

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: P282523

Luminaire Tested: **LDA2B109040D010 EU2B10SP159040 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282523
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: LDA2B109040D010 EU2B10SP159040 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: 925.2 lumens
Efficiency: N/A
Efficacy: 92.5 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

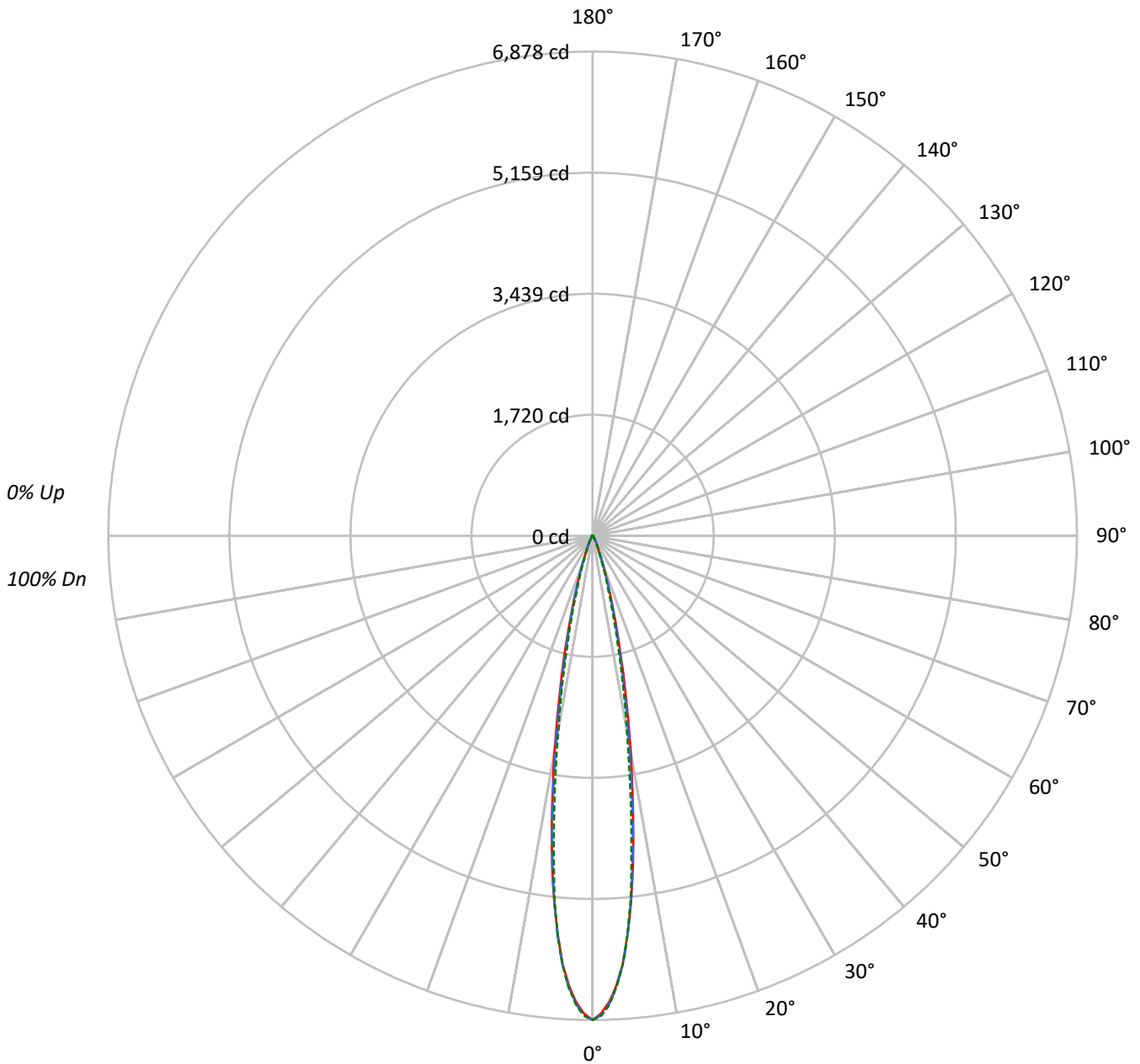
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	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°	3393490	3393490	3393490
5°	2815228	2824390	2813643
10°	1558125	1501866	1399066
15°	630745	603265	535640
20°	211322	224081	181396
25°	80403	80675	76374
30°	36061	35434	34238
35°	17466	15539	12407
40°	11528	14620	10176
45°	2930	4814	4396
50°	844	1228	1612
55°	7225	6365	9978
60°	10459	8288	13518
65°	4903	12958	12374
70°	4616	3750	4616
75°	2097	4956	14106
80°	23866	32957	30116
85°	0	14718	18114



