

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: **LD4C35D010 EX4C359050 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: LD4C35D010 EX4C359050 4LBSQLI
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

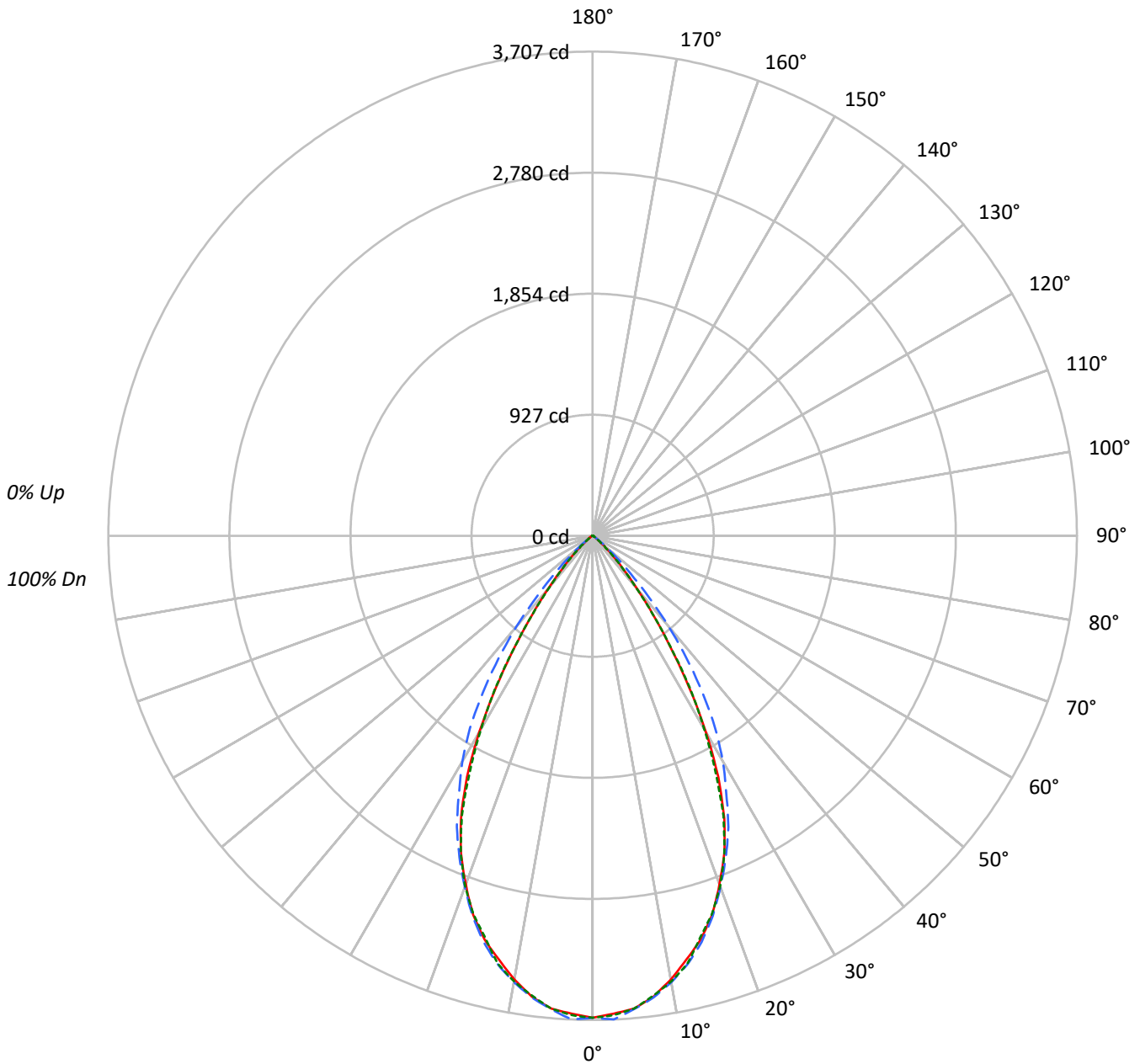
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3407.0 lumens
Efficiency: N/A
Efficacy: 84.3 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): 40.4
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°	356073	356073	356073
5°	351990	352435	351990
10°	337904	339982	339521
15°	319457	321794	317808
20°	291543	293699	292981
25°	253852	261837	252106
30°	193039	222029	190176
35°	121513	172611	122621
40°	65561	113991	64377
45°	31030	56302	30703
50°	11619	21105	11619
55°	5518	6712	5131
60°	3628	3184	3628
65°	2146	2146	2146
70°	1326	2003	1326
75°	895	895	895
80°	1334	1334	1334
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.2	10.0
10°-20°	896.7	26.3
20°-30°	1095.4	32.2
30°-40°	766.2	22.5
40°-50°	251.1	7.4
50°-60°	39.9	1.2
60°-70°	10.9	0.3
70°-80°	3.7	0.1
80°-90°	1.0	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°	2334.3	68.5
0°-40°	3100.4	91.0
0°-60°	3391.4	99.5
0°-90°	3407.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3407.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3690	3690	3690	3690	3690	
5°	3634	3635	3639	3616	3634	341
15°	3198	3211	3221	3200	3182	892
25°	2384	2421	2459	2415	2368	1071
35°	1032	1218	1465	1199	1041	658
45°	227	280	413	277	225	191
55°	33	35	40	35	30	32
65°	9	12	9	12	9	10
75°	2	2	2	2	2	3
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°	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3
2.5°	3662.2	3688.0	3680.9	3697.4	3697.4	3678.6	3683.3	3690.3	3699.7	3706.8	3650.4
5°	3634.1	3657.5	3636.4	3659.8	3645.7	3624.7	3659.8	3641.0	3652.8	3638.7	3648.1
7.5°	3559.0	3596.5	3554.4	3582.5	3573.1	3561.3	3575.4	3570.7	3577.8	3566.0	3540.3
