

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: P565040

Luminaire Tested: **SQ4-PW1-125U-075D-930-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565040
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-075D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

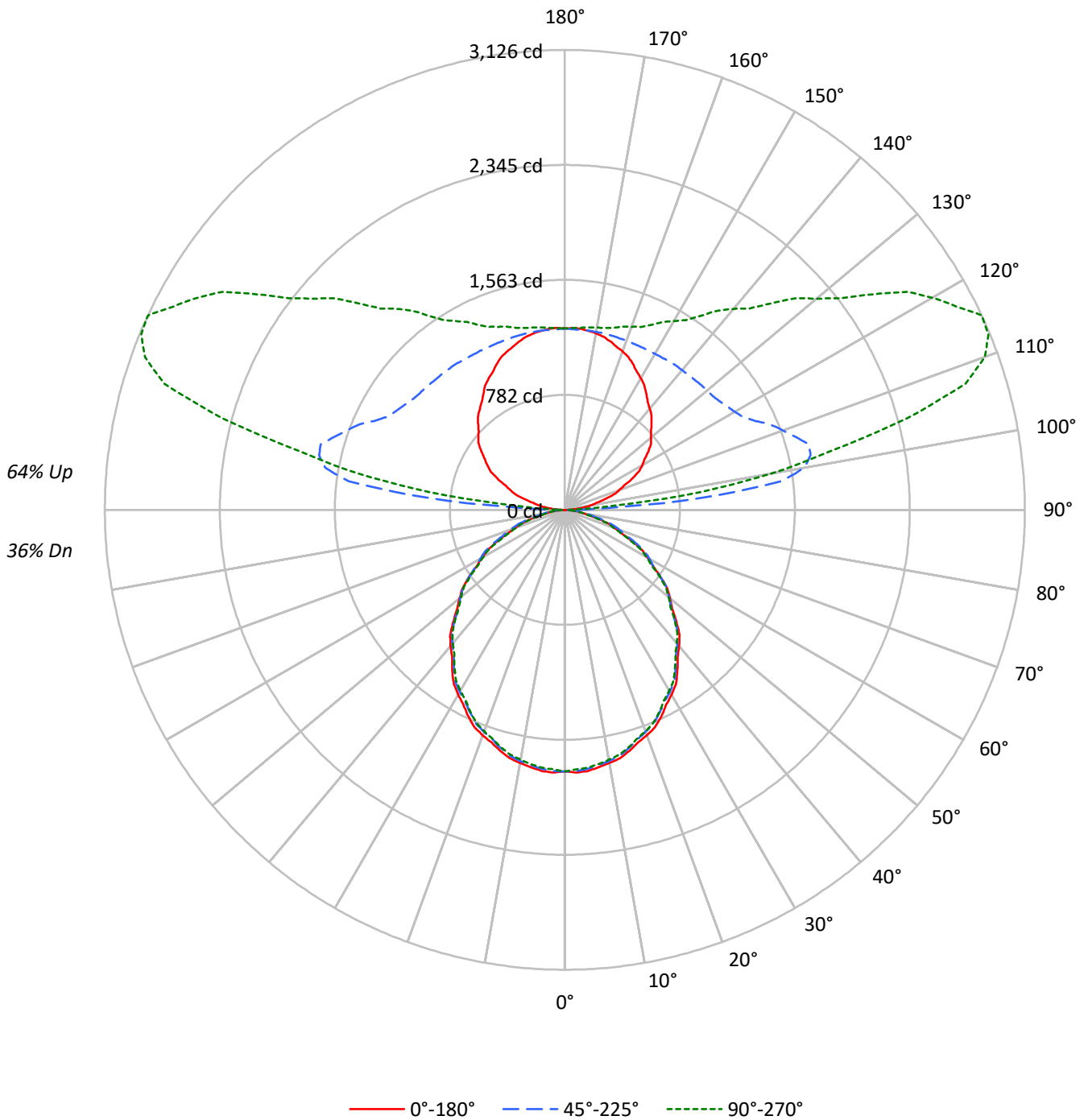
Lumens per Lamp: N/A
Luminaire Lumens: 12482.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 116
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: P565040

