

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: P281221

Luminaire Tested: **LDA2B158027D010 EU2B15SP158027 2LBALD1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281221  
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: LDA2B158027D010 EU2B15SP158027 2LBALD1B  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, B  
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): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

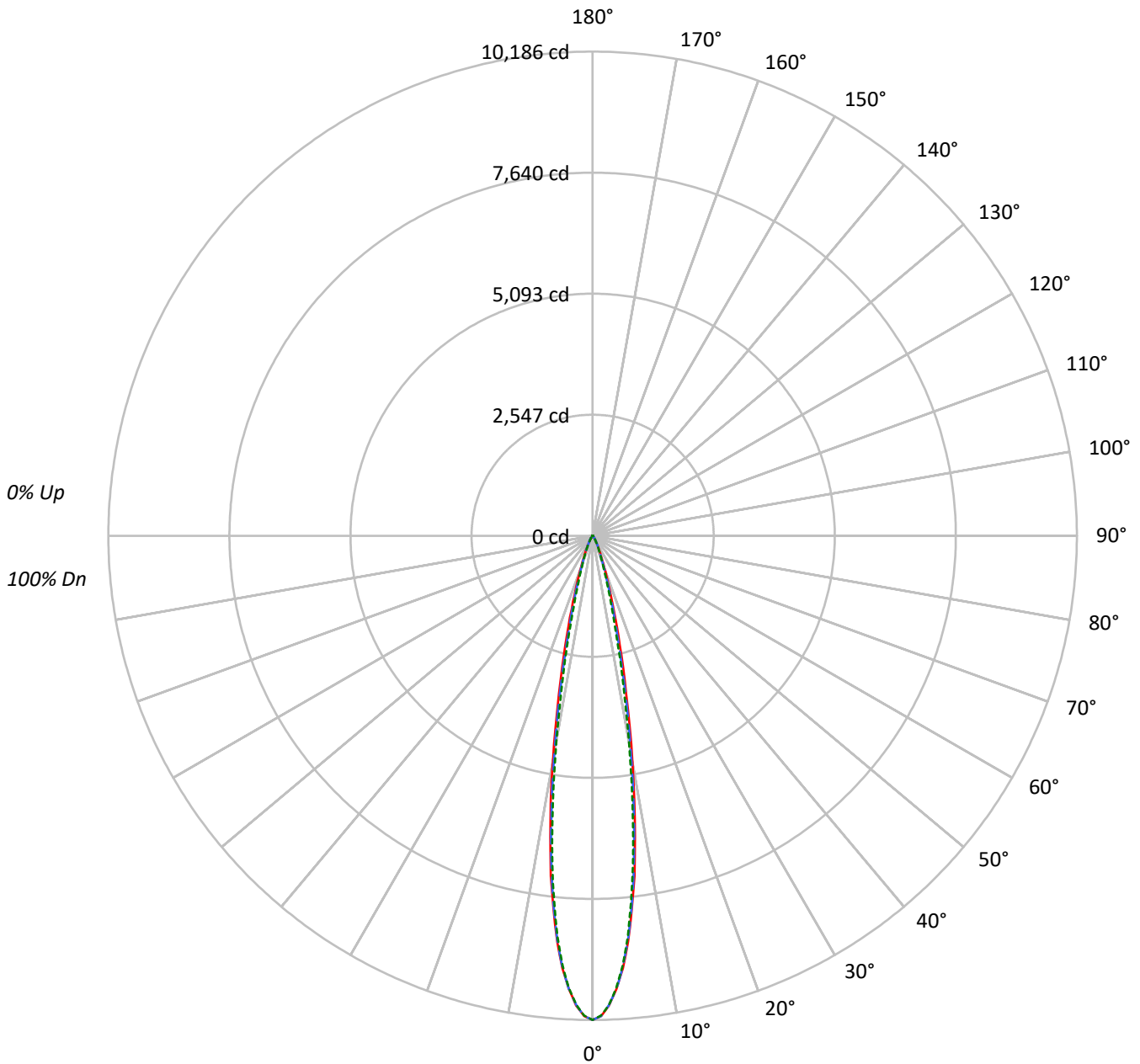
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	88	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°	5025383	5025383	5025383
5°	4245945	4223312	4192112
10°	2416742	2310336	2192858
15°	1000794	886485	780910
20°	380695	333391	305249
25°	168154	161567	143658
30°	77819	85965	68419
35°	40895	48243	38305
40°	17969	20738	11979
45°	6977	5512	7954
50°	3300	3838	5526
55°	0	2494	0
60°	0	0	1381
65°	0	0	0
70°	0	1010	0
75°	0	0	0
80°	3978	0	0
85°	40757	36228	16416



