

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: P844842

Luminaire Tested: **SQ4P-BB-075U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844842
REPORT IS A COMBINATION OF REPORTS P700218 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-075U-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

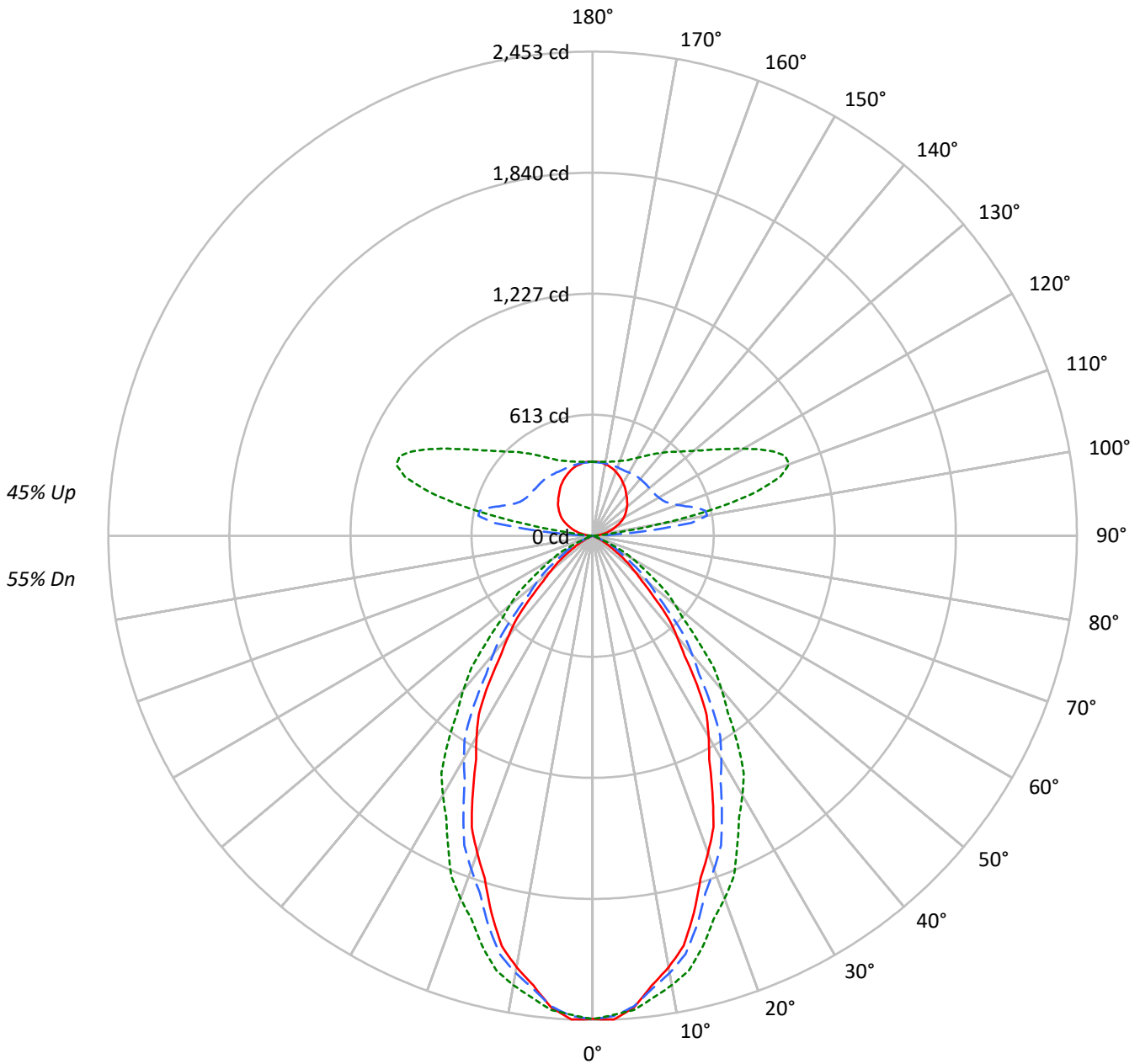
Lumens per Lamp: N/A
Luminaire Lumens: 5357.3 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 64.8
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P844842

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Luminous Intensity Polar Plot





