

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: **LDA2B058027D010 EU2B05SP158027 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: LDA2B058027D010 EU2B05SP158027 2LBALSQC1MB  
Description: PORTFOLIO 2IN ADJ 500 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: 781.4 lumens  
Efficiency: N/A  
Efficacy: 111.6 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

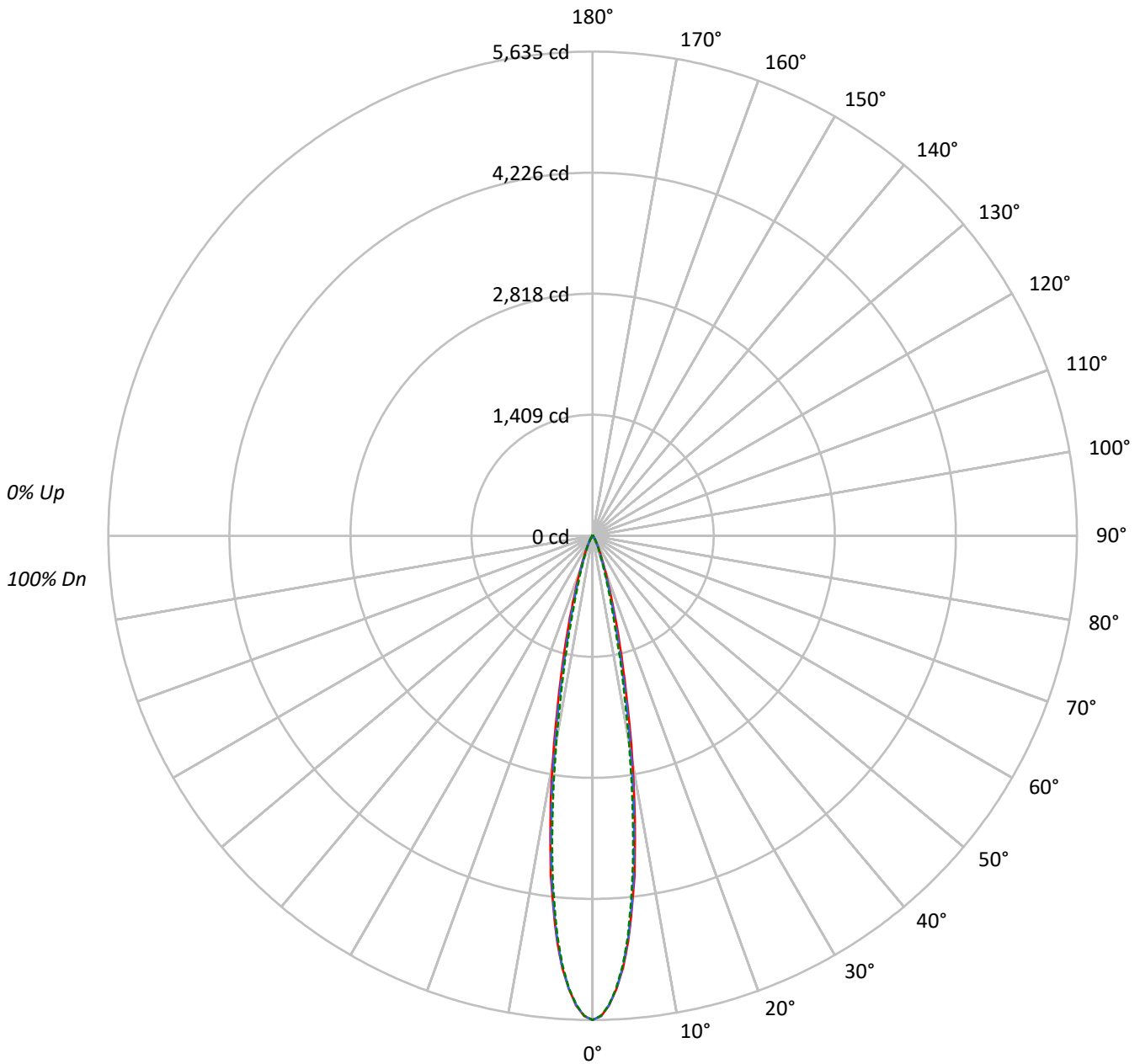
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
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°	2779995	2779995	2779995
5°	2348805	2336275	2319041
10°	1336946	1278082	1213055
15°	553619	490386	432006
20°	210587	184441	168848
25°	93032	89385	79477
30°	43068	47569	37884
35°	22646	26681	21200
40°	9918	11464	6634
45°	3837	3070	4396
50°	1842	2149	3070
55°	0	1376	0
60°	0	0	789
65°	0	0	0
70°	0	577	0
75°	0	0	0
80°	2273	0	0
85°	22643	20378	9057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	376.8	48.2
10°-20°	288.0	36.9
20°-30°	80.1	10.3
30°-40°	26.0	3.3
40°-50°	5.7	0.7
50°-60°	1.8	0.2
60°-70°	1.0	0.1
70°-80°	0.6	0.1
80°-90°	1.3	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°	744.9	95.3
0°-40°	770.9	98.7
0°-60°	778.4	99.6
0°-90°	781.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	781.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5635	5635	5635	5635	5635	
5°	4743	4708	4717	4682	4683	383
15°	1084	1046	960	886	846	316
25°	171	173	164	155	146	86
35°	38	41	44	34	35	25
45°	6	8	4	4	6	6
55°	0	2	2	1	0	1
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°	5634.8	5634.8	5634.8	5634.8	5634.8
1°	5591.7	5570.7	5590.9	5579.0	5585.8
