

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: P564647

Luminaire Tested: **SQ4-PW1-050U-075D-835-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564647
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-075D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7252.2 lumens
Efficiency: N/A
Efficacy: 124.0 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

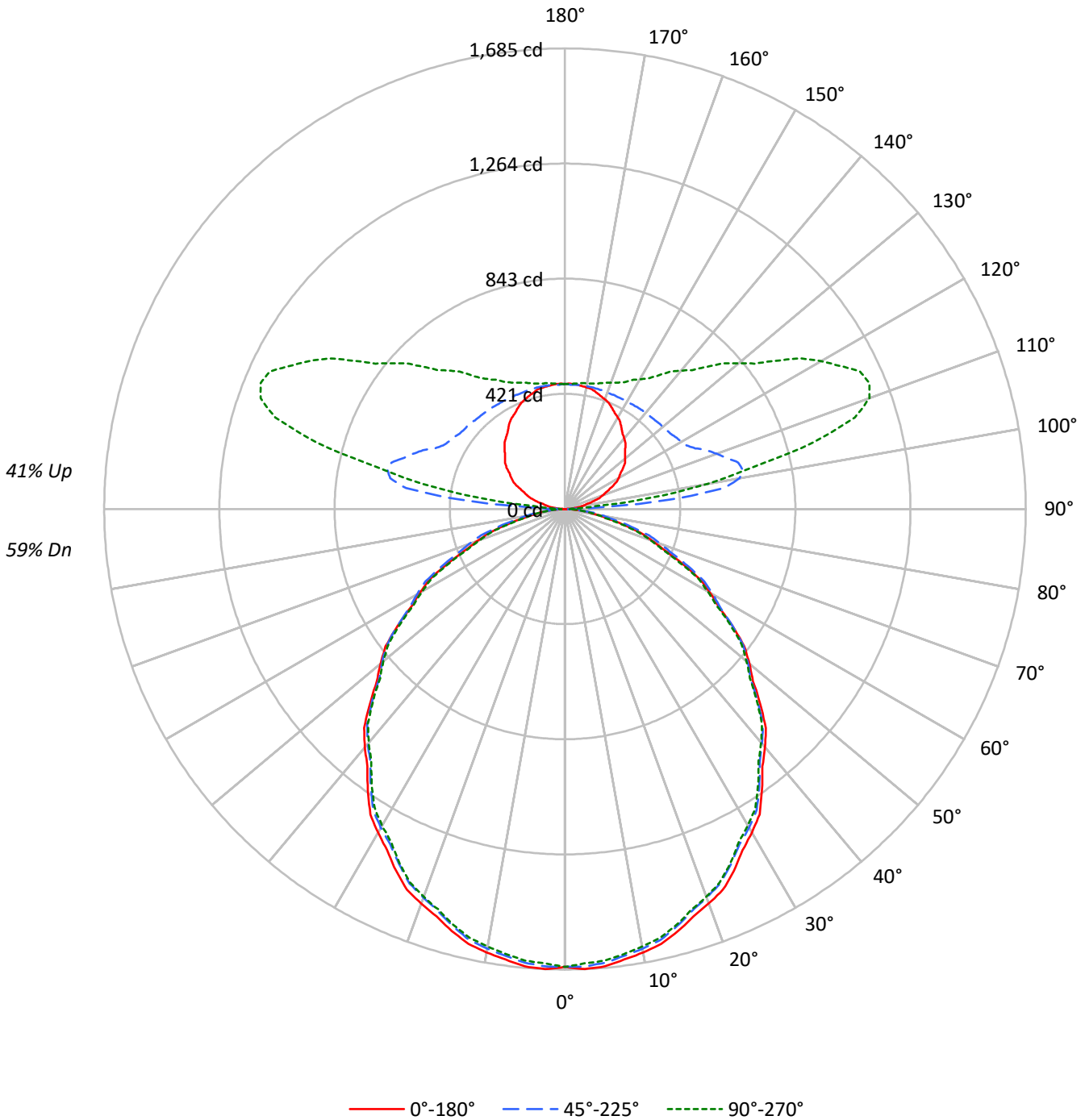
Input Watts (W): 58.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 76 | 76 | 76 | 64 | 64 | 64 | 59 |
| 1 | 100 | 96 | 92 | 88 | 93 | 89 | 86 | 83 | 78 | 75 | 73 | 67 | 65 | 63 | 57 | 56 | 55 | 50 |
| 2 | 91 | 84 | 77 | 72 | 85 | 78 | 73 | 68 | 68 | 64 | 60 | 59 | 56 | 53 | 50 | 48 | 46 | 42 |
| 3 | 83 | 74 | 66 | 60 | 77 | 69 | 62 | 57 | 60 | 55 | 51 | 52 | 48 | 45 | 45 | 42 | 39 | 36 |
| 4 | 76 | 65 | 57 | 51 | 71 | 61 | 54 | 48 | 54 | 48 | 43 | 46 | 42 | 39 | 40 | 37 | 34 | 31 |
| 5 | 70 | 58 | 50 | 44 | 65 | 55 | 47 | 42 | 48 | 42 | 38 | 42 | 37 | 34 | 36 | 32 | 30 | 27 |
| 6 | 64 | 52 | 44 | 38 | 60 | 49 | 42 | 36 | 43 | 37 | 33 | 38 | 33 | 29 | 33 | 29 | 26 | 23 |
| 7 | 60 | 47 | 39 | 33 | 55 | 44 | 37 | 32 | 39 | 33 | 29 | 34 | 30 | 26 | 30 | 26 | 23 | 21 |
| 8 | 55 | 43 | 35 | 30 | 52 | 40 | 33 | 28 | 36 | 30 | 26 | 31 | 27 | 23 | 27 | 24 | 21 | 19 |
| 9 | 52 | 39 | 32 | 26 | 48 | 37 | 30 | 25 | 33 | 27 | 23 | 29 | 24 | 21 | 25 | 22 | 19 | 17 |
| 10 | 48 | 36 | 29 | 24 | 45 | 34 | 27 | 23 | 30 | 25 | 21 | 27 | 22 | 19 | 23 | 20 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10305 | 10305 | 10305 |
| 5° | 10372 | 10289 | 10244 |
| 10° | 10289 | 10205 | 10150 |
| 15° | 10180 | 10067 | 10029 |
| 20° | 10058 | 9903 | 9884 |
| 25° | 9917 | 9737 | 9707 |
| 30° | 9708 | 9561 | 9498 |
| 35° | 9432 | 9299 | 9244 |
| 40° | 9138 | 8996 | 8960 |
| 45° | 8782 | 8667 | 8628 |
| 50° | 8419 | 8348 | 8291 |
| 55° | 8026 | 8026 | 7899 |
