

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: P521827

Luminaire Tested: **SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4 (5700K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521827
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-075D-92765-1D-UNV-STD-W-4 (5700K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

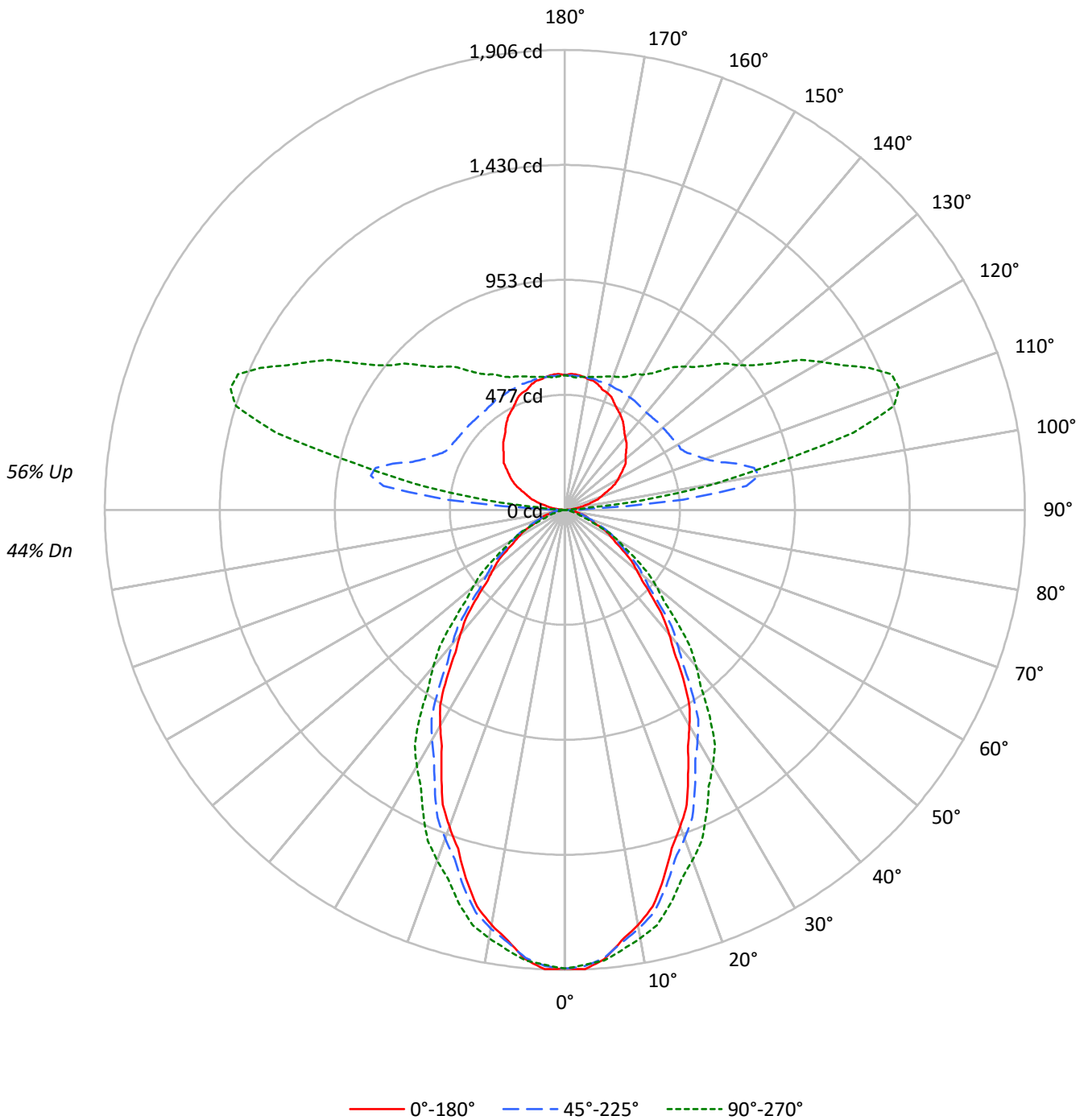
Lumens per Lamp: N/A
Luminaire Lumens: 6236.8 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 55.4
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: P521827

CATALOG NUMBER: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4 (5700K)

