

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: P562377

Luminaire Tested: **SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (3500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562377
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-92765-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

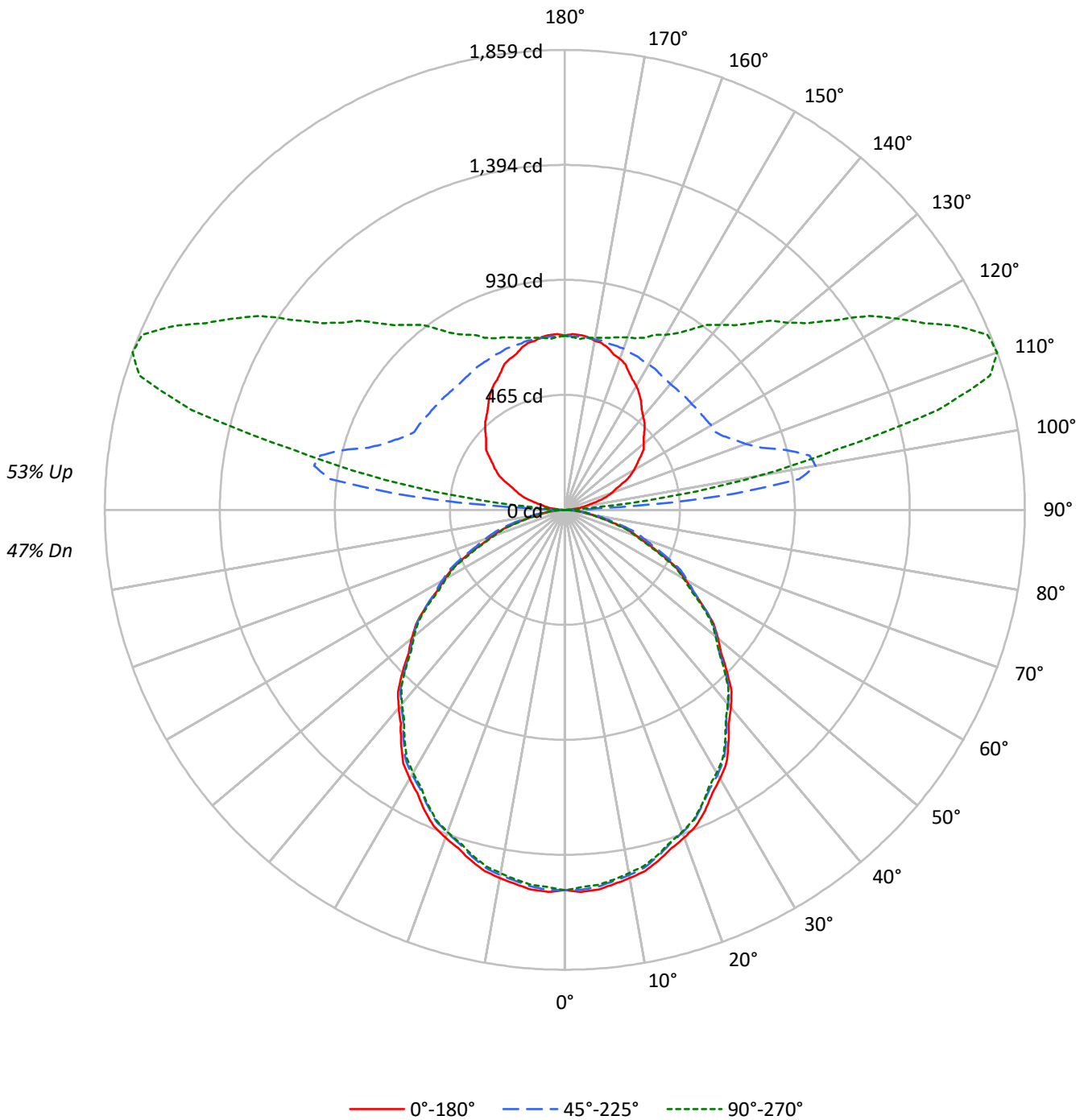
Lumens per Lamp: N/A
Luminaire Lumens: 8283.6 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 74.8
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



TEST NUMBER: P562377
CATALOG NUMBER: SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P562377

CATALOG NUMBER: SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (3500K)

