

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: P282656

Luminaire Tested: **LDA2B059730D010 EU2B05NFL259730 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282656  
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: LDA2B059730D010 EU2B05NFL259730 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 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: 498.7 lumens  
Efficiency: N/A  
Efficacy: 71.2 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

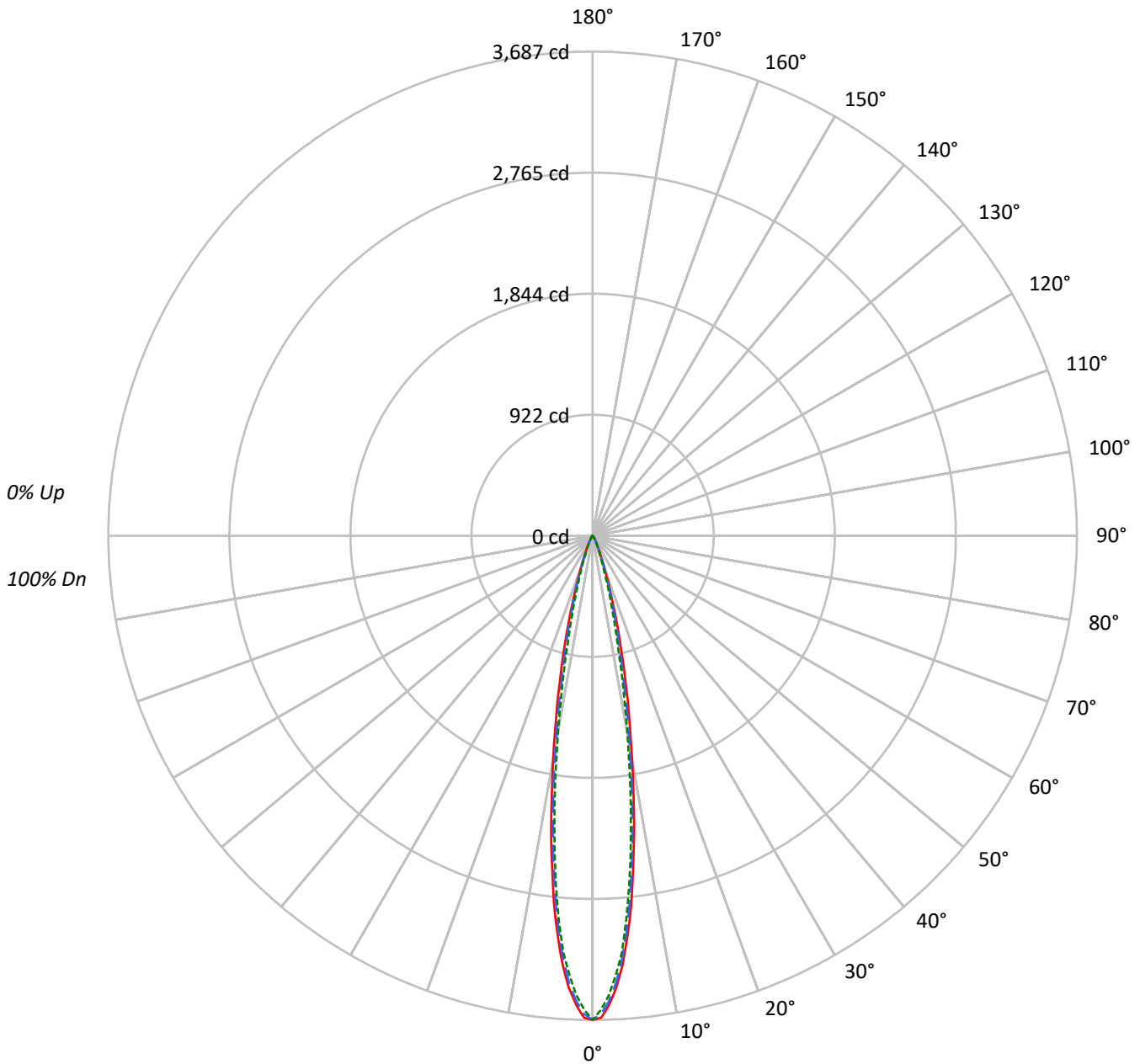
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	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	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84
8	96	91	87	84	96	90	87	84	89	86	84	88	86	84	88	85	83	83
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79

