

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: P563954

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

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563954  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PR1-050U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

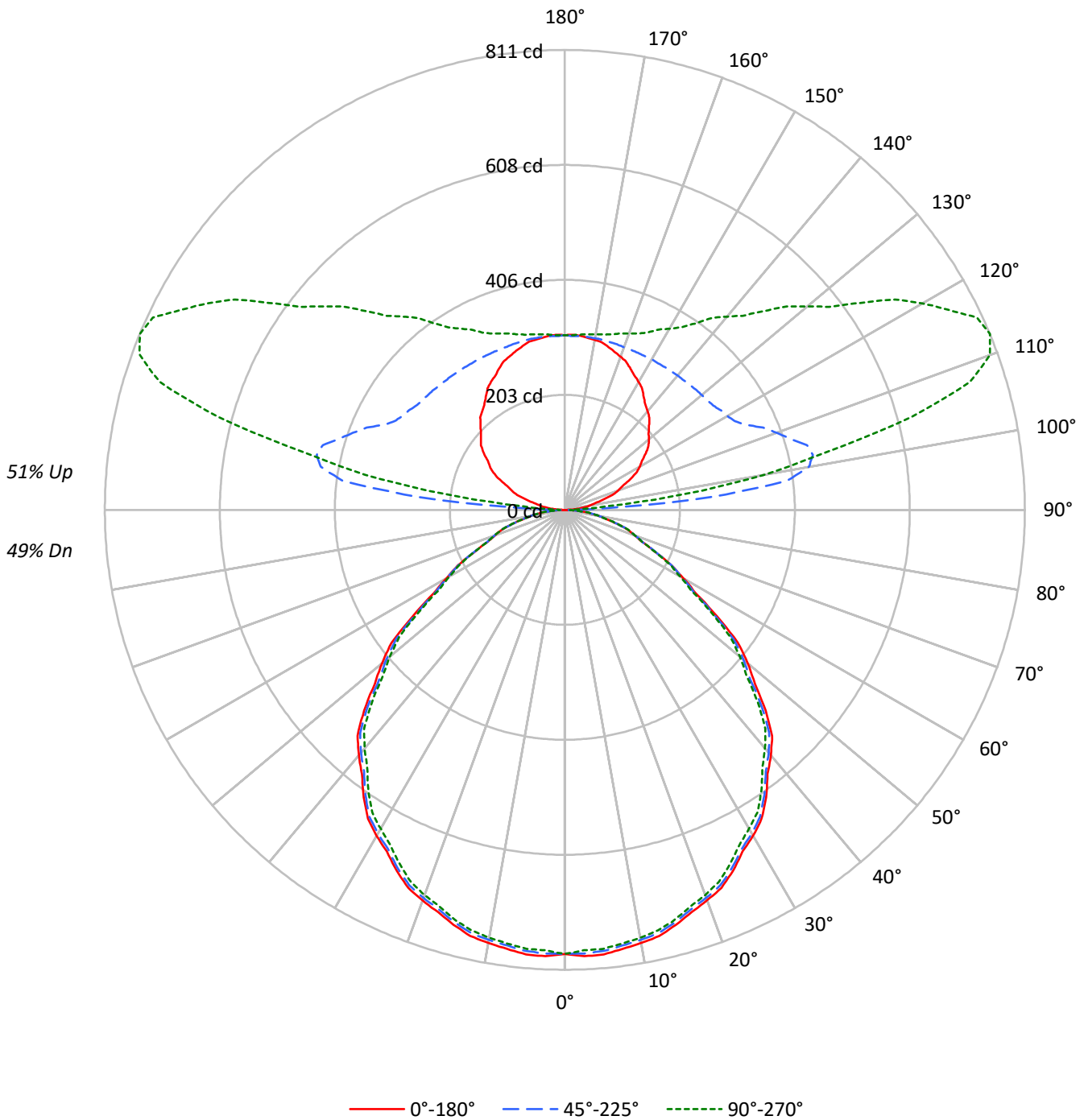
Lumens per Lamp: N/A  
Luminaire Lumens: 3970.5 lumens  
Efficiency: N/A  
Efficacy: 139.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 28.5  
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





