

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: **LD4C30D010 EX4C309030 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: 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: LD4C30D010 EX4C309030 4LBCSSQMMMS  
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBCSSQ TRIM WITH MMS FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

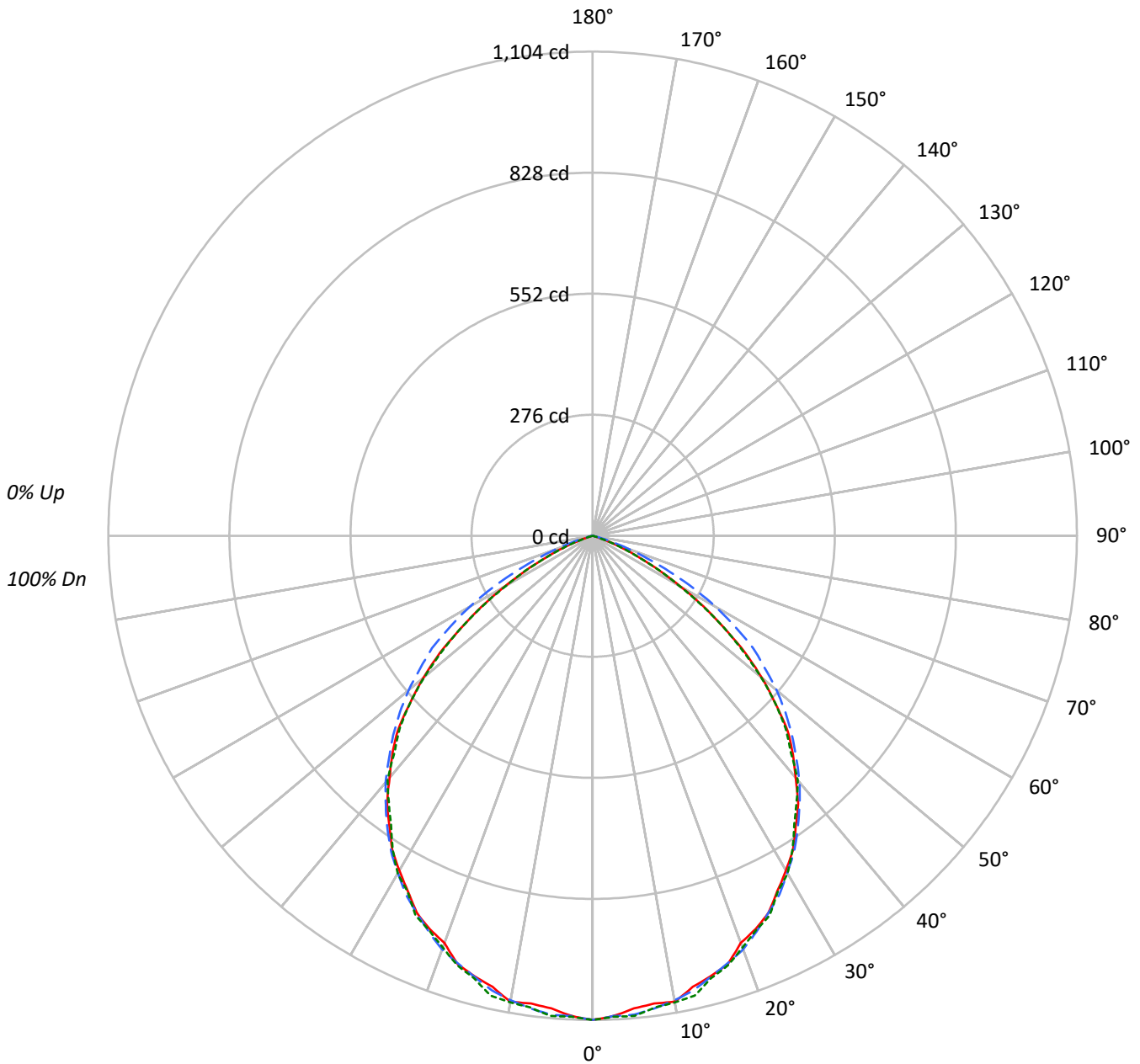
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2358.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 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): 31.6  
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

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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°	106514	106514	106514
5°	104790	106156	106456
10°	105698	105384	105845
15°	103848	103998	104308
20°	101429	103041	102558
25°	100991	100991	101662
30°	98180	98870	99049
35°	95116	96035	94374
40°	90651	92427	91634
45°	85790	87727	84944
50°	75550	82140	75085
55°	61200	75179	61452
60°	44771	62332	43883
65°	27215	44384	26484
70°	10608	23895	10184
75°	1156	6450	1156
80°	889	889	889
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	4.4
10°-20°	294.8	12.5
20°-30°	437.5	18.6
30°-40°	506.9	21.5
40°-50°	486.0	20.6
50°-60°	357.3	15.2
60°-70°	154.3	6.5
70°-80°	16.7	0.7
80°-90°	0.2	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°	836.5	35.5
0°-40°	1343.4	57.0
0°-60°	2186.8	92.7
0°-90°	2358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2358.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1082	1093	1096	1098	1099	103
15°	1040	1046	1041	1043	1044	293
25°	949	947	949	950	955	434
35°	808	812	815	814	801	505
45°	629	630	643	634	622	478
55°	364	401	447	400	365	327
65°	119	149	194	147	116	122
75°	3	5	17	3	3	10
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°	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9
2.5°	1096.0	1108.5	1110.1	1102.3	1099.1	1094.4	1105.4	1097.6	1100.7	1097.6	1096.0
5°	1081.9	1096.0	1097.6	1097.6	1094.4	1092.9	1097.6	1096.0	1094.4	1091.3	1096.0
7.5°	1075.6	1083.4	1091.3	1081.9	1086.6	1085.0	1096.0	1091.3	1089.7	1089.7	1086.6
