

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: **LDA2B158050D010 EU2B15SP158050 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: LDA2B158050D010 EU2B15SP158050 2LBALSQC1MB  
Description: PORTFOLIO 2IN ADJ 1500 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: 1505.2 lumens  
Efficiency: N/A  
Efficacy: 106.8 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

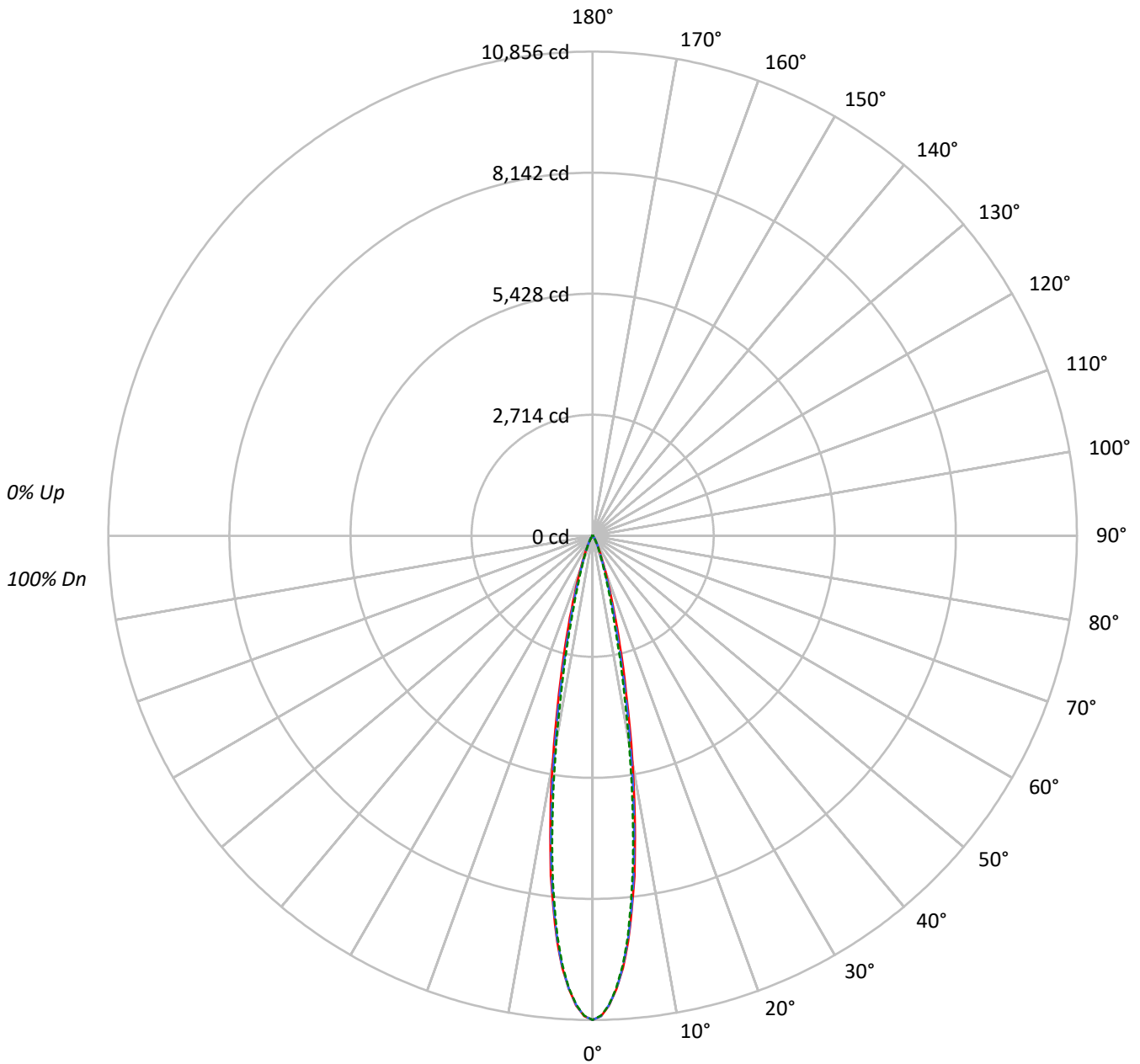
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	5355788	5355788	5355788
5°	4525115	4500947	4467766
10°	2575651	2462231	2337038
15°	1066581	944763	832242
20°	405739	355337	325305
25°	179205	172182	153075
30°	82946	91605	72920
35°	43605	51435	40835
40°	19128	22091	12752
45°	7466	5861	8512
50°	3531	4068	5833
55°	0	2580	0
60°	0	0	1480
65°	0	0	0
70°	0	1154	0
75°	0	0	0
80°	4262	0	0
85°	43021	39059	16982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	725.8	48.2
10°-20°	554.9	36.9
20°-30°	154.3	10.3
30°-40°	50.2	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°	2.4	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°	1435.0	95.3
0°-40°	1485.2	98.7
0°-60°	1499.6	99.6
0°-90°	1505.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10856	10856	10856	10856	10856	
5°	9137	9070	9088	9020	9021	739
15°	2088	2016	1850	1707	1629	610
25°	329	333	316	298	281	165
35°	72	78	85	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°	10855.7	10855.7	10855.7	10855.7	10855.7
1°	10772.6	10732.3	10771.1	10748.3	10761.2
2°	10538.7	10488.4	10528.8	10496.8	10523.4
3°	10174.4	10135.5	10171.3	10130.9	10152.3
