

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: P521800

Luminaire Tested: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521800
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-050U-125D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

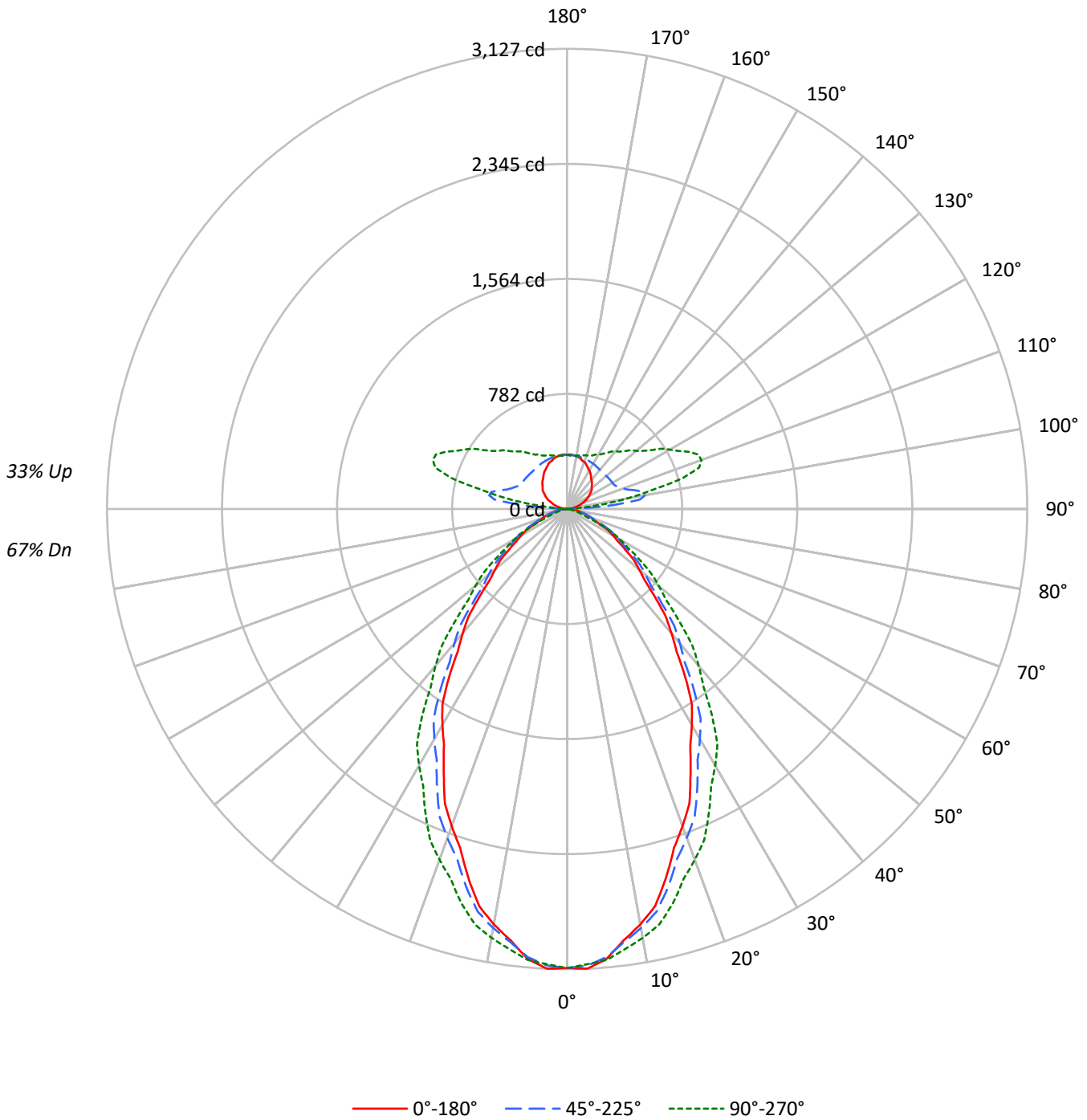
Lumens per Lamp: N/A
Luminaire Lumens: 6828.8 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 71.5
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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Luminous Intensity Polar Plot



