

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: P519173

Luminaire Tested: **SQ4-WB-075U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519173
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-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

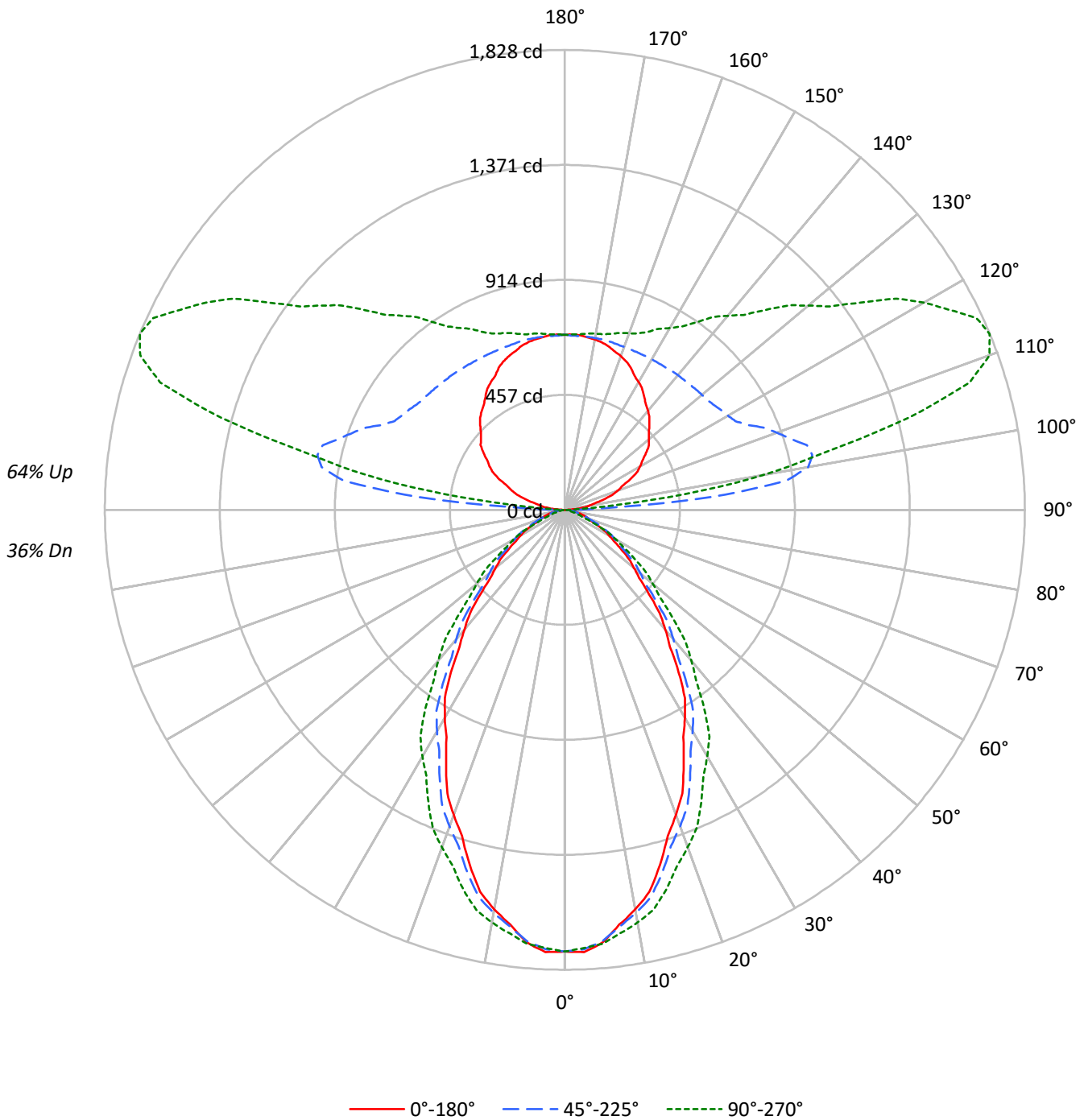
Lumens per Lamp: N/A
Luminaire Lumens: 7095.6 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 59 | 59 | 59 | 43 | 43 | 43 | 36 |
| 1 | 95 | 92 | 88 | 85 | 86 | 83 | 80 | 78 | 67 | 65 | 64 | 53 | 52 | 50 | 40 | 39 | 38 | 32 |
| 2 | 88 | 81 | 75 | 71 | 79 | 74 | 69 | 65 | 60 | 57 | 54 | 47 | 45 | 43 | 36 | 35 | 33 | 28 |
| 3 | 80 | 72 | 65 | 60 | 73 | 66 | 60 | 55 | 54 | 50 | 46 | 43 | 40 | 38 | 33 | 31 | 29 | 25 |
| 4 | 74 | 64 | 57 | 51 | 67 | 59 | 52 | 48 | 48 | 44 | 40 | 39 | 36 | 33 | 30 | 28 | 26 | 22 |
| 5 | 68 | 58 | 50 | 45 | 62 | 53 | 46 | 41 | 44 | 39 | 35 | 35 | 32 | 29 | 27 | 25 | 23 | 20 |
| 6 | 63 | 52 | 44 | 39 | 57 | 48 | 41 | 36 | 40 | 35 | 31 | 32 | 29 | 26 | 25 | 23 | 21 | 18 |
| 7 | 58 | 47 | 40 | 35 | 53 | 43 | 37 | 32 | 36 | 31 | 28 | 29 | 26 | 23 | 23 | 21 | 19 | 16 |
| 8 | 54 | 43 | 36 | 31 | 49 | 40 | 33 | 29 | 33 | 28 | 25 | 27 | 24 | 21 | 21 | 19 | 17 | 15 |
| 9 | 51 | 39 | 32 | 28 | 46 | 36 | 30 | 26 | 31 | 26 | 23 | 25 | 22 | 19 | 20 | 18 | 16 | 14 |
| 10 | 47 | 36 | 29 | 25 | 43 | 33 | 27 | 23 | 28 | 24 | 20 | 23 | 20 | 18 | 19 | 16 | 15 | 13 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10797 | 10797 | 10797 |
| 5° | 10662 | 10624 | 10686 |
| 10° | 10074 | 10165 | 10401 |
| 15° | 9300 | 9515 | 9942 |
| 20° | 8445 | 8763 | 9342 |
| 25° | 7575 | 7987 | 8704 |
| 30° | 6773 | 7216 | 8042 |
| 35° | 5922 | 6350 | 7259 |
| 40° | 4985 | 5380 | 6284 |
| 45° | 4114 | 4469 | 5246 |
| 50° | 3434 | 3744 | 4371 |
| 55° | 2916 | 3213 | 3610 |
| 60° | 2492 | 2786 | 2881 |
| 65° | 1984 | 2343 | 1861 |
| 70° | 1759 | 1829 | 1137 |
| 75° | 1630 | 1483 | 696 |
| 80° | 1502 | 1364 | 599 |
| 85° | 1362 | 1249 | 487 |



