

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P1036272

Luminaire Tested: SQ4R-PP3-075D-B2750-1D-UNV-W2A\_5000K

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P1036272  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P563482)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PP3-075D-B2750-1D-UNV-W2A\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -  
Ballast/Driver: -

**Summary**

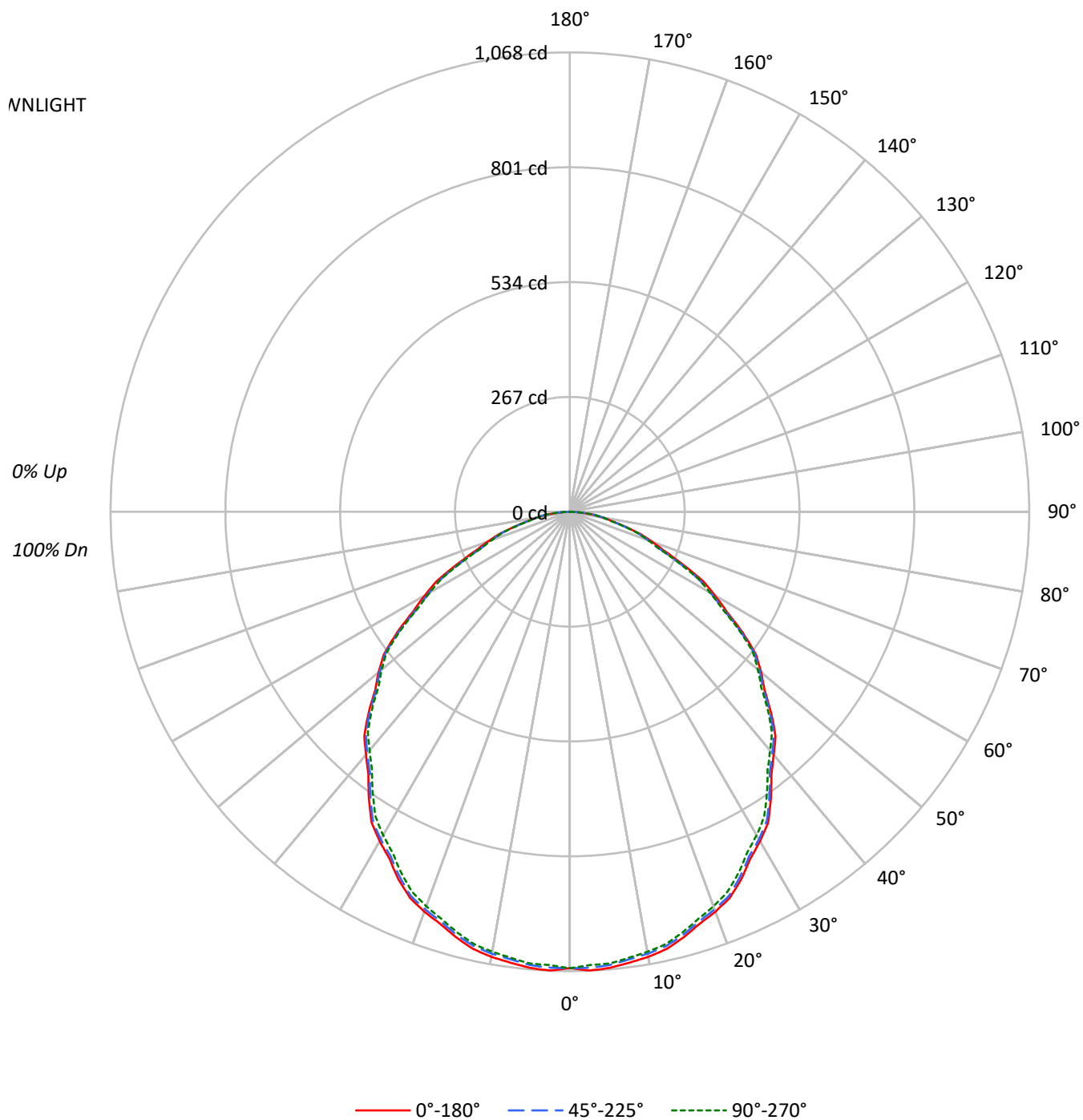
Lumens per Lamp: N/A  
Luminaire Lumens: 2715.2 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 25.6  
Input Voltage (V): NR  
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

