

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: P283775

Luminaire Tested: **LDA2B209050D010 EU2B20FL409050 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283775
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: LDA2B209050D010 EU2B20FL409050 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1461.5 lumens
Efficiency: N/A
Efficacy: 70.9 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

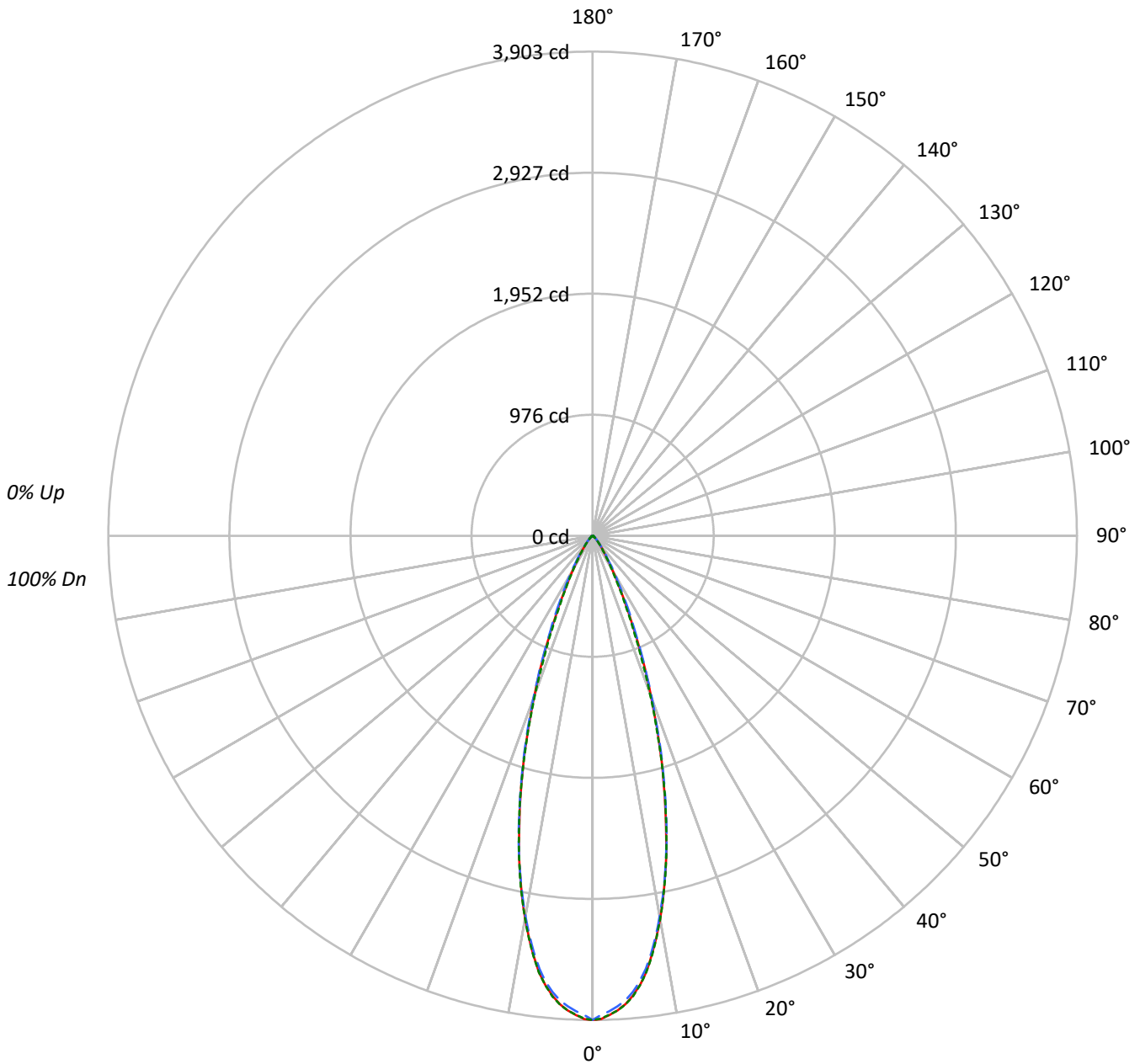
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1925690	1925690	1925690
5°	1842911	1829093	1845734
10°	1570099	1560229	1571702
15°	1157242	1164750	1161022
20°	722434	735770	706473
25°	373162	400380	354436
30°	178938	205087	170507
35°	92330	102208	86428
40°	51781	54421	49140
45°	31467	31467	30351
50°	16348	20109	16348
55°	8429	13418	9204
60°	9670	9670	9670
65°	10507	10507	10507
70°	12982	11828	12982
75°	12581	12581	12581
80°	11649	11649	11649
85°	9057	9057	9057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.7	23.0
10°-20°	616.7	42.2
20°-30°	334.3	22.9
30°-40°	107.3	7.3
40°-50°	36.6	2.5
50°-60°	12.8	0.9
60°-70°	9.3	0.6
70°-80°	6.8	0.5
80°-90°	1.9	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°	1286.8	88.0
0°-40°	1394.1	95.4
0°-60°	1443.5	98.8
0°-90°	1461.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1461.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3903	3903	3903	3903	3903	
5°	3721	3698	3693	3730	3727	336
15°	2266	2284	2280	2291	2273	614
25°	686	717	736	685	651	329
35°	153	160	170	154	144	103
45°	45	46	45	45	44	36
55°	10	12	16	12	11	11
65°	9	10	9	10	9	9
75°	7	7	7	7	7	7
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°	3903.2	3903.2	3903.2	3903.2	3903.2
1°	3896.7	3868.8	3864.7	3900.8	3892.6
2°	3865.5	3839.3	3835.2	3871.2	3863.9
