

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: P840101

Luminaire Tested: **LD4C08D010 EU4089030 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: P840101  
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 EU4089030 4LBCSSQMW  
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MW FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

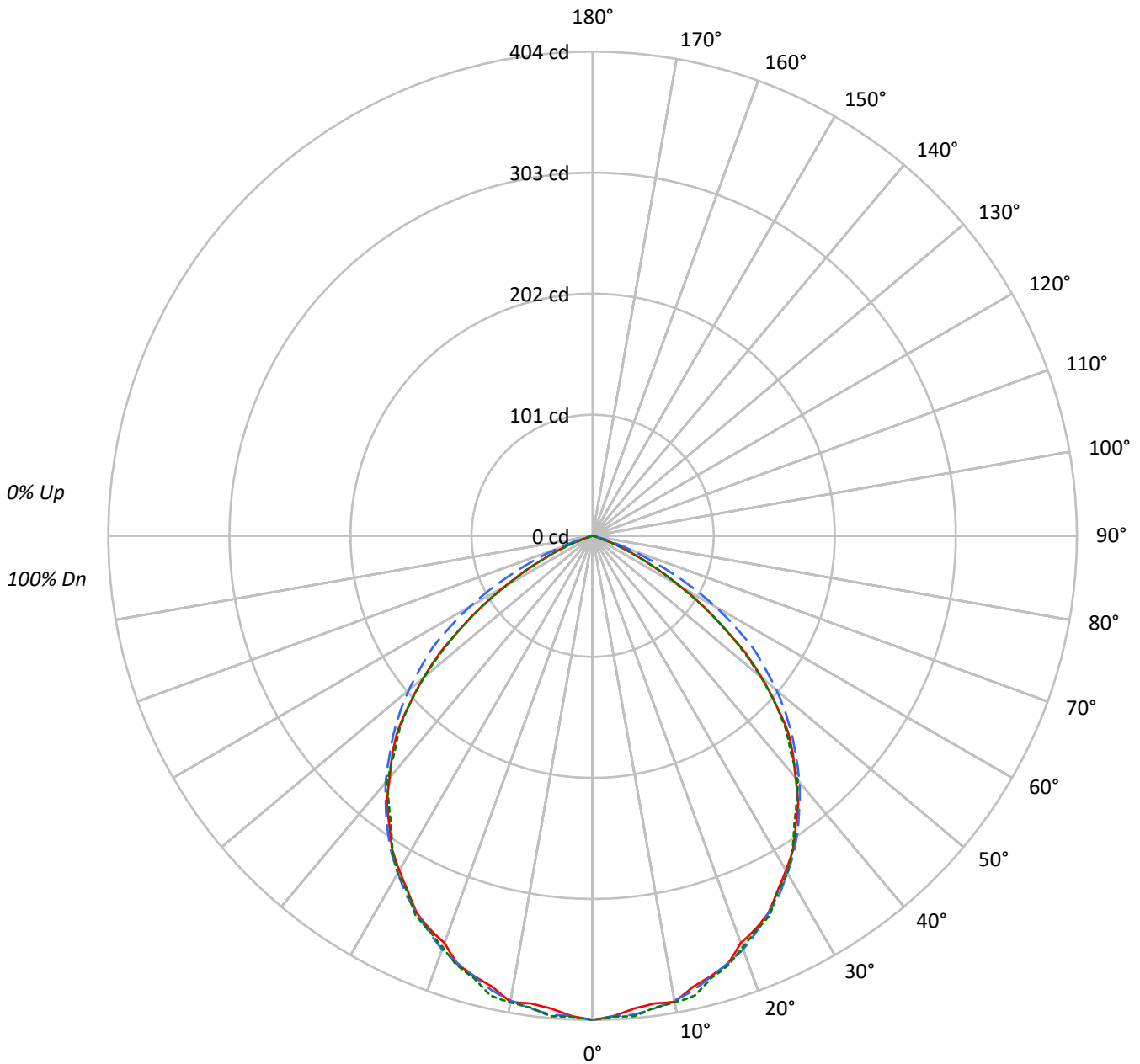
Lumens per Lamp: N/A  
Luminaire Lumens: 863.0 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.9  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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: P840101

