

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: P283669

Luminaire Tested: **LDA2B159027D010 EU2B15FL409027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283669  
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: LDA2B159027D010 EU2B15FL409027 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: 904.1 lumens  
Efficiency: N/A  
Efficacy: 64.1 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

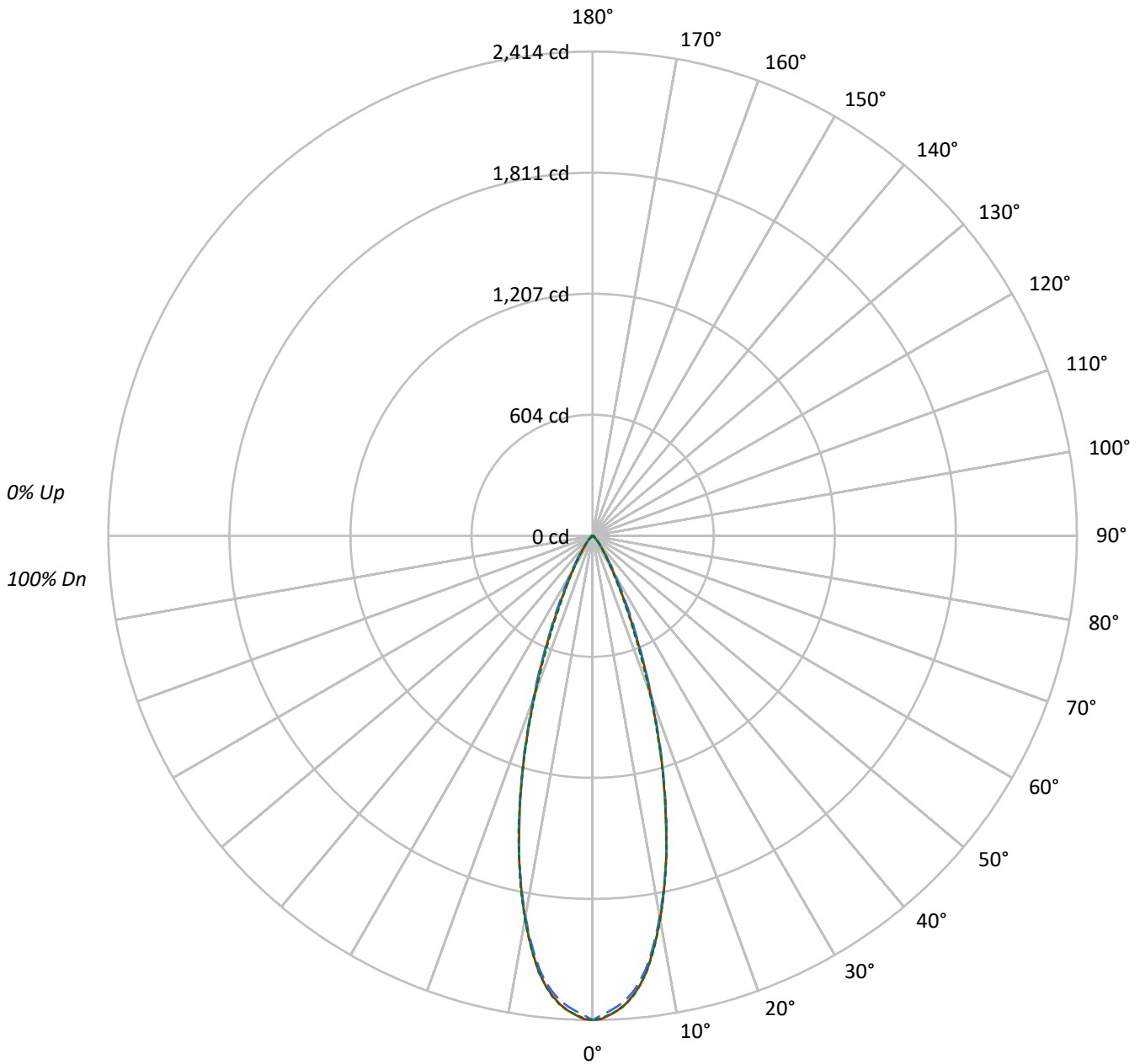
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1191222	1191222	1191222
5°	1140008	1131489	1141790
10°	971236	965174	972288
15°	715889	720537	718188
20°	446901	455144	437031
25°	230865	247686	219270
30°	110690	126869	105449
35°	57157	63240	53483
40°	32009	33619	30399
45°	19466	19466	18769
50°	10131	12434	10131
55°	5247	8257	5677
60°	6019	6019	6019
65°	6537	6537	6537
70°	8078	7357	8078
75°	7815	7815	7815
80°	7103	7103	7103
85°	5661	5661	5661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.7	23.0
10°-20°	381.5	42.2
20°-30°	206.8	22.9
30°-40°	66.4	7.3
40°-50°	22.6	2.5
50°-60°	7.9	0.9
60°-70°	5.8	0.6
70°-80°	4.2	0.5
80°-90°	1.2	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°	796.0	88.0
0°-40°	862.4	95.4
0°-60°	892.9	98.8
0°-90°	904.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	904.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2414	2414	2414	2414	2414	
5°	2302	2288	2285	2308	2306	208
15°	1402	1413	1411	1417	1406	380
25°	424	443	455	424	403	203
35°	95	99	105	95	89	64
45°	28	28	28	28	27	22
55°	6	8	10	8	7	7
65°	6	6	6	6	6	6
75°	4	4	4	4	4	4
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°	2414.5	2414.5	2414.5	2414.5	2414.5
1°	2410.5	2393.2	2390.7	2413.0	2408.0
2°	2391.2	2375.0	2372.4	2394.8	2390.2
3°	2369.9	2355.2	2350.1	2373.5	2370.4
