

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: P282644

Luminaire Tested: **LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282644  
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: LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 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: 564.0 lumens  
Efficiency: N/A  
Efficacy: 80.6 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

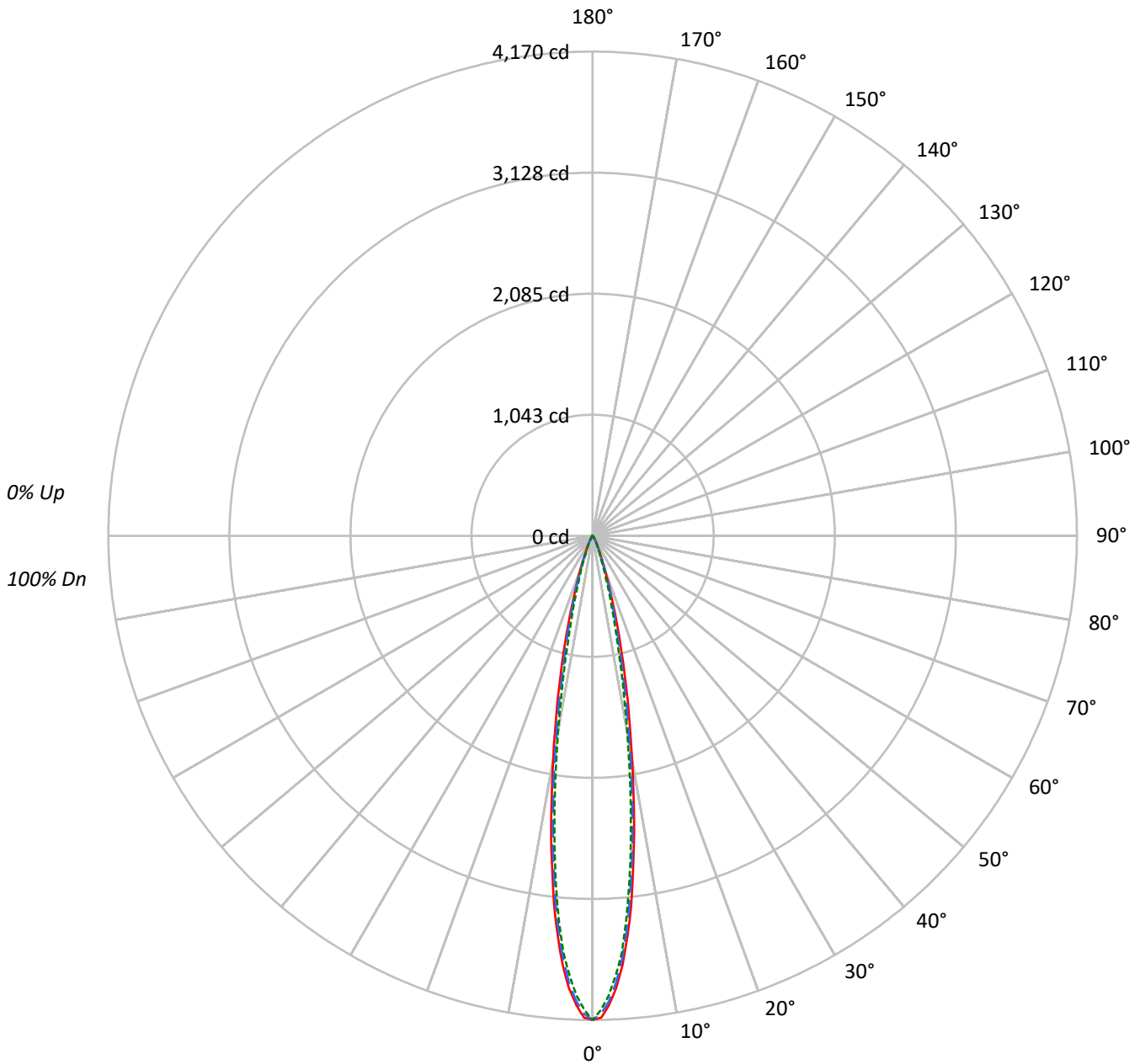
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2057368	2057368	2057368
5°	1711918	1680569	1646645
10°	980554	920137	858767
15°	436143	387365	324592
20°	158242	148739	117868
25°	60751	56723	48829
30°	26206	24383	21648
35°	12407	12407	10239
40°	6183	6440	5152
45°	3558	3349	3140
50°	2456	2226	2226
55°	1978	1376	1634
60°	1579	987	1283
65°	1167	700	1167
70°	865	433	865
75°	572	572	572
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	271.2	48.1
10°-20°	219.5	38.9
20°-30°	52.9	9.4
30°-40°	13.5	2.4
40°-50°	4.0	0.7
50°-60°	1.7	0.3
60°-70°	0.8	0.1
70°-80°	0.3	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°	543.6	96.4
0°-40°	557.1	98.8
0°-60°	562.9	99.8
0°-90°	564.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	564.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4170	4170	4170	4170	4170	
5°	3457	3425	3393	3364	3325	280
15°	854	834	758	683	636	243
25°	112	112	104	95	90	58
35°	21	21	21	19	17	14
45°	5	5	5	4	4	4
55°	2	2	2	2	2	2
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
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°	4170.1	4170.1	4170.1	4170.1	4170.1
1°	4151.4	4122.5	4118.9	4136.9	4083.9
2°	4045.3	4024.7	4012.8	4023.4	3963.3
3°	3899.6	3879.6	3858.1	3858.4	3791.2
