

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P#

Luminaire Tested: **LD4C70D010 EX4C709035 4LBSQLI**

Issue Date: 2/9/2022

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209151)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/9/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C70D010 EX4C709035 4LBSQLI  
Description: 4 INCH 7000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

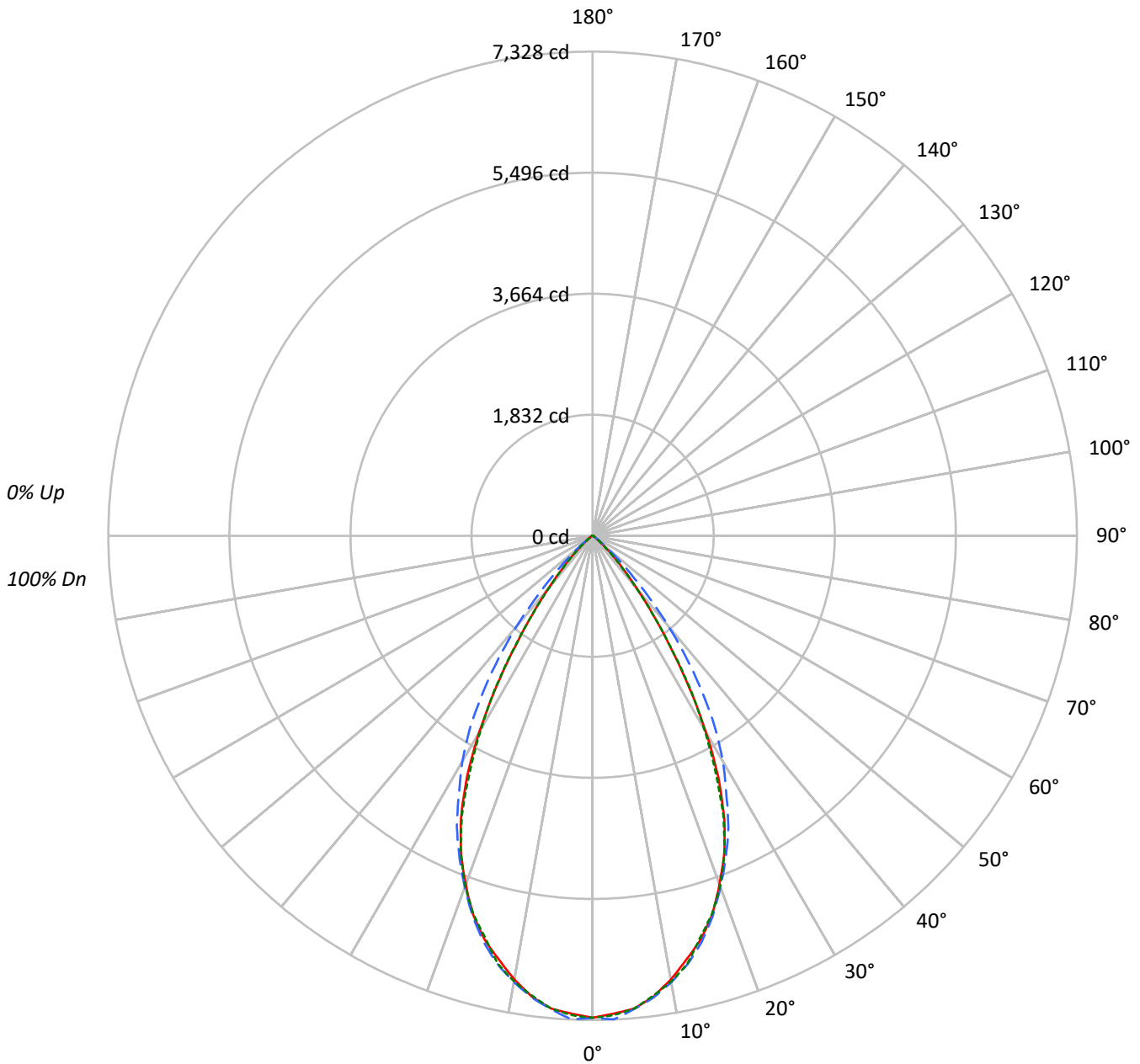
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6735.0 lumens  
Efficiency: N/A  
Efficacy: 86.3 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 78  
Input Voltage (V):  
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									
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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

