

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: **LDA2B059727D010 EU2B05SP159727 2LBALSQC1MMS**

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: LDA2B059727D010 EU2B05SP159727 2LBALSQC1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 554.0 lumens  
Efficiency: N/A  
Efficacy: 79.1 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

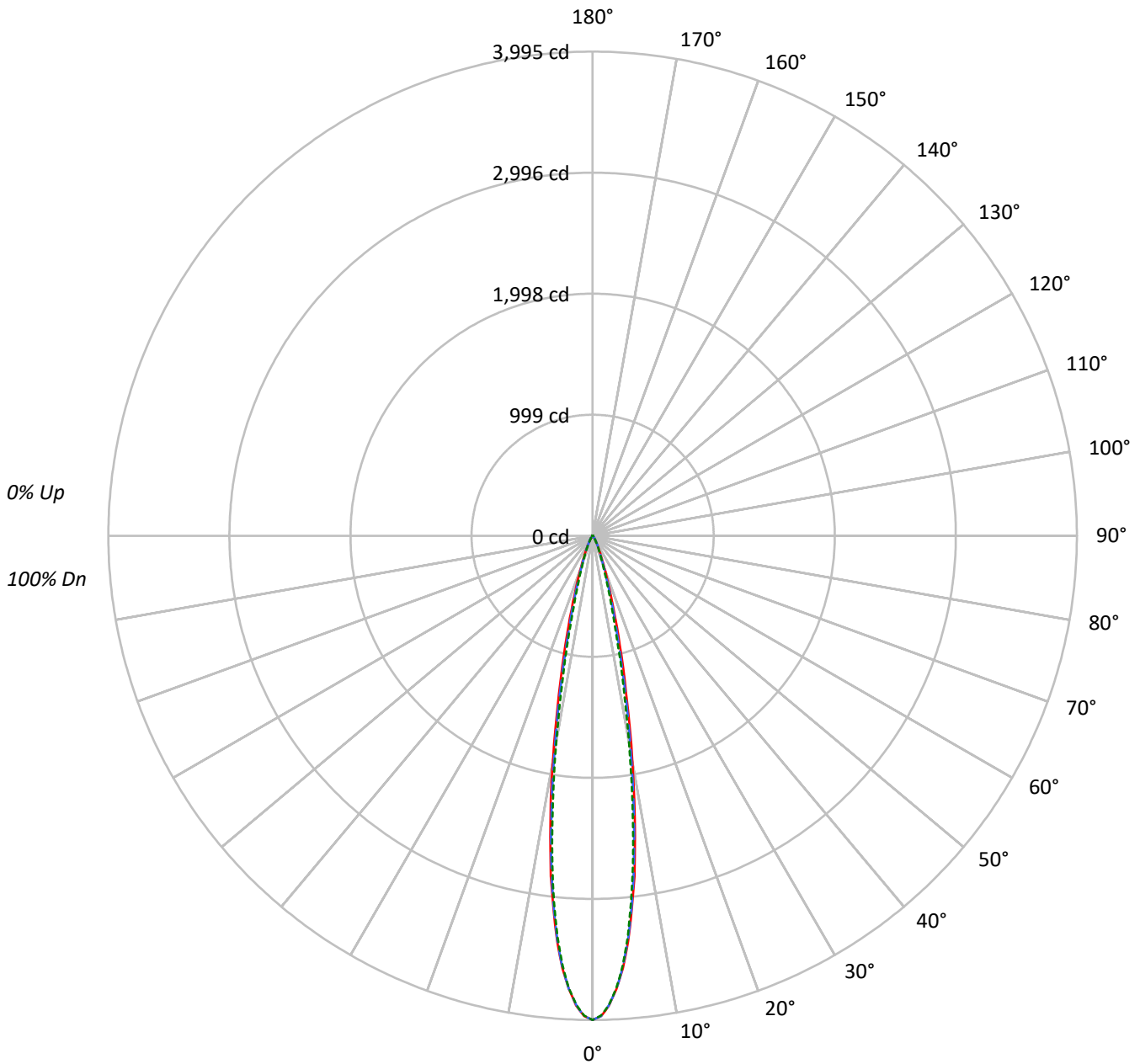
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1971178	1971178	1971178
5°	1665464	1656550	1644366
10°	947941	906209	860120
15°	392575	347729	306306
20°	149317	130784	119706
25°	65977	63364	56342
30°	30535	33725	26832
35°	16021	18912	15057
40°	7020	8115	4701
45°	2721	2163	3140
50°	1305	1535	2149
55°	0	946	0
60°	0	0	592
65°	0	0	0
70°	0	433	0
75°	0	0	0
80°	1705	0	0
85°	15850	14152	6227



