

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: **LD4C10D010 EX4C109035 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: LD4C10D010 EX4C109035 4LBSQLI
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

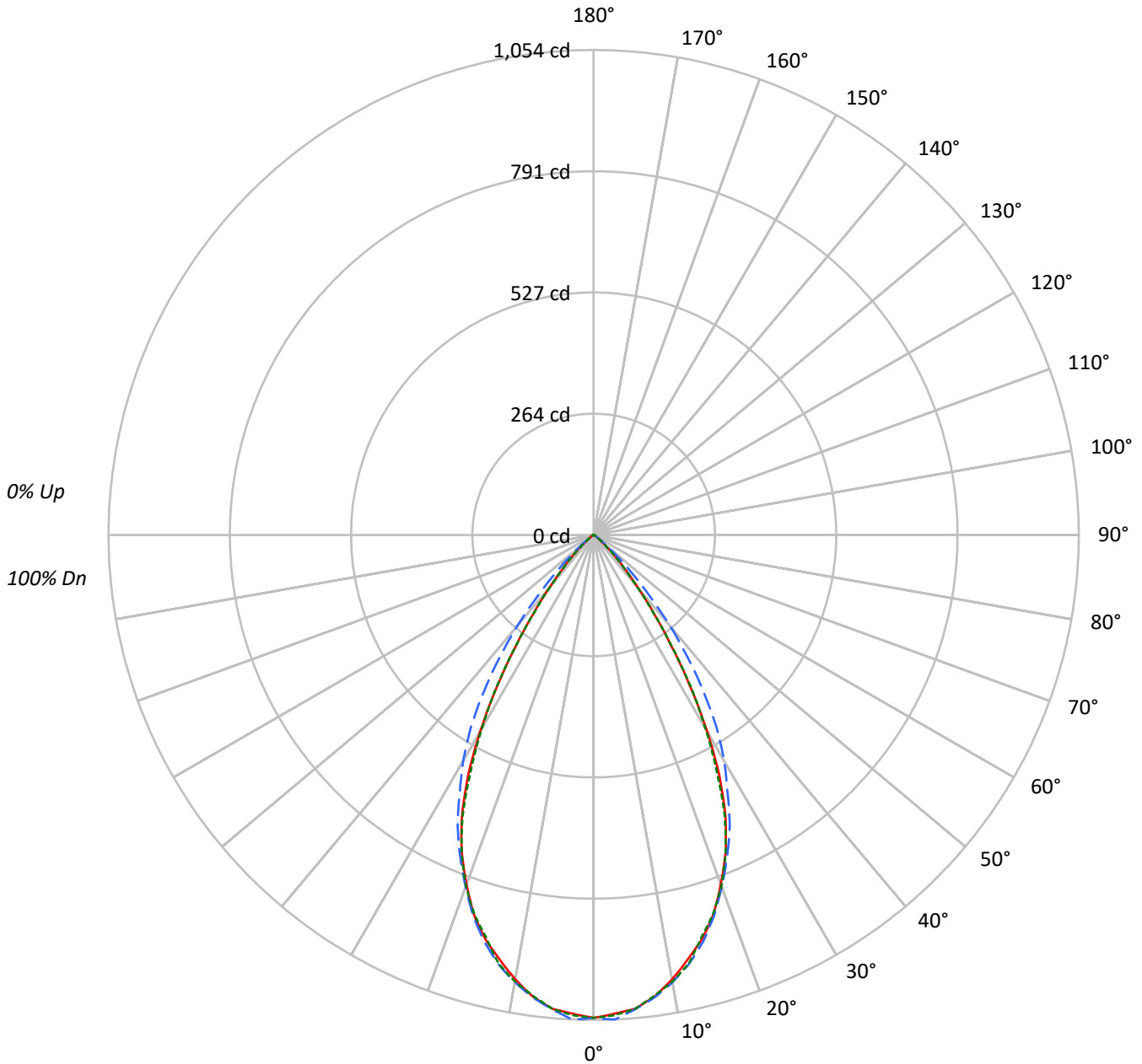
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 969.0 lumens
Efficiency: N/A
Efficacy: 98.9 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): 9.8
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

