

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: P519245

Luminaire Tested: **SQ4-WB-075U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519245
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

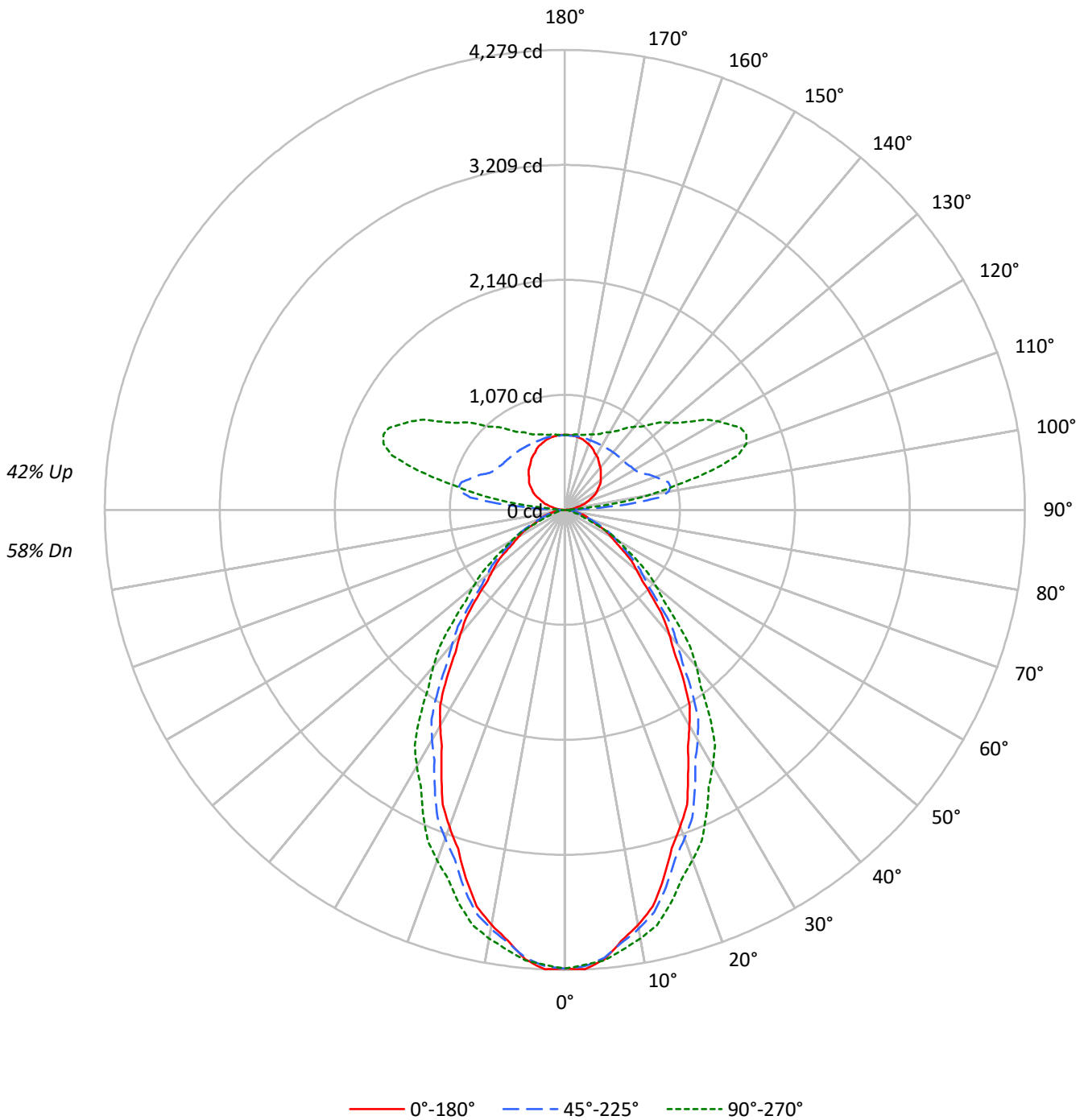
Lumens per Lamp: N/A
Luminaire Lumens: 10757.0 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 97.3
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 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 75 | 75 | 75 | 63 | 63 | 63 | 58 |
| 1 | 101 | 97 | 94 | 90 | 94 | 91 | 88 | 85 | 79 | 77 | 75 | 68 | 66 | 65 | 58 | 57 | 56 | 51 |
| 2 | 93 | 86 | 81 | 76 | 87 | 81 | 76 | 72 | 71 | 67 | 64 | 61 | 59 | 57 | 53 | 51 | 49 | 45 |
| 3 | 86 | 77 | 70 | 65 | 80 | 72 | 67 | 62 | 64 | 59 | 56 | 56 | 52 | 50 | 48 | 46 | 44 | 40 |
| 4 | 79 | 69 | 62 | 57 | 74 | 65 | 59 | 54 | 58 | 53 | 49 | 51 | 47 | 44 | 44 | 41 | 39 | 36 |
| 5 | 73 | 63 | 55 | 50 | 68 | 59 | 52 | 47 | 52 | 47 | 43 | 46 | 42 | 39 | 40 | 37 | 35 | 32 |
| 6 | 68 | 57 | 49 | 44 | 64 | 54 | 47 | 42 | 48 | 42 | 38 | 42 | 38 | 35 | 37 | 34 | 31 | 29 |
| 7 | 63 | 52 | 44 | 39 | 59 | 49 | 42 | 38 | 44 | 39 | 35 | 39 | 35 | 32 | 34 | 31 | 29 | 26 |
| 8 | 59 | 48 | 40 | 35 | 55 | 45 | 39 | 34 | 40 | 35 | 31 | 36 | 32 | 29 | 32 | 29 | 26 | 24 |
| 9 | 55 | 44 | 37 | 32 | 52 | 42 | 35 | 31 | 37 | 32 | 29 | 34 | 29 | 26 | 30 | 26 | 24 | 22 |
| 10 | 52 | 41 | 34 | 29 | 49 | 39 | 32 | 28 | 35 | 30 | 26 | 31 | 27 | 24 | 28 | 25 | 22 | 20 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 26252 | 26252 | 26252 |
| 5° | 25925 | 25832 | 25983 |
| 10° | 24493 | 24715 | 25289 |
| 15° | 22611 | 23135 | 24173 |
| 20° | 20533 | 21305 | 22715 |
| 25° | 18417 | 19421 | 21162 |
| 30° | 16467 | 17544 | 19553 |
| 35° | 14400 | 15440 | 17649 |
| 40° | 12120 | 13082 | 15278 |
| 45° | 10002 | 10866 | 12756 |
| 50° | 8351 | 9104 | 10627 |
| 55° | 7089 | 7812 | 8776 |
| 60° | 6059 | 6773 | 7003 |
