

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: P520996

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520996
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4150.7 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

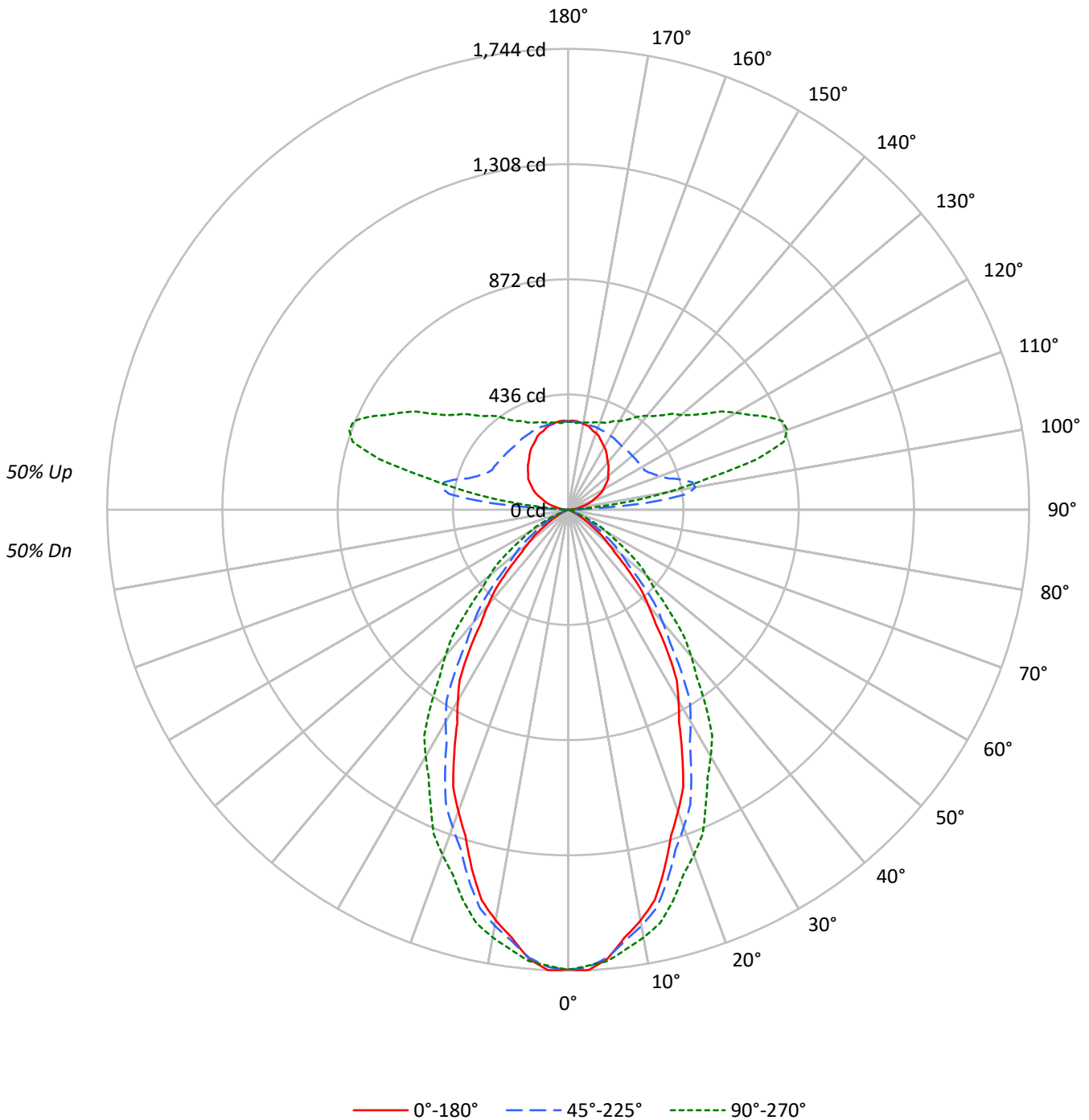
Input Watts (W): 45.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | | 69 | 69 | 69 | | 56 | 56 | 56 | 50 |
| 1 | 100 | 96 | 93 | 90 | 92 | 89 | 86 | 84 | 76 | 74 | 72 | | 64 | 62 | 61 | | 52 | 52 | 51 | 46 |
| 2 | 92 | 86 | 81 | 76 | 85 | 80 | 75 | 72 | 69 | 65 | 63 | | 58 | 56 | 54 | | 48 | 47 | 46 | 41 |
| 3 | 85 | 77 | 71 | 66 | 79 | 72 | 67 | 62 | 62 | 58 | 55 | | 53 | 50 | 48 | | 45 | 43 | 41 | 37 |
| 4 | 79 | 70 | 63 | 58 | 73 | 65 | 59 | 55 | 57 | 52 | 49 | | 49 | 45 | 43 | | 41 | 39 | 37 | 34 |
| 5 | 73 | 63 | 56 | 51 | 68 | 59 | 53 | 48 | 52 | 47 | 43 | | 45 | 41 | 38 | | 38 | 36 | 34 | 31 |
| 6 | 68 | 57 | 50 | 45 | 63 | 54 | 48 | 43 | 47 | 42 | 39 | | 41 | 37 | 35 | | 35 | 33 | 31 | 28 |
| 7 | 64 | 53 | 45 | 40 | 59 | 49 | 43 | 39 | 44 | 39 | 35 | | 38 | 34 | 32 | | 33 | 30 | 28 | 26 |
| 8 | 59 | 48 | 41 | 36 | 55 | 46 | 39 | 35 | 40 | 35 | 32 | | 35 | 32 | 29 | | 31 | 28 | 26 | 24 |
| 9 | 56 | 45 | 38 | 33 | 52 | 42 | 36 | 32 | 37 | 32 | 29 | | 33 | 29 | 26 | | 29 | 26 | 24 | 22 |
| 10 | 52 | 41 | 35 | 30 | 49 | 39 | 33 | 29 | 35 | 30 | 27 | | 31 | 27 | 24 | | 27 | 24 | 22 | 20 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16057 | 16057 | 16057 |
| 5° | 15799 | 15759 | 15877 |
| 10° | 14783 | 14979 | 15398 |
| 15° | 13439 | 13865 | 14637 |
| 20° | 11929 | 12549 | 13648 |
| 25° | 10389 | 11211 | 12540 |
| 30° | 8898 | 9876 | 11491 |
| 35° | 7378 | 8383 | 10224 |
| 40° | 5669 | 6704 | 8711 |
| 45° | 4098 | 5076 | 7009 |
| 50° | 2792 | 3782 | 5559 |
