

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: P564955

Luminaire Tested: **SQ4-PW1-100U-100D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564955
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-100D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

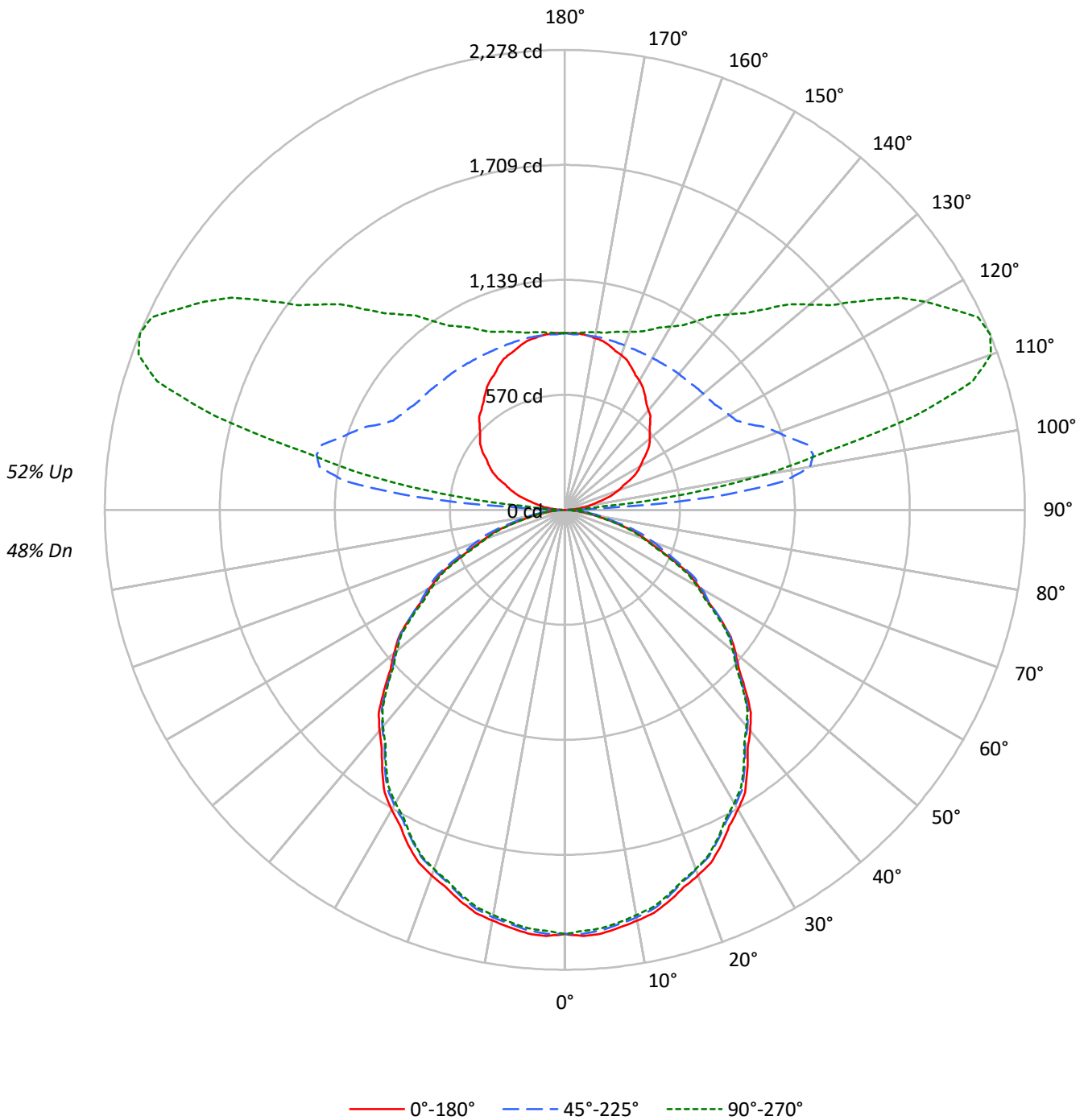
Lumens per Lamp: N/A
Luminaire Lumens: 11034.2 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 92.9
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