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

	0°	45°	90°
0°	703896	703896	703896
5°	695805	696705	695805
10°	667980	672076	671165
15°	631501	636126	628245
20°	576320	580591	579174
25°	501827	517616	498357
30°	381599	438922	375928
35°	240200	341218	242391
40°	129597	225338	127255
45°	61351	111307	60696
50°	22967	41731	22967
55°	10918	13273	10144
60°	7159	6272	7159
65°	4224	4224	4224
70°	2624	3950	2624
75°	1752	1752	1752
80°	2612	2612	2612
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	676.4	10.0
10°-20°	1772.6	26.3
20°-30°	2165.4	32.2
30°-40°	1514.6	22.5
40°-50°	496.3	7.4
50°-60°	78.9	1.2
60°-70°	21.5	0.3
70°-80°	7.2	0.1
80°-90°	2.0	0.0
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°	4614.4	68.5
0°-40°	6129.0	91.0
0°-60°	6704.2	99.5
0°-90°	6735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6735.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7295	7295	7295	7295	7295	
5°	7184	7186	7193	7149	7184	674
15°	6322	6347	6368	6326	6289	1763
25°	4714	4785	4862	4774	4681	2117
35°	2039	2408	2897	2371	2058	1301
45°	450	554	816	547	445	377
55°	65	70	79	70	60	64
65°	18	23	18	23	18	21
75°	5	5	5	5	5	7
85°	0	0	0	0	0	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1
2.5°	7239.4	7290.5	7276.5	7309.0	7309.0	7272.0	7281.2	7295.1	7313.6	7327.6	7216.2
5°	7183.8	7230.2	7188.4	7234.7	7206.9	7165.3	7234.7	7197.7	7220.9	7193.1	7211.6
7.5°	7035.6	7109.7	7026.3	7081.9	7063.4	7040.1	7067.9	7058.6	7072.6	7049.4	6998.5
10°	6817.7	6878.0	6822.4	6901.1	6864.0	6840.9	6864.0	6887.3	6882.6	6859.5	6887.3
12.5°	6567.5	6636.9	6609.1	6655.4	6613.8	6613.8	6669.4	6655.4	6660.1	6641.6	6673.9
15°	6321.8	6372.8	6331.0	6391.4	6372.8	6321.8	6344.9	6344.9	6382.1	6368.1	6331.0
17.5°	6015.9	6057.6	6011.2	6025.2	6006.7	5997.4	6094.6	6029.8	6066.8	6039.0	6043.7
20°	5612.7	5631.2	5617.3	5654.3	5631.2	5659.1	5649.8	5640.5	5640.5	5654.3	5622.0
22.5°	5204.8	5204.8	5218.7	5228.0	5246.6	5218.7	5274.4	5228.0	5232.6	5265.1	5255.8
25°	4713.6	4699.6	4732.1	4778.4	4797.0	4773.7	4847.9	4810.8	4838.6	4861.9	4810.8
27.5°	4115.7	4115.7	4148.1	4226.9	4240.7	4268.5	4370.5	4370.5	4407.6	4375.2	4412.3
30°	3425.0	3476.1	3517.7	3619.6	3652.2	3712.5	3819.0	3870.0	3953.4	3939.5	3920.9
32.5°	2716.0	2785.5	2790.1	2896.8	2984.7	3086.7	3230.4	3350.9	3411.2	3452.8	3406.5
35°	2039.2	2081.0	2118.1	2192.2	2340.5	2475.0	2604.7	2762.3	2869.0	2896.8	2855.0
37.5°	1492.4	1501.7	1538.8	1608.2	1719.4	1849.3	2006.9	2178.2	2289.6	2331.3	2284.9
40°	1028.9	1038.2	1056.7	1117.0	1209.7	1302.4	1427.6	1603.7	1705.6	1789.0	1728.7
42.5°	690.5	699.8	718.3	764.7	815.7	903.7	1001.1	1112.3	1209.7	1246.8	1214.2
45°	449.6	449.6	458.8	491.4	519.2	588.6	658.2	727.6	792.5	815.7	792.5
47.5°	264.2	268.8	278.0	301.3	333.6	361.4	412.5	458.8	477.4	495.9	486.6
