

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: P688905

Luminaire Tested: SQ4R-PR1-100D-92765-1-UNV-STD-W-4\_3000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688905  
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-PR1-100D-92765-1-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3419.9 lumens  
Efficiency: N/A  
Efficacy: 74.2 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

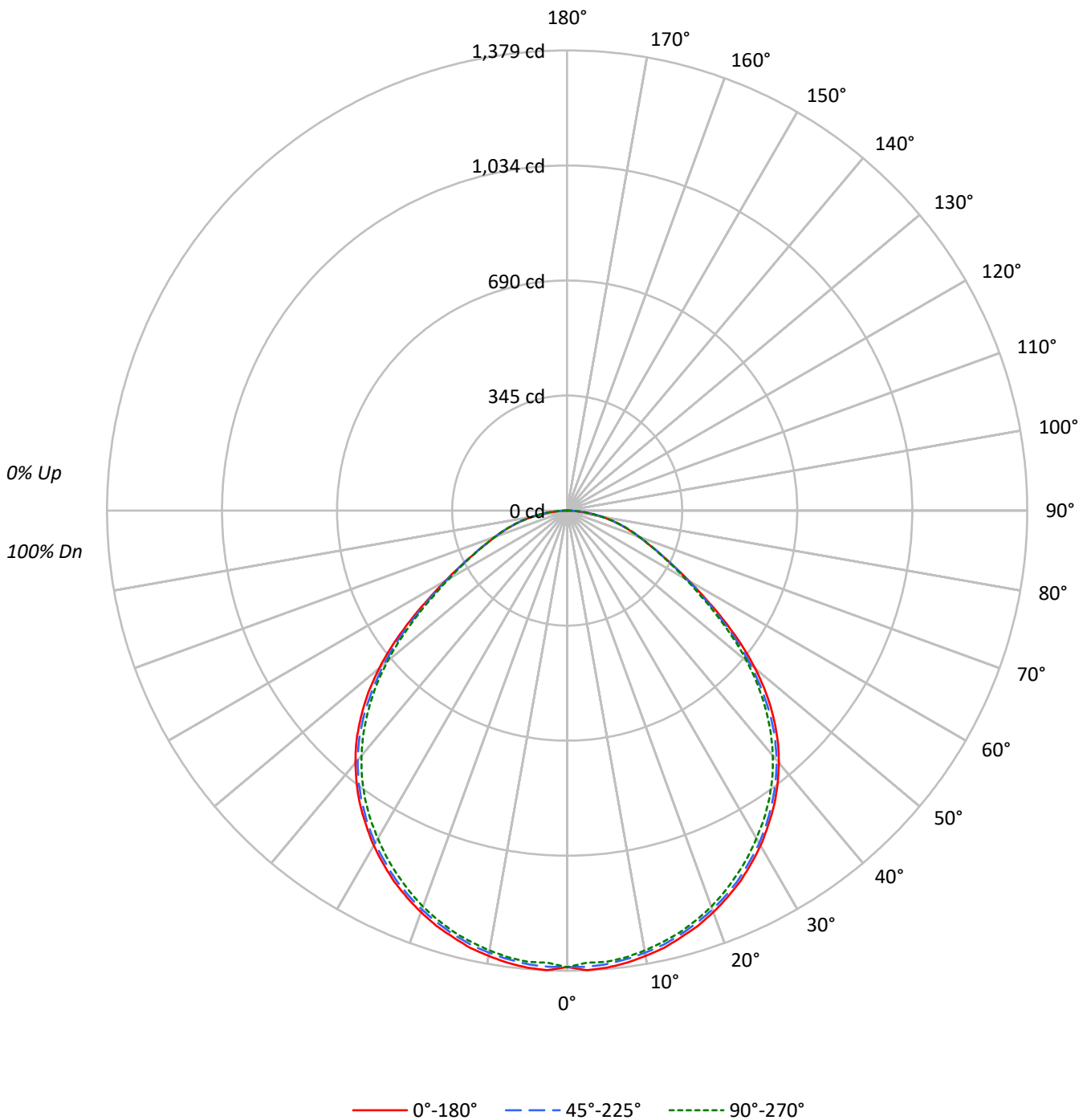
Input Watts (W): 46.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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   | 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°  | 13170 | 13170 | 13170 |
| 5°  | 13288 | 13186 | 13118 |
| 10° | 13246 | 13154 | 13085 |
| 15° | 13188 | 13106 | 13036 |
| 20° | 13122 | 13037 | 12941 |
| 25° | 13030 | 12942 | 12792 |
| 30° | 12889 | 12798 | 12614 |
| 35° | 12699 | 12587 | 12407 |
| 40° | 12409 | 12276 | 12054 |
| 45° | 11904 | 11695 | 11454 |
| 50° | 11011 | 10748 | 10535 |
| 55° | 9611  | 9394  | 9196  |
| 60° | 8099  | 8031  | 7873  |
| 65° | 7005  | 7032  | 6978  |
| 70° | 6435  | 6469  | 6469  |
| 75° | 6178  | 6178  | 6223  |
| 80° | 5816  | 5877  | 5816  |
| 85° | 4684  | 5203  | 5203  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11904 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 129.4  | 3.8       |
| 10°-20°   | 370.3  | 10.8      |
| 20°-30°   | 558.5  | 16.3      |
| 30°-40°   | 665.6  | 19.5      |
| 40°-50°   | 656.6  | 19.2      |
| 50°-60°   | 500.9  | 14.6      |
| 60°-70°   | 309.2  | 9.0       |
| 70°-80°   | 176.1  | 5.2       |
| 80°-90°   | 53.1   | 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°    | 1058.3 | 30.9      |
| 0°-40°    | 1723.9 | 50.4      |
| 0°-60°    | 2881.4 | 84.3      |
| 0°-90°    | 3419.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3419.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1368 | 1368  | 1368 | 1368  | 1368 |      |
| 5°  | 1375 | 1360  | 1364 | 1360  | 1357 | 131  |
| 15° | 1323 | 1309  | 1315 | 1310  | 1308 | 374  |
| 25° | 1227 | 1211  | 1218 | 1205  | 1204 | 565  |
| 35° | 1080 | 1068  | 1071 | 1057  | 1056 | 675  |
| 45° | 874  | 862   | 859  | 844   | 841  | 671  |
| 55° | 573  | 563   | 560  | 550   | 548  | 513  |
