

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

(formerly Eaton)

Brand: CORELITE

Report Number: P563644

Luminaire Tested: **SQ4-PP3-100U-125D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563644
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-100U-125D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

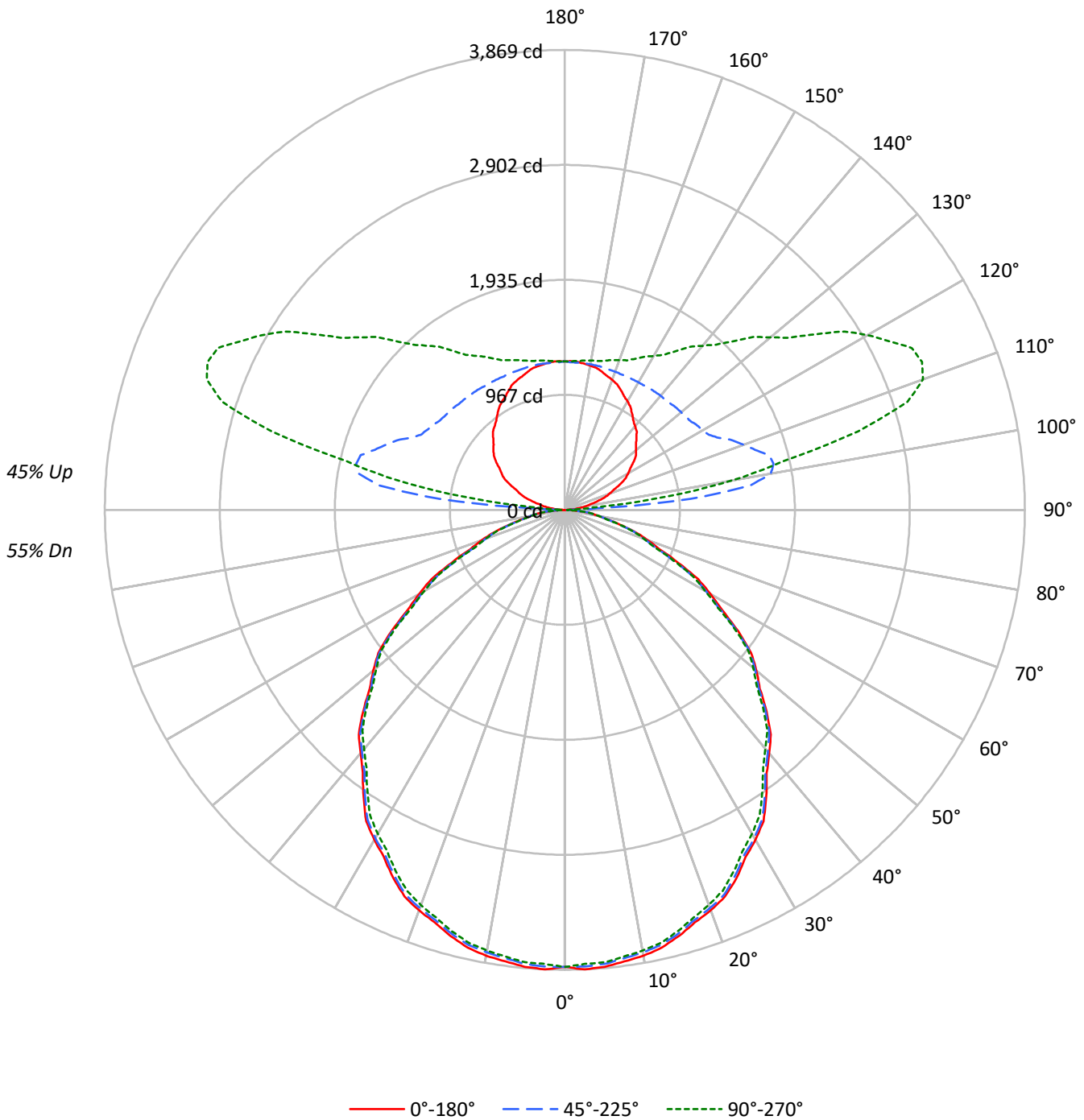
Lumens per Lamp: N/A
Luminaire Lumens: 17957.4 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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 | 108 | 108 | 108 | 108 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 | 55 |
| 1 | 99 | 95 | 91 | 88 | 92 | 88 | 85 | 82 | 76 | 73 | 71 | 64 | 63 | 61 | 54 | 53 | 52 | 47 |
| 2 | 90 | 83 | 77 | 72 | 84 | 77 | 72 | 68 | 67 | 63 | 59 | 57 | 54 | 51 | 48 | 46 | 44 | 39 |
| 3 | 83 | 73 | 66 | 60 | 76 | 68 | 62 | 57 | 59 | 54 | 50 | 50 | 47 | 44 | 42 | 40 | 37 | 34 |
| 4 | 76 | 65 | 57 | 51 | 70 | 61 | 54 | 48 | 52 | 47 | 43 | 45 | 41 | 37 | 38 | 35 | 32 | 29 |
| 5 | 69 | 58 | 50 | 44 | 64 | 54 | 47 | 41 | 47 | 41 | 37 | 40 | 36 | 33 | 34 | 31 | 28 | 25 |
| 6 | 64 | 52 | 44 | 38 | 59 | 49 | 41 | 36 | 42 | 37 | 32 | 37 | 32 | 29 | 31 | 28 | 25 | 22 |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 37 | 32 | 38 | 33 | 28 | 33 | 29 | 25 | 28 | 25 | 22 | 20 |
| 8 | 55 | 43 | 35 | 29 | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 30 | 26 | 23 | 26 | 22 | 20 | 18 |
| 9 | 51 | 39 | 31 | 26 | 48 | 37 | 30 | 25 | 32 | 27 | 23 | 28 | 23 | 20 | 24 | 21 | 18 | 16 |
| 10 | 48 | 36 | 28 | 24 | 44 | 34 | 27 | 23 | 30 | 24 | 20 | 26 | 21 | 18 | 22 | 19 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17738 | 17738 | 17738 |
| 5° | 17868 | 17759 | 17696 |
| 10° | 17838 | 17712 | 17633 |
| 15° | 17720 | 17623 | 17527 |
| 20° | 17602 | 17503 | 17371 |
| 25° | 17393 | 17273 | 17101 |
| 30° | 17071 | 16982 | 16766 |
| 35° | 16625 | 16511 | 16302 |
| 40° | 16093 | 15991 | 15809 |
| 45° | 15653 | 15543 | 15390 |
| 50° | 15091 | 14995 | 14849 |
| 55° | 14310 | 14121 | 14013 |
| 60° | 13027 | 12655 | 12592 |
| 65° | 11477 | 10998 | 10961 |
| 70° | 9908 | 9499 | 9499 |
| 75° | 8529 | 8409 | 8290 |
| 80° | 7521 | 7608 | 7430 |
| 85° | 5886 | 6420 | 6420 |



