

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: P283608

Luminaire Tested: **LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283608  
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 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1000 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: 760.5 lumens  
Efficiency: N/A  
Efficacy: 76.0 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

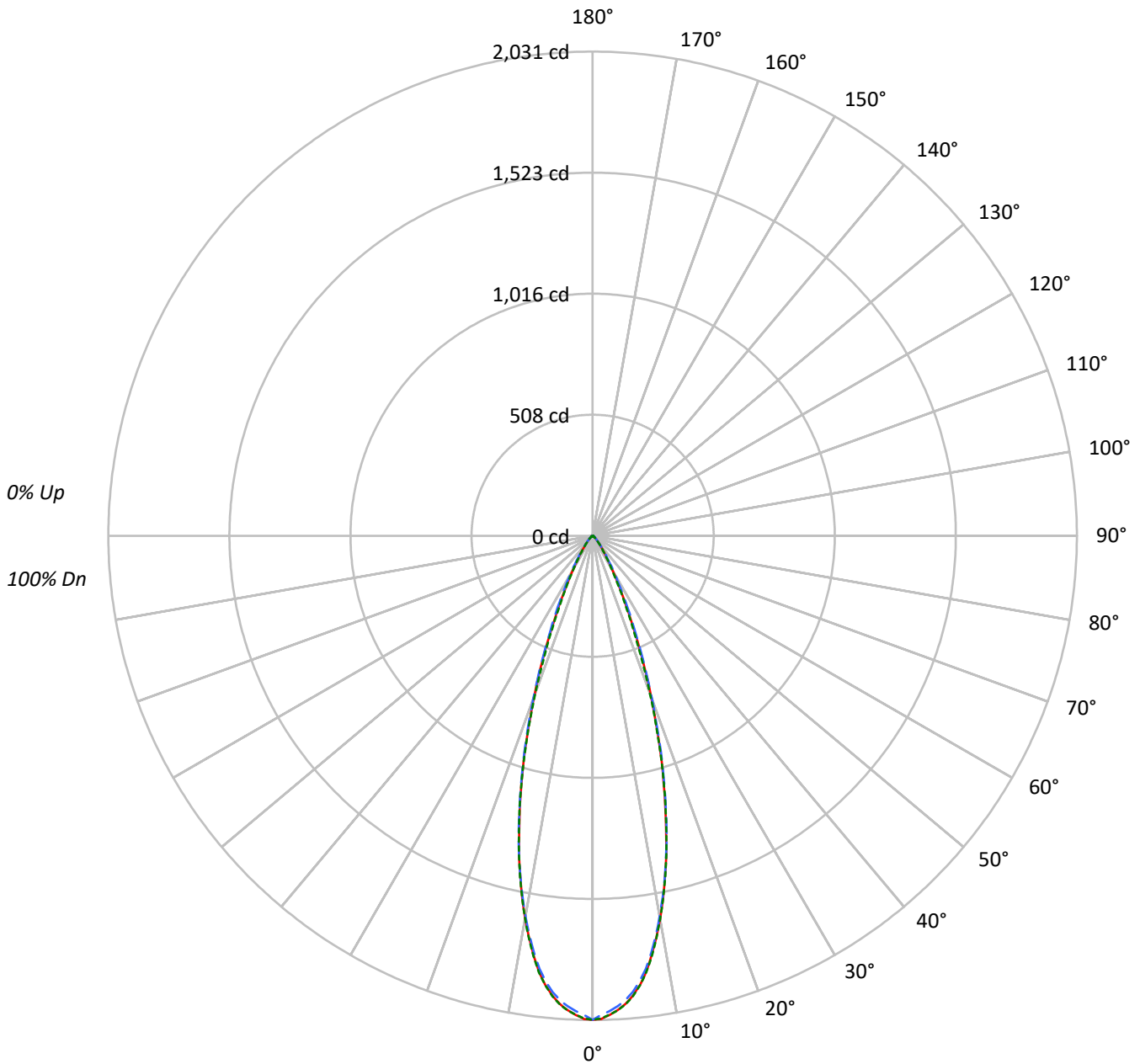
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P283608

