

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: P519569

Luminaire Tested: **SQ4-WB-150U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519569
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

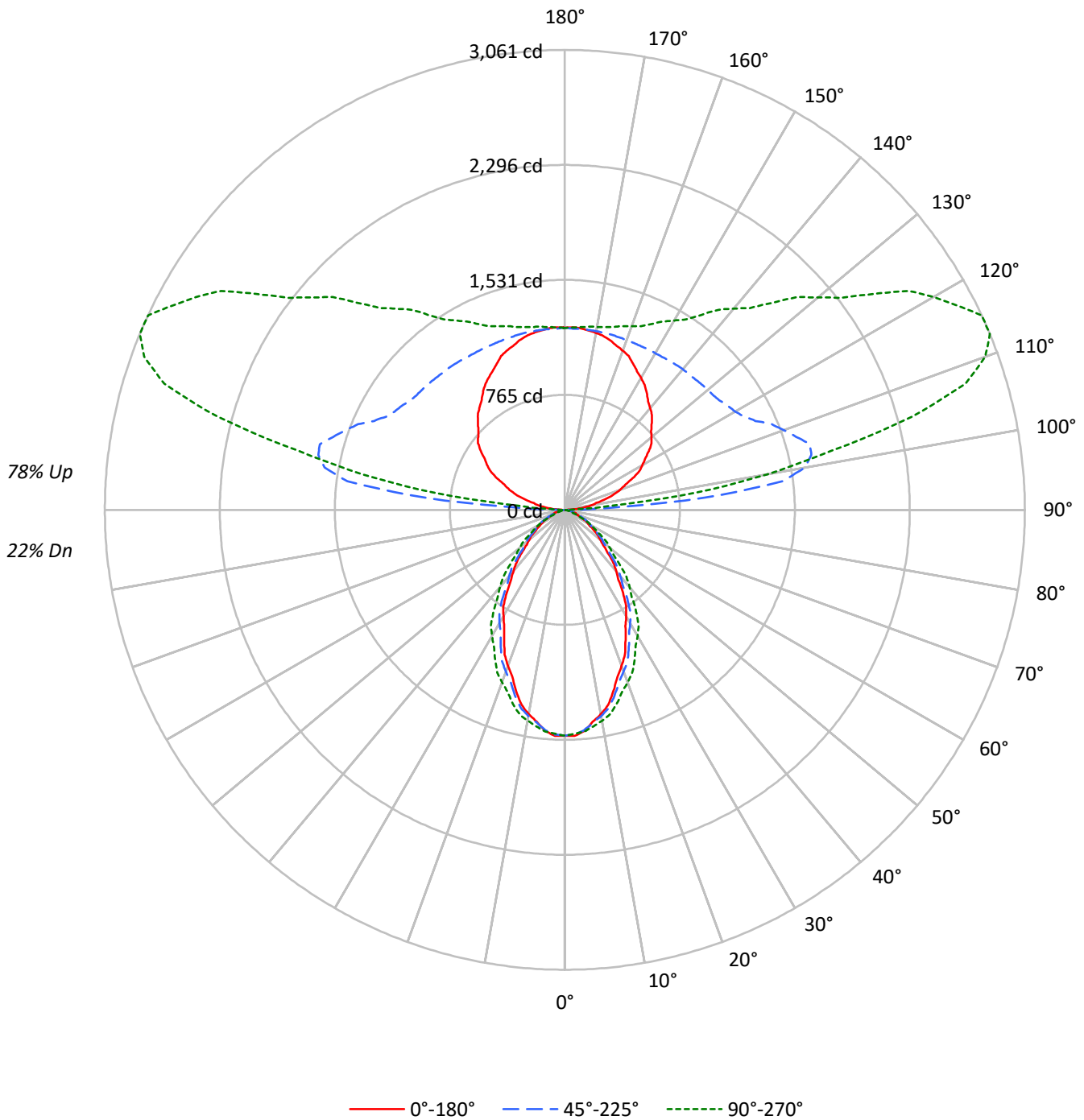
Lumens per Lamp: N/A
Luminaire Lumens: 10003.2 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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 | 100 | 100 | 100 | 100 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 48 | 48 | 48 | 30 | 30 | 30 | 22 |
| 1 | 92 | 88 | 84 | 81 | 81 | 78 | 75 | 73 | 60 | 58 | 56 | 43 | 42 | 41 | 27 | 27 | 26 | 19 |
| 2 | 84 | 77 | 72 | 67 | 74 | 69 | 64 | 60 | 53 | 50 | 47 | 38 | 37 | 35 | 25 | 24 | 23 | 17 |
| 3 | 77 | 68 | 62 | 56 | 68 | 61 | 56 | 51 | 47 | 43 | 40 | 34 | 32 | 30 | 22 | 21 | 20 | 15 |
| 4 | 71 | 61 | 54 | 48 | 63 | 54 | 48 | 44 | 42 | 38 | 35 | 31 | 28 | 26 | 20 | 19 | 18 | 13 |
| 5 | 65 | 54 | 47 | 41 | 57 | 49 | 42 | 38 | 38 | 34 | 30 | 28 | 25 | 23 | 19 | 17 | 16 | 12 |
| 6 | 60 | 49 | 41 | 36 | 53 | 44 | 37 | 33 | 34 | 30 | 26 | 25 | 23 | 20 | 17 | 16 | 14 | 11 |
| 7 | 55 | 44 | 37 | 32 | 49 | 40 | 33 | 29 | 31 | 27 | 23 | 23 | 20 | 18 | 16 | 14 | 13 | 10 |
| 8 | 51 | 40 | 33 | 28 | 46 | 36 | 30 | 25 | 28 | 24 | 21 | 21 | 18 | 16 | 15 | 13 | 12 | 9 |
| 9 | 48 | 36 | 29 | 25 | 42 | 33 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 15 | 14 | 12 | 11 | 8 |
| 10 | 45 | 33 | 27 | 22 | 40 | 30 | 24 | 20 | 24 | 20 | 17 | 18 | 15 | 13 | 13 | 11 | 10 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9241 | 9241 | 9241 |
| 5° | 9126 | 9093 | 9146 |
| 10° | 8622 | 8700 | 8902 |
| 15° | 7959 | 8144 | 8509 |
| 20° | 7228 | 7499 | 7996 |
| 25° | 6483 | 6836 | 7449 |
| 30° | 5796 | 6175 | 6883 |
| 35° | 5069 | 5435 | 6212 |
| 40° | 4266 | 4605 | 5378 |
| 45° | 3521 | 3825 | 4490 |
| 50° | 2940 | 3205 | 3741 |
| 55° | 2495 | 2750 | 3089 |
| 60° | 2133 | 2384 | 2465 |
| 65° | 1698 | 2006 | 1592 |
| 70° | 1505 | 1565 | 973 |
| 75° | 1395 | 1269 | 596 |
| 80° | 1286 | 1169 | 514 |
| 85° | 1164 | 1073 | 416 |



