

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: P281642

Luminaire Tested: **LDA2B059050D010 EU2B05SP159050 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281642  
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: LDA2B059050D010 EU2B05SP159050 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS  
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): 0.3 / 0.3 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

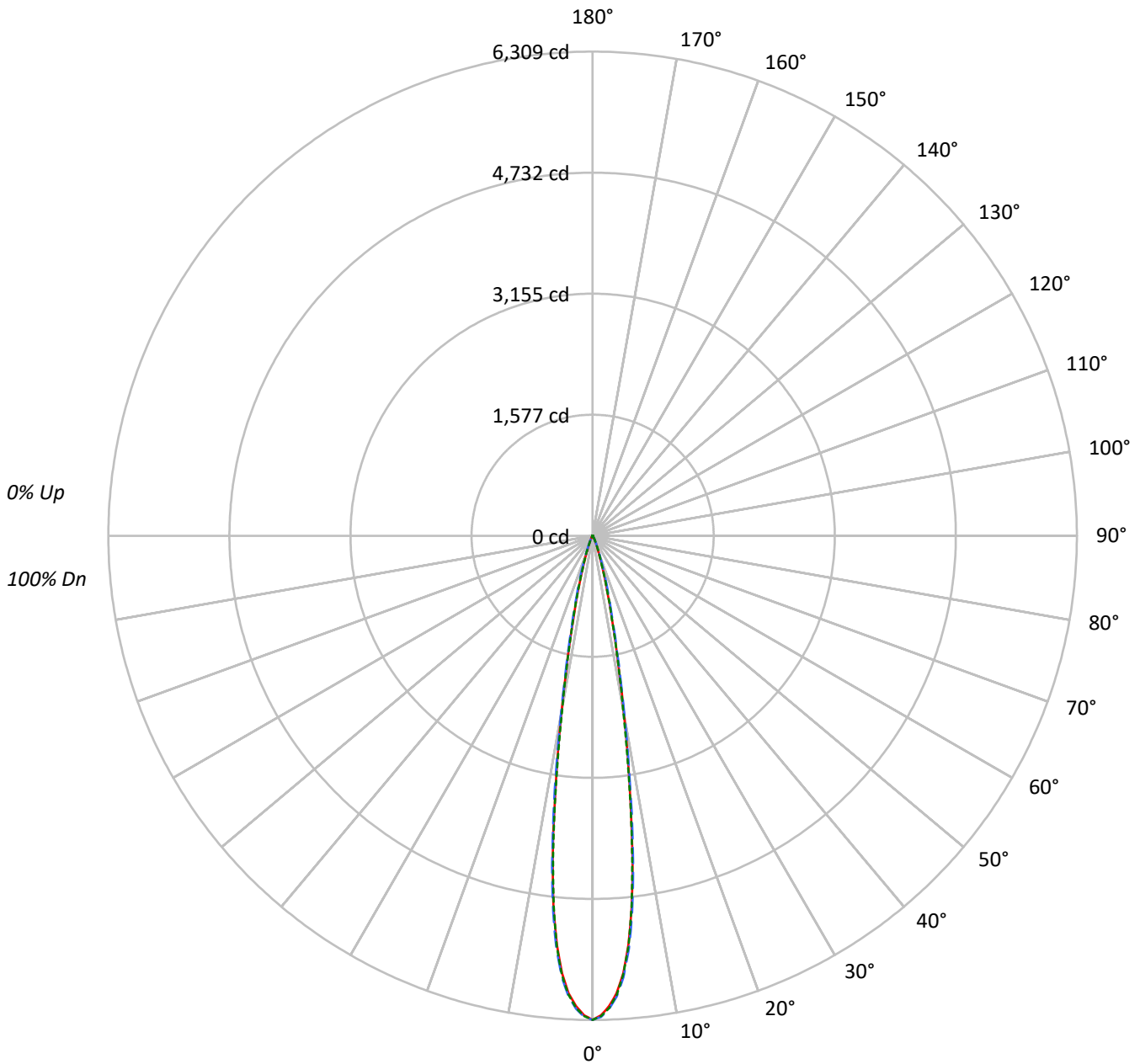
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3112422	3112422	3112422
5°	2650311	2677896	2655313
10°	1170072	1196824	1142719
15°	355033	407182	360601
20°	106212	141652	118708
25°	41372	40773	43495
30°	18458	16635	17546
35°	3734	3313	3313
40°	0	258	1030
45°	3279	2721	4884
50°	0	921	2993
55°	0	0	1376
60°	0	395	1579
65°	0	0	934
70°	0	2308	4472
75°	0	0	0
80°	0	0	0
85°	0	2264	9057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.0	58.4
10°-20°	233.6	33.4
20°-30°	44.3	6.3
30°-40°	8.1	1.2
40°-50°	2.1	0.3
50°-60°	1.6	0.2
60°-70°	0.3	0.0
70°-80°	0.4	0.1
80°-90°	0.5	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°	686.9	98.2
0°-40°	694.9	99.3
0°-60°	698.6	99.8
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°	6309	6309	6309	6309	6309	
5°	5352	5387	5407	5398	5362	406
15°	695	756	797	749	706	221
25°	76	82	75	85	80	40
35°	6	8	6	7	6	9
45°	5	7	4	4	7	2
55°	0	0	0	0	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	2	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6308.6	6308.6	6308.6	6308.6	6308.6
1°	6248.9	6255.6	6269.6	6284.0	6261.4