| 60° | 7536 | 7681 | 7408 |
| 65° | 6896 | 7239 | 6724 |
| 70° | 6079 | 6663 | 5920 |
| 75° | 5193 | 5963 | 5052 |
| 80° | 4027 | 5019 | 4077 |
| 85° | 2604 | 3853 | 3437 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 157.8 | 2.2 |
| 10°-20° | 445.4 | 6.1 |
| 20°-30° | 660.7 | 9.1 |
| 30°-40° | 773.1 | 10.7 |
| 40°-50° | 769.6 | 10.6 |
| 50°-60° | 664.6 | 9.2 |
| 60°-70° | 478.4 | 6.6 |
| 70°-80° | 250.9 | 3.5 |
| 80°-90° | 63.9 | 0.9 |
| 90°-100° | 219.7 | 3.0 |
| 100°-110° | 596.8 | 8.2 |
| 110°-120° | 613.6 | 8.5 |
| 120°-130° | 490.6 | 6.8 |
| 130°-140° | 385.5 | 5.3 |
| 140°-150° | 295.6 | 4.1 |
| 150°-160° | 212.5 | 2.9 |
| 160°-170° | 130.0 | 1.8 |
| 170°-180° | 43.8 | 0.6 |
| 0°-30° | 1263.9 | 17.4 |
| 0°-40° | 2036.9 | 28.1 |
| 0°-60° | 3471.1 | 47.9 |
| 0°-90° | 4264.3 | 58.8 |
| 90°-120° | 1430.0 | 19.7 |
| 90°-150° | 2601.6 | 35.9 |
| 90°-180° | 2988.0 | 41.2 |
| 0°-180° | 7252.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1675 | 1675 | 1675 | 1675 | 1675 | |
| 5° | 1680 | 1661 | 1666 | 1662 | 1659 | 159 |
| 15° | 1599 | 1578 | 1581 | 1578 | 1575 | 451 |
| 25° | 1461 | 1437 | 1435 | 1426 | 1430 | 672 |
| 35° | 1256 | 1239 | 1238 | 1227 | 1231 | 785 |
| 45° | 1010 | 1001 | 996 | 993 | 992 | 779 |
| 55° | 748 | 747 | 748 | 738 | 737 | 668 |
| 65° | 474 | 488 | 497 | 478 | 462 | 470 |
| 75° | 218 | 239 | 251 | 234 | 213 | 234 |
| 85° | 37 | 48 | 55 | 52 | 49 | 49 |
| 90° | 2 | 6 | 10 | 13 | 13 | 4 |
| 95° | 32 | 120 | 383 | 166 | 112 | 34 |
| 105° | 106 | 165 | 656 | 999 | 940 | 113 |
| 115° | 188 | 229 | 525 | 1045 | 1190 | 186 |
| 125° | 259 | 295 | 475 | 801 | 945 | 231 |
| 135° | 312 | 346 | 462 | 652 | 736 | 241 |
| 145° | 360 | 386 | 456 | 554 | 596 | 226 |
| 155° | 408 | 422 | 453 | 498 | 512 | 188 |
| 165° | 441 | 447 | 455 | 474 | 475 | 125 |
| 175° | 458 | 459 | 456 | 462 | 461 | 43 |
| 180° | 458 | 458 | 458 | 458 | 458 | |

TEST NUMBER: P564647

