

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: P282177

Luminaire Tested: **LDA2B059050D010 EU2B05NFL259050 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282177  
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: LDA2B059050D010 EU2B05NFL259050 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 634.8 lumens  
Efficiency: N/A  
Efficacy: 90.7 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

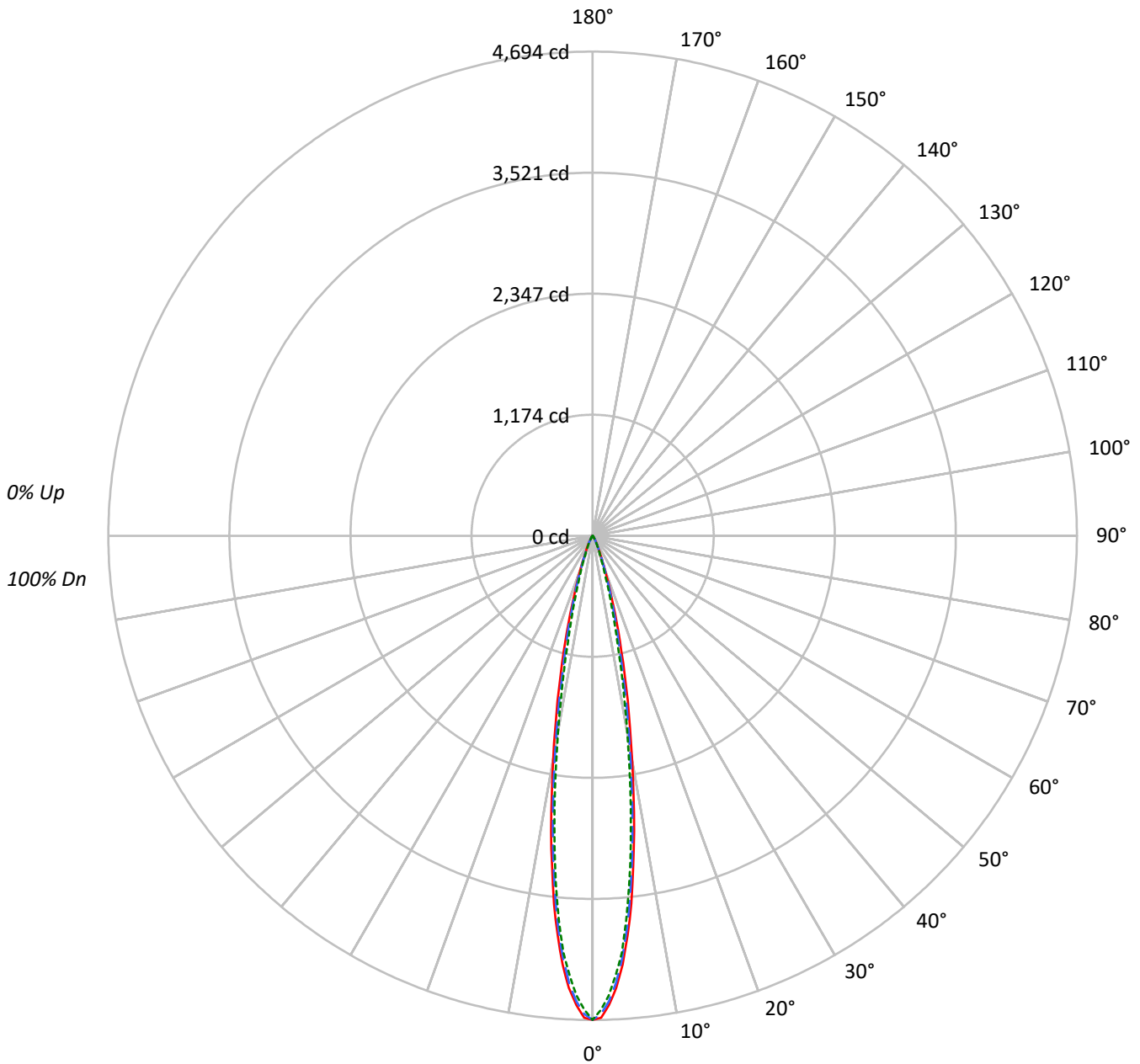
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2315692	2315692	2315692
5°	1926904	1891544	1853360
10°	1103693	1035711	966627
15°	490897	435990	365351
20°	178088	167430	132674
25°	68372	63854	54981
30°	29510	27402	24326
35°	13973	13973	11564
40°	7020	7213	5796
45°	4047	3768	3558
50°	2763	2533	2533
55°	2150	1548	1892
60°	1776	1085	1381
65°	1284	817	1284
70°	1010	577	1010
75°	762	762	762
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.3	48.1
10°-20°	247.0	38.9
20°-30°	59.6	9.4
30°-40°	15.2	2.4
40°-50°	4.5	0.7
50°-60°	1.9	0.3
60°-70°	0.9	0.1
70°-80°	0.3	0.1
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°	611.9	96.4
0°-40°	627.1	98.8
0°-60°	633.5	99.8
0°-90°	634.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	634.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4694	4694	4694	4694	4694	
5°	3891	3855	3819	3786	3742	315
15°	961	938	854	769	715	274
25°	126	126	117	106	101	65
35°	23	24	23	21	19	16
45°	6	6	5	5	5	5
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°	4693.7	4693.7	4693.7	4693.7	4693.7
1°	4672.7	4640.1	4636.1	4656.4	4596.7
2°	4553.2	4530.0	4516.7	4528.6	4460.9
