

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: P1036238

Luminaire Tested: SQ4R-PC3-075D-B2750-1D-UNV-W2A\_3500K

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P1036238  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P562810)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PC3-075D-B2750-1D-UNV-W2A\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -  
Ballast/Driver: -

**Summary**

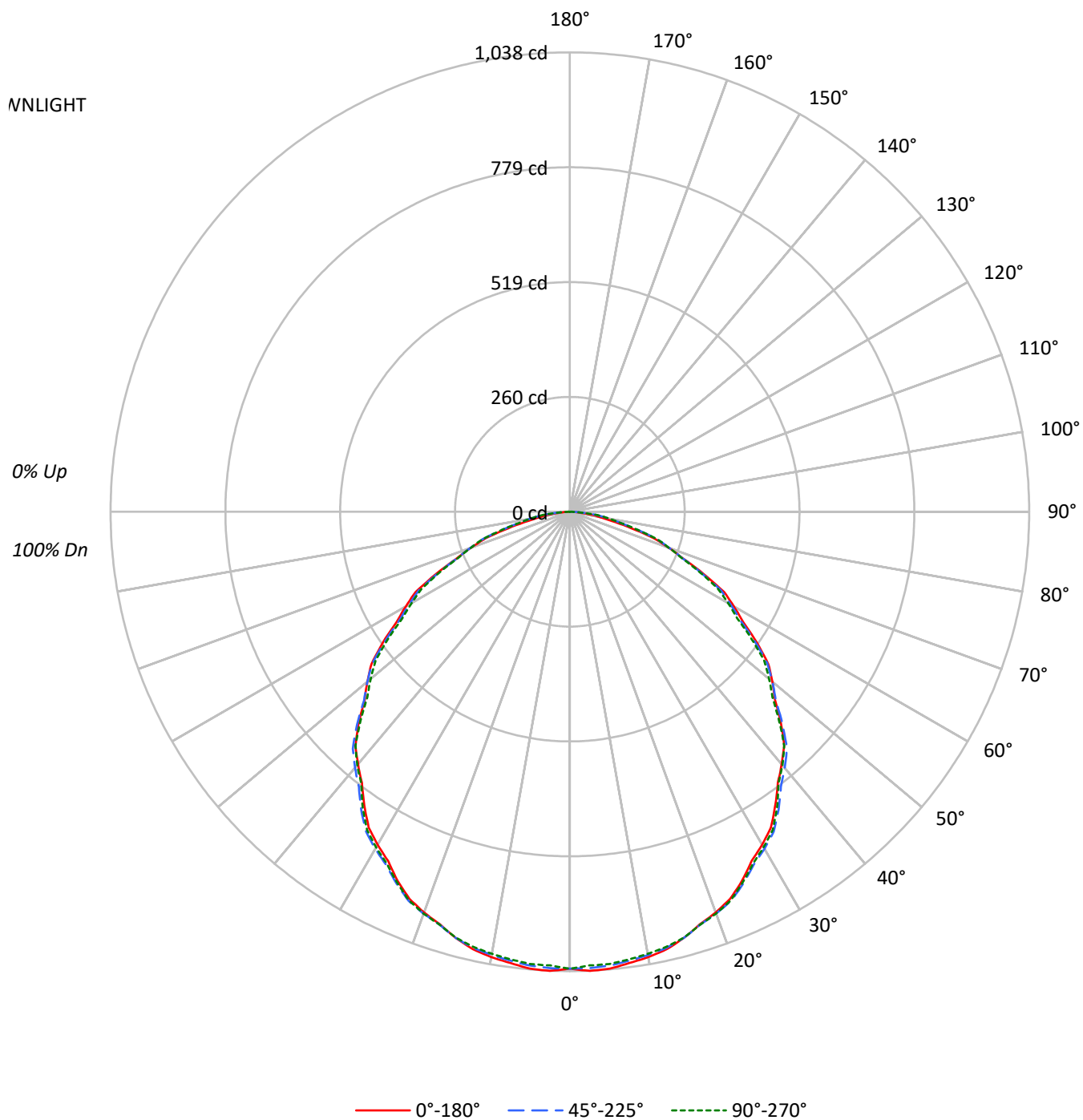
Lumens per Lamp: N/A  
Luminaire Lumens: 2817.3 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P1036238