Luminous Intensity Polar Plot





TEST NUMBER: P521827

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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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 | 44 |
| 1 | 98 | 94 | 90 | 87 | 89 | 86 | 83 | 80 | 72 | 70 | 68 | 59 | 57 | 56 | 47 | 46 | 45 | 39 |
| 2 | 90 | 83 | 77 | 73 | 82 | 76 | 72 | 68 | 64 | 61 | 58 | 53 | 51 | 48 | 42 | 41 | 40 | 35 |
| 3 | 82 | 74 | 67 | 62 | 76 | 68 | 62 | 58 | 58 | 53 | 50 | 48 | 45 | 42 | 38 | 37 | 35 | 31 |
| 4 | 76 | 66 | 59 | 53 | 70 | 61 | 55 | 50 | 52 | 47 | 44 | 43 | 40 | 37 | 35 | 33 | 31 | 27 |
| 5 | 70 | 59 | 52 | 46 | 64 | 55 | 49 | 44 | 47 | 42 | 38 | 39 | 36 | 33 | 32 | 30 | 28 | 25 |
| 6 | 65 | 54 | 46 | 41 | 60 | 50 | 43 | 39 | 43 | 38 | 34 | 36 | 32 | 29 | 30 | 27 | 25 | 22 |
| 7 | 60 | 49 | 42 | 36 | 55 | 46 | 39 | 34 | 39 | 34 | 30 | 33 | 29 | 27 | 27 | 25 | 23 | 20 |
| 8 | 56 | 45 | 37 | 32 | 52 | 42 | 35 | 31 | 36 | 31 | 27 | 31 | 27 | 24 | 25 | 23 | 21 | 18 |
| 9 | 53 | 41 | 34 | 29 | 48 | 38 | 32 | 28 | 33 | 28 | 25 | 28 | 25 | 22 | 24 | 21 | 19 | 17 |
| 10 | 49 | 38 | 31 | 27 | 45 | 35 | 29 | 25 | 31 | 26 | 23 | 26 | 23 | 20 | 22 | 19 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17538 | 17538 | 17538 |
| 5° | 17319 | 17257 | 17358 |
| 10° | 16363 | 16511 | 16894 |
| 15° | 15105 | 15456 | 16149 |
| 20° | 13717 | 14233 | 15174 |
| 25° | 12304 | 12974 | 14137 |
| 30° | 11001 | 11720 | 13062 |
| 35° | 9620 | 10315 | 11790 |
| 40° | 8097 | 8739 | 10206 |
| 45° | 6682 | 7259 | 8522 |
| 50° | 5579 | 6082 | 7099 |
| 55° | 4736 | 5220 | 5863 |
| 60° | 4048 | 4525 | 4680 |
| 65° | 3222 | 3805 | 3024 |
| 70° | 2857 | 2970 | 1845 |
| 75° | 2645 | 2410 | 1130 |
| 80° | 2439 | 2216 | 972 |
| 85° | 2212 | 2032 | 794 |



