

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: P519804

Luminaire Tested: **SQ4-F-025U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519804  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-025U-050D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

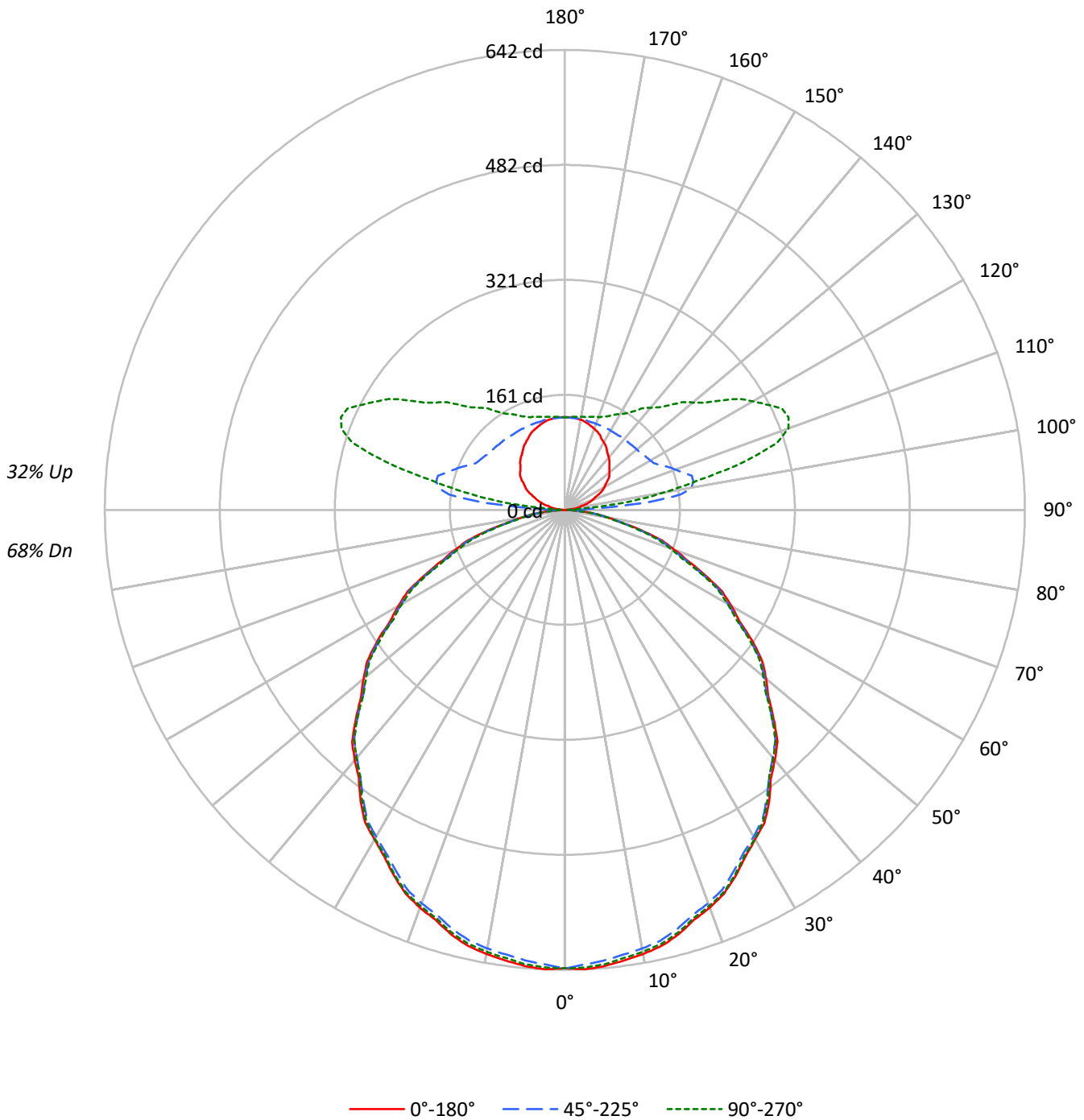
Lumens per Lamp: N/A  
Luminaire Lumens: 2586.8 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 22.1  
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   | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 82 | 82 | 82 | 72 | 72 | 72 | 68 |
| 1   | 102 | 97  | 93  | 90  | 96  | 92  | 88  | 85  | 82 | 79 | 77 | 72 | 70 | 69 | 64 | 62 | 61 | 57 |
| 2   | 93  | 85  | 78  | 73  | 87  | 80  | 75  | 70  | 72 | 67 | 63 | 63 | 60 | 57 | 56 | 54 | 51 | 47 |
| 3   | 84  | 75  | 67  | 61  | 79  | 71  | 64  | 58  | 63 | 58 | 53 | 56 | 52 | 48 | 50 | 46 | 43 | 40 |
| 4   | 77  | 66  | 58  | 51  | 72  | 62  | 55  | 49  | 56 | 50 | 45 | 50 | 45 | 41 | 44 | 40 | 37 | 34 |
| 5   | 71  | 59  | 50  | 44  | 67  | 56  | 48  | 42  | 50 | 44 | 39 | 45 | 40 | 36 | 40 | 36 | 32 | 30 |
| 6   | 65  | 53  | 44  | 38  | 61  | 50  | 42  | 37  | 45 | 39 | 34 | 40 | 35 | 31 | 36 | 32 | 29 | 26 |
| 7   | 60  | 48  | 39  | 34  | 57  | 45  | 38  | 32  | 41 | 35 | 30 | 37 | 32 | 28 | 33 | 29 | 25 | 23 |
| 8   | 56  | 43  | 35  | 30  | 53  | 41  | 34  | 29  | 37 | 31 | 27 | 34 | 28 | 25 | 30 | 26 | 23 | 20 |
| 9   | 52  | 40  | 32  | 27  | 49  | 38  | 31  | 26  | 34 | 28 | 24 | 31 | 26 | 22 | 28 | 24 | 20 | 18 |
| 10  | 49  | 36  | 29  | 24  | 46  | 35  | 28  | 23  | 32 | 26 | 22 | 29 | 24 | 20 | 26 | 22 | 19 | 17 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5905 | 5905 | 5905 |
| 5°  | 5920 | 5849 | 5896 |
| 10° | 5899 | 5827 | 5868 |
| 15° | 5859 | 5785 | 5835 |
| 20° | 5804 | 5737 | 5779 |
| 25° | 5738 | 5669 | 5722 |
| 30° | 5659 | 5613 | 5650 |
| 35° | 5598 | 5530 | 5558 |
| 40° | 5491 | 5438 | 5449 |
| 45° | 5377 | 5333 | 5333 |
| 50° | 5263 | 5215 | 5190 |
| 55° | 5141 | 5072 | 5044 |
| 60° | 4949 | 4870 | 4838 |
| 65° | 4713 | 4619 | 4563 |
| 70° | 4392 | 4297 | 4205 |
