

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: P282756

Luminaire Tested: **LDA2B208040D010 EU2B20NFL258040 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282756  
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 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: 1757.4 lumens  
Efficiency: N/A  
Efficacy: 85.3 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

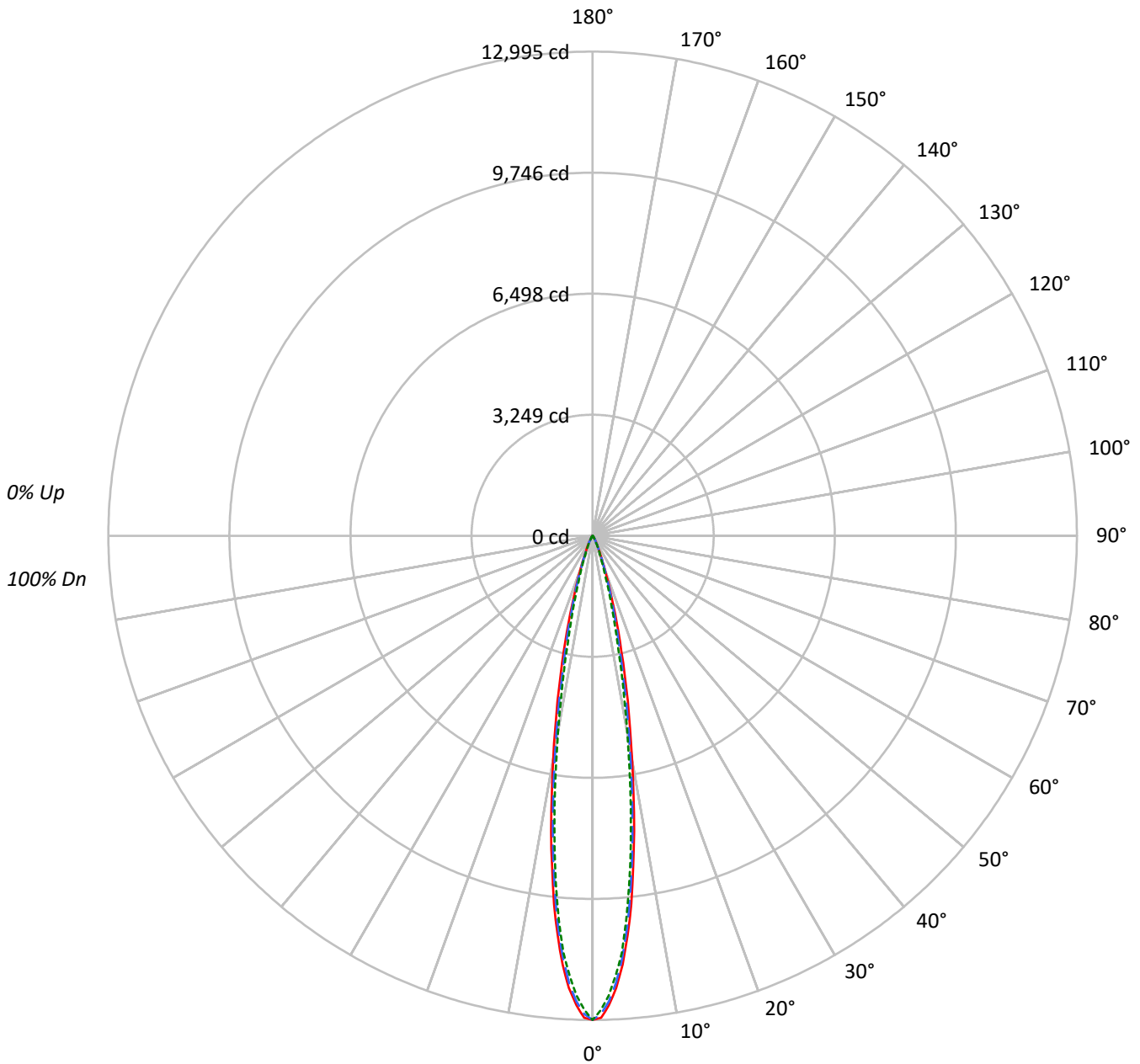
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					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	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°	6411286	6411286	6411286
5°	5334893	5237082	5131346
10°	3055783	2867467	2676196
15°	1359148	1207093	1011520
20°	493051	463597	367307
25°	189330	176755	152204
30°	81636	75939	67394
35°	38606	38606	31981
40°	19386	20030	16165
45°	11164	10466	9768
50°	7675	6908	6908
55°	6021	4301	5161
60°	4934	2960	3947
65°	3502	2335	3502
70°	2885	1442	2885
75°	1906	1906	1906
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	845.2	48.1
10°-20°	684.0	38.9
20°-30°	164.9	9.4
30°-40°	42.0	2.4
40°-50°	12.5	0.7
50°-60°	5.3	0.3
60°-70°	2.6	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°	1694.1	96.4
0°-40°	1736.2	98.8
0°-60°	1754.0	99.8
0°-90°	1757.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1757.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12995	12995	12995	12995	12995	
5°	10772	10673	10575	10482	10361	871
15°	2661	2598	2363	2129	1980	759
25°	348	350	325	295	280	180
35°	64	65	64	58	53	44
45°	16	16	15	14	14	14
55°	7	6	5	5	6	6
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°	12995.1	12995.1	12995.1	12995.1	12995.1
1°	12937.0	12846.8	12835.8	12891.9	12726.5
