

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: P845390

Luminaire Tested: **SQ4P-WB-150U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845390
REPORT IS A COMBINATION OF REPORTS P700157 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-WB-150U-100D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

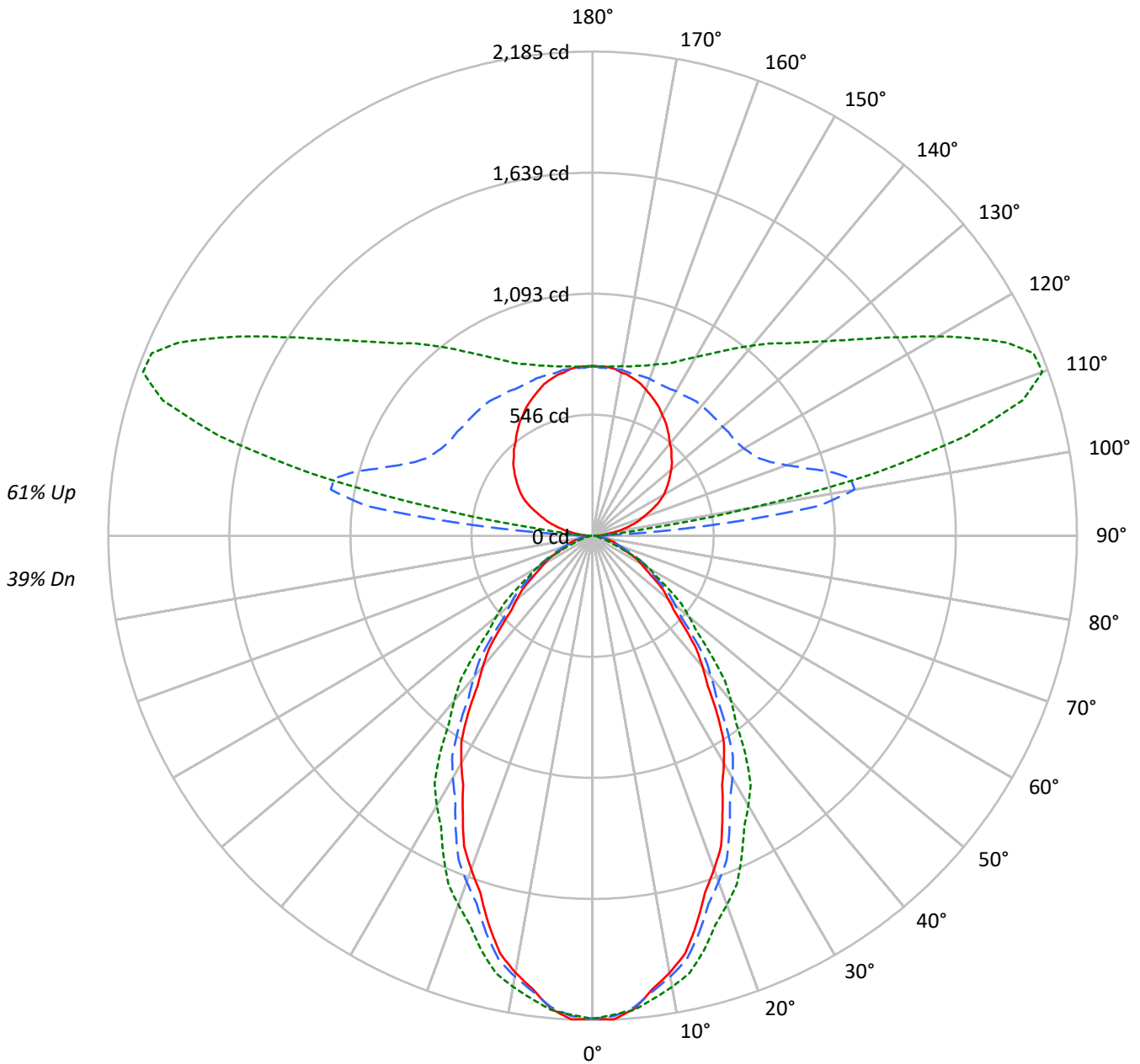
Lumens per Lamp: N/A
Luminaire Lumens: 8144.1 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 77.9
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: P845390

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Luminous Intensity Polar Plot





