

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: P282567

Luminaire Tested: **LDA2B159050D010 EU2B15SP159050 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282567  
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: LDA2B159050D010 EU2B15SP159050 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1264.8 lumens  
Efficiency: N/A  
Efficacy: 89.7 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

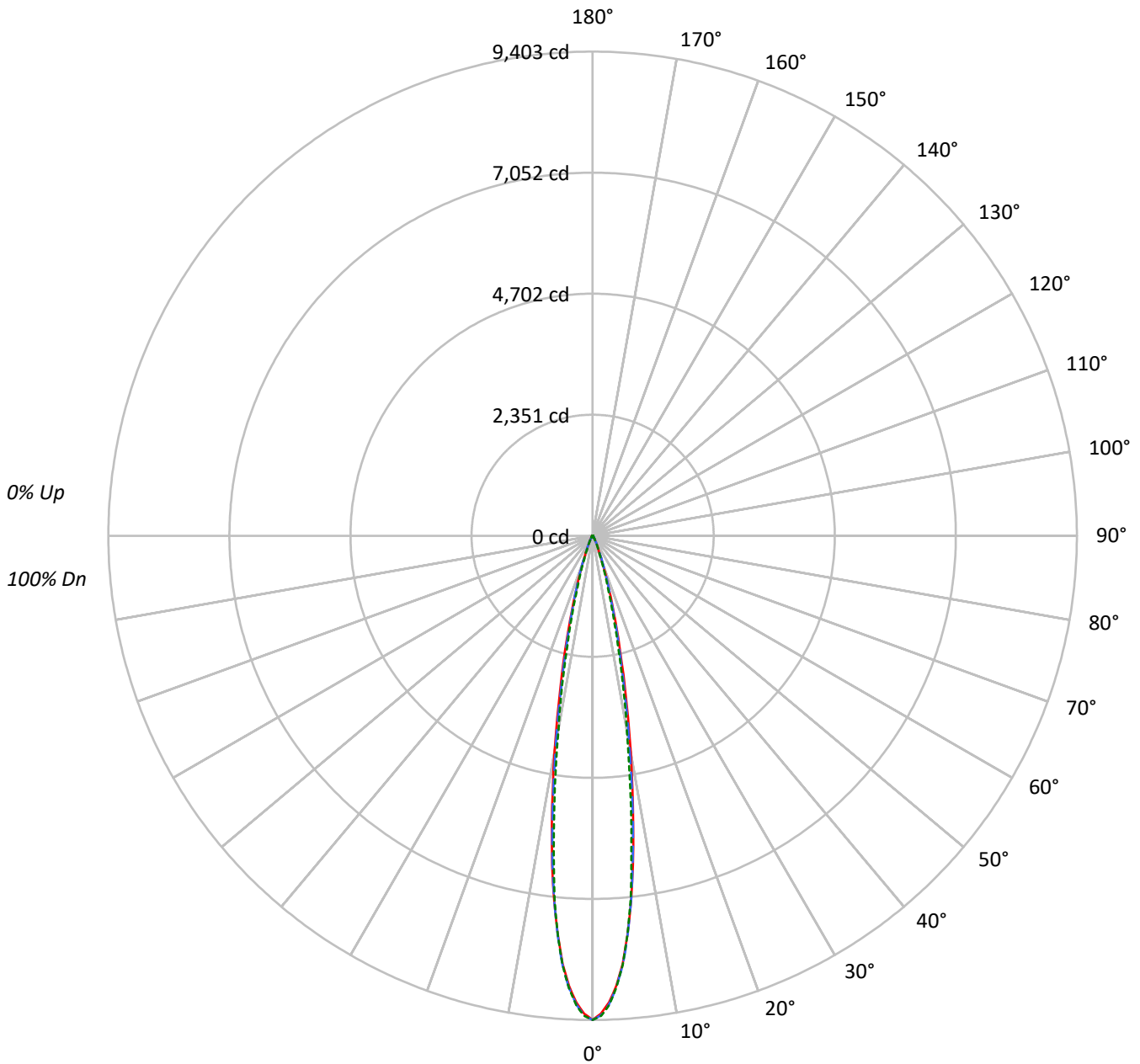
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4638884	4638884	4638884
5°	3848411	3860891	3846281
10°	2129986	2053036	1912513
15°	862224	824682	732234
20°	288869	306299	247969
25°	109907	110288	104409
30°	49278	48480	46828
35°	23911	21261	16924
40°	15779	19965	13911
45°	4047	6559	6070
50°	1075	1689	2226
55°	9892	8688	13676
60°	14209	11347	18452
65°	6771	17628	16810
70°	6203	5193	6203
75°	2669	6862	19253
80°	32673	45174	40913
85°	0	20378	24341



