

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: P564116

Luminaire Tested: **SQ4-PR1-075U-125D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564116  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-PR1-075U-125D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

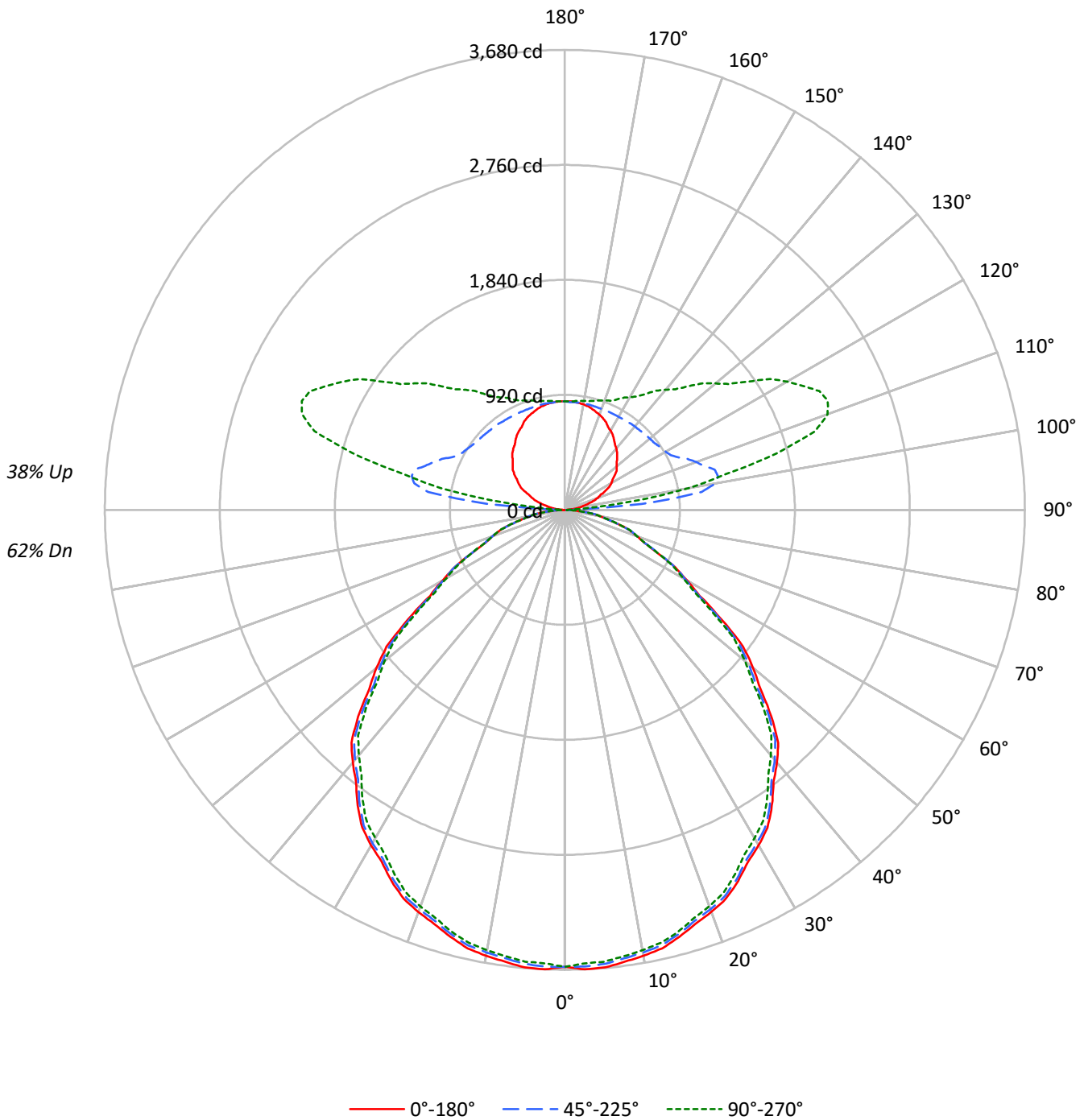
Lumens per Lamp: N/A  
Luminaire Lumens: 14796.0 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 127.7  
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 |    |    |    | 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 | 78 | 78 | 78 | 67 | 67 | 67 | 62 |
| 1   | 101 | 97  | 93  | 89  | 94  | 91  | 87  | 84  | 79 | 77 | 75 | 69 | 67 | 66 | 60 | 58 | 57 | 53 |
| 2   | 92  | 85  | 79  | 74  | 86  | 80  | 74  | 70  | 70 | 66 | 62 | 61 | 58 | 55 | 53 | 51 | 49 | 45 |
| 3   | 84  | 75  | 67  | 62  | 79  | 70  | 64  | 59  | 62 | 57 | 53 | 54 | 51 | 47 | 47 | 44 | 42 | 38 |
| 4   | 77  | 66  | 59  | 53  | 72  | 63  | 56  | 50  | 55 | 50 | 45 | 49 | 44 | 41 | 42 | 39 | 36 | 33 |
| 5   | 71  | 59  | 51  | 45  | 66  | 56  | 49  | 43  | 50 | 44 | 39 | 44 | 39 | 36 | 38 | 35 | 32 | 29 |
| 6   | 66  | 53  | 45  | 39  | 61  | 51  | 43  | 38  | 45 | 39 | 35 | 40 | 35 | 31 | 35 | 31 | 28 | 26 |
| 7   | 61  | 48  | 40  | 35  | 57  | 46  | 38  | 33  | 41 | 35 | 31 | 36 | 31 | 28 | 32 | 28 | 25 | 23 |
| 8   | 56  | 44  | 36  | 31  | 53  | 42  | 35  | 30  | 37 | 31 | 27 | 33 | 28 | 25 | 29 | 25 | 23 | 20 |
| 9   | 53  | 40  | 33  | 28  | 49  | 38  | 31  | 27  | 34 | 29 | 24 | 31 | 26 | 22 | 27 | 23 | 20 | 18 |
| 10  | 49  | 37  | 30  | 25  | 46  | 35  | 28  | 24  | 32 | 26 | 22 | 28 | 24 | 20 | 25 | 21 | 19 | 17 |

