

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: P281069

Luminaire Tested: **LDA2B059040D010 EU2B05SP159040 2LBALD1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281069  
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: LDA2B059040D010 EU2B05SP159040 2LBALD1B  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, B  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 681.0 lumens  
Efficiency: N/A  
Efficacy: 97.3 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

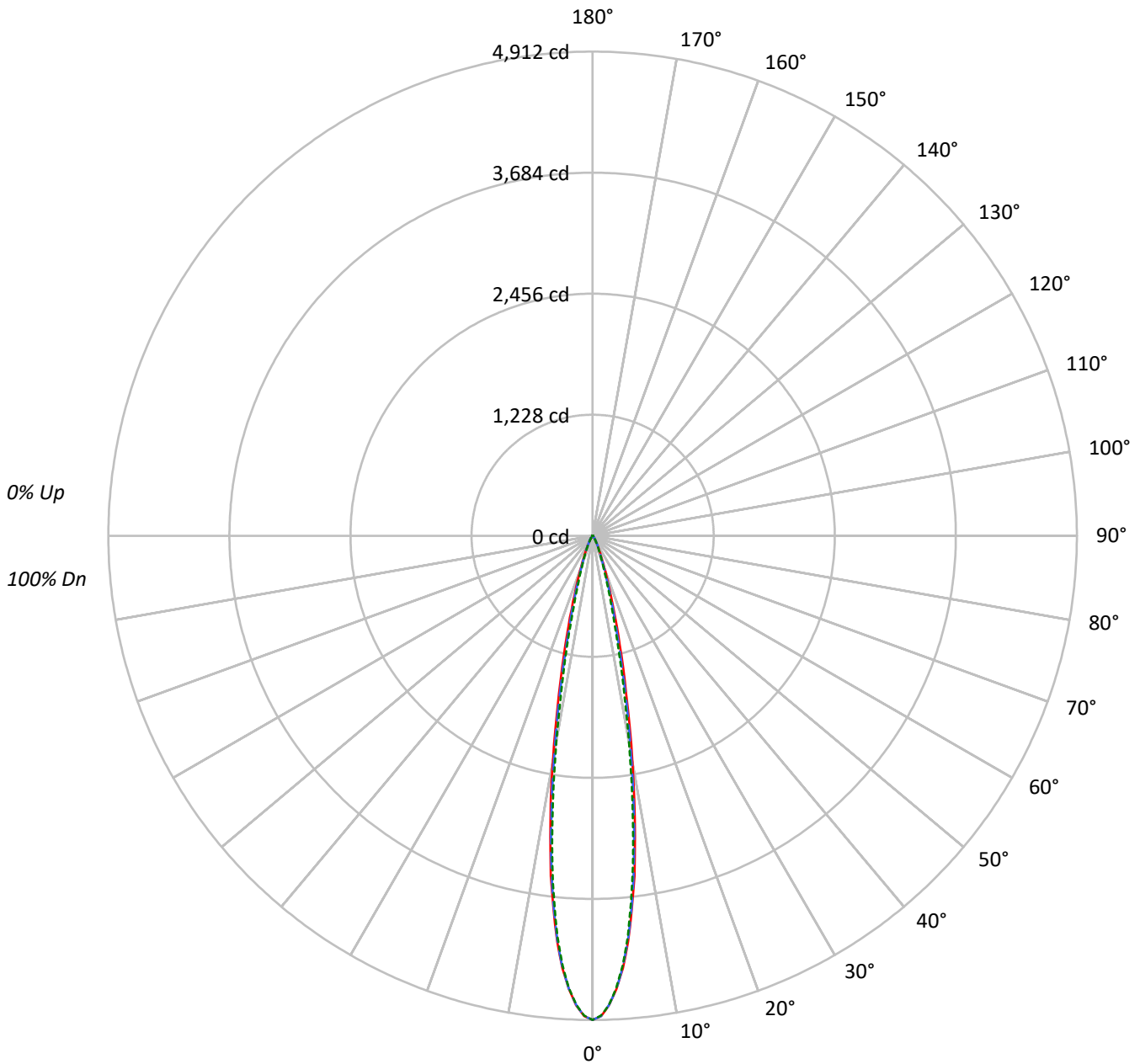
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	89	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°	2423294	2423294	2423294
5°	2047447	2036503	2021497
10°	1165363	1114063	1057403
15°	482571	427460	376536
20°	183601	160763	147164
25°	81110	77899	69243
30°	37542	41473	32985
35°	19755	23248	18490
40°	8630	9983	5796
45°	3349	2651	3837
50°	1612	1842	2610
55°	0	1204	0
60°	0	0	691
65°	0	0	0
70°	0	433	0
75°	0	0	0
80°	1989	0	0
85°	19246	17548	7925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	328.4	48.2
10°-20°	251.1	36.9
20°-30°	69.8	10.3
30°-40°	22.7	3.3
40°-50°	5.0	0.7
50°-60°	1.5	0.2
60°-70°	0.9	0.1
70°-80°	0.5	0.1
80°-90°	1.1	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°	649.3	95.3
0°-40°	672.0	98.7
0°-60°	678.5	99.6
0°-90°	681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	681.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4912	4912	4912	4912	4912	
5°	4134	4104	4112	4081	4082	334
15°	945	912	837	772	737	276
25°	149	151	143	135	127	75
35°	33	36	39	29	31	22
45°	5	7	4	4	6	5
55°	0	2	1	1	0	1
65°	0	1	0	0	0	1
75°	0	0	0	1	0	0
85°	3	2	3	2	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4911.8	4911.8	4911.8	4911.8	4911.8
