

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: P281695

Luminaire Tested: **LDA2B158027D010 EU2B15SP158027 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281695  
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: LDA2B158027D010 EU2B15SP158027 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: 1412.4 lumens  
Efficiency: N/A  
Efficacy: 100.2 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

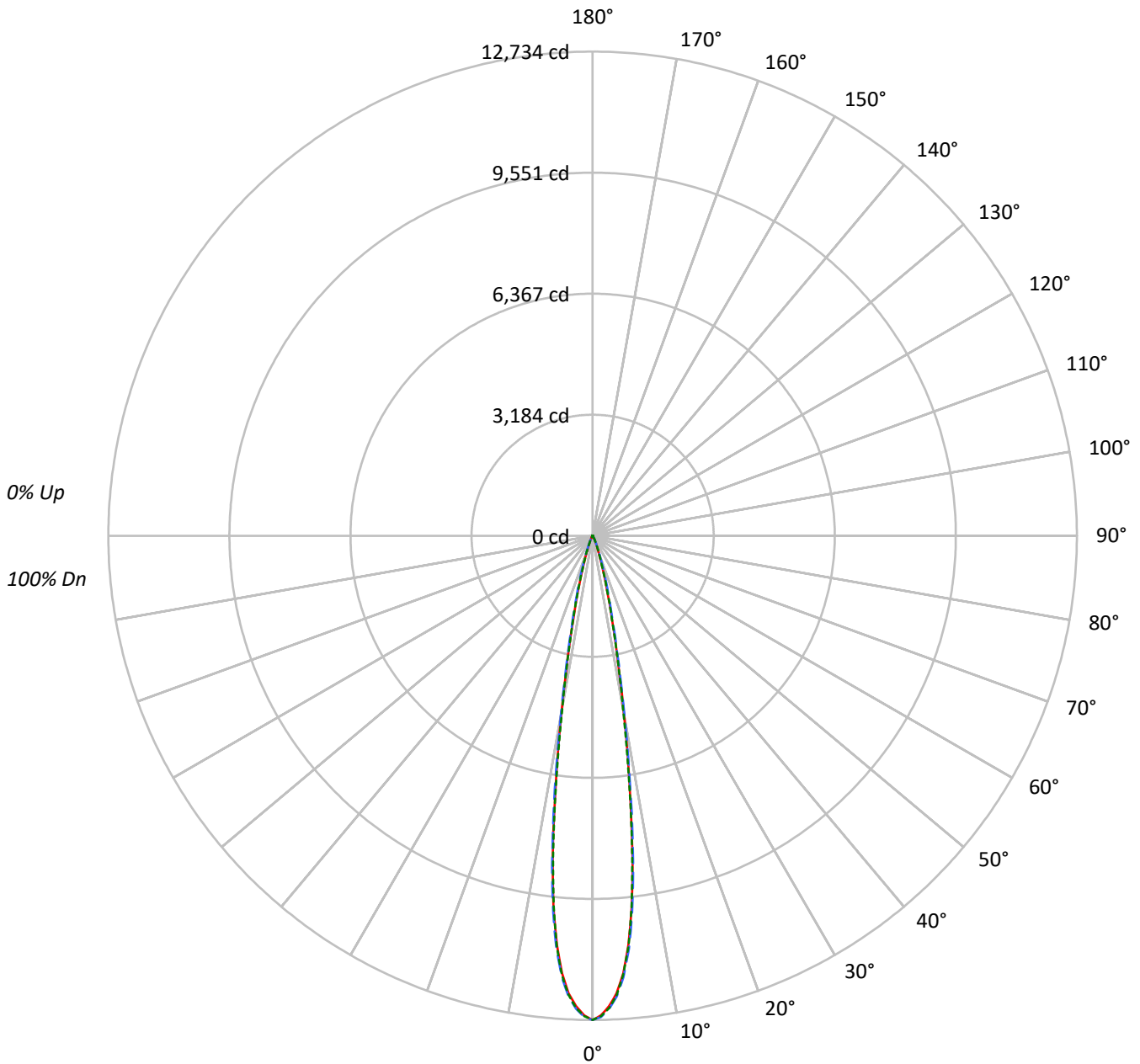
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281695

CATALOG NUMBER: LDA2B158027D010 EU2B15SP158027 2LBAPINSQ1MB

### Luminous Intensity Polar Plot





TEST NUMBER: P281695

CATALOG NUMBER: LDA2B158027D010 EU2B15SP158027 2LBAPINSQ1MB

**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°	6282617	6282617	6282617
5°	5349800	5405564	5359952
10°	2361886	2415891	2306679
15°	716655	821975	727943
20°	214420	285928	239621
25°	83560	82253	87806
30°	37200	33611	35434
35°	7589	6625	6625
40°	0	515	1997
45°	6559	5512	9908
50°	0	1842	6064
55°	0	0	2666
60°	0	789	3059
65°	0	0	1868
70°	0	4472	9088
75°	0	0	0
80°	0	0	0
85°	0	4529	17548



