

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: P282775

Luminaire Tested: **LDA2B209040D010 EU2B20NFL259040 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282775
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: LDA2B209040D010 EU2B20NFL259040 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: 1452.0 lumens
Efficiency: N/A
Efficacy: 70.5 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

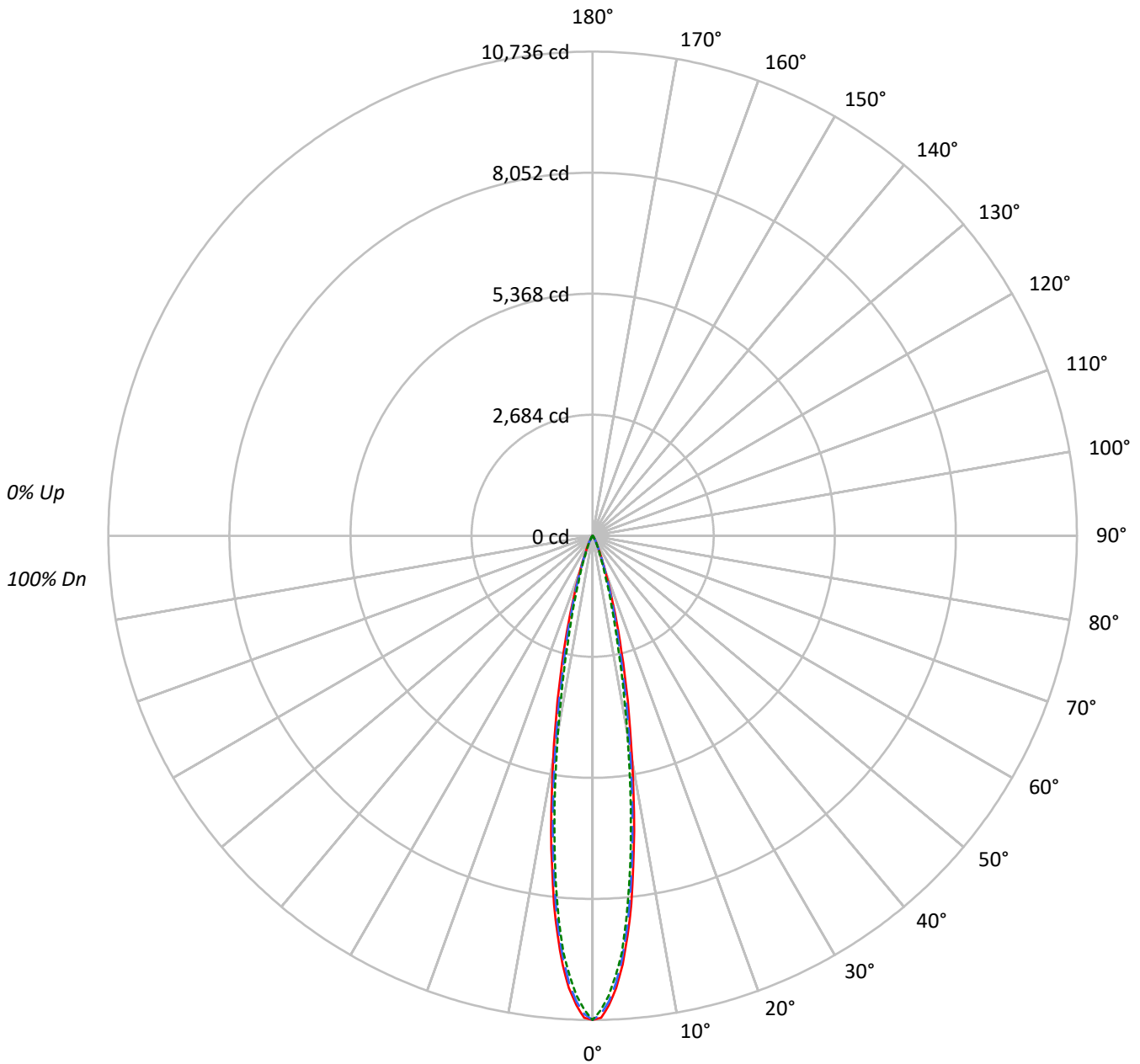
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5296930	5296930	5296930
5°	4407593	4326819	4239457
10°	2524652	2369100	2211043
15°	1122918	997270	835715
20°	407367	383005	303464
25°	156396	146053	125748
30°	67451	62722	55658
35°	31921	31921	26440
40°	15972	16552	13332
45°	9210	8652	8094
50°	6371	5757	5757
55°	4989	3527	4301
60°	4046	2467	3256
65°	2918	1985	2918
70°	2452	1154	2452
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	698.3	48.1
10°-20°	565.1	38.9
20°-30°	136.3	9.4
30°-40°	34.7	2.4
40°-50°	10.4	0.7
50°-60°	4.4	0.3
60°-70°	2.2	0.1
70°-80°	0.7	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°	1399.7	96.4
0°-40°	1434.4	98.8
0°-60°	1449.1	99.8
0°-90°	1452.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1452.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10736	10736	10736	10736	10736	
5°	8900	8818	8737	8660	8560	720
15°	2198	2146	1952	1759	1636	627
25°	287	289	268	243	231	148
35°	53	54	53	48	44	37
45°	13	13	12	12	12	11
55°	6	5	4	4	5	5
65°	2	2	2	2	2	3
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°	10736.4	10736.4	10736.4	10736.4	10736.4
1°	10688.4	10613.8	10604.7	10651.1	10514.5
2°	10415.1	10362.1	10331.5	10358.8	10204.0
