

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: P281778

Luminaire Tested: **LDA2B159027D010 EU2B15SP159027 2LBALSQC1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P281778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B159027D010 EU2B15SP159027 2LBALSQC1MMS
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1113.0 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

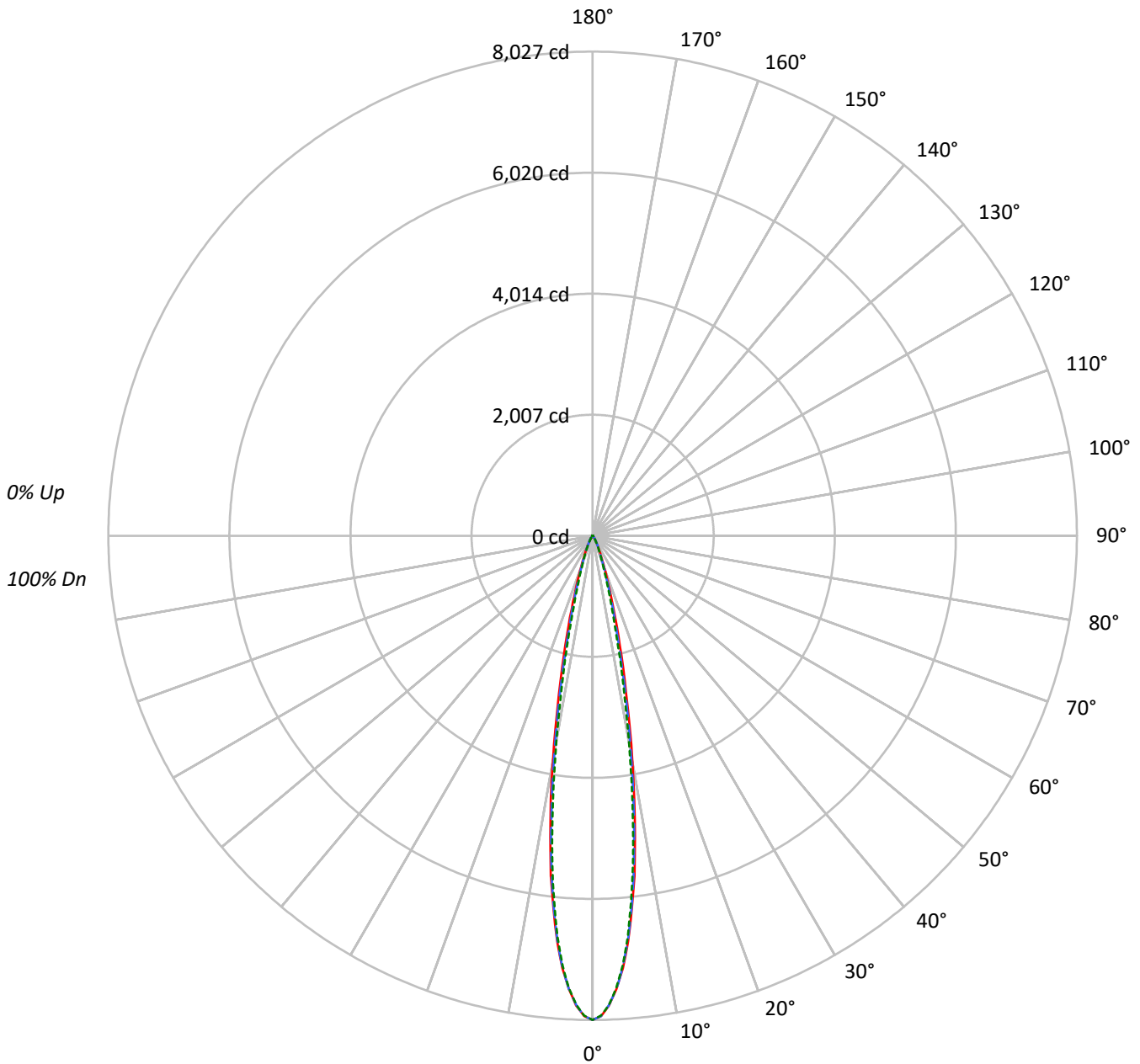
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B159027D010 EU2B15SP159027 2LBALSQC1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P281778

CATALOG NUMBER: LDA2B159027D010 EU2B15SP159027 2LBALSQC1MMS

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	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97				97															
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95				95															
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92				92															
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90				90															
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88				88															
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86				86															
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84				84															
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82				82															
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80				80															
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79				79															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3960215	3960215	3960215
5°	3345983	3328105	3303590
10°	1904498	1820635	1728055
15°	788673	698574	615371
20°	299999	262722	240566
25°	132498	127327	113173
30°	61298	67736	53949
35°	32222	38004	30235
40°	14169	16359	9467
45°	5512	4326	6279
50°	2610	2993	4298
55°	0	1978	0
60°	0	0	1085
65°	0	0	0
70°	0	865	0
75°	0	0	0
80°	3125	0	0
85°	31700	28870	13020



