

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: P281725

Luminaire Tested: **LDA2B159050D010 EU2B15SP159050 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281725  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B159050D010 EU2B15SP159050 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1264.8 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

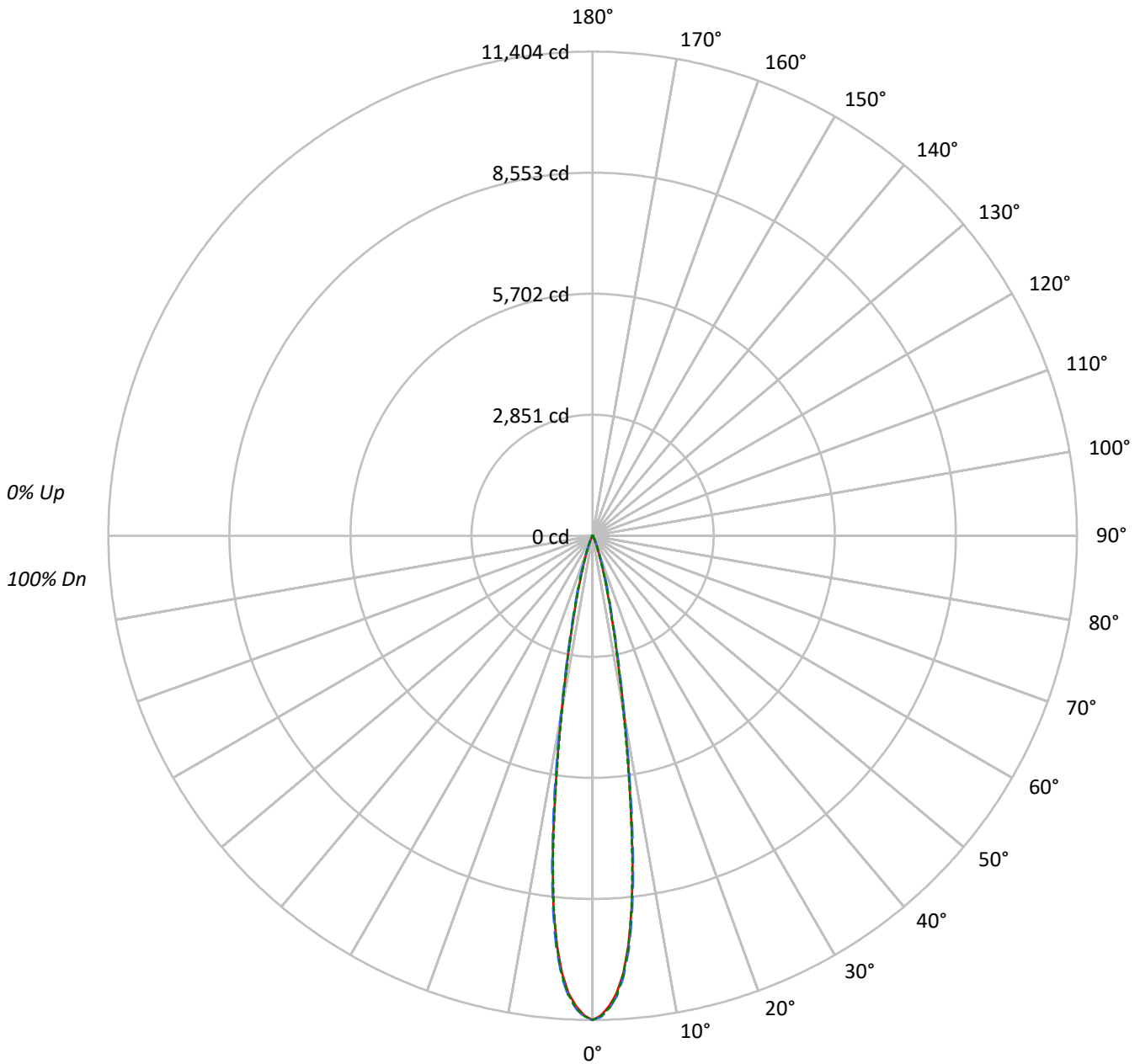
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	5626298	5626298	5626298
5°	4790964	4840835	4800027
10°	2115107	2163501	2065711
15°	641777	736116	651890
20°	192054	256055	214578
25°	74796	73653	78661
30°	33327	30136	31731
35°	6806	5963	5963
40°	0	451	1803
45°	5931	4884	8861
50°	0	1612	5373
55°	0	0	2408
60°	0	691	2763
65°	0	0	1634
70°	0	4039	8078
75°	0	0	0
80°	0	0	0
85°	0	3962	15850



