

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: P282781

Luminaire Tested: **LDA2B209727D010 EU2B20NFL259727 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282781
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: LDA2B209727D010 EU2B20NFL259727 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1181.1 lumens
Efficiency: N/A
Efficacy: 57.3 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

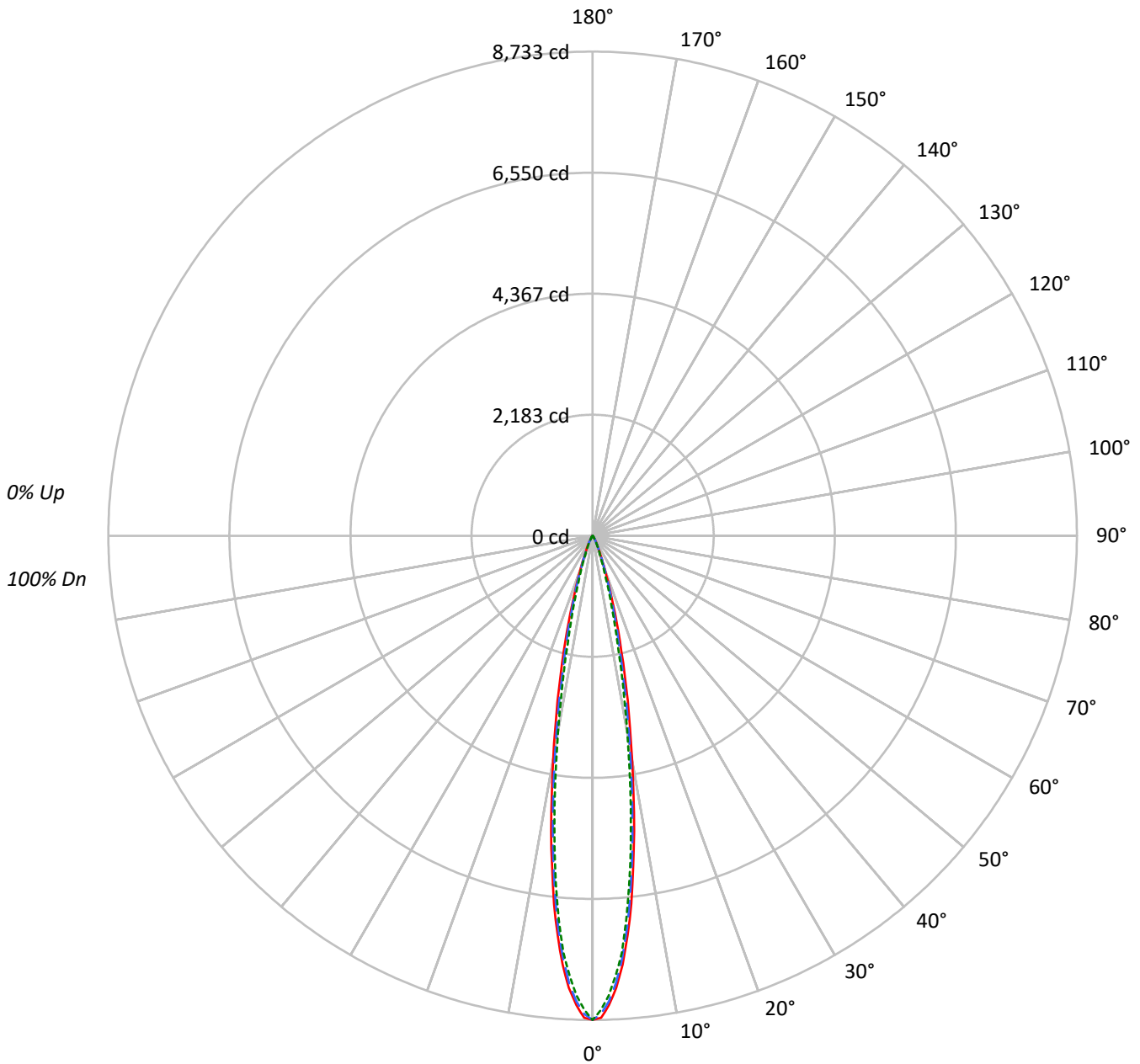
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4308726	4308726	4308726
5°	3585286	3519567	3448549
10°	2053637	1927092	1798542
15°	913402	811249	679829
20°	331343	311550	246814
25°	127218	118780	102286
30°	54861	51044	45290
35°	25958	25958	21502
40°	13010	13460	10820
45°	7535	7047	6559
50°	5142	4682	4682
55°	4043	2925	3441
60°	3355	1973	2664
65°	2335	1518	2335
70°	1875	1010	1875
75°	1334	1334	1334
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	568.0	48.1
10°-20°	459.7	38.9
20°-30°	110.8	9.4
30°-40°	28.3	2.4
40°-50°	8.4	0.7
50°-60°	3.6	0.3
60°-70°	1.7	0.1
70°-80°	0.6	0.1
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°	1138.5	96.4
0°-40°	1166.8	98.8
0°-60°	1178.8	99.8
0°-90°	1181.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1181.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8733	8733	8733	8733	8733	
5°	7239	7173	7107	7045	6963	585
15°	1788	1746	1588	1431	1331	510
25°	234	235	218	198	188	121
35°	43	44	43	39	36	30
45°	11	11	10	9	9	9
55°	5	4	3	3	4	4
65°	2	2	1	1	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°	8733.4	8733.4	8733.4	8733.4	8733.4
1°	8694.3	8633.7	8626.3	8664.0	8552.9
