

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
(formerly Eaton)

Brand: CORELITE

Report Number: P519461

Luminaire Tested: **SQ4-WB-125U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519461
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-125U-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

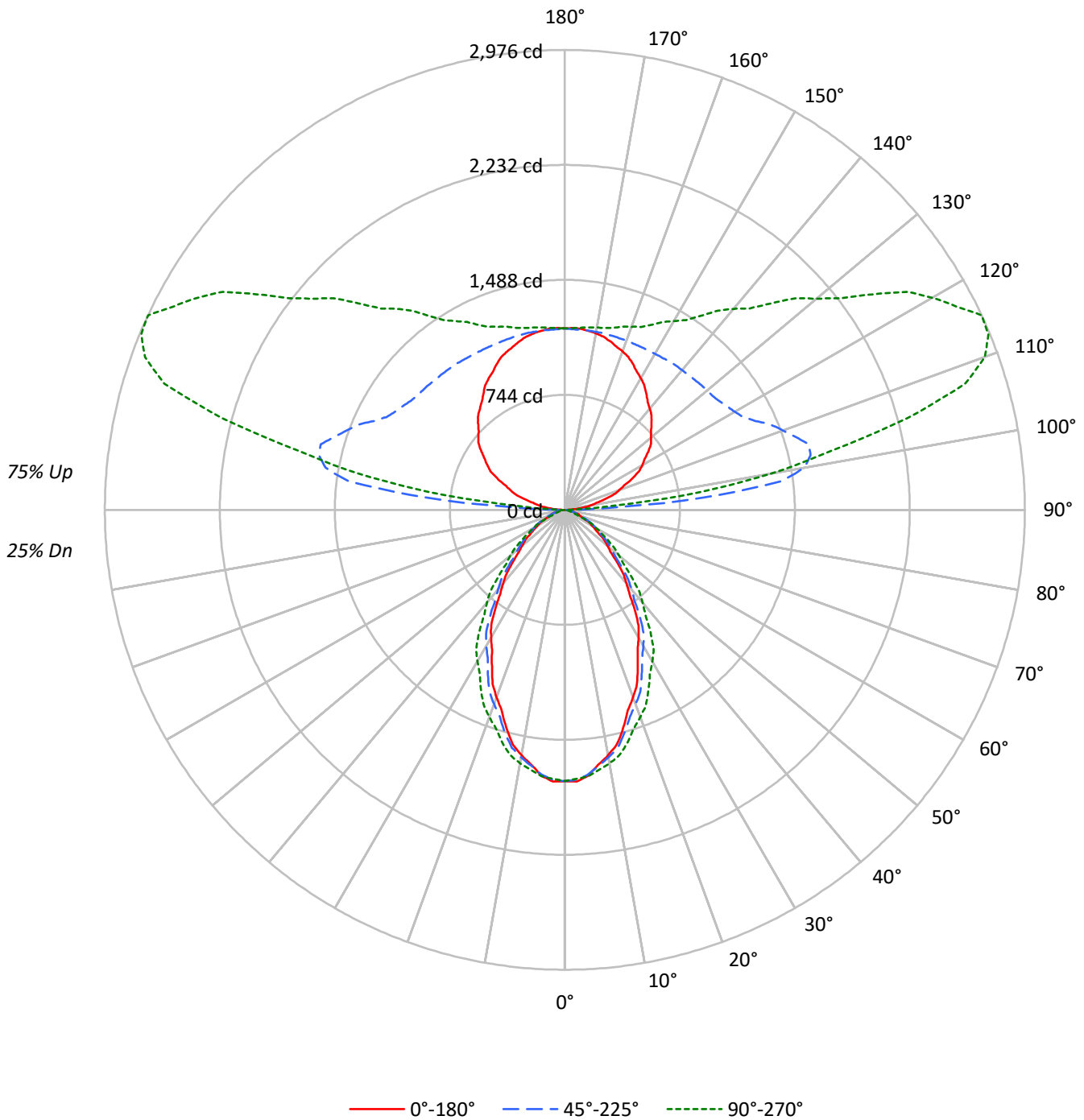
Lumens per Lamp: N/A
Luminaire Lumens: 10135.1 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
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





