

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521788

Luminaire Tested: **SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4 (5700K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521788  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4 (5700K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

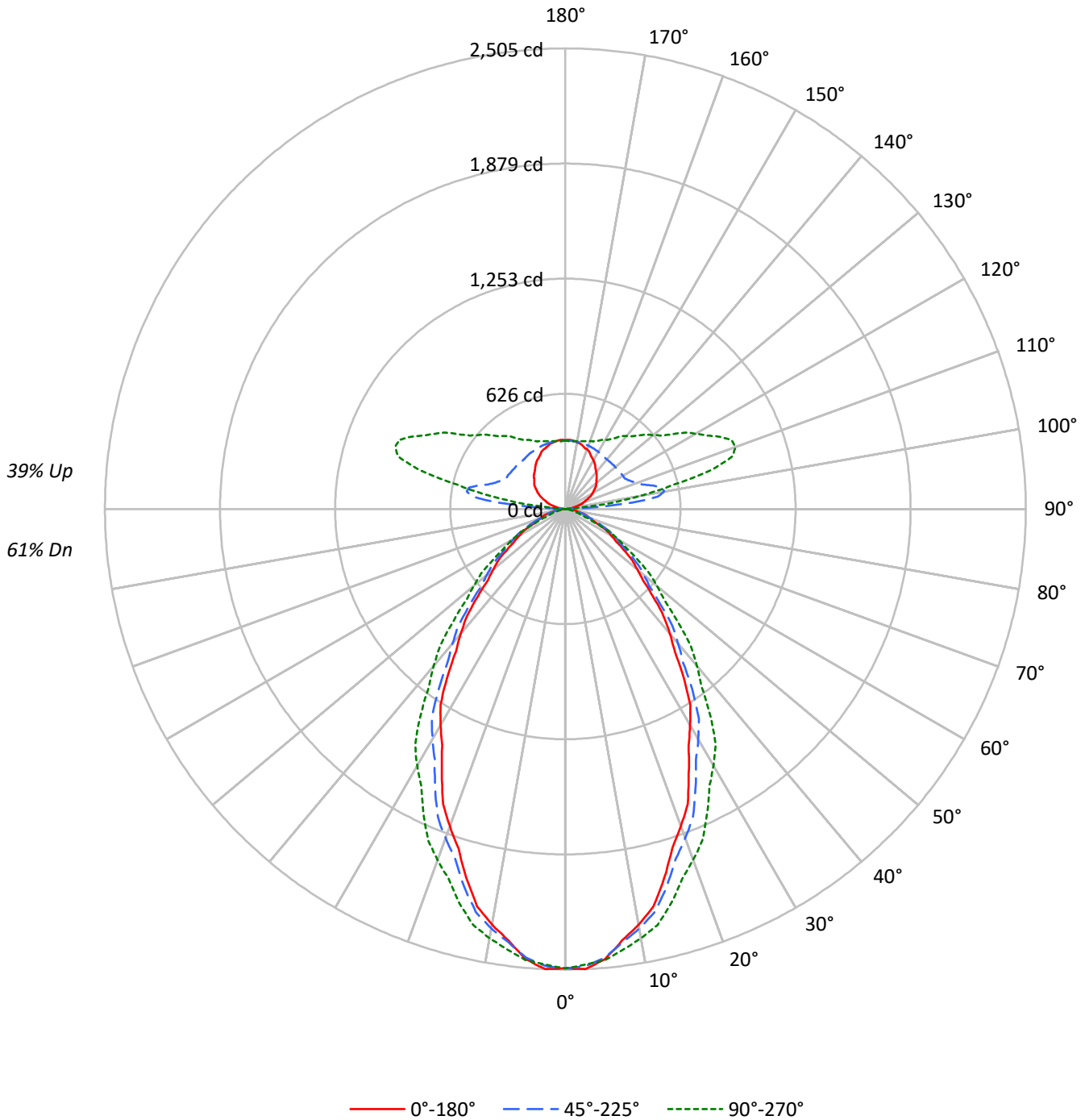
Lumens per Lamp: N/A  
Luminaire Lumens: 5957.2 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 58.1  
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 | 77 | 77 | 77 | 66 | 66 | 66 | 61 |
| 1   | 102 | 98  | 94  | 91  | 95  | 92  | 89  | 86  | 81 | 78 | 76 | 70 | 69 | 67 | 61 | 60 | 59 | 54 |
| 2   | 94  | 87  | 82  | 77  | 88  | 82  | 77  | 73  | 72 | 69 | 66 | 63 | 61 | 59 | 55 | 53 | 52 | 48 |
| 3   | 87  | 78  | 71  | 66  | 81  | 74  | 68  | 63  | 65 | 61 | 57 | 58 | 54 | 51 | 50 | 48 | 46 | 42 |
| 4   | 80  | 70  | 63  | 57  | 75  | 66  | 60  | 55  | 59 | 54 | 50 | 52 | 48 | 45 | 46 | 43 | 41 | 38 |
| 5   | 74  | 63  | 56  | 50  | 69  | 60  | 53  | 48  | 54 | 48 | 44 | 48 | 44 | 40 | 42 | 39 | 37 | 34 |
| 6   | 69  | 58  | 50  | 45  | 65  | 55  | 48  | 43  | 49 | 44 | 40 | 44 | 40 | 36 | 39 | 36 | 33 | 31 |
| 7   | 64  | 53  | 45  | 40  | 60  | 50  | 43  | 38  | 45 | 40 | 36 | 40 | 36 | 33 | 36 | 33 | 30 | 28 |
| 8   | 60  | 48  | 41  | 36  | 56  | 46  | 39  | 35  | 42 | 36 | 32 | 37 | 33 | 30 | 34 | 30 | 27 | 25 |
| 9   | 56  | 45  | 37  | 33  | 53  | 42  | 36  | 32  | 39 | 33 | 29 | 35 | 30 | 27 | 31 | 28 | 25 | 23 |
| 10  | 53  | 41  | 34  | 30  | 50  | 39  | 33  | 29  | 36 | 31 | 27 | 32 | 28 | 25 | 29 | 26 | 23 | 22 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 23054 | 23054 | 23054 |
| 5°  | 22766 | 22686 | 22817 |
| 10° | 21510 | 21705 | 22208 |
| 15° | 19857 | 20317 | 21229 |
| 20° | 18032 | 18710 | 19948 |
| 25° | 16174 | 17056 | 18585 |
| 30° | 14461 | 15407 | 17171 |
| 35° | 12646 | 13560 | 15498 |
| 40° | 10643 | 11489 | 13417 |
| 45° | 8784  | 9542  | 11202 |
| 50° | 7333  | 7995  | 9333  |
| 55° | 6225  | 6860  | 7707  |
| 60° | 5322  | 5949  | 6150  |
| 65° | 4237  | 5004  | 3973  |
