

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: P519372

Luminaire Tested: **SQ4-WB-100U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519372  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

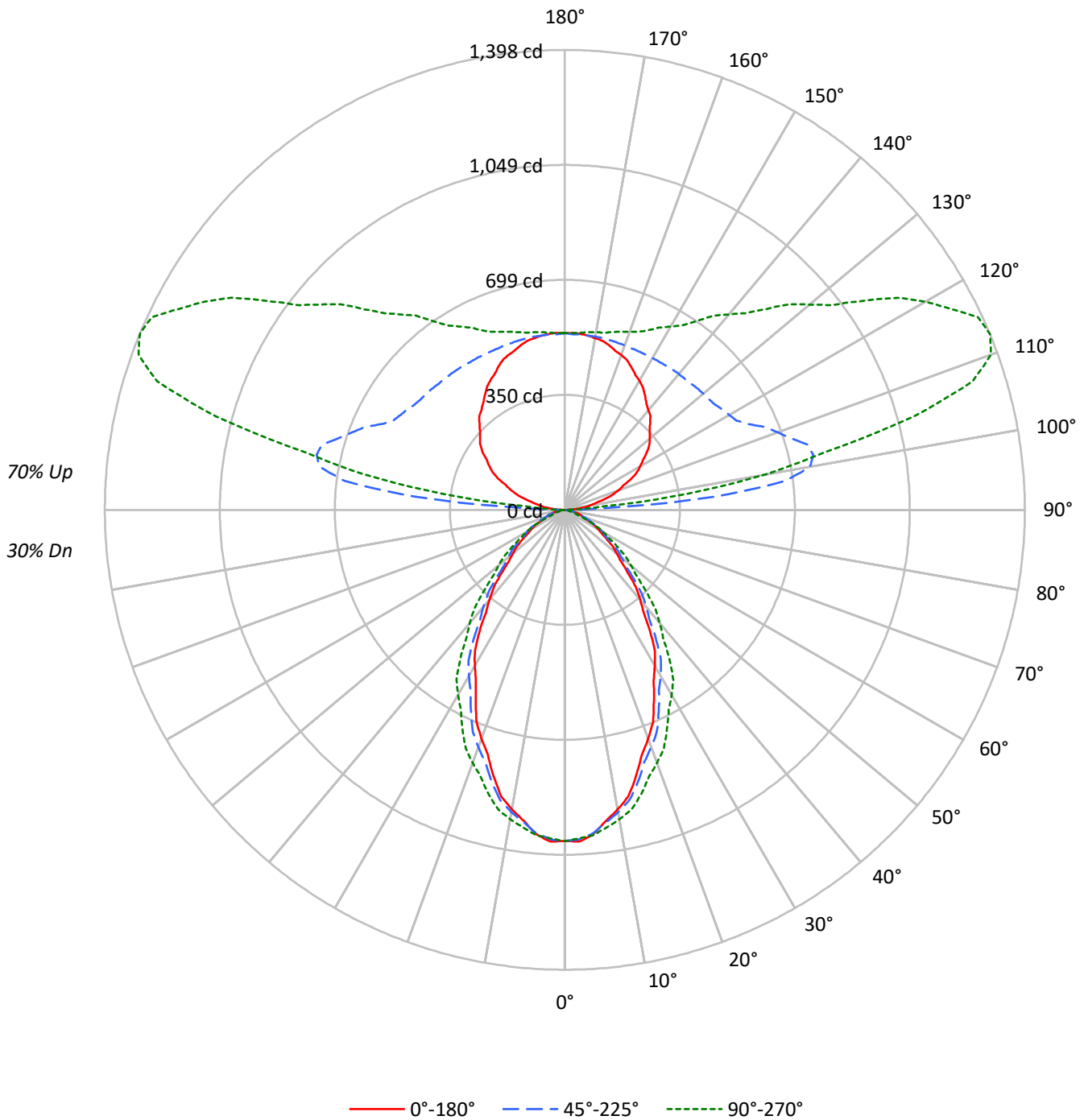
Lumens per Lamp: N/A  
Luminaire Lumens: 4957.8 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 41.3  
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   | 102 | 102 | 102 | 102 | 92 | 92 | 92 | 92 | 72 | 72 | 72 | 54 | 54 | 54 | 37 | 37 | 37 | 30 |
| 1   | 94  | 90  | 86  | 83  | 84 | 81 | 78 | 75 | 64 | 62 | 60 | 48 | 47 | 46 | 34 | 33 | 33 | 26 |
| 2   | 86  | 79  | 74  | 69  | 77 | 72 | 67 | 63 | 57 | 54 | 51 | 43 | 41 | 40 | 31 | 30 | 29 | 23 |
| 3   | 79  | 70  | 64  | 58  | 71 | 64 | 58 | 53 | 51 | 47 | 44 | 39 | 36 | 34 | 28 | 27 | 25 | 20 |
| 4   | 72  | 63  | 55  | 50  | 65 | 57 | 51 | 46 | 46 | 41 | 38 | 35 | 32 | 30 | 25 | 24 | 22 | 18 |
| 5   | 67  | 56  | 49  | 43  | 60 | 51 | 44 | 40 | 41 | 36 | 33 | 32 | 29 | 26 | 23 | 21 | 20 | 16 |
| 6   | 62  | 50  | 43  | 38  | 55 | 46 | 39 | 35 | 37 | 33 | 29 | 29 | 26 | 23 | 21 | 19 | 18 | 15 |
| 7   | 57  | 46  | 38  | 33  | 51 | 42 | 35 | 31 | 34 | 29 | 26 | 27 | 23 | 21 | 20 | 18 | 16 | 13 |
| 8   | 53  | 42  | 34  | 29  | 48 | 38 | 32 | 27 | 31 | 26 | 23 | 24 | 21 | 19 | 18 | 16 | 15 | 12 |
| 9   | 49  | 38  | 31  | 26  | 44 | 35 | 29 | 24 | 28 | 24 | 21 | 23 | 19 | 17 | 17 | 15 | 14 | 11 |
| 10  | 46  | 35  | 28  | 24  | 42 | 32 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 16 | 16 | 14 | 12 | 10 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 9288 | 9288 | 9288 |
| 5°  | 9173 | 9139 | 9193 |
| 10° | 8666 | 8745 | 8947 |
| 15° | 8000 | 8186 | 8553 |
| 20° | 7265 | 7538 | 8036 |
| 25° | 6516 | 6871 | 7487 |
| 30° | 5826 | 6207 | 6917 |
| 35° | 5094 | 5463 | 6244 |
| 40° | 4288 | 4628 | 5405 |
| 45° | 3539 | 3844 | 4513 |
| 50° | 2954 | 3221 | 3759 |
| 55° | 2508 | 2763 | 3104 |
| 60° | 2144 | 2397 | 2478 |
| 65° | 1707 | 2015 | 1600 |
| 70° | 1513 | 1573 | 977  |
| 75° | 1401 | 1276 | 599  |
| 80° | 1291 | 1174 | 515  |
