

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: P840107

Luminaire Tested: **LD4C08D010 EU4089050 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: P840107
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: LD4C08D010 EU4089050 4LBCSSQMW
Description: 4 INCH 800 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

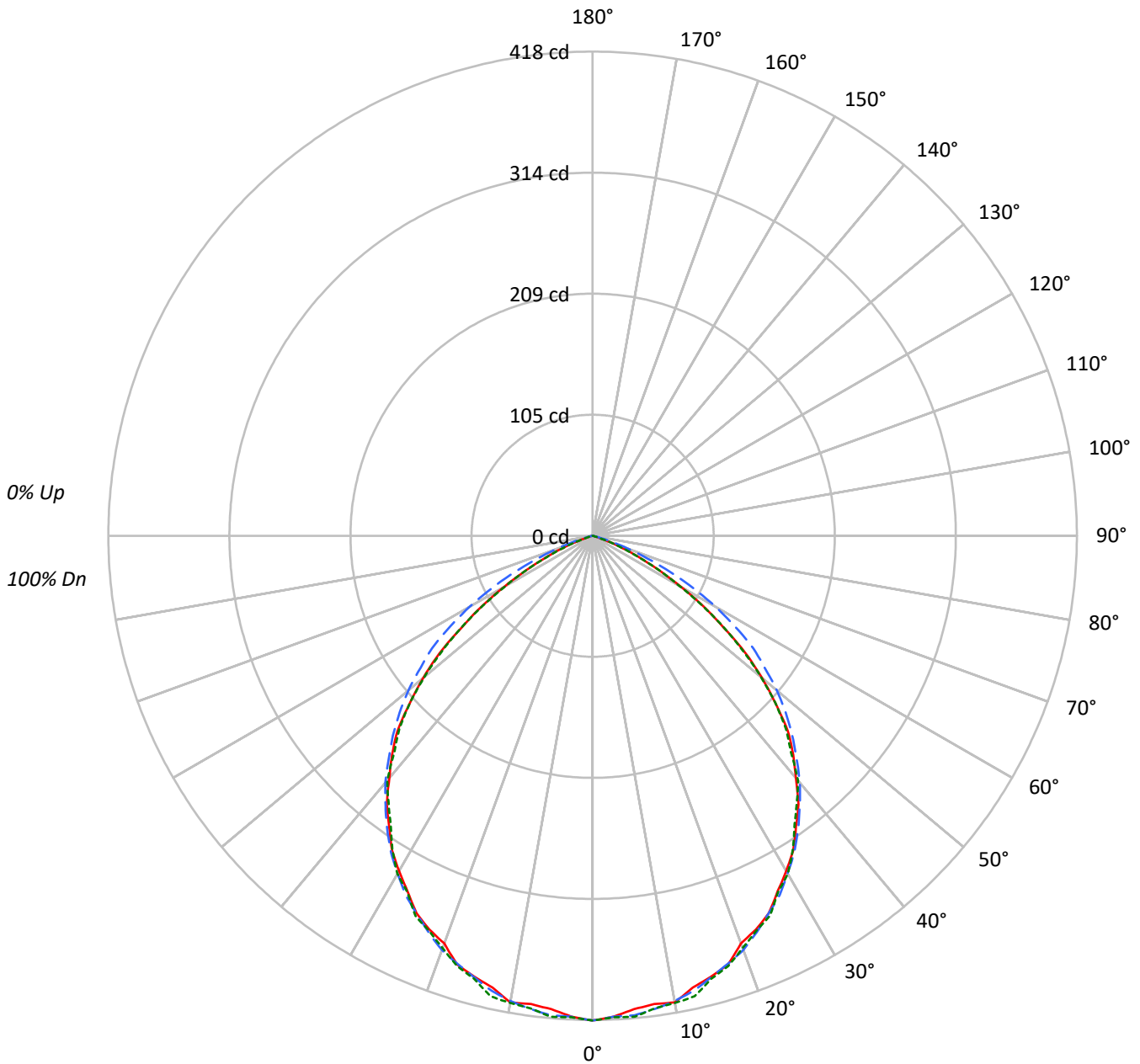
Lumens per Lamp: N/A
Luminaire Lumens: 894.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.9
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					20					
RC	80					70					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°	40381	40381	40381
5°	39731	40244	40361
10°	40073	39955	40132
15°	39368	39428	39548
20°	38454	39070	38885
25°	38284	38284	38540
30°	37224	37491	37558
35°	36056	36409	35785
40°	34374	35041	34739
45°	32531	33254	32204
50°	28641	31148	28461
55°	23198	28497	23299
60°	16982	23640	16635
65°	10320	16827	10046
70°	4034	9056	3865
75°	447	2423	447
80°	333	333	333
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	4.4
10°-20°	111.8	12.5
20°-30°	165.9	18.6
30°-40°	192.2	21.5
40°-50°	184.3	20.6
50°-60°	135.5	15.2
60°-70°	58.5	6.5
70°-80°	6.3	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°	317.2	35.5
0°-40°	509.3	57.0
0°-60°	829.1	92.7
0°-90°	894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	410	414	416	416	417	39
15°	394	396	395	395	396	111
25°	360	359	360	360	362	165
35°	306	308	309	308	304	191
45°	238	239	244	240	236	181
55°	138	152	169	152	138	124
65°	45	56	74	56	44	46
75°	1	2	6	1	1	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5
2.5°	415.5	420.3	420.9	417.9	416.7	414.9	419.1	416.1	417.3	416.1	415.5
5°	410.2	415.5	416.1	416.1	414.9	414.3	416.1	415.5	414.9	413.8	415.5
7.5°	407.8	410.8	413.8	410.2	412.0	411.4	415.5	413.8	413.1	413.1	412.0
10°	409.0	408.4	410.8	407.2	408.4	407.2	410.8	410.8	409.6	408.4	407.8
