

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: **LDA2B158040D010 EU2B15SP158040 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: LDA2B158040D010 EU2B15SP158040 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: 1515.1 lumens  
Efficiency: N/A  
Efficacy: 107.5 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

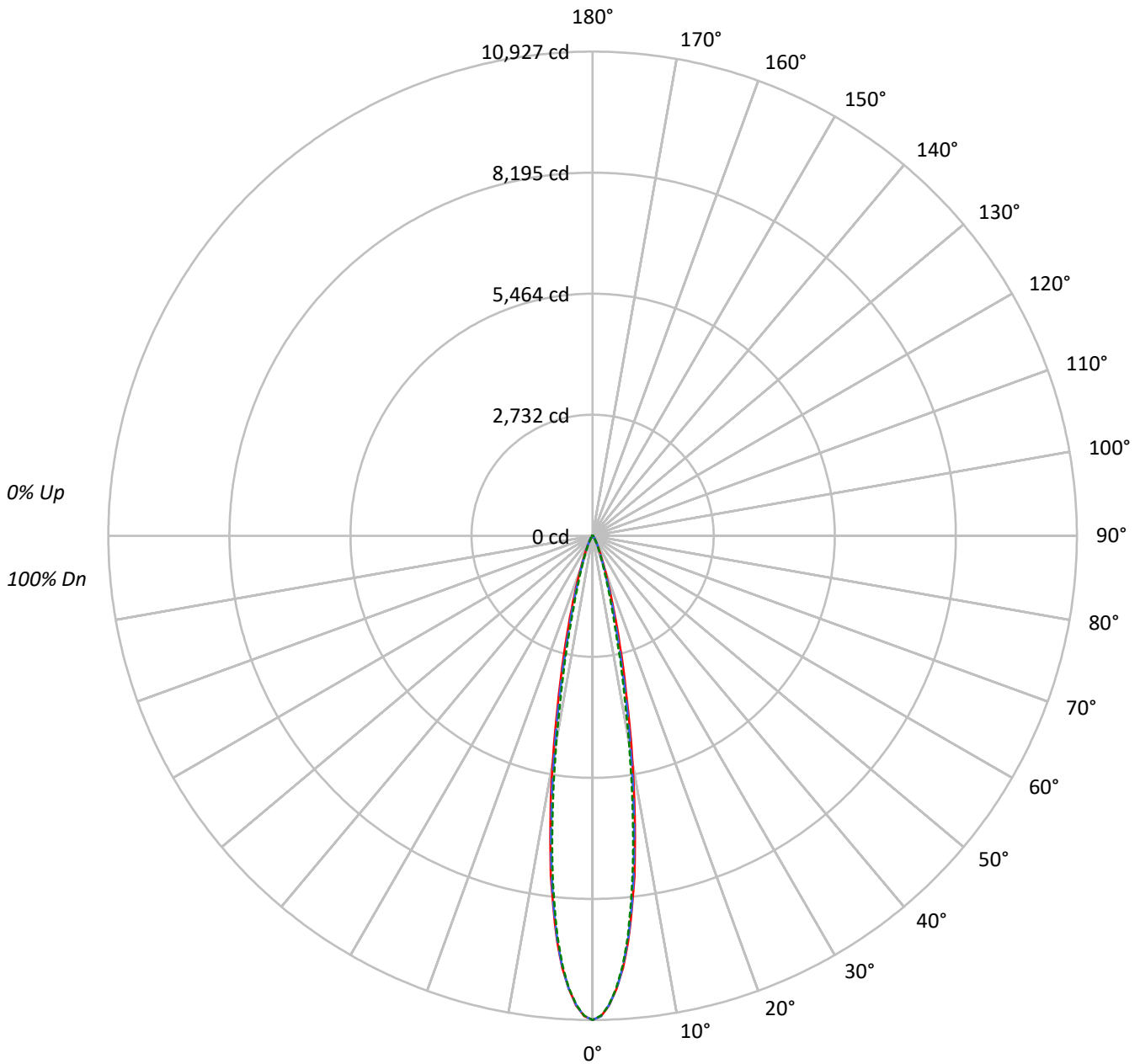
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5390964	5390964	5390964
5°	4554830	4530514	4497084
10°	2592534	2478412	2352367
15°	1073578	950944	837707
20°	408417	357647	327458
25°	180402	173326	154110
30°	83459	92232	73432
35°	43906	51736	41136
40°	19257	22219	12816
45°	7466	5861	8582
50°	3531	4145	5910
55°	0	2666	0
60°	0	0	1480
65°	0	0	0
70°	0	1154	0
75°	0	0	0
80°	4262	0	0
85°	43587	39059	17548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	730.6	48.2
10°-20°	558.5	36.9
20°-30°	155.3	10.3
30°-40°	50.5	3.3
40°-50°	11.1	0.7
50°-60°	3.4	0.2
60°-70°	2.0	0.1
70°-80°	1.2	0.1
80°-90°	2.5	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°	1444.5	95.3
0°-40°	1495.0	98.7
0°-60°	1509.5	99.6
0°-90°	1515.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1515.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10927	10927	10927	10927	10927	
5°	9197	9130	9148	9080	9080	743
15°	2102	2029	1862	1718	1640	614
25°	331	335	318	300	283	166
35°	73	79	86	65	68	48
45°	11	15	8	8	12	11
55°	0	5	3	2	0	3
65°	0	3	0	0	0	2
75°	0	0	0	2	0	1
85°	8	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°	10927.0	10927.0	10927.0	10927.0	10927.0
1°	10843.3	10802.7	10841.8	10818.8	10831.8
2°	10607.8	10557.2	10597.9	10565.6	10592.5
3°	10241.1	10202.0	10238.1	10197.4	10218.9
