

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: P701260

Luminaire Tested: SQ4P-WB-050U-075D-B50-1D-UNV-

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P701260  
REPORT IS A COMBINATION OF REPORTS P700212 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-050U-075D-B50-1D-UNV-  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUN  
FOOT DOWNLIGHT

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4015.9 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 38.6  
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: P701260

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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 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 76 | 76 | 76 | 64 | 64 | 64 |
| 1   | 101 | 97  | 94  | 91  | 94  | 91  | 88  | 85  | 79 | 77 | 75 | 69 | 67 | 66 | 59 | 58 | 57 |
| 2   | 93  | 86  | 81  | 76  | 87  | 81  | 76  | 72  | 71 | 68 | 64 | 62 | 59 | 57 | 53 | 51 | 50 |
| 3   | 86  | 77  | 71  | 65  | 80  | 73  | 67  | 62  | 64 | 60 | 56 | 56 | 53 | 50 | 49 | 46 | 44 |
| 4   | 79  | 69  | 62  | 57  | 74  | 65  | 59  | 54  | 58 | 53 | 49 | 51 | 47 | 44 | 44 | 42 | 39 |
| 5   | 73  | 63  | 55  | 50  | 69  | 59  | 53  | 48  | 53 | 47 | 43 | 46 | 42 | 39 | 41 | 38 | 35 |
| 6   | 68  | 57  | 49  | 44  | 64  | 54  | 47  | 42  | 48 | 43 | 39 | 43 | 38 | 35 | 38 | 34 | 32 |
| 7   | 64  | 52  | 45  | 39  | 59  | 49  | 43  | 38  | 44 | 39 | 35 | 39 | 35 | 32 | 35 | 31 | 29 |
| 8   | 59  | 48  | 40  | 35  | 56  | 45  | 39  | 34  | 41 | 35 | 32 | 36 | 32 | 29 | 32 | 29 | 26 |
| 9   | 56  | 44  | 37  | 32  | 52  | 42  | 35  | 31  | 38 | 32 | 29 | 34 | 30 | 26 | 30 | 27 | 24 |
| 10  | 52  | 41  | 34  | 29  | 49  | 39  | 32  | 28  | 35 | 30 | 26 | 32 | 27 | 24 | 28 | 25 | 22 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14888 | 14888 | 14888 |
| 5°  | 14703 | 14650 | 14736 |
| 10° | 13892 | 14017 | 14342 |
| 15° | 12823 | 13122 | 13710 |
| 20° | 11645 | 12082 | 12882 |
| 25° | 10446 | 11015 | 12002 |
| 30° | 9339  | 9949  | 11088 |
| 35° | 8167  | 8756  | 10010 |
| 40° | 6872  | 7420  | 8664  |
| 45° | 5672  | 6161  | 7235  |
| 50° | 4735  | 5163  | 6026  |
| 55° | 4020  | 4430  | 4977  |
| 60° | 3438  | 3842  | 3973  |
| 65° | 2738  | 3229  | 2565  |
| 70° | 2428  | 2522  | 1567  |
| 75° | 2246  | 2046  | 959   |
| 80° | 2067  | 1881  | 824   |
| 85° | 1863  | 1736  | 677   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7235 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 148.0  | 3.7       |
| 10°-20°   | 385.0  | 9.6       |
| 20°-30°   | 498.7  | 12.4      |
| 30°-40°   | 488.3  | 12.2      |
| 40°-50°   | 373.8  | 9.3       |
| 50°-60°   | 249.1  | 6.2       |
| 60°-70°   | 135.9  | 3.4       |
| 70°-80°   | 56.6   | 1.4       |
| 80°-90°   | 16.6   | 0.4       |
| 90°-100°  | 102.0  | 2.5       |
| 100°-110° | 355.0  | 8.8       |
