

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: P688842

Luminaire Tested: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_4000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688842
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_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4828.0 lumens
Efficiency: N/A
Efficacy: 78.9 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

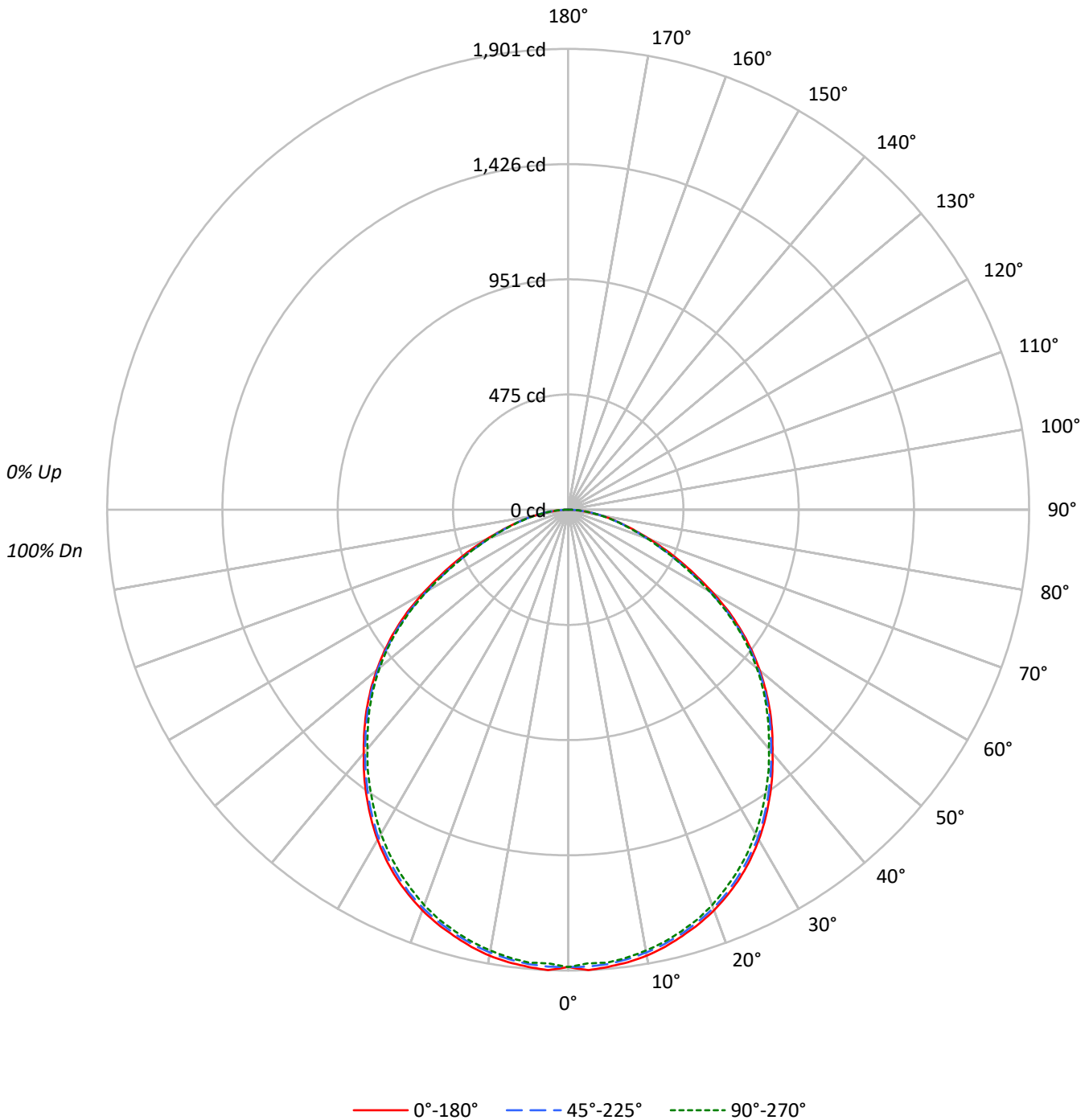
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



