

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: P519546

Luminaire Tested: **SQ4-WB-125U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519546
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-125D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

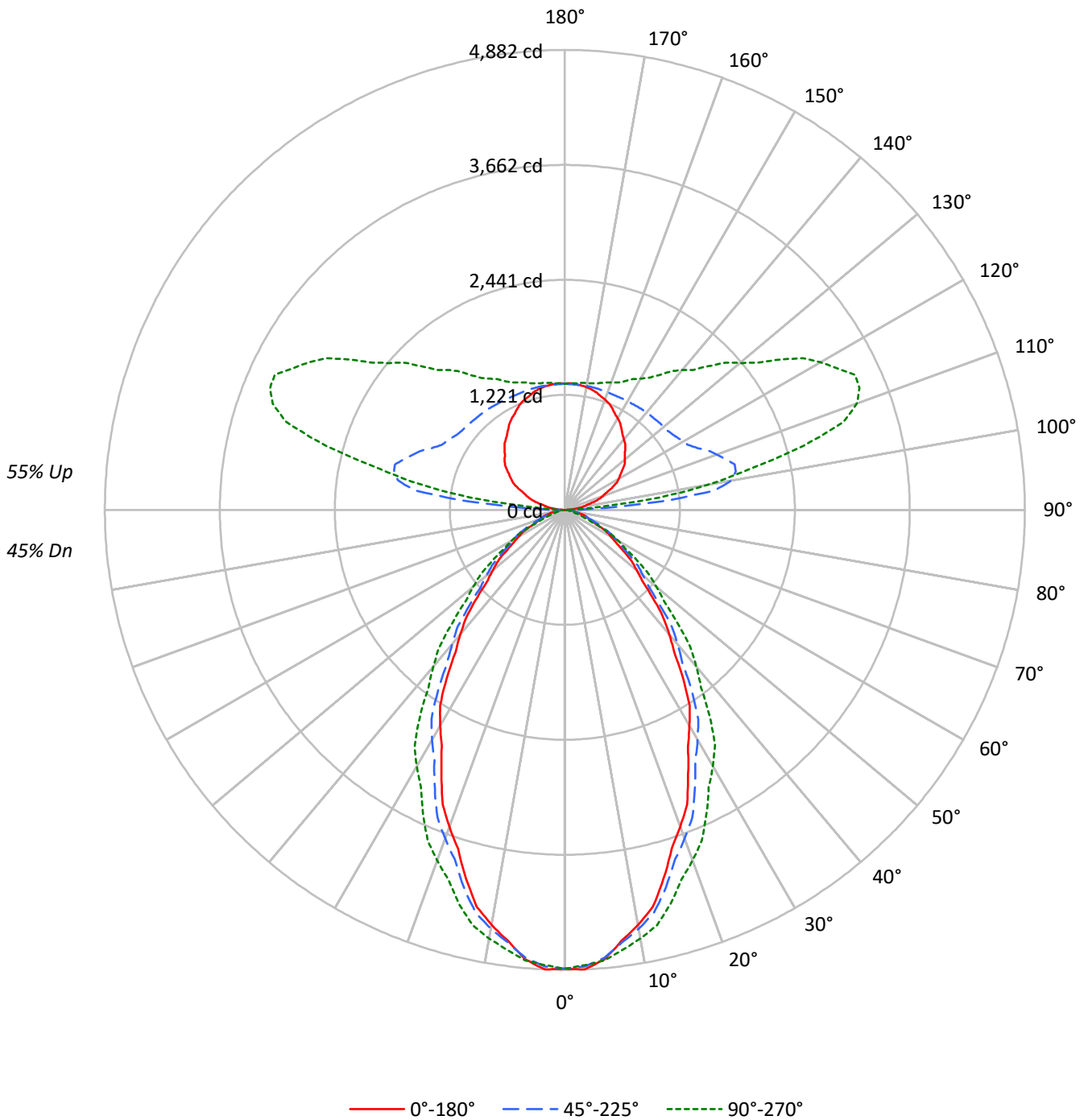
Lumens per Lamp: N/A
Luminaire Lumens: 15744.1 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 152.7
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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 81 | 81 | 81 | 65 | 65 | 65 | 52 | 52 | 52 | 45 |
| 1 | 98 | 94 | 90 | 87 | 90 | 86 | 83 | 81 | 72 | 70 | 68 | 59 | 58 | 57 | 47 | 46 | 46 | 40 |
| 2 | 90 | 83 | 78 | 73 | 82 | 77 | 72 | 68 | 64 | 61 | 58 | 53 | 51 | 49 | 43 | 41 | 40 | 35 |
| 3 | 83 | 74 | 67 | 62 | 76 | 68 | 63 | 58 | 58 | 54 | 50 | 48 | 45 | 43 | 39 | 37 | 35 | 31 |
| 4 | 76 | 66 | 59 | 54 | 70 | 61 | 55 | 50 | 52 | 47 | 44 | 44 | 40 | 38 | 36 | 33 | 31 | 28 |
| 5 | 70 | 60 | 52 | 47 | 65 | 55 | 49 | 44 | 47 | 42 | 39 | 40 | 36 | 33 | 33 | 30 | 28 | 25 |
| 6 | 65 | 54 | 46 | 41 | 60 | 50 | 44 | 39 | 43 | 38 | 34 | 36 | 33 | 30 | 30 | 27 | 25 | 23 |
| 7 | 61 | 49 | 42 | 36 | 56 | 46 | 39 | 34 | 39 | 34 | 31 | 33 | 30 | 27 | 28 | 25 | 23 | 20 |
| 8 | 56 | 45 | 38 | 33 | 52 | 42 | 35 | 31 | 36 | 31 | 28 | 31 | 27 | 24 | 26 | 23 | 21 | 19 |
| 9 | 53 | 41 | 34 | 29 | 49 | 39 | 32 | 28 | 33 | 28 | 25 | 29 | 25 | 22 | 24 | 21 | 19 | 17 |
| 10 | 49 | 38 | 31 | 27 | 46 | 36 | 29 | 25 | 31 | 26 | 23 | 27 | 23 | 20 | 22 | 20 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22469 | 22469 | 22469 |
| 5° | 22188 | 22109 | 22238 |
| 10° | 20963 | 21153 | 21644 |
| 15° | 19352 | 19801 | 20689 |
| 20° | 17573 | 18235 | 19441 |
| 25° | 15762 | 16622 | 18112 |
| 30° | 14094 | 15016 | 16735 |
| 35° | 12324 | 13215 | 15104 |
| 40° | 10373 | 11197 | 13076 |
| 45° | 8561 | 9300 | 10917 |
| 50° | 7147 | 7792 | 9095 |
| 55° | 6067 | 6687 | 7511 |
| 60° | 5186 | 5797 | 5994 |
| 65° | 4129 | 4876 | 3873 |
| 70° | 3661 | 3805 | 2363 |
| 75° | 3390 | 3085 | 1447 |
| 80° | 3121 | 2840 | 1249 |
| 85° | 2826 | 2604 | 1016 |



