

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: **LD4C100D010 EX4C1009035 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: LD4C100D010 EX4C1009035 4LBSQLI
Description: 4 INCH 10000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

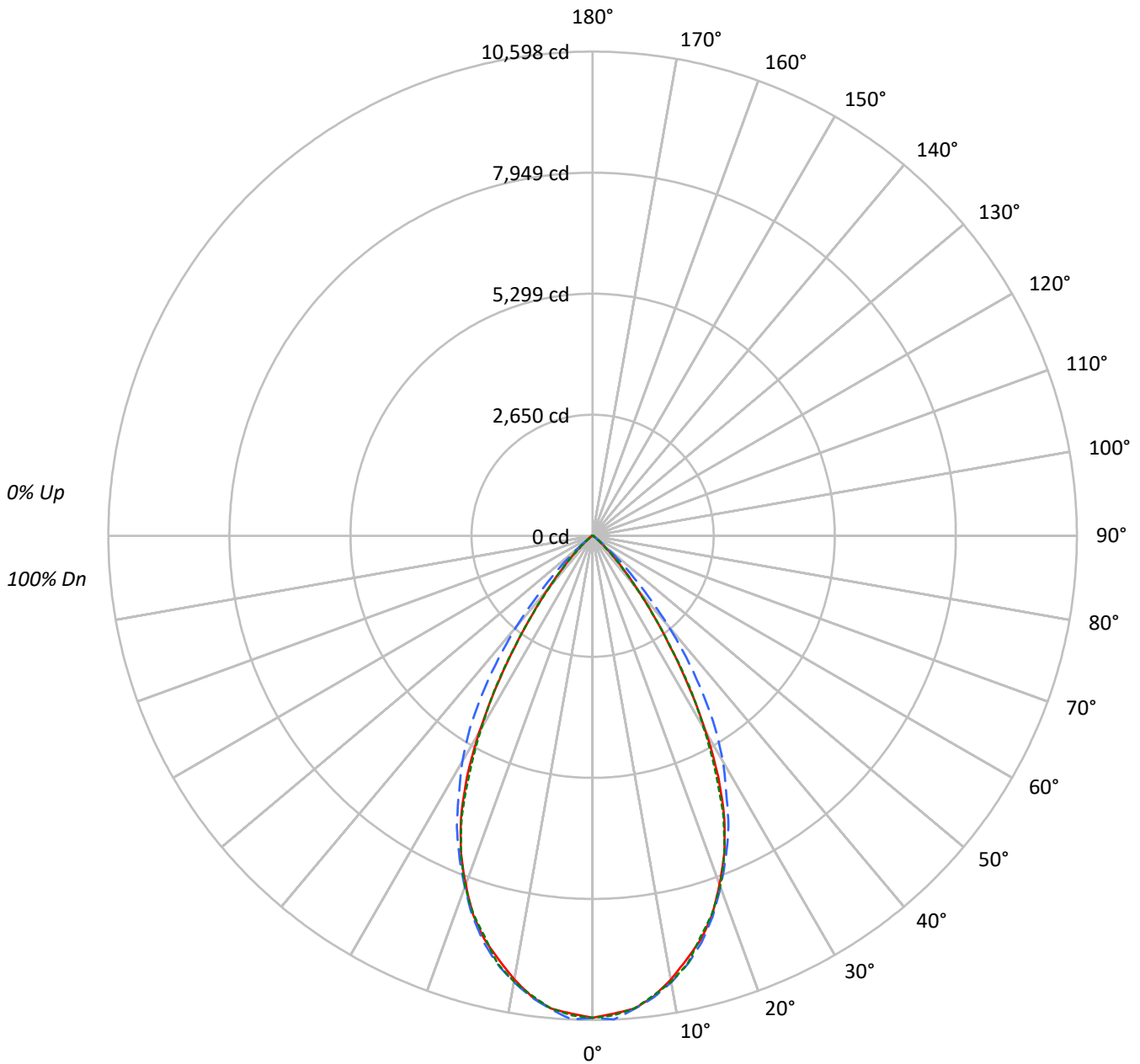
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9740.9 lumens
Efficiency: N/A
Efficacy: 85.1 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): 114.4
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°	1018054	1018054	1018054
5°	1006368	1007666	1006368
10°	966116	972034	970721
15°	913348	920051	908654
20°	833547	839728	837674
25°	725806	748632	720791
30°	551920	634814	543720
35°	347413	493510	350570
40°	187437	325915	184061
45°	88724	160991	87796
50°	33219	60359	33219
55°	15779	19194	14686
60°	10344	9070	10344
65°	6119	6119	6119
70°	3780	5699	3780
75°	2535	2535	2535
80°	3778	3778	3778
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	978.3	10.0
10°-20°	2563.8	26.3
20°-30°	3131.9	32.2
30°-40°	2190.5	22.5
40°-50°	717.9	7.4
50°-60°	114.1	1.2
60°-70°	31.1	0.3
70°-80°	10.4	0.1
80°-90°	2.9	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°	6674.0	68.5
0°-40°	8864.5	91.0
0°-60°	9696.5	99.5
0°-90°	9740.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9740.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10551	10551	10551	10551	10551	
5°	10390	10394	10404	10340	10390	975
15°	9143	9180	9210	9150	9096	2550
25°	6817	6921	7032	6904	6770	3062
35°	2949	3482	4190	3429	2976	1882
45°	650	801	1180	791	643	545
55°	94	101	114	101	87	93
65°	27	34	27	34	27	30
75°	7	7	7	7	7	10
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°	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0
2.5°	10470.6	10544.4	10524.2	10571.3	10571.3	10517.6	10531.0	10551.0	10577.8	10598.1	10437.0
5°	10390.2	10457.2	10396.7	10463.8	10423.6	10363.4	10463.8	10410.1	10443.8	10403.6	10430.4
7.5°	10175.7	10282.9	10162.3	10242.7	10215.9	10182.3	10222.5	10209.1	10229.3	10195.7	10122.1
10°	9860.6	9947.8	9867.4	9981.2	9927.6	9894.2	9927.6	9961.2	9954.4	9921.0	9961.2
