

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: P314842

Luminaire Tested: **LDA2B20SP8050D010 PIN1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P314842  
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: LDA2B20SP8050D010 PIN1MMS  
Description: PORTFOLIO 2IN ADJ 2000 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: 2094.1 lumens  
Efficiency: N/A  
Efficacy: 101.7 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

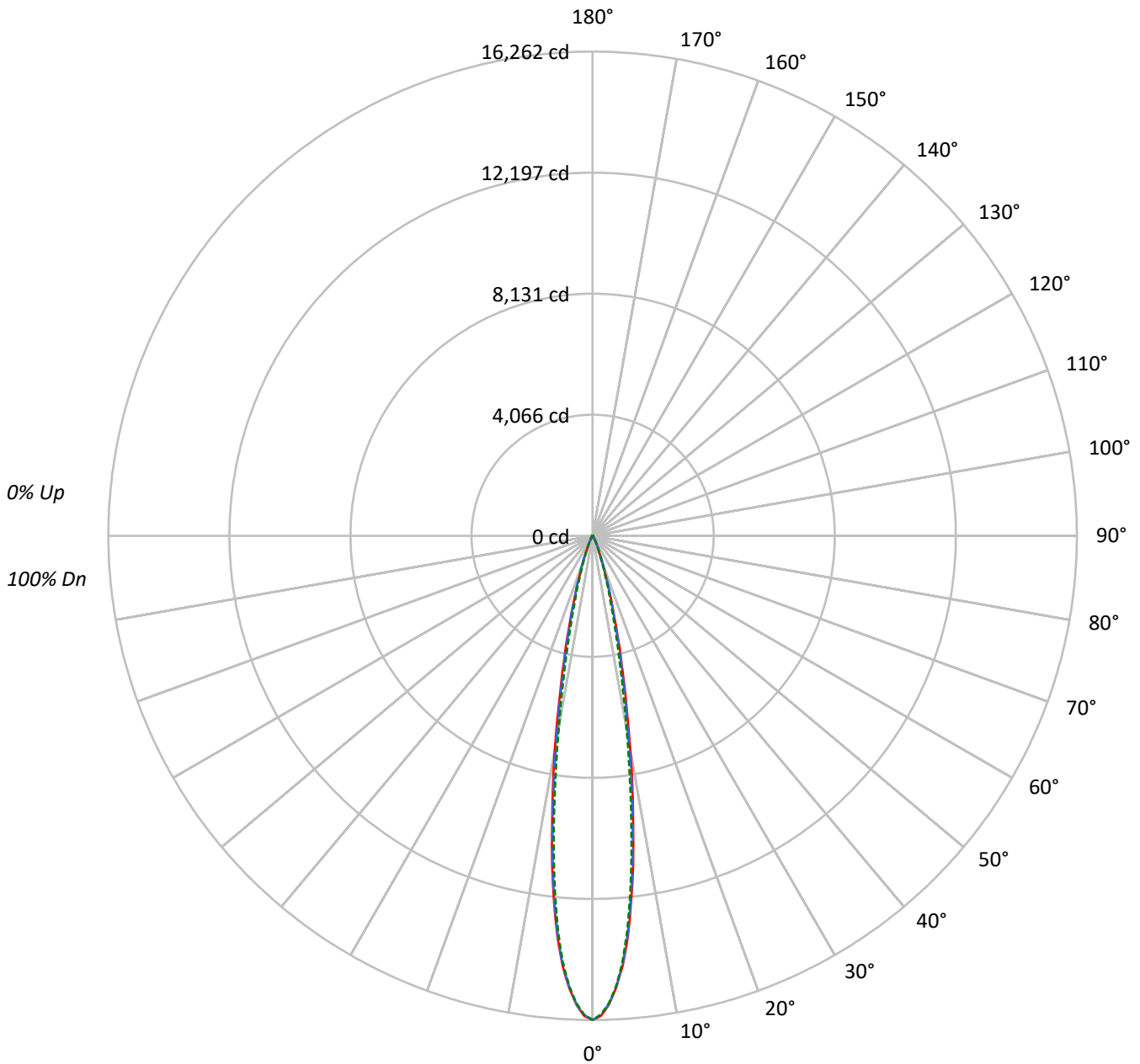
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	8023049	8023049	8023049
5°	6702862	6670820	6591877
10°	3651941	3509664	3285078
15°	1447868	1410939	1211230
20°	486488	519827	429628
25°	168807	182362	162057
30°	61754	67394	65970
35°	39751	46496	35234
40°	20867	24860	25697
45°	19117	14792	13885
50°	11436	7675	5757
55°	0	0	0
60°	7400	7400	2467
65°	5837	1401	0
70°	0	5337	7212
75°	0	11818	0
80°	0	0	0
85°	0	6793	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1063.3	50.8
10°-20°	791.4	37.8
20°-30°	175.0	8.4
30°-40°	38.9	1.9
40°-50°	15.9	0.8
50°-60°	2.7	0.1
60°-70°	2.7	0.1
70°-80°	2.2	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°	2029.7	96.9
0°-40°	2068.6	98.8
0°-60°	2087.1	99.7
0°-90°	2094.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2094.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16262	16262	16262	16262	16262	
5°	13534	13478	13470	13419	13310	1079
15°	2835	2826	2762	2505	2371	833
25°	310	346	335	310	298	169
35°	66	66	77	62	58	38
45°	27	22	21	21	20	16
55°	0	0	0	0	0	4
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°	16262.0	16262.0	16262.0	16262.0	16262.0
1°	16128.7	16062.7	16095.1	16113.8	16086.4
2°	15752.6	15672.9	15724.0	15729.0	15701.6
