

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: P281686

Luminaire Tested: **LDA2B109727D010 EU2B10SP159727 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281686  
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: LDA2B109727D010 EU2B10SP159727 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: 752.6 lumens  
Efficiency: N/A  
Efficacy: 75.3 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

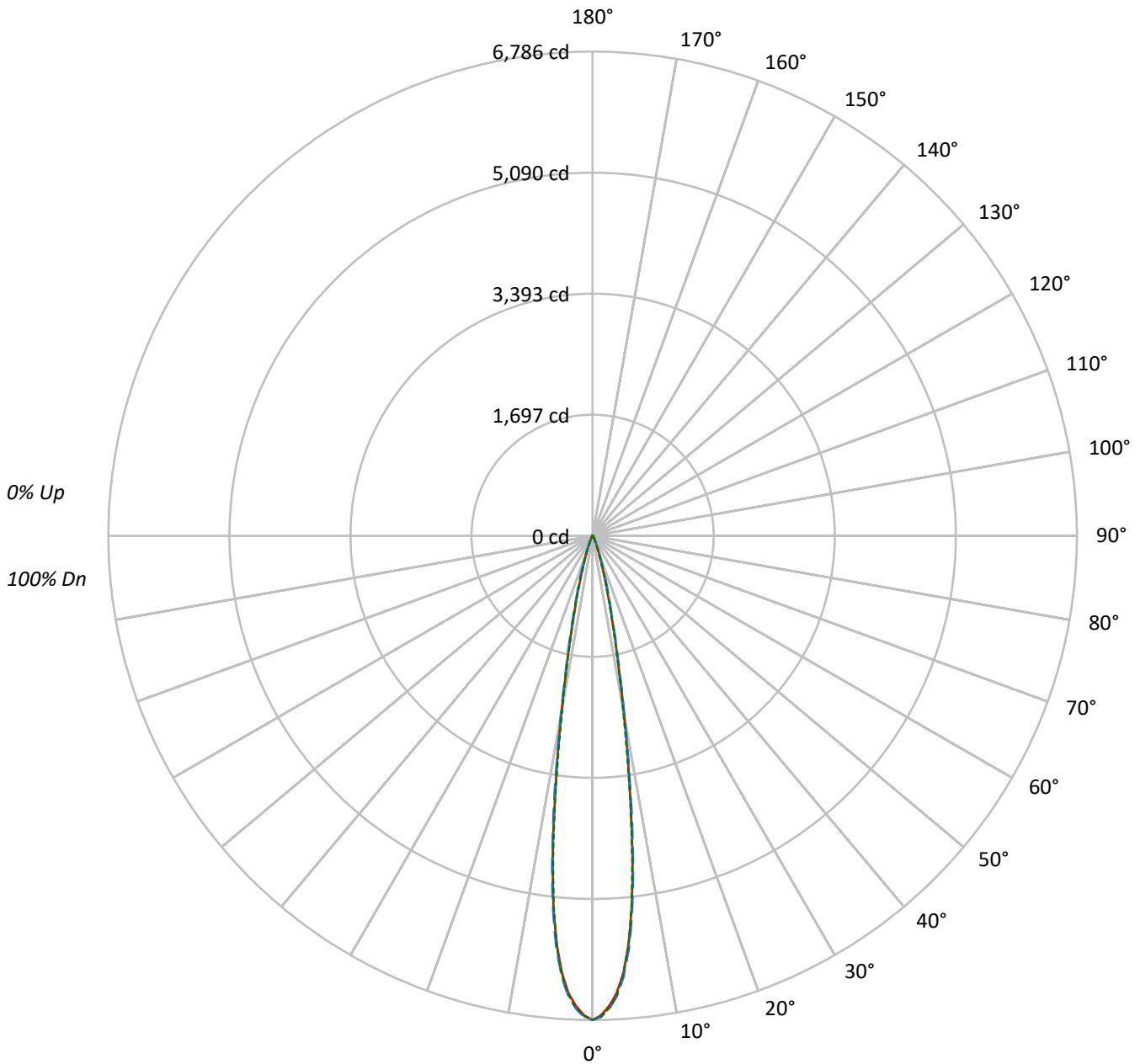
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3347953	3347953	3347953
5°	2850886	2880551	2856284
10°	1258594	1287400	1229187
15°	381900	438033	387875
20°	114245	152362	127686
25°	44529	43821	46815
30°	19825	17945	18857
35°	4035	3553	3553
40°	0	258	1095
45°	3489	2930	5233
50°	0	998	3224
55°	0	0	1462
60°	0	395	1677
65°	0	0	934
70°	0	2452	4904
75°	0	0	0
80°	0	0	0
85°	0	2264	9623



