

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: P282563

Luminaire Tested: **LDA2B159040D010 EU2B15SP159040 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282563
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: LDA2B159040D010 EU2B15SP159040 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MW
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1231.1 lumens
Efficiency: N/A
Efficacy: 87.3 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

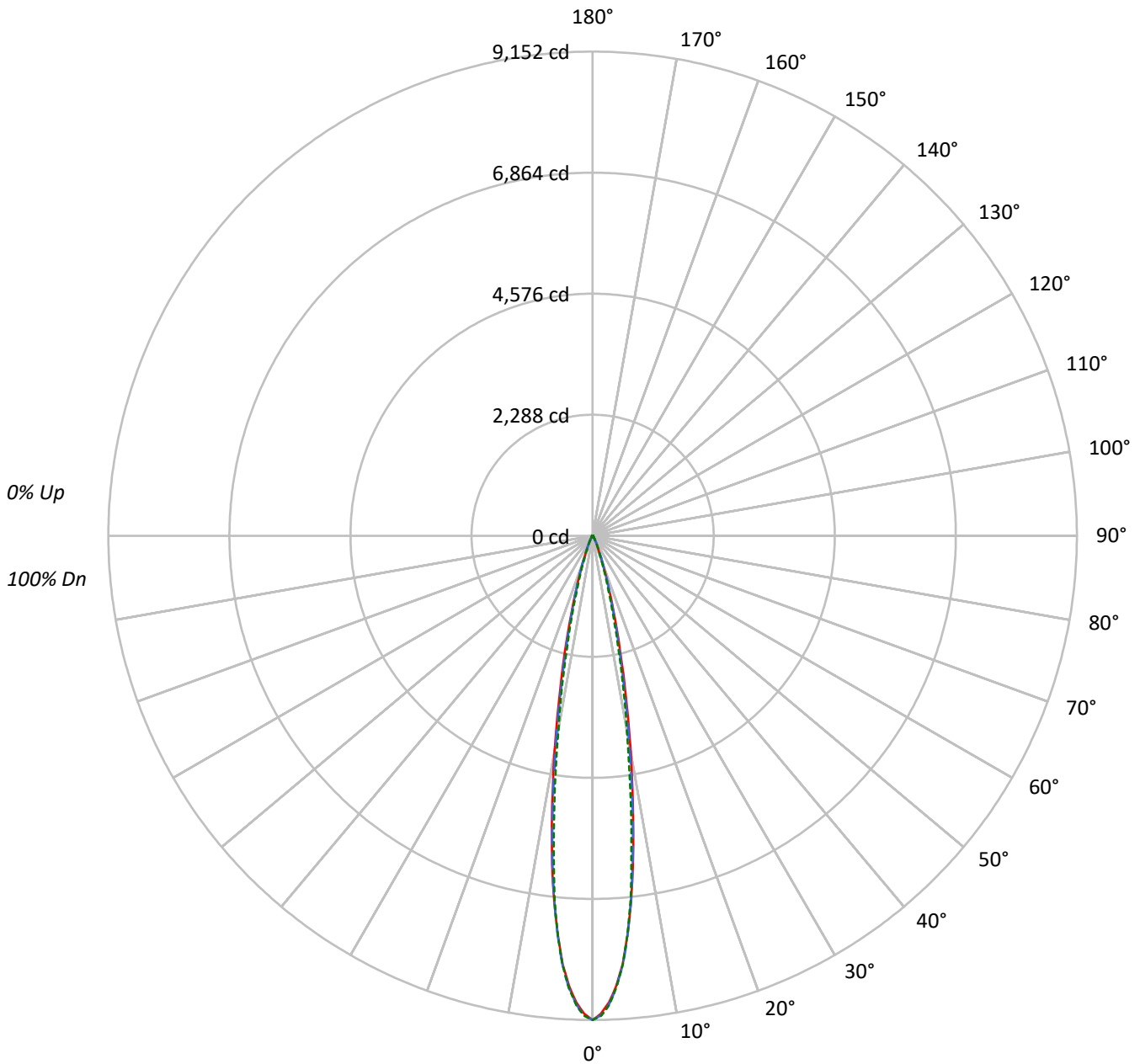
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282563

CATALOG NUMBER: LDA2B159040D010 EU2B15SP159040 2LBALPINSQ1MW

Luminous Intensity Polar Plot





TEST NUMBER: P282563

CATALOG NUMBER: LDA2B159040D010 EU2B15SP159040 2LBALPINSQ1MW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	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	100	100	100	100	100		
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96	96	96	96		
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	94	94	94	94	94		
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	91	91	91	91	91	91		
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89	89	89	89	89		
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	87	87	87	87	87	87		
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	85	85	85	85	85		
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	83	83	83	83	83		
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	81	81	81	81	81		
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	80	80	80	80	80		
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	78	78	78	78	78	78		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4515346	4515346	4515346
5°	3745944	3758078	3743815
10°	2073225	1998330	1861564
15°	839290	802719	712722
20°	281203	298109	241354
25°	106968	107349	101633
30°	47967	47170	45575
35°	23248	20719	16503
40°	15393	19450	13589
45°	3907	6349	5861
50°	1075	1612	2149
55°	9634	8429	13246
60°	13814	11051	17958
65°	6537	17161	16344
70°	6058	5049	6058
75°	2669	6672	18681
80°	31821	43754	39776
85°	0	19812	23775



