

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: P281660

Luminaire Tested: **LDA2B108035D010 EU2B10SP158035 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281660  
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: LDA2B108035D010 EU2B10SP158035 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1093.9 lumens  
Efficiency: N/A  
Efficacy: 109.4 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

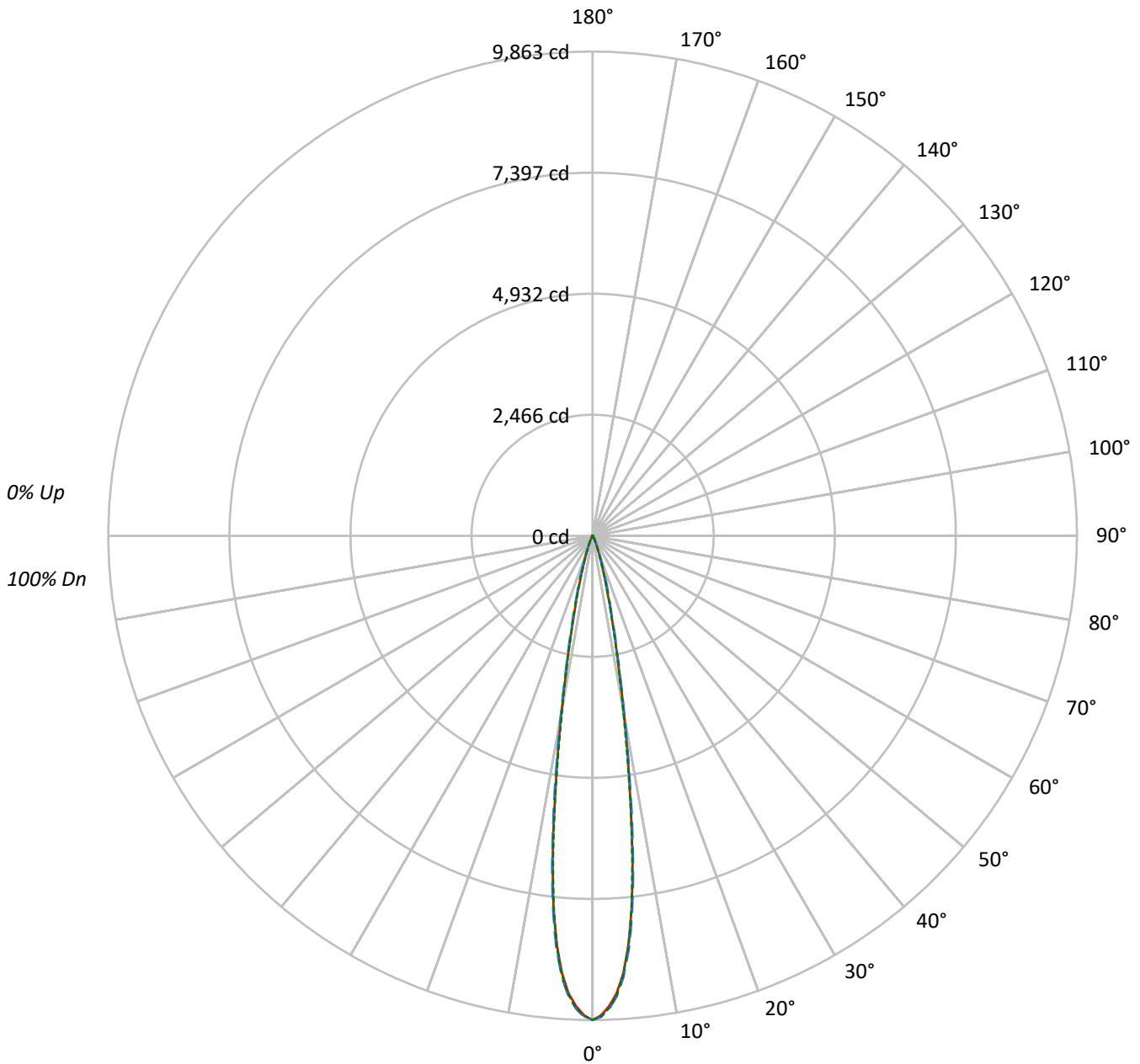
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281660

CATALOG NUMBER: LDA2B108035D010 EU2B10SP158035 2LBAPINSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P281660

