

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: P521634

Luminaire Tested: **SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521634
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-125U-100D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

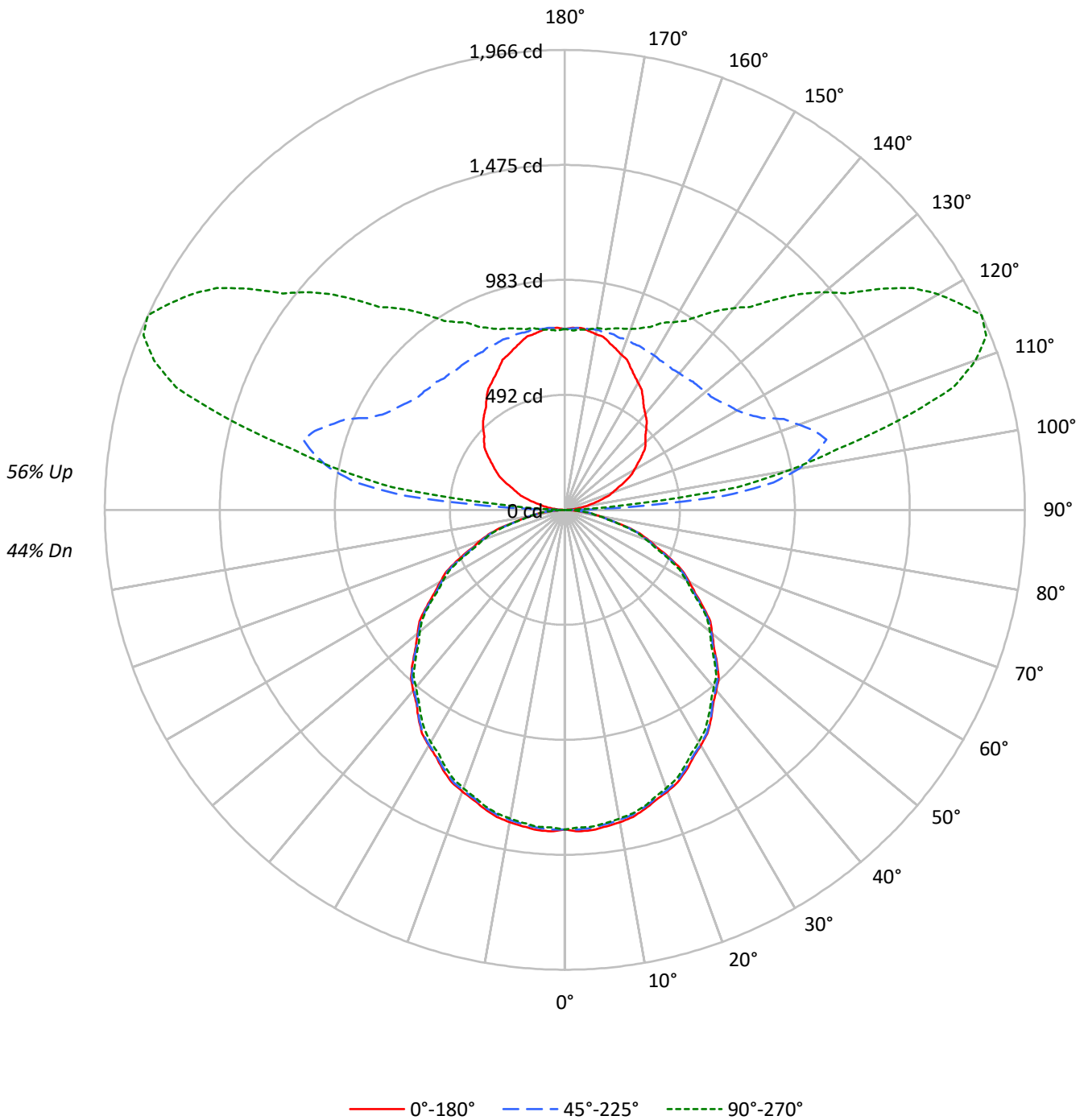
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8905.4 lumens
Efficiency: N/A
Efficacy: 106.3 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): 83.8
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: P521634
CATALOG NUMBER: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521634

CATALOG NUMBER: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3000K)

