

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: P281677

Luminaire Tested: **LDA2B109035D010 EU2B10SP159035 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281677  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B109035D010 EU2B10SP159035 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 906.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 lumens/watt  
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

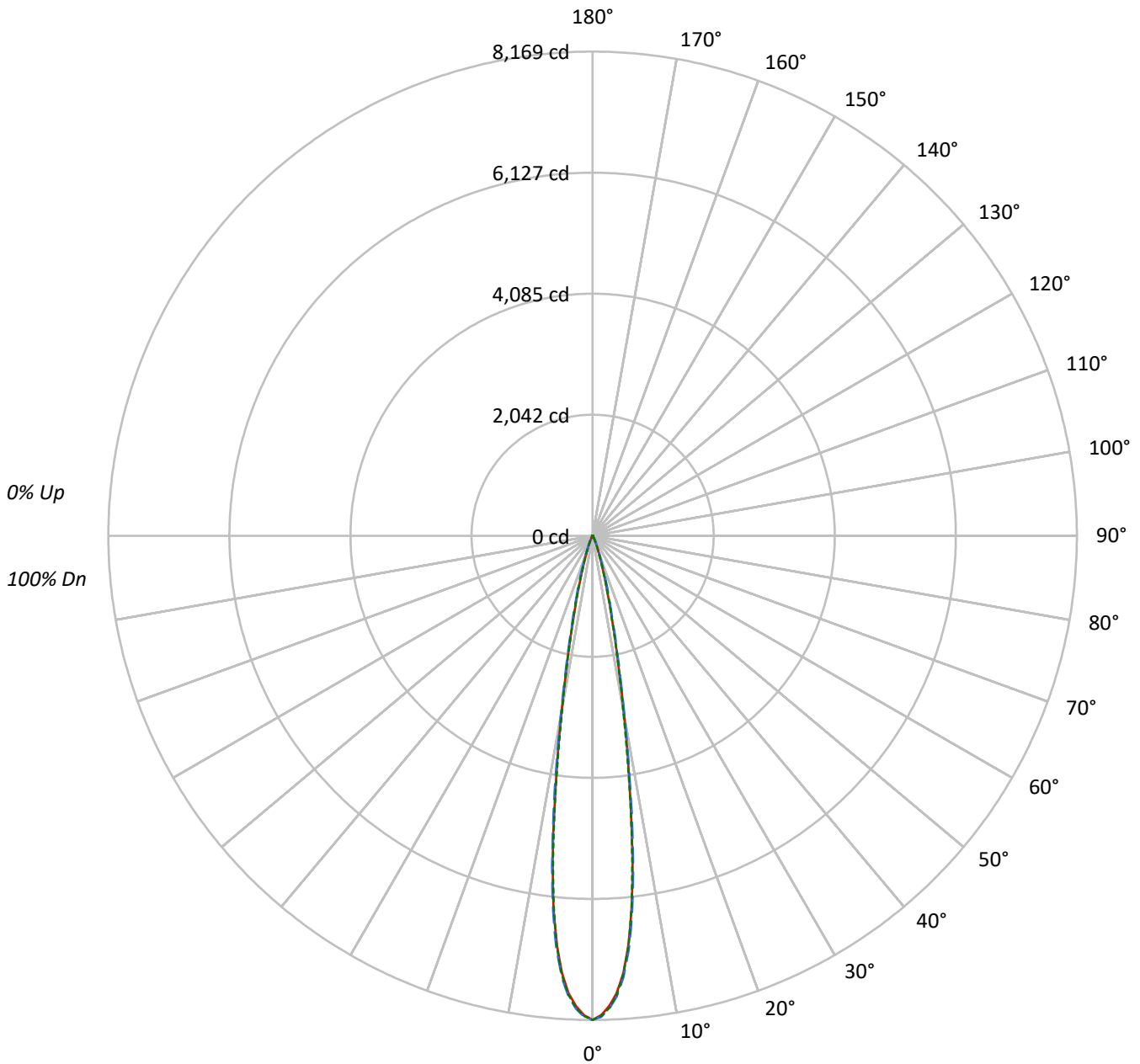
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98																			
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96																			
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94																			
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93																			
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91																			
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89																			
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88																			
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87																			
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85																			
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4030124	4030124	4030124
5°	3431760	3467517	3438248
10°	1515092	1549709	1479673
15°	459740	527263	466942
20°	137556	183391	153727
25°	53565	52749	56342
30°	23870	21591	22730
35°	4878	4276	4276
40°	0	322	1288
45°	4256	3489	6349
50°	0	1151	3838
55°	0	0	1720
60°	0	493	1973
65°	0	0	1167
70°	0	2885	5770
75°	0	0	0
80°	0	0	0
85°	0	2830	11321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	529.5	58.4
10°-20°	302.4	33.4
20°-30°	57.4	6.3
30°-40°	10.4	1.2
40°-50°	2.7	0.3
50°-60°	2.0	0.2
60°-70°	0.3	0.0
70°-80°	0.5	0.1
80°-90°	0.6	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°	889.4	98.2
0°-40°	899.8	99.3
0°-60°	904.5	99.8
0°-90°	906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	906.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8169	8169	8169	8169	8169	
