

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: P282532

Luminaire Tested: **LDA2B109730D010 EU2B10SP159730 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282532
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: LDA2B109730D010 EU2B10SP159730 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: 801.0 lumens
Efficiency: N/A
Efficacy: 80.1 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

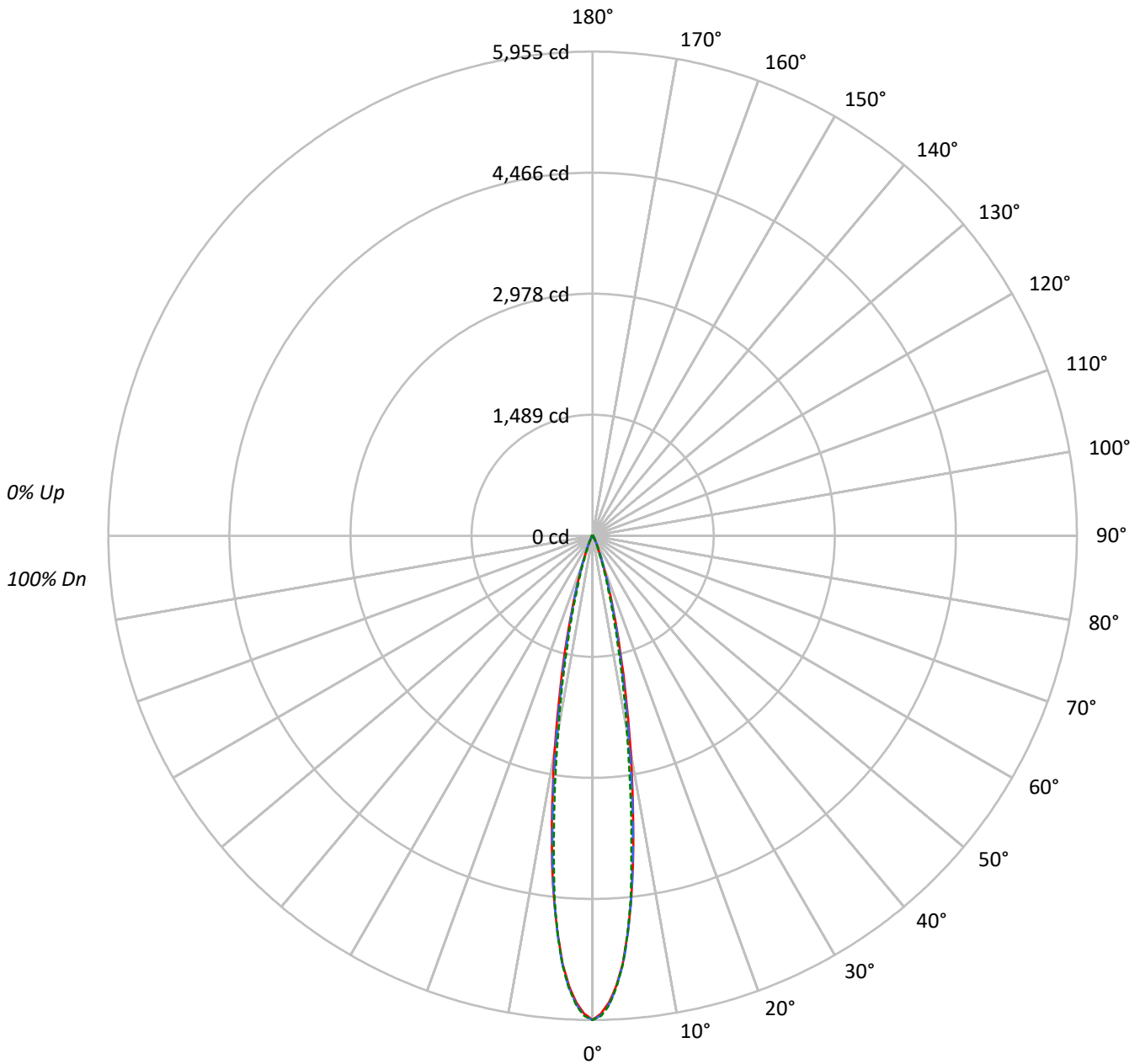
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	96	98	96	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	96	94	92	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°	2937821	2937821	2937821
5°	2437256	2445130	2435869
10°	1348919	1300225	1211202
15°	546060	522258	463724
20°	182971	193997	157035
25°	69624	69842	66140
30°	31219	30706	29681
35°	15117	13491	10721
40°	9983	12623	8823
45°	2582	4117	3837
50°	691	1075	1382
55°	6279	5505	8602
60°	8979	7203	11742
65°	4319	11207	10623
70°	3895	3318	3895
75°	1716	4384	12200
80°	20740	28412	25855
85°	0	13020	15284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.0	48.7
10°-20°	295.4	36.9
20°-30°	67.1	8.4
30°-40°	19.8	2.5
40°-50°	6.6	0.8
50°-60°	5.8	0.7
60°-70°	7.0	0.9
70°-80°	4.5	0.6
80°-90°	4.7	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°	752.6	94.0
0°-40°	772.4	96.4
0°-60°	784.9	98.0
0°-90°	801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5955	5955	5955	5955	5955	
5°	4921	4960	4937	4873	4918	395
15°	1069	1084	1022	927	908	311
25°	128	138	128	127	122	67
35°	25	28	22	26	18	20
45°	4	10	6	10	6	5
55°	7	10	6	10	10	3
65°	4	8	10	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°	5954.7	5954.7	5954.7	5954.7	5954.7
