

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: P564765

Luminaire Tested: **SQ4-PW1-075U-100D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564765
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-PW1-075U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20312.2 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

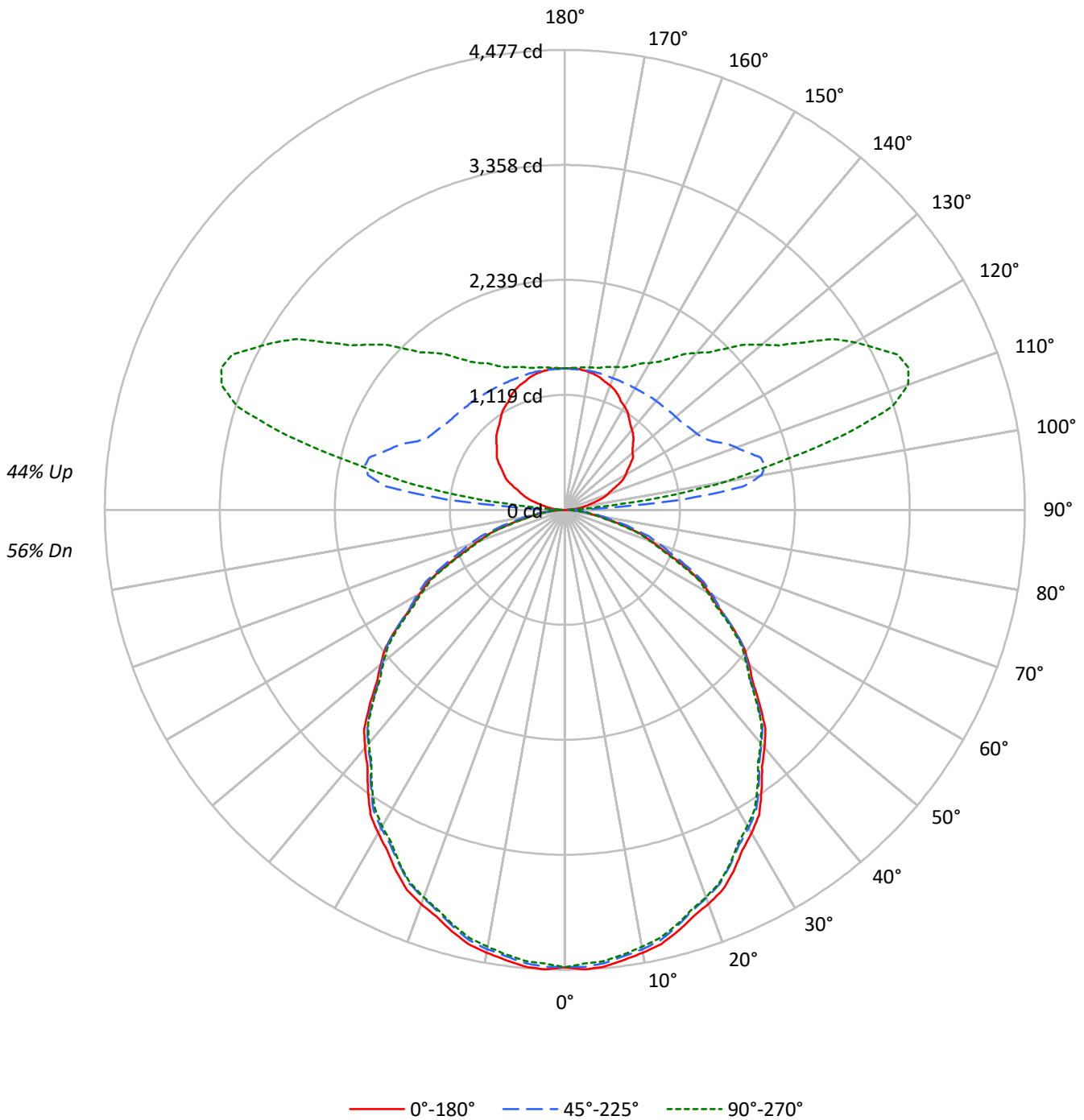
Input Watts (W): 162.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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CATALOG NUMBER: SQ4-PW1-075U-100D-835-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P564765

