

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: P518808

Luminaire Tested: **SQ4-BB-125U-075D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518808
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-125U-075D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

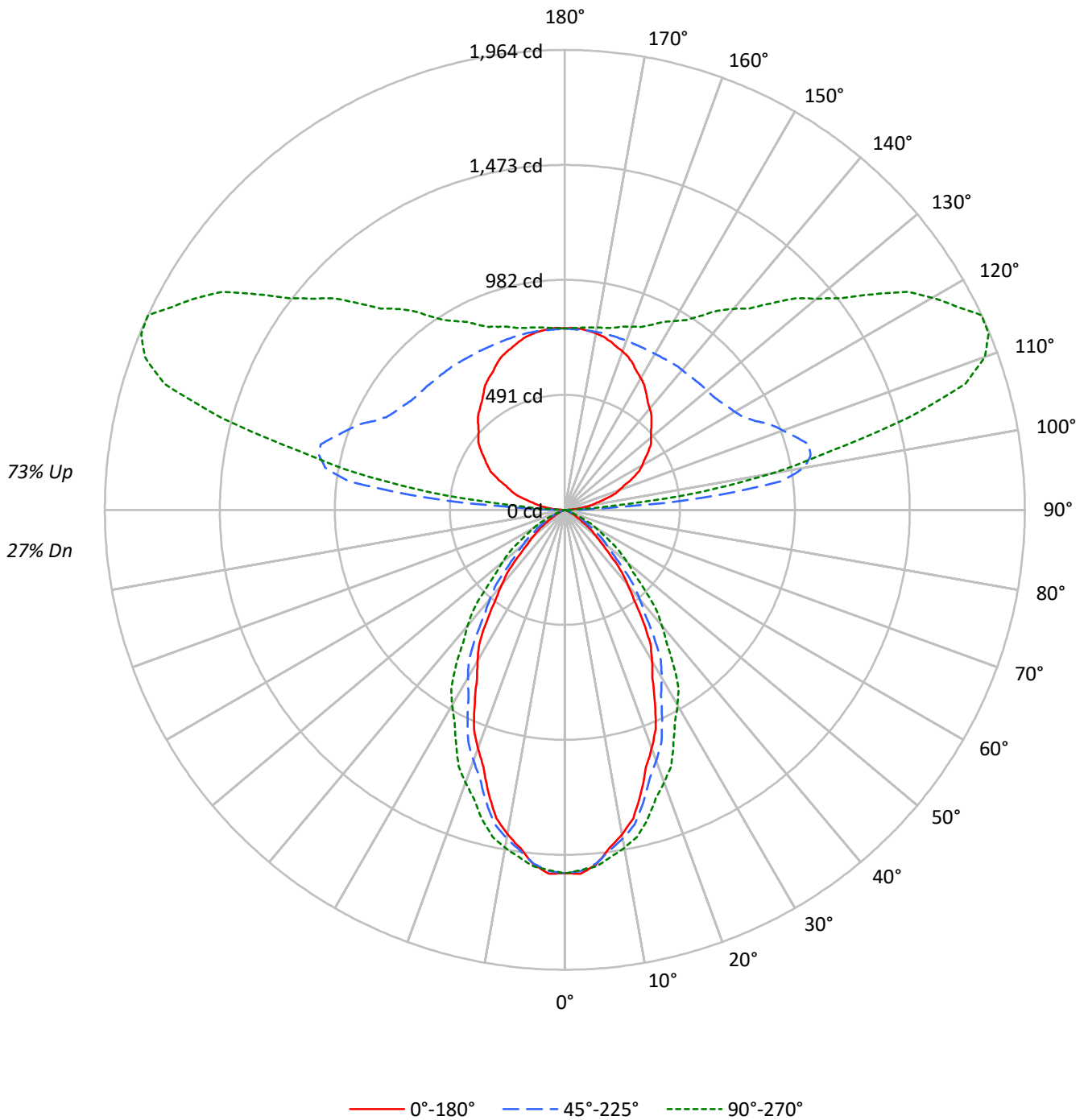
Lumens per Lamp: N/A
Luminaire Lumens: 6852.3 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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



TEST NUMBER: P518808
CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518808

