

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: P845168

Luminaire Tested: **SQ4P-PR1-075U-050D-B35-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845168
REPORT IS A COMBINATION OF REPORTS P700231 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-075U-050D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

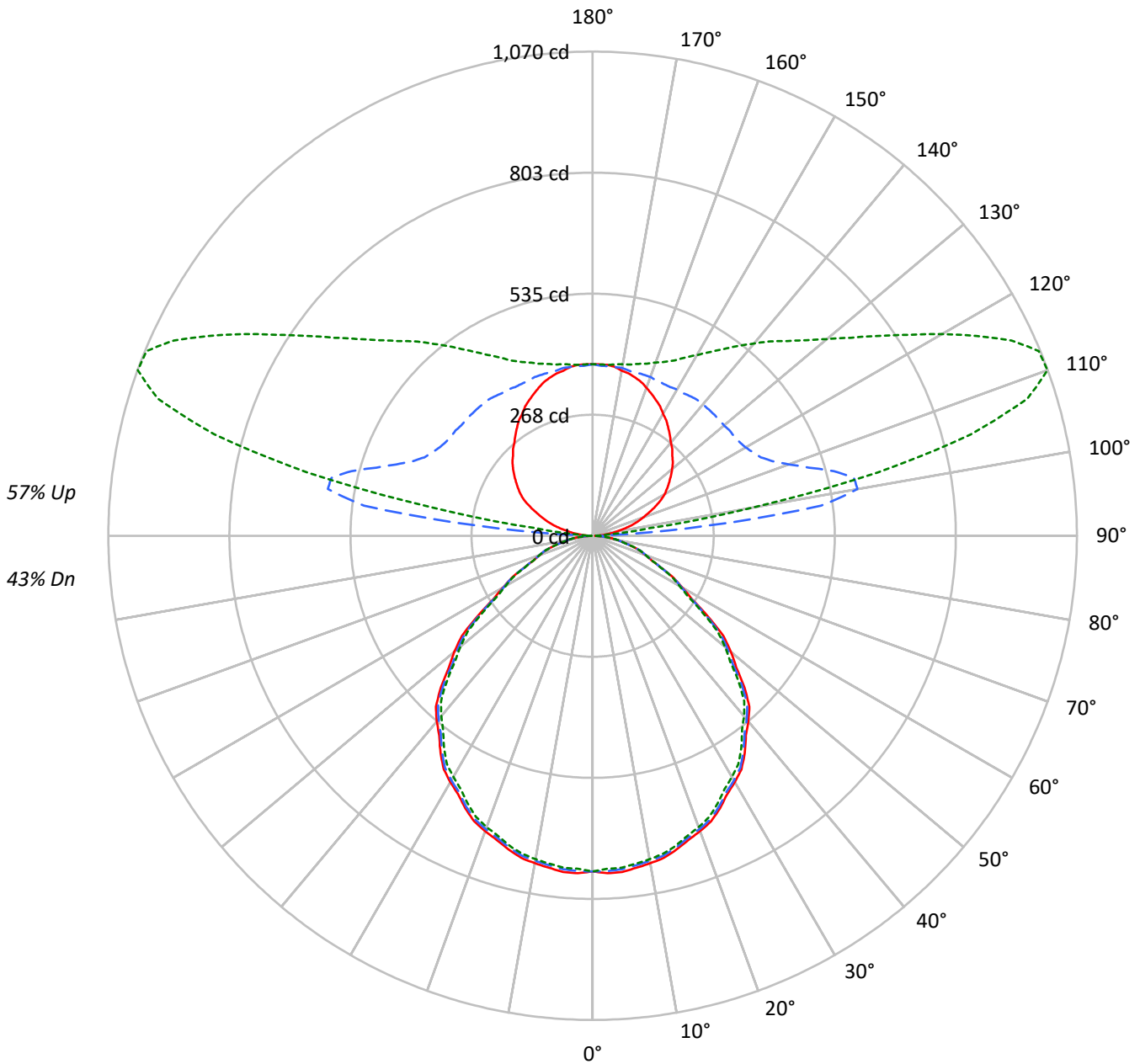
Lumens per Lamp: N/A
Luminaire Lumens: 4315.7 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 35.8
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: P845168

