

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

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: -

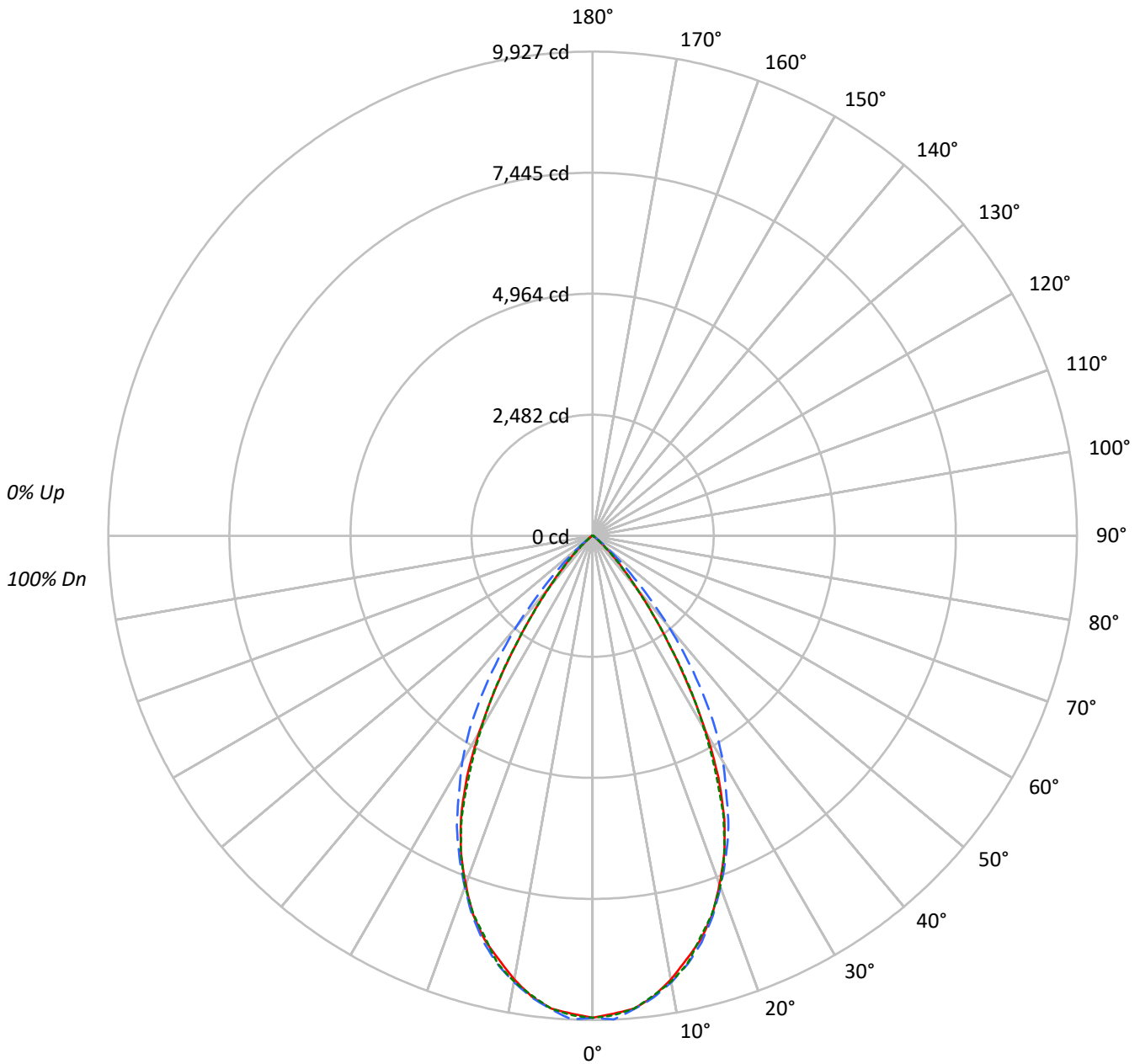
Summary

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 (A_{in}): 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	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)