| 70° | 3755  | 3903  | 2425  |
| 75° | 3479  | 3165  | 1486  |
| 80° | 3204  | 2912  | 1280  |
| 85° | 2901  | 2668  | 1048  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 229.2  | 3.8       |
| 10°-20°   | 596.2  | 10.0      |
| 20°-30°   | 772.2  | 13.0      |
| 30°-40°   | 756.2  | 12.7      |
| 40°-50°   | 578.8  | 9.7       |
| 50°-60°   | 385.7  | 6.5       |
| 60°-70°   | 210.5  | 3.5       |
| 70°-80°   | 87.7   | 1.5       |
| 80°-90°   | 24.8   | 0.4       |
| 90°-100°  | 169.9  | 2.9       |
| 100°-110° | 483.4  | 8.1       |
| 110°-120° | 463.2  | 7.8       |
| 120°-130° | 366.6  | 6.2       |
| 130°-140° | 294.2  | 4.9       |
| 140°-150° | 230.4  | 3.9       |
| 150°-160° | 168.5  | 2.8       |
| 160°-170° | 104.4  | 1.8       |
| 170°-180° | 35.4   | 0.6       |
| 0°-30°    | 1597.6 | 26.8      |
| 0°-40°    | 2353.7 | 39.5      |
| 0°-60°    | 3318.2 | 55.7      |
| 0°-90°    | 3641.2 | 61.1      |
| 90°-120°  | 1116.5 | 18.7      |
| 90°-150°  | 2007.7 | 33.7      |
| 90°-180°  | 2316.0 | 38.9      |
| 0°-180°   | 5957.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2499 | 2499  | 2499 | 2499  | 2499 |      |
| 5°   | 2458 | 2434  | 2450 | 2455  | 2464 | 229  |
| 15°  | 2079 | 2071  | 2127 | 2185  | 2222 | 581  |
| 25°  | 1589 | 1593  | 1675 | 1748  | 1826 | 731  |
| 35°  | 1123 | 1128  | 1204 | 1285  | 1376 | 698  |
| 45°  | 673  | 686   | 731  | 787   | 858  | 525  |
| 55°  | 387  | 403   | 426  | 443   | 479  | 351  |
| 65°  | 194  | 210   | 229  | 200   | 182  | 202  |
| 75°  | 98   | 98    | 89   | 61    | 42   | 104  |
| 85°  | 27   | 27    | 25   | 16    | 10   | 30   |
| 90°  | 0    | 0     | 0    | 0     | 0    | 2    |
| 95°  | 18   | 73    | 329  | 114   | 70   | 21   |
| 105° | 75   | 114   | 493  | 870   | 827  | 79   |
| 115° | 140  | 169   | 374  | 791   | 929  | 137  |
| 125° | 197  | 218   | 356  | 592   | 707  | 176  |
| 135° | 241  | 261   | 352  | 500   | 565  | 186  |
| 145° | 284  | 299   | 355  | 433   | 471  | 178  |
| 155° | 325  | 332   | 364  | 391   | 407  | 150  |
| 165° | 359  | 360   | 368  | 376   | 381  | 101  |
