

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: P844957

Luminaire Tested: **SQ4P-F-125U-075D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844957
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

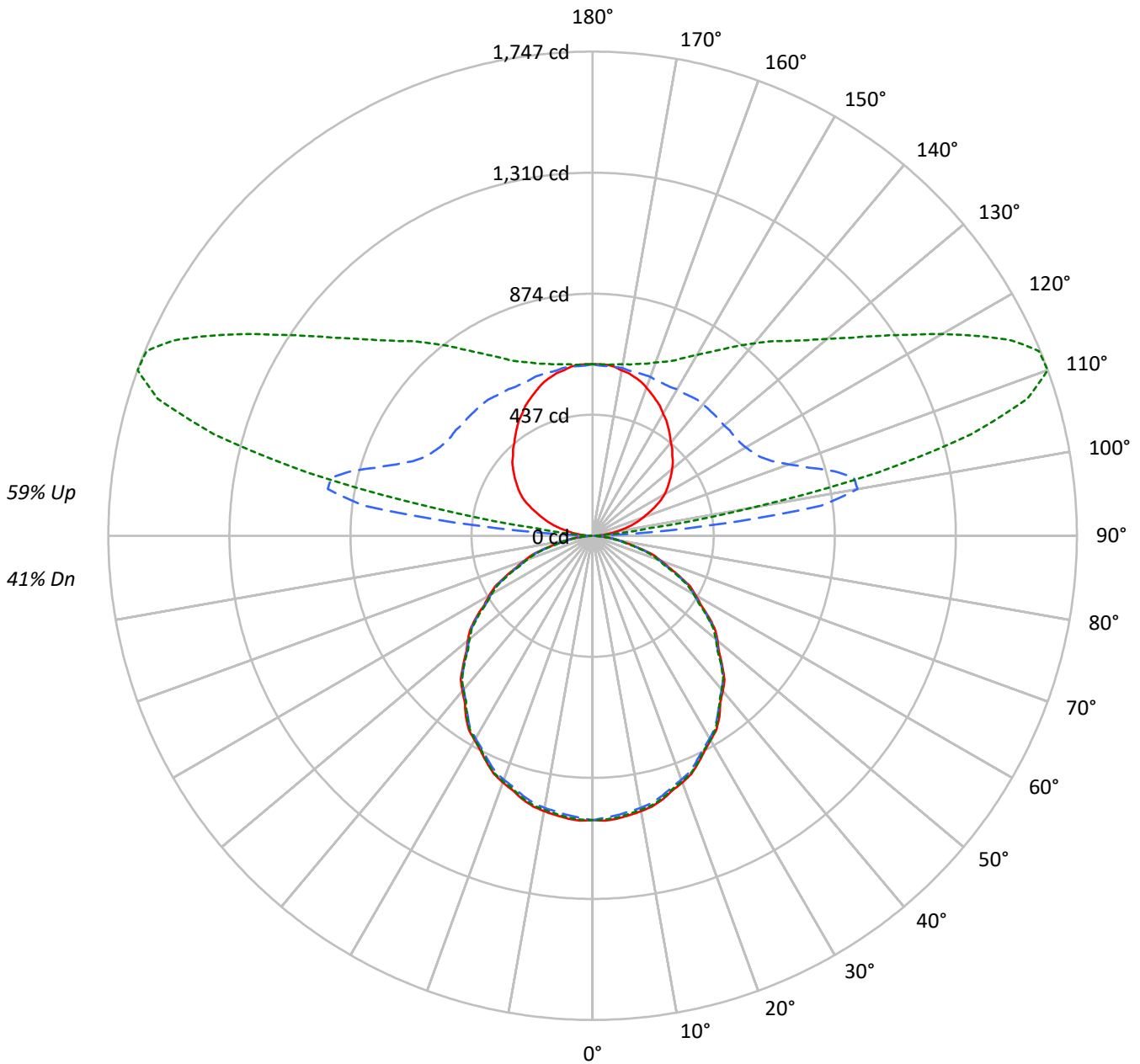
Lumens per Lamp: N/A
Luminaire Lumens: 6819.8 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

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Luminous Intensity Polar Plot





TEST NUMBER: P844957

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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° | 9464 | 9464 | 9464 |
| 5° | 9489 | 9374 | 9450 |
| 10° | 9456 | 9340 | 9405 |
| 15° | 9392 | 9274 | 9353 |
| 20° | 9303 | 9196 | 9264 |
| 25° | 9199 | 9087 | 9172 |
| 30° | 9071 | 8997 | 9055 |
| 35° | 8973 | 8864 | 8909 |
| 40° | 8802 | 8716 | 8734 |
| 45° | 8618 | 8548 | 8548 |
| 50° | 8437 | 8359 | 8319 |
| 55° | 8241 | 8130 | 8086 |
| 60° | 7933 | 7805 | 7756 |
| 65° | 7556 | 7405 | 7313 |
| 70° | 7041 | 6887 | 6741 |
| 75° | 6313 | 6121 | 5971 |
| 80° | 5111 | 5042 | 4888 |
| 85° | 3038 | 3493 | 3631 |



