

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: P565112

Luminaire Tested: **SQ4-PW1-150U-050D-930-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565112
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

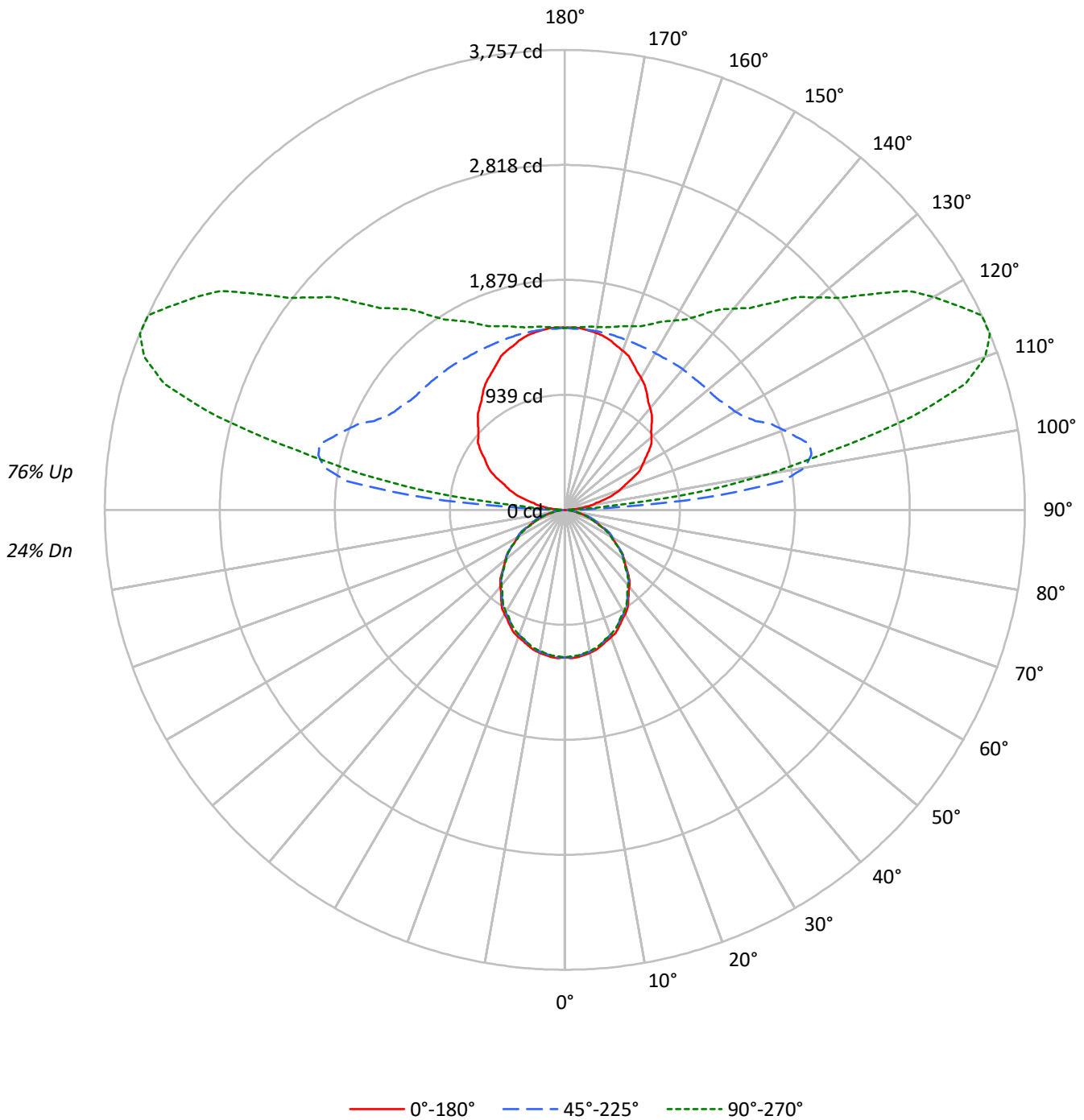
Lumens per Lamp: N/A
Luminaire Lumens: 12658.8 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 111.9
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