TEST NUMBER: P564955

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 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 | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 68 | 68 | 68 | 55 | 55 | 55 | 48 | | | | 48 |
| 1 | 98 | 93 | 89 | 86 | 90 | 86 | 83 | 80 | 72 | 70 | 68 | 60 | 58 | 57 | 49 | 47 | 46 | | | | 41 | |
| 2 | 89 | 82 | 75 | 70 | 82 | 75 | 70 | 66 | 64 | 60 | 56 | 53 | 50 | 48 | 43 | 41 | 39 | | | | 35 | |
| 3 | 81 | 72 | 64 | 59 | 74 | 66 | 60 | 55 | 56 | 51 | 47 | 47 | 43 | 40 | 38 | 36 | 33 | | | | 29 | |
| 4 | 74 | 63 | 56 | 50 | 68 | 59 | 52 | 47 | 50 | 45 | 40 | 42 | 38 | 35 | 34 | 31 | 29 | | | | 25 | |
| 5 | 68 | 57 | 48 | 43 | 62 | 52 | 45 | 40 | 45 | 39 | 35 | 37 | 33 | 30 | 31 | 28 | 25 | | | | 22 | |
| 6 | 63 | 51 | 43 | 37 | 58 | 47 | 40 | 35 | 40 | 35 | 30 | 34 | 30 | 26 | 28 | 25 | 22 | | | | 19 | |
| 7 | 58 | 46 | 38 | 32 | 53 | 43 | 35 | 30 | 36 | 31 | 27 | 31 | 26 | 23 | 25 | 22 | 20 | | | | 17 | |
| 8 | 54 | 42 | 34 | 29 | 49 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 23 | 20 | 18 | | | | 15 | |
| 9 | 50 | 38 | 30 | 25 | 46 | 35 | 29 | 24 | 30 | 25 | 21 | 26 | 22 | 19 | 21 | 18 | 16 | | | | 14 | |
| 10 | 47 | 35 | 28 | 23 | 43 | 32 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 | | | | 12 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12924 | 12924 | 12924 |
| 5° | 13007 | 12905 | 12847 |
| 10° | 12904 | 12799 | 12730 |
| 15° | 12767 | 12625 | 12578 |
| 20° | 12614 | 12420 | 12396 |
| 25° | 12438 | 12212 | 12175 |
| 30° | 12176 | 11991 | 11912 |
| 35° | 11829 | 11663 | 11593 |
| 40° | 11460 | 11282 | 11237 |
| 45° | 11015 | 10870 | 10821 |
| 50° | 10557 | 10469 | 10399 |
| 55° | 10065 | 10065 | 9906 |
| 60° | 9451 | 9633 | 9291 |
| 65° | 8649 | 9080 | 8433 |
| 70° | 7623 | 8357 | 7424 |
| 75° | 6512 | 7479 | 6336 |
| 80° | 5048 | 6294 | 5115 |
| 85° | 3268 | 4834 | 4312 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 197.9 | 1.8 |
| 10°-20° | 558.6 | 5.1 |
| 20°-30° | 828.6 | 7.5 |
| 30°-40° | 969.5 | 8.8 |
| 40°-50° | 965.2 | 8.7 |
| 50°-60° | 833.5 | 7.6 |
| 60°-70° | 600.0 | 5.4 |
| 70°-80° | 314.6 | 2.9 |
| 80°-90° | 79.8 | 0.7 |
| 90°-100° | 409.9 | 3.7 |
| 100°-110° | 1131.5 | 10.3 |
| 110°-120° | 1166.9 | 10.6 |
| 120°-130° | 937.7 | 8.5 |
| 130°-140° | 736.9 | 6.7 |
| 140°-150° | 565.2 | 5.1 |
| 150°-160° | 406.2 | 3.7 |
| 160°-170° | 248.4 | 2.3 |
| 170°-180° | 83.8 | 0.8 |
| 0°-30° | 1585.1 | 14.4 |
| 0°-40° | 2554.6 | 23.2 |
| 0°-60° | 4353.3 | 39.5 |
| 0°-90° | 5347.7 | 48.5 |
| 90°-120° | 2708.2 | 24.5 |
| 90°-150° | 4948.1 | 44.8 |
| 90°-180° | 5686.0 | 51.5 |
| 0°-180° | 11034.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2101 | 2101 | 2101 | 2101 | 2101 | |
| 5° | 2107 | 2083 | 2090 | 2084 | 2081 | 200 |
| 15° | 2005 | 1980 | 1983 | 1979 | 1975 | 565 |
| 25° | 1833 | 1802 | 1799 | 1788 | 1794 | 843 |
| 35° | 1575 | 1554 | 1553 | 1538 | 1544 | 985 |
| 45° | 1266 | 1255 | 1250 | 1246 | 1244 | 977 |
| 55° | 939 | 937 | 939 | 926 | 924 | 837 |
| 65° | 594 | 612 | 624 | 599 | 579 | 589 |
| 75° | 274 | 299 | 315 | 294 | 267 | 294 |
| 85° | 46 | 61 | 68 | 65 | 61 | 61 |
| 90° | 3 | 6 | 11 | 13 | 14 | 6 |
| 95° | 60 | 222 | 744 | 306 | 199 | 64 |
| 105° | 202 | 311 | 1245 | 1900 | 1790 | 215 |
| 115° | 361 | 437 | 1003 | 1985 | 2257 | 355 |
| 125° | 496 | 564 | 909 | 1538 | 1805 | 441 |
| 135° | 596 | 661 | 884 | 1246 | 1404 | 462 |
| 145° | 692 | 740 | 872 | 1060 | 1141 | 433 |
| 155° | 780 | 806 | 865 | 952 | 982 | 359 |
| 165° | 844 | 855 | 870 | 903 | 910 | 238 |
| 175° | 875 | 876 | 871 | 884 | 881 | 83 |
| 180° | 875 | 875 | 875 | 875 | 875 | |