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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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 70 | 70 | 70 | 51 | 51 | 51 | 33 | 33 | 33 | 25 |
| 1 | 93 | 89 | 85 | 82 | 83 | 79 | 76 | 74 | 62 | 60 | 58 | 45 | 44 | 43 | 30 | 30 | 29 | 22 |
| 2 | 85 | 78 | 73 | 68 | 76 | 70 | 65 | 62 | 55 | 52 | 49 | 41 | 39 | 37 | 27 | 26 | 26 | 20 |
| 3 | 78 | 69 | 63 | 57 | 69 | 62 | 57 | 52 | 49 | 45 | 42 | 36 | 34 | 32 | 25 | 24 | 22 | 17 |
| 4 | 71 | 62 | 54 | 49 | 64 | 55 | 49 | 45 | 44 | 39 | 36 | 33 | 30 | 28 | 23 | 21 | 20 | 16 |
| 5 | 66 | 55 | 48 | 42 | 59 | 50 | 43 | 38 | 39 | 35 | 31 | 30 | 27 | 24 | 21 | 19 | 18 | 14 |
| 6 | 61 | 49 | 42 | 37 | 54 | 45 | 38 | 34 | 36 | 31 | 28 | 27 | 24 | 22 | 19 | 17 | 16 | 13 |
| 7 | 56 | 45 | 37 | 32 | 50 | 40 | 34 | 30 | 32 | 28 | 24 | 25 | 22 | 19 | 17 | 16 | 14 | 11 |
| 8 | 52 | 41 | 33 | 29 | 46 | 37 | 31 | 26 | 30 | 25 | 22 | 23 | 20 | 17 | 16 | 14 | 13 | 10 |
| 9 | 48 | 37 | 30 | 25 | 43 | 34 | 28 | 23 | 27 | 23 | 20 | 21 | 18 | 16 | 15 | 13 | 12 | 10 |
| 10 | 45 | 34 | 27 | 23 | 41 | 31 | 25 | 21 | 25 | 21 | 18 | 19 | 16 | 14 | 14 | 12 | 11 | 9 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10797 | 10797 | 10797 |
| 5° | 10662 | 10624 | 10686 |
| 10° | 10074 | 10165 | 10401 |
| 15° | 9300 | 9515 | 9942 |
| 20° | 8445 | 8763 | 9342 |
| 25° | 7575 | 7987 | 8704 |
| 30° | 6773 | 7216 | 8042 |
| 35° | 5922 | 6350 | 7259 |
| 40° | 4985 | 5380 | 6284 |
| 45° | 4114 | 4469 | 5246 |
| 50° | 3434 | 3744 | 4371 |
| 55° | 2916 | 3213 | 3610 |
| 60° | 2492 | 2786 | 2881 |
| 65° | 1984 | 2343 | 1861 |
| 70° | 1759 | 1829 | 1137 |
| 75° | 1630 | 1483 | 696 |
| 80° | 1502 | 1364 | 599 |
| 85° | 1362 | 1249 | 487 |



TEST NUMBER: P519461

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 161.0 | 1.6 |
| 10°-20° | 418.8 | 4.1 |
| 20°-30° | 542.5 | 5.4 |
| 30°-40° | 531.2 | 5.2 |
| 40°-50° | 406.6 | 4.0 |
| 50°-60° | 270.9 | 2.7 |
| 60°-70° | 147.9 | 1.5 |
| 70°-80° | 61.6 | 0.6 |
| 80°-90° | 20.2 | 0.2 |
| 90°-100° | 548.9 | 5.4 |
| 100°-110° | 1478.5 | 14.6 |
| 110°-120° | 1551.7 | 15.3 |
| 120°-130° | 1259.2 | 12.4 |
| 130°-140° | 987.5 | 9.7 |
| 140°-150° | 758.2 | 7.5 |
| 150°-160° | 545.1 | 5.4 |
| 160°-170° | 333.0 | 3.3 |
| 170°-180° | 112.3 | 1.1 |
| 0°-30° | 1122.3 | 11.1 |
| 0°-40° | 1653.5 | 16.3 |
| 0°-60° | 2331.0 | 23.0 |
| 0°-90° | 2560.7 | 25.3 |
| 90°-120° | 3579.1 | 35.3 |
| 90°-150° | 6584.0 | 65.0 |
| 90°-180° | 7574.0 | 74.7 |
| 0°-180° | 10135.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1755 | 1755 | 1755 | 1755 | 1755 | |
| 5° | 1727 | 1710 | 1721 | 1725 | 1731 | 161 |
| 15° | 1460 | 1455 | 1494 | 1535 | 1561 | 408 |
| 25° | 1116 | 1119 | 1177 | 1228 | 1282 | 513 |
| 35° | 789 | 792 | 846 | 903 | 967 | 490 |
| 45° | 473 | 482 | 514 | 553 | 603 | 369 |
| 55° | 272 | 283 | 300 | 311 | 337 | 247 |
| 65° | 136 | 148 | 161 | 141 | 128 | 142 |
| 75° | 69 | 69 | 62 | 43 | 29 | 73 |
| 85° | 19 | 19 | 18 | 12 | 7 | 21 |
| 90° | 3 | 9 | 18 | 19 | 19 | 7 |
| 95° | 84 | 298 | 900 | 460 | 318 | 87 |
| 105° | 274 | 426 | 1635 | 2446 | 2296 | 288 |
| 115° | 483 | 591 | 1362 | 2631 | 2976 | 475 |
| 125° | 659 | 757 | 1223 | 2066 | 2432 | 589 |
| 135° | 794 | 886 | 1188 | 1667 | 1888 | 613 |
| 145° | 918 | 989 | 1173 | 1425 | 1530 | 576 |
| 155° | 1042 | 1080 | 1163 | 1279 | 1320 | 480 |
| 165° | 1130 | 1143 | 1167 | 1214 | 1220 | 319 |
| 175° | 1175 | 1173 | 1169 | 1185 | 1182 | 112 |
| 180° | 1173 | 1173 | 1173 | 1173 | 1173 | |

