

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: P284099

Luminaire Tested: **LDA2B209035D010 EU2B20WFL559035 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P284099  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-61)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209035D010 EU2B20WFL559035 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH WIDE FLOOD OPTIC AND  
2in Adj SQ Pinhole w-lens, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1447.7 lumens  
Efficiency: N/A  
Efficacy: 70.3 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

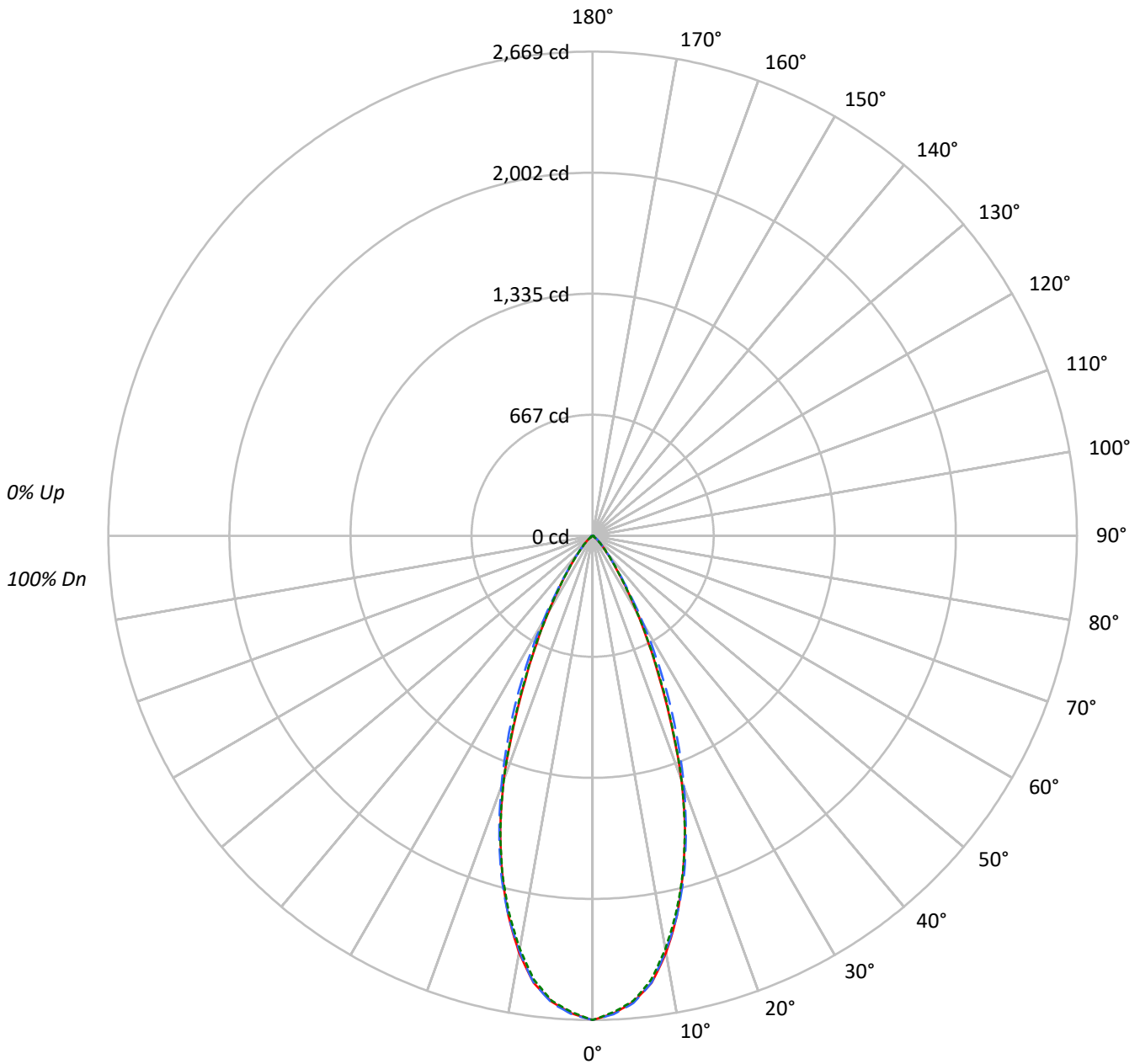
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	101	98	107	103	99	96	100	97	94	97	94	92	94	92	90	89																			
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84																			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79																			
5	95	88	82	79	94	87	82	78	85	81	78	84	80	77	82	79	76	75																			
6	91	83	78	74	90	82	77	74	81	77	73	80	76	73	78	75	72	71																			
7	87	79	74	70	86	78	73	70	77	73	69	76	72	69	75	71	69	67																			
8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64																			
9	81	72	67	63	80	71	66	63	71	66	63	70	66	63	69	65	62	61																			
10	77	69	64	60	76	68	63	60	68	63	60	67	63	60	66	62	60	58																			

