

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: P565055

Luminaire Tested: **SQ4-PW1-125U-100D-835-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565055
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-125U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

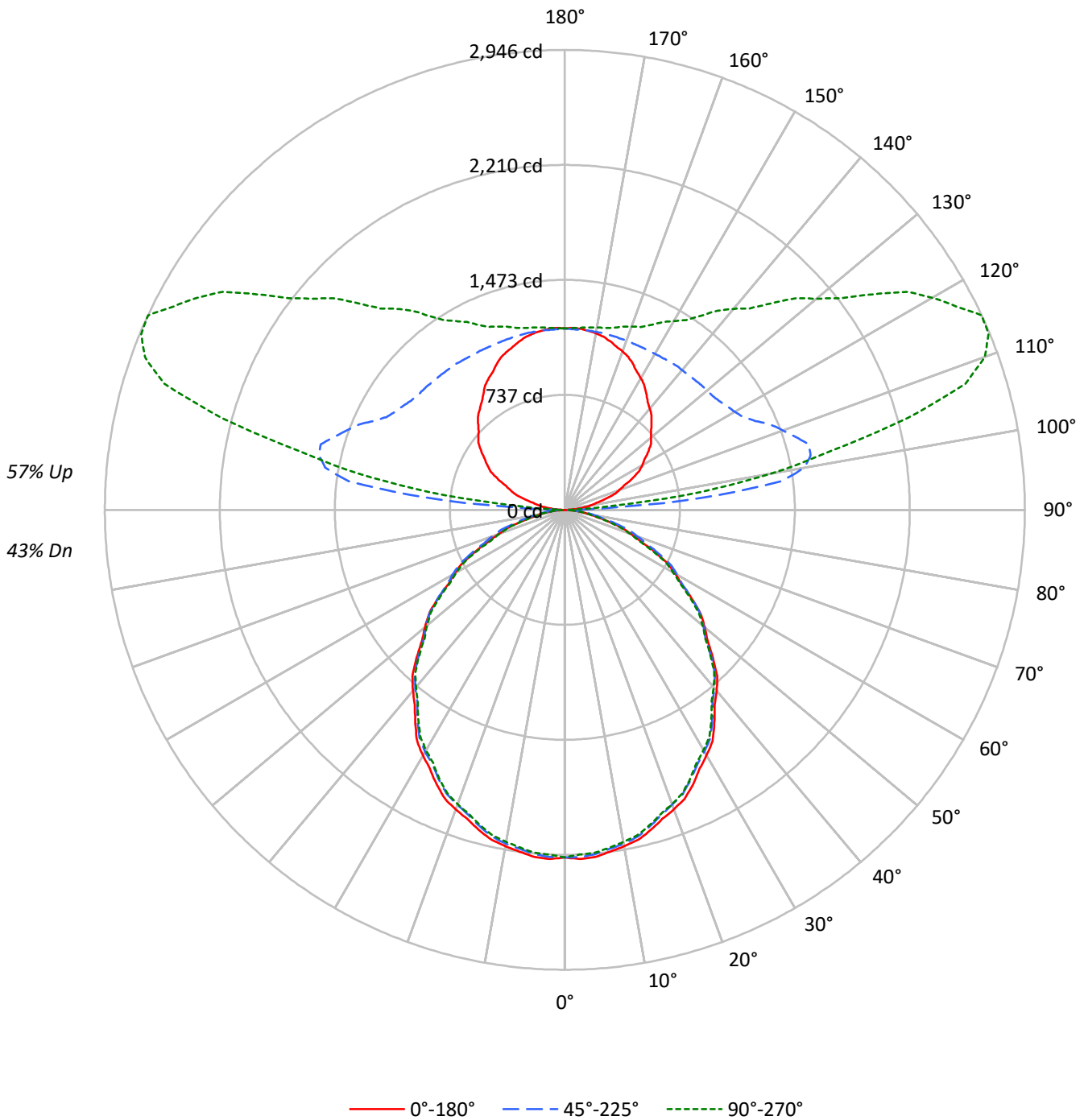
Lumens per Lamp: N/A
Luminaire Lumens: 13165.4 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 102.8
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





