

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: P281209

Luminaire Tested: **LDA2B109730D010 EU2B10SP159730 2LBALD1GPH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281209  
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: LDA2B109730D010 EU2B10SP159730 2LBALD1GPH  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, GPH  
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): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

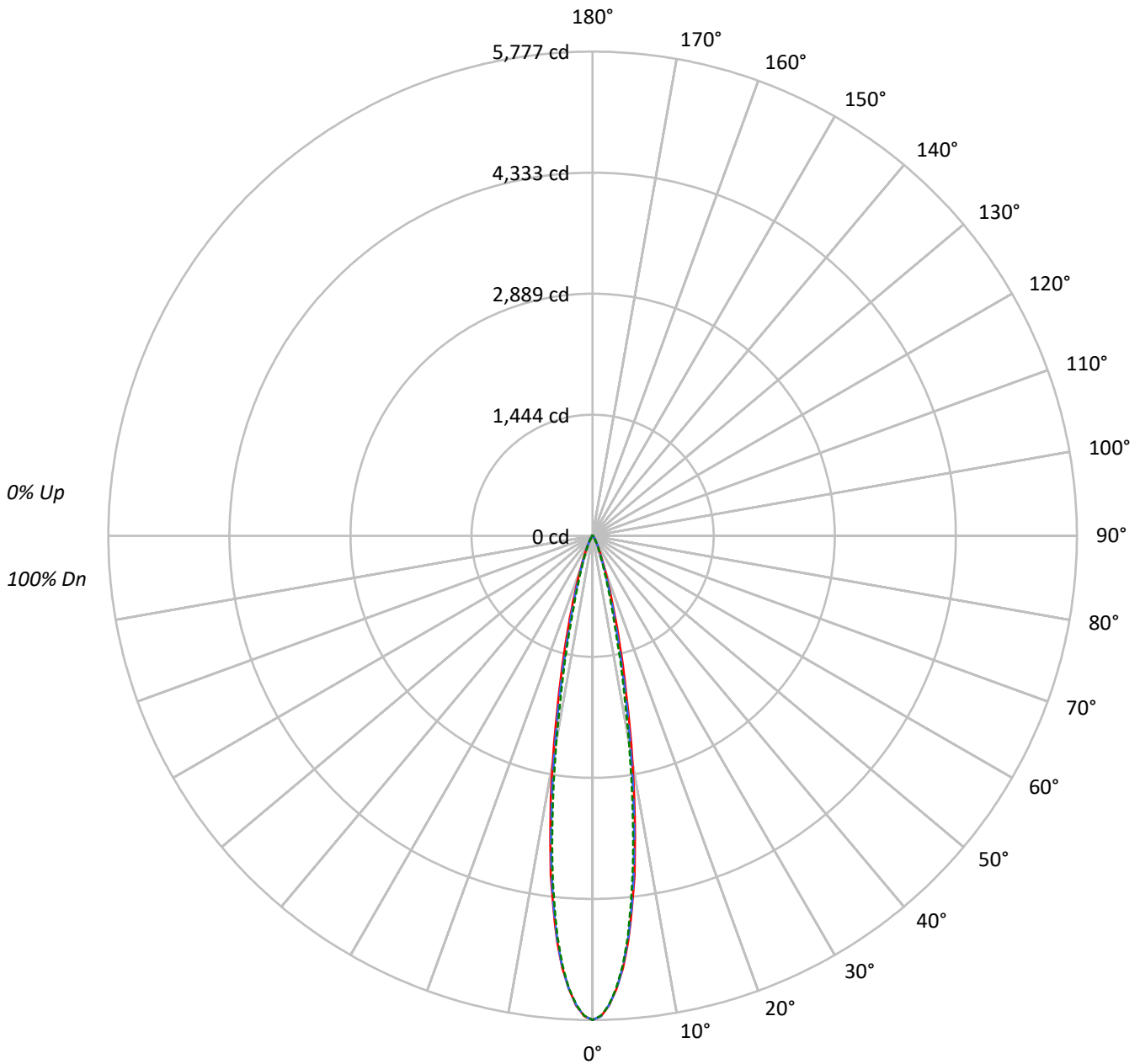
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	89	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°	2850151	2850151	2850151
5°	2408086	2395259	2377579
10°	1370661	1310294	1243665
15°	567614	502747	442885
20°	215943	189061	173101
25°	95373	91617	81491
30°	44151	48765	38796
35°	23188	27344	21742
40°	10176	11786	6762
45°	3977	3140	4535
50°	1842	2149	3147
55°	0	1376	0
60°	0	0	789
65°	0	0	0
70°	0	577	0
75°	0	0	0
80°	2273	0	0
85°	23209	20945	9057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	386.3	48.2
10°-20°	295.3	36.9
20°-30°	82.1	10.3
30°-40°	26.7	3.3
40°-50°	5.9	0.7
50°-60°	1.8	0.2
60°-70°	1.0	0.1
70°-80°	0.6	0.1
80°-90°	1.3	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°	763.7	95.3
0°-40°	790.4	98.7
0°-60°	798.1	99.6
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°	5777	5777	5777	5777	5777	
5°	4862	4827	4836	4800	4801	393
15°	1111	1073	984	908	867	324
25°	175	177	168	159	150	88
35°	38	42	45	34	36	25
45°	6	8	4	4	6	6
55°	0	2	2	1	0	2
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	4	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°	5777.0	5777.0	5777.0	5777.0	5777.0
1°	5732.8	5711.3	5732.0	5719.8	5726.7
