

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: P845169

Luminaire Tested: **SQ4P-PR1-075U-050D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845169  
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-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

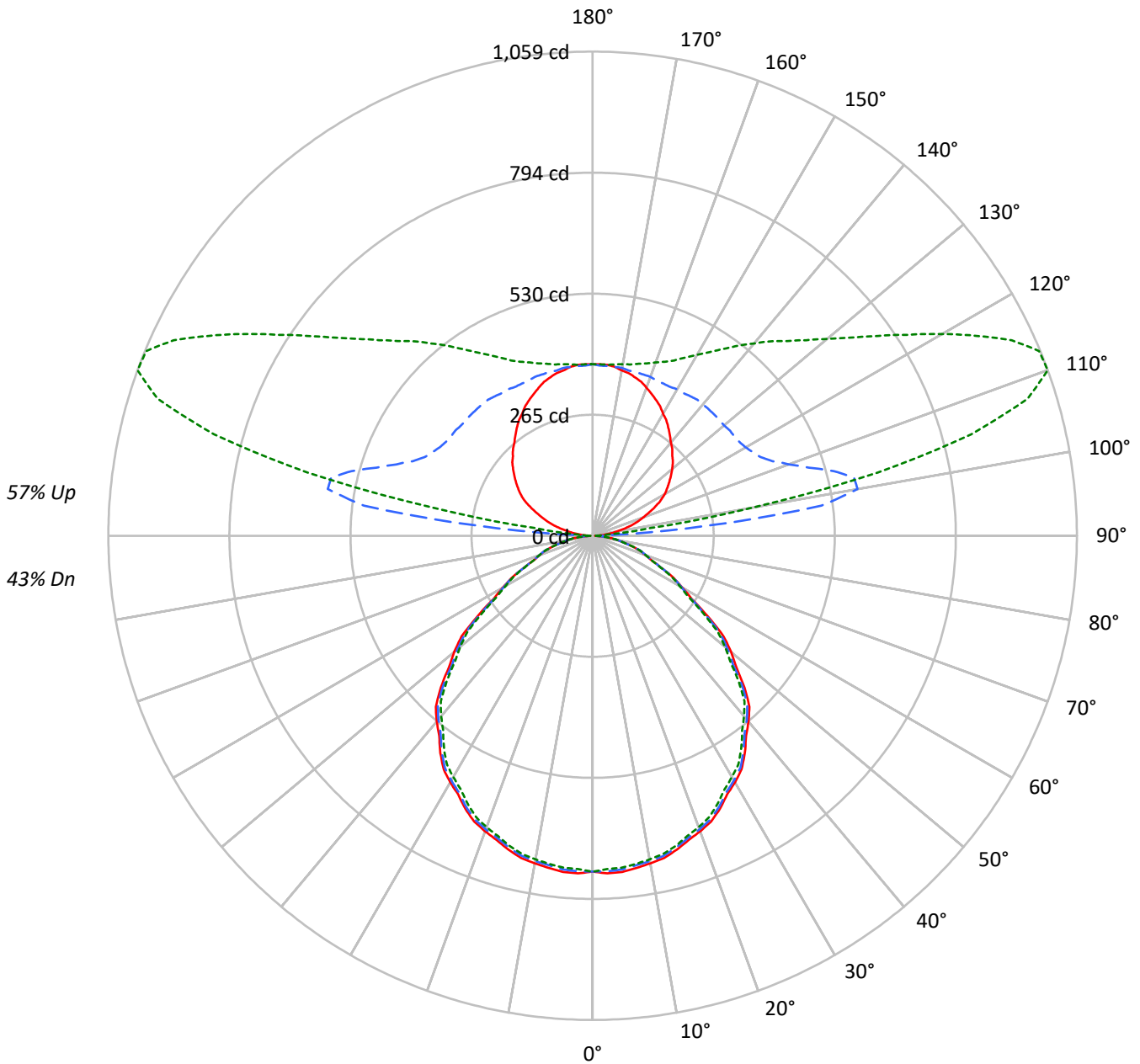
Lumens per Lamp: N/A  
Luminaire Lumens: 4273.9 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 35.8  
Input Voltage (V): NR  
Input Current (A<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