TEST NUMBER: P565055

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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 | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 | 43 |
| 1 | 96 | 92 | 88 | 85 | 88 | 84 | 81 | 78 | 70 | 67 | 65 | 56 | 55 | 53 | 44 | 43 | 42 | 36 |
| 2 | 88 | 80 | 74 | 69 | 80 | 74 | 69 | 64 | 61 | 57 | 54 | 50 | 47 | 45 | 39 | 37 | 36 | 31 |
| 3 | 80 | 71 | 64 | 58 | 73 | 65 | 59 | 54 | 54 | 49 | 46 | 44 | 41 | 38 | 34 | 32 | 30 | 26 |
| 4 | 73 | 63 | 55 | 49 | 67 | 58 | 51 | 45 | 48 | 43 | 39 | 39 | 35 | 32 | 31 | 28 | 26 | 22 |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 43 | 38 | 33 | 35 | 31 | 28 | 28 | 25 | 23 | 19 |
| 6 | 62 | 50 | 42 | 36 | 56 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 25 | 22 | 20 | 17 |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 | 15 |
| 8 | 53 | 41 | 33 | 28 | 48 | 38 | 31 | 26 | 32 | 27 | 23 | 26 | 22 | 19 | 21 | 18 | 16 | 14 |
| 9 | 49 | 37 | 30 | 25 | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 17 | 14 | 12 |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 16 | 18 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13692 | 13692 | 13692 |
| 5° | 13780 | 13672 | 13611 |
| 10° | 13671 | 13560 | 13487 |
| 15° | 13526 | 13376 | 13326 |
| 20° | 13364 | 13159 | 13133 |
| 25° | 13178 | 12938 | 12898 |
| 30° | 12899 | 12704 | 12620 |
| 35° | 12533 | 12356 | 12282 |
| 40° | 12142 | 11952 | 11905 |
| 45° | 11669 | 11516 | 11465 |
| 50° | 11185 | 11091 | 11017 |
| 55° | 10664 | 10664 | 10495 |
| 60° | 10012 | 10205 | 9844 |
| 65° | 9163 | 9620 | 8935 |
| 70° | 8076 | 8853 | 7866 |
| 75° | 6899 | 7923 | 6711 |
| 80° | 5349 | 6670 | 5419 |
| 85° | 3458 | 5124 | 4566 |



TEST NUMBER: P565055

CATALOG NUMBER: SQ4-PW1-125U-100D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 209.6 | 1.6 |
| 10°-20° | 591.8 | 4.5 |
| 20°-30° | 877.9 | 6.7 |
| 30°-40° | 1027.2 | 7.8 |
| 40°-50° | 1022.6 | 7.8 |
| 50°-60° | 883.1 | 6.7 |
| 60°-70° | 635.6 | 4.8 |
| 70°-80° | 333.3 | 2.5 |
| 80°-90° | 85.4 | 0.6 |
| 90°-100° | 543.4 | 4.1 |
| 100°-110° | 1463.8 | 11.1 |
| 110°-120° | 1536.2 | 11.7 |
| 120°-130° | 1246.6 | 9.5 |
| 130°-140° | 977.7 | 7.4 |
| 140°-150° | 750.6 | 5.7 |
| 150°-160° | 539.7 | 4.1 |
| 160°-170° | 329.7 | 2.5 |
| 170°-180° | 111.2 | 0.8 |
| 0°-30° | 1679.3 | 12.8 |
| 0°-40° | 2706.5 | 20.6 |
| 0°-60° | 4612.1 | 35.0 |
| 0°-90° | 5666.4 | 43.0 |
| 90°-120° | 3543.5 | 26.9 |
| 90°-150° | 6518.4 | 49.5 |
| 90°-180° | 7499.0 | 57.0 |
| 0°-180° | 13165.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2226 | 2226 | 2226 | 2226 | 2226 | |
| 5° | 2232 | 2207 | 2214 | 2208 | 2204 | 211 |
| 15° | 2124 | 2097 | 2100 | 2096 | 2093 | 599 |
| 25° | 1942 | 1909 | 1906 | 1895 | 1900 | 893 |
| 35° | 1669 | 1646 | 1646 | 1630 | 1636 | 1043 |
| 45° | 1342 | 1330 | 1324 | 1320 | 1318 | 1035 |
| 55° | 994 | 992 | 994 | 981 | 979 | 887 |
| 65° | 630 | 649 | 661 | 635 | 614 | 624 |
| 75° | 290 | 317 | 333 | 311 | 282 | 311 |
| 85° | 49 | 64 | 73 | 69 | 65 | 65 |
| 90° | 3 | 9 | 18 | 19 | 19 | 8 |
| 95° | 83 | 296 | 891 | 456 | 315 | 87 |
| 105° | 271 | 421 | 1619 | 2422 | 2273 | 285 |
| 115° | 478 | 585 | 1348 | 2605 | 2946 | 470 |
| 125° | 653 | 750 | 1210 | 2046 | 2408 | 583 |
| 135° | 786 | 877 | 1176 | 1650 | 1869 | 607 |
| 145° | 909 | 980 | 1162 | 1411 | 1515 | 570 |
| 155° | 1031 | 1069 | 1151 | 1266 | 1307 | 475 |
| 165° | 1119 | 1132 | 1156 | 1202 | 1208 | 315 |
| 175° | 1163 | 1162 | 1157 | 1173 | 1170 | 110 |
| 180° | 1162 | 1162 | 1162 | 1162 | 1162 | |