TEST NUMBER: P563644

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 363.6 | 2.0 |
| 10°-20° | 1038.2 | 5.8 |
| 20°-30° | 1555.0 | 8.7 |
| 30°-40° | 1824.0 | 10.2 |
| 40°-50° | 1829.7 | 10.2 |
| 50°-60° | 1560.9 | 8.7 |
| 60°-70° | 1018.0 | 5.7 |
| 70°-80° | 510.7 | 2.8 |
| 80°-90° | 143.9 | 0.8 |
| 90°-100° | 584.8 | 3.3 |
| 100°-110° | 1614.4 | 9.0 |
| 110°-120° | 1664.9 | 9.3 |
| 120°-130° | 1337.9 | 7.5 |
| 130°-140° | 1051.5 | 5.9 |
| 140°-150° | 806.4 | 4.5 |
| 150°-160° | 579.6 | 3.2 |
| 160°-170° | 354.4 | 2.0 |
| 170°-180° | 119.5 | 0.7 |
| 0°-30° | 2956.8 | 16.5 |
| 0°-40° | 4780.8 | 26.6 |
| 0°-60° | 8171.3 | 45.5 |
| 0°-90° | 9843.9 | 54.8 |
| 90°-120° | 3864.1 | 21.5 |
| 90°-150° | 7060.0 | 39.3 |
| 90°-180° | 8113.0 | 45.2 |
| 0°-180° | 17957.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3845 | 3845 | 3845 | 3845 | 3845 | |
| 5° | 3859 | 3822 | 3835 | 3822 | 3822 | 366 |
| 15° | 3710 | 3674 | 3690 | 3676 | 3670 | 1047 |
| 25° | 3417 | 3378 | 3394 | 3363 | 3360 | 1571 |
| 35° | 2952 | 2922 | 2932 | 2898 | 2895 | 1844 |
| 45° | 2399 | 2383 | 2382 | 2359 | 2359 | 1847 |
| 55° | 1779 | 1773 | 1756 | 1746 | 1742 | 1581 |
| 65° | 1051 | 1032 | 1008 | 1001 | 1004 | 1049 |
| 75° | 478 | 478 | 472 | 468 | 465 | 519 |
| 85° | 111 | 121 | 121 | 121 | 121 | 131 |
| 90° | 4 | 8 | 16 | 18 | 20 | 10 |
| 95° | 86 | 316 | 1061 | 436 | 284 | 92 |
| 105° | 288 | 444 | 1776 | 2712 | 2553 | 306 |
| 115° | 516 | 623 | 1430 | 2832 | 3221 | 507 |
| 125° | 707 | 805 | 1297 | 2194 | 2575 | 629 |
| 135° | 851 | 943 | 1261 | 1777 | 2004 | 659 |
| 145° | 987 | 1055 | 1245 | 1513 | 1628 | 618 |
| 155° | 1113 | 1150 | 1235 | 1358 | 1401 | 513 |
| 165° | 1205 | 1220 | 1241 | 1289 | 1299 | 340 |
| 175° | 1249 | 1251 | 1243 | 1261 | 1257 | 119 |
| 180° | 1249 | 1249 | 1249 | 1249 | 1249 | |

