

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: P282783

Luminaire Tested: **LDA2B209730D010 EU2B20NFL259730 2LBALPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282783
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: LDA2B209730D010 EU2B20NFL259730 2LBALPINSQ1MB
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MB
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1236.3 lumens
Efficiency: N/A
Efficacy: 60.0 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

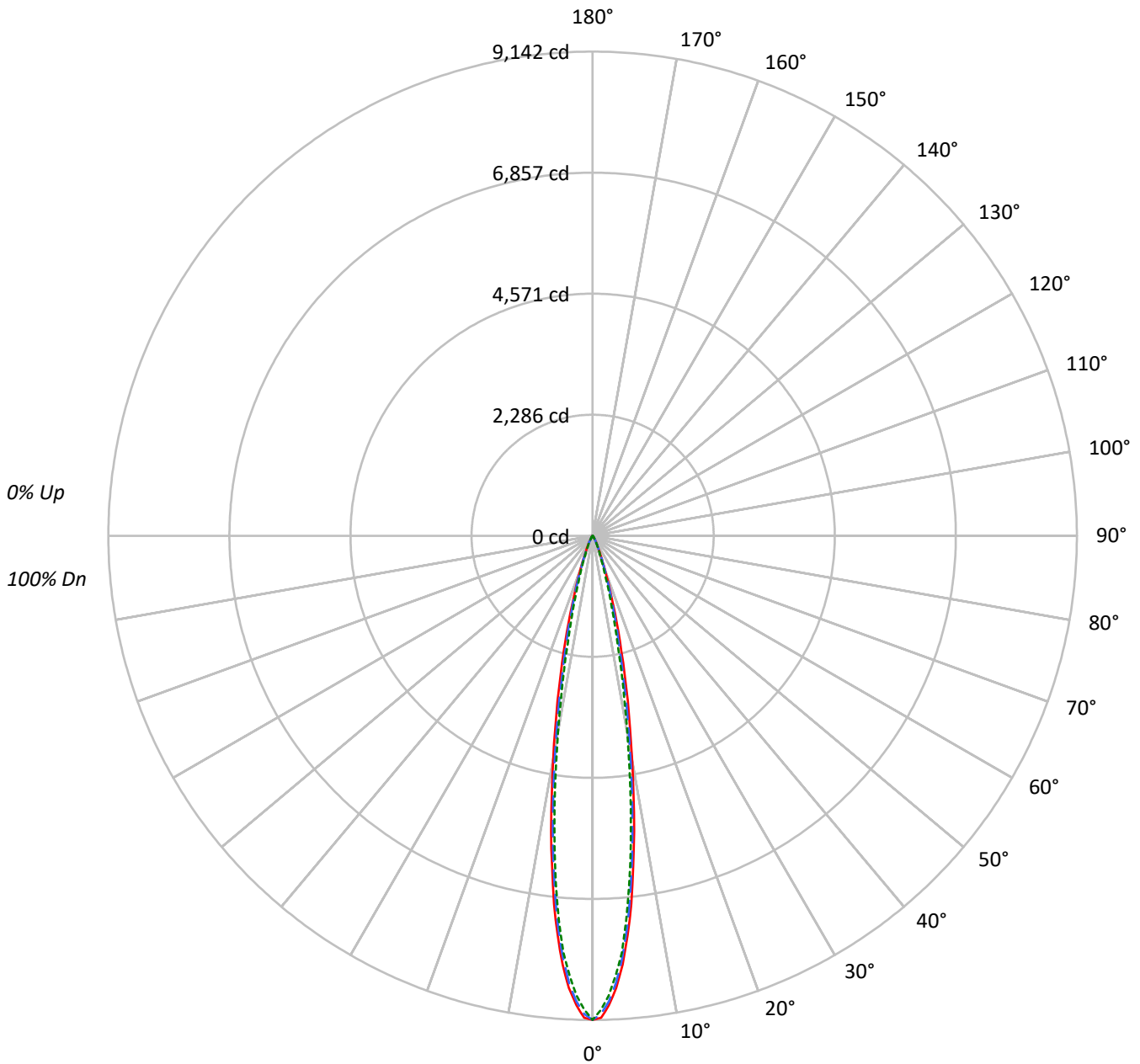
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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																			
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97																			
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95																			
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92																			
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90																			
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88																			
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86																			
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84																			
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83																			
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81																			
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4510165	4510165	4510165
5°	3752927	3684138	3609801
10°	2149674	2017217	1882605
15°	956102	849148	711599
20°	346831	326145	258365
25°	133206	124333	107076
30°	57424	53436	47398
35°	27163	27163	22525
40°	13654	14104	11335
45°	7884	7396	6907
50°	5449	4835	4835
55°	4215	3011	3613
60°	3454	2072	2763
65°	2452	1634	2452
70°	2019	1010	2019
75°	1334	1334	1334
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	594.6	48.1
10°-20°	481.2	38.9
20°-30°	116.0	9.4
30°-40°	29.6	2.4
40°-50°	8.8	0.7
50°-60°	3.7	0.3
60°-70°	1.8	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°	1191.8	96.4
0°-40°	1221.3	98.8
0°-60°	1233.9	99.8
