

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: P282764

Luminaire Tested: **LDA2B209027D010 EU2B20NFL259027 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282764
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: LDA2B209027D010 EU2B20NFL259027 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: 1309.4 lumens
Efficiency: N/A
Efficacy: 63.6 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

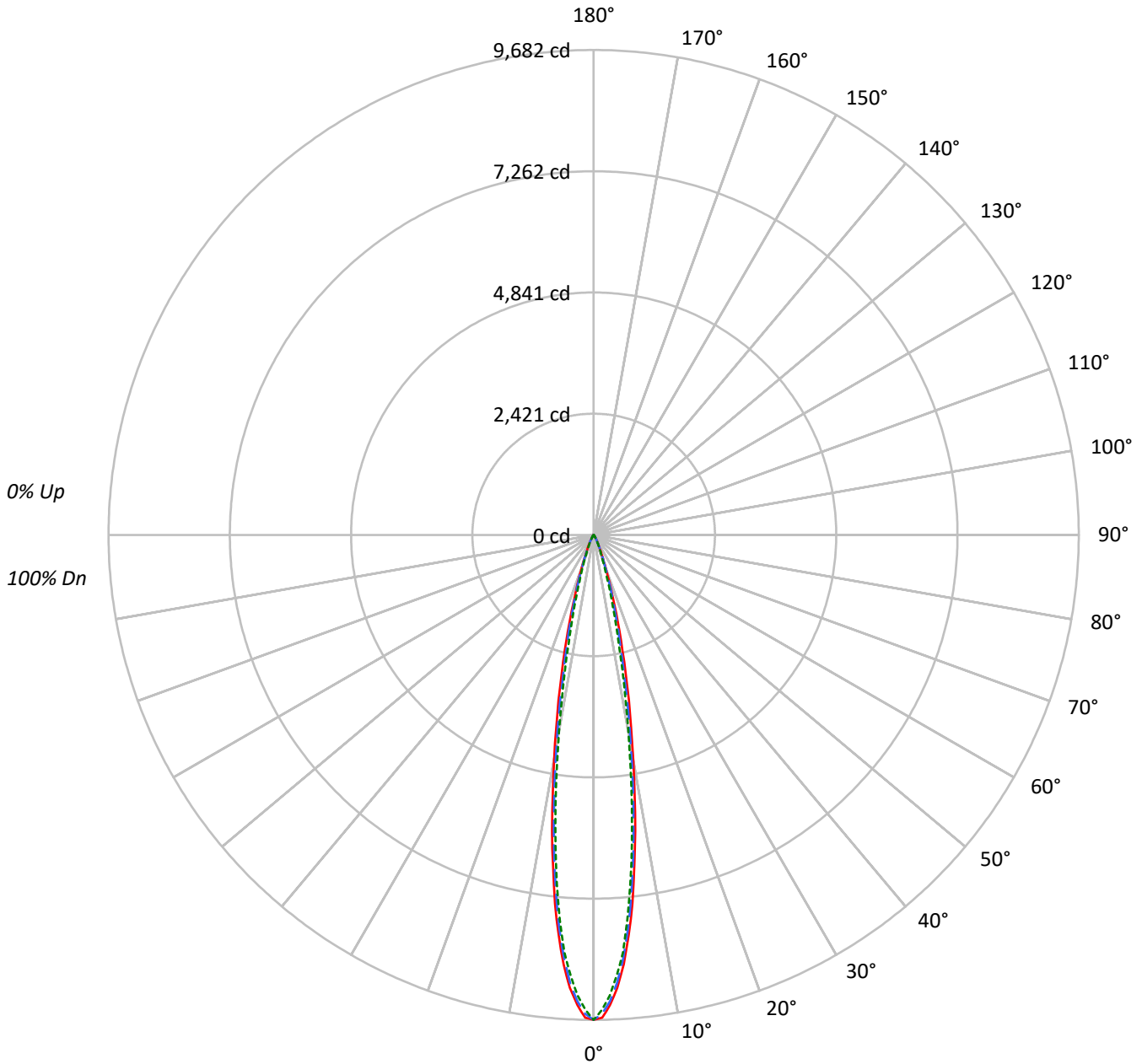
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4776976	4776976	4776976
5°	3974946	3902096	3823302
10°	2276821	2136498	1993971
15°	1012644	899407	753686
20°	367360	345414	273643
25°	141045	131736	113391
30°	60842	56570	50189
35°	28789	28789	23850
40°	14426	14877	12044
45°	8303	7814	7326
50°	5757	5142	5142
55°	4473	3183	3871
60°	3651	2171	2960
65°	2568	1751	2568
70°	2164	1010	2164
75°	1334	1334	1334
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	629.7	48.1
10°-20°	509.6	38.9
20°-30°	122.9	9.4
30°-40°	31.3	2.4
40°-50°	9.3	0.7
50°-60°	4.0	0.3
60°-70°	1.9	0.1
70°-80°	0.6	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°	1262.3	96.4
0°-40°	1293.6	98.8
0°-60°	1306.9	99.8
0°-90°	1309.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1309.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9682	9682	9682	9682	9682	
5°	8026	7952	7879	7810	7720	649
15°	1983	1936	1761	1586	1476	565
25°	259	261	242	220	208	134
35°	48	48	48	43	40	33
45°	12	12	11	10	10	10
55°	5	4	4	4	4	5
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9682.5	9682.5	9682.5	9682.5	9682.5
1°	9639.2	9572.0	9563.8	9605.6	9482.4
2°	9392.7	9345.0	9317.3	9342.0	9202.3
3°	9054.5	9008.2	8958.1	8958.9	8802.8
