

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: P314816

Luminaire Tested: **LDA2B15SP9040D010 PIN1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P314816  
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: LDA2B15SP9040D010 PIN1MB  
Description: PORTFOLIO 2IN ADJ 1500 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: 1231.1 lumens  
Efficiency: N/A  
Efficacy: 87.3 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

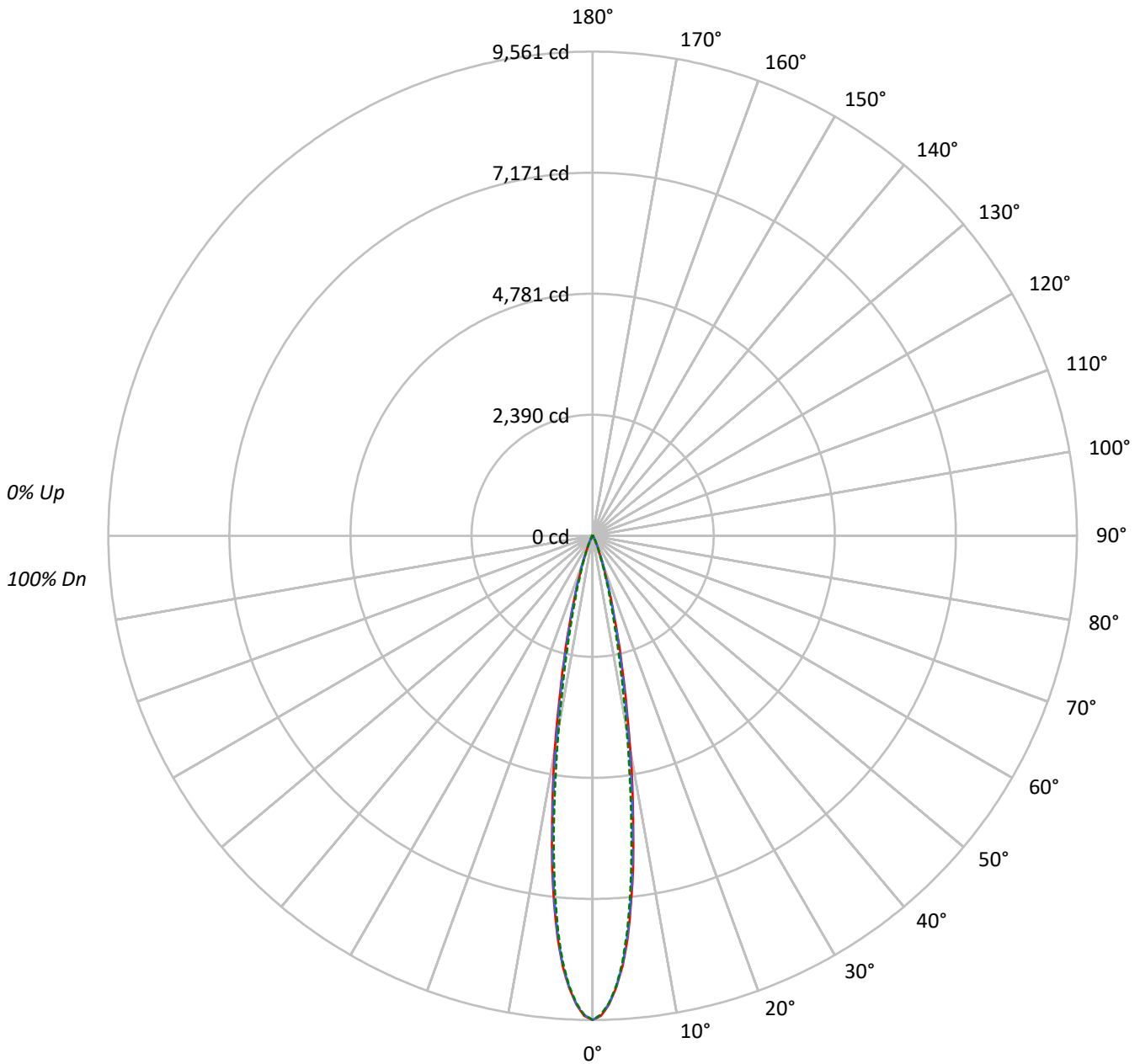
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4716835	4716835	4716835
5°	3940675	3921806	3875402
10°	2147019	2063356	1931300
15°	851191	829535	712058
20°	286033	305617	252589
25°	99238	107240	95264
30°	36289	39650	38796
35°	23369	27344	20719
40°	12237	14620	15070
45°	11233	8652	8163
50°	6754	4528	3377
55°	0	0	0
60°	4342	4342	1480
65°	3385	817	0
70°	0	3173	4183
75°	0	7053	0
80°	0	0	0
85°	0	3962	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	625.1	50.8
10°-20°	465.3	37.8
20°-30°	102.9	8.4
30°-40°	22.9	1.9
40°-50°	9.3	0.8
50°-60°	1.6	0.1
60°-70°	1.6	0.1
70°-80°	1.3	0.1
80°-90°	1.2	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°	1193.3	96.9
0°-40°	1216.1	98.8
0°-60°	1227.0	99.7
0°-90°	1231.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1231.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9561	9561	9561	9561	9561	
5°	7957	7924	7919	7889	7825	634
15°	1666	1661	1624	1472	1394	490
25°	182	204	197	182	175	99
35°	39	39	45	37	34	22
45°	16	13	12	12	12	10
55°	0	0	0	0	0	2
65°	3	2	1	0	0	3
75°	0	0	4	0	0	1
85°	0	1	1	2	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9560.6	9560.6	9560.6	9560.6	9560.6
1°	9482.2	9443.4	9462.5	9473.4	9457.3
