

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: P282731

Luminaire Tested: **LDA2B159040D010 EU2B15NFL259040 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282731  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B159040D010 EU2B15NFL259040 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1041.2 lumens  
Efficiency: N/A  
Efficacy: 73.8 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

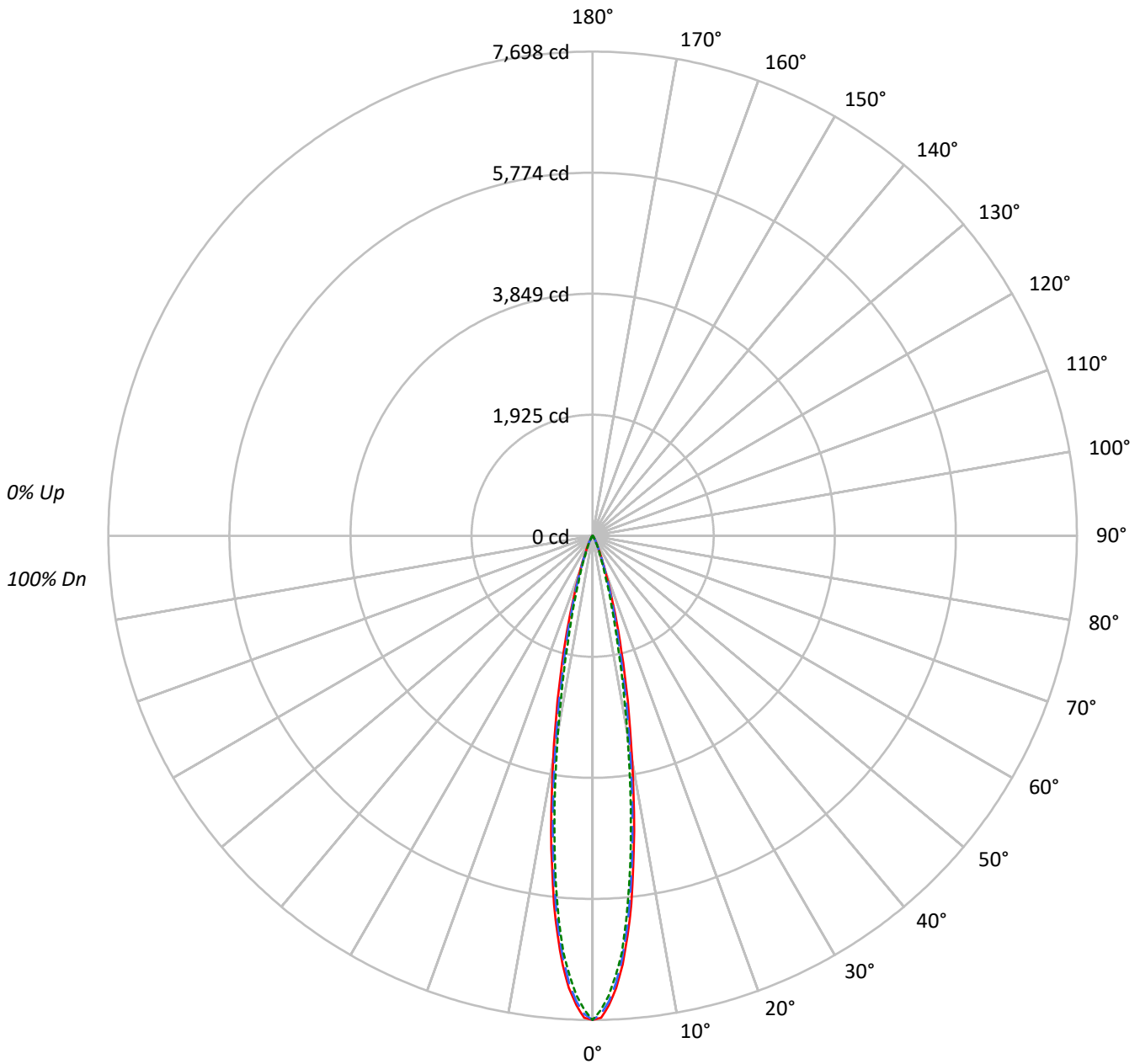
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3798096	3798096	3798096
5°	3160415	3102520	3039872
10°	1810265	1698748	1585378
15°	805171	715072	599230
20°	292071	274640	217570
25°	112139	104736	90201
30°	48366	45005	39935
35°	22887	22887	18972
40°	11464	11850	9532
45°	6628	6210	5791
50°	4528	4068	4068
55°	3613	2580	3097
60°	2960	1776	2368
65°	2101	1401	2101
70°	1731	865	1731
75°	1144	1144	1144
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	500.7	48.1
10°-20°	405.2	38.9
20°-30°	97.7	9.4
30°-40°	24.9	2.4
40°-50°	7.4	0.7
50°-60°	3.2	0.3
60°-70°	1.5	0.1
70°-80°	0.5	0.0
80°-90°	0.0	0.0
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°	1003.6	96.4
0°-40°	1028.5	98.8
0°-60°	1039.1	99.8
0°-90°	1041.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1041.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7698	7698	7698	7698	7698	
5°	6382	6323	6265	6210	6138	516
15°	1576	1539	1400	1261	1173	449
25°	206	207	192	175	166	106
35°	38	39	38	34	32	26
45°	10	10	9	8	8	8
55°	4	4	3	3	4	4
65°	2	2	1	1	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7698.4	7698.4	7698.4	7698.4	7698.4
1°	7664.0	7610.6	7604.0	7637.3	7539.3
2°	7468.1	7430.1	7408.1	7427.7	7316.7
