

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: P521584

Luminaire Tested: **SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521584
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

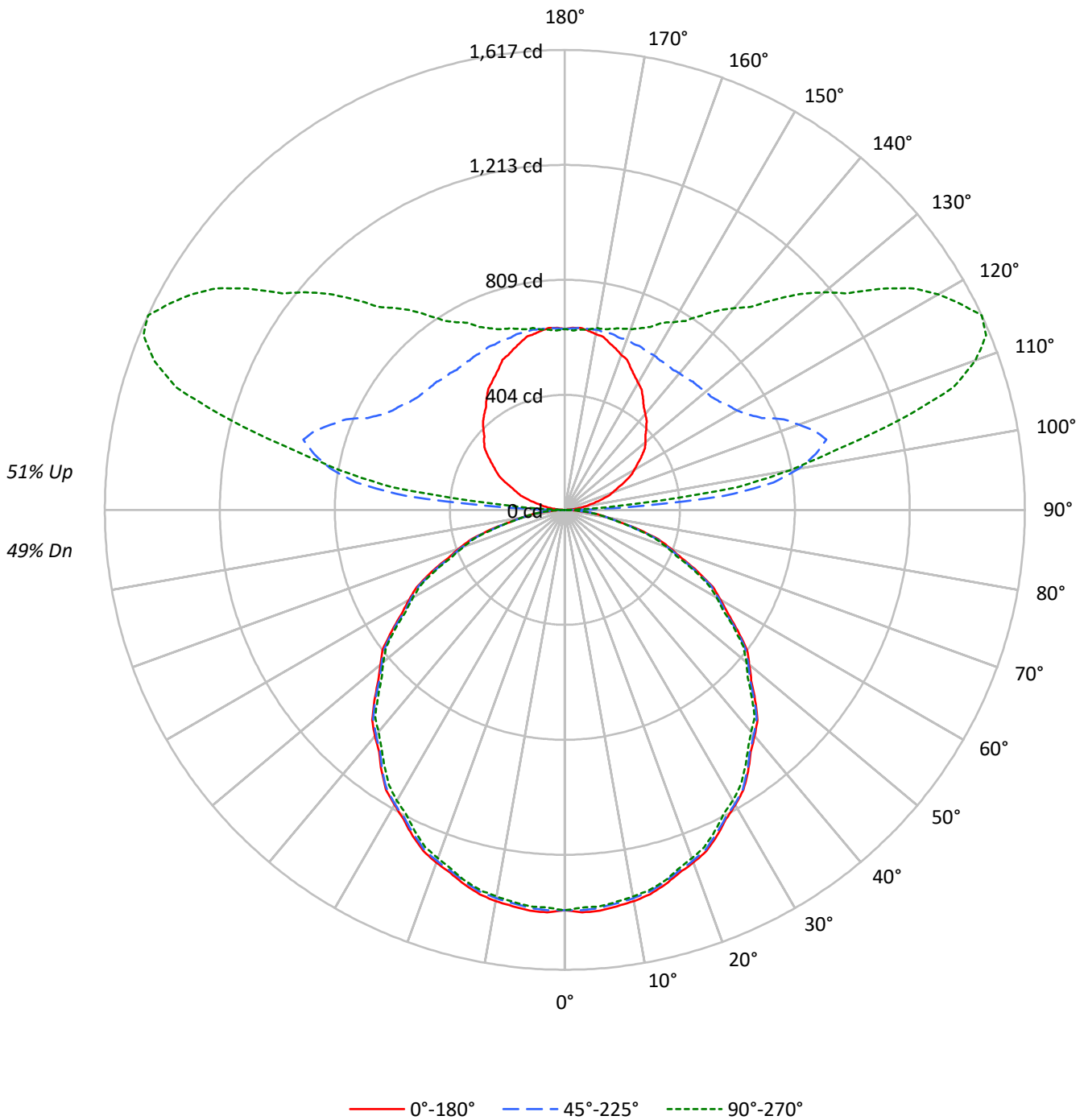
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8133.1 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 74.8
Input Voltage (V): 120
Input Current (Ain): 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: 24 FT

TEST NUMBER: P521584
CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521584

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4000K)

