

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: P519457

Luminaire Tested: **SQ4-WB-125U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519457
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

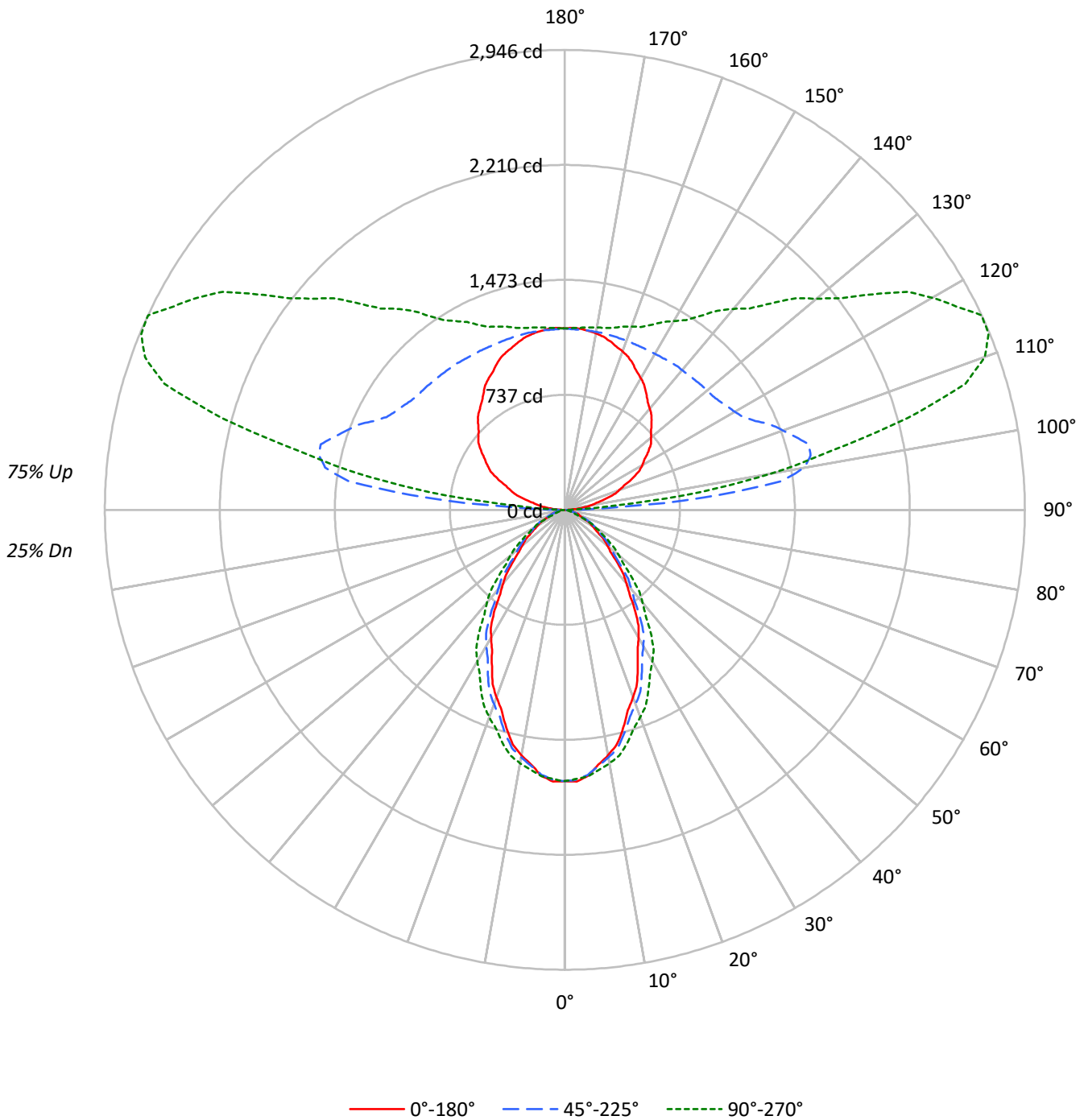
Lumens per Lamp: N/A
Luminaire Lumens: 10034.2 lumens
Efficiency: N/A
Efficacy: 135.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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° | 10689 | 10689 | 10689 |
| 5° | 10556 | 10519 | 10580 |
| 10° | 9973 | 10064 | 10297 |
| 15° | 9207 | 9420 | 9843 |
| 20° | 8361 | 8675 | 9250 |
| 25° | 7499 | 7908 | 8617 |
| 30° | 6705 | 7144 | 7962 |
| 35° | 5864 | 6287 | 7186 |
| 40° | 4935 | 5327 | 6221 |
| 45° | 4073 | 4424 | 5194 |
| 50° | 3401 | 3707 | 4327 |
| 55° | 2887 | 3181 | 3573 |
| 60° | 2468 | 2758 | 2852 |
| 65° | 1965 | 2320 | 1843 |
| 70° | 1741 | 1811 | 1124 |
| 75° | 1614 | 1469 | 689 |
| 80° | 1484 | 1350 | 595 |
| 85° | 1348 | 1235 | 487 |



