

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: **LD4C55D010 EX4C559030 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: LD4C55D010 EX4C559030 4LBCSSQMMS  
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBCSSQ TRIM WITH MMS FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

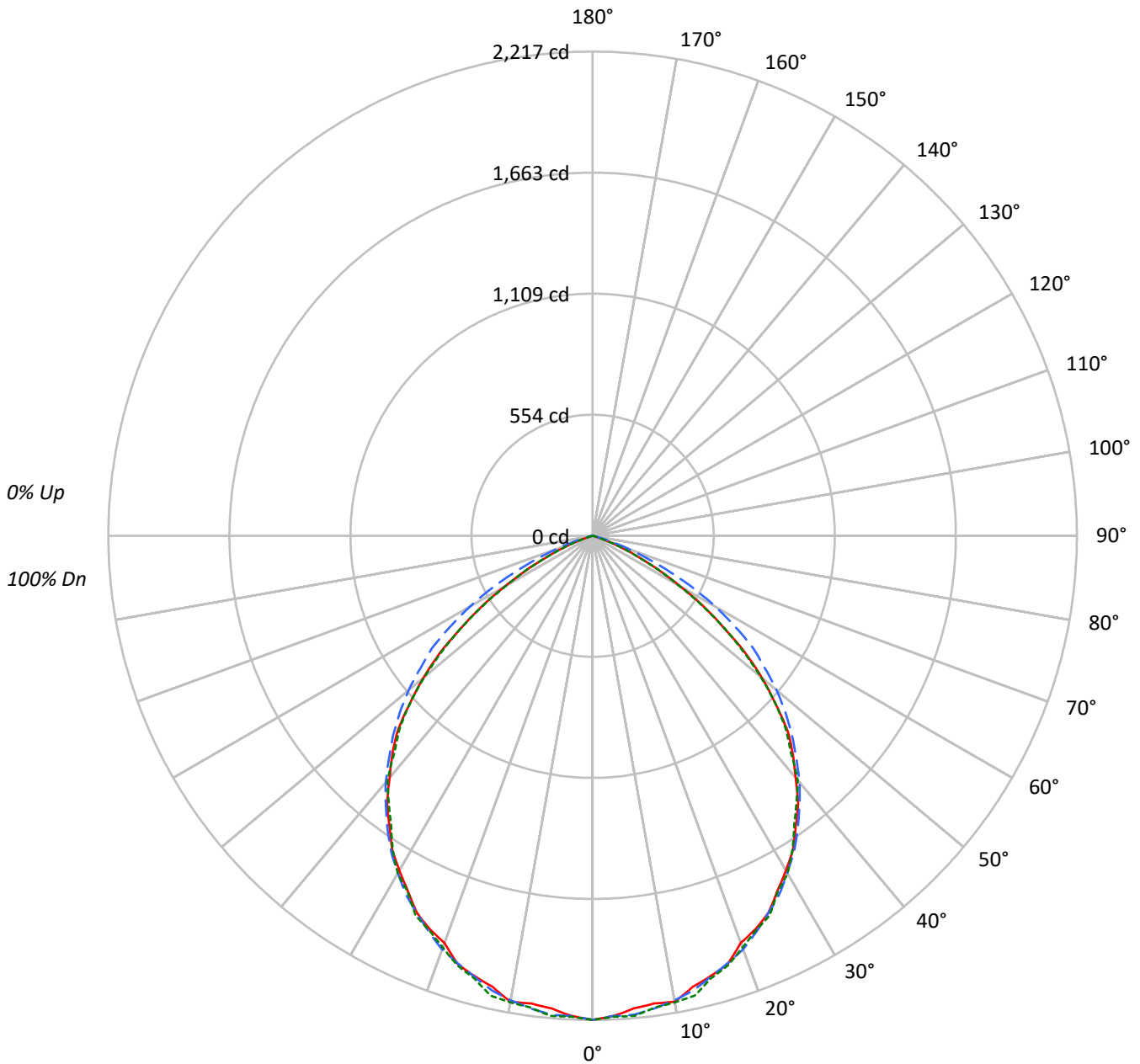
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4735.0 lumens  
Efficiency: N/A  
Efficacy: 74.1 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 (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									
RC	80									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°	213877	213877	213877
5°	210423	213164	213774
10°	212239	211621	212542
15°	208526	208836	209465
20°	203679	206903	205948
25°	202792	202792	204134
30°	197139	198543	198899
35°	190987	192848	189514
40°	182033	185598	184011
45°	172276	176151	170556
50°	151716	164956	150771
55°	122870	150947	123409
60°	89908	125165	88114
65°	54635	89133	53197
70°	21300	47988	20453
75°	2349	12936	2349
80°	1778	1778	1778
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.2	4.4
10°-20°	592.1	12.5
20°-30°	878.5	18.6
30°-40°	1017.9	21.5
40°-50°	975.9	20.6
50°-60°	717.6	15.2
60°-70°	309.9	6.5
70°-80°	33.5	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°	1679.8	35.5
0°-40°	2697.7	57.0
0°-60°	4391.2	92.7
0°-90°	4735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4735.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2217	2217	2217	2217	2217	
5°	2172	2194	2201	2204	2207	207
15°	2088	2100	2091	2094	2097	588
25°	1905	1902	1905	1908	1917	872
35°	1621	1631	1637	1634	1609	1014
45°	1262	1266	1291	1272	1250	960
55°	730	806	897	803	734	657
65°	239	299	390	296	233	246
75°	6	10	35	6	6	19
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°	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6
2.5°	2200.8	2226.0	2229.2	2213.4	2207.1	2197.7	2219.7	2204.0	2210.3	2204.0	2200.8
5°	2172.5	2200.8	2204.0	2204.0	2197.7	2194.5	2204.0	2200.8	2197.7	2191.4	2200.8
7.5°	2159.9	2175.6	2191.4	2172.5	2181.9	2178.8	2200.8	2191.4	2188.2	2188.2	2181.9
10°	2166.2	2163.0	2175.6	2156.7	2163.0	2156.7	2175.6	2175.6	2169.3	2163.0	2159.9
12.5°	2115.8	2140.9	2140.9	2137.9	2131.6	2122.1	2140.9	2153.7	2134.6	2134.6	2131.6