TEST NUMBER: P519569

CATALOG NUMBER: SQ4-WB-150U-050D-940-1D-UNV-STD-W-6

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 137.8 | 1.4 |
| 10°-20° | 358.4 | 3.6 |
| 20°-30° | 464.3 | 4.6 |
| 30°-40° | 454.6 | 4.5 |
| 40°-50° | 348.0 | 3.5 |
| 50°-60° | 231.9 | 2.3 |
| 60°-70° | 126.5 | 1.3 |
| 70°-80° | 52.7 | 0.5 |
| 80°-90° | 17.5 | 0.2 |
| 90°-100° | 563.1 | 5.6 |
| 100°-110° | 1522.4 | 15.2 |
| 110°-120° | 1600.6 | 16.0 |
| 120°-130° | 1300.1 | 13.0 |
| 130°-140° | 1019.8 | 10.2 |
| 140°-150° | 782.7 | 7.8 |
| 150°-160° | 562.9 | 5.6 |
| 160°-170° | 343.9 | 3.4 |
| 170°-180° | 115.9 | 1.2 |
| 0°-30° | 960.5 | 9.6 |
| 0°-40° | 1415.2 | 14.1 |
| 0°-60° | 1995.1 | 19.9 |
| 0°-90° | 2191.8 | 21.9 |
| 90°-120° | 3686.0 | 36.8 |
| 90°-150° | 6788.7 | 67.9 |
| 90°-180° | 7811.0 | 78.1 |
| 0°-180° | 10003.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1502 | 1502 | 1502 | 1502 | 1502 | |
| 5° | 1478 | 1463 | 1473 | 1476 | 1481 | 137 |
| 15° | 1250 | 1245 | 1279 | 1314 | 1336 | 349 |
| 25° | 955 | 958 | 1007 | 1051 | 1098 | 439 |
| 35° | 675 | 678 | 724 | 772 | 827 | 420 |
| 45° | 405 | 412 | 440 | 473 | 516 | 316 |
| 55° | 233 | 242 | 256 | 266 | 288 | 211 |
| 65° | 117 | 126 | 138 | 120 | 109 | 121 |
| 75° | 59 | 59 | 53 | 37 | 25 | 63 |
| 85° | 16 | 16 | 15 | 10 | 6 | 18 |
| 90° | 3 | 8 | 17 | 18 | 17 | 7 |
| 95° | 87 | 307 | 936 | 485 | 288 | 91 |
| 105° | 283 | 437 | 1689 | 2491 | 2389 | 298 |
| 115° | 498 | 609 | 1401 | 2712 | 3061 | 492 |
| 125° | 682 | 782 | 1262 | 2130 | 2503 | 608 |
| 135° | 818 | 915 | 1228 | 1720 | 1947 | 632 |
| 145° | 951 | 1022 | 1212 | 1472 | 1585 | 595 |
| 155° | 1073 | 1115 | 1201 | 1321 | 1364 | 495 |
| 165° | 1168 | 1180 | 1206 | 1253 | 1260 | 329 |
| 175° | 1213 | 1212 | 1208 | 1223 | 1221 | 115 |
| 180° | 1212 | 1212 | 1212 | 1212 | 1212 | |



