

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: P281681

Luminaire Tested: **LDA2B109040D010 EU2B10SP159040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B109040D010 EU2B10SP159040 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 925.2 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

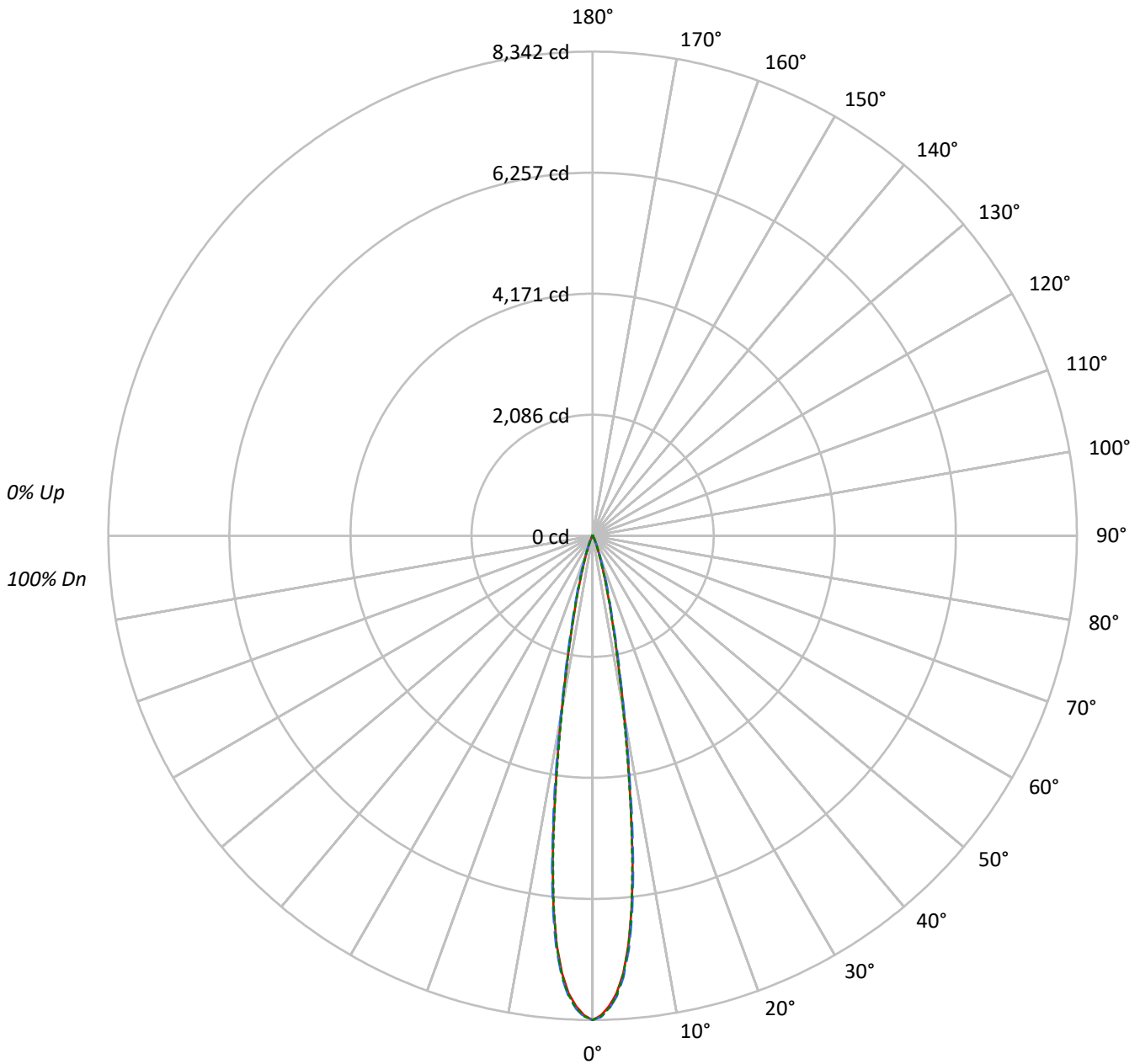
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281681

CATALOG NUMBER: LDA2B109040D010 EU2B10SP159040 2LBAPINSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P281681

CATALOG NUMBER: LDA2B109040D010 EU2B10SP159040 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	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	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98						98													
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96						96													
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94						94													
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93						93													
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91						91													
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89						89													
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88						88													
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87						87													
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85						85													
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84						84													

