

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: P281778

Luminaire Tested: **LDA2B059730D010 EU2B05SP159730 2LBALSQC1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281778  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B059730D010 EU2B05SP159730 2LBALSQC1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 589.6 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

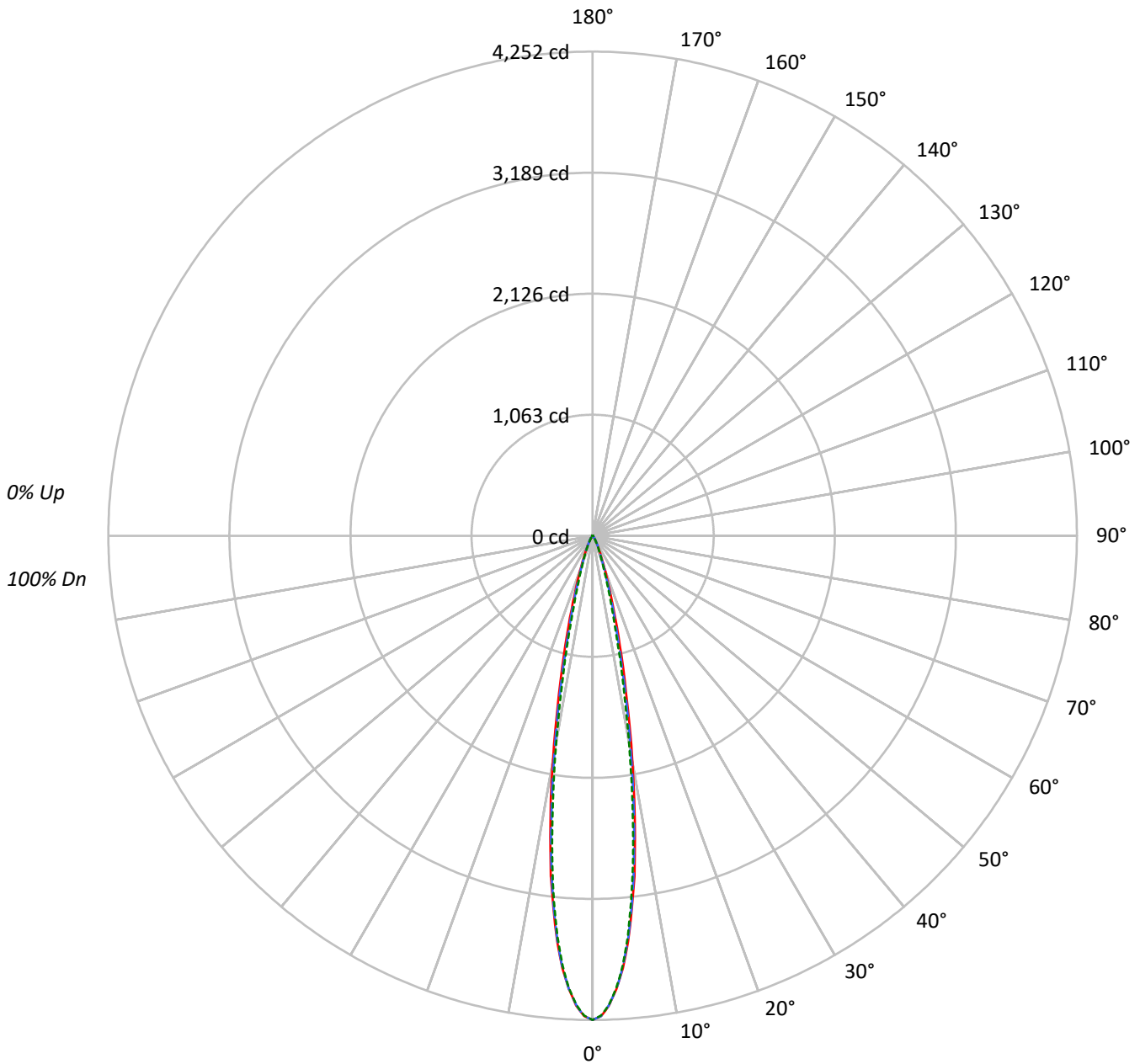
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2097922	2097922	2097922
5°	1772536	1763077	1750052
10°	1008909	964473	915427
15°	417806	370050	326022
20°	158925	139184	127423
25°	70223	67447	59989
30°	32472	35890	28598
35°	17105	20116	16021
40°	7471	8630	5023
45°	2930	2302	3349
50°	1382	1612	2303
55°	0	1032	0
60°	0	0	592
65°	0	0	0
70°	0	433	0
75°	0	0	0
80°	1705	0	0
85°	16982	15284	6793