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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 50 | 50 | 50 | 44 |
| 1 | 96 | 92 | 88 | 85 | 88 | 84 | 81 | 78 | 70 | 67 | 65 | 57 | 55 | 53 | 44 | 43 | 42 | 37 |
| 2 | 88 | 80 | 74 | 69 | 80 | 73 | 68 | 64 | 61 | 57 | 54 | 49 | 47 | 44 | 39 | 37 | 35 | 30 |
| 3 | 80 | 70 | 63 | 57 | 73 | 64 | 58 | 53 | 54 | 49 | 45 | 44 | 40 | 37 | 34 | 32 | 30 | 26 |
| 4 | 73 | 62 | 54 | 48 | 66 | 57 | 50 | 45 | 48 | 42 | 38 | 39 | 35 | 32 | 31 | 28 | 26 | 22 |
| 5 | 67 | 55 | 47 | 41 | 61 | 51 | 44 | 38 | 42 | 37 | 33 | 35 | 31 | 27 | 27 | 25 | 22 | 19 |
| 6 | 61 | 49 | 41 | 35 | 56 | 45 | 38 | 33 | 38 | 33 | 28 | 31 | 27 | 24 | 25 | 22 | 19 | 16 |
| 7 | 57 | 44 | 36 | 31 | 52 | 41 | 34 | 29 | 34 | 29 | 25 | 28 | 24 | 21 | 23 | 20 | 17 | 15 |
| 8 | 53 | 40 | 33 | 27 | 48 | 37 | 30 | 25 | 31 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 15 | 13 |
| 9 | 49 | 37 | 29 | 24 | 45 | 34 | 27 | 23 | 29 | 23 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 12 |
| 10 | 46 | 34 | 26 | 22 | 42 | 31 | 25 | 20 | 26 | 21 | 18 | 22 | 18 | 15 | 18 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12610 | 12610 | 12610 |
| 5° | 12722 | 12632 | 12586 |
| 10° | 12704 | 12612 | 12557 |
| 15° | 12644 | 12568 | 12531 |
| 20° | 12582 | 12524 | 12428 |
| 25° | 12506 | 12436 | 12326 |
| 30° | 12387 | 12356 | 12210 |
| 35° | 12278 | 12234 | 12080 |
| 40° | 12137 | 12078 | 11913 |
| 45° | 11983 | 11919 | 11753 |
| 50° | 11788 | 11718 | 11605 |
| 55° | 11585 | 11474 | 11348 |
| 60° | 11317 | 11190 | 11027 |
| 65° | 10946 | 10732 | 10540 |
| 70° | 10324 | 10083 | 9900 |
| 75° | 9407 | 9094 | 8919 |
| 80° | 7715 | 7715 | 7715 |
| 85° | 5505 | 6235 | 6542 |



TEST NUMBER: P521634

CATALOG NUMBER: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3000K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 129.4 | 1.5 |
| 10°-20° | 370.6 | 4.2 |
| 20°-30° | 560.6 | 6.3 |
| 30°-40° | 675.1 | 7.6 |
| 40°-50° | 701.1 | 7.9 |
| 50°-60° | 636.3 | 7.1 |
| 60°-70° | 485.5 | 5.5 |
| 70°-80° | 271.4 | 3.0 |
| 80°-90° | 70.7 | 0.8 |
| 90°-100° | 398.5 | 4.5 |
| 100°-110° | 963.0 | 10.8 |
| 110°-120° | 1027.1 | 11.5 |
| 120°-130° | 831.9 | 9.3 |
| 130°-140° | 644.1 | 7.2 |
| 140°-150° | 491.3 | 5.5 |
| 150°-160° | 355.7 | 4.0 |
| 160°-170° | 219.1 | 2.5 |
| 170°-180° | 74.2 | 0.8 |
| 0°-30° | 1060.6 | 11.9 |
| 0°-40° | 1735.7 | 19.5 |
| 0°-60° | 3073.2 | 34.5 |
| 0°-90° | 3900.7 | 43.8 |
| 90°-120° | 2388.6 | 26.8 |
| 90°-150° | 4355.8 | 48.9 |
| 90°-180° | 5005.0 | 56.2 |
| 0°-180° | 8905.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1367 | 1367 | 1367 | 1367 | 1367 | |
| 5° | 1374 | 1359 | 1364 | 1361 | 1359 | 130 |
| 15° | 1324 | 1310 | 1316 | 1312 | 1312 | 373 |
| 25° | 1228 | 1216 | 1222 | 1211 | 1211 | 566 |
| 35° | 1090 | 1080 | 1086 | 1072 | 1072 | 681 |
| 45° | 918 | 912 | 914 | 901 | 901 | 708 |
| 55° | 720 | 718 | 713 | 706 | 706 | 644 |
| 65° | 501 | 498 | 492 | 485 | 483 | 495 |
| 75° | 264 | 260 | 255 | 251 | 250 | 277 |
| 85° | 52 | 57 | 59 | 60 | 62 | 64 |
| 90° | 0 | 0 | 0 | 0 | 0 | 4 |
| 95° | 39 | 199 | 683 | 444 | 311 | 44 |
| 105° | 154 | 266 | 1157 | 1498 | 1478 | 163 |
| 115° | 282 | 360 | 930 | 1763 | 1966 | 278 |
| 125° | 401 | 462 | 807 | 1402 | 1647 | 358 |
| 135° | 493 | 550 | 774 | 1106 | 1272 | 380 |
| 145° | 583 | 626 | 760 | 940 | 1013 | 364 |
| 155° | 668 | 697 | 769 | 832 | 863 | 308 |
| 165° | 738 | 750 | 779 | 791 | 802 | 208 |
| 175° | 781 | 778 | 781 | 774 | 773 | 74 |
| 180° | 773 | 773 | 773 | 773 | 773 | |