TEST NUMBER: P521800

CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4_5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|----|--|--|--|--|--|--|--|--|----|---|
| RF | 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 | 50 | 30 | 10 | 0 | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 81 | 81 | 81 | 71 | 71 | 71 | 67 | | | | | | | | | | | | | | | | | | | | |
| 1 | 103 | 99 | 96 | 93 | 97 | 94 | 91 | 88 | 83 | 81 | 79 | 74 | 72 | 71 | 65 | 64 | 63 | 59 | | | | | | | | | | | | | | | | | | | | |
| 2 | 95 | 88 | 83 | 78 | 90 | 84 | 79 | 75 | 75 | 71 | 68 | 67 | 64 | 62 | 60 | 57 | 56 | 52 | | | | | | | | | | | | | | | | | | | | |
| 3 | 88 | 79 | 73 | 67 | 83 | 75 | 69 | 65 | 68 | 63 | 59 | 61 | 57 | 54 | 54 | 52 | 49 | 46 | | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 71 | 64 | 59 | 77 | 68 | 61 | 56 | 61 | 56 | 52 | 55 | 51 | 48 | 50 | 47 | 44 | 41 | | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 65 | 57 | 52 | 71 | 62 | 55 | 50 | 56 | 50 | 46 | 51 | 46 | 43 | 46 | 42 | 39 | 37 | | | | | | | | | | | | | | | | | | | | |
| 6 | 70 | 59 | 51 | 46 | 66 | 56 | 49 | 44 | 51 | 46 | 41 | 46 | 42 | 38 | 42 | 38 | 36 | 33 | | | | | | | | | | | | | | | | | | | | |
| 7 | 65 | 54 | 46 | 41 | 62 | 51 | 45 | 40 | 47 | 41 | 37 | 43 | 38 | 35 | 39 | 35 | 32 | 30 | | | | | | | | | | | | | | | | | | | | |
| 8 | 61 | 49 | 42 | 37 | 58 | 47 | 41 | 36 | 43 | 38 | 34 | 40 | 35 | 32 | 36 | 32 | 30 | 28 | | | | | | | | | | | | | | | | | | | | |
| 9 | 57 | 46 | 38 | 34 | 54 | 44 | 37 | 33 | 40 | 35 | 31 | 37 | 32 | 29 | 34 | 30 | 27 | 25 | | | | | | | | | | | | | | | | | | | | |
| 10 | 54 | 42 | 35 | 31 | 51 | 41 | 34 | 30 | 37 | 32 | 28 | 34 | 30 | 27 | 32 | 28 | 25 | 23 | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 28778 | 28778 | 28778 |
| 5° | 28420 | 28318 | 28483 |
| 10° | 26850 | 27094 | 27722 |
| 15° | 24787 | 25363 | 26499 |
| 20° | 22509 | 23356 | 24901 |
| 25° | 20189 | 21290 | 23199 |
| 30° | 18051 | 19233 | 21435 |
| 35° | 15785 | 16926 | 19347 |
| 40° | 13287 | 14342 | 16748 |
| 45° | 10965 | 11911 | 13983 |
| 50° | 9155 | 9980 | 11649 |
| 55° | 7771 | 8564 | 9621 |
| 60° | 6643 | 7425 | 7678 |
| 65° | 5290 | 6246 | 4960 |
| 70° | 4688 | 4874 | 3027 |
| 75° | 4342 | 3953 | 1854 |
| 80° | 4001 | 3634 | 1599 |
| 85° | 3620 | 3335 | 1302 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13983 cd/sqm

