

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: P686083

Luminaire Tested: SQ4R-F-125D-935-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-125D-935-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4287.3 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

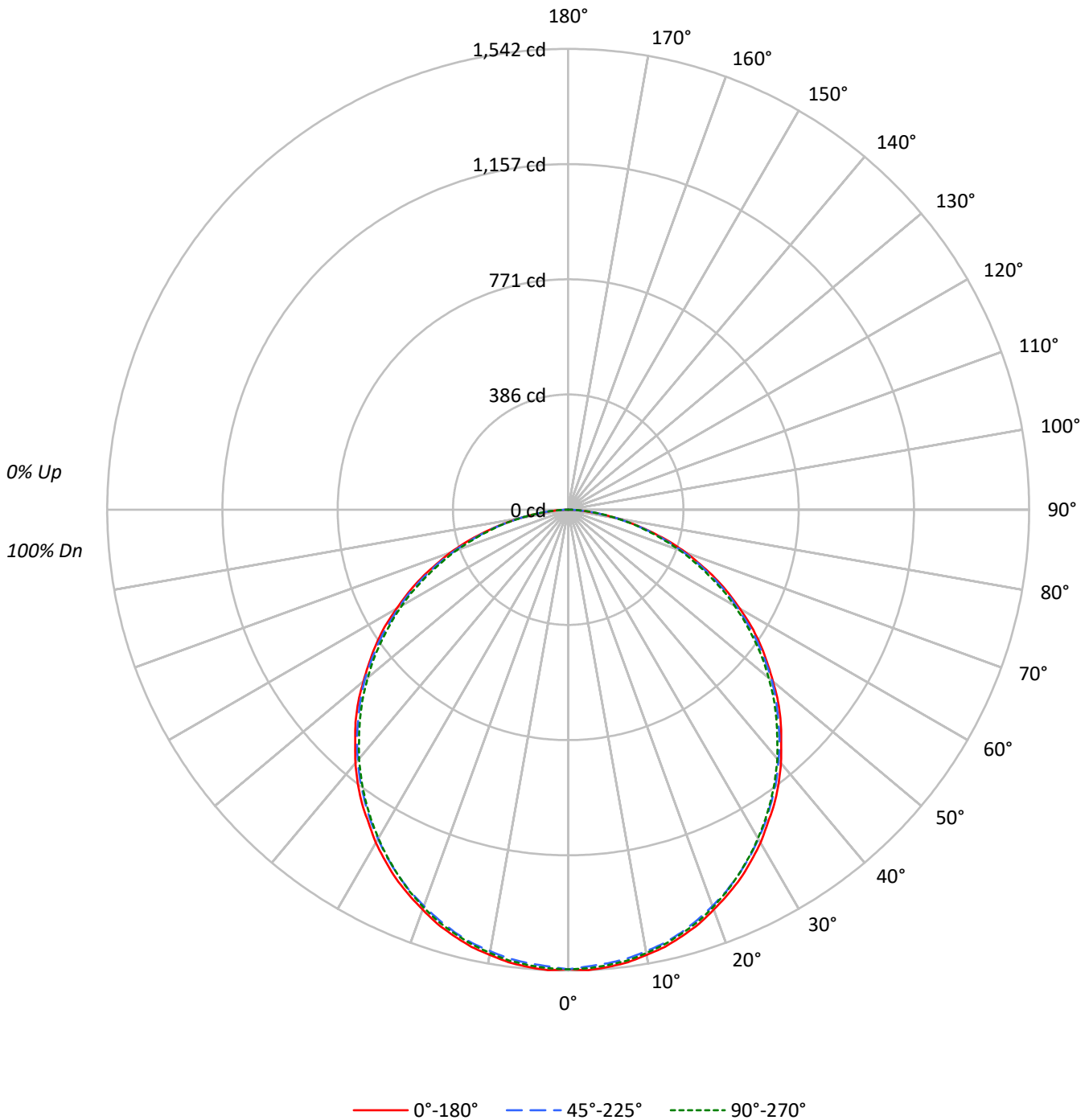
Input Watts (W): 49.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | | 94 | 91 | 88 | | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | | 82 | 77 | 74 | | 79 | 75 | 72 | 70 |
| 3 | 90 | 80 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 68 | 63 | | 72 | 67 | 62 | | 70 | 65 | 61 | 59 |
| 4 | 82 | 70 | 62 | 55 | 80 | 69 | 61 | 54 | 67 | 59 | 54 | | 64 | 58 | 53 | | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 60 | 52 | 46 | | 58 | 51 | 46 | | 56 | 50 | 45 | 43 |
| 6 | 70 | 57 | 48 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 41 | | 52 | 45 | 40 | | 51 | 45 | 40 | 38 |
| 7 | 65 | 51 | 43 | 36 | 63 | 51 | 42 | 36 | 49 | 41 | 36 | | 48 | 41 | 36 | | 46 | 40 | 35 | 33 |
| 8 | 60 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | | 44 | 37 | 32 | | 42 | 36 | 32 | 30 |
| 9 | 56 | 43 | 35 | 29 | 55 | 42 | 35 | 29 | 41 | 34 | 29 | | 40 | 34 | 29 | | 39 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 26 | 38 | 31 | 26 | | 37 | 31 | 26 | | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14808 | 14808 | 14808 |
| 5° | 14844 | 14721 | 14782 |
| 10° | 14788 | 14664 | 14726 |
| 15° | 14719 | 14593 | 14635 |
| 20° | 14589 | 14459 | 14502 |
| 25° | 14475 | 14318 | 14318 |
| 30° | 14304 | 14139 | 14116 |
| 35° | 14129 | 13955 | 13905 |
| 40° | 13914 | 13754 | 13675 |
| 45° | 13693 | 13520 | 13404 |
| 50° | 13385 | 13322 | 13101 |
| 55° | 13156 | 12980 | 12766 |
| 60° | 12774 | 12569 | 12367 |
| 65° | 12370 | 12080 | 11791 |
| 70° | 11775 | 11417 | 11181 |
| 75° | 10687 | 10452 | 10218 |
| 80° | 9137 | 9137 | 9020 |
| 85° | 6539 | 7003 | 7003 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13693 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 145.5 | 3.4 |
| 10°-20° | 414.9 | 9.7 |
| 20°-30° | 623.6 | 14.5 |
| 30°-40° | 745.2 | 17.4 |
| 40°-50° | 767.9 | 17.9 |
| 50°-60° | 690.9 | 16.1 |
| 60°-70° | 525.3 | 12.3 |
| 70°-80° | 298.6 | 7.0 |
| 80°-90° | 75.5 | 1.8 |
| 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° | 1183.9 | 27.6 |
| 0°-40° | 1929.1 | 45.0 |
| 0°-60° | 3387.9 | 79.0 |
| 0°-90° | 4287.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4287.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1538 | 1538 | 1538 | 1538 | 1538 | |
| 5° | 1536 | 1534 | 1523 | 1536 | 1530 | 146 |
| 15° | 1477 | 1475 | 1464 | 1473 | 1468 | 417 |
| 25° | 1363 | 1358 | 1348 | 1352 | 1348 | 627 |
| 35° | 1202 | 1198 | 1187 | 1187 | 1183 | 751 |
| 45° | 1006 | 1006 | 993 | 987 | 984 | 775 |
| 55° | 784 | 782 | 773 | 767 | 761 | 700 |
| 65° | 543 | 541 | 530 | 524 | 518 | 536 |
| 75° | 287 | 285 | 281 | 279 | 275 | 306 |
| 85° | 59 | 61 | 63 | 63 | 63 | 73 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P686083

