

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: P564404

Luminaire Tested: **SQ4-PR1-125U-125D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564404  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-PR1-125U-125D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

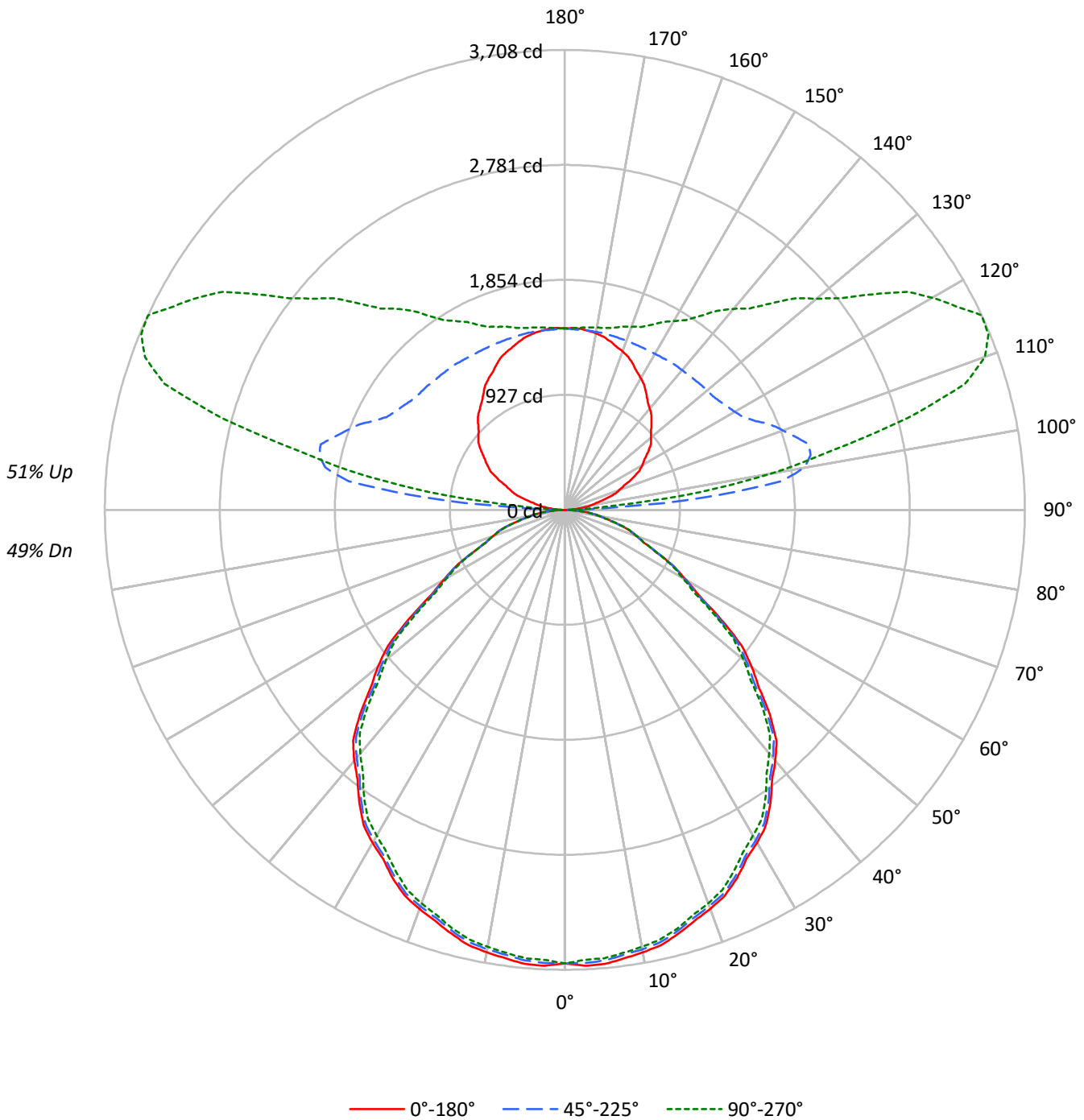
Lumens per Lamp: N/A  
Luminaire Lumens: 18583.3 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

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 |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RC  | 80  |     |     |     |    | 70 |    |    |    |    | 50 |    |    |    |    | 0  |    |    |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 55 | 55 | 55 | 49 |
| 1   | 98  | 94  | 90  | 86  | 90 | 86 | 83 | 80 | 73 | 71 | 69 | 61 | 59 | 58 | 49 | 48 | 47 | 42 |
| 2   | 89  | 82  | 76  | 71  | 82 | 76 | 71 | 66 | 64 | 61 | 57 | 54 | 51 | 49 | 44 | 42 | 40 | 36 |
| 3   | 82  | 72  | 65  | 60  | 75 | 67 | 61 | 56 | 57 | 52 | 48 | 48 | 44 | 41 | 39 | 37 | 35 | 31 |
| 4   | 75  | 64  | 56  | 51  | 69 | 60 | 53 | 47 | 51 | 46 | 41 | 43 | 39 | 36 | 35 | 32 | 30 | 26 |
| 5   | 69  | 57  | 49  | 43  | 63 | 53 | 46 | 41 | 46 | 40 | 36 | 38 | 34 | 31 | 32 | 29 | 26 | 23 |
| 6   | 63  | 51  | 43  | 38  | 58 | 48 | 41 | 36 | 41 | 36 | 31 | 35 | 30 | 27 | 29 | 26 | 23 | 20 |
| 7   | 59  | 46  | 39  | 33  | 54 | 43 | 36 | 31 | 37 | 32 | 28 | 32 | 27 | 24 | 26 | 23 | 21 | 18 |
| 8   | 54  | 42  | 35  | 29  | 50 | 39 | 33 | 28 | 34 | 29 | 25 | 29 | 25 | 22 | 24 | 21 | 19 | 16 |
| 9   | 51  | 39  | 31  | 26  | 47 | 36 | 29 | 25 | 31 | 26 | 22 | 27 | 22 | 19 | 22 | 19 | 17 | 15 |
| 10  | 47  | 35  | 28  | 23  | 44 | 33 | 27 | 22 | 29 | 23 | 20 | 25 | 20 | 18 | 21 | 18 | 15 | 13 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16870 | 16870 | 16870 |
| 5°  | 17022 | 16891 | 16804 |
| 10° | 16968 | 16850 | 16762 |
| 15° | 16894 | 16788 | 16698 |
| 20° | 16809 | 16700 | 16577 |
| 25° | 16691 | 16578 | 16386 |
| 30° | 16510 | 16393 | 16158 |
| 35° | 16267 | 16125 | 15894 |
| 40° | 15896 | 15725 | 15440 |
| 45° | 15248 | 14981 | 14672 |
| 50° | 14106 | 13767 | 13496 |
| 55° | 12313 | 12033 | 11780 |
