

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: P314761

Luminaire Tested: **LDA2B10SP9024D010 PIN1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P314761  
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: LDA2B10SP9024D010 PIN1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj PinHole, Black oculus, matte metallic silver finish  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 776.3 lumens  
Efficiency: N/A  
Efficacy: 77.6 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

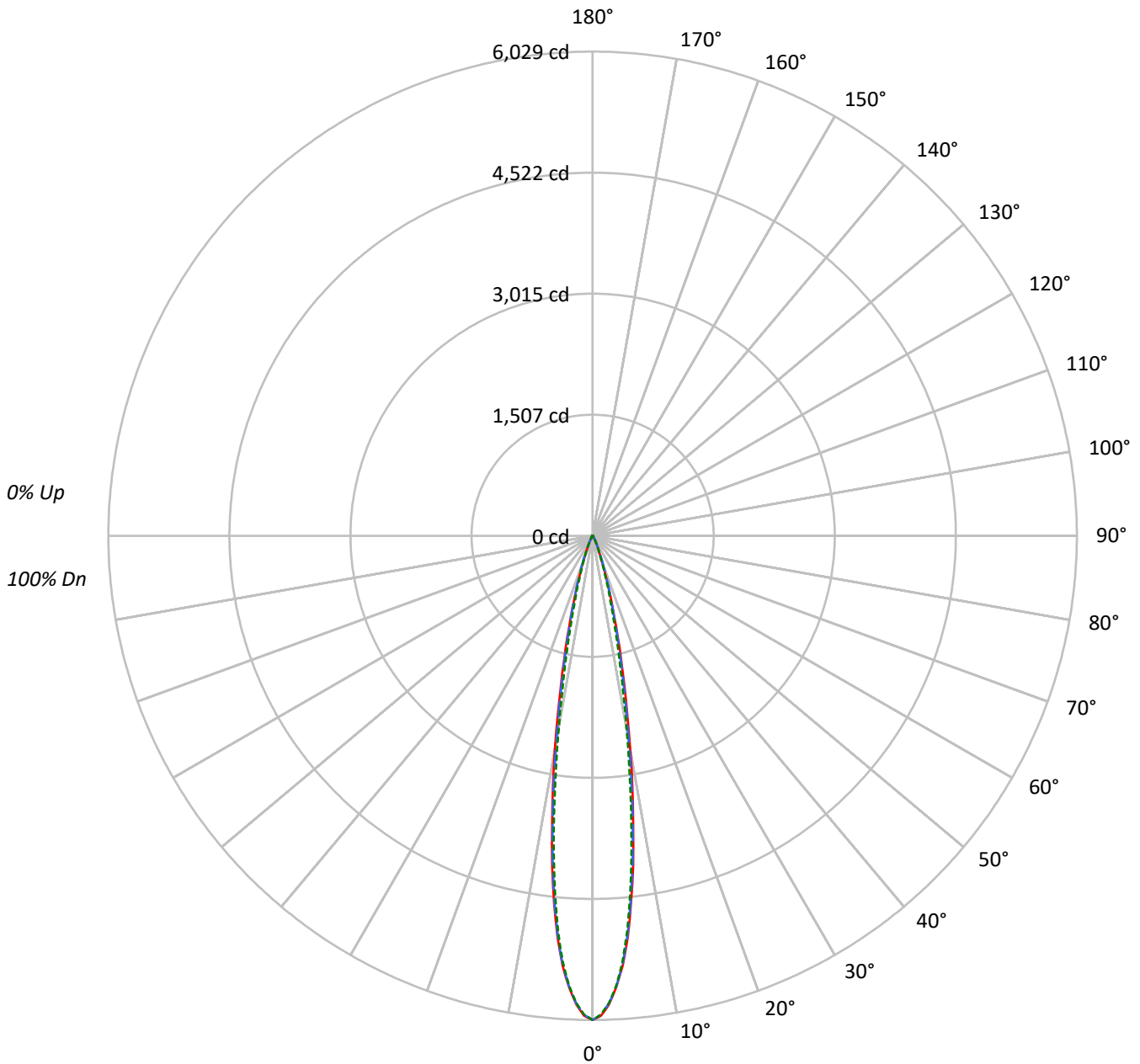
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2974281	2974281	2974281
5°	2484849	2472963	2443694
10°	1353829	1301076	1217815
15°	536764	523075	449014
20°	180346	192737	159240
25°	62602	67610	60043
30°	22901	25009	24439
35°	14756	17225	13070
40°	7728	9210	9532
45°	7117	5442	5163
50°	4221	2840	2149
55°	0	0	0
60°	2763	2763	888
65°	2101	584	0
70°	0	2019	2596
75°	0	4384	0
80°	0	0	0
85°	0	2830	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	394.2	50.8
10°-20°	293.4	37.8
20°-30°	64.9	8.4
30°-40°	14.4	1.9
40°-50°	5.9	0.8
50°-60°	1.0	0.1
60°-70°	1.0	0.1
70°-80°	0.8	0.1
80°-90°	0.8	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°	752.4	96.9
0°-40°	766.9	98.8
0°-60°	773.7	99.7
0°-90°	776.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6029	6029	6029	6029	6029	
5°	5017	4997	4993	4974	4934	400
15°	1051	1048	1024	928	879	309
25°	115	128	124	115	110	63
35°	24	24	29	23	22	14
45°	10	8	8	8	7	6
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°	6028.6	6028.6	6028.6	6028.6	6028.6
1°	5979.2	5954.7	5966.7	5973.6	5963.5
