

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: P520060

Luminaire Tested: **SQ4-F-075U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520060  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-075U-125D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

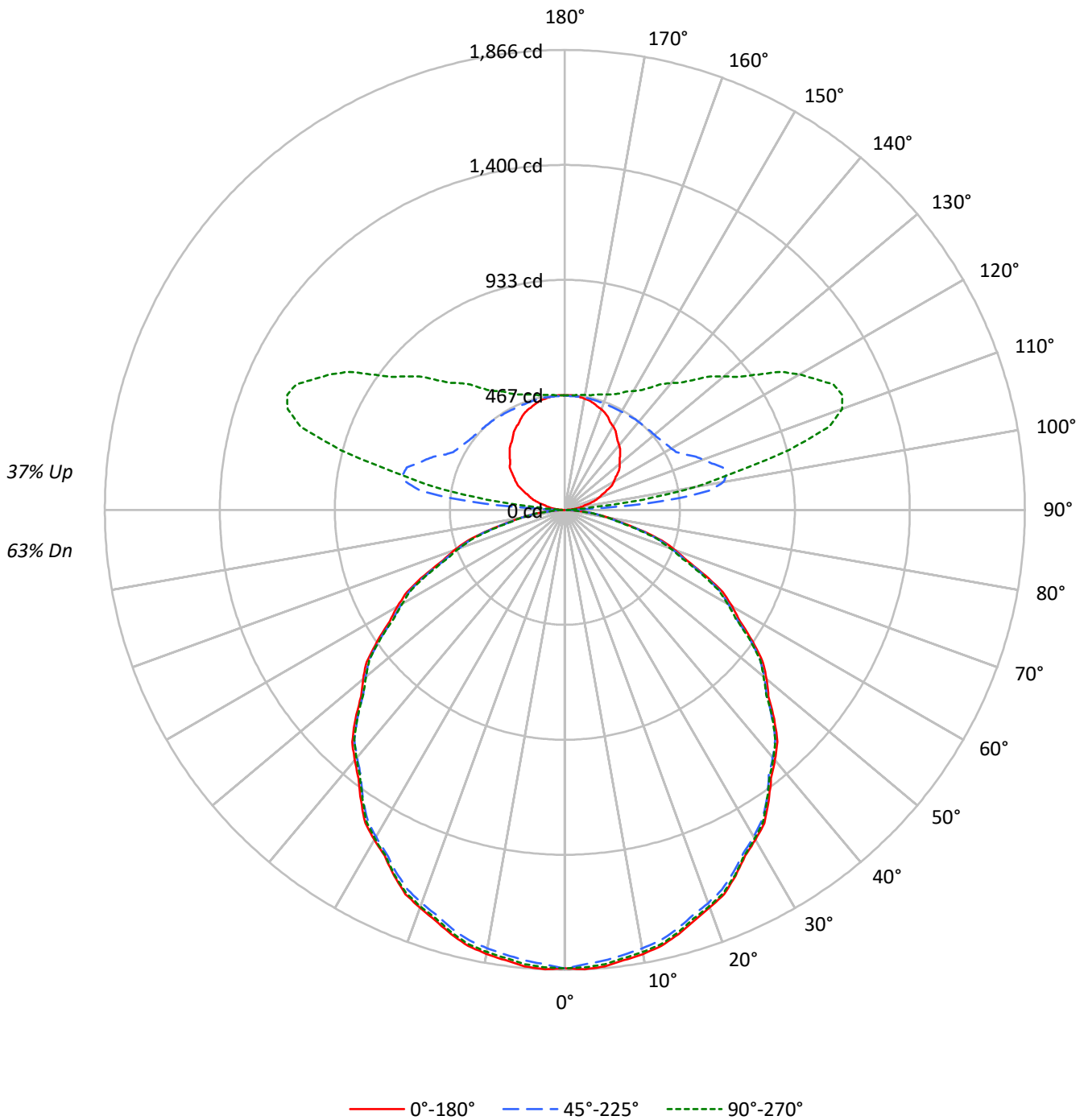
Lumens per Lamp: N/A  
Luminaire Lumens: 8099.9 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 62.1  
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   | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 79 | 79 | 79 | 68 | 68 | 68 | 63 |
| 1   | 101 | 96  | 92  | 89  | 94  | 90  | 87  | 84  | 79 | 77 | 74 | 69 | 67 | 66 | 60 | 59 | 57 | 53 |
| 2   | 92  | 84  | 78  | 72  | 86  | 79  | 73  | 69  | 69 | 65 | 61 | 61 | 57 | 55 | 53 | 50 | 48 | 44 |
| 3   | 83  | 74  | 66  | 60  | 78  | 69  | 63  | 57  | 61 | 56 | 52 | 54 | 49 | 46 | 47 | 43 | 41 | 37 |
| 4   | 76  | 65  | 57  | 51  | 71  | 61  | 54  | 48  | 54 | 48 | 44 | 48 | 43 | 39 | 41 | 38 | 35 | 32 |
| 5   | 70  | 58  | 50  | 44  | 65  | 55  | 47  | 42  | 49 | 42 | 38 | 43 | 38 | 34 | 37 | 34 | 30 | 27 |
| 6   | 65  | 52  | 44  | 38  | 60  | 49  | 42  | 36  | 44 | 38 | 33 | 39 | 34 | 30 | 34 | 30 | 27 | 24 |
| 7   | 60  | 47  | 39  | 33  | 56  | 45  | 37  | 32  | 40 | 34 | 29 | 35 | 30 | 26 | 31 | 27 | 24 | 21 |
| 8   | 55  | 43  | 35  | 29  | 52  | 41  | 33  | 28  | 36 | 30 | 26 | 32 | 27 | 24 | 28 | 24 | 21 | 19 |
| 9   | 52  | 39  | 31  | 26  | 48  | 37  | 30  | 25  | 33 | 27 | 23 | 30 | 25 | 21 | 26 | 22 | 19 | 17 |
| 10  | 48  | 36  | 28  | 24  | 45  | 34  | 27  | 23  | 31 | 25 | 21 | 27 | 23 | 19 | 24 | 20 | 17 | 15 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 17162 | 17162 | 17162 |
| 5°  | 17218 | 16999 | 17142 |
| 10° | 17139 | 16928 | 17062 |
| 15° | 17024 | 16819 | 16955 |
| 20° | 16866 | 16675 | 16805 |
| 25° | 16674 | 16497 | 16633 |
| 30° | 16468 | 16326 | 16413 |
| 35° | 16235 | 16096 | 16109 |
| 40° | 15967 | 15794 | 15843 |
| 45° | 15668 | 15494 | 15522 |
| 50° | 15325 | 15150 | 15104 |
| 55° | 14935 | 14721 | 14689 |
| 60° | 14450 | 14129 | 14055 |
| 65° | 13701 | 13409 | 13232 |
