

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

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-PP3-025U-075D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

**Test Information**

Test Method: LM-79-2019  
Report Number:  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/1/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-PP3-025U-075D-927-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

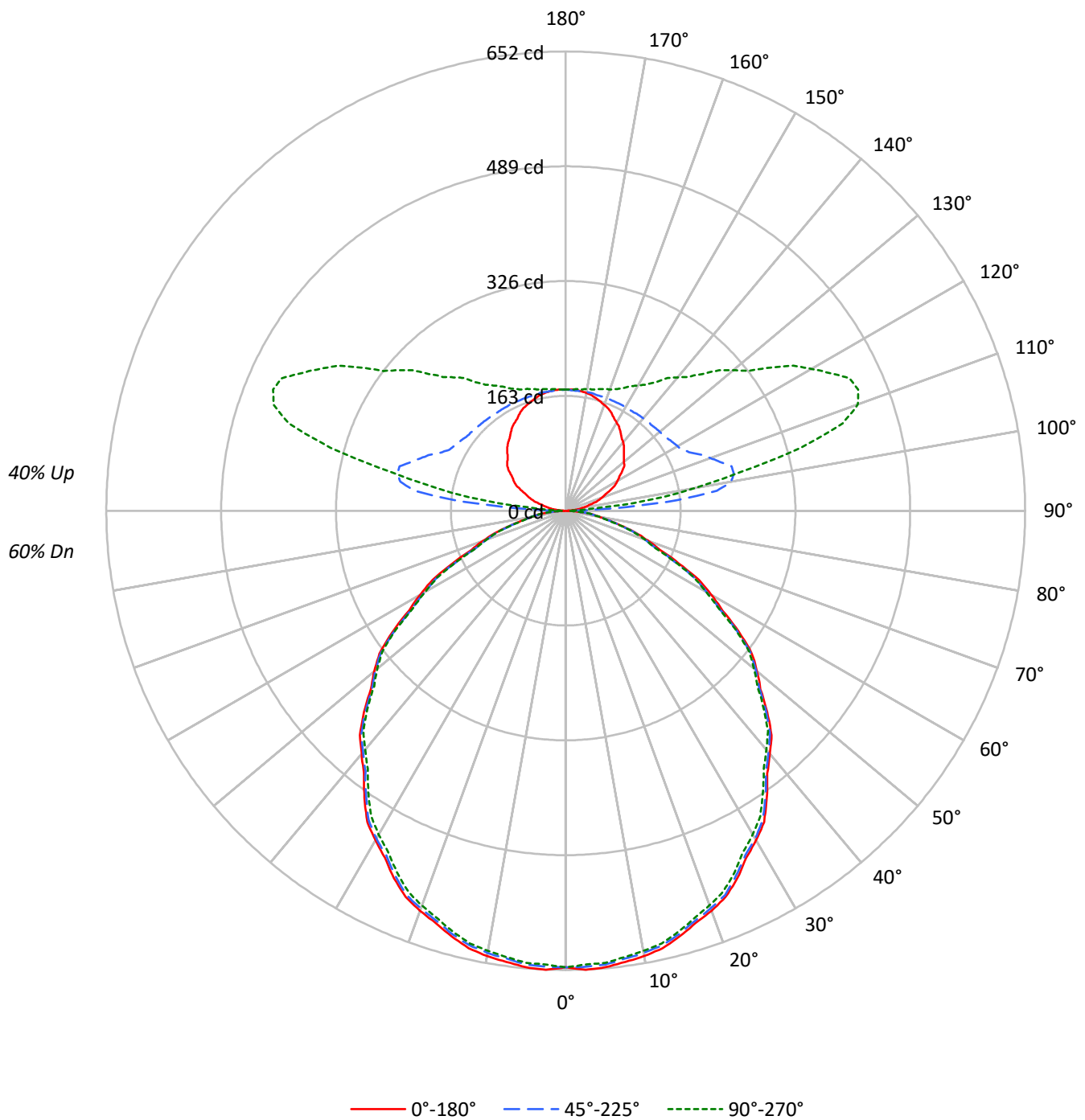
Lumens per Lamp: N/A  
Luminaire Lumens: 2775.8 lumens  
Efficiency: N/A  
Efficacy: 57.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 48.6  
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

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-025U-075D-927-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-025U-075D-927-1D-UNV-STD-W-6

