

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: P519636

Luminaire Tested: **SQ4-WB-150U-125D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519636
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-125D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

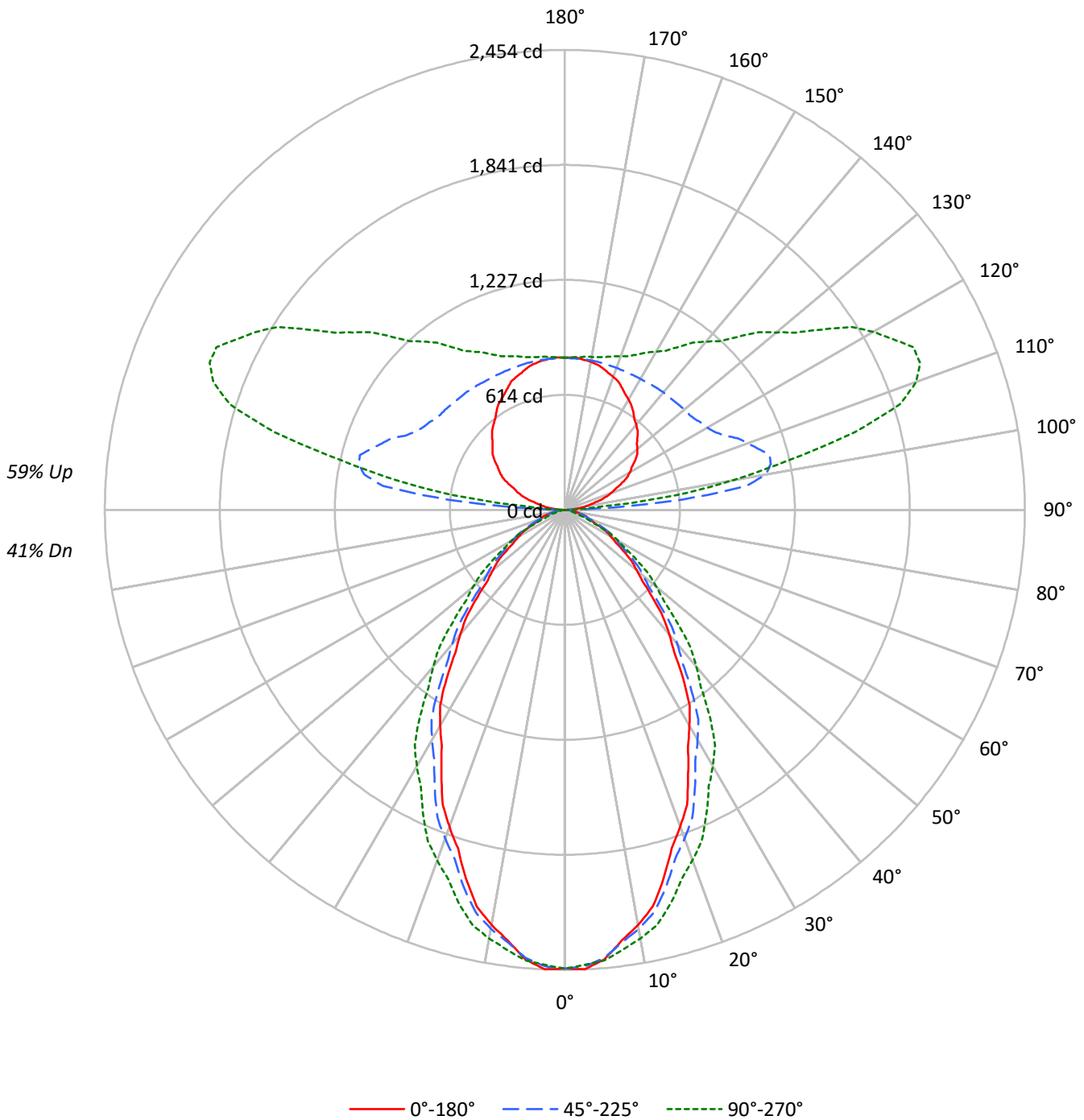
Lumens per Lamp: N/A
Luminaire Lumens: 8802.7 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
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



TEST NUMBER: P519636
CATALOG NUMBER: SQ4-WB-150U-125D-935-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P519636

