

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: P521253

Luminaire Tested: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521253
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7688.1 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

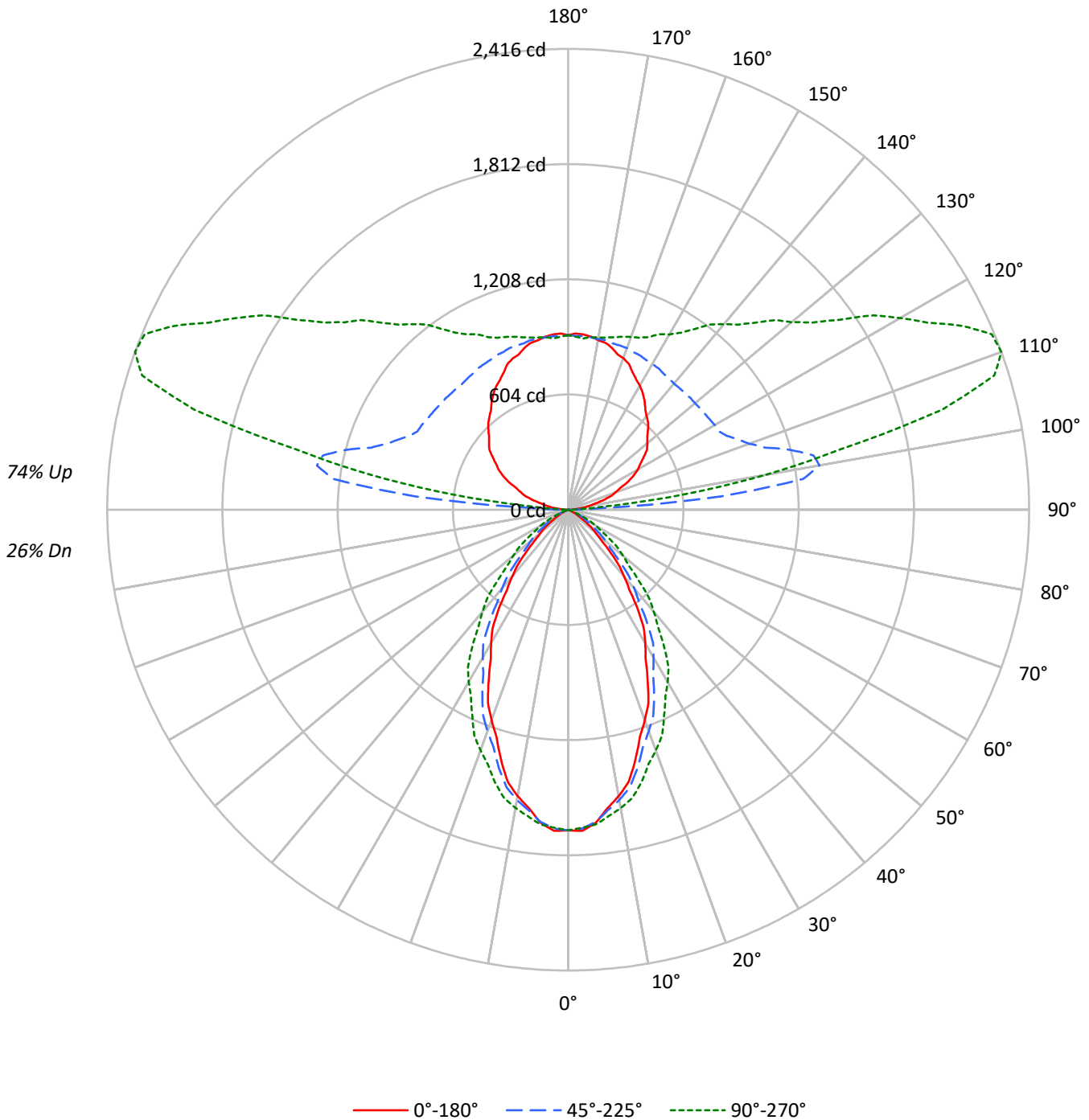
Input Watts (W): 73.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521253

