

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: P283787

Luminaire Tested: **LDA2B209730D010 EU2B20FL409730 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283787  
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: LDA2B209730D010 EU2B20FL409730 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1231.6 lumens  
Efficiency: N/A  
Efficacy: 59.8 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

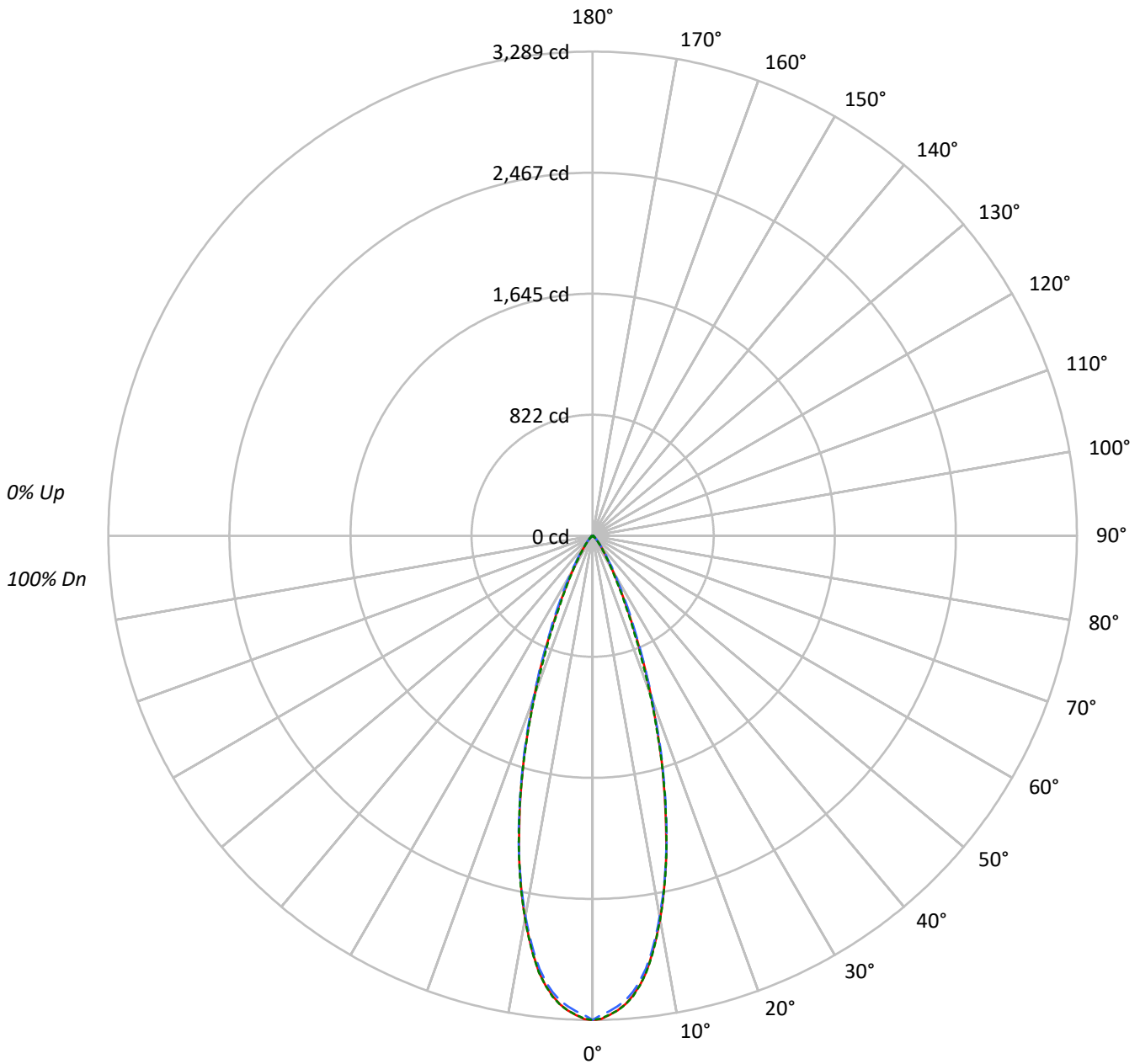
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1622766	1622766	1622766
5°	1552994	1541355	1555371
10°	1323069	1314753	1324472
15°	975154	981538	978372
20°	608766	620002	595325
25°	314479	337397	298693
30°	150796	172785	143675
35°	77815	86127	72816
40°	43601	45856	41412
45°	26513	26513	25537
50°	13816	16963	13816
55°	7139	11268	7741
60°	8190	8190	8190
65°	8872	8872	8872
70°	10963	9953	10963
75°	10484	10484	10484
80°	9944	9944	9944
85°	7925	7925	7925