TEST NUMBER: P844957

CATALOG NUMBER: SQ4P-F-125U-075D-B50-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 96.8 | 1.4 |
| 10°-20° | 275.6 | 4.0 |
| 20°-30° | 414.0 | 6.1 |
| 30°-40° | 494.2 | 7.2 |
| 40°-50° | 506.4 | 7.4 |
| 50°-60° | 451.6 | 6.6 |
| 60°-70° | 336.3 | 4.9 |
| 70°-80° | 182.6 | 2.7 |
| 80°-90° | 43.8 | 0.6 |
| 90°-100° | 246.4 | 3.6 |
| 100°-110° | 857.4 | 12.6 |
| 110°-120° | 830.6 | 12.2 |
| 120°-130° | 651.5 | 9.6 |
| 130°-140° | 515.7 | 7.6 |
| 140°-150° | 398.0 | 5.8 |
| 150°-160° | 285.3 | 4.2 |
| 160°-170° | 174.5 | 2.6 |
| 170°-180° | 59.0 | 0.9 |
| 0°-30° | 786.4 | 11.5 |
| 0°-40° | 1280.6 | 18.8 |
| 0°-60° | 2238.7 | 32.8 |
| 0°-90° | 2801.4 | 41.1 |
| 90°-120° | 1934.4 | 28.4 |
| 90°-150° | 3499.5 | 51.3 |
| 90°-180° | 4018.0 | 58.9 |
| 0°-180° | 6819.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1026 | 1026 | 1026 | 1026 | 1026 | |
| 5° | 1025 | 1023 | 1012 | 1022 | 1020 | 97 |
| 15° | 983 | 980 | 971 | 979 | 979 | 277 |
| 25° | 904 | 901 | 893 | 898 | 901 | 416 |
| 35° | 797 | 794 | 787 | 787 | 791 | 497 |
| 45° | 660 | 662 | 655 | 654 | 655 | 510 |
| 55° | 512 | 512 | 505 | 501 | 503 | 456 |
| 65° | 346 | 345 | 339 | 335 | 335 | 343 |
| 75° | 177 | 176 | 172 | 169 | 168 | 187 |
| 85° | 29 | 31 | 33 | 34 | 34 | 40 |
| 90° | 9 | 14 | 14 | 9 | 5 | 6 |
| 95° | 42 | 143 | 416 | 106 | 65 | 44 |
| 105° | 143 | 203 | 901 | 1520 | 1414 | 151 |
| 115° | 250 | 300 | 670 | 1414 | 1668 | 246 |
| 125° | 337 | 416 | 624 | 1054 | 1257 | 302 |
| 135° | 407 | 457 | 619 | 878 | 993 | 315 |
| 145° | 476 | 508 | 614 | 758 | 822 | 298 |
| 155° | 541 | 559 | 605 | 675 | 698 | 249 |
| 165° | 592 | 596 | 610 | 638 | 642 | 167 |
| 175° | 619 | 619 | 614 | 624 | 619 | 59 |
| 180° | 619 | 619 | 619 | 619 | 619 | |