TEST NUMBER: P845390

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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 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 | | | | | | | | | | | | | | | | | | | |
| 1 | 96 | 92 | 89 | 86 | 87 | 84 | 81 | 79 | 69 | 67 | 65 | 55 | 54 | 52 | 42 | 41 | 41 | 35 | | | | | | | | | | | | | | | | | | | |
| 2 | 88 | 82 | 76 | 71 | 80 | 75 | 70 | 66 | 61 | 58 | 55 | 49 | 47 | 45 | 38 | 37 | 36 | 30 | | | | | | | | | | | | | | | | | | | |
| 3 | 81 | 73 | 66 | 61 | 74 | 66 | 61 | 56 | 55 | 51 | 48 | 44 | 42 | 39 | 35 | 33 | 31 | 27 | | | | | | | | | | | | | | | | | | | |
| 4 | 75 | 65 | 58 | 52 | 68 | 60 | 53 | 48 | 50 | 45 | 41 | 40 | 37 | 35 | 32 | 30 | 28 | 24 | | | | | | | | | | | | | | | | | | | |
| 5 | 69 | 58 | 51 | 45 | 63 | 54 | 47 | 42 | 45 | 40 | 36 | 37 | 33 | 31 | 29 | 27 | 25 | 22 | | | | | | | | | | | | | | | | | | | |
| 6 | 64 | 53 | 45 | 40 | 58 | 48 | 42 | 37 | 41 | 36 | 32 | 33 | 30 | 27 | 27 | 24 | 22 | 19 | | | | | | | | | | | | | | | | | | | |
| 7 | 59 | 48 | 40 | 35 | 54 | 44 | 38 | 33 | 37 | 32 | 29 | 31 | 27 | 25 | 25 | 22 | 20 | 18 | | | | | | | | | | | | | | | | | | | |
| 8 | 55 | 44 | 36 | 31 | 50 | 40 | 34 | 30 | 34 | 29 | 26 | 28 | 25 | 22 | 23 | 20 | 19 | 16 | | | | | | | | | | | | | | | | | | | |
| 9 | 51 | 40 | 33 | 28 | 47 | 37 | 31 | 27 | 31 | 27 | 23 | 26 | 23 | 20 | 21 | 19 | 17 | 15 | | | | | | | | | | | | | | | | | | | |
| 10 | 48 | 37 | 30 | 25 | 44 | 34 | 28 | 24 | 29 | 24 | 21 | 24 | 21 | 18 | 20 | 17 | 16 | 14 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 20106 | 20106 | 20106 |
| 5° | 19855 | 19783 | 19899 |
| 10° | 18758 | 18928 | 19367 |
| 15° | 17316 | 17719 | 18513 |
| 20° | 15725 | 16316 | 17396 |
| 25° | 14105 | 14874 | 16208 |
| 30° | 12613 | 13435 | 14973 |
| 35° | 11028 | 11824 | 13517 |
| 40° | 9281 | 10019 | 11701 |
| 45° | 7659 | 8321 | 9769 |
| 50° | 6393 | 6973 | 8137 |
| 55° | 5429 | 5982 | 6719 |
| 60° | 4641 | 5187 | 5364 |
| 65° | 3696 | 4362 | 3462 |
| 70° | 3275 | 3404 | 2115 |
| 75° | 3030 | 2763 | 1298 |
| 80° | 2795 | 2545 | 1116 |
| 85° | 2519 | 2339 | 910 |



