

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: P845177

Luminaire Tested: **SQ4P-PR1-075U-125D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845177
REPORT IS A COMBINATION OF REPORTS P700234 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-125D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

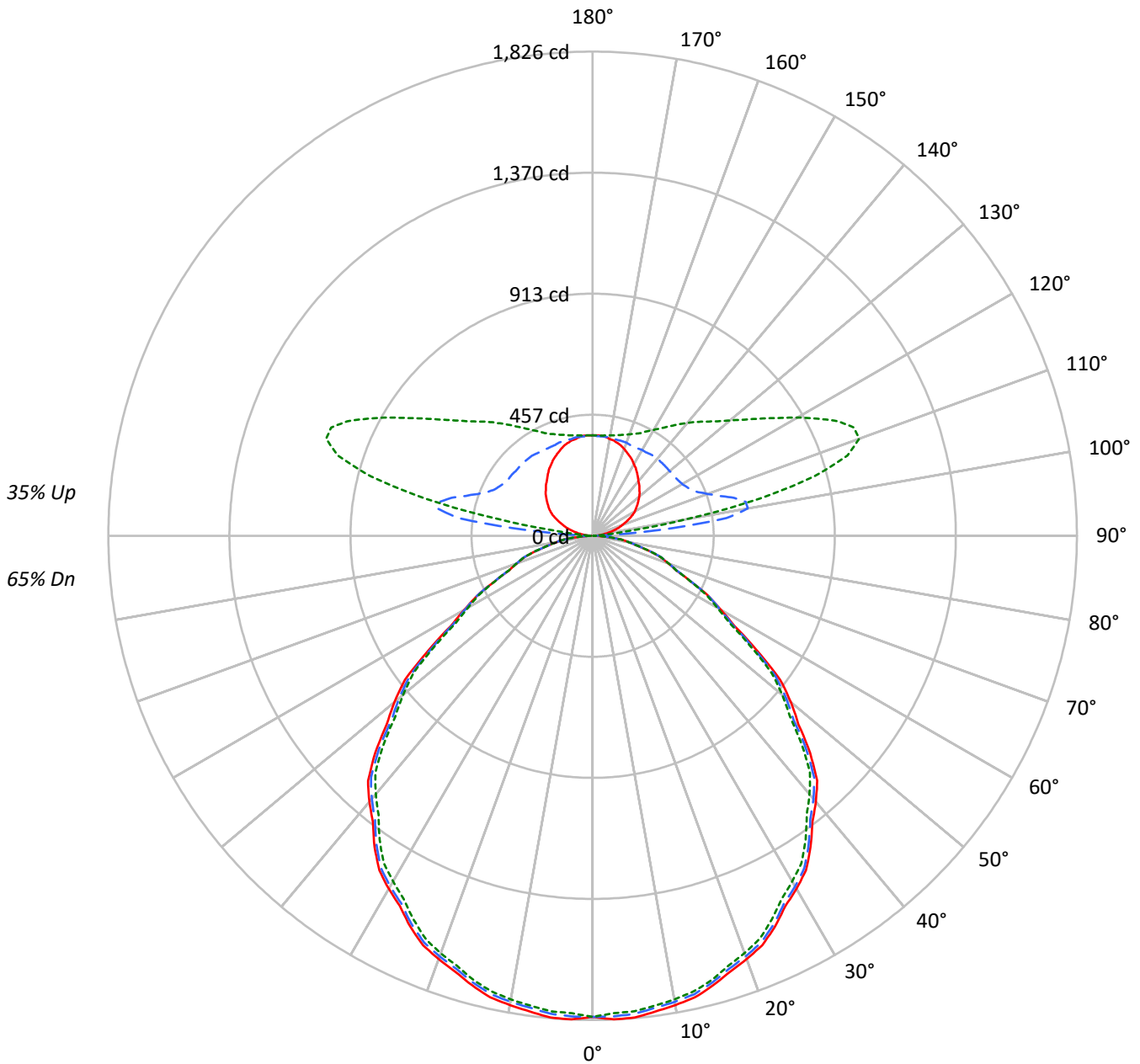
Lumens per Lamp: N/A
Luminaire Lumens: 6996.9 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64.8
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: P845177

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Luminous Intensity Polar Plot





