

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: P283749

Luminaire Tested: **LDA2B209027D010 EU2B20FL409027 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283749  
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: LDA2B209027D010 EU2B20FL409027 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MB  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1319.0 lumens  
Efficiency: N/A  
Efficacy: 64.0 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

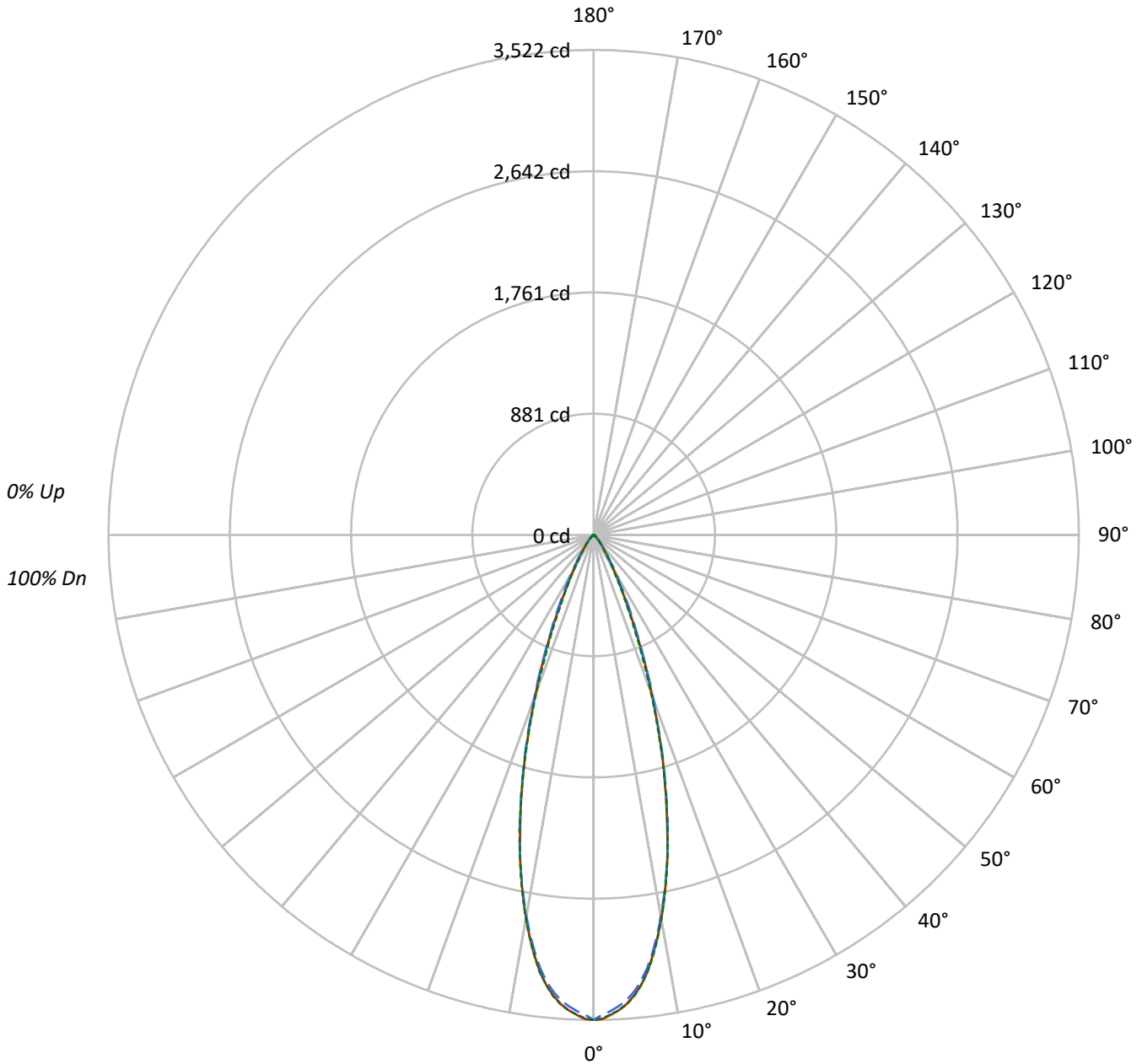
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1737867	1737867	1737867
5°	1663136	1650706	1665712
10°	1416951	1408034	1418404
15°	1044363	1051156	1047734
20°	651976	663999	637590
25°	336798	361349	319869
30°	161449	185091	153872
35°	83356	92270	77996
40°	46693	49076	44310
45°	28397	28397	27351
50°	14737	18191	14737
55°	7655	12128	8257
60°	8782	8782	8782
65°	9456	9456	9456
70°	11684	10674	11684
75°	11247	11247	11247
80°	10512	10512	10512
85°	8491	8491	8491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	303.0	23.0
10°-20°	556.5	42.2
20°-30°	301.7	22.9
30°-40°	96.8	7.3
40°-50°	33.0	2.5
50°-60°	11.6	0.9
60°-70°	8.4	0.6
70°-80°	6.1	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°	1161.3	88.0
0°-40°	1258.1	95.4
0°-60°	1302.7	98.8
0°-90°	1319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1319.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3522	3522	3522	3522	3522	
5°	3358	3338	3333	3366	3363	304
15°	2045	2062	2058	2068	2051	554
25°	619	647	664	618	588	296
35°	138	144	153	139	130	93
45°	41	41	41	41	39	32
55°	9	11	14	11	10	10
65°	8	9	8	9	8	8
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°	3522.5	3522.5	3522.5	3522.5	3522.5
1°	3516.6	3491.4	3487.7	3520.3	3512.9
2°	3488.5	3464.8	3461.1	3493.7	3487.0