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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 98  | 95  | 93  |  | 95  | 92  | 90  |  | 91  |
| 2   | 100 | 92  | 86  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  |  | 84  | 79  | 76  |  | 81  |
| 3   | 92  | 81  | 74  | 67  | 89  | 80  | 73  | 67  | 77  | 71  | 66  |  | 74  | 69  | 64  |  | 72  |
| 4   | 84  | 72  | 64  | 57  | 82  | 71  | 63  | 57  | 69  | 62  | 56  |  | 66  | 60  | 56  |  | 64  |
| 5   | 77  | 65  | 56  | 50  | 75  | 64  | 56  | 49  | 62  | 54  | 49  |  | 60  | 53  | 48  |  | 58  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 49  | 43  | 56  | 49  | 43  |  | 54  | 48  | 43  |  | 53  |
| 7   | 66  | 53  | 45  | 39  | 65  | 52  | 44  | 39  | 51  | 44  | 38  |  | 49  | 43  | 38  |  | 48  |
| 8   | 62  | 49  | 40  | 35  | 60  | 48  | 40  | 34  | 47  | 39  | 34  |  | 45  | 39  | 34  |  | 44  |
| 9   | 58  | 45  | 37  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  |  | 42  | 35  | 31  |  | 41  |
| 10  | 54  | 41  | 34  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 9788 | 9788 | 9788 |
| 5°  | 9860 | 9799 | 9764 |
| 10° | 9844 | 9773 | 9730 |
| 15° | 9778 | 9725 | 9671 |
| 20° | 9712 | 9657 | 9585 |
| 25° | 9598 | 9532 | 9438 |
| 30° | 9420 | 9371 | 9250 |
| 35° | 9174 | 9111 | 8996 |
| 40° | 8879 | 8823 | 8723 |
| 45° | 8638 | 8578 | 8492 |
| 50° | 8328 | 8275 | 8193 |
| 55° | 7896 | 7793 | 7734 |
| 60° | 7189 | 6984 | 6947 |
| 65° | 6335 | 6069 | 6047 |
| 70° | 5465 | 5241 | 5241 |
| 75° | 4705 | 4638 | 4570 |
| 80° | 4150 | 4197 | 4096 |
| 85° | 3250 | 3546 | 3546 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8638 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.3  | 3.7       |
| 10°-20°   | 286.4  | 10.5      |
| 20°-30°   | 429.0  | 15.8      |
| 30°-40°   | 503.2  | 18.5      |
| 40°-50°   | 504.8  | 18.6      |
| 50°-60°   | 430.7  | 15.9      |
| 60°-70°   | 280.9  | 10.3      |
| 70°-80°   | 140.9  | 5.2       |
| 80°-90°   | 39.0   | 1.4       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 815.8  | 30.0      |
| 0°-40°    | 1319.0 | 48.6      |
| 0°-60°    | 2254.5 | 83.0      |
| 0°-90°    | 2715.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2715.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1061 | 1061  | 1061 | 1061  | 1061 |      |
| 5°  | 1065 | 1055  | 1058 | 1054  | 1054 | 101  |
| 15° | 1024 | 1014  | 1018 | 1014  | 1012 | 289  |
| 25° | 943  | 932   | 936  | 928   | 927  | 434  |
| 35° | 814  | 806   | 809  | 800   | 799  | 509  |
| 45° | 662  | 657   | 657  | 651   | 651  | 510  |
| 55° | 491  | 489   | 484  | 482   | 481  | 436  |
| 65° | 290  | 285   | 278  | 276   | 277  | 290  |
| 75° | 132  | 132   | 130  | 129   | 128  | 143  |
| 85° | 31   | 33    | 34   | 34    | 34   | 37   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1060.9 | 1060.9 | 1060.9 | 1060.9 | 1060.9 |
| 2.5°  | 1067.5 | 1058.8 | 1060.9 | 1059.3 | 1054.9 |
| 5°    | 1064.6 | 1054.7 | 1058.0 | 1054.3 | 1054.3 |
| 7.5°  | 1057.3 | 1046.5 | 1049.8 | 1046.2 | 1046.0 |
| 10°   | 1050.7 | 1039.7 | 1043.2 | 1039.4 | 1038.6 |
| 12.5° | 1041.0 | 1030.1 | 1034.3 | 1029.8 | 1029.6 |
| 15°   | 1023.7 | 1013.6 | 1018.1 | 1014.3 | 1012.5 |
| 17.5° | 1004.1 | 993.2  | 998.6  | 993.4  | 992.6  |
| 20°   | 989.2  | 978.3  | 983.6  | 976.2  | 976.2  |
| 22.5° | 971.4  | 960.5  | 966.6  | 956.9  | 956.9  |
| 25°   | 942.8  | 931.8  | 936.3  | 927.8  | 927.1  |
| 27.5° | 908.8  | 898.0  | 902.7  | 893.1  | 892.9  |
| 30°   | 884.2  | 874.1  | 879.6  | 869.3  | 868.3  |
| 32.5° | 857.5  | 848.2  | 852.1  | 841.8  | 840.8  |