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	739.3	58.4
10°-20°	422.2	33.4
20°-30°	80.1	6.3
30°-40°	14.6	1.2
40°-50°	3.8	0.3
50°-60°	2.9	0.2
60°-70°	0.5	0.0
70°-80°	0.6	0.1
80°-90°	0.9	0.1
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°	1241.6	98.2
0°-40°	1256.2	99.3
0°-60°	1262.8	99.8
0°-90°	1264.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1264.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11404	11404	11404	11404	11404	
5°	9674	9737	9775	9758	9692	735
15°	1256	1366	1441	1354	1276	400
25°	137	148	135	154	144	72
35°	11	14	10	12	10	16
45°	8	13	7	8	13	4
55°	0	1	0	1	3	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	1	1	1	3	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11404.0	11404.0	11404.0	11404.0	11404.0
1°	11296.1	11308.1	11333.5	11359.6	11318.7
2°	11084.7	11113.6	11149.6	11173.5	11129.1
3°	10788.7	10828.9	10867.0	10871.9	10830.3
4°	10331.4	10380.7	10420.9	10415.9	10363.8
5°	9673.9	9737.3	9774.6	9757.7	9692.2
6°	8804.9	8866.2	8914.2	8865.5	8777.4
7°	7722.5	7792.9	7843.7	7760.5	7652.7
8°	6468.0	6566.7	6617.4	6501.2	6390.5
9°	5279.9	5348.2	5399.7	5272.8	5160.0
10°	4222.0	4347.5	4318.6	4220.6	4123.4
11°	3320.7	3434.2	3439.1	3372.8	3277.7
12°	2599.8	2719.6	2749.9	2699.1	2614.6
13°	2054.3	2143.8	2193.8	2141.7	2061.3
14°	1635.0	1714.6	1778.7	1711.1	1630.7
15°	1256.5	1366.5	1441.2	1353.8	1276.3
16°	999.3	1090.2	1179.0	1079.6	1017.6
17°	767.5	848.5	940.1	849.9	799.2
18°	607.5	671.6	772.4	679.4	635.0
19°	475.7	524.3	618.0	536.3	500.4
20°	365.8	419.3	487.7	432.0	408.7
22.5°	221.3	250.9	270.6	253.7	241.7
25°	137.4	148.0	135.3	154.3	144.5
26°	119.8	127.6	124.7	137.4	125.4
27°	95.8	105.7	98.0	107.8	104.3
28°	87.4	99.4	83.9	95.8	90.2
29°	61.3	66.2	59.9	64.1	64.1
30°	58.5	59.9	52.9	57.8	55.7
32.5°	45.8	43.0	35.2	37.4	35.9
35°	11.3	14.1	9.9	12.0	9.9
37.5°	16.9	15.5	18.3	17.6	16.9
40°	0.0	0.7	0.7	0.7	2.8
42.5°	12.7	7.8	7.0	4.9	8.5
45°	8.5	13.4	7.0	7.8	12.7
47.5°	0.0	0.7	0.0	1.4	1.4
50°	0.0	1.4	2.1	2.8	7.0
52.5°	1.4	8.5	4.2	7.8	11.3
55°	0.0	0.7	0.0	0.7	2.8
57.5°	2.8	1.4	2.8	2.8	12.7
60°	0.0	1.4	0.7	0.7	2.8
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.4
67.5°	0.0	0.7	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.7	0.0	0.0
80°	0.0	0.7	0.0	0.0	0.0
82.5°	0.0	0.7	1.4	2.1	1.4
85°	0.0	0.7	0.7	0.7	2.8
87.5°	0.0	1.4	2.1	0.0	1.4
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	2.1	2.8	0.0	5.6
72.5°	0.0	3.5	0.7	0.7	0.0



(END OF REPORT)