

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 EX4C709027 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 EX4C709027 4LBSQLI
Description: 4 INCH 7000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

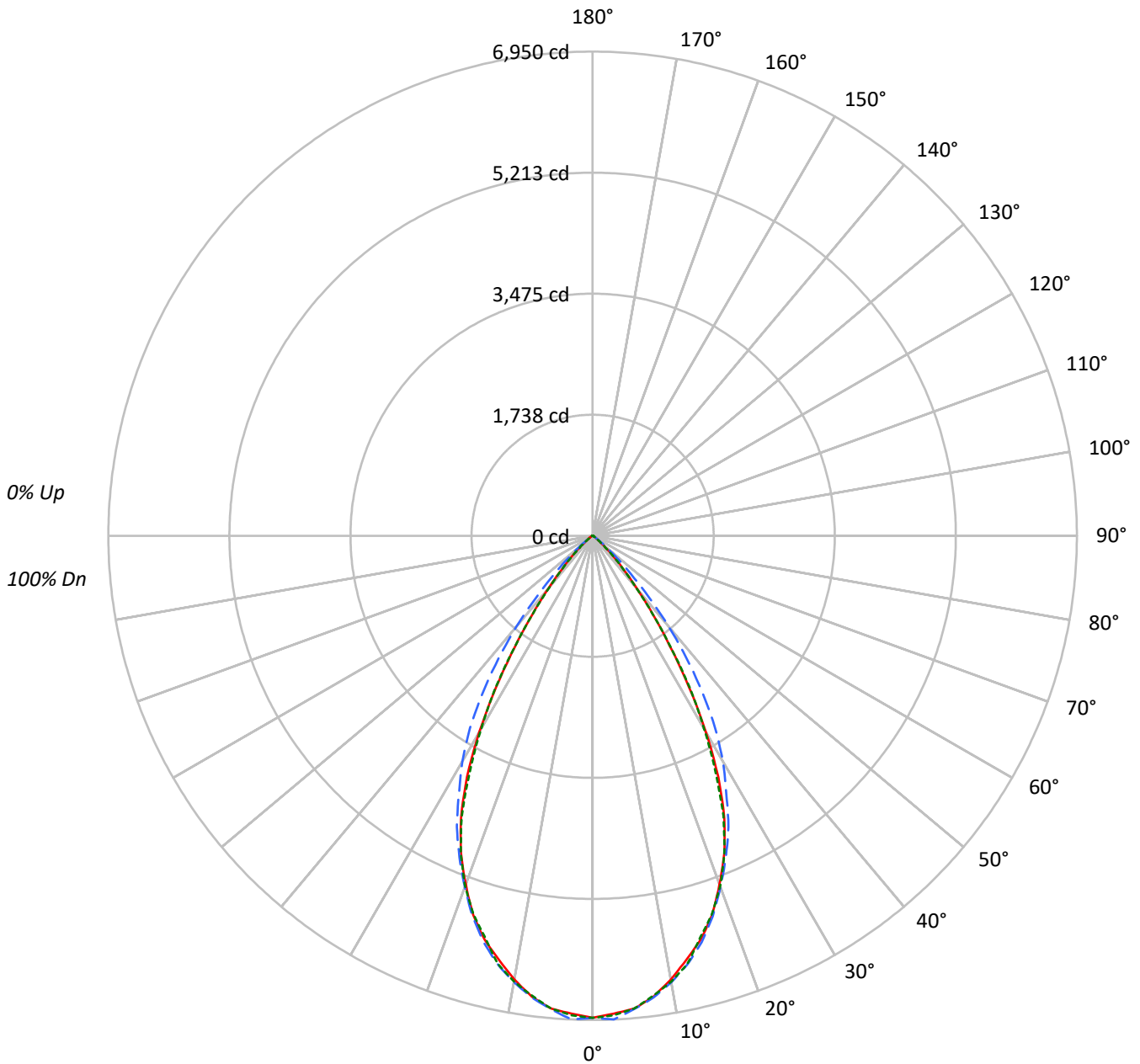
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6388.1 lumens
Efficiency: N/A
Efficacy: 81.9 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°	667626	667626	667626
5°	659958	660810	659958
10°	633561	637451	636589
15°	598966	603352	595880
20°	546624	550680	549335
25°	475967	490947	472688
30°	361945	416305	356564
35°	227832	323631	229905
40°	122922	213724	120705
45°	58185	105576	57571
50°	21781	39584	21781
55°	10346	12583	9622
60°	6793	5963	6793
65°	4018	4018	4018
70°	2483	3752	2483
75°	1678	1678	1678
80°	2500	2500	2500
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	641.5	10.0
10°-20°	1681.3	26.3
20°-30°	2053.9	32.2
30°-40°	1436.5	22.5
40°-50°	470.8	7.4
50°-60°	74.9	1.2
60°-70°	20.5	0.3
70°-80°	6.9	0.1
80°-90°	1.9	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°	4376.7	68.5
0°-40°	5813.2	91.0
0°-60°	6358.8	99.5
0°-90°	6388.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6388.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6919	6919	6919	6919	6919	
5°	6814	6816	6822	6781	6814	639
15°	5996	6020	6040	6000	5965	1673
25°	4471	4539	4611	4528	4440	2008
35°	1934	2284	2748	2249	1952	1234
45°	426	525	774	519	422	358
55°	62	66	75	66	57	61
65°	18	22	18	22	18	20
75°	4	4	4	4	4	6
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°	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2
2.5°	6866.5	6914.9	6901.6	6932.5	6932.5	6897.3	6906.1	6919.2	6936.8	6950.1	6844.4
5°	6813.7	6857.7	6818.0	6862.0	6835.6	6796.1	6862.0	6826.8	6848.9	6822.5	6840.1
7.5°	6673.1	6743.4	6664.3	6717.0	6699.4	6677.4	6703.8	6695.0	6708.2	6686.2	6637.9
10°	6466.4	6523.6	6470.9	6545.5	6510.4	6488.5	6510.4	6532.4	6528.0	6506.1	6532.4
12.5°	6229.1	6294.9	6268.6	6312.5	6273.0	6273.0	6325.8	6312.5	6317.0	6299.4	6330.1
