

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: P283693

Luminaire Tested: **LDA2B159050D010 EU2B15FL409050 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283693  
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: LDA2B159050D010 EU2B15FL409050 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1027.5 lumens  
Efficiency: N/A  
Efficacy: 72.9 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

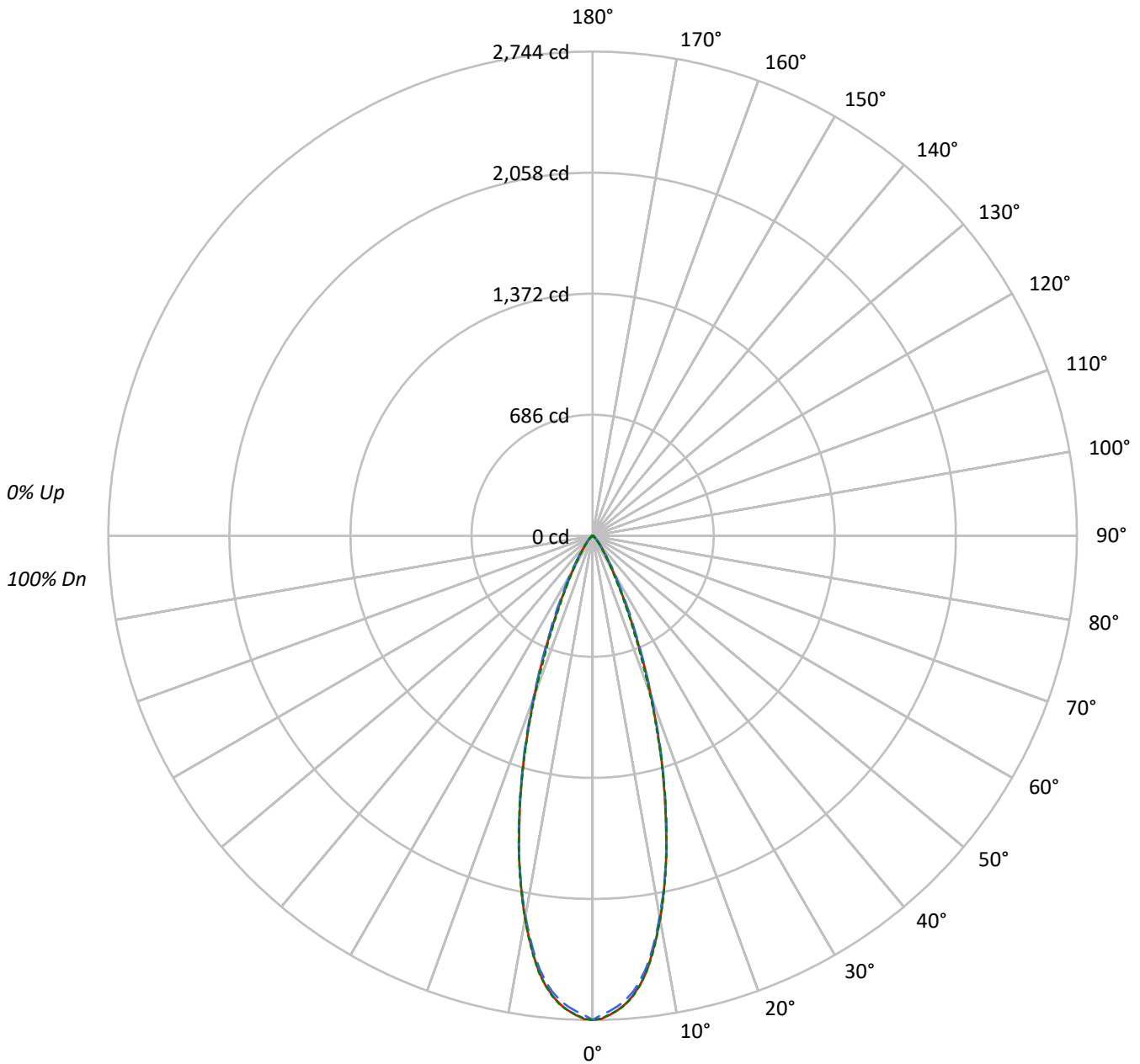
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1353735	1353735	1353735
5°	1295515	1285808	1297545
10°	1103743	1096830	1104895
15°	813497	818809	816153
20°	507856	517254	496673
25°	262329	281491	249156
30°	125786	144187	119862
35°	64926	71852	60770
40°	36388	38256	34520
45°	22118	22118	21350
50°	11513	14123	11513
55°	5935	9462	6451
60°	6808	6808	6808
65°	7355	7355	7355
70°	9088	8366	9088
75°	8769	8769	8769
80°	8239	8239	8239
85°	6793	6793	6793