4°	9717.9	9661.5	9697.3	9643.2	9656.1
5°	9137.1	9070.1	9088.3	9020.5	9021.3
6°	8405.5	8359.0	8369.7	8263.7	8256.1
7°	7689.8	7580.1	7568.7	7447.5	7423.9
8°	6821.0	6721.2	6688.4	6545.9	6495.6
9°	5988.0	5863.8	5796.7	5631.3	5572.7
10°	5141.3	5015.5	4914.9	4728.2	4665.0
11°	4357.8	4244.3	4119.3	3919.6	3857.9
12°	3630.8	3541.6	3404.4	3211.6	3146.8
13°	3037.1	2934.2	2787.1	2608.0	2552.4
14°	2522.6	2412.1	2265.0	2111.8	2003.6
15°	2088.2	2015.8	1849.7	1707.2	1629.4
16°	1706.4	1644.7	1501.4	1377.9	1323.0
17°	1399.3	1349.7	1227.8	1131.0	1085.3
18°	1154.6	1092.9	996.9	933.6	897.8
19°	936.7	888.6	818.5	769.7	733.9
20°	772.8	733.2	676.8	633.3	619.6
22.5°	499.2	492.3	455.8	432.1	420.7
25°	329.2	333.0	316.3	298.0	281.2
26°	281.2	283.5	268.3	257.6	236.3
27°	240.8	241.6	241.6	221.8	201.2
28°	196.6	205.0	197.4	188.2	168.4
29°	168.4	179.1	175.3	166.1	147.1
30°	145.6	153.2	160.8	146.3	128.0
32.5°	102.1	109.0	117.4	109.7	94.5
35°	72.4	78.5	85.4	64.8	67.8
37.5°	49.5	60.2	57.9	52.6	45.0
40°	29.7	31.2	34.3	36.6	19.8
42.5°	21.3	25.2	22.9	25.9	9.1
45°	10.7	15.2	8.4	8.4	12.2
47.5°	7.6	13.0	4.6	4.6	1.5
50°	4.6	9.9	5.3	2.3	7.6
52.5°	7.6	9.1	6.1	6.9	1.5
55°	0.0	4.6	3.0	1.5	0.0
57.5°	3.0	5.3	3.0	1.5	3.0
60°	0.0	0.0	0.0	0.8	1.5
62.5°	0.0	1.5	0.0	2.3	3.0
65°	0.0	3.0	0.0	0.0	0.0
67.5°	4.6	5.3	3.0	6.1	9.1



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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	7.6	2.3	2.3	3.0
80°	1.5	0.0	0.0	0.8	0.0
82.5°	0.0	6.1	0.8	3.0	4.6
85°	7.6	3.8	6.9	3.8	3.0
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)