

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: P845174

Luminaire Tested: **SQ4P-PR1-075U-100D-B35-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845174
REPORT IS A COMBINATION OF REPORTS P700233 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-075U-100D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

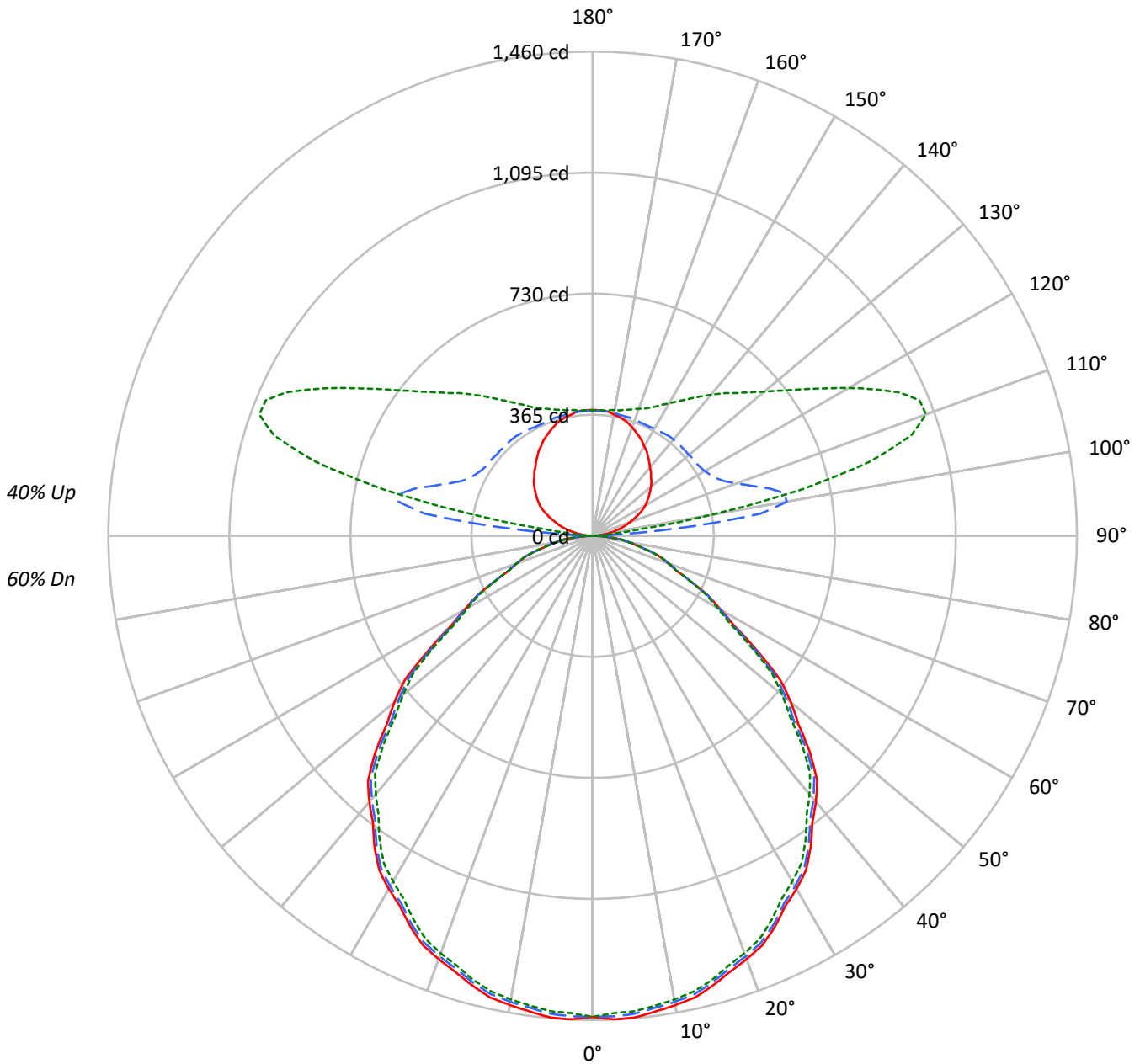
Lumens per Lamp: N/A
Luminaire Lumens: 6087.9 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 53.9
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: P845174

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Luminous Intensity Polar Plot





