

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: P521327

Luminaire Tested: SQ4-BB-150U-125D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521327
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-150U-125D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9418.5 lumens
Efficiency: N/A
Efficacy: 88.4 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

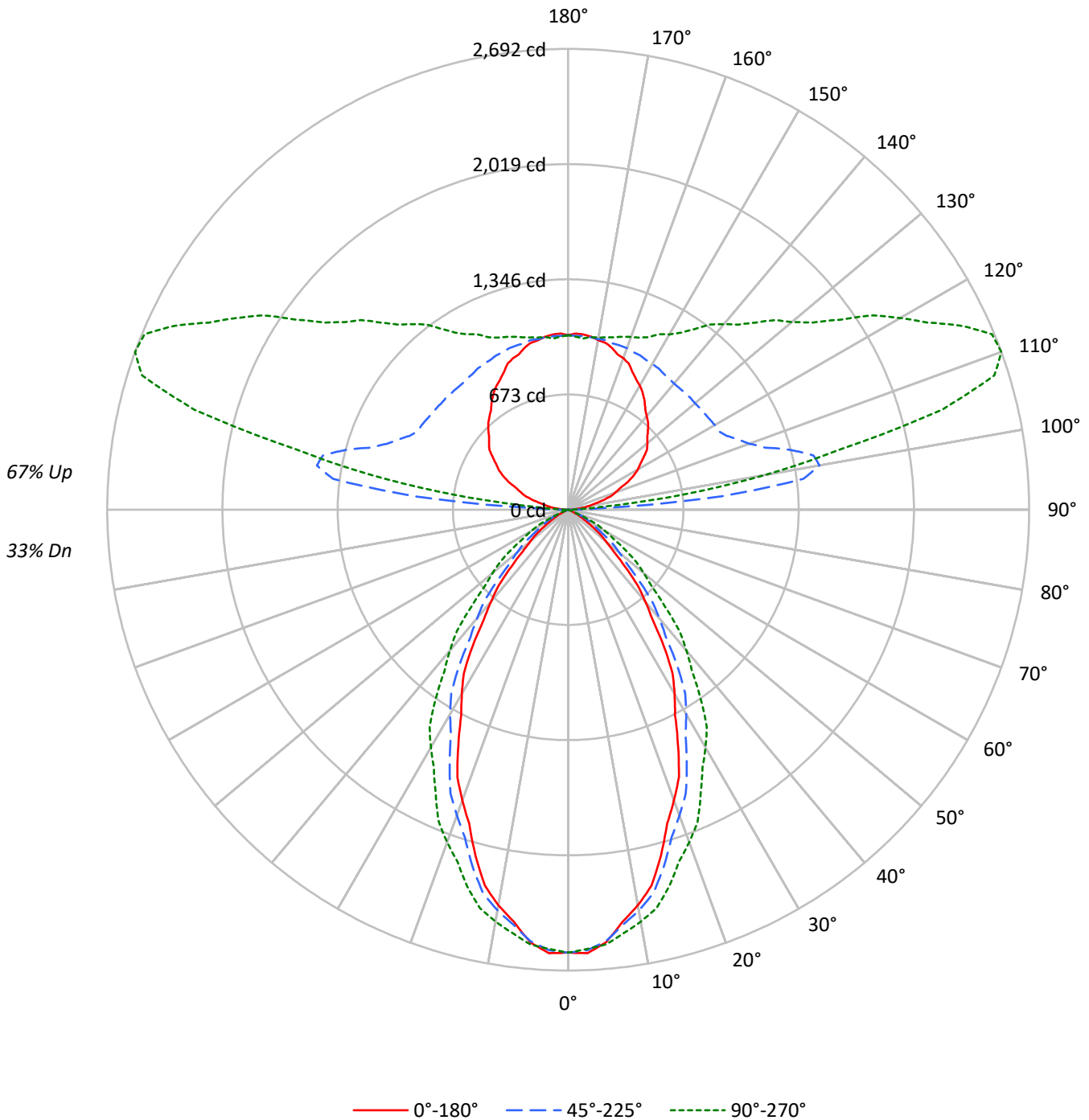
Input Watts (W): 106.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521327

CATALOG NUMBER: SQ4-BB-150U-125D-92765-1D-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P521327

