

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: P840214

Luminaire Tested: **LD4C55D010 EU4559040 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: P840214
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: LD4C55D010 EU4559040 4LBCSSQMMS
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

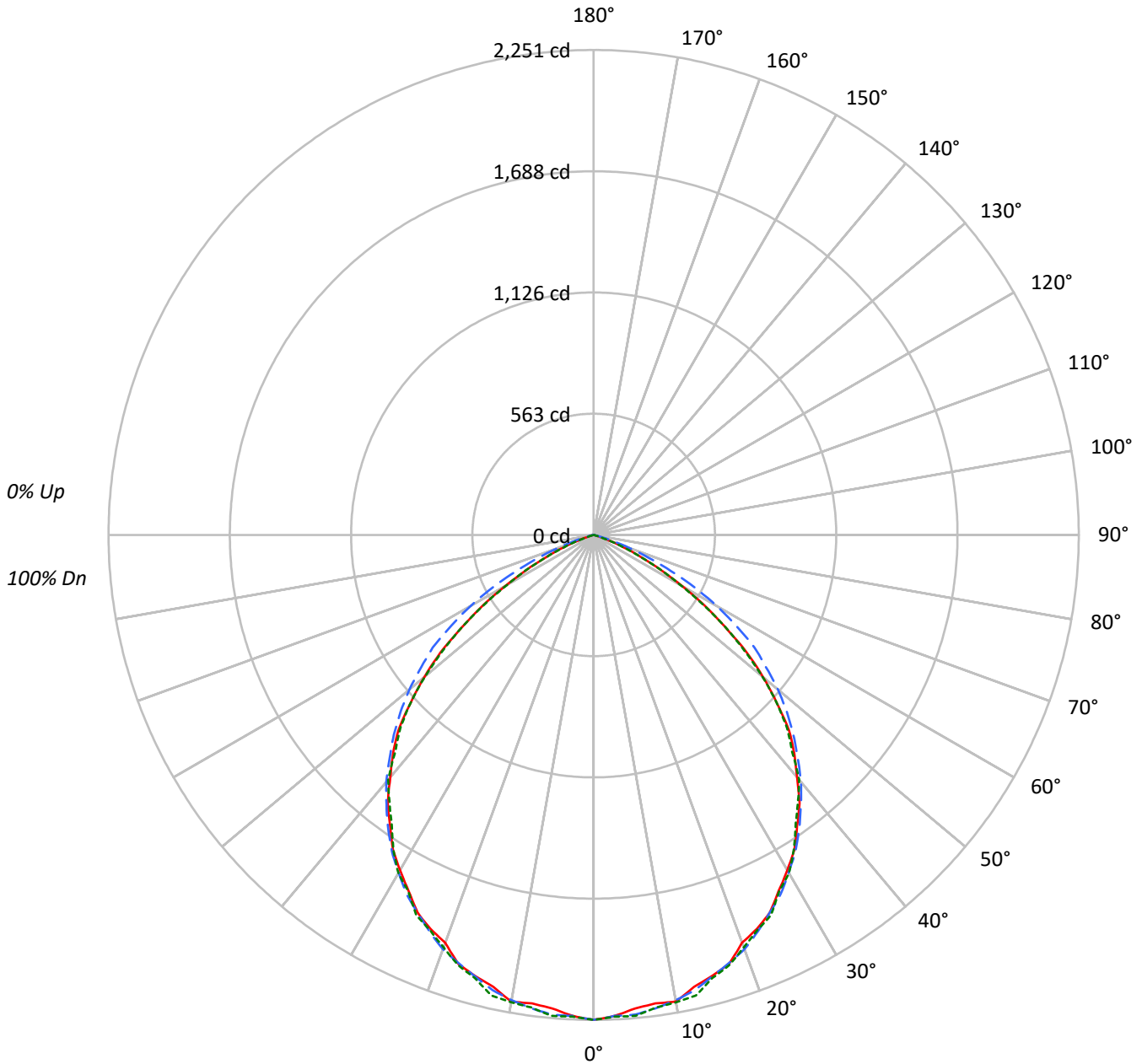
Lumens per Lamp: N/A
Luminaire Lumens: 4808.0 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
Input Voltage (V):
Input Current (A_{in}): 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				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				100
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89				89
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67				67
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				52
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				46
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41				41
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	37				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33				33
10	57	45	38	33	56	44	37	33	44	37	32	43	37	32	42	36	32	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	217177	217177	217177
5°	213668	216447	217067
10°	215511	214884	215825
15°	211742	212052	212691
20°	206821	210096	209121
25°	205922	205922	207285
30°	200181	201607	201975
35°	193931	195828	192435
40°	184842	188457	186845
45°	174936	178866	173190
50°	154058	167493	153097
55°	124771	153268	125326
60°	91298	127095	89465
65°	55480	90503	54019
70°	21638	48721	20764
75°	2386	13123	2386
80°	1834	1834	1834
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.5	4.4
10°-20°	601.2	12.5
20°-30°	892.0	18.6
30°-40°	1033.6	21.5
40°-50°	991.0	20.6
50°-60°	728.6	15.2
60°-70°	314.7	6.5
70°-80°	34.0	0.7
80°-90°	0.4	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°	1705.7	35.5
0°-40°	2739.3	57.0
0°-60°	4458.9	92.7
0°-90°	4808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2251	2251	2251	2251	2251	
5°	2206	2228	2235	2238	2241	210
15°	2120	2132	2123	2126	2129	597
25°	1934	1931	1934	1938	1947	886
35°	1646	1656	1662	1659	1634	1030
45°	1282	1285	1311	1292	1269	975
55°	742	818	911	815	745	667
65°	243	304	396	300	237	250
75°	6	10	35	6	6	20
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°	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8
2.5°	2234.7	2260.3	2263.6	2247.5	2241.1	2231.6	2253.9	2238.0	2244.4	2238.0	2234.7
