

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: P283779

Luminaire Tested: **LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283779  
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: LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MB

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1186.8 lumens  
Efficiency: N/A  
Efficacy: 57.6 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

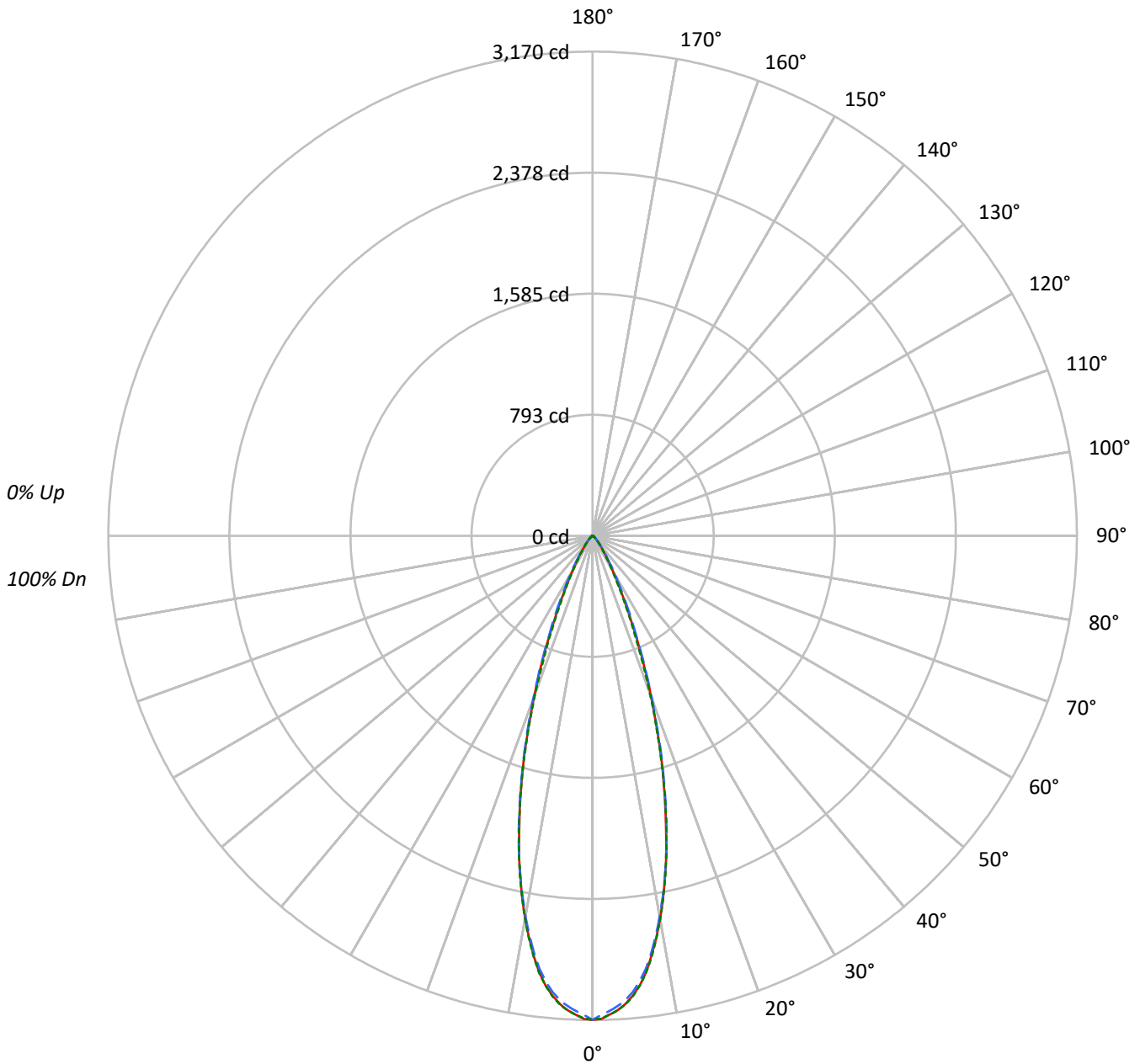
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1563710	1563710	1563710
5°	1496486	1485244	1498764
10°	1274925	1266910	1276278
15°	939707	945785	942771
20°	586610	597426	573694
25°	303048	325149	287806
30°	145270	166519	138433
35°	74984	82995	70166
40°	42056	44181	39866
45°	25537	25537	24629
50°	13278	16348	13278
55°	6881	10924	7483
60°	7894	7894	7894
65°	8522	8522	8522
70°	10530	9665	10530
75°	10103	10103	10103
80°	9376	9376	9376
85°	7359	7359	7359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	272.6	23.0
10°-20°	500.8	42.2
20°-30°	271.5	22.9
30°-40°	87.1	7.3
40°-50°	29.7	2.5
50°-60°	10.4	0.9
60°-70°	7.6	0.6
70°-80°	5.5	0.5
80°-90°	1.6	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°	1044.9	88.0
0°-40°	1132.0	95.4
0°-60°	1172.1	98.8
0°-90°	1186.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1186.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3170	3170	3170	3170	3170	
5°	3022	3003	2999	3029	3026	273
15°	1840	1855	1852	1860	1846	499
25°	557	582	597	556	529	267
35°	124	130	138	125	116	84
45°	37	37	37	37	35	29
55°	8	10	13	10	9	9
65°	7	8	7	8	7	8
75°	5	5	5	5	5	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°	3169.5	3169.5	3169.5	3169.5	3169.5
1°	3164.2	3141.5	3138.2	3167.5	3160.8
2°	3138.8	3117.5	3114.2	3143.5	3137.5
