

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: P283792

Luminaire Tested: **LDA2B20D2WD010 EU2B20FL40D2W 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283792  
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: LDA2B20D2WD010 EU2B20FL40D2W 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MMS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1303.8 lumens  
Efficiency: N/A  
Efficacy: 63.3 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

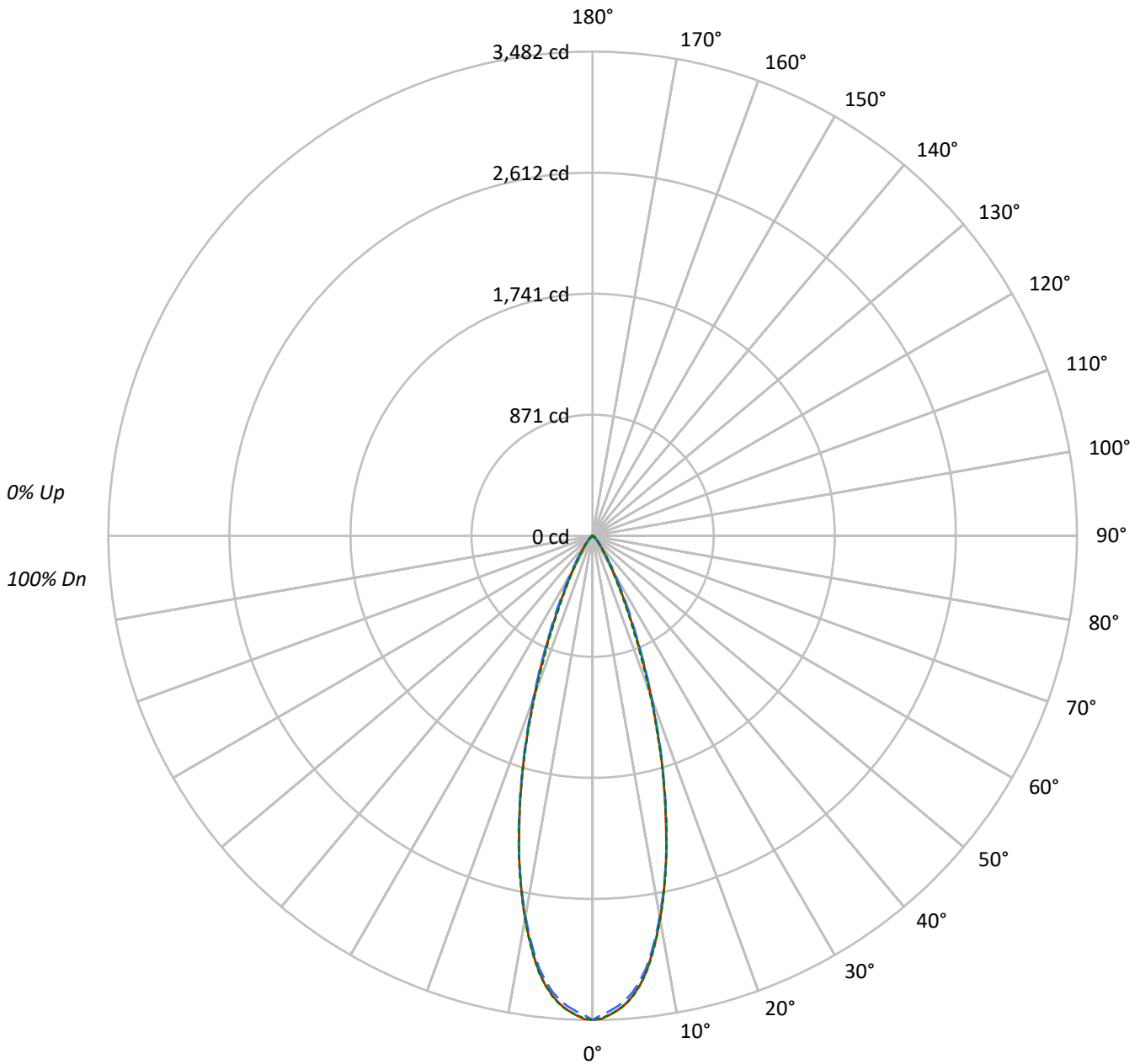
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1717738	1717738	1717738
5°	1643921	1631589	1646446
10°	1400519	1391752	1402022
15°	1032257	1039000	1035629
20°	644415	656333	630187
25°	332879	357158	316167
30°	159569	182926	152106
35°	82392	91186	77092
40°	46178	48496	43795
45°	28048	28048	27071
50°	14583	17960	14583
55°	7569	11956	8171
60°	8683	8683	8683
65°	9339	9339	9339
70°	11540	10530	11540
75°	11247	11247	11247
80°	10512	10512	10512
85°	8491	8491	8491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.5	23.0
10°-20°	550.1	42.2
20°-30°	298.2	22.9
30°-40°	95.7	7.3
40°-50°	32.6	2.5
50°-60°	11.4	0.9
60°-70°	8.3	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°	1147.8	88.0
0°-40°	1243.5	95.4
0°-60°	1287.6	98.8
0°-90°	1303.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1303.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3482	3482	3482	3482	3482	
5°	3319	3299	3294	3327	3324	300
15°	2021	2038	2034	2044	2028	548
25°	612	639	656	611	581	293
35°	137	143	151	138	128	92
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°	3481.7	3481.7	3481.7	3481.7	3481.7
1°	3475.9	3451.0	3447.4	3479.5	3472.2
