

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: P282495

Luminaire Tested: **LDA2B108027D010 EU2B10SP158027 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282495  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B108027D010 EU2B10SP158027 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1061.4 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

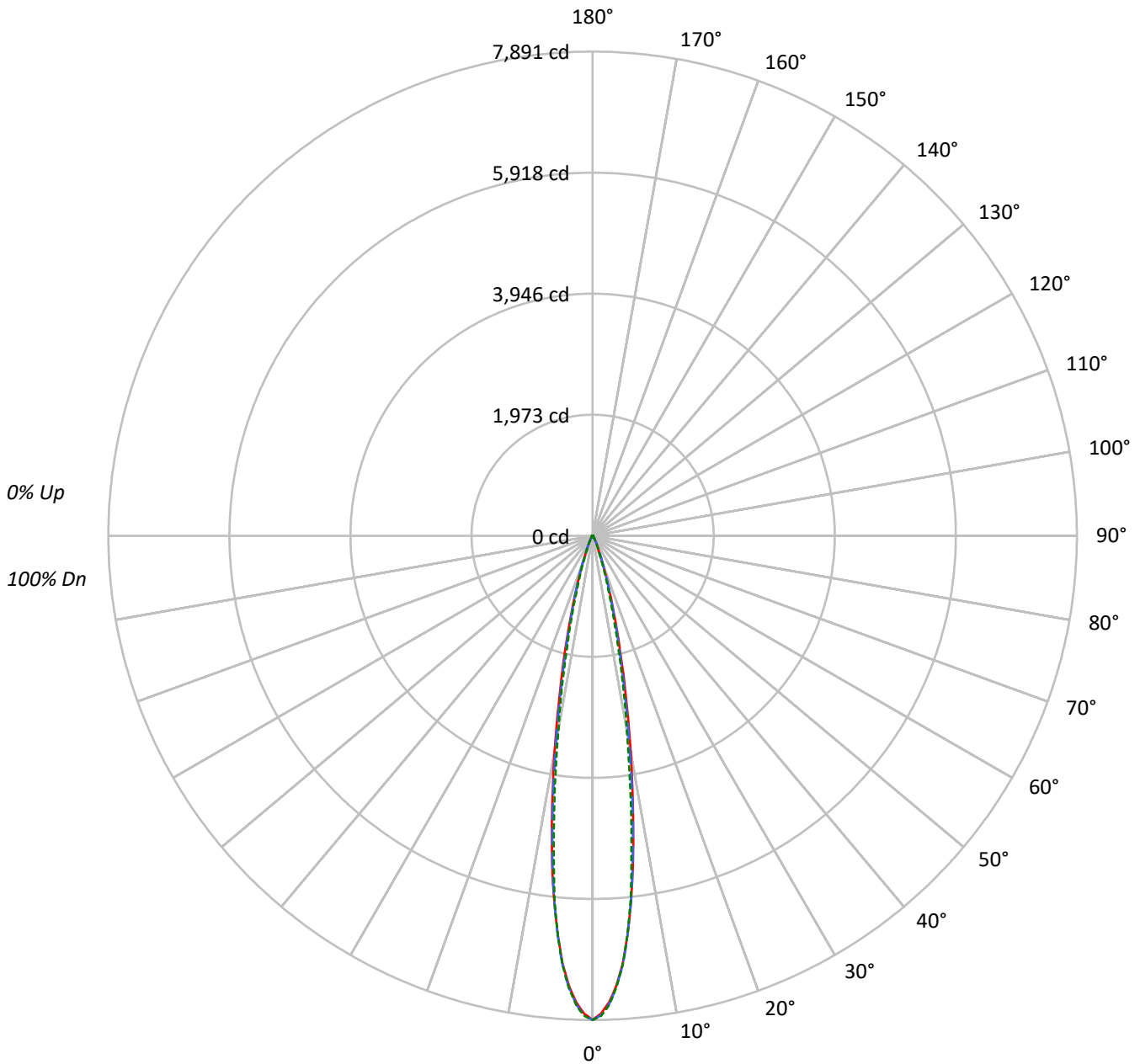
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20												
RC	80					70					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	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	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	95	94	94	92	90	89	88	87	86	85	84	83	82	81	80
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78		
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76		
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74		
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72		
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70		
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	86	84	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68		
9	94	88	84	81	93	87	84	81	86	83	81	85	83	81	84	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67		
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65		