TEST NUMBER: P281695

CATALOG NUMBER: LDA2B158027D010 EU2B15SP158027 2LBAPINSQ1MB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	825.5	58.4
10°-20°	471.5	33.4
20°-30°	89.5	6.3
30°-40°	16.3	1.2
40°-50°	4.2	0.3
50°-60°	3.2	0.2
60°-70°	0.5	0.0
70°-80°	0.7	0.1
80°-90°	1.0	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°	1386.5	98.2
0°-40°	1402.7	99.3
0°-60°	1410.1	99.8
0°-90°	1412.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1412.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12734	12734	12734	12734	12734	
5°	10802	10873	10915	10896	10823	820
15°	1403	1526	1609	1512	1425	446
25°	154	165	151	172	161	80
35°	13	16	11	13	11	17
45°	9	15	8	9	14	4
55°	0	1	0	1	3	1
65°	0	0	0	0	2	0
75°	0	0	0	0	0	0
85°	0	1	1	1	3	0
90°	0	0	0	0	0	



TEST NUMBER: P281695

CATALOG NUMBER: LDA2B158027D010 EU2B15SP158027 2LBAPINSQ1MB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12734.3	12734.3	12734.3	12734.3	12734.3
1°	12613.9	12627.3	12655.6	12684.7	12639.1
2°	12377.8	12410.1	12450.2	12477.0	12427.4
3°	12047.3	12092.1	12134.6	12140.1	12093.7
4°	11536.6	11591.6	11636.5	11631.0	11572.8
5°	10802.3	10873.2	10914.9	10896.0	10822.8
6°	9832.0	9900.5	9954.0	9899.7	9801.4
7°	8623.3	8702.0	8758.7	8665.8	8545.4
8°	7222.5	7332.7	7389.4	7259.5	7136.0
9°	5895.8	5972.1	6029.5	5887.9	5762.0
10°	4714.6	4854.6	4822.4	4713.0	4604.4
11°	3708.1	3834.8	3840.3	3766.3	3660.1
12°	2903.0	3036.8	3070.6	3014.0	2919.6
13°	2293.9	2393.9	2449.7	2391.5	2301.8
14°	1825.7	1914.6	1986.2	1910.7	1821.0
15°	1403.1	1525.9	1609.3	1511.7	1425.2
16°	1115.9	1217.4	1316.6	1205.6	1136.3
17°	857.0	947.5	1049.8	949.1	892.4
18°	678.3	750.0	862.5	758.6	709.0
19°	531.2	585.5	690.1	598.9	558.7
20°	408.4	468.2	544.6	482.4	456.4
22.5°	247.1	280.2	302.2	283.3	269.9
25°	153.5	165.3	151.1	172.3	161.3
26°	133.8	142.4	139.3	153.5	140.1
27°	107.0	118.0	109.4	120.4	116.5
28°	97.6	111.0	93.6	107.0	100.7
29°	68.5	74.0	66.9	71.6	71.6
30°	65.3	66.9	59.0	64.5	62.2
32.5°	51.2	48.0	39.3	41.7	40.1
35°	12.6	15.7	11.0	13.4	11.0
37.5°	18.9	17.3	20.5	19.7	18.9
40°	0.0	0.8	0.8	0.8	3.1
42.5°	14.2	8.7	7.9	5.5	9.4
45°	9.4	15.0	7.9	8.7	14.2
47.5°	0.0	0.8	0.0	1.6	1.6
50°	0.0	1.6	2.4	3.1	7.9
52.5°	1.6	9.4	4.7	8.7	12.6
55°	0.0	0.8	0.0	0.8	3.1
57.5°	3.1	1.6	3.1	3.1	14.2
60°	0.0	1.6	0.8	0.8	3.1
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.6
67.5°	0.0	0.8	0.0	0.0	0.0



TEST NUMBER: P281695

CATALOG NUMBER: LDA2B158027D010 EU2B15SP158027 2LBAPINSQ1MB

**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	0.8	0.0	0.0
80°	0.0	0.8	0.0	0.0	0.0
82.5°	0.0	0.8	1.6	2.4	1.6
85°	0.0	0.8	0.8	0.8	3.1
87.5°	0.0	1.6	2.4	0.0	1.6
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	2.4	3.1	0.0	6.3
72.5°	0.0	3.9	0.8	0.8	0.0



(END OF REPORT)