2°	5839.7	5810.2	5829.1	5831.0	5820.8
3°	5632.0	5618.6	5624.6	5626.9	5606.6
4°	5366.0	5346.6	5350.8	5345.7	5320.8
5°	5017.4	4996.6	4993.4	4974.5	4934.3
6°	4591.3	4579.3	4557.6	4525.2	4471.7
7°	4134.6	4124.9	4087.5	4029.4	3967.5
8°	3634.1	3634.1	3580.1	3499.8	3429.1
9°	3160.4	3142.9	3074.1	2977.1	2908.8
10°	2702.4	2678.9	2597.1	2498.8	2430.9
11°	2268.9	2243.9	2165.4	2064.8	2002.0
12°	1894.4	1881.0	1820.1	1709.3	1646.5
13°	1578.1	1560.6	1507.0	1402.2	1348.7
14°	1302.5	1280.3	1237.4	1141.4	1089.2
15°	1050.9	1047.6	1024.1	928.5	879.1
16°	858.8	856.9	834.8	741.5	721.2
17°	689.3	699.0	692.6	606.7	583.6
18°	536.5	555.9	560.5	483.0	459.9
19°	431.7	450.2	458.0	390.1	370.8
20°	343.5	361.1	367.1	316.3	303.3
22.5°	194.8	218.4	219.3	193.0	179.6
25°	115.0	128.4	124.2	115.0	110.3
26°	96.5	109.4	103.0	100.2	96.5
27°	81.3	90.0	85.0	80.3	83.6
28°	67.4	73.4	68.3	69.7	64.6
29°	53.6	63.7	56.3	57.7	53.6
30°	40.2	49.4	43.9	46.2	42.9
32.5°	30.0	32.8	29.1	32.8	32.8
35°	24.5	24.5	28.6	23.1	21.7
37.5°	11.1	8.8	9.7	7.8	9.2
40°	12.0	13.4	14.3	12.0	14.8
42.5°	8.3	11.1	11.1	7.4	12.9
45°	10.2	8.3	7.8	7.8	7.4
47.5°	4.6	3.2	3.7	4.2	6.5
50°	5.5	2.3	3.7	5.5	2.8
52.5°	1.8	0.0	2.3	0.0	0.9
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.5	0.9	0.0
60°	2.8	3.2	2.8	1.8	0.9
62.5°	4.6	0.9	1.4	1.8	0.0
65°	1.8	0.9	0.5	0.0	0.0
67.5°	0.0	0.0	1.4	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	2.3	0.0	0.0
77.5°	0.9	0.0	1.8	0.0	0.0
80°	0.0	0.9	0.0	0.0	0.0
82.5°	0.0	0.0	2.3	1.8	0.0
85°	0.0	0.5	0.5	1.4	0.0
87.5°	0.0	1.4	1.8	0.5	0.9
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	1.4	0.9	1.8
72.5°	0.0	0.5	1.8	2.8	0.9



(END OF REPORT)