CATALOG NUMBER: SQ4R-PC3-075D-B2750-1D-UNV-W2A\_3500K

### Luminous Intensity Polar Plot



TEST NUMBER: P1036238

CATALOG NUMBER: SQ4R-PC3-075D-B2750-1D-UNV-W2A\_3500K

**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  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 109 | 105 | 100 | 97  | 106 | 102 | 98  | 95  | 98  | 95  | 92  | 94  | 92  | 89  | 91  | 88  | 87  | 87  | 87  | 85  |
| 2   | 99  | 91  | 85  | 79  | 97  | 90  | 83  | 78  | 86  | 81  | 76  | 83  | 78  | 75  | 80  | 76  | 73  | 73  | 73  | 71  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 70  | 64  | 73  | 68  | 63  | 71  | 66  | 62  | 62  | 62  | 60  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 53  | 53  | 51  |
| 5   | 77  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 61  | 53  | 48  | 59  | 52  | 47  | 57  | 51  | 47  | 47  | 47  | 44  |
| 6   | 71  | 58  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 52  | 46  | 41  | 41  | 41  | 39  |
| 7   | 66  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 36  | 36  | 36  | 34  |
| 8   | 61  | 48  | 39  | 33  | 60  | 47  | 39  | 33  | 46  | 38  | 33  | 44  | 38  | 33  | 43  | 37  | 33  | 33  | 33  | 31  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 29  | 29  | 29  | 28  |
| 10  | 54  | 40  | 32  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 27  | 27  | 27  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 9523 | 9523 | 9523 |
| 5°  | 9597 | 9534 | 9499 |
| 10° | 9573 | 9528 | 9501 |
| 15° | 9523 | 9523 | 9513 |
| 20° | 9460 | 9487 | 9487 |
| 25° | 9371 | 9438 | 9409 |
| 30° | 9256 | 9368 | 9327 |
| 35° | 9119 | 9258 | 9193 |
| 40° | 8967 | 9094 | 9003 |
| 45° | 8805 | 8867 | 8729 |
| 50° | 8575 | 8575 | 8437 |
| 55° | 8303 | 8194 | 8072 |
| 60° | 7901 | 7743 | 7619 |
| 65° | 7302 | 7156 | 7093 |
| 70° | 6396 | 6444 | 6423 |
| 75° | 5144 | 5689 | 5729 |
| 80° | 3661 | 4824 | 4877 |
| 85° | 2234 | 4054 | 4054 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 8867 cd/sqm

TEST NUMBER: P1036238

CATALOG NUMBER: SQ4R-PC3-075D-B2750-1D-UNV-W2A\_3500K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 97.7   | 3.5       |
| 10°-20°   | 280.4  | 10.0      |
| 20°-30°   | 424.6  | 15.1      |
| 30°-40°   | 509.0  | 18.1      |
| 40°-50°   | 519.0  | 18.4      |
| 50°-60°   | 453.0  | 16.1      |
| 60°-70°   | 324.3  | 11.5      |
| 70°-80°   | 167.1  | 5.9       |
| 80°-90°   | 42.3   | 1.5       |
| 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       |
| <hr/>     |        |           |
| 0°-30°    | 802.6  | 28.5      |
| 0°-40°    | 1311.6 | 46.6      |
| 0°-60°    | 2283.6 | 81.1      |
| 0°-90°    | 2817.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2817.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1032 | 1032  | 1032 | 1032  | 1032 |      |
| 5°  | 1036 | 1026  | 1029 | 1026  | 1026 | 98   |
| 15° | 997  | 988   | 997  | 997   | 996  | 281  |
| 25° | 920  | 914   | 927  | 924   | 924  | 424  |
| 35° | 810  | 808   | 822  | 816   | 816  | 506  |
| 45° | 675  | 673   | 680  | 671   | 669  | 519  |
| 55° | 516  | 510   | 509  | 502   | 502  | 460  |
| 65° | 334  | 327   | 328  | 325   | 325  | 331  |
| 75° | 144  | 151   | 160  | 161   | 161  | 156  |
| 85° | 21   | 32    | 38   | 39    | 38   | 29   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1036238

CATALOG NUMBER: SQ4R-PC3-075D-B2750-1D-UNV-W2A\_3500K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1032.2 | 1032.2 | 1032.2 | 1032.2 | 1032.2 |
| 2.5°  | 1038.5 | 1029.4 | 1032.2 | 1029.9 | 1026.1 |
| 5°    | 1036.2 | 1025.7 | 1029.4 | 1026.4 | 1025.6 |
| 7.5°  | 1028.6 | 1018.4 | 1023.2 | 1021.1 | 1020.2 |
| 10°   | 1021.8 | 1011.4 | 1017.0 | 1015.1 | 1014.1 |
| 12.5° | 1012.6 | 1003.0 | 1009.3 | 1007.5 | 1007.1 |
| 15°   | 997.0  | 988.5  | 997.0  | 997.0  | 996.0  |
| 17.5° | 977.2  | 969.6  | 978.5  | 979.2  | 978.5  |
| 20°   | 963.5  | 955.1  | 966.3  | 965.4  | 966.3  |
| 22.5° | 946.7  | 939.8  | 951.8  | 949.3  | 950.3  |
| 25°   | 920.5  | 913.9  | 927.1  | 924.3  | 924.3  |
| 27.5° | 889.5  | 884.7  | 899.2  | 896.1  | 896.1  |
| 30°   | 868.8  | 864.2  | 879.3  | 875.5  | 875.5  |
| 32.5° | 845.9  | 842.7  | 857.2  | 852.6  | 852.6  |
| 35°   | 809.6  | 807.6  | 822.0  | 816.2  | 816.2  |
| 37.5° | 772.1  | 770.4  | 783.4  | 776.5  | 774.2  |
| 40°   | 744.5  | 743.7  | 755.1  | 747.5  | 747.5  |
| 42.5° | 717.0  | 716.0  | 726.1  | 716.9  | 716.9  |
| 45°   | 674.8  | 672.9  | 679.6  | 670.9  | 669.0  |
| 47.5° | 628.7  | 626.9  | 631.0  | 621.6  | 620.6  |
| 50°   | 597.4  | 595.5  | 597.4  | 588.7  | 587.8  |
| 52.5° | 565.3  | 561.8  | 562.2  | 553.6  | 553.4  |
| 55°   | 516.2  | 509.6  | 509.4  | 501.8  | 501.8  |
| 57.5° | 464.1  | 455.5  | 456.4  | 449.7  | 448.8  |
| 60°   | 428.2  | 418.8  | 419.6  | 413.8  | 412.9  |
| 62.5° | 393.0  | 382.2  | 384.4  | 377.9  | 377.8  |
| 65°   | 334.5  | 327.0  | 327.8  | 324.9  | 324.9  |
| 67.5° | 278.3  | 271.4  | 276.4  | 274.2  | 274.0  |
| 70°   | 237.1  | 232.3  | 238.9  | 238.9  | 238.1  |
| 72.5° | 198.8  | 198.6  | 206.8  | 206.8  | 207.5  |
| 75°   | 144.3  | 150.9  | 159.6  | 160.7  | 160.7  |
| 77.5° | 96.4   | 107.9  | 117.6  | 117.9  | 117.8  |
| 80°   | 68.9   | 81.9   | 90.8   | 92.8   | 91.8   |
| 82.5° | 46.6   | 60.5   | 67.9   | 69.7   | 68.9   |
| 85°   | 21.1   | 32.3   | 38.3   | 39.2   | 38.3   |
| 87.5° | 6.1    | 12.8   | 15.4   | 15.4   | 13.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1036238