4°	9781.6	9724.9	9760.9	9706.5	9719.5
5°	9197.1	9129.6	9148.0	9079.7	9080.5
6°	8460.6	8413.8	8424.6	8318.0	8310.3
7°	7740.3	7629.8	7618.3	7496.4	7472.6
8°	6865.8	6765.3	6732.3	6588.9	6538.2
9°	6027.3	5902.3	5834.8	5668.3	5609.2
10°	5175.0	5048.5	4947.2	4759.3	4695.6
11°	4386.4	4272.1	4146.3	3945.3	3883.2
12°	3654.6	3564.8	3426.8	3232.7	3167.5
13°	3057.0	2953.4	2805.4	2625.1	2569.1
14°	2539.2	2428.0	2279.9	2125.7	2016.8
15°	2101.9	2029.1	1861.8	1718.4	1640.1
16°	1717.6	1655.5	1511.2	1387.0	1331.7
17°	1408.4	1358.6	1235.8	1138.4	1092.4
18°	1162.2	1100.1	1003.4	939.7	903.7
19°	942.8	894.5	823.9	774.8	738.7
20°	777.9	738.0	681.2	637.5	623.7
22.5°	502.5	495.6	458.7	435.0	423.5
25°	331.4	335.2	318.4	299.9	283.1
26°	283.1	285.4	270.0	259.3	237.8
27°	242.4	243.2	243.2	223.2	202.5
28°	197.9	206.4	198.7	189.5	169.5
29°	169.5	180.3	176.4	167.2	148.1
30°	146.5	154.2	161.9	147.3	128.9
32.5°	102.8	109.7	118.1	110.5	95.1
35°	72.9	79.0	85.9	65.2	68.3
37.5°	49.9	60.6	58.3	52.9	45.3
40°	29.9	31.5	34.5	36.8	19.9
42.5°	21.5	25.3	23.0	26.1	9.2
45°	10.7	15.3	8.4	8.4	12.3
47.5°	7.7	13.0	4.6	4.6	1.5
50°	4.6	10.0	5.4	2.3	7.7
52.5°	7.7	9.2	6.1	6.9	1.5
55°	0.0	4.6	3.1	1.5	0.0
57.5°	3.1	5.4	3.1	1.5	3.1
60°	0.0	0.0	0.0	0.8	1.5
62.5°	0.0	1.5	0.0	2.3	3.1
65°	0.0	3.1	0.0	0.0	0.0
67.5°	4.6	5.4	3.1	6.1	9.2



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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	7.7	2.3	2.3	3.1
80°	1.5	0.0	0.0	0.8	0.0
82.5°	0.0	6.1	0.8	3.1	4.6
85°	7.7	3.8	6.9	3.8	3.1
87.5°	0.0	0.8	1.5	0.8	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	0.8	0.8	0.0
72.5°	1.5	0.0	0.0	0.0	0.0



(END OF REPORT)