CATALOG NUMBER: SQ4-WB-150U-125D-935-1D-UNV-STD-W-4

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 | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 78 | 78 | 78 | 62 | 62 | 62 | 47 | 47 | 47 | 41 |
| 1 | 97 | 93 | 89 | 86 | 88 | 85 | 82 | 79 | 70 | 68 | 66 | 56 | 55 | 53 | 43 | 43 | 42 | 36 |
| 2 | 89 | 82 | 76 | 72 | 81 | 75 | 70 | 66 | 62 | 59 | 56 | 50 | 48 | 46 | 39 | 38 | 37 | 32 |
| 3 | 82 | 73 | 66 | 61 | 74 | 67 | 61 | 57 | 56 | 52 | 48 | 45 | 43 | 40 | 36 | 34 | 32 | 28 |
| 4 | 75 | 65 | 58 | 52 | 68 | 60 | 54 | 49 | 50 | 46 | 42 | 41 | 38 | 35 | 33 | 31 | 29 | 25 |
| 5 | 69 | 59 | 51 | 46 | 63 | 54 | 48 | 43 | 45 | 41 | 37 | 37 | 34 | 31 | 30 | 28 | 26 | 22 |
| 6 | 64 | 53 | 45 | 40 | 59 | 49 | 42 | 38 | 41 | 36 | 33 | 34 | 31 | 28 | 28 | 25 | 23 | 20 |
| 7 | 59 | 48 | 41 | 35 | 54 | 45 | 38 | 33 | 38 | 33 | 29 | 31 | 28 | 25 | 25 | 23 | 21 | 18 |
| 8 | 55 | 44 | 37 | 32 | 51 | 41 | 34 | 30 | 35 | 30 | 26 | 29 | 25 | 23 | 24 | 21 | 19 | 17 |
| 9 | 52 | 40 | 33 | 28 | 47 | 37 | 31 | 27 | 32 | 27 | 24 | 27 | 23 | 21 | 22 | 19 | 18 | 15 |
| 10 | 48 | 37 | 30 | 26 | 44 | 34 | 28 | 24 | 30 | 25 | 22 | 25 | 21 | 19 | 21 | 18 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22583 | 22583 | 22583 |
| 5° | 22302 | 22222 | 22351 |
| 10° | 21070 | 21261 | 21755 |
| 15° | 19451 | 19902 | 20795 |
| 20° | 17663 | 18328 | 19540 |
| 25° | 15843 | 16706 | 18205 |
| 30° | 14165 | 15092 | 16820 |
| 35° | 12387 | 13283 | 15182 |
| 40° | 10426 | 11254 | 13142 |
| 45° | 8605 | 9347 | 10973 |
| 50° | 7184 | 7831 | 9142 |
| 55° | 6098 | 6720 | 7550 |
| 60° | 5213 | 5827 | 6025 |
| 65° | 4150 | 4901 | 3892 |
| 70° | 3679 | 3825 | 2377 |
| 75° | 3408 | 3101 | 1454 |
| 80° | 3140 | 2853 | 1254 |
| 85° | 2848 | 2615 | 1027 |



