

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: P281320

Luminaire Tested: **LDA2B159730D010 EU2B15SP159730 2LBALD1WHH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281320  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B159730D010 EU2B15SP159730 2LBALD1WHH  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, WHH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1065.8 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

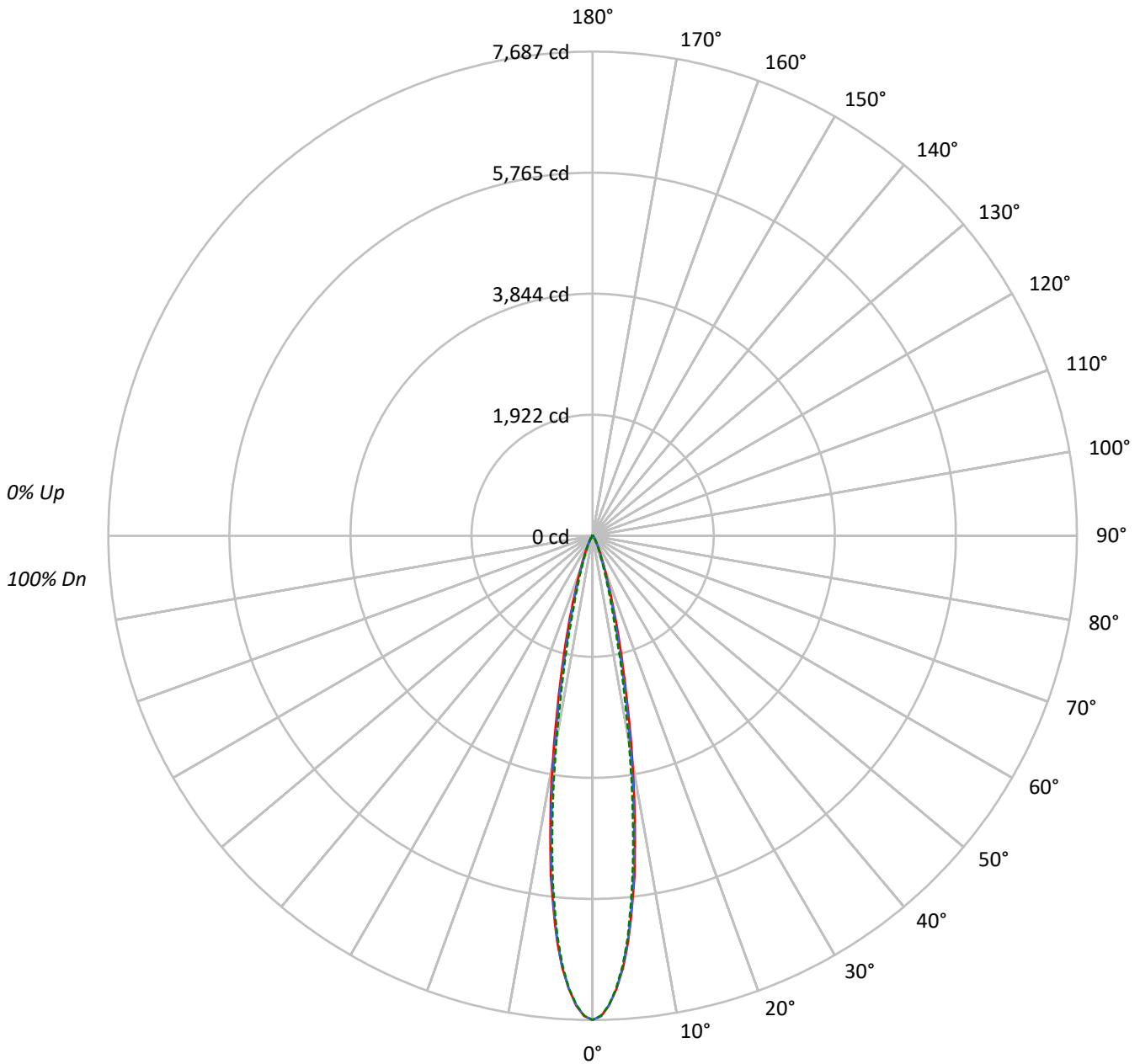
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									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	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97						97													
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95						95													
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92						92													
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90						90													
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88						88													
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86						86													
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84						84													
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82						82													
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80						80													
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79						79													