TEST NUMBER: P565055

CATALOG NUMBER: SQ4-PW1-125U-100D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2226.1 | 2226.1 | 2226.1 | 2226.1 | 2226.1 |
| 2.5° | 2238.6 | 2220.2 | 2226.1 | 2221.1 | 2210.4 |
| 5° | 2231.9 | 2207.0 | 2214.3 | 2208.3 | 2204.5 |
| 7.5° | 2209.2 | 2186.2 | 2191.5 | 2185.2 | 2182.9 |
| 10° | 2188.8 | 2165.8 | 2171.1 | 2163.2 | 2159.4 |
| 12.5° | 2165.3 | 2140.7 | 2146.0 | 2138.1 | 2135.8 |
| 15° | 2124.1 | 2097.2 | 2100.5 | 2096.5 | 2092.7 |
| 17.5° | 2076.2 | 2049.0 | 2049.5 | 2043.3 | 2042.5 |
| 20° | 2041.7 | 2012.9 | 2010.3 | 2002.6 | 2006.4 |
| 22.5° | 2004.0 | 1973.7 | 1971.1 | 1960.2 | 1965.6 |
| 25° | 1941.7 | 1909.1 | 1906.4 | 1894.7 | 1900.5 |
| 27.5° | 1869.5 | 1837.3 | 1837.3 | 1821.0 | 1827.1 |
| 30° | 1816.2 | 1785.5 | 1788.7 | 1769.3 | 1776.9 |
| 32.5° | 1759.7 | 1732.1 | 1733.8 | 1714.3 | 1722.0 |
| 35° | 1669.1 | 1646.0 | 1645.5 | 1630.0 | 1635.7 |
| 37.5° | 1576.5 | 1556.2 | 1552.9 | 1544.0 | 1545.5 |
| 40° | 1512.2 | 1494.9 | 1488.6 | 1482.7 | 1482.7 |
| 42.5° | 1444.7 | 1429.0 | 1422.7 | 1418.4 | 1416.8 |
| 45° | 1341.5 | 1330.0 | 1323.9 | 1319.9 | 1318.0 |
| 47.5° | 1239.5 | 1228.8 | 1223.5 | 1220.7 | 1218.7 |
| 50° | 1168.9 | 1161.3 | 1159.1 | 1153.2 | 1151.3 |
| 52.5° | 1098.3 | 1093.7 | 1091.7 | 1084.2 | 1082.2 |
| 55° | 994.4 | 992.5 | 994.4 | 980.6 | 978.7 |
| 57.5° | 886.1 | 889.2 | 895.5 | 877.0 | 872.4 |
| 60° | 813.9 | 821.6 | 829.6 | 807.9 | 800.2 |
| 62.5° | 740.2 | 752.5 | 763.7 | 738.8 | 728.0 |
| 65° | 629.6 | 648.8 | 661.0 | 635.0 | 613.9 |
| 67.5° | 522.9 | 546.7 | 561.3 | 533.3 | 509.5 |
| 70° | 449.1 | 476.0 | 492.3 | 464.2 | 437.4 |
| 72.5° | 384.8 | 414.7 | 428.0 | 401.5 | 374.6 |
| 75° | 290.3 | 317.1 | 333.4 | 311.2 | 282.4 |
| 77.5° | 205.9 | 231.2 | 244.8 | 225.4 | 201.6 |
| 80° | 151.0 | 177.9 | 188.3 | 172.2 | 153.0 |
| 82.5° | 107.1 | 129.3 | 136.5 | 126.8 | 113.8 |
| 85° | 49.0 | 64.4 | 72.6 | 68.6 | 64.7 |
| 87.5° | 13.1 | 25.0 | 33.4 | 33.7 | 35.2 |
| 90° | 3.0 | 8.7 | 17.8 | 19.2 | 19.2 |
| 92.5° | 36.1 | 127.6 | 252.2 | 121.4 | 84.3 |
| 95° | 82.9 | 295.6 | 890.8 | 455.5 | 315.2 |
| 97.5° | 132.3 | 338.3 | 1397.2 | 1167.2 | 880.2 |
| 100° | 170.2 | 355.4 | 1558.2 | 1630.3 | 1352.5 |
| 102.5° | 206.9 | 379.3 | 1611.5 | 1977.1 | 1749.1 |
| 105° | 270.8 | 421.3 | 1618.9 | 2422.0 | 2272.9 |
| 107.5° | 331.2 | 465.4 | 1549.9 | 2650.6 | 2689.1 |
| 110° | 371.4 | 498.8 | 1487.2 | 2721.5 | 2861.9 |



