

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: **LDA2B109030D010 EU2B10SP159030 2LBALSQC1MB**

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: LDA2B109030D010 EU2B10SP159030 2LBALSQC1MB  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 872.7 lumens  
Efficiency: N/A  
Efficacy: 87.3 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

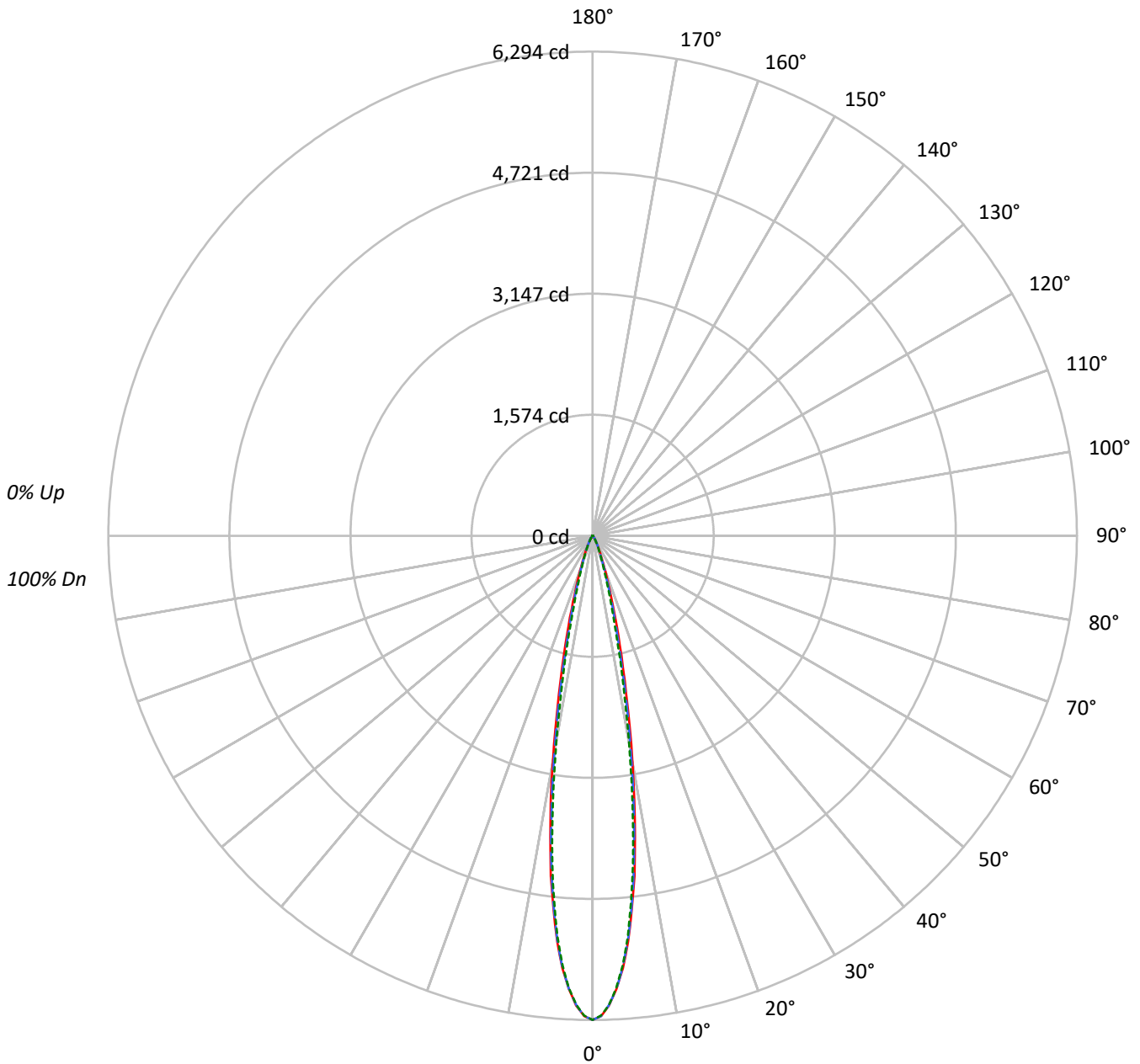
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				100															
1	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97				97															
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95				95															
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92				92															
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90				90															
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88				88															
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86				86															
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84				84															
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82				82															
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80				80															
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79				79															