| 65° | 4825 | 5696 | 4525 |
| 70° | 4277 | 4446 | 2762 |
| 75° | 3962 | 3605 | 1692 |
| 80° | 3648 | 3315 | 1459 |
| 85° | 3303 | 3042 | 1193 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 391.5 | 3.6 |
| 10°-20° | 1018.3 | 9.5 |
| 20°-30° | 1318.9 | 12.3 |
| 30°-40° | 1291.6 | 12.0 |
| 40°-50° | 988.6 | 9.2 |
| 50°-60° | 658.8 | 6.1 |
| 60°-70° | 359.5 | 3.3 |
| 70°-80° | 149.8 | 1.4 |
| 80°-90° | 44.2 | 0.4 |
| 90°-100° | 328.4 | 3.1 |
| 100°-110° | 903.5 | 8.4 |
| 110°-120° | 932.6 | 8.7 |
| 120°-130° | 747.2 | 6.9 |
| 130°-140° | 586.8 | 5.5 |
| 140°-150° | 449.7 | 4.2 |
| 150°-160° | 323.3 | 3.0 |
| 160°-170° | 197.7 | 1.8 |
| 170°-180° | 66.6 | 0.6 |
| 0°-30° | 2728.7 | 25.4 |
| 0°-40° | 4020.3 | 37.4 |
| 0°-60° | 5667.7 | 52.7 |
| 0°-90° | 6221.2 | 57.8 |
| 90°-120° | 2164.4 | 20.1 |
| 90°-150° | 3948.2 | 36.7 |
| 90°-180° | 4536.0 | 42.2 |
| 0°-180° | 10757.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4268 | 4268 | 4268 | 4268 | 4268 | |
| 5° | 4199 | 4157 | 4184 | 4194 | 4208 | 391 |
| 15° | 3551 | 3538 | 3633 | 3732 | 3796 | 992 |
| 25° | 2714 | 2721 | 2862 | 2986 | 3118 | 1248 |
| 35° | 1918 | 1927 | 2056 | 2195 | 2350 | 1192 |
| 45° | 1150 | 1172 | 1249 | 1344 | 1466 | 897 |
| 55° | 661 | 689 | 728 | 756 | 818 | 599 |
| 65° | 332 | 359 | 391 | 342 | 311 | 345 |
| 75° | 167 | 167 | 152 | 104 | 71 | 178 |
| 85° | 47 | 47 | 43 | 28 | 17 | 51 |
| 90° | 2 | 6 | 10 | 13 | 13 | 6 |
| 95° | 49 | 179 | 581 | 248 | 158 | 52 |
| 105° | 162 | 248 | 996 | 1516 | 1415 | 170 |
| 115° | 286 | 348 | 798 | 1590 | 1804 | 282 |
| 125° | 394 | 449 | 724 | 1226 | 1436 | 352 |
| 135° | 476 | 528 | 704 | 991 | 1121 | 367 |
| 145° | 550 | 587 | 693 | 844 | 910 | 345 |
| 155° | 622 | 642 | 689 | 759 | 781 | 286 |
| 165° | 673 | 681 | 692 | 720 | 724 | 190 |
| 175° | 696 | 698 | 693 | 702 | 701 | 66 |
| 180° | 696 | 696 | 696 | 696 | 696 | |

TEST NUMBER: P519245

