

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 EX4C059040 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: LD4C05D010 EX4C059040 4LBCSSQMW  
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MW FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

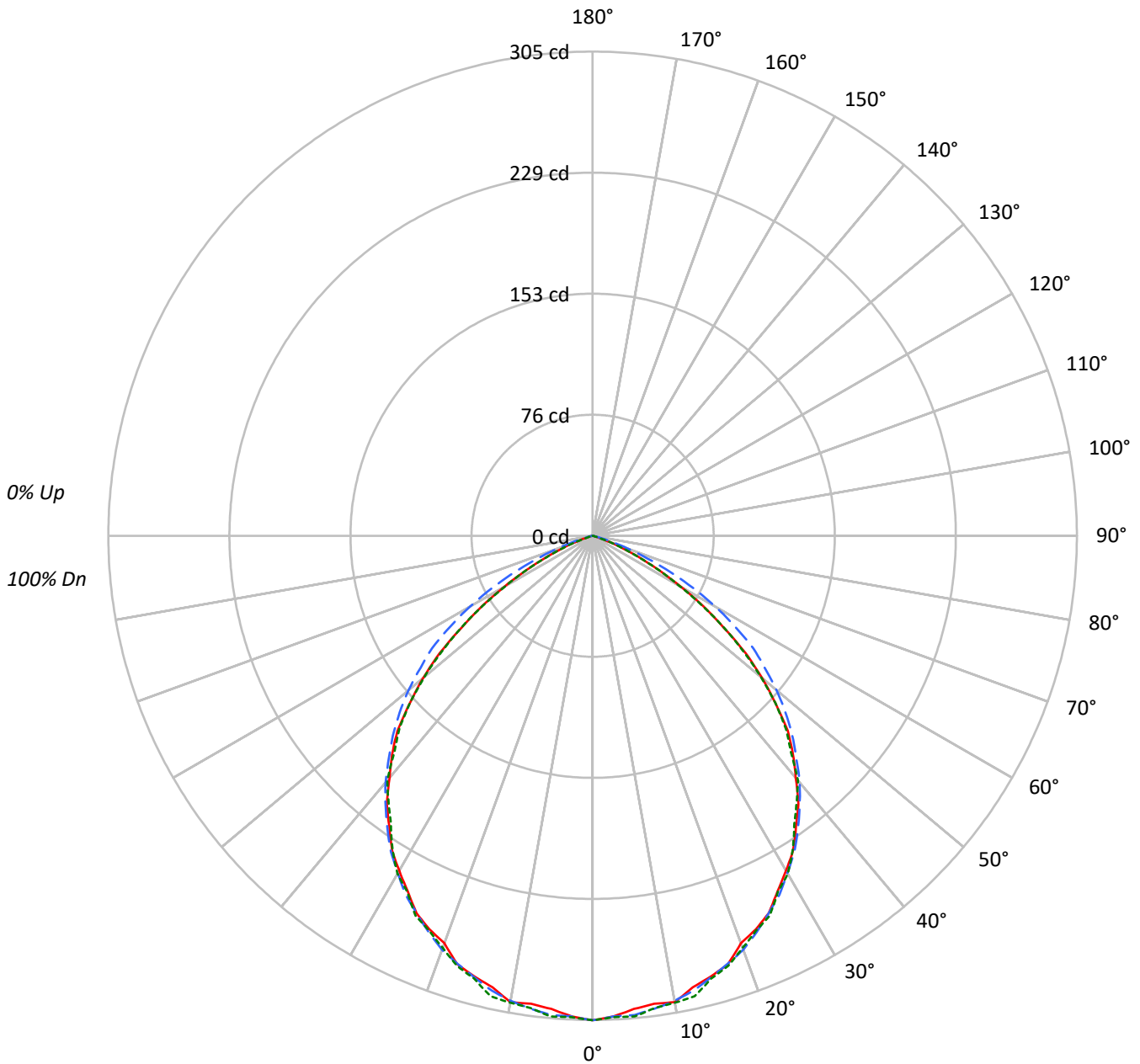
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 652.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 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): 7.2  
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									
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	34																			
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°	29448	29448	29448
5°	28980	29348	29435
10°	29227	29138	29266
15°	28709	28759	28839
20°	28042	28494	28361
25°	27925	27925	28106
30°	27141	27341	27386
35°	26303	26550	26091
40°	25066	25557	25343
45°	23716	24262	23484
50°	20895	22712	20760
55°	16923	20792	16991
60°	12389	17233	12138
65°	7534	12283	7329
70°	2934	6601	2821
75°	336	1789	336
80°	222	222	222
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.8	4.4
10°-20°	81.5	12.5
20°-30°	121.0	18.6
30°-40°	140.2	21.5
40°-50°	134.4	20.6
50°-60°	98.8	15.2
60°-70°	42.7	6.5
70°-80°	4.6	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°	231.3	35.5
0°-40°	371.5	57.0
0°-60°	604.7	92.7
0°-90°	652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	652.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	305	305	305	305	305	
5°	299	302	303	304	304	29
15°	287	289	288	288	289	81
25°	262	262	262	263	264	120
35°	223	225	225	225	222	140
45°	174	174	178	175	172	132
55°	101	111	124	111	101	91
65°	33	41	54	41	32	34
75°	1	1	5	1	1	3
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°	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2
2.5°	303.0	306.5	307.0	304.8	303.9	302.6	305.6	303.5	304.4	303.5	303.0
5°	299.2	303.0	303.5	303.5	302.6	302.2	303.5	303.0	302.6	301.8	303.0
7.5°	297.4	299.6	301.8	299.2	300.4	300.0	303.0	301.8	301.3	301.3	300.4