50°	153.0	153.0	166.8	180.8	203.9	222.4	241.0	259.5	268.8	278.0	268.8
52.5°	83.4	88.1	92.7	97.4	106.7	125.2	139.0	139.0	143.7	148.3	143.7
55°	64.9	64.9	64.9	64.9	69.6	69.6	69.6	74.1	74.1	78.9	74.1
57.5°	46.3	46.3	46.3	51.1	51.1	51.1	46.3	46.3	46.3	46.3	46.3
60°	37.1	37.1	37.1	37.1	37.1	37.1	37.1	32.5	32.5	32.5	32.5
62.5°	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
65°	18.5	18.5	23.3	23.3	23.3	23.3	23.3	18.5	18.5	18.5	18.5
67.5°	14.0	14.0	14.0	14.0	18.5	18.5	14.0	14.0	14.0	14.0	14.0
70°	9.3	9.3	9.3	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
72.5°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
75°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
77.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
80°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1	7295.1
2.5°	7295.1	7216.2	7225.5	7267.3	7244.0	7267.3	7262.7	7262.7
5°	7216.2	7193.1	7156.0	7142.0	7169.9	7230.2	7220.9	7183.8
7.5°	7067.9	7007.8	7049.4	7067.9	7044.8	7081.9	7100.4	7021.6
10°	6891.8	6868.7	6859.5	6868.7	6859.5	6896.5	6850.2	6850.2
12.5°	6641.6	6604.5	6604.5	6660.1	6627.6	6599.8	6636.9	6632.3
15°	6391.4	6317.0	6317.0	6335.6	6349.6	6331.0	6335.6	6289.2
17.5°	6020.5	5997.4	5964.9	6015.9	6029.8	6011.2	6025.2	6002.0
20°	5672.9	5672.9	5612.7	5635.8	5654.3	5668.3	5677.6	5640.5
22.5°	5228.0	5237.3	5195.5	5241.8	5255.8	5209.5	5218.7	5209.5
25°	4820.1	4815.5	4783.0	4764.5	4773.7	4755.2	4750.6	4681.0
27.5°	4370.5	4324.2	4254.7	4273.3	4194.4	4129.5	4129.5	4022.9
30°	3883.9	3805.2	3712.5	3619.6	3550.2	3476.1	3434.3	3374.1
32.5°	3313.8	3207.3	3091.4	2966.2	2887.5	2776.3	2716.0	2748.5
35°	2748.5	2590.7	2433.2	2308.2	2187.5	2122.6	2048.5	2057.8
37.5°	2201.5	1979.1	1840.1	1705.6	1603.7	1520.2	1487.7	1478.5
40°	1608.2	1432.1	1293.1	1195.7	1126.3	1061.4	1024.3	1010.3
42.5°	1112.3	987.3	875.9	797.2	750.9	709.1	690.5	686.0
45°	723.1	648.9	574.8	519.2	482.1	454.3	449.6	444.8
47.5°	454.3	417.0	370.7	329.1	296.6	278.0	264.2	264.2
50°	259.5	245.7	222.4	199.3	180.8	171.5	157.5	153.0
52.5°	139.0	139.0	129.7	111.2	97.4	88.1	88.1	83.4
55°	74.1	74.1	69.6	69.6	64.9	64.9	64.9	60.3
57.5°	46.3	46.3	51.1	51.1	46.3	46.3	46.3	46.3
60°	32.5	37.1	37.1	37.1	37.1	37.1	37.1	37.1
62.5°	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
65°	18.5	23.3	23.3	23.3	23.3	18.5	18.5	18.5
67.5°	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
70°	14.0	14.0	14.0	14.0	14.0	9.3	9.3	9.3
72.5°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
75°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
77.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
80°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







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









(END OF REPORT)