TEST NUMBER: P519173

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 161.0 | 2.3 |
| 10°-20° | 418.8 | 5.9 |
| 20°-30° | 542.5 | 7.6 |
| 30°-40° | 531.2 | 7.5 |
| 40°-50° | 406.6 | 5.7 |
| 50°-60° | 270.9 | 3.8 |
| 60°-70° | 147.9 | 2.1 |
| 70°-80° | 61.6 | 0.9 |
| 80°-90° | 19.2 | 0.3 |
| 90°-100° | 328.4 | 4.6 |
| 100°-110° | 903.5 | 12.7 |
| 110°-120° | 932.6 | 13.1 |
| 120°-130° | 747.2 | 10.5 |
| 130°-140° | 586.8 | 8.3 |
| 140°-150° | 449.7 | 6.3 |
| 150°-160° | 323.3 | 4.6 |
| 160°-170° | 197.7 | 2.8 |
| 170°-180° | 66.6 | 0.9 |
| 0°-30° | 1122.3 | 15.8 |
| 0°-40° | 1653.5 | 23.3 |
| 0°-60° | 2331.0 | 32.9 |
| 0°-90° | 2559.7 | 36.1 |
| 90°-120° | 2164.4 | 30.5 |
| 90°-150° | 3948.2 | 55.6 |
| 90°-180° | 4536.0 | 63.9 |
| 0°-180° | 7095.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1755 | 1755 | 1755 | 1755 | 1755 | |
| 5° | 1727 | 1710 | 1721 | 1725 | 1731 | 161 |
| 15° | 1460 | 1455 | 1494 | 1535 | 1561 | 408 |
| 25° | 1116 | 1119 | 1177 | 1228 | 1282 | 513 |
| 35° | 789 | 792 | 846 | 903 | 967 | 490 |
| 45° | 473 | 482 | 514 | 553 | 603 | 369 |
| 55° | 272 | 283 | 300 | 311 | 337 | 247 |
| 65° | 136 | 148 | 161 | 141 | 128 | 142 |
| 75° | 69 | 69 | 62 | 43 | 29 | 73 |
| 85° | 19 | 19 | 18 | 12 | 7 | 21 |
| 90° | 2 | 6 | 10 | 13 | 13 | 4 |
| 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: P519173