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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 74 | 74 | 74 | | 56 | 56 | 56 | | 40 | 40 | 40 | 33 |
| 1 | 95 | 91 | 88 | 85 | 86 | 83 | 80 | 77 | 66 | 64 | 63 | | 51 | 50 | 49 | | 37 | 37 | 36 | 30 |
| 2 | 88 | 81 | 76 | 71 | 79 | 74 | 69 | 65 | 59 | 56 | 54 | | 46 | 45 | 43 | | 34 | 33 | 32 | 27 |
| 3 | 81 | 72 | 66 | 61 | 73 | 66 | 60 | 56 | 54 | 50 | 47 | | 42 | 40 | 38 | | 32 | 30 | 29 | 24 |
| 4 | 74 | 65 | 58 | 53 | 67 | 59 | 53 | 49 | 48 | 44 | 41 | | 38 | 36 | 33 | | 29 | 27 | 26 | 22 |
| 5 | 69 | 58 | 51 | 46 | 62 | 53 | 47 | 42 | 44 | 39 | 36 | | 35 | 32 | 30 | | 27 | 25 | 24 | 20 |
| 6 | 64 | 53 | 45 | 40 | 58 | 48 | 42 | 37 | 40 | 35 | 32 | | 32 | 29 | 27 | | 25 | 23 | 21 | 18 |
| 7 | 59 | 48 | 41 | 36 | 53 | 44 | 38 | 33 | 37 | 32 | 29 | | 30 | 26 | 24 | | 23 | 21 | 20 | 17 |
| 8 | 55 | 44 | 37 | 32 | 50 | 40 | 34 | 30 | 34 | 29 | 26 | | 27 | 24 | 22 | | 21 | 19 | 18 | 15 |
| 9 | 51 | 40 | 33 | 29 | 47 | 37 | 31 | 27 | 31 | 27 | 23 | | 25 | 22 | 20 | | 20 | 18 | 16 | 14 |
| 10 | 48 | 37 | 30 | 26 | 44 | 34 | 28 | 24 | 29 | 24 | 21 | | 24 | 20 | 18 | | 19 | 17 | 15 | 13 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 23870 | 23870 | 23870 |
| 5° | 23486 | 23429 | 23602 |
| 10° | 21976 | 22269 | 22890 |
| 15° | 19978 | 20612 | 21760 |
| 20° | 17734 | 18656 | 20290 |
| 25° | 15443 | 16667 | 18642 |
| 30° | 13228 | 14682 | 17082 |
| 35° | 10968 | 12463 | 15197 |
| 40° | 8427 | 9965 | 12950 |
| 45° | 6092 | 7546 | 10420 |
| 50° | 4150 | 5624 | 8265 |
| 55° | 2698 | 4066 | 6423 |
| 60° | 1548 | 2864 | 4643 |
| 65° | 410 | 1749 | 2349 |
| 70° | 202 | 540 | 674 |
| 75° | 89 | 46 | 0 |
| 80° | 69 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10420 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 236.1 | 2.5 |
| 10°-20° | 603.8 | 6.4 |
| 20°-30° | 755.9 | 8.0 |
| 30°-40° | 698.2 | 7.4 |
| 40°-50° | 469.2 | 5.0 |
| 50°-60° | 242.3 | 2.6 |
| 60°-70° | 75.9 | 0.8 |
| 70°-80° | 4.8 | 0.1 |
| 80°-90° | 0.1 | 0.0 |
| 90°-100° | 464.5 | 4.9 |
| 100°-110° | 1321.7 | 14.0 |
| 110°-120° | 1266.3 | 13.4 |
| 120°-130° | 1002.2 | 10.6 |
| 130°-140° | 804.5 | 8.5 |
| 140°-150° | 629.8 | 6.7 |
| 150°-160° | 460.8 | 4.9 |
| 160°-170° | 285.4 | 3.0 |
| 170°-180° | 96.9 | 1.0 |
| 0°-30° | 1595.8 | 16.9 |
| 0°-40° | 2294.1 | 24.4 |
| 0°-60° | 3005.6 | 31.9 |
| 0°-90° | 3086.4 | 32.8 |
| 90°-120° | 3052.5 | 32.4 |
| 90°-150° | 5489.0 | 58.3 |
| 90°-180° | 6332.0 | 67.2 |
| 0°-180° | 9418.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2587 | 2587 | 2587 | 2587 | 2587 | |
| 5° | 2536 | 2510 | 2530 | 2539 | 2548 | 235 |
| 15° | 2092 | 2084 | 2158 | 2230 | 2278 | 583 |
| 25° | 1517 | 1529 | 1637 | 1749 | 1831 | 695 |
| 35° | 974 | 998 | 1106 | 1237 | 1349 | 603 |
| 45° | 467 | 495 | 578 | 691 | 799 | 367 |
| 55° | 168 | 196 | 253 | 325 | 399 | 157 |
| 65° | 19 | 36 | 80 | 97 | 108 | 32 |
| 75° | 2 | 2 | 1 | 0 | 0 | 4 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 50 | 200 | 899 | 311 | 192 | 58 |
| 105° | 205 | 312 | 1347 | 2379 | 2262 | 217 |
| 115° | 382 | 461 | 1021 | 2164 | 2541 | 376 |
| 125° | 539 | 598 | 975 | 1618 | 1934 | 482 |
| 135° | 659 | 714 | 963 | 1366 | 1545 | 508 |
| 145° | 777 | 817 | 971 | 1183 | 1289 | 485 |
| 155° | 888 | 908 | 994 | 1069 | 1112 | 410 |
| 165° | 981 | 984 | 1006 | 1028 | 1043 | 276 |
| 175° | 1027 | 1022 | 1018 | 1012 | 1004 | 97 |
| 180° | 1019 | 1019 | 1019 | 1019 | 1019 | |

