

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: P845217

Luminaire Tested: **SQ4P-PR1-150U-050D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845217  
REPORT IS A COMBINATION OF REPORTS P700147 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-150U-050D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

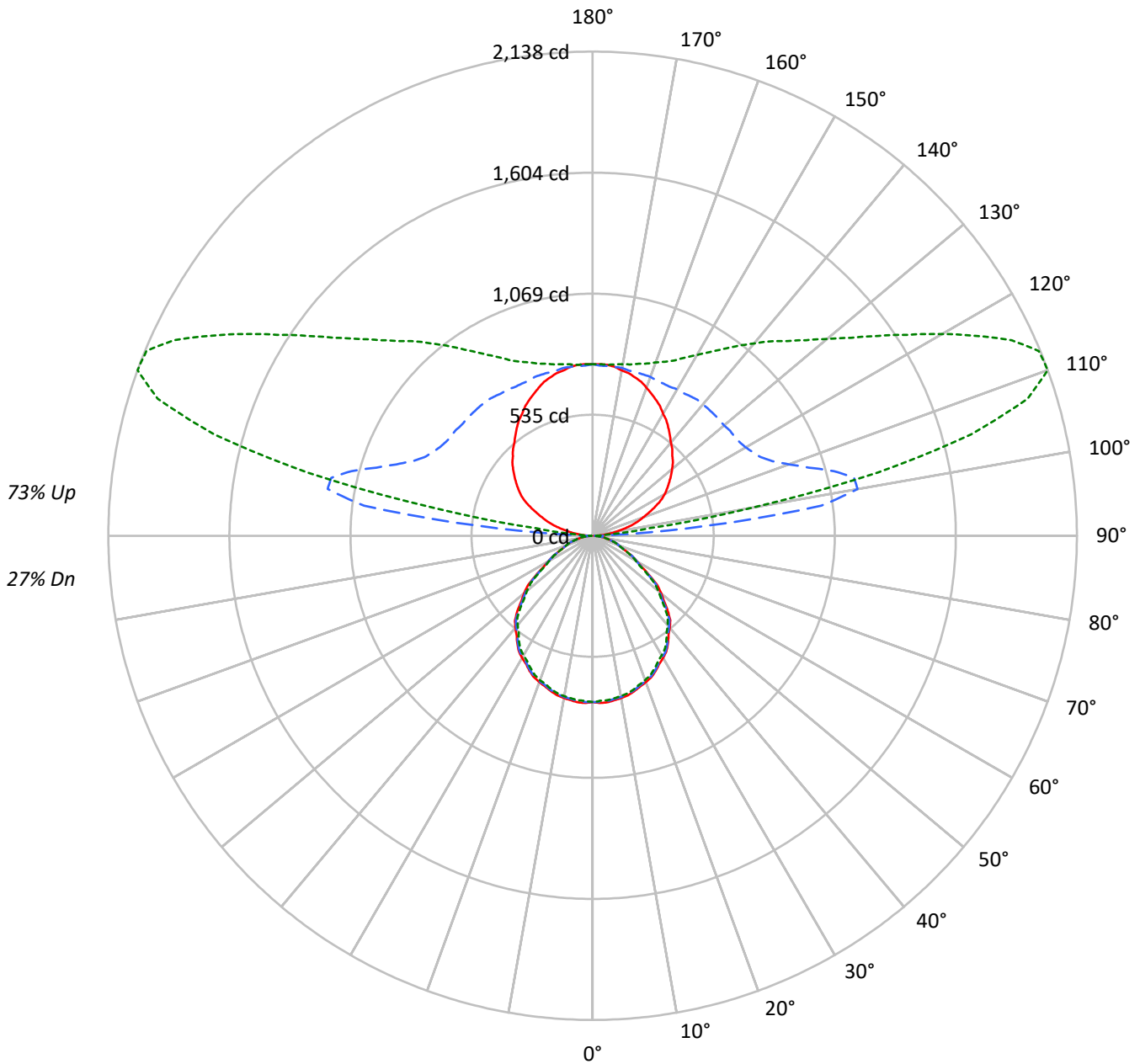
Lumens per Lamp: N/A  
Luminaire Lumens: 6756.9 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 59.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P845217

