

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: P282733

Luminaire Tested: **LDA2B159040D010 EU2B15NFL259040 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282733  
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 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1043.7 lumens  
Efficiency: N/A  
Efficacy: 74.0 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

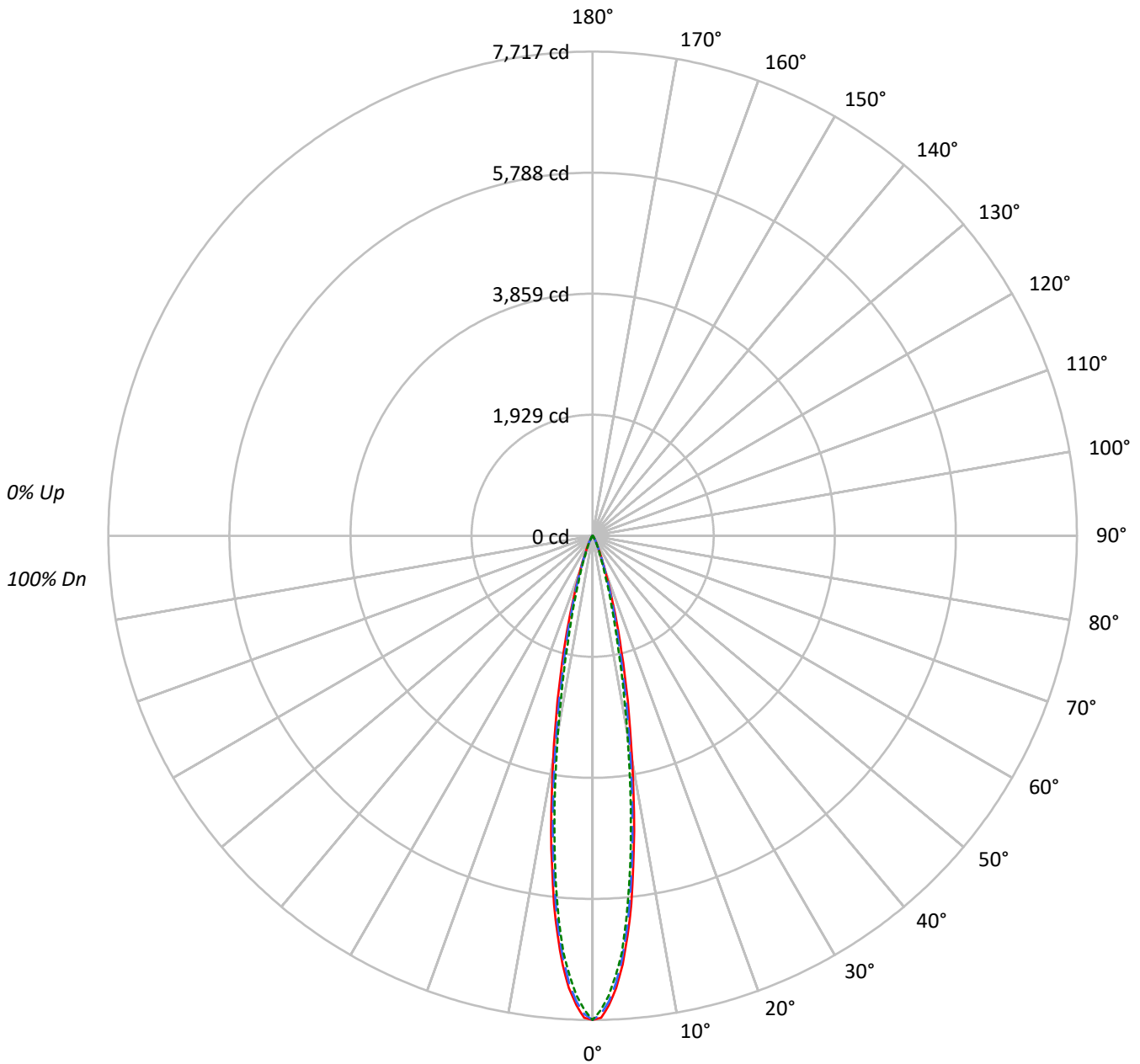
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3807421	3807421	3807421
5°	3168140	3110098	3047300
10°	1814673	1702906	1589286
15°	807112	716860	600712
20°	292806	275323	218095
25°	112411	104953	90419
30°	48480	45119	39992
35°	22947	22947	18972
40°	11528	11915	9596
45°	6628	6210	5791
50°	4605	4145	4145
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°	501.9	48.1
10°-20°	406.2	38.9
20°-30°	97.9	9.4
30°-40°	25.0	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°	1006.1	96.4
0°-40°	1031.0	98.8
0°-60°	1041.7	99.8
0°-90°	1043.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1043.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7717	7717	7717	7717	7717	
5°	6397	6338	6280	6225	6153	517
15°	1580	1543	1404	1264	1176	451
25°	206	208	193	175	166	107
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°	7717.3	7717.3	7717.3	7717.3	7717.3
1°	7682.8	7629.2	7622.6	7656.0	7557.8
2°	7486.3	7448.3	7426.2	7445.9	7334.6
3°	7216.7	7179.8	7139.9	7140.5	7016.1
4°	6849.5	6820.3	6753.1	6732.8	6660.8
5°	6397.1	6338.2	6279.9	6225.1	6153.1
6°	5897.2	5821.0	5737.7	5656.1	5582.3
7°	5309.1	5258.5	5148.4	5037.1	4974.6
8°	4756.2	4674.7	4546.1	4406.8	4353.8
9°	4161.6	4103.3	3955.7	3793.8	3740.8
10°	3622.3	3561.6	3399.2	3218.8	3172.4
11°	3116.4	3059.3	2890.3	2701.0	2651.6
12°	2688.5	2607.5	2413.5	2249.2	2201.0
13°	2262.3	2207.0	2023.1	1860.6	1767.1
14°	1899.9	1854.0	1687.4	1544.5	1445.7
15°	1580.2	1542.7	1403.5	1264.2	1176.1
16°	1296.3	1273.1	1163.0	1028.5	956.5
17°	1051.7	1030.3	960.0	836.2	775.5
18°	849.3	846.4	788.0	680.9	626.7
19°	698.8	697.6	644.0	554.1	509.5
20°	557.7	565.4	524.4	445.8	415.4
21°	454.7	458.9	426.2	366.6	339.3
22°	370.2	373.2	351.8	303.0	288.1
23°	303.5	305.3	287.5	251.2	238.1
24°	250.0	251.2	235.1	209.5	198.2
25°	206.5	207.7	192.8	175.0	166.1
26°	171.4	172.6	159.5	147.0	138.1
27°	142.3	144.6	131.5	123.8	114.3
28°	121.4	122.0	110.1	105.3	96.4
29°	99.4	103.0	92.9	88.7	82.1
30°	85.1	86.9	79.2	76.2	70.2
32.5°	56.5	57.7	54.2	51.8	47.0
35°	38.1	38.7	38.1	34.5	31.5
37.5°	26.2	26.2	26.8	22.6	21.4
40°	17.9	17.9	18.5	15.5	14.9
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°	6.0	6.0	5.4	4.8	5.4
52.5°	4.8	4.8	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)