

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: P563572

Luminaire Tested: **SQ4-PP3-100U-050D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563572
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-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

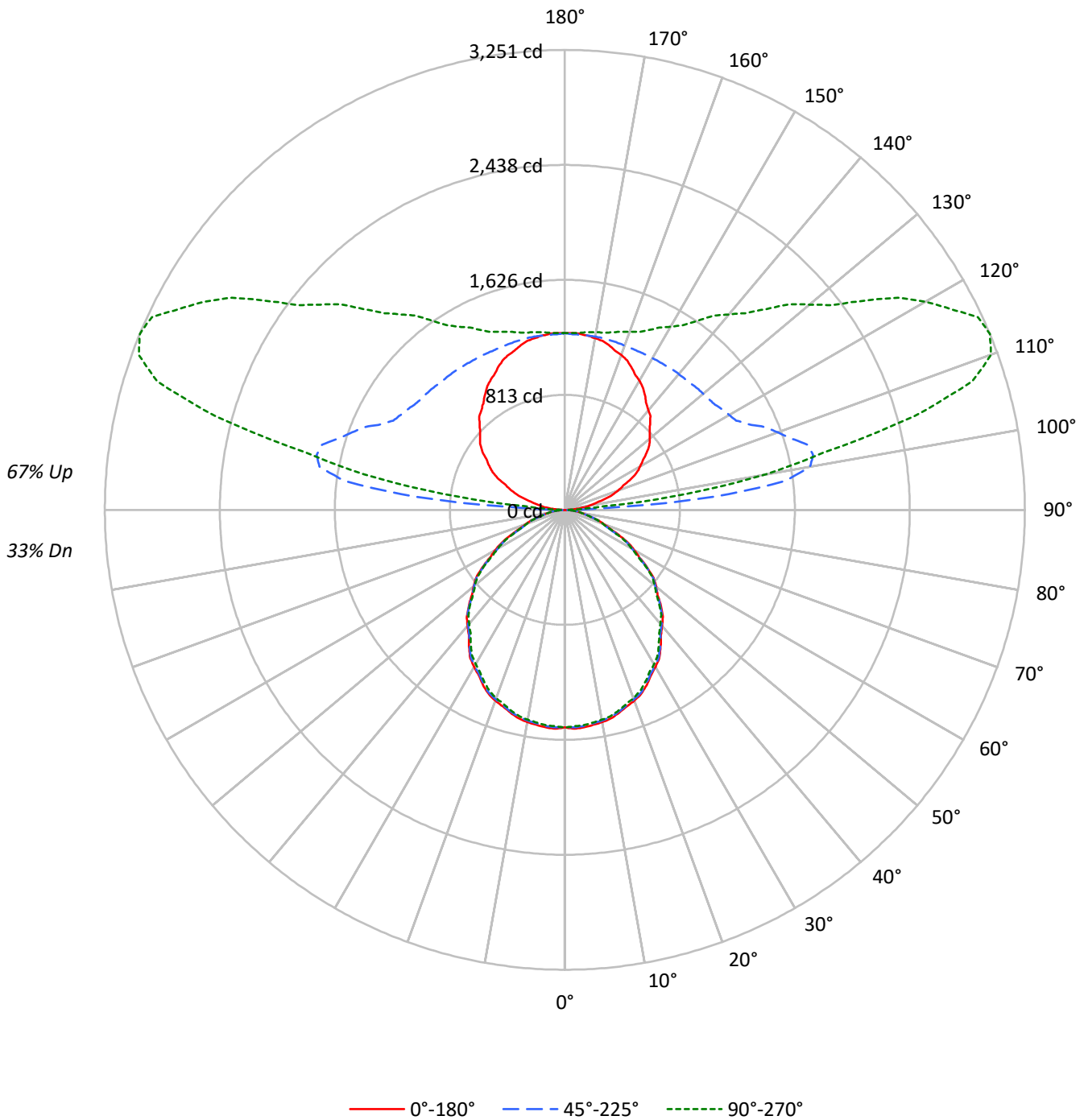
Lumens per Lamp: N/A
Luminaire Lumens: 12054.0 lumens
Efficiency: N/A
Efficacy: 142.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 74 | 74 | 74 | 56 | 56 | 56 | 40 | 40 | 40 | 33 |
| 1 | 94 | 90 | 86 | 83 | 85 | 81 | 78 | 75 | 65 | 63 | 61 | 50 | 48 | 47 | 36 | 35 | 34 | 28 |
| 2 | 86 | 79 | 73 | 68 | 77 | 71 | 66 | 62 | 57 | 53 | 50 | 44 | 41 | 39 | 32 | 30 | 29 | 23 |
| 3 | 78 | 69 | 62 | 56 | 70 | 63 | 57 | 52 | 50 | 46 | 42 | 39 | 36 | 33 | 28 | 26 | 25 | 20 |
| 4 | 71 | 61 | 53 | 48 | 64 | 55 | 49 | 44 | 45 | 40 | 36 | 34 | 31 | 29 | 25 | 23 | 21 | 17 |
| 5 | 66 | 54 | 47 | 41 | 59 | 49 | 43 | 37 | 40 | 35 | 31 | 31 | 27 | 25 | 23 | 20 | 19 | 15 |
