

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: **LDA2B058035D010 EU2B05SP158035 2LBALSQC1MMS**

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: LDA2B058035D010 EU2B05SP158035 2LBALSQC1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 805.2 lumens  
Efficiency: N/A  
Efficacy: 115.0 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

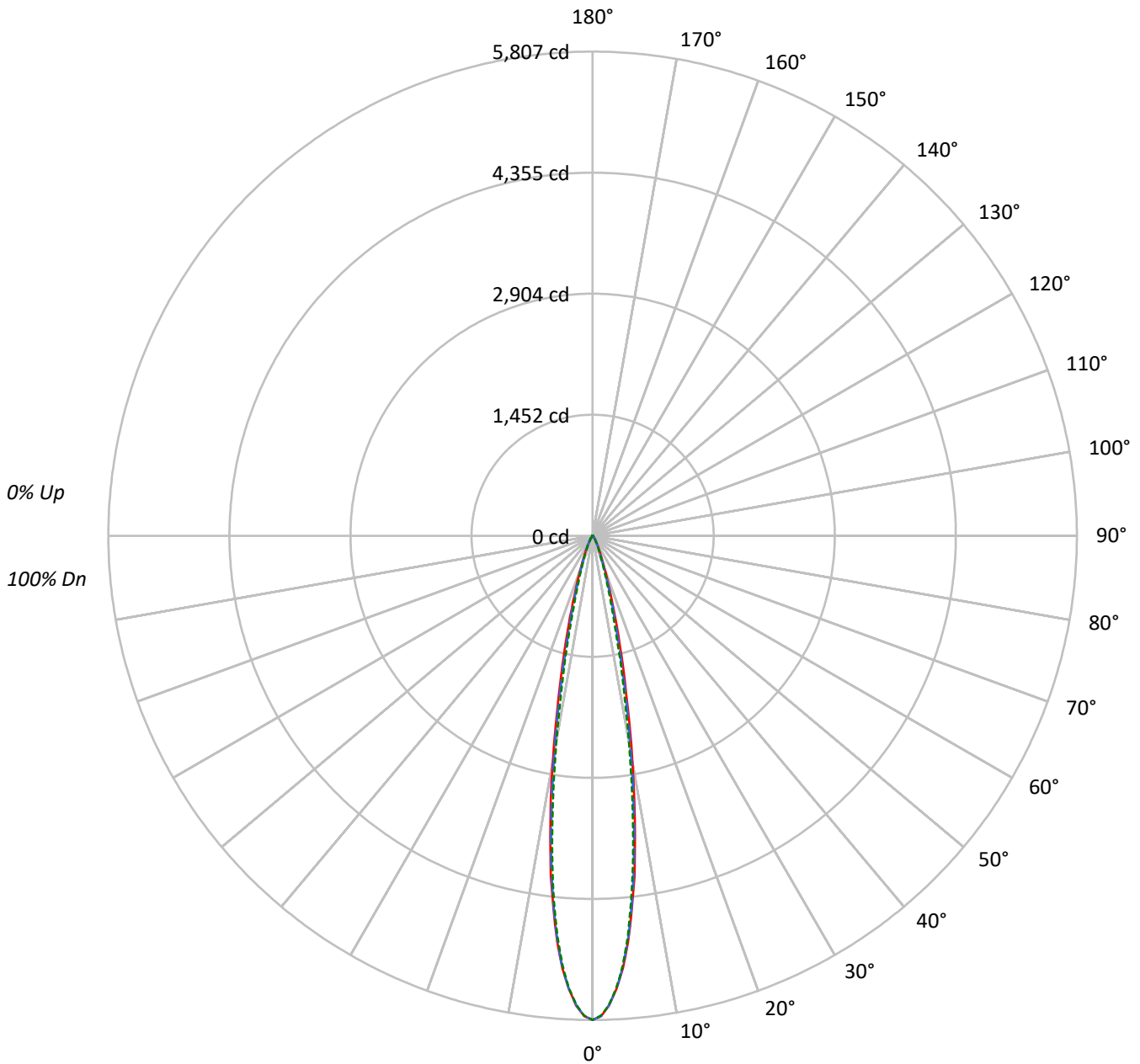
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B058035D010 EU2B05SP158035 2LBALSQC1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P281778

