

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: P281667

Luminaire Tested: **LDA2B109024D010 EU2B10SP159024 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281667  
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: LDA2B109024D010 EU2B10SP159024 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 776.3 lumens  
Efficiency: N/A  
Efficacy: 77.6 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

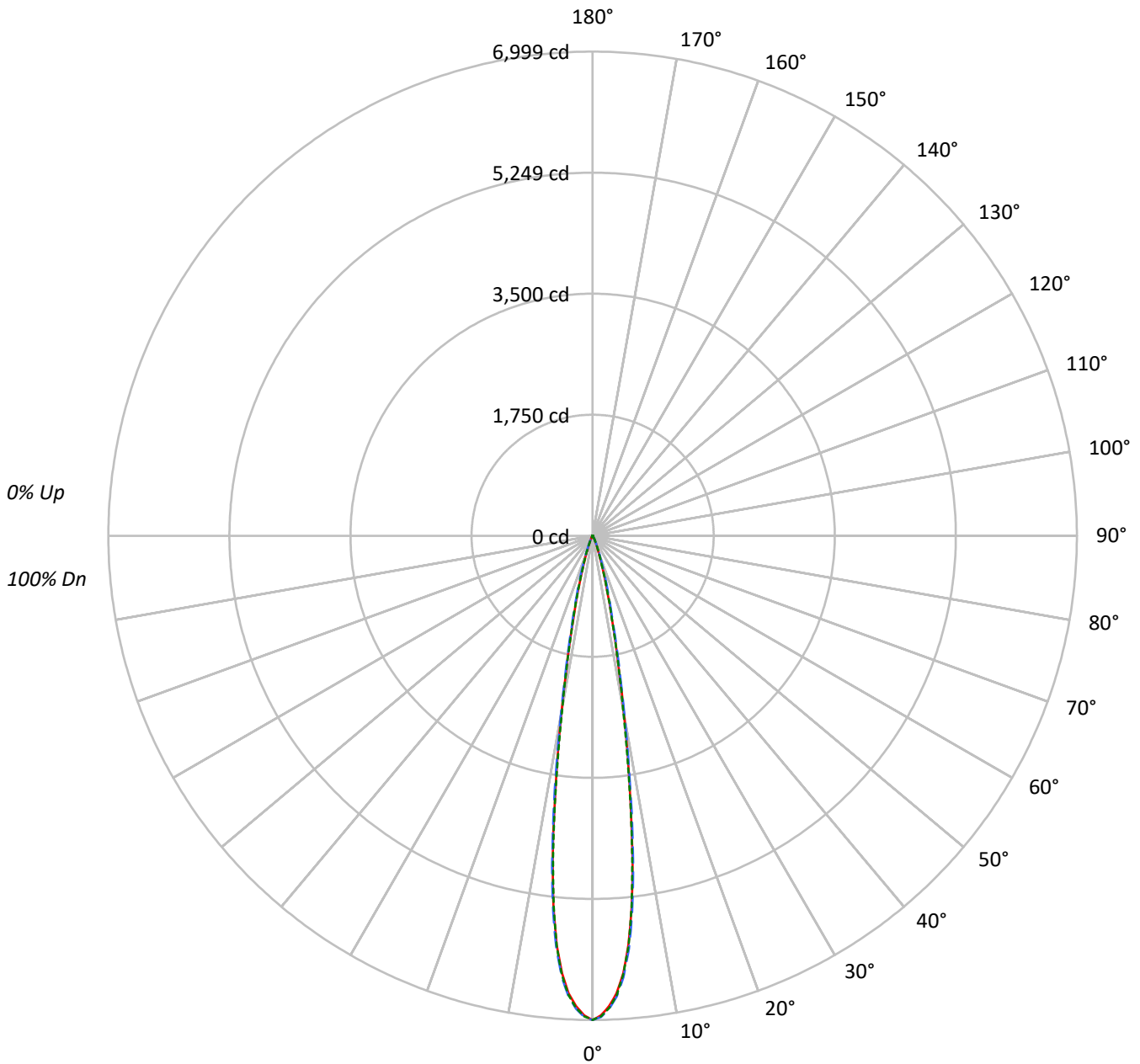
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3453236	3453236	3453236
5°	2940525	2971181	2946121
10°	1298221	1327878	1267862
15°	393903	451823	400083
20°	117868	157140	131729
25°	45890	45182	48285
30°	20452	18458	19483
35°	4156	3674	3674
40°	0	258	1095
45°	3628	3000	5442
50°	0	998	3300
55°	0	0	1462
60°	0	395	1677
65°	0	0	1051
70°	0	2452	5049
75°	0	0	0
80°	0	0	0
85°	0	2264	9623