10°	1078.8	1077.2	1083.4	1074.0	1077.2	1074.0	1083.4	1083.4	1080.3	1077.2	1075.6
12.5°	1053.6	1066.2	1066.2	1064.6	1061.5	1056.8	1066.2	1072.5	1063.0	1063.0	1061.5
15°	1039.6	1042.7	1044.2	1044.2	1042.7	1045.8	1050.5	1044.2	1045.8	1038.0	1041.1
17.5°	1023.9	1017.6	1022.3	1019.2	1020.8	1023.9	1030.2	1030.2	1020.8	1019.2	1022.3
20°	987.8	1006.6	1008.2	998.8	1000.3	1000.3	1011.3	1001.9	1008.2	1000.3	1003.5
22.5°	970.5	983.1	984.7	972.1	979.9	970.5	981.5	967.4	983.1	972.1	976.8
25°	948.6	947.1	951.7	945.5	947.1	947.1	954.9	948.6	953.3	947.1	948.6
27.5°	912.6	925.1	923.5	917.2	920.4	918.8	934.5	917.2	926.6	918.8	922.0
30°	881.2	892.2	889.0	882.8	882.8	878.0	895.3	890.6	889.0	889.0	887.4
32.5°	849.8	851.4	848.3	849.8	851.4	845.1	859.2	853.0	851.4	853.0	854.6
35°	807.5	807.5	810.6	805.9	812.2	812.2	824.7	816.9	815.3	810.6	815.3
37.5°	769.9	765.2	766.7	766.7	769.9	773.0	779.3	776.1	776.1	771.4	774.6
40°	719.7	716.6	721.2	721.2	726.0	726.0	732.2	729.1	733.8	733.8	733.8
42.5°	675.8	675.8	672.7	677.3	678.9	677.3	688.3	686.8	688.3	685.2	686.8
45°	628.7	628.7	625.6	624.1	631.9	630.3	642.9	638.1	644.4	641.3	642.9
47.5°	564.4	572.3	567.6	572.3	581.7	583.3	591.1	588.0	594.2	589.6	595.8
50°	503.3	503.3	508.0	514.3	523.7	525.3	534.7	541.0	544.1	545.6	547.2
52.5°	439.0	437.4	442.2	450.0	457.9	464.1	473.5	482.9	489.2	498.6	493.9
55°	363.8	366.9	371.6	381.0	393.6	401.4	409.2	421.8	432.8	437.4	446.9
57.5°	299.5	296.3	299.5	312.0	326.1	332.4	343.4	355.9	371.6	381.0	384.2
60°	232.0	233.6	236.8	247.8	258.7	268.1	272.8	293.2	307.3	316.7	323.0
62.5°	170.9	174.1	177.2	186.6	197.5	205.4	213.2	230.5	243.0	252.4	258.7
65°	119.2	120.7	125.5	130.1	141.1	148.9	155.2	169.3	181.9	189.7	194.4
67.5°	73.7	75.2	78.4	84.7	92.5	98.8	105.0	114.4	125.5	133.3	134.9
70°	37.6	39.2	40.8	45.5	51.8	54.9	59.6	67.4	75.2	81.5	84.7
72.5°	12.5	12.5	14.1	17.3	20.4	23.5	25.1	32.9	39.2	42.3	43.9
75°	3.1	3.1	3.1	3.1	3.1	4.7	4.7	9.4	12.5	15.7	17.3
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.1	3.1
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9
