°	1863.3	96.4
0°-40°	1909.6	98.8
0°-60°	1929.2	99.8
0°-90°	1933.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14293	14293	14293	14293	14293	
5°	11848	11739	11631	11530	11396	958
15°	2927	2857	2599	2341	2178	835
25°	382	385	357	324	308	198
35°	71	72	71	64	58	49
45°	18	18	16	15	15	15
55°	8	7	6	6	7	7
65°	3	3	2	2	3	4
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°	14293.0	14293.0	14293.0	14293.0	14293.0
1°	14229.1	14129.9	14117.8	14179.5	13997.6
2°	13865.3	13794.8	13754.0	13790.4	13584.2
3°	13366.0	13297.6	13223.8	13224.9	12994.5
4°	12685.8	12631.8	12507.2	12469.8	12336.4
5°	11848.0	11738.9	11630.9	11529.5	11396.1
6°	10922.1	10781.0	10626.6	10475.6	10338.9
7°	9832.9	9739.2	9535.3	9329.2	9213.4
8°	8808.9	8657.8	8419.7	8161.8	8063.7
9°	7707.6	7599.6	7326.2	7026.4	6928.3
10°	6708.9	6596.5	6295.5	5961.5	5875.5
11°	5771.9	5666.1	5353.0	5002.5	4911.0
12°	4979.3	4829.4	4470.0	4165.8	4076.5
13°	4190.0	4087.5	3746.9	3445.9	3272.9
14°	3518.7	3433.8	3125.2	2860.6	2677.6
15°	2926.7	2857.3	2599.3	2341.4	2178.2
16°	2400.9	2357.9	2154.0	1904.9	1771.5
17°	1947.8	1908.2	1778.1	1548.8	1436.4
18°	1573.1	1567.5	1459.5	1261.1	1160.8
19°	1294.2	1292.0	1192.7	1026.3	943.6
20°	1032.9	1047.2	971.2	825.7	769.4
21°	842.2	849.9	789.3	679.0	628.3
22°	685.7	691.2	651.5	561.1	533.5
23°	562.2	565.5	532.4	465.2	440.9
24°	463.0	465.2	435.4	388.0	367.1
25°	382.5	384.7	357.2	324.1	307.6
26°	317.5	319.7	295.4	272.3	255.7
27°	263.5	267.9	243.6	229.3	211.7
28°	224.9	226.0	203.9	195.1	178.6
29°	184.1	190.7	172.0	164.2	152.1
30°	157.6	160.9	146.6	141.1	130.1
32.5°	104.7	106.9	100.3	95.9	87.1
35°	70.6	71.7	70.6	63.9	58.4
37.5°	48.5	48.5	49.6	41.9	39.7
40°	33.1	33.1	34.2	28.7	27.6
42.5°	24.3	24.3	23.1	19.8	19.8
45°	17.6	17.6	16.5	15.4	15.4
47.5°	14.3	13.2	12.1	12.1	12.1
50°	11.0	11.0	9.9	8.8	9.9
52.5°	8.8	8.8	7.7	7.7	7.7
55°	7.7	6.6	5.5	5.5	6.6
57.5°	5.5	5.5	4.4	4.4	5.5
60°	5.5	4.4	3.3	4.4	4.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	3.3	2.2	2.2	2.2	2.2
70°	2.2	2.2	1.1	1.1	2.2
72.5°	1.1	1.1	1.1	1.1	1.1
75°	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	0.0	0.0	1.1
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°	4.4	3.3	3.3	3.3	3.3
65°	3.3	3.3	2.2	2.2	3.3



(END OF REPORT)