

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: P521662

Luminaire Tested: **SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521662
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-150U-050D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

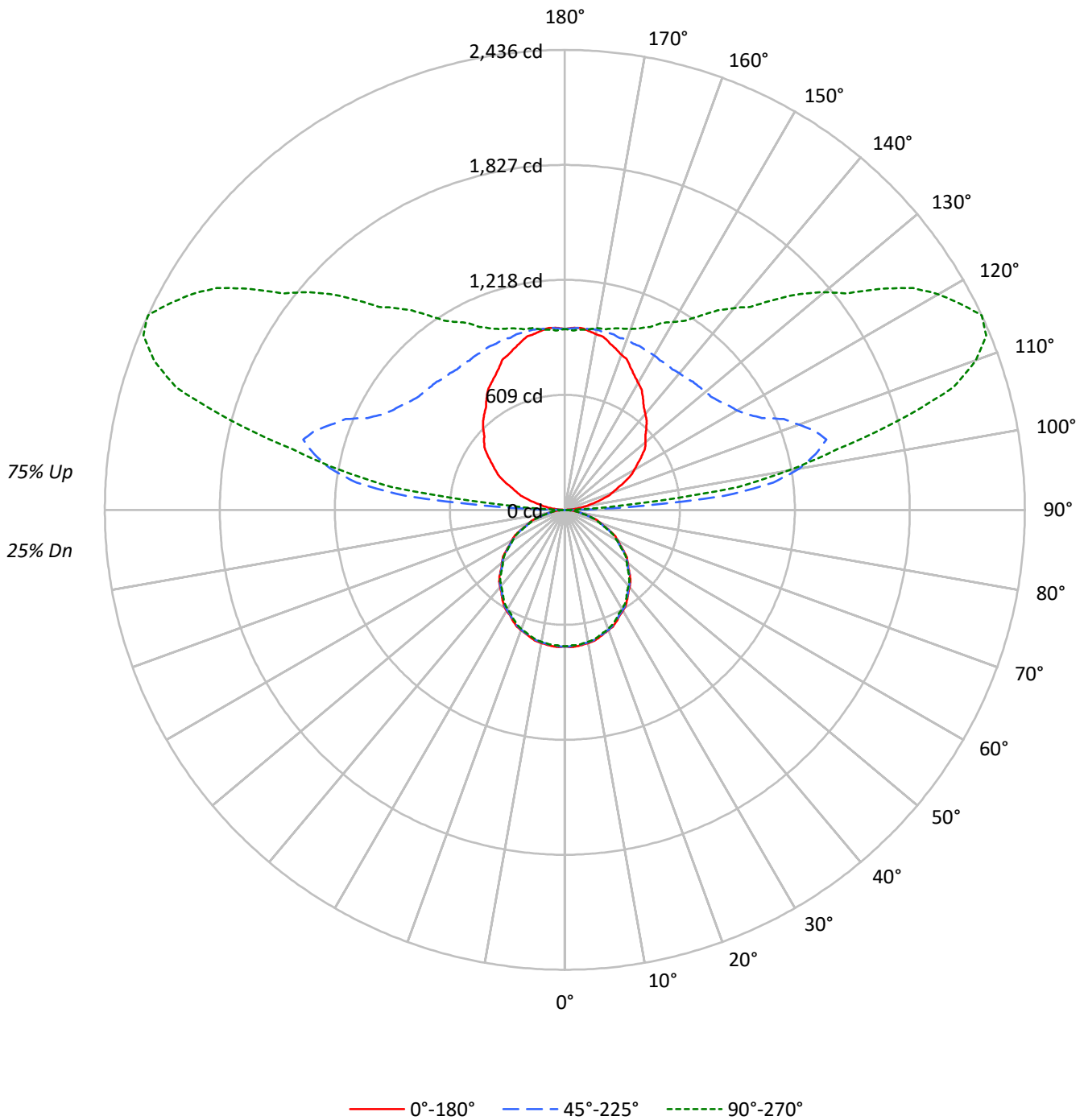
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8261.5 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.9
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: P521662
CATALOG NUMBER: SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (4000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521662

