

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: P281610

Luminaire Tested: **LDA2B058027D010 EU2B05SP158027 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281610  
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: LDA2B058027D010 EU2B05SP158027 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 781.3 lumens  
Efficiency: N/A  
Efficacy: 111.6 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

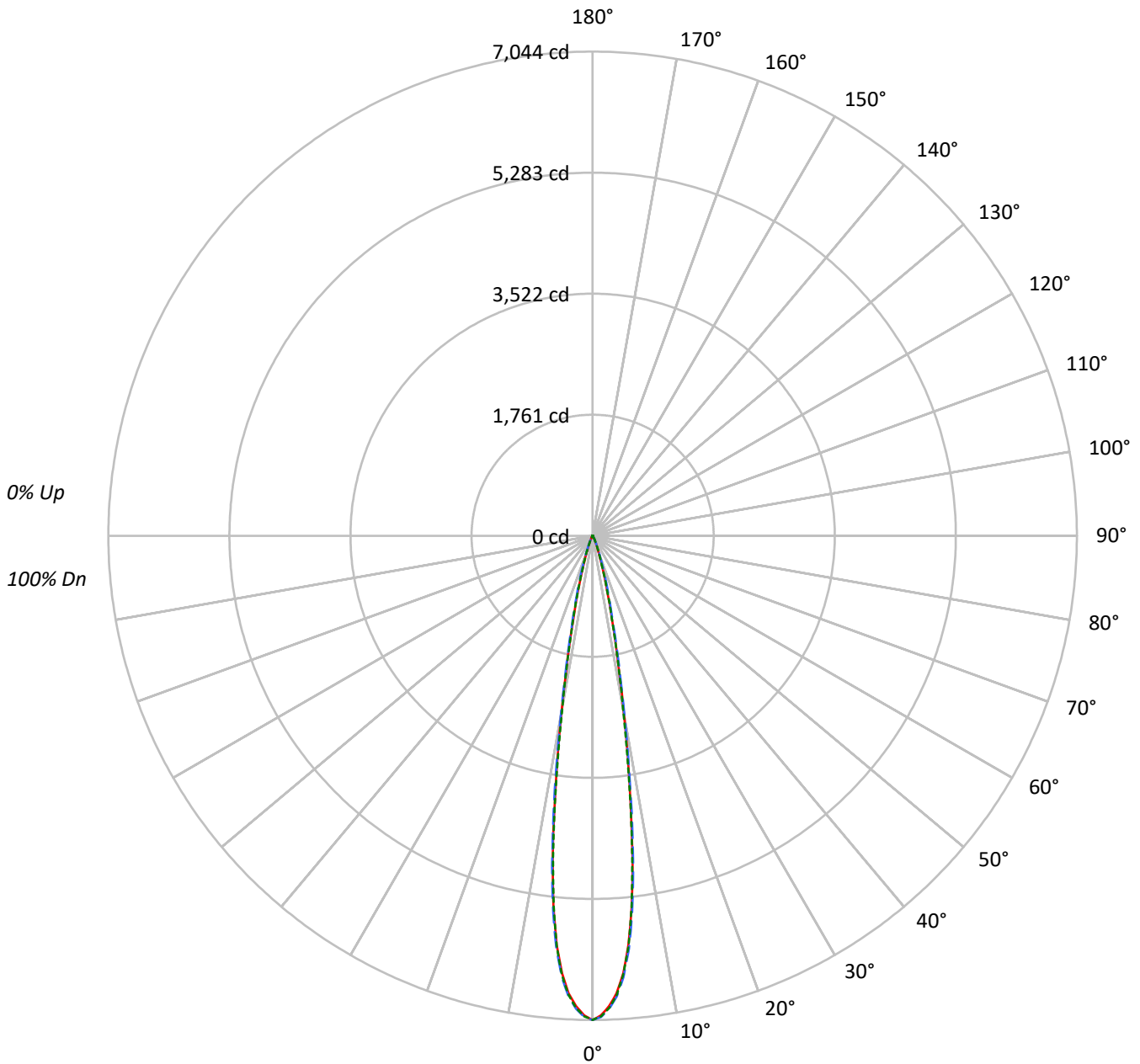
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3475487	3475487	3475487
5°	2959493	2990297	2965089
10°	1306587	1336445	1276028
15°	396456	454684	402688
20°	118603	158137	132569
25°	46217	45509	48557
30°	20566	18572	19597
35°	4216	3674	3674
40°	0	258	1095
45°	3628	3070	5442
50°	0	998	3377
55°	0	0	1462
60°	0	395	1677
65°	0	0	1051
70°	0	2452	5049
75°	0	0	0
80°	0	0	0
85°	0	2264	9623



