

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: P281778

Luminaire Tested: **LDA2B109727D010 EU2B10SP159727 2LBALSQC1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281778  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B109727D010 EU2B10SP159727 2LBALSQC1MW  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 752.6 lumens  
Efficiency: N/A  
Efficacy: 75.3 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

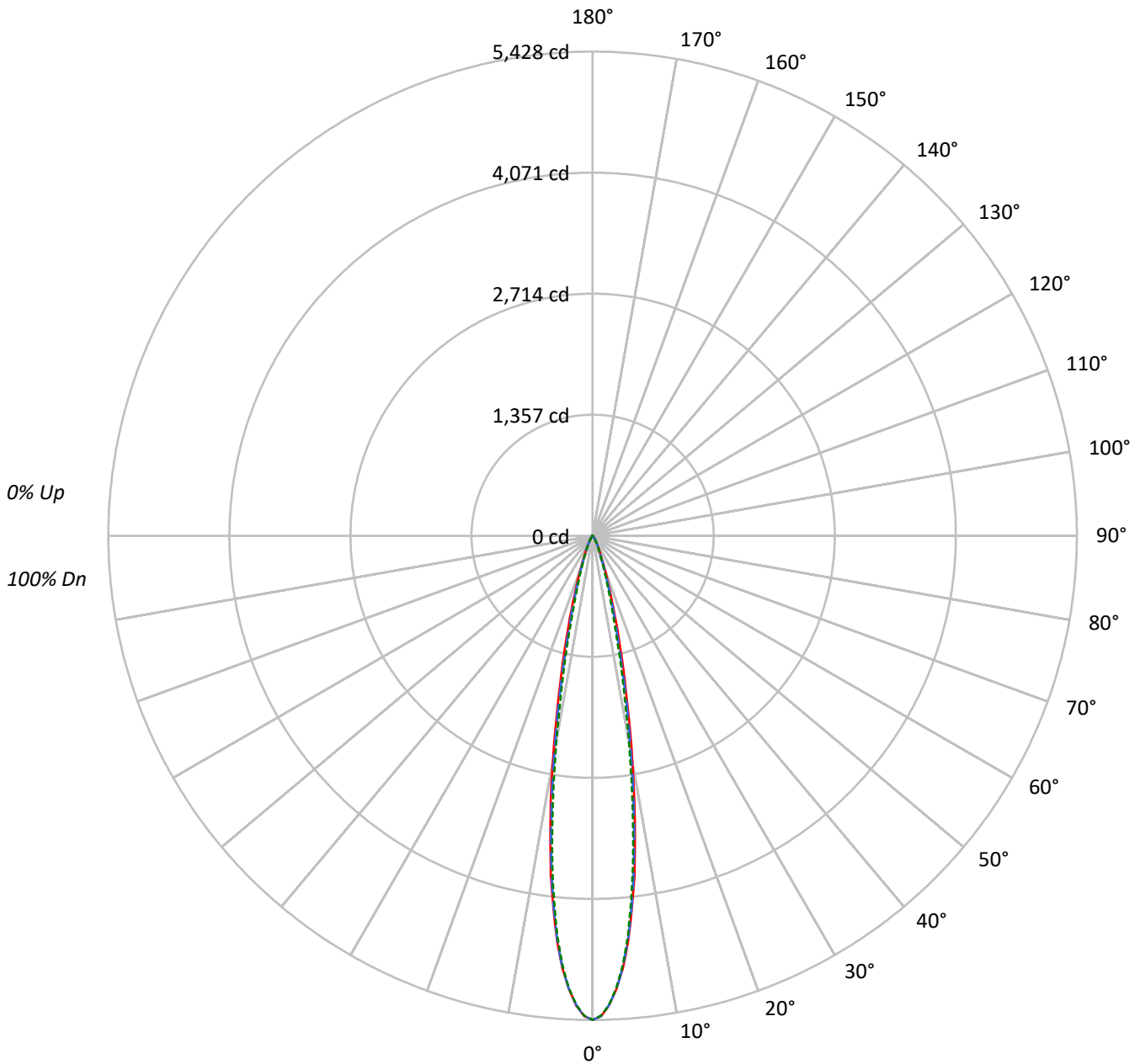
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97																			
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95																			
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92																			
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90																			
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88																			
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86																			
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84																			
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82																			
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80																			
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79																			

