

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: P281470

Luminaire Tested: **LDA2B059040D010 EU2B05SP159040 2LBASQC1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281470  
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: LDA2B059040D010 EU2B05SP159040 2LBASQC1MB  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 681.1 lumens  
Efficiency: N/A  
Efficacy: 97.3 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

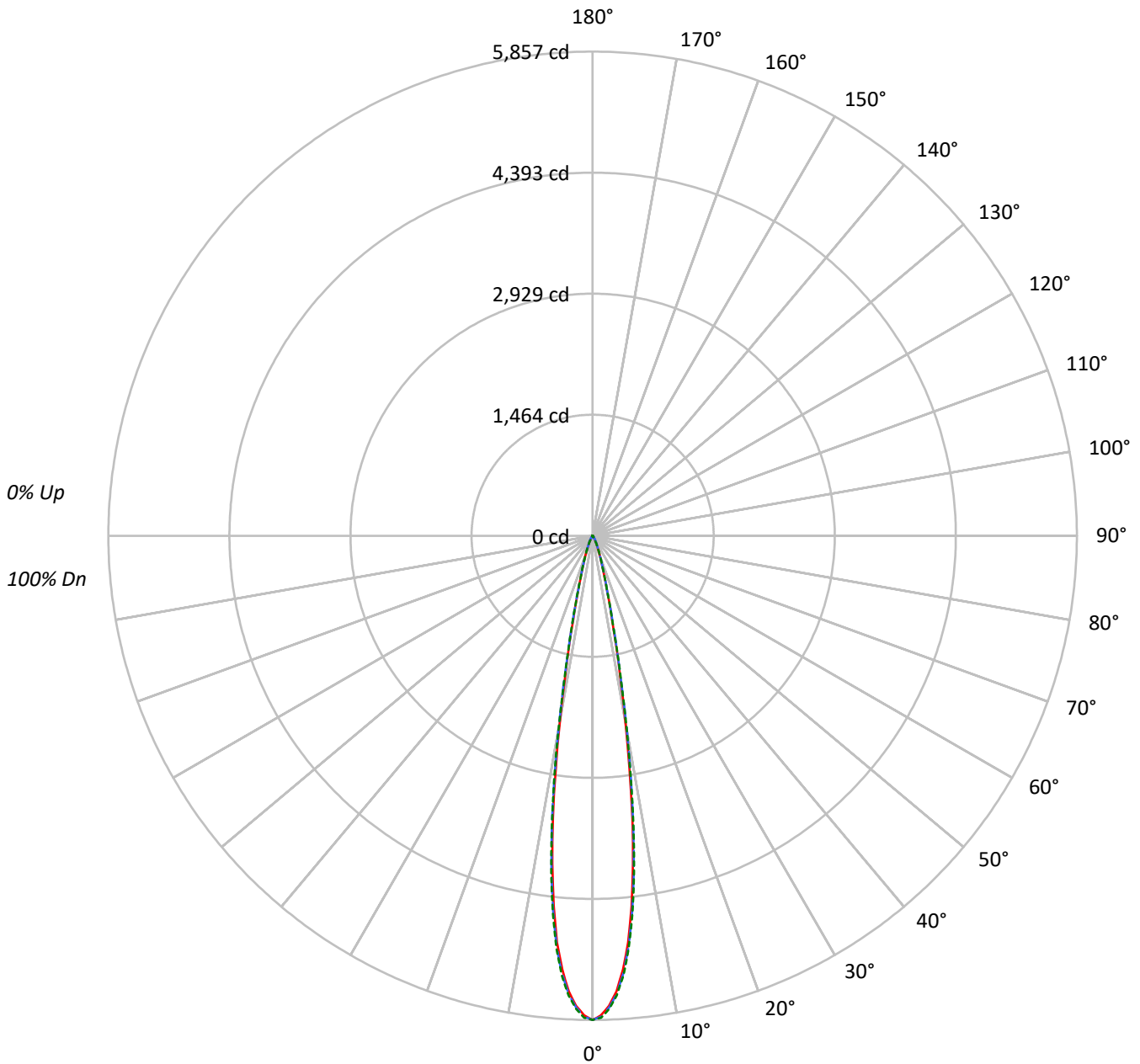
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281470

