

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: P281723

Luminaire Tested: **LDA2B159040D010 EU2B15SP159040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P281723
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: LDA2B159040D010 EU2B15SP159040 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1231.1 lumens
Efficiency: N/A
Efficacy: 87.3 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

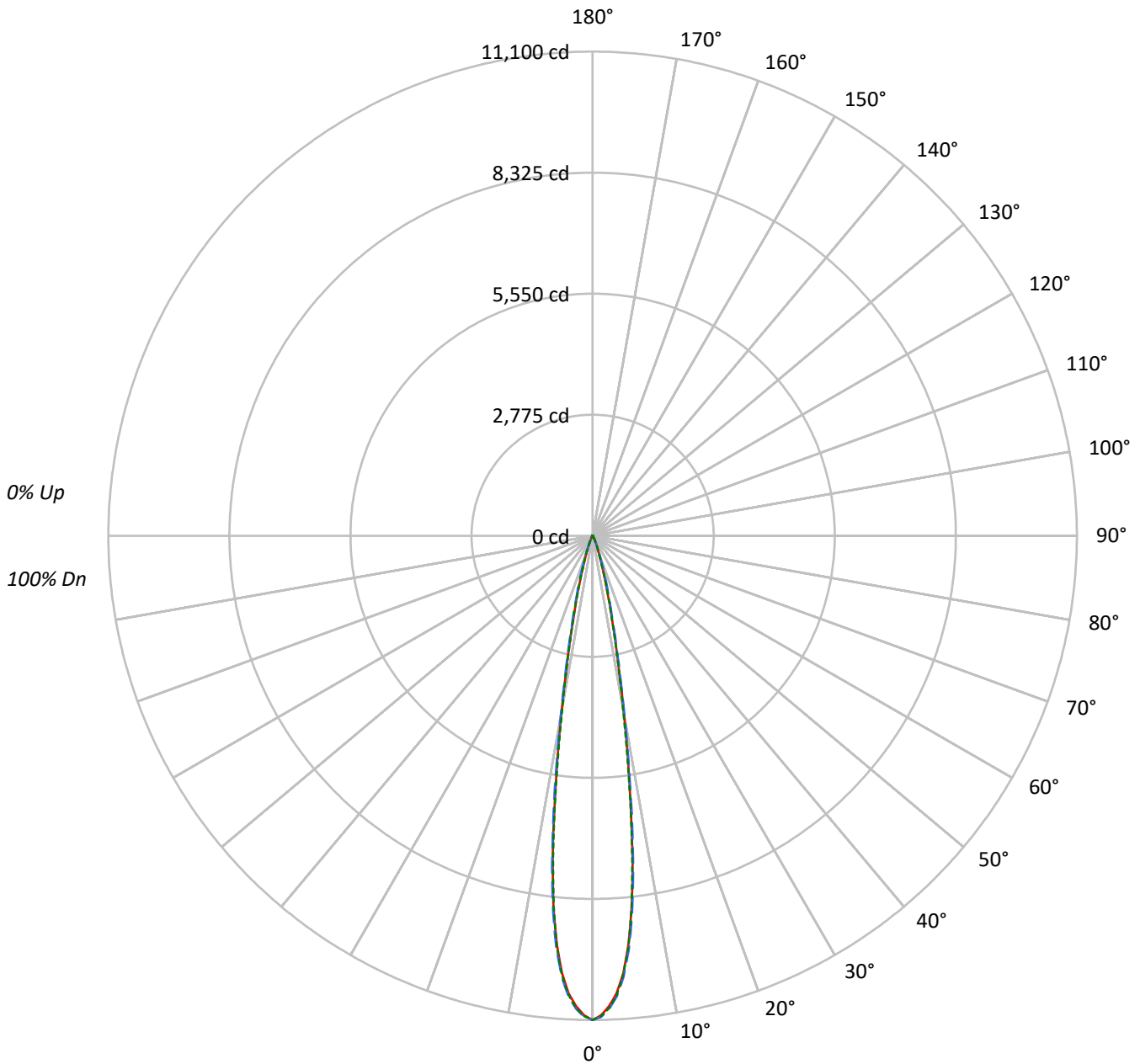
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5476464	5476464	5476464
5°	4663339	4711922	4672204
10°	2058797	2105889	2010704
15°	624718	716502	634524
20°	186909	249229	208907
25°	72836	71693	76538
30°	32415	29282	30877
35°	6625	5782	5782
40°	0	451	1739
45°	5721	4814	8582
50°	0	1612	5296
55°	0	0	2322
60°	0	691	2664
65°	0	0	1634
70°	0	3895	7934
75°	0	0	0
80°	0	0	0
85°	0	3962	15284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	719.6	58.4
10°-20°	411.0	33.4
20°-30°	78.0	6.3
30°-40°	14.2	1.2
40°-50°	3.7	0.3
50°-60°	2.8	0.2
60°-70°	0.5	0.0
70°-80°	0.6	0.1
80°-90°	0.9	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°	1208.6	98.2
0°-40°	1222.7	99.3
0°-60°	1229.2	99.8
0°-90°	1231.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1231.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11100	11100	11100	11100	11100	
5°	9416	9478	9514	9498	9434	715
15°	1223	1330	1403	1318	1242	389
25°	134	144	132	150	141	70
35°	11	14	10	12	10	15
45°	8	13	7	8	12	4
55°	0	1	0	1	3	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	1	1	1	3	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11100.3	11100.3	11100.3	11100.3	11100.3
1°	10995.3	11007.0	11031.7	11057.1	11017.3
