

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: P688521

Luminaire Tested: SQ4R-PH1-125D-930-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-125D-930-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3692.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

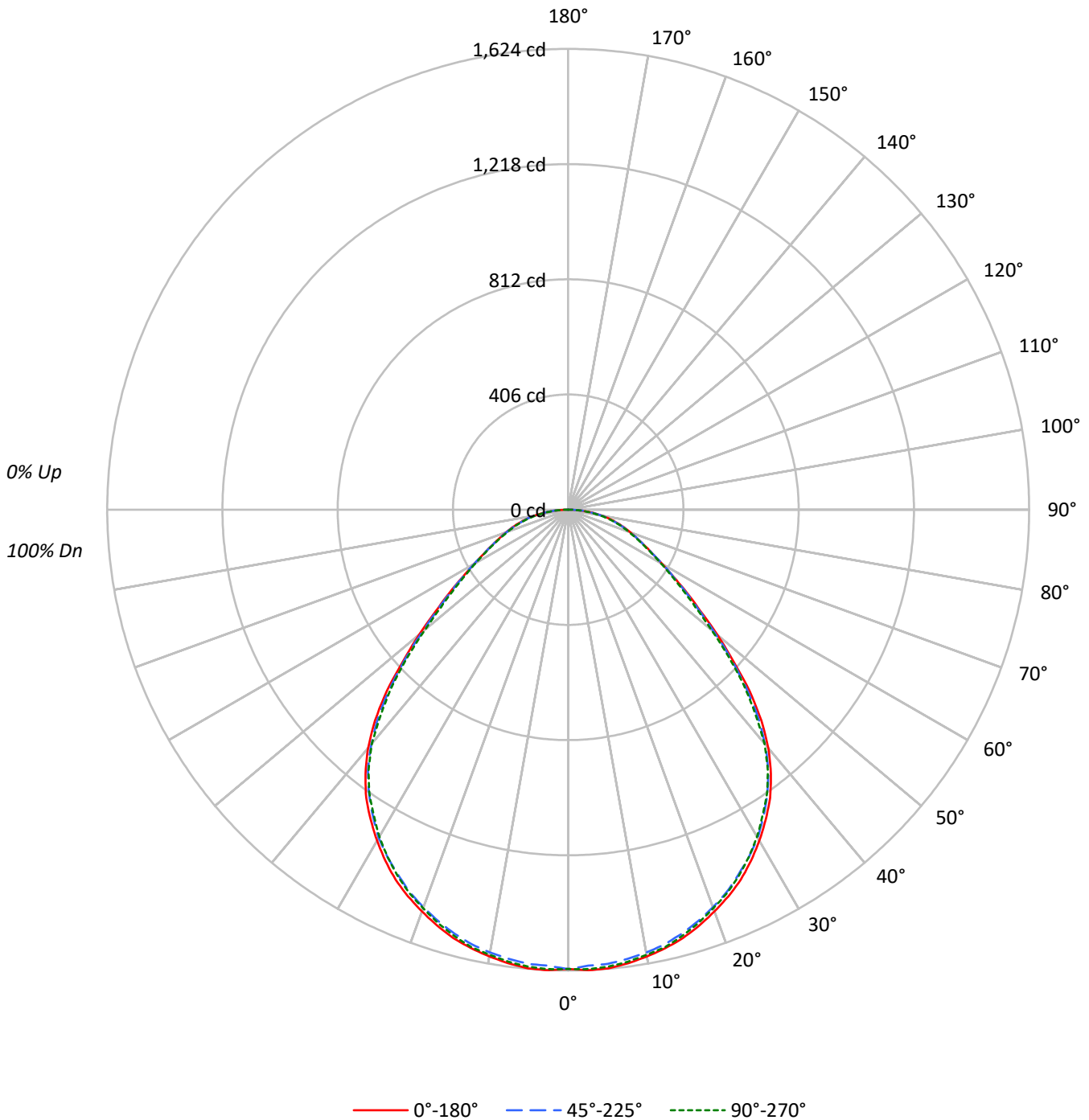
Input Watts (W): 49.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 110 | 105 | 102 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | | 95 | 93 | 91 | | 92 | 90 | 88 | 86 |
| 2 | 101 | 93 | 87 | 82 | 98 | 91 | 86 | 81 | 88 | 83 | 79 | | 85 | 81 | 77 | | 82 | 79 | 76 | 74 |
| 3 | 93 | 83 | 76 | 70 | 90 | 82 | 75 | 69 | 79 | 73 | 68 | | 76 | 71 | 67 | | 73 | 69 | 66 | 64 |
| 4 | 86 | 75 | 66 | 60 | 83 | 73 | 66 | 60 | 71 | 64 | 59 | | 69 | 63 | 58 | | 66 | 62 | 57 | 55 |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 58 | 52 | 64 | 57 | 52 | | 62 | 56 | 51 | | 60 | 55 | 51 | 49 |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 46 | 58 | 51 | 46 | | 57 | 50 | 46 | | 55 | 50 | 45 | 43 |
| 7 | 68 | 56 | 47 | 42 | 67 | 55 | 47 | 41 | 53 | 46 | 41 | | 52 | 46 | 41 | | 51 | 45 | 41 | 39 |
| 8 | 64 | 51 | 43 | 37 | 62 | 50 | 43 | 37 | 49 | 42 | 37 | | 48 | 42 | 37 | | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 58 | 47 | 39 | 34 | 45 | 39 | 34 | | 44 | 38 | 34 | | 43 | 38 | 33 | 32 |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 35 | 31 | | 41 | 35 | 31 | | 40 | 35 | 31 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15582 | 15582 | 15582 |
| 5° | 15680 | 15525 | 15622 |
| 10° | 15627 | 15491 | 15568 |
| 15° | 15574 | 15415 | 15495 |
| 20° | 15435 | 15272 | 15312 |
| 25° | 15283 | 15070 | 15113 |
| 30° | 14972 | 14839 | 14794 |
