

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: P282646

Luminaire Tested: **LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282646  
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 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 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: 565.3 lumens  
Efficiency: N/A  
Efficacy: 80.8 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

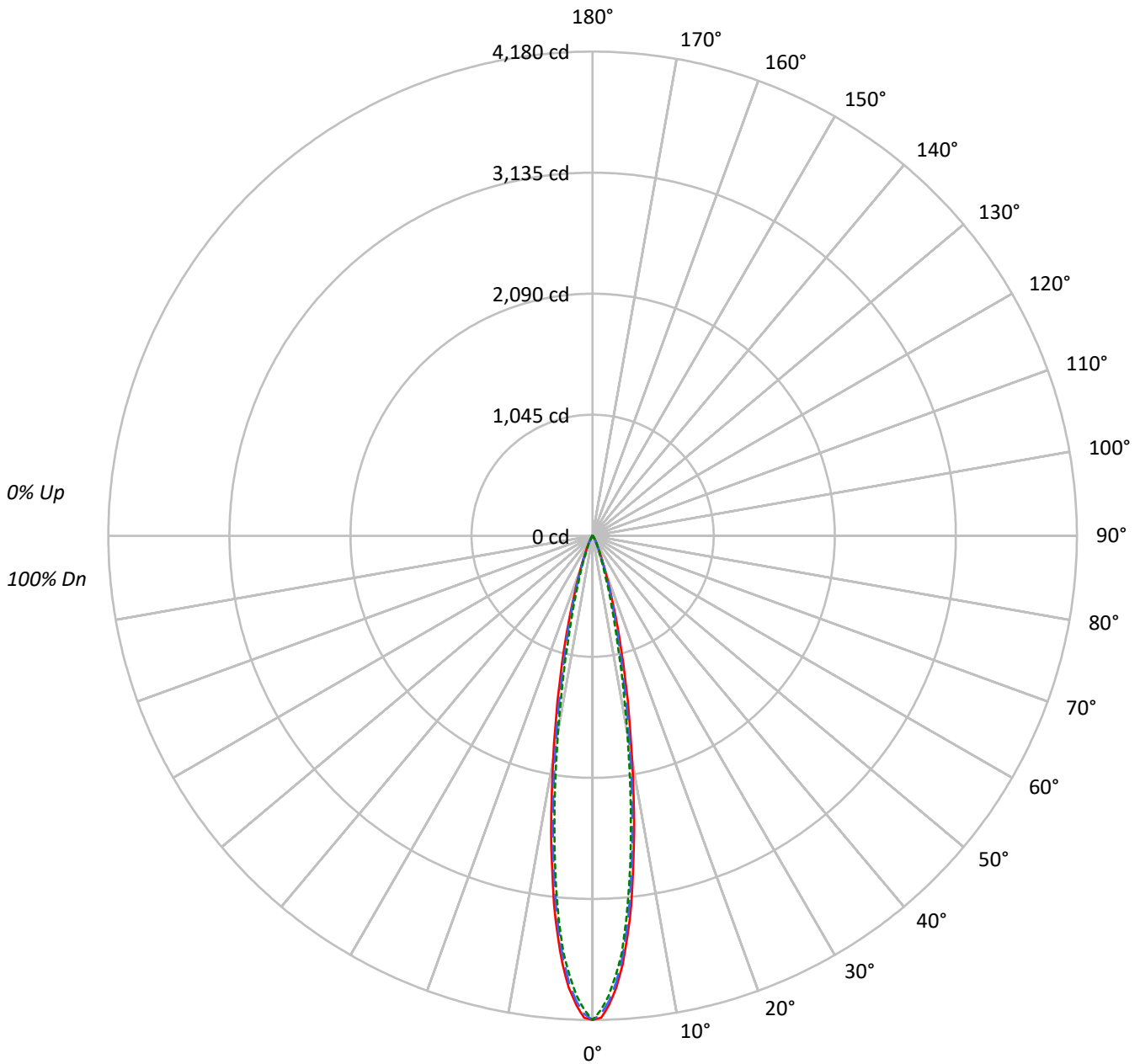
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P282646

CATALOG NUMBER: LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P282646

CATALOG NUMBER: LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MMS

**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°	2062400	2062400	2062400
5°	1716128	1684680	1650656
10°	982959	922391	860871
15°	437215	388284	325409
20°	158610	149107	118131
25°	60914	56886	48993
30°	26262	24439	21648
35°	12407	12407	10299
40°	6247	6440	5217
45°	3628	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



TEST NUMBER: P282646

CATALOG NUMBER: LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	271.9	48.1
10°-20°	220.0	38.9
20°-30°	53.1	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°	545.0	96.4
0°-40°	558.5	98.8
0°-60°	564.2	99.8
0°-90°	565.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	565.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4180	4180	4180	4180	4180	
5°	3465	3433	3402	3372	3333	280
15°	856	836	760	685	637	244
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



TEST NUMBER: P282646

CATALOG NUMBER: LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4180.3	4180.3	4180.3	4180.3	4180.3
1°	4161.6	4132.5	4129.0	4147.1	4093.9
2°	4055.2	4034.5	4022.6	4033.2	3973.0
3°	3909.1	3889.1	3867.5	3867.9	3800.5
4°	3710.2	3694.4	3658.0	3647.0	3608.0
5°	3465.2	3433.3	3401.7	3372.0	3333.0
6°	3194.4	3153.1	3108.0	3063.8	3023.8
7°	2875.8	2848.4	2788.8	2728.5	2694.6
8°	2576.3	2532.1	2462.5	2387.1	2358.4
9°	2254.2	2222.6	2142.7	2055.0	2026.3
10°	1962.1	1929.3	1841.2	1743.5	1718.4
11°	1688.1	1657.1	1565.6	1463.1	1436.3
12°	1456.3	1412.4	1307.3	1218.4	1192.2
13°	1225.4	1195.5	1095.8	1007.8	957.2
14°	1029.1	1004.3	914.0	836.6	783.1
15°	856.0	835.7	760.2	684.8	637.1
16°	702.2	689.6	630.0	557.1	518.1
17°	569.7	558.1	520.0	453.0	420.1
18°	460.1	458.5	426.9	368.8	339.5
19°	378.5	377.9	348.8	300.2	276.0
20°	302.1	306.3	284.0	241.5	225.0
21°	246.3	248.6	230.8	198.6	183.8
22°	200.5	202.1	190.5	164.1	156.0
23°	164.4	165.4	155.7	136.1	129.0
24°	135.4	136.1	127.3	113.5	107.4
25°	111.9	112.5	104.5	94.8	90.0
26°	92.9	93.5	86.4	79.6	74.8
27°	77.1	78.3	71.3	67.1	61.9
28°	65.8	66.1	59.6	57.1	52.2
29°	53.8	55.8	50.3	48.0	44.5
30°	46.1	47.1	42.9	41.3	38.0
32.5°	30.6	31.3	29.3	28.0	25.5
35°	20.6	21.0	20.6	18.7	17.1
37.5°	14.2	14.2	14.5	12.3	11.6
40°	9.7	9.7	10.0	8.4	8.1
42.5°	7.1	7.1	6.8	5.8	5.8
45°	5.2	5.2	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



TEST NUMBER: P282646

CATALOG NUMBER: LDA2B059035D010 EU2B05NFL259035 2LBALPINSQ1MMS

**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)