

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: P281719

Luminaire Tested: **LDA2B159035D010 EU2B15SP159035 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281719  
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: LDA2B159035D010 EU2B15SP159035 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: 1205.5 lumens  
Efficiency: N/A  
Efficacy: 85.5 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

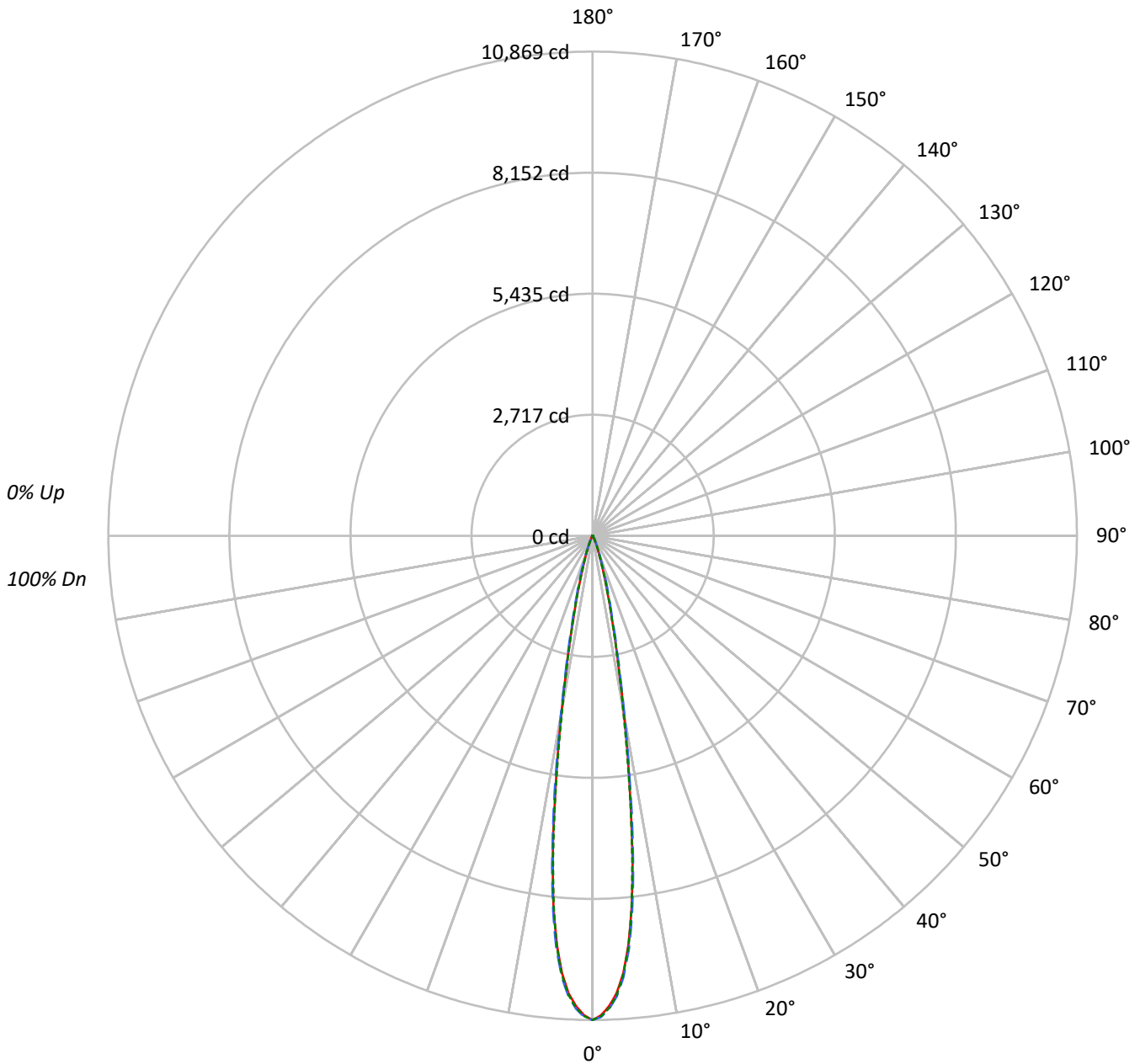
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					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	103	101	100	100	98					98			
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96					96			
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94					94			
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93					93			
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91					91			
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89					89			
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88					88			
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87					87			
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85					85			
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84					84			

