

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: P283465

Luminaire Tested: **LDA2B058027D010 EU2B05FL408027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283465  
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: LDA2B058027D010 EU2B05FL408027 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 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: 634.7 lumens  
Efficiency: N/A  
Efficacy: 90.7 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

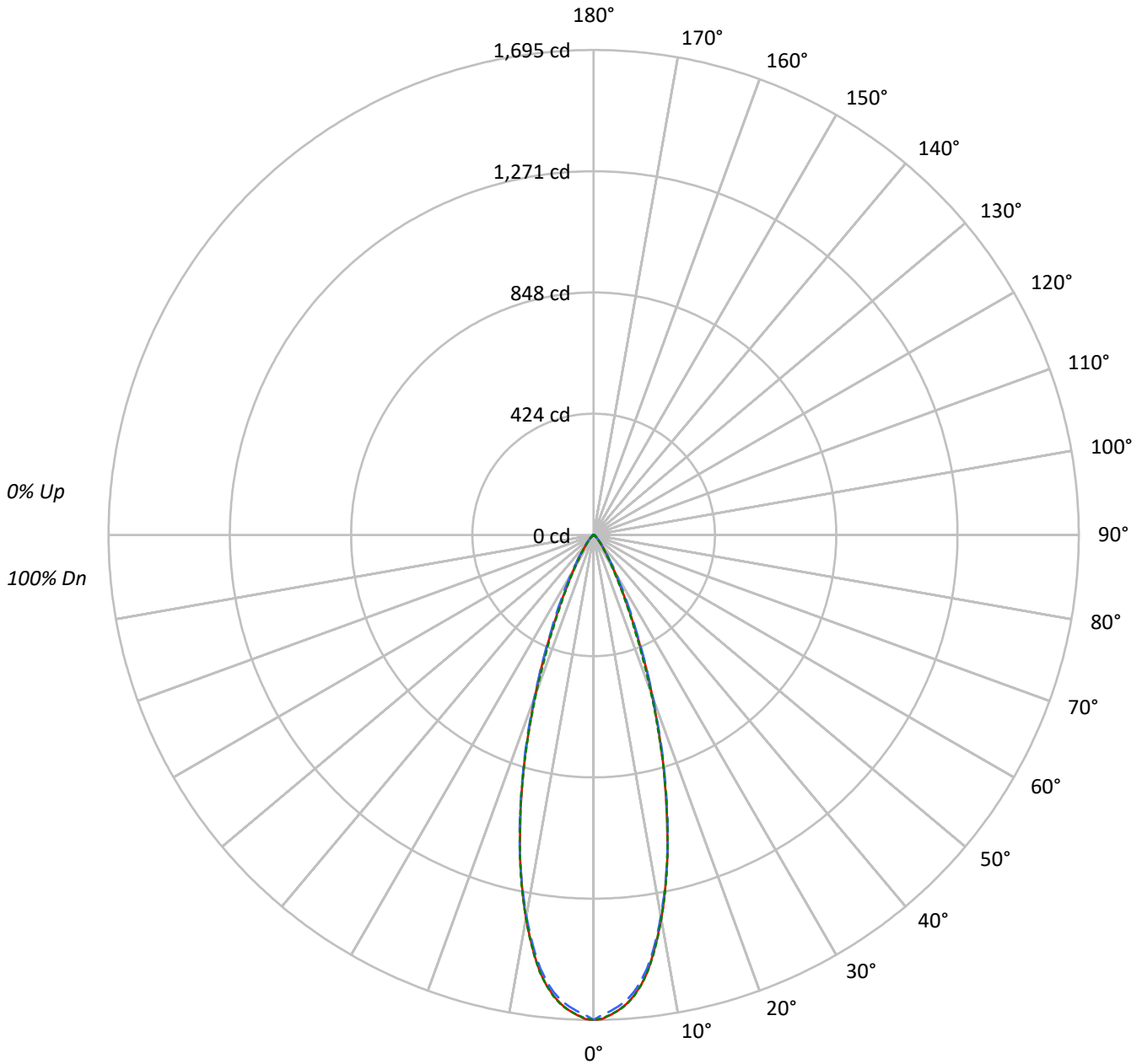
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	836248	836248	836248
5°	800269	794276	801507
10°	681824	677515	682525
15°	502542	505811	504177
20°	313702	319530	306772
25°	162057	173870	153892
30°	77705	89042	74059
35°	40112	44388	37522
40°	22477	23636	21318
45°	13675	13675	13187
50°	7138	8750	7138
55°	3699	5849	3957
60°	4243	4243	4243
65°	4553	4553	4553
70°	5626	5193	5626
75°	5337	5337	5337
80°	5114	5114	5114
85°	3962	3962	3962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.8	23.0
10°-20°	267.8	42.2
20°-30°	145.2	22.9
30°-40°	46.6	7.3
40°-50°	15.9	2.5
50°-60°	5.6	0.9
60°-70°	4.1	0.6
70°-80°	2.9	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°	558.8	88.0
0°-40°	605.4	95.4
0°-60°	626.8	98.8
0°-90°	634.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	634.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1695	1695	1695	1695	1695	
5°	1616	1606	1604	1620	1618	146
15°	984	992	990	995	987	267
25°	298	311	319	297	283	143
35°	67	69	74	67	62	45
45°	20	20	20	20	19	16
55°	4	5	7	5	5	5
65°	4	4	4	4	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°	1695.0	1695.0	1695.0	1695.0	1695.0
1°	1692.1	1680.0	1678.2	1693.9	1690.3
2°	1678.6	1667.2	1665.4	1681.1	1677.9