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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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 69 | 69 | 69 | 50 | 50 | 50 | 32 | 32 | 32 | 24 |
| 1 | 92 | 88 | 84 | 81 | 82 | 78 | 75 | 72 | 60 | 58 | 57 | 44 | 43 | 42 | 29 | 28 | 27 | 21 |
| 2 | 84 | 77 | 71 | 66 | 74 | 68 | 64 | 59 | 53 | 50 | 47 | 39 | 37 | 35 | 25 | 24 | 23 | 17 |
| 3 | 76 | 67 | 60 | 55 | 68 | 60 | 54 | 50 | 47 | 43 | 39 | 34 | 32 | 29 | 22 | 21 | 20 | 15 |
| 4 | 70 | 60 | 52 | 46 | 62 | 53 | 47 | 42 | 41 | 37 | 33 | 30 | 27 | 25 | 20 | 18 | 17 | 13 |
| 5 | 64 | 53 | 45 | 39 | 57 | 47 | 41 | 36 | 37 | 32 | 29 | 27 | 24 | 22 | 18 | 16 | 15 | 11 |
| 6 | 59 | 47 | 40 | 34 | 52 | 42 | 36 | 31 | 33 | 28 | 25 | 24 | 21 | 19 | 16 | 14 | 13 | 10 |
| 7 | 54 | 43 | 35 | 30 | 48 | 38 | 32 | 27 | 30 | 25 | 22 | 22 | 19 | 17 | 15 | 13 | 11 | 9 |
| 8 | 50 | 38 | 31 | 26 | 45 | 35 | 28 | 24 | 27 | 22 | 19 | 20 | 17 | 15 | 14 | 12 | 10 | 8 |
| 9 | 47 | 35 | 28 | 23 | 41 | 31 | 25 | 21 | 25 | 20 | 17 | 18 | 15 | 13 | 13 | 11 | 9 | 7 |
| 10 | 43 | 32 | 25 | 20 | 39 | 29 | 23 | 19 | 23 | 18 | 15 | 17 | 14 | 12 | 12 | 10 | 8 | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5563 | 5563 | 5563 |
| 5° | 5599 | 5555 | 5531 |
| 10° | 5555 | 5510 | 5480 |
| 15° | 5496 | 5435 | 5415 |
| 20° | 5431 | 5347 | 5336 |
| 25° | 5355 | 5257 | 5241 |
| 30° | 5242 | 5162 | 5128 |
| 35° | 5093 | 5021 | 4991 |
| 40° | 4934 | 4857 | 4837 |
| 45° | 4742 | 4680 | 4659 |
| 50° | 4545 | 4507 | 4476 |
| 55° | 4333 | 4333 | 4264 |
| 60° | 4069 | 4147 | 4000 |
| 65° | 3723 | 3909 | 3631 |
| 70° | 3282 | 3597 | 3197 |
| 75° | 2804 | 3219 | 2727 |
| 80° | 2173 | 2710 | 2202 |
| 85° | 1408 | 2080 | 1858 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 113.6 | 0.9 |
| 10°-20° | 320.6 | 2.5 |
| 20°-30° | 475.6 | 3.8 |
| 30°-40° | 556.5 | 4.4 |
| 40°-50° | 554.0 | 4.4 |
| 50°-60° | 478.4 | 3.8 |
| 60°-70° | 344.4 | 2.7 |
| 70°-80° | 180.6 | 1.4 |
| 80°-90° | 47.9 | 0.4 |
| 90°-100° | 691.1 | 5.5 |
| 100°-110° | 1868.5 | 14.8 |
| 110°-120° | 1964.4 | 15.5 |
| 120°-130° | 1595.6 | 12.6 |
| 130°-140° | 1251.7 | 9.9 |
| 140°-150° | 960.7 | 7.6 |
| 150°-160° | 690.9 | 5.5 |
| 160°-170° | 422.1 | 3.3 |
| 170°-180° | 142.3 | 1.1 |
| 0°-30° | 909.8 | 7.2 |
| 0°-40° | 1466.3 | 11.6 |
| 0°-60° | 2498.8 | 19.7 |
| 0°-90° | 3071.6 | 24.3 |
| 90°-120° | 4524.0 | 35.7 |
| 90°-150° | 8331.9 | 65.8 |
| 90°-180° | 9587.0 | 75.7 |
| 0°-180° | 12658.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1206 | 1206 | 1206 | 1206 | 1206 | |
| 5° | 1209 | 1196 | 1200 | 1196 | 1194 | 115 |
| 15° | 1151 | 1136 | 1138 | 1136 | 1134 | 324 |
| 25° | 1052 | 1034 | 1033 | 1026 | 1030 | 484 |
| 35° | 904 | 892 | 892 | 883 | 886 | 565 |
| 45° | 727 | 721 | 717 | 715 | 714 | 561 |
| 55° | 539 | 538 | 539 | 531 | 530 | 481 |
| 65° | 341 | 352 | 358 | 344 | 333 | 338 |
| 75° | 157 | 172 | 181 | 169 | 153 | 169 |
| 85° | 27 | 35 | 39 | 37 | 35 | 35 |
| 90° | 3 | 10 | 21 | 22 | 21 | 8 |
| 95° | 107 | 376 | 1149 | 595 | 354 | 112 |
| 105° | 347 | 537 | 2073 | 3058 | 2932 | 366 |
| 115° | 611 | 748 | 1719 | 3328 | 3757 | 604 |
| 125° | 837 | 959 | 1549 | 2615 | 3072 | 746 |
| 135° | 1004 | 1122 | 1508 | 2111 | 2390 | 776 |
| 145° | 1167 | 1254 | 1487 | 1807 | 1945 | 730 |
| 155° | 1317 | 1369 | 1474 | 1621 | 1674 | 608 |
| 165° | 1434 | 1448 | 1481 | 1538 | 1546 | 404 |
| 175° | 1489 | 1487 | 1482 | 1501 | 1498 | 141 |
| 180° | 1487 | 1487 | 1487 | 1487 | 1487 | |

