

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: P282441

Luminaire Tested: **LDA2B209730D010 EU2B20NFL259730 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282441  
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: LDA2B209730D010 EU2B20NFL259730 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1345.3 lumens  
Efficiency: N/A  
Efficacy: 65.3 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

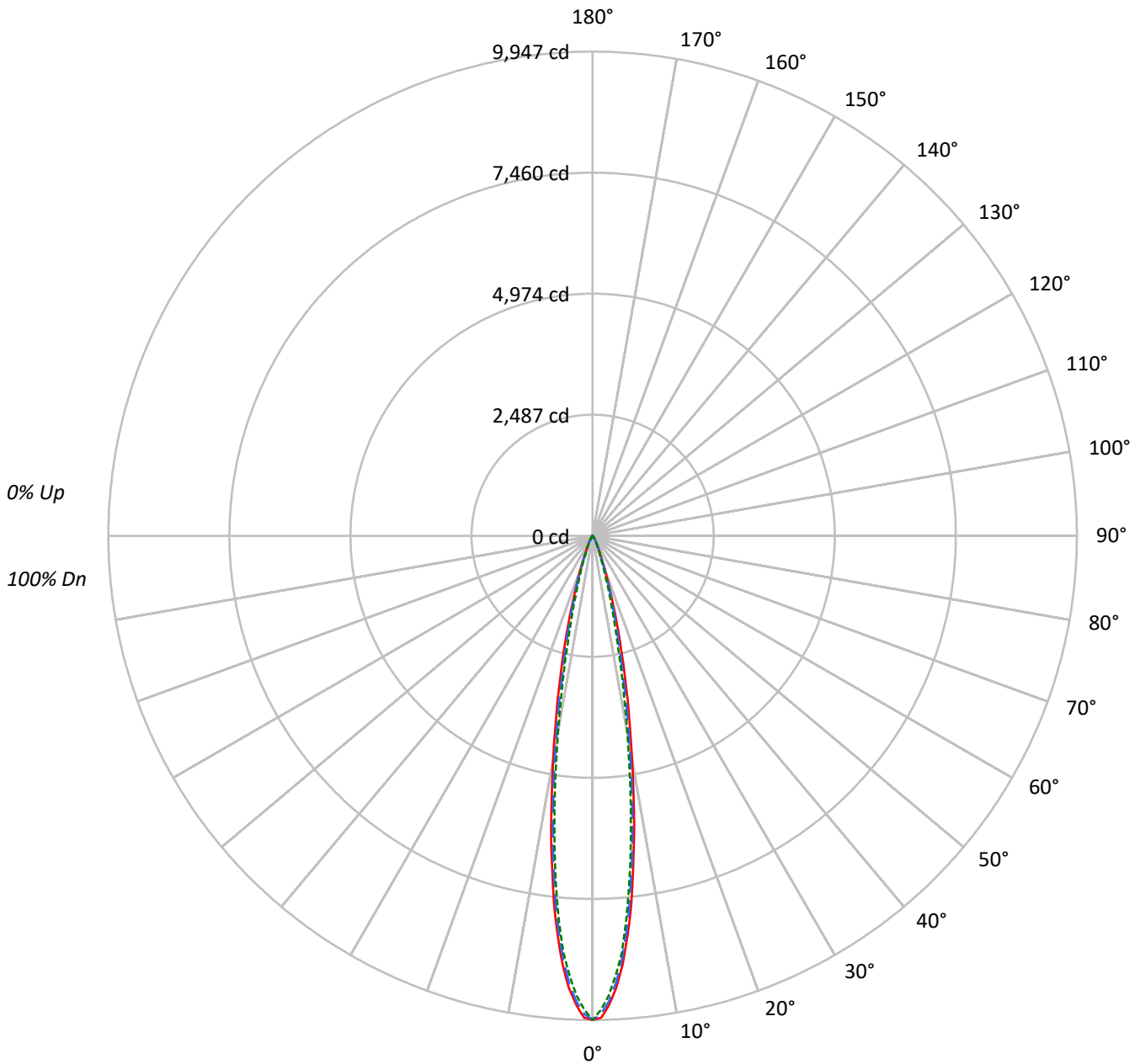
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4907470	4907470	4907470
5°	4083554	4008673	3927749
10°	2339041	2194912	2048477
15°	1040328	923975	774270
20°	377388	354864	281151
25°	144910	135329	116494
30°	62494	58108	51557
35°	29572	29572	24513
40°	14813	15328	12366
45°	8582	8024	7466
50°	5910	5296	5296
55°	4645	3269	3957
60°	3750	2269	3059
65°	2685	1751	2685
70°	2164	1154	2164
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	647.0	48.1
10°-20°	523.5	38.9
20°-30°	126.2	9.4
30°-40°	32.2	2.4
40°-50°	9.6	0.7
50°-60°	4.1	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°	1296.7	96.4
0°-40°	1328.9	98.8
0°-60°	1342.6	99.8
0°-90°	1345.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1345.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9947	9947	9947	9947	9947	
5°	8246	8170	8094	8024	7931	667
15°	2037	1988	1809	1630	1516	581
25°	266	268	249	226	214	137
35°	49	50	49	44	41	34
45°	12	12	12	11	11	10
55°	5	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	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9947.0	9947.0	9947.0	9947.0	9947.0
1°	9902.5	9833.5	9825.1	9868.0	9741.4