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

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |    |    |    |    |    | 20 |    |    |    |    |    |    |    |    | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |    |    |    |    |    | 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   | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 52 | 52 | 52 | 35 | 35 | 35 | 27 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 93  | 89  | 85  | 82  | 83 | 79 | 76 | 74 | 62 | 60 | 58 | 46 | 45 | 44 | 31 | 31 | 30 | 23 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 85  | 78  | 72  | 67  | 75 | 70 | 65 | 61 | 54 | 51 | 48 | 41 | 38 | 37 | 28 | 27 | 25 | 20 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 77  | 68  | 61  | 56  | 69 | 61 | 55 | 51 | 48 | 44 | 41 | 36 | 33 | 31 | 25 | 23 | 22 | 17 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 71  | 60  | 53  | 47  | 63 | 54 | 48 | 43 | 43 | 38 | 35 | 32 | 29 | 27 | 22 | 20 | 19 | 15 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 65  | 54  | 46  | 40  | 58 | 48 | 42 | 37 | 38 | 33 | 30 | 29 | 26 | 23 | 20 | 18 | 16 | 13 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 60  | 48  | 40  | 35  | 53 | 43 | 37 | 32 | 34 | 30 | 26 | 26 | 23 | 20 | 18 | 16 | 15 | 11 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 55  | 43  | 36  | 30  | 49 | 39 | 32 | 28 | 31 | 26 | 23 | 24 | 20 | 18 | 16 | 14 | 13 | 10 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 51  | 39  | 32  | 27  | 45 | 35 | 29 | 24 | 28 | 23 | 20 | 21 | 18 | 16 | 15 | 13 | 12 | 9  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 47  | 36  | 28  | 24  | 42 | 32 | 26 | 22 | 26 | 21 | 18 | 20 | 16 | 14 | 14 | 12 | 10 | 8  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 44  | 32  | 26  | 21  | 39 | 29 | 23 | 19 | 24 | 19 | 16 | 18 | 15 | 13 | 13 | 11 | 9  | 7  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6777 | 6777 | 6777 |
| 5°  | 6839 | 6786 | 6751 |
| 10° | 6817 | 6769 | 6734 |
| 15° | 6787 | 6744 | 6708 |
| 20° | 6752 | 6709 | 6659 |
| 25° | 6706 | 6661 | 6583 |
| 30° | 6632 | 6586 | 6491 |
| 35° | 6536 | 6477 | 6385 |
| 40° | 6386 | 6317 | 6204 |
| 45° | 6126 | 6019 | 5895 |
| 50° | 5667 | 5530 | 5421 |
| 55° | 4946 | 4835 | 4734 |
| 60° | 4168 | 4133 | 4052 |
| 65° | 3604 | 3620 | 3589 |
| 70° | 3310 | 3329 | 3329 |
| 75° | 3183 | 3183 | 3201 |
| 80° | 2991 | 3029 | 2991 |
| 85° | 2414 | 2678 | 2678 |



TEST NUMBER: P845217

CATALOG NUMBER: SQ4P-PR1-150U-050D-B40-1D-UNV

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 69.5   | 1.0       |
| 10°-20°   | 198.8  | 2.9       |
| 20°-30°   | 299.8  | 4.4       |
| 30°-40°   | 357.2  | 5.3       |
| 40°-50°   | 352.1  | 5.2       |
| 50°-60°   | 269.1  | 4.0       |
| 60°-70°   | 166.5  | 2.5       |
| 70°-80°   | 94.6   | 1.4       |
| 80°-90°   | 30.6   | 0.5       |
| 90°-100°  | 301.6  | 4.5       |
| 100°-110° | 1049.5 | 15.5      |
| 110°-120° | 1016.6 | 15.0      |
| 120°-130° | 797.5  | 11.8      |
| 130°-140° | 631.2  | 9.3       |
| 140°-150° | 487.1  | 7.2       |
| 150°-160° | 349.2  | 5.2       |
| 160°-170° | 213.6  | 3.2       |
| 170°-180° | 72.2   | 1.1       |
| 0°-30°    | 568.0  | 8.4       |
| 0°-40°    | 925.2  | 13.7      |
| 0°-60°    | 1546.5 | 22.9      |
| 0°-90°    | 1838.3 | 27.2      |
| 90°-120°  | 2367.8 | 35.0      |
| 90°-150°  | 4283.6 | 63.4      |
| 90°-180°  | 4919.0 | 72.8      |
| 0°-180°   | 6756.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|-----|-------|------|-------|------|------|
| 0°   | 734 | 734   | 734  | 734   | 734  |      |
| 5°   | 738 | 730   | 733  | 730   | 729  | 70   |
| 15°  | 711 | 703   | 706  | 704   | 702  | 201  |
| 25°  | 659 | 650   | 654  | 647   | 647  | 303  |
| 35°  | 580 | 573   | 575  | 568   | 567  | 362  |
| 45°  | 470 | 463   | 461  | 453   | 452  | 360  |
| 55°  | 308 | 302   | 301  | 296   | 294  | 276  |
| 65°  | 165 | 164   | 166  | 164   | 164  | 167  |
| 75°  | 89  | 89    | 89   | 90    | 90   | 94   |
| 85°  | 23  | 24    | 25   | 25    | 25   | 26   |
| 90°  | 11  | 17    | 17   | 11    | 6    | 8    |
| 95°  | 51  | 175   | 509  | 130   | 79   | 54   |
| 105° | 175 | 249   | 1103 | 1861  | 1731 | 184  |
| 115° | 305 | 368   | 820  | 1731  | 2042 | 302  |
| 125° | 413 | 509   | 764  | 1290  | 1538 | 370  |
| 135° | 498 | 560   | 758  | 1075  | 1216 | 386  |
| 145° | 583 | 622   | 752  | 928   | 1007 | 364  |
| 155° | 662 | 684   | 741  | 826   | 854  | 305  |
| 165° | 724 | 730   | 747  | 780   | 786  | 204  |
| 175° | 758 | 758   | 752  | 764   | 758  | 72   |
| 180° | 758 | 758   | 758  | 758   | 758  |      |



