

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 EX4C709030 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 EX4C709030 4LBSQLI
Description: 4 INCH 7000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

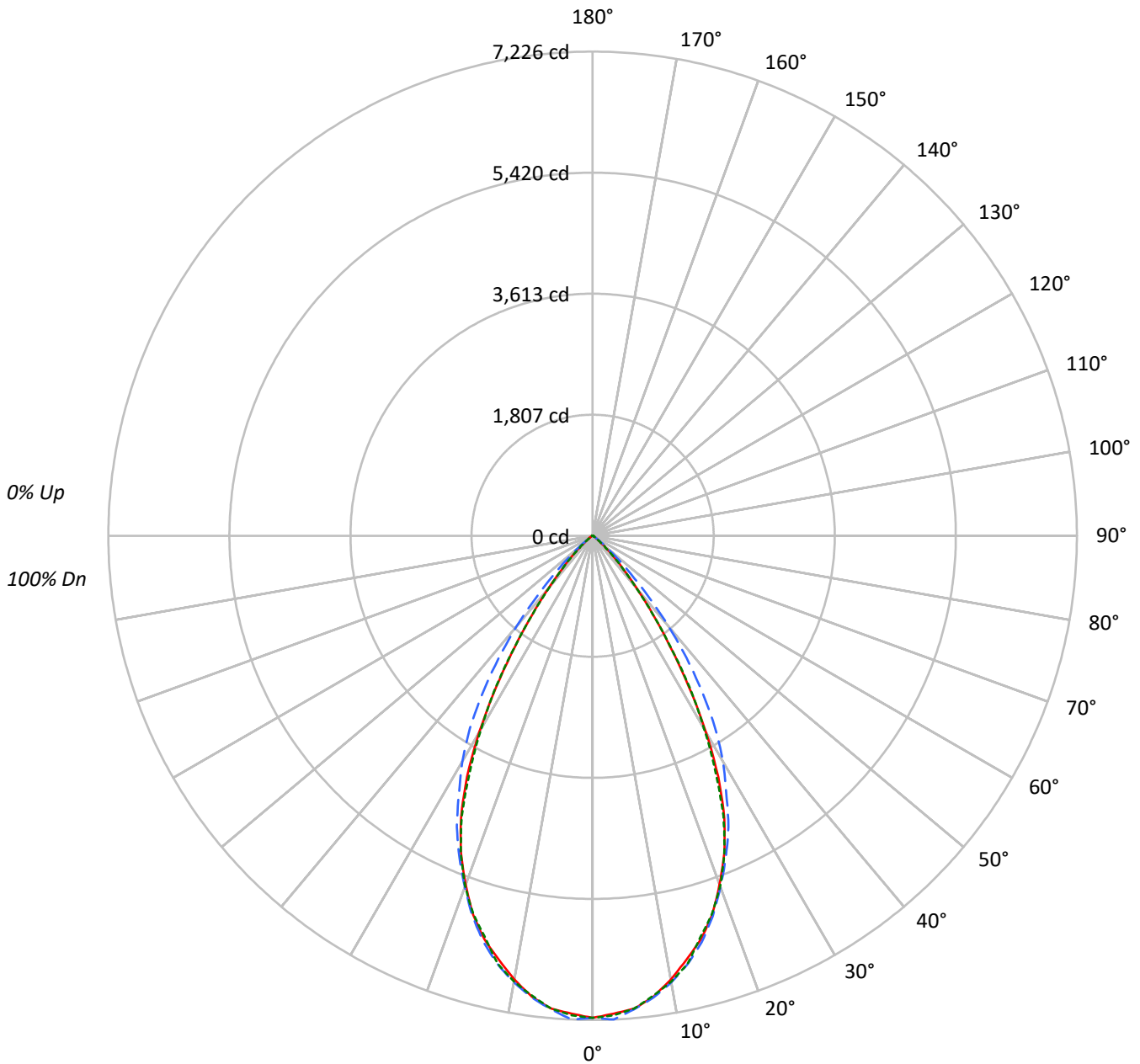
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6642.0 lumens
Efficiency: N/A
Efficacy: 85.2 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°	694170	694170	694170
5°	686196	687087	686196
10°	658751	662797	661896
15°	622781	627346	619574
20°	568362	572572	571175
25°	494897	510462	491479
30°	376329	432861	370736
35°	236890	336506	239045
40°	127809	222226	125504
45°	60505	109779	59863
50°	22652	41160	22652
55°	10766	13088	10009
60°	7063	6195	7063
65°	4178	4178	4178
70°	2567	3893	2567
75°	1752	1752	1752
80°	2612	2612	2612
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	667.0	10.0
10°-20°	1748.1	26.3
20°-30°	2135.5	32.2
30°-40°	1493.6	22.5
40°-50°	489.5	7.4
50°-60°	77.8	1.2
60°-70°	21.2	0.3
70°-80°	7.1	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°	4550.7	68.5
0°-40°	6044.3	91.0
0°-60°	6611.7	99.5
0°-90°	6642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6642.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7194	7194	7194	7194	7194	
5°	7085	7087	7094	7050	7085	664
15°	6234	6260	6280	6239	6202	1739
25°	4648	4719	4795	4708	4616	2088
35°	2011	2374	2857	2338	2029	1283
45°	443	546	804	539	439	372
55°	64	69	78	69	60	63
65°	18	23	18	23	18	20
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°	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3
2.5°	7139.5	7189.8	7176.0	7208.1	7208.1	7171.6	7180.7	7194.3	7212.6	7226.4	7116.5
5°	7084.6	7130.3	7089.1	7134.8	7107.4	7066.4	7134.8	7098.3	7121.2	7093.8	7112.1
7.5°	6938.4	7011.5	6929.3	6984.1	6965.8	6942.9	6970.3	6961.2	6975.0	6952.0	6901.9
