

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: P281178

Luminaire Tested: **LDA2B109040D010 EU2B10SP159040 2LBALD1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281178  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B109040D010 EU2B10SP159040 2LBALD1LI  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, H  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 925.3 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

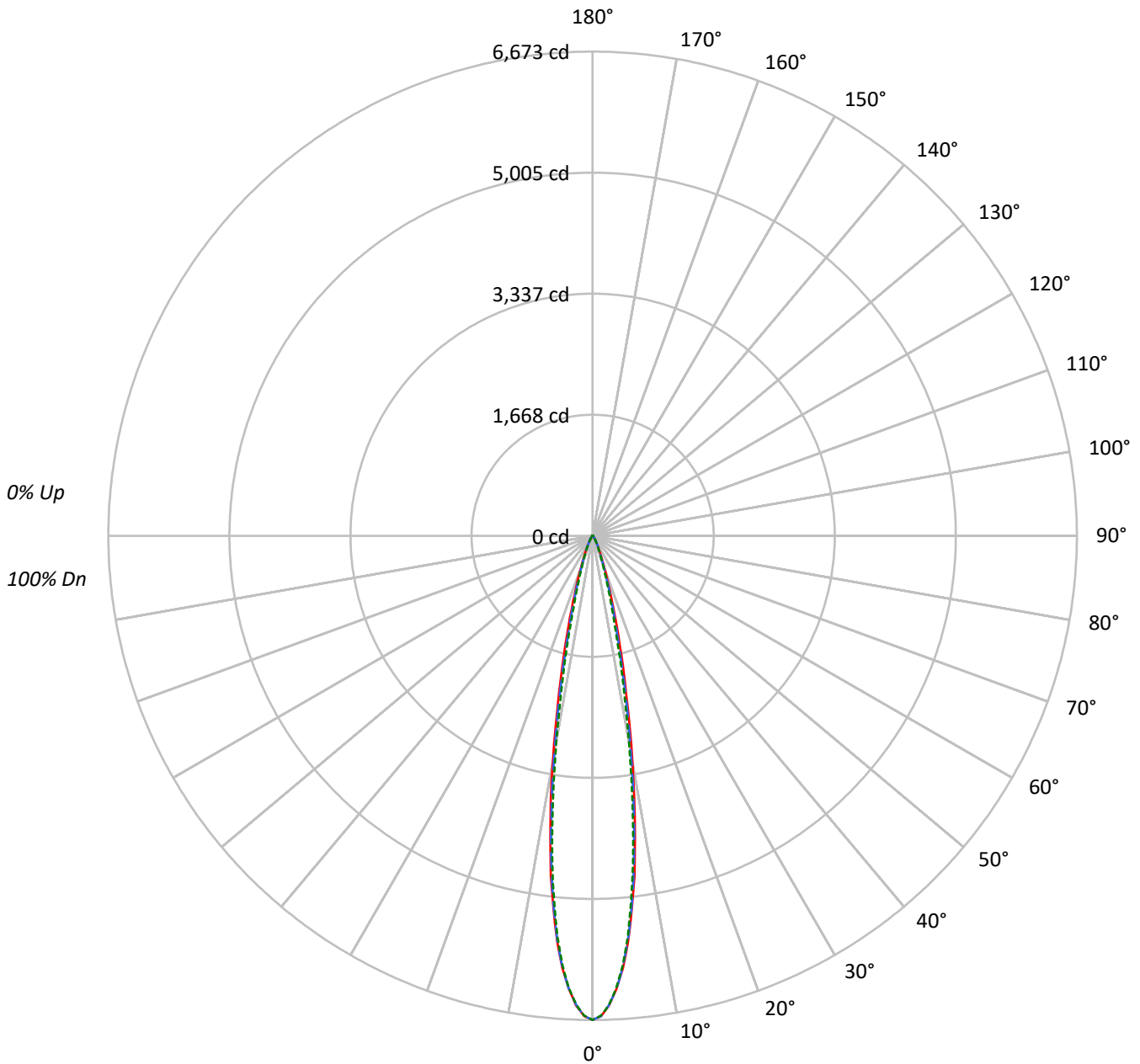
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97																			
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95																			
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92																			
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90																			
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88																			
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86																			
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84																			
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82																			
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80																			
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79																			

