

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: P282746

Luminaire Tested: **LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1661.6 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

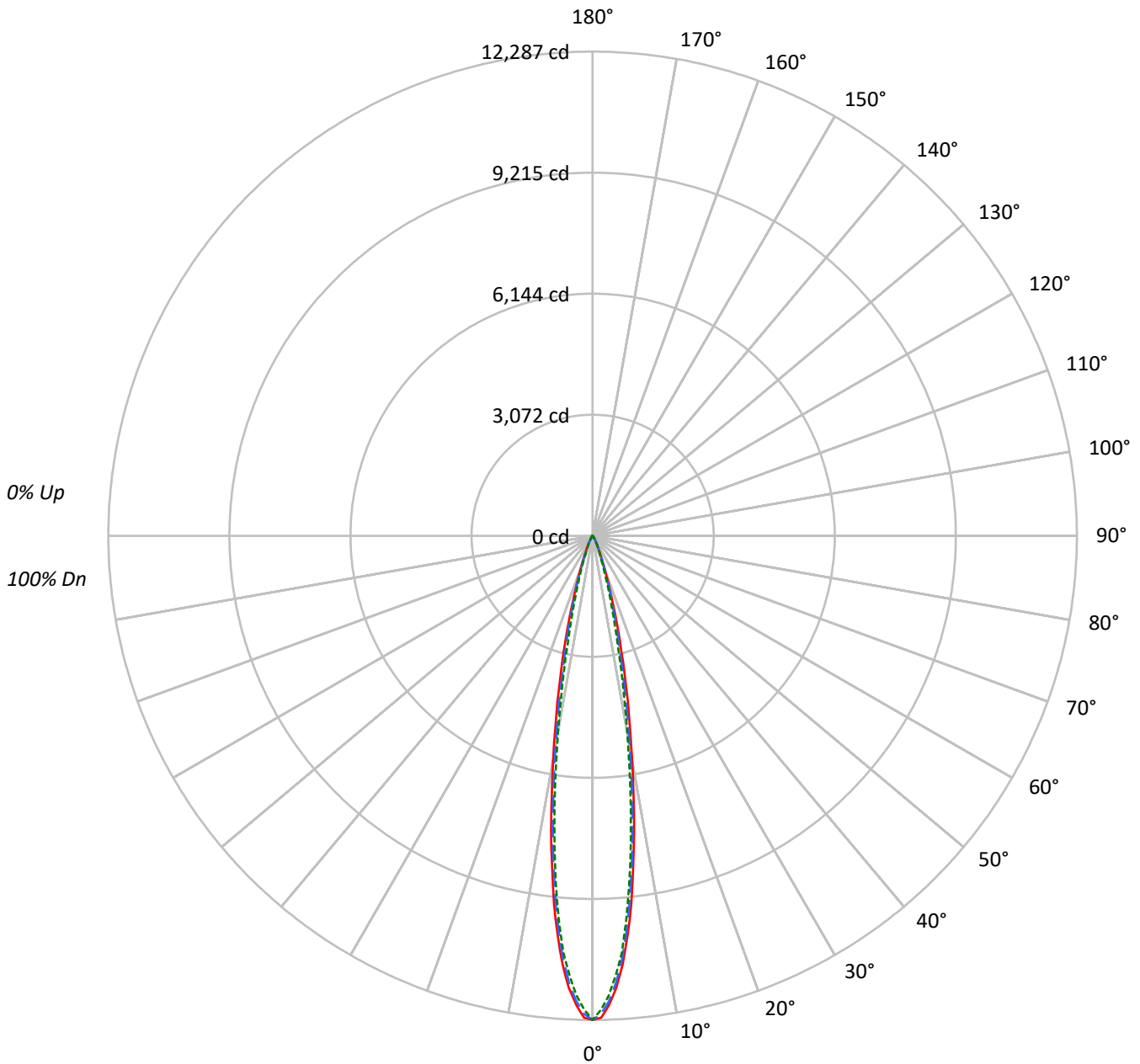
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282746

