

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: P281477

Luminaire Tested: **LDA2B059727D010 EU2B05SP159727 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281477  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B059727D010 EU2B05SP159727 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, 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): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

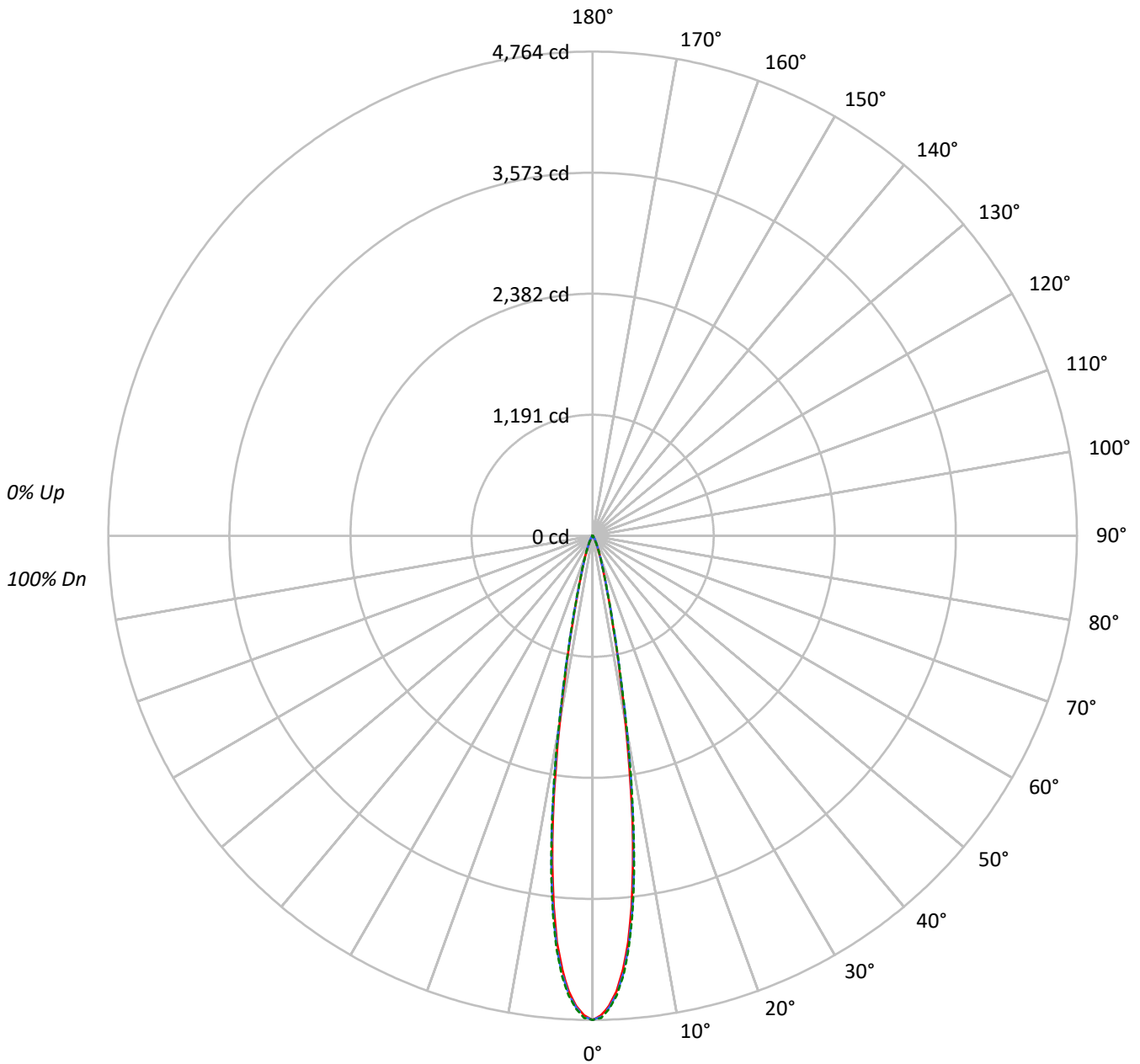
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	98	98	98																
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	96	96	96																
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	94	94	94																
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	92	92	92																
5	105	100	96	94	103	99	96	93	98	95	93	96	94	92	95	93	91	90	90	90	90																
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	89	89	89																
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	87	87	87																
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	86	86	86	86																
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	84	84	84																
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	83	83	83																

