

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 EX4C109040 4LBCSSQMW**

Issue Date: 5/25/2022



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 EX4C109040 4LBCSSQMW
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

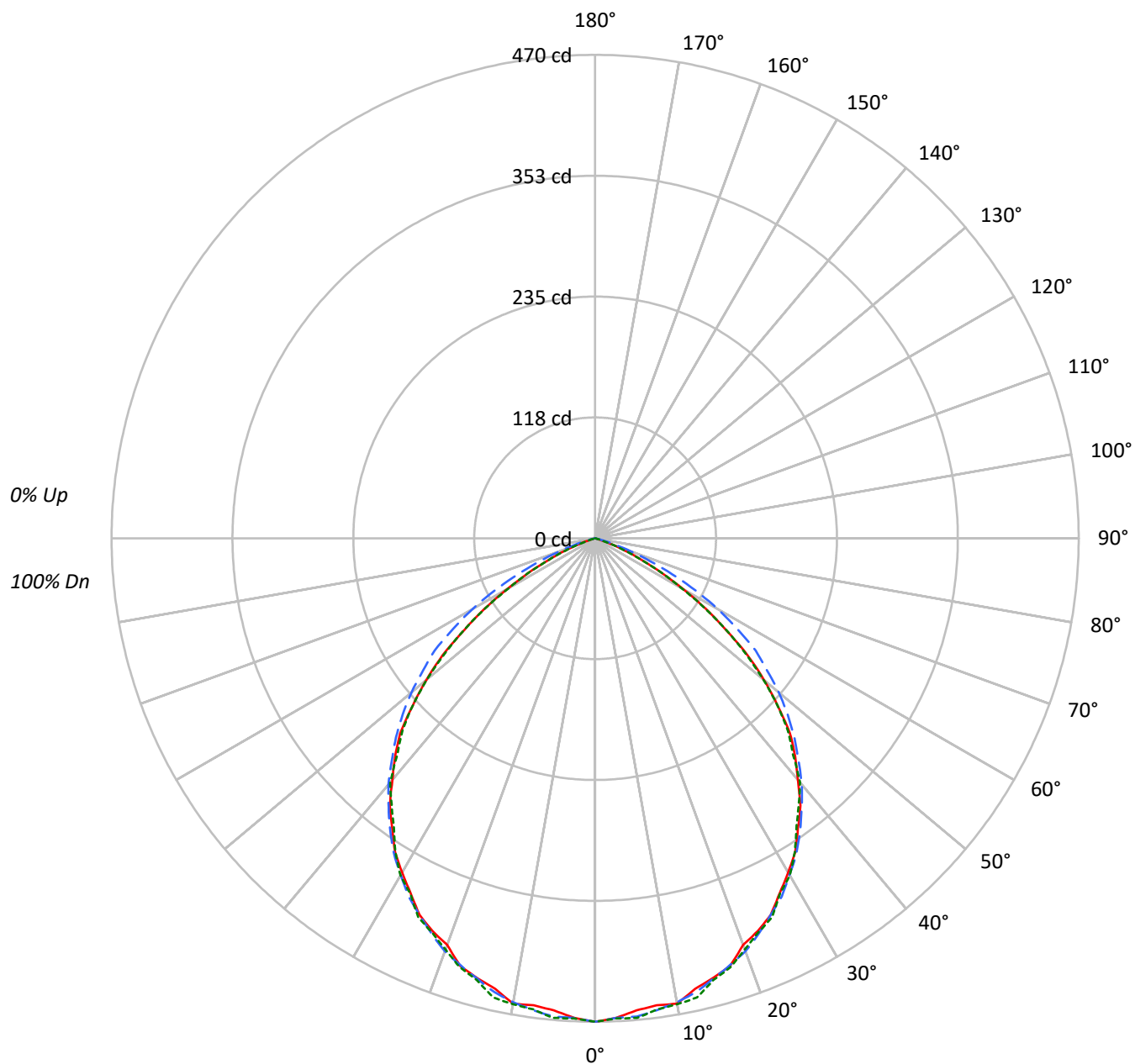
Lumens per Lamp: N/A
Luminaire Lumens: 1004.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.75
Input Voltage (V):
Input Current (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				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	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°	45350	45350	45350
5°	44622	45203	45329
10°	45001	44874	45070
15°	44212	44282	44412
20°	43188	43876	43670
25°	43001	43001	43288
30°	41803	42104	42171
35°	40497	40897	40179
40°	38593	39349	39022
45°	36529	37348	36161
50°	32169	34976	31973
55°	26058	32013	26176
60°	19066	26534	18680
65°	11575	18904	11279
70°	4514	10184	4345
75°	485	2759	485
80°	389	389	389
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	4.4
10°-20°	125.5	12.5
20°-30°	186.3	18.6
30°-40°	215.8	21.5
40°-50°	206.9	20.6
50°-60°	152.2	15.2
60°-70°	65.7	6.5
70°-80°	7.1	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°	356.2	35.5
0°-40°	572.0	57.0
0°-60°	931.1	92.7
0°-90°	1004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	461	465	467	467	468	44
15°	443	445	443	444	445	125
25°	404	403	404	405	407	185
35°	344	346	347	346	341	215
45°	268	268	274	270	265	203
55°	155	171	190	170	156	139
65°	51	63	83	63	49	52
75°	1	2	7	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°	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0
2.5°	466.7	472.0	472.7	469.3	468.0	466.0	470.7	467.3	468.7	467.3	466.7
5°	460.7	466.7	467.3	467.3	466.0	465.3	467.3	466.7	466.0	464.7	466.7
7.5°	458.0	461.3	464.7	460.7	462.6	462.0	466.7	464.7	464.0	464.0	462.6
10°	459.3	458.6	461.3	457.3	458.6	457.3	461.3	461.3	460.0	458.6	458.0
