

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: P281689

Luminaire Tested: **LDA2B109730D010 EU2B10SP159730 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281689  
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: LDA2B109730D010 EU2B10SP159730 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: 801.0 lumens  
Efficiency: N/A  
Efficacy: 80.1 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

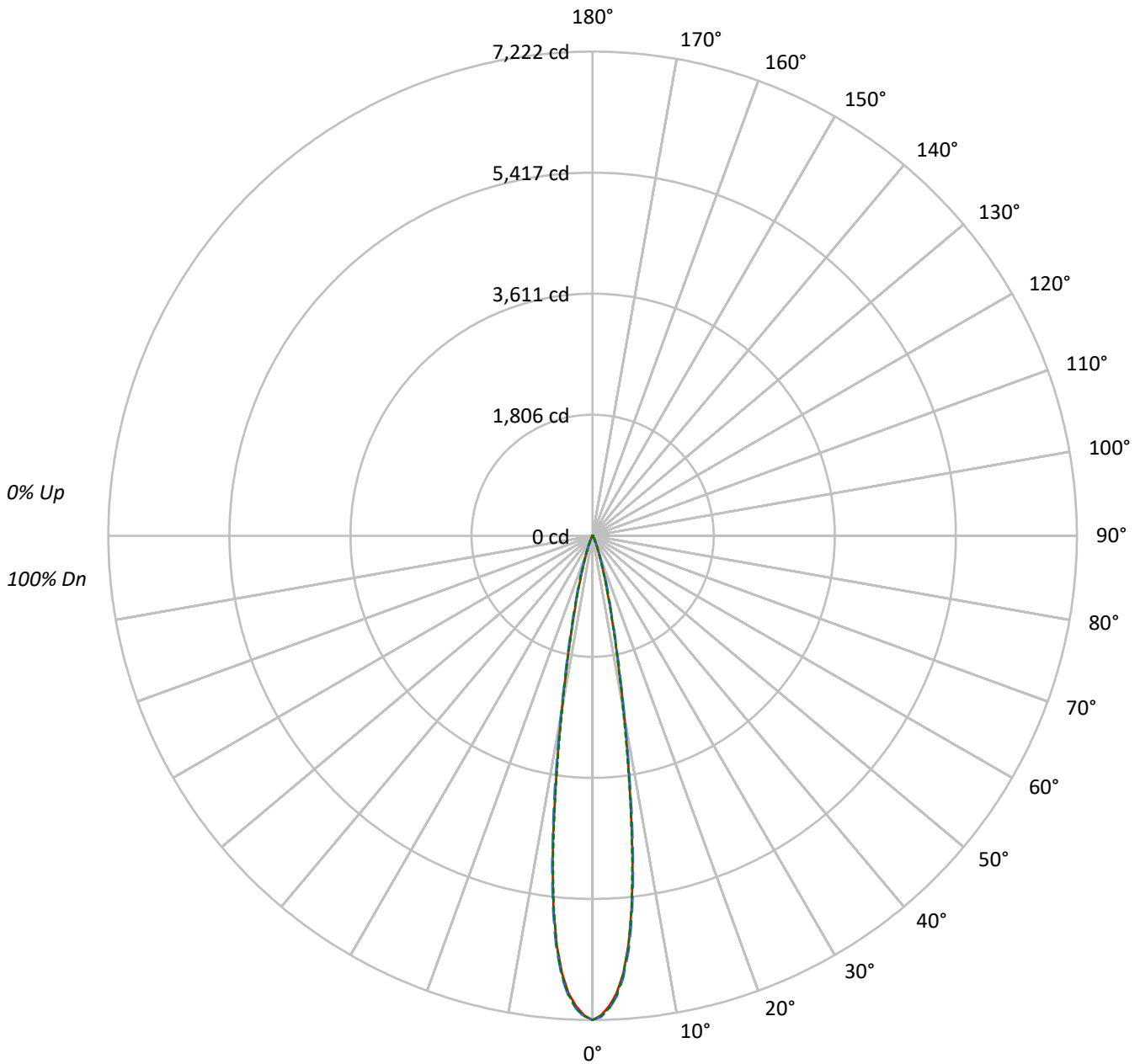
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3563207	3563207	3563207
5°	3034176	3065773	3039921
10°	1339551	1370160	1308240
15°	406467	466176	412852
20°	121596	162128	135929
25°	47360	46652	49809
30°	21078	19084	20110
35°	4276	3734	3734
40°	0	258	1159
45°	3768	3140	5582
50°	0	998	3454
55°	0	0	1548
60°	0	395	1776
65°	0	0	1051
70°	0	2596	5193
75°	0	0	0
80°	0	0	0
85°	0	2264	10189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	468.2	58.5
10°-20°	267.4	33.4
20°-30°	50.8	6.3
30°-40°	9.2	1.2
40°-50°	2.4	0.3
50°-60°	1.8	0.2
60°-70°	0.3	0.0
70°-80°	0.4	0.0
80°-90°	0.5	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°	786.3	98.2
0°-40°	795.6	99.3
0°-60°	799.7	99.8
0°-90°	801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	801.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7222	7222	7222	7222	7222	
5°	6127	6167	6190	6180	6138	465
15°	796	865	913	857	808	253
25°	87	94	86	98	92	46
35°	7	9	6	8	6	10
45°	5	8	4	5	8	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°	7222.3	7222.3	7222.3	7222.3	7222.3
1°	7154.0	7161.6	7177.6	7194.1	7168.3