| 60° | 10375 | 10288 | 10084 |
| 65° | 8974  | 9009  | 8940  |
| 70° | 8242  | 8284  | 8284  |
| 75° | 7915  | 7915  | 7973  |
| 80° | 7446  | 7531  | 7446  |
| 85° | 6002  | 6669  | 6669  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 345.8   | 1.9       |
| 10°-20°   | 989.5   | 5.3       |
| 20°-30°   | 1492.4  | 8.0       |
| 30°-40°   | 1778.2  | 9.6       |
| 40°-50°   | 1753.1  | 9.4       |
| 50°-60°   | 1339.8  | 7.2       |
| 60°-70°   | 829.1   | 4.5       |
| 70°-80°   | 470.9   | 2.5       |
| 80°-90°   | 146.7   | 0.8       |
| 90°-100°  | 683.9   | 3.7       |
| 100°-110° | 1842.3  | 9.9       |
| 110°-120° | 1933.4  | 10.4      |
| 120°-130° | 1568.9  | 8.4       |
| 130°-140° | 1230.4  | 6.6       |
| 140°-150° | 944.7   | 5.1       |
| 150°-160° | 679.2   | 3.7       |
| 160°-170° | 415.0   | 2.2       |
| 170°-180° | 139.9   | 0.8       |
| 0°-30°    | 2827.7  | 15.2      |
| 0°-40°    | 4605.9  | 24.8      |
| 0°-60°    | 7698.9  | 41.4      |
| 0°-90°    | 9145.6  | 49.2      |
| 90°-120°  | 4459.5  | 24.0      |
| 90°-150°  | 8203.5  | 44.1      |
| 90°-180°  | 9438.0  | 50.8      |
| 0°-180°   | 18583.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 3657 | 3657  | 3657 | 3657  | 3657 |      |
| 5°   | 3676 | 3636  | 3648 | 3635  | 3629 | 349  |
| 15°  | 3537 | 3500  | 3515 | 3503  | 3496 | 998  |
| 25°  | 3279 | 3239  | 3257 | 3222  | 3219 | 1509 |
| 35°  | 2888 | 2855  | 2863 | 2825  | 2822 | 1803 |
| 45°  | 2337 | 2306  | 2296 | 2255  | 2249 | 1791 |
| 55°  | 1531 | 1506  | 1496 | 1471  | 1465 | 1372 |
| 65°  | 822  | 816   | 825  | 819   | 819  | 833  |
| 75°  | 444  | 444   | 444  | 447   | 447  | 469  |
| 85°  | 113  | 120   | 126  | 126   | 126  | 132  |
| 90°  | 4    | 11    | 22   | 24    | 24   | 12   |
| 95°  | 104  | 372   | 1121 | 573   | 397  | 109  |
| 105° | 341  | 530   | 2037 | 3048  | 2861 | 358  |
| 115° | 602  | 736   | 1697 | 3278  | 3708 | 592  |
| 125° | 821  | 943   | 1523 | 2575  | 3030 | 733  |
| 135° | 989  | 1104  | 1481 | 2077  | 2352 | 763  |
| 145° | 1144 | 1233  | 1462 | 1776  | 1907 | 717  |
| 155° | 1298 | 1345  | 1449 | 1594  | 1644 | 598  |
