

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: P840165

Luminaire Tested: **LD4C30D010 EU4309040 4LBCSSQMW**

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: P840165  
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 EU4309040 4LBCSSQMW  
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBCSSQ TRIM WITH MW FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

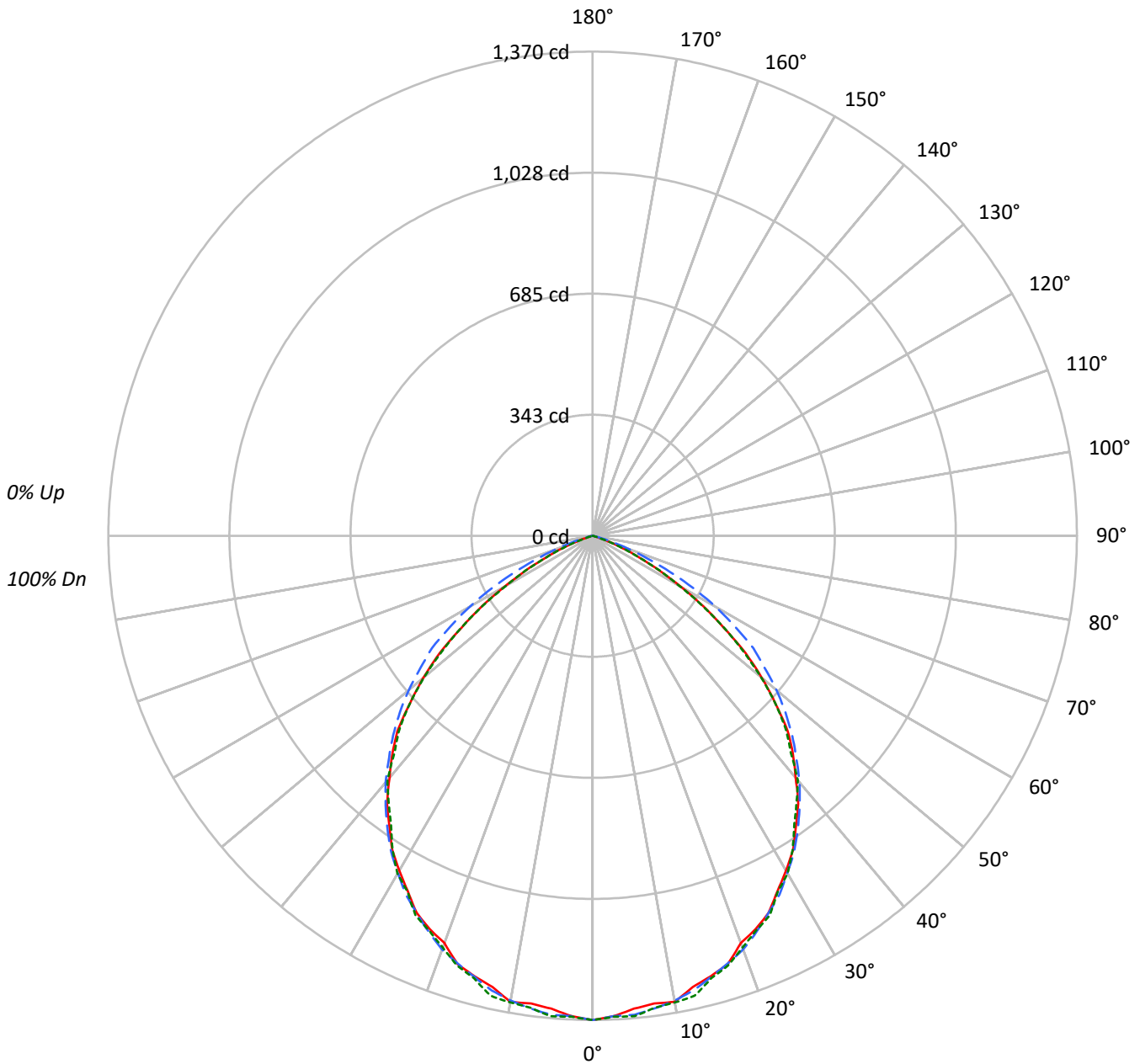
Lumens per Lamp: N/A  
Luminaire Lumens: 2927.0 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

