

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: P565172

Luminaire Tested: **SQ4-PW1-150U-125D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565172  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-150U-125D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

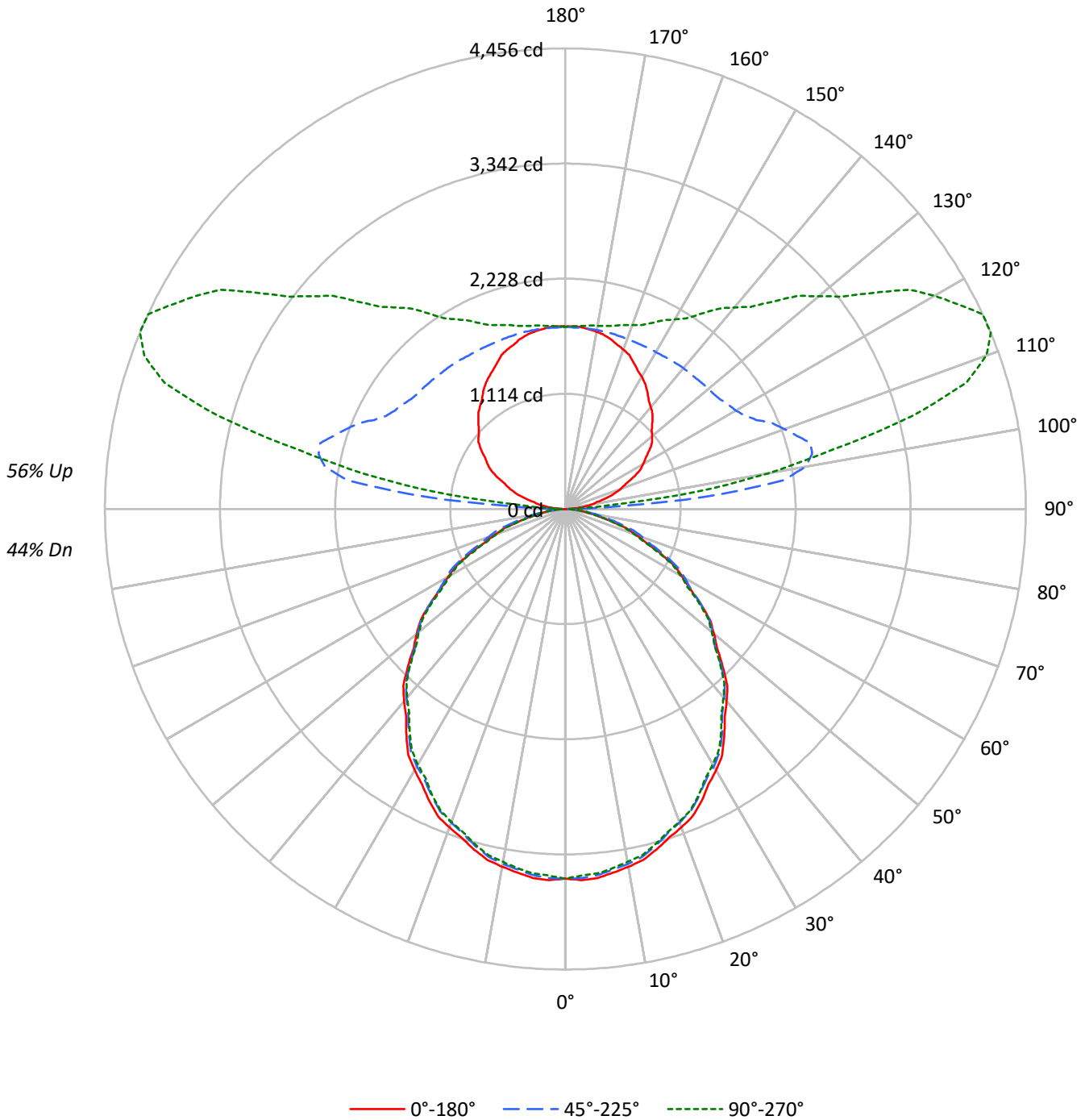
Lumens per Lamp: N/A  
Luminaire Lumens: 20471.8 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 167.8  
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 | 44 |
| 1   | 97  | 92  | 89  | 85  | 88 | 85 | 82 | 79 | 70 | 68 | 66 | 57 | 56 | 54 | 45 | 44 | 43 | 38 |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 48 | 45 | 40 | 38 | 37 | 32 |
| 3   | 80  | 71  | 64  | 58  | 73 | 65 | 59 | 54 | 55 | 50 | 46 | 45 | 41 | 38 | 35 | 33 | 31 | 27 |
| 4   | 73  | 63  | 55  | 49  | 67 | 58 | 51 | 46 | 48 | 43 | 39 | 40 | 36 | 33 | 32 | 29 | 27 | 23 |
| 5   | 67  | 56  | 48  | 42  | 62 | 52 | 45 | 39 | 43 | 38 | 34 | 36 | 32 | 29 | 29 | 26 | 23 | 20 |
| 6   | 62  | 50  | 42  | 36  | 57 | 46 | 39 | 34 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 | 18 |
| 7   | 57  | 45  | 37  | 32  | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 24 | 21 | 18 | 16 |
| 8   | 53  | 41  | 33  | 28  | 49 | 38 | 31 | 26 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 16 | 14 |
| 9   | 50  | 37  | 30  | 25  | 45 | 35 | 28 | 24 | 30 | 24 | 21 | 25 | 21 | 18 | 20 | 17 | 15 | 13 |
| 10  | 46  | 34  | 27  | 22  | 42 | 32 | 25 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 13 | 11 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16493 | 16493 | 16493 |
| 5°  | 16599 | 16468 | 16395 |
| 10° | 16467 | 16334 | 16246 |
| 15° | 16292 | 16112 | 16052 |
| 20° | 16098 | 15850 | 15819 |
| 25° | 15873 | 15584 | 15536 |
| 30° | 15537 | 15302 | 15201 |
| 35° | 15096 | 14883 | 14794 |
| 40° | 14625 | 14397 | 14340 |
| 45° | 14056 | 13871 | 13809 |
| 50° | 13474 | 13360 | 13270 |
| 55° | 12844 | 12844 | 12642 |
| 60° | 12060 | 12293 | 11858 |
| 65° | 11037 | 11587 | 10762 |
| 70° | 9729  | 10663 | 9474  |
| 75° | 8309  | 9545  | 8085  |
| 80° | 6442  | 8033  | 6527  |
