

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: P282782

Luminaire Tested: **LDA2B209730D010 EU2B20NFL259730 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282782
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 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1254.0 lumens
Efficiency: N/A
Efficacy: 60.9 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

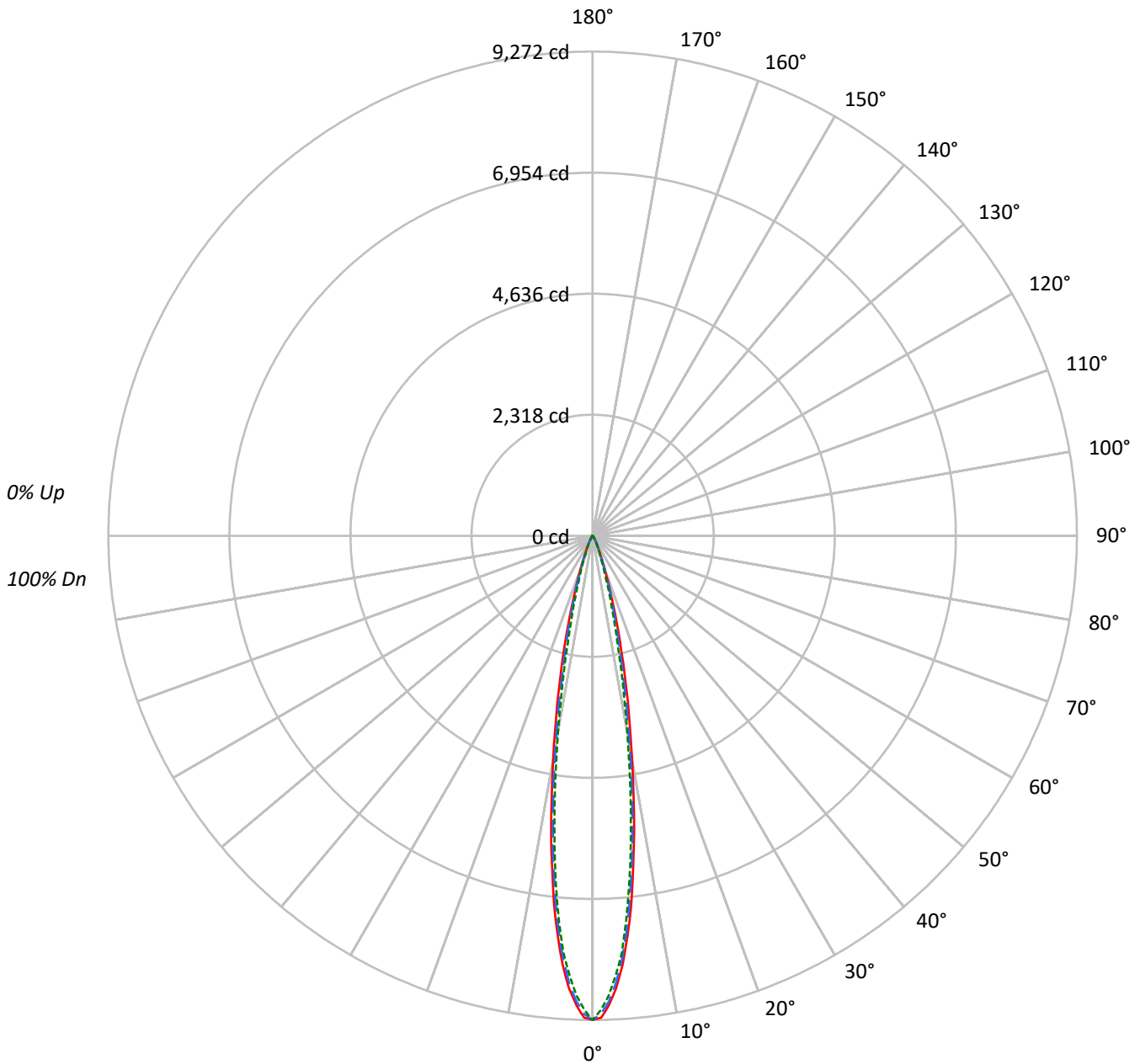
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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																			
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°	4574549	4574549	4574549
5°	3806513	3736733	3661307
10°	2180333	2045972	1909508
15°	969740	861253	721763
20°	351819	330766	262092
25°	135057	126129	108601
30°	58279	54177	48081
35°	27585	27585	22827
40°	13847	14298	11528
45°	7954	7466	6977
50°	5526	4912	4912
55°	4301	3097	3699
60°	3552	2072	2861
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°	603.1	48.1
10°-20°	488.0	38.9
20°-30°	117.7	9.4
30°-40°	30.0	2.4
40°-50°	8.9	0.7
50°-60°	3.8	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°	1208.8	96.4
0°-40°	1238.8	98.8
0°-60°	1251.5	99.8
0°-90°	1254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9272	9272	9272	9272	9272	
5°	7686	7615	7545	7479	7393	622
15°	1899	1854	1686	1519	1413	541
25°	248	250	232	210	200	128
35°	46	46	46	42	38	32
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°	9272.2	9272.2	9272.2	9272.2	9272.2
1°	9230.7	9166.3	9158.5	9198.5	9080.5
2°	8994.7	8949.0	8922.5	8946.1	8812.4