TEST NUMBER: P519546

CATALOG NUMBER: SQ4-WB-125U-125D-940-1D-UNV-STD-W-8

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 446.7 | 2.8 |
| 10°-20° | 1162.0 | 7.4 |
| 20°-30° | 1505.1 | 9.6 |
| 30°-40° | 1473.9 | 9.4 |
| 40°-50° | 1128.2 | 7.2 |
| 50°-60° | 751.8 | 4.8 |
| 60°-70° | 410.2 | 2.6 |
| 70°-80° | 170.9 | 1.1 |
| 80°-90° | 51.5 | 0.3 |
| 90°-100° | 626.4 | 4.0 |
| 100°-110° | 1687.3 | 10.7 |
| 110°-120° | 1770.7 | 11.2 |
| 120°-130° | 1436.9 | 9.1 |
| 130°-140° | 1126.9 | 7.2 |
| 140°-150° | 865.2 | 5.5 |
| 150°-160° | 622.1 | 4.0 |
| 160°-170° | 380.0 | 2.4 |
| 170°-180° | 128.2 | 0.8 |
| 0°-30° | 3113.9 | 19.8 |
| 0°-40° | 4587.8 | 29.1 |
| 0°-60° | 6467.7 | 41.1 |
| 0°-90° | 7100.5 | 45.1 |
| 90°-120° | 4084.4 | 25.9 |
| 90°-150° | 7513.4 | 47.7 |
| 90°-180° | 8644.0 | 54.9 |
| 0°-180° | 15744.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4871 | 4871 | 4871 | 4871 | 4871 | |
| 5° | 4792 | 4743 | 4774 | 4786 | 4802 | 446 |
| 15° | 4052 | 4037 | 4146 | 4259 | 4332 | 1132 |
| 25° | 3097 | 3105 | 3266 | 3408 | 3558 | 1424 |
| 35° | 2188 | 2199 | 2347 | 2504 | 2682 | 1361 |
| 45° | 1312 | 1337 | 1426 | 1533 | 1673 | 1023 |
| 55° | 754 | 786 | 831 | 863 | 934 | 684 |
| 65° | 378 | 410 | 447 | 390 | 355 | 393 |
| 75° | 190 | 190 | 173 | 119 | 81 | 203 |
| 85° | 53 | 53 | 49 | 32 | 19 | 58 |
| 90° | 3 | 10 | 20 | 22 | 22 | 9 |
| 95° | 96 | 341 | 1027 | 525 | 363 | 100 |
| 105° | 312 | 486 | 1866 | 2792 | 2620 | 328 |
| 115° | 551 | 674 | 1554 | 3002 | 3396 | 542 |
| 125° | 752 | 864 | 1395 | 2358 | 2775 | 672 |
| 135° | 906 | 1011 | 1356 | 1902 | 2154 | 699 |
| 145° | 1047 | 1129 | 1339 | 1626 | 1747 | 657 |
| 155° | 1189 | 1232 | 1327 | 1459 | 1506 | 547 |
| 165° | 1290 | 1304 | 1332 | 1385 | 1392 | 364 |
| 175° | 1341 | 1339 | 1334 | 1352 | 1349 | 127 |
| 180° | 1339 | 1339 | 1339 | 1339 | 1339 | |