TEST NUMBER: P519457

CATALOG NUMBER: SQ4-WB-125U-050D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 159.4 | 1.6 |
| 10°-20° | 414.6 | 4.1 |
| 20°-30° | 537.1 | 5.4 |
| 30°-40° | 525.9 | 5.2 |
| 40°-50° | 402.6 | 4.0 |
| 50°-60° | 268.3 | 2.7 |
| 60°-70° | 146.4 | 1.5 |
| 70°-80° | 61.0 | 0.6 |
| 80°-90° | 20.0 | 0.2 |
| 90°-100° | 543.4 | 5.4 |
| 100°-110° | 1463.8 | 14.6 |
| 110°-120° | 1536.2 | 15.3 |
| 120°-130° | 1246.6 | 12.4 |
| 130°-140° | 977.7 | 9.7 |
| 140°-150° | 750.6 | 7.5 |
| 150°-160° | 539.7 | 5.4 |
| 160°-170° | 329.7 | 3.3 |
| 170°-180° | 111.2 | 1.1 |
| 0°-30° | 1111.1 | 11.1 |
| 0°-40° | 1637.0 | 16.3 |
| 0°-60° | 2307.8 | 23.0 |
| 0°-90° | 2535.2 | 25.3 |
| 90°-120° | 3543.5 | 35.3 |
| 90°-150° | 6518.4 | 65.0 |
| 90°-180° | 7499.0 | 74.7 |
| 0°-180° | 10034.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1738 | 1738 | 1738 | 1738 | 1738 | |
| 5° | 1710 | 1692 | 1704 | 1708 | 1714 | 159 |
| 15° | 1446 | 1441 | 1479 | 1520 | 1546 | 404 |
| 25° | 1105 | 1108 | 1165 | 1216 | 1270 | 508 |
| 35° | 781 | 785 | 837 | 894 | 957 | 485 |
| 45° | 468 | 477 | 509 | 547 | 597 | 365 |
| 55° | 269 | 280 | 297 | 308 | 333 | 244 |
| 65° | 135 | 146 | 159 | 139 | 127 | 140 |
| 75° | 68 | 68 | 62 | 42 | 29 | 72 |
| 85° | 19 | 19 | 18 | 11 | 7 | 21 |
| 90° | 3 | 9 | 18 | 19 | 19 | 7 |
| 95° | 83 | 296 | 891 | 456 | 315 | 87 |
| 105° | 271 | 421 | 1619 | 2422 | 2273 | 285 |
| 115° | 478 | 585 | 1348 | 2605 | 2946 | 470 |
| 125° | 653 | 750 | 1210 | 2046 | 2408 | 583 |
| 135° | 786 | 877 | 1176 | 1650 | 1869 | 607 |
| 145° | 909 | 980 | 1162 | 1411 | 1515 | 570 |
| 155° | 1031 | 1069 | 1151 | 1266 | 1307 | 475 |
| 165° | 1119 | 1132 | 1156 | 1202 | 1208 | 315 |
| 175° | 1163 | 1162 | 1157 | 1173 | 1170 | 110 |
| 180° | 1162 | 1162 | 1162 | 1162 | 1162 | |

