

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: P564636

Luminaire Tested: **SQ4-PW1-050U-050D-935-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564636  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-050D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

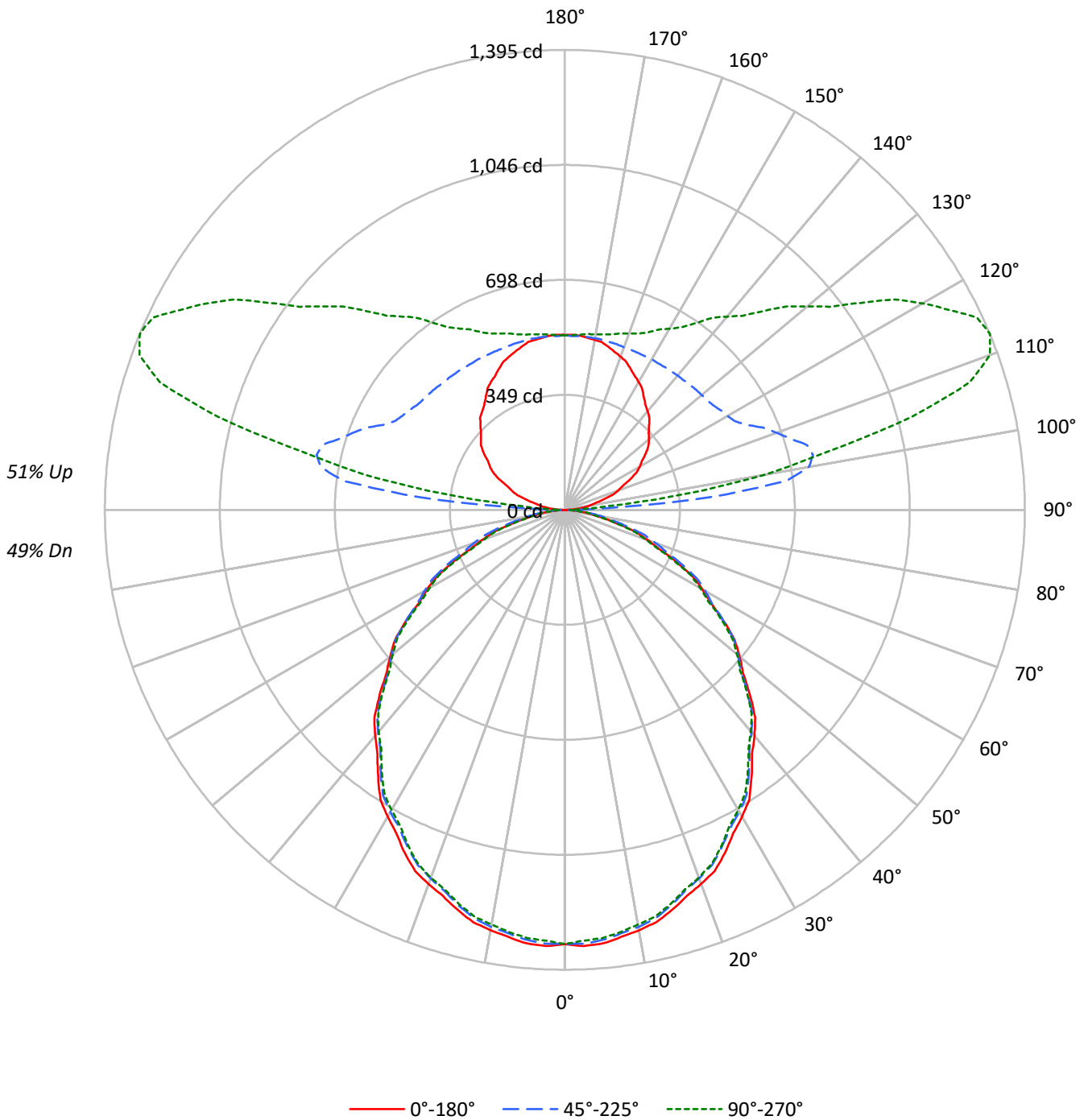
Lumens per Lamp: N/A  
Luminaire Lumens: 6814.1 lumens  
Efficiency: N/A  
Efficacy: 115.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.9  
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: P564636  
CATALOG NUMBER: SQ4-PW1-050U-050D-935-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P564636

