

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: P283668

Luminaire Tested: **LDA2B159027D010 EU2B15FL409027 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283668  
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 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 890.4 lumens  
Efficiency: N/A  
Efficacy: 63.2 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

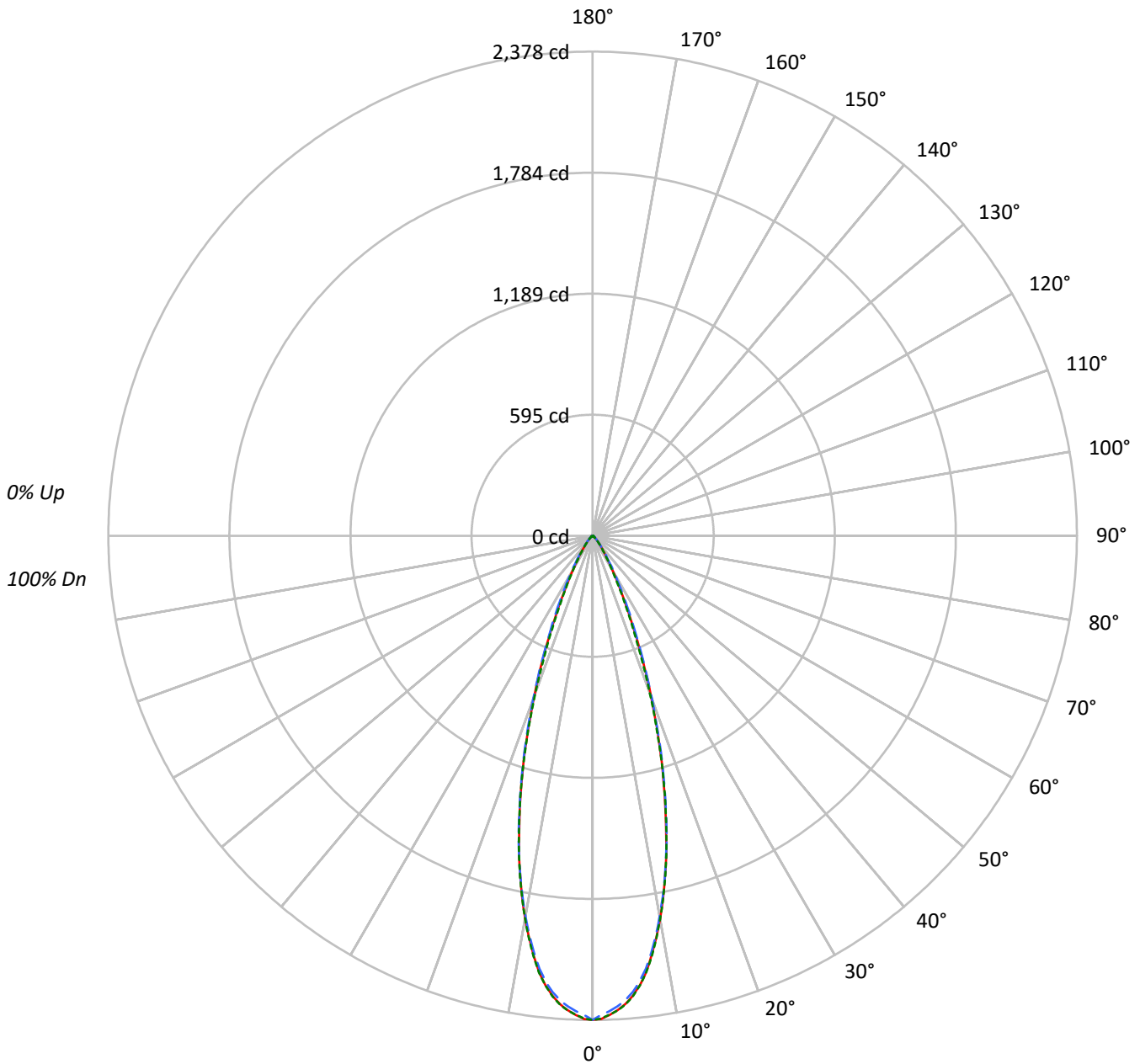
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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°	1173165	1173165	1173165
5°	1122723	1114304	1124457
10°	956507	950495	957509
15°	705010	709556	707257
20°	440076	448214	430415
25°	227327	243930	215895
30°	108981	124932	103854
35°	56253	62276	52640
40°	31558	33168	29948
45°	19187	19187	18490
50°	9978	12281	9978
55°	5161	8171	5591
60°	5920	5920	5920
65°	6421	6421	6421
70°	7934	7212	7934
75°	7625	7625	7625
80°	7103	7103	7103
85°	5661	5661	5661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.5	23.0
10°-20°	375.7	42.2
20°-30°	203.7	22.9
30°-40°	65.4	7.3
40°-50°	22.3	2.5
50°-60°	7.8	0.9
60°-70°	5.7	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°	783.9	88.0
0°-40°	849.3	95.4
0°-60°	879.4	98.8
0°-90°	890.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	890.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2378	2378	2378	2378	2378	
5°	2267	2253	2250	2272	2270	205
15°	1380	1392	1389	1396	1385	374
25°	418	437	448	417	397	200
35°	93	97	103	94	87	63
45°	28	28	28	28	26	22
55°	6	8	10	8	6	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°	2377.9	2377.9	2377.9	2377.9	2377.9
1°	2373.9	2356.9	2354.4	2376.4	2371.4
2°	2354.9	2338.9	2336.4	2358.4	2353.9
