

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: P281549

Luminaire Tested: **LDA2B159030D010 EU2B15SP159030 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281549  
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: LDA2B159030D010 EU2B15SP159030 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 1500 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: 1161.2 lumens  
Efficiency: N/A  
Efficacy: 82.4 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

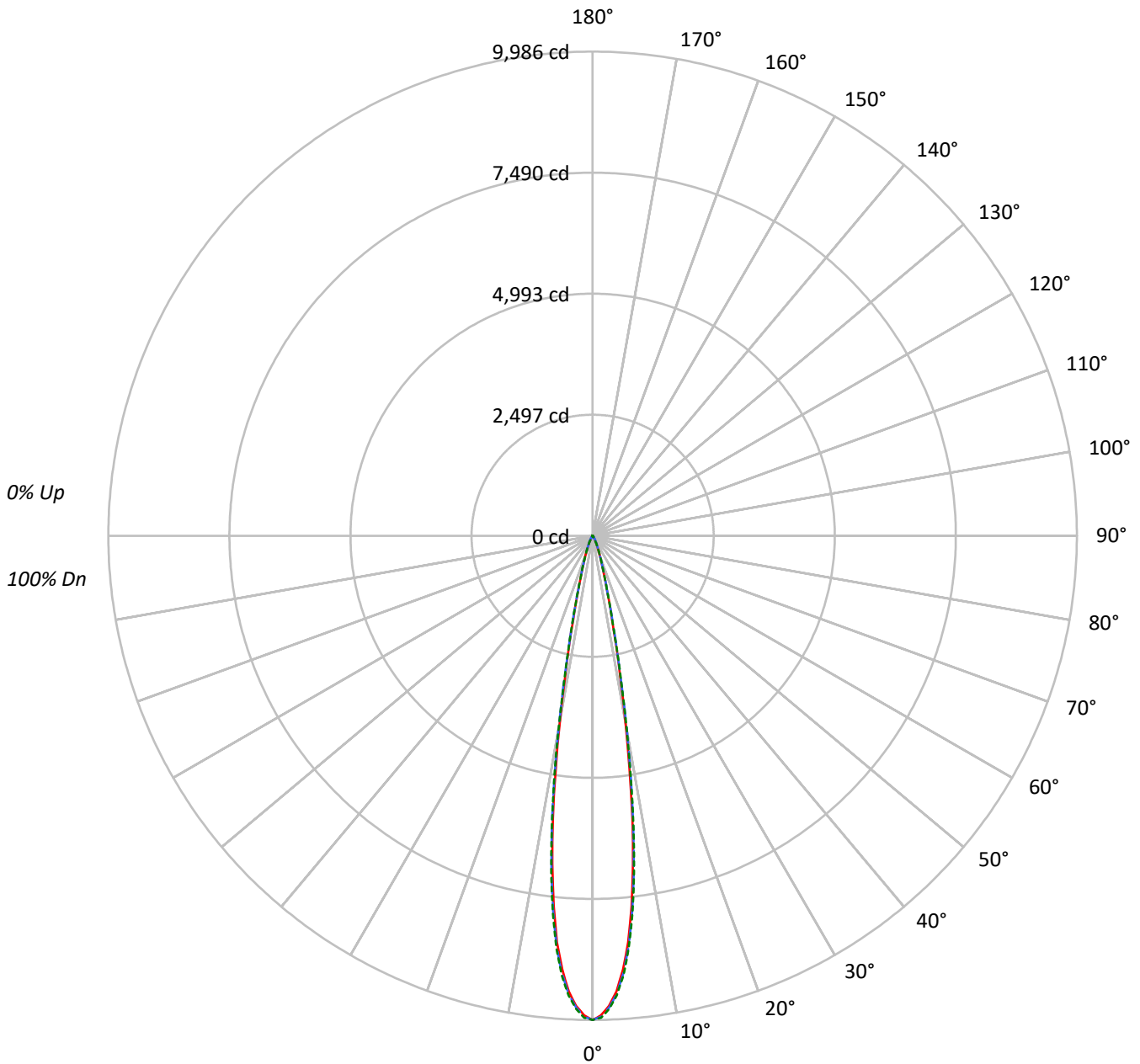
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100													
1	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	97	96						98											
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	95	94						96											
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	93	92						94											
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	91	90						92											
5	105	100	96	94	103	99	96	93	98	95	93	96	94	92	95	93	91	90	89	88						90											
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	88	87						89											
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	86	85						87											
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	85	84	83						86											
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	83	82						84											
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	82	81						83											