5°	2206.0	2234.7	2238.0	2238.0	2231.6	2228.3	2238.0	2234.7	2231.6	2225.2	2234.7
7.5°	2193.2	2209.2	2225.2	2206.0	2215.6	2212.4	2234.7	2225.2	2221.9	2221.9	2215.6
10°	2199.6	2196.4	2209.2	2190.0	2196.4	2190.0	2209.2	2209.2	2202.8	2196.4	2193.2
12.5°	2148.4	2173.9	2173.9	2170.8	2164.4	2154.8	2173.9	2186.9	2167.6	2167.6	2164.4
15°	2119.7	2126.1	2129.2	2129.2	2126.1	2132.5	2142.0	2129.2	2132.5	2116.4	2122.8
17.5°	2087.7	2074.9	2084.5	2078.1	2081.3	2087.7	2100.5	2100.5	2081.3	2078.1	2084.5
20°	2014.2	2052.5	2055.8	2036.6	2039.7	2039.7	2062.2	2043.0	2055.8	2039.7	2046.1
22.5°	1978.9	2004.5	2007.8	1982.2	1998.1	1978.9	2001.4	1972.5	2004.5	1982.2	1991.7
25°	1934.2	1931.1	1940.6	1927.8	1931.1	1931.1	1947.0	1934.2	1943.8	1931.1	1934.2
27.5°	1860.8	1886.3	1883.1	1870.3	1876.7	1873.5	1905.5	1870.3	1889.5	1873.5	1879.9
30°	1796.7	1819.1	1812.8	1800.0	1800.0	1790.3	1825.5	1815.9	1812.8	1812.8	1809.5
32.5°	1732.8	1736.0	1729.7	1732.8	1736.0	1723.3	1752.0	1739.2	1736.0	1739.2	1742.4
35°	1646.4	1646.4	1652.8	1643.3	1656.1	1656.1	1681.7	1665.6	1662.5	1652.8	1662.5
37.5°	1569.7	1560.2	1563.3	1563.3	1569.7	1576.1	1588.9	1582.5	1582.5	1573.0	1579.4
40°	1467.5	1461.1	1470.6	1470.6	1480.3	1480.3	1493.0	1486.6	1496.2	1496.2	1496.2
42.5°	1378.0	1378.0	1371.6	1381.1	1384.4	1381.1	1403.6	1400.3	1403.6	1397.2	1400.3
45°	1282.0	1282.0	1275.6	1272.5	1288.4	1285.2	1310.8	1301.2	1313.9	1307.6	1310.8
47.5°	1150.9	1166.9	1157.3	1166.9	1186.1	1189.4	1205.3	1198.9	1211.7	1202.2	1214.9
50°	1026.3	1026.3	1035.8	1048.6	1067.8	1071.1	1090.2	1103.0	1109.4	1112.5	1115.8
52.5°	895.2	892.0	901.6	917.5	933.6	946.4	965.5	984.7	997.5	1016.7	1007.0
55°	741.7	748.1	757.7	776.9	802.5	818.4	834.4	860.0	882.4	892.0	911.1
57.5°	610.6	604.2	610.6	636.2	665.0	677.8	700.2	725.8	757.7	776.9	783.3
60°	473.1	476.4	482.8	505.2	527.5	546.7	556.3	597.8	626.6	645.8	658.6
62.5°	348.5	354.9	361.3	380.5	402.8	418.8	434.8	470.0	495.5	514.7	527.5
65°	243.0	246.1	255.8	265.3	287.8	303.7	316.5	345.3	370.8	386.9	396.4
67.5°	150.3	153.4	159.8	172.7	188.6	201.4	214.2	233.4	255.8	271.7	275.0
70°	76.7	80.0	83.1	92.7	105.5	111.9	121.4	137.5	153.4	166.2	172.7
72.5°	25.6	25.6	28.8	35.2	41.6	48.0	51.1	67.2	80.0	86.4	89.5
75°	6.4	6.4	6.4	6.4	6.4	9.7	9.7	19.2	25.6	32.0	35.2
77.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	6.4	6.4
