

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: P314723

Luminaire Tested: **LDA2B05SP9027D010 PIN1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P314723  
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: LDA2B05SP9027D010 PIN1MB  
Description: PORTFOLIO 2IN ADJ 500 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: 615.7 lumens  
Efficiency: N/A  
Efficacy: 88.0 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

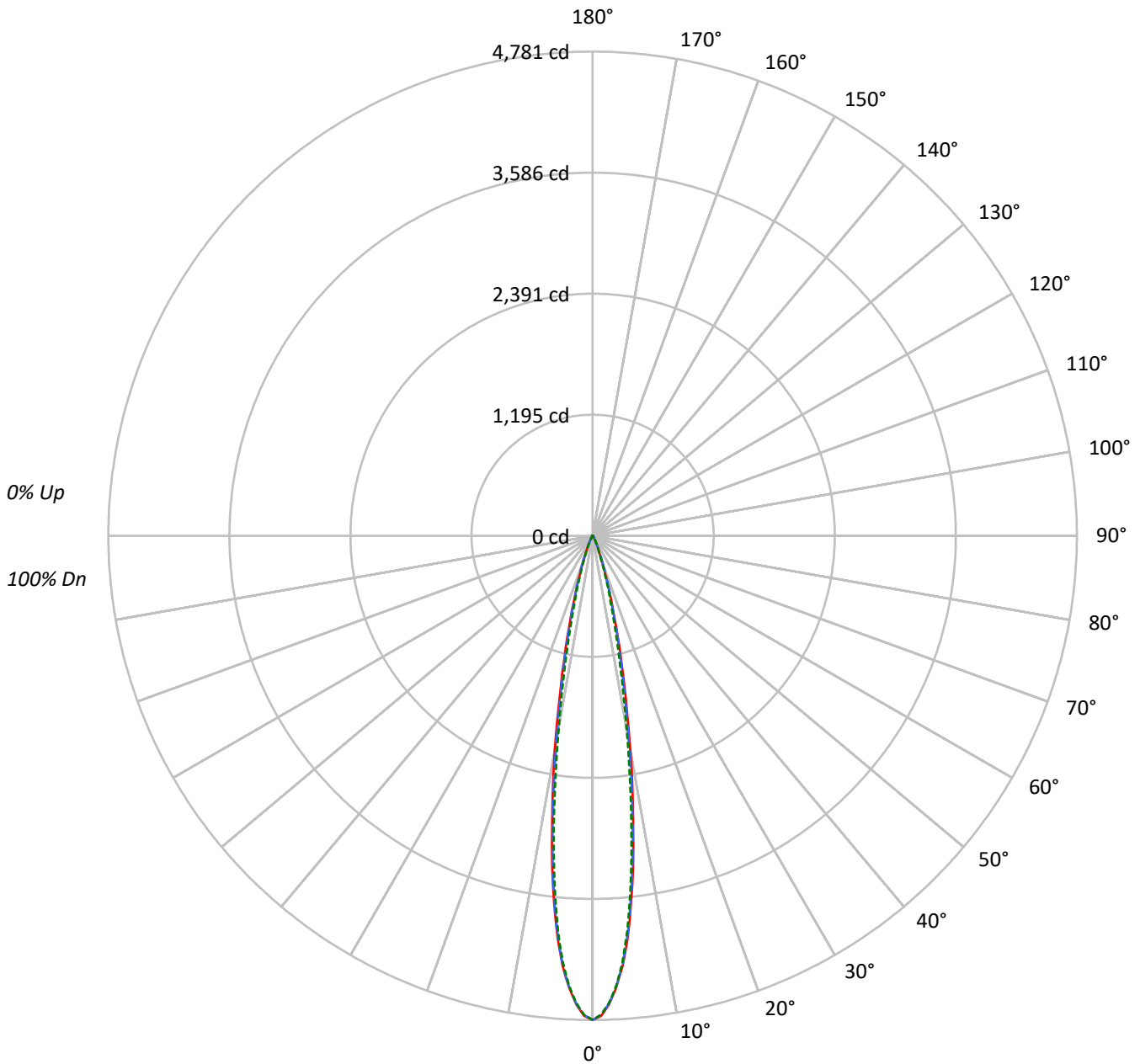
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	91	95	92	91	94	92	90	89				89															
6	101	96	92	90	100	95	92	90	94	91	89	93	90	88	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°	2358911	2358911	2358911
5°	1970783	1961324	1938147
10°	1073735	1031904	965875
15°	425672	414844	356106
20°	143017	152835	126321
25°	49646	53620	47632
30°	18173	19825	19426
35°	11684	13672	10359
40°	6118	7342	7535
45°	5652	4326	4117
50°	3377	2226	1689
55°	0	0	0
60°	2171	2171	691
65°	1751	467	0
70°	0	1587	2164
75°	0	3431	0
80°	0	0	0
85°	0	2264	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	312.6	50.8
10°-20°	232.7	37.8
20°-30°	51.5	8.4
30°-40°	11.4	1.9
40°-50°	4.7	0.8
50°-60°	0.8	0.1
60°-70°	0.8	0.1
70°-80°	0.6	0.1
80°-90°	0.6	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°	596.8	96.9
0°-40°	608.2	98.8
0°-60°	613.7	99.7
0°-90°	615.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	615.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4781	4781	4781	4781	4781	
5°	3979	3963	3960	3945	3914	317
15°	833	831	812	736	697	245
25°	91	102	98	91	88	50
35°	19	19	23	18	17	11
45°	8	7	6	6	6	5
55°	0	0	0	0	0	1
65°	2	1	0	0	0	2
75°	0	0	2	0	0	0
85°	0	0	0	1	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4781.3	4781.3	4781.3	4781.3	4781.3
