

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: P283581

Luminaire Tested: **LDA2B109027D010 EU2B10FL409027 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283581  
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 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MB  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 712.6 lumens  
Efficiency: N/A  
Efficacy: 71.3 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

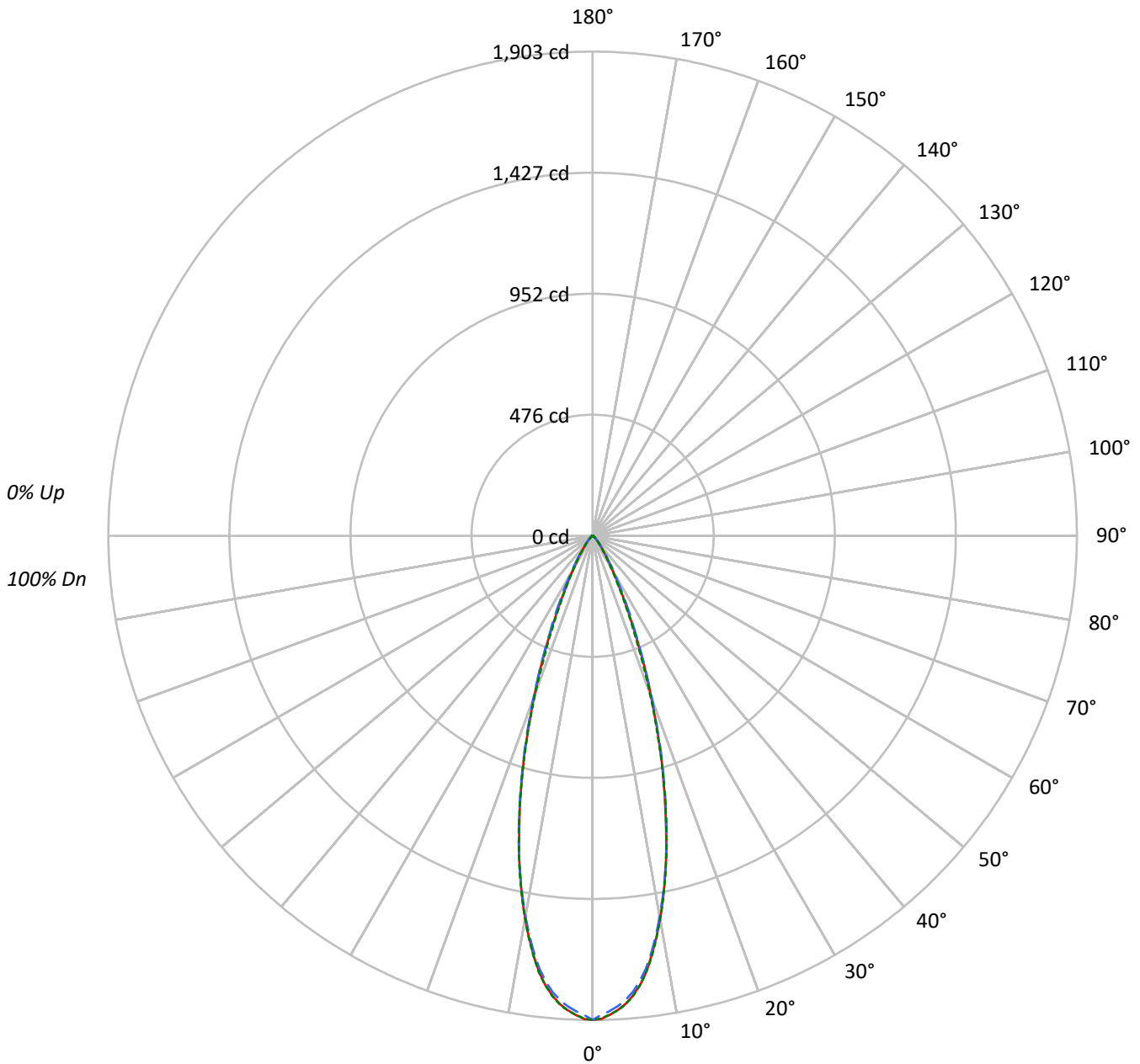
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	938818	938818	938818
5°	898426	891691	899813
10°	765436	760627	766238
15°	564192	567869	566031
20°	352187	358697	344416
25°	181927	195209	172781
30°	87219	99980	83117
35°	45051	49869	42160
40°	25246	26534	23958
45°	15350	15350	14792
50°	7982	9824	7982
55°	4129	6537	4473
60°	4736	4736	4736
65°	5137	5137	5137
70°	6347	5770	6347
75°	6100	6100	6100
80°	5682	5682	5682
85°	4529	4529	4529