TEST NUMBER: P519569

CATALOG NUMBER: SQ4-WB-150U-050D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1502.4 | 1502.4 | 1502.4 | 1502.4 | 1502.4 |
| 2.5° | 1506.1 | 1492.7 | 1496.1 | 1496.0 | 1491.8 |
| 5° | 1478.0 | 1463.2 | 1472.7 | 1476.1 | 1481.3 |
| 7.5° | 1423.2 | 1411.9 | 1429.3 | 1442.2 | 1452.7 |
| 10° | 1380.4 | 1370.8 | 1393.0 | 1411.7 | 1425.3 |
| 12.5° | 1330.9 | 1322.7 | 1350.2 | 1375.4 | 1393.1 |
| 15° | 1249.9 | 1245.4 | 1278.9 | 1313.7 | 1336.3 |
| 17.5° | 1163.3 | 1161.1 | 1199.5 | 1240.1 | 1269.0 |
| 20° | 1104.2 | 1103.6 | 1145.7 | 1188.0 | 1221.6 |
| 22.5° | 1044.6 | 1046.0 | 1090.4 | 1134.4 | 1172.5 |
| 25° | 955.2 | 957.8 | 1007.3 | 1051.2 | 1097.6 |
| 27.5° | 872.6 | 873.7 | 924.9 | 971.3 | 1020.8 |
| 30° | 816.1 | 819.4 | 869.5 | 917.5 | 969.1 |
| 32.5° | 759.7 | 763.4 | 812.6 | 862.2 | 914.8 |
| 35° | 675.1 | 678.3 | 723.8 | 772.5 | 827.3 |
| 37.5° | 587.8 | 592.2 | 632.6 | 678.7 | 732.5 |
| 40° | 531.3 | 537.8 | 573.5 | 616.9 | 669.8 |
| 42.5° | 477.0 | 485.0 | 518.2 | 559.3 | 607.0 |
| 45° | 404.8 | 412.5 | 439.7 | 473.0 | 516.2 |
| 47.5° | 342.5 | 351.4 | 372.3 | 401.0 | 437.9 |
| 50° | 307.2 | 315.6 | 334.9 | 356.1 | 390.9 |
| 52.5° | 276.1 | 284.5 | 301.7 | 318.0 | 347.7 |
| 55° | 232.7 | 242.4 | 256.4 | 266.2 | 288.1 |
| 57.5° | 197.1 | 206.4 | 217.5 | 221.9 | 235.2 |
| 60° | 173.4 | 183.7 | 193.8 | 193.3 | 200.4 |
| 62.5° | 151.8 | 160.5 | 170.6 | 163.6 | 164.0 |
| 65° | 116.7 | 126.4 | 137.8 | 120.4 | 109.4 |
| 67.5° | 94.3 | 96.3 | 108.1 | 84.0 | 70.9 |
| 70° | 83.7 | 83.7 | 87.0 | 65.0 | 54.1 |
| 72.5° | 73.7 | 73.7 | 70.7 | 52.9 | 41.4 |
| 75° | 58.7 | 58.7 | 53.4 | 36.7 | 25.1 |
| 77.5° | 45.2 | 44.7 | 40.9 | 27.3 | 18.2 |
| 80° | 36.3 | 36.3 | 33.0 | 21.6 | 14.5 |
| 82.5° | 28.3 | 28.3 | 25.6 | 16.9 | 10.8 |
| 85° | 16.5 | 16.5 | 15.2 | 9.8 | 5.9 |
| 87.5° | 6.3 | 7.3 | 8.7 | 6.8 | 6.0 |
| 90° | 2.6 | 7.7 | 17.0 | 18.2 | 17.0 |
| 92.5° | 37.0 | 135.0 | 266.3 | 115.6 | 83.7 |