1°	4742.2	4722.7	4732.3	4737.8	4729.7
2°	4631.6	4608.1	4623.1	4624.6	4616.6
3°	4466.8	4456.2	4460.9	4462.8	4446.6
4°	4255.9	4240.5	4243.8	4239.7	4220.0
5°	3979.4	3962.9	3960.3	3945.3	3913.5
6°	3641.4	3631.9	3614.7	3589.0	3546.5
7°	3279.2	3271.5	3241.9	3195.7	3146.7
8°	2882.3	2882.3	2839.4	2775.7	2719.7
9°	2506.6	2492.7	2438.1	2361.2	2307.0
10°	2143.3	2124.6	2059.8	1981.8	1928.0
11°	1799.5	1779.7	1717.4	1637.6	1587.8
12°	1502.5	1491.9	1443.5	1355.6	1305.8
13°	1251.6	1237.7	1195.2	1112.1	1069.6
14°	1033.0	1015.4	981.4	905.2	863.8
15°	833.4	830.9	812.2	736.4	697.2
16°	681.1	679.6	662.1	588.1	572.0
17°	546.7	554.4	549.3	481.2	462.9
18°	425.5	440.9	444.6	383.0	364.7
19°	342.4	357.0	363.3	309.4	294.1
20°	272.4	286.4	291.1	250.8	240.6
22.5°	154.5	173.2	173.9	153.1	142.4
25°	91.2	101.8	98.5	91.2	87.5
26°	76.5	86.8	81.7	79.5	76.5
27°	64.4	71.4	67.4	63.7	66.3
28°	53.5	58.2	54.2	55.3	51.3
29°	42.5	50.5	44.7	45.8	42.5
30°	31.9	39.2	34.8	36.6	34.1
32.5°	23.8	26.0	23.1	26.0	26.0
35°	19.4	19.4	22.7	18.3	17.2
37.5°	8.8	7.0	7.7	6.2	7.3
40°	9.5	10.6	11.4	9.5	11.7
42.5°	6.6	8.8	8.8	5.9	10.3
45°	8.1	6.6	6.2	6.2	5.9
47.5°	3.7	2.6	2.9	3.3	5.1
50°	4.4	1.8	2.9	4.4	2.2
52.5°	1.5	0.0	1.8	0.0	0.7
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.4	0.7	0.0
60°	2.2	2.6	2.2	1.5	0.7
62.5°	3.7	0.7	1.1	1.5	0.0
65°	1.5	0.7	0.4	0.0	0.0
67.5°	0.0	0.0	1.1	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	1.8	0.0	0.0
77.5°	0.7	0.0	1.5	0.0	0.0
80°	0.0	0.7	0.0	0.0	0.0
82.5°	0.0	0.0	1.8	1.5	0.0
85°	0.0	0.4	0.4	1.1	0.0
87.5°	0.0	1.1	1.5	0.4	0.7
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	1.1	0.7	1.5
72.5°	0.0	0.4	1.5	2.2	0.7



(END OF REPORT)