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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   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 | 43 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 96  | 92  | 89  | 85  | 88 | 84 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 44 | 43 | 42 | 37 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 47 | 45 | 39 | 38 | 36 | 31 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 80  | 71  | 64  | 58  | 73 | 65 | 59 | 54 | 55 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 | 27 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 74  | 63  | 55  | 50  | 67 | 58 | 51 | 46 | 49 | 44 | 40 | 40 | 36 | 33 | 31 | 29 | 27 | 23 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 68  | 56  | 48  | 43  | 62 | 52 | 45 | 40 | 43 | 38 | 34 | 36 | 32 | 29 | 28 | 26 | 23 | 20 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 62  | 50  | 43  | 37  | 57 | 47 | 40 | 35 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 | 18 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 58  | 46  | 38  | 32  | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 29 | 25 | 22 | 24 | 21 | 18 | 16 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 53  | 41  | 34  | 29  | 49 | 38 | 32 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 14 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 50  | 38  | 30  | 25  | 45 | 35 | 28 | 24 | 30 | 24 | 21 | 25 | 21 | 18 | 20 | 17 | 15 | 13 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 46  | 35  | 27  | 23  | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 18 | 16 | 14 | 12 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

**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: P845169

CATALOG NUMBER: SQ4P-PR1-075U-050D-B40-1D-UNV

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 69.5   | 1.6       |
| 10°-20°   | 198.8  | 4.7       |
| 20°-30°   | 299.8  | 7.0       |
| 30°-40°   | 357.2  | 8.4       |
| 40°-50°   | 352.1  | 8.2       |
| 50°-60°   | 269.1  | 6.3       |
| 60°-70°   | 166.5  | 3.9       |
| 70°-80°   | 94.6   | 2.2       |
| 80°-90°   | 29.7   | 0.7       |
| 90°-100°  | 149.4  | 3.5       |
| 100°-110° | 519.9  | 12.2      |
| 110°-120° | 503.6  | 11.8      |
| 120°-130° | 395.1  | 9.2       |
| 130°-140° | 312.7  | 7.3       |
| 140°-150° | 241.3  | 5.6       |
| 150°-160° | 173.0  | 4.0       |
| 160°-170° | 105.8  | 2.5       |
| 170°-180° | 35.8   | 0.8       |
| 0°-30°    | 568.0  | 13.3      |
| 0°-40°    | 925.2  | 21.6      |
| 0°-60°    | 1546.5 | 36.2      |
| 0°-90°    | 1837.3 | 43.0      |
| 90°-120°  | 1172.9 | 27.4      |
| 90°-150°  | 2122.0 | 49.6      |
| 90°-180°  | 2437.0 | 57.0      |
| 0°-180°   | 4273.9 | 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°  | 6   | 8     | 8   | 6     | 3    | 4    |
| 95°  | 25  | 87    | 252 | 64    | 39   | 27   |
| 105° | 87  | 123   | 546 | 922   | 857  | 91   |
| 115° | 151 | 182   | 406 | 857   | 1011 | 149  |
| 125° | 205 | 252   | 378 | 639   | 762  | 183  |
| 135° | 246 | 277   | 375 | 532   | 602  | 191  |
| 145° | 289 | 308   | 373 | 460   | 499  | 181  |
| 155° | 328 | 339   | 367 | 409   | 423  | 151  |
| 165° | 359 | 362   | 370 | 387   | 390  | 101  |
| 175° | 375 | 375   | 373 | 378   | 375  | 36   |
| 180° | 375 | 375   | 375 | 375   | 375  |      |



