

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: P281728

Luminaire Tested: **LDA2B159727D010 EU2B15SP159727 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281728  
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: LDA2B159727D010 EU2B15SP159727 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1001.5 lumens  
Efficiency: N/A  
Efficacy: 71.0 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

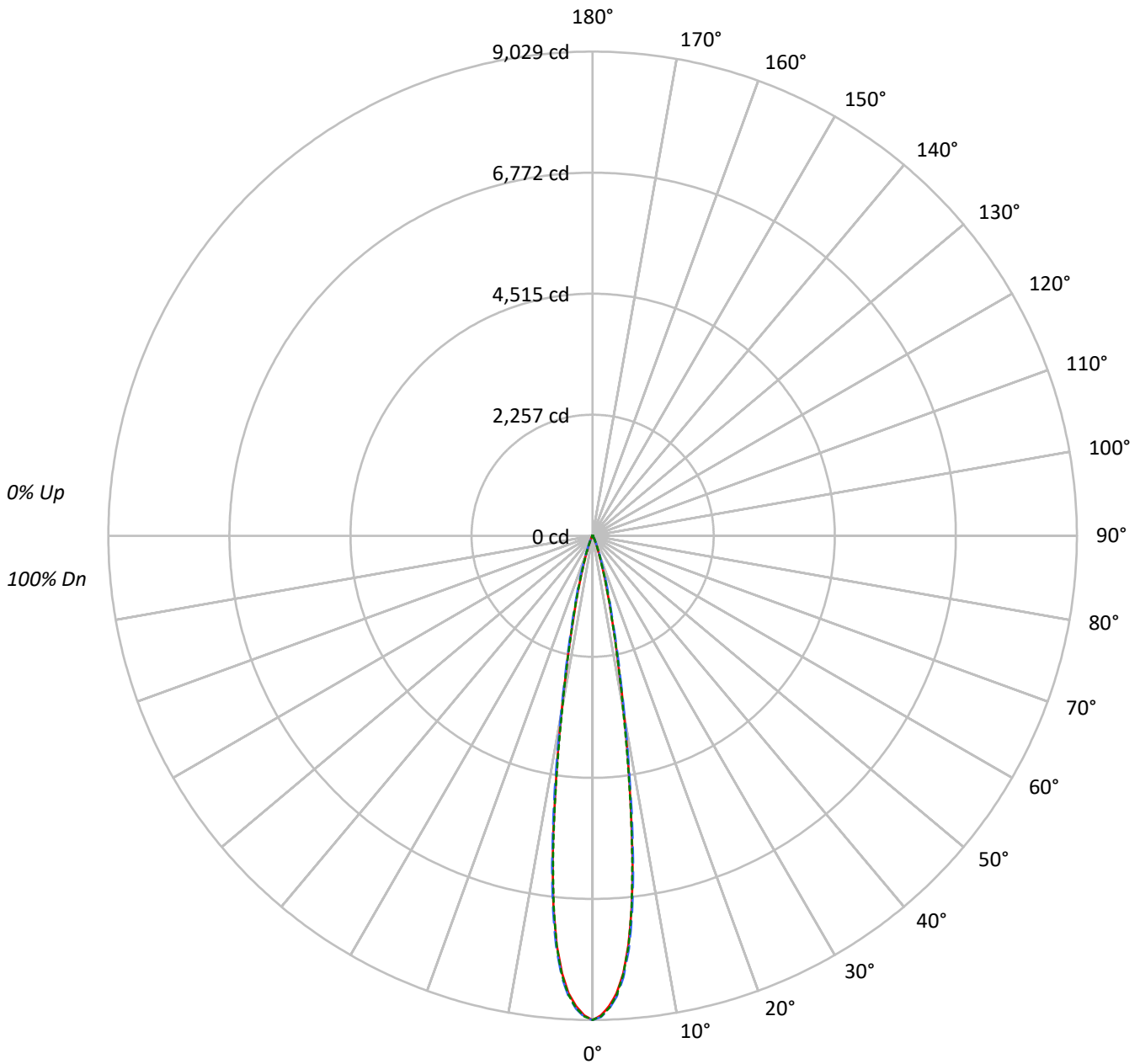
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4454761	4454761	4454761
5°	3793339	3832860	3800520
10°	1674702	1713026	1635576
15°	508161	582835	516129
20°	152047	202712	169898
25°	59227	58301	62275
30°	26376	23813	25123
35°	5360	4698	4698
40°	0	386	1417
45°	4675	3907	6977
50°	0	1305	4298
55°	0	0	1892
60°	0	592	2171
65°	0	0	1284
70°	0	3173	6491
75°	0	0	0
80°	0	0	0
85°	0	3396	12454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	585.3	58.4
10°-20°	334.3	33.4
20°-30°	63.5	6.3
30°-40°	11.5	1.2
40°-50°	3.0	0.3
50°-60°	2.3	0.2
60°-70°	0.4	0.0
70°-80°	0.5	0.1
80°-90°	0.7	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°	983.1	98.2
0°-40°	994.6	99.3
0°-60°	999.9	99.8
0°-90°	1001.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9029	9029	9029	9029	9029	
5°	7660	7710	7739	7726	7674	582
15°	995	1082	1141	1072	1010	316
25°	109	117	107	122	114	57
35°	9	11	8	10	8	12
45°	7	11	6	6	10	3
55°	0	1	0	1	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	1	1	1	2	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9029.4	9029.4	9029.4	9029.4	9029.4
1°	8944.0	8953.5	8973.6	8994.2	8961.9