TEST NUMBER: P563954

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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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 49 |
| 1   | 98  | 94  | 90  | 86  | 90 | 87 | 83 | 80 | 73 | 71 | 69 | 61 | 59 | 58 | 49 | 48 | 47 | 42 |
| 2   | 89  | 82  | 76  | 71  | 82 | 76 | 71 | 66 | 64 | 61 | 57 | 54 | 51 | 49 | 44 | 42 | 40 | 36 |
| 3   | 82  | 72  | 65  | 60  | 75 | 67 | 61 | 56 | 57 | 52 | 48 | 48 | 44 | 41 | 39 | 37 | 35 | 31 |
| 4   | 75  | 64  | 56  | 51  | 69 | 60 | 53 | 48 | 51 | 46 | 42 | 43 | 39 | 36 | 35 | 32 | 30 | 26 |
| 5   | 69  | 57  | 49  | 43  | 63 | 53 | 46 | 41 | 46 | 40 | 36 | 38 | 34 | 31 | 32 | 29 | 26 | 23 |
| 6   | 63  | 51  | 43  | 38  | 58 | 48 | 41 | 36 | 41 | 36 | 31 | 35 | 31 | 27 | 29 | 26 | 23 | 20 |
| 7   | 59  | 47  | 39  | 33  | 54 | 43 | 36 | 31 | 37 | 32 | 28 | 32 | 27 | 24 | 26 | 23 | 21 | 18 |
| 8   | 54  | 42  | 35  | 29  | 50 | 39 | 33 | 28 | 34 | 29 | 25 | 29 | 25 | 22 | 24 | 21 | 19 | 16 |
| 9   | 51  | 39  | 31  | 26  | 47 | 36 | 29 | 25 | 31 | 26 | 22 | 27 | 22 | 19 | 22 | 19 | 17 | 15 |
| 10  | 47  | 35  | 28  | 23  | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 20 | 18 | 21 | 18 | 15 | 13 |

**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 |



TEST NUMBER: P563954

CATALOG NUMBER: SQ4-PR1-050U-050D-840-1D-UNV-STD-W-4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 74.0   | 1.9       |
| 10°-20°   | 211.8  | 5.3       |
| 20°-30°   | 319.5  | 8.0       |
| 30°-40°   | 380.7  | 9.6       |
| 40°-50°   | 375.3  | 9.5       |
| 50°-60°   | 286.9  | 7.2       |
| 60°-70°   | 177.5  | 4.5       |
| 70°-80°   | 100.8  | 2.5       |
| 80°-90°   | 31.9   | 0.8       |
| 90°-100°  | 147.9  | 3.7       |
| 100°-110° | 401.8  | 10.1      |
| 110°-120° | 413.2  | 10.4      |
| 120°-130° | 330.3  | 8.3       |
| 130°-140° | 259.5  | 6.5       |
| 140°-150° | 199.0  | 5.0       |
| 150°-160° | 143.1  | 3.6       |
| 160°-170° | 87.5   | 2.2       |
| 170°-180° | 29.5   | 0.7       |
| 0°-30°    | 605.4  | 15.2      |
| 0°-40°    | 986.1  | 24.8      |
| 0°-60°    | 1648.3 | 41.5      |
| 0°-90°    | 1958.5 | 49.3      |
| 90°-120°  | 962.9  | 24.3      |
| 90°-150°  | 1751.8 | 44.1      |
| 90°-180°  | 2012.0 | 50.7      |
| 0°-180°   | 3970.5 | 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   | 2    |
| 95°  | 22  | 81    | 258 | 112   | 75  | 23   |
| 105° | 71  | 111   | 442 | 673   | 633 | 76   |
| 115° | 127 | 154   | 354 | 704   | 802 | 125  |
| 125° | 174 | 199   | 320 | 539   | 636 | 155  |
| 135° | 210 | 233   | 311 | 439   | 495 | 162  |
| 145° | 243 | 260   | 307 | 373   | 401 | 152  |
| 155° | 274 | 284   | 305 | 335   | 345 | 127  |
| 165° | 297 | 301   | 306 | 319   | 320 | 84   |
| 175° | 308 | 309   | 307 | 311   | 310 | 29   |
| 180° | 308 | 308   | 308 | 308   | 308 |      |