TEST NUMBER: P844842

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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 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 86 | 86 | 86 | 73 | 73 | 73 | 60 | 60 | 60 | 55 | | | | | | | | | | | | | | | | | | | |
| 1 | 101 | 97 | 94 | 91 | 94 | 91 | 88 | 85 | 78 | 76 | 74 | 67 | 65 | 64 | 56 | 55 | 55 | 50 | | | | | | | | | | | | | | | | | | | |
| 2 | 93 | 87 | 82 | 78 | 87 | 81 | 77 | 73 | 71 | 68 | 65 | 61 | 59 | 57 | 52 | 50 | 49 | 45 | | | | | | | | | | | | | | | | | | | |
| 3 | 87 | 78 | 72 | 67 | 80 | 74 | 68 | 64 | 64 | 60 | 57 | 56 | 53 | 51 | 48 | 46 | 44 | 41 | | | | | | | | | | | | | | | | | | | |
| 4 | 80 | 71 | 64 | 59 | 75 | 67 | 61 | 56 | 59 | 54 | 51 | 51 | 48 | 45 | 44 | 42 | 40 | 37 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 64 | 57 | 52 | 69 | 61 | 54 | 50 | 54 | 49 | 45 | 47 | 43 | 41 | 41 | 38 | 36 | 33 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 59 | 51 | 46 | 65 | 55 | 49 | 44 | 49 | 44 | 41 | 43 | 40 | 37 | 38 | 35 | 33 | 30 | | | | | | | | | | | | | | | | | | | |
| 7 | 65 | 54 | 47 | 42 | 61 | 51 | 44 | 40 | 45 | 40 | 37 | 40 | 36 | 33 | 35 | 32 | 30 | 28 | | | | | | | | | | | | | | | | | | | |
| 8 | 61 | 49 | 42 | 38 | 57 | 47 | 41 | 36 | 42 | 37 | 33 | 37 | 33 | 31 | 33 | 30 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 9 | 57 | 46 | 39 | 34 | 53 | 43 | 37 | 33 | 39 | 34 | 31 | 35 | 31 | 28 | 31 | 28 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 53 | 42 | 36 | 31 | 50 | 40 | 34 | 30 | 36 | 31 | 28 | 33 | 29 | 26 | 29 | 26 | 24 | 22 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22583 | 22583 | 22583 |
| 5° | 22219 | 22164 | 22328 |
| 10° | 20789 | 21067 | 21655 |
| 15° | 18900 | 19500 | 20586 |
| 20° | 16778 | 17648 | 19194 |
| 25° | 14609 | 15767 | 17636 |
| 30° | 12516 | 13889 | 16160 |
| 35° | 10376 | 11791 | 14376 |
| 40° | 7972 | 9428 | 12250 |
| 45° | 5765 | 7138 | 9858 |
| 50° | 3926 | 5318 | 7820 |
| 55° | 2553 | 3848 | 6075 |
| 60° | 1465 | 2711 | 4394 |
| 65° | 386 | 1657 | 2222 |
| 70° | 197 | 513 | 634 |
| 75° | 86 | 39 | 0 |
| 80° | 58 | 0 | 0 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P844842