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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 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 59 | 59 | 59 | 44 | 44 | 44 | 36 |
| 1 | 95 | 91 | 87 | 83 | 86 | 82 | 79 | 76 | 66 | 64 | 62 | 52 | 50 | 49 | 39 | 38 | 37 | 31 |
| 2 | 86 | 79 | 73 | 68 | 78 | 72 | 67 | 62 | 58 | 55 | 52 | 46 | 43 | 41 | 34 | 32 | 31 | 26 |
| 3 | 79 | 70 | 62 | 57 | 71 | 63 | 57 | 52 | 51 | 47 | 43 | 40 | 37 | 35 | 30 | 28 | 27 | 22 |
| 4 | 72 | 61 | 54 | 48 | 65 | 56 | 49 | 44 | 46 | 41 | 37 | 36 | 33 | 30 | 27 | 25 | 23 | 19 |
| 5 | 66 | 55 | 47 | 41 | 60 | 50 | 43 | 38 | 41 | 36 | 32 | 32 | 29 | 26 | 24 | 22 | 20 | 16 |
| 6 | 61 | 49 | 41 | 35 | 55 | 45 | 38 | 33 | 37 | 31 | 28 | 29 | 25 | 23 | 22 | 19 | 18 | 14 |
| 7 | 56 | 44 | 36 | 31 | 51 | 40 | 34 | 29 | 33 | 28 | 24 | 26 | 23 | 20 | 20 | 17 | 16 | 13 |
| 8 | 52 | 40 | 32 | 27 | 47 | 37 | 30 | 25 | 30 | 25 | 21 | 24 | 20 | 18 | 18 | 16 | 14 | 11 |
| 9 | 48 | 36 | 29 | 24 | 44 | 33 | 27 | 22 | 28 | 23 | 19 | 22 | 18 | 16 | 17 | 14 | 13 | 10 |
| 10 | 45 | 33 | 26 | 22 | 41 | 31 | 24 | 20 | 25 | 20 | 17 | 20 | 17 | 14 | 16 | 13 | 11 | 9 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8200 | 8200 | 8200 |
| 5° | 8253 | 8188 | 8151 |
| 10° | 8187 | 8121 | 8077 |
| 15° | 8100 | 8011 | 7981 |
| 20° | 8004 | 7881 | 7865 |
| 25° | 7892 | 7748 | 7725 |
| 30° | 7725 | 7608 | 7558 |
| 35° | 7506 | 7400 | 7356 |
| 40° | 7272 | 7158 | 7130 |
| 45° | 6988 | 6896 | 6866 |
| 50° | 6699 | 6643 | 6598 |
| 55° | 6386 | 6386 | 6285 |
| 60° | 5997 | 6112 | 5896 |
| 65° | 5487 | 5761 | 5351 |
| 70° | 4837 | 5302 | 4711 |
| 75° | 4132 | 4745 | 4019 |
| 80° | 3204 | 3993 | 3246 |
| 85° | 2075 | 3065 | 2736 |



TEST NUMBER: P565040

CATALOG NUMBER: SQ4-PW1-125U-075D-930-1D-UNV-STD-W-8

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 167.4 | 1.3 |
| 10°-20° | 472.6 | 3.8 |
| 20°-30° | 701.0 | 5.6 |
| 30°-40° | 820.2 | 6.6 |
| 40°-50° | 816.6 | 6.5 |
| 50°-60° | 705.1 | 5.6 |
| 60°-70° | 507.6 | 4.1 |
| 70°-80° | 266.2 | 2.1 |
| 80°-90° | 68.9 | 0.6 |
| 90°-100° | 576.6 | 4.6 |
| 100°-110° | 1553.1 | 12.4 |
| 110°-120° | 1629.9 | 13.1 |
| 120°-130° | 1322.7 | 10.6 |
| 130°-140° | 1037.3 | 8.3 |
| 140°-150° | 796.4 | 6.4 |
| 150°-160° | 572.6 | 4.6 |
| 160°-170° | 349.8 | 2.8 |
| 170°-180° | 118.0 | 0.9 |
| 0°-30° | 1341.0 | 10.7 |
| 0°-40° | 2161.2 | 17.3 |
| 0°-60° | 3682.9 | 29.5 |
| 0°-90° | 4525.5 | 36.3 |
| 90°-120° | 3759.6 | 30.1 |
| 90°-150° | 6916.0 | 55.4 |
| 90°-180° | 7956.0 | 63.7 |
| 0°-180° | 12482.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1778 | 1778 | 1778 | 1778 | 1778 | |
| 5° | 1782 | 1762 | 1768 | 1763 | 1760 | 169 |
| 15° | 1696 | 1675 | 1677 | 1674 | 1671 | 478 |
| 25° | 1550 | 1524 | 1522 | 1513 | 1518 | 713 |
| 35° | 1333 | 1314 | 1314 | 1302 | 1306 | 833 |
| 45° | 1071 | 1062 | 1057 | 1054 | 1052 | 827 |
| 55° | 794 | 792 | 794 | 783 | 782 | 708 |
| 65° | 503 | 518 | 528 | 507 | 490 | 498 |
| 75° | 232 | 253 | 266 | 248 | 226 | 248 |
| 85° | 39 | 51 | 58 | 55 | 52 | 52 |
| 90° | 3 | 9 | 19 | 20 | 20 | 8 |
| 95° | 88 | 314 | 945 | 483 | 334 | 92 |
| 105° | 287 | 447 | 1718 | 2570 | 2412 | 302 |
| 115° | 507 | 621 | 1430 | 2764 | 3126 | 499 |
| 125° | 692 | 795 | 1284 | 2171 | 2554 | 618 |
| 135° | 834 | 930 | 1248 | 1751 | 1983 | 643 |
| 145° | 964 | 1039 | 1232 | 1497 | 1608 | 605 |
| 155° | 1094 | 1134 | 1222 | 1343 | 1386 | 504 |
| 165° | 1187 | 1201 | 1226 | 1275 | 1281 | 335 |
| 175° | 1234 | 1232 | 1228 | 1245 | 1242 | 117 |
| 180° | 1232 | 1232 | 1232 | 1232 | 1232 | |

