

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: P282778

Luminaire Tested: **LDA2B209050D010 EU2B20NFL259050 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282778
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: LDA2B209050D010 EU2B20NFL259050 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: 1491.8 lumens
Efficiency: N/A
Efficacy: 72.4 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

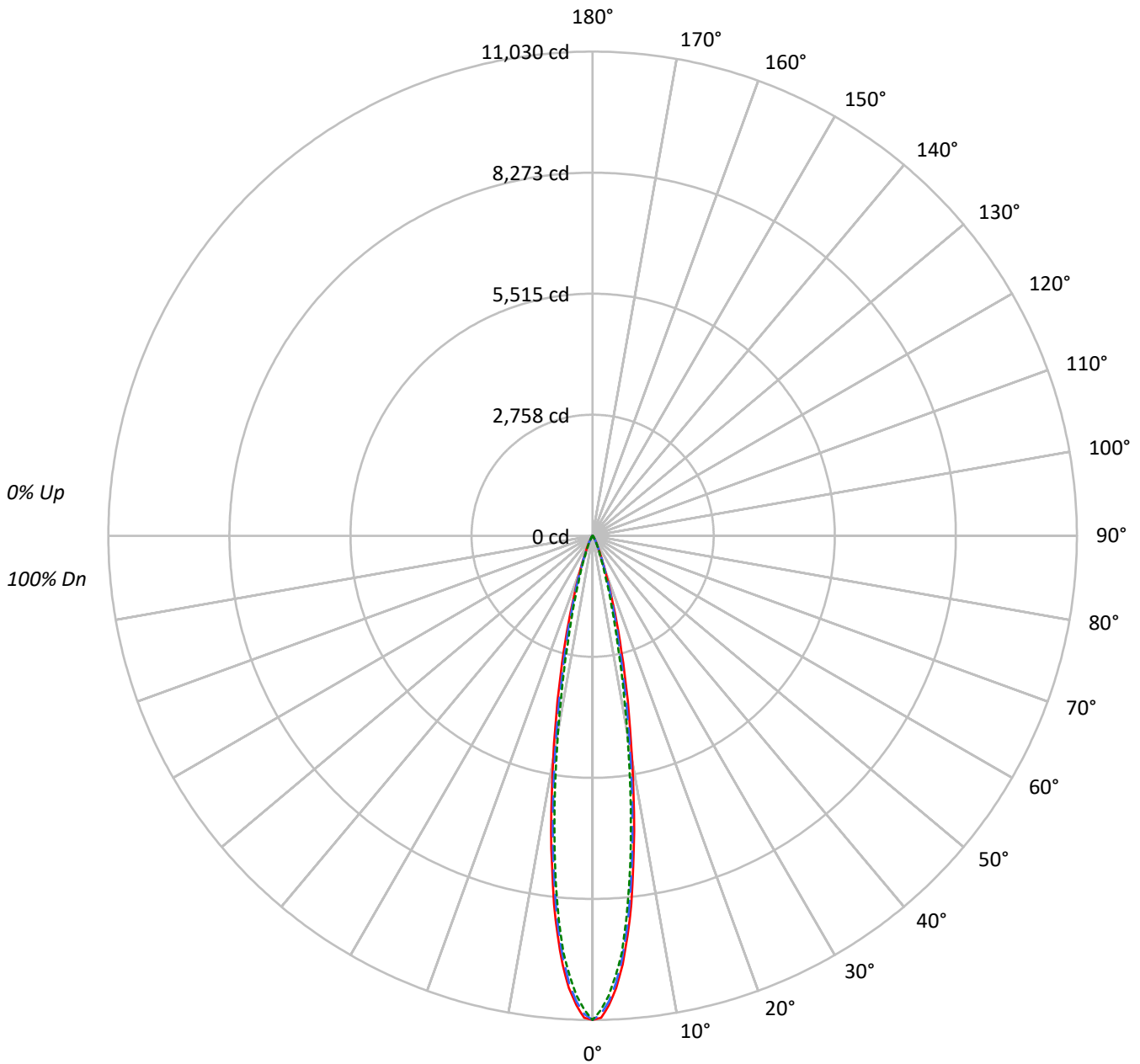
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	84	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°	5441830	5441830	5441830
5°	4528186	4445183	4355444
10°	2593686	2433876	2271510
15°	1153615	1024545	858597
20°	418497	393506	311760
25°	160696	150027	129178
30°	69274	64431	57196
35°	32764	32764	27163
40°	16423	17003	13718
45°	9489	8931	8303
50°	6524	5910	5910
55°	5161	3699	4387
60°	4243	2565	3355
65°	3035	1985	3035
70°	2452	1298	2452
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	717.4	48.1
10°-20°	580.6	38.9
20°-30°	140.0	9.4
30°-40°	35.7	2.4
40°-50°	10.6	0.7
50°-60°	4.6	0.3
60°-70°	2.2	0.1
70°-80°	0.8	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°	1437.9	96.4
0°-40°	1473.6	98.8
0°-60°	1488.8	99.8
0°-90°	1491.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1491.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11030	11030	11030	11030	11030	
5°	9143	9059	8976	8897	8794	739
15°	2259	2205	2006	1807	1681	644
25°	295	297	276	250	237	152
35°	54	55	54	49	45	38
45°	14	14	13	12	12	12
55°	6	5	4	4	5	5
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11030.1	11030.1	11030.1	11030.1	11030.1
1°	10980.8	10904.2	10894.9	10942.5	10802.2
2°	10700.1	10645.6	10614.1	10642.2	10483.1