TEST NUMBER: P688842

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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 | | | | 85 |
| 2 | 100 | 92 | 86 | 80 | 97 | 90 | 84 | 79 | 87 | 82 | 77 | 84 | 79 | 76 | 81 | 77 | 74 | 72 | | | | 72 |
| 3 | 92 | 81 | 74 | 67 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 74 | 69 | 64 | 72 | 67 | 63 | 61 | | | | 61 |
| 4 | 84 | 72 | 64 | 57 | 82 | 71 | 63 | 57 | 69 | 62 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 | | | | 53 |
| 5 | 77 | 65 | 56 | 50 | 75 | 64 | 56 | 50 | 62 | 55 | 49 | 60 | 53 | 48 | 58 | 52 | 48 | 46 | | | | 46 |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 49 | 43 | 56 | 49 | 43 | 54 | 48 | 43 | 53 | 47 | 42 | 40 | | | | 40 |
| 7 | 66 | 53 | 45 | 39 | 65 | 52 | 44 | 39 | 51 | 44 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | | | | 36 |
| 8 | 62 | 49 | 40 | 35 | 60 | 48 | 40 | 34 | 47 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 | | | | 32 |
| 9 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 29 | | | | 29 |
| 10 | 54 | 41 | 34 | 28 | 53 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 18161 | 18161 | 18161 |
| 5° | 18294 | 18183 | 18118 |
| 10° | 18263 | 18134 | 18053 |
| 15° | 18143 | 18044 | 17946 |
| 20° | 18022 | 17921 | 17786 |
| 25° | 17809 | 17686 | 17509 |
| 30° | 17479 | 17387 | 17166 |
| 35° | 17022 | 16905 | 16691 |
| 40° | 16477 | 16373 | 16186 |
| 45° | 16028 | 15915 | 15757 |
| 50° | 15452 | 15352 | 15204 |
| 55° | 14651 | 14458 | 14348 |
| 60° | 13338 | 12956 | 12893 |
| 65° | 11750 | 11260 | 11224 |
| 70° | 10145 | 9725 | 9725 |
| 75° | 8734 | 8611 | 8488 |
| 80° | 7701 | 7790 | 7607 |
| 85° | 6031 | 6572 | 6572 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16028 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 178.5 | 3.7 |
| 10°-20° | 509.6 | 10.6 |
| 20°-30° | 763.3 | 15.8 |
| 30°-40° | 895.3 | 18.5 |
| 40°-50° | 898.1 | 18.6 |
| 50°-60° | 766.8 | 15.9 |
| 60°-70° | 498.4 | 10.3 |
| 70°-80° | 249.6 | 5.2 |
| 80°-90° | 68.4 | 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° | 1451.5 | 30.1 |
| 0°-40° | 2346.7 | 48.6 |
| 0°-60° | 4011.6 | 83.1 |
| 0°-90° | 4828.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4828.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1886 | 1886 | 1886 | 1886 | 1886 | |
| 5° | 1893 | 1875 | 1882 | 1875 | 1875 | 180 |
| 15° | 1820 | 1802 | 1810 | 1804 | 1800 | 514 |
| 25° | 1676 | 1657 | 1665 | 1650 | 1648 | 771 |
| 35° | 1448 | 1433 | 1438 | 1422 | 1420 | 905 |
| 45° | 1177 | 1169 | 1169 | 1157 | 1157 | 907 |
| 55° | 873 | 870 | 861 | 856 | 855 | 777 |
| 65° | 516 | 506 | 494 | 491 | 493 | 514 |
| 75° | 235 | 235 | 232 | 230 | 228 | 254 |
| 85° | 55 | 60 | 60 | 60 | 60 | 65 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P688842

CATALOG NUMBER: SQ4R-PP3-125D-92765-1-UNV-STD-W-4_4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1886.4 | 1886.4 | 1886.4 | 1886.4 | 1886.4 |
| 2.5° | 1901.3 | 1881.5 | 1886.4 | 1883.1 | 1873.2 |
| 5° | 1893.0 | 1874.8 | 1881.5 | 1874.8 | 1874.8 |
| 7.5° | 1883.1 | 1863.3 | 1869.9 | 1863.3 | 1863.3 |
| 10° | 1868.2 | 1848.4 | 1855.0 | 1848.4 | 1846.7 |
| 12.5° | 1846.7 | 1826.9 | 1835.2 | 1826.9 | 1826.9 |
| 15° | 1820.3 | 1802.1 | 1810.4 | 1803.8 | 1800.5 |
| 17.5° | 1792.2 | 1772.3 | 1782.3 | 1774.0 | 1772.3 |
| 20° | 1759.1 | 1739.3 | 1749.2 | 1736.0 | 1736.0 |
| 22.5° | 1719.4 | 1699.6 | 1711.2 | 1693.0 | 1693.0 |
| 25° | 1676.5 | 1656.6 | 1664.9 | 1650.0 | 1648.3 |
| 27.5° | 1626.9 | 1607.0 | 1615.3 | 1598.7 | 1598.7 |
| 30° | 1572.3 | 1554.1 | 1564.0 | 1545.8 | 1544.2 |
| 32.5° | 1512.8 | 1496.2 | 1502.9 | 1484.7 | 1483.0 |
| 35° | 1448.3 | 1433.4 | 1438.4 | 1421.8 | 1420.2 |
| 37.5° | 1382.2 | 1365.6 | 1372.2 | 1357.4 | 1357.4 |
| 40° | 1311.1 | 1301.2 | 1302.8 | 1291.2 | 1287.9 |
| 42.5° | 1244.9 | 1233.4 | 1235.0 | 1223.4 | 1223.4 |
| 45° | 1177.2 | 1168.9 | 1168.9 | 1157.3 | 1157.3 |
| 47.5° | 1106.1 | 1099.4 | 1097.8 | 1087.9 | 1087.9 |
| 50° | 1031.7 | 1026.7 | 1025.0 | 1016.8 | 1015.1 |
| 52.5° | 954.0 | 952.3 | 945.7 | 939.1 | 939.1 |
| 55° | 872.9 | 869.6 | 861.4 | 856.4 | 854.8 |
| 57.5° | 787.0 | 780.4 | 772.1 | 763.8 | 765.5 |
| 60° | 692.7 | 686.1 | 672.9 | 669.6 | 669.6 |
| 62.5° | 601.8 | 593.5 | 580.3 | 575.4 | 578.7 |
| 65° | 515.8 | 505.9 | 494.3 | 491.0 | 492.7 |
| 67.5° | 436.5 | 426.6 | 413.3 | 413.3 | 411.7 |
| 70° | 360.4 | 355.5 | 345.5 | 345.5 | 345.5 |
| 72.5° | 292.6 | 291.0 | 284.4 | 284.4 | 282.7 |
| 75° | 234.8 | 234.8 | 231.5 | 229.8 | 228.2 |
| 77.5° | 185.2 | 185.2 | 183.5 | 181.9 | 178.6 |
| 80° | 138.9 | 142.2 | 140.5 | 138.9 | 137.2 |
| 82.5° | 95.9 | 99.2 | 99.2 | 95.9 | 95.9 |
| 85° | 54.6 | 59.5 | 59.5 | 59.5 | 59.5 |
| 87.5° | 18.2 | 24.8 | 26.5 | 26.5 | 28.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)