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.1	48.2
10°-20°	204.2	36.9
20°-30°	56.8	10.3
30°-40°	18.5	3.3
40°-50°	4.1	0.7
50°-60°	1.2	0.2
60°-70°	0.7	0.1
70°-80°	0.4	0.1
80°-90°	0.9	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°	528.2	95.3
0°-40°	546.6	98.7
0°-60°	551.9	99.6
0°-90°	554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	554.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3995	3995	3995	3995	3995	
5°	3363	3338	3345	3320	3320	272
15°	769	742	681	628	600	224
25°	121	123	116	110	104	61
35°	27	29	31	24	25	18
45°	4	6	3	3	4	4
55°	0	2	1	1	0	1
65°	0	1	0	0	0	1
75°	0	0	0	1	0	0
85°	3	1	2	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3995.4	3995.4	3995.4	3995.4	3995.4
1°	3964.8	3950.0	3964.3	3955.9	3960.6
2°	3878.7	3860.2	3875.1	3863.3	3873.1
3°	3744.7	3730.3	3743.5	3728.7	3736.5
4°	3576.6	3555.9	3569.1	3549.1	3553.9
5°	3362.9	3338.2	3344.9	3320.0	3320.3
6°	3093.6	3076.5	3080.4	3041.4	3038.6
7°	2830.2	2789.8	2785.6	2741.0	2732.3
8°	2510.5	2473.7	2461.7	2409.2	2390.7
9°	2203.9	2158.2	2133.5	2072.6	2051.0
10°	1892.2	1846.0	1808.9	1740.2	1716.9
11°	1603.9	1562.1	1516.1	1442.6	1419.9
12°	1336.3	1303.5	1253.0	1182.0	1158.2
13°	1117.8	1079.9	1025.8	959.9	939.4
14°	928.4	887.8	833.6	777.3	737.4
15°	768.6	741.9	680.8	628.3	599.7
16°	628.0	605.3	552.6	507.1	486.9
17°	515.0	496.8	451.9	416.3	399.4
18°	425.0	402.2	366.9	343.6	330.4
19°	344.7	327.1	301.3	283.3	270.1
20°	284.4	269.8	249.1	233.1	228.0
22.5°	183.7	181.2	167.7	159.0	154.8
25°	121.2	122.6	116.4	109.7	103.5
26°	103.5	104.3	98.7	94.8	87.0
27°	88.6	88.9	88.9	81.6	74.1
28°	72.4	75.5	72.6	69.3	62.0
29°	62.0	65.9	64.5	61.1	54.1
30°	53.6	56.4	59.2	53.9	47.1
32.5°	37.6	40.1	43.2	40.4	34.8
35°	26.6	28.9	31.4	23.8	25.0
37.5°	18.2	22.2	21.3	19.4	16.5
40°	10.9	11.5	12.6	13.5	7.3
42.5°	7.9	9.3	8.4	9.5	3.4
45°	3.9	5.6	3.1	3.1	4.5
47.5°	2.8	4.8	1.7	1.7	0.6
50°	1.7	3.6	2.0	0.8	2.8
52.5°	2.8	3.4	2.2	2.5	0.6
55°	0.0	1.7	1.1	0.6	0.0
57.5°	1.1	2.0	1.1	0.6	1.1
60°	0.0	0.0	0.0	0.3	0.6
62.5°	0.0	0.6	0.0	0.8	1.1
65°	0.0	1.1	0.0	0.0	0.0
67.5°	1.7	2.0	1.1	2.2	3.4



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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	2.8	0.8	0.8	1.1
80°	0.6	0.0	0.0	0.3	0.0
82.5°	0.0	2.2	0.3	1.1	1.7
85°	2.8	1.4	2.5	1.4	1.1
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)