2°	9261.1	9214.2	9244.3	9247.2	9231.1
3°	8931.6	8910.4	8919.9	8923.6	8891.3
4°	8509.8	8479.1	8485.7	8477.6	8438.1
5°	7957.0	7924.1	7918.9	7888.9	7825.2
6°	7281.2	7262.1	7227.7	7176.5	7091.5
7°	6557.0	6541.6	6482.3	6390.1	6292.0
8°	5763.3	5763.3	5677.6	5550.2	5438.2
9°	5012.0	4984.2	4875.1	4721.3	4613.0
10°	4285.7	4248.3	4118.7	3962.8	3855.1
11°	3598.1	3558.6	3434.1	3274.5	3174.9
12°	3004.3	2983.1	2886.4	2710.7	2611.1
13°	2502.7	2474.9	2390.0	2223.7	2138.8
14°	2065.6	2030.4	1962.3	1810.0	1727.3
15°	1666.5	1661.4	1624.1	1472.5	1394.1
16°	1361.9	1359.0	1323.9	1175.9	1143.7
17°	1093.2	1108.6	1098.3	962.1	925.5
18°	850.8	881.6	888.9	765.9	729.3
19°	684.6	713.9	726.4	618.7	588.0
20°	544.8	572.6	582.1	501.6	481.1
22.5°	309.0	346.3	347.8	306.1	284.8
25°	182.3	203.6	197.0	182.3	175.0
26°	153.0	173.5	163.3	158.9	153.0
27°	128.9	142.8	134.7	127.4	132.5
28°	106.9	116.4	108.4	110.6	102.5
29°	84.9	101.0	89.3	91.5	84.9
30°	63.7	78.3	69.6	73.2	68.1
32.5°	47.6	52.0	46.1	52.0	52.0
35°	38.8	38.8	45.4	36.6	34.4
37.5°	17.6	13.9	15.4	12.4	14.6
40°	19.0	21.2	22.7	19.0	23.4
42.5°	13.2	17.6	17.6	11.7	20.5
45°	16.1	13.2	12.4	12.4	11.7
47.5°	7.3	5.1	5.9	6.6	10.3
50°	8.8	3.7	5.9	8.8	4.4
52.5°	2.9	0.0	3.7	0.0	1.5
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.7	1.5	0.0
60°	4.4	5.1	4.4	2.9	1.5
62.5°	7.3	1.5	2.2	2.9	0.0
65°	2.9	1.5	0.7	0.0	0.0
67.5°	0.0	0.0	2.2	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	3.7	0.0	0.0
77.5°	1.5	0.0	2.9	0.0	0.0
80°	0.0	1.5	0.0	0.0	0.0
82.5°	0.0	0.0	3.7	2.9	0.0
85°	0.0	0.7	0.7	2.2	0.0
87.5°	0.0	2.2	2.9	0.7	1.5
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	2.2	1.5	2.9
72.5°	0.0	0.7	2.9	4.4	1.5



(END OF REPORT)