

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521838

Luminaire Tested: **SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521838
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

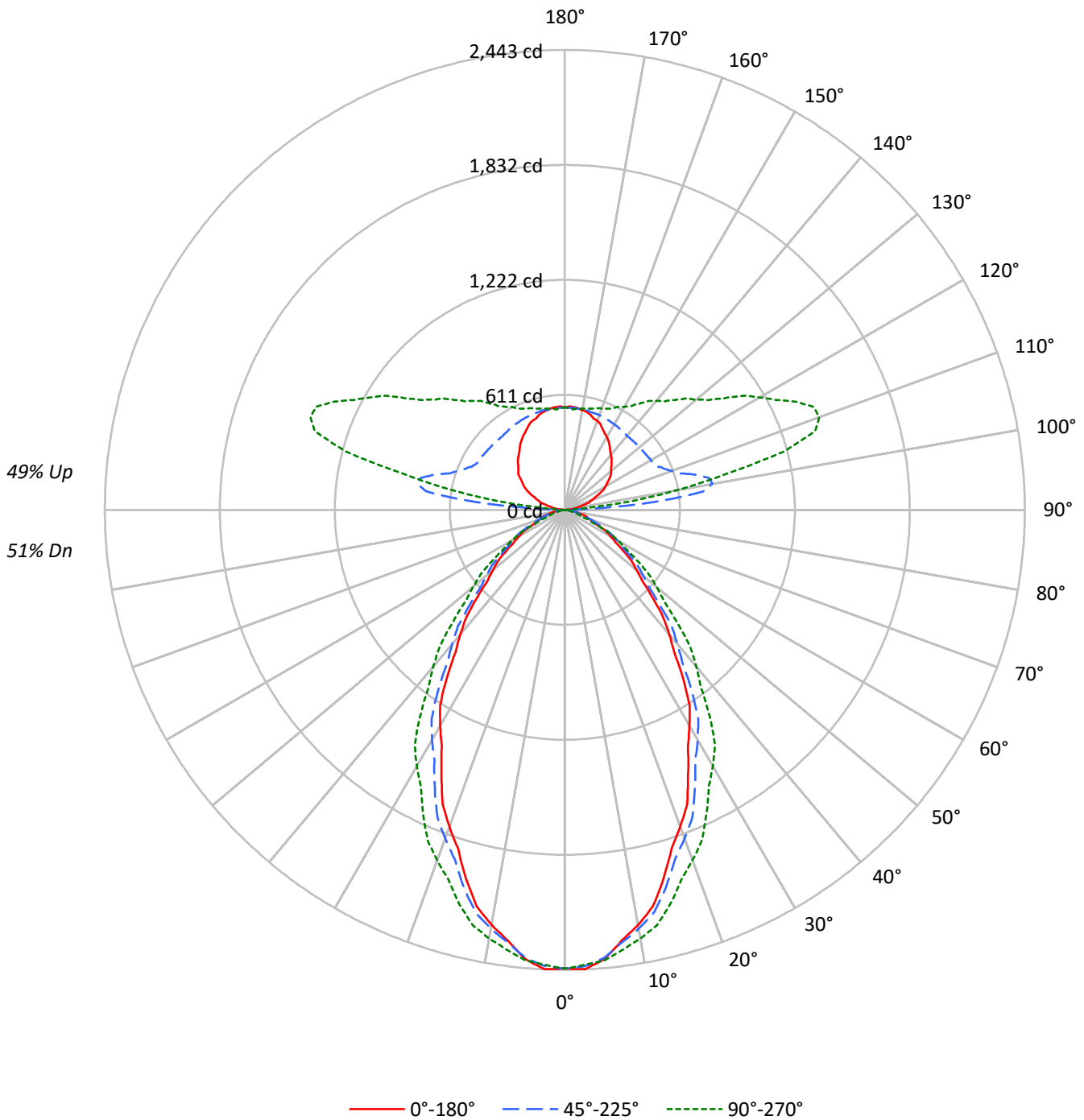
Lumens per Lamp: N/A
Luminaire Lumens: 6931.6 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 66
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: P521838

CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521838

CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|--|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | | | | |
| 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 | | | | | | | |
| 1 | 99 | 95 | 92 | 89 | 92 | 88 | 85 | 83 | 75 | 73 | 71 | 63 | 62 | 61 | 52 | 51 | 51 | 45 | | | | | | | |
| 2 | 91 | 85 | 79 | 75 | 84 | 79 | 74 | 70 | 67 | 64 | 61 | 57 | 55 | 53 | 48 | 46 | 45 | 40 | | | | | | | |
| 3 | 84 | 76 | 69 | 64 | 78 | 70 | 65 | 60 | 61 | 56 | 53 | 52 | 49 | 46 | 43 | 41 | 39 | 35 | | | | | | | |
| 4 | 78 | 68 | 60 | 55 | 72 | 63 | 57 | 52 | 55 | 50 | 46 | 47 | 43 | 41 | 40 | 37 | 35 | 32 | | | | | | | |
| 5 | 72 | 61 | 54 | 48 | 66 | 57 | 51 | 46 | 50 | 45 | 41 | 43 | 39 | 36 | 36 | 34 | 31 | 28 | | | | | | | |
| 6 | 67 | 55 | 48 | 42 | 62 | 52 | 45 | 40 | 45 | 40 | 36 | 39 | 35 | 32 | 33 | 31 | 28 | 26 | | | | | | | |
| 7 | 62 | 50 | 43 | 38 | 57 | 47 | 41 | 36 | 42 | 36 | 33 | 36 | 32 | 29 | 31 | 28 | 26 | 23 | | | | | | | |
| 8 | 58 | 46 | 39 | 34 | 54 | 43 | 37 | 32 | 38 | 33 | 29 | 33 | 29 | 26 | 29 | 26 | 23 | 21 | | | | | | | |
| 9 | 54 | 42 | 35 | 31 | 50 | 40 | 34 | 29 | 35 | 30 | 27 | 31 | 27 | 24 | 27 | 24 | 22 | 20 | | | | | | | |
| 10 | 51 | 39 | 32 | 28 | 47 | 37 | 31 | 27 | 33 | 28 | 24 | 29 | 25 | 22 | 25 | 22 | 20 | 18 | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22482 | 22482 | 22482 |
| 5° | 22202 | 22122 | 22251 |
| 10° | 20975 | 21166 | 21657 |
| 15° | 19363 | 19813 | 20701 |
| 20° | 17584 | 18245 | 19453 |
| 25° | 15772 | 16632 | 18123 |
| 30° | 14102 | 15025 | 16745 |
| 35° | 12332 | 13223 | 15114 |
| 40° | 10379 | 11203 | 13083 |
| 45° | 8566 | 9306 | 10924 |
| 50° | 7152 | 7797 | 9100 |
| 55° | 6071 | 6690 | 7515 |
| 60° | 5189 | 5801 | 5997 |
| 65° | 4133 | 4879 | 3875 |
| 70° | 3663 | 3806 | 2366 |
| 75° | 3394 | 3087 | 1447 |
| 80° | 3124 | 2843 | 1249 |
| 85° | 2826 | 2604 | 1016 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 223.5 | 3.2 |
| 10°-20° | 581.4 | 8.4 |
| 20°-30° | 753.0 | 10.9 |
| 30°-40° | 737.4 | 10.6 |
| 40°-50° | 564.4 | 8.1 |
| 50°-60° | 376.1 | 5.4 |
| 60°-70° | 205.2 | 3.0 |
| 70°-80° | 85.5 | 1.2 |
| 80°-90° | 24.2 | 0.3 |
| 90°-100° | 248.0 | 3.6 |
| 100°-110° | 705.7 | 10.2 |
| 110°-120° | 676.1 | 9.8 |
| 120°-130° | 535.1 | 7.7 |
| 130°-140° | 429.5 | 6.2 |
| 140°-150° | 336.2 | 4.9 |
| 150°-160° | 246.0 | 3.5 |
| 160°-170° | 152.4 | 2.2 |
| 170°-180° | 51.7 | 0.7 |
| 0°-30° | 1557.9 | 22.5 |
| 0°-40° | 2295.3 | 33.1 |
| 0°-60° | 3235.8 | 46.7 |
| 0°-90° | 3550.8 | 51.2 |
| 90°-120° | 1629.8 | 23.5 |
| 90°-150° | 2930.6 | 42.3 |
| 90°-180° | 3381.0 | 48.8 |
| 0°-180° | 6931.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2437 | 2437 | 2437 | 2437 | 2437 | |
| 5° | 2397 | 2373 | 2389 | 2394 | 2402 | 223 |
| 15° | 2027 | 2020 | 2074 | 2131 | 2167 | 566 |
| 25° | 1549 | 1554 | 1634 | 1705 | 1780 | 712 |
| 35° | 1095 | 1100 | 1174 | 1253 | 1342 | 681 |
| 45° | 656 | 669 | 713 | 767 | 837 | 512 |
| 55° | 377 | 393 | 416 | 432 | 467 | 342 |
| 65° | 189 | 205 | 224 | 195 | 178 | 197 |
| 75° | 95 | 95 | 87 | 59 | 41 | 102 |
| 85° | 27 | 27 | 25 | 16 | 10 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 27 | 107 | 480 | 166 | 102 | 31 |
| 105° | 110 | 166 | 719 | 1270 | 1208 | 116 |
| 115° | 204 | 246 | 545 | 1155 | 1356 | 201 |
| 125° | 288 | 319 | 520 | 864 | 1033 | 257 |
| 135° | 352 | 381 | 514 | 730 | 825 | 271 |
| 145° | 415 | 436 | 518 | 631 | 688 | 259 |
| 155° | 474 | 485 | 531 | 571 | 594 | 219 |
| 165° | 524 | 526 | 537 | 549 | 557 | 147 |
| 175° | 548 | 545 | 543 | 540 | 536 | 52 |
| 180° | 544 | 544 | 544 | 544 | 544 | |

