

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 EX4C359040 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 EX4C359040 4LBSQLI
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

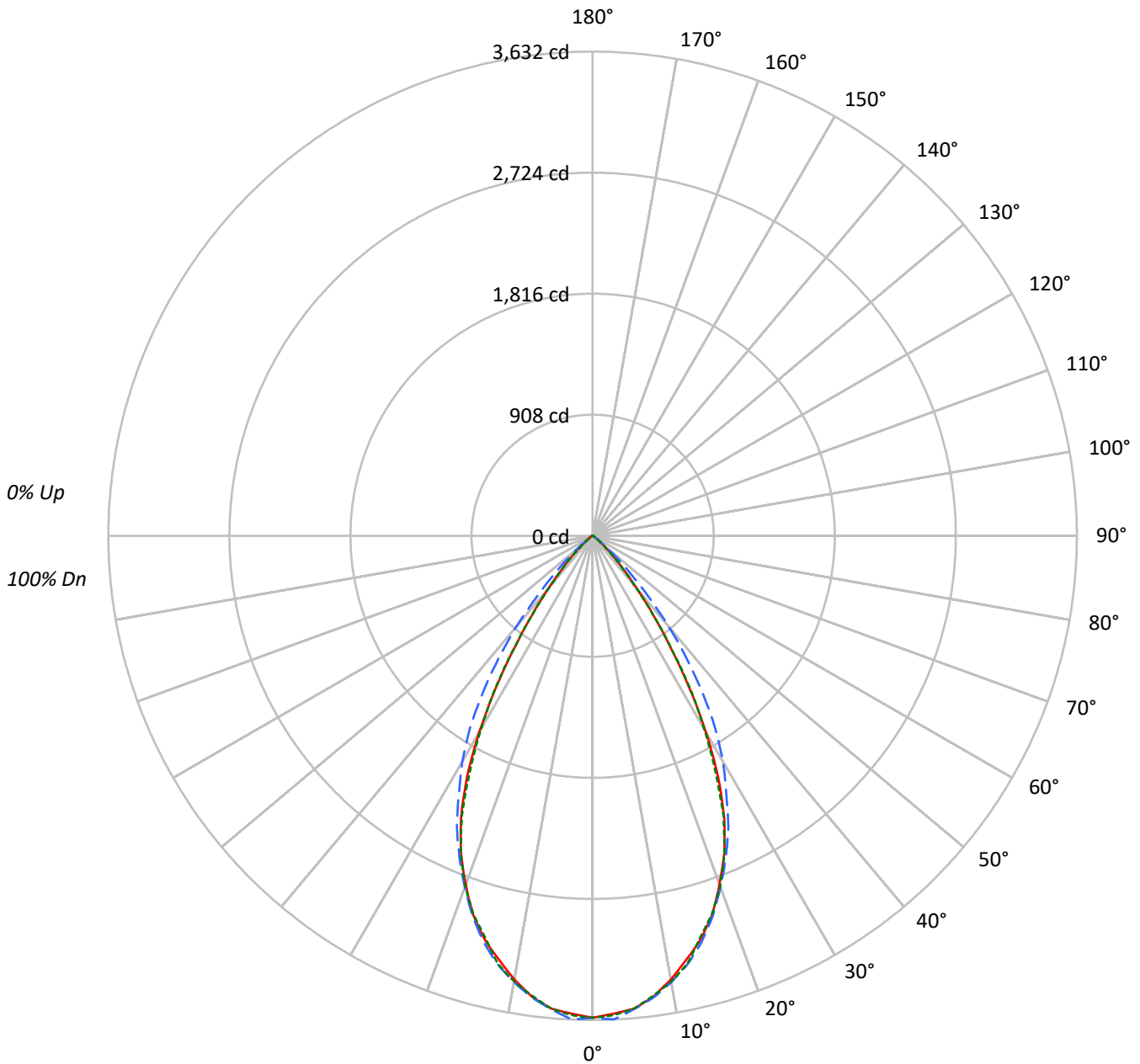
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3338.0 lumens
Efficiency: N/A
Efficacy: 82.6 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 (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

