

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: P281743

Luminaire Tested: **LDA2B208035D010 EU2B20SP158035 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281743  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B208035D010 EU2B20SP158035 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MB  
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): 0.3 / 0.3 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

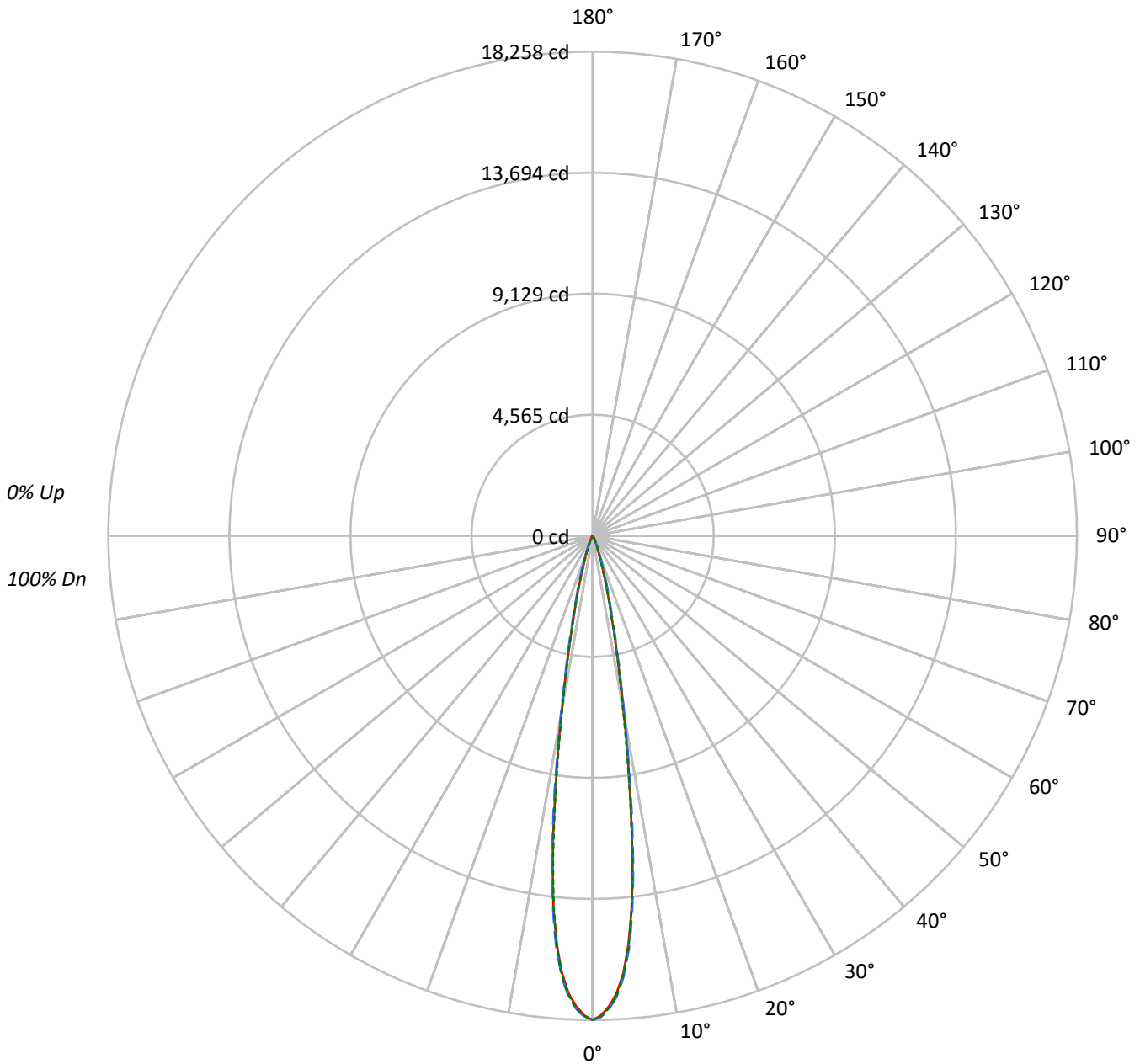
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
1	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98																			
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96																			
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94																			
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93																			
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91																			
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89																			
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88																			
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87																			
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85																			
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84																			

