

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: P563860

Luminaire Tested: **LD4C50D010 EX4C509030 4LBPSSQMW**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P563860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209253)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C50D010 EX4C509030 4LBPSSQMW
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBPSSQ TRIM WITH MW FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

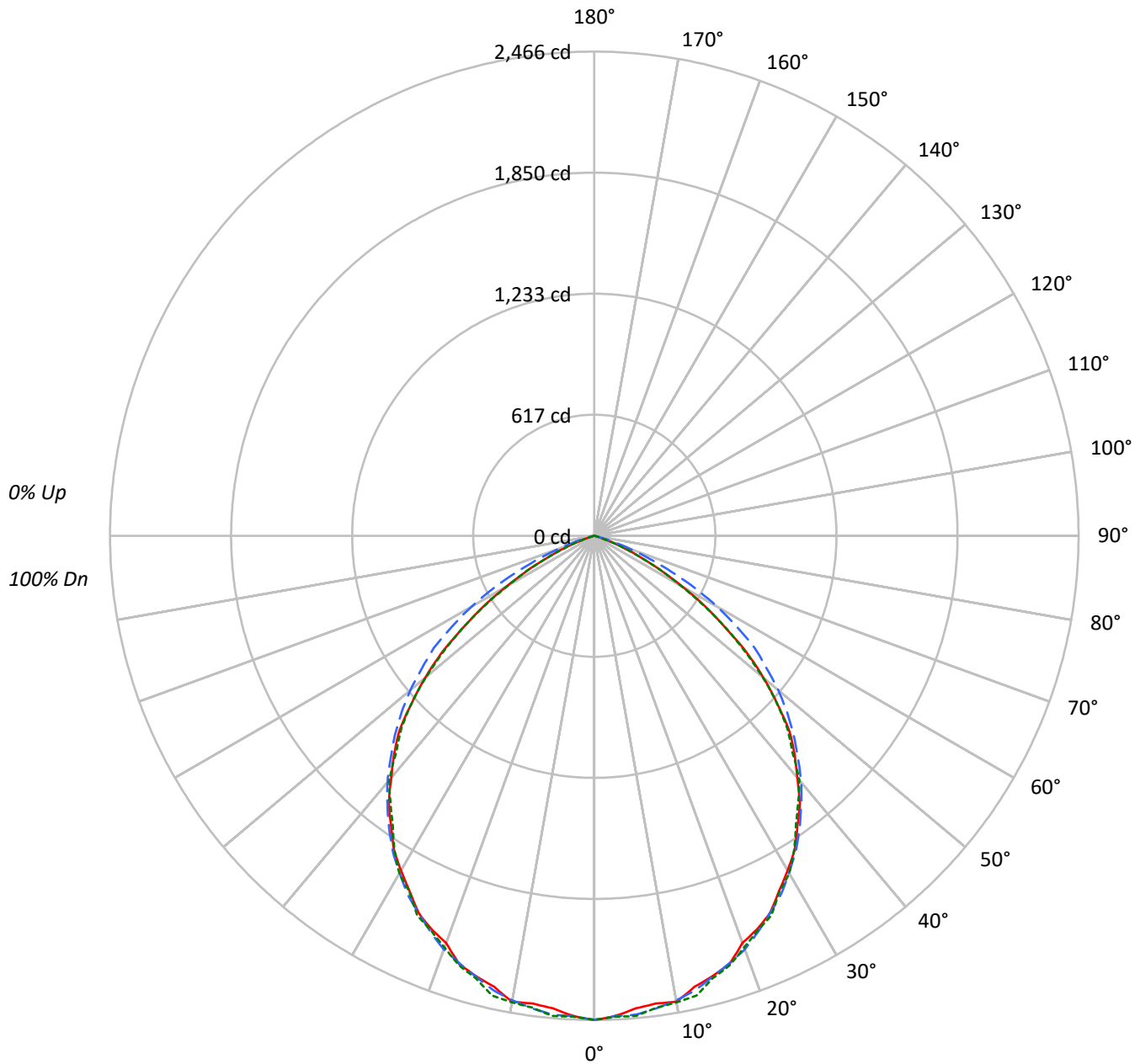
Lumens per Lamp: N/A
Luminaire Lumens: 5267.1 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
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°	237913	237913	237913
5°	234075	237117	237795
10°	236086	235400	236429
15°	231961	232300	233000
20°	226566	230160	229082
25°	225575	225575	227076
30°	219300	220848	221261
35°	212448	214521	210811
40°	202489	206444	204681
45°	191625	195951	189728
50°	168769	183495	167718
55°	136681	167920	137287
60°	100020	139233	98013
65°	60777	99133	59179
70°	23698	53376	22738
75°	2610	14390	2610
80°	2000	2000	2000
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.7	4.4
10°-20°	658.6	12.5
20°-30°	977.2	18.6
30°-40°	1132.3	21.5
40°-50°	1085.6	20.6
50°-60°	798.2	15.2
60°-70°	344.7	6.5
70°-80°	37.2	0.7
80°-90°	0.5	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°	1868.5	35.5
0°-40°	3000.8	57.0
0°-60°	4884.6	92.7
0°-90°	5267.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5267.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2466	2466	2466	2466	2466	
5°	2417	2441	2448	2452	2455	231
15°	2322	2336	2326	2329	2332	654
25°	2119	2116	2119	2122	2133	970
35°	1804	1814	1821	1818	1790	1128
45°	1404	1408	1436	1415	1390	1068
55°	812	897	998	893	816	731
65°	266	333	434	329	259	274
75°	7	11	39	7	7	22
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°	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7
2.5°	2448.1	2476.1	2479.6	2462.1	2455.1	2444.6	2469.2	2451.7	2458.7	2451.7	2448.1
5°	2416.7	2448.1	2451.7	2451.7	2444.6	2441.1	2451.7	2448.1	2444.6	2437.6	2448.1
7.5°	2402.6	2420.1	2437.6	2416.7	2427.1	2423.7	2448.1	2437.6	2434.1	2434.1	2427.1
10°	2409.6	2406.1	2420.1	2399.1	2406.1	2399.1	2420.1	2420.1	2413.1	2406.1	2402.6