| 65° | 308  | 305   | 309  | 306   | 306  | 310  |
| 75° | 166  | 166   | 166  | 167   | 167  | 175  |
| 85° | 42   | 45    | 47   | 47    | 47   | 50   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1368.0 | 1368.0 | 1368.0 | 1368.0 | 1368.0 |
| 2.5°  | 1378.6 | 1363.2 | 1368.0 | 1364.4 | 1356.2 |
| 5°    | 1375.0 | 1359.7 | 1364.4 | 1359.7 | 1357.4 |
| 7.5°  | 1366.8 | 1351.5 | 1356.2 | 1351.5 | 1350.3 |
| 10°   | 1355.0 | 1340.9 | 1345.6 | 1340.9 | 1338.5 |
| 12.5° | 1342.0 | 1326.7 | 1332.6 | 1326.7 | 1324.4 |
| 15°   | 1323.2 | 1309.0 | 1314.9 | 1310.2 | 1307.9 |
| 17.5° | 1304.3 | 1289.0 | 1294.9 | 1290.2 | 1286.7 |
| 20°   | 1280.8 | 1266.6 | 1272.5 | 1264.3 | 1263.1 |
| 22.5° | 1254.8 | 1240.7 | 1246.6 | 1234.8 | 1234.8 |
| 25°   | 1226.6 | 1211.3 | 1218.3 | 1205.4 | 1204.2 |
| 27.5° | 1193.6 | 1179.4 | 1185.3 | 1172.4 | 1171.2 |
| 30°   | 1159.4 | 1145.3 | 1151.2 | 1137.0 | 1134.7 |
| 32.5° | 1120.5 | 1107.6 | 1112.3 | 1098.1 | 1097.0 |
| 35°   | 1080.5 | 1067.5 | 1071.0 | 1056.9 | 1055.7 |
| 37.5° | 1035.7 | 1023.9 | 1026.3 | 1010.9 | 1009.8 |
| 40°   | 987.4  | 975.6  | 976.8  | 960.3  | 959.1  |
| 42.5° | 934.4  | 922.6  | 921.4  | 904.9  | 903.7  |
| 45°   | 874.3  | 862.5  | 859.0  | 843.6  | 841.3  |
| 47.5° | 808.3  | 796.5  | 789.4  | 776.5  | 775.3  |
| 50°   | 735.2  | 723.5  | 717.6  | 707.0  | 703.4  |
| 52.5° | 656.3  | 644.5  | 639.8  | 630.4  | 626.8  |
| 55°   | 572.6  | 563.2  | 559.7  | 550.2  | 547.9  |
| 57.5° | 492.5  | 485.4  | 484.3  | 474.8  | 473.7  |
| 60°   | 420.6  | 417.1  | 417.1  | 408.9  | 408.9  |
| 62.5° | 359.4  | 357.0  | 359.4  | 354.7  | 353.5  |
| 65°   | 307.5  | 305.2  | 308.7  | 306.3  | 306.3  |
| 67.5° | 263.9  | 263.9  | 266.3  | 265.1  | 265.1  |
| 70°   | 228.6  | 228.6  | 229.8  | 229.8  | 229.8  |
| 72.5° | 196.8  | 195.6  | 199.1  | 199.1  | 197.9  |
| 75°   | 166.1  | 166.1  | 166.1  | 167.3  | 167.3  |
| 77.5° | 135.5  | 135.5  | 136.7  | 136.7  | 135.5  |
| 80°   | 104.9  | 106.0  | 106.0  | 104.9  | 104.9  |
| 82.5° | 74.2   | 75.4   | 75.4   | 75.4   | 74.2   |
| 85°   | 42.4   | 44.8   | 47.1   | 47.1   | 47.1   |
| 87.5° | 15.3   | 20.0   | 23.6   | 23.6   | 22.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)