

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: P688903

Luminaire Tested: SQ4R-PR1-075D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688903
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-075D-93050-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2934.7 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

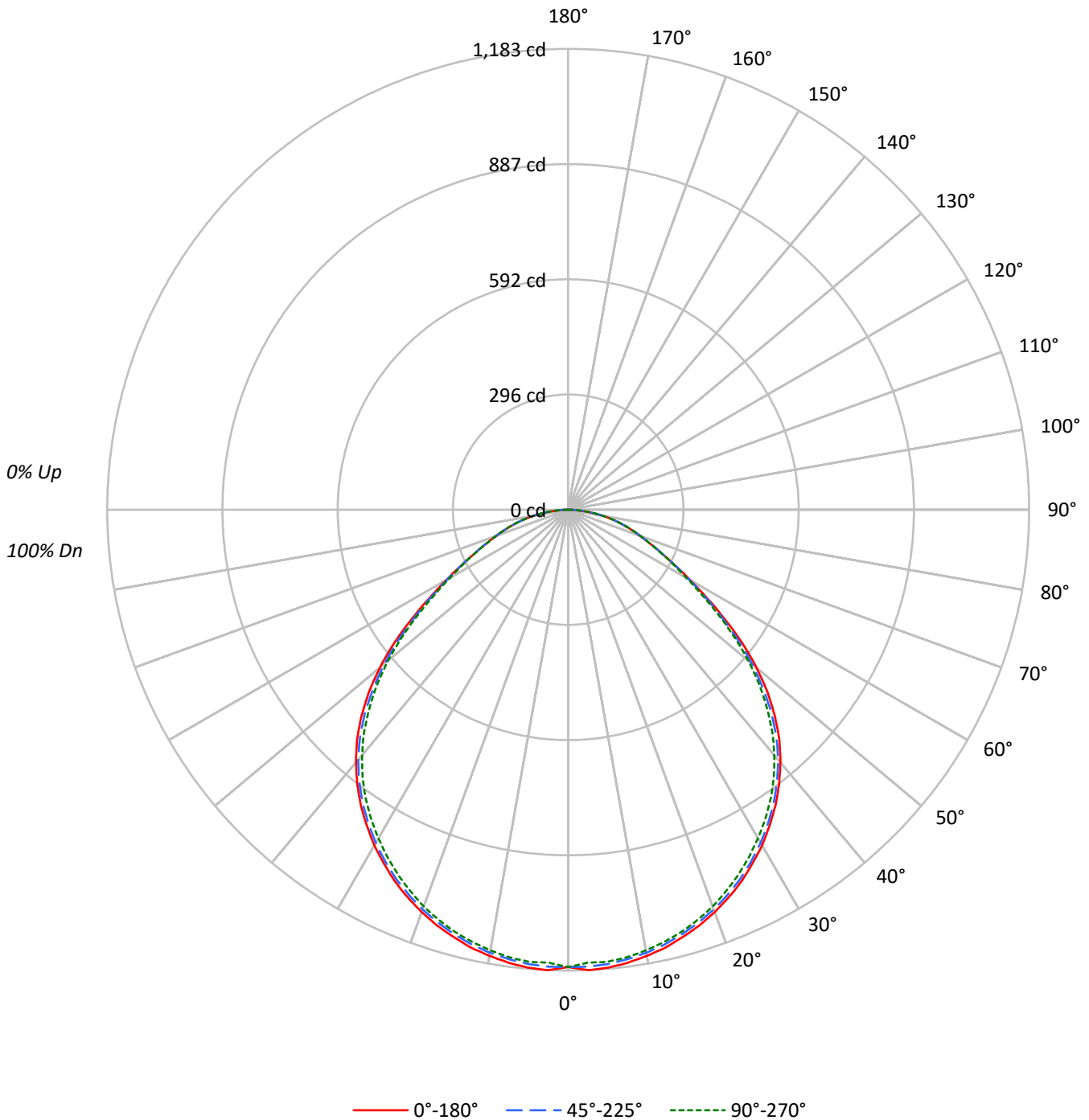
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688903

CATALOG NUMBER: SQ4R-PR1-075D-93050-1-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P688903

CATALOG NUMBER: SQ4R-PR1-075D-93050-1-UNV-STD-W-4_5000K

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 | 101 | 98 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 72 |
| 3 | 92 | 82 | 74 | 68 | 90 | 80 | 73 | 68 | 78 | 71 | 66 | 75 | 70 | 65 | 72 | 68 | 64 | 62 |
| 4 | 85 | 73 | 65 | 58 | 82 | 72 | 64 | 58 | 69 | 63 | 57 | 67 | 61 | 56 | 65 | 60 | 56 | 54 |
| 5 | 78 | 66 | 57 | 51 | 76 | 65 | 57 | 50 | 63 | 55 | 50 | 61 | 54 | 49 | 59 | 53 | 49 | 47 |
| 6 | 72 | 59 | 51 | 45 | 70 | 58 | 50 | 44 | 57 | 49 | 44 | 55 | 49 | 44 | 53 | 48 | 43 | 41 |
| 7 | 67 | 54 | 46 | 40 | 65 | 53 | 45 | 39 | 52 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | 37 |
| 8 | 63 | 49 | 41 | 36 | 61 | 49 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 33 |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 31 | 30 |
| 10 | 55 | 42 | 34 | 29 | 54 | 41 | 34 | 29 | 40 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | 27 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11302 | 11302 | 11302 |
| 5° | 11403 | 11315 | 11257 |
| 10° | 11367 | 11288 | 11229 |
| 15° | 11317 | 11247 | 11186 |
| 20° | 11261 | 11188 | 11105 |
| 25° | 11180 | 11106 | 10976 |
| 30° | 11060 | 10981 | 10824 |
| 35° | 10897 | 10802 | 10647 |
| 40° | 10649 | 10534 | 10343 |
| 45° | 10214 | 10036 | 9829 |
| 50° | 9449 | 9223 | 9040 |
| 55° | 8248 | 8062 | 7892 |
| 60° | 6951 | 6891 | 6755 |
| 65° | 6012 | 6034 | 5989 |
| 70° | 5523 | 5551 | 5551 |
| 75° | 5304 | 5304 | 5342 |
| 80° | 4990 | 5045 | 4990 |
| 85° | 4021 | 4463 | 4463 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10214 cd/sqm

