

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: P845235

Luminaire Tested: **SQ4P-PW1-025U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845235
REPORT IS A COMBINATION OF REPORTS P700181 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-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

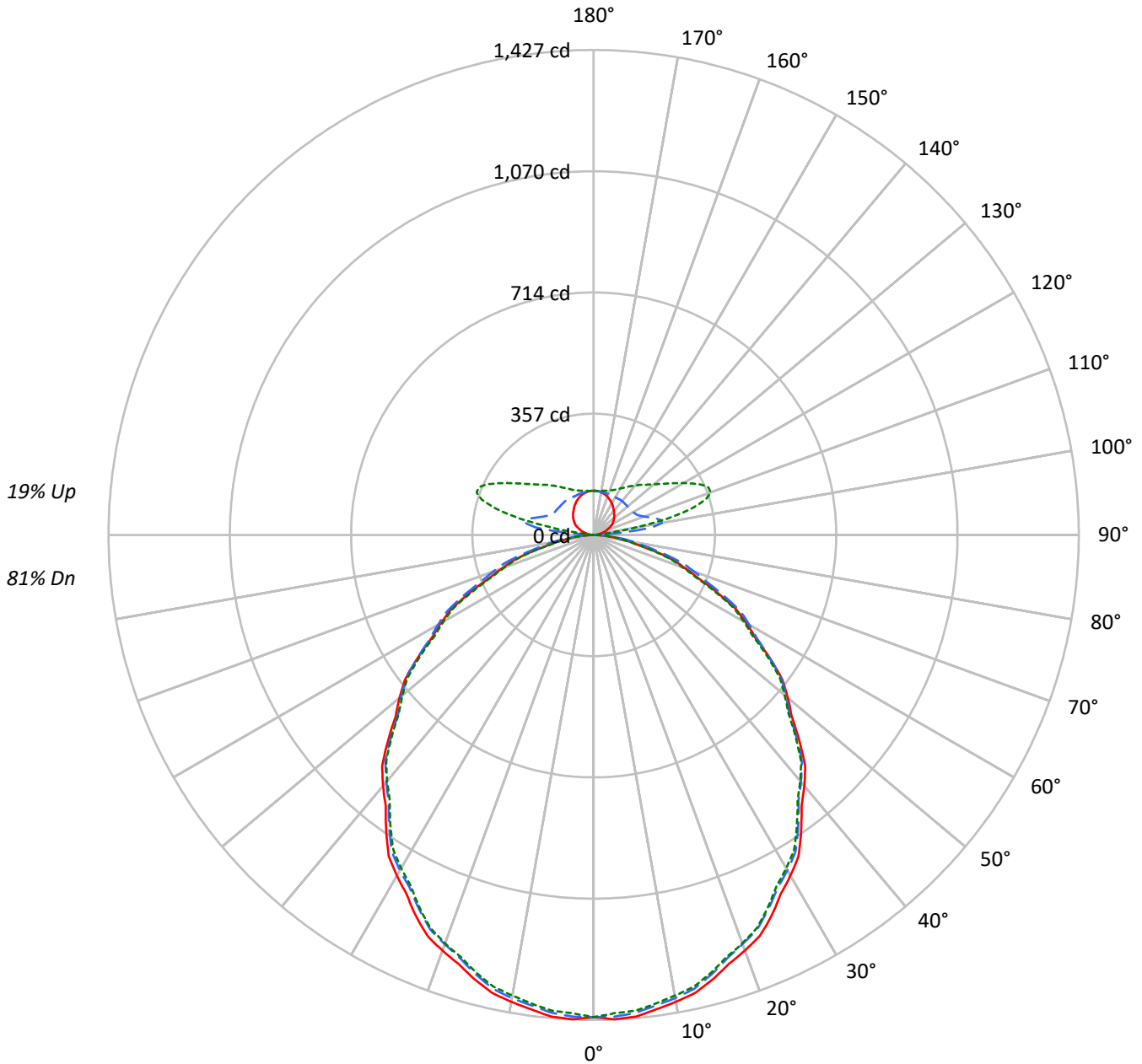
Lumens per Lamp: N/A
Luminaire Lumens: 4452.9 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 41.9
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: P845235

CATALOG NUMBER: SQ4P-PW1-025U-100D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845235