15°	2087.5	2093.8	2096.9	2096.9	2093.8	2100.1	2109.5	2096.9	2100.1	2084.3	2090.6
17.5°	2056.0	2043.4	2052.8	2046.5	2049.7	2056.0	2068.6	2068.6	2049.7	2046.5	2052.8
20°	1983.6	2021.3	2024.5	2005.7	2008.8	2008.8	2030.8	2012.0	2024.5	2008.8	2015.0
22.5°	1948.9	1974.1	1977.3	1952.1	1967.8	1948.9	1971.0	1942.6	1974.1	1952.1	1961.5
25°	1904.8	1901.7	1911.1	1898.5	1901.7	1901.7	1917.4	1904.8	1914.3	1901.7	1904.8
27.5°	1832.5	1857.7	1854.5	1841.9	1848.2	1845.1	1876.6	1841.9	1860.8	1845.1	1851.4
30°	1769.4	1791.5	1785.2	1772.6	1772.6	1763.1	1797.8	1788.3	1785.2	1785.2	1782.0
32.5°	1706.5	1709.7	1703.4	1706.5	1709.7	1697.1	1725.4	1712.8	1709.7	1712.8	1716.0
35°	1621.4	1621.4	1627.7	1618.4	1630.9	1630.9	1656.1	1640.3	1637.2	1627.7	1637.2
37.5°	1545.9	1536.5	1539.6	1539.6	1545.9	1552.2	1564.8	1558.5	1558.5	1549.1	1555.4
40°	1445.2	1438.9	1448.3	1448.3	1457.8	1457.8	1470.4	1464.1	1473.5	1473.5	1473.5
42.5°	1357.1	1357.1	1350.8	1360.1	1363.4	1360.1	1382.2	1379.0	1382.2	1375.9	1379.0
45°	1262.5	1262.5	1256.2	1253.1	1268.8	1265.7	1290.9	1281.4	1294.0	1287.7	1290.9
47.5°	1133.4	1149.2	1139.7	1149.2	1168.1	1171.3	1187.0	1180.7	1193.3	1183.9	1196.5
50°	1010.7	1010.7	1020.1	1032.7	1051.6	1054.8	1073.7	1086.3	1092.6	1095.6	1098.9
52.5°	881.6	878.4	887.9	903.6	919.4	932.0	950.9	969.8	982.3	1001.2	991.7
55°	730.4	736.7	746.2	765.1	790.3	806.0	821.8	846.9	869.0	878.4	897.3
57.5°	601.3	595.0	601.3	626.5	654.9	667.5	689.6	714.8	746.2	765.1	771.4
60°	465.9	469.1	475.4	497.5	519.5	538.4	547.9	588.7	617.1	636.0	648.6
62.5°	343.2	349.5	355.8	374.7	396.7	412.5	428.2	462.8	488.0	506.9	519.5
65°	239.3	242.4	251.9	261.3	283.4	299.1	311.6	340.0	365.2	381.0	390.4
67.5°	148.0	151.1	157.4	170.1	185.8	198.3	210.9	229.8	251.9	267.6	270.8
70°	75.5	78.7	81.8	91.3	103.9	110.2	119.6	135.4	151.1	163.7	170.1
72.5°	25.2	25.2	28.4	34.7	41.0	47.3	50.4	66.2	78.7	85.0	88.1
75°	6.3	6.3	6.3	6.3	6.3	9.5	9.5	18.9	25.2	31.5	34.7
77.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	6.3	6.3
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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°	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6	2216.6