4°	2341.5	2327.8	2323.2	2346.6	2344.0
5°	2301.9	2287.7	2284.7	2307.5	2305.5
6°	2253.2	2241.6	2236.0	2258.8	2254.8
7°	2192.4	2181.7	2175.6	2192.4	2194.4
8°	2113.2	2108.2	2101.1	2117.8	2117.8
9°	2029.0	2024.5	2016.9	2032.1	2032.1
10°	1938.7	1935.7	1926.6	1940.8	1940.8
11°	1839.8	1838.3	1831.7	1843.4	1843.4
12°	1735.8	1739.4	1733.3	1743.4	1739.9
13°	1631.8	1630.3	1630.8	1638.4	1632.9
14°	1514.2	1523.3	1524.8	1529.4	1520.8
15°	1401.6	1413.2	1410.7	1417.3	1406.1
16°	1286.4	1299.6	1299.1	1300.6	1290.0
17°	1178.9	1186.5	1187.0	1185.5	1172.3
18°	1064.2	1074.9	1074.9	1072.3	1056.6
19°	952.1	960.2	965.8	960.2	942.0
20°	851.2	856.8	866.9	852.7	832.4
21°	754.3	759.4	768.0	751.2	728.9
22°	661.5	668.1	676.2	656.9	633.6
23°	574.7	589.9	593.0	566.6	546.8
24°	495.1	512.3	517.4	490.5	469.7
25°	424.1	443.3	455.0	423.6	402.8
26°	362.7	381.5	395.7	364.2	344.4
27°	308.9	328.7	343.4	314.0	295.2
28°	262.8	282.0	297.3	269.9	252.1
29°	228.3	239.4	254.6	231.8	215.6
30°	194.3	206.5	222.7	199.4	185.1
32.5°	133.4	140.0	152.7	138.5	127.3
35°	94.9	98.9	105.0	95.4	88.8
37.5°	67.5	69.5	73.0	67.5	63.9
40°	49.7	50.7	52.2	49.2	47.2
42.5°	37.0	37.5	37.5	36.5	35.5
45°	27.9	28.4	27.9	27.9	26.9
47.5°	20.3	21.8	21.3	21.3	19.8
50°	13.2	16.2	16.2	15.7	13.2
52.5°	8.1	11.2	12.7	11.2	8.6
55°	6.1	7.6	9.6	7.6	6.6
57.5°	6.1	6.1	7.1	6.1	6.1
60°	6.1	6.1	6.1	6.1	6.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	5.6	5.6	5.6	5.6	5.6
70°	5.6	5.6	5.1	5.6	5.6
72.5°	5.1	5.1	4.6	5.1	4.6
75°	4.1	4.1	4.1	4.1	4.1
77.5°	3.0	3.0	3.0	3.0	3.0
80°	2.5	2.5	2.5	2.5	2.5
82.5°	1.5	1.5	1.5	2.0	1.5
85°	1.0	1.0	1.0	1.0	1.0
87.5°	0.5	0.5	0.5	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	6.1	6.1	6.1	6.1	6.1
65°	5.6	6.1	5.6	6.1	5.6



(END OF REPORT)