TEST NUMBER: P521634

CATALOG NUMBER: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1366.8 | 1366.8 | 1366.8 | 1366.8 | 1366.8 |
| 2.5° | 1375.5 | 1363.9 | 1367.6 | 1365.9 | 1359.0 |
| 5° | 1373.7 | 1359.3 | 1363.9 | 1360.9 | 1359.0 |
| 7.5° | 1364.7 | 1350.3 | 1354.9 | 1350.9 | 1349.8 |
| 10° | 1356.0 | 1341.6 | 1346.2 | 1342.3 | 1340.3 |
| 12.5° | 1344.3 | 1330.6 | 1335.2 | 1330.5 | 1330.1 |
| 15° | 1323.7 | 1310.2 | 1315.8 | 1311.9 | 1311.9 |
| 17.5° | 1299.5 | 1287.0 | 1292.8 | 1287.1 | 1286.2 |
| 20° | 1281.5 | 1269.0 | 1275.6 | 1266.7 | 1265.8 |
| 22.5° | 1261.1 | 1249.3 | 1255.2 | 1244.8 | 1245.4 |
| 25° | 1228.5 | 1216.0 | 1221.6 | 1210.8 | 1210.8 |
| 27.5° | 1191.0 | 1178.7 | 1185.7 | 1172.7 | 1172.0 |
| 30° | 1162.7 | 1151.2 | 1159.8 | 1146.1 | 1146.1 |
| 32.5° | 1134.5 | 1124.5 | 1130.7 | 1117.7 | 1115.4 |
| 35° | 1090.1 | 1080.5 | 1086.2 | 1072.5 | 1072.5 |
| 37.5° | 1041.5 | 1033.6 | 1036.6 | 1023.9 | 1026.7 |
| 40° | 1007.7 | 999.1 | 1002.8 | 990.0 | 989.1 |
| 42.5° | 973.2 | 965.3 | 968.3 | 955.6 | 958.4 |
| 45° | 918.4 | 911.7 | 913.5 | 900.8 | 900.8 |
| 47.5° | 862.9 | 857.9 | 856.4 | 845.1 | 847.0 |
| 50° | 821.3 | 819.4 | 816.4 | 806.6 | 808.5 |
| 52.5° | 783.6 | 779.4 | 775.5 | 766.5 | 767.7 |
| 55° | 720.2 | 718.3 | 713.3 | 705.5 | 705.5 |
| 57.5° | 659.6 | 655.3 | 649.6 | 641.5 | 641.5 |
| 60° | 613.3 | 611.3 | 606.4 | 597.6 | 597.6 |
| 62.5° | 569.3 | 566.6 | 560.9 | 552.8 | 552.0 |
| 65° | 501.4 | 497.6 | 491.6 | 484.7 | 482.8 |
| 67.5° | 430.6 | 426.5 | 421.7 | 415.2 | 414.1 |
| 70° | 382.7 | 377.9 | 373.8 | 368.9 | 367.0 |
| 72.5° | 334.0 | 331.5 | 326.7 | 321.8 | 320.7 |
| 75° | 263.9 | 260.1 | 255.1 | 251.2 | 250.2 |
| 77.5° | 190.0 | 189.4 | 187.6 | 185.1 | 186.0 |
| 80° | 145.2 | 146.2 | 145.2 | 144.3 | 145.2 |
| 82.5° | 105.2 | 107.7 | 107.5 | 107.4 | 108.3 |
| 85° | 52.0 | 56.8 | 58.9 | 59.9 | 61.8 |
| 87.5° | 14.9 | 19.5 | 23.5 | 24.4 | 25.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 13.1 | 107.9 | 254.1 | 123.5 | 83.8 |
| 95° | 39.3 | 199.4 | 682.7 | 443.9 | 311.0 |
| 97.5° | 69.7 | 220.8 | 899.1 | 866.2 | 743.6 |
| 100° | 93.3 | 234.2 | 1018.3 | 1074.9 | 974.1 |
| 102.5° | 115.6 | 246.2 | 1096.9 | 1248.7 | 1188.9 |
| 105° | 153.9 | 265.9 | 1157.4 | 1497.5 | 1478.3 |
| 107.5° | 191.5 | 289.2 | 1121.7 | 1697.1 | 1742.2 |
| 110° | 217.7 | 309.0 | 1064.1 | 1783.1 | 1867.9 |