CATALOG NUMBER: LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MW

Luminous Intensity Polar Plot





TEST NUMBER: P282746

CATALOG NUMBER: LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MW

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6061838	6061838	6061838
5°	5044084	4951622	4851681
10°	2889210	2711164	2530313
15°	1285035	1141306	956409
20°	466169	438291	347251
25°	178987	167120	143930
30°	77192	71780	63691
35°	36498	36498	30235
40°	18291	18935	15264
45°	10605	9908	9280
50°	7292	6524	6524
55°	5677	4043	4903
60°	4638	2763	3750
65°	3269	2218	3269
70°	2741	1298	2741
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



TEST NUMBER: P282746

CATALOG NUMBER: LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	799.1	48.1
10°-20°	646.7	38.9
20°-30°	155.9	9.4
30°-40°	39.7	2.4
40°-50°	11.9	0.7
50°-60°	5.0	0.3
60°-70°	2.4	0.1
70°-80°	0.8	0.0
80°-90°	0.0	0.0
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°	1601.8	96.4
0°-40°	1641.5	98.8
0°-60°	1658.4	99.8
0°-90°	1661.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1661.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12287	12287	12287	12287	12287	
5°	10185	10091	9998	9911	9796	824
15°	2516	2456	2234	2013	1872	717
25°	329	331	307	279	264	170
35°	61	62	61	55	50	42
45°	15	15	14	13	13	13
55°	7	6	5	5	6	6
65°	3	3	2	2	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P282746

CATALOG NUMBER: LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12286.8	12286.8	12286.8	12286.8	12286.8
1°	12231.8	12146.5	12136.1	12189.2	12032.8
2°	11919.1	11858.5	11823.4	11854.7	11677.5
3°	11489.8	11431.1	11367.6	11368.5	11170.5
4°	10905.2	10858.7	10751.6	10719.4	10604.8
5°	10185.0	10091.2	9998.3	9911.1	9796.5
6°	9389.0	9267.7	9135.0	9005.2	8887.7
7°	8452.7	8372.2	8196.9	8019.7	7920.2
8°	7572.4	7442.6	7237.9	7016.1	6931.8
9°	6625.7	6532.9	6297.9	6040.1	5955.8
10°	5767.2	5670.5	5411.8	5124.7	5050.8
11°	4961.7	4870.7	4601.6	4300.3	4221.6
12°	4280.4	4151.5	3842.6	3581.0	3504.3
13°	3601.9	3513.8	3220.9	2962.2	2813.5
14°	3024.8	2951.8	2686.5	2459.1	2301.8
15°	2515.9	2456.2	2234.5	2012.7	1872.5
16°	2063.9	2027.0	1851.6	1637.5	1522.8
17°	1674.4	1640.3	1528.5	1331.4	1234.7
18°	1352.2	1347.5	1254.6	1084.1	997.8
19°	1112.5	1110.6	1025.3	882.2	811.2
20°	887.9	900.2	834.8	709.8	661.4
21°	724.0	730.6	678.5	583.7	540.1
22°	589.4	594.2	560.0	482.3	458.6
23°	483.3	486.1	457.7	399.9	379.0
24°	398.0	399.9	374.3	333.6	315.6
25°	328.8	330.7	307.0	278.6	264.4
26°	272.9	274.8	254.0	234.1	219.8
27°	226.5	230.3	209.4	197.1	181.9
28°	193.3	194.3	175.3	167.7	153.5
29°	158.3	163.9	147.8	141.2	130.8
30°	135.5	138.4	126.0	121.3	111.8
32.5°	90.0	91.9	86.2	82.4	74.9
35°	60.6	61.6	60.6	55.0	50.2
37.5°	41.7	41.7	42.6	36.0	34.1
40°	28.4	28.4	29.4	24.6	23.7
42.5°	20.8	20.8	19.9	17.1	17.1
45°	15.2	15.2	14.2	13.3	13.3
47.5°	12.3	11.4	10.4	10.4	10.4
50°	9.5	9.5	8.5	7.6	8.5
52.5°	7.6	7.6	6.6	6.6	6.6
55°	6.6	5.7	4.7	4.7	5.7
57.5°	4.7	4.7	3.8	3.8	4.7
60°	4.7	3.8	2.8	3.8	3.8



TEST NUMBER: P282746

CATALOG NUMBER: LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.8	1.9	1.9	1.9	1.9
70°	1.9	1.9	0.9	0.9	1.9
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	3.8	2.8	2.8	2.8	2.8
65°	2.8	2.8	1.9	1.9	2.8



(END OF REPORT)