

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: P281459

Luminaire Tested: **LDA2B059024D010 EU2B05SP159024 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281459  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B059024D010 EU2B05SP159024 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 571.5 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

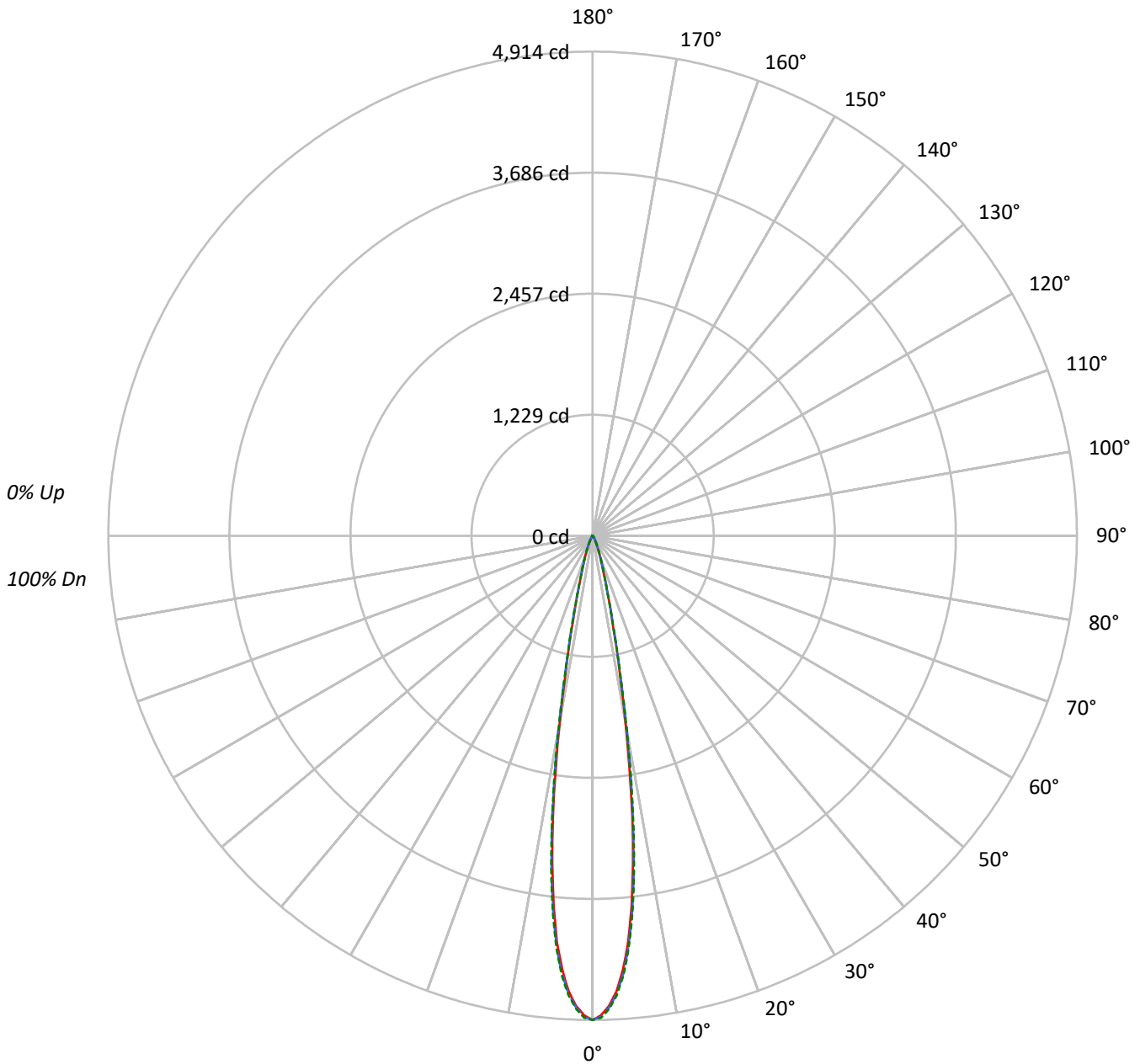
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	98	98	98																
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	96	96	96																
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	94	94	94																
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	92	92	92																
5	105	100	96	94	103	99	96	93	97	95	93	96	94	92	95	93	91	90	90	90	90																
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	89	89	89																
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	87	87	87																
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	86	86	86	86																
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	84	84	84																
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	83	83	83																