2°	6132.0	6148.0	6167.8	6181.1	6156.5
3°	5968.2	5990.5	6011.5	6014.2	5991.2
4°	5715.2	5742.5	5764.7	5762.0	5733.2
5°	5351.5	5386.6	5407.2	5397.9	5361.6
6°	4870.8	4904.7	4931.2	4904.3	4855.6
7°	4272.0	4311.0	4339.0	4293.0	4233.4
8°	3578.1	3632.6	3660.7	3596.4	3535.2
9°	2920.8	2958.6	2987.0	2916.9	2854.5
10°	2335.6	2405.0	2389.0	2334.8	2281.0
11°	1837.0	1899.7	1902.5	1865.8	1813.2
12°	1438.2	1504.4	1521.2	1493.1	1446.3
13°	1136.4	1185.9	1213.6	1184.8	1140.3
14°	904.5	948.5	984.0	946.6	902.1
15°	695.1	755.9	797.2	748.9	706.0
16°	552.8	603.1	652.2	597.3	562.9
17°	424.5	469.4	520.1	470.2	442.1
18°	336.1	371.5	427.3	375.8	351.3
19°	263.1	290.0	341.9	296.7	276.8
20°	202.3	232.0	269.8	239.0	226.1
22.5°	122.4	138.8	149.7	140.3	133.7
25°	76.0	81.9	74.9	85.4	79.9
26°	66.3	70.6	69.0	76.0	69.4
27°	53.0	58.5	54.2	59.6	57.7
28°	48.3	55.0	46.4	53.0	49.9
29°	33.9	36.6	33.1	35.5	35.5
30°	32.4	33.1	29.2	32.0	30.8
32.5°	25.3	23.8	19.5	20.7	19.9
35°	6.2	7.8	5.5	6.6	5.5
37.5°	9.4	8.6	10.1	9.7	9.4
40°	0.0	0.4	0.4	0.4	1.6
42.5°	7.0	4.3	3.9	2.7	4.7
45°	4.7	7.4	3.9	4.3	7.0
47.5°	0.0	0.4	0.0	0.8	0.8
50°	0.0	0.8	1.2	1.6	3.9
52.5°	0.8	4.7	2.3	4.3	6.2
55°	0.0	0.4	0.0	0.4	1.6
57.5°	1.6	0.8	1.6	1.6	7.0
60°	0.0	0.8	0.4	0.4	1.6
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.8
67.5°	0.0	0.4	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	0.4	0.0	0.0
80°	0.0	0.4	0.0	0.0	0.0
82.5°	0.0	0.4	0.8	1.2	0.8
85°	0.0	0.4	0.4	0.4	1.6
87.5°	0.0	0.8	1.2	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	1.2	1.6	0.0	3.1
72.5°	0.0	1.9	0.4	0.4	0.0



(END OF REPORT)