TEST NUMBER: P521838

CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2436.8 | 2436.8 | 2436.8 | 2436.8 | 2436.8 |
| 2.5° | 2442.7 | 2421.0 | 2426.5 | 2426.3 | 2419.6 |
| 5° | 2397.2 | 2373.1 | 2388.6 | 2394.2 | 2402.5 |
| 7.5° | 2308.2 | 2290.0 | 2318.3 | 2339.2 | 2356.1 |
| 10° | 2238.9 | 2223.3 | 2259.3 | 2289.7 | 2311.7 |
| 12.5° | 2158.5 | 2145.4 | 2190.0 | 2230.8 | 2259.5 |
| 15° | 2027.2 | 2019.9 | 2074.3 | 2130.7 | 2167.3 |
| 17.5° | 1886.7 | 1883.2 | 1945.6 | 2011.4 | 2058.3 |
| 20° | 1790.9 | 1789.9 | 1858.3 | 1926.9 | 1981.3 |
| 22.5° | 1694.3 | 1696.6 | 1768.5 | 1839.8 | 1901.7 |
| 25° | 1549.3 | 1553.5 | 1633.8 | 1705.0 | 1780.3 |
| 27.5° | 1415.2 | 1417.1 | 1500.1 | 1575.3 | 1655.6 |
| 30° | 1323.7 | 1328.9 | 1410.3 | 1488.1 | 1571.8 |
| 32.5° | 1232.2 | 1238.2 | 1317.9 | 1398.3 | 1483.7 |
| 35° | 1094.9 | 1100.1 | 1174.0 | 1253.0 | 1341.9 |
| 37.5° | 953.3 | 960.4 | 1026.0 | 1100.7 | 1188.1 |
| 40° | 861.8 | 872.2 | 930.2 | 1000.6 | 1086.3 |
| 42.5° | 773.7 | 786.7 | 840.4 | 907.2 | 984.5 |
| 45° | 656.5 | 669.0 | 713.2 | 767.2 | 837.2 |
| 47.5° | 555.6 | 570.0 | 603.9 | 650.4 | 710.2 |
| 50° | 498.3 | 511.8 | 543.2 | 577.6 | 634.0 |
| 52.5° | 447.8 | 461.4 | 489.3 | 515.8 | 563.9 |
| 55° | 377.4 | 393.1 | 415.9 | 431.7 | 467.2 |
| 57.5° | 319.7 | 334.8 | 352.8 | 360.0 | 381.5 |
| 60° | 281.2 | 297.9 | 314.4 | 313.5 | 325.0 |
| 62.5° | 246.1 | 260.4 | 276.7 | 265.4 | 266.0 |
| 65° | 189.3 | 204.9 | 223.5 | 195.3 | 177.5 |
| 67.5° | 152.9 | 156.2 | 175.4 | 136.2 | 115.0 |
| 70° | 135.8 | 135.8 | 141.1 | 105.4 | 87.7 |
| 72.5° | 119.5 | 119.5 | 114.6 | 85.8 | 67.1 |
| 75° | 95.2 | 95.2 | 86.6 | 59.4 | 40.6 |
| 77.5° | 73.3 | 72.5 | 66.3 | 44.4 | 29.5 |
| 80° | 58.8 | 58.8 | 53.5 | 35.0 | 23.5 |
| 82.5° | 46.0 | 46.0 | 41.5 | 27.4 | 17.5 |
| 85° | 26.7 | 26.7 | 24.6 | 15.9 | 9.6 |
| 87.5° | 9.4 | 9.4 | 8.6 | 5.1 | 4.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 8.3 | 43.9 | 101.8 | 29.6 | 22.3 |
| 95° | 26.9 | 106.8 | 480.1 | 166.2 | 102.4 |
| 97.5° | 49.5 | 125.1 | 739.4 | 529.1 | 362.6 |
| 100° | 65.2 | 136.0 | 795.7 | 806.0 | 620.8 |
| 102.5° | 82.6 | 147.7 | 783.3 | 1031.7 | 870.0 |
| 105° | 109.7 | 166.3 | 719.1 | 1270.2 | 1207.5 |
| 107.5° | 137.2 | 188.0 | 644.2 | 1337.5 | 1393.4 |
| 110° | 156.2 | 203.8 | 601.2 | 1311.8 | 1437.2 |

