

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: P562486

Luminaire Tested: **SQ4-PW1-150U-100D-92765-1D-UNV-STD-W-4 (6500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562486
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-PW1-150U-100D-92765-1D-UNV-STD-W-4 (6500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

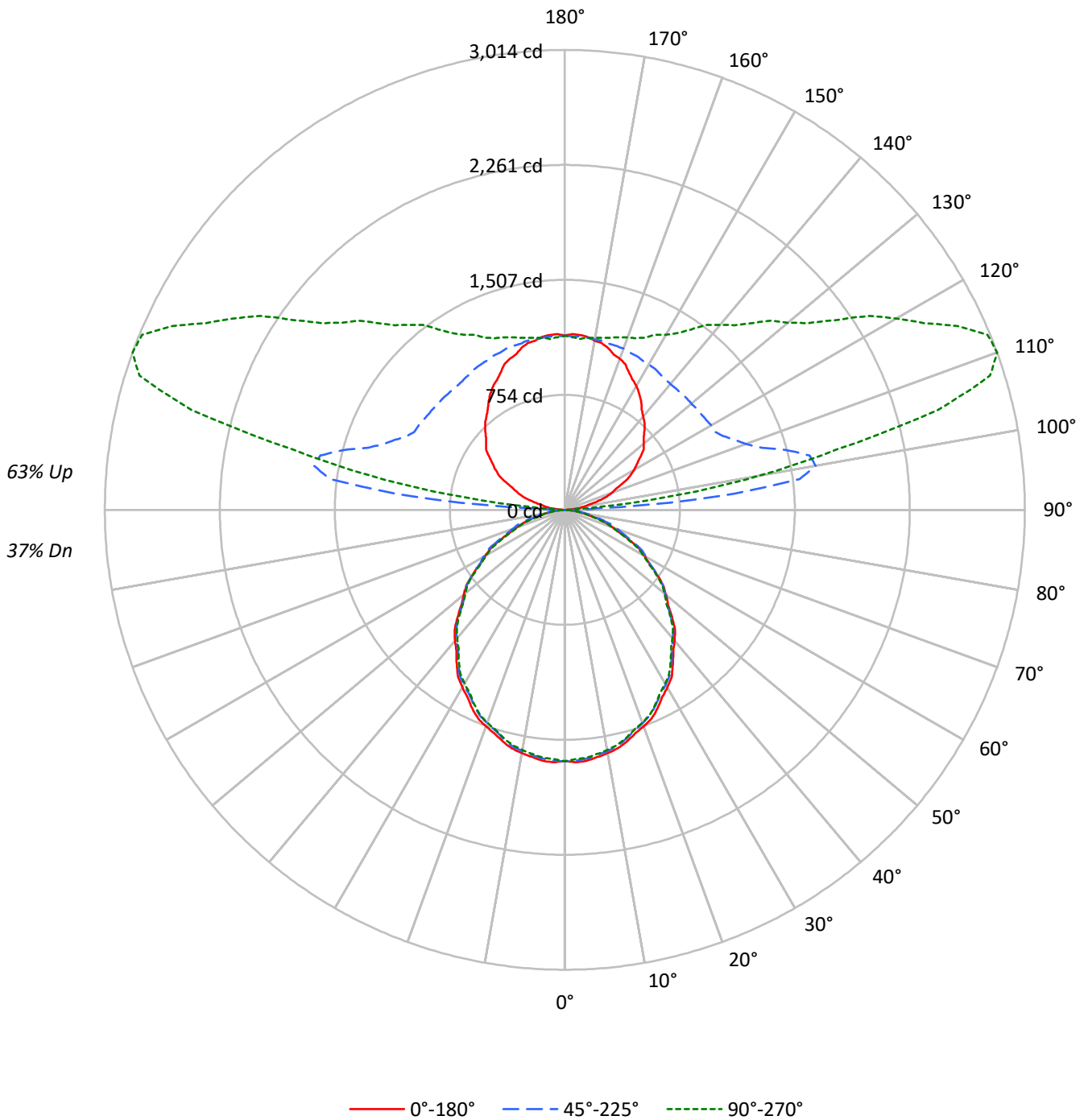
Lumens per Lamp: N/A
Luminaire Lumens: 11278.5 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 92.9
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



TEST NUMBER: P562486
CATALOG NUMBER: SQ4-PW1-150U-100D-92765-1D-UNV-STD-W-4 (6500K)

Luminous Intensity Polar Plot





TEST NUMBER: P562486

CATALOG NUMBER: SQ4-PW1-150U-100D-92765-1D-UNV-STD-W-4 (6500K)

