

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: P845237

Luminaire Tested: **SQ4P-PW1-025U-125D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845237
REPORT IS A COMBINATION OF REPORTS P700182 AND P700243
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-025U-125D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

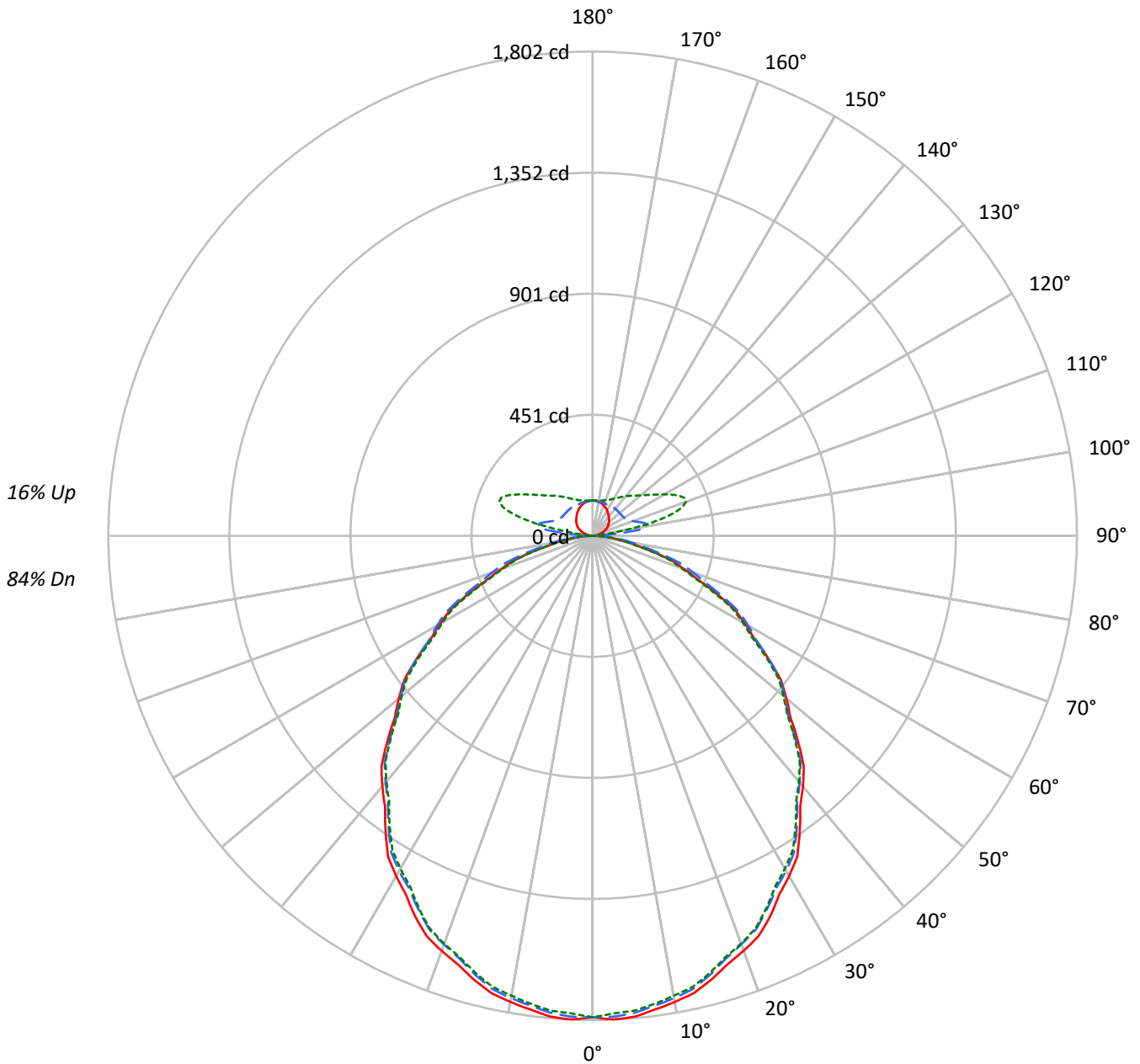
Lumens per Lamp: N/A
Luminaire Lumens: 5410.5 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 52.8
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: P845237

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Luminous Intensity Polar Plot





