

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: P281509

Luminaire Tested: **LDA2B109035D010 EU2B10SP159035 2LBASQC1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281509  
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: LDA2B109035D010 EU2B10SP159035 2LBASQC1MB  
Description: PORTFOLIO 2IN ADJ 1000 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: 906.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 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

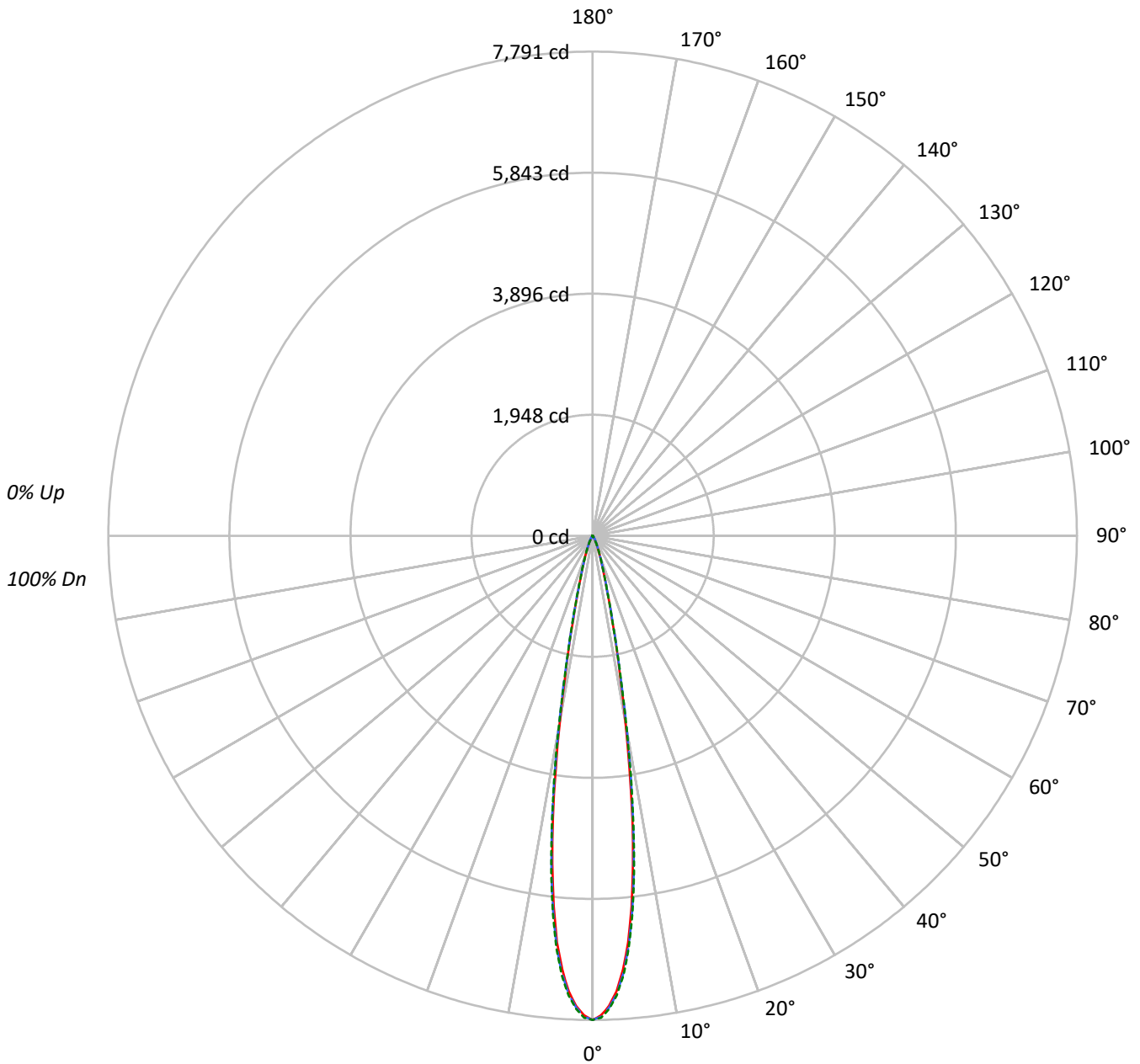
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	98	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°	3843732	3843732	3843732
5°	3253273	3287297	3301609
10°	1521304	1578916	1581972
15°	445592	452079	451823
20°	178928	179138	179401
25°	79804	87860	81709
30°	33896	46600	30877
35°	15539	21622	14515
40°	5088	8437	4508
45°	0	3070	0
50°	0	0	0
55°	1462	774	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	2557	0	0
85°	5095	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	514.9	56.8
10°-20°	291.8	32.2
20°-30°	76.2	8.4
30°-40°	19.6	2.2
40°-50°	1.9	0.2
50°-60°	0.6	0.1
60°-70°	0.1	0.0
70°-80°	0.6	0.1
80°-90°	0.2	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°	882.9	97.5
0°-40°	902.5	99.6
0°-60°	905.1	99.9
0°-90°	906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	906.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7791	7791	7791	7791	7791	
5°	6569	6628	6638	6596	6667	508
15°	872	884	885	875	885	286
25°	147	159	161	154	150	73
35°	26	28	36	24	24	18
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	2