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 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 60 | 60 | 60 | 44 | 44 | 44 | 37 |
| 1 | 95 | 91 | 87 | 84 | 86 | 82 | 79 | 76 | 67 | 65 | 63 | 52 | 51 | 50 | 39 | 38 | 38 | 31 |
| 2 | 87 | 79 | 73 | 68 | 78 | 72 | 67 | 63 | 59 | 55 | 52 | 46 | 44 | 42 | 35 | 33 | 32 | 26 |
| 3 | 79 | 70 | 63 | 57 | 71 | 63 | 57 | 52 | 52 | 47 | 44 | 41 | 38 | 35 | 31 | 29 | 27 | 22 |
| 4 | 72 | 62 | 54 | 48 | 65 | 56 | 50 | 44 | 46 | 41 | 37 | 36 | 33 | 30 | 27 | 25 | 23 | 19 |
| 5 | 66 | 55 | 47 | 41 | 60 | 50 | 43 | 38 | 41 | 36 | 32 | 33 | 29 | 26 | 25 | 22 | 20 | 17 |
| 6 | 61 | 49 | 41 | 36 | 55 | 45 | 38 | 33 | 37 | 32 | 28 | 29 | 26 | 23 | 22 | 20 | 18 | 15 |
| 7 | 56 | 44 | 36 | 31 | 51 | 41 | 34 | 29 | 33 | 28 | 24 | 27 | 23 | 20 | 20 | 18 | 16 | 13 |
| 8 | 52 | 40 | 33 | 27 | 47 | 37 | 30 | 25 | 30 | 25 | 22 | 24 | 21 | 18 | 19 | 16 | 14 | 12 |
| 9 | 48 | 37 | 29 | 24 | 44 | 34 | 27 | 23 | 28 | 23 | 19 | 22 | 19 | 16 | 17 | 15 | 13 | 11 |
| 10 | 45 | 33 | 26 | 22 | 41 | 31 | 24 | 20 | 26 | 21 | 17 | 21 | 17 | 14 | 16 | 13 | 12 | 10 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15191 | 15191 | 15191 |
| 5° | 15290 | 15168 | 15102 |
| 10° | 15168 | 15045 | 14963 |
| 15° | 15007 | 14840 | 14785 |
| 20° | 14828 | 14600 | 14571 |
| 25° | 14620 | 14355 | 14310 |
| 30° | 14311 | 14095 | 14002 |
| 35° | 13904 | 13708 | 13627 |
| 40° | 13471 | 13262 | 13209 |
| 45° | 12947 | 12776 | 12720 |
| 50° | 12410 | 12307 | 12223 |
| 55° | 11831 | 11831 | 11644 |
| 60° | 11108 | 11322 | 10922 |
| 65° | 10167 | 10673 | 9913 |
| 70° | 8961 | 9822 | 8727 |
| 75° | 7653 | 8791 | 7447 |
| 80° | 5935 | 7401 | 6014 |
| 85° | 3843 | 5685 | 5071 |



TEST NUMBER: P562486

CATALOG NUMBER: SQ4-PW1-150U-100D-92765-1D-UNV-STD-W-4 (6500K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 155.0 | 1.4 |
| 10°-20° | 437.7 | 3.9 |
| 20°-30° | 649.3 | 5.8 |
| 30°-40° | 759.8 | 6.7 |
| 40°-50° | 756.4 | 6.7 |
| 50°-60° | 653.2 | 5.8 |
| 60°-70° | 470.2 | 4.2 |
| 70°-80° | 246.5 | 2.2 |
| 80°-90° | 61.1 | 0.5 |
| 90°-100° | 520.1 | 4.6 |
| 100°-110° | 1479.7 | 13.1 |
| 110°-120° | 1417.7 | 12.6 |
| 120°-130° | 1122.1 | 9.9 |
| 130°-140° | 900.6 | 8.0 |
| 140°-150° | 705.1 | 6.3 |
| 150°-160° | 515.9 | 4.6 |
| 160°-170° | 319.6 | 2.8 |
| 170°-180° | 108.4 | 1.0 |
| 0°-30° | 1242.1 | 11.0 |
| 0°-40° | 2001.9 | 17.7 |
| 0°-60° | 3411.4 | 30.2 |
| 0°-90° | 4189.2 | 37.1 |
| 90°-120° | 3417.5 | 30.3 |
| 90°-150° | 6145.3 | 54.5 |
| 90°-180° | 7089.0 | 62.9 |
| 0°-180° | 11278.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1646 | 1646 | 1646 | 1646 | 1646 | |
| 5° | 1651 | 1632 | 1638 | 1633 | 1631 | 156 |
| 15° | 1571 | 1551 | 1554 | 1551 | 1548 | 443 |
| 25° | 1436 | 1412 | 1410 | 1402 | 1406 | 660 |
| 35° | 1234 | 1218 | 1217 | 1206 | 1210 | 772 |
| 45° | 992 | 984 | 979 | 976 | 975 | 766 |
| 55° | 736 | 734 | 736 | 725 | 724 | 656 |
| 65° | 466 | 480 | 489 | 470 | 454 | 461 |
| 75° | 215 | 235 | 247 | 230 | 209 | 230 |
| 85° | 36 | 48 | 54 | 51 | 48 | 48 |
| 90° | 0 | 0 | 0 | 0 | 0 | 4 |
| 95° | 56 | 224 | 1007 | 348 | 215 | 64 |
| 105° | 230 | 349 | 1508 | 2664 | 2532 | 243 |
| 115° | 427 | 516 | 1143 | 2422 | 2844 | 421 |
| 125° | 603 | 669 | 1091 | 1811 | 2165 | 540 |
| 135° | 738 | 799 | 1078 | 1530 | 1729 | 569 |
| 145° | 870 | 915 | 1087 | 1324 | 1443 | 544 |
| 155° | 994 | 1017 | 1113 | 1197 | 1245 | 459 |
| 165° | 1098 | 1102 | 1126 | 1150 | 1167 | 309 |
| 175° | 1150 | 1144 | 1139 | 1132 | 1124 | 109 |
| 180° | 1141 | 1141 | 1141 | 1141 | 1141 | |