10°	3448.8	3479.3	3451.2	3491.0	3472.3	3460.6	3472.3	3484.0	3481.6	3470.0	3484.0
12.5°	3322.2	3357.4	3343.3	3366.7	3345.7	3345.7	3373.8	3366.7	3369.1	3359.8	3376.1
15°	3198.0	3223.8	3202.7	3233.2	3223.8	3198.0	3209.6	3209.6	3228.5	3221.4	3202.7
17.5°	3043.3	3064.3	3040.9	3047.9	3038.6	3033.9	3083.1	3050.2	3069.0	3054.9	3057.3
20°	2839.3	2848.7	2841.6	2860.3	2848.7	2862.7	2858.0	2853.3	2853.3	2860.3	2844.0
22.5°	2632.9	2632.9	2640.0	2644.7	2654.0	2640.0	2668.1	2644.7	2647.0	2663.4	2658.7
25°	2384.4	2377.4	2393.8	2417.2	2426.6	2414.9	2452.4	2433.6	2447.7	2459.4	2433.6
27.5°	2082.0	2082.0	2098.4	2138.3	2145.2	2159.3	2210.9	2210.9	2229.6	2213.3	2232.0
30°	1732.6	1758.4	1779.5	1831.0	1847.5	1878.0	1931.9	1957.7	1999.9	1992.8	1983.5
32.5°	1373.9	1409.1	1411.4	1465.4	1509.9	1561.4	1634.1	1695.1	1725.6	1746.7	1723.2
35°	1031.6	1052.7	1071.5	1109.0	1184.0	1252.0	1317.6	1397.3	1451.3	1465.4	1444.2
37.5°	755.0	759.7	778.4	813.5	869.8	935.5	1015.2	1101.9	1158.2	1179.3	1155.9
40°	520.5	525.2	534.5	565.1	611.9	658.8	722.2	811.2	862.8	905.0	874.5
42.5°	349.3	354.0	363.4	386.8	412.6	457.1	506.4	562.7	611.9	630.7	614.2
45°	227.4	227.4	232.1	248.6	262.6	297.7	333.0	368.1	400.9	412.6	400.9
47.5°	133.7	136.0	140.6	152.4	168.8	182.8	208.7	232.1	241.5	250.9	246.2
50°	77.4	77.4	84.4	91.5	103.1	112.5	121.9	131.3	136.0	140.6	136.0
52.5°	42.2	44.6	46.9	49.3	54.0	63.3	70.3	70.3	72.7	75.0	72.7
55°	32.8	32.8	32.8	32.8	35.2	35.2	35.2	37.5	37.5	39.9	37.5
57.5°	23.4	23.4	23.4	25.8	25.8	25.8	23.4	23.4	23.4	23.4	23.4
60°	18.8	18.8	18.8	18.8	18.8	18.8	18.8	16.5	16.5	16.5	16.5
62.5°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
65°	9.4	9.4	11.8	11.8	11.8	11.8	11.8	9.4	9.4	9.4	9.4
67.5°	7.1	7.1	7.1	7.1	9.4	9.4	7.1	7.1	7.1	7.1	7.1
70°	4.7	4.7	4.7	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