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.7	23.0
10°-20°	300.7	42.2
20°-30°	163.0	22.9
30°-40°	52.3	7.3
40°-50°	17.8	2.5
50°-60°	6.3	0.9
60°-70°	4.5	0.6
70°-80°	3.3	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°	627.3	88.0
0°-40°	679.7	95.4
0°-60°	703.8	98.8
0°-90°	712.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	712.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1903	1903	1903	1903	1903	
5°	1814	1803	1800	1818	1817	164
15°	1105	1114	1112	1117	1108	299
25°	334	349	359	334	317	160
35°	75	78	83	75	70	50
45°	22	22	22	22	21	18
55°	5	6	8	6	5	5
65°	4	5	4	5	4	5
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°	1902.9	1902.9	1902.9	1902.9	1902.9
1°	1899.7	1886.1	1884.1	1901.7	1897.7
2°	1884.5	1871.7	1869.7	1887.3	1883.7
3°	1867.7	1856.1	1852.1	1870.5	1868.1
4°	1845.3	1834.5	1830.9	1849.3	1847.3
5°	1814.1	1802.9	1800.5	1818.5	1816.9
6°	1775.8	1766.6	1762.2	1780.2	1777.0
7°	1727.8	1719.4	1714.6	1727.8	1729.4
8°	1665.4	1661.4	1655.8	1669.0	1669.0
9°	1599.1	1595.5	1589.5	1601.5	1601.5
10°	1527.9	1525.5	1518.3	1529.5	1529.5
11°	1450.0	1448.8	1443.6	1452.8	1452.8
12°	1368.0	1370.8	1366.0	1374.0	1371.2
13°	1286.0	1284.9	1285.3	1291.2	1286.8
14°	1193.3	1200.5	1201.7	1205.3	1198.5
15°	1104.6	1113.8	1111.8	1116.9	1108.2
16°	1013.8	1024.2	1023.8	1025.0	1016.6
17°	929.1	935.1	935.5	934.3	923.9
18°	838.7	847.1	847.1	845.1	832.7
19°	750.4	756.8	761.2	756.8	742.4
20°	670.8	675.2	683.2	672.0	656.0
21°	594.5	598.5	605.2	592.1	574.5
22°	521.3	526.5	532.9	517.7	499.3
23°	452.9	464.9	467.3	446.5	430.9
24°	390.2	403.8	407.8	386.6	370.2
25°	334.2	349.4	358.6	333.8	317.4
26°	285.8	300.6	311.8	287.0	271.4
27°	243.5	259.0	270.6	247.5	232.7
28°	207.1	222.3	234.3	212.7	198.7
29°	179.9	188.7	200.7	182.7	169.9
30°	153.1	162.7	175.5	157.1	145.9
32.5°	105.1	110.3	120.3	109.1	100.3
35°	74.8	78.0	82.8	75.2	70.0
37.5°	53.2	54.8	57.6	53.2	50.4
40°	39.2	40.0	41.2	38.8	37.2
42.5°	29.2	29.6	29.6	28.8	28.0
45°	22.0	22.4	22.0	22.0	21.2
47.5°	16.0	17.2	16.8	16.8	15.6
50°	10.4	12.8	12.8	12.4	10.4
52.5°	6.4	8.8	10.0	8.8	6.8
55°	4.8	6.0	7.6	6.0	5.2
57.5°	4.8	4.8	5.6	4.8	4.8
60°	4.8	4.8	4.8	4.8	4.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	4.4	4.4	4.4	4.4	4.4
70°	4.4	4.4	4.0	4.4	4.4
72.5°	4.0	4.0	3.6	4.0	3.6
75°	3.2	3.2	3.2	3.2	3.2
77.5°	2.4	2.4	2.4	2.4	2.4
80°	2.0	2.0	2.0	2.0	2.0
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°	4.8	4.8	4.8	4.8	4.8
65°	4.4	4.8	4.4	4.8	4.4



(END OF REPORT)