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

	0°	45°	90°
0°	3792373	3792373	3792373
5°	3204194	3187108	3163584
10°	1823791	1743485	1654813
15°	755269	668950	589321
20°	287293	251592	230328
25°	126891	121938	108383
30°	58735	64887	51670
35°	30897	36378	28910
40°	13525	15650	9017
45°	5303	4117	6000
50°	2456	2917	4145
55°	0	1892	0
60°	0	0	1085
65°	0	0	0
70°	0	721	0
75°	0	0	0
80°	3125	0	0
85°	30568	27737	12454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	514.0	48.2
10°-20°	392.9	36.9
20°-30°	109.3	10.3
30°-40°	35.5	3.3
40°-50°	7.8	0.7
50°-60°	2.4	0.2
60°-70°	1.4	0.1
70°-80°	0.8	0.1
80°-90°	1.7	0.2
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°	1016.1	95.3
0°-40°	1051.7	98.7
0°-60°	1061.9	99.6
0°-90°	1065.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1065.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7687	7687	7687	7687	7687	
5°	6470	6422	6435	6387	6388	523
15°	1479	1427	1310	1209	1154	432
25°	233	236	224	211	199	117
35°	51	56	60	46	48	34
45°	8	11	6	6	9	8
55°	0	3	2	1	0	2
65°	0	2	0	0	0	2
75°	0	0	0	1	0	0
85°	5	3	5	3	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7686.8	7686.8	7686.8	7686.8	7686.8
1°	7628.0	7599.4	7626.9	7610.7	7619.9
2°	7462.3	7426.7	7455.3	7432.7	7451.5
3°	7204.4	7176.9	7202.2	7173.6	7188.7
4°	6881.1	6841.2	6866.6	6828.2	6837.4
5°	6469.9	6422.4	6435.4	6387.3	6387.9
6°	5951.8	5918.9	5926.5	5851.5	5846.1
7°	5445.1	5367.4	5359.3	5273.5	5256.8
8°	4829.9	4759.2	4736.0	4635.1	4599.5
9°	4240.1	4152.1	4104.6	3987.5	3945.9
10°	3640.5	3551.5	3480.2	3348.0	3303.2
11°	3085.7	3005.3	2916.8	2775.4	2731.7
12°	2570.9	2507.8	2410.6	2274.1	2228.2
13°	2150.5	2077.7	1973.5	1846.7	1807.3
14°	1786.3	1708.0	1603.9	1495.4	1418.8
15°	1478.7	1427.4	1309.7	1208.8	1153.8
16°	1208.3	1164.6	1063.1	975.7	936.8
17°	990.8	955.7	869.4	800.8	768.5
18°	817.6	773.9	705.9	661.1	635.7
19°	663.2	629.2	579.6	545.1	519.7
20°	547.2	519.1	479.2	448.5	438.7
22.5°	353.5	348.6	322.7	306.0	297.9
25°	233.1	235.8	224.0	211.0	199.1
26°	199.1	200.8	190.0	182.4	167.3
27°	170.5	171.1	171.1	157.0	142.5
28°	139.2	145.2	139.8	133.3	119.3
29°	119.3	126.8	124.1	117.6	104.2
30°	103.1	108.5	113.9	103.6	90.7
32.5°	72.3	77.2	83.1	77.7	66.9
35°	51.3	55.6	60.4	45.9	48.0
37.5°	35.1	42.6	41.0	37.2	31.8
40°	21.0	22.1	24.3	25.9	14.0
42.5°	15.1	17.8	16.2	18.3	6.5
45°	7.6	10.8	5.9	5.9	8.6
47.5°	5.4	9.2	3.2	3.2	1.1
50°	3.2	7.0	3.8	1.6	5.4
52.5°	5.4	6.5	4.3	4.9	1.1
55°	0.0	3.2	2.2	1.1	0.0
57.5°	2.2	3.8	2.2	1.1	2.2
60°	0.0	0.0	0.0	0.5	1.1
62.5°	0.0	1.1	0.0	1.6	2.2
65°	0.0	2.2	0.0	0.0	0.0
67.5°	3.2	3.8	2.2	4.3	6.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.1	0.0
77.5°	0.0	5.4	1.6	1.6	2.2
80°	1.1	0.0	0.0	0.5	0.0
82.5°	0.0	4.3	0.5	2.2	3.2
85°	5.4	2.7	4.9	2.7	2.2
87.5°	0.0	0.5	1.1	0.5	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	0.5	0.5	0.0
72.5°	1.1	0.0	0.0	0.0	0.0



(END OF REPORT)