

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: P282442

Luminaire Tested: **LDA2B209730D010 EU2B20NFL259730 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282442  
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 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1346.0 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

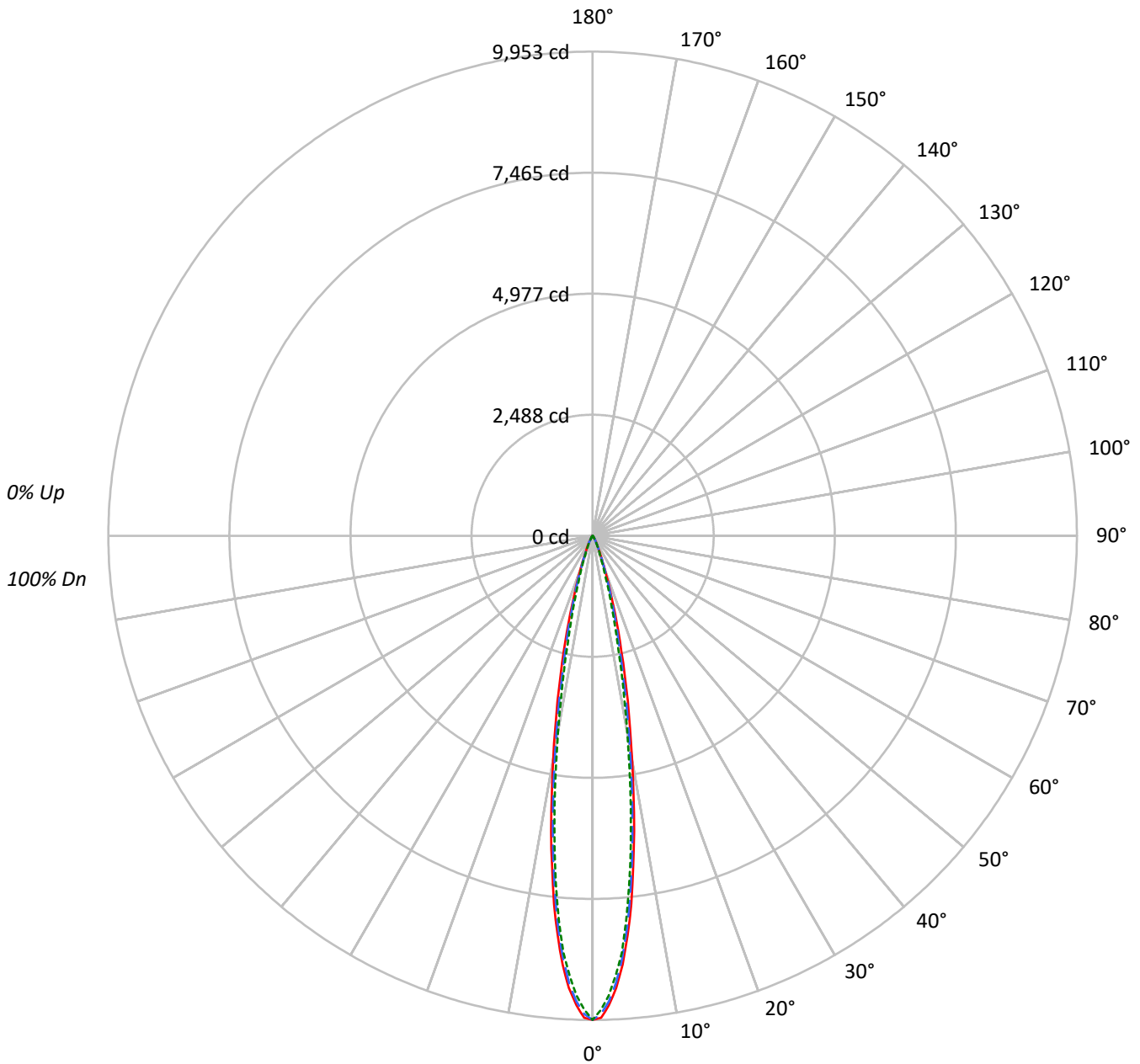
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4910282	4910282	4910282
5°	4085881	4011000	3930027
10°	2340344	2196164	2049630
15°	1040941	924486	774729
20°	377598	355074	281308
25°	145019	135383	116603
30°	62551	58165	51613
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°	647.3	48.1
10°-20°	523.8	38.9
20°-30°	126.3	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°	1297.5	96.4
0°-40°	1329.7	98.8
0°-60°	1343.4	99.8
0°-90°	1346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1346.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9953	9953	9953	9953	9953	
5°	8250	8174	8099	8028	7936	667
15°	2038	1990	1810	1630	1517	581
25°	266	268	249	226	214	138
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9952.7	9952.7	9952.7	9952.7	9952.7
1°	9908.2	9839.1	9830.7	9873.6	9747.0
2°	9654.9	9605.8	9577.4	9602.7	9459.1
3°	9307.2	9259.6	9208.1	9208.9	9048.5
4°	8833.5	8795.9	8709.2	8683.1	8590.2
5°	8250.2	8174.2	8099.0	8028.3	7935.5
6°	7605.4	7507.1	7399.7	7294.5	7199.3
7°	6847.0	6781.8	6639.7	6496.2	6415.6
8°	6133.9	6028.7	5862.9	5683.3	5615.0
9°	5367.1	5291.8	5101.5	4892.7	4824.4
10°	4671.6	4593.3	4383.8	4151.2	4091.3
11°	4019.2	3945.5	3727.5	3483.4	3419.7
12°	3467.3	3362.9	3112.6	2900.8	2838.6
13°	2917.7	2846.3	2609.1	2399.5	2279.0
14°	2450.2	2391.1	2176.1	1991.9	1864.5
15°	2038.0	1989.6	1810.0	1630.4	1516.8
16°	1671.8	1641.9	1499.9	1326.4	1233.5
17°	1356.4	1328.7	1238.1	1078.5	1000.2
18°	1095.4	1091.5	1016.3	878.1	808.3
19°	901.2	899.6	830.5	714.6	657.1
20°	719.2	729.2	676.3	574.9	535.8
21°	586.4	591.8	549.6	472.8	437.5
22°	477.4	481.3	453.7	390.7	371.5
23°	391.5	393.8	370.8	323.9	307.0
24°	322.4	323.9	303.2	270.2	255.6
25°	266.4	267.9	248.7	225.7	214.2
26°	221.1	222.6	205.7	189.6	178.1
27°	183.5	186.5	169.6	159.7	147.4
28°	156.6	157.4	142.0	135.9	124.4
29°	128.2	132.8	119.7	114.4	105.9
30°	109.8	112.1	102.1	98.3	90.6
32.5°	72.9	74.5	69.9	66.8	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	20.0	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



TEST NUMBER: P282442

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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)