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 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 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 | 43 | | | | 43 |
| 1 | 96 | 92 | 89 | 85 | 88 | 84 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 44 | 43 | 42 | 37 | | | | 37 |
| 2 | 88 | 81 | 75 | 70 | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 47 | 45 | 39 | 38 | 36 | 31 | | | | 31 |
| 3 | 80 | 71 | 64 | 58 | 73 | 65 | 59 | 54 | 55 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 | 27 | | | | 27 |
| 4 | 74 | 63 | 55 | 50 | 67 | 58 | 51 | 46 | 49 | 44 | 40 | 40 | 36 | 33 | 31 | 29 | 27 | 23 | | | | 23 |
| 5 | 68 | 56 | 48 | 43 | 62 | 52 | 45 | 40 | 43 | 38 | 34 | 36 | 32 | 29 | 28 | 26 | 23 | 20 | | | | 20 |
| 6 | 62 | 50 | 43 | 37 | 57 | 47 | 40 | 35 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 | 18 | | | | 18 |
| 7 | 58 | 46 | 38 | 32 | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 29 | 25 | 22 | 24 | 21 | 18 | 16 | | | | 16 |
| 8 | 53 | 41 | 34 | 29 | 49 | 38 | 32 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 14 | | | | 14 |
| 9 | 50 | 38 | 30 | 25 | 45 | 35 | 28 | 24 | 30 | 24 | 21 | 25 | 21 | 18 | 20 | 17 | 15 | 13 | | | | 13 |
| 10 | 46 | 35 | 27 | 23 | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 18 | 16 | 14 | 12 | | | | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6844 | 6844 | 6844 |
| 5° | 6906 | 6853 | 6817 |
| 10° | 6883 | 6835 | 6800 |
| 15° | 6854 | 6810 | 6774 |
| 20° | 6819 | 6775 | 6725 |
| 25° | 6771 | 6726 | 6648 |
| 30° | 6697 | 6650 | 6555 |
| 35° | 6600 | 6542 | 6448 |
| 40° | 6448 | 6378 | 6264 |
| 45° | 6186 | 6078 | 5952 |
| 50° | 5723 | 5585 | 5474 |
| 55° | 4995 | 4884 | 4781 |
| 60° | 4209 | 4174 | 4091 |
| 65° | 3639 | 3655 | 3626 |
| 70° | 3342 | 3361 | 3361 |
| 75° | 3212 | 3212 | 3233 |
| 80° | 3023 | 3055 | 3023 |
| 85° | 2435 | 2699 | 2699 |



TEST NUMBER: P845168

CATALOG NUMBER: SQ4P-PR1-075U-050D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.1 | 1.6 |
| 10°-20° | 200.7 | 4.7 |
| 20°-30° | 302.7 | 7.0 |
| 30°-40° | 360.7 | 8.4 |
| 40°-50° | 355.6 | 8.2 |
| 50°-60° | 271.8 | 6.3 |
| 60°-70° | 168.2 | 3.9 |
| 70°-80° | 95.5 | 2.2 |
| 80°-90° | 30.0 | 0.7 |
| 90°-100° | 150.9 | 3.5 |
| 100°-110° | 525.0 | 12.2 |
| 110°-120° | 508.6 | 11.8 |
| 120°-130° | 398.9 | 9.2 |
| 130°-140° | 315.7 | 7.3 |
| 140°-150° | 243.7 | 5.6 |
| 150°-160° | 174.7 | 4.0 |
| 160°-170° | 106.8 | 2.5 |
| 170°-180° | 36.1 | 0.8 |
| 0°-30° | 573.6 | 13.3 |
| 0°-40° | 934.3 | 21.6 |
| 0°-60° | 1561.6 | 36.2 |
| 0°-90° | 1855.3 | 43.0 |
| 90°-120° | 1184.4 | 27.4 |
| 90°-150° | 2142.8 | 49.6 |
| 90°-180° | 2460.0 | 57.0 |
| 0°-180° | 4315.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|------|------|
| 0° | 742 | 742 | 742 | 742 | 742 | |
| 5° | 746 | 737 | 740 | 737 | 736 | 71 |
| 15° | 718 | 710 | 713 | 710 | 709 | 202 |
| 25° | 665 | 657 | 661 | 654 | 653 | 306 |
| 35° | 586 | 579 | 581 | 573 | 572 | 366 |
| 45° | 474 | 468 | 466 | 457 | 456 | 363 |
| 55° | 310 | 306 | 304 | 298 | 297 | 278 |
| 65° | 167 | 166 | 167 | 166 | 166 | 169 |
| 75° | 90 | 90 | 90 | 91 | 91 | 95 |
| 85° | 23 | 24 | 26 | 26 | 26 | 27 |
| 90° | 6 | 8 | 8 | 6 | 3 | 4 |
| 95° | 25 | 88 | 255 | 65 | 40 | 27 |
| 105° | 88 | 124 | 552 | 931 | 866 | 92 |
| 115° | 153 | 184 | 410 | 866 | 1021 | 151 |
| 125° | 207 | 255 | 382 | 645 | 770 | 185 |
| 135° | 249 | 280 | 379 | 538 | 608 | 193 |
| 145° | 291 | 311 | 376 | 464 | 504 | 182 |
| 155° | 331 | 342 | 371 | 413 | 427 | 153 |
| 165° | 362 | 365 | 373 | 390 | 393 | 102 |
| 175° | 379 | 379 | 376 | 382 | 379 | 36 |
| 180° | 379 | 379 | 379 | 379 | 379 | |



