

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P844995

Luminaire Tested: **SQ4P-PC3-050U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844995  
REPORT IS A COMBINATION OF REPORTS P700197 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PC3-050U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

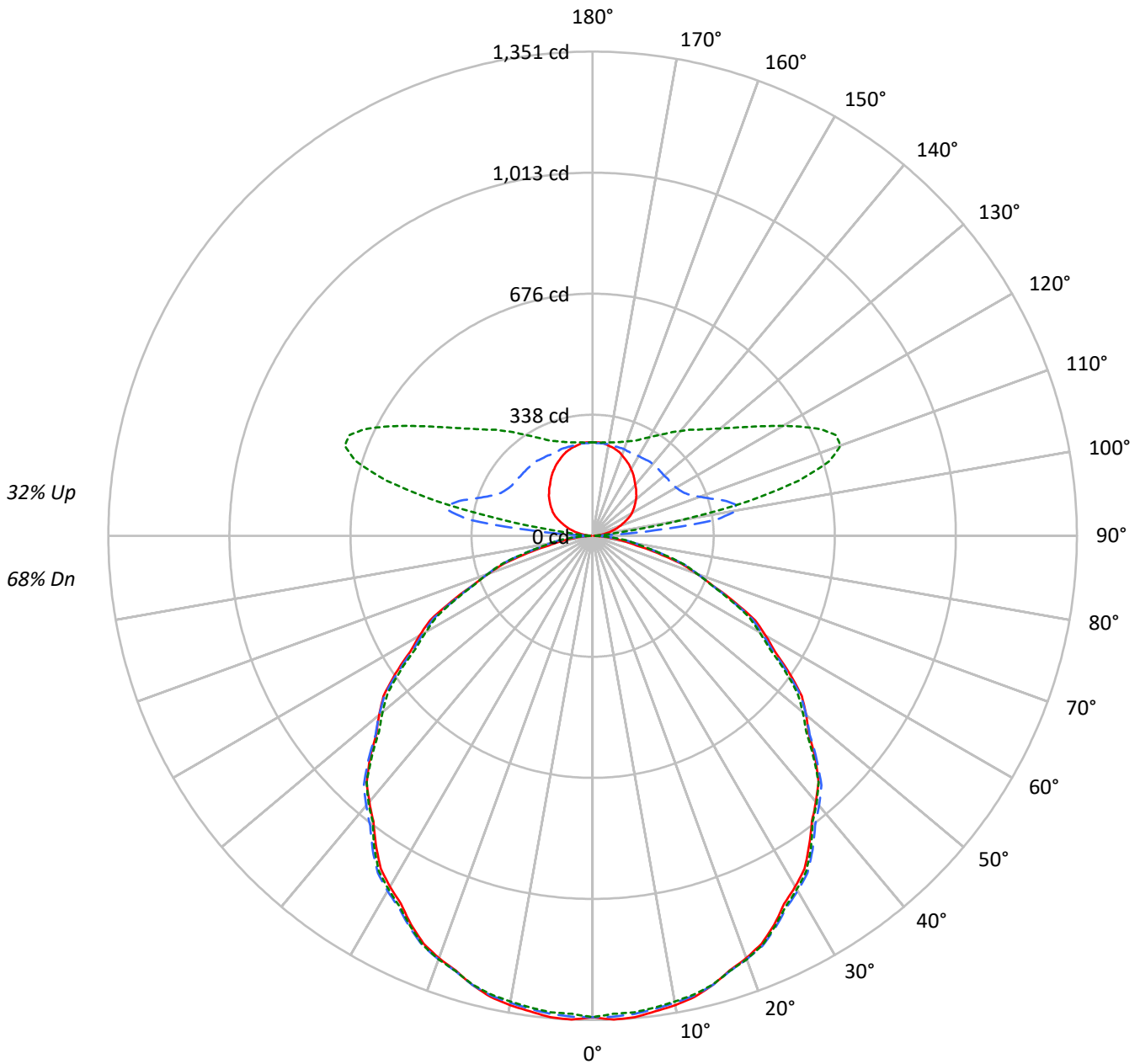
Lumens per Lamp: N/A  
Luminaire Lumens: 5360.2 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 47.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |    | 20 |    |    |    |    |    |    |    |    | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |    | 50 |    |    |    |    |    |    |    |    | 30 |    |   |  |  |  |  |  |  | 10 |  |  |  |  |  |  |  |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 105 | 94 | 94 | 94 | 83 | 83 | 83 | 73 | 73 | 73 | 68 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 102 | 98  | 94  | 90  | 96  | 92  | 89  | 86  | 82 | 80 | 77 | 73 | 71 | 69 | 65 | 63 | 62 | 58 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 93  | 85  | 79  | 74  | 87  | 81  | 75  | 70  | 72 | 68 | 64 | 64 | 61 | 58 | 57 | 54 | 52 | 48 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 85  | 75  | 67  | 61  | 80  | 71  | 64  | 59  | 64 | 58 | 54 | 57 | 53 | 49 | 50 | 47 | 44 | 41 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 78  | 66  | 58  | 52  | 73  | 63  | 56  | 50  | 57 | 51 | 46 | 51 | 46 | 42 | 45 | 41 | 38 | 35 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 