| 55° | 1814 | 2736 | 4321 |
| 60° | 1041 | 1926 | 3122 |
| 65° | 275 | 1177 | 1581 |
| 70° | 138 | 364 | 453 |
| 75° | 61 | 29 | 0 |
| 80° | 43 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7009 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 158.8 | 3.8 |
| 10°-20° | 406.2 | 9.8 |
| 20°-30° | 508.5 | 12.3 |
| 30°-40° | 469.7 | 11.3 |
| 40°-50° | 315.6 | 7.6 |
| 50°-60° | 163.0 | 3.9 |
| 60°-70° | 51.1 | 1.2 |
| 70°-80° | 3.2 | 0.1 |
| 80°-90° | 0.1 | 0.0 |
| 90°-100° | 152.2 | 3.7 |
| 100°-110° | 433.0 | 10.4 |
| 110°-120° | 414.9 | 10.0 |
| 120°-130° | 328.4 | 7.9 |
| 130°-140° | 263.6 | 6.3 |
| 140°-150° | 206.3 | 5.0 |
| 150°-160° | 151.0 | 3.6 |
| 160°-170° | 93.5 | 2.3 |
| 170°-180° | 31.7 | 0.8 |
| 0°-30° | 1073.5 | 25.9 |
| 0°-40° | 1543.2 | 37.2 |
| 0°-60° | 2021.8 | 48.7 |
| 0°-90° | 2076.1 | 50.0 |
| 90°-120° | 1000.1 | 24.1 |
| 90°-150° | 1798.3 | 43.3 |
| 90°-180° | 2075.0 | 50.0 |
| 0°-180° | 4150.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1740 | 1740 | 1740 | 1740 | 1740 | |
| 5° | 1706 | 1689 | 1702 | 1708 | 1714 | 158 |
| 15° | 1407 | 1402 | 1452 | 1500 | 1532 | 392 |
| 25° | 1020 | 1029 | 1101 | 1177 | 1232 | 468 |
| 35° | 655 | 672 | 744 | 832 | 908 | 406 |
| 45° | 314 | 333 | 389 | 465 | 537 | 247 |
| 55° | 113 | 132 | 170 | 218 | 269 | 105 |
| 65° | 13 | 24 | 54 | 65 | 72 | 21 |
| 75° | 2 | 2 | 1 | 0 | 0 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 16 | 66 | 295 | 102 | 63 | 19 |
| 105° | 67 | 102 | 441 | 779 | 741 | 71 |
| 115° | 125 | 151 | 335 | 709 | 832 | 123 |
| 125° | 176 | 196 | 319 | 530 | 634 | 158 |
| 135° | 216 | 234 | 316 | 448 | 506 | 167 |
| 145° | 255 | 268 | 318 | 388 | 422 | 159 |
| 155° | 291 | 298 | 326 | 350 | 364 | 134 |
| 165° | 321 | 322 | 330 | 337 | 342 | 90 |
| 175° | 336 | 335 | 333 | 331 | 329 | 32 |
