

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: P519520

Luminaire Tested: **SQ4-WB-125U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519520  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

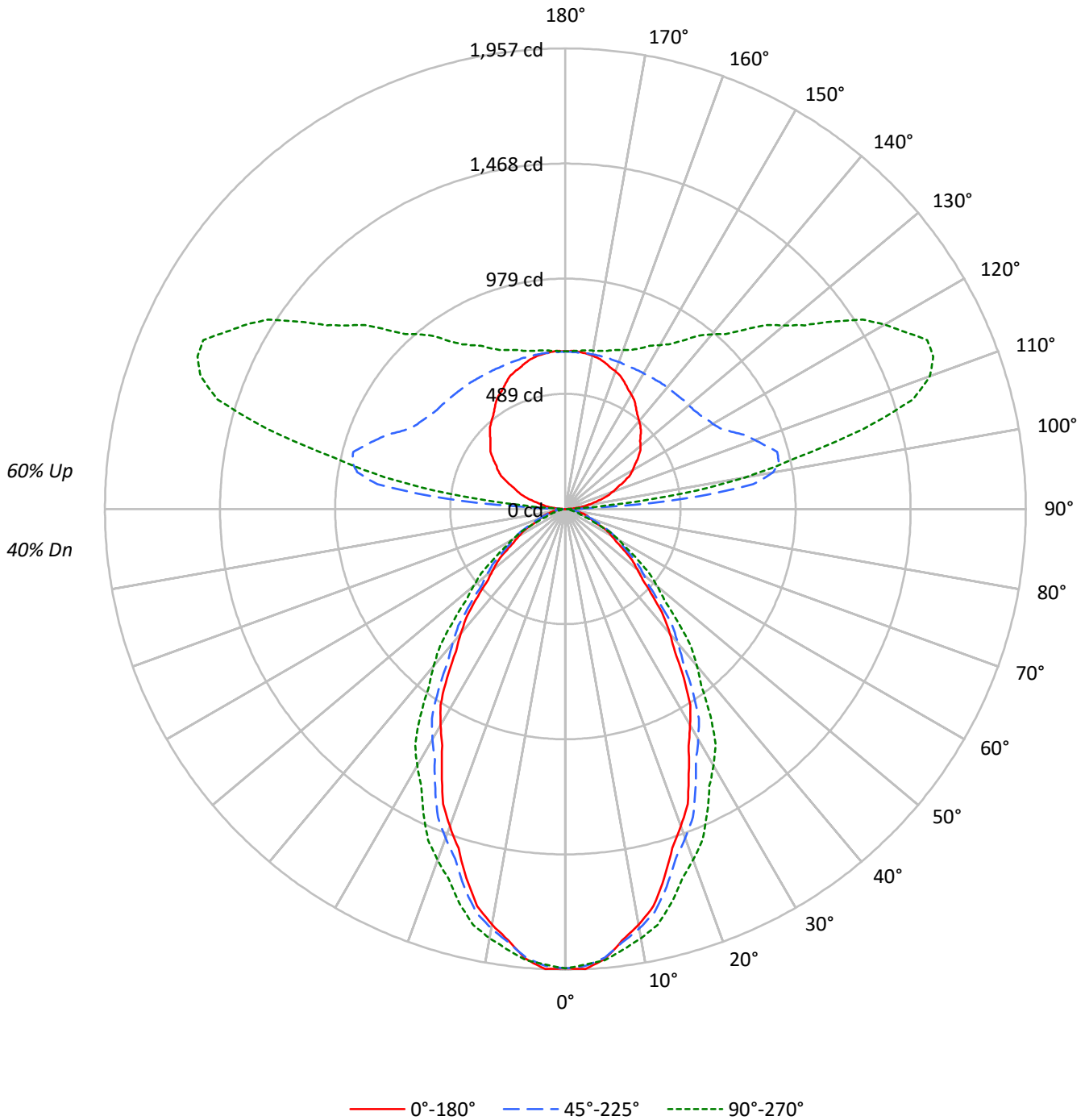
Lumens per Lamp: N/A  
Luminaire Lumens: 7167.9 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 64.5  
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   | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 78 | 78 | 78 | 61 | 61 | 61 | 47 | 47 | 47 | 40 |
| 1   | 96  | 92  | 89  | 86  | 88 | 84 | 81 | 79 | 69 | 67 | 65 | 55 | 54 | 53 | 43 | 42 | 41 | 35 |
| 2   | 88  | 82  | 76  | 72  | 80 | 75 | 70 | 66 | 62 | 59 | 56 | 50 | 48 | 46 | 39 | 37 | 36 | 31 |
| 3   | 81  | 73  | 66  | 61  | 74 | 67 | 61 | 56 | 55 | 51 | 48 | 45 | 42 | 40 | 35 | 33 | 32 | 27 |
| 4   | 75  | 65  | 58  | 52  | 68 | 60 | 54 | 49 | 50 | 45 | 42 | 41 | 37 | 35 | 32 | 30 | 28 | 24 |
| 5   | 69  | 58  | 51  | 45  | 63 | 54 | 47 | 42 | 45 | 40 | 37 | 37 | 34 | 31 | 29 | 27 | 25 | 22 |
| 6   | 64  | 53  | 45  | 40  | 58 | 49 | 42 | 37 | 41 | 36 | 32 | 34 | 30 | 28 | 27 | 25 | 23 | 20 |
| 7   | 59  | 48  | 40  | 35  | 54 | 44 | 38 | 33 | 37 | 33 | 29 | 31 | 27 | 25 | 25 | 23 | 21 | 18 |
| 8   | 55  | 44  | 36  | 32  | 50 | 40 | 34 | 30 | 34 | 29 | 26 | 29 | 25 | 22 | 23 | 21 | 19 | 16 |
| 9   | 52  | 40  | 33  | 28  | 47 | 37 | 31 | 27 | 32 | 27 | 24 | 26 | 23 | 20 | 22 | 19 | 17 | 15 |
| 10  | 48  | 37  | 30  | 26  | 44 | 34 | 28 | 24 | 29 | 25 | 21 | 25 | 21 | 19 | 20 | 18 | 16 | 14 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 18010 | 18010 | 18010 |
| 5°  | 17785 | 17722 | 17825 |
| 10° | 16803 | 16956 | 17349 |
| 15° | 15512 | 15872 | 16584 |
| 20° | 14086 | 14617 | 15584 |
| 25° | 12634 | 13324 | 14518 |
| 30° | 11297 | 12036 | 13414 |
| 35° | 9879  | 10593 | 12107 |
| 40° | 8315  | 8975  | 10481 |
| 45° | 6862  | 7454  | 8751  |
| 50° | 5728  | 6245  | 7290  |
| 55° | 4864  | 5360  | 6021  |
| 60° | 4157  | 4646  | 4805  |
| 65° | 3310  | 3908  | 3104  |
| 70° | 2935  | 3051  | 1894  |
| 75° | 2716  | 2474  | 1159  |