2°	8472.0	8428.9	8404.0	8426.2	8300.3
3°	8166.9	8125.2	8080.0	8080.7	7939.9
4°	7751.3	7718.3	7642.2	7619.3	7537.8
5°	7239.4	7172.7	7106.7	7044.8	6963.3
6°	6673.6	6587.4	6493.1	6400.8	6317.3
7°	6008.2	5950.9	5826.3	5700.3	5629.6
8°	5382.4	5290.1	5144.7	4987.0	4927.1
9°	4709.5	4643.5	4476.5	4293.3	4233.3
10°	4099.3	4030.6	3846.7	3642.6	3590.1
11°	3526.8	3462.1	3270.8	3056.6	3000.7
12°	3042.5	2950.9	2731.3	2545.4	2490.8
13°	2560.2	2497.6	2289.4	2105.6	1999.8
14°	2150.0	2098.1	1909.5	1747.9	1636.1
15°	1788.3	1745.9	1588.3	1430.6	1331.0
16°	1467.0	1440.7	1316.1	1163.9	1082.4
17°	1190.2	1165.9	1086.5	946.4	877.6
18°	961.2	957.8	891.8	770.6	709.3
19°	790.8	789.4	728.8	627.1	576.6
20°	631.1	639.9	593.4	504.5	470.1
21°	514.6	519.3	482.3	414.9	383.9
22°	419.0	422.3	398.1	342.8	326.0
23°	343.5	345.5	325.3	284.2	269.4
24°	282.9	284.2	266.1	237.1	224.3
25°	233.7	235.1	218.2	198.0	187.9
26°	194.0	195.3	180.5	166.4	156.3
27°	161.0	163.7	148.9	140.1	129.3
28°	137.4	138.1	124.6	119.2	109.1
29°	112.5	116.5	105.1	100.4	93.0
30°	96.3	98.3	89.6	86.2	79.5
32.5°	64.0	65.3	61.3	58.6	53.2
35°	43.1	43.8	43.1	39.1	35.7
37.5°	29.6	29.6	30.3	25.6	24.2
40°	20.2	20.2	20.9	17.5	16.8
42.5°	14.8	14.8	14.1	12.1	12.1
45°	10.8	10.8	10.1	9.4	9.4
47.5°	8.8	8.1	7.4	7.4	7.4
50°	6.7	6.7	6.1	5.4	6.1
52.5°	5.4	5.4	4.7	4.7	4.7
55°	4.7	4.0	3.4	3.4	4.0
57.5°	3.4	3.4	2.7	2.7	3.4
60°	3.4	2.7	2.0	2.7	2.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.0	1.3	1.3	1.3	1.3
70°	1.3	1.3	0.7	0.7	1.3
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°	2.7	2.0	2.0	2.0	2.0
65°	2.0	2.0	1.3	1.3	2.0



(END OF REPORT)