

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: P281473

Luminaire Tested: **LDA2B059050D010 EU2B05SP159050 2LBASQC1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281473  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B059050D010 EU2B05SP159050 2LBASQC1MB  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 699.7 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

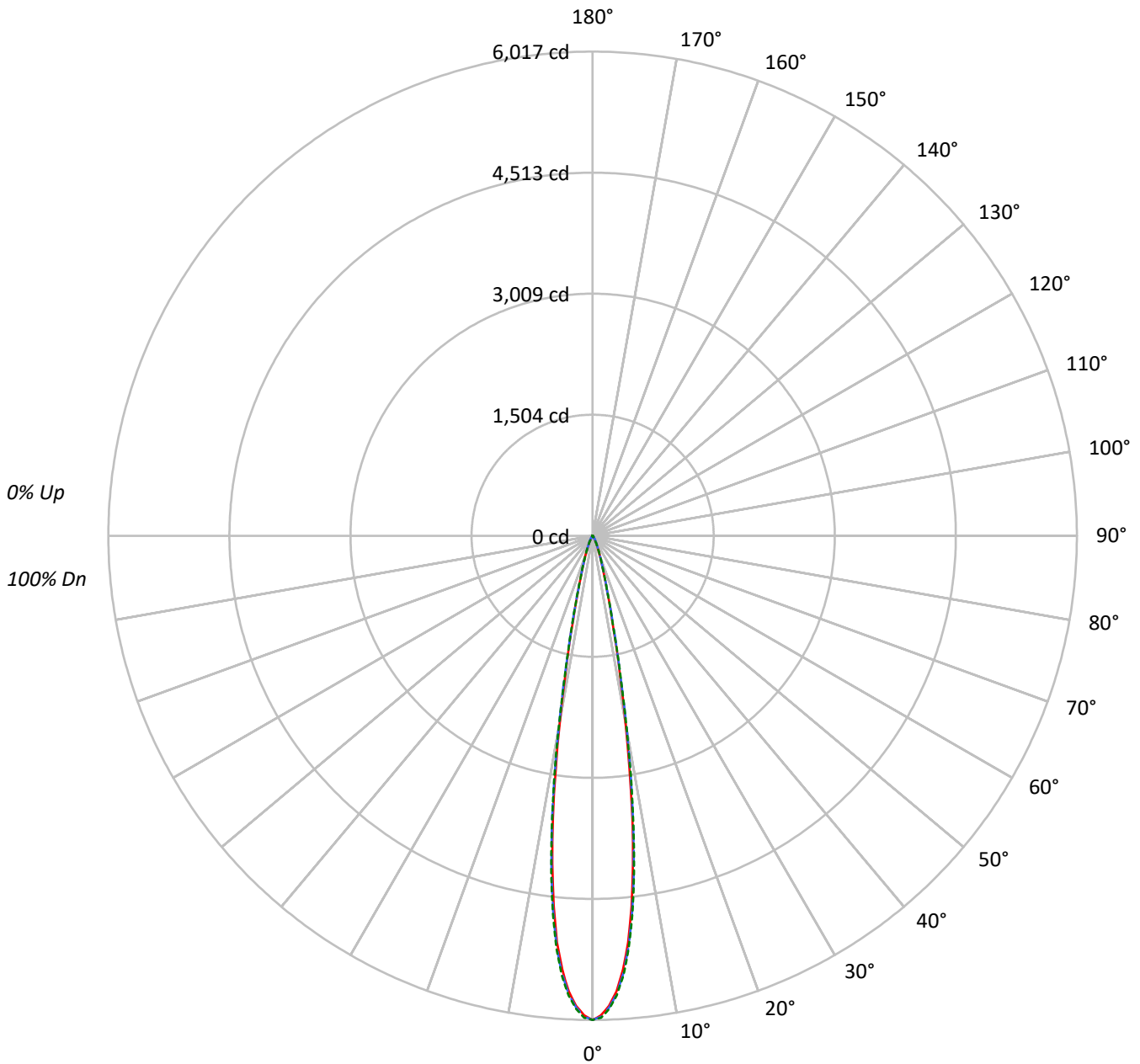
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	97	96						98											
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	95	94						96											
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	93	92						94											
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	91	90						92											
5	105	100	96	94	103	99	96	93	97	95	93	96	94	92	95	93	91	90	89	88						90											
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	88	87						89											
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	86	85						87											
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	85	84	83						86											
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	83	82						84											
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	82	81						83											