CATALOG NUMBER: LD4C08D010 EU4089030 4LBCSSQMW

### 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°	38982	38982	38982
5°	38356	38850	38966
10°	38681	38574	38740
15°	38009	38059	38179
20°	37119	37715	37540
25°	36964	36964	37209
30°	35932	36188	36255
35°	34807	35149	34536
40°	33177	33832	33542
45°	31399	32108	31085
50°	27650	30067	27485
55°	22391	27505	22491
60°	16384	22810	16056
65°	9954	16256	9703
70°	3893	8746	3724
75°	410	2349	410
80°	333	333	333
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.1	4.4
10°-20°	107.9	12.5
20°-30°	160.1	18.6
30°-40°	185.5	21.5
40°-50°	177.9	20.6
50°-60°	130.8	15.2
60°-70°	56.5	6.5
70°-80°	6.1	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°	306.2	35.5
0°-40°	491.7	57.0
0°-60°	800.3	92.7
0°-90°	863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	863.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	396	400	401	402	402	38
15°	380	383	381	382	382	107
25°	347	347	347	348	350	159
35°	296	297	298	298	293	185
45°	230	231	235	232	228	175
55°	133	147	164	146	134	120
65°	44	54	71	54	42	45
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°	404.0	404.0	404.0	404.0	404.0	404.0	404.0	404.0	404.0	404.0	404.0
2.5°	401.1	405.7	406.3	403.4	402.3	400.6	404.6	401.7	402.8	401.7	401.1
5°	396.0	401.1	401.7	401.7	400.6	400.0	401.7	401.1	400.6	399.4	401.1
7.5°	393.7	396.5	399.4	396.0	397.7	397.1	401.1	399.4	398.8	398.8	397.7
10°	394.8	394.2	396.5	393.1	394.2	393.1	396.5	396.5	395.4	394.2	393.7
12.5°	385.6	390.2	390.2	389.6	388.5	386.8	390.2	392.5	389.1	389.1	388.5
15°	380.5	381.6	382.2	382.2	381.6	382.8	384.5	382.2	382.8	379.9	381.0
17.5°	374.7	372.4	374.1	373.0	373.6	374.7	377.0	377.0	373.6	373.0	374.1
20°	361.5	368.4	369.0	365.6	366.1	366.1	370.1	366.7	369.0	366.1	367.3
22.5°	355.2	359.8	360.4	355.8	358.6	355.2	359.2	354.1	359.8	355.8	357.5
25°	347.2	346.6	348.3	346.0	346.6	346.6	349.5	347.2	348.9	346.6	347.2
27.5°	334.0	338.6	338.0	335.7	336.8	336.3	342.0	335.7	339.1	336.3	337.4
30°	322.5	326.5	325.4	323.1	323.1	321.3	327.7	325.9	325.4	325.4	324.8
32.5°	311.0	311.6	310.5	311.0	311.6	309.3	314.5	312.2	311.6	312.2	312.8
35°	295.5	295.5	296.7	295.0	297.3	297.3	301.8	299.0	298.4	296.7	298.4
37.5°	281.8	280.0	280.6	280.6	281.8	282.9	285.2	284.1	284.1	282.3	283.5
40°	263.4	262.3	264.0	264.0	265.7	265.7	268.0	266.8	268.6	268.6	268.6
42.5°	247.3	247.3	246.2	247.9	248.5	247.9	251.9	251.3	251.9	250.8	251.3
45°	230.1	230.1	229.0	228.4	231.3	230.7	235.3	233.5	235.8	234.7	235.3
47.5°	206.6	209.5	207.7	209.5	212.9	213.5	216.3	215.2	217.5	215.8	218.1
50°	184.2	184.2	185.9	188.2	191.7	192.2	195.7	198.0	199.1	199.7	200.3
52.5°	160.7	160.1	161.8	164.7	167.6	169.9	173.3	176.7	179.0	182.5	180.8
55°	133.1	134.3	136.0	139.4	144.0	146.9	149.8	154.4	158.4	160.1	163.5
57.5°	109.6	108.5	109.6	114.2	119.4	121.7	125.7	130.3	136.0	139.4	140.6
60°	84.9	85.5	86.7	90.7	94.7	98.1	99.9	107.3	112.5	115.9	118.2
62.5°	62.6	63.7	64.9	68.3	72.3	75.2	78.0	84.4	88.9	92.4	94.7
65°	43.6	44.2	45.9	47.6	51.6	54.5	56.8	62.0	66.6	69.4	71.2
67.5°	27.0	27.5	28.7	31.0	33.9	36.2	38.4	41.9	45.9	48.8	49.4
70°	13.8	14.4	14.9	16.6	18.9	20.1	21.8	24.7	27.5	29.8	31.0
72.5°	4.6	4.6	5.2	6.3	7.5	8.6	9.2	12.1	14.4	15.5	16.1
75°	1.1	1.1	1.1	1.1	1.1	1.7	1.7	3.4	4.6	5.7	6.3
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.1
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