CATALOG NUMBER: SQ4P-PW1-025U-100D-B40-1D-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 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 110 | 101 | 101 | 101 | 92 | 92 | 92 | 85 | 85 | 85 | 81 | | | | | | | | | | | | | | | | | | | |
| 1 | 105 | 100 | 96 | 93 | 100 | 96 | 93 | 90 | 89 | 86 | 83 | 82 | 79 | 77 | 75 | 74 | 72 | 69 | | | | | | | | | | | | | | | | | | | |
| 2 | 96 | 88 | 82 | 76 | 91 | 84 | 79 | 74 | 78 | 73 | 69 | 72 | 68 | 65 | 66 | 63 | 61 | 58 | | | | | | | | | | | | | | | | | | | |
| 3 | 87 | 77 | 70 | 64 | 83 | 74 | 68 | 62 | 69 | 63 | 58 | 64 | 59 | 55 | 59 | 55 | 52 | 49 | | | | | | | | | | | | | | | | | | | |
| 4 | 80 | 69 | 60 | 54 | 76 | 66 | 59 | 53 | 61 | 55 | 50 | 57 | 52 | 47 | 53 | 48 | 45 | 42 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 61 | 53 | 47 | 70 | 59 | 51 | 46 | 55 | 48 | 43 | 51 | 46 | 41 | 48 | 43 | 39 | 37 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 55 | 47 | 41 | 65 | 53 | 46 | 40 | 50 | 43 | 38 | 46 | 41 | 36 | 43 | 38 | 35 | 32 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 50 | 42 | 36 | 60 | 49 | 41 | 35 | 45 | 39 | 34 | 42 | 37 | 32 | 39 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 46 | 38 | 32 | 56 | 44 | 37 | 31 | 41 | 35 | 30 | 39 | 33 | 29 | 36 | 31 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 42 | 34 | 29 | 52 | 41 | 33 | 28 | 38 | 32 | 27 | 36 | 30 | 26 | 34 | 29 | 25 | 23 | | | | | | | | | | | | | | | | | | | |
| 10 | 51 | 39 | 31 | 26 | 49 | 38 | 30 | 26 | 35 | 29 | 25 | 33 | 28 | 24 | 31 | 26 | 23 | 21 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13089 | 13089 | 13089 |
| 5° | 13175 | 13071 | 13013 |
| 10° | 13069 | 12964 | 12894 |
| 15° | 12931 | 12788 | 12740 |
| 20° | 12777 | 12579 | 12557 |
| 25° | 12598 | 12370 | 12330 |
| 30° | 12331 | 12146 | 12065 |
| 35° | 11982 | 11812 | 11741 |
| 40° | 11608 | 11426 | 11382 |
| 45° | 11156 | 11010 | 10959 |
| 50° | 10695 | 10606 | 10531 |
| 55° | 10193 | 10193 | 10034 |
| 60° | 9573 | 9758 | 9411 |
| 65° | 8759 | 9197 | 8542 |
| 70° | 7720 | 8462 | 7521 |
| 75° | 6598 | 7571 | 6417 |
| 80° | 5117 | 6381 | 5186 |
| 85° | 3303 | 4901 | 4361 |