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 49 |
| 1 | 98 | 93 | 89 | 86 | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 41 |
| 2 | 89 | 81 | 75 | 70 | 81 | 75 | 70 | 65 | 63 | 59 | 56 | 53 | 50 | 47 | 43 | 41 | 39 | 34 |
| 3 | 81 | 71 | 64 | 58 | 74 | 66 | 59 | 54 | 56 | 51 | 47 | 46 | 43 | 40 | 38 | 35 | 33 | 29 |
| 4 | 74 | 63 | 55 | 49 | 68 | 58 | 51 | 46 | 49 | 44 | 40 | 41 | 37 | 34 | 34 | 31 | 28 | 25 |
| 5 | 68 | 56 | 48 | 42 | 62 | 52 | 45 | 39 | 44 | 38 | 34 | 37 | 33 | 29 | 30 | 27 | 25 | 21 |
| 6 | 62 | 50 | 42 | 36 | 57 | 46 | 39 | 34 | 40 | 34 | 30 | 33 | 29 | 26 | 27 | 24 | 21 | 19 |
| 7 | 57 | 45 | 37 | 31 | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 30 | 26 | 23 | 25 | 22 | 19 | 16 |
| 8 | 53 | 41 | 33 | 28 | 49 | 38 | 31 | 26 | 33 | 27 | 23 | 28 | 23 | 20 | 23 | 19 | 17 | 15 |
| 9 | 50 | 37 | 30 | 25 | 46 | 35 | 28 | 23 | 30 | 24 | 21 | 25 | 21 | 18 | 21 | 18 | 15 | 13 |
| 10 | 46 | 34 | 27 | 22 | 43 | 32 | 25 | 21 | 28 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12989 | 12989 | 12989 |
| 5° | 13104 | 13010 | 12963 |
| 10° | 13085 | 12990 | 12933 |
| 15° | 13023 | 12945 | 12906 |
| 20° | 12959 | 12899 | 12800 |
| 25° | 12881 | 12808 | 12695 |
| 30° | 12759 | 12727 | 12575 |
| 35° | 12646 | 12601 | 12441 |
| 40° | 12500 | 12440 | 12269 |
| 45° | 12343 | 12277 | 12106 |
| 50° | 12142 | 12070 | 11954 |
| 55° | 11932 | 11818 | 11689 |
| 60° | 11656 | 11525 | 11357 |
| 65° | 11274 | 11053 | 10854 |
| 70° | 10634 | 10388 | 10197 |
| 75° | 9693 | 9368 | 9186 |
| 80° | 7948 | 7948 | 7948 |
| 85° | 5674 | 6415 | 6743 |



TEST NUMBER: P521584

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4000K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 133.3 | 1.6 |
| 10°-20° | 381.7 | 4.7 |
| 20°-30° | 577.4 | 7.1 |
| 30°-40° | 695.4 | 8.5 |
| 40°-50° | 722.2 | 8.9 |
| 50°-60° | 655.4 | 8.1 |
| 60°-70° | 500.0 | 6.1 |
| 70°-80° | 279.5 | 3.4 |
| 80°-90° | 72.8 | 0.9 |
| 90°-100° | 327.6 | 4.0 |
| 100°-110° | 791.9 | 9.7 |
| 110°-120° | 844.6 | 10.4 |
| 120°-130° | 684.0 | 8.4 |
| 130°-140° | 529.6 | 6.5 |
| 140°-150° | 404.0 | 5.0 |
| 150°-160° | 292.5 | 3.6 |
| 160°-170° | 180.1 | 2.2 |
| 170°-180° | 61.0 | 0.7 |
| 0°-30° | 1092.4 | 13.4 |
| 0°-40° | 1787.7 | 22.0 |
| 0°-60° | 3165.3 | 38.9 |
| 0°-90° | 4017.7 | 49.4 |
| 90°-120° | 1964.1 | 24.1 |
| 90°-150° | 3581.8 | 44.0 |
| 90°-180° | 4115.0 | 50.6 |
| 0°-180° | 8133.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1408 | 1408 | 1408 | 1408 | 1408 | |
| 5° | 1415 | 1400 | 1405 | 1402 | 1400 | 134 |
| 15° | 1363 | 1350 | 1355 | 1351 | 1351 | 385 |
| 25° | 1265 | 1252 | 1258 | 1247 | 1247 | 583 |
| 35° | 1123 | 1113 | 1119 | 1105 | 1105 | 702 |
| 45° | 946 | 939 | 941 | 928 | 928 | 730 |
| 55° | 742 | 740 | 735 | 727 | 727 | 664 |
| 65° | 516 | 512 | 506 | 499 | 497 | 509 |
| 75° | 272 | 268 | 263 | 259 | 258 | 286 |
| 85° | 54 | 58 | 61 | 62 | 64 | 66 |
| 90° | 0 | 0 | 0 | 0 | 0 | 4 |
| 95° | 32 | 164 | 561 | 365 | 256 | 36 |
| 105° | 126 | 219 | 952 | 1231 | 1216 | 134 |
| 115° | 232 | 296 | 765 | 1450 | 1617 | 229 |
| 125° | 330 | 380 | 664 | 1153 | 1354 | 294 |
| 135° | 405 | 453 | 637 | 909 | 1046 | 313 |
| 145° | 479 | 515 | 625 | 773 | 833 | 300 |
| 155° | 549 | 573 | 633 | 684 | 709 | 254 |
| 165° | 607 | 616 | 641 | 650 | 660 | 171 |
| 175° | 642 | 640 | 642 | 637 | 635 | 61 |
| 180° | 635 | 635 | 635 | 635 | 635 | |

