

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: P282767

Luminaire Tested: **LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282767  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209030D010 EU2B20NFL259030 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1366.2 lumens  
Efficiency: N/A  
Efficacy: 66.3 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

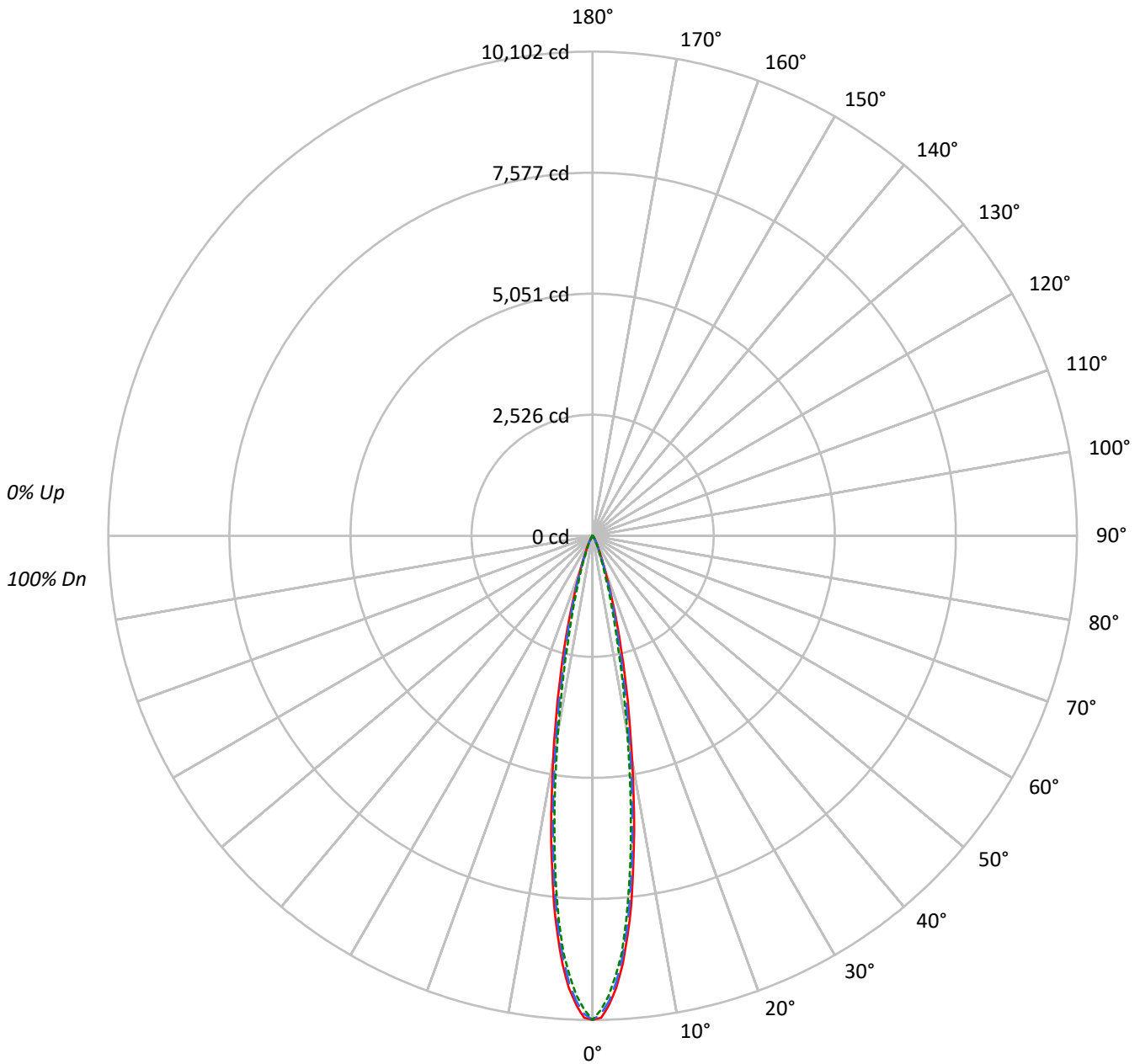
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				100															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