TEST NUMBER: P845174

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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 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 76 | 76 | 76 | 65 | 65 | 65 | 60 | | | | | | | | | | | | | | | | | | | |
| 1 | 100 | 96 | 92 | 89 | 94 | 90 | 87 | 84 | 78 | 76 | 74 | 68 | 66 | 64 | 58 | 57 | 56 | 51 | | | | | | | | | | | | | | | | | | | |
| 2 | 92 | 84 | 78 | 73 | 85 | 79 | 74 | 69 | 69 | 65 | 62 | 60 | 57 | 54 | 51 | 49 | 47 | 43 | | | | | | | | | | | | | | | | | | | |
| 3 | 84 | 74 | 67 | 61 | 78 | 70 | 63 | 58 | 61 | 56 | 52 | 53 | 49 | 46 | 46 | 43 | 41 | 37 | | | | | | | | | | | | | | | | | | | |
| 4 | 77 | 66 | 58 | 52 | 72 | 62 | 55 | 50 | 55 | 49 | 45 | 48 | 43 | 40 | 41 | 38 | 35 | 32 | | | | | | | | | | | | | | | | | | | |
| 5 | 71 | 59 | 51 | 45 | 66 | 56 | 48 | 43 | 49 | 43 | 39 | 43 | 38 | 35 | 37 | 34 | 31 | 28 | | | | | | | | | | | | | | | | | | | |
| 6 | 65 | 53 | 45 | 39 | 61 | 50 | 43 | 37 | 44 | 38 | 34 | 39 | 34 | 31 | 34 | 30 | 27 | 25 | | | | | | | | | | | | | | | | | | | |
| 7 | 60 | 48 | 40 | 34 | 56 | 45 | 38 | 33 | 40 | 34 | 30 | 35 | 31 | 27 | 31 | 27 | 24 | 22 | | | | | | | | | | | | | | | | | | | |
| 8 | 56 | 44 | 36 | 31 | 52 | 41 | 34 | 29 | 37 | 31 | 27 | 32 | 28 | 24 | 28 | 25 | 22 | 20 | | | | | | | | | | | | | | | | | | | |
| 9 | 52 | 40 | 32 | 27 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 22 | 26 | 23 | 20 | 18 | | | | | | | | | | | | | | | | | | | |
| 10 | 49 | 37 | 29 | 25 | 46 | 35 | 28 | 24 | 31 | 26 | 22 | 28 | 23 | 20 | 24 | 21 | 18 | 16 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13384 | 13384 | 13384 |
| 5° | 13505 | 13401 | 13332 |
| 10° | 13461 | 13368 | 13298 |
| 15° | 13404 | 13320 | 13247 |
| 20° | 13335 | 13249 | 13152 |
| 25° | 13241 | 13154 | 13000 |
| 30° | 13098 | 13007 | 12819 |
| 35° | 12906 | 12792 | 12610 |
| 40° | 12610 | 12475 | 12249 |
| 45° | 12099 | 11884 | 11641 |
| 50° | 11191 | 10922 | 10706 |
| 55° | 9767 | 9548 | 9347 |
| 60° | 8230 | 8163 | 8001 |
| 65° | 7119 | 7147 | 7091 |
| 70° | 6536 | 6571 | 6571 |
| 75° | 6277 | 6277 | 6327 |
| 80° | 5908 | 5972 | 5908 |
| 85° | 4764 | 5293 | 5293 |



