

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: P283753

Luminaire Tested: **LDA2B209027D010 EU2B20FL409027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283753  
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: LDA2B209027D010 EU2B20FL409027 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: 1257.9 lumens  
Efficiency: N/A  
Efficacy: 61.1 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

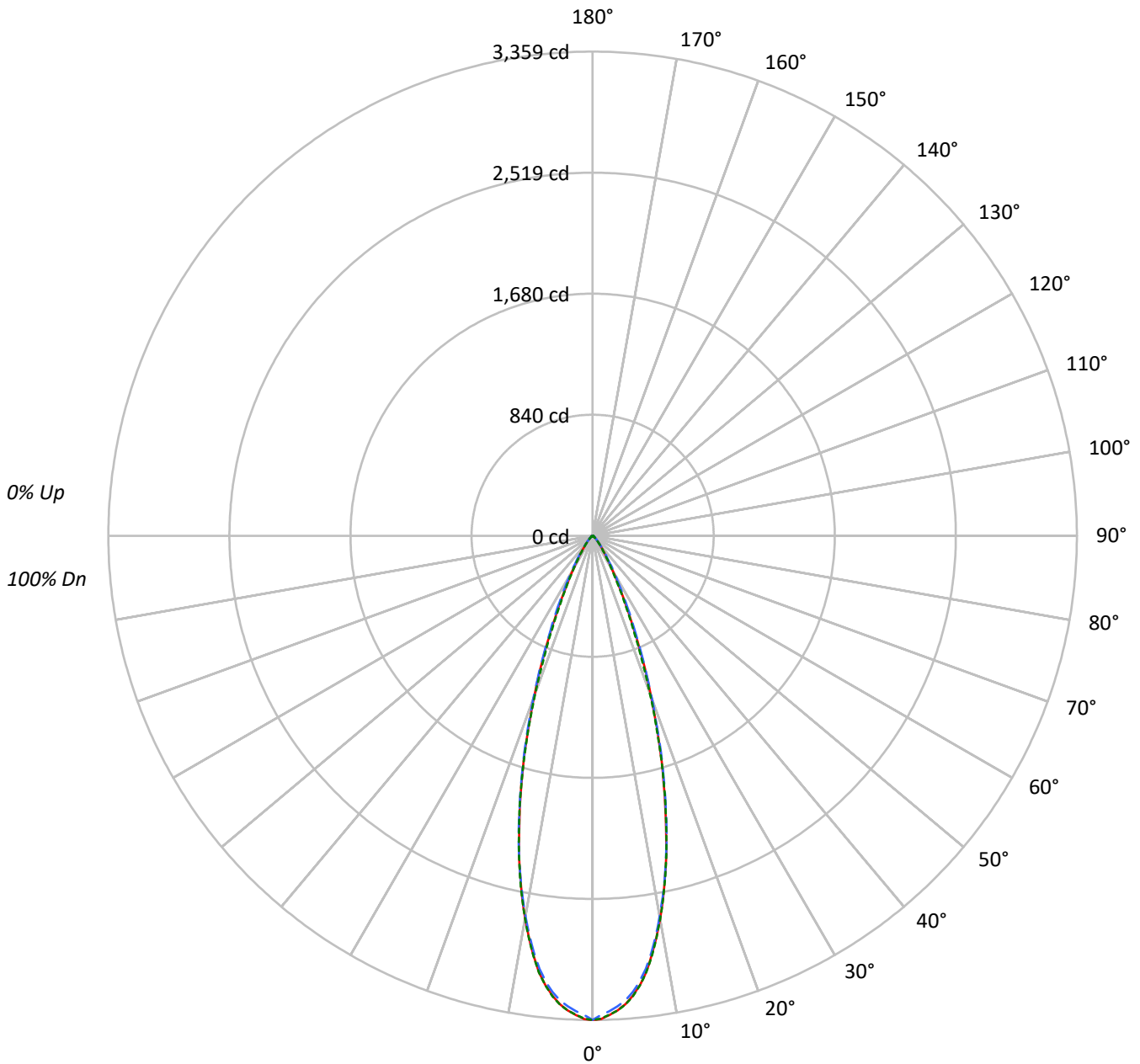
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1657301	1657301	1657301
5°	1586026	1574141	1588453
10°	1351224	1342757	1352626
15°	995942	1002429	999160
20°	621734	633180	608031
25°	321175	344583	305007
30°	153986	176488	146751
35°	79501	87994	74382
40°	44567	46822	42249
45°	27071	27071	26095
50°	14046	17346	14046
55°	7311	11526	7913
60°	8387	8387	8387
65°	9106	9106	9106
70°	11251	10242	11251
75°	10675	10675	10675
80°	9944	9944	9944
85°	7925	7925	7925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	288.9	23.0
10°-20°	530.7	42.2
20°-30°	287.7	22.9
30°-40°	92.4	7.3
40°-50°	31.5	2.5
50°-60°	11.0	0.9
60°-70°	8.1	0.6
70°-80°	5.9	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°	1107.4	88.0
0°-40°	1199.8	95.4
0°-60°	1242.3	98.8
0°-90°	1257.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3359	3359	3359	3359	3359	
5°	3202	3183	3178	3210	3207	290
15°	1950	1966	1963	1972	1956	529
25°	590	617	633	589	560	283
35°	132	138	146	133	124	89
45°	39	40	39	39	37	31
55°	8	11	13	11	9	9
65°	8	8	8	8	8	8
75°	6	6	6	6	6	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°	3359.2	3359.2	3359.2	3359.2	3359.2
1°	3353.5	3329.5	3326.0	3357.0	3350.0
2°	3326.7	3304.1	3300.6	3331.6	3325.3
3°	3297.1	3276.6	3269.5	3302.0	3297.8
