

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: P521707

Luminaire Tested: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521707
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_4000K
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3747.1 lumens
Efficiency: N/A
Efficacy: 108.0 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

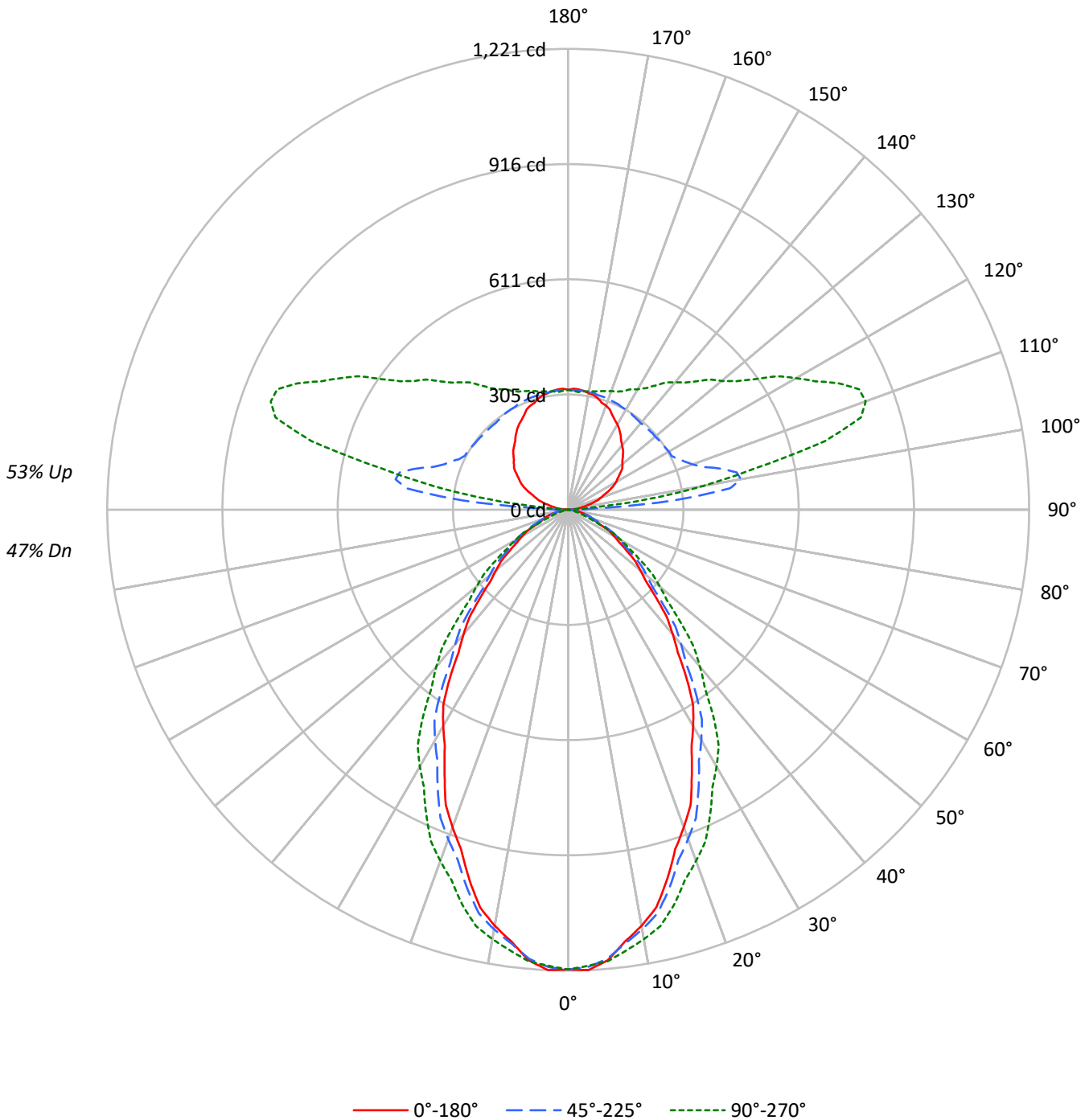
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521707