0°-90°	1236.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1236.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9142	9142	9142	9142	9142	
5°	7578	7508	7439	7374	7289	613
15°	1872	1828	1662	1498	1393	534
25°	245	246	228	207	197	126
35°	45	46	45	41	37	31
45°	11	11	11	10	10	10
55°	5	4	4	4	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°	9141.7	9141.7	9141.7	9141.7	9141.7
1°	9100.9	9037.4	9029.6	9069.1	8952.8
2°	8868.2	8823.1	8797.0	8820.2	8688.4
3°	8548.8	8505.1	8457.8	8458.6	8311.2
4°	8113.8	8079.2	7999.6	7975.6	7890.3
5°	7577.9	7508.1	7439.0	7374.2	7288.9
6°	6985.7	6895.4	6796.7	6700.1	6612.7
7°	6289.1	6229.2	6098.7	5966.9	5892.9
8°	5634.1	5537.5	5385.2	5220.2	5157.5
9°	4929.7	4860.7	4685.8	4494.0	4431.3
10°	4291.0	4219.1	4026.6	3812.9	3757.9
11°	3691.7	3624.0	3423.7	3199.5	3141.0
12°	3184.7	3088.8	2859.0	2664.4	2607.3
13°	2679.9	2614.3	2396.5	2204.0	2093.3
14°	2250.5	2196.2	1998.8	1829.6	1712.6
15°	1871.9	1827.5	1662.5	1497.5	1393.2
16°	1535.6	1508.1	1377.7	1218.3	1133.0
17°	1245.8	1220.5	1137.3	990.6	918.7
18°	1006.1	1002.6	933.5	806.6	742.4
19°	827.7	826.3	762.9	656.4	603.5
20°	660.6	669.8	621.2	528.1	492.1
21°	538.7	543.6	504.8	434.3	401.9
22°	438.5	442.1	416.7	358.9	341.2
23°	359.6	361.7	340.5	297.5	282.0
24°	296.1	297.5	278.5	248.2	234.8
25°	244.7	246.1	228.4	207.3	196.7
26°	203.1	204.5	189.0	174.1	163.6
27°	168.5	171.3	155.8	146.7	135.4
28°	143.8	144.5	130.4	124.8	114.2
29°	117.7	122.0	110.0	105.1	97.3
30°	100.8	102.9	93.8	90.2	83.2
32.5°	67.0	68.4	64.2	61.3	55.7
35°	45.1	45.8	45.1	40.9	37.4
37.5°	31.0	31.0	31.7	26.8	25.4
40°	21.2	21.2	21.9	18.3	17.6
42.5°	15.5	15.5	14.8	12.7	12.7
45°	11.3	11.3	10.6	9.9	9.9
47.5°	9.2	8.5	7.8	7.8	7.8
50°	7.1	7.1	6.3	5.6	6.3
52.5°	5.6	5.6	4.9	4.9	4.9
55°	4.9	4.2	3.5	3.5	4.2
57.5°	3.5	3.5	2.8	2.8	3.5
60°	3.5	2.8	2.1	2.8	2.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.1	1.4	1.4	1.4	1.4
70°	1.4	1.4	0.7	0.7	1.4
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°	2.8	2.1	2.1	2.1	2.1
65°	2.1	2.1	1.4	1.4	2.1



(END OF REPORT)