10°	6723.5	6783.0	6728.2	6805.8	6769.2	6746.5	6769.2	6792.2	6787.5	6764.8	6792.2
12.5°	6476.8	6545.2	6517.8	6563.5	6522.5	6522.5	6577.3	6563.5	6568.2	6549.9	6581.8
15°	6234.5	6284.8	6243.6	6303.1	6284.8	6234.5	6257.2	6257.2	6294.0	6280.2	6243.6
17.5°	5932.9	5973.9	5928.2	5942.0	5923.7	5914.6	6010.5	5946.5	5983.1	5955.6	5960.3
20°	5535.2	5553.5	5539.7	5576.2	5553.5	5580.9	5571.8	5562.6	5562.6	5576.2	5544.3
22.5°	5132.9	5132.9	5146.7	5155.8	5174.1	5146.7	5201.5	5155.8	5160.3	5192.4	5183.2
25°	4648.5	4634.7	4666.8	4712.5	4730.7	4707.8	4780.9	4744.4	4771.8	4794.7	4744.4
27.5°	4058.9	4058.9	4090.8	4168.6	4182.2	4209.6	4310.1	4310.1	4346.7	4314.8	4351.4
30°	3377.7	3428.1	3469.1	3569.7	3601.7	3661.2	3766.2	3816.6	3898.9	3885.1	3866.8
32.5°	2678.4	2747.1	2751.6	2856.8	2943.5	3044.0	3185.8	3304.6	3364.1	3405.1	3359.4
35°	2011.1	2052.3	2088.9	2162.0	2308.2	2440.8	2568.8	2724.1	2829.3	2856.8	2815.5
37.5°	1471.8	1481.0	1517.5	1586.0	1695.7	1823.8	1979.2	2148.2	2258.0	2299.1	2253.4
40°	1014.7	1023.8	1042.1	1101.6	1193.0	1284.4	1407.9	1581.5	1682.0	1764.3	1704.8
42.5°	681.0	690.1	708.4	754.1	804.5	891.2	987.3	1096.9	1193.0	1229.5	1197.5
45°	443.4	443.4	452.5	484.6	512.0	580.5	649.1	717.6	781.5	804.5	781.5
47.5°	260.6	265.0	274.2	297.1	329.0	356.4	406.8	452.5	470.8	489.1	479.9
50°	150.9	150.9	164.5	178.3	201.1	219.4	237.6	255.9	265.0	274.2	265.0
52.5°	82.3	86.9	91.4	96.1	105.2	123.5	137.1	137.1	141.8	146.2	141.8
55°	64.0	64.0	64.0	64.0	68.6	68.6	68.6	73.1	73.1	77.8	73.1
57.5°	45.7	45.7	45.7	50.4	50.4	50.4	45.7	45.7	45.7	45.7	45.7
60°	36.6	36.6	36.6	36.6	36.6	36.6	36.6	32.1	32.1	32.1	32.1
62.5°	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
65°	18.3	18.3	22.9	22.9	22.9	22.9	22.9	18.3	18.3	18.3	18.3
67.5°	13.8	13.8	13.8	13.8	18.3	18.3	13.8	13.8	13.8	13.8	13.8
70°	9.1	9.1	9.1	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
