

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: P281656

Luminaire Tested: **LDA2B108030D010 EU2B10SP158030 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281656  
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: LDA2B108030D010 EU2B10SP158030 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1081.9 lumens  
Efficiency: N/A  
Efficacy: 108.2 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

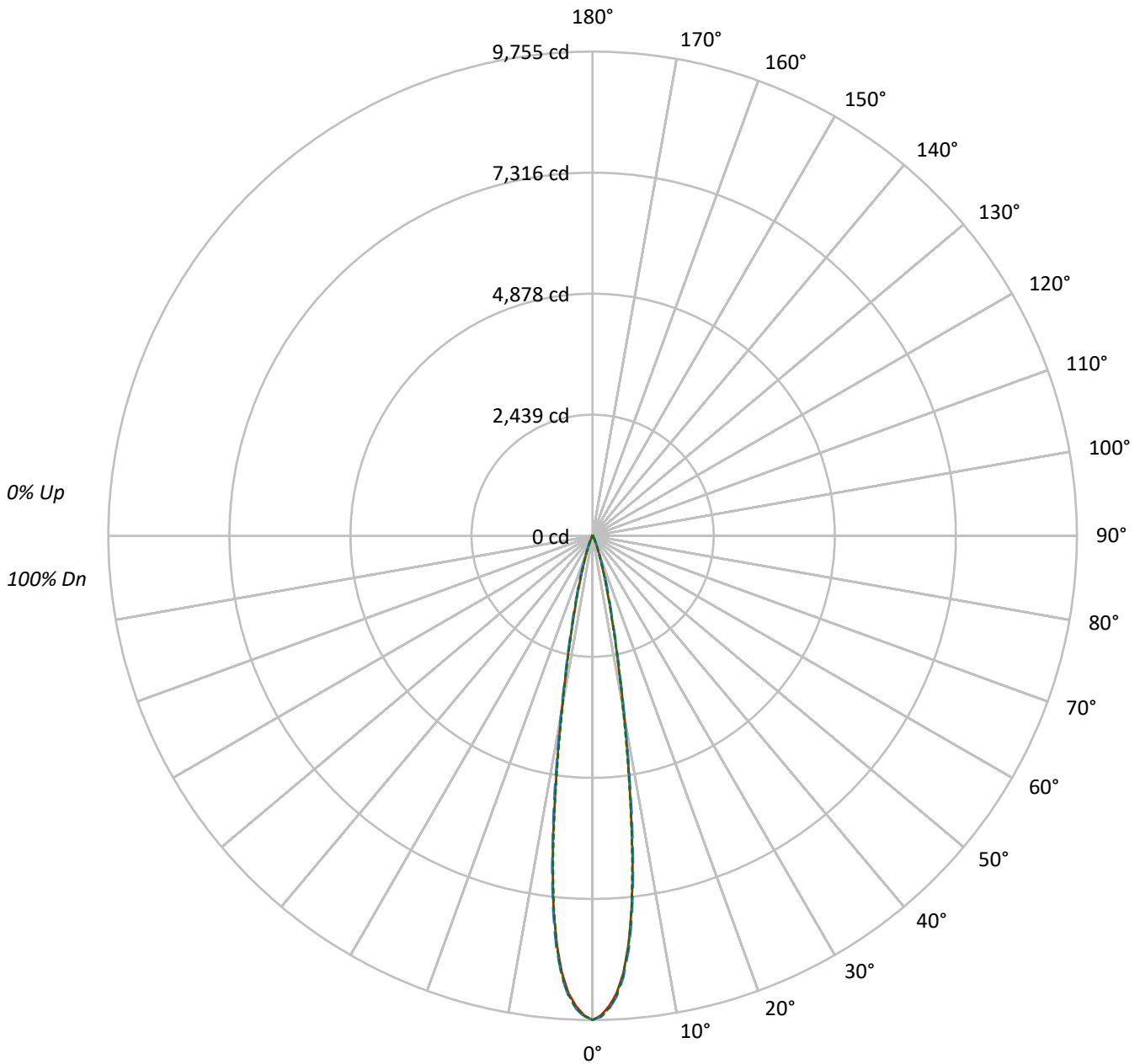
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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°	4812695	4812695	4812695
5°	4098164	4140854	4105889
10°	1809263	1850643	1766981
15°	548971	629672	557603
20°	164280	219040	183549
25°	64017	62983	67283
30°	28484	25750	27117
35°	5782	5059	5059
40°	0	386	1546
45°	5024	4186	7605
50°	0	1382	4605
55°	0	0	2064
60°	0	592	2368
65°	0	0	1401
70°	0	3462	6924
75°	0	0	0
80°	0	0	0
85°	0	3396	13586