CATALOG NUMBER: SQ4P-BB-075U-125D-B40-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 223.4 | 4.2 |
| 10°-20° | 571.2 | 10.7 |
| 20°-30° | 715.1 | 13.3 |
| 30°-40° | 660.5 | 12.3 |
| 40°-50° | 443.8 | 8.3 |
| 50°-60° | 229.3 | 4.3 |
| 60°-70° | 71.8 | 1.3 |
| 70°-80° | 4.5 | 0.1 |
| 80°-90° | 1.0 | 0.0 |
| 90°-100° | 149.4 | 2.8 |
| 100°-110° | 519.9 | 9.7 |
| 110°-120° | 503.6 | 9.4 |
| 120°-130° | 395.1 | 7.4 |
| 130°-140° | 312.7 | 5.8 |
| 140°-150° | 241.3 | 4.5 |
| 150°-160° | 173.0 | 3.2 |
| 160°-170° | 105.8 | 2.0 |
| 170°-180° | 35.8 | 0.7 |
| 0°-30° | 1509.7 | 28.2 |
| 0°-40° | 2170.3 | 40.5 |
| 0°-60° | 2843.4 | 53.1 |
| 0°-90° | 2920.7 | 54.5 |
| 90°-120° | 1172.9 | 21.9 |
| 90°-150° | 2122.0 | 39.6 |
| 90°-180° | 2437.0 | 45.5 |
| 0°-180° | 5357.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2448 | 2448 | 2448 | 2448 | 2448 | |
| 5° | 2399 | 2375 | 2393 | 2402 | 2411 | 222 |
| 15° | 1979 | 1972 | 2042 | 2110 | 2155 | 551 |
| 25° | 1435 | 1447 | 1549 | 1655 | 1732 | 658 |
| 35° | 921 | 944 | 1047 | 1170 | 1276 | 571 |
| 45° | 442 | 468 | 547 | 654 | 756 | 347 |
| 55° | 159 | 185 | 239 | 307 | 378 | 148 |
| 65° | 18 | 34 | 76 | 91 | 102 | 30 |
| 75° | 2 | 2 | 1 | 0 | 0 | 3 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 6 | 8 | 8 | 6 | 3 | 3 |
| 95° | 25 | 87 | 252 | 64 | 39 | 27 |
| 105° | 87 | 123 | 546 | 922 | 857 | 91 |
| 115° | 151 | 182 | 406 | 857 | 1011 | 149 |
| 125° | 205 | 252 | 378 | 639 | 762 | 183 |
| 135° | 246 | 277 | 375 | 532 | 602 | 191 |
| 145° | 289 | 308 | 373 | 460 | 499 | 181 |
| 155° | 328 | 339 | 367 | 409 | 423 | 151 |
| 165° | 359 | 362 | 370 | 387 | 390 | 101 |
| 175° | 375 | 375 | 373 | 378 | 375 | 36 |
| 180° | 375 | 375 | 375 | 375 | 375 | |



TEST NUMBER: P844842

CATALOG NUMBER: SQ4P-BB-075U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2447.7 | 2447.7 | 2447.7 | 2447.7 | 2447.7 |
| 2.5° | 2453.3 | 2430.2 | 2436.1 | 2436.1 | 2429.7 |
| 5° | 2399.1 | 2374.8 | 2393.2 | 2401.5 | 2410.9 |
| 7.5° | 2297.8 | 2278.8 | 2314.1 | 2340.4 | 2359.8 |
| 10° | 2219.0 | 2202.9 | 2248.7 | 2284.7 | 2311.5 |
| 12.5° | 2128.1 | 2115.5 | 2171.0 | 2220.6 | 2254.6 |
| 15° | 1978.7 | 1971.8 | 2041.5 | 2109.8 | 2155.2 |
| 17.5° | 1818.7 | 1818.4 | 1897.8 | 1983.1 | 2037.5 |
| 20° | 1708.8 | 1712.3 | 1797.5 | 1891.4 | 1954.9 |
| 22.5° | 1598.9 | 1606.9 | 1698.1 | 1796.0 | 1868.8 |
| 25° | 1435.1 | 1446.6 | 1548.8 | 1655.0 | 1732.4 |
| 27.5° | 1278.0 | 1294.9 | 1402.4 | 1512.3 | 1606.9 |
| 30° | 1174.8 | 1194.4 | 1303.7 | 1419.6 | 1516.9 |
| 32.5° | 1073.1 | 1096.8 | 1203.2 | 1326.0 | 1424.9 |
| 35° | 921.2 | 944.4 | 1046.9 | 1169.9 | 1276.4 |
| 37.5° | 764.3 | 786.9 | 886.9 | 1008.3 | 1123.3 |
| 40° | 661.9 | 687.4 | 782.8 | 900.3 | 1017.1 |
| 42.5° | 569.1 | 594.6 | 684.2 | 799.7 | 910.1 |
| 45° | 441.8 | 468.3 | 547.1 | 653.6 | 755.5 |
| 47.5° | 336.2 | 364.9 | 434.0 | 530.6 | 623.3 |
| 50° | 273.5 | 302.4 | 370.5 | 455.5 | 544.8 |
| 52.5° | 223.3 | 251.5 | 312.8 | 392.8 | 474.6 |
| 55° | 158.7 | 185.3 | 239.2 | 307.2 | 377.7 |
| 57.5° | 109.6 | 132.7 | 180.9 | 237.5 | 293.0 |
| 60° | 79.4 | 101.4 | 146.9 | 192.7 | 238.1 |
| 62.5° | 52.8 | 72.9 | 117.5 | 152.8 | 183.2 |
| 65° | 17.7 | 34.0 | 75.9 | 91.4 | 101.8 |
| 67.5° | 9.1 | 10.8 | 39.6 | 42.1 | 45.5 |
| 70° | 7.3 | 7.3 | 19.0 | 20.1 | 23.5 |
| 72.5° | 5.1 | 5.1 | 7.5 | 9.7 | 10.5 |
| 75° | 2.4 | 2.4 | 1.1 | 0.0 | 0.0 |
| 77.5° | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 |
| 80° | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 5.6 | 8.4 | 8.4 | 5.6 | 2.8 |
| 92.5° | 14.1 | 42.1 | 39.2 | 16.8 | 14.1 |
| 95° | 25.2 | 86.8 | 252.2 | 64.4 | 39.2 |
| 97.5° | 39.2 | 98.1 | 504.3 | 229.8 | 123.3 |
| 100° | 53.2 | 103.7 | 588.3 | 552.0 | 355.8 |
| 102.5° | 70.1 | 112.0 | 585.6 | 776.1 | 638.8 |
| 105° | 86.8 | 123.3 | 546.4 | 921.8 | 857.3 |



