

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: P282160

Luminaire Tested: **LDA2B059030D010 EU2B05NFL259030 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282160  
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: LDA2B059030D010 EU2B05NFL259030 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC  
AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 583.1 lumens  
Efficiency: N/A  
Efficacy: 83.3 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

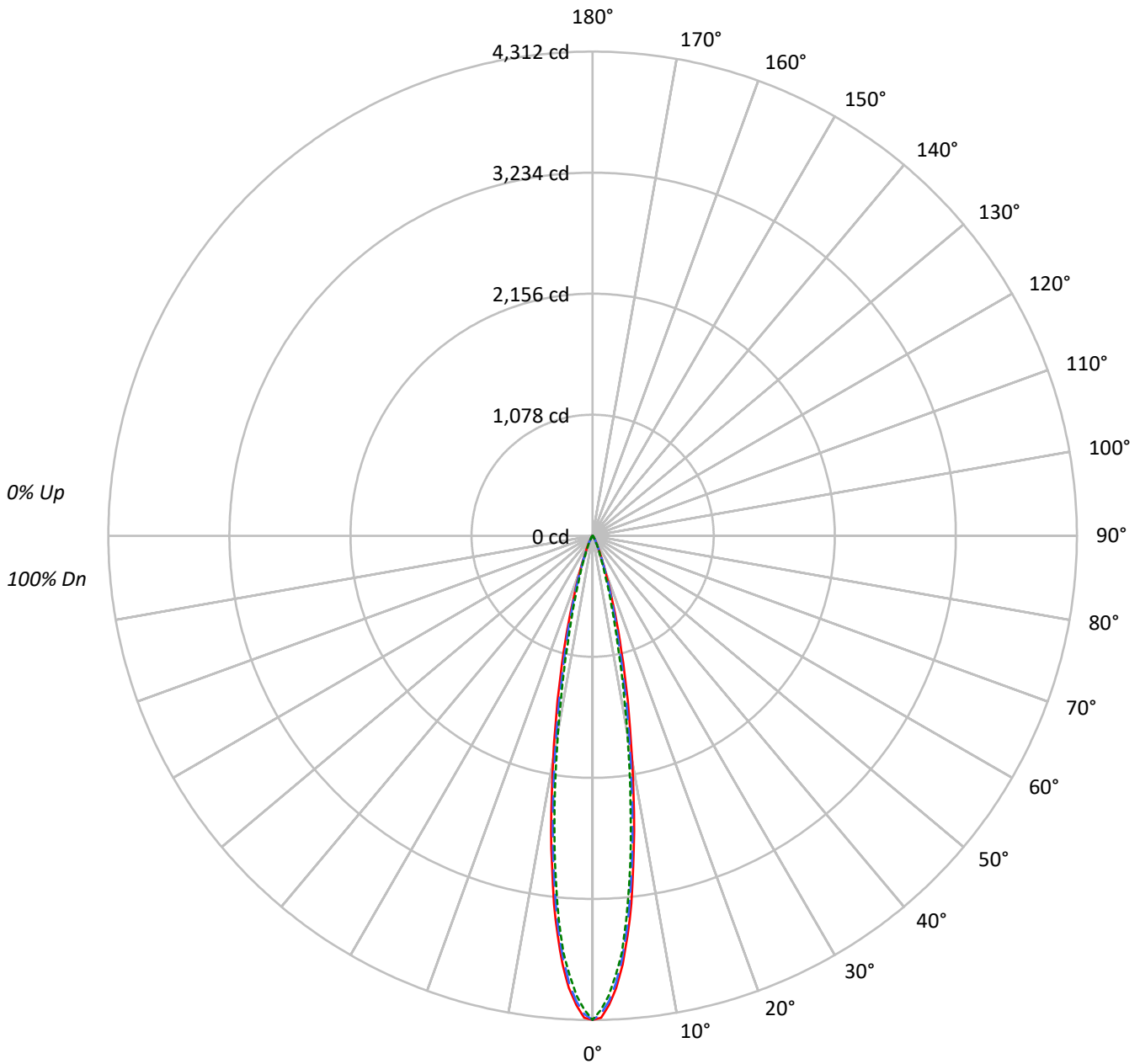
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P282160

CATALOG NUMBER: LDA2B059030D010 EU2B05NFL259030 2LBAPINSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P282160

