

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: **LD4C90D010 EX4C909040 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: LD4C90D010 EX4C909040 4LBSQLI
Description: 4 INCH 9000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

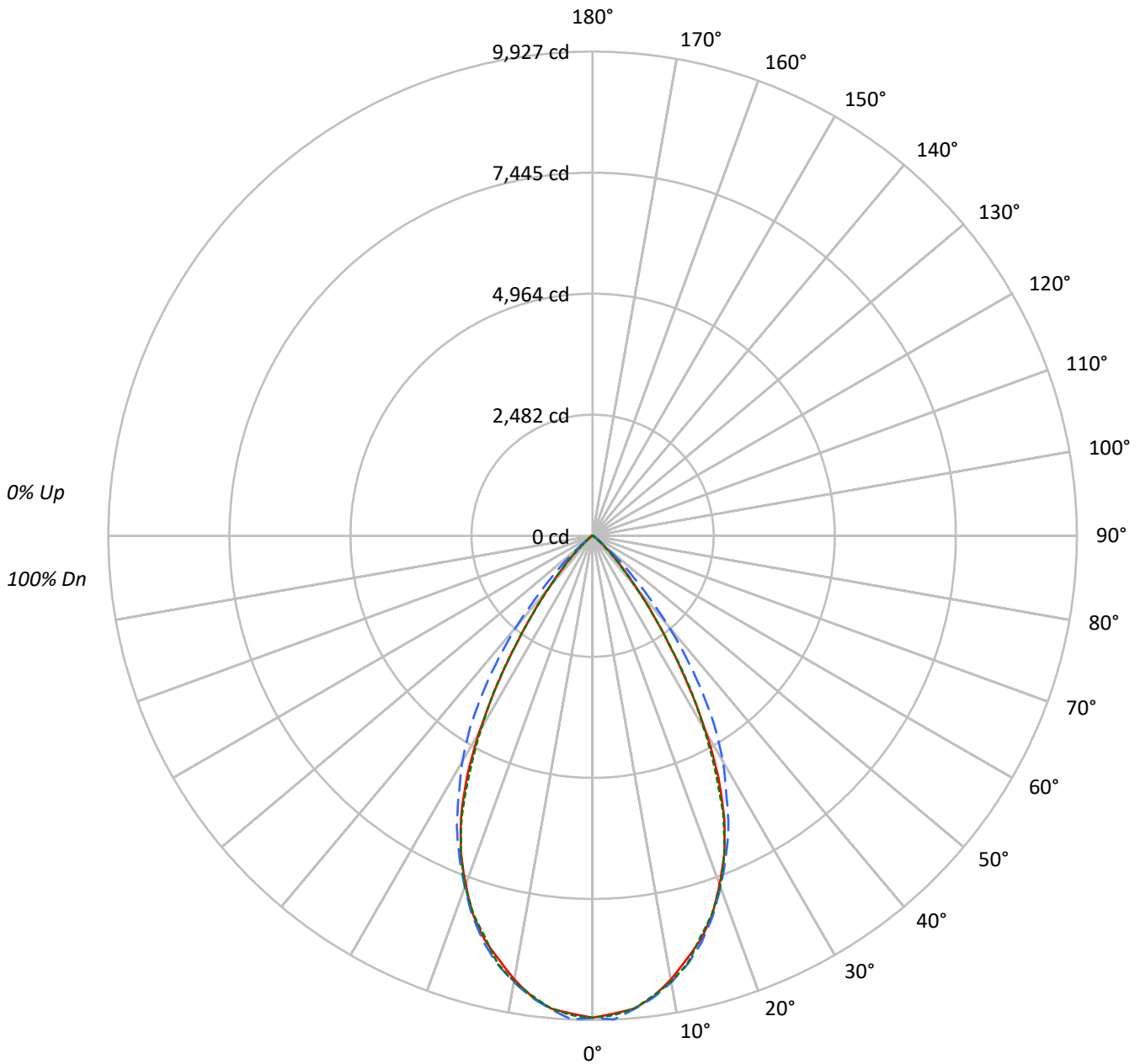
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9124.0 lumens
Efficiency: N/A
Efficacy: 94.0 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): 97.1
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				20				
RC	80				70				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°	953571	953571	953571
5°	942627	943837	942627
10°	904919	910465	909240
15°	855501	861774	851095
20°	780748	786539	784619
25°	679824	701213	675140
30°	516958	594604	509282
35°	325410	462248	328366
40°	175559	305270	172398
45°	83102	150797	82228
50°	31118	56531	31118
55°	14787	17966	13744
60°	9687	8510	9687
65°	5731	5731	5731
70°	3555	5360	3555
75°	2386	2386	2386
80°	3556	3556	3556
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	916.3	10.0
10°-20°	2401.4	26.3
20°-30°	2933.5	32.2
30°-40°	2051.8	22.5
40°-50°	672.4	7.4
50°-60°	106.9	1.2
60°-70°	29.2	0.3
70°-80°	9.8	0.1
80°-90°	2.7	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°	6251.2	68.5
0°-40°	8303.0	91.0
0°-60°	9082.3	99.5
0°-90°	9124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9883	9883	9883	9883	9883	
5°	9732	9735	9745	9685	9732	913
15°	8564	8599	8627	8570	8520	2389
25°	6386	6483	6586	6467	6342	2868
35°	2763	3262	3924	3212	2788	1763
45°	609	750	1105	741	603	511
55°	88	94	107	94	82	87
65°	25	32	25	32	25	28
75°	6	6	6	6	6	9
85°	0	0	0	0	0	3
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°	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7
2.5°	9807.4	9876.6	9857.6	9901.7	9901.7	9851.4	9864.0	9882.7	9907.8	9926.8	9775.9
5°	9732.1	9794.8	9738.2	9801.0	9763.3	9706.9	9801.0	9750.8	9782.3	9744.6	9769.7
7.5°	9531.2	9631.6	9518.6	9593.9	9568.8	9537.3	9575.0	9562.4	9581.4	9549.9	9481.0
10°	9236.0	9317.7	9242.4	9349.0	9298.8	9267.5	9298.8	9330.3	9323.9	9292.6	9330.3
12.5°	8897.0	8991.1	8953.4	9016.2	8959.8	8959.8	9035.1	9016.2	9022.6	8997.5	9041.3
