

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: **LD4C50D010 EX4C509027 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: LD4C50D010 EX4C509027 4LBSQLI
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

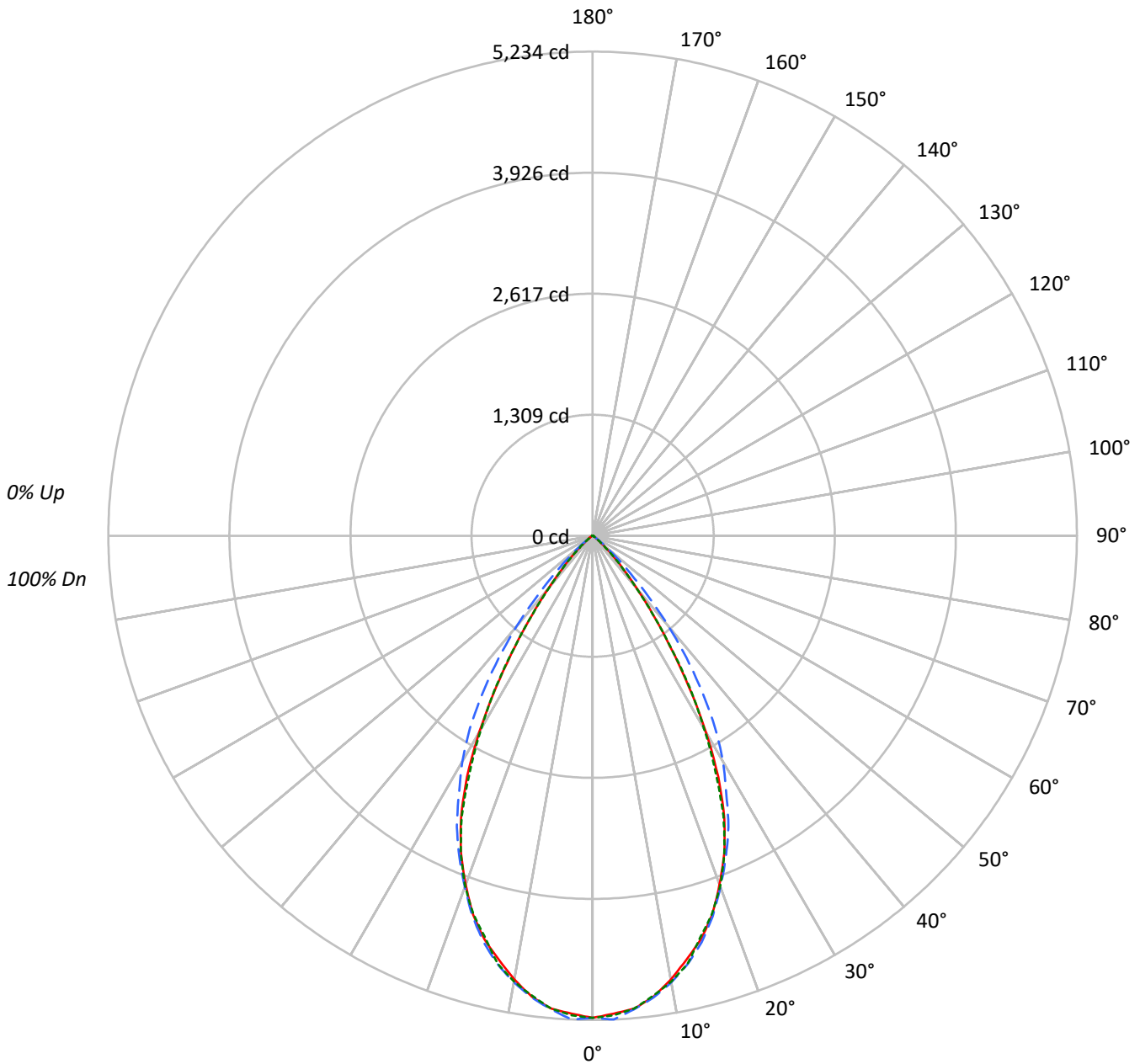
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4811.0 lumens
Efficiency: N/A
Efficacy: 82.4 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): 58.4
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°	502813	502813	502813
5°	497034	497673	497034
10°	477160	480079	479433
15°	451095	454402	448778
20°	411680	414730	413724
25°	358463	369748	355993
30°	272590	313535	268534
35°	171586	243734	173141
40°	92579	160961	90903
45°	43816	79513	43366
50°	16407	29812	16407
55°	7789	9471	7250
60°	5114	4477	5114
65°	3014	3014	3014
70°	1862	2821	1862
75°	1268	1268	1268
80°	1889	1889	1889
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	483.2	10.0
10°-20°	1266.2	26.3
20°-30°	1546.8	32.2
30°-40°	1081.9	22.5
40°-50°	354.6	7.4
50°-60°	56.4	1.2
60°-70°	15.4	0.3
70°-80°	5.2	0.1
80°-90°	1.4	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°	3296.2	68.5
0°-40°	4378.1	91.0
0°-60°	4789.0	99.5
0°-90°	4811.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4811.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5211	5211	5211	5211	5211	
5°	5132	5133	5138	5107	5132	481
15°	4516	4534	4549	4519	4493	1260
25°	3367	3418	3473	3410	3344	1512
35°	1457	1720	2069	1693	1470	930
45°	321	396	583	391	318	269
55°	46	50	56	50	43	46
65°	13	17	13	17	13	15
75°	3	3	3	3	3	5
85°	0	0	0	0	0	1
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°	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1
2.5°	5171.3	5207.8	5197.8	5221.1	5221.1	5194.6	5201.2	5211.1	5224.3	5234.3	5154.7
5°	5131.6	5164.7	5134.9	5168.0	5148.1	5118.4	5168.0	5141.5	5158.1	5138.2	5151.5
7.5°	5025.7	5078.7	5019.1	5058.8	5045.6	5028.9	5048.8	5042.2	5052.2	5035.6	4999.2