| 75° | 3939 | 3818 | 3725 |
| 80° | 3188 | 3145 | 3050 |
| 85° | 1895 | 2181 | 2265 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 60.4   | 2.3       |
| 10°-20°   | 172.0  | 6.6       |
| 20°-30°   | 258.3  | 10.0      |
| 30°-40°   | 308.3  | 11.9      |
| 40°-50°   | 315.9  | 12.2      |
| 50°-60°   | 281.8  | 10.9      |
| 60°-70°   | 209.8  | 8.1       |
| 70°-80°   | 113.9  | 4.4       |
| 80°-90°   | 27.1   | 1.0       |
| 90°-100°  | 63.1   | 2.4       |
| 100°-110° | 165.9  | 6.4       |
| 110°-120° | 172.1  | 6.7       |
| 120°-130° | 138.0  | 5.3       |
| 130°-140° | 108.3  | 4.2       |
| 140°-150° | 83.1   | 3.2       |
| 150°-160° | 59.9   | 2.3       |
| 160°-170° | 36.6   | 1.4       |
| 170°-180° | 12.4   | 0.5       |
| 0°-30°    | 490.6  | 19.0      |
| 0°-40°    | 799.0  | 30.9      |
| 0°-60°    | 1396.7 | 54.0      |
| 0°-90°    | 1747.5 | 67.6      |
| 90°-120°  | 401.1  | 15.5      |
| 90°-150°  | 730.5  | 28.2      |
| 90°-180°  | 839.0  | 32.4      |
| 0°-180°   | 2586.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 640 | 640   | 640 | 640   | 640 |      |
| 5°   | 639 | 638   | 632 | 637   | 637 | 61   |
| 15°  | 613 | 612   | 606 | 611   | 611 | 173  |
| 25°  | 564 | 562   | 557 | 560   | 562 | 260  |
| 35°  | 497 | 495   | 491 | 491   | 494 | 310  |
| 45°  | 412 | 413   | 409 | 408   | 409 | 318  |
| 55°  | 320 | 320   | 315 | 313   | 314 | 285  |
| 65°  | 216 | 215   | 212 | 209   | 209 | 214  |
| 75°  | 110 | 110   | 107 | 105   | 104 | 117  |
| 85°  | 18  | 20    | 21  | 21    | 21  | 25   |
| 90°  | 1   | 2     | 7   | 3     | 3   | 1    |
| 95°  | 8   | 33    | 109 | 56    | 38  | 9    |
| 105° | 30  | 45    | 183 | 278   | 260 | 32   |
| 115° | 53  | 64    | 147 | 293   | 335 | 52   |
| 125° | 74  | 83    | 134 | 226   | 266 | 66   |
| 135° | 88  | 97    | 130 | 182   | 207 | 68   |
| 145° | 102 | 109   | 128 | 156   | 168 | 64   |
| 155° | 115 | 119   | 128 | 140   | 144 | 53   |
| 165° | 124 | 126   | 128 | 133   | 134 | 35   |
| 175° | 130 | 130   | 129 | 130   | 130 | 12   |
| 180° | 130 | 130   | 130 | 130   | 130 |      |

