

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: P283716

Luminaire Tested: **LDA2B208027D010 EU2B20FL408027 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283716  
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 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1571.9 lumens  
Efficiency: N/A  
Efficacy: 76.3 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

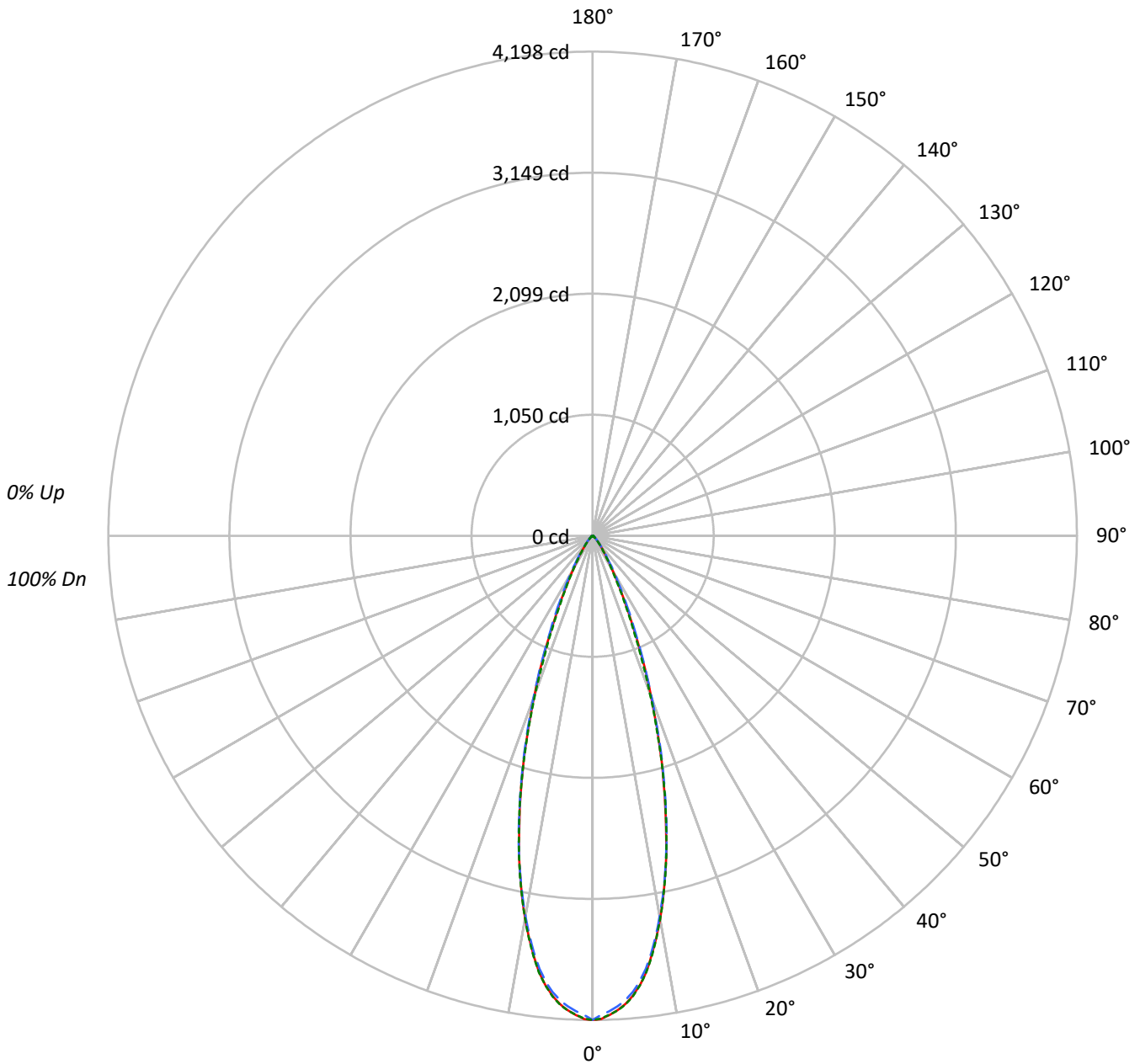
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2071083	2071083	2071083
5°	1982025	1967168	1985096
10°	1688629	1678008	1690382
15°	1244583	1252704	1248669
20°	776931	791317	759816
25°	401360	430647	381164
30°	192440	220582	183382
35°	99317	109977	92932
40°	55645	58479	52811
45°	33839	33839	32583
50°	17577	21644	17577
55°	9118	14451	9892
60°	10459	10459	10459
65°	11324	11324	11324
70°	13992	12694	13992
75°	13534	13534	13534
80°	12501	12501	12501
85°	10189	10189	10189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	361.1	23.0
10°-20°	663.2	42.2
20°-30°	359.6	22.9
30°-40°	115.4	7.3
40°-50°	39.3	2.5
50°-60°	13.8	0.9
60°-70°	10.0	0.6
70°-80°	7.3	0.5
80°-90°	2.1	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°	1383.9	88.0
0°-40°	1499.3	95.4
0°-60°	1552.5	98.8
0°-90°	1571.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1571.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4198	4198	4198	4198	4198	
5°	4002	3977	3972	4012	4008	362
15°	2437	2457	2453	2464	2445	661
25°	737	771	791	736	700	353
35°	165	172	183	166	154	111
45°	48	49	48	48	47	39
55°	11	13	17	13	12	12
65°	10	11	10	11	10	10
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°	4197.9	4197.9	4197.9	4197.9	4197.9
1°	4190.8	4160.8	4156.4	4195.2	4186.4
2°	4157.3	4129.1	4124.7	4163.5	4155.6
3°	4120.3	4094.7	4085.9	4126.5	4121.2