CATALOG NUMBER: SQ4-PW1-075U-100D-835-1D-UNV-STD-W-12

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|--|--|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 109 | 109 | 109 | 109 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 73 | 73 | 73 | 61 | 61 | 61 | 56 | | |
| 1 | 99 | 95 | 91 | 88 | 92 | 88 | 85 | 82 | 76 | 74 | 71 | 65 | 63 | 61 | 55 | 53 | 52 | 47 | | |
| 2 | 90 | 83 | 77 | 72 | 84 | 77 | 72 | 67 | 67 | 63 | 59 | 57 | 54 | 51 | 48 | 46 | 44 | 40 | | |
| 3 | 83 | 73 | 66 | 60 | 76 | 68 | 62 | 56 | 59 | 54 | 50 | 51 | 47 | 44 | 43 | 40 | 38 | 34 | | |
| 4 | 76 | 65 | 57 | 51 | 70 | 60 | 53 | 48 | 52 | 47 | 43 | 45 | 41 | 37 | 38 | 35 | 32 | 29 | | |
| 5 | 69 | 58 | 49 | 43 | 64 | 54 | 47 | 41 | 47 | 41 | 37 | 40 | 36 | 32 | 34 | 31 | 28 | 25 | | |
| 6 | 64 | 52 | 44 | 38 | 59 | 49 | 41 | 36 | 42 | 37 | 32 | 37 | 32 | 28 | 31 | 28 | 25 | 22 | | |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 37 | 32 | 38 | 33 | 28 | 33 | 29 | 25 | 29 | 25 | 22 | 20 | | |
| 8 | 55 | 43 | 35 | 29 | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 30 | 26 | 23 | 26 | 23 | 20 | 18 | | |
| 9 | 51 | 39 | 31 | 26 | 48 | 37 | 30 | 25 | 32 | 27 | 23 | 28 | 24 | 20 | 24 | 21 | 18 | 16 | | |
| 10 | 48 | 36 | 28 | 24 | 44 | 34 | 27 | 22 | 30 | 24 | 20 | 26 | 21 | 18 | 22 | 19 | 16 | 14 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13692 | 13692 | 13692 |
| 5° | 13781 | 13672 | 13611 |
| 10° | 13671 | 13560 | 13487 |
| 15° | 13526 | 13376 | 13326 |
| 20° | 13364 | 13159 | 13133 |
| 25° | 13178 | 12938 | 12898 |
| 30° | 12899 | 12704 | 12620 |
| 35° | 12532 | 12356 | 12282 |
| 40° | 12142 | 11952 | 11905 |
| 45° | 11669 | 11516 | 11465 |
| 50° | 11186 | 11091 | 11017 |
| 55° | 10663 | 10663 | 10495 |
| 60° | 10013 | 10206 | 9844 |
| 65° | 9162 | 9619 | 8935 |
| 70° | 8077 | 8853 | 7865 |
| 75° | 6898 | 7923 | 6712 |
| 80° | 5349 | 6670 | 5419 |
| 85° | 3462 | 5120 | 4566 |



TEST NUMBER: P564765

CATALOG NUMBER: SQ4-PW1-075U-100D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 419.2 | 2.1 |
| 10°-20° | 1183.6 | 5.8 |
| 20°-30° | 1755.7 | 8.6 |
| 30°-40° | 2054.3 | 10.1 |
| 40°-50° | 2045.2 | 10.1 |
| 50°-60° | 1766.1 | 8.7 |
| 60°-70° | 1271.3 | 6.3 |
| 70°-80° | 666.6 | 3.3 |
| 80°-90° | 168.8 | 0.8 |
| 90°-100° | 650.2 | 3.2 |
| 100°-110° | 1789.0 | 8.8 |
| 110°-120° | 1846.5 | 9.1 |
| 120°-130° | 1479.4 | 7.3 |
| 130°-140° | 1162.0 | 5.7 |
| 140°-150° | 890.5 | 4.4 |
| 150°-160° | 640.2 | 3.2 |
| 160°-170° | 391.5 | 1.9 |
| 170°-180° | 132.0 | 0.6 |
| 0°-30° | 3358.6 | 16.5 |
| 0°-40° | 5412.9 | 26.6 |
| 0°-60° | 9224.2 | 45.4 |
| 0°-90° | 11330.9 | 55.8 |
| 90°-120° | 4285.7 | 21.1 |
| 90°-150° | 7817.7 | 38.5 |
| 90°-180° | 8981.0 | 44.2 |
| 0°-180° | 20312.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4452 | 4452 | 4452 | 4452 | 4452 | |
| 5° | 4464 | 4414 | 4429 | 4417 | 4409 | 423 |
| 15° | 4248 | 4194 | 4201 | 4193 | 4185 | 1197 |
| 25° | 3883 | 3818 | 3813 | 3790 | 3801 | 1786 |
| 35° | 3338 | 3292 | 3291 | 3260 | 3271 | 2087 |
| 45° | 2683 | 2660 | 2648 | 2640 | 2636 | 2070 |
| 55° | 1989 | 1985 | 1989 | 1961 | 1957 | 1774 |
| 65° | 1259 | 1298 | 1322 | 1270 | 1228 | 1248 |
| 75° | 580 | 634 | 667 | 622 | 565 | 622 |
| 85° | 98 | 129 | 145 | 137 | 129 | 129 |
| 90° | 3 | 12 | 20 | 26 | 26 | 10 |
| 95° | 97 | 355 | 1150 | 492 | 314 | 102 |
| 105° | 320 | 492 | 1971 | 3002 | 2801 | 337 |
| 115° | 566 | 690 | 1581 | 3148 | 3573 | 559 |
| 125° | 780 | 889 | 1434 | 2426 | 2842 | 696 |
| 135° | 942 | 1045 | 1393 | 1962 | 2220 | 727 |
| 145° | 1088 | 1163 | 1373 | 1672 | 1801 | 682 |
| 155° | 1232 | 1272 | 1364 | 1503 | 1546 | 566 |
| 165° | 1332 | 1349 | 1370 | 1426 | 1434 | 375 |
| 175° | 1379 | 1382 | 1373 | 1390 | 1387 | 131 |
| 180° | 1379 | 1379 | 1379 | 1379 | 1379 | |