TEST NUMBER: P845235

CATALOG NUMBER: SQ4P-PW1-025U-100D-B40-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 133.6 | 3.0 |
| 10°-20° | 377.2 | 8.5 |
| 20°-30° | 559.5 | 12.6 |
| 30°-40° | 654.7 | 14.7 |
| 40°-50° | 651.8 | 14.6 |
| 50°-60° | 562.8 | 12.6 |
| 60°-70° | 405.1 | 9.1 |
| 70°-80° | 212.4 | 4.8 |
| 80°-90° | 53.0 | 1.2 |
| 90°-100° | 51.7 | 1.2 |
| 100°-110° | 179.8 | 4.0 |
| 110°-120° | 174.2 | 3.9 |
| 120°-130° | 136.6 | 3.1 |
| 130°-140° | 108.2 | 2.4 |
| 140°-150° | 83.5 | 1.9 |
| 150°-160° | 59.8 | 1.3 |
| 160°-170° | 36.6 | 0.8 |
| 170°-180° | 12.4 | 0.3 |
| 0°-30° | 1070.3 | 24.0 |
| 0°-40° | 1724.9 | 38.7 |
| 0°-60° | 2939.5 | 66.0 |
| 0°-90° | 3610.1 | 81.1 |
| 90°-120° | 405.7 | 9.1 |
| 90°-150° | 734.0 | 16.5 |
| 90°-180° | 843.0 | 18.9 |
| 0°-180° | 4452.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1419 | 1419 | 1419 | 1419 | 1419 | |
| 5° | 1423 | 1407 | 1411 | 1408 | 1405 | 135 |
| 15° | 1354 | 1337 | 1339 | 1336 | 1334 | 382 |
| 25° | 1238 | 1217 | 1215 | 1208 | 1211 | 569 |
| 35° | 1064 | 1049 | 1049 | 1039 | 1042 | 665 |
| 45° | 855 | 848 | 844 | 841 | 840 | 660 |
| 55° | 634 | 633 | 634 | 625 | 624 | 565 |
| 65° | 401 | 414 | 421 | 405 | 391 | 398 |
| 75° | 185 | 202 | 212 | 198 | 180 | 198 |
| 85° | 31 | 41 | 46 | 44 | 41 | 41 |
| 90° | 2 | 3 | 3 | 2 | 1 | 2 |
| 95° | 9 | 30 | 87 | 22 | 14 | 9 |
| 105° | 30 | 43 | 189 | 319 | 297 | 32 |
| 115° | 52 | 63 | 140 | 297 | 350 | 52 |
| 125° | 71 | 87 | 131 | 221 | 264 | 63 |
| 135° | 85 | 96 | 130 | 184 | 208 | 66 |
| 145° | 100 | 107 | 129 | 159 | 172 | 62 |
| 155° | 113 | 117 | 127 | 142 | 146 | 52 |
| 165° | 124 | 125 | 128 | 134 | 135 | 35 |
| 175° | 130 | 130 | 129 | 131 | 130 | 12 |
| 180° | 130 | 130 | 130 | 130 | 130 | |



TEST NUMBER: P845235

CATALOG NUMBER: SQ4P-PW1-025U-100D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1418.7 | 1418.7 | 1418.7 | 1418.7 | 1418.7 |
| 2.5° | 1426.8 | 1415.0 | 1418.7 | 1415.7 | 1408.7 |
| 5° | 1422.6 | 1406.6 | 1411.3 | 1407.5 | 1405.1 |
| 7.5° | 1408.1 | 1393.5 | 1396.7 | 1392.8 | 1391.3 |
| 10° | 1395.0 | 1380.3 | 1383.8 | 1378.8 | 1376.3 |
| 12.5° | 1380.1 | 1364.3 | 1367.8 | 1362.7 | 1361.3 |
| 15° | 1353.8 | 1336.6 | 1338.8 | 1336.1 | 1333.8 |
| 17.5° | 1323.3 | 1306.0 | 1306.2 | 1302.3 | 1301.6 |
| 20° | 1301.3 | 1282.9 | 1281.2 | 1276.3 | 1278.9 |
| 22.5° | 1277.3 | 1257.9 | 1256.2 | 1249.3 | 1252.8 |
| 25° | 1237.5 | 1216.8 | 1215.1 | 1207.5 | 1211.2 |
| 27.5° | 1191.6 | 1171.1 | 1171.1 | 1160.5 | 1164.4 |
| 30° | 1157.5 | 1138.0 | 1140.1 | 1127.6 | 1132.5 |
| 32.5° | 1121.6 | 1103.9 | 1104.9 | 1092.7 | 1097.7 |
| 35° | 1063.8 | 1049.1 | 1048.7 | 1038.8 | 1042.4 |
| 37.5° | 1004.7 | 991.8 | 989.7 | 984.1 | 985.0 |
| 40° | 963.8 | 952.8 | 948.7 | 945.0 | 945.0 |
| 42.5° | 920.7 | 910.8 | 906.8 | 903.9 | 903.1 |
| 45° | 855.0 | 847.6 | 843.8 | 841.2 | 839.9 |
| 47.5° | 789.9 | 783.3 | 779.8 | 778.1 | 776.8 |
| 50° | 745.1 | 740.2 | 738.9 | 734.9 | 733.7 |
| 52.5° | 700.1 | 697.0 | 695.8 | 691.0 | 689.8 |
| 55° | 633.7 | 632.6 | 633.7 | 625.0 | 623.8 |
| 57.5° | 564.8 | 566.7 | 570.8 | 559.0 | 556.0 |
| 60° | 518.8 | 523.6 | 528.8 | 515.0 | 510.0 |
| 62.5° | 471.6 | 479.7 | 486.8 | 470.8 | 463.9 |
| 65° | 401.2 | 413.5 | 421.3 | 404.7 | 391.3 |
| 67.5° | 333.4 | 348.4 | 357.7 | 340.0 | 324.7 |
| 70° | 286.2 | 303.4 | 313.7 | 295.9 | 278.8 |
| 72.5° | 245.2 | 264.4 | 272.8 | 255.7 | 238.8 |
| 75° | 185.1 | 202.1 | 212.4 | 198.3 | 180.0 |
| 77.5° | 131.2 | 147.4 | 156.0 | 143.7 | 128.4 |
| 80° | 96.3 | 113.4 | 120.1 | 109.7 | 97.6 |
| 82.5° | 68.3 | 82.6 | 87.0 | 80.8 | 72.4 |
| 85° | 31.2 | 40.9 | 46.3 | 43.7 | 41.2 |
| 87.5° | 7.9 | 14.8 | 19.0 | 19.0 | 20.1 |
| 90° | 1.9 | 2.9 | 2.9 | 1.9 | 1.0 |
| 92.5° | 4.8 | 14.5 | 13.6 | 5.8 | 4.8 |
| 95° | 8.7 | 30.0 | 87.2 | 22.3 | 13.6 |
| 97.5° | 13.6 | 33.9 | 174.4 | 79.5 | 42.6 |
| 100° | 18.4 | 35.9 | 203.5 | 190.9 | 123.1 |
| 102.5° | 24.2 | 38.8 | 202.5 | 268.4 | 220.9 |
| 105° | 30.0 | 42.6 | 189.0 | 318.9 | 296.6 |