10°	4870.1	4913.2	4873.4	4929.6	4903.2	4886.7	4903.2	4919.8	4916.4	4899.9	4919.8
12.5°	4691.3	4740.9	4721.0	4754.1	4724.4	4724.4	4764.1	4754.1	4757.5	4744.3	4767.4
15°	4515.8	4552.3	4522.4	4565.5	4552.3	4515.8	4532.3	4532.3	4558.9	4548.9	4522.4
17.5°	4297.4	4327.1	4294.0	4304.0	4290.7	4284.1	4353.6	4307.2	4333.7	4313.8	4317.2
20°	4009.3	4022.6	4012.6	4039.0	4022.6	4042.4	4035.8	4029.2	4029.2	4039.0	4015.9
22.5°	3717.9	3717.9	3727.9	3734.5	3747.8	3727.9	3767.6	3734.5	3737.8	3761.0	3754.4
25°	3367.0	3357.0	3380.3	3413.4	3426.6	3410.0	3463.0	3436.5	3456.3	3473.0	3436.5
27.5°	2940.0	2940.0	2963.1	3019.4	3029.3	3049.1	3122.0	3122.0	3148.4	3125.3	3151.8
30°	2446.6	2483.1	2512.8	2585.6	2608.8	2651.9	2728.0	2764.5	2824.1	2814.1	2800.8
32.5°	1940.1	1989.8	1993.0	2069.2	2132.1	2204.9	2307.6	2393.6	2436.7	2466.4	2433.3
35°	1456.7	1486.5	1513.0	1566.0	1671.9	1768.0	1860.6	1973.2	2049.4	2069.2	2039.4
37.5°	1066.1	1072.7	1099.2	1148.8	1228.2	1321.0	1433.6	1556.0	1635.6	1665.3	1632.2
40°	735.0	741.6	754.8	797.9	864.1	930.3	1019.8	1145.5	1218.4	1277.9	1234.8
42.5°	493.3	499.9	513.1	546.2	582.7	645.5	715.1	794.5	864.1	890.6	867.4
45°	321.1	321.1	327.8	351.0	370.9	420.4	470.2	519.7	566.1	582.7	566.1
47.5°	188.7	192.0	198.6	215.2	238.3	258.2	294.7	327.8	341.0	354.2	347.6
50°	109.3	109.3	119.2	129.2	145.6	158.9	172.1	185.4	192.0	198.6	192.0
52.5°	59.6	63.0	66.2	69.6	76.2	89.4	99.3	99.3	102.7	105.9	102.7
55°	46.3	46.3	46.3	46.3	49.7	49.7	49.7	53.0	53.0	56.3	53.0
57.5°	33.1	33.1	33.1	36.5	36.5	36.5	33.1	33.1	33.1	33.1	33.1
60°	26.5	26.5	26.5	26.5	26.5	26.5	26.5	23.2	23.2	23.2	23.2
62.5°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
65°	13.2	13.2	16.6	16.6	16.6	16.6	16.6	13.2	13.2	13.2	13.2
67.5°	10.0	10.0	10.0	10.0	13.2	13.2	10.0	10.0	10.0	10.0	10.0
70°	6.6	6.6	6.6	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
72.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
