

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: P281041

Luminaire Tested: **LDA2B059024D010 EU2B05SP159024 2LBALD1GPH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281041  
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: LDA2B059024D010 EU2B05SP159024 2LBALD1GPH  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, GPH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 571.4 lumens  
Efficiency: N/A  
Efficacy: 81.6 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

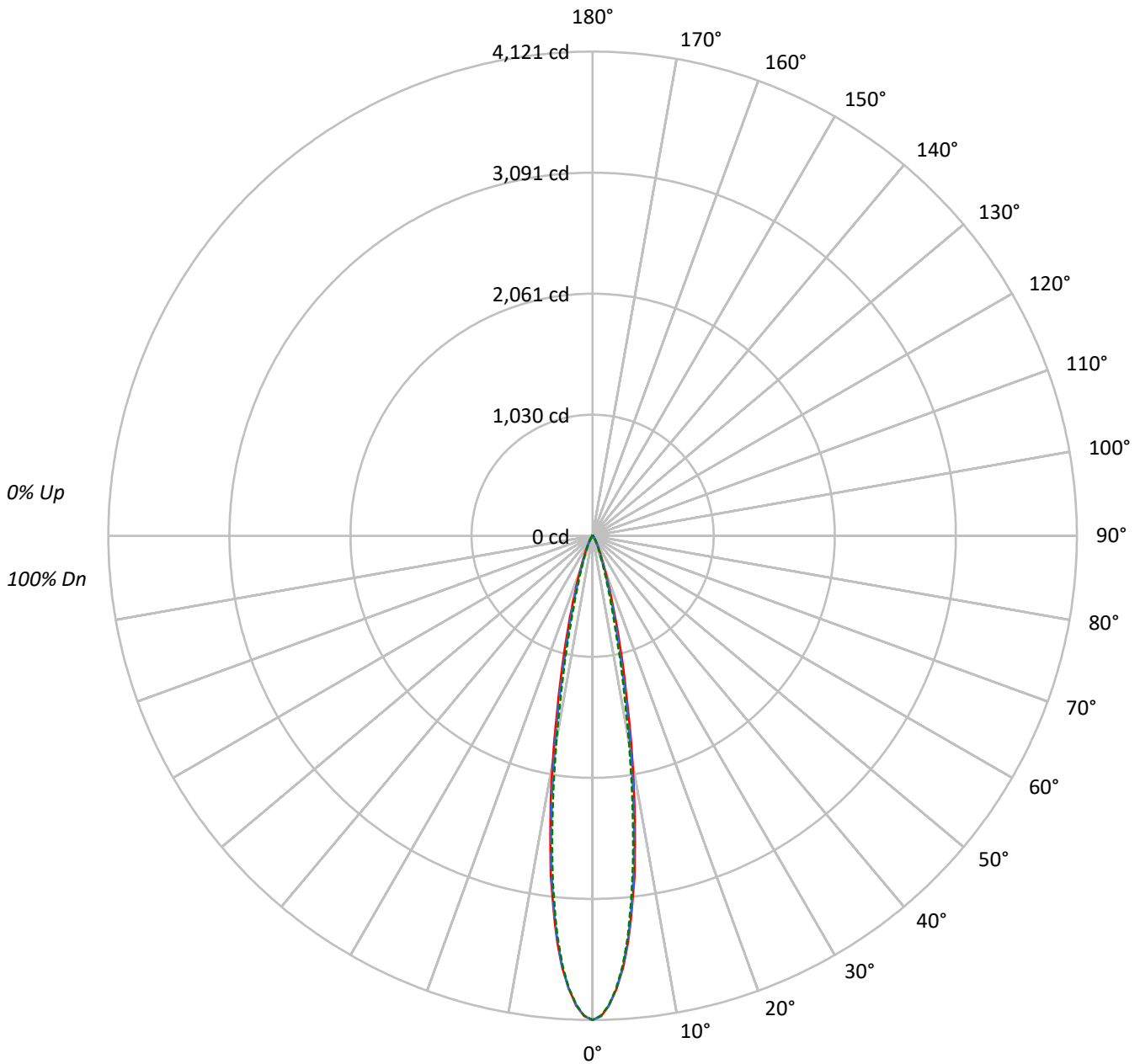
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				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°	2033193	2033193	2033193
5°	1717861	1708699	1696070
10°	977798	934715	887173
15°	404884	358660	315960
20°	154042	134879	123486
25°	68046	65378	58138
30°	31504	34751	27687
35°	16563	19514	15479
40°	7278	8372	4830
45°	2861	2233	3210
50°	1305	1535	2226
55°	0	1032	0
60°	0	0	592
65°	0	0	0
70°	0	433	0
75°	0	0	0
80°	1705	0	0
85°	16416	14718	6793