TEST NUMBER: P521584

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1407.8 | 1407.8 | 1407.8 | 1407.8 | 1407.8 |
| 2.5° | 1416.7 | 1404.9 | 1408.6 | 1406.9 | 1399.7 |
| 5° | 1414.9 | 1400.1 | 1404.8 | 1401.7 | 1399.7 |
| 7.5° | 1405.6 | 1390.8 | 1395.5 | 1391.4 | 1390.2 |
| 10° | 1396.7 | 1381.9 | 1386.6 | 1382.5 | 1380.5 |
| 12.5° | 1384.6 | 1370.5 | 1375.3 | 1370.4 | 1370.0 |
| 15° | 1363.4 | 1349.5 | 1355.3 | 1351.2 | 1351.2 |
| 17.5° | 1338.5 | 1325.6 | 1331.6 | 1325.7 | 1324.7 |
| 20° | 1319.9 | 1307.1 | 1313.8 | 1304.7 | 1303.7 |
| 22.5° | 1298.9 | 1286.8 | 1292.8 | 1282.1 | 1282.7 |
| 25° | 1265.3 | 1252.5 | 1258.2 | 1247.1 | 1247.1 |
| 27.5° | 1226.7 | 1214.1 | 1221.3 | 1207.9 | 1207.1 |
| 30° | 1197.6 | 1185.8 | 1194.6 | 1180.4 | 1180.4 |
| 32.5° | 1168.5 | 1158.2 | 1164.7 | 1151.3 | 1148.9 |
| 35° | 1122.8 | 1112.9 | 1118.8 | 1104.6 | 1104.6 |
| 37.5° | 1072.7 | 1064.6 | 1067.6 | 1054.6 | 1057.5 |
| 40° | 1037.9 | 1029.0 | 1032.9 | 1019.7 | 1018.7 |
| 42.5° | 1002.4 | 994.3 | 997.3 | 984.2 | 987.2 |
| 45° | 946.0 | 939.0 | 940.9 | 927.8 | 927.8 |
| 47.5° | 888.8 | 883.6 | 882.1 | 870.4 | 872.4 |
| 50° | 845.9 | 843.9 | 840.9 | 830.8 | 832.8 |
| 52.5° | 807.1 | 802.8 | 798.8 | 789.5 | 790.7 |
| 55° | 741.8 | 739.8 | 734.7 | 726.7 | 726.7 |
| 57.5° | 679.4 | 675.0 | 669.0 | 660.8 | 660.8 |
| 60° | 631.7 | 629.7 | 624.6 | 615.5 | 615.5 |
| 62.5° | 586.4 | 583.6 | 577.7 | 569.4 | 568.6 |
| 65° | 516.4 | 512.5 | 506.3 | 499.2 | 497.2 |
| 67.5° | 443.5 | 439.3 | 434.4 | 427.7 | 426.5 |
| 70° | 394.2 | 389.2 | 385.1 | 380.0 | 378.0 |
| 72.5° | 344.0 | 341.5 | 336.5 | 331.5 | 330.3 |
| 75° | 271.9 | 267.9 | 262.8 | 258.7 | 257.7 |
| 77.5° | 195.7 | 195.1 | 193.2 | 190.6 | 191.6 |
| 80° | 149.6 | 150.6 | 149.6 | 148.6 | 149.6 |
| 82.5° | 108.3 | 110.9 | 110.8 | 110.6 | 111.6 |
| 85° | 53.6 | 58.5 | 60.6 | 61.7 | 63.7 |
| 87.5° | 15.4 | 20.1 | 24.3 | 25.1 | 25.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 10.8 | 88.7 | 208.9 | 101.6 | 68.9 |
| 95° | 32.3 | 163.9 | 561.4 | 365.0 | 255.8 |
| 97.5° | 57.3 | 181.6 | 739.3 | 712.3 | 611.4 |
| 100° | 76.7 | 192.6 | 837.3 | 883.9 | 801.0 |
| 102.5° | 95.0 | 202.4 | 902.0 | 1026.8 | 977.6 |
| 105° | 126.5 | 218.7 | 951.8 | 1231.4 | 1215.6 |
| 107.5° | 157.5 | 237.8 | 922.4 | 1395.5 | 1432.6 |
| 110° | 179.0 | 254.1 | 875.0 | 1466.2 | 1536.0 |

