

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: **LD4C10D010 EX4C109050 4LBCSSQMW**

Issue Date: 5/25/2022

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 (P209253)
Test Lab: INNOVATION CENTER
Issue Date: 5/25/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C10D010 EX4C109050 4LBCSSQMW
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

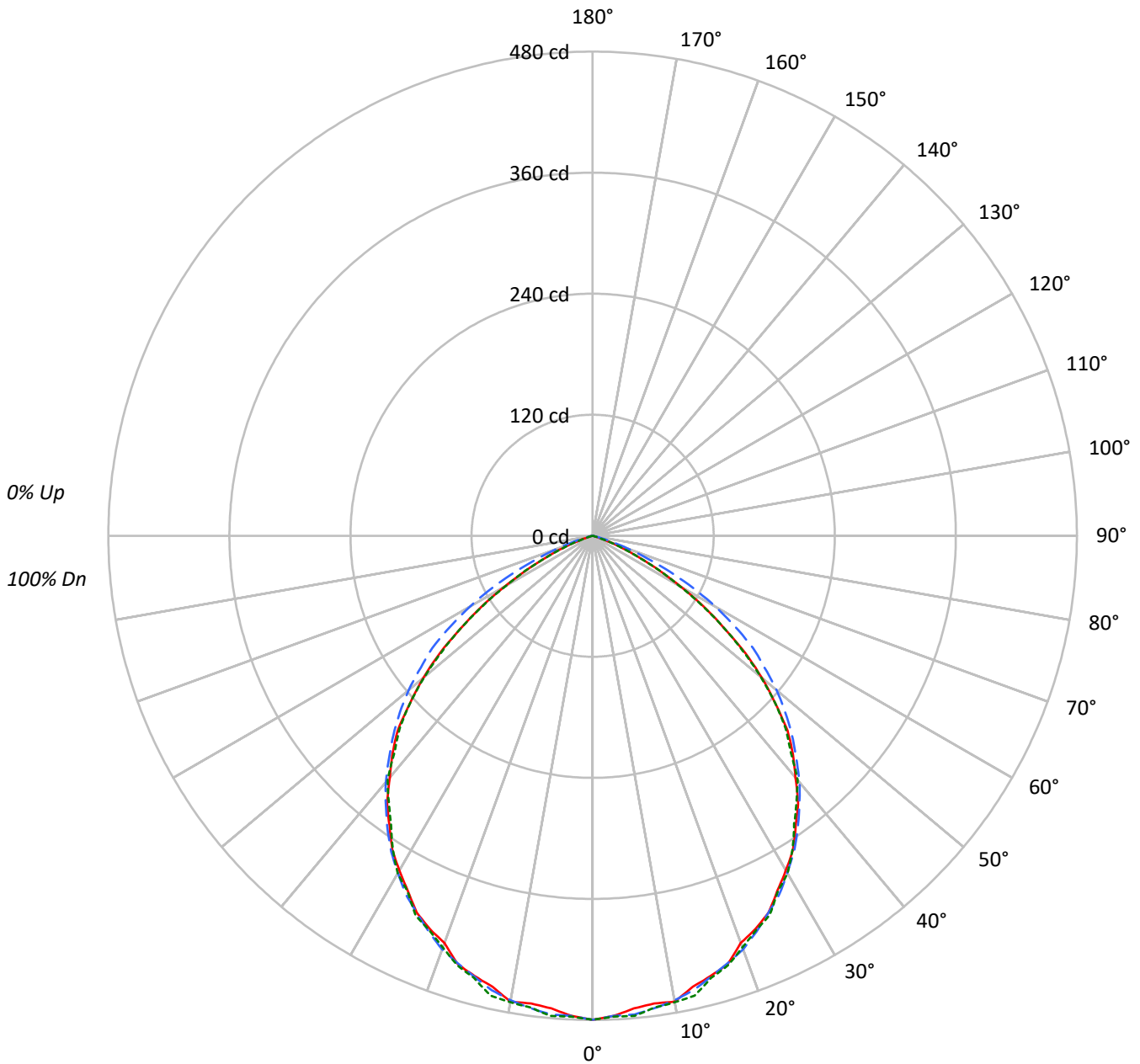
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1025.0 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.75
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