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_4000K

Luminous Intensity Polar Plot



TEST NUMBER: P521707

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11238 | 11238 | 11238 |
| 5° | 11098 | 11058 | 11123 |
| 10° | 10485 | 10580 | 10825 |
| 15° | 9680 | 9904 | 10348 |
| 20° | 8789 | 9120 | 9724 |
| 25° | 7884 | 8314 | 9059 |
| 30° | 7049 | 7511 | 8370 |
| 35° | 6164 | 6610 | 7555 |
| 40° | 5189 | 5600 | 6540 |
| 45° | 4282 | 4652 | 5461 |
| 50° | 3575 | 3897 | 4549 |
| 55° | 3035 | 3344 | 3758 |
| 60° | 2594 | 2899 | 2999 |
| 65° | 2065 | 2439 | 1936 |
| 70° | 1832 | 1904 | 1182 |
| 75° | 1697 | 1544 | 724 |
| 80° | 1562 | 1419 | 627 |
| 85° | 1419 | 1302 | 508 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5461 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 111.7 | 3.0 |
| 10°-20° | 290.6 | 7.8 |
| 20°-30° | 376.4 | 10.0 |
| 30°-40° | 368.6 | 9.8 |
| 40°-50° | 282.1 | 7.5 |
| 50°-60° | 188.0 | 5.0 |
| 60°-70° | 102.6 | 2.7 |
| 70°-80° | 42.8 | 1.1 |
| 80°-90° | 12.1 | 0.3 |
| 90°-100° | 144.7 | 3.9 |
| 100°-110° | 411.6 | 11.0 |
| 110°-120° | 394.4 | 10.5 |
| 120°-130° | 312.1 | 8.3 |
| 130°-140° | 250.5 | 6.7 |
| 140°-150° | 196.1 | 5.2 |
| 150°-160° | 143.5 | 3.8 |
| 160°-170° | 88.9 | 2.4 |
| 170°-180° | 30.2 | 0.8 |
| 0°-30° | 778.7 | 20.8 |
| 0°-40° | 1147.4 | 30.6 |
| 0°-60° | 1617.5 | 43.2 |
| 0°-90° | 1775.0 | 47.4 |
| 90°-120° | 950.7 | 25.4 |
| 90°-150° | 1709.6 | 45.6 |
| 90°-180° | 1972.0 | 52.6 |
| 0°-180° | 3747.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1218 | 1218 | 1218 | 1218 | 1218 | |
| 5° | 1198 | 1186 | 1194 | 1197 | 1201 | 111 |
| 15° | 1013 | 1010 | 1037 | 1065 | 1083 | 283 |
| 25° | 774 | 776 | 817 | 852 | 890 | 356 |
| 35° | 547 | 550 | 587 | 626 | 671 | 340 |
| 45° | 328 | 334 | 356 | 384 | 418 | 256 |
| 55° | 189 | 196 | 208 | 216 | 234 | 171 |
| 65° | 95 | 102 | 112 | 98 | 89 | 98 |
| 75° | 48 | 48 | 43 | 30 | 20 | 51 |
| 85° | 13 | 13 | 12 | 8 | 5 | 15 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 16 | 62 | 280 | 97 | 60 | 18 |
| 105° | 64 | 97 | 420 | 741 | 704 | 68 |
| 115° | 119 | 144 | 318 | 674 | 791 | 117 |
| 125° | 168 | 186 | 304 | 504 | 602 | 150 |
| 135° | 205 | 222 | 300 | 426 | 481 | 158 |
| 145° | 242 | 254 | 302 | 368 | 401 | 151 |
| 155° | 276 | 283 | 310 | 333 | 346 | 128 |
| 165° | 305 | 307 | 313 | 320 | 325 | 86 |
| 175° | 320 | 318 | 317 | 315 | 313 | 30 |
| 180° | 318 | 318 | 318 | 318 | 318 | |

