

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: P281629

Luminaire Tested: **LDA2B059027D010 EU2B05SP159027 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281629  
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: LDA2B059027D010 EU2B05SP159027 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 615.7 lumens  
Efficiency: N/A  
Efficacy: 88.0 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

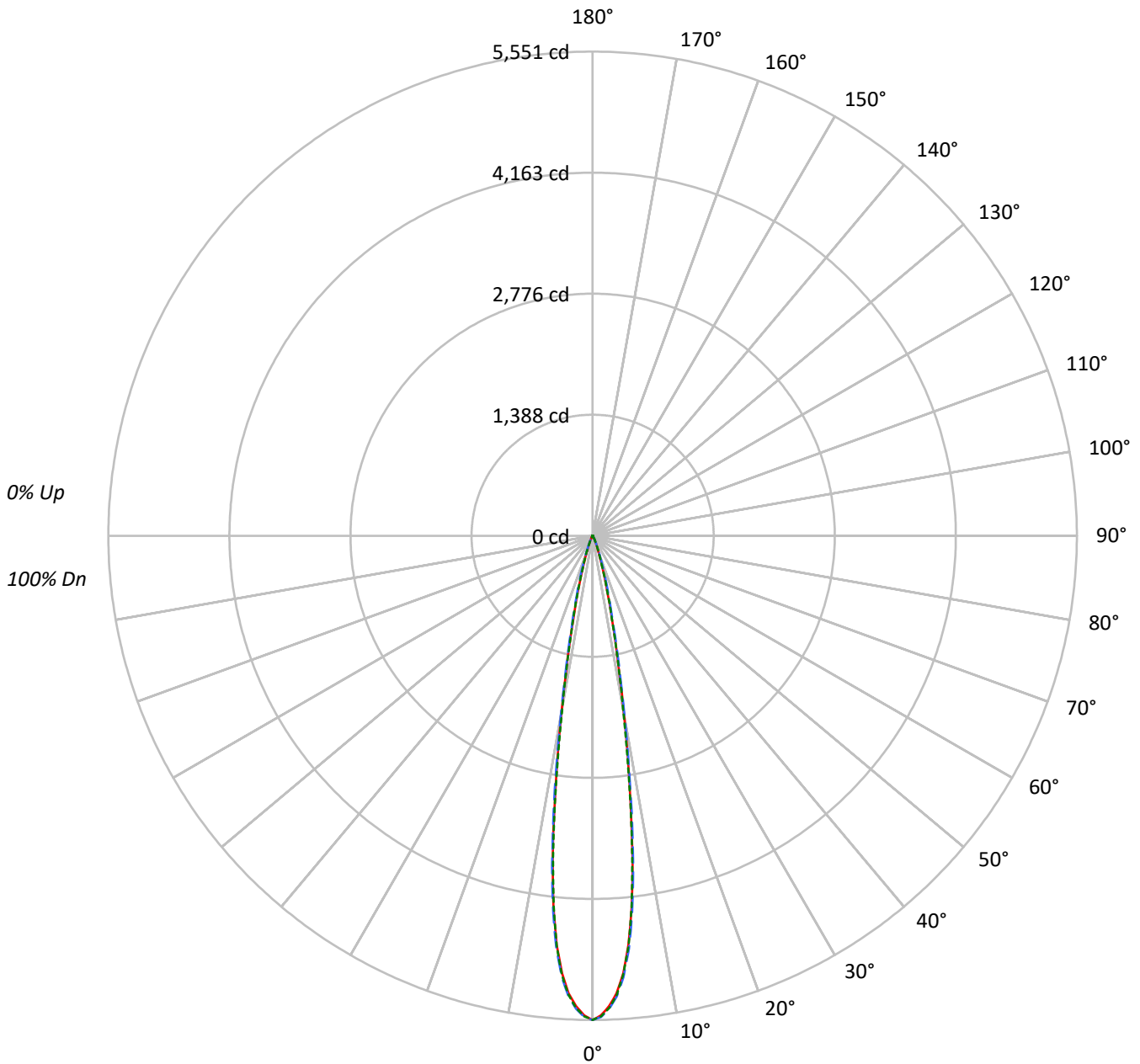
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2738849	2738849	2738849
5°	2332165	2356481	2336622
10°	1029649	1053195	1005552
15°	312435	358353	317339
20°	93454	124641	104480
25°	36418	35874	38269
30°	16236	14641	15438
35°	3313	2891	2891
40°	0	193	902
45°	2861	2372	4326
50°	0	768	2610
55°	0	0	1204
60°	0	296	1381
65°	0	0	817
70°	0	2019	3895
75°	0	0	0
80°	0	0	0
85°	0	1698	7925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	359.9	58.5
10°-20°	205.5	33.4
20°-30°	39.0	6.3
30°-40°	7.1	1.2
40°-50°	1.8	0.3
50°-60°	1.4	0.2
60°-70°	0.2	0.0
70°-80°	0.3	0.0
80°-90°	0.4	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°	604.4	98.2
0°-40°	611.5	99.3
0°-60°	614.7	99.8
0°-90°	615.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	615.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5551	5551	5551	5551	5551	
5°	4709	4740	4758	4750	4718	358
15°	612	665	702	659	621	195
25°	67	72	66	75	70	35
35°	6	7	5	6	5	8
45°	4	6	3	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°	5551.4	5551.4	5551.4	5551.4	5551.4
1°	5498.9	5504.7	5517.0	5529.7	5509.8