4°	4070.9	4047.1	4039.1	4079.7	4075.3
5°	4002.1	3977.4	3972.1	4011.8	4008.3
6°	3917.4	3897.2	3887.5	3927.1	3920.1
7°	3811.6	3793.1	3782.5	3811.6	3815.1
8°	3674.0	3665.2	3652.9	3682.0	3682.0
9°	3527.6	3519.7	3506.5	3532.9	3532.9
10°	3370.7	3365.4	3349.5	3374.2	3374.2
11°	3198.7	3196.0	3184.6	3204.9	3204.9
12°	3017.9	3024.1	3013.5	3031.1	3024.9
13°	2837.1	2834.5	2835.3	2848.6	2838.9
14°	2632.5	2648.4	2651.0	2659.0	2644.0
15°	2436.7	2457.0	2452.6	2464.1	2444.7
16°	2236.5	2259.4	2258.6	2261.2	2242.7
17°	2049.6	2062.8	2063.7	2061.0	2038.1
18°	1850.2	1868.8	1868.8	1864.4	1837.0
19°	1655.3	1669.5	1679.2	1669.5	1637.7
20°	1479.8	1489.5	1507.2	1482.5	1447.2
21°	1311.4	1320.2	1335.2	1306.1	1267.3
22°	1150.0	1161.5	1175.6	1142.1	1101.5
23°	999.2	1025.7	1031.0	985.1	950.7
24°	860.7	890.7	899.5	852.8	816.6
25°	737.3	770.8	791.1	736.4	700.2
26°	630.6	663.2	687.9	633.2	598.8
27°	537.1	571.5	597.1	545.9	513.3
28°	456.8	490.3	516.8	469.2	438.3
29°	396.9	416.3	442.7	403.0	374.8
30°	337.8	358.9	387.2	346.6	321.9
32.5°	231.9	243.4	265.5	240.8	221.4
35°	164.9	172.0	182.6	165.8	154.3
37.5°	117.3	120.8	127.0	117.3	111.1
40°	86.4	88.2	90.8	85.5	82.0
42.5°	64.4	65.3	65.3	63.5	61.7
45°	48.5	49.4	48.5	48.5	46.7
47.5°	35.3	37.9	37.0	37.0	34.4
50°	22.9	28.2	28.2	27.3	22.9
52.5°	14.1	19.4	22.0	19.4	15.0
55°	10.6	13.2	16.8	13.2	11.5
57.5°	10.6	10.6	12.3	10.6	10.6
60°	10.6	10.6	10.6	10.6	10.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	9.7	9.7	9.7	9.7	9.7
70°	9.7	9.7	8.8	9.7	9.7
72.5°	8.8	8.8	7.9	8.8	7.9
75°	7.1	7.1	7.1	7.1	7.1
77.5°	5.3	5.3	5.3	5.3	5.3
80°	4.4	4.4	4.4	4.4	4.4
82.5°	2.6	2.6	2.6	3.5	2.6
85°	1.8	1.8	1.8	1.8	1.8
87.5°	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	10.6	10.6	10.6	10.6	10.6
65°	9.7	10.6	9.7	10.6	9.7



(END OF REPORT)