4°	8593.7	8557.1	8472.7	8447.4	8357.0
5°	8026.2	7952.2	7879.1	7810.4	7720.0
6°	7398.9	7303.3	7198.8	7096.5	7003.9
7°	6661.1	6597.6	6459.5	6319.8	6241.4
8°	5967.4	5865.1	5703.8	5529.0	5462.6
9°	5221.3	5148.2	4963.0	4759.8	4693.4
10°	4544.8	4468.6	4264.7	4038.5	3980.2
11°	3910.0	3838.3	3626.3	3388.8	3326.8
12°	3373.1	3271.6	3028.1	2822.0	2761.5
13°	2838.4	2769.0	2538.2	2334.4	2217.1
14°	2383.7	2326.2	2117.1	1937.8	1813.9
15°	1982.6	1935.6	1760.9	1586.1	1475.6
16°	1626.4	1597.3	1459.2	1290.4	1200.0
17°	1319.5	1292.6	1204.5	1049.2	973.0
18°	1065.6	1061.9	988.7	854.3	786.3
19°	876.7	875.2	808.0	695.2	639.2
20°	699.7	709.4	657.9	559.3	521.2
21°	570.5	575.8	534.7	460.0	425.7
22°	464.5	468.2	441.3	380.1	361.4
23°	380.8	383.1	360.7	315.1	298.7
24°	313.6	315.1	295.0	262.9	248.7
25°	259.1	260.6	242.0	219.5	208.3
26°	215.1	216.6	200.1	184.4	173.2
27°	178.5	181.5	165.0	155.3	143.4
28°	152.3	153.1	138.2	132.2	121.0
29°	124.7	129.2	116.5	111.3	103.1
30°	106.8	109.0	99.3	95.6	88.1
32.5°	70.9	72.4	68.0	65.0	59.0
35°	47.8	48.5	47.8	43.3	39.6
37.5°	32.9	32.9	33.6	28.4	26.9
40°	22.4	22.4	23.1	19.4	18.7
42.5°	16.4	16.4	15.7	13.4	13.4
45°	11.9	11.9	11.2	10.5	10.5
47.5°	9.7	9.0	8.2	8.2	8.2
50°	7.5	7.5	6.7	6.0	6.7
52.5°	6.0	6.0	5.2	5.2	5.2
55°	5.2	4.5	3.7	3.7	4.5
57.5°	3.7	3.7	3.0	3.0	3.7
60°	3.7	3.0	2.2	3.0	3.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.2	1.5	1.5	1.5	1.5
70°	1.5	1.5	0.7	0.7	1.5
72.5°	0.7	0.7	0.7	0.7	0.7
75°	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.0	0.0	0.7
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



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







62.5°	3.0	2.2	2.2	2.2	2.2
65°	2.2	2.2	1.5	1.5	2.2



(END OF REPORT)