

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P521706

Luminaire Tested: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521706
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3679.8 lumens
Efficiency: N/A
Efficacy: 106.0 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

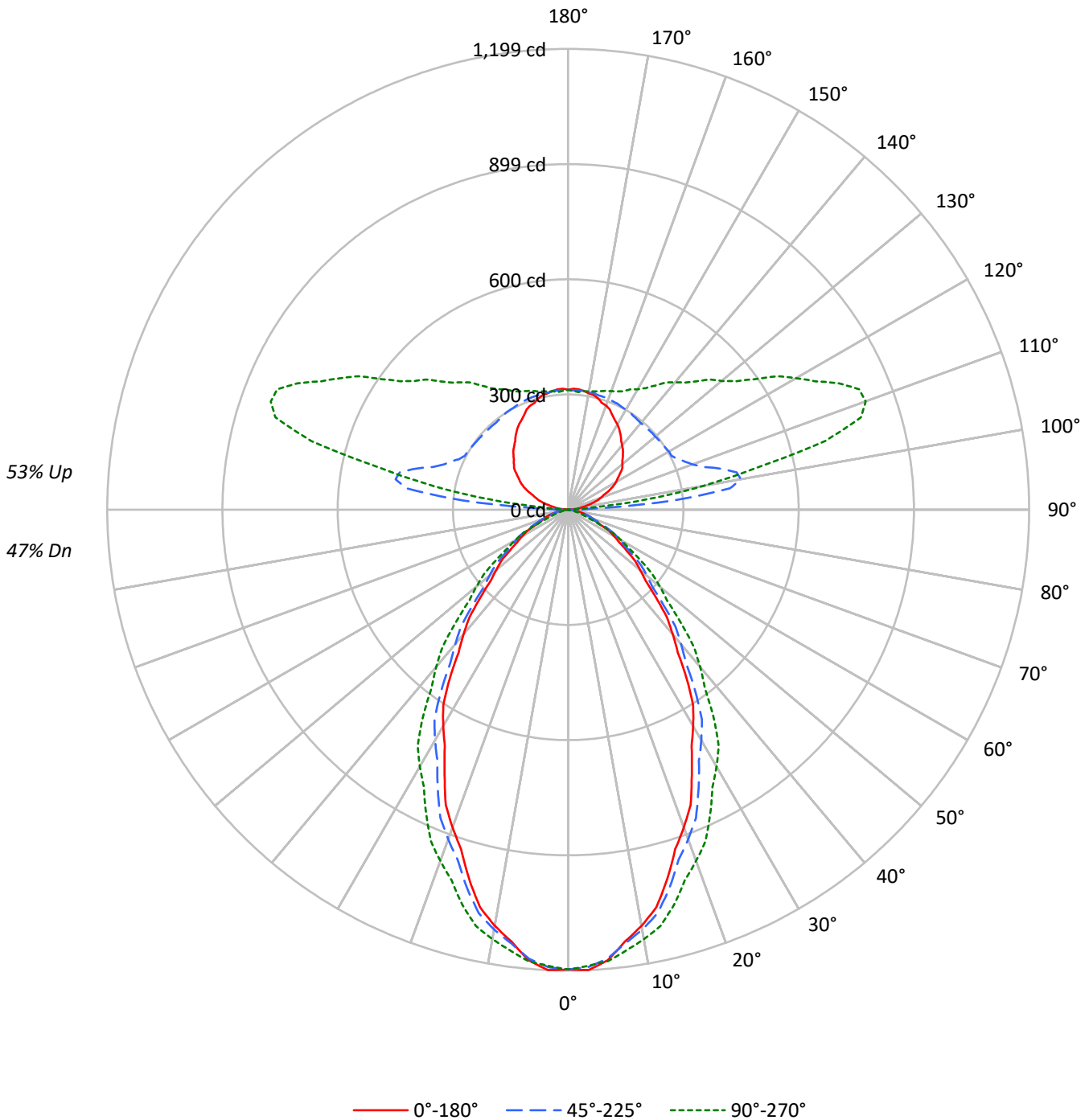
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_3500K