TEST NUMBER: P565112

CATALOG NUMBER: SQ4-PW1-150U-050D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 |
| 2.5° | 1212.8 | 1202.9 | 1206.0 | 1203.4 | 1197.5 |
| 5° | 1209.2 | 1195.7 | 1199.7 | 1196.4 | 1194.4 |
| 7.5° | 1196.9 | 1184.4 | 1187.3 | 1183.9 | 1182.7 |
| 10° | 1185.9 | 1173.4 | 1176.3 | 1172.0 | 1169.9 |
| 12.5° | 1173.1 | 1159.8 | 1162.7 | 1158.4 | 1157.2 |
| 15° | 1150.8 | 1136.2 | 1138.0 | 1135.9 | 1133.8 |
| 17.5° | 1124.9 | 1110.1 | 1110.4 | 1107.0 | 1106.6 |
| 20° | 1106.2 | 1090.6 | 1089.2 | 1085.0 | 1087.0 |
| 22.5° | 1085.8 | 1069.3 | 1067.9 | 1062.0 | 1064.9 |
| 25° | 1052.0 | 1034.3 | 1032.8 | 1026.5 | 1029.7 |
| 27.5° | 1012.9 | 995.4 | 995.4 | 986.6 | 989.9 |
| 30° | 984.0 | 967.3 | 969.1 | 958.6 | 962.7 |
| 32.5° | 953.4 | 938.4 | 939.3 | 928.8 | 933.0 |
| 35° | 904.3 | 891.8 | 891.5 | 883.1 | 886.2 |
| 37.5° | 854.1 | 843.1 | 841.4 | 836.5 | 837.3 |
| 40° | 819.3 | 809.9 | 806.5 | 803.3 | 803.3 |
| 42.5° | 782.7 | 774.2 | 770.8 | 768.5 | 767.6 |
| 45° | 726.8 | 720.6 | 717.3 | 715.1 | 714.1 |
| 47.5° | 671.6 | 665.7 | 662.8 | 661.3 | 660.3 |
| 50° | 633.3 | 629.2 | 628.0 | 624.8 | 623.7 |
| 52.5° | 595.1 | 592.6 | 591.4 | 587.4 | 586.3 |
| 55° | 538.7 | 537.7 | 538.7 | 531.3 | 530.2 |
| 57.5° | 480.1 | 481.7 | 485.2 | 475.1 | 472.6 |
| 60° | 441.0 | 445.1 | 449.5 | 437.7 | 433.5 |
| 62.5° | 401.0 | 407.7 | 413.8 | 400.3 | 394.4 |
| 65° | 341.1 | 351.5 | 358.1 | 344.0 | 332.6 |
| 67.5° | 283.3 | 296.2 | 304.1 | 288.9 | 276.1 |
| 70° | 243.3 | 257.9 | 266.7 | 251.5 | 237.0 |
| 72.5° | 208.5 | 224.7 | 231.9 | 217.5 | 203.0 |
| 75° | 157.3 | 171.8 | 180.6 | 168.6 | 153.0 |
| 77.5° | 111.6 | 125.3 | 132.6 | 122.1 | 109.2 |
| 80° | 81.8 | 96.4 | 102.0 | 93.3 | 82.9 |
| 82.5° | 58.0 | 70.1 | 74.0 | 68.7 | 61.6 |
| 85° | 26.6 | 34.9 | 39.3 | 37.1 | 35.1 |
| 87.5° | 7.4 | 14.5 | 20.3 | 20.6 | 21.2 |
| 90° | 3.2 | 9.5 | 20.8 | 22.4 | 20.8 |
| 92.5° | 45.5 | 165.7 | 326.8 | 141.9 | 102.8 |