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20 |    |    |    | 20 |    |    |    | 20 |
| RC  | 80  |     |     |     | 70  |     |     |     | 50 |    |    |    | 30 |    |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 76 | 76 | 76 | 65 | 65 | 65 |
| 1   | 100 | 96  | 92  | 89  | 94  | 90  | 86  | 83  | 78 | 76 | 74 | 68 | 66 | 64 | 58 | 57 | 56 |
| 2   | 91  | 84  | 78  | 73  | 85  | 79  | 73  | 69  | 69 | 65 | 61 | 60 | 57 | 54 | 51 | 49 | 47 |
| 3   | 84  | 74  | 67  | 61  | 78  | 69  | 63  | 58  | 61 | 56 | 52 | 53 | 49 | 46 | 46 | 43 | 40 |
| 4   | 77  | 66  | 58  | 52  | 71  | 62  | 55  | 49  | 54 | 49 | 44 | 47 | 43 | 39 | 41 | 38 | 35 |
| 5   | 70  | 59  | 50  | 44  | 65  | 55  | 48  | 42  | 49 | 43 | 38 | 43 | 38 | 34 | 37 | 33 | 30 |
| 6   | 65  | 53  | 44  | 39  | 60  | 50  | 42  | 37  | 44 | 38 | 33 | 38 | 34 | 30 | 33 | 30 | 27 |
| 7   | 60  | 48  | 40  | 34  | 56  | 45  | 38  | 32  | 40 | 34 | 30 | 35 | 30 | 27 | 31 | 27 | 24 |
| 8   | 56  | 43  | 35  | 30  | 52  | 41  | 34  | 29  | 36 | 30 | 26 | 32 | 27 | 24 | 28 | 24 | 21 |
| 9   | 52  | 40  | 32  | 27  | 49  | 37  | 30  | 26  | 33 | 28 | 24 | 30 | 25 | 21 | 26 | 22 | 19 |
| 10  | 49  | 36  | 29  | 24  | 45  | 34  | 28  | 23  | 31 | 25 | 21 | 27 | 23 | 19 | 24 | 20 | 18 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3988 | 3988 | 3988 |
| 5°  | 4017 | 3992 | 3978 |
| 10° | 4010 | 3982 | 3964 |
| 15° | 3984 | 3962 | 3940 |
| 20° | 3957 | 3935 | 3905 |
| 25° | 3910 | 3883 | 3845 |
| 30° | 3837 | 3818 | 3769 |
| 35° | 3737 | 3712 | 3665 |
| 40° | 3618 | 3595 | 3554 |
| 45° | 3519 | 3494 | 3459 |
| 50° | 3392 | 3371 | 3339 |
| 55° | 3217 | 3174 | 3151 |
| 60° | 2929 | 2845 | 2831 |
| 65° | 2580 | 2473 | 2464 |
| 70° | 2228 | 2136 | 2136 |
| 75° | 1918 | 1889 | 1863 |
| 80° | 1690 | 1711 | 1672 |
| 85° | 1327 | 1447 | 1447 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3519 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-025U-075D-927-1D-UNV-STD-W-6