TEST NUMBER: P519636

CATALOG NUMBER: SQ4-WB-150U-125D-935-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 224.5 | 2.6 |
| 10°-20° | 584.0 | 6.6 |
| 20°-30° | 756.4 | 8.6 |
| 30°-40° | 740.7 | 8.4 |
| 40°-50° | 567.0 | 6.4 |
| 50°-60° | 377.8 | 4.3 |
| 60°-70° | 206.2 | 2.3 |
| 70°-80° | 85.9 | 1.0 |
| 80°-90° | 26.0 | 0.3 |
| 90°-100° | 377.3 | 4.3 |
| 100°-110° | 1020.1 | 11.6 |
| 110°-120° | 1072.5 | 12.2 |
| 120°-130° | 871.2 | 9.9 |
| 130°-140° | 683.3 | 7.8 |
| 140°-150° | 524.5 | 6.0 |
| 150°-160° | 377.2 | 4.3 |
| 160°-170° | 230.4 | 2.6 |
| 170°-180° | 77.7 | 0.9 |
| 0°-30° | 1564.9 | 17.8 |
| 0°-40° | 2305.6 | 26.2 |
| 0°-60° | 3250.4 | 36.9 |
| 0°-90° | 3568.5 | 40.5 |
| 90°-120° | 2469.9 | 28.1 |
| 90°-150° | 4548.9 | 51.7 |
| 90°-180° | 5234.0 | 59.5 |
| 0°-180° | 8802.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2448 | 2448 | 2448 | 2448 | 2448 | |
| 5° | 2408 | 2384 | 2399 | 2405 | 2413 | 224 |
| 15° | 2036 | 2029 | 2084 | 2140 | 2177 | 569 |
| 25° | 1556 | 1560 | 1641 | 1713 | 1788 | 716 |
| 35° | 1100 | 1105 | 1179 | 1259 | 1348 | 684 |
| 45° | 660 | 672 | 716 | 771 | 841 | 514 |
| 55° | 379 | 395 | 418 | 434 | 469 | 344 |
| 65° | 190 | 206 | 224 | 196 | 178 | 198 |
| 75° | 96 | 96 | 87 | 60 | 41 | 102 |
| 85° | 27 | 27 | 25 | 16 | 10 | 29 |
| 90° | 2 | 5 | 11 | 12 | 11 | 5 |
| 95° | 58 | 206 | 627 | 325 | 193 | 61 |
| 105° | 190 | 293 | 1132 | 1669 | 1601 | 200 |
| 115° | 334 | 408 | 938 | 1817 | 2051 | 330 |
| 125° | 457 | 524 | 846 | 1428 | 1677 | 407 |
| 135° | 548 | 613 | 823 | 1153 | 1305 | 423 |
| 145° | 637 | 685 | 812 | 987 | 1062 | 399 |
| 155° | 719 | 747 | 805 | 885 | 914 | 332 |
| 165° | 783 | 791 | 808 | 840 | 844 | 221 |
| 175° | 813 | 812 | 809 | 820 | 818 | 77 |
| 180° | 812 | 812 | 812 | 812 | 812 | |

TEST NUMBER: P519636

CATALOG NUMBER: SQ4-WB-150U-125D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2447.7 | 2447.7 | 2447.7 | 2447.7 | 2447.7 |
| 2.5° | 2453.7 | 2431.9 | 2437.4 | 2437.2 | 2430.5 |
| 5° | 2408.0 | 2383.8 | 2399.4 | 2404.9 | 2413.3 |
| 7.5° | 2318.6 | 2300.3 | 2328.7 | 2349.7 | 2366.7 |
| 10° | 2249.0 | 2233.3 | 2269.4 | 2300.0 | 2322.1 |
| 12.5° | 2168.2 | 2155.0 | 2199.8 | 2240.9 | 2269.6 |
| 15° | 2036.4 | 2029.0 | 2083.6 | 2140.3 | 2177.1 |
| 17.5° | 1895.2 | 1891.7 | 1954.3 | 2020.5 | 2067.5 |
| 20° | 1799.0 | 1797.9 | 1866.7 | 1935.6 | 1990.2 |
| 22.5° | 1701.9 | 1704.2 | 1776.4 | 1848.1 | 1910.3 |
| 25° | 1556.3 | 1560.5 | 1641.1 | 1712.6 | 1788.3 |
| 27.5° | 1421.6 | 1423.5 | 1506.9 | 1582.4 | 1663.0 |
| 30° | 1329.6 | 1334.9 | 1416.6 | 1494.8 | 1578.8 |
| 32.5° | 1237.7 | 1243.8 | 1323.8 | 1404.6 | 1490.3 |
| 35° | 1099.8 | 1105.1 | 1179.3 | 1258.6 | 1347.9 |
| 37.5° | 957.6 | 964.7 | 1030.6 | 1105.7 | 1193.5 |
| 40° | 865.7 | 876.2 | 934.4 | 1005.1 | 1091.2 |
| 42.5° | 777.2 | 790.2 | 844.2 | 911.3 | 989.0 |
| 45° | 659.5 | 672.1 | 716.4 | 770.6 | 841.0 |
| 47.5° | 558.1 | 572.6 | 606.6 | 653.3 | 713.4 |
| 50° | 500.5 | 514.1 | 545.6 | 580.2 | 636.9 |
| 52.5° | 449.8 | 463.5 | 491.5 | 518.1 | 566.4 |
| 55° | 379.1 | 394.9 | 417.8 | 433.6 | 469.4 |
| 57.5° | 321.1 | 336.3 | 354.4 | 361.6 | 383.2 |
| 60° | 282.5 | 299.3 | 315.8 | 315.0 | 326.5 |
| 62.5° | 247.2 | 261.5 | 278.0 | 266.6 | 267.2 |
| 65° | 190.1 | 205.9 | 224.5 | 196.1 | 178.3 |
| 67.5° | 153.6 | 156.9 | 176.1 | 136.8 | 115.6 |
| 70° | 136.4 | 136.4 | 141.8 | 105.9 | 88.1 |
| 72.5° | 120.1 | 120.1 | 115.1 | 86.1 | 67.4 |
| 75° | 95.6 | 95.6 | 87.0 | 59.7 | 40.8 |
| 77.5° | 73.7 | 72.8 | 66.6 | 44.6 | 29.6 |
| 80° | 59.1 | 59.1 | 53.7 | 35.2 | 23.6 |
| 82.5° | 46.2 | 46.2 | 41.7 | 27.5 | 17.6 |
| 85° | 26.9 | 26.9 | 24.7 | 16.0 | 9.7 |
| 87.5° | 9.8 | 10.5 | 10.9 | 7.6 | 6.6 |
| 90° | 1.7 | 5.2 | 11.4 | 12.2 | 11.4 |
| 92.5° | 24.8 | 90.4 | 178.4 | 77.5 | 56.1 |
| 95° | 58.5 | 205.5 | 627.4 | 324.7 | 193.1 |
| 97.5° | 94.0 | 235.7 | 978.0 | 809.4 | 594.4 |
| 100° | 120.6 | 247.9 | 1087.1 | 1133.7 | 916.7 |
| 102.5° | 145.1 | 264.9 | 1125.6 | 1379.7 | 1217.3 |
| 105° | 189.6 | 293.0 | 1131.7 | 1669.3 | 1600.9 |
| 107.5° | 230.9 | 325.2 | 1082.2 | 1850.0 | 1872.7 |
| 110° | 263.0 | 348.5 | 1038.2 | 1898.5 | 1995.1 |