TEST NUMBER: P845217

CATALOG NUMBER: SQ4P-PR1-150U-050D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 0°     | 734.5 | 734.5 | 734.5  | 734.5  | 734.5  |
| 2.5°   | 739.1 | 732.7 | 734.5  | 733.0  | 729.5  |
| 5°     | 738.4 | 730.3 | 732.7  | 730.1  | 728.9  |
| 7.5°   | 732.7 | 724.8 | 727.2  | 724.6  | 723.9  |
| 10°    | 727.6 | 720.2 | 722.5  | 720.0  | 718.8  |
| 12.5°  | 722.0 | 714.2 | 717.0  | 713.9  | 712.7  |
| 15°    | 710.6 | 703.2 | 706.1  | 703.5  | 702.3  |
| 17.5°  | 697.9 | 690.0 | 693.0  | 690.1  | 688.4  |
| 20°    | 687.7 | 680.4 | 683.3  | 678.9  | 678.2  |
| 22.5°  | 676.6 | 669.2 | 672.1  | 666.3  | 666.1  |
| 25°    | 658.7 | 650.5 | 654.3  | 647.3  | 646.7  |
| 27.5°  | 637.3 | 629.9 | 632.8  | 625.7  | 625.0  |
| 30°    | 622.5 | 615.2 | 618.2  | 610.5  | 609.3  |
| 32.5°  | 605.9 | 599.0 | 601.5  | 593.8  | 593.1  |
| 35°    | 580.3 | 573.4 | 575.1  | 567.6  | 566.9  |
| 37.5°  | 551.0 | 544.8 | 545.8  | 537.3  | 536.9  |
| 40°    | 530.2 | 524.1 | 524.5  | 515.6  | 515.1  |
| 42.5°  | 507.5 | 501.3 | 500.7  | 491.9  | 491.2  |
| 45°    | 469.5 | 463.3 | 461.3  | 452.9  | 451.8  |
| 47.5°  | 426.2 | 420.0 | 416.2  | 409.4  | 408.6  |
| 50°    | 394.8 | 388.6 | 385.3  | 379.6  | 377.7  |
| 52.5°  | 360.9 | 354.7 | 352.0  | 346.7  | 344.9  |
| 55°    | 307.5 | 302.5 | 300.6  | 295.5  | 294.3  |
| 57.5°  | 256.7 | 253.5 | 252.8  | 247.9  | 247.4  |
| 60°    | 225.9 | 224.0 | 224.0  | 219.6  | 219.6  |
| 62.5°  | 199.6 | 198.2 | 199.1  | 196.2  | 195.8  |
| 65°    | 165.1 | 164.0 | 165.8  | 164.4  | 164.4  |
| 67.5°  | 138.0 | 138.0 | 139.1  | 138.5  | 138.5  |
| 70°    | 122.7 | 122.7 | 123.4  | 123.4  | 123.4  |
| 72.5°  | 109.0 | 108.6 | 110.3  | 110.2  | 109.7  |
| 75°    | 89.3  | 89.3  | 89.3   | 89.8   | 89.8   |
| 77.5°  | 69.5  | 69.6  | 70.2   | 70.1   | 69.5   |
| 80°    | 56.3  | 57.0  | 57.0   | 56.3   | 56.3   |
| 82.5°  | 43.2  | 43.7  | 43.7   | 43.6   | 43.2   |
| 85°    | 22.8  | 24.0  | 25.3   | 25.3   | 25.3   |
| 87.5°  | 6.6   | 8.5   | 10.2   | 10.2   | 9.6    |
| 90°    | 11.3  | 17.0  | 17.0   | 11.3   | 5.6    |
| 92.5°  | 28.3  | 84.8  | 79.2   | 33.9   | 28.3   |
| 95°    | 50.9  | 175.3 | 509.0  | 130.0  | 79.2   |
| 97.5°  | 79.2  | 198.0 | 1018.1 | 463.8  | 248.9  |
| 100°   | 107.5 | 209.2 | 1187.8 | 1114.2 | 718.3  |
| 102.5° | 141.4 | 226.3 | 1182.1 | 1566.7 | 1289.5 |
| 105°   | 175.3 | 248.9 | 1102.9 | 1860.8 | 1730.7 |



