

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: P282769

Luminaire Tested: **LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282769
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: LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 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: 1369.5 lumens
Efficiency: N/A
Efficacy: 66.5 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

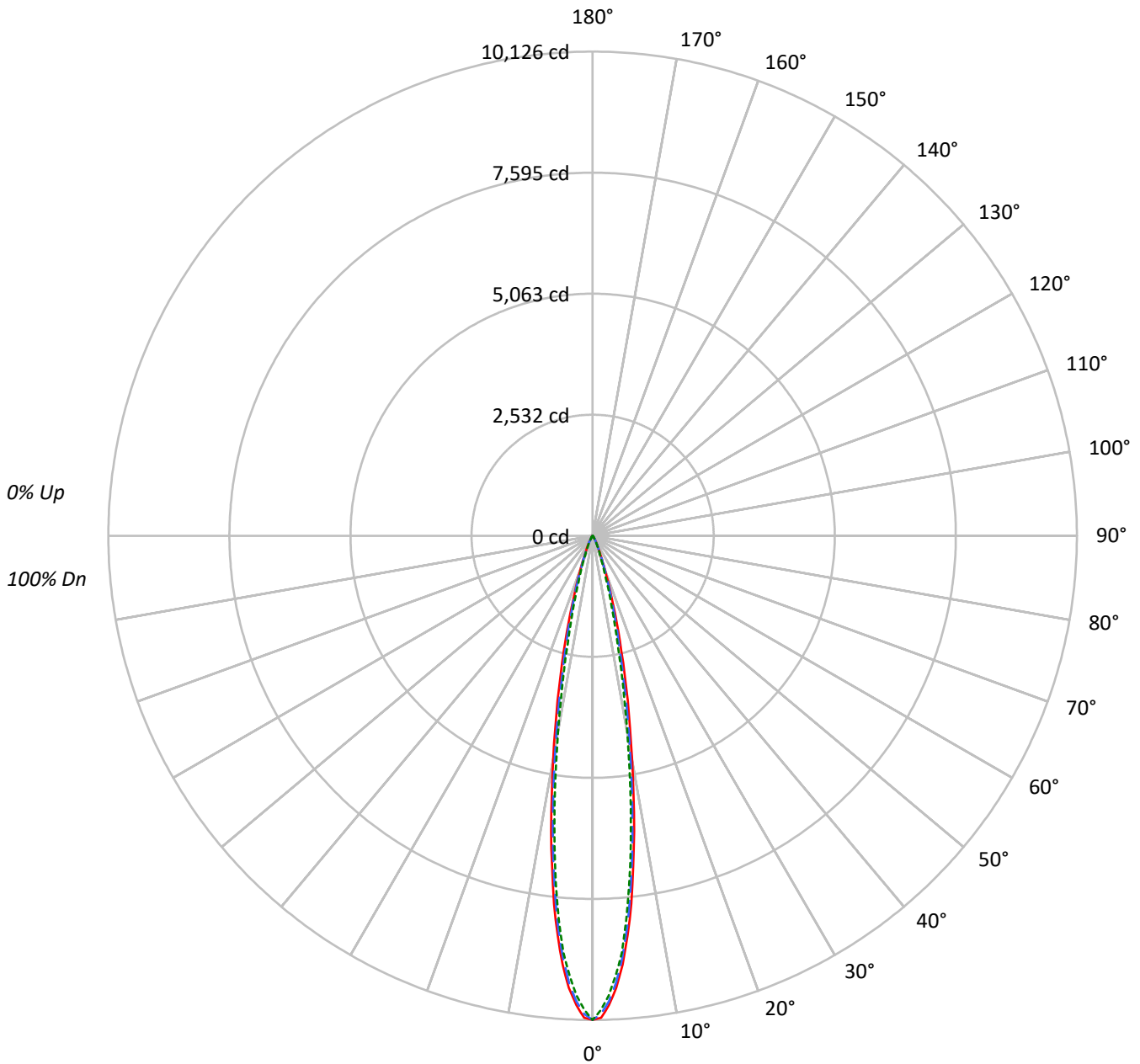
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282769

