

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 EX4C709040 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 EX4C709040 4LBSQLI
Description: 4 INCH 7000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

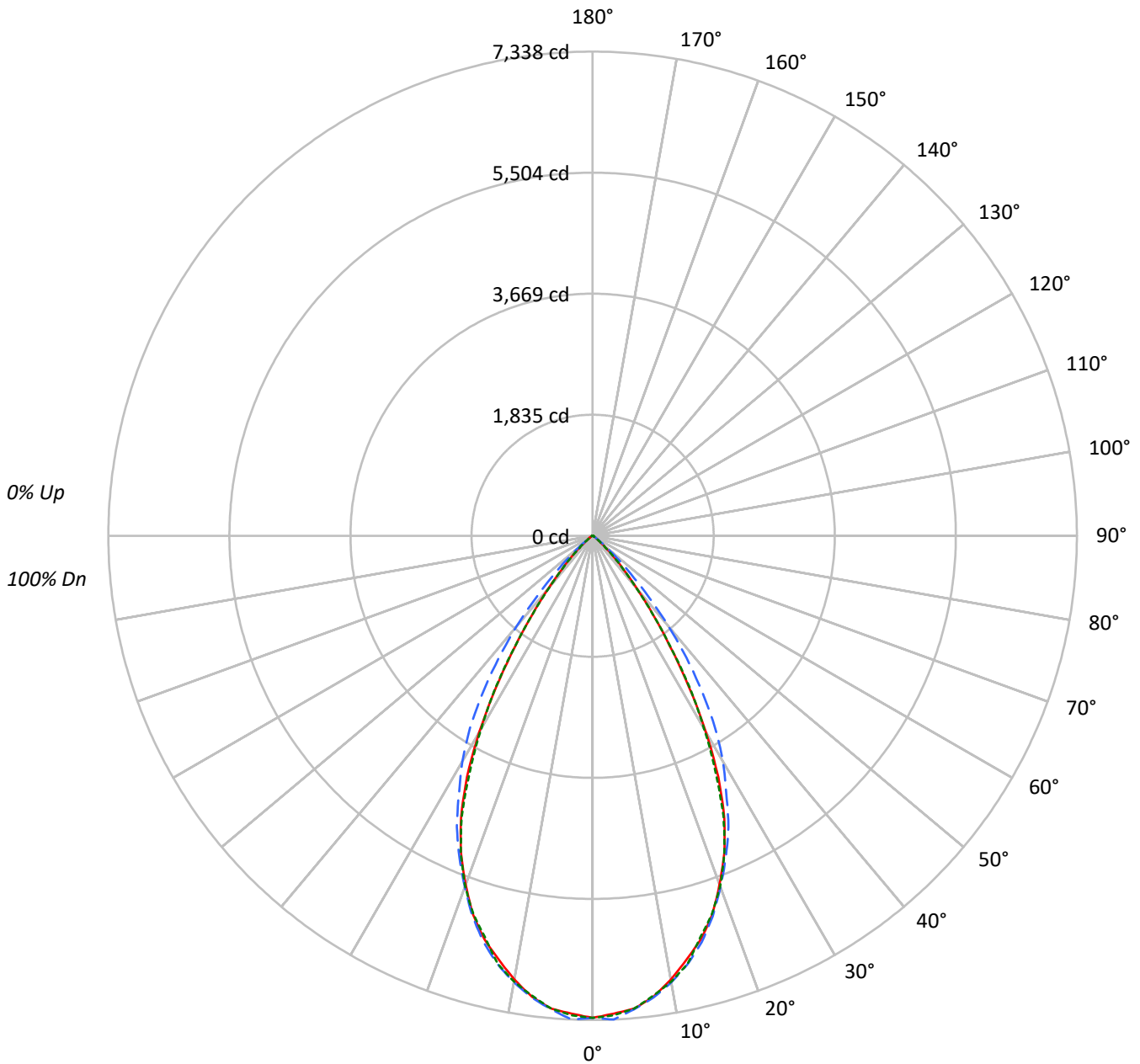
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6745.0 lumens
Efficiency: N/A
Efficacy: 86.5 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