TEST NUMBER: P521327

CATALOG NUMBER: SQ4-BB-150U-125D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2587.2 | 2587.2 | 2587.2 | 2587.2 | 2587.2 |
| 2.5° | 2593.2 | 2568.8 | 2575.2 | 2575.1 | 2568.2 |
| 5° | 2535.9 | 2510.2 | 2529.7 | 2538.6 | 2548.4 |
| 7.5° | 2428.8 | 2408.7 | 2446.0 | 2474.0 | 2494.4 |
| 10° | 2345.7 | 2328.5 | 2377.0 | 2415.1 | 2443.3 |
| 12.5° | 2249.5 | 2236.3 | 2294.8 | 2347.2 | 2383.2 |
| 15° | 2091.6 | 2084.2 | 2157.9 | 2230.3 | 2278.1 |
| 17.5° | 1922.3 | 1922.1 | 2006.2 | 2096.1 | 2153.7 |
| 20° | 1806.2 | 1809.9 | 1900.1 | 1999.2 | 2066.5 |
| 22.5° | 1690.0 | 1698.6 | 1794.9 | 1898.3 | 1975.4 |
| 25° | 1517.0 | 1529.3 | 1637.2 | 1749.2 | 1831.2 |
| 27.5° | 1350.8 | 1368.7 | 1482.2 | 1598.7 | 1698.5 |
| 30° | 1241.7 | 1262.5 | 1378.1 | 1500.6 | 1603.4 |
| 32.5° | 1134.5 | 1159.3 | 1272.0 | 1401.5 | 1506.3 |
| 35° | 973.8 | 998.3 | 1106.5 | 1236.7 | 1349.3 |
| 37.5° | 807.8 | 831.8 | 937.5 | 1065.7 | 1187.3 |
| 40° | 699.7 | 726.6 | 827.4 | 951.6 | 1075.2 |
| 42.5° | 601.6 | 628.5 | 723.2 | 845.3 | 962.0 |
| 45° | 466.9 | 495.0 | 578.3 | 690.9 | 798.6 |
| 47.5° | 355.2 | 385.8 | 458.9 | 560.7 | 658.9 |
| 50° | 289.1 | 319.7 | 391.8 | 481.5 | 575.8 |
| 52.5° | 236.1 | 265.7 | 330.7 | 415.3 | 501.7 |
| 55° | 167.7 | 195.9 | 252.8 | 324.6 | 399.3 |
| 57.5° | 115.9 | 140.1 | 191.3 | 251.2 | 309.7 |
| 60° | 83.9 | 107.1 | 155.2 | 203.9 | 251.6 |
| 62.5° | 55.8 | 77.1 | 124.2 | 161.4 | 193.5 |
| 65° | 18.8 | 35.9 | 80.1 | 96.6 | 107.6 |
| 67.5° | 9.5 | 11.5 | 42.1 | 44.4 | 48.1 |
| 70° | 7.5 | 7.5 | 20.0 | 21.4 | 25.0 |
| 72.5° | 5.5 | 5.5 | 8.0 | 10.3 | 11.0 |
| 75° | 2.5 | 2.5 | 1.3 | 0.0 | 0.0 |
| 77.5° | 1.3 | 1.3 | 1.0 | 0.0 | 0.0 |
| 80° | 1.3 | 1.3 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.3 | 0.3 | 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° | 15.5 | 82.2 | 190.7 | 55.5 | 41.9 |
| 95° | 50.4 | 200.1 | 899.2 | 311.2 | 191.9 |
| 97.5° | 92.6 | 234.4 | 1384.9 | 991.0 | 679.1 |
| 100° | 122.1 | 254.7 | 1490.3 | 1509.6 | 1162.8 |
| 102.5° | 154.7 | 276.7 | 1467.1 | 1932.3 | 1629.5 |
| 105° | 205.4 | 311.5 | 1346.9 | 2379.1 | 2261.7 |
| 107.5° | 257.0 | 352.1 | 1206.6 | 2505.1 | 2609.7 |
| 110° | 292.6 | 381.7 | 1126.0 | 2456.9 | 2691.9 |