TEST NUMBER: P845168

CATALOG NUMBER: SQ4P-PR1-075U-050D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 741.8 | 741.8 | 741.8 | 741.8 | 741.8 |
| 2.5° | 746.4 | 739.9 | 741.8 | 740.2 | 736.7 |
| 5° | 745.7 | 737.4 | 739.9 | 737.3 | 736.1 |
| 7.5° | 739.9 | 731.9 | 734.3 | 731.7 | 731.0 |
| 10° | 734.7 | 727.3 | 729.6 | 727.1 | 725.8 |
| 12.5° | 729.1 | 721.2 | 724.0 | 720.9 | 719.7 |
| 15° | 717.6 | 710.0 | 713.0 | 710.4 | 709.2 |
| 17.5° | 704.8 | 696.7 | 699.8 | 696.8 | 695.2 |
| 20° | 694.5 | 687.1 | 690.0 | 685.6 | 684.9 |
| 22.5° | 683.2 | 675.8 | 678.7 | 672.9 | 672.7 |
| 25° | 665.1 | 656.9 | 660.7 | 653.7 | 653.0 |
| 27.5° | 643.5 | 636.1 | 639.0 | 631.9 | 631.2 |
| 30° | 628.6 | 621.2 | 624.2 | 616.5 | 615.3 |
| 32.5° | 611.8 | 604.9 | 607.4 | 599.7 | 598.9 |
| 35° | 586.0 | 579.0 | 580.8 | 573.1 | 572.5 |
| 37.5° | 556.4 | 550.1 | 551.1 | 542.6 | 542.1 |
| 40° | 535.4 | 529.2 | 529.6 | 520.7 | 520.1 |
| 42.5° | 512.5 | 506.2 | 505.6 | 496.7 | 496.0 |
| 45° | 474.1 | 467.9 | 465.8 | 457.4 | 456.2 |
| 47.5° | 430.4 | 424.1 | 420.3 | 413.4 | 412.6 |
| 50° | 398.7 | 392.4 | 389.1 | 383.3 | 381.4 |
| 52.5° | 364.4 | 358.2 | 355.4 | 350.1 | 348.3 |
| 55° | 310.5 | 305.5 | 303.6 | 298.4 | 297.2 |
| 57.5° | 259.2 | 256.0 | 255.3 | 250.3 | 249.8 |
| 60° | 228.1 | 226.2 | 226.2 | 221.7 | 221.7 |
| 62.5° | 201.6 | 200.1 | 201.1 | 198.2 | 197.7 |
| 65° | 166.7 | 165.6 | 167.4 | 166.1 | 166.1 |
| 67.5° | 139.3 | 139.3 | 140.4 | 139.8 | 139.8 |
| 70° | 123.9 | 123.9 | 124.6 | 124.6 | 124.6 |
| 72.5° | 110.1 | 109.7 | 111.4 | 111.3 | 110.8 |
| 75° | 90.1 | 90.1 | 90.1 | 90.7 | 90.7 |
| 77.5° | 70.2 | 70.3 | 70.8 | 70.8 | 70.2 |
| 80° | 56.9 | 57.5 | 57.5 | 56.9 | 56.9 |
| 82.5° | 43.6 | 44.1 | 44.1 | 44.0 | 43.6 |
| 85° | 23.0 | 24.3 | 25.5 | 25.5 | 25.5 |
| 87.5° | 6.7 | 8.6 | 10.3 | 10.3 | 9.7 |
| 90° | 5.7 | 8.5 | 8.5 | 5.7 | 2.8 |
| 92.5° | 14.2 | 42.5 | 39.6 | 16.9 | 14.2 |
| 95° | 25.4 | 87.7 | 254.6 | 65.1 | 39.6 |
| 97.5° | 39.6 | 99.0 | 509.2 | 232.0 | 124.5 |
| 100° | 53.7 | 104.7 | 594.1 | 557.4 | 359.3 |
| 102.5° | 70.8 | 113.1 | 591.3 | 783.7 | 645.1 |
| 105° | 87.7 | 124.5 | 551.7 | 930.8 | 865.7 |