TEST NUMBER: P519546

CATALOG NUMBER: SQ4-WB-125U-125D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4870.6 | 4870.6 | 4870.6 | 4870.6 | 4870.6 |
| 2.5° | 4882.5 | 4839.1 | 4850.0 | 4849.7 | 4836.4 |
| 5° | 4791.5 | 4743.4 | 4774.4 | 4785.5 | 4802.2 |
| 7.5° | 4613.7 | 4577.3 | 4633.8 | 4675.6 | 4709.4 |
| 10° | 4475.2 | 4443.8 | 4515.8 | 4576.6 | 4620.5 |
| 12.5° | 4314.5 | 4288.1 | 4377.3 | 4459.0 | 4516.2 |
| 15° | 4052.0 | 4037.4 | 4146.1 | 4258.9 | 4332.0 |
| 17.5° | 3771.2 | 3764.1 | 3888.8 | 4020.4 | 4114.0 |
| 20° | 3579.7 | 3577.6 | 3714.4 | 3851.5 | 3960.1 |
| 22.5° | 3386.5 | 3391.1 | 3534.8 | 3677.4 | 3801.1 |
| 25° | 3096.7 | 3105.1 | 3265.6 | 3407.9 | 3558.4 |
| 27.5° | 2828.7 | 2832.5 | 2998.4 | 3148.7 | 3309.2 |
| 30° | 2645.8 | 2656.2 | 2818.9 | 2974.4 | 3141.6 |
| 32.5° | 2462.9 | 2475.0 | 2634.3 | 2795.0 | 2965.5 |
| 35° | 2188.4 | 2198.9 | 2346.6 | 2504.5 | 2682.1 |
| 37.5° | 1905.5 | 1919.7 | 2050.8 | 2200.1 | 2374.8 |
| 40° | 1722.5 | 1743.4 | 1859.3 | 2000.0 | 2171.3 |
| 42.5° | 1546.4 | 1572.4 | 1679.8 | 1813.3 | 1967.9 |
| 45° | 1312.2 | 1337.3 | 1425.5 | 1533.4 | 1673.4 |
| 47.5° | 1110.5 | 1139.3 | 1207.1 | 1300.0 | 1419.5 |
| 50° | 995.9 | 1023.1 | 1085.7 | 1154.5 | 1267.3 |
| 52.5° | 895.0 | 922.2 | 978.0 | 1031.0 | 1127.1 |
| 55° | 754.4 | 785.8 | 831.4 | 862.9 | 933.9 |
| 57.5° | 639.0 | 669.1 | 705.3 | 719.5 | 762.5 |
| 60° | 562.1 | 595.5 | 628.3 | 626.7 | 649.7 |
| 62.5° | 492.0 | 520.4 | 553.1 | 530.5 | 531.7 |
| 65° | 378.3 | 409.6 | 446.7 | 390.3 | 354.8 |
| 67.5° | 305.6 | 312.3 | 350.5 | 272.2 | 230.0 |
| 70° | 271.4 | 271.4 | 282.1 | 210.8 | 175.2 |
| 72.5° | 238.9 | 238.9 | 229.1 | 171.4 | 134.2 |
| 75° | 190.2 | 190.2 | 173.1 | 118.8 | 81.2 |
| 77.5° | 146.6 | 144.9 | 132.5 | 88.7 | 59.0 |
| 80° | 117.5 | 117.5 | 106.9 | 70.0 | 47.0 |
| 82.5° | 91.9 | 91.9 | 82.9 | 54.7 | 35.0 |
| 85° | 53.4 | 53.4 | 49.2 | 31.8 | 19.2 |
| 87.5° | 19.5 | 20.8 | 21.2 | 14.7 | 13.0 |
| 90° | 3.4 | 10.1 | 20.5 | 22.2 | 22.2 |
| 92.5° | 41.6 | 147.0 | 290.6 | 139.9 | 97.2 |
| 95° | 95.5 | 340.7 | 1026.8 | 525.1 | 363.3 |
| 97.5° | 152.5 | 390.0 | 1610.5 | 1345.4 | 1014.5 |
| 100° | 196.2 | 409.6 | 1796.1 | 1879.2 | 1559.0 |
| 102.5° | 238.5 | 437.2 | 1857.5 | 2278.9 | 2016.1 |
| 105° | 312.1 | 485.6 | 1866.0 | 2791.7 | 2619.9 |
| 107.5° | 381.7 | 536.5 | 1786.5 | 3055.2 | 3099.5 |
| 110° | 428.1 | 574.9 | 1714.2 | 3137.0 | 3298.7 |

