

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: P314837

Luminaire Tested: **LDA2B20SP8035D010 PIN1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P314837  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-8)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B20SP8035D010 PIN1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj PinHole, Black oculus black finish  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2025.0 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

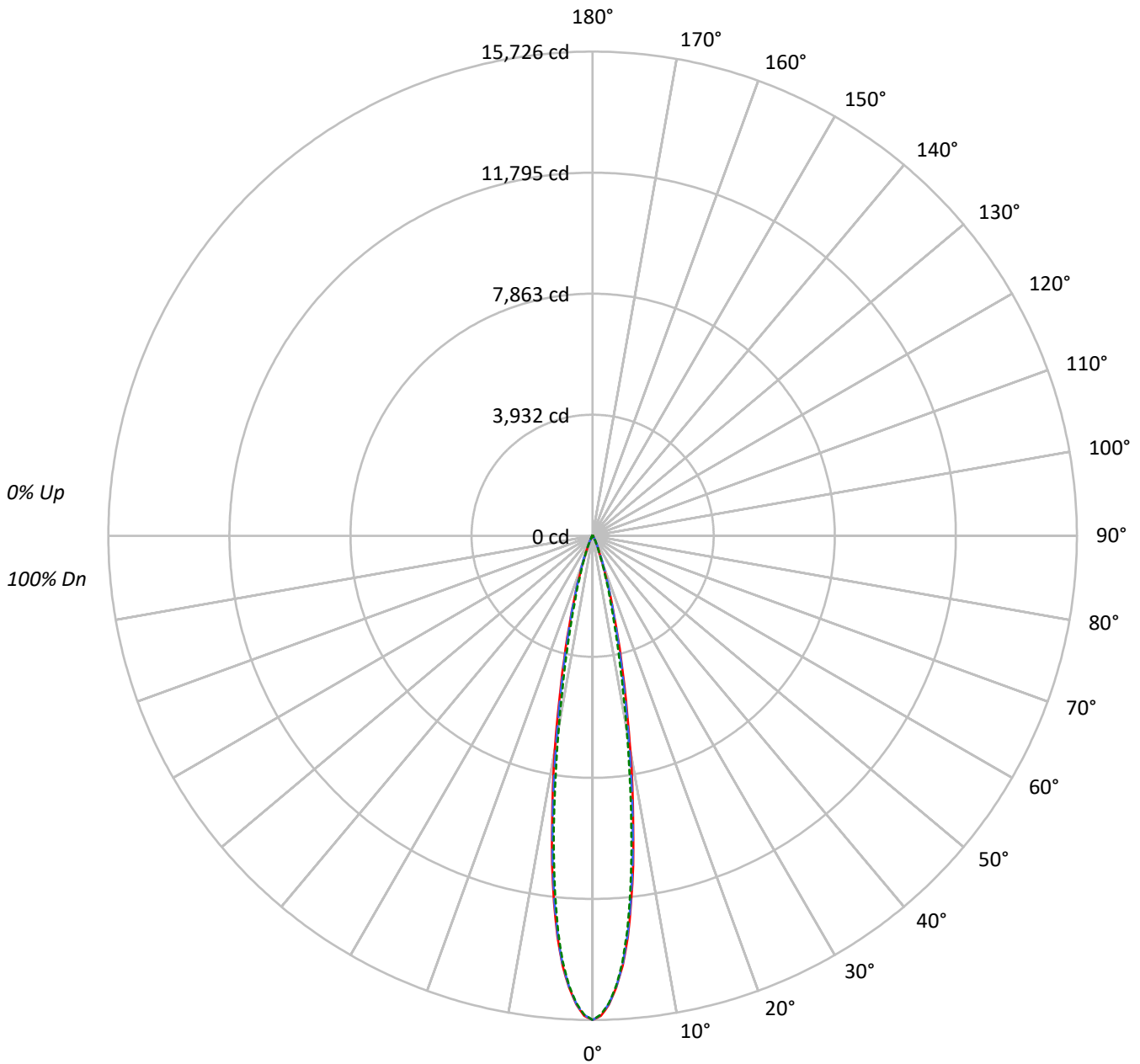
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				100															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	101	101	100	98	99	98	96	95				95															
3	109	105	102	99	107	104	101	98	101	99	97	99	97	95	97	95	94	93				93															
4	106	102	98	96	105	101	97	95	99	96	94	97	95	93	95	93	92	91				91															
5	104	99	95	92	103	98	95	92	96	94	91	95	92	91	94	92	90	89				89															
6	101	96	92	90	100	95	92	90	94	91	89	93	90	89	92	90	88	87				87															
7	99	94	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	85				85															
8	97	92	88	86	96	91	88	85	90	87	85	89	87	85	89	86	85	84				84															
9	95	90	86	84	95	89	86	84	88	86	83	88	85	83	87	85	83	82				82															
10	93	88	84	82	93	87	84	82	87	84	82	86	84	82	86	83	82	81				81															