TEST NUMBER: P519461

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1755.4 | 1755.4 | 1755.4 | 1755.4 | 1755.4 |
| 2.5° | 1759.7 | 1744.0 | 1748.0 | 1747.9 | 1743.1 |
| 5° | 1726.9 | 1709.6 | 1720.7 | 1724.7 | 1730.8 |
| 7.5° | 1662.8 | 1649.7 | 1670.1 | 1685.1 | 1697.3 |
| 10° | 1612.9 | 1601.6 | 1627.5 | 1649.5 | 1665.3 |
| 12.5° | 1555.0 | 1545.5 | 1577.6 | 1607.1 | 1627.7 |
| 15° | 1460.4 | 1455.1 | 1494.3 | 1534.9 | 1561.3 |
| 17.5° | 1359.2 | 1356.6 | 1401.5 | 1449.0 | 1482.7 |
| 20° | 1290.2 | 1289.4 | 1338.7 | 1388.1 | 1427.3 |
| 22.5° | 1220.5 | 1222.2 | 1274.0 | 1325.4 | 1370.0 |
| 25° | 1116.1 | 1119.1 | 1176.9 | 1228.2 | 1282.5 |
| 27.5° | 1019.5 | 1020.9 | 1080.7 | 1134.8 | 1192.7 |
| 30° | 953.6 | 957.3 | 1016.0 | 1072.0 | 1132.3 |
| 32.5° | 887.6 | 892.0 | 949.4 | 1007.3 | 1068.8 |
| 35° | 788.7 | 792.5 | 845.7 | 902.6 | 966.7 |
| 37.5° | 686.8 | 691.9 | 739.1 | 792.9 | 855.9 |
| 40° | 620.8 | 628.4 | 670.1 | 720.8 | 782.6 |
| 42.5° | 557.4 | 566.7 | 605.4 | 653.5 | 709.2 |
| 45° | 472.9 | 482.0 | 513.8 | 552.6 | 603.1 |
| 47.5° | 400.2 | 410.6 | 435.0 | 468.5 | 511.6 |
| 50° | 358.9 | 368.7 | 391.3 | 416.1 | 456.8 |
| 52.5° | 322.6 | 332.4 | 352.5 | 371.6 | 406.2 |
| 55° | 271.9 | 283.2 | 299.6 | 311.0 | 336.6 |
| 57.5° | 230.3 | 241.1 | 254.2 | 259.3 | 274.8 |
| 60° | 202.6 | 214.6 | 226.5 | 225.9 | 234.2 |
| 62.5° | 177.3 | 187.6 | 199.3 | 191.2 | 191.6 |
| 65° | 136.3 | 147.6 | 161.0 | 140.7 | 127.9 |
| 67.5° | 110.1 | 112.6 | 126.3 | 98.1 | 82.9 |
| 70° | 97.8 | 97.8 | 101.7 | 76.0 | 63.2 |
| 72.5° | 86.1 | 86.1 | 82.6 | 61.8 | 48.4 |
| 75° | 68.6 | 68.6 | 62.4 | 42.8 | 29.3 |
| 77.5° | 52.8 | 52.2 | 47.8 | 32.0 | 21.3 |
| 80° | 42.4 | 42.4 | 38.5 | 25.2 | 16.9 |
| 82.5° | 33.1 | 33.1 | 29.9 | 19.7 | 12.6 |
| 85° | 19.3 | 19.3 | 17.7 | 11.5 | 6.9 |
| 87.5° | 7.4 | 8.5 | 9.7 | 7.6 | 7.0 |
| 90° | 3.0 | 8.8 | 17.9 | 19.4 | 19.4 |
| 92.5° | 36.5 | 128.8 | 254.7 | 122.6 | 85.2 |