TEST NUMBER: P845174

CATALOG NUMBER: SQ4P-PR1-075U-100D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 137.2 | 2.3 |
| 10°-20° | 392.5 | 6.4 |
| 20°-30° | 592.0 | 9.7 |
| 30°-40° | 705.4 | 11.6 |
| 40°-50° | 695.4 | 11.4 |
| 50°-60° | 531.5 | 8.7 |
| 60°-70° | 328.9 | 5.4 |
| 70°-80° | 186.8 | 3.1 |
| 80°-90° | 57.7 | 0.9 |
| 90°-100° | 150.9 | 2.5 |
| 100°-110° | 525.0 | 8.6 |
| 110°-120° | 508.6 | 8.4 |
| 120°-130° | 398.9 | 6.6 |
| 130°-140° | 315.7 | 5.2 |
| 140°-150° | 243.7 | 4.0 |
| 150°-160° | 174.7 | 2.9 |
| 160°-170° | 106.8 | 1.8 |
| 170°-180° | 36.1 | 0.6 |
| 0°-30° | 1121.7 | 18.4 |
| 0°-40° | 1827.1 | 30.0 |
| 0°-60° | 3054.0 | 50.2 |
| 0°-90° | 3627.5 | 59.6 |
| 90°-120° | 1184.4 | 19.5 |
| 90°-150° | 2142.8 | 35.2 |
| 90°-180° | 2460.0 | 40.4 |
| 0°-180° | 6087.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1451 | 1451 | 1451 | 1451 | 1451 | |
| 5° | 1458 | 1442 | 1447 | 1442 | 1440 | 138 |
| 15° | 1403 | 1389 | 1394 | 1390 | 1387 | 396 |
| 25° | 1301 | 1285 | 1292 | 1278 | 1277 | 599 |
| 35° | 1146 | 1132 | 1136 | 1121 | 1120 | 715 |
| 45° | 927 | 915 | 911 | 894 | 892 | 710 |
| 55° | 607 | 598 | 594 | 584 | 581 | 544 |
| 65° | 326 | 324 | 327 | 325 | 325 | 330 |
| 75° | 176 | 176 | 176 | 178 | 178 | 186 |
| 85° | 45 | 47 | 50 | 50 | 50 | 52 |
| 90° | 6 | 8 | 8 | 6 | 3 | 5 |
| 95° | 25 | 88 | 255 | 65 | 40 | 27 |
| 105° | 88 | 124 | 552 | 931 | 866 | 92 |
| 115° | 153 | 184 | 410 | 866 | 1021 | 151 |
| 125° | 207 | 255 | 382 | 645 | 770 | 185 |
| 135° | 249 | 280 | 379 | 538 | 608 | 193 |
| 145° | 291 | 311 | 376 | 464 | 504 | 182 |
| 155° | 331 | 342 | 371 | 413 | 427 | 153 |
| 165° | 362 | 365 | 373 | 390 | 393 | 102 |
| 175° | 379 | 379 | 376 | 382 | 379 | 36 |
| 180° | 379 | 379 | 379 | 379 | 379 | |



TEST NUMBER: P845174

CATALOG NUMBER: SQ4P-PR1-075U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1450.6 | 1450.6 | 1450.6 | 1450.6 | 1450.6 |
| 2.5° | 1459.7 | 1447.0 | 1450.6 | 1447.6 | 1440.7 |
| 5° | 1458.2 | 1442.2 | 1447.0 | 1441.8 | 1439.5 |
| 7.5° | 1447.0 | 1431.3 | 1436.0 | 1430.9 | 1429.6 |
| 10° | 1436.8 | 1422.2 | 1426.9 | 1422.0 | 1419.4 |
| 12.5° | 1425.9 | 1410.4 | 1416.0 | 1409.9 | 1407.6 |
| 15° | 1403.3 | 1388.6 | 1394.5 | 1389.5 | 1386.9 |
| 17.5° | 1378.3 | 1362.6 | 1368.6 | 1362.8 | 1359.5 |
| 20° | 1358.2 | 1343.6 | 1349.4 | 1340.8 | 1339.5 |
| 22.5° | 1336.2 | 1321.7 | 1327.4 | 1315.8 | 1315.6 |
| 25° | 1300.7 | 1284.8 | 1292.1 | 1278.3 | 1277.0 |
| 27.5° | 1258.5 | 1243.9 | 1249.7 | 1235.7 | 1234.4 |
| 30° | 1229.5 | 1214.8 | 1220.9 | 1205.8 | 1203.3 |
| 32.5° | 1196.5 | 1182.9 | 1187.9 | 1172.8 | 1171.2 |
| 35° | 1145.9 | 1132.3 | 1135.7 | 1120.8 | 1119.6 |
| 37.5° | 1088.2 | 1075.8 | 1077.8 | 1061.3 | 1060.2 |
| 40° | 1047.0 | 1034.9 | 1035.8 | 1018.4 | 1017.0 |
| 42.5° | 1002.2 | 989.9 | 988.8 | 971.4 | 970.2 |
| 45° | 927.3 | 915.0 | 910.8 | 894.5 | 892.2 |
| 47.5° | 841.8 | 829.4 | 821.9 | 808.6 | 806.8 |
| 50° | 779.7 | 767.4 | 760.9 | 749.6 | 745.9 |
| 52.5° | 712.7 | 700.5 | 695.1 | 684.7 | 681.1 |
| 55° | 607.2 | 597.5 | 593.6 | 583.5 | 581.1 |
| 57.5° | 507.0 | 500.5 | 499.3 | 489.6 | 488.5 |
| 60° | 446.0 | 442.4 | 442.4 | 433.6 | 433.6 |
| 62.5° | 394.2 | 391.3 | 393.3 | 387.5 | 386.6 |
| 65° | 326.1 | 323.7 | 327.4 | 324.8 | 324.8 |
| 67.5° | 272.4 | 272.4 | 274.6 | 273.5 | 273.5 |
| 70° | 242.3 | 242.3 | 243.6 | 243.6 | 243.6 |
| 72.5° | 215.4 | 214.5 | 217.7 | 217.5 | 216.7 |
| 75° | 176.1 | 176.1 | 176.1 | 177.5 | 177.5 |
| 77.5° | 137.2 | 137.4 | 138.5 | 138.3 | 137.2 |
| 80° | 111.2 | 112.4 | 112.4 | 111.2 | 111.2 |
| 82.5° | 85.3 | 86.4 | 86.4 | 86.1 | 85.3 |
| 85° | 45.0 | 47.4 | 50.0 | 50.0 | 50.0 |
| 87.5° | 12.9 | 16.8 | 20.1 | 20.1 | 19.0 |
| 90° | 5.7 | 8.5 | 8.5 | 5.7 | 2.8 |
| 92.5° | 14.2 | 42.5 | 39.6 | 16.9 | 14.2 |
| 95° | 25.4 | 87.7 | 254.6 | 65.1 | 39.6 |
| 97.5° | 39.6 | 99.0 | 509.2 | 232.0 | 124.5 |
| 100° | 53.7 | 104.7 | 594.1 | 557.4 | 359.3 |
| 102.5° | 70.8 | 113.1 | 591.3 | 783.7 | 645.1 |
| 105° | 87.7 | 124.5 | 551.7 | 930.8 | 865.7 |