TEST NUMBER: P564955

CATALOG NUMBER: SQ4-PW1-100U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2101.2 | 2101.2 | 2101.2 | 2101.2 | 2101.2 |
| 2.5° | 2113.0 | 2095.6 | 2101.2 | 2096.5 | 2086.4 |
| 5° | 2106.7 | 2083.2 | 2090.1 | 2084.4 | 2080.8 |
| 7.5° | 2085.2 | 2063.5 | 2068.6 | 2062.6 | 2060.4 |
| 10° | 2066.0 | 2044.3 | 2049.3 | 2041.8 | 2038.2 |
| 12.5° | 2043.8 | 2020.6 | 2025.6 | 2018.2 | 2016.0 |
| 15° | 2004.9 | 1979.6 | 1982.7 | 1978.9 | 1975.3 |
| 17.5° | 1959.7 | 1934.0 | 1934.6 | 1928.6 | 1927.9 |
| 20° | 1927.1 | 1900.0 | 1897.5 | 1890.2 | 1893.8 |
| 22.5° | 1891.6 | 1863.0 | 1860.5 | 1850.3 | 1855.3 |
| 25° | 1832.7 | 1802.0 | 1799.4 | 1788.4 | 1793.9 |
| 27.5° | 1764.6 | 1734.2 | 1734.2 | 1718.8 | 1724.6 |
| 30° | 1714.3 | 1685.3 | 1688.3 | 1670.0 | 1677.2 |
| 32.5° | 1660.9 | 1634.9 | 1636.5 | 1618.2 | 1625.4 |
| 35° | 1575.4 | 1553.7 | 1553.2 | 1538.5 | 1543.9 |
| 37.5° | 1488.0 | 1468.8 | 1465.8 | 1457.3 | 1458.8 |
| 40° | 1427.3 | 1411.0 | 1405.1 | 1399.5 | 1399.5 |
| 42.5° | 1363.6 | 1348.8 | 1342.9 | 1338.8 | 1337.3 |
| 45° | 1266.3 | 1255.4 | 1249.6 | 1245.8 | 1244.0 |
| 47.5° | 1170.0 | 1159.9 | 1154.8 | 1152.2 | 1150.4 |
| 50° | 1103.3 | 1096.1 | 1094.1 | 1088.5 | 1086.7 |
| 52.5° | 1036.7 | 1032.4 | 1030.4 | 1023.3 | 1021.5 |
| 55° | 938.6 | 936.8 | 938.6 | 925.6 | 923.8 |
| 57.5° | 836.4 | 839.3 | 845.3 | 827.8 | 823.4 |
| 60° | 768.3 | 775.5 | 783.1 | 762.5 | 755.3 |
| 62.5° | 698.7 | 710.2 | 720.9 | 697.3 | 687.2 |
| 65° | 594.3 | 612.4 | 623.9 | 599.4 | 579.4 |
| 67.5° | 493.5 | 516.0 | 529.8 | 503.4 | 481.0 |
| 70° | 423.9 | 449.3 | 464.7 | 438.2 | 412.8 |
| 72.5° | 363.2 | 391.5 | 403.9 | 378.9 | 353.6 |
| 75° | 274.0 | 299.3 | 314.7 | 293.7 | 266.6 |
| 77.5° | 194.4 | 218.3 | 231.0 | 212.8 | 190.3 |
| 80° | 142.5 | 167.9 | 177.7 | 162.5 | 144.4 |
| 82.5° | 101.1 | 122.1 | 128.8 | 119.7 | 107.4 |
| 85° | 46.3 | 60.8 | 68.5 | 64.7 | 61.1 |
| 87.5° | 12.4 | 23.1 | 30.4 | 30.7 | 32.4 |
| 90° | 2.8 | 5.5 | 11.2 | 12.6 | 14.0 |
| 92.5° | 25.2 | 104.6 | 187.1 | 68.3 | 53.2 |
| 95° | 60.2 | 221.8 | 743.6 | 305.6 | 198.8 |
| 97.5° | 99.7 | 248.4 | 1101.5 | 848.0 | 614.2 |
| 100° | 128.8 | 264.4 | 1233.7 | 1242.4 | 1009.6 |
| 102.5° | 156.8 | 282.5 | 1259.4 | 1535.0 | 1314.3 |
| 105° | 201.6 | 311.2 | 1244.9 | 1900.5 | 1789.6 |
| 107.5° | 249.3 | 346.7 | 1175.4 | 2076.7 | 2117.2 |
| 110° | 282.9 | 370.5 | 1121.6 | 2114.6 | 2246.1 |