10°	298.3	297.8	299.6	297.0	297.8	297.0	299.6	299.6	298.7	297.8	297.4
12.5°	291.3	294.8	294.8	294.4	293.5	292.2	294.8	296.6	293.9	293.9	293.5
15°	287.4	288.3	288.7	288.7	288.3	289.2	290.5	288.7	289.2	287.0	287.9
17.5°	283.1	281.4	282.7	281.8	282.2	283.1	284.8	284.8	282.2	281.8	282.7
20°	273.1	278.3	278.8	276.2	276.6	276.6	279.6	277.0	278.8	276.6	277.5
22.5°	268.4	271.8	272.3	268.8	271.0	268.4	271.4	267.5	271.8	268.8	270.1
25°	262.3	261.9	263.2	261.4	261.9	261.9	264.0	262.3	263.6	261.9	262.3
27.5°	252.3	255.8	255.4	253.6	254.5	254.1	258.4	253.6	256.2	254.1	254.9
30°	243.6	246.7	245.8	244.1	244.1	242.8	247.6	246.2	245.8	245.8	245.4
32.5°	235.0	235.4	234.6	235.0	235.4	233.7	237.6	235.8	235.4	235.8	236.3
35°	223.3	223.3	224.1	222.8	224.6	224.6	228.0	225.9	225.4	224.1	225.4
37.5°	212.9	211.6	212.0	212.0	212.9	213.7	215.5	214.6	214.6	213.3	214.2
40°	199.0	198.1	199.4	199.4	200.7	200.7	202.5	201.6	202.9	202.9	202.9
42.5°	186.9	186.9	186.0	187.3	187.7	187.3	190.3	189.9	190.3	189.5	189.9
45°	173.8	173.8	173.0	172.6	174.7	174.3	177.8	176.4	178.2	177.3	177.8
47.5°	156.1	158.2	156.9	158.2	160.8	161.3	163.4	162.6	164.3	163.0	164.8
50°	139.2	139.2	140.5	142.2	144.8	145.2	147.8	149.6	150.4	150.9	151.3
52.5°	121.4	121.0	122.3	124.4	126.6	128.3	130.9	133.5	135.3	137.9	136.6
55°	100.6	101.4	102.8	105.4	108.8	111.0	113.2	116.6	119.7	121.0	123.6
57.5°	82.8	81.9	82.8	86.3	90.2	91.9	95.0	98.4	102.8	105.4	106.2
60°	64.2	64.6	65.5	68.5	71.5	74.1	75.4	81.1	85.0	87.6	89.3
62.5°	47.3	48.1	49.0	51.6	54.6	56.8	59.0	63.7	67.2	69.8	71.5
65°	33.0	33.4	34.7	36.0	39.0	41.2	42.9	46.8	50.3	52.5	53.8
67.5°	20.4	20.8	21.7	23.4	25.6	27.3	29.0	31.6	34.7	36.8	37.3
70°	10.4	10.8	11.3	12.6	14.3	15.2	16.5	18.6	20.8	22.5	23.4
72.5°	3.5	3.5	3.9	4.8	5.6	6.5	6.9	9.1	10.8	11.7	12.1
75°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	2.6	3.5	4.3	4.8
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9
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	0.0	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°	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2
