

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: P283782

Luminaire Tested: **LDA2B209727D010 EU2B20FL409727 2LBALPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209727D010 EU2B20FL409727 2LBALPINSQ1MB
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MB

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1114.6 lumens
Efficiency: N/A
Efficacy: 54.1 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

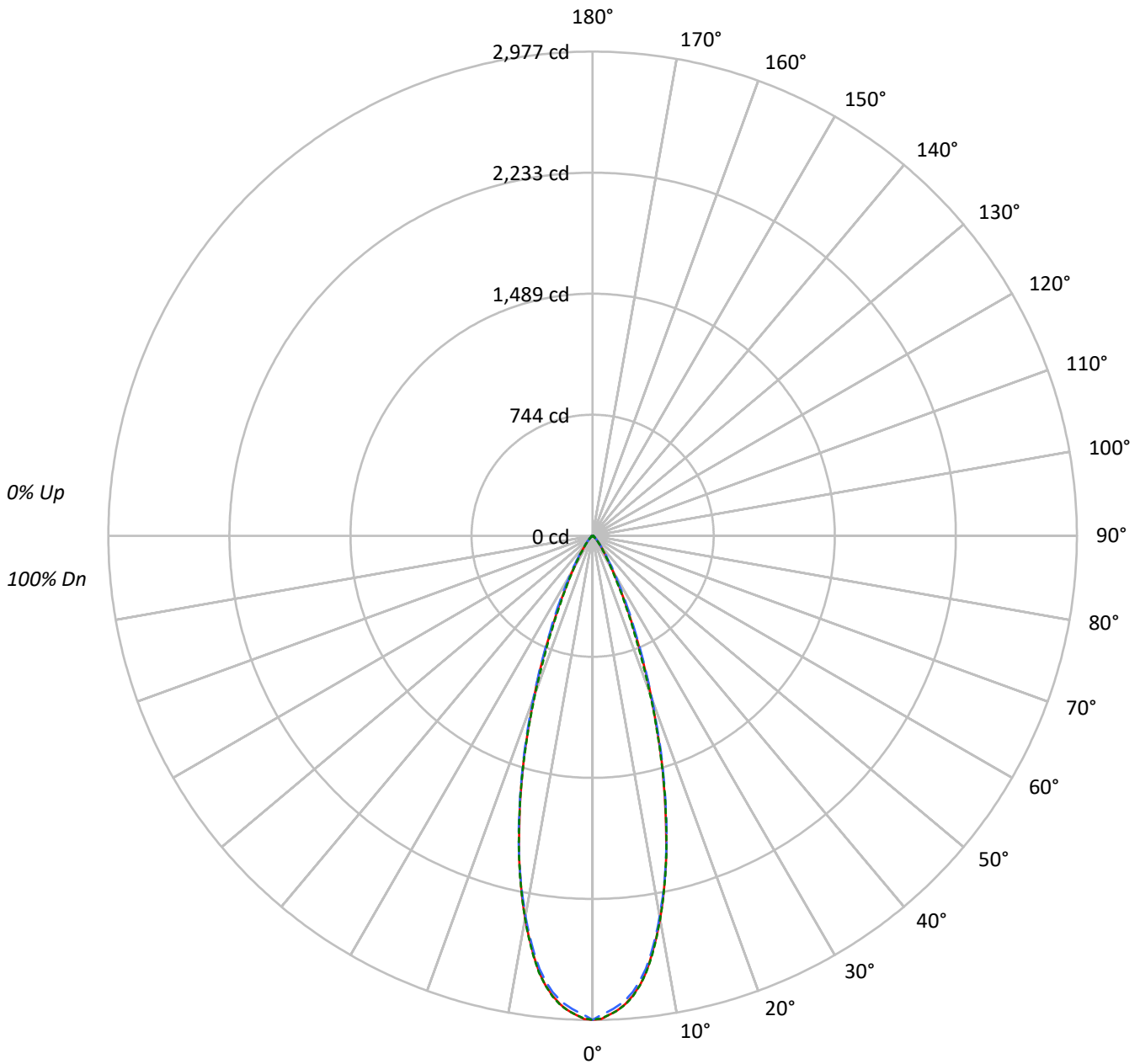
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1468541	1468541	1468541
5°	1405361	1394861	1407540
10°	1197325	1189810	1198577
15°	882501	888222	885361
20°	550908	561094	538780
25°	284594	305334	270277
30°	136440	156379	130002
35°	70407	77935	65890
40°	39480	41476	37483
45°	24002	24002	23094
50°	12511	15351	12511
55°	6451	10236	6967
60°	7400	7400	7400
65°	8055	8055	8055
70°	9953	9088	9953
75°	9531	9531	9531
80°	8808	8808	8808
85°	7359	7359	7359