TEST NUMBER: P688903

CATALOG NUMBER: SQ4R-PR1-075D-93050-1-UNV-STD-W-4_5000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 111.1 | 3.8 |
| 10°-20° | 317.8 | 10.8 |
| 20°-30° | 479.3 | 16.3 |
| 30°-40° | 571.2 | 19.5 |
| 40°-50° | 563.5 | 19.2 |
| 50°-60° | 429.8 | 14.6 |
| 60°-70° | 265.3 | 9.0 |
| 70°-80° | 151.2 | 5.2 |
| 80°-90° | 45.6 | 1.6 |
| 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° | 908.1 | 30.9 |
| 0°-40° | 1479.3 | 50.4 |
| 0°-60° | 2472.6 | 84.3 |
| 0°-90° | 2934.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2934.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1174 | 1174 | 1174 | 1174 | 1174 | |
| 5° | 1180 | 1167 | 1171 | 1167 | 1165 | 112 |
| 15° | 1136 | 1123 | 1128 | 1124 | 1122 | 321 |
| 25° | 1052 | 1039 | 1046 | 1034 | 1033 | 485 |
| 35° | 927 | 916 | 919 | 907 | 906 | 579 |
| 45° | 750 | 740 | 737 | 724 | 722 | 576 |
| 55° | 491 | 483 | 480 | 472 | 470 | 440 |
| 65° | 264 | 262 | 265 | 263 | 263 | 266 |
| 75° | 143 | 143 | 143 | 144 | 144 | 151 |
| 85° | 36 | 38 | 40 | 40 | 40 | 43 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P688903

CATALOG NUMBER: SQ4R-PR1-075D-93050-1-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1173.9 | 1173.9 | 1173.9 | 1173.9 | 1173.9 |
| 2.5° | 1183.0 | 1169.8 | 1173.9 | 1170.8 | 1163.8 |
| 5° | 1179.9 | 1166.8 | 1170.8 | 1166.8 | 1164.8 |
| 7.5° | 1172.9 | 1159.7 | 1163.8 | 1159.7 | 1158.7 |
| 10° | 1162.8 | 1150.6 | 1154.7 | 1150.6 | 1148.6 |
| 12.5° | 1151.6 | 1138.5 | 1143.5 | 1138.5 | 1136.5 |
| 15° | 1135.5 | 1123.3 | 1128.4 | 1124.3 | 1122.3 |
| 17.5° | 1119.3 | 1106.1 | 1111.2 | 1107.1 | 1104.1 |
| 20° | 1099.1 | 1086.9 | 1092.0 | 1084.9 | 1083.9 |
| 22.5° | 1076.8 | 1064.7 | 1069.7 | 1059.6 | 1059.6 |
| 25° | 1052.5 | 1039.4 | 1045.5 | 1034.3 | 1033.3 |
| 27.5° | 1024.2 | 1012.1 | 1017.2 | 1006.0 | 1005.0 |
| 30° | 994.9 | 982.8 | 987.8 | 975.7 | 973.7 |
| 32.5° | 961.5 | 950.4 | 954.5 | 942.3 | 941.3 |
| 35° | 927.2 | 916.1 | 919.1 | 907.0 | 905.9 |
| 37.5° | 888.8 | 878.6 | 880.7 | 867.5 | 866.5 |
| 40° | 847.3 | 837.2 | 838.2 | 824.0 | 823.0 |
| 42.5° | 801.8 | 791.7 | 790.7 | 776.5 | 775.5 |
| 45° | 750.2 | 740.1 | 737.1 | 723.9 | 721.9 |
| 47.5° | 693.6 | 683.5 | 677.4 | 666.3 | 665.3 |
| 50° | 630.9 | 620.8 | 615.8 | 606.7 | 603.6 |
| 52.5° | 563.2 | 553.1 | 549.0 | 540.9 | 537.9 |
| 55° | 491.4 | 483.3 | 480.3 | 472.2 | 470.2 |
| 57.5° | 422.6 | 416.6 | 415.6 | 407.5 | 406.5 |
| 60° | 361.0 | 357.9 | 357.9 | 350.8 | 350.8 |
| 62.5° | 308.4 | 306.4 | 308.4 | 304.3 | 303.3 |
| 65° | 263.9 | 261.9 | 264.9 | 262.9 | 262.9 |
| 67.5° | 226.5 | 226.5 | 228.5 | 227.5 | 227.5 |
| 70° | 196.2 | 196.2 | 197.2 | 197.2 | 197.2 |
| 72.5° | 168.9 | 167.8 | 170.9 | 170.9 | 169.9 |
| 75° | 142.6 | 142.6 | 142.6 | 143.6 | 143.6 |
| 77.5° | 116.3 | 116.3 | 117.3 | 117.3 | 116.3 |
| 80° | 90.0 | 91.0 | 91.0 | 90.0 | 90.0 |
| 82.5° | 63.7 | 64.7 | 64.7 | 64.7 | 63.7 |
| 85° | 36.4 | 38.4 | 40.4 | 40.4 | 40.4 |
| 87.5° | 13.1 | 17.2 | 20.2 | 20.2 | 19.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)