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

	0°	45°	90°
0°	1818976	1818976	1818976
5°	1513572	1485838	1455826
10°	866983	813530	759274
15°	385628	342468	286999
20°	139867	131519	104217
25°	53729	50136	43168
30°	23186	21534	19141
35°	10962	10962	9094
40°	5474	5668	4573
45°	3140	3000	2791
50°	2149	1996	1996
55°	1720	1204	1462
60°	1381	888	1085
65°	1051	700	1051
70°	865	433	865
75°	572	572	572
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.8	48.1
10°-20°	194.1	38.9
20°-30°	46.8	9.4
30°-40°	11.9	2.4
40°-50°	3.6	0.7
50°-60°	1.5	0.3
60°-70°	0.8	0.2
70°-80°	0.3	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°	480.6	96.4
0°-40°	492.6	98.8
0°-60°	497.6	99.8
0°-90°	498.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	498.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3687	3687	3687	3687	3687	
5°	3056	3028	3000	2974	2940	247
15°	755	737	670	604	562	215
25°	99	99	92	84	79	51
35°	18	18	18	16	15	13
45°	4	4	4	4	4	4
55°	2	2	1	1	2	2
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
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°	3686.9	3686.9	3686.9	3686.9	3686.9
1°	3670.4	3644.8	3641.7	3657.6	3610.7
2°	3576.6	3558.4	3547.9	3557.3	3504.1
3°	3447.8	3430.1	3411.1	3411.4	3351.9
4°	3272.3	3258.4	3226.3	3216.6	3182.2
5°	3056.2	3028.1	3000.2	2974.0	2939.6
6°	2817.4	2781.0	2741.2	2702.2	2666.9
7°	2536.4	2512.3	2459.7	2406.5	2376.6
8°	2272.3	2233.3	2171.9	2105.3	2080.0
9°	1988.2	1960.3	1889.8	1812.5	1787.2
10°	1730.6	1701.6	1623.9	1537.8	1515.6
11°	1488.9	1461.6	1380.8	1290.4	1266.8
12°	1284.4	1245.7	1153.1	1074.6	1051.5
13°	1080.8	1054.4	966.5	888.9	844.2
14°	907.7	885.8	806.1	737.9	690.7
15°	755.0	737.0	670.5	604.0	561.9
16°	619.3	608.2	555.6	491.4	457.0
17°	502.5	492.2	458.7	399.5	370.5
18°	405.8	404.3	376.5	325.3	299.4
19°	333.8	333.3	307.7	264.7	243.4
20°	266.4	270.1	250.5	213.0	198.5
21°	217.2	219.2	203.6	175.2	162.1
22°	176.9	178.3	168.1	144.7	137.6
23°	145.0	145.9	137.3	120.0	113.7
24°	119.4	120.0	112.3	100.1	94.7
25°	98.7	99.2	92.1	83.6	79.3
26°	81.9	82.5	76.2	70.2	66.0
27°	68.0	69.1	62.8	59.1	54.6
28°	58.0	58.3	52.6	50.3	46.1
29°	47.5	49.2	44.4	42.4	39.2
30°	40.7	41.5	37.8	36.4	33.6
32.5°	27.0	27.6	25.9	24.7	22.5
35°	18.2	18.5	18.2	16.5	15.1
37.5°	12.5	12.5	12.8	10.8	10.2
40°	8.5	8.5	8.8	7.4	7.1
42.5°	6.3	6.3	6.0	5.1	5.1
45°	4.5	4.5	4.3	4.0	4.0
47.5°	3.7	3.4	3.1	3.1	3.1
50°	2.8	2.8	2.6	2.3	2.6
52.5°	2.3	2.3	2.0	2.0	2.0
55°	2.0	1.7	1.4	1.4	1.7
57.5°	1.4	1.4	1.1	1.1	1.4
60°	1.4	1.1	0.9	1.1	1.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	0.9	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.3	0.3	0.6
72.5°	0.3	0.3	0.3	0.3	0.3
75°	0.3	0.3	0.3	0.3	0.3
77.5°	0.3	0.3	0.0	0.0	0.3
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°	1.1	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.6	0.6	0.9



(END OF REPORT)