

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: P283732

Luminaire Tested: **LDA2B208040D010 EU2B20FL408040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283732  
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: LDA2B208040D010 EU2B20FL408040 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: 1834.0 lumens  
Efficiency: N/A  
Efficacy: 89.0 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

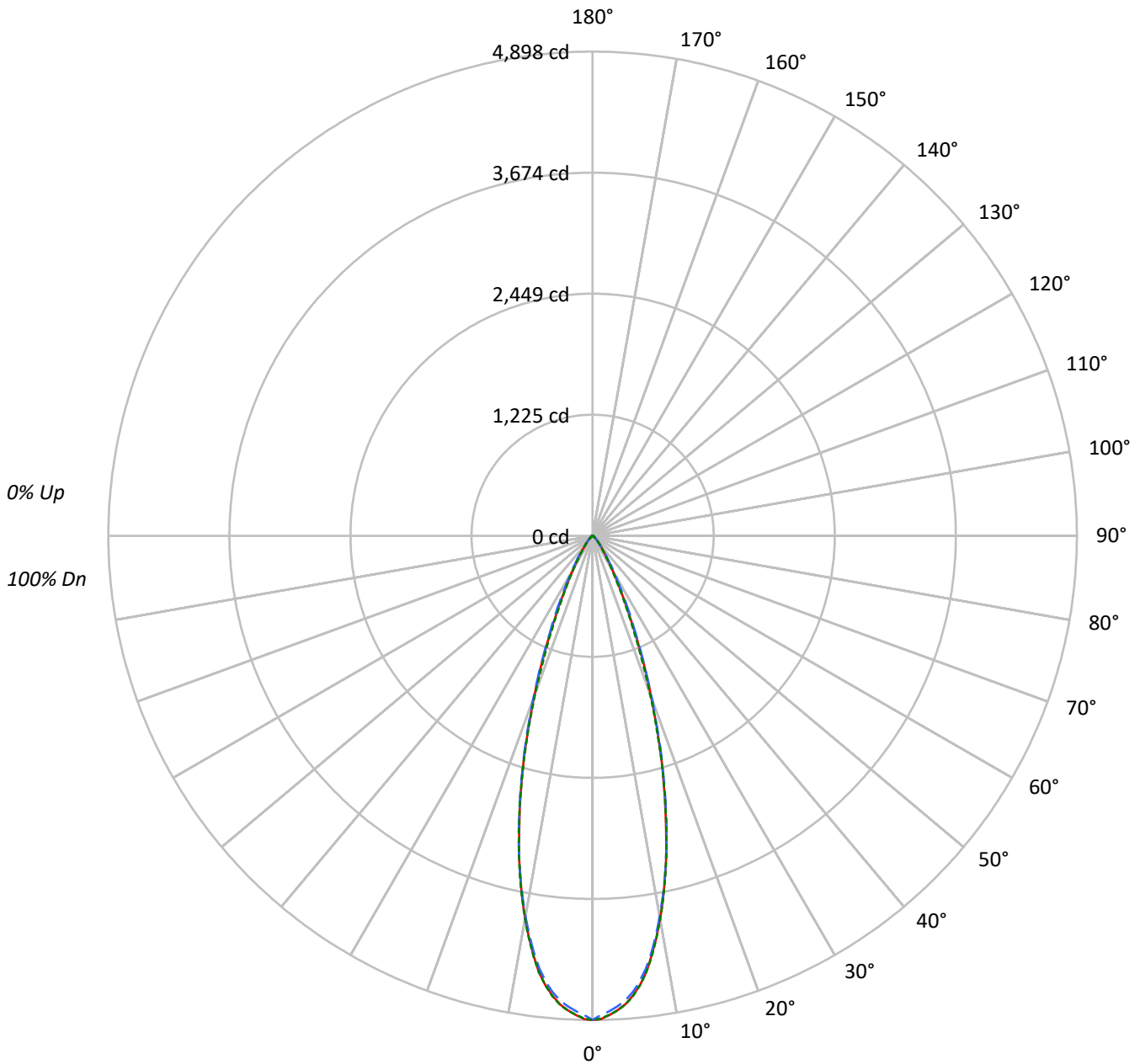
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2416486	2416486	2416486
5°	2312553	2295269	2316119
10°	1970225	1957851	1972279
15°	1452158	1461607	1456908
20°	906508	923256	886557
25°	468262	502448	444746
30°	224513	257327	213974
35°	115879	128286	108471
40°	64919	68268	61634
45°	39491	39491	38026
50°	20570	25252	20570
55°	10580	16859	11526
60°	12137	12137	12137
65°	13192	13192	13192
70°	16300	14858	16300
75°	15631	15631	15631
80°	14490	14490	14490
85°	11887	11887	11887