15°	8564.2	8633.4	8576.8	8658.5	8633.4	8564.2	8595.5	8595.5	8645.9	8627.0	8576.8
17.5°	8149.9	8206.3	8143.5	8162.4	8137.3	8124.8	8256.5	8168.6	8218.8	8181.1	8187.5
20°	7603.6	7628.7	7609.8	7660.0	7628.7	7666.4	7653.8	7641.3	7641.3	7660.0	7616.2
22.5°	7051.0	7051.0	7069.9	7082.5	7107.6	7069.9	7145.2	7082.5	7088.6	7132.7	7120.1
25°	6385.5	6366.6	6410.7	6473.4	6498.5	6467.0	6567.5	6517.2	6554.9	6586.4	6517.2
27.5°	5575.6	5575.6	5619.4	5726.3	5745.0	5782.7	5920.8	5920.8	5971.0	5927.2	5977.4
30°	4639.9	4709.1	4765.5	4903.6	4947.6	5029.4	5173.6	5242.8	5355.8	5336.8	5311.7
32.5°	3679.3	3773.6	3779.8	3924.3	4043.4	4181.5	4376.3	4539.5	4621.2	4677.6	4614.8
35°	2762.6	2819.2	2869.4	2969.9	3170.7	3352.9	3528.7	3742.1	3886.6	3924.3	3867.7
37.5°	2021.8	2034.4	2084.6	2178.7	2329.3	2505.3	2718.8	2950.9	3101.8	3158.2	3095.4
40°	1393.8	1406.4	1431.5	1513.2	1638.8	1764.3	1934.0	2172.5	2310.6	2423.6	2341.9
42.5°	935.5	948.0	973.1	1035.9	1105.1	1224.2	1356.2	1506.8	1638.8	1689.0	1644.9
45°	609.0	609.0	621.6	665.7	703.3	797.4	891.6	985.7	1073.6	1105.1	1073.6
47.5°	357.9	364.1	376.6	408.2	452.0	489.6	558.8	621.6	646.7	671.8	659.3
50°	207.3	207.3	226.0	244.9	276.2	301.3	326.4	351.5	364.1	376.6	364.1
52.5°	113.0	119.4	125.5	132.0	144.5	169.6	188.3	188.3	194.7	200.9	194.7
55°	87.9	87.9	87.9	87.9	94.3	94.3	94.3	100.4	100.4	106.8	100.4
57.5°	62.8	62.8	62.8	69.2	69.2	69.2	62.8	62.8	62.8	62.8	62.8
60°	50.2	50.2	50.2	50.2	50.2	50.2	50.2	44.1	44.1	44.1	44.1
62.5°	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
65°	25.1	25.1	31.5	31.5	31.5	31.5	31.5	25.1	25.1	25.1	25.1
67.5°	19.0	19.0	19.0	19.0	25.1	25.1	19.0	19.0	19.0	19.0	19.0
70°	12.6	12.6	12.6	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
72.5°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
75°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
77.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
80°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	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°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