12.5°	9498.7	9599.1	9558.9	9625.9	9565.7	9565.7	9646.1	9625.9	9632.7	9605.9	9652.7
15°	9143.3	9217.2	9156.7	9244.0	9217.2	9143.3	9176.7	9176.7	9230.6	9210.4	9156.7
17.5°	8701.0	8761.2	8694.2	8714.4	8687.6	8674.2	8814.8	8721.0	8774.6	8734.4	8741.2
20°	8117.8	8144.6	8124.4	8178.0	8144.6	8184.8	8171.4	8158.0	8158.0	8178.0	8131.2
22.5°	7527.8	7527.8	7548.0	7561.4	7588.2	7548.0	7628.4	7561.4	7568.0	7615.0	7601.6
25°	6817.4	6797.1	6844.2	6911.2	6938.0	6904.4	7011.6	6958.0	6998.2	7031.8	6958.0
27.5°	5952.7	5952.7	5999.5	6113.5	6133.5	6173.7	6321.2	6321.2	6374.8	6328.0	6381.6
30°	4953.7	5027.5	5087.7	5235.2	5282.2	5369.5	5523.5	5597.3	5718.0	5697.7	5670.9
32.5°	3928.1	4028.8	4035.4	4189.7	4316.9	4464.3	4672.2	4846.5	4933.7	4993.9	4926.9
35°	2949.4	3009.8	3063.5	3170.7	3385.2	3579.6	3767.3	3995.2	4149.4	4189.7	4129.2
37.5°	2158.6	2172.0	2225.6	2326.0	2486.8	2674.7	2902.6	3150.5	3311.6	3371.8	3304.7
40°	1488.1	1501.5	1528.3	1615.6	1749.6	1883.7	2064.7	2319.4	2466.9	2587.5	2500.2
42.5°	998.7	1012.1	1038.9	1106.0	1179.8	1307.0	1447.9	1608.7	1749.6	1803.2	1756.2
45°	650.2	650.2	663.6	710.7	750.9	851.3	951.9	1052.3	1146.2	1179.8	1146.2
47.5°	382.1	388.7	402.1	435.8	482.5	522.8	596.6	663.6	690.4	717.2	703.8
50°	221.3	221.3	241.3	261.5	294.9	321.7	348.5	375.3	388.7	402.1	388.7
52.5°	120.6	127.5	134.0	140.9	154.3	181.1	201.1	201.1	207.9	214.5	207.9
55°	93.8	93.8	93.8	93.8	100.7	100.7	100.7	107.2	107.2	114.1	107.2
57.5°	67.0	67.0	67.0	73.9	73.9	73.9	67.0	67.0	67.0	67.0	67.0
60°	53.6	53.6	53.6	53.6	53.6	53.6	53.6	47.0	47.0	47.0	47.0
62.5°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
65°	26.8	26.8	33.6	33.6	33.6	33.6	33.6	26.8	26.8	26.8	26.8
67.5°	20.2	20.2	20.2	20.2	26.8	26.8	20.2	20.2	20.2	20.2	20.2
70°	13.4	13.4	13.4	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
72.5°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
75°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
77.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	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°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
