

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: P564050

Luminaire Tested: **SQ4-PR1-075U-050D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564050  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-075U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

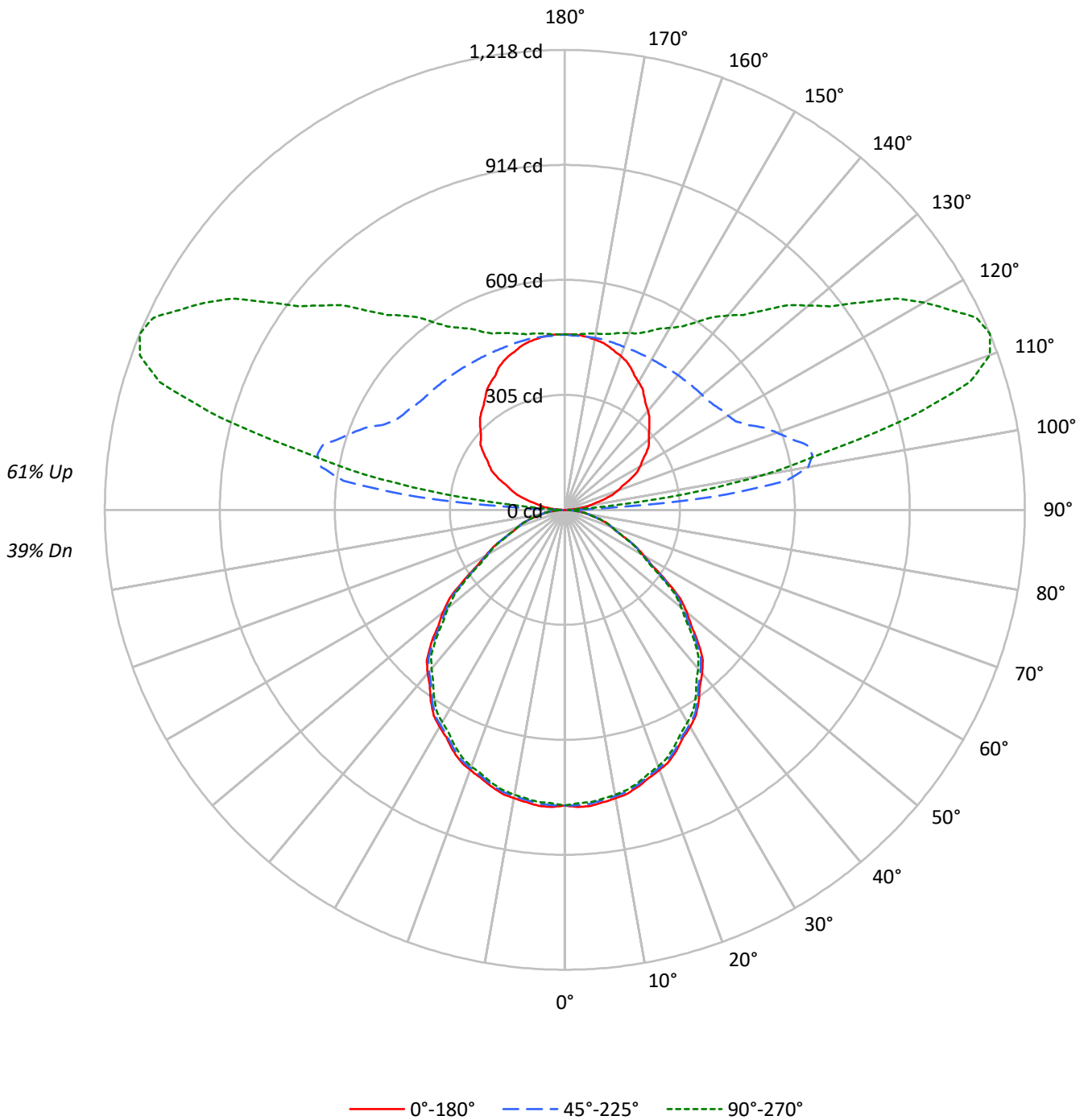
Lumens per Lamp: N/A  
Luminaire Lumens: 4982.4 lumens  
Efficiency: N/A  
Efficacy: 143.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 34.7  
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   | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 |
| 1   | 96  | 91  | 88  | 84  | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 53 | 51 | 41 | 40 | 39 | 34 |
| 2   | 87  | 80  | 74  | 69  | 79 | 73 | 68 | 64 | 60 | 56 | 53 | 48 | 45 | 43 | 37 | 35 | 34 | 28 |
| 3   | 80  | 71  | 63  | 58  | 72 | 64 | 58 | 53 | 53 | 49 | 45 | 42 | 39 | 37 | 33 | 31 | 29 | 24 |
| 4   | 73  | 63  | 55  | 49  | 66 | 57 | 51 | 45 | 47 | 42 | 38 | 38 | 34 | 32 | 29 | 27 | 25 | 21 |
| 5   | 67  | 56  | 48  | 42  | 61 | 51 | 44 | 39 | 42 | 37 | 33 | 34 | 30 | 27 | 26 | 24 | 22 | 18 |
| 6   | 62  | 50  | 42  | 36  | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 21 | 19 | 16 |
| 7   | 57  | 45  | 37  | 32  | 52 | 41 | 35 | 30 | 34 | 29 | 25 | 28 | 24 | 21 | 22 | 19 | 17 | 14 |
| 8   | 53  | 41  | 33  | 28  | 48 | 38 | 31 | 26 | 31 | 26 | 23 | 26 | 22 | 19 | 20 | 17 | 15 | 13 |
| 9   | 49  | 37  | 30  | 25  | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 23 | 20 | 17 | 19 | 16 | 14 | 12 |
| 10  | 46  | 34  | 27  | 22  | 42 | 31 | 25 | 21 | 26 | 22 | 18 | 22 | 18 | 15 | 17 | 15 | 13 | 11 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7224 | 7224 | 7224 |
| 5°  | 7289 | 7232 | 7195 |
| 10° | 7265 | 7215 | 7177 |
| 15° | 7233 | 7189 | 7150 |
| 20° | 7198 | 7151 | 7098 |
| 25° | 7146 | 7099 | 7016 |
| 30° | 7070 | 7020 | 6918 |
| 35° | 6965 | 6904 | 6805 |
| 40° | 6806 | 6734 | 6611 |
| 45° | 6529 | 6414 | 6283 |
| 50° | 6040 | 5895 | 5779 |
| 55° | 5273 | 5152 | 5044 |
| 60° | 4443 | 4405 | 4318 |
