

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: P282423

Luminaire Tested: **LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282423
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: LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MB
Description: PORTFOLIO 2IN ADJ 2000 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: 1553.9 lumens
Efficiency: N/A
Efficacy: 75.4 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

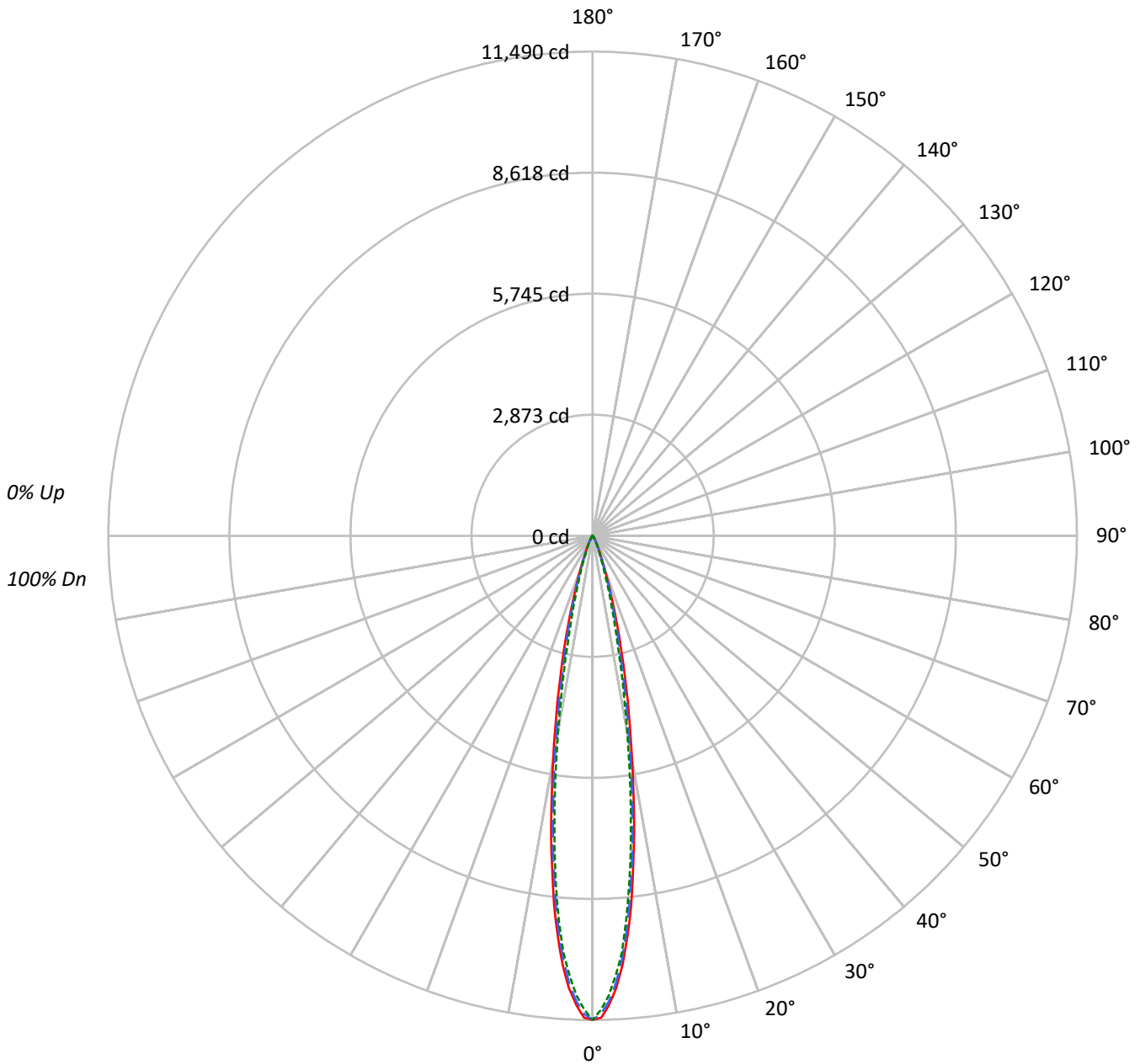
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282423

