

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: P283765

Luminaire Tested: **LDA2B209035D010 EU2B20FL409035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209035D010 EU2B20FL409035 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1362.4 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

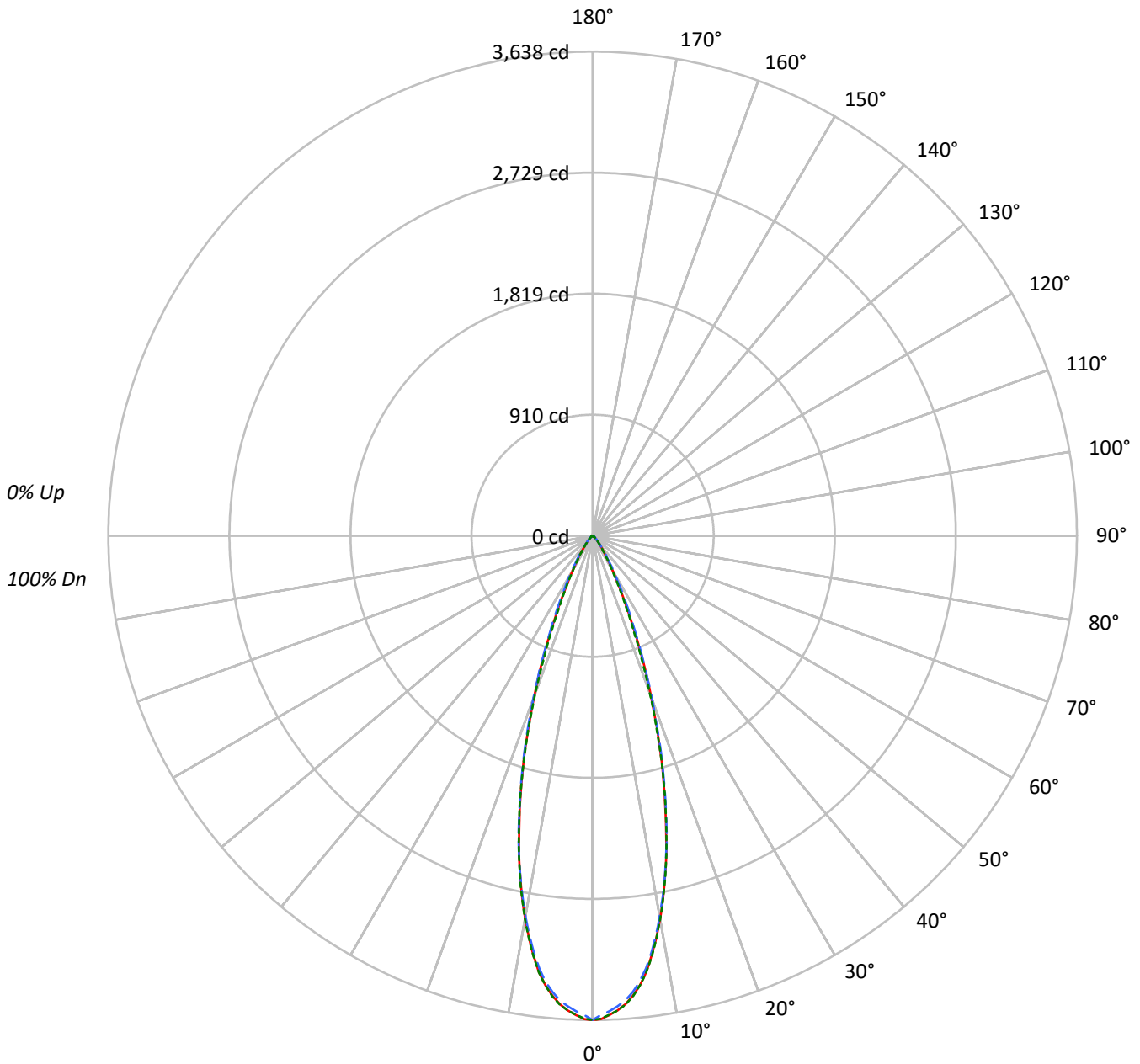
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1794998	1794998	1794998
5°	1717861	1704985	1720486
10°	1463542	1454324	1465045
15°	1078686	1085735	1082210
20°	673397	685840	658538
25°	347849	373216	330375
30°	166747	191186	158942
35°	86066	95281	80586
40°	48238	50686	45791
45°	29304	29304	28258
50°	15274	18805	15274
55°	7913	12472	8515
60°	9078	9078	9078
65°	9806	9806	9806
70°	12117	10963	12117
75°	11628	11628	11628
80°	10796	10796	10796
85°	8491	8491	8491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.0	23.0
10°-20°	574.8	42.2
20°-30°	311.6	22.9
30°-40°	100.0	7.3
40°-50°	34.1	2.5
50°-60°	12.0	0.9
60°-70°	8.7	0.6
70°-80°	6.3	0.5
80°-90°	1.8	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°	1199.4	88.0
0°-40°	1299.5	95.4
0°-60°	1345.5	98.8
0°-90°	1362.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1362.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3638	3638	3638	3638	3638	
5°	3469	3447	3443	3477	3474	314
15°	2112	2130	2126	2136	2119	573
25°	639	668	686	638	607	306
35°	143	149	158	144	134	96
45°	42	43	42	42	40	33
55°	9	12	14	12	10	10
65°	8	9	8	9	8	9
75°	6	6	6	6	6	6
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3638.3	3638.3	3638.3	3638.3	3638.3
1°	3632.2	3606.2	3602.4	3636.1	3628.4
2°	3603.2	3578.7	3574.9	3608.5	3601.7
3°	3571.1	3548.9	3541.3	3576.4	3571.8
4°	3528.3	3507.6	3500.8	3535.9	3532.1