CATALOG NUMBER: SQ4-WB-075U-125D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4268.1 | 4268.1 | 4268.1 | 4268.1 | 4268.1 |
| 2.5° | 4278.6 | 4240.5 | 4250.1 | 4249.8 | 4238.1 |
| 5° | 4198.8 | 4156.7 | 4183.8 | 4193.5 | 4208.2 |
| 7.5° | 4043.0 | 4011.1 | 4060.6 | 4097.2 | 4126.9 |
| 10° | 3921.6 | 3894.2 | 3957.2 | 4010.5 | 4049.0 |
| 12.5° | 3780.8 | 3757.7 | 3835.9 | 3907.4 | 3957.6 |
| 15° | 3550.8 | 3538.0 | 3633.2 | 3732.1 | 3796.1 |
| 17.5° | 3304.7 | 3298.5 | 3407.7 | 3523.1 | 3605.1 |
| 20° | 3136.9 | 3135.1 | 3254.9 | 3375.1 | 3470.3 |
| 22.5° | 2967.6 | 2971.7 | 3097.6 | 3222.5 | 3330.9 |
| 25° | 2713.7 | 2721.0 | 2861.6 | 2986.4 | 3118.2 |
| 27.5° | 2478.8 | 2482.1 | 2627.5 | 2759.2 | 2899.8 |
| 30° | 2318.5 | 2327.7 | 2470.2 | 2606.5 | 2753.0 |
| 32.5° | 2158.2 | 2168.8 | 2308.4 | 2449.3 | 2598.7 |
| 35° | 1917.7 | 1926.9 | 2056.3 | 2194.7 | 2350.4 |
| 37.5° | 1669.8 | 1682.2 | 1797.1 | 1928.0 | 2081.0 |
| 40° | 1509.5 | 1527.8 | 1629.3 | 1752.6 | 1902.8 |
| 42.5° | 1355.2 | 1377.9 | 1472.0 | 1589.0 | 1724.5 |
| 45° | 1149.9 | 1171.9 | 1249.2 | 1343.7 | 1466.4 |
| 47.5° | 973.1 | 998.4 | 1057.8 | 1139.2 | 1243.9 |
| 50° | 872.7 | 896.5 | 951.4 | 1011.7 | 1110.6 |
| 52.5° | 784.3 | 808.1 | 857.0 | 903.5 | 987.7 |
| 55° | 661.1 | 688.6 | 728.5 | 756.1 | 818.4 |
| 57.5° | 560.0 | 586.3 | 618.0 | 630.5 | 668.2 |
| 60° | 492.5 | 521.8 | 550.6 | 549.2 | 569.3 |
| 62.5° | 431.1 | 456.0 | 484.7 | 464.9 | 466.0 |
| 65° | 331.5 | 359.0 | 391.4 | 342.0 | 310.9 |
| 67.5° | 267.8 | 273.7 | 307.1 | 238.5 | 201.5 |
| 70° | 237.8 | 237.8 | 247.2 | 184.7 | 153.6 |
| 72.5° | 209.4 | 209.4 | 200.8 | 150.2 | 117.6 |
| 75° | 166.7 | 166.7 | 151.7 | 104.1 | 71.2 |
| 77.5° | 128.5 | 127.0 | 116.1 | 77.7 | 51.7 |
| 80° | 103.0 | 103.0 | 93.6 | 61.3 | 41.2 |
| 82.5° | 80.5 | 80.5 | 72.7 | 47.9 | 30.7 |
| 85° | 46.8 | 46.8 | 43.1 | 27.8 | 16.9 |
| 87.5° | 16.8 | 17.6 | 17.1 | 11.6 | 10.2 |
