

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: P522033

Luminaire Tested: SQ4-WB-150U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522033
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-150U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 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: 9549.4 lumens
Efficiency: N/A
Efficacy: 115.1 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-Indirect

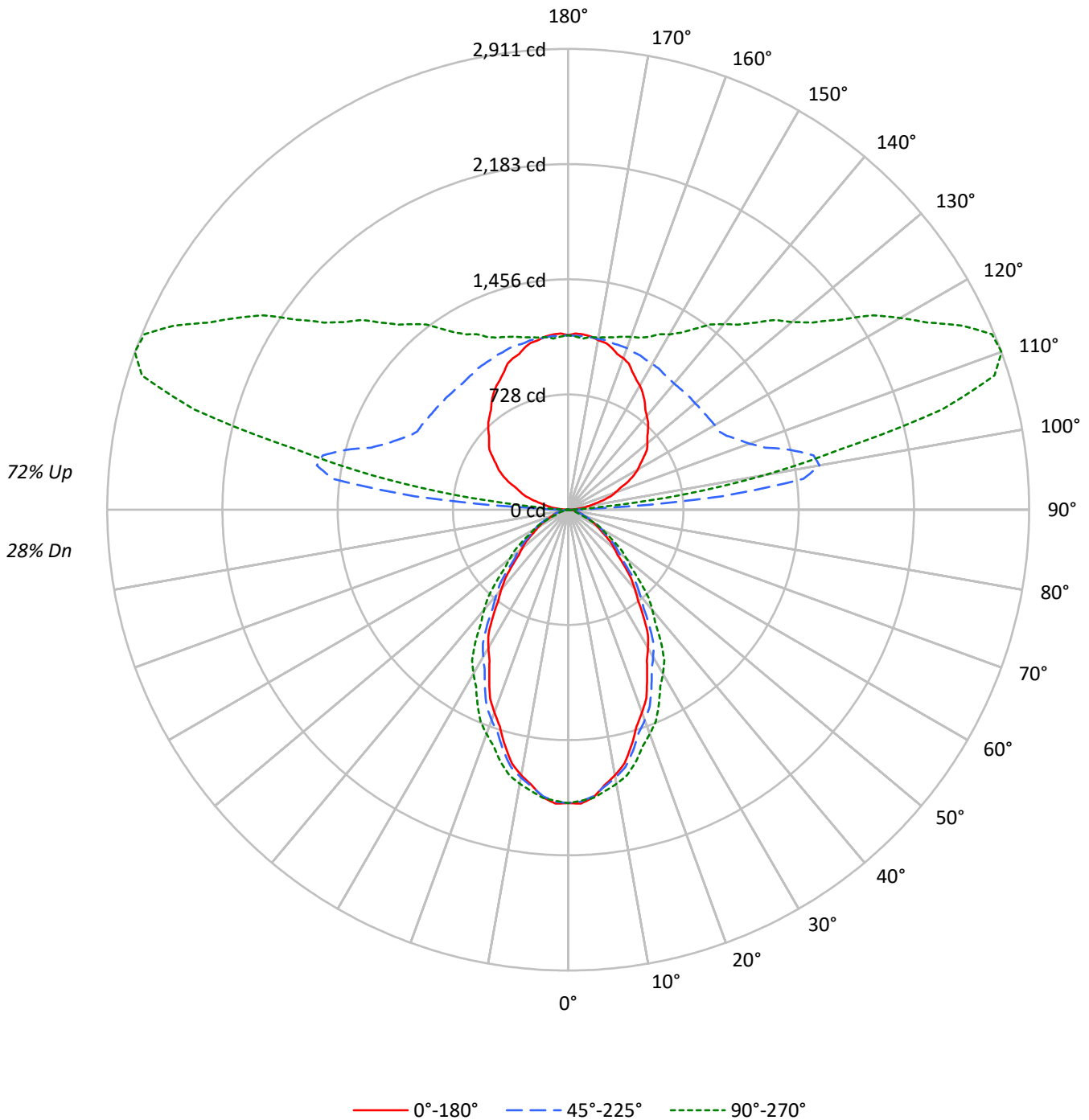
Input Watts (W): 83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P522033