CATALOG NUMBER: SQ4-PW1-050U-050D-935-1D-UNV-STD-W-8

**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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 55 | 55 | 55 | 49 |
| 1   | 98  | 93  | 90  | 86  | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 42 |
| 2   | 89  | 82  | 76  | 70  | 82 | 75 | 70 | 66 | 64 | 60 | 57 | 53 | 50 | 48 | 43 | 41 | 40 | 35 |
| 3   | 81  | 72  | 65  | 59  | 75 | 66 | 60 | 55 | 56 | 52 | 48 | 47 | 44 | 41 | 38 | 36 | 34 | 30 |
| 4   | 74  | 64  | 56  | 50  | 68 | 59 | 52 | 47 | 50 | 45 | 41 | 42 | 38 | 35 | 34 | 32 | 29 | 26 |
| 5   | 68  | 57  | 49  | 43  | 63 | 53 | 45 | 40 | 45 | 39 | 35 | 38 | 33 | 30 | 31 | 28 | 25 | 22 |
| 6   | 63  | 51  | 43  | 37  | 58 | 47 | 40 | 35 | 40 | 35 | 31 | 34 | 30 | 26 | 28 | 25 | 22 | 19 |
| 7   | 58  | 46  | 38  | 32  | 53 | 43 | 36 | 31 | 37 | 31 | 27 | 31 | 27 | 23 | 26 | 22 | 20 | 17 |
| 8   | 54  | 42  | 34  | 29  | 50 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 24 | 20 | 18 | 15 |
| 9   | 50  | 38  | 31  | 26  | 46 | 35 | 29 | 24 | 31 | 25 | 21 | 26 | 22 | 19 | 22 | 19 | 16 | 14 |
| 10  | 47  | 35  | 28  | 23  | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 | 13 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6075 | 6075 | 6075 |
| 5°  | 6114 | 6066 | 6039 |
| 10° | 6066 | 6016 | 5984 |
| 15° | 6001 | 5934 | 5912 |
| 20° | 5929 | 5838 | 5827 |
| 25° | 5847 | 5740 | 5723 |
| 30° | 5723 | 5637 | 5599 |
| 35° | 5561 | 5482 | 5450 |
| 40° | 5387 | 5303 | 5282 |
| 45° | 5177 | 5110 | 5087 |
| 50° | 4963 | 4921 | 4888 |
| 55° | 4732 | 4732 | 4657 |
| 60° | 4442 | 4528 | 4368 |
| 65° | 4065 | 4268 | 3965 |
| 70° | 3584 | 3928 | 3489 |
| 75° | 3060 | 3515 | 2978 |
| 80° | 2372 | 2959 | 2404 |
| 85° | 1535 | 2271 | 2027 |



TEST NUMBER: P564636

CATALOG NUMBER: SQ4-PW1-050U-050D-935-1D-UNV-STD-W-8

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 124.0  | 1.8       |
| 10°-20°   | 350.1  | 5.1       |
| 20°-30°   | 519.3  | 7.6       |
| 30°-40°   | 607.7  | 8.9       |
| 40°-50°   | 604.9  | 8.9       |
| 50°-60°   | 522.4  | 7.7       |
| 60°-70°   | 376.0  | 5.5       |
| 70°-80°   | 197.2  | 2.9       |
| 80°-90°   | 50.9   | 0.7       |
| 90°-100°  | 254.5  | 3.7       |
| 100°-110° | 691.4  | 10.1      |
| 110°-120° | 710.8  | 10.4      |
| 120°-130° | 568.3  | 8.3       |
| 130°-140° | 446.6  | 6.6       |
| 140°-150° | 342.4  | 5.0       |
| 150°-160° | 246.2  | 3.6       |
| 160°-170° | 150.6  | 2.2       |
| 170°-180° | 50.7   | 0.7       |
| 0°-30°    | 993.4  | 14.6      |
| 0°-40°    | 1601.1 | 23.5      |
| 0°-60°    | 2728.4 | 40.0      |
| 0°-90°    | 3352.6 | 49.2      |
| 90°-120°  | 1656.7 | 24.3      |
| 90°-150°  | 3014.0 | 44.2      |
| 90°-180°  | 3462.0 | 50.8      |
| 0°-180°   | 6814.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1317 | 1317  | 1317 | 1317  | 1317 |      |
| 5°   | 1320 | 1306  | 1310 | 1306  | 1304 | 125  |
| 15°  | 1257 | 1241  | 1243 | 1240  | 1238 | 354  |
| 25°  | 1149 | 1129  | 1128 | 1121  | 1124 | 528  |
| 35°  | 987  | 974   | 974  | 964   | 968  | 617  |
| 45°  | 794  | 787   | 783  | 781   | 780  | 612  |
| 55°  | 588  | 587   | 588  | 580   | 579  | 525  |
| 65°  | 372  | 384   | 391  | 376   | 363  | 369  |
| 75°  | 172  | 188   | 197  | 184   | 167  | 184  |
| 85°  | 29   | 38    | 43   | 41    | 38   | 38   |
| 90°  | 2    | 7     | 12   | 15    | 15   | 4    |
| 95°  | 38   | 139   | 443  | 193   | 130  | 40   |
| 105° | 123  | 191   | 760  | 1158  | 1089 | 130  |
| 115° | 218  | 265   | 609  | 1211  | 1379 | 215  |
| 125° | 300  | 342   | 551  | 928   | 1094 | 267  |
| 135° | 361  | 401   | 535  | 756   | 852  | 279  |
| 145° | 418  | 448   | 528  | 642   | 690  | 262  |
| 155° | 472  | 489   | 525  | 577   | 593  | 218  |
| 165° | 511  | 518   | 527  | 549   | 551  | 144  |
| 175° | 530  | 532   | 528  | 535   | 534  | 50   |
| 180° | 530  | 530   | 530  | 530   | 530  |      |



