

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: P282399

Luminaire Tested: **LDA2B209024D010 EU2B20NFL259024 2LBAPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282399
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: LDA2B209024D010 EU2B20NFL259024 2LBAPINSQ1MB
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MB
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1303.7 lumens
Efficiency: N/A
Efficacy: 63.3 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

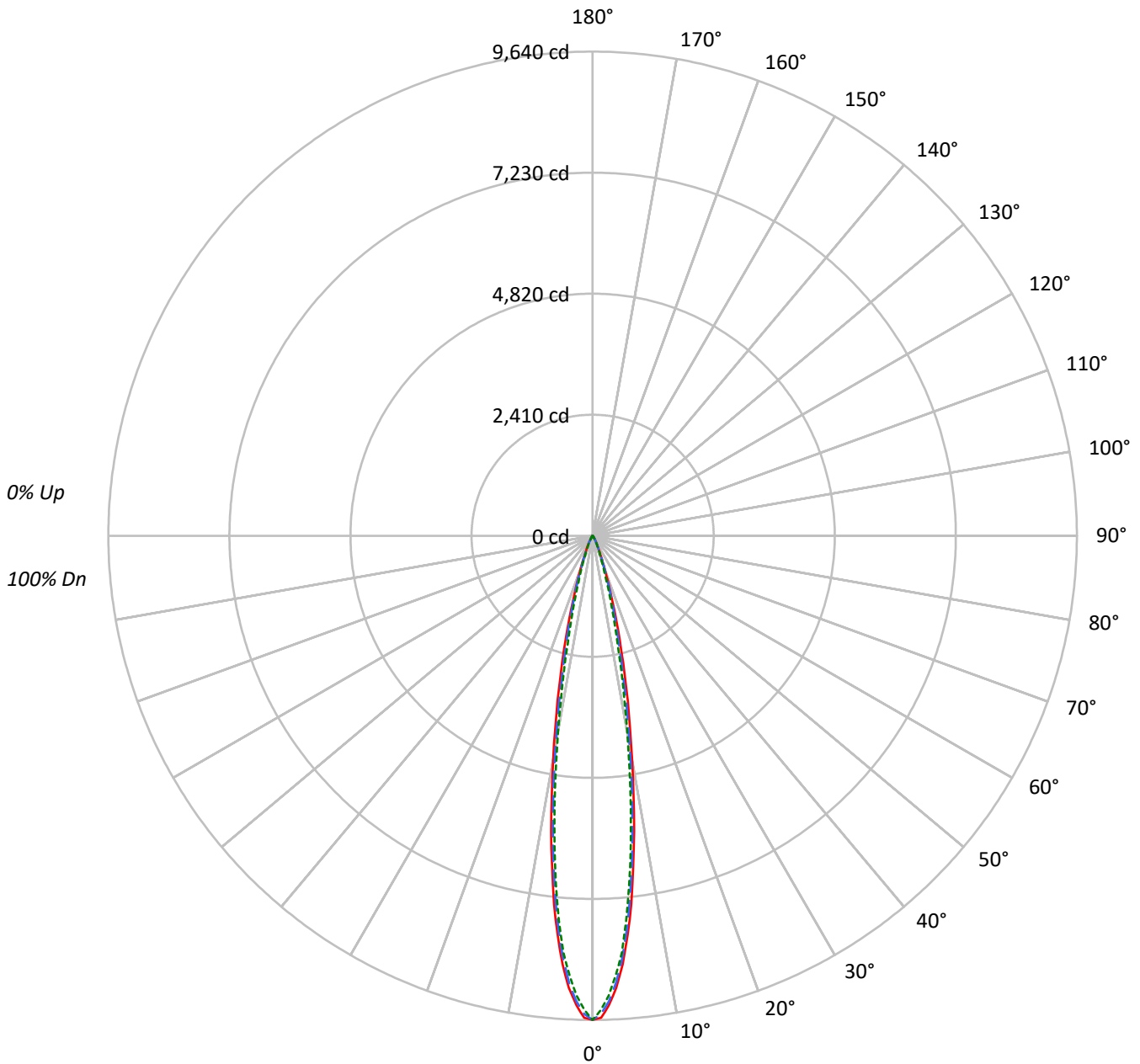
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4756106	4756106	4756106
5°	3957563	3885010	3806612
10°	2266851	2127180	1985255
15°	1008252	895474	750366
20°	365785	343891	272488
25°	140446	131137	112901
30°	60558	56342	49961
35°	28669	28669	23730
40°	14362	14813	11979
45°	8303	7814	7256
50°	5680	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°	627.0	48.1
10°-20°	507.4	38.9
20°-30°	122.4	9.4
30°-40°	31.2	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°	1256.7	96.4
0°-40°	1287.9	98.8
0°-60°	1301.2	99.8
0°-90°	1303.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1303.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9640	9640	9640	9640	9640	
5°	7991	7918	7845	7776	7686	646
15°	1974	1927	1753	1579	1469	563
25°	258	260	241	219	207	133
35°	48	48	48	43	39	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°	9640.2	9640.2	9640.2	9640.2	9640.2
1°	9597.0	9530.1	9521.9	9563.6	9440.9
2°	9351.7	9304.1	9276.6	9301.1	9162.1
3°	9014.9	8968.8	8919.0	8919.7	8764.3
4°	8556.1	8519.7	8435.7	8410.4	8320.5
5°	7991.1	7917.5	7844.6	7776.2	7686.3
6°	7366.6	7271.4	7167.3	7065.4	6973.2
7°	6632.0	6568.8	6431.2	6292.2	6214.1
8°	5941.3	5839.4	5678.8	5504.8	5438.7
9°	5198.5	5125.7	4941.3	4739.0	4672.9
10°	4524.9	4449.1	4246.1	4020.8	3962.8
11°	3892.9	3821.6	3610.4	3374.0	3312.3
12°	3358.4	3257.3	3014.9	2809.7	2749.4
13°	2826.0	2756.9	2527.1	2324.2	2207.4
14°	2373.2	2316.0	2107.8	1929.4	1806.0
15°	1974.0	1927.1	1753.2	1579.2	1469.1
16°	1619.3	1590.3	1452.8	1284.8	1194.8
17°	1313.8	1287.0	1199.3	1044.6	968.8
18°	1061.0	1057.3	984.4	850.6	782.9
19°	872.9	871.4	804.5	692.2	636.4
20°	696.7	706.3	655.0	556.9	519.0
21°	568.0	573.2	532.3	458.0	423.8
22°	462.5	466.2	439.4	378.4	359.9
23°	379.2	381.4	359.1	313.8	297.4
24°	312.3	313.8	293.7	261.7	247.6
25°	258.0	259.5	240.9	218.6	207.4
26°	214.1	215.6	199.3	183.6	172.5
27°	177.7	180.7	164.3	154.6	142.8
28°	151.7	152.4	137.5	131.6	120.4
29°	124.2	128.6	116.0	110.8	102.6
30°	106.3	108.6	98.9	95.2	87.7
32.5°	70.6	72.1	67.7	64.7	58.7
35°	47.6	48.3	47.6	43.1	39.4
37.5°	32.7	32.7	33.5	28.3	26.8
40°	22.3	22.3	23.0	19.3	18.6
42.5°	16.4	16.4	15.6	13.4	13.4
45°	11.9	11.9	11.2	10.4	10.4
47.5°	9.7	8.9	8.2	8.2	8.2
50°	7.4	7.4	6.7	5.9	6.7
52.5°	5.9	5.9	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)