CATALOG NUMBER: SQ4-F-150U-050D-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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 69 | 69 | 69 | 50 | 50 | 50 | 33 | 33 | 33 | 25 |
| 1 | 92 | 88 | 84 | 81 | 82 | 78 | 75 | 72 | 61 | 58 | 57 | 44 | 43 | 42 | 29 | 28 | 28 | 21 |
| 2 | 84 | 77 | 71 | 66 | 74 | 68 | 63 | 59 | 53 | 50 | 47 | 39 | 37 | 35 | 25 | 24 | 23 | 17 |
| 3 | 76 | 67 | 60 | 55 | 68 | 60 | 54 | 49 | 47 | 42 | 39 | 34 | 31 | 29 | 22 | 21 | 20 | 15 |
| 4 | 70 | 59 | 52 | 46 | 62 | 53 | 47 | 42 | 41 | 37 | 33 | 30 | 27 | 25 | 20 | 18 | 17 | 12 |
| 5 | 64 | 53 | 45 | 39 | 56 | 47 | 40 | 35 | 37 | 32 | 28 | 27 | 24 | 21 | 18 | 16 | 15 | 11 |
| 6 | 59 | 47 | 39 | 34 | 52 | 42 | 35 | 31 | 33 | 28 | 24 | 24 | 21 | 19 | 16 | 14 | 13 | 9 |
| 7 | 54 | 42 | 35 | 29 | 48 | 38 | 31 | 27 | 30 | 25 | 21 | 22 | 19 | 16 | 15 | 13 | 11 | 8 |
| 8 | 50 | 38 | 31 | 26 | 44 | 34 | 28 | 23 | 27 | 22 | 19 | 20 | 17 | 14 | 13 | 11 | 10 | 7 |
| 9 | 46 | 35 | 27 | 23 | 41 | 31 | 25 | 21 | 25 | 20 | 17 | 18 | 15 | 13 | 12 | 10 | 9 | 7 |
| 10 | 43 | 32 | 25 | 20 | 38 | 28 | 22 | 18 | 22 | 18 | 15 | 17 | 14 | 11 | 11 | 10 | 8 | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6676 | 6676 | 6676 |
| 5° | 6720 | 6683 | 6655 |
| 10° | 6713 | 6675 | 6647 |
| 15° | 6690 | 6651 | 6622 |
| 20° | 6658 | 6628 | 6589 |
| 25° | 6615 | 6574 | 6512 |
| 30° | 6568 | 6524 | 6460 |
| 35° | 6500 | 6465 | 6397 |
| 40° | 6427 | 6378 | 6317 |
| 45° | 6356 | 6290 | 6237 |
| 50° | 6238 | 6194 | 6136 |
| 55° | 6129 | 6064 | 5998 |
| 60° | 5986 | 5894 | 5818 |
| 65° | 5759 | 5604 | 5539 |
| 70° | 5398 | 5263 | 5206 |
| 75° | 4898 | 4755 | 4684 |
| 80° | 4081 | 4134 | 4027 |
| 85° | 2890 | 3419 | 3419 |



