

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: P283621

Luminaire Tested: **LDA2B109730D010 EU2B10FL409730 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283621  
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: LDA2B109730D010 EU2B10FL409730 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: 650.7 lumens  
Efficiency: N/A  
Efficacy: 65.1 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

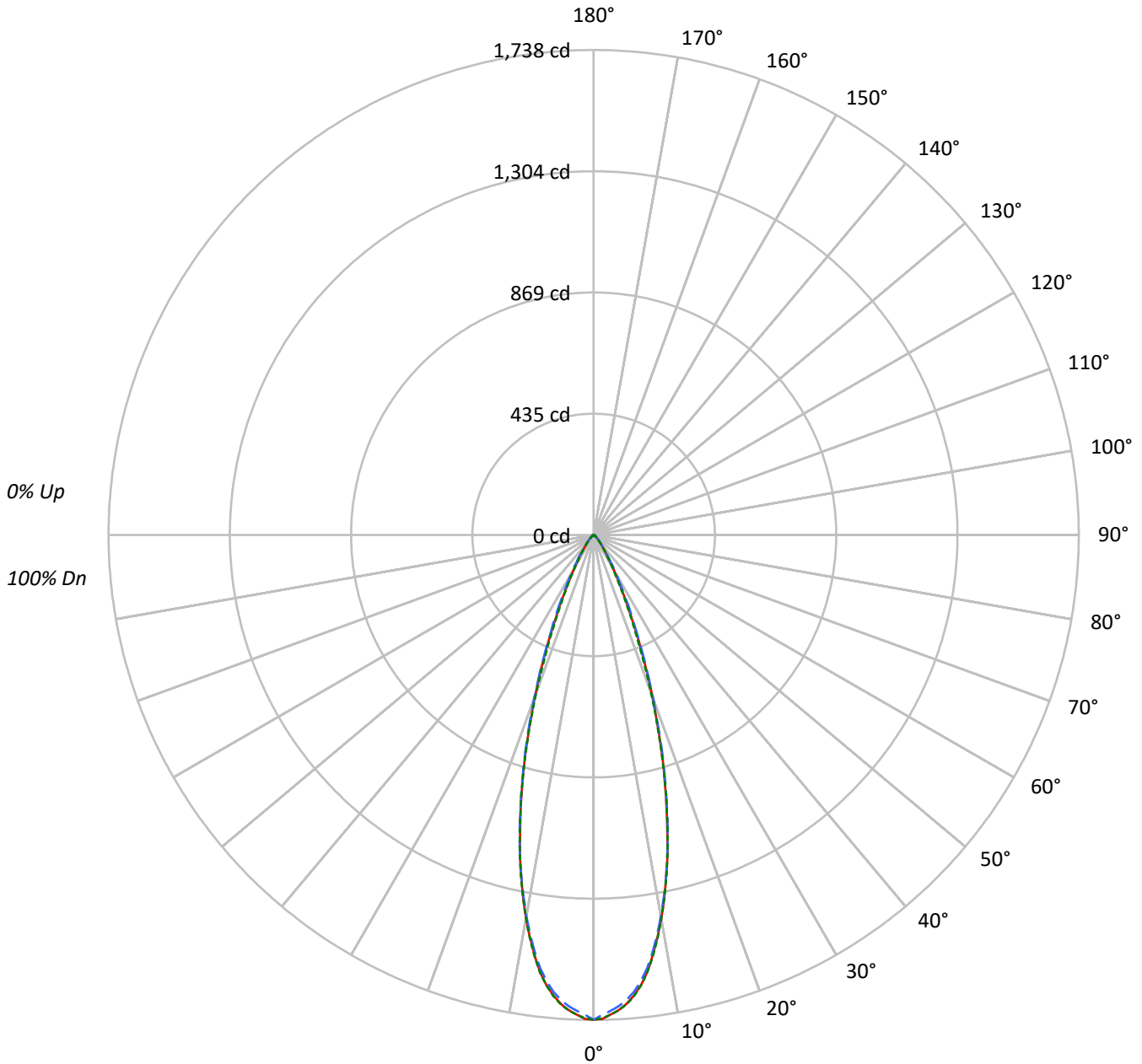
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	857315	857315	857315
5°	820475	814334	821762
10°	699007	694599	699759
15°	515209	518580	516895
20°	321630	327563	314542
25°	166140	178279	157811
30°	79642	91321	75939
35°	41136	45533	38486
40°	23057	24216	21897
45°	14024	14024	13466
50°	7292	8980	7292
55°	3785	5935	4043
60°	4342	4342	4342
65°	4670	4670	4670
70°	5770	5337	5770
75°	5528	5528	5528
80°	5114	5114	5114
85°	3962	3962	3962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.5	23.0
10°-20°	274.6	42.2
20°-30°	148.9	22.9
30°-40°	47.8	7.3
40°-50°	16.3	2.5
50°-60°	5.7	0.9
60°-70°	4.2	0.6
70°-80°	3.0	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°	572.9	88.0
0°-40°	620.7	95.4
0°-60°	642.7	98.8
0°-90°	650.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	650.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1738	1738	1738	1738	1738	
5°	1657	1646	1644	1661	1659	150
15°	1009	1017	1015	1020	1012	273
25°	305	319	328	305	290	146
35°	68	71	76	69	64	46
45°	20	20	20	20	19	16
55°	4	6	7	6	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°	1737.7	1737.7	1737.7	1737.7	1737.7
1°	1734.8	1722.4	1720.6	1736.6	1733.0
2°	1720.9	1709.3	1707.4	1723.5	1720.2
3°	1705.6	1695.0	1691.4	1708.2	1706.0