| 65° | 3842 | 3858 | 3827 |
| 70° | 3528 | 3547 | 3547 |
| 75° | 3390 | 3390 | 3415 |
| 80° | 3188 | 3225 | 3188 |
| 85° | 2572 | 2858 | 2858 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 74.0   | 1.5       |
| 10°-20°   | 211.8  | 4.3       |
| 20°-30°   | 319.5  | 6.4       |
| 30°-40°   | 380.7  | 7.6       |
| 40°-50°   | 375.3  | 7.5       |
| 50°-60°   | 286.9  | 5.8       |
| 60°-70°   | 177.5  | 3.6       |
| 70°-80°   | 100.8  | 2.0       |
| 80°-90°   | 31.9   | 0.6       |
| 90°-100°  | 218.9  | 4.4       |
| 100°-110° | 602.3  | 12.1      |
| 110°-120° | 621.7  | 12.5      |
| 120°-130° | 498.1  | 10.0      |
| 130°-140° | 391.2  | 7.9       |
| 140°-150° | 299.8  | 6.0       |
| 150°-160° | 215.6  | 4.3       |
| 160°-170° | 131.8  | 2.6       |
| 170°-180° | 44.4   | 0.9       |
| 0°-30°    | 605.4  | 12.2      |
| 0°-40°    | 986.1  | 19.8      |
| 0°-60°    | 1648.3 | 33.1      |
| 0°-90°    | 1958.5 | 39.3      |
| 90°-120°  | 1442.9 | 29.0      |
| 90°-150°  | 2632.1 | 52.8      |
| 90°-180°  | 3024.0 | 60.7      |
| 0°-180°   | 4982.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 783 | 783   | 783 | 783   | 783  |      |
| 5°   | 787 | 778   | 781 | 778   | 777  | 75   |
| 15°  | 757 | 749   | 753 | 750   | 749  | 214  |
| 25°  | 702 | 694   | 697 | 690   | 689  | 323  |
| 35°  | 618 | 611   | 613 | 605   | 604  | 386  |
| 45°  | 500 | 494   | 492 | 483   | 482  | 383  |
| 55°  | 328 | 322   | 320 | 315   | 314  | 294  |
| 65°  | 176 | 175   | 177 | 175   | 175  | 178  |
| 75°  | 95  | 95    | 95  | 96    | 96   | 100  |
| 85°  | 24  | 26    | 27  | 27    | 27   | 28   |
| 90°  | 1   | 4     | 7   | 9     | 9    | 3    |
| 95°  | 33  | 120   | 387 | 166   | 106  | 34   |
| 105° | 108 | 166   | 664 | 1011  | 943  | 113  |
| 115° | 191 | 232   | 532 | 1060  | 1203 | 188  |
| 125° | 263 | 299   | 483 | 817   | 957  | 234  |
| 135° | 317 | 352   | 469 | 661   | 748  | 245  |
| 145° | 366 | 392   | 462 | 563   | 606  | 230  |
| 155° | 415 | 428   | 459 | 506   | 520  | 191  |