| 80° | 2502  | 2274  | 999   |
| 85° | 2265  | 2085  | 815   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 179.0  | 2.5       |
| 10°-20°   | 465.7  | 6.5       |
| 20°-30°   | 603.2  | 8.4       |
| 30°-40°   | 590.7  | 8.2       |
| 40°-50°   | 452.2  | 6.3       |
| 50°-60°   | 301.3  | 4.2       |
| 60°-70°   | 164.4  | 2.3       |
| 70°-80°   | 68.5   | 1.0       |
| 80°-90°   | 21.0   | 0.3       |
| 90°-100°  | 313.2  | 4.4       |
| 100°-110° | 843.6  | 11.8      |
| 110°-120° | 885.4  | 12.4      |
| 120°-130° | 718.5  | 10.0      |
| 130°-140° | 563.5  | 7.9       |
| 140°-150° | 432.6  | 6.0       |
| 150°-160° | 311.0  | 4.3       |
| 160°-170° | 190.0  | 2.7       |
| 170°-180° | 64.1   | 0.9       |
| 0°-30°    | 1248.0 | 17.4      |
| 0°-40°    | 1838.7 | 25.7      |
| 0°-60°    | 2592.2 | 36.2      |
| 0°-90°    | 2846.1 | 39.7      |
| 90°-120°  | 2042.2 | 28.5      |
| 90°-150°  | 3756.7 | 52.4      |
| 90°-180°  | 4322.0 | 60.3      |
| 0°-180°   | 7167.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1952 | 1952  | 1952 | 1952  | 1952 |      |
| 5°   | 1920 | 1901  | 1914 | 1918  | 1925 | 179  |
| 15°  | 1624 | 1618  | 1662 | 1707  | 1736 | 454  |
| 25°  | 1241 | 1244  | 1309 | 1366  | 1426 | 571  |
| 35°  | 877  | 881   | 940  | 1004  | 1075 | 545  |
| 45°  | 526  | 536   | 571  | 615   | 671  | 410  |
| 55°  | 302  | 315   | 333  | 346   | 374  | 274  |
| 65°  | 152  | 164   | 179  | 156   | 142  | 158  |
| 75°  | 76   | 76    | 69   | 48    | 32   | 81   |
| 85°  | 21   | 21    | 20   | 13    | 8    | 23   |
| 90°  | 2    | 5     | 10   | 11    | 11   | 4    |
| 95°  | 48   | 170   | 513  | 262   | 182  | 50   |
| 105° | 156  | 243   | 933  | 1396  | 1310 | 164  |
| 115° | 276  | 337   | 777  | 1501  | 1698 | 271  |
| 125° | 376  | 432   | 698  | 1179  | 1388 | 336  |
| 135° | 453  | 505   | 678  | 951   | 1077 | 350  |
| 145° | 524  | 564   | 670  | 813   | 873  | 328  |
| 155° | 594  | 616   | 664  | 730   | 753  | 274  |
| 165° | 645  | 652   | 666  | 693   | 696  | 182  |
| 175° | 670  | 670   | 667  | 676   | 675  | 64   |