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

	0°	45°	90°
0°	3292154	3292154	3292154
5°	2781551	2766743	2746290
10°	1583224	1513539	1436539
15°	655619	580741	511583
20°	249387	218410	199982
25°	110179	105824	94121
30°	50987	56285	44834
35°	26802	31620	25115
40°	11786	13589	7857
45°	4605	3628	5233
50°	2149	2533	3607
55°	0	1634	0
60°	0	0	888
65°	0	0	0
70°	0	721	0
75°	0	0	0
80°	2557	0	0
85°	26605	23775	10755



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	446.2	48.2
10°-20°	341.1	36.9
20°-30°	94.8	10.3
30°-40°	30.8	3.3
40°-50°	6.8	0.7
50°-60°	2.1	0.2
60°-70°	1.2	0.1
70°-80°	0.7	0.1
80°-90°	1.5	0.2
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°	882.1	95.3
0°-40°	912.9	98.7
0°-60°	921.8	99.6
0°-90°	925.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	925.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6673	6673	6673	6673	6673	
5°	5616	5575	5587	5545	5545	454
15°	1284	1239	1137	1049	1002	375
25°	202	205	194	183	173	102
35°	44	48	52	40	42	29
45°	7	9	5	5	8	7
55°	0	3	2	1	0	2
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	5	2	4	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6672.9	6672.9	6672.9	6672.9	6672.9
1°	6621.9	6597.0	6620.9	6606.9	6614.9
2°	6478.1	6447.1	6472.0	6452.3	6468.7
3°	6254.1	6230.2	6252.3	6227.4	6240.5
4°	5973.5	5938.8	5960.9	5927.6	5935.6
5°	5616.5	5575.3	5586.6	5544.9	5545.3
6°	5166.8	5138.2	5144.8	5079.7	5075.0
7°	4726.9	4659.4	4652.4	4577.9	4563.4
8°	4192.8	4131.5	4111.3	4023.7	3992.8
9°	3680.8	3604.4	3563.2	3461.6	3425.5
10°	3160.3	3083.0	3021.2	2906.4	2867.5
11°	2678.7	2608.9	2532.1	2409.4	2371.4
12°	2231.8	2177.0	2092.7	1974.1	1934.3
13°	1866.9	1803.6	1713.2	1603.1	1568.9
14°	1550.6	1482.7	1392.3	1298.1	1231.6
15°	1283.6	1239.1	1137.0	1049.4	1001.6
16°	1048.9	1011.0	922.9	847.0	813.3
17°	860.1	829.7	754.7	695.2	667.1
18°	709.7	671.8	612.8	573.9	551.9
19°	575.8	546.2	503.1	473.2	451.1
20°	475.0	450.7	416.0	389.3	380.9
22.5°	306.9	302.6	280.1	265.6	258.6
25°	202.4	204.7	194.4	183.2	172.9
26°	172.9	174.3	164.9	158.3	145.2
27°	148.0	148.5	148.5	136.3	123.7
28°	120.9	126.0	121.3	115.7	103.5
29°	103.5	110.1	107.7	102.1	90.4
30°	89.5	94.2	98.8	89.9	78.7
32.5°	62.8	67.0	72.1	67.5	58.1
35°	44.5	48.3	52.5	39.8	41.7
37.5°	30.5	37.0	35.6	32.3	27.6
40°	18.3	19.2	21.1	22.5	12.2
42.5°	13.1	15.5	14.1	15.9	5.6
45°	6.6	9.4	5.2	5.2	7.5
47.5°	4.7	8.0	2.8	2.8	0.9
50°	2.8	6.1	3.3	1.4	4.7
52.5°	4.7	5.6	3.7	4.2	0.9
55°	0.0	2.8	1.9	0.9	0.0
57.5°	1.9	3.3	1.9	0.9	1.9
60°	0.0	0.0	0.0	0.5	0.9
62.5°	0.0	0.9	0.0	1.4	1.9
65°	0.0	1.9	0.0	0.0	0.0
67.5°	2.8	3.3	1.9	3.7	5.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.9	0.0
77.5°	0.0	4.7	1.4	1.4	1.9
80°	0.9	0.0	0.0	0.5	0.0
82.5°	0.0	3.7	0.5	1.9	2.8
85°	4.7	2.3	4.2	2.3	1.9
87.5°	0.0	0.5	0.9	0.5	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	0.5	0.5	0.0
72.5°	0.9	0.0	0.0	0.0	0.0



(END OF REPORT)