3°	8670.8	8626.4	8578.5	8579.2	8429.8
4°	8229.5	8194.5	8113.7	8089.4	8002.9
5°	7686.1	7615.3	7545.2	7479.4	7392.9
6°	7085.4	6993.8	6893.7	6795.7	6707.1
7°	6378.8	6318.0	6185.7	6052.0	5976.9
8°	5714.5	5616.5	5462.0	5294.7	5231.1
9°	5000.1	4930.0	4752.7	4558.1	4494.5
10°	4352.2	4279.2	4084.0	3867.3	3811.6
11°	3744.3	3675.7	3472.6	3245.2	3185.8
12°	3230.2	3132.9	2899.8	2702.4	2644.5
13°	2718.2	2651.6	2430.7	2235.5	2123.2
14°	2282.6	2227.6	2027.4	1855.7	1737.0
15°	1898.6	1853.6	1686.2	1518.9	1413.1
16°	1557.5	1529.6	1397.3	1235.7	1149.2
17°	1263.6	1237.9	1153.5	1004.7	931.8
18°	1020.5	1016.9	946.8	818.1	753.0
19°	839.5	838.1	773.8	665.8	612.1
20°	670.1	679.4	630.0	535.6	499.2
21°	546.3	551.4	512.0	440.5	407.6
22°	444.8	448.4	422.6	364.0	346.1
23°	364.7	366.9	345.4	301.8	286.0
24°	300.3	301.8	282.5	251.7	238.1
25°	248.1	249.6	231.7	210.2	199.5
26°	206.0	207.4	191.7	176.6	165.9
27°	170.9	173.8	158.0	148.7	137.3
28°	145.9	146.6	132.3	126.6	115.8
29°	119.4	123.7	111.6	106.6	98.7
30°	102.3	104.4	95.1	91.5	84.4
32.5°	67.9	69.4	65.1	62.2	56.5
35°	45.8	46.5	45.8	41.5	37.9
37.5°	31.5	31.5	32.2	27.2	25.7
40°	21.5	21.5	22.2	18.6	17.9
42.5°	15.7	15.7	15.0	12.9	12.9
45°	11.4	11.4	10.7	10.0	10.0
47.5°	9.3	8.6	7.9	7.9	7.9
50°	7.2	7.2	6.4	5.7	6.4
52.5°	5.7	5.7	5.0	5.0	5.0
55°	5.0	4.3	3.6	3.6	4.3
57.5°	3.6	3.6	2.9	2.9	3.6
60°	3.6	2.9	2.1	2.9	2.9



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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°	2.9	2.1	2.1	2.1	2.1
65°	2.1	2.1	1.4	1.4	2.1



(END OF REPORT)