

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: P281519

Luminaire Tested: **LDA2B109727D010 EU2B10SP159727 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281519  
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: LDA2B109727D010 EU2B10SP159727 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MMS  
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): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

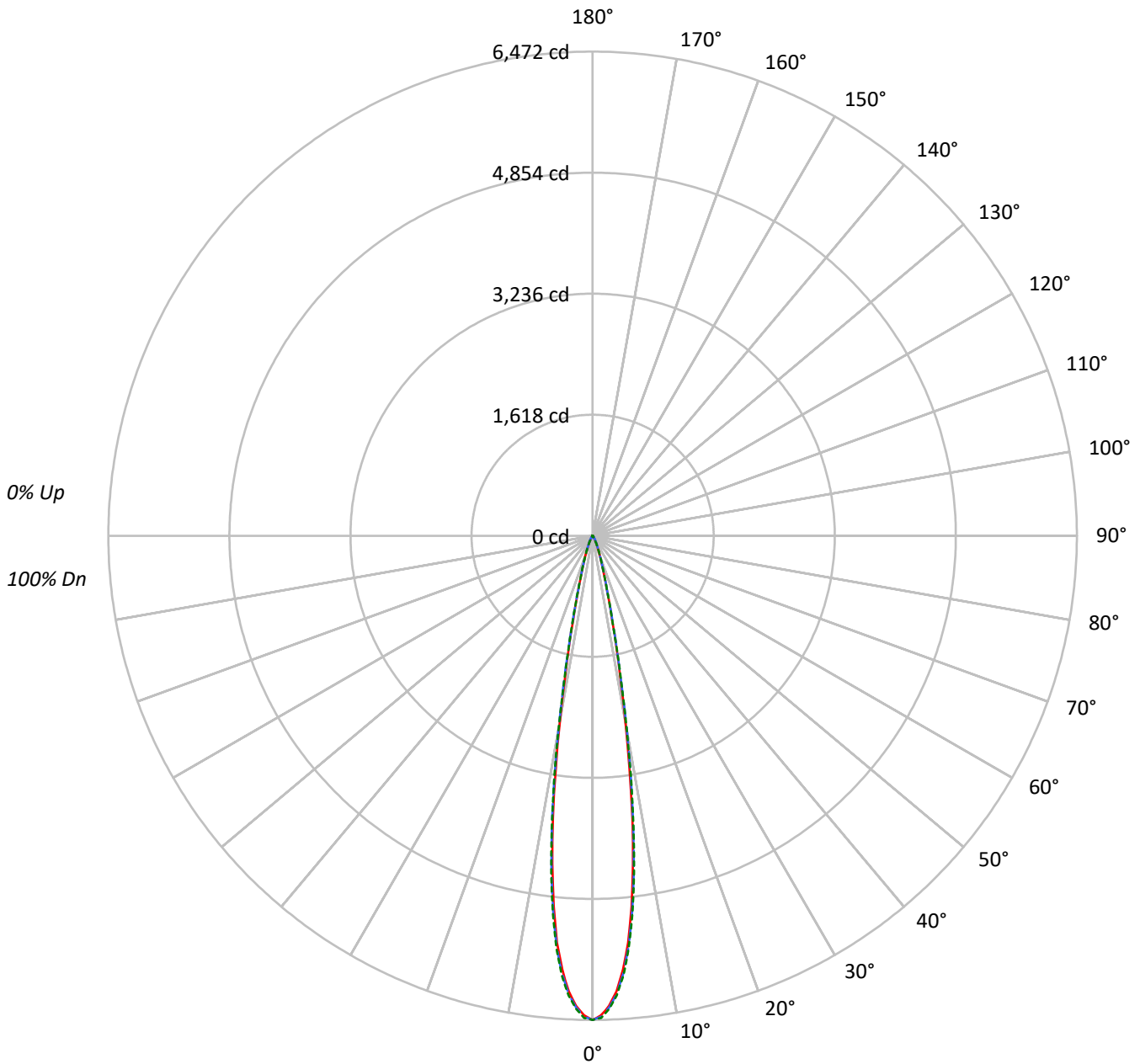
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3193136	3193136	3193136
5°	2702609	2730838	2742724
10°	1263754	1311647	1314202
15°	370152	375515	375362
20°	148634	148844	149002
25°	66304	72999	67882
30°	28142	38739	25693
35°	12889	17948	12046
40°	4186	7020	3735
45°	0	2512	0
50°	0	0	0
55°	1290	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°	427.7	56.8
10°-20°	242.4	32.2
20°-30°	63.3	8.4
30°-40°	16.3	2.2
40°-50°	1.6	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°	733.5	97.5
0°-40°	749.8	99.6
0°-60°	751.9	99.9
0°-90°	752.7	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°	6472	6472	6472	6472	6472	
5°	5457	5506	5514	5479	5538	422
15°	725	734	735	727	735	238
25°	122	132	134	128	125	61
35°	21	23	30	20	20	15
45°	0	2	4	0	0	1
55°	2	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°	6472.2	6472.2	6472.2	6472.2	6472.2
1°	6411.5	6436.9	6429.3	6420.2	6445.6
2°	6287.9	6312.6	6310.4	6298.4	6328.2
3°	6097.5	6132.0	6132.0	6114.2	6151.2
4°	5813.6	5866.3	5871.4	5846.3	5892.5
5°	5457.1	5505.8	5514.1	5479.2	5538.1
6°	4974.1	5040.6	5059.5	5019.1	5079.5
7°	4419.1	4488.9	4517.6	4472.5	4540.1
8°	3820.5	3870.7	3905.2	3853.6	3922.3
9°	3150.7	3223.0	3254.6	3204.5	3271.3
10°	2522.6	2589.2	2618.2	2606.2	2623.3
11°	1959.3	2018.2	2037.8	2021.5	2029.5
12°	1534.1	1557.7	1570.4	1559.5	1565.0
13°	1164.8	1196.4	1202.3	1197.5	1200.1
14°	909.7	925.0	931.5	929.3	930.4
15°	724.7	734.5	735.2	726.9	734.9
16°	583.7	591.3	594.6	585.9	596.4
17°	478.3	484.5	488.1	479.4	483.7
18°	393.6	398.3	403.4	395.8	402.3
19°	330.4	333.3	333.6	331.5	333.3
20°	283.1	281.7	283.5	279.5	283.8
22.5°	186.4	190.1	194.4	189.7	191.5
25°	121.8	131.9	134.1	127.9	124.7
26°	100.3	113.4	119.2	109.4	98.9
27°	83.2	92.7	100.3	87.2	78.9
28°	73.1	81.0	88.7	76.3	66.5
29°	61.1	69.1	82.1	68.0	61.8
30°	49.4	55.2	68.0	51.6	45.1
32.5°	28.0	32.7	44.0	30.5	25.1
35°	21.4	22.9	29.8	20.4	20.0
37.5°	18.5	16.7	23.3	16.7	13.4
40°	6.5	9.8	10.9	7.3	5.8
42.5°	2.9	2.9	4.7	1.5	1.5
45°	0.0	1.5	3.6	0.4	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°	1.5	1.8	0.7	0.4	0.0
57.5°	2.2	1.8	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	0.4	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.4	0.0	0.0	0.0
77.5°	3.6	0.7	1.1	0.7	1.5
80°	0.7	0.0	0.0	0.0	0.0
82.5°	1.5	0.0	0.0	0.0	0.0
85°	0.7	0.0	0.0	0.0	0.0
87.5°	0.0	0.4	0.0	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	0.0	0.0	0.0
72.5°	1.5	1.1	0.0	0.0	1.5



(END OF REPORT)