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4115772	4115772	4115772
5°	3504710	3541210	3511346
10°	1547304	1582673	1511134
15°	469496	538500	476851
20°	140497	187276	156982
25°	54709	53892	57539
30°	24383	22047	23186
35°	4939	4336	4336
40°	0	322	1352
45°	4326	3628	6489
50°	0	1151	3991
55°	0	0	1806
60°	0	493	2072
65°	0	0	1167
70°	0	3029	5914
75°	0	0	0
80°	0	0	0
85°	0	2830	11887



TEST NUMBER: P281681

CATALOG NUMBER: LDA2B109040D010 EU2B10SP159040 2LBAPINSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	540.8	58.4
10°-20°	308.9	33.4
20°-30°	58.6	6.3
30°-40°	10.6	1.2
40°-50°	2.8	0.3
50°-60°	2.1	0.2
60°-70°	0.3	0.0
70°-80°	0.5	0.1
80°-90°	0.6	0.1
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°	908.3	98.2
0°-40°	918.9	99.3
0°-60°	923.8	99.8
0°-90°	925.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	925.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8342	8342	8342	8342	8342	
5°	7077	7123	7150	7138	7090	537
15°	919	1000	1054	990	934	292
25°	100	108	99	113	106	53
35°	8	10	7	9	7	11
45°	6	10	5	6	9	3
55°	0	0	0	0	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	2	0
90°	0	0	0	0	0	



TEST NUMBER: P281681

CATALOG NUMBER: LDA2B109040D010 EU2B10SP159040 2LBAPINSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8342.3	8342.3	8342.3	8342.3	8342.3
1°	8263.5	8272.2	8290.8	8309.9	8280.0
2°	8108.8	8129.9	8156.2	8173.8	8141.3
3°	7892.3	7921.7	7949.5	7953.1	7922.7
4°	7557.7	7593.8	7623.2	7619.6	7581.4
5°	7076.7	7123.1	7150.4	7138.1	7090.1
6°	6441.1	6485.9	6521.0	6485.4	6421.0
7°	5649.2	5700.8	5737.9	5677.0	5598.2
8°	4731.6	4803.7	4840.9	4755.8	4674.8
9°	3862.4	3912.4	3950.0	3857.2	3774.7
10°	3088.6	3180.3	3159.2	3087.5	3016.4
11°	2429.2	2512.2	2515.8	2467.3	2397.7
12°	1901.8	1989.4	2011.6	1974.5	1912.6
13°	1502.8	1568.3	1604.9	1566.7	1507.9
14°	1196.0	1254.3	1301.2	1251.7	1192.9
15°	919.2	999.6	1054.3	990.3	933.6
16°	731.0	797.5	862.5	789.8	744.4
17°	561.4	620.7	687.7	621.7	584.6
18°	444.4	491.3	565.0	497.0	464.5
19°	348.0	383.6	452.1	392.3	366.0
20°	267.6	306.7	356.7	316.0	299.0
22.5°	161.9	183.5	198.0	185.6	176.8
25°	100.5	108.3	99.0	112.9	105.7
26°	87.6	93.3	91.2	100.5	91.8
27°	70.1	77.3	71.7	78.9	76.3
28°	63.9	72.7	61.3	70.1	66.0
29°	44.9	48.5	43.8	46.9	46.9
30°	42.8	43.8	38.7	42.3	40.7
32.5°	33.5	31.4	25.8	27.3	26.3
35°	8.2	10.3	7.2	8.8	7.2
37.5°	12.4	11.3	13.4	12.9	12.4
40°	0.0	0.5	0.5	0.5	2.1
42.5°	9.3	5.7	5.2	3.6	6.2
45°	6.2	9.8	5.2	5.7	9.3
47.5°	0.0	0.5	0.0	1.0	1.0
50°	0.0	1.0	1.5	2.1	5.2
52.5°	1.0	6.2	3.1	5.7	8.2
55°	0.0	0.5	0.0	0.5	2.1
57.5°	2.1	1.0	2.1	2.1	9.3
60°	0.0	1.0	0.5	0.5	2.1
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.0
67.5°	0.0	0.5	0.0	0.0	0.0



TEST NUMBER: P281681

CATALOG NUMBER: LDA2B109040D010 EU2B10SP159040 2LBAPINSQ1MMS

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.5	0.0	0.0
80°	0.0	0.5	0.0	0.0	0.0
82.5°	0.0	0.5	1.0	1.5	1.0
85°	0.0	0.5	0.5	0.5	2.1
87.5°	0.0	1.0	1.5	0.0	1.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093







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







70°	0.0	1.5	2.1	0.0	4.1
72.5°	0.0	2.6	0.5	0.5	0.0



(END OF REPORT)