| 90° | 1.5 | 5.8 | 10.4 | 13.3 | 13.3 |
| 92.5° | 20.4 | 87.4 | 151.4 | 58.1 | 47.7 |
| 95° | 48.9 | 179.3 | 580.7 | 248.3 | 158.5 |
| 97.5° | 79.7 | 198.8 | 886.2 | 682.8 | 481.8 |
| 100° | 102.2 | 210.9 | 982.2 | 991.4 | 808.8 |
| 102.5° | 123.5 | 225.2 | 1007.1 | 1229.9 | 1062.5 |
| 105° | 161.5 | 248.4 | 995.5 | 1516.1 | 1414.7 |
| 107.5° | 197.6 | 277.0 | 938.9 | 1656.3 | 1686.4 |
| 110° | 223.7 | 296.1 | 896.3 | 1691.2 | 1795.5 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 247.4 | 317.5 | 853.6 | 1668.7 | 1827.5 |
| 115° | 285.9 | 348.2 | 798.5 | 1590.0 | 1804.4 |
| 117.5° | 322.7 | 380.0 | 763.5 | 1479.5 | 1722.0 |
| 120° | 345.2 | 400.2 | 748.1 | 1396.7 | 1647.3 |
| 122.5° | 365.3 | 420.4 | 737.4 | 1324.2 | 1562.0 |
| 125° | 394.1 | 449.1 | 724.4 | 1225.5 | 1435.5 |
| 127.5° | 421.3 | 473.7 | 715.8 | 1143.1 | 1327.3 |
| 130° | 435.5 | 489.1 | 711.1 | 1094.1 | 1262.2 |
| 132.5° | 452.1 | 505.7 | 707.5 | 1051.1 | 1202.9 |
| 135° | 475.5 | 527.7 | 703.7 | 991.1 | 1121.4 |
| 137.5° | 497.5 | 545.8 | 700.4 | 942.5 | 1050.0 |
| 140° | 514.0 | 559.0 | 699.2 | 910.3 | 1007.4 |
| 142.5° | 528.3 | 569.7 | 696.9 | 881.5 | 964.7 |
| 145° | 549.6 | 587.3 | 693.3 | 844.4 | 909.6 |
| 147.5° | 572.4 | 604.9 | 691.5 | 811.5 | 863.7 |
| 150° | 586.6 | 615.6 | 690.3 | 793.5 | 834.0 |
| 152.5° | 599.7 | 626.3 | 689.2 | 777.9 | 811.5 |
| 155° | 622.2 | 642.5 | 688.9 | 759.0 | 780.7 |
| 157.5° | 638.5 | 655.0 | 688.9 | 743.4 | 758.5 |
| 160° | 650.3 | 663.4 | 688.9 | 735.0 | 746.6 |
| 162.5° | 659.8 | 670.5 | 690.0 | 727.9 | 737.1 |
| 165° | 672.6 | 681.2 | 691.8 | 720.1 | 724.4 |
| 167.5° | 681.4 | 688.1 | 693.3 | 713.5 | 714.6 |
| 170° | 687.4 | 691.7 | 693.3 | 711.1 | 711.1 |
| 172.5° | 692.1 | 694.1 | 693.3 | 707.5 | 706.3 |
| 175° | 696.3 | 697.7 | 693.3 | 702.2 | 700.7 |
| 177.5° | 697.4 | 697.4 | 692.7 | 699.8 | 697.4 |
| 180° | 696.3 | 696.3 | 696.3 | 696.3 | 696.3 |

(END OF REPORT)