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

	0°	45°	90°
0°	1316832	1316832	1316832
5°	1277240	1280360	1274566
10°	1169120	1164461	1157447
15°	983428	992520	981794
20°	752045	771996	750785
25°	477571	538431	486880
30°	277721	313555	282621
35°	146837	156172	147319
40°	77478	81020	77478
45°	43328	44933	43887
50°	20263	25636	20263
55°	7311	14020	7999
60°	8387	8387	8387
65°	9106	9923	9106
70°	11251	10097	11251
75°	10293	10293	10293
80°	11081	8808	11081
85°	9057	9057	9057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.3	16.5
10°-20°	530.5	36.6
20°-30°	428.4	29.6
30°-40°	169.3	11.7
40°-50°	52.0	3.6
50°-60°	13.4	0.9
60°-70°	8.1	0.6
70°-80°	5.9	0.4
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°	1197.2	82.7
0°-40°	1366.5	94.4
0°-60°	1431.9	98.9
0°-90°	1447.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1447.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2579	2584	2585	2580	2574	239
15°	1925	1931	1943	1935	1922	529
25°	877	919	989	936	894	408
35°	244	251	259	252	245	163
45°	62	63	64	64	63	51
55°	8	12	16	12	9	11
65°	8	8	8	8	8	8
75°	5	5	5	5	5	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°	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2635.7	2637.3	2639.6	2636.5	2628.7
5°	2579.0	2583.7	2585.3	2579.8	2573.6
7.5°	2485.9	2480.4	2485.1	2475.8	2468.0
10°	2333.7	2326.7	2324.4	2310.4	2310.4
12.5°	2145.8	2143.5	2145.1	2138.1	2127.2
15°	1925.4	1930.8	1943.2	1935.4	1922.2
17.5°	1691.7	1699.4	1710.3	1708.0	1690.1
20°	1432.4	1454.9	1470.4	1455.7	1430.0
22.5°	1137.4	1185.5	1225.1	1194.0	1152.1
25°	877.3	919.2	989.1	936.3	894.4
27.5°	665.3	695.6	759.3	707.3	678.5
30°	487.5	506.2	550.4	516.3	496.1
32.5°	348.6	361.8	380.4	360.2	350.1
35°	243.8	250.8	259.3	251.5	244.6
37.5°	171.6	173.9	180.1	173.9	170.8
40°	120.3	121.1	125.8	121.9	120.3
42.5°	87.0	87.0	89.3	87.7	87.0
45°	62.1	62.9	64.4	63.7	62.9
47.5°	44.3	45.8	45.8	46.6	43.5
50°	26.4	32.6	33.4	32.6	26.4
52.5°	14.0	19.4	24.1	19.4	14.0
55°	8.5	11.6	16.3	11.6	9.3
57.5°	8.5	8.5	10.9	9.3	8.5
60°	8.5	8.5	8.5	8.5	8.5
62.5°	8.5	8.5	8.5	8.5	8.5
65°	7.8	8.5	8.5	8.5	7.8
67.5°	7.8	7.8	7.8	7.8	7.8
70°	7.8	7.8	7.0	7.8	7.8
72.5°	7.0	7.0	6.2	7.0	7.0
75°	5.4	5.4	5.4	5.4	5.4
77.5°	4.7	4.7	4.7	4.7	4.7
80°	3.9	3.9	3.1	3.9	3.9
82.5°	2.3	2.3	2.3	2.3	2.3
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°







(END OF REPORT)