

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: **LD4C15D010 EX4C159027 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: LD4C15D010 EX4C159027 4LBCSSQMW
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

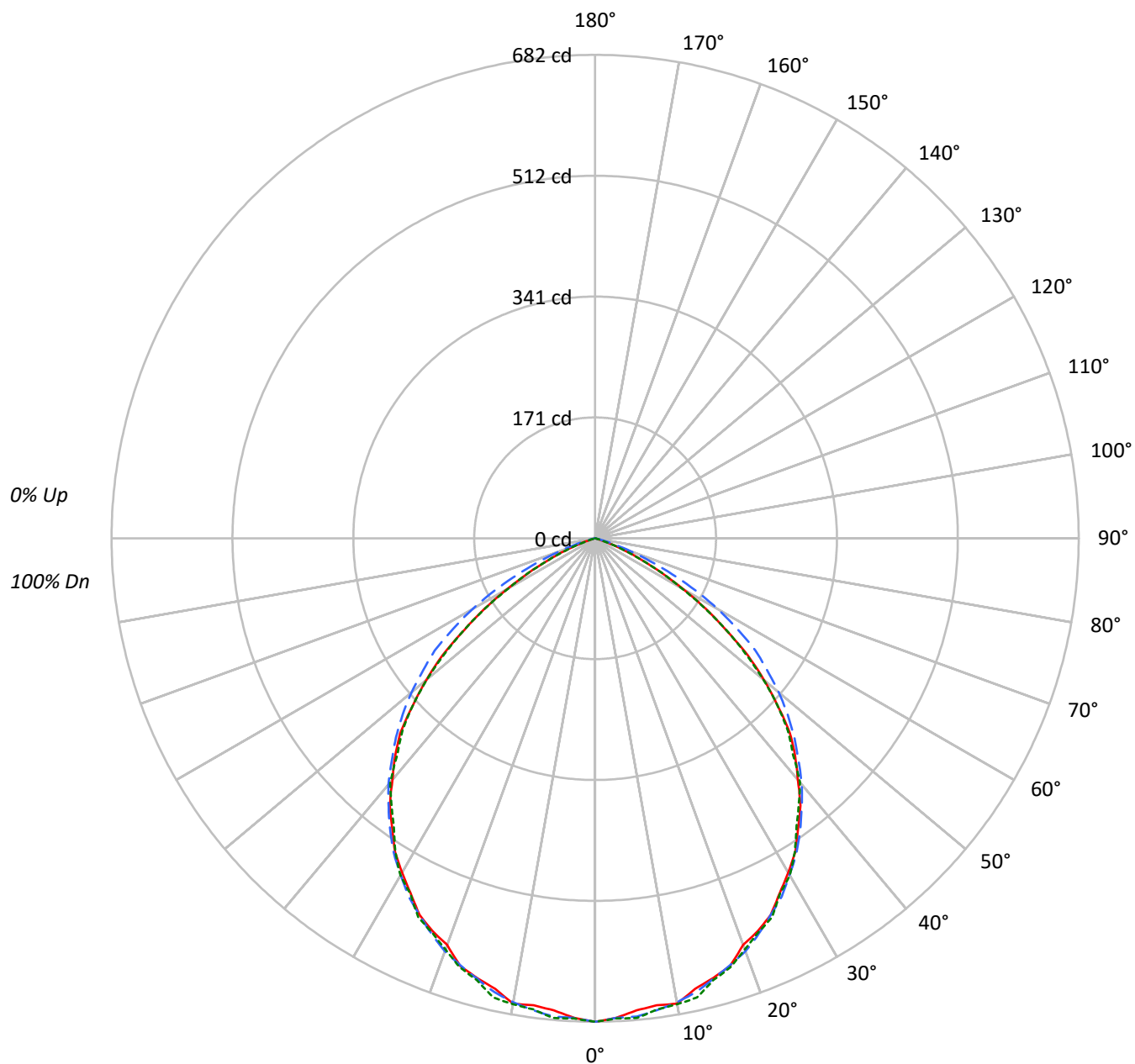
Lumens per Lamp: N/A
Luminaire Lumens: 1457.0 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 15.8
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	65815	65815	65815
5°	64749	65592	65776
10°	65312	65116	65400
15°	64161	64261	64451
20°	62677	63662	63375
25°	62398	62398	62814
30°	60666	61089	61201
35°	58766	59343	58318
40°	56013	57109	56618
45°	53013	54200	52481
50°	46684	50752	46399
55°	37817	46446	37968
60°	27673	38518	27113
65°	16804	27420	16370
70°	6545	14755	6291
75°	708	3989	708
80°	556	556	556
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	4.4
10°-20°	182.2	12.5
20°-30°	270.3	18.6
30°-40°	313.2	21.5
40°-50°	300.3	20.6
50°-60°	220.8	15.2
60°-70°	95.4	6.5
70°-80°	10.3	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°	516.9	35.5
0°-40°	830.1	57.0
0°-60°	1351.2	92.7
0°-90°	1457.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1457.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	668	675	677	678	679	64
15°	642	646	643	644	645	181
25°	586	585	586	587	590	268
35°	499	502	504	503	495	312
45°	388	390	397	391	385	295
55°	225	248	276	247	226	202
65°	74	92	120	91	72	76
75°	2	3	11	2	2	6
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°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	677.2	685.0	685.9	681.1	679.1	676.3	683.0	678.2	680.1	678.2	677.2
5°	668.5	677.2	678.2	678.2	676.3	675.3	678.2	677.2	676.3	674.3	677.2
7.5°	664.6	669.5	674.3	668.5	671.4	670.4	677.2	674.3	673.3	673.3	671.4
10°	666.6	665.6	669.5	663.6	665.6	663.6	669.5	669.5	667.5	665.6	664.6
12.5°	651.0	658.8	658.8	657.8	655.9	653.0	658.8	662.7	656.8	656.8	655.9
