

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: P844955

Luminaire Tested: **SQ4P-F-125U-075D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844955
REPORT IS A COMBINATION OF REPORTS P700108 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-125U-075D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

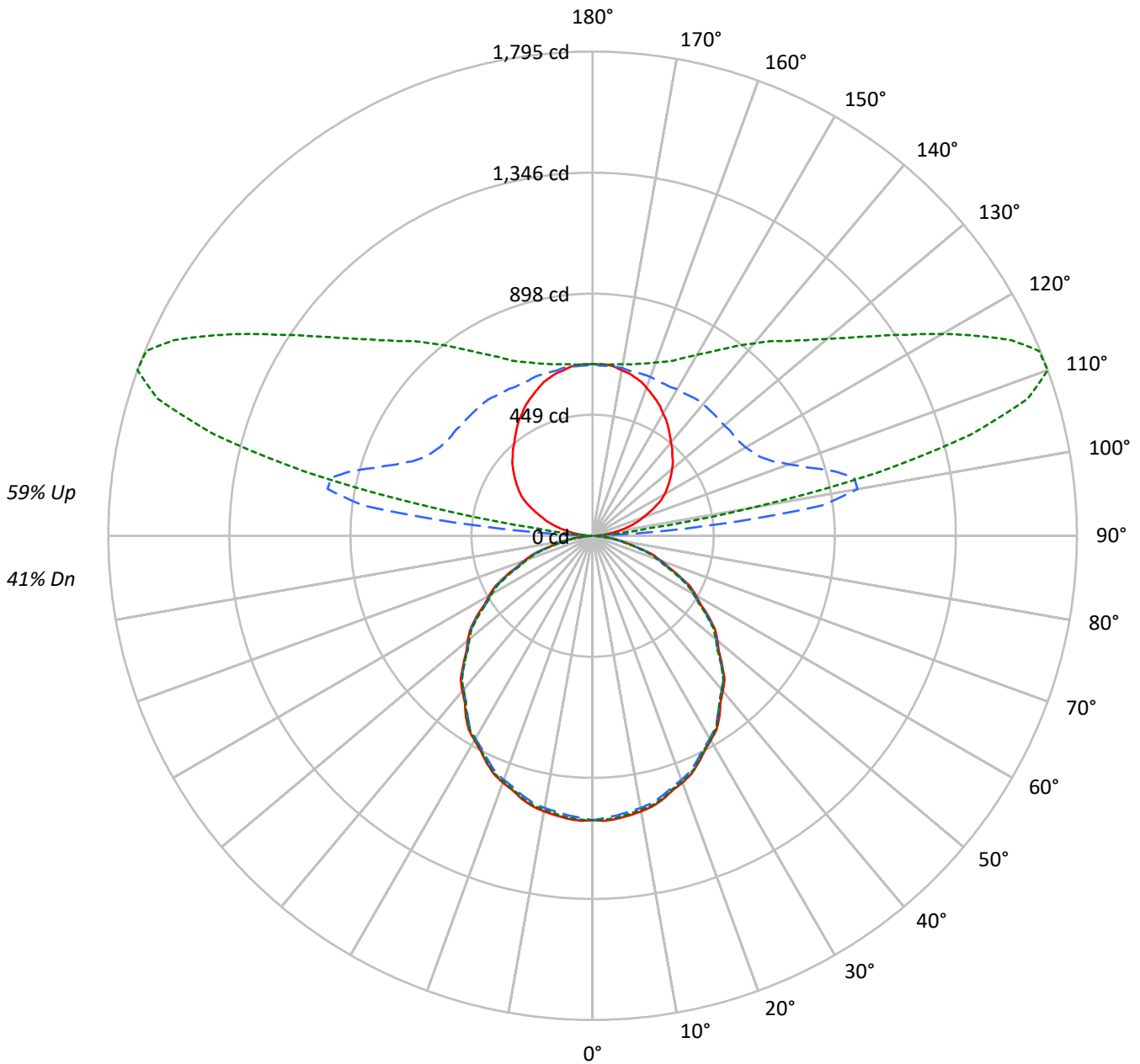
Lumens per Lamp: N/A
Luminaire Lumens: 7010.0 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 59.6
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 FT

TEST NUMBER: P844955

CATALOG NUMBER: SQ4P-F-125U-075D-B35-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P844955

