

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: P564446

Luminaire Tested: **SQ4-PR1-150U-050D-940-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564446
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PR1-150U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

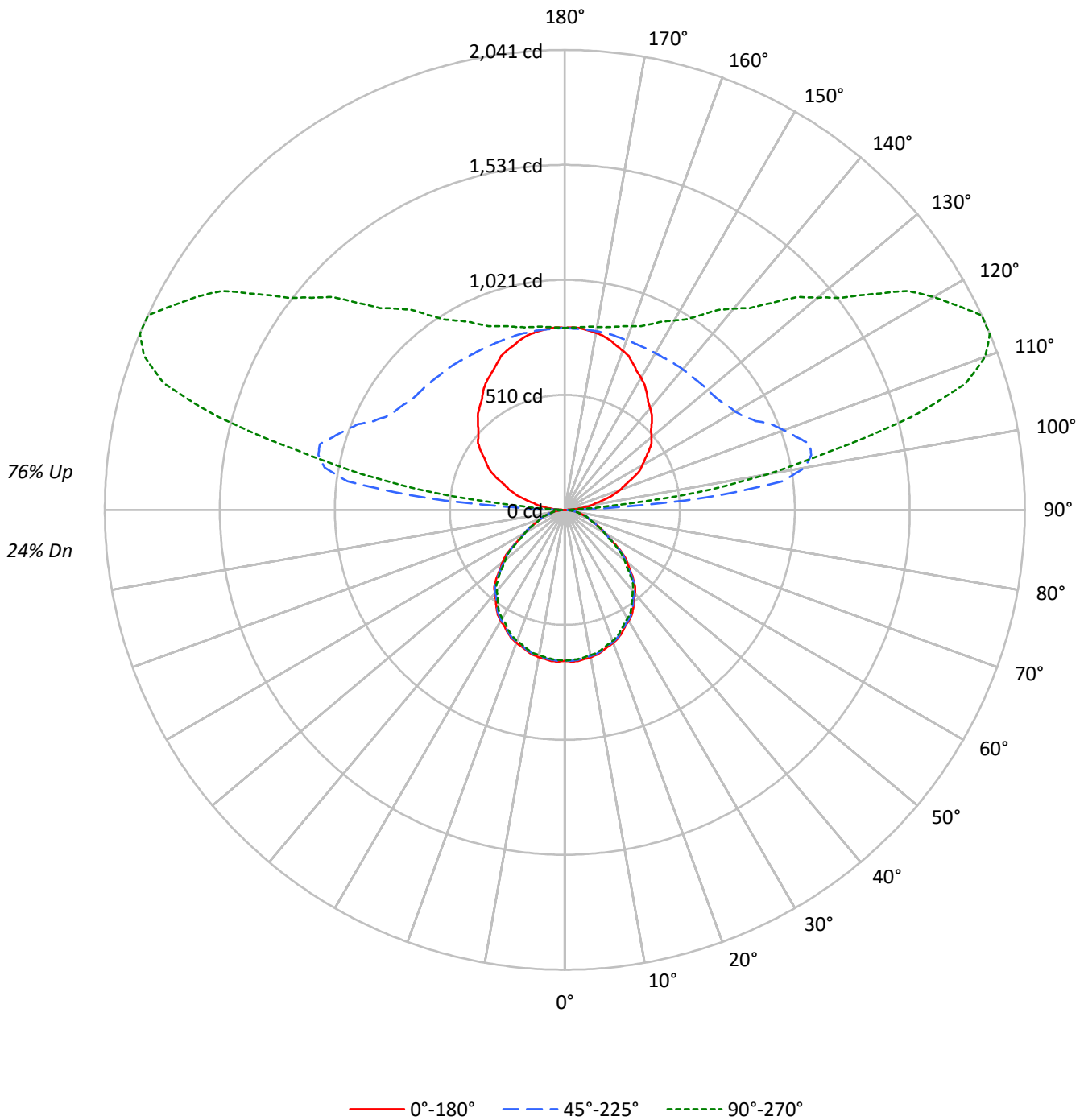
Lumens per Lamp: N/A
Luminaire Lumens: 6884.5 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 69 | 69 | 69 | 50 | 50 | 50 | 33 | 33 | 33 | 24 |
| 1 | 92 | 88 | 84 | 81 | 82 | 78 | 75 | 73 | 61 | 59 | 57 | 44 | 43 | 42 | 29 | 28 | 28 | 21 |
| 2 | 84 | 77 | 71 | 66 | 75 | 69 | 64 | 60 | 53 | 50 | 47 | 39 | 37 | 35 | 26 | 25 | 24 | 18 |
| 3 | 77 | 68 | 61 | 55 | 68 | 61 | 55 | 50 | 47 | 43 | 40 | 34 | 32 | 30 | 23 | 21 | 20 | 15 |
| 4 | 70 | 60 | 52 | 47 | 62 | 54 | 47 | 42 | 42 | 37 | 34 | 31 | 28 | 25 | 20 | 19 | 17 | 13 |
| 5 | 64 | 53 | 46 | 40 | 57 | 48 | 41 | 36 | 37 | 33 | 29 | 28 | 24 | 22 | 18 | 17 | 15 | 11 |
| 6 | 59 | 48 | 40 | 34 | 52 | 43 | 36 | 31 | 33 | 29 | 25 | 25 | 22 | 19 | 17 | 15 | 13 | 10 |
| 7 | 54 | 43 | 35 | 30 | 48 | 38 | 32 | 27 | 30 | 26 | 22 | 22 | 19 | 17 | 15 | 13 | 12 | 9 |
| 8 | 50 | 39 | 31 | 26 | 45 | 35 | 28 | 24 | 27 | 23 | 19 | 20 | 17 | 15 | 14 | 12 | 11 | 8 |
| 9 | 47 | 35 | 28 | 23 | 42 | 32 | 25 | 21 | 25 | 20 | 17 | 19 | 16 | 13 | 13 | 11 | 10 | 7 |
| 10 | 44 | 32 | 25 | 21 | 39 | 29 | 23 | 19 | 23 | 19 | 15 | 17 | 14 | 12 | 12 | 10 | 9 | 7 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6182 | 6182 | 6182 |
| 5° | 6239 | 6190 | 6158 |
| 10° | 6219 | 6175 | 6143 |
| 15° | 6191 | 6152 | 6120 |
| 20° | 6160 | 6121 | 6075 |
| 25° | 6116 | 6075 | 6005 |
| 30° | 6050 | 6008 | 5921 |
| 35° | 5962 | 5910 | 5825 |
| 40° | 5826 | 5763 | 5658 |
| 45° | 5588 | 5491 | 5377 |
| 50° | 5170 | 5045 | 4946 |
| 55° | 4512 | 4411 | 4317 |
| 60° | 3803 | 3770 | 3696 |
| 65° | 3288 | 3301 | 3277 |
| 70° | 3021 | 3037 | 3037 |
| 75° | 2902 | 2902 | 2923 |
| 80° | 2731 | 2758 | 2731 |
| 85° | 2202 | 2445 | 2445 |



