

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: P282548

Luminaire Tested: **LDA2B158050D010 EU2B15SP158050 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282548  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B158050D010 EU2B15SP158050 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1505.2 lumens  
Efficiency: N/A  
Efficacy: 106.8 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

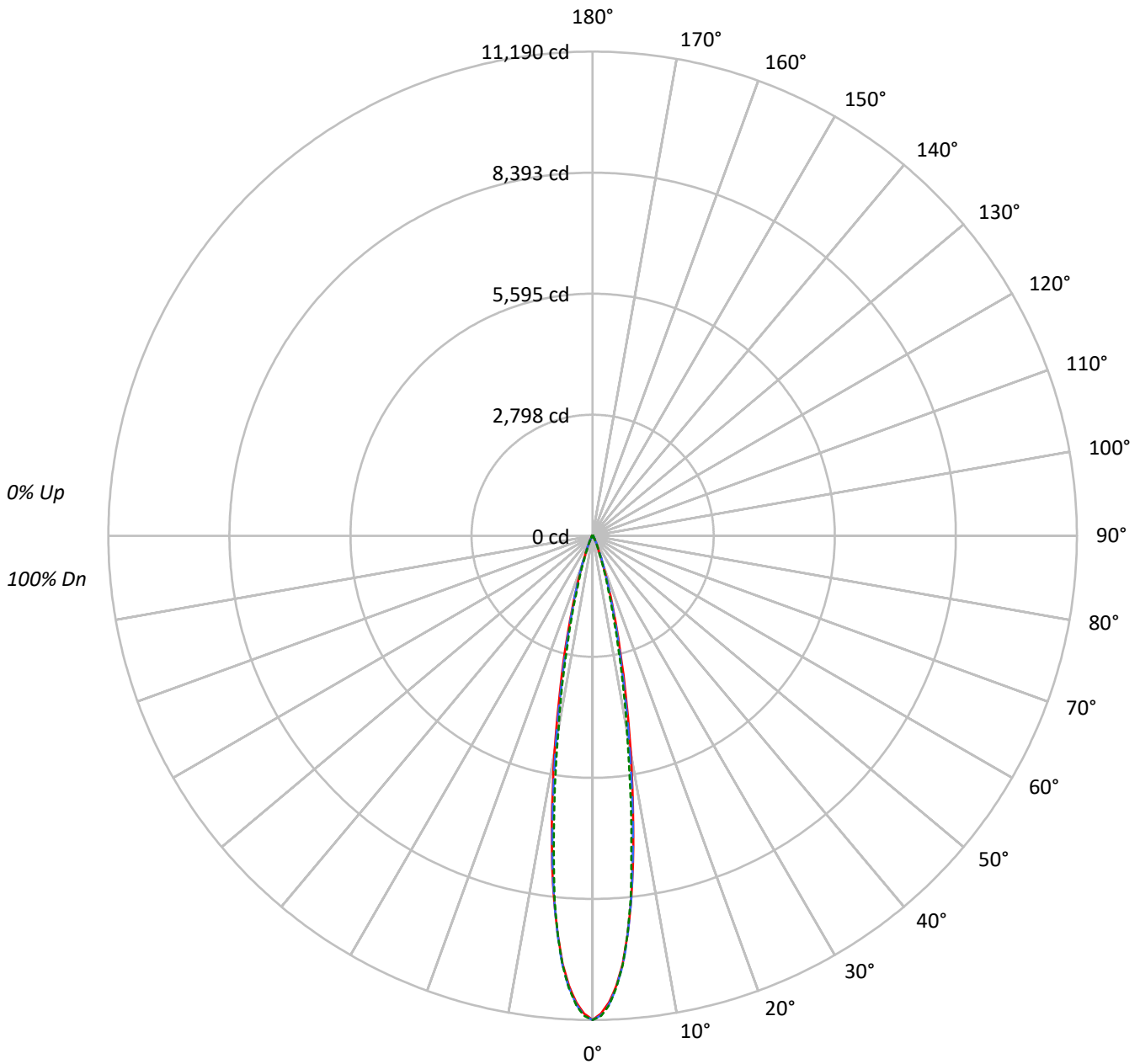
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	98	99	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	98	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5520570	5520570	5520570
5°	4579890	4594747	4577314
10°	2534822	2443244	2276019
15°	1026128	981436	871417
20°	343786	364525	295116
25°	130811	131246	124278
30°	58678	57709	55715
35°	28428	25356	20176
40°	18806	23765	16552
45°	4814	7814	7187
50°	1305	1996	2610
55°	11784	10322	16257
60°	16972	13518	22004
65°	8055	21013	20079
70°	7357	6203	7357
75°	3241	8197	22874
80°	38924	53698	48868
85°	0	24341	28870



