

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: P282571

Luminaire Tested: **LDA2B159727D010 EU2B15SP159727 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282571  
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: LDA2B159727D010 EU2B15SP159727 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1001.5 lumens  
Efficiency: N/A  
Efficacy: 71.0 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

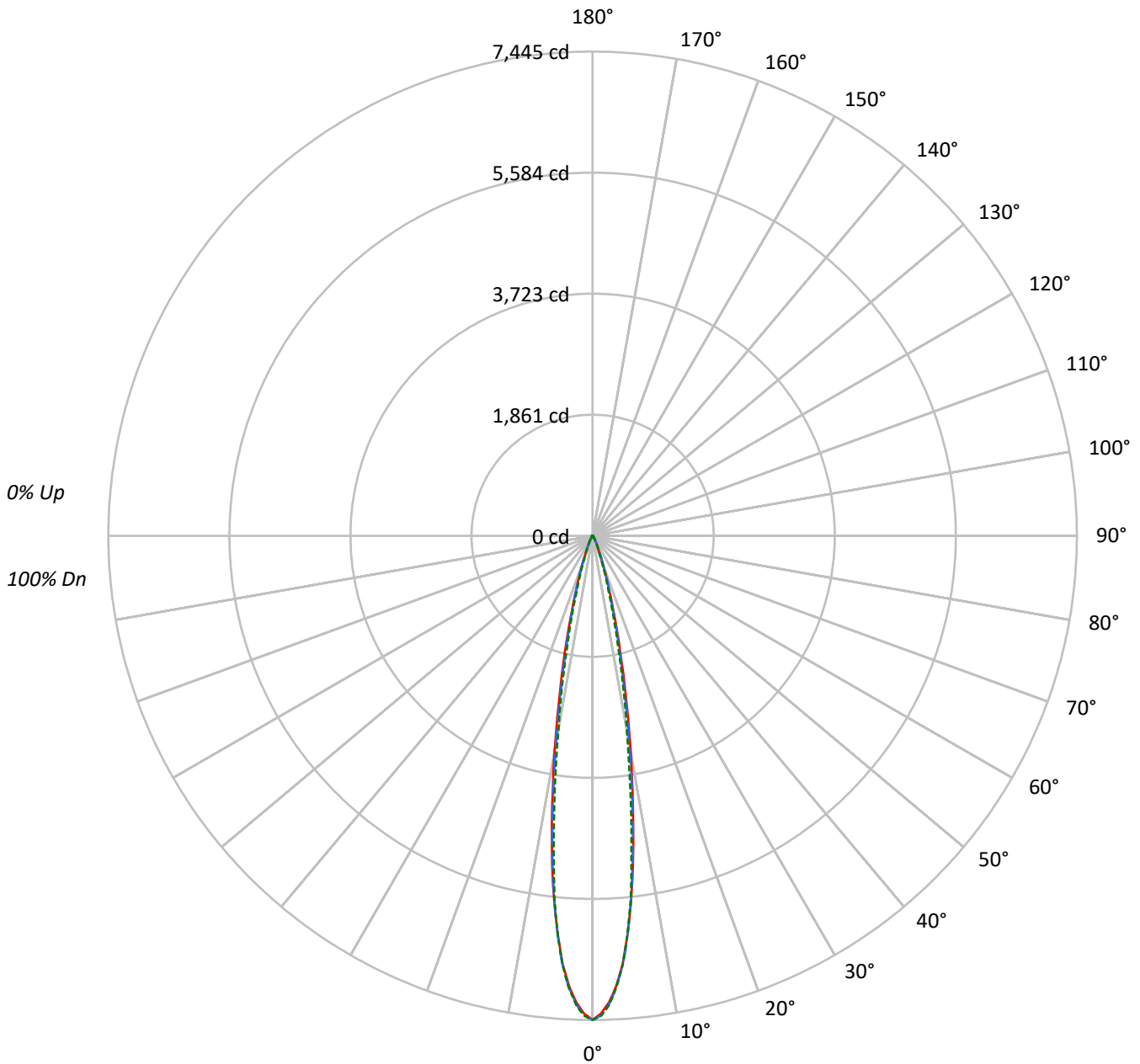
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3672931	3672931	3672931
5°	3047053	3056958	3045369
10°	1686474	1625556	1514240
15°	682689	652963	579770
20°	228701	242509	196359
25°	87044	87316	82689
30°	39023	38397	37087
35°	18912	16864	13431
40°	12494	15843	11013
45°	3210	5163	4814
50°	844	1305	1765
55°	7827	6881	10838
60°	11249	8979	14604
65°	5370	14009	13308
70°	4904	4183	4904
75°	2097	5528	15250
80°	25855	35799	32389
85°	0	16416	19246



