

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: P688839

Luminaire Tested: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4400.4 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

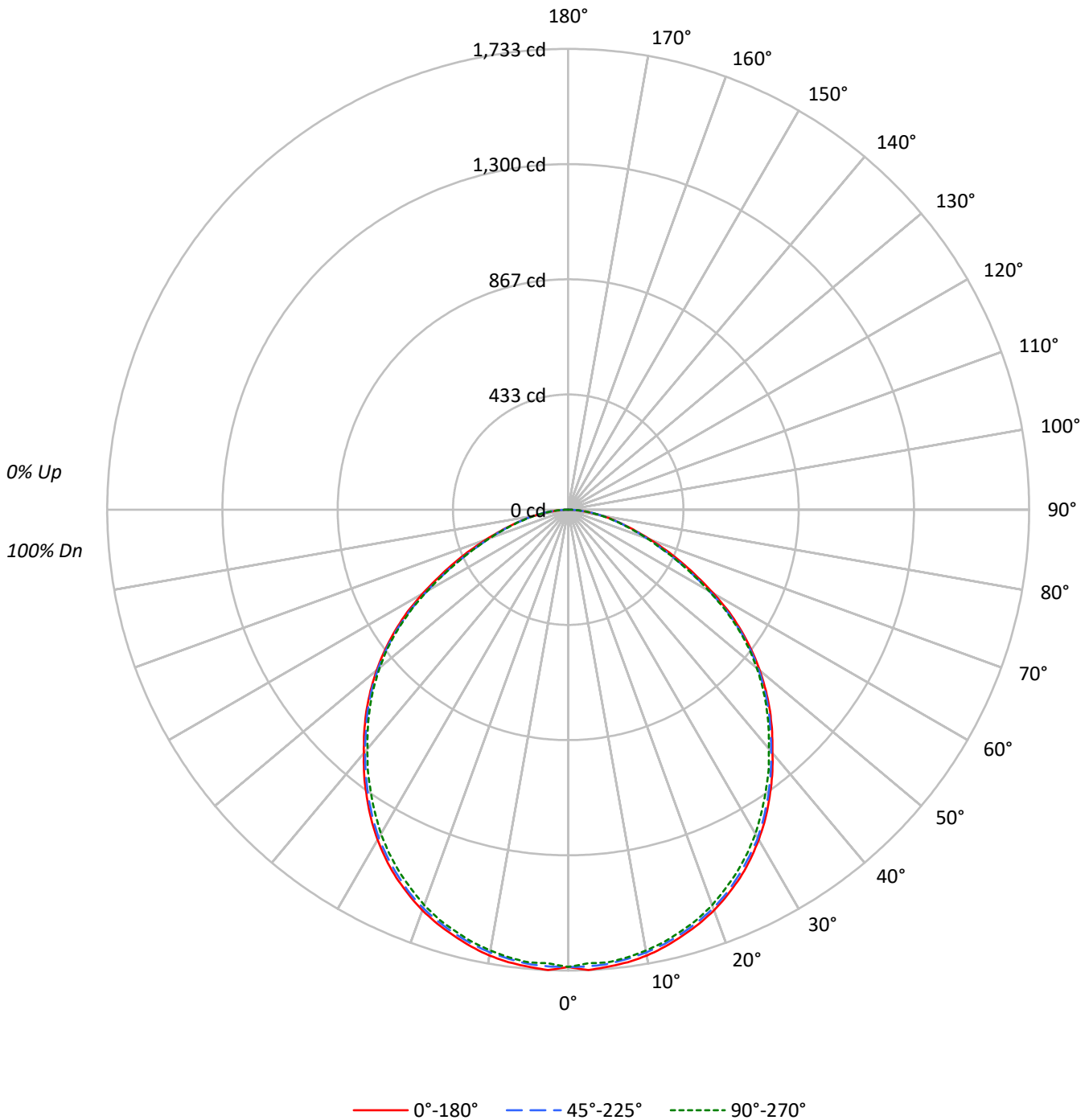
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688839

