

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: P283789

Luminaire Tested: **LDA2B209730D010 EU2B20FL409730 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283789
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: LDA2B209730D010 EU2B20FL409730 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1204.6 lumens
Efficiency: N/A
Efficacy: 58.5 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

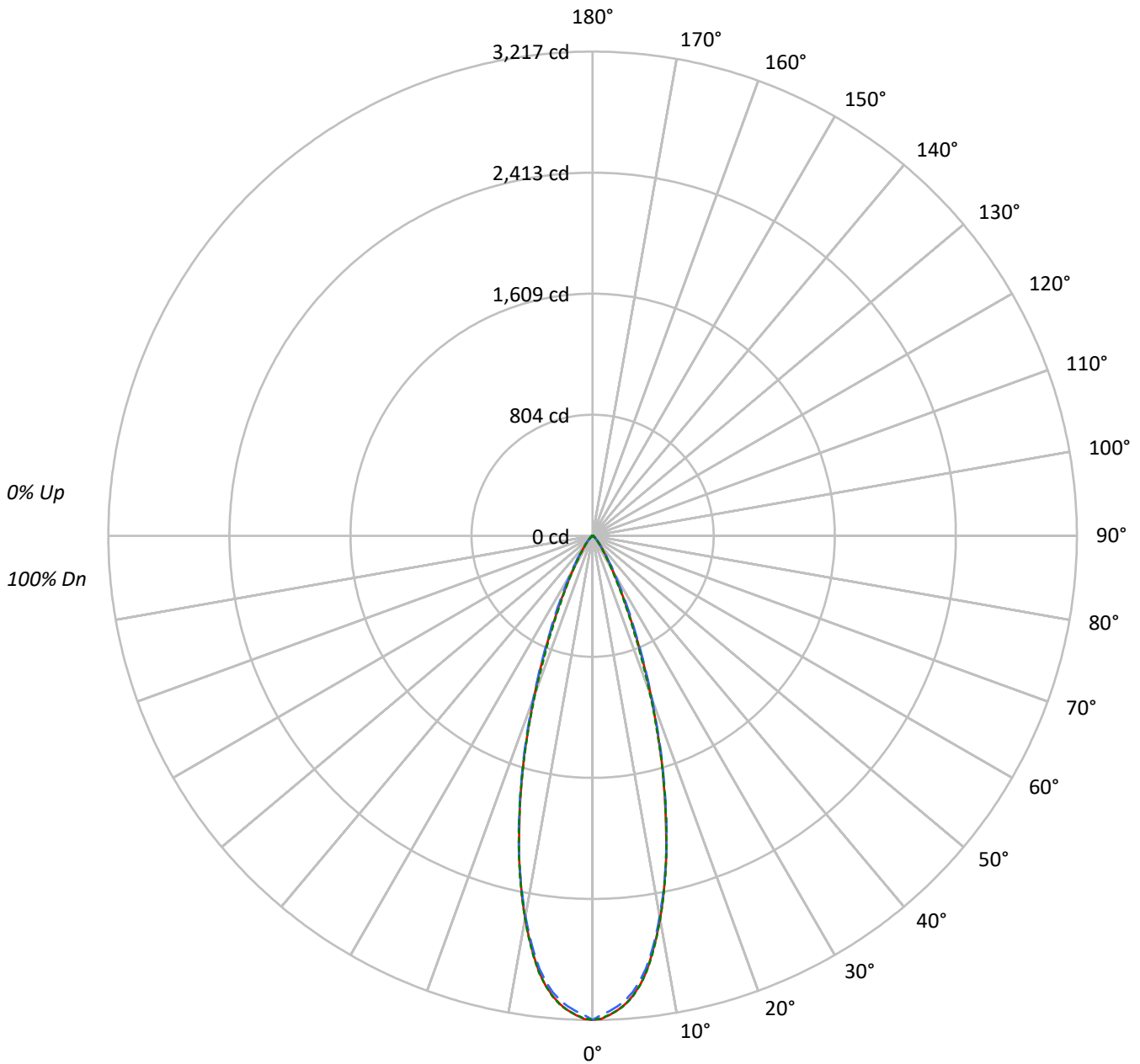
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1587046	1587046	1587046
5°	1518822	1507431	1521149
10°	1293962	1285847	1295315
15°	953702	959933	956817
20°	595378	606351	582252
25°	307566	329994	292106
30°	147435	169026	140541
35°	76129	84259	71250
40°	42635	44825	40446
45°	25955	25955	24978
50°	13509	16579	13509
55°	6967	11010	7569
60°	7992	7992	7992
65°	8639	8639	8639
70°	10674	9809	10674
75°	10293	10293	10293
80°	9660	9660	9660
85°	7925	7925	7925