15°	642.3	644.3	645.2	645.2	644.3	646.2	649.1	645.2	646.2	641.4	643.3
17.5°	632.7	628.8	631.7	629.7	630.7	632.7	636.5	636.5	630.7	629.7	631.7
20°	610.4	622.0	623.0	617.2	618.1	618.1	624.9	619.1	623.0	618.1	620.0
22.5°	599.7	607.4	608.4	600.7	605.5	599.7	606.5	597.8	607.4	600.7	603.6
25°	586.1	585.2	588.1	584.2	585.2	585.2	590.0	586.1	589.1	585.2	586.1
27.5°	563.9	571.6	570.6	566.8	568.7	567.7	577.4	566.8	572.6	567.7	569.7
30°	544.5	551.3	549.3	545.5	545.5	542.5	553.2	550.3	549.3	549.3	548.3
32.5°	525.1	526.1	524.1	525.1	526.1	522.2	530.9	527.0	526.1	527.0	528.0
35°	498.9	498.9	500.9	498.0	501.9	501.9	509.6	504.7	503.8	500.9	503.8
37.5°	475.7	472.8	473.8	473.8	475.7	477.6	481.5	479.6	479.6	476.7	478.6
40°	444.7	442.8	445.6	445.6	448.6	448.6	452.4	450.5	453.4	453.4	453.4
42.5°	417.6	417.6	415.6	418.5	419.5	418.5	425.3	424.3	425.3	423.4	424.3
45°	388.5	388.5	386.6	385.6	390.4	389.5	397.2	394.3	398.2	396.2	397.2
47.5°	348.8	353.6	350.7	353.6	359.4	360.4	365.2	363.3	367.2	364.3	368.2
50°	311.0	311.0	313.9	317.8	323.6	324.6	330.4	334.3	336.2	337.1	338.1
52.5°	271.3	270.3	273.2	278.0	282.9	286.8	292.6	298.4	302.3	308.1	305.2
55°	224.8	226.7	229.6	235.4	243.2	248.0	252.9	260.6	267.4	270.3	276.1
57.5°	185.0	183.1	185.0	192.8	201.5	205.4	212.2	219.9	229.6	235.4	237.4
60°	143.4	144.4	146.3	153.1	159.9	165.7	168.6	181.2	189.9	195.7	199.6
62.5°	105.6	107.6	109.5	115.3	122.1	126.9	131.7	142.4	150.2	156.0	159.9
65°	73.6	74.6	77.5	80.4	87.2	92.0	95.9	104.6	112.4	117.2	120.1
67.5°	45.5	46.5	48.4	52.3	57.2	61.0	64.9	70.7	77.5	82.3	83.3
70°	23.2	24.2	25.2	28.1	32.0	33.9	36.8	41.7	46.5	50.4	52.3
72.5°	7.7	7.7	8.7	10.7	12.6	14.5	15.5	20.4	24.2	26.2	27.1
75°	1.9	1.9	1.9	1.9	1.9	2.9	2.9	5.8	7.7	9.7	10.7
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.9	1.9
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	682.1	680.1	679.1	680.1	680.1	679.1	682.1	685.9	690.8	678.2