TEST NUMBER: P521634

CATALOG NUMBER: SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 243.9 | 328.8 | 1013.0 | 1804.1 | 1949.1 |
| 115° | 281.6 | 360.0 | 929.9 | 1762.9 | 1966.2 |
| 117.5° | 318.9 | 392.9 | 881.1 | 1668.1 | 1906.2 |
| 120° | 343.8 | 412.6 | 849.7 | 1593.7 | 1843.4 |
| 122.5° | 370.0 | 433.7 | 830.0 | 1517.6 | 1763.5 |
| 125° | 401.1 | 461.9 | 807.1 | 1402.0 | 1646.9 |
| 127.5° | 431.9 | 489.2 | 791.0 | 1304.1 | 1519.2 |
| 130° | 450.2 | 506.2 | 785.8 | 1235.9 | 1447.2 |
| 132.5° | 467.2 | 525.8 | 777.9 | 1186.7 | 1366.0 |
| 135° | 492.8 | 550.4 | 774.3 | 1105.6 | 1272.0 |
| 137.5° | 517.0 | 574.9 | 762.9 | 1050.6 | 1176.1 |
| 140° | 535.3 | 588.2 | 762.9 | 1011.1 | 1126.3 |
| 142.5° | 553.7 | 606.5 | 756.3 | 976.6 | 1073.9 |
| 145° | 582.8 | 626.0 | 759.6 | 939.7 | 1013.4 |
| 147.5° | 610.0 | 651.9 | 757.6 | 897.2 | 958.0 |
| 150° | 627.0 | 663.8 | 762.9 | 878.6 | 926.6 |
| 152.5° | 645.3 | 680.9 | 761.6 | 858.8 | 901.7 |
| 155° | 667.9 | 696.7 | 769.4 | 832.3 | 862.8 |
| 157.5° | 695.1 | 719.8 | 767.8 | 822.2 | 840.2 |
| 160° | 705.6 | 726.4 | 774.3 | 809.0 | 821.8 |
| 162.5° | 722.6 | 740.9 | 771.7 | 805.0 | 812.7 |
| 165° | 738.3 | 749.5 | 779.3 | 791.0 | 802.2 |
| 167.5° | 757.6 | 765.0 | 777.3 | 790.1 | 790.4 |
| 170° | 762.9 | 767.7 | 782.5 | 781.1 | 789.1 |
| 172.5° | 772.1 | 775.6 | 778.6 | 782.1 | 777.3 |
| 175° | 780.9 | 777.7 | 780.9 | 774.3 | 772.7 |
| 177.5° | 779.3 | 779.3 | 776.6 | 773.9 | 767.5 |
| 180° | 772.7 | 772.7 | 772.7 | 772.7 | 772.7 |

(END OF REPORT)