

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: P283712

Luminaire Tested: **LDA2B208027D010 EU2B20FL408027 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283712  
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: LDA2B208027D010 EU2B20FL408027 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1729.1 lumens  
Efficiency: N/A  
Efficacy: 83.9 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

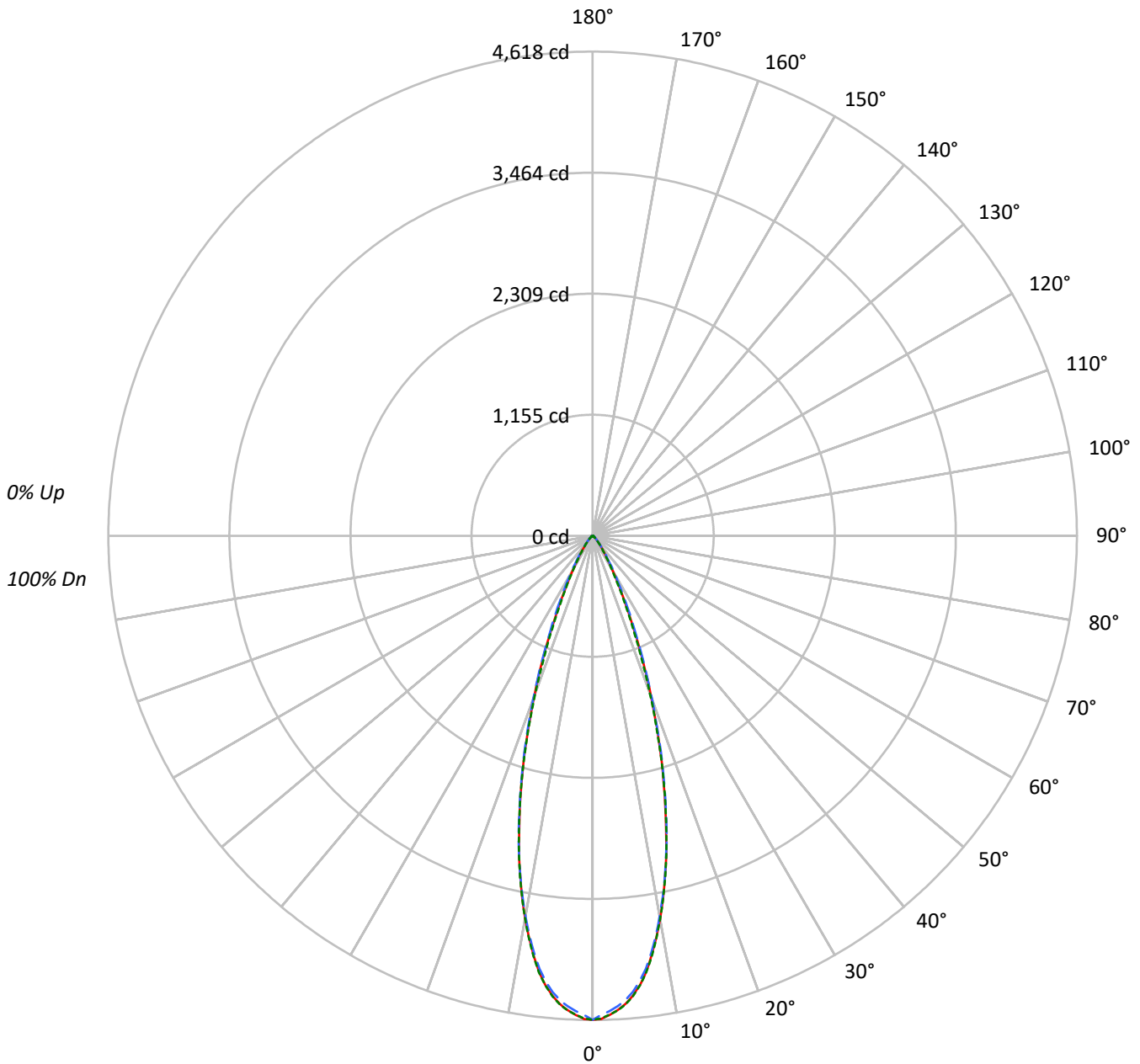
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2278197	2278197	2278197
5°	2180223	2163880	2183591
10°	1857456	1845784	1859410
15°	1369056	1377944	1373500
20°	854635	870438	835787
25°	441480	473706	419324
30°	211638	242629	201726
35°	109254	120939	102268
40°	61248	64339	58092
45°	37258	37258	35863
50°	19342	23794	19342
55°	9978	15827	10838
60°	11446	11446	11446
65°	12491	12491	12491
70°	15435	13992	15435
75°	14868	14868	14868
80°	13922	13922	13922
85°	10755	10755	10755