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CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 174.5 | 219.6 | 572.2 | 1250.9 | 1429.8 |
| 115° | 203.8 | 246.3 | 545.3 | 1155.2 | 1356.5 |
| 117.5° | 229.7 | 269.6 | 529.4 | 1050.5 | 1263.8 |
| 120° | 250.4 | 283.8 | 527.7 | 990.7 | 1195.1 |
| 122.5° | 267.0 | 300.3 | 523.6 | 938.3 | 1128.1 |
| 125° | 287.7 | 319.0 | 520.5 | 863.7 | 1032.7 |
| 127.5° | 310.2 | 339.5 | 518.8 | 819.1 | 958.4 |
| 130° | 321.8 | 351.1 | 516.3 | 788.1 | 909.5 |
| 132.5° | 334.2 | 362.7 | 516.3 | 763.9 | 875.6 |
| 135° | 351.8 | 381.1 | 514.3 | 729.6 | 824.7 |
| 137.5° | 368.4 | 396.9 | 514.0 | 700.5 | 782.7 |
| 140° | 380.8 | 410.1 | 513.2 | 676.4 | 755.3 |
| 142.5° | 394.8 | 419.3 | 515.7 | 657.2 | 728.0 |
| 145° | 414.9 | 436.2 | 518.4 | 631.4 | 688.1 |
| 147.5° | 432.1 | 452.7 | 522.9 | 605.4 | 654.4 |
| 150° | 447.0 | 461.2 | 524.6 | 596.8 | 631.2 |
| 152.5° | 458.6 | 473.6 | 526.3 | 585.1 | 617.1 |
| 155° | 473.9 | 485.0 | 530.8 | 570.7 | 593.9 |
| 157.5° | 492.9 | 499.6 | 531.8 | 564.1 | 580.7 |
| 160° | 502.9 | 507.9 | 536.0 | 559.1 | 573.2 |
| 162.5° | 508.7 | 514.5 | 536.8 | 554.9 | 565.8 |
| 165° | 523.6 | 525.6 | 537.0 | 548.6 | 556.7 |
| 167.5° | 533.7 | 531.9 | 541.8 | 547.0 | 550.3 |
| 170° | 537.0 | 536.0 | 540.1 | 541.3 | 545.3 |
| 172.5° | 544.5 | 541.0 | 542.6 | 539.6 | 542.8 |
| 175° | 548.4 | 545.4 | 543.2 | 540.0 | 536.0 |
| 177.5° | 550.1 | 545.2 | 542.6 | 539.3 | 540.1 |
| 180° | 544.3 | 544.3 | 544.3 | 544.3 | 544.3 |

(END OF REPORT)