

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: P281054

Luminaire Tested: **LDA2B059030D010 EU2B05SP159030 2LBALD1WMH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281054  
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: LDA2B059030D010 EU2B05SP159030 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: 642.4 lumens  
Efficiency: N/A  
Efficacy: 91.8 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

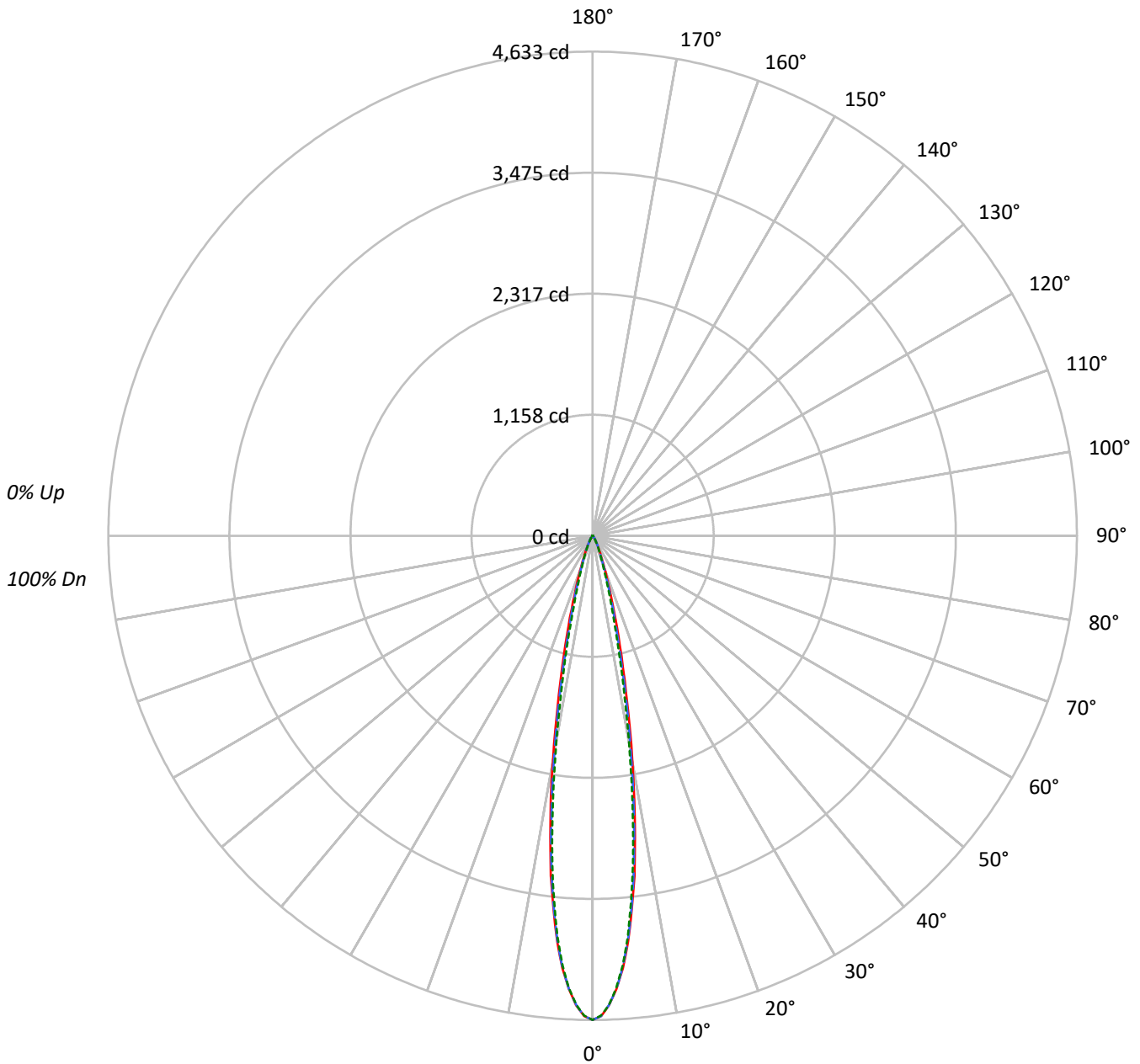
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				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°	2285597	2285597	2285597
5°	1931114	1920813	1906649
10°	1099184	1050790	997336
15°	455194	403198	355186
20°	173153	151627	138817
25°	76483	73489	65324
30°	35377	39080	31105
35°	18611	21923	17406
40°	8179	9403	5474
45°	3210	2512	3628
50°	1535	1765	2533
55°	0	1118	0
60°	0	0	691
65°	0	0	0
70°	0	433	0
75°	0	0	0
80°	1989	0	0
85°	18680	16416	7359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.8	48.2
10°-20°	236.8	36.9
20°-30°	65.8	10.3
30°-40°	21.4	3.3
40°-50°	4.7	0.7
50°-60°	1.5	0.2
60°-70°	0.8	0.1
70°-80°	0.5	0.1
80°-90°	1.0	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°	612.4	95.3
0°-40°	633.8	98.7
0°-60°	640.0	99.6
0°-90°	642.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4633	4633	4633	4633	4633	
5°	3899	3871	3878	3850	3850	315
15°	891	860	789	728	695	260
25°	140	142	135	127	120	71
35°	31	34	36	28	29	20
45°	5	6	4	4	5	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°	4632.7	4632.7	4632.7	4632.7	4632.7
1°	4597.3	4580.0	4596.6	4586.9	4592.4