TEST NUMBER: P521662

CATALOG NUMBER: SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (4000K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.5 | 0.8 |
| 10°-20° | 196.1 | 2.4 |
| 20°-30° | 296.4 | 3.6 |
| 30°-40° | 357.0 | 4.3 |
| 40°-50° | 370.7 | 4.5 |
| 50°-60° | 336.3 | 4.1 |
| 60°-70° | 255.0 | 3.1 |
| 70°-80° | 142.2 | 1.7 |
| 80°-90° | 37.6 | 0.5 |
| 90°-100° | 493.7 | 6.0 |
| 100°-110° | 1193.3 | 14.4 |
| 110°-120° | 1272.7 | 15.4 |
| 120°-130° | 1030.8 | 12.5 |
| 130°-140° | 798.1 | 9.7 |
| 140°-150° | 608.8 | 7.4 |
| 150°-160° | 440.7 | 5.3 |
| 160°-170° | 271.4 | 3.3 |
| 170°-180° | 91.9 | 1.1 |
| 0°-30° | 561.0 | 6.8 |
| 0°-40° | 918.0 | 11.1 |
| 0°-60° | 1625.1 | 19.7 |
| 0°-90° | 2059.9 | 24.9 |
| 90°-120° | 2959.8 | 35.8 |
| 90°-150° | 5397.5 | 65.3 |
| 90°-180° | 6202.0 | 75.1 |
| 0°-180° | 8261.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|------|-------|------|------|
| 0° | 724 | 724 | 724 | 724 | 724 | |
| 5° | 726 | 720 | 722 | 720 | 719 | 69 |
| 15° | 700 | 692 | 696 | 694 | 693 | 198 |
| 25° | 650 | 643 | 646 | 640 | 640 | 299 |
| 35° | 577 | 571 | 574 | 567 | 568 | 361 |
| 45° | 487 | 482 | 482 | 477 | 478 | 375 |
| 55° | 381 | 380 | 377 | 373 | 373 | 340 |
| 65° | 264 | 261 | 257 | 254 | 254 | 260 |
| 75° | 137 | 136 | 133 | 131 | 131 | 145 |
| 85° | 27 | 30 | 32 | 32 | 32 | 34 |
| 90° | 0 | 0 | 0 | 0 | 0 | 3 |
| 95° | 49 | 247 | 846 | 550 | 385 | 55 |
| 105° | 191 | 330 | 1434 | 1856 | 1832 | 201 |
| 115° | 349 | 446 | 1152 | 2184 | 2436 | 345 |
| 125° | 497 | 572 | 1000 | 1737 | 2041 | 443 |
| 135° | 611 | 682 | 960 | 1370 | 1576 | 471 |
| 145° | 722 | 776 | 941 | 1164 | 1256 | 451 |
| 155° | 828 | 863 | 954 | 1031 | 1069 | 382 |
| 165° | 915 | 929 | 966 | 980 | 994 | 258 |
| 175° | 968 | 964 | 968 | 960 | 958 | 91 |
| 180° | 958 | 958 | 958 | 958 | 958 | |

TEST NUMBER: P521662

CATALOG NUMBER: SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 0° | 723.6 | 723.6 | 723.6 | 723.6 | 723.6 |
| 2.5° | 727.7 | 722.1 | 723.6 | 722.7 | 719.6 |
| 5° | 725.6 | 719.7 | 721.6 | 719.6 | 718.6 |
| 7.5° | 720.6 | 714.5 | 716.5 | 714.5 | 715.1 |
| 10° | 716.5 | 709.6 | 712.5 | 710.5 | 709.5 |
| 12.5° | 711.7 | 704.0 | 706.8 | 704.0 | 704.6 |
| 15° | 700.4 | 692.5 | 696.3 | 694.3 | 693.3 |
| 17.5° | 687.8 | 680.9 | 684.8 | 681.6 | 681.6 |
| 20° | 678.1 | 671.2 | 675.1 | 671.1 | 671.1 |
| 22.5° | 667.6 | 659.9 | 663.8 | 658.9 | 658.9 |
| 25° | 649.8 | 642.9 | 645.8 | 639.7 | 639.7 |
| 27.5° | 629.4 | 622.3 | 626.2 | 620.1 | 620.1 |
| 30° | 616.5 | 608.6 | 612.4 | 606.4 | 606.4 |
| 32.5° | 600.3 | 594.8 | 597.1 | 591.0 | 591.0 |
| 35° | 577.1 | 571.1 | 574.0 | 567.0 | 568.0 |
| 37.5° | 551.4 | 547.3 | 547.4 | 541.1 | 542.3 |
| 40° | 533.6 | 528.7 | 529.6 | 522.5 | 524.5 |
| 42.5° | 515.0 | 510.9 | 511.0 | 505.5 | 506.7 |
| 45° | 487.1 | 482.2 | 482.1 | 477.0 | 478.0 |
| 47.5° | 455.6 | 453.0 | 452.6 | 446.7 | 447.7 |
| 50° | 434.6 | 433.6 | 431.5 | 426.5 | 427.5 |
| 52.5° | 413.6 | 412.6 | 410.5 | 405.5 | 406.5 |
| 55° | 381.0 | 380.0 | 377.0 | 372.9 | 372.9 |
| 57.5° | 347.1 | 346.1 | 342.8 | 338.8 | 338.8 |
| 60° | 324.4 | 323.4 | 319.4 | 315.3 | 315.3 |
| 62.5° | 301.0 | 299.2 | 295.1 | 291.9 | 291.9 |
| 65° | 263.8 | 260.8 | 256.7 | 253.7 | 253.7 |
| 67.5° | 225.2 | 223.2 | 220.1 | 217.3 | 217.3 |
| 70° | 200.1 | 198.1 | 195.1 | 193.0 | 193.0 |
| 72.5° | 175.0 | 173.1 | 170.0 | 168.0 | 168.0 |
| 75° | 137.4 | 135.5 | 133.4 | 131.4 | 131.4 |
| 77.5° | 100.3 | 99.7 | 99.6 | 97.6 | 97.6 |
| 80° | 76.8 | 77.8 | 77.8 | 75.8 | 75.8 |
| 82.5° | 55.0 | 56.8 | 57.6 | 57.2 | 57.2 |
| 85° | 27.3 | 30.3 | 32.3 | 32.3 | 32.3 |
| 87.5° | 8.1 | 10.5 | 12.9 | 12.9 | 12.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 16.2 | 133.7 | 314.8 | 153.1 | 103.9 |
| 95° | 48.7 | 247.0 | 845.9 | 550.1 | 385.4 |
| 97.5° | 86.4 | 273.7 | 1114.1 | 1073.3 | 921.4 |
| 100° | 115.6 | 290.2 | 1261.8 | 1332.0 | 1207.0 |
| 102.5° | 143.2 | 305.1 | 1359.2 | 1547.4 | 1473.2 |
| 105° | 190.7 | 329.5 | 1434.2 | 1855.7 | 1831.9 |
| 107.5° | 237.3 | 358.3 | 1390.0 | 2102.9 | 2158.9 |
| 110° | 269.8 | 382.9 | 1318.6 | 2209.5 | 2314.7 |

