

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: P282511

Luminaire Tested: **LDA2B109024D010 EU2B10SP159024 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282511
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: LDA2B109024D010 EU2B10SP159024 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: 776.3 lumens
Efficiency: N/A
Efficacy: 77.6 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

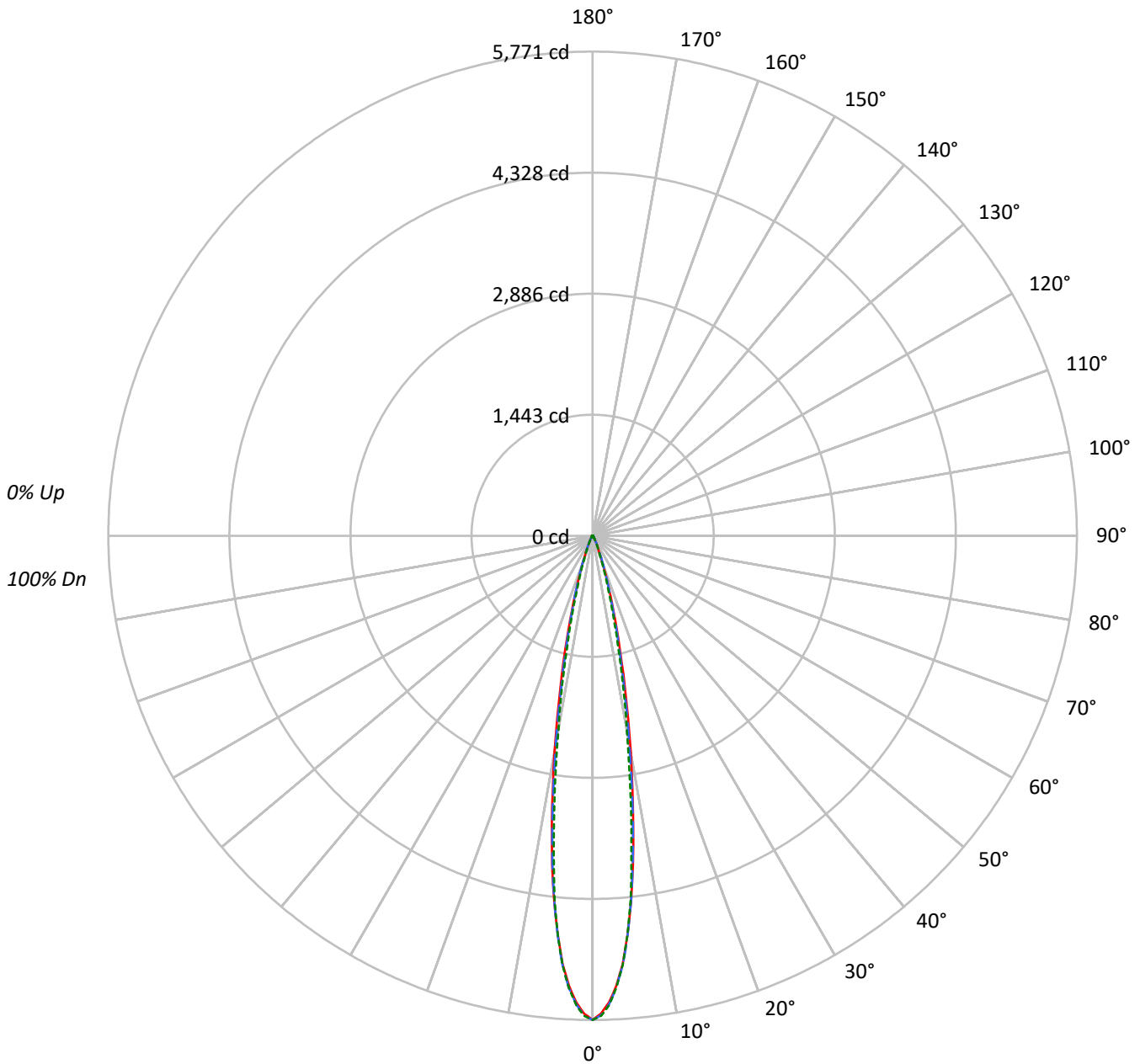
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	98	99	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	98	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2847191	2847191	2847191
5°	2362028	2369704	2360740
10°	1307338	1260097	1173829
15°	529204	506169	449423
20°	177301	188011	152205
25°	67447	67719	64072
30°	30250	29738	28769
35°	14635	13070	10420
40°	9661	12237	8566
45°	2442	4047	3698
50°	691	998	1382
55°	6107	5333	8343
60°	8782	7006	11347
65°	4086	10857	10390
70°	3895	3173	3895
75°	1716	4194	11818
80°	20172	27559	25286
85°	0	12454	15284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	378.0	48.7
10°-20°	286.3	36.9
20°-30°	65.1	8.4
30°-40°	19.2	2.5
40°-50°	6.4	0.8
50°-60°	5.6	0.7
60°-70°	6.8	0.9
70°-80°	4.3	0.6
80°-90°	4.5	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°	729.4	94.0
0°-40°	748.6	96.4
0°-60°	760.7	98.0
0°-90°	776.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5771	5771	5771	5771	5771	
5°	4769	4807	4785	4722	4767	382
15°	1036	1050	991	898	880	301
25°	124	133	124	123	118	65
35°	24	27	22	25	17	19
45°	4	10	6	10	5	5
55°	7	10	6	9	10	3
65°	4	8	9	9	9	4
75°	1	3	2	4	6	2
85°	0	0	2	2	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5771.0	5771.0	5771.0	5771.0	5771.0