| 95° | 107.2 | 376.4 | 1149.3 | 594.8 | 353.7 |
| 97.5° | 172.2 | 431.7 | 1791.4 | 1482.5 | 1088.8 |
| 100° | 220.9 | 454.1 | 1991.2 | 2076.6 | 1679.1 |
| 102.5° | 265.7 | 485.1 | 2061.6 | 2527.0 | 2229.7 |
| 105° | 347.3 | 536.7 | 2072.8 | 3057.6 | 2932.4 |
| 107.5° | 422.9 | 595.7 | 1982.2 | 3388.5 | 3430.2 |
| 110° | 481.8 | 638.3 | 1901.6 | 3477.4 | 3654.3 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 534.3 | 680.8 | 1827.3 | 3459.6 | 3756.7 |
| 115° | 611.4 | 747.6 | 1719.1 | 3327.9 | 3756.7 |
| 117.5° | 687.0 | 814.7 | 1647.7 | 3126.5 | 3612.6 |
| 120° | 733.1 | 858.3 | 1605.4 | 2982.1 | 3478.2 |
| 122.5° | 776.6 | 899.3 | 1579.8 | 2827.2 | 3327.1 |
| 125° | 837.1 | 959.2 | 1549.4 | 2614.6 | 3071.6 |
| 127.5° | 892.8 | 1012.7 | 1531.5 | 2441.1 | 2843.0 |
| 130° | 923.6 | 1047.2 | 1523.8 | 2334.0 | 2697.1 |
| 132.5° | 955.6 | 1078.0 | 1516.1 | 2237.3 | 2571.6 |
| 135° | 1003.6 | 1122.5 | 1507.8 | 2111.2 | 2389.7 |
| 137.5° | 1051.9 | 1164.3 | 1500.8 | 2008.8 | 2235.8 |
| 140° | 1085.2 | 1190.1 | 1498.2 | 1943.0 | 2144.9 |
| 142.5° | 1117.2 | 1215.8 | 1493.1 | 1883.5 | 2060.3 |
| 145° | 1166.9 | 1254.5 | 1487.0 | 1807.0 | 1944.8 |
| 147.5° | 1212.0 | 1289.6 | 1479.9 | 1737.8 | 1843.6 |
| 150° | 1245.3 | 1314.2 | 1477.4 | 1700.2 | 1784.7 |
| 152.5° | 1276.0 | 1336.1 | 1476.1 | 1665.3 | 1734.8 |
| 155° | 1317.3 | 1369.0 | 1474.2 | 1621.1 | 1674.3 |
| 157.5° | 1360.2 | 1396.2 | 1474.5 | 1590.2 | 1625.3 |
| 160° | 1384.5 | 1414.3 | 1475.8 | 1570.8 | 1595.8 |
| 162.5° | 1403.8 | 1428.5 | 1477.1 | 1555.3 | 1574.1 |
| 165° | 1434.2 | 1448.3 | 1480.6 | 1538.4 | 1546.2 |
| 167.5° | 1455.0 | 1464.7 | 1480.9 | 1523.9 | 1527.6 |
| 170° | 1467.8 | 1472.5 | 1482.2 | 1517.4 | 1517.4 |
| 172.5° | 1478.0 | 1479.0 | 1482.2 | 1509.7 | 1508.4 |
| 175° | 1488.6 | 1487.0 | 1482.2 | 1501.3 | 1498.2 |
| 177.5° | 1492.1 | 1488.4 | 1481.9 | 1494.6 | 1490.8 |
| 180° | 1487.0 | 1487.0 | 1487.0 | 1487.0 | 1487.0 |

(END OF REPORT)