TEST NUMBER: P564446

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.4 | 0.9 |
| 10°-20° | 181.3 | 2.6 |
| 20°-30° | 273.5 | 4.0 |
| 30°-40° | 325.8 | 4.7 |
| 40°-50° | 321.2 | 4.7 |
| 50°-60° | 245.5 | 3.6 |
| 60°-70° | 151.9 | 2.2 |
| 70°-80° | 86.3 | 1.3 |
| 80°-90° | 27.9 | 0.4 |
| 90°-100° | 375.4 | 5.5 |
| 100°-110° | 1014.9 | 14.7 |
| 110°-120° | 1067.1 | 15.5 |
| 120°-130° | 866.7 | 12.6 |
| 130°-140° | 679.9 | 9.9 |
| 140°-150° | 521.8 | 7.6 |
| 150°-160° | 375.3 | 5.5 |
| 160°-170° | 229.3 | 3.3 |
| 170°-180° | 77.3 | 1.1 |
| 0°-30° | 518.1 | 7.5 |
| 0°-40° | 844.0 | 12.3 |
| 0°-60° | 1410.7 | 20.5 |
| 0°-90° | 1676.9 | 24.4 |
| 90°-120° | 2457.4 | 35.7 |
| 90°-150° | 4525.8 | 65.7 |
| 90°-180° | 5208.0 | 75.6 |
| 0°-180° | 6884.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|------|-------|------|------|
| 0° | 670 | 670 | 670 | 670 | 670 | |
| 5° | 674 | 666 | 668 | 666 | 665 | 64 |
| 15° | 648 | 641 | 644 | 642 | 641 | 183 |
| 25° | 601 | 594 | 597 | 590 | 590 | 276 |
| 35° | 529 | 523 | 525 | 518 | 517 | 330 |
| 45° | 428 | 423 | 421 | 413 | 412 | 328 |
| 55° | 280 | 276 | 274 | 270 | 268 | 251 |
| 65° | 151 | 150 | 151 | 150 | 150 | 153 |
| 75° | 81 | 81 | 81 | 82 | 82 | 86 |
| 85° | 21 | 22 | 23 | 23 | 23 | 24 |
| 90° | 2 | 5 | 11 | 12 | 11 | 5 |
| 95° | 58 | 204 | 624 | 323 | 192 | 61 |
| 105° | 189 | 292 | 1126 | 1661 | 1593 | 199 |
| 115° | 332 | 406 | 934 | 1808 | 2041 | 328 |
| 125° | 455 | 521 | 842 | 1420 | 1668 | 405 |
| 135° | 545 | 610 | 819 | 1147 | 1298 | 421 |
| 145° | 634 | 681 | 808 | 982 | 1056 | 397 |
| 155° | 716 | 744 | 801 | 880 | 909 | 330 |
| 165° | 779 | 787 | 804 | 836 | 840 | 219 |
| 175° | 809 | 808 | 805 | 816 | 814 | 77 |
| 180° | 808 | 808 | 808 | 808 | 808 | |

TEST NUMBER: P564446

CATALOG NUMBER: SQ4-PR1-150U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 0° | 670.1 | 670.1 | 670.1 | 670.1 | 670.1 |
| 2.5° | 674.3 | 668.4 | 670.1 | 668.7 | 665.5 |
| 5° | 673.6 | 666.2 | 668.4 | 666.0 | 664.9 |