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 61.3   | 2.2       |
| 10°-20°   | 175.0  | 6.3       |
| 20°-30°   | 262.2  | 9.4       |
| 30°-40°   | 307.5  | 11.1      |
| 40°-50°   | 308.5  | 11.1      |
| 50°-60°   | 263.2  | 9.5       |
| 60°-70°   | 171.6  | 6.2       |
| 70°-80°   | 86.1   | 3.1       |
| 80°-90°   | 24.8   | 0.9       |
| 90°-100°  | 83.9   | 3.0       |
| 100°-110° | 220.5  | 7.9       |
| 110°-120° | 228.7  | 8.2       |
| 120°-130° | 183.4  | 6.6       |
| 130°-140° | 143.9  | 5.2       |
| 140°-150° | 110.5  | 4.0       |
| 150°-160° | 79.6   | 2.9       |
| 160°-170° | 48.7   | 1.8       |
| 170°-180° | 16.4   | 0.6       |
| 0°-30°    | 498.5  | 18.0      |
| 0°-40°    | 806.1  | 29.0      |
| 0°-60°    | 1377.7 | 49.6      |
| 0°-90°    | 1660.2 | 59.8      |
| 90°-120°  | 533.1  | 19.2      |
| 90°-150°  | 970.9  | 35.0      |
| 90°-180°  | 1116.0 | 40.2      |
| 0°-180°   | 2775.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 648 | 648   | 648 | 648   | 648 |      |
| 5°   | 651 | 644   | 647 | 644   | 644 | 62   |
| 15°  | 626 | 620   | 622 | 620   | 619 | 176  |
| 25°  | 576 | 570   | 572 | 567   | 566 | 265  |
| 35°  | 498 | 493   | 494 | 489   | 488 | 311  |
| 45°  | 404 | 402   | 402 | 398   | 398 | 311  |
| 55°  | 300 | 299   | 296 | 294   | 294 | 267  |
| 65°  | 177 | 174   | 170 | 169   | 169 | 177  |
| 75°  | 81  | 81    | 80  | 79    | 78  | 88   |
| 85°  | 19  | 20    | 20  | 20    | 20  | 22   |
| 90°  | 1   | 3     | 9   | 4     | 4   | 2    |
| 95°  | 11  | 43    | 144 | 74    | 51  | 12   |
| 105° | 40  | 60    | 244 | 370   | 345 | 42   |
| 115° | 71  | 86    | 195 | 390   | 445 | 70   |
| 125° | 98  | 110   | 178 | 300   | 354 | 87   |
| 135° | 117 | 129   | 172 | 242   | 275 | 91   |
| 145° | 136 | 144   | 170 | 207   | 223 | 85   |
| 155° | 153 | 158   | 170 | 187   | 192 | 70   |
| 165° | 166 | 168   | 170 | 177   | 179 | 47   |
| 175° | 172 | 172   | 171 | 173   | 173 | 16   |
| 180° | 172 | 172   | 172 | 172   | 172 |      |

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-025U-075D-927-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 648.3 | 648.3 | 648.3 | 648.3 | 648.3 |
| 2.5°   | 652.4 | 647.1 | 648.3 | 647.3 | 644.7 |
| 5°     | 650.6 | 644.5 | 646.6 | 644.3 | 644.3 |
| 7.5°   | 646.1 | 639.5 | 641.6 | 639.3 | 639.2 |
| 10°    | 642.0 | 635.4 | 637.5 | 635.2 | 634.7 |
| 12.5°  | 636.1 | 629.5 | 632.0 | 629.3 | 629.2 |
| 15°    | 625.6 | 619.5 | 622.2 | 619.9 | 618.8 |
| 17.5°  | 613.6 | 607.0 | 610.2 | 607.0 | 606.6 |
| 20°    | 604.5 | 597.9 | 601.1 | 596.6 | 596.6 |
| 22.5°  | 593.6 | 587.0 | 590.7 | 584.8 | 584.8 |
| 25°    | 576.1 | 569.5 | 572.2 | 567.0 | 566.5 |
| 27.5°  | 555.3 | 548.8 | 551.6 | 545.8 | 545.7 |
| 30°    | 540.3 | 534.2 | 537.5 | 531.2 | 530.7 |
| 32.5°  | 524.0 | 518.3 | 520.7 | 514.4 | 513.9 |
| 35°    | 497.7 | 492.7 | 494.3 | 488.6 | 488.1 |
| 37.5°  | 470.1 | 465.0 | 466.8 | 461.9 | 461.7 |
| 40°    | 450.6 | 447.2 | 447.7 | 443.7 | 442.6 |
| 42.5°  | 432.4 | 428.6 | 429.1 | 425.1 | 424.9 |
| 45°    | 404.5 | 401.8 | 401.7 | 397.7 | 397.7 |
| 47.5°  | 375.0 | 372.9 | 372.3 | 369.0 | 368.9 |
| 50°    | 354.5 | 352.9 | 352.3 | 349.4 | 348.9 |
| 52.5°  | 333.2 | 332.4 | 330.5 | 328.1 | 328.0 |
| 55°    | 300.0 | 298.9 | 296.0 | 294.3 | 293.8 |
| 57.5°  | 264.0 | 261.8 | 258.5 | 256.0 | 256.5 |
| 60°    | 238.1 | 235.8 | 231.3 | 230.1 | 230.1 |
| 62.5°  | 213.1 | 210.4 | 205.8 | 204.2 | 205.1 |
| 65°    | 177.3 | 173.9 | 169.9 | 168.8 | 169.3 |
| 67.5°  | 144.8 | 141.8 | 137.4 | 137.4 | 136.9 |
| 70°    | 123.9 | 122.2 | 118.8 | 118.8 | 118.8 |
| 72.5°  | 105.2 | 104.5 | 101.9 | 101.9 | 101.5 |
| 75°    | 80.7  | 80.7  | 79.5  | 79.0  | 78.4  |
| 77.5°  | 60.5  | 60.7  | 60.1  | 59.5  | 58.5  |
| 80°    | 47.7  | 48.8  | 48.3  | 47.7  | 47.2  |
| 82.5°  | 35.9  | 37.0  | 36.9  | 35.9  | 35.8  |
| 85°    | 18.8  | 20.4  | 20.5  | 20.5  | 20.5  |
| 87.5°  | 5.2   | 7.4   | 9.0   | 8.2   | 8.6   |
| 90°    | 1.1   | 3.3   | 8.8   | 4.4   | 4.4   |
| 92.5°  | 4.6   | 22.3  | 49.4  | 21.9  | 14.1  |
| 95°    | 11.0  | 43.4  | 144.5 | 74.5  | 50.8  |
| 97.5°  | 19.2  | 47.7  | 216.3 | 172.0 | 126.7 |
| 100°   | 25.4  | 51.3  | 238.3 | 241.5 | 187.6 |
| 102.5° | 30.7  | 54.8  | 244.5 | 300.8 | 254.7 |
| 105°   | 39.7  | 60.2  | 243.8 | 370.2 | 345.3 |
| 107.5° | 49.0  | 68.0  | 229.9 | 406.2 | 412.2 |
| 110°   | 55.2  | 72.4  | 218.5 | 415.4 | 441.3 |