2°	9649.4	9600.3	9571.9	9597.2	9453.8
3°	9301.9	9254.3	9202.9	9203.7	9043.3
4°	8828.5	8790.9	8704.2	8678.2	8585.3
5°	8245.5	8169.5	8094.3	8023.8	7930.9
6°	7601.1	7502.9	7395.5	7290.4	7195.2
7°	6843.1	6777.9	6636.0	6492.5	6412.0
8°	6130.4	6025.3	5859.6	5680.1	5611.8
9°	5364.0	5288.8	5098.6	4889.9	4821.6
10°	4669.0	4590.7	4381.3	4148.8	4089.0
11°	4016.9	3943.2	3725.3	3481.4	3417.7
12°	3465.3	3360.9	3110.8	2899.1	2837.0
13°	2916.0	2844.6	2607.6	2398.2	2277.7
14°	2448.8	2389.7	2174.9	1990.8	1863.4
15°	2036.8	1988.5	1809.0	1629.5	1515.9
16°	1670.9	1641.0	1499.0	1325.7	1232.8
17°	1355.6	1328.0	1237.4	1077.9	999.6
18°	1094.7	1090.9	1015.7	877.6	807.8
19°	900.6	899.1	830.1	714.2	656.7
20°	718.8	728.8	675.9	574.6	535.5
21°	586.1	591.5	549.3	472.6	437.3
22°	477.2	481.0	453.4	390.5	371.3
23°	391.3	393.6	370.5	323.7	306.9
24°	322.2	323.7	303.0	270.0	255.5
25°	266.2	267.7	248.6	225.5	214.0
26°	220.9	222.5	205.6	189.5	178.0
27°	183.4	186.4	169.5	159.6	147.3
28°	156.5	157.3	141.9	135.8	124.3
29°	128.1	132.7	119.7	114.3	105.9
30°	109.7	112.0	102.0	98.2	90.5
32.5°	72.9	74.4	69.8	66.7	60.6
35°	49.1	49.9	49.1	44.5	40.7
37.5°	33.8	33.8	34.5	29.2	27.6
40°	23.0	23.0	23.8	19.9	19.2
42.5°	16.9	16.9	16.1	13.8	13.8
45°	12.3	12.3	11.5	10.7	10.7
47.5°	10.0	9.2	8.4	8.4	8.4
50°	7.7	7.7	6.9	6.1	6.9
52.5°	6.1	6.1	5.4	5.4	5.4
55°	5.4	4.6	3.8	3.8	4.6
57.5°	3.8	3.8	3.1	3.1	3.8
60°	3.8	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	1.5	1.5	1.5	1.5
70°	1.5	1.5	0.8	0.8	1.5
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	1.5	1.5	2.3



(END OF REPORT)