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.9	23.0
10°-20°	519.7	42.2
20°-30°	281.7	22.9
30°-40°	90.4	7.3
40°-50°	30.8	2.5
50°-60°	10.8	0.9
60°-70°	7.9	0.6
70°-80°	5.7	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°	1084.3	88.0
0°-40°	1174.8	95.4
0°-60°	1216.4	98.8
0°-90°	1231.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1231.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3289	3289	3289	3289	3289	
5°	3136	3116	3112	3143	3141	284
15°	1909	1925	1922	1931	1916	518
25°	578	604	620	577	549	277
35°	129	135	143	130	121	87
45°	38	39	38	38	37	30
55°	8	10	13	10	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°	3289.2	3289.2	3289.2	3289.2	3289.2
1°	3283.6	3260.1	3256.7	3287.1	3280.2
2°	3257.4	3235.3	3231.8	3262.2	3256.0
3°	3228.4	3208.3	3201.4	3233.2	3229.0
4°	3189.7	3171.0	3164.8	3196.6	3193.1
5°	3135.8	3116.4	3112.3	3143.4	3140.6
6°	3069.4	3053.5	3045.9	3077.0	3071.5
7°	2986.5	2972.0	2963.7	2986.5	2989.3
8°	2878.7	2871.8	2862.1	2884.9	2884.9
9°	2764.0	2757.8	2747.4	2768.1	2768.1
10°	2641.0	2636.9	2624.4	2643.8	2643.8
11°	2506.3	2504.2	2495.2	2511.1	2511.1
12°	2364.6	2369.4	2361.1	2375.0	2370.1
13°	2222.9	2220.9	2221.6	2231.9	2224.3
14°	2062.6	2075.1	2077.1	2083.4	2071.6
15°	1909.2	1925.1	1921.7	1930.7	1915.5
16°	1752.4	1770.3	1769.7	1771.7	1757.2
17°	1605.9	1616.2	1616.9	1614.9	1596.9
18°	1449.7	1464.2	1464.2	1460.8	1439.4
19°	1297.0	1308.1	1315.7	1308.1	1283.2
20°	1159.5	1167.1	1180.9	1161.6	1133.9
21°	1027.5	1034.4	1046.2	1023.4	993.0
22°	901.1	910.0	921.1	894.8	863.1
23°	782.9	803.6	807.8	771.8	744.9
24°	674.4	697.9	704.8	668.2	639.9
25°	577.7	603.9	619.8	577.0	548.7
26°	494.1	519.6	539.0	496.1	469.2
27°	420.8	447.8	467.8	427.7	402.2
28°	357.9	384.2	404.9	367.6	343.4
29°	311.0	326.2	346.9	315.8	293.7
30°	264.7	281.2	303.3	271.6	252.2
32.5°	181.7	190.7	208.0	188.6	173.4
35°	129.2	134.7	143.0	129.9	120.9
37.5°	91.9	94.7	99.5	91.9	87.1
40°	67.7	69.1	71.2	67.0	64.3
42.5°	50.4	51.1	51.1	49.8	48.4
45°	38.0	38.7	38.0	38.0	36.6
47.5°	27.6	29.7	29.0	29.0	26.9
50°	18.0	22.1	22.1	21.4	18.0
52.5°	11.1	15.2	17.3	15.2	11.7
55°	8.3	10.4	13.1	10.4	9.0
57.5°	8.3	8.3	9.7	8.3	8.3
60°	8.3	8.3	8.3	8.3	8.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	7.6	7.6	7.6	7.6	7.6
70°	7.6	7.6	6.9	7.6	7.6
72.5°	6.9	6.9	6.2	6.9	6.2
75°	5.5	5.5	5.5	5.5	5.5
77.5°	4.1	4.1	4.1	4.1	4.1
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°	8.3	8.3	8.3	8.3	8.3
65°	7.6	8.3	7.6	8.3	7.6



(END OF REPORT)