| 35°   | 814.5  | 806.4  | 808.9  | 799.6  | 798.7  |
| 37.5° | 769.3  | 761.0  | 763.8  | 755.8  | 755.5  |
| 40°   | 737.2  | 731.8  | 732.6  | 726.0  | 724.3  |
| 42.5° | 707.5  | 701.4  | 702.1  | 695.5  | 695.3  |
| 45°   | 662.0  | 657.4  | 657.4  | 650.8  | 650.8  |
| 47.5° | 613.7  | 610.2  | 609.2  | 603.7  | 603.6  |
| 50°   | 580.2  | 577.4  | 576.5  | 571.8  | 570.8  |
| 52.5° | 545.2  | 543.9  | 540.8  | 536.8  | 536.7  |
| 55°   | 490.9  | 489.1  | 484.5  | 481.5  | 480.8  |
| 57.5° | 432.0  | 428.3  | 423.1  | 419.1  | 419.7  |
| 60°   | 389.6  | 385.9  | 378.5  | 376.5  | 376.5  |
| 62.5° | 348.6  | 344.3  | 336.8  | 334.3  | 335.7  |
| 65°   | 290.2  | 284.7  | 278.0  | 276.2  | 277.0  |
| 67.5° | 237.0  | 231.9  | 224.8  | 224.8  | 224.1  |
| 70°   | 202.6  | 199.9  | 194.3  | 194.3  | 194.3  |
| 72.5° | 172.1  | 170.9  | 166.9  | 166.7  | 166.0  |
| 75°   | 132.0  | 132.0  | 130.1  | 129.2  | 128.2  |
| 77.5° | 98.9   | 99.2   | 98.4   | 97.5   | 95.7   |
| 80°   | 78.1   | 80.0   | 79.0   | 78.1   | 77.1   |
| 82.5° | 58.8   | 60.5   | 60.5   | 58.8   | 58.5   |
| 85°   | 30.7   | 33.3   | 33.5   | 33.5   | 33.5   |
| 87.5° | 8.2    | 11.0   | 11.9   | 11.9   | 12.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 19.01            | 20.60 | 19.38 | 20.91 | 21.23 | 18.85          | 20.44 | 19.21 | 20.75 | 21.06 |
|                 | 3H   | 20.32            | 21.75 | 20.70 | 22.08 | 22.44 | 20.12          | 21.55 | 20.50 | 21.88 | 22.24 |
|                 | 4H   | 20.81            | 22.15 | 21.21 | 22.50 | 22.88 | 20.61          | 21.95 | 21.01 | 22.30 | 22.67 |
|                 | 6H   | 21.13            | 22.37 | 21.54 | 22.73 | 23.12 | 20.93          | 22.17 | 21.34 | 22.53 | 22.93 |
|                 | 8H   | 21.25            | 22.43 | 21.67 | 22.82 | 23.22 | 21.06          | 22.24 | 21.48 | 22.63 | 23.03 |
|                 | 12H  | 21.32            | 22.45 | 21.75 | 22.83 | 23.26 | 21.14          | 22.27 | 21.57 | 22.66 | 23.08 |
| 4H              | 2H   | 19.48            | 20.82 | 19.88 | 21.17 | 21.54 | 19.35          | 20.69 | 19.74 | 21.04 | 21.41 |
|                 | 3H   | 21.02            | 22.13 | 21.43 | 22.53 | 22.93 | 20.85          | 21.96 | 21.26 | 22.36 | 22.76 |
|                 | 4H   | 21.61            | 22.62 | 22.04 | 23.03 | 23.47 | 21.44          | 22.45 | 21.87 | 22.86 | 23.30 |
|                 | 6H   | 22.05            | 22.92 | 22.50 | 23.36 | 23.82 | 21.88          | 22.75 | 22.33 | 23.20 | 23.65 |
|                 | 8H   | 22.22            | 23.04 | 22.68 | 23.48 | 23.95 | 22.06          | 22.87 | 22.52 | 23.32 | 23.78 |
|                 | 12H  | 22.33            | 23.07 | 22.81 | 23.54 | 24.01 | 22.18          | 22.92 | 22.66 | 23.39 | 23.86 |
| 8H              | 4H   | 21.82            | 22.64 | 22.28 | 23.08 | 23.54 | 21.66          | 22.48 | 22.12 | 22.92 | 23.39 |
|                 | 6H   | 22.37            | 23.05 | 22.86 | 23.54 | 24.01 | 22.21          | 22.89 | 22.71 | 23.38 | 23.86 |
|                 | 8H   | 22.62            | 23.23 | 23.13 | 23.73 | 24.22 | 22.47          | 23.08 | 22.98 | 23.58 | 24.07 |
|                 | 12H  | 22.79            | 23.33 | 23.30 | 23.83 | 24.39 | 22.66          | 23.20 | 23.17 | 23.69 | 24.25 |
| 12H             | 4H   | 21.83            | 22.57 | 22.31 | 23.04 | 23.51 | 21.68          | 22.42 | 22.16 | 22.89 | 23.36 |
|                 | 6H   | 22.40            | 23.02 | 22.92 | 23.52 | 24.01 | 22.26          | 22.87 | 22.77 | 23.38 | 23.86 |
|                 | 8H   | 22.71            | 23.25 | 23.22 | 23.74 | 24.31 | 22.57          | 23.11 | 23.07 | 23.60 | 24.16 |