

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: P282541

Luminaire Tested: **LDA2B158030D010 EU2B15SP158030 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282541  
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: LDA2B158030D010 EU2B15SP158030 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: 1439.6 lumens  
Efficiency: N/A  
Efficacy: 102.1 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

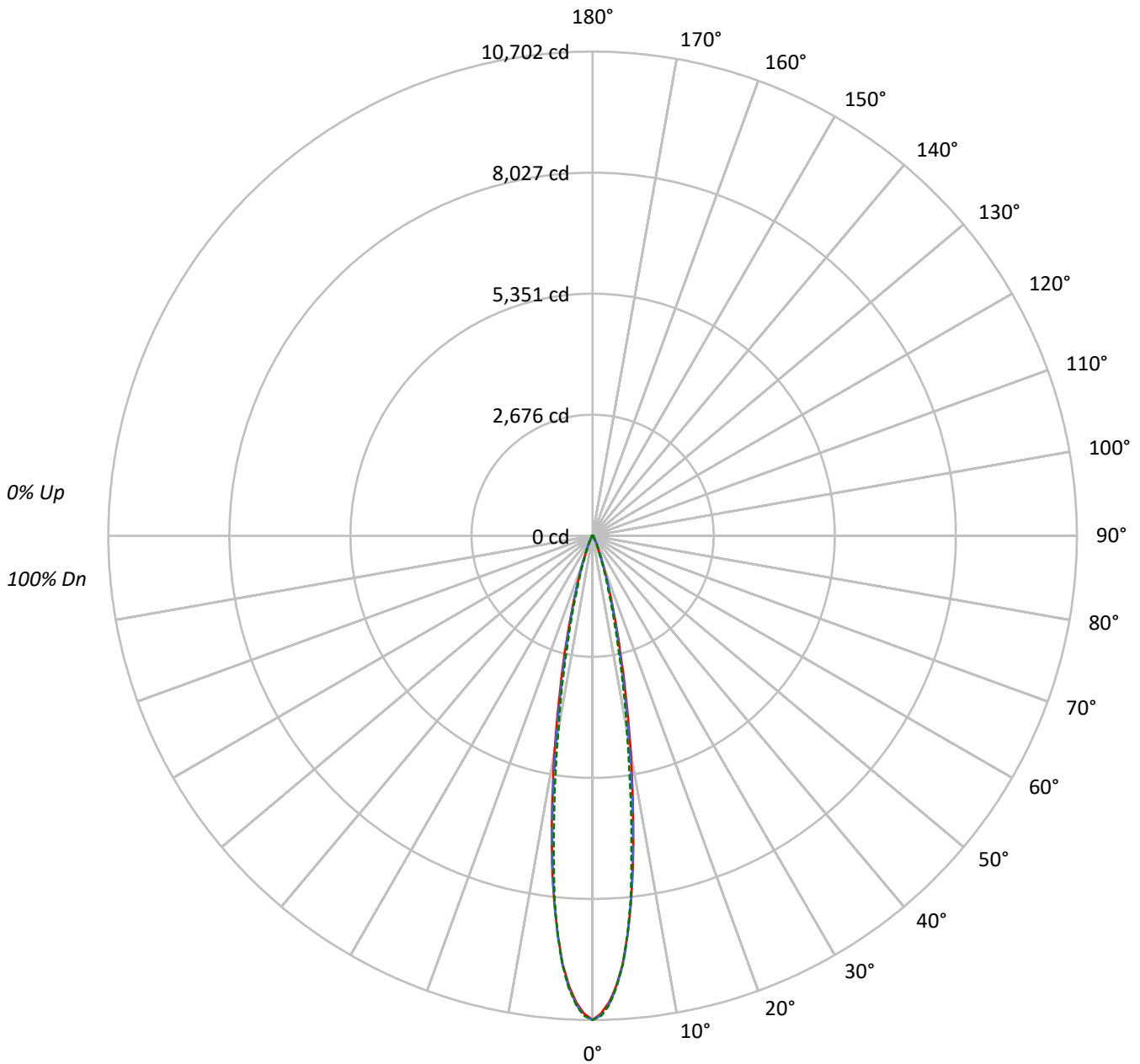
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P282541

CATALOG NUMBER: LDA2B158030D010 EU2B15SP158030 2LBALPINSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P282541

CATALOG NUMBER: LDA2B158030D010 EU2B15SP158030 2LBALPINSQ1MMS

**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°	5279859	5279859	5279859
5°	4380206	4394420	4377730
10°	2424307	2336737	2176776
15°	981385	938634	833416
20°	328770	348616	282253
25°	125095	125530	118835
30°	56114	55146	53323
35°	27163	24212	19273
40°	17969	22735	15843
45°	4605	7466	6838
50°	1228	1919	2533
55°	11268	9892	15569
60°	16182	12926	21017
65°	7705	20079	19145
70°	7068	5914	7068
75°	3050	7815	21921
80°	37219	51425	46595
85°	0	23209	27737



