

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: P563885

Luminaire Tested: **LD4C08D010 EX4C08D2W 4LBCSSQMMS**

Issue Date: 5/25/2022



Test Information

Test Method: LM-79-08
Report Number: P563885
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 EX4C08D2W 4LBCSSQMMS
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MMS FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

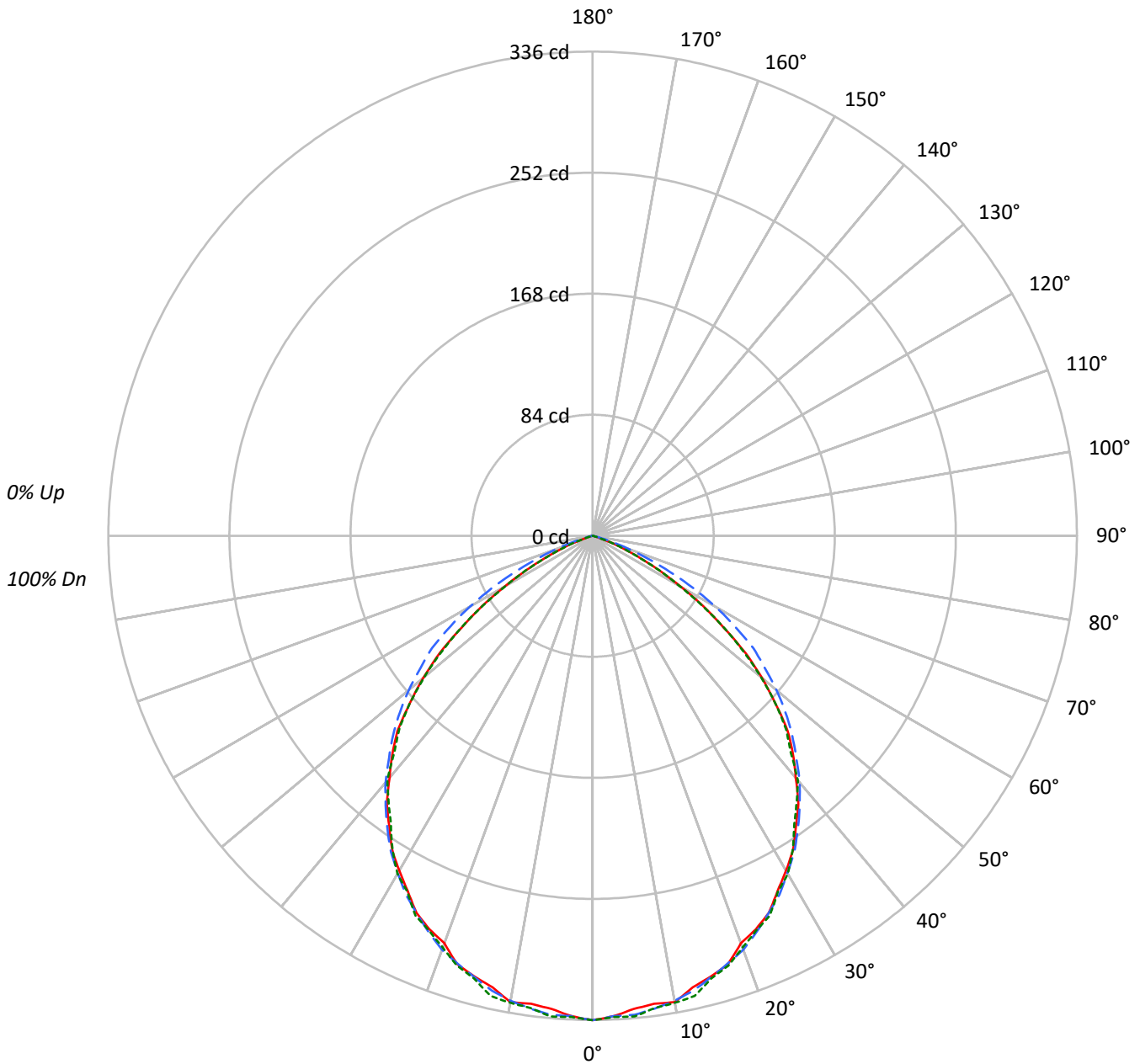
Lumens per Lamp: N/A
Luminaire Lumens: 718.2 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P563885