TEST NUMBER: P844957

CATALOG NUMBER: SQ4P-F-125U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1025.8 | 1025.8 | 1025.8 | 1025.8 | 1025.8 |
| 2.5° | 1029.0 | 1026.9 | 1018.2 | 1025.8 | 1024.9 |
| 5° | 1024.6 | 1023.1 | 1012.2 | 1021.7 | 1020.4 |
| 7.5° | 1017.0 | 1014.5 | 1003.5 | 1013.0 | 1011.6 |
| 10° | 1009.3 | 1006.6 | 997.0 | 1005.1 | 1003.9 |
| 12.5° | 999.5 | 997.9 | 987.2 | 995.4 | 995.1 |
| 15° | 983.3 | 980.5 | 970.9 | 979.2 | 979.2 |
| 17.5° | 961.9 | 960.3 | 950.8 | 958.7 | 957.9 |
| 20° | 947.5 | 944.9 | 936.6 | 943.5 | 943.5 |
| 22.5° | 930.0 | 928.4 | 920.2 | 925.8 | 927.0 |
| 25° | 903.6 | 901.0 | 892.6 | 898.2 | 901.0 |
| 27.5° | 874.5 | 872.4 | 865.6 | 869.1 | 871.0 |
| 30° | 851.5 | 851.5 | 844.5 | 846.0 | 850.0 |
| 32.5° | 830.6 | 830.6 | 822.6 | 824.1 | 826.0 |
| 35° | 796.7 | 793.9 | 787.0 | 787.0 | 791.0 |
| 37.5° | 756.9 | 755.6 | 751.2 | 750.5 | 751.6 |
| 40° | 730.8 | 729.3 | 723.7 | 725.2 | 725.2 |
| 42.5° | 704.3 | 702.9 | 697.3 | 695.5 | 697.5 |
| 45° | 660.5 | 661.9 | 655.1 | 653.7 | 655.1 |
| 47.5° | 617.6 | 617.6 | 612.0 | 608.2 | 610.2 |
| 50° | 587.8 | 587.8 | 582.4 | 579.6 | 579.6 |
| 52.5° | 557.0 | 558.1 | 551.4 | 547.7 | 548.8 |
| 55° | 512.3 | 512.3 | 505.4 | 501.3 | 502.7 |
| 57.5° | 462.8 | 462.8 | 456.0 | 451.8 | 454.2 |
| 60° | 429.9 | 429.9 | 423.0 | 418.8 | 420.3 |
| 62.5° | 396.9 | 396.9 | 390.1 | 386.0 | 386.1 |
| 65° | 346.1 | 344.8 | 339.2 | 335.0 | 335.0 |
| 67.5° | 297.1 | 293.6 | 289.5 | 284.0 | 284.0 |
| 70° | 261.0 | 259.5 | 255.3 | 249.9 | 249.9 |
| 72.5° | 227.9 | 225.5 | 221.3 | 217.1 | 217.1 |
| 75° | 177.1 | 175.6 | 171.7 | 169.0 | 167.5 |
| 77.5° | 126.9 | 125.9 | 125.5 | 121.7 | 122.8 |
| 80° | 96.2 | 96.2 | 94.9 | 92.0 | 92.0 |
| 82.5° | 68.6 | 69.7 | 67.3 | 66.6 | 65.6 |
| 85° | 28.7 | 31.4 | 33.0 | 34.3 | 34.3 |
| 87.5° | 5.6 | 8.7 | 7.7 | 8.9 | 8.9 |
| 90° | 9.2 | 13.9 | 13.9 | 9.2 | 4.7 |
| 92.5° | 23.1 | 69.3 | 64.6 | 27.7 | 23.1 |
| 95° | 41.6 | 143.3 | 415.8 | 106.2 | 64.6 |
| 97.5° | 64.6 | 161.7 | 831.7 | 378.9 | 203.4 |
| 100° | 87.8 | 171.0 | 970.3 | 910.2 | 586.8 |
| 102.5° | 115.5 | 184.8 | 965.7 | 1279.9 | 1053.5 |
| 105° | 143.3 | 203.4 | 901.0 | 1520.2 | 1413.9 |



TEST NUMBER: P844957

CATALOG NUMBER: SQ4P-F-125U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 221.8 | 272.7 | 702.3 | 1529.4 | 1742.0 |
| 115° | 249.5 | 300.4 | 670.0 | 1413.9 | 1668.0 |
| 117.5° | 277.2 | 332.7 | 651.5 | 1307.7 | 1561.8 |
| 120° | 300.4 | 360.4 | 637.7 | 1206.0 | 1455.6 |
| 122.5° | 318.8 | 388.1 | 628.4 | 1122.8 | 1349.2 |
| 125° | 337.3 | 415.8 | 623.8 | 1053.5 | 1256.9 |
| 127.5° | 355.8 | 434.3 | 623.8 | 1002.7 | 1173.7 |
| 130° | 374.2 | 443.5 | 619.2 | 951.8 | 1104.3 |
| 132.5° | 392.8 | 448.2 | 619.2 | 914.9 | 1044.3 |
| 135° | 406.6 | 457.4 | 619.2 | 878.0 | 993.4 |
| 137.5° | 425.1 | 466.7 | 619.2 | 845.6 | 951.8 |
| 140° | 439.0 | 480.6 | 619.2 | 813.2 | 905.7 |
| 142.5° | 457.4 | 494.4 | 619.2 | 780.9 | 864.1 |
| 145° | 475.9 | 508.3 | 614.5 | 757.8 | 822.5 |
| 147.5° | 494.4 | 522.1 | 610.0 | 734.7 | 785.5 |
| 150° | 508.3 | 536.0 | 610.0 | 711.5 | 753.1 |
| 152.5° | 526.8 | 549.9 | 605.3 | 688.5 | 725.4 |
| 155° | 540.7 | 559.1 | 605.3 | 674.6 | 697.7 |
| 157.5° | 554.5 | 572.9 | 605.3 | 660.8 | 679.3 |
| 160° | 568.4 | 582.2 | 610.0 | 651.5 | 665.4 |
| 162.5° | 582.2 | 591.5 | 610.0 | 642.2 | 651.5 |
| 165° | 591.5 | 596.1 | 610.0 | 637.7 | 642.2 |
| 167.5° | 600.7 | 605.3 | 610.0 | 633.0 | 633.0 |
| 170° | 605.3 | 610.0 | 614.5 | 628.4 | 628.4 |
| 172.5° | 614.5 | 614.5 | 614.5 | 623.8 | 623.8 |
| 175° | 619.2 | 619.2 | 614.5 | 623.8 | 619.2 |
| 177.5° | 619.2 | 619.2 | 614.5 | 623.8 | 619.2 |
| 180° | 619.2 | 619.2 | 619.2 | 619.2 | 619.2 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|--------|--------|
| 107.5° | 171.0 | 226.4 | 817.9 | 1626.4 | 1645.0 |
| 110° | 194.0 | 249.5 | 753.1 | 1612.6 | 1746.6 |



(END OF REPORT)