2°	5470.2	5444.1	5465.1	5448.5	5462.3
3°	5281.1	5261.0	5279.6	5258.6	5269.7
4°	5044.2	5014.9	5033.5	5005.4	5012.1
5°	4742.7	4707.9	4717.4	4682.2	4682.6
6°	4363.0	4338.8	4344.4	4289.4	4285.4
7°	3991.5	3934.6	3928.6	3865.7	3853.5
8°	3540.5	3488.7	3471.7	3397.7	3371.6
9°	3108.2	3043.7	3008.9	2923.0	2892.6
10°	2668.7	2603.4	2551.2	2454.3	2421.4
11°	2262.0	2203.0	2138.2	2034.5	2002.5
12°	1884.6	1838.3	1767.1	1667.0	1633.4
13°	1576.4	1523.0	1446.7	1353.7	1324.8
14°	1309.4	1252.0	1175.7	1096.2	1040.0
15°	1083.9	1046.3	960.1	886.1	845.8
16°	885.7	853.7	779.3	715.2	686.7
17°	726.3	700.6	637.3	587.1	563.3
18°	599.3	567.3	517.4	484.6	466.0
19°	486.2	461.3	424.9	399.5	381.0
20°	401.1	380.6	351.3	328.7	321.6
22.5°	259.1	255.6	236.6	224.3	218.4
25°	170.9	172.9	164.2	154.7	146.0
26°	146.0	147.2	139.2	133.7	122.6
27°	125.0	125.4	125.4	115.1	104.4
28°	102.1	106.4	102.5	97.7	87.4
29°	87.4	93.0	91.0	86.2	76.3
30°	75.6	79.5	83.5	76.0	66.5
32.5°	53.0	56.6	60.9	57.0	49.1
35°	37.6	40.7	44.3	33.6	35.2
37.5°	25.7	31.3	30.1	27.3	23.3
40°	15.4	16.2	17.8	19.0	10.3
42.5°	11.1	13.1	11.9	13.5	4.7
45°	5.5	7.9	4.4	4.4	6.3
47.5°	4.0	6.7	2.4	2.4	0.8
50°	2.4	5.1	2.8	1.2	4.0
52.5°	4.0	4.7	3.2	3.6	0.8
55°	0.0	2.4	1.6	0.8	0.0
57.5°	1.6	2.8	1.6	0.8	1.6
60°	0.0	0.0	0.0	0.4	0.8
62.5°	0.0	0.8	0.0	1.2	1.6
65°	0.0	1.6	0.0	0.0	0.0
67.5°	2.4	2.8	1.6	3.2	4.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.8	0.0
77.5°	0.0	4.0	1.2	1.2	1.6
80°	0.8	0.0	0.0	0.4	0.0
82.5°	0.0	3.2	0.4	1.6	2.4
85°	4.0	2.0	3.6	2.0	1.6
87.5°	0.0	0.4	0.8	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°	0.8	0.0	0.0	0.0	0.0



(END OF REPORT)