TEST NUMBER: P564765

CATALOG NUMBER: SQ4-PW1-075U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4452.1 | 4452.1 | 4452.1 | 4452.1 | 4452.1 |
| 2.5° | 4477.2 | 4440.4 | 4452.1 | 4442.2 | 4420.7 |
| 5° | 4463.9 | 4414.0 | 4428.6 | 4416.7 | 4409.0 |
| 7.5° | 4418.4 | 4372.4 | 4383.1 | 4370.4 | 4365.8 |
| 10° | 4377.6 | 4331.6 | 4342.3 | 4326.4 | 4318.8 |
| 12.5° | 4330.5 | 4281.4 | 4292.1 | 4276.3 | 4271.7 |
| 15° | 4248.2 | 4194.5 | 4201.1 | 4193.1 | 4185.4 |
| 17.5° | 4152.4 | 4098.0 | 4099.1 | 4086.5 | 4085.0 |
| 20° | 4083.4 | 4025.9 | 4020.6 | 4005.1 | 4012.8 |
| 22.5° | 4008.1 | 3947.5 | 3942.2 | 3920.5 | 3931.2 |
| 25° | 3883.4 | 3818.2 | 3812.7 | 3789.5 | 3801.0 |
| 27.5° | 3739.0 | 3674.6 | 3674.7 | 3642.0 | 3654.3 |
| 30° | 3632.3 | 3570.9 | 3577.4 | 3538.5 | 3553.9 |
| 32.5° | 3519.3 | 3464.1 | 3467.6 | 3428.7 | 3444.0 |
| 35° | 3338.1 | 3292.1 | 3291.0 | 3259.9 | 3271.4 |
| 37.5° | 3153.0 | 3112.3 | 3105.9 | 3087.9 | 3091.0 |
| 40° | 3024.3 | 2989.8 | 2977.2 | 2965.5 | 2965.5 |
| 42.5° | 2889.4 | 2857.9 | 2845.4 | 2836.7 | 2833.7 |
| 45° | 2683.0 | 2660.0 | 2647.7 | 2639.8 | 2636.0 |
| 47.5° | 2479.1 | 2457.6 | 2446.9 | 2441.3 | 2437.5 |
| 50° | 2337.9 | 2322.5 | 2318.2 | 2306.4 | 2302.6 |
| 52.5° | 2196.6 | 2187.4 | 2183.3 | 2168.3 | 2164.5 |
| 55° | 1988.7 | 1984.9 | 1988.7 | 1961.2 | 1957.4 |
| 57.5° | 1772.2 | 1778.4 | 1791.1 | 1754.0 | 1744.8 |
| 60° | 1627.9 | 1643.2 | 1659.3 | 1615.8 | 1600.4 |
| 62.5° | 1480.4 | 1504.9 | 1527.5 | 1477.5 | 1456.1 |
| 65° | 1259.1 | 1297.5 | 1321.9 | 1270.0 | 1227.8 |
| 67.5° | 1045.8 | 1093.3 | 1122.6 | 1066.6 | 1019.1 |
| 70° | 898.3 | 952.0 | 984.6 | 928.4 | 874.7 |
| 72.5° | 769.6 | 829.4 | 855.9 | 802.9 | 749.2 |
| 75° | 580.5 | 634.2 | 666.8 | 622.4 | 564.9 |
| 77.5° | 411.9 | 462.5 | 489.5 | 450.8 | 403.2 |
| 80° | 302.0 | 355.7 | 376.6 | 344.3 | 306.0 |
| 82.5° | 214.2 | 258.7 | 273.0 | 253.6 | 227.5 |
| 85° | 98.1 | 128.7 | 145.1 | 137.1 | 129.4 |
| 87.5° | 25.7 | 48.9 | 63.7 | 65.0 | 68.0 |
| 90° | 2.9 | 11.5 | 20.5 | 26.4 | 26.4 |
| 92.5° | 40.5 | 173.0 | 299.8 | 115.1 | 94.5 |
| 95° | 96.8 | 354.9 | 1149.9 | 491.7 | 313.9 |
| 97.5° | 157.8 | 393.6 | 1754.7 | 1352.0 | 953.9 |
| 100° | 202.4 | 417.5 | 1944.8 | 1963.0 | 1601.6 |
| 102.5° | 244.6 | 446.0 | 1994.1 | 2435.3 | 2103.8 |
| 105° | 319.7 | 491.8 | 1971.2 | 3002.1 | 2801.3 |
| 107.5° | 391.3 | 548.5 | 1859.1 | 3279.6 | 3339.3 |
| 110° | 442.9 | 586.3 | 1774.6 | 3348.7 | 3555.2 |