CATALOG NUMBER: LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MB

Luminous Intensity Polar Plot





TEST NUMBER: P282423

CATALOG NUMBER: LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	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
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5668579	5668579	5668579
5°	4716875	4630405	4536902
10°	2701796	2535323	2366144
15°	1201678	1067245	894351
20°	435928	409887	324728
25°	167392	156287	134567
30°	72179	67166	59589
35°	34149	34149	28307
40°	17131	17711	14298
45°	9908	9280	8652
50°	6831	6140	6140
55°	5333	3785	4559
60°	4342	2664	3454
65°	3152	2101	3152
70°	2596	1298	2596
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



TEST NUMBER: P282423

CATALOG NUMBER: LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	747.3	48.1
10°-20°	604.7	38.9
20°-30°	145.8	9.4
30°-40°	37.2	2.4
40°-50°	11.1	0.7
50°-60°	4.7	0.3
60°-70°	2.3	0.1
70°-80°	0.8	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°	1497.9	96.4
0°-40°	1535.0	98.8
0°-60°	1550.8	99.8
0°-90°	1553.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1553.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11490	11490	11490	11490	11490	
5°	9524	9436	9350	9268	9161	770
15°	2353	2297	2090	1882	1751	671
25°	308	309	287	260	247	159
35°	57	58	57	51	47	39
45°	14	14	13	12	12	12
55°	6	5	4	4	5	5
65°	3	3	2	2	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P282423

CATALOG NUMBER: LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11489.7	11489.7	11489.7	11489.7	11489.7
1°	11438.3	11358.6	11348.8	11398.4	11252.2
2°	11145.9	11089.2	11056.4	11085.6	10919.9
3°	10744.5	10689.5	10630.2	10631.0	10445.8
4°	10197.7	10154.3	10054.2	10024.0	9916.8
5°	9524.3	9436.5	9349.7	9268.2	9160.9
6°	8779.9	8666.5	8542.4	8421.0	8311.1
7°	7904.4	7829.1	7665.1	7499.4	7406.4
8°	7081.2	6959.8	6768.4	6561.0	6482.1
9°	6195.9	6109.1	5889.3	5648.3	5569.4
10°	5393.1	5302.7	5060.8	4792.3	4723.1
11°	4639.8	4554.8	4303.1	4021.3	3947.8
12°	4002.7	3882.2	3593.3	3348.7	3277.0
13°	3368.2	3285.8	3012.0	2770.1	2631.0
14°	2828.6	2760.3	2512.2	2299.5	2152.4
15°	2352.7	2296.9	2089.5	1882.2	1751.0
16°	1930.0	1895.5	1731.5	1531.3	1424.0
17°	1565.8	1533.9	1429.3	1245.0	1154.6
18°	1264.5	1260.1	1173.3	1013.7	933.1
19°	1040.3	1038.6	958.8	825.0	758.5
20°	830.3	841.8	780.7	663.7	618.5
21°	677.0	683.2	634.5	545.9	505.1
22°	551.2	555.6	523.7	451.0	428.9
23°	451.9	454.6	428.0	374.0	354.5
24°	372.2	374.0	350.0	311.9	295.1
25°	307.5	309.3	287.1	260.5	247.2
26°	255.2	257.0	237.5	218.9	205.6
27°	211.8	215.3	195.8	184.3	170.1
28°	180.8	181.7	163.9	156.8	143.6
29°	148.0	153.3	138.2	132.0	122.3
30°	126.7	129.4	117.9	113.4	104.6
32.5°	84.2	86.0	80.6	77.1	70.0
35°	56.7	57.6	56.7	51.4	47.0
37.5°	39.0	39.0	39.9	33.7	31.9
40°	26.6	26.6	27.5	23.0	22.2
42.5°	19.5	19.5	18.6	16.0	16.0
45°	14.2	14.2	13.3	12.4	12.4
47.5°	11.5	10.6	9.7	9.7	9.7
50°	8.9	8.9	8.0	7.1	8.0
52.5°	7.1	7.1	6.2	6.2	6.2
55°	6.2	5.3	4.4	4.4	5.3
57.5°	4.4	4.4	3.5	3.5	4.4
60°	4.4	3.5	2.7	3.5	3.5



TEST NUMBER: P282423

CATALOG NUMBER: LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MB

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.7	1.8	1.8	1.8	1.8
70°	1.8	1.8	0.9	0.9	1.8
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.0	0.0	0.9
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°	3.5	2.7	2.7	2.7	2.7
65°	2.7	2.7	1.8	1.8	2.7



(END OF REPORT)