TEST NUMBER: P#
CATALOG NUMBER: LD4C70D010 EX4C709040 4LBSQLI

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°	704938	704938	704938
5°	696841	697742	696841
10°	668970	673075	672164
15°	632440	637075	629184
20°	577172	581454	580037
25°	502573	518382	499102
30°	382167	439569	376485
35°	240565	341724	242744
40°	129786	225678	127456
45°	61432	111471	60791
50°	22997	41791	22997
55°	10935	13290	10161
60°	7159	6291	7159
65°	4247	4247	4247
70°	2624	3950	2624
75°	1752	1752	1752
80°	2612	2612	2612
85°	0	0	0



TEST NUMBER: P#

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	677.4	10.0
10°-20°	1775.2	26.3
20°-30°	2168.6	32.2
30°-40°	1516.8	22.5
40°-50°	497.1	7.4
50°-60°	79.0	1.2
60°-70°	21.6	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°	4621.3	68.5
0°-40°	6138.1	91.0
0°-60°	6714.2	99.5
0°-90°	6745.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6745.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7306	7306	7306	7306	7306	
5°	7194	7197	7204	7160	7194	675
15°	6331	6357	6378	6336	6299	1766
25°	4721	4792	4869	4781	4688	2120
35°	2042	2411	2901	2374	2061	1303
45°	450	555	817	548	446	378
55°	65	70	79	70	60	64
65°	19	23	19	23	19	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°	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9
2.5°	7250.2	7301.3	7287.3	7319.9	7319.9	7282.8	7292.1	7305.9	7324.4	7338.5	7226.9
5°	7194.5	7240.9	7199.1	7245.5	7217.6	7175.9	7245.5	7208.3	7231.6	7203.8	7222.4
7.5°	7046.0	7120.3	7036.7	7092.4	7073.9	7050.6	7078.4	7069.1	7083.1	7059.8	7008.9
10°	6827.8	6888.2	6832.5	6911.3	6874.2	6851.1	6874.2	6897.5	6892.8	6869.7	6897.5
12.5°	6577.2	6646.7	6618.9	6665.3	6623.6	6623.6	6679.3	6665.3	6670.0	6651.5	6683.9
15°	6331.2	6382.3	6340.4	6400.9	6382.3	6331.2	6354.3	6354.3	6391.6	6377.6	6340.4
17.5°	6024.9	6066.6	6020.1	6034.2	6015.6	6006.3	6103.7	6038.7	6075.8	6048.0	6052.7
20°	5621.0	5639.6	5625.6	5662.7	5639.6	5667.5	5658.2	5648.9	5648.9	5662.7	5630.3
22.5°	5212.5	5212.5	5226.5	5235.8	5254.3	5226.5	5282.2	5235.8	5240.3	5272.9	5263.6
25°	4720.6	4706.6	4739.1	4785.5	4804.1	4780.8	4855.1	4817.9	4845.8	4869.1	4817.9
27.5°	4121.8	4121.8	4154.2	4233.2	4247.0	4274.9	4377.0	4377.0	4414.1	4381.7	4418.8
30°	3430.1	3481.2	3522.9	3625.0	3657.6	3718.0	3824.6	3875.8	3959.3	3945.3	3926.7
32.5°	2720.0	2789.7	2794.2	2901.1	2989.1	3091.2	3235.2	3355.8	3416.3	3457.9	3411.5
35°	2042.3	2084.1	2121.2	2195.5	2344.0	2478.7	2608.6	2766.4	2873.2	2901.1	2859.2
37.5°	1494.7	1503.9	1541.1	1610.6	1722.0	1852.1	2009.9	2181.5	2293.0	2334.7	2288.3
40°	1030.4	1039.7	1058.3	1118.7	1211.5	1304.3	1429.7	1606.0	1708.1	1791.7	1731.2
42.5°	691.6	700.8	719.4	765.8	816.9	905.0	1002.6	1113.9	1211.5	1248.6	1216.0
45°	450.2	450.2	459.5	492.1	519.9	589.5	659.2	728.7	793.6	816.9	793.6
47.5°	264.6	269.2	278.4	301.7	334.1	362.0	413.1	459.5	478.1	496.6	487.4
50°	153.2	153.2	167.1	181.1	204.2	222.8	241.3	259.9	269.2	278.4	269.2
52.5°	83.5	88.3	92.8	97.5	106.8	125.4	139.2	139.2	144.0	148.5	144.0
55°	65.0	65.0	65.0	65.0	69.7	69.7	69.7	74.3	74.3	79.0	74.3
57.5°	46.4	46.4	46.4	51.1	51.1	51.1	46.4	46.4	46.4	46.4	46.4
60°	37.1	37.1	37.1	37.1	37.1	37.1	37.1	32.6	32.6	32.6	32.6
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°	18.6	18.6	23.3	23.3	23.3	23.3	23.3	18.6	18.6	18.6	18.6
67.5°	14.0	14.0	14.0	14.0	18.6	18.6	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



