

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: **LDA2B158030D010 EU2B15SP158030 2LBALSQC1MMS**

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: LDA2B158030D010 EU2B15SP158030 2LBALSQC1MMS  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1439.6 lumens  
Efficiency: N/A  
Efficacy: 102.1 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

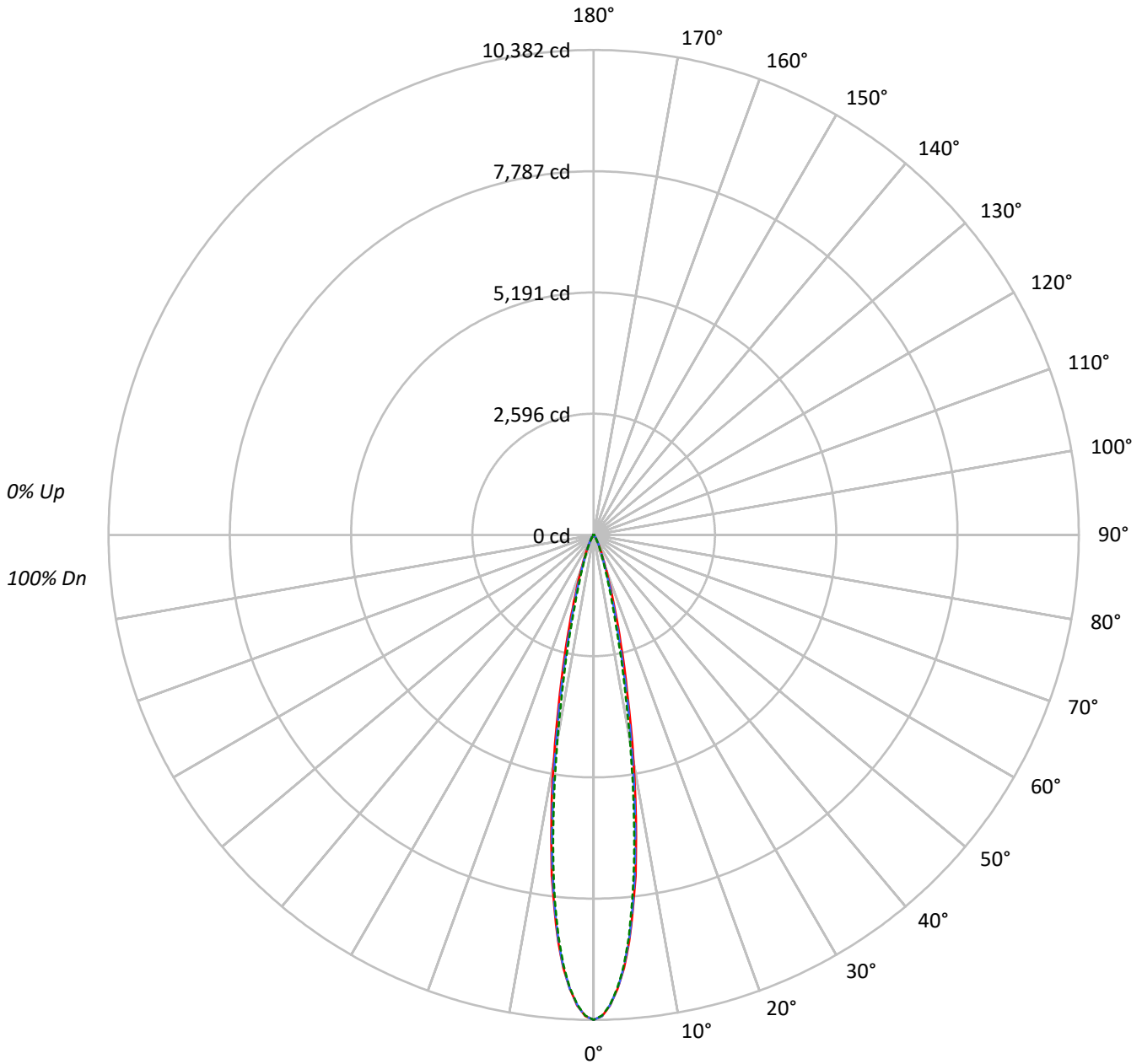
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5122279	5122279	5122279
5°	4327809	4304731	4272936
10°	2463333	2354872	2235140
15°	1020101	903545	795977
20°	388046	339848	311130
25°	171420	164670	146434
30°	79300	87618	69786
35°	41678	49146	39088
40°	18291	21124	12237
45°	7117	5582	8163
50°	3377	3914	5603
55°	0	2494	0
60°	0	0	1480
65°	0	0	0
70°	0	1010	0
75°	0	0	0
80°	4262	0	0
85°	41323	37361	16416



