

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: P283609

Luminaire Tested: **LDA2B109050D010 EU2B10FL409050 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283609  
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 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1000 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: 772.2 lumens  
Efficiency: N/A  
Efficacy: 77.2 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

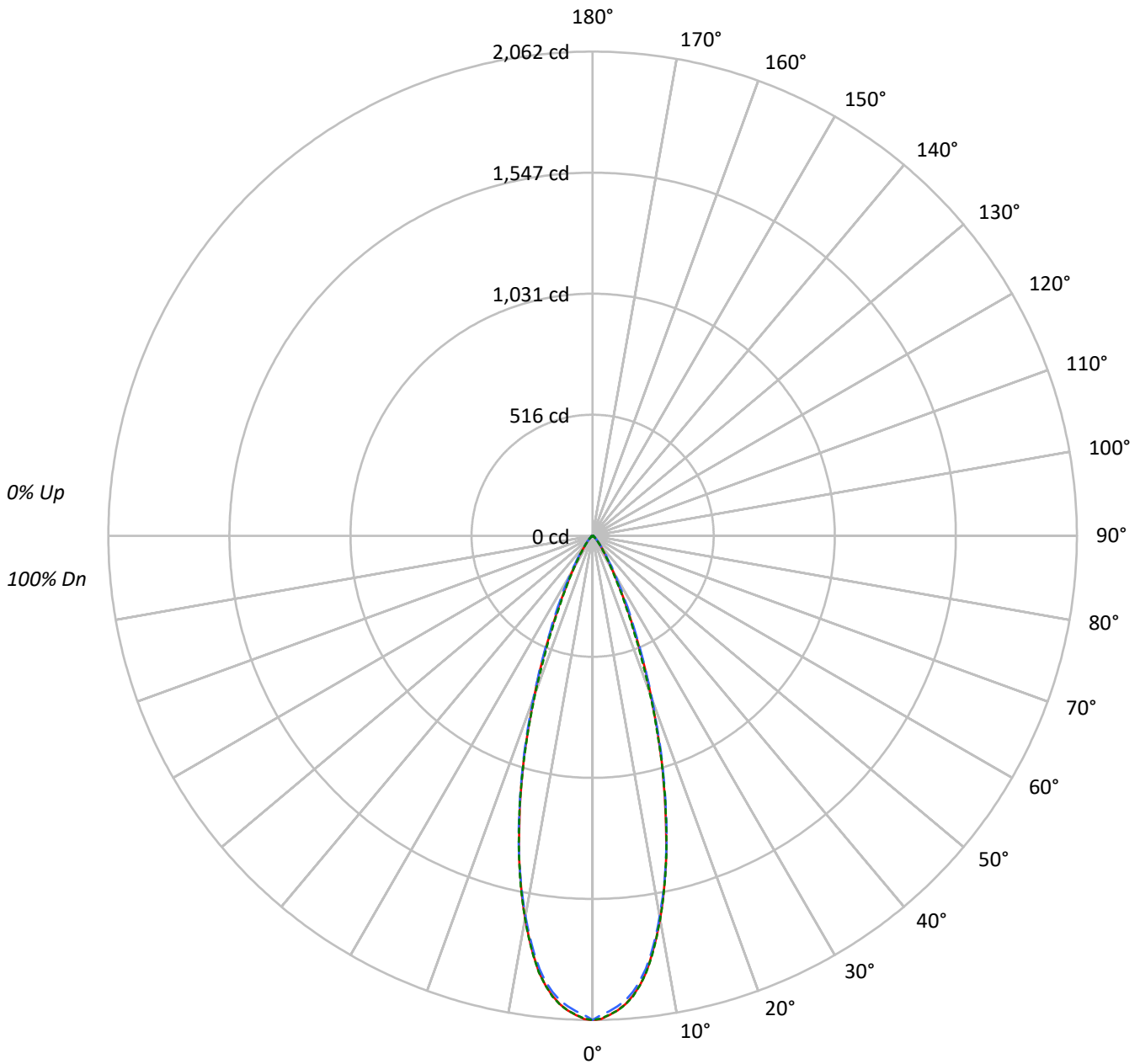
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1017411	1017411	1017411
5°	973654	966374	975140
10°	829511	824300	830362
15°	611387	615371	613379
20°	381693	388728	373240
25°	197169	211540	187261
30°	94511	108354	90067
35°	48785	54025	45653
40°	27372	28724	25955
45°	16606	16606	16048
50°	8673	10669	8673
55°	4473	7053	4817
60°	5131	5131	5131
65°	5603	5603	5603
70°	6924	6203	6924
75°	6672	6672	6672
80°	6251	6251	6251
85°	5095	5095	5095