TEST NUMBER: P563954

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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°  | 8.9   | 40.5  | 70.3  | 30.2  | 25.6  |
| 95°    | 21.8  | 80.9  | 257.6 | 112.1 | 75.3  |
| 97.5°  | 36.1  | 89.3  | 394.9 | 307.3 | 215.8 |
| 100°   | 45.6  | 95.0  | 437.0 | 442.9 | 357.7 |
| 102.5° | 55.1  | 100.6 | 448.0 | 547.8 | 472.6 |
| 105°   | 71.3  | 111.1 | 441.9 | 672.9 | 633.1 |
| 107.5° | 88.2  | 123.3 | 416.3 | 737.4 | 748.5 |
| 110°   | 100.1 | 132.0 | 397.3 | 750.1 | 797.6 |



TEST NUMBER: P563954

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 110.4 | 140.8 | 378.3 | 739.6 | 811.1 |
| 115°   | 126.8 | 154.0 | 353.7 | 703.7 | 801.6 |
| 117.5° | 142.3 | 168.2 | 338.1 | 652.9 | 763.1 |
| 120°   | 152.6 | 177.8 | 330.9 | 618.8 | 728.3 |
| 122.5° | 161.3 | 186.5 | 326.2 | 584.6 | 690.2 |
| 125°   | 174.4 | 198.6 | 320.0 | 539.2 | 636.1 |
| 127.5° | 186.1 | 210.1 | 316.7 | 504.8 | 588.0 |
| 130°   | 193.2 | 216.5 | 315.1 | 483.2 | 557.8 |
| 132.5° | 200.3 | 223.6 | 313.5 | 464.8 | 530.9 |
| 135°   | 210.1 | 233.3 | 311.1 | 439.2 | 495.4 |
| 137.5° | 220.6 | 241.7 | 309.9 | 416.6 | 463.9 |
| 140°   | 226.9 | 247.2 | 309.1 | 402.2 | 444.9 |
| 142.5° | 233.2 | 252.0 | 308.3 | 391.0 | 426.6 |
| 145°   | 242.8 | 260.2 | 307.2 | 373.2 | 401.3 |
| 147.5° | 253.5 | 268.4 | 306.2 | 359.2 | 381.3 |
| 150°   | 260.6 | 273.2 | 306.2 | 351.1 | 368.6 |
| 152.5° | 266.1 | 277.2 | 305.4 | 343.9 | 358.3 |
| 155°   | 274.5 | 284.1 | 305.2 | 335.1 | 344.8 |
| 157.5° | 282.6 | 290.1 | 305.2 | 329.1 | 336.5 |
| 160°   | 287.3 | 294.1 | 305.2 | 325.1 | 330.9 |
| 162.5° | 292.1 | 297.3 | 306.0 | 321.9 | 326.2 |
| 165°   | 297.2 | 301.1 | 306.2 | 319.1 | 320.0 |
| 167.5° | 302.6 | 304.5 | 307.2 | 315.7 | 316.5 |
| 170°   | 304.2 | 306.1 | 307.2 | 314.1 | 314.1 |
| 172.5° | 305.8 | 306.9 | 307.2 | 312.5 | 312.5 |
| 175°   | 308.1 | 309.1 | 307.2 | 311.1 | 310.1 |
| 177.5° | 308.9 | 308.9 | 306.6 | 309.7 | 308.1 |
| 180°   | 308.1 | 308.1 | 308.1 | 308.1 | 308.1 |

(END OF REPORT)