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B159027D010 EU2B15SP159027 2LBALSQC1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	536.7	48.2
10°-20°	410.3	36.9
20°-30°	114.1	10.3
30°-40°	37.1	3.3
40°-50°	8.2	0.7
50°-60°	2.5	0.2
60°-70°	1.5	0.1
70°-80°	0.9	0.1
80°-90°	1.8	0.2
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°	1061.1	95.3
0°-40°	1098.2	98.7
0°-60°	1108.9	99.6
0°-90°	1113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8027	8027	8027	8027	8027	
5°	6756	6707	6720	6670	6671	546
15°	1544	1490	1368	1262	1205	451
25°	243	246	234	220	208	122
35°	54	58	63	48	50	35
45°	8	11	6	6	9	8
55°	0	3	2	1	0	2
65°	0	2	0	0	0	2
75°	0	0	0	1	0	0
85°	6	3	5	3	2	2
90°	0	0	0	0	0	



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B159027D010 EU2B15SP159027 2LBALSQC1MMS

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8027.0	8027.0	8027.0	8027.0	8027.0
1°	7965.6	7935.7	7964.4	7947.5	7957.1
2°	7792.6	7755.4	7785.2	7761.6	7781.3
3°	7523.2	7494.4	7520.9	7491.1	7506.8
4°	7185.6	7143.9	7170.4	7130.4	7140.0
5°	6756.2	6706.6	6720.1	6670.0	6670.6
6°	6215.2	6180.8	6188.7	6110.4	6104.8
7°	5686.1	5604.9	5596.5	5506.9	5489.4
8°	5043.6	4969.8	4945.6	4840.2	4803.0
9°	4427.7	4335.8	4286.2	4164.0	4120.6
10°	3801.6	3708.6	3634.2	3496.2	3449.4
11°	3222.3	3138.3	3045.9	2898.3	2852.6
12°	2684.7	2618.7	2517.3	2374.7	2326.8
13°	2245.7	2169.6	2060.8	1928.4	1887.3
14°	1865.3	1783.6	1674.8	1561.6	1481.5
15°	1544.1	1490.5	1367.7	1262.3	1204.8
16°	1261.8	1216.1	1110.2	1018.9	978.3
17°	1034.6	998.0	907.9	836.3	802.5
18°	853.8	808.1	737.1	690.3	663.8
19°	692.6	657.1	605.2	569.2	542.7
20°	571.4	542.1	500.4	468.3	458.2
22.5°	369.1	364.0	337.0	319.5	311.1
25°	243.4	246.3	233.9	220.3	207.9
26°	207.9	209.6	198.4	190.5	174.7
27°	178.1	178.6	178.6	164.0	148.8
28°	145.4	151.6	146.0	139.2	124.5
29°	124.5	132.4	129.6	122.9	108.8
30°	107.6	113.3	118.9	108.2	94.7
32.5°	75.5	80.6	86.8	81.1	69.9
35°	53.5	58.0	63.1	47.9	50.2
37.5°	36.6	44.5	42.8	38.9	33.2
40°	22.0	23.1	25.4	27.0	14.7
42.5°	15.8	18.6	16.9	19.2	6.8
45°	7.9	11.3	6.2	6.2	9.0
47.5°	5.6	9.6	3.4	3.4	1.1
50°	3.4	7.3	3.9	1.7	5.6
52.5°	5.6	6.8	4.5	5.1	1.1
55°	0.0	3.4	2.3	1.1	0.0
57.5°	2.3	3.9	2.3	1.1	2.3
60°	0.0	0.0	0.0	0.6	1.1
62.5°	0.0	1.1	0.0	1.7	2.3
65°	0.0	2.3	0.0	0.0	0.0
67.5°	3.4	3.9	2.3	4.5	6.8



TEST NUMBER: P281778

CATALOG NUMBER: LDA2B159027D010 EU2B15SP159027 2LBALSQC1MMS

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.1	0.0
77.5°	0.0	5.6	1.7	1.7	2.3
80°	1.1	0.0	0.0	0.6	0.0
82.5°	0.0	4.5	0.6	2.3	3.4
85°	5.6	2.8	5.1	2.8	2.3
87.5°	0.0	0.6	1.1	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







70°	0.0	0.0	0.6	0.6	0.0
72.5°	1.1	0.0	0.0	0.0	0.0



(END OF REPORT)