| 35° | 14584 | 14373 | 14349 |
| 40° | 13787 | 13560 | 13510 |
| 45° | 12297 | 12052 | 11916 |
| 50° | 10266 | 10056 | 9846 |
| 55° | 8552 | 8451 | 8251 |
| 60° | 7350 | 7388 | 7234 |
| 65° | 6736 | 6691 | 6599 |
| 70° | 6525 | 6469 | 6356 |
| 75° | 6614 | 6465 | 6316 |
| 80° | 6647 | 6537 | 6315 |
| 85° | 6396 | 6396 | 5965 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12297 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 153.5 | 4.2 |
| 10°-20° | 438.6 | 11.9 |
| 20°-30° | 657.0 | 17.8 |
| 30°-40° | 764.4 | 20.7 |
| 40°-50° | 679.9 | 18.4 |
| 50°-60° | 456.5 | 12.4 |
| 60°-70° | 295.1 | 8.0 |
| 70°-80° | 183.9 | 5.0 |
| 80°-90° | 63.0 | 1.7 |
| 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° | 1249.0 | 33.8 |
| 0°-40° | 2013.5 | 54.5 |
| 0°-60° | 3149.9 | 85.3 |
| 0°-90° | 3692.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3692.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1618 | 1618 | 1618 | 1618 | 1618 | |
| 5° | 1622 | 1618 | 1606 | 1618 | 1616 | 154 |
| 15° | 1563 | 1559 | 1547 | 1557 | 1555 | 440 |
| 25° | 1439 | 1433 | 1419 | 1427 | 1423 | 661 |
| 35° | 1241 | 1235 | 1223 | 1223 | 1221 | 771 |
| 45° | 903 | 899 | 885 | 873 | 875 | 690 |
| 55° | 510 | 510 | 504 | 496 | 492 | 462 |
| 65° | 296 | 298 | 294 | 292 | 290 | 296 |
| 75° | 178 | 176 | 174 | 174 | 170 | 187 |
| 85° | 58 | 60 | 58 | 56 | 54 | 64 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P688521

CATALOG NUMBER: SQ4R-PH1-125D-930-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1618.5 | 1618.5 | 1618.5 | 1618.5 | 1618.5 |
| 2.5° | 1624.5 | 1620.5 | 1608.5 | 1622.5 | 1620.5 |
| 5° | 1622.5 | 1618.5 | 1606.5 | 1618.5 | 1616.5 |
