

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: P521481

Luminaire Tested: **SQ4-F-075U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521481
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-075U-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

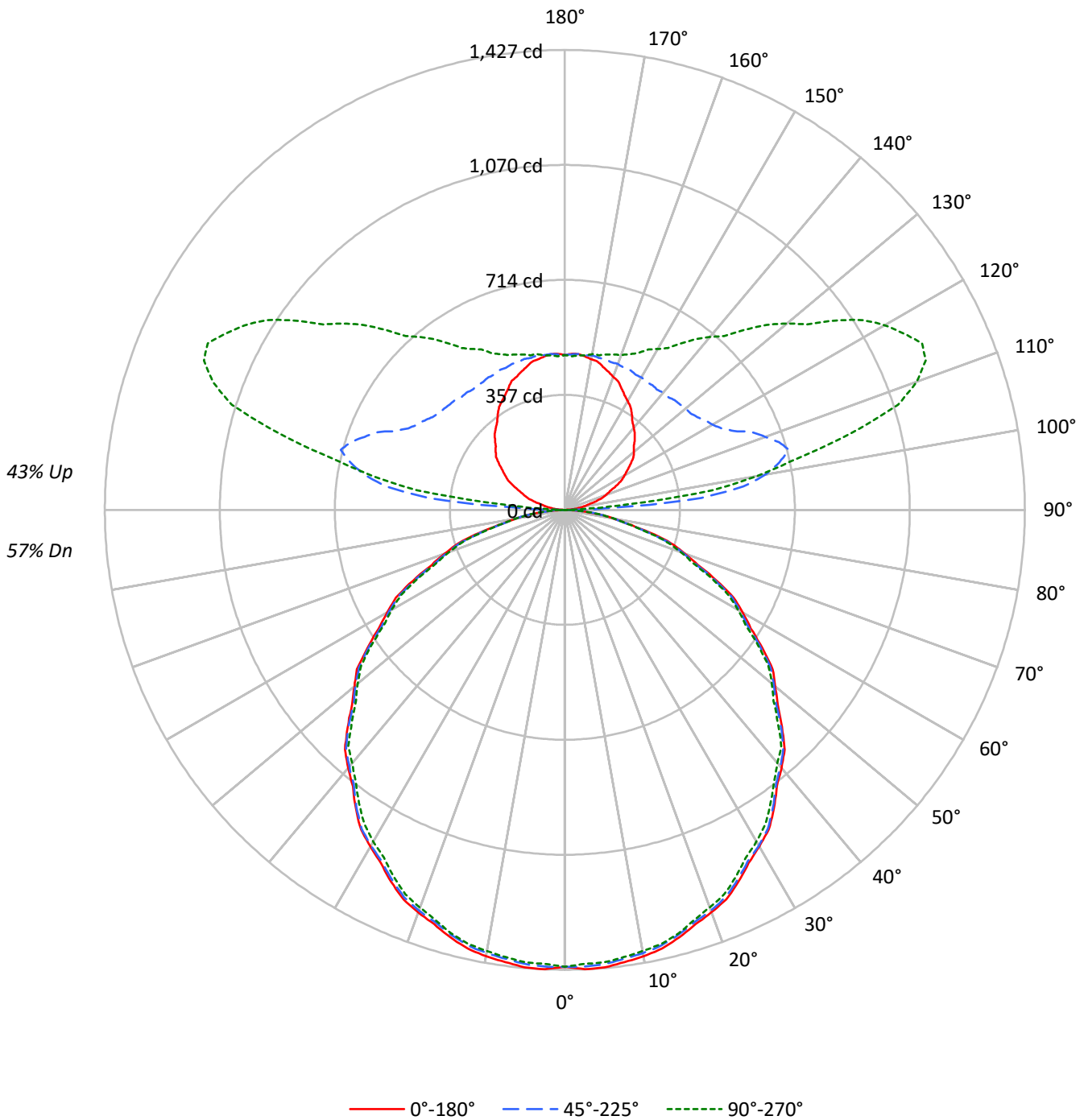
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7157.5 lumens
Efficiency: N/A
Efficacy: 108.4 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): 66
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: P521481
CATALOG NUMBER: SQ4-F-075U-100D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521481

CATALOG NUMBER: SQ4-F-075U-100D-93050-1D-UNV-STD-W-4 (4500K)