75°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	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°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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°	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1	5211.1
2.5°	5211.1	5154.7	5161.3	5191.2	5174.6	5191.2	5188.0	5188.0
5°	5154.7	5138.2	5111.8	5101.8	5121.6	5164.7	5158.1	5131.6
7.5°	5048.8	5005.8	5035.6	5048.8	5032.3	5058.8	5072.0	5015.7
10°	4923.0	4906.5	4899.9	4906.5	4899.9	4926.4	4893.3	4893.3
12.5°	4744.3	4717.8	4717.8	4757.5	4734.3	4714.4	4740.9	4737.7
15°	4565.5	4512.4	4512.4	4525.7	4535.7	4522.4	4525.7	4492.6
17.5°	4300.6	4284.1	4260.9	4297.4	4307.2	4294.0	4304.0	4287.4
20°	4052.3	4052.3	4009.3	4025.8	4039.0	4049.0	4055.7	4029.2
22.5°	3734.5	3741.1	3711.3	3744.4	3754.4	3721.3	3727.9	3721.3
25°	3443.1	3439.9	3416.6	3403.4	3410.0	3396.8	3393.5	3343.8
27.5°	3122.0	3088.9	3039.3	3052.5	2996.2	2949.8	2949.8	2873.6
30°	2774.3	2718.1	2651.9	2585.6	2536.0	2483.1	2453.2	2410.2
32.5°	2367.1	2291.1	2208.3	2118.8	2062.6	1983.2	1940.1	1963.3
35°	1963.3	1850.6	1738.1	1648.8	1562.6	1516.3	1463.3	1469.9
37.5°	1572.6	1413.7	1314.4	1218.4	1145.5	1086.0	1062.7	1056.1
40°	1148.8	1023.0	923.7	854.1	804.5	758.2	731.7	721.7
42.5°	794.5	705.2	625.7	569.5	536.4	506.5	493.3	490.0
45°	516.5	463.5	410.6	370.9	344.4	324.5	321.1	317.8
47.5°	324.5	297.9	264.8	235.1	211.8	198.6	188.7	188.7
50°	185.4	175.5	158.9	142.4	129.2	122.5	112.5	109.3
52.5°	99.3	99.3	92.7	79.4	69.6	63.0	63.0	59.6
55°	53.0	53.0	49.7	49.7	46.3	46.3	46.3	43.1
57.5°	33.1	33.1	36.5	36.5	33.1	33.1	33.1	33.1
60°	23.2	26.5	26.5	26.5	26.5	26.5	26.5	26.5
62.5°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
65°	13.2	16.6	16.6	16.6	16.6	13.2	13.2	13.2
67.5°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
70°	10.0	10.0	10.0	10.0	10.0	6.6	6.6	6.6
72.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
75°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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)