TEST NUMBER: P845390

CATALOG NUMBER: SQ4P-WB-150U-100D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 199.9 | 2.5 |
| 10°-20° | 519.9 | 6.4 |
| 20°-30° | 673.4 | 8.3 |
| 30°-40° | 659.4 | 8.1 |
| 40°-50° | 504.8 | 6.2 |
| 50°-60° | 336.3 | 4.1 |
| 60°-70° | 183.5 | 2.3 |
| 70°-80° | 76.5 | 0.9 |
| 80°-90° | 23.5 | 0.3 |
| 90°-100° | 304.6 | 3.7 |
| 100°-110° | 1059.8 | 13.0 |
| 110°-120° | 1026.6 | 12.6 |
| 120°-130° | 805.3 | 9.9 |
| 130°-140° | 637.4 | 7.8 |
| 140°-150° | 491.9 | 6.0 |
| 150°-160° | 352.6 | 4.3 |
| 160°-170° | 215.7 | 2.6 |
| 170°-180° | 73.0 | 0.9 |
| 0°-30° | 1393.2 | 17.1 |
| 0°-40° | 2052.6 | 25.2 |
| 0°-60° | 2893.7 | 35.5 |
| 0°-90° | 3177.3 | 39.0 |
| 90°-120° | 2391.0 | 29.4 |
| 90°-150° | 4325.6 | 53.1 |
| 90°-180° | 4967.0 | 61.0 |
| 0°-180° | 8144.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2179 | 2179 | 2179 | 2179 | 2179 | |
| 5° | 2144 | 2122 | 2136 | 2141 | 2149 | 199 |
| 15° | 1813 | 1806 | 1855 | 1906 | 1938 | 506 |
| 25° | 1386 | 1389 | 1461 | 1525 | 1592 | 637 |
| 35° | 979 | 984 | 1050 | 1121 | 1200 | 609 |
| 45° | 587 | 598 | 638 | 686 | 749 | 458 |
| 55° | 338 | 352 | 372 | 386 | 418 | 306 |
| 65° | 169 | 183 | 200 | 175 | 159 | 176 |
| 75° | 85 | 85 | 78 | 53 | 36 | 91 |
| 85° | 24 | 24 | 22 | 14 | 9 | 26 |
| 90° | 11 | 17 | 17 | 11 | 6 | 8 |
| 95° | 51 | 177 | 514 | 131 | 80 | 54 |
| 105° | 177 | 251 | 1114 | 1879 | 1748 | 186 |
| 115° | 308 | 371 | 828 | 1748 | 2062 | 305 |
| 125° | 417 | 514 | 771 | 1302 | 1554 | 373 |
| 135° | 503 | 565 | 765 | 1085 | 1228 | 390 |
| 145° | 588 | 628 | 760 | 937 | 1017 | 368 |
| 155° | 668 | 691 | 748 | 834 | 862 | 308 |
| 165° | 731 | 737 | 754 | 788 | 794 | 206 |
| 175° | 765 | 765 | 760 | 771 | 765 | 72 |
| 180° | 765 | 765 | 765 | 765 | 765 | |



TEST NUMBER: P845390

CATALOG NUMBER: SQ4P-WB-150U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2179.2 | 2179.2 | 2179.2 | 2179.2 | 2179.2 |
| 2.5° | 2184.6 | 2165.1 | 2170.1 | 2169.9 | 2163.8 |
| 5° | 2143.8 | 2122.2 | 2136.1 | 2141.0 | 2148.6 |
| 7.5° | 2064.2 | 2047.9 | 2073.3 | 2091.9 | 2107.0 |
| 10° | 2002.2 | 1988.3 | 2020.4 | 2047.7 | 2067.2 |
| 12.5° | 1930.4 | 1918.5 | 1958.6 | 1994.9 | 2020.7 |
| 15° | 1812.9 | 1806.4 | 1855.1 | 1905.6 | 1938.2 |
| 17.5° | 1687.3 | 1684.1 | 1739.9 | 1798.8 | 1840.6 |
| 20° | 1601.6 | 1600.7 | 1661.8 | 1723.3 | 1771.8 |
| 22.5° | 1515.2 | 1517.2 | 1581.5 | 1645.4 | 1700.7 |
| 25° | 1385.6 | 1389.3 | 1461.1 | 1524.8 | 1592.1 |
| 27.5° | 1265.7 | 1267.4 | 1341.4 | 1408.7 | 1480.6 |
| 30° | 1183.9 | 1188.4 | 1261.1 | 1330.8 | 1405.5 |
| 32.5° | 1102.1 | 1107.4 | 1178.7 | 1250.5 | 1326.7 |
| 35° | 979.1 | 983.9 | 1049.8 | 1120.7 | 1200.1 |
| 37.5° | 852.4 | 858.9 | 917.6 | 984.2 | 1062.6 |
| 40° | 770.6 | 780.1 | 831.9 | 894.9 | 971.5 |
| 42.5° | 691.8 | 703.5 | 751.5 | 811.3 | 880.3 |
| 45° | 587.0 | 598.3 | 637.7 | 686.0 | 748.7 |
| 47.5° | 496.8 | 509.7 | 540.1 | 581.7 | 635.1 |
| 50° | 445.4 | 457.8 | 485.8 | 516.5 | 566.9 |
| 52.5° | 400.4 | 412.6 | 437.5 | 461.3 | 504.4 |
| 55° | 337.5 | 351.5 | 371.9 | 386.1 | 417.7 |
| 57.5° | 285.9 | 299.3 | 315.6 | 321.9 | 341.1 |
| 60° | 251.5 | 266.5 | 281.1 | 280.4 | 290.7 |
| 62.5° | 220.2 | 232.9 | 247.4 | 237.2 | 237.9 |
| 65° | 169.3 | 183.4 | 199.8 | 174.7 | 158.6 |
| 67.5° | 136.8 | 139.6 | 156.8 | 121.8 | 102.8 |
| 70° | 121.4 | 121.4 | 126.2 | 94.3 | 78.4 |
| 72.5° | 107.0 | 107.0 | 102.7 | 76.6 | 60.0 |
| 75° | 85.0 | 85.0 | 77.5 | 53.2 | 36.4 |
| 77.5° | 65.6 | 65.0 | 59.3 | 39.6 | 26.4 |
| 80° | 52.6 | 52.6 | 47.9 | 31.4 | 21.0 |
| 82.5° | 41.1 | 41.1 | 37.0 | 24.5 | 15.6 |
| 85° | 23.8 | 23.8 | 22.1 | 14.3 | 8.6 |
| 87.5° | 8.4 | 8.4 | 7.5 | 4.5 | 3.9 |
| 90° | 11.4 | 17.1 | 17.1 | 11.4 | 5.7 |
| 92.5° | 28.6 | 85.6 | 79.9 | 34.2 | 28.6 |
| 95° | 51.4 | 177.0 | 514.0 | 131.3 | 79.9 |
| 97.5° | 79.9 | 199.9 | 1028.1 | 468.3 | 251.3 |
| 100° | 108.5 | 211.3 | 1199.4 | 1125.2 | 725.3 |
| 102.5° | 142.8 | 228.5 | 1193.7 | 1582.0 | 1302.2 |
| 105° | 177.0 | 251.3 | 1113.7 | 1879.0 | 1747.7 |



