

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

Brand: CORELITE

Report Number: P521839

Luminaire Tested: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521839
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7008.3 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

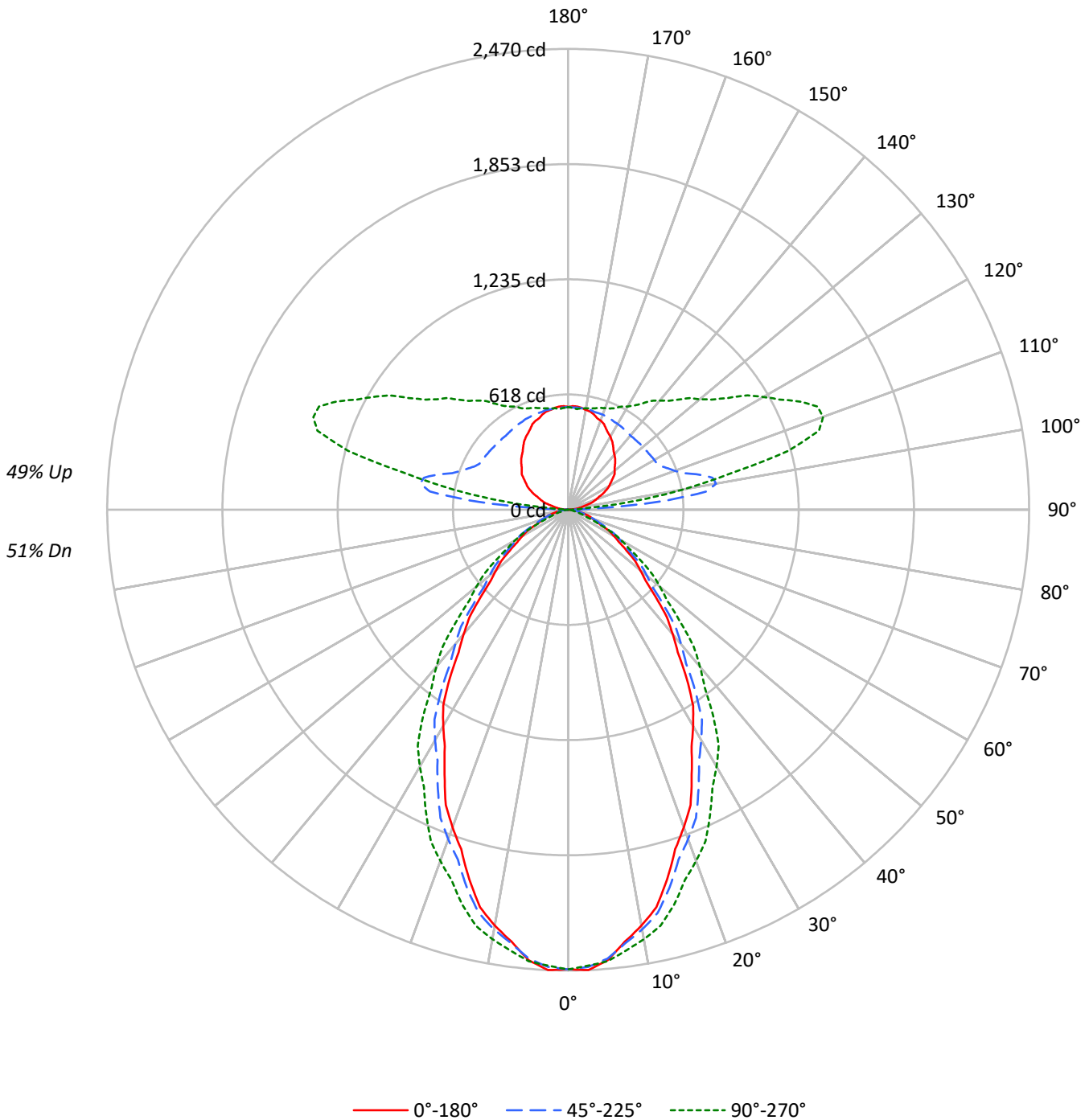
Input Watts (W): 65.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521839

CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P521839

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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 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 70 | 70 | 70 | 57 | 57 | 57 | 51 | | | | 51 |
| 1 | 99 | 95 | 92 | 89 | 92 | 88 | 85 | 83 | 75 | 73 | 71 | 63 | 62 | 61 | 52 | 51 | 51 | 45 | | | | 45 |
| 2 | 91 | 85 | 79 | 75 | 84 | 79 | 74 | 70 | 67 | 64 | 61 | 57 | 55 | 53 | 48 | 46 | 45 | 40 | | | | 40 |
| 3 | 84 | 76 | 69 | 64 | 78 | 70 | 65 | 60 | 61 | 56 | 53 | 52 | 49 | 46 | 43 | 41 | 39 | 35 | | | | 35 |
| 4 | 78 | 68 | 60 | 55 | 72 | 63 | 57 | 52 | 55 | 50 | 46 | 47 | 43 | 41 | 40 | 37 | 35 | 32 | | | | 32 |
| 5 | 72 | 61 | 54 | 48 | 66 | 57 | 51 | 46 | 50 | 45 | 41 | 43 | 39 | 36 | 36 | 34 | 31 | 28 | | | | 28 |
| 6 | 67 | 55 | 48 | 42 | 62 | 52 | 45 | 40 | 45 | 40 | 36 | 39 | 35 | 32 | 33 | 31 | 28 | 26 | | | | 26 |
| 7 | 62 | 50 | 43 | 38 | 57 | 47 | 41 | 36 | 42 | 36 | 33 | 36 | 32 | 29 | 31 | 28 | 26 | 23 | | | | 23 |
| 8 | 58 | 46 | 39 | 34 | 54 | 43 | 37 | 32 | 38 | 33 | 29 | 33 | 29 | 26 | 29 | 26 | 23 | 21 | | | | 21 |
| 9 | 54 | 42 | 35 | 31 | 50 | 40 | 34 | 29 | 35 | 30 | 27 | 31 | 27 | 24 | 27 | 24 | 22 | 20 | | | | 20 |
| 10 | 51 | 39 | 32 | 28 | 47 | 37 | 31 | 27 | 33 | 28 | 24 | 29 | 25 | 22 | 25 | 22 | 20 | 18 | | | | 18 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22731 | 22731 | 22731 |
| 5° | 22447 | 22367 | 22497 |
| 10° | 21208 | 21401 | 21896 |
| 15° | 19578 | 20032 | 20931 |
| 20° | 17779 | 18448 | 19668 |
| 25° | 15946 | 16815 | 18324 |
| 30° | 14258 | 15191 | 16929 |
| 35° | 12468 | 13369 | 15281 |
| 40° | 10494 | 11327 | 13228 |
| 45° | 8661 | 9409 | 11045 |
| 50° | 7231 | 7883 | 9202 |
| 55° | 6138 | 6764 | 7599 |
| 60° | 5246 | 5864 | 6063 |
| 65° | 4176 | 4932 | 3919 |
| 70° | 3704 | 3849 | 2390 |
| 75° | 3429 | 3123 | 1465 |
| 80° | 3161 | 2874 | 1265 |
| 85° | 2858 | 2636 | 1027 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11045 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 226.0 | 3.2 |
| 10°-20° | 587.8 | 8.4 |
| 20°-30° | 761.4 | 10.9 |
| 30°-40° | 745.6 | 10.6 |
| 40°-50° | 570.7 | 8.1 |
| 50°-60° | 380.3 | 5.4 |
| 60°-70° | 207.5 | 3.0 |
| 70°-80° | 86.5 | 1.2 |
| 80°-90° | 24.5 | 0.3 |
| 90°-100° | 250.8 | 3.6 |
| 100°-110° | 713.5 | 10.2 |
| 110°-120° | 683.6 | 9.8 |
| 120°-130° | 541.0 | 7.7 |
| 130°-140° | 434.3 | 6.2 |
| 140°-150° | 340.0 | 4.9 |
| 150°-160° | 248.8 | 3.5 |
| 160°-170° | 154.1 | 2.2 |