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

	0°	45°	90°
0°	3105120	3105120	3105120
5°	2623518	2609552	2590287
10°	1493299	1427522	1354931
15°	618384	547745	482520
20°	235211	206020	188589
25°	103919	99836	88731
30°	48081	53095	42271
35°	25296	29813	23670
40°	11077	12816	7406
45°	4326	3419	4954
50°	2072	2379	3377
55°	0	1548	0
60°	0	0	888
65°	0	0	0
70°	0	577	0
75°	0	0	0
80°	2557	0	0
85°	24907	22643	10189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	420.8	48.2
10°-20°	321.7	36.9
20°-30°	89.5	10.3
30°-40°	29.1	3.3
40°-50°	6.4	0.7
50°-60°	2.0	0.2
60°-70°	1.1	0.1
70°-80°	0.7	0.1
80°-90°	1.4	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°	832.0	95.3
0°-40°	861.1	98.7
0°-60°	869.5	99.6
0°-90°	872.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	872.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6294	6294	6294	6294	6294	
5°	5297	5258	5269	5230	5230	428
15°	1211	1169	1072	990	945	353
25°	191	193	183	173	163	96
35°	42	46	50	38	39	28
45°	6	9	5	5	7	6
55°	0	3	2	1	0	2
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	4	2	4	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6293.8	6293.8	6293.8	6293.8	6293.8
1°	6245.7	6222.2	6244.8	6231.5	6239.0
2°	6110.0	6080.8	6104.3	6085.7	6101.2
3°	5898.8	5876.3	5897.0	5873.6	5886.0
4°	5634.1	5601.4	5622.2	5590.8	5598.3
5°	5297.4	5258.5	5269.2	5229.8	5230.3
6°	4873.2	4846.3	4852.5	4791.1	4786.6
7°	4458.3	4394.7	4388.1	4317.8	4304.1
8°	3954.6	3896.7	3877.7	3795.1	3766.0
9°	3471.7	3399.7	3360.8	3264.9	3230.9
10°	2980.8	2907.9	2849.5	2741.3	2704.6
11°	2526.5	2460.7	2388.2	2272.5	2236.7
12°	2105.0	2053.3	1973.8	1862.0	1824.4
13°	1760.8	1701.2	1615.9	1512.0	1479.8
14°	1462.5	1398.5	1313.2	1224.4	1161.6
15°	1210.7	1168.7	1072.4	989.8	944.7
16°	989.3	953.5	870.5	798.9	767.1
17°	811.3	782.5	711.8	655.7	629.2
18°	669.4	633.6	577.9	541.3	520.5
19°	543.0	515.2	474.6	446.3	425.5
20°	448.0	425.1	392.4	367.2	359.2
22.5°	289.4	285.4	264.2	250.5	243.9
25°	190.9	193.1	183.4	172.8	163.0
26°	163.0	164.4	155.5	149.3	137.0
27°	139.6	140.1	140.1	128.6	116.7
28°	114.0	118.9	114.4	109.1	97.7
29°	97.7	103.8	101.6	96.3	85.3
30°	84.4	88.8	93.2	84.8	74.2
32.5°	59.2	63.2	68.0	63.6	54.8
35°	42.0	45.5	49.5	37.6	39.3
37.5°	28.7	34.9	33.6	30.5	26.1
40°	17.2	18.1	19.9	21.2	11.5
42.5°	12.4	14.6	13.3	15.0	5.3
45°	6.2	8.8	4.9	4.9	7.1
47.5°	4.4	7.5	2.7	2.7	0.9
50°	2.7	5.7	3.1	1.3	4.4
52.5°	4.4	5.3	3.5	4.0	0.9
55°	0.0	2.7	1.8	0.9	0.0
57.5°	1.8	3.1	1.8	0.9	1.8
60°	0.0	0.0	0.0	0.4	0.9
62.5°	0.0	0.9	0.0	1.3	1.8
65°	0.0	1.8	0.0	0.0	0.0
67.5°	2.7	3.1	1.8	3.5	5.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.9	0.0
77.5°	0.0	4.4	1.3	1.3	1.8
80°	0.9	0.0	0.0	0.4	0.0
82.5°	0.0	3.5	0.4	1.8	2.7
85°	4.4	2.2	4.0	2.2	1.8
87.5°	0.0	0.4	0.9	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°	0.9	0.0	0.0	0.0	0.0



(END OF REPORT)