| 6 | 60 | 49 | 41 | 35 | 54 | 44 | 37 | 32 | 36 | 31 | 27 | 28 | 24 | 22 | 20 | 18 | 16 | 13 |
| 7 | 56 | 44 | 36 | 31 | 50 | 40 | 33 | 28 | 32 | 27 | 24 | 25 | 22 | 19 | 19 | 16 | 15 | 12 |
| 8 | 52 | 40 | 32 | 27 | 46 | 36 | 30 | 25 | 29 | 24 | 21 | 23 | 20 | 17 | 17 | 15 | 13 | 10 |
| 9 | 48 | 36 | 29 | 24 | 43 | 33 | 27 | 22 | 27 | 22 | 19 | 21 | 18 | 15 | 16 | 13 | 12 | 9 |
| 10 | 45 | 33 | 26 | 21 | 40 | 30 | 24 | 20 | 25 | 20 | 17 | 19 | 16 | 14 | 15 | 12 | 11 | 9 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7098 | 7098 | 7098 |
| 5° | 7150 | 7106 | 7081 |
| 10° | 7137 | 7087 | 7055 |
| 15° | 7090 | 7052 | 7013 |
| 20° | 7044 | 7004 | 6951 |
| 25° | 6960 | 6912 | 6843 |
| 30° | 6831 | 6795 | 6709 |
| 35° | 6652 | 6607 | 6523 |
| 40° | 6439 | 6399 | 6325 |
| 45° | 6264 | 6220 | 6158 |
| 50° | 6038 | 6000 | 5942 |
| 55° | 5726 | 5650 | 5607 |
| 60° | 5213 | 5063 | 5038 |
| 65° | 4592 | 4401 | 4386 |
| 70° | 3965 | 3801 | 3801 |
| 75° | 3413 | 3365 | 3317 |
| 80° | 3010 | 3044 | 2973 |
| 85° | 2355 | 2567 | 2567 |



