

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: P564529

Luminaire Tested: **SQ4-PW1-025U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564529  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-025U-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8771.7 lumens  
Efficiency: N/A  
Efficacy: 127.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

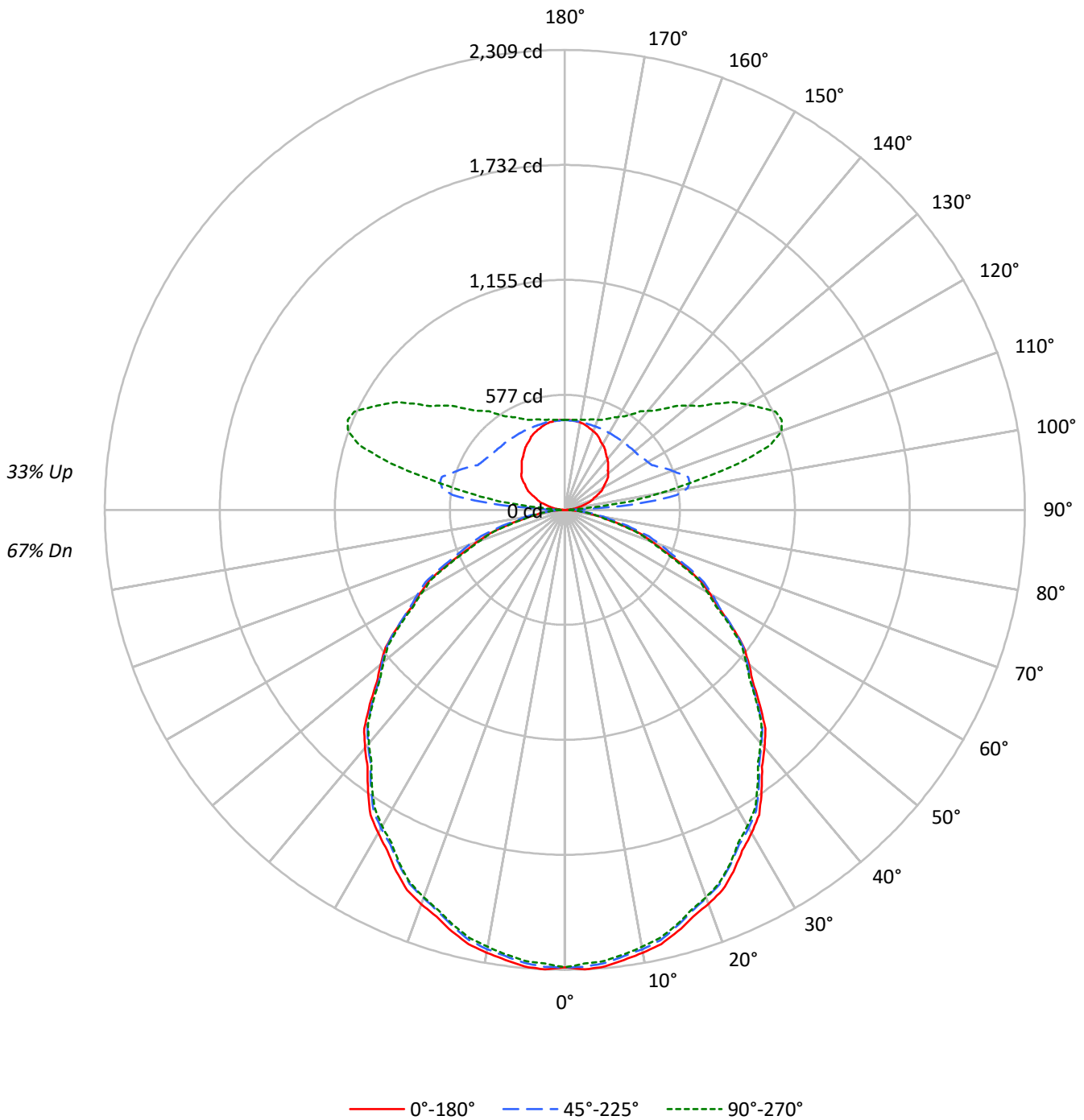
Input Watts (W): 68.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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   | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 82 | 82 | 82 | 71 | 71 | 71 | 67 |
| 1   | 102 | 97  | 93  | 90  | 96  | 92  | 88  | 85  | 82 | 79 | 77 | 72 | 70 | 68 | 63 | 62 | 61 | 56 |
| 2   | 93  | 85  | 79  | 74  | 87  | 80  | 75  | 70  | 72 | 67 | 64 | 63 | 60 | 57 | 56 | 53 | 51 | 47 |
| 3   | 85  | 75  | 67  | 61  | 79  | 71  | 64  | 59  | 63 | 58 | 54 | 56 | 52 | 49 | 50 | 46 | 44 | 40 |
| 4   | 78  | 66  | 58  | 52  | 73  | 63  | 56  | 50  | 56 | 50 | 46 | 50 | 45 | 42 | 44 | 41 | 38 | 35 |
| 5   | 71  | 59  | 51  | 45  | 67  | 56  | 49  | 43  | 50 | 44 | 40 | 45 | 40 | 36 | 40 | 36 | 33 | 30 |
| 6   | 66  | 53  | 45  | 39  | 62  | 51  | 43  | 38  | 46 | 39 | 35 | 41 | 36 | 32 | 36 | 32 | 29 | 26 |
| 7   | 61  | 48  | 40  | 34  | 57  | 46  | 38  | 33  | 41 | 35 | 31 | 37 | 32 | 28 | 33 | 29 | 26 | 23 |
| 8   | 57  | 44  | 36  | 30  | 53  | 42  | 35  | 29  | 38 | 32 | 27 | 34 | 29 | 25 | 31 | 26 | 23 | 21 |
| 9   | 53  | 40  | 32  | 27  | 50  | 38  | 31  | 26  | 35 | 29 | 25 | 31 | 26 | 23 | 28 | 24 | 21 | 19 |
| 10  | 49  | 37  | 30  | 25  | 47  | 35  | 28  | 24  | 32 | 26 | 22 | 29 | 24 | 21 | 26 | 22 | 19 | 17 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7062 | 7062 | 7062 |
| 5°  | 7108 | 7051 | 7020 |
| 10° | 7051 | 6994 | 6956 |
| 15° | 6976 | 6899 | 6873 |
| 20° | 6893 | 6787 | 6774 |
| 25° | 6796 | 6673 | 6652 |
| 30° | 6653 | 6552 | 6509 |
| 35° | 6464 | 6373 | 6335 |
| 40° | 6262 | 6165 | 6140 |
| 45° | 6019 | 5939 | 5913 |
| 50° | 5769 | 5721 | 5682 |
| 55° | 5500 | 5500 | 5413 |
| 60° | 5164 | 5264 | 5077 |
