

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: P283767

Luminaire Tested: **LDA2B209040D010 EU2B20FL409040 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283767  
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: LDA2B209040D010 EU2B20FL409040 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MB  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1459.0 lumens  
Efficiency: N/A  
Efficacy: 70.8 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

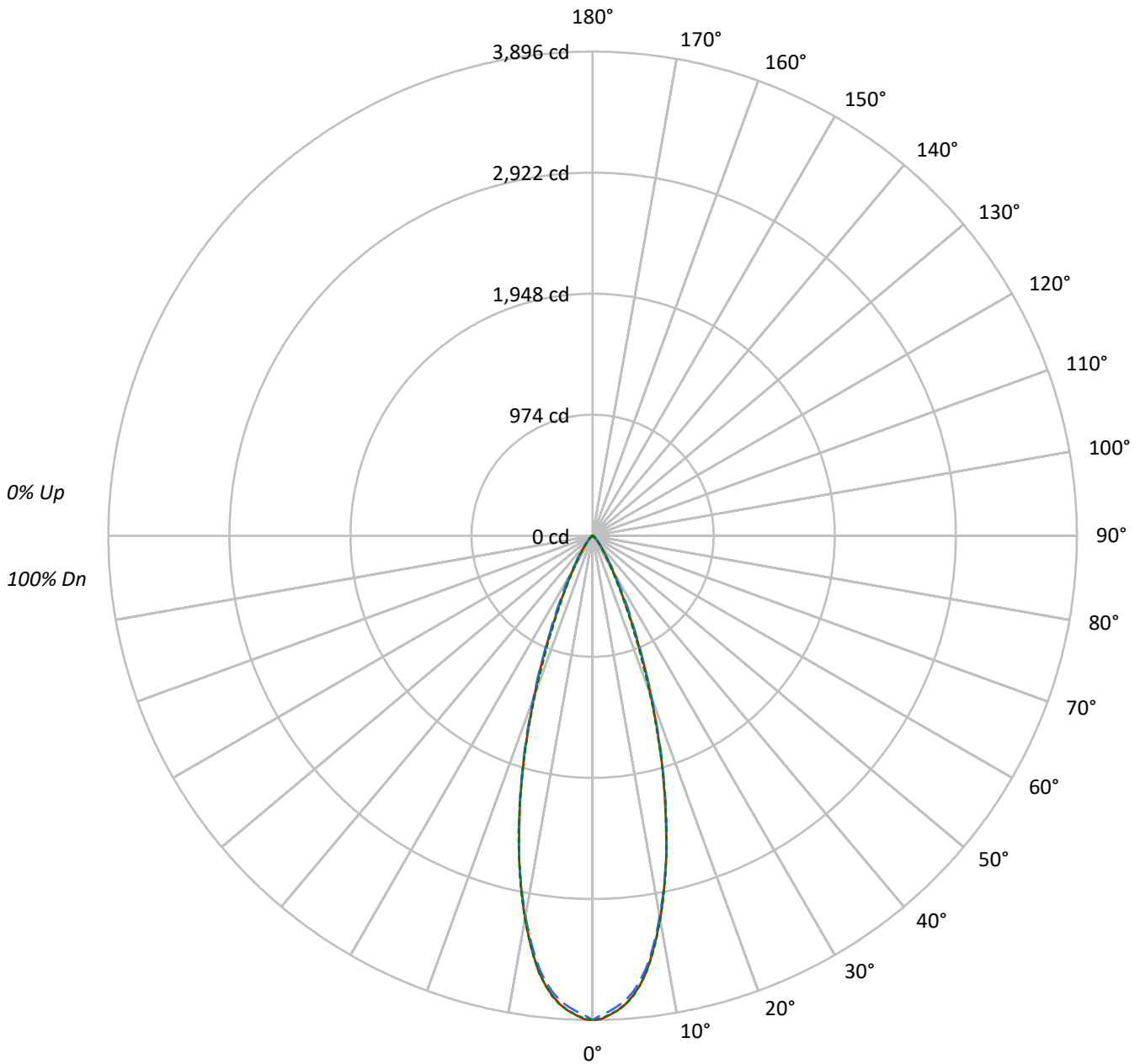
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1922335	1922335	1922335
5°	1839692	1825874	1842515
10°	1567343	1557474	1568996
15°	1155199	1162707	1158978
20°	721174	734457	705266
25°	372509	399727	353782
30°	178596	204745	170222
35°	92210	102027	86307
40°	51652	54292	49011
45°	31397	31397	30281
50°	16348	20109	16348
55°	8429	13418	9118
60°	9670	9670	9670
65°	10507	10507	10507
70°	12982	11828	12982
75°	12390	12390	12390
80°	11649	11649	11649
85°	9057	9057	9057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	335.2	23.0
10°-20°	615.6	42.2
20°-30°	333.8	22.9
30°-40°	107.1	7.3
40°-50°	36.5	2.5
50°-60°	12.8	0.9
60°-70°	9.3	0.6
70°-80°	6.8	0.5
80°-90°	1.9	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°	1284.5	88.0
0°-40°	1391.7	95.4
0°-60°	1441.0	98.8
0°-90°	1459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1459.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3896	3896	3896	3896	3896	
5°	3715	3692	3687	3724	3720	336
15°	2262	2280	2276	2287	2269	613
25°	684	715	734	684	650	328
35°	153	160	169	154	143	103
45°	45	46	45	45	43	36
55°	10	12	16	12	11	11
65°	9	10	9	10	9	9
75°	6	6	6	6	6	7
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°	3896.4	3896.4	3896.4	3896.4	3896.4
1°	3889.9	3862.0	3857.9	3893.9	3885.8
2°	3858.7	3832.6	3828.5	3864.5	3857.1