| 175° | 376  | 374   | 372  | 370   | 367  | 36   |
| 180° | 373  | 373   | 373  | 373   | 373  |      |

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CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4 (5700K)

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2498.8 | 2498.8 | 2498.8 | 2498.8 | 2498.8 |
| 2.5°   | 2504.9 | 2482.7 | 2488.3 | 2488.1 | 2481.3 |
| 5°     | 2458.2 | 2433.6 | 2449.5 | 2455.1 | 2463.7 |
| 7.5°   | 2367.0 | 2348.4 | 2377.3 | 2398.8 | 2416.1 |
| 10°    | 2296.0 | 2279.9 | 2316.8 | 2348.0 | 2370.5 |
| 12.5°  | 2213.5 | 2200.0 | 2245.7 | 2287.6 | 2317.0 |
| 15°    | 2078.9 | 2071.4 | 2127.1 | 2185.0 | 2222.5 |
| 17.5°  | 1934.8 | 1931.2 | 1995.1 | 2062.6 | 2110.7 |
| 20°    | 1836.6 | 1835.5 | 1905.6 | 1976.0 | 2031.7 |
| 22.5°  | 1737.4 | 1739.8 | 1813.5 | 1886.7 | 1950.1 |
| 25°    | 1588.8 | 1593.0 | 1675.4 | 1748.4 | 1825.6 |
| 27.5°  | 1451.3 | 1453.2 | 1538.3 | 1615.4 | 1697.7 |
| 30°    | 1357.4 | 1362.8 | 1446.2 | 1526.0 | 1611.8 |
| 32.5°  | 1263.5 | 1269.8 | 1351.5 | 1434.0 | 1521.4 |
| 35°    | 1122.8 | 1128.1 | 1203.9 | 1284.9 | 1376.0 |
| 37.5°  | 977.6  | 984.9  | 1052.2 | 1128.7 | 1218.4 |
| 40°    | 883.7  | 894.5  | 953.9  | 1026.1 | 1114.0 |
| 42.5°  | 793.4  | 806.7  | 861.8  | 930.3  | 1009.6 |
| 45°    | 673.2  | 686.1  | 731.3  | 786.7  | 858.5  |
| 47.5°  | 569.7  | 584.5  | 619.3  | 666.9  | 728.3  |
| 50°    | 510.9  | 524.9  | 557.0  | 592.3  | 650.2  |
| 52.5°  | 459.2  | 473.1  | 501.7  | 529.0  | 578.3  |
| 55°    | 387.0  | 403.1  | 426.5  | 442.7  | 479.1  |
| 57.5°  | 327.8  | 343.3  | 361.8  | 369.1  | 391.2  |
| 60°    | 288.4  | 305.5  | 322.4  | 321.5  | 333.3  |
| 62.5°  | 252.4  | 267.0  | 283.8  | 272.2  | 272.8  |
| 65°    | 194.1  | 210.2  | 229.2  | 200.2  | 182.0  |
| 67.5°  | 156.8  | 160.2  | 179.8  | 139.6  | 118.0  |
| 70°    | 139.2  | 139.2  | 144.7  | 108.1  | 89.9   |
| 72.5°  | 122.6  | 122.6  | 117.5  | 87.9   | 68.9   |
| 75°    | 97.6   | 97.6   | 88.8   | 61.0   | 41.7   |
| 77.5°  | 75.2   | 74.4   | 68.0   | 45.5   | 30.3   |
| 80°    | 60.3   | 60.3   | 54.8   | 35.9   | 24.1   |
| 82.5°  | 47.1   | 47.1   | 42.5   | 28.1   | 18.0   |