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.3	48.2
10°-20°	217.4	36.9
20°-30°	60.4	10.3
30°-40°	19.6	3.3
40°-50°	4.3	0.7
50°-60°	1.3	0.2
60°-70°	0.8	0.1
70°-80°	0.5	0.1
80°-90°	1.0	0.2
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°	562.1	95.3
0°-40°	581.8	98.7
0°-60°	587.4	99.6
0°-90°	589.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	589.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4252	4252	4252	4252	4252	
5°	3579	3553	3560	3533	3534	289
15°	818	790	724	669	638	239
25°	129	130	124	117	110	65
35°	28	31	33	25	27	19
45°	4	6	3	3	5	4
55°	0	2	1	1	0	1
65°	0	1	0	0	0	1
75°	0	0	0	1	0	0
85°	3	2	3	2	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4252.3	4252.3	4252.3	4252.3	4252.3
1°	4219.7	4203.9	4219.2	4210.2	4215.3
2°	4128.1	4108.4	4124.2	4111.7	4122.1
3°	3985.4	3970.2	3984.2	3968.4	3976.7
4°	3806.6	3784.5	3798.5	3777.3	3782.4
5°	3579.1	3552.8	3560.0	3533.4	3533.7
6°	3292.5	3274.3	3278.5	3237.0	3234.0
7°	3012.2	2969.2	2964.7	2917.3	2908.0
8°	2671.9	2632.8	2619.9	2564.1	2544.4
9°	2345.6	2296.9	2270.6	2205.9	2182.9
10°	2013.9	1964.6	1925.2	1852.1	1827.3
11°	1707.0	1662.5	1613.6	1535.3	1511.2
12°	1422.2	1387.3	1333.5	1258.0	1232.6
13°	1189.6	1149.3	1091.7	1021.6	999.8
14°	988.1	944.9	887.2	827.2	784.8
15°	818.0	789.6	724.5	668.7	638.3
16°	668.4	644.2	588.1	539.7	518.3
17°	548.1	528.7	480.9	443.0	425.1
18°	452.3	428.1	390.5	365.7	351.7
19°	366.9	348.1	320.6	301.5	287.5
20°	302.7	287.2	265.1	248.1	242.7
22.5°	195.5	192.9	178.5	169.3	164.8
25°	129.0	130.5	123.9	116.7	110.2
26°	110.2	111.1	105.1	100.9	92.5
27°	94.3	94.6	94.6	86.9	78.8
28°	77.0	80.3	77.3	73.7	66.0
29°	66.0	70.2	68.7	65.1	57.6
30°	57.0	60.0	63.0	57.3	50.2
32.5°	40.0	42.7	46.0	43.0	37.0
35°	28.4	30.7	33.4	25.4	26.6
37.5°	19.4	23.6	22.7	20.6	17.6
40°	11.6	12.2	13.4	14.3	7.8
42.5°	8.4	9.9	9.0	10.2	3.6
45°	4.2	6.0	3.3	3.3	4.8
47.5°	3.0	5.1	1.8	1.8	0.6
50°	1.8	3.9	2.1	0.9	3.0
52.5°	3.0	3.6	2.4	2.7	0.6
55°	0.0	1.8	1.2	0.6	0.0
57.5°	1.2	2.1	1.2	0.6	1.2
60°	0.0	0.0	0.0	0.3	0.6
62.5°	0.0	0.6	0.0	0.9	1.2
65°	0.0	1.2	0.0	0.0	0.0
67.5°	1.8	2.1	1.2	2.4	3.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.6	0.0
77.5°	0.0	3.0	0.9	0.9	1.2
80°	0.6	0.0	0.0	0.3	0.0
82.5°	0.0	2.4	0.3	1.2	1.8
85°	3.0	1.5	2.7	1.5	1.2
87.5°	0.0	0.3	0.6	0.3	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	0.3	0.3	0.0
72.5°	0.6	0.0	0.0	0.0	0.0



(END OF REPORT)