

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: P845077

Luminaire Tested: **SQ4P-PP3-050U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845077
REPORT IS A COMBINATION OF REPORTS P700200 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PP3-050U-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

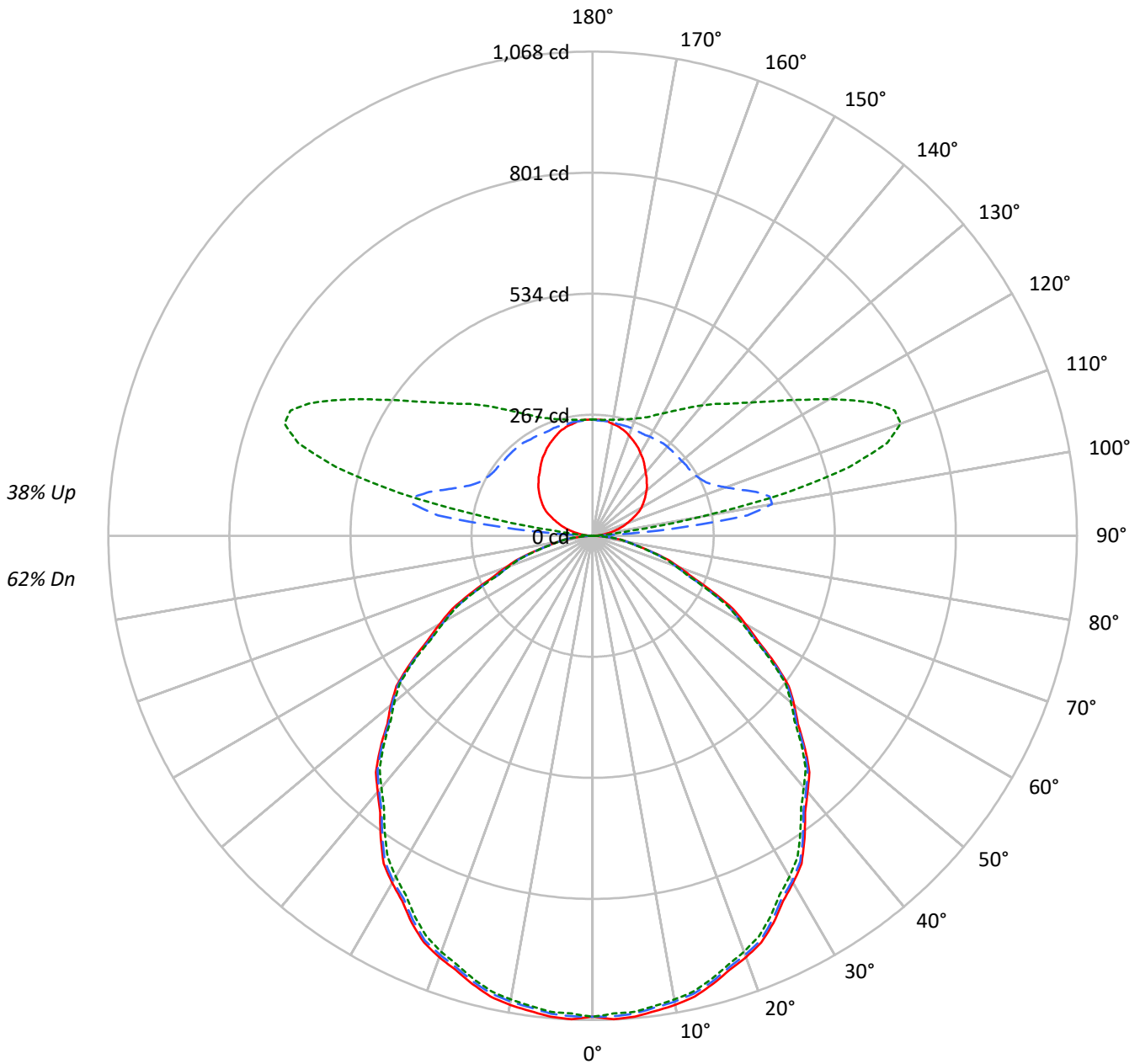
Lumens per Lamp: N/A
Luminaire Lumens: 4379.6 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.6
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P845077