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 | 109 | 109 | 109 | 109 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 74 | 74 | 74 | 62 | 62 | 62 | 57 |
| 1 | 99 | 95 | 91 | 87 | 92 | 88 | 85 | 82 | 76 | 73 | 71 | 65 | 63 | 61 | 55 | 53 | 52 | 47 |
| 2 | 90 | 82 | 76 | 71 | 83 | 77 | 71 | 67 | 66 | 62 | 59 | 57 | 54 | 51 | 48 | 46 | 44 | 39 |
| 3 | 82 | 72 | 65 | 59 | 76 | 67 | 61 | 55 | 58 | 53 | 49 | 50 | 46 | 43 | 42 | 39 | 37 | 33 |
| 4 | 75 | 64 | 56 | 50 | 69 | 60 | 52 | 47 | 52 | 46 | 42 | 44 | 40 | 37 | 38 | 34 | 32 | 28 |
| 5 | 69 | 57 | 49 | 42 | 64 | 53 | 46 | 40 | 46 | 40 | 36 | 40 | 35 | 32 | 34 | 30 | 27 | 24 |
| 6 | 63 | 51 | 43 | 37 | 59 | 48 | 40 | 35 | 42 | 36 | 31 | 36 | 31 | 28 | 31 | 27 | 24 | 21 |
| 7 | 59 | 46 | 38 | 32 | 54 | 43 | 36 | 31 | 38 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 19 |
| 8 | 54 | 42 | 34 | 28 | 50 | 39 | 32 | 27 | 34 | 28 | 24 | 30 | 25 | 22 | 26 | 22 | 19 | 17 |
| 9 | 51 | 38 | 30 | 25 | 47 | 36 | 29 | 24 | 31 | 26 | 22 | 27 | 23 | 19 | 24 | 20 | 17 | 15 |
| 10 | 47 | 35 | 28 | 23 | 44 | 33 | 26 | 22 | 29 | 23 | 20 | 25 | 21 | 18 | 22 | 18 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13081 | 13081 | 13081 |
| 5° | 13197 | 13102 | 13055 |
| 10° | 13178 | 13082 | 13025 |
| 15° | 13114 | 13036 | 12998 |
| 20° | 13051 | 12991 | 12890 |
| 25° | 12972 | 12899 | 12785 |
| 30° | 12849 | 12816 | 12665 |
| 35° | 12736 | 12690 | 12529 |
| 40° | 12590 | 12528 | 12356 |
| 45° | 12429 | 12364 | 12191 |
| 50° | 12228 | 12154 | 12038 |
| 55° | 12017 | 11902 | 11771 |
| 60° | 11738 | 11607 | 11437 |
| 65° | 11354 | 11132 | 10931 |
| 70° | 10707 | 10461 | 10270 |
| 75° | 9760 | 9432 | 9250 |
| 80° | 8002 | 8002 | 8002 |
| 85° | 5706 | 6468 | 6786 |



