

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: P563975

Luminaire Tested: **SQ4-PR1-050U-075D-835-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563975
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PR1-050U-075D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

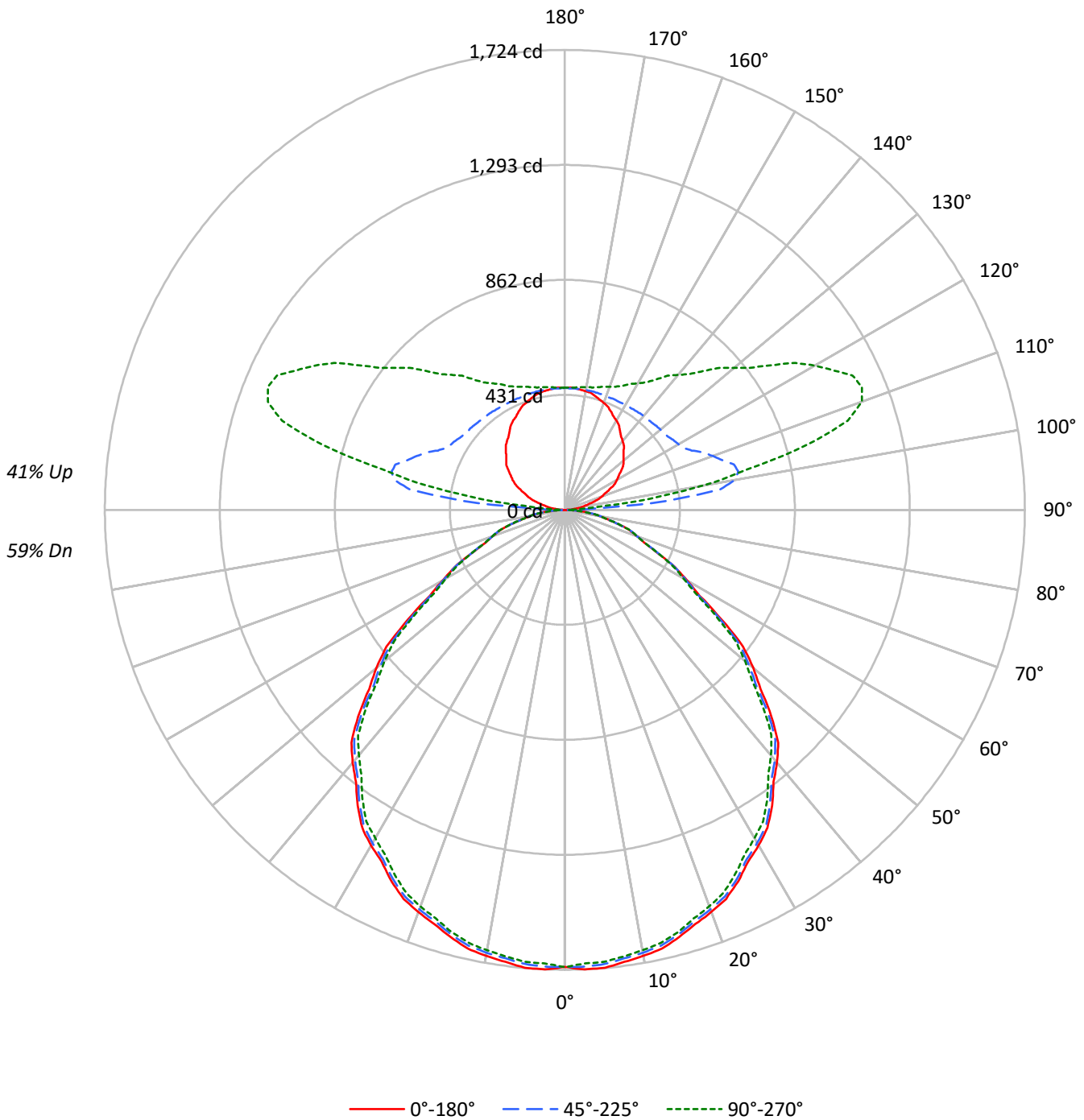
Lumens per Lamp: N/A
Luminaire Lumens: 7273.8 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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 | 89 | 93 | 90 | 86 | 83 | 78 | 76 | 73 | 67 | 65 | 64 | 57 | 56 | 55 | 50 |
| 2 | 91 | 84 | 78 | 73 | 85 | 79 | 73 | 69 | 69 | 65 | 61 | 59 | 56 | 54 | 51 | 49 | 47 | 43 |
| 3 | 84 | 74 | 67 | 61 | 78 | 70 | 63 | 58 | 61 | 56 | 52 | 53 | 49 | 46 | 45 | 43 | 40 | 37 |
| 4 | 77 | 66 | 58 | 52 | 71 | 62 | 55 | 49 | 54 | 49 | 44 | 47 | 43 | 40 | 41 | 38 | 35 | 32 |
| 5 | 71 | 59 | 51 | 45 | 66 | 55 | 48 | 43 | 49 | 43 | 39 | 43 | 38 | 35 | 37 | 33 | 31 | 28 |
| 6 | 65 | 53 | 45 | 39 | 61 | 50 | 43 | 37 | 44 | 38 | 34 | 39 | 34 | 30 | 33 | 30 | 27 | 24 |
| 7 | 60 | 48 | 40 | 34 | 56 | 45 | 38 | 33 | 40 | 34 | 30 | 35 | 30 | 27 | 31 | 27 | 24 | 22 |
| 8 | 56 | 44 | 36 | 30 | 52 | 41 | 34 | 29 | 37 | 31 | 27 | 32 | 28 | 24 | 28 | 24 | 22 | 19 |
| 9 | 52 | 40 | 32 | 27 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 22 | 26 | 22 | 20 | 17 |
| 10 | 49 | 37 | 29 | 25 | 46 | 35 | 28 | 24 | 31 | 25 | 22 | 27 | 23 | 20 | 24 | 20 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10541 | 10541 | 10541 |
| 5° | 10636 | 10554 | 10499 |
| 10° | 10602 | 10528 | 10473 |
| 15° | 10555 | 10490 | 10434 |
| 20° | 10502 | 10435 | 10358 |
| 25° | 10428 | 10358 | 10238 |
| 30° | 10316 | 10242 | 10096 |
| 35° | 10164 | 10075 | 9931 |
| 40° | 9932 | 9825 | 9647 |
