

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: P281672

Luminaire Tested: **LDA2B109027D010 EU2B10SP159027 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281672  
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: LDA2B109027D010 EU2B10SP159027 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 836.5 lumens  
Efficiency: N/A  
Efficacy: 83.7 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

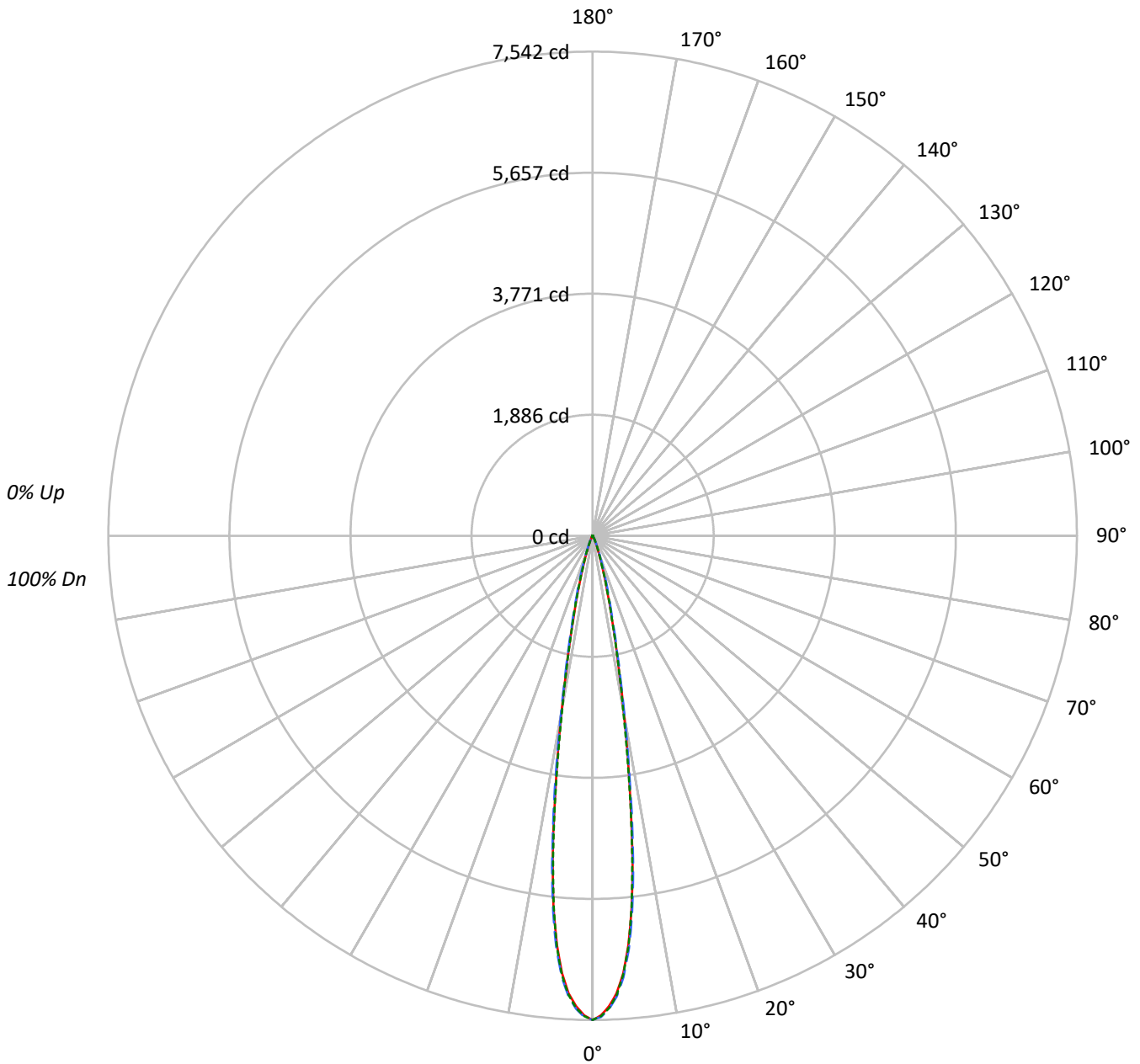
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3720885	3720885	3720885
5°	3168438	3201421	3174430
10°	1398816	1430778	1366102
15°	424446	486811	431086
20°	127003	169320	141914
25°	49483	48721	51987
30°	22047	19939	20964
35°	4517	3915	3915
40°	0	322	1224
45°	3907	3279	5861
50°	0	1075	3607
55°	0	0	1634
60°	0	493	1875
65°	0	0	1051
70°	0	2741	5337
75°	0	0	0
80°	0	0	0
85°	0	2830	10755