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.7	23.0
10°-20°	508.2	42.2
20°-30°	275.5	22.9
30°-40°	88.5	7.3
40°-50°	30.2	2.5
50°-60°	10.6	0.9
60°-70°	7.7	0.6
70°-80°	5.6	0.5
80°-90°	1.6	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°	1060.5	88.0
0°-40°	1148.9	95.4
0°-60°	1189.6	98.8
0°-90°	1204.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3217	3217	3217	3217	3217	
5°	3067	3048	3044	3074	3072	277
15°	1867	1883	1879	1888	1873	506
25°	565	591	606	564	537	271
35°	126	132	140	127	118	85
45°	37	38	37	37	36	30
55°	8	10	13	10	9	9
65°	7	8	7	8	7	8
75°	5	5	5	5	5	6
85°	1	1	1	1	1	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3216.8	3216.8	3216.8	3216.8	3216.8
1°	3211.4	3188.4	3185.0	3214.8	3208.0
2°	3185.7	3164.1	3160.7	3190.5	3184.4
3°	3157.3	3137.7	3131.0	3162.1	3158.0
4°	3119.5	3101.2	3095.2	3126.3	3122.9
5°	3066.8	3047.9	3043.8	3074.2	3071.5
6°	3001.9	2986.4	2978.9	3009.3	3003.9
7°	2920.8	2906.6	2898.5	2920.8	2923.5
8°	2815.4	2808.6	2799.2	2821.5	2821.5
9°	2703.2	2697.1	2687.0	2707.3	2707.3
10°	2582.9	2578.9	2566.7	2585.6	2585.6
11°	2451.1	2449.1	2440.3	2455.9	2455.9
12°	2312.6	2317.3	2309.2	2322.7	2318.0
13°	2174.0	2172.0	2172.7	2182.8	2175.4
14°	2017.3	2029.4	2031.5	2037.5	2026.0
15°	1867.2	1882.8	1879.4	1888.2	1873.3
16°	1713.8	1731.4	1730.7	1732.8	1718.6
17°	1570.6	1580.7	1581.4	1579.3	1561.8
18°	1417.8	1432.0	1432.0	1428.6	1407.7
19°	1268.5	1279.3	1286.7	1279.3	1255.0
20°	1134.0	1141.4	1154.9	1136.0	1109.0
21°	1004.9	1011.7	1023.2	1000.9	971.1
22°	881.2	890.0	900.8	875.2	844.1
23°	765.7	786.0	790.0	754.9	728.5
24°	659.6	682.6	689.3	653.5	625.8
25°	565.0	590.6	606.2	564.3	536.6
26°	483.2	508.2	527.1	485.2	458.9
27°	411.6	437.9	457.5	418.3	393.3
28°	350.1	375.7	396.0	359.5	335.9
29°	304.1	319.0	339.3	308.8	287.2
30°	258.8	275.1	296.7	265.6	246.7
32.5°	177.7	186.5	203.4	184.5	169.6
35°	126.4	131.8	139.9	127.1	118.3
37.5°	89.9	92.6	97.3	89.9	85.2
40°	66.2	67.6	69.6	65.6	62.8
42.5°	49.3	50.0	50.0	48.7	47.3
45°	37.2	37.8	37.2	37.2	35.8
47.5°	27.0	29.1	28.4	28.4	26.4
50°	17.6	21.6	21.6	20.9	17.6
52.5°	10.8	14.9	16.9	14.9	11.5
55°	8.1	10.1	12.8	10.1	8.8
57.5°	8.1	8.1	9.5	8.1	8.1
60°	8.1	8.1	8.1	8.1	8.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	7.4	7.4	7.4	7.4	7.4
70°	7.4	7.4	6.8	7.4	7.4
72.5°	6.8	6.8	6.1	6.8	6.1
75°	5.4	5.4	5.4	5.4	5.4
77.5°	4.1	4.1	4.1	4.1	4.1
80°	3.4	3.4	3.4	3.4	3.4
82.5°	2.0	2.0	2.0	2.7	2.0
85°	1.4	1.4	1.4	1.4	1.4
87.5°	0.7	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	8.1	8.1	8.1	8.1	8.1
65°	7.4	8.1	7.4	8.1	7.4



(END OF REPORT)