15°	5996.1	6044.5	6004.9	6062.1	6044.5	5996.1	6018.0	6018.0	6053.3	6040.0	6004.9
17.5°	5706.0	5745.5	5701.5	5714.8	5697.2	5688.4	5780.6	5719.1	5754.3	5727.9	5732.4
20°	5323.5	5341.1	5327.8	5363.0	5341.1	5367.5	5358.7	5349.9	5349.9	5363.0	5332.3
22.5°	4936.6	4936.6	4949.9	4958.7	4976.2	4949.9	5002.6	4958.7	4963.0	4993.8	4985.0
25°	4470.7	4457.4	4488.3	4532.3	4549.8	4527.8	4598.1	4562.9	4589.3	4611.4	4562.9
27.5°	3903.7	3903.7	3934.4	4009.2	4022.3	4048.6	4145.3	4145.3	4180.5	4149.8	4185.0
30°	3248.6	3297.0	3336.5	3433.1	3464.0	3521.2	3622.2	3670.6	3749.8	3736.5	3718.9
32.5°	2576.0	2642.0	2646.3	2747.5	2830.9	2927.6	3064.0	3178.2	3235.5	3274.9	3231.0
35°	1934.2	1973.8	2009.0	2079.3	2219.9	2347.5	2470.5	2620.0	2721.1	2747.5	2707.9
37.5°	1415.6	1424.3	1459.5	1525.3	1630.8	1754.1	1903.5	2066.0	2171.7	2211.1	2167.2
40°	975.9	984.7	1002.2	1059.5	1147.4	1235.3	1354.0	1521.0	1617.7	1696.8	1639.6
42.5°	654.9	663.7	681.3	725.3	773.7	857.1	949.5	1055.0	1147.4	1182.5	1151.7
45°	426.4	426.4	435.2	466.0	492.4	558.3	624.3	690.1	751.6	773.7	751.6
47.5°	250.6	254.9	263.7	285.8	316.4	342.8	391.2	435.2	452.8	470.4	461.6
50°	145.1	145.1	158.2	171.5	193.4	211.0	228.5	246.1	254.9	263.7	254.9
52.5°	79.1	83.6	87.9	92.4	101.2	118.8	131.9	131.9	136.3	140.6	136.3
55°	61.5	61.5	61.5	61.5	66.0	66.0	66.0	70.3	70.3	74.8	70.3
57.5°	44.0	44.0	44.0	48.4	48.4	48.4	44.0	44.0	44.0	44.0	44.0
60°	35.2	35.2	35.2	35.2	35.2	35.2	35.2	30.9	30.9	30.9	30.9
62.5°	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
65°	17.6	17.6	22.1	22.1	22.1	22.1	22.1	17.6	17.6	17.6	17.6
67.5°	13.3	13.3	13.3	13.3	17.6	17.6	13.3	13.3	13.3	13.3	13.3
70°	8.8	8.8	8.8	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
72.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
75°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
80°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	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°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