TEST NUMBER: P#

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9	7305.9
2.5°	7305.9	7226.9	7236.2	7278.0	7254.7	7278.0	7273.5	7273.5
5°	7226.9	7203.8	7166.7	7152.7	7180.5	7240.9	7231.6	7194.5
7.5°	7078.4	7018.2	7059.8	7078.4	7055.3	7092.4	7111.0	7032.0
10°	6902.1	6878.9	6869.7	6878.9	6869.7	6906.8	6860.4	6860.4
12.5°	6651.5	6614.3	6614.3	6670.0	6637.4	6609.6	6646.7	6642.2
15°	6400.9	6326.4	6326.4	6345.0	6359.0	6340.4	6345.0	6298.6
17.5°	6029.4	6006.3	5973.7	6024.9	6038.7	6020.1	6034.2	6010.9
20°	5681.3	5681.3	5621.0	5644.2	5662.7	5676.7	5686.0	5648.9
22.5°	5235.8	5245.1	5203.2	5249.6	5263.6	5217.2	5226.5	5217.2
25°	4827.2	4822.7	4790.1	4771.5	4780.8	4762.2	4757.7	4688.0
27.5°	4377.0	4330.6	4261.1	4279.6	4200.6	4135.7	4135.7	4028.8
30°	3889.6	3810.8	3718.0	3625.0	3555.5	3481.2	3439.4	3379.1
32.5°	3318.7	3212.1	3096.0	2970.6	2891.8	2780.4	2720.0	2752.6
35°	2752.6	2594.6	2436.8	2311.6	2190.8	2125.8	2051.5	2060.8
37.5°	2204.8	1982.0	1842.8	1708.1	1606.0	1522.5	1489.9	1480.6
40°	1610.6	1434.2	1295.0	1197.5	1128.0	1063.0	1025.9	1011.9
42.5°	1113.9	988.7	877.2	798.4	752.0	710.1	691.6	687.0
45°	724.1	649.9	575.6	519.9	482.8	455.0	450.2	445.5
47.5°	455.0	417.7	371.3	329.6	297.0	278.4	264.6	264.6
50°	259.9	246.0	222.8	199.6	181.1	171.8	157.8	153.2
52.5°	139.2	139.2	129.9	111.4	97.5	88.3	88.3	83.5
55°	74.3	74.3	69.7	69.7	65.0	65.0	65.0	60.4
57.5°	46.4	46.4	51.1	51.1	46.4	46.4	46.4	46.4
60°	32.6	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°	18.6	23.3	23.3	23.3	23.3	18.6	18.6	18.6
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)