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°	132209	132209	132209
5°	130080	131775	132143
10°	131202	130819	131388
15°	128901	129091	129481
20°	125908	127900	127304
25°	125361	125361	126191
30°	121867	122736	122958
35°	118062	119216	117143
40°	112530	114722	113752
45°	106490	108892	105439
50°	93789	101970	93203
55°	75953	93313	76289
60°	55578	77365	54458
65°	33767	55092	32877
70°	13175	29650	12639
75°	1454	7978	1454
80°	1111	1111	1111
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.3	4.4
10°-20°	366.0	12.5
20°-30°	543.1	18.6
30°-40°	629.2	21.5
40°-50°	603.3	20.6
50°-60°	443.6	15.2
60°-70°	191.6	6.5
70°-80°	20.7	0.7
80°-90°	0.3	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°	1038.4	35.5
0°-40°	1667.6	57.0
0°-60°	2714.5	92.7
0°-90°	2927.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2927.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1343	1357	1360	1362	1364	128
15°	1290	1298	1292	1294	1296	364
25°	1178	1176	1178	1180	1185	539
35°	1002	1008	1012	1010	994	627
45°	780	782	798	786	773	593
55°	452	498	555	496	454	406
65°	148	185	241	183	144	152
75°	4	6	21	4	4	12
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°	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2
2.5°	1360.5	1376.0	1378.0	1368.2	1364.3	1358.5	1372.1	1362.4	1366.3	1362.4	1360.5
5°	1343.0	1360.5	1362.4	1362.4	1358.5	1356.6	1362.4	1360.5	1358.5	1354.7	1360.5
7.5°	1335.2	1344.9	1354.7	1343.0	1348.8	1346.9	1360.5	1354.7	1352.7	1352.7	1348.8
10°	1339.1	1337.1	1344.9	1333.2	1337.1	1333.2	1344.9	1344.9	1341.0	1337.1	1335.2
12.5°	1307.9	1323.4	1323.4	1321.5	1317.7	1311.8	1323.4	1331.3	1319.6	1319.6	1317.7
15°	1290.4	1294.3	1296.2	1296.2	1294.3	1298.2	1304.0	1296.2	1298.2	1288.4	1292.3
17.5°	1271.0	1263.2	1269.0	1265.1	1267.1	1271.0	1278.7	1278.7	1267.1	1265.1	1269.0
20°	1226.2	1249.5	1251.5	1239.8	1241.7	1241.7	1255.4	1243.7	1251.5	1241.7	1245.6
22.5°	1204.7	1220.3	1222.3	1206.7	1216.4	1204.7	1218.4	1200.8	1220.3	1206.7	1212.5
25°	1177.5	1175.6	1181.4	1173.6	1175.6	1175.6	1185.3	1177.5	1183.4	1175.6	1177.5
27.5°	1132.8	1148.3	1146.4	1138.6	1142.5	1140.6	1160.0	1138.6	1150.3	1140.6	1144.5
30°	1093.8	1107.5	1103.6	1095.8	1095.8	1089.9	1111.3	1105.5	1103.6	1103.6	1101.6
32.5°	1054.9	1056.9	1053.0	1054.9	1056.9	1049.1	1066.6	1058.8	1056.9	1058.8	1060.8
35°	1002.3	1002.3	1006.2	1000.4	1008.2	1008.2	1023.8	1014.0	1012.1	1006.2	1012.1
37.5°	955.6	949.8	951.7	951.7	955.6	959.5	967.3	963.4	963.4	957.6	961.5
40°	893.4	889.5	895.3	895.3	901.1	901.1	908.9	905.0	910.8	910.8	910.8
42.5°	838.9	838.9	835.0	840.8	842.8	840.8	854.5	852.5	854.5	850.6	852.5
45°	780.4	780.4	776.6	774.6	784.3	782.4	798.0	792.1	799.9	796.0	798.0
47.5°	700.6	710.4	704.5	710.4	722.1	724.1	733.7	729.9	737.6	731.8	739.6
50°	624.8	624.8	630.6	638.4	650.1	652.0	663.7	671.5	675.4	677.3	679.3
52.5°	545.0	543.0	548.9	558.6	568.3	576.1	587.8	599.5	607.2	618.9	613.0
55°	451.5	455.4	461.3	473.0	488.5	498.2	508.0	523.6	537.2	543.0	554.7
