

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: P283776

Luminaire Tested: **LDA2B209050D010 EU2B20FL409050 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283776  
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: LDA2B209050D010 EU2B20FL409050 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1407.7 lumens  
Efficiency: N/A  
Efficacy: 68.3 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

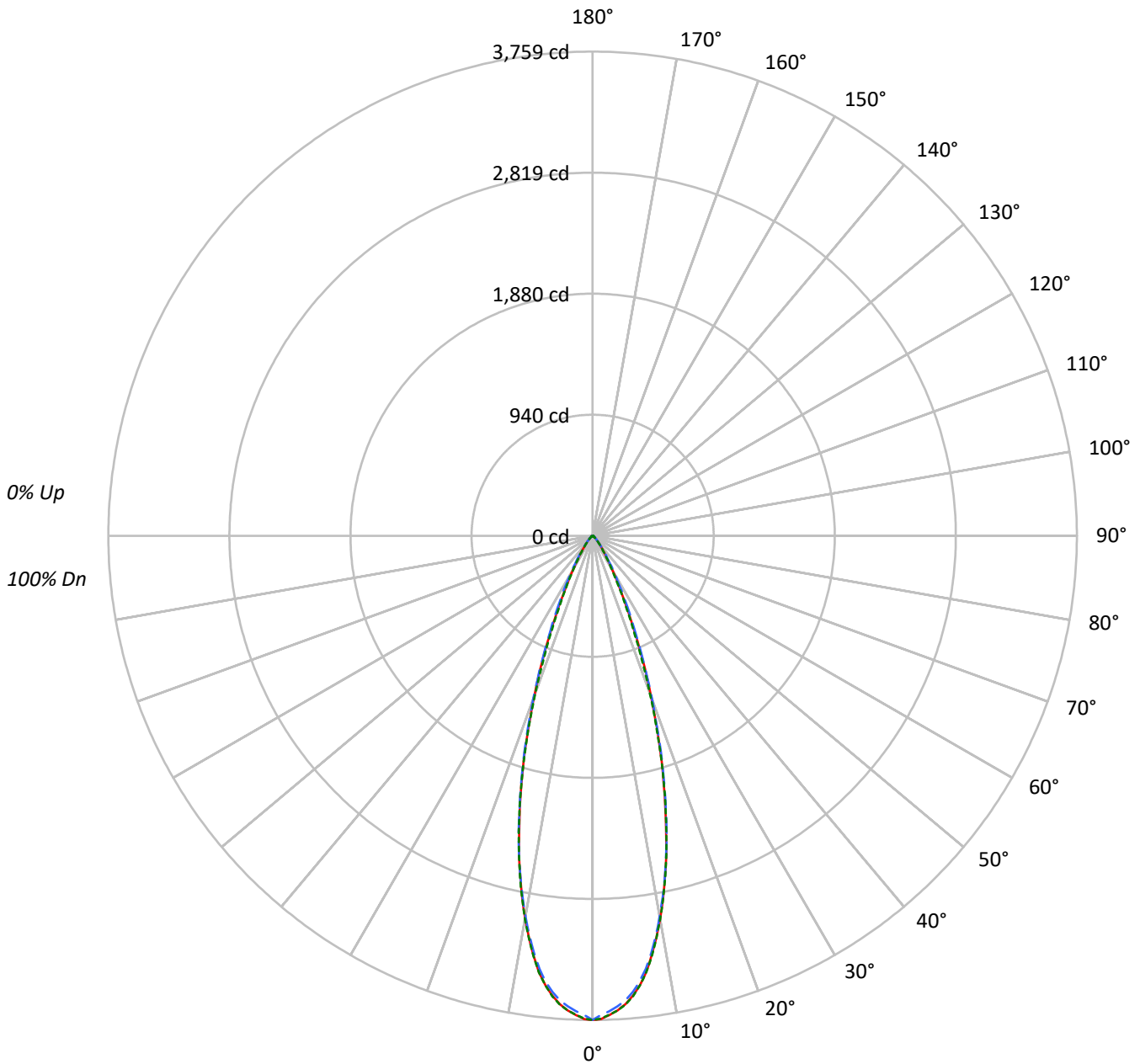
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1854695	1854695	1854695
5°	1774963	1761690	1777687
10°	1512186	1502718	1513789
15°	1114593	1121846	1118219
20°	695763	708626	680432
25°	359444	385628	341371
30°	172330	197510	164240
35°	88957	98473	83236
40°	49849	52360	47272
45°	30281	30281	29234
50°	15734	19419	15734
55°	8171	12902	8860
60°	9374	9374	9374
65°	10156	10156	10156
70°	12550	11396	12550
75°	12009	12009	12009
80°	11081	11081	11081
85°	9057	9057	9057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	323.4	23.0
10°-20°	594.0	42.2
20°-30°	322.0	22.9
30°-40°	103.4	7.3
40°-50°	35.2	2.5
50°-60°	12.3	0.9
60°-70°	9.0	0.6
70°-80°	6.5	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°	1239.3	88.0
0°-40°	1342.7	95.4
0°-60°	1390.3	98.8
0°-90°	1407.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1407.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3759	3759	3759	3759	3759	
5°	3584	3562	3557	3593	3590	324
15°	2182	2200	2196	2207	2189	592
25°	660	690	708	660	627	316
35°	148	154	164	148	138	99
45°	43	44	43	43	42	35
55°	10	12	15	12	10	10
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°	3759.3	3759.3	3759.3	3759.3	3759.3
1°	3753.0	3726.2	3722.2	3757.0	3749.1
2°	3723.0	3697.7	3693.8	3728.5	3721.4
3°	3689.8	3666.9	3659.0	3695.4	3690.6
