

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: P283601

Luminaire Tested: **LDA2B109040D010 EU2B10FL409040 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283601  
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: LDA2B109040D010 EU2B10FL409040 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 1000 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: 768.5 lumens  
Efficiency: N/A  
Efficacy: 76.9 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

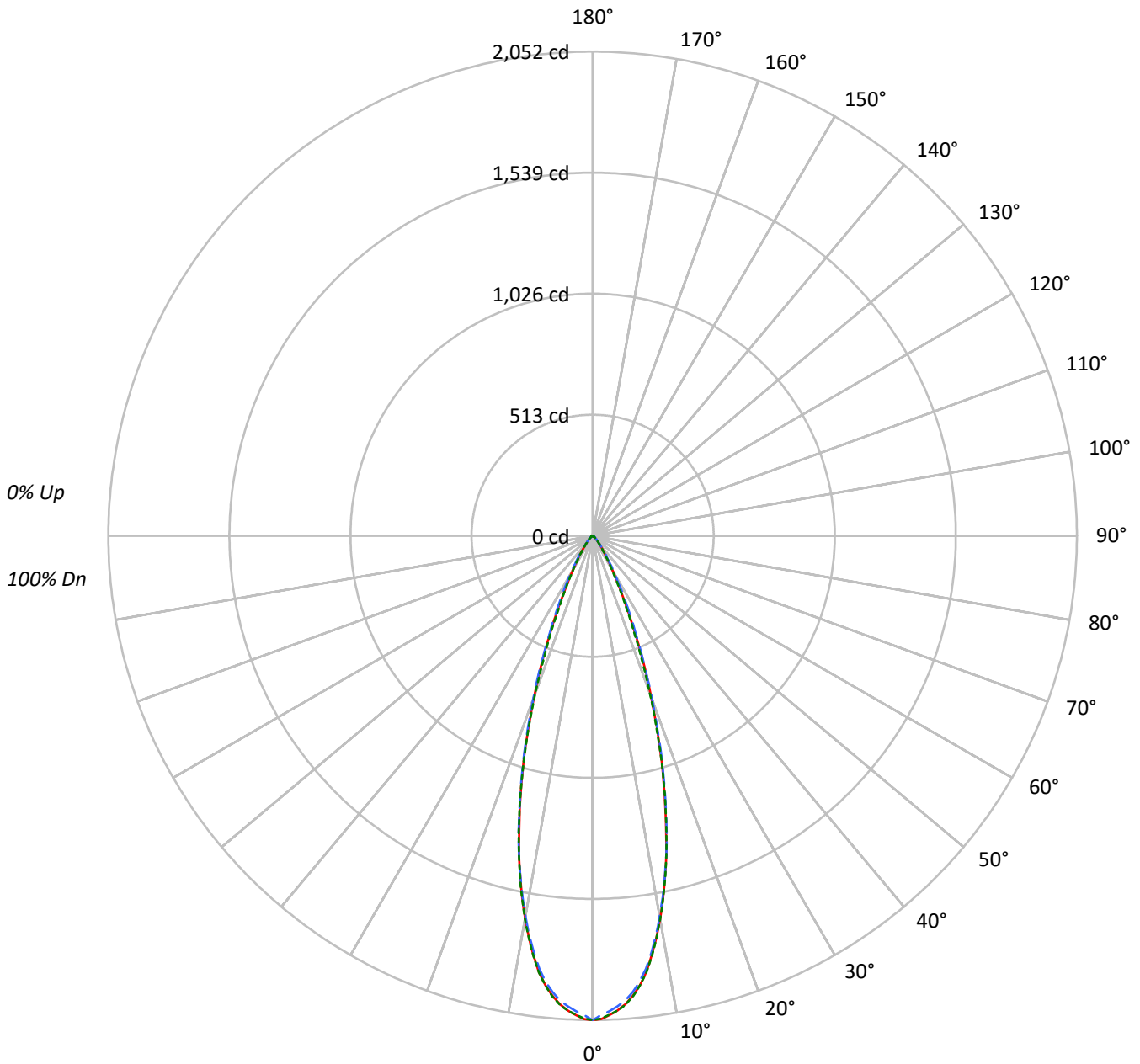
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1012576	1012576	1012576
5°	969049	961768	970534
10°	825603	820393	826455
15°	608475	612459	610467
20°	379855	386891	371507
25°	196243	210560	186390
30°	94055	107841	89668
35°	48544	53784	45472
40°	27243	28595	25826
45°	16536	16536	15978
50°	8596	10592	8596
55°	4473	7053	4817
60°	5131	5131	5131
65°	5487	5487	5487
70°	6780	6203	6780
75°	6481	6481	6481
80°	6251	6251	6251
85°	5095	5095	5095