| 65° | 4726 | 4961 | 4608 |
| 70° | 4166 | 4566 | 4057 |
| 75° | 3558 | 4086 | 3461 |
| 80° | 2759 | 3439 | 2795 |
| 85° | 1785 | 2643 | 2357 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 216.2  | 2.5       |
| 10°-20°   | 610.5  | 7.0       |
| 20°-30°   | 905.5  | 10.3      |
| 30°-40°   | 1059.6 | 12.1      |
| 40°-50°   | 1054.8 | 12.0      |
| 50°-60°   | 910.9  | 10.4      |
| 60°-70°   | 655.7  | 7.5       |
| 70°-80°   | 343.8  | 3.9       |
| 80°-90°   | 87.7   | 1.0       |
| 90°-100°  | 220.1  | 2.5       |
| 100°-110° | 578.6  | 6.6       |
| 110°-120° | 600.0  | 6.8       |
| 120°-130° | 481.3  | 5.5       |
| 130°-140° | 377.6  | 4.3       |
| 140°-150° | 289.8  | 3.3       |
| 150°-160° | 208.7  | 2.4       |
| 160°-170° | 127.7  | 1.5       |
| 170°-180° | 43.1   | 0.5       |
| 0°-30°    | 1732.2 | 19.7      |
| 0°-40°    | 2791.8 | 31.8      |
| 0°-60°    | 4757.6 | 54.2      |
| 0°-90°    | 5844.8 | 66.6      |
| 90°-120°  | 1398.7 | 15.9      |
| 90°-150°  | 2547.3 | 29.0      |
| 90°-180°  | 2927.0 | 33.4      |
| 0°-180°   | 8771.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2296 | 2296  | 2296 | 2296  | 2296 |      |
| 5°   | 2302 | 2277  | 2284 | 2278  | 2274 | 218  |
| 15°  | 2191 | 2163  | 2167 | 2163  | 2159 | 618  |
| 25°  | 2003 | 1969  | 1966 | 1954  | 1960 | 921  |
| 35°  | 1722 | 1698  | 1697 | 1681  | 1687 | 1076 |
| 45°  | 1384 | 1372  | 1366 | 1362  | 1360 | 1068 |
| 55°  | 1026 | 1024  | 1026 | 1012  | 1010 | 915  |
| 65°  | 649  | 669   | 682  | 655   | 633  | 644  |
| 75°  | 299  | 327   | 344  | 321   | 291  | 321  |
| 85°  | 51   | 66    | 75   | 71    | 67   | 67   |
| 90°  | 3    | 9     | 23   | 12    | 12   | 4    |
| 95°  | 29   | 114   | 379  | 195   | 133  | 32   |
| 105° | 104  | 158   | 640  | 971   | 906  | 110  |
| 115° | 185  | 225   | 512  | 1022  | 1167 | 183  |
| 125° | 258  | 289   | 466  | 788   | 929  | 229  |
| 135° | 307  | 338   | 452  | 636   | 721  | 237  |
| 145° | 356  | 379   | 446  | 542   | 585  | 223  |
| 155° | 402  | 414   | 446  | 490   | 504  | 185  |
| 165° | 434  | 440   | 446  | 463   | 469  | 123  |