TEST NUMBER: P562486

CATALOG NUMBER: SQ4-PW1-150U-100D-92765-1D-UNV-STD-W-4 (6500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1646.5 | 1646.5 | 1646.5 | 1646.5 | 1646.5 |
| 2.5° | 1655.8 | 1642.2 | 1646.5 | 1642.9 | 1634.9 |
| 5° | 1650.9 | 1632.4 | 1637.8 | 1633.4 | 1630.6 |
| 7.5° | 1634.1 | 1617.0 | 1621.0 | 1616.3 | 1614.6 |
| 10° | 1619.0 | 1602.0 | 1605.9 | 1600.0 | 1597.2 |
| 12.5° | 1601.6 | 1583.4 | 1587.3 | 1581.5 | 1579.8 |
| 15° | 1571.1 | 1551.2 | 1553.7 | 1550.7 | 1547.9 |
| 17.5° | 1535.7 | 1515.6 | 1516.0 | 1511.3 | 1510.8 |
| 20° | 1510.2 | 1488.9 | 1487.0 | 1481.2 | 1484.1 |
| 22.5° | 1482.3 | 1459.9 | 1457.9 | 1449.9 | 1453.9 |
| 25° | 1436.2 | 1412.1 | 1410.1 | 1401.5 | 1405.7 |
| 27.5° | 1382.8 | 1359.0 | 1359.0 | 1346.9 | 1351.5 |
| 30° | 1343.3 | 1320.6 | 1323.0 | 1308.7 | 1314.3 |
| 32.5° | 1301.6 | 1281.1 | 1282.4 | 1268.0 | 1273.7 |
| 35° | 1234.5 | 1217.5 | 1217.1 | 1205.6 | 1209.9 |
| 37.5° | 1166.1 | 1151.0 | 1148.7 | 1142.0 | 1143.1 |
| 40° | 1118.5 | 1105.7 | 1101.1 | 1096.7 | 1096.7 |
| 42.5° | 1068.6 | 1056.9 | 1052.3 | 1049.1 | 1048.0 |
| 45° | 992.3 | 983.8 | 979.2 | 976.3 | 974.9 |
| 47.5° | 916.8 | 908.9 | 904.9 | 902.9 | 901.5 |
| 50° | 864.6 | 858.9 | 857.4 | 853.0 | 851.6 |
| 52.5° | 812.4 | 809.0 | 807.5 | 801.9 | 800.5 |
| 55° | 735.5 | 734.1 | 735.5 | 725.3 | 723.9 |
| 57.5° | 655.4 | 657.7 | 662.4 | 648.7 | 645.3 |
| 60° | 602.0 | 607.7 | 613.6 | 597.6 | 591.9 |
| 62.5° | 547.5 | 556.6 | 564.9 | 546.4 | 538.5 |
| 65° | 465.7 | 479.9 | 488.9 | 469.7 | 454.1 |
| 67.5° | 386.8 | 404.3 | 415.2 | 394.5 | 376.9 |
| 70° | 332.2 | 352.1 | 364.1 | 343.4 | 323.5 |
| 72.5° | 284.6 | 306.8 | 316.5 | 296.9 | 277.1 |
| 75° | 214.7 | 234.6 | 246.6 | 230.2 | 208.9 |
| 77.5° | 152.3 | 171.0 | 181.0 | 166.7 | 149.1 |
| 80° | 111.7 | 131.6 | 139.3 | 127.3 | 113.2 |
| 82.5° | 79.2 | 95.7 | 101.0 | 93.8 | 84.1 |
| 85° | 36.3 | 47.6 | 53.7 | 50.7 | 47.9 |
| 87.5° | 9.3 | 17.2 | 22.1 | 22.1 | 23.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 17.4 | 92.0 | 213.5 | 62.1 | 46.9 |
| 95° | 56.4 | 224.0 | 1006.8 | 348.5 | 214.8 |
| 97.5° | 103.7 | 262.4 | 1550.5 | 1109.5 | 760.3 |
| 100° | 136.7 | 285.2 | 1668.5 | 1690.1 | 1301.8 |
| 102.5° | 173.1 | 309.8 | 1642.5 | 2163.3 | 1824.3 |
| 105° | 230.0 | 348.8 | 1508.0 | 2663.6 | 2532.1 |
| 107.5° | 287.7 | 394.2 | 1350.9 | 2804.6 | 2921.8 |
| 110° | 327.6 | 427.3 | 1260.6 | 2750.7 | 3013.7 |