TEST NUMBER: P845177

CATALOG NUMBER: SQ4P-PR1-075U-125D-B35-1D-UNV

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 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 80 | 80 | 80 | 70 | 70 | 70 | 65 | | | | | | | | | | | | | | | | | | | |
| 1 | 101 | 97 | 93 | 90 | 95 | 92 | 88 | 85 | 81 | 78 | 76 | 71 | 69 | 68 | 62 | 61 | 60 | 55 | | | | | | | | | | | | | | | | | | | |
| 2 | 93 | 85 | 79 | 74 | 87 | 80 | 75 | 71 | 71 | 67 | 64 | 63 | 60 | 57 | 55 | 53 | 51 | 47 | | | | | | | | | | | | | | | | | | | |
| 3 | 85 | 75 | 68 | 62 | 80 | 71 | 65 | 59 | 63 | 58 | 54 | 56 | 52 | 49 | 49 | 46 | 44 | 40 | | | | | | | | | | | | | | | | | | | |
| 4 | 78 | 67 | 59 | 53 | 73 | 63 | 56 | 51 | 57 | 51 | 46 | 50 | 46 | 42 | 44 | 41 | 38 | 35 | | | | | | | | | | | | | | | | | | | |
| 5 | 72 | 60 | 52 | 46 | 67 | 57 | 49 | 44 | 51 | 45 | 40 | 45 | 40 | 37 | 40 | 36 | 33 | 30 | | | | | | | | | | | | | | | | | | | |
| 6 | 66 | 54 | 46 | 40 | 62 | 51 | 44 | 38 | 46 | 40 | 35 | 41 | 36 | 32 | 36 | 32 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 7 | 61 | 49 | 41 | 35 | 57 | 46 | 39 | 34 | 42 | 36 | 31 | 37 | 32 | 29 | 33 | 29 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 8 | 57 | 44 | 37 | 31 | 53 | 42 | 35 | 30 | 38 | 32 | 28 | 34 | 29 | 26 | 31 | 27 | 24 | 21 | | | | | | | | | | | | | | | | | | | |
| 9 | 53 | 41 | 33 | 28 | 50 | 39 | 32 | 27 | 35 | 29 | 25 | 32 | 27 | 23 | 28 | 24 | 21 | 19 | | | | | | | | | | | | | | | | | | | |
| 10 | 50 | 37 | 30 | 25 | 47 | 36 | 29 | 24 | 32 | 27 | 23 | 29 | 24 | 21 | 26 | 22 | 19 | 17 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16739 | 16739 | 16739 |
| 5° | 16891 | 16760 | 16673 |
| 10° | 16835 | 16719 | 16631 |
| 15° | 16764 | 16658 | 16567 |
| 20° | 16678 | 16569 | 16449 |
| 25° | 16561 | 16451 | 16258 |
| 30° | 16381 | 16267 | 16034 |
| 35° | 16141 | 15999 | 15771 |
| 40° | 15770 | 15602 | 15320 |
| 45° | 15132 | 14864 | 14559 |
| 50° | 13996 | 13662 | 13390 |
| 55° | 12215 | 11942 | 11691 |
| 60° | 10295 | 10210 | 10005 |
| 65° | 8905 | 8938 | 8868 |
| 70° | 8176 | 8217 | 8217 |
| 75° | 7857 | 7857 | 7910 |
| 80° | 7385 | 7470 | 7385 |
| 85° | 5960 | 6616 | 6616 |