TEST NUMBER: P521707

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1218.1 | 1218.1 | 1218.1 | 1218.1 | 1218.1 |
| 2.5° | 1221.1 | 1210.2 | 1212.9 | 1212.9 | 1209.5 |
| 5° | 1198.3 | 1186.3 | 1194.0 | 1196.8 | 1201.0 |
| 7.5° | 1153.8 | 1144.7 | 1158.9 | 1169.3 | 1177.8 |
| 10° | 1119.2 | 1111.4 | 1129.3 | 1144.6 | 1155.5 |
| 12.5° | 1079.0 | 1072.4 | 1094.7 | 1115.1 | 1129.5 |
| 15° | 1013.4 | 1009.7 | 1036.9 | 1065.1 | 1083.4 |
| 17.5° | 943.1 | 941.4 | 972.5 | 1005.5 | 1028.9 |
| 20° | 895.2 | 894.7 | 928.9 | 963.2 | 990.4 |
| 22.5° | 846.9 | 848.1 | 884.0 | 919.7 | 950.6 |
| 25° | 774.5 | 776.5 | 816.7 | 852.3 | 889.9 |
| 27.5° | 707.4 | 708.4 | 749.9 | 787.4 | 827.6 |
| 30° | 661.7 | 664.3 | 705.0 | 743.9 | 785.7 |
| 32.5° | 615.9 | 619.0 | 658.8 | 699.0 | 741.6 |
| 35° | 547.3 | 549.9 | 586.9 | 626.3 | 670.8 |
| 37.5° | 476.5 | 480.1 | 512.9 | 550.2 | 593.9 |
| 40° | 430.8 | 436.0 | 465.0 | 500.2 | 543.0 |
| 42.5° | 386.7 | 393.2 | 420.1 | 453.5 | 492.1 |
| 45° | 328.2 | 334.4 | 356.5 | 383.5 | 418.5 |
| 47.5° | 277.7 | 284.9 | 301.9 | 325.1 | 355.0 |
| 50° | 249.1 | 255.9 | 271.5 | 288.7 | 316.9 |
| 52.5° | 223.8 | 230.6 | 244.6 | 257.8 | 281.9 |
| 55° | 188.7 | 196.5 | 207.9 | 215.8 | 233.6 |
| 57.5° | 159.8 | 167.3 | 176.4 | 179.9 | 190.7 |
| 60° | 140.6 | 148.9 | 157.1 | 156.7 | 162.5 |
| 62.5° | 123.0 | 130.1 | 138.3 | 132.7 | 133.0 |
| 65° | 94.6 | 102.4 | 111.7 | 97.6 | 88.7 |
| 67.5° | 76.4 | 78.1 | 87.7 | 68.1 | 57.5 |
| 70° | 67.9 | 67.9 | 70.6 | 52.7 | 43.8 |
| 72.5° | 59.8 | 59.8 | 57.3 | 42.9 | 33.6 |
| 75° | 47.6 | 47.6 | 43.3 | 29.7 | 20.3 |
| 77.5° | 36.7 | 36.2 | 33.1 | 22.2 | 14.8 |
| 80° | 29.4 | 29.4 | 26.7 | 17.5 | 11.8 |
| 82.5° | 23.0 | 23.0 | 20.7 | 13.7 | 8.8 |
| 85° | 13.4 | 13.4 | 12.3 | 7.9 | 4.8 |
| 87.5° | 4.7 | 4.7 | 4.3 | 2.6 | 2.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 4.8 | 25.6 | 59.4 | 17.3 | 13.0 |
| 95° | 15.7 | 62.3 | 280.1 | 96.9 | 59.8 |
| 97.5° | 28.9 | 73.0 | 431.3 | 308.6 | 211.5 |
| 100° | 38.0 | 79.3 | 464.2 | 470.2 | 362.2 |
| 102.5° | 48.2 | 86.2 | 456.9 | 601.8 | 507.5 |
| 105° | 64.0 | 97.0 | 419.5 | 741.0 | 704.4 |
| 107.5° | 80.0 | 109.7 | 375.8 | 780.2 | 812.8 |
| 110° | 91.1 | 118.9 | 350.7 | 765.2 | 838.4 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 101.8 | 128.1 | 333.8 | 729.7 | 834.1 |
| 115° | 118.9 | 143.7 | 318.1 | 673.9 | 791.3 |
| 117.5° | 134.0 | 157.3 | 308.8 | 612.8 | 737.2 |
| 120° | 146.1 | 165.5 | 307.8 | 577.9 | 697.2 |
| 122.5° | 155.7 | 175.2 | 305.4 | 547.3 | 658.0 |
| 125° | 167.8 | 186.1 | 303.6 | 503.8 | 602.4 |
| 127.5° | 181.0 | 198.1 | 302.6 | 477.8 | 559.1 |
| 130° | 187.7 | 204.8 | 301.2 | 459.7 | 530.6 |
| 132.5° | 195.0 | 211.6 | 301.2 | 445.6 | 510.8 |
| 135° | 205.2 | 222.3 | 300.0 | 425.6 | 481.1 |
| 137.5° | 214.9 | 231.5 | 299.9 | 408.6 | 456.6 |
| 140° | 222.1 | 239.2 | 299.4 | 394.6 | 440.6 |
| 142.5° | 230.3 | 244.6 | 300.8 | 383.4 | 424.7 |
| 145° | 242.0 | 254.4 | 302.4 | 368.3 | 401.4 |
| 147.5° | 252.1 | 264.1 | 305.1 | 353.2 | 381.7 |
| 150° | 260.8 | 269.0 | 306.0 | 348.1 | 368.2 |
| 152.5° | 267.5 | 276.2 | 307.0 | 341.3 | 360.0 |
| 155° | 276.4 | 282.9 | 309.6 | 332.9 | 346.5 |
| 157.5° | 287.6 | 291.4 | 310.2 | 329.1 | 338.7 |
| 160° | 293.3 | 296.3 | 312.7 | 326.1 | 334.4 |
| 162.5° | 296.7 | 300.2 | 313.1 | 323.7 | 330.0 |
| 165° | 305.4 | 306.6 | 313.3 | 320.0 | 324.7 |
| 167.5° | 311.3 | 310.3 | 316.0 | 319.1 | 321.0 |
| 170° | 313.3 | 312.7 | 315.1 | 315.7 | 318.1 |
| 172.5° | 317.6 | 315.6 | 316.5 | 314.8 | 316.6 |
| 175° | 319.9 | 318.1 | 316.9 | 315.0 | 312.7 |
| 177.5° | 320.9 | 318.0 | 316.5 | 314.6 | 315.1 |
| 180° | 317.5 | 317.5 | 317.5 | 317.5 | 317.5 |

(END OF REPORT)