

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: P845175

Luminaire Tested: **SQ4P-PR1-075U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845175
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

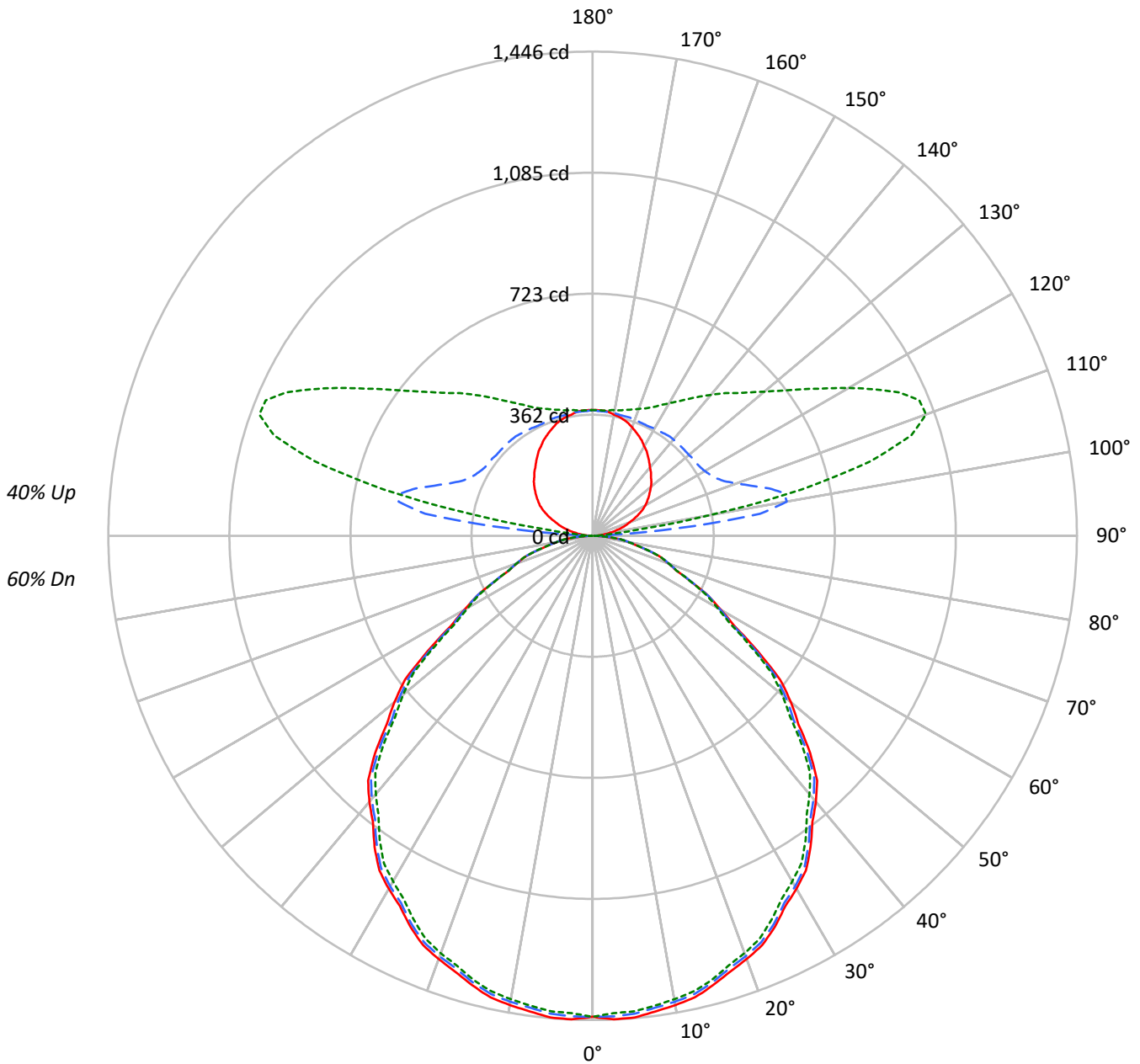
Lumens per Lamp: N/A
Luminaire Lumens: 6028.8 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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: P845175

CATALOG NUMBER: SQ4P-PR1-075U-100D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845175

CATALOG NUMBER: SQ4P-PR1-075U-100D-B40-1D-UNV

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° | 13253 | 13253 | 13253 |
| 5° | 13374 | 13272 | 13202 |
| 10° | 13330 | 13239 | 13168 |
| 15° | 13273 | 13190 | 13119 |
| 20° | 13207 | 13120 | 13024 |
| 25° | 13113 | 13026 | 12874 |
| 30° | 12971 | 12880 | 12696 |
| 35° | 12781 | 12668 | 12487 |
| 40° | 12487 | 12355 | 12129 |
| 45° | 11982 | 11769 | 11528 |
| 50° | 11082 | 10815 | 10601 |
| 55° | 9672 | 9455 | 9256 |
| 60° | 8150 | 8084 | 7923 |
| 65° | 7049 | 7078 | 7021 |
| 70° | 6471 | 6507 | 6507 |
| 75° | 6217 | 6217 | 6267 |
| 80° | 5850 | 5914 | 5850 |
| 85° | 4721 | 5240 | 5240 |