TEST NUMBER: P519804

CATALOG NUMBER: SQ4-F-025U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 640.0 | 640.0 | 640.0 | 640.0 | 640.0 |
| 2.5°   | 642.0 | 640.7 | 635.2 | 640.0 | 639.4 |
| 5°     | 639.2 | 638.3 | 631.5 | 637.4 | 636.6 |
| 7.5°   | 634.5 | 632.9 | 626.1 | 632.0 | 631.1 |
| 10°    | 629.7 | 628.0 | 622.0 | 627.1 | 626.3 |
| 12.5°  | 623.6 | 622.6 | 615.9 | 621.0 | 620.8 |
| 15°    | 613.4 | 611.7 | 605.7 | 610.9 | 610.9 |
| 17.5°  | 600.1 | 599.1 | 593.2 | 598.1 | 597.6 |
| 20°    | 591.1 | 589.5 | 584.3 | 588.6 | 588.6 |
| 22.5°  | 580.2 | 579.2 | 574.1 | 577.6 | 578.3 |
| 25°    | 563.7 | 562.1 | 556.9 | 560.4 | 562.1 |
| 27.5°  | 545.6 | 544.3 | 540.0 | 542.2 | 543.4 |
| 30°    | 531.2 | 531.2 | 526.9 | 527.8 | 530.3 |
| 32.5°  | 518.2 | 518.2 | 513.2 | 514.1 | 515.3 |
| 35°    | 497.0 | 495.3 | 491.0 | 491.0 | 493.5 |
| 37.5°  | 472.2 | 471.4 | 468.7 | 468.2 | 468.9 |
| 40°    | 455.9 | 455.0 | 451.5 | 452.4 | 452.4 |
| 42.5°  | 439.4 | 438.5 | 435.0 | 433.9 | 435.2 |
| 45°    | 412.1 | 413.0 | 408.7 | 407.8 | 408.7 |
| 47.5°  | 385.3 | 385.3 | 381.8 | 379.4 | 380.7 |
| 50°    | 366.7 | 366.7 | 363.3 | 361.6 | 361.6 |
| 52.5°  | 347.5 | 348.2 | 344.0 | 341.7 | 342.4 |
| 55°    | 319.6 | 319.6 | 315.3 | 312.8 | 313.6 |
| 57.5°  | 288.7 | 288.7 | 284.5 | 281.9 | 283.4 |
| 60°    | 268.2 | 268.2 | 263.9 | 261.3 | 262.2 |
| 62.5°  | 247.6 | 247.6 | 243.4 | 240.8 | 240.9 |
| 65°    | 215.9 | 215.1 | 211.6 | 209.0 | 209.0 |
| 67.5°  | 185.4 | 183.2 | 180.6 | 177.2 | 177.2 |
| 70°    | 162.8 | 161.9 | 159.3 | 155.9 | 155.9 |
| 72.5°  | 142.2 | 140.7 | 138.1 | 135.4 | 135.4 |
| 75°    | 110.5 | 109.6 | 107.1 | 105.4 | 104.5 |
| 77.5°  | 79.2  | 78.5  | 78.3  | 75.9  | 76.6  |
| 80°    | 60.0  | 60.0  | 59.2  | 57.4  | 57.4  |
| 82.5°  | 42.8  | 43.5  | 42.0  | 41.6  | 40.9  |
| 85°    | 17.9  | 19.6  | 20.6  | 21.4  | 21.4  |
| 87.5°  | 3.5   | 5.9   | 6.2   | 6.2   | 6.2   |
| 90°    | 0.9   | 2.5   | 6.6   | 3.3   | 3.3   |
| 92.5°  | 3.4   | 16.8  | 37.2  | 16.4  | 10.6  |
| 95°    | 8.3   | 32.7  | 108.8 | 56.0  | 38.1  |
| 97.5°  | 14.4  | 35.8  | 162.7 | 129.4 | 95.3  |
| 100°   | 19.1  | 38.6  | 179.3 | 181.7 | 141.1 |
| 102.5° | 23.0  | 41.3  | 183.9 | 226.3 | 191.6 |
| 105°   | 29.9  | 45.3  | 183.4 | 278.4 | 259.8 |
| 107.5° | 36.9  | 51.1  | 173.0 | 305.6 | 310.1 |
| 110°   | 41.5  | 54.5  | 164.3 | 312.6 | 332.0 |

