

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: P563786

Luminaire Tested: **LD4C15D010 EX4C15D2W 4LBCSSQMMS**

Issue Date: 5/25/2022



Test Information

Test Method: LM-79-08
Report Number: P563786
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 EX4C15D2W 4LBCSSQMMS
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

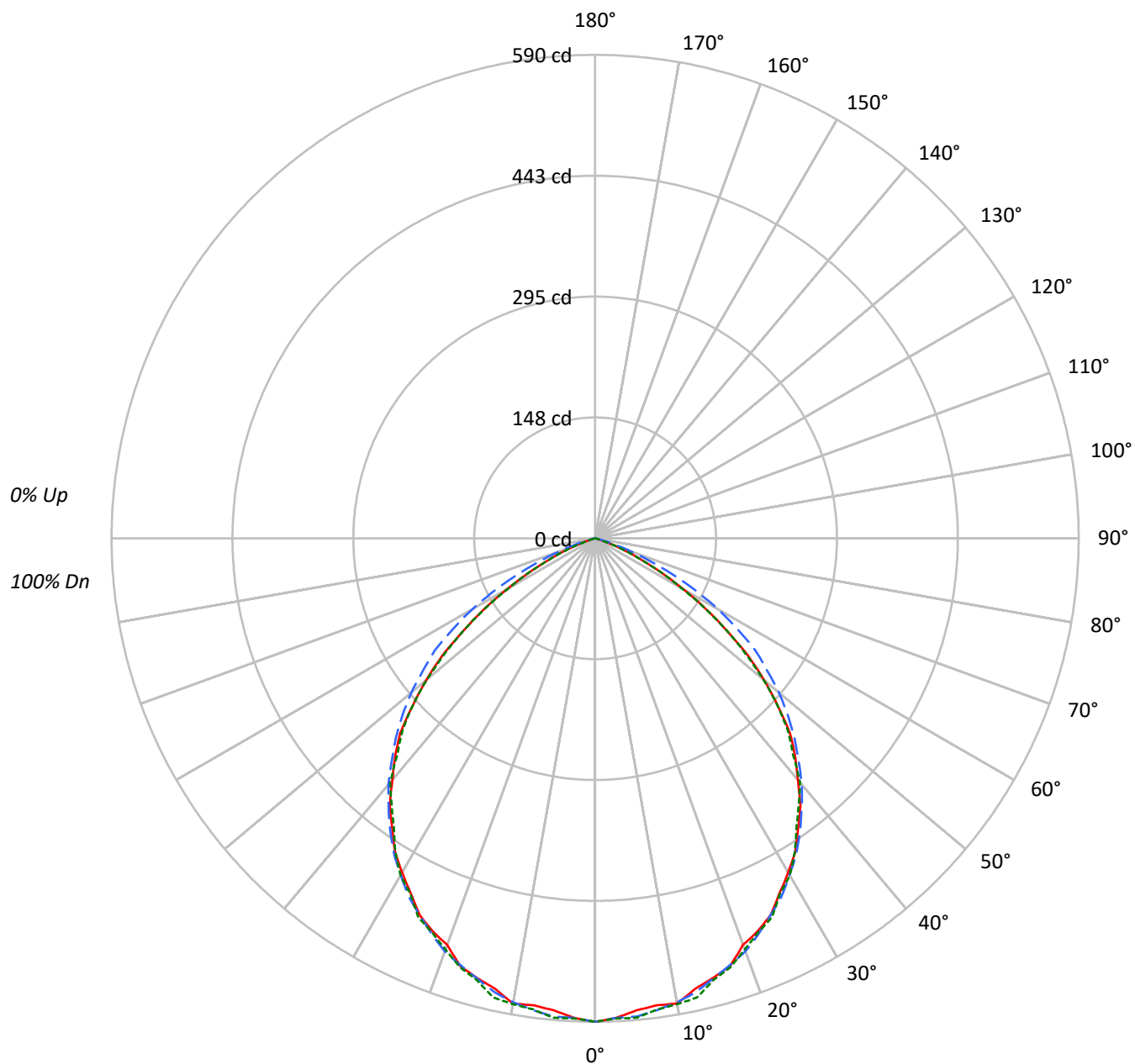
Lumens per Lamp: N/A
Luminaire Lumens: 1260.3 lumens
Efficiency: N/A
Efficacy: 79.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	56928	56928	56928
5°	56013	56739	56894
10°	56484	56327	56572
15°	55500	55580	55750
20°	54205	55078	54811
25°	53977	53977	54328
30°	52477	52845	52934
35°	50839	51333	50438
40°	48456	49400	48985
45°	45863	46886	45399
50°	40380	43892	40124
55°	32703	40172	32854
60°	23929	33308	23466
65°	14543	23744	14155
70°	5671	12780	5445
75°	596	3467	596
80°	445	445	445
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	4.4
10°-20°	157.6	12.5
20°-30°	233.8	18.6
30°-40°	270.9	21.5
40°-50°	259.8	20.6
50°-60°	191.0	15.2
60°-70°	82.5	6.5
70°-80°	8.9	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°	447.1	35.5
0°-40°	718.0	57.0
0°-60°	1168.8	92.7
0°-90°	1260.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1260.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	578	584	586	587	587	55
15°	556	559	556	557	558	157
25°	507	506	507	508	510	232
35°	432	434	436	435	428	270
45°	336	337	344	338	333	255
55°	194	214	239	214	195	175
65°	64	80	104	79	62	65
75°	2	2	9	2	2	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P563786