2°	8776.6	8799.5	8827.9	8846.9	8811.8
3°	8542.3	8574.1	8604.2	8608.1	8575.2
4°	8180.1	8219.2	8251.0	8247.1	8205.8
5°	7659.5	7709.7	7739.3	7725.9	7674.0
6°	6971.5	7020.1	7058.0	7019.5	6949.8
7°	6114.4	6170.2	6210.4	6144.6	6059.2
8°	5121.2	5199.3	5239.5	5147.4	5059.8
9°	4180.5	4234.6	4275.3	4174.9	4085.6
10°	3342.9	3442.2	3419.4	3341.8	3264.8
11°	2629.2	2719.1	2723.0	2670.5	2595.2
12°	2058.4	2153.3	2177.3	2137.1	2070.1
13°	1626.5	1697.4	1737.0	1695.7	1632.1
14°	1294.5	1357.6	1408.4	1354.8	1291.2
15°	994.9	1081.9	1141.1	1071.9	1010.5
16°	791.2	863.2	933.5	854.8	805.7
17°	607.7	671.8	744.4	672.9	632.8
18°	481.0	531.8	611.6	537.9	502.7
19°	376.6	415.1	489.4	424.6	396.2
20°	289.6	332.0	386.1	342.0	323.6
22.5°	175.2	198.6	214.3	200.9	191.4
25°	108.8	117.2	107.1	122.2	114.4
26°	94.9	101.0	98.8	108.8	99.3
27°	75.9	83.7	77.6	85.4	82.6
28°	69.2	78.7	66.4	75.9	71.4
29°	48.5	52.5	47.4	50.8	50.8
30°	46.3	47.4	41.8	45.8	44.1
32.5°	36.3	34.0	27.9	29.6	28.5
35°	8.9	11.2	7.8	9.5	7.8
37.5°	13.4	12.3	14.5	13.9	13.4
40°	0.0	0.6	0.6	0.6	2.2
42.5°	10.0	6.1	5.6	3.9	6.7
45°	6.7	10.6	5.6	6.1	10.0
47.5°	0.0	0.6	0.0	1.1	1.1
50°	0.0	1.1	1.7	2.2	5.6
52.5°	1.1	6.7	3.3	6.1	8.9
55°	0.0	0.6	0.0	0.6	2.2
57.5°	2.2	1.1	2.2	2.2	10.0
60°	0.0	1.1	0.6	0.6	2.2
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.1
67.5°	0.0	0.6	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	0.6	0.0	0.0
80°	0.0	0.6	0.0	0.0	0.0
82.5°	0.0	0.6	1.1	1.7	1.1
85°	0.0	0.6	0.6	0.6	2.2
87.5°	0.0	1.1	1.7	0.0	1.1
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	1.7	2.2	0.0	4.5
72.5°	0.0	2.8	0.6	0.6	0.0



(END OF REPORT)