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-4

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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 52 | 52 | 52 | 35 | 35 | 35 | 27 | | | | |
| 1 | 94 | 90 | 86 | 83 | 84 | 81 | 78 | 75 | 63 | 61 | 60 | 47 | 46 | 45 | 32 | 32 | 31 | 25 | | | | |
| 2 | 86 | 80 | 74 | 70 | 77 | 71 | 67 | 63 | 56 | 53 | 51 | 43 | 41 | 39 | 30 | 29 | 28 | 22 | | | | |
| 3 | 79 | 71 | 64 | 59 | 71 | 64 | 58 | 54 | 51 | 47 | 44 | 39 | 36 | 34 | 27 | 26 | 25 | 20 | | | | |
| 4 | 73 | 63 | 56 | 51 | 65 | 57 | 51 | 47 | 46 | 42 | 38 | 35 | 32 | 30 | 25 | 24 | 22 | 18 | | | | |
| 5 | 67 | 57 | 49 | 44 | 60 | 51 | 45 | 41 | 41 | 37 | 34 | 32 | 29 | 27 | 23 | 21 | 20 | 17 | | | | |
| 6 | 62 | 51 | 44 | 39 | 56 | 46 | 40 | 36 | 37 | 33 | 30 | 29 | 26 | 24 | 21 | 20 | 18 | 15 | | | | |
| 7 | 58 | 46 | 39 | 34 | 52 | 42 | 36 | 32 | 34 | 30 | 27 | 27 | 24 | 22 | 20 | 18 | 17 | 14 | | | | |
| 8 | 53 | 42 | 35 | 30 | 48 | 39 | 32 | 28 | 31 | 27 | 24 | 25 | 22 | 20 | 18 | 17 | 15 | 13 | | | | |
| 9 | 50 | 39 | 32 | 27 | 45 | 35 | 29 | 25 | 29 | 25 | 22 | 23 | 20 | 18 | 17 | 15 | 14 | 12 | | | | |
| 10 | 47 | 36 | 29 | 25 | 42 | 33 | 27 | 23 | 27 | 22 | 20 | 21 | 18 | 16 | 16 | 14 | 13 | 11 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14317 | 14317 | 14317 |
| 5° | 14087 | 14052 | 14156 |
| 10° | 13181 | 13357 | 13730 |
| 15° | 11983 | 12363 | 13051 |
| 20° | 10636 | 11189 | 12170 |
| 25° | 9263 | 9997 | 11181 |
| 30° | 7934 | 8806 | 10245 |
| 35° | 6579 | 7475 | 9115 |
| 40° | 5055 | 5976 | 7767 |
| 45° | 3653 | 4525 | 6250 |
| 50° | 2489 | 3373 | 4956 |
| 55° | 1618 | 2440 | 3852 |
| 60° | 928 | 1718 | 2784 |
| 65° | 247 | 1048 | 1410 |
| 70° | 121 | 324 | 405 |
| 75° | 53 | 29 | 0 |
| 80° | 43 | 0 | 0 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P518808