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

	0°	45°	90°
0°	9007849	9007849	9007849
5°	7670425	7750358	7684936
10°	3386375	3463825	3307271
15°	1027507	1178541	1043648
20°	307454	409939	343576
25°	119760	117909	125912
30°	53323	48195	50759
35°	10901	9516	9516
40°	0	708	2898
45°	9419	7884	14164
50°	0	2610	8673
55°	0	0	3871
60°	0	1085	4440
65°	0	0	2685
70°	0	6491	12982
75°	0	0	0
80°	0	0	0
85°	0	6227	25473



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1183.6	58.4
10°-20°	676.0	33.4
20°-30°	128.3	6.3
30°-40°	23.3	1.2
40°-50°	6.0	0.3
50°-60°	4.6	0.2
60°-70°	0.7	0.0
70°-80°	1.0	0.1
80°-90°	1.4	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°	1987.9	98.2
0°-40°	2011.2	99.3
0°-60°	2021.8	99.8
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°	18258	18258	18258	18258	18258	
5°	15488	15590	15650	15622	15517	1176
15°	2012	2188	2307	2168	2043	640
25°	220	237	217	247	231	115
35°	18	23	16	19	16	25
45°	14	21	11	12	20	6
55°	0	1	0	1	4	2
65°	0	0	0	0	2	0
75°	0	0	0	0	0	0
85°	0	1	1	1	4	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	18258.1	18258.1	18258.1	18258.1	18258.1
1°	18085.4	18104.6	18145.2	18187.0	18121.5
2°	17747.0	17793.2	17850.8	17889.1	17818.0
3°	17273.1	17337.4	17398.3	17406.2	17339.6
4°	16540.8	16619.8	16684.1	16676.2	16592.7
5°	15488.1	15589.7	15649.5	15622.4	15517.4
6°	14096.9	14195.1	14271.8	14194.0	14052.9
7°	12363.9	12476.7	12557.9	12424.8	12252.2
8°	10355.5	10513.5	10594.7	10408.5	10231.4
9°	8453.2	8562.6	8645.0	8441.9	8261.4
10°	6759.6	6960.5	6914.2	6757.4	6601.7
11°	5316.5	5498.2	5506.1	5400.0	5247.7
12°	4162.3	4354.1	4402.6	4321.4	4186.0
13°	3289.0	3432.3	3512.4	3428.9	3300.3
14°	2617.6	2745.1	2847.8	2739.5	2610.9
15°	2011.7	2187.8	2307.4	2167.5	2043.3
16°	1599.9	1745.5	1887.6	1728.5	1629.3
17°	1228.7	1358.5	1505.1	1360.7	1279.5
18°	972.6	1075.3	1236.6	1087.7	1016.6
19°	761.6	839.5	989.5	858.6	801.1
20°	585.6	671.3	780.8	691.6	654.4
22.5°	354.3	401.7	433.3	406.2	387.0
25°	220.0	236.9	216.6	247.1	231.3
26°	191.8	204.2	199.7	220.0	200.8
27°	153.4	169.2	156.8	172.6	167.0
28°	139.9	159.1	134.3	153.4	144.4
29°	98.2	106.1	95.9	102.7	102.7
30°	93.6	95.9	84.6	92.5	89.1
32.5°	73.3	68.8	56.4	59.8	57.5
35°	18.1	22.6	15.8	19.2	15.8
37.5°	27.1	24.8	29.3	28.2	27.1
40°	0.0	1.1	1.1	1.1	4.5
42.5°	20.3	12.4	11.3	7.9	13.5
45°	13.5	21.4	11.3	12.4	20.3
47.5°	0.0	1.1	0.0	2.3	2.3
50°	0.0	2.3	3.4	4.5	11.3
52.5°	2.3	13.5	6.8	12.4	18.1
55°	0.0	1.1	0.0	1.1	4.5
57.5°	4.5	2.3	4.5	4.5	20.3
60°	0.0	2.3	1.1	1.1	4.5
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	2.3
67.5°	0.0	1.1	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	1.1	0.0	0.0
80°	0.0	1.1	0.0	0.0	0.0
82.5°	0.0	1.1	2.3	3.4	2.3
85°	0.0	1.1	1.1	1.1	4.5
87.5°	0.0	2.3	3.4	0.0	2.3
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	3.4	4.5	0.0	9.0
72.5°	0.0	5.6	1.1	1.1	0.0



(END OF REPORT)