

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: P282553

Luminaire Tested: **LDA2B159024D010 EU2B15SP159024 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282553
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: LDA2B159024D010 EU2B15SP159024 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 1500 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: 1032.9 lumens
Efficiency: N/A
Efficacy: 73.3 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

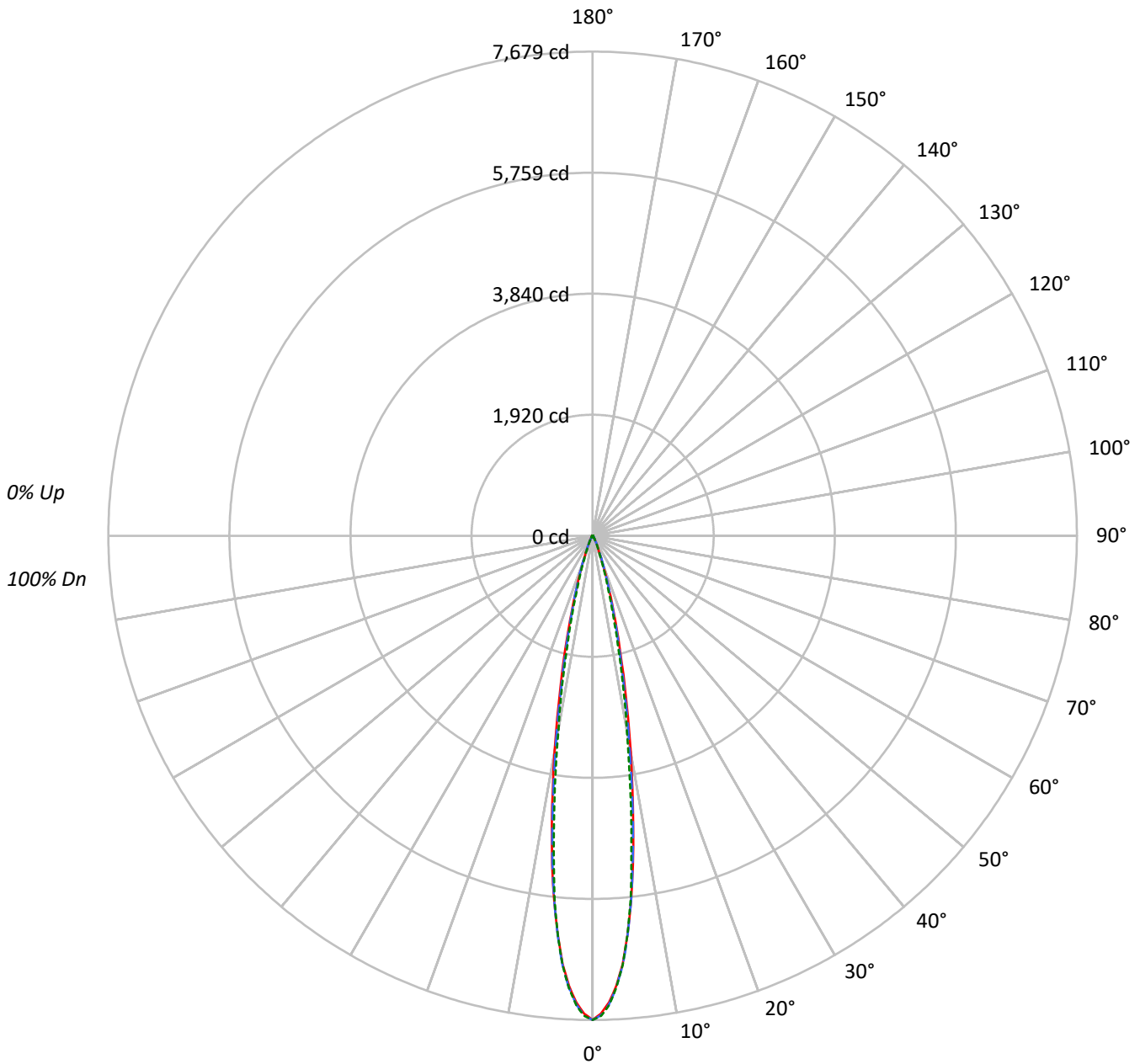
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	96	94	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	94	92	90	89															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	92	89	88	87	92	89	88	87															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	90	88	86	85															
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°	3788476	3788476	3788476
5°	3142932	3153134	3141149
10°	1739527	1676655	1561883
15°	704193	673496	598004
20°	235894	250122	202502
25°	89766	90092	85302
30°	40277	39593	38226
35°	19514	17406	13853
40°	12881	16294	11399
45°	3279	5372	4954
50°	921	1382	1842
55°	8085	7053	11182
60°	11643	9275	15097
65°	5487	14476	13775
70°	5049	4183	5049
75°	2287	5528	15631
80°	26707	36935	33526
85°	0	16416	19812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	502.9	48.7
10°-20°	381.0	36.9
20°-30°	86.6	8.4
30°-40°	25.6	2.5
40°-50°	8.5	0.8
50°-60°	7.5	0.7
60°-70°	9.0	0.9
70°-80°	5.8	0.6
80°-90°	6.0	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°	970.5	94.0
0°-40°	996.1	96.4
0°-60°	1012.1	98.0
0°-90°	1032.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1032.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7679	7679	7679	7679	7679	
5°	6346	6396	6367	6284	6343	509
15°	1379	1398	1319	1195	1171	401
25°	165	177	166	164	157	86
35°	32	36	29	34	23	26