| 85° | 1164 | 1080 | 423  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 92.3   | 1.9       |
| 10°-20°   | 240.2  | 4.8       |
| 20°-30°   | 311.1  | 6.3       |
| 30°-40°   | 304.6  | 6.1       |
| 40°-50°   | 233.2  | 4.7       |
| 50°-60°   | 155.4  | 3.1       |
| 60°-70°   | 84.8   | 1.7       |
| 70°-80°   | 35.3   | 0.7       |
| 80°-90°   | 11.1   | 0.2       |
| 90°-100°  | 251.5  | 5.1       |
| 100°-110° | 694.4  | 14.0      |
| 110°-120° | 716.1  | 14.4      |
| 120°-130° | 575.5  | 11.6      |
| 130°-140° | 452.3  | 9.1       |
| 140°-150° | 346.9  | 7.0       |
| 150°-160° | 249.3  | 5.0       |
| 160°-170° | 152.5  | 3.1       |
| 170°-180° | 51.4   | 1.0       |
| 0°-30°    | 643.6  | 13.0      |
| 0°-40°    | 948.3  | 19.1      |
| 0°-60°    | 1336.8 | 27.0      |
| 0°-90°    | 1468.1 | 29.6      |
| 90°-120°  | 1662.0 | 33.5      |
| 90°-150°  | 3036.6 | 61.2      |
| 90°-180°  | 3490.0 | 70.4      |
| 0°-180°   | 4957.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1007 | 1007  | 1007 | 1007  | 1007 |      |
| 5°   | 990  | 980   | 987  | 989   | 993  | 92   |
| 15°  | 838  | 834   | 857  | 880   | 895  | 234  |
| 25°  | 640  | 642   | 675  | 704   | 736  | 294  |
| 35°  | 452  | 454   | 485  | 518   | 554  | 281  |
| 45°  | 271  | 276   | 295  | 317   | 346  | 211  |
| 55°  | 156  | 162   | 172  | 178   | 193  | 141  |
| 65°  | 78   | 85    | 92   | 81    | 73   | 81   |
| 75°  | 39   | 39    | 36   | 25    | 17   | 42   |
| 85°  | 11   | 11    | 10   | 7     | 4    | 12   |
| 90°  | 2    | 3     | 7    | 8     | 9    | 3    |
| 95°  | 37   | 136   | 456  | 188   | 122  | 40   |
| 105° | 124  | 191   | 764  | 1166  | 1098 | 132  |
| 115° | 222  | 268   | 615  | 1218  | 1385 | 218  |
| 125° | 304  | 346   | 558  | 944   | 1108 | 271  |
| 135° | 366  | 406   | 542  | 764   | 862  | 283  |
| 145° | 424  | 454   | 535  | 651   | 700  | 266  |
| 155° | 479  | 495   | 531  | 584   | 602  | 221  |
| 165° | 518  | 525   | 534  | 554   | 559  | 146  |
| 175° | 537  | 538   | 534  | 542   | 540  | 51   |