4°	3645.6	3624.3	3617.2	3653.5	3649.6
5°	3584.0	3561.9	3557.2	3592.7	3589.5
6°	3508.2	3490.0	3481.3	3516.9	3510.6
7°	3413.4	3396.8	3387.4	3413.4	3416.6
8°	3290.2	3282.3	3271.3	3297.3	3297.3
9°	3159.1	3152.0	3140.2	3163.8	3163.8
10°	3018.5	3013.8	2999.6	3021.7	3021.7
11°	2864.5	2862.2	2851.9	2870.1	2870.1
12°	2702.6	2708.1	2698.7	2714.5	2708.9
13°	2540.7	2538.3	2539.1	2551.0	2542.3
14°	2357.5	2371.7	2374.1	2381.2	2367.8
15°	2182.2	2200.3	2196.4	2206.6	2189.3
16°	2002.9	2023.4	2022.6	2025.0	2008.4
17°	1835.4	1847.3	1848.1	1845.7	1825.2
18°	1657.0	1673.5	1673.5	1669.6	1645.1
19°	1482.4	1495.0	1503.7	1495.0	1466.6
20°	1325.2	1333.9	1349.7	1327.6	1296.0
21°	1174.4	1182.3	1195.7	1169.7	1134.9
22°	1029.9	1040.1	1052.8	1022.8	986.4
23°	894.8	918.5	923.3	882.2	851.4
24°	770.8	797.7	805.6	763.7	731.3
25°	660.3	690.3	708.4	659.5	627.1
26°	564.7	593.9	616.0	567.1	536.3
27°	481.0	511.8	534.7	488.9	459.7
28°	409.1	439.1	462.8	420.2	392.5
29°	355.4	372.8	396.5	360.9	335.7
30°	302.5	321.4	346.7	310.4	288.3
32.5°	207.7	218.0	237.7	215.6	198.2
35°	147.7	154.0	163.5	148.5	138.2
37.5°	105.0	108.2	113.7	105.0	99.5
40°	77.4	79.0	81.3	76.6	73.4
42.5°	57.7	58.4	58.4	56.9	55.3
45°	43.4	44.2	43.4	43.4	41.9
47.5°	31.6	34.0	33.2	33.2	30.8
50°	20.5	25.3	25.3	24.5	20.5
52.5°	12.6	17.4	19.7	17.4	13.4
55°	9.5	11.8	15.0	11.8	10.3
57.5°	9.5	9.5	11.1	9.5	9.5
60°	9.5	9.5	9.5	9.5	9.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	8.7	8.7	8.7	8.7	8.7
70°	8.7	8.7	7.9	8.7	8.7
72.5°	7.9	7.9	7.1	7.9	7.1
75°	6.3	6.3	6.3	6.3	6.3
77.5°	4.7	4.7	4.7	4.7	4.7
80°	3.9	3.9	3.9	3.9	3.9
82.5°	2.4	2.4	2.4	3.2	2.4
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°	9.5	9.5	9.5	9.5	9.5
65°	8.7	9.5	8.7	9.5	8.7



(END OF REPORT)