

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: P283585

Luminaire Tested: **LDA2B109027D010 EU2B10FL409027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283585  
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 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: 679.5 lumens  
Efficiency: N/A  
Efficacy: 68.0 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

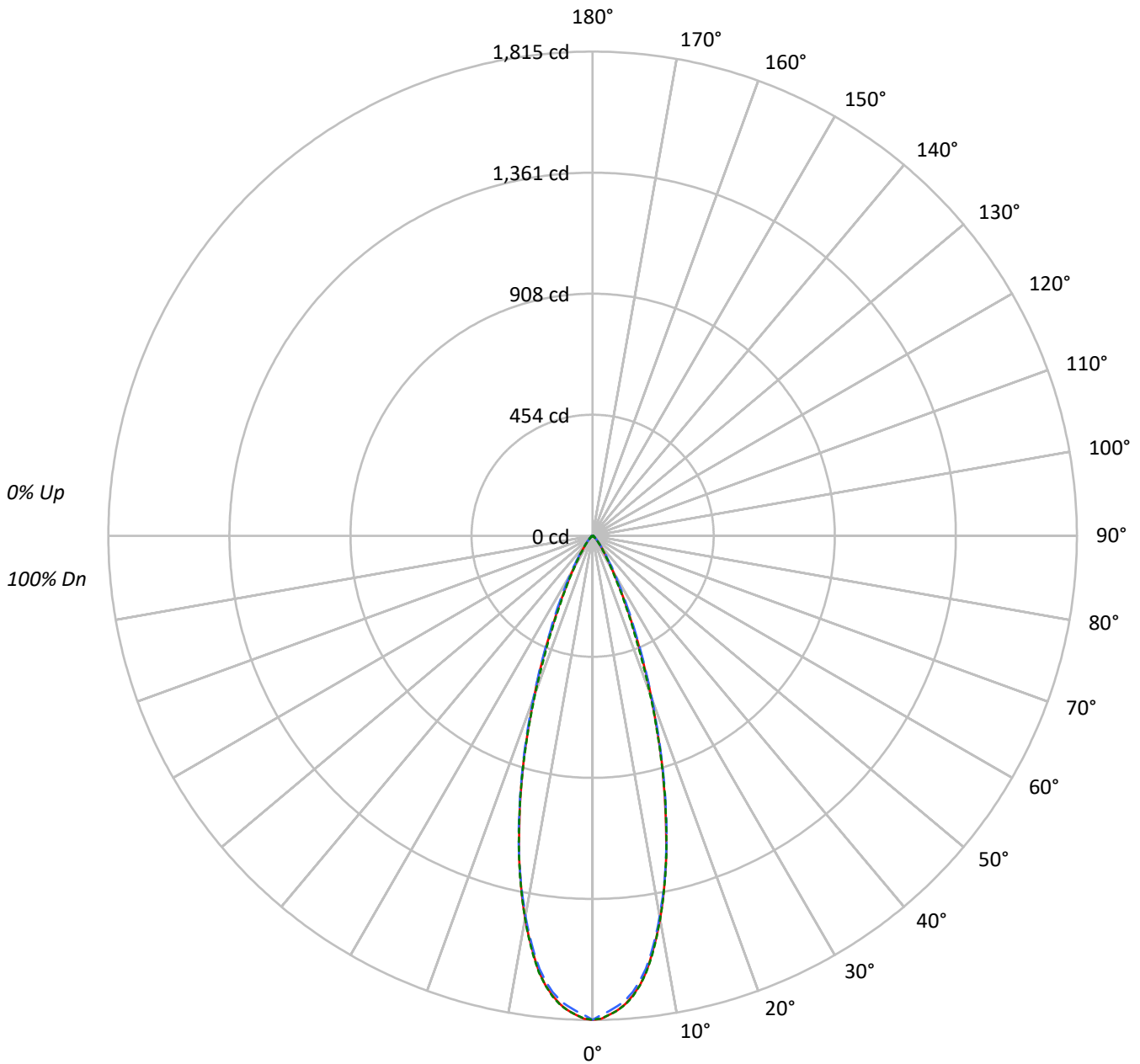
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	895254	895254	895254
5°	856776	850338	858113
10°	729917	725358	730719
15°	537990	541514	539777
20°	335858	342054	328455
25°	173489	186173	164779
30°	83174	95365	79243
35°	42943	47520	40172
40°	24087	25311	22863
45°	14652	14652	14094
50°	7599	9364	7599
55°	3957	6193	4301
60°	4539	4539	4539
65°	4903	4903	4903
70°	6058	5481	6058
75°	5719	5719	5719
80°	5398	5398	5398
85°	4529	4529	4529