| 70° | 12757 | 12425 | 12263 |
| 75° | 11347 | 11097 | 10765 |
| 80° | 9245  | 8979  | 8921  |
| 85° | 5526  | 6288  | 6288  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 175.5  | 2.2       |
| 10°-20°   | 499.8  | 6.2       |
| 20°-30°   | 751.0  | 9.3       |
| 30°-40°   | 896.0  | 11.1      |
| 40°-50°   | 918.5  | 11.3      |
| 50°-60°   | 818.6  | 10.1      |
| 60°-70°   | 609.4  | 7.5       |
| 70°-80°   | 330.2  | 4.1       |
| 80°-90°   | 77.0   | 1.0       |
| 90°-100°  | 218.9  | 2.7       |
| 100°-110° | 602.3  | 7.4       |
| 110°-120° | 621.7  | 7.7       |
| 120°-130° | 498.1  | 6.1       |
| 130°-140° | 391.2  | 4.8       |
| 140°-150° | 299.8  | 3.7       |
| 150°-160° | 215.6  | 2.7       |
| 160°-170° | 131.8  | 1.6       |
| 170°-180° | 44.4   | 0.5       |
| 0°-30°    | 1426.3 | 17.6      |
| 0°-40°    | 2322.4 | 28.7      |
| 0°-60°    | 4059.5 | 50.1      |
| 0°-90°    | 5076.0 | 62.7      |
| 90°-120°  | 1443.0 | 17.8      |
| 90°-150°  | 2632.1 | 32.5      |
| 90°-180°  | 3024.0 | 37.3      |
| 0°-180°   | 8099.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1860 | 1860  | 1860 | 1860  | 1860 |      |
| 5°   | 1859 | 1856  | 1836 | 1852  | 1851 | 176  |
| 15°  | 1782 | 1778  | 1761 | 1776  | 1775 | 502  |
| 25°  | 1638 | 1635  | 1620 | 1630  | 1634 | 754  |
| 35°  | 1441 | 1440  | 1429 | 1429  | 1430 | 901  |
| 45°  | 1201 | 1198  | 1188 | 1186  | 1190 | 925  |
| 55°  | 928  | 926   | 915  | 908   | 913  | 829  |
| 65°  | 628  | 624   | 614  | 610   | 606  | 621  |
| 75°  | 318  | 318   | 311  | 305   | 302  | 338  |
| 85°  | 52   | 59    | 59   | 60    | 59   | 72   |
| 90°  | 1    | 4     | 7    | 9     | 9    | 3    |
| 95°  | 33   | 120   | 387  | 166   | 106  | 34   |
| 105° | 108  | 166   | 664  | 1011  | 943  | 114  |
| 115° | 191  | 232   | 532  | 1060  | 1203 | 188  |
| 125° | 263  | 299   | 483  | 817   | 957  | 234  |
| 135° | 317  | 352   | 469  | 661   | 748  | 245  |
| 145° | 366  | 392   | 462  | 563   | 606  | 230  |
| 155° | 415  | 428   | 459  | 506   | 520  | 191  |
| 165° | 448  | 454   | 461  | 480   | 483  | 126  |