3°	3824.4	3800.6	3792.4	3830.1	3825.2
4°	3778.5	3756.4	3749.1	3786.7	3782.6
5°	3714.7	3691.8	3686.8	3723.7	3720.4
6°	3636.1	3617.3	3608.3	3645.1	3638.6
7°	3537.9	3520.7	3510.9	3537.9	3541.1
8°	3410.2	3402.0	3390.5	3417.5	3417.5
9°	3274.3	3266.9	3254.6	3279.2	3279.2
10°	3128.6	3123.7	3108.9	3131.9	3131.9
11°	2969.0	2966.5	2955.9	2974.7	2974.7
12°	2801.2	2806.9	2797.1	2813.4	2807.7
13°	2633.3	2630.9	2631.7	2644.0	2635.0
14°	2443.4	2458.2	2460.6	2468.0	2454.1
15°	2261.7	2280.5	2276.4	2287.1	2269.1
16°	2075.9	2097.2	2096.4	2098.8	2081.6
17°	1902.4	1914.6	1915.5	1913.0	1891.7
18°	1717.4	1734.6	1734.6	1730.5	1705.1
19°	1536.5	1549.6	1558.6	1549.6	1520.1
20°	1373.6	1382.6	1398.9	1376.0	1343.3
21°	1217.2	1225.4	1239.3	1212.3	1176.3
22°	1067.4	1078.1	1091.2	1060.1	1022.4
23°	927.4	952.0	956.9	914.3	882.4
24°	798.9	826.8	834.9	791.6	758.0
25°	684.3	715.4	734.3	683.5	649.9
26°	585.3	615.6	638.5	587.7	555.8
27°	498.5	530.4	554.2	506.7	476.4
28°	424.0	455.1	479.7	435.5	406.8
29°	368.4	386.4	410.9	374.1	347.9
30°	313.5	333.2	359.4	321.7	298.8
32.5°	215.3	225.9	246.4	223.5	205.5
35°	153.1	159.6	169.4	153.9	143.3
37.5°	108.9	112.1	117.9	108.9	103.1
40°	80.2	81.9	84.3	79.4	76.1
42.5°	59.8	60.6	60.6	58.9	57.3
45°	45.0	45.8	45.0	45.0	43.4
47.5°	32.7	35.2	34.4	34.4	31.9
50°	21.3	26.2	26.2	25.4	21.3
52.5°	13.1	18.0	20.5	18.0	13.9
55°	9.8	12.3	15.6	12.3	10.6
57.5°	9.8	9.8	11.5	9.8	9.8
60°	9.8	9.8	9.8	9.8	9.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	9.0	9.0	9.0	9.0	9.0
70°	9.0	9.0	8.2	9.0	9.0
72.5°	8.2	8.2	7.4	8.2	7.4
75°	6.5	6.5	6.5	6.5	6.5
77.5°	4.9	4.9	4.9	4.9	4.9
80°	4.1	4.1	4.1	4.1	4.1
82.5°	2.5	2.5	2.5	3.3	2.5
85°	1.6	1.6	1.6	1.6	1.6
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	9.8	9.8	9.8	9.8	9.8
65°	9.0	9.8	9.0	9.8	9.0



(END OF REPORT)