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 | 106 | 106 | 106 | 106 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 67 | 67 | 67 | 54 | 54 | 54 | 47 |
| 1 | 97 | 93 | 89 | 86 | 89 | 86 | 82 | 79 | 72 | 70 | 67 | 59 | 58 | 56 | 48 | 46 | 45 | 40 |
| 2 | 89 | 81 | 75 | 70 | 81 | 75 | 70 | 65 | 63 | 59 | 56 | 52 | 49 | 47 | 42 | 40 | 38 | 34 |
| 3 | 81 | 71 | 64 | 58 | 74 | 66 | 60 | 55 | 56 | 51 | 47 | 46 | 43 | 40 | 37 | 35 | 33 | 29 |
| 4 | 74 | 63 | 55 | 49 | 68 | 58 | 52 | 46 | 49 | 44 | 40 | 41 | 37 | 34 | 33 | 30 | 28 | 25 |
| 5 | 68 | 56 | 48 | 42 | 62 | 52 | 45 | 40 | 44 | 39 | 35 | 37 | 33 | 30 | 30 | 27 | 25 | 21 |
| 6 | 63 | 51 | 42 | 37 | 57 | 47 | 40 | 35 | 40 | 34 | 30 | 33 | 29 | 26 | 27 | 24 | 22 | 19 |
| 7 | 58 | 46 | 38 | 32 | 53 | 42 | 35 | 30 | 36 | 31 | 27 | 30 | 26 | 23 | 25 | 22 | 19 | 17 |
| 8 | 54 | 41 | 34 | 28 | 49 | 38 | 32 | 27 | 33 | 27 | 24 | 28 | 23 | 20 | 23 | 20 | 17 | 15 |
| 9 | 50 | 38 | 30 | 25 | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 21 | 18 | 16 | 13 |
| 10 | 47 | 35 | 27 | 23 | 43 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 19 | 17 | 20 | 16 | 14 | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14183 | 14183 | 14183 |
| 5° | 14275 | 14162 | 14099 |
| 10° | 14161 | 14046 | 13969 |
| 15° | 14010 | 13855 | 13803 |
| 20° | 13843 | 13630 | 13603 |
| 25° | 13649 | 13401 | 13360 |
| 30° | 13361 | 13159 | 13072 |
| 35° | 12982 | 12798 | 12722 |
| 40° | 12576 | 12381 | 12332 |
| 45° | 12088 | 11928 | 11875 |
| 50° | 11586 | 11488 | 11411 |
| 55° | 11046 | 11046 | 10871 |
| 60° | 10372 | 10571 | 10197 |
| 65° | 9490 | 9964 | 9254 |
| 70° | 8365 | 9169 | 8147 |
| 75° | 7144 | 8206 | 6951 |
| 80° | 5542 | 6907 | 5611 |
| 85° | 3589 | 5304 | 4732 |