| 180° | 670  | 670   | 670  | 670   | 670  |      |

TEST NUMBER: P519520

CATALOG NUMBER: SQ4-WB-125U-100D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1952.0 | 1952.0 | 1952.0 | 1952.0 | 1952.0 |
| 2.5°   | 1956.8 | 1939.4 | 1943.8 | 1943.7 | 1938.3 |
| 5°     | 1920.3 | 1901.1 | 1913.5 | 1917.9 | 1924.6 |
| 7.5°   | 1849.1 | 1834.5 | 1857.1 | 1873.9 | 1887.5 |
| 10°    | 1793.6 | 1781.0 | 1809.9 | 1834.2 | 1851.8 |
| 12.5°  | 1729.2 | 1718.6 | 1754.4 | 1787.1 | 1810.0 |
| 15°    | 1624.0 | 1618.1 | 1661.7 | 1706.9 | 1736.2 |
| 17.5°  | 1511.4 | 1508.6 | 1558.5 | 1611.3 | 1648.8 |
| 20°    | 1434.7 | 1433.9 | 1488.7 | 1543.6 | 1587.2 |
| 22.5°  | 1357.3 | 1359.1 | 1416.7 | 1473.9 | 1523.4 |
| 25°    | 1241.1 | 1244.5 | 1308.8 | 1365.8 | 1426.1 |
| 27.5°  | 1133.7 | 1135.2 | 1201.7 | 1261.9 | 1326.3 |
| 30°    | 1060.4 | 1064.6 | 1129.8 | 1192.1 | 1259.1 |
| 32.5°  | 987.1  | 991.9  | 1055.8 | 1120.2 | 1188.5 |
| 35°    | 877.1  | 881.3  | 940.5  | 1003.8 | 1074.9 |
| 37.5°  | 763.7  | 769.4  | 821.9  | 881.8  | 951.8  |
| 40°    | 690.4  | 698.7  | 745.2  | 801.6  | 870.2  |
| 42.5°  | 619.8  | 630.2  | 673.2  | 726.7  | 788.7  |
| 45°    | 525.9  | 536.0  | 571.3  | 614.6  | 670.7  |
| 47.5°  | 445.1  | 456.6  | 483.8  | 521.0  | 568.9  |
| 50°    | 399.1  | 410.0  | 435.1  | 462.7  | 507.9  |
| 52.5°  | 358.7  | 369.6  | 391.9  | 413.2  | 451.7  |
| 55°    | 302.4  | 314.9  | 333.2  | 345.8  | 374.3  |
| 57.5°  | 256.1  | 268.2  | 282.7  | 288.4  | 305.6  |
| 60°    | 225.3  | 238.7  | 251.8  | 251.2  | 260.4  |
| 62.5°  | 197.2  | 208.6  | 221.7  | 212.6  | 213.1  |
| 65°    | 151.6  | 164.2  | 179.0  | 156.4  | 142.2  |
| 67.5°  | 122.5  | 125.2  | 140.5  | 109.1  | 92.2   |
| 70°    | 108.8  | 108.8  | 113.1  | 84.5   | 70.2   |
| 72.5°  | 95.8   | 95.8   | 91.8   | 68.7   | 53.8   |
| 75°    | 76.2   | 76.2   | 69.4   | 47.6   | 32.5   |
| 77.5°  | 58.8   | 58.1   | 53.1   | 35.5   | 23.6   |
| 80°    | 47.1   | 47.1   | 42.8   | 28.1   | 18.8   |
| 82.5°  | 36.8   | 36.8   | 33.2   | 21.9   | 14.0   |
| 85°    | 21.4   | 21.4   | 19.7   | 12.7   | 7.7    |