CATALOG NUMBER: SQ4P-PP3-050U-075D-B50-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845077

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 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 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 78 | 78 | 78 | 67 | 67 | 67 | 62 | | | | 62 |
| 1 | 101 | 96 | 93 | 89 | 94 | 91 | 87 | 84 | 79 | 77 | 75 | 69 | 67 | 66 | 60 | 58 | 57 | 53 | | | | 53 |
| 2 | 92 | 84 | 78 | 73 | 86 | 79 | 74 | 69 | 70 | 66 | 62 | 61 | 58 | 55 | 53 | 51 | 49 | 45 | | | | 45 |
| 3 | 84 | 74 | 67 | 61 | 78 | 70 | 64 | 58 | 62 | 57 | 52 | 54 | 50 | 47 | 47 | 44 | 42 | 38 | | | | 38 |
| 4 | 77 | 66 | 58 | 52 | 72 | 62 | 55 | 50 | 55 | 49 | 45 | 48 | 44 | 40 | 42 | 39 | 36 | 33 | | | | 33 |
| 5 | 71 | 59 | 51 | 45 | 66 | 56 | 48 | 43 | 49 | 43 | 39 | 43 | 39 | 35 | 38 | 34 | 31 | 28 | | | | 28 |
| 6 | 65 | 53 | 45 | 39 | 61 | 50 | 43 | 37 | 45 | 38 | 34 | 39 | 34 | 31 | 34 | 31 | 28 | 25 | | | | 25 |
| 7 | 60 | 48 | 40 | 34 | 56 | 45 | 38 | 33 | 40 | 34 | 30 | 36 | 31 | 27 | 32 | 28 | 25 | 22 | | | | 22 |
| 8 | 56 | 44 | 36 | 30 | 52 | 41 | 34 | 29 | 37 | 31 | 27 | 33 | 28 | 24 | 29 | 25 | 22 | 20 | | | | 20 |
| 9 | 52 | 40 | 32 | 27 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 22 | 27 | 23 | 20 | 18 | | | | 18 |
| 10 | 49 | 37 | 29 | 24 | 46 | 35 | 28 | 23 | 31 | 26 | 22 | 28 | 23 | 20 | 25 | 21 | 18 | 16 | | | | 16 |

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 |



TEST NUMBER: P845077

CATALOG NUMBER: SQ4P-PP3-050U-075D-B50-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 100.3 | 2.3 |
| 10°-20° | 286.4 | 6.5 |
| 20°-30° | 429.0 | 9.8 |
| 30°-40° | 503.2 | 11.5 |
| 40°-50° | 504.8 | 11.5 |
| 50°-60° | 430.7 | 9.8 |
| 60°-70° | 280.9 | 6.4 |
| 70°-80° | 140.9 | 3.2 |
| 80°-90° | 39.6 | 0.9 |
| 90°-100° | 102.0 | 2.3 |
| 100°-110° | 355.0 | 8.1 |
| 110°-120° | 343.9 | 7.9 |
| 120°-130° | 269.8 | 6.2 |
| 130°-140° | 213.5 | 4.9 |
| 140°-150° | 164.8 | 3.8 |
| 150°-160° | 118.1 | 2.7 |
| 160°-170° | 72.3 | 1.6 |
| 170°-180° | 24.4 | 0.6 |
| 0°-30° | 815.8 | 18.6 |
| 0°-40° | 1319.0 | 30.1 |
| 0°-60° | 2254.5 | 51.5 |
| 0°-90° | 2715.8 | 62.0 |
| 90°-120° | 800.9 | 18.3 |
| 90°-150° | 1449.0 | 33.1 |
| 90°-180° | 1664.0 | 38.0 |
| 0°-180° | 4379.6 | 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 | 36 |
| 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 | |



TEST NUMBER: P845077

CATALOG NUMBER: SQ4P-PP3-050U-075D-B50-1D-UNV

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° | 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 |



TEST NUMBER: P845077

CATALOG NUMBER: SQ4P-PP3-050U-075D-B50-1D-UNV

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 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|-------|-------|-------|-------|
| 107.5° | 70.8 | 93.8 | 338.6 | 673.5 | 681.1 |
| 110° | 80.4 | 103.3 | 311.9 | 667.7 | 723.2 |



(END OF REPORT)