| 95° | 87.4 | 306.7 | 936.4 | 484.6 | 288.2 |
| 97.5° | 140.3 | 351.8 | 1459.6 | 1207.9 | 887.1 |
| 100° | 180.0 | 370.0 | 1622.4 | 1692.0 | 1368.1 |
| 102.5° | 216.5 | 395.3 | 1679.8 | 2059.0 | 1816.7 |
| 105° | 283.0 | 437.3 | 1688.9 | 2491.2 | 2389.2 |
| 107.5° | 344.6 | 485.3 | 1615.1 | 2760.9 | 2794.8 |
| 110° | 392.6 | 520.1 | 1549.3 | 2833.3 | 2977.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 435.3 | 554.7 | 1488.8 | 2818.8 | 3060.9 |
| 115° | 498.2 | 609.1 | 1400.7 | 2711.5 | 3060.9 |
| 117.5° | 559.7 | 663.8 | 1342.5 | 2547.4 | 2943.5 |
| 120° | 597.3 | 699.3 | 1308.1 | 2429.7 | 2833.9 |
| 122.5° | 632.8 | 732.8 | 1287.2 | 2303.5 | 2710.8 |
| 125° | 682.1 | 781.5 | 1262.4 | 2130.3 | 2502.7 |
| 127.5° | 727.5 | 825.1 | 1247.8 | 1989.0 | 2316.4 |
| 130° | 752.5 | 853.2 | 1241.6 | 1901.7 | 2197.5 |
| 132.5° | 778.6 | 878.3 | 1235.3 | 1822.9 | 2095.3 |
| 135° | 817.7 | 914.6 | 1228.5 | 1720.1 | 1947.1 |
| 137.5° | 857.1 | 948.6 | 1222.8 | 1636.7 | 1821.6 |
| 140° | 884.2 | 969.7 | 1220.7 | 1583.1 | 1747.6 |
| 142.5° | 910.3 | 990.6 | 1216.5 | 1534.6 | 1678.7 |
| 145° | 950.7 | 1022.1 | 1211.6 | 1472.3 | 1584.6 |
| 147.5° | 987.5 | 1050.8 | 1205.8 | 1415.9 | 1502.1 |
| 150° | 1014.6 | 1070.7 | 1203.7 | 1385.3 | 1454.1 |
| 152.5° | 1039.7 | 1088.6 | 1202.7 | 1356.8 | 1413.4 |
| 155° | 1073.3 | 1115.4 | 1201.1 | 1320.8 | 1364.1 |
| 157.5° | 1108.3 | 1137.6 | 1201.4 | 1295.7 | 1324.2 |
| 160° | 1128.1 | 1152.3 | 1202.4 | 1279.8 | 1300.2 |
| 162.5° | 1143.7 | 1163.9 | 1203.5 | 1267.2 | 1282.5 |
| 165° | 1168.5 | 1180.0 | 1206.3 | 1253.4 | 1259.8 |
| 167.5° | 1185.5 | 1193.4 | 1206.6 | 1241.6 | 1244.7 |
| 170° | 1195.9 | 1199.7 | 1207.6 | 1236.3 | 1236.3 |
| 172.5° | 1204.3 | 1205.0 | 1207.6 | 1230.1 | 1229.0 |
| 175° | 1212.9 | 1211.6 | 1207.6 | 1223.2 | 1220.7 |
| 177.5° | 1215.7 | 1212.7 | 1207.4 | 1217.8 | 1214.7 |
| 180° | 1211.6 | 1211.6 | 1211.6 | 1211.6 | 1211.6 |

(END OF REPORT)