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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 | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 78 | 78 | 78 | 63 | 63 | 63 | 48 | 48 | 48 | 41 | | | |
| 1 | 96 | 91 | 88 | 84 | 87 | 84 | 80 | 77 | 69 | 66 | 64 | 55 | 53 | 52 | 42 | 41 | 40 | 35 | | | |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 63 | 60 | 56 | 53 | 48 | 46 | 43 | 37 | 35 | 34 | 29 | | | |
| 3 | 79 | 70 | 63 | 57 | 72 | 64 | 58 | 53 | 53 | 48 | 44 | 42 | 39 | 36 | 33 | 31 | 29 | 24 | | | |
| 4 | 73 | 62 | 54 | 48 | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 38 | 34 | 31 | 29 | 27 | 25 | 21 | | | |
| 5 | 67 | 55 | 47 | 41 | 60 | 50 | 43 | 38 | 42 | 37 | 32 | 34 | 30 | 27 | 26 | 24 | 21 | 18 | | | |
| 6 | 61 | 49 | 41 | 35 | 56 | 45 | 38 | 33 | 38 | 32 | 28 | 30 | 27 | 23 | 24 | 21 | 19 | 16 | | | |
| 7 | 57 | 44 | 36 | 31 | 51 | 41 | 34 | 29 | 34 | 29 | 25 | 28 | 24 | 21 | 22 | 19 | 17 | 14 | | | |
| 8 | 52 | 40 | 33 | 27 | 48 | 37 | 30 | 25 | 31 | 26 | 22 | 25 | 21 | 18 | 20 | 17 | 15 | 12 | | | |
| 9 | 49 | 37 | 29 | 24 | 44 | 34 | 27 | 23 | 28 | 23 | 20 | 23 | 19 | 16 | 18 | 16 | 13 | 11 | | | |
| 10 | 45 | 34 | 26 | 22 | 41 | 31 | 25 | 20 | 26 | 21 | 18 | 21 | 18 | 15 | 17 | 14 | 12 | 10 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9728 | 9728 | 9728 |
| 5° | 9753 | 9636 | 9713 |
| 10° | 9720 | 9601 | 9667 |
| 15° | 9654 | 9532 | 9614 |
| 20° | 9562 | 9452 | 9522 |
| 25° | 9455 | 9340 | 9428 |
| 30° | 9324 | 9248 | 9308 |
| 35° | 9223 | 9112 | 9158 |
| 40° | 9046 | 8959 | 8978 |
| 45° | 8858 | 8786 | 8786 |
| 50° | 8672 | 8592 | 8552 |
| 55° | 8471 | 8356 | 8311 |
| 60° | 8154 | 8023 | 7971 |
| 65° | 7765 | 7612 | 7519 |
| 70° | 7235 | 7081 | 6930 |
| 75° | 6488 | 6288 | 6135 |
| 80° | 5249 | 5186 | 5021 |
| 85° | 3123 | 3599 | 3726 |



