

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: P281705

Luminaire Tested: **LDA2B158040D010 EU2B15SP158040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281705  
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: LDA2B158040D010 EU2B15SP158040 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1515.1 lumens  
Efficiency: N/A  
Efficacy: 107.5 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

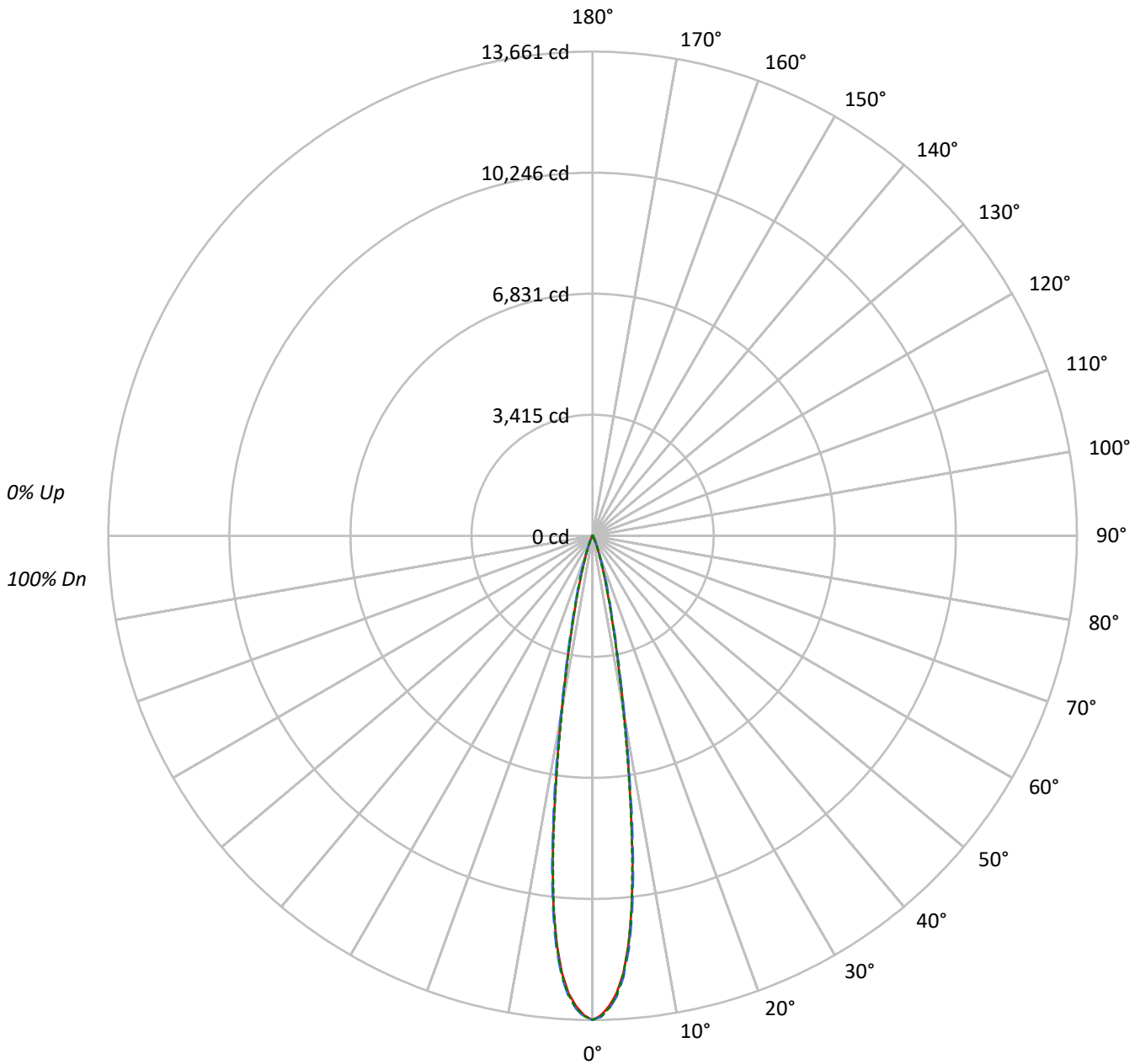
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98						98													
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96						96													
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94						94													
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93						93													
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91						91													
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89						89													
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88						88													
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87						87													
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85						85													
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84						84													