2°	10789.5	10817.7	10852.6	10876.0	10832.7
3°	10501.4	10540.5	10577.6	10582.4	10541.9
4°	10056.2	10104.3	10143.4	10138.6	10087.8
5°	9416.2	9478.0	9514.3	9497.9	9434.1
6°	8570.4	8630.1	8676.8	8629.4	8543.7
7°	7516.8	7585.4	7634.8	7553.8	7448.9
8°	6295.8	6391.8	6441.2	6328.0	6220.3
9°	5139.2	5205.8	5255.9	5132.4	5022.6
10°	4109.6	4231.7	4203.6	4108.2	4013.6
11°	3232.3	3342.7	3347.5	3283.0	3190.4
12°	2530.5	2647.1	2676.6	2627.2	2544.9
13°	1999.6	2086.7	2135.4	2084.6	2006.4
14°	1591.4	1669.0	1731.4	1665.5	1587.3
15°	1223.1	1330.1	1402.8	1317.7	1242.3
16°	972.7	1061.2	1147.6	1050.9	990.5
17°	747.0	825.9	915.1	827.3	777.9
18°	591.3	653.7	751.8	661.3	618.1
19°	463.0	510.4	601.6	522.0	487.0
20°	356.0	408.1	474.7	420.5	397.9
22.5°	215.4	244.2	263.4	246.9	235.3
25°	133.8	144.1	131.7	150.2	140.6
26°	116.6	124.2	121.4	133.8	122.1
27°	93.3	102.9	95.3	105.0	101.5
28°	85.1	96.7	81.6	93.3	87.8
29°	59.7	64.5	58.3	62.4	62.4
30°	56.9	58.3	51.4	56.2	54.2
32.5°	44.6	41.8	34.3	36.4	35.0
35°	11.0	13.7	9.6	11.7	9.6
37.5°	16.5	15.1	17.8	17.1	16.5
40°	0.0	0.7	0.7	0.7	2.7
42.5°	12.3	7.5	6.9	4.8	8.2
45°	8.2	13.0	6.9	7.5	12.3
47.5°	0.0	0.7	0.0	1.4	1.4
50°	0.0	1.4	2.1	2.7	6.9
52.5°	1.4	8.2	4.1	7.5	11.0
55°	0.0	0.7	0.0	0.7	2.7
57.5°	2.7	1.4	2.7	2.7	12.3
60°	0.0	1.4	0.7	0.7	2.7
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.4
67.5°	0.0	0.7	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	0.7	0.0	0.0
80°	0.0	0.7	0.0	0.0	0.0
82.5°	0.0	0.7	1.4	2.1	1.4
85°	0.0	0.7	0.7	0.7	2.7
87.5°	0.0	1.4	2.1	0.0	1.4
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	2.1	2.7	0.0	5.5
72.5°	0.0	3.4	0.7	0.7	0.0



(END OF REPORT)