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	694.2	48.2
10°-20°	530.7	36.9
20°-30°	147.6	10.3
30°-40°	48.0	3.3
40°-50°	10.6	0.7
50°-60°	3.2	0.2
60°-70°	1.9	0.1
70°-80°	1.1	0.1
80°-90°	2.3	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°	1372.5	95.3
0°-40°	1420.5	98.7
0°-60°	1434.3	99.6
0°-90°	1439.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1439.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10382	10382	10382	10382	10382	
5°	8739	8675	8692	8627	8628	706
15°	1997	1928	1769	1633	1558	583
25°	315	318	302	285	269	158
35°	69	75	82	62	65	46
45°	10	15	8	8	12	10
55°	0	4	3	2	0	3
65°	0	3	0	0	0	2
75°	0	0	0	2	0	1
85°	7	4	7	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10382.4	10382.4	10382.4	10382.4	10382.4
1°	10302.9	10264.3	10301.5	10279.6	10292.0
2°	10079.2	10031.1	10069.7	10039.1	10064.6
3°	9730.8	9693.6	9727.8	9689.2	9709.6
4°	9294.1	9240.2	9274.5	9222.7	9235.1
5°	8738.7	8674.6	8692.1	8627.2	8627.9
6°	8039.0	7994.5	8004.7	7903.4	7896.1
7°	7354.6	7249.6	7238.7	7122.8	7100.2
8°	6523.6	6428.1	6396.8	6260.5	6212.4
9°	5726.9	5608.1	5544.0	5385.8	5329.7
10°	4917.1	4796.9	4700.6	4522.1	4461.6
11°	4167.8	4059.2	3939.7	3748.7	3689.7
12°	3472.5	3387.2	3256.0	3071.6	3009.6
13°	2904.6	2806.2	2665.6	2494.3	2441.1
14°	2412.6	2307.0	2166.3	2019.8	1916.3
15°	1997.2	1927.9	1769.0	1632.7	1558.4
16°	1632.0	1573.0	1435.9	1317.8	1265.4
17°	1338.3	1290.9	1174.3	1081.7	1037.9
18°	1104.3	1045.2	953.4	892.9	858.6
19°	895.8	849.9	782.8	736.2	701.9
20°	739.1	701.2	647.3	605.7	592.6
22.5°	477.4	470.9	435.9	413.3	402.4
25°	314.9	318.5	302.5	285.0	269.0
26°	269.0	271.1	256.6	246.4	226.0
27°	230.3	231.1	231.1	212.1	192.4
28°	188.1	196.1	188.8	180.0	161.1
29°	161.1	171.3	167.6	158.9	140.7
30°	139.2	146.5	153.8	139.9	122.5
32.5°	97.7	104.2	112.2	105.0	90.4
35°	69.2	75.1	81.6	62.0	64.9
37.5°	47.4	57.6	55.4	50.3	43.0
40°	28.4	29.9	32.8	35.0	19.0
42.5°	20.4	24.1	21.9	24.8	8.7
45°	10.2	14.6	8.0	8.0	11.7
47.5°	7.3	12.4	4.4	4.4	1.5
50°	4.4	9.5	5.1	2.2	7.3
52.5°	7.3	8.7	5.8	6.6	1.5
55°	0.0	4.4	2.9	1.5	0.0
57.5°	2.9	5.1	2.9	1.5	2.9
60°	0.0	0.0	0.0	0.7	1.5
62.5°	0.0	1.5	0.0	2.2	2.9
65°	0.0	2.9	0.0	0.0	0.0
67.5°	4.4	5.1	2.9	5.8	8.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.5	0.0
77.5°	0.0	7.3	2.2	2.2	2.9
80°	1.5	0.0	0.0	0.7	0.0
82.5°	0.0	5.8	0.7	2.9	4.4
85°	7.3	3.6	6.6	3.6	2.9
87.5°	0.0	0.7	1.5	0.7	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	0.7	0.7	0.0
72.5°	1.5	0.0	0.0	0.0	0.0



(END OF REPORT)