

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: P521709

Luminaire Tested: **SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521709
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

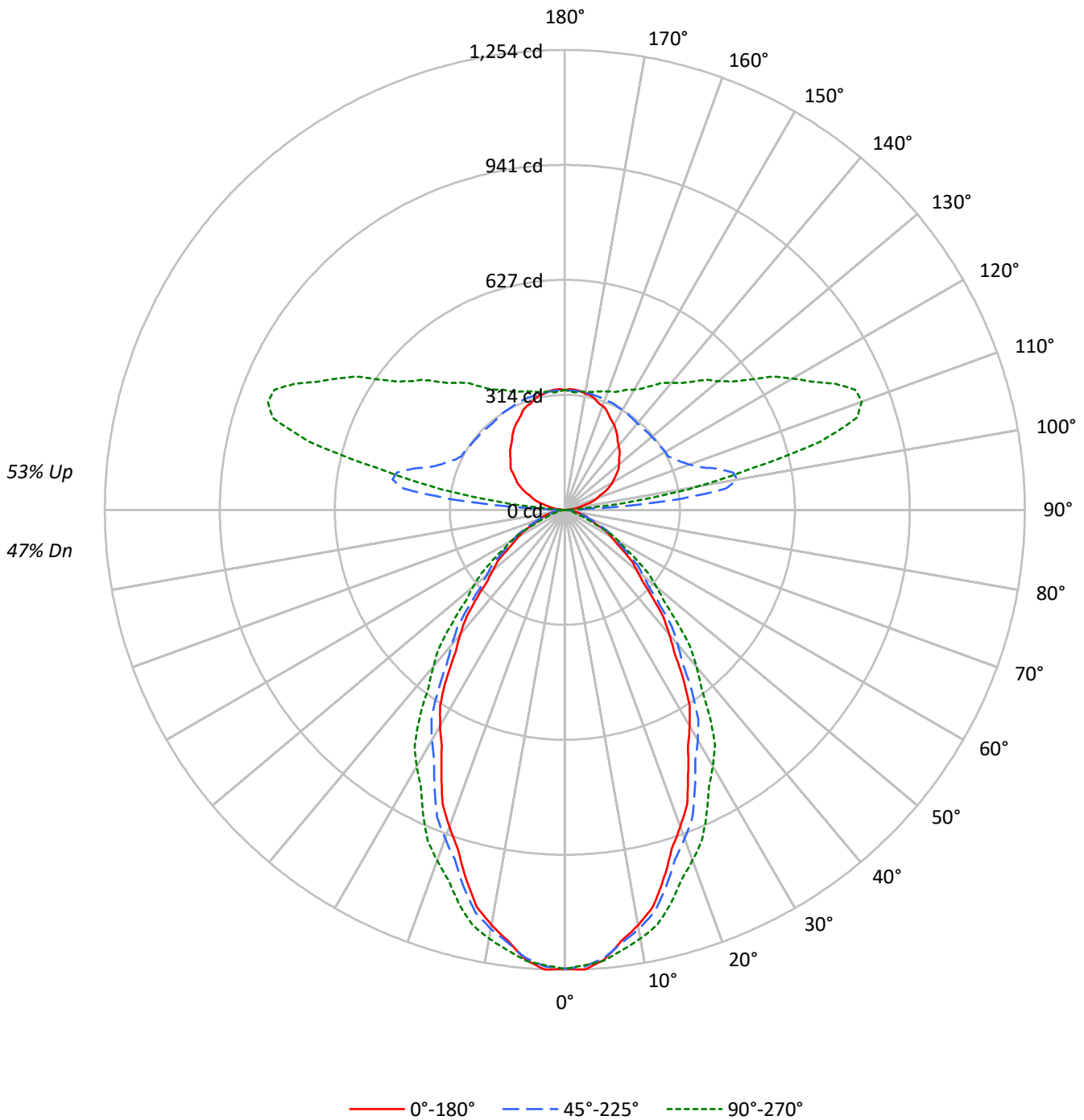
Lumens per Lamp: N/A
Luminaire Lumens: 3849.7 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.7
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: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4 (5000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4 (5000K)