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

	0°	45°	90°
0°	2968459	2968459	2968459
5°	2512484	2538732	2549776
10°	1174881	1219368	1221772
15°	344103	349108	348955
20°	138186	138344	138554
25°	61622	67882	63092
30°	26206	36004	23870
35°	11985	16683	11202
40°	3929	6505	3478
45°	0	2372	0
50°	0	0	0
55°	1204	602	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	1989	0	0
85°	3962	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	397.6	56.8
10°-20°	225.4	32.2
20°-30°	58.9	8.4
30°-40°	15.2	2.2
40°-50°	1.5	0.2
50°-60°	0.5	0.1
60°-70°	0.1	0.0
70°-80°	0.5	0.1
80°-90°	0.1	0.0
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°	681.9	97.5
0°-40°	697.0	99.6
0°-60°	699.0	99.9
0°-90°	699.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	699.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6017	6017	6017	6017	6017	
5°	5073	5118	5126	5094	5148	393
15°	674	683	684	676	683	221
25°	113	123	125	119	116	56
35°	20	21	28	19	19	14
45°	0	1	3	0	0	1
55°	1	2	1	0	0	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	1
85°	1	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6016.8	6016.8	6016.8	6016.8	6016.8
1°	5960.4	5984.1	5977.0	5968.5	5992.2
2°	5845.5	5868.5	5866.5	5855.3	5883.0
3°	5668.5	5700.6	5700.6	5684.0	5718.5
4°	5404.6	5453.6	5458.3	5435.0	5477.9
5°	5073.2	5118.4	5126.2	5093.8	5148.5
6°	4624.1	4686.0	4703.5	4666.0	4722.1
7°	4108.2	4173.1	4199.8	4157.9	4220.7
8°	3551.7	3598.3	3630.4	3582.5	3646.3
9°	2929.0	2996.3	3025.7	2979.0	3041.2
10°	2345.2	2407.0	2434.0	2422.9	2438.8
11°	1821.5	1876.2	1894.5	1879.2	1886.7
12°	1426.2	1448.1	1459.9	1449.8	1454.9
13°	1082.9	1112.3	1117.7	1113.3	1115.7
14°	845.7	859.9	866.0	863.9	865.0
15°	673.7	682.8	683.5	675.7	683.2
16°	542.6	549.7	552.8	544.7	554.4
17°	444.6	450.4	453.8	445.7	449.7
18°	365.9	370.3	375.0	367.9	374.0
19°	307.1	309.8	310.2	308.1	309.8
20°	263.2	261.9	263.5	259.8	263.9
22.5°	173.3	176.7	180.8	176.4	178.1
25°	113.2	122.6	124.7	118.9	115.9
26°	93.3	105.4	110.8	101.7	91.9
27°	77.4	86.2	93.3	81.1	73.3
28°	67.9	75.3	82.4	71.0	61.8
29°	56.8	64.2	76.4	63.2	57.4
30°	46.0	51.4	63.2	48.0	41.9
32.5°	26.0	30.4	40.9	28.4	23.3
35°	19.9	21.3	27.7	18.9	18.6
37.5°	17.2	15.5	21.6	15.5	12.5
40°	6.1	9.1	10.1	6.8	5.4
42.5°	2.7	2.7	4.4	1.4	1.4
45°	0.0	1.4	3.4	0.3	0.0
47.5°	0.0	0.0	0.7	0.0	0.0
50°	0.0	0.7	0.0	0.0	0.0
52.5°	0.7	0.0	0.0	0.0	0.0
55°	1.4	1.7	0.7	0.3	0.0
57.5°	2.0	1.7	0.7	0.7	0.7
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.7	0.3	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.3	0.0	0.0	0.0
77.5°	3.4	0.7	1.0	0.7	1.4
80°	0.7	0.0	0.0	0.0	0.0
82.5°	1.4	0.0	0.0	0.0	0.0
85°	0.7	0.0	0.0	0.0	0.0
87.5°	0.0	0.3	0.0	0.3	0.0
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	0.0	0.0	0.0
72.5°	1.4	1.0	0.0	0.0	1.4



(END OF REPORT)