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.0	23.0
10°-20°	470.3	42.2
20°-30°	255.0	22.9
30°-40°	81.8	7.3
40°-50°	27.9	2.5
50°-60°	9.8	0.9
60°-70°	7.1	0.6
70°-80°	5.2	0.5
80°-90°	1.5	0.1
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°	981.3	88.0
0°-40°	1063.1	95.4
0°-60°	1100.8	98.8
0°-90°	1114.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1114.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2977	2977	2977	2977	2977	
5°	2838	2820	2816	2845	2842	257
15°	1728	1742	1739	1747	1733	468
25°	523	546	561	522	496	251
35°	117	122	129	118	109	79
45°	34	35	34	34	33	27
55°	8	9	12	9	8	8
65°	7	8	7	8	7	7
75°	5	5	5	5	5	5
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2976.6	2976.6	2976.6	2976.6	2976.6
1°	2971.6	2950.3	2947.2	2974.7	2968.4
2°	2947.8	2927.8	2924.7	2952.2	2946.5
3°	2921.5	2903.4	2897.1	2925.9	2922.2
4°	2886.5	2869.6	2864.0	2892.8	2889.6
5°	2837.7	2820.2	2816.5	2844.6	2842.1
6°	2777.7	2763.3	2756.4	2784.6	2779.6
7°	2702.7	2689.5	2682.0	2702.7	2705.2
8°	2605.1	2598.9	2590.1	2610.7	2610.7
9°	2501.3	2495.7	2486.3	2505.1	2505.1
10°	2390.0	2386.2	2375.0	2392.5	2392.5
11°	2268.1	2266.2	2258.1	2272.4	2272.4
12°	2139.9	2144.2	2136.7	2149.2	2144.9
13°	2011.7	2009.8	2010.4	2019.8	2012.9
14°	1866.6	1877.9	1879.7	1885.4	1874.7
15°	1727.8	1742.2	1739.0	1747.2	1733.4
16°	1585.8	1602.1	1601.5	1603.3	1590.2
17°	1453.3	1462.6	1463.3	1461.4	1445.1
18°	1311.9	1325.1	1325.1	1321.9	1302.6
19°	1173.7	1183.7	1190.6	1183.7	1161.2
20°	1049.3	1056.2	1068.7	1051.2	1026.2
21°	929.9	936.1	946.7	926.1	898.6
22°	815.4	823.6	833.6	809.8	781.0
23°	708.5	727.3	731.0	698.5	674.1
24°	610.3	631.6	637.8	604.7	579.1
25°	522.8	546.5	560.9	522.1	496.5
26°	447.1	470.2	487.8	449.0	424.6
27°	380.8	405.2	423.3	387.1	363.9
28°	323.9	347.7	366.4	332.7	310.8
29°	281.4	295.2	313.9	285.8	265.8
30°	239.5	254.5	274.5	245.8	228.2
32.5°	164.5	172.6	188.2	170.7	157.0
35°	116.9	121.9	129.4	117.6	109.4
37.5°	83.2	85.7	90.0	83.2	78.8
40°	61.3	62.5	64.4	60.7	58.2
42.5°	45.6	46.3	46.3	45.0	43.8
45°	34.4	35.0	34.4	34.4	33.1
47.5°	25.0	26.9	26.3	26.3	24.4
50°	16.3	20.0	20.0	19.4	16.3
52.5°	10.0	13.8	15.6	13.8	10.6
55°	7.5	9.4	11.9	9.4	8.1
57.5°	7.5	7.5	8.8	7.5	7.5
60°	7.5	7.5	7.5	7.5	7.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	6.9	6.9	6.9	6.9	6.9
70°	6.9	6.9	6.3	6.9	6.9
72.5°	6.3	6.3	5.6	6.3	5.6
75°	5.0	5.0	5.0	5.0	5.0
77.5°	3.8	3.8	3.8	3.8	3.8
80°	3.1	3.1	3.1	3.1	3.1
82.5°	1.9	1.9	1.9	2.5	1.9
85°	1.3	1.3	1.3	1.3	1.3
87.5°	0.6	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	7.5	7.5	7.5	7.5	7.5
65°	6.9	7.5	6.9	7.5	6.9



(END OF REPORT)