| 110°-120° | 343.9  | 8.6       |
| 120°-130° | 269.8  | 6.7       |
| 130°-140° | 213.5  | 5.3       |
| 140°-150° | 164.8  | 4.1       |
| 150°-160° | 118.1  | 2.9       |
| 160°-170° | 72.3   | 1.8       |
| 170°-180° | 24.4   | 0.6       |
| 0°-30°    | 1031.7 | 25.7      |
| 0°-40°    | 1520.0 | 37.9      |
| 0°-60°    | 2142.9 | 53.4      |
| 0°-90°    | 2352.1 | 58.6      |
| 90°-120°  | 800.9  | 19.9      |
| 90°-150°  | 1449.0 | 36.1      |
| 90°-180°  | 1664.0 | 41.4      |
| 0°-180°   | 4015.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1614 | 1614  | 1614 | 1614  | 1614 |      |
| 5°   | 1588 | 1572  | 1582 | 1586  | 1591 | 148  |
| 15°  | 1342 | 1338  | 1374 | 1411  | 1435 | 375  |
| 25°  | 1026 | 1029  | 1082 | 1129  | 1179 | 472  |
| 35°  | 725  | 729   | 777  | 830   | 889  | 451  |
| 45°  | 435  | 443   | 472  | 508   | 554  | 339  |
| 55°  | 250  | 260   | 275  | 286   | 309  | 227  |
| 65°  | 125  | 136   | 148  | 129   | 118  | 130  |
| 75°  | 63   | 63    | 57   | 39    | 27   | 67   |
| 85°  | 18   | 18    | 16   | 11    | 6    | 19   |
| 90°  | 4    | 6     | 6    | 4     | 2    | 3    |
| 95°  | 17   | 59    | 172  | 44    | 27   | 18   |
| 105° | 59   | 84    | 373  | 629   | 585  | 62   |
| 115° | 103  | 124   | 277  | 585   | 691  | 102  |
| 125° | 140  | 172   | 258  | 436   | 520  | 125  |
| 135° | 168  | 189   | 256  | 364   | 411  | 130  |
| 145° | 197  | 210   | 254  | 314   | 340  | 123  |
| 155° | 224  | 232   | 251  | 279   | 289  | 103  |
| 165° | 245  | 247   | 253  | 264   | 266  | 69   |
| 175° | 256  | 256   | 254  | 258   | 256  | 24   |
| 180° | 256  | 256   | 256  | 256   | 256  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1613.7 | 1613.7 | 1613.7 | 1613.7 | 1613.7 |
| 2.5°   | 1617.7 | 1603.3 | 1607.0 | 1606.8 | 1602.4 |
| 5°     | 1587.6 | 1571.5 | 1581.8 | 1585.5 | 1591.1 |
| 7.5°   | 1528.6 | 1516.6 | 1535.3 | 1549.1 | 1560.4 |
| 10°    | 1482.8 | 1472.3 | 1496.2 | 1516.4 | 1530.9 |
| 12.5°  | 1429.6 | 1420.7 | 1450.4 | 1477.3 | 1496.4 |
| 15°    | 1342.5 | 1337.7 | 1373.8 | 1411.1 | 1435.3 |
| 17.5°  | 1249.5 | 1247.2 | 1288.5 | 1332.1 | 1363.0 |
| 20°    | 1186.0 | 1185.4 | 1230.6 | 1276.1 | 1312.0 |
| 22.5°  | 1122.1 | 1123.5 | 1171.1 | 1218.4 | 1259.4 |
| 25°    | 1026.1 | 1028.8 | 1082.0 | 1129.1 | 1179.0 |
| 27.5°  | 937.3  | 938.5  | 993.3  | 1043.2 | 1096.4 |
| 30°    | 876.6  | 880.1  | 933.9  | 985.5  | 1040.8 |
| 32.5°  | 816.1  | 820.1  | 872.8  | 926.0  | 982.5  |
| 35°    | 725.1  | 728.6  | 777.4  | 829.9  | 888.7  |
| 37.5°  | 631.3  | 636.0  | 679.5  | 728.9  | 786.9  |
| 40°    | 570.6  | 577.7  | 616.1  | 662.7  | 719.4  |
| 42.5°  | 512.3  | 520.9  | 556.6  | 600.8  | 651.9  |
| 45°    | 434.7  | 443.1  | 472.2  | 508.0  | 554.5  |
| 47.5°  | 367.9  | 377.5  | 399.9  | 430.7  | 470.3  |
| 50°    | 329.9  | 339.0  | 359.7  | 382.4  | 419.8  |
