

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: P840106

Luminaire Tested: **LD4C08D010 EU4089050 4LBCSSQMMS**

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: P840106
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 4LBCSSQMMS
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

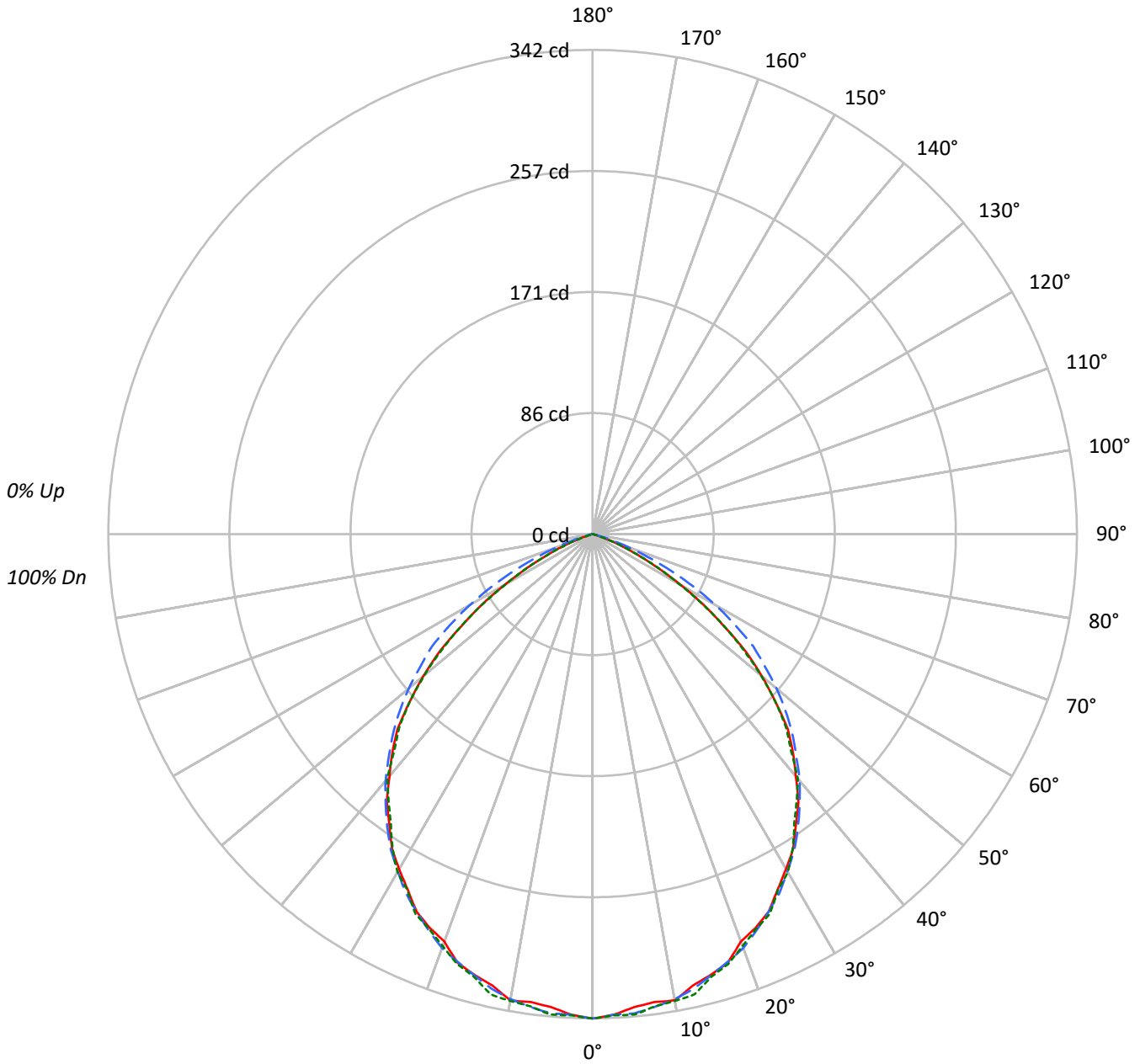
Lumens per Lamp: N/A
Luminaire Lumens: 731.0 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	33018	33018	33018
5°	32486	32912	32999
10°	32764	32675	32813
15°	32195	32235	32335
20°	31441	31944	31790
25°	31311	31311	31513
30°	30439	30650	30706
35°	29483	29778	29259
40°	28101	28655	28403
45°	26595	27196	26336
50°	23417	25459	23282
55°	18976	23299	19060
60°	13875	19317	13605
65°	8425	13767	8219
70°	3301	7420	3160
75°	373	2013	373
80°	278	278	278
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.3	4.4
10°-20°	91.4	12.5
20°-30°	135.6	18.6
30°-40°	157.1	21.5
40°-50°	150.7	20.6
50°-60°	110.8	15.2
60°-70°	47.8	6.5
70°-80°	5.2	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°	259.3	35.5
0°-40°	416.5	57.0
0°-60°	677.9	92.7
0°-90°	731.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	342	342	342	342	342	
5°	335	339	340	340	341	32
15°	322	324	323	323	324	91
25°	294	294	294	295	296	135
35°	250	252	253	252	248	157
45°	195	195	199	196	193	148
55°	113	124	138	124	113	101
65°	37	46	60	46	36	38
75°	1	2	5	1	1	3
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°	342.2	342.2	342.2	342.2	342.2	342.2	342.2	342.2	342.2	342.2	342.2
2.5°	339.8	343.7	344.1	341.7	340.7	339.3	342.7	340.3	341.2	340.3	339.8
5°	335.4	339.8	340.3	340.3	339.3	338.8	340.3	339.8	339.3	338.3	339.8
7.5°	333.5	335.9	338.3	335.4	336.8	336.4	339.8	338.3	337.8	337.8	336.8
10°	334.4	333.9	335.9	333.0	333.9	333.0	335.9	335.9	334.9	333.9	333.5
12.5°	326.6	330.5	330.5	330.0	329.1	327.6	330.5	332.5	329.6	329.6	329.1
