

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: P281078

Luminaire Tested: **LDA2B059050D010 EU2B05SP159050 2LBALD1WMH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281078  
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: LDA2B059050D010 EU2B05SP159050 2LBALD1WMH  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, WMH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 699.7 lumens  
Efficiency: N/A  
Efficacy: 100.0 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

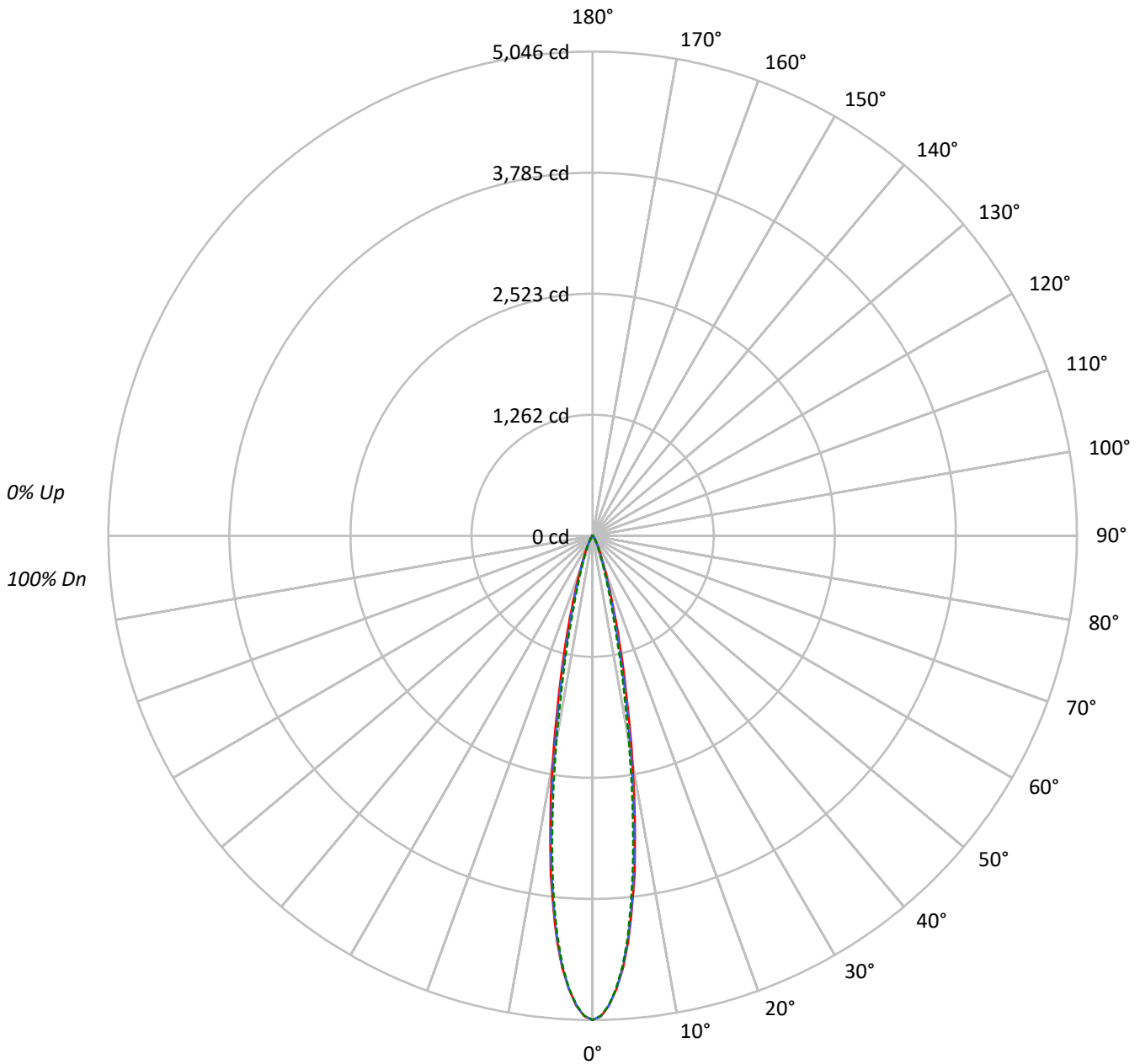
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2489602	2489602	2489602
5°	2103460	2092218	2076766
10°	1197275	1144572	1086359
15°	495800	439156	386854
20°	188589	165173	151207
25°	83288	80022	71148
30°	38568	42555	33896
35°	20297	23911	18972
40°	8888	10240	5925
45°	3489	2721	3977
50°	1612	1919	2686
55°	0	1204	0
60°	0	0	691
65°	0	0	0
70°	0	577	0
75°	0	0	0
80°	1989	0	0
85°	19812	18114	7925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.4	48.2
10°-20°	257.9	36.9
20°-30°	71.7	10.3
30°-40°	23.3	3.3
40°-50°	5.1	0.7
50°-60°	1.6	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°	667.1	95.3
0°-40°	690.4	98.7
0°-60°	697.1	99.6
0°-90°	699.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	699.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5046	5046	5046	5046	5046	
5°	4247	4216	4225	4193	4193	343
15°	971	937	860	794	757	283
25°	153	155	147	138	131	77
35°	34	36	40	30	32	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°	4	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°	5046.2	5046.2	5046.2	5046.2	5046.2
1°	5007.5	4988.8	5006.8	4996.2	5002.2