3°	3457.4	3435.9	3428.5	3462.6	3458.1
4°	3416.0	3396.0	3389.3	3423.4	3419.7
5°	3358.2	3337.5	3333.1	3366.4	3363.4
6°	3287.2	3270.2	3262.0	3295.3	3289.4
7°	3198.4	3182.8	3174.0	3198.4	3201.3
8°	3082.9	3075.5	3065.2	3089.6	3089.6
9°	2960.1	2953.4	2942.3	2964.5	2964.5
10°	2828.4	2823.9	2810.6	2831.3	2831.3
11°	2684.1	2681.8	2672.2	2689.2	2689.2
12°	2532.4	2537.5	2528.7	2543.5	2538.3
13°	2380.7	2378.4	2379.2	2390.3	2382.1
14°	2209.0	2222.3	2224.5	2231.2	2218.6
15°	2044.7	2061.7	2058.0	2067.6	2051.3
16°	1876.7	1895.9	1895.2	1897.4	1881.9
17°	1719.8	1730.9	1731.7	1729.4	1710.2
18°	1552.6	1568.1	1568.1	1564.4	1541.5
19°	1389.0	1400.9	1409.0	1400.9	1374.2
20°	1241.8	1249.9	1264.7	1244.0	1214.4
21°	1100.4	1107.8	1120.4	1096.0	1063.4
22°	965.0	974.6	986.5	958.3	924.3
23°	838.4	860.6	865.1	826.6	797.7
24°	722.3	747.4	754.8	715.6	685.3
25°	618.7	646.8	663.8	617.9	587.6
26°	529.1	556.5	577.2	531.3	502.5
27°	450.7	479.5	501.0	458.1	430.7
28°	383.3	411.5	433.7	393.7	367.8
29°	333.0	349.3	371.5	338.2	314.5
30°	283.4	301.2	324.9	290.8	270.1
32.5°	194.6	204.2	222.7	202.0	185.7
35°	138.4	144.3	153.2	139.1	129.5
37.5°	98.4	101.4	106.6	98.4	93.2
40°	72.5	74.0	76.2	71.8	68.8
42.5°	54.0	54.8	54.8	53.3	51.8
45°	40.7	41.4	40.7	40.7	39.2
47.5°	29.6	31.8	31.1	31.1	28.9
50°	19.2	23.7	23.7	22.9	19.2
52.5°	11.8	16.3	18.5	16.3	12.6
55°	8.9	11.1	14.1	11.1	9.6
57.5°	8.9	8.9	10.4	8.9	8.9
60°	8.9	8.9	8.9	8.9	8.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	8.1	8.1	8.1	8.1	8.1
70°	8.1	8.1	7.4	8.1	8.1
72.5°	7.4	7.4	6.7	7.4	6.7
75°	5.9	5.9	5.9	5.9	5.9
77.5°	4.4	4.4	4.4	4.4	4.4
80°	3.7	3.7	3.7	3.7	3.7
82.5°	2.2	2.2	2.2	3.0	2.2
85°	1.5	1.5	1.5	1.5	1.5
87.5°	0.7	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	8.9	8.9	8.9	8.9	8.9
65°	8.1	8.9	8.1	8.9	8.1



(END OF REPORT)