

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: P283607

Luminaire Tested: **LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283607  
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: LDA2B109050D010 EU2B10FL409050 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: 789.5 lumens  
Efficiency: N/A  
Efficacy: 79.0 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

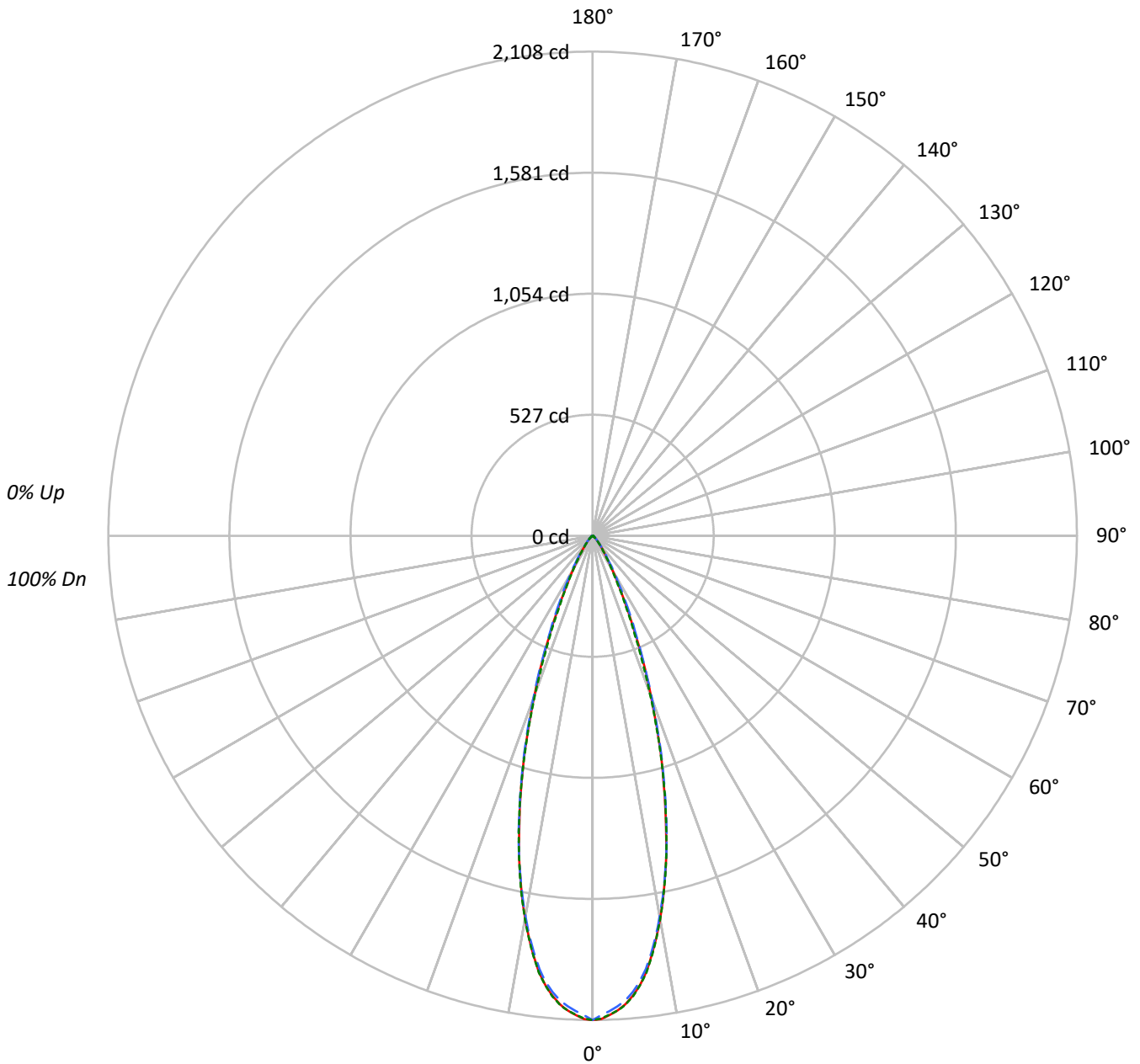
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1040253	1040253	1040253
5°	995544	988066	997079
10°	848147	842836	849049
15°	625126	629212	627169
20°	390251	397444	381640
25°	201578	216276	191453
30°	96676	110804	92118
35°	49869	55229	46677
40°	27951	29368	26534
45°	17024	17024	16396
50°	8827	10899	8827
55°	4559	7225	4989
60°	5230	5230	5230
65°	5720	5720	5720
70°	7068	6347	7068
75°	6672	6672	6672
80°	6251	6251	6251
85°	5095	5095	5095