2°	5395.9	5410.0	5427.5	5439.2	5417.6
3°	5251.9	5271.4	5289.9	5292.3	5272.1
4°	5029.2	5053.2	5072.8	5070.4	5045.0
5°	4709.1	4740.0	4758.2	4750.0	4718.1
6°	4286.2	4316.0	4339.3	4315.7	4272.8
7°	3759.2	3793.5	3818.2	3777.7	3725.3
8°	3148.6	3196.6	3221.3	3164.7	3110.8
9°	2570.2	2603.5	2628.5	2566.8	2511.9
10°	2055.3	2116.3	2102.3	2054.6	2007.2
11°	1616.5	1671.7	1674.1	1641.9	1595.6
12°	1265.5	1323.9	1338.6	1313.9	1272.7
13°	1000.0	1043.6	1067.9	1042.6	1003.4
14°	795.9	834.7	865.9	832.9	793.8
15°	611.7	665.2	701.6	659.0	621.3
16°	486.5	530.7	573.9	525.6	495.4
17°	373.6	413.0	457.6	413.7	389.0
18°	295.7	326.9	376.0	330.7	309.1
19°	231.6	255.2	300.9	261.1	243.6
20°	178.0	204.1	237.4	210.3	199.0
22.5°	107.7	122.1	131.7	123.5	117.7
25°	66.9	72.0	65.9	75.1	70.3
26°	58.3	62.1	60.7	66.9	61.1
27°	46.7	51.5	47.7	52.5	50.8
28°	42.5	48.4	40.8	46.7	43.9
29°	29.8	32.2	29.2	31.2	31.2
30°	28.5	29.2	25.7	28.1	27.1
32.5°	22.3	20.9	17.2	18.2	17.5
35°	5.5	6.9	4.8	5.8	4.8
37.5°	8.2	7.5	8.9	8.6	8.2
40°	0.0	0.3	0.3	0.3	1.4
42.5°	6.2	3.8	3.4	2.4	4.1
45°	4.1	6.5	3.4	3.8	6.2
47.5°	0.0	0.3	0.0	0.7	0.7
50°	0.0	0.7	1.0	1.4	3.4
52.5°	0.7	4.1	2.1	3.8	5.5
55°	0.0	0.3	0.0	0.3	1.4
57.5°	1.4	0.7	1.4	1.4	6.2
60°	0.0	0.7	0.3	0.3	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	0.3	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	0.3	0.0	0.0
80°	0.0	0.3	0.0	0.0	0.0
82.5°	0.0	0.3	0.7	1.0	0.7
85°	0.0	0.3	0.3	0.3	1.4
87.5°	0.0	0.7	1.0	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	1.0	1.4	0.0	2.7
72.5°	0.0	1.7	0.3	0.3	0.0



(END OF REPORT)