TEST NUMBER: P564636

CATALOG NUMBER: SQ4-PW1-050U-050D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1316.9 | 1316.9 | 1316.9 | 1316.9 | 1316.9 |
| 2.5°   | 1324.3 | 1313.4 | 1316.9 | 1314.0 | 1307.6 |
| 5°     | 1320.4 | 1305.6 | 1309.9 | 1306.4 | 1304.1 |
| 7.5°   | 1306.9 | 1293.3 | 1296.5 | 1292.7 | 1291.4 |
| 10°    | 1294.9 | 1281.2 | 1284.4 | 1279.7 | 1277.4 |
| 12.5°  | 1280.9 | 1266.4 | 1269.6 | 1264.9 | 1263.5 |
| 15°    | 1256.6 | 1240.7 | 1242.6 | 1240.3 | 1238.0 |
| 17.5°  | 1228.3 | 1212.1 | 1212.5 | 1208.7 | 1208.3 |
| 20°    | 1207.8 | 1190.8 | 1189.3 | 1184.7 | 1186.9 |
| 22.5°  | 1185.6 | 1167.6 | 1166.1 | 1159.6 | 1162.8 |
| 25°    | 1148.7 | 1129.4 | 1127.8 | 1120.9 | 1124.3 |
| 27.5°  | 1106.0 | 1086.9 | 1086.9 | 1077.3 | 1080.9 |
| 30°    | 1074.4 | 1056.3 | 1058.2 | 1046.7 | 1051.2 |
| 32.5°  | 1041.0 | 1024.6 | 1025.7 | 1014.2 | 1018.7 |
| 35°    | 987.4  | 973.8  | 973.5  | 964.3  | 967.7  |
| 37.5°  | 932.6  | 920.6  | 918.7  | 913.4  | 914.3  |
| 40°    | 894.6  | 884.4  | 880.6  | 877.2  | 877.2  |
| 42.5°  | 854.6  | 845.3  | 841.7  | 839.1  | 838.2  |
| 45°    | 793.6  | 786.8  | 783.2  | 780.8  | 779.7  |
| 47.5°  | 733.3  | 726.9  | 723.8  | 722.1  | 721.0  |
| 50°    | 691.5  | 687.0  | 685.7  | 682.2  | 681.1  |
| 52.5°  | 649.7  | 647.0  | 645.8  | 641.4  | 640.2  |
| 55°    | 588.3  | 587.1  | 588.3  | 580.1  | 579.0  |
| 57.5°  | 524.2  | 526.0  | 529.8  | 518.8  | 516.1  |
| 60°    | 481.5  | 486.0  | 490.8  | 477.9  | 473.4  |
| 62.5°  | 437.9  | 445.1  | 451.8  | 437.0  | 430.7  |
| 65°    | 372.4  | 383.8  | 391.0  | 375.6  | 363.2  |
| 67.5°  | 309.3  | 323.4  | 332.1  | 315.5  | 301.4  |
| 70°    | 265.7  | 281.6  | 291.2  | 274.6  | 258.7  |
| 72.5°  | 227.6  | 245.3  | 253.2  | 237.5  | 221.6  |
| 75°    | 171.7  | 187.6  | 197.2  | 184.1  | 167.1  |
| 77.5°  | 121.8  | 136.8  | 144.8  | 133.3  | 119.3  |
| 80°    | 89.3   | 105.2  | 111.4  | 101.8  | 90.5   |
| 82.5°  | 63.4   | 76.5   | 80.8   | 75.0   | 67.3   |
| 85°    | 29.0   | 38.1   | 42.9   | 40.6   | 38.3   |
| 87.5°  | 7.8    | 15.1   | 20.0   | 20.7   | 21.6   |
| 90°    | 1.7    | 6.7    | 11.9   | 15.3   | 15.3   |
| 92.5°  | 15.3   | 69.7   | 121.0  | 52.0   | 44.0   |
| 95°    | 37.5   | 139.2  | 443.2  | 192.9  | 129.6  |
| 97.5°  | 62.1   | 153.7  | 679.5  | 528.6  | 371.3  |
| 100°   | 78.4   | 163.4  | 751.8  | 762.1  | 615.4  |
| 102.5° | 94.8   | 173.1  | 770.9  | 942.5  | 813.1  |
| 105°   | 122.7  | 191.1  | 760.3  | 1157.6 | 1089.3 |
| 107.5° | 151.7  | 212.1  | 716.3  | 1268.7 | 1287.7 |
| 110°   | 172.2  | 227.2  | 683.6  | 1290.6 | 1372.3 |



