

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: P564498

Luminaire Tested: **SQ4-PR1-150U-125D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564498
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

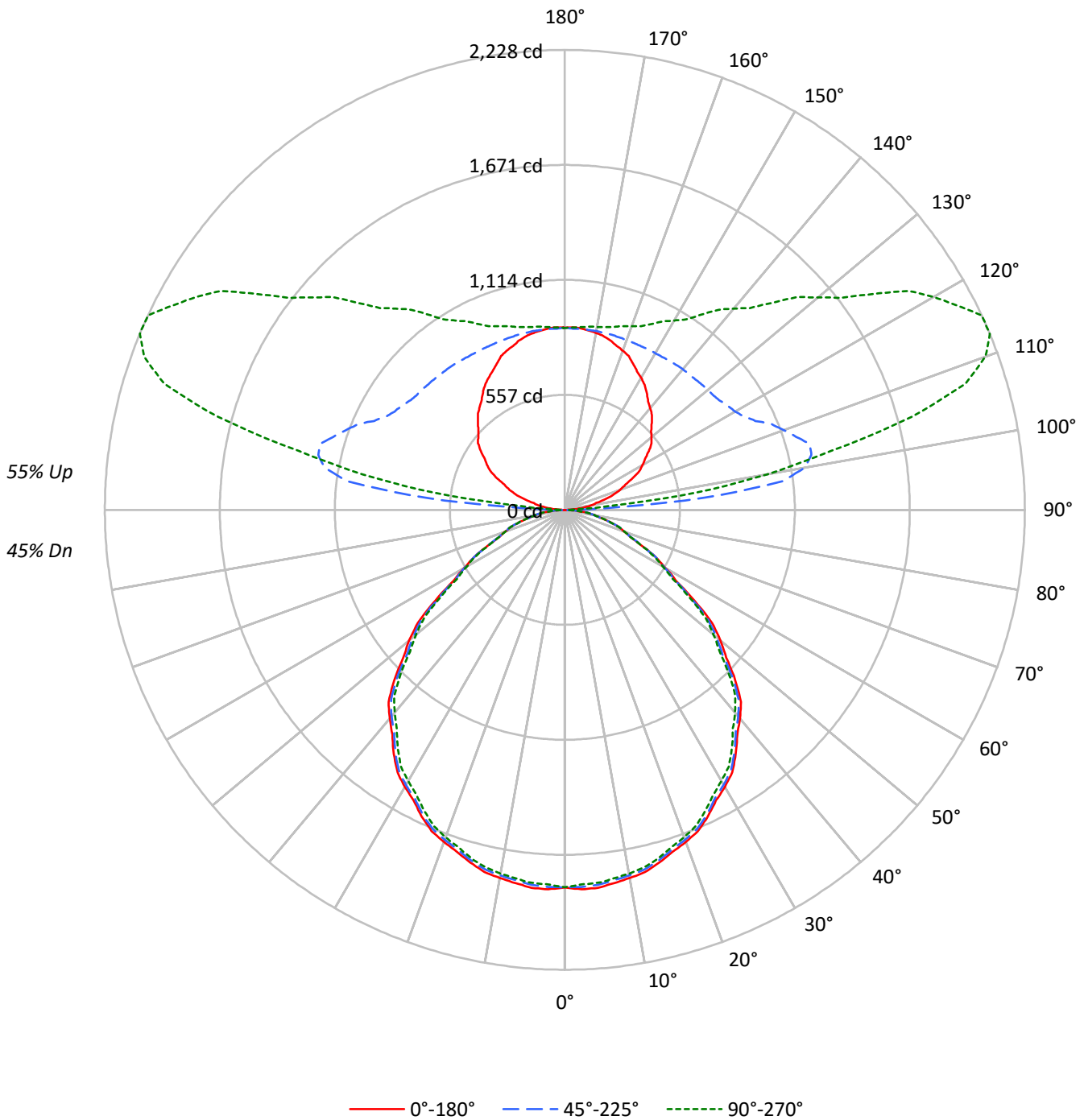
Lumens per Lamp: N/A
Luminaire Lumens: 10258.9 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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



