

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: P282496

Luminaire Tested: **LDA2B108027D010 EU2B10SP158027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282496
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 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
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

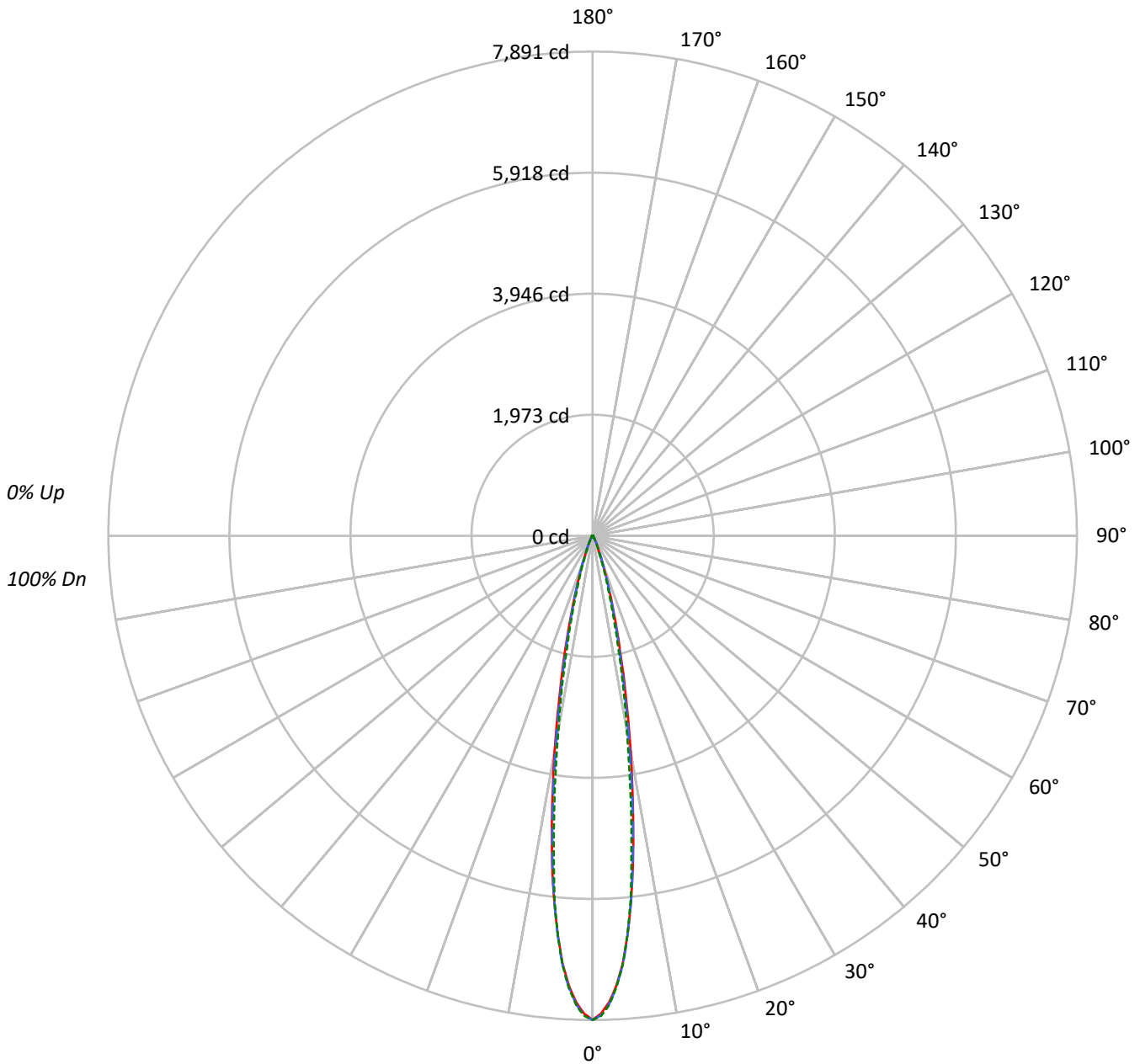
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78

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)