

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P564502

Luminaire Tested: **SQ4-PR1-150U-125D-835-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564502
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-125D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

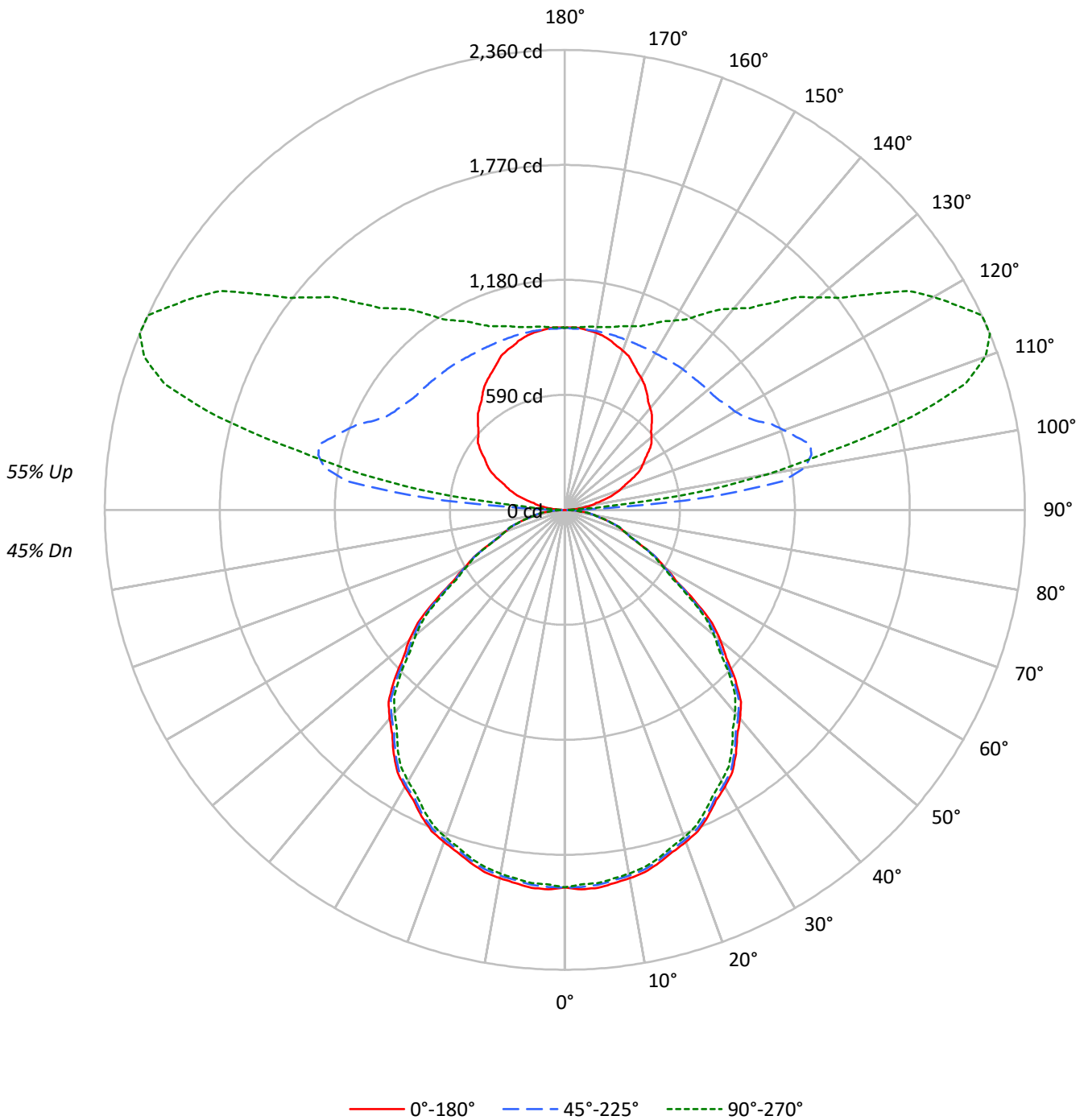
Lumens per Lamp: N/A
Luminaire Lumens: 10868.8 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
Input Voltage (V): 120
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: 24 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 | | | | | 70 | | | | | 50 | | | | | 30 | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 | 45 | | |
| 1 | 97 | 93 | 89 | 85 | 89 | 85 | 82 | 79 | 71 | 68 | 66 | 58 | 56 | 55 | 46 | 45 | 44 | 38 | | |
| 2 | 88 | 81 | 75 | 70 | 81 | 75 | 69 | 65 | 62 | 59 | 55 | 51 | 48 | 46 | 40 | 39 | 37 | 32 | | |
| 3 | 81 | 72 | 64 | 59 | 74 | 66 | 60 | 55 | 55 | 51 | 47 | 45 | 42 | 39 | 36 | 34 | 32 | 28 | | |
| 4 | 74 | 63 | 56 | 50 | 68 | 58 | 52 | 47 | 49 | 44 | 40 | 40 | 37 | 34 | 32 | 30 | 28 | 24 | | |
| 5 | 68 | 57 | 49 | 43 | 62 | 52 | 45 | 40 | 44 | 39 | 35 | 36 | 32 | 29 | 29 | 26 | 24 | 21 | | |
| 6 | 63 | 51 | 43 | 37 | 57 | 47 | 40 | 35 | 40 | 34 | 30 | 33 | 29 | 26 | 27 | 24 | 21 | 18 | | |
| 7 | 58 | 46 | 38 | 33 | 53 | 42 | 35 | 31 | 36 | 31 | 27 | 30 | 26 | 23 | 24 | 21 | 19 | 16 | | |
| 8 | 54 | 42 | 34 | 29 | 49 | 39 | 32 | 27 | 33 | 27 | 24 | 27 | 23 | 20 | 22 | 19 | 17 | 15 | | |
| 9 | 50 | 38 | 31 | 26 | 46 | 35 | 29 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 21 | 18 | 15 | 13 | | |
| 10 | 47 | 35 | 28 | 23 | 43 | 32 | 26 | 22 | 28 | 23 | 19 | 23 | 19 | 17 | 19 | 16 | 14 | 12 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17873 | 17873 | 17873 |
| 5° | 18034 | 17895 | 17802 |
| 10° | 17977 | 17852 | 17758 |
| 15° | 17898 | 17786 | 17691 |
| 20° | 17807 | 17694 | 17562 |
| 25° | 17683 | 17564 | 17360 |
| 30° | 17492 | 17367 | 17118 |
| 35° | 17234 | 17083 | 16838 |