2°	4497.4	4475.9	4493.2	4479.5	4490.9
3°	4341.9	4325.4	4340.6	4323.4	4332.5
4°	4147.1	4123.1	4138.3	4115.3	4120.8
5°	3899.3	3870.7	3878.5	3849.5	3849.9
6°	3587.1	3567.2	3571.8	3526.6	3523.3
7°	3281.7	3234.8	3230.0	3178.2	3168.2
8°	2910.9	2868.3	2854.3	2793.5	2772.0
9°	2555.4	2502.4	2473.8	2403.2	2378.2
10°	2194.1	2140.4	2097.5	2017.8	1990.8
11°	1859.7	1811.3	1757.9	1672.7	1646.4
12°	1549.4	1511.4	1452.8	1370.6	1342.9
13°	1296.1	1252.2	1189.4	1113.0	1089.2
14°	1076.5	1029.4	966.6	901.2	855.1
15°	891.2	860.3	789.4	728.5	695.4
16°	728.2	701.9	640.7	588.0	564.6
17°	597.1	576.0	524.0	482.7	463.1
18°	492.7	466.4	425.4	398.4	383.1
19°	399.7	379.2	349.3	328.5	313.2
20°	329.8	312.9	288.8	270.3	264.4
22.5°	213.0	210.1	194.5	184.4	179.5
25°	140.5	142.1	135.0	127.2	120.0
26°	120.0	121.0	114.5	109.9	100.8
27°	102.8	103.1	103.1	94.6	85.9
28°	83.9	87.5	84.2	80.3	71.9
29°	71.9	76.4	74.8	70.9	62.8
30°	62.1	65.4	68.6	62.4	54.6
32.5°	43.6	46.5	50.1	46.8	40.3
35°	30.9	33.5	36.4	27.6	28.9
37.5°	21.1	25.7	24.7	22.4	19.2
40°	12.7	13.3	14.6	15.6	8.5
42.5°	9.1	10.7	9.8	11.1	3.9
45°	4.6	6.5	3.6	3.6	5.2
47.5°	3.3	5.5	2.0	2.0	0.7
50°	2.0	4.2	2.3	1.0	3.3
52.5°	3.3	3.9	2.6	2.9	0.7
55°	0.0	2.0	1.3	0.7	0.0
57.5°	1.3	2.3	1.3	0.7	1.3
60°	0.0	0.0	0.0	0.3	0.7
62.5°	0.0	0.7	0.0	1.0	1.3
65°	0.0	1.3	0.0	0.0	0.0
67.5°	2.0	2.3	1.3	2.6	3.9



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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	3.3	1.0	1.0	1.3
80°	0.7	0.0	0.0	0.3	0.0
82.5°	0.0	2.6	0.3	1.3	2.0
85°	3.3	1.6	2.9	1.6	1.3
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)