

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: P521232

Luminaire Tested: **SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521232
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

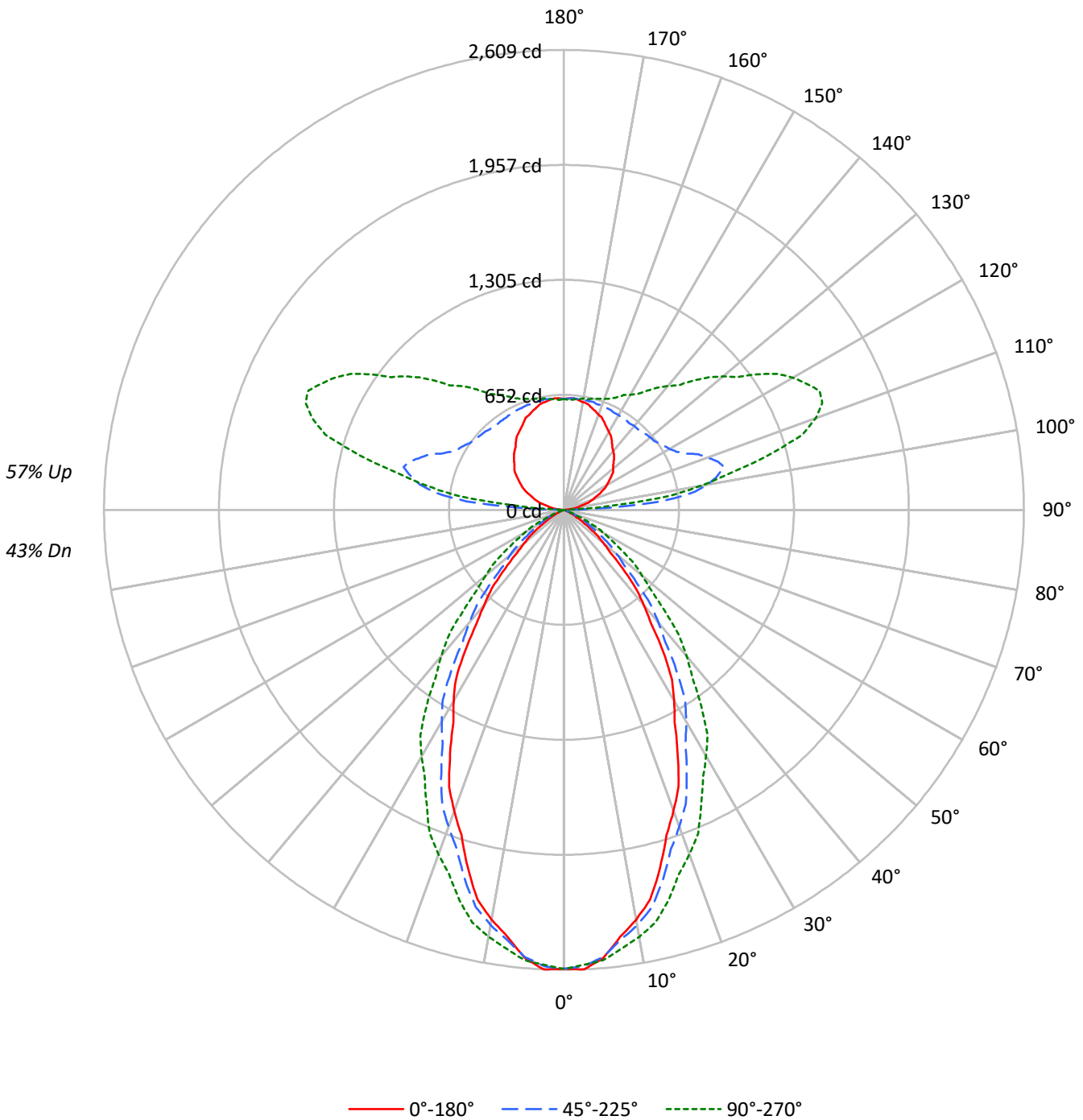
Lumens per Lamp: N/A
Luminaire Lumens: 7177.7 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.9
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: P521232

CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521232

CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-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 | 96 | 96 | 96 | 96 | 80 | 80 | 80 | 64 | 64 | 64 | 50 | 50 | 50 | 43 |
| 1 | 98 | 94 | 91 | 88 | 89 | 86 | 84 | 81 | 72 | 70 | 68 | 59 | 58 | 56 | 46 | 46 | 45 | 40 |
| 2 | 90 | 84 | 79 | 74 | 83 | 77 | 73 | 69 | 65 | 62 | 59 | 53 | 51 | 50 | 43 | 42 | 40 | 36 |
| 3 | 83 | 75 | 69 | 64 | 76 | 70 | 64 | 60 | 59 | 55 | 52 | 49 | 46 | 44 | 39 | 38 | 36 | 32 |
| 4 | 77 | 68 | 61 | 56 | 71 | 63 | 57 | 52 | 53 | 49 | 46 | 45 | 42 | 39 | 36 | 34 | 33 | 29 |
| 5 | 72 | 61 | 54 | 49 | 66 | 57 | 51 | 46 | 49 | 44 | 40 | 41 | 38 | 35 | 34 | 31 | 30 | 26 |
| 6 | 66 | 56 | 48 | 43 | 61 | 52 | 45 | 41 | 44 | 40 | 36 | 38 | 34 | 32 | 31 | 29 | 27 | 24 |
| 7 | 62 | 51 | 44 | 39 | 57 | 47 | 41 | 37 | 41 | 36 | 33 | 35 | 31 | 29 | 29 | 27 | 25 | 22 |
| 8 | 58 | 47 | 40 | 35 | 53 | 43 | 37 | 33 | 38 | 33 | 29 | 32 | 29 | 26 | 27 | 25 | 23 | 20 |
| 9 | 54 | 43 | 36 | 31 | 50 | 40 | 34 | 30 | 35 | 30 | 27 | 30 | 26 | 24 | 25 | 23 | 21 | 19 |
| 10 | 51 | 40 | 33 | 29 | 47 | 37 | 31 | 27 | 32 | 28 | 25 | 28 | 24 | 22 | 24 | 21 | 19 | 18 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 24019 | 24019 | 24019 |
| 5° | 23633 | 23575 | 23750 |
| 10° | 22113 | 22408 | 23033 |
| 15° | 20102 | 20740 | 21895 |
| 20° | 17845 | 18772 | 20416 |
| 25° | 15540 | 16771 | 18759 |
| 30° | 13310 | 14773 | 17188 |
| 35° | 11037 | 12540 | 15292 |
| 40° | 8480 | 10027 | 13030 |
| 45° | 6130 | 7593 | 10485 |
| 50° | 4175 | 5658 | 8316 |
| 55° | 2715 | 4092 | 6463 |
| 60° | 1557 | 2882 | 4672 |
| 65° | 413 | 1760 | 2364 |
| 70° | 205 | 545 | 680 |
| 75° | 89 | 46 | 0 |
| 80° | 69 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3500K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 237.6 | 3.3 |
| 10°-20° | 607.6 | 8.5 |
| 20°-30° | 760.6 | 10.6 |
| 30°-40° | 702.6 | 9.8 |
| 40°-50° | 472.1 | 6.6 |
| 50°-60° | 243.8 | 3.4 |
| 60°-70° | 76.4 | 1.1 |
| 70°-80° | 4.8 | 0.1 |
| 80°-90° | 0.1 | 0.0 |
| 90°-100° | 324.2 | 4.5 |
| 100°-110° | 783.5 | 10.9 |
| 110°-120° | 835.7 | 11.6 |
| 120°-130° | 676.8 | 9.4 |
| 130°-140° | 524.0 | 7.3 |
| 140°-150° | 399.8 | 5.6 |
| 150°-160° | 289.4 | 4.0 |
| 160°-170° | 178.2 | 2.5 |
| 170°-180° | 60.4 | 0.8 |
| 0°-30° | 1605.8 | 22.4 |
| 0°-40° | 2308.4 | 32.2 |
| 0°-60° | 3024.3 | 42.1 |
| 0°-90° | 3105.6 | 43.3 |
| 90°-120° | 1943.4 | 27.1 |
| 90°-150° | 3544.1 | 49.4 |
| 90°-180° | 4072.0 | 56.7 |
| 0°-180° | 7177.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2603 | 2603 | 2603 | 2603 | 2603 | |
| 5° | 2552 | 2526 | 2546 | 2554 | 2564 | 237 |
| 15° | 2105 | 2097 | 2171 | 2244 | 2292 | 586 |
| 25° | 1526 | 1539 | 1647 | 1760 | 1843 | 700 |
| 35° | 980 | 1004 | 1113 | 1244 | 1358 | 607 |
| 45° | 470 | 498 | 582 | 695 | 804 | 369 |
| 55° | 169 | 197 | 254 | 327 | 402 | 157 |
| 65° | 19 | 36 | 81 | 97 | 108 | 32 |
| 75° | 2 | 2 | 1 | 0 | 0 | 4 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 32 | 162 | 556 | 361 | 253 | 36 |
| 105° | 125 | 216 | 942 | 1218 | 1203 | 132 |
| 115° | 229 | 293 | 757 | 1434 | 1600 | 227 |
| 125° | 326 | 376 | 657 | 1141 | 1340 | 291 |
| 135° | 401 | 448 | 630 | 900 | 1035 | 310 |
| 145° | 474 | 509 | 618 | 765 | 824 | 296 |
| 155° | 544 | 567 | 626 | 677 | 702 | 251 |
| 165° | 601 | 610 | 634 | 644 | 653 | 170 |
| 175° | 635 | 633 | 635 | 630 | 629 | 60 |
| 180° | 629 | 629 | 629 | 629 | 629 | |