3°	10040.0	9988.7	9933.2	9934.0	9761.0
4°	9529.1	9488.5	9395.0	9366.8	9266.6
5°	8899.8	8817.8	8736.7	8660.5	8560.3
6°	8204.2	8098.3	7982.3	7868.9	7766.2
7°	7386.1	7315.8	7162.6	7007.7	6920.8
8°	6616.9	6503.4	6324.6	6130.8	6057.1
9°	5789.7	5708.5	5503.2	5277.9	5204.2
10°	5039.5	4955.0	4729.0	4478.1	4413.5
11°	4335.6	4256.1	4021.0	3757.7	3688.9
12°	3740.3	3627.7	3357.7	3129.2	3062.1
13°	3147.4	3070.4	2814.5	2588.5	2458.5
14°	2643.1	2579.4	2347.5	2148.8	2011.3
15°	2198.5	2146.3	1952.5	1758.8	1636.2
16°	1803.5	1771.2	1618.0	1430.9	1330.7
17°	1463.2	1433.3	1335.6	1163.4	1078.9
18°	1181.6	1177.5	1096.3	947.3	871.9
19°	972.1	970.5	895.9	770.9	708.8
20°	775.9	786.6	729.5	620.2	578.0
21°	632.6	638.4	592.9	510.1	472.0
22°	515.0	519.2	489.4	421.5	400.8
23°	422.3	424.8	399.9	349.4	331.2
24°	347.8	349.4	327.1	291.5	275.7
25°	287.3	289.0	268.3	243.4	231.0
26°	238.5	240.1	221.9	204.5	192.1
27°	197.9	201.2	183.0	172.2	159.0
28°	168.9	169.7	153.2	146.6	134.1
29°	138.3	143.3	129.2	123.4	114.3
30°	118.4	120.9	110.1	106.0	97.7
32.5°	78.7	80.3	75.4	72.0	65.4
35°	53.0	53.8	53.0	48.0	43.9
37.5°	36.4	36.4	37.3	31.5	29.8
40°	24.8	24.8	25.7	21.5	20.7
42.5°	18.2	18.2	17.4	14.9	14.9
45°	13.2	13.2	12.4	11.6	11.6
47.5°	10.8	9.9	9.1	9.1	9.1
50°	8.3	8.3	7.5	6.6	7.5
52.5°	6.6	6.6	5.8	5.8	5.8
55°	5.8	5.0	4.1	4.1	5.0
57.5°	4.1	4.1	3.3	3.3	4.1
60°	4.1	3.3	2.5	3.3	3.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.5	1.7	1.7	1.7	1.7
70°	1.7	1.7	0.8	0.8	1.7
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.0	0.0	0.8
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°	3.3	2.5	2.5	2.5	2.5
65°	2.5	2.5	1.7	1.7	2.5



(END OF REPORT)