| 40° | 16841 | 16659 | 16358 |
| 45° | 16155 | 15871 | 15545 |
| 50° | 14945 | 14586 | 14297 |
| 55° | 13044 | 12749 | 12481 |
| 60° | 10992 | 10900 | 10684 |
| 65° | 9507 | 9545 | 9470 |
| 70° | 8732 | 8778 | 8778 |
| 75° | 8388 | 8388 | 8445 |
| 80° | 7890 | 7980 | 7890 |
| 85° | 6362 | 7061 | 7061 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 183.2 | 1.7 |
| 10°-20° | 524.1 | 4.8 |
| 20°-30° | 790.6 | 7.3 |
| 30°-40° | 941.9 | 8.7 |
| 40°-50° | 928.7 | 8.5 |
| 50°-60° | 709.8 | 6.5 |
| 60°-70° | 439.2 | 4.0 |
| 70°-80° | 249.5 | 2.3 |
| 80°-90° | 77.8 | 0.7 |
| 90°-100° | 434.2 | 4.0 |
| 100°-110° | 1174.0 | 10.8 |
| 110°-120° | 1234.3 | 11.4 |
| 120°-130° | 1002.6 | 9.2 |
| 130°-140° | 786.5 | 7.2 |
| 140°-150° | 603.6 | 5.6 |
| 150°-160° | 434.1 | 4.0 |
| 160°-170° | 265.2 | 2.4 |
| 170°-180° | 89.4 | 0.8 |
| 0°-30° | 1497.9 | 13.8 |
| 0°-40° | 2439.8 | 22.4 |
| 0°-60° | 4078.3 | 37.5 |
| 0°-90° | 4844.8 | 44.6 |
| 90°-120° | 2842.6 | 26.2 |
| 90°-150° | 5235.3 | 48.2 |
| 90°-180° | 6024.0 | 55.4 |
| 0°-180° | 10868.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1937 | 1937 | 1937 | 1937 | 1937 | |
| 5° | 1947 | 1926 | 1932 | 1926 | 1922 | 185 |
| 15° | 1874 | 1854 | 1862 | 1855 | 1852 | 529 |
| 25° | 1737 | 1716 | 1725 | 1707 | 1705 | 799 |
| 35° | 1530 | 1512 | 1517 | 1497 | 1495 | 955 |
| 45° | 1238 | 1222 | 1216 | 1195 | 1191 | 949 |
| 55° | 811 | 798 | 793 | 779 | 776 | 727 |
| 65° | 436 | 432 | 437 | 434 | 434 | 441 |
| 75° | 235 | 235 | 235 | 237 | 237 | 248 |
| 85° | 60 | 63 | 67 | 67 | 67 | 70 |
| 90° | 2 | 6 | 13 | 14 | 13 | 7 |
| 95° | 67 | 236 | 722 | 374 | 222 | 71 |
| 105° | 218 | 337 | 1302 | 1921 | 1842 | 230 |
| 115° | 384 | 470 | 1080 | 2091 | 2360 | 379 |
| 125° | 526 | 603 | 974 | 1643 | 1930 | 469 |
| 135° | 631 | 705 | 947 | 1326 | 1502 | 487 |
| 145° | 733 | 788 | 934 | 1135 | 1222 | 459 |
| 155° | 828 | 860 | 926 | 1019 | 1052 | 382 |
| 165° | 901 | 910 | 930 | 967 | 972 | 254 |
| 175° | 935 | 934 | 931 | 943 | 941 | 89 |