| 85°    | 27.4   | 27.4   | 25.2   | 16.3   | 9.9    |
| 87.5°  | 9.6    | 9.6    | 8.8    | 5.2    | 4.4    |
| 90°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 92.5°  | 5.7    | 30.1   | 69.8   | 20.3   | 15.3   |
| 95°    | 18.4   | 73.2   | 328.9  | 113.8  | 70.2   |
| 97.5°  | 33.9   | 85.7   | 506.5  | 362.5  | 248.4  |
| 100°   | 44.7   | 93.2   | 545.1  | 552.1  | 425.3  |
| 102.5° | 56.6   | 101.2  | 536.6  | 706.7  | 596.0  |
| 105°   | 75.1   | 114.0  | 492.6  | 870.2  | 827.2  |
| 107.5° | 94.0   | 128.8  | 441.3  | 916.3  | 954.5  |
| 110°   | 107.0  | 139.6  | 411.8  | 898.6  | 984.6  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 119.5 | 150.4 | 392.0 | 856.9 | 979.5 |
| 115°   | 139.6 | 168.8 | 373.6 | 791.4 | 929.3 |
| 117.5° | 157.4 | 184.7 | 362.6 | 719.7 | 865.8 |
| 120°   | 171.5 | 194.4 | 361.5 | 678.7 | 818.7 |
| 122.5° | 182.9 | 205.8 | 358.7 | 642.8 | 772.8 |
| 125°   | 197.1 | 218.5 | 356.5 | 591.7 | 707.4 |
| 127.5° | 212.5 | 232.6 | 355.4 | 561.2 | 656.5 |
| 130°   | 220.4 | 240.5 | 353.7 | 539.9 | 623.1 |
| 132.5° | 229.0 | 248.5 | 353.7 | 523.3 | 599.8 |
| 135°   | 241.0 | 261.1 | 352.3 | 499.8 | 564.9 |
| 137.5° | 252.3 | 271.9 | 352.2 | 479.9 | 536.2 |
| 140°   | 260.9 | 281.0 | 351.6 | 463.4 | 517.5 |
| 142.5° | 270.5 | 287.3 | 353.3 | 450.2 | 498.7 |
| 145°   | 284.2 | 298.8 | 355.1 | 432.6 | 471.4 |
| 147.5° | 296.0 | 310.2 | 358.2 | 414.7 | 448.3 |
| 150°   | 306.2 | 315.9 | 359.4 | 408.8 | 432.4 |
| 152.5° | 314.2 | 324.4 | 360.5 | 400.9 | 422.8 |
| 155°   | 324.6 | 332.3 | 363.6 | 390.9 | 406.9 |
| 157.5° | 337.7 | 342.3 | 364.3 | 386.4 | 397.8 |
| 160°   | 344.5 | 348.0 | 367.2 | 383.0 | 392.7 |
| 162.5° | 348.5 | 352.5 | 367.7 | 380.1 | 387.6 |
| 165°   | 358.7 | 360.1 | 367.9 | 375.8 | 381.4 |
| 167.5° | 365.6 | 364.4 | 371.1 | 374.7 | 377.0 |
| 170°   | 367.9 | 367.2 | 370.0 | 370.8 | 373.6 |
| 172.5° | 373.0 | 370.6 | 371.7 | 369.6 | 371.9 |
| 175°   | 375.7 | 373.6 | 372.1 | 370.0 | 367.2 |
| 177.5° | 376.8 | 373.5 | 371.7 | 369.5 | 370.0 |
| 180°   | 372.9 | 372.9 | 372.9 | 372.9 | 372.9 |

(END OF REPORT)