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	488.9	58.4
10°-20°	279.2	33.4
20°-30°	53.0	6.3
30°-40°	9.6	1.2
40°-50°	2.5	0.3
50°-60°	1.9	0.2
60°-70°	0.3	0.0
70°-80°	0.4	0.1
80°-90°	0.6	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°	821.1	98.2
0°-40°	830.8	99.3
0°-60°	835.2	99.8
0°-90°	836.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	836.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7542	7542	7542	7542	7542	
5°	6398	6440	6464	6453	6410	486
15°	831	904	953	895	844	264
25°	91	98	90	102	96	48
35°	8	9	6	8	6	10
45°	6	9	5	5	8	3
55°	0	0	0	0	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	2	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7541.9	7541.9	7541.9	7541.9	7541.9
1°	7470.5	7478.5	7495.2	7512.5	7485.5
2°	7330.7	7349.8	7373.6	7389.4	7360.1
3°	7135.0	7161.5	7186.7	7190.0	7162.5
4°	6832.5	6865.1	6891.7	6888.4	6853.9
5°	6397.7	6439.6	6464.3	6453.1	6409.8
6°	5823.0	5863.6	5895.2	5863.1	5804.8
7°	5107.1	5153.7	5187.3	5132.3	5061.0
8°	4277.5	4342.8	4376.3	4299.4	4226.3
9°	3491.8	3537.0	3571.0	3487.1	3412.5
10°	2792.2	2875.2	2856.0	2791.3	2726.9
11°	2196.1	2271.1	2274.4	2230.6	2167.7
12°	1719.3	1798.5	1818.6	1785.0	1729.1
13°	1358.6	1417.8	1450.9	1416.4	1363.2
14°	1081.3	1133.9	1176.3	1131.6	1078.5
15°	831.0	903.7	953.1	895.3	844.0
16°	660.9	721.0	779.7	714.0	673.0
17°	507.5	561.1	621.7	562.1	528.5
18°	401.7	444.2	510.8	449.3	419.9
19°	314.6	346.8	408.7	354.7	330.9
20°	241.9	277.3	322.5	285.7	270.3
22.5°	146.3	165.9	179.0	167.8	159.9
25°	90.9	97.9	89.5	102.1	95.5
26°	79.2	84.4	82.5	90.9	83.0
27°	63.4	69.9	64.8	71.3	69.0
28°	57.8	65.7	55.5	63.4	59.7
29°	40.5	43.8	39.6	42.4	42.4
30°	38.7	39.6	35.0	38.2	36.8
32.5°	30.3	28.4	23.3	24.7	23.8
35°	7.5	9.3	6.5	7.9	6.5
37.5°	11.2	10.3	12.1	11.7	11.2
40°	0.0	0.5	0.5	0.5	1.9
42.5°	8.4	5.1	4.7	3.3	5.6
45°	5.6	8.9	4.7	5.1	8.4
47.5°	0.0	0.5	0.0	0.9	0.9
50°	0.0	0.9	1.4	1.9	4.7
52.5°	0.9	5.6	2.8	5.1	7.5
55°	0.0	0.5	0.0	0.5	1.9
57.5°	1.9	0.9	1.9	1.9	8.4
60°	0.0	0.9	0.5	0.5	1.9
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.9
67.5°	0.0	0.5	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	0.5	0.0	0.0
80°	0.0	0.5	0.0	0.0	0.0
82.5°	0.0	0.5	0.9	1.4	0.9
85°	0.0	0.5	0.5	0.5	1.9
87.5°	0.0	0.9	1.4	0.0	0.9
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	1.4	1.9	0.0	3.7
72.5°	0.0	2.3	0.5	0.5	0.0



(END OF REPORT)