TEST NUMBER: P565040

CATALOG NUMBER: SQ4-PW1-125U-075D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1777.6 | 1777.6 | 1777.6 | 1777.6 | 1777.6 |
| 2.5° | 1787.6 | 1772.9 | 1777.6 | 1773.6 | 1765.0 |
| 5° | 1782.3 | 1762.4 | 1768.2 | 1763.4 | 1760.3 |
| 7.5° | 1764.1 | 1745.7 | 1750.0 | 1745.0 | 1743.1 |
| 10° | 1747.8 | 1729.4 | 1733.7 | 1727.4 | 1724.3 |
| 12.5° | 1729.0 | 1709.4 | 1713.7 | 1707.4 | 1705.5 |
| 15° | 1696.1 | 1674.7 | 1677.3 | 1674.1 | 1671.1 |
| 17.5° | 1657.9 | 1636.2 | 1636.6 | 1631.6 | 1631.0 |
| 20° | 1630.4 | 1607.4 | 1605.3 | 1599.1 | 1602.2 |
| 22.5° | 1600.3 | 1576.1 | 1574.0 | 1565.3 | 1569.6 |
| 25° | 1550.5 | 1524.5 | 1522.3 | 1513.0 | 1517.6 |
| 27.5° | 1492.9 | 1467.1 | 1467.2 | 1454.1 | 1459.0 |
| 30° | 1450.3 | 1425.7 | 1428.3 | 1412.8 | 1418.9 |
| 32.5° | 1405.1 | 1383.1 | 1384.5 | 1369.0 | 1375.1 |
| 35° | 1332.8 | 1314.4 | 1314.0 | 1301.6 | 1306.2 |
| 37.5° | 1258.9 | 1242.6 | 1240.1 | 1232.9 | 1234.1 |
| 40° | 1207.5 | 1193.7 | 1188.7 | 1184.0 | 1184.0 |
| 42.5° | 1153.6 | 1141.1 | 1136.1 | 1132.6 | 1131.4 |
| 45° | 1071.2 | 1062.1 | 1057.1 | 1054.0 | 1052.4 |
| 47.5° | 989.8 | 981.2 | 977.0 | 974.7 | 973.2 |
| 50° | 933.4 | 927.3 | 925.6 | 920.9 | 919.3 |
| 52.5° | 877.0 | 873.4 | 871.7 | 865.7 | 864.2 |
| 55° | 794.0 | 792.5 | 794.0 | 783.0 | 781.5 |
| 57.5° | 707.6 | 710.0 | 715.1 | 700.3 | 696.6 |
| 60° | 650.0 | 656.1 | 662.5 | 645.1 | 639.0 |
| 62.5° | 591.1 | 600.9 | 609.9 | 589.9 | 581.4 |
| 65° | 502.7 | 518.0 | 527.8 | 507.0 | 490.2 |
| 67.5° | 417.5 | 436.5 | 448.2 | 425.9 | 406.9 |
| 70° | 358.6 | 380.1 | 393.1 | 370.7 | 349.3 |
| 72.5° | 307.3 | 331.2 | 341.7 | 320.6 | 299.1 |
| 75° | 231.8 | 253.2 | 266.2 | 248.5 | 225.5 |
| 77.5° | 164.4 | 184.7 | 195.5 | 180.0 | 161.0 |
| 80° | 120.6 | 142.0 | 150.3 | 137.5 | 122.2 |
| 82.5° | 85.5 | 103.3 | 109.0 | 101.2 | 90.8 |
| 85° | 39.2 | 51.4 | 57.9 | 54.7 | 51.7 |
| 87.5° | 10.7 | 20.5 | 27.6 | 27.9 | 29.1 |
| 90° | 3.1 | 9.3 | 18.8 | 20.4 | 20.4 |
| 92.5° | 38.3 | 135.3 | 267.5 | 128.8 | 89.5 |
| 95° | 87.9 | 313.6 | 945.2 | 483.3 | 334.4 |
| 97.5° | 140.4 | 359.0 | 1482.4 | 1238.4 | 933.9 |
| 100° | 180.6 | 377.1 | 1653.3 | 1729.8 | 1435.0 |
| 102.5° | 219.5 | 402.5 | 1709.8 | 2097.7 | 1855.8 |
| 105° | 287.3 | 447.0 | 1717.6 | 2569.7 | 2411.6 |
| 107.5° | 351.4 | 493.8 | 1644.5 | 2812.3 | 2853.1 |
| 110° | 394.1 | 529.2 | 1577.9 | 2887.6 | 3036.5 |