CATALOG NUMBER: SQ4-WB-150U-075D-92765-1D-UNV-STD-W-4_4500K

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 | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 53 | 53 | 53 | 36 | 36 | 36 | 28 | | | | |
| 1 | 94 | 90 | 86 | 83 | 84 | 80 | 78 | 75 | 63 | 61 | 60 | 47 | 46 | 45 | 33 | 32 | 32 | 25 | | | | |
| 2 | 86 | 79 | 73 | 69 | 77 | 71 | 66 | 62 | 56 | 53 | 50 | 42 | 41 | 39 | 30 | 29 | 28 | 22 | | | | |
| 3 | 79 | 70 | 63 | 58 | 70 | 63 | 57 | 53 | 50 | 46 | 43 | 38 | 36 | 34 | 27 | 26 | 24 | 20 | | | | |
| 4 | 72 | 62 | 55 | 50 | 65 | 56 | 50 | 45 | 45 | 41 | 37 | 34 | 32 | 29 | 25 | 23 | 22 | 17 | | | | |
| 5 | 66 | 56 | 48 | 43 | 59 | 50 | 44 | 39 | 40 | 36 | 32 | 31 | 28 | 26 | 22 | 21 | 19 | 16 | | | | |
| 6 | 61 | 50 | 43 | 37 | 55 | 46 | 39 | 34 | 37 | 32 | 29 | 28 | 25 | 23 | 21 | 19 | 17 | 14 | | | | |
| 7 | 57 | 45 | 38 | 33 | 51 | 41 | 35 | 30 | 33 | 29 | 25 | 26 | 23 | 20 | 19 | 17 | 16 | 13 | | | | |
| 8 | 53 | 41 | 34 | 29 | 47 | 38 | 31 | 27 | 31 | 26 | 23 | 24 | 21 | 18 | 18 | 16 | 14 | 12 | | | | |
| 9 | 49 | 38 | 31 | 26 | 44 | 34 | 28 | 24 | 28 | 24 | 20 | 22 | 19 | 17 | 16 | 14 | 13 | 11 | | | | |
| 10 | 46 | 35 | 28 | 23 | 41 | 32 | 26 | 22 | 26 | 21 | 18 | 20 | 17 | 15 | 15 | 13 | 12 | 10 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17103 | 17103 | 17103 |
| 5° | 16889 | 16828 | 16926 |
| 10° | 15956 | 16101 | 16475 |
| 15° | 14730 | 15072 | 15748 |
| 20° | 13376 | 13879 | 14798 |
| 25° | 11998 | 12652 | 13786 |
| 30° | 10727 | 11429 | 12737 |
| 35° | 9381 | 10059 | 11497 |
| 40° | 7896 | 8522 | 9953 |
| 45° | 6516 | 7078 | 8310 |
| 50° | 5440 | 5931 | 6923 |
| 55° | 4618 | 5089 | 5717 |
| 60° | 3947 | 4412 | 4563 |
| 65° | 3144 | 3711 | 2947 |
| 70° | 2787 | 2897 | 1799 |
| 75° | 2581 | 2349 | 1102 |
| 80° | 2375 | 2162 | 951 |
| 85° | 2149 | 1980 | 773 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8310 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 170.0 | 1.8 |
| 10°-20° | 442.2 | 4.6 |
| 20°-30° | 572.8 | 6.0 |
| 30°-40° | 560.9 | 5.9 |
| 40°-50° | 429.4 | 4.5 |
| 50°-60° | 286.1 | 3.0 |
| 60°-70° | 156.1 | 1.6 |
| 70°-80° | 65.0 | 0.7 |
| 80°-90° | 18.4 | 0.2 |
| 90°-100° | 502.4 | 5.3 |
| 100°-110° | 1429.4 | 15.0 |
| 110°-120° | 1369.6 | 14.3 |
| 120°-130° | 1083.9 | 11.4 |
| 130°-140° | 870.0 | 9.1 |
| 140°-150° | 681.1 | 7.1 |
| 150°-160° | 498.4 | 5.2 |
| 160°-170° | 308.7 | 3.2 |
| 170°-180° | 104.8 | 1.1 |
| 0°-30° | 1185.1 | 12.4 |
| 0°-40° | 1746.0 | 18.3 |
| 0°-60° | 2461.5 | 25.8 |
| 0°-90° | 2701.1 | 28.3 |
| 90°-120° | 3301.4 | 34.6 |
| 90°-150° | 5936.5 | 62.2 |
| 90°-180° | 6848.0 | 71.7 |
| 0°-180° | 9549.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1854 | 1854 | 1854 | 1854 | 1854 | |
| 5° | 1824 | 1805 | 1817 | 1821 | 1828 | 170 |
| 15° | 1542 | 1537 | 1578 | 1621 | 1649 | 431 |
| 25° | 1179 | 1182 | 1243 | 1297 | 1354 | 542 |
| 35° | 833 | 837 | 893 | 953 | 1021 | 518 |
| 45° | 499 | 509 | 542 | 584 | 637 | 389 |
| 55° | 287 | 299 | 316 | 328 | 355 | 260 |
| 65° | 144 | 156 | 170 | 148 | 135 | 150 |
| 75° | 72 | 72 | 66 | 45 | 31 | 77 |
| 85° | 20 | 20 | 19 | 12 | 7 | 22 |
| 90° | 0 | 0 | 0 | 0 | 0 | 3 |
| 95° | 54 | 216 | 972 | 337 | 208 | 62 |
| 105° | 222 | 337 | 1457 | 2573 | 2446 | 235 |
| 115° | 413 | 499 | 1105 | 2340 | 2748 | 407 |
| 125° | 583 | 646 | 1054 | 1750 | 2092 | 522 |
| 135° | 713 | 772 | 1042 | 1478 | 1670 | 550 |
| 145° | 840 | 884 | 1050 | 1279 | 1394 | 525 |
| 155° | 960 | 982 | 1075 | 1156 | 1203 | 444 |
| 165° | 1061 | 1065 | 1088 | 1111 | 1128 | 298 |
| 175° | 1111 | 1105 | 1100 | 1094 | 1086 | 105 |
| 180° | 1102 | 1102 | 1102 | 1102 | 1102 | |