2°	3448.1	3424.7	3421.0	3453.2	3446.6
3°	3417.4	3396.2	3388.8	3422.5	3418.1
4°	3376.4	3356.7	3350.1	3383.7	3380.1
5°	3319.4	3298.9	3294.5	3327.4	3324.5
6°	3249.1	3232.3	3224.3	3257.2	3251.3
7°	3161.4	3146.0	3137.2	3161.4	3164.3
8°	3047.3	3039.9	3029.7	3053.8	3053.8
9°	2925.8	2919.2	2908.3	2930.2	2930.2
10°	2795.6	2791.2	2778.1	2798.6	2798.6
11°	2653.0	2650.8	2641.3	2658.1	2658.1
12°	2503.0	2508.2	2499.4	2514.0	2508.9
13°	2353.1	2350.9	2351.6	2362.6	2354.6
14°	2183.4	2196.6	2198.8	2205.3	2192.9
15°	2021.0	2037.8	2034.2	2043.7	2027.6
16°	1855.0	1874.0	1873.3	1875.5	1860.1
17°	1699.9	1710.9	1711.6	1709.4	1690.4
18°	1534.6	1550.0	1550.0	1546.3	1523.6
19°	1372.9	1384.7	1392.7	1384.7	1358.3
20°	1227.4	1235.4	1250.1	1229.6	1200.3
21°	1087.7	1095.0	1107.4	1083.3	1051.1
22°	953.8	963.3	975.0	947.2	913.6
23°	828.7	850.7	855.1	817.0	788.5
24°	713.9	738.8	746.1	707.3	677.3
25°	611.5	639.3	656.1	610.8	580.8
26°	523.0	550.1	570.5	525.2	496.7
27°	445.5	474.0	495.2	452.8	425.7
28°	378.9	406.7	428.6	389.1	363.5
29°	329.2	345.2	367.2	334.3	310.9
30°	280.1	297.7	321.1	287.5	267.0
32.5°	192.4	201.9	220.2	199.7	183.6
35°	136.8	142.6	151.4	137.5	128.0
37.5°	97.3	100.2	105.3	97.3	92.2
40°	71.7	73.1	75.3	71.0	68.0
42.5°	53.4	54.1	54.1	52.7	51.2
45°	40.2	41.0	40.2	40.2	38.8
47.5°	29.3	31.5	30.7	30.7	28.5
50°	19.0	23.4	23.4	22.7	19.0
52.5°	11.7	16.1	18.3	16.1	12.4
55°	8.8	11.0	13.9	11.0	9.5
57.5°	8.8	8.8	10.2	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°	8.0	8.0	8.0	8.0	8.0
70°	8.0	8.0	7.3	8.0	8.0
72.5°	7.3	7.3	6.6	7.3	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°	8.0	8.8	8.0	8.8	8.0



(END OF REPORT)