| 175° | 464  | 465   | 462  | 468   | 467  | 44   |
| 180° | 464  | 464   | 464  | 464   | 464  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1860.1 | 1860.1 | 1860.1 | 1860.1 | 1860.1 |
| 2.5°   | 1865.8 | 1862.6 | 1846.1 | 1860.0 | 1857.7 |
| 5°     | 1859.1 | 1856.1 | 1835.5 | 1851.9 | 1850.9 |
| 7.5°   | 1843.3 | 1839.5 | 1820.8 | 1836.1 | 1834.3 |
| 10°    | 1829.4 | 1826.4 | 1806.9 | 1822.2 | 1821.2 |
| 12.5°  | 1812.2 | 1809.1 | 1789.7 | 1805.0 | 1804.8 |
| 15°    | 1782.3 | 1778.3 | 1760.8 | 1776.1 | 1775.1 |
| 17.5°  | 1746.5 | 1741.8 | 1724.6 | 1736.7 | 1738.7 |
| 20°    | 1717.8 | 1714.8 | 1698.4 | 1709.6 | 1711.6 |
| 22.5°  | 1688.3 | 1684.5 | 1667.2 | 1680.2 | 1682.1 |
| 25°    | 1637.9 | 1634.9 | 1620.5 | 1629.8 | 1633.9 |
| 27.5°  | 1582.7 | 1582.7 | 1569.3 | 1575.9 | 1578.4 |
| 30°    | 1545.8 | 1545.8 | 1532.5 | 1536.7 | 1540.6 |
| 32.5°  | 1506.5 | 1503.2 | 1490.8 | 1494.1 | 1498.1 |
| 35°    | 1441.4 | 1440.4 | 1429.1 | 1429.2 | 1430.2 |
| 37.5°  | 1374.0 | 1371.2 | 1358.9 | 1359.8 | 1364.6 |
| 40°    | 1325.7 | 1323.8 | 1311.4 | 1311.5 | 1315.4 |
| 42.5°  | 1276.5 | 1274.6 | 1263.9 | 1262.2 | 1263.9 |
| 45°    | 1200.8 | 1197.8 | 1187.5 | 1185.5 | 1189.6 |
| 47.5°  | 1120.1 | 1121.0 | 1108.7 | 1105.8 | 1108.1 |
| 50°    | 1067.7 | 1067.7 | 1055.5 | 1049.4 | 1052.3 |
| 52.5°  | 1012.9 | 1011.3 | 998.9  | 992.1  | 999.1  |
| 55°    | 928.5  | 925.5  | 915.2  | 908.1  | 913.2  |
| 57.5°  | 842.1  | 837.5  | 827.1  | 819.4  | 822.3  |
| 60°    | 783.1  | 776.2  | 765.7  | 759.6  | 761.7  |
| 62.5°  | 721.7  | 717.9  | 706.7  | 697.5  | 701.9  |
| 65°    | 627.6  | 623.5  | 614.2  | 610.0  | 606.1  |
| 67.5°  | 535.2  | 532.6  | 522.1  | 517.7  | 515.2  |
| 70°    | 472.9  | 467.9  | 460.6  | 455.6  | 454.6  |
| 72.5°  | 412.4  | 406.5  | 399.2  | 394.9  | 392.3  |
| 75°    | 318.3  | 318.3  | 311.3  | 305.0  | 302.0  |
| 77.5°  | 228.9  | 229.7  | 223.8  | 221.7  | 220.3  |
| 80°    | 174.0  | 174.0  | 169.0  | 166.9  | 167.9  |
| 82.5°  | 121.6  | 124.1  | 122.2  | 119.3  | 118.0  |
| 85°    | 52.2   | 59.2   | 59.4   | 60.4   | 59.4   |
