

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: **LD4C05D010 EX4C059035 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: LD4C05D010 EX4C059035 4LBSQLI
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

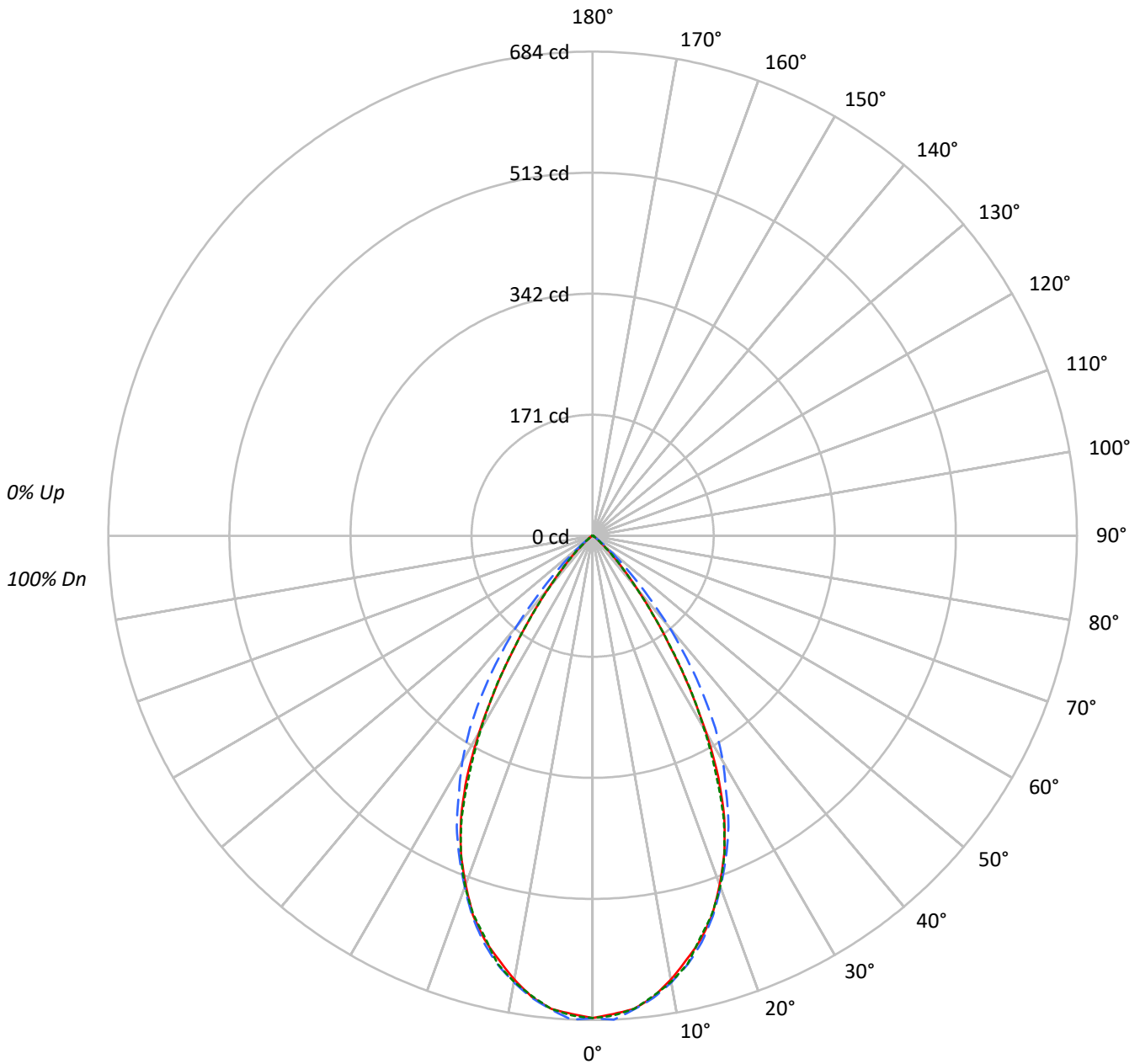
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 629.0 lumens
Efficiency: N/A
Efficacy: 87.4 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): 7.2
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	65																			
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°	65738	65738	65738
5°	64982	65069	64982
10°	62382	62764	62686
15°	58977	59406	58677
20°	53826	54226	54093
25°	46865	48345	46546
30°	35642	40990	35107
35°	22427	31863	22639
40°	12104	21047	11890
45°	5731	10398	5663
50°	2147	3903	2147
55°	1026	1245	942
60°	675	579	675
65°	388	388	388
70°	254	367	254
75°	149	149	149
80°	222	222	222
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	10.0
10°-20°	165.5	26.3
20°-30°	202.2	32.2
30°-40°	141.4	22.5
40°-50°	46.4	7.4
50°-60°	7.4	1.2
60°-70°	2.0	0.3
70°-80°	0.7	0.1
80°-90°	0.2	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°	431.0	68.5
0°-40°	572.4	91.0
0°-60°	626.1	99.5
0°-90°	629.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	629.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	671	671	672	668	671	63
15°	590	593	595	591	587	165
25°	440	447	454	446	437	198
35°	190	225	270	221	192	122
45°	42	52	76	51	42	35
55°	6	6	7	6	6	6
65°	2	2	2	2	2	2
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	681.3	681.3	681.3	681.3	681.3	681.3	681.3	681.3	681.3	681.3	681.3
2.5°	676.1	680.9	679.6	682.6	682.6	679.1	680.0	681.3	683.0	684.3	673.9
5°	670.9	675.2	671.3	675.7	673.1	669.2	675.7	672.2	674.4	671.8	673.5
7.5°	657.1	664.0	656.2	661.4	659.7	657.5	660.1	659.2	660.5	658.4	653.6
10°	636.7	642.4	637.2	644.5	641.0	638.9	641.0	643.2	642.8	640.6	643.2
12.5°	613.4	619.8	617.2	621.6	617.7	617.7	622.9	621.6	622.0	620.3	623.3
15°	590.4	595.2	591.3	596.9	595.2	590.4	592.6	592.6	596.0	594.7	591.3
17.5°	561.8	565.7	561.4	562.7	561.0	560.1	569.2	563.1	566.6	564.0	564.4
20°	524.2	525.9	524.6	528.1	525.9	528.5	527.6	526.8	526.8	528.1	525.1
22.5°	486.1	486.1	487.4	488.3	490.0	487.4	492.6	488.3	488.7	491.7	490.9
25°	440.2	438.9	441.9	446.3	448.0	445.8	452.8	449.3	451.9	454.1	449.3
27.5°	384.4	384.4	387.4	394.8	396.1	398.7	408.2	408.2	411.6	408.6	412.1
30°	319.9	324.6	328.5	338.0	341.1	346.7	356.7	361.4	369.2	367.9	366.2
32.5°	253.7	260.2	260.6	270.5	278.8	288.3	301.7	312.9	318.6	322.5	318.1