2°	7020.1	7038.4	7061.1	7076.3	7048.2
3°	6832.6	6858.1	6882.2	6885.3	6859.0
4°	6543.0	6574.2	6599.6	6596.5	6563.5
5°	6126.6	6166.7	6190.4	6179.7	6138.2
6°	5576.2	5615.1	5645.4	5614.6	5558.8
7°	4890.7	4935.3	4967.5	4914.8	4846.5
8°	4096.3	4158.8	4190.9	4117.2	4047.2
9°	3343.8	3387.1	3419.7	3339.3	3267.9
10°	2673.9	2753.3	2735.0	2673.0	2611.4
11°	2103.0	2174.9	2178.0	2136.1	2075.8
12°	1646.5	1722.3	1741.5	1709.4	1655.8
13°	1301.0	1357.7	1389.4	1356.3	1305.5
14°	1035.4	1085.9	1126.5	1083.7	1032.8
15°	795.8	865.4	912.7	857.4	808.3
16°	632.9	690.4	746.7	683.8	644.5
17°	486.0	537.4	595.4	538.3	506.1
18°	384.7	425.3	489.2	430.2	402.1
19°	301.3	332.1	391.4	339.6	316.9
20°	231.6	265.6	308.8	273.6	258.9
22.5°	140.1	158.9	171.4	160.7	153.1
25°	87.0	93.7	85.7	97.7	91.5
26°	75.9	80.8	79.0	87.0	79.4
27°	60.7	66.9	62.0	68.3	66.1
28°	55.3	62.9	53.1	60.7	57.1
29°	38.8	42.0	37.9	40.6	40.6
30°	37.0	37.9	33.5	36.6	35.3
32.5°	29.0	27.2	22.3	23.7	22.8
35°	7.1	8.9	6.2	7.6	6.2
37.5°	10.7	9.8	11.6	11.2	10.7
40°	0.0	0.4	0.4	0.4	1.8
42.5°	8.0	4.9	4.5	3.1	5.4
45°	5.4	8.5	4.5	4.9	8.0
47.5°	0.0	0.4	0.0	0.9	0.9
50°	0.0	0.9	1.3	1.8	4.5
52.5°	0.9	5.4	2.7	4.9	7.1
55°	0.0	0.4	0.0	0.4	1.8
57.5°	1.8	0.9	1.8	1.8	8.0
60°	0.0	0.9	0.4	0.4	1.8
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.9
67.5°	0.0	0.4	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	0.4	0.0	0.0
80°	0.0	0.4	0.0	0.0	0.0
82.5°	0.0	0.4	0.9	1.3	0.9
85°	0.0	0.4	0.4	0.4	1.8
87.5°	0.0	0.9	1.3	0.0	0.9
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	1.3	1.8	0.0	3.6
72.5°	0.0	2.2	0.4	0.4	0.0



(END OF REPORT)