3°	1663.6	1653.3	1649.7	1666.1	1664.0
4°	1643.7	1634.1	1630.9	1647.3	1645.5
5°	1615.9	1606.0	1603.8	1619.8	1618.4
6°	1581.7	1573.5	1569.6	1585.7	1582.8
7°	1539.0	1531.5	1527.3	1539.0	1540.4
8°	1483.5	1479.9	1474.9	1486.7	1486.7
9°	1424.3	1421.1	1415.8	1426.5	1426.5
10°	1361.0	1358.8	1352.4	1362.4	1362.4
11°	1291.5	1290.5	1285.8	1294.0	1294.0
12°	1218.5	1221.0	1216.7	1223.9	1221.4
13°	1145.5	1144.5	1144.8	1150.2	1146.2
14°	1062.9	1069.3	1070.4	1073.6	1067.5
15°	983.9	992.1	990.3	994.9	987.1
16°	903.0	912.3	911.9	913.0	905.5
17°	827.5	832.9	833.2	832.2	822.9
18°	747.1	754.5	754.5	752.8	741.7
19°	668.4	674.1	678.0	674.1	661.3
20°	597.5	601.4	608.6	598.6	584.3
21°	529.5	533.1	539.1	527.4	511.7
22°	464.3	469.0	474.7	461.1	444.8
23°	403.4	414.1	416.3	397.7	383.9
24°	347.5	359.6	363.2	344.3	329.7
25°	297.7	311.2	319.4	297.3	282.7
26°	254.6	267.8	277.7	255.7	241.8
27°	216.9	230.7	241.1	220.4	207.2
28°	184.5	198.0	208.7	189.4	177.0
29°	160.2	168.1	178.8	162.7	151.3
30°	136.4	144.9	156.3	139.9	130.0
32.5°	93.7	98.3	107.2	97.2	89.4
35°	66.6	69.4	73.7	66.9	62.3
37.5°	47.4	48.8	51.3	47.4	44.9
40°	34.9	35.6	36.7	34.5	33.1
42.5°	26.0	26.4	26.4	25.6	24.9
45°	19.6	19.9	19.6	19.6	18.9
47.5°	14.2	15.3	15.0	15.0	13.9
50°	9.3	11.4	11.4	11.0	9.3
52.5°	5.7	7.8	8.9	7.8	6.1
55°	4.3	5.3	6.8	5.3	4.6
57.5°	4.3	4.3	5.0	4.3	4.3
60°	4.3	4.3	4.3	4.3	4.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	3.9	3.9	3.9	3.9	3.9
70°	3.9	3.9	3.6	3.9	3.9
72.5°	3.6	3.6	3.2	3.6	3.2
75°	2.8	2.8	2.8	2.8	2.8
77.5°	2.1	2.1	2.1	2.1	2.1
80°	1.8	1.8	1.8	1.8	1.8
82.5°	1.1	1.1	1.1	1.4	1.1
85°	0.7	0.7	0.7	0.7	0.7
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°	4.3	4.3	4.3	4.3	4.3
65°	3.9	4.3	3.9	4.3	3.9



(END OF REPORT)