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	681.1	48.2
10°-20°	520.7	36.9
20°-30°	144.8	10.3
30°-40°	47.1	3.3
40°-50°	10.4	0.7
50°-60°	3.2	0.2
60°-70°	1.8	0.1
70°-80°	1.1	0.1
80°-90°	2.3	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°	1346.5	95.3
0°-40°	1393.6	98.7
0°-60°	1407.1	99.6
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°	10186	10186	10186	10186	10186	
5°	8573	8510	8528	8464	8465	693
15°	1959	1892	1736	1602	1529	572
25°	309	312	297	280	264	155
35°	68	74	80	61	64	45
45°	10	14	8	8	11	10
55°	0	4	3	1	0	3
65°	0	3	0	0	0	2
75°	0	0	0	1	0	1
85°	7	4	6	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10186.0	10186.0	10186.0	10186.0	10186.0
1°	10108.1	10070.1	10106.6	10085.2	10097.3
2°	9888.5	9841.3	9879.2	9849.2	9874.2
3°	9546.7	9510.2	9543.8	9505.9	9526.0
4°	9118.3	9065.4	9099.0	9048.3	9060.4
5°	8573.4	8510.5	8527.7	8464.0	8464.7
6°	7886.9	7843.3	7853.3	7753.9	7746.8
7°	7215.4	7112.5	7101.7	6988.0	6965.9
8°	6400.2	6306.5	6275.8	6142.1	6094.9
9°	5618.6	5502.0	5439.1	5283.9	5228.9
10°	4824.1	4706.1	4611.7	4436.5	4377.2
11°	4089.0	3982.4	3865.2	3677.8	3619.9
12°	3406.8	3323.1	3194.4	3013.5	2952.7
13°	2849.7	2753.2	2615.1	2447.1	2394.9
14°	2367.0	2263.3	2125.3	1981.6	1880.0
15°	1959.4	1891.5	1735.6	1601.8	1528.9
16°	1601.1	1543.2	1408.8	1292.9	1241.4
17°	1312.9	1266.5	1152.0	1061.2	1018.3
18°	1083.4	1025.5	935.4	876.0	842.4
19°	878.9	833.8	768.0	722.3	688.6
20°	725.1	687.9	635.0	594.3	581.4
22.5°	468.4	462.0	427.6	405.5	394.7
25°	308.9	312.5	296.8	279.6	263.9
26°	263.9	266.0	251.7	241.7	221.7
27°	226.0	226.7	226.7	208.1	188.8
28°	184.5	192.4	185.2	176.6	158.0
29°	158.0	168.1	164.5	155.9	138.0
30°	136.6	143.7	150.9	137.3	120.1
32.5°	95.8	102.3	110.1	103.0	88.7
35°	67.9	73.7	80.1	60.8	63.6
37.5°	46.5	56.5	54.3	49.3	42.2
40°	27.9	29.3	32.2	34.3	18.6
42.5°	20.0	23.6	21.5	24.3	8.6
45°	10.0	14.3	7.9	7.9	11.4
47.5°	7.2	12.2	4.3	4.3	1.4
50°	4.3	9.3	5.0	2.1	7.2
52.5°	7.2	8.6	5.7	6.4	1.4
55°	0.0	4.3	2.9	1.4	0.0
57.5°	2.9	5.0	2.9	1.4	2.9
60°	0.0	0.0	0.0	0.7	1.4
62.5°	0.0	1.4	0.0	2.1	2.9
65°	0.0	2.9	0.0	0.0	0.0
67.5°	4.3	5.0	2.9	5.7	8.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.4	0.0
77.5°	0.0	7.2	2.1	2.1	2.9
80°	1.4	0.0	0.0	0.7	0.0
82.5°	0.0	5.7	0.7	2.9	4.3
85°	7.2	3.6	6.4	3.6	2.9
87.5°	0.0	0.7	1.4	0.7	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	0.7	0.7	0.0
72.5°	1.4	0.0	0.0	0.0	0.0



(END OF REPORT)