

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: P281460

Luminaire Tested: **LDA2B059027D010 EU2B05SP159027 2LBASQC1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281460  
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: LDA2B059027D010 EU2B05SP159027 2LBASQC1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 615.7 lumens  
Efficiency: N/A  
Efficacy: 88.0 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

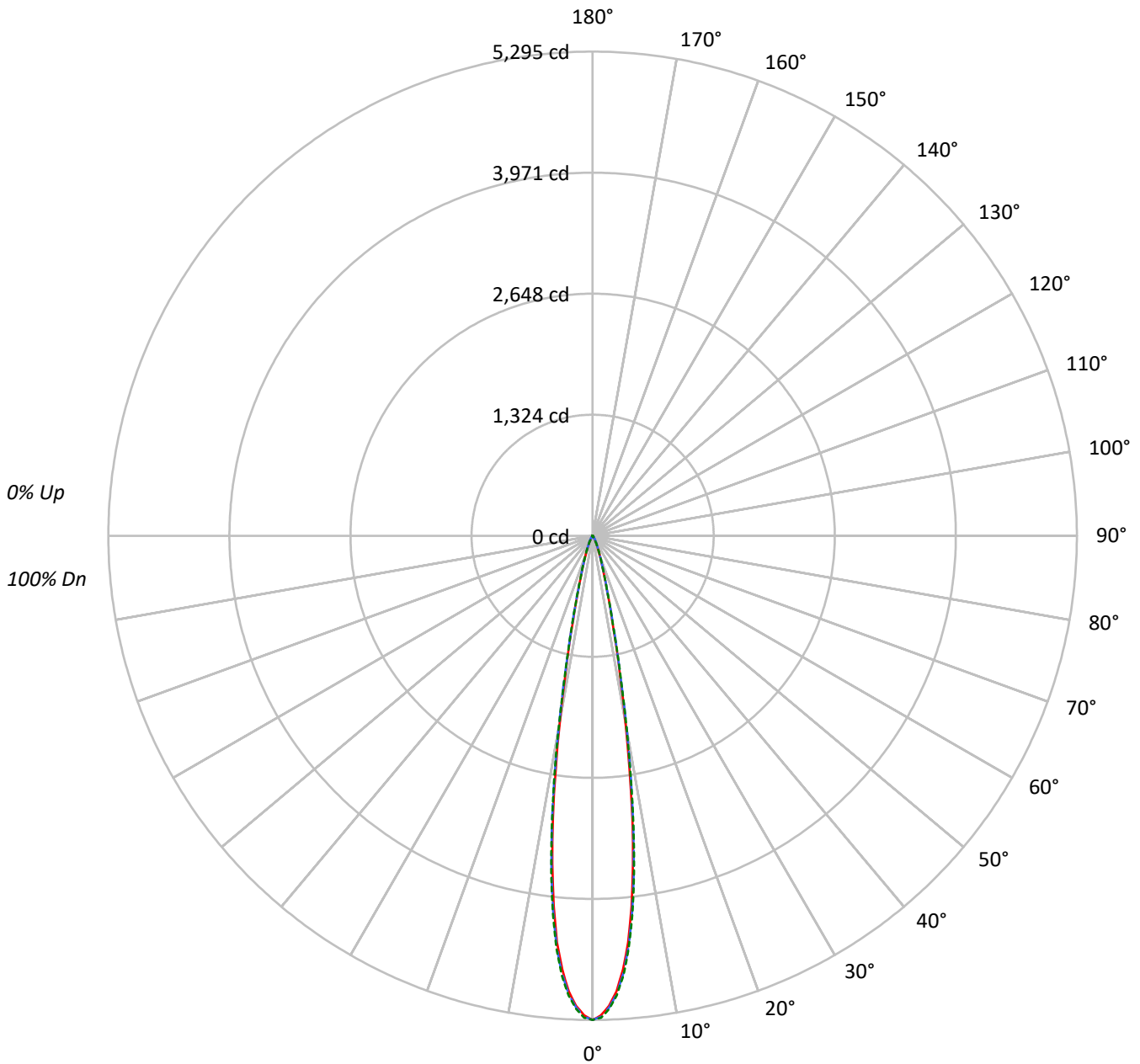
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
1	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	99																		
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96																			
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94																			
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92																			
5	105	100	96	94	103	99	96	93	97	95	93	96	94	92	95	93	91	90																			
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89																			
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87																			
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	86																			
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84																			
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83																			