TEST NUMBER: P563572

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 145.5 | 1.2 |
| 10°-20° | 415.4 | 3.4 |
| 20°-30° | 622.2 | 5.2 |
| 30°-40° | 729.9 | 6.1 |
| 40°-50° | 732.1 | 6.1 |
| 50°-60° | 624.6 | 5.2 |
| 60°-70° | 407.3 | 3.4 |
| 70°-80° | 204.4 | 1.7 |
| 80°-90° | 59.1 | 0.5 |
| 90°-100° | 584.8 | 4.9 |
| 100°-110° | 1614.4 | 13.4 |
| 110°-120° | 1664.9 | 13.8 |
| 120°-130° | 1337.9 | 11.1 |
| 130°-140° | 1051.5 | 8.7 |
| 140°-150° | 806.4 | 6.7 |
| 150°-160° | 579.6 | 4.8 |
| 160°-170° | 354.4 | 2.9 |
| 170°-180° | 119.5 | 1.0 |
| 0°-30° | 1183.1 | 9.8 |
| 0°-40° | 1913.0 | 15.9 |
| 0°-60° | 3269.7 | 27.1 |
| 0°-90° | 3940.5 | 32.7 |
| 90°-120° | 3864.1 | 32.1 |
| 90°-150° | 7060.0 | 58.6 |
| 90°-180° | 8113.0 | 67.3 |
| 0°-180° | 12054.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1539 | 1539 | 1539 | 1539 | 1539 | |
| 5° | 1544 | 1530 | 1534 | 1529 | 1529 | 147 |
| 15° | 1485 | 1470 | 1477 | 1471 | 1468 | 419 |
| 25° | 1367 | 1352 | 1358 | 1346 | 1344 | 629 |
| 35° | 1181 | 1169 | 1173 | 1160 | 1158 | 738 |
| 45° | 960 | 954 | 953 | 944 | 944 | 739 |
| 55° | 712 | 709 | 702 | 698 | 697 | 633 |
| 65° | 421 | 413 | 403 | 400 | 402 | 420 |
| 75° | 192 | 192 | 189 | 187 | 186 | 208 |
| 85° | 44 | 48 | 48 | 48 | 48 | 52 |
| 90° | 4 | 8 | 16 | 18 | 20 | 8 |
| 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 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1538.6 | 1538.6 | 1538.6 | 1538.6 | 1538.6 |
| 2.5° | 1548.3 | 1535.6 | 1538.6 | 1536.3 | 1530.0 |
| 5° | 1544.0 | 1529.5 | 1534.5 | 1529.1 | 1529.1 |
| 7.5° | 1533.5 | 1517.6 | 1522.7 | 1517.3 | 1517.0 |
| 10° | 1523.7 | 1507.9 | 1513.0 | 1507.5 | 1506.2 |
| 12.5° | 1509.7 | 1493.9 | 1500.0 | 1493.5 | 1493.3 |
| 15° | 1484.6 | 1470.1 | 1476.6 | 1471.1 | 1468.5 |
| 17.5° | 1456.3 | 1440.5 | 1448.2 | 1440.7 | 1439.6 |
| 20° | 1434.8 | 1418.9 | 1426.7 | 1415.9 | 1415.9 |
| 22.5° | 1408.9 | 1393.0 | 1401.8 | 1387.8 | 1387.8 |
| 25° | 1367.3 | 1351.5 | 1357.9 | 1345.7 | 1344.4 |
| 27.5° | 1318.0 | 1302.4 | 1309.1 | 1295.3 | 1295.1 |
| 30° | 1282.4 | 1267.9 | 1275.6 | 1260.8 | 1259.5 |
| 32.5° | 1243.5 | 1230.1 | 1235.7 | 1220.9 | 1219.5 |
| 35° | 1181.2 | 1169.4 | 1173.2 | 1159.6 | 1158.3 |
| 37.5° | 1115.7 | 1103.6 | 1107.9 | 1096.3 | 1095.7 |
| 40° | 1069.3 | 1061.4 | 1062.6 | 1053.1 | 1050.4 |
| 42.5° | 1026.2 | 1017.2 | 1018.3 | 1008.9 | 1008.4 |
| 45° | 960.1 | 953.5 | 953.4 | 943.9 | 943.9 |
| 47.5° | 890.0 | 885.0 | 883.5 | 875.7 | 875.4 |
| 50° | 841.4 | 837.5 | 836.0 | 829.3 | 827.9 |
| 52.5° | 790.7 | 788.9 | 784.3 | 778.6 | 778.3 |
| 55° | 712.0 | 709.3 | 702.5 | 698.5 | 697.1 |
| 57.5° | 626.5 | 621.2 | 613.5 | 607.6 | 608.7 |
| 60° | 565.0 | 559.7 | 548.8 | 546.1 | 546.1 |
| 62.5° | 505.7 | 499.3 | 488.4 | 484.7 | 486.8 |
| 65° | 420.7 | 412.8 | 403.2 | 400.5 | 401.8 |
| 67.5° | 343.6 | 336.5 | 326.1 | 326.0 | 325.0 |
| 70° | 294.0 | 290.0 | 281.8 | 281.8 | 281.8 |
| 72.5° | 249.7 | 247.9 | 241.9 | 241.9 | 240.8 |
| 75° | 191.5 | 191.5 | 188.8 | 187.4 | 186.1 |
| 77.5° | 143.5 | 144.0 | 142.7 | 141.3 | 138.9 |
| 80° | 113.3 | 115.9 | 114.6 | 113.2 | 111.9 |
| 82.5° | 85.2 | 87.9 | 87.6 | 85.2 | 85.0 |
| 85° | 44.5 | 48.5 | 48.5 | 48.5 | 48.5 |
| 87.5° | 12.7 | 17.7 | 20.5 | 20.9 | 22.3 |
| 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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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)