**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   | 2.3       |
| 10°-20°   | 989.5   | 6.7       |
| 20°-30°   | 1492.4  | 10.1      |
| 30°-40°   | 1778.2  | 12.0      |
| 40°-50°   | 1753.1  | 11.8      |
| 50°-60°   | 1339.8  | 9.1       |
| 60°-70°   | 829.1   | 5.6       |
| 70°-80°   | 470.9   | 3.2       |
| 80°-90°   | 145.5   | 1.0       |
| 90°-100°  | 409.2   | 2.8       |
| 100°-110° | 1125.7  | 7.6       |
| 110°-120° | 1161.9  | 7.9       |
| 120°-130° | 931.0   | 6.3       |
| 130°-140° | 731.2   | 4.9       |
| 140°-150° | 560.3   | 3.8       |
| 150°-160° | 402.9   | 2.7       |
| 160°-170° | 246.4   | 1.7       |
| 170°-180° | 83.0    | 0.6       |
| 0°-30°    | 2827.7  | 19.1      |
| 0°-40°    | 4605.9  | 31.1      |
| 0°-60°    | 7698.9  | 52.0      |
| 0°-90°    | 9144.4  | 61.8      |
| 90°-120°  | 2696.8  | 18.2      |
| 90°-150°  | 4919.3  | 33.2      |
| 90°-180°  | 5652.0  | 38.2      |
| 0°-180°   | 14796.0 | 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°  | 2    | 7     | 13   | 17    | 17   | 9    |
| 95°  | 61   | 223   | 724  | 309   | 198  | 64   |
| 105° | 201  | 310   | 1240 | 1889  | 1763 | 212  |
| 115° | 356  | 434   | 995  | 1981  | 2248 | 352  |
| 125° | 491  | 560   | 903  | 1527  | 1789 | 438  |
| 135° | 592  | 658   | 877  | 1235  | 1397 | 457  |
| 145° | 685  | 732   | 864  | 1052  | 1133 | 429  |
| 155° | 775  | 800   | 858  | 946   | 973  | 356  |
| 165° | 838  | 849   | 862  | 897   | 903  | 236  |
| 175° | 868  | 869   | 864  | 875   | 873  | 82   |
| 180° | 868  | 868   | 868  | 868   | 868  |      |