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°	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7	9882.7
2.5°	9882.7	9775.9	9788.4	9845.0	9813.5	9845.0	9838.9	9838.9
5°	9775.9	9744.6	9694.4	9675.4	9713.1	9794.8	9782.3	9732.1
7.5°	9575.0	9493.5	9549.9	9575.0	9543.7	9593.9	9619.1	9512.2
10°	9336.4	9305.2	9292.6	9305.2	9292.6	9342.9	9280.1	9280.1
12.5°	8997.5	8947.2	8947.2	9022.6	8978.5	8940.8	8991.1	8984.9
15°	8658.5	8557.8	8557.8	8582.9	8601.9	8576.8	8582.9	8520.1
17.5°	8156.0	8124.8	8080.7	8149.9	8168.6	8143.5	8162.4	8130.9
20°	7685.1	7685.1	7603.6	7634.9	7660.0	7679.0	7691.5	7641.3
22.5°	7082.5	7095.0	7038.4	7101.2	7120.1	7057.4	7069.9	7057.4
25°	6529.8	6523.6	6479.6	6454.5	6467.0	6441.9	6435.8	6341.5
27.5°	5920.8	5858.0	5764.0	5789.1	5682.2	5594.3	5594.3	5449.8
30°	5261.5	5154.9	5029.4	4903.6	4809.5	4709.1	4652.5	4571.0
32.5°	4489.3	4345.0	4187.9	4018.3	3911.7	3761.1	3679.3	3723.4
35°	3723.4	3509.7	3296.3	3126.9	2963.5	2875.6	2775.1	2787.7
37.5°	2982.4	2681.1	2492.8	2310.6	2172.5	2059.5	2015.4	2002.9
40°	2178.7	1940.1	1751.8	1619.8	1525.8	1437.9	1387.7	1368.7
42.5°	1506.8	1337.5	1186.6	1080.0	1017.2	960.6	935.5	929.3
45°	979.5	879.1	778.7	703.3	653.1	615.4	609.0	602.6
47.5°	615.4	565.0	502.2	445.8	401.8	376.6	357.9	357.9
50°	351.5	332.8	301.3	270.1	244.9	232.4	213.4	207.3
52.5°	188.3	188.3	175.8	150.7	132.0	119.4	119.4	113.0
55°	100.4	100.4	94.3	94.3	87.9	87.9	87.9	81.7
57.5°	62.8	62.8	69.2	69.2	62.8	62.8	62.8	62.8
60°	44.1	50.2	50.2	50.2	50.2	50.2	50.2	50.2
62.5°	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
65°	25.1	31.5	31.5	31.5	31.5	25.1	25.1	25.1
67.5°	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
70°	19.0	19.0	19.0	19.0	19.0	12.6	12.6	12.6
72.5°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
75°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
77.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
80°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
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°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
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)