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

	0°	45°	90°
0°	2612153	2612153	2612153
5°	2210879	2234007	2243714
10°	1033857	1073033	1075087
15°	302833	307226	307072
20°	121596	121753	121911
25°	54219	59717	55525
30°	23015	31674	21021
35°	10540	14696	9877
40°	3478	5732	3091
45°	0	2093	0
50°	0	0	0
55°	1032	516	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	1705	0	0
85°	3396	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	349.9	56.8
10°-20°	198.3	32.2
20°-30°	51.8	8.4
30°-40°	13.4	2.2
40°-50°	1.3	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°	600.0	97.4
0°-40°	613.4	99.6
0°-60°	615.1	99.9
0°-90°	615.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	615.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5295	5295	5295	5295	5295	
5°	4464	4504	4511	4482	4530	345
15°	593	601	602	595	601	195
25°	100	108	110	105	102	50
35°	18	19	24	17	16	12
45°	0	1	3	0	0	1
55°	1	2	1	0	0	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	1
85°	1	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°	5294.6	5294.6	5294.6	5294.6	5294.6
1°	5245.0	5265.8	5259.6	5252.1	5272.9
2°	5143.9	5164.1	5162.3	5152.5	5176.9
3°	4988.1	5016.3	5016.3	5001.8	5032.1
4°	4755.9	4799.0	4803.2	4782.7	4820.4
5°	4464.2	4504.1	4510.9	4482.4	4530.5
6°	4069.1	4123.5	4139.0	4106.0	4155.3
7°	3615.1	3672.2	3695.7	3658.8	3714.1
8°	3125.4	3166.4	3194.7	3152.5	3208.7
9°	2577.4	2636.6	2662.5	2621.5	2676.2
10°	2063.7	2118.1	2141.9	2132.1	2146.0
11°	1602.8	1651.0	1667.1	1653.7	1660.2
12°	1255.0	1274.3	1284.7	1275.8	1280.3
13°	952.9	978.8	983.5	979.7	981.7
14°	744.2	756.7	762.0	760.2	761.1
15°	592.9	600.9	601.5	594.6	601.2
16°	477.5	483.7	486.4	479.3	487.9
17°	391.3	396.3	399.3	392.2	395.7
18°	322.0	325.9	330.0	323.8	329.1
19°	270.3	272.6	272.9	271.2	272.6
20°	231.6	230.4	231.9	228.6	232.2
22.5°	152.5	155.5	159.1	155.2	156.7
25°	99.6	107.9	109.7	104.7	102.0
26°	82.1	92.8	97.5	89.5	80.9
27°	68.1	75.8	82.1	71.4	64.5
28°	59.8	66.3	72.5	62.4	54.4
29°	49.9	56.5	67.2	55.6	50.5
30°	40.4	45.2	55.6	42.2	36.9
32.5°	22.9	26.8	36.0	25.0	20.5
35°	17.5	18.7	24.4	16.6	16.4
37.5°	15.2	13.7	19.0	13.7	11.0
40°	5.4	8.0	8.9	5.9	4.8
42.5°	2.4	2.4	3.9	1.2	1.2
45°	0.0	1.2	3.0	0.3	0.0
47.5°	0.0	0.0	0.6	0.0	0.0
50°	0.0	0.6	0.0	0.0	0.0
52.5°	0.6	0.0	0.0	0.0	0.0
55°	1.2	1.5	0.6	0.3	0.0
57.5°	1.8	1.5	0.6	0.6	0.6
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°	0.6	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°	3.0	0.6	0.9	0.6	1.2
80°	0.6	0.0	0.0	0.0	0.0
82.5°	1.2	0.0	0.0	0.0	0.0
85°	0.6	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°	1.2	0.9	0.0	0.0	1.2



(END OF REPORT)