TEST NUMBER: P845174

CATALOG NUMBER: SQ4P-PR1-075U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 135.8 | 166.9 | 430.1 | 936.5 | 1066.6 |
| 115° | 152.8 | 183.9 | 410.2 | 865.7 | 1021.3 |
| 117.5° | 169.8 | 203.7 | 399.0 | 800.7 | 956.3 |
| 120° | 183.9 | 220.7 | 390.4 | 738.4 | 891.2 |
| 122.5° | 195.2 | 237.7 | 384.8 | 687.5 | 826.1 |
| 125° | 206.6 | 254.6 | 381.9 | 645.1 | 769.5 |
| 127.5° | 217.8 | 266.0 | 381.9 | 614.0 | 718.7 |
| 130° | 229.2 | 271.6 | 379.1 | 582.8 | 676.2 |
| 132.5° | 240.4 | 274.4 | 379.1 | 560.2 | 639.4 |
| 135° | 248.9 | 280.1 | 379.1 | 537.5 | 608.3 |
| 137.5° | 260.3 | 285.7 | 379.1 | 517.8 | 582.8 |
| 140° | 268.8 | 294.3 | 379.1 | 497.9 | 554.6 |
| 142.5° | 280.1 | 302.8 | 379.1 | 478.1 | 529.0 |
| 145° | 291.4 | 311.2 | 376.3 | 464.0 | 503.6 |
| 147.5° | 302.8 | 319.7 | 373.4 | 449.8 | 481.0 |
| 150° | 311.2 | 328.2 | 373.4 | 435.7 | 461.2 |
| 152.5° | 322.5 | 336.6 | 370.6 | 421.6 | 444.2 |
| 155° | 331.0 | 342.3 | 370.6 | 413.1 | 427.2 |
| 157.5° | 339.5 | 350.8 | 370.6 | 404.5 | 415.9 |
| 160° | 348.0 | 356.5 | 373.4 | 399.0 | 407.4 |
| 162.5° | 356.5 | 362.2 | 373.4 | 393.3 | 399.0 |
| 165° | 362.2 | 365.0 | 373.4 | 390.4 | 393.3 |
| 167.5° | 367.8 | 370.6 | 373.4 | 387.6 | 387.6 |
| 170° | 370.6 | 373.4 | 376.3 | 384.8 | 384.8 |
| 172.5° | 376.3 | 376.3 | 376.3 | 381.9 | 381.9 |
| 175° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 177.5° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 180° | 379.1 | 379.1 | 379.1 | 379.1 | 379.1 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|--------|
| 107.5° | 104.7 | 138.7 | 500.7 | 995.9 | 1007.2 |
| 110° | 118.8 | 152.8 | 461.2 | 987.4 | 1069.5 |



(END OF REPORT)