CATALOG NUMBER: SQ4R-F-125D-935-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1538.1 | 1538.1 | 1538.1 | 1538.1 | 1538.1 |
| 2.5° | 1542.3 | 1538.1 | 1529.6 | 1540.2 | 1536.0 |
| 5° | 1536.0 | 1533.9 | 1523.3 | 1536.0 | 1529.6 |
| 7.5° | 1527.5 | 1525.4 | 1514.8 | 1525.4 | 1521.2 |
| 10° | 1512.7 | 1510.6 | 1500.0 | 1510.6 | 1506.4 |
| 12.5° | 1497.9 | 1495.8 | 1485.3 | 1493.7 | 1489.5 |
| 15° | 1476.8 | 1474.7 | 1464.1 | 1472.6 | 1468.4 |
| 17.5° | 1453.6 | 1451.5 | 1438.8 | 1447.2 | 1445.1 |
| 20° | 1424.0 | 1421.9 | 1411.3 | 1417.7 | 1415.5 |
| 22.5° | 1394.4 | 1392.3 | 1381.7 | 1388.1 | 1383.8 |
| 25° | 1362.7 | 1358.5 | 1347.9 | 1352.2 | 1347.9 |
| 27.5° | 1324.7 | 1322.6 | 1312.0 | 1314.1 | 1309.9 |
| 30° | 1286.7 | 1284.5 | 1271.9 | 1274.0 | 1269.8 |
| 32.5° | 1242.3 | 1242.3 | 1231.7 | 1231.7 | 1227.5 |
| 35° | 1202.2 | 1197.9 | 1187.4 | 1187.4 | 1183.1 |
| 37.5° | 1155.7 | 1151.4 | 1143.0 | 1140.9 | 1136.7 |
| 40° | 1107.1 | 1105.0 | 1094.4 | 1092.3 | 1088.1 |
| 42.5° | 1054.3 | 1056.4 | 1045.8 | 1039.5 | 1035.2 |
| 45° | 1005.7 | 1005.7 | 993.0 | 986.7 | 984.5 |
| 47.5° | 952.8 | 952.8 | 942.3 | 935.9 | 931.7 |
| 50° | 893.7 | 897.9 | 889.5 | 878.9 | 874.7 |
| 52.5° | 838.8 | 840.9 | 830.3 | 824.0 | 819.7 |
| 55° | 783.8 | 781.7 | 773.3 | 766.9 | 760.6 |
| 57.5° | 726.8 | 724.7 | 712.0 | 705.7 | 701.4 |
| 60° | 663.4 | 663.4 | 652.8 | 646.5 | 642.3 |
| 62.5° | 604.2 | 602.1 | 593.7 | 585.2 | 583.1 |
| 65° | 543.0 | 540.9 | 530.3 | 524.0 | 517.6 |
| 67.5° | 477.5 | 475.4 | 469.0 | 460.6 | 456.4 |
| 70° | 418.3 | 412.0 | 405.6 | 399.3 | 397.2 |
| 72.5° | 354.9 | 348.6 | 342.3 | 338.0 | 333.8 |
| 75° | 287.3 | 285.2 | 281.0 | 278.9 | 274.7 |
| 77.5° | 226.1 | 226.1 | 221.8 | 219.7 | 219.7 |
| 80° | 164.8 | 164.8 | 164.8 | 162.7 | 162.7 |
| 82.5° | 107.7 | 109.9 | 109.9 | 107.7 | 109.9 |
| 85° | 59.2 | 61.3 | 63.4 | 63.4 | 63.4 |
| 87.5° | 19.0 | 25.4 | 23.2 | 25.4 | 25.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)