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	397.2	23.0
10°-20°	729.6	42.2
20°-30°	395.5	22.9
30°-40°	127.0	7.3
40°-50°	43.3	2.5
50°-60°	15.1	0.9
60°-70°	11.0	0.6
70°-80°	8.1	0.5
80°-90°	2.3	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°	1522.3	88.0
0°-40°	1649.3	95.4
0°-60°	1707.7	98.8
0°-90°	1729.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1729.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4618	4618	4618	4618	4618	
5°	4402	4375	4369	4413	4409	398
15°	2680	2703	2698	2710	2689	727
25°	811	848	870	810	770	389
35°	181	189	201	182	170	122
45°	53	54	53	53	51	42
55°	12	15	18	15	13	13
65°	11	12	11	12	11	11
75°	8	8	8	8	8	8
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°	4617.7	4617.7	4617.7	4617.7	4617.7
1°	4609.9	4576.9	4572.1	4614.8	4605.1
2°	4573.0	4542.0	4537.2	4579.8	4571.1
3°	4532.3	4504.2	4494.5	4539.1	4533.3
4°	4478.0	4451.8	4443.1	4487.7	4482.8
5°	4402.3	4375.1	4369.3	4413.0	4409.1
6°	4309.2	4286.9	4276.2	4319.9	4312.1
7°	4192.8	4172.4	4160.8	4192.8	4196.6
8°	4041.4	4031.7	4018.2	4050.2	4050.2
9°	3880.4	3871.7	3857.1	3886.2	3886.2
10°	3707.7	3701.9	3684.4	3711.6	3711.6
11°	3518.5	3515.6	3503.0	3525.3	3525.3
12°	3319.7	3326.5	3314.8	3334.2	3327.4
13°	3120.8	3117.9	3118.9	3133.4	3122.7
14°	2895.7	2913.2	2916.1	2924.8	2908.4
15°	2680.4	2702.7	2697.8	2710.5	2689.1
16°	2460.2	2485.4	2484.4	2487.3	2467.0
17°	2254.5	2269.1	2270.0	2267.1	2241.9
18°	2035.3	2055.6	2055.6	2050.8	2020.7
19°	1820.9	1836.4	1847.1	1836.4	1801.5
20°	1627.8	1638.5	1657.9	1630.7	1591.9
21°	1442.5	1452.2	1468.7	1436.7	1394.0
22°	1265.0	1277.6	1293.1	1256.3	1211.7
23°	1099.1	1128.2	1134.0	1083.6	1045.8
24°	946.8	979.8	989.5	938.1	898.3
25°	811.0	847.9	870.2	810.0	770.3
26°	693.6	729.5	756.7	696.5	658.7
27°	590.8	628.6	656.8	600.5	564.6
28°	502.5	539.4	568.5	516.1	482.1
29°	436.5	457.9	487.0	443.3	412.3
30°	371.5	394.8	425.9	381.2	354.1
32.5°	255.1	267.7	292.0	264.8	243.5
35°	181.4	189.2	200.8	182.4	169.8
37.5°	129.0	132.9	139.7	129.0	122.2
40°	95.1	97.0	99.9	94.1	90.2
42.5°	70.8	71.8	71.8	69.8	67.9
45°	53.4	54.3	53.4	53.4	51.4
47.5°	38.8	41.7	40.7	40.7	37.8
50°	25.2	31.0	31.0	30.1	25.2
52.5°	15.5	21.3	24.3	21.3	16.5
55°	11.6	14.6	18.4	14.6	12.6
57.5°	11.6	11.6	13.6	11.6	11.6
60°	11.6	11.6	11.6	11.6	11.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	10.7	10.7	10.7	10.7	10.7
70°	10.7	10.7	9.7	10.7	10.7
72.5°	9.7	9.7	8.7	9.7	8.7
75°	7.8	7.8	7.8	7.8	7.8
77.5°	5.8	5.8	5.8	5.8	5.8
80°	4.9	4.9	4.9	4.9	4.9
82.5°	2.9	2.9	2.9	3.9	2.9
85°	1.9	1.9	1.9	1.9	1.9
87.5°	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	11.6	11.6	11.6	11.6	11.6
65°	10.7	11.6	10.7	11.6	10.7



(END OF REPORT)