| 170°-180° | 52.3 | 0.7 |
| 0°-30° | 1575.1 | 22.5 |
| 0°-40° | 2320.7 | 33.1 |
| 0°-60° | 3271.6 | 46.7 |
| 0°-90° | 3590.1 | 51.2 |
| 90°-120° | 1647.8 | 23.5 |
| 90°-150° | 2963.1 | 42.3 |
| 90°-180° | 3418.0 | 48.8 |
| 0°-180° | 7008.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2464 | 2464 | 2464 | 2464 | 2464 | |
| 5° | 2424 | 2399 | 2415 | 2421 | 2429 | 225 |
| 15° | 2050 | 2042 | 2097 | 2154 | 2191 | 572 |
| 25° | 1566 | 1571 | 1652 | 1724 | 1800 | 720 |
| 35° | 1107 | 1112 | 1187 | 1267 | 1357 | 688 |
| 45° | 664 | 676 | 721 | 776 | 846 | 518 |
| 55° | 382 | 398 | 420 | 436 | 472 | 346 |
| 65° | 191 | 207 | 226 | 197 | 180 | 199 |
| 75° | 96 | 96 | 88 | 60 | 41 | 103 |
| 85° | 27 | 27 | 25 | 16 | 10 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 27 | 108 | 485 | 168 | 104 | 31 |
| 105° | 111 | 168 | 727 | 1284 | 1221 | 117 |
| 115° | 206 | 249 | 551 | 1168 | 1372 | 203 |
| 125° | 291 | 322 | 526 | 873 | 1044 | 260 |
| 135° | 356 | 385 | 520 | 738 | 834 | 274 |
| 145° | 420 | 441 | 524 | 638 | 696 | 262 |
| 155° | 479 | 490 | 537 | 577 | 600 | 221 |
| 165° | 529 | 531 | 543 | 555 | 563 | 149 |
| 175° | 554 | 551 | 549 | 546 | 542 | 53 |
| 180° | 550 | 550 | 550 | 550 | 550 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2463.7 | 2463.7 | 2463.7 | 2463.7 | 2463.7 |
| 2.5° | 2469.8 | 2447.8 | 2453.3 | 2453.2 | 2446.4 |
| 5° | 2423.7 | 2399.4 | 2415.1 | 2420.7 | 2429.1 |
| 7.5° | 2333.8 | 2315.4 | 2343.9 | 2365.1 | 2382.2 |
| 10° | 2263.7 | 2247.9 | 2284.3 | 2315.0 | 2337.2 |
| 12.5° | 2182.4 | 2169.1 | 2214.2 | 2255.5 | 2284.5 |
| 15° | 2049.7 | 2042.3 | 2097.2 | 2154.3 | 2191.3 |
| 17.5° | 1907.6 | 1904.0 | 1967.1 | 2033.7 | 2081.0 |
| 20° | 1810.8 | 1809.7 | 1878.9 | 1948.2 | 2003.2 |
| 22.5° | 1713.0 | 1715.4 | 1788.1 | 1860.2 | 1922.8 |
| 25° | 1566.4 | 1570.7 | 1651.8 | 1723.8 | 1800.0 |
| 27.5° | 1430.9 | 1432.8 | 1516.7 | 1592.7 | 1673.9 |
| 30° | 1338.3 | 1343.6 | 1425.9 | 1504.6 | 1589.1 |
| 32.5° | 1245.8 | 1251.9 | 1332.5 | 1413.8 | 1500.1 |
| 35° | 1107.0 | 1112.3 | 1187.0 | 1266.9 | 1356.7 |
| 37.5° | 963.9 | 971.1 | 1037.4 | 1112.9 | 1201.3 |
| 40° | 871.3 | 881.9 | 940.5 | 1011.7 | 1098.3 |
| 42.5° | 782.2 | 795.4 | 849.7 | 917.2 | 995.4 |
| 45° | 663.8 | 676.4 | 721.1 | 775.6 | 846.5 |
| 47.5° | 561.7 | 576.3 | 610.6 | 657.6 | 718.0 |
| 50° | 503.8 | 517.5 | 549.2 | 584.0 | 641.1 |
| 52.5° | 452.7 | 466.5 | 494.7 | 521.5 | 570.1 |
| 55° | 381.6 | 397.5 | 420.5 | 436.5 | 472.4 |