| 45° | 9528 | 9361 | 9167 |
| 50° | 8814 | 8602 | 8432 |
| 55° | 7693 | 7518 | 7361 |
| 60° | 6483 | 6428 | 6301 |
| 65° | 5608 | 5628 | 5586 |
| 70° | 5151 | 5176 | 5176 |
| 75° | 4945 | 4945 | 4981 |
| 80° | 4654 | 4704 | 4654 |
| 85° | 3747 | 4164 | 4164 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 162.1 | 2.2 |
| 10°-20° | 463.7 | 6.4 |
| 20°-30° | 699.4 | 9.6 |
| 30°-40° | 833.3 | 11.5 |
| 40°-50° | 821.6 | 11.3 |
| 50°-60° | 627.9 | 8.6 |
| 60°-70° | 388.6 | 5.3 |
| 70°-80° | 220.7 | 3.0 |
| 80°-90° | 68.9 | 0.9 |
| 90°-100° | 219.7 | 3.0 |
| 100°-110° | 596.8 | 8.2 |
| 110°-120° | 613.6 | 8.4 |
| 120°-130° | 490.6 | 6.7 |
| 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° | 1325.1 | 18.2 |
| 0°-40° | 2158.4 | 29.7 |
| 0°-60° | 3607.8 | 49.6 |
| 0°-90° | 4285.9 | 58.9 |
| 90°-120° | 1430.0 | 19.7 |
| 90°-150° | 2601.6 | 35.8 |
| 90°-180° | 2988.0 | 41.1 |
| 0°-180° | 7273.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1714 | 1714 | 1714 | 1714 | 1714 | |
| 5° | 1723 | 1704 | 1709 | 1703 | 1700 | 163 |
| 15° | 1658 | 1640 | 1647 | 1641 | 1638 | 468 |
| 25° | 1537 | 1518 | 1526 | 1510 | 1509 | 707 |
| 35° | 1354 | 1338 | 1342 | 1324 | 1323 | 845 |
| 45° | 1095 | 1081 | 1076 | 1057 | 1054 | 839 |
| 55° | 717 | 706 | 701 | 689 | 686 | 643 |
| 65° | 385 | 382 | 387 | 384 | 384 | 390 |
| 75° | 208 | 208 | 208 | 210 | 210 | 220 |
| 85° | 53 | 56 | 59 | 59 | 59 | 62 |
| 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: P563975

CATALOG NUMBER: SQ4-PR1-050U-075D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1713.7 | 1713.7 | 1713.7 | 1713.7 | 1713.7 |
| 2.5° | 1724.4 | 1709.4 | 1713.7 | 1710.0 | 1701.9 |
| 5° | 1722.6 | 1703.8 | 1709.3 | 1703.3 | 1700.5 |
| 7.5° | 1709.3 | 1690.8 | 1696.3 | 1690.4 | 1688.6 |
| 10° | 1697.5 | 1680.2 | 1685.7 | 1679.7 | 1676.8 |
| 12.5° | 1684.5 | 1666.0 | 1672.7 | 1665.6 | 1662.7 |
| 15° | 1657.6 | 1640.3 | 1647.3 | 1641.3 | 1638.5 |
| 17.5° | 1628.1 | 1609.7 | 1616.6 | 1609.7 | 1606.0 |
| 20° | 1604.5 | 1587.2 | 1594.2 | 1583.8 | 1582.4 |
| 22.5° | 1578.5 | 1561.2 | 1568.2 | 1554.3 | 1554.0 |
| 25° | 1536.6 | 1517.8 | 1526.3 | 1510.0 | 1508.6 |
| 27.5° | 1486.7 | 1469.4 | 1476.4 | 1459.8 | 1458.1 |
| 30° | 1452.5 | 1435.2 | 1442.1 | 1424.4 | 1421.5 |
| 32.5° | 1413.5 | 1397.3 | 1403.2 | 1385.4 | 1383.7 |
| 35° | 1353.6 | 1337.7 | 1341.8 | 1324.0 | 1322.6 |
| 37.5° | 1285.4 | 1270.9 | 1273.3 | 1253.8 | 1252.3 |
| 40° | 1237.0 | 1222.5 | 1223.7 | 1203.0 | 1201.5 |
| 42.5° | 1183.8 | 1169.4 | 1168.2 | 1147.5 | 1146.0 |
| 45° | 1095.3 | 1080.8 | 1076.1 | 1056.8 | 1053.9 |
| 47.5° | 994.3 | 979.9 | 971.0 | 955.3 | 953.3 |
| 50° | 921.1 | 906.6 | 898.9 | 885.6 | 881.2 |
| 52.5° | 842.0 | 827.5 | 821.0 | 808.8 | 804.5 |
| 55° | 717.4 | 705.8 | 701.1 | 689.3 | 686.4 |
| 57.5° | 599.0 | 591.2 | 589.8 | 578.3 | 577.2 |
| 60° | 527.0 | 522.6 | 522.5 | 512.2 | 512.2 |
| 62.5° | 465.6 | 462.4 | 464.7 | 457.9 | 456.7 |
| 65° | 385.3 | 382.4 | 386.7 | 383.8 | 383.8 |
| 67.5° | 321.8 | 321.8 | 324.4 | 323.3 | 323.3 |
| 70° | 286.4 | 286.4 | 287.8 | 287.8 | 287.8 |
| 72.5° | 254.5 | 253.3 | 257.1 | 257.1 | 256.0 |
| 75° | 208.1 | 208.1 | 208.1 | 209.6 | 209.6 |
| 77.5° | 162.1 | 162.4 | 163.6 | 163.2 | 162.1 |
| 80° | 131.4 | 132.8 | 132.8 | 131.4 | 131.4 |
| 82.5° | 100.7 | 102.1 | 102.1 | 101.8 | 100.7 |
| 85° | 53.1 | 56.0 | 59.0 | 59.0 | 59.0 |
| 87.5° | 15.6 | 21.1 | 25.7 | 26.2 | 25.1 |
| 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)