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-025U-075D-927-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 61.3  | 77.7  | 207.9 | 409.6 | 449.3 |
| 115°   | 70.6  | 85.7  | 195.3 | 389.6 | 444.7 |
| 117.5° | 79.7  | 93.5  | 186.7 | 362.0 | 423.0 |
| 120°   | 85.0  | 97.9  | 183.2 | 343.4 | 402.7 |
| 122.5° | 90.3  | 103.2 | 180.5 | 324.8 | 383.3 |
| 125°   | 98.2  | 110.1 | 177.6 | 300.2 | 354.2 |
| 127.5° | 104.6 | 116.7 | 175.2 | 280.4 | 325.9 |
| 130°   | 108.1 | 121.1 | 174.3 | 268.0 | 310.0 |
| 132.5° | 111.7 | 124.6 | 173.4 | 257.3 | 295.0 |
| 135°   | 117.0 | 128.8 | 172.1 | 242.4 | 274.7 |
| 137.5° | 122.5 | 134.1 | 171.9 | 231.2 | 257.7 |
| 140°   | 126.9 | 137.7 | 171.0 | 222.3 | 247.2 |
| 142.5° | 130.4 | 140.3 | 171.0 | 216.1 | 237.4 |
| 145°   | 135.7 | 144.3 | 169.9 | 206.7 | 222.9 |
| 147.5° | 141.0 | 149.4 | 169.9 | 198.9 | 212.3 |
| 150°   | 144.5 | 152.1 | 169.9 | 194.4 | 205.2 |
| 152.5° | 148.1 | 153.9 | 169.9 | 190.8 | 199.0 |
| 155°   | 153.4 | 157.7 | 169.9 | 186.6 | 192.0 |
| 157.5° | 157.3 | 161.4 | 169.9 | 182.8 | 186.7 |
| 160°   | 160.0 | 163.2 | 169.9 | 181.0 | 183.2 |
| 162.5° | 162.6 | 165.0 | 169.9 | 179.2 | 181.4 |
| 165°   | 165.5 | 167.7 | 169.9 | 176.6 | 178.7 |
| 167.5° | 168.2 | 169.2 | 171.0 | 175.5 | 176.3 |
| 170°   | 169.9 | 171.0 | 171.0 | 175.4 | 175.4 |
| 172.5° | 170.8 | 171.0 | 171.0 | 174.5 | 173.7 |
| 175°   | 172.1 | 172.1 | 171.0 | 173.2 | 173.2 |
| 177.5° | 172.1 | 172.1 | 171.2 | 173.0 | 172.1 |
| 180°   | 172.1 | 172.1 | 172.1 | 172.1 | 172.1 |

(END OF REPORT)