1°	5878.0	5901.8	5899.5	5889.9	5906.8
2°	5742.8	5771.6	5768.9	5747.9	5778.0
3°	5544.6	5570.2	5566.1	5536.0	5568.8
4°	5279.8	5309.0	5297.6	5252.4	5294.4
5°	4921.3	4960.1	4937.2	4872.9	4918.5
6°	4523.9	4556.8	4520.7	4435.3	4480.1
7°	4079.1	4099.7	4052.2	3942.6	3912.4
8°	3593.7	3620.6	3554.4	3426.5	3393.6
9°	3129.7	3138.8	3058.4	2922.3	2880.8
10°	2692.6	2685.8	2595.4	2457.4	2417.7
11°	2278.4	2269.3	2173.8	2046.4	2059.2
12°	1901.6	1919.5	1808.5	1692.9	1695.2
13°	1592.0	1593.8	1498.4	1388.3	1381.9
14°	1303.4	1320.3	1238.5	1139.9	1121.6
15°	1069.1	1083.7	1022.5	926.6	907.9
16°	855.8	874.1	830.3	743.5	718.8
17°	689.1	712.4	683.7	611.0	582.7
18°	551.2	569.0	562.2	487.3	464.0
19°	435.2	459.9	461.7	399.1	371.3
20°	348.5	370.8	369.5	321.1	299.1
22.5°	200.0	211.9	212.4	189.5	176.7
25°	127.9	137.5	128.3	127.0	121.5
26°	111.0	118.7	108.7	108.7	103.7
27°	90.0	96.8	87.2	91.3	84.5
28°	75.8	83.1	74.9	74.0	73.1
29°	63.0	69.9	59.4	63.9	61.2
30°	54.8	59.8	53.9	60.7	52.1
32.5°	42.5	46.6	36.1	45.7	34.3
35°	25.1	27.9	22.4	26.0	17.8
37.5°	26.0	26.9	24.2	26.9	25.1
40°	15.5	16.0	19.6	19.6	13.7
42.5°	14.6	14.2	8.7	13.7	11.0
45°	3.7	10.5	5.9	10.5	5.5
47.5°	2.7	3.7	3.7	7.3	7.3
50°	0.9	3.7	1.4	2.7	1.8
52.5°	0.0	8.7	1.8	6.4	5.5
55°	7.3	10.5	6.4	9.6	10.0
57.5°	0.9	7.3	3.7	7.8	5.5
60°	9.1	12.3	7.3	13.2	11.9
62.5°	0.9	8.2	9.6	7.3	6.4
65°	3.7	7.8	9.6	9.1	9.1
67.5°	4.6	7.8	5.9	5.9	8.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.9	3.2	2.3	4.1	6.4
77.5°	0.9	3.7	3.2	7.3	5.5
80°	7.3	8.2	10.0	13.2	9.1
82.5°	6.4	6.4	10.0	7.3	5.5
85°	0.0	0.0	2.3	2.3	2.7
87.5°	0.0	1.8	4.6	3.7	6.4
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	2.3	2.3	2.7
72.5°	0.9	4.1	3.7	2.3	4.6



(END OF REPORT)