4°	3257.5	3238.5	3232.1	3264.6	3261.1
5°	3202.5	3182.7	3178.5	3210.3	3207.4
6°	3134.7	3118.5	3110.7	3142.5	3136.9
7°	3050.1	3035.2	3026.8	3050.1	3052.9
8°	2940.0	2932.9	2923.0	2946.3	2946.3
9°	2822.8	2816.5	2805.9	2827.1	2827.1
10°	2697.2	2693.0	2680.3	2700.0	2700.0
11°	2559.6	2557.5	2548.3	2564.5	2564.5
12°	2414.9	2419.9	2411.4	2425.5	2420.6
13°	2270.3	2268.1	2268.8	2279.4	2271.7
14°	2106.5	2119.2	2121.3	2127.7	2115.7
15°	1949.9	1966.1	1962.6	1971.7	1956.2
16°	1789.7	1808.0	1807.3	1809.4	1794.6
17°	1640.1	1650.6	1651.3	1649.2	1630.9
18°	1480.6	1495.4	1495.4	1491.9	1470.0
19°	1324.6	1335.9	1343.7	1335.9	1310.5
20°	1184.2	1191.9	1206.0	1186.3	1158.1
21°	1049.4	1056.4	1068.4	1045.1	1014.1
22°	920.2	929.4	940.7	913.9	881.4
23°	799.6	820.7	825.0	788.3	760.7
24°	688.8	712.8	719.8	682.4	653.5
25°	590.0	616.8	633.0	589.3	560.3
26°	504.6	530.7	550.4	506.7	479.2
27°	429.8	457.3	477.8	436.8	410.7
28°	365.6	392.4	413.5	375.4	350.7
29°	317.6	333.1	354.3	322.5	299.9
30°	270.3	287.2	309.8	277.3	257.6
32.5°	185.6	194.8	212.4	192.7	177.1
35°	132.0	137.6	146.1	132.7	123.5
37.5°	93.9	96.7	101.6	93.9	88.9
40°	69.2	70.6	72.7	68.5	65.6
42.5°	51.5	52.2	52.2	50.8	49.4
45°	38.8	39.5	38.8	38.8	37.4
47.5°	28.2	30.3	29.6	29.6	27.5
50°	18.3	22.6	22.6	21.9	18.3
52.5°	11.3	15.5	17.6	15.5	12.0
55°	8.5	10.6	13.4	10.6	9.2
57.5°	8.5	8.5	9.9	8.5	8.5
60°	8.5	8.5	8.5	8.5	8.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	7.8	7.8	7.8	7.8	7.8
70°	7.8	7.8	7.1	7.8	7.8
72.5°	7.1	7.1	6.4	7.1	6.4
75°	5.6	5.6	5.6	5.6	5.6
77.5°	4.2	4.2	4.2	4.2	4.2
80°	3.5	3.5	3.5	3.5	3.5
82.5°	2.1	2.1	2.1	2.8	2.1
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°	8.5	8.5	8.5	8.5	8.5
65°	7.8	8.5	7.8	8.5	7.8



(END OF REPORT)