TEST NUMBER: P519457

CATALOG NUMBER: SQ4-WB-125U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1737.9 | 1737.9 | 1737.9 | 1737.9 | 1737.9 |
| 2.5° | 1742.2 | 1726.7 | 1730.6 | 1730.5 | 1725.7 |
| 5° | 1709.7 | 1692.5 | 1703.6 | 1707.5 | 1713.5 |
| 7.5° | 1646.2 | 1633.3 | 1653.4 | 1668.3 | 1680.4 |
| 10° | 1596.8 | 1585.6 | 1611.3 | 1633.0 | 1648.7 |
| 12.5° | 1539.5 | 1530.1 | 1561.9 | 1591.0 | 1611.5 |
| 15° | 1445.8 | 1440.6 | 1479.4 | 1519.6 | 1545.7 |
| 17.5° | 1345.6 | 1343.1 | 1387.6 | 1434.6 | 1468.0 |
| 20° | 1277.3 | 1276.6 | 1325.4 | 1374.3 | 1413.1 |
| 22.5° | 1208.4 | 1210.0 | 1261.3 | 1312.2 | 1356.3 |
| 25° | 1105.0 | 1108.0 | 1165.2 | 1216.0 | 1269.7 |
| 27.5° | 1009.3 | 1010.7 | 1069.9 | 1123.5 | 1180.8 |
| 30° | 944.1 | 947.8 | 1005.8 | 1061.3 | 1121.0 |
| 32.5° | 878.8 | 883.1 | 940.0 | 997.3 | 1058.2 |
| 35° | 780.9 | 784.6 | 837.3 | 893.7 | 957.0 |
| 37.5° | 679.9 | 685.0 | 731.8 | 785.0 | 847.4 |
| 40° | 614.6 | 622.1 | 663.4 | 713.6 | 774.8 |
| 42.5° | 551.8 | 561.0 | 599.4 | 647.0 | 702.2 |
| 45° | 468.2 | 477.2 | 508.6 | 547.1 | 597.1 |
| 47.5° | 396.2 | 406.5 | 430.7 | 463.9 | 506.5 |
| 50° | 355.4 | 365.1 | 387.4 | 411.9 | 452.2 |
| 52.5° | 319.4 | 329.1 | 349.0 | 367.9 | 402.2 |
| 55° | 269.2 | 280.4 | 296.6 | 307.9 | 333.2 |
| 57.5° | 228.0 | 238.7 | 251.7 | 256.7 | 272.1 |
| 60° | 200.6 | 212.5 | 224.2 | 223.6 | 231.8 |
| 62.5° | 175.5 | 185.7 | 197.4 | 189.3 | 189.7 |
| 65° | 135.0 | 146.2 | 159.4 | 139.3 | 126.6 |
| 67.5° | 109.0 | 111.4 | 125.1 | 97.1 | 82.1 |
| 70° | 96.8 | 96.8 | 100.7 | 75.2 | 62.5 |
| 72.5° | 85.3 | 85.3 | 81.7 | 61.2 | 47.9 |
| 75° | 67.9 | 67.9 | 61.8 | 42.4 | 29.0 |
| 77.5° | 52.3 | 51.7 | 47.3 | 31.6 | 21.0 |
| 80° | 41.9 | 41.9 | 38.1 | 25.0 | 16.8 |
| 82.5° | 32.8 | 32.8 | 29.6 | 19.5 | 12.5 |
| 85° | 19.1 | 19.1 | 17.5 | 11.3 | 6.9 |
| 87.5° | 7.3 | 8.5 | 9.7 | 7.5 | 6.9 |
| 90° | 3.0 | 8.7 | 17.8 | 19.2 | 19.2 |
| 92.5° | 36.1 | 127.6 | 252.2 | 121.4 | 84.3 |