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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°	348865	348865	348865
5°	344861	345297	344861
10°	331066	333094	332643
15°	312984	315281	311375
20°	285639	287754	287056
25°	248710	256535	246996
30°	189128	217539	186321
35°	119052	169113	120135
40°	64226	111686	63067
45°	30402	55169	30089
50°	11378	20685	11378
55°	5417	6578	5030
60°	3551	3107	3551
65°	2100	2100	2100
70°	1298	1947	1298
75°	857	857	857
80°	1278	1278	1278
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.2	10.0
10°-20°	878.5	26.3
20°-30°	1073.2	32.2
30°-40°	750.6	22.5
40°-50°	246.0	7.4
50°-60°	39.1	1.2
60°-70°	10.7	0.3
70°-80°	3.5	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°	2287.0	68.5
0°-40°	3037.6	91.0
0°-60°	3322.8	99.5
0°-90°	3338.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3338.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3616	3616	3616	3616	3616	
5°	3560	3562	3565	3543	3560	334
15°	3133	3146	3156	3135	3117	874
25°	2336	2372	2410	2366	2320	1049
35°	1011	1193	1436	1175	1020	645
45°	223	274	404	271	220	187
55°	32	34	39	34	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°	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6
2.5°	3588.0	3613.3	3606.4	3622.5	3622.5	3604.1	3608.7	3615.6	3624.8	3631.7	3576.5
5°	3560.5	3583.4	3562.7	3585.7	3571.9	3551.3	3585.7	3567.3	3578.8	3565.0	3574.2
7.5°	3487.0	3523.7	3482.4	3509.9	3500.7	3489.2	3503.0	3498.4	3505.3	3493.8	3468.6
10°	3379.0	3408.9	3381.3	3420.3	3401.9	3390.5	3401.9	3413.5	3411.1	3399.7	3413.5
12.5°	3255.0	3289.4	3275.6	3298.6	3277.9	3277.9	3305.5	3298.6	3300.9	3291.7	3307.7
15°	3133.2	3158.5	3137.8	3167.7	3158.5	3133.2	3144.6	3144.6	3163.1	3156.2	3137.8
17.5°	2981.6	3002.2	2979.3	2986.2	2977.0	2972.4	3020.6	2988.5	3006.8	2993.1	2995.4
20°	2781.8	2791.0	2784.0	2802.4	2791.0	2804.7	2800.1	2795.6	2795.6	2802.4	2786.4
22.5°	2579.6	2579.6	2586.5	2591.1	2600.3	2586.5	2614.1	2591.1	2593.4	2609.5	2604.9
25°	2336.1	2329.2	2345.3	2368.3	2377.5	2366.0	2402.7	2384.3	2398.1	2409.6	2384.3
27.5°	2039.8	2039.8	2055.9	2095.0	2101.8	2115.6	2166.1	2166.1	2184.5	2168.4	2186.8
30°	1697.5	1722.8	1743.4	1794.0	1810.1	1840.0	1892.8	1918.1	1959.4	1952.5	1943.3
32.5°	1346.1	1380.6	1382.8	1435.7	1479.3	1529.8	1601.0	1660.8	1690.7	1711.3	1688.3
35°	1010.7	1031.4	1049.8	1086.5	1160.0	1226.7	1291.0	1369.0	1421.9	1435.7	1415.0
37.5°	739.7	744.3	762.7	797.1	852.2	916.6	994.7	1079.6	1134.8	1155.4	1132.5
40°	509.9	514.5	523.7	553.6	599.5	645.5	707.5	794.8	845.3	886.7	856.8
42.5°	342.2	346.8	356.0	379.0	404.3	447.9	496.2	551.3	599.5	617.9	601.8
45°	222.8	222.8	227.4	243.5	257.3	291.7	326.2	360.6	392.8	404.3	392.8
47.5°	131.0	133.2	137.8	149.3	165.4	179.1	204.4	227.4	236.6	245.8	241.2
50°	75.8	75.8	82.7	89.6	101.1	110.2	119.4	128.6	133.2	137.8	133.2
52.5°	41.3	43.7	45.9	48.3	52.9	62.1	68.9	68.9	71.2	73.5	71.2
55°	32.2	32.2	32.2	32.2	34.5	34.5	34.5	36.7	36.7	39.1	36.7
57.5°	23.0	23.0	23.0	25.3	25.3	25.3	23.0	23.0	23.0	23.0	23.0
60°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	16.1	16.1	16.1	16.1
62.5°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
65°	9.2	9.2	11.5	11.5	11.5	11.5	11.5	9.2	9.2	9.2	9.2
67.5°	6.9	6.9	6.9	6.9	9.2	9.2	6.9	6.9	6.9	6.9	6.9
70°	4.6	4.6	4.6	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
72.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	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°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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°	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6	3615.6
2.5°	3615.6	3576.5	3581.1	3601.8	3590.3	3601.8	3599.5	3599.5
5°	3576.5	3565.0	3546.7	3539.7	3553.5	3583.4	3578.8	3560.5
7.5°	3503.0	3473.2	3493.8	3503.0	3491.6	3509.9	3519.1	3480.0
10°	3415.7	3404.3	3399.7	3404.3	3399.7	3418.1	3395.1	3395.1
12.5°	3291.7	3273.3	3273.3	3300.9	3284.8	3271.0	3289.4	3287.1
15°	3167.7	3130.9	3130.9	3140.0	3147.0	3137.8	3140.0	3117.1
17.5°	2983.9	2972.4	2956.3	2981.6	2988.5	2979.3	2986.2	2974.7
20°	2811.6	2811.6	2781.8	2793.2	2802.4	2809.3	2813.9	2795.6
22.5°	2591.1	2595.7	2575.0	2598.0	2604.9	2581.9	2586.5	2581.9
25°	2388.9	2386.7	2370.5	2361.4	2366.0	2356.8	2354.5	2320.0
27.5°	2166.1	2143.1	2108.7	2117.9	2078.8	2046.7	2046.7	1993.8
30°	1924.9	1885.9	1840.0	1794.0	1759.6	1722.8	1702.1	1672.3
32.5°	1642.4	1589.6	1532.1	1470.1	1431.1	1376.0	1346.1	1362.2
35°	1362.2	1284.0	1205.9	1144.0	1084.2	1052.0	1015.3	1019.9
37.5°	1091.1	980.9	912.0	845.3	794.8	753.5	737.3	732.8
40°	797.1	709.8	640.9	592.6	558.2	526.1	507.7	500.7
42.5°	551.3	489.3	434.1	395.1	372.1	351.4	342.2	340.0
45°	358.4	321.6	284.9	257.3	238.9	225.2	222.8	220.5
47.5°	225.2	206.7	183.7	163.1	147.0	137.8	131.0	131.0
50°	128.6	121.8	110.2	98.8	89.6	85.0	78.1	75.8
52.5°	68.9	68.9	64.3	55.1	48.3	43.7	43.7	41.3
55°	36.7	36.7	34.5	34.5	32.2	32.2	32.2	29.9
57.5°	23.0	23.0	25.3	25.3	23.0	23.0	23.0	23.0
60°	16.1	18.4	18.4	18.4	18.4	18.4	18.4	18.4
62.5°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
65°	9.2	11.5	11.5	11.5	11.5	9.2	9.2	9.2
67.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
70°	6.9	6.9	6.9	6.9	6.9	4.6	4.6	4.6
72.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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)