

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: P282561

Luminaire Tested: **LDA2B159035D010 EU2B15SP159035 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282561  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B159035D010 EU2B15SP159035 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1205.5 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

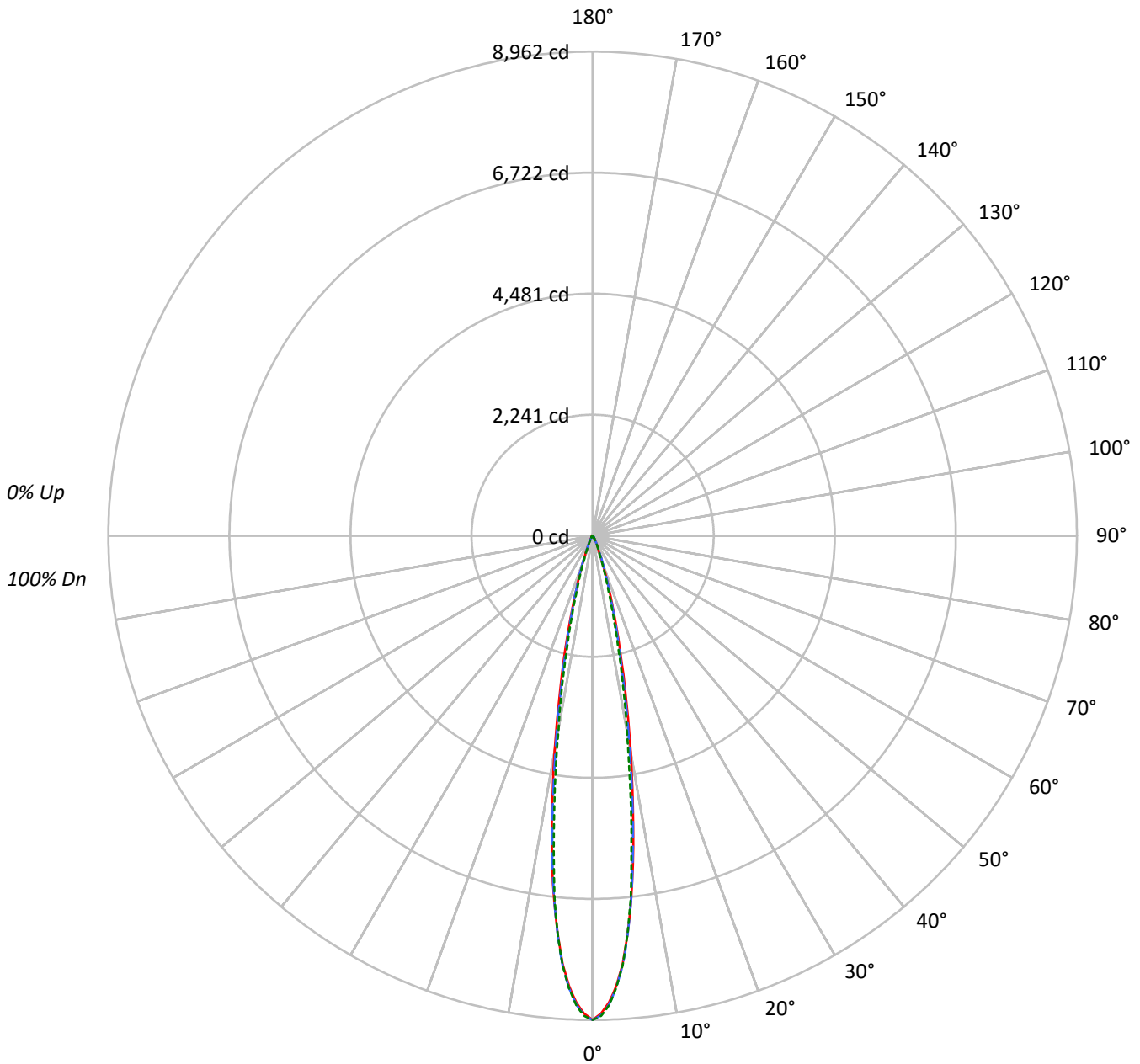
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	98	96	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	96	94	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	94	92	90	89															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	92	89	88	87	92	89	88	87															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	90	88	86	85															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	88	86	84	83															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