Luminous Intensity Polar Plot



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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 67 | 67 | 67 | 54 | 54 | 54 | 47 | | | | 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° | 11036 | 11036 | 11036 |
| 5° | 10899 | 10860 | 10923 |
| 10° | 10297 | 10391 | 10631 |
| 15° | 9506 | 9726 | 10162 |
| 20° | 8632 | 8956 | 9549 |
| 25° | 7742 | 8164 | 8896 |
| 30° | 6923 | 7375 | 8220 |
| 35° | 6054 | 6491 | 7419 |
| 40° | 5095 | 5499 | 6423 |
| 45° | 4205 | 4568 | 5363 |
| 50° | 3511 | 3827 | 4468 |
| 55° | 2981 | 3285 | 3690 |
| 60° | 2546 | 2847 | 2945 |
| 65° | 2028 | 2395 | 1901 |
| 70° | 1799 | 1869 | 1160 |
| 75° | 1665 | 1515 | 709 |
| 80° | 1536 | 1392 | 611 |
| 85° | 1387 | 1281 | 498 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5363 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 109.7 | 3.0 |
| 10°-20° | 285.4 | 7.8 |
| 20°-30° | 369.7 | 10.0 |
| 30°-40° | 362.0 | 9.8 |
| 40°-50° | 277.1 | 7.5 |
| 50°-60° | 184.6 | 5.0 |
| 60°-70° | 100.8 | 2.7 |
| 70°-80° | 42.0 | 1.1 |
| 80°-90° | 11.9 | 0.3 |
| 90°-100° | 142.1 | 3.9 |
| 100°-110° | 404.2 | 11.0 |
| 110°-120° | 387.3 | 10.5 |
| 120°-130° | 306.6 | 8.3 |
| 130°-140° | 246.0 | 6.7 |
| 140°-150° | 192.6 | 5.2 |
| 150°-160° | 140.9 | 3.8 |
| 160°-170° | 87.3 | 2.4 |
| 170°-180° | 29.6 | 0.8 |
| 0°-30° | 764.8 | 20.8 |
| 0°-40° | 1126.7 | 30.6 |
| 0°-60° | 1588.4 | 43.2 |
| 0°-90° | 1743.1 | 47.4 |
| 90°-120° | 933.6 | 25.4 |
| 90°-150° | 1678.9 | 45.6 |
| 90°-180° | 1937.0 | 52.6 |
| 0°-180° | 3679.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1196 | 1196 | 1196 | 1196 | 1196 | |
| 5° | 1177 | 1165 | 1173 | 1175 | 1179 | 109 |
| 15° | 995 | 992 | 1018 | 1046 | 1064 | 278 |
| 25° | 760 | 763 | 802 | 837 | 874 | 350 |
| 35° | 538 | 540 | 576 | 615 | 659 | 334 |
| 45° | 322 | 328 | 350 | 377 | 411 | 251 |
| 55° | 185 | 193 | 204 | 212 | 229 | 168 |
| 65° | 93 | 101 | 110 | 96 | 87 | 97 |
| 75° | 47 | 47 | 42 | 29 | 20 | 50 |
| 85° | 13 | 13 | 12 | 8 | 5 | 14 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 15 | 61 | 275 | 95 | 59 | 18 |
| 105° | 63 | 95 | 412 | 728 | 692 | 66 |
| 115° | 117 | 141 | 312 | 662 | 777 | 115 |
| 125° | 165 | 183 | 298 | 495 | 592 | 147 |
| 135° | 202 | 218 | 295 | 418 | 472 | 156 |
| 145° | 238 | 250 | 297 | 362 | 394 | 148 |
| 155° | 272 | 278 | 304 | 327 | 340 | 126 |
| 165° | 300 | 301 | 308 | 314 | 319 | 84 |
| 175° | 314 | 312 | 311 | 309 | 307 | 30 |
| 180° | 312 | 312 | 312 | 312 | 312 | |