CATALOG NUMBER: LDA2B058035D010 EU2B05SP158035 2LBALSQC1MMS

**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°	2865051	2865051	2865051
5°	2420665	2407739	2390009
10°	1377825	1317157	1250177
15°	570576	505403	445183
20°	217045	190059	174046
25°	95863	92106	81872
30°	44378	48993	39023
35°	23308	27524	21863
40°	10240	11786	6827
45°	3977	3140	4535
50°	1842	2226	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



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B058035D010 EU2B05SP158035 2LBALSQC1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	388.3	48.2
10°-20°	296.8	36.9
20°-30°	82.5	10.3
30°-40°	26.8	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°	767.7	95.3
0°-40°	794.5	98.7
0°-60°	802.2	99.6
0°-90°	805.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5807	5807	5807	5807	5807	
5°	4888	4852	4862	4826	4826	395
15°	1117	1078	990	913	872	326
25°	176	178	169	159	150	88
35°	39	42	46	35	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	



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B058035D010 EU2B05SP158035 2LBALSQC1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5807.2	5807.2	5807.2	5807.2	5807.2
1°	5762.7	5741.1	5761.9	5749.7	5756.6
2°	5637.6	5610.7	5632.3	5615.2	5629.4
3°	5442.7	5421.9	5441.1	5419.5	5430.9
4°	5198.5	5168.3	5187.5	5158.5	5165.5
5°	4887.8	4852.0	4861.7	4825.5	4825.9
6°	4496.4	4471.6	4477.3	4420.6	4416.5
7°	4113.6	4054.9	4048.8	3984.0	3971.3
8°	3648.9	3595.4	3577.9	3501.7	3474.8
9°	3203.2	3136.8	3100.9	3012.4	2981.1
10°	2750.3	2683.0	2629.2	2529.3	2495.5
11°	2331.2	2270.4	2203.6	2096.8	2063.7
12°	1942.2	1894.5	1821.2	1718.0	1683.4
13°	1624.7	1569.6	1490.9	1395.1	1365.4
14°	1349.5	1290.3	1211.7	1129.7	1071.8
15°	1117.1	1078.3	989.5	913.2	871.6
16°	912.8	879.8	803.2	737.1	707.8
17°	748.5	722.0	656.8	605.0	580.6
18°	617.7	584.6	533.3	499.4	480.3
19°	501.1	475.4	437.9	411.8	392.6
20°	413.4	392.2	362.0	338.8	331.5
22.5°	267.0	263.4	243.8	231.2	225.0
25°	176.1	178.2	169.2	159.4	150.4
26°	150.4	151.7	143.5	137.8	126.4
27°	128.8	129.2	129.2	118.6	107.6
28°	105.2	109.7	105.6	100.7	90.1
29°	90.1	95.8	93.8	88.9	78.7
30°	77.9	81.9	86.0	78.3	68.5
32.5°	54.6	58.3	62.8	58.7	50.6
35°	38.7	42.0	45.7	34.7	36.3
37.5°	26.5	32.2	31.0	28.1	24.1
40°	15.9	16.7	18.3	19.6	10.6
42.5°	11.4	13.5	12.2	13.9	4.9
45°	5.7	8.2	4.5	4.5	6.5
47.5°	4.1	6.9	2.4	2.4	0.8
50°	2.4	5.3	2.9	1.2	4.1
52.5°	4.1	4.9	3.3	3.7	0.8
55°	0.0	2.4	1.6	0.8	0.0
57.5°	1.6	2.9	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	2.9	1.6	3.3	4.9



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B058035D010 EU2B05SP158035 2LBALSQC1MMS

**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	3.3	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



Report Generated By E9808895 / USPTCWHP6082093







— 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)