TEST NUMBER: P844955

CATALOG NUMBER: SQ4P-F-125U-075D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 99.5 | 1.4 |
| 10°-20° | 283.3 | 4.0 |
| 20°-30° | 425.6 | 6.1 |
| 30°-40° | 508.0 | 7.2 |
| 40°-50° | 520.5 | 7.4 |
| 50°-60° | 464.2 | 6.6 |
| 60°-70° | 345.7 | 4.9 |
| 70°-80° | 187.7 | 2.7 |
| 80°-90° | 45.0 | 0.6 |
| 90°-100° | 253.3 | 3.6 |
| 100°-110° | 881.3 | 12.6 |
| 110°-120° | 853.7 | 12.2 |
| 120°-130° | 669.7 | 9.6 |
| 130°-140° | 530.1 | 7.6 |
| 140°-150° | 409.1 | 5.8 |
| 150°-160° | 293.2 | 4.2 |
| 160°-170° | 179.4 | 2.6 |
| 170°-180° | 60.7 | 0.9 |
| 0°-30° | 808.4 | 11.5 |
| 0°-40° | 1316.4 | 18.8 |
| 0°-60° | 2301.1 | 32.8 |
| 0°-90° | 2879.5 | 41.1 |
| 90°-120° | 1988.3 | 28.4 |
| 90°-150° | 3597.1 | 51.3 |
| 90°-180° | 4130.0 | 58.9 |
| 0°-180° | 7010.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1054 | 1054 | 1054 | 1054 | 1054 | |
| 5° | 1053 | 1052 | 1040 | 1050 | 1049 | 100 |
| 15° | 1011 | 1008 | 998 | 1006 | 1006 | 285 |
| 25° | 929 | 926 | 918 | 923 | 926 | 428 |
| 35° | 819 | 816 | 809 | 809 | 813 | 511 |
| 45° | 679 | 680 | 673 | 672 | 673 | 524 |
| 55° | 527 | 527 | 520 | 515 | 517 | 469 |
| 65° | 356 | 354 | 349 | 344 | 344 | 352 |
| 75° | 182 | 180 | 176 | 174 | 172 | 192 |
| 85° | 30 | 32 | 34 | 35 | 35 | 41 |
| 90° | 10 | 14 | 14 | 10 | 5 | 7 |
| 95° | 43 | 147 | 427 | 109 | 66 | 45 |
| 105° | 147 | 209 | 926 | 1563 | 1453 | 155 |
| 115° | 256 | 309 | 689 | 1453 | 1714 | 253 |
| 125° | 347 | 427 | 641 | 1083 | 1292 | 310 |
| 135° | 418 | 470 | 636 | 902 | 1021 | 324 |
| 145° | 489 | 522 | 632 | 779 | 845 | 306 |
| 155° | 556 | 575 | 622 | 693 | 717 | 256 |
| 165° | 608 | 613 | 627 | 655 | 660 | 171 |
| 175° | 636 | 636 | 632 | 641 | 636 | 60 |
| 180° | 636 | 636 | 636 | 636 | 636 | |



TEST NUMBER: P844955

CATALOG NUMBER: SQ4P-F-125U-075D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1054.4 | 1054.4 | 1054.4 | 1054.4 | 1054.4 |
| 2.5° | 1057.7 | 1055.6 | 1046.6 | 1054.4 | 1053.4 |
| 5° | 1053.1 | 1051.7 | 1040.4 | 1050.2 | 1048.8 |
| 7.5° | 1045.4 | 1042.8 | 1031.5 | 1041.3 | 1039.8 |
| 10° | 1037.5 | 1034.6 | 1024.8 | 1033.2 | 1031.9 |
| 12.5° | 1027.4 | 1025.7 | 1014.8 | 1023.2 | 1022.8 |
| 15° | 1010.7 | 1007.8 | 997.9 | 1006.5 | 1006.5 |
| 17.5° | 988.7 | 987.1 | 977.3 | 985.4 | 984.6 |
| 20° | 973.9 | 971.2 | 962.7 | 969.8 | 969.8 |
| 22.5° | 956.0 | 954.3 | 945.9 | 951.7 | 952.8 |
| 25° | 928.8 | 926.1 | 917.5 | 923.3 | 926.1 |
| 27.5° | 898.9 | 896.8 | 889.7 | 893.3 | 895.3 |
| 30° | 875.2 | 875.2 | 868.1 | 869.6 | 873.7 |
| 32.5° | 853.8 | 853.8 | 845.6 | 847.0 | 849.0 |
| 35° | 818.9 | 816.0 | 809.0 | 809.0 | 813.1 |
| 37.5° | 778.0 | 776.7 | 772.2 | 771.4 | 772.6 |
| 40° | 751.1 | 749.7 | 743.9 | 745.4 | 745.4 |
| 42.5° | 723.9 | 722.5 | 716.7 | 714.8 | 717.0 |
| 45° | 678.9 | 680.4 | 673.4 | 671.9 | 673.4 |
| 47.5° | 634.8 | 634.8 | 629.0 | 625.1 | 627.3 |
| 50° | 604.2 | 604.2 | 598.6 | 595.8 | 595.8 |
| 52.5° | 572.6 | 573.6 | 566.8 | 563.0 | 564.1 |
| 55° | 526.6 | 526.6 | 519.5 | 515.3 | 516.7 |
| 57.5° | 475.7 | 475.7 | 468.7 | 464.4 | 466.9 |
| 60° | 441.9 | 441.9 | 434.8 | 430.5 | 432.0 |
| 62.5° | 408.0 | 408.0 | 401.0 | 396.7 | 396.9 |
| 65° | 355.7 | 354.4 | 348.7 | 344.4 | 344.4 |
| 67.5° | 305.4 | 301.8 | 297.6 | 291.9 | 291.9 |
| 70° | 268.2 | 266.8 | 262.5 | 256.9 | 256.9 |
| 72.5° | 234.3 | 231.8 | 227.5 | 223.1 | 223.1 |
| 75° | 182.0 | 180.5 | 176.4 | 173.7 | 172.1 |
| 77.5° | 130.4 | 129.4 | 129.0 | 125.1 | 126.2 |
| 80° | 98.8 | 98.8 | 97.6 | 94.5 | 94.5 |
| 82.5° | 70.6 | 71.6 | 69.2 | 68.5 | 67.4 |
| 85° | 29.5 | 32.3 | 34.0 | 35.2 | 35.2 |
| 87.5° | 5.8 | 8.9 | 7.9 | 9.1 | 9.1 |
| 90° | 9.5 | 14.3 | 14.3 | 9.5 | 4.8 |
| 92.5° | 23.8 | 71.2 | 66.4 | 28.5 | 23.8 |
| 95° | 42.8 | 147.3 | 427.4 | 109.2 | 66.4 |
| 97.5° | 66.4 | 166.3 | 854.9 | 389.5 | 209.0 |
| 100° | 90.2 | 175.8 | 997.4 | 935.6 | 603.2 |
| 102.5° | 118.7 | 189.9 | 992.7 | 1315.6 | 1082.9 |
| 105° | 147.3 | 209.0 | 926.1 | 1562.6 | 1453.4 |