| 95° | 82.9 | 295.6 | 890.8 | 455.5 | 315.2 |
| 97.5° | 132.3 | 338.3 | 1397.2 | 1167.2 | 880.2 |
| 100° | 170.2 | 355.4 | 1558.2 | 1630.3 | 1352.5 |
| 102.5° | 206.9 | 379.3 | 1611.5 | 1977.1 | 1749.1 |
| 105° | 270.8 | 421.3 | 1618.9 | 2422.0 | 2272.9 |
| 107.5° | 331.2 | 465.4 | 1549.9 | 2650.6 | 2689.1 |
| 110° | 371.4 | 498.8 | 1487.2 | 2721.5 | 2861.9 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 414.0 | 532.1 | 1426.8 | 2705.8 | 2936.5 |
| 115° | 478.0 | 585.0 | 1348.1 | 2604.8 | 2946.2 |
| 117.5° | 536.3 | 636.7 | 1287.1 | 2443.5 | 2823.7 |
| 120° | 574.2 | 671.1 | 1256.3 | 2327.7 | 2718.4 |
| 122.5° | 607.3 | 703.1 | 1233.8 | 2209.3 | 2598.8 |
| 125° | 652.6 | 749.5 | 1210.5 | 2045.9 | 2407.6 |
| 127.5° | 696.1 | 791.6 | 1195.7 | 1901.8 | 2224.7 |
| 130° | 722.1 | 817.6 | 1189.7 | 1819.2 | 2102.8 |
| 132.5° | 748.2 | 842.5 | 1183.8 | 1746.4 | 2006.9 |
| 135° | 785.8 | 876.9 | 1176.4 | 1650.5 | 1869.0 |
| 137.5° | 821.6 | 909.0 | 1172.6 | 1569.1 | 1748.5 |
| 140° | 846.4 | 930.4 | 1169.0 | 1519.0 | 1681.0 |
| 142.5° | 872.5 | 950.6 | 1166.7 | 1472.2 | 1608.8 |
| 145° | 908.6 | 979.5 | 1161.6 | 1411.1 | 1515.3 |
| 147.5° | 947.7 | 1009.3 | 1156.6 | 1359.7 | 1441.6 |
| 150° | 973.7 | 1027.2 | 1154.2 | 1327.4 | 1395.4 |
| 152.5° | 997.4 | 1044.0 | 1153.0 | 1301.1 | 1356.4 |
| 155° | 1031.4 | 1069.0 | 1151.3 | 1266.1 | 1306.6 |
| 157.5° | 1061.3 | 1090.5 | 1151.6 | 1241.6 | 1268.8 |
| 160° | 1080.2 | 1104.8 | 1152.7 | 1227.2 | 1247.5 |
| 162.5° | 1096.8 | 1116.8 | 1153.9 | 1215.2 | 1229.7 |
| 165° | 1118.7 | 1131.7 | 1155.7 | 1201.7 | 1207.5 |
| 167.5° | 1136.5 | 1144.0 | 1157.2 | 1191.3 | 1193.6 |
| 170° | 1148.3 | 1151.2 | 1157.2 | 1185.3 | 1185.3 |
| 172.5° | 1155.4 | 1156.0 | 1158.4 | 1179.4 | 1179.4 |
| 175° | 1163.1 | 1161.7 | 1157.2 | 1173.4 | 1170.5 |
| 177.5° | 1166.4 | 1164.0 | 1158.1 | 1167.5 | 1165.2 |
| 180° | 1161.6 | 1161.6 | 1161.6 | 1161.6 | 1161.6 |

(END OF REPORT)