TEST NUMBER: P845237

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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 | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 102 | 102 | 102 | 95 | 95 | 95 | 88 | 88 | 88 | 84 | 84 | 84 | 84 |
| 1 | 106 | 101 | 97 | 94 | 101 | 97 | 94 | 91 | 90 | 87 | 85 | 84 | 82 | 79 | 78 | 76 | 74 | 71 | 71 | 71 | 71 |
| 2 | 96 | 89 | 82 | 77 | 92 | 85 | 80 | 75 | 79 | 75 | 71 | 74 | 70 | 67 | 69 | 66 | 63 | 60 | 60 | 60 | 60 |
| 3 | 88 | 78 | 70 | 64 | 84 | 75 | 68 | 63 | 70 | 64 | 60 | 65 | 61 | 57 | 61 | 57 | 54 | 51 | 51 | 51 | 51 |
| 4 | 81 | 69 | 61 | 55 | 77 | 67 | 59 | 53 | 62 | 56 | 51 | 58 | 53 | 49 | 55 | 50 | 46 | 44 | 44 | 44 | 44 |
| 5 | 74 | 62 | 53 | 47 | 71 | 60 | 52 | 46 | 56 | 49 | 44 | 53 | 47 | 42 | 49 | 44 | 40 | 38 | 38 | 38 | 38 |
| 6 | 69 | 56 | 47 | 41 | 66 | 54 | 46 | 40 | 51 | 44 | 39 | 48 | 42 | 37 | 45 | 40 | 36 | 33 | 33 | 33 | 33 |
| 7 | 64 | 51 | 42 | 36 | 61 | 49 | 41 | 36 | 46 | 39 | 34 | 43 | 37 | 33 | 41 | 36 | 32 | 30 | 30 | 30 | 30 |
| 8 | 59 | 46 | 38 | 32 | 57 | 45 | 37 | 32 | 42 | 36 | 31 | 40 | 34 | 30 | 38 | 32 | 29 | 27 | 27 | 27 | 27 |
| 9 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 29 | 39 | 32 | 28 | 37 | 31 | 27 | 35 | 30 | 26 | 24 | 24 | 24 | 24 |
| 10 | 52 | 39 | 31 | 26 | 50 | 38 | 31 | 26 | 36 | 30 | 25 | 34 | 28 | 24 | 32 | 27 | 24 | 22 | 22 | 22 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16532 | 16532 | 16532 |
| 5° | 16640 | 16509 | 16435 |
| 10° | 16506 | 16373 | 16284 |
| 15° | 16331 | 16151 | 16091 |
| 20° | 16136 | 15888 | 15859 |
| 25° | 15911 | 15622 | 15572 |
| 30° | 15575 | 15341 | 15239 |
| 35° | 15133 | 14918 | 14830 |
| 40° | 14661 | 14432 | 14377 |
| 45° | 14089 | 13906 | 13842 |
| 50° | 13508 | 13395 | 13301 |
| 55° | 12875 | 12875 | 12672 |
| 60° | 12092 | 12324 | 11887 |
| 65° | 11062 | 11614 | 10789 |
| 70° | 9749 | 10688 | 9501 |
| 75° | 8334 | 9564 | 8099 |
| 80° | 6461 | 8055 | 6551 |
| 85° | 4171 | 6193 | 5505 |