TEST NUMBER: P282563

CATALOG NUMBER: LDA2B159040D010 EU2B15SP159040 2LBALPINSQ1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	599.4	48.7
10°-20°	454.1	36.9
20°-30°	103.2	8.4
30°-40°	30.5	2.5
40°-50°	10.2	0.8
50°-60°	8.9	0.7
60°-70°	10.7	0.9
70°-80°	6.9	0.6
80°-90°	7.2	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°	1156.7	94.0
0°-40°	1187.2	96.4
0°-60°	1206.3	98.0
0°-90°	1231.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1231.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9152	9152	9152	9152	9152	
5°	7564	7623	7588	7489	7560	606
15°	1643	1666	1572	1424	1395	477
25°	196	211	197	195	187	103
35°	39	43	34	40	27	30
45°	6	16	9	16	8	8
55°	11	16	10	15	15	5
65°	6	12	15	14	14	6
75°	1	5	4	6	10	3
85°	0	0	4	4	4	4
90°	0	0	0	0	0	



TEST NUMBER: P282563

CATALOG NUMBER: LDA2B159040D010 EU2B15SP159040 2LBALPINSQ1MW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9152.2	9152.2	9152.2	9152.2	9152.2
1°	9034.2	9070.7	9067.2	9052.5	9078.5
2°	8826.5	8870.7	8866.5	8834.2	8880.5
3°	8521.9	8561.2	8554.8	8508.5	8559.1
4°	8114.7	8159.7	8142.1	8072.6	8137.2
5°	7563.8	7623.4	7588.3	7489.4	7559.5
6°	6953.1	7003.6	6948.2	6816.9	6885.7
7°	6269.4	6301.0	6228.0	6059.6	6013.2
8°	5523.3	5564.7	5462.9	5266.4	5215.9
9°	4810.2	4824.2	4700.7	4491.5	4427.6
10°	4138.4	4127.9	3988.9	3777.0	3715.9
11°	3501.8	3487.8	3341.1	3145.2	3164.9
12°	2922.7	2950.1	2779.6	2602.0	2605.5
13°	2446.8	2449.7	2303.0	2133.8	2124.0
14°	2003.2	2029.2	1903.6	1752.0	1723.9
15°	1643.2	1665.6	1571.6	1424.2	1395.4
16°	1315.4	1343.5	1276.1	1142.7	1104.8
17°	1059.2	1095.0	1050.8	939.2	895.6
18°	847.2	874.6	864.0	748.9	713.1
19°	668.9	706.8	709.6	613.5	570.7
20°	535.6	569.9	567.8	493.4	459.7
22.5°	307.4	325.7	326.4	291.3	271.6
25°	196.5	211.3	197.2	195.1	186.7
26°	170.6	182.5	167.1	167.1	159.3
27°	138.3	148.8	134.1	140.4	129.9
28°	116.5	127.7	115.1	113.7	112.3
29°	96.9	107.4	91.2	98.3	94.1
30°	84.2	91.9	82.8	93.4	80.0
32.5°	65.3	71.6	55.5	70.2	52.6
35°	38.6	42.8	34.4	40.0	27.4
37.5°	40.0	41.4	37.2	41.4	38.6
40°	23.9	24.6	30.2	30.2	21.1
42.5°	22.5	21.8	13.3	21.1	16.8
45°	5.6	16.1	9.1	16.1	8.4
47.5°	4.2	5.6	5.6	11.2	11.2
50°	1.4	5.6	2.1	4.2	2.8
52.5°	0.0	13.3	2.8	9.8	8.4
55°	11.2	16.1	9.8	14.7	15.4
57.5°	1.4	11.2	5.6	11.9	8.4
60°	14.0	19.0	11.2	20.4	18.2
62.5°	1.4	12.6	14.7	11.2	9.8
65°	5.6	11.9	14.7	14.0	14.0
67.5°	7.0	11.9	9.1	9.1	12.6



TEST NUMBER: P282563

CATALOG NUMBER: LDA2B159040D010 EU2B15SP159040 2LBALPINSQ1MW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.4	4.9	3.5	6.3	9.8
77.5°	1.4	5.6	4.9	11.2	8.4
80°	11.2	12.6	15.4	20.4	14.0
82.5°	9.8	9.8	15.4	11.2	8.4
85°	0.0	0.0	3.5	3.5	4.2
87.5°	0.0	2.8	7.0	5.6	9.8
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







70°	4.2	1.4	3.5	3.5	4.2
72.5°	1.4	6.3	5.6	3.5	7.0



(END OF REPORT)