5°	681.1	679.1	681.1	675.3	678.2	676.3	680.1	679.1	683.0	679.1
7.5°	678.2	674.3	675.3	672.4	676.3	671.4	674.3	680.1	676.3	670.4
10°	668.5	666.6	673.3	663.6	661.7	665.6	673.3	667.5	665.6	667.5
12.5°	658.8	658.8	661.7	654.0	654.9	656.8	660.7	656.8	658.8	663.6
15°	648.2	646.2	651.0	645.2	644.3	642.3	646.2	646.2	648.2	645.2
17.5°	635.5	632.7	632.7	630.7	629.7	634.6	636.5	637.5	638.5	634.6
20°	620.0	619.1	622.0	619.1	620.0	621.0	621.0	619.1	627.8	617.2
22.5°	603.6	606.5	602.6	600.7	602.6	604.6	604.6	605.5	603.6	601.6
25°	587.1	589.1	590.0	584.2	587.1	584.2	591.0	591.9	588.1	590.0
27.5°	572.6	569.7	568.7	564.8	566.8	565.8	566.8	566.8	572.6	564.8
30°	550.3	547.4	548.3	545.5	546.4	545.5	546.4	546.4	550.3	549.3
32.5°	529.0	526.1	527.0	524.1	524.1	525.1	523.2	523.2	526.1	524.1
35°	508.6	501.9	502.8	501.9	502.8	498.9	498.9	498.0	499.9	495.1
37.5°	479.6	476.7	475.7	474.7	475.7	473.8	475.7	472.8	475.7	471.8
40°	453.4	451.5	452.4	446.6	446.6	447.6	445.6	444.7	445.6	449.5
42.5°	427.3	423.4	421.5	419.5	420.5	417.6	416.6	414.7	416.6	412.7
45°	396.2	396.2	395.3	390.4	391.4	391.4	387.5	383.7	384.6	384.6
47.5°	368.2	366.2	365.2	360.4	359.4	358.5	354.6	351.7	351.7	348.8
50°	337.1	335.2	332.3	327.5	325.5	319.7	316.8	312.9	309.1	309.1
52.5°	308.1	301.3	297.4	289.7	286.8	283.9	276.1	273.2	270.3	267.4
55°	273.2	267.4	259.7	250.9	247.1	242.2	234.4	228.6	224.8	225.7
57.5°	239.3	229.6	221.9	210.3	205.4	202.5	194.7	187.0	183.1	183.1
60°	197.6	189.9	180.2	169.5	165.7	160.8	151.1	146.3	143.4	140.5
62.5°	157.9	152.1	143.4	129.8	126.9	122.1	115.3	109.5	106.6	106.6
65°	118.2	112.4	104.6	94.9	91.1	87.2	81.4	75.6	72.7	71.7
67.5°	83.3	76.5	69.8	62.0	59.1	57.2	51.3	47.5	45.5	44.5
70°	50.4	46.5	41.7	35.9	32.9	31.0	27.1	24.2	23.2	22.3
72.5°	26.2	23.2	19.4	15.5	13.6	11.6	9.7	7.7	6.8	6.8
75°	9.7	7.7	4.9	2.9	1.9	1.9	1.9	1.9	1.9	1.9
77.5°	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)