15°	322.3	323.2	323.7	323.7	323.2	324.2	325.7	323.7	324.2	321.8	322.7
17.5°	317.4	315.5	316.9	315.9	316.4	317.4	319.4	319.4	316.4	315.9	316.9
20°	306.2	312.1	312.6	309.6	310.1	310.1	313.5	310.6	312.6	310.1	311.1
22.5°	300.9	304.8	305.3	301.4	303.8	300.9	304.3	299.9	304.8	301.4	302.8
25°	294.1	293.6	295.0	293.1	293.6	293.6	296.0	294.1	295.5	293.6	294.1
27.5°	282.9	286.8	286.3	284.4	285.3	284.8	289.7	284.4	287.3	284.8	285.8
30°	273.2	276.6	275.6	273.7	273.7	272.2	277.6	276.1	275.6	275.6	275.1
32.5°	263.5	263.9	263.0	263.5	263.9	262.0	266.4	264.4	263.9	264.4	264.9
35°	250.3	250.3	251.3	249.8	251.8	251.8	255.7	253.2	252.8	251.3	252.8
37.5°	238.7	237.2	237.7	237.7	238.7	239.6	241.6	240.6	240.6	239.2	240.1
40°	223.1	222.1	223.6	223.6	225.1	225.1	227.0	226.0	227.5	227.5	227.5
42.5°	209.5	209.5	208.5	210.0	210.5	210.0	213.4	212.9	213.4	212.4	212.9
45°	194.9	194.9	193.9	193.5	195.9	195.4	199.3	197.8	199.8	198.8	199.3
47.5°	175.0	177.4	176.0	177.4	180.3	180.8	183.2	182.3	184.2	182.8	184.7
50°	156.0	156.0	157.5	159.4	162.3	162.8	165.8	167.7	168.7	169.1	169.6
52.5°	136.1	135.6	137.1	139.5	141.9	143.9	146.8	149.7	151.7	154.6	153.1
55°	112.8	113.7	115.2	118.1	122.0	124.4	126.9	130.8	134.2	135.6	138.5
57.5°	92.8	91.9	92.8	96.7	101.1	103.0	106.5	110.3	115.2	118.1	119.1
60°	71.9	72.4	73.4	76.8	80.2	83.1	84.6	90.9	95.3	98.2	100.1
62.5°	53.0	54.0	54.9	57.9	61.2	63.7	66.1	71.5	75.3	78.3	80.2
65°	36.9	37.4	38.9	40.3	43.7	46.2	48.1	52.5	56.4	58.8	60.3
67.5°	22.8	23.3	24.3	26.3	28.7	30.6	32.6	35.5	38.9	41.3	41.8
70°	11.7	12.2	12.6	14.1	16.0	17.0	18.5	20.9	23.3	25.3	26.3
72.5°	3.9	3.9	4.4	5.4	6.3	7.3	7.8	10.2	12.2	13.1	13.6
75°	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.9	3.9	4.9	5.4
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	342.2	342.2	342.2	342.2	342.2	342.2	342.2	342.2	342.2	342.2
2.5°	342.2	341.2	340.7	341.2	341.2	340.7	342.2	344.1	346.6	340.3