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	632.4	58.4
10°-20°	361.2	33.4
20°-30°	68.6	6.3
30°-40°	12.5	1.2
40°-50°	3.2	0.3
50°-60°	2.4	0.2
60°-70°	0.4	0.0
70°-80°	0.5	0.1
80°-90°	0.8	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°	1062.1	98.2
0°-40°	1074.5	99.3
0°-60°	1080.2	99.8
0°-90°	1081.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1081.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9755	9755	9755	9755	9755	
5°	8275	8329	8361	8347	8291	628
15°	1075	1169	1233	1158	1092	342
25°	118	127	116	132	124	62
35°	10	12	8	10	8	13
45°	7	12	6	7	11	3
55°	0	1	0	1	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	1	1	1	2	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9754.9	9754.9	9754.9	9754.9	9754.9
1°	9662.7	9672.9	9694.6	9716.9	9682.0
2°	9481.8	9506.5	9537.3	9557.8	9519.8
3°	9228.6	9263.0	9295.5	9299.8	9264.2
4°	8837.4	8879.6	8914.0	8909.7	8865.1
5°	8275.0	8329.2	8361.2	8346.7	8290.6
6°	7531.7	7584.1	7625.1	7583.5	7508.2
7°	6605.7	6666.0	6709.4	6638.3	6546.1
8°	5532.7	5617.1	5660.5	5561.1	5466.4
9°	4516.4	4574.8	4618.8	4510.3	4413.9
10°	3611.5	3718.8	3694.1	3610.3	3527.1
11°	2840.5	2937.6	2941.8	2885.1	2803.7
12°	2223.8	2326.3	2352.2	2308.8	2236.5
13°	1757.2	1833.8	1876.6	1832.0	1763.3
14°	1398.6	1466.7	1521.5	1463.7	1394.9
15°	1074.8	1168.9	1232.8	1158.0	1091.7
16°	854.8	932.6	1008.5	923.5	870.5
17°	656.5	725.8	804.2	727.0	683.6
18°	519.6	574.5	660.7	581.1	543.1
19°	406.9	448.5	528.7	458.7	428.0
20°	312.9	358.7	417.2	369.5	349.6
22.5°	189.3	214.6	231.5	217.0	206.8
25°	117.6	126.6	115.7	132.0	123.6
26°	102.5	109.1	106.7	117.6	107.3
27°	82.0	90.4	83.8	92.2	89.2
28°	74.8	85.0	71.7	82.0	77.2
29°	52.4	56.7	51.2	54.9	54.9
30°	50.0	51.2	45.2	49.4	47.6
32.5°	39.2	36.8	30.1	31.9	30.7
35°	9.6	12.1	8.4	10.2	8.4
37.5°	14.5	13.3	15.7	15.1	14.5
40°	0.0	0.6	0.6	0.6	2.4
42.5°	10.9	6.6	6.0	4.2	7.2
45°	7.2	11.5	6.0	6.6	10.9
47.5°	0.0	0.6	0.0	1.2	1.2
50°	0.0	1.2	1.8	2.4	6.0
52.5°	1.2	7.2	3.6	6.6	9.6
55°	0.0	0.6	0.0	0.6	2.4
57.5°	2.4	1.2	2.4	2.4	10.9
60°	0.0	1.2	0.6	0.6	2.4
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.2
67.5°	0.0	0.6	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	0.6	0.0	0.0
80°	0.0	0.6	0.0	0.0	0.0
82.5°	0.0	0.6	1.2	1.8	1.2
85°	0.0	0.6	0.6	0.6	2.4
87.5°	0.0	1.2	1.8	0.0	1.2
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	1.8	2.4	0.0	4.8
72.5°	0.0	3.0	0.6	0.6	0.0



(END OF REPORT)