TEST NUMBER: P519804

CATALOG NUMBER: SQ4-F-025U-050D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 46.2  | 58.5  | 156.4 | 308.2 | 338.0 |
| 115°   | 53.1  | 64.5  | 146.9 | 293.2 | 334.6 |
| 117.5° | 59.9  | 70.4  | 140.4 | 272.3 | 318.2 |
| 120°   | 63.9  | 73.7  | 137.7 | 258.4 | 303.0 |
| 122.5° | 67.9  | 77.6  | 135.8 | 244.4 | 288.4 |
| 125°   | 73.9  | 82.8  | 133.6 | 225.9 | 266.4 |
| 127.5° | 78.7  | 87.7  | 131.8 | 211.0 | 245.2 |
| 130°   | 81.3  | 91.1  | 131.1 | 201.6 | 233.2 |
| 132.5° | 84.0  | 93.8  | 130.5 | 193.6 | 222.0 |
| 135°   | 87.9  | 96.9  | 129.5 | 182.4 | 206.7 |
| 137.5° | 92.1  | 100.9 | 129.3 | 174.0 | 193.9 |
| 140°   | 95.5  | 103.6 | 128.7 | 167.3 | 185.9 |
| 142.5° | 98.1  | 105.6 | 128.7 | 162.6 | 178.7 |
| 145°   | 102.1 | 108.6 | 127.8 | 155.5 | 167.7 |
| 147.5° | 106.1 | 112.4 | 127.8 | 149.6 | 159.7 |
| 150°   | 108.8 | 114.4 | 127.8 | 146.2 | 154.4 |
| 152.5° | 111.4 | 115.8 | 127.8 | 143.6 | 149.8 |
| 155°   | 115.4 | 118.6 | 127.8 | 140.4 | 144.4 |
| 157.5° | 118.3 | 121.5 | 127.8 | 137.5 | 140.4 |
| 160°   | 120.3 | 122.8 | 127.8 | 136.2 | 137.7 |
| 162.5° | 122.3 | 124.2 | 127.8 | 134.9 | 136.5 |
| 165°   | 124.5 | 126.2 | 127.8 | 132.9 | 134.5 |
| 167.5° | 126.5 | 127.3 | 128.7 | 132.0 | 132.7 |
| 170°   | 127.8 | 128.7 | 128.7 | 132.0 | 132.0 |
| 172.5° | 128.5 | 128.7 | 128.7 | 131.3 | 130.7 |
| 175°   | 129.5 | 129.5 | 128.7 | 130.3 | 130.3 |
| 177.5° | 129.5 | 129.5 | 128.8 | 130.1 | 129.5 |
| 180°   | 129.5 | 129.5 | 129.5 | 129.5 | 129.5 |

(END OF REPORT)