80°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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°	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8	2250.8
2.5°	2250.8	2244.4	2241.1	2244.4	2244.4	2241.1	2250.8	2263.6	2279.5	2238.0
5°	2247.5	2241.1	2247.5	2228.3	2238.0	2231.6	2244.4	2241.1	2253.9	2241.1
7.5°	2238.0	2225.2	2228.3	2218.8	2231.6	2215.6	2225.2	2244.4	2231.6	2212.4
10°	2206.0	2199.6	2221.9	2190.0	2183.6	2196.4	2221.9	2202.8	2196.4	2202.8
12.5°	2173.9	2173.9	2183.6	2158.0	2161.2	2167.6	2180.3	2167.6	2173.9	2190.0
15°	2138.9	2132.5	2148.4	2129.2	2126.1	2119.7	2132.5	2132.5	2138.9	2129.2
17.5°	2097.2	2087.7	2087.7	2081.3	2078.1	2094.1	2100.5	2103.6	2106.9	2094.1
20°	2046.1	2043.0	2052.5	2043.0	2046.1	2049.4	2049.4	2043.0	2071.7	2036.6
22.5°	1991.7	2001.4	1988.6	1982.2	1988.6	1995.0	1995.0	1998.1	1991.7	1985.3
25°	1937.5	1943.8	1947.0	1927.8	1937.5	1927.8	1950.2	1953.4	1940.6	1947.0
27.5°	1889.5	1879.9	1876.7	1863.9	1870.3	1867.1	1870.3	1870.3	1889.5	1863.9
30°	1815.9	1806.4	1809.5	1800.0	1803.1	1800.0	1803.1	1803.1	1815.9	1812.8
32.5°	1745.6	1736.0	1739.2	1729.7	1729.7	1732.8	1726.4	1726.4	1736.0	1729.7
35°	1678.4	1656.1	1659.2	1656.1	1659.2	1646.4	1646.4	1643.3	1649.7	1633.7
37.5°	1582.5	1573.0	1569.7	1566.6	1569.7	1563.3	1569.7	1560.2	1569.7	1557.0
40°	1496.2	1489.8	1493.0	1473.9	1473.9	1477.0	1470.6	1467.5	1470.6	1483.4
42.5°	1409.9	1397.2	1390.8	1384.4	1387.5	1378.0	1374.7	1368.3	1374.7	1361.9
45°	1307.6	1307.6	1304.4	1288.4	1291.6	1291.6	1278.9	1266.1	1269.2	1269.2
47.5°	1214.9	1208.5	1205.3	1189.4	1186.1	1183.0	1170.1	1160.5	1160.5	1150.9
50°	1112.5	1106.1	1096.6	1080.6	1074.2	1055.0	1045.5	1032.7	1019.9	1019.9
52.5°	1016.7	994.2	981.4	955.9	946.4	936.7	911.1	901.6	892.0	882.4
55°	901.6	882.4	856.9	828.0	815.3	799.2	773.7	754.5	741.7	745.0
57.5°	789.7	757.7	732.2	693.8	677.8	668.1	642.6	617.0	604.2	604.2
60°	652.2	626.6	594.7	559.5	546.7	530.8	498.7	482.8	473.1	463.6
62.5°	521.1	501.9	473.1	428.4	418.8	402.8	380.5	361.3	351.7	351.7
65°	390.0	370.8	345.3	313.3	300.5	287.8	268.6	249.4	239.8	236.6
67.5°	275.0	252.5	230.2	204.7	195.0	188.6	169.4	156.7	150.3	147.0
70°	166.2	153.4	137.5	118.3	108.7	102.3	89.5	80.0	76.7	73.6
72.5°	86.4	76.7	63.9	51.1	44.7	38.4	32.0	25.6	22.4	22.4
75°	32.0	25.6	16.0	9.7	6.4	6.4	6.4	6.4	6.4	6.4
77.5°	6.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
80°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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)