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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 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 | 45 |
| 1 | 97 | 93 | 89 | 85 | 89 | 85 | 82 | 79 | 71 | 68 | 66 | 58 | 56 | 55 | 46 | 45 | 44 | 38 |
| 2 | 88 | 81 | 75 | 70 | 81 | 75 | 69 | 65 | 62 | 59 | 55 | 51 | 48 | 46 | 40 | 39 | 37 | 32 |
| 3 | 81 | 72 | 64 | 59 | 74 | 66 | 60 | 55 | 55 | 51 | 47 | 45 | 42 | 39 | 36 | 34 | 32 | 28 |
| 4 | 74 | 63 | 56 | 50 | 68 | 58 | 52 | 47 | 49 | 44 | 40 | 40 | 37 | 34 | 32 | 30 | 28 | 24 |
| 5 | 68 | 57 | 49 | 43 | 62 | 52 | 45 | 40 | 44 | 39 | 35 | 36 | 32 | 29 | 29 | 26 | 24 | 21 |
| 6 | 63 | 51 | 43 | 37 | 57 | 47 | 40 | 35 | 40 | 34 | 30 | 33 | 29 | 26 | 27 | 24 | 21 | 18 |
| 7 | 58 | 46 | 38 | 33 | 53 | 42 | 35 | 31 | 36 | 31 | 27 | 30 | 26 | 23 | 24 | 21 | 19 | 16 |
| 8 | 54 | 42 | 34 | 29 | 49 | 39 | 32 | 27 | 33 | 27 | 24 | 27 | 23 | 20 | 22 | 19 | 17 | 15 |
| 9 | 50 | 38 | 31 | 26 | 46 | 35 | 29 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 21 | 18 | 15 | 13 |
| 10 | 47 | 35 | 28 | 23 | 43 | 32 | 26 | 22 | 28 | 23 | 19 | 23 | 19 | 17 | 19 | 16 | 14 | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16870 | 16870 | 16870 |
| 5° | 17023 | 16891 | 16803 |
| 10° | 16968 | 16850 | 16761 |
| 15° | 16894 | 16788 | 16698 |
| 20° | 16809 | 16701 | 16577 |
| 25° | 16690 | 16578 | 16386 |
| 30° | 16511 | 16393 | 16158 |
| 35° | 16266 | 16124 | 15895 |
| 40° | 15896 | 15725 | 15440 |
| 45° | 15248 | 14980 | 14672 |
| 50° | 14107 | 13766 | 13495 |
| 55° | 12312 | 12033 | 11781 |
| 60° | 10376 | 10287 | 10084 |
| 65° | 8975 | 9007 | 8940 |
| 70° | 8241 | 8284 | 8284 |
| 75° | 7917 | 7917 | 7971 |
| 80° | 7449 | 7529 | 7449 |
| 85° | 6002 | 6669 | 6669 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 172.9 | 1.7 |
| 10°-20° | 494.7 | 4.8 |
| 20°-30° | 746.2 | 7.3 |
| 30°-40° | 889.1 | 8.7 |
| 40°-50° | 876.6 | 8.5 |
| 50°-60° | 669.9 | 6.5 |
| 60°-70° | 414.6 | 4.0 |
| 70°-80° | 235.5 | 2.3 |
| 80°-90° | 73.5 | 0.7 |
| 90°-100° | 409.8 | 4.0 |
| 100°-110° | 1108.2 | 10.8 |
| 110°-120° | 1165.1 | 11.4 |
| 120°-130° | 946.4 | 9.2 |
| 130°-140° | 742.3 | 7.2 |
| 140°-150° | 569.7 | 5.6 |
| 150°-160° | 409.7 | 4.0 |
| 160°-170° | 250.3 | 2.4 |
| 170°-180° | 84.4 | 0.8 |
| 0°-30° | 1413.8 | 13.8 |
| 0°-40° | 2302.9 | 22.4 |
| 0°-60° | 3849.4 | 37.5 |
| 0°-90° | 4572.9 | 44.6 |
| 90°-120° | 2683.1 | 26.2 |
| 90°-150° | 4941.5 | 48.2 |
| 90°-180° | 5686.0 | 55.4 |
| 0°-180° | 10258.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1828 | 1828 | 1828 | 1828 | 1828 | |
| 5° | 1838 | 1818 | 1824 | 1817 | 1814 | 174 |
| 15° | 1769 | 1750 | 1758 | 1751 | 1748 | 499 |
| 25° | 1640 | 1620 | 1628 | 1611 | 1610 | 755 |
| 35° | 1444 | 1427 | 1432 | 1413 | 1411 | 901 |
| 45° | 1169 | 1153 | 1148 | 1128 | 1124 | 895 |
| 55° | 765 | 753 | 748 | 735 | 732 | 686 |
| 65° | 411 | 408 | 413 | 410 | 410 | 416 |
| 75° | 222 | 222 | 222 | 224 | 224 | 235 |
| 85° | 57 | 60 | 63 | 63 | 63 | 66 |
| 90° | 2 | 6 | 12 | 13 | 12 | 7 |
| 95° | 64 | 223 | 682 | 353 | 210 | 67 |
| 105° | 206 | 318 | 1229 | 1813 | 1739 | 217 |
| 115° | 363 | 443 | 1020 | 1974 | 2228 | 358 |
| 125° | 496 | 569 | 919 | 1551 | 1822 | 443 |
| 135° | 595 | 666 | 894 | 1252 | 1417 | 460 |
| 145° | 692 | 744 | 882 | 1072 | 1153 | 433 |
| 155° | 781 | 812 | 874 | 961 | 993 | 360 |
| 165° | 851 | 859 | 878 | 912 | 917 | 240 |
| 175° | 883 | 882 | 879 | 890 | 888 | 84 |
| 180° | 882 | 882 | 882 | 882 | 882 | |