TEST NUMBER: P519546

CATALOG NUMBER: SQ4-WB-125U-125D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 477.2 | 613.3 | 1644.6 | 3118.9 | 3384.7 |
| 115° | 550.9 | 674.3 | 1553.9 | 3002.4 | 3396.0 |
| 117.5° | 618.1 | 733.9 | 1483.6 | 2816.4 | 3254.7 |
| 120° | 661.8 | 773.5 | 1448.1 | 2683.0 | 3133.3 |
| 122.5° | 700.0 | 810.4 | 1422.2 | 2546.5 | 2995.5 |
| 125° | 752.2 | 863.9 | 1395.2 | 2358.2 | 2775.1 |
| 127.5° | 802.3 | 912.4 | 1378.2 | 2192.0 | 2564.3 |
| 130° | 832.4 | 942.4 | 1371.3 | 2096.9 | 2423.7 |
| 132.5° | 862.4 | 971.1 | 1364.5 | 2013.0 | 2313.2 |
| 135° | 905.7 | 1010.8 | 1356.0 | 1902.4 | 2154.2 |
| 137.5° | 947.0 | 1047.7 | 1351.6 | 1808.6 | 2015.4 |
| 140° | 975.6 | 1072.4 | 1347.5 | 1750.8 | 1937.6 |
| 142.5° | 1005.7 | 1095.7 | 1344.7 | 1697.0 | 1854.4 |
| 145° | 1047.3 | 1129.0 | 1338.9 | 1626.5 | 1746.6 |
| 147.5° | 1092.3 | 1163.3 | 1333.1 | 1567.3 | 1661.6 |
| 150° | 1122.3 | 1184.0 | 1330.4 | 1530.0 | 1608.4 |
| 152.5° | 1149.6 | 1203.3 | 1329.0 | 1499.7 | 1563.4 |
| 155° | 1188.8 | 1232.2 | 1327.0 | 1459.4 | 1506.1 |
| 157.5° | 1223.3 | 1257.0 | 1327.3 | 1431.1 | 1462.4 |
| 160° | 1245.1 | 1273.5 | 1328.7 | 1414.5 | 1437.9 |
| 162.5° | 1264.2 | 1287.2 | 1330.1 | 1400.7 | 1417.4 |
| 165° | 1289.5 | 1304.5 | 1332.1 | 1385.1 | 1391.8 |
| 167.5° | 1309.9 | 1318.6 | 1333.8 | 1373.1 | 1375.8 |
| 170° | 1323.6 | 1326.9 | 1333.8 | 1366.2 | 1366.2 |
| 172.5° | 1331.8 | 1332.4 | 1335.2 | 1359.4 | 1359.4 |
| 175° | 1340.6 | 1339.0 | 1333.8 | 1352.5 | 1349.2 |
| 177.5° | 1344.4 | 1341.7 | 1334.8 | 1345.7 | 1343.0 |
| 180° | 1338.9 | 1338.9 | 1338.9 | 1338.9 | 1338.9 |

(END OF REPORT)