| 87.5°  | 9.2    | 15.4   | 17.0   | 15.7   | 14.1   |
| 90°    | 1.0    | 3.9    | 6.9    | 8.9    | 8.9    |
| 92.5°  | 13.6   | 58.2   | 100.9  | 38.7   | 31.8   |
| 95°    | 32.6   | 119.5  | 387.1  | 165.5  | 105.6  |
| 97.5°  | 53.1   | 132.5  | 590.8  | 455.2  | 321.2  |
| 100°   | 68.2   | 140.6  | 654.8  | 660.9  | 539.2  |
| 102.5° | 82.4   | 150.1  | 671.4  | 820.0  | 708.4  |
| 105°   | 107.7  | 165.6  | 663.7  | 1010.8 | 943.2  |
| 107.5° | 131.8  | 184.7  | 625.9  | 1104.2 | 1124.2 |
| 110°   | 149.2  | 197.4  | 597.5  | 1127.5 | 1197.0 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 164.9 | 211.7 | 569.1 | 1112.5 | 1218.3 |
| 115°   | 190.6 | 232.1 | 532.3 | 1060.0 | 1202.9 |
| 117.5° | 215.1 | 253.3 | 509.0 | 986.3  | 1148.0 |
| 120°   | 230.2 | 266.8 | 498.7 | 931.2  | 1098.2 |
| 122.5° | 243.6 | 280.2 | 491.6 | 882.8  | 1041.3 |
| 125°   | 262.7 | 299.4 | 482.9 | 816.9  | 957.0  |
| 127.5° | 280.9 | 315.8 | 477.2 | 762.1  | 884.9  |
| 130°   | 290.4 | 326.1 | 474.1 | 729.4  | 841.5  |
| 132.5° | 301.5 | 337.2 | 471.6 | 700.7  | 802.0  |
| 135°   | 317.0 | 351.8 | 469.1 | 660.7  | 747.6  |
| 137.5° | 331.7 | 363.9 | 467.0 | 628.3  | 700.0  |
| 140°   | 342.7 | 372.7 | 466.2 | 606.8  | 671.6  |
| 142.5° | 352.2 | 379.8 | 464.6 | 587.7  | 643.1  |
| 145°   | 366.4 | 391.5 | 462.2 | 562.9  | 606.4  |
| 147.5° | 381.6 | 403.3 | 461.0 | 541.0  | 575.8  |
| 150°   | 391.1 | 410.4 | 460.2 | 529.0  | 556.1  |
| 152.5° | 399.8 | 417.6 | 459.4 | 518.6  | 541.0  |
| 155°   | 414.8 | 428.3 | 459.2 | 506.0  | 520.5  |
| 157.5° | 425.7 | 436.6 | 459.2 | 495.6  | 505.7  |
| 160°   | 433.6 | 442.2 | 459.2 | 490.0  | 497.8  |
| 162.5° | 439.9 | 447.0 | 460.0 | 485.2  | 491.4  |
| 165°   | 448.4 | 454.1 | 461.2 | 480.1  | 482.9  |
| 167.5° | 454.3 | 458.7 | 462.2 | 475.7  | 476.4  |
| 170°   | 458.2 | 461.2 | 462.2 | 474.1  | 474.1  |
| 172.5° | 461.4 | 462.7 | 462.2 | 471.6  | 470.9  |
| 175°   | 464.2 | 465.1 | 462.2 | 468.1  | 467.1  |
| 177.5° | 465.0 | 465.0 | 461.8 | 466.5  | 465.0  |
| 180°   | 464.2 | 464.2 | 464.2 | 464.2  | 464.2  |

(END OF REPORT)