TEST NUMBER: P845390

CATALOG NUMBER: SQ4P-WB-150U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 274.1 | 337.0 | 868.1 | 1890.5 | 2153.1 |
| 115° | 308.4 | 371.3 | 828.2 | 1747.7 | 2061.8 |
| 117.5° | 342.7 | 411.2 | 805.3 | 1616.3 | 1930.4 |
| 120° | 371.3 | 445.4 | 788.1 | 1490.6 | 1799.1 |
| 122.5° | 394.1 | 479.8 | 776.8 | 1387.9 | 1667.7 |
| 125° | 417.0 | 514.0 | 771.0 | 1302.2 | 1553.5 |
| 127.5° | 439.8 | 536.8 | 771.0 | 1239.4 | 1450.7 |
| 130° | 462.7 | 548.3 | 765.3 | 1176.5 | 1365.0 |
| 132.5° | 485.5 | 554.0 | 765.3 | 1130.8 | 1290.7 |
| 135° | 502.6 | 565.4 | 765.3 | 1085.1 | 1227.9 |
| 137.5° | 525.5 | 576.9 | 765.3 | 1045.2 | 1176.5 |
| 140° | 542.6 | 594.0 | 765.3 | 1005.2 | 1119.4 |
| 142.5° | 565.4 | 611.1 | 765.3 | 965.3 | 1068.0 |
| 145° | 588.3 | 628.2 | 759.6 | 936.7 | 1016.6 |
| 147.5° | 611.1 | 645.4 | 753.9 | 908.1 | 970.9 |
| 150° | 628.2 | 662.5 | 753.9 | 879.5 | 930.9 |
| 152.5° | 651.1 | 679.6 | 748.2 | 851.0 | 896.7 |
| 155° | 668.3 | 691.1 | 748.2 | 833.8 | 862.4 |
| 157.5° | 685.4 | 708.2 | 748.2 | 816.7 | 839.6 |
| 160° | 702.5 | 719.6 | 753.9 | 805.3 | 822.4 |
| 162.5° | 719.6 | 731.1 | 753.9 | 793.9 | 805.3 |
| 165° | 731.1 | 736.8 | 753.9 | 788.1 | 793.9 |
| 167.5° | 742.4 | 748.2 | 753.9 | 782.5 | 782.5 |
| 170° | 748.2 | 753.9 | 759.6 | 776.8 | 776.8 |
| 172.5° | 759.6 | 759.6 | 759.6 | 771.0 | 771.0 |
| 175° | 765.3 | 765.3 | 759.6 | 771.0 | 765.3 |
| 177.5° | 765.3 | 765.3 | 759.6 | 771.0 | 765.3 |
| 180° | 765.3 | 765.3 | 765.3 | 765.3 | 765.3 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|--------|--------|--------|
| 107.5° | 211.3 | 279.9 | 1011.0 | 2010.4 | 2033.3 |
| 110° | 239.8 | 308.4 | 930.9 | 1993.2 | 2158.9 |



(END OF REPORT)