CATALOG NUMBER: SQ4R-PC3-075D-B2750-1D-UNV-W2A\_3500K

**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 | 19.30            | 20.91 | 19.66 | 21.23 | 21.54 | 19.18          | 20.80 | 19.55 | 21.11 | 21.42 |
|                 | 3H   | 20.84            | 22.30 | 21.22 | 22.62 | 22.99 | 20.78          | 22.24 | 21.16 | 22.57 | 22.93 |
|                 | 4H   | 21.35            | 22.72 | 21.75 | 23.07 | 23.44 | 21.38          | 22.75 | 21.78 | 23.10 | 23.48 |
|                 | 6H   | 21.59            | 22.86 | 22.00 | 23.22 | 23.61 | 21.75          | 23.02 | 22.16 | 23.38 | 23.77 |
|                 | 8H   | 21.65            | 22.86 | 22.08 | 23.25 | 23.65 | 21.89          | 23.10 | 22.31 | 23.49 | 23.89 |
|                 | 12H  | 21.68            | 22.84 | 22.11 | 23.22 | 23.65 | 21.98          | 23.14 | 22.41 | 23.52 | 23.95 |
| 4H              | 2H   | 19.89            | 21.26 | 20.29 | 21.61 | 21.99 | 19.80          | 21.17 | 20.20 | 21.52 | 21.89 |
|                 | 3H   | 21.65            | 22.79 | 22.06 | 23.19 | 23.59 | 21.62          | 22.77 | 22.03 | 23.17 | 23.57 |
|                 | 4H   | 22.26            | 23.29 | 22.69 | 23.70 | 24.14 | 22.33          | 23.36 | 22.76 | 23.77 | 24.21 |
|                 | 6H   | 22.60            | 23.50 | 23.05 | 23.94 | 24.39 | 22.80          | 23.71 | 23.26 | 24.15 | 24.60 |
|                 | 8H   | 22.70            | 23.54 | 23.16 | 23.98 | 24.45 | 22.99          | 23.83 | 23.45 | 24.27 | 24.74 |
|                 | 12H  | 22.75            | 23.50 | 23.23 | 23.98 | 24.45 | 23.12          | 23.87 | 23.60 | 24.35 | 24.82 |
| 8H              | 4H   | 22.51            | 23.35 | 22.97 | 23.80 | 24.26 | 22.57          | 23.42 | 23.04 | 23.86 | 24.33 |
|                 | 6H   | 22.96            | 23.66 | 23.45 | 24.14 | 24.62 | 23.16          | 23.86 | 23.66 | 24.35 | 24.83 |
|                 | 8H   | 23.12            | 23.75 | 23.63 | 24.26 | 24.74 | 23.42          | 24.05 | 23.93 | 24.56 | 25.04 |
|                 | 12H  | 23.23            | 23.78 | 23.73 | 24.27 | 24.83 | 23.62          | 24.17 | 24.13 | 24.67 | 25.23 |
| 12H             | 4H   | 22.53            | 23.29 | 23.01 | 23.77 | 24.24 | 22.59          | 23.35 | 23.07 | 23.82 | 24.29 |
|                 | 6H   | 23.00            | 23.63 | 23.51 | 24.14 | 24.62 | 23.20          | 23.83 | 23.71 | 24.34 | 24.82 |
|                 | 8H   | 23.23            | 23.78 | 23.73 | 24.27 | 24.83 | 23.52          | 24.07 | 24.03 | 24.56 | 25.12 |