

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: P282721

Luminaire Tested: **LDA2B159024D010 EU2B15NFL259024 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282721  
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: LDA2B159024D010 EU2B15NFL259024 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: 875.7 lumens  
Efficiency: N/A  
Efficacy: 62.1 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

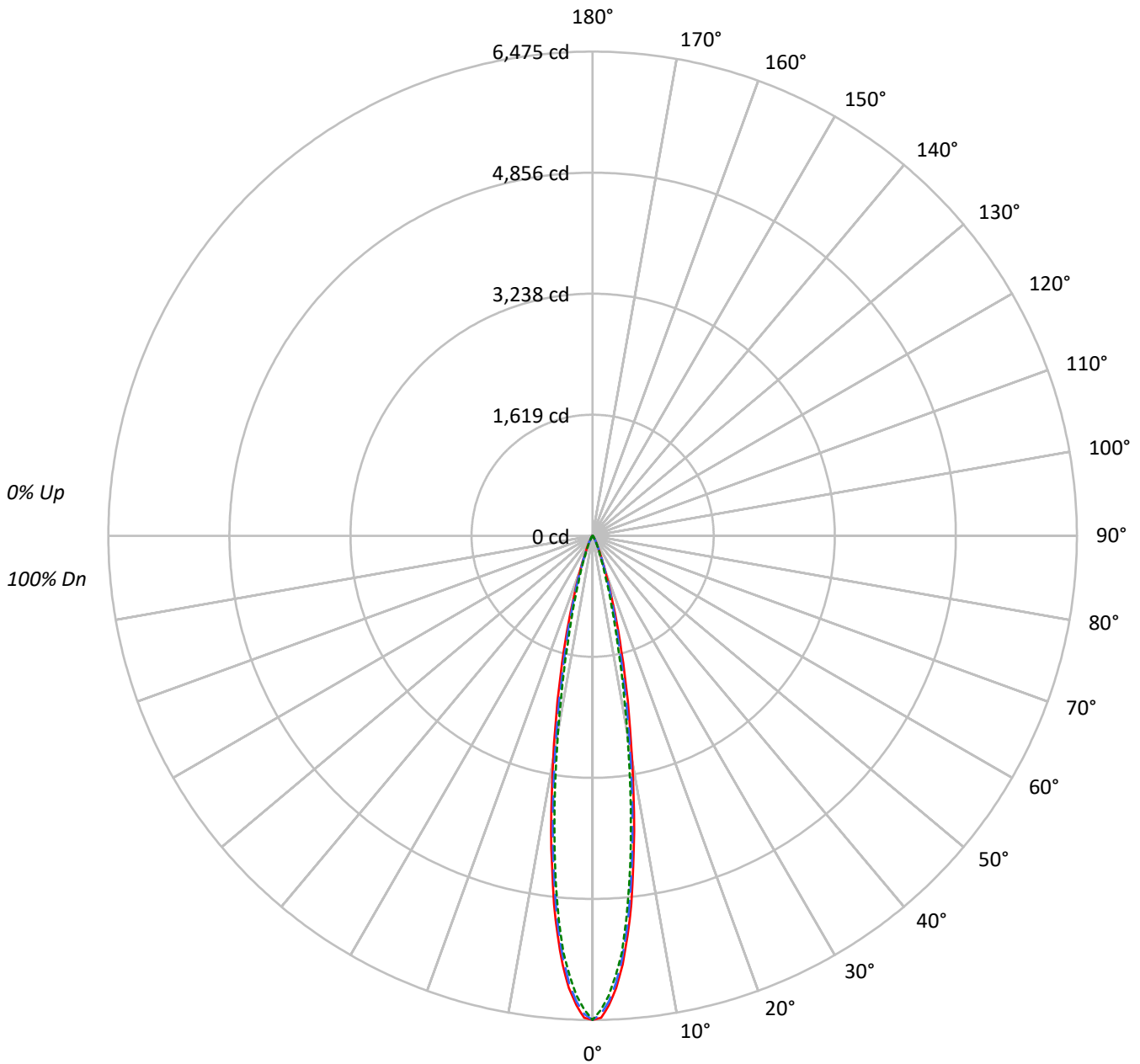
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3194518	3194518	3194518
5°	2658185	2609453	2556759
10°	1522556	1428774	1333439
15°	677224	601427	504024
20°	245659	231011	183024
25°	94338	88078	75830
30°	40676	37827	33554
35°	19273	19273	15961
40°	9661	9983	8050
45°	5582	5233	4884
50°	3838	3454	3454
55°	3011	2150	2580
60°	2467	1480	1973
65°	1751	1167	1751
70°	1442	721	1442
75°	953	953	953
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	421.1	48.1
10°-20°	340.8	38.9
20°-30°	82.2	9.4
30°-40°	21.0	2.4
40°-50°	6.3	0.7
50°-60°	2.7	0.3
60°-70°	1.3	0.1
70°-80°	0.4	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°	844.1	96.4
0°-40°	865.1	98.8
0°-60°	874.0	99.8
0°-90°	875.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	875.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6475	6475	6475	6475	6475	
5°	5367	5318	5269	5223	5163	434
15°	1326	1294	1178	1061	987	378
25°	173	174	162	147	139	89
35°	32	32	32	29	26	22
45°	8	8	8	7	7	7
55°	4	3	2	2	3	3
65°	2	2	1	1	2	2
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6475.0	6475.0	6475.0	6475.0	6475.0
1°	6446.0	6401.1	6395.6	6423.6	6341.2
2°	6281.2	6249.3	6230.8	6247.3	6153.9