5°	6929	6975	7002	6990	6942	526
15°	900	979	1032	970	914	286
25°	98	106	97	111	104	52
35°	8	10	7	9	7	11
45°	6	10	5	6	9	3
55°	0	0	0	0	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	2	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8168.7	8168.7	8168.7	8168.7	8168.7
1°	8091.4	8100.0	8118.2	8136.9	8107.6
2°	7940.0	7960.7	7986.4	8003.6	7971.8
3°	7728.0	7756.8	7784.0	7787.6	7757.8
4°	7400.4	7435.7	7464.5	7461.0	7423.6
5°	6929.4	6974.8	7001.6	6989.5	6942.5
6°	6307.0	6350.9	6385.2	6350.4	6287.3
7°	5531.6	5582.1	5618.4	5558.9	5481.6
8°	4633.1	4703.7	4740.1	4656.8	4577.5
9°	3782.0	3830.9	3867.8	3776.9	3696.1
10°	3024.3	3114.1	3093.4	3023.2	2953.6
11°	2378.6	2459.9	2463.4	2416.0	2347.8
12°	1862.2	1948.0	1969.7	1933.4	1872.8
13°	1471.5	1535.6	1571.4	1534.1	1476.5
14°	1171.1	1228.2	1274.1	1225.7	1168.1
15°	900.1	978.8	1032.3	969.7	914.2
16°	715.8	780.9	844.5	773.4	728.9
17°	549.7	607.8	673.4	608.8	572.4
18°	435.1	481.1	553.3	486.6	454.8
19°	340.7	375.6	442.7	384.2	358.4
20°	262.0	300.4	349.3	309.4	292.8
22.5°	158.5	179.7	193.8	181.7	173.1
25°	98.4	106.0	96.9	110.6	103.5
26°	85.8	91.4	89.3	98.4	89.9
27°	68.7	75.7	70.2	77.2	74.7
28°	62.6	71.2	60.1	68.7	64.6
29°	43.9	47.5	42.9	45.9	45.9
30°	41.9	42.9	37.9	41.4	39.9
32.5°	32.8	30.8	25.2	26.8	25.7
35°	8.1	10.1	7.1	8.6	7.1
37.5°	12.1	11.1	13.1	12.6	12.1
40°	0.0	0.5	0.5	0.5	2.0
42.5°	9.1	5.6	5.0	3.5	6.1
45°	6.1	9.6	5.0	5.6	9.1
47.5°	0.0	0.5	0.0	1.0	1.0
50°	0.0	1.0	1.5	2.0	5.0
52.5°	1.0	6.1	3.0	5.6	8.1
55°	0.0	0.5	0.0	0.5	2.0
57.5°	2.0	1.0	2.0	2.0	9.1
60°	0.0	1.0	0.5	0.5	2.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.0
67.5°	0.0	0.5	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.5	0.0	0.0
80°	0.0	0.5	0.0	0.0	0.0
82.5°	0.0	0.5	1.0	1.5	1.0
85°	0.0	0.5	0.5	0.5	2.0
87.5°	0.0	1.0	1.5	0.0	1.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







70°	0.0	1.5	2.0	0.0	4.0
72.5°	0.0	2.5	0.5	0.5	0.0



(END OF REPORT)