5°	3468.7	3447.3	3442.7	3477.1	3474.0
6°	3395.3	3377.7	3369.3	3403.7	3397.6
7°	3303.6	3287.5	3278.3	3303.6	3306.6
8°	3184.3	3176.7	3166.0	3191.2	3191.2
9°	3057.4	3050.6	3039.1	3062.0	3062.0
10°	2921.4	2916.8	2903.0	2924.4	2924.4
11°	2772.3	2770.0	2760.1	2777.7	2777.7
12°	2615.6	2621.0	2611.8	2627.1	2621.8
13°	2458.9	2456.6	2457.4	2468.9	2460.5
14°	2281.6	2295.4	2297.7	2304.5	2291.5
15°	2111.9	2129.5	2125.7	2135.6	2118.8
16°	1938.4	1958.3	1957.5	1959.8	1943.8
17°	1776.4	1787.8	1788.6	1786.3	1766.4
18°	1603.6	1619.7	1619.7	1615.9	1592.2
19°	1434.7	1446.9	1455.3	1446.9	1419.4
20°	1282.6	1291.0	1306.3	1284.9	1254.3
21°	1136.6	1144.2	1157.2	1132.0	1098.4
22°	996.7	1006.7	1018.9	989.8	954.7
23°	866.0	888.9	893.5	853.8	824.0
24°	746.0	772.0	779.6	739.1	707.8
25°	639.0	668.0	685.6	638.2	606.9
26°	546.5	574.8	596.2	548.8	519.0
27°	465.5	495.3	517.5	473.1	444.9
28°	395.9	425.0	447.9	406.6	379.9
29°	344.0	360.8	383.7	349.3	324.9
30°	292.7	311.1	335.6	300.4	279.0
32.5°	201.0	211.0	230.1	208.7	191.9
35°	142.9	149.0	158.2	143.7	133.8
37.5°	101.7	104.7	110.1	101.7	96.3
40°	74.9	76.4	78.7	74.1	71.1
42.5°	55.8	56.6	56.6	55.0	53.5
45°	42.0	42.8	42.0	42.0	40.5
47.5°	30.6	32.9	32.1	32.1	29.8
50°	19.9	24.5	24.5	23.7	19.9
52.5°	12.2	16.8	19.1	16.8	13.0
55°	9.2	11.5	14.5	11.5	9.9
57.5°	9.2	9.2	10.7	9.2	9.2
60°	9.2	9.2	9.2	9.2	9.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	8.4	8.4	8.4	8.4	8.4
70°	8.4	8.4	7.6	8.4	8.4
72.5°	7.6	7.6	6.9	7.6	6.9
75°	6.1	6.1	6.1	6.1	6.1
77.5°	4.6	4.6	4.6	4.6	4.6
80°	3.8	3.8	3.8	3.8	3.8
82.5°	2.3	2.3	2.3	3.1	2.3
85°	1.5	1.5	1.5	1.5	1.5
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	9.2	9.2	9.2	9.2	9.2
65°	8.4	9.2	8.4	9.2	8.4



(END OF REPORT)