TEST NUMBER: P845169

CATALOG NUMBER: SQ4P-PR1-075U-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°    | 5.6   | 8.4   | 8.4   | 5.6   | 2.8   |
| 92.5°  | 14.1  | 42.1  | 39.2  | 16.8  | 14.1  |
| 95°    | 25.2  | 86.8  | 252.2 | 64.4  | 39.2  |
| 97.5°  | 39.2  | 98.1  | 504.3 | 229.8 | 123.3 |
| 100°   | 53.2  | 103.7 | 588.3 | 552.0 | 355.8 |
| 102.5° | 70.1  | 112.0 | 585.6 | 776.1 | 638.8 |
| 105°   | 86.8  | 123.3 | 546.4 | 921.8 | 857.3 |



TEST NUMBER: P845169

CATALOG NUMBER: SQ4P-PR1-075U-050D-B40-1D-UNV

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°    |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 134.5 | 165.3 | 425.9 | 927.4 | 1056.3 |
| 115°   | 151.3 | 182.1 | 406.2 | 857.3 | 1011.4 |
| 117.5° | 168.1 | 201.8 | 395.1 | 792.9 | 947.0  |
| 120°   | 182.1 | 218.5 | 386.7 | 731.3 | 882.5  |
| 122.5° | 193.3 | 235.4 | 381.0 | 680.9 | 818.1  |
| 125°   | 204.6 | 252.2 | 378.2 | 638.8 | 762.1  |
| 127.5° | 215.7 | 263.4 | 378.2 | 608.0 | 711.7  |
| 130°   | 227.0 | 269.0 | 375.4 | 577.2 | 669.6  |
| 132.5° | 238.1 | 271.7 | 375.4 | 554.8 | 633.2  |
| 135°   | 246.5 | 277.3 | 375.4 | 532.3 | 602.4  |
| 137.5° | 257.8 | 283.0 | 375.4 | 512.7 | 577.2  |
| 140°   | 266.2 | 291.4 | 375.4 | 493.1 | 549.2  |
| 142.5° | 277.3 | 299.8 | 375.4 | 473.5 | 523.9  |
| 145°   | 288.6 | 308.2 | 372.6 | 459.5 | 498.7  |
| 147.5° | 299.8 | 316.6 | 369.8 | 445.5 | 476.3  |
| 150°   | 308.2 | 325.0 | 369.8 | 431.4 | 456.7  |
| 152.5° | 319.4 | 333.4 | 367.0 | 417.5 | 439.9  |
| 155°   | 327.8 | 339.0 | 367.0 | 409.0 | 423.1  |
| 157.5° | 336.2 | 347.4 | 367.0 | 400.6 | 411.9  |
| 160°   | 344.6 | 353.0 | 369.8 | 395.1 | 403.4  |
| 162.5° | 353.0 | 358.7 | 369.8 | 389.5 | 395.1  |
| 165°   | 358.7 | 361.5 | 369.8 | 386.7 | 389.5  |
| 167.5° | 364.3 | 367.0 | 369.8 | 383.8 | 383.8  |
| 170°   | 367.0 | 369.8 | 372.6 | 381.0 | 381.0  |
| 172.5° | 372.6 | 372.6 | 372.6 | 378.2 | 378.2  |
| 175°   | 375.4 | 375.4 | 372.6 | 378.2 | 375.4  |
| 177.5° | 375.4 | 375.4 | 372.6 | 378.2 | 375.4  |
| 180°   | 375.4 | 375.4 | 375.4 | 375.4 | 375.4  |



Report Generated By 670246072 / DESKTOP-50001EG







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







|        |       |       |       |       |        |
|--------|-------|-------|-------|-------|--------|
| 107.5° | 103.7 | 137.3 | 495.9 | 986.2 | 997.5  |
| 110°   | 117.6 | 151.3 | 456.7 | 977.8 | 1059.1 |



(END OF REPORT)