TEST NUMBER: P563644

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3845.1 | 3845.1 | 3845.1 | 3845.1 | 3845.1 |
| 2.5° | 3869.4 | 3837.7 | 3845.1 | 3839.3 | 3823.5 |
| 5° | 3858.6 | 3822.3 | 3835.0 | 3821.5 | 3821.5 |
| 7.5° | 3832.3 | 3792.8 | 3805.3 | 3791.8 | 3791.2 |
| 10° | 3808.0 | 3768.5 | 3781.1 | 3767.5 | 3764.2 |
| 12.5° | 3773.0 | 3733.4 | 3748.7 | 3732.5 | 3731.9 |
| 15° | 3710.3 | 3674.1 | 3690.1 | 3676.5 | 3669.9 |
| 17.5° | 3639.5 | 3600.0 | 3619.3 | 3600.4 | 3597.7 |
| 20° | 3585.6 | 3546.1 | 3565.4 | 3538.4 | 3538.4 |
| 22.5° | 3520.9 | 3481.4 | 3503.4 | 3468.3 | 3468.3 |
| 25° | 3417.1 | 3377.6 | 3393.5 | 3363.1 | 3359.8 |
| 27.5° | 3293.8 | 3254.9 | 3271.5 | 3237.1 | 3236.5 |
| 30° | 3204.8 | 3168.6 | 3188.0 | 3150.8 | 3147.5 |
| 32.5° | 3107.8 | 3074.1 | 3088.2 | 3051.1 | 3047.8 |
| 35° | 2952.1 | 2922.4 | 2931.8 | 2898.1 | 2894.8 |
| 37.5° | 2788.3 | 2758.0 | 2768.7 | 2739.7 | 2738.4 |
| 40° | 2672.4 | 2652.6 | 2655.5 | 2631.8 | 2625.2 |
| 42.5° | 2564.5 | 2542.1 | 2545.0 | 2521.4 | 2520.0 |
| 45° | 2399.4 | 2382.9 | 2382.5 | 2359.0 | 2359.0 |
| 47.5° | 2224.2 | 2211.6 | 2208.0 | 2188.4 | 2187.8 |
| 50° | 2102.8 | 2093.0 | 2089.4 | 2072.4 | 2069.1 |
| 52.5° | 1976.1 | 1971.5 | 1960.0 | 1945.8 | 1945.1 |
| 55° | 1779.3 | 1772.7 | 1755.7 | 1745.6 | 1742.3 |
| 57.5° | 1565.7 | 1552.5 | 1533.3 | 1518.6 | 1521.2 |
| 60° | 1412.0 | 1398.8 | 1371.6 | 1364.8 | 1364.8 |
| 62.5° | 1263.7 | 1247.9 | 1220.6 | 1211.3 | 1216.5 |
| 65° | 1051.4 | 1031.7 | 1007.6 | 1000.9 | 1004.2 |
| 67.5° | 858.7 | 840.9 | 814.9 | 814.8 | 812.2 |
| 70° | 734.6 | 724.8 | 704.3 | 704.3 | 704.3 |
| 72.5° | 624.1 | 619.5 | 604.6 | 604.5 | 601.9 |
| 75° | 478.5 | 478.5 | 471.8 | 468.3 | 465.1 |
| 77.5° | 358.6 | 359.9 | 356.5 | 353.0 | 347.1 |
| 80° | 283.1 | 289.7 | 286.4 | 283.0 | 279.7 |
| 82.5° | 213.0 | 219.6 | 219.0 | 213.0 | 212.3 |
| 85° | 111.2 | 121.1 | 121.3 | 121.3 | 121.3 |
| 87.5° | 30.5 | 41.8 | 46.3 | 46.8 | 49.8 |
| 90° | 4.0 | 7.9 | 16.0 | 18.0 | 20.0 |
| 92.5° | 36.0 | 149.3 | 266.9 | 97.4 | 75.9 |
| 95° | 85.9 | 316.4 | 1060.9 | 436.1 | 283.7 |
| 97.5° | 142.3 | 354.4 | 1571.6 | 1210.0 | 876.3 |
| 100° | 183.8 | 377.2 | 1760.2 | 1772.6 | 1440.5 |
| 102.5° | 223.8 | 403.1 | 1796.9 | 2190.2 | 1875.3 |
| 105° | 287.7 | 444.0 | 1776.2 | 2711.6 | 2553.4 |
| 107.5° | 355.6 | 494.7 | 1677.1 | 2963.1 | 3020.9 |
| 110° | 403.6 | 528.6 | 1600.3 | 3017.1 | 3204.7 |