3°	6055.0	6024.1	5990.6	5991.1	5886.7
4°	5746.9	5722.4	5666.0	5649.0	5588.6
5°	5367.4	5317.9	5269.0	5223.0	5162.6
6°	4947.9	4884.0	4814.1	4745.6	4683.7
7°	4454.5	4412.0	4319.7	4226.3	4173.8
8°	3990.6	3922.2	3814.3	3697.4	3653.0
9°	3491.7	3442.7	3318.9	3183.1	3138.6
10°	3039.2	2988.3	2852.0	2700.7	2661.7
11°	2614.8	2566.8	2425.0	2266.2	2224.8
12°	2255.7	2187.8	2025.0	1887.2	1846.7
13°	1898.2	1851.7	1697.4	1561.1	1482.7
14°	1594.0	1555.6	1415.8	1295.9	1213.0
15°	1325.9	1294.4	1177.5	1060.7	986.8
16°	1087.7	1068.2	975.8	862.9	802.5
17°	882.4	864.4	805.5	701.6	650.7
18°	712.6	710.1	661.2	571.3	525.9
19°	586.3	585.3	540.3	464.9	427.5
20°	467.9	474.4	440.0	374.0	348.6
21°	381.5	385.0	357.6	307.6	284.6
22°	310.6	313.1	295.1	254.2	241.7
23°	254.7	256.2	241.2	210.7	199.8
24°	209.7	210.7	197.3	175.8	166.3
25°	173.3	174.3	161.8	146.8	139.3
26°	143.8	144.8	133.8	123.3	115.9
27°	119.4	121.4	110.4	103.9	95.9
28°	101.9	102.4	92.4	88.4	80.9
29°	83.4	86.4	77.9	74.4	68.9
30°	71.4	72.9	66.4	63.9	58.9
32.5°	47.4	48.4	45.4	43.4	39.5
35°	32.0	32.5	32.0	29.0	26.5
37.5°	22.0	22.0	22.5	19.0	18.0
40°	15.0	15.0	15.5	13.0	12.5
42.5°	11.0	11.0	10.5	9.0	9.0
45°	8.0	8.0	7.5	7.0	7.0
47.5°	6.5	6.0	5.5	5.5	5.5
50°	5.0	5.0	4.5	4.0	4.5
52.5°	4.0	4.0	3.5	3.5	3.5
55°	3.5	3.0	2.5	2.5	3.0
57.5°	2.5	2.5	2.0	2.0	2.5
60°	2.5	2.0	1.5	2.0	2.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.5	1.0	1.0	1.0	1.0
70°	1.0	1.0	0.5	0.5	1.0
72.5°	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.0	0.0	0.5
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°	2.0	1.5	1.5	1.5	1.5
65°	1.5	1.5	1.0	1.0	1.5



(END OF REPORT)