4°	1685.2	1675.3	1672.0	1688.8	1687.0
5°	1656.7	1646.5	1644.3	1660.7	1659.3
6°	1621.6	1613.3	1609.2	1625.7	1622.7
7°	1577.8	1570.2	1565.8	1577.8	1579.3
8°	1520.9	1517.2	1512.1	1524.2	1524.2
9°	1460.3	1457.0	1451.5	1462.5	1462.5
10°	1395.3	1393.1	1386.5	1396.8	1396.8
11°	1324.1	1323.0	1318.3	1326.7	1326.7
12°	1249.3	1251.8	1247.5	1254.8	1252.2
13°	1174.4	1173.3	1173.7	1179.2	1175.2
14°	1089.7	1096.3	1097.4	1100.7	1094.5
15°	1008.7	1017.1	1015.3	1020.0	1012.0
16°	925.8	935.3	934.9	936.0	928.4
17°	848.4	853.9	854.3	853.2	843.7
18°	765.9	773.6	773.6	771.8	760.4
19°	685.2	691.1	695.1	691.1	677.9
20°	612.6	616.6	623.9	613.7	599.1
21°	542.9	546.5	552.7	540.7	524.6
22°	476.1	480.8	486.6	472.8	456.0
23°	413.6	424.6	426.8	407.8	393.5
24°	356.3	368.7	372.4	353.0	338.1
25°	305.2	319.1	327.5	304.8	289.9
26°	261.0	274.5	284.8	262.1	247.9
27°	222.3	236.6	247.2	226.0	212.5
28°	189.1	203.0	213.9	194.2	181.4
29°	164.3	172.3	183.3	166.8	155.2
30°	139.8	148.6	160.3	143.5	133.3
32.5°	96.0	100.8	109.9	99.7	91.6
35°	68.3	71.2	75.6	68.6	63.9
37.5°	48.6	50.0	52.6	48.6	46.0
40°	35.8	36.5	37.6	35.4	34.0
42.5°	26.7	27.0	27.0	26.3	25.6
45°	20.1	20.4	20.1	20.1	19.3
47.5°	14.6	15.7	15.3	15.3	14.2
50°	9.5	11.7	11.7	11.3	9.5
52.5°	5.8	8.0	9.1	8.0	6.2
55°	4.4	5.5	6.9	5.5	4.7
57.5°	4.4	4.4	5.1	4.4	4.4
60°	4.4	4.4	4.4	4.4	4.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	4.0	4.0	4.0	4.0	4.0
70°	4.0	4.0	3.7	4.0	4.0
72.5°	3.7	3.7	3.3	3.7	3.3
75°	2.9	2.9	2.9	2.9	2.9
77.5°	2.2	2.2	2.2	2.2	2.2
80°	1.8	1.8	1.8	1.8	1.8
82.5°	1.1	1.1	1.1	1.5	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°	4.4	4.4	4.4	4.4	4.4
65°	4.0	4.4	4.0	4.4	4.0



(END OF REPORT)