TEST NUMBER: P564498

CATALOG NUMBER: SQ4-PR1-150U-125D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1828.5 | 1828.5 | 1828.5 | 1828.5 | 1828.5 |
| 2.5° | 1839.9 | 1823.8 | 1828.5 | 1824.5 | 1815.9 |
| 5° | 1838.0 | 1818.0 | 1823.8 | 1817.4 | 1814.3 |
| 7.5° | 1823.8 | 1804.1 | 1809.9 | 1803.6 | 1801.7 |
| 10° | 1811.2 | 1792.7 | 1798.6 | 1792.2 | 1789.1 |
| 12.5° | 1797.3 | 1777.6 | 1784.7 | 1777.1 | 1774.0 |
| 15° | 1768.7 | 1750.2 | 1757.6 | 1751.3 | 1748.2 |
| 17.5° | 1737.2 | 1717.5 | 1724.9 | 1717.6 | 1713.6 |
| 20° | 1712.0 | 1693.5 | 1701.0 | 1689.9 | 1688.4 |
| 22.5° | 1684.3 | 1665.8 | 1673.2 | 1658.4 | 1658.1 |
| 25° | 1639.5 | 1619.5 | 1628.5 | 1611.1 | 1609.6 |
| 27.5° | 1586.3 | 1567.8 | 1575.3 | 1557.6 | 1555.7 |
| 30° | 1549.8 | 1531.3 | 1538.7 | 1519.8 | 1516.7 |
| 32.5° | 1508.2 | 1490.9 | 1497.2 | 1478.2 | 1476.4 |
| 35° | 1444.2 | 1427.3 | 1431.6 | 1412.7 | 1411.2 |
| 37.5° | 1371.5 | 1356.1 | 1358.6 | 1337.7 | 1336.2 |
| 40° | 1319.8 | 1304.4 | 1305.6 | 1283.6 | 1282.0 |
| 42.5° | 1263.1 | 1247.7 | 1246.4 | 1224.3 | 1222.8 |
| 45° | 1168.6 | 1153.2 | 1148.1 | 1127.6 | 1124.5 |
| 47.5° | 1060.9 | 1045.5 | 1036.0 | 1019.3 | 1017.1 |
| 50° | 982.8 | 967.4 | 959.1 | 944.9 | 940.2 |
| 52.5° | 898.4 | 883.0 | 876.0 | 863.0 | 858.4 |
| 55° | 765.4 | 753.1 | 748.1 | 735.4 | 732.4 |
| 57.5° | 639.1 | 630.8 | 629.4 | 617.0 | 615.8 |
| 60° | 562.3 | 557.6 | 557.5 | 546.5 | 546.5 |
| 62.5° | 496.7 | 493.4 | 495.8 | 488.5 | 487.3 |
| 65° | 411.1 | 408.0 | 412.6 | 409.5 | 409.5 |
| 67.5° | 343.3 | 343.3 | 346.2 | 344.9 | 344.9 |
| 70° | 305.5 | 305.5 | 307.1 | 307.1 | 307.1 |
| 72.5° | 271.5 | 270.3 | 274.4 | 274.3 | 273.1 |
| 75° | 222.1 | 222.1 | 222.1 | 223.6 | 223.6 |
| 77.5° | 172.9 | 173.2 | 174.5 | 174.2 | 172.9 |
| 80° | 140.2 | 141.7 | 141.7 | 140.2 | 140.2 |
| 82.5° | 107.4 | 109.0 | 109.0 | 108.6 | 107.4 |
| 85° | 56.7 | 59.8 | 63.0 | 63.0 | 63.0 |
| 87.5° | 16.8 | 22.4 | 27.7 | 27.8 | 26.4 |
