

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: P844943

Luminaire Tested: **SQ4P-F-100U-075D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844943
REPORT IS A COMBINATION OF REPORTS P700080 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-100U-075D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

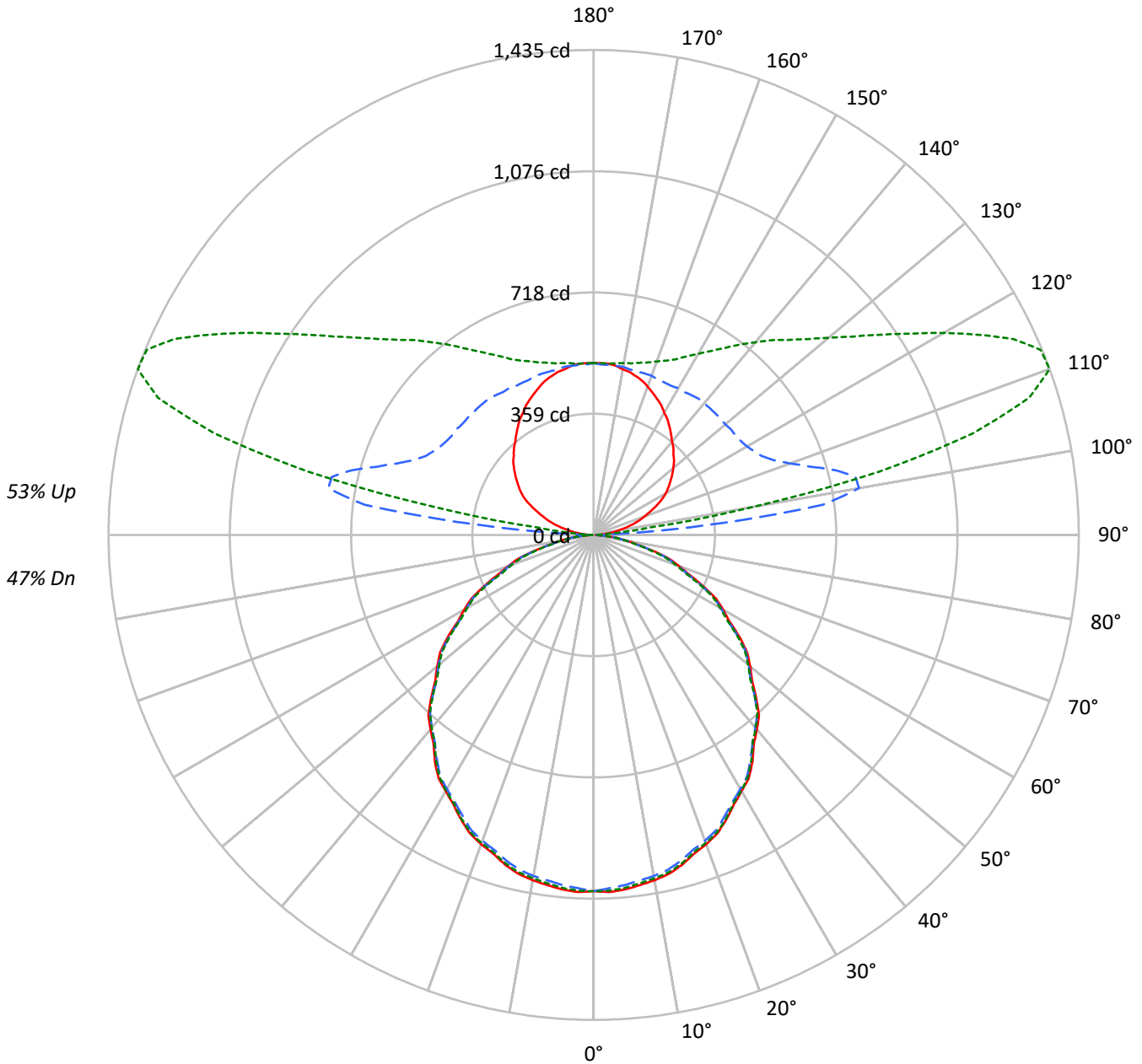
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6180.0 lumens
Efficiency: N/A
Efficacy: 119.8 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): 51.6
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: P844943
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Luminous Intensity Polar Plot