TEST NUMBER: P564765

CATALOG NUMBER: SQ4-PW1-075U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 489.9 | 628.7 | 1690.2 | 3304.2 | 3618.5 |
| 115° | 566.1 | 689.5 | 1581.0 | 3148.3 | 3572.8 |
| 117.5° | 638.9 | 752.4 | 1511.8 | 2929.5 | 3409.7 |
| 120° | 683.5 | 792.4 | 1481.3 | 2765.6 | 3261.8 |
| 122.5° | 723.4 | 832.3 | 1460.2 | 2621.9 | 3092.9 |
| 125° | 780.3 | 889.2 | 1434.4 | 2426.5 | 2842.4 |
| 127.5° | 834.2 | 938.1 | 1417.4 | 2263.4 | 2628.2 |
| 130° | 862.4 | 968.5 | 1408.0 | 2166.5 | 2499.2 |
| 132.5° | 895.2 | 1001.4 | 1400.9 | 2081.3 | 2381.8 |
| 135° | 941.6 | 1044.8 | 1393.3 | 1962.4 | 2220.5 |
| 137.5° | 985.0 | 1080.8 | 1386.9 | 1866.3 | 2079.1 |
| 140° | 1017.9 | 1106.8 | 1384.5 | 1802.5 | 1994.6 |
| 142.5° | 1046.0 | 1128.0 | 1379.8 | 1745.5 | 1910.2 |
| 145° | 1088.3 | 1162.8 | 1372.8 | 1672.0 | 1801.0 |
| 147.5° | 1133.4 | 1197.7 | 1369.3 | 1606.9 | 1710.1 |
| 150° | 1161.6 | 1218.9 | 1366.9 | 1571.1 | 1651.4 |
| 152.5° | 1187.4 | 1240.2 | 1364.6 | 1540.3 | 1606.9 |
| 155° | 1232.0 | 1272.1 | 1364.0 | 1502.8 | 1545.8 |
| 157.5° | 1264.3 | 1296.9 | 1364.0 | 1472.0 | 1501.8 |
| 160° | 1287.7 | 1313.5 | 1364.0 | 1455.4 | 1478.4 |
| 162.5° | 1306.5 | 1327.7 | 1366.3 | 1441.3 | 1459.6 |
| 165° | 1331.7 | 1348.9 | 1369.8 | 1425.8 | 1434.4 |
| 167.5° | 1349.3 | 1362.5 | 1372.8 | 1412.7 | 1415.0 |
| 170° | 1361.0 | 1369.7 | 1372.8 | 1408.0 | 1408.0 |
| 172.5° | 1370.4 | 1374.5 | 1372.8 | 1400.9 | 1398.6 |
| 175° | 1378.6 | 1381.5 | 1372.8 | 1390.3 | 1387.4 |
| 177.5° | 1381.0 | 1381.0 | 1371.6 | 1385.6 | 1381.0 |
| 180° | 1378.6 | 1378.6 | 1378.6 | 1378.6 | 1378.6 |

(END OF REPORT)