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	456.7	58.5
10°-20°	260.8	33.4
20°-30°	49.5	6.3
30°-40°	9.0	1.2
40°-50°	2.3	0.3
50°-60°	1.8	0.2
60°-70°	0.3	0.0
70°-80°	0.4	0.0
80°-90°	0.5	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°	767.0	98.2
0°-40°	776.0	99.3
0°-60°	780.1	99.8
0°-90°	781.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	781.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7044	7044	7044	7044	7044	
5°	5976	6015	6038	6028	5987	454
15°	776	844	890	836	788	247
25°	85	91	84	95	89	45
35°	7	9	6	7	6	10
45°	5	8	4	5	8	2
55°	0	0	0	0	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	2	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7044.5	7044.5	7044.5	7044.5	7044.5
1°	6977.9	6985.3	7001.0	7017.1	6991.8
2°	6847.3	6865.1	6887.3	6902.1	6874.7
3°	6664.5	6689.3	6712.8	6715.8	6690.1
4°	6381.9	6412.4	6437.2	6434.2	6402.0
5°	5975.8	6014.9	6038.0	6027.6	5987.1
6°	5439.0	5476.9	5506.5	5476.4	5422.0
7°	4770.3	4813.9	4845.2	4793.8	4727.2
8°	3995.5	4056.4	4087.7	4015.9	3947.6
9°	3261.5	3303.7	3335.5	3257.1	3187.5
10°	2608.1	2685.5	2667.7	2607.2	2547.1
11°	2051.3	2121.4	2124.4	2083.5	2024.7
12°	1605.9	1679.9	1698.7	1667.3	1615.1
13°	1269.0	1324.3	1355.2	1323.0	1273.3
14°	1010.0	1059.2	1098.8	1057.0	1007.4
15°	776.2	844.1	890.2	836.3	788.4
16°	617.3	673.5	728.3	666.9	628.6
17°	474.1	524.1	580.7	525.0	493.7
18°	375.3	414.9	477.1	419.7	392.2
19°	293.8	323.9	381.8	331.3	309.1
20°	225.9	259.0	301.2	266.9	252.5
22.5°	136.7	155.0	167.2	156.7	149.3
25°	84.9	91.4	83.6	95.3	89.2
26°	74.0	78.8	77.1	84.9	77.5
27°	59.2	65.3	60.5	66.6	64.4
28°	54.0	61.4	51.8	59.2	55.7
29°	37.9	40.9	37.0	39.6	39.6
30°	36.1	37.0	32.6	35.7	34.4
32.5°	28.3	26.6	21.8	23.1	22.2
35°	7.0	8.7	6.1	7.4	6.1
37.5°	10.4	9.6	11.3	10.9	10.4
40°	0.0	0.4	0.4	0.4	1.7
42.5°	7.8	4.8	4.4	3.0	5.2
45°	5.2	8.3	4.4	4.8	7.8
47.5°	0.0	0.4	0.0	0.9	0.9
50°	0.0	0.9	1.3	1.7	4.4
52.5°	0.9	5.2	2.6	4.8	7.0
55°	0.0	0.4	0.0	0.4	1.7
57.5°	1.7	0.9	1.7	1.7	7.8
60°	0.0	0.9	0.4	0.4	1.7
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.9
67.5°	0.0	0.4	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	0.4	0.0	0.0
80°	0.0	0.4	0.0	0.0	0.0
82.5°	0.0	0.4	0.9	1.3	0.9
85°	0.0	0.4	0.4	0.4	1.7
87.5°	0.0	0.9	1.3	0.0	0.9
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	1.3	1.7	0.0	3.5
72.5°	0.0	2.2	0.4	0.4	0.0



(END OF REPORT)