TEST NUMBER: P522033

CATALOG NUMBER: SQ4-WB-150U-075D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1853.7 | 1853.7 | 1853.7 | 1853.7 | 1853.7 |
| 2.5° | 1858.2 | 1841.7 | 1845.8 | 1845.7 | 1840.6 |
| 5° | 1823.6 | 1805.3 | 1817.0 | 1821.3 | 1827.6 |
| 7.5° | 1755.9 | 1742.0 | 1763.5 | 1779.4 | 1792.3 |
| 10° | 1703.2 | 1691.2 | 1718.6 | 1741.8 | 1758.5 |
| 12.5° | 1642.0 | 1632.0 | 1665.9 | 1697.0 | 1718.8 |
| 15° | 1542.1 | 1536.6 | 1577.9 | 1620.8 | 1648.7 |
| 17.5° | 1435.3 | 1432.6 | 1480.0 | 1530.1 | 1565.7 |
| 20° | 1362.4 | 1361.6 | 1413.6 | 1465.8 | 1507.2 |
| 22.5° | 1288.9 | 1290.6 | 1345.3 | 1399.6 | 1446.6 |
| 25° | 1178.6 | 1181.7 | 1242.8 | 1297.0 | 1354.2 |
| 27.5° | 1076.6 | 1078.0 | 1141.1 | 1198.3 | 1259.4 |
| 30° | 1006.9 | 1010.9 | 1072.8 | 1132.0 | 1195.6 |
| 32.5° | 937.3 | 941.9 | 1002.5 | 1063.7 | 1128.6 |
| 35° | 832.9 | 836.9 | 893.1 | 953.2 | 1020.8 |
| 37.5° | 725.2 | 730.6 | 780.5 | 837.3 | 903.8 |
| 40° | 655.6 | 663.5 | 707.6 | 761.2 | 826.4 |
| 42.5° | 588.5 | 598.4 | 639.3 | 690.1 | 748.9 |
| 45° | 499.4 | 508.9 | 542.5 | 583.6 | 636.9 |
| 47.5° | 422.6 | 433.6 | 459.4 | 494.7 | 540.2 |
| 50° | 379.0 | 389.4 | 413.2 | 439.4 | 482.3 |
| 52.5° | 340.6 | 351.0 | 372.2 | 392.4 | 429.0 |
| 55° | 287.1 | 299.0 | 316.4 | 328.4 | 355.4 |
| 57.5° | 243.2 | 254.6 | 268.4 | 273.8 | 290.2 |
| 60° | 213.9 | 226.6 | 239.1 | 238.5 | 247.3 |
| 62.5° | 187.2 | 198.1 | 210.5 | 201.9 | 202.4 |
| 65° | 144.0 | 155.9 | 170.0 | 148.5 | 135.0 |
| 67.5° | 116.3 | 118.9 | 133.4 | 103.6 | 87.5 |
| 70° | 103.3 | 103.3 | 107.4 | 80.2 | 66.7 |
| 72.5° | 90.9 | 90.9 | 87.2 | 65.2 | 51.1 |
| 75° | 72.4 | 72.4 | 65.9 | 45.2 | 30.9 |
| 77.5° | 55.8 | 55.2 | 50.4 | 33.7 | 22.4 |
| 80° | 44.7 | 44.7 | 40.7 | 26.6 | 17.9 |
| 82.5° | 35.0 | 35.0 | 31.6 | 20.8 | 13.3 |
| 85° | 20.3 | 20.3 | 18.7 | 12.1 | 7.3 |
| 87.5° | 7.2 | 7.2 | 6.5 | 3.9 | 3.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 16.8 | 88.9 | 206.2 | 60.0 | 45.3 |
| 95° | 54.5 | 216.4 | 972.5 | 336.6 | 207.5 |
| 97.5° | 100.2 | 253.5 | 1497.8 | 1071.8 | 734.4 |
| 100° | 132.0 | 275.5 | 1611.8 | 1632.6 | 1257.6 |
| 102.5° | 167.3 | 299.2 | 1586.6 | 2089.8 | 1762.3 |
| 105° | 222.2 | 336.9 | 1456.7 | 2573.1 | 2446.0 |
| 107.5° | 277.9 | 380.8 | 1305.0 | 2709.3 | 2822.4 |
| 110° | 316.5 | 412.8 | 1217.8 | 2657.2 | 2911.3 |