| 57.5° | 323.2 | 338.5 | 356.7 | 363.9 | 385.7 |
| 60° | 284.3 | 301.2 | 317.8 | 317.0 | 328.6 |
| 62.5° | 248.9 | 263.2 | 279.8 | 268.3 | 269.0 |
| 65° | 191.3 | 207.2 | 225.9 | 197.4 | 179.5 |
| 67.5° | 154.6 | 158.0 | 177.3 | 137.7 | 116.3 |
| 70° | 137.3 | 137.3 | 142.7 | 106.6 | 88.6 |
| 72.5° | 120.9 | 120.9 | 115.9 | 86.7 | 67.9 |
| 75° | 96.2 | 96.2 | 87.6 | 60.1 | 41.1 |
| 77.5° | 74.2 | 73.3 | 67.0 | 44.8 | 29.8 |
| 80° | 59.5 | 59.5 | 54.1 | 35.4 | 23.8 |
| 82.5° | 46.5 | 46.5 | 41.9 | 27.7 | 17.7 |
| 85° | 27.0 | 27.0 | 24.9 | 16.1 | 9.7 |
| 87.5° | 9.5 | 9.5 | 8.6 | 5.2 | 4.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 8.4 | 44.4 | 102.9 | 30.0 | 22.6 |
| 95° | 27.2 | 108.0 | 485.4 | 168.0 | 103.6 |
| 97.5° | 50.0 | 126.5 | 747.6 | 535.0 | 366.6 |
| 100° | 65.9 | 137.5 | 804.5 | 814.9 | 627.7 |
| 102.5° | 83.5 | 149.4 | 792.0 | 1043.1 | 879.6 |
| 105° | 110.9 | 168.2 | 727.1 | 1284.3 | 1220.9 |
| 107.5° | 138.7 | 190.1 | 651.3 | 1352.3 | 1408.8 |
| 110° | 158.0 | 206.0 | 607.8 | 1326.3 | 1453.1 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 176.4 | 222.0 | 578.5 | 1264.7 | 1445.6 |
| 115° | 206.1 | 249.1 | 551.3 | 1168.0 | 1371.5 |
| 117.5° | 232.2 | 272.6 | 535.2 | 1062.2 | 1277.8 |
| 120° | 253.2 | 286.9 | 533.5 | 1001.7 | 1208.3 |
| 122.5° | 269.9 | 303.7 | 529.4 | 948.6 | 1140.5 |
| 125° | 290.8 | 322.5 | 526.2 | 873.2 | 1044.1 |
| 127.5° | 313.6 | 343.3 | 524.5 | 828.2 | 969.0 |
| 130° | 325.4 | 355.0 | 522.0 | 796.8 | 919.6 |
| 132.5° | 337.9 | 366.8 | 522.0 | 772.3 | 885.3 |
| 135° | 355.7 | 385.4 | 519.9 | 737.6 | 833.8 |
| 137.5° | 372.4 | 401.3 | 519.7 | 708.3 | 791.3 |
| 140° | 385.0 | 414.7 | 518.9 | 683.9 | 763.7 |
| 142.5° | 399.2 | 424.0 | 521.4 | 664.5 | 736.1 |
| 145° | 419.5 | 441.0 | 524.1 | 638.4 | 695.7 |
| 147.5° | 436.9 | 457.7 | 528.7 | 612.1 | 661.6 |
| 150° | 451.9 | 466.3 | 530.4 | 603.4 | 638.2 |
| 152.5° | 463.7 | 478.8 | 532.1 | 591.6 | 623.9 |
| 155° | 479.1 | 490.4 | 536.7 | 577.0 | 600.5 |
| 157.5° | 498.4 | 505.1 | 537.7 | 570.3 | 587.1 |
| 160° | 508.4 | 513.6 | 541.9 | 565.3 | 579.6 |
| 162.5° | 514.3 | 520.2 | 542.8 | 561.0 | 572.0 |
| 165° | 529.4 | 531.4 | 543.0 | 554.7 | 562.8 |
| 167.5° | 539.6 | 537.8 | 547.8 | 553.1 | 556.4 |
| 170° | 543.0 | 541.9 | 546.1 | 547.2 | 551.3 |
| 172.5° | 550.5 | 547.0 | 548.6 | 545.5 | 548.8 |
| 175° | 554.5 | 551.4 | 549.2 | 546.0 | 541.9 |
| 177.5° | 556.1 | 551.2 | 548.6 | 545.3 | 546.1 |
| 180° | 550.3 | 550.3 | 550.3 | 550.3 | 550.3 |

(END OF REPORT)