TEST NUMBER: P845217

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 271.4 | 333.7 | 859.7 | 1872.1 | 2132.2 |
| 115°   | 305.4 | 367.7 | 820.1 | 1730.7 | 2041.8 |
| 117.5° | 339.4 | 407.2 | 797.4 | 1600.6 | 1911.7 |
| 120°   | 367.7 | 441.1 | 780.5 | 1476.2 | 1781.6 |
| 122.5° | 390.2 | 475.1 | 769.2 | 1374.4 | 1651.5 |
| 125°   | 412.9 | 509.0 | 763.5 | 1289.5 | 1538.4 |
| 127.5° | 435.5 | 531.6 | 763.5 | 1227.3 | 1436.6 |
| 130°   | 458.2 | 543.0 | 757.9 | 1165.1 | 1351.7 |
| 132.5° | 480.8 | 548.6 | 757.9 | 1119.8 | 1278.2 |
| 135°   | 497.7 | 559.9 | 757.9 | 1074.6 | 1216.0 |
| 137.5° | 520.4 | 571.3 | 757.9 | 1035.1 | 1165.1 |
| 140°   | 537.3 | 588.2 | 757.9 | 995.4  | 1108.5 |
| 142.5° | 559.9 | 605.2 | 757.9 | 955.9  | 1057.6 |
| 145°   | 582.6 | 622.1 | 752.2 | 927.6  | 1006.8 |
| 147.5° | 605.2 | 639.1 | 746.6 | 899.3  | 961.5  |
| 150°   | 622.1 | 656.1 | 746.6 | 871.0  | 921.9  |
| 152.5° | 644.8 | 673.0 | 740.9 | 842.7  | 888.0  |
| 155°   | 661.8 | 684.4 | 740.9 | 825.7  | 854.0  |
| 157.5° | 678.7 | 701.3 | 740.9 | 808.8  | 831.5  |
| 160°   | 695.7 | 712.6 | 746.6 | 797.4  | 814.4  |
| 162.5° | 712.6 | 724.0 | 746.6 | 786.2  | 797.4  |
| 165°   | 724.0 | 729.6 | 746.6 | 780.5  | 786.2  |
| 167.5° | 735.2 | 740.9 | 746.6 | 774.9  | 774.9  |
| 170°   | 740.9 | 746.6 | 752.2 | 769.2  | 769.2  |
| 172.5° | 752.2 | 752.2 | 752.2 | 763.5  | 763.5  |
| 175°   | 757.9 | 757.9 | 752.2 | 763.5  | 757.9  |
| 177.5° | 757.9 | 757.9 | 752.2 | 763.5  | 757.9  |
| 180°   | 757.9 | 757.9 | 757.9 | 757.9  | 757.9  |



Report Generated By 670246072 / DESKTOP-50001EG







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







|        |       |       |        |        |        |
|--------|-------|-------|--------|--------|--------|
| 107.5° | 209.2 | 277.2 | 1001.1 | 1990.8 | 2013.5 |
| 110°   | 237.5 | 305.4 | 921.9  | 1973.9 | 2137.9 |



(END OF REPORT)