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 141.6 | 2.1 |
| 10°-20° | 362.2 | 5.3 |
| 20°-30° | 453.4 | 6.6 |
| 30°-40° | 418.8 | 6.1 |
| 40°-50° | 281.4 | 4.1 |
| 50°-60° | 145.3 | 2.1 |
| 60°-70° | 45.5 | 0.7 |
| 70°-80° | 2.9 | 0.0 |
| 80°-90° | 1.9 | 0.0 |
| 90°-100° | 362.3 | 5.3 |
| 100°-110° | 975.9 | 14.2 |
| 110°-120° | 1024.2 | 14.9 |
| 120°-130° | 831.1 | 12.1 |
| 130°-140° | 651.8 | 9.5 |
| 140°-150° | 500.4 | 7.3 |
| 150°-160° | 359.8 | 5.3 |
| 160°-170° | 219.8 | 3.2 |
| 170°-180° | 74.1 | 1.1 |
| 0°-30° | 957.2 | 14.0 |
| 0°-40° | 1376.0 | 20.1 |
| 0°-60° | 1802.7 | 26.3 |
| 0°-90° | 1853.0 | 27.0 |
| 90°-120° | 2362.3 | 34.5 |
| 90°-150° | 4345.6 | 63.4 |
| 90°-180° | 4999.0 | 73.0 |
| 0°-180° | 6852.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1552 | 1552 | 1552 | 1552 | 1552 | |
| 5° | 1521 | 1506 | 1517 | 1523 | 1528 | 141 |
| 15° | 1254 | 1250 | 1294 | 1338 | 1366 | 349 |
| 25° | 910 | 917 | 982 | 1049 | 1098 | 417 |
| 35° | 584 | 599 | 664 | 742 | 809 | 362 |
| 45° | 280 | 297 | 347 | 414 | 479 | 220 |
| 55° | 101 | 118 | 152 | 195 | 240 | 94 |
| 65° | 11 | 22 | 48 | 58 | 65 | 19 |
| 75° | 2 | 2 | 1 | 0 | 0 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 2 | 6 | 12 | 13 | 13 | 4 |
| 95° | 55 | 197 | 594 | 304 | 210 | 58 |
| 105° | 180 | 281 | 1079 | 1615 | 1515 | 190 |
| 115° | 319 | 390 | 899 | 1736 | 1964 | 314 |
| 125° | 435 | 500 | 807 | 1364 | 1605 | 389 |
| 135° | 524 | 585 | 784 | 1100 | 1246 | 404 |
| 145° | 606 | 653 | 774 | 941 | 1010 | 380 |
| 155° | 688 | 713 | 768 | 844 | 871 | 317 |
| 165° | 746 | 754 | 770 | 801 | 805 | 210 |
| 175° | 775 | 774 | 772 | 782 | 780 | 74 |
| 180° | 774 | 774 | 774 | 774 | 774 | |



TEST NUMBER: P518808

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1551.8 | 1551.8 | 1551.8 | 1551.8 | 1551.8 |
| 2.5° | 1555.4 | 1540.7 | 1544.6 | 1544.5 | 1540.4 |
| 5° | 1521.0 | 1505.6 | 1517.3 | 1522.7 | 1528.5 |
| 7.5° | 1456.8 | 1444.7 | 1467.1 | 1483.9 | 1496.1 |
| 10° | 1406.9 | 1396.6 | 1425.7 | 1448.6 | 1465.5 |
| 12.5° | 1349.3 | 1341.3 | 1376.4 | 1407.8 | 1429.4 |
| 15° | 1254.5 | 1250.1 | 1294.3 | 1337.7 | 1366.4 |
| 17.5° | 1153.0 | 1152.9 | 1203.3 | 1257.2 | 1291.7 |
| 20° | 1083.3 | 1085.5 | 1139.6 | 1199.1 | 1239.5 |
| 22.5° | 1013.7 | 1018.8 | 1076.6 | 1138.6 | 1184.8 |
| 25° | 909.9 | 917.3 | 982.0 | 1049.2 | 1098.3 |
| 27.5° | 810.2 | 820.9 | 889.0 | 958.9 | 1018.8 |
| 30° | 744.7 | 757.2 | 826.6 | 900.1 | 961.7 |
| 32.5° | 680.5 | 695.3 | 762.9 | 840.6 | 903.5 |
| 35° | 584.1 | 598.8 | 663.7 | 741.8 | 809.3 |
| 37.5° | 484.5 | 498.9 | 562.3 | 639.2 | 712.2 |
| 40° | 419.7 | 435.8 | 496.2 | 570.8 | 644.9 |
| 42.5° | 360.8 | 377.0 | 433.8 | 507.0 | 577.0 |
| 45° | 280.0 | 296.9 | 346.8 | 414.4 | 479.0 |
| 47.5° | 213.1 | 231.4 | 275.2 | 336.3 | 395.2 |
| 50° | 173.4 | 191.8 | 235.0 | 288.8 | 345.3 |
| 52.5° | 141.6 | 159.4 | 198.3 | 249.1 | 300.9 |
| 55° | 100.6 | 117.5 | 151.7 | 194.7 | 239.5 |
| 57.5° | 69.5 | 84.1 | 114.7 | 150.6 | 185.7 |
| 60° | 50.3 | 64.2 | 93.1 | 122.3 | 150.9 |
| 62.5° | 33.5 | 46.3 | 74.5 | 96.8 | 116.1 |
| 65° | 11.3 | 21.5 | 48.0 | 58.0 | 64.6 |
| 67.5° | 5.7 | 6.9 | 25.2 | 26.6 | 28.8 |
| 70° | 4.5 | 4.5 | 12.0 | 12.8 | 15.0 |
| 72.5° | 3.3 | 3.3 | 4.8 | 6.2 | 6.6 |
| 75° | 1.5 | 1.5 | 0.8 | 0.0 | 0.0 |
| 77.5° | 0.8 | 0.8 | 0.6 | 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° | 0.4 | 1.2 | 2.4 | 2.6 | 2.6 |
| 90° | 2.0 | 5.8 | 11.8 | 12.8 | 12.8 |
| 92.5° | 24.1 | 85.0 | 168.1 | 80.9 | 56.2 |
| 95° | 55.2 | 197.0 | 593.9 | 303.7 | 210.1 |
| 97.5° | 88.2 | 225.6 | 931.5 | 778.2 | 586.8 |
| 100° | 113.4 | 236.9 | 1038.8 | 1086.9 | 901.7 |
| 102.5° | 137.9 | 252.9 | 1074.3 | 1318.1 | 1166.1 |
| 105° | 180.5 | 280.9 | 1079.3 | 1614.6 | 1515.3 |
| 107.5° | 220.8 | 310.3 | 1033.3 | 1767.0 | 1792.7 |
| 110° | 247.6 | 332.5 | 991.5 | 1814.4 | 1907.9 |