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

	0°	45°	90°
0°	4421311	4421311	4421311
5°	3667943	3679829	3665913
10°	2030092	1956749	1822789
15°	821822	786017	697859
20°	275323	291914	236366
25°	104736	105117	99510
30°	46999	46201	44663
35°	22766	20297	16141
40°	15070	19064	13267
45°	3837	6210	5721
50°	1075	1612	2072
55°	9462	8257	12988
60°	13518	10854	17662
65°	6421	16810	15993
70°	5914	4904	5914
75°	2669	6481	18300
80°	31253	42901	38924
85°	0	19246	23209



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	586.9	48.7
10°-20°	444.6	36.9
20°-30°	101.1	8.4
30°-40°	29.9	2.5
40°-50°	10.0	0.8
50°-60°	8.8	0.7
60°-70°	10.5	0.9
70°-80°	6.7	0.6
80°-90°	7.0	0.6
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°	1132.6	94.0
0°-40°	1162.5	96.4
0°-60°	1181.2	98.0
0°-90°	1205.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1205.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8962	8962	8962	8962	8962	
5°	7406	7465	7430	7333	7402	594
15°	1609	1631	1539	1394	1366	468
25°	192	207	193	191	183	101
35°	38	42	34	39	27	30
45°	6	16	9	16	8	8
55°	11	16	10	14	15	5
65°	6	12	14	14	14	6
75°	1	5	3	6	10	3
85°	0	0	3	3	4	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8961.6	8961.6	8961.6	8961.6	8961.6
1°	8846.2	8881.9	8878.5	8864.0	8889.5
2°	8642.7	8686.0	8681.9	8650.3	8695.7
3°	8344.5	8382.9	8376.8	8331.4	8380.9
4°	7945.8	7989.8	7972.6	7904.6	7967.8
5°	7406.3	7464.7	7430.3	7333.4	7402.2
6°	6808.3	6857.8	6803.5	6675.0	6742.4
7°	6138.9	6169.8	6098.4	5933.4	5888.1
8°	5408.3	5448.9	5349.2	5156.8	5107.3
9°	4710.0	4723.8	4602.8	4398.0	4335.5
10°	4052.3	4042.0	3905.9	3698.3	3638.5
11°	3428.9	3415.2	3271.5	3079.8	3099.0
12°	2861.9	2888.7	2721.7	2547.8	2551.2
13°	2395.9	2398.7	2255.0	2089.4	2079.8
14°	1961.5	1987.0	1863.9	1715.5	1688.0
15°	1609.0	1631.0	1538.9	1394.5	1366.3
16°	1288.0	1315.5	1249.5	1118.9	1081.8
17°	1037.1	1072.2	1028.9	919.6	877.0
18°	829.6	856.4	846.1	733.3	698.3
19°	655.0	692.1	694.9	600.7	558.8
20°	524.4	558.1	556.0	483.2	450.2
22.5°	301.0	318.9	319.6	285.2	266.0
25°	192.4	206.9	193.1	191.1	182.8
26°	167.0	178.7	163.6	163.6	156.0
27°	135.4	145.7	131.3	137.5	127.1
28°	114.1	125.1	112.7	111.3	110.0
29°	94.8	105.2	89.3	96.2	92.1
30°	82.5	90.0	81.1	91.4	78.4
32.5°	63.9	70.1	54.3	68.7	51.5
35°	37.8	41.9	33.7	39.2	26.8
37.5°	39.2	40.6	36.4	40.6	37.8
40°	23.4	24.1	29.6	29.6	20.6
42.5°	22.0	21.3	13.1	20.6	16.5
45°	5.5	15.8	8.9	15.8	8.2
47.5°	4.1	5.5	5.5	11.0	11.0
50°	1.4	5.5	2.1	4.1	2.7
52.5°	0.0	13.1	2.7	9.6	8.2
55°	11.0	15.8	9.6	14.4	15.1
57.5°	1.4	11.0	5.5	11.7	8.2
60°	13.7	18.6	11.0	19.9	17.9
62.5°	1.4	12.4	14.4	11.0	9.6
65°	5.5	11.7	14.4	13.7	13.7
67.5°	6.9	11.7	8.9	8.9	12.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.4	4.8	3.4	6.2	9.6
77.5°	1.4	5.5	4.8	11.0	8.2
80°	11.0	12.4	15.1	19.9	13.7
82.5°	9.6	9.6	15.1	11.0	8.2
85°	0.0	0.0	3.4	3.4	4.1
87.5°	0.0	2.7	6.9	5.5	9.6
90°	0.0	0.0	0.0	0.0	0.0



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







70°	4.1	1.4	3.4	3.4	4.1
72.5°	1.4	6.2	5.5	3.4	6.9



(END OF REPORT)