CATALOG NUMBER: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P688839

CATALOG NUMBER: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_2700K

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | | 95 | 92 | 90 | | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 86 | 80 | 97 | 90 | 84 | 79 | 87 | 82 | 77 | | 84 | 79 | 76 | | 81 | 77 | 74 | 72 |
| 3 | 92 | 81 | 74 | 67 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | | 74 | 69 | 64 | | 72 | 67 | 63 | 61 |
| 4 | 84 | 72 | 64 | 57 | 82 | 71 | 63 | 57 | 69 | 62 | 56 | | 66 | 60 | 56 | | 64 | 59 | 55 | 53 |
| 5 | 77 | 65 | 56 | 50 | 75 | 64 | 56 | 50 | 62 | 55 | 49 | | 60 | 53 | 48 | | 58 | 52 | 48 | 46 |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 49 | 43 | 56 | 49 | 43 | | 54 | 48 | 43 | | 53 | 47 | 42 | 40 |
| 7 | 66 | 53 | 45 | 39 | 65 | 52 | 44 | 39 | 51 | 44 | 38 | | 49 | 43 | 38 | | 48 | 42 | 38 | 36 |
| 8 | 62 | 49 | 40 | 35 | 60 | 48 | 40 | 34 | 47 | 39 | 34 | | 45 | 39 | 34 | | 44 | 38 | 34 | 32 |
| 9 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 43 | 36 | 31 | | 42 | 35 | 31 | | 41 | 35 | 31 | 29 |
| 10 | 54 | 41 | 34 | 28 | 53 | 41 | 33 | 28 | 40 | 33 | 28 | | 39 | 33 | 28 | | 38 | 32 | 28 | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16552 | 16552 | 16552 |
| 5° | 16674 | 16572 | 16514 |
| 10° | 16646 | 16528 | 16455 |
| 15° | 16536 | 16445 | 16356 |
| 20° | 16426 | 16334 | 16210 |
| 25° | 16231 | 16119 | 15959 |
| 30° | 15930 | 15847 | 15646 |
| 35° | 15514 | 15408 | 15213 |
| 40° | 15018 | 14923 | 14753 |
| 45° | 14608 | 14506 | 14361 |
| 50° | 14083 | 13993 | 13857 |
| 55° | 13354 | 13178 | 13077 |
| 60° | 12157 | 11809 | 11751 |
| 65° | 10709 | 10265 | 10228 |
| 70° | 9247 | 8864 | 8864 |
| 75° | 7960 | 7849 | 7733 |
| 80° | 7019 | 7102 | 6936 |
| 85° | 5490 | 5987 | 5987 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14608 cd/sqm

TEST NUMBER: P688839

CATALOG NUMBER: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 162.7 | 3.7 |
| 10°-20° | 464.5 | 10.6 |
| 20°-30° | 695.7 | 15.8 |
| 30°-40° | 816.0 | 18.5 |
| 40°-50° | 818.5 | 18.6 |
| 50°-60° | 698.9 | 15.9 |
| 60°-70° | 454.2 | 10.3 |
| 70°-80° | 227.5 | 5.2 |
| 80°-90° | 62.4 | 1.4 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1322.9 | 30.1 |
| 0°-40° | 2138.9 | 48.6 |
| 0°-60° | 3656.3 | 83.1 |
| 0°-90° | 4400.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4400.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1719 | 1719 | 1719 | 1719 | 1719 | |
| 5° | 1725 | 1709 | 1715 | 1709 | 1709 | 164 |
| 15° | 1659 | 1642 | 1650 | 1644 | 1641 | 468 |
| 25° | 1528 | 1510 | 1517 | 1504 | 1502 | 703 |
| 35° | 1320 | 1306 | 1311 | 1296 | 1294 | 825 |
| 45° | 1073 | 1065 | 1065 | 1055 | 1055 | 827 |
| 55° | 796 | 793 | 785 | 781 | 779 | 708 |
| 65° | 470 | 461 | 451 | 448 | 449 | 469 |
| 75° | 214 | 214 | 211 | 210 | 208 | 231 |
| 85° | 50 | 54 | 54 | 54 | 54 | 59 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P688839