3°	2333.9	2319.4	2314.4	2337.4	2334.4
4°	2305.9	2292.4	2287.9	2310.9	2308.4
5°	2267.0	2253.0	2250.0	2272.4	2270.5
6°	2219.0	2207.5	2202.0	2224.5	2220.5
7°	2159.1	2148.6	2142.6	2159.1	2161.0
8°	2081.1	2076.1	2069.1	2085.6	2085.6
9°	1998.2	1993.7	1986.2	2001.2	2001.2
10°	1909.3	1906.3	1897.3	1911.3	1911.3
11°	1811.9	1810.4	1803.9	1815.4	1815.4
12°	1709.5	1713.0	1707.0	1716.9	1713.5
13°	1607.0	1605.6	1606.0	1613.5	1608.0
14°	1491.2	1500.1	1501.6	1506.1	1497.6
15°	1380.3	1391.7	1389.2	1395.7	1384.7
16°	1266.9	1279.8	1279.3	1280.8	1270.4
17°	1161.0	1168.4	1168.9	1167.4	1154.5
18°	1048.1	1058.5	1058.5	1056.0	1040.6
19°	937.7	945.6	951.1	945.6	927.7
20°	838.2	843.7	853.7	839.7	819.8
21°	742.8	747.8	756.3	739.8	717.9
22°	651.4	657.9	665.9	646.9	623.9
23°	566.0	581.0	584.0	558.0	538.5
24°	487.6	504.5	509.5	483.1	462.6
25°	417.6	436.6	448.1	417.1	396.6
26°	357.2	375.7	389.6	358.7	339.2
27°	304.2	323.7	338.2	309.2	290.7
28°	258.8	277.7	292.7	265.8	248.3
29°	224.8	235.8	250.8	228.3	212.3
30°	191.3	203.3	219.3	196.3	182.3
32.5°	131.4	137.9	150.4	136.4	125.4
35°	93.4	97.4	103.4	93.9	87.4
37.5°	66.4	68.4	71.9	66.4	62.9
40°	49.0	50.0	51.5	48.5	46.5
42.5°	36.5	37.0	37.0	36.0	35.0
45°	27.5	28.0	27.5	27.5	26.5
47.5°	20.0	21.5	21.0	21.0	19.5
50°	13.0	16.0	16.0	15.5	13.0
52.5°	8.0	11.0	12.5	11.0	8.5
55°	6.0	7.5	9.5	7.5	6.5
57.5°	6.0	6.0	7.0	6.0	6.0
60°	6.0	6.0	6.0	6.0	6.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	5.5	5.5	5.5	5.5	5.5
70°	5.5	5.5	5.0	5.5	5.5
72.5°	5.0	5.0	4.5	5.0	4.5
75°	4.0	4.0	4.0	4.0	4.0
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°	6.0	6.0	6.0	6.0	6.0
65°	5.5	6.0	5.5	6.0	5.5



(END OF REPORT)