71  | 59  | 51  | 45  | 67  | 56  | 49  | 43  | 51 | 44 | 40 | 45 | 40 | 36 | 41 | 36 | 33 | 30 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 66  | 53  | 45  | 39  | 62  | 51  | 43  | 37  | 46 | 39 | 35 | 41 | 36 | 32 | 37 | 33 | 29 | 27 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 61  | 48  | 40  | 34  | 57  | 46  | 38  | 33  | 41 | 35 | 31 | 37 | 32 | 28 | 34 | 29 | 26 | 24 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 56  | 44  | 36  | 30  | 53  | 42  | 34  | 29  | 38 | 32 | 27 | 34 | 29 | 25 | 31 | 26 | 23 | 21 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 53  | 40  | 32  | 27  | 50  | 38  | 31  | 26  | 35 | 29 | 24 | 31 | 26 | 23 | 28 | 24 | 21 | 19 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 49  | 37  | 29  | 24  | 46  | 35  | 28  | 24  | 32 | 26 | 22 | 29 | 24 | 21 | 26 | 22 | 19 | 17 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12392 | 12392 | 12392 |
| 5°  | 12487 | 12406 | 12360 |
| 10° | 12457 | 12398 | 12363 |
| 15° | 12391 | 12391 | 12378 |
| 20° | 12310 | 12346 | 12346 |
| 25° | 12194 | 12281 | 12243 |
| 30° | 12044 | 12190 | 12136 |
| 35° | 11866 | 12047 | 11963 |
| 40° | 11668 | 11833 | 11714 |
| 45° | 11459 | 11539 | 11359 |
| 50° | 11158 | 11158 | 10980 |
| 55° | 10805 | 10663 | 10505 |
| 60° | 10282 | 10077 | 9913  |
| 65° | 9501  | 9315  | 9230  |
| 70° | 8322  | 8387  | 8357  |
| 75° | 6695  | 7408  | 7450  |
| 80° | 4761  | 6275  | 6344  |
| 85° | 2901  | 5261  | 5261  |