| 7.5° | 1612.5 | 1610.5 | 1596.5 | 1610.5 | 1606.5 |
| 10° | 1598.5 | 1598.5 | 1584.6 | 1596.5 | 1592.5 |
| 12.5° | 1582.6 | 1580.6 | 1568.6 | 1580.6 | 1578.6 |
| 15° | 1562.6 | 1558.6 | 1546.6 | 1556.6 | 1554.6 |
| 17.5° | 1536.6 | 1534.6 | 1520.6 | 1530.6 | 1526.6 |
| 20° | 1506.6 | 1502.6 | 1490.6 | 1498.6 | 1494.6 |
| 22.5° | 1474.7 | 1470.7 | 1458.7 | 1464.7 | 1462.7 |
| 25° | 1438.7 | 1432.7 | 1418.7 | 1426.7 | 1422.7 |
| 27.5° | 1394.7 | 1392.7 | 1378.7 | 1382.7 | 1378.7 |
| 30° | 1346.8 | 1344.8 | 1334.8 | 1334.8 | 1330.8 |
| 32.5° | 1294.8 | 1296.8 | 1280.8 | 1282.8 | 1274.8 |
| 35° | 1240.9 | 1234.9 | 1222.9 | 1222.9 | 1220.9 |
| 37.5° | 1172.9 | 1168.9 | 1158.9 | 1156.9 | 1154.9 |
| 40° | 1097.0 | 1093.0 | 1079.0 | 1075.0 | 1075.0 |
| 42.5° | 1007.1 | 1003.1 | 989.1 | 983.1 | 975.1 |
| 45° | 903.2 | 899.2 | 885.2 | 873.2 | 875.2 |
| 47.5° | 787.3 | 791.3 | 777.3 | 767.3 | 765.3 |
| 50° | 685.4 | 683.4 | 671.4 | 665.4 | 657.4 |
| 52.5° | 587.5 | 589.5 | 579.5 | 575.5 | 565.5 |
| 55° | 509.5 | 509.5 | 503.5 | 495.5 | 491.6 |
| 57.5° | 439.6 | 443.6 | 437.6 | 433.6 | 429.6 |
| 60° | 381.7 | 383.7 | 383.7 | 375.7 | 375.7 |
| 62.5° | 333.7 | 335.7 | 333.7 | 329.7 | 329.7 |
| 65° | 295.7 | 297.7 | 293.7 | 291.7 | 289.7 |
| 67.5° | 261.8 | 263.8 | 261.8 | 259.8 | 255.8 |
| 70° | 231.8 | 231.8 | 229.8 | 229.8 | 225.8 |
| 72.5° | 205.8 | 203.8 | 201.8 | 201.8 | 199.8 |
| 75° | 177.8 | 175.8 | 173.8 | 173.8 | 169.8 |
| 77.5° | 149.9 | 147.9 | 147.9 | 143.9 | 141.9 |
| 80° | 119.9 | 119.9 | 117.9 | 115.9 | 113.9 |
| 82.5° | 91.9 | 89.9 | 87.9 | 85.9 | 83.9 |
| 85° | 57.9 | 59.9 | 57.9 | 55.9 | 54.0 |
| 87.5° | 26.0 | 28.0 | 28.0 | 28.0 | 26.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)