CATALOG NUMBER: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4_4500K

Luminous Intensity Polar Plot



TEST NUMBER: P521253

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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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 70 | 70 | 70 | 51 | 51 | 51 | 34 | 34 | 34 | 26 | | | | |
| 1 | 93 | 90 | 86 | 83 | 83 | 80 | 77 | 75 | 63 | 61 | 59 | 46 | 45 | 44 | 32 | 31 | 31 | 24 | | | | |
| 2 | 86 | 79 | 74 | 69 | 76 | 71 | 67 | 63 | 56 | 53 | 50 | 42 | 40 | 39 | 29 | 28 | 27 | 22 | | | | |
| 3 | 79 | 70 | 64 | 59 | 70 | 63 | 58 | 54 | 50 | 47 | 44 | 38 | 36 | 34 | 27 | 25 | 24 | 19 | | | | |
| 4 | 73 | 63 | 56 | 51 | 65 | 57 | 51 | 46 | 45 | 41 | 38 | 34 | 32 | 30 | 24 | 23 | 22 | 18 | | | | |
| 5 | 67 | 56 | 49 | 44 | 60 | 51 | 45 | 40 | 41 | 37 | 33 | 31 | 29 | 26 | 22 | 21 | 20 | 16 | | | | |
| 6 | 62 | 51 | 44 | 38 | 55 | 46 | 40 | 35 | 37 | 33 | 29 | 29 | 26 | 24 | 21 | 19 | 18 | 15 | | | | |
| 7 | 57 | 46 | 39 | 34 | 51 | 42 | 36 | 31 | 34 | 29 | 26 | 26 | 23 | 21 | 19 | 18 | 16 | 13 | | | | |
| 8 | 53 | 42 | 35 | 30 | 48 | 38 | 32 | 28 | 31 | 27 | 24 | 24 | 21 | 19 | 18 | 16 | 15 | 12 | | | | |
| 9 | 50 | 38 | 32 | 27 | 45 | 35 | 29 | 25 | 29 | 24 | 21 | 22 | 20 | 17 | 17 | 15 | 14 | 11 | | | | |
| 10 | 46 | 35 | 29 | 24 | 42 | 32 | 27 | 23 | 26 | 22 | 19 | 21 | 18 | 16 | 16 | 14 | 13 | 11 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15511 | 15511 | 15511 |
| 5° | 15262 | 15224 | 15337 |
| 10° | 14280 | 14471 | 14874 |
| 15° | 12982 | 13393 | 14139 |
| 20° | 11524 | 12123 | 13185 |
| 25° | 10035 | 10830 | 12113 |
| 30° | 8596 | 9540 | 11100 |
| 35° | 7127 | 8098 | 9875 |
| 40° | 5476 | 6475 | 8415 |
| 45° | 3959 | 4903 | 6771 |
| 50° | 2697 | 3654 | 5370 |
| 55° | 1753 | 2643 | 4174 |
| 60° | 1006 | 1862 | 3017 |
| 65° | 266 | 1137 | 1526 |
| 70° | 132 | 351 | 440 |
| 75° | 57 | 29 | 0 |
| 80° | 43 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6771 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 153.4 | 2.0 |
| 10°-20° | 392.4 | 5.1 |
| 20°-30° | 491.2 | 6.4 |
| 30°-40° | 453.7 | 5.9 |
| 40°-50° | 304.9 | 4.0 |
| 50°-60° | 157.5 | 2.0 |
| 60°-70° | 49.3 | 0.6 |
| 70°-80° | 3.1 | 0.0 |
| 80°-90° | 0.1 | 0.0 |
| 90°-100° | 416.8 | 5.4 |
| 100°-110° | 1186.1 | 15.4 |
| 110°-120° | 1136.4 | 14.8 |
| 120°-130° | 899.4 | 11.7 |
| 130°-140° | 721.9 | 9.4 |
| 140°-150° | 565.2 | 7.4 |
| 150°-160° | 413.5 | 5.4 |
| 160°-170° | 256.2 | 3.3 |
| 170°-180° | 86.9 | 1.1 |
| 0°-30° | 1037.0 | 13.5 |
| 0°-40° | 1490.7 | 19.4 |
| 0°-60° | 1953.1 | 25.4 |
| 0°-90° | 2005.6 | 26.1 |
| 90°-120° | 2739.4 | 35.6 |
| 90°-150° | 4925.9 | 64.1 |
| 90°-180° | 5682.0 | 73.9 |
| 0°-180° | 7688.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1681 | 1681 | 1681 | 1681 | 1681 | |
| 5° | 1648 | 1631 | 1644 | 1650 | 1656 | 153 |
| 15° | 1359 | 1354 | 1402 | 1449 | 1480 | 379 |
| 25° | 986 | 994 | 1064 | 1137 | 1190 | 452 |
| 35° | 633 | 649 | 719 | 804 | 877 | 392 |
| 45° | 303 | 322 | 376 | 449 | 519 | 238 |
| 55° | 109 | 127 | 164 | 211 | 260 | 102 |
| 65° | 12 | 23 | 52 | 63 | 70 | 21 |
| 75° | 2 | 2 | 1 | 0 | 0 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 45 | 180 | 807 | 279 | 172 | 52 |
| 105° | 184 | 280 | 1209 | 2135 | 2030 | 195 |
| 115° | 343 | 414 | 916 | 1942 | 2280 | 337 |
| 125° | 484 | 536 | 875 | 1452 | 1736 | 433 |
| 135° | 591 | 641 | 864 | 1226 | 1386 | 456 |
| 145° | 697 | 733 | 871 | 1061 | 1157 | 436 |
| 155° | 796 | 815 | 892 | 959 | 998 | 368 |
| 165° | 880 | 883 | 903 | 922 | 936 | 247 |
| 175° | 922 | 917 | 913 | 908 | 901 | 87 |
| 180° | 915 | 915 | 915 | 915 | 915 | |