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°	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2	6919.2
2.5°	6919.2	6844.4	6853.2	6892.8	6870.8	6892.8	6888.5	6888.5
5°	6844.4	6822.5	6787.3	6774.1	6800.4	6857.7	6848.9	6813.7
7.5°	6703.8	6646.7	6686.2	6703.8	6681.9	6717.0	6734.6	6659.8
10°	6536.7	6514.9	6506.1	6514.9	6506.1	6541.2	6497.3	6497.3
12.5°	6299.4	6264.2	6264.2	6317.0	6286.1	6259.8	6294.9	6290.6
15°	6062.1	5991.6	5991.6	6009.2	6022.4	6004.9	6009.2	5965.2
17.5°	5710.3	5688.4	5657.6	5706.0	5719.1	5701.5	5714.8	5692.7
20°	5380.6	5380.6	5323.5	5345.4	5363.0	5376.3	5385.1	5349.9
22.5°	4958.7	4967.4	4927.8	4971.8	4985.0	4941.1	4949.9	4941.1
25°	4571.7	4567.4	4536.6	4519.0	4527.8	4510.2	4505.9	4439.9
27.5°	4145.3	4101.4	4035.5	4053.1	3978.3	3916.8	3916.8	3815.6
30°	3683.7	3609.1	3521.2	3433.1	3367.3	3297.0	3257.3	3200.3
32.5°	3143.1	3042.1	2932.1	2813.4	2738.7	2633.2	2576.0	2606.9
35°	2606.9	2457.3	2307.8	2189.3	2074.8	2013.3	1943.0	1951.8
37.5°	2088.1	1877.1	1745.3	1617.7	1521.0	1441.9	1411.1	1402.3
40°	1525.3	1358.3	1226.5	1134.1	1068.3	1006.7	971.6	958.3
42.5°	1055.0	936.4	830.8	756.1	712.2	672.5	654.9	650.6
45°	685.8	615.5	545.2	492.4	457.3	430.9	426.4	421.9
47.5°	430.9	395.6	351.6	312.1	281.3	263.7	250.6	250.6
50°	246.1	233.0	211.0	189.1	171.5	162.7	149.4	145.1
52.5°	131.9	131.9	123.1	105.5	92.4	83.6	83.6	79.1
55°	70.3	70.3	66.0	66.0	61.5	61.5	61.5	57.2
57.5°	44.0	44.0	48.4	48.4	44.0	44.0	44.0	44.0
60°	30.9	35.2	35.2	35.2	35.2	35.2	35.2	35.2
62.5°	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
65°	17.6	22.1	22.1	22.1	22.1	17.6	17.6	17.6
67.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
70°	13.3	13.3	13.3	13.3	13.3	8.8	8.8	8.8
72.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
75°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
80°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
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°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
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)