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

	0°	45°	90°
0°	4983793	4983793	4983793
5°	4147044	4071024	3988813
10°	2375412	2229028	2080339
15°	1056519	938328	786324
20°	383268	360377	285508
25°	147142	137398	118345
30°	63463	59019	52354
35°	30054	30054	24874
40°	15070	15586	12559
45°	8721	8163	7605
50°	5987	5373	5373
55°	4731	3355	4043
60°	3848	2269	3059
65°	2685	1868	2685
70°	2308	1154	2308
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	657.0	48.1
10°-20°	531.7	38.9
20°-30°	128.2	9.4
30°-40°	32.7	2.4
40°-50°	9.7	0.7
50°-60°	4.2	0.3
60°-70°	2.0	0.1
70°-80°	0.7	0.1
80°-90°	0.0	0.0
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°	1316.9	96.4
0°-40°	1349.6	98.8
0°-60°	1363.5	99.8
0°-90°	1366.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1366.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10102	10102	10102	10102	10102	
5°	8374	8296	8220	8148	8054	677
15°	2068	2019	1837	1655	1540	590
25°	270	272	252	229	217	140
35°	50	51	50	45	41	34
45°	12	12	12	11	11	11
55°	6	5	4	4	5	5
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10101.7	10101.7	10101.7	10101.7	10101.7
1°	10056.5	9986.4	9977.8	10021.5	9892.9
2°	9799.4	9749.6	9720.7	9746.4	9600.7
3°	9446.5	9398.2	9346.0	9346.8	9183.9
4°	8965.8	8927.6	8839.6	8813.1	8718.8
5°	8373.7	8296.5	8220.2	8148.5	8054.2
6°	7719.2	7619.5	7510.4	7403.7	7307.1
7°	6949.5	6883.3	6739.1	6593.5	6511.6
8°	6225.7	6119.0	5950.7	5768.4	5699.1
9°	5447.4	5371.1	5177.8	4965.9	4896.6
10°	4741.6	4662.1	4449.4	4213.3	4152.6
11°	4079.3	4004.5	3783.3	3535.5	3470.9
12°	3519.2	3413.2	3159.2	2944.2	2881.1
13°	2961.3	2888.9	2648.1	2435.4	2313.1
14°	2486.9	2426.9	2208.7	2021.7	1892.4
15°	2068.5	2019.4	1837.1	1654.8	1539.5
16°	1696.9	1666.5	1522.3	1346.3	1252.0
17°	1376.7	1348.6	1256.7	1094.6	1015.2
18°	1111.8	1107.9	1031.5	891.3	820.4
19°	914.7	913.1	843.0	725.3	666.9
20°	730.0	740.1	686.4	583.5	543.8
21°	595.2	600.7	557.8	479.9	444.1
22°	484.6	488.5	460.4	396.6	377.1
23°	397.3	399.7	376.3	328.8	311.6
24°	327.2	328.8	307.7	274.2	259.4
25°	270.3	271.9	252.4	229.1	217.4
26°	224.4	225.9	208.8	192.4	180.7
27°	186.2	189.3	172.2	162.1	149.6
28°	158.9	159.7	144.1	137.9	126.2
29°	130.1	134.8	121.5	116.1	107.5
30°	111.4	113.7	103.6	99.7	91.9
32.5°	74.0	75.6	70.9	67.8	61.5
35°	49.9	50.6	49.9	45.2	41.3
37.5°	34.3	34.3	35.1	29.6	28.0
40°	23.4	23.4	24.2	20.3	19.5
42.5°	17.1	17.1	16.4	14.0	14.0
45°	12.5	12.5	11.7	10.9	10.9
47.5°	10.1	9.3	8.6	8.6	8.6
50°	7.8	7.8	7.0	6.2	7.0
52.5°	6.2	6.2	5.5	5.5	5.5
55°	5.5	4.7	3.9	3.9	4.7
57.5°	3.9	3.9	3.1	3.1	3.9
60°	3.9	3.1	2.3	3.1	3.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.3	1.6	1.6	1.6	1.6
70°	1.6	1.6	0.8	0.8	1.6
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	3.1	2.3	2.3	2.3	2.3
65°	2.3	2.3	1.6	1.6	2.3



(END OF REPORT)