TEST NUMBER: P#
CATALOG NUMBER: LD4C10D010 EX4C109050 4LBCSSQMW

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	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89																			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77																			
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67																			
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																			
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46																			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41																			
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	37																			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33																			
10	57	45	38	33	56	44	37	33	44	37	32	43	37	32	42	36	32	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	46295	46295	46295
5°	45552	46143	46278
10°	45942	45814	46010
15°	45141	45211	45341
20°	44091	44790	44584
25°	43895	43895	44193
30°	42672	42984	43062
35°	41345	41745	41027
40°	39399	40180	39828
45°	37293	38126	36925
50°	32844	35711	32634
55°	26596	32669	26714
60°	19471	27094	19066
65°	11827	19292	11507
70°	4627	10382	4429
75°	522	2796	522
80°	389	389	389
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	4.4
10°-20°	128.2	12.5
20°-30°	190.2	18.6
30°-40°	220.3	21.5
40°-50°	211.3	20.6
50°-60°	155.3	15.2
60°-70°	67.1	6.5
70°-80°	7.3	0.7
80°-90°	0.1	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°	363.6	35.5
0°-40°	584.0	57.0
0°-60°	950.6	92.7
0°-90°	1025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1025.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	480	480	480	480	480	
5°	470	475	476	477	478	45
15°	452	455	453	453	454	127
25°	412	412	412	413	415	189
35°	351	353	354	354	348	219
45°	273	274	279	275	271	208
55°	158	174	194	174	159	142
65°	52	65	84	64	50	53
75°	1	2	8	1	1	4
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°	22.5°	25°	30°	35°	40°	45°
0°	479.8	479.8	479.8	479.8	479.8	479.8	479.8	479.8	479.8	479.8	479.8
2.5°	476.4	481.9	482.6	479.1	477.8	475.7	480.5	477.1	478.5	477.1	476.4
5°	470.3	476.4	477.1	477.1	475.7	475.1	477.1	476.4	475.7	474.4	476.4
7.5°	467.6	471.0	474.4	470.3	472.3	471.7	476.4	474.4	473.7	473.7	472.3
10°	468.9	468.2	471.0	466.9	468.2	466.9	471.0	471.0	469.6	468.2	467.6
12.5°	458.0	463.5	463.5	462.8	461.4	459.4	463.5	466.2	462.1	462.1	461.4
15°	451.9	453.2	453.9	453.9	453.2	454.6	456.6	453.9	454.6	451.2	452.6
17.5°	445.1	442.3	444.4	443.0	443.7	445.1	447.8	447.8	443.7	443.0	444.4
20°	429.4	437.6	438.3	434.2	434.8	434.8	439.6	435.5	438.3	434.8	436.2
22.5°	421.9	427.3	428.0	422.6	426.0	421.9	426.7	420.5	427.3	422.6	424.6
25°	412.3	411.7	413.7	411.0	411.7	411.7	415.1	412.3	414.4	411.7	412.3
27.5°	396.7	402.1	401.4	398.7	400.1	399.4	406.2	398.7	402.8	399.4	400.8
30°	383.0	387.8	386.5	383.7	383.7	381.7	389.2	387.1	386.5	386.5	385.8
32.5°	369.4	370.1	368.7	369.4	370.1	367.4	373.5	370.8	370.1	370.8	371.5
35°	351.0	351.0	352.4	350.3	353.1	353.1	358.5	355.1	354.4	352.4	354.4
37.5°	334.6	332.6	333.3	333.3	334.6	336.0	338.7	337.4	337.4	335.3	336.7
40°	312.8	311.5	313.5	313.5	315.6	315.6	318.3	316.9	319.0	319.0	319.0
42.5°	293.8	293.8	292.4	294.4	295.1	294.4	299.2	298.5	299.2	297.9	298.5
45°	273.3	273.3	271.9	271.3	274.7	274.0	279.4	277.4	280.1	278.8	279.4
47.5°	245.4	248.8	246.7	248.8	252.9	253.6	257.0	255.6	258.3	256.3	259.0
50°	218.8	218.8	220.8	223.6	227.6	228.3	232.4	235.1	236.5	237.2	237.9
52.5°	190.8	190.2	192.2	195.6	199.0	201.7	205.8	209.9	212.7	216.7	214.7
55°	158.1	159.5	161.5	165.6	171.1	174.5	177.9	183.3	188.1	190.2	194.2
57.5°	130.2	128.8	130.2	135.6	141.8	144.5	149.3	154.7	161.5	165.6	167.0
60°	100.9	101.6	102.9	107.7	112.5	116.5	118.6	127.4	133.6	137.7	140.4
62.5°	74.3	75.7	77.0	81.1	85.9	89.3	92.7	100.2	105.6	109.7	112.5
65°	51.8	52.5	54.5	56.6	61.3	64.7	67.5	73.6	79.1	82.5	84.5
67.5°	32.0	32.7	34.1	36.8	40.2	42.9	45.7	49.7	54.5	57.9	58.6
70°	16.4	17.0	17.7	19.8	22.5	23.9	25.9	29.3	32.7	35.4	36.8
72.5°	5.5	5.5	6.1	7.5	8.9	10.2	10.9	14.3	17.0	18.4	19.1
75°	1.4	1.4	1.4	1.4	1.4	2.1	2.1	4.1	5.5	6.8	7.5
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: LD4C10D010 EX4C109050 4LBCSSQMW