2.5°	305.2	304.4	303.9	304.4	304.4	303.9	305.2	307.0	309.1	303.5
5°	304.8	303.9	304.8	302.2	303.5	302.6	304.4	303.9	305.6	303.9
7.5°	303.5	301.8	302.2	300.9	302.6	300.4	301.8	304.4	302.6	300.0
10°	299.2	298.3	301.3	297.0	296.1	297.8	301.3	298.7	297.8	298.7
12.5°	294.8	294.8	296.1	292.6	293.1	293.9	295.7	293.9	294.8	297.0
15°	290.0	289.2	291.3	288.7	288.3	287.4	289.2	289.2	290.0	288.7
17.5°	284.4	283.1	283.1	282.2	281.8	284.0	284.8	285.3	285.7	284.0
20°	277.5	277.0	278.3	277.0	277.5	277.9	277.9	277.0	280.9	276.2
22.5°	270.1	271.4	269.7	268.8	269.7	270.5	270.5	271.0	270.1	269.2
25°	262.7	263.6	264.0	261.4	262.7	261.4	264.5	264.9	263.2	264.0
27.5°	256.2	254.9	254.5	252.8	253.6	253.2	253.6	253.6	256.2	252.8
30°	246.2	245.0	245.4	244.1	244.5	244.1	244.5	244.5	246.2	245.8
32.5°	236.7	235.4	235.8	234.6	234.6	235.0	234.1	234.1	235.4	234.6
35°	227.6	224.6	225.0	224.6	225.0	223.3	223.3	222.8	223.7	221.5
37.5°	214.6	213.3	212.9	212.4	212.9	212.0	212.9	211.6	212.9	211.1
40°	202.9	202.0	202.5	199.9	199.9	200.3	199.4	199.0	199.4	201.2
42.5°	191.2	189.5	188.6	187.7	188.2	186.9	186.4	185.6	186.4	184.7
45°	177.3	177.3	176.9	174.7	175.2	175.2	173.4	171.7	172.1	172.1
47.5°	164.8	163.9	163.4	161.3	160.8	160.4	158.7	157.4	157.4	156.1
50°	150.9	150.0	148.7	146.5	145.7	143.1	141.8	140.0	138.3	138.3
52.5°	137.9	134.8	133.1	129.6	128.3	127.0	123.6	122.3	121.0	119.7
55°	122.3	119.7	116.2	112.3	110.6	108.4	104.9	102.3	100.6	101.0
57.5°	107.1	102.8	99.3	94.1	91.9	90.6	87.1	83.7	81.9	81.9
60°	88.4	85.0	80.6	75.9	74.1	72.0	67.6	65.5	64.2	62.9
62.5°	70.7	68.1	64.2	58.1	56.8	54.6	51.6	49.0	47.7	47.7
65°	52.9	50.3	46.8	42.5	40.8	39.0	36.4	33.8	32.5	32.1
67.5°	37.3	34.2	31.2	27.8	26.4	25.6	23.0	21.2	20.4	19.9
70°	22.5	20.8	18.6	16.0	14.7	13.9	12.1	10.8	10.4	10.0
72.5°	11.7	10.4	8.7	6.9	6.1	5.2	4.3	3.5	3.0	3.0
75°	4.3	3.5	2.2	1.3	0.9	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	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
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)