

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: P281778

Luminaire Tested: **LDA2B159024D010 EU2B15SP159024 2LBALSQC1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281778  
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: LDA2B159024D010 EU2B15SP159024 2LBALSQC1MW  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1032.9 lumens  
Efficiency: N/A  
Efficacy: 73.3 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

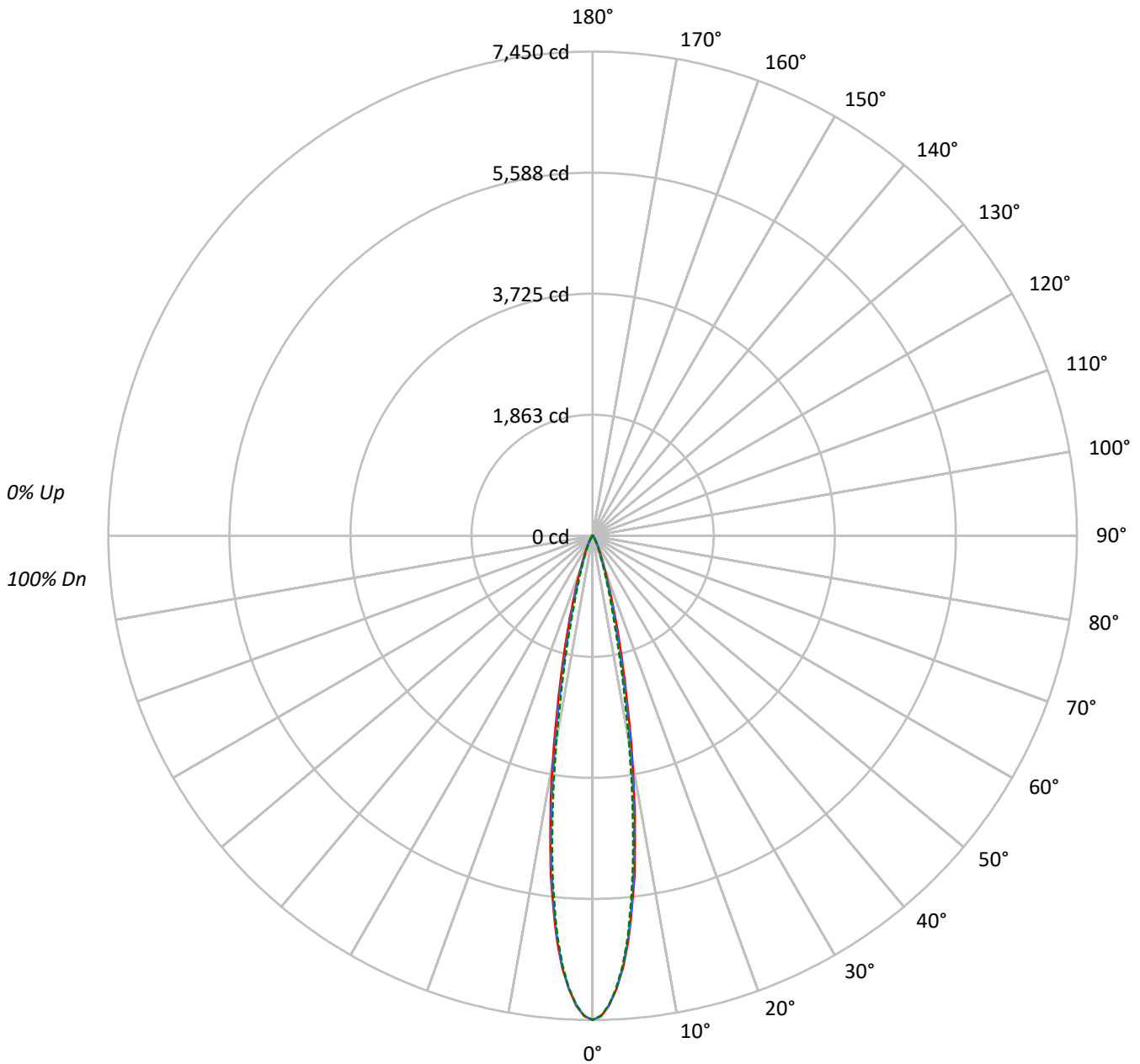
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3675397	3675397	3675397
5°	3105343	3088752	3065971
10°	1767532	1689731	1603764
15°	731927	648315	571138
20°	278421	243821	223240
25°	122972	118127	105062
30°	56912	62893	50075
35°	29933	35294	28006
40°	13138	15135	8759
45°	5093	4047	5861
50°	2379	2840	3991
55°	0	1806	0
60°	0	0	987
65°	0	0	0
70°	0	721	0
75°	0	0	0
80°	2841	0	0
85°	29436	26605	11887