TEST NUMBER: P845237

CATALOG NUMBER: SQ4P-PW1-025U-125D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 168.7 | 3.1 |
| 10°-20° | 476.4 | 8.8 |
| 20°-30° | 706.6 | 13.1 |
| 30°-40° | 826.8 | 15.3 |
| 40°-50° | 823.2 | 15.2 |
| 50°-60° | 710.8 | 13.1 |
| 60°-70° | 511.7 | 9.5 |
| 70°-80° | 268.3 | 5.0 |
| 80°-90° | 66.9 | 1.2 |
| 90°-100° | 52.2 | 1.0 |
| 100°-110° | 181.6 | 3.4 |
| 110°-120° | 175.9 | 3.3 |
| 120°-130° | 138.0 | 2.6 |
| 130°-140° | 109.2 | 2.0 |
| 140°-150° | 84.3 | 1.6 |
| 150°-160° | 60.4 | 1.1 |
| 160°-170° | 37.0 | 0.7 |
| 170°-180° | 12.5 | 0.2 |
| 0°-30° | 1351.8 | 25.0 |
| 0°-40° | 2178.6 | 40.3 |
| 0°-60° | 3712.6 | 68.6 |
| 0°-90° | 4559.5 | 84.3 |
| 90°-120° | 409.7 | 7.6 |
| 90°-150° | 741.2 | 13.7 |
| 90°-180° | 851.0 | 15.7 |
| 0°-180° | 5410.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1792 | 1792 | 1792 | 1792 | 1792 | |
| 5° | 1797 | 1777 | 1783 | 1778 | 1775 | 170 |
| 15° | 1710 | 1688 | 1691 | 1688 | 1685 | 482 |
| 25° | 1563 | 1537 | 1535 | 1525 | 1530 | 719 |
| 35° | 1344 | 1325 | 1324 | 1312 | 1317 | 840 |
| 45° | 1080 | 1071 | 1066 | 1062 | 1061 | 833 |
| 55° | 800 | 799 | 800 | 790 | 788 | 714 |
| 65° | 507 | 522 | 532 | 511 | 494 | 502 |
| 75° | 234 | 255 | 268 | 250 | 227 | 250 |
| 85° | 39 | 52 | 58 | 55 | 52 | 52 |
| 90° | 2 | 3 | 3 | 2 | 1 | 3 |
| 95° | 9 | 30 | 88 | 22 | 14 | 9 |
| 105° | 30 | 43 | 191 | 322 | 300 | 32 |
| 115° | 53 | 64 | 142 | 300 | 353 | 52 |
| 125° | 71 | 88 | 132 | 223 | 266 | 64 |
| 135° | 86 | 97 | 131 | 186 | 210 | 67 |
| 145° | 101 | 108 | 130 | 160 | 174 | 63 |
| 155° | 114 | 118 | 128 | 143 | 148 | 53 |
| 165° | 125 | 126 | 129 | 135 | 136 | 35 |
| 175° | 131 | 131 | 130 | 132 | 131 | 12 |
| 180° | 131 | 131 | 131 | 131 | 131 | |



TEST NUMBER: P845237

CATALOG NUMBER: SQ4P-PW1-025U-125D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1791.9 | 1791.9 | 1791.9 | 1791.9 | 1791.9 |
| 2.5° | 1802.1 | 1787.2 | 1791.9 | 1788.0 | 1779.3 |
| 5° | 1796.7 | 1776.6 | 1782.6 | 1777.7 | 1774.6 |
| 7.5° | 1778.4 | 1760.0 | 1764.1 | 1759.2 | 1757.2 |
| 10° | 1761.9 | 1743.3 | 1747.7 | 1741.5 | 1738.2 |
| 12.5° | 1743.1 | 1723.3 | 1727.6 | 1721.0 | 1719.4 |
| 15° | 1709.8 | 1688.1 | 1690.9 | 1687.5 | 1684.6 |
| 17.5° | 1671.3 | 1649.5 | 1649.8 | 1644.9 | 1644.0 |
| 20° | 1643.5 | 1620.3 | 1618.2 | 1611.9 | 1615.2 |
| 22.5° | 1613.3 | 1588.8 | 1586.6 | 1577.9 | 1582.2 |
| 25° | 1563.0 | 1536.8 | 1534.6 | 1525.1 | 1529.7 |
| 27.5° | 1504.9 | 1479.1 | 1479.1 | 1465.8 | 1470.7 |
| 30° | 1462.0 | 1437.2 | 1440.0 | 1424.1 | 1430.4 |
| 32.5° | 1416.5 | 1394.2 | 1395.5 | 1380.1 | 1386.3 |
| 35° | 1343.6 | 1325.1 | 1324.5 | 1312.1 | 1316.7 |
| 37.5° | 1269.0 | 1252.7 | 1249.9 | 1242.9 | 1244.0 |
| 40° | 1217.3 | 1203.4 | 1198.3 | 1193.7 | 1193.7 |
| 42.5° | 1162.8 | 1150.4 | 1145.2 | 1141.7 | 1140.5 |
| 45° | 1079.8 | 1070.6 | 1065.8 | 1062.4 | 1060.9 |
| 47.5° | 997.6 | 989.2 | 984.9 | 982.7 | 981.1 |
| 50° | 941.1 | 934.8 | 933.2 | 928.3 | 926.7 |
| 52.5° | 884.2 | 880.4 | 878.8 | 872.8 | 871.1 |
| 55° | 800.4 | 799.0 | 800.4 | 789.5 | 787.8 |
| 57.5° | 713.3 | 715.7 | 720.9 | 705.9 | 702.1 |
| 60° | 655.3 | 661.3 | 667.9 | 650.5 | 644.2 |
| 62.5° | 595.8 | 605.8 | 614.7 | 594.7 | 586.0 |
| 65° | 506.7 | 522.3 | 532.0 | 511.1 | 494.2 |
| 67.5° | 421.0 | 440.1 | 451.8 | 429.5 | 410.1 |
| 70° | 361.4 | 383.2 | 396.2 | 373.6 | 352.2 |
| 72.5° | 309.7 | 333.9 | 344.6 | 323.0 | 301.5 |
| 75° | 233.8 | 255.3 | 268.3 | 250.4 | 227.2 |
| 77.5° | 165.8 | 186.1 | 197.0 | 181.5 | 162.2 |
| 80° | 121.6 | 143.2 | 151.6 | 138.6 | 123.3 |
| 82.5° | 86.3 | 104.2 | 110.0 | 102.1 | 91.4 |
| 85° | 39.4 | 51.7 | 58.5 | 55.3 | 52.0 |
| 87.5° | 10.1 | 18.8 | 24.0 | 24.0 | 25.3 |
| 90° | 2.0 | 2.9 | 2.9 | 2.0 | 1.0 |
| 92.5° | 4.9 | 14.7 | 13.7 | 5.9 | 4.9 |
| 95° | 8.8 | 30.3 | 88.1 | 22.5 | 13.7 |
| 97.5° | 13.7 | 34.2 | 176.1 | 80.2 | 43.1 |
| 100° | 18.6 | 36.2 | 205.5 | 192.8 | 124.3 |
| 102.5° | 24.5 | 39.1 | 204.5 | 271.1 | 223.1 |
| 105° | 30.3 | 43.1 | 190.8 | 322.0 | 299.5 |