CATALOG NUMBER: SQ4-WB-075U-050D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1755.4 | 1755.4 | 1755.4 | 1755.4 | 1755.4 |
| 2.5° | 1759.7 | 1744.0 | 1748.0 | 1747.9 | 1743.1 |
| 5° | 1726.9 | 1709.6 | 1720.7 | 1724.7 | 1730.8 |
| 7.5° | 1662.8 | 1649.7 | 1670.1 | 1685.1 | 1697.3 |
| 10° | 1612.9 | 1601.6 | 1627.5 | 1649.5 | 1665.3 |
| 12.5° | 1555.0 | 1545.5 | 1577.6 | 1607.1 | 1627.7 |
| 15° | 1460.4 | 1455.1 | 1494.3 | 1534.9 | 1561.3 |
| 17.5° | 1359.2 | 1356.6 | 1401.5 | 1449.0 | 1482.7 |
| 20° | 1290.2 | 1289.4 | 1338.7 | 1388.1 | 1427.3 |
| 22.5° | 1220.5 | 1222.2 | 1274.0 | 1325.4 | 1370.0 |
| 25° | 1116.1 | 1119.1 | 1176.9 | 1228.2 | 1282.5 |
| 27.5° | 1019.5 | 1020.9 | 1080.7 | 1134.8 | 1192.7 |
| 30° | 953.6 | 957.3 | 1016.0 | 1072.0 | 1132.3 |
| 32.5° | 887.6 | 892.0 | 949.4 | 1007.3 | 1068.8 |
| 35° | 788.7 | 792.5 | 845.7 | 902.6 | 966.7 |
| 37.5° | 686.8 | 691.9 | 739.1 | 792.9 | 855.9 |
| 40° | 620.8 | 628.4 | 670.1 | 720.8 | 782.6 |
| 42.5° | 557.4 | 566.7 | 605.4 | 653.5 | 709.2 |
| 45° | 472.9 | 482.0 | 513.8 | 552.6 | 603.1 |
| 47.5° | 400.2 | 410.6 | 435.0 | 468.5 | 511.6 |
| 50° | 358.9 | 368.7 | 391.3 | 416.1 | 456.8 |
| 52.5° | 322.6 | 332.4 | 352.5 | 371.6 | 406.2 |
| 55° | 271.9 | 283.2 | 299.6 | 311.0 | 336.6 |
| 57.5° | 230.3 | 241.1 | 254.2 | 259.3 | 274.8 |
| 60° | 202.6 | 214.6 | 226.5 | 225.9 | 234.2 |
| 62.5° | 177.3 | 187.6 | 199.3 | 191.2 | 191.6 |
| 65° | 136.3 | 147.6 | 161.0 | 140.7 | 127.9 |
| 67.5° | 110.1 | 112.6 | 126.3 | 98.1 | 82.9 |
| 70° | 97.8 | 97.8 | 101.7 | 76.0 | 63.2 |
| 72.5° | 86.1 | 86.1 | 82.6 | 61.8 | 48.4 |
| 75° | 68.6 | 68.6 | 62.4 | 42.8 | 29.3 |
| 77.5° | 52.8 | 52.2 | 47.8 | 32.0 | 21.3 |
| 80° | 42.4 | 42.4 | 38.5 | 25.2 | 16.9 |
| 82.5° | 33.1 | 33.1 | 29.9 | 19.7 | 12.6 |
| 85° | 19.3 | 19.3 | 17.7 | 11.5 | 6.9 |
| 87.5° | 7.1 | 7.9 | 8.2 | 6.4 | 5.7 |
| 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 |



TEST NUMBER: P519173

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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)