| 7.5° | 668.4 | 661.2 | 663.3 | 661.0 | 660.3 |
| 10° | 663.8 | 657.0 | 659.1 | 656.8 | 655.7 |
| 12.5° | 658.7 | 651.5 | 654.1 | 651.3 | 650.1 |
| 15° | 648.2 | 641.4 | 644.1 | 641.8 | 640.7 |
| 17.5° | 636.6 | 629.4 | 632.1 | 629.4 | 628.0 |
| 20° | 627.4 | 620.6 | 623.4 | 619.3 | 618.7 |
| 22.5° | 617.2 | 610.5 | 613.2 | 607.8 | 607.7 |
| 25° | 600.8 | 593.5 | 596.8 | 590.4 | 589.9 |
| 27.5° | 581.3 | 574.6 | 577.3 | 570.8 | 570.1 |
| 30° | 567.9 | 561.2 | 563.9 | 557.0 | 555.8 |
| 32.5° | 552.7 | 546.4 | 548.7 | 541.7 | 541.1 |
| 35° | 529.3 | 523.1 | 524.7 | 517.7 | 517.2 |
| 37.5° | 502.6 | 497.0 | 497.9 | 490.2 | 489.7 |
| 40° | 483.7 | 478.0 | 478.5 | 470.4 | 469.8 |
| 42.5° | 462.9 | 457.3 | 456.8 | 448.7 | 448.1 |
| 45° | 428.3 | 422.6 | 420.8 | 413.2 | 412.1 |
| 47.5° | 388.8 | 383.1 | 379.7 | 373.5 | 372.7 |
| 50° | 360.2 | 354.5 | 351.5 | 346.3 | 344.6 |
| 52.5° | 329.2 | 323.6 | 321.0 | 316.3 | 314.6 |
| 55° | 280.5 | 276.0 | 274.2 | 269.5 | 268.4 |
| 57.5° | 234.2 | 231.2 | 230.6 | 226.1 | 225.7 |
| 60° | 206.1 | 204.4 | 204.3 | 200.3 | 200.3 |
| 62.5° | 182.0 | 180.8 | 181.7 | 179.0 | 178.6 |
| 65° | 150.6 | 149.5 | 151.2 | 150.1 | 150.1 |
| 67.5° | 125.8 | 125.8 | 126.9 | 126.4 | 126.4 |
| 70° | 112.0 | 112.0 | 112.6 | 112.6 | 112.6 |
| 72.5° | 99.5 | 99.1 | 100.5 | 100.5 | 100.1 |
| 75° | 81.4 | 81.4 | 81.4 | 82.0 | 82.0 |
| 77.5° | 63.4 | 63.5 | 64.0 | 63.8 | 63.4 |
| 80° | 51.4 | 51.9 | 51.9 | 51.4 | 51.4 |
| 82.5° | 39.4 | 39.9 | 39.9 | 39.8 | 39.4 |
| 85° | 20.8 | 21.9 | 23.1 | 23.1 | 23.1 |
| 87.5° | 6.4 | 8.8 | 11.5 | 11.7 | 11.0 |
| 90° | 1.7 | 5.1 | 11.3 | 12.2 | 11.3 |
| 92.5° | 24.7 | 90.0 | 177.5 | 77.1 | 55.8 |
| 95° | 58.3 | 204.5 | 624.3 | 323.1 | 192.1 |
| 97.5° | 93.6 | 234.5 | 973.1 | 805.3 | 591.4 |
| 100° | 120.0 | 246.6 | 1081.6 | 1128.0 | 912.0 |
| 102.5° | 144.3 | 263.5 | 1119.8 | 1372.6 | 1211.1 |
| 105° | 188.7 | 291.5 | 1125.9 | 1660.8 | 1592.8 |
| 107.5° | 229.7 | 323.6 | 1076.7 | 1840.6 | 1863.2 |
| 110° | 261.7 | 346.7 | 1032.9 | 1888.9 | 1984.9 |