12.5°	399.5	404.2	404.2	403.6	402.5	400.7	404.2	406.6	403.0	403.0	402.5
15°	394.1	395.3	395.9	395.9	395.3	396.5	398.3	395.9	396.5	393.5	394.7
17.5°	388.2	385.8	387.6	386.4	387.0	388.2	390.6	390.6	387.0	386.4	387.6
20°	374.5	381.6	382.2	378.7	379.3	379.3	383.4	379.9	382.2	379.3	380.5
22.5°	368.0	372.7	373.3	368.6	371.5	368.0	372.1	366.8	372.7	368.6	370.3
25°	359.6	359.1	360.8	358.5	359.1	359.1	362.0	359.6	361.4	359.1	359.6
27.5°	346.0	350.7	350.1	347.8	348.9	348.4	354.3	347.8	351.3	348.4	349.6
30°	334.1	338.3	337.1	334.7	334.7	332.9	339.4	337.6	337.1	337.1	336.5
32.5°	322.2	322.8	321.6	322.2	322.8	320.4	325.8	323.4	322.8	323.4	324.0
35°	306.1	306.1	307.3	305.6	307.9	307.9	312.7	309.7	309.1	307.3	309.1
37.5°	291.9	290.1	290.7	290.7	291.9	293.1	295.4	294.3	294.3	292.5	293.7
40°	272.9	271.7	273.4	273.4	275.2	275.2	277.6	276.4	278.2	278.2	278.2
42.5°	256.2	256.2	255.0	256.8	257.4	256.8	261.0	260.4	261.0	259.8	260.4
45°	238.4	238.4	237.2	236.6	239.6	239.0	243.7	241.9	244.3	243.1	243.7
47.5°	214.0	217.0	215.2	217.0	220.5	221.2	224.1	222.9	225.3	223.5	225.9
50°	190.8	190.8	192.6	195.0	198.5	199.2	202.7	205.1	206.3	206.9	207.5
52.5°	166.5	165.9	167.6	170.6	173.6	176.0	179.5	183.1	185.5	189.0	187.2
55°	137.9	139.1	140.9	144.5	149.2	152.2	155.2	159.9	164.1	165.9	169.4
57.5°	113.5	112.3	113.5	118.3	123.6	126.0	130.2	135.0	140.9	144.5	145.6
60°	88.0	88.6	89.8	93.9	98.1	101.7	103.4	111.2	116.5	120.1	122.5
62.5°	64.8	66.0	67.2	70.7	74.9	77.9	80.8	87.4	92.1	95.7	98.1
65°	45.2	45.8	47.6	49.3	53.5	56.5	58.8	64.2	69.0	71.9	73.7
67.5°	27.9	28.5	29.7	32.1	35.1	37.4	39.8	43.4	47.6	50.5	51.1
70°	14.3	14.9	15.5	17.2	19.6	20.8	22.6	25.6	28.5	30.9	32.1
72.5°	4.8	4.8	5.4	6.5	7.7	8.9	9.5	12.5	14.9	16.1	16.6
75°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	3.6	4.8	5.9	6.5
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5	418.5
2.5°	418.5	417.3	416.7	417.3	417.3	416.7	418.5	420.9	423.8	416.1