| 165° | 448 | 454   | 461 | 480   | 483  | 126  |
| 175° | 464 | 465   | 462 | 468   | 467  | 44   |
| 180° | 464 | 464   | 464 | 464   | 464  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 0°     | 783.0 | 783.0 | 783.0 | 783.0  | 783.0  |
| 2.5°   | 787.8 | 781.0 | 783.0 | 781.3  | 777.6  |
| 5°     | 787.0 | 778.4 | 780.9 | 778.2  | 776.9  |
| 7.5°   | 780.9 | 772.5 | 775.0 | 772.3  | 771.5  |
| 10°    | 775.5 | 767.6 | 770.1 | 767.4  | 766.1  |
| 12.5°  | 769.6 | 761.2 | 764.2 | 760.9  | 759.6  |
| 15°    | 757.3 | 749.4 | 752.6 | 749.9  | 748.6  |
| 17.5°  | 743.8 | 735.4 | 738.6 | 735.4  | 733.7  |
| 20°    | 733.1 | 725.1 | 728.3 | 723.6  | 722.9  |
| 22.5°  | 721.2 | 713.3 | 716.5 | 710.1  | 710.0  |
| 25°    | 702.0 | 693.5 | 697.3 | 689.9  | 689.2  |
| 27.5°  | 679.2 | 671.3 | 674.5 | 666.9  | 666.2  |
| 30°    | 663.6 | 655.7 | 658.9 | 650.7  | 649.4  |
| 32.5°  | 645.8 | 638.4 | 641.1 | 633.0  | 632.2  |
| 35°    | 618.4 | 611.2 | 613.0 | 604.9  | 604.2  |
| 37.5°  | 587.3 | 580.7 | 581.7 | 572.8  | 572.1  |
| 40°    | 565.1 | 558.5 | 559.1 | 549.6  | 548.9  |
| 42.5°  | 540.9 | 534.3 | 533.7 | 524.3  | 523.6  |
| 45°    | 500.4 | 493.8 | 491.6 | 482.8  | 481.5  |
| 47.5°  | 454.3 | 447.7 | 443.6 | 436.4  | 435.5  |
| 50°    | 420.8 | 414.2 | 410.7 | 404.6  | 402.6  |
| 52.5°  | 384.7 | 378.1 | 375.1 | 369.5  | 367.5  |
| 55°    | 327.8 | 322.5 | 320.3 | 314.9  | 313.6  |
| 57.5°  | 273.7 | 270.1 | 269.5 | 264.2  | 263.7  |
| 60°    | 240.8 | 238.8 | 238.7 | 234.0  | 234.0  |
| 62.5°  | 212.7 | 211.2 | 212.3 | 209.2  | 208.7  |
| 65°    | 176.0 | 174.7 | 176.7 | 175.3  | 175.3  |
| 67.5°  | 147.0 | 147.0 | 148.2 | 147.7  | 147.7  |
| 70°    | 130.8 | 130.8 | 131.5 | 131.5  | 131.5  |
| 72.5°  | 116.3 | 115.7 | 117.5 | 117.5  | 116.9  |
| 75°    | 95.1  | 95.1  | 95.1  | 95.8   | 95.8   |
| 77.5°  | 74.0  | 74.2  | 74.7  | 74.6   | 74.0   |
| 80°    | 60.0  | 60.7  | 60.7  | 60.0   | 60.0   |
| 82.5°  | 46.0  | 46.7  | 46.7  | 46.5   | 46.0   |
| 85°    | 24.3  | 25.6  | 27.0  | 27.0   | 27.0   |