TEST NUMBER: P845235

CATALOG NUMBER: SQ4P-PW1-025U-100D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 46.5 | 57.2 | 147.3 | 320.9 | 365.4 |
| 115° | 52.3 | 63.0 | 140.5 | 296.6 | 349.9 |
| 117.5° | 58.1 | 69.8 | 136.6 | 274.2 | 327.6 |
| 120° | 63.0 | 75.6 | 133.7 | 252.9 | 305.4 |
| 122.5° | 66.9 | 81.4 | 131.8 | 235.5 | 283.1 |
| 125° | 70.7 | 87.2 | 130.8 | 220.9 | 263.6 |
| 127.5° | 74.6 | 91.1 | 130.8 | 210.3 | 246.1 |
| 130° | 78.5 | 93.0 | 129.9 | 199.6 | 231.6 |
| 132.5° | 82.4 | 94.0 | 129.9 | 191.9 | 219.0 |
| 135° | 85.3 | 95.9 | 129.9 | 184.1 | 208.3 |
| 137.5° | 89.2 | 97.9 | 129.9 | 177.3 | 199.6 |
| 140° | 92.1 | 100.8 | 129.9 | 170.6 | 189.9 |
| 142.5° | 95.9 | 103.7 | 129.9 | 163.8 | 181.2 |
| 145° | 99.8 | 106.6 | 128.9 | 158.9 | 172.5 |
| 147.5° | 103.7 | 109.5 | 127.9 | 154.1 | 164.7 |
| 150° | 106.6 | 112.4 | 127.9 | 149.2 | 158.0 |
| 152.5° | 110.5 | 115.3 | 126.9 | 144.4 | 152.1 |
| 155° | 113.4 | 117.3 | 126.9 | 141.5 | 146.3 |
| 157.5° | 116.3 | 120.2 | 126.9 | 138.6 | 142.5 |
| 160° | 119.2 | 122.1 | 127.9 | 136.6 | 139.5 |
| 162.5° | 122.1 | 124.0 | 127.9 | 134.7 | 136.6 |
| 165° | 124.0 | 125.0 | 127.9 | 133.7 | 134.7 |
| 167.5° | 126.0 | 126.9 | 127.9 | 132.8 | 132.8 |
| 170° | 126.9 | 127.9 | 128.9 | 131.8 | 131.8 |
| 172.5° | 128.9 | 128.9 | 128.9 | 130.8 | 130.8 |
| 175° | 129.9 | 129.9 | 128.9 | 130.8 | 129.9 |
| 177.5° | 129.9 | 129.9 | 128.9 | 130.8 | 129.9 |
| 180° | 129.9 | 129.9 | 129.9 | 129.9 | 129.9 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 35.9 | 47.5 | 171.5 | 341.2 | 345.1 |
| 110° | 40.7 | 52.3 | 158.0 | 338.3 | 366.4 |



(END OF REPORT)