TEST NUMBER: P844943

CATALOG NUMBER: SQ4P-F-100U-075D-B35-1D-UNV

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 106 | 106 | 106 | 106 | 98 | 98 | 98 | 98 | 81 | 81 | 81 | 67 | 67 | 67 | 53 | 53 | 53 | 47 | | | | 47 | | | | | | | | | | | | | | | |
| 1 | 97 | 93 | 89 | 85 | 89 | 85 | 82 | 79 | 71 | 69 | 67 | 59 | 57 | 55 | 47 | 46 | 45 | | | | 39 | | | | | | | | | | | | | | | | |
| 2 | 88 | 81 | 75 | 70 | 81 | 74 | 69 | 65 | 62 | 59 | 55 | 51 | 49 | 46 | 41 | 39 | 38 | | | | 33 | | | | | | | | | | | | | | | | |
| 3 | 80 | 71 | 64 | 58 | 74 | 65 | 59 | 54 | 55 | 50 | 46 | 45 | 42 | 39 | 36 | 34 | 32 | | | | 28 | | | | | | | | | | | | | | | | |
| 4 | 74 | 63 | 55 | 49 | 67 | 58 | 51 | 46 | 49 | 44 | 39 | 40 | 36 | 33 | 32 | 30 | 27 | | | | 24 | | | | | | | | | | | | | | | | |
| 5 | 67 | 56 | 48 | 42 | 62 | 52 | 44 | 39 | 44 | 38 | 34 | 36 | 32 | 29 | 29 | 26 | 24 | | | | 20 | | | | | | | | | | | | | | | | |
| 6 | 62 | 50 | 42 | 36 | 57 | 46 | 39 | 34 | 39 | 34 | 29 | 33 | 28 | 25 | 26 | 23 | 21 | | | | 18 | | | | | | | | | | | | | | | | |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 30 | 25 | 22 | 24 | 21 | 18 | | | | 16 | | | | | | | | | | | | | | | | |
| 8 | 53 | 41 | 33 | 28 | 49 | 38 | 31 | 26 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | | | | 14 | | | | | | | | | | | | | | | | |
| 9 | 49 | 37 | 30 | 25 | 45 | 35 | 28 | 23 | 30 | 24 | 20 | 25 | 21 | 18 | 20 | 17 | 15 | | | | 13 | | | | | | | | | | | | | | | | |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 23 | 19 | 16 | 19 | 16 | 13 | | | | 12 | | | | | | | | | | | | | | | | |

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: P844943

CATALOG NUMBER: SQ4P-F-100U-075D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 99.5 | 1.6 |
| 10°-20° | 283.3 | 4.6 |
| 20°-30° | 425.6 | 6.9 |
| 30°-40° | 508.0 | 8.2 |
| 40°-50° | 520.5 | 8.4 |
| 50°-60° | 464.2 | 7.5 |
| 60°-70° | 345.7 | 5.6 |
| 70°-80° | 187.7 | 3.0 |
| 80°-90° | 44.7 | 0.7 |
| 90°-100° | 202.4 | 3.3 |
| 100°-110° | 704.3 | 11.4 |
| 110°-120° | 682.2 | 11.0 |
| 120°-130° | 535.2 | 8.7 |
| 130°-140° | 423.6 | 6.9 |
| 140°-150° | 326.9 | 5.3 |
| 150°-160° | 234.3 | 3.8 |
| 160°-170° | 143.3 | 2.3 |
| 170°-180° | 48.5 | 0.8 |
| 0°-30° | 808.4 | 13.1 |
| 0°-40° | 1316.4 | 21.3 |
| 0°-60° | 2301.1 | 37.2 |
| 0°-90° | 2879.2 | 46.6 |
| 90°-120° | 1588.9 | 25.7 |
| 90°-150° | 2874.6 | 46.5 |
| 90°-180° | 3301.0 | 53.4 |
| 0°-180° | 6180.0 | 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° | 8 | 11 | 11 | 8 | 4 | 5 |
| 95° | 34 | 118 | 342 | 87 | 53 | 36 |
| 105° | 118 | 167 | 740 | 1249 | 1162 | 124 |
| 115° | 205 | 247 | 550 | 1162 | 1370 | 202 |
| 125° | 277 | 342 | 512 | 865 | 1032 | 248 |
| 135° | 334 | 376 | 509 | 721 | 816 | 259 |
| 145° | 391 | 418 | 505 | 622 | 676 | 245 |
| 155° | 444 | 459 | 497 | 554 | 573 | 205 |
| 165° | 486 | 490 | 501 | 524 | 528 | 137 |
| 175° | 509 | 509 | 505 | 512 | 509 | 48 |
| 180° | 509 | 509 | 509 | 509 | 509 | |