4°	3701.1	3685.4	3649.0	3638.1	3599.2
5°	3456.7	3424.9	3393.4	3363.8	3324.9
6°	3186.6	3145.4	3100.4	3056.3	3016.4
7°	2868.8	2841.5	2782.0	2721.8	2688.1
8°	2570.0	2526.0	2456.5	2381.2	2352.6
9°	2248.7	2217.2	2137.5	2050.0	2021.4
10°	1957.3	1924.5	1836.7	1739.3	1714.2
11°	1684.0	1653.1	1561.8	1459.5	1432.8
12°	1452.7	1409.0	1304.1	1215.4	1189.3
13°	1222.5	1192.5	1093.2	1005.4	954.9
14°	1026.6	1001.8	911.8	834.6	781.2
15°	853.9	833.6	758.4	683.1	635.5
16°	700.5	687.9	628.4	555.8	516.8
17°	568.3	556.7	518.8	451.9	419.1
18°	458.9	457.3	425.8	367.9	338.7
19°	377.6	376.9	348.0	299.4	275.3
20°	301.4	305.5	283.3	240.9	224.5
21°	245.7	248.0	230.3	198.1	183.3
22°	200.0	201.7	190.1	163.7	155.7
23°	164.0	165.0	155.3	135.7	128.6
24°	135.1	135.7	127.0	113.2	107.1
25°	111.6	112.2	104.2	94.6	89.7
26°	92.6	93.3	86.2	79.4	74.6
27°	76.9	78.2	71.1	66.9	61.8
28°	65.6	65.9	59.5	56.9	52.1
29°	53.7	55.6	50.2	47.9	44.4
30°	46.0	47.0	42.8	41.2	38.0
32.5°	30.6	31.2	29.3	28.0	25.4
35°	20.6	20.9	20.6	18.7	17.0
37.5°	14.2	14.2	14.5	12.2	11.6
40°	9.6	9.6	10.0	8.4	8.0
42.5°	7.1	7.1	6.8	5.8	5.8
45°	5.1	5.1	4.8	4.5	4.5
47.5°	4.2	3.9	3.5	3.5	3.5
50°	3.2	3.2	2.9	2.6	2.9
52.5°	2.6	2.6	2.3	2.3	2.3
55°	2.3	1.9	1.6	1.6	1.9
57.5°	1.6	1.6	1.3	1.3	1.6
60°	1.6	1.3	1.0	1.3	1.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.0	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.3	0.3	0.6
72.5°	0.3	0.3	0.3	0.3	0.3
75°	0.3	0.3	0.3	0.3	0.3
77.5°	0.3	0.3	0.0	0.0	0.3
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



Report Generated By E9808895 / USPTCWHP6082093







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







62.5°	1.3	1.0	1.0	1.0	1.0
65°	1.0	1.0	0.6	0.6	1.0



(END OF REPORT)