CATALOG NUMBER: LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MB

### Luminous Intensity Polar Plot





TEST NUMBER: P283608

CATALOG NUMBER: LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MB

**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°	1001919	1001919	1001919
5°	958846	951665	960332
10°	816886	811776	817738
15°	602091	606024	604083
20°	375865	382795	367570
25°	194175	208328	184431
30°	93087	106702	88700
35°	48062	53182	44991
40°	26921	28273	25568
45°	16396	16396	15768
50°	8520	10515	8520
55°	4387	6967	4731
60°	5032	5032	5032
65°	5487	5487	5487
70°	6780	6203	6780
75°	6481	6481	6481
80°	5966	5966	5966
85°	5095	5095	5095



TEST NUMBER: P283608

CATALOG NUMBER: LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.7	23.0
10°-20°	320.9	42.2
20°-30°	174.0	22.9
30°-40°	55.8	7.3
40°-50°	19.0	2.5
50°-60°	6.7	0.9
60°-70°	4.8	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°	669.5	88.0
0°-40°	725.3	95.4
0°-60°	751.0	98.8
0°-90°	760.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	760.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2031	2031	2031	2031	2031	
5°	1936	1924	1922	1941	1939	175
15°	1179	1189	1186	1192	1183	320
25°	357	373	383	356	339	171
35°	80	83	88	80	75	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	



TEST NUMBER: P283608

CATALOG NUMBER: LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2030.8	2030.8	2030.8	2030.8	2030.8
1°	2027.4	2012.9	2010.8	2029.5	2025.3
2°	2011.2	1997.5	1995.4	2014.2	2010.3
3°	1993.3	1980.9	1976.6	1996.3	1993.7
4°	1969.4	1957.9	1954.0	1973.7	1971.5
5°	1936.1	1924.2	1921.6	1940.8	1939.1
6°	1895.2	1885.3	1880.6	1899.8	1896.4
7°	1844.0	1835.0	1829.9	1844.0	1845.7
8°	1777.4	1773.1	1767.2	1781.2	1781.2
9°	1706.6	1702.7	1696.3	1709.1	1709.1
10°	1630.6	1628.1	1620.4	1632.3	1632.3
11°	1547.4	1546.2	1540.6	1550.4	1550.4
12°	1460.0	1463.0	1457.8	1466.4	1463.4
13°	1372.5	1371.2	1371.7	1378.1	1373.4
14°	1273.5	1281.2	1282.5	1286.3	1279.1
15°	1178.8	1188.6	1186.5	1192.0	1182.7
16°	1082.0	1093.1	1092.6	1093.9	1085.0
17°	991.5	997.9	998.3	997.1	986.0
18°	895.1	904.1	904.1	901.9	888.7
19°	800.8	807.6	812.3	807.6	792.3
20°	715.9	720.6	729.1	717.2	700.1
21°	634.4	638.7	645.9	631.9	613.1
22°	556.3	561.9	568.7	552.5	532.9
23°	483.4	496.2	498.7	476.6	459.9
24°	416.4	430.9	435.2	412.6	395.1
25°	356.7	372.9	382.7	356.2	338.8
26°	305.1	320.8	332.8	306.3	289.7
27°	259.8	276.5	288.8	264.1	248.3
28°	221.0	237.2	250.0	227.0	212.0
29°	192.0	201.4	214.2	195.0	181.3
30°	163.4	173.6	187.3	167.7	155.7
32.5°	112.2	117.8	128.4	116.5	107.1
35°	79.8	83.2	88.3	80.2	74.7
37.5°	56.7	58.5	61.4	56.7	53.8
40°	41.8	42.7	43.9	41.4	39.7
42.5°	31.1	31.6	31.6	30.7	29.9
45°	23.5	23.9	23.5	23.5	22.6
47.5°	17.1	18.3	17.9	17.9	16.6
50°	11.1	13.7	13.7	13.2	11.1
52.5°	6.8	9.4	10.7	9.4	7.3
55°	5.1	6.4	8.1	6.4	5.5
57.5°	5.1	5.1	6.0	5.1	5.1
60°	5.1	5.1	5.1	5.1	5.1



TEST NUMBER: P283608

CATALOG NUMBER: LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MB

**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	3.8	4.3	3.8
75°	3.4	3.4	3.4	3.4	3.4
77.5°	2.6	2.6	2.6	2.6	2.6
80°	2.1	2.1	2.1	2.1	2.1
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



Report Generated By E9808895 / USPTCWHP6082093







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







62.5°	5.1	5.1	5.1	5.1	5.1
65°	4.7	5.1	4.7	5.1	4.7



(END OF REPORT)