

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: P281613

Luminaire Tested: **LDA2B058030D010 EU2B05SP158030 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281613  
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: LDA2B058030D010 EU2B05SP158030 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: 796.3 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

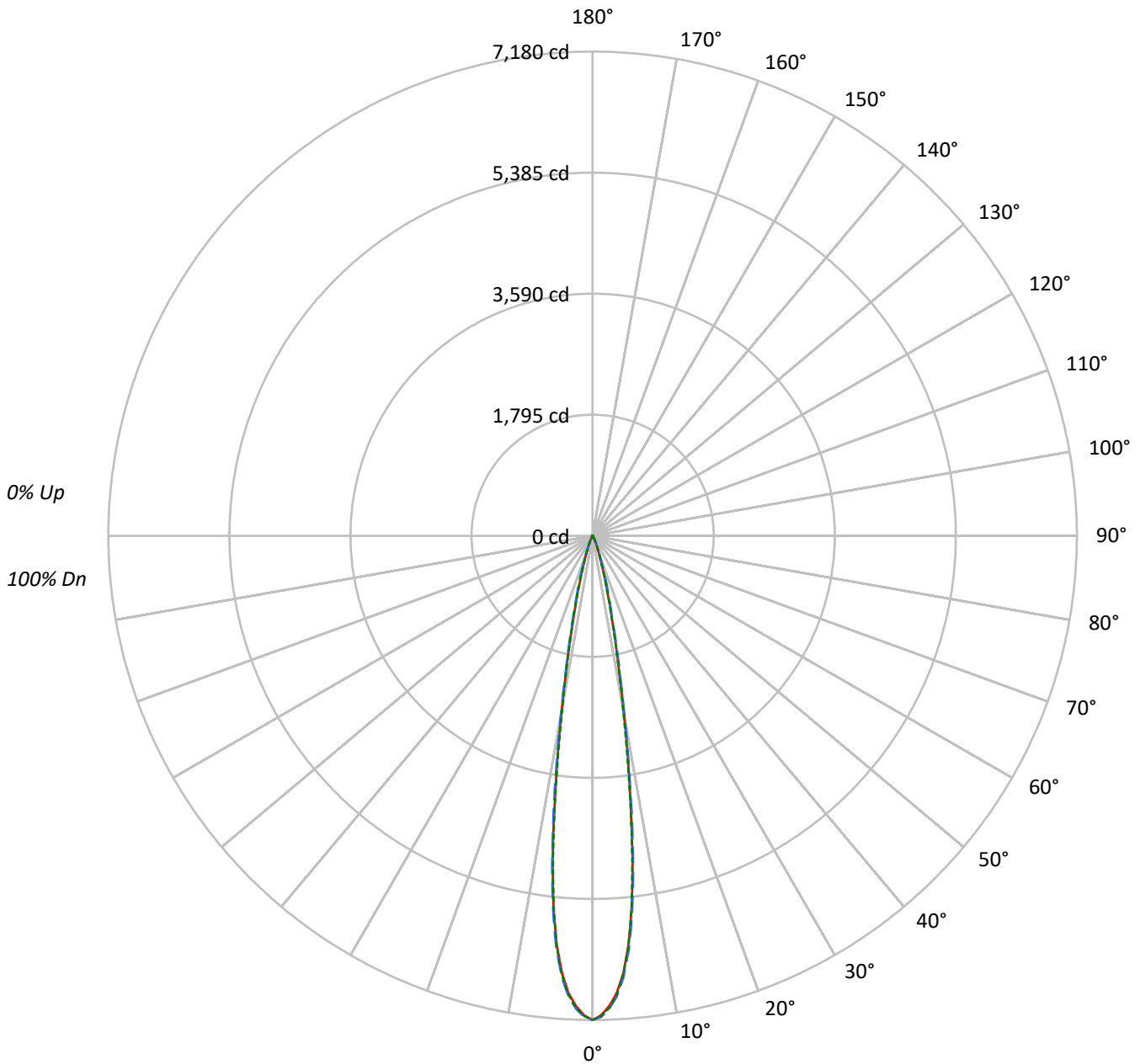
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3542486	3542486	3542486
5°	3016546	3047944	3022241
10°	1331736	1362195	1300625
15°	404118	463469	410451
20°	120913	161235	135141
25°	47088	46380	49537
30°	20964	18971	19996
35°	4276	3734	3734
40°	0	258	1159
45°	3698	3070	5582
50°	0	998	3377
55°	0	0	1548
60°	0	395	1776
65°	0	0	1051
70°	0	2596	5049
75°	0	0	0
80°	0	0	0
85°	0	2264	10189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	465.5	58.5
10°-20°	265.9	33.4
20°-30°	50.5	6.3
30°-40°	9.2	1.2
40°-50°	2.4	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°	781.8	98.2
0°-40°	790.9	99.3
0°-60°	795.1	99.8
0°-90°	796.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7180	7180	7180	7180	7180	
5°	6091	6131	6154	6144	6102	462
15°	791	860	907	852	804	252
25°	86	93	85	97	91	45
35°	7	9	6	8	6	10
45°	5	8	4	5	8	3
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°	7180.3	7180.3	7180.3	7180.3	7180.3
1°	7112.4	7120.0	7135.9	7152.4	7126.6