| 180° | 934 | 934 | 934 | 934 | 934 | |

TEST NUMBER: P564502

CATALOG NUMBER: SQ4-PR1-150U-125D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1937.2 | 1937.2 | 1937.2 | 1937.2 | 1937.2 |
| 2.5° | 1949.2 | 1932.3 | 1937.2 | 1933.0 | 1923.9 |
| 5° | 1947.2 | 1926.0 | 1932.2 | 1925.5 | 1922.2 |
| 7.5° | 1932.2 | 1911.3 | 1917.5 | 1910.8 | 1908.8 |
| 10° | 1918.9 | 1899.3 | 1905.5 | 1898.8 | 1895.5 |
| 12.5° | 1904.2 | 1883.3 | 1890.8 | 1882.7 | 1879.5 |
| 15° | 1873.8 | 1854.2 | 1862.1 | 1855.4 | 1852.1 |
| 17.5° | 1840.4 | 1819.6 | 1827.4 | 1819.7 | 1815.4 |
| 20° | 1813.7 | 1794.2 | 1802.1 | 1790.3 | 1788.7 |
| 22.5° | 1784.4 | 1764.8 | 1772.7 | 1757.0 | 1756.7 |
| 25° | 1737.0 | 1715.8 | 1725.3 | 1706.9 | 1705.3 |
| 27.5° | 1680.6 | 1661.0 | 1668.9 | 1650.2 | 1648.2 |
| 30° | 1641.9 | 1622.3 | 1630.2 | 1610.1 | 1606.8 |
| 32.5° | 1597.8 | 1579.6 | 1586.1 | 1566.1 | 1564.1 |
| 35° | 1530.1 | 1512.1 | 1516.7 | 1496.7 | 1495.0 |
| 37.5° | 1453.0 | 1436.7 | 1439.3 | 1417.3 | 1415.6 |
| 40° | 1398.3 | 1382.0 | 1383.2 | 1359.9 | 1358.2 |
| 42.5° | 1338.2 | 1321.9 | 1320.5 | 1297.1 | 1295.5 |
| 45° | 1238.1 | 1221.8 | 1216.4 | 1194.6 | 1191.4 |
| 47.5° | 1124.0 | 1107.6 | 1097.6 | 1079.8 | 1077.6 |
| 50° | 1041.2 | 1024.9 | 1016.2 | 1001.0 | 996.1 |
| 52.5° | 951.8 | 935.4 | 928.1 | 914.3 | 909.4 |
| 55° | 810.9 | 797.9 | 792.6 | 779.2 | 775.9 |
| 57.5° | 677.1 | 668.3 | 666.8 | 653.7 | 652.4 |
| 60° | 595.7 | 590.8 | 590.7 | 579.0 | 579.0 |
| 62.5° | 526.3 | 522.7 | 525.3 | 517.6 | 516.3 |
| 65° | 435.5 | 432.2 | 437.2 | 433.8 | 433.8 |
| 67.5° | 363.7 | 363.7 | 366.8 | 365.4 | 365.4 |
| 70° | 323.7 | 323.7 | 325.4 | 325.4 | 325.4 |
| 72.5° | 287.7 | 286.4 | 290.7 | 290.6 | 289.3 |
| 75° | 235.3 | 235.3 | 235.3 | 236.9 | 236.9 |
| 77.5° | 183.2 | 183.5 | 184.9 | 184.5 | 183.2 |
| 80° | 148.5 | 150.1 | 150.2 | 148.5 | 148.5 |
| 82.5° | 113.8 | 115.4 | 115.5 | 115.1 | 113.8 |
| 85° | 60.1 | 63.3 | 66.7 | 66.7 | 66.7 |