TEST NUMBER: P521253

CATALOG NUMBER: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1681.2 | 1681.2 | 1681.2 | 1681.2 | 1681.2 |
| 2.5° | 1685.1 | 1669.2 | 1673.4 | 1673.3 | 1668.9 |
| 5° | 1647.9 | 1631.2 | 1643.8 | 1649.6 | 1656.0 |
| 7.5° | 1578.2 | 1565.2 | 1589.5 | 1607.7 | 1620.9 |
| 10° | 1524.2 | 1513.1 | 1544.6 | 1569.4 | 1587.7 |
| 12.5° | 1461.8 | 1453.2 | 1491.2 | 1525.3 | 1548.6 |
| 15° | 1359.1 | 1354.4 | 1402.2 | 1449.3 | 1480.3 |
| 17.5° | 1249.2 | 1249.0 | 1303.7 | 1362.1 | 1399.5 |
| 20° | 1173.7 | 1176.1 | 1234.7 | 1299.1 | 1342.9 |
| 22.5° | 1098.2 | 1103.8 | 1166.4 | 1233.5 | 1283.6 |
| 25° | 985.8 | 993.7 | 1063.9 | 1136.7 | 1189.9 |
| 27.5° | 877.8 | 889.4 | 963.2 | 1038.8 | 1103.7 |
| 30° | 806.9 | 820.4 | 895.5 | 975.1 | 1041.9 |
| 32.5° | 737.2 | 753.3 | 826.5 | 910.7 | 978.8 |
| 35° | 632.8 | 648.7 | 719.0 | 803.6 | 876.8 |
| 37.5° | 524.9 | 540.5 | 609.2 | 692.5 | 771.6 |
| 40° | 454.7 | 472.2 | 537.6 | 618.4 | 698.7 |
| 42.5° | 390.9 | 408.4 | 470.0 | 549.3 | 625.1 |
| 45° | 303.4 | 321.7 | 375.8 | 448.9 | 518.9 |
| 47.5° | 230.8 | 250.7 | 298.2 | 364.4 | 428.2 |
| 50° | 187.9 | 207.8 | 254.6 | 312.9 | 374.1 |
| 52.5° | 153.4 | 172.6 | 214.9 | 269.8 | 326.0 |
| 55° | 109.0 | 127.3 | 164.3 | 210.9 | 259.5 |
| 57.5° | 75.3 | 91.1 | 124.3 | 163.2 | 201.2 |
| 60° | 54.5 | 69.6 | 100.9 | 132.5 | 163.5 |
| 62.5° | 36.3 | 50.1 | 80.7 | 104.9 | 125.7 |
| 65° | 12.2 | 23.3 | 52.1 | 62.8 | 69.9 |
| 67.5° | 6.2 | 7.5 | 27.3 | 28.8 | 31.2 |
| 70° | 4.9 | 4.9 | 13.0 | 13.9 | 16.3 |
| 72.5° | 3.6 | 3.6 | 5.2 | 6.7 | 7.2 |
| 75° | 1.6 | 1.6 | 0.8 | 0.0 | 0.0 |
| 77.5° | 0.8 | 0.8 | 0.7 | 0.0 | 0.0 |
| 80° | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 13.9 | 73.8 | 171.1 | 49.8 | 37.6 |
| 95° | 45.2 | 179.6 | 807.0 | 279.3 | 172.2 |
| 97.5° | 83.1 | 210.3 | 1242.8 | 889.3 | 609.4 |
| 100° | 109.6 | 228.6 | 1337.4 | 1354.7 | 1043.5 |
| 102.5° | 138.8 | 248.3 | 1316.6 | 1734.0 | 1462.3 |
| 105° | 184.4 | 279.6 | 1208.7 | 2135.1 | 2029.6 |
| 107.5° | 230.6 | 316.0 | 1082.8 | 2248.1 | 2342.0 |
| 110° | 262.6 | 342.5 | 1010.5 | 2204.9 | 2415.7 |