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	585.8	592.5	593.3	589.2	587.4	585.0	590.8	586.6	588.3	586.6	585.8
5°	578.3	585.8	586.6	586.6	585.0	584.1	586.6	585.8	585.0	583.3	585.8
7.5°	574.9	579.1	583.3	578.3	580.7	579.9	585.8	583.3	582.4	582.4	580.7
10°	576.5	575.7	579.1	574.1	575.7	574.1	579.1	579.1	577.4	575.7	574.9
12.5°	563.1	569.8	569.8	569.0	567.4	564.9	569.8	573.2	568.2	568.2	567.4
15°	555.6	557.3	558.1	558.1	557.3	559.0	561.5	558.1	559.0	554.8	556.4
17.5°	547.3	543.9	546.4	544.7	545.5	547.3	550.6	550.6	545.5	544.7	546.4
20°	527.9	538.0	538.9	533.8	534.6	534.6	540.5	535.6	538.9	534.6	536.4
22.5°	518.8	525.5	526.3	519.6	523.8	518.8	524.6	517.0	525.5	519.6	522.1
25°	507.0	506.2	508.7	505.3	506.2	506.2	510.3	507.0	509.5	506.2	507.0
27.5°	487.7	494.5	493.6	490.3	491.9	491.1	499.4	490.3	495.3	491.1	492.7
30°	471.0	476.9	475.1	471.8	471.8	469.3	478.5	475.9	475.1	475.1	474.3
32.5°	454.2	455.1	453.4	454.2	455.1	451.7	459.3	455.9	455.1	455.9	456.7
35°	431.6	431.6	433.2	430.8	434.1	434.1	440.9	436.6	435.8	433.2	435.8
37.5°	411.5	409.0	409.8	409.8	411.5	413.2	416.5	414.8	414.8	412.4	414.0
40°	384.7	383.0	385.5	385.5	388.1	388.1	391.3	389.7	392.2	392.2	392.2
42.5°	361.2	361.2	359.6	362.0	362.8	362.0	367.9	367.0	367.9	366.2	367.0
45°	336.1	336.1	334.4	333.5	337.7	336.9	343.6	341.1	344.4	342.8	343.6
47.5°	301.7	305.9	303.3	305.9	311.0	311.8	315.9	314.2	317.6	315.1	318.5
50°	269.0	269.0	271.5	274.8	279.9	280.7	285.7	289.1	290.8	291.6	292.4
52.5°	234.7	233.9	236.3	240.5	244.7	248.1	253.1	258.2	261.4	266.5	264.0
55°	194.4	196.1	198.7	203.6	210.4	214.5	218.7	225.4	231.3	233.9	238.8
57.5°	160.0	158.4	160.0	166.7	174.3	177.7	183.5	190.2	198.7	203.6	205.4
60°	124.0	124.9	126.5	132.4	138.2	143.3	145.9	156.8	164.3	169.3	172.6
62.5°	91.3	93.1	94.7	99.8	105.6	109.8	113.9	123.2	129.9	134.9	138.2
65°	63.7	64.5	67.0	69.6	75.5	79.6	82.9	90.5	97.2	101.4	104.0
67.5°	39.4	40.2	41.9	45.3	49.4	52.8	56.1	61.1	67.0	71.2	72.1
70°	20.1	21.0	21.8	24.3	27.7	29.3	31.8	36.0	40.2	43.5	45.3
72.5°	6.7	6.7	7.5	9.3	10.9	12.6	13.4	17.6	21.0	22.7	23.5