TEST NUMBER: P845177

CATALOG NUMBER: SQ4P-PR1-075U-125D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 171.6 | 2.5 |
| 10°-20° | 490.9 | 7.0 |
| 20°-30° | 740.4 | 10.6 |
| 30°-40° | 882.2 | 12.6 |
| 40°-50° | 869.8 | 12.4 |
| 50°-60° | 664.7 | 9.5 |
| 60°-70° | 411.3 | 5.9 |
| 70°-80° | 233.6 | 3.3 |
| 80°-90° | 72.0 | 1.0 |
| 90°-100° | 150.9 | 2.2 |
| 100°-110° | 525.0 | 7.5 |
| 110°-120° | 508.6 | 7.3 |
| 120°-130° | 398.9 | 5.7 |
| 130°-140° | 315.7 | 4.5 |
| 140°-150° | 243.7 | 3.5 |
| 150°-160° | 174.7 | 2.5 |
| 160°-170° | 106.8 | 1.5 |
| 170°-180° | 36.1 | 0.5 |
| 0°-30° | 1402.9 | 20.1 |
| 0°-40° | 2285.1 | 32.7 |
| 0°-60° | 3819.6 | 54.6 |
| 0°-90° | 4536.5 | 64.8 |
| 90°-120° | 1184.4 | 16.9 |
| 90°-150° | 2142.8 | 30.6 |
| 90°-180° | 2460.0 | 35.2 |
| 0°-180° | 6996.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1814 | 1814 | 1814 | 1814 | 1814 | |
| 5° | 1824 | 1804 | 1810 | 1803 | 1800 | 173 |
| 15° | 1755 | 1737 | 1744 | 1738 | 1734 | 495 |
| 25° | 1627 | 1607 | 1616 | 1599 | 1597 | 749 |
| 35° | 1433 | 1416 | 1420 | 1402 | 1400 | 894 |
| 45° | 1160 | 1144 | 1139 | 1119 | 1116 | 888 |
| 55° | 759 | 747 | 742 | 730 | 727 | 680 |
| 65° | 408 | 405 | 409 | 406 | 406 | 413 |
| 75° | 220 | 220 | 220 | 222 | 222 | 233 |
| 85° | 56 | 59 | 62 | 62 | 62 | 65 |
| 90° | 6 | 8 | 8 | 6 | 3 | 6 |
| 95° | 25 | 88 | 255 | 65 | 40 | 27 |
| 105° | 88 | 124 | 552 | 931 | 866 | 92 |
| 115° | 153 | 184 | 410 | 866 | 1021 | 151 |
| 125° | 207 | 255 | 382 | 645 | 770 | 185 |
| 135° | 249 | 280 | 379 | 538 | 608 | 193 |
| 145° | 291 | 311 | 376 | 464 | 504 | 182 |
| 155° | 331 | 342 | 371 | 413 | 427 | 153 |
| 165° | 362 | 365 | 373 | 390 | 393 | 102 |
| 175° | 379 | 379 | 376 | 382 | 379 | 36 |
| 180° | 379 | 379 | 379 | 379 | 379 | |



TEST NUMBER: P845177

CATALOG NUMBER: SQ4P-PR1-075U-125D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1814.3 | 1814.3 | 1814.3 | 1814.3 | 1814.3 |
| 2.5° | 1825.6 | 1809.7 | 1814.3 | 1810.5 | 1801.9 |
| 5° | 1823.8 | 1803.8 | 1809.7 | 1803.2 | 1800.3 |
| 7.5° | 1809.7 | 1790.1 | 1796.0 | 1789.5 | 1787.8 |
| 10° | 1797.0 | 1778.7 | 1784.6 | 1778.4 | 1775.2 |
| 12.5° | 1783.3 | 1763.9 | 1770.9 | 1763.4 | 1760.4 |
| 15° | 1755.1 | 1736.7 | 1744.0 | 1737.7 | 1734.5 |
| 17.5° | 1723.7 | 1704.1 | 1711.6 | 1704.4 | 1700.4 |
| 20° | 1698.7 | 1680.4 | 1687.6 | 1676.9 | 1675.3 |
| 22.5° | 1671.3 | 1652.9 | 1660.2 | 1645.7 | 1645.4 |
| 25° | 1626.8 | 1606.9 | 1616.0 | 1598.8 | 1597.1 |
| 27.5° | 1574.0 | 1555.7 | 1563.0 | 1545.4 | 1543.8 |
| 30° | 1537.6 | 1519.3 | 1526.9 | 1508.0 | 1505.0 |
| 32.5° | 1496.4 | 1479.5 | 1485.7 | 1466.8 | 1464.9 |
| 35° | 1433.1 | 1416.2 | 1420.5 | 1401.9 | 1400.2 |
| 37.5° | 1360.9 | 1345.5 | 1348.0 | 1327.2 | 1325.9 |
| 40° | 1309.4 | 1294.3 | 1295.4 | 1273.6 | 1272.0 |
| 42.5° | 1253.4 | 1238.1 | 1236.7 | 1214.9 | 1213.3 |
| 45° | 1159.7 | 1144.3 | 1139.2 | 1118.7 | 1115.8 |
| 47.5° | 1052.7 | 1037.4 | 1028.0 | 1011.3 | 1009.1 |
| 50° | 975.1 | 959.8 | 951.8 | 937.5 | 932.9 |
| 52.5° | 891.4 | 876.0 | 869.3 | 856.3 | 851.7 |
| 55° | 759.4 | 747.2 | 742.4 | 729.7 | 726.8 |
| 57.5° | 634.1 | 626.1 | 624.4 | 612.3 | 610.9 |
| 60° | 557.9 | 553.3 | 553.3 | 542.2 | 542.2 |
| 62.5° | 493.0 | 489.5 | 491.9 | 484.6 | 483.5 |
| 65° | 407.9 | 404.8 | 409.4 | 406.2 | 406.2 |
| 67.5° | 340.7 | 340.7 | 343.5 | 342.1 | 342.1 |
| 70° | 303.1 | 303.1 | 304.6 | 304.6 | 304.6 |
| 72.5° | 269.4 | 268.3 | 272.3 | 272.0 | 271.0 |
| 75° | 220.4 | 220.4 | 220.4 | 221.9 | 221.9 |
| 77.5° | 171.6 | 171.8 | 173.2 | 172.9 | 171.6 |
| 80° | 139.0 | 140.6 | 140.6 | 139.0 | 139.0 |
| 82.5° | 106.7 | 108.0 | 108.0 | 107.7 | 106.7 |
| 85° | 56.3 | 59.3 | 62.5 | 62.5 | 62.5 |
| 87.5° | 16.1 | 21.0 | 25.1 | 25.1 | 23.7 |
| 90° | 5.7 | 8.5 | 8.5 | 5.7 | 2.8 |
| 92.5° | 14.2 | 42.5 | 39.6 | 16.9 | 14.2 |
| 95° | 25.4 | 87.7 | 254.6 | 65.1 | 39.6 |
| 97.5° | 39.6 | 99.0 | 509.2 | 232.0 | 124.5 |
| 100° | 53.7 | 104.7 | 594.1 | 557.4 | 359.3 |
| 102.5° | 70.8 | 113.1 | 591.3 | 783.7 | 645.1 |
| 105° | 87.7 | 124.5 | 551.7 | 930.8 | 865.7 |