12.5°	2353.5	2381.5	2381.5	2378.1	2371.1	2360.5	2381.5	2395.6	2374.6	2374.6	2371.1
15°	2322.1	2329.1	2332.5	2332.5	2329.1	2336.1	2346.5	2332.5	2336.1	2318.5	2325.5
17.5°	2287.1	2273.0	2283.5	2276.5	2280.1	2287.1	2301.0	2301.0	2280.1	2276.5	2283.5
20°	2206.5	2248.5	2252.1	2231.0	2234.5	2234.5	2259.0	2238.0	2252.1	2234.5	2241.5
22.5°	2167.9	2195.9	2199.5	2171.4	2188.9	2167.9	2192.5	2160.8	2195.9	2171.4	2181.9
25°	2118.8	2115.5	2125.8	2111.9	2115.5	2115.5	2132.9	2118.8	2129.4	2115.5	2118.8
27.5°	2038.4	2066.4	2062.9	2048.8	2055.9	2052.4	2087.4	2048.8	2069.9	2052.4	2059.4
30°	1968.3	1992.8	1985.9	1971.8	1971.8	1961.3	1999.8	1989.2	1985.9	1985.9	1982.2
32.5°	1898.2	1901.8	1894.8	1898.2	1901.8	1887.8	1919.3	1905.2	1901.8	1905.2	1908.8
35°	1803.6	1803.6	1810.6	1800.2	1814.2	1814.2	1842.3	1824.7	1821.2	1810.6	1821.2
37.5°	1719.6	1709.2	1712.7	1712.7	1719.6	1726.6	1740.6	1733.6	1733.6	1723.1	1730.2
40°	1607.6	1600.6	1611.0	1611.0	1621.6	1621.6	1635.6	1628.6	1639.0	1639.0	1639.0
42.5°	1509.5	1509.5	1502.5	1513.0	1516.5	1513.0	1537.6	1534.0	1537.6	1530.6	1534.0
45°	1404.3	1404.3	1397.4	1394.0	1411.4	1407.9	1436.0	1425.4	1439.4	1432.4	1436.0
47.5°	1260.8	1278.3	1267.7	1278.3	1299.4	1302.9	1320.3	1313.4	1327.3	1317.0	1330.9
50°	1124.3	1124.3	1134.8	1148.7	1169.8	1173.3	1194.3	1208.3	1215.4	1218.8	1222.4
52.5°	980.7	977.1	987.7	1005.1	1022.7	1036.7	1057.7	1078.7	1092.8	1113.7	1103.2
55°	812.5	819.6	830.0	851.1	879.1	896.6	914.2	942.1	966.6	977.1	998.2
57.5°	668.9	661.9	668.9	696.9	728.5	742.5	767.1	795.0	830.0	851.1	858.1
60°	518.3	521.8	528.8	553.5	577.9	598.9	609.4	654.9	686.5	707.5	721.5
62.5°	381.9	388.8	395.8	416.8	441.3	458.9	476.3	514.8	542.9	563.8	577.9
65°	266.2	269.7	280.2	290.6	315.2	332.6	346.7	378.3	406.3	423.9	434.2
67.5°	164.6	168.0	175.1	189.2	206.6	220.6	234.7	255.6	280.2	297.6	301.2
70°	84.0	87.6	91.0	101.6	115.6	122.6	133.0	150.6	168.0	182.1	189.2
72.5°	28.0	28.0	31.5	38.6	45.6	52.6	56.0	73.5	87.6	94.6	98.1
75°	7.0	7.0	7.0	7.0	7.0	10.6	10.6	21.1	28.0	35.0	38.6
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	7.0	7.0
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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°	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7	2465.7