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

	0°	45°	90°
0°	2350376	2350376	2350376
5°	1989306	2010106	2018872
10°	930256	965475	967378
15°	272442	276426	276273
20°	109415	109573	109678
25°	48775	53729	49973
30°	20737	28484	18914
35°	9516	13190	8854
40°	3091	5152	2769
45°	0	1884	0
50°	0	0	0
55°	946	430	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	1421	0	0
85°	2830	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	314.8	56.8
10°-20°	178.4	32.2
20°-30°	46.6	8.4
30°-40°	12.0	2.2
40°-50°	1.2	0.2
50°-60°	0.4	0.1
60°-70°	0.1	0.0
70°-80°	0.4	0.1
80°-90°	0.1	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°	539.9	97.5
0°-40°	551.9	99.6
0°-60°	553.5	99.9
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°	4764	4764	4764	4764	4764	
5°	4017	4053	4059	4033	4076	311
15°	533	541	541	535	541	175
25°	90	97	99	94	92	45
35°	16	17	22	15	15	11
45°	0	1	3	0	0	1
55°	1	1	0	0	0	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	1
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4764.0	4764.0	4764.0	4764.0	4764.0
1°	4719.3	4738.0	4732.4	4725.7	4744.5
2°	4628.4	4646.5	4644.9	4636.1	4658.0
3°	4488.2	4513.6	4513.6	4500.5	4527.8
4°	4279.2	4318.0	4321.8	4303.3	4337.3
5°	4016.8	4052.7	4058.8	4033.1	4076.5
6°	3661.3	3710.2	3724.1	3694.4	3738.9
7°	3252.8	3304.1	3325.3	3292.1	3341.9
8°	2812.2	2849.1	2874.5	2836.5	2887.1
9°	2319.1	2372.4	2395.6	2358.7	2407.9
10°	1856.9	1905.8	1927.2	1918.4	1931.0
11°	1442.2	1485.5	1500.0	1487.9	1493.8
12°	1129.2	1146.6	1156.0	1147.9	1151.9
13°	857.4	880.7	885.0	881.5	883.3
14°	669.6	680.8	685.7	684.0	684.8
15°	533.4	540.7	541.2	535.0	540.9
16°	429.6	435.3	437.7	431.2	439.0
17°	352.1	356.6	359.3	352.9	356.1
18°	289.7	293.2	296.9	291.3	296.1
19°	243.2	245.3	245.6	244.0	245.3
20°	208.4	207.3	208.7	205.7	208.9
22.5°	137.2	139.9	143.1	139.6	141.0
25°	89.6	97.1	98.7	94.2	91.8
26°	73.8	83.5	87.7	80.5	72.8
27°	61.3	68.2	73.8	64.2	58.1
28°	53.8	59.7	65.3	56.2	49.0
29°	44.9	50.8	60.5	50.0	45.5
30°	36.4	40.7	50.0	38.0	33.2
32.5°	20.6	24.1	32.4	22.5	18.5
35°	15.8	16.9	21.9	15.0	14.7
37.5°	13.6	12.3	17.1	12.3	9.9
40°	4.8	7.2	8.0	5.4	4.3
42.5°	2.1	2.1	3.5	1.1	1.1
45°	0.0	1.1	2.7	0.3	0.0
47.5°	0.0	0.0	0.5	0.0	0.0
50°	0.0	0.5	0.0	0.0	0.0
52.5°	0.5	0.0	0.0	0.0	0.0
55°	1.1	1.3	0.5	0.3	0.0
57.5°	1.6	1.3	0.5	0.5	0.5
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.5	0.3	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.3	0.0	0.0	0.0
77.5°	2.7	0.5	0.8	0.5	1.1
80°	0.5	0.0	0.0	0.0	0.0
82.5°	1.1	0.0	0.0	0.0	0.0
85°	0.5	0.0	0.0	0.0	0.0
87.5°	0.0	0.3	0.0	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	0.0	0.0	0.0
72.5°	1.1	0.8	0.0	0.0	1.1



(END OF REPORT)