| 180° | 537  | 537   | 537  | 537   | 537  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1006.7 | 1006.7 | 1006.7 | 1006.7 | 1006.7 |
| 2.5°   | 1009.2 | 1000.2 | 1002.5 | 1002.4 | 999.6  |
| 5°     | 990.4  | 980.4  | 986.8  | 989.1  | 992.6  |
| 7.5°   | 953.6  | 946.1  | 957.8  | 966.4  | 973.4  |
| 10°    | 925.0  | 918.5  | 933.4  | 946.0  | 955.0  |
| 12.5°  | 891.8  | 886.3  | 904.8  | 921.6  | 933.5  |
| 15°    | 837.5  | 834.5  | 857.0  | 880.3  | 895.4  |
| 17.5°  | 779.5  | 778.0  | 803.8  | 831.0  | 850.3  |
| 20°    | 739.9  | 739.5  | 767.7  | 796.1  | 818.5  |
| 22.5°  | 700.0  | 700.9  | 730.6  | 760.1  | 785.7  |
| 25°    | 640.1  | 641.8  | 675.0  | 704.4  | 735.5  |
| 27.5°  | 584.7  | 585.5  | 619.7  | 650.8  | 684.0  |
| 30°    | 546.9  | 549.0  | 582.6  | 614.8  | 649.3  |
| 32.5°  | 509.1  | 511.6  | 544.5  | 577.7  | 612.9  |
| 35°    | 452.3  | 454.5  | 485.0  | 517.7  | 554.4  |
| 37.5°  | 393.8  | 396.8  | 423.9  | 454.7  | 490.9  |
| 40°    | 356.0  | 360.4  | 384.3  | 413.4  | 448.8  |
| 42.5°  | 319.6  | 325.0  | 347.2  | 374.8  | 406.7  |
| 45°    | 271.2  | 276.4  | 294.6  | 316.9  | 345.9  |
| 47.5°  | 229.5  | 235.5  | 249.5  | 268.7  | 293.4  |
| 50°    | 205.8  | 211.5  | 224.4  | 238.6  | 261.9  |
| 52.5°  | 185.0  | 190.6  | 202.1  | 213.1  | 233.0  |
| 55°    | 155.9  | 162.4  | 171.8  | 178.4  | 193.0  |
| 57.5°  | 132.1  | 138.3  | 145.8  | 148.7  | 157.6  |
| 60°    | 116.2  | 123.1  | 129.9  | 129.5  | 134.3  |
| 62.5°  | 101.7  | 107.6  | 114.3  | 109.6  | 109.9  |
| 65°    | 78.2   | 84.7   | 92.3   | 80.7   | 73.3   |
| 67.5°  | 63.2   | 64.5   | 72.4   | 56.3   | 47.5   |
| 70°    | 56.1   | 56.1   | 58.3   | 43.6   | 36.2   |
| 72.5°  | 49.4   | 49.4   | 47.4   | 35.4   | 27.7   |
| 75°    | 39.3   | 39.3   | 35.8   | 24.6   | 16.8   |
| 77.5°  | 30.3   | 30.0   | 27.4   | 18.3   | 12.2   |
| 80°    | 24.3   | 24.3   | 22.1   | 14.5   | 9.7    |
| 82.5°  | 19.0   | 19.0   | 17.1   | 11.3   | 7.2    |
| 85°    | 11.0   | 11.0   | 10.2   | 6.6    | 4.0    |