TEST NUMBER: P844943

CATALOG NUMBER: SQ4P-F-100U-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° | 7.6 | 11.4 | 11.4 | 7.6 | 3.8 |
| 92.5° | 19.0 | 57.0 | 53.1 | 22.8 | 19.0 |
| 95° | 34.2 | 117.6 | 341.6 | 87.3 | 53.1 |
| 97.5° | 53.1 | 132.9 | 683.2 | 311.3 | 167.0 |
| 100° | 72.1 | 140.4 | 797.0 | 747.7 | 482.0 |
| 102.5° | 94.9 | 151.8 | 793.2 | 1051.4 | 865.3 |
| 105° | 117.6 | 167.0 | 740.1 | 1248.7 | 1161.5 |



TEST NUMBER: P844943

CATALOG NUMBER: SQ4P-F-100U-075D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 182.2 | 223.9 | 577.0 | 1256.3 | 1431.0 |
| 115° | 204.9 | 246.7 | 550.3 | 1161.5 | 1370.2 |
| 117.5° | 227.7 | 273.3 | 535.2 | 1074.2 | 1282.9 |
| 120° | 246.7 | 296.0 | 523.8 | 990.6 | 1195.6 |
| 122.5° | 261.9 | 318.8 | 516.2 | 922.3 | 1108.3 |
| 125° | 277.0 | 341.6 | 512.4 | 865.3 | 1032.4 |
| 127.5° | 292.3 | 356.8 | 512.4 | 823.7 | 964.1 |
| 130° | 307.5 | 364.4 | 508.6 | 781.9 | 907.1 |
| 132.5° | 322.6 | 368.1 | 508.6 | 751.5 | 857.8 |
| 135° | 334.0 | 375.8 | 508.6 | 721.2 | 816.0 |
| 137.5° | 349.2 | 383.3 | 508.6 | 694.6 | 781.9 |
| 140° | 360.6 | 394.8 | 508.6 | 668.0 | 743.9 |
| 142.5° | 375.8 | 406.1 | 508.6 | 641.5 | 709.8 |
| 145° | 390.9 | 417.6 | 504.8 | 622.5 | 675.6 |
| 147.5° | 406.1 | 428.9 | 501.0 | 603.5 | 645.3 |
| 150° | 417.6 | 440.3 | 501.0 | 584.5 | 618.6 |
| 152.5° | 432.7 | 451.7 | 497.2 | 565.5 | 595.9 |
| 155° | 444.1 | 459.2 | 497.2 | 554.2 | 573.1 |
| 157.5° | 455.4 | 470.7 | 497.2 | 542.8 | 558.0 |
| 160° | 466.9 | 478.2 | 501.0 | 535.2 | 546.5 |
| 162.5° | 478.2 | 485.9 | 501.0 | 527.5 | 535.2 |
| 165° | 485.9 | 489.7 | 501.0 | 523.8 | 527.5 |
| 167.5° | 493.4 | 497.2 | 501.0 | 520.0 | 520.0 |
| 170° | 497.2 | 501.0 | 504.8 | 516.2 | 516.2 |
| 172.5° | 504.8 | 504.8 | 504.8 | 512.4 | 512.4 |
| 175° | 508.6 | 508.6 | 504.8 | 512.4 | 508.6 |
| 177.5° | 508.6 | 508.6 | 504.8 | 512.4 | 508.6 |
| 180° | 508.6 | 508.6 | 508.6 | 508.6 | 508.6 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|--------|--------|
| 107.5° | 140.4 | 186.0 | 671.8 | 1336.0 | 1351.2 |
| 110° | 159.4 | 204.9 | 618.6 | 1324.7 | 1434.7 |



(END OF REPORT)