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	615.8	48.7
10°-20°	466.5	36.9
20°-30°	106.0	8.4
30°-40°	31.3	2.5
40°-50°	10.5	0.8
50°-60°	9.2	0.7
60°-70°	11.1	0.9
70°-80°	7.1	0.6
80°-90°	7.4	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°	1188.3	94.0
0°-40°	1219.7	96.4
0°-60°	1239.3	98.0
0°-90°	1264.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1264.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9403	9403	9403	9403	9403	
5°	7771	7832	7796	7694	7766	623
15°	1688	1711	1615	1463	1434	491
25°	202	217	203	200	192	106
35°	40	44	35	41	28	31
45°	6	17	9	17	9	9
55°	12	17	10	15	16	5
65°	6	12	15	14	14	6
75°	1	5	4	6	10	3
85°	0	0	4	4	4	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9402.6	9402.6	9402.6	9402.6	9402.6
1°	9281.4	9318.9	9315.3	9300.2	9326.8
2°	9068.0	9113.4	9109.1	9075.9	9123.5
3°	8755.0	8795.4	8788.9	8741.3	8793.2
4°	8336.8	8382.9	8364.9	8293.5	8359.8
5°	7770.7	7832.0	7795.9	7694.3	7766.4
6°	7143.3	7195.2	7138.3	7003.4	7074.1
7°	6441.0	6473.4	6398.4	6225.3	6177.8
8°	5674.4	5717.0	5612.4	5410.5	5358.6
9°	4941.8	4956.2	4829.3	4614.4	4548.8
10°	4251.7	4240.9	4098.1	3880.3	3817.6
11°	3597.6	3583.2	3432.5	3231.3	3251.5
12°	3002.7	3030.8	2855.6	2673.2	2676.8
13°	2513.8	2516.7	2366.0	2192.2	2182.1
14°	2058.1	2084.7	1955.7	1799.9	1771.0
15°	1688.1	1711.2	1614.6	1463.1	1433.6
16°	1351.4	1380.2	1311.0	1174.0	1135.0
17°	1088.2	1124.9	1079.5	964.8	920.1
18°	870.4	898.5	887.7	769.4	732.6
19°	687.2	726.2	729.0	630.3	586.3
20°	550.2	585.5	583.4	506.9	472.3
22.5°	315.8	334.6	335.3	299.3	279.1
25°	201.9	217.1	202.6	200.5	191.8
26°	175.2	187.5	171.6	171.6	163.7
27°	142.1	152.9	137.7	144.2	133.4
28°	119.7	131.2	118.3	116.8	115.4
29°	99.5	110.3	93.7	101.0	96.6
30°	86.5	94.5	85.1	95.9	82.2
32.5°	67.1	73.6	57.0	72.1	54.1
35°	39.7	44.0	35.3	41.1	28.1
37.5°	41.1	42.5	38.2	42.5	39.7
40°	24.5	25.2	31.0	31.0	21.6
42.5°	23.1	22.4	13.7	21.6	17.3
45°	5.8	16.6	9.4	16.6	8.7
47.5°	4.3	5.8	5.8	11.5	11.5
50°	1.4	5.8	2.2	4.3	2.9
52.5°	0.0	13.7	2.9	10.1	8.7
55°	11.5	16.6	10.1	15.1	15.9
57.5°	1.4	11.5	5.8	12.3	8.7
60°	14.4	19.5	11.5	20.9	18.7
62.5°	1.4	13.0	15.1	11.5	10.1
65°	5.8	12.3	15.1	14.4	14.4
67.5°	7.2	12.3	9.4	9.4	13.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.4	5.0	3.6	6.5	10.1
77.5°	1.4	5.8	5.0	11.5	8.7
80°	11.5	13.0	15.9	20.9	14.4
82.5°	10.1	10.1	15.9	11.5	8.7
85°	0.0	0.0	3.6	3.6	4.3
87.5°	0.0	2.9	7.2	5.8	10.1
90°	0.0	0.0	0.0	0.0	0.0



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







70°	4.3	1.4	3.6	3.6	4.3
72.5°	1.4	6.5	5.8	3.6	7.2



(END OF REPORT)