

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 EX4C509035 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 EX4C509035 4LBSQLI
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

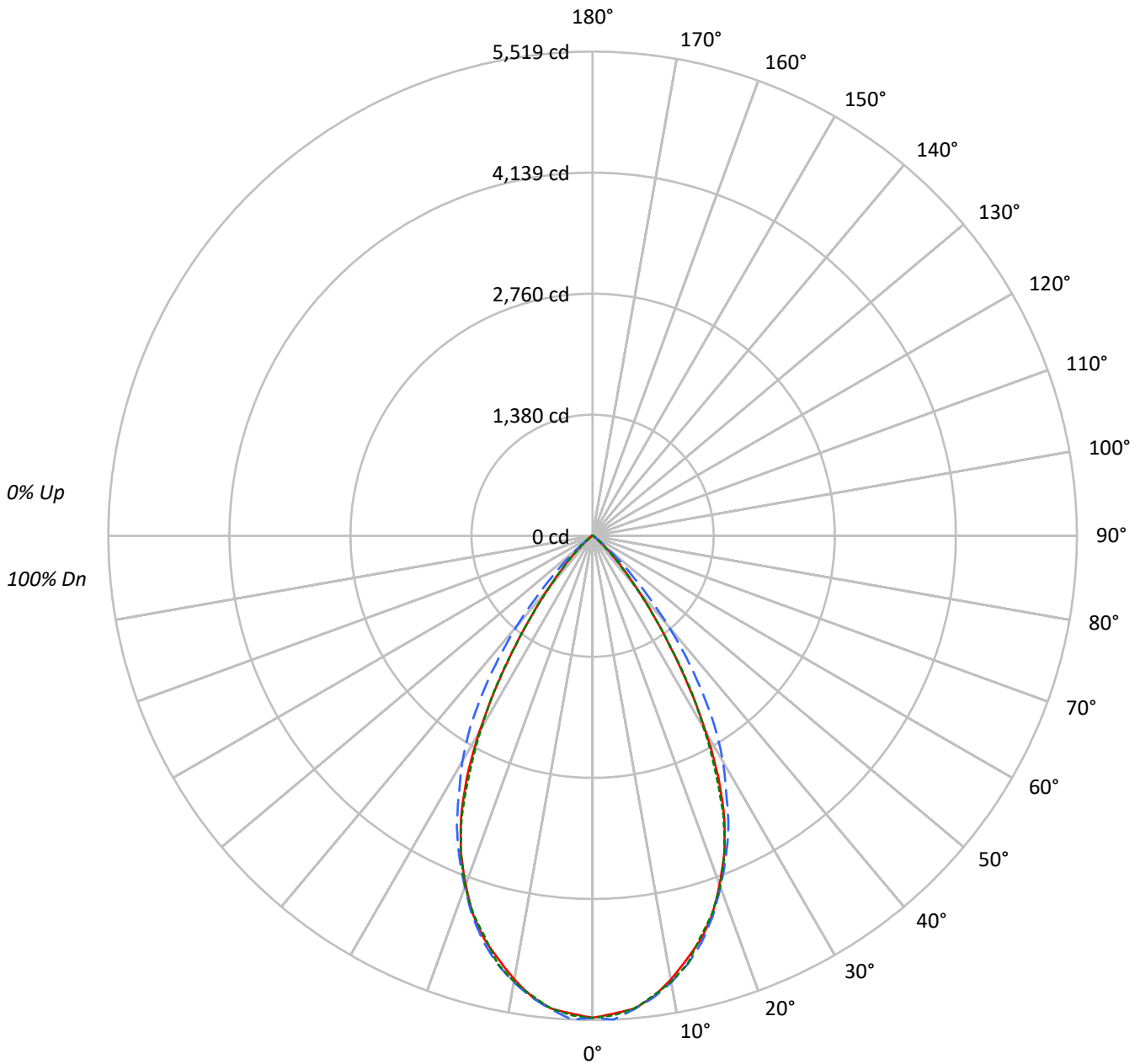
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5073.0 lumens
Efficiency: N/A
Efficacy: 86.9 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): 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°	530187	530187	530187
5°	524105	524783	524105
10°	503143	506230	505544
15°	475659	479145	473211
20°	434106	437320	436252
25°	377989	389881	375380
30°	287430	330604	283163
35°	180927	257009	182576
40°	97617	169727	95854
45°	46204	83839	45726
50°	17293	31433	17293
55°	8226	9992	7637
60°	5384	4728	5384
65°	3196	3196	3196
70°	1975	2962	1975
75°	1342	1342	1342
80°	2000	2000	2000
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	509.5	10.0
10°-20°	1335.2	26.3
20°-30°	1631.1	32.2
30°-40°	1140.8	22.5
40°-50°	373.9	7.4
50°-60°	59.4	1.2
60°-70°	16.2	0.3
70°-80°	5.5	0.1
80°-90°	1.5	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°	3475.7	68.5
0°-40°	4616.5	91.0
0°-60°	5049.8	99.5
0°-90°	5073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5495	5495	5495	5495	5495	
5°	5411	5413	5418	5385	5411	508
15°	4762	4781	4797	4765	4737	1328
25°	3550	3604	3662	3596	3526	1595
35°	1536	1814	2182	1786	1550	980
45°	339	417	614	412	335	284
55°	49	52	59	52	45	48
65°	14	18	14	18	14	15
75°	4	4	4	4	4	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°	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8
2.5°	5453.0	5491.4	5480.9	5505.4	5505.4	5477.5	5484.4	5494.8	5508.8	5519.3	5435.4
5°	5411.1	5446.0	5414.5	5449.4	5428.5	5397.1	5449.4	5421.5	5439.0	5418.1	5432.0
7.5°	5299.4	5355.2	5292.4	5334.3	5320.3	5302.8	5323.8	5316.8	5327.3	5309.8	5271.5
10°	5135.3	5180.7	5138.8	5198.1	5170.2	5152.8	5170.2	5187.7	5184.1	5166.8	5187.7