| 95° | 83.7 | 298.5 | 899.8 | 460.1 | 318.4 |
| 97.5° | 133.6 | 341.7 | 1411.3 | 1179.0 | 889.0 |
| 100° | 171.9 | 359.0 | 1573.9 | 1646.7 | 1366.1 |
| 102.5° | 209.0 | 383.2 | 1627.7 | 1997.0 | 1766.7 |
| 105° | 273.5 | 425.5 | 1635.2 | 2446.3 | 2295.8 |
| 107.5° | 334.5 | 470.1 | 1565.5 | 2677.2 | 2716.1 |
| 110° | 375.2 | 503.8 | 1502.1 | 2748.9 | 2890.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 418.2 | 537.5 | 1441.2 | 2733.1 | 2966.0 |
| 115° | 482.8 | 590.9 | 1361.6 | 2631.0 | 2975.9 |
| 117.5° | 541.7 | 643.1 | 1300.1 | 2468.1 | 2852.1 |
| 120° | 579.9 | 677.8 | 1269.0 | 2351.1 | 2745.7 |
| 122.5° | 613.4 | 710.2 | 1246.3 | 2231.5 | 2624.9 |
| 125° | 659.1 | 757.1 | 1222.6 | 2066.5 | 2431.8 |
| 127.5° | 703.1 | 799.5 | 1207.7 | 1920.9 | 2247.1 |
| 130° | 729.4 | 825.9 | 1201.7 | 1837.5 | 2123.9 |
| 132.5° | 755.7 | 851.0 | 1195.7 | 1764.0 | 2027.1 |
| 135° | 793.7 | 885.7 | 1188.3 | 1667.1 | 1887.8 |
| 137.5° | 829.8 | 918.1 | 1184.4 | 1584.9 | 1766.1 |
| 140° | 855.0 | 939.7 | 1180.8 | 1534.3 | 1697.9 |
| 142.5° | 881.3 | 960.2 | 1178.4 | 1487.0 | 1625.0 |
| 145° | 917.7 | 989.3 | 1173.3 | 1425.3 | 1530.5 |
| 147.5° | 957.2 | 1019.4 | 1168.2 | 1373.4 | 1456.1 |
| 150° | 983.5 | 1037.6 | 1165.8 | 1340.8 | 1409.5 |
| 152.5° | 1007.4 | 1054.5 | 1164.6 | 1314.2 | 1370.0 |
| 155° | 1041.8 | 1079.8 | 1162.9 | 1278.9 | 1319.8 |
| 157.5° | 1072.0 | 1101.5 | 1163.2 | 1254.1 | 1281.5 |
| 160° | 1091.1 | 1116.0 | 1164.3 | 1239.5 | 1260.0 |
| 162.5° | 1107.8 | 1128.0 | 1165.5 | 1227.5 | 1242.1 |
| 165° | 1130.0 | 1143.1 | 1167.3 | 1213.8 | 1219.7 |
| 167.5° | 1147.9 | 1155.5 | 1168.8 | 1203.3 | 1205.6 |
| 170° | 1159.9 | 1162.8 | 1168.8 | 1197.2 | 1197.2 |
| 172.5° | 1167.0 | 1167.6 | 1170.0 | 1191.3 | 1191.3 |
| 175° | 1174.8 | 1173.3 | 1168.8 | 1185.2 | 1182.3 |
| 177.5° | 1178.1 | 1175.8 | 1169.7 | 1179.2 | 1176.9 |
| 180° | 1173.3 | 1173.3 | 1173.3 | 1173.3 | 1173.3 |

(END OF REPORT)