

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: P283583

Luminaire Tested: **LDA2B109027D010 EU2B10FL409027 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283583  
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: LDA2B109027D010 EU2B10FL409027 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: 694.8 lumens  
Efficiency: N/A  
Efficacy: 69.5 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

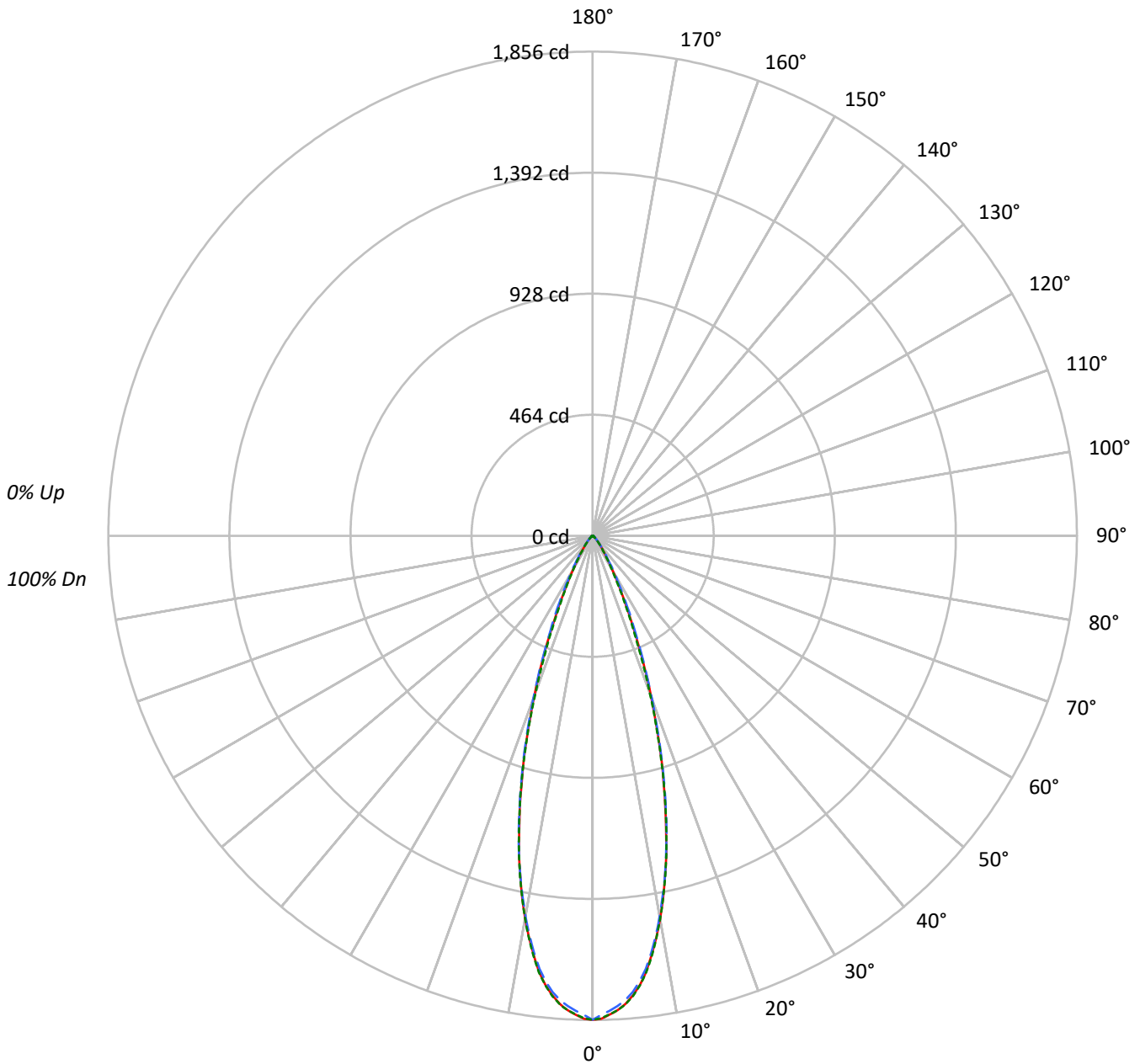
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95					95			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90					90			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86					86			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82					82			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79					79			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75					75			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72					72			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69					69			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67					67			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64					64			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	915433	915433	915433
5°	876041	869504	877378
10°	746349	741690	747151
15°	550095	553670	551882
20°	343419	349771	335858
25°	177408	190364	168481
30°	85054	97473	81066
35°	43906	48604	41076
40°	24602	25826	23379
45°	14931	14931	14443
50°	7752	9594	7752
55°	4043	6365	4387
60°	4638	4638	4638
65°	5020	5020	5020
70°	6203	5626	6203
75°	5909	5909	5909
80°	5398	5398	5398
85°	4529	4529	4529