TEST NUMBER: P521800

CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4_5000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 286.1 | 4.2 |
| 10°-20° | 744.2 | 10.9 |
| 20°-30° | 963.9 | 14.1 |
| 30°-40° | 943.9 | 13.8 |
| 40°-50° | 722.5 | 10.6 |
| 50°-60° | 481.4 | 7.1 |
| 60°-70° | 262.7 | 3.8 |
| 70°-80° | 109.5 | 1.6 |
| 80°-90° | 31.0 | 0.5 |
| 90°-100° | 167.5 | 2.5 |
| 100°-110° | 476.6 | 7.0 |
| 110°-120° | 456.7 | 6.7 |
| 120°-130° | 361.4 | 5.3 |
| 130°-140° | 290.1 | 4.2 |
| 140°-150° | 227.1 | 3.3 |
| 150°-160° | 166.2 | 2.4 |
| 160°-170° | 102.9 | 1.5 |
| 170°-180° | 34.9 | 0.5 |
| 0°-30° | 1994.2 | 29.2 |
| 0°-40° | 2938.1 | 43.0 |
| 0°-60° | 4142.1 | 60.7 |
| 0°-90° | 4545.3 | 66.6 |
| 90°-120° | 1100.8 | 16.1 |
| 90°-150° | 1979.5 | 29.0 |
| 90°-180° | 2283.0 | 33.4 |
| 0°-180° | 6828.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3119 | 3119 | 3119 | 3119 | 3119 | |
| 5° | 3069 | 3038 | 3058 | 3065 | 3075 | 285 |
| 15° | 2595 | 2586 | 2655 | 2728 | 2774 | 725 |
| 25° | 1983 | 1989 | 2091 | 2182 | 2279 | 912 |
| 35° | 1402 | 1408 | 1503 | 1604 | 1718 | 871 |
| 45° | 840 | 856 | 913 | 982 | 1072 | 655 |
| 55° | 483 | 503 | 532 | 553 | 598 | 438 |
| 65° | 242 | 262 | 286 | 250 | 227 | 252 |
| 75° | 122 | 122 | 111 | 76 | 52 | 130 |
| 85° | 34 | 34 | 32 | 20 | 12 | 37 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 18 | 72 | 324 | 112 | 69 | 21 |
| 105° | 74 | 112 | 486 | 858 | 816 | 78 |
| 115° | 138 | 166 | 368 | 780 | 916 | 136 |
| 125° | 194 | 216 | 352 | 583 | 698 | 174 |
| 135° | 238 | 257 | 347 | 493 | 557 | 183 |
| 145° | 280 | 295 | 350 | 426 | 465 | 175 |
| 155° | 320 | 328 | 358 | 385 | 401 | 148 |
| 165° | 354 | 355 | 363 | 370 | 376 | 99 |
| 175° | 370 | 368 | 367 | 365 | 362 | 35 |
| 180° | 368 | 368 | 368 | 368 | 368 | |

TEST NUMBER: P521800

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3119.2 | 3119.2 | 3119.2 | 3119.2 | 3119.2 |
| 2.5° | 3126.9 | 3099.1 | 3106.1 | 3105.9 | 3097.3 |
| 5° | 3068.6 | 3037.8 | 3057.6 | 3064.7 | 3075.4 |
| 7.5° | 2954.7 | 2931.4 | 2967.6 | 2994.4 | 3016.0 |
| 10° | 2866.0 | 2846.0 | 2892.0 | 2931.0 | 2959.1 |
| 12.5° | 2763.1 | 2746.2 | 2803.3 | 2855.6 | 2892.3 |
| 15° | 2595.0 | 2585.7 | 2655.3 | 2727.5 | 2774.3 |
| 17.5° | 2415.2 | 2410.6 | 2490.5 | 2574.8 | 2634.7 |
| 20° | 2292.6 | 2291.2 | 2378.8 | 2466.6 | 2536.2 |
| 22.5° | 2168.8 | 2171.8 | 2263.8 | 2355.1 | 2434.3 |
| 25° | 1983.2 | 1988.6 | 2091.4 | 2182.5 | 2278.9 |
| 27.5° | 1811.6 | 1814.0 | 1920.3 | 2016.5 | 2119.3 |
| 30° | 1694.4 | 1701.1 | 1805.3 | 1904.9 | 2012.0 |
| 32.5° | 1577.3 | 1585.0 | 1687.0 | 1790.0 | 1899.2 |
| 35° | 1401.5 | 1408.2 | 1502.8 | 1604.0 | 1717.7 |
| 37.5° | 1220.3 | 1229.4 | 1313.4 | 1409.0 | 1520.9 |
| 40° | 1103.2 | 1116.5 | 1190.8 | 1280.8 | 1390.6 |
| 42.5° | 990.4 | 1007.0 | 1075.8 | 1161.3 | 1260.3 |
| 45° | 840.4 | 856.4 | 912.9 | 982.0 | 1071.7 |
| 47.5° | 711.2 | 729.6 | 773.0 | 832.5 | 909.1 |
| 50° | 637.8 | 655.2 | 695.3 | 739.4 | 811.6 |
| 52.5° | 573.2 | 590.6 | 626.3 | 660.3 | 721.8 |
| 55° | 483.1 | 503.2 | 532.4 | 552.6 | 598.1 |
| 57.5° | 409.2 | 428.5 | 451.7 | 460.8 | 488.3 |
| 60° | 360.0 | 381.4 | 402.4 | 401.4 | 416.1 |
| 62.5° | 315.1 | 333.3 | 354.2 | 339.7 | 340.5 |
| 65° | 242.3 | 262.3 | 286.1 | 250.0 | 227.2 |
| 67.5° | 195.7 | 200.0 | 224.5 | 174.3 | 147.3 |
| 70° | 173.8 | 173.8 | 180.7 | 135.0 | 112.2 |
| 72.5° | 153.0 | 153.0 | 146.7 | 109.8 | 86.0 |
| 75° | 121.8 | 121.8 | 110.9 | 76.1 | 52.0 |
| 77.5° | 93.9 | 92.8 | 84.9 | 56.8 | 37.8 |
| 80° | 75.3 | 75.3 | 68.4 | 44.8 | 30.1 |
| 82.5° | 58.9 | 58.9 | 53.1 | 35.0 | 22.4 |
| 85° | 34.2 | 34.2 | 31.5 | 20.3 | 12.3 |
| 87.5° | 12.0 | 12.0 | 10.9 | 6.5 | 5.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 5.6 | 29.6 | 68.8 | 20.0 | 15.1 |
| 95° | 18.2 | 72.2 | 324.3 | 112.2 | 69.2 |
| 97.5° | 33.4 | 84.5 | 499.4 | 357.4 | 244.9 |
| 100° | 44.0 | 91.9 | 537.4 | 544.4 | 419.3 |
| 102.5° | 55.8 | 99.8 | 529.1 | 696.8 | 587.6 |
| 105° | 74.1 | 112.3 | 485.7 | 858.0 | 815.6 |
| 107.5° | 92.7 | 127.0 | 435.1 | 903.4 | 941.1 |
| 110° | 105.5 | 137.6 | 406.1 | 886.0 | 970.8 |