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	439.9	58.5
10°-20°	251.2	33.4
20°-30°	47.7	6.3
30°-40°	8.7	1.2
40°-50°	2.2	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°	738.8	98.2
0°-40°	747.5	99.3
0°-60°	751.4	99.8
0°-90°	752.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	752.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6786	6786	6786	6786	6786	
5°	5756	5794	5816	5806	5767	437
15°	748	813	858	806	759	238
25°	82	88	80	92	86	43
35°	7	8	6	7	6	9
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°	6786.0	6786.0	6786.0	6786.0	6786.0
1°	6721.8	6728.9	6744.0	6759.6	6735.2
2°	6596.0	6613.2	6634.6	6648.8	6622.4
3°	6419.9	6443.8	6466.4	6469.4	6444.6
4°	6147.7	6177.1	6201.0	6198.0	6167.0
5°	5756.5	5794.2	5816.4	5806.4	5767.4
6°	5239.4	5275.9	5304.4	5275.5	5223.0
7°	4595.3	4637.2	4667.4	4617.9	4553.8
8°	3848.8	3907.5	3937.7	3868.5	3802.7
9°	3141.8	3182.5	3213.1	3137.6	3070.5
10°	2512.3	2587.0	2569.8	2511.5	2453.6
11°	1976.0	2043.5	2046.4	2007.0	1950.4
12°	1547.0	1618.3	1636.3	1606.1	1555.8
13°	1222.4	1275.7	1305.4	1274.4	1226.6
14°	972.9	1020.3	1058.4	1018.2	970.4
15°	747.7	813.1	857.6	805.6	759.4
16°	594.6	648.7	701.6	642.4	605.5
17°	456.7	504.9	559.4	505.7	475.5
18°	361.5	399.6	459.6	404.3	377.8
19°	283.1	312.0	367.8	319.1	297.7
20°	217.6	249.5	290.2	257.1	243.2
22.5°	131.7	149.3	161.0	151.0	143.8
25°	81.8	88.1	80.5	91.8	86.0
26°	71.3	75.9	74.2	81.8	74.6
27°	57.0	62.9	58.3	64.2	62.1
28°	52.0	59.1	49.9	57.0	53.7
29°	36.5	39.4	35.6	38.2	38.2
30°	34.8	35.6	31.5	34.4	33.1
32.5°	27.3	25.6	21.0	22.2	21.4
35°	6.7	8.4	5.9	7.1	5.9
37.5°	10.1	9.2	10.9	10.5	10.1
40°	0.0	0.4	0.4	0.4	1.7
42.5°	7.5	4.6	4.2	2.9	5.0
45°	5.0	8.0	4.2	4.6	7.5
47.5°	0.0	0.4	0.0	0.8	0.8
50°	0.0	0.8	1.3	1.7	4.2
52.5°	0.8	5.0	2.5	4.6	6.7
55°	0.0	0.4	0.0	0.4	1.7
57.5°	1.7	0.8	1.7	1.7	7.5
60°	0.0	0.8	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	0.8
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	0.8	1.3	0.8
85°	0.0	0.4	0.4	0.4	1.7
87.5°	0.0	0.8	1.3	0.0	0.8
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	3.4
72.5°	0.0	2.1	0.4	0.4	0.0



(END OF REPORT)