

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: P283751

Luminaire Tested: **LDA2B209027D010 EU2B20FL409027 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283751  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209027D010 EU2B20FL409027 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1286.2 lumens  
Efficiency: N/A  
Efficacy: 62.4 lumens/watt  
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

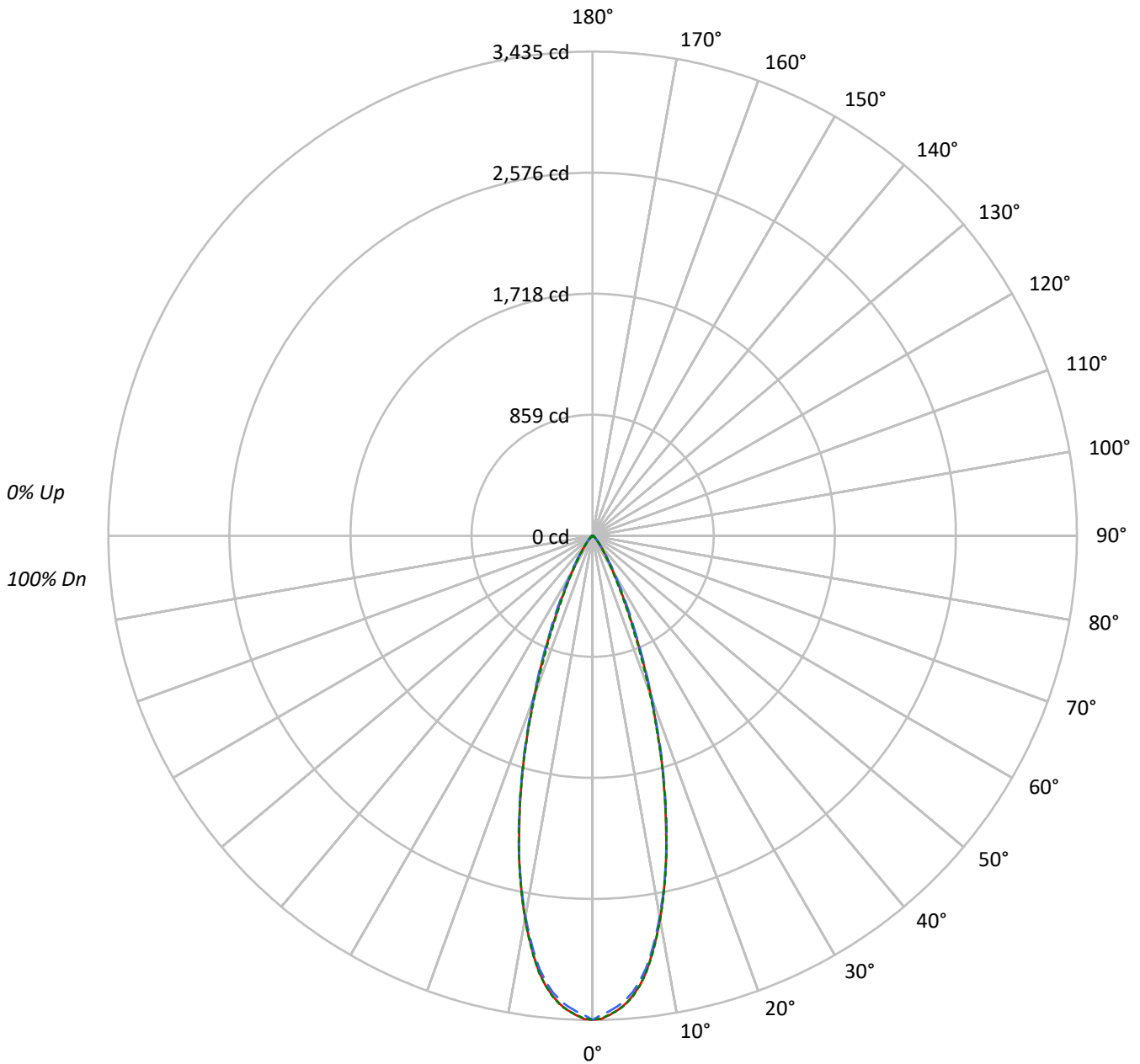
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