TEST NUMBER: P521662

CATALOG NUMBER: SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 302.3 | 407.4 | 1255.3 | 2235.6 | 2415.3 |
| 115° | 348.9 | 446.1 | 1152.3 | 2184.5 | 2436.4 |
| 117.5° | 395.2 | 486.8 | 1091.8 | 2067.0 | 2362.1 |
| 120° | 426.0 | 511.3 | 1052.9 | 1974.8 | 2284.2 |
| 122.5° | 458.5 | 537.4 | 1028.5 | 1880.6 | 2185.2 |
| 125° | 497.0 | 572.4 | 1000.1 | 1737.3 | 2040.8 |
| 127.5° | 535.2 | 606.2 | 980.2 | 1616.0 | 1882.6 |
| 130° | 557.9 | 627.3 | 973.7 | 1531.5 | 1793.3 |
| 132.5° | 579.0 | 651.6 | 964.0 | 1470.5 | 1692.7 |
| 135° | 610.6 | 682.0 | 959.5 | 1370.0 | 1576.2 |
| 137.5° | 640.6 | 712.4 | 945.3 | 1301.9 | 1457.4 |
| 140° | 663.4 | 728.8 | 945.3 | 1252.9 | 1395.7 |
| 142.5° | 686.1 | 751.5 | 937.2 | 1210.2 | 1330.8 |
| 145° | 722.2 | 775.7 | 941.3 | 1164.5 | 1255.7 |
| 147.5° | 755.9 | 807.8 | 938.9 | 1111.8 | 1187.2 |
| 150° | 777.0 | 822.6 | 945.3 | 1088.7 | 1148.2 |
| 152.5° | 799.7 | 843.7 | 943.7 | 1064.2 | 1117.4 |
| 155° | 827.7 | 863.4 | 953.5 | 1031.4 | 1069.1 |
| 157.5° | 861.4 | 891.9 | 951.4 | 1018.9 | 1041.1 |
| 160° | 874.3 | 900.1 | 959.5 | 1002.5 | 1018.4 |
| 162.5° | 895.4 | 918.1 | 956.3 | 997.5 | 1007.0 |
| 165° | 914.9 | 928.8 | 965.6 | 980.1 | 994.0 |
| 167.5° | 938.9 | 948.0 | 963.2 | 979.0 | 979.4 |
| 170° | 945.3 | 951.3 | 969.7 | 967.9 | 977.8 |
| 172.5° | 956.7 | 961.1 | 964.8 | 969.1 | 963.2 |
| 175° | 967.7 | 963.7 | 967.7 | 959.5 | 957.5 |
| 177.5° | 965.6 | 965.6 | 962.4 | 959.0 | 951.0 |
| 180° | 957.5 | 957.5 | 957.5 | 957.5 | 957.5 |

(END OF REPORT)