2°	4898.8	4875.4	4894.2	4879.3	4891.7
3°	4729.4	4711.4	4728.0	4709.2	4719.2
4°	4517.2	4491.0	4507.7	4482.5	4488.5
5°	4247.3	4216.1	4224.6	4193.1	4193.4
6°	3907.2	3885.6	3890.5	3841.3	3837.8
7°	3574.5	3523.5	3518.2	3461.9	3450.9
8°	3170.7	3124.3	3109.0	3042.8	3019.4
9°	2783.5	2725.7	2694.5	2617.7	2590.4
10°	2389.9	2331.4	2284.7	2197.9	2168.5
11°	2025.7	1972.9	1914.8	1822.0	1793.3
12°	1687.7	1646.3	1582.5	1492.9	1462.8
13°	1411.7	1363.9	1295.5	1212.3	1186.4
14°	1172.6	1121.2	1052.9	981.7	931.4
15°	970.7	937.0	859.8	793.6	757.4
16°	793.2	764.5	697.9	640.5	615.0
17°	650.4	627.4	570.7	525.7	504.5
18°	536.7	508.0	463.4	434.0	417.3
19°	435.4	413.1	380.5	357.8	341.2
20°	359.2	340.8	314.6	294.4	288.0
22.5°	232.0	228.9	211.9	200.9	195.6
25°	153.0	154.8	147.0	138.5	130.7
26°	130.7	131.8	124.7	119.7	109.8
27°	111.9	112.3	112.3	103.1	93.5
28°	91.4	95.3	91.8	87.5	78.3
29°	78.3	83.3	81.5	77.2	68.4
30°	67.7	71.2	74.7	68.0	59.5
32.5°	47.5	50.7	54.6	51.0	43.9
35°	33.7	36.5	39.7	30.1	31.5
37.5°	23.0	28.0	26.9	24.4	20.9
40°	13.8	14.5	15.9	17.0	9.2
42.5°	9.9	11.7	10.6	12.0	4.3
45°	5.0	7.1	3.9	3.9	5.7
47.5°	3.5	6.0	2.1	2.1	0.7
50°	2.1	4.6	2.5	1.1	3.5
52.5°	3.5	4.3	2.8	3.2	0.7
55°	0.0	2.1	1.4	0.7	0.0
57.5°	1.4	2.5	1.4	0.7	1.4
60°	0.0	0.0	0.0	0.4	0.7
62.5°	0.0	0.7	0.0	1.1	1.4
65°	0.0	1.4	0.0	0.0	0.0
67.5°	2.1	2.5	1.4	2.8	4.3



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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	3.5	1.1	1.1	1.4
80°	0.7	0.0	0.0	0.4	0.0
82.5°	0.0	2.8	0.4	1.4	2.1
85°	3.5	1.8	3.2	1.8	1.4
87.5°	0.0	0.4	0.7	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°	0.7	0.0	0.0	0.0	0.0



(END OF REPORT)