TEST NUMBER: P840101

CATALOG NUMBER: LD4C08D010 EU4089030 4LBCSSQMW

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	404.0	404.0	404.0	404.0	404.0	404.0	404.0	404.0	404.0	404.0
2.5°	404.0	402.8	402.3	402.8	402.8	402.3	404.0	406.3	409.1	401.7
5°	403.4	402.3	403.4	400.0	401.7	400.6	402.8	402.3	404.6	402.3
7.5°	401.7	399.4	400.0	398.3	400.6	397.7	399.4	402.8	400.6	397.1
10°	396.0	394.8	398.8	393.1	391.9	394.2	398.8	395.4	394.2	395.4
12.5°	390.2	390.2	391.9	387.4	387.9	389.1	391.4	389.1	390.2	393.1
15°	383.9	382.8	385.6	382.2	381.6	380.5	382.8	382.8	383.9	382.2
17.5°	376.4	374.7	374.7	373.6	373.0	375.9	377.0	377.6	378.2	375.9
20°	367.3	366.7	368.4	366.7	367.3	367.8	367.8	366.7	371.9	365.6
22.5°	357.5	359.2	356.9	355.8	356.9	358.1	358.1	358.6	357.5	356.4
25°	347.8	348.9	349.5	346.0	347.8	346.0	350.1	350.6	348.3	349.5
27.5°	339.1	337.4	336.8	334.6	335.7	335.1	335.7	335.7	339.1	334.6
30°	325.9	324.2	324.8	323.1	323.6	323.1	323.6	323.6	325.9	325.4
32.5°	313.3	311.6	312.2	310.5	310.5	311.0	309.9	309.9	311.6	310.5
35°	301.3	297.3	297.8	297.3	297.8	295.5	295.5	295.0	296.1	293.2
37.5°	284.1	282.3	281.8	281.2	281.8	280.6	281.8	280.0	281.8	279.5
40°	268.6	267.4	268.0	264.5	264.5	265.1	264.0	263.4	264.0	266.3
42.5°	253.1	250.8	249.6	248.5	249.0	247.3	246.8	245.6	246.8	244.5
45°	234.7	234.7	234.1	231.3	231.8	231.8	229.5	227.2	227.8	227.8
47.5°	218.1	216.9	216.3	213.5	212.9	212.3	210.0	208.3	208.3	206.6
50°	199.7	198.5	196.8	194.0	192.8	189.4	187.7	185.4	183.1	183.1
52.5°	182.5	178.5	176.2	171.6	169.9	168.1	163.5	161.8	160.1	158.4
55°	161.8	158.4	153.8	148.6	146.3	143.5	138.9	135.4	133.1	133.7
57.5°	141.7	136.0	131.4	124.5	121.7	119.9	115.3	110.7	108.5	108.5
60°	117.1	112.5	106.7	100.4	98.1	95.3	89.5	86.7	84.9	83.2
62.5°	93.5	90.1	84.9	76.9	75.2	72.3	68.3	64.9	63.1	63.1
65°	70.0	66.6	62.0	56.2	53.9	51.6	48.2	44.8	43.0	42.5
67.5°	49.4	45.3	41.3	36.7	35.0	33.9	30.4	28.1	27.0	26.4
70°	29.8	27.5	24.7	21.2	19.5	18.4	16.1	14.4	13.8	13.2
72.5°	15.5	13.8	11.5	9.2	8.0	6.9	5.7	4.6	4.0	4.0
75°	5.7	4.6	2.9	1.7	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	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)