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.4	23.0
10°-20°	325.8	42.2
20°-30°	176.6	22.9
30°-40°	56.7	7.3
40°-50°	19.3	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°	679.8	88.0
0°-40°	736.5	95.4
0°-60°	762.6	98.8
0°-90°	772.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	772.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2062	2062	2062	2062	2062	
5°	1966	1954	1951	1971	1969	178
15°	1197	1207	1205	1210	1201	325
25°	362	379	389	362	344	174
35°	81	84	90	81	76	55
45°	24	24	24	24	23	19
55°	5	6	8	6	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°	2062.2	2062.2	2062.2	2062.2	2062.2
1°	2058.7	2044.0	2041.8	2060.9	2056.5
2°	2042.2	2028.4	2026.2	2045.3	2041.4
3°	2024.0	2011.5	2007.1	2027.1	2024.5
4°	1999.8	1988.1	1984.2	2004.1	2001.9
5°	1966.0	1953.9	1951.3	1970.8	1969.0
6°	1924.4	1914.4	1909.7	1929.2	1925.7
7°	1872.4	1863.3	1858.1	1872.4	1874.1
8°	1804.8	1800.5	1794.4	1808.7	1808.7
9°	1732.9	1729.0	1722.5	1735.5	1735.5
10°	1655.8	1653.2	1645.4	1657.5	1657.5
11°	1571.3	1570.0	1564.4	1574.3	1574.3
12°	1482.5	1485.5	1480.3	1489.0	1486.0
13°	1393.7	1392.4	1392.8	1399.3	1394.6
14°	1293.2	1301.0	1302.3	1306.2	1298.8
15°	1197.0	1207.0	1204.8	1210.4	1200.9
16°	1098.7	1109.9	1109.5	1110.8	1101.7
17°	1006.8	1013.3	1013.8	1012.5	1001.2
18°	908.9	918.0	918.0	915.8	902.4
19°	813.2	820.1	824.9	820.1	804.5
20°	727.0	731.7	740.4	728.3	710.9
21°	644.2	648.5	655.9	641.6	622.5
22°	564.9	570.6	577.5	561.0	541.1
23°	490.8	503.8	506.4	483.9	467.0
24°	422.8	437.6	441.9	418.9	401.2
25°	362.2	378.6	388.6	361.7	344.0
26°	309.8	325.8	337.9	311.1	294.2
27°	263.8	280.7	293.3	268.2	252.1
28°	224.4	240.9	253.9	230.5	215.3
29°	195.0	204.5	217.5	198.0	184.1
30°	165.9	176.3	190.2	170.3	158.1
32.5°	113.9	119.6	130.4	118.3	108.7
35°	81.0	84.5	89.7	81.4	75.8
37.5°	57.6	59.4	62.4	57.6	54.6
40°	42.5	43.3	44.6	42.0	40.3
42.5°	31.6	32.1	32.1	31.2	30.3
45°	23.8	24.3	23.8	23.8	23.0
47.5°	17.3	18.6	18.2	18.2	16.9
50°	11.3	13.9	13.9	13.4	11.3
52.5°	6.9	9.5	10.8	9.5	7.4
55°	5.2	6.5	8.2	6.5	5.6
57.5°	5.2	5.2	6.1	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°	4.8	4.8	4.8	4.8	4.8
70°	4.8	4.8	4.3	4.8	4.8
72.5°	4.3	4.3	3.9	4.3	3.9
75°	3.5	3.5	3.5	3.5	3.5
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°	4.8	5.2	4.8	5.2	4.8



(END OF REPORT)