CATALOG NUMBER: LDA2B059030D010 EU2B05NFL259030 2LBAPINSQ1MMS

**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°	2127179	2127179	2127179
5°	1770010	1737572	1702508
10°	1013869	951397	887924
15°	450955	400491	335624
20°	163598	153832	121858
25°	62820	58628	50517
30°	27117	25180	22332
35°	12829	12829	10600
40°	6440	6634	5346
45°	3698	3489	3279
50°	2533	2303	2303
55°	1978	1462	1720
60°	1677	987	1283
65°	1167	817	1167
70°	1010	433	1010
75°	572	572	572
80°	0	0	0
85°	0	0	0



TEST NUMBER: P282160

CATALOG NUMBER: LDA2B059030D010 EU2B05NFL259030 2LBAPINSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	280.4	48.1
10°-20°	226.9	38.9
20°-30°	54.7	9.4
30°-40°	14.0	2.4
40°-50°	4.2	0.7
50°-60°	1.8	0.3
60°-70°	0.9	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°	562.1	96.4
0°-40°	576.0	98.8
0°-60°	582.0	99.8
0°-90°	583.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	583.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4312	4312	4312	4312	4312	
5°	3574	3541	3508	3478	3438	289
15°	883	862	784	706	657	252
25°	115	116	108	98	93	60
35°	21	22	21	19	18	15
45°	5	5	5	5	5	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



TEST NUMBER: P282160

CATALOG NUMBER: LDA2B059030D010 EU2B05NFL259030 2LBAPINSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4311.6	4311.6	4311.6	4311.6	4311.6
1°	4292.3	4262.4	4258.7	4277.3	4222.5
2°	4182.5	4161.3	4149.0	4159.9	4097.8
3°	4031.9	4011.3	3989.0	3989.3	3919.8
4°	3826.7	3810.4	3772.9	3761.6	3721.3
5°	3574.0	3541.1	3508.5	3477.9	3437.7
6°	3294.7	3252.1	3205.6	3160.0	3118.8
7°	2966.2	2937.9	2876.4	2814.2	2779.3
8°	2657.2	2611.7	2539.9	2462.0	2432.4
9°	2325.0	2292.5	2210.0	2119.5	2089.9
10°	2023.8	1989.9	1899.1	1798.3	1772.4
11°	1741.1	1709.2	1614.8	1509.0	1481.4
12°	1502.0	1456.8	1348.4	1256.6	1229.7
13°	1263.9	1233.0	1130.3	1039.5	987.3
14°	1061.4	1035.8	942.7	862.9	807.7
15°	882.9	861.9	784.1	706.3	657.1
16°	724.2	711.3	649.8	574.6	534.4
17°	587.6	575.6	536.4	467.2	433.3
18°	474.5	472.9	440.3	380.4	350.2
19°	390.4	389.7	359.8	309.6	284.6
20°	311.6	315.9	293.0	249.1	232.1
21°	254.1	256.4	238.1	204.8	189.5
22°	206.8	208.5	196.5	169.3	160.9
23°	169.6	170.6	160.6	140.3	133.0
24°	139.7	140.3	131.3	117.1	110.7
25°	115.4	116.1	107.7	97.8	92.8
26°	95.8	96.4	89.1	82.1	77.1
27°	79.5	80.8	73.5	69.2	63.8
28°	67.8	68.2	61.5	58.9	53.9
29°	55.5	57.5	51.9	49.5	45.9
30°	47.6	48.5	44.2	42.6	39.2
32.5°	31.6	32.3	30.3	28.9	26.3
35°	21.3	21.6	21.3	19.3	17.6
37.5°	14.6	14.6	15.0	12.6	12.0
40°	10.0	10.0	10.3	8.6	8.3
42.5°	7.3	7.3	7.0	6.0	6.0
45°	5.3	5.3	5.0	4.7	4.7
47.5°	4.3	4.0	3.7	3.7	3.7
50°	3.3	3.3	3.0	2.7	3.0
52.5°	2.7	2.7	2.3	2.3	2.3
55°	2.3	2.0	1.7	1.7	2.0
57.5°	1.7	1.7	1.3	1.3	1.7
60°	1.7	1.3	1.0	1.3	1.3



TEST NUMBER: P282160

CATALOG NUMBER: LDA2B059030D010 EU2B05NFL259030 2LBAPINSQ1MMS

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	1.0	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.3	0.3	0.7
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	0.7	0.7	1.0



(END OF REPORT)