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.0	23.0
10°-20°	433.5	42.2
20°-30°	235.0	22.9
30°-40°	75.4	7.3
40°-50°	25.7	2.5
50°-60°	9.0	0.9
60°-70°	6.5	0.6
70°-80°	4.8	0.5
80°-90°	1.4	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°	904.6	88.0
0°-40°	980.0	95.4
0°-60°	1014.7	98.8
0°-90°	1027.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1027.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2744	2744	2744	2744	2744	
5°	2616	2600	2596	2622	2620	237
15°	1593	1606	1603	1611	1598	432
25°	482	504	517	481	458	231
35°	108	112	119	108	101	73
45°	32	32	32	32	31	25
55°	7	9	11	9	8	8
65°	6	7	6	7	6	6
75°	5	5	5	5	5	5
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2743.9	2743.9	2743.9	2743.9	2743.9
1°	2739.3	2719.7	2716.8	2742.2	2736.4
2°	2717.4	2698.9	2696.1	2721.4	2716.2
3°	2693.2	2676.5	2670.7	2697.2	2693.8
4°	2660.9	2645.3	2640.1	2666.7	2663.8
5°	2615.9	2599.8	2596.3	2622.3	2620.0
6°	2560.6	2547.3	2541.0	2566.9	2562.3
7°	2491.4	2479.3	2472.4	2491.4	2493.7
8°	2401.5	2395.7	2387.7	2406.7	2406.7
9°	2305.8	2300.6	2292.0	2309.3	2309.3
10°	2203.2	2199.7	2189.4	2205.5	2205.5
11°	2090.8	2089.1	2081.6	2094.8	2094.8
12°	1972.6	1976.6	1969.7	1981.3	1977.2
13°	1854.4	1852.7	1853.3	1861.9	1855.6
14°	1720.7	1731.1	1732.8	1738.0	1728.2
15°	1592.7	1606.0	1603.1	1610.6	1597.9
16°	1461.9	1476.9	1476.3	1478.0	1465.9
17°	1339.7	1348.3	1348.9	1347.2	1332.2
18°	1209.4	1221.5	1221.5	1218.6	1200.7
19°	1082.0	1091.2	1097.6	1091.2	1070.5
20°	967.3	973.6	985.2	969.0	946.0
21°	857.2	862.9	872.7	853.7	828.4
22°	751.7	759.2	768.4	746.5	720.0
23°	653.1	670.4	673.9	643.9	621.4
24°	562.6	582.2	588.0	557.4	533.8
25°	481.9	503.8	517.1	481.3	457.7
26°	412.2	433.5	449.6	413.9	391.4
27°	351.1	373.5	390.3	356.8	335.5
28°	298.6	320.5	337.8	306.7	286.5
29°	259.4	272.1	289.4	263.4	245.0
30°	220.8	234.6	253.1	226.5	210.4
32.5°	151.6	159.1	173.5	157.4	144.7
35°	107.8	112.4	119.3	108.4	100.9
37.5°	76.7	79.0	83.0	76.7	72.6
40°	56.5	57.6	59.4	55.9	53.6
42.5°	42.1	42.7	42.7	41.5	40.4
45°	31.7	32.3	31.7	31.7	30.6
47.5°	23.1	24.8	24.2	24.2	22.5
50°	15.0	18.4	18.4	17.9	15.0
52.5°	9.2	12.7	14.4	12.7	9.8
55°	6.9	8.6	11.0	8.6	7.5
57.5°	6.9	6.9	8.1	6.9	6.9
60°	6.9	6.9	6.9	6.9	6.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	6.3	6.3	6.3	6.3	6.3
70°	6.3	6.3	5.8	6.3	6.3
72.5°	5.8	5.8	5.2	5.8	5.2
75°	4.6	4.6	4.6	4.6	4.6
77.5°	3.5	3.5	3.5	3.5	3.5
80°	2.9	2.9	2.9	2.9	2.9
82.5°	1.7	1.7	1.7	2.3	1.7
85°	1.2	1.2	1.2	1.2	1.2
87.5°	0.6	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	6.9	6.9	6.9	6.9	6.9
65°	6.3	6.9	6.3	6.9	6.3



(END OF REPORT)