

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: P283619

Luminaire Tested: **LDA2B109730D010 EU2B10FL409730 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283619  
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 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: 665.3 lumens  
Efficiency: N/A  
Efficacy: 66.5 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

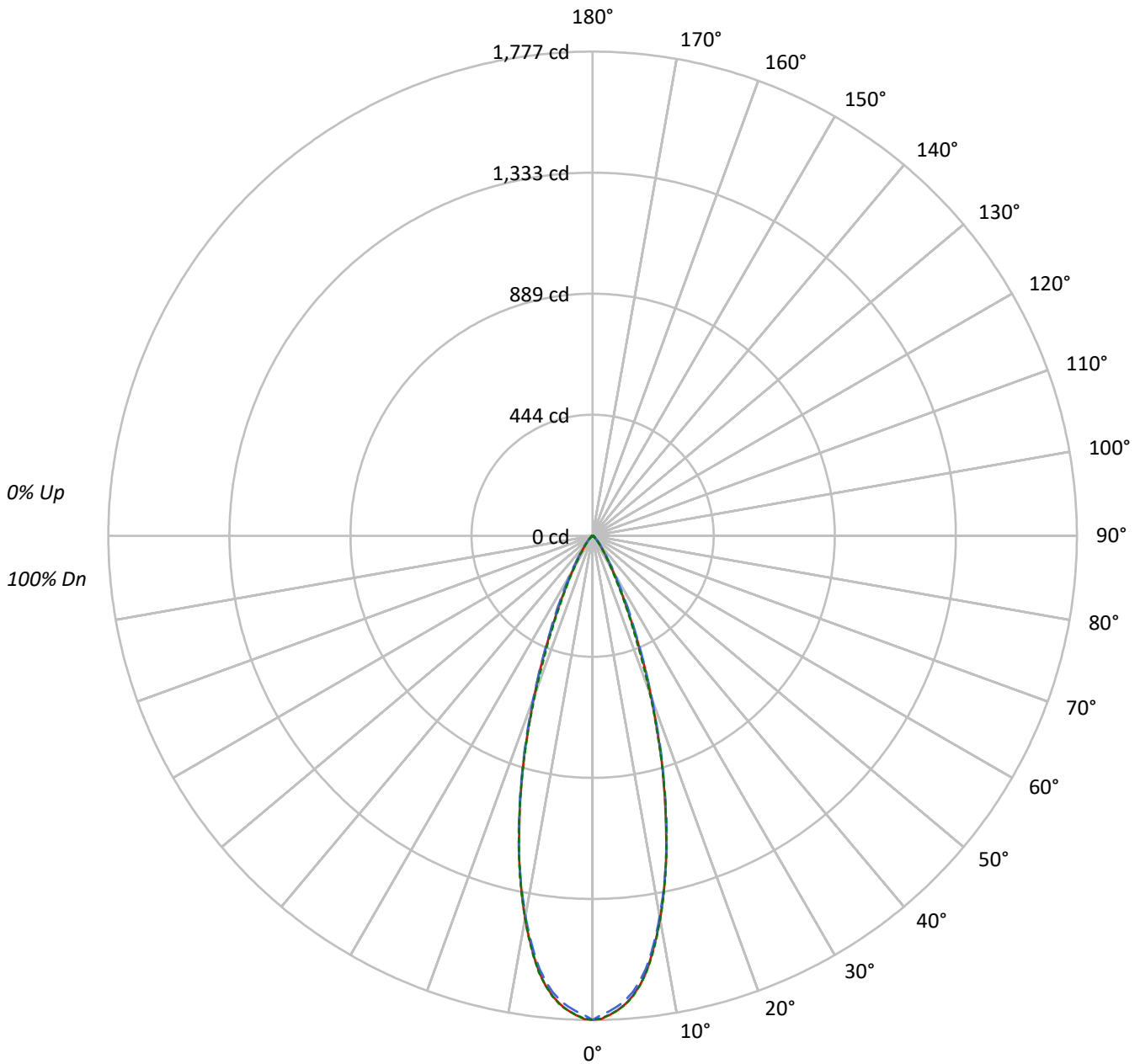
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	876605	876605	876605
5°	838947	832658	840235
10°	714738	710229	715489
15°	526804	530226	528489
20°	328875	334913	321630
25°	169896	182253	161350
30°	81465	93371	77591
35°	42039	46557	39329
40°	23572	24731	22348
45°	14303	14303	13815
50°	7445	9134	7445
55°	3871	6107	4215
60°	4440	4440	4440
65°	4786	4786	4786
70°	5914	5337	5914
75°	5719	5719	5719
80°	5398	5398	5398
85°	3962	3962	3962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.8	23.0
10°-20°	280.7	42.2
20°-30°	152.2	22.9
30°-40°	48.9	7.3
40°-50°	16.6	2.5
50°-60°	5.8	0.9
60°-70°	4.3	0.6
70°-80°	3.1	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°	585.8	88.0
0°-40°	634.6	95.4
0°-60°	657.1	98.8
0°-90°	665.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	665.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1777	1777	1777	1777	1777	
5°	1694	1684	1681	1698	1697	153
15°	1031	1040	1038	1043	1035	280
25°	312	326	335	312	296	150
35°	70	73	77	70	65	47
45°	20	21	20	20	20	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°	1776.8	1776.8	1776.8	1776.8	1776.8
1°	1773.8	1761.2	1759.3	1775.7	1772.0
2°	1759.7	1747.7	1745.8	1762.3	1758.9
3°	1744.0	1733.2	1729.4	1746.6	1744.4