| 87.5° | 17.8 | 23.8 | 29.3 | 29.5 | 28.0 |
| 90° | 2.0 | 5.9 | 13.1 | 14.1 | 13.1 |
| 92.5° | 28.6 | 104.1 | 205.4 | 89.2 | 64.6 |
| 95° | 67.4 | 236.5 | 722.1 | 373.7 | 222.3 |
| 97.5° | 108.2 | 271.3 | 1125.6 | 931.5 | 684.1 |
| 100° | 138.8 | 285.3 | 1251.1 | 1304.8 | 1055.0 |
| 102.5° | 167.0 | 304.8 | 1295.4 | 1587.8 | 1401.0 |
| 105° | 218.2 | 337.2 | 1302.4 | 1921.2 | 1842.5 |
| 107.5° | 265.7 | 374.3 | 1245.5 | 2129.1 | 2155.3 |
| 110° | 302.7 | 401.1 | 1194.8 | 2185.0 | 2296.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 335.7 | 427.8 | 1148.1 | 2173.8 | 2360.5 |
| 115° | 384.2 | 469.7 | 1080.2 | 2091.0 | 2360.5 |
| 117.5° | 431.7 | 511.9 | 1035.3 | 1964.5 | 2269.9 |
| 120° | 460.6 | 539.3 | 1008.8 | 1873.7 | 2185.5 |
| 122.5° | 488.0 | 565.1 | 992.7 | 1776.4 | 2090.5 |
| 125° | 526.0 | 602.7 | 973.6 | 1642.9 | 1930.0 |
| 127.5° | 561.0 | 636.3 | 962.3 | 1533.9 | 1786.4 |
| 130° | 580.3 | 658.0 | 957.5 | 1466.5 | 1694.7 |
| 132.5° | 600.4 | 677.3 | 952.6 | 1405.8 | 1615.8 |
| 135° | 630.6 | 705.3 | 947.4 | 1326.5 | 1501.6 |
| 137.5° | 661.0 | 731.6 | 943.0 | 1262.2 | 1404.8 |
| 140° | 681.9 | 747.8 | 941.4 | 1220.8 | 1347.7 |
| 142.5° | 702.0 | 764.0 | 938.1 | 1183.5 | 1294.6 |
| 145° | 733.2 | 788.2 | 934.3 | 1135.4 | 1222.0 |
| 147.5° | 761.5 | 810.3 | 929.9 | 1091.9 | 1158.4 |
| 150° | 782.5 | 825.7 | 928.3 | 1068.3 | 1121.4 |
| 152.5° | 801.8 | 839.5 | 927.5 | 1046.4 | 1090.0 |
| 155° | 827.7 | 860.2 | 926.3 | 1018.6 | 1052.0 |
| 157.5° | 854.7 | 877.3 | 926.5 | 999.2 | 1021.2 |
| 160° | 870.0 | 888.6 | 927.3 | 987.0 | 1002.7 |
| 162.5° | 882.0 | 897.6 | 928.1 | 977.2 | 989.0 |
| 165° | 901.1 | 910.0 | 930.3 | 966.6 | 971.5 |
| 167.5° | 914.2 | 920.3 | 930.5 | 957.5 | 959.9 |
| 170° | 922.3 | 925.2 | 931.3 | 953.4 | 953.4 |
| 172.5° | 928.7 | 929.3 | 931.3 | 948.6 | 947.8 |
| 175° | 935.3 | 934.3 | 931.3 | 943.3 | 941.4 |
| 177.5° | 937.5 | 935.2 | 931.1 | 939.1 | 936.7 |
| 180° | 934.3 | 934.3 | 934.3 | 934.3 | 934.3 |

(END OF REPORT)