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.5	23.0
10°-20°	324.3	42.2
20°-30°	175.8	22.9
30°-40°	56.4	7.3
40°-50°	19.2	2.5
50°-60°	6.8	0.9
60°-70°	4.9	0.6
70°-80°	3.6	0.5
80°-90°	1.0	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°	676.6	88.0
0°-40°	733.0	95.4
0°-60°	759.0	98.8
0°-90°	768.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	768.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2052	2052	2052	2052	2052	
5°	1957	1945	1942	1961	1960	177
15°	1191	1201	1199	1205	1195	323
25°	360	377	387	360	342	173
35°	81	84	89	81	76	54
45°	24	24	24	24	23	19
55°	5	6	8	6	6	6
65°	5	5	5	5	5	5
75°	3	3	3	3	3	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°	2052.4	2052.4	2052.4	2052.4	2052.4
1°	2048.9	2034.3	2032.1	2051.1	2046.8
2°	2032.6	2018.8	2016.6	2035.6	2031.7
3°	2014.5	2001.9	1997.6	2017.5	2014.9
4°	1990.3	1978.7	1974.8	1994.6	1992.5
5°	1956.7	1944.6	1942.0	1961.4	1959.7
6°	1915.3	1905.4	1900.6	1920.0	1916.6
7°	1863.5	1854.5	1849.3	1863.5	1865.3
8°	1796.3	1792.0	1785.9	1800.2	1800.2
9°	1724.7	1720.8	1714.4	1727.3	1727.3
10°	1648.0	1645.4	1637.6	1649.7	1649.7
11°	1563.9	1562.6	1557.0	1566.9	1566.9
12°	1475.5	1478.5	1473.3	1481.9	1478.9
13°	1387.1	1385.8	1386.2	1392.7	1388.0
14°	1287.1	1294.8	1296.1	1300.0	1292.7
15°	1191.3	1201.3	1199.1	1204.7	1195.2
16°	1093.5	1104.7	1104.2	1105.5	1096.5
17°	1002.1	1008.5	1009.0	1007.7	996.4
18°	904.6	913.7	913.7	911.5	898.1
19°	809.3	816.2	821.0	816.2	800.7
20°	723.5	728.3	736.9	724.8	707.6
21°	641.2	645.5	652.8	638.6	619.6
22°	562.3	567.9	574.8	558.4	538.5
23°	488.5	501.5	504.0	481.6	464.8
24°	420.8	435.5	439.8	416.9	399.3
25°	360.5	376.8	386.8	360.0	342.4
26°	308.3	324.2	336.3	309.6	292.8
27°	262.6	279.4	291.9	266.9	250.9
28°	223.3	239.7	252.7	229.4	214.3
29°	194.0	203.5	216.5	197.0	183.2
30°	165.1	175.5	189.3	169.5	157.4
32.5°	113.4	119.0	129.8	117.7	108.2
35°	80.6	84.1	89.3	81.1	75.5
37.5°	57.3	59.1	62.1	57.3	54.3
40°	42.3	43.1	44.4	41.8	40.1
42.5°	31.5	31.9	31.9	31.0	30.2
45°	23.7	24.1	23.7	23.7	22.9
47.5°	17.2	18.5	18.1	18.1	16.8
50°	11.2	13.8	13.8	13.4	11.2
52.5°	6.9	9.5	10.8	9.5	7.3
55°	5.2	6.5	8.2	6.5	5.6
57.5°	5.2	5.2	6.0	5.2	5.2
60°	5.2	5.2	5.2	5.2	5.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	4.7	4.7	4.7	4.7	4.7
70°	4.7	4.7	4.3	4.7	4.7
72.5°	4.3	4.3	3.9	4.3	3.9
75°	3.4	3.4	3.4	3.4	3.4
77.5°	2.6	2.6	2.6	2.6	2.6
80°	2.2	2.2	2.2	2.2	2.2
82.5°	1.3	1.3	1.3	1.7	1.3
85°	0.9	0.9	0.9	0.9	0.9
87.5°	0.4	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	5.2	5.2	5.2	5.2	5.2
65°	4.7	5.2	4.7	5.2	4.7



(END OF REPORT)