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1675.4 | 1675.4 | 1675.4 | 1675.4 | 1675.4 |
| 2.5° | 1684.8 | 1671.0 | 1675.4 | 1671.6 | 1663.6 |
| 5° | 1679.8 | 1661.0 | 1666.5 | 1662.0 | 1659.1 |
| 7.5° | 1662.7 | 1645.4 | 1649.4 | 1644.6 | 1642.9 |
| 10° | 1647.3 | 1630.0 | 1634.0 | 1628.1 | 1625.2 |
| 12.5° | 1629.6 | 1611.1 | 1615.1 | 1609.2 | 1607.5 |
| 15° | 1598.6 | 1578.4 | 1580.9 | 1577.9 | 1575.0 |
| 17.5° | 1562.6 | 1542.1 | 1542.5 | 1537.8 | 1537.2 |
| 20° | 1536.6 | 1515.0 | 1513.0 | 1507.2 | 1510.0 |
| 22.5° | 1508.3 | 1485.5 | 1483.5 | 1475.3 | 1479.3 |
| 25° | 1461.3 | 1436.8 | 1434.8 | 1426.0 | 1430.3 |
| 27.5° | 1407.0 | 1382.8 | 1382.8 | 1370.5 | 1375.1 |
| 30° | 1366.9 | 1343.8 | 1346.2 | 1331.6 | 1337.3 |
| 32.5° | 1324.4 | 1303.6 | 1304.9 | 1290.2 | 1296.0 |
| 35° | 1256.2 | 1238.8 | 1238.4 | 1226.7 | 1231.1 |
| 37.5° | 1186.5 | 1171.2 | 1168.8 | 1162.0 | 1163.2 |
| 40° | 1138.1 | 1125.1 | 1120.4 | 1115.9 | 1115.9 |
| 42.5° | 1087.3 | 1075.5 | 1070.8 | 1067.5 | 1066.3 |
| 45° | 1009.6 | 1001.0 | 996.4 | 993.4 | 991.9 |
| 47.5° | 932.9 | 924.8 | 920.8 | 918.7 | 917.2 |
| 50° | 879.8 | 874.0 | 872.4 | 867.9 | 866.5 |
| 52.5° | 826.6 | 823.1 | 821.6 | 816.0 | 814.5 |
| 55° | 748.4 | 746.9 | 748.4 | 738.0 | 736.6 |
| 57.5° | 666.9 | 669.2 | 674.0 | 660.0 | 656.6 |
| 60° | 612.6 | 618.4 | 624.4 | 608.0 | 602.2 |
| 62.5° | 557.1 | 566.3 | 574.8 | 556.0 | 547.9 |
| 65° | 473.8 | 488.3 | 497.4 | 477.9 | 462.0 |
| 67.5° | 393.5 | 411.4 | 422.5 | 401.4 | 383.5 |
| 70° | 338.0 | 358.2 | 370.5 | 349.4 | 329.2 |
| 72.5° | 289.6 | 312.1 | 322.1 | 302.1 | 281.9 |
| 75° | 218.5 | 238.7 | 250.9 | 234.2 | 212.6 |
| 77.5° | 155.0 | 174.0 | 184.2 | 169.6 | 151.7 |
| 80° | 113.7 | 133.9 | 141.7 | 129.6 | 115.1 |
| 82.5° | 80.6 | 97.3 | 102.7 | 95.4 | 85.6 |
| 85° | 36.9 | 48.4 | 54.6 | 51.6 | 48.7 |
| 87.5° | 9.7 | 18.7 | 24.5 | 25.1 | 26.3 |
