

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: P563823

Luminaire Tested: **LD4C35D010 EX4C359030 4LBCSSQMW**

Issue Date: 5/25/2022



Test Information

Test Method: LM-79-08
Report Number: P563823
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: LD4C35D010 EX4C359030 4LBCSSQMW
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MW FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

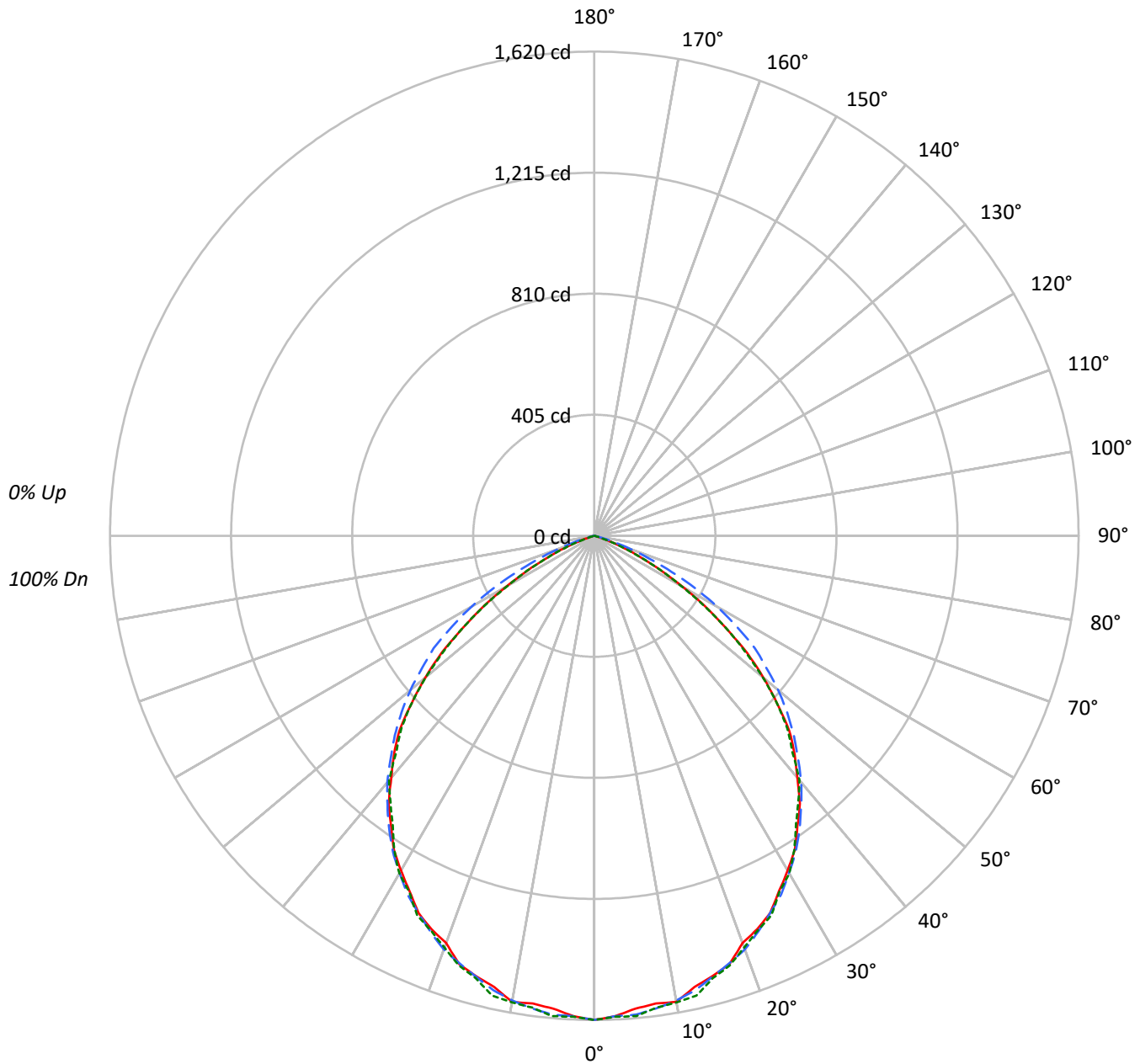
Lumens per Lamp: N/A
Luminaire Lumens: 3460.5 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	108	104	101	109	105	102	100		101	99	96			97	95	94			94
2	103	96	91	86	100	94	89	85		91	87	83			88	84	81			85
3	95	86	79	74	93	85	78	73		82	76	72			79	74	71			77
4	88	77	70	64	86	76	69	63		74	67	63			71	66	62			69
5	81	70	62	56	79	69	61	56		67	60	55			65	59	54			63
6	75	63	55	49	73	62	55	49		61	54	49			59	53	48			57
7	70	58	50	44	68	57	49	44		55	49	44			54	48	43			53
8	65	53	45	40	64	52	45	39		51	44	39			50	44	39			49
9	61	49	41	36	60	48	41	36		47	40	36			46	40	35			45
10	57	45	38	33	56	44	37	33		44	37	32			43	37	32			42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	156312	156312	156312
5°	153781	155786	156241
10°	155118	154667	155333
15°	152396	152616	153085
20°	148857	151219	150510
25°	148208	148208	149188
30°	144083	145097	145364
35°	139583	140937	138499
40°	133036	135631	134485
45°	125908	128746	124639
50°	110886	120553	110196
55°	89798	110321	90201
60°	65728	91471	64377
65°	39932	65137	38882
70°	15573	35067	14952
75°	1715	9432	1715
80°	1278	1278	1278
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.9	4.4
10°-20°	432.7	12.5
20°-30°	642.0	18.6
30°-40°	743.9	21.5
40°-50°	713.3	20.6
50°-60°	524.4	15.2
60°-70°	226.5	6.5
70°-80°	24.4	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°	1227.6	35.5
0°-40°	1971.6	57.0
0°-60°	3209.2	92.7
0°-90°	3460.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3460.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1620	1620	1620	1620	1620	
5°	1588	1604	1608	1611	1613	151
15°	1526	1535	1528	1530	1532	430
25°	1392	1390	1392	1394	1401	637
35°	1185	1192	1196	1194	1176	741
45°	923	925	944	930	913	701
55°	534	589	656	587	536	480
65°	175	219	285	216	170	180
75°	5	7	25	5	5	14
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°	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0