TEST NUMBER: P844995

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 127.1  | 2.4       |
| 10°-20°   | 364.8  | 6.8       |
| 20°-30°   | 552.5  | 10.3      |
| 30°-40°   | 662.3  | 12.4      |
| 40°-50°   | 675.3  | 12.6      |
| 50°-60°   | 589.5  | 11.0      |
| 60°-70°   | 422.0  | 7.9       |
| 70°-80°   | 217.4  | 4.1       |
| 80°-90°   | 55.6   | 1.0       |
| 90°-100°  | 103.8  | 1.9       |
| 100°-110° | 361.4  | 6.7       |
| 110°-120° | 350.0  | 6.5       |
| 120°-130° | 274.6  | 5.1       |
| 130°-140° | 217.3  | 4.1       |
| 140°-150° | 167.7  | 3.1       |
| 150°-160° | 120.2  | 2.2       |
| 160°-170° | 73.5   | 1.4       |
| 170°-180° | 24.9   | 0.5       |
| 0°-30°    | 1044.4 | 19.5      |
| 0°-40°    | 1706.7 | 31.8      |
| 0°-60°    | 2971.6 | 55.4      |
| 0°-90°    | 3666.6 | 68.4      |
| 90°-120°  | 815.2  | 15.2      |
| 90°-150°  | 1474.9 | 27.5      |
| 90°-180°  | 1694.0 | 31.6      |
| 0°-180°   | 5360.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1343 | 1343  | 1343 | 1343  | 1343 |      |
| 5°   | 1348 | 1335  | 1340 | 1336  | 1335 | 128  |
| 15°  | 1297 | 1286  | 1297 | 1297  | 1296 | 366  |
| 25°  | 1198 | 1189  | 1206 | 1203  | 1203 | 551  |
| 35°  | 1054 | 1051  | 1070 | 1062  | 1062 | 659  |
| 45°  | 878  | 876   | 884  | 873   | 871  | 676  |
| 55°  | 672  | 663   | 663  | 653   | 653  | 599  |
| 65°  | 435  | 426   | 427  | 423   | 423  | 430  |
| 75°  | 188  | 196   | 208  | 209   | 209  | 203  |
| 85°  | 27   | 42    | 50   | 51    | 50   | 37   |
| 90°  | 4    | 6     | 6    | 4     | 2    | 3    |
| 95°  | 18   | 60    | 175  | 45    | 27   | 19   |
| 105° | 60   | 86    | 380  | 641   | 596  | 63   |
| 115° | 105  | 127   | 282  | 596   | 703  | 104  |
| 125° | 142  | 175   | 263  | 444   | 530  | 127  |
| 135° | 171  | 193   | 261  | 370   | 419  | 133  |
| 145° | 201  | 214   | 259  | 319   | 347  | 125  |
| 155° | 228  | 236   | 255  | 284   | 294  | 105  |
| 165° | 249  | 251   | 257  | 269   | 271  | 70   |
| 175° | 261  | 261   | 259  | 263   | 261  | 25   |
| 180° | 261  | 261   | 261  | 261   | 261  |      |