3°	10314.7	10262.0	10205.0	10205.8	10028.0
4°	9789.8	9748.1	9652.0	9623.1	9520.2
5°	9143.3	9059.1	8975.7	8897.4	8794.5
6°	8428.7	8319.8	8200.7	8084.2	7978.7
7°	7588.2	7515.9	7358.5	7199.4	7110.1
8°	6797.9	6681.4	6497.6	6298.6	6222.8
9°	5948.1	5864.7	5653.7	5422.3	5346.6
10°	5177.3	5090.6	4858.3	4600.6	4534.2
11°	4454.2	4372.6	4131.0	3860.5	3789.9
12°	3842.6	3726.9	3449.6	3214.8	3145.9
13°	3233.5	3154.4	2891.5	2659.3	2525.7
14°	2715.4	2649.9	2411.7	2207.6	2066.3
15°	2258.6	2205.0	2005.9	1806.9	1681.0
16°	1852.8	1819.6	1662.3	1470.0	1367.1
17°	1503.2	1472.6	1372.2	1195.2	1108.5
18°	1213.9	1209.7	1126.3	973.2	895.8
19°	998.7	997.0	920.5	792.0	728.2
20°	797.1	808.2	749.5	637.2	593.8
21°	649.9	655.9	609.1	524.0	484.9
22°	529.1	533.4	502.8	433.0	411.7
23°	433.9	436.4	410.9	359.0	340.3
24°	357.3	359.0	336.0	299.4	283.3
25°	295.2	296.9	275.6	250.1	237.3
26°	245.0	246.7	228.0	210.1	197.4
27°	203.3	206.7	188.0	176.9	163.3
28°	173.5	174.4	157.4	150.6	137.8
29°	142.1	147.2	132.7	126.8	117.4
30°	121.6	124.2	113.1	108.9	100.4
32.5°	80.8	82.5	77.4	74.0	67.2
35°	54.4	55.3	54.4	49.3	45.1
37.5°	37.4	37.4	38.3	32.3	30.6
40°	25.5	25.5	26.4	22.1	21.3
42.5°	18.7	18.7	17.9	15.3	15.3
45°	13.6	13.6	12.8	11.9	11.9
47.5°	11.1	10.2	9.4	9.4	9.4
50°	8.5	8.5	7.7	6.8	7.7
52.5°	6.8	6.8	6.0	6.0	6.0
55°	6.0	5.1	4.3	4.3	5.1
57.5°	4.3	4.3	3.4	3.4	4.3
60°	4.3	3.4	2.6	3.4	3.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.6	1.7	1.7	1.7	1.7
70°	1.7	1.7	0.9	0.9	1.7
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



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







62.5°	3.4	2.6	2.6	2.6	2.6
65°	2.6	2.6	1.7	1.7	2.6



(END OF REPORT)