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CATALOG NUMBER: SQ4-PP3-100U-125D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 446.7 | 567.1 | 1528.4 | 2974.4 | 3251.0 |
| 115° | 515.5 | 622.9 | 1430.5 | 2831.9 | 3220.7 |
| 117.5° | 575.4 | 682.5 | 1366.2 | 2631.3 | 3073.6 |
| 120° | 615.4 | 720.9 | 1340.6 | 2495.6 | 2941.0 |
| 122.5° | 653.7 | 754.5 | 1319.8 | 2368.8 | 2790.7 |
| 125° | 707.3 | 804.9 | 1296.7 | 2194.4 | 2575.3 |
| 127.5° | 752.8 | 850.5 | 1283.1 | 2047.0 | 2375.5 |
| 130° | 783.2 | 880.9 | 1276.7 | 1956.8 | 2255.7 |
| 132.5° | 812.0 | 904.9 | 1270.3 | 1881.0 | 2151.8 |
| 135° | 851.1 | 942.9 | 1260.7 | 1777.3 | 2003.9 |
| 137.5° | 895.1 | 978.7 | 1255.9 | 1690.3 | 1883.7 |
| 140° | 919.1 | 1001.1 | 1252.7 | 1632.2 | 1802.1 |
| 142.5° | 946.2 | 1022.0 | 1249.5 | 1580.6 | 1730.2 |
| 145° | 987.0 | 1055.4 | 1244.7 | 1513.1 | 1628.3 |
| 147.5° | 1026.1 | 1085.9 | 1240.3 | 1456.1 | 1545.6 |
| 150° | 1054.9 | 1103.7 | 1238.7 | 1422.2 | 1494.5 |
| 152.5° | 1077.3 | 1123.0 | 1237.1 | 1393.1 | 1452.9 |
| 155° | 1112.9 | 1150.0 | 1234.7 | 1357.6 | 1400.6 |
| 157.5° | 1145.6 | 1174.1 | 1235.1 | 1331.7 | 1361.0 |
| 160° | 1164.8 | 1190.2 | 1236.7 | 1317.1 | 1338.6 |
| 162.5° | 1180.8 | 1203.1 | 1238.3 | 1304.2 | 1321.0 |
| 165° | 1204.8 | 1220.4 | 1240.7 | 1288.9 | 1298.7 |
| 167.5° | 1223.1 | 1232.5 | 1242.7 | 1279.5 | 1282.7 |
| 170° | 1232.7 | 1240.5 | 1242.7 | 1274.7 | 1274.7 |
| 172.5° | 1240.7 | 1245.4 | 1242.7 | 1268.3 | 1266.7 |
| 175° | 1248.7 | 1250.7 | 1242.7 | 1260.6 | 1256.7 |
| 177.5° | 1251.9 | 1250.3 | 1242.3 | 1253.4 | 1250.3 |
| 180° | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 |

(END OF REPORT)