TEST NUMBER: P282541

CATALOG NUMBER: LDA2B158030D010 EU2B15SP158030 2LBALPINSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	700.9	48.7
10°-20°	530.9	36.9
20°-30°	120.7	8.4
30°-40°	35.7	2.5
40°-50°	11.9	0.8
50°-60°	10.5	0.7
60°-70°	12.6	0.9
70°-80°	8.0	0.6
80°-90°	8.4	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°	1352.5	94.0
0°-40°	1388.2	96.4
0°-60°	1410.6	98.0
0°-90°	1439.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1439.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10702	10702	10702	10702	10702	
5°	8844	8914	8873	8758	8840	709
15°	1921	1948	1838	1665	1632	558
25°	230	247	231	228	218	120
35°	45	50	40	47	32	36
45°	7	19	11	19	10	10
55°	13	19	12	17	18	5
65°	7	14	17	16	16	7
75°	2	6	4	7	12	4
85°	0	0	4	4	5	5
90°	0	0	0	0	0	



TEST NUMBER: P282541

CATALOG NUMBER: LDA2B158030D010 EU2B15SP158030 2LBALPINSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10701.8	10701.8	10701.8	10701.8	10701.8
1°	10564.0	10606.6	10602.5	10585.3	10615.7
2°	10321.0	10372.7	10367.8	10330.0	10384.2
3°	9964.8	10010.8	10003.4	9949.2	10008.3
4°	9488.8	9541.3	9520.8	9439.5	9515.0
5°	8844.5	8914.2	8873.2	8757.5	8839.5
6°	8130.4	8189.5	8124.7	7971.2	8051.6
7°	7331.0	7367.9	7282.6	7085.6	7031.4
8°	6458.5	6507.0	6387.9	6158.1	6099.0
9°	5624.6	5641.1	5496.6	5252.0	5177.3
10°	4839.2	4826.9	4664.4	4416.5	4345.1
11°	4094.8	4078.3	3906.8	3677.8	3700.8
12°	3417.6	3449.6	3250.2	3042.5	3046.6
13°	2861.2	2864.4	2692.9	2495.1	2483.6
14°	2342.4	2372.8	2225.9	2048.6	2015.8
15°	1921.4	1947.7	1837.7	1665.3	1631.7
16°	1538.1	1570.9	1492.1	1336.2	1291.9
17°	1238.5	1280.4	1228.7	1098.2	1047.3
18°	990.7	1022.7	1010.4	875.7	833.9
19°	782.2	826.5	829.8	717.3	667.3
20°	626.2	666.5	664.0	577.0	537.6
22.5°	359.5	380.8	381.7	340.6	317.6
25°	229.8	247.0	230.6	228.2	218.3
26°	199.4	213.4	195.3	195.3	186.3
27°	161.7	174.0	156.8	164.2	151.8
28°	136.2	149.4	134.6	133.0	131.3
29°	113.3	125.6	106.7	114.9	110.0
30°	98.5	107.5	96.8	109.2	93.6
32.5°	76.3	83.7	64.8	82.1	61.6
35°	45.1	50.1	40.2	46.8	32.0
37.5°	46.8	48.4	43.5	48.4	45.1
40°	27.9	28.7	35.3	35.3	24.6
42.5°	26.3	25.4	15.6	24.6	19.7
45°	6.6	18.9	10.7	18.9	9.8
47.5°	4.9	6.6	6.6	13.1	13.1
50°	1.6	6.6	2.5	4.9	3.3
52.5°	0.0	15.6	3.3	11.5	9.8
55°	13.1	18.9	11.5	17.2	18.1
57.5°	1.6	13.1	6.6	14.0	9.8
60°	16.4	22.2	13.1	23.8	21.3
62.5°	1.6	14.8	17.2	13.1	11.5
65°	6.6	14.0	17.2	16.4	16.4
67.5°	8.2	14.0	10.7	10.7	14.8



TEST NUMBER: P282541

CATALOG NUMBER: LDA2B158030D010 EU2B15SP158030 2LBALPINSQ1MMS

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.6	5.7	4.1	7.4	11.5
77.5°	1.6	6.6	5.7	13.1	9.8
80°	13.1	14.8	18.1	23.8	16.4
82.5°	11.5	11.5	18.1	13.1	9.8
85°	0.0	0.0	4.1	4.1	4.9
87.5°	0.0	3.3	8.2	6.6	11.5
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093







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







70°	4.9	1.6	4.1	4.1	4.9
72.5°	1.6	7.4	6.6	4.1	8.2



(END OF REPORT)