1°	5696.7	5719.7	5717.5	5708.2	5724.6
2°	5565.7	5593.6	5590.9	5570.5	5599.8
3°	5373.6	5398.4	5394.4	5365.2	5397.0
4°	5116.9	5145.2	5134.1	5090.3	5131.0
5°	4769.4	4807.1	4784.9	4722.5	4766.8
6°	4384.4	4416.2	4381.3	4298.5	4341.9
7°	3953.3	3973.2	3927.2	3820.9	3791.7
8°	3482.8	3508.9	3444.7	3320.8	3288.9
9°	3033.1	3042.0	2964.1	2832.2	2791.9
10°	2609.6	2602.9	2515.3	2381.6	2343.1
11°	2208.1	2199.3	2106.8	1983.3	1995.7
12°	1843.0	1860.2	1752.7	1640.7	1642.9
13°	1542.9	1544.7	1452.2	1345.5	1339.3
14°	1263.2	1279.6	1200.3	1104.7	1087.0
15°	1036.1	1050.3	991.0	898.0	879.9
16°	829.4	847.1	804.6	720.5	696.6
17°	667.9	690.5	662.6	592.2	564.8
18°	534.2	551.5	544.8	472.3	449.7
19°	421.8	445.7	447.5	386.8	359.8
20°	337.7	359.4	358.1	311.1	289.9
22.5°	193.9	205.4	205.8	183.7	171.3
25°	123.9	133.2	124.4	123.0	117.7
26°	107.6	115.1	105.3	105.3	100.5
27°	87.2	93.8	84.5	88.5	81.9
28°	73.5	80.6	72.6	71.7	70.8
29°	61.1	67.7	57.5	62.0	59.3
30°	53.1	58.0	52.2	58.9	50.5
32.5°	41.2	45.1	35.0	44.3	33.2
35°	24.3	27.0	21.7	25.2	17.3
37.5°	25.2	26.1	23.5	26.1	24.3
40°	15.0	15.5	19.0	19.0	13.3
42.5°	14.2	13.7	8.4	13.3	10.6
45°	3.5	10.2	5.8	10.2	5.3
47.5°	2.7	3.5	3.5	7.1	7.1
50°	0.9	3.5	1.3	2.7	1.8
52.5°	0.0	8.4	1.8	6.2	5.3
55°	7.1	10.2	6.2	9.3	9.7
57.5°	0.9	7.1	3.5	7.5	5.3
60°	8.9	12.0	7.1	12.8	11.5
62.5°	0.9	8.0	9.3	7.1	6.2
65°	3.5	7.5	9.3	8.9	8.9
67.5°	4.4	7.5	5.8	5.8	8.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.9	3.1	2.2	4.0	6.2
77.5°	0.9	3.5	3.1	7.1	5.3
80°	7.1	8.0	9.7	12.8	8.9
82.5°	6.2	6.2	9.7	7.1	5.3
85°	0.0	0.0	2.2	2.2	2.7
87.5°	0.0	1.8	4.4	3.5	6.2
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.7	0.9	2.2	2.2	2.7
72.5°	0.9	4.0	3.5	2.2	4.4



(END OF REPORT)