45°	5	14	8	14	7	7
55°	9	14	8	12	13	4
65°	5	10	12	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°	7678.9	7678.9	7678.9	7678.9	7678.9
1°	7580.0	7610.6	7607.6	7595.3	7617.1
2°	7405.6	7442.7	7439.2	7412.1	7451.0
3°	7150.1	7183.0	7177.7	7138.9	7181.3
4°	6808.5	6846.2	6831.5	6773.1	6827.3
5°	6346.2	6396.2	6366.8	6283.8	6342.6
6°	5833.8	5876.2	5829.7	5719.6	5777.3
7°	5260.2	5286.7	5225.5	5084.1	5045.3
8°	4634.2	4668.9	4583.5	4418.7	4376.3
9°	4035.9	4047.6	3944.0	3768.5	3714.9
10°	3472.3	3463.4	3346.8	3169.0	3117.7
11°	2938.1	2926.3	2803.3	2638.9	2655.4
12°	2452.3	2475.2	2332.1	2183.1	2186.1
13°	2053.0	2055.3	1932.2	1790.3	1782.1
14°	1680.8	1702.6	1597.1	1469.9	1446.4
15°	1378.7	1397.5	1318.6	1194.9	1170.8
16°	1103.6	1127.2	1070.7	958.8	927.0
17°	888.7	918.7	881.6	788.0	751.5
18°	710.8	733.8	725.0	628.4	598.3
19°	561.2	593.0	595.4	514.7	478.8
20°	449.3	478.2	476.4	414.0	385.7
22.5°	257.9	273.3	273.8	244.4	227.9
25°	164.9	177.3	165.5	163.7	156.7
26°	143.1	153.1	140.2	140.2	133.7
27°	116.0	124.9	112.5	117.8	108.9
28°	97.8	107.2	96.6	95.4	94.2
29°	81.3	90.1	76.6	82.4	78.9
30°	70.7	77.1	69.5	78.3	67.1
32.5°	54.8	60.1	46.5	58.9	44.2
35°	32.4	35.9	28.9	33.6	23.0
37.5°	33.6	34.7	31.2	34.7	32.4
40°	20.0	20.6	25.3	25.3	17.7
42.5°	18.8	18.3	11.2	17.7	14.1
45°	4.7	13.5	7.7	13.5	7.1
47.5°	3.5	4.7	4.7	9.4	9.4
50°	1.2	4.7	1.8	3.5	2.4
52.5°	0.0	11.2	2.4	8.2	7.1
55°	9.4	13.5	8.2	12.4	13.0
57.5°	1.2	9.4	4.7	10.0	7.1
60°	11.8	15.9	9.4	17.1	15.3
62.5°	1.2	10.6	12.4	9.4	8.2
65°	4.7	10.0	12.4	11.8	11.8
67.5°	5.9	10.0	7.7	7.7	10.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.2	4.1	2.9	5.3	8.2
77.5°	1.2	4.7	4.1	9.4	7.1
80°	9.4	10.6	13.0	17.1	11.8
82.5°	8.2	8.2	13.0	9.4	7.1
85°	0.0	0.0	2.9	2.9	3.5
87.5°	0.0	2.4	5.9	4.7	8.2
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.5	1.2	2.9	2.9	3.5
72.5°	1.2	5.3	4.7	2.9	5.9



(END OF REPORT)