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	498.1	48.2
10°-20°	380.8	36.9
20°-30°	105.9	10.3
30°-40°	34.4	3.3
40°-50°	7.6	0.7
50°-60°	2.3	0.2
60°-70°	1.3	0.1
70°-80°	0.8	0.1
80°-90°	1.7	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°	984.8	95.3
0°-40°	1019.2	98.7
0°-60°	1029.1	99.6
0°-90°	1032.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1032.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7450	7450	7450	7450	7450	
5°	6270	6224	6237	6190	6191	507
15°	1433	1383	1269	1172	1118	418
25°	226	229	217	204	193	113
35°	50	54	59	44	46	33
45°	7	10	6	6	8	7
55°	0	3	2	1	0	2
65°	0	2	0	0	0	2
75°	0	0	0	1	0	0
85°	5	3	5	3	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7449.7	7449.7	7449.7	7449.7	7449.7
1°	7392.7	7365.0	7391.6	7375.9	7384.8
2°	7232.1	7197.6	7225.3	7203.4	7221.7
3°	6982.1	6955.4	6980.0	6952.3	6967.0
4°	6668.8	6630.1	6654.7	6617.6	6626.5
5°	6270.3	6224.3	6236.8	6190.3	6190.8
6°	5768.2	5736.3	5743.6	5670.9	5665.7
7°	5277.1	5201.8	5194.0	5110.8	5094.6
8°	4680.9	4612.4	4589.9	4492.1	4457.6
9°	4109.3	4024.0	3978.0	3864.5	3824.2
10°	3528.2	3441.9	3372.9	3244.7	3201.3
11°	2990.5	2912.6	2826.8	2689.8	2647.5
12°	2491.6	2430.4	2336.3	2203.9	2159.5
13°	2084.2	2013.6	1912.6	1789.7	1751.5
14°	1731.1	1655.3	1554.4	1449.2	1375.0
15°	1433.0	1383.3	1269.3	1171.5	1118.2
16°	1171.0	1128.6	1030.3	945.6	907.9
17°	960.2	926.2	842.6	776.1	744.8
18°	792.4	750.0	684.1	640.7	616.1
19°	642.8	609.8	561.7	528.2	503.7
20°	530.3	503.1	464.4	434.6	425.2
22.5°	342.6	337.9	312.8	296.5	288.7
25°	225.9	228.6	217.0	204.5	193.0
26°	193.0	194.6	184.1	176.8	162.1
27°	165.3	165.8	165.8	152.2	138.1
28°	134.9	140.7	135.5	129.2	115.6
29°	115.6	122.9	120.3	114.0	100.9
30°	99.9	105.1	110.4	100.4	87.9
32.5°	70.1	74.8	80.5	75.3	64.9
35°	49.7	53.9	58.6	44.5	46.5
37.5°	34.0	41.3	39.7	36.1	30.9
40°	20.4	21.4	23.5	25.1	13.6
42.5°	14.6	17.3	15.7	17.8	6.3
45°	7.3	10.5	5.8	5.8	8.4
47.5°	5.2	8.9	3.1	3.1	1.0
50°	3.1	6.8	3.7	1.6	5.2
52.5°	5.2	6.3	4.2	4.7	1.0
55°	0.0	3.1	2.1	1.0	0.0
57.5°	2.1	3.7	2.1	1.0	2.1
60°	0.0	0.0	0.0	0.5	1.0
62.5°	0.0	1.0	0.0	1.6	2.1
65°	0.0	2.1	0.0	0.0	0.0
67.5°	3.1	3.7	2.1	4.2	6.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.0	0.0
77.5°	0.0	5.2	1.6	1.6	2.1
80°	1.0	0.0	0.0	0.5	0.0
82.5°	0.0	4.2	0.5	2.1	3.1
85°	5.2	2.6	4.7	2.6	2.1
87.5°	0.0	0.5	1.0	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°	1.0	0.0	0.0	0.0	0.0



(END OF REPORT)