| 87.5°  | 7.9    | 8.5    | 8.9    | 6.3    | 5.6    |
| 90°    | 1.7    | 5.0    | 10.2   | 11.1   | 11.1   |
| 92.5°  | 20.8   | 73.5   | 145.3  | 70.0   | 48.6   |
| 95°    | 47.8   | 170.3  | 513.4  | 262.5  | 181.7  |
| 97.5°  | 76.2   | 195.0  | 805.2  | 672.7  | 507.3  |
| 100°   | 98.1   | 204.8  | 898.0  | 939.6  | 779.5  |
| 102.5° | 119.2  | 218.6  | 928.7  | 1139.5 | 1008.0 |
| 105°   | 156.1  | 242.8  | 933.0  | 1395.8 | 1309.9 |
| 107.5° | 190.9  | 268.2  | 893.3  | 1527.6 | 1549.8 |
| 110°   | 214.1  | 287.4  | 857.1  | 1568.5 | 1649.4 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 238.6 | 306.7 | 822.3 | 1559.4 | 1692.4 |
| 115°   | 275.5 | 337.2 | 776.9 | 1501.2 | 1698.0 |
| 117.5° | 309.1 | 366.9 | 741.8 | 1408.2 | 1627.4 |
| 120°   | 330.9 | 386.8 | 724.1 | 1341.5 | 1566.6 |
| 122.5° | 350.0 | 405.2 | 711.1 | 1273.3 | 1497.7 |
| 125°   | 376.1 | 432.0 | 697.6 | 1179.1 | 1387.6 |
| 127.5° | 401.2 | 456.2 | 689.1 | 1096.0 | 1282.1 |
| 130°   | 416.2 | 471.2 | 685.7 | 1048.4 | 1211.9 |
| 132.5° | 431.2 | 485.6 | 682.3 | 1006.5 | 1156.6 |
| 135°   | 452.9 | 505.4 | 678.0 | 951.2  | 1077.1 |
| 137.5° | 473.5 | 523.9 | 675.8 | 904.3  | 1007.7 |
| 140°   | 487.8 | 536.2 | 673.7 | 875.4  | 968.8  |
| 142.5° | 502.8 | 547.9 | 672.4 | 848.5  | 927.2  |
| 145°   | 523.6 | 564.5 | 669.5 | 813.3  | 873.3  |
| 147.5° | 546.2 | 581.7 | 666.6 | 783.6  | 830.8  |
| 150°   | 561.2 | 592.0 | 665.2 | 765.0  | 804.2  |
| 152.5° | 574.8 | 601.7 | 664.5 | 749.8  | 781.7  |
| 155°   | 594.4 | 616.1 | 663.5 | 729.7  | 753.0  |
| 157.5° | 611.6 | 628.5 | 663.7 | 715.5  | 731.2  |
| 160°   | 622.6 | 636.7 | 664.4 | 707.3  | 718.9  |
| 162.5° | 632.1 | 643.6 | 665.0 | 700.4  | 708.7  |
| 165°   | 644.7 | 652.2 | 666.1 | 692.6  | 695.9  |
| 167.5° | 655.0 | 659.3 | 666.9 | 686.6  | 687.9  |
| 170°   | 661.8 | 663.5 | 666.9 | 683.1  | 683.1  |
| 172.5° | 665.9 | 666.2 | 667.6 | 679.7  | 679.7  |
| 175°   | 670.3 | 669.5 | 666.9 | 676.3  | 674.6  |
| 177.5° | 672.2 | 670.9 | 667.4 | 672.9  | 671.5  |
| 180°   | 669.5 | 669.5 | 669.5 | 669.5  | 669.5  |

(END OF REPORT)