72.5°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
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°	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3	7194.3
2.5°	7194.3	7116.5	7125.7	7166.9	7144.0	7166.9	7162.4	7162.4
5°	7116.5	7093.8	7057.2	7043.4	7070.8	7130.3	7121.2	7084.6
7.5°	6970.3	6911.0	6952.0	6970.3	6947.6	6984.1	7002.4	6924.6
10°	6796.7	6773.9	6764.8	6773.9	6764.8	6801.3	6755.6	6755.6
12.5°	6549.9	6513.3	6513.3	6568.2	6536.1	6508.7	6545.2	6540.7
15°	6303.1	6229.8	6229.8	6248.1	6261.9	6243.6	6248.1	6202.4
17.5°	5937.4	5914.6	5882.5	5932.9	5946.5	5928.2	5942.0	5919.1
20°	5594.5	5594.5	5535.2	5558.0	5576.2	5590.0	5599.2	5562.6
22.5°	5155.8	5165.0	5123.7	5169.4	5183.2	5137.5	5146.7	5137.5
25°	4753.5	4749.0	4716.9	4698.7	4707.8	4689.5	4685.0	4616.4
27.5°	4310.1	4264.4	4196.0	4214.3	4136.5	4072.5	4072.5	3967.3
30°	3830.2	3752.6	3661.2	3569.7	3501.2	3428.1	3386.9	3327.5
32.5°	3268.0	3163.0	3048.7	2925.2	2847.6	2737.9	2678.4	2710.5
35°	2710.5	2555.0	2399.6	2276.3	2157.3	2093.3	2020.2	2029.4
37.5°	2171.1	1951.8	1814.7	1682.0	1581.5	1499.3	1467.2	1458.0
40°	1586.0	1412.3	1275.2	1179.2	1110.7	1046.8	1010.2	996.4
42.5°	1096.9	973.6	863.8	786.2	740.5	699.3	681.0	676.5
45°	713.1	640.0	566.8	512.0	475.4	448.0	443.4	438.7
47.5°	448.0	411.3	365.6	324.5	292.5	274.2	260.6	260.6
50°	255.9	242.3	219.4	196.6	178.3	169.2	155.4	150.9
52.5°	137.1	137.1	128.0	109.7	96.1	86.9	86.9	82.3
55°	73.1	73.1	68.6	68.6	64.0	64.0	64.0	59.5
57.5°	45.7	45.7	50.4	50.4	45.7	45.7	45.7	45.7
60°	32.1	36.6	36.6	36.6	36.6	36.6	36.6	36.6
62.5°	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
65°	18.3	22.9	22.9	22.9	22.9	18.3	18.3	18.3
67.5°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
70°	13.8	13.8	13.8	13.8	13.8	9.1	9.1	9.1
72.5°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
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)