TEST NUMBER: P521827

CATALOG NUMBER: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4 (5700K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 174.4 | 2.8 |
| 10°-20° | 453.5 | 7.3 |
| 20°-30° | 587.4 | 9.4 |
| 30°-40° | 575.2 | 9.2 |
| 40°-50° | 440.3 | 7.1 |
| 50°-60° | 293.4 | 4.7 |
| 60°-70° | 160.1 | 2.6 |
| 70°-80° | 66.7 | 1.1 |
| 80°-90° | 18.9 | 0.3 |
| 90°-100° | 254.3 | 4.1 |
| 100°-110° | 723.6 | 11.6 |
| 110°-120° | 693.3 | 11.1 |
| 120°-130° | 548.7 | 8.8 |
| 130°-140° | 440.5 | 7.1 |
| 140°-150° | 344.8 | 5.5 |
| 150°-160° | 252.3 | 4.0 |
| 160°-170° | 156.3 | 2.5 |
| 170°-180° | 53.0 | 0.9 |
| 0°-30° | 1215.3 | 19.5 |
| 0°-40° | 1790.5 | 28.7 |
| 0°-60° | 2524.2 | 40.5 |
| 0°-90° | 2769.9 | 44.4 |
| 90°-120° | 1671.3 | 26.8 |
| 90°-150° | 3005.3 | 48.2 |
| 90°-180° | 3467.0 | 55.6 |
| 0°-180° | 6236.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1901 | 1901 | 1901 | 1901 | 1901 | |
| 5° | 1870 | 1851 | 1863 | 1868 | 1874 | 174 |
| 15° | 1581 | 1576 | 1618 | 1662 | 1691 | 442 |
| 25° | 1209 | 1212 | 1274 | 1330 | 1389 | 556 |
| 35° | 854 | 858 | 916 | 977 | 1047 | 531 |
| 45° | 512 | 522 | 556 | 598 | 653 | 399 |
| 55° | 294 | 307 | 324 | 337 | 364 | 267 |
| 65° | 148 | 160 | 174 | 152 | 138 | 153 |
| 75° | 74 | 74 | 68 | 46 | 32 | 79 |
| 85° | 21 | 21 | 19 | 12 | 8 | 23 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 28 | 110 | 492 | 170 | 105 | 32 |
| 105° | 112 | 171 | 737 | 1303 | 1238 | 119 |
| 115° | 209 | 253 | 559 | 1185 | 1391 | 206 |
| 125° | 295 | 327 | 534 | 886 | 1059 | 264 |
| 135° | 361 | 391 | 527 | 748 | 846 | 278 |
| 145° | 426 | 447 | 532 | 648 | 706 | 266 |
| 155° | 486 | 497 | 544 | 585 | 609 | 225 |
| 165° | 537 | 539 | 551 | 563 | 571 | 151 |
| 175° | 562 | 559 | 557 | 554 | 550 | 53 |
| 180° | 558 | 558 | 558 | 558 | 558 | |

TEST NUMBER: P521827

CATALOG NUMBER: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4 (5700K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1900.9 | 1900.9 | 1900.9 | 1900.9 | 1900.9 |
| 2.5° | 1905.5 | 1888.6 | 1892.8 | 1892.7 | 1887.5 |
| 5° | 1870.0 | 1851.2 | 1863.3 | 1867.6 | 1874.2 |
| 7.5° | 1800.6 | 1786.4 | 1808.4 | 1824.8 | 1838.0 |
| 10° | 1746.6 | 1734.3 | 1762.4 | 1786.1 | 1803.3 |
| 12.5° | 1683.8 | 1673.6 | 1708.4 | 1740.2 | 1762.6 |
| 15° | 1581.4 | 1575.7 | 1618.1 | 1662.1 | 1690.7 |
| 17.5° | 1471.8 | 1469.0 | 1517.7 | 1569.1 | 1605.6 |
| 20° | 1397.1 | 1396.3 | 1449.6 | 1503.1 | 1545.5 |
| 22.5° | 1321.7 | 1323.5 | 1379.6 | 1435.2 | 1483.5 |
| 25° | 1208.6 | 1211.8 | 1274.5 | 1330.0 | 1388.7 |
| 27.5° | 1104.0 | 1105.4 | 1170.2 | 1228.8 | 1291.5 |
| 30° | 1032.6 | 1036.7 | 1100.1 | 1160.8 | 1226.1 |
| 32.5° | 961.2 | 965.9 | 1028.1 | 1090.8 | 1157.4 |
| 35° | 854.1 | 858.2 | 915.8 | 977.4 | 1046.8 |
| 37.5° | 743.7 | 749.2 | 800.4 | 858.6 | 926.8 |
| 40° | 672.3 | 680.4 | 725.6 | 780.5 | 847.4 |
| 42.5° | 603.5 | 613.6 | 655.6 | 707.7 | 768.0 |
| 45° | 512.1 | 521.9 | 556.3 | 598.4 | 653.1 |
| 47.5° | 433.4 | 444.6 | 471.1 | 507.3 | 554.0 |
| 50° | 388.7 | 399.3 | 423.7 | 450.6 | 494.6 |
| 52.5° | 349.3 | 359.9 | 381.7 | 402.4 | 439.9 |
| 55° | 294.4 | 306.7 | 324.5 | 336.8 | 364.5 |
| 57.5° | 249.4 | 261.1 | 275.2 | 280.8 | 297.6 |
| 60° | 219.4 | 232.4 | 245.2 | 244.6 | 253.6 |
| 62.5° | 192.0 | 203.1 | 215.9 | 207.0 | 207.5 |
| 65° | 147.6 | 159.9 | 174.3 | 152.3 | 138.5 |
| 67.5° | 119.3 | 121.9 | 136.8 | 106.2 | 89.7 |
| 70° | 105.9 | 105.9 | 110.1 | 82.3 | 68.4 |
| 72.5° | 93.2 | 93.2 | 89.4 | 66.9 | 52.4 |
| 75° | 74.2 | 74.2 | 67.6 | 46.4 | 31.7 |
| 77.5° | 57.2 | 56.6 | 51.7 | 34.6 | 23.0 |
| 80° | 45.9 | 45.9 | 41.7 | 27.3 | 18.3 |
| 82.5° | 35.9 | 35.9 | 32.4 | 21.3 | 13.7 |
| 85° | 20.9 | 20.9 | 19.2 | 12.4 | 7.5 |
| 87.5° | 7.3 | 7.3 | 6.7 | 4.0 | 3.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 8.5 | 45.0 | 104.4 | 30.4 | 22.9 |
| 95° | 27.6 | 109.5 | 492.3 | 170.4 | 105.0 |
| 97.5° | 50.7 | 128.3 | 758.2 | 542.6 | 371.8 |
| 100° | 66.8 | 139.5 | 816.0 | 826.5 | 636.6 |
| 102.5° | 84.7 | 151.5 | 803.2 | 1057.9 | 892.1 |
| 105° | 112.5 | 170.6 | 737.4 | 1302.6 | 1238.3 |
| 107.5° | 140.7 | 192.8 | 660.6 | 1371.6 | 1428.8 |
| 110° | 160.2 | 209.0 | 616.5 | 1345.2 | 1473.8 |