12.5°	4946.8	4999.1	4978.1	5013.0	4981.7	4981.7	5023.6	5013.0	5016.6	5002.6	5027.0
15°	4761.7	4800.2	4768.7	4814.2	4800.2	4761.7	4779.1	4779.1	4807.2	4796.6	4768.7
17.5°	4531.4	4562.7	4527.8	4538.4	4524.4	4517.4	4590.7	4541.8	4569.7	4548.8	4552.3
20°	4227.7	4241.6	4231.1	4259.0	4241.6	4262.6	4255.6	4248.6	4248.6	4259.0	4234.6
22.5°	3920.4	3920.4	3930.9	3937.9	3951.9	3930.9	3972.8	3937.9	3941.3	3965.8	3958.8
25°	3550.4	3539.9	3564.4	3599.3	3613.2	3595.7	3651.6	3623.6	3644.6	3662.1	3623.6
27.5°	3100.1	3100.1	3124.4	3183.9	3194.3	3215.2	3292.0	3292.0	3319.9	3295.5	3323.5
30°	2579.8	2618.3	2649.6	2726.4	2750.9	2796.4	2876.6	2915.0	2977.9	2967.3	2953.4
32.5°	2045.7	2098.2	2101.6	2181.9	2248.2	2325.0	2433.2	2524.0	2569.4	2600.8	2565.9
35°	1536.0	1567.5	1595.4	1651.3	1763.0	1864.2	1962.0	2080.6	2161.0	2181.9	2150.4
37.5°	1124.2	1131.1	1159.1	1211.3	1295.1	1393.0	1511.6	1640.7	1724.6	1756.0	1721.1
40°	775.0	782.0	795.9	841.4	911.2	981.0	1075.3	1207.9	1284.7	1347.5	1302.1
42.5°	520.1	527.1	541.1	576.0	614.4	680.7	754.0	837.8	911.2	939.1	914.6
45°	338.6	338.6	345.6	370.1	391.1	443.3	495.8	548.0	596.9	614.4	596.9
47.5°	199.0	202.4	209.4	226.9	251.3	272.2	310.7	345.6	359.6	373.5	366.6
50°	115.2	115.2	125.7	136.2	153.6	167.5	181.5	195.5	202.4	209.4	202.4
52.5°	62.8	66.4	69.8	73.4	80.3	94.3	104.7	104.7	108.3	111.7	108.3
55°	48.9	48.9	48.9	48.9	52.4	52.4	52.4	55.8	55.8	59.4	55.8
57.5°	34.9	34.9	34.9	38.5	38.5	38.5	34.9	34.9	34.9	34.9	34.9
60°	27.9	27.9	27.9	27.9	27.9	27.9	27.9	24.5	24.5	24.5	24.5
62.5°	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
65°	14.0	14.0	17.5	17.5	17.5	17.5	17.5	14.0	14.0	14.0	14.0
67.5°	10.5	10.5	10.5	10.5	14.0	14.0	10.5	10.5	10.5	10.5	10.5