2.5°	1608.4	1626.8	1629.1	1617.7	1613.1	1606.2	1622.2	1610.7	1615.4	1610.7	1608.4
5°	1587.7	1608.4	1610.7	1610.7	1606.2	1603.8	1610.7	1608.4	1606.2	1601.6	1608.4
7.5°	1578.6	1590.0	1601.6	1587.7	1594.7	1592.3	1608.4	1601.6	1599.2	1599.2	1594.7
10°	1583.2	1580.8	1590.0	1576.3	1580.8	1576.3	1590.0	1590.0	1585.4	1580.8	1578.6
12.5°	1546.2	1564.7	1564.7	1562.4	1557.8	1550.9	1564.7	1574.0	1560.1	1560.1	1557.8
15°	1525.6	1530.2	1532.5	1532.5	1530.2	1534.9	1541.7	1532.5	1534.9	1523.3	1527.8
17.5°	1502.6	1493.5	1500.3	1495.7	1498.0	1502.6	1511.9	1511.9	1498.0	1495.7	1500.3
20°	1449.7	1477.3	1479.6	1465.8	1468.0	1468.0	1484.2	1470.5	1479.6	1468.0	1472.7
22.5°	1424.3	1442.7	1445.0	1426.6	1438.1	1424.3	1440.5	1419.7	1442.7	1426.6	1433.5
25°	1392.1	1389.9	1396.7	1387.6	1389.9	1389.9	1401.3	1392.1	1399.1	1389.9	1392.1
27.5°	1339.2	1357.7	1355.3	1346.2	1350.7	1348.5	1371.5	1346.2	1359.9	1348.5	1353.1
30°	1293.2	1309.3	1304.7	1295.5	1295.5	1288.6	1313.9	1307.0	1304.7	1304.7	1302.3
32.5°	1247.2	1249.5	1245.0	1247.2	1249.5	1240.3	1260.9	1251.8	1249.5	1251.8	1254.1
35°	1185.0	1185.0	1189.6	1182.8	1192.0	1192.0	1210.4	1198.8	1196.5	1189.6	1196.5
37.5°	1129.8	1123.0	1125.2	1125.2	1129.8	1134.4	1143.6	1139.0	1139.0	1132.1	1136.7
40°	1056.2	1051.6	1058.5	1058.5	1065.4	1065.4	1074.6	1070.0	1076.8	1076.8	1076.8
42.5°	991.8	991.8	987.2	994.0	996.3	994.0	1010.2	1007.8	1010.2	1005.6	1007.8
45°	922.7	922.7	918.1	915.9	927.3	925.0	943.5	936.5	945.7	941.1	943.5
47.5°	828.3	839.9	833.0	839.9	853.7	856.1	867.5	862.9	872.0	865.2	874.5
50°	738.7	738.7	745.5	754.8	768.5	770.8	784.7	793.9	798.5	800.7	803.1
52.5°	644.3	642.0	649.0	660.4	672.0	681.1	695.0	708.7	717.9	731.8	724.8
55°	533.8	538.4	545.4	559.2	577.6	589.1	600.6	619.0	635.1	642.0	655.8
57.5°	439.4	434.9	439.4	457.8	478.6	487.8	503.9	522.3	545.4	559.2	563.7
60°	340.6	342.9	347.5	363.6	379.6	393.5	400.4	430.3	451.0	464.9	474.0
62.5°	250.8	255.4	260.1	273.8	289.9	301.5	312.9	338.2	356.6	370.5	379.6
65°	174.9	177.2	184.1	190.9	207.1	218.6	227.8	248.5	266.9	278.5	285.3
67.5°	108.1	110.4	115.0	124.3	135.8	145.0	154.2	167.9	184.1	195.6	197.9
70°	55.2	57.6	59.8	66.7	76.0	80.6	87.4	99.0	110.4	119.6	124.3
72.5°	18.4	18.4	20.8	25.3	29.9	34.6	36.8	48.3	57.6	62.2	64.4
75°	4.6	4.6	4.6	4.6	4.6	6.9	6.9	13.8	18.4	23.0	25.3
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	4.6	4.6