TEST NUMBER: P845237

CATALOG NUMBER: SQ4P-PW1-025U-125D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 47.0 | 57.7 | 148.7 | 324.0 | 369.0 |
| 115° | 52.8 | 63.6 | 141.9 | 299.5 | 353.4 |
| 117.5° | 58.7 | 70.5 | 138.0 | 276.9 | 330.9 |
| 120° | 63.6 | 76.3 | 135.0 | 255.4 | 308.3 |
| 122.5° | 67.5 | 82.2 | 133.1 | 237.8 | 285.8 |
| 125° | 71.4 | 88.1 | 132.1 | 223.1 | 266.2 |
| 127.5° | 75.3 | 92.0 | 132.1 | 212.3 | 248.6 |
| 130° | 79.3 | 93.9 | 131.1 | 201.6 | 233.9 |
| 132.5° | 83.2 | 94.9 | 131.1 | 193.8 | 221.2 |
| 135° | 86.1 | 96.9 | 131.1 | 185.9 | 210.4 |
| 137.5° | 90.0 | 98.8 | 131.1 | 179.1 | 201.6 |
| 140° | 93.0 | 101.8 | 131.1 | 172.2 | 191.8 |
| 142.5° | 96.9 | 104.7 | 131.1 | 165.4 | 183.0 |
| 145° | 100.8 | 107.6 | 130.1 | 160.5 | 174.2 |
| 147.5° | 104.7 | 110.6 | 129.2 | 155.6 | 166.4 |
| 150° | 107.6 | 113.5 | 129.2 | 150.7 | 159.5 |
| 152.5° | 111.6 | 116.4 | 128.2 | 145.8 | 153.6 |
| 155° | 114.5 | 118.4 | 128.2 | 142.9 | 147.8 |
| 157.5° | 117.4 | 121.3 | 128.2 | 139.9 | 143.8 |
| 160° | 120.4 | 123.3 | 129.2 | 138.0 | 140.9 |
| 162.5° | 123.3 | 125.3 | 129.2 | 136.0 | 138.0 |
| 165° | 125.3 | 126.2 | 129.2 | 135.0 | 136.0 |
| 167.5° | 127.2 | 128.2 | 129.2 | 134.1 | 134.1 |
| 170° | 128.2 | 129.2 | 130.1 | 133.1 | 133.1 |
| 172.5° | 130.1 | 130.1 | 130.1 | 132.1 | 132.1 |
| 175° | 131.1 | 131.1 | 130.1 | 132.1 | 131.1 |
| 177.5° | 131.1 | 131.1 | 130.1 | 132.1 | 131.1 |
| 180° | 131.1 | 131.1 | 131.1 | 131.1 | 131.1 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 36.2 | 47.9 | 173.2 | 344.6 | 348.5 |
| 110° | 41.1 | 52.8 | 159.5 | 341.6 | 370.0 |



(END OF REPORT)