TEST NUMBER: P#
CATALOG NUMBER: LD4C10D010 EX4C109035 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°	101275	101275	101275
5°	100112	100238	100112
10°	96106	96694	96567
15°	90852	91522	90393
20°	82915	83531	83326
25°	72204	74471	71703
30°	54906	63150	54092
35°	34560	49095	34878
40°	18642	32421	18314
45°	8829	16020	8733
50°	3302	6004	3302
55°	1564	1901	1464
60°	1023	907	1023
65°	616	616	616
70°	367	564	367
75°	261	261	261
80°	389	389	389
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	10.0
10°-20°	255.0	26.3
20°-30°	311.6	32.2
30°-40°	217.9	22.5
40°-50°	71.4	7.4
50°-60°	11.4	1.2
60°-70°	3.1	0.3
70°-80°	1.0	0.1
80°-90°	0.3	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°	663.9	68.5
0°-40°	881.8	91.0
0°-60°	964.6	99.5
0°-90°	969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	969.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1034	1034	1035	1029	1034	97
15°	910	913	916	910	905	254
25°	678	688	700	687	674	305
35°	293	346	417	341	296	187
45°	65	80	117	79	64	54
55°	9	10	11	10	9	9
65°	3	3	3	3	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
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°	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6
2.5°	1041.6	1048.9	1046.9	1051.6	1051.6	1046.3	1047.6	1049.6	1052.2	1054.3	1038.2
5°	1033.6	1040.2	1034.2	1040.9	1036.9	1030.9	1040.9	1035.6	1038.9	1034.9	1037.6
7.5°	1012.2	1022.9	1010.9	1018.9	1016.2	1012.9	1016.9	1015.6	1017.6	1014.2	1006.9
10°	980.9	989.6	981.6	992.9	987.6	984.2	987.6	990.9	990.2	986.9	990.9
12.5°	944.9	954.9	950.9	957.5	951.6	951.6	959.6	957.5	958.2	955.6	960.2
15°	909.5	916.9	910.9	919.6	916.9	909.5	912.9	912.9	918.2	916.2	910.9
17.5°	865.5	871.5	864.9	866.9	864.2	862.9	876.9	867.5	872.9	868.9	869.5
20°	807.5	810.2	808.2	813.5	810.2	814.2	812.9	811.5	811.5	813.5	808.9
22.5°	748.8	748.8	750.8	752.2	754.8	750.8	758.8	752.2	752.8	757.5	756.2
25°	678.2	676.2	680.8	687.5	690.2	686.8	697.5	692.2	696.2	699.5	692.2
27.5°	592.2	592.2	596.8	608.2	610.1	614.1	628.8	628.8	634.1	629.5	634.8
30°	492.8	500.1	506.1	520.8	525.5	534.1	549.5	556.8	568.8	566.8	564.1
32.5°	390.8	400.8	401.4	416.8	429.4	444.1	464.8	482.1	490.8	496.8	490.1
35°	293.4	299.4	304.7	315.4	336.7	356.1	374.8	397.4	412.8	416.8	410.8
37.5°	214.7	216.1	221.4	231.4	247.4	266.1	288.7	313.4	329.4	335.4	328.7
40°	148.0	149.4	152.0	160.7	174.0	187.4	205.4	230.7	245.4	257.4	248.7
42.5°	99.3	100.7	103.3	110.0	117.4	130.0	144.0	160.0	174.0	179.4	174.7
45°	64.7	64.7	66.0	70.7	74.7	84.7	94.7	104.7	114.0	117.4	114.0
47.5°	38.0	38.7	40.0	43.3	48.0	52.0	59.3	66.0	68.7	71.3	70.0
50°	22.0	22.0	24.0	26.0	29.3	32.0	34.7	37.3	38.7	40.0	38.7
52.5°	12.0	12.7	13.3	14.0	15.3	18.0	20.0	20.0	20.7	21.3	20.7
55°	9.3	9.3	9.3	9.3	10.0	10.0	10.0	10.7	10.7	11.3	10.7
57.5°	6.7	6.7	6.7	7.3	7.3	7.3	6.7	6.7	6.7	6.7	6.7
60°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	4.7	4.7	4.7	4.7
62.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
65°	2.7	2.7	3.3	3.3	3.3	3.3	3.3	2.7	2.7	2.7	2.7
67.5°	2.0	2.0	2.0	2.0	2.7	2.7	2.0	2.0	2.0	2.0	2.0
70°	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	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°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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°	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6	1049.6
2.5°	1049.6	1038.2	1039.6	1045.6	1042.2	1045.6	1044.9	1044.9
5°	1038.2	1034.9	1029.6	1027.6	1031.6	1040.2	1038.9	1033.6
7.5°	1016.9	1008.2	1014.2	1016.9	1013.6	1018.9	1021.6	1010.2
10°	991.6	988.2	986.9	988.2	986.9	992.2	985.6	985.6
12.5°	955.6	950.2	950.2	958.2	953.5	949.5	954.9	954.2
15°	919.6	908.9	908.9	911.5	913.5	910.9	911.5	904.9
17.5°	866.2	862.9	858.2	865.5	867.5	864.9	866.9	863.5
20°	816.2	816.2	807.5	810.9	813.5	815.5	816.9	811.5
22.5°	752.2	753.5	747.5	754.2	756.2	749.5	750.8	749.5
25°	693.5	692.8	688.2	685.5	686.8	684.2	683.5	673.5
27.5°	628.8	622.1	612.2	614.8	603.5	594.1	594.1	578.8
30°	558.8	547.5	534.1	520.8	510.8	500.1	494.1	485.5
32.5°	476.8	461.5	444.8	426.8	415.4	399.4	390.8	395.4
35°	395.4	372.7	350.1	332.1	314.7	305.4	294.7	296.1
37.5°	316.7	284.7	264.7	245.4	230.7	218.7	214.0	212.7
40°	231.4	206.0	186.0	172.0	162.0	152.7	147.4	145.4
42.5°	160.0	142.0	126.0	114.7	108.0	102.0	99.3	98.7
45°	104.0	93.4	82.7	74.7	69.4	65.4	64.7	64.0
47.5°	65.4	60.0	53.3	47.3	42.7	40.0	38.0	38.0
50°	37.3	35.3	32.0	28.7	26.0	24.7	22.7	22.0
52.5°	20.0	20.0	18.7	16.0	14.0	12.7	12.7	12.0
55°	10.7	10.7	10.0	10.0	9.3	9.3	9.3	8.7
57.5°	6.7	6.7	7.3	7.3	6.7	6.7	6.7	6.7
60°	4.7	5.3	5.3	5.3	5.3	5.3	5.3	5.3
62.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
65°	2.7	3.3	3.3	3.3	3.3	2.7	2.7	2.7
67.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
70°	2.0	2.0	2.0	2.0	2.0	1.3	1.3	1.3
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)