| 85° | 4166  | 6166  | 5499  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 336.7   | 1.6       |
| 10°-20°   | 950.5   | 4.6       |
| 20°-30°   | 1409.9  | 6.9       |
| 30°-40°   | 1649.7  | 8.1       |
| 40°-50°   | 1642.3  | 8.0       |
| 50°-60°   | 1418.2  | 6.9       |
| 60°-70°   | 1020.9  | 5.0       |
| 70°-80°   | 535.3   | 2.6       |
| 80°-90°   | 136.4   | 0.7       |
| 90°-100°  | 819.7   | 4.0       |
| 100°-110° | 2216.3  | 10.8      |
| 110°-120° | 2330.1  | 11.4      |
| 120°-130° | 1892.7  | 9.2       |
| 130°-140° | 1484.7  | 7.3       |
| 140°-150° | 1139.5  | 5.6       |
| 150°-160° | 819.5   | 4.0       |
| 160°-170° | 500.6   | 2.4       |
| 170°-180° | 168.8   | 0.8       |
| 0°-30°    | 2697.0  | 13.2      |
| 0°-40°    | 4346.7  | 21.2      |
| 0°-60°    | 7407.2  | 36.2      |
| 0°-90°    | 9099.8  | 44.5      |
| 90°-120°  | 5366.2  | 26.2      |
| 90°-150°  | 9883.0  | 48.3      |
| 90°-180°  | 11372.0 | 55.5      |
| 0°-180°   | 20471.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 3575 | 3575  | 3575 | 3575  | 3575 |      |
| 5°   | 3585 | 3545  | 3556 | 3547  | 3540 | 340  |
| 15°  | 3411 | 3368  | 3374 | 3367  | 3361 | 962  |
| 25°  | 3118 | 3066  | 3062 | 3043  | 3052 | 1434 |
| 35°  | 2681 | 2644  | 2643 | 2618  | 2627 | 1676 |
| 45°  | 2154 | 2136  | 2126 | 2120  | 2117 | 1662 |
| 55°  | 1597 | 1594  | 1597 | 1575  | 1572 | 1425 |
| 65°  | 1011 | 1042  | 1062 | 1020  | 986  | 1002 |
| 75°  | 466  | 509   | 536  | 500   | 454  | 500  |
| 85°  | 79   | 103   | 116  | 110   | 104  | 104  |
| 90°  | 4    | 11    | 25   | 26    | 25   | 11   |
| 95°  | 127  | 446   | 1363 | 706   | 420  | 133  |
| 105° | 412  | 637   | 2459 | 3627  | 3478 | 434  |
| 115° | 725  | 887   | 2039 | 3947  | 4456 | 716  |
| 125° | 993  | 1138  | 1838 | 3101  | 3643 | 885  |
| 135° | 1190 | 1332  | 1788 | 2504  | 2835 | 920  |
| 145° | 1384 | 1488  | 1764 | 2143  | 2307 | 866  |
| 155° | 1563 | 1624  | 1749 | 1923  | 1986 | 721  |
| 165° | 1701 | 1718  | 1756 | 1825  | 1834 | 479  |
| 175° | 1766 | 1764  | 1758 | 1781  | 1777 | 168  |