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CATALOG NUMBER: SQ4-BB-150U-125D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 326.7 | 411.3 | 1071.7 | 2342.9 | 2677.9 |
| 115° | 381.8 | 461.4 | 1021.3 | 2163.6 | 2540.7 |
| 117.5° | 430.2 | 504.9 | 991.5 | 1967.6 | 2367.1 |
| 120° | 469.0 | 531.5 | 988.4 | 1855.6 | 2238.4 |
| 122.5° | 500.0 | 562.5 | 980.6 | 1757.3 | 2112.8 |
| 125° | 538.8 | 597.5 | 974.8 | 1617.7 | 1934.1 |
| 127.5° | 581.0 | 636.0 | 971.7 | 1534.2 | 1795.0 |
| 130° | 602.7 | 657.7 | 967.1 | 1476.1 | 1703.5 |
| 132.5° | 626.0 | 679.4 | 967.1 | 1430.7 | 1639.9 |
| 135° | 658.9 | 713.9 | 963.2 | 1366.5 | 1544.6 |
| 137.5° | 689.9 | 743.4 | 962.8 | 1312.0 | 1465.9 |
| 140° | 713.2 | 768.1 | 961.3 | 1266.9 | 1414.7 |
| 142.5° | 739.5 | 785.4 | 965.9 | 1230.9 | 1363.6 |
| 145° | 777.1 | 816.9 | 970.9 | 1182.7 | 1288.8 |
| 147.5° | 809.3 | 848.0 | 979.5 | 1133.9 | 1225.6 |
| 150° | 837.2 | 863.7 | 982.6 | 1117.8 | 1182.2 |
| 152.5° | 858.9 | 887.0 | 985.7 | 1095.9 | 1155.8 |
| 155° | 887.6 | 908.5 | 994.2 | 1068.8 | 1112.4 |
| 157.5° | 923.3 | 935.8 | 996.1 | 1056.5 | 1087.6 |
| 160° | 941.9 | 951.3 | 1003.9 | 1047.1 | 1073.7 |
| 162.5° | 952.7 | 963.7 | 1005.4 | 1039.2 | 1059.7 |
| 165° | 980.6 | 984.4 | 1005.8 | 1027.5 | 1042.6 |
| 167.5° | 999.6 | 996.2 | 1014.7 | 1024.6 | 1030.6 |
| 170° | 1005.8 | 1003.9 | 1011.6 | 1013.7 | 1021.3 |
| 172.5° | 1019.8 | 1013.3 | 1016.3 | 1010.6 | 1016.7 |
| 175° | 1027.1 | 1021.5 | 1017.5 | 1011.5 | 1003.9 |
| 177.5° | 1030.2 | 1021.1 | 1016.3 | 1010.1 | 1011.6 |
| 180° | 1019.4 | 1019.4 | 1019.4 | 1019.4 | 1019.4 |

(END OF REPORT)