| 175° | 452  | 452   | 449  | 454   | 454  | 43   |
| 180° | 452  | 452   | 452  | 452   | 452  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2296.3 | 2296.3 | 2296.3 | 2296.3 | 2296.3 |
| 2.5°   | 2309.2 | 2290.2 | 2296.3 | 2291.2 | 2280.1 |
| 5°     | 2302.4 | 2276.6 | 2284.1 | 2278.0 | 2274.0 |
| 7.5°   | 2278.9 | 2255.1 | 2260.7 | 2254.1 | 2251.8 |
| 10°    | 2257.8 | 2234.1 | 2239.6 | 2231.4 | 2227.5 |
| 12.5°  | 2233.6 | 2208.2 | 2213.7 | 2205.6 | 2203.2 |
| 15°    | 2191.1 | 2163.4 | 2166.8 | 2162.7 | 2158.7 |
| 17.5°  | 2141.7 | 2113.6 | 2114.2 | 2107.7 | 2106.9 |
| 20°    | 2106.1 | 2076.4 | 2073.7 | 2065.7 | 2069.7 |
| 22.5°  | 2067.3 | 2036.0 | 2033.3 | 2022.1 | 2027.6 |
| 25°    | 2002.9 | 1969.3 | 1966.5 | 1954.5 | 1960.4 |
| 27.5°  | 1928.5 | 1895.2 | 1895.3 | 1878.4 | 1884.8 |
| 30°    | 1873.4 | 1841.8 | 1845.1 | 1825.1 | 1833.0 |
| 32.5°  | 1815.2 | 1786.7 | 1788.5 | 1768.4 | 1776.3 |
| 35°    | 1721.7 | 1698.0 | 1697.4 | 1681.4 | 1687.3 |
| 37.5°  | 1626.2 | 1605.2 | 1601.9 | 1592.7 | 1594.2 |
| 40°    | 1559.9 | 1542.0 | 1535.6 | 1529.5 | 1529.5 |
| 42.5°  | 1490.3 | 1474.0 | 1467.6 | 1463.1 | 1461.5 |
| 45°    | 1383.8 | 1372.0 | 1365.6 | 1361.5 | 1359.6 |
| 47.5°  | 1278.6 | 1267.6 | 1262.0 | 1259.2 | 1257.2 |
| 50°    | 1205.8 | 1197.9 | 1195.7 | 1189.6 | 1187.6 |
| 52.5°  | 1133.0 | 1128.2 | 1126.1 | 1118.4 | 1116.4 |
| 55°    | 1025.7 | 1023.8 | 1025.7 | 1011.5 | 1009.6 |
| 57.5°  | 914.1  | 917.2  | 923.8  | 904.6  | 899.9  |
| 60°    | 839.6  | 847.5  | 855.8  | 833.4  | 825.4  |
| 62.5°  | 763.5  | 776.2  | 787.8  | 762.1  | 751.0  |
| 65°    | 649.4  | 669.2  | 681.8  | 655.0  | 633.2  |
| 67.5°  | 539.4  | 563.9  | 579.0  | 550.1  | 525.6  |
| 70°    | 463.3  | 491.0  | 507.8  | 478.9  | 451.2  |
| 72.5°  | 396.9  | 427.8  | 441.5  | 414.1  | 386.4  |
| 75°    | 299.4  | 327.1  | 343.9  | 321.0  | 291.3  |
| 77.5°  | 212.4  | 238.5  | 252.5  | 232.5  | 208.0  |
| 80°    | 155.8  | 183.5  | 194.2  | 177.6  | 157.8  |
| 82.5°  | 110.5  | 133.4  | 140.8  | 130.8  | 117.3  |
| 85°    | 50.6   | 66.4   | 74.9   | 70.7   | 66.8   |