4°	1723.1	1713.0	1709.6	1726.8	1724.9
5°	1694.0	1683.5	1681.3	1698.1	1696.6
6°	1658.1	1649.5	1645.4	1662.2	1659.2
7°	1613.3	1605.5	1601.0	1613.3	1614.8
8°	1555.1	1551.4	1546.1	1558.5	1558.5
9°	1493.1	1489.8	1484.2	1495.4	1495.4
10°	1426.7	1424.4	1417.7	1428.2	1428.2
11°	1353.9	1352.8	1347.9	1356.5	1356.5
12°	1277.4	1280.0	1275.5	1283.0	1280.4
13°	1200.9	1199.7	1200.1	1205.7	1201.6
14°	1114.3	1121.0	1122.1	1125.4	1119.1
15°	1031.4	1040.0	1038.1	1043.0	1034.7
16°	946.6	956.4	956.0	957.1	949.3
17°	867.5	873.1	873.5	872.4	862.7
18°	783.1	791.0	791.0	789.1	777.5
19°	700.7	706.6	710.7	706.6	693.2
20°	626.4	630.5	637.9	627.5	612.6
21°	555.1	558.8	565.2	552.8	536.4
22°	486.8	491.6	497.6	483.4	466.2
23°	422.9	434.1	436.4	417.0	402.4
24°	364.3	377.0	380.7	361.0	345.7
25°	312.1	326.2	334.8	311.7	296.4
26°	266.9	280.7	291.2	268.0	253.5
27°	227.3	241.9	252.7	231.1	217.3
28°	193.4	207.5	218.7	198.6	185.5
29°	168.0	176.2	187.4	170.6	158.6
30°	143.0	151.9	163.9	146.7	136.2
32.5°	98.2	103.0	112.4	101.9	93.7
35°	69.8	72.8	77.3	70.2	65.3
37.5°	49.6	51.1	53.8	49.6	47.0
40°	36.6	37.3	38.4	36.2	34.7
42.5°	27.2	27.6	27.6	26.9	26.1
45°	20.5	20.9	20.5	20.5	19.8
47.5°	14.9	16.1	15.7	15.7	14.6
50°	9.7	11.9	11.9	11.6	9.7
52.5°	6.0	8.2	9.3	8.2	6.3
55°	4.5	5.6	7.1	5.6	4.9
57.5°	4.5	4.5	5.2	4.5	4.5
60°	4.5	4.5	4.5	4.5	4.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	4.1	4.1	4.1	4.1	4.1
70°	4.1	4.1	3.7	4.1	4.1
72.5°	3.7	3.7	3.4	3.7	3.4
75°	3.0	3.0	3.0	3.0	3.0
77.5°	2.2	2.2	2.2	2.2	2.2
80°	1.9	1.9	1.9	1.9	1.9
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°	4.5	4.5	4.5	4.5	4.5
65°	4.1	4.5	4.1	4.5	4.1



(END OF REPORT)