| 165° | 1408 | 1424  | 1454 | 1512  | 1520 | 397  |
| 175° | 1464 | 1462  | 1456 | 1477  | 1473 | 139  |
| 180° | 1462 | 1462  | 1462 | 1462  | 1462 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 3657.0 | 3657.0 | 3657.0 | 3657.0 | 3657.0 |
| 2.5°   | 3679.7 | 3647.7 | 3657.0 | 3649.1 | 3631.8 |
| 5°     | 3675.9 | 3635.9 | 3647.6 | 3634.9 | 3628.7 |
| 7.5°   | 3647.6 | 3608.2 | 3619.9 | 3607.2 | 3603.5 |
| 10°    | 3622.4 | 3585.4 | 3597.2 | 3584.5 | 3578.3 |
| 12.5°  | 3594.7 | 3555.3 | 3569.5 | 3554.2 | 3548.1 |
| 15°    | 3537.3 | 3500.4 | 3515.3 | 3502.6 | 3496.4 |
| 17.5°  | 3474.3 | 3434.9 | 3449.8 | 3435.1 | 3427.1 |
| 20°    | 3424.0 | 3387.0 | 3401.9 | 3379.8 | 3376.7 |
| 22.5°  | 3368.5 | 3331.6 | 3346.5 | 3316.8 | 3316.2 |
| 25°    | 3279.1 | 3239.0 | 3257.0 | 3222.3 | 3219.2 |
| 27.5°  | 3172.6 | 3135.6 | 3150.5 | 3115.2 | 3111.5 |
| 30°    | 3099.5 | 3062.6 | 3077.5 | 3039.5 | 3033.4 |
| 32.5°  | 3016.4 | 2981.9 | 2994.3 | 2956.4 | 2952.7 |
| 35°    | 2888.5 | 2854.6 | 2863.3 | 2825.4 | 2822.3 |
| 37.5°  | 2742.9 | 2712.1 | 2717.1 | 2675.5 | 2672.4 |
| 40°    | 2639.6 | 2608.8 | 2611.3 | 2567.1 | 2564.0 |
| 42.5°  | 2526.2 | 2495.4 | 2492.8 | 2448.7 | 2445.6 |
| 45°    | 2337.2 | 2306.4 | 2296.3 | 2255.2 | 2249.0 |
| 47.5°  | 2121.8 | 2091.0 | 2072.0 | 2038.5 | 2034.2 |
| 50°    | 1965.5 | 1934.7 | 1918.3 | 1889.7 | 1880.5 |
| 52.5°  | 1796.7 | 1765.9 | 1752.0 | 1725.9 | 1716.7 |
| 55°    | 1530.9 | 1506.2 | 1496.2 | 1470.9 | 1464.7 |
| 57.5°  | 1278.2 | 1261.6 | 1258.7 | 1234.1 | 1231.6 |
| 60°    | 1124.5 | 1115.3 | 1115.1 | 1093.0 | 1093.0 |
| 62.5°  | 993.5  | 986.7  | 991.6  | 977.0  | 974.6  |
| 65°    | 822.1  | 816.0  | 825.3  | 819.0  | 819.0  |
| 67.5°  | 686.7  | 686.7  | 692.4  | 689.8  | 689.8  |
| 70°    | 611.1  | 611.1  | 614.2  | 614.2  | 614.2  |
| 72.5°  | 543.0  | 540.6  | 548.7  | 548.7  | 546.2  |
| 75°    | 444.1  | 444.1  | 444.1  | 447.3  | 447.3  |
| 77.5°  | 345.9  | 346.5  | 349.0  | 348.3  | 345.9  |
| 80°    | 280.3  | 283.4  | 283.5  | 280.3  | 280.3  |
| 82.5°  | 214.8  | 217.9  | 218.0  | 217.3  | 214.8  |
| 85°    | 113.4  | 119.6  | 126.0  | 126.0  | 126.0  |