2°	5608.3	5581.5	5603.0	5586.0	5600.2
3°	5414.4	5393.7	5412.8	5391.3	5402.6
4°	5171.5	5141.5	5160.5	5131.7	5138.6
5°	4862.4	4826.7	4836.5	4800.4	4800.8
6°	4473.1	4448.3	4454.0	4397.6	4393.6
7°	4092.2	4033.8	4027.8	3963.3	3950.7
8°	3629.9	3576.8	3559.3	3483.5	3456.7
9°	3186.6	3120.5	3084.8	2996.8	2965.6
10°	2736.0	2669.1	2615.5	2516.2	2482.5
11°	2319.1	2258.6	2192.1	2085.9	2053.0
12°	1932.2	1884.7	1811.7	1709.1	1674.6
13°	1616.2	1561.5	1483.2	1387.9	1358.3
14°	1342.4	1283.6	1205.4	1123.8	1066.3
15°	1111.3	1072.7	984.3	908.5	867.1
16°	908.1	875.2	799.0	733.3	704.1
17°	744.6	718.3	653.4	601.9	577.5
18°	614.4	581.6	530.5	496.8	477.8
19°	498.5	472.9	435.6	409.6	390.6
20°	411.3	390.2	360.1	337.0	329.7
22.5°	265.7	262.0	242.5	230.0	223.9
25°	175.2	177.2	168.3	158.6	149.7
26°	149.7	150.9	142.8	137.1	125.7
27°	128.2	128.6	128.6	118.0	107.1
28°	104.6	109.1	105.0	100.2	89.6
29°	89.6	95.3	93.3	88.4	78.3
30°	77.5	81.5	85.6	77.9	68.1
32.5°	54.3	58.0	62.5	58.4	50.3
35°	38.5	41.8	45.4	34.5	36.1
37.5°	26.4	32.0	30.8	28.0	23.9
40°	15.8	16.6	18.3	19.5	10.5
42.5°	11.4	13.4	12.2	13.8	4.9
45°	5.7	8.1	4.5	4.5	6.5
47.5°	4.1	6.9	2.4	2.4	0.8
50°	2.4	5.3	2.8	1.2	4.1
52.5°	4.1	4.9	3.2	3.7	0.8
55°	0.0	2.4	1.6	0.8	0.0
57.5°	1.6	2.8	1.6	0.8	1.6
60°	0.0	0.0	0.0	0.4	0.8
62.5°	0.0	0.8	0.0	1.2	1.6
65°	0.0	1.6	0.0	0.0	0.0
67.5°	2.4	2.8	1.6	3.2	4.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.8	0.0
77.5°	0.0	4.1	1.2	1.2	1.6
80°	0.8	0.0	0.0	0.4	0.0
82.5°	0.0	3.2	0.4	1.6	2.4
85°	4.1	2.0	3.7	2.0	1.6
87.5°	0.0	0.4	0.8	0.4	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	0.4	0.4	0.0
72.5°	0.8	0.0	0.0	0.0	0.0



(END OF REPORT)