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.1	23.0
10°-20°	286.7	42.2
20°-30°	155.4	22.9
30°-40°	49.9	7.3
40°-50°	17.0	2.5
50°-60°	6.0	0.9
60°-70°	4.4	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°	598.2	88.0
0°-40°	648.1	95.4
0°-60°	671.1	98.8
0°-90°	679.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	679.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1815	1815	1815	1815	1815	
5°	1730	1719	1717	1734	1733	156
15°	1053	1062	1060	1065	1057	286
25°	319	333	342	318	303	153
35°	71	74	79	72	67	48
45°	21	21	21	21	20	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°	1814.6	1814.6	1814.6	1814.6	1814.6
1°	1811.6	1798.6	1796.7	1813.5	1809.7
2°	1797.1	1784.9	1783.0	1799.8	1796.3
3°	1781.1	1770.0	1766.2	1783.8	1781.5
4°	1759.7	1749.5	1746.0	1763.6	1761.6
5°	1730.0	1719.3	1717.0	1734.2	1732.7
6°	1693.4	1684.6	1680.4	1697.6	1694.6
7°	1647.7	1639.7	1635.1	1647.7	1649.2
8°	1588.2	1584.4	1579.0	1591.6	1591.6
9°	1524.9	1521.5	1515.8	1527.2	1527.2
10°	1457.0	1454.8	1447.9	1458.6	1458.6
11°	1382.7	1381.6	1376.6	1385.4	1385.4
12°	1304.6	1307.2	1302.7	1310.3	1307.6
13°	1226.4	1225.3	1225.6	1231.4	1227.2
14°	1138.0	1144.8	1146.0	1149.4	1142.9
15°	1053.3	1062.1	1060.2	1065.1	1056.8
16°	966.8	976.7	976.3	977.5	969.5
17°	886.0	891.7	892.1	890.9	881.0
18°	799.8	807.8	807.8	805.9	794.1
19°	715.6	721.7	725.9	721.7	707.9
20°	639.7	643.9	651.5	640.8	625.6
21°	566.9	570.7	577.2	564.6	547.8
22°	497.1	502.1	508.2	493.7	476.2
23°	431.9	443.4	445.7	425.8	411.0
24°	372.1	385.0	388.9	368.6	353.0
25°	318.7	333.2	342.0	318.3	302.7
26°	272.6	286.7	297.4	273.7	258.9
27°	232.2	247.0	258.1	236.0	221.9
28°	197.5	212.0	223.4	202.8	189.5
29°	171.6	179.9	191.4	174.2	162.0
30°	146.0	155.2	167.4	149.8	139.1
32.5°	100.3	105.2	114.7	104.1	95.7
35°	71.3	74.3	78.9	71.7	66.7
37.5°	50.7	52.2	54.9	50.7	48.0
40°	37.4	38.1	39.3	37.0	35.5
42.5°	27.8	28.2	28.2	27.4	26.7
45°	21.0	21.3	21.0	21.0	20.2
47.5°	15.2	16.4	16.0	16.0	14.9
50°	9.9	12.2	12.2	11.8	9.9
52.5°	6.1	8.4	9.5	8.4	6.5
55°	4.6	5.7	7.2	5.7	5.0
57.5°	4.6	4.6	5.3	4.6	4.6
60°	4.6	4.6	4.6	4.6	4.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	4.2	4.2	4.2	4.2	4.2
70°	4.2	4.2	3.8	4.2	4.2
72.5°	3.8	3.8	3.4	3.8	3.4
75°	3.0	3.0	3.0	3.0	3.0
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°	1.1	1.1	1.1	1.5	1.1
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°	4.6	4.6	4.6	4.6	4.6
65°	4.2	4.6	4.2	4.6	4.2



(END OF REPORT)