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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CATALOG NUMBER: LD4C100D010 EX4C1009035 4LBSQLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0	10551.0
2.5°	10551.0	10437.0	10450.4	10510.8	10477.2	10510.8	10504.2	10504.2
5°	10437.0	10403.6	10350.0	10329.7	10369.9	10457.2	10443.8	10390.2
7.5°	10222.5	10135.5	10195.7	10222.5	10189.1	10242.7	10269.5	10155.5
10°	9967.8	9934.4	9921.0	9934.4	9921.0	9974.6	9907.6	9907.6
12.5°	9605.9	9552.3	9552.3	9632.7	9585.7	9545.5	9599.1	9592.5
15°	9244.0	9136.5	9136.5	9163.3	9183.6	9156.7	9163.3	9096.3
17.5°	8707.6	8674.2	8627.2	8701.0	8721.0	8694.2	8714.4	8680.8
20°	8204.8	8204.8	8117.8	8151.2	8178.0	8198.2	8211.6	8158.0
22.5°	7561.4	7574.8	7514.4	7581.4	7601.6	7534.6	7548.0	7534.6
25°	6971.4	6964.8	6917.8	6891.0	6904.4	6877.5	6871.0	6770.3
27.5°	6321.2	6254.1	6153.7	6180.5	6066.5	5972.6	5972.6	5818.4
30°	5617.3	5503.5	5369.5	5235.2	5134.8	5027.5	4967.1	4880.1
32.5°	4792.8	4638.8	4471.1	4290.1	4176.3	4015.4	3928.1	3975.2
35°	3975.2	3747.1	3519.2	3338.4	3163.9	3070.0	2962.8	2976.2
37.5°	3184.1	2862.4	2661.3	2466.9	2319.4	2198.8	2151.7	2138.3
40°	2326.0	2071.3	1870.2	1729.4	1629.0	1535.1	1481.5	1461.3
42.5°	1608.7	1427.9	1266.8	1153.0	1086.0	1025.5	998.7	992.2
45°	1045.8	938.5	831.3	750.9	697.3	657.1	650.2	643.4
47.5°	657.1	603.2	536.2	476.0	428.9	402.1	382.1	382.1
50°	375.3	355.3	321.7	288.3	261.5	248.1	227.9	221.3
52.5°	201.1	201.1	187.7	160.8	140.9	127.5	127.5	120.6
55°	107.2	107.2	100.7	100.7	93.8	93.8	93.8	87.3
57.5°	67.0	67.0	73.9	73.9	67.0	67.0	67.0	67.0
60°	47.0	53.6	53.6	53.6	53.6	53.6	53.6	53.6
62.5°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
65°	26.8	33.6	33.6	33.6	33.6	26.8	26.8	26.8
67.5°	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
70°	20.2	20.2	20.2	20.2	20.2	13.4	13.4	13.4
72.5°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
75°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
77.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
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°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
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)