70°	7.0	7.0	7.0	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	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°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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°	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8	5494.8
2.5°	5494.8	5435.4	5442.4	5473.9	5456.4	5473.9	5470.5	5470.5
5°	5435.4	5418.1	5390.1	5379.6	5400.5	5446.0	5439.0	5411.1
7.5°	5323.8	5278.4	5309.8	5323.8	5306.4	5334.3	5348.3	5288.9
10°	5191.1	5173.7	5166.8	5173.7	5166.8	5194.7	5159.8	5159.8
12.5°	5002.6	4974.7	4974.7	5016.6	4992.1	4971.2	4999.1	4995.7
15°	4814.2	4758.2	4758.2	4772.1	4782.7	4768.7	4772.1	4737.2
17.5°	4534.8	4517.4	4492.9	4531.4	4541.8	4527.8	4538.4	4520.8
20°	4273.0	4273.0	4227.7	4245.0	4259.0	4269.5	4276.5	4248.6
22.5°	3937.9	3944.9	3913.4	3948.3	3958.8	3923.9	3930.9	3923.9
25°	3630.6	3627.2	3602.7	3588.7	3595.7	3581.7	3578.3	3525.9
27.5°	3292.0	3257.1	3204.8	3218.8	3159.3	3110.5	3110.5	3030.1
30°	2925.4	2866.2	2796.4	2726.4	2674.1	2618.3	2586.8	2541.5
32.5°	2496.1	2415.8	2328.5	2234.2	2174.9	2091.2	2045.7	2070.2
35°	2070.2	1951.4	1832.8	1738.6	1647.7	1598.8	1543.0	1550.0
37.5°	1658.2	1490.7	1386.0	1284.7	1207.9	1145.1	1120.6	1113.6
40°	1211.3	1078.7	974.0	900.6	848.4	799.5	771.6	761.0
42.5°	837.8	743.6	659.7	600.5	565.6	534.1	520.1	516.7
45°	544.6	488.8	432.9	391.1	363.1	342.2	338.6	335.1
47.5°	342.2	314.1	279.2	247.9	223.4	209.4	199.0	199.0
50°	195.5	185.1	167.5	150.2	136.2	129.2	118.7	115.2
52.5°	104.7	104.7	97.7	83.8	73.4	66.4	66.4	62.8
55°	55.8	55.8	52.4	52.4	48.9	48.9	48.9	45.4
57.5°	34.9	34.9	38.5	38.5	34.9	34.9	34.9	34.9
60°	24.5	27.9	27.9	27.9	27.9	27.9	27.9	27.9
62.5°	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
65°	14.0	17.5	17.5	17.5	17.5	14.0	14.0	14.0
67.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
70°	10.5	10.5	10.5	10.5	10.5	7.0	7.0	7.0
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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)