3°	3831.1	3807.3	3799.1	3836.8	3831.9
4°	3785.1	3763.0	3755.6	3793.3	3789.2
5°	3721.2	3698.2	3693.3	3730.2	3726.9
6°	3642.5	3623.6	3614.6	3651.5	3644.9
7°	3544.1	3526.8	3517.0	3544.1	3547.3
8°	3416.1	3407.9	3396.5	3423.5	3423.5
9°	3280.0	3272.6	3260.3	3284.9	3284.9
10°	3134.1	3129.1	3114.4	3137.3	3137.3
11°	2974.2	2971.7	2961.0	2979.9	2979.9
12°	2806.1	2811.8	2802.0	2818.4	2812.6
13°	2638.0	2635.5	2636.3	2648.6	2639.6
14°	2447.7	2462.5	2464.9	2472.3	2458.4
15°	2265.7	2284.5	2280.4	2291.1	2273.1
16°	2079.5	2100.8	2100.0	2102.5	2085.3
17°	1905.7	1918.0	1918.8	1916.3	1895.0
18°	1720.4	1737.6	1737.6	1733.5	1708.1
19°	1539.1	1552.3	1561.3	1552.3	1522.7
20°	1376.0	1385.0	1401.4	1378.4	1345.6
21°	1219.3	1227.5	1241.5	1214.4	1178.3
22°	1069.3	1079.9	1093.1	1061.9	1024.2
23°	929.1	953.7	958.6	915.9	884.0
24°	800.3	828.2	836.4	792.9	759.3
25°	685.5	716.7	735.5	684.7	651.1
26°	586.3	616.6	639.6	588.8	556.8
27°	499.4	531.4	555.1	507.6	477.2
28°	424.8	455.9	480.5	436.2	407.5
29°	369.0	387.0	411.6	374.7	348.5
30°	314.1	333.7	360.0	322.3	299.3
32.5°	215.7	226.3	246.8	223.9	205.8
35°	153.3	159.9	169.7	154.2	143.5
37.5°	109.1	112.3	118.1	109.1	103.3
40°	80.4	82.0	84.5	79.5	76.3
42.5°	59.9	60.7	60.7	59.0	57.4
45°	45.1	45.9	45.1	45.1	43.5
47.5°	32.8	35.3	34.4	34.4	32.0
50°	21.3	26.2	26.2	25.4	21.3
52.5°	13.1	18.0	20.5	18.0	13.9
55°	9.8	12.3	15.6	12.3	10.7
57.5°	9.8	9.8	11.5	9.8	9.8
60°	9.8	9.8	9.8	9.8	9.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	9.0	9.0	9.0	9.0	9.0
70°	9.0	9.0	8.2	9.0	9.0
72.5°	8.2	8.2	7.4	8.2	7.4
75°	6.6	6.6	6.6	6.6	6.6
77.5°	4.9	4.9	4.9	4.9	4.9
80°	4.1	4.1	4.1	4.1	4.1
82.5°	2.5	2.5	2.5	3.3	2.5
85°	1.6	1.6	1.6	1.6	1.6
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°	9.8	9.8	9.8	9.8	9.8
65°	9.0	9.8	9.0	9.8	9.0



(END OF REPORT)