| 52.5°  | 296.6  | 305.5  | 324.0  | 341.6  | 373.5  |
| 55°    | 249.9  | 260.3  | 275.4  | 286.0  | 309.4  |
| 57.5°  | 211.7  | 221.7  | 233.7  | 238.4  | 252.7  |
| 60°    | 186.3  | 197.4  | 208.2  | 207.5  | 215.3  |
| 62.5°  | 163.0  | 172.5  | 183.3  | 175.6  | 176.1  |
| 65°    | 125.4  | 135.8  | 147.9  | 129.4  | 117.5  |
| 67.5°  | 101.3  | 103.4  | 116.1  | 90.3   | 76.2   |
| 70°    | 90.0   | 90.0   | 93.5   | 69.9   | 58.1   |
| 72.5°  | 79.2   | 79.2   | 76.0   | 56.7   | 44.4   |
| 75°    | 63.0   | 63.0   | 57.4   | 39.4   | 26.9   |
| 77.5°  | 48.6   | 48.1   | 43.9   | 29.3   | 19.5   |
| 80°    | 38.9   | 38.9   | 35.4   | 23.2   | 15.5   |
| 82.5°  | 30.5   | 30.5   | 27.4   | 18.1   | 11.5   |
| 85°    | 17.6   | 17.6   | 16.4   | 10.6   | 6.4    |
| 87.5°  | 6.3    | 6.3    | 5.6    | 3.3    | 2.9    |
| 90°    | 3.8    | 5.7    | 5.7    | 3.8    | 1.9    |
| 92.5°  | 9.5    | 28.7   | 26.8   | 11.5   | 9.5    |
| 95°    | 17.2   | 59.3   | 172.2  | 44.0   | 26.8   |
| 97.5°  | 26.8   | 66.9   | 344.3  | 156.9  | 84.2   |
| 100°   | 36.4   | 70.8   | 401.8  | 376.9  | 243.0  |
| 102.5° | 47.8   | 76.5   | 399.9  | 529.9  | 436.2  |
| 105°   | 59.3   | 84.2   | 373.1  | 629.4  | 585.4  |
| 107.5° | 70.8   | 93.8   | 338.6  | 673.5  | 681.1  |
| 110°   | 80.4   | 103.3  | 311.9  | 667.7  | 723.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 91.9  | 112.9 | 290.8 | 633.3 | 721.3 |
| 115°   | 103.3 | 124.3 | 277.4 | 585.4 | 690.6 |
| 117.5° | 114.8 | 137.8 | 269.7 | 541.4 | 646.6 |
| 120°   | 124.3 | 149.2 | 264.0 | 499.3 | 602.6 |
| 122.5° | 132.0 | 160.7 | 260.2 | 464.9 | 558.6 |
| 125°   | 139.7 | 172.2 | 258.3 | 436.2 | 520.4 |
| 127.5° | 147.3 | 179.8 | 258.3 | 415.2 | 485.9 |
| 130°   | 155.0 | 183.6 | 256.4 | 394.1 | 457.3 |
| 132.5° | 162.6 | 185.5 | 256.4 | 378.8 | 432.4 |
| 135°   | 168.3 | 189.4 | 256.4 | 363.5 | 411.4 |
| 137.5° | 176.0 | 193.3 | 256.4 | 350.1 | 394.1 |
| 140°   | 181.7 | 199.0 | 256.4 | 336.7 | 375.0 |
| 142.5° | 189.4 | 204.7 | 256.4 | 323.3 | 357.8 |
| 145°   | 197.1 | 210.5 | 254.5 | 313.8 | 340.5 |
| 147.5° | 204.7 | 216.2 | 252.6 | 304.2 | 325.2 |
| 150°   | 210.5 | 221.9 | 252.6 | 294.7 | 311.9 |
| 152.5° | 218.1 | 227.6 | 250.7 | 285.0 | 300.4 |
| 155°   | 223.8 | 231.5 | 250.7 | 279.3 | 288.8 |
| 157.5° | 229.5 | 237.2 | 250.7 | 273.6 | 281.2 |
| 160°   | 235.3 | 241.1 | 252.6 | 269.7 | 275.5 |
| 162.5° | 241.1 | 244.9 | 252.6 | 265.9 | 269.7 |
| 165°   | 244.9 | 246.8 | 252.6 | 264.0 | 265.9 |
| 167.5° | 248.7 | 250.7 | 252.6 | 262.1 | 262.1 |
| 170°   | 250.7 | 252.6 | 254.5 | 260.2 | 260.2 |
| 172.5° | 254.5 | 254.5 | 254.5 | 258.3 | 258.3 |
| 175°   | 256.4 | 256.4 | 254.5 | 258.3 | 256.4 |
| 177.5° | 256.4 | 256.4 | 254.5 | 258.3 | 256.4 |
| 180°   | 256.4 | 256.4 | 256.4 | 256.4 | 256.4 |

(END OF REPORT)