| 87.5°  | 4.2    | 4.6    | 4.9    | 3.7    | 3.5    |
| 90°    | 1.7    | 3.4    | 6.9    | 7.8    | 8.6    |
| 92.5°  | 15.5   | 64.2   | 114.8  | 41.9   | 32.7   |
| 95°    | 37.0   | 136.1  | 456.3  | 187.6  | 122.0  |
| 97.5°  | 61.2   | 152.4  | 676.0  | 520.4  | 376.9  |
| 100°   | 79.1   | 162.2  | 757.1  | 762.4  | 619.6  |
| 102.5° | 96.2   | 173.4  | 772.9  | 942.0  | 806.6  |
| 105°   | 123.7  | 191.0  | 764.0  | 1166.3 | 1098.2 |
| 107.5° | 153.0  | 212.8  | 721.3  | 1274.5 | 1299.3 |
| 110°   | 173.6  | 227.4  | 688.3  | 1297.7 | 1378.4 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 192.2 | 243.9 | 657.4 | 1279.4 | 1398.3 |
| 115°   | 221.7 | 267.9 | 615.3 | 1218.1 | 1385.3 |
| 117.5° | 247.5 | 293.5 | 587.6 | 1131.8 | 1322.0 |
| 120°   | 264.7 | 310.1 | 576.6 | 1073.4 | 1265.0 |
| 122.5° | 281.2 | 324.5 | 567.7 | 1018.8 | 1200.3 |
| 125°   | 304.2 | 346.2 | 557.7 | 943.9  | 1107.7 |
| 127.5° | 323.8 | 365.8 | 551.9 | 880.4  | 1021.8 |
| 130°   | 336.9 | 378.9 | 549.1 | 841.6  | 970.2  |
| 132.5° | 349.2 | 389.2 | 546.4 | 809.1  | 925.5  |
| 135°   | 366.1 | 405.6 | 542.2 | 764.5  | 861.9  |
| 137.5° | 385.0 | 421.0 | 540.2 | 727.0  | 810.2  |
| 140°   | 395.3 | 430.6 | 538.8 | 702.0  | 775.1  |
| 142.5° | 407.0 | 439.6 | 537.4 | 679.8  | 744.2  |
| 145°   | 424.5 | 453.9 | 535.4 | 650.8  | 700.4  |
| 147.5° | 441.4 | 467.1 | 533.5 | 626.3  | 664.8  |
| 150°   | 453.7 | 474.7 | 532.8 | 611.7  | 642.8  |
| 152.5° | 463.4 | 483.0 | 532.1 | 599.2  | 624.9  |
| 155°   | 478.7 | 494.6 | 531.1 | 583.9  | 602.4  |
| 157.5° | 492.8 | 505.0 | 531.2 | 572.8  | 585.4  |
| 160°   | 501.0 | 511.9 | 531.9 | 566.5  | 575.8  |
| 162.5° | 507.9 | 517.5 | 532.6 | 561.0  | 568.2  |
| 165°   | 518.2 | 524.9 | 533.7 | 554.4  | 558.6  |
| 167.5° | 526.1 | 530.1 | 534.5 | 550.4  | 551.7  |
| 170°   | 530.2 | 533.6 | 534.5 | 548.3  | 548.3  |
| 172.5° | 533.7 | 535.7 | 534.5 | 545.5  | 544.8  |
| 175°   | 537.1 | 537.9 | 534.5 | 542.2  | 540.5  |
| 177.5° | 538.5 | 537.8 | 534.3 | 539.1  | 537.8  |
| 180°   | 537.1 | 537.1 | 537.1 | 537.1  | 537.1  |

(END OF REPORT)