3°	15192.2	15156.0	15172.2	15178.5	15123.7
4°	14474.8	14422.5	14433.7	14420.0	14352.7
5°	13534.4	13478.4	13469.7	13418.6	13310.3
6°	12384.9	12352.5	12294.0	12206.8	12062.3
7°	11153.1	11127.0	11026.1	10869.2	10702.3
8°	9803.0	9803.0	9657.3	9440.6	9250.1
9°	8525.2	8477.9	8292.3	8030.7	7846.4
10°	7289.7	7226.2	7005.7	6740.4	6557.4
11°	6120.2	6052.9	5841.2	5569.7	5400.3
12°	5110.1	5074.0	4909.6	4610.7	4441.3
13°	4257.0	4209.7	4065.2	3782.5	3638.0
14°	3513.5	3453.7	3337.8	3078.8	2938.0
15°	2834.7	2826.0	2762.4	2504.6	2371.4
16°	2316.6	2311.6	2251.8	2000.2	1945.4
17°	1859.5	1885.6	1868.2	1636.5	1574.3
18°	1447.2	1499.5	1512.0	1302.8	1240.5
19°	1164.5	1214.3	1235.5	1052.4	1000.1
20°	926.6	974.0	990.1	853.1	818.3
22.5°	525.6	589.1	591.6	520.6	484.5
25°	310.1	346.2	335.0	310.1	297.7
26°	260.3	295.2	277.7	270.3	260.3
27°	219.2	242.9	229.2	216.7	225.4
28°	181.8	198.0	184.3	188.1	174.4
29°	144.5	171.9	151.9	155.7	144.5
30°	108.4	133.3	118.3	124.5	115.8
32.5°	81.0	88.4	78.5	88.4	88.4
35°	66.0	66.0	77.2	62.3	58.5
37.5°	29.9	23.7	26.2	21.2	24.9
40°	32.4	36.1	38.6	32.4	39.9
42.5°	22.4	29.9	29.9	19.9	34.9
45°	27.4	22.4	21.2	21.2	19.9
47.5°	12.5	8.7	10.0	11.2	17.4
50°	14.9	6.2	10.0	14.9	7.5
52.5°	5.0	0.0	6.2	0.0	2.5
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	1.2	2.5	0.0
60°	7.5	8.7	7.5	5.0	2.5
62.5°	12.5	2.5	3.7	5.0	0.0
65°	5.0	2.5	1.2	0.0	0.0
67.5°	0.0	0.0	3.7	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	6.2	0.0	0.0
77.5°	2.5	0.0	5.0	0.0	0.0
80°	0.0	2.5	0.0	0.0	0.0
82.5°	0.0	0.0	6.2	5.0	0.0
85°	0.0	1.2	1.2	3.7	0.0
87.5°	0.0	3.7	5.0	1.2	2.5
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	3.7	2.5	5.0
72.5°	0.0	1.2	5.0	7.5	2.5



(END OF REPORT)