TEST NUMBER: P845175

CATALOG NUMBER: SQ4P-PR1-075U-100D-B40-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 135.9 | 2.3 |
| 10°-20° | 388.7 | 6.4 |
| 20°-30° | 586.3 | 9.7 |
| 30°-40° | 698.5 | 11.6 |
| 40°-50° | 688.7 | 11.4 |
| 50°-60° | 526.3 | 8.7 |
| 60°-70° | 325.7 | 5.4 |
| 70°-80° | 185.0 | 3.1 |
| 80°-90° | 57.2 | 0.9 |
| 90°-100° | 149.4 | 2.5 |
| 100°-110° | 519.9 | 8.6 |
| 110°-120° | 503.6 | 8.4 |
| 120°-130° | 395.1 | 6.6 |
| 130°-140° | 312.7 | 5.2 |
| 140°-150° | 241.3 | 4.0 |
| 150°-160° | 173.0 | 2.9 |
| 160°-170° | 105.8 | 1.8 |
| 170°-180° | 35.8 | 0.6 |
| 0°-30° | 1110.8 | 18.4 |
| 0°-40° | 1809.4 | 30.0 |
| 0°-60° | 3024.4 | 50.2 |
| 0°-90° | 3592.2 | 59.6 |
| 90°-120° | 1172.9 | 19.5 |
| 90°-150° | 2122.0 | 35.2 |
| 90°-180° | 2437.0 | 40.4 |
| 0°-180° | 6028.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1436 | 1436 | 1436 | 1436 | 1436 | |
| 5° | 1444 | 1428 | 1433 | 1428 | 1426 | 137 |
| 15° | 1390 | 1375 | 1381 | 1376 | 1374 | 392 |
| 25° | 1288 | 1272 | 1280 | 1266 | 1265 | 593 |
| 35° | 1135 | 1121 | 1125 | 1110 | 1109 | 708 |
| 45° | 918 | 906 | 902 | 886 | 884 | 703 |
| 55° | 601 | 592 | 588 | 578 | 575 | 539 |
| 65° | 323 | 321 | 324 | 322 | 322 | 327 |
| 75° | 174 | 174 | 174 | 176 | 176 | 184 |
| 85° | 45 | 47 | 50 | 50 | 50 | 52 |
| 90° | 6 | 8 | 8 | 6 | 3 | 5 |
| 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: P845175

CATALOG NUMBER: SQ4P-PR1-075U-100D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1436.5 | 1436.5 | 1436.5 | 1436.5 | 1436.5 |
| 2.5° | 1445.6 | 1433.0 | 1436.5 | 1433.5 | 1426.8 |
| 5° | 1444.0 | 1428.2 | 1433.0 | 1427.8 | 1425.5 |
| 7.5° | 1433.0 | 1417.4 | 1422.1 | 1417.0 | 1415.7 |
| 10° | 1422.9 | 1408.4 | 1413.1 | 1408.1 | 1405.6 |
| 12.5° | 1412.0 | 1396.7 | 1402.2 | 1396.2 | 1393.9 |
| 15° | 1389.6 | 1375.1 | 1380.9 | 1376.0 | 1373.5 |
| 17.5° | 1364.9 | 1349.3 | 1355.3 | 1349.5 | 1346.3 |
| 20° | 1345.1 | 1330.5 | 1336.3 | 1327.8 | 1326.5 |
| 22.5° | 1323.3 | 1308.8 | 1314.5 | 1303.0 | 1302.8 |
| 25° | 1288.1 | 1272.3 | 1279.6 | 1265.9 | 1264.6 |
| 27.5° | 1246.3 | 1231.8 | 1237.6 | 1223.7 | 1222.4 |
| 30° | 1217.5 | 1203.0 | 1209.0 | 1194.1 | 1191.7 |
| 32.5° | 1184.9 | 1171.4 | 1176.3 | 1161.4 | 1159.9 |
| 35° | 1134.8 | 1121.3 | 1124.7 | 1110.0 | 1108.7 |
| 37.5° | 1077.6 | 1065.4 | 1067.3 | 1050.9 | 1049.9 |
| 40° | 1036.8 | 1024.9 | 1025.8 | 1008.5 | 1007.1 |
| 42.5° | 992.5 | 980.3 | 979.2 | 962.0 | 960.7 |
| 45° | 918.3 | 906.1 | 902.0 | 885.8 | 883.5 |
| 47.5° | 833.6 | 821.4 | 813.9 | 800.7 | 799.0 |
| 50° | 772.1 | 759.9 | 753.5 | 742.3 | 738.6 |
| 52.5° | 705.8 | 693.7 | 688.3 | 678.1 | 674.5 |
| 55° | 601.3 | 591.7 | 587.8 | 577.9 | 575.4 |
| 57.5° | 502.1 | 495.7 | 494.4 | 484.8 | 483.8 |
| 60° | 441.7 | 438.1 | 438.1 | 429.4 | 429.4 |
| 62.5° | 390.3 | 387.5 | 389.5 | 383.7 | 382.9 |
| 65° | 322.9 | 320.6 | 324.2 | 321.6 | 321.6 |
| 67.5° | 269.8 | 269.8 | 271.9 | 270.9 | 270.9 |
| 70° | 239.9 | 239.9 | 241.2 | 241.2 | 241.2 |
| 72.5° | 213.3 | 212.4 | 215.6 | 215.4 | 214.6 |
| 75° | 174.4 | 174.4 | 174.4 | 175.8 | 175.8 |
| 77.5° | 135.9 | 136.1 | 137.1 | 136.9 | 135.9 |
| 80° | 110.1 | 111.3 | 111.3 | 110.1 | 110.1 |
| 82.5° | 84.5 | 85.6 | 85.6 | 85.3 | 84.5 |
| 85° | 44.6 | 46.9 | 49.5 | 49.5 | 49.5 |
| 87.5° | 12.8 | 16.7 | 19.9 | 19.9 | 18.8 |
| 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: P845175

CATALOG NUMBER: SQ4P-PR1-075U-100D-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)