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	421.3	23.0
10°-20°	773.9	42.2
20°-30°	419.5	22.9
30°-40°	134.7	7.3
40°-50°	45.9	2.5
50°-60°	16.1	0.9
60°-70°	11.7	0.6
70°-80°	8.5	0.5
80°-90°	2.4	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°	1614.7	88.0
0°-40°	1749.4	95.4
0°-60°	1811.3	98.8
0°-90°	1834.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1834.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4898	4898	4898	4898	4898	
5°	4670	4641	4635	4681	4677	422
15°	2843	2867	2862	2875	2852	771
25°	860	899	923	859	817	412
35°	192	201	213	193	180	130
45°	57	58	57	57	54	45
55°	12	15	20	15	13	13
65°	11	12	11	12	11	12
75°	8	8	8	8	8	9
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°	4898.0	4898.0	4898.0	4898.0	4898.0
1°	4889.7	4854.8	4849.6	4894.9	4884.6
2°	4850.6	4817.7	4812.6	4857.8	4848.6
3°	4807.4	4777.6	4767.3	4814.6	4808.5
4°	4749.8	4722.0	4712.8	4760.1	4754.9
5°	4669.5	4640.7	4634.6	4680.9	4676.7
6°	4570.8	4547.1	4535.8	4582.1	4573.8
7°	4447.3	4425.7	4413.3	4447.3	4451.4
8°	4286.8	4276.5	4262.1	4296.0	4296.0
9°	4115.9	4106.7	4091.3	4122.1	4122.1
10°	3932.8	3926.6	3908.1	3936.9	3936.9
11°	3732.1	3729.0	3715.7	3739.3	3739.3
12°	3521.2	3528.4	3516.0	3536.6	3529.4
13°	3310.3	3307.2	3308.2	3323.6	3312.3
14°	3071.5	3090.0	3093.1	3102.4	3084.9
15°	2843.1	2866.8	2861.6	2875.0	2852.4
16°	2609.5	2636.3	2635.2	2638.3	2616.7
17°	2391.4	2406.8	2407.8	2404.7	2378.0
18°	2158.8	2180.4	2180.4	2175.3	2143.4
19°	1931.4	1947.9	1959.2	1947.9	1910.8
20°	1726.6	1738.0	1758.5	1729.7	1688.6
21°	1530.1	1540.4	1557.9	1523.9	1478.7
22°	1341.8	1355.2	1371.6	1332.5	1285.2
23°	1165.8	1196.7	1202.9	1149.4	1109.2
24°	1004.3	1039.3	1049.6	995.0	952.8
25°	860.2	899.3	923.0	859.2	817.0
26°	735.7	773.8	802.6	738.8	698.7
27°	626.7	666.8	696.6	636.9	598.9
28°	533.0	572.1	603.0	547.4	511.4
29°	463.0	485.7	516.6	470.2	437.3
30°	394.1	418.8	451.7	404.4	375.6
32.5°	270.6	284.0	309.7	280.9	258.3
35°	192.4	200.7	213.0	193.4	180.1
37.5°	136.9	141.0	148.2	136.9	129.7
40°	100.8	102.9	106.0	99.8	95.7
42.5°	75.1	76.1	76.1	74.1	72.0
45°	56.6	57.6	56.6	56.6	54.5
47.5°	41.2	44.2	43.2	43.2	40.1
50°	26.8	32.9	32.9	31.9	26.8
52.5°	16.5	22.6	25.7	22.6	17.5
55°	12.3	15.4	19.6	15.4	13.4
57.5°	12.3	12.3	14.4	12.3	12.3
60°	12.3	12.3	12.3	12.3	12.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	11.3	11.3	11.3	11.3	11.3
70°	11.3	11.3	10.3	11.3	11.3
72.5°	10.3	10.3	9.3	10.3	9.3
75°	8.2	8.2	8.2	8.2	8.2
77.5°	6.2	6.2	6.2	6.2	6.2
80°	5.1	5.1	5.1	5.1	5.1
82.5°	3.1	3.1	3.1	4.1	3.1
85°	2.1	2.1	2.1	2.1	2.1
87.5°	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	12.3	12.3	12.3	12.3	12.3
65°	11.3	12.3	11.3	12.3	11.3



(END OF REPORT)