5°	417.9	416.7	417.9	414.3	416.1	414.9	417.3	416.7	419.1	416.7
7.5°	416.1	413.8	414.3	412.6	414.9	412.0	413.8	417.3	414.9	411.4
10°	410.2	409.0	413.1	407.2	406.0	408.4	413.1	409.6	408.4	409.6
12.5°	404.2	404.2	406.0	401.3	401.8	403.0	405.4	403.0	404.2	407.2
15°	397.7	396.5	399.5	395.9	395.3	394.1	396.5	396.5	397.7	395.9
17.5°	390.0	388.2	388.2	387.0	386.4	389.4	390.6	391.2	391.8	389.4
20°	380.5	379.9	381.6	379.9	380.5	381.1	381.1	379.9	385.2	378.7
22.5°	370.3	372.1	369.8	368.6	369.8	370.9	370.9	371.5	370.3	369.2
25°	360.3	361.4	362.0	358.5	360.3	358.5	362.6	363.2	360.8	362.0
27.5°	351.3	349.6	348.9	346.6	347.8	347.2	347.8	347.8	351.3	346.6
30°	337.6	335.9	336.5	334.7	335.3	334.7	335.3	335.3	337.6	337.1
32.5°	324.6	322.8	323.4	321.6	321.6	322.2	321.0	321.0	322.8	321.6
35°	312.1	307.9	308.5	307.9	308.5	306.1	306.1	305.6	306.7	303.8
37.5°	294.3	292.5	291.9	291.3	291.9	290.7	291.9	290.1	291.9	289.5
40°	278.2	277.0	277.6	274.1	274.1	274.6	273.4	272.9	273.4	275.8
42.5°	262.2	259.8	258.6	257.4	258.0	256.2	255.6	254.4	255.6	253.2
45°	243.1	243.1	242.5	239.6	240.2	240.2	237.8	235.4	236.0	236.0
47.5°	225.9	224.7	224.1	221.2	220.5	220.0	217.6	215.8	215.8	214.0
50°	206.9	205.7	203.9	200.9	199.7	196.2	194.4	192.0	189.6	189.6
52.5°	189.0	184.9	182.5	177.7	176.0	174.2	169.4	167.6	165.9	164.1
55°	167.6	164.1	159.3	154.0	151.6	148.6	143.9	140.3	137.9	138.5
57.5°	146.8	140.9	136.1	129.0	126.0	124.2	119.5	114.7	112.3	112.3
60°	121.3	116.5	110.6	104.0	101.7	98.7	92.7	89.8	88.0	86.2
62.5°	96.9	93.3	88.0	79.7	77.9	74.9	70.7	67.2	65.4	65.4
65°	72.5	69.0	64.2	58.3	55.9	53.5	49.9	46.4	44.6	44.0
67.5°	51.1	47.0	42.8	38.1	36.3	35.1	31.5	29.1	27.9	27.3
70°	30.9	28.5	25.6	22.0	20.2	19.0	16.6	14.9	14.3	13.7
72.5°	16.1	14.3	11.9	9.5	8.3	7.1	5.9	4.8	4.2	4.2
75°	5.9	4.8	3.0	1.8	1.2	1.2	1.2	1.2	1.2	1.2
77.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)