TEST NUMBER: P521800

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 117.8 | 148.3 | 386.5 | 844.9 | 965.7 |
| 115° | 137.7 | 166.4 | 368.3 | 780.3 | 916.2 |
| 117.5° | 155.2 | 182.1 | 357.6 | 709.6 | 853.6 |
| 120° | 169.1 | 191.7 | 356.4 | 669.2 | 807.2 |
| 122.5° | 180.3 | 202.9 | 353.6 | 633.7 | 761.9 |
| 125° | 194.3 | 215.5 | 351.5 | 583.4 | 697.5 |
| 127.5° | 209.5 | 229.3 | 350.4 | 553.3 | 647.3 |
| 130° | 217.4 | 237.2 | 348.7 | 532.3 | 614.3 |
| 132.5° | 225.7 | 245.0 | 348.7 | 516.0 | 591.4 |
| 135° | 237.6 | 257.4 | 347.3 | 492.8 | 557.0 |
| 137.5° | 248.8 | 268.1 | 347.2 | 473.1 | 528.6 |
| 140° | 257.2 | 277.0 | 346.6 | 456.9 | 510.2 |
| 142.5° | 266.7 | 283.2 | 348.3 | 443.9 | 491.7 |
| 145° | 280.3 | 294.6 | 350.1 | 426.5 | 464.8 |
| 147.5° | 291.9 | 305.8 | 353.2 | 408.9 | 442.0 |
| 150° | 301.9 | 311.5 | 354.3 | 403.1 | 426.3 |
| 152.5° | 309.7 | 319.9 | 355.5 | 395.2 | 416.8 |
| 155° | 320.1 | 327.6 | 358.5 | 385.4 | 401.2 |
| 157.5° | 332.9 | 337.5 | 359.2 | 381.0 | 392.2 |
| 160° | 339.7 | 343.1 | 362.0 | 377.6 | 387.2 |
| 162.5° | 343.6 | 347.5 | 362.6 | 374.8 | 382.2 |
| 165° | 353.6 | 355.0 | 362.7 | 370.5 | 376.0 |
| 167.5° | 360.5 | 359.3 | 365.9 | 369.5 | 371.7 |
| 170° | 362.7 | 362.0 | 364.8 | 365.6 | 368.3 |
| 172.5° | 367.8 | 365.4 | 366.5 | 364.4 | 366.6 |
| 175° | 370.4 | 368.4 | 366.9 | 364.8 | 362.0 |
| 177.5° | 371.5 | 368.2 | 366.5 | 364.3 | 364.8 |
| 180° | 367.6 | 367.6 | 367.6 | 367.6 | 367.6 |

(END OF REPORT)