3°	7199.1	7162.3	7122.5	7123.1	6999.0
4°	6832.8	6803.7	6736.6	6716.4	6644.6
5°	6381.5	6322.8	6264.6	6209.9	6138.1
6°	5882.8	5806.8	5723.7	5642.3	5568.7
7°	5296.2	5245.7	5135.9	5024.8	4962.5
8°	4744.6	4663.2	4535.0	4396.1	4343.2
9°	4151.4	4093.3	3946.0	3784.5	3731.7
10°	3613.5	3552.9	3390.9	3211.0	3164.6
11°	3108.8	3051.8	2883.2	2694.4	2645.1
12°	2681.9	2601.2	2407.6	2243.7	2195.7
13°	2256.8	2201.6	2018.1	1856.0	1762.8
14°	1895.2	1849.5	1683.3	1540.8	1442.2
15°	1576.4	1539.0	1400.0	1261.1	1173.2
16°	1293.2	1270.0	1160.2	1026.0	954.1
17°	1049.1	1027.8	957.7	834.2	773.6
18°	847.3	844.3	786.1	679.2	625.2
19°	697.1	695.9	642.4	552.8	508.2
20°	556.3	564.1	523.1	444.7	414.4
21°	453.6	457.8	425.1	365.7	338.4
22°	369.3	372.3	350.9	302.2	287.4
23°	302.8	304.6	286.8	250.6	237.5
24°	249.4	250.6	234.5	209.0	197.7
25°	206.0	207.2	192.4	174.6	165.7
26°	171.0	172.2	159.1	146.7	137.7
27°	141.9	144.3	131.2	123.5	114.0
28°	121.1	121.7	109.8	105.1	96.2
29°	99.2	102.7	92.6	88.5	81.9
30°	84.9	86.7	79.0	76.0	70.1
32.5°	56.4	57.6	54.0	51.7	46.9
35°	38.0	38.6	38.0	34.4	31.5
37.5°	26.1	26.1	26.7	22.6	21.4
40°	17.8	17.8	18.4	15.4	14.8
42.5°	13.1	13.1	12.5	10.7	10.7
45°	9.5	9.5	8.9	8.3	8.3
47.5°	7.7	7.1	6.5	6.5	6.5
50°	5.9	5.9	5.3	4.7	5.3
52.5°	4.7	4.7	4.2	4.2	4.2
55°	4.2	3.6	3.0	3.0	3.6
57.5°	3.0	3.0	2.4	2.4	3.0
60°	3.0	2.4	1.8	2.4	2.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.8	1.2	1.2	1.2	1.2
70°	1.2	1.2	0.6	0.6	1.2
72.5°	0.6	0.6	0.6	0.6	0.6
75°	0.6	0.6	0.6	0.6	0.6
77.5°	0.6	0.6	0.0	0.0	0.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	2.4	1.8	1.8	1.8	1.8
65°	1.8	1.8	1.2	1.2	1.8



(END OF REPORT)