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	487.6	48.7
10°-20°	369.3	36.9
20°-30°	83.9	8.4
30°-40°	24.8	2.5
40°-50°	8.3	0.8
50°-60°	7.3	0.7
60°-70°	8.8	0.9
70°-80°	5.6	0.6
80°-90°	5.9	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°	940.9	94.0
0°-40°	965.7	96.4
0°-60°	981.2	98.0
0°-90°	1001.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7445	7445	7445	7445	7445	
5°	6153	6201	6173	6092	6149	493
15°	1337	1355	1278	1158	1135	388
25°	160	172	160	159	152	84
35°	31	35	28	32	22	25
45°	5	13	7	13	7	7
55°	9	13	8	12	13	4
65°	5	10	12	11	11	5
75°	1	4	3	5	8	3
85°	0	0	3	3	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7444.7	7444.7	7444.7	7444.7	7444.7
1°	7348.8	7378.5	7375.6	7363.6	7384.8
2°	7179.8	7215.8	7212.3	7186.1	7223.8
3°	6932.0	6964.0	6958.8	6921.1	6962.3
4°	6600.8	6637.4	6623.1	6566.6	6619.1
5°	6152.6	6201.2	6172.6	6092.1	6149.2
6°	5655.9	5697.0	5651.9	5545.1	5601.1
7°	5099.8	5125.5	5066.1	4929.1	4891.4
8°	4492.9	4526.6	4443.8	4283.9	4242.8
9°	3912.8	3924.2	3823.7	3653.6	3601.6
10°	3366.4	3357.8	3244.8	3072.3	3022.6
11°	2848.5	2837.1	2717.8	2558.5	2574.4
12°	2377.5	2399.7	2261.0	2116.5	2119.4
13°	1990.4	1992.6	1873.3	1735.7	1727.7
14°	1629.5	1650.6	1548.4	1425.1	1402.3
15°	1336.6	1354.9	1278.4	1158.5	1135.1
16°	1070.0	1092.8	1038.0	929.5	898.7
17°	861.6	890.7	854.7	763.9	728.5
18°	689.1	711.4	702.8	609.2	580.1
19°	544.1	575.0	577.2	499.0	464.2
20°	435.6	463.6	461.9	401.4	374.0
22.5°	250.1	264.9	265.5	236.9	221.0
25°	159.9	171.9	160.4	158.7	151.9
26°	138.7	148.4	135.9	135.9	129.6
27°	112.5	121.0	109.1	114.2	105.6
28°	94.8	103.9	93.6	92.5	91.4
29°	78.8	87.4	74.2	79.9	76.5
30°	68.5	74.8	67.4	75.9	65.1
32.5°	53.1	58.2	45.1	57.1	42.8
35°	31.4	34.8	28.0	32.5	22.3
37.5°	32.5	33.7	30.3	33.7	31.4
40°	19.4	20.0	24.6	24.6	17.1
42.5°	18.3	17.7	10.8	17.1	13.7
45°	4.6	13.1	7.4	13.1	6.9
47.5°	3.4	4.6	4.6	9.1	9.1
50°	1.1	4.6	1.7	3.4	2.3
52.5°	0.0	10.8	2.3	8.0	6.9
55°	9.1	13.1	8.0	12.0	12.6
57.5°	1.1	9.1	4.6	9.7	6.9
60°	11.4	15.4	9.1	16.6	14.8
62.5°	1.1	10.3	12.0	9.1	8.0
65°	4.6	9.7	12.0	11.4	11.4
67.5°	5.7	9.7	7.4	7.4	10.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.1	4.0	2.9	5.1	8.0
77.5°	1.1	4.6	4.0	9.1	6.9
80°	9.1	10.3	12.6	16.6	11.4
82.5°	8.0	8.0	12.6	9.1	6.9
85°	0.0	0.0	2.9	2.9	3.4
87.5°	0.0	2.3	5.7	4.6	8.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.4	1.1	2.9	2.9	3.4
72.5°	1.1	5.1	4.6	2.9	5.7



(END OF REPORT)