TEST NUMBER: P521232

CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2603.4 | 2603.4 | 2603.4 | 2603.4 | 2603.4 |
| 2.5° | 2609.4 | 2584.8 | 2591.3 | 2591.1 | 2584.3 |
| 5° | 2551.8 | 2525.9 | 2545.5 | 2554.5 | 2564.4 |
| 7.5° | 2443.9 | 2423.7 | 2461.3 | 2489.5 | 2509.9 |
| 10° | 2360.3 | 2343.1 | 2391.8 | 2430.2 | 2458.6 |
| 12.5° | 2263.6 | 2250.3 | 2309.2 | 2361.9 | 2398.1 |
| 15° | 2104.6 | 2097.2 | 2171.4 | 2244.3 | 2292.3 |
| 17.5° | 1934.3 | 1934.1 | 2018.7 | 2109.2 | 2167.1 |
| 20° | 1817.5 | 1821.2 | 1911.9 | 2011.7 | 2079.4 |
| 22.5° | 1700.6 | 1709.2 | 1806.1 | 1910.2 | 1987.7 |
| 25° | 1526.5 | 1538.8 | 1647.4 | 1760.1 | 1842.7 |
| 27.5° | 1359.3 | 1377.2 | 1491.5 | 1608.7 | 1709.1 |
| 30° | 1249.4 | 1270.4 | 1386.7 | 1510.0 | 1613.4 |
| 32.5° | 1141.6 | 1166.5 | 1279.9 | 1410.3 | 1515.7 |
| 35° | 979.9 | 1004.5 | 1113.4 | 1244.4 | 1357.7 |
| 37.5° | 812.9 | 837.0 | 943.4 | 1072.4 | 1194.8 |
| 40° | 704.1 | 731.2 | 832.5 | 957.5 | 1081.9 |
| 42.5° | 605.3 | 632.4 | 727.7 | 850.6 | 968.1 |
| 45° | 469.8 | 498.1 | 581.9 | 695.2 | 803.6 |
| 47.5° | 357.4 | 388.2 | 461.7 | 564.2 | 663.0 |
| 50° | 290.9 | 321.7 | 394.2 | 484.5 | 579.4 |
| 52.5° | 237.5 | 267.3 | 332.8 | 417.9 | 504.8 |
| 55° | 168.8 | 197.1 | 254.4 | 326.7 | 401.8 |
| 57.5° | 116.6 | 141.0 | 192.5 | 252.7 | 311.6 |
| 60° | 84.4 | 107.8 | 156.2 | 205.1 | 253.2 |
| 62.5° | 56.2 | 77.6 | 124.9 | 162.5 | 194.7 |
| 65° | 18.9 | 36.1 | 80.6 | 97.2 | 108.3 |
| 67.5° | 9.6 | 11.5 | 42.3 | 44.7 | 48.4 |
| 70° | 7.6 | 7.6 | 20.2 | 21.5 | 25.2 |
| 72.5° | 5.5 | 5.5 | 8.1 | 10.3 | 11.1 |
| 75° | 2.5 | 2.5 | 1.3 | 0.0 | 0.0 |
| 77.5° | 1.3 | 1.3 | 1.0 | 0.0 | 0.0 |
| 80° | 1.3 | 1.3 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 10.7 | 87.8 | 206.7 | 100.5 | 68.2 |
| 95° | 32.0 | 162.2 | 555.5 | 361.2 | 253.1 |
| 97.5° | 56.7 | 179.7 | 731.5 | 704.8 | 605.0 |
| 100° | 75.9 | 190.5 | 828.5 | 874.6 | 792.6 |
| 102.5° | 94.0 | 200.3 | 892.5 | 1016.0 | 967.3 |
| 105° | 125.2 | 216.4 | 941.7 | 1218.4 | 1202.8 |
| 107.5° | 155.8 | 235.3 | 912.7 | 1380.8 | 1417.5 |
| 110° | 177.2 | 251.4 | 865.8 | 1450.8 | 1519.8 |