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	479.8	479.8	479.8	479.8	479.8	479.8	479.8	479.8	479.8	479.8
2.5°	479.8	478.5	477.8	478.5	478.5	477.8	479.8	482.6	486.0	477.1
5°	479.1	477.8	479.1	475.1	477.1	475.7	478.5	477.8	480.5	477.8
7.5°	477.1	474.4	475.1	473.0	475.7	472.3	474.4	478.5	475.7	471.7
10°	470.3	468.9	473.7	466.9	465.5	468.2	473.7	469.6	468.2	469.6
12.5°	463.5	463.5	465.5	460.1	460.7	462.1	464.8	462.1	463.5	466.9
15°	456.0	454.6	458.0	453.9	453.2	451.9	454.6	454.6	456.0	453.9
17.5°	447.1	445.1	445.1	443.7	443.0	446.4	447.8	448.5	449.2	446.4
20°	436.2	435.5	437.6	435.5	436.2	436.9	436.9	435.5	441.7	434.2
22.5°	424.6	426.7	423.9	422.6	423.9	425.3	425.3	426.0	424.6	423.2
25°	413.0	414.4	415.1	411.0	413.0	411.0	415.8	416.4	413.7	415.1
27.5°	402.8	400.8	400.1	397.4	398.7	398.0	398.7	398.7	402.8	397.4
30°	387.1	385.1	385.8	383.7	384.4	383.7	384.4	384.4	387.1	386.5
32.5°	372.1	370.1	370.8	368.7	368.7	369.4	368.0	368.0	370.1	368.7
35°	357.8	353.1	353.7	353.1	353.7	351.0	351.0	350.3	351.7	348.3
37.5°	337.4	335.3	334.6	334.0	334.6	333.3	334.6	332.6	334.6	331.9
40°	319.0	317.6	318.3	314.2	314.2	314.9	313.5	312.8	313.5	316.2
42.5°	300.6	297.9	296.5	295.1	295.8	293.8	293.1	291.7	293.1	290.3
45°	278.8	278.8	278.1	274.7	275.4	275.4	272.6	269.9	270.6	270.6
47.5°	259.0	257.6	257.0	253.6	252.9	252.2	249.4	247.4	247.4	245.4
50°	237.2	235.8	233.8	230.4	229.0	224.9	222.9	220.2	217.4	217.4
52.5°	216.7	212.0	209.2	203.8	201.7	199.7	194.2	192.2	190.2	188.1
55°	192.2	188.1	182.7	176.5	173.8	170.4	164.9	160.8	158.1	158.8
57.5°	168.4	161.5	156.1	147.9	144.5	142.4	137.0	131.5	128.8	128.8
60°	139.0	133.6	126.8	119.3	116.5	113.2	106.3	102.9	100.9	98.8
62.5°	111.1	107.0	100.9	91.3	89.3	85.9	81.1	77.0	75.0	75.0
65°	83.1	79.1	73.6	66.8	64.1	61.3	57.3	53.2	51.1	50.4
67.5°	58.6	53.8	49.1	43.6	41.6	40.2	36.1	33.4	32.0	31.3
70°	35.4	32.7	29.3	25.2	23.2	21.8	19.1	17.0	16.4	15.7
72.5°	18.4	16.4	13.6	10.9	9.5	8.2	6.8	5.5	4.8	4.8
75°	6.8	5.5	3.4	2.1	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	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	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	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)