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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°	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0	1620.0
2.5°	1620.0	1615.4	1613.1	1615.4	1615.4	1613.1	1620.0	1629.1	1640.6	1610.7
5°	1617.7	1613.1	1617.7	1603.8	1610.7	1606.2	1615.4	1613.1	1622.2	1613.1
7.5°	1610.7	1601.6	1603.8	1597.0	1606.2	1594.7	1601.6	1615.4	1606.2	1592.3
10°	1587.7	1583.2	1599.2	1576.3	1571.6	1580.8	1599.2	1585.4	1580.8	1585.4
12.5°	1564.7	1564.7	1571.6	1553.3	1555.5	1560.1	1569.2	1560.1	1564.7	1576.3
15°	1539.4	1534.9	1546.2	1532.5	1530.2	1525.6	1534.9	1534.9	1539.4	1532.5
17.5°	1509.4	1502.6	1502.6	1498.0	1495.7	1507.2	1511.9	1514.1	1516.4	1507.2
20°	1472.7	1470.5	1477.3	1470.5	1472.7	1475.0	1475.0	1470.5	1491.1	1465.8
22.5°	1433.5	1440.5	1431.3	1426.6	1431.3	1435.9	1435.9	1438.1	1433.5	1429.0
25°	1394.5	1399.1	1401.3	1387.6	1394.5	1387.6	1403.6	1405.9	1396.7	1401.3
27.5°	1359.9	1353.1	1350.7	1341.5	1346.2	1343.8	1346.2	1346.2	1359.9	1341.5
30°	1307.0	1300.1	1302.3	1295.5	1297.7	1295.5	1297.7	1297.7	1307.0	1304.7
32.5°	1256.3	1249.5	1251.8	1245.0	1245.0	1247.2	1242.5	1242.5	1249.5	1245.0
35°	1208.0	1192.0	1194.2	1192.0	1194.2	1185.0	1185.0	1182.8	1187.4	1175.8
37.5°	1139.0	1132.1	1129.8	1127.6	1129.8	1125.2	1129.8	1123.0	1129.8	1120.6
40°	1076.8	1072.2	1074.6	1060.8	1060.8	1063.1	1058.5	1056.2	1058.5	1067.7
42.5°	1014.8	1005.6	1001.0	996.3	998.7	991.8	989.4	984.9	989.4	980.3
45°	941.1	941.1	938.9	927.3	929.6	929.6	920.5	911.2	913.4	913.4
47.5°	874.5	869.8	867.5	856.1	853.7	851.4	842.1	835.3	835.3	828.3
50°	800.7	796.2	789.2	777.8	773.2	759.3	752.5	743.3	734.1	734.1
52.5°	731.8	715.6	706.3	688.0	681.1	674.2	655.8	649.0	642.0	635.1
55°	649.0	635.1	616.7	596.0	586.8	575.2	556.8	543.0	533.8	536.2
57.5°	568.4	545.4	527.0	499.3	487.8	480.8	462.5	444.1	434.9	434.9
60°	469.4	451.0	428.0	402.7	393.5	382.1	359.0	347.5	340.6	333.6
62.5°	375.0	361.3	340.6	308.3	301.5	289.9	273.8	260.1	253.1	253.1
65°	280.7	266.9	248.5	225.5	216.4	207.1	193.3	179.5	172.5	170.3
67.5°	197.9	181.8	165.7	147.3	140.4	135.8	122.0	112.7	108.1	105.8
70°	119.6	110.4	99.0	85.1	78.2	73.6	64.4	57.6	55.2	53.0
72.5°	62.2	55.2	46.0	36.8	32.2	27.6	23.0	18.4	16.2	16.2
75°	23.0	18.4	11.6	6.9	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	4.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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)