2°	12606.3	12542.1	12505.0	12538.1	12350.7
3°	12152.3	12090.1	12023.0	12024.0	11814.5
4°	11533.9	11484.8	11371.5	11337.4	11216.2
5°	10772.2	10672.9	10574.7	10482.5	10361.2
6°	9930.3	9802.0	9661.7	9524.4	9400.1
7°	8940.1	8854.9	8669.4	8482.0	8376.8
8°	8009.0	7871.7	7655.2	7420.6	7331.4
9°	7007.7	6909.5	6660.9	6388.3	6299.1
10°	6099.7	5997.5	5723.8	5420.2	5342.0
11°	5247.8	5151.6	4866.9	4548.2	4465.0
12°	4527.2	4390.8	4064.1	3787.5	3706.3
13°	3809.5	3716.3	3406.6	3133.0	2975.7
14°	3199.2	3122.0	2841.4	2600.8	2434.5
15°	2661.0	2597.8	2363.3	2128.8	1980.4
16°	2182.9	2143.8	1958.4	1731.9	1610.6
17°	1771.0	1734.9	1616.6	1408.2	1305.9
18°	1430.2	1425.2	1327.0	1146.6	1055.4
19°	1176.6	1174.6	1084.4	933.1	857.9
20°	939.1	952.1	883.0	750.7	699.6
21°	765.7	772.7	717.6	617.4	571.3
22°	623.4	628.4	592.3	510.1	485.1
23°	511.1	514.2	484.1	422.9	400.9
24°	420.9	422.9	395.9	352.8	333.7
25°	347.8	349.8	324.7	294.7	279.6
26°	288.6	290.7	268.6	247.6	232.5
27°	239.5	243.5	221.5	208.5	192.4
28°	204.5	205.5	185.4	177.4	162.4
29°	167.4	173.4	156.4	149.3	138.3
30°	143.3	146.3	133.3	128.3	118.3
32.5°	95.2	97.2	91.2	87.2	79.2
35°	64.1	65.1	64.1	58.1	53.1
37.5°	44.1	44.1	45.1	38.1	36.1
40°	30.1	30.1	31.1	26.1	25.1
42.5°	22.0	22.0	21.0	18.0	18.0
45°	16.0	16.0	15.0	14.0	14.0
47.5°	13.0	12.0	11.0	11.0	11.0
50°	10.0	10.0	9.0	8.0	9.0
52.5°	8.0	8.0	7.0	7.0	7.0
55°	7.0	6.0	5.0	5.0	6.0
57.5°	5.0	5.0	4.0	4.0	5.0
60°	5.0	4.0	3.0	4.0	4.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	3.0	2.0	2.0	2.0	2.0
70°	2.0	2.0	1.0	1.0	2.0
72.5°	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	0.0	0.0	1.0
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°	4.0	3.0	3.0	3.0	3.0
65°	3.0	3.0	2.0	2.0	3.0



(END OF REPORT)