TEST NUMBER: P844995

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1343.1 | 1343.1 | 1343.1 | 1343.1 | 1343.1 |
| 2.5°   | 1351.3 | 1339.5 | 1343.1 | 1340.1 | 1335.2 |
| 5°     | 1348.3 | 1334.8 | 1339.5 | 1335.7 | 1334.6 |
| 7.5°   | 1338.5 | 1325.1 | 1331.4 | 1328.8 | 1327.5 |
| 10°    | 1329.7 | 1316.1 | 1323.4 | 1320.8 | 1319.6 |
| 12.5°  | 1317.6 | 1305.2 | 1313.4 | 1310.9 | 1310.6 |
| 15°    | 1297.3 | 1286.3 | 1297.3 | 1297.3 | 1295.9 |
| 17.5°  | 1271.5 | 1261.7 | 1273.3 | 1274.1 | 1273.3 |
| 20°    | 1253.8 | 1242.8 | 1257.4 | 1256.1 | 1257.4 |
| 22.5°  | 1231.9 | 1222.9 | 1238.6 | 1235.3 | 1236.6 |
| 25°    | 1197.8 | 1189.2 | 1206.4 | 1202.7 | 1202.7 |
| 27.5°  | 1157.4 | 1151.2 | 1170.1 | 1166.1 | 1166.1 |
| 30°    | 1130.5 | 1124.5 | 1144.2 | 1139.2 | 1139.2 |
| 32.5°  | 1100.7 | 1096.6 | 1115.5 | 1109.5 | 1109.5 |
| 35°    | 1053.5 | 1050.9 | 1069.6 | 1062.1 | 1062.1 |
| 37.5°  | 1004.6 | 1002.5 | 1019.5 | 1010.4 | 1007.4 |
| 40°    | 968.8  | 967.7  | 982.5  | 972.6  | 972.6  |
| 42.5°  | 933.0  | 931.8  | 944.8  | 932.8  | 932.8  |
| 45°    | 878.2  | 875.5  | 884.4  | 873.0  | 870.6  |
| 47.5°  | 818.1  | 815.8  | 821.1  | 808.9  | 807.6  |
| 50°    | 777.4  | 774.8  | 777.4  | 766.0  | 765.0  |
| 52.5°  | 735.5  | 731.1  | 731.4  | 720.3  | 720.1  |
| 55°    | 671.7  | 663.1  | 662.9  | 653.1  | 653.1  |
| 57.5°  | 603.9  | 592.8  | 593.8  | 585.3  | 584.0  |
| 60°    | 557.2  | 545.0  | 546.1  | 538.5  | 537.2  |
| 62.5°  | 511.3  | 497.4  | 500.1  | 491.8  | 491.6  |
| 65°    | 435.2  | 425.5  | 426.7  | 422.8  | 422.8  |
| 67.5°  | 362.1  | 353.1  | 359.7  | 356.7  | 356.5  |
| 70°    | 308.5  | 302.3  | 310.9  | 310.9  | 309.8  |
| 72.5°  | 258.7  | 258.5  | 269.0  | 269.0  | 269.9  |
| 75°    | 187.8  | 196.3  | 207.8  | 209.0  | 209.0  |
| 77.5°  | 125.4  | 140.4  | 153.1  | 153.5  | 153.3  |
| 80°    | 89.6   | 106.6  | 118.1  | 120.7  | 119.4  |
| 82.5°  | 60.7   | 78.7   | 88.3   | 90.7   | 89.6   |
| 85°    | 27.4   | 42.1   | 49.7   | 51.1   | 49.7   |
| 87.5°  | 7.9    | 16.8   | 20.0   | 20.0   | 18.0   |
| 90°    | 3.9    | 5.8    | 5.8    | 3.9    | 1.9    |
| 92.5°  | 9.7    | 29.2   | 27.2   | 11.7   | 9.7    |
| 95°    | 17.5   | 60.4   | 175.3  | 44.8   | 27.2   |
| 97.5°  | 27.2   | 68.1   | 350.5  | 159.7  | 85.7   |
| 100°   | 37.0   | 72.1   | 408.9  | 383.7  | 247.3  |
| 102.5° | 48.6   | 77.9   | 407.0  | 539.4  | 444.0  |
| 105°   | 60.4   | 85.7   | 379.8  | 640.6  | 595.9  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 93.5  | 114.9 | 296.0 | 644.6 | 734.2 |
| 115°   | 105.1 | 126.6 | 282.4 | 595.9 | 703.0 |
| 117.5° | 116.9 | 140.2 | 274.5 | 551.1 | 658.2 |
| 120°   | 126.6 | 151.9 | 268.7 | 508.3 | 613.4 |
| 122.5° | 134.4 | 163.6 | 264.8 | 473.2 | 568.6 |
| 125°   | 142.2 | 175.3 | 262.9 | 444.0 | 529.7 |
| 127.5° | 149.9 | 183.1 | 262.9 | 422.6 | 494.6 |
| 130°   | 157.8 | 186.9 | 261.0 | 401.2 | 465.4 |
| 132.5° | 165.5 | 188.9 | 261.0 | 385.6 | 440.1 |
| 135°   | 171.3 | 192.7 | 261.0 | 370.0 | 418.7 |
| 137.5° | 179.2 | 196.7 | 261.0 | 356.3 | 401.2 |
| 140°   | 185.0 | 202.5 | 261.0 | 342.8 | 381.7 |
| 142.5° | 192.7 | 208.3 | 261.0 | 329.1 | 364.2 |
| 145°   | 200.6 | 214.3 | 259.0 | 319.4 | 346.6 |
| 147.5° | 208.3 | 220.1 | 257.1 | 309.6 | 331.0 |
| 150°   | 214.3 | 225.9 | 257.1 | 299.9 | 317.5 |
| 152.5° | 222.0 | 231.7 | 255.2 | 290.1 | 305.7 |
| 155°   | 227.8 | 235.7 | 255.2 | 284.3 | 294.0 |
| 157.5° | 233.6 | 241.5 | 255.2 | 278.5 | 286.3 |
| 160°   | 239.6 | 245.4 | 257.1 | 274.5 | 280.4 |
| 162.5° | 245.4 | 249.2 | 257.1 | 270.7 | 274.5 |
| 165°   | 249.2 | 251.2 | 257.1 | 268.7 | 270.7 |
| 167.5° | 253.1 | 255.2 | 257.1 | 266.8 | 266.8 |
| 170°   | 255.2 | 257.1 | 259.0 | 264.8 | 264.8 |
| 172.5° | 259.0 | 259.0 | 259.0 | 262.9 | 262.9 |
| 175°   | 261.0 | 261.0 | 259.0 | 262.9 | 261.0 |
| 177.5° | 261.0 | 261.0 | 259.0 | 262.9 | 261.0 |
| 180°   | 261.0 | 261.0 | 261.0 | 261.0 | 261.0 |



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







|        |      |       |       |       |       |
|--------|------|-------|-------|-------|-------|
| 107.5° | 72.1 | 95.5  | 344.7 | 685.5 | 693.3 |
| 110°   | 81.8 | 105.1 | 317.5 | 679.6 | 736.1 |



(END OF REPORT)