72.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	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°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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°	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3	3690.3
2.5°	3690.3	3650.4	3655.1	3676.2	3664.5	3676.2	3673.9	3673.9
5°	3650.4	3638.7	3620.0	3612.9	3627.0	3657.5	3652.8	3634.1
7.5°	3575.4	3545.0	3566.0	3575.4	3563.7	3582.5	3591.9	3552.0
10°	3486.3	3474.7	3470.0	3474.7	3470.0	3488.7	3465.3	3465.3
12.5°	3359.8	3341.0	3341.0	3369.1	3352.7	3338.6	3357.4	3355.1
15°	3233.2	3195.6	3195.6	3204.9	3212.0	3202.7	3204.9	3181.5
17.5°	3045.6	3033.9	3017.4	3043.3	3050.2	3040.9	3047.9	3036.2
20°	2869.7	2869.7	2839.3	2850.9	2860.3	2867.4	2872.1	2853.3
22.5°	2644.7	2649.4	2628.2	2651.7	2658.7	2635.3	2640.0	2635.3
25°	2438.3	2436.0	2419.5	2410.2	2414.9	2405.5	2403.2	2368.0
27.5°	2210.9	2187.4	2152.3	2161.7	2121.8	2089.0	2089.0	2035.0
30°	1964.7	1924.9	1878.0	1831.0	1795.9	1758.4	1737.3	1706.9
32.5°	1676.3	1622.5	1563.8	1500.5	1460.7	1404.4	1373.9	1390.4
35°	1390.4	1310.6	1230.9	1167.6	1106.6	1073.8	1036.3	1041.0
37.5°	1113.7	1001.2	930.8	862.8	811.2	769.0	752.6	747.9
40°	813.5	724.5	654.1	604.9	569.7	536.9	518.2	511.1
42.5°	562.7	499.4	443.1	403.3	379.8	358.7	349.3	347.0
45°	365.8	328.3	290.8	262.6	243.9	229.8	227.4	225.0
47.5°	229.8	211.0	187.5	166.5	150.0	140.6	133.7	133.7
50°	131.3	124.3	112.5	100.8	91.5	86.8	79.7	77.4
52.5°	70.3	70.3	65.6	56.3	49.3	44.6	44.6	42.2
55°	37.5	37.5	35.2	35.2	32.8	32.8	32.8	30.5
57.5°	23.4	23.4	25.8	25.8	23.4	23.4	23.4	23.4
60°	16.5	18.8	18.8	18.8	18.8	18.8	18.8	18.8
62.5°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
65°	9.4	11.8	11.8	11.8	11.8	9.4	9.4	9.4
67.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
70°	7.1	7.1	7.1	7.1	7.1	4.7	4.7	4.7
72.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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)