TEST NUMBER: P521481

CATALOG NUMBER: SQ4-F-075U-100D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 134.2 | 1.9 |
| 10°-20° | 384.4 | 5.4 |
| 20°-30° | 581.5 | 8.1 |
| 30°-40° | 700.3 | 9.8 |
| 40°-50° | 727.3 | 10.2 |
| 50°-60° | 660.1 | 9.2 |
| 60°-70° | 503.6 | 7.0 |
| 70°-80° | 281.5 | 3.9 |
| 80°-90° | 73.3 | 1.0 |
| 90°-100° | 247.7 | 3.5 |
| 100°-110° | 598.7 | 8.4 |
| 110°-120° | 638.5 | 8.9 |
| 120°-130° | 517.2 | 7.2 |
| 130°-140° | 400.4 | 5.6 |
| 140°-150° | 305.5 | 4.3 |
| 150°-160° | 221.1 | 3.1 |
| 160°-170° | 136.2 | 1.9 |
| 170°-180° | 46.1 | 0.6 |
| 0°-30° | 1100.1 | 15.4 |
| 0°-40° | 1800.4 | 25.2 |
| 0°-60° | 3187.7 | 44.5 |
| 0°-90° | 4046.1 | 56.5 |
| 90°-120° | 1485.0 | 20.7 |
| 90°-150° | 2708.0 | 37.8 |
| 90°-180° | 3111.0 | 43.5 |
| 0°-180° | 7157.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1418 | 1418 | 1418 | 1418 | 1418 | |
| 5° | 1425 | 1410 | 1415 | 1412 | 1410 | 135 |
| 15° | 1373 | 1359 | 1365 | 1361 | 1361 | 387 |
| 25° | 1274 | 1261 | 1267 | 1256 | 1256 | 587 |
| 35° | 1131 | 1121 | 1127 | 1112 | 1112 | 707 |
| 45° | 953 | 946 | 948 | 934 | 934 | 735 |
| 55° | 747 | 745 | 740 | 732 | 732 | 668 |
| 65° | 520 | 516 | 510 | 503 | 501 | 513 |
| 75° | 274 | 270 | 265 | 260 | 260 | 288 |
| 85° | 54 | 59 | 61 | 62 | 64 | 67 |
| 90° | 0 | 0 | 0 | 0 | 0 | 3 |
| 95° | 24 | 124 | 424 | 276 | 193 | 27 |
| 105° | 96 | 165 | 720 | 931 | 919 | 101 |
| 115° | 175 | 224 | 578 | 1096 | 1222 | 173 |
| 125° | 249 | 287 | 502 | 872 | 1024 | 222 |
| 135° | 306 | 342 | 481 | 687 | 791 | 237 |
| 145° | 362 | 389 | 472 | 584 | 630 | 226 |
| 155° | 415 | 433 | 478 | 518 | 536 | 192 |
| 165° | 459 | 466 | 484 | 492 | 499 | 130 |
| 175° | 486 | 484 | 486 | 481 | 480 | 46 |
| 180° | 480 | 480 | 480 | 480 | 480 | |

TEST NUMBER: P521481

CATALOG NUMBER: SQ4-F-075U-100D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1417.8 | 1417.8 | 1417.8 | 1417.8 | 1417.8 |
| 2.5° | 1426.7 | 1414.8 | 1418.6 | 1416.8 | 1409.6 |
| 5° | 1424.9 | 1410.0 | 1414.7 | 1411.6 | 1409.6 |
| 7.5° | 1415.5 | 1400.6 | 1405.4 | 1401.3 | 1400.1 |
| 10° | 1406.6 | 1391.6 | 1396.4 | 1392.3 | 1390.3 |
| 12.5° | 1394.4 | 1380.2 | 1385.0 | 1380.1 | 1379.7 |
| 15° | 1373.0 | 1359.1 | 1364.8 | 1360.8 | 1360.8 |
| 17.5° | 1348.0 | 1335.0 | 1341.0 | 1335.1 | 1334.1 |
| 20° | 1329.2 | 1316.3 | 1323.1 | 1313.9 | 1312.9 |
| 22.5° | 1308.1 | 1295.9 | 1301.9 | 1291.2 | 1291.8 |
| 25° | 1274.3 | 1261.3 | 1267.1 | 1255.9 | 1255.9 |
| 27.5° | 1235.4 | 1222.6 | 1229.9 | 1216.4 | 1215.6 |
| 30° | 1206.1 | 1194.1 | 1203.0 | 1188.8 | 1188.8 |
| 32.5° | 1176.8 | 1166.4 | 1172.9 | 1159.4 | 1157.0 |
| 35° | 1130.8 | 1120.8 | 1126.7 | 1112.4 | 1112.4 |
| 37.5° | 1080.3 | 1072.1 | 1075.2 | 1062.0 | 1065.0 |
| 40° | 1045.3 | 1036.3 | 1040.2 | 1026.9 | 1025.9 |
| 42.5° | 1009.4 | 1001.3 | 1004.3 | 991.2 | 994.2 |
| 45° | 952.6 | 945.7 | 947.6 | 934.3 | 934.3 |
| 47.5° | 895.0 | 889.9 | 888.3 | 876.6 | 878.6 |
| 50° | 851.9 | 849.9 | 846.8 | 836.7 | 838.7 |
| 52.5° | 812.8 | 808.4 | 804.5 | 795.1 | 796.3 |
| 55° | 747.1 | 745.1 | 739.9 | 731.8 | 731.8 |
| 57.5° | 684.2 | 679.8 | 673.8 | 665.4 | 665.4 |
| 60° | 636.1 | 634.1 | 629.0 | 619.8 | 619.8 |
| 62.5° | 590.5 | 587.7 | 581.8 | 573.4 | 572.6 |
| 65° | 520.1 | 516.1 | 509.9 | 502.7 | 500.7 |
| 67.5° | 446.6 | 442.4 | 437.4 | 430.7 | 429.5 |
| 70° | 396.9 | 392.0 | 387.8 | 382.6 | 380.7 |
| 72.5° | 346.5 | 343.9 | 338.9 | 333.8 | 332.6 |
| 75° | 273.8 | 269.8 | 264.6 | 260.5 | 259.5 |
| 77.5° | 197.0 | 196.4 | 194.6 | 192.0 | 193.0 |
| 80° | 150.6 | 151.6 | 150.6 | 149.6 | 150.6 |
| 82.5° | 109.1 | 111.7 | 111.5 | 111.4 | 112.4 |
| 85° | 53.9 | 58.9 | 61.1 | 62.1 | 64.1 |
| 87.5° | 15.5 | 20.2 | 24.4 | 25.3 | 26.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 8.1 | 67.1 | 158.0 | 76.8 | 52.1 |
| 95° | 24.4 | 123.9 | 424.4 | 276.0 | 193.4 |
| 97.5° | 43.4 | 137.3 | 559.0 | 538.5 | 462.3 |
| 100° | 58.0 | 145.6 | 633.1 | 668.3 | 605.6 |
| 102.5° | 71.9 | 153.1 | 681.9 | 776.3 | 739.1 |
| 105° | 95.7 | 165.3 | 719.6 | 931.0 | 919.1 |
| 107.5° | 119.1 | 179.8 | 697.4 | 1055.1 | 1083.1 |
| 110° | 135.4 | 192.1 | 661.6 | 1108.5 | 1161.3 |