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

	0°	45°	90°
0°	6739618	6739618	6739618
5°	5738964	5798790	5749860
10°	2533669	2591632	2474454
15°	768805	881786	780859
20°	230013	306719	257052
25°	89602	88241	94229
30°	39935	36061	37998
35°	8131	7107	7107
40°	0	515	2190
45°	7047	5861	10605
50°	0	1919	6447
55°	0	0	2925
60°	0	789	3355
65°	0	0	1985
70°	0	4904	9809
75°	0	0	0
80°	0	0	0
85°	0	4529	19246



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	885.5	58.4
10°-20°	505.8	33.4
20°-30°	96.0	6.3
30°-40°	17.4	1.2
40°-50°	4.5	0.3
50°-60°	3.4	0.2
60°-70°	0.6	0.0
70°-80°	0.8	0.1
80°-90°	1.1	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°	1487.3	98.2
0°-40°	1504.8	99.3
0°-60°	1512.7	99.8
0°-90°	1515.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1515.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13661	13661	13661	13661	13661	
5°	11588	11664	11709	11689	11610	880
15°	1505	1637	1726	1622	1529	479
25°	165	177	162	185	173	86
35°	14	17	12	14	12	19
45°	10	16	8	9	15	5
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13660.6	13660.6	13660.6	13660.6	13660.6
1°	13531.5	13545.8	13576.2	13607.4	13558.5
2°	13278.2	13312.8	13355.9	13384.6	13331.4
3°	12923.6	12971.8	13017.3	13023.3	12973.4
4°	12375.8	12434.9	12483.0	12477.1	12414.6
5°	11588.1	11664.1	11708.9	11688.6	11610.1
6°	10547.3	10620.7	10678.1	10619.9	10514.3
7°	9250.6	9335.0	9395.8	9296.2	9167.0
8°	7747.9	7866.1	7926.9	7787.6	7655.1
9°	6324.6	6406.5	6468.2	6316.2	6181.1
10°	5057.5	5207.8	5173.2	5055.8	4939.3
11°	3977.8	4113.7	4119.6	4040.3	3926.3
12°	3114.2	3257.7	3294.0	3233.2	3131.9
13°	2460.8	2568.0	2627.9	2565.5	2469.2
14°	1958.5	2053.9	2130.7	2049.7	1953.4
15°	1505.2	1636.9	1726.4	1621.7	1528.8
16°	1197.1	1306.0	1412.3	1293.3	1219.0
17°	919.3	1016.4	1126.1	1018.1	957.3
18°	727.7	804.5	925.2	813.8	760.6
19°	569.8	628.1	740.4	642.4	599.4
20°	438.1	502.3	584.2	517.5	489.6
22.5°	265.1	300.5	324.2	303.9	289.6
25°	164.6	177.3	162.1	184.9	173.1
26°	143.5	152.8	149.4	164.6	150.3
27°	114.8	126.6	117.3	129.2	124.9
28°	104.7	119.0	100.5	114.8	108.1
29°	73.4	79.4	71.8	76.8	76.8
30°	70.1	71.8	63.3	69.2	66.7
32.5°	54.9	51.5	42.2	44.7	43.1
35°	13.5	16.9	11.8	14.4	11.8
37.5°	20.3	18.6	21.9	21.1	20.3
40°	0.0	0.8	0.8	0.8	3.4
42.5°	15.2	9.3	8.4	5.9	10.1
45°	10.1	16.0	8.4	9.3	15.2
47.5°	0.0	0.8	0.0	1.7	1.7
50°	0.0	1.7	2.5	3.4	8.4
52.5°	1.7	10.1	5.1	9.3	13.5
55°	0.0	0.8	0.0	0.8	3.4
57.5°	3.4	1.7	3.4	3.4	15.2
60°	0.0	1.7	0.8	0.8	3.4
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.7
67.5°	0.0	0.8	0.0	0.0	0.0



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**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	1.7	2.5	1.7
85°	0.0	0.8	0.8	0.8	3.4
87.5°	0.0	1.7	2.5	0.0	1.7
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	2.5	3.4	0.0	6.8
72.5°	0.0	4.2	0.8	0.8	0.0



(END OF REPORT)