TEST NUMBER: P519636

CATALOG NUMBER: SQ4-WB-150U-125D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 291.7 | 371.7 | 997.6 | 1888.8 | 2051.0 |
| 115° | 333.8 | 408.2 | 938.5 | 1816.9 | 2051.0 |
| 117.5° | 375.1 | 444.8 | 899.6 | 1706.9 | 1972.3 |
| 120° | 400.2 | 468.6 | 876.5 | 1628.1 | 1898.9 |
| 122.5° | 424.0 | 491.0 | 862.5 | 1543.5 | 1816.4 |
| 125° | 457.0 | 523.7 | 845.9 | 1427.5 | 1677.0 |
| 127.5° | 487.4 | 552.9 | 836.1 | 1332.8 | 1552.2 |
| 130° | 504.2 | 571.7 | 831.9 | 1274.2 | 1472.5 |
| 132.5° | 521.7 | 588.5 | 827.7 | 1221.5 | 1404.0 |
| 135° | 547.9 | 612.9 | 823.2 | 1152.6 | 1304.7 |
| 137.5° | 574.3 | 635.7 | 819.3 | 1096.7 | 1220.6 |
| 140° | 592.5 | 649.7 | 817.9 | 1060.8 | 1171.0 |
| 142.5° | 610.0 | 663.8 | 815.2 | 1028.3 | 1124.9 |
| 145° | 637.1 | 684.9 | 811.8 | 986.6 | 1061.8 |
| 147.5° | 661.7 | 704.1 | 808.0 | 948.8 | 1006.5 |
| 150° | 679.9 | 717.5 | 806.6 | 928.2 | 974.4 |
| 152.5° | 696.7 | 729.5 | 805.9 | 909.2 | 947.1 |
| 155° | 719.2 | 747.4 | 804.8 | 885.0 | 914.1 |
| 157.5° | 742.6 | 762.3 | 805.0 | 868.2 | 887.3 |
| 160° | 755.9 | 772.1 | 805.7 | 857.6 | 871.3 |
| 162.5° | 766.4 | 779.9 | 806.4 | 849.1 | 859.4 |
| 165° | 783.0 | 790.7 | 808.3 | 839.9 | 844.2 |
| 167.5° | 794.4 | 799.7 | 808.5 | 832.0 | 834.0 |
| 170° | 801.3 | 803.9 | 809.2 | 828.4 | 828.4 |
| 172.5° | 806.9 | 807.4 | 809.2 | 824.2 | 823.5 |
| 175° | 812.7 | 811.8 | 809.2 | 819.7 | 817.9 |
| 177.5° | 814.6 | 812.6 | 809.0 | 816.0 | 813.9 |
| 180° | 811.8 | 811.8 | 811.8 | 811.8 | 811.8 |

(END OF REPORT)