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

	0°	45°	90°
0°	5362448	5362448	5362448
5°	4566270	4613864	4574937
10°	2015964	2062054	1968823
15°	611693	701588	621295
20°	183024	244031	204550
25°	71312	70223	74959
30°	31731	28712	30250
35°	6444	5661	5661
40°	0	451	1739
45°	5652	4675	8442
50°	0	1535	5142
55°	0	0	2322
60°	0	691	2664
65°	0	0	1518
70°	0	3895	7789
75°	0	0	0
80°	0	0	0
85°	0	3962	15284



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	704.6	58.4
10°-20°	402.4	33.4
20°-30°	76.4	6.3
30°-40°	13.9	1.2
40°-50°	3.6	0.3
50°-60°	2.7	0.2
60°-70°	0.4	0.0
70°-80°	0.6	0.1
80°-90°	0.8	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°	1183.4	98.2
0°-40°	1197.3	99.3
0°-60°	1203.6	99.8
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°	10869	10869	10869	10869	10869	
5°	9220	9281	9316	9300	9238	700
15°	1198	1302	1374	1290	1216	381
25°	131	141	129	147	138	69
35°	11	13	9	11	9	15
45°	8	13	7	7	12	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°	10869.2	10869.2	10869.2	10869.2	10869.2
1°	10766.4	10777.8	10802.0	10826.9	10787.9
2°	10564.9	10592.5	10626.7	10649.6	10607.2
3°	10282.8	10321.1	10357.4	10362.1	10322.4
4°	9846.9	9893.9	9932.2	9927.5	9877.8
5°	9220.2	9280.7	9316.3	9300.1	9237.7
6°	8392.0	8450.5	8496.1	8449.8	8365.8
7°	7360.3	7427.5	7475.8	7396.6	7293.8
8°	6164.7	6258.8	6307.1	6196.3	6090.8
9°	5032.3	5097.4	5146.4	5025.5	4918.1
10°	4024.1	4143.6	4116.1	4022.7	3930.0
11°	3165.0	3273.1	3277.8	3214.7	3124.0
12°	2477.8	2592.0	2620.9	2572.6	2491.9
13°	1958.0	2043.3	2091.0	2041.2	1964.7
14°	1558.3	1634.2	1695.3	1630.8	1554.3
15°	1197.6	1302.4	1373.6	1290.3	1216.4
16°	952.4	1039.1	1123.7	1029.0	969.9
17°	731.5	808.7	896.0	810.1	761.7
18°	579.0	640.1	736.2	647.5	605.2
19°	453.4	499.7	589.1	511.2	476.9
20°	348.6	399.7	464.8	411.7	389.6
22.5°	210.9	239.1	257.9	241.8	230.4
25°	131.0	141.1	129.0	147.1	137.7
26°	114.2	121.6	118.9	131.0	119.6
27°	91.3	100.8	93.4	102.8	99.4
28°	83.3	94.7	79.9	91.3	86.0
29°	58.4	63.1	57.1	61.1	61.1
30°	55.7	57.1	50.4	55.1	53.1
32.5°	43.7	41.0	33.6	35.6	34.3
35°	10.7	13.4	9.4	11.4	9.4
37.5°	16.1	14.8	17.5	16.8	16.1
40°	0.0	0.7	0.7	0.7	2.7
42.5°	12.1	7.4	6.7	4.7	8.1
45°	8.1	12.8	6.7	7.4	12.1
47.5°	0.0	0.7	0.0	1.3	1.3
50°	0.0	1.3	2.0	2.7	6.7
52.5°	1.3	8.1	4.0	7.4	10.7
55°	0.0	0.7	0.0	0.7	2.7
57.5°	2.7	1.3	2.7	2.7	12.1
60°	0.0	1.3	0.7	0.7	2.7
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.3
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	1.3	2.0	1.3
85°	0.0	0.7	0.7	0.7	2.7
87.5°	0.0	1.3	2.0	0.0	1.3
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	2.0	2.7	0.0	5.4
72.5°	0.0	3.4	0.7	0.7	0.0



(END OF REPORT)