| 180° | 334 | 334 | 334 | 334 | 334 | |

TEST NUMBER: P520996

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1740.4 | 1740.4 | 1740.4 | 1740.4 | 1740.4 |
| 2.5° | 1744.4 | 1728.0 | 1732.3 | 1732.2 | 1727.6 |
| 5° | 1705.9 | 1688.6 | 1701.6 | 1707.7 | 1714.3 |
| 7.5° | 1633.8 | 1620.3 | 1645.4 | 1664.2 | 1677.9 |
| 10° | 1577.9 | 1566.4 | 1598.9 | 1624.6 | 1643.6 |
| 12.5° | 1513.2 | 1504.3 | 1543.7 | 1578.9 | 1603.1 |
| 15° | 1407.0 | 1402.0 | 1451.6 | 1500.3 | 1532.4 |
| 17.5° | 1293.1 | 1293.0 | 1349.5 | 1410.0 | 1448.7 |
| 20° | 1215.0 | 1217.5 | 1278.1 | 1344.8 | 1390.1 |
| 22.5° | 1136.8 | 1142.6 | 1207.4 | 1277.0 | 1328.8 |
| 25° | 1020.5 | 1028.7 | 1101.3 | 1176.7 | 1231.8 |
| 27.5° | 908.7 | 920.7 | 997.1 | 1075.4 | 1142.6 |
| 30° | 835.2 | 849.2 | 927.0 | 1009.4 | 1078.6 |
| 32.5° | 763.2 | 779.8 | 855.6 | 942.8 | 1013.2 |
| 35° | 655.1 | 671.5 | 744.3 | 831.9 | 907.7 |
| 37.5° | 543.4 | 559.6 | 630.6 | 716.9 | 798.7 |
| 40° | 470.7 | 488.8 | 556.6 | 640.1 | 723.3 |
| 42.5° | 404.7 | 422.8 | 486.5 | 568.6 | 647.1 |
| 45° | 314.1 | 333.0 | 389.0 | 464.7 | 537.2 |
| 47.5° | 239.0 | 259.5 | 308.7 | 377.2 | 443.2 |
| 50° | 194.5 | 215.1 | 263.5 | 323.9 | 387.3 |
| 52.5° | 158.8 | 178.7 | 222.5 | 279.3 | 337.5 |
| 55° | 112.8 | 131.8 | 170.1 | 218.4 | 268.6 |
| 57.5° | 78.0 | 94.3 | 128.7 | 169.0 | 208.3 |
| 60° | 56.4 | 72.1 | 104.4 | 137.1 | 169.2 |
| 62.5° | 37.6 | 51.9 | 83.5 | 108.6 | 130.2 |
| 65° | 12.6 | 24.2 | 53.9 | 65.0 | 72.4 |
| 67.5° | 6.4 | 7.7 | 28.3 | 29.9 | 32.3 |
| 70° | 5.1 | 5.1 | 13.5 | 14.4 | 16.8 |
| 72.5° | 3.7 | 3.7 | 5.4 | 6.9 | 7.4 |
| 75° | 1.7 | 1.7 | 0.8 | 0.0 | 0.0 |
| 77.5° | 0.8 | 0.8 | 0.7 | 0.0 | 0.0 |
| 80° | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 5.1 | 26.9 | 62.5 | 18.2 | 13.7 |