TEST NUMBER: P845168

CATALOG NUMBER: SQ4P-PR1-075U-050D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 135.8 | 166.9 | 430.1 | 936.5 | 1066.6 |
| 115° | 152.8 | 183.9 | 410.2 | 865.7 | 1021.3 |
| 117.5° | 169.8 | 203.7 | 399.0 | 800.7 | 956.3 |
| 120° | 183.9 | 220.7 | 390.4 | 738.4 | 891.2 |
| 122.5° | 195.2 | 237.7 | 384.8 | 687.5 | 826.1 |
| 125° | 206.6 | 254.6 | 381.9 | 645.1 | 769.5 |
| 127.5° | 217.8 | 266.0 | 381.9 | 614.0 | 718.7 |
| 130° | 229.2 | 271.6 | 379.1 | 582.8 | 676.2 |
| 132.5° | 240.4 | 274.4 | 379.1 | 560.2 | 639.4 |
| 135° | 248.9 | 280.1 | 379.1 | 537.5 | 608.3 |
| 137.5° | 260.3 | 285.7 | 379.1 | 517.8 | 582.8 |
| 140° | 268.8 | 294.3 | 379.1 | 497.9 | 554.6 |
| 142.5° | 280.1 | 302.8 | 379.1 | 478.1 | 529.0 |
| 145° | 291.4 | 311.2 | 376.3 | 464.0 | 503.6 |
| 147.5° | 302.8 | 319.7 | 373.4 | 449.8 | 481.0 |
| 150° | 311.2 | 328.2 | 373.4 | 435.7 | 461.2 |
| 152.5° | 322.5 | 336.6 | 370.6 | 421.6 | 444.2 |
| 155° | 331.0 | 342.3 | 370.6 | 413.1 | 427.2 |
| 157.5° | 339.5 | 350.8 | 370.6 | 404.5 | 415.9 |
| 160° | 348.0 | 356.5 | 373.4 | 399.0 | 407.4 |
| 162.5° | 356.5 | 362.2 | 373.4 | 393.3 | 399.0 |
| 165° | 362.2 | 365.0 | 373.4 | 390.4 | 393.3 |
| 167.5° | 367.8 | 370.6 | 373.4 | 387.6 | 387.6 |
| 170° | 370.6 | 373.4 | 376.3 | 384.8 | 384.8 |
| 172.5° | 376.3 | 376.3 | 376.3 | 381.9 | 381.9 |
| 175° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 177.5° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 180° | 379.1 | 379.1 | 379.1 | 379.1 | 379.1 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|--------|
| 107.5° | 104.7 | 138.7 | 500.7 | 995.9 | 1007.2 |
| 110° | 118.8 | 152.8 | 461.2 | 987.4 | 1069.5 |



(END OF REPORT)