2.5°	2216.6	2210.3	2207.1	2210.3	2210.3	2207.1	2216.6	2229.2	2244.9	2204.0
5°	2213.4	2207.1	2213.4	2194.5	2204.0	2197.7	2210.3	2207.1	2219.7	2207.1
7.5°	2204.0	2191.4	2194.5	2185.1	2197.7	2181.9	2191.4	2210.3	2197.7	2178.8
10°	2172.5	2166.2	2188.2	2156.7	2150.4	2163.0	2188.2	2169.3	2163.0	2169.3
12.5°	2140.9	2140.9	2150.4	2125.3	2128.4	2134.6	2147.2	2134.6	2140.9	2156.7
15°	2106.4	2100.1	2115.8	2096.9	2093.8	2087.5	2100.1	2100.1	2106.4	2096.9
17.5°	2065.4	2056.0	2056.0	2049.7	2046.5	2062.3	2068.6	2071.7	2074.9	2062.3
20°	2015.0	2012.0	2021.3	2012.0	2015.0	2018.3	2018.3	2012.0	2040.2	2005.7
22.5°	1961.5	1971.0	1958.4	1952.1	1958.4	1964.7	1964.7	1967.8	1961.5	1955.2
25°	1908.0	1914.3	1917.4	1898.5	1908.0	1898.5	1920.6	1923.7	1911.1	1917.4
27.5°	1860.8	1851.4	1848.2	1835.6	1841.9	1838.8	1841.9	1841.9	1860.8	1835.6
30°	1788.3	1778.9	1782.0	1772.6	1775.7	1772.6	1775.7	1775.7	1788.3	1785.2
32.5°	1719.1	1709.7	1712.8	1703.4	1703.4	1706.5	1700.2	1700.2	1709.7	1703.4
35°	1652.9	1630.9	1634.0	1630.9	1634.0	1621.4	1621.4	1618.4	1624.7	1608.9
37.5°	1558.5	1549.1	1545.9	1542.8	1545.9	1539.6	1545.9	1536.5	1545.9	1533.3
40°	1473.5	1467.2	1470.4	1451.5	1451.5	1454.6	1448.3	1445.2	1448.3	1460.9
42.5°	1388.5	1375.9	1369.7	1363.4	1366.4	1357.1	1353.9	1347.6	1353.9	1341.3
45°	1287.7	1287.7	1284.6	1268.8	1272.0	1272.0	1259.4	1246.8	1249.9	1249.9
47.5°	1196.5	1190.2	1187.0	1171.3	1168.1	1165.0	1152.3	1142.9	1142.9	1133.4
50°	1095.6	1089.4	1080.0	1064.2	1057.9	1039.0	1029.6	1017.0	1004.4	1004.4
52.5°	1001.2	979.1	966.5	941.4	932.0	922.5	897.3	887.9	878.4	869.0
55°	887.9	869.0	843.9	815.5	802.9	787.1	761.9	743.0	730.4	733.6
57.5°	777.7	746.2	721.1	683.3	667.5	658.0	632.8	607.6	595.0	595.0
60°	642.3	617.1	585.7	551.0	538.4	522.7	491.1	475.4	465.9	456.6
62.5°	513.2	494.3	465.9	421.9	412.5	396.7	374.7	355.8	346.3	346.3
65°	384.1	365.2	340.0	308.6	296.0	283.4	264.5	245.6	236.1	233.0
67.5°	270.8	248.7	226.7	201.6	192.1	185.8	166.9	154.3	148.0	144.8
70°	163.7	151.1	135.4	116.5	107.0	100.7	88.1	78.7	75.5	72.5
72.5°	85.0	75.5	62.9	50.4	44.1	37.8	31.5	25.2	22.1	22.1
75°	31.5	25.2	15.8	9.5	6.3	6.3	6.3	6.3	6.3	6.3
77.5°	6.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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)