1°	4874.2	4855.9	4873.5	4863.2	4869.0
2°	4768.3	4745.6	4763.8	4749.4	4761.4
3°	4603.5	4585.9	4602.1	4583.8	4593.5
4°	4396.9	4371.4	4387.6	4363.1	4369.0
5°	4134.2	4103.8	4112.1	4081.4	4081.8
6°	3803.1	3782.1	3786.9	3739.0	3735.6
7°	3479.3	3429.7	3424.5	3369.7	3359.0
8°	3086.2	3041.1	3026.2	2961.8	2939.0
9°	2709.3	2653.1	2622.8	2548.0	2521.4
10°	2326.2	2269.3	2223.8	2139.3	2110.7
11°	1971.7	1920.4	1863.8	1773.5	1745.5
12°	1642.8	1602.4	1540.4	1453.1	1423.8
13°	1374.2	1327.6	1261.0	1180.0	1154.8
14°	1141.4	1091.4	1024.8	955.5	906.6
15°	944.8	912.1	836.9	772.4	737.2
16°	772.1	744.1	679.3	623.5	598.6
17°	633.1	610.7	555.5	511.7	491.0
18°	522.4	494.5	451.0	422.4	406.2
19°	423.8	402.1	370.3	348.3	332.1
20°	349.7	331.7	306.2	286.6	280.3
22.5°	225.9	222.8	206.2	195.5	190.3
25°	149.0	150.7	143.1	134.8	127.2
26°	127.2	128.3	121.4	116.6	106.9
27°	109.0	109.3	109.3	100.3	91.0
28°	89.0	92.8	89.3	85.2	76.2
29°	76.2	81.0	79.3	75.2	66.6
30°	65.9	69.3	72.8	66.2	57.9
32.5°	46.2	49.3	53.1	49.7	42.8
35°	32.8	35.5	38.6	29.3	30.7
37.5°	22.4	27.2	26.2	23.8	20.3
40°	13.4	14.1	15.5	16.6	9.0
42.5°	9.7	11.4	10.3	11.7	4.1
45°	4.8	6.9	3.8	3.8	5.5
47.5°	3.4	5.9	2.1	2.1	0.7
50°	2.1	4.5	2.4	1.0	3.4
52.5°	3.4	4.1	2.8	3.1	0.7
55°	0.0	2.1	1.4	0.7	0.0
57.5°	1.4	2.4	1.4	0.7	1.4
60°	0.0	0.0	0.0	0.3	0.7
62.5°	0.0	0.7	0.0	1.0	1.4
65°	0.0	1.4	0.0	0.0	0.0
67.5°	2.1	2.4	1.4	2.8	4.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.7	0.0
77.5°	0.0	3.4	1.0	1.0	1.4
80°	0.7	0.0	0.0	0.3	0.0
82.5°	0.0	2.8	0.3	1.4	2.1
85°	3.4	1.7	3.1	1.7	1.4
87.5°	0.0	0.3	0.7	0.3	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	0.3	0.3	0.0
72.5°	0.7	0.0	0.0	0.0	0.0



(END OF REPORT)