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

	0°	45°	90°
0°	4926464	4926464	4926464
5°	4169628	4213259	4231583
10°	1949786	2023679	2027587
15°	571087	579413	579106
20°	229331	229646	229908
25°	102232	112629	104681
30°	43467	59760	39593
35°	19936	27705	18550
40°	6505	10820	5796
45°	0	3907	0
50°	0	0	0
55°	1892	946	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	3125	0	0
85°	6227	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	659.9	56.8
10°-20°	374.0	32.2
20°-30°	97.7	8.4
30°-40°	25.2	2.2
40°-50°	2.5	0.2
50°-60°	0.8	0.1
60°-70°	0.1	0.0
70°-80°	0.8	0.1
80°-90°	0.2	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°	1131.6	97.5
0°-40°	1156.8	99.6
0°-60°	1160.1	99.9
0°-90°	1161.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1161.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9986	9986	9986	9986	9986	
5°	8419	8494	8507	8454	8544	652
15°	1118	1133	1134	1122	1134	367
25°	188	204	207	197	192	93
35°	33	35	46	31	31	23
45°	0	2	6	1	0	2
55°	2	3	1	1	0	2
65°	0	0	0	0	0	1
75°	0	1	0	0	0	2
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°	9985.5	9985.5	9985.5	9985.5	9985.5
1°	9891.8	9931.1	9919.3	9905.3	9944.5
2°	9701.2	9739.3	9735.9	9717.4	9763.4
3°	9407.3	9460.6	9460.6	9433.1	9490.3
4°	8969.4	9050.7	9058.6	9019.9	9091.1
5°	8419.3	8494.5	8507.4	8453.5	8544.4
6°	7674.1	7776.7	7805.9	7743.7	7836.7
7°	6817.9	6925.6	6969.9	6900.3	7004.6
8°	5894.4	5971.8	6025.0	5945.4	6051.4
9°	4861.0	4972.5	5021.3	4943.9	5047.1
10°	3892.0	3994.6	4039.5	4021.0	4047.3
11°	3022.9	3113.7	3144.0	3118.8	3131.1
12°	2366.8	2403.3	2422.9	2406.1	2414.5
13°	1797.1	1845.9	1854.9	1847.6	1851.5
14°	1403.5	1427.1	1437.1	1433.8	1435.5
15°	1118.1	1133.2	1134.4	1121.5	1133.8
16°	900.5	912.3	917.4	903.9	920.2
17°	737.9	747.5	753.1	739.6	746.3
18°	607.3	614.6	622.4	610.6	620.7
19°	509.7	514.2	514.7	511.4	514.2
20°	436.8	434.6	437.4	431.2	437.9
22.5°	287.7	293.3	300.0	292.7	295.5
25°	187.8	203.5	206.9	197.4	192.3
26°	154.8	174.9	183.9	168.8	152.5
27°	128.4	143.0	154.8	134.6	121.7
28°	112.7	125.0	136.8	117.8	102.6
29°	94.2	106.5	126.7	104.9	95.3
30°	76.3	85.2	104.9	79.6	69.5
32.5°	43.2	50.5	67.8	47.1	38.7
35°	33.1	35.3	46.0	31.4	30.8
37.5°	28.6	25.8	35.9	25.8	20.7
40°	10.1	15.1	16.8	11.2	9.0
42.5°	4.5	4.5	7.3	2.2	2.2
45°	0.0	2.2	5.6	0.6	0.0
47.5°	0.0	0.0	1.1	0.0	0.0
50°	0.0	1.1	0.0	0.0	0.0
52.5°	1.1	0.0	0.0	0.0	0.0
55°	2.2	2.8	1.1	0.6	0.0
57.5°	3.4	2.8	1.1	1.1	1.1
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°	1.1	0.6	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.6	0.0	0.0	0.0
77.5°	5.6	1.1	1.7	1.1	2.2
80°	1.1	0.0	0.0	0.0	0.0
82.5°	2.2	0.0	0.0	0.0	0.0
85°	1.1	0.0	0.0	0.0	0.0
87.5°	0.0	0.6	0.0	0.6	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°	2.2	1.7	0.0	0.0	2.2



(END OF REPORT)