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°	7790.9	7790.9	7790.9	7790.9	7790.9
1°	7717.9	7748.5	7739.3	7728.4	7759.0
2°	7569.1	7598.9	7596.2	7581.8	7617.7
3°	7339.9	7381.4	7381.4	7360.0	7404.6
4°	6998.2	7061.6	7067.7	7037.6	7093.1
5°	6569.0	6627.6	6637.7	6595.7	6666.6
6°	5987.6	6067.6	6090.4	6041.8	6114.4
7°	5319.5	5403.5	5438.1	5383.8	5465.2
8°	4599.0	4659.3	4700.9	4638.8	4721.5
9°	3792.7	3879.7	3917.8	3857.4	3937.9
10°	3036.7	3116.7	3151.7	3137.3	3157.8
11°	2358.5	2429.4	2453.0	2433.4	2443.0
12°	1846.7	1875.1	1890.4	1877.3	1883.9
13°	1402.2	1440.2	1447.2	1441.5	1444.6
14°	1095.1	1113.4	1121.3	1118.7	1120.0
15°	872.4	884.2	885.1	875.0	884.6
16°	702.6	711.8	715.7	705.2	717.9
17°	575.7	583.2	587.6	577.1	582.3
18°	473.8	479.5	485.6	476.4	484.3
19°	397.7	401.2	401.6	399.0	401.2
20°	340.8	339.1	341.2	336.4	341.7
22.5°	224.4	228.8	234.1	228.4	230.6
25°	146.6	158.8	161.4	154.0	150.1
26°	120.7	136.5	143.5	131.7	119.0
27°	100.2	111.6	120.7	105.0	94.9
28°	87.9	97.6	106.7	91.9	80.1
29°	73.5	83.1	98.9	81.8	74.4
30°	59.5	66.5	81.8	62.1	54.2
32.5°	33.7	39.4	52.9	36.7	30.2
35°	25.8	27.6	35.9	24.5	24.1
37.5°	22.3	20.1	28.0	20.1	16.2
40°	7.9	11.8	13.1	8.7	7.0
42.5°	3.5	3.5	5.7	1.7	1.7
45°	0.0	1.7	4.4	0.4	0.0
47.5°	0.0	0.0	0.9	0.0	0.0
50°	0.0	0.9	0.0	0.0	0.0
52.5°	0.9	0.0	0.0	0.0	0.0
55°	1.7	2.2	0.9	0.4	0.0
57.5°	2.6	2.2	0.9	0.9	0.9
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°	0.9	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°	4.4	0.9	1.3	0.9	1.7
80°	0.9	0.0	0.0	0.0	0.0
82.5°	1.7	0.0	0.0	0.0	0.0
85°	0.9	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°	1.7	1.3	0.0	0.0	1.7



(END OF REPORT)