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	732.9	48.7
10°-20°	555.1	36.9
20°-30°	126.2	8.4
30°-40°	37.3	2.5
40°-50°	12.4	0.8
50°-60°	10.9	0.7
60°-70°	13.2	0.9
70°-80°	8.4	0.6
80°-90°	8.8	0.6
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°	1414.2	94.0
0°-40°	1451.5	96.4
0°-60°	1474.8	98.0
0°-90°	1505.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11190	11190	11190	11190	11190	
5°	9248	9321	9278	9157	9242	741
15°	2009	2036	1922	1741	1706	584
25°	240	258	241	239	228	126
35°	47	52	42	49	34	37
45°	7	20	11	20	10	10
55°	14	20	12	18	19	6
65°	7	15	18	17	17	7
75°	2	6	4	8	12	4
85°	0	0	4	4	5	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11189.7	11189.7	11189.7	11189.7	11189.7
1°	11045.6	11090.2	11085.9	11067.9	11099.6
2°	10791.5	10845.6	10840.5	10801.0	10857.6
3°	10419.1	10467.1	10459.4	10402.8	10464.6
4°	9921.4	9976.3	9954.8	9869.9	9948.8
5°	9247.7	9320.6	9277.7	9156.7	9242.5
6°	8501.1	8562.9	8495.1	8334.6	8418.7
7°	7665.2	7703.8	7614.6	7408.6	7352.0
8°	6753.0	6803.6	6679.2	6438.9	6377.1
9°	5881.1	5898.2	5747.2	5491.5	5413.4
10°	5059.8	5046.9	4877.0	4617.8	4543.2
11°	4281.4	4264.3	4084.9	3845.5	3869.5
12°	3573.4	3606.9	3398.4	3181.3	3185.5
13°	2991.6	2995.0	2815.7	2608.8	2596.8
14°	2449.2	2481.0	2327.4	2142.0	2107.7
15°	2009.0	2036.4	1921.5	1741.2	1706.1
16°	1608.2	1642.5	1560.2	1397.1	1350.8
17°	1295.0	1338.8	1284.7	1148.2	1095.0
18°	1035.8	1069.3	1056.4	915.7	871.9
19°	817.8	864.2	867.6	750.0	697.7
20°	654.8	696.8	694.3	603.3	562.1
22.5°	375.9	398.2	399.1	356.1	332.1
25°	240.3	258.3	241.1	238.6	228.3
26°	208.5	223.1	204.2	204.2	194.8
27°	169.1	181.9	163.9	171.6	158.8
28°	142.5	156.2	140.7	139.0	137.3
29°	118.4	131.3	111.6	120.1	115.0
30°	103.0	112.4	101.3	114.1	97.8
32.5°	79.8	87.5	67.8	85.8	64.4
35°	47.2	52.3	42.1	48.9	33.5
37.5°	48.9	50.6	45.5	50.6	47.2
40°	29.2	30.0	36.9	36.9	25.7
42.5°	27.5	26.6	16.3	25.7	20.6
45°	6.9	19.7	11.2	19.7	10.3
47.5°	5.1	6.9	6.9	13.7	13.7
50°	1.7	6.9	2.6	5.1	3.4
52.5°	0.0	16.3	3.4	12.0	10.3
55°	13.7	19.7	12.0	18.0	18.9
57.5°	1.7	13.7	6.9	14.6	10.3
60°	17.2	23.2	13.7	24.9	22.3
62.5°	1.7	15.4	18.0	13.7	12.0
65°	6.9	14.6	18.0	17.2	17.2
67.5°	8.6	14.6	11.2	11.2	15.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.7	6.0	4.3	7.7	12.0
77.5°	1.7	6.9	6.0	13.7	10.3
80°	13.7	15.4	18.9	24.9	17.2
82.5°	12.0	12.0	18.9	13.7	10.3
85°	0.0	0.0	4.3	4.3	5.1
87.5°	0.0	3.4	8.6	6.9	12.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







70°	5.1	1.7	4.3	4.3	5.1
72.5°	1.7	7.7	6.9	4.3	8.6



(END OF REPORT)