TEST NUMBER: P521584

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 200.6 | 270.3 | 833.0 | 1483.5 | 1602.8 |
| 115° | 231.5 | 296.0 | 764.6 | 1449.6 | 1616.8 |
| 117.5° | 262.2 | 323.1 | 724.5 | 1371.6 | 1567.5 |
| 120° | 282.7 | 339.3 | 698.7 | 1310.5 | 1515.8 |
| 122.5° | 304.2 | 356.6 | 682.5 | 1247.9 | 1450.1 |
| 125° | 329.8 | 379.8 | 663.7 | 1152.9 | 1354.3 |
| 127.5° | 355.1 | 402.2 | 650.5 | 1072.4 | 1249.3 |
| 130° | 370.2 | 416.3 | 646.2 | 1016.3 | 1190.0 |
| 132.5° | 384.2 | 432.4 | 639.7 | 975.8 | 1123.3 |
| 135° | 405.2 | 452.6 | 636.8 | 909.1 | 1046.0 |
| 137.5° | 425.1 | 472.8 | 627.3 | 863.9 | 967.1 |
| 140° | 440.2 | 483.6 | 627.3 | 831.4 | 926.2 |
| 142.5° | 455.3 | 498.7 | 621.9 | 803.1 | 883.1 |
| 145° | 479.2 | 514.8 | 624.6 | 772.7 | 833.3 |
| 147.5° | 501.6 | 536.1 | 623.0 | 737.8 | 787.8 |
| 150° | 515.6 | 545.9 | 627.3 | 722.5 | 761.9 |
| 152.5° | 530.7 | 559.9 | 626.2 | 706.2 | 741.5 |
| 155° | 549.2 | 572.9 | 632.7 | 684.4 | 709.4 |
| 157.5° | 571.6 | 591.9 | 631.4 | 676.1 | 690.9 |
| 160° | 580.2 | 597.3 | 636.8 | 665.3 | 675.8 |
| 162.5° | 594.2 | 609.2 | 634.6 | 661.9 | 668.3 |
| 165° | 607.1 | 616.3 | 640.8 | 650.4 | 659.6 |
| 167.5° | 623.0 | 629.1 | 639.2 | 649.7 | 649.9 |
| 170° | 627.3 | 631.3 | 643.5 | 642.3 | 648.9 |
| 172.5° | 634.9 | 637.8 | 640.3 | 643.1 | 639.2 |
| 175° | 642.1 | 639.5 | 642.1 | 636.7 | 635.4 |
| 177.5° | 640.8 | 640.8 | 638.6 | 636.4 | 631.1 |
| 180° | 635.4 | 635.4 | 635.4 | 635.4 | 635.4 |

(END OF REPORT)