

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: P281631

Luminaire Tested: **LDA2B059030D010 EU2B05SP159030 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281631  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B059030D010 EU2B05SP159030 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MW  
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): 0.3 / 0.3 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

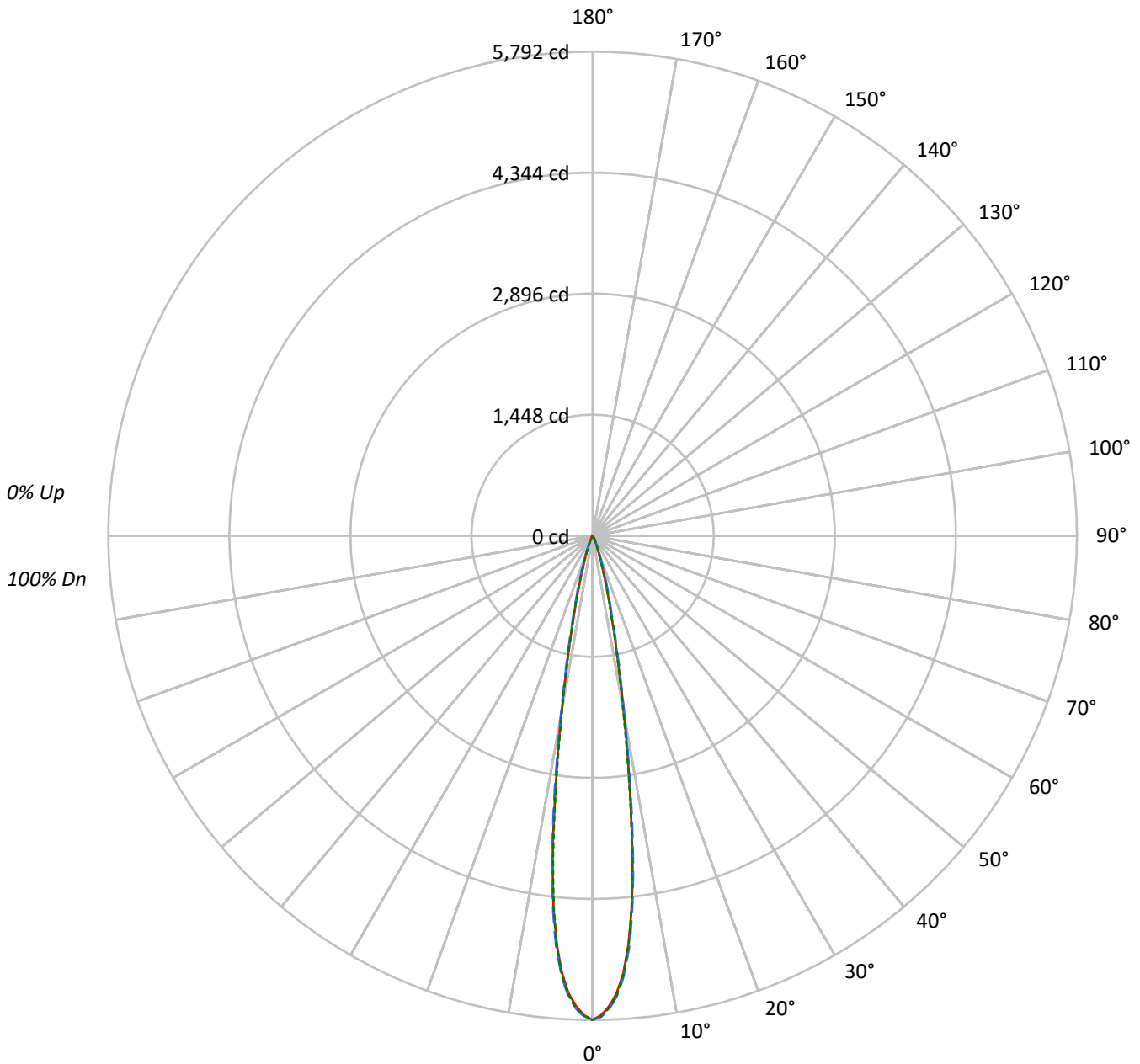
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
1	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98																			
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96																			
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94																			
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93																			
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91																			
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89																			
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88																			
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87																			
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85																			
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84																			