| 90° | 1.9 | 5.6 | 12.3 | 13.3 | 12.3 |
| 92.5° | 27.0 | 98.2 | 193.8 | 84.2 | 60.9 |
| 95° | 63.6 | 223.3 | 681.6 | 352.7 | 209.8 |
| 97.5° | 102.1 | 256.0 | 1062.5 | 879.3 | 645.7 |
| 100° | 131.0 | 269.3 | 1180.9 | 1231.6 | 995.8 |
| 102.5° | 157.6 | 287.7 | 1222.7 | 1498.7 | 1322.4 |
| 105° | 206.0 | 318.3 | 1229.3 | 1813.4 | 1739.1 |
| 107.5° | 250.8 | 353.3 | 1175.6 | 2009.7 | 2034.4 |
| 110° | 285.7 | 378.6 | 1127.8 | 2062.4 | 2167.3 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 316.9 | 403.8 | 1083.7 | 2051.8 | 2228.0 |
| 115° | 362.6 | 443.4 | 1019.6 | 1973.7 | 2228.0 |
| 117.5° | 407.4 | 483.2 | 977.2 | 1854.3 | 2142.6 |
| 120° | 434.8 | 509.0 | 952.2 | 1768.6 | 2062.8 |
| 122.5° | 460.6 | 533.4 | 937.0 | 1676.8 | 1973.2 |
| 125° | 496.5 | 568.9 | 918.9 | 1550.7 | 1821.7 |
| 127.5° | 529.5 | 600.6 | 908.3 | 1447.8 | 1686.2 |
| 130° | 547.7 | 621.1 | 903.7 | 1384.2 | 1599.6 |
| 132.5° | 566.7 | 639.3 | 899.2 | 1326.9 | 1525.2 |
| 135° | 595.2 | 665.8 | 894.2 | 1252.1 | 1417.3 |
| 137.5° | 623.9 | 690.5 | 890.1 | 1191.4 | 1326.0 |
| 140° | 643.6 | 705.8 | 888.5 | 1152.3 | 1272.1 |
| 142.5° | 662.6 | 721.1 | 885.5 | 1117.1 | 1221.9 |
| 145° | 692.0 | 744.0 | 881.9 | 1071.7 | 1153.4 |
| 147.5° | 718.8 | 764.9 | 877.7 | 1030.7 | 1093.4 |
| 150° | 738.6 | 779.4 | 876.2 | 1008.4 | 1058.5 |
| 152.5° | 756.8 | 792.4 | 875.4 | 987.6 | 1028.9 |
| 155° | 781.3 | 811.9 | 874.3 | 961.4 | 993.0 |
| 157.5° | 806.7 | 828.1 | 874.5 | 943.1 | 963.9 |
| 160° | 821.1 | 838.8 | 875.3 | 931.6 | 946.5 |
| 162.5° | 832.5 | 847.2 | 876.0 | 922.4 | 933.5 |
| 165° | 850.6 | 858.9 | 878.1 | 912.4 | 917.0 |
| 167.5° | 862.9 | 868.7 | 878.3 | 903.8 | 906.0 |
| 170° | 870.5 | 873.3 | 879.1 | 899.9 | 899.9 |
| 172.5° | 876.6 | 877.1 | 879.1 | 895.4 | 894.6 |
| 175° | 882.9 | 881.9 | 879.1 | 890.4 | 888.5 |
| 177.5° | 884.9 | 882.7 | 878.9 | 886.4 | 884.2 |
| 180° | 881.9 | 881.9 | 881.9 | 881.9 | 881.9 |

(END OF REPORT)