| 87.5°  | 13.5   | 25.7   | 35.4   | 33.1   | 34.7   |
| 90°    | 2.9    | 8.6    | 23.2   | 11.6   | 11.6   |
| 92.5°  | 12.2   | 58.6   | 129.7  | 57.4   | 37.1   |
| 95°    | 28.9   | 113.9  | 379.2  | 195.4  | 133.2  |
| 97.5°  | 50.4   | 125.1  | 567.4  | 451.2  | 332.3  |
| 100°   | 66.6   | 134.5  | 625.3  | 633.6  | 492.1  |
| 102.5° | 80.5   | 143.9  | 641.5  | 789.2  | 668.1  |
| 105°   | 104.2  | 158.0  | 639.7  | 971.1  | 906.0  |
| 107.5° | 128.5  | 178.3  | 603.3  | 1065.6 | 1081.5 |
| 110°   | 144.7  | 190.0  | 573.2  | 1090.0 | 1157.9 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 160.9 | 204.0 | 545.4 | 1074.6 | 1178.7 |
| 115°   | 185.3 | 224.9 | 512.4 | 1022.2 | 1166.6 |
| 117.5° | 209.0 | 245.2 | 489.8 | 949.6  | 1109.8 |
| 120°   | 222.9 | 256.9 | 480.5 | 900.9  | 1056.6 |
| 122.5° | 236.8 | 270.8 | 473.6 | 852.2  | 1005.6 |
| 125°   | 257.6 | 288.8 | 466.0 | 787.7  | 929.2  |
| 127.5° | 274.4 | 306.1 | 459.7 | 735.7  | 855.1  |
| 130°   | 283.7 | 317.6 | 457.4 | 703.0  | 813.4  |
| 132.5° | 292.9 | 326.9 | 455.0 | 675.0  | 774.0  |
| 135°   | 306.8 | 338.0 | 451.6 | 635.9  | 720.8  |
| 137.5° | 321.3 | 351.9 | 451.0 | 606.6  | 676.2  |
| 140°   | 332.9 | 361.2 | 448.7 | 583.3  | 648.4  |
| 142.5° | 342.2 | 368.2 | 448.7 | 566.9  | 622.9  |
| 145°   | 356.0 | 378.7 | 445.8 | 542.3  | 584.7  |
| 147.5° | 369.9 | 392.0 | 445.8 | 521.8  | 556.9  |
| 150°   | 379.2 | 399.0 | 445.8 | 510.1  | 538.4  |
| 152.5° | 388.5 | 403.8 | 445.8 | 500.7  | 522.2  |
| 155°   | 402.4 | 413.7 | 445.8 | 489.5  | 503.7  |
| 157.5° | 412.8 | 423.5 | 445.8 | 479.6  | 489.8  |
| 160°   | 419.7 | 428.2 | 445.8 | 474.9  | 480.5  |
| 162.5° | 426.7 | 432.9 | 445.8 | 470.2  | 475.9  |
| 165°   | 434.2 | 439.9 | 445.8 | 463.3  | 468.9  |
| 167.5° | 441.2 | 444.0 | 448.7 | 460.3  | 462.6  |
| 170°   | 445.8 | 448.6 | 448.7 | 460.3  | 460.3  |
| 172.5° | 448.1 | 448.7 | 448.7 | 457.9  | 455.6  |
| 175°   | 451.6 | 451.6 | 448.7 | 454.5  | 454.5  |
| 177.5° | 451.6 | 451.6 | 449.3 | 453.8  | 451.6  |
| 180°   | 451.6 | 451.6 | 451.6 | 451.6  | 451.6  |

(END OF REPORT)