2.5°	2465.7	2458.7	2455.1	2458.7	2458.7	2455.1	2465.7	2479.6	2497.1	2451.7
5°	2462.1	2455.1	2462.1	2441.1	2451.7	2444.6	2458.7	2455.1	2469.2	2455.1
7.5°	2451.7	2437.6	2441.1	2430.7	2444.6	2427.1	2437.6	2458.7	2444.6	2423.7
10°	2416.7	2409.6	2434.1	2399.1	2392.0	2406.1	2434.1	2413.1	2406.1	2413.1
12.5°	2381.5	2381.5	2392.0	2364.1	2367.5	2374.6	2388.5	2374.6	2381.5	2399.1
15°	2343.1	2336.1	2353.5	2332.5	2329.1	2322.1	2336.1	2336.1	2343.1	2332.5
17.5°	2297.4	2287.1	2287.1	2280.1	2276.5	2294.1	2301.0	2304.5	2308.0	2294.1
20°	2241.5	2238.0	2248.5	2238.0	2241.5	2245.1	2245.1	2238.0	2269.5	2231.0
22.5°	2181.9	2192.5	2178.4	2171.4	2178.4	2185.5	2185.5	2188.9	2181.9	2174.9
25°	2122.4	2129.4	2132.9	2111.9	2122.4	2111.9	2136.4	2139.9	2125.8	2132.9
27.5°	2069.9	2059.4	2055.9	2041.8	2048.8	2045.4	2048.8	2048.8	2069.9	2041.8
30°	1989.2	1978.9	1982.2	1971.8	1975.3	1971.8	1975.3	1975.3	1989.2	1985.9
32.5°	1912.2	1901.8	1905.2	1894.8	1894.8	1898.2	1891.3	1891.3	1901.8	1894.8
35°	1838.7	1814.2	1817.6	1814.2	1817.6	1803.6	1803.6	1800.2	1807.3	1789.7
37.5°	1733.6	1723.1	1719.6	1716.2	1719.6	1712.7	1719.6	1709.2	1719.6	1705.6
40°	1639.0	1632.0	1635.6	1614.6	1614.6	1618.1	1611.0	1607.6	1611.0	1625.0
42.5°	1544.5	1530.6	1523.6	1516.5	1520.0	1509.5	1506.0	1498.9	1506.0	1492.0
45°	1432.4	1432.4	1429.0	1411.4	1414.9	1414.9	1401.0	1387.0	1390.4	1390.4
47.5°	1330.9	1323.9	1320.3	1302.9	1299.4	1295.9	1281.8	1271.4	1271.4	1260.8
50°	1218.8	1211.8	1201.3	1183.7	1176.8	1155.7	1145.3	1131.3	1117.3	1117.3
52.5°	1113.7	1089.1	1075.2	1047.1	1036.7	1026.2	998.2	987.7	977.1	966.6
55°	987.7	966.6	938.7	907.1	893.1	875.5	847.5	826.5	812.5	816.1
57.5°	865.1	830.0	802.1	760.1	742.5	731.9	703.9	675.9	661.9	661.9
60°	714.5	686.5	651.4	612.9	598.9	581.4	546.3	528.8	518.3	507.9
62.5°	570.9	549.9	518.3	469.2	458.9	441.3	416.8	395.8	385.2	385.2
65°	427.2	406.3	378.3	343.2	329.3	315.2	294.2	273.2	262.6	259.2
67.5°	301.2	276.7	252.2	224.2	213.6	206.6	185.6	171.6	164.6	161.0
70°	182.1	168.0	150.6	129.6	119.0	112.0	98.1	87.6	84.0	80.6
72.5°	94.6	84.0	70.0	56.0	49.0	42.0	35.0	28.0	24.6	24.6
75°	35.0	28.0	17.6	10.6	7.0	7.0	7.0	7.0	7.0	7.0
77.5°	7.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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)