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

	0°	45°	90°
0°	7758361	7758361	7758361
5°	6481784	6450732	6374415
10°	3531457	3393890	3176668
15°	1400111	1364408	1171237
20°	470475	502711	415452
25°	163255	176374	156668
30°	59703	65172	63805
35°	38426	44991	34089
40°	20158	24023	24795
45°	18490	14303	13466
50°	11129	7368	5526
55°	0	0	0
60°	7104	7104	2368
65°	5603	1401	0
70°	0	5193	6924
75°	0	11437	0
80°	0	0	0
85°	0	6793	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1028.2	50.8
10°-20°	765.3	37.8
20°-30°	169.2	8.4
30°-40°	37.6	1.9
40°-50°	15.4	0.8
50°-60°	2.6	0.1
60°-70°	2.6	0.1
70°-80°	2.1	0.1
80°-90°	2.0	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°	1962.7	96.9
0°-40°	2000.3	98.8
0°-60°	2018.3	99.7
0°-90°	2025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2025.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15726	15726	15726	15726	15726	
5°	13088	13034	13025	12976	12871	1043
15°	2741	2733	2671	2422	2293	806
25°	300	335	324	300	288	163
35°	64	64	75	60	57	37
45°	26	22	20	20	19	16
55°	0	0	0	0	0	3
65°	5	2	1	0	0	5
75°	0	0	6	0	0	1
85°	0	1	1	4	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15725.5	15725.5	15725.5	15725.5	15725.5
1°	15596.7	15532.8	15564.1	15582.2	15555.7
2°	15232.9	15155.9	15205.2	15210.1	15183.6
3°	14691.0	14656.0	14671.7	14677.7	14624.7
4°	13997.3	13946.7	13957.5	13944.3	13879.2
5°	13088.0	13033.8	13025.3	12975.9	12871.2
6°	11976.3	11945.0	11888.4	11804.1	11664.4
7°	10785.2	10759.9	10662.3	10510.6	10349.2
8°	9479.6	9479.6	9338.7	9129.2	8944.9
9°	8244.0	8198.2	8018.7	7765.8	7587.6
10°	7049.2	6987.8	6774.6	6518.1	6341.0
11°	5918.3	5853.3	5648.5	5386.0	5222.2
12°	4941.6	4906.6	4747.6	4458.6	4294.8
13°	4116.6	4070.8	3931.1	3657.7	3518.0
14°	3397.5	3339.7	3227.7	2977.2	2841.1
15°	2741.2	2732.7	2671.3	2422.0	2293.1
16°	2240.1	2235.3	2177.5	1934.2	1881.2
17°	1798.1	1823.4	1806.6	1582.5	1522.3
18°	1399.5	1450.1	1462.1	1259.8	1199.6
19°	1126.1	1174.3	1194.7	1017.7	967.1
20°	896.1	941.8	957.5	825.0	791.3
22.5°	508.2	569.7	572.1	503.4	468.5
25°	299.9	334.8	324.0	299.9	287.8
26°	251.7	285.4	268.6	261.3	251.7
27°	212.0	234.9	221.6	209.6	218.0
28°	175.8	191.5	178.2	181.9	168.6
29°	139.7	166.2	146.9	150.5	139.7
30°	104.8	128.9	114.4	120.4	112.0
32.5°	78.3	85.5	75.9	85.5	85.5
35°	63.8	63.8	74.7	60.2	56.6
37.5°	28.9	22.9	25.3	20.5	24.1
40°	31.3	34.9	37.3	31.3	38.5
42.5°	21.7	28.9	28.9	19.3	33.7
45°	26.5	21.7	20.5	20.5	19.3
47.5°	12.0	8.4	9.6	10.8	16.9
50°	14.5	6.0	9.6	14.5	7.2
52.5°	4.8	0.0	6.0	0.0	2.4
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	1.2	2.4	0.0
60°	7.2	8.4	7.2	4.8	2.4
62.5°	12.0	2.4	3.6	4.8	0.0
65°	4.8	2.4	1.2	0.0	0.0
67.5°	0.0	0.0	3.6	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	6.0	0.0	0.0
77.5°	2.4	0.0	4.8	0.0	0.0
80°	0.0	2.4	0.0	0.0	0.0
82.5°	0.0	0.0	6.0	4.8	0.0
85°	0.0	1.2	1.2	3.6	0.0
87.5°	0.0	3.6	4.8	1.2	2.4
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	3.6	2.4	4.8
72.5°	0.0	1.2	4.8	7.2	2.4



(END OF REPORT)