

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: P283759

Luminaire Tested: **LDA2B209030D010 EU2B20FL409030 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283759
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: LDA2B209030D010 EU2B20FL409030 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: 1312.3 lumens
Efficiency: N/A
Efficacy: 63.7 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

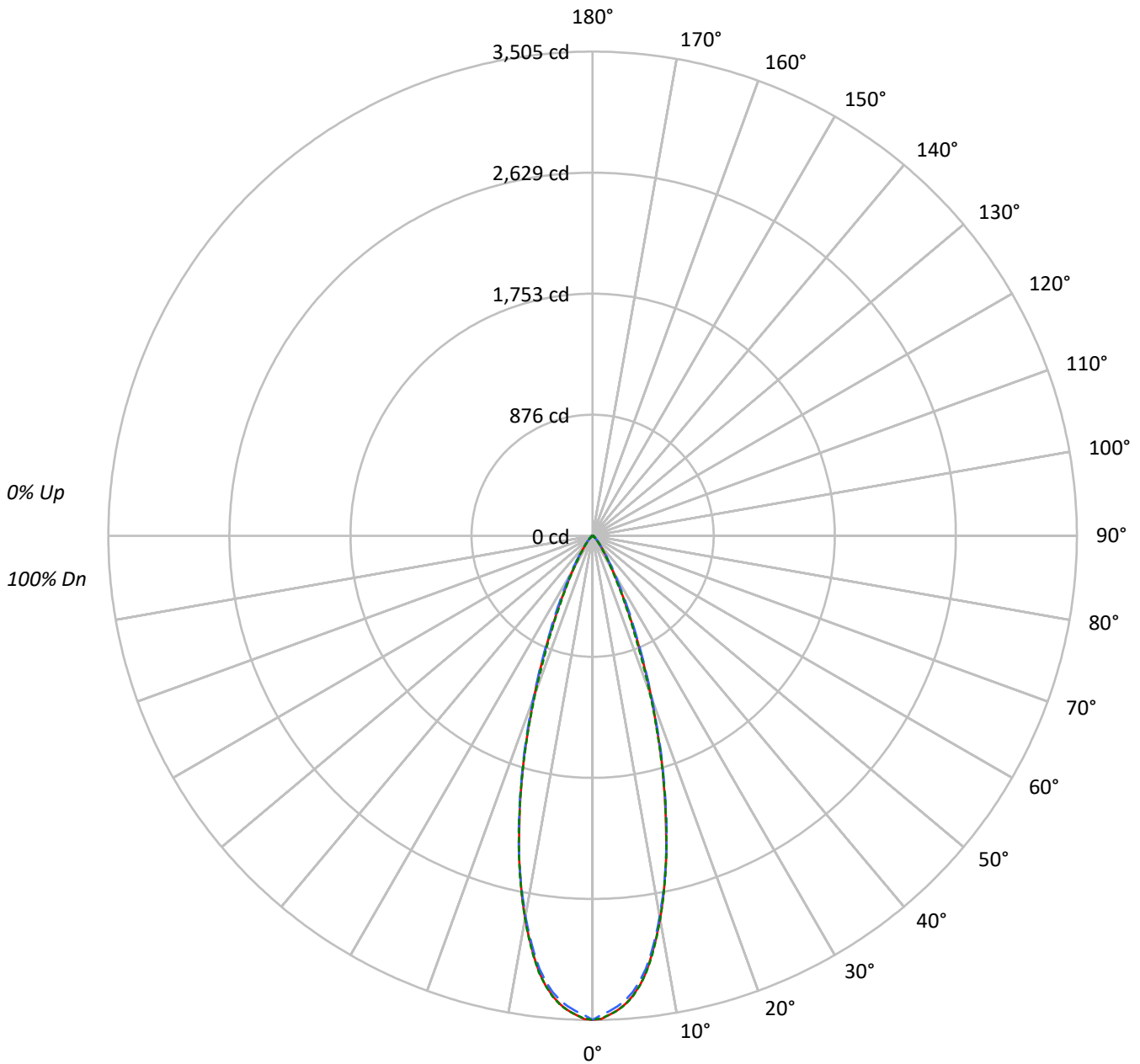
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1729036	1729036	1729036
5°	1654668	1642286	1657243
10°	1409737	1400870	1411190
15°	1039051	1045793	1042422
20°	648615	660639	634335
25°	335056	359498	318235
30°	160651	184122	153074
35°	82934	91788	77574
40°	46500	48818	44117
45°	28258	28258	27211
50°	14660	18114	14660
55°	7569	12042	8257
60°	8683	8683	8683
65°	9456	9456	9456
70°	11684	10674	11684
75°	11247	11247	11247
80°	10512	10512	10512
85°	8491	8491	8491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.4	23.0
10°-20°	553.7	42.2
20°-30°	300.2	22.9
30°-40°	96.4	7.3
40°-50°	32.8	2.5
50°-60°	11.5	0.9
60°-70°	8.4	0.6
70°-80°	6.1	0.5
80°-90°	1.7	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°	1155.3	88.0
0°-40°	1251.7	95.4
0°-60°	1296.0	98.8
0°-90°	1312.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1312.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3505	3505	3505	3505	3505	
5°	3341	3320	3316	3349	3346	302
15°	2034	2051	2048	2057	2041	551
25°	616	644	660	615	585	295
35°	138	144	152	138	129	93
45°	40	41	40	40	39	32
55°	9	11	14	11	10	10
65°	8	9	8	9	8	8
75°	6	6	6	6	6	6
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3504.6	3504.6	3504.6	3504.6	3504.6
1°	3498.7	3473.7	3470.0	3502.4	3495.0
2°	3470.7	3447.2	3443.5	3475.9	3469.3