TEST NUMBER: P518808

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 276.0 | 354.7 | 951.2 | 1803.9 | 1957.7 |
| 115° | 318.6 | 390.0 | 898.7 | 1736.5 | 1964.2 |
| 117.5° | 357.5 | 424.5 | 858.1 | 1629.0 | 1882.5 |
| 120° | 382.8 | 447.4 | 837.6 | 1551.8 | 1812.2 |
| 122.5° | 404.9 | 468.7 | 822.6 | 1472.9 | 1732.5 |
| 125° | 435.1 | 499.7 | 807.0 | 1363.9 | 1605.1 |
| 127.5° | 464.1 | 527.7 | 797.1 | 1267.8 | 1483.1 |
| 130° | 481.4 | 545.1 | 793.2 | 1212.8 | 1401.8 |
| 132.5° | 498.8 | 561.7 | 789.2 | 1164.3 | 1337.9 |
| 135° | 523.8 | 584.6 | 784.3 | 1100.3 | 1246.0 |
| 137.5° | 547.7 | 606.0 | 781.7 | 1046.1 | 1165.7 |
| 140° | 564.3 | 620.2 | 779.4 | 1012.7 | 1120.7 |
| 142.5° | 581.7 | 633.7 | 777.8 | 981.5 | 1072.5 |
| 145° | 605.7 | 653.0 | 774.4 | 940.7 | 1010.2 |
| 147.5° | 631.8 | 672.9 | 771.1 | 906.5 | 961.1 |
| 150° | 649.1 | 684.8 | 769.5 | 885.0 | 930.3 |
| 152.5° | 664.9 | 696.0 | 768.7 | 867.4 | 904.2 |
| 155° | 687.6 | 712.7 | 767.5 | 844.1 | 871.1 |
| 157.5° | 707.5 | 727.0 | 767.7 | 827.7 | 845.8 |
| 160° | 720.2 | 736.6 | 768.5 | 818.1 | 831.6 |
| 162.5° | 731.2 | 744.5 | 769.3 | 810.2 | 819.8 |
| 165° | 745.8 | 754.5 | 770.5 | 801.1 | 805.0 |
| 167.5° | 757.6 | 762.7 | 771.5 | 794.2 | 795.7 |
| 170° | 765.5 | 767.5 | 771.5 | 790.2 | 790.2 |
| 172.5° | 770.3 | 770.7 | 772.2 | 786.3 | 786.3 |
| 175° | 775.4 | 774.4 | 771.5 | 782.3 | 780.3 |
| 177.5° | 777.6 | 776.0 | 772.1 | 778.3 | 776.8 |
| 180° | 774.4 | 774.4 | 774.4 | 774.4 | 774.4 |

(END OF REPORT)