CATALOG NUMBER: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1719.3 | 1719.3 | 1719.3 | 1719.3 | 1719.3 |
| 2.5° | 1732.9 | 1714.8 | 1719.3 | 1716.3 | 1707.3 |
| 5° | 1725.4 | 1708.8 | 1714.8 | 1708.8 | 1708.8 |
| 7.5° | 1716.3 | 1698.3 | 1704.3 | 1698.3 | 1698.3 |
| 10° | 1702.8 | 1684.7 | 1690.7 | 1684.7 | 1683.2 |
| 12.5° | 1683.2 | 1665.1 | 1672.6 | 1665.1 | 1665.1 |
| 15° | 1659.1 | 1642.5 | 1650.0 | 1644.0 | 1641.0 |
| 17.5° | 1633.5 | 1615.4 | 1624.4 | 1616.9 | 1615.4 |
| 20° | 1603.3 | 1585.2 | 1594.3 | 1582.2 | 1582.2 |
| 22.5° | 1567.2 | 1549.1 | 1559.6 | 1543.0 | 1543.0 |
| 25° | 1528.0 | 1509.9 | 1517.4 | 1503.9 | 1502.4 |
| 27.5° | 1482.8 | 1464.7 | 1472.2 | 1457.1 | 1457.1 |
| 30° | 1433.0 | 1416.5 | 1425.5 | 1408.9 | 1407.4 |
| 32.5° | 1378.8 | 1363.7 | 1369.8 | 1353.2 | 1351.7 |
| 35° | 1320.0 | 1306.5 | 1311.0 | 1295.9 | 1294.4 |
| 37.5° | 1259.7 | 1244.7 | 1250.7 | 1237.1 | 1237.1 |
| 40° | 1195.0 | 1185.9 | 1187.4 | 1176.9 | 1173.9 |
| 42.5° | 1134.7 | 1124.1 | 1125.6 | 1115.1 | 1115.1 |
| 45° | 1072.9 | 1065.4 | 1065.4 | 1054.8 | 1054.8 |
| 47.5° | 1008.1 | 1002.1 | 1000.6 | 991.5 | 991.5 |
| 50° | 940.3 | 935.8 | 934.3 | 926.7 | 925.2 |
| 52.5° | 869.5 | 868.0 | 861.9 | 855.9 | 855.9 |
| 55° | 795.6 | 792.6 | 785.1 | 780.6 | 779.1 |
| 57.5° | 717.3 | 711.2 | 703.7 | 696.2 | 697.7 |
| 60° | 631.4 | 625.4 | 613.3 | 610.3 | 610.3 |
| 62.5° | 548.5 | 541.0 | 528.9 | 524.4 | 527.4 |
| 65° | 470.1 | 461.1 | 450.6 | 447.5 | 449.0 |
| 67.5° | 397.8 | 388.8 | 376.7 | 376.7 | 375.2 |
| 70° | 328.5 | 324.0 | 314.9 | 314.9 | 314.9 |
| 72.5° | 266.7 | 265.2 | 259.2 | 259.2 | 257.7 |
| 75° | 214.0 | 214.0 | 211.0 | 209.5 | 207.9 |
| 77.5° | 168.8 | 168.8 | 167.3 | 165.8 | 162.7 |
| 80° | 126.6 | 129.6 | 128.1 | 126.6 | 125.1 |
| 82.5° | 87.4 | 90.4 | 90.4 | 87.4 | 87.4 |
| 85° | 49.7 | 54.2 | 54.2 | 54.2 | 54.2 |
| 87.5° | 16.6 | 22.6 | 24.1 | 24.1 | 25.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)