12.5°	448.6	454.0	454.0	453.3	452.0	450.0	454.0	456.7	452.6	452.6	452.0
15°	442.6	444.0	444.6	444.6	444.0	445.3	447.3	444.6	445.3	441.9	443.3
17.5°	436.0	433.3	435.3	433.9	434.6	436.0	438.6	438.6	434.6	433.9	435.3
20°	420.6	428.6	429.3	425.3	425.9	425.9	430.6	426.6	429.3	425.9	427.3
22.5°	413.2	418.6	419.3	413.9	417.2	413.2	417.9	411.9	418.6	413.9	415.9
25°	403.9	403.2	405.2	402.6	403.2	403.2	406.6	403.9	405.9	403.2	403.9
27.5°	388.6	393.9	393.2	390.5	391.9	391.2	397.9	390.5	394.6	391.2	392.6
30°	375.2	379.9	378.5	375.9	375.9	373.9	381.2	379.2	378.5	378.5	377.9
32.5°	361.8	362.5	361.2	361.8	362.5	359.9	365.8	363.2	362.5	363.2	363.9
35°	343.8	343.8	345.1	343.2	345.8	345.8	351.2	347.8	347.2	345.1	347.2
37.5°	327.8	325.8	326.5	326.5	327.8	329.1	331.8	330.5	330.5	328.5	329.8
40°	306.4	305.1	307.1	307.1	309.1	309.1	311.8	310.4	312.4	312.4	312.4
42.5°	287.7	287.7	286.4	288.4	289.1	288.4	293.1	292.4	293.1	291.8	292.4
45°	267.7	267.7	266.4	265.7	269.0	268.4	273.7	271.7	274.4	273.0	273.7
47.5°	240.3	243.7	241.7	243.7	247.7	248.4	251.7	250.4	253.0	251.0	253.7
50°	214.3	214.3	216.3	219.0	223.0	223.7	227.7	230.3	231.7	232.3	233.0
52.5°	186.9	186.3	188.3	191.6	194.9	197.6	201.6	205.6	208.3	212.3	210.3
55°	154.9	156.2	158.2	162.2	167.6	170.9	174.2	179.6	184.3	186.3	190.3
57.5°	127.5	126.2	127.5	132.8	138.9	141.5	146.2	151.6	158.2	162.2	163.6
60°	98.8	99.5	100.8	105.5	110.2	114.2	116.2	124.8	130.9	134.9	137.5
62.5°	72.8	74.1	75.5	79.5	84.1	87.5	90.8	98.1	103.5	107.5	110.2
65°	50.7	51.4	53.4	55.4	60.1	63.4	66.1	72.1	77.4	80.8	82.8
67.5°	31.4	32.0	33.4	36.1	39.4	42.1	44.7	48.7	53.4	56.7	57.4
70°	16.0	16.7	17.4	19.4	22.0	23.4	25.4	28.7	32.0	34.7	36.1
72.5°	5.3	5.3	6.0	7.4	8.7	10.0	10.7	14.0	16.7	18.0	18.7
75°	1.3	1.3	1.3	1.3	1.3	2.0	2.0	4.0	5.3	6.7	7.4
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3	1.3
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0
2.5°	470.0	468.7	468.0	468.7	468.7	468.0	470.0	472.7	476.0	467.3