| 87.5°  | 7.2   | 9.9   | 12.2  | 12.6   | 12.0   |
| 90°    | 1.0   | 3.9   | 6.9   | 8.9    | 8.9    |
| 92.5°  | 13.6  | 58.2  | 100.9 | 38.8   | 31.8   |
| 95°    | 32.6  | 119.5 | 387.1 | 165.5  | 105.7  |
| 97.5°  | 53.1  | 132.5 | 590.8 | 455.2  | 321.2  |
| 100°   | 68.1  | 140.6 | 654.8 | 660.9  | 539.2  |
| 102.5° | 82.4  | 150.2 | 671.4 | 819.9  | 708.3  |
| 105°   | 107.6 | 165.6 | 663.7 | 1010.8 | 943.2  |
| 107.5° | 131.7 | 184.7 | 625.9 | 1104.2 | 1124.3 |
| 110°   | 149.1 | 197.4 | 597.5 | 1127.4 | 1197.0 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 164.9 | 211.7 | 569.1 | 1112.5 | 1218.3 |
| 115°   | 190.6 | 232.1 | 532.3 | 1060.0 | 1202.9 |
| 117.5° | 215.1 | 253.3 | 509.0 | 986.3  | 1148.0 |
| 120°   | 230.1 | 266.8 | 498.7 | 931.2  | 1098.2 |
| 122.5° | 243.5 | 280.2 | 491.6 | 882.8  | 1041.3 |
| 125°   | 262.7 | 299.4 | 482.9 | 817.0  | 957.0  |
| 127.5° | 280.9 | 315.8 | 477.2 | 762.1  | 884.9  |
| 130°   | 290.4 | 326.1 | 474.1 | 729.4  | 841.4  |
| 132.5° | 301.4 | 337.1 | 471.7 | 700.7  | 801.9  |
| 135°   | 317.0 | 351.8 | 469.1 | 660.7  | 747.6  |
| 137.5° | 331.6 | 363.9 | 466.9 | 628.4  | 700.0  |
| 140°   | 342.7 | 372.6 | 466.1 | 606.9  | 671.6  |
| 142.5° | 352.2 | 379.8 | 464.6 | 587.7  | 643.1  |
| 145°   | 366.4 | 391.5 | 462.2 | 562.9  | 606.4  |
| 147.5° | 381.6 | 403.2 | 461.0 | 541.0  | 575.8  |
| 150°   | 391.1 | 410.4 | 460.2 | 529.0  | 556.0  |
| 152.5° | 399.8 | 417.6 | 459.4 | 518.6  | 541.0  |
| 155°   | 414.8 | 428.3 | 459.2 | 506.0  | 520.5  |
| 157.5° | 425.7 | 436.7 | 459.2 | 495.6  | 505.7  |
| 160°   | 433.6 | 442.2 | 459.2 | 490.0  | 497.8  |
| 162.5° | 439.9 | 447.0 | 460.0 | 485.3  | 491.4  |
| 165°   | 448.4 | 454.2 | 461.2 | 480.0  | 482.9  |
| 167.5° | 454.3 | 458.7 | 462.2 | 475.6  | 476.4  |
| 170°   | 458.2 | 461.1 | 462.2 | 474.1  | 474.1  |
| 172.5° | 461.4 | 462.8 | 462.2 | 471.7  | 470.9  |
| 175°   | 464.2 | 465.1 | 462.2 | 468.1  | 467.1  |
| 177.5° | 465.0 | 465.0 | 461.8 | 466.5  | 465.0  |
| 180°   | 464.2 | 464.2 | 464.2 | 464.2  | 464.2  |

(END OF REPORT)