57.5°	371.7	367.8	371.7	387.3	404.8	412.6	426.3	441.8	461.3	473.0	476.9
60°	288.0	290.0	293.9	307.6	321.1	332.8	338.7	363.9	381.5	393.2	400.9
62.5°	212.2	216.1	220.0	231.6	245.2	255.0	264.7	286.1	301.7	313.4	321.1
65°	147.9	149.8	155.7	161.5	175.2	184.9	192.7	210.2	225.8	235.5	241.3
67.5°	91.5	93.4	97.3	105.1	114.8	122.6	130.4	142.1	155.7	165.4	167.4
70°	46.7	48.7	50.6	56.5	64.2	68.1	73.9	83.7	93.4	101.2	105.1
72.5°	15.6	15.6	17.5	21.4	25.3	29.2	31.1	40.9	48.7	52.6	54.5
75°	3.9	3.9	3.9	3.9	3.9	5.9	5.9	11.7	15.6	19.5	21.4
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.9	3.9
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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°	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2	1370.2
2.5°	1370.2	1366.3	1364.3	1366.3	1366.3	1364.3	1370.2	1378.0	1387.7	1362.4
5°	1368.2	1364.3	1368.2	1356.6	1362.4	1358.5	1366.3	1364.3	1372.1	1364.3
7.5°	1362.4	1354.7	1356.6	1350.8	1358.5	1348.8	1354.7	1366.3	1358.5	1346.9
10°	1343.0	1339.1	1352.7	1333.2	1329.3	1337.1	1352.7	1341.0	1337.1	1341.0
12.5°	1323.4	1323.4	1329.3	1313.8	1315.7	1319.6	1327.3	1319.6	1323.4	1333.2
15°	1302.1	1298.2	1307.9	1296.2	1294.3	1290.4	1298.2	1298.2	1302.1	1296.2
17.5°	1276.8	1271.0	1271.0	1267.1	1265.1	1274.8	1278.7	1280.6	1282.6	1274.8
20°	1245.6	1243.7	1249.5	1243.7	1245.6	1247.6	1247.6	1243.7	1261.2	1239.8
22.5°	1212.5	1218.4	1210.6	1206.7	1210.6	1214.5	1214.5	1216.4	1212.5	1208.6
25°	1179.5	1183.4	1185.3	1173.6	1179.5	1173.6	1187.3	1189.2	1181.4	1185.3
27.5°	1150.3	1144.5	1142.5	1134.7	1138.6	1136.7	1138.6	1138.6	1150.3	1134.7
30°	1105.5	1099.7	1101.6	1095.8	1097.7	1095.8	1097.7	1097.7	1105.5	1103.6
32.5°	1062.7	1056.9	1058.8	1053.0	1053.0	1054.9	1051.0	1051.0	1056.9	1053.0
35°	1021.8	1008.2	1010.1	1008.2	1010.1	1002.3	1002.3	1000.4	1004.3	994.5
37.5°	963.4	957.6	955.6	953.7	955.6	951.7	955.6	949.8	955.6	947.8
40°	910.8	906.9	908.9	897.3	897.3	899.2	895.3	893.4	895.3	903.1
42.5°	858.3	850.6	846.7	842.8	844.7	838.9	836.9	833.0	836.9	829.1
45°	796.0	796.0	794.1	784.3	786.3	786.3	778.5	770.8	772.7	772.7
47.5°	739.6	735.7	733.7	724.1	722.1	720.2	712.3	706.5	706.5	700.6
50°	677.3	673.4	667.6	657.8	653.9	642.3	636.5	628.7	620.9	620.9
52.5°	618.9	605.3	597.5	581.9	576.1	570.2	554.7	548.9	543.0	537.2
55°	548.9	537.2	521.6	504.1	496.3	486.5	471.0	459.3	451.5	453.5
57.5°	480.7	461.3	445.7	422.4	412.6	406.7	391.2	375.6	367.8	367.8
60°	397.0	381.5	362.0	340.6	332.8	323.1	303.6	293.9	288.0	282.2
62.5°	317.2	305.6	288.0	260.8	255.0	245.2	231.6	220.0	214.1	214.1
65°	237.4	225.8	210.2	190.7	183.0	175.2	163.5	151.8	146.0	144.0
67.5°	167.4	153.7	140.2	124.6	118.7	114.8	103.2	95.4	91.5	89.5
70°	101.2	93.4	83.7	72.0	66.1	62.3	54.5	48.7	46.7	44.8
72.5°	52.6	46.7	38.9	31.1	27.2	23.3	19.5	15.6	13.7	13.7
75°	19.5	15.6	9.8	5.9	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	3.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)