TEST NUMBER: P564446

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 290.2 | 369.8 | 992.6 | 1879.2 | 2040.6 |
| 115° | 332.1 | 406.1 | 933.8 | 1807.6 | 2040.6 |
| 117.5° | 373.2 | 442.5 | 895.0 | 1698.3 | 1962.3 |
| 120° | 398.2 | 466.2 | 872.0 | 1619.8 | 1889.3 |
| 122.5° | 421.9 | 488.5 | 858.1 | 1535.7 | 1807.2 |
| 125° | 454.7 | 521.0 | 841.6 | 1420.2 | 1668.5 |
| 127.5° | 485.0 | 550.1 | 831.9 | 1326.0 | 1544.3 |
| 130° | 501.7 | 568.8 | 827.7 | 1267.8 | 1465.0 |
| 132.5° | 519.1 | 585.5 | 823.5 | 1215.3 | 1396.8 |
| 135° | 545.1 | 609.7 | 819.0 | 1146.7 | 1298.1 |
| 137.5° | 571.4 | 632.4 | 815.2 | 1091.2 | 1214.4 |
| 140° | 589.5 | 646.4 | 813.8 | 1055.4 | 1165.0 |
| 142.5° | 606.9 | 660.4 | 811.0 | 1023.1 | 1119.1 |
| 145° | 633.8 | 681.4 | 807.7 | 981.6 | 1056.4 |
| 147.5° | 658.3 | 700.5 | 803.9 | 944.0 | 1001.4 |
| 150° | 676.4 | 713.8 | 802.5 | 923.5 | 969.4 |
| 152.5° | 693.1 | 725.8 | 801.8 | 904.6 | 942.3 |
| 155° | 715.5 | 743.6 | 800.8 | 880.5 | 909.4 |
| 157.5° | 738.8 | 758.4 | 800.9 | 863.8 | 882.8 |
| 160° | 752.1 | 768.2 | 801.6 | 853.2 | 866.8 |
| 162.5° | 762.5 | 775.9 | 802.3 | 844.8 | 855.0 |
| 165° | 779.0 | 786.7 | 804.2 | 835.6 | 839.9 |
| 167.5° | 790.3 | 795.6 | 804.4 | 827.8 | 829.8 |
| 170° | 797.3 | 799.8 | 805.1 | 824.2 | 824.2 |
| 172.5° | 802.8 | 803.3 | 805.1 | 820.0 | 819.4 |
| 175° | 808.6 | 807.7 | 805.1 | 815.5 | 813.8 |
| 177.5° | 810.5 | 808.4 | 804.9 | 811.8 | 809.8 |
| 180° | 807.7 | 807.7 | 807.7 | 807.7 | 807.7 |

(END OF REPORT)