TEST NUMBER: P521706

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1196.2 | 1196.2 | 1196.2 | 1196.2 | 1196.2 |
| 2.5° | 1199.1 | 1188.5 | 1191.2 | 1191.1 | 1187.8 |
| 5° | 1176.8 | 1165.0 | 1172.6 | 1175.3 | 1179.4 |
| 7.5° | 1133.1 | 1124.2 | 1138.0 | 1148.3 | 1156.6 |
| 10° | 1099.1 | 1091.4 | 1109.1 | 1124.0 | 1134.8 |
| 12.5° | 1059.6 | 1053.2 | 1075.0 | 1095.1 | 1109.2 |
| 15° | 995.2 | 991.6 | 1018.3 | 1046.0 | 1063.9 |
| 17.5° | 926.2 | 924.4 | 955.1 | 987.4 | 1010.4 |
| 20° | 879.2 | 878.7 | 912.2 | 945.9 | 972.6 |
| 22.5° | 831.7 | 832.8 | 868.1 | 903.2 | 933.5 |
| 25° | 760.5 | 762.6 | 802.0 | 837.0 | 873.9 |
| 27.5° | 694.7 | 695.6 | 736.4 | 773.3 | 812.7 |
| 30° | 649.8 | 652.4 | 692.3 | 730.5 | 771.6 |
| 32.5° | 604.9 | 607.8 | 647.0 | 686.4 | 728.3 |
| 35° | 537.5 | 540.0 | 576.3 | 615.1 | 658.7 |
| 37.5° | 468.0 | 471.5 | 503.7 | 540.3 | 583.2 |
| 40° | 423.0 | 428.2 | 456.6 | 491.2 | 533.3 |
| 42.5° | 379.8 | 386.2 | 412.6 | 445.3 | 483.3 |
| 45° | 322.3 | 328.4 | 350.1 | 376.6 | 411.0 |
| 47.5° | 272.7 | 279.8 | 296.4 | 319.3 | 348.6 |
| 50° | 244.6 | 251.3 | 266.6 | 283.5 | 311.3 |
| 52.5° | 219.8 | 226.5 | 240.2 | 253.2 | 276.8 |
| 55° | 185.3 | 193.0 | 204.2 | 211.9 | 229.4 |
| 57.5° | 156.9 | 164.3 | 173.2 | 176.7 | 187.3 |
| 60° | 138.0 | 146.3 | 154.3 | 153.9 | 159.6 |
| 62.5° | 120.8 | 127.8 | 135.8 | 130.3 | 130.6 |
| 65° | 92.9 | 100.6 | 109.7 | 95.9 | 87.1 |
| 67.5° | 75.1 | 76.7 | 86.1 | 66.8 | 56.5 |
| 70° | 66.7 | 66.7 | 69.3 | 51.8 | 43.0 |
| 72.5° | 58.7 | 58.7 | 56.3 | 42.1 | 33.0 |
| 75° | 46.7 | 46.7 | 42.5 | 29.2 | 19.9 |
| 77.5° | 36.0 | 35.6 | 32.5 | 21.8 | 14.5 |
| 80° | 28.9 | 28.9 | 26.2 | 17.2 | 11.5 |
| 82.5° | 22.6 | 22.6 | 20.4 | 13.4 | 8.6 |
| 85° | 13.1 | 13.1 | 12.1 | 7.8 | 4.7 |
| 87.5° | 4.6 | 4.6 | 4.2 | 2.5 | 2.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 4.7 | 25.1 | 58.3 | 17.0 | 12.8 |
| 95° | 15.4 | 61.2 | 275.0 | 95.2 | 58.7 |
| 97.5° | 28.3 | 71.7 | 423.6 | 303.1 | 207.7 |
| 100° | 37.3 | 77.9 | 455.8 | 461.7 | 355.7 |
| 102.5° | 47.3 | 84.6 | 448.7 | 591.0 | 498.4 |
| 105° | 62.8 | 95.3 | 412.0 | 727.7 | 691.7 |
| 107.5° | 78.6 | 107.7 | 369.0 | 766.2 | 798.2 |
| 110° | 89.5 | 116.7 | 344.4 | 751.5 | 823.3 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 99.9 | 125.8 | 327.8 | 716.6 | 819.1 |
| 115° | 116.8 | 141.1 | 312.4 | 661.8 | 777.1 |
| 117.5° | 131.6 | 154.4 | 303.3 | 601.8 | 724.0 |
| 120° | 143.4 | 162.6 | 302.3 | 567.6 | 684.6 |
| 122.5° | 152.9 | 172.1 | 299.9 | 537.5 | 646.2 |
| 125° | 164.8 | 182.8 | 298.2 | 494.8 | 591.6 |
| 127.5° | 177.7 | 194.5 | 297.2 | 469.3 | 549.0 |
| 130° | 184.3 | 201.2 | 295.8 | 451.5 | 521.0 |
| 132.5° | 191.5 | 207.8 | 295.8 | 437.6 | 501.6 |
| 135° | 201.5 | 218.3 | 294.6 | 417.9 | 472.4 |
| 137.5° | 211.0 | 227.4 | 294.5 | 401.3 | 448.4 |
| 140° | 218.1 | 234.9 | 294.0 | 387.5 | 432.7 |
| 142.5° | 226.2 | 240.2 | 295.4 | 376.5 | 417.1 |
| 145° | 237.7 | 249.9 | 297.0 | 361.7 | 394.2 |
| 147.5° | 247.5 | 259.4 | 299.6 | 346.8 | 374.9 |
| 150° | 256.1 | 264.2 | 300.5 | 341.9 | 361.6 |
| 152.5° | 262.7 | 271.3 | 301.5 | 335.2 | 353.5 |
| 155° | 271.5 | 277.9 | 304.1 | 326.9 | 340.2 |
| 157.5° | 282.4 | 286.2 | 304.7 | 323.1 | 332.7 |
| 160° | 288.1 | 291.0 | 307.0 | 320.3 | 328.4 |
| 162.5° | 291.4 | 294.8 | 307.5 | 317.9 | 324.1 |
| 165° | 299.9 | 301.1 | 307.6 | 314.3 | 318.9 |
| 167.5° | 305.7 | 304.7 | 310.4 | 313.4 | 315.2 |
| 170° | 307.6 | 307.1 | 309.4 | 310.1 | 312.4 |
| 172.5° | 311.9 | 309.9 | 310.8 | 309.1 | 311.0 |
| 175° | 314.2 | 312.4 | 311.2 | 309.4 | 307.0 |
| 177.5° | 315.1 | 312.3 | 310.8 | 309.0 | 309.4 |
| 180° | 311.8 | 311.8 | 311.8 | 311.8 | 311.8 |

(END OF REPORT)