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	453.7	58.4
10°-20°	259.2	33.4
20°-30°	49.2	6.3
30°-40°	8.9	1.2
40°-50°	2.3	0.3
50°-60°	1.7	0.2
60°-70°	0.3	0.0
70°-80°	0.4	0.1
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°	762.1	98.2
0°-40°	771.0	99.3
0°-60°	775.1	99.8
0°-90°	776.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6999	6999	6999	6999	6999	
5°	5938	5976	5999	5989	5949	451
15°	771	839	885	831	783	245
25°	84	91	83	95	89	44
35°	7	9	6	7	6	10
45°	5	8	4	5	8	2
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°	6999.4	6999.4	6999.4	6999.4	6999.4
1°	6933.3	6940.6	6956.2	6972.2	6947.1
2°	6803.5	6821.2	6843.3	6858.0	6830.8
3°	6621.8	6646.5	6669.8	6672.9	6647.4
4°	6341.1	6371.4	6396.0	6393.0	6361.0
5°	5937.5	5976.5	5999.4	5989.0	5948.8
6°	5404.2	5441.8	5471.3	5441.4	5387.3
7°	4739.8	4783.1	4814.2	4763.2	4697.0
8°	3969.9	4030.5	4061.6	3990.2	3922.3
9°	3240.6	3282.6	3314.2	3236.3	3167.1
10°	2591.4	2668.4	2650.6	2590.5	2530.8
11°	2038.2	2107.8	2110.8	2070.2	2011.8
12°	1595.7	1669.2	1687.8	1656.6	1604.7
13°	1260.9	1315.8	1346.5	1314.5	1265.2
14°	1003.5	1052.4	1091.7	1050.2	1000.9
15°	771.2	838.7	884.6	830.9	783.3
16°	613.3	669.1	723.6	662.7	624.6
17°	471.0	520.8	577.0	521.6	490.5
18°	372.9	412.2	474.1	417.0	389.7
19°	292.0	321.8	379.3	329.2	307.1
20°	224.5	257.4	299.3	265.2	250.9
22.5°	135.8	154.0	166.1	155.7	148.4
25°	84.3	90.8	83.0	94.7	88.7
26°	73.5	78.3	76.6	84.3	77.0
27°	58.8	64.9	60.1	66.2	64.0
28°	53.6	61.0	51.5	58.8	55.4
29°	37.6	40.7	36.8	39.4	39.4
30°	35.9	36.8	32.4	35.5	34.2
32.5°	28.1	26.4	21.6	22.9	22.1
35°	6.9	8.7	6.1	7.4	6.1
37.5°	10.4	9.5	11.2	10.8	10.4
40°	0.0	0.4	0.4	0.4	1.7
42.5°	7.8	4.8	4.3	3.0	5.2
45°	5.2	8.2	4.3	4.8	7.8
47.5°	0.0	0.4	0.0	0.9	0.9
50°	0.0	0.9	1.3	1.7	4.3
52.5°	0.9	5.2	2.6	4.8	6.9
55°	0.0	0.4	0.0	0.4	1.7
57.5°	1.7	0.9	1.7	1.7	7.8
60°	0.0	0.9	0.4	0.4	1.7
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	1.7
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	1.7	0.0	3.5
72.5°	0.0	2.2	0.4	0.4	0.0



(END OF REPORT)