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

	0°	45°	90°
0°	1694550	1694550	1694550
5°	1621684	1609551	1624210
10°	1381633	1372966	1383085
15°	1018314	1024954	1021634
20°	635700	647460	621682
25°	328361	352367	311866
30°	157461	180476	150055
35°	81248	89981	76068
40°	45533	47852	43215
45°	27699	27699	26653
50°	14430	17730	14430
55°	7483	11784	8085
60°	8584	8584	8584
65°	9222	9222	9222
70°	11396	10386	11396
75°	11056	11056	11056
80°	10228	10228	10228
85°	7925	7925	7925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	295.4	23.0
10°-20°	542.7	42.2
20°-30°	294.2	22.9
30°-40°	94.4	7.3
40°-50°	32.2	2.5
50°-60°	11.3	0.9
60°-70°	8.2	0.6
70°-80°	6.0	0.5
80°-90°	1.7	0.1
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°	1132.3	88.0
0°-40°	1226.8	95.4
0°-60°	1270.3	98.8
0°-90°	1286.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1286.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3435	3435	3435	3435	3435	
5°	3274	3254	3250	3282	3280	296
15°	1994	2010	2007	2016	2000	540
25°	603	631	647	602	573	289
35°	135	141	149	136	126	91
45°	40	40	40	40	38	32
55°	9	11	14	11	9	9
65°	8	9	8	9	8	8
75°	6	6	6	6	6	6
85°	1	1	1	1	1	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3434.7	3434.7	3434.7	3434.7	3434.7
1°	3428.9	3404.4	3400.8	3432.5	3425.3
2°	3401.5	3378.4	3374.8	3406.6	3400.1
3°	3371.2	3350.3	3343.1	3376.3	3371.9
4°	3330.8	3311.3	3304.8	3338.0	3334.4
5°	3274.5	3254.3	3250.0	3282.5	3279.6
6°	3205.3	3188.7	3180.7	3213.2	3207.4
7°	3118.7	3103.5	3094.8	3118.7	3121.5
8°	3006.1	2998.9	2988.8	3012.6	3012.6
9°	2886.3	2879.8	2869.0	2890.6	2890.6
10°	2757.9	2753.5	2740.6	2760.8	2760.8
11°	2617.2	2615.0	2605.6	2622.2	2622.2
12°	2469.2	2474.3	2465.6	2480.1	2475.0
13°	2321.3	2319.2	2319.9	2330.7	2322.8
14°	2153.9	2166.9	2169.1	2175.6	2163.3
15°	1993.7	2010.3	2006.7	2016.1	2000.2
16°	1829.9	1848.7	1848.0	1850.1	1835.0
17°	1676.9	1687.8	1688.5	1686.3	1667.6
18°	1513.9	1529.0	1529.0	1525.4	1503.0
19°	1354.4	1365.9	1373.9	1365.9	1340.0
20°	1210.8	1218.7	1233.2	1213.0	1184.1
21°	1073.0	1080.2	1092.5	1068.7	1036.9
22°	940.9	950.3	961.9	934.4	901.3
23°	817.5	839.2	843.5	806.0	777.9
24°	704.3	728.8	736.0	697.8	668.2
25°	603.2	630.7	647.3	602.5	572.9
26°	515.9	542.6	562.8	518.1	490.0
27°	439.4	467.6	488.5	446.7	420.0
28°	373.8	401.2	422.8	383.9	358.6
29°	324.7	340.6	362.2	329.8	306.7
30°	276.4	293.7	316.8	283.6	263.4
32.5°	189.8	199.2	217.2	197.0	181.1
35°	134.9	140.7	149.4	135.7	126.3
37.5°	96.0	98.9	103.9	96.0	90.9
40°	70.7	72.2	74.3	70.0	67.1
42.5°	52.7	53.4	53.4	52.0	50.5
45°	39.7	40.4	39.7	39.7	38.2
47.5°	28.9	31.0	30.3	30.3	28.1
50°	18.8	23.1	23.1	22.4	18.8
52.5°	11.5	15.9	18.0	15.9	12.3
55°	8.7	10.8	13.7	10.8	9.4
57.5°	8.7	8.7	10.1	8.7	8.7
60°	8.7	8.7	8.7	8.7	8.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	7.9	7.9	7.9	7.9	7.9
70°	7.9	7.9	7.2	7.9	7.9
72.5°	7.2	7.2	6.5	7.2	6.5
75°	5.8	5.8	5.8	5.8	5.8
77.5°	4.3	4.3	4.3	4.3	4.3
80°	3.6	3.6	3.6	3.6	3.6
82.5°	2.2	2.2	2.2	2.9	2.2
85°	1.4	1.4	1.4	1.4	1.4
87.5°	0.7	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







62.5°	8.7	8.7	8.7	8.7	8.7
65°	7.9	8.7	7.9	8.7	7.9



(END OF REPORT)