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.4	23.0
10°-20°	333.1	42.2
20°-30°	180.6	22.9
30°-40°	58.0	7.3
40°-50°	19.8	2.5
50°-60°	6.9	0.9
60°-70°	5.0	0.6
70°-80°	3.7	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°	695.1	88.0
0°-40°	753.1	95.4
0°-60°	779.8	98.8
0°-90°	789.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	789.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2108	2108	2108	2108	2108	
5°	2010	1998	1995	2015	2013	182
15°	1224	1234	1232	1238	1228	332
25°	370	387	397	370	352	177
35°	83	86	92	83	78	56
45°	24	25	24	24	24	19
55°	5	7	8	7	6	6
65°	5	5	5	5	5	5
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°	2108.5	2108.5	2108.5	2108.5	2108.5
1°	2105.0	2089.9	2087.7	2107.2	2102.8
2°	2088.2	2074.0	2071.8	2091.3	2087.3
3°	2069.6	2056.7	2052.3	2072.7	2070.0
4°	2044.8	2032.8	2028.8	2049.2	2047.0
5°	2010.2	1997.8	1995.1	2015.1	2013.3
6°	1967.7	1957.5	1952.6	1972.6	1969.0
7°	1914.5	1905.2	1899.9	1914.5	1916.3
8°	1845.4	1841.0	1834.8	1849.4	1849.4
9°	1771.9	1767.9	1761.3	1774.5	1774.5
10°	1693.0	1690.4	1682.4	1694.8	1694.8
11°	1606.7	1605.3	1599.6	1609.8	1609.8
12°	1515.8	1519.0	1513.6	1522.5	1519.4
13°	1425.0	1423.7	1424.2	1430.8	1425.9
14°	1322.3	1330.2	1331.6	1335.6	1328.0
15°	1223.9	1234.1	1231.9	1237.7	1227.9
16°	1123.4	1134.9	1134.5	1135.8	1126.5
17°	1029.5	1036.1	1036.6	1035.2	1023.7
18°	929.4	938.7	938.7	936.4	922.7
19°	831.5	838.5	843.4	838.5	822.6
20°	743.3	748.2	757.0	744.6	726.9
21°	658.7	663.1	670.7	656.0	636.6
22°	577.6	583.4	590.5	573.6	553.3
23°	501.9	515.2	517.8	494.8	477.5
24°	432.3	447.4	451.8	428.4	410.2
25°	370.3	387.2	397.3	369.9	351.7
26°	316.7	333.1	345.5	318.1	300.8
27°	269.8	287.0	299.9	274.2	257.8
28°	229.5	246.3	259.6	235.7	220.2
29°	199.3	209.1	222.4	202.4	188.3
30°	169.7	180.3	194.5	174.1	161.7
32.5°	116.5	122.3	133.3	120.9	111.2
35°	82.8	86.4	91.7	83.3	77.5
37.5°	58.9	60.7	63.8	58.9	55.8
40°	43.4	44.3	45.6	43.0	41.2
42.5°	32.3	32.8	32.8	31.9	31.0
45°	24.4	24.8	24.4	24.4	23.5
47.5°	17.7	19.0	18.6	18.6	17.3
50°	11.5	14.2	14.2	13.7	11.5
52.5°	7.1	9.7	11.1	9.7	7.5
55°	5.3	6.6	8.4	6.6	5.8
57.5°	5.3	5.3	6.2	5.3	5.3
60°	5.3	5.3	5.3	5.3	5.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	4.9	4.9	4.9	4.9	4.9
70°	4.9	4.9	4.4	4.9	4.9
72.5°	4.4	4.4	4.0	4.4	4.0
75°	3.5	3.5	3.5	3.5	3.5
77.5°	2.7	2.7	2.7	2.7	2.7
80°	2.2	2.2	2.2	2.2	2.2
82.5°	1.3	1.3	1.3	1.8	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°	5.3	5.3	5.3	5.3	5.3
65°	4.9	5.3	4.9	5.3	4.9



(END OF REPORT)