35°	190.4	194.4	197.8	204.7	218.6	231.1	243.3	258.0	267.9	270.5	266.6
37.5°	139.4	140.2	143.7	150.2	160.6	172.7	187.4	203.4	213.8	217.7	213.4
40°	96.1	97.0	98.7	104.3	113.0	121.6	133.3	149.8	159.3	167.1	161.4
42.5°	64.5	65.4	67.1	71.4	76.2	84.4	93.5	103.9	113.0	116.4	113.4
45°	42.0	42.0	42.9	45.9	48.5	55.0	61.5	68.0	74.0	76.2	74.0
47.5°	24.7	25.1	26.0	28.1	31.2	33.8	38.5	42.9	44.6	46.3	45.4
50°	14.3	14.3	15.6	16.9	19.0	20.8	22.5	24.2	25.1	26.0	25.1
52.5°	7.8	8.2	8.7	9.1	10.0	11.7	13.0	13.0	13.4	13.8	13.4
55°	6.1	6.1	6.1	6.1	6.5	6.5	6.5	6.9	6.9	7.4	6.9
57.5°	4.3	4.3	4.3	4.8	4.8	4.8	4.3	4.3	4.3	4.3	4.3
60°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.0
62.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
65°	1.7	1.7	2.2	2.2	2.2	2.2	2.2	1.7	1.7	1.7	1.7
67.5°	1.3	1.3	1.3	1.3	1.7	1.7	1.3	1.3	1.3	1.3	1.3
70°	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	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°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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°	681.3	681.3	681.3	681.3	681.3	681.3	681.3	681.3
2.5°	681.3	673.9	674.8	678.7	676.5	678.7	678.3	678.3
5°	673.9	671.8	668.3	667.0	669.6	675.2	674.4	670.9
7.5°	660.1	654.5	658.4	660.1	657.9	661.4	663.1	655.8
10°	643.6	641.5	640.6	641.5	640.6	644.1	639.8	639.8
12.5°	620.3	616.8	616.8	622.0	619.0	616.4	619.8	619.4
15°	596.9	590.0	590.0	591.7	593.0	591.3	591.7	587.4
17.5°	562.3	560.1	557.1	561.8	563.1	561.4	562.7	560.5
20°	529.8	529.8	524.2	526.3	528.1	529.4	530.2	526.8
22.5°	488.3	489.1	485.2	489.5	490.9	486.5	487.4	486.5
25°	450.2	449.7	446.7	445.0	445.8	444.1	443.7	437.2
27.5°	408.2	403.8	397.4	399.1	391.7	385.7	385.7	375.7
30°	362.7	355.4	346.7	338.0	331.6	324.6	320.7	315.1
32.5°	309.5	299.5	288.7	277.0	269.7	259.3	253.7	256.7
35°	256.7	242.0	227.2	215.6	204.3	198.2	191.3	192.2
37.5°	205.6	184.8	171.8	159.3	149.8	142.0	138.9	138.1
40°	150.2	133.7	120.8	111.7	105.2	99.1	95.7	94.4
42.5°	103.9	92.2	81.8	74.5	70.1	66.2	64.5	64.1
45°	67.5	60.6	53.7	48.5	45.0	42.4	42.0	41.5
47.5°	42.4	38.9	34.6	30.7	27.7	26.0	24.7	24.7
50°	24.2	22.9	20.8	18.6	16.9	16.0	14.7	14.3
52.5°	13.0	13.0	12.1	10.4	9.1	8.2	8.2	7.8
55°	6.9	6.9	6.5	6.5	6.1	6.1	6.1	5.6
57.5°	4.3	4.3	4.8	4.8	4.3	4.3	4.3	4.3
60°	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5
62.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
65°	1.7	2.2	2.2	2.2	2.2	1.7	1.7	1.7
67.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
70°	1.3	1.3	1.3	1.3	1.3	0.9	0.9	0.9
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)