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.5	48.2
10°-20°	210.7	36.9
20°-30°	58.6	10.3
30°-40°	19.1	3.3
40°-50°	4.2	0.7
50°-60°	1.3	0.2
60°-70°	0.8	0.1
70°-80°	0.5	0.1
80°-90°	0.9	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°	544.8	95.3
0°-40°	563.8	98.7
0°-60°	569.3	99.6
0°-90°	571.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	571.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4121	4121	4121	4121	4121	
5°	3469	3443	3450	3424	3425	280
15°	793	765	702	648	619	231
25°	125	126	120	113	107	63
35°	28	30	32	25	26	18
45°	4	6	3	3	5	4
55°	0	2	1	1	0	1
65°	0	1	0	0	0	1
75°	0	0	0	1	0	0
85°	3	1	3	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4121.1	4121.1	4121.1	4121.1	4121.1
1°	4089.6	4074.2	4089.0	4080.3	4085.2
2°	4000.7	3981.6	3997.0	3984.8	3995.0
3°	3862.4	3847.7	3861.3	3846.0	3854.1
4°	3689.1	3667.7	3681.3	3660.8	3665.7
5°	3468.7	3443.2	3450.2	3424.4	3424.7
6°	3190.9	3173.3	3177.3	3137.1	3134.2
7°	2919.3	2877.6	2873.3	2827.3	2818.3
8°	2589.4	2551.5	2539.1	2485.0	2465.9
9°	2273.2	2226.0	2200.6	2137.8	2115.5
10°	1951.8	1904.0	1865.8	1795.0	1770.9
11°	1654.3	1611.2	1563.8	1488.0	1464.5
12°	1378.3	1344.5	1292.4	1219.2	1194.6
13°	1152.9	1113.9	1058.1	990.1	968.9
14°	957.7	915.7	859.9	801.7	760.6
15°	792.7	765.3	702.2	648.1	618.6
16°	647.8	624.4	570.0	523.1	502.3
17°	531.2	512.4	466.1	429.4	412.0
18°	438.3	414.9	378.4	354.4	340.8
19°	355.6	337.3	310.7	292.2	278.6
20°	293.4	278.3	256.9	240.4	235.2
22.5°	189.5	186.9	173.0	164.0	159.7
25°	125.0	126.4	120.1	113.1	106.8
26°	106.8	107.6	101.8	97.8	89.7
27°	91.4	91.7	91.7	84.2	76.4
28°	74.6	77.8	74.9	71.5	63.9
29°	63.9	68.0	66.5	63.1	55.8
30°	55.3	58.2	61.0	55.5	48.6
32.5°	38.8	41.4	44.6	41.7	35.9
35°	27.5	29.8	32.4	24.6	25.7
37.5°	18.8	22.9	22.0	20.0	17.1
40°	11.3	11.9	13.0	13.9	7.5
42.5°	8.1	9.5	8.7	9.8	3.5
45°	4.1	5.8	3.2	3.2	4.6
47.5°	2.9	4.9	1.7	1.7	0.6
50°	1.7	3.8	2.0	0.9	2.9
52.5°	2.9	3.5	2.3	2.6	0.6
55°	0.0	1.7	1.2	0.6	0.0
57.5°	1.2	2.0	1.2	0.6	1.2
60°	0.0	0.0	0.0	0.3	0.6
62.5°	0.0	0.6	0.0	0.9	1.2
65°	0.0	1.2	0.0	0.0	0.0
67.5°	1.7	2.0	1.2	2.3	3.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.6	0.0
77.5°	0.0	2.9	0.9	0.9	1.2
80°	0.6	0.0	0.0	0.3	0.0
82.5°	0.0	2.3	0.3	1.2	1.7
85°	2.9	1.4	2.6	1.4	1.2
87.5°	0.0	0.3	0.6	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°	0.6	0.0	0.0	0.0	0.0



(END OF REPORT)