

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: P283730

Luminaire Tested: **LDA2B208040D010 EU2B20FL408040 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283730  
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 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1854.8 lumens  
Efficiency: N/A  
Efficacy: 90.0 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

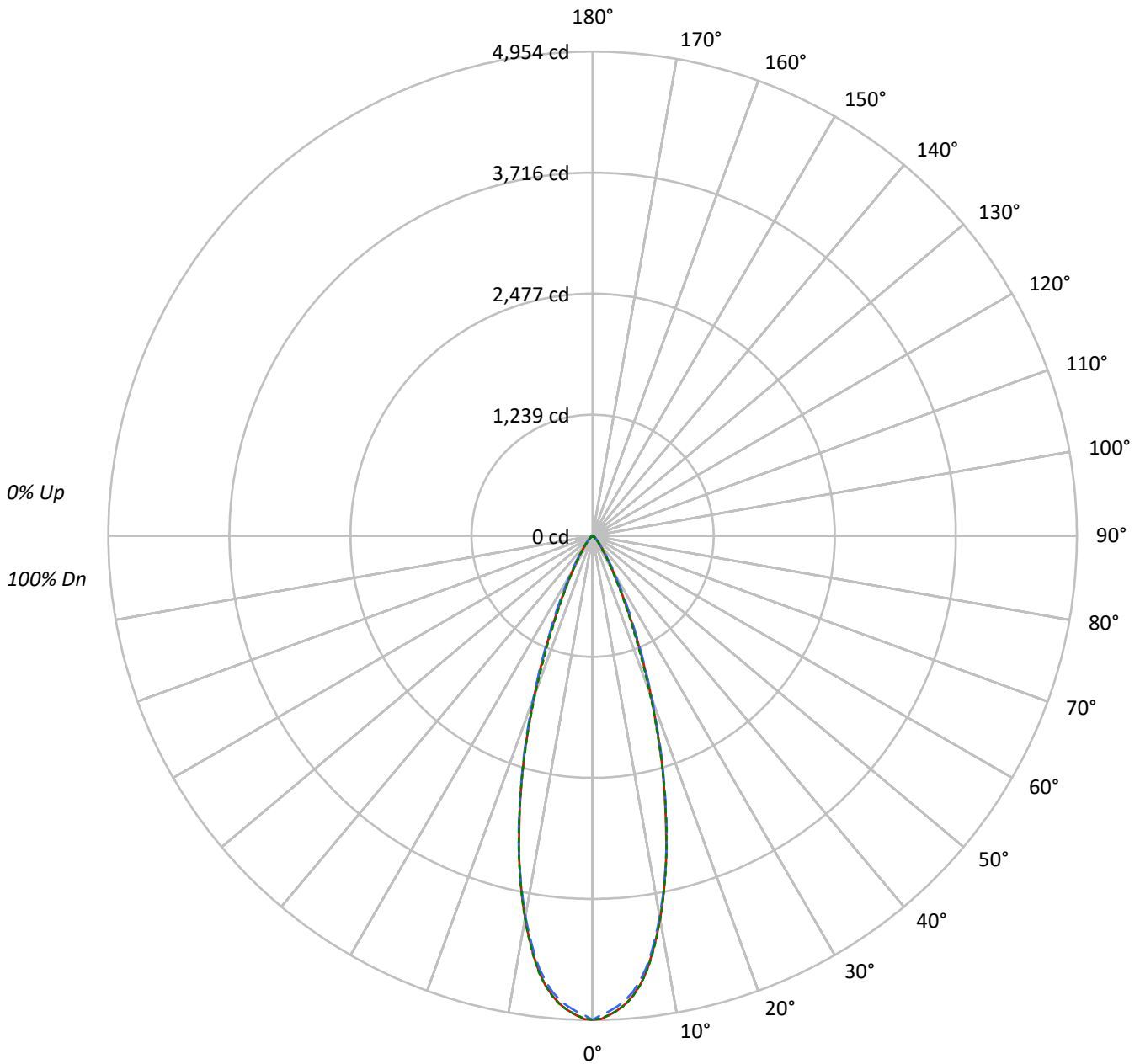
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100													
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95						95													
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90						90													
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86						86													
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82						82													
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79						79													
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75						75													
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72						72													
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69						69													
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67						67													
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64						64													