TEST NUMBER: P844842

CATALOG NUMBER: SQ4P-BB-075U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 134.5 | 165.3 | 425.9 | 927.4 | 1056.3 |
| 115° | 151.3 | 182.1 | 406.2 | 857.3 | 1011.4 |
| 117.5° | 168.1 | 201.8 | 395.1 | 792.9 | 947.0 |
| 120° | 182.1 | 218.5 | 386.7 | 731.3 | 882.5 |
| 122.5° | 193.3 | 235.4 | 381.0 | 680.9 | 818.1 |
| 125° | 204.6 | 252.2 | 378.2 | 638.8 | 762.1 |
| 127.5° | 215.7 | 263.4 | 378.2 | 608.0 | 711.7 |
| 130° | 227.0 | 269.0 | 375.4 | 577.2 | 669.6 |
| 132.5° | 238.1 | 271.7 | 375.4 | 554.8 | 633.2 |
| 135° | 246.5 | 277.3 | 375.4 | 532.3 | 602.4 |
| 137.5° | 257.8 | 283.0 | 375.4 | 512.7 | 577.2 |
| 140° | 266.2 | 291.4 | 375.4 | 493.1 | 549.2 |
| 142.5° | 277.3 | 299.8 | 375.4 | 473.5 | 523.9 |
| 145° | 288.6 | 308.2 | 372.6 | 459.5 | 498.7 |
| 147.5° | 299.8 | 316.6 | 369.8 | 445.5 | 476.3 |
| 150° | 308.2 | 325.0 | 369.8 | 431.4 | 456.7 |
| 152.5° | 319.4 | 333.4 | 367.0 | 417.5 | 439.9 |
| 155° | 327.8 | 339.0 | 367.0 | 409.0 | 423.1 |
| 157.5° | 336.2 | 347.4 | 367.0 | 400.6 | 411.9 |
| 160° | 344.6 | 353.0 | 369.8 | 395.1 | 403.4 |
| 162.5° | 353.0 | 358.7 | 369.8 | 389.5 | 395.1 |
| 165° | 358.7 | 361.5 | 369.8 | 386.7 | 389.5 |
| 167.5° | 364.3 | 367.0 | 369.8 | 383.8 | 383.8 |
| 170° | 367.0 | 369.8 | 372.6 | 381.0 | 381.0 |
| 172.5° | 372.6 | 372.6 | 372.6 | 378.2 | 378.2 |
| 175° | 375.4 | 375.4 | 372.6 | 378.2 | 375.4 |
| 177.5° | 375.4 | 375.4 | 372.6 | 378.2 | 375.4 |
| 180° | 375.4 | 375.4 | 375.4 | 375.4 | 375.4 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|--------|
| 107.5° | 103.7 | 137.3 | 495.9 | 986.2 | 997.5 |
| 110° | 117.6 | 151.3 | 456.7 | 977.8 | 1059.1 |



(END OF REPORT)