3°	3439.8	3418.5	3411.1	3445.0	3440.5
4°	3398.6	3378.7	3372.1	3405.9	3402.3
5°	3341.1	3320.5	3316.1	3349.2	3346.3
6°	3270.5	3253.5	3245.4	3278.6	3272.7
7°	3182.1	3166.6	3157.8	3182.1	3185.1
8°	3067.3	3059.9	3049.6	3073.9	3073.9
9°	2945.0	2938.4	2927.4	2949.5	2949.5
10°	2814.0	2809.6	2796.3	2816.9	2816.9
11°	2670.4	2668.2	2658.6	2675.6	2675.6
12°	2519.5	2524.6	2515.8	2530.5	2525.4
13°	2368.5	2366.3	2367.1	2378.1	2370.0
14°	2197.7	2211.0	2213.2	2219.8	2207.3
15°	2034.3	2051.2	2047.5	2057.1	2040.9
16°	1867.2	1886.3	1885.6	1887.8	1872.3
17°	1711.1	1722.1	1722.8	1720.6	1701.5
18°	1544.7	1560.1	1560.1	1556.5	1533.6
19°	1382.0	1393.7	1401.8	1393.7	1367.2
20°	1235.4	1243.5	1258.3	1237.7	1208.2
21°	1094.8	1102.2	1114.7	1090.4	1058.0
22°	960.1	969.7	981.4	953.5	919.6
23°	834.2	856.3	860.7	822.4	793.7
24°	718.6	743.6	751.0	712.0	681.8
25°	615.5	643.5	660.4	614.8	584.6
26°	526.4	553.7	574.3	528.6	499.9
27°	448.4	477.1	498.4	455.7	428.5
28°	381.4	409.4	431.4	391.7	365.9
29°	331.3	347.5	369.6	336.5	312.9
30°	282.0	299.7	323.2	289.3	268.7
32.5°	193.6	203.2	221.6	201.0	184.8
35°	137.7	143.6	152.4	138.4	128.8
37.5°	97.9	100.9	106.0	97.9	92.8
40°	72.2	73.6	75.8	71.4	68.5
42.5°	53.7	54.5	54.5	53.0	51.5
45°	40.5	41.2	40.5	40.5	39.0
47.5°	29.5	31.7	30.9	30.9	28.7
50°	19.1	23.6	23.6	22.8	19.1
52.5°	11.8	16.2	18.4	16.2	12.5
55°	8.8	11.0	14.0	11.0	9.6
57.5°	8.8	8.8	10.3	8.8	8.8
60°	8.8	8.8	8.8	8.8	8.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	8.1	8.1	8.1	8.1	8.1
70°	8.1	8.1	7.4	8.1	8.1
72.5°	7.4	7.4	6.6	7.4	6.6
75°	5.9	5.9	5.9	5.9	5.9
77.5°	4.4	4.4	4.4	4.4	4.4
80°	3.7	3.7	3.7	3.7	3.7
82.5°	2.2	2.2	2.2	2.9	2.2
85°	1.5	1.5	1.5	1.5	1.5
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°	8.8	8.8	8.8	8.8	8.8
65°	8.1	8.8	8.1	8.8	8.1



(END OF REPORT)