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

	0°	45°	90°
0°	2857403	2857403	2857403
5°	2433145	2458502	2437751
10°	1074186	1098783	1049087
15°	325971	373829	331078
20°	97550	130049	108995
25°	37997	37398	39956
30°	16920	15268	16122
35°	3433	3011	3011
40°	0	258	902
45°	3000	2512	4465
50°	0	844	2763
55°	0	0	1204
60°	0	395	1381
65°	0	0	817
70°	0	2019	4183
75°	0	0	0
80°	0	0	0
85°	0	2264	7925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	375.4	58.4
10°-20°	214.4	33.4
20°-30°	40.7	6.3
30°-40°	7.4	1.2
40°-50°	1.9	0.3
50°-60°	1.4	0.2
60°-70°	0.2	0.0
70°-80°	0.3	0.1
80°-90°	0.5	0.1
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°	630.6	98.2
0°-40°	638.0	99.3
0°-60°	641.3	99.8
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°	5792	5792	5792	5792	5792	
5°	4913	4945	4964	4956	4922	373
15°	638	694	732	688	648	203
25°	70	75	69	78	73	37
35°	6	7	5	6	5	8
45°	4	7	4	4	6	2
55°	0	0	0	0	1	0
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5791.7	5791.7	5791.7	5791.7	5791.7
1°	5736.9	5743.0	5755.9	5769.2	5748.4
2°	5629.6	5644.2	5662.5	5674.7	5652.1
3°	5479.2	5499.6	5519.0	5521.5	5500.4
4°	5247.0	5272.0	5292.4	5289.9	5263.4
5°	4913.0	4945.2	4964.2	4955.6	4922.3
6°	4471.7	4502.9	4527.2	4502.5	4457.8
7°	3922.0	3957.8	3983.5	3941.3	3886.5
8°	3284.9	3335.0	3360.8	3301.7	3245.5
9°	2681.5	2716.2	2742.3	2677.9	2620.6
10°	2144.2	2207.9	2193.3	2143.5	2094.1
11°	1686.5	1744.1	1746.6	1713.0	1664.6
12°	1320.3	1381.2	1396.6	1370.8	1327.8
13°	1043.3	1088.8	1114.2	1087.7	1046.9
14°	830.4	870.8	903.4	869.0	828.2
15°	638.2	694.0	731.9	687.5	648.2
16°	507.5	553.7	598.8	548.3	516.8
17°	389.8	430.9	477.5	431.6	405.9
18°	308.5	341.1	392.3	345.0	322.5
19°	241.6	266.3	313.9	272.4	254.1
20°	185.8	213.0	247.7	219.4	207.6
22.5°	112.4	127.4	137.4	128.8	122.8
25°	69.8	75.2	68.7	78.4	73.4
26°	60.8	64.8	63.4	69.8	63.7
27°	48.7	53.7	49.7	54.8	53.0
28°	44.4	50.5	42.6	48.7	45.8
29°	31.1	33.6	30.4	32.6	32.6
30°	29.7	30.4	26.8	29.3	28.3
32.5°	23.3	21.8	17.9	19.0	18.3
35°	5.7	7.2	5.0	6.1	5.0
37.5°	8.6	7.9	9.3	8.9	8.6
40°	0.0	0.4	0.4	0.4	1.4
42.5°	6.4	3.9	3.6	2.5	4.3
45°	4.3	6.8	3.6	3.9	6.4
47.5°	0.0	0.4	0.0	0.7	0.7
50°	0.0	0.7	1.1	1.4	3.6
52.5°	0.7	4.3	2.1	3.9	5.7
55°	0.0	0.4	0.0	0.4	1.4
57.5°	1.4	0.7	1.4	1.4	6.4
60°	0.0	0.7	0.4	0.4	1.4
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.7
67.5°	0.0	0.4	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.4	0.0	0.0
80°	0.0	0.4	0.0	0.0	0.0
82.5°	0.0	0.4	0.7	1.1	0.7
85°	0.0	0.4	0.4	0.4	1.4
87.5°	0.0	0.7	1.1	0.0	0.7
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







70°	0.0	1.1	1.4	0.0	2.9
72.5°	0.0	1.8	0.4	0.4	0.0



(END OF REPORT)