TEST NUMBER: P562486

CATALOG NUMBER: SQ4-PW1-150U-100D-92765-1D-UNV-STD-W-4 (6500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|---------------|
| 112.5° | 365.8 | 460.4 | 1199.9 | 2623.0 | <i>2998.1</i> |
| 115° | 427.4 | 516.5 | 1143.4 | 2422.3 | <i>2844.5</i> |
| 117.5° | 481.7 | 565.3 | 1110.0 | 2202.9 | <i>2650.1</i> |
| 120° | 525.1 | 595.1 | 1106.6 | 2077.5 | <i>2506.0</i> |
| 122.5° | 559.8 | 629.8 | 1097.9 | 1967.4 | <i>2365.4</i> |
| 125° | 603.2 | 669.0 | 1091.4 | 1811.1 | <i>2165.4</i> |
| 127.5° | 650.5 | 712.0 | 1087.9 | 1717.7 | <i>2009.6</i> |
| 130° | 674.8 | 736.3 | 1082.7 | 1652.6 | <i>1907.2</i> |
| 132.5° | 700.8 | 760.6 | 1082.7 | 1601.8 | <i>1836.0</i> |
| 135° | 737.7 | 799.2 | 1078.4 | 1529.8 | <i>1729.3</i> |
| 137.5° | 772.4 | 832.2 | 1077.9 | 1468.9 | <i>1641.2</i> |
| 140° | 798.5 | 860.0 | 1076.2 | 1418.4 | <i>1583.9</i> |
| 142.5° | 828.0 | 879.3 | 1081.4 | 1378.1 | <i>1526.6</i> |
| 145° | 870.1 | 914.6 | 1087.0 | 1324.1 | <i>1442.9</i> |
| 147.5° | 906.1 | 949.4 | 1096.6 | 1269.5 | <i>1372.1</i> |
| 150° | 937.3 | 967.0 | 1100.1 | 1251.4 | <i>1323.5</i> |
| 152.5° | 961.6 | 993.0 | 1103.5 | 1227.0 | <i>1294.0</i> |
| 155° | 993.7 | 1017.1 | 1113.1 | 1196.6 | <i>1245.4</i> |
| 157.5° | 1033.7 | 1047.7 | 1115.2 | 1182.9 | <i>1217.7</i> |
| 160° | 1054.5 | 1065.1 | 1123.9 | 1172.3 | <i>1202.0</i> |
| 162.5° | 1066.6 | 1078.9 | 1125.7 | 1163.5 | <i>1186.4</i> |
| 165° | 1097.9 | 1102.1 | 1126.1 | 1150.3 | <i>1167.3</i> |
| 167.5° | 1119.1 | 1115.3 | 1136.1 | 1147.1 | <i>1153.9</i> |
| 170° | 1126.1 | 1124.0 | 1132.6 | 1135.0 | <i>1143.4</i> |
| 172.5° | 1141.7 | 1134.5 | 1137.8 | 1131.4 | <i>1138.2</i> |
| 175° | 1150.0 | 1143.6 | 1139.1 | 1132.4 | <i>1123.9</i> |
| 177.5° | 1153.4 | 1143.2 | 1137.8 | 1130.9 | <i>1132.6</i> |
| 180° | 1141.3 | 1141.3 | 1141.3 | 1141.3 | <i>1141.3</i> |

(END OF REPORT)