TEST NUMBER: P521827

CATALOG NUMBER: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4 (5700K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 178.9 | 225.2 | 586.8 | 1282.8 | 1466.2 |
| 115° | 209.0 | 252.6 | 559.2 | 1184.6 | 1391.1 |
| 117.5° | 235.6 | 276.4 | 542.8 | 1077.3 | 1296.0 |
| 120° | 256.8 | 291.0 | 541.1 | 1016.0 | 1225.5 |
| 122.5° | 273.8 | 308.0 | 536.9 | 962.1 | 1156.8 |
| 125° | 295.0 | 327.1 | 533.7 | 885.7 | 1058.9 |
| 127.5° | 318.1 | 348.2 | 532.0 | 840.0 | 982.8 |
| 130° | 330.0 | 360.1 | 529.5 | 808.2 | 932.7 |
| 132.5° | 342.7 | 372.0 | 529.5 | 783.3 | 897.9 |
| 135° | 360.8 | 390.9 | 527.4 | 748.1 | 845.7 |
| 137.5° | 377.7 | 407.0 | 527.1 | 718.4 | 802.6 |
| 140° | 390.5 | 420.6 | 526.3 | 693.7 | 774.6 |
| 142.5° | 404.9 | 430.0 | 528.8 | 673.9 | 746.6 |
| 145° | 425.5 | 447.3 | 531.6 | 647.5 | 705.6 |
| 147.5° | 443.1 | 464.3 | 536.3 | 620.8 | 671.0 |
| 150° | 458.4 | 472.9 | 538.0 | 612.0 | 647.3 |
| 152.5° | 470.3 | 485.6 | 539.7 | 600.0 | 632.8 |
| 155° | 486.0 | 497.4 | 544.3 | 585.2 | 609.1 |
| 157.5° | 505.5 | 512.3 | 545.4 | 578.5 | 595.5 |
| 160° | 515.7 | 520.9 | 549.6 | 573.3 | 587.8 |
| 162.5° | 521.6 | 527.6 | 550.5 | 569.0 | 580.2 |
| 165° | 536.9 | 539.0 | 550.7 | 562.6 | 570.9 |
| 167.5° | 547.3 | 545.4 | 555.6 | 561.0 | 564.3 |
| 170° | 550.7 | 549.7 | 553.9 | 555.0 | 559.2 |
| 172.5° | 558.3 | 554.8 | 556.4 | 553.3 | 556.6 |
| 175° | 562.4 | 559.3 | 557.1 | 553.8 | 549.6 |
| 177.5° | 564.1 | 559.1 | 556.4 | 553.0 | 553.9 |
| 180° | 558.1 | 558.1 | 558.1 | 558.1 | 558.1 |

(END OF REPORT)