CATALOG NUMBER: LD4C08D010 EX4C08D2W 4LBCSSQMMS

Luminous Intensity Polar Plot





TEST NUMBER: P563885

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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°	32440	32440	32440
5°	31915	32321	32428
10°	32195	32097	32244
15°	31636	31676	31766
20°	30897	31379	31225
25°	30757	30757	30960
30°	29893	30116	30171
35°	28977	29248	28741
40°	27610	28151	27900
45°	26118	26718	25872
50°	23012	25008	22877
55°	18639	22895	18723
60°	13644	18989	13373
65°	8288	13516	8059
70°	3244	7279	3103
75°	336	1976	336
80°	278	278	278
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.7	4.4
10°-20°	89.8	12.5
20°-30°	133.2	18.6
30°-40°	154.4	21.5
40°-50°	148.0	20.6
50°-60°	108.8	15.2
60°-70°	47.0	6.5
70°-80°	5.1	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°	254.8	35.5
0°-40°	409.2	57.0
0°-60°	666.0	92.7
0°-90°	718.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	718.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	336	336	336	336	336	
5°	330	333	334	334	335	31
15°	317	318	317	318	318	89
25°	289	288	289	289	291	132
35°	246	247	248	248	244	154
45°	191	192	196	193	190	146
55°	111	122	136	122	111	100
65°	36	45	59	45	35	37
75°	1	1	5	1	1	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P563885

CATALOG NUMBER: LD4C08D010 EX4C08D2W 4LBCSSQMMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	336.2	336.2	336.2	336.2	336.2	336.2	336.2	336.2	336.2	336.2	336.2
2.5°	333.7	337.6	338.1	335.7	334.8	333.3	336.7	334.3	335.3	334.3	333.7
5°	329.5	333.7	334.3	334.3	333.3	332.8	334.3	333.7	333.3	332.3	333.7
7.5°	327.6	330.0	332.3	329.5	330.9	330.5	333.7	332.3	331.9	331.9	330.9
10°	328.6	328.0	330.0	327.1	328.0	327.1	330.0	330.0	329.1	328.0	327.6
12.5°	320.9	324.7	324.7	324.3	323.3	321.8	324.7	326.6	323.8	323.8	323.3
15°	316.7	317.6	318.0	318.0	317.6	318.5	319.9	318.0	318.5	316.1	317.1
17.5°	311.9	309.9	311.4	310.3	310.9	311.9	313.7	313.7	310.9	310.3	311.4
20°	300.9	306.6	307.1	304.1	304.7	304.7	308.0	305.2	307.1	304.7	305.6
22.5°	295.6	299.4	299.9	296.1	298.4	295.6	299.0	294.6	299.4	296.1	297.5
25°	288.9	288.5	289.9	288.0	288.5	288.5	290.8	288.9	290.3	288.5	288.9
27.5°	277.9	281.8	281.3	279.3	280.3	279.8	284.6	279.3	282.2	279.8	280.7
30°	268.3	271.7	270.8	268.8	268.8	267.4	272.7	271.2	270.8	270.8	270.3
32.5°	258.8	259.3	258.4	258.8	259.3	257.4	261.7	259.8	259.3	259.8	260.3
35°	246.0	246.0	246.9	245.5	247.4	247.4	251.1	248.8	248.3	246.9	248.3
37.5°	234.5	233.0	233.5	233.5	234.5	235.4	237.3	236.4	236.4	235.0	235.9
40°	219.2	218.2	219.6	219.6	221.1	221.1	223.0	222.1	223.5	223.5	223.5
42.5°	205.8	205.8	204.9	206.3	206.8	206.3	209.6	209.1	209.6	208.7	209.1
45°	191.4	191.4	190.5	190.0	192.5	191.9	195.8	194.4	196.2	195.3	195.8
47.5°	171.9	174.3	172.8	174.3	177.2	177.6	180.0	179.0	181.0	179.5	181.5
50°	153.3	153.3	154.7	156.6	159.5	160.0	162.9	164.8	165.7	166.2	166.6
52.5°	133.8	133.3	134.7	137.0	139.5	141.4	144.2	147.1	149.0	151.9	150.4
55°	110.8	111.7	113.2	116.1	119.8	122.3	124.6	128.5	131.8	133.3	136.1
57.5°	91.2	90.2	91.2	95.0	99.3	101.2	104.6	108.4	113.2	116.1	117.0
60°	70.7	71.2	72.1	75.5	78.8	81.7	83.1	89.3	93.6	96.4	98.4
62.5°	52.1	53.0	54.0	56.9	60.1	62.6	64.9	70.2	74.1	76.9	78.8
65°	36.3	36.7	38.2	39.7	43.0	45.4	47.3	51.6	55.4	57.8	59.2
67.5°	22.5	22.9	23.9	25.8	28.2	30.1	32.0	34.9	38.2	40.6	41.1
70°	11.5	11.9	12.4	13.8	15.8	16.7	18.1	20.5	22.9	24.8	25.8
72.5°	3.9	3.9	4.3	5.3	6.2	7.1	7.6	10.1	11.9	12.9	13.3
75°	0.9	0.9	0.9	0.9	0.9	1.4	1.4	2.8	3.9	4.8	5.3
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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: P563885