3°	3110.9	3091.6	3084.9	3115.5	3111.5
4°	3073.6	3055.6	3049.6	3080.3	3076.9
5°	3021.7	3003.0	2999.0	3029.0	3026.3
6°	2957.7	2942.4	2935.1	2965.1	2959.7
7°	2877.8	2863.8	2855.9	2877.8	2880.5
8°	2774.0	2767.3	2758.0	2780.0	2780.0
9°	2663.4	2657.4	2647.4	2667.4	2667.4
10°	2544.9	2540.9	2528.9	2547.6	2547.6
11°	2415.1	2413.1	2404.4	2419.7	2419.7
12°	2278.6	2283.2	2275.2	2288.5	2283.9
13°	2142.1	2140.1	2140.7	2150.7	2143.4
14°	1987.6	1999.6	2001.6	2007.6	1996.2
15°	1839.8	1855.1	1851.7	1860.4	1845.8
16°	1688.6	1705.9	1705.3	1707.3	1693.3
17°	1547.5	1557.4	1558.1	1556.1	1538.8
18°	1397.0	1411.0	1411.0	1407.6	1387.0
19°	1249.8	1260.5	1267.8	1260.5	1236.5
20°	1117.3	1124.6	1137.9	1119.3	1092.7
21°	990.1	996.8	1008.1	986.1	956.8
22°	868.3	876.9	887.6	862.3	831.7
23°	754.4	774.4	778.4	743.8	717.8
24°	649.9	672.5	679.2	643.9	616.6
25°	556.7	582.0	597.3	556.0	528.7
26°	476.1	500.7	519.4	478.1	452.1
27°	405.5	431.5	450.8	412.2	387.5
28°	344.9	370.2	390.2	354.2	330.9
29°	299.6	314.3	334.3	304.3	283.0
30°	255.0	271.0	292.3	261.7	243.0
32.5°	175.1	183.8	200.4	181.8	167.1
35°	124.5	129.8	137.8	125.2	116.5
37.5°	88.6	91.2	95.9	88.6	83.9
40°	65.3	66.6	68.6	64.6	61.9
42.5°	48.6	49.3	49.3	47.9	46.6
45°	36.6	37.3	36.6	36.6	35.3
47.5°	26.6	28.6	28.0	28.0	26.0
50°	17.3	21.3	21.3	20.6	17.3
52.5°	10.7	14.6	16.6	14.6	11.3
55°	8.0	10.0	12.7	10.0	8.7
57.5°	8.0	8.0	9.3	8.0	8.0
60°	8.0	8.0	8.0	8.0	8.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	7.3	7.3	7.3	7.3	7.3
70°	7.3	7.3	6.7	7.3	7.3
72.5°	6.7	6.7	6.0	6.7	6.0
75°	5.3	5.3	5.3	5.3	5.3
77.5°	4.0	4.0	4.0	4.0	4.0
80°	3.3	3.3	3.3	3.3	3.3
82.5°	2.0	2.0	2.0	2.7	2.0
85°	1.3	1.3	1.3	1.3	1.3
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°	8.0	8.0	8.0	8.0	8.0
65°	7.3	8.0	7.3	8.0	7.3



(END OF REPORT)