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 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 67 | 67 | 67 | 54 | 54 | 54 | 47 |
| 1 | 98 | 94 | 91 | 88 | 90 | 87 | 84 | 81 | 73 | 71 | 69 | 61 | 59 | 58 | 49 | 48 | 47 | 42 |
| 2 | 90 | 84 | 78 | 74 | 83 | 77 | 73 | 69 | 66 | 62 | 59 | 55 | 52 | 50 | 45 | 43 | 42 | 37 |
| 3 | 83 | 75 | 68 | 63 | 76 | 69 | 63 | 59 | 59 | 55 | 51 | 49 | 46 | 44 | 41 | 39 | 37 | 33 |
| 4 | 77 | 67 | 60 | 54 | 71 | 62 | 56 | 51 | 53 | 48 | 45 | 45 | 41 | 39 | 37 | 35 | 33 | 29 |
| 5 | 71 | 60 | 53 | 47 | 65 | 56 | 49 | 45 | 48 | 43 | 39 | 41 | 37 | 34 | 34 | 31 | 29 | 26 |
| 6 | 66 | 54 | 47 | 42 | 61 | 51 | 44 | 39 | 44 | 39 | 35 | 37 | 34 | 31 | 31 | 29 | 26 | 24 |
| 7 | 61 | 50 | 42 | 37 | 56 | 46 | 40 | 35 | 40 | 35 | 31 | 34 | 31 | 28 | 29 | 26 | 24 | 21 |
| 8 | 57 | 45 | 38 | 33 | 53 | 42 | 36 | 31 | 37 | 32 | 28 | 32 | 28 | 25 | 27 | 24 | 22 | 20 |
| 9 | 53 | 42 | 35 | 30 | 49 | 39 | 33 | 28 | 34 | 29 | 26 | 29 | 26 | 23 | 25 | 22 | 20 | 18 |
| 10 | 50 | 38 | 32 | 27 | 46 | 36 | 30 | 26 | 32 | 27 | 23 | 27 | 24 | 21 | 23 | 21 | 19 | 17 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11546 | 11546 | 11546 |
| 5° | 11402 | 11361 | 11427 |
| 10° | 10772 | 10870 | 11122 |
| 15° | 9944 | 10175 | 10631 |
| 20° | 9031 | 9370 | 9990 |
| 25° | 8100 | 8541 | 9308 |
| 30° | 7242 | 7716 | 8600 |
| 35° | 6333 | 6791 | 7761 |
| 40° | 5331 | 5753 | 6719 |
| 45° | 4400 | 4779 | 5611 |
| 50° | 3673 | 4003 | 4673 |
| 55° | 3117 | 3436 | 3860 |
| 60° | 2665 | 2978 | 3080 |
| 65° | 2122 | 2506 | 1991 |
| 70° | 1880 | 1956 | 1214 |
| 75° | 1743 | 1586 | 745 |
| 80° | 1605 | 1461 | 643 |
| 85° | 1450 | 1334 | 519 |



TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4 (5000K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 114.8 | 3.0 |
| 10°-20° | 298.6 | 7.8 |
| 20°-30° | 386.7 | 10.0 |
| 30°-40° | 378.7 | 9.8 |
| 40°-50° | 289.9 | 7.5 |
| 50°-60° | 193.2 | 5.0 |
| 60°-70° | 105.4 | 2.7 |
| 70°-80° | 43.9 | 1.1 |
| 80°-90° | 12.4 | 0.3 |
| 90°-100° | 148.6 | 3.9 |
| 100°-110° | 422.9 | 11.0 |
| 110°-120° | 405.2 | 10.5 |
| 120°-130° | 320.7 | 8.3 |
| 130°-140° | 257.4 | 6.7 |
| 140°-150° | 201.5 | 5.2 |
| 150°-160° | 147.4 | 3.8 |
| 160°-170° | 91.3 | 2.4 |
| 170°-180° | 31.0 | 0.8 |
| 0°-30° | 800.1 | 20.8 |
| 0°-40° | 1178.8 | 30.6 |
| 0°-60° | 1661.8 | 43.2 |
| 0°-90° | 1823.5 | 47.4 |
| 90°-120° | 976.8 | 25.4 |
| 90°-150° | 1756.4 | 45.6 |
| 90°-180° | 2026.0 | 52.6 |
| 0°-180° | 3849.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1251 | 1251 | 1251 | 1251 | 1251 | |
| 5° | 1231 | 1219 | 1227 | 1230 | 1234 | 115 |
| 15° | 1041 | 1037 | 1065 | 1094 | 1113 | 291 |
| 25° | 796 | 798 | 839 | 876 | 914 | 366 |
| 35° | 562 | 565 | 603 | 644 | 689 | 350 |
| 45° | 337 | 344 | 366 | 394 | 430 | 263 |
| 55° | 194 | 202 | 214 | 222 | 240 | 176 |
| 65° | 97 | 105 | 115 | 100 | 91 | 101 |
| 75° | 49 | 49 | 44 | 30 | 21 | 52 |
| 85° | 14 | 14 | 13 | 8 | 5 | 15 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 16 | 64 | 288 | 100 | 61 | 18 |
| 105° | 66 | 100 | 431 | 761 | 724 | 70 |
| 115° | 122 | 148 | 327 | 692 | 813 | 120 |
| 125° | 172 | 191 | 312 | 518 | 619 | 154 |
| 135° | 211 | 228 | 308 | 437 | 494 | 163 |
| 145° | 249 | 261 | 311 | 378 | 412 | 155 |
| 155° | 284 | 291 | 318 | 342 | 356 | 131 |
| 165° | 314 | 315 | 322 | 329 | 334 | 88 |
| 175° | 329 | 327 | 326 | 324 | 321 | 31 |
| 180° | 326 | 326 | 326 | 326 | 326 | |

TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1251.4 | 1251.4 | 1251.4 | 1251.4 | 1251.4 |
| 2.5° | 1254.5 | 1243.3 | 1246.1 | 1246.1 | 1242.6 |
| 5° | 1231.1 | 1218.8 | 1226.7 | 1229.5 | 1233.8 |
| 7.5° | 1185.4 | 1176.1 | 1190.6 | 1201.3 | 1210.0 |
| 10° | 1149.8 | 1141.8 | 1160.3 | 1175.9 | 1187.2 |
| 12.5° | 1108.5 | 1101.8 | 1124.7 | 1145.7 | 1160.4 |
| 15° | 1041.1 | 1037.3 | 1065.3 | 1094.2 | 1113.0 |
| 17.5° | 969.0 | 967.1 | 999.2 | 1033.0 | 1057.0 |
| 20° | 919.8 | 919.2 | 954.3 | 989.6 | 1017.5 |
| 22.5° | 870.1 | 871.3 | 908.2 | 944.9 | 976.6 |
| 25° | 795.7 | 797.8 | 839.0 | 875.6 | 914.3 |
| 27.5° | 726.8 | 727.8 | 770.4 | 809.0 | 850.2 |
| 30° | 679.8 | 682.5 | 724.3 | 764.2 | 807.2 |
| 32.5° | 632.8 | 635.9 | 676.8 | 718.1 | 761.9 |
| 35° | 562.3 | 565.0 | 602.9 | 643.5 | 689.1 |
| 37.5° | 489.6 | 493.2 | 526.9 | 565.3 | 610.2 |
| 40° | 442.6 | 447.9 | 477.7 | 513.9 | 557.9 |
| 42.5° | 397.3 | 404.0 | 431.6 | 465.9 | 505.6 |
| 45° | 337.2 | 343.6 | 366.3 | 394.0 | 430.0 |
| 47.5° | 285.3 | 292.7 | 310.1 | 334.0 | 364.7 |
| 50° | 255.9 | 262.9 | 278.9 | 296.6 | 325.6 |
| 52.5° | 230.0 | 236.9 | 251.3 | 264.9 | 289.6 |
| 55° | 193.8 | 201.9 | 213.6 | 221.7 | 240.0 |
| 57.5° | 164.2 | 171.9 | 181.2 | 184.9 | 195.9 |
| 60° | 144.4 | 153.0 | 161.4 | 161.0 | 166.9 |
| 62.5° | 126.4 | 133.7 | 142.1 | 136.3 | 136.6 |
| 65° | 97.2 | 105.2 | 114.8 | 100.3 | 91.2 |
| 67.5° | 78.5 | 80.2 | 90.1 | 69.9 | 59.1 |
| 70° | 69.7 | 69.7 | 72.5 | 54.2 | 45.0 |
| 72.5° | 61.4 | 61.4 | 58.9 | 44.0 | 34.5 |
| 75° | 48.9 | 48.9 | 44.5 | 30.5 | 20.9 |
| 77.5° | 37.7 | 37.2 | 34.0 | 22.8 | 15.2 |
| 80° | 30.2 | 30.2 | 27.5 | 18.0 | 12.1 |
| 82.5° | 23.6 | 23.6 | 21.3 | 14.1 | 9.0 |
| 85° | 13.7 | 13.7 | 12.6 | 8.2 | 4.9 |
| 87.5° | 4.8 | 4.8 | 4.4 | 2.6 | 2.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 5.0 | 26.3 | 61.0 | 17.8 | 13.4 |
| 95° | 16.1 | 64.0 | 287.7 | 99.6 | 61.4 |
| 97.5° | 29.6 | 75.0 | 443.1 | 317.1 | 217.3 |
| 100° | 39.1 | 81.5 | 476.9 | 483.0 | 372.1 |
| 102.5° | 49.5 | 88.5 | 469.4 | 618.3 | 521.4 |
| 105° | 65.7 | 99.7 | 431.0 | 761.3 | 723.7 |
| 107.5° | 82.2 | 112.7 | 386.1 | 801.6 | 835.1 |
| 110° | 93.6 | 122.1 | 360.3 | 786.2 | 861.3 |

TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 104.6 | 131.6 | 342.9 | 749.7 | 856.9 |
| 115° | 122.2 | 147.6 | 326.8 | 692.3 | 813.0 |
| 117.5° | 137.7 | 161.6 | 317.3 | 629.6 | 757.4 |
| 120° | 150.1 | 170.1 | 316.3 | 593.8 | 716.2 |
| 122.5° | 160.0 | 180.0 | 313.8 | 562.3 | 676.1 |
| 125° | 172.4 | 191.2 | 311.9 | 517.6 | 618.9 |
| 127.5° | 185.9 | 203.5 | 310.9 | 490.9 | 574.4 |
| 130° | 192.9 | 210.4 | 309.4 | 472.3 | 545.1 |
| 132.5° | 200.3 | 217.4 | 309.4 | 457.8 | 524.7 |
| 135° | 210.8 | 228.4 | 308.2 | 437.2 | 494.2 |
| 137.5° | 220.8 | 237.9 | 308.1 | 419.8 | 469.1 |
| 140° | 228.2 | 245.8 | 307.6 | 405.4 | 452.7 |
| 142.5° | 236.6 | 251.3 | 309.1 | 393.9 | 436.3 |
| 145° | 248.7 | 261.4 | 310.7 | 378.4 | 412.4 |
| 147.5° | 259.0 | 271.3 | 313.4 | 362.8 | 392.2 |
| 150° | 267.9 | 276.4 | 314.4 | 357.7 | 378.3 |
| 152.5° | 274.8 | 283.8 | 315.4 | 350.7 | 369.8 |
| 155° | 284.0 | 290.7 | 318.1 | 342.0 | 355.9 |
| 157.5° | 295.4 | 299.4 | 318.7 | 338.1 | 348.0 |
| 160° | 301.4 | 304.4 | 321.2 | 335.1 | 343.5 |
| 162.5° | 304.9 | 308.4 | 321.7 | 332.5 | 339.1 |
| 165° | 313.8 | 315.0 | 321.8 | 328.8 | 333.6 |
| 167.5° | 319.9 | 318.8 | 324.7 | 327.8 | 329.8 |
| 170° | 321.8 | 321.2 | 323.7 | 324.4 | 326.8 |
| 172.5° | 326.3 | 324.2 | 325.2 | 323.4 | 325.3 |
| 175° | 328.7 | 326.8 | 325.6 | 323.6 | 321.2 |
| 177.5° | 329.7 | 326.7 | 325.2 | 323.2 | 323.7 |
| 180° | 326.2 | 326.2 | 326.2 | 326.2 | 326.2 |

(END OF REPORT)