2.5°	1103.9	1100.7	1099.1	1100.7	1100.7	1099.1	1103.9	1110.1	1117.9	1097.6
5°	1102.3	1099.1	1102.3	1092.9	1097.6	1094.4	1100.7	1099.1	1105.4	1099.1
7.5°	1097.6	1091.3	1092.9	1088.2	1094.4	1086.6	1091.3	1100.7	1094.4	1085.0
10°	1081.9	1078.8	1089.7	1074.0	1070.9	1077.2	1089.7	1080.3	1077.2	1080.3
12.5°	1066.2	1066.2	1070.9	1058.4	1059.9	1063.0	1069.3	1063.0	1066.2	1074.0
15°	1049.0	1045.8	1053.6	1044.2	1042.7	1039.6	1045.8	1045.8	1049.0	1044.2
17.5°	1028.6	1023.9	1023.9	1020.8	1019.2	1027.0	1030.2	1031.7	1033.3	1027.0
20°	1003.5	1001.9	1006.6	1001.9	1003.5	1005.1	1005.1	1001.9	1016.0	998.8
22.5°	976.8	981.5	975.3	972.1	975.3	978.4	978.4	979.9	976.8	973.7
25°	950.2	953.3	954.9	945.5	950.2	945.5	956.5	958.0	951.7	954.9
27.5°	926.6	922.0	920.4	914.1	917.2	915.7	917.2	917.2	926.6	914.1
30°	890.6	885.9	887.4	882.8	884.3	882.8	884.3	884.3	890.6	889.0
32.5°	856.1	851.4	853.0	848.3	848.3	849.8	846.7	846.7	851.4	848.3
35°	823.1	812.2	813.7	812.2	813.7	807.5	807.5	805.9	809.1	801.2
37.5°	776.1	771.4	769.9	768.3	769.9	766.7	769.9	765.2	769.9	763.6
40°	733.8	730.6	732.2	722.8	722.8	724.4	721.2	719.7	721.2	727.5
42.5°	691.5	685.2	682.1	678.9	680.5	675.8	674.2	671.1	674.2	667.9
45°	641.3	641.3	639.7	631.9	633.5	633.5	627.2	620.9	622.5	622.5
47.5°	595.8	592.7	591.1	583.3	581.7	580.2	573.8	569.2	569.2	564.4
50°	545.6	542.5	537.8	530.0	526.8	517.4	512.7	506.5	500.2	500.2
52.5°	498.6	487.6	481.3	468.8	464.1	459.4	446.9	442.2	437.4	432.8
55°	442.2	432.8	420.2	406.1	399.8	392.0	379.4	370.0	363.8	365.3
57.5°	387.3	371.6	359.1	340.3	332.4	327.7	315.1	302.6	296.3	296.3
60°	319.9	307.3	291.7	274.4	268.1	260.3	244.6	236.8	232.0	227.4
62.5°	255.6	246.2	232.0	210.1	205.4	197.5	186.6	177.2	172.5	172.5
65°	191.3	181.9	169.3	153.7	147.4	141.1	131.7	122.3	117.6	116.0
67.5°	134.9	123.9	112.9	100.4	95.6	92.5	83.1	76.8	73.7	72.1
70°	81.5	75.2	67.4	58.0	53.3	50.2	43.9	39.2	37.6	36.1
72.5°	42.3	37.6	31.3	25.1	21.9	18.8	15.7	12.5	11.0	11.0
75°	15.7	12.5	7.9	4.7	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	3.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)