TEST NUMBER: P565055

CATALOG NUMBER: SQ4-PW1-125U-100D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 414.0 | 532.1 | 1426.8 | 2705.8 | 2936.5 |
| 115° | 478.0 | 585.0 | 1348.1 | 2604.8 | 2946.2 |
| 117.5° | 536.3 | 636.7 | 1287.1 | 2443.5 | 2823.7 |
| 120° | 574.2 | 671.1 | 1256.3 | 2327.7 | 2718.4 |
| 122.5° | 607.3 | 703.1 | 1233.8 | 2209.3 | 2598.8 |
| 125° | 652.6 | 749.5 | 1210.5 | 2045.9 | 2407.6 |
| 127.5° | 696.1 | 791.6 | 1195.7 | 1901.8 | 2224.7 |
| 130° | 722.1 | 817.6 | 1189.7 | 1819.2 | 2102.8 |
| 132.5° | 748.2 | 842.5 | 1183.8 | 1746.4 | 2006.9 |
| 135° | 785.8 | 876.9 | 1176.4 | 1650.5 | 1869.0 |
| 137.5° | 821.6 | 909.0 | 1172.6 | 1569.1 | 1748.5 |
| 140° | 846.4 | 930.4 | 1169.0 | 1519.0 | 1681.0 |
| 142.5° | 872.5 | 950.6 | 1166.7 | 1472.2 | 1608.8 |
| 145° | 908.6 | 979.5 | 1161.6 | 1411.1 | 1515.3 |
| 147.5° | 947.7 | 1009.3 | 1156.6 | 1359.7 | 1441.6 |
| 150° | 973.7 | 1027.2 | 1154.2 | 1327.4 | 1395.4 |
| 152.5° | 997.4 | 1044.0 | 1153.0 | 1301.1 | 1356.4 |
| 155° | 1031.4 | 1069.0 | 1151.3 | 1266.1 | 1306.6 |
| 157.5° | 1061.3 | 1090.5 | 1151.6 | 1241.6 | 1268.8 |
| 160° | 1080.2 | 1104.8 | 1152.7 | 1227.2 | 1247.5 |
| 162.5° | 1096.8 | 1116.8 | 1153.9 | 1215.2 | 1229.7 |
| 165° | 1118.7 | 1131.7 | 1155.7 | 1201.7 | 1207.5 |
| 167.5° | 1136.5 | 1144.0 | 1157.2 | 1191.3 | 1193.6 |
| 170° | 1148.3 | 1151.2 | 1157.2 | 1185.3 | 1185.3 |
| 172.5° | 1155.4 | 1156.0 | 1158.4 | 1179.4 | 1179.4 |
| 175° | 1163.1 | 1161.7 | 1157.2 | 1173.4 | 1170.5 |
| 177.5° | 1166.4 | 1164.0 | 1158.1 | 1167.5 | 1165.2 |
| 180° | 1161.6 | 1161.6 | 1161.6 | 1161.6 | 1161.6 |

(END OF REPORT)