TEST NUMBER: P844955

CATALOG NUMBER: SQ4P-F-125U-075D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 228.0 | 280.3 | 721.9 | 1572.1 | 1790.6 |
| 115° | 256.5 | 308.7 | 688.7 | 1453.4 | 1714.5 |
| 117.5° | 285.0 | 342.0 | 669.6 | 1344.2 | 1605.3 |
| 120° | 308.7 | 370.5 | 655.4 | 1239.6 | 1496.1 |
| 122.5° | 327.7 | 399.0 | 646.0 | 1154.1 | 1386.8 |
| 125° | 346.7 | 427.4 | 641.2 | 1082.9 | 1291.9 |
| 127.5° | 365.7 | 446.4 | 641.2 | 1030.6 | 1206.4 |
| 130° | 384.7 | 455.9 | 636.5 | 978.4 | 1135.1 |
| 132.5° | 403.8 | 460.7 | 636.5 | 940.4 | 1073.4 |
| 135° | 417.9 | 470.2 | 636.5 | 902.4 | 1021.1 |
| 137.5° | 436.9 | 479.7 | 636.5 | 869.2 | 978.4 |
| 140° | 451.2 | 494.0 | 636.5 | 835.9 | 930.9 |
| 142.5° | 470.2 | 508.2 | 636.5 | 802.6 | 888.1 |
| 145° | 489.2 | 522.5 | 631.7 | 778.9 | 845.4 |
| 147.5° | 508.2 | 536.6 | 627.0 | 755.2 | 807.4 |
| 150° | 522.5 | 550.9 | 627.0 | 731.4 | 774.1 |
| 152.5° | 541.4 | 565.2 | 622.2 | 707.7 | 745.7 |
| 155° | 555.7 | 574.7 | 622.2 | 693.4 | 717.2 |
| 157.5° | 569.9 | 588.9 | 622.2 | 679.2 | 698.2 |
| 160° | 584.2 | 598.4 | 627.0 | 669.6 | 683.9 |
| 162.5° | 598.4 | 608.0 | 627.0 | 660.1 | 669.6 |
| 165° | 608.0 | 612.7 | 627.0 | 655.4 | 660.1 |
| 167.5° | 617.5 | 622.2 | 627.0 | 650.6 | 650.6 |
| 170° | 622.2 | 627.0 | 631.7 | 646.0 | 646.0 |
| 172.5° | 631.7 | 631.7 | 631.7 | 641.2 | 641.2 |
| 175° | 636.5 | 636.5 | 631.7 | 641.2 | 636.5 |
| 177.5° | 636.5 | 636.5 | 631.7 | 641.2 | 636.5 |
| 180° | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|--------|-------|-------|-------|--------|--------|
| 107.5° | 175.8 | 232.7 | 840.7 | 1671.8 | 1690.9 |
| 110° | 199.4 | 256.5 | 774.1 | 1657.6 | 1795.3 |



(END OF REPORT)