| 90° | 1.5 | 5.8 | 10.3 | 13.2 | 13.2 |
| 92.5° | 13.2 | 60.1 | 104.5 | 44.9 | 38.0 |
| 95° | 32.4 | 120.1 | 382.6 | 166.5 | 111.8 |
| 97.5° | 53.6 | 132.7 | 586.5 | 456.3 | 320.5 |
| 100° | 67.7 | 141.1 | 648.9 | 657.8 | 531.2 |
| 102.5° | 81.8 | 149.4 | 665.4 | 813.5 | 701.9 |
| 105° | 105.9 | 164.9 | 656.3 | 999.2 | 940.2 |
| 107.5° | 131.0 | 183.0 | 618.3 | 1095.1 | 1111.5 |
| 110° | 148.6 | 196.1 | 590.0 | 1114.0 | 1184.5 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 163.9 | 209.1 | 561.8 | 1098.3 | 1204.5 |
| 115° | 188.3 | 228.6 | 525.3 | 1045.1 | 1190.4 |
| 117.5° | 211.3 | 249.9 | 502.0 | 969.6 | 1133.3 |
| 120° | 226.6 | 264.0 | 491.5 | 918.9 | 1081.5 |
| 122.5° | 239.5 | 277.0 | 484.4 | 868.2 | 1025.0 |
| 125° | 259.0 | 294.9 | 475.3 | 800.8 | 944.7 |
| 127.5° | 276.3 | 312.0 | 470.3 | 749.7 | 873.1 |
| 130° | 286.9 | 321.5 | 467.9 | 717.6 | 828.4 |
| 132.5° | 297.5 | 332.1 | 465.6 | 690.3 | 788.4 |
| 135° | 311.9 | 346.5 | 462.0 | 652.3 | 735.7 |
| 137.5° | 327.5 | 358.9 | 460.3 | 618.7 | 688.9 |
| 140° | 337.0 | 367.2 | 459.1 | 597.4 | 660.7 |
| 142.5° | 346.4 | 374.3 | 457.9 | 580.6 | 633.6 |
| 145° | 360.5 | 386.4 | 456.1 | 554.2 | 595.9 |
| 147.5° | 376.4 | 398.5 | 454.7 | 533.4 | 566.2 |
| 150° | 387.0 | 405.7 | 454.7 | 521.5 | 547.4 |
| 152.5° | 395.2 | 411.6 | 453.5 | 510.8 | 532.1 |
| 155° | 407.6 | 422.0 | 453.2 | 497.7 | 512.1 |
| 157.5° | 419.6 | 430.9 | 453.2 | 488.8 | 499.7 |
| 160° | 426.7 | 436.8 | 453.2 | 482.8 | 491.5 |
| 162.5° | 433.8 | 441.5 | 454.4 | 478.1 | 484.4 |
| 165° | 441.4 | 447.2 | 454.7 | 473.8 | 475.3 |
| 167.5° | 449.4 | 452.2 | 456.1 | 468.8 | 470.0 |
| 170° | 451.7 | 454.6 | 456.1 | 466.4 | 466.4 |
| 172.5° | 454.1 | 455.8 | 456.1 | 464.1 | 464.1 |
| 175° | 457.6 | 459.1 | 456.1 | 462.0 | 460.6 |
| 177.5° | 458.8 | 458.8 | 455.3 | 459.9 | 457.6 |
| 180° | 457.6 | 457.6 | 457.6 | 457.6 | 457.6 |

(END OF REPORT)