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

	0°	45°	90°
0°	2677968	2677968	2677968
5°	2262632	2250548	2233957
10°	1287850	1231140	1168569
15°	533290	472407	416121
20°	202870	177668	162653
25°	89602	86064	76538
30°	41473	45803	36460
35°	21803	25718	20417
40°	9596	11013	6376
45°	3698	2930	4256
50°	1765	2072	2917
55°	0	1290	0
60°	0	0	789
65°	0	0	0
70°	0	577	0
75°	0	0	0
80°	2273	0	0
85°	21511	19246	8491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	362.9	48.2
10°-20°	277.5	36.9
20°-30°	77.2	10.3
30°-40°	25.1	3.3
40°-50°	5.5	0.7
50°-60°	1.7	0.2
60°-70°	1.0	0.1
70°-80°	0.6	0.1
80°-90°	1.2	0.2
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°	717.5	95.3
0°-40°	742.6	98.7
0°-60°	749.9	99.6
0°-90°	752.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	752.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5428	5428	5428	5428	5428	
5°	4569	4535	4544	4510	4511	369
15°	1044	1008	925	854	815	305
25°	165	166	158	149	141	83
35°	36	39	43	32	34	24
45°	5	8	4	4	6	5
55°	0	2	2	1	0	1
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	4	2	3	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5428.0	5428.0	5428.0	5428.0	5428.0
1°	5386.5	5366.3	5385.7	5374.3	5380.8
2°	5269.5	5244.3	5264.5	5248.5	5261.9
3°	5087.3	5067.9	5085.8	5065.6	5076.3
4°	4859.1	4830.9	4848.8	4821.7	4828.2
5°	4568.7	4535.2	4544.3	4510.4	4510.8
6°	4202.9	4179.6	4185.0	4132.0	4128.2
7°	3845.0	3790.2	3784.4	3723.9	3712.0
8°	3410.6	3360.7	3344.3	3273.0	3247.9
9°	2994.1	2932.0	2898.4	2815.8	2786.4
10°	2570.7	2507.8	2457.5	2364.2	2332.6
11°	2179.0	2122.2	2059.7	1959.9	1929.0
12°	1815.4	1770.9	1702.3	1605.8	1573.5
13°	1518.6	1467.1	1393.6	1304.0	1276.2
14°	1261.4	1206.1	1132.6	1056.0	1001.8
15°	1044.1	1007.9	924.9	853.6	814.7
16°	853.2	822.4	750.7	689.0	661.5
17°	699.7	674.9	613.9	565.5	542.6
18°	577.3	546.5	498.4	466.8	448.9
19°	468.3	444.3	409.3	384.9	367.0
20°	386.4	366.6	338.4	316.7	309.8
22.5°	249.6	246.2	227.9	216.1	210.4
25°	164.6	166.5	158.1	149.0	140.6
26°	140.6	141.8	134.1	128.8	118.1
27°	120.4	120.8	120.8	110.9	100.6
28°	98.3	102.5	98.7	94.1	84.2
29°	84.2	89.6	87.6	83.1	73.5
30°	72.8	76.6	80.4	73.2	64.0
32.5°	51.1	54.5	58.7	54.9	47.3
35°	36.2	39.3	42.7	32.4	33.9
37.5°	24.8	30.1	29.0	26.3	22.5
40°	14.9	15.6	17.1	18.3	9.9
42.5°	10.7	12.6	11.4	13.0	4.6
45°	5.3	7.6	4.2	4.2	6.1
47.5°	3.8	6.5	2.3	2.3	0.8
50°	2.3	5.0	2.7	1.1	3.8
52.5°	3.8	4.6	3.0	3.4	0.8
55°	0.0	2.3	1.5	0.8	0.0
57.5°	1.5	2.7	1.5	0.8	1.5
60°	0.0	0.0	0.0	0.4	0.8
62.5°	0.0	0.8	0.0	1.1	1.5
65°	0.0	1.5	0.0	0.0	0.0
67.5°	2.3	2.7	1.5	3.0	4.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.8	0.0
77.5°	0.0	3.8	1.1	1.1	1.5
80°	0.8	0.0	0.0	0.4	0.0
82.5°	0.0	3.0	0.4	1.5	2.3
85°	3.8	1.9	3.4	1.9	1.5
87.5°	0.0	0.4	0.8	0.4	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	0.4	0.4	0.0
72.5°	0.8	0.0	0.0	0.0	0.0



(END OF REPORT)