| 87.5°  | 33.5   | 44.8   | 54.9   | 55.2   | 52.7   |
| 90°    | 3.7    | 11.0   | 22.3   | 24.2   | 24.2   |
| 92.5°  | 45.4   | 160.5  | 317.3  | 152.8  | 106.2  |
| 95°    | 104.3  | 372.0  | 1121.1 | 573.3  | 396.7  |
| 97.5°  | 166.5  | 425.8  | 1758.4 | 1469.0 | 1107.7 |
| 100°   | 214.2  | 447.3  | 1961.0 | 2051.8 | 1702.2 |
| 102.5° | 260.4  | 477.4  | 2028.1 | 2488.3 | 2201.3 |
| 105°   | 340.8  | 530.2  | 2037.4 | 3048.1 | 2860.6 |
| 107.5° | 416.8  | 585.8  | 1950.6 | 3335.8 | 3384.2 |
| 110°   | 467.4  | 627.7  | 1871.6 | 3425.1 | 3601.8 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 521.1  | 669.7  | 1795.7 | 3405.4 | 3695.6 |
| 115°   | 601.5  | 736.3  | 1696.6 | 3278.2 | 3707.9 |
| 117.5° | 674.9  | 801.3  | 1619.9 | 3075.2 | 3553.7 |
| 120°   | 722.6  | 844.6  | 1581.1 | 2929.5 | 3421.1 |
| 122.5° | 764.3  | 884.9  | 1552.8 | 2780.4 | 3270.6 |
| 125°   | 821.3  | 943.3  | 1523.4 | 2574.8 | 3030.0 |
| 127.5° | 876.0  | 996.2  | 1504.8 | 2393.4 | 2799.8 |
| 130°   | 908.8  | 1029.0 | 1497.3 | 2289.5 | 2646.4 |
| 132.5° | 941.6  | 1060.3 | 1489.9 | 2197.9 | 2525.7 |
| 135°   | 988.9  | 1103.6 | 1480.6 | 2077.2 | 2352.1 |
| 137.5° | 1034.0 | 1144.0 | 1475.7 | 1974.7 | 2200.5 |
| 140°   | 1065.3 | 1170.9 | 1471.2 | 1911.7 | 2115.6 |
| 142.5° | 1098.0 | 1196.4 | 1468.3 | 1852.8 | 2024.7 |
| 145°   | 1143.5 | 1232.7 | 1461.9 | 1775.9 | 1907.0 |
| 147.5° | 1192.6 | 1270.2 | 1455.6 | 1711.2 | 1814.3 |
| 150°   | 1225.4 | 1292.8 | 1452.6 | 1670.6 | 1756.2 |
| 152.5° | 1255.2 | 1313.9 | 1451.1 | 1637.5 | 1707.0 |
| 155°   | 1298.0 | 1345.4 | 1448.9 | 1593.5 | 1644.4 |
| 157.5° | 1335.7 | 1372.5 | 1449.3 | 1562.5 | 1596.8 |
| 160°   | 1359.5 | 1390.5 | 1450.8 | 1544.5 | 1570.0 |
| 162.5° | 1380.4 | 1405.5 | 1452.3 | 1529.4 | 1547.6 |
| 165°   | 1407.9 | 1424.3 | 1454.5 | 1512.4 | 1519.7 |
| 167.5° | 1430.3 | 1439.7 | 1456.3 | 1499.2 | 1502.2 |
| 170°   | 1445.2 | 1448.8 | 1456.3 | 1491.7 | 1491.7 |
| 172.5° | 1454.1 | 1454.8 | 1457.8 | 1484.3 | 1484.3 |
| 175°   | 1463.8 | 1462.0 | 1456.3 | 1476.8 | 1473.1 |
| 177.5° | 1467.9 | 1465.0 | 1457.5 | 1469.3 | 1466.4 |
| 180°   | 1461.9 | 1461.9 | 1461.9 | 1461.9 | 1461.9 |

(END OF REPORT)