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CATALOG NUMBER: SQ4-PW1-100U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 313.1 | 397.4 | 1071.2 | 2084.7 | 2278.5 |
| 115° | 361.3 | 436.6 | 1002.6 | 1984.8 | 2257.3 |
| 117.5° | 403.3 | 478.3 | 957.5 | 1844.2 | 2154.2 |
| 120° | 431.3 | 505.2 | 939.6 | 1749.1 | 2061.2 |
| 122.5° | 458.2 | 528.8 | 925.0 | 1660.2 | 1955.9 |
| 125° | 495.7 | 564.2 | 908.8 | 1538.0 | 1805.0 |
| 127.5° | 527.6 | 596.1 | 899.3 | 1434.6 | 1664.9 |
| 130° | 548.9 | 617.4 | 894.8 | 1371.4 | 1580.9 |
| 132.5° | 569.1 | 634.2 | 890.3 | 1318.3 | 1508.1 |
| 135° | 596.5 | 660.9 | 883.6 | 1245.7 | 1404.5 |
| 137.5° | 627.3 | 685.9 | 880.2 | 1184.6 | 1320.2 |
| 140° | 644.1 | 701.6 | 878.0 | 1143.9 | 1263.1 |
| 142.5° | 663.2 | 716.3 | 875.7 | 1107.8 | 1212.6 |
| 145° | 691.7 | 739.7 | 872.4 | 1060.5 | 1141.2 |
| 147.5° | 719.2 | 761.1 | 869.3 | 1020.6 | 1083.3 |
| 150° | 739.4 | 773.6 | 868.2 | 996.8 | 1047.4 |
| 152.5° | 755.0 | 787.1 | 867.1 | 976.4 | 1018.3 |
| 155° | 780.0 | 806.0 | 865.4 | 951.5 | 981.6 |
| 157.5° | 802.9 | 822.9 | 865.7 | 933.3 | 953.9 |
| 160° | 816.4 | 834.2 | 866.8 | 923.1 | 938.2 |
| 162.5° | 827.6 | 843.2 | 867.9 | 914.1 | 925.9 |
| 165° | 844.4 | 855.3 | 869.6 | 903.3 | 910.2 |
| 167.5° | 857.3 | 863.8 | 871.0 | 896.8 | 899.0 |
| 170° | 864.0 | 869.5 | 871.0 | 893.4 | 893.4 |
| 172.5° | 869.6 | 872.9 | 871.0 | 888.9 | 887.8 |
| 175° | 875.2 | 876.5 | 871.0 | 883.5 | 880.8 |
| 177.5° | 877.4 | 876.3 | 870.7 | 878.5 | 876.3 |
| 180° | 875.2 | 875.2 | 875.2 | 875.2 | 875.2 |

(END OF REPORT)