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2443917	2443917	2443917
5°	2338801	2321319	2342416
10°	1992569	1980095	1994673
15°	1468656	1478207	1473406
20°	916798	933756	896585
25°	473597	508164	449808
30°	227076	260289	216366
35°	117204	129732	109676
40°	65692	69041	62343
45°	39910	39910	38514
50°	20800	25559	20800
55°	10752	17031	11612
60°	12334	12334	12334
65°	13308	13308	13308
70°	16444	15002	16444
75°	15821	15821	15821
80°	14774	14774	14774
85°	11887	11887	11887



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	426.1	23.0
10°-20°	782.6	42.2
20°-30°	424.3	22.9
30°-40°	136.2	7.3
40°-50°	46.4	2.5
50°-60°	16.3	0.9
60°-70°	11.8	0.6
70°-80°	8.6	0.5
80°-90°	2.5	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°	1633.0	88.0
0°-40°	1769.2	95.4
0°-60°	1831.9	98.8
0°-90°	1854.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1854.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4954	4954	4954	4954	4954	
5°	4722	4693	4687	4734	4730	427
15°	2875	2899	2894	2908	2885	779
25°	870	910	934	869	826	417
35°	195	203	215	196	182	131
45°	57	58	57	57	55	46
55°	12	16	20	16	14	14
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°	4953.6	4953.6	4953.6	4953.6	4953.6
1°	4945.2	4909.9	4904.7	4950.5	4940.0
2°	4905.7	4872.4	4867.2	4913.0	4903.6
3°	4862.0	4831.8	4821.4	4869.3	4863.0
4°	4803.7	4775.6	4766.3	4814.1	4808.9
5°	4722.5	4693.4	4687.2	4734.0	4729.8
6°	4622.6	4598.7	4587.3	4634.1	4625.8
7°	4497.8	4475.9	4463.4	4497.8	4501.9
8°	4335.4	4325.0	4310.4	4344.8	4344.8
9°	4162.7	4153.3	4137.7	4168.9	4168.9
10°	3977.4	3971.2	3952.5	3981.6	3981.6
11°	3774.5	3771.4	3757.8	3781.8	3781.8
12°	3561.2	3568.4	3556.0	3576.8	3569.5
13°	3347.8	3344.7	3345.7	3361.4	3349.9
14°	3106.4	3125.1	3128.2	3137.6	3119.9
15°	2875.4	2899.3	2894.1	2907.6	2884.7
16°	2639.1	2666.2	2665.1	2668.3	2646.4
17°	2418.5	2434.1	2435.2	2432.0	2405.0
18°	2183.3	2205.2	2205.2	2200.0	2167.7
19°	1953.3	1970.0	1981.4	1970.0	1932.5
20°	1746.2	1757.7	1778.5	1749.4	1707.7
21°	1547.5	1557.9	1575.6	1541.2	1495.4
22°	1357.0	1370.6	1387.2	1347.7	1299.8
23°	1179.1	1210.3	1216.5	1162.4	1121.8
24°	1015.7	1051.1	1061.5	1006.3	963.7
25°	870.0	909.5	933.5	869.0	826.3
26°	744.1	782.6	811.7	747.2	706.6
27°	633.8	674.4	704.5	644.2	605.7
28°	539.1	578.6	609.8	553.6	517.2
29°	468.3	491.2	522.4	475.6	442.3
30°	398.6	423.6	456.9	409.0	379.8
32.5°	273.7	287.2	313.2	284.1	261.2
35°	194.6	202.9	215.4	195.6	182.1
37.5°	138.4	142.6	149.9	138.4	131.1
40°	102.0	104.1	107.2	100.9	96.8
42.5°	76.0	77.0	77.0	74.9	72.8
45°	57.2	58.3	57.2	57.2	55.2
47.5°	41.6	44.7	43.7	43.7	40.6
50°	27.1	33.3	33.3	32.3	27.1
52.5°	16.7	22.9	26.0	22.9	17.7
55°	12.5	15.6	19.8	15.6	13.5
57.5°	12.5	12.5	14.6	12.5	12.5
60°	12.5	12.5	12.5	12.5	12.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	11.4	11.4	11.4	11.4	11.4
70°	11.4	11.4	10.4	11.4	11.4
72.5°	10.4	10.4	9.4	10.4	9.4
75°	8.3	8.3	8.3	8.3	8.3
77.5°	6.2	6.2	6.2	6.2	6.2
80°	5.2	5.2	5.2	5.2	5.2
82.5°	3.1	3.1	3.1	4.2	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°	12.5	12.5	12.5	12.5	12.5
65°	11.4	12.5	11.4	12.5	11.4



(END OF REPORT)