75°	1.6	1.6	1.6	1.6	1.6	2.5	2.5	5.0	6.7	8.3	9.3
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	590.0	588.3	587.4	588.3	588.3	587.4	590.0	593.3	597.5	586.6
5°	589.2	587.4	589.2	584.1	586.6	585.0	588.3	587.4	590.8	587.4
7.5°	586.6	583.3	584.1	581.6	585.0	580.7	583.3	588.3	585.0	579.9
10°	578.3	576.5	582.4	574.1	572.4	575.7	582.4	577.4	575.7	577.4
12.5°	569.8	569.8	572.4	565.7	566.5	568.2	571.6	568.2	569.8	574.1
15°	560.7	559.0	563.1	558.1	557.3	555.6	559.0	559.0	560.7	558.1
17.5°	549.8	547.3	547.3	545.5	544.7	548.9	550.6	551.4	552.2	548.9
20°	536.4	535.6	538.0	535.6	536.4	537.2	537.2	535.6	543.1	533.8
22.5°	522.1	524.6	521.2	519.6	521.2	522.9	522.9	523.8	522.1	520.4
25°	507.9	509.5	510.3	505.3	507.9	505.3	511.2	512.1	508.7	510.3
27.5°	495.3	492.7	491.9	488.6	490.3	489.5	490.3	490.3	495.3	488.6
30°	475.9	473.5	474.3	471.8	472.7	471.8	472.7	472.7	475.9	475.1
32.5°	457.5	455.1	455.9	453.4	453.4	454.2	452.6	452.6	455.1	453.4
35°	439.9	434.1	435.0	434.1	435.0	431.6	431.6	430.8	432.4	428.2
37.5°	414.8	412.4	411.5	410.6	411.5	409.8	411.5	409.0	411.5	408.1
40°	392.2	390.5	391.3	386.3	386.3	387.1	385.5	384.7	385.5	388.9
42.5°	369.5	366.2	364.6	362.8	363.8	361.2	360.4	358.7	360.4	357.0
45°	342.8	342.8	341.9	337.7	338.5	338.5	335.3	331.9	332.7	332.7
47.5°	318.5	316.8	315.9	311.8	311.0	310.0	306.7	304.2	304.2	301.7
50°	291.6	289.9	287.5	283.3	281.6	276.6	274.0	270.7	267.3	267.3
52.5°	266.5	260.6	257.2	250.5	248.1	245.6	238.8	236.3	233.9	231.3
55°	236.3	231.3	224.6	217.1	213.7	209.5	202.8	197.7	194.4	195.3
57.5°	207.0	198.7	191.9	181.9	177.7	175.2	168.4	161.7	158.4	158.4
60°	171.0	164.3	155.8	146.7	143.3	139.2	130.7	126.5	124.0	121.6
62.5°	136.6	131.5	124.0	112.3	109.8	105.6	99.8	94.7	92.2	92.2
65°	102.2	97.2	90.5	82.1	78.7	75.5	70.4	65.4	62.9	62.0
67.5°	72.1	66.2	60.3	53.6	51.2	49.4	44.5	41.1	39.4	38.6
70°	43.5	40.2	36.0	31.0	28.5	26.9	23.5	21.0	20.1	19.3
72.5°	22.7	20.1	16.8	13.4	11.7	10.1	8.3	6.7	5.9	5.9
75°	8.3	6.7	4.2	2.5	1.6	1.6	1.6	1.6	1.6	1.6
77.5°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)