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

	0°	45°	90°
0°	2424281	2424281	2424281
5°	2051905	2073349	2082362
10°	959513	995834	997787
15°	281023	285109	284956
20°	112880	112985	113143
25°	50299	55416	51497
30°	21363	29396	19483
35°	9817	13612	9155
40°	3220	5346	2834
45°	0	1954	0
50°	0	0	0
55°	946	516	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	1705	0	0
85°	3396	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	324.7	56.8
10°-20°	184.1	32.2
20°-30°	48.1	8.4
30°-40°	12.4	2.2
40°-50°	1.2	0.2
50°-60°	0.4	0.1
60°-70°	0.1	0.0
70°-80°	0.4	0.1
80°-90°	0.1	0.0
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°	556.9	97.4
0°-40°	569.3	99.6
0°-60°	570.9	99.9
0°-90°	571.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	571.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4914	4914	4914	4914	4914	
5°	4143	4180	4186	4160	4205	321
15°	550	558	558	552	558	181
25°	92	100	102	97	95	46
35°	16	17	23	16	15	11
45°	0	1	3	0	0	1
55°	1	1	1	0	0	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	1
85°	1	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4913.8	4913.8	4913.8	4913.8	4913.8
1°	4867.8	4887.1	4881.3	4874.4	4893.7
2°	4773.9	4792.7	4791.1	4782.0	4804.6
3°	4629.4	4655.6	4655.6	4642.1	4670.2
4°	4413.9	4453.9	4457.7	4438.7	4473.7
5°	4143.2	4180.1	4186.5	4160.0	4204.7
6°	3776.4	3826.9	3841.3	3810.7	3856.5
7°	3355.1	3408.1	3429.9	3395.7	3447.0
8°	2900.6	2938.7	2964.9	2925.7	2977.9
9°	2392.1	2447.0	2471.0	2432.9	2483.7
10°	1915.3	1965.8	1987.8	1978.7	1991.7
11°	1487.6	1532.3	1547.2	1534.7	1540.8
12°	1164.7	1182.7	1192.3	1184.0	1188.2
13°	884.4	908.4	912.8	909.2	911.1
14°	690.7	702.3	707.2	705.6	706.4
15°	550.2	557.7	558.2	551.9	557.9
16°	443.2	448.9	451.4	444.8	452.8
17°	363.1	367.8	370.6	364.0	367.3
18°	298.8	302.4	306.3	300.5	305.5
19°	250.8	253.0	253.3	251.7	253.0
20°	215.0	213.8	215.2	212.2	215.5
22.5°	141.6	144.3	147.6	144.0	145.4
25°	92.4	100.2	101.8	97.1	94.6
26°	76.2	86.1	90.5	83.1	75.1
27°	63.2	70.4	76.2	66.2	59.9
28°	55.5	61.5	67.3	57.9	50.5
29°	46.4	52.4	62.4	51.6	46.9
30°	37.5	41.9	51.6	39.2	34.2
32.5°	21.2	24.8	33.4	23.2	19.0
35°	16.3	17.4	22.6	15.5	15.2
37.5°	14.1	12.7	17.7	12.7	10.2
40°	5.0	7.5	8.3	5.5	4.4
42.5°	2.2	2.2	3.6	1.1	1.1
45°	0.0	1.1	2.8	0.3	0.0
47.5°	0.0	0.0	0.6	0.0	0.0
50°	0.0	0.6	0.0	0.0	0.0
52.5°	0.6	0.0	0.0	0.0	0.0
55°	1.1	1.4	0.6	0.3	0.0
57.5°	1.7	1.4	0.6	0.6	0.6
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.6	0.3	0.0	0.0	0.0



TEST NUMBER: P281459

CATALOG NUMBER: LDA2B059024D010 EU2B05SP159024 2LBASQC1MMS

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.3	0.0	0.0	0.0
77.5°	2.8	0.6	0.8	0.6	1.1
80°	0.6	0.0	0.0	0.0	0.0
82.5°	1.1	0.0	0.0	0.0	0.0
85°	0.6	0.0	0.0	0.0	0.0
87.5°	0.0	0.3	0.0	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	0.0	0.0	0.0
72.5°	1.1	0.8	0.0	0.0	1.1



(END OF REPORT)