| 180° | 1764 | 1764  | 1764 | 1764  | 1764 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 3575.2 | 3575.2 | 3575.2 | 3575.2 | 3575.2 |
| 2.5°   | 3595.3 | 3565.7 | 3575.2 | 3567.2 | 3550.0 |
| 5°     | 3584.6 | 3544.6 | 3556.3 | 3546.7 | 3540.5 |
| 7.5°   | 3548.1 | 3511.1 | 3519.7 | 3509.6 | 3505.9 |
| 10°    | 3515.3 | 3478.4 | 3487.0 | 3474.2 | 3468.1 |
| 12.5°  | 3477.5 | 3438.1 | 3446.6 | 3434.0 | 3430.3 |
| 15°    | 3411.4 | 3368.2 | 3373.6 | 3367.1 | 3361.0 |
| 17.5°  | 3334.5 | 3290.8 | 3291.7 | 3281.6 | 3280.3 |
| 20°    | 3279.1 | 3232.9 | 3228.7 | 3216.2 | 3222.4 |
| 22.5°  | 3218.6 | 3169.9 | 3165.7 | 3148.2 | 3156.8 |
| 25°    | 3118.4 | 3066.1 | 3061.7 | 3043.0 | 3052.3 |
| 27.5°  | 3002.5 | 2950.8 | 2950.8 | 2924.6 | 2934.5 |
| 30°    | 2916.8 | 2867.5 | 2872.7 | 2841.5 | 2853.8 |
| 32.5°  | 2826.1 | 2781.8 | 2784.5 | 2753.3 | 2765.6 |
| 35°    | 2680.6 | 2643.6 | 2642.8 | 2617.8 | 2627.0 |
| 37.5°  | 2531.9 | 2499.3 | 2494.1 | 2479.7 | 2482.1 |
| 40°    | 2428.6 | 2400.9 | 2390.8 | 2381.3 | 2381.3 |
| 42.5°  | 2320.2 | 2295.0 | 2285.0 | 2278.0 | 2275.5 |
| 45°    | 2154.5 | 2136.1 | 2126.2 | 2119.8 | 2116.7 |
| 47.5°  | 1990.7 | 1973.5 | 1964.9 | 1960.4 | 1957.4 |
| 50°    | 1877.4 | 1865.0 | 1861.6 | 1852.1 | 1849.0 |
| 52.5°  | 1764.0 | 1756.6 | 1753.2 | 1741.2 | 1738.1 |
| 55°    | 1597.0 | 1593.9 | 1597.0 | 1574.9 | 1571.8 |
| 57.5°  | 1423.1 | 1428.1 | 1438.3 | 1408.5 | 1401.1 |
| 60°    | 1307.2 | 1319.5 | 1332.4 | 1297.5 | 1285.2 |
| 62.5°  | 1188.8 | 1208.5 | 1226.6 | 1186.5 | 1169.2 |
| 65°    | 1011.1 | 1041.9 | 1061.5 | 1019.8 | 985.9  |
| 67.5°  | 839.8  | 878.0  | 901.5  | 856.5  | 818.3  |
| 70°    | 721.3  | 764.5  | 790.6  | 745.6  | 702.4  |
| 72.5°  | 618.0  | 666.1  | 687.3  | 644.8  | 601.6  |
| 75°    | 466.2  | 509.3  | 535.5  | 499.8  | 453.6  |
| 77.5°  | 330.7  | 371.4  | 393.1  | 362.0  | 323.8  |
| 80°    | 242.5  | 285.7  | 302.4  | 276.5  | 245.7  |
| 82.5°  | 172.0  | 207.7  | 219.2  | 203.6  | 182.7  |
| 85°    | 78.7   | 103.4  | 116.5  | 110.1  | 103.9  |
| 87.5°  | 20.9   | 39.7   | 52.8   | 53.2   | 55.3   |