TEST NUMBER: P565040

CATALOG NUMBER: SQ4-PW1-125U-075D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------------|--------------|---------------|---------------|---------------|
| 112.5° | 439.3 | 564.6 | 1513.8 | 2870.9 | <i>3115.6</i> |
| 115° | <i>507.1</i> | <i>620.7</i> | <i>1430.3</i> | <i>2763.7</i> | <i>3126.0</i> |
| 117.5° | 569.0 | 675.5 | 1365.6 | 2592.5 | <i>2996.0</i> |
| 120° | 609.2 | 712.0 | 1333.0 | 2469.7 | <i>2884.2</i> |
| 122.5° | 644.4 | 746.0 | 1309.1 | 2344.1 | <i>2757.3</i> |
| 125° | 692.4 | 795.3 | 1284.3 | 2170.7 | <i>2554.5</i> |
| 127.5° | 738.6 | 839.9 | 1268.6 | 2017.8 | <i>2360.4</i> |
| 130° | 766.2 | 867.5 | 1262.3 | 1930.2 | <i>2231.1</i> |
| 132.5° | 793.8 | 893.9 | 1256.0 | 1853.0 | <i>2129.3</i> |
| 135° | 833.7 | 930.4 | 1248.2 | 1751.2 | <i>1983.0</i> |
| 137.5° | 871.7 | 964.4 | 1244.1 | 1664.8 | <i>1855.2</i> |
| 140° | 898.1 | 987.1 | 1240.3 | 1611.6 | <i>1783.6</i> |
| 142.5° | 925.7 | 1008.6 | 1237.8 | 1562.0 | <i>1707.0</i> |
| 145° | 964.0 | 1039.2 | 1232.5 | 1497.2 | <i>1607.7</i> |
| 147.5° | 1005.5 | 1070.9 | 1227.2 | 1442.7 | <i>1529.5</i> |
| 150° | 1033.1 | 1089.9 | 1224.6 | 1408.4 | <i>1480.6</i> |
| 152.5° | 1058.2 | 1107.7 | 1223.4 | 1380.5 | <i>1439.1</i> |
| 155° | 1094.3 | 1134.2 | 1221.5 | 1343.4 | <i>1386.4</i> |
| 157.5° | 1126.0 | 1157.1 | 1221.8 | 1317.3 | <i>1346.2</i> |
| 160° | 1146.1 | 1172.2 | 1223.1 | 1302.1 | <i>1323.6</i> |
| 162.5° | 1163.7 | 1184.9 | 1224.3 | 1289.4 | <i>1304.7</i> |
| 165° | 1187.0 | 1200.8 | 1226.2 | 1275.0 | <i>1281.2</i> |
| 167.5° | 1205.8 | 1213.8 | 1227.8 | 1264.0 | <i>1266.4</i> |
| 170° | 1218.4 | 1221.4 | 1227.8 | 1257.6 | <i>1257.6</i> |
| 172.5° | 1225.9 | 1226.5 | 1229.0 | 1251.3 | <i>1251.3</i> |
| 175° | 1234.1 | 1232.5 | 1227.8 | 1245.0 | <i>1241.9</i> |
| 177.5° | 1237.5 | 1235.1 | 1228.7 | 1238.7 | <i>1236.3</i> |
| 180° | 1232.5 | 1232.5 | 1232.5 | 1232.5 | <i>1232.5</i> |

(END OF REPORT)