5°	341.7	340.7	341.7	338.8	340.3	339.3	341.2	340.7	342.7	340.7
7.5°	340.3	338.3	338.8	337.3	339.3	336.8	338.3	341.2	339.3	336.4
10°	335.4	334.4	337.8	333.0	332.0	333.9	337.8	334.9	333.9	334.9
12.5°	330.5	330.5	332.0	328.1	328.6	329.6	331.5	329.6	330.5	333.0
15°	325.2	324.2	326.6	323.7	323.2	322.3	324.2	324.2	325.2	323.7
17.5°	318.9	317.4	317.4	316.4	315.9	318.4	319.4	319.8	320.3	318.4
20°	311.1	310.6	312.1	310.6	311.1	311.6	311.6	310.6	315.0	309.6
22.5°	302.8	304.3	302.3	301.4	302.3	303.3	303.3	303.8	302.8	301.8
25°	294.6	295.5	296.0	293.1	294.6	293.1	296.5	297.0	295.0	296.0
27.5°	287.3	285.8	285.3	283.4	284.4	283.9	284.4	284.4	287.3	283.4
30°	276.1	274.6	275.1	273.7	274.1	273.7	274.1	274.1	276.1	275.6
32.5°	265.4	263.9	264.4	263.0	263.0	263.5	262.5	262.5	263.9	263.0
35°	255.2	251.8	252.3	251.8	252.3	250.3	250.3	249.8	250.8	248.4
37.5°	240.6	239.2	238.7	238.2	238.7	237.7	238.7	237.2	238.7	236.7
40°	227.5	226.5	227.0	224.1	224.1	224.6	223.6	223.1	223.6	225.5
42.5°	214.4	212.4	211.5	210.5	211.0	209.5	209.0	208.0	209.0	207.1
45°	198.8	198.8	198.3	195.9	196.4	196.4	194.4	192.5	193.0	193.0
47.5°	184.7	183.7	183.2	180.8	180.3	179.9	177.9	176.4	176.4	175.0
50°	169.1	168.2	166.7	164.3	163.3	160.4	159.0	157.0	155.1	155.1
52.5°	154.6	151.2	149.2	145.3	143.9	142.4	138.5	137.1	135.6	134.2
55°	137.1	134.2	130.3	125.9	124.0	121.5	117.6	114.7	112.8	113.3
57.5°	120.1	115.2	111.3	105.5	103.0	101.6	97.7	93.8	91.9	91.9
60°	99.2	95.3	90.4	85.1	83.1	80.7	75.8	73.4	71.9	70.5
62.5°	79.2	76.3	71.9	65.1	63.7	61.2	57.9	54.9	53.5	53.5
65°	59.3	56.4	52.5	47.6	45.7	43.7	40.8	37.9	36.5	36.0
67.5°	41.8	38.4	35.0	31.1	29.6	28.7	25.8	23.8	22.8	22.4
70°	25.3	23.3	20.9	18.0	16.5	15.5	13.6	12.2	11.7	11.2
72.5°	13.1	11.7	9.7	7.8	6.8	5.8	4.9	3.9	3.4	3.4
75°	4.9	3.9	2.4	1.5	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	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)