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.6	23.0
10°-20°	293.2	42.2
20°-30°	158.9	22.9
30°-40°	51.0	7.3
40°-50°	17.4	2.5
50°-60°	6.1	0.9
60°-70°	4.5	0.6
70°-80°	3.2	0.5
80°-90°	0.9	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°	611.7	88.0
0°-40°	662.7	95.4
0°-60°	686.2	98.8
0°-90°	694.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	694.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1856	1856	1856	1856	1856	
5°	1769	1758	1756	1773	1772	160
15°	1077	1086	1084	1089	1080	292
25°	326	341	350	326	310	156
35°	73	76	81	73	68	49
45°	21	22	21	21	21	17
55°	5	6	7	6	5	5
65°	4	5	4	5	4	4
75°	3	3	3	3	3	3
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°	1855.5	1855.5	1855.5	1855.5	1855.5
1°	1852.3	1839.1	1837.1	1854.3	1850.4
2°	1837.5	1825.1	1823.1	1840.3	1836.7
3°	1821.2	1809.8	1806.0	1823.9	1821.5
4°	1799.3	1788.8	1785.3	1803.2	1801.3
5°	1768.9	1758.0	1755.7	1773.2	1771.6
6°	1731.5	1722.5	1718.2	1735.8	1732.7
7°	1684.7	1676.5	1671.9	1684.7	1686.3
8°	1623.9	1620.0	1614.6	1627.4	1627.4
9°	1559.2	1555.7	1549.9	1561.5	1561.5
10°	1489.8	1487.5	1480.5	1491.4	1491.4
11°	1413.8	1412.6	1407.6	1416.5	1416.5
12°	1333.9	1336.6	1332.0	1339.7	1337.0
13°	1254.0	1252.8	1253.2	1259.1	1254.8
14°	1163.6	1170.6	1171.7	1175.3	1168.6
15°	1077.0	1086.0	1084.0	1089.1	1080.5
16°	988.5	998.7	998.3	999.5	991.3
17°	905.9	911.7	912.1	911.0	900.8
18°	817.8	826.0	826.0	824.0	812.0
19°	731.7	737.9	742.2	737.9	723.9
20°	654.1	658.4	666.2	655.3	639.7
21°	579.6	583.5	590.2	577.3	560.1
22°	508.3	513.4	519.6	504.8	486.9
23°	441.6	453.3	455.7	435.4	420.2
24°	380.4	393.7	397.6	376.9	361.0
25°	325.9	340.7	349.7	325.5	309.5
26°	278.7	293.1	304.0	279.9	264.7
27°	237.4	252.6	263.9	241.3	226.9
28°	201.9	216.7	228.4	207.4	193.7
29°	175.4	184.0	195.7	178.1	165.7
30°	149.3	158.6	171.1	153.2	142.3
32.5°	102.5	107.6	117.3	106.4	97.8
35°	72.9	76.0	80.7	73.3	68.2
37.5°	51.8	53.4	56.1	51.8	49.1
40°	38.2	39.0	40.1	37.8	36.3
42.5°	28.5	28.8	28.8	28.1	27.3
45°	21.4	21.8	21.4	21.4	20.7
47.5°	15.6	16.8	16.4	16.4	15.2
50°	10.1	12.5	12.5	12.1	10.1
52.5°	6.2	8.6	9.7	8.6	6.6
55°	4.7	5.8	7.4	5.8	5.1
57.5°	4.7	4.7	5.5	4.7	4.7
60°	4.7	4.7	4.7	4.7	4.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	4.3	4.3	4.3	4.3	4.3
70°	4.3	4.3	3.9	4.3	4.3
72.5°	3.9	3.9	3.5	3.9	3.5
75°	3.1	3.1	3.1	3.1	3.1
77.5°	2.3	2.3	2.3	2.3	2.3
80°	1.9	1.9	1.9	1.9	1.9
82.5°	1.2	1.2	1.2	1.6	1.2
85°	0.8	0.8	0.8	0.8	0.8
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°	4.7	4.7	4.7	4.7	4.7
65°	4.3	4.7	4.3	4.7	4.3



(END OF REPORT)