TEST NUMBER: P522033

CATALOG NUMBER: SQ4-WB-150U-075D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 353.4 | 444.8 | 1159.1 | 2533.9 | 2896.2 |
| 115° | 412.9 | 499.0 | 1104.6 | 2340.0 | 2747.8 |
| 117.5° | 465.3 | 546.1 | 1072.3 | 2128.0 | 2560.0 |
| 120° | 507.2 | 574.9 | 1068.9 | 2006.9 | 2420.8 |
| 122.5° | 540.8 | 608.4 | 1060.6 | 1900.6 | 2285.0 |
| 125° | 582.7 | 646.2 | 1054.3 | 1749.5 | 2091.8 |
| 127.5° | 628.4 | 687.8 | 1050.9 | 1659.3 | 1941.3 |
| 130° | 651.8 | 711.3 | 1045.9 | 1596.4 | 1842.4 |
| 132.5° | 677.0 | 734.8 | 1045.9 | 1547.4 | 1773.6 |
| 135° | 712.6 | 772.1 | 1041.7 | 1477.8 | 1670.5 |
| 137.5° | 746.2 | 804.0 | 1041.3 | 1419.0 | 1585.4 |
| 140° | 771.3 | 830.7 | 1039.6 | 1370.2 | 1530.1 |
| 142.5° | 799.8 | 849.4 | 1044.6 | 1331.3 | 1474.7 |
| 145° | 840.5 | 883.5 | 1050.1 | 1279.1 | 1393.8 |
| 147.5° | 875.3 | 917.1 | 1059.3 | 1226.3 | 1325.5 |
| 150° | 905.5 | 934.2 | 1062.7 | 1208.9 | 1278.5 |
| 152.5° | 928.9 | 959.3 | 1066.0 | 1185.3 | 1250.0 |
| 155° | 960.0 | 982.5 | 1075.2 | 1156.0 | 1203.1 |
| 157.5° | 998.5 | 1012.0 | 1077.3 | 1142.6 | 1176.3 |
| 160° | 1018.6 | 1028.9 | 1085.7 | 1132.5 | 1161.2 |
| 162.5° | 1030.4 | 1042.3 | 1087.4 | 1123.9 | 1146.1 |
| 165° | 1060.6 | 1064.7 | 1087.8 | 1111.2 | 1127.6 |
| 167.5° | 1081.1 | 1077.4 | 1097.4 | 1108.1 | 1114.6 |
| 170° | 1087.8 | 1085.8 | 1094.1 | 1096.4 | 1104.6 |
| 172.5° | 1102.9 | 1095.9 | 1099.1 | 1093.0 | 1099.5 |
| 175° | 1110.9 | 1104.7 | 1100.4 | 1093.9 | 1085.7 |
| 177.5° | 1114.2 | 1104.4 | 1099.1 | 1092.5 | 1094.1 |
| 180° | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 |

(END OF REPORT)