TEST NUMBER: P521232

CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 198.5 | 267.5 | 824.3 | 1467.9 | 1585.9 |
| 115° | 229.1 | 292.9 | 756.6 | 1434.3 | 1599.8 |
| 117.5° | 259.5 | 319.6 | 716.9 | 1357.2 | 1551.0 |
| 120° | 279.7 | 335.7 | 691.3 | 1296.7 | 1499.9 |
| 122.5° | 301.0 | 352.9 | 675.3 | 1234.8 | 1434.9 |
| 125° | 326.3 | 375.8 | 656.7 | 1140.7 | 1340.0 |
| 127.5° | 351.4 | 398.0 | 643.6 | 1061.1 | 1236.1 |
| 130° | 366.3 | 411.9 | 639.4 | 1005.6 | 1177.5 |
| 132.5° | 380.2 | 427.8 | 633.0 | 965.6 | 1111.4 |
| 135° | 400.9 | 447.8 | 630.0 | 899.5 | 1035.0 |
| 137.5° | 420.7 | 467.8 | 620.7 | 854.8 | 956.9 |
| 140° | 435.6 | 478.6 | 620.7 | 822.7 | 916.4 |
| 142.5° | 450.5 | 493.5 | 615.4 | 794.6 | 873.8 |
| 145° | 474.2 | 509.4 | 618.1 | 764.6 | 824.5 |
| 147.5° | 496.3 | 530.4 | 616.5 | 730.0 | 779.5 |
| 150° | 510.2 | 540.1 | 620.7 | 714.9 | 753.9 |
| 152.5° | 525.1 | 554.0 | 619.7 | 698.8 | 733.7 |
| 155° | 543.5 | 566.9 | 626.0 | 677.2 | 702.0 |
| 157.5° | 565.6 | 585.6 | 624.7 | 669.0 | 683.6 |
| 160° | 574.1 | 591.0 | 630.0 | 658.3 | 668.7 |
| 162.5° | 588.0 | 602.8 | 627.9 | 655.0 | 661.2 |
| 165° | 600.7 | 609.9 | 634.0 | 643.6 | 652.7 |
| 167.5° | 616.5 | 622.4 | 632.4 | 642.8 | 643.1 |
| 170° | 620.7 | 624.6 | 636.7 | 635.5 | 642.0 |
| 172.5° | 628.2 | 631.0 | 633.5 | 636.4 | 632.4 |
| 175° | 635.4 | 632.8 | 635.4 | 630.0 | 628.7 |
| 177.5° | 634.0 | 634.0 | 631.9 | 629.7 | 624.5 |
| 180° | 628.7 | 628.7 | 628.7 | 628.7 | 628.7 |

(END OF REPORT)