TEST NUMBER: P564636

CATALOG NUMBER: SQ4-PW1-050U-050D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 189.9 | 242.2 | 650.8 | 1272.4 | 1395.4 |
| 115°   | 218.2 | 264.9 | 608.6 | 1210.7 | 1379.1 |
| 117.5° | 244.8 | 289.5 | 581.6 | 1123.3 | 1312.9 |
| 120°   | 262.5 | 305.9 | 569.4 | 1064.6 | 1252.9 |
| 122.5° | 277.5 | 320.9 | 561.2 | 1005.8 | 1187.5 |
| 125°   | 300.0 | 341.7 | 550.6 | 927.7  | 1094.4 |
| 127.5° | 320.1 | 361.5 | 544.8 | 868.5  | 1011.6 |
| 130°   | 332.4 | 372.4 | 542.1 | 831.4  | 959.7  |
| 132.5° | 344.7 | 384.7 | 539.4 | 799.7  | 913.4  |
| 135°   | 361.4 | 401.4 | 535.3 | 755.7  | 852.3  |
| 137.5° | 379.5 | 415.8 | 533.2 | 716.8  | 798.1  |
| 140°   | 390.4 | 425.4 | 531.9 | 692.1  | 765.4  |
| 142.5° | 401.3 | 433.6 | 530.5 | 672.7  | 734.0  |
| 145°   | 417.6 | 447.6 | 528.4 | 642.1  | 690.4  |
| 147.5° | 436.1 | 461.7 | 526.7 | 618.0  | 656.0  |
| 150°   | 448.3 | 470.0 | 526.7 | 604.1  | 634.1  |
| 152.5° | 457.9 | 476.9 | 525.4 | 591.7  | 616.4  |
| 155°   | 472.2 | 488.9 | 525.0 | 576.6  | 593.2  |
| 157.5° | 486.2 | 499.2 | 525.0 | 566.2  | 578.9  |
| 160°   | 494.4 | 506.0 | 525.0 | 559.4  | 569.4  |
| 162.5° | 502.5 | 511.5 | 526.4 | 553.8  | 561.2  |
| 165°   | 511.4 | 518.1 | 526.7 | 548.9  | 550.6  |
| 167.5° | 520.6 | 523.9 | 528.4 | 543.1  | 544.5  |
| 170°   | 523.3 | 526.7 | 528.4 | 540.4  | 540.4  |
| 172.5° | 526.1 | 528.1 | 528.4 | 537.7  | 537.7  |
| 175°   | 530.2 | 531.8 | 528.4 | 535.2  | 533.6  |
| 177.5° | 531.5 | 531.5 | 527.4 | 532.8  | 530.2  |
| 180°   | 530.2 | 530.2 | 530.2 | 530.2  | 530.2  |

(END OF REPORT)