CATALOG NUMBER: LDA2B059040D010 EU2B05SP159040 2LBASQC1MB

### Luminous Intensity Polar Plot





TEST NUMBER: P281470

CATALOG NUMBER: LDA2B059040D010 EU2B05SP159040 2LBASQC1MB

**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	97	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°	2889423	2889423	2889423
5°	2445576	2471131	2481878
10°	1143570	1186904	1189209
15°	334960	339812	339659
20°	134511	134669	134879
25°	59989	66086	61404
30°	25465	35036	23243
35°	11684	16262	10901
40°	3800	6376	3413
45°	0	2302	0
50°	0	0	0
55°	1118	602	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	1989	0	0
85°	3962	0	0



TEST NUMBER: P281470

CATALOG NUMBER: LDA2B059040D010 EU2B05SP159040 2LBASQC1MB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	387.0	56.8
10°-20°	219.4	32.2
20°-30°	57.3	8.4
30°-40°	14.8	2.2
40°-50°	1.5	0.2
50°-60°	0.5	0.1
60°-70°	0.1	0.0
70°-80°	0.5	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°	663.7	97.5
0°-40°	678.5	99.6
0°-60°	680.4	99.9
0°-90°	681.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	681.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5857	5857	5857	5857	5857	
5°	4938	4982	4990	4958	5011	382
15°	656	665	665	658	665	215
25°	110	119	121	116	113	55
35°	19	21	27	18	18	13
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	



TEST NUMBER: P281470

CATALOG NUMBER: LDA2B059040D010 EU2B05SP159040 2LBASQC1MB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5856.6	5856.6	5856.6	5856.6	5856.6
1°	5801.7	5824.7	5817.8	5809.6	5832.6
2°	5689.9	5712.2	5710.3	5699.4	5726.4
3°	5517.5	5548.8	5548.8	5532.7	5566.2
4°	5260.7	5308.4	5313.0	5290.3	5332.1
5°	4938.1	4982.1	4989.7	4958.1	5011.4
6°	4501.0	4561.2	4578.3	4541.8	4596.4
7°	3998.8	4061.9	4087.9	4047.1	4108.3
8°	3457.1	3502.5	3533.8	3487.1	3549.2
9°	2851.0	2916.5	2945.1	2899.7	2960.2
10°	2282.7	2342.9	2369.2	2358.4	2373.8
11°	1773.0	1826.2	1844.0	1829.2	1836.4
12°	1388.2	1409.6	1421.1	1411.2	1416.1
13°	1054.0	1082.7	1087.9	1083.6	1085.9
14°	823.2	837.0	842.9	840.9	841.9
15°	655.8	664.7	665.3	657.8	665.0
16°	528.2	535.1	538.0	530.1	539.7
17°	432.8	438.4	441.7	433.8	437.7
18°	356.2	360.4	365.1	358.1	364.1
19°	298.9	301.6	301.9	299.9	301.6
20°	256.2	254.9	256.5	252.9	256.9
22.5°	168.7	172.0	175.9	171.7	173.3
25°	110.2	119.4	121.4	115.8	112.8
26°	90.8	102.6	107.9	99.0	89.5
27°	75.3	83.9	90.8	78.9	71.4
28°	66.1	73.3	80.2	69.1	60.2
29°	55.3	62.5	74.3	61.5	55.9
30°	44.7	50.0	61.5	46.7	40.8
32.5°	25.3	29.6	39.8	27.6	22.7
35°	19.4	20.7	27.0	18.4	18.1
37.5°	16.8	15.1	21.0	15.1	12.2
40°	5.9	8.9	9.9	6.6	5.3
42.5°	2.6	2.6	4.3	1.3	1.3
45°	0.0	1.3	3.3	0.3	0.0
47.5°	0.0	0.0	0.7	0.0	0.0
50°	0.0	0.7	0.0	0.0	0.0
52.5°	0.7	0.0	0.0	0.0	0.0
55°	1.3	1.6	0.7	0.3	0.0
57.5°	2.0	1.6	0.7	0.7	0.7
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°	0.7	0.3	0.0	0.0	0.0



TEST NUMBER: P281470

CATALOG NUMBER: LDA2B059040D010 EU2B05SP159040 2LBASQC1MB

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.3	0.0	0.0	0.0
77.5°	3.3	0.7	1.0	0.7	1.3
80°	0.7	0.0	0.0	0.0	0.0
82.5°	1.3	0.0	0.0	0.0	0.0
85°	0.7	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



Report Generated By E9808895 / USPTCWHP6082093







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







70°	0.0	0.0	0.0	0.0	0.0
72.5°	1.3	1.0	0.0	0.0	1.3



(END OF REPORT)