5°	469.3	468.0	469.3	465.3	467.3	466.0	468.7	468.0	470.7	468.0
7.5°	467.3	464.7	465.3	463.3	466.0	462.6	464.7	468.7	466.0	462.0
10°	460.7	459.3	464.0	457.3	456.0	458.6	464.0	460.0	458.6	460.0
12.5°	454.0	454.0	456.0	450.6	451.3	452.6	455.3	452.6	454.0	457.3
15°	446.6	445.3	448.6	444.6	444.0	442.6	445.3	445.3	446.6	444.6
17.5°	437.9	436.0	436.0	434.6	433.9	437.3	438.6	439.3	440.0	437.3
20°	427.3	426.6	428.6	426.6	427.3	427.9	427.9	426.6	432.6	425.3
22.5°	415.9	417.9	415.3	413.9	415.3	416.6	416.6	417.2	415.9	414.6
25°	404.6	405.9	406.6	402.6	404.6	402.6	407.2	407.9	405.2	406.6
27.5°	394.6	392.6	391.9	389.2	390.5	389.9	390.5	390.5	394.6	389.2
30°	379.2	377.2	377.9	375.9	376.5	375.9	376.5	376.5	379.2	378.5
32.5°	364.5	362.5	363.2	361.2	361.2	361.8	360.5	360.5	362.5	361.2
35°	350.5	345.8	346.5	345.8	346.5	343.8	343.8	343.2	344.5	341.1
37.5°	330.5	328.5	327.8	327.1	327.8	326.5	327.8	325.8	327.8	325.1
40°	312.4	311.1	311.8	307.8	307.8	308.4	307.1	306.4	307.1	309.8
42.5°	294.4	291.8	290.4	289.1	289.7	287.7	287.1	285.7	287.1	284.4
45°	273.0	273.0	272.4	269.0	269.7	269.7	267.0	264.4	265.0	265.0
47.5°	253.7	252.4	251.7	248.4	247.7	247.0	244.3	242.3	242.3	240.3
50°	232.3	231.0	229.0	225.6	224.3	220.3	218.3	215.6	213.0	213.0
52.5°	212.3	207.6	204.9	199.6	197.6	195.6	190.3	188.3	186.3	184.3
55°	188.3	184.3	178.9	172.9	170.2	166.9	161.6	157.5	154.9	155.6
57.5°	164.9	158.2	152.9	144.9	141.5	139.5	134.2	128.8	126.2	126.2
60°	136.2	130.9	124.2	116.8	114.2	110.8	104.1	100.8	98.8	96.8
62.5°	108.8	104.8	98.8	89.5	87.5	84.1	79.5	75.5	73.4	73.4
65°	81.4	77.4	72.1	65.4	62.8	60.1	56.1	52.1	50.1	49.4
67.5°	57.4	52.7	48.1	42.7	40.7	39.4	35.4	32.7	31.4	30.7
70°	34.7	32.0	28.7	24.7	22.7	21.4	18.7	16.7	16.0	15.4
72.5°	18.0	16.0	13.3	10.7	9.3	8.0	6.7	5.3	4.7	4.7
75°	6.7	5.3	3.3	2.0	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	1.3	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)