3°	4389.2	4366.8	4342.5	4342.9	4267.2
4°	4165.9	4148.1	4107.2	4094.9	4051.1
5°	3890.8	3854.9	3819.4	3786.1	3742.3
6°	3586.7	3540.3	3489.7	3440.1	3395.2
7°	3229.0	3198.3	3131.3	3063.6	3025.6
8°	2892.7	2843.1	2764.9	2680.2	2648.0
9°	2531.1	2495.6	2405.8	2307.4	2275.2
10°	2203.1	2166.2	2067.4	1957.7	1929.5
11°	1895.4	1860.7	1757.9	1642.7	1612.7
12°	1635.1	1585.9	1467.9	1368.0	1338.7
13°	1376.0	1342.3	1230.4	1131.6	1074.8
14°	1155.5	1127.6	1026.3	939.4	879.3
15°	961.1	938.3	853.6	768.9	715.3
16°	788.4	774.3	707.3	625.5	581.7
17°	639.7	626.6	583.9	508.6	471.7
18°	516.6	514.8	479.3	414.1	381.2
19°	425.0	424.3	391.7	337.0	309.9
20°	339.2	343.9	318.9	271.1	252.7
21°	276.6	279.1	259.2	223.0	206.3
22°	225.2	227.0	213.9	184.3	175.2
23°	184.6	185.7	174.8	152.8	144.8
24°	152.0	152.8	143.0	127.4	120.5
25°	125.6	126.3	117.3	106.4	101.0
26°	104.3	105.0	97.0	89.4	84.0
27°	86.5	88.0	80.0	75.3	69.5
28°	73.8	74.2	67.0	64.1	58.6
29°	60.5	62.6	56.5	53.9	50.0
30°	51.8	52.9	48.1	46.3	42.7
32.5°	34.4	35.1	32.9	31.5	28.6
35°	23.2	23.5	23.2	21.0	19.2
37.5°	15.9	15.9	16.3	13.8	13.0
40°	10.9	10.9	11.2	9.4	9.0
42.5°	8.0	8.0	7.6	6.5	6.5
45°	5.8	5.8	5.4	5.1	5.1
47.5°	4.7	4.3	4.0	4.0	4.0
50°	3.6	3.6	3.3	2.9	3.3
52.5°	2.9	2.9	2.5	2.5	2.5
55°	2.5	2.2	1.8	1.8	2.2
57.5°	1.8	1.8	1.4	1.4	1.8
60°	1.8	1.4	1.1	1.4	1.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.1	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.4	0.4	0.7
72.5°	0.4	0.4	0.4	0.4	0.4
75°	0.4	0.4	0.4	0.4	0.4
77.5°	0.4	0.4	0.0	0.0	0.4
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°	1.4	1.1	1.1	1.1	1.1
65°	1.1	1.1	0.7	0.7	1.1



(END OF REPORT)