| 90°    | 3.8    | 11.2   | 24.7   | 26.5   | 24.7   |
| 92.5°  | 53.9   | 196.5  | 387.7  | 168.3  | 121.9  |
| 95°    | 127.2  | 446.5  | 1363.2 | 705.5  | 419.6  |
| 97.5°  | 204.3  | 512.1  | 2124.9 | 1758.5 | 1291.4 |
| 100°   | 262.0  | 538.6  | 2361.9 | 2463.2 | 1991.6 |
| 102.5° | 315.2  | 575.4  | 2445.4 | 2997.5 | 2644.8 |
| 105°   | 412.0  | 636.6  | 2458.7 | 3626.8 | 3478.3 |
| 107.5° | 501.6  | 706.6  | 2351.2 | 4019.3 | 4068.7 |
| 110°   | 571.5  | 757.1  | 2255.5 | 4124.7 | 4334.5 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 633.8  | 807.5  | 2167.5 | 4103.7 | 4456.0 |
| 115°   | 725.3  | 886.8  | 2039.1 | 3947.4 | 4456.0 |
| 117.5° | 814.9  | 966.4  | 1954.4 | 3708.6 | 4285.2 |
| 120°   | 869.6  | 1018.1 | 1904.3 | 3537.2 | 4125.7 |
| 122.5° | 921.2  | 1066.7 | 1873.9 | 3353.5 | 3946.4 |
| 125°   | 993.0  | 1137.8 | 1837.9 | 3101.4 | 3643.4 |
| 127.5° | 1059.0 | 1201.2 | 1816.6 | 2895.6 | 3372.3 |
| 130°   | 1095.5 | 1242.2 | 1807.5 | 2768.5 | 3199.2 |
| 132.5° | 1133.5 | 1278.6 | 1798.4 | 2653.8 | 3050.3 |
| 135°   | 1190.4 | 1331.5 | 1788.5 | 2504.2 | 2834.6 |
| 137.5° | 1247.8 | 1381.1 | 1780.1 | 2382.8 | 2652.0 |
| 140°   | 1287.3 | 1411.6 | 1777.1 | 2304.7 | 2544.1 |
| 142.5° | 1325.2 | 1442.2 | 1771.0 | 2234.1 | 2443.9 |
| 145°   | 1384.1 | 1488.0 | 1763.8 | 2143.4 | 2306.8 |
| 147.5° | 1437.6 | 1529.7 | 1755.5 | 2061.3 | 2186.8 |
| 150°   | 1477.1 | 1558.8 | 1752.4 | 2016.7 | 2116.9 |
| 152.5° | 1513.6 | 1584.9 | 1750.9 | 1975.3 | 2057.7 |
| 155°   | 1562.6 | 1623.8 | 1748.6 | 1922.8 | 1985.9 |
| 157.5° | 1613.4 | 1656.1 | 1749.0 | 1886.3 | 1927.8 |
| 160°   | 1642.3 | 1677.6 | 1750.5 | 1863.2 | 1892.9 |
| 162.5° | 1665.1 | 1694.4 | 1752.0 | 1844.8 | 1867.1 |
| 165°   | 1701.2 | 1717.9 | 1756.2 | 1824.8 | 1834.1 |
| 167.5° | 1725.8 | 1737.3 | 1756.6 | 1807.6 | 1812.0 |
| 170°   | 1741.0 | 1746.6 | 1758.1 | 1799.9 | 1799.9 |
| 172.5° | 1753.2 | 1754.3 | 1758.1 | 1790.7 | 1789.2 |
| 175°   | 1765.7 | 1763.9 | 1758.1 | 1780.8 | 1777.1 |
| 177.5° | 1769.9 | 1765.4 | 1757.7 | 1772.8 | 1768.4 |
| 180°   | 1763.8 | 1763.8 | 1763.8 | 1763.8 | 1763.8 |

(END OF REPORT)