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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°  | 33.1   | 44.1   | 53.0   | 53.7   | 51.2   |
| 90°    | 1.8    | 7.3    | 12.9   | 16.6   | 16.6   |
| 92.5°  | 25.5   | 108.9  | 188.6  | 72.4   | 59.4   |
| 95°    | 60.9   | 223.3  | 723.6  | 309.4  | 197.5  |
| 97.5°  | 99.3   | 247.7  | 1104.2 | 850.8  | 600.3  |
| 100°   | 127.4  | 262.7  | 1223.8 | 1235.2 | 1007.8 |
| 102.5° | 153.9  | 280.6  | 1254.8 | 1532.4 | 1323.8 |
| 105°   | 201.2  | 309.5  | 1240.4 | 1889.1 | 1762.7 |
| 107.5° | 246.2  | 345.1  | 1169.9 | 2063.7 | 2101.3 |
| 110°   | 278.7  | 369.0  | 1116.7 | 2107.2 | 2237.1 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 308.3 | 395.6 | 1063.6 | 2079.2 | 2277.0 |
| 115°   | 356.2 | 433.8 | 994.9  | 1981.1 | 2248.2 |
| 117.5° | 402.0 | 473.5 | 951.3  | 1843.4 | 2145.6 |
| 120°   | 430.1 | 498.7 | 932.1  | 1740.3 | 2052.5 |
| 122.5° | 455.2 | 523.8 | 918.8  | 1649.9 | 1946.2 |
| 125°   | 491.0 | 559.6 | 902.6  | 1526.9 | 1788.6 |
| 127.5° | 524.9 | 590.3 | 891.9  | 1424.3 | 1653.8 |
| 130°   | 542.7 | 609.4 | 886.0  | 1363.3 | 1572.6 |
| 132.5° | 563.3 | 630.1 | 881.6  | 1309.7 | 1498.8 |
| 135°   | 592.5 | 657.5 | 876.8  | 1234.8 | 1397.3 |
| 137.5° | 619.8 | 680.1 | 872.7  | 1174.4 | 1308.3 |
| 140°   | 640.5 | 696.4 | 871.2  | 1134.2 | 1255.2 |
| 142.5° | 658.2 | 709.8 | 868.3  | 1098.4 | 1202.0 |
| 145°   | 684.8 | 731.7 | 863.8  | 1052.1 | 1133.3 |
| 147.5° | 713.2 | 753.6 | 861.6  | 1011.1 | 1076.1 |
| 150°   | 730.9 | 767.0 | 860.1  | 988.7  | 1039.2 |
| 152.5° | 747.2 | 780.4 | 858.7  | 969.3  | 1011.1 |
| 155°   | 775.2 | 800.5 | 858.3  | 945.7  | 972.7  |
| 157.5° | 795.5 | 816.1 | 858.3  | 926.3  | 945.1  |
| 160°   | 810.3 | 826.6 | 858.3  | 915.9  | 930.3  |
| 162.5° | 822.1 | 835.5 | 859.8  | 906.9  | 918.5  |
| 165°   | 838.0 | 848.8 | 862.0  | 897.2  | 902.6  |
| 167.5° | 849.1 | 857.4 | 863.8  | 889.0  | 890.4  |
| 170°   | 856.5 | 861.9 | 863.8  | 886.0  | 886.0  |
| 172.5° | 862.4 | 864.9 | 863.8  | 881.5  | 880.1  |
| 175°   | 867.5 | 869.3 | 863.8  | 874.9  | 873.1  |
| 177.5° | 869.0 | 869.0 | 863.1  | 871.9  | 869.0  |
| 180°   | 867.5 | 867.5 | 867.5  | 867.5  | 867.5  |

(END OF REPORT)