CATALOG NUMBER: LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P282769

CATALOG NUMBER: LDA2B209030D010 EU2B20NFL259030 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°	4995979	4995979	4995979
5°	4157197	4080978	3998619
10°	2381223	2234488	2085399
15°	1059073	940626	788265
20°	384213	361269	286191
25°	147523	137724	118617
30°	63634	59190	52525
35°	30114	30114	24935
40°	15070	15586	12559
45°	8721	8163	7605
50°	5987	5373	5373
55°	4731	3355	4043
60°	3848	2269	3059
65°	2685	1868	2685
70°	2308	1154	2308
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



TEST NUMBER: P282769

CATALOG NUMBER: LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	658.6	48.1
10°-20°	533.0	38.9
20°-30°	128.5	9.4
30°-40°	32.8	2.4
40°-50°	9.8	0.7
50°-60°	4.2	0.3
60°-70°	2.0	0.1
70°-80°	0.7	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°	1320.1	96.4
0°-40°	1352.9	98.8
0°-60°	1366.8	99.8
0°-90°	1369.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1369.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10126	10126	10126	10126	10126	
5°	8394	8317	8240	8168	8074	679
15°	2074	2024	1842	1659	1543	591
25°	271	273	253	230	218	140
35°	50	51	50	45	41	34
45°	12	12	12	11	11	11
55°	6	5	4	4	5	5
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P282769

CATALOG NUMBER: LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10126.4	10126.4	10126.4	10126.4	10126.4
1°	10081.1	10010.8	10002.2	10046.0	9917.1
2°	9823.4	9773.4	9744.5	9770.3	9624.2
3°	9469.6	9421.2	9368.8	9369.6	9206.4
4°	8987.7	8949.5	8861.2	8834.6	8740.1
5°	8394.2	8316.8	8240.3	8168.5	8074.0
6°	7738.1	7638.2	7528.8	7421.8	7325.0
7°	6966.5	6900.1	6755.6	6609.6	6527.6
8°	6241.0	6134.0	5965.3	5782.5	5713.0
9°	5460.7	5384.2	5190.5	4978.1	4908.6
10°	4753.2	4673.5	4460.3	4223.6	4162.7
11°	4089.3	4014.3	3792.5	3544.2	3479.3
12°	3527.8	3421.6	3166.9	2951.4	2888.1
13°	2968.6	2895.9	2654.6	2441.4	2318.8
14°	2492.9	2432.8	2214.1	2026.7	1897.0
15°	2073.5	2024.3	1841.6	1658.8	1543.3
16°	1701.0	1670.6	1526.1	1349.6	1255.1
17°	1380.0	1351.9	1259.7	1097.3	1017.6
18°	1114.5	1110.6	1034.0	893.5	822.4
19°	916.9	915.3	845.0	727.1	668.5
20°	731.8	741.9	688.1	585.0	545.1
21°	596.7	602.1	559.2	481.1	445.2
22°	485.8	489.7	461.6	397.5	378.0
23°	398.3	400.7	377.2	329.6	312.4
24°	328.0	329.6	308.5	274.9	260.1
25°	271.0	272.6	253.0	229.6	217.9
26°	224.9	226.5	209.3	192.9	181.2
27°	186.7	189.8	172.6	162.4	150.0
28°	159.3	160.1	144.5	138.2	126.5
29°	130.4	135.1	121.8	116.4	107.8
30°	111.7	114.0	103.9	100.0	92.2
32.5°	74.2	75.8	71.1	67.9	61.7
35°	50.0	50.8	50.0	45.3	41.4
37.5°	34.4	34.4	35.1	29.7	28.1
40°	23.4	23.4	24.2	20.3	19.5
42.5°	17.2	17.2	16.4	14.1	14.1
45°	12.5	12.5	11.7	10.9	10.9
47.5°	10.2	9.4	8.6	8.6	8.6
50°	7.8	7.8	7.0	6.2	7.0
52.5°	6.2	6.2	5.5	5.5	5.5
55°	5.5	4.7	3.9	3.9	4.7
57.5°	3.9	3.9	3.1	3.1	3.9
60°	3.9	3.1	2.3	3.1	3.1



TEST NUMBER: P282769

CATALOG NUMBER: LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.3	1.6	1.6	1.6	1.6
70°	1.6	1.6	0.8	0.8	1.6
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.0	0.0	0.8
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°	3.1	2.3	2.3	2.3	2.3
65°	2.3	2.3	1.6	1.6	2.3



(END OF REPORT)