TEST NUMBER: P521481

CATALOG NUMBER: SQ4-F-075U-100D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 151.6 | 204.4 | 629.8 | 1121.6 | 1211.8 |
| 115° | 175.1 | 223.8 | 578.1 | 1096.0 | 1222.4 |
| 117.5° | 198.3 | 244.2 | 547.8 | 1037.0 | 1185.1 |
| 120° | 213.7 | 256.5 | 528.2 | 990.8 | 1146.0 |
| 122.5° | 230.0 | 269.6 | 516.0 | 943.5 | 1096.4 |
| 125° | 249.4 | 287.2 | 501.8 | 871.6 | 1023.9 |
| 127.5° | 268.5 | 304.1 | 491.8 | 810.8 | 944.5 |
| 130° | 279.9 | 314.7 | 488.5 | 768.4 | 899.7 |
| 132.5° | 290.5 | 326.9 | 483.7 | 737.8 | 849.2 |
| 135° | 306.4 | 342.2 | 481.4 | 687.3 | 790.8 |
| 137.5° | 321.4 | 357.4 | 474.3 | 653.2 | 731.2 |
| 140° | 332.8 | 365.7 | 474.3 | 628.6 | 700.2 |
| 142.5° | 344.2 | 377.1 | 470.2 | 607.2 | 667.7 |
| 145° | 362.3 | 389.2 | 472.3 | 584.2 | 630.0 |
| 147.5° | 379.2 | 405.3 | 471.0 | 557.8 | 595.6 |
| 150° | 389.8 | 412.7 | 474.3 | 546.2 | 576.1 |
| 152.5° | 401.2 | 423.3 | 473.5 | 533.9 | 560.6 |
| 155° | 415.3 | 433.2 | 478.4 | 517.5 | 536.4 |
| 157.5° | 432.2 | 447.5 | 477.3 | 511.2 | 522.3 |
| 160° | 438.7 | 451.6 | 481.4 | 503.0 | 510.9 |
| 162.5° | 449.3 | 460.6 | 479.8 | 500.5 | 505.2 |
| 165° | 459.0 | 466.0 | 484.5 | 491.7 | 498.7 |
| 167.5° | 471.0 | 475.6 | 483.2 | 491.2 | 491.4 |
| 170° | 474.3 | 477.3 | 486.5 | 485.6 | 490.6 |
| 172.5° | 480.0 | 482.2 | 484.1 | 486.2 | 483.2 |
| 175° | 485.5 | 483.5 | 485.5 | 481.4 | 480.4 |
| 177.5° | 484.5 | 484.5 | 482.8 | 481.1 | 477.1 |
| 180° | 480.4 | 480.4 | 480.4 | 480.4 | 480.4 |

(END OF REPORT)