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.5	48.7
10°-20°	341.2	36.9
20°-30°	77.6	8.4
30°-40°	22.9	2.5
40°-50°	7.6	0.8
50°-60°	6.7	0.7
60°-70°	8.1	0.9
70°-80°	5.2	0.6
80°-90°	5.4	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°	869.3	94.0
0°-40°	892.2	96.4
0°-60°	906.6	98.0
0°-90°	925.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	925.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6878	6878	6878	6878	6878	
5°	5684	5729	5703	5629	5681	456
15°	1235	1252	1181	1070	1049	359
25°	148	159	148	147	140	77
35°	29	32	26	30	21	23
45°	4	12	7	12	6	6
55°	8	12	7	11	12	3
65°	4	9	11	11	11	4
75°	1	4	3	5	7	2
85°	0	0	3	3	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6878.3	6878.3	6878.3	6878.3	6878.3
1°	6789.6	6817.1	6814.4	6803.4	6822.9
2°	6633.5	6666.7	6663.6	6639.3	6674.1
3°	6404.6	6434.1	6429.3	6394.5	6432.5
4°	6098.6	6132.4	6119.2	6066.9	6115.5
5°	5684.5	5729.3	5703.0	5628.6	5681.3
6°	5225.6	5263.5	5221.9	5123.2	5174.9
7°	4711.8	4735.5	4680.6	4554.0	4519.2
8°	4151.0	4182.1	4105.6	3957.9	3920.0
9°	3615.1	3625.6	3532.8	3375.6	3327.6
10°	3110.2	3102.3	2997.9	2838.6	2792.7
11°	2631.8	2621.2	2511.0	2363.8	2378.6
12°	2196.6	2217.1	2089.0	1955.5	1958.1
13°	1838.9	1841.0	1730.8	1603.6	1596.3
14°	1505.5	1525.0	1430.6	1316.7	1295.6
15°	1234.9	1251.8	1181.1	1070.3	1048.7
16°	988.6	1009.7	959.0	858.8	830.3
17°	796.0	822.9	789.7	705.8	673.1
18°	636.7	657.3	649.4	562.9	536.0
19°	502.7	531.2	533.3	461.0	428.9
20°	402.5	428.3	426.8	370.8	345.5
22.5°	231.1	244.8	245.3	218.9	204.1
25°	147.7	158.8	148.2	146.6	140.3
26°	128.2	137.2	125.5	125.5	119.7
27°	103.9	111.8	100.8	105.5	97.6
28°	87.6	96.0	86.5	85.5	84.4
29°	72.8	80.7	68.6	73.9	70.7
30°	63.3	69.1	62.2	70.2	60.1
32.5°	49.1	53.8	41.7	52.8	39.6
35°	29.0	32.2	25.8	30.1	20.6
37.5°	30.1	31.1	28.0	31.1	29.0
40°	17.9	18.5	22.7	22.7	15.8
42.5°	16.9	16.4	10.0	15.8	12.7
45°	4.2	12.1	6.9	12.1	6.3
47.5°	3.2	4.2	4.2	8.4	8.4
50°	1.1	4.2	1.6	3.2	2.1
52.5°	0.0	10.0	2.1	7.4	6.3
55°	8.4	12.1	7.4	11.1	11.6
57.5°	1.1	8.4	4.2	9.0	6.3
60°	10.6	14.2	8.4	15.3	13.7
62.5°	1.1	9.5	11.1	8.4	7.4
65°	4.2	9.0	11.1	10.6	10.6
67.5°	5.3	9.0	6.9	6.9	9.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.1	3.7	2.6	4.7	7.4
77.5°	1.1	4.2	3.7	8.4	6.3
80°	8.4	9.5	11.6	15.3	10.6
82.5°	7.4	7.4	11.6	8.4	6.3
85°	0.0	0.0	2.6	2.6	3.2
87.5°	0.0	2.1	5.3	4.2	7.4
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.2	1.1	2.6	2.6	3.2
72.5°	1.1	4.7	4.2	2.6	5.3



(END OF REPORT)