| 95° | 16.5 | 65.6 | 294.6 | 102.0 | 62.9 |
| 97.5° | 30.3 | 76.8 | 453.7 | 324.7 | 222.5 |
| 100° | 40.0 | 83.5 | 488.3 | 494.6 | 381.0 |
| 102.5° | 50.7 | 90.6 | 480.6 | 633.0 | 533.8 |
| 105° | 67.3 | 102.1 | 441.3 | 779.4 | 740.9 |
| 107.5° | 84.2 | 115.4 | 395.3 | 820.7 | 855.0 |
| 110° | 95.9 | 125.1 | 368.9 | 804.9 | 881.9 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 107.0 | 134.7 | 351.1 | 767.6 | 877.3 |
| 115° | 125.1 | 151.2 | 334.6 | 708.8 | 832.4 |
| 117.5° | 141.0 | 165.4 | 324.8 | 644.6 | 775.5 |
| 120° | 153.7 | 174.1 | 323.8 | 607.9 | 733.3 |
| 122.5° | 163.8 | 184.3 | 321.3 | 575.7 | 692.2 |
| 125° | 176.5 | 195.8 | 319.4 | 530.0 | 633.6 |
| 127.5° | 190.3 | 208.4 | 318.3 | 502.6 | 588.1 |
| 130° | 197.5 | 215.5 | 316.8 | 483.6 | 558.1 |
| 132.5° | 205.1 | 222.6 | 316.8 | 468.7 | 537.3 |
| 135° | 215.9 | 233.9 | 315.6 | 447.7 | 506.0 |
| 137.5° | 226.0 | 243.5 | 315.4 | 429.8 | 480.3 |
| 140° | 233.7 | 251.7 | 314.9 | 415.1 | 463.5 |
| 142.5° | 242.3 | 257.3 | 316.4 | 403.3 | 446.7 |
| 145° | 254.6 | 267.6 | 318.1 | 387.5 | 422.2 |
| 147.5° | 265.1 | 277.8 | 320.9 | 371.5 | 401.5 |
| 150° | 274.3 | 283.0 | 321.9 | 366.2 | 387.3 |
| 152.5° | 281.4 | 290.6 | 322.9 | 359.0 | 378.7 |
| 155° | 290.8 | 297.6 | 325.7 | 350.2 | 364.4 |
| 157.5° | 302.5 | 306.6 | 326.3 | 346.1 | 356.3 |
| 160° | 308.6 | 311.7 | 328.9 | 343.1 | 351.7 |
| 162.5° | 312.1 | 315.7 | 329.4 | 340.5 | 347.2 |
| 165° | 321.3 | 322.5 | 329.5 | 336.6 | 341.6 |
| 167.5° | 327.5 | 326.4 | 332.4 | 335.7 | 337.6 |
| 170° | 329.5 | 328.9 | 331.4 | 332.1 | 334.6 |
| 172.5° | 334.1 | 332.0 | 333.0 | 331.1 | 333.1 |
| 175° | 336.5 | 334.6 | 333.3 | 331.4 | 328.9 |
| 177.5° | 337.5 | 334.5 | 333.0 | 330.9 | 331.4 |
| 180° | 334.0 | 334.0 | 334.0 | 334.0 | 334.0 |

(END OF REPORT)