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

	0°	45°	90°
0°	3893019	3893019	3893019
5°	3229650	3240149	3227818
10°	1787521	1722945	1605016
15°	723602	692088	614502
20°	242404	257052	208120
25°	92215	92596	87643
30°	41359	40676	39308
35°	20056	17888	14214
40°	13267	16745	11721
45°	3349	5512	5093
50°	921	1382	1842
55°	8343	7311	11440
60°	11939	9571	15492
65°	5603	14826	14125
70°	5193	4327	5193
75°	2287	5719	16203
80°	27559	37787	34378
85°	0	16982	20378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	516.8	48.7
10°-20°	391.5	36.9
20°-30°	89.0	8.4
30°-40°	26.3	2.5
40°-50°	8.8	0.8
50°-60°	7.7	0.7
60°-70°	9.3	0.9
70°-80°	5.9	0.6
80°-90°	6.2	0.6
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°	997.3	94.0
0°-40°	1023.6	96.4
0°-60°	1040.0	98.0
0°-90°	1061.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1061.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7891	7891	7891	7891	7891	
5°	6521	6573	6542	6457	6518	523
15°	1417	1436	1355	1228	1203	412
25°	169	182	170	168	161	89
35°	33	37	30	34	24	26
45°	5	14	8	14	7	7
55°	10	14	8	13	13	4
65°	5	10	13	12	12	5
75°	1	4	3	5	8	3
85°	0	0	3	3	4	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7890.8	7890.8	7890.8	7890.8	7890.8
1°	7789.1	7820.6	7817.5	7804.8	7827.2
2°	7610.0	7648.1	7644.5	7616.6	7656.6
3°	7347.3	7381.2	7375.8	7335.8	7379.4
4°	6996.3	7035.1	7019.9	6960.0	7015.7
5°	6521.3	6572.7	6542.5	6457.1	6517.6
6°	5994.8	6038.4	5990.5	5877.4	5936.7
7°	5405.3	5432.6	5369.6	5224.4	5184.5
8°	4762.1	4797.8	4710.0	4540.6	4497.0
9°	4147.2	4159.3	4052.8	3872.5	3817.4
10°	3568.1	3559.0	3439.2	3256.4	3203.8
11°	3019.2	3007.1	2880.6	2711.8	2728.7
12°	2519.9	2543.5	2396.5	2243.4	2246.4
13°	2109.6	2112.0	1985.6	1839.7	1831.2
14°	1727.1	1749.5	1641.2	1510.5	1486.3
15°	1416.7	1436.1	1355.0	1227.9	1203.1
16°	1134.1	1158.3	1100.2	985.2	952.5
17°	913.2	944.1	905.9	809.7	772.2
18°	730.4	754.0	745.0	645.7	614.8
19°	576.7	609.4	611.8	528.9	492.0
20°	461.7	491.4	489.6	425.4	396.4
22.5°	265.1	280.8	281.4	251.1	234.2
25°	169.4	182.2	170.1	168.2	161.0
26°	147.1	157.3	144.0	144.0	137.4
27°	119.2	128.3	115.6	121.0	112.0
28°	100.5	110.1	99.2	98.0	96.8
29°	83.5	92.6	78.7	84.7	81.1
30°	72.6	79.3	71.4	80.5	69.0
32.5°	56.3	61.7	47.8	60.5	45.4
35°	33.3	36.9	29.7	34.5	23.6
37.5°	34.5	35.7	32.1	35.7	33.3
40°	20.6	21.2	26.0	26.0	18.2
42.5°	19.4	18.8	11.5	18.2	14.5
45°	4.8	13.9	7.9	13.9	7.3
47.5°	3.6	4.8	4.8	9.7	9.7
50°	1.2	4.8	1.8	3.6	2.4
52.5°	0.0	11.5	2.4	8.5	7.3
55°	9.7	13.9	8.5	12.7	13.3
57.5°	1.2	9.7	4.8	10.3	7.3
60°	12.1	16.3	9.7	17.5	15.7
62.5°	1.2	10.9	12.7	9.7	8.5
65°	4.8	10.3	12.7	12.1	12.1
67.5°	6.1	10.3	7.9	7.9	10.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.2	4.2	3.0	5.4	8.5
77.5°	1.2	4.8	4.2	9.7	7.3
80°	9.7	10.9	13.3	17.5	12.1
82.5°	8.5	8.5	13.3	9.7	7.3
85°	0.0	0.0	3.0	3.0	3.6
87.5°	0.0	2.4	6.1	4.8	8.5
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.6	1.2	3.0	3.0	3.6
72.5°	1.2	5.4	4.8	3.0	6.1



(END OF REPORT)