2°	6979.3	6997.5	7020.1	7035.2	7007.3
3°	6792.9	6818.2	6842.2	6845.3	6819.1
4°	6505.0	6536.0	6561.3	6558.2	6525.4
5°	6091.0	6130.9	6154.4	6143.8	6102.5
6°	5543.9	5582.5	5612.6	5582.0	5526.6
7°	4862.3	4906.7	4938.6	4886.3	4818.4
8°	4072.5	4134.6	4166.6	4093.3	4023.7
9°	3324.4	3367.4	3399.8	3319.9	3248.9
10°	2658.3	2737.3	2719.1	2657.5	2596.2
11°	2090.8	2162.3	2165.4	2123.7	2063.8
12°	1636.9	1712.3	1731.4	1699.5	1646.2
13°	1293.5	1349.8	1381.3	1348.5	1297.9
14°	1029.4	1079.6	1120.0	1077.4	1026.8
15°	791.2	860.4	907.4	852.4	803.6
16°	629.2	686.4	742.3	679.8	640.7
17°	483.2	534.2	591.9	535.1	503.2
18°	382.5	422.9	486.3	427.7	399.8
19°	299.5	330.1	389.1	337.7	315.0
20°	230.3	264.0	307.1	272.0	257.4
22.5°	139.3	158.0	170.4	159.7	152.2
25°	86.5	93.2	85.2	97.2	91.0
26°	75.4	80.3	78.5	86.5	79.0
27°	60.3	66.6	61.7	67.9	65.7
28°	55.0	62.6	52.8	60.3	56.8
29°	38.6	41.7	37.7	40.4	40.4
30°	36.8	37.7	33.3	36.4	35.1
32.5°	28.8	27.1	22.2	23.5	22.6
35°	7.1	8.9	6.2	7.5	6.2
37.5°	10.6	9.8	11.5	11.1	10.6
40°	0.0	0.4	0.4	0.4	1.8
42.5°	8.0	4.9	4.4	3.1	5.3
45°	5.3	8.4	4.4	4.9	8.0
47.5°	0.0	0.4	0.0	0.9	0.9
50°	0.0	0.9	1.3	1.8	4.4
52.5°	0.9	5.3	2.7	4.9	7.1
55°	0.0	0.4	0.0	0.4	1.8
57.5°	1.8	0.9	1.8	1.8	8.0
60°	0.0	0.9	0.4	0.4	1.8
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	1.8
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	1.8	0.0	3.5
72.5°	0.0	2.2	0.4	0.4	0.0



(END OF REPORT)