TEST NUMBER: P521253

CATALOG NUMBER: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 293.2 | 369.1 | 961.8 | 2102.5 | 2403.2 |
| 115° | 342.6 | 414.0 | 916.5 | 1941.7 | 2280.1 |
| 117.5° | 386.1 | 453.1 | 889.8 | 1765.8 | 2124.2 |
| 120° | 420.9 | 477.0 | 887.0 | 1665.2 | 2008.8 |
| 122.5° | 448.7 | 504.8 | 880.0 | 1577.0 | 1896.1 |
| 125° | 483.5 | 536.2 | 874.8 | 1451.7 | 1735.7 |
| 127.5° | 521.4 | 570.7 | 872.0 | 1376.8 | 1610.8 |
| 130° | 540.9 | 590.2 | 867.9 | 1324.7 | 1528.7 |
| 132.5° | 561.8 | 609.7 | 867.9 | 1284.0 | 1471.7 |
| 135° | 591.3 | 640.6 | 864.4 | 1226.3 | 1386.1 |
| 137.5° | 619.1 | 667.1 | 864.0 | 1177.4 | 1315.5 |
| 140° | 640.0 | 689.3 | 862.6 | 1137.0 | 1269.6 |
| 142.5° | 663.7 | 704.8 | 866.8 | 1104.6 | 1223.7 |
| 145° | 697.4 | 733.1 | 871.3 | 1061.3 | 1156.6 |
| 147.5° | 726.3 | 761.0 | 879.0 | 1017.6 | 1099.9 |
| 150° | 751.3 | 775.1 | 881.8 | 1003.1 | 1060.9 |
| 152.5° | 770.8 | 796.0 | 884.5 | 983.5 | 1037.2 |
| 155° | 796.5 | 815.2 | 892.2 | 959.2 | 998.3 |
| 157.5° | 828.5 | 839.8 | 893.9 | 948.1 | 976.0 |
| 160° | 845.2 | 853.7 | 900.9 | 939.7 | 963.5 |
| 162.5° | 855.0 | 864.8 | 902.3 | 932.6 | 951.0 |
| 165° | 880.0 | 883.4 | 902.6 | 922.1 | 935.7 |
| 167.5° | 897.1 | 894.0 | 910.6 | 919.5 | 924.9 |
| 170° | 902.6 | 900.9 | 907.9 | 909.7 | 916.5 |
| 172.5° | 915.2 | 909.4 | 912.0 | 906.9 | 912.4 |
| 175° | 921.8 | 916.7 | 913.1 | 907.7 | 900.9 |
| 177.5° | 924.5 | 916.4 | 912.0 | 906.5 | 907.9 |
| 180° | 914.8 | 914.8 | 914.8 | 914.8 | 914.8 |

(END OF REPORT)