TEST NUMBER: P845177

CATALOG NUMBER: SQ4P-PR1-075U-125D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 135.8 | 166.9 | 430.1 | 936.5 | 1066.6 |
| 115° | 152.8 | 183.9 | 410.2 | 865.7 | 1021.3 |
| 117.5° | 169.8 | 203.7 | 399.0 | 800.7 | 956.3 |
| 120° | 183.9 | 220.7 | 390.4 | 738.4 | 891.2 |
| 122.5° | 195.2 | 237.7 | 384.8 | 687.5 | 826.1 |
| 125° | 206.6 | 254.6 | 381.9 | 645.1 | 769.5 |
| 127.5° | 217.8 | 266.0 | 381.9 | 614.0 | 718.7 |
| 130° | 229.2 | 271.6 | 379.1 | 582.8 | 676.2 |
| 132.5° | 240.4 | 274.4 | 379.1 | 560.2 | 639.4 |
| 135° | 248.9 | 280.1 | 379.1 | 537.5 | 608.3 |
| 137.5° | 260.3 | 285.7 | 379.1 | 517.8 | 582.8 |
| 140° | 268.8 | 294.3 | 379.1 | 497.9 | 554.6 |
| 142.5° | 280.1 | 302.8 | 379.1 | 478.1 | 529.0 |
| 145° | 291.4 | 311.2 | 376.3 | 464.0 | 503.6 |
| 147.5° | 302.8 | 319.7 | 373.4 | 449.8 | 481.0 |
| 150° | 311.2 | 328.2 | 373.4 | 435.7 | 461.2 |
| 152.5° | 322.5 | 336.6 | 370.6 | 421.6 | 444.2 |
| 155° | 331.0 | 342.3 | 370.6 | 413.1 | 427.2 |
| 157.5° | 339.5 | 350.8 | 370.6 | 404.5 | 415.9 |
| 160° | 348.0 | 356.5 | 373.4 | 399.0 | 407.4 |
| 162.5° | 356.5 | 362.2 | 373.4 | 393.3 | 399.0 |
| 165° | 362.2 | 365.0 | 373.4 | 390.4 | 393.3 |
| 167.5° | 367.8 | 370.6 | 373.4 | 387.6 | 387.6 |
| 170° | 370.6 | 373.4 | 376.3 | 384.8 | 384.8 |
| 172.5° | 376.3 | 376.3 | 376.3 | 381.9 | 381.9 |
| 175° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 177.5° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 180° | 379.1 | 379.1 | 379.1 | 379.1 | 379.1 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|--------|
| 107.5° | 104.7 | 138.7 | 500.7 | 995.9 | 1007.2 |
| 110° | 118.8 | 152.8 | 461.2 | 987.4 | 1069.5 |



(END OF REPORT)