CATALOG NUMBER: LDA2B108035D010 EU2B10SP158035 2LBAPINSQ1MMS

**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°	4866077	4866077	4866077
5°	4143627	4186763	4151452
10°	1829352	1871183	1786619
15°	555100	636669	563783
20°	166065	221455	185596
25°	64725	63691	68046
30°	28826	26035	27459
35°	5902	5119	5119
40°	0	386	1546
45°	5093	4256	7675
50°	0	1382	4682
55°	0	0	2064
60°	0	592	2368
65°	0	0	1401
70°	0	3462	7068
75°	0	0	0
80°	0	0	0
85°	0	3396	13586



TEST NUMBER: P281660

CATALOG NUMBER: LDA2B108035D010 EU2B10SP158035 2LBAPINSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	639.4	58.5
10°-20°	365.2	33.4
20°-30°	69.3	6.3
30°-40°	12.6	1.2
40°-50°	3.2	0.3
50°-60°	2.5	0.2
60°-70°	0.4	0.0
70°-80°	0.6	0.1
80°-90°	0.8	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°	1073.9	98.2
0°-40°	1086.5	99.3
0°-60°	1092.2	99.8
0°-90°	1093.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1093.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9863	9863	9863	9863	9863	
5°	8367	8422	8454	8439	8383	635
15°	1087	1182	1246	1171	1104	346
25°	119	128	117	134	125	62
35°	10	12	8	10	8	13
45°	7	12	6	7	11	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	



TEST NUMBER: P281660

CATALOG NUMBER: LDA2B108035D010 EU2B10SP158035 2LBAPINSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9863.1	9863.1	9863.1	9863.1	9863.1
1°	9769.9	9780.2	9802.2	9824.7	9789.4
2°	9587.0	9612.0	9643.1	9663.8	9625.4
3°	9331.0	9365.8	9398.7	9403.0	9367.0
4°	8935.5	8978.1	9012.9	9008.6	8963.5
5°	8366.8	8421.6	8453.9	8439.3	8382.6
6°	7615.3	7668.3	7709.7	7667.7	7591.5
7°	6679.0	6740.0	6783.9	6712.0	6618.7
8°	5594.1	5679.4	5723.3	5622.8	5527.1
9°	4566.5	4625.6	4670.1	4560.4	4462.9
10°	3651.6	3760.1	3735.1	3650.4	3566.3
11°	2872.0	2970.2	2974.4	2917.1	2834.8
12°	2248.5	2352.1	2378.3	2334.4	2261.3
13°	1776.7	1854.1	1897.4	1852.3	1782.8
14°	1414.1	1482.9	1538.4	1479.9	1410.4
15°	1086.8	1181.8	1246.5	1170.9	1103.8
16°	864.3	942.9	1019.7	933.8	880.1
17°	663.8	733.9	813.1	735.1	691.2
18°	525.4	580.9	668.0	587.6	549.2
19°	411.4	453.5	534.5	463.8	432.8
20°	316.3	362.7	421.8	373.6	353.5
22.5°	191.4	217.0	234.1	219.4	209.1
25°	118.9	128.0	117.0	133.5	125.0
26°	103.6	110.3	107.9	118.9	108.5
27°	82.9	91.4	84.7	93.3	90.2
28°	75.6	85.9	72.5	82.9	78.0
29°	53.0	57.3	51.8	55.5	55.5
30°	50.6	51.8	45.7	50.0	48.2
32.5°	39.6	37.2	30.5	32.3	31.1
35°	9.8	12.2	8.5	10.4	8.5
37.5°	14.6	13.4	15.8	15.2	14.6
40°	0.0	0.6	0.6	0.6	2.4
42.5°	11.0	6.7	6.1	4.3	7.3
45°	7.3	11.6	6.1	6.7	11.0
47.5°	0.0	0.6	0.0	1.2	1.2
50°	0.0	1.2	1.8	2.4	6.1
52.5°	1.2	7.3	3.7	6.7	9.8
55°	0.0	0.6	0.0	0.6	2.4
57.5°	2.4	1.2	2.4	2.4	11.0
60°	0.0	1.2	0.6	0.6	2.4
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.2
67.5°	0.0	0.6	0.0	0.0	0.0



TEST NUMBER: P281660

CATALOG NUMBER: LDA2B108035D010 EU2B10SP158035 2LBAPINSQ1MMS

**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	1.2	1.8	1.2
85°	0.0	0.6	0.6	0.6	2.4
87.5°	0.0	1.2	1.8	0.0	1.2
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	1.8	2.4	0.0	4.9
72.5°	0.0	3.0	0.6	0.6	0.0



(END OF REPORT)