CATALOG NUMBER: LD4C08D010 EX4C08D2W 4LBCSSQMMS

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	336.2	336.2	336.2	336.2	336.2	336.2	336.2	336.2	336.2	336.2
2.5°	336.2	335.3	334.8	335.3	335.3	334.8	336.2	338.1	340.5	334.3
5°	335.7	334.8	335.7	332.8	334.3	333.3	335.3	334.8	336.7	334.8
7.5°	334.3	332.3	332.8	331.4	333.3	330.9	332.3	335.3	333.3	330.5
10°	329.5	328.6	331.9	327.1	326.1	328.0	331.9	329.1	328.0	329.1
12.5°	324.7	324.7	326.1	322.4	322.8	323.8	325.7	323.8	324.7	327.1
15°	319.5	318.5	320.9	318.0	317.6	316.7	318.5	318.5	319.5	318.0
17.5°	313.3	311.9	311.9	310.9	310.3	312.8	313.7	314.2	314.7	312.8
20°	305.6	305.2	306.6	305.2	305.6	306.1	306.1	305.2	309.4	304.1
22.5°	297.5	299.0	297.0	296.1	297.0	297.9	297.9	298.4	297.5	296.5
25°	289.4	290.3	290.8	288.0	289.4	288.0	291.3	291.7	289.9	290.8
27.5°	282.2	280.7	280.3	278.4	279.3	278.9	279.3	279.3	282.2	278.4
30°	271.2	269.8	270.3	268.8	269.4	268.8	269.4	269.4	271.2	270.8
32.5°	260.7	259.3	259.8	258.4	258.4	258.8	257.9	257.9	259.3	258.4
35°	250.7	247.4	247.8	247.4	247.8	246.0	246.0	245.5	246.4	244.0
37.5°	236.4	235.0	234.5	234.0	234.5	233.5	234.5	233.0	234.5	232.5
40°	223.5	222.6	223.0	220.1	220.1	220.6	219.6	219.2	219.6	221.5
42.5°	210.6	208.7	207.7	206.8	207.2	205.8	205.4	204.4	205.4	203.4
45°	195.3	195.3	194.8	192.5	193.0	193.0	191.0	189.1	189.6	189.6
47.5°	181.5	180.6	180.0	177.6	177.2	176.7	174.8	173.3	173.3	171.9
50°	166.2	165.2	163.8	161.4	160.4	157.6	156.1	154.2	152.4	152.4
52.5°	151.9	148.5	146.6	142.8	141.4	139.9	136.1	134.7	133.3	131.8
55°	134.7	131.8	128.0	123.7	121.8	119.4	115.6	112.7	110.8	111.3
57.5°	118.0	113.2	109.3	103.7	101.2	99.8	96.0	92.2	90.2	90.2
60°	97.4	93.6	88.8	83.6	81.7	79.2	74.5	72.1	70.7	69.3
62.5°	77.8	75.0	70.7	64.0	62.6	60.1	56.9	54.0	52.5	52.5
65°	58.3	55.4	51.6	46.8	44.9	43.0	40.1	37.2	35.8	35.3
67.5°	41.1	37.7	34.4	30.6	29.1	28.2	25.3	23.4	22.5	22.0
70°	24.8	22.9	20.5	17.7	16.3	15.3	13.3	11.9	11.5	11.0
72.5°	12.9	11.5	9.6	7.6	6.7	5.7	4.8	3.9	3.4	3.4
75°	4.8	3.9	2.4	1.4	0.9	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)