TEST NUMBER: P562377

CATALOG NUMBER: SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (3500K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 144.8 | 1.7 |
| 10°-20° | 408.7 | 4.9 |
| 20°-30° | 606.2 | 7.3 |
| 30°-40° | 709.3 | 8.6 |
| 40°-50° | 706.1 | 8.5 |
| 50°-60° | 609.8 | 7.4 |
| 60°-70° | 438.9 | 5.3 |
| 70°-80° | 230.2 | 2.8 |
| 80°-90° | 57.1 | 0.7 |
| 90°-100° | 320.7 | 3.9 |
| 100°-110° | 912.7 | 11.0 |
| 110°-120° | 874.4 | 10.6 |
| 120°-130° | 692.1 | 8.4 |
| 130°-140° | 555.5 | 6.7 |
| 140°-150° | 434.9 | 5.3 |
| 150°-160° | 318.2 | 3.8 |
| 160°-170° | 197.1 | 2.4 |
| 170°-180° | 66.9 | 0.8 |
| 0°-30° | 1159.6 | 14.0 |
| 0°-40° | 1868.9 | 22.6 |
| 0°-60° | 3184.8 | 38.4 |
| 0°-90° | 3911.0 | 47.2 |
| 90°-120° | 2107.9 | 25.4 |
| 90°-150° | 3790.4 | 45.8 |
| 90°-180° | 4373.0 | 52.8 |
| 0°-180° | 8283.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1537 | 1537 | 1537 | 1537 | 1537 | |
| 5° | 1541 | 1524 | 1529 | 1525 | 1522 | 146 |
| 15° | 1467 | 1448 | 1450 | 1448 | 1445 | 413 |
| 25° | 1341 | 1318 | 1316 | 1308 | 1312 | 617 |
| 35° | 1153 | 1137 | 1136 | 1126 | 1130 | 721 |
| 45° | 926 | 918 | 914 | 912 | 910 | 715 |
| 55° | 687 | 685 | 687 | 677 | 676 | 613 |
| 65° | 435 | 448 | 456 | 438 | 424 | 431 |
| 75° | 200 | 219 | 230 | 215 | 195 | 215 |
| 85° | 34 | 44 | 50 | 47 | 45 | 45 |
| 90° | 0 | 0 | 0 | 0 | 0 | 3 |
| 95° | 35 | 138 | 621 | 215 | 132 | 40 |
| 105° | 142 | 215 | 930 | 1643 | 1562 | 150 |
| 115° | 264 | 319 | 705 | 1494 | 1754 | 260 |
| 125° | 372 | 413 | 673 | 1117 | 1336 | 333 |
| 135° | 455 | 493 | 665 | 944 | 1067 | 351 |
| 145° | 537 | 564 | 670 | 817 | 890 | 335 |
| 155° | 613 | 627 | 686 | 738 | 768 | 283 |
| 165° | 677 | 680 | 695 | 710 | 720 | 190 |
| 175° | 709 | 705 | 703 | 698 | 693 | 67 |
| 180° | 704 | 704 | 704 | 704 | 704 | |



TEST NUMBER: P562377

CATALOG NUMBER: SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1537.2 | 1537.2 | 1537.2 | 1537.2 | 1537.2 |
| 2.5° | 1545.9 | 1533.1 | 1537.2 | 1533.8 | 1526.4 |
| 5° | 1541.3 | 1524.0 | 1529.1 | 1524.9 | 1522.3 |
| 7.5° | 1525.5 | 1509.7 | 1513.4 | 1509.0 | 1507.4 |
| 10° | 1511.5 | 1495.6 | 1499.3 | 1493.8 | 1491.1 |
| 12.5° | 1495.2 | 1478.3 | 1481.9 | 1476.5 | 1474.9 |
| 15° | 1466.8 | 1448.2 | 1450.5 | 1447.7 | 1445.1 |
| 17.5° | 1433.7 | 1414.9 | 1415.3 | 1411.0 | 1410.4 |
| 20° | 1409.9 | 1390.0 | 1388.2 | 1382.9 | 1385.5 |
| 22.5° | 1383.9 | 1363.0 | 1361.1 | 1353.6 | 1357.3 |
| 25° | 1340.8 | 1318.3 | 1316.4 | 1308.4 | 1312.4 |
| 27.5° | 1291.0 | 1268.7 | 1268.8 | 1257.5 | 1261.7 |
| 30° | 1254.1 | 1232.9 | 1235.2 | 1221.7 | 1227.0 |
| 32.5° | 1215.1 | 1196.1 | 1197.2 | 1183.8 | 1189.1 |
| 35° | 1152.6 | 1136.7 | 1136.3 | 1125.6 | 1129.5 |
| 37.5° | 1088.6 | 1074.6 | 1072.4 | 1066.2 | 1067.2 |
| 40° | 1044.2 | 1032.3 | 1028.0 | 1023.9 | 1023.9 |
| 42.5° | 997.6 | 986.8 | 982.4 | 979.4 | 978.4 |
| 45° | 926.4 | 918.4 | 914.2 | 911.5 | 910.1 |
| 47.5° | 856.0 | 848.5 | 844.8 | 842.9 | 841.6 |
| 50° | 807.2 | 801.9 | 800.4 | 796.3 | 795.0 |
| 52.5° | 758.4 | 755.3 | 753.8 | 748.7 | 747.3 |
| 55° | 686.7 | 685.3 | 686.7 | 677.1 | 675.8 |
| 57.5° | 611.9 | 614.0 | 618.4 | 605.6 | 602.4 |
| 60° | 562.1 | 567.4 | 572.9 | 557.9 | 552.6 |
| 62.5° | 511.1 | 519.6 | 527.4 | 510.2 | 502.7 |
| 65° | 434.7 | 448.0 | 456.4 | 438.5 | 423.9 |
| 67.5° | 361.1 | 377.5 | 387.6 | 368.3 | 351.9 |
| 70° | 310.1 | 328.7 | 339.9 | 320.6 | 302.0 |
| 72.5° | 265.7 | 286.4 | 295.5 | 277.2 | 258.7 |
| 75° | 200.4 | 219.0 | 230.2 | 214.9 | 195.0 |
| 77.5° | 142.2 | 159.7 | 169.0 | 155.6 | 139.2 |
| 80° | 104.3 | 122.8 | 130.0 | 118.9 | 105.6 |
| 82.5° | 73.9 | 89.3 | 94.3 | 87.6 | 78.6 |
| 85° | 33.9 | 44.5 | 50.1 | 47.3 | 44.7 |
| 87.5° | 8.7 | 16.1 | 20.6 | 20.6 | 21.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 10.7 | 56.8 | 131.7 | 38.3 | 28.9 |
| 95° | 34.8 | 138.2 | 620.9 | 214.9 | 132.5 |
| 97.5° | 64.0 | 161.8 | 956.3 | 684.3 | 468.9 |
| 100° | 84.3 | 175.9 | 1029.1 | 1042.4 | 802.9 |
| 102.5° | 106.8 | 191.1 | 1013.1 | 1334.3 | 1125.2 |
| 105° | 141.9 | 215.1 | 930.1 | 1642.9 | 1561.7 |
| 107.5° | 177.5 | 243.1 | 833.2 | 1729.9 | 1802.1 |
| 110° | 202.1 | 263.6 | 777.5 | 1696.6 | 1858.8 |



TEST NUMBER: P562377

CATALOG NUMBER: SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 225.6 | 284.0 | 740.1 | 1617.8 | 1849.2 |
| 115° | 263.6 | 318.6 | 705.3 | 1494.1 | 1754.4 |
| 117.5° | 297.1 | 348.6 | 684.6 | 1358.7 | 1634.5 |
| 120° | 323.9 | 367.0 | 682.5 | 1281.4 | 1545.7 |
| 122.5° | 345.3 | 388.4 | 677.2 | 1213.5 | 1459.0 |
| 125° | 372.0 | 412.6 | 673.1 | 1117.1 | 1335.6 |
| 127.5° | 401.2 | 439.2 | 671.0 | 1059.4 | 1239.5 |
| 130° | 416.2 | 454.1 | 667.8 | 1019.3 | 1176.3 |
| 132.5° | 432.3 | 469.2 | 667.8 | 988.0 | 1132.4 |
| 135° | 455.0 | 493.0 | 665.1 | 943.6 | 1066.6 |
| 137.5° | 476.4 | 513.3 | 664.8 | 906.0 | 1012.3 |
| 140° | 492.5 | 530.4 | 663.8 | 874.9 | 976.9 |
| 142.5° | 510.7 | 542.3 | 667.0 | 850.0 | 941.6 |
| 145° | 536.6 | 564.1 | 670.5 | 816.7 | 889.9 |
| 147.5° | 558.9 | 585.5 | 676.4 | 783.0 | 846.3 |
| 150° | 578.1 | 596.4 | 678.5 | 771.8 | 816.3 |
| 152.5° | 593.1 | 612.5 | 680.6 | 756.8 | 798.1 |
| 155° | 612.9 | 627.3 | 686.5 | 738.1 | 768.2 |
| 157.5° | 637.5 | 646.2 | 687.9 | 729.6 | 751.0 |
| 160° | 650.4 | 656.9 | 693.2 | 723.1 | 741.4 |
| 162.5° | 657.9 | 665.5 | 694.3 | 717.6 | 731.8 |
| 165° | 677.2 | 679.8 | 694.6 | 709.5 | 720.0 |
| 167.5° | 690.3 | 687.9 | 700.7 | 707.5 | 711.7 |
| 170° | 694.6